TEST REPORT

Applicant:	Elo Touch Solutions, Inc
Address:	670 N. McCarthy Blvd., Suite 100, Milpitas, CA 95035, USA.
Equipment Type:	Mobile Computer
Model Name:	EMC-M51
Brand Name:	Elo
FCC ID:	RBWEMCM51
Test Standard:	FCC 47 CFR Part 2.1093 (refer section 3.1)
Maximum SAR:	Head (1 g@0mm): 0.78 W/kg Body-worn (1 g@15mm): 0.68 W/kg Hotspot (1 g@10mm): 0.87 W/kg Specific (10g@0mm): 1.12W/kg
Sample Arrival Date:	Aug. 20, 2024
Test Date：	Sep. 04, 2024 - Sep. 28, 2024
Date of Issue:	Nov. 06, 2024

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Xiong Lining **Checked by:** Xu Rui **Approved by:** Tolan Tu

(Testing Director)

Revision History

Version	Issue Date	Revisions Content
Rev. 01	Sep. 29, 2024	Initial Issue
Rev. 02	Oct. 29, 2024	Updated BT and Simultaneous Transmission
Rev. 03	Nov. 06, 2024	Updated pages 7, 9, and 36.

TABLE OF CONTENTS

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	☐ Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	☑ 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℃ to 25℃
Ambient Relative Humidity	30% to 70%

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Elo Touch Solutions, Inc
Address	670 N. McCarthy Blvd., Suite 100, Milpitas, CA 95035, USA.

2.2 Manufacturer Information

Manufacturer	Elo Touch Solutions, Inc
Address	670 N. McCarthy Blvd., Suite 100, Milpitas, CA 95035, USA.

2.3 Factory Information

Factory	N/A
Address	N/A

2.4 General Description for Equipment under Test (EUT)

EUT Name	Mobile Computer
Model Name Under Test	EMC-M51
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	N/A
Software Version	N/A
Dimensions (Approx.)	166x78x16mm
Weight (Approx.)	N/A

2.5 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	Elo
	Model No.	M51
	Serial No.	N/A
	Capacity	Rated: 4500mAh/17.33Wh
	Rated Voltage	3.85 V
	Limit Charge Voltage	4.4 V

2.6 Technical Information

Network and Wireless connectivity	Bluetooth (BR+EDR+BLE) 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20/40), 802.11ax(HE20/40) 5G WIFI 802.11a, 802.11n(HT20/40), 802.11ac(VHT20/40/80/160) and 802.11ax(HE20/40/80/160) 6G WIFI 802.11ax(HE20/40/80/160) GPS, GLONASS, BDS, Galileo

The requirement for the following technical information of the EUT was tested in this report:

Operating Mode	WLAN; Bluetooth		
Frequency Range	802.11b/g /n(HT20/HT40)	2412 ~ 2462 MHz	
	802.11ax (HE20/40)	2412 ~ 2462 MHz	
	802.11a/ /n(HT20/HT40) /ac(VHT20/VHT40 /VHT80/VHT160)	5150 ~ 5250 MHz	
		5250 ~ 5350 MHz	
		5470 ~ 5725 MHz	
		5725 ~ 5850 MHz	
	802.11ax (HE20/40/80/160)	5150 ~ 5250 MHz	
		5250 ~ 5350 MHz	
		5470 ~ 5725 MHz	
		5725 ~ 5850 MHz	
		5925 ~ 7125 MHz	
	Bluetooth	2402 ~ 2480 MHz	
Antenna Type	WIFI: PIFA Antenna Bluetooth: PIFA Antenna		
DTM	N/A		
Hotspot Function	Support		
Power Reduction	Support		
Exposure Category	General Population/Uncontrolled exposure		
Product Type	Portable Device		
EUT Type	☒ Production unit	☐ 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	IEEE Std. 1528-2013	IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate(SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
4	KDB 447498 D01 v06	447498 D01 Interim General RF Exposure Guidance v06
5	KDB 941225 D06 v02r01	SAR EVALUATION PROCEDURES FOR PORTABLE DEVICES WITH WIRELESS ROUTER CAPABILITIES
6	KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
7	KDB 865664 D02 v01r02	RF Exposure Reporting
8	KDB 648474 D04 v01r03	SAR EVALUATION CONSIDERATIONS FOR WIRELESS HANDSETS
9	KDB 248227 D01 v02r02	SAR GUIDANCE FOR IEEE 802.11 (Wi-Fi) TRANSMITTERS

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/ ControlledExposure
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 Values

Equipment Class	Band	Maximum Scaled SAR (W/kg)				Maximum Report SAR (W/kg)			
		Head (0mm)	Body-worn (15mm)	Hotspot (10mm)	Specific (0mm)	Head (0mm)	Body-worn (15mm)	Hotspot (10mm)	Specific (0mm)
		1g SAR			10g SAR	1g SAR			10g SAR
DTS	2.4G WIFI	0.78	0.46	0.85	/	0.78	0.68	0.87	1.12
NII	5G WIFI	0.13	0.68	0.87	1.12				
6XD	6G WIFI	0.03	0.13	/	0.33				
DSS	Bluetooth	0.03	0.02	0.07	/				
Limit (W/kg)		1.6			4.0	1.6			4.0
Verdict		Pass							

Equipment Class	Band	Maximum Scaled APD (W/m^2)			
		Head 1g (0mm)	Body-worn 1g (15mm)	Hotspot 1g (10mm)	Specific 10g(0mm)
6XD	6G WIFI	0.236	1.09	/	8.08
Limit (W/Kg)		20.0	20.0	/	20.0
Verdict		Pass			

3.3.2 Highest Simultaneous Transmission SAR Values

Equipment Class	Maximum Scaled SAR (W/kg)			
	Head 1g (0mm)	Body-worn 1g (15mm)	Hotspot 1g (10mm)	Specific 10g(0mm)
DTS	0.81	0.48	0.92	/
NII	0.15	0.71	0.94	/
6XD	0.06	0.15	/	/
DSS	0.81	0.71	0.94	/
Limit (W/Kg)	1.60	1.60	1.60	4.0
Verdict	Pass			
Note: The highest simultaneous SAR please refer section 12.2				

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 1 g SAR for the EUT in this report is 0.87 W/kg, which is lower than 1.5 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

The maximum 10g SAR for the EUT in this report is 1.12 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:

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

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

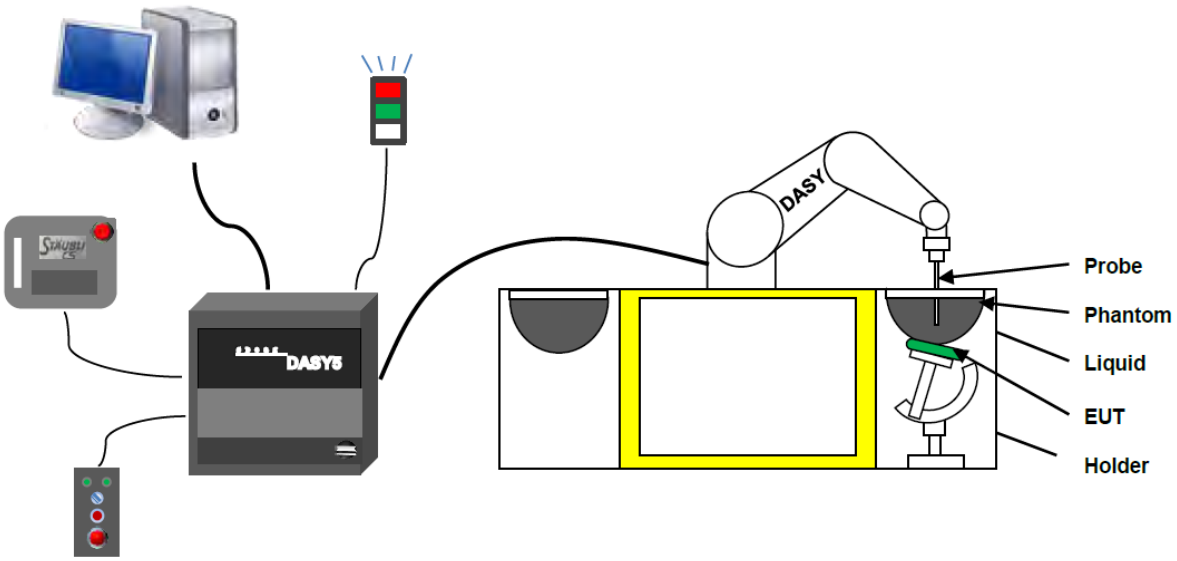
$$\mathbf{SAR} = \frac{\boldsymbol{\sigma}\mathbf{E}^{2}}{\boldsymbol{\rho}}$$

Where: σ is the conductivity of the tissue,

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

4.2 DASY SAR System

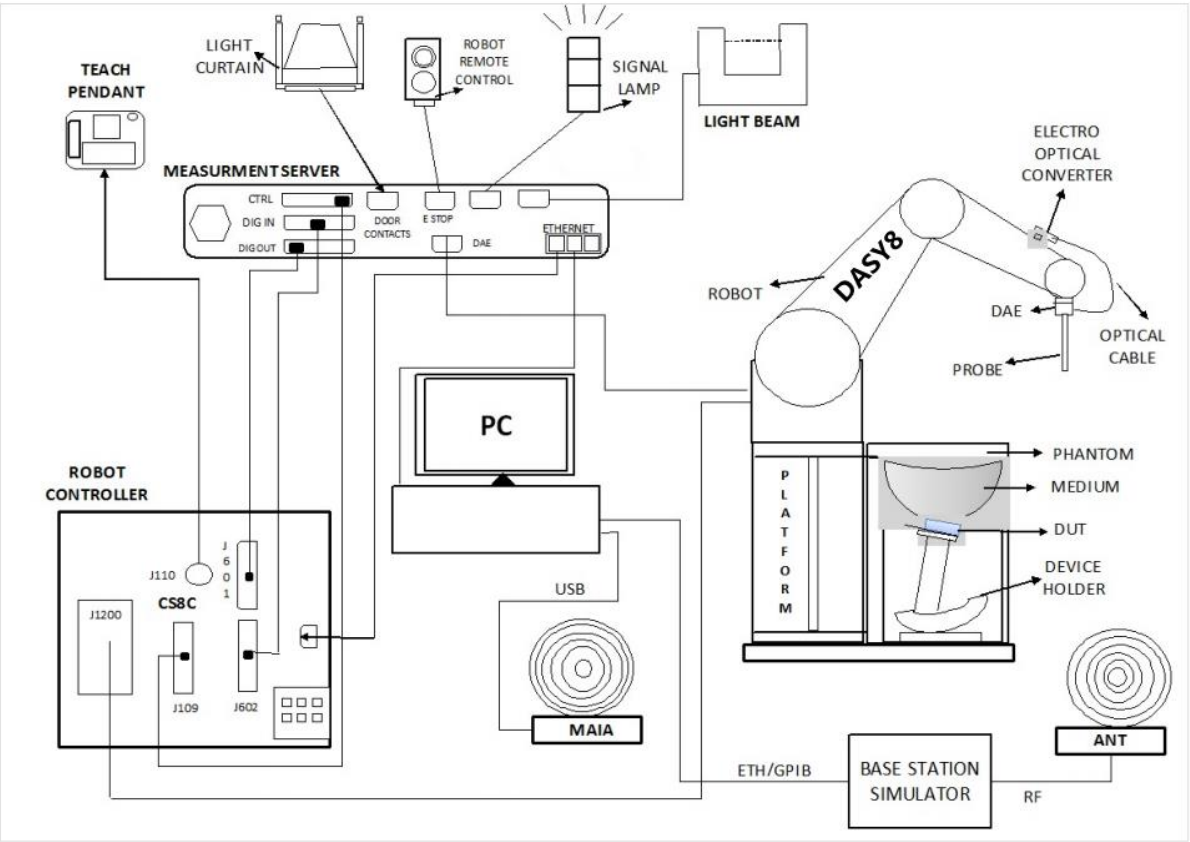
4.2.1 DASY 5 SAR System Diagram



The DASY5 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 DASY5 measurement server.
6. The DASY5 measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation.
7. DASY5 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 DASY8 SAR System Diagram



The DASY8 system for performing compliance tests consists of the following items:

13. A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
14. 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.
15. 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.
16. A unit to operate the optical surface detector which is connected to the EOC.
17. 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.
18. The DASY measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation.
19. DASY software and SEMCAD data evaluation software.
20. Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
21. The generic twin phantom enabling the testing of left-hand and right-hand usage.
22. The device holder for handheld mobile phones.
23. Tissue simulating liquid mixed according to the given recipes.
24. System validation dipoles allowing to validate the proper functioning of the system.

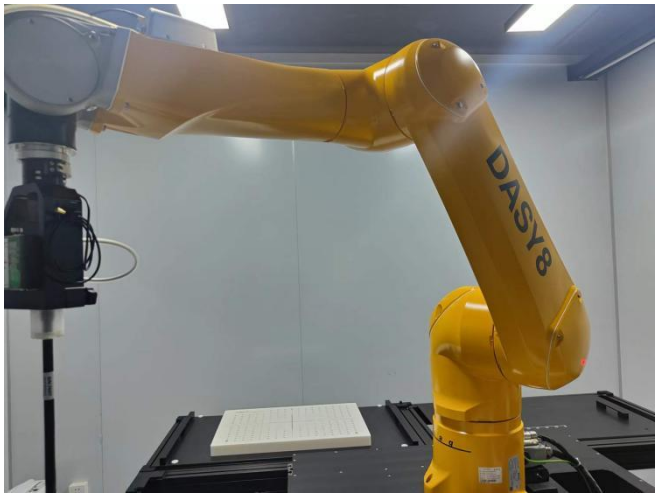
4.2.3 DASY5 Robot

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 _elds shielded via the closed metallic construction shields)

4.2.4 DASY8 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 _elds shielded via the closed metallic construction shields)

4.2.5 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:7893 with following specifications is used.

Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection systemBuilt-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., glycolether)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to 7.5 GHz; Linearity: ± 0.2 dB (30 MHz to 7.5 GHz)
Directivity	± 0.2 dB in HSL (rotation around probe axis) ; ± 0.4 dB in HSL (rotation normal to probe axis)
Dynamic range	5 µW/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)

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 with following specifications is used.

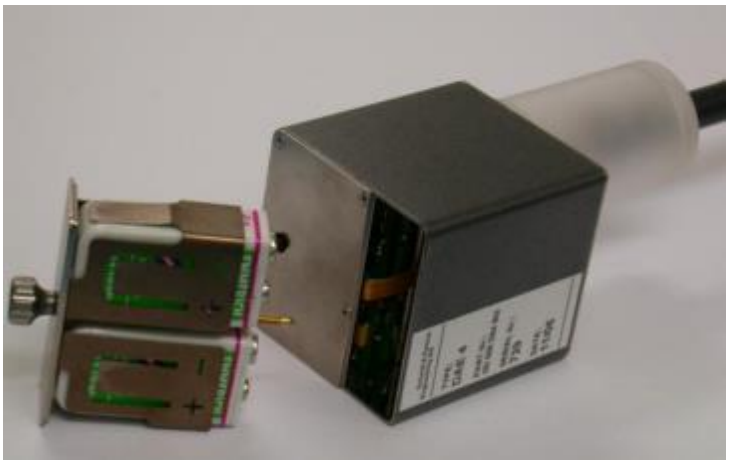
Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection systemBuilt-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., glycolether)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to 6 GHz; Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.2 dB in HSL (rotation around probe axis) ; ± 0.4 dB in HSL (rotation normal to probe axis)
Dynamic range	5 µW/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 CENELEC EN 62209-1/-2 and IEEE 1528 std, with CALISAR, Antennessa proprietary calibration system. The calibration is performed with the EN 62209-1/2 annexe technique using reference guide at the five frequencies.

4.2.6 Data Acquisition Electronics

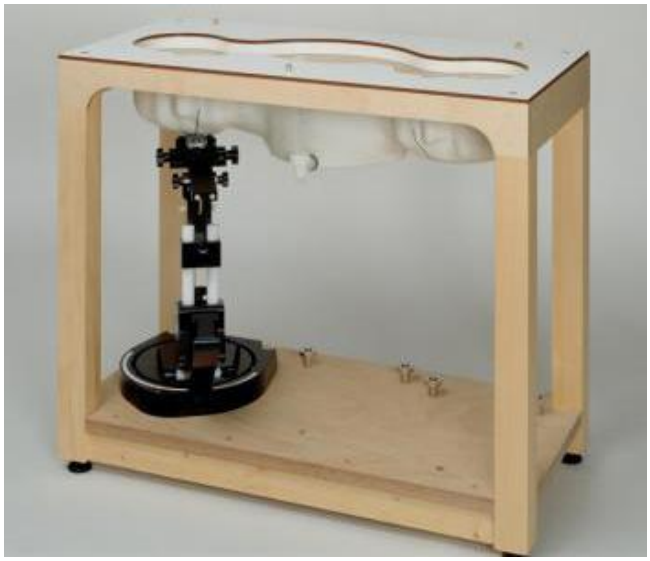
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an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



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

4.2.7 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 head
- Right head
- Flat phantom

Photo of Phantom SN1857

Photo of Phantom SN1859

Serial Number	Material	Length	Height
SN 1857 SAM1	Vinylester, glass fiber reinforced	1000	500
SN 1859 SAM2	Vinylester, glass fiber reinforced	1000	500

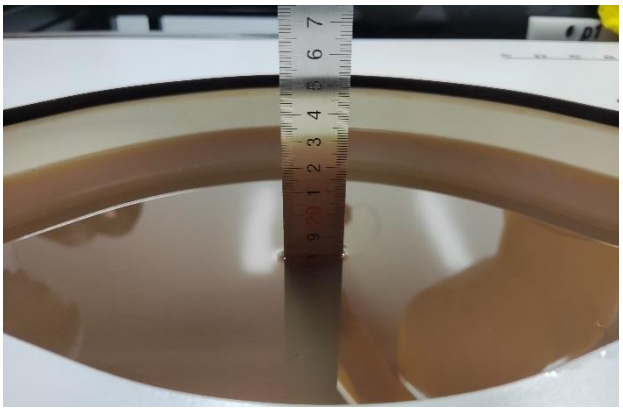
4.2.8 Device Holder

The DASY5 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°.

4.2.9 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%.

Head Liquid Depth	Body Liquid Depth
	

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, Alkoxylated alcohol

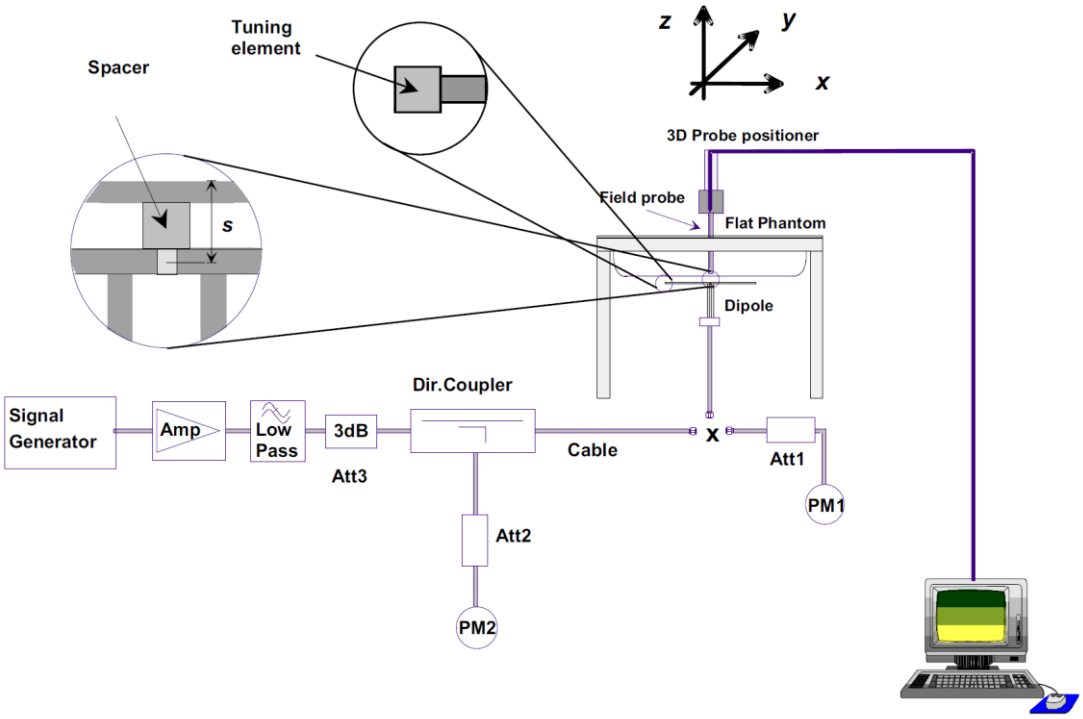
5 SYSTEM VERIFICATION

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

According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

6.1 Head Exposure Conditions

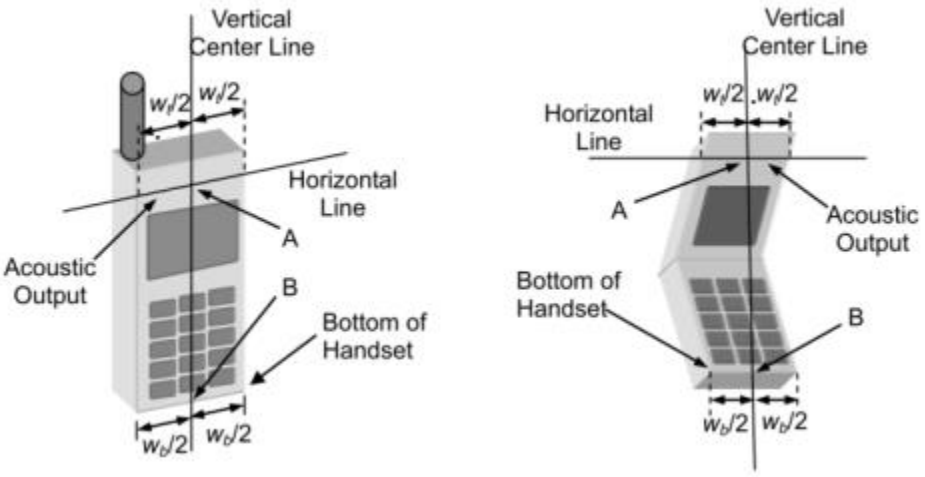
Head exposure is limited to next to the ear voice mode operations. Head SAR compliance is tested according to the test positions defined in IEEE Std 1528-2013 using the SAM phantom illustrated as below.

6.1.1 Two Imaginary Lines on the Handset

(a) The vertical center line passes through two points on the front side of the handset - the midpoint of the width w t of the handset at the level of the acoustic output, and the midpoint of the width w b of the bottom of the handset.

(b) The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output. The horizontal line is also tangential to the face of the handset at point A.

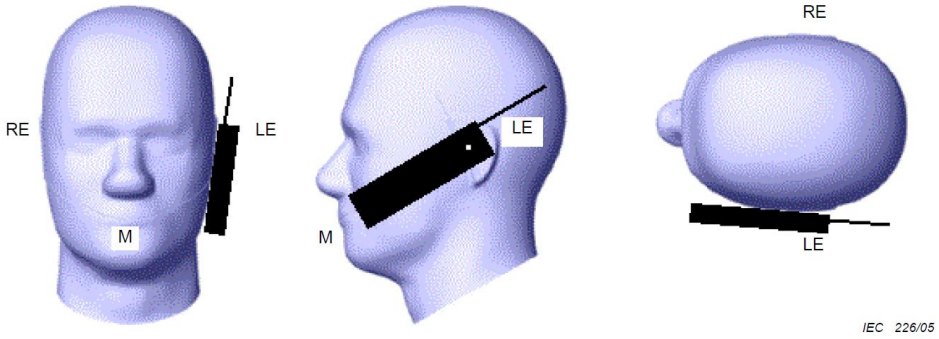
(c) The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical center line is not necessarily parallel to the front face of the handset, especially for clamshell handsets, handsets with flip covers, and other irregularly shaped handsets.



6.1.2 Cheek Position

(a) To position the device with the vertical center line of the body of the device and the horizontal line crossing the center piece in a plane parallel to the sagittal plane of the phantom. While maintaining the device in this plane, align the vertical center line with the reference plane containing the three ear and mouth reference point (M: Mouth, RE: Right Ear, and LE: Left Ear) and align the center of the ear piece with the line RE-LE.

(b) To move the device towards the phantom with the ear piece aligned with the line LE-RE until the phone touched the ear. While maintaining the device in the reference plane and maintaining the phone contact with the ear, move the bottom of the phone until any point on the front side is in contact with the cheek of the phantom or until contact with the ear is lost.



6.1.3 Tilted Position

(a) To position the device in the “cheek” position described above.

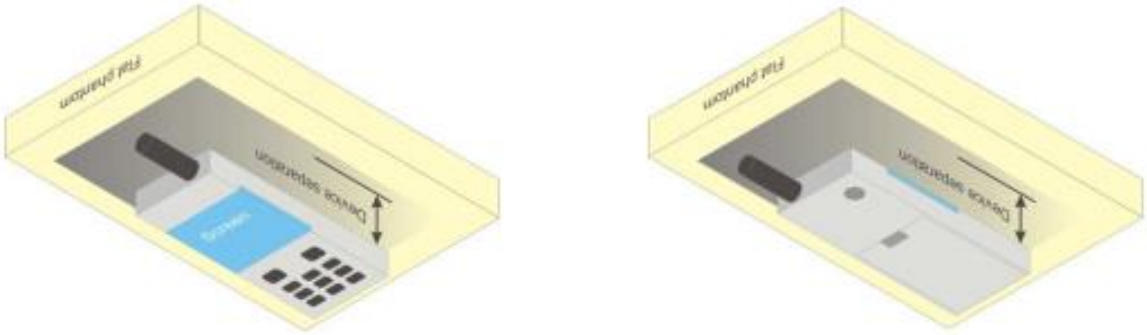
(b) While maintaining the device the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until contact with the ear is lost.

6.2 Body-worn Position Conditions

Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in KDB 447498 are used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode. When the reported SAR for a body-worn accessory.

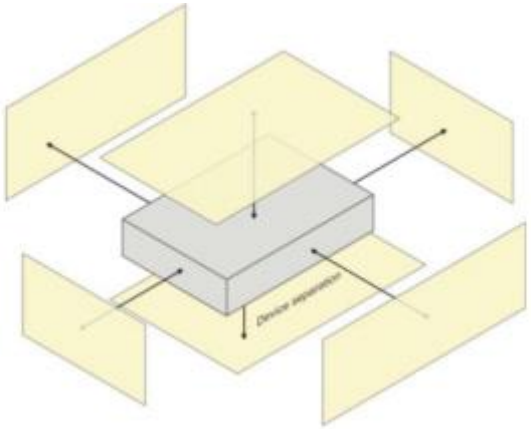
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics. All body-worn accessories containing metallic components are tested in conjunction with the host device.

Body-worn accessory SAR compliance is based on a single minimum test separation distance for all wireless and operating modes applicable to each body-worn accessory used by the host, and according to the relevant voice and/or data mode transmissions and operations. If a body-worn accessory supports voice only operations in its normal and expected use conditions, testing of data mode for body-worn compliance is not required. A conservative minimum test separation distance for supporting off-the-shelf body-worn accessories that may be acquired by users of consumer handsets is used to test for body-worn accessory SAR compliance. This distance is determined by the handset manufacturer, according to the requirements of Supplement C 01-01. Devices that are designed to operate on the body of users using lanyards and straps, or without requiring additional body-worn accessories, will be tested using a conservative minimum test separation distance <= 5 mm to support compliance.



6.3 Hotspot Mode Exposure Position Conditions

For handsets that support hotspot mode operations, with wireless router capabilities and various web browsing functions, the relevant hand and body exposure conditions are tested according to the hotspot SAR procedures in KDB 941225. A test separation distance of 10 mm is required between the phantom and all surfaces and edges with a transmitting antenna located within 25 mm from that surface or edge. When the form factor of a handset is smaller than 9 cm x 5 cm, a test separation distance of 5 mm (instead of 10 mm) is required for testing hotspot mode. When the separation distance required for body-worn accessory testing is larger than or equal to that tested for hotspot mode, in the same wireless mode and for the same surface of the phone, the hotspot mode SAR data may be used to support body-worn accessory SAR compliance for that particular configuration (surface).



6.4 Product Specific 10g Exposure Consideration

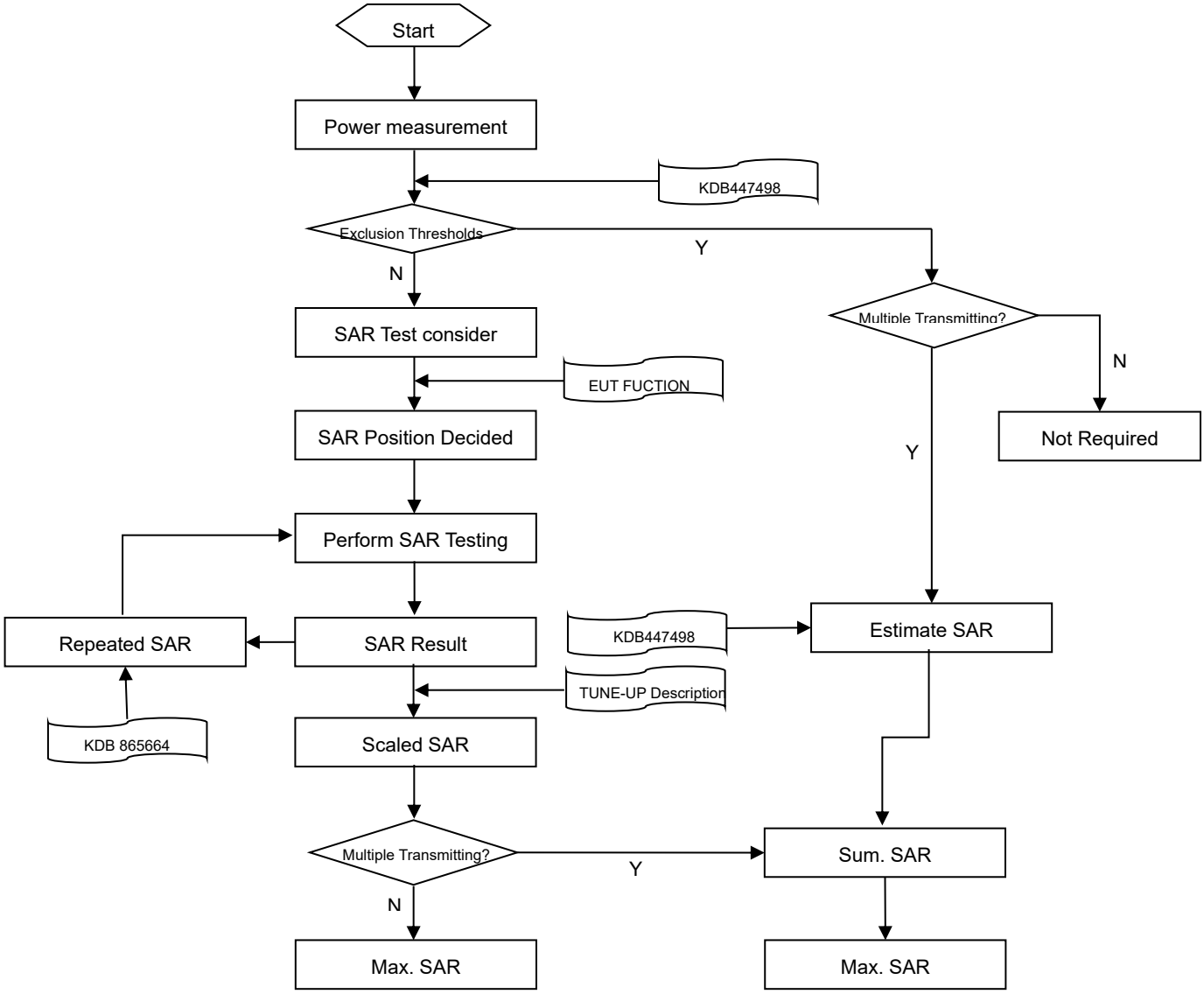
According with FCC KDB 648474 D04, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear, unless it is confirmed otherwise through KDB inquiries, the following phablet procedures should be applied to evaluate SAR compliance for each applicable wireless modes and frequency band. Devices marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance;

The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at $\leqslant$ 25 mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions. The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.

.

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. Boththe 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.

<table>
<tr><th colspan="3"></th><th>≤3GHz</th><th>>3GHz</th></tr>
<tr><td colspan="3">Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface</td><td>5±1 mm</td><td>½·δ·ln(2)±0.5 mm</td></tr>
<tr><td colspan="3">Maximum probe angle from probe axis to phantom surface normal at the measurement location</td><td>30°±1°</td><td>20°±1°</td></tr>
<tr><td colspan="3" rowspan="2">Maximum area scan spatial resolution: Δx Area , Δy Area</td><td>≤ 2 GHz: ≤ 15 mm
2 – 3 GHz: ≤ 12 mm</td><td>3–4 GHz: ≤ 12 mm
4 – 6 GHz: ≤ 10 mm</td></tr>
<tr><td colspan="2">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.</td></tr>
<tr><td colspan="3">Maximum zoom scan spatial resolution: Δx Zoom , Δy Zoom</td><td>≤ 2 GHz: ≤ 8 mm
2 –3 GHz: ≤ 5 mm*</td><td>3–4 GHz: ≤ 5 mm*
4 – 6 GHz: ≤ 4 mm*</td></tr>
<tr><td rowspan="7">Maximum zoom scan spatial resolution, normal to phantom surface</td><td colspan="2" rowspan="3">uniform grid: Δz Zoom (n)</td><td rowspan="3">≤ 5 mm</td><td>3–4 GHz: ≤ 4 mm</td></tr>
<tr><td>4–5 GHz: ≤ 3 mm</td></tr>
<tr><td>5–6 GHz: ≤ 2 mm</td></tr>
<tr><td rowspan="4">graded grid</td><td rowspan="3">Δz Zoom (1): between 1st two points closest to phantom surface</td><td rowspan="3">≤ 4 mm</td><td>3–4 GHz: ≤ 3 mm</td></tr>
<tr><td>4–5 GHz: ≤ 2.5 mm</td></tr>
<tr><td>5–6 GHz: ≤ 2 mm</td></tr>
<tr><td>Δz Zoom (n>1): between subsequent points</td><td colspan="2">≤ 1.5·Δz Zoom (n-1)</td></tr>
<tr><td rowspan="3">Minimum zoom scan volume</td><td colspan="2" rowspan="3">x, y, z</td><td rowspan="3">≥30 mm</td><td>3–4 GHz: ≥ 28 mm</td></tr>
<tr><td>4–5 GHz: ≥ 25 mm</td></tr>
<tr><td>5–6 GHz: ≥ 22 mm</td></tr>
<tr><td colspan="5">Note:
1. δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.
2. * 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.</td></tr>
</table>

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 to16 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.

8 CONDUCTED RF OUPUT POWER

8.1 WIFI

8.1.1 2.4G WIFI-ANT 6

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	19.57	21.00	YES
		6	2437	19.48	21.00	YES
		11	2462	19.52	21.00	YES
	802.11g	1	2412	18.72	20.00	NO
		6	2437	18.66	20.00	NO
		11	2462	18.69	20.00	NO
	802.11n(HT20)	1	2412	17.70	19.00	NO
		6	2437	17.51	19.00	NO
		11	2462	17.49	19.00	NO
	802.11n(HT40)	3	2422	17.24	18.50	NO
		6	2437	17.11	18.50	NO
		9	2452	17.03	18.50	NO
	802.11 ax (HE20)	1	2412	17.67	19.00	NO
		6	2437	17.53	19.00	NO
		11	2462	17.58	19.00	NO
	802.11 ax (HE40)	3	2422	17.16	18.50	NO
		6	2437	17.14	18.50	NO
		9	2452	17.05	18.50	NO

Note: When multiple channel bandwidth configurations in a frequency band have the same maximum tune-up output power, the test configuration is determined by applying the following steps sequentially.

1) The largest channel bandwidth configuration is selected between the multiple configurations in a frequency band with the same maximum tune-up output power.

2) When multiple transmission modes (802.11b/g/n/VHT/ax) have the same maximum tune-up output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11b is chosen over 802.11g, and 802.11g chosen over 802.11n.

3) According KDB 247228, 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 $\leqslant$ 1.2 W/kg, OFDM SAR test is not required.

8.1.2 2.4G WIFI-ANT 7

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	19.55	21.00	NO
		6	2437	19.56	21.00	YES
		11	2462	19.49	21.00	NO
	802.11g	1	2412	18.78	20.00	NO
		6	2437	18.65	20.00	NO
		11	2462	18.61	20.00	NO
	802.11n(HT20)	1	2412	17.71	19.00	NO
		6	2437	17.48	19.00	NO
		11	2462	17.53	19.00	NO
	802.11n(HT40)	3	2422	17.25	18.50	NO
		6	2437	17.14	18.50	NO
		9	2452	17.07	18.50	NO
	802.11 ax (HE20)	1	2412	17.64	19.00	NO
		6	2437	17.51	19.00	NO
		11	2462	17.55	19.00	NO
	802.11 ax (HE40)	3	2422	17.12	18.50	NO
		6	2437	17.19	18.50	NO
		9	2452	17.01	18.50	NO

Note: When multiple channel bandwidth configurations in a frequency band have the same maximum tune-up output power, the test configuration is determined by applying the following steps sequentially.

1) The largest channel bandwidth configuration is selected between the multiple configurations in a frequency band with the same maximum tune-up output power.

2) When multiple transmission modes (802.11b/g/n/VHT/ax) have the same maximum tune-up output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11b is chosen over 802.11g, and 802.11g chosen over 802.11n.

3) According KDB 247228, 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 $\leqslant$ 1.2 W/kg, OFDM SAR test is not required.

8.1.3 2.4G WIFI-MIMO

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	N/A		
		6	2437			
		11	2462			
	802.11g	1	2412			
		6	2437			
		11	2462			
	802.11n(HT20)	1	2412	18.20	19.50	Yes
		6	2437	18.04	19.50	NO
		11	2462	18.04	19.50	NO
	802.11n(HT40)	3	2422	17.75	19.00	NO
		6	2437	17.65	19.00	NO
		9	2452	17.62	19.00	NO
	802.11 ax (HE20)	1	2412	18.15	19.50	NO
		6	2437	18.04	19.50	NO
		11	2462	18.09	19.50	NO
	802.11 ax (HE40)	3	2422	17.71	19.00	NO
		6	2437	17.64	19.00	NO
		9	2452	17.58	19.00	NO

Note: When multiple channel bandwidth configurations in a frequency band have the same maximum tune-up output power, the test configuration is determined by applying the following steps sequentially.

1) The largest channel bandwidth configuration is selected between the multiple configurations in a frequency band with the same maximum tune-up output power.

2) When multiple transmission modes (802.11b/g/n/VHT/ax) have the same maximum tune-up output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11b is chosen over 802.11g, and 802.11g chosen over 802.11n.

3) According KDB 247228, 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 $\leqslant$ 1.2 W/kg, OFDM SAR test is not required.

8.1.4 5G WIFI-ANT 6

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5G WLAN	802.11a	36	5180	16.55	18.00	Yes
		44	5220	16.58	18.00	Yes
		48	5240	16.51	18.00	Yes
		52	5260	16.53	18.00	Yes
		60	5300	16.59	18.00	Yes
		64	5320	16.56	18.00	Yes
		100	5500	16.52	18.00	Yes
		116	5580	16.55	18.00	Yes
		140	5700	16.51	18.00	Yes
		149	5745	14.57	16.00	Yes
		157	5785	14.66	16.00	Yes
		165	5825	14.44	16.00	Yes
	802.11n(HT20)	36	5180	16.53	18.00	No
		44	5220	16.49	18.00	No
		48	5240	16.54	18.00	No
		52	5260	16.52	18.00	No
		60	5300	16.41	18.00	No
		64	5320	16.47	18.00	No
		100	5500	16.55	18.00	No
		116	5580	16.46	18.00	No
		140	5700	16.43	18.00	No
		149	5745	14.18	16.00	No
		157	5785	13.96	16.00	No
		165	5825	14.22	16.00	No
	802.11n(HT40)	38	5190	15.58	17.00	No
		46	5230	15.47	17.00	No
		54	5270	15.55	17.00	No
		62	5310	15.41	17.00	No
		102	5510	15.53	17.00	No
		118	5590	15.42	17.00	No
		134	5670	15.45	17.00	No
		151	5755	13.36	15.00	No
		159	5795	13.41	15.00	No
	802.11ac(VHT20)	36	5180	13.51	15.00	No
		44	5220	13.42	15.00	No

		48	5240	13.55	15.00	No
		52	5260	13.43	15.00	No
		60	5300	13.47	15.00	No
		64	5320	13.54	15.00	No
		100	5500	13.47	15.00	No
		116	5580	13.44	15.00	No
		140	5700	11.41	13.00	No
		149	5745	11.48	13.00	No
		157	5785	11.64	13.00	No
		165	5825	11.62	13.00	No
	802.11ac(VHT40)	38	5190	13.47	15.00	No
		46	5230	13.52	15.00	No
		54	5270	13.35	15.00	No
		62	5310	13.36	15.00	No
		102	5510	13.38	15.00	No
		118	5590	13.43	15.00	No
		134	5670	11.41	13.00	No
		151	5755	11.43	13.00	No
		159	5795	11.54	13.00	No
	802.11ac(VHT80)	42	5210	13.39	15.00	No
		58	5290	13.36	15.00	No
		106	5530	13.35	15.00	No
		112	5610	12.28	14.00	No
		155	5775	11.47	13.00	No
	802.11ac (VHT160)	50	5250	13.32	15.00	No
		114	5570	13.25	15.00	No
	802.11ax(HE20)	36	5180	12.53	14.00	No
		44	5220	12.47	14.00	No
		48	5240	12.58	14.00	No
		52	5260	12.44	14.00	No
		60	5300	12.42	14.00	No
		64	5320	12.49	14.00	No
		100	5500	12.46	14.00	No
		116	5580	11.91	13.50	No
		140	5700	10.49	12.50	No
		149	5745	10.46	12.50	No
		157	5785	10.72	12.50	No
		165	5825	10.88	12.50	No
	802.11ax(HE40)	38	5190	12.49	14.00	No

		46	5230	12.51	14.00	No
		54	5270	12.58	14.00	No
		62	5310	12.42	14.00	No
		102	5510	12.58	14.00	No
		118	5590	11.43	13.00	No
		134	5670	10.33	12.00	No
		151	5755	10.15	12.00	No
		159	5795	10.32	12.00	No
	802.11ax(HE80)	42	5210	12.42	14.00	No
		58	5290	12.36	14.00	No
		106	5530	12.38	14.00	No
		112	5610	11.44	13.00	No
		155	5775	11.06	13.00	No
	802.11ax(HE160)	50	5250	12.55	14.00	No
		114	5570	12.07	14.00	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.						

8.1.5 5G WIFI-ANT 7

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5G WLAN	802.11a	36	5180	15.53	17.00	No
		44	5220	15.49	17.00	No
		48	5240	15.54	17.00	Yes
		52	5260	15.52	17.00	No
		60	5300	15.45	17.00	No
		64	5320	15.58	17.00	Yes
		100	5500	15.87	17.00	No
		116	5580	15.76	17.00	No
		140	5700	15.88	17.00	Yes
		149	5745	14.55	16.00	Yes
		157	5785	14.32	16.00	No
		165	5825	14.49	16.00	No
	802.11n(HT20)	36	5180	15.52	17.00	No
		44	5220	15.43	17.00	No
		48	5240	15.56	17.00	No
		52	5260	15.53	17.00	No
		60	5300	15.48	17.00	No
		64	5320	15.44	17.00	No
		100	5500	15.61	17.00	No
		116	5580	15.59	17.00	No
		140	5700	15.54	17.00	No
		149	5745	14.14	16.00	No
		157	5785	14.08	16.00	No
		165	5825	14.26	16.00	No
	802.11n(HT40)	38	5190	14.55	16.00	No
		46	5230	14.42	16.00	No
		54	5270	14.56	16.00	No
		62	5310	14.47	16.00	No
		102	5510	15.05	16.00	No
		118	5590	14.97	16.00	No
		134	5670	14.90	16.00	No
		151	5755	13.37	15.00	No
		159	5795	13.48	15.00	No
	802.11ac(VHT20)	36	5180	12.53	14.00	No
		44	5220	12.37	14.00	No

		48	5240	12.38	14.00	No
		52	5260	12.44	14.00	No
		60	5300	12.41	14.00	No
		64	5320	12.58	14.00	No
		100	5500	12.91	14.00	No
		116	5580	13.05	14.00	No
		140	5700	12.46	14.00	No
		149	5745	11.42	13.00	No
		157	5785	11.66	13.00	No
		165	5825	11.64	13.00	No
	802.11ac(VHT40)	38	5190	12.49	14.00	No
		46	5230	12.51	14.00	No
		54	5270	12.31	14.00	No
		62	5310	12.37	14.00	No
		102	5510	13.11	14.00	No
		118	5590	13.14	14.00	No
		134	5670	13.12	14.00	No
		151	5755	11.47	13.00	No
		159	5795	11.51	13.00	No
	802.11ac(VHT80)	42	5210	12.52	14.00	No
		58	5290	12.48	14.00	No
		106	5530	12.93	14.00	No
		112	5610	12.76	14.00	No
		155	5775	11.43	13.00	No
	802.11ac (VHT160)	50	5250	12.45	14.00	No
		114	5570	13.11	14.00	No
	802.11ax(HE20)	36	5180	11.54	13.00	No
		44	5220	11.35	13.00	No
		48	5240	11.22	13.00	No
		52	5260	11.46	13.00	No
		60	5300	11.51	13.00	No
		64	5320	11.45	13.00	No
		100	5500	12.07	13.00	No
		116	5580	11.98	13.00	No
		140	5700	11.86	13.00	No
		149	5745	10.48	12.00	No
		157	5785	10.76	12.00	No
		165	5825	10.86	12.00	No
	802.11ax(HE40)	38	5190	11.48	13.00	No

		46	5230	11.37	13.00	No
		54	5270	11.56	13.00	No
		62	5310	11.48	13.00	No
		102	5510	12.11	13.00	No
		118	5590	11.96	13.00	No
		134	5670	11.94	13.00	No
		151	5755	10.17	12.00	No
		159	5795	10.39	12.00	No
	802.11ax(HE80)	42	5210	11.48	13.00	No
		58	5290	11.68	13.00	No
		106	5530	12.02	13.00	No
		112	5610	12.06	13.00	No
		155	5775	11.12	12.50	No
	802.11ax(HE160)	50	5250	11.57	13.00	No
		114	5570	11.54	13.00	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.						

8.1.6 5G WIFI-MIMO

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5G WLAN	802.11a	36	5180	N/A		
		44	5220			
		48	5240			
		52	5260			
		60	5300			
		64	5320			
		100	5500			
		116	5580			
		140	5700			
		149	5745			
		157	5785			
		165	5825			
	802.11n(HT20)	36	5180	16.07	17.00	No
		44	5220	16.00	17.00	No
		48	5240	16.11	17.00	Yes
		52	5260	16.06	17.00	Yes
		60	5300	15.99	17.00	No
		64	5320	15.97	17.00	No
		100	5500	16.09	17.00	Yes
		116	5580	16.05	17.00	No
		140	5700	16.03	17.00	No
		149	5745	14.14	15.00	No
		157	5785	14.02	15.00	No
		165	5825	14.24	15.00	Yes
	802.11n(HT40)	38	5190	15.10	16.00	No
		46	5230	14.99	16.00	No
		54	5270	15.09	16.00	No
		62	5310	14.97	16.00	No
		102	5510	15.30	16.50	No
		118	5590	15.20	16.50	No
		134	5670	15.21	16.50	No
		151	5755	13.37	14.50	No
		159	5795	13.47	14.50	No
	802.11ac(VHT20)	36	5180	13.07	14.50	No
		44	5220	12.96	14.50	No
		48	5240	13.01	14.50	No

		52	5260	12.98	14.50	No
		60	5300	12.98	14.50	No
		64	5320	13.08	14.50	No
		100	5500	13.21	14.50	No
		116	5580	13.25	14.50	No
		140	5700	12.02	13.50	No
		149	5745	11.46	13.00	No
		157	5785	11.65	13.00	No
		165	5825	11.68	13.00	No
	802.11ac(VHT40)	38	5190	13.02	14.50	No
		46	5230	13.09	14.50	No
		54	5270	12.87	14.50	No
		62	5310	12.88	14.50	No
		102	5510	12.78	14.50	No
		118	5590	13.31	15.00	No
		134	5670	12.41	14.00	No
		151	5755	11.48	13.00	No
		159	5795	11.56	13.00	No
	802.11ac(VHT80)	42	5210	12.98	14.50	No
		58	5290	12.89	14.50	No
		106	5530	13.17	14.50	No
		112	5610	12.54	14.00	No
		155	5775	11.47	13.00	No
	802.11ac (VHT160)	50	5250	12.95	14.00	No
		114	5570	13.21	14.00	No
	802.11ax(HE20)	36	5180	12.10	13.00	No
		44	5220	11.95	13.00	No
		48	5240	11.94	13.00	No
		52	5260	11.99	13.00	No
		60	5300	12.02	13.00	No
		64	5320	11.98	13.00	No
		100	5500	12.28	13.00	No
		116	5580	11.97	13.00	No
		140	5700	11.20	13.00	No
		149	5745	10.44	12.00	No
		157	5785	10.75	12.00	No
		165	5825	10.85	12.00	No
	802.11ax(HE40)	38	5190	12.01	13.00	No
		46	5230	12.00	13.00	No

		54	5270	12.09	13.00	No
		62	5310	11.97	13.00	No
		102	5510	12.34	13.00	No
		118	5590	11.71	13.00	No
		134	5670	11.22	12.00	No
		151	5755	10.18	11.00	No
		159	5795	10.36	11.00	No
	802.11ax(HE80)	42	5210	11.99	13.00	No
		58	5290	12.02	13.00	No
		106	5530	12.21	13.00	No
		112	5610	11.76	13.00	No
		155	5775	11.13	12.00	No
	802.11ax(HE160)	50	5250	12.05	13.00	No
		114	5570	11.82	13.00	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.						

8.1.7 6G WIFI-ANT6

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
6G WLAN	802.11ax(HE20)	1	5955	9.57	10.50	No
		45	6175	9.47	10.50	No
		93	6415	9.57	10.50	No
		97	6435	9.68	10.50	No
		105	6475	9.56	10.50	No
		113	6515	9.57	10.50	No
		117	6535	10.02	10.50	No
		153	6715	9.73	10.50	No
		181	6855	9.65	10.50	No
		185	6875	9.78	10.50	No
		213	7015	9.55	10.50	No
		229	7095	9.55	10.50	No
		233	7115	9.62	10.50	No
	802.11ax(HE40)	3	5965	10.03	10.50	No
		43	6165	9.85	10.50	No
		91	6405	9.95	10.50	No
		99	6445	9.75	10.50	No
		107	6485	9.94	10.50	No
		115	6525	9.69	10.50	No
		123	6565	9.98	10.50	No
		155	6725	9.84	10.50	No
		179	6845	10.18	10.50	No
		187	6885	10.42	10.50	No
		211	7005	10.01	10.50	No
		227	7085	10.53	10.50	No
	802.11ax(HE80)	7	5985	10.26	10.50	No
		39	6145	10.07	10.50	No
		87	6385	9.72	10.50	No
		103	6465	9.49	10.50	No
		119	6545	9.04	10.50	No
		135	6625	10.41	10.50	No
		151	6705	9.76	10.50	No
		167	6785	9.29	10.50	No
		183	6865	10.22	10.50	No
		199	6945	9.97	10.50	No
		215	7025	10.45	10.50	No

	802.11ax(HE160)	15	6025	10.00	10.50	Yes
		47	6185	9.62	10.50	Yes
		79	6345	9.75	10.50	Yes
		111	6505	8.83	10.50	Yes
		143	6665	10.33	10.50	Yes
		175	6825	10.42	10.50	Yes
		207	6985	10.35	10.50	Yes
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.						

8.1.8 6G WIFI-ANT7

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
6G WLAN	802.11ax(HE20)	1	5955	9.82	10.50	No
		45	6175	9.66	10.50	No
		93	6415	9.78	10.50	No
		97	6435	9.61	10.50	No
		105	6475	9.57	10.50	No
		113	6515	9.52	10.50	No
		117	6535	9.68	10.50	No
		153	6715	9.74	10.50	No
		181	6855	9.77	10.50	No
		185	6875	9.62	10.50	No
		213	7015	9.64	10.50	No
		229	7095	9.48	10.50	No
		233	7115	9.51	10.50	No
	802.11ax(HE40)	3	5965	10.08	10.50	No
		43	6165	9.84	10.50	No
		91	6405	9.96	10.50	No
		99	6445	9.83	10.50	No
		107	6485	9.91	10.50	No
		115	6525	9.78	10.50	No
		123	6565	9.74	10.50	No
		155	6725	9.82	10.50	No
		179	6845	9.93	10.50	No
		187	6885	9.94	10.50	No
		211	7005	9.85	10.50	No

		227	7085	10.04	10.50	No
	802.11ax(HE80)	7	5985	9.62	10.50	No
		39	6145	9.78	10.50	No
		87	6385	10.15	10.50	No
		103	6465	9.82	10.50	No
		119	6545	9.41	10.50	No
		135	6625	9.26	10.50	No
		151	6705	10.43	10.50	No
		167	6785	10.21	10.50	No
		183	6865	9.96	10.50	No
		199	6945	9.75	10.50	No
		215	7025	9.52	10.50	No
	802.11ax(HE160)	15	6025	9.84	10.50	Yes
		47	6185	10.12	10.50	Yes
		79	6345	10.54	11.00	Yes
		111	6505	9.76	10.50	Yes
		143	6665	9.52	10.50	Yes
		175	6825	10.67	11.00	Yes
		207	6985	10.34	10.50	Yes
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.						

8.1.9 6G WIFI-MIMO

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
6G WLAN	802.11ax(HE20)	1	5955	9.74	10.50	No
		45	6175	9.62	10.50	No
		93	6415	9.76	10.50	No
		97	6435	9.65	10.50	No
		105	6475	9.59	10.50	No
		113	6515	9.64	10.50	No
		117	6535	9.92	10.50	No
		153	6715	9.86	10.50	No
		181	6855	9.83	10.50	No
		185	6875	9.61	10.50	No
		213	7015	9.57	10.50	No
		229	7095	9.55	10.50	No

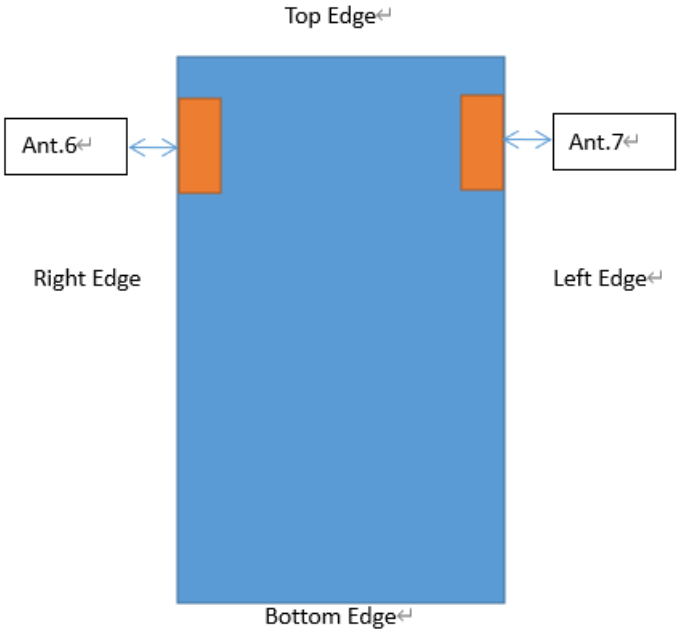
		233	7115	9.52	10.50	No
	802.11ax(HE40)	3	5965	7.92	10.50	No
		43	6165	7.88	10.50	No
		91	6405	8.05	10.50	No
		99	6445	7.85	10.50	No
		107	6485	7.97	10.50	No
		115	6525	7.73	10.50	No
		123	6565	9.94	10.50	No
		155	6725	9.89	10.50	No
		179	6845	10.06	10.50	No
		187	6885	10.41	10.50	No
		211	7005	10.07	10.50	No
		227	7085	10.33	10.50	No
	802.11ax(HE80)	7	5985	10.28	10.50	No
		39	6145	9.97	10.50	No
		87	6385	9.88	10.50	No
		103	6465	9.49	10.50	No
		119	6545	9.16	10.50	No
		135	6625	10.57	10.50	No
		151	6705	9.76	10.50	No
		167	6785	9.16	10.50	No
		183	6865	10.23	10.50	No
		199	6945	10.16	10.50	No
		215	7025	11.89	10.50	No
	802.11ax(HE160)	15	6025	9.97	10.50	Yes
		47	6185	9.46	10.50	Yes
		79	6345	9.83	10.50	Yes
		111	6505	8.79	10.50	Yes
		143	6665	9.87	10.50	Yes
		175	6825	10.11	10.50	Yes
		207	6985	9.83	10.50	Yes
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.						

8.2 Bluetooth

Mode	GFSK			π/4-DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
Average Power (dBm)	**8.61**	8.53	7.33	6.83	6.81	6.63
Tune-Up Limit (dBm)	10.00	10.00	9.00	8.00	8.00	8.00
SAR Test Require	YES	YES	YES	NO	NO	NO
Mode	8-DPSK			/		
Channel	0	39	78	/	/	/
Frequency (MHz)	2402	2441	2480	/	/	/
Average Power (dBm)	6.79	6.82	6.58	/	/	/
Tune-Up Limit (dBm)	8.00	8.00	8.00	/	/	/
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)	4.18	3.72	2.56	4.12	3.58	2.36
Tune-Up Limit (dBm)	5.00	5.00	4.00	5.00	5.00	4.00
SAR Test Require	NO	NO	NO	NO	NO	NO

Note 1: Since 44luetooth 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 ≤ ¼ Db higher than the primary mode.

9 TEST EXCLUSION CONSIDERATION



<Back View>

Antenna	Description	Support Bands
Antenna 6	WLAN 2.4G TX Antenna WLAN 5G TX Antenna	2.4G WLAN 5G WLAN/6G WLAN
Antenna 7	WLAN 2.4G TX Antenna WLAN 5G TX Antenna Bluetooth TX Antenna	2.4G WLAN 5G WLAN/6G WLAN Bluetooth

Antenna	Front Side(mm)	Back Side(mm)	Left Edge(mm)	Right Edge(mm)	Top Edge(mm)	Bottom Edge(mm)
Ant.6	<25	<25	>25	<25	<25	>25
Ant.7	<25	<25	<25	>25	<25	>25

Note: 1. Per KDB 941225 DO6, When the overall length and width of a device is > 9 cm *5 cm, a test separation distance of 10 mm is required for hotspot mode SAR measurements and hotspot mode SAR is measured for all edges and surfaces of the device with a transmitting antenna located within 25 mm from that surface or edge.

10 TEST RESULT

10.1 Bluetooth

Antenna	Test Position	Dist.	Test Mode	Test Channel/ Freq.(MHz)	Power Drift(dB)	Meas 1-g SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No
7	**Head**												
	Left cheek	0mm	BR/EDR 1Mbps	39/2441	0.00	0.016	8.53	10.00	1.403	77.50	1.290	0.029	1#
	Left tilt			39/2441	0.00	0.012	8.53	10.00	1.403	77.50	1.290	0.022	
	Right cheek			39/2441	0.00	0.014	8.53	10.00	1.403	77.50	1.290	0.025	
	Right tilt			39/2441	0.00	0.010	8.53	10.00	1.403	77.50	1.290	0.018	
	Left cheek			00/2402	0.00	0.014	8.61	10.00	1.377	77.50	1.290	0.025	
	Left cheek			78/2480	0.00	0.012	7.33	9.00	1.469	77.50	1.290	0.023	
	Body-worn												
	Front side	15mm	BR/EDR 1Mbps	39/2441	0.00	0.006	8.53	10.00	1.403	77.50	1.290	0.011	
	Back side			39/2441	0.00	0.012	8.53	10.00	1.403	77.50	1.290	0.022	2#
	Back side			00/2402	0.00	0.010	8.61	10.00	1.377	77.50	1.290	0.018	
	Back side			78/2480	0.00	0.006	7.33	9.00	1.469	77.50	1.290	0.011	
	Hotspot												
	Front side	10mm	BR/EDR 1Mbps	39/2441	0.00	0.020	8.53	10.00	1.403	77.50	1.290	0.036	
	Back side			39/2441	-0.20	0.039	8.53	10.00	1.403	77.50	1.290	0.071	3#
	Left side			39/2441	0.18	0.037	8.53	10.00	1.403	77.50	1.290	0.067	
	Top side			39/2441	0.00	0.011	8.53	10.00	1.403	77.50	1.290	0.020	
	Back side			00/2402	0.16	0.031	8.61	10.00	1.377	77.50	1.290	0.055	
	Back side			78/2480	0.10	0.025	7.33	9.00	1.469	77.50	1.290	0.047	
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.2WIFI 2.4GHz

Antenna	Test Position	Dist.	Test Mode	Test Channel/ Freq.(MHz)	Power Drift(dB)	Meas 1-g SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No
Head													
Ant.6	Left cheek	0mm	802.11 b	6/2437	0.05	0.546	19.48	21.00	1.419	99.84	1.002	0.776	4#
	Left tilt			6/2437	-0.12	0.312	19.48	21.00	1.419	99.84	1.002	0.443	
	Right cheek			6/2437	0.12	0.357	19.48	21.00	1.419	99.84	1.002	0.507	
	Right tilt			6/2437	0.13	0.297	19.48	21.00	1.419	99.84	1.002	0.422	
	Left cheek			1/2412	-0.15	0.451	19.57	21.00	1.390	99.84	1.002	0.628	
	Left cheek			11/2462	0.09	0.438	19.72	21.00	1.343	99.84	1.002	0.589	
Ant.7	Left cheek	0mm	802.11 b	6/2437	0.05	0.198	19.56	21.00	1.393	99.84	1.002	0.276	
	Left tilt			6/2437	0.08	0.185	19.56	21.00	1.393	99.84	1.002	0.258	
	Right cheek			6/2437	0.07	0.337	19.56	21.00	1.393	99.84	1.002	0.470	
	Right tilt			6/2437	0.13	0.266	19.56	21.00	1.393	99.84	1.002	0.371	
MIMO	Left cheek	0mm	802.11 n20	1/2412	0.19	0.346	18.20	19.50	1.349	99.96	1.000	0.467	
	Left tilt			1/2412	-0.04	0.285	18.20	19.50	1.349	99.96	1.000	0.385	
	Right cheek			1/2412	0.06	0.344	18.20	19.50	1.349	99.96	1.000	0.464	
	Right tilt			1/2412	0.03	0.250	18.20	19.50	1.349	99.96	1.000	0.337	
Body-worn													
Ant.6	Front side	15mm	802.11 b	6/2437	-0.02	0.079	19.48	21.00	1.419	99.84	1.002	0.112	
	Back side			6/2437	-0.01	0.148	19.48	21.00	1.419	99.84	1.002	0.210	
	Back side			1/2412	-0.08	0.150	19.57	21.00	1.390	99.84	1.002	0.209	
	Back side			11/2462	-0.16	0.154	19.72	21.00	1.343	99.84	1.002	0.207	
Ant.7	Front side	15mm	802.11 b	6/2437	-0.05	0.078	19.56	21.00	1.393	99.84	1.002	0.109	
	Back side			6/2437	-0.11	0.331	19.56	21.00	1.393	99.84	1.002	0.462	5#
	Back side			1/2412	-0.08	0.157	19.55	21.00	1.396	99.84	1.002	0.220	
	Back side			11/2462	-0.16	0.121	19.49	21.00	1.416	99.84	1.002	0.172	
MIMO	Front side	15mm	802.11 n20	1/2412	0.05	0.184	18.20	19.50	1.349	99.96	1.000	0.248	
	Back side			1/2412	-0.14	0.330	18.20	19.50	1.349	99.96	1.000	0.445	
Hotspot													
Ant.6	Front side	10mm	802.11 b	6/2437	0.13	0.128	19.48	21.00	1.419	99.84	1.002	0.182	
	Back side			6/2437	-0.15	0.308	19.48	21.00	1.419	99.84	1.002	0.438	
	Right side			6/2437	0.13	0.343	19.48	21.00	1.419	99.84	1.002	0.488	
	Top side			6/2437	-0.13	0.113	19.48	21.00	1.419	99.84	1.002	0.161	
	Right side			1/2412	0.07	0.320	19.57	21.00	1.390	99.84	1.002	0.445	
	Right side			11/2462	0.08	0.324	19.72	21.00	1.343	99.84	1.002	0.436	
Ant.7	Front side	10mm	802.11 b	6/2437	0.16	0.127	19.56	21.00	1.393	99.84	1.002	0.177	
	Back side			6/2437	0.05	0.609	19.56	21.00	1.393	99.84	1.002	0.850	6#

	Left side			6/2437	0.03	0.362	19.56	21.00	1.393	99.84	1.002	0.505	
	Top side			6/2437	-0.03	0.132	19.56	21.00	1.393	99.84	1.002	0.184	
	Back side			1/2412	0.07	0.517	19.55	21.00	1.396	99.84	1.002	0.723	
	Back side			11/2462	0.08	0.453	19.49	21.00	1.416	99.84	1.002	0.642	
MIMO	Front side	10mm	802.11 n20	1/2412	0.13	0.101	18.20	19.50	1.349	99.96	1.000	0.136	
	Back side			1/2412	0.15	0.251	18.20	19.50	1.349	99.96	1.000	0.339	
	Left side			1/2412	-0.01	0.239	18.20	19.50	1.349	99.96	1.000	0.323	
	Right side			1/2412	-0.17	0.338	18.20	19.50	1.349	99.96	1.000	0.456	
	Top side			1/2412	0.07	0.228	18.20	19.50	1.349	99.96	1.000	0.308	
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.3WIFI 5GHz

WLAN 5.2&5.3G

Antenna	Test Position	Dist.	Test Mode	Test Channel/ Freq.(MHz)	Power Drift(dB)	Meas 1-g SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No
Head													
Ant.6	Left cheek	0mm	802.11 a	60/5300	0.15	0.050	16.59	18.00	1.384	99.29	1.007	0.070	
	Left tilt			60/5300	-0.05	0.045	16.59	18.00	1.384	99.29	1.007	0.063	
	Right cheek			60/5300	0.20	0.068	16.59	18.00	1.384	99.29	1.007	0.095	7#
	Right tilt			60/5300	-0.19	0.062	16.59	18.00	1.384	99.29	1.007	0.086	
	Right cheek			52/5260	0.02	0.059	16.53	18.00	1.403	99.29	1.007	0.083	
	Right cheek			64/5320	-0.09	0.052	16.56	18.00	1.393	99.29	1.007	0.073	
Ant.7	Left cheek	0mm	802.11 a	64/5320	0.08	0.065	15.58	17.00	1.387	99.29	1.007	0.091	
	Left tilt			64/5320	0.02	0.057	15.58	17.00	1.387	99.29	1.007	0.080	
	Right cheek			64/5320	-0.19	0.064	15.58	17.00	1.387	99.29	1.007	0.089	
	Right tilt			64/5320	0.01	0.046	15.58	17.00	1.387	99.29	1.007	0.064	
MIMO	Left cheek	0mm	802.11 n20	52/5260	0.07	0.065	16.06	17.00	1.242	99.71	1.003	0.081	
	Left tilt			52/5260	-0.18	0.052	16.06	17.00	1.242	99.71	1.003	0.065	
	Right cheek			52/5260	-0.18	0.072	16.06	17.00	1.242	99.71	1.003	0.090	
	Right tilt			52/5260	-0.09	0.060	16.06	17.00	1.242	99.71	1.003	0.075	
Body-worn													
Ant.6	Front side	15mm	802.11 a	60/5300	0.20	0.052	16.59	18.00	1.384	99.29	1.007	0.072	
	Back side			60/5300	0.13	0.392	16.59	18.00	1.384	99.29	1.007	0.546	
	Back side			52/5260	-0.04	0.465	16.53	18.00	1.403	99.29	1.007	0.657	8#
	Back side			64/5320	-0.10	0.399	16.56	18.00	1.393	99.29	1.007	0.560	
Ant.7	Front side	15mm	802.11 a	64/5320	-0.18	0.054	15.58	17.00	1.387	99.29	1.007	0.075	
	Back side			64/5320	-0.18	0.092	15.58	17.00	1.387	99.29	1.007	0.128	
MIMO	Front side	15mm	802.11 n20	52/5260	0.14	0.060	16.06	17.00	1.242	99.71	1.003	0.075	
	Back side			52/5260	0.17	0.439	16.06	17.00	1.242	99.71	1.003	0.547	
Hotspot													
Ant.6	Front side	10mm	802.11 a	44/5220	0.06	0.084	16.58	18.00	1.387	99.29	1.007	0.117	
	Back side			44/5220	-0.16	0.539	16.58	18.00	1.387	99.29	1.007	0.753	
	Right side			44/5220	0.11	0.137	16.58	18.00	1.387	99.29	1.007	0.191	
	Top side			44/5220	0.08	0.073	16.58	18.00	1.387	99.29	1.007	0.102	
	Back side			36/5180	0.06	0.584	16.55	18.00	1.396	99.29	1.007	0.821	9#
	Back side			48/5240	-0.01	0.527	16.51	18.00	1.409	99.29	1.007	0.748	
Ant.7	Front side	10mm	802.11 a	48/5240	0.06	0.049	15.54	17.00	1.400	99.29	1.007	0.069	
	Back side			48/5240	0.13	0.128	15.54	17.00	1.400	99.29	1.007	0.180	
	Left side			48/5240	-0.14	0.089	15.54	17.00	1.400	99.29	1.007	0.125	
	Top side			48/5240	0.08	0.084	15.54	17.00	1.400	99.29	1.007	0.118	

MIMO	Front side	10mm	802.11 n20	48/5240	0.15	0.102	16.11	17.00	1.227	99.71	1.003	0.126	
	Back side			48/5240	0.08	0.539	16.11	17.00	1.227	99.71	1.003	0.664	
	Left side			48/5240	0.00	0.072	16.11	17.00	1.227	99.71	1.003	0.089	
	Right side			48/5240	-0.16	0.183	16.11	17.00	1.227	99.71	1.003	0.225	
	Top side			48/5240	0.13	0.083	16.11	17.00	1.227	99.71	1.003	0.102	
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

Antenna	Test Position	Dist.	Test Mode	Test Channel/ Freq.(MHz)	Power Drift(dB)	Meas 10-g 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
Specific													
Ant.6	Front side	0mm	802.11 a	60/5300	-0.04	0.102	16.59	18.00	1.384	99.29	1.007	0.142	
	Back side			60/5300	-0.11	0.715	16.59	18.00	1.384	99.29	1.007	0.996	
	Right side			60/5300	-0.18	0.428	16.59	18.00	1.384	99.29	1.007	0.596	
	Top side			60/5300	-0.08	0.125	16.59	18.00	1.384	99.29	1.007	0.174	
	Back side			52/5260	-0.04	0.795	16.53	18.00	1.403	99.29	1.007	1.123	10#
	Back side			64/5320	0.13	0.751	16.56	18.00	1.393	99.29	1.007	1.054	
Ant.7	Front side	0mm	802.11 a	64/5320	-0.08	0.072	15.58	17.00	1.387	99.29	1.007	0.101	
	Back side			64/5320	-0.13	0.402	15.58	17.00	1.387	99.29	1.007	0.561	
	Left side			64/5320	-0.20	0.238	15.58	17.00	1.387	99.29	1.007	0.332	
	Top side			64/5320	0.13	0.192	15.58	17.00	1.387	99.29	1.007	0.268	
MIMO	Front side	0mm	802.11 n20	52/5260	0.19	0.095	16.06	17.00	1.242	99.71	1.003	0.118	
	Back side			52/5260	-0.16	0.612	16.06	17.00	1.242	99.71	1.003	0.762	
	Left side			52/5260	0.09	0.256	16.06	17.00	1.242	99.71	1.003	0.319	
	Right side			52/5260	-0.20	0.384	16.06	17.00	1.242	99.71	1.003	0.478	
	Top side			52/5260	-0.12	0.208	16.06	17.00	1.242	99.71	1.003	0.259	
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

WLAN 5.6G

Antenna	Test Position	Dist.	Test Mode	Test Channel/ Freq.(MHz)	Power Drift(dB)	Meas 1-g SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No
Head													
Ant.6	Left cheek	0mm	802.11 a	116/5580	-0.06	0.076	16.55	18.00	1.396	99.29	1.007	0.107	
	Left tilt			116/5580	-0.03	0.058	16.55	18.00	1.396	99.29	1.007	0.082	
	Right cheek			116/5580	-0.03	0.060	16.55	18.00	1.396	99.29	1.007	0.084	
	Right tilt			116/5580	0.00	0.063	16.55	18.00	1.396	99.29	1.007	0.089	
	Left cheek			100/5500	-0.06	0.062	16.52	18.00	1.406	99.29	1.007	0.088	
	Left cheek			140/5700	-0.06	0.088	16.51	18.00	1.409	99.29	1.007	0.125	11#
Ant.7	Left cheek	0mm	802.11 a	140/5700	-0.02	0.069	15.88	17.00	1.294	99.29	1.007	0.090	
	Left tilt			140/5700	-0.08	0.067	15.88	17.00	1.294	99.29	1.007	0.087	
	Right cheek			140/5700	-0.08	0.054	15.88	17.00	1.294	99.29	1.007	0.070	
	Right tilt			140/5700	-0.05	0.049	15.88	17.00	1.294	99.29	1.007	0.064	
MIMO	Left cheek	0mm	802.11 n20	100/5500	-0.08	0.045	16.09	17.00	1.233	99.71	1.003	0.056	
	Left tilt			100/5500	-0.17	0.038	16.09	17.00	1.233	99.71	1.003	0.047	
	Right cheek			100/5500	-0.12	0.062	16.09	17.00	1.233	99.71	1.003	0.077	
	Right tilt			100/5500	0.10	0.048	16.09	17.00	1.233	99.71	1.003	0.059	
Body-worn													
Ant.6	Front side	15mm	802.11 a	116/5580	-0.02	0.057	16.55	18.00	1.396	99.29	1.007	0.080	
	Back side			116/5580	0.00	0.415	16.55	18.00	1.396	99.29	1.007	0.584	12#
	Back side			100/5500	-0.05	0.401	16.52	18.00	1.406	99.29	1.007	0.568	
	Back side			140/5700	-0.05	0.397	16.51	18.00	1.409	99.29	1.007	0.563	
Ant.7	Front side	15mm	802.11 a	140/5700	0.01	0.058	15.88	17.00	1.294	99.29	1.007	0.076	
	Back side			140/5700	-0.07	0.114	15.88	17.00	1.294	99.29	1.007	0.149	
MIMO	Front side	15mm	802.11 n20	100/5500	0.11	0.050	16.09	17.00	1.233	99.71	1.003	0.062	
	Back side			100/5500	-0.16	0.384	16.09	17.00	1.233	99.71	1.003	0.475	
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

Antenna	Test Position	Dist.	Test Mode	Test Channel/ Freq.(MHz)	Power Drift(dB)	Meas 10-g 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
Specific													
Ant.6	Front side	0mm	802.11 a	116/5580	-0.07	0.045	16.55	18.00	1.396	99.29	1.007	0.063	
	Back side			116/5580	-0.06	0.601	16.55	18.00	1.396	99.29	1.007	0.845	
	Right side			116/5580	-0.04	0.262	16.55	18.00	1.396	99.29	1.007	0.368	
	Top side			116/5580	-0.01	0.071	16.55	18.00	1.396	99.29	1.007	0.100	
	Back side			100/5500	-0.08	0.582	16.52	18.00	1.406	99.29	1.007	0.824	

	Back side			140/5700	-0.08	0.625	16.51	18.00	1.409	99.29	1.007	0.887	13#
Ant.7	Front side	0mm	802.11 a	140/5700	0.01	0.034	15.88	17.00	1.294	99.29	1.007	0.044	
	Back side			140/5700	-0.06	0.231	15.88	17.00	1.294	99.29	1.007	0.301	
	Left side			140/5700	-0.04	0.175	15.88	17.00	1.294	99.29	1.007	0.228	
	Top side			140/5700	-0.04	0.060	15.88	17.00	1.294	99.29	1.007	0.078	
MIMO	Front side	0mm	802.11 n20	100/5500	0.19	0.040	16.09	17.00	1.233	99.71	1.003	0.049	
	Back side			100/5500	0.14	0.524	16.09	17.00	1.233	99.71	1.003	0.648	
	Left side			100/5500	-0.16	0.196	16.09	17.00	1.233	99.71	1.003	0.242	
	Right side			100/5500	0.00	0.241	16.09	17.00	1.233	99.71	1.003	0.298	
	Top side			100/5500	0.15	0.065	16.09	17.00	1.233	99.71	1.003	0.080	
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

WLAN 5.8G

Antenna	Test Position	Dist.	Test Mode	Test Channel/ Freq.(MHz)	Power Drift(dB)	Meas 1-g SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	Duty cycle (%)	Duty cycle Factor	1g Scaled SAR (W/kg)	Meas. No
Head													
Ant.6	Left cheek	0mm	802.11 a	157/5785	0.00	0.040	14.66	16.00	1.361	99.29	1.007	0.055	
	Left tilt			157/5785	0.00	0.047	14.66	16.00	1.361	99.29	1.007	0.064	14#
	Right cheek			157/5785	0.00	0.034	14.66	16.00	1.361	99.29	1.007	0.047	
	Right tilt			157/5785	0.00	0.041	14.66	16.00	1.361	99.29	1.007	0.056	
	Left tilt			149/5745	0.00	0.038	14.57	16.00	1.390	99.29	1.007	0.053	
	Left tilt			165/5825	0.00	0.039	14.44	16.00	1.432	99.29	1.007	0.056	
Ant.7	Left cheek	0mm	802.11 a	149/5745	0.00	0.044	14.55	16.00	1.396	99.29	1.007	0.062	
	Left tilt			149/5745	0.00	0.041	14.55	16.00	1.396	99.29	1.007	0.058	
	Right cheek			149/5745	0.00	0.040	14.55	16.00	1.396	99.29	1.007	0.056	
	Right tilt			149/5745	0.00	0.032	14.55	16.00	1.396	99.29	1.007	0.045	
MIMO	Left cheek	0mm	802.11 n20	165/5825	0.00	0.031	14.24	15.00	1.191	99.71	1.007	0.037	
	Left tilt			165/5825	0.00	0.034	14.24	15.00	1.191	99.71	1.007	0.041	
	Right cheek			165/5825	0.00	0.028	14.24	15.00	1.191	99.71	1.007	0.034	
	Right tilt			165/5825	0.00	0.036	14.24	15.00	1.191	99.71	1.007	0.043	
Body-worn													
Ant.6	Front side	15mm	802.11 a	157/5785	-0.09	0.059	14.66	16.00	1.361	99.29	1.007	0.081	
	Back side			157/5785	0.01	0.357	14.66	16.00	1.361	99.29	1.007	0.490	
	Back side			149/5745	-0.08	0.365	14.57	16.00	1.390	99.29	1.007	0.511	
	Back side			165/5825	0.09	0.477	14.44	16.00	1.432	99.29	1.007	0.688	15#
Ant.7	Front side	15mm	802.11 a	149/5745	-0.09	0.066	14.55	16.00	1.396	99.29	1.007	0.093	
	Back side			149/5745	-0.06	0.243	14.55	16.00	1.396	99.29	1.007	0.342	
MIMO	Front side	15mm	802.11 n20	165/5825	0.00	0.060	14.24	15.00	1.191	99.71	1.003	0.072	
	Back side			165/5825	0.20	0.241	14.24	15.00	1.191	99.71	1.003	0.288	
Hotspot													
Ant.6	Front side	10mm	802.11 a	157/5785	-0.17	0.132	14.66	16.00	1.361	99.29	1.007	0.181	
	Back side			157/5785	-0.10	0.635	14.66	16.00	1.361	99.29	1.007	0.871	16#
	Right side			157/5785	-0.07	0.160	14.66	16.00	1.361	99.29	1.007	0.219	
	Top side			157/5785	0.10	0.157	14.66	16.00	1.361	99.29	1.007	0.216	
	Back side			149/5745	-0.07	0.620	14.57	16.00	1.390	99.29	1.007	0.868	
	Back side			165/5825	0.19	0.594	14.44	16.00	1.432	99.29	1.007	0.856	
Ant.7	Front side	10mm	802.11 a	149/5745	-0.12	0.109	14.55	16.00	1.396	99.29	1.007	0.154	
	Back side			149/5745	-0.20	0.522	14.55	16.00	1.396	99.29	1.007	0.734	
	Left side			149/5745	-0.10	0.253	14.55	16.00	1.396	99.29	1.007	0.356	
	Top side			149/5745	-0.14	0.112	14.55	16.00	1.396	99.29	1.007	0.158	
MIMO	Front side	10mm	802.11 n20	165/5825	-0.07	0.104	14.24	15.00	1.191	99.71	1.003	0.124	
	Back side			165/5825	-0.11	0.498	14.24	15.00	1.191	99.71	1.003	0.594	

	Left side			165/5825	-0.16	0.148	14.24	15.00	1.191	99.71	1.003	0.177	
	Right side			165/5825	0.00	0.139	14.24	15.00	1.191	99.71	1.003	0.166	
	Top side			165/5825	0.19	0.083	14.24	15.00	1.191	99.71	1.003	0.099	
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.4WIFI 6GHz

Fre. Band	Mode	Antenna	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift(dB)	1 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	Duty cycle(%)	Duty Factor	1g Scaled SAR (W/kg)	Meas. APD (W/m2)	Scaled APD (W/m2)	Meas. No.
Head																	
6G	802.11 ax MCS0 HE160	Ant.7	Left Cheek	0	175	6825	-0.08	0.019	10.67	11.00	1.079	99.58	1.004	0.021	0.147	0.159	/
			Left Tilt	0	175	6825	0.15	0.017	10.67	11.00	1.079	99.58	1.004	0.018	0.132	0.143	/
			Right Cheek	0	175	6825	-0.11	0.014	10.67	11.00	1.079	99.58	1.004	0.015	0.109	0.118	/
			Right Tilt	0	175	6825	0.09	0.010	10.67	11.00	1.079	99.58	1.004	0.011	0.078	0.084	/
			Left Cheek	0	15	6025	-0.15	0.016	9.84	10.50	1.164	99.58	1.004	0.019	0.124	0.145	/
				0	47	6185	-0.04	0.017	10.12	10.50	1.091	99.58	1.004	0.019	0.132	0.145	/
				0	79	6345	0.13	0.020	10.54	11.00	1.112	99.58	1.004	0.022	0.155	0.173	/
				0	111	6505	0.04	0.019	9.76	10.50	1.186	99.58	1.004	0.023	0.147	0.175	/
				0	143	6665	0.17	0.015	9.52	10.50	1.253	99.58	1.004	0.019	0.116	0.146	/
				0	207	6985	0.15	0.016	10.34	10.50	1.038	99.58	1.004	0.017	0.124	0.129	/
6G	802.11 ax MCS0 HE160	Ant.6	Left Cheek	0	175	6825	-0.02	0.030	10.42	10.50	1.019	99.58	1.004	0.031	0.231	0.236	17#
			Left Tilt	0	175	6825	-0.01	0.015	10.42	10.50	1.019	99.58	1.004	0.015	0.116	0.119	/
			Right Cheek	0	175	6825	-0.12	0.011	10.42	10.50	1.019	99.58	1.004	0.011	0.085	0.087	/
			Right Tilt	0	175	6825	-0.14	0.008	10.42	10.50	1.019	99.58	1.004	0.008	0.062	0.063	/
			Left Cheek	0	15	6025	-0.15	0.017	10.00	10.50	1.122	99.58	1.004	0.019	0.132	0.149	/
				0	47	6185	-0.03	0.011	9.62	10.50	1.225	99.58	1.004	0.014	0.085	0.105	/
				0	79	6345	0.11	0.015	9.75	10.50	1.189	99.58	1.004	0.018	0.116	0.138	/
				0	111	6505	0.13	0.012	8.83	10.50	1.469	99.58	1.004	0.018	0.093	0.137	/
				0	143	6665	-0.15	0.009	10.33	10.50	1.040	99.58	1.004	0.009	0.070	0.073	/
				0	207	6985	0.08	0.014	10.35	10.50	1.035	99.58	1.004	0.015	0.109	0.113	/
6G	802.11 ax MCS0 HE160	Ant.6&7	Left Cheek	0	175	6825	-0.02	0.018	10.11	10.50	1.094	99.58	1.004	0.020	0.140	0.154	/
			Left Tilt	0	175	6825	-0.04	0.015	10.11	10.50	1.094	99.58	1.004	0.016	0.116	0.127	/
			Right Cheek	0	175	6825	-0.19	0.010	10.11	10.50	1.094	99.58	1.004	0.011	0.078	0.086	/
			Right Tilt	0	175	6825	-0.11	0.005	10.11	10.50	1.094	99.58	1.004	0.005	0.039	0.043	/
			Left Cheek	0	15	6025	0.08	0.012	9.97	10.50	1.130	99.58	1.004	0.014	0.093	0.106	/
				0	47	6185	0.12	0.010	9.46	10.50	1.271	99.58	1.004	0.013	0.078	0.100	/
				0	79	6345	-0.03	0.014	9.83	10.50	1.167	99.58	1.004	0.016	0.109	0.128	/
				0	111	6505	0.14	0.010	8.79	10.50	1.483	99.58	1.004	0.015	0.078	0.116	/
				0	143	6665	0.02	0.012	9.87	10.50	1.156	99.58	1.004	0.014	0.093	0.108	/
				0	207	6985	0.04	0.007	9.83	10.50	1.167	99.58	1.004	0.008	0.054	0.063	/
Body-worn																	
6G	802.11 ax	Ant.7	Front Side	15	175	6825	-0.03	0.012	10.67	11.00	1.079	99.58	1.004	0.013	0.103	0.112	/
			Back Side	15	175	6825	0.00	0.053	10.67	11.00	1.079	99.58	1.004	0.057	0.457	0.495	/

	MCS0 HE160		Back Side	15	15	6025	0.14	0.062	9.84	10.50	1.164	99.58	1.004	0.072	0.534	0.624	/
				15	47	6185	-0.15	0.046	10.12	10.50	1.091	99.58	1.004	0.050	0.397	0.435	/
				15	79	6345	0.09	0.019	10.54	11.00	1.112	99.58	1.004	0.021	0.164	0.183	/
				15	111	6505	-0.12	0.035	9.76	10.50	1.186	99.58	1.004	0.042	0.302	0.360	/
				15	143	6665	-0.18	0.031	9.52	10.50	1.253	99.58	1.004	0.039	0.267	0.336	/
				15	207	6985	0.11	0.066	10.34	10.50	1.038	99.58	1.004	0.069	0.569	0.593	/
6G	802.11 ax MCS0 HE160	Ant.6	Front Side	15	175	6825	-0.12	0.022	10.42	10.50	1.019	99.58	1.004	0.023	0.190	0.194	/
			Back Side	15	175	6825	-0.15	0.025	10.42	10.50	1.019	99.58	1.004	0.026	0.216	0.221	/
			Back Side	15	15	6025	-0.06	0.083	10.00	10.50	1.122	99.58	1.004	0.093	0.716	0.807	/
				15	47	6185	-0.13	0.098	9.62	10.50	1.225	99.58	1.004	0.121	0.872	1.072	/
				15	79	6345	-0.09	0.105	9.75	10.50	1.189	99.58	1.004	0.125	0.910	1.086	18#
				15	111	6505	-0.04	0.076	8.83	10.50	1.469	99.58	1.004	0.112	0.655	0.966	/
				15	143	6665	0.11	0.041	10.33	10.50	1.040	99.58	1.004	0.043	0.353	0.369	/
				15	207	6985	0.09	0.025	10.35	10.50	1.035	99.58	1.004	0.026	0.216	0.224	/
6G	802.11 ax MCS0 HE160	Ant.6&7	Front Side	15	175	6825	0.10	0.018	10.11	10.50	1.094	99.58	1.004	0.020	0.155	0.170	/
			Back Side	15	175	6825	-0.09	0.025	10.11	10.50	1.094	99.58	1.004	0.027	0.216	0.237	/
			Back Side	15	15	6025	0.14	0.043	9.97	10.50	1.130	99.58	1.004	0.049	0.371	0.421	/
				15	47	6185	0.03	0.061	9.46	10.50	1.271	99.58	1.004	0.078	0.526	0.671	/
				15	79	6345	0.10	0.072	9.83	10.50	1.167	99.58	1.004	0.084	0.621	0.728	/
				15	111	6505	0.02	0.035	8.79	10.50	1.483	99.58	1.004	0.052	0.302	0.450	/
				15	143	6665	-0.07	0.020	9.87	10.50	1.156	99.58	1.004	0.023	0.172	0.200	/
				15	207	6985	0.01	0.020	9.83	10.50	1.167	99.58	1.004	0.023	0.172	0.202	/

Fre. Band	Mode	Antenna	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift(dB)	10 g Meas SAR(W/kg)	Meas. Power (dBm)	Max. tune-up power(dBm)	Scaling Factor	Duty cycle(%)	Duty Factor	10g Scaled SAR (W/kg)	Meas. APD (W/m2)	Scaled APD (W/m2)	Meas. No.
Specific																	
6G	802.11 ax MCS0 HE160	Ant.7	Front Side	0	175	6825	0.03	0.016	10.67	11.00	1.079	99.58	1.004	0.017	0.388	0.420	/
			Back Side	0	175	6825	-0.06	0.212	10.67	11.00	1.079	99.58	1.004	0.230	5.140	5.568	
			Right Edge	0	175	6825	0.11	0.101	10.67	11.00	1.079	99.58	1.004	0.109	2.450	2.654	
			Top Edge	0	175	6825	0.00	0.027	10.67	11.00	1.079	99.58	1.004	0.029	0.655	0.710	/
			Back Side	0	15	6025	0.14	0.202	9.84	10.50	1.164	99.58	1.004	0.236	4.900	5.726	/
				0	47	6185	-0.18	0.115	10.12	10.50	1.091	99.58	1.004	0.126	2.790	3.056	/
				0	79	6345	0.18	0.053	10.54	11.00	1.112	99.58	1.004	0.059	1.280	1.429	/
				0	111	6505	-0.15	0.037	9.76	10.50	1.186	99.58	1.004	0.044	0.898	1.069	/
				0	143	6665	0.17	0.057	9.52	10.50	1.253	99.58	1.004	0.072	1.380	1.736	/
				0	207	6985	0.11	0.221	10.34	10.50	1.038	99.58	1.004	0.230	5.360	5.586	/
6G		Ant.6	Front Side	0	175	6825	0.06	0.043	10.42	10.50	1.019	99.58	1.004	0.044	1.040	1.064	/

	802.11 ax MCS0 HE160		Back Side	0	175	6825	-0.05	0.078	10.42	10.50	1.019	99.58	1.004	0.080	1.890	1.934	
			Left Edge	0	175	6825	0.10	0.030	10.42	10.50	1.019	99.58	1.004	0.031	0.728	0.745	
			Top Edge	0	175	6825	0.08	0.032	10.42	10.50	1.019	99.58	1.004	0.033	0.777	0.795	/
			Back Side	0	15	6025	-0.18	0.182	10.00	10.50	1.122	99.58	1.004	0.205	4.410	4.968	/
				0	47	6185	-0.05	0.271	9.62	10.50	1.225	99.58	1.004	0.333	6.57	8.080	19#
				0	79	6345	0.00	0.214	9.75	10.50	1.189	99.58	1.004	0.255	5.190	6.196	/
				0	111	6505	0.10	0.126	8.83	10.50	1.469	99.58	1.004	0.186	3.050	4.498	/
				0	143	6665	0.15	0.099	10.33	10.50	1.040	99.58	1.004	0.103	2.400	2.506	/
				0	207	6985	0.06	0.051	10.35	10.50	1.035	99.58	1.004	0.053	1.230	1.278	/
6G	802.11 ax MCS0 HE160	Ant.6&7	Front Side	0	175	6825	-0.09	0.008	10.11	10.50	1.094	99.58	1.004	0.009	0.197	0.216	/
			Back Side	0	175	6825	0.05	0.088	10.11	10.50	1.094	99.58	1.004	0.097	2.130	2.340	
			Left Edge	0	175	6825	0.05	0.014	10.11	10.50	1.094	99.58	1.004	0.015	0.340	0.373	
			Right Edge	0	175	6825	-0.04	0.043	10.11	10.50	1.094	99.58	1.004	0.047	1.040	1.142	
			Top Edge	0	175	6825	-0.09	0.013	10.11	10.50	1.094	99.58	1.004	0.014	0.316	0.347	/
			Back Side	0	15	6025	-0.01	0.119	9.97	10.50	1.130	99.58	1.004	0.135	2.880	3.267	/
				0	47	6185	-0.18	0.134	9.46	10.50	1.271	99.58	1.004	0.171	3.250	4.147	/
				0	79	6345	0.17	0.092	9.83	10.50	1.167	99.58	1.004	0.108	2.230	2.613	/
				0	111	6505	0.04	0.067	8.79	10.50	1.483	99.58	1.004	0.100	1.620	2.412	/
				0	143	6665	-0.02	0.050	9.87	10.50	1.156	99.58	1.004	0.058	1.210	1.404	/
				0	207	6985	0.13	0.093	9.83	10.50	1.167	99.58	1.004	0.109	2.250	2.636	/

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.

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).

12.1 Simultaneous Transmission Mode Consider

No.	Simultaneous Tx Combination	Head	Body-worn	Hotspot	Specific
1	WLAN 2.4G + Bluetooth	Yes	Yes	Yes	No
2	WLAN 5G + Bluetooth	Yes	Yes	Yes	No
3	WLAN 6G + Bluetooth	Yes	Yes	No	No

Note:

1. The maximum SAR summation is calculated based on the same configuration and test position.
2. The simultaneous transmission combinations of multiple antennas contain combinations of two antennas, so only the worst simultaneous transmission combinations is shown in this report.
3. BT does not test the Specific mode, so there is no need to consider the simultaneous transmission of the Specific mode.

12.2 Sum SAR of Simultaneous Transmission

12.2.1 Head Simultaneous Transmission SAR Evaluation for WLAN and BT

Position					SUM SAR		
	1	2	3	4			
	2.4GWIFI MAX	5GWIFI MAX	6GWIFI MAX	Bluetooth	1+4	2+4	3+4
Left Cheek	0.776	0.125	0.031	0.029	0.805	0.154	0.060
Left Tilt	0.443	0.087	0.016	0.022	0.465	0.109	0.038
Right Cheek	0.507	0.095	0.014	0.025	0.533	0.120	0.039
Right Tilt	0.422	0.089	0.010	0.018	0.440	0.107	0.028
Note: 1: The simultaneous transmission combinations of the antennas antennas contain combinations of two antennas, so only the worst simultaneous transmission combinations was shown in this table. 2: The highest Summed 1g SAR is 0.805W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.							

12.2.2 Body-Worn Simultaneous Transmission SAR Evaluation for WLAN and BT

Position					SUM SAR		
	1	2	3	4			
	2.4GWIFI MAX	5GWIFI MAX	6GWIFI MAX	Bluetooth	1+4	2+4	3+4
Front side	0.248	0.093	0.023	0.011	0.259	0.104	0.034
Back side	0.462	0.688	0.125	0.022	0.484	0.710	0.147
Note: 1: The simultaneous transmission combinations of the antennas antennas contain combinations of two antennas, so only the worst simultaneous transmission combinations was shown in this table. 2: The highest Summed 1g SAR is 0.710W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.							

12.2.3 Hotspot Simultaneous Transmission SAR Evaluation for WLAN and BT

Position					SUM SAR		
	1	2	3	4			
	2.4GWIFI MAX	5GWIFI MAX	6GWIFI MAX	Bluetooth	1+4	2+4	3+4
Front side	0.182	0.181	/	0.036	0.218	0.217	/
Back side	0.850	0.871	/	0.071	0.921	0.942	/
Left side	0.505	0.356	/	0.067	0.572	0.423	/
Right side	0.488	0.225	/	0.000	0.488	0.225	/
Top side	0.308	0.216	/	0.020	0.328	0.236	/
Bottom side	0.000	0.000	/	0.000	0.000	0.000	/

Note:

1: The simultaneous transmission combinations of the antennas antennas contain combinations of two antennas, so only the worst simultaneous transmission combinations was shown in this table.

2: The highest Summed 1g SAR is 0.942W/Kg < 1.6 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	DASY5	52.8.8.1222	N/A	N/A
Test Software	Speag	DASY8	16.0.0.65	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
Data Acquisition Electronicsr	Speag	DAE4	SN: 540	2024/02/22	2025/02/21
E-Field Probe	Speag	EX3DV4	SN: 7893	2024/09/05	2025/09/04
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	2024/08/08	2025/08/07
Power Sensor	R&S	NRV-Z4	100381	2024/08/08	2025/08/07
Power Sensor	R&S	NRV-Z2	100211	2024/08/08	2025/08/07
Wireless Communication Test Set	Anritsu	MT8820C	6201144551	2024/05/29	2025/05/28
Network Analyzer	Agilent	E5071C	MY46103472	2023/11/14	2024/11/13
Thermometer	Elitech	RC-4	EF5238001629	2023/10/09	2024/10/08
Thermometer	Elitech	RC-4HC	EF7239002655	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: 1857	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 an SCLMP Dielectric Probe Kit.

Head Liquid

Date	Liquid Type	Fre. (MHz)	Temp. (℃)	Meas. Conductivity (σ) (S/m)	Meas. Permittivity (ε)	Target Conductivity (σ) (S/m)	Target Permittivity (ε)	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2024.09.03	Head	2450	21.5	1.836	39.326	1.8	39.2	2.00	0.32
2024.09.23	Head	2450	21.7	1.816	39.773	1.8	39.2	0.89	1.46
2024.09.26	Head	5250	21.2	4.655	34.815	4.71	35.95	-1.16	-3.16
2024.09.27	Head	5250	21.4	4.641	34.916	4.71	35.95	-1.46	-2.88
2024.09.28	Head	5600	21.1	4.992	34.611	5.07	35.5	-1.54	-2.50
2024.09.24	Head	5750	21.6	5.127	34.301	5.22	35.35	-1.78	-2.97
2024.09.25	Head	6500	21.3	6.087	34.381	6.07	34.46	0.28	-0.23
Note: The tolerance limit of Conductivity and Permittivity is± 5%.									

ANNEX B SYSTEM CHECK RESULT

Comparing to the original SAR value provided by SPEAG, the validation data should be within itsspecification of 10 %(for 1 g).

Date	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2024.09.03	2450	100	5.38	53.8	52.6	2.28
2024.09.23	2450	100	5.25	52.5	52.6	-0.19
2024.09.26	5250	100	7.79	77.9	77.7	0.26
2024.09.27	5250	100	7.45	74.5	77.7	-4.12
2024.09.28	5600	100	8.48	84.8	81.3	4.31
2024.09.24	5750	100	8.09	80.9	77.6	4.25
2024.09.25	6500	100	29.600	296	299.0	-1.00
Note: The tolerance limit of System validation ±10%.						

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

Date	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2024.09.26	5250	100	2.11	21.1	22	-4.09
2024.09.27	5250	100	2.05	20.5	22	-6.82
2024.09.28	5600	100	2.42	24.2	23.1	4.76
2024.09.24	5750	100	2.21	22.1	21.9	0.91
2024.09.25	6500	100	5.620	56.2	55.2	1.81
Note: The tolerance limit of System validation ±10%.						

System Performance Check Data(2450MHz)

Date: 2024/9/3
Communication System Band: D2450 (2450.0 MHz); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.836 S/m; ε_r = 39.326; ρ = 1000 kg/m^3
Phantom section: Flat Section

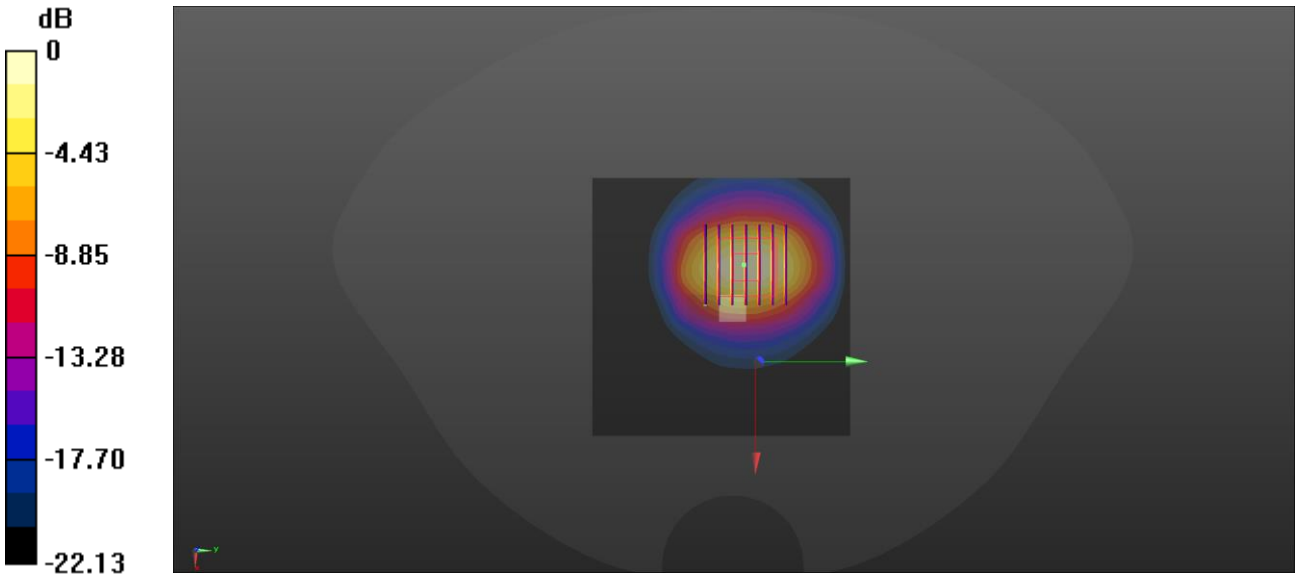
Ambient Temperature:22.5℃ Liquid Temperature:21.5℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.75, 7.75, 7.75); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

D2450/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 6.41 W/kg

D2450/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 39.84 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 11.1 W/kg
SAR(1 g) = 5.38 W/kg; SAR(10 g) = 2.55 W/kg
Maximum value of SAR (measured) = 6.26 W/kg



0 dB = 6.26 W/kg

System Performance Check Data(2450MHz)

Date: 2024/9/23
Communication System Band: D2450 (2450.0 MHz); Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.816 S/m; ε_r = 39.773; ρ = 1000 kg/m^3
Phantom section: Flat Section

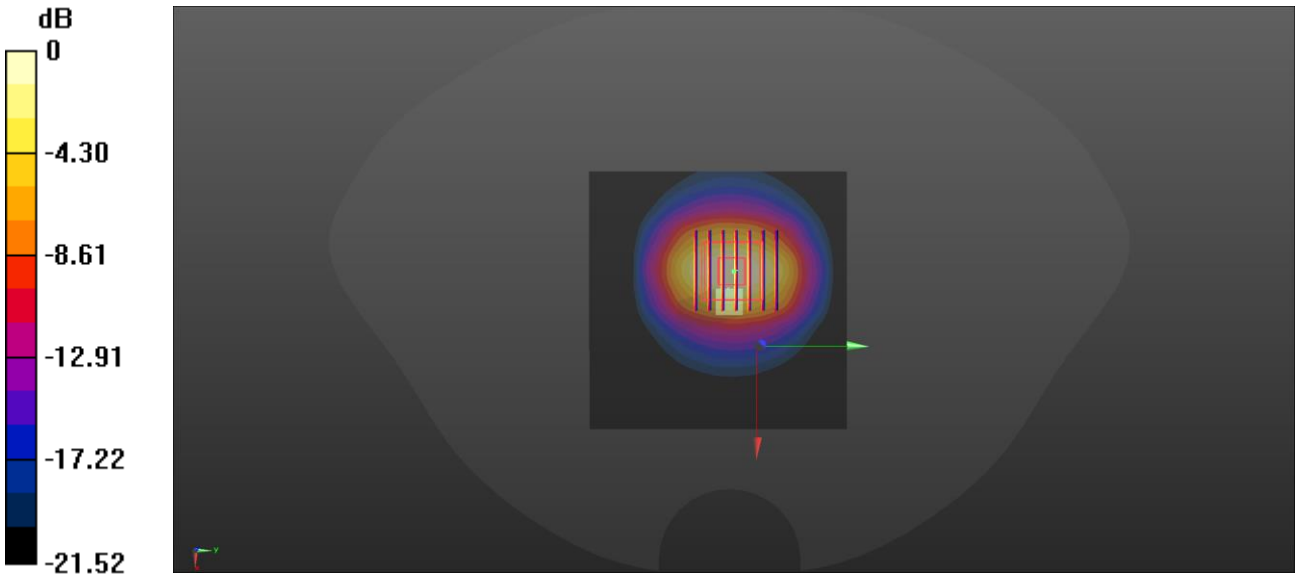
Ambient Temperature:22.6℃ Liquid Temperature:21.7℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.75, 7.75, 7.75); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

D2450/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 6.23 W/kg

D2450/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 44.02 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 10.6 W/kg
SAR(1 g) = 5.25 W/kg; SAR(10 g) = 2.41 W/kg
Maximum value of SAR (measured) = 6.08 W/kg



0 dB = 6.08 W/kg

System Performance Check Data(5250MHz)

Date: 2024/9/26
Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5250 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5250 MHz; σ = 4.655 S/m; ε_r = 34.815; ρ = 1000 kg/m^3
Phantom section: Flat Section

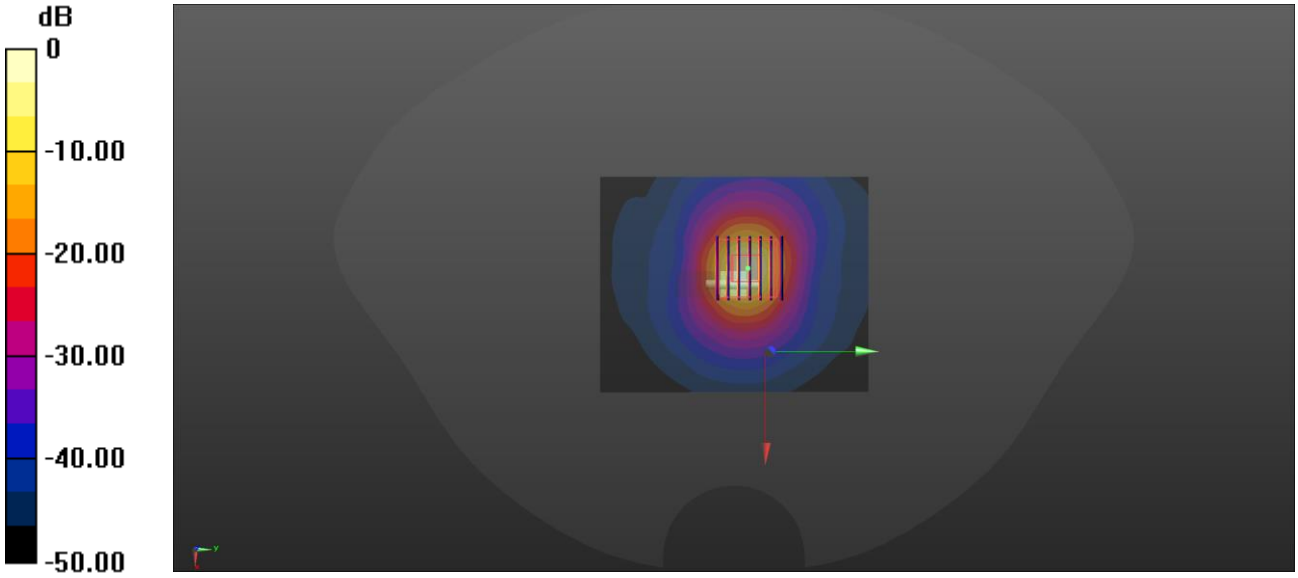
Ambient Temperature:22.0℃ Liquid Temperature:21.2℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.50, 5.50, 5.50); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

D5250/Area Scan (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 8.72 W/kg

D5250/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 41.08 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 32.2 W/kg
SAR(1 g) = 7.79 W/kg; SAR(10 g) = 2.11 W/kg
Maximum value of SAR (measured) = 19.2 W/kg



0 dB = 19.2 W/kg

System Performance Check Data(5250MHz)

Date: 2024/9/27
Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5250 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5250 MHz; σ = 4.641 S/m; ε_r = 34.916; ρ = 1000 kg/m^3
Phantom section: Flat Section

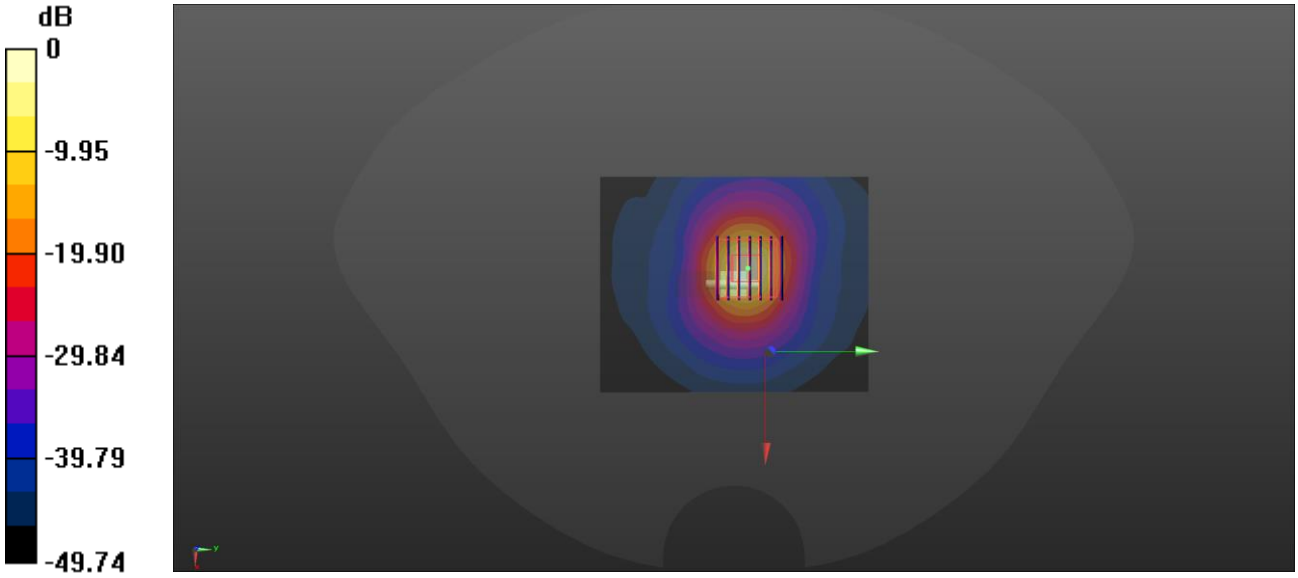
Ambient Temperature:22.3℃ Liquid Temperature:21.4℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.50, 5.50, 5.50); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

D5250/Area Scan (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 8.15 W/kg

D5250/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 38.52 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 31.4 W/kg
SAR(1 g) = 7.45 W/kg; SAR(10 g) = 2.05 W/kg
Maximum value of SAR (measured) = 18.5 W/kg



0 dB = 18.5 W/kg

System Performance Check Data(5600MHz)

Date: 2024/9/28
Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5600 MHz; σ = 4.992 S/m; ε_r = 34.611; ρ = 1000 kg/m^3
Phantom section: Flat Section

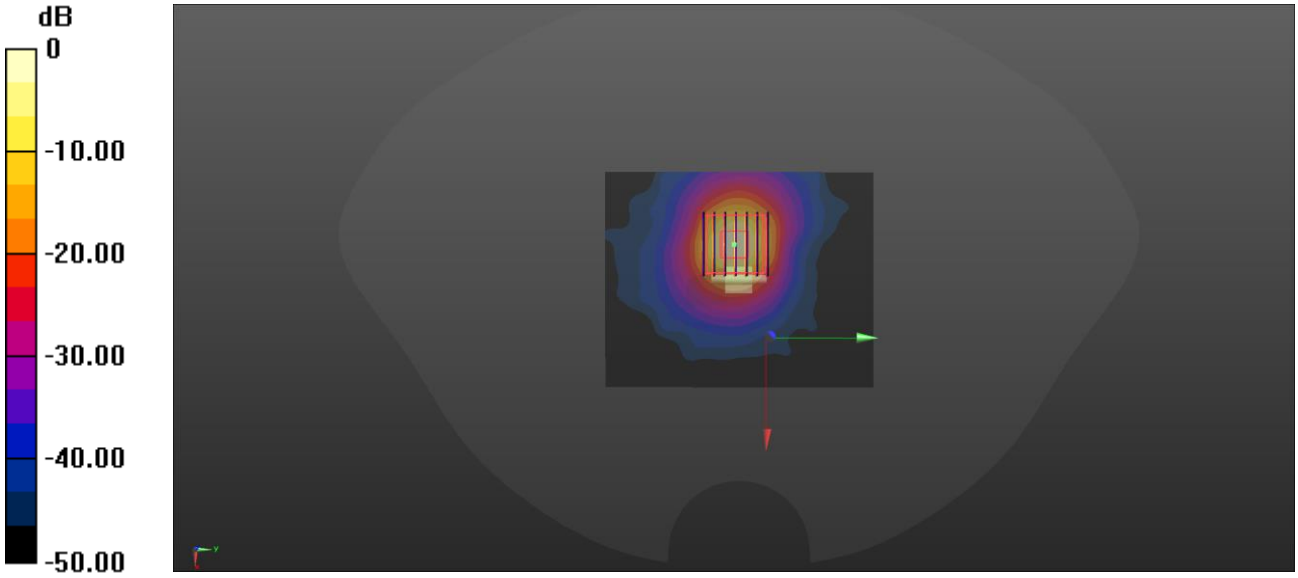
Ambient Temperature:21.8℃ Liquid Temperature:21.1℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.00, 5.00, 5.00); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

D5600/Area Scan (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 9.19 W/kg

D5600/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 34.15 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 39.1 W/kg
SAR(1 g) = 8.48 W/kg; SAR(10 g) = 2.42 W/kg
Maximum value of SAR (measured) = 17.6 W/kg



0 dB = 17.6 W/kg

System Performance Check Data(5750MHz)

Date: 2024/9/24
Communication System Band: D5GHz (5000.0 - 6000.0 MHz); Frequency: 5750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5750 MHz; σ = 5.127 S/m; ε_r = 34.301; ρ = 1000 kg/m^3
Phantom section: Flat Section

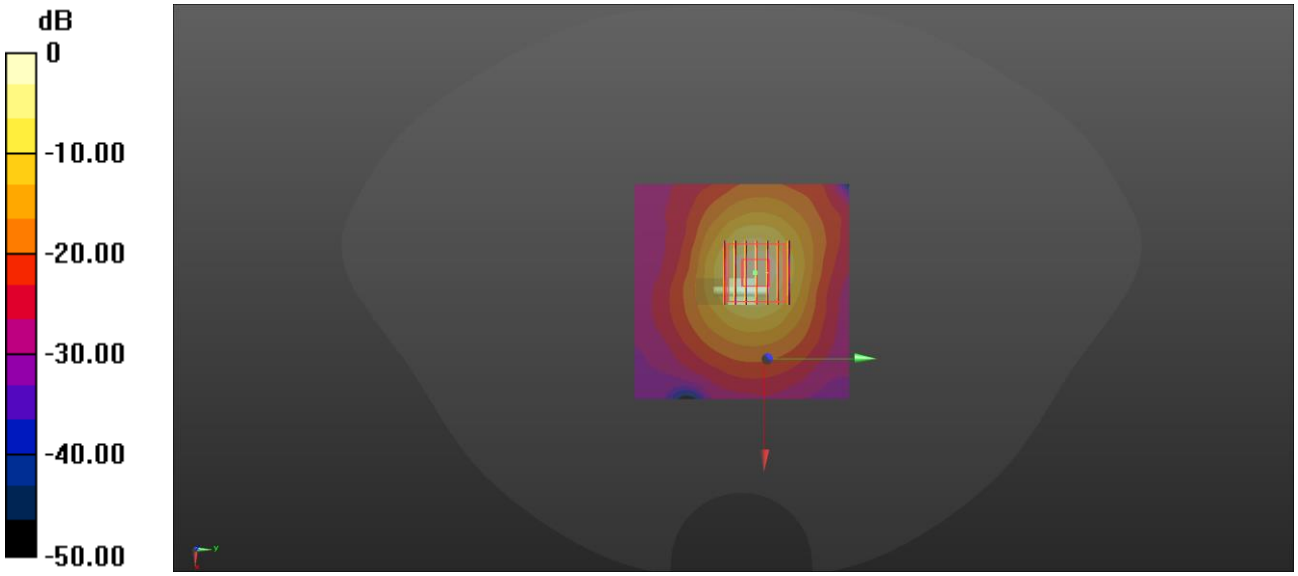
Ambient Temperature:22.6℃ Liquid Temperature:21.6℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.04, 5.04, 5.04); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

D5750/Area Scan (81x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 9.02 W/kg

D5750/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 31.83 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 40.8 W/kg
SAR(1 g) = 8.09 W/kg; SAR(10 g) = 2.21 W/kg
Maximum value of SAR (measured) = 19.7 W/kg



0 dB = 19.7 W/kg

System Performance Check Data(6500MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D6.5GHzV2, 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 [℃]	Liquid Temperature [℃]
Flat, HSL		Validation band	CW, 0--	6500.0, 6500	5.11	6.09	34.4	22.3	21.3

Hardware Setup

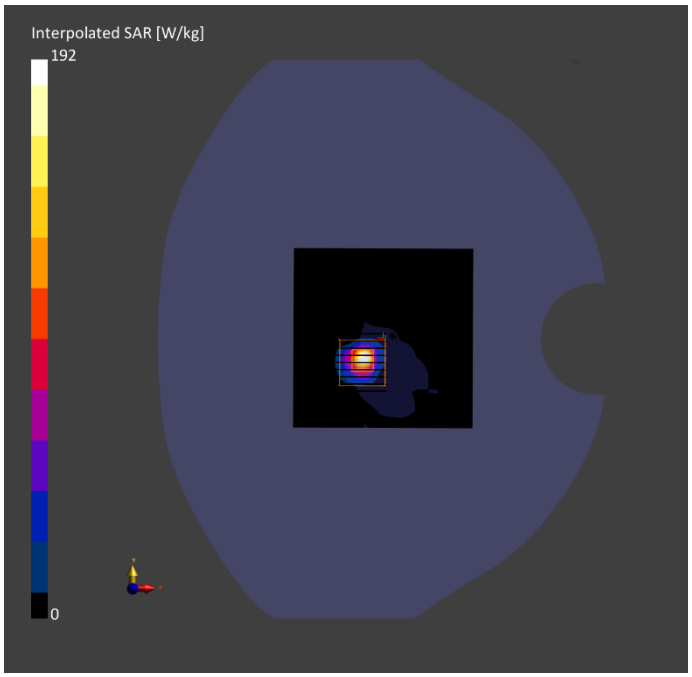
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-09-25	EX3DV4 - SN7893, 2024-09-05	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	85.0 x 85.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	All points	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-09-25	2024-09-25
psSAR1g [W/kg]	27.1	29.6
psSAR10g [W/kg]	5.18	5.62
APD 4cm^2 [W/m^2]		136
Power Drift [dB]	0.01	0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		54.5
Dist 3dB Peak [mm]		5.6


Interpolated SAR [W/kg]
192
0

ANNEX C TEST DATA

Meas.1 Head Left Cheek on Mid Channel in BT with ANT7
Date: 2024/9/3
Communication System Band: BT; Frequency: 2441 MHz;Duty Cycle: 1:1.29
Medium parameters used (interpolated): f = 2441 MHz; σ = 1.82 S/m; ε_r = 39.381; ρ = 1000 kg/m^3
Phantom section: Left Section

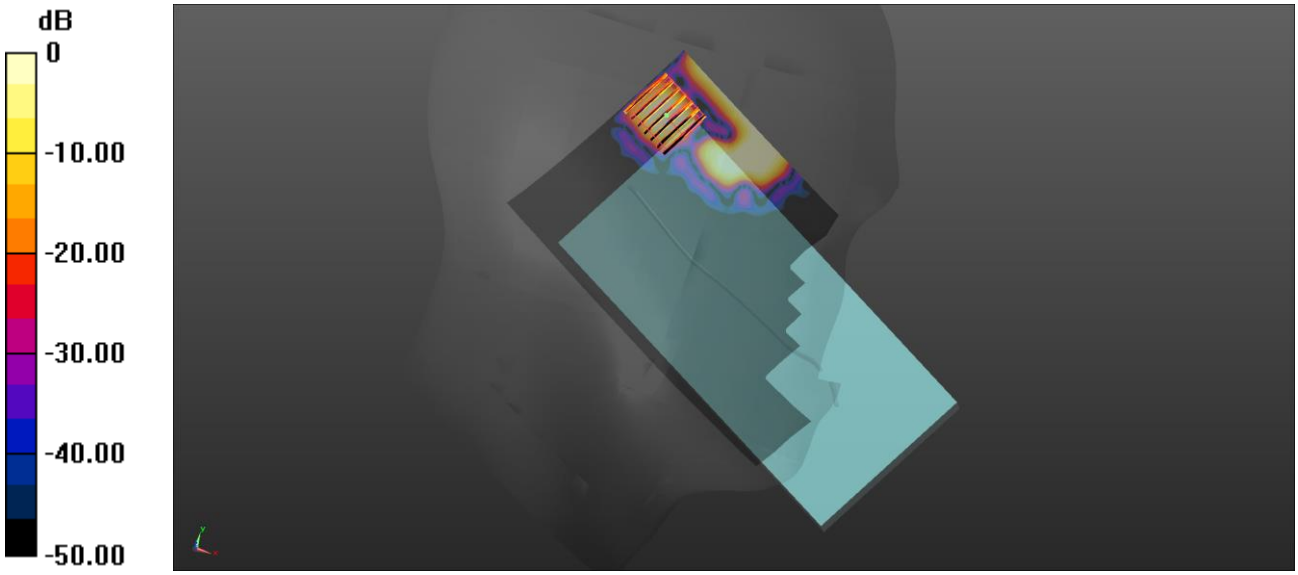
Ambient Temperature:22.5℃ Liquid Temperature:21.5℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.75, 7.75, 7.75); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Ch39/Area Scan (81x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.071 W/kg

Ch39/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.098 W/kg
SAR(1 g) = 0.016 W/kg; SAR(10 g) = 0.00602 W/kg
Maximum value of SAR (measured) = 0.028 W/kg



0 dB = 0.028 W/kg

Meas.2 Body-Worn Back Side 15mm Mid BT ANT7
Date: 2024/9/3
Communication System Band: BT; Frequency: 2441 MHz;Duty Cycle: 1:1.29
Medium parameters used (interpolated): f = 2441 MHz; σ = 1.82 S/m; ε_r = 39.381; ρ = 1000 kg/m^3
Phantom section: Flat Section

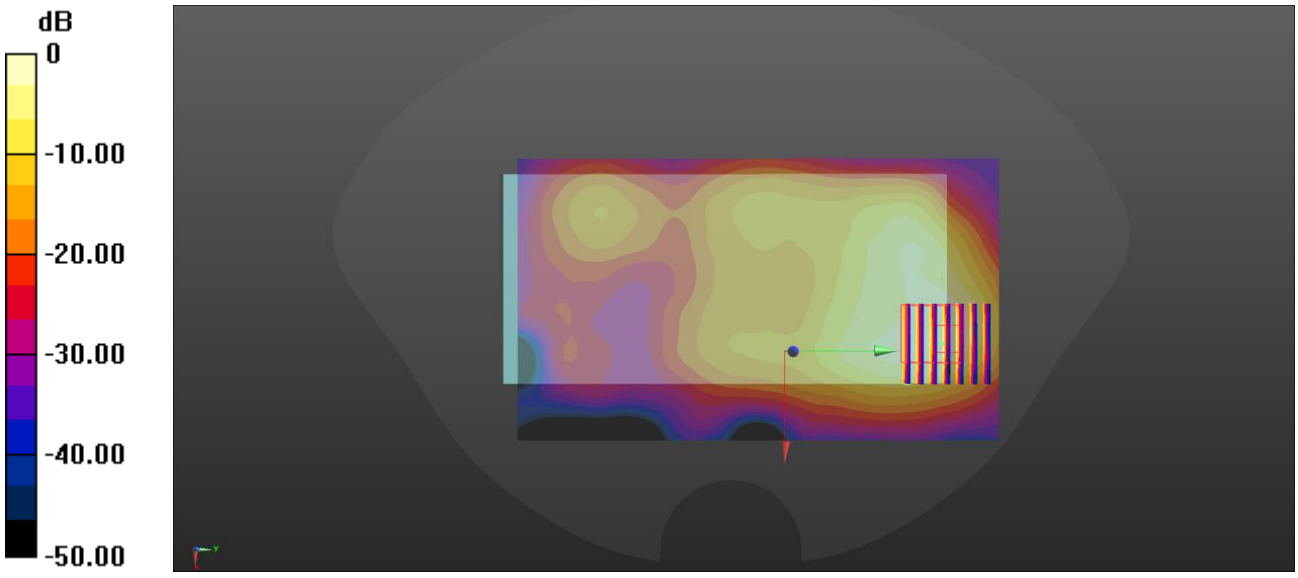
Ambient Temperature:22.5℃ Liquid Temperature:21.5℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.75, 7.75, 7.75); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Ch39/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.0525 W/kg

Ch39/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.0724 W/kg
SAR(1 g) = 0.012 W/kg; SAR(10 g) = 0.00535 W/kg
Maximum value of SAR (measured) = 0.0283 W/kg



0 dB = 0.0283 W/kg

Meas.3 Hotspot Back Side 10mm Mid BT ANT7
Date: 2024/9/3
Communication System Band: BT; Frequency: 2441 MHz;Duty Cycle: 1:1.29
Medium parameters used (interpolated): f = 2441 MHz; σ = 1.82 S/m; ε_r = 39.381; ρ = 1000 kg/m^3
Phantom section: Flat Section

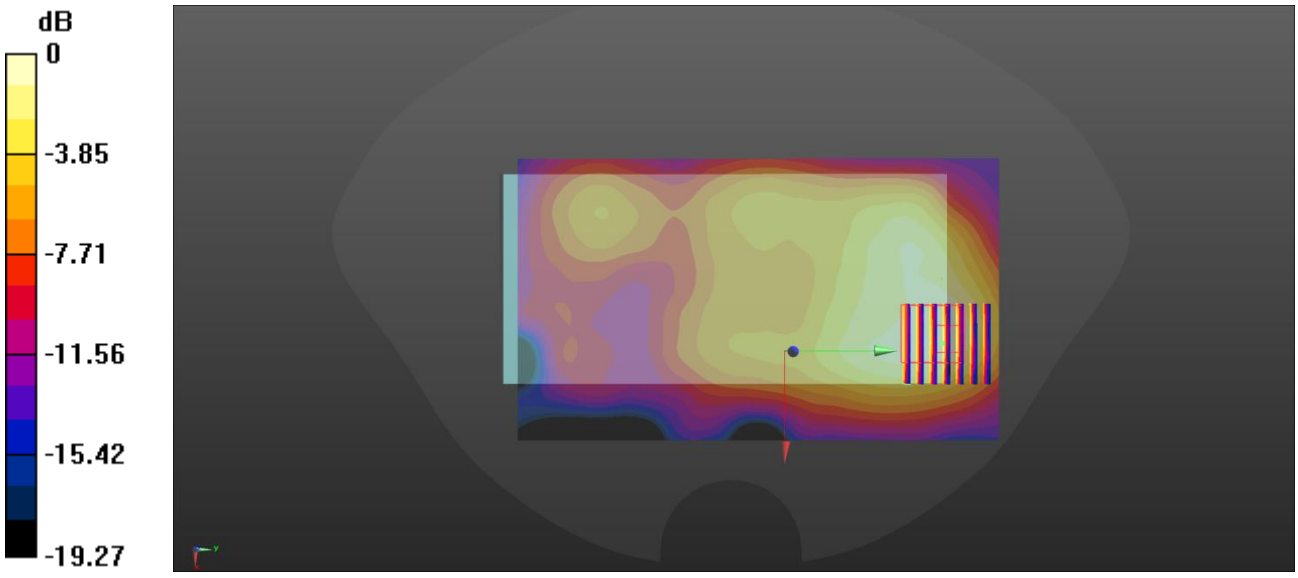
Ambient Temperature:22.5℃ Liquid Temperature:21.5℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.75, 7.75, 7.75); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Ch39/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.0679 W/kg

Ch39/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.104 V/m; Power Drift = -0.20 dB
Peak SAR (extrapolated) = 0.0760 W/kg
SAR(1 g) = 0.039 W/kg; SAR(10 g) = 0.022 W/kg
Maximum value of SAR (measured) = 0.0610 W/kg



0 dB = 0.0679 W/kg

Meas.4 Head Left cheek Mid WLAN 2.4G ANT6
Date: 2024/9/23
Communication System Band: WLAN(b); Frequency: 2437 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.791 S/m; ε_r = 39.791; ρ = 1000 kg/m^3
Phantom section: Left Section

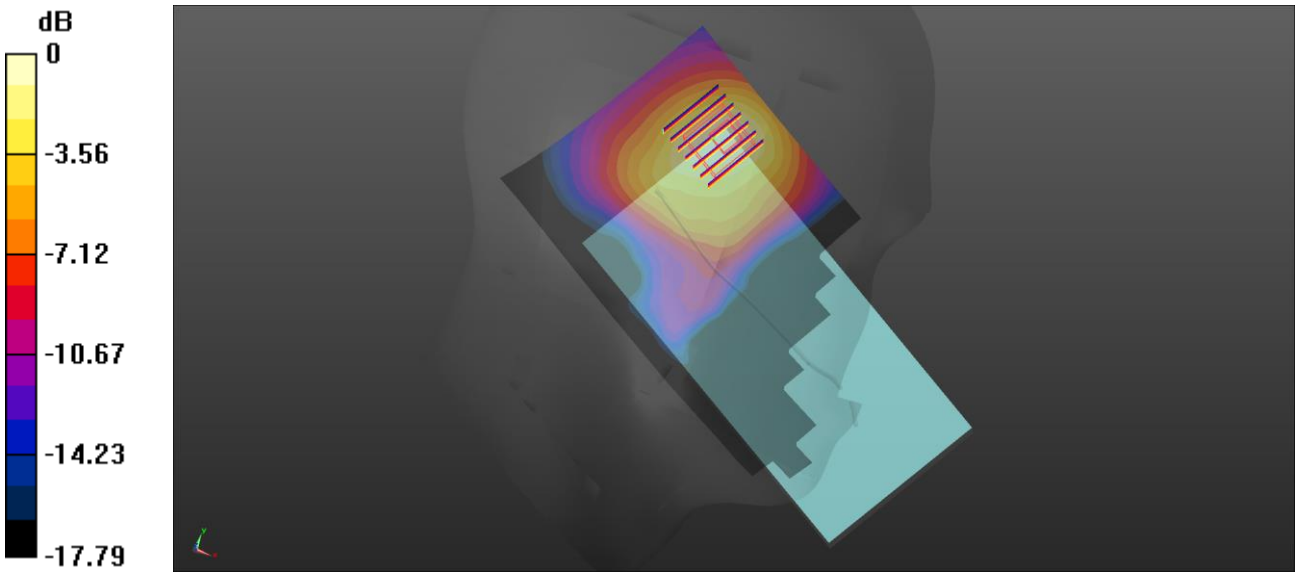
Ambient Temperature:22.6℃ Liquid Temperature:21.7℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.75, 7.75, 7.75); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Ch6/Area Scan (91x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.861 W/kg

Ch6/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.05 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 1.01 W/kg
SAR(1 g) = 0.546 W/kg; SAR(10 g) = 0.304 W/kg
Maximum value of SAR (measured) = 0.818 W/kg



0 dB = 0.818 W/kg

Meas.5 Back Side 15mm Mid WLAN 2.4G ANT7
Date: 2024/9/23
Communication System Band: WLAN(b); Frequency: 2437 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.791 S/m; ε_r = 39.791; ρ = 1000 kg/m^3
Phantom section: Flat Section

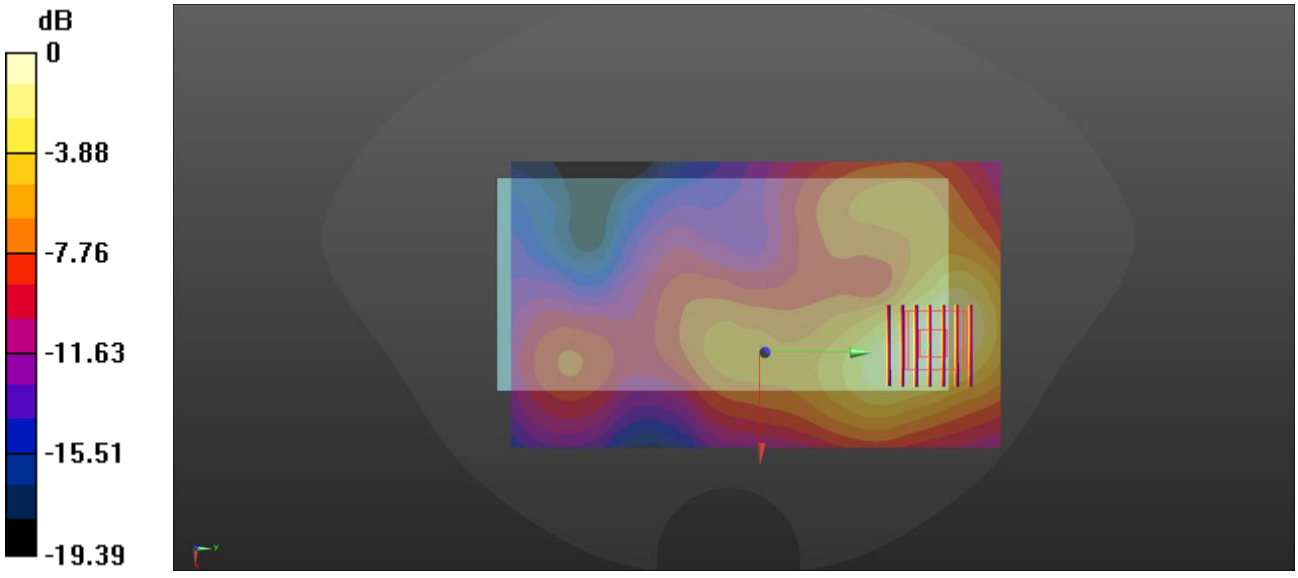
Ambient Temperature:22.6℃ Liquid Temperature:21.7℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.75, 7.75, 7.75); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Ch6/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.514 W/kg

Ch6/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.292 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.594 W/kg
SAR(1 g) = 0.331 W/kg; SAR(10 g) = 0.189 W/kg
Maximum value of SAR (measured) = 0.497 W/kg



0 dB = 0.514 W/kg

Meas.6 Back Side 10mm Mid WLAN 2.4G ANT7
Date: 2024/9/23
Communication System Band: WLAN(b); Frequency: 2437 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.791 S/m; ε_r = 39.791; ρ = 1000 kg/m^3
Phantom section: Flat Section

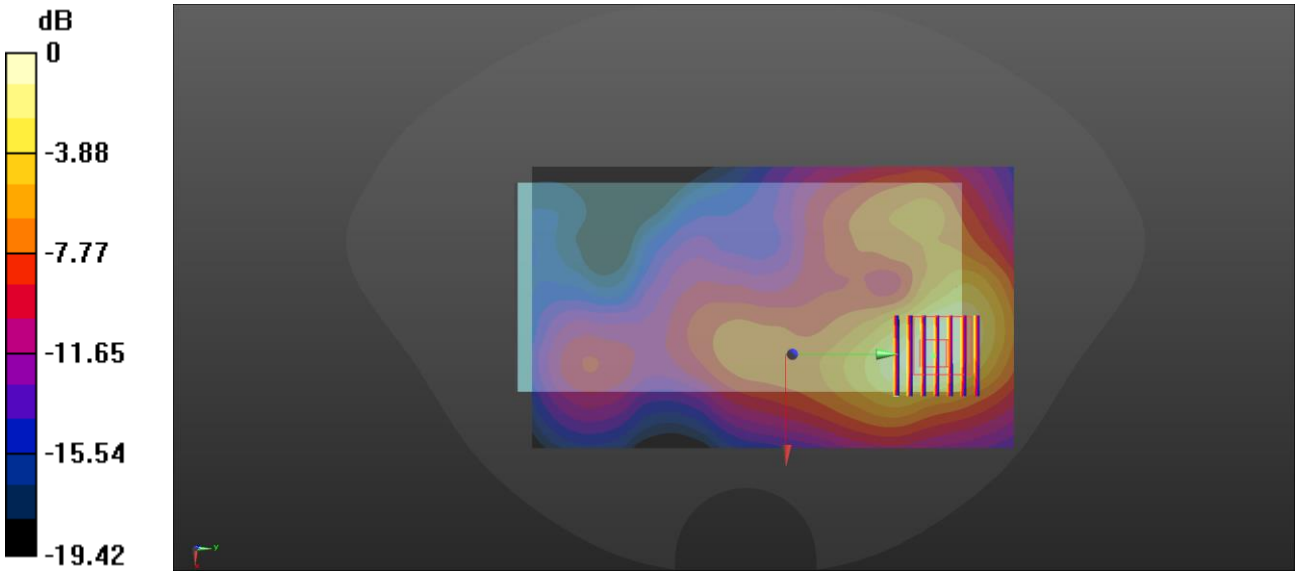
Ambient Temperature:22.6℃ Liquid Temperature:21.7℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(7.75, 7.75, 7.75); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Ch6/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.03 W/kg

Ch6/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.836 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 1.17 W/kg
SAR(1 g) = 0.609 W/kg; SAR(10 g) = 0.331 W/kg
Maximum value of SAR (measured) = 0.961 W/kg



0 dB = 0.961 W/kg

Meas.7 Head Right Cheek Mid WLAN 5.3G ANT6
Date: 2024/9/26
Communication System Band: WLAN(a); Frequency: 5300 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5300 MHz; σ = 4.696 S/m; ε_r = 34.996; ρ = 1000 kg/m^3
Phantom section: Right Section

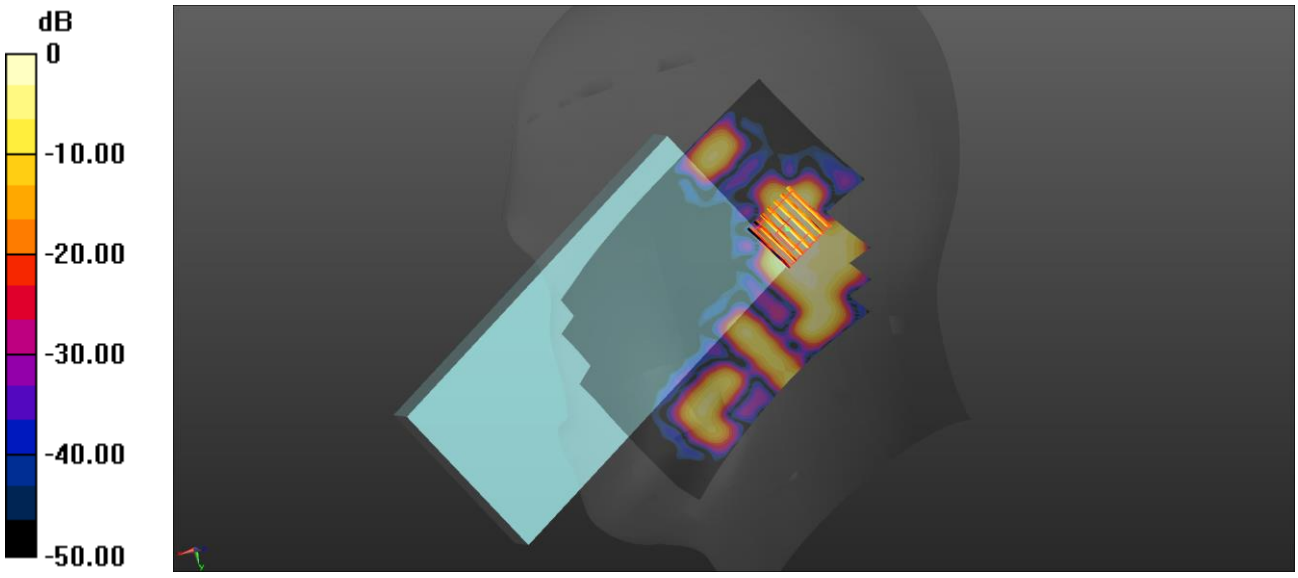
Ambient Temperature:22.0℃ Liquid Temperature:21.2℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.50, 5.50, 5.50); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Ch60/Area Scan (101x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.439 W/kg

Ch60/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 0 V/m; Power Drift = 0.20 dB
Peak SAR (extrapolated) = 0.317 W/kg
SAR(1 g) = 0.068 W/kg; SAR(10 g) = 0.019 W/kg
Maximum value of SAR (measured) = 0.172 W/kg



0 dB = 0.172 W/kg

Meas.8 Back Side 15mm Low WLAN 5.3G ANT6
Date: 2024/9/26
Communication System Band: WLAN(a); Frequency: 5260 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5260 MHz; σ = 4.65 S/m; ε_r = 34.939; ρ = 1000 kg/m^3
Phantom section: Flat Section

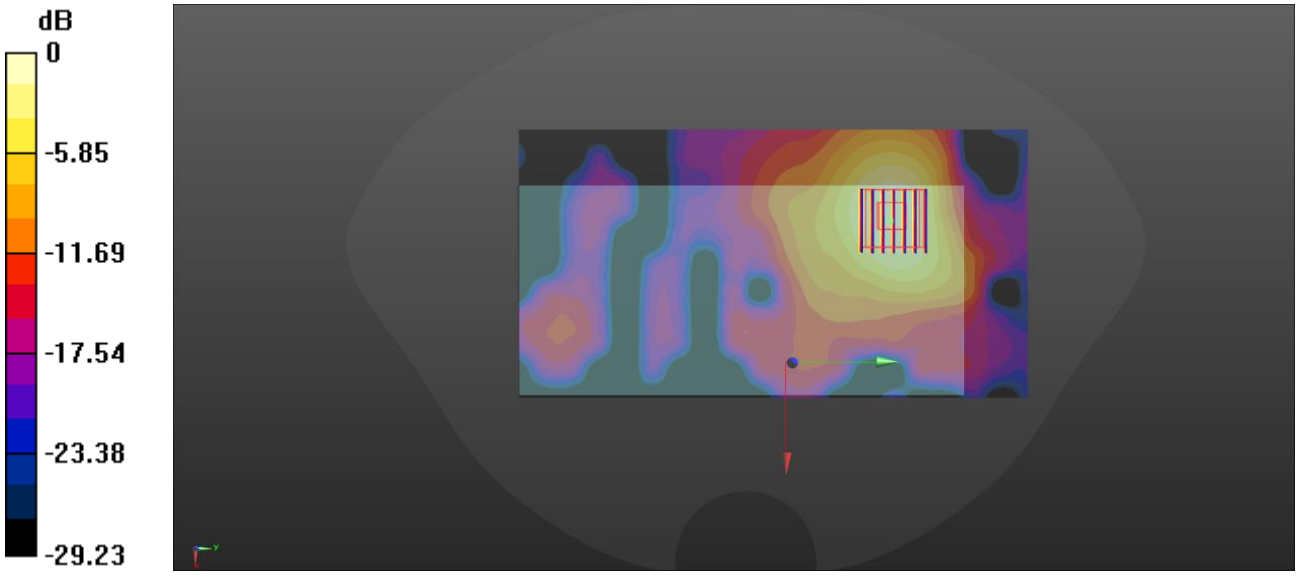
Ambient Temperature:22.0℃ Liquid Temperature:21.2℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.50, 5.50, 5.50); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Ch52/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.968 W/kg

Ch52/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 0.8330 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 1.38 W/kg
SAR(1 g) = 0.465 W/kg; SAR(10 g) = 0.190 W/kg
Maximum value of SAR (measured) = 0.948 W/kg



0 dB = 0.948 W/kg

Meas.9 Back Side 10mm Low WLAN 5.2G ANT6
Date: 2024/9/27
Communication System Band: WLAN(a); Frequency: 5180 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5180 MHz; σ = 4.571 S/m; ε_r = 35.168; ρ = 1000 kg/m^3
Phantom section: Flat Section

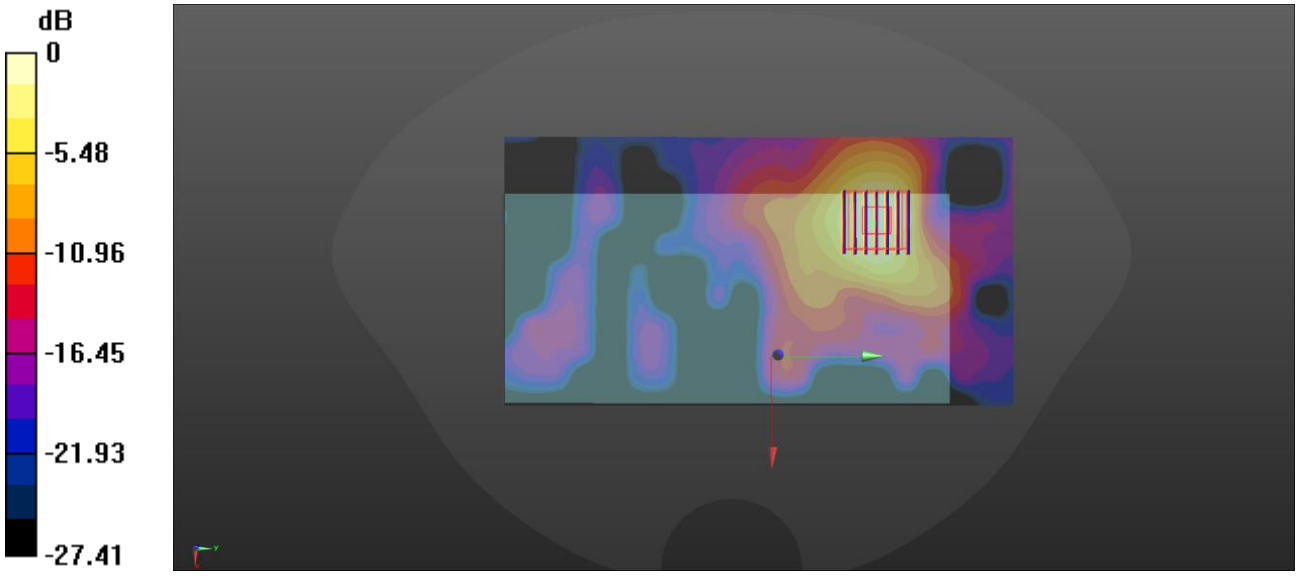
Ambient Temperature:22.3℃ Liquid Temperature:21.4℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.74, 5.74, 5.74); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Ch36/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.27 W/kg

Ch36/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 0 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 1.78 W/kg
SAR(1 g) = 0.584 W/kg; SAR(10 g) = 0.227 W/kg
Maximum value of SAR (measured) = 1.21 W/kg



0 dB = 1.21 W/kg

Meas.10 Back Side 0mm Low WLAN 5.3G ANT6
Date: 2024/9/26
Communication System Band: WLAN(a); Frequency: 5260 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5260 MHz; σ = 4.65 S/m; ε_r = 34.939; ρ = 1000 kg/m^3
Phantom section: Flat Section

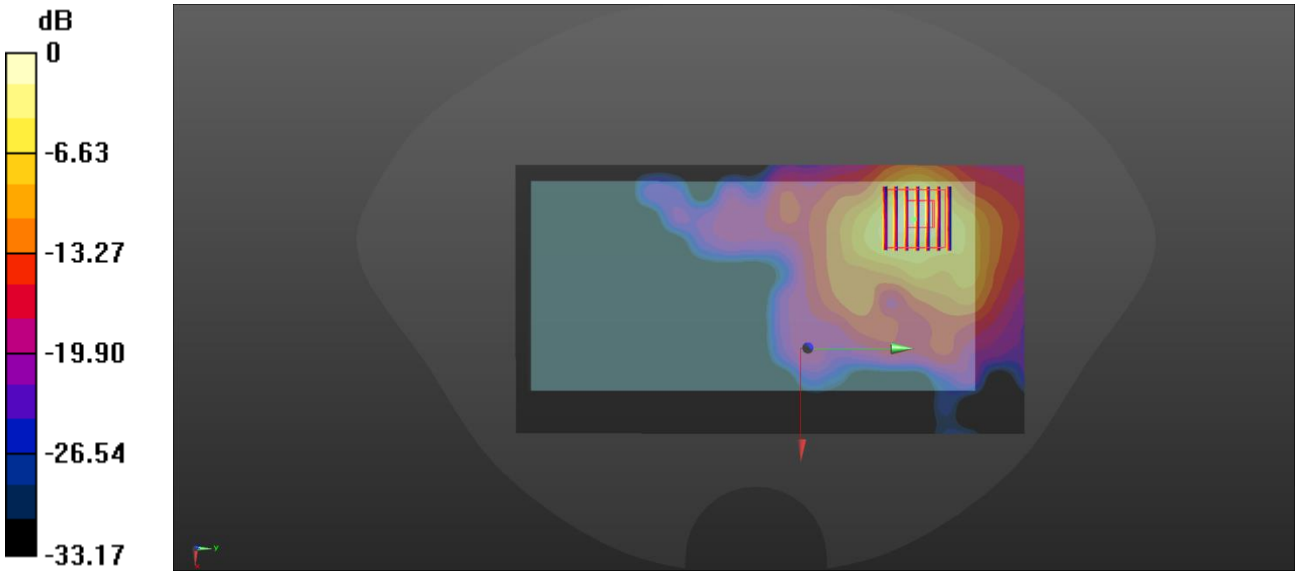
Ambient Temperature:22.0℃ Liquid Temperature:21.2℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.50, 5.50, 5.50); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Ch52/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 5.85 W/kg

Ch52/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 1.792 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 10.9 W/kg
SAR(1 g) = 2.61 W/kg; SAR(10 g) = 0.795 W/kg
Maximum value of SAR (measured) = 5.97 W/kg



0 dB = 5.97 W/kg

Meas.11 Head Left Cheek High WLAN 5.6G ANT7
Date: 2024/9/28
Communication System Band: WLAN(a); Frequency: 5700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5700 MHz; σ = 5.096 S/m; ε_r = 34.246; ρ = 1000 kg/m^3
Phantom section: Left Section

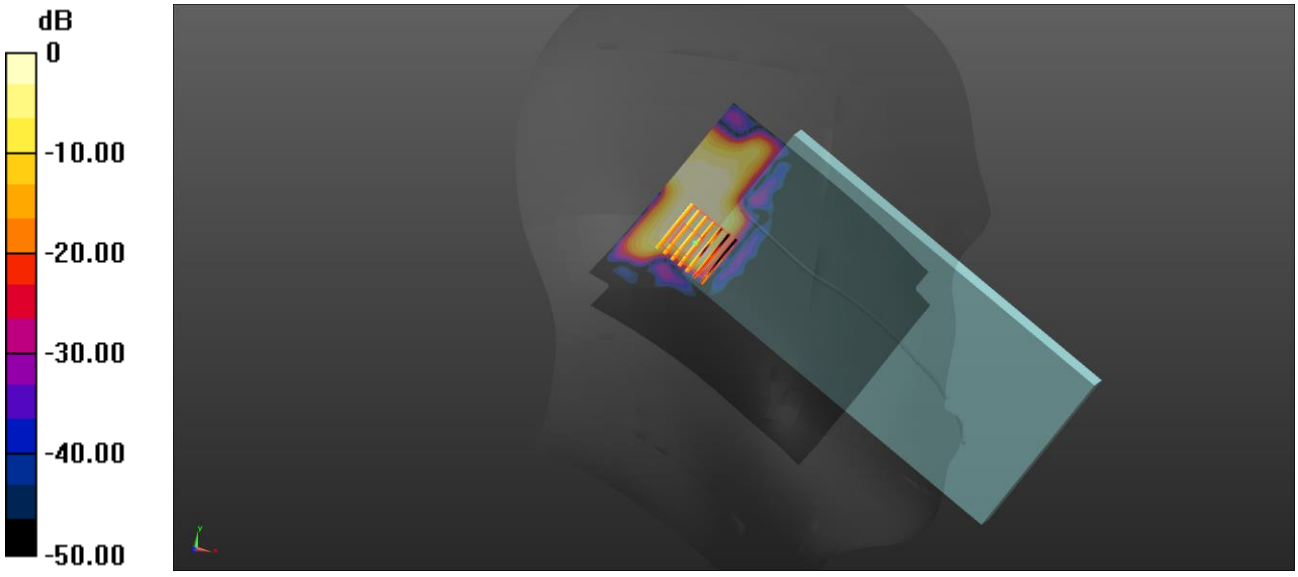
Ambient Temperature:21.8℃ Liquid Temperature:21.1℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.00, 5.00, 5.00); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Ch140/Area Scan (101x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.365 W/kg

Ch140/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 1.957 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.495 W/kg
SAR(1 g) = 0.088 W/kg; SAR(10 g) = 0.027 W/kg
Maximum value of SAR (measured) = 0.212 W/kg



0 dB = 0.212 W/kg

Meas.12 Back Side 15mm Mid WLAN 5.6G ANT6
Date: 2024/9/28
Communication System Band: WLAN(a); Frequency: 5580 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5580 MHz; σ = 4.995 S/m; ε_r = 34.451; ρ = 1000 kg/m^3
Phantom section: Flat Section

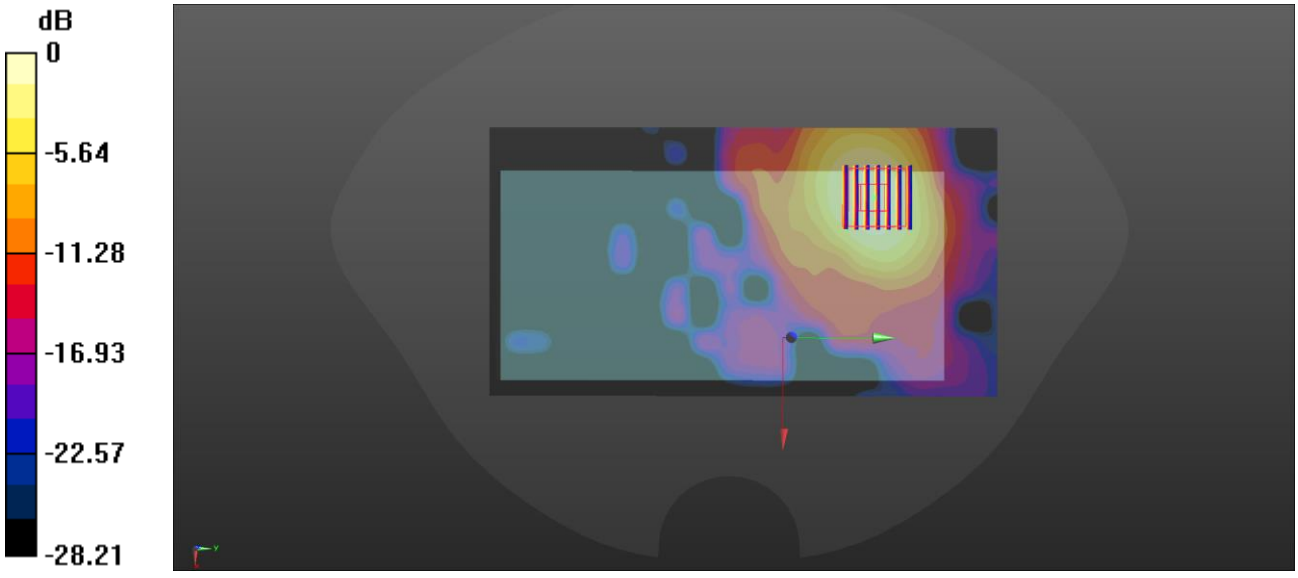
Ambient Temperature:21.8℃ Liquid Temperature:21.1℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.00, 5.00, 5.00); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Ch116/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.900 W/kg

Ch116/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 0.7010 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 1.32 W/kg
SAR(1 g) = 0.415 W/kg; SAR(10 g) = 0.169 W/kg
Maximum value of SAR (measured) = 0.880 W/kg



0 dB = 0.880 W/kg

Meas.13 Back Side 0mm High WLAN 5.6G ANT6
Date: 2024/9/28
Communication System Band: WLAN(a); Frequency: 5700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5700 MHz; σ = 5.096 S/m; ε_r = 34.246; ρ = 1000 kg/m^3
Phantom section: Flat Section

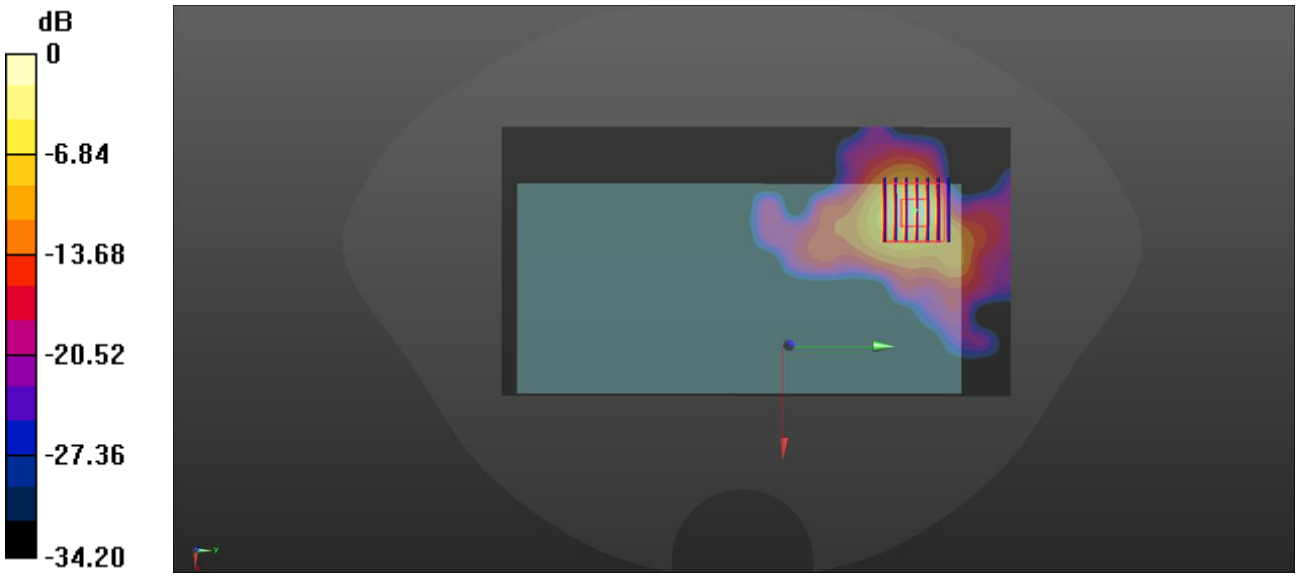
Ambient Temperature:21.8℃ Liquid Temperature:21.1℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.00, 5.00, 5.00); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Ch140/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 5.89 W/kg

Ch140/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 0 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 12.2 W/kg
SAR(1 g) = 2.65 W/kg; SAR(10 g) = 0.644 W/kg
Maximum value of SAR (measured) = 6.91 W/kg



0 dB = 5.89 W/kg

Meas.14 Head Left tilt Mid WLAN 5.8G ANT6
Date: 2024/9/24
Communication System Band: WLAN(a); Frequency: 5785 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5785 MHz; σ = 5.152 S/m; ε_r = 34.265; ρ = 1000 kg/m^3
Phantom section: Left Section

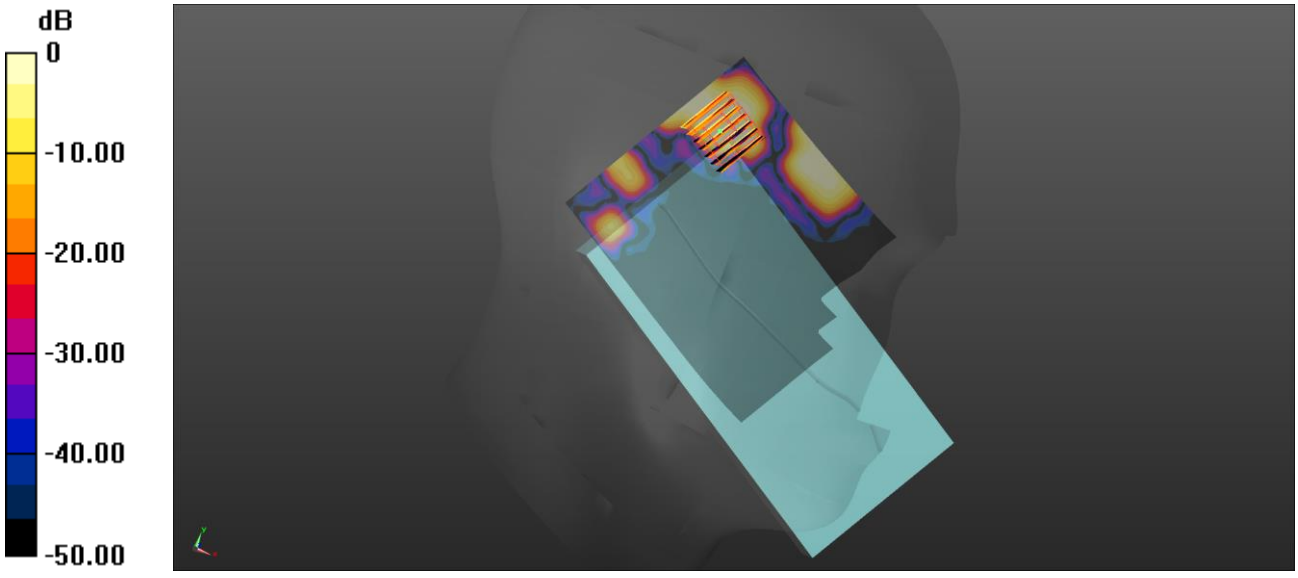
Ambient Temperature:22.6℃ Liquid Temperature:21.6℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.04, 5.04, 5.04); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Ch157/Area Scan (101x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.408 W/kg

Ch157/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 0 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.293 W/kg
SAR(1 g) = 0.047 W/kg; SAR(10 g) = 0.014 W/kg
Maximum value of SAR (measured) = 0.149 W/kg



0 dB = 0.149 W/kg

Meas.15 Back Side 15mm High WLAN 5.8G ANT6
Date: 2024/9/24
Communication System Band: WLAN(a); Frequency: 5825 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5825 MHz; σ = 5.209 S/m; ε_r = 34.293; ρ = 1000 kg/m^3
Phantom section: Flat Section

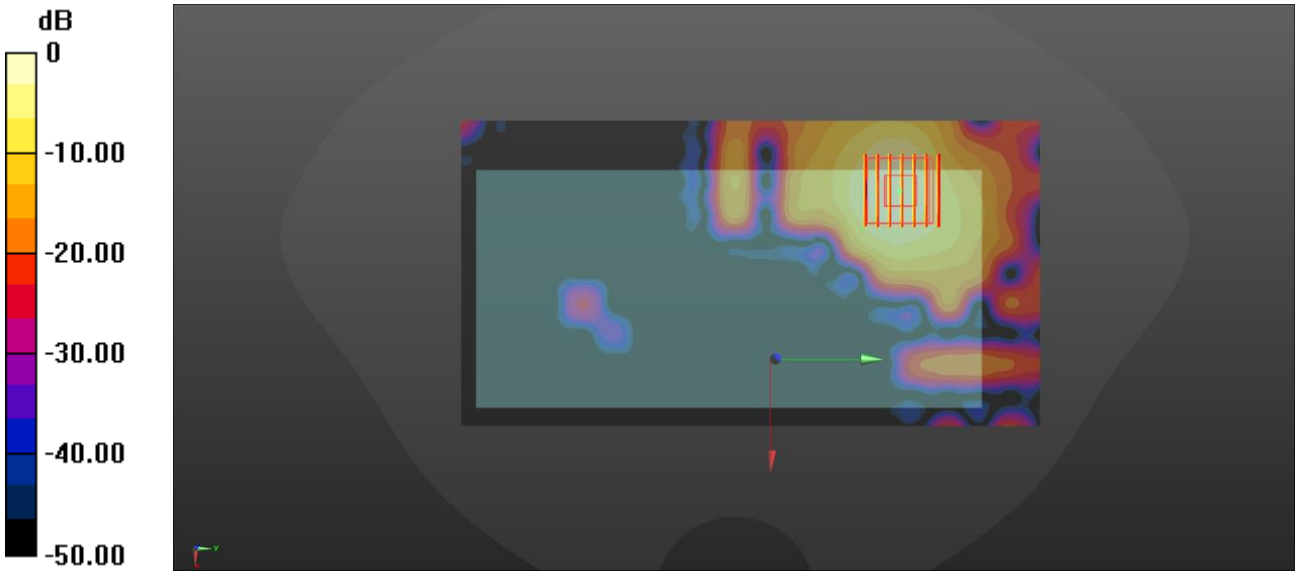
Ambient Temperature:22.6℃ Liquid Temperature:21.6℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.04, 5.04, 5.04); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Ch165/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.14 W/kg

Ch165/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 0 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 1.80 W/kg
SAR(1 g) = 0.477 W/kg; SAR(10 g) = 0.159 W/kg
Maximum value of SAR (measured) = 1.13 W/kg



0 dB = 1.13 W/kg

Meas.16 Back Side 10mm High WLAN 5.8G ANT6
Date: 2024/9/24
Communication System Band: WLAN(a); Frequency: 5785 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5785 MHz; σ = 5.152 S/m; ε_r = 34.265; ρ = 1000 kg/m^3
Phantom section: Flat Section

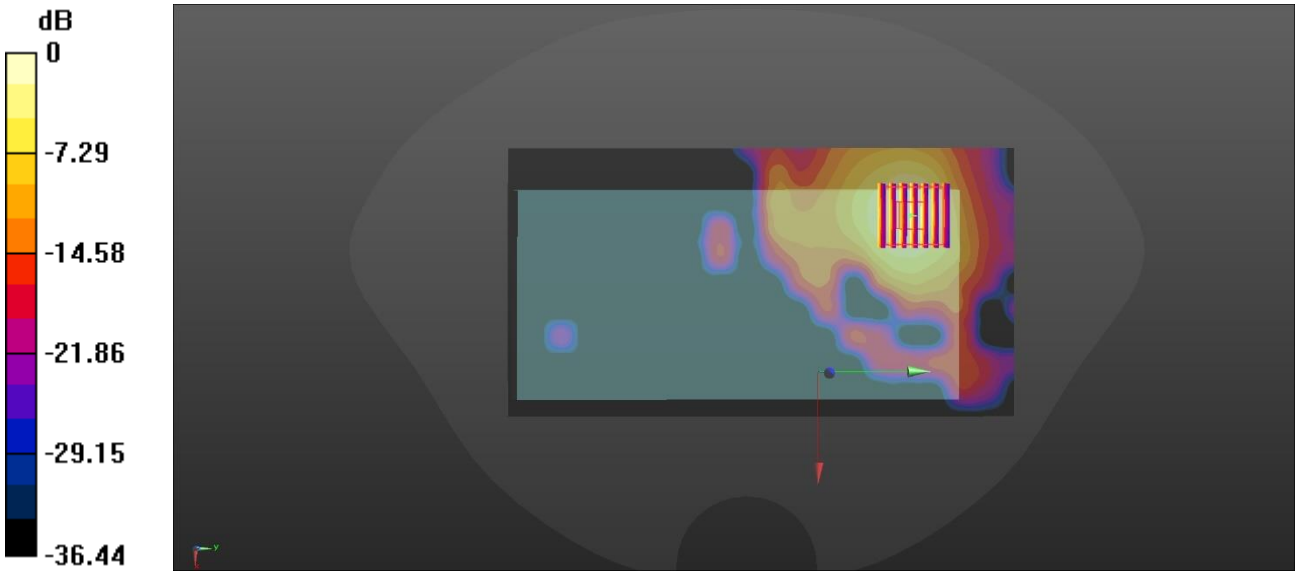
Ambient Temperature:22.6℃ Liquid Temperature:21.6℃

DASY5 Configuration:

- Probe: EX3DV4 - SN7510; ConvF(5.04, 5.04, 5.04); Calibrated: 2024/6/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn540; Calibrated: 2024/2/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1857
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Ch157/Area Scan (101x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.42 W/kg

Ch157/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 0 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 2.23 W/kg
SAR(1 g) = 0.635 W/kg; SAR(10 g) = 0.226 W/kg
Maximum value of SAR (measured) = 1.43 W/kg



0 dB = 1.42 W/kg

Meas 17. Left Head with Cheek on 175 Channel in IEEE802.11ax160 mode with Antenna 6

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
EMC-M51	170.0 x 80.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
LeftHead, HSL	CHEEK, 0.00	U-NII-7	WLAN, 10755-AAC	6825.0, 175	5.38	6.71	33.0	22.3	21.3

Hardware Setup

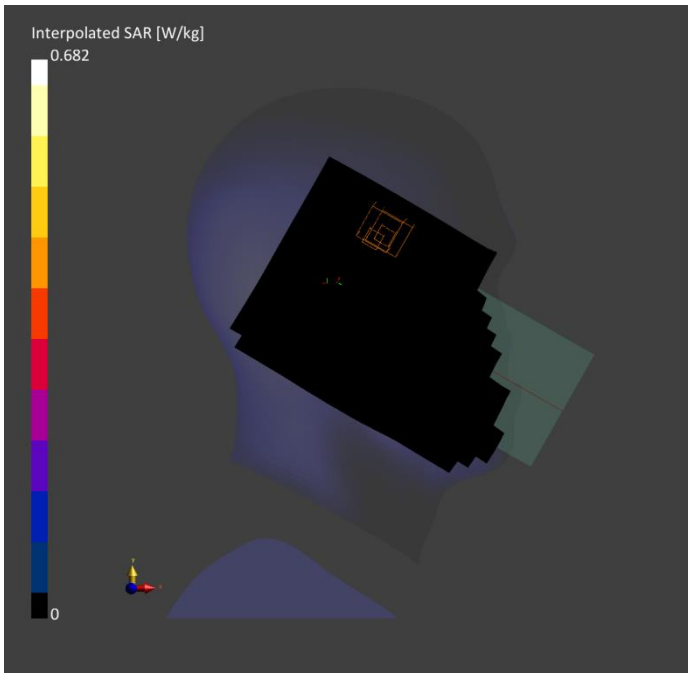
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-09-25	EX3DV4 - SN7893, 2024-09-05	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	136.0 x 187.0	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	2024-09-25	2024-09-25
psSAR1g [W/kg]	0.036	0.030
psSAR10g [W/kg]	0.012	0.01
APD4cm^2 [W/m^2]		0.231
Power Drift [dB]	1.95	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		65.1
Dist 3dB Peak [mm]		3.4


Interpolated SAR [W/kg]
0.682
0

Meas.18 Body Plane with Back Side 15mm on 79 Channel in IEEE802.11ax160 mode with Antenna 6

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
EMC-M51	170.0 x 80.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 15.00	U-NII-5	WLAN, 10743-AAC	6345.0, 79	5.11	5.87	35.0	22.3	21.3

Hardware Setup

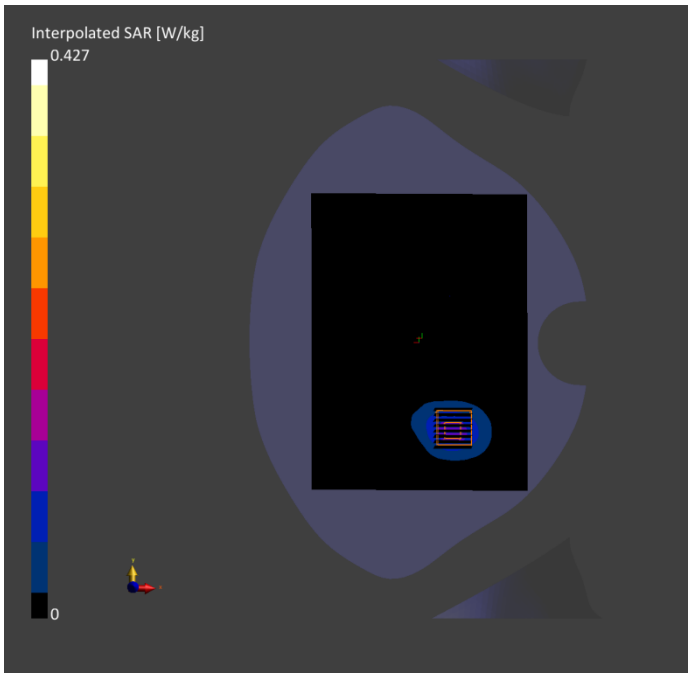
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-09-25	EX3DV4 - SN7893, 2024-09-05	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	136.0 x 187.0	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	2024-09-25	2024-09-25
psSAR1g [W/kg]	0.105	0.105
psSAR10g [W/kg]	0.041	0.041
APD 4cm^2 [W/m^2]		0.910
Power Drift [dB]	-0.17	-0.09
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		58.9
Dist 3dB Peak [mm]		11.3


Interpolated SAR [W/kg]
0.427
0

Meas.19 Body Plane with Back Side 0mm on 47 Channel in IEEE802.11ax160 mode with Antenna 6

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
EMC-M51	170.0 x 80.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 0.00	U-NII-5	WLAN, 10755-AAC	6185.0, 47	5.11	5.56	35.7	22.3	21.3

Hardware Setup

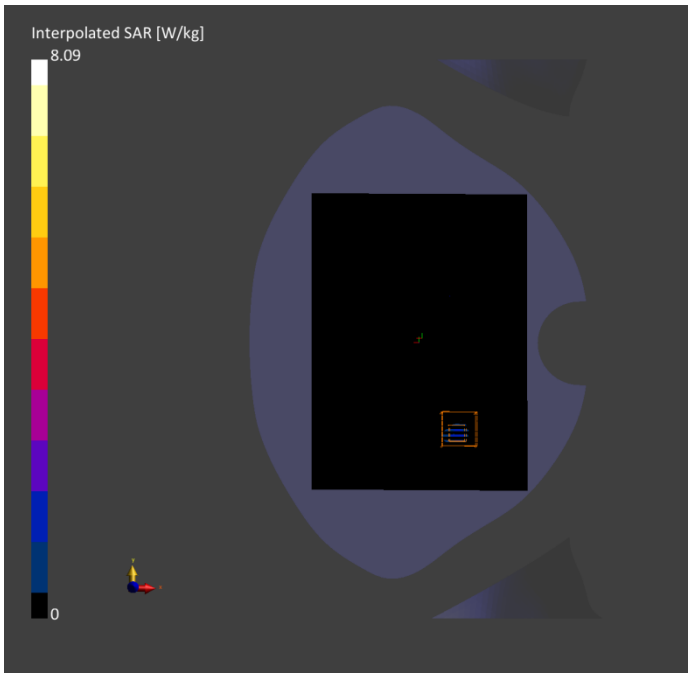
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-09-25	EX3DV4 - SN7893, 2024-09-05	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	136.0 x 187.0	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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-09-25	2024-09-25
psSAR1g [W/kg]	1.16	1.39
psSAR10g [W/kg]	0.259	0.271
APD 4cm^2 [W/m^2]		6.57
Power Drift [dB]	0.01	-0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		52.6
Dist 3dB Peak [mm]		4.6


Interpolated SAR [W/kg]
8.09
0

ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SH2490682-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SH2490682-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “BL-SH2490682-AC.pdf”.

Statement

1. The laboratory guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.
2. The report without China inspection body and laboratory Mandatory Approval (CMA) mark has no effect of proving to the society.
3. For the report with CNAS mark or A2LA mark, the items marked with "☆" are not within the accredited scope.
4. This report is invalid if it is altered, without the signature of the testing and approval personnel, or without the “inspection and testing dedicated stamp” or test report stamp.
5. The test data and results are only valid for the tested samples provided by the customer.
6. This report shall not be partially reproduced without the written permission of the laboratory.
7. Any objection shall be raised to the laboratory within 30 days after receiving the report.

--END OF REPORT--