

TEST REPORT

Applicant: TECNO MOBILE LIMITED
Address: FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG
Equipment Type: PC Handheld device
Model Name: AG01
Brand Name: TECNO
FCC ID: 2ADYY-AG01
Test Standard: FCC 47 CFR Part 2.1093 (refer to section 3.1)
Maximum SAR: Limbs 2.4GHz(10 g@0mm): 0.88 W/kg
Limbs 5GHz(10 g@0mm): 0.86 W/kg
Limbs 6GHz(10 g@0mm): 0.19 W/kg
Sample Arrival Date: Jul. 08, 2024
Test Date: Jul. 31, 2024 - Aug. 19, 2024
Date of Issue: Sep. 23, 2024

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

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(Testing Director)

Revision History		
Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Sep. 23, 2024</u>	<u>Initial Issue</u>

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1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6685 0100

1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	<input type="checkbox"/> Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	<input checked="" type="checkbox"/> 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.

1.3 Test Environment Condition

Ambient Temperature	18°C to 25°C
Ambient Relative Humidity	30% to 70%

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	TECNO MOBILE LIMITED
Address	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG

2.2 Manufacturer Information

Manufacturer	TECNO MOBILE LIMITED
Address	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG

2.3 General Description for Equipment under Test (EUT)

EUT Name	PC Handheld device
Model Name Under Test	AG01
Series Model Name	N/A
Description of Model Name Differentiation	N/A
Hardware Version	AG01_MB_V11
Software Version	Windows 11
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	N/A
	Model No.	506382-3S1P
	Serial No.	N/A
	Capacity	4329mAh
	Rated Voltage	11.55V
	Limit Charge Voltage	13.20V

2.5 Technical Information

Network and Wireless connectivity	Bluetooth (BR+EDR+BLE) WIFI 802.11a, 802.11b, 802.11g, 802.11n, 802.11ac, 802.11ax
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The requirement for the following technical information of the EUT was tested in this report:

Operating Mode	2.4G WIFI, 5G WIFI, 6G WIFI, Bluetooth	
Frequency Range	802.11b/g/n(HT20/HT40)/ ax(HE20/HE40)	2412 MHz ~ 2462 MHz
	802.11a/n(HT20/HT40)/ ac(VHT20/VHT40/VHT80)/ ax(HE20/HE40/HE80)	5150 MHz ~ 5250 MHz
		5250 MHz ~ 5350 MHz
		5470 MHz ~ 5725 MHz
		5725 MHz ~ 5850 MHz
	802.11ac(VHT160)/ ax(HE160)	5150 MHz ~ 5250 MHz
		5470 MHz ~ 5725 MHz
802.11 ax(HE20/HE40/HE80/HE160)	5925 MHz ~ 6425 MHz	
	6425 MHz ~ 6525 MHz	
	6525 MHz ~ 6875 MHz	
	6875 MHz ~ 7125 MHz	
Bluetooth	2402 MHz ~ 2480 MHz	
Antenna Type	WIFI	FPC Antenna
	Bluetooth	FPC Antenna
Hotspot Function	N/A	
Exposure Category	General Population/Uncontrolled exposure	
Product Type	Portable Device	
EUT Type	<input checked="" type="checkbox"/> Production unit	<input type="checkbox"/> Identical prototype

3 SUMMARY OF TEST RESULT

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices
2	ANSI C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
3	FCC KDB 447498 D04 v01	RF Exposure Procedures and Equipment Authorization Policies for Mobile and Portable Devices
4	FCC KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
5	FCC KDB 865664 D02 v01r02	RF Exposure Reporting
6	KDB 248227 D01 v02r02	SAR Guidance for IEEE 802.11 (Wi-Fi) Transmitters
7	IEC/IEEE 62209- 1528:2020	Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Part 1528: Human models, instrumentation, and procedures (Frequency range of 4 MHz to 10 GHz)

3.2 Device Category and SAR Limit

This device belongs to portable device category because its radiating structure is allowed to be used within 20 centimeters of the body of the user.

Limit for General Population/Uncontrolled exposure should be applied for this device, it is 1.6 W/kg as averaged over any 1 gram of tissue.

Table of Exposure Limits:

Body Position	SAR Value (W/Kg)	
	General Population/ Uncontrolled Exposure	Occupational/ Controlled Exposure
Whole-Body SAR (averaged over the entire body)	0.08	0.4
Partial-Body SAR (averaged over any 1 gram of tissue)	1.60	8.0
SAR for hands, wrists, feet and ankles (averaged over any 10 grams of tissue)	4.0	20.0

NOTE:

General Population/Uncontrolled Exposure: Locations where there is the exposure of individuals who have no knowledge or control of their exposure. 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.

Occupational/Controlled Exposure: Locations where there is exposure that may be incurred by persons who are aware of the potential for exposure. 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. This 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.

3.3 Test Result Summary

3.3.1 Highest SAR (10 g Value)

Equipment Class	Band	Antenna	Maximum Scaled SAR (W/kg)	Maximum Report SAR (W/kg)
			Limbs (0mm)	Limbs (0mm)
DTS	2.4G WLAN	Aux.	0.88	0.88
	2.4G WLAN	Main	0.65	
U-NII-2A	5.3G WLAN	Aux.	0.50	
	5.3G WLAN	Main	0.62	
U-NII-2C	5.6G WLAN	Aux.	0.44	
	5.6G WLAN	Main	0.60	
U-NII-3	5.8G WLAN	Aux.	0.41	
	5.8G WLAN	Main	0.86	
U-NII-5/6/7/8	6G WLAN	Aux.	0.12	
	6G WLAN	Main	0.19	
DSS	Bluetooth	Aux.	0.14	
Limit (W/kg)			4.00	
Verdict			Pass	

3.3.2 Highest Simultaneous Transmission SAR Values (10 g Value)

Equipment Class	Maximum Report SAR (W/kg)	SPLSR
	Limbs (0mm)	
DTS	1.54	/
NII	1.49	/
DSS	1.49	/
Limit (W/Kg)	4.00	0.04
Verdict	Pass	Pass

Note: The simultaneous transmission SAR detail please refer to section 12.

3.4 Test Uncertainty

According to KDB 865664 D01, when the highest measured 1 g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis is not required in SAR reports submitted for equipment approval.

The maximum 10 g SAR for the EUT in this report is 0.884 W/kg, which is lower than 3.75 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

4 MEASUREMENT SYSTEM

4.1 Specific Absorption Rate (SAR) Definition

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.

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:

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

SAR is expressed in units of Watts per kilogram (W/kg) SAR measurement can be related to the electrical field in the tissue by

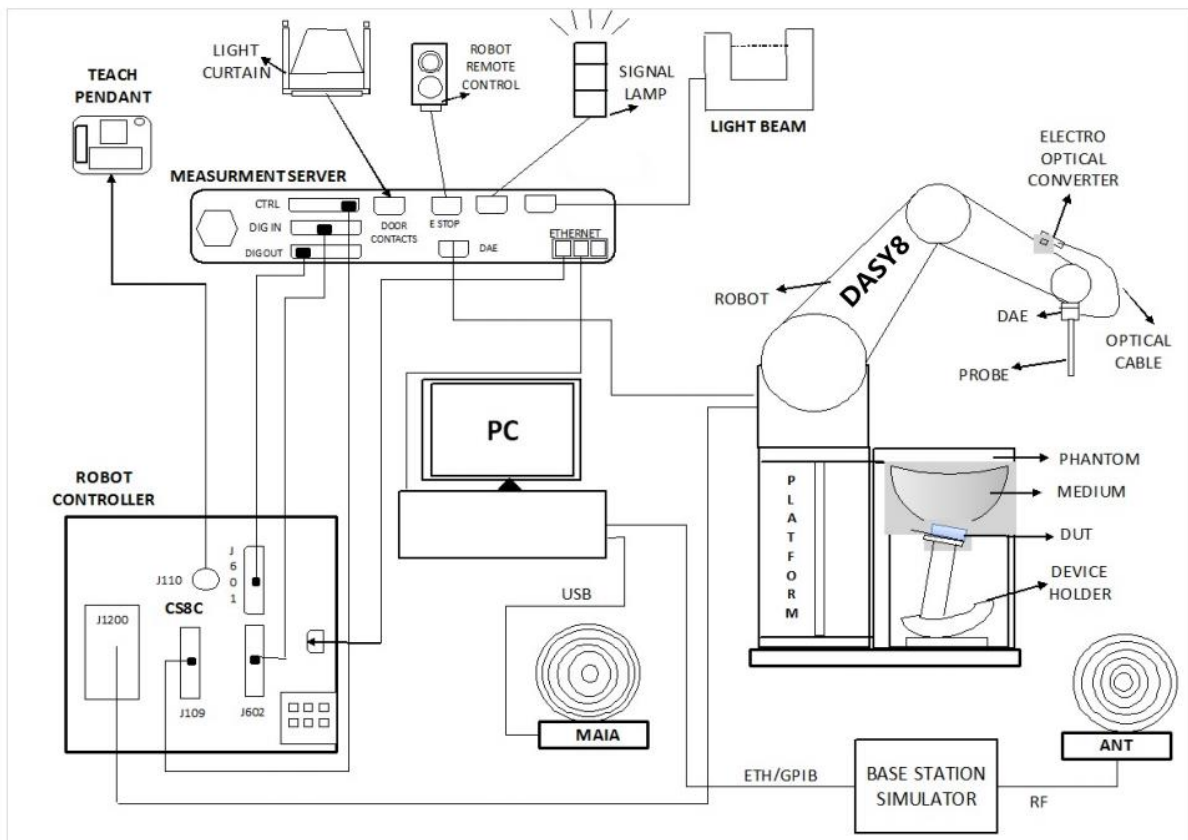
$$SAR = \frac{\sigma E^2}{\rho}$$

Where: σ is the conductivity of the tissue,

ρ is the mass density of the tissue and E is the RMS electrical field strength.

4.2 DASY SAR System

4.2.1 DASY SAR System Diagram

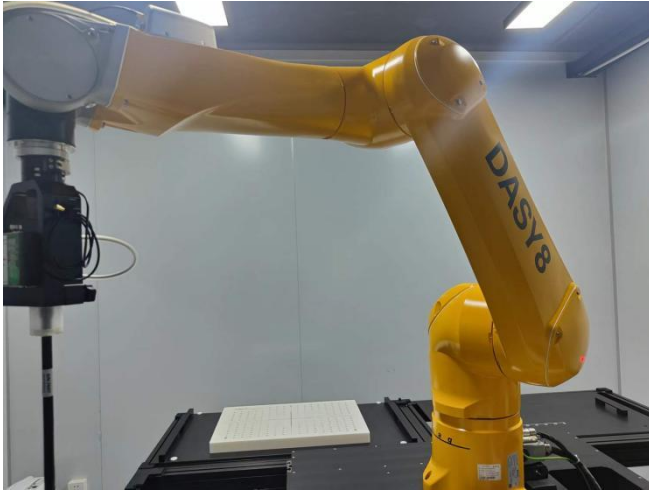


The DASY system for performing compliance tests consists of the following items:

1. A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
2. A dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
3. A data acquisition electronic (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.
4. A unit to operate the optical surface detector which is connected to the EOC.
5. The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DASY measurement server.
6. The DASY measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation.
7. DASY software and SEMCAD data evaluation software.
8. Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
9. The generic twin phantom enabling the testing of left-hand and right-hand usage.
10. The device holder for handheld mobile phones.
11. Tissue simulating liquid mixed according to the given recipes.
12. System validation dipoles allowing to validate the proper functioning of the system.

4.2.2 Robot

The Dasy SAR system uses the high precision robots. Symmetrical design with triangular core Built-in optical fiber for surface detection system For the 6-axis controller system, Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents). The robot series have many features that are important for our application:



- High precision
(repeatability ± 0.02 mm)
- High reliability
(industrial design)
- Low maintenance costs
(virtually maintenance free due to direct drive gears; no belt drives)
- Jerk-free straight movements
(brush less synchron motors; no stepper motors)
- Low ELF interference
(motor control fields shielded via the closed metallic construction shields)

4.2.3 E-Field Probe

The probe is specially designed and calibrated for use in liquids with high permittivities for the measurements the Specific Dosimetric E-Field Probe EX3DV4 SN:7510 & SN:3801 with following specifications is used.

Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection system Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., glycoether)
Calibration	ISO/IEC 17025 calibration service available
Frequency	4 MHz to 10 GHz; Linearity: ± 0.2 dB
Directivity	± 0.2 dB in HSL (rotation around probe axis) ; ± 0.4 dB in HSL (rotation normal to probe axis)
Dynamic range	5 μ W/g to > 100 mW/g; Linearity: ± 0.2 dB
Dimensions	Overall length: 337 mm (Tip: 9 mm) Tip diameter: 2.5 mm (Body: 10 mm) Distance from probe tip to dipole centers: 1.0 mm
Application	General dosimetry up to 3 GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms (EX3DV4)



E-Field Probe Calibration Process

Probe calibration is realized, in compliance with IEC/IEEE 62209-1528 and IEEE 1528 std, with CALISAR, Antennassa proprietary calibration system. The calibration is performed with the IEC/IEEE 62209-1528 annexe technique using reference guide at the five frequencies.

4.2.4 Data Acquisition Electronics

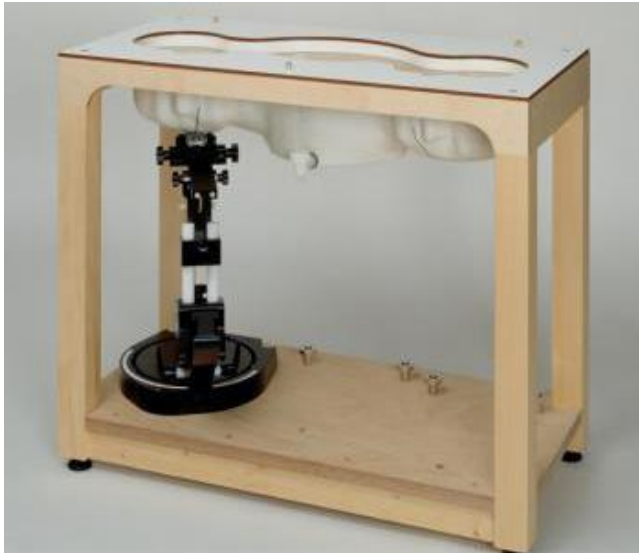
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an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



- Input Impedance: 200M Ω m
- The Inputs: Symmetrical and Floating
- Commom Mode Rejection: Above 80dB

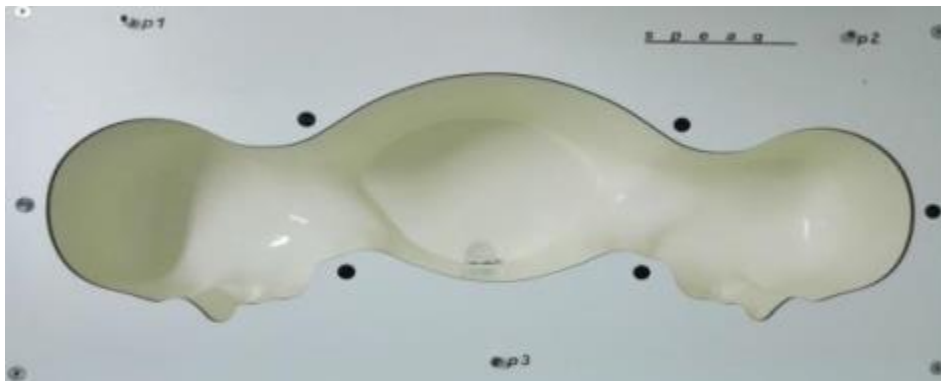
4.2.5 Phantoms

For the measurements the Specific Anthropomorphic Mannequin (SAM) defined by the IEEE SCC-34/SC2 group is used. The phantom is a polyurethane shell integrated in a wooden table. The thickness of the phantom amounts to 2mm +/- 0.2mm. It enables the dosimetric evaluation of left and right phone usage and includes an additional flat phantom part for the simplified performance check. The phantom set-up includes a cover, which prevents the evaporation of the liquid.



- Left hand
- Right hand
- Flat phantom

Photo of Phantom SN1859



Serial Number	Material	Length	Height
SN 1859 SAM	Vinylester, glass fiber reinforced	1000	500

4.2.6 Device Holder

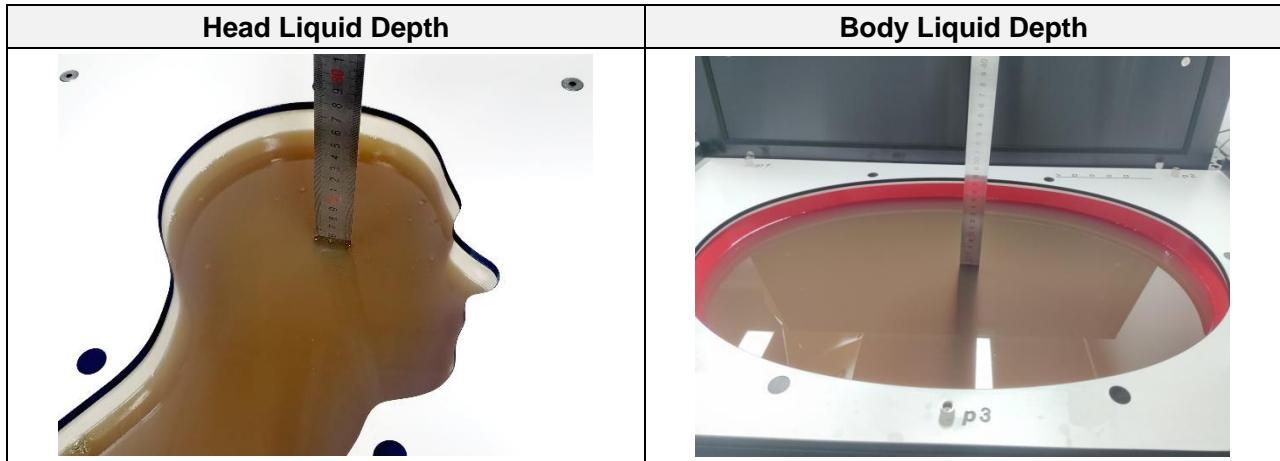
The DASY device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65° . The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. This device holder is used for standard mobile phones or PDA"s only. If necessary an additional support of polystyrene material is used. Larger DUT"s (e.g. notebooks) cannot be tested using this device holder. Instead a support of bigger polystyrene cubes and thin polystyrene plates is used to position the DUT in all relevant positions to find and measure spots with maximum SAR values. Therefore those devices are normally only tested at the flat part of the SAM.



The positioning system allows obtaining cheek and tilting position with a very good accuracy. Incompliance with CENELEC, the tilt angle uncertainty is lower than 1° .

4.2.7 Simulating Liquid

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. The nominal dielectric values of the tissue simulating liquids in the phantom and the tolerance of 5%.



The following table gives the recipes for tissue simulating liquid and the theoretical Conductivity/Permittivity.

The following table gives the recipes for tissue simulating liquid.

TSL	Manufacturer / Model	Freq Range (MHz)	Main Ingredients
Head WideBand	SPEAG HBBL600-10000V6	600-10000	Ethanediol, Sodium petroleum sulfonate, Hexylene Glycol / 2-Methyl-pentane-2.4-diol, Alkoxyated alcohol

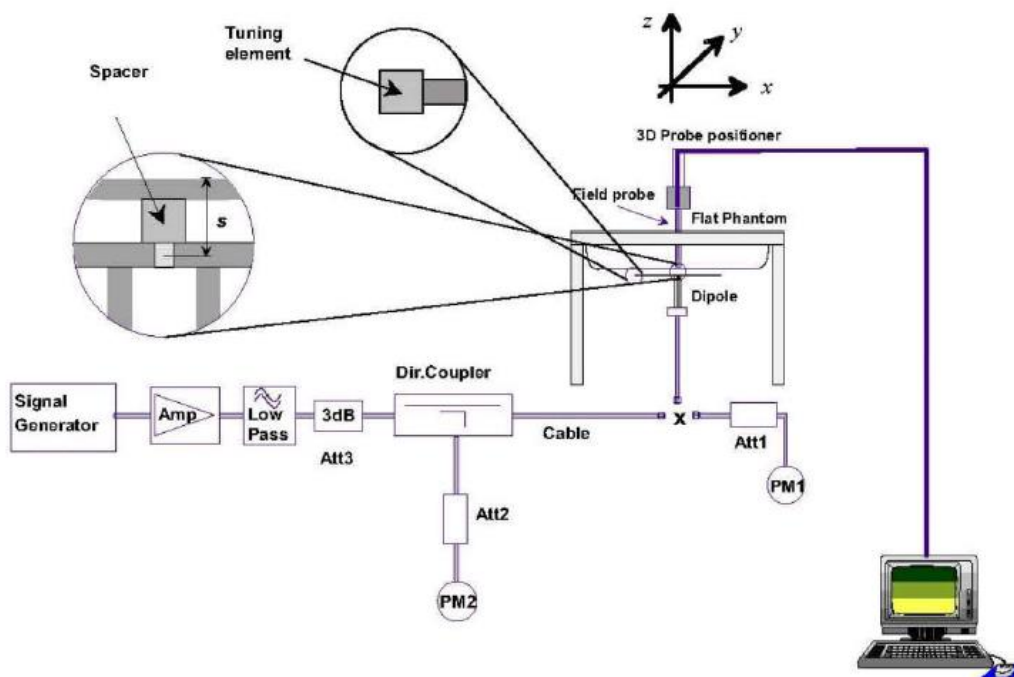
5 SYSTEM VERIFICATION

5.1 Purpose of System Check

The system performance check verifies that the system operates within its specifications. System and operator errors can be detected and corrected. It is recommended that the system performance check be performed prior to any usage of the system in order to guarantee reproducible results. The system performance check uses normal SAR measurements in a simplified setup with a well characterized source. This setup was selected to give a high sensitivity to all parameters that might fail or vary over time. The system check does not intend to replace the calibration of the components, but indicates situations where the system uncertainty is exceeded due to drift or failure.

5.2 System Check Setup

In the simplified setup for system evaluation, the EUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave that comes from a signal generator. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. The distance holder should touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The equipment setup is shown below:



6 TEST POSITION CONFIGURATIONS

6.1 Exposure Condition

This DUT was tested in two different positions. They are Back Side and Bottom Edge in these positions, the surface of DUT is touching with phantom 0mm.

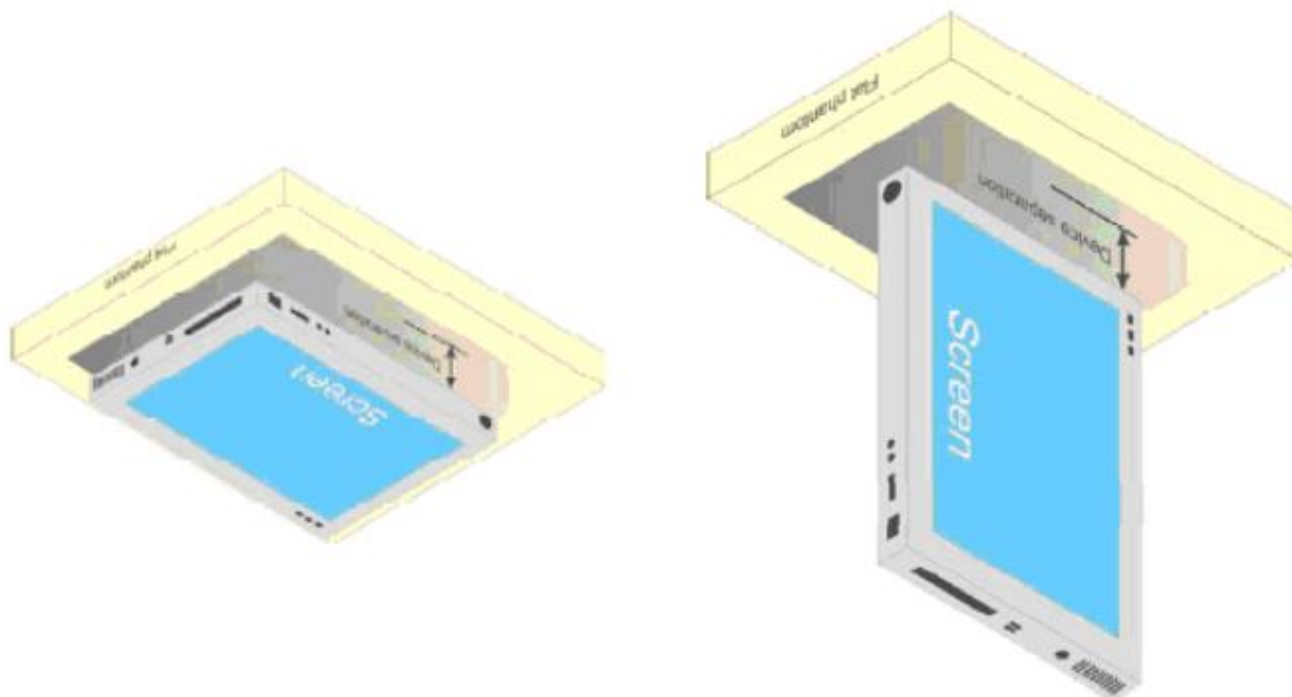
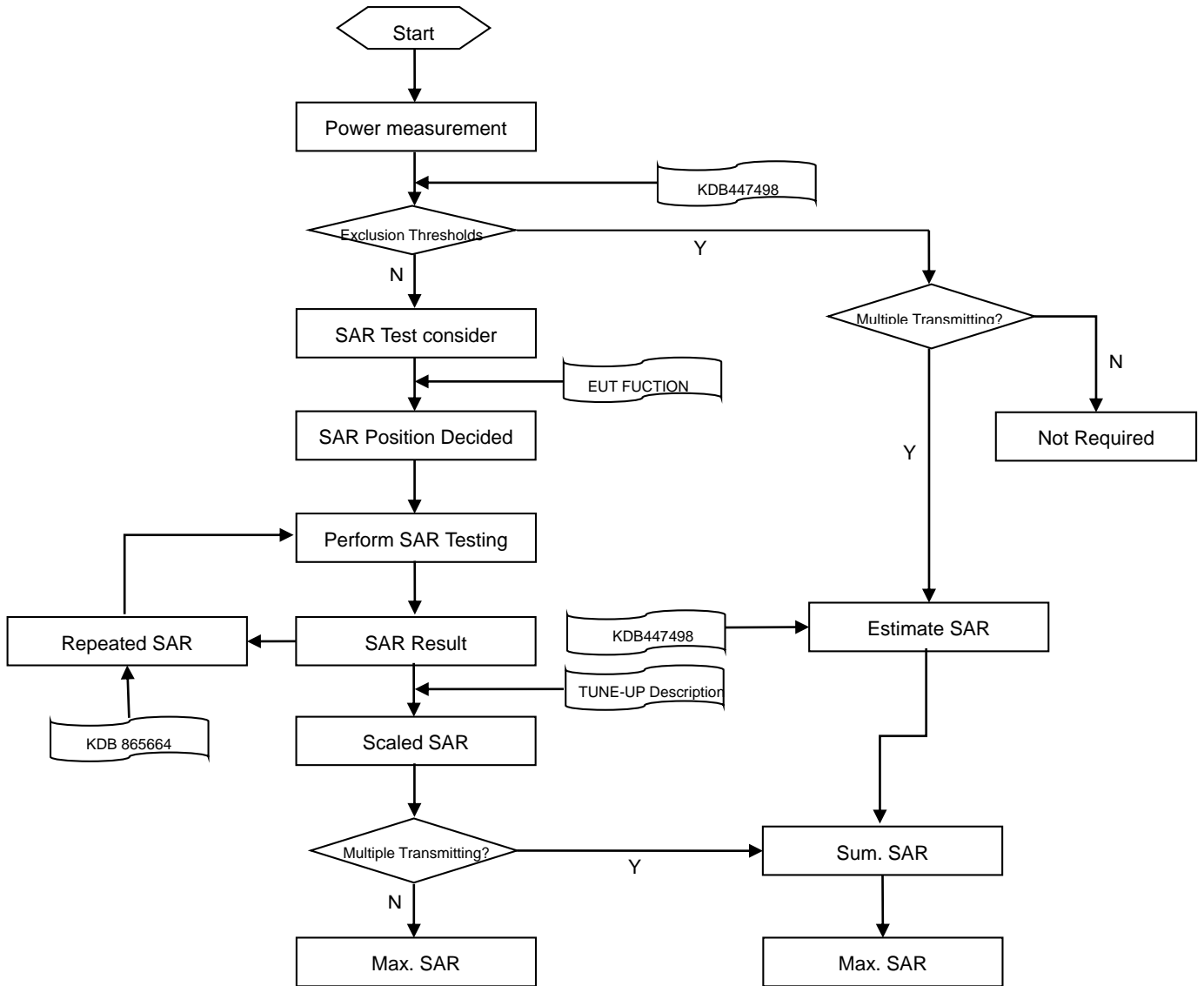


Fig Illustration for Lap-touching Position

7 MEASUREMENT PROCEDURE

7.1 Measurement Process Diagram



7.2 SAR Scan General Requirement

Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Both the probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1 g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE Std 1528-2013.

		≤3GHz	>3GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface		5±1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ 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.	
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: Δz Zoom (n)	≤ 5 mm	3–4 GHz: ≤ 4 mm
			4–5 GHz: ≤ 3 mm
			5–6 GHz: ≤ 2 mm
	graded grid	Δz Zoom (1): between 1st two points closest to phantom surface	≤ 4 mm
4–5 GHz: ≤ 2.5 mm			
	Δz Zoom (n>1): between subsequent points	≤ 1.5· Δz 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 3GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

7.3 Measurement Procedure

The following steps are used for each test position

- a. Establish a call with the maximum output power with a base station simulator. The connection between the mobile and the base station simulator is established via air interface
- b. Measurement of the local E-field value at a fixed location. This value serves as a reference value for calculating a possible power drift.
- c. Measurement of the SAR distribution with a grid of 8 to 16mm * 8 to 16 mm and a constant distance to the inner surface of the phantom. Since the sensors cannot directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolation scheme.
- d. Around this point, a cube of 30 * 30 * 30 mm or 32 * 32 * 32 mm is assessed by measuring 5 or 8 * 5 or 8*4 or 5 mm. With these data, the peak spatial-average SAR value can be calculated.

7.4 Area & Zoom Scan Procedure

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g. Area scan and zoom scan resolution setting follows KDB 865664 D01v01r04 quoted below.

When the 1 g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

7.5 Interim Procedures for WIFI 6E

Interim procedures for FCC radio frequency (RF) exposure evaluations of U-NII 6-7 GHz band portable devices have been made available during the TCB workshop in April 2021. The procedure is summarized below:

- a. Evaluate SAR / APD with DASY6 Module SAR V16.0 or higher. The configurations to be tested are defined in the relevant Knowledge Database (KDB). The psSAR and absorbed psPD are reported.
- b. For the configuration with the highest SAR, evaluate the incident power density with DASY6 Module mmWave V2.4.2 or higher. The incident psPD must be adjusted per amount that the measurement uncertainty exceeds 30% before it is included in the test report.

8 CONDUCTED RF OUPUT POWER

8.1 WIFI

8.1.1 2.4G WIFI (Main Antenna)

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Power Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	17.56	18.00	Yes
		6	2437	17.67	18.00	Yes
		11	2462	17.32	18.00	Yes
	802.11g	1	2412	15.61	16.00	No
		6	2437	15.63	16.00	No
		11	2462	15.35	16.00	No
	802.11n(HT20)	1	2412	15.48	16.00	No
		6	2437	15.53	16.00	No
		11	2462	15.72	16.00	No
	802.11n(HT40)	3	2422	15.46	16.00	No
		6	2437	15.41	16.00	No
		9	2452	13.71	15.00	No
	802.11ax(HE20)	1	2412	13.63	14.00	No
		6	2437	13.78	14.00	No
		11	2462	13.46	14.00	No
	802.11ax(HE40)	3	2422	13.62	14.00	No
		6	2437	13.57	14.00	No
		9	2452	13.61	14.00	No

Note: According KDB 248227 D01 SAR is not required for the following 2.4 GHz OFDM conditions. 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.

Adjusted SAR = Report SAR * (max power (OFDM)/ max power (DSSS)) = 0.651 * (39.81mW/63.10mW) = 0.41 W/Kg, so the 2.4G OFDM SAR test is not required.

Band (GHz)	Mode	Channel	Freq. (MHz)	RU Config	Average Power (dBm)	Tune-up Power Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11ax (HE20)	1	2412	26	10.84	11.00	No
				52	10.88	11.00	No
				106	10.78	11.00	No
		6	2437	26	10.89	11.00	No
				52	10.78	11.00	No
				106	10.81	11.00	No
		11	2462	26	10.87	11.00	No
				52	10.72	11.00	No
				106	10.75	11.00	No
	802.11ax (HE40)	3	2422	26	10.74	11.00	No
				52	10.84	11.00	No
				106	10.71	11.00	No
				242	10.90	11.00	No
		6	2437	26	10.67	11.00	No
				52	10.87	11.00	No
				106	10.88	11.00	No
				242	10.84	11.00	No
		9	2452	26	10.66	11.00	No
				52	10.85	11.00	No
				106	10.88	11.00	No
242	10.71			11.00	No		

8.1.2 2.4G WIFI (Aux. Antenna)

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Power Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	16.96	18.00	Yes
		6	2437	17.47	18.00	Yes
		11	2462	17.12	18.00	Yes
	802.11g	1	2412	15.41	16.00	No
		6	2437	14.93	16.00	No
		11	2462	14.85	16.00	No
	802.11n(HT20)	1	2412	15.28	16.00	No
		6	2437	15.33	16.00	No
		11	2462	15.22	16.00	No
	802.11n(HT40)	3	2422	15.36	16.00	No
		6	2437	14.81	16.00	No
		9	2452	13.65	15.00	No
	802.11ax(HE20)	1	2412	13.03	14.00	No
		6	2437	13.48	14.00	No
		11	2462	13.06	14.00	No
	802.11ax(HE40)	3	2422	13.32	14.00	No
		6	2437	12.97	14.00	No
		9	2452	13.11	14.00	No

Note: According KDB 248227 D01 SAR is not required for the following 2.4 GHz OFDM conditions. 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.

Adjusted SAR = Report SAR * (max power (OFDM)/ max power (DSSS)) = 0.884 * (39.81mW/63.10mW) = 0.56 W/Kg, so the 2.4G OFDM SAR test is not required.

Band (GHz)	Mode	Channel	Freq. (MHz)	RU Config	Average Power (dBm)	Tune-up Power Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11ax (HE20)	1	2412	26	10.44	11.00	No
				52	10.38	11.00	No
				106	10.18	11.00	No
		6	2437	26	10.59	11.00	No
				52	10.28	11.00	No
				106	10.21	11.00	No
		11	2462	26	10.37	11.00	No
				52	10.42	11.00	No
				106	10.15	11.00	No
	802.11ax (HE40)	3	2422	26	10.14	11.00	No
				52	10.24	11.00	No
				106	10.41	11.00	No
				242	10.30	11.00	No
		6	2437	26	10.47	11.00	No
				52	10.47	11.00	No
				106	10.58	11.00	No
				242	10.64	11.00	No
		9	2452	26	9.96	11.00	No
				52	10.75	11.00	No
				106	10.28	11.00	No
242	10.51			11.00	No		

8.1.3 2.4G WIFI (MIMO)

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Power Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	17.27	18.00	No
		6	2437	17.18	18.00	No
		11	2462	16.69	18.00	No
	802.11g	1	2412	14.97	16.00	No
		6	2437	15.30	16.00	No
		11	2462	15.16	16.00	No
	802.11n(HT20)	1	2412	14.84	16.00	No
		6	2437	15.09	16.00	No
		11	2462	15.68	16.00	No
	802.11n(HT40)	3	2422	15.27	16.00	No
		6	2437	14.67	16.00	No
		9	2452	14.36	16.00	No
	802.11ax(HE20)	1	2412	12.89	14.00	No
		6	2437	13.15	14.00	No
		11	2462	13.07	14.00	No
	802.11ax(HE40)	3	2422	13.28	14.00	No
		6	2437	12.98	14.00	No
		9	2452	12.97	14.00	No

Band (GHz)	Mode	Channel	Freq. (MHz)	RU Config	Average Power (dBm)	Tune-up Power Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11ax (HE20)	1	2412	26	10.21	11.00	No
				52	10.44	11.00	No
				106	10.09	11.00	No
		6	2437	26	10.35	11.00	No
				52	10.10	11.00	No
				106	10.31	11.00	No
		11	2462	26	10.08	11.00	No
				52	10.43	11.00	No
				106	10.52	11.00	No
	802.11ax (HE40)	3	2422	26	10.15	11.00	No
				52	10.11	11.00	No
				106	10.22	11.00	No
				242	10.16	11.00	No
		6	2437	26	10.38	11.00	No
				52	10.48	11.00	No
				106	10.55	11.00	No
				242	10.55	11.00	No
		9	2452	26	9.78	11.00	No
				52	10.31	11.00	No
				106	10.42	11.00	No
242	10.27			11.00	No		

8.1.4 5G WIFI (Main Antenna)

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Power Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	15.74	16.00	No
		44	5220	15.80	16.00	No
		48	5240	15.78	16.00	No
	802.11n(HT20)	36	5180	15.52	16.00	No
		44	5220	15.88	16.00	No
		48	5240	15.89	16.00	No
	802.11n(HT40)	38	5190	15.56	16.00	No
		46	5230	15.50	16.00	No
	802.11ac(VHT20)	36	5180	15.70	16.00	No
		44	5220	15.85	16.00	No
		48	5240	15.79	16.00	No
	802.11ac(VHT40)	38	5190	15.60	16.00	No
		46	5230	15.45	16.00	No
	802.11ac(VHT80)	42	5210	15.86	16.00	No
	802.11ac(VHT160)	50	5250	13.62	15.00	No
	802.11ax(HE20)	36	5180	15.81	16.00	No
		44	5220	15.50	16.00	No
		48	5240	15.47	16.00	No
802.11ax(HE40)	38	5190	15.80	16.00	No	
	46	5230	15.62	16.00	No	
802.11ax(HE80)	42	5210	15.65	16.00	No	
802.11ax(HE160)	50	5250	14.21	15.00	No	
5.3 (5.25~5.35)	802.11a	52	5260	15.61	16.00	No
		60	5300	15.50	16.00	No
		64	5320	15.55	16.00	No
	802.11n(HT20)	52	5260	15.83	16.00	No
		60	5300	15.45	16.00	No
		64	5320	15.51	16.00	No
	802.11n(HT40)	54	5270	15.45	16.00	No
		62	5310	15.46	16.00	No
	802.11ac(VHT20)	52	5260	15.84	16.00	No
		60	5300	15.89	16.00	No
		64	5320	15.90	16.00	No
	802.11ac(VHT40)	54	5270	15.47	16.00	No
		62	5310	15.49	16.00	No
	802.11ac(VHT80)	58	5290	15.85	16.00	Yes

	802.11ax(HE20)	52	5260	15.54	16.00	No	
		60	5300	15.58	16.00	No	
		64	5320	15.64	16.00	No	
	802.11ax(HE40)	54	5270	15.63	16.00	No	
		62	5310	15.67	16.00	No	
	802.11ax(HE80)	58	5290	15.70	16.00	No	
	5.6 (5.47~5.725)	802.11a	100	5500	15.60	16.00	No
			116	5580	15.89	16.00	No
			140	5700	14.08	15.00	No
802.11n(HT20)		100	5500	15.77	16.00	No	
		116	5580	15.88	16.00	No	
		140	5700	13.43	15.00	No	
802.11n(HT40)		102	5510	15.45	16.00	No	
		118	5590	15.46	16.00	No	
		134	5670	15.67	16.00	No	
802.11ac(VHT20)		100	5500	15.78	16.00	No	
		116	5580	15.81	16.00	No	
		140	5700	12.93	14.00	No	
802.11ac(VHT40)		102	5510	15.48	16.00	No	
		118	5590	15.52	16.00	No	
		134	5670	15.67	16.00	No	
802.11ac(VHT80)		106	5530	15.81	16.00	Yes	
		122	5610	15.56	16.00	Yes	
802.11ac(VHT160)		114	5570	13.58	15.00	No	
802.11ax(HE20)		100	5500	15.84	16.00	No	
		116	5580	15.55	16.00	No	
		140	5700	13.69	15.00	No	
802.11ax(HE40)		102	5510	15.60	16.00	No	
		118	5590	15.67	16.00	No	
		134	5670	15.84	16.00	No	
802.11ax(HE80)		106	5530	15.59	16.00	No	
		122	5610	15.79	16.00	No	
802.11ax(HE160)		114	5570	13.75	15.00	No	
5.8 (5.725~5.85)	802.11a	149	5745	15.79	16.00	No	
		157	5785	15.88	16.00	No	
		165	5825	15.64	16.00	No	
	802.11n(HT20)	149	5745	15.74	16.00	No	
		157	5785	15.44	16.00	No	
		165	5825	15.48	16.00	No	

	802.11n(HT40)	151	5755	15.47	16.00	No
		159	5795	15.58	16.00	No
	802.11ac(VHT20)	149	5745	15.75	16.00	No
		157	5785	15.87	16.00	No
		165	5825	15.90	16.00	No
	802.11ac(VHT40)	151	5755	15.43	16.00	No
		159	5795	15.51	16.00	No
	802.11ac(VHT80)	155	5775	15.75	16.00	Yes
	802.11ax(HE20)	149	5745	15.85	16.00	No
		157	5785	15.57	16.00	No
		165	5825	15.56	16.00	No
	802.11ax(HE40)	151	5755	15.62	16.00	No
		159	5795	15.73	16.00	No
	802.11ax(HE80)	155	5775	15.65	16.00	No

Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.

Band (GHz)	Mode	Channel	Freq. (MHz)	RU Config	Average Power (dBm)	Tune-up Power Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11ax (HE20)	36	5180	26	12.86	13.00	No
				52	12.77	13.00	No
				106	12.75	13.00	No
		44	5220	26	12.89	13.00	No
				52	12.70	13.00	No
				106	12.78	13.00	No
		48	5240	26	12.49	13.00	No
				52	12.80	13.00	No
				106	12.84	13.00	No
	802.11ax (HE40)	38	5190	26	12.70	13.00	No
				52	12.82	13.00	No
				106	12.85	13.00	No
				242	12.81	13.00	No
		46	5230	26	12.59	13.00	No
				52	12.66	13.00	No
				106	12.70	13.00	No
	802.11ax (HE80)	42	5210	26	12.86	13.00	No
				52	12.91	13.00	No

	802.11ax (HE160)	50	5250	106	12.55	13.00	No
				242	12.54	13.00	No
				484	12.89	13.00	No
				26	12.75	13.00	No
				52	12.88	13.00	No
				106	12.91	13.00	No
				242	12.55	13.00	No
				484	12.63	13.00	No
				996	12.70	13.00	No
5.3 (5.25~5.35)	802.11ax (HE20)	52	5260	26	12.55	13.00	No
				52	12.88	13.00	No
				106	12.85	13.00	No
		60	5300	26	12.63	13.00	No
				52	12.88	13.00	No
				106	12.90	13.00	No
		64	5320	26	12.74	13.00	No
				52	12.60	13.00	No
				106	12.63	13.00	No
	802.11ax (HE40)	54	5270	26	12.79	13.00	No
				52	12.89	13.00	No
				106	12.90	13.00	No
		62	5310	242	12.91	13.00	No
				26	12.79	13.00	No
				52	12.77	13.00	No
	802.11ax (HE80)	58	5290	106	12.85	13.00	No
				242	12.71	13.00	No
				26	12.54	13.00	No
				52	12.59	13.00	No
				106	12.54	13.00	No
				242	12.61	13.00	No
5.6 (5.47~5.725)	802.11ax (HE20)	100	5500	484	12.73	13.00	No
				26	12.72	13.00	No
				52	12.54	13.00	No
		116	5580	106	12.56	13.00	No
				26	12.74	13.00	No
				52	12.50	13.00	No
		140	5700	106	12.55	13.00	No
				26	12.88	13.00	No
				52	12.64	13.00	No

	802.11ax (HE40)	102	5510	106	12.74	13.00	No
				26	12.80	13.00	No
				52	12.85	13.00	No
				106	12.70	13.00	No
		242	12.75	13.00	No		
		118	5590	26	12.37	13.00	No
				52	12.47	13.00	No
				106	12.64	13.00	No
				242	12.91	13.00	No
		134	5670	26	12.67	13.00	No
				52	12.80	13.00	No
				106	12.86	13.00	No
	242			12.80	13.00	No	
	802.11ax (HE80)	106	5530	26	12.60	13.00	No
				52	12.81	13.00	No
				106	12.57	13.00	No
				242	12.69	13.00	No
				484	12.56	13.00	No
		122	5610	26	12.57	13.00	No
				52	12.70	13.00	No
				106	12.84	13.00	No
				242	12.84	13.00	No
				484	12.41	13.00	No
	802.11ax (HE160)	114	5570	26	12.90	13.00	No
52				12.36	13.00	No	
106				12.69	13.00	No	
242				12.60	13.00	No	
484				12.50	13.00	No	
996				12.60	13.00	No	
5.8 (5.725~5.85)	802.11ax (HE20)	149	5745	26	12.66	13.00	No
				52	12.48	13.00	No
				106	12.48	13.00	No
		157	5785	26	12.84	13.00	No
				52	12.66	13.00	No
				106	12.64	13.00	No
		165	5825	26	12.59	13.00	No
				52	12.79	13.00	No
				106	12.90	13.00	No
	802.11ax	151	5755	26	12.69	13.00	No

	(HE40)			52	12.74	13.00	No
				106	12.59	13.00	No
				242	12.88	13.00	No
		159	5795	26	12.91	13.00	No
				52	12.86	13.00	No
				106	12.68	13.00	No
	802.11ax (HE80)	155	5775	242	12.75	13.00	No
				26	12.60	13.00	No
				52	12.65	13.00	No
				106	12.80	13.00	No
				242	12.82	13.00	No
				484	12.45	13.00	No

8.1.5 5G WIFI (Aux. Antenna)

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Power Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	15.64	16.00	No
		44	5220	15.30	16.00	No
		48	5240	15.58	16.00	No
	802.11n(HT20)	36	5180	15.42	16.00	No
		44	5220	15.28	16.00	No
		48	5240	15.19	16.00	No
	802.11n(HT40)	38	5190	15.16	16.00	No
		46	5230	15.20	16.00	No
	802.11ac(VHT20)	36	5180	15.40	16.00	No
		44	5220	15.75	16.00	No
		48	5240	15.29	16.00	No
	802.11ac(VHT40)	38	5190	15.10	16.00	No
		46	5230	15.15	16.00	No
	802.11ac(VHT80)	42	5210	15.56	16.00	No
	802.11ac(VHT160)	50	5250	13.52	15.00	No
	802.11ax(HE20)	36	5180	15.71	16.00	No
		44	5220	15.40	16.00	No
		48	5240	15.27	16.00	No
802.11ax(HE40)	38	5190	15.10	16.00	No	
	46	5230	15.02	16.00	No	
802.11ax(HE80)	42	5210	15.15	16.00	No	
802.11ax(HE160)	50	5250	13.71	15.00	No	
5.3 (5.25~5.35)	802.11a	52	5260	15.41	16.00	No
		60	5300	14.80	16.00	No
		64	5320	14.85	16.00	No
	802.11n(HT20)	52	5260	15.53	16.00	No
		60	5300	15.15	16.00	No
		64	5320	15.41	16.00	No
	802.11n(HT40)	54	5270	14.85	16.00	No
		62	5310	15.06	16.00	No
	802.11ac(VHT20)	52	5260	15.74	16.00	No
		60	5300	15.69	16.00	No
		64	5320	15.40	16.00	No
	802.11ac(VHT40)	54	5270	15.17	16.00	No
62		5310	15.29	16.00	No	
802.11ac(VHT80)	58	5290	15.45	16.00	Yes	

	802.11ax(HE20)	52	5260	15.24	16.00	No	
		60	5300	15.48	16.00	No	
		64	5320	15.04	16.00	No	
	802.11ax(HE40)	54	5270	15.13	16.00	No	
		62	5310	15.07	16.00	No	
	802.11ax(HE80)	58	5290	15.40	16.00	No	
	5.6 (5.47~5.725)	802.11a	100	5500	15.30	16.00	No
			116	5580	15.59	16.00	No
			140	5700	13.38	15.00	No
802.11n(HT20)		100	5500	15.07	16.00	No	
		116	5580	15.68	16.00	No	
		140	5700	13.21	15.00	No	
802.11n(HT40)		102	5510	15.35	16.00	No	
		118	5590	14.96	16.00	No	
		134	5670	15.07	16.00	No	
802.11ac(VHT20)		100	5500	15.28	16.00	No	
		116	5580	15.51	16.00	No	
		140	5700	12.65	14.00	No	
802.11ac(VHT40)		102	5510	14.78	16.00	No	
		118	5590	15.32	16.00	No	
		134	5670	15.57	16.00	No	
802.11ac(VHT80)		106	5530	15.71	16.00	Yes	
		122	5610	15.46	16.00	Yes	
802.11ac(VHT160)		114	5570	13.36	15.00	No	
802.11ax(HE20)		100	5500	15.74	16.00	No	
		116	5580	14.95	16.00	No	
		140	5700	13.45	15.00	No	
802.11ax(HE40)		102	5510	15.40	16.00	No	
		118	5590	15.07	16.00	No	
		134	5670	15.44	16.00	No	
802.11ax(HE80)		106	5530	15.19	16.00	No	
		122	5610	15.49	16.00	No	
802.11ax(HE160)		114	5570	13.24	15.00	No	
5.8 (5.725~5.85)	802.11a	149	5745	15.19	16.00	No	
		157	5785	15.58	16.00	No	
		165	5825	15.04	16.00	No	
	802.11n(HT20)	149	5745	15.44	16.00	No	
		157	5785	14.84	16.00	No	
		165	5825	15.18	16.00	No	

	802.11n(HT40)	151	5755	14.87	16.00	No
		159	5795	15.08	16.00	No
	802.11ac(VHT20)	149	5745	15.45	16.00	No
		157	5785	15.17	16.00	No
		165	5825	15.70	16.00	No
	802.11ac(VHT40)	151	5755	15.03	16.00	No
		159	5795	14.81	16.00	No
	802.11ac(VHT80)	155	5775	15.35	16.00	Yes
	802.11ax(HE20)	149	5745	15.25	16.00	No
		157	5785	14.87	16.00	No
		165	5825	15.36	16.00	No
	802.11ax(HE40)	151	5755	15.42	16.00	No
		159	5795	15.13	16.00	No
	802.11ax(HE80)	155	5775	15.25	16.00	No

Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.

Band (GHz)	Mode	Channel	Freq. (MHz)	RU Config	Average Power (dBm)	Tune-up Power Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11ax (HE20)	36	5180	26	12.46	13.00	No
				52	12.17	13.00	No
				106	12.75	13.00	No
		44	5220	26	12.89	13.00	No
				52	12.20	13.00	No
				106	12.18	13.00	No
		48	5240	26	12.39	13.00	No
				52	12.20	13.00	No
				106	12.24	13.00	No
	802.11ax (HE40)	38	5190	26	12.20	13.00	No
				52	12.42	13.00	No
				106	12.65	13.00	No
				242	12.61	13.00	No
		46	5230	26	12.39	13.00	No
				52	12.36	13.00	No
				106	12.10	13.00	No
	802.11ax (HE80)	42	5210	26	12.66	13.00	No
				52	12.41	13.00	No

	802.11ax (HE160)	50	5250	106	12.55	13.00	No
				242	11.94	13.00	No
				484	12.29	13.00	No
				26	12.35	13.00	No
				52	12.78	13.00	No
				106	12.81	13.00	No
				242	12.05	13.00	No
				484	12.23	13.00	No
5.3 (5.25~5.35)	802.11ax (HE20)	52	5260	26	12.45	13.00	No
				52	12.78	13.00	No
				106	12.25	13.00	No
		60	5300	26	12.43	13.00	No
				52	12.88	13.00	No
				106	12.50	13.00	No
	64	5320	26	12.74	13.00	No	
			52	12.40	13.00	No	
			106	12.53	13.00	No	
	802.11ax (HE40)	54	5270	26	12.29	13.00	No
				52	12.79	13.00	No
				106	12.50	13.00	No
		62	5310	242	12.81	13.00	No
				26	12.19	13.00	No
				52	12.67	13.00	No
	802.11ax (HE80)	58	5290	106	12.75	13.00	No
				242	12.41	13.00	No
				26	12.54	13.00	No
				52	12.29	13.00	No
				106	12.34	13.00	No
242				12.61	13.00	No	
5.6 (5.47~5.725)	802.11ax (HE20)	100	5500	484	12.63	13.00	No
				26	12.12	13.00	No
				52	11.94	13.00	No
		116	5580	106	12.56	13.00	No
				26	12.74	13.00	No
				52	12.00	13.00	No
		140	5700	106	12.05	13.00	No
				26	12.48	13.00	No
				52	12.44	13.00	No

	802.11ax (HE40)	102	5510	106	12.74	13.00	No		
				26	12.70	13.00	No		
				52	12.45	13.00	No		
				106	12.10	13.00	No		
						242	12.55	13.00	No
			118	5590	26	12.07	13.00	No	
					52	12.17	13.00	No	
					106	12.14	13.00	No	
					242	12.91	13.00	No	
			134	5670	26	12.17	13.00	No	
					52	12.50	13.00	No	
					106	12.36	13.00	No	
		242			12.30	13.00	No		
		802.11ax (HE80)	106	5530	26	12.30	13.00	No	
					52	12.31	13.00	No	
					106	12.47	13.00	No	
					242	12.29	13.00	No	
						484	12.16	13.00	No
			122	5610	26	12.57	13.00	No	
					52	12.60	13.00	No	
					106	12.34	13.00	No	
		242			12.64	13.00	No		
					484	12.21	13.00	No	
		802.11ax (HE160)	114	5570	26	12.50	13.00	No	
					52	12.06	13.00	No	
					106	12.49	13.00	No	
					242	12.20	13.00	No	
					484	12.10	13.00	No	
	996				12.40	13.00	No		
5.8 (5.725~5.85)	802.11ax (HE20)	149	5745	26	12.16	13.00	No		
					52	12.08	13.00	No	
					106	11.88	13.00	No	
			157	5785	26	12.34	13.00	No	
					52	12.06	13.00	No	
					106	12.04	13.00	No	
			165	5825	26	12.59	13.00	No	
					52	12.19	13.00	No	
					106	12.80	13.00	No	
			802.11ax	151	5755	26	12.39	13.00	No

	(HE40)			52	12.54	13.00	No
				106	12.49	13.00	No
				242	12.48	13.00	No
		159	5795	26	12.31	13.00	No
				52	12.26	13.00	No
				106	12.28	13.00	No
	802.11ax (HE80)	155	5775	242	12.65	13.00	No
				26	12.60	13.00	No
				52	12.65	13.00	No
				106	12.70	13.00	No
				484	12.35	13.00	No

8.1.6 5G WIFI (MIMO)

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Power Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	15.40	16.00	No
		44	5220	15.46	16.00	No
		48	5240	15.65	16.00	No
	802.11n(HT20)	36	5180	14.93	16.00	No
		44	5220	15.35	16.00	No
		48	5240	15.90	16.00	No
	802.11n(HT40)	38	5190	15.33	16.00	No
		46	5230	15.46	16.00	No
	802.11ac(VHT20)	36	5180	15.36	16.00	No
		44	5220	15.98	16.00	No
		48	5240	15.70	16.00	No
	802.11ac(VHT40)	38	5190	15.76	16.00	No
		46	5230	15.61	16.00	No
	802.11ac(VHT80)	42	5210	15.33	16.00	No
	802.11ac(VHT160)	50	5250	13.59	15.00	No
	802.11ax(HE20)	36	5180	15.43	16.00	No
		44	5220	15.12	16.00	No
		48	5240	15.63	16.00	No
802.11ax(HE40)	38	5190	15.37	16.00	No	
	46	5230	15.24	16.00	No	
802.11ax(HE80)	42	5210	15.02	16.00	No	
802.11ax(HE160)	50	5250	14.12	15.00	No	
5.3 (5.25~5.35)	802.11a	52	5260	15.38	16.00	No
		60	5300	15.17	16.00	No
		64	5320	15.01	16.00	No
	802.11n(HT20)	52	5260	15.24	16.00	No
		60	5300	15.32	16.00	No
		64	5320	15.57	16.00	No
	802.11n(HT40)	54	5270	15.32	16.00	No
		62	5310	14.97	16.00	No
	802.11ac(VHT20)	52	5260	15.36	16.00	No
		60	5300	15.55	16.00	No
		64	5320	15.61	16.00	No
	802.11ac(VHT40)	54	5270	15.13	16.00	No
		62	5310	14.96	16.00	No
	802.11ac(VHT80)	58	5290	15.76	16.00	No

	802.11ax(HE20)	52	5260	15.25	16.00	No	
		60	5300	14.90	16.00	No	
		64	5320	15.55	16.00	No	
	802.11ax(HE40)	54	5270	15.14	16.00	No	
		62	5310	15.68	16.00	No	
	802.11ax(HE80)	58	5290	15.52	16.00	No	
	5.6 (5.47~5.725)	802.11a	100	5500	15.26	16.00	No
			116	5580	15.16	16.00	No
			140	5700	14.14	15.00	No
802.11n(HT20)		100	5500	15.44	16.00	No	
		116	5580	15.74	16.00	No	
		140	5700	13.37	15.00	No	
802.11n(HT40)		102	5510	15.16	16.00	No	
		118	5590	15.13	16.00	No	
		134	5670	15.34	16.00	No	
802.11ac(VHT20)		100	5500	15.29	16.00	No	
		116	5580	15.37	16.00	No	
		140	5700	12.87	14.00	No	
802.11ac(VHT40)		102	5510	15.45	16.00	No	
		118	5590	15.28	16.00	No	
		134	5670	15.09	16.00	No	
802.11ac(VHT80)		106	5530	15.32	16.00	No	
		122	5610	15.08	16.00	No	
802.11ac(VHT160)		114	5570	13.45	15.00	No	
802.11ax(HE20)		100	5500	15.51	16.00	No	
		116	5580	15.71	16.00	No	
		140	5700	13.31	15.00	No	
802.11ax(HE40)		102	5510	15.36	16.00	No	
		118	5590	15.44	16.00	No	
		134	5670	15.25	16.00	No	
802.11ax(HE80)		106	5530	15.70	16.00	No	
		122	5610	15.35	16.00	No	
802.11ax(HE160)		114	5570	13.43	15.00	No	
5.8 (5.725~5.85)		802.11a	149	5745	15.75	16.00	No
			157	5785	15.74	16.00	No
			165	5825	15.45	16.00	No
	802.11n(HT20)	149	5745	15.36	16.00	No	
		157	5785	15.11	16.00	No	
		165	5825	14.85	16.00	No	

	802.11n(HT40)	151	5755	15.24	16.00	No
		159	5795	15.24	16.00	No
	802.11ac(VHT20)	149	5745	15.72	16.00	No
		157	5785	15.99	16.00	No
		165	5825	15.67	16.00	No
	802.11ac(VHT40)	151	5755	14.84	16.00	No
		159	5795	15.08	16.00	No
	802.11ac(VHT80)	155	5775	15.41	16.00	No
	802.11ax(HE20)	149	5745	15.67	16.00	No
		157	5785	15.24	16.00	No
		165	5825	15.23	16.00	No
	802.11ax(HE40)	151	5755	15.29	16.00	No
		159	5795	15.74	16.00	No
	802.11ax(HE80)	155	5775	15.41	16.00	No

Band (GHz)	Mode	Channel	Freq. (MHz)	RU Config	Average Power (dBm)	Tune-up Power Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11ax (HE20)	36	5180	26	12.13	13.00	No
				52	11.95	13.00	No
				106	12.11	13.00	No
		44	5220	26	12.56	13.00	No
				52	12.13	13.00	No
				106	12.12	13.00	No
		48	5240	26	12.35	13.00	No
				52	12.02	13.00	No
				106	12.01	13.00	No
	802.11ax (HE40)	38	5190	26	11.92	13.00	No
				52	12.39	13.00	No
				106	12.38	13.00	No
				242	12.32	13.00	No
		46	5230	26	11.95	13.00	No
				52	12.03	13.00	No
				106	11.97	13.00	No
				242	12.66	13.00	No
	802.11ax (HE80)	42	5210	26	12.37	13.00	No
				52	12.53	13.00	No
				106	12.16	13.00	No
				242	11.78	13.00	No
				484	12.15	13.00	No
	802.11ax	50	5250	26	12.36	13.00	No

	(HE160)			52	12.39	13.00	No
				106	12.77	13.00	No
				242	11.91	13.00	No
				484	12.20	13.00	No
				996	12.16	13.00	No
5.3 (5.25~5.35)	802.11ax (HE20)	52	5260	26	11.81	13.00	No
				52	12.39	13.00	No
				106	12.08	13.00	No
		60	5300	26	12.24	13.00	No
				52	12.34	13.00	No
				106	12.38	13.00	No
	64	5320	26	12.35	13.00	No	
			52	12.27	13.00	No	
			106	12.19	13.00	No	
	802.11ax (HE40)	54	5270	26	12.16	13.00	No
				52	12.65	13.00	No
				106	12.16	13.00	No
		62	5310	242	12.72	13.00	No
				26	12.36	13.00	No
				52	12.13	13.00	No
	802.11ax (HE80)	58	5290	106	12.56	13.00	No
				242	12.22	13.00	No
				26	12.10	13.00	No
				52	12.20	13.00	No
				106	12.20	13.00	No
5.6 (5.47~5.725)	802.11ax (HE20)	100	5500	242	12.12	13.00	No
				484	12.29	13.00	No
				26	11.89	13.00	No
		116	5580	52	11.75	13.00	No
				106	12.37	13.00	No
				26	12.45	13.00	No
	140	5700	52	11.96	13.00	No	
			106	12.07	13.00	No	
			26	12.10	13.00	No	
	802.11ax (HE40)	102	5510	26	12.10	13.00	No
				52	12.45	13.00	No
				106	12.20	13.00	No
				26	12.46	13.00	No
				52	12.11	13.00	No
				106	11.86	13.00	No

		118	5590	242	12.36	13.00	No		
				26	11.63	13.00	No		
				52	11.78	13.00	No		
				106	12.11	13.00	No		
						242	12.52	13.00	No
		134	5670	26	12.08	13.00	No		
				52	12.31	13.00	No		
				106	12.27	13.00	No		
	242			12.02	13.00	No			
	802.11ax (HE80)	106	5530	26	12.16	13.00	No		
				52	12.22	13.00	No		
				106	12.03	13.00	No		
				242	11.91	13.00	No		
						484	11.93	13.00	No
		122	5610	26	12.33	13.00	No		
				52	12.46	13.00	No		
				106	12.00	13.00	No		
	242			12.60	13.00	No			
					484	11.88	13.00	No	
	802.11ax (HE160)	114	5570	26	12.36	13.00	No		
52				11.92	13.00	No			
106				12.35	13.00	No			
242				12.06	13.00	No			
484				12.12	13.00	No			
996				12.06	13.00	No			
5.8 (5.725~5.85)	802.11ax (HE20)	149	5745	26	12.04	13.00	No		
				52	11.85	13.00	No		
				106	11.79	13.00	No		
						26	12.20	13.00	No
		157	5785	52	12.08	13.00	No		
				106	11.76	13.00	No		
	26			12.00	13.00	No			
	165	5825	52	12.00	13.00	No			
			106	12.37	13.00	No			
			26	12.10	13.00	No			
	802.11ax (HE40)	151	5755	52	12.41	13.00	No		
				106	12.00	13.00	No		
242				12.04	13.00	No			
26				12.22	13.00	No			
				159	5795	26	12.22	13.00	No

				52	12.13	13.00	No
				106	12.15	13.00	No
				242	12.31	13.00	No
	802.11ax (HE80)	155	5775	26	12.51	13.00	No
				52	12.51	13.00	No
				106	12.47	13.00	No
				242	12.20	13.00	No
				484	12.02	13.00	No

8.1.7 6G WIFI (Main Antenna)

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Power Limit (dBm)	SAR Test Require.
6 (5.925~6.425)	802.11ax(HE20)	1	5955	7.66	8.00	No
		45	6175	7.46	8.00	No
		93	6415	7.26	8.00	No
	802.11ax(HE40)	3	5965	9.36	10.00	No
		43	6165	9.16	10.00	No
		91	6405	9.26	10.00	No
	802.11ax(HE80)	7	5985	9.56	10.00	No
		39	6145	9.76	10.00	No
		87	6385	9.66	10.00	No
	802.11ax(HE160)	15	6025	9.06	10.00	Yes
47		6185	8.86	10.00	Yes	
79		6345	9.06	10.00	Yes	
6 (6.425~6.525)	802.11ax(HE20)	97	6435	8.08	9.00	No
		105	6475	7.78	9.00	No
		113	6515	8.08	9.00	No
	802.11ax(HE40)	99	6445	10.38	11.00	No
		107	6485	10.18	11.00	No
		115	6525	10.08	11.00	No
	802.11ax(HE80)	103	6465	10.58	11.00	No
		119	6545	10.28	11.00	No
802.11ax(HE160)	111	6505	10.58	11.00	Yes	
6 (6.425~6.875)	802.11ax(HE20)	117	6535	7.10	8.00	No
		153	6715	6.60	8.00	No
		181	6855	6.90	8.00	No
	802.11ax(HE40)	123	6565	9.90	10.00	No
		155	6725	9.90	10.00	No
		179	6845	9.30	10.00	No
	802.11ax(HE80)	135	6625	9.60	10.00	No
		151	6705	9.30	10.00	No
		167	6785	9.70	10.00	No
	802.11ax(HE160)	143	6665	9.40	10.00	Yes
		175	6825	9.90	10.00	Yes
6 (6.875~7.125)	802.11ax(HE20)	185	6875	6.75	8.00	No
		213	7015	6.35	8.00	No
		229	7095	6.95	8.00	No
		233	7115	1.65	2.00	No

	802.11ax(HE40)	187	6885	10.15	11.00	No
		211	7005	9.95	11.00	No
		227	7085	9.85	11.00	No
	802.11ax(HE80)	183	6865	10.15	11.00	No
		199	6945	9.75	11.00	No
		215	7025	9.35	11.00	No
	802.11ax(HE160)	207	6985	10.15	11.00	Yes

Band (GHz)	Mode	Channel	Freq. (MHz)	RU Config	Average Power (dBm)	Tune-up Power Limit (dBm)	SAR Test Require.	
6 (5.925~6.425)	802.11ax (HE20)	1	5955	26	-1.16	0.00	No	
				52	-1.33	0.00	No	
				106	-1.20	0.00	No	
		45	6175	26	-1.51	0.00	No	
				52	-1.18	0.00	No	
				106	-1.07	0.00	No	
		93	6415	26	-1.74	0.00	No	
				52	-1.30	0.00	No	
				106	-1.22	0.00	No	
	802.11ax (HE40)	3	5965	26	-1.01	0.00	No	
				52	-0.91	0.00	No	
				106	-0.75	0.00	No	
				242	-0.57	0.00	No	
		43	6165	26	-1.21	0.00	No	
				52	-0.99	0.00	No	
				106	-0.93	0.00	No	
				242	-0.90	0.00	No	
		91	6405	26	-1.21	0.00	No	
				52	-1.03	0.00	No	
				106	-0.93	0.00	No	
				242	-0.88	0.00	No	
	802.11ax (HE80)	7	5985	26	-1.24	0.00	No	
				52	-1.05	0.00	No	
				106	-0.90	0.00	No	
				242	-0.72	0.00	No	
				484	-0.31	0.00	No	
		39	6145	26	-1.39	0.00	No	
				52	-1.24	0.00	No	
				106	-1.16	0.00	No	
					242	-1.12	0.00	No

		87	6385	484	-1.00	0.00	No
				26	-1.42	0.00	No
				52	-1.24	0.00	No
				106	-1.14	0.00	No
				242	-1.07	0.00	No
				484	-0.84	0.00	No
	802.11ax (HE160)	15	6025	26	-1.38	0.00	No
				52	-1.20	0.00	No
				106	-1.01	0.00	No
				242	-0.73	0.00	No
				484	-0.11	0.00	No
				996	0.40	1.00	No
		47	6185	26	-0.73	0.00	No
				52	-0.56	0.00	No
				106	-0.43	0.00	No
				242	-0.27	0.00	No
				484	0.18	1.00	No
				996	0.51	1.00	No
79		6345	26	-1.41	0.00	No	
			52	-1.22	0.00	No	
			106	-1.08	0.00	No	
			242	-1.06	0.00	No	
			484	-0.60	0.00	No	
			996	-0.35	0.00	No	
6 (6.425-6.525)	802.11ax (HE20)	97	6435	26	-1.77	0.00	No
				52	-1.53	0.00	No
				106	-1.39	0.00	No
		105	6475	26	-1.94	0.00	No
				52	-1.69	0.00	No
				106	-1.56	0.00	No
	113	6515	26	-1.82	0.00	No	
			52	-1.61	0.00	No	
			106	-1.46	0.00	No	
	802.11ax (HE40)	99	6445	26	-1.86	0.00	No
				52	-1.67	0.00	No
				106	-1.58	0.00	No
				242	-1.52	0.00	No
		107	6485	26	-2.06	-1.00	No
				52	-1.89	0.00	No

		115	6525	106	-1.77	0.00	No
				242	-1.65	0.00	No
				26	-0.60	0.00	No
				52	-0.45	0.00	No
				106	-0.37	0.00	No
				242	-0.30	0.00	No
	802.11ax (HE80)	103	6465	26	-1.93	0.00	No
				52	-1.75	0.00	No
				106	-1.64	0.00	No
				242	-1.53	0.00	No
		119	6545	484	-1.29	0.00	No
				26	-1.58	0.00	No
				52	-1.42	0.00	No
				106	-1.31	0.00	No
	802.11ax (HE160)	111	6505	242	-1.23	0.00	No
				484	-1.00	0.00	No
				26	-2.98	-2.00	No
				52	-2.80	-2.00	No
106				-2.63	-2.00	No	
242				-2.44	-2.00	No	
6 (6.425-6.875)	802.11ax (HE20)	117	6535	484	-2.02	-2.00	No
				996	-1.30	0.00	No
				26	-1.19	0.00	No
		153	6715	52	-0.97	0.00	No
				106	-0.86	0.00	No
				26	-1.64	0.00	No
				52	-1.41	0.00	No
				106	-1.30	0.00	No
				26	-1.49	0.00	No
	181	6855	52	-1.28	0.00	No	
			106	-1.15	0.00	No	
			26	-1.06	0.00	No	
	802.11ax (HE40)	123	6565	52	-0.90	0.00	No
				106	-0.81	0.00	No
				242	-0.74	0.00	No
				26	-1.60	0.00	No
		155	6725	52	-1.43	0.00	No
				106	-1.33	0.00	No
242				-1.25	0.00	No	
26				-1.25	0.00	No	

		179	6845	26	-1.14	0.00	No
				52	-0.98	0.00	No
				106	-0.89	0.00	No
				242	-0.81	0.00	No
	802.11ax (HE80)	135	6625	26	-1.16	0.00	No
				52	-0.98	0.00	No
				106	-0.83	0.00	No
				242	-0.71	0.00	No
				484	-0.39	0.00	No
		151	6705	26	-1.59	0.00	No
				52	-1.46	0.00	No
				106	-1.35	0.00	No
				242	-1.26	0.00	No
				484	-0.99	0.00	No
		167	6785	26	-1.08	0.00	No
				52	-0.92	0.00	No
	106			-0.81	0.00	No	
	242			-0.73	0.00	No	
	484			-0.41	0.00	No	
	802.11ax (HE160)	143	6665	26	-1.51	0.00	No
52				-1.35	0.00	No	
106				-1.17	0.00	No	
242				-0.95	0.00	No	
484				-0.52	0.00	No	
996				-0.20	0.00	No	
175		6825	26	-4.22	-3.00	No	
			52	-4.04	-3.00	No	
			106	-3.89	-3.00	No	
			242	-3.69	-3.00	No	
			484	-3.15	-3.00	No	
			996	-2.83	-2.00	No	
6 (6.875~7.125)	185	6875	26	-2.71	-2.00	No	
			52	-2.46	-2.00	No	
			106	-2.34	-2.00	No	
	213	6995	26	-1.06	0.00	No	
			52	-0.81	0.00	No	
			106	-0.67	0.00	No	
	229	7095	26	-0.50	0.00	No	
			52	-0.25	0.00	No	

		233	7115	106	-0.10	0.00	No
				26	-1.71	0.00	No
				52	-1.45	0.00	No
				106	-1.33	0.00	No
	802.11ax (HE40)	187	6885	26	-2.63	-2.00	No
				52	-2.48	-2.00	No
				106	-2.38	-2.00	No
				242	-2.32	-2.00	No
		211	7005	26	-1.01	0.00	No
				52	-0.84	0.00	No
				106	-0.74	0.00	No
				242	-0.69	0.00	No
		227	7085	26	-0.41	0.00	No
				52	-0.28	0.00	No
				106	-0.13	0.00	No
				242	-0.03	0.00	No
	802.11ax (HE80)	183	6865	26	-1.04	0.00	No
				52	-0.88	0.00	No
				106	-0.78	0.00	No
				242	-0.67	0.00	No
				484	-0.38	0.00	No
		199	6945	26	-1.20	0.00	No
				52	-1.04	0.00	No
				106	-0.92	0.00	No
				242	-0.82	0.00	No
				484	-0.55	0.00	No
		215	7025	26	-1.32	0.00	No
				52	-0.67	0.00	No
106	-0.56			0.00	No		
242	-0.40			0.00	No		
484	-0.08			0.00	No		
802.11ax (HE160)	207	6985	26	-2.53	-2.00	No	
			52	-2.21	-2.00	No	
			106	-2.05	-2.00	No	
			242	-1.83	0.00	No	
			484	-1.36	0.00	No	
			996	-1.12	0.00	No	

8.1.8 6G WIFI (Aux. Antenna)

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Power Limit (dBm)	SAR Test Require.
6 (5.925~6.425)	802.11ax(HE20)	1	5955	7.30	8.00	No
		45	6175	7.60	8.00	No
		93	6415	7.40	8.00	No
	802.11ax(HE40)	3	5965	9.20	10.00	No
		43	6165	9.50	10.00	No
		91	6405	9.40	10.00	No
	802.11ax(HE80)	7	5985	9.30	10.00	No
		39	6145	9.50	10.00	No
		87	6385	9.40	10.00	No
	802.11ax(HE160)	15	6025	9.40	10.00	Yes
47		6185	9.50	10.00	Yes	
79		6345	9.30	10.00	Yes	
6 (6.425~6.525)	802.11ax(HE20)	97	6435	7.80	9.00	No
		105	6475	7.20	9.00	No
		113	6515	7.30	9.00	No
	802.11ax(HE40)	99	6445	10.30	11.00	No
		107	6485	9.60	11.00	No
		115	6525	9.40	11.00	No
	802.11ax(HE80)	103	6465	9.70	11.00	No
		119	6545	9.90	11.00	No
802.11ax(HE160)	111	6505	10.30	11.00	Yes	
6 (6.425~6.875)	802.11ax(HE20)	117	6535	6.80	8.00	No
		153	6715	6.80	8.00	No
		181	6855	6.90	8.00	No
	802.11ax(HE40)	123	6565	9.30	10.00	No
		155	6725	9.70	10.00	No
		179	6845	9.30	10.00	No
	802.11ax(HE80)	135	6625	9.60	10.00	No
		151	6705	9.21	10.00	No
		167	6785	9.60	10.00	No
	802.11ax(HE160)	143	6665	9.60	10.00	Yes
		175	6825	9.70	10.00	Yes
6 (6.875~7.125)	802.11ax(HE20)	185	6875	6.80	8.00	No
		213	7015	6.10	8.00	No
		229	7095	6.60	8.00	No
		233	7115	1.80	2.00	No

	802.11ax(HE40)	187	6885	9.90	11.00	No
		211	7005	9.60	11.00	No
		227	7085	9.40	11.00	No
	802.11ax(HE80)	183	6865	9.60	11.00	No
		199	6945	9.50	11.00	No
		215	7025	9.23	11.00	No
	802.11ax(HE160)	207	6985	9.90	11.00	Yes

Band (GHz)	Mode	Channel	Freq. (MHz)	RU Config	Average Power (dBm)	Tune-up Power Limit (dBm)	SAR Test Require.
6 (5.925~6.425)	802.11ax (HE20)	1	5955	26	-1.12	0.00	No
				52	-1.59	0.00	No
				106	-1.06	0.00	No
		45	6175	26	-1.57	0.00	No
				52	-1.24	0.00	No
				106	-1.23	0.00	No
		93	6415	26	-2.10	-1.00	No
				52	-1.26	0.00	No
				106	-1.28	0.00	No
	802.11ax (HE40)	3	5965	26	-0.77	0.00	No
				52	-0.97	0.00	No
				106	-0.81	0.00	No
				242	-0.73	0.00	No
		43	6165	26	-1.47	0.00	No
				52	-0.75	0.00	No
				106	-1.09	0.00	No
				242	-1.16	0.00	No
		91	6405	26	-1.27	0.00	No
				52	-0.99	0.00	No
				106	-0.79	0.00	No
				242	-0.64	0.00	No
	802.11ax (HE80)	7	5985	26	-1.20	0.00	No
				52	-1.01	0.00	No
				106	-1.16	0.00	No
				242	-0.48	0.00	No
		39	6145	484	-0.27	0.00	No
				26	-1.35	0.00	No
				52	-1.60	0.00	No
106				-1.32	0.00	No	
				242	-1.48	0.00	No

		87	6385	484	-0.96	0.00	No
				26	-1.38	0.00	No
				52	-1.00	0.00	No
				106	-1.20	0.00	No
				242	-1.43	0.00	No
				484	-1.00	0.00	No
	802.11ax (HE160)	15	6025	26	-1.54	0.00	No
				52	-1.36	0.00	No
				106	-0.77	0.00	No
				242	-0.99	0.00	No
				484	-0.27	0.00	No
				996	0.24	1.00	No
		47	6185	26	-0.89	0.00	No
				52	-0.32	0.00	No
				106	-0.49	0.00	No
				242	-0.63	0.00	No
				484	0.42	1.00	No
				996	0.75	1.00	No
		79	6345	26	-1.27	0.00	No
				52	-1.58	0.00	No
				106	-1.24	0.00	No
242	-1.22			0.00	No		
484	-0.66			0.00	No		
996	-0.71			0.00	No		
6 (6.425-6.525)	802.11ax (HE20)	97	6435	26	-1.95	0.00	No
				52	-1.91	0.00	No
				106	-1.97	0.00	No
		105	6475	26	-2.22	-2.00	No
				52	-1.97	0.00	No
				106	-1.84	0.00	No
	113	6515	26	-2.50	-2.00	No	
			52	-2.39	-2.00	No	
			106	-1.64	0.00	No	
	802.11ax (HE40)	99	6445	26	-2.64	-2.00	No
				52	-2.05	-2.00	No
				106	-2.26	-2.00	No
				242	-1.80	0.00	No
		107	6485	26	-2.34	-2.00	No
				52	-2.07	-2.00	No

		115	6525	106	-2.45	-2.00	No
				242	-2.03	-2.00	No
				26	-1.18	0.00	No
				52	-0.93	0.00	No
				106	-0.75	0.00	No
				242	-1.08	0.00	No
	802.11ax (HE80)	103	6465	26	-2.11	-2.00	No
				52	-2.03	-2.00	No
				106	-2.32	-2.00	No
				242	-2.31	-2.00	No
				484	-1.67	0.00	No
				26	-1.76	0.00	No
	802.11ax (HE160)	111	6505	52	-2.00	-2.00	No
				106	-2.09	-2.00	No
				242	-1.41	0.00	No
				484	-1.58	0.00	No
				26	-3.56	-2.00	No
				52	-2.98	-2.00	No
6 (6.425-6.875)	802.11ax (HE20)	117	6535	106	-3.11	-2.00	No
				242	-2.72	-2.00	No
				484	-2.50	-2.00	No
		153	6715	996	-1.98	0.00	No
				26	-0.99	0.00	No
				52	-1.17	0.00	No
	181	6855	106	-1.26	0.00	No	
			26	-1.54	0.00	No	
			52	-1.81	0.00	No	
	802.11ax (HE40)	123	6565	106	-1.60	0.00	No
				26	-1.29	0.00	No
				52	-1.38	0.00	No
		155	6725	106	-1.05	0.00	No
				26	-1.16	0.00	No
				52	-0.80	0.00	No
	242	-1.04	0.00	No			
	26	-1.80	0.00	No			
	52	-1.33	0.00	No			
106	-1.13	0.00	No				
242	-1.15	0.00	No				

		179	6845	26	-1.44	0.00	No	
				52	-1.38	0.00	No	
				106	-0.69	0.00	No	
				242	-1.11	0.00	No	
	802.11ax (HE80)	135	6625	26	-1.56	0.00	No	
				52	-1.38	0.00	No	
				106	-1.03	0.00	No	
				242	-0.61	0.00	No	
				484	-0.19	0.00	No	
		151	6705	26	-1.99	0.00	No	
				52	-1.56	0.00	No	
				106	-1.65	0.00	No	
				242	-1.36	0.00	No	
		167	6785	484	-1.19	0.00	No	
				26	-1.08	0.00	No	
				52	-0.92	0.00	No	
				106	-0.81	0.00	No	
		802.11ax (HE160)	143	6665	242	-0.53	0.00	No
					484	-0.61	0.00	No
					26	-1.41	0.00	No
52	-1.55				0.00	No		
106	-0.97				0.00	No		
175	6825		242	-0.95	0.00	No		
			484	-0.82	0.00	No		
			996	-0.50	0.00	No		
			26	-4.62	-3.00	No		
			52	-4.34	-3.00	No		
6 (6.875~7.125)	185	6875	106	-3.69	-3.00	No		
			242	-3.49	-3.00	No		
			484	-3.55	-3.00	No		
	213	6995	996	-2.83	-2.00	No		
			26	-1.51	0.00	No		
			52	-0.96	0.00	No		
	229	7095	106	-1.12	0.00	No		
			26	-0.95	0.00	No		
					52	-0.20	0.00	No

		233	7115	106	-0.35	0.00	No
				26	-2.06	-2.00	No
				52	-1.90	0.00	No
				106	-1.68	0.00	No
	802.11ax (HE40)	187	6885	26	-2.88	-2.00	No
				52	-3.03	-2.00	No
				106	-2.73	-2.00	No
				242	-2.27	-2.00	No
		211	7005	26	-0.96	0.00	No
				52	-1.39	0.00	No
				106	-0.89	0.00	No
				242	-0.64	0.00	No
		227	7085	26	-0.36	0.00	No
				52	-0.43	0.00	No
				106	-0.58	0.00	No
				242	-0.08	0.00	No
	802.11ax (HE80)	183	6865	26	-1.59	0.00	No
				52	-1.13	0.00	No
				106	-1.23	0.00	No
				242	-1.22	0.00	No
				484	-0.83	0.00	No
		199	6945	26	-1.75	0.00	No
				52	-1.19	0.00	No
				106	-1.47	0.00	No
				242	-1.37	0.00	No
				484	-0.90	0.00	No
		215	7025	26	-1.87	0.00	No
				52	-0.82	0.00	No
	106			-1.01	0.00	No	
	242			-0.55	0.00	No	
484	-0.43			0.00	No		
802.11ax (HE160)	207	6985	26	-2.88	-2.00	No	
			52	-2.66	-2.00	No	
			106	-2.40	-2.00	No	
			242	-1.88	0.00	No	
			484	-1.81	0.00	No	
			996	-1.37	0.00	No	

8.1.9 6G WIFI (MIMO)

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power (dBm)	Tune-up Power Limit (dBm)	SAR Test Require.
6 (5.925~6.425)	802.11ax(HE20)	1	5955	7.14	8.00	No
		45	6175	7.24	8.00	No
		93	6415	6.79	8.00	No
	802.11ax(HE40)	3	5965	9.09	10.00	No
		43	6165	8.84	10.00	No
		91	6405	8.94	10.00	No
	802.11ax(HE80)	7	5985	9.25	10.00	No
		39	6145	9.21	10.00	No
		87	6385	9.24	10.00	No
	802.11ax(HE160)	15	6025	8.80	10.00	No
		47	6185	8.69	10.00	No
		79	6345	8.69	10.00	No
6 (6.425~6.525)	802.11ax(HE20)	97	6435	7.41	9.00	No
		105	6475	7.30	9.00	No
		113	6515	7.38	9.00	No
	802.11ax(HE40)	99	6445	10.00	11.00	No
		107	6485	9.66	11.00	No
		115	6525	9.51	11.00	No
	802.11ax(HE80)	103	6465	9.61	11.00	No
		119	6545	9.60	11.00	No
	802.11ax(HE160)	111	6505	9.95	11.00	No
6 (6.425~6.875)	802.11ax(HE20)	117	6535	6.77	8.00	No
		153	6715	6.11	8.00	No
		181	6855	6.66	8.00	No
	802.11ax(HE40)	123	6565	9.41	10.00	No
		155	6725	9.26	10.00	No
		179	6845	8.91	10.00	No
	802.11ax(HE80)	135	6625	9.26	10.00	No
		151	6705	8.77	10.00	No
		167	6785	9.21	10.00	No
	802.11ax(HE160)	143	6665	9.11	10.00	No
		175	6825	9.27	10.00	No
	6 (6.875~7.125)	802.11ax(HE20)	185	6875	6.09	8.00
213			7015	5.89	7.00	No
229			7095	6.34	8.00	No
233			7115	1.44	2.00	No

	802.11ax(HE40)	187	6885	9.69	11.00	No
		211	7005	9.34	11.00	No
		227	7085	9.24	11.00	No
	802.11ax(HE80)	183	6865	9.25	11.00	No
		199	6945	9.24	11.00	No
		215	7025	8.80	10.00	No
	802.11ax(HE160)	207	6985	9.54	11.00	No

Band (GHz)	Mode	Channel	Freq. (MHz)	RU Config	Average Power (dBm)	Tune-up Power Limit (dBm)	SAR Test Require.
6 (5.925~6.425)	802.11ax (HE20)	1	5955	26	-1.35	0.00	No
				52	-1.31	0.00	No
				106	-1.24	0.00	No
		45	6175	26	-1.49	0.00	No
				52	-1.23	0.00	No
				106	-1.38	0.00	No
		93	6415	26	-1.94	-1.00	No
				52	-1.60	0.00	No
				106	-1.41	0.00	No
	802.11ax (HE40)	3	5965	26	-1.00	0.00	No
				52	-1.09	0.00	No
				106	-1.02	0.00	No
				242	-0.67	0.00	No
		43	6165	26	-1.20	0.00	No
				52	-1.24	0.00	No
				106	-1.26	0.00	No
				242	-1.19	0.00	No
		91	6405	26	-1.29	0.00	No
				52	-1.16	0.00	No
				106	-1.20	0.00	No
				242	-0.93	0.00	No
	802.11ax (HE80)	7	5985	26	-1.57	0.00	No
				52	-1.15	0.00	No
				106	-1.20	0.00	No
				242	-0.96	0.00	No
				484	-0.58	0.00	No
		39	6145	26	-1.62	0.00	No
				52	-1.63	0.00	No
106				-1.33	0.00	No	
				242	-1.46	0.00	No

		87	6385	484	-1.10	0.00	No
				26	-1.77	0.00	No
				52	-1.42	0.00	No
				106	-1.27	0.00	No
				242	-1.08	0.00	No
				484	-1.22	0.00	No
	802.11ax (HE160)	15	6025	26	-1.44	0.00	No
				52	-1.55	0.00	No
				106	-1.65	0.00	No
				242	-0.80	0.00	No
				484	-0.59	0.00	No
				996	-0.41	1.00	No
		47	6185	26	-1.01	0.00	No
				52	-0.87	0.00	No
				106	-0.90	0.00	No
				242	-0.84	0.00	No
				484	-0.52	1.00	No
				996	-0.56	1.00	No
79	6345	26	-1.40	0.00	No		
		52	-1.16	0.00	No		
		106	-1.19	0.00	No		
		242	-1.08	0.00	No		
		484	-0.95	0.00	No		
		996	-0.71	0.00	No		
6 (6.425-6.525)	802.11ax (HE20)	97	6435	26	-2.14	-1.00	No
				52	-1.74	0.00	No
				106	-2.09	-1.00	No
		105	6475	26	-2.52	-2.00	No
				52	-1.98	0.00	No
				106	-1.71	0.00	No
		113	6515	26	-1.86	-1.00	No
				52	-1.77	-1.00	No
				106	-1.99	0.00	No
	802.11ax (HE40)	99	6445	26	-2.38	-2.00	No
				52	-1.75	-1.00	No
				106	-1.77	-1.00	No
				242	-1.94	0.00	No
		107	6485	26	-1.72	-1.00	No
				52	-1.98	-1.00	No

		115	6525	106	-2.07	-1.00	No
				242	-1.61	-1.00	No
				26	-1.00	0.00	No
				52	-1.20	0.00	No
				106	-0.67	0.00	No
				242	-0.57	0.00	No
	802.11ax (HE80)	103	6465	26	-1.80	-1.00	No
				52	-2.24	-2.00	No
				106	-2.12	-2.00	No
				242	-1.69	-1.00	No
		119	6545	484	-2.00	0.00	No
				26	-2.01	-1.00	No
				52	-1.57	-1.00	No
				106	-1.56	-1.00	No
	802.11ax (HE160)	111	6505	242	-1.23	0.00	No
				484	-1.32	0.00	No
				26	-3.67	-2.00	No
				52	-3.36	-2.00	No
106				-2.80	-2.00	No	
242				-2.51	-2.00	No	
6 (6.425-6.875)	802.11ax (HE20)	117	6535	484	-2.39	-2.00	No
				996	-1.94	0.00	No
				26	-1.02	0.00	No
		153	6715	52	-1.11	0.00	No
				106	-1.05	0.00	No
				26	-1.54	0.00	No
				52	-1.32	0.00	No
				106	-1.37	0.00	No
				26	-1.22	0.00	No
	181	6855	52	-1.21	0.00	No	
			106	-1.00	0.00	No	
			26	-1.09	0.00	No	
	802.11ax (HE40)	123	6565	52	-0.97	0.00	No
				106	-1.03	0.00	No
				242	-0.88	0.00	No
				26	-1.61	0.00	No
		155	6725	52	-1.08	0.00	No
				106	-1.09	0.00	No
242				-1.35	0.00	No	
26				-1.09	0.00	No	

		179	6845	26	-1.34	0.00	No
				52	-1.21	0.00	No
				106	-1.22	0.00	No
				242	-0.68	0.00	No
	802.11ax (HE80)	135	6625	26	-1.05	0.00	No
				52	-0.91	0.00	No
				106	-0.79	0.00	No
				242	-0.86	0.00	No
				484	-0.77	0.00	No
		151	6705	26	-1.24	0.00	No
				52	-1.24	0.00	No
				106	-1.19	0.00	No
				242	-1.40	0.00	No
				484	-1.22	0.00	No
		167	6785	26	-0.91	0.00	No
				52	-0.93	0.00	No
	106			-0.83	0.00	No	
	242			-1.08	0.00	No	
	484			-0.91	0.00	No	
	802.11ax (HE160)	143	6665	26	-1.43	0.00	No
52				-1.25	0.00	No	
106				-1.21	0.00	No	
242				-0.99	0.00	No	
484				-1.08	0.00	No	
996				-0.41	0.00	No	
175		6825	26	-4.43	-3.00	No	
			52	-4.24	-3.00	No	
			106	-4.51	-3.00	No	
			242	-4.11	-3.00	No	
			484	-3.30	-3.00	No	
			996	-3.04	-2.00	No	
6 (6.875~7.125)	185	6875	26	-2.85	-2.00	No	
			52	-2.88	-2.00	No	
			106	-2.32	-2.00	No	
	213	6995	26	-1.31	0.00	No	
			52	-1.53	0.00	No	
			106	-0.73	0.00	No	
	229	7095	26	-0.65	0.00	No	
			52	-0.42	0.00	No	

		233	7115	106	-0.29	0.00	No
				26	-1.99	-1.00	No
				52	-1.70	0.00	No
				106	-1.89	0.00	No
	802.11ax (HE40)	187	6885	26	-2.85	-2.00	No
				52	-2.47	-2.00	No
				106	-2.61	-2.00	No
				242	-2.80	-2.00	No
		211	7005	26	-1.22	0.00	No
				52	-0.82	0.00	No
				106	-0.57	0.00	No
				242	-0.84	0.00	No
		227	7085	26	-0.40	0.00	No
				52	-0.57	0.00	No
				106	-0.51	0.00	No
				242	-0.41	0.00	No
	802.11ax (HE80)	183	6865	26	-0.71	0.00	No
				52	-0.54	0.00	No
				106	-0.79	0.00	No
				242	-0.78	0.00	No
				484	-0.73	0.00	No
		199	6945	26	-0.90	0.00	No
				52	-1.05	0.00	No
				106	-0.96	0.00	No
				242	-0.75	0.00	No
				484	-0.67	0.00	No
		215	7025	26	-1.04	0.00	No
				52	-0.78	0.00	No
106	-1.11			0.00	No		
242	-0.85			0.00	No		
484	-0.42			0.00	No		
802.11ax (HE160)	207	6985	26	-2.66	-2.00	No	
			52	-2.64	-2.00	No	
			106	-1.39	-1.00	No	
			242	-2.10	-2.00	No	
			484	-1.82	0.00	No	
			996	-0.85	0.00	No	

8.2 Bluetooth (Aux. Antenna)

Mode	GFSK			π/4-DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
Average Power (dBm)	6.96	6.62	5.59	6.72	6.42	5.41
Tune-Up Limit (dBm)	8.00	8.00	6.00	8.00	8.00	6.00
SAR Test Require	Yes	Yes	Yes	No	No	No
Mode	8-DPSK			/		
Channel	0	39	78	/	/	/
Frequency (MHz)	2402	2441	2480	/	/	/
Average Power (dBm)	6.70	6.40	5.40	/	/	/
Tune-Up Limit (dBm)	8.00	8.00	6.00	/	/	/
SAR Test Require	No	No	No	/	/	/
Mode	BLE-1Mbps			BLE-2Mbps		
Channel	0	19	39	1	19	38
Frequency (MHz)	2402	2440	2480	2404	2440	2478
Average Power (dBm)	7.88	7.25	6.64	7.81	7.25	6.87
Tune-Up Limit (dBm)	8.00	8.00	8.00	8.00	8.00	8.00
SAR Test Require	Yes	Yes	Yes	No	No	No

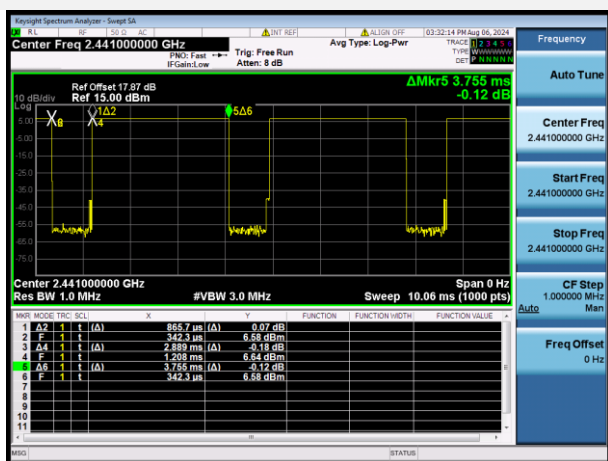
Note: Since Bluetooth BR mode is the maximum output power mode, SAR measurements were performed with test software using DH5 modulation, and SAR measurement is not required for the EDR and LE. When the secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode.

Note: The Bluetooth GFSK duty cycle is 76.94 % as following figure, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the maximum duty cycle is 100%, therefore the actual duty cycle will be scaled up to 100% for Bluetooth reported SAR calculation.

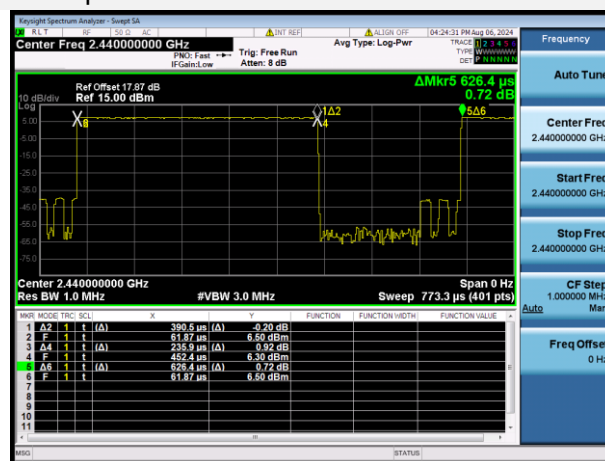
Note: The Bluetooth BLE-1Mbps duty cycle is 62.34 % as following figure, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the maximum duty cycle is 100%, therefore the actual duty cycle will be scaled up to 100% for Bluetooth reported SAR calculation.

Duty Cycle

GFSK

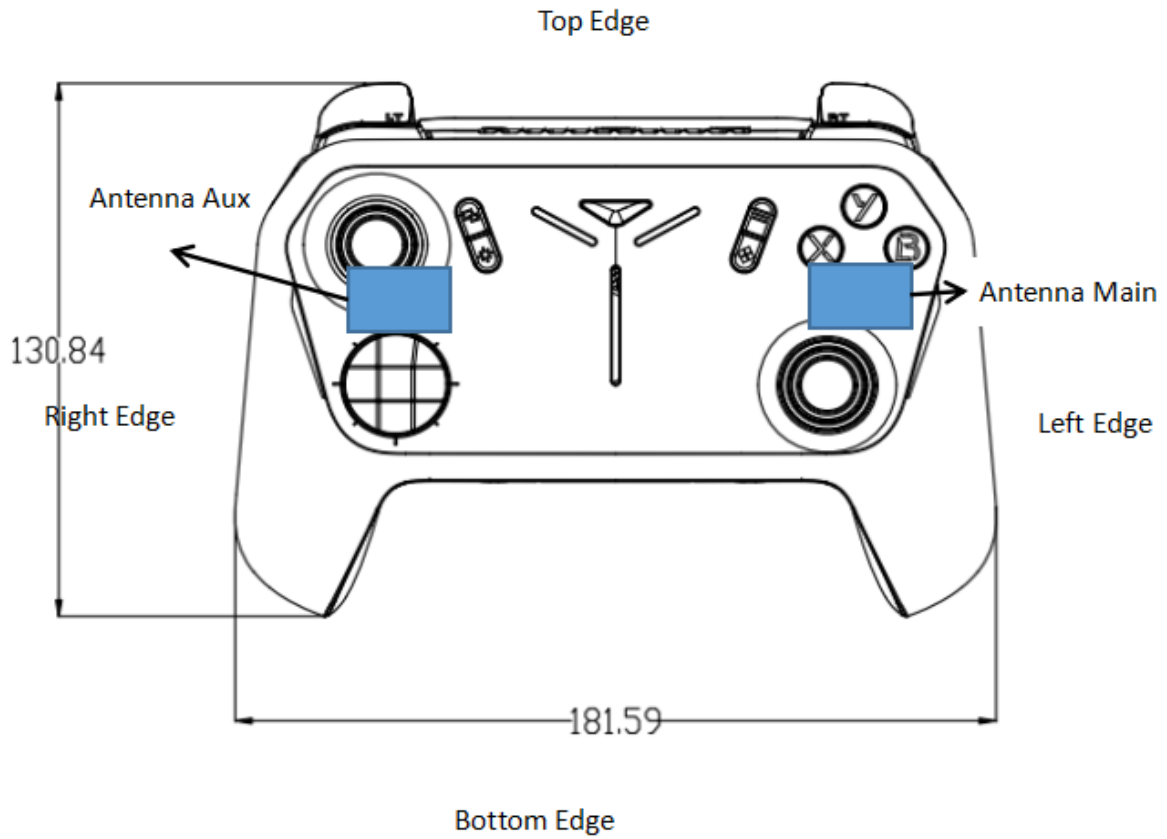


BLE-1Mbps



9 TEST EXCLUSION CONSIDERATION

9.1 Antenna location sketch



Antenna	Support Bands
Antenna Aux.	BT、WLAN 2.4/5/6G
Antenna Main	WLAN 2.4/5/6G

9.2 SAR Test Consideration Table

According with FCC KDB 447498 D04, Appendix B, The SAR-based exemption formula applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold Pth (mW).

This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive). The following table shows the power threshold from 5mm to 50mm.

Power Thresholds (mW)					
Frequency (MHz)	At separation distance of ≤ 5 mm	At separation distance of 10 mm	At separation distance of 15 mm	At separation distance of 20 mm	At separation distance of 25 mm
300	39 mW	65 mW	88 mW	110 mW	129 mW
450	22 mW	44 mW	67 mW	89 mW	112 mW
835	9 mW	25 mW	44 mW	66 mW	90 mW
1900	3 mW	12 mW	26 mW	44 mW	66 mW
2450	3 mW	10 mW	22 mW	38 mW	59 mW
3600	2 mW	8 mW	18 mW	32 mW	49 mW
5800	1 mW	6 mW	14 mW	25 mW	40 mW
Frequency (MHz)	At separation distance of 30 mm	At separation distance of 35 mm	At separation distance of 40 mm	At separation distance of 45 mm	At separation distance of 50 mm
300	148 mW	166 mW	184 mW	201 mW	217 mW
450	135 mW	158 mW	180 mW	203 mW	226 mW
835	116 mW	145 mW	175 mW	207 mW	240 mW
1900	92 mW	122 mW	157 mW	195 mW	236 mW
2450	83 mW	111 mW	143 mW	179 mW	219 mW
3600	71 mW	96 mW	125 mW	158 mW	195 mW
5800	58 mW	80 mW	106 mW	136 mW	169 mW

9.2.1 Laptop mode SAR Test Consideration

This host is a notebook computer, under normal use the RF exposure scenarios are shown in the table below:

RF Exposure Position	RF Exposure Scenarios
Front Side	Limbs
Back Side	Limbs
Left Edge	Limbs
Right Edge	Limbs
Top Edge	Limbs
Bottom Edge	Limbs

Main Antenna Limbs RF exposure scenarios

Test Position Configurations	Mode	DTS	UNII-2A	UNII-2C	UNII-3
Calculated Frequency(MHz)		2462	5320	5710	5825
Front Side	Distance to User (mm)	61			
	Max. Peak Power (dBm)	18.00	16.00	16.00	16.00
	Max. Peak Power (mW)	63.10	39.81	39.81	39.81
	Exclusion Threshold (mW)	798.31	654.47	642.64	639.35
	SAR Test Required	No	No	No	No
Back Side	Distance to User (mm)	5			
	Max. Peak Power (dBm)	18.00	16.00	16.00	16.00
	Max. Peak Power (mW)	63.10	39.81	39.81	39.81
	Exclusion Threshold (mW)	6.83	3.69	3.48	3.43
	SAR Test Required	Yes	Yes	Yes	Yes
Left Edge	Distance to User (mm)	20			
	Max. Peak Power (dBm)	18.00	16.00	16.00	16.00
	Max. Peak Power (mW)	63.10	39.81	39.81	39.81
	Exclusion Threshold (mW)	95.60	65.03	62.77	62.15
	SAR Test Required	No	No	No	No
Right Edge	Distance to User (mm)	160			
	Max. Peak Power (dBm)	18.00	16.00	16.00	16.00
	Max. Peak Power (mW)	63.10	39.81	39.81	39.81
	Exclusion Threshold (mW)	5002.89	4819.55	4803.06	4798.42
	SAR Test Required	No	No	No	No
Top Edge	Distance to User (mm)	70			
	Max. Peak Power (dBm)	18.00	16.00	16.00	16.00
	Max. Peak Power (mW)	63.10	39.81	39.81	39.81
	Exclusion Threshold (mW)	1037.35	870.25	856.32	852.44
	SAR Test Required	No	No	No	No
Bottom Edge	Distance to User (mm)	15			
	Max. Peak Power (dBm)	18.00	16.00	16.00	16.00
	Max. Peak Power (mW)	63.10	39.81	39.81	39.81
	Exclusion Threshold (mW)	55.29	35.85	34.45	34.06
	SAR Test Required	Yes	Yes	Yes	Yes

Aux. Antenna Limbs RF exposure scenarios

Test Position Configurations	Mode	DSS	DTS	UNII-2A	UNII-2C	UNII-3
Calculated Frequency(MHz)		2480	2462	5320	5710	5825
Front Side	Distance to User (mm)	61				
	Max. Peak Power (dBm)	8.00	18.00	16.00	16.00	16.00
	Max. Peak Power (mW)	6.31	63.10	39.81	39.81	39.81
	Exclusion Threshold (mW)	796.82	798.31	654.47	642.64	639.35
	SAR Test Required	No	No	No	No	No
Back Side	Distance to User (mm)	5				
	Max. Peak Power (dBm)	8.00	18.00	16.00	16.00	16.00
	Max. Peak Power (mW)	6.31	63.10	39.81	39.81	39.81
	Exclusion Threshold (mW)	6.79	6.83	3.69	3.48	3.43
	SAR Test Required	Yes	Yes	Yes	Yes	Yes
Left Edge	Distance to User (mm)	160				
	Max. Peak Power (dBm)	8.00	18.00	16.00	16.00	16.00
	Max. Peak Power (mW)	6.31	63.10	39.81	39.81	39.81
	Exclusion Threshold (mW)	5001.12	5002.89	4819.55	4803.06	4798.42
	SAR Test Required	No	No	No	No	No
Right Edge	Distance to User (mm)	20				
	Max. Peak Power (dBm)	8.00	18.00	16.00	16.00	16.00
	Max. Peak Power (mW)	6.31	63.10	39.81	39.81	39.81
	Exclusion Threshold (mW)	95.25	95.60	65.03	62.77	62.15
	SAR Test Required	No	No	No	No	No
Top Edge	Distance to User (mm)	70				
	Max. Peak Power (dBm)	8.00	18.00	16.00	16.00	16.00
	Max. Peak Power (mW)	6.31	63.10	39.81	39.81	39.81
	Exclusion Threshold (mW)	1035.63	1037.35	870.25	856.32	852.44
	SAR Test Required	No	No	No	No	No
Bottom Edge	Distance to User (mm)	15				
	Max. Peak Power (dBm)	8.00	18.00	16.00	16.00	16.00
	Max. Peak Power (mW)	6.31	63.10	39.81	39.81	39.81
	Exclusion Threshold (mW)	55.07	55.29	35.85	34.45	34.06
	SAR Test Required	Yes	Yes	Yes	Yes	Yes

Note:

1. Maximum power is the source-based time-average power and represents the maximum RF output power including tune-up tolerance among production units
2. Per KDB 447498 D04, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
3. Per KDB 447498 D04, standalone SAR test exclusion threshold is applied; If the distance of the antenna to the user is < 5mm, 5mm is used to determine SAR exclusion threshold
4. Per KDB 447498 D04, for separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive), the threshold Pth (mW) is given by Following:

$$P_{th}(mW) = \begin{cases} ERP_{20cm}(d/20cm)^x & d \leq 20cm \\ ERP_{20cm} & 20cm < d \leq 40cm \end{cases}$$

where

$$x = -\log_{10} \left(\frac{60}{ERP_{20cm} \sqrt{f}} \right)$$

- a. f(GHz) is the RF channel transmit frequency in GHz
- b. d is the separation distance (cm), The result is rounded to one decimal place for comparison
- c. ERP_{20cm} are determined by:

$$ERP_{20cm}(mW) = f(x) = \begin{cases} 2040f & 0.3GHz \leq f < 1.5GHz \\ 3060 & 1.5GHz \leq f \leq 6GHz \end{cases}$$

5. Per KDB 248227 D01, choose the highest output power channel to test SAR and determine further SAR exclusion.8. For each frequency band, testing at higher data rates and higher order modulations is not required when the maximum average output power for each of these configurations is less than 1/4dB higher than those measured at the lowest data rate
6. Per KDB 248227 D01 SAR is not required for the following 2.4 GHz OFDM conditions.
 - a. When KDB Publication 447498 D04 SAR test exclusion applies to the OFDM configuration.
 - b. 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.
7. Per KDB 248227 D01 SAR is not required for the following U-NII-1 and U-NII-2A bands conditions.
 - a. When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.
 - b. When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest reported SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for the band with lower maximum output power in that test configuration; otherwise, each band is tested independently for SAR.
8. For Limb SAR, SAR test exemption considered by applying a factor of 2.5 to the applicable power level thresholds.

10 TEST RESULT

1. 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 WIFI 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 WIFI/Bluetooth: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
2. Absorbed power density (APD) using a 4cm² averaging area is reported based on SAR measurements.
3. Per KDB 447498 D04, 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
4. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥0.8W/kg

10.1 Bluetooth

Mode	Antenna	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	10g Scaled SAR (W/kg)	Meas. No.
Limbs														
DH5	Aux.	Back Side	0	0	2402	0.14	0.038	6.96	8.00	1.271	76.94	1.300	0.063	/
		Bottom Edge	0	0	2402	-0.02	0.005	6.96	8.00	1.271	76.94	1.300	0.008	/
		Back Side	0	39	2441	0.00	0.078	6.62	8.00	1.374	76.94	1.300	0.139	1#
		Back Side	0	78	2480	0.01	0.076	5.59	6.00	1.099	76.94	1.300	0.109	/
BLE 1M	Aux.	Back Side	0	0	2402	0.18	0.031	7.88	8.00	1.028	62.34	1.604	0.051	/
		Bottom Edge	0	0	2402	-0.19	0.004	7.88	8.00	1.028	62.34	1.604	0.007	/
		Back Side	0	19	2440	0.01	0.064	7.25	8.00	1.189	62.34	1.604	0.122	/
		Back Side	0	39	2480	-0.03	0.051	6.64	8.00	1.368	62.34	1.604	0.112	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.2 WIFI 2.4GHZ

Mode	Antenna	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	10g Scaled SAR (W/kg)	Meas. No.
Limbs														
802.11b	Aux.	Back Side	0	6	2437	-0.01	0.634	17.47	18.00	1.130	99.32	1.007	0.721	/
		Bottom Edge	0	6	2437	0.08	0.133	17.47	18.00	1.130	99.32	1.007	0.151	/
		Back Side	0	1	2412	-0.01	0.589	16.96	18.00	1.271	99.32	1.007	0.754	/
		Back Side	0	11	2462	0.00	0.717	17.12	18.00	1.225	99.32	1.007	0.884	2#
	Main	Back Side	0	6	2437	-0.11	0.476	17.67	18.00	1.079	99.32	1.007	0.517	/
		Bottom Edge	0	6	2437	0.06	0.125	17.67	18.00	1.079	99.32	1.007	0.136	/
		Back Side	0	1	2412	0.18	0.391	17.56	18.00	1.107	99.32	1.007	0.436	/
		Back Side	0	11	2462	-0.02	0.553	17.32	18.00	1.169	99.32	1.007	0.651	3#
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.3 WIFI 5GHz

Fre. Band	Mode	Antenna	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	10g Scaled SAR (W/kg)	Meas. No.
Limbs															
5.3G	802.11 ac80	Aux.	Back Side	0	58	5290	-0.01	0.432	15.45	16.00	1.135	98.90	1.011	0.496	4#
			Bottom Edge	0	58	5290	0.17	0.052	15.45	16.00	1.135	98.90	1.011	0.060	/
		Main	Back Side	0	58	5290	0.05	0.589	15.85	16.00	1.035	98.90	1.011	0.616	5#
			Bottom Edge	0	58	5290	0.09	0.030	15.85	16.00	1.035	98.90	1.011	0.031	/
5.6G	802.11 ac80	Aux.	Back Side	0	106	5530	-0.02	0.411	15.71	16.00	1.069	98.90	1.011	0.444	6#
			Bottom Edge	0	106	5530	-0.01	0.061	15.71	16.00	1.069	98.90	1.011	0.066	/
			Back Side	0	122	5610	0.05	0.385	15.46	16.00	1.132	98.90	1.011	0.441	/
		Main	Back Side	0	106	5530	-0.03	0.569	15.81	16.00	1.045	98.90	1.011	0.601	7#
			Bottom Edge	0	106	5530	-0.09	0.036	15.81	16.00	1.045	98.90	1.011	0.038	/
			Back Side	0	122	5610	-0.12	0.531	15.56	16.00	1.107	98.90	1.011	0.594	/
5.8G	802.11 ac80	Aux.	Back Side	0	155	5775	-0.03	0.346	15.35	16.00	1.161	98.90	1.011	0.406	8#
			Bottom Edge	0	155	5775	0.11	0.073	15.35	16.00	1.161	98.90	1.011	0.086	/
		Main	Back Side	0	155	5775	0.08	0.802	15.75	16.00	1.059	98.90	1.011	0.859	9#
			Bottom Edge	0	155	5775	0.17	0.045	15.75	16.00	1.059	98.90	1.011	0.048	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.4 WIFI 6GHz

Mode	Antenna	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	10g Scaled SAR (W/kg)	Measured APD4 cm ² [W/m ²]	Scaled APD W/m ²	Meas. No.
Limbs																
802.11 ax160	Aux.	Back Side	0	111	6505	-0.07	0.087	10.30	11.00	1.175	98.68	1.013	0.104	2.020	2.404	/
		Bottom Edge	0	111	6505	0.05	0.005	10.30	11.00	1.175	98.68	1.013	0.006	0.116	0.138	/
		Back Side	0	15	6025	0.00	0.099	9.40	10.00	1.148	98.68	1.013	0.115	2.240	2.605	10#
		Back Side	0	47	6185	0.05	0.092	9.50	10.00	1.122	98.68	1.013	0.105	2.040	2.319	/
		Back Side	0	79	6345	-0.17	0.080	9.30	10.00	1.175	98.68	1.013	0.095	1.840	2.190	/
		Back Side	0	143	6665	0.11	0.071	9.60	10.00	1.096	98.68	1.013	0.079	1.530	1.699	/
		Back Side	0	175	6825	-0.16	0.066	9.70	10.00	1.072	98.68	1.013	0.072	1.400	1.520	/
	Main	Back Side	0	207	6985	0.00	0.071	9.90	11.00	1.288	98.68	1.013	0.093	1.800	2.349	/
		Back Side	0	111	6505	0.10	0.076	10.58	11.00	1.102	98.68	1.013	0.085	1.560	1.741	/
		Bottom Edge	0	111	6505	0.09	0.006	10.58	11.00	1.102	98.68	1.013	0.007	0.129	0.144	/
		Back Side	0	15	6025	0.13	0.149	9.06	10.00	1.242	98.68	1.013	0.187	3.430	4.315	11#
		Back Side	0	47	6185	0.07	0.118	8.86	10.00	1.300	98.68	1.013	0.155	2.850	3.753	/
		Back Side	0	79	6345	-0.18	0.090	9.06	10.00	1.242	98.68	1.013	0.113	2.080	2.617	/
		Back Side	0	143	6665	-0.03	0.070	9.40	10.00	1.148	98.68	1.013	0.081	1.490	1.733	/
Back Side	0	175	6825	0.03	0.069	9.90	10.00	1.023	98.68	1.013	0.072	1.320	1.368	/		
Back Side	0	207	6985	-0.09	0.066	10.15	11.00	1.216	98.68	1.013	0.081	1.490	1.835	/		
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

11 SAR Measurement Variability

According to KDB 865664 D01, SAR measurement variability was assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. Alternatively, if the highest measured SAR for both head and body tissue-equivalent media are ≤ 1.45 W/kg and the ratio of these highest SAR values, i.e., largest divided by smallest value, is ≤ 1.10 , the highest SAR configuration for either head or body tissue-equivalent medium may be used to perform the repeated measurement. These additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR repeated measurement procedure:

1. When the highest measured SAR is < 0.80 W/kg, repeated measurement is not required.
2. When the highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
3. If the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 , or when the original or repeated measurement is ≥ 1.45 W/kg, perform a second repeated measurement.
4. If the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 , and the original, first or second repeated measurement is ≥ 1.5 W/kg, perform a third repeated measurement.

Note: For product specific 10g SAR, the highest measured 10g SAR is $0.802 < 2.0$ W/kg, repeated measurement is not required.

12 SIMULTANEOUS TRANSMISSION

Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneous transmitting antenna. When the sum of SAR 1g of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the SAR limit (SAR 1g 1.6 W/kg), the simultaneous transmission SAR is not required. When the sum of SAR 1g is greater than the SAR limit (SAR 1g 1.6 W/kg), SAR test exclusion is determined by the SAR to Peak Location Ratio (SPLSR).

According KDB 447498 D04, simultaneous transmission:

- a) $SPLSR = (SAR1 + SAR2)^{1.5} / R_i$ (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.
SAR1 is the highest reported or estimated SAR for the first of a pair of simultaneous transmitting antennas, in a specific test operating mode and exposure condition.
SAR2 is the highest reported or estimated SAR for the second of a pair of simultaneous transmitting antennas, in a specific test operating mode and exposure condition as the first.
- b) If $SPLSR \leq 0.04$, simultaneously transmission SAR measurement is not necessary.
- c) Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.

12.1 Simultaneous Transmission Mode for Limbs SAR

No.	Simultaneous Tx Combination	Limbs
1	Bluetooth + WLAN 2.4GHz (Antenna Main)	Yes
2	WLAN 2.4GHz (Antenna Main) + WLAN 2.4GHz (Antenna Auxiliary)	Yes
3	Bluetooth + WLAN 5GHz (Antenna Auxiliary)	Yes
4	Bluetooth + WLAN 5GHz (Antenna Main)	Yes
5	WLAN 5GHz (Antenna Auxiliary) + WLAN 5GHz (Antenna Main)	Yes
6	Bluetooth + WLAN 5GHz (Antenna Auxiliary) + WLAN 5GHz (Antenna Main)	Yes
7	Bluetooth + WLAN 6GHz (Antenna Auxiliary)	Yes
8	Bluetooth + WLAN 6GHz (Antenna Main)	Yes
9	WLAN 6GHz (Antenna Auxiliary) + WLAN 6GHz (Antenna Main)	Yes
10	Bluetooth + WLAN 6GHz (Antenna Auxiliary) + WLAN 6GHz (Antenna Main)	Yes

Note:

- The EUT supports the Antenna Auxiliary with TX/RX diversity function for WLAN and Bluetooth, the Antenna Main with TX/RX diversity function for WLAN.
- WLAN 2.4GHz and Bluetooth will not be transmitting from the Antenna Auxiliary at same time.

12.2 Limbs Simultaneous Transmission SAR Evaluation for WLAN Antenna with Bluetooth

State	Position	Stand alone SAR							SUM SAR			
		1	2	3	4	5	6	7	Sum SAR	Sum SAR	Sum SAR	Sum SAR
		Bluetooth	WLAN 2.4GHz (Antenna Auxiliary)	WLAN 2.4GHz (Antenna Main)	MAX. WLAN 5GHz (Antenna Auxiliary)	WLAN 6GHz	MAX. WLAN 5GHz (Antenna Main)	WLAN 6GHz	(1+3)	(2+3)	(1+4+6)	(1+5+7)
Limbs	Back Side	0.139	0.884	0.651	0.496	0.115	0.859	0.187	0.790	1.535	1.494	0.441
Limbs	Bottom Edge	0.008	0.151	0.136	0.086	0.006	0.048	0.007	0.144	0.287	0.142	0.021
Note: 1: The highest Summed 10g SAR is 1.535W/Kg < 4.0 W/kg, so Simultaneous Transmission SAR test is not required.												

13 TEST EQUIPMENTS LIST

Description	Manufacturer	Model	Serial No./Version	Cal. Date	Cal. Due
PC	Dell	N/A	N/A	N/A	N/A
Test Software	Speag	DASY8	16.2.2.1588	N/A	N/A
2450MHz Validation Dipole	Speag	D2450V2	SN: 952	2024/05/07	2027/05/06
5GHz Validation Dipole	Speag	D5GHzV2	SN: 1200	2024/05/09	2027/05/08
6.5GHz Validation Dipole	Speag	D6.5GHzV2	SN: 1037	2024/05/28	2027/05/27
Data Acquisition Electronicsr	Speag	DAE4	SN: 1711	2024/03/18	2025/03/17
E-Field Probe	Speag	EX3DV4	SN: 3801	2024/06/20	2025/06/19
E-Field Probe	Speag	EX3DV4	SN: 7510	2024/06/25	2025/06/24
Signal Generator	R&S	SMB100A	177746	2024/04/24	2025/04/23
Power Meter	R&S	NRVD-B2	835843/014	2023/09/05	2024/09/04
Power Sensor	R&S	NRV-Z4	100381	2023/09/05	2024/09/04
Power Sensor	R&S	NRV-Z2	100211	2023/09/05	2024/09/04
Network Analyzer	Agilent	E5071C	MY46103472	2023/11/14	2024/11/13
Thermometer	Elitech	RC-4	EF5238001628	2023/10/09	2024/10/08
Thermometer	Elitech	RC-4HC	EF7239002652	2023/11/17	2024/11/16
Power Amplifier	SATIMO	6552B	22374	N/A	N/A
Dielectric Probe Kit	Speag	DAK3.5	SN: 1312	N/A	N/A
Phantom	Speag	SAM	SN: 1859	N/A	N/A
Attenuator	COM-MW	ZA-S1-31	1305003187	N/A	N/A
Directional coupler	AA-MCS	AAMCS-UDC	000272	N/A	N/A

Note: For dipole antennas, BALUN has adopted 3 years as calibration intervals, and on annual basis, every measurement dipole has been evaluated and is in compliance with the following criteria:

1. There is no physical damage on the dipole;
2. System validation with specific dipole is within 10% of calibrated value;
3. Return-loss in within 20% of calibrated measurement.
4. Impedance (real or imaginary parts) in within 5 Ohms of calibrated measurement.

ANNEX A SIMULATING LIQUID VERIFICATION RESULT

The dielectric parameters of the liquids were verified prior to the SAR evaluation using a DAK3.5 Dielectric Probe Kit.

Date	Liquid Type	Fre. (MHz)	Temp. (°C)	Meas. Conductivity (σ) (S/m)	Meas. Permittivity (ϵ)	Target Conductivity (σ) (S/m)	Target Permittivity (ϵ)	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2024.08.17	Head	2450	21.2	1.80	39.44	1.80	39.20	0.00	0.61
2024.08.18	Head	5250	21.4	4.70	35.70	4.71	35.93	-0.21	-0.64
2024.08.18	Head	5600	21.4	5.05	35.17	5.07	35.53	-0.39	-1.01
2024.08.19	Head	5750	21.3	5.17	35.66	5.22	35.36	-0.96	0.85
2024.07.31	Head	6500	21.7	6.10	34.49	6.07	34.46	0.49	0.09

Note: The tolerance limit of Conductivity and Permittivity is $\pm 5\%$.

ANNEX B SYSTEM CHECK RESULT

Comparing to the original SAR value provided by SPEAG, the validation data should be within its specification of 10 % (for 10 g).

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2024.08.17	Head	2450	100	2.490	24.90	24.70	0.81
2024.08.18	Head	5250	100	2.160	21.60	22.00	-1.82
2024.08.18	Head	5600	100	2.410	24.10	23.10	4.33
2024.08.19	Head	5750	100	2.270	22.70	21.90	3.65
2024.07.31	Head	6500	100	5.480	54.80	55.20	-0.72

Note: The tolerance limit of System validation $\pm 10\%$.

System Performance Check Data (2450MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D2450V2, SPEAG	40.0 x 8.0 x 8.0	Dipole

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D2450	CW, 0--	2450.0, 50	7.75	1.80	39.4	22.3	21.2

Hardware Setup

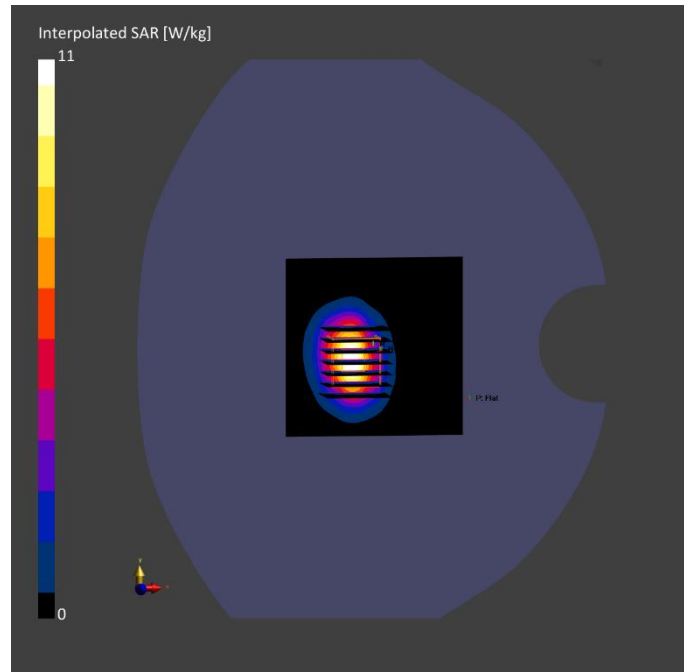
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-08-17	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-08-17	2024-08-17
psSAR1g [W/kg]	5.32	5.37
psSAR10g [W/kg]	2.29	2.49
Power Drift [dB]	0.06	0.05
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		80.8
Dist 3dB Peak [mm]		8.9



System Performance Check Data (5250MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D5GHZV2, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D5GH z	CW, 0--	5250.0, 30	5.50	4.70	35.7	22.5	21.4

Hardware Setup

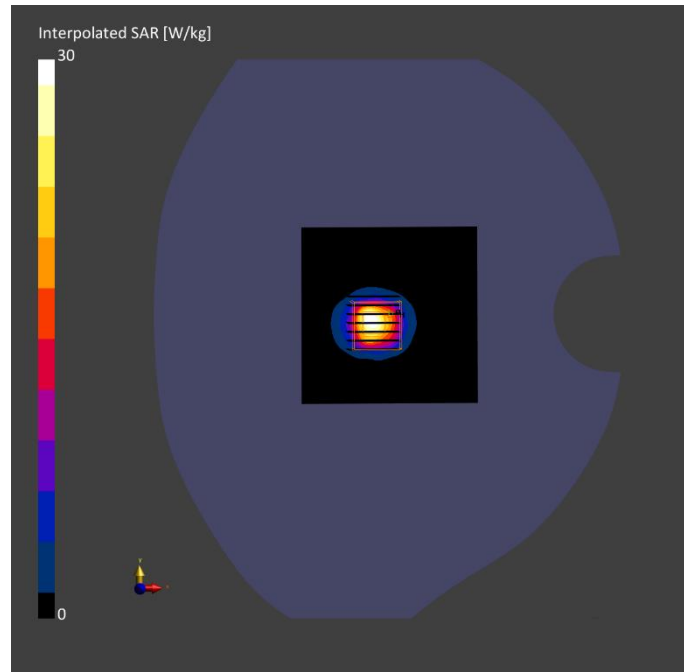
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-08-18	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-08-18	2024-08-18
psSAR1g [W/kg]	7.53	7.88
psSAR10g [W/kg]	2.05	2.16
Power Drift [dB]	-0.06	0.11
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		64.6
Dist 3dB Peak [mm]		6.8



System Performance Check Data (5600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D5GHZV2, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D5GH z	CW, 0--	5600.0, 60	5.00	5.05	35.2	22.5	21.4

Hardware Setup

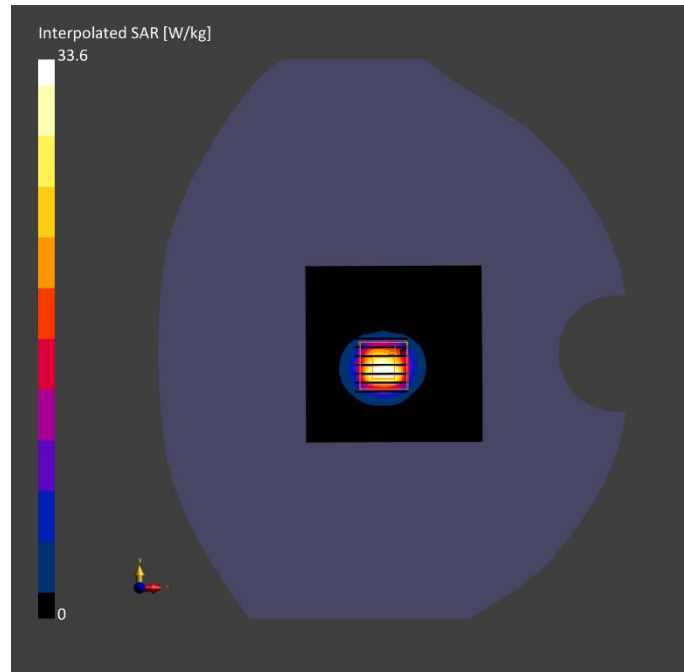
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-08-18	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-08-18	2024-08-18
psSAR1g [W/kg]	7.62	8.32
psSAR10g [W/kg]	2.25	2.41
Power Drift [dB]	0.05	0.12
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		62.3
Dist 3dB Peak [mm]		7.2



System Performance Check Data (5750MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D5GHZV2, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D5GH z	CW, 0--	5750.0, 80	5.04	5.32	36.4	22.4	21.1

Hardware Setup

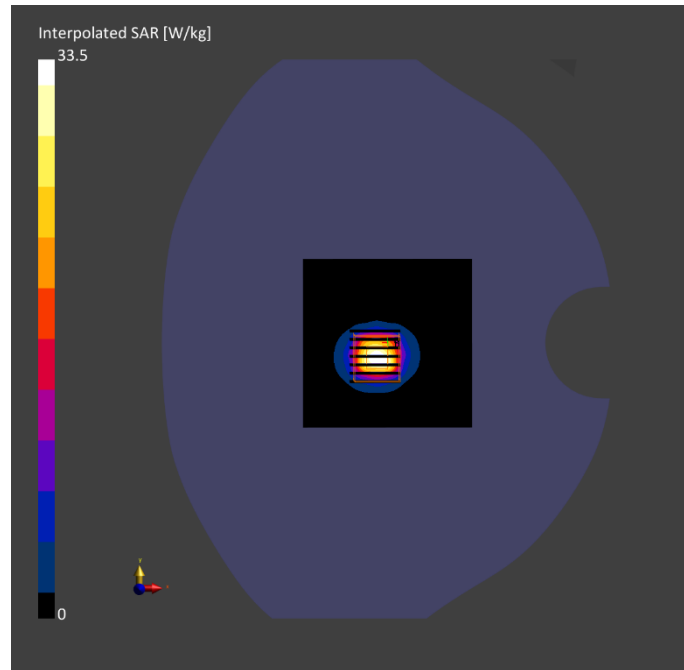
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-08-19	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-08-19	2024-08-19
psSAR1g [W/kg]	7.75	7.79
psSAR10g [W/kg]	2.11	2.27
Power Drift [dB]	-0.06	0.09
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		60.1
Dist 3dB Peak [mm]		7.4



System Performance Check Data (6500MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D5GHZV2, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D6GH z	CW, 0--	6500.0, 6500	5.35	6.10	34.5	22.6	21.7

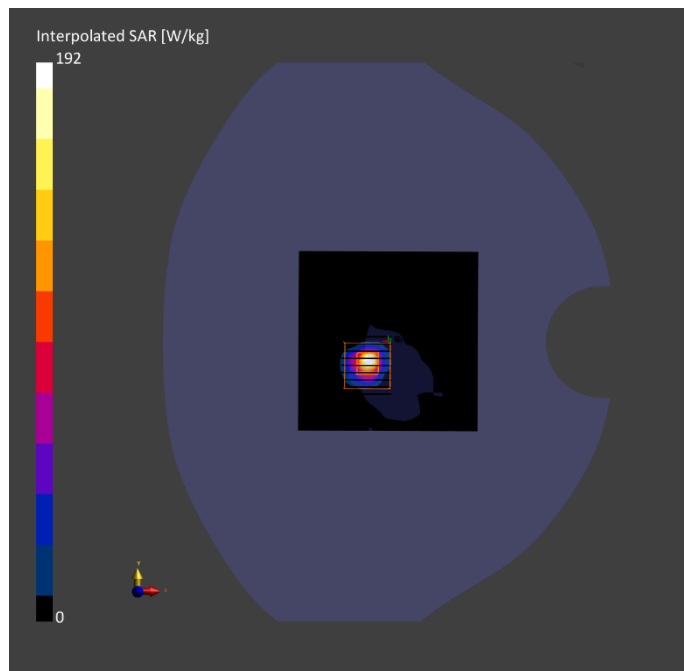
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-07-31	EX3DV4 - SN3801, 2024-06-20	DAE4 Sn1711, 2024-03-18

Scan Setup

Measurement Results

		Area Scan	Zoom Scan			Area Scan	Zoom Scan
Grid Extents [mm]		80.0 x 80.0	22.0 x 22.0 x 22.0	Date		2024-07-31	2024-07-31
Grid Steps [mm]		10.0 x 10.0	4.0 x 4.0 x 1.4	psSAR1g [W/kg]		22.8	29.4
Sensor Surface [mm]		3.0	1.4	psSAR10g [W/kg]		4.98	5.48
Graded Grid	Yes	Yes	Yes	APD 4cm ² [W/m ²]			133
Grading Ratio	1.5	1.4	1.4	Power Drift [dB]		0.05	0.04
MAIA Surface Detection	N/A	N/A	N/A	Power Scaling	Disabled	Disabled	Disabled
Scan Method	Measured	Measured	Measured	Scaling Factor [dB]			
				TSL Correction	No correction	No correction	No correction
				M2/M1 [%]			51.0
				Dist 3dB Peak [mm]			4.6



ANNEX C TEST DATA

Meas.1 Limbs Plane with Back Side 0mm on 39 Channel in Bluetooth mode with Antenna Aux

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
AG01	175.0 x 90.0 x 40.0	PC Handheld device

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 0.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2441.0, 39	7.75	1.79	39.5	22.3	21.2

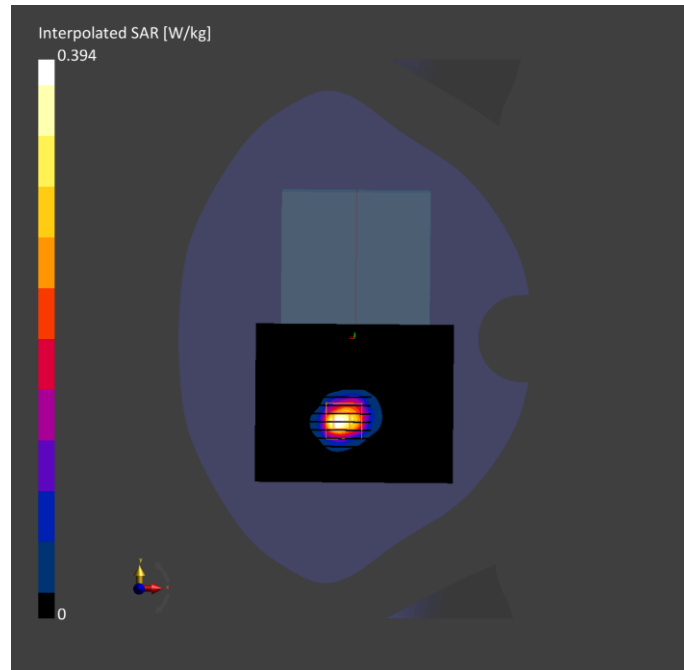
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-08-17	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

Measurement Results

		Area Scan	Zoom Scan			Area Scan	Zoom Scan
Grid Extents [mm]		120.0 x 96.0	30.0 x 30.0 x 30.0	Date		2024-08-17	2024-08-17
Grid Steps [mm]		12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]		0.169	0.192
Sensor Surface [mm]		3.0	1.4	psSAR10g [W/kg]		0.072	0.078
Graded Grid	Yes		Yes	Power Drift [dB]		0.01	0.00
Grading Ratio	1.5		1.5	Power Scaling	Disabled		Disabled
MAIA	Y		N/A	Scaling Factor			
Surface Detection	VMS + 6p		VMS + 6p	[dB]			
Scan Method	Measured		Measured	TSL Correction	No correction		No correction
				M2/M1 [%]			48.3
				Dist 3dB Peak [mm]			7.8



Meas.2 Limbs Plane with Back Side 0mm on 11 Channel in IEEE802.11b mode with Antenna AUX
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
AG01	175.0 x 90.0 x 40.0	PC Handheld device

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 0.00	WLAN, 2.4G N	WLAN, 10012- CAB Hz	2462.0, 11	7.75	1.81	39.4	22.3	21.2

Hardware Setup

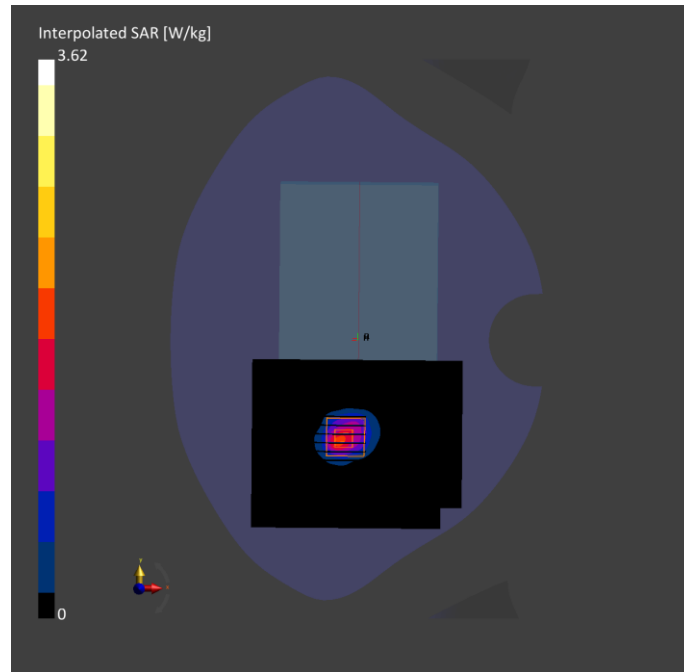
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-08-17	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 96.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-08-17	2024-08-17
psSAR1g [W/kg]	1.48	1.74
psSAR10g [W/kg]	0.661	0.717
Power Drift [dB]	-0.02	-0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		48.6
Dist 3dB Peak [mm]		7.8



Meas.3 Limbs Plane with Back Side 0mm on 11 Channel in IEEE802.11b mode with Antenna Main

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
AG01	175.0 x 90.0 x 40.0	PC Handheld device

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 0.00	WLAN, 2.4G Hz	WLAN, 10012-CAB	2462.0, 11	7.75	1.81	39.4	22.3	21.2

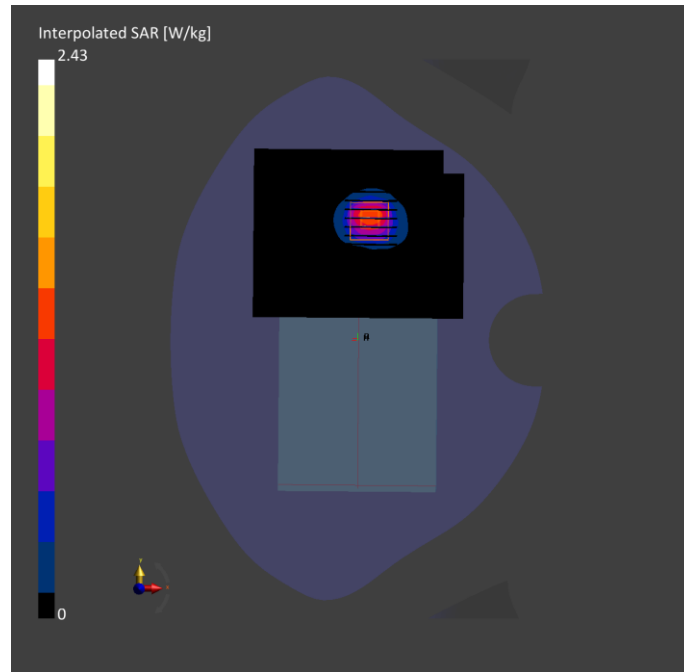
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-08-17	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

Measurement Results

		Area Scan	Zoom Scan			Area Scan	Zoom Scan
Grid Extents [mm]		120.0 x 96.0	30.0 x 30.0 x 30.0	Date		2024-08-17	2024-08-17
Grid Steps [mm]		12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]		1.11	1.27
Sensor Surface [mm]		3.0	1.4	psSAR10g [W/kg]		0.508	0.553
Graded Grid	Yes	Yes	Yes	Power Drift [dB]		-0.01	-0.02
Grading Ratio	1.5	1.5	1.5	Power Scaling	Disabled	Disabled	Disabled
MAIA	N/A	N/A	N/A	Scaling Factor [dB]			
Surface Detection	VMS + 6p	VMS + 6p	VMS + 6p	TSL Correction	No correction	No correction	No correction
Scan Method	Measured	Measured	Measured	M2/M1 [%]			53.4
				Dist 3dB Peak [mm]			9.0



Meas.4 Limbs Plane with Back Side 0mm on 58 Channel in IEEE802.11ac80 mode with Antenna AUX
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
AG01	175.0 x 90.0 x 40.0	PC Handheld device

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 0.00	WLAN, 5GHz	WLAN, 10544-AAD	5290.0, 58	5.50	4.79	35.2	22.5	21.4

Hardware Setup

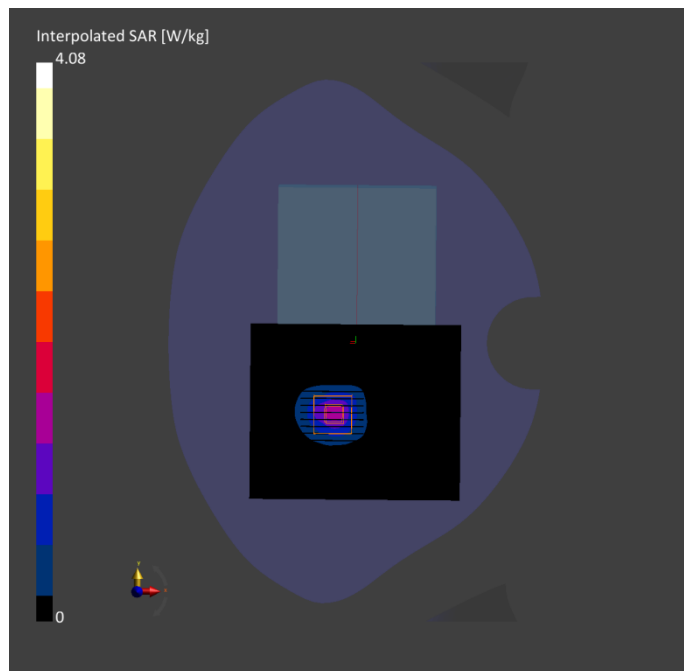
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-08-18	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

		Area Scan	Zoom Scan
Grid Extents [mm]		120.0 x 100.0	24.0 x 24.0 x 22.0
Grid Steps [mm]		10.0 x 10.0	4.0 x 4.0 x 2.0
Sensor Surface [mm]		3.0	1.4
Graded Grid	Yes	Yes	
Grading Ratio	1.5	1.4	
MAIA	N/A	N/A	
Surface Detection	VMS + 6p	VMS + 6p	
Scan Method	Measured	Measured	

Measurement Results

		Area Scan	Zoom Scan
Date		2024-08-18	2024-08-18
psSAR1g [W/kg]		1.12	1.18
psSAR10g [W/kg]		0.414	0.432
Power Drift [dB]		-0.04	-0.01
Power Scaling	Disabled	Disabled	Disabled
Scaling Factor [dB]			
TSL Correction	No correction	No correction	
M2/M1 [%]			53.5
Dist 3dB Peak [mm]			10.1



Meas.5 Limbs Plane with Back Side 0mm on 58 Channel in IEEE802.11ac80 mode with Antenna Main

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
AG01	175.0 x 90.0 x 40.0	PC Handheld device

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 0.00	WLAN, 5GHz	WLAN, 10402-AAF	5290.0, 58	5.50	4.79	35.2	22.5	21.4

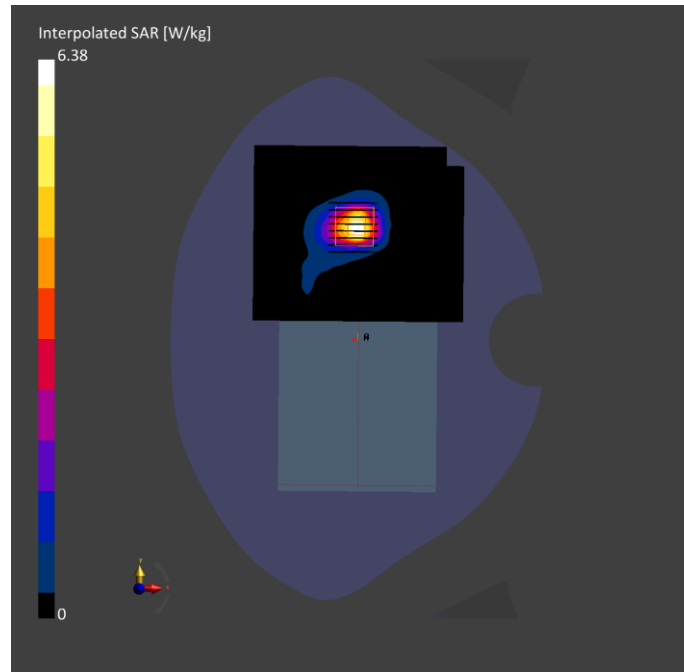
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-08-18	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

Measurement Results

		Area Scan	Zoom Scan			Area Scan	Zoom Scan
Grid Extents [mm]		120.0 x 100.0	24.0 x 24.0 x 22.0	Date		2024-08-18	2024-08-18
Grid Steps [mm]		10.0 x 10.0	4.0 x 4.0 x 2.0	psSAR1g [W/kg]		1.62	1.81
Sensor Surface [mm]		3.0	1.4	psSAR10g [W/kg]		0.552	0.589
Graded Grid	Yes	Yes	Yes	Power Drift [dB]		0.01	0.05
Grading Ratio	1.5	1.4	1.4	Power Scaling	Disabled	Disabled	Disabled
MAIA	N/A	N/A	N/A	Scaling Factor			
Surface Detection	VMS + 6p	VMS + 6p	VMS + 6p	TSL Correction	No correction	No correction	No correction
Scan Method	Measured	Measured	Measured	M2/M1 [%]			54.5
				Dist 3dB Peak [mm]			8.6



Meas.6 Limbs Plane with Back Side 0mm on 106 Channel in IEEE802.11ac80 mode with Antenna AUX

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
AG01	175.0 x 90.0 x 40.0	PC Handheld device

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 0.00	WLAN, 5GHz	WLAN, 10544-AAD	5530.0, 106	5.00	4.94	36.0	22.5	21.4

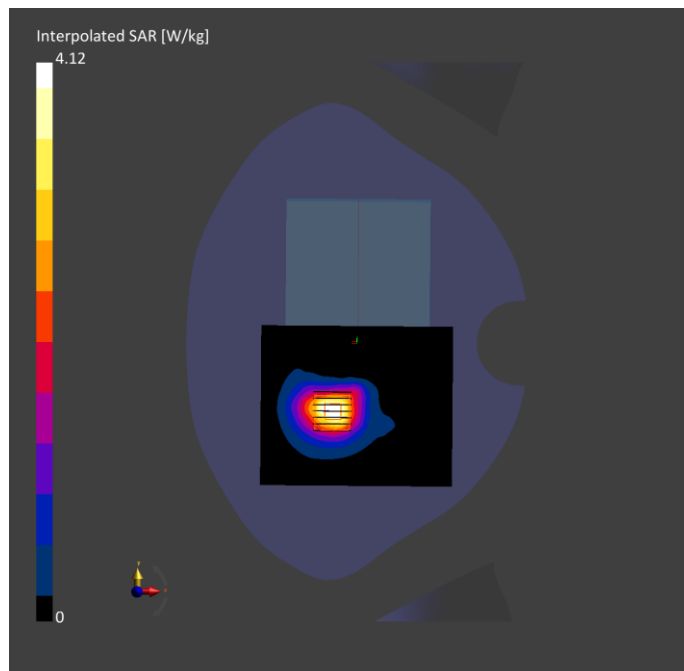
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-08-18	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

Measurement Results

		Area Scan	Zoom Scan			Area Scan	Zoom Scan
Grid Extents [mm]		120.0 x 100.0	24.0 x 24.0 x 22.0	Date		2024-08-18	2024-08-18
Grid Steps [mm]		10.0 x 10.0	4.0 x 4.0 x 2.0	psSAR1g [W/kg]		1.03	1.12
Sensor Surface [mm]		3.0	1.4	psSAR10g [W/kg]		0.400	0.411
Graded Grid	Yes	Yes	Yes	Power Drift [dB]		0.03	-0.02
Grading Ratio	1.5	1.4	1.4	Power Scaling	Disabled	Disabled	Disabled
MAIA	Y	N/A	N/A	Scaling Factor			
Surface Detection	VMS + 6p	VMS + 6p	VMS + 6p	TSL Correction	No correction	No correction	No correction
Scan Method	Measured	Measured	Measured	M2/M1 [%]			51.0
				Dist 3dB Peak [mm]			9.6



Meas.7 Limbs Plane with Back Side 0mm on 106 Channel in IEEE802.11ac80 mode with Antenna Main
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
AG01	175.0 x 90.0 x 40.0	PC Handheld device

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 0.00	WLAN, N	WLAN, 10402-5GHz	5530.0, 106	5.00	4.94	36.0	22.5	21.4

Hardware Setup

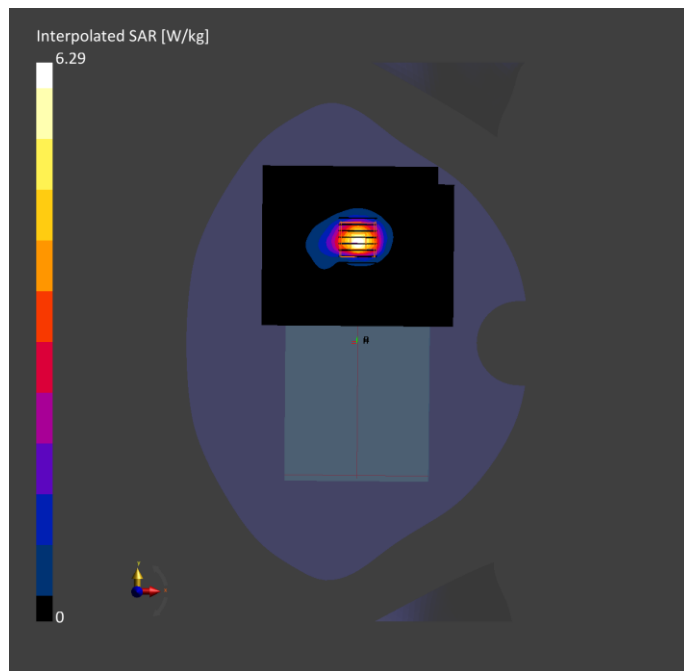
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-08-18	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 100.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-08-18	2024-08-18
psSAR1g [W/kg]	1.61	1.75
psSAR10g [W/kg]	0.542	0.569
Power Drift [dB]	-0.02	-0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		53.7
Dist 3dB Peak [mm]		7.9



Meas.8 Limbs Plane with Back Side 0mm on 155 Channel in IEEE802.11ac80 mode with Antenna AUX
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
AG01	175.0 x 90.0 x 40.0	PC Handheld device

Exposure Conditions

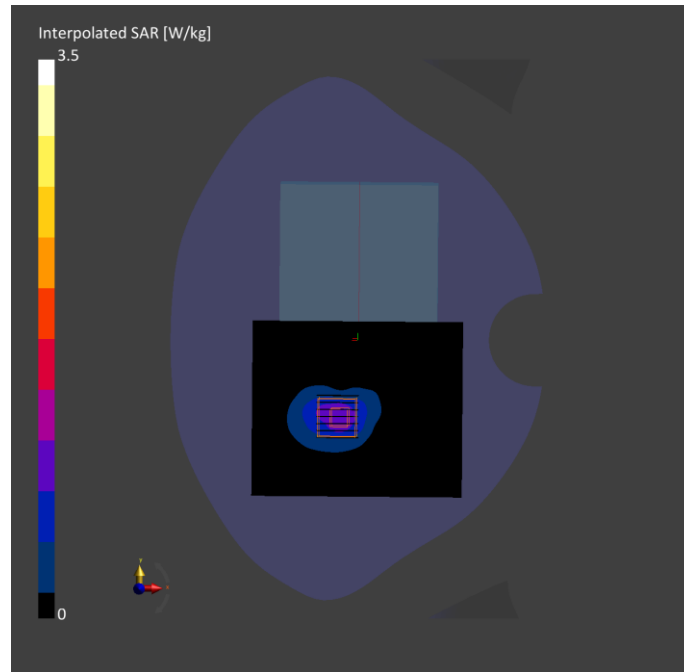
Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 0.00	WLAN, 5GHz	WLAN, 10544-AAD	5775.0, 155	5.04	5.22	35.4	22.6	21.3

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-08-19	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup
Measurement Results

		Area Scan	Zoom Scan			Area Scan	Zoom Scan
Grid Extents [mm]		120.0 x 100.0	24.0 x 24.0 x 22.0	Date		2024-08-19	2024-08-19
Grid Steps [mm]		10.0 x 10.0	4.0 x 4.0 x 2.0	psSAR1g [W/kg]		0.881	0.919
Sensor Surface [mm]		3.0	1.4	psSAR10g [W/kg]		0.345	0.346
Graded Grid	Yes	Yes		Power Drift [dB]		0.10	-0.03
Grading Ratio	1.5	1.4		Power Scaling	Disabled		Disabled
MAIA	Y	N/A		Scaling Factor			
Surface Detection	VMS + 6p	VMS + 6p		TSL Correction	No correction		No correction
Scan Method	Measured	Measured		M2/M1 [%]			49.1
				Dist 3dB Peak [mm]			11.1



Meas.9 Limbs Plane with Back Side 0mm on 155 Channel in IEEE802.11ac80 mode with Antenna Main
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
AG01	175.0 x 90.0 x 40.0	PC Handheld device

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 0.00	WLAN	WLAN, 10402-5GHz	5775.0, 155	5.04	5.22	35.4	22.6	21.3

Hardware Setup

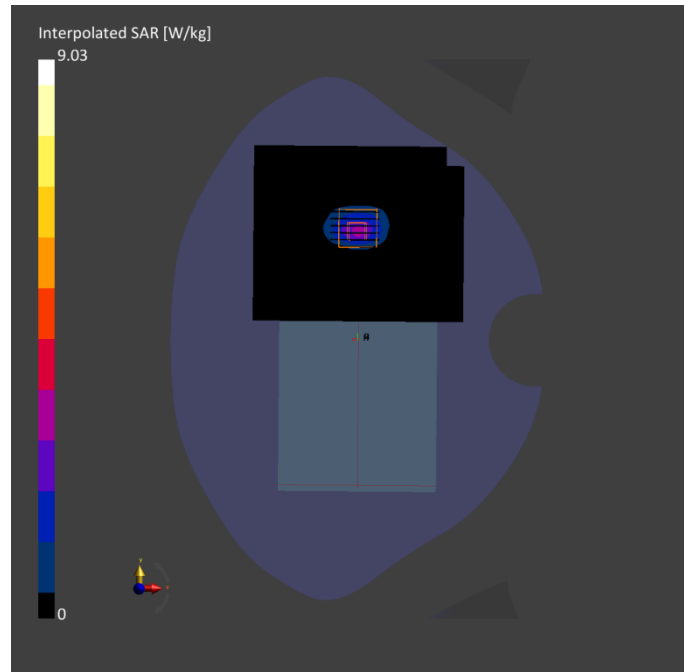
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-08-19	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

		Area Scan	Zoom Scan
Grid Extents [mm]		120.0 x 100.0	24.0 x 24.0 x 22.0
Grid Steps [mm]		10.0 x 10.0	4.0 x 4.0 x 2.0
Sensor Surface [mm]		3.0	1.4
Graded Grid	Yes	Yes	Yes
Grading Ratio	1.5	1.4	1.4
MAIA	N/A	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured	Measured

Measurement Results

		Area Scan	Zoom Scan
Date		2024-08-19	2024-08-19
psSAR1g [W/kg]		2.30	2.44
psSAR10g [W/kg]		0.763	0.802
Power Drift [dB]		-0.03	0.08
Power Scaling	Disabled	Disabled	Disabled
Scaling Factor [dB]			
TSL Correction	No correction	No correction	No correction
M2/M1 [%]			52.8
Dist 3dB Peak [mm]			7.2



Meas.10 Limbs Plane with Back Side 0mm on 9 Channel in IEEE802.11ax160 mode with Antenna AUX
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
AG01	175.0 x 90.0 x 40.0	PC Handheld device

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 0.00	U-NII-5	WLAN, 10554-AAE	6025.0, 15	5.35	5.48	36.4	22.6	21.7

Hardware Setup

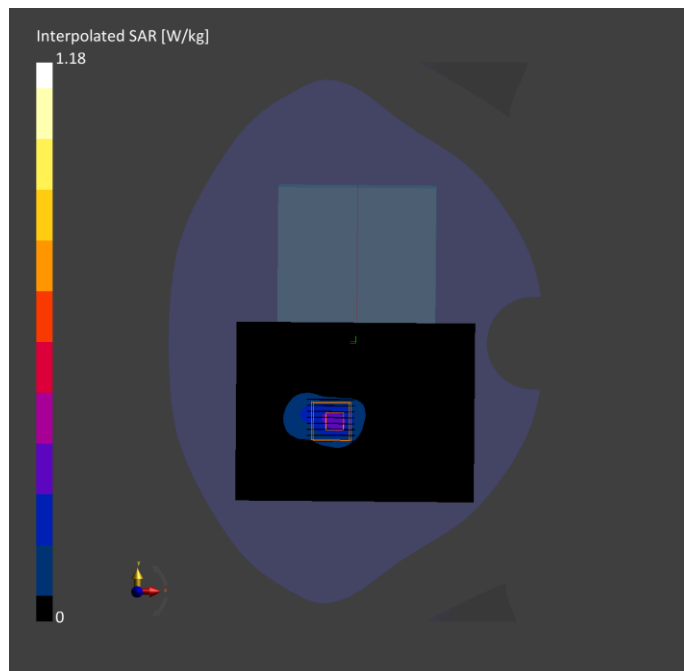
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-07-31	EX3DV4 - SN3801, 2024-06-20	DAE4 Sn1711, 2024-03-18

Scan Setup

		Area Scan	Zoom Scan
Grid Extents [mm]		136.0 x 102.0	22.0 x 22.0 x 22.0
Grid Steps [mm]		8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]		3.0	1.4
Graded Grid		Yes	Yes
Grading Ratio		1.5	1.4
MAIA		Y	Y
Surface Detection		VMS + 6p	VMS + 6p
Scan Method		Measured	Measured

Measurement Results

		Area Scan	Zoom Scan
Date		2024-07-31	2024-07-31
psSAR1g [W/kg]		0.260	0.280
psSAR10g [W/kg]		0.095	0.099
APD4cm ² [W/m ²]			2.24
Power Drift [dB]		0.08	-0.00
Power Scaling		Disabled	Disabled
Scaling Factor [dB]			
TSL Correction		No correction	No correction
M2/M1 [%]			54.3
Dist 3dB Peak [mm]			9.1



Meas.11 Limbs Plane with Back Side 0mm on 15 Channel in IEEE802.11ax160 mode with Antenna Main
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
AG01	175.0 x 90.0 x 40.0	PC Handheld device

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 0.00	U-NII-5	WLAN, 10743-AAC	6025.0, 15	5.35	5.48	36.4	22.6	21.7

Hardware Setup

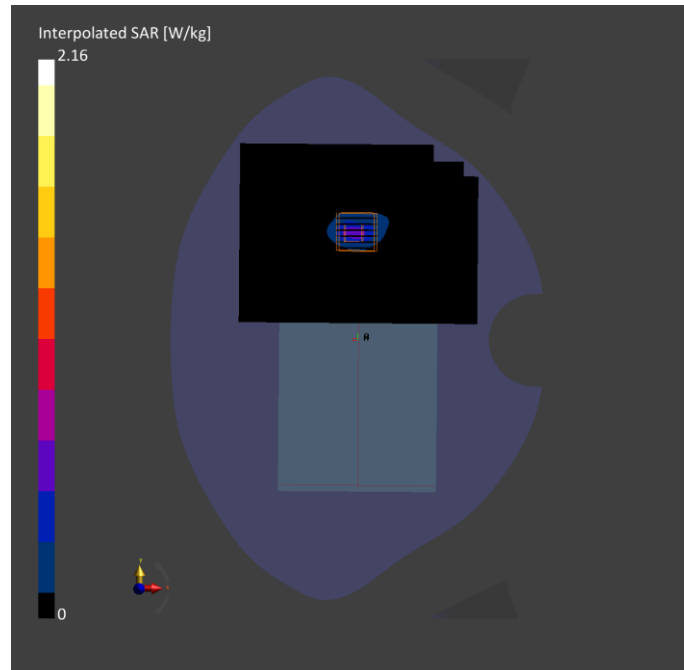
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-07-31	EX3DV4 - SN3801, 2024-06-20	DAE4 Sn1711, 2024-03-18

Scan Setup

		Area Scan	Zoom Scan
Grid Extents [mm]		136.0 x 102.0	23.8 x 23.8 x 22.0
Grid Steps [mm]		8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]		3.0	1.4
Graded Grid		Yes	Yes
Grading Ratio		1.5	1.4
MAIA		Y	Y
Surface Detection		VMS + 6p	VMS + 6p
Scan Method		Measured	Measured

Measurement Results

		Area Scan	Zoom Scan
Date		2024-07-31	2024-07-31
psSAR1g [W/kg]		0.452	0.495
psSAR10g [W/kg]		0.141	0.149
APD4cm ² [W/m ²]			3.43
Power Drift [dB]		0.03	0.13
Power Scaling		Disabled	Disabled
Scaling Factor			
TSL Correction		No correction	No correction
M2/M1 [%]			57.6
Dist 3dB Peak [mm]			6.7



ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2471008-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SZ2471008-AS-1.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “BL-SZ2471008-AC-1.pdf”.

ANNEX G TUNE-UP PROCEDURE

Please refer the document “BL-SZ2471008-AT.pdf”.

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