

TEST REPORT

Applicant: MEIZU TECHNOLOGY CO., LTD.
Address: MEIZU Tech Bldg, Technology & Innovation Coast,
Zhuhai, 519085, Guangdong, China
Equipment Type: Mobile Phone
Model Name: M411H
Brand Name: MEIZU
FCC ID: 2ANQ6-M411H
Test Standard: FCC 47 CFR Part 2.1093
(refer to section 3.1)
Maximum SAR: Head (1 g@0mm): 1.06 W/kg
Body-worn (1 g@15mm): 0.54 W/kg
Hotspot (1 g@10mm): 0.99 W/kg
Specific (10 g@0mm): 2.29 W/kg
Sample Arrival Date: May 16, 2024
Test Date: May 17, 2024 - Jun. 13, 2024
Date of Issue: Jun. 19, 2024

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Zhang Jiwei**Checked by:** Xu Rui**Approved by:** Tolan Tu
(Testing Director)*Zhang Jiwei**Xu Rui**Tolan Tu*

Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Jun. 19, 2024</u>	<u>Initial Issue</u>

TABLE OF CONTENTS

1	GENERAL INFORMATION	5
1.1	Test Laboratory	5
1.2	Test Location	5
1.3	Test Environment Condition	5
2	PRODUCT INFORMATION	6
2.1	Applicant Information	6
2.2	Manufacturer Information	6
2.3	General Description for Equipment under Test (EUT)	6
2.4	Ancillary Equipment	6
2.5	Technical Information	7
3	SUMMARY OF TEST RESULT	9
3.1	Test Standards	9
3.2	Device Category and SAR Limit	10
3.3	Test Result Summary	11
3.4	Test Uncertainty	13
4	MEASUREMENT SYSTEM	14
4.1	Specific Absorption Rate (SAR) Definition	14
4.2	DASY SAR System	15
5	SYSTEM VERIFICATION	22
5.1	Purpose of System Check	22
5.2	System Check Setup	22
6	TEST POSITION CONFIGURATIONS	23
6.1	Head Exposure Conditions	23
6.2	Body-worn Position Conditions	25

6.3	Hotspot Mode Exposure Position Conditions	26
6.4	Product Specific 10g Exposure Consideration	26
7	MEASUREMENT PROCEDURE	27
7.1	Measurement Process Diagram	27
7.2	SAR Scan General Requirement	28
7.3	Measurement Procedure	29
7.4	Area & Zoom Scan Procedure	29
8	CONDUCTED RF OUPUT POWER	30
8.1	GSM	30
8.2	WCDMA	30
8.3	LTE	30
8.4	WIFI	31
8.5	Bluetooth	40
8.6	Power Reduction List	41
9	TEST EXCLUSION CONSIDERATION	46
9.1	SAR Test Exclusion Consideration Table	48
10	PROXIMITY SENSOR TRIGGERING TEST	52
10.1	Procedures for determining proximity sensor distance	52
10.2	Procedures for determining EUT tilt angle influences to proximity sensor triggering ...	54
11	TEST RESULT	55
11.1	GSM 850	55
11.2	GSM 1900	56
11.3	WCDMA Band 2	57
11.4	WCDMA Band 4	58
11.5	WCDMA Band 5	59
11.6	LTE Band 2 (20MHz Bandwidth)	60
11.7	LTE Band 4 (20MHz Bandwidth)	61
11.8	LTE Band 5 (10MHz Bandwidth)	63
11.9	LTE Band 7 (20MHz Bandwidth)	64
11.10	LTE Band 12 (10MHz Bandwidth)	66

11.11	LTE Band 17 (10MHz Bandwidth).....	67
11.12	LTE Band 26 (15MHz Bandwidth).....	68
11.13	LTE Band 66 (20MHz Bandwidth).....	69
11.14	LTE Band 38 (20MHz Bandwidth).....	71
11.15	LTE Band 41 (20MHz Bandwidth).....	72
11.16	WIFI 2.4GHz.....	74
11.17	WIFI 5GHz.....	75
11.18	Bluetooth	77
12	SAR Measurement Variability.....	78
13	SIMULTANEOUS TRANSMISSION	79
13.1	Simultaneous Transmission Mode Consider	79
13.2	Sum SAR of Simultaneous Transmission	80
14	TEST EQUIPMENTS LIST	87
ANNEX A	SIMULATING LIQUID VERIFICATION RESULT	88
ANNEX B	SYSTEM CHECK RESULT	89
ANNEX C	TEST DATA.....	116
ANNEX D	EUT EXTERNAL PHOTOS	246
ANNEX E	SAR TEST SETUP PHOTOS.....	246
ANNEX F	CALIBRATION REPORT	246
ANNEX G	TUNE-UP PROCEDURE	246

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

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	MEIZU TECHNOLOGY CO., LTD.
Address	MEIZU Tech Bldg, Technology & Innovation Coast, Zhuhai, 519085, Guangdong, China

2.2 Manufacturer Information

Manufacturer	MEIZU TECHNOLOGY CO., LTD.
Address	MEIZU Tech Bldg, Technology & Innovation Coast, Zhuhai, 519085, Guangdong, China

2.3 General Description for Equipment under Test (EUT)

EUT Name	Mobile Phone
Model Name Under Test	M411H
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	V1.0
Software Version	Android 14
Dimensions (Approx.)	167.8*77.4*9.1mm
Weight (Approx.)	N/A

2.4 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	N/A
	Model No.	BA411
	Serial No.	N/A
	Capacity	Rated: 5850mAh/22.64Wh Typical: 6000mAh/23.22Wh
	Rated Voltage	3.87 V
	Limit Charge Voltage	4.45 V
	Manufacturer	Guangdong Fenghua New Energy Co., Ltd.

2.5 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/1900 MHz 3G Network WCDMA/HSDPA/HSUPA Band 2/4/5 4G Network LTE FDD Band 2/4/5/7/12/17/26/66 LTE TDD Band 38/41 Bluetooth (BR+EDR+BLE) 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20) 5G WIFI 802.11a, 802.11n(HT20/40) and 802.11ac(VHT20/40/80) U-NII-1/2A/2C/3, GPS, GLONASS, Galileo, BDS, FM Receiver
Note: The EUT is a mobile phone, which supports dual SIM card under the same transceiver. Each SIM supports GSM, WCDMA and LTE, and both SIM share the same transmitting electro circuit, NV parameters, so only SIM1 was tested in this report.	

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

Operating Mode	GSM, WCDMA, LTE, 2.4G WLAN, 5G WLAN, Bluetooth		
Frequency Range	GSM 850	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	GSM 1900	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	WCDMA Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	LTE Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	LTE Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 7	TX: 2500 ~ 2570 MHz	RX: 2620 ~ 2690 MHz
	LTE Band 12	TX: 699 ~ 716 MHz	RX: 729 ~ 746 MHz
	LTE Band 17	TX: 704 ~ 716 MHz	RX: 734 ~ 746 MHz
	LTE Band 66	TX: 1710 ~ 1780 MHz	RX: 2110 ~ 2180 MHz
	LTE Band 38	TX: 2570 ~ 2620 MHz	RX: 2570 ~ 2620 MHz
	LTE Band 41	TX: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz
	802.11b/g/n(HT20)	2412 ~ 2462 MHz	
	802.11a/ /n(HT20/HT40) /ac(VHT20/VHT40/ VHT80)	5150 ~ 5250 MHz	
		5250 ~ 5350 MHz	
		5470 ~ 5725 MHz	
5725 ~ 5850 MHz			
Bluetooth	2402 ~ 2480 MHz		
Antenna Type	WWAN: LDS Antenna WLAN: LDS Antenna Bluetooth: LDS 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
Note: 1. The device utilizes independent power reduction mechanisms for SAR compliance for the 2/3/4G transmitter for held-to-ear exposure conditions. 2. The device utilizes independent power reduction mechanisms for SAR compliance for the 2/3/4G transmitter for near to body exposure conditions. 3. The reduction power details please refer section 8.6.		

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 D04 v01	447498 D04 Interim General RF Exposure Guidance v01
5	KDB 941225 D01 v03r01	3G SAR MEAUREMENT PROCEDURES
6	KDB 941225 D05 v02r05	SAR Evaluation Considerations for LTE Devices
7	KDB 941225 D06 v02r01	SAR EVALUATION PROCEDURES FOR PORTABLE DEVICES WITH WIRELESS ROUTER CAPABILITIES
8	KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
9	KDB 865664 D02 v01r02	RF Exposure Reporting
10	KDB 648474 D04 v01r03	SAR EVALUATION CONSIDERATIONS FOR WIRELESS HANDSETS
11	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/ Controlled Exposure
Whole-Body SAR (averaged over the entire body)	0.08	0.4
Partial-Body SAR (averaged over any 1 gram of tissue)	1.60	8.0
SAR for hands, wrists, feet and ankles (averaged over any 10 grams of tissue)	4.0	20.0

NOTE:

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

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

3.3 Test Result Summary

3.3.1 Highest SAR 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
PCE	GSM 850	0.20	0.40	0.47	/	1.06	0.54	0.99	2.29
	GSM 1900	0.61	0.24	0.48	/				
	WCDMA Band 2	0.40	0.25	0.50	/				
	WCDMA Band 4	0.61	0.19	0.42	/				
	WCDMA Band 5	0.31	0.30	0.36	/				
	LTE Band 2	0.32	0.33	0.60	/				
	LTE Band 4	0.66	0.37	0.73	2.29				
	LTE Band 5	0.11	0.28	0.34	/				
	LTE Band 7	1.06	0.54	0.99	1.34				
	LTE Band 12	0.04	0.47	0.46	/				
	LTE Band 17	0.05	0.45	0.45	/				
	LTE Band 26	0.10	0.29	0.38	/				
	LTE Band 38	0.78	0.25	0.39	/				
	LTE Band 41	0.80	0.34	0.71	0.90				
LTE Band 66	0.61	0.44	0.79	1.03					
DTS	2.4 G WIFI	0.73	0.10	0.19	/				
NII	5.2G WIFI	/	/	0.41	/				
	5.3G WIFI	0.83	0.24	/	0.68				
	5.6 G WIFI	0.65	0.20	/	0.64				
	5.8 G WIFI	0.58	0.19	0.34	/				
DSS	DH5	0.13	0.02	0.04	/				
Limit (W/kg)		1.60			4.00	1.60			4.00
Verdict		Pass							

3.3.2 Highest Simultaneous Transmission SAR Values

Equipment Class	Maximum Scaled SAR (W/kg)			
	Head (0mm)	Body-worn (15mm)	Hotspot (10mm)	Specific (0mm)
	1g SAR			10g SAR
PCE	1.46	0.81	1.32	2.76
DTS	1.31	0.64	1.18	2.29
NII	1.46	0.81	1.32	2.76
DSS	1.46	0.81	1.32	2.76
Limit (W/Kg)	1.60			4.00
Verdict	Pass			
Note: The highest simultaneous SAR please refer section 13.2				

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 1.06 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 10 g SAR for the EUT in this report is 2.29 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:

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

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

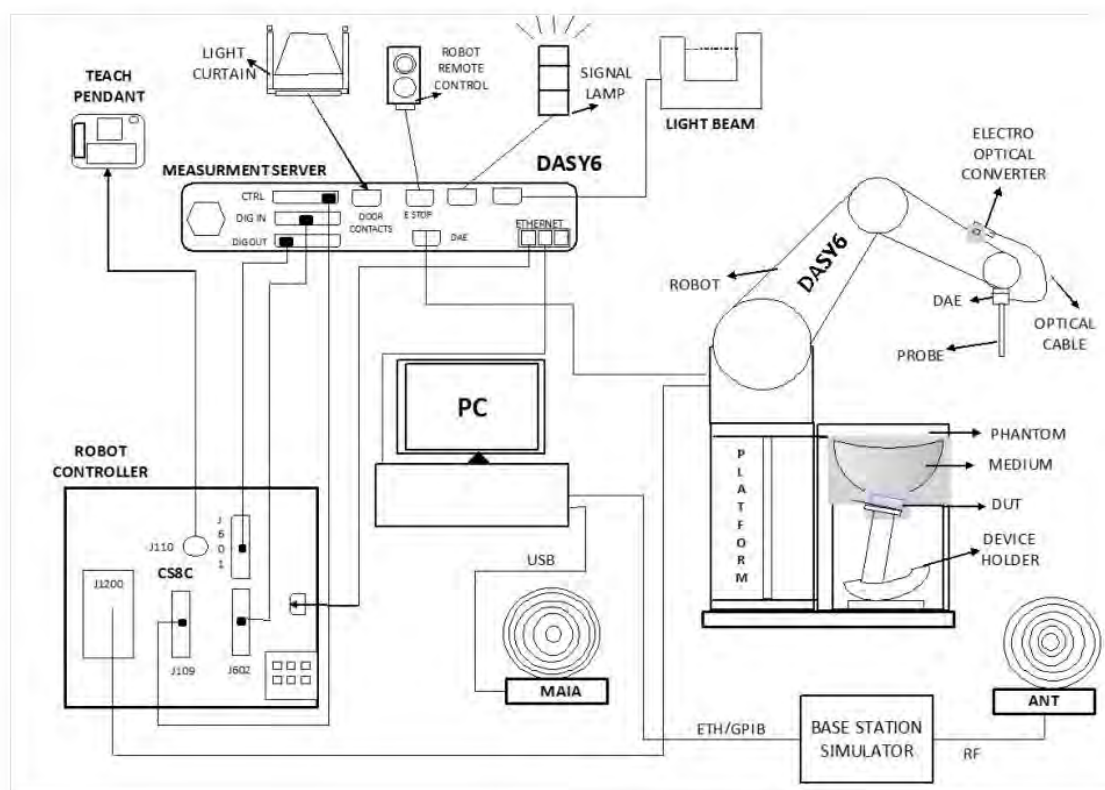
$$\text{SAR} = \frac{\sigma E^2}{\rho}$$

Where: σ is the conductivity of the tissue,

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

4.2 DASY SAR System

4.2.1 DASY SAR System Diagram



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

1. A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
2. A dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
3. A data acquisition electronic (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
4. A unit to operate the optical surface detector which is connected to the EOC.
5. The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the 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 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)

4.2.3 E-Field Probe

The probe is specially designed and calibrated for use in liquids with high permittivities for the measurements the Specific Dosimetric E-Field Probe EX3DV4-SN: 7607 with following specifications is used.

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



E-Field Probe Calibration Process

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

4.2.4 Data Acquisition Electronics

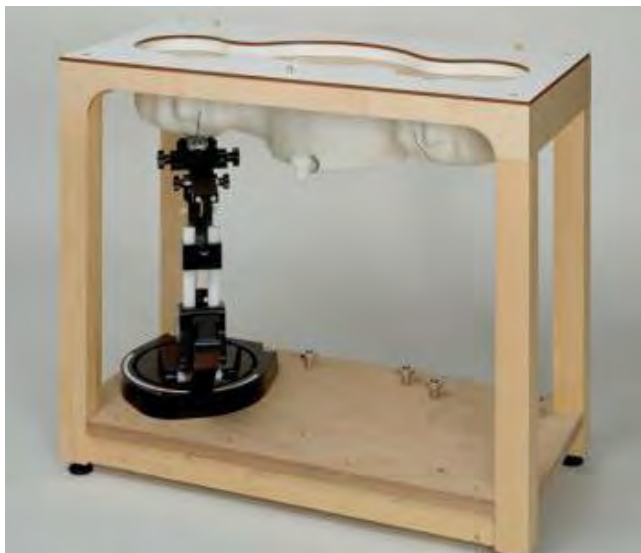
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through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



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

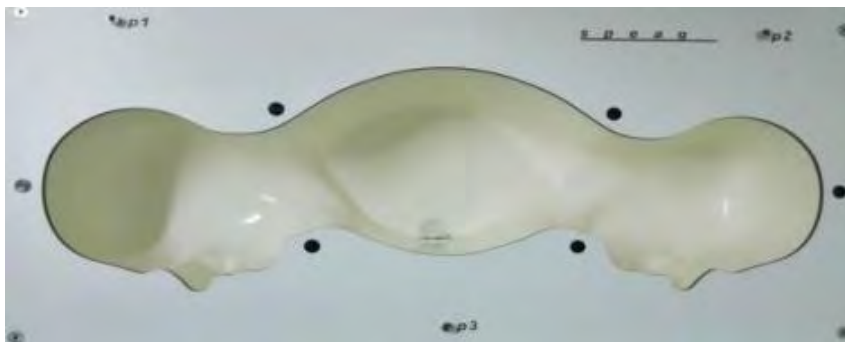
4.2.5 Phantoms

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



- Left head
- Right head
- Flat phantom

Photo of Phantom SN1859



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

4.2.6 Device Holder

The 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° .

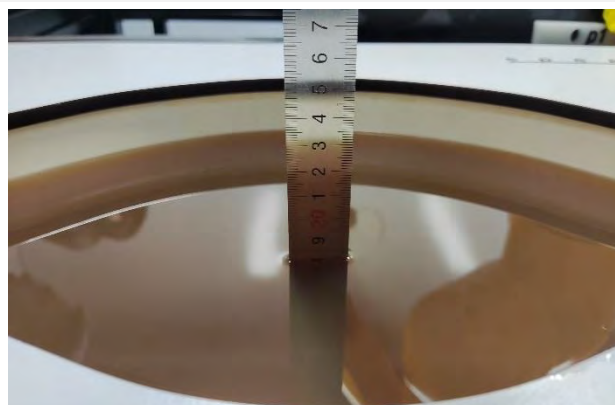
4.2.7 Simulating Liquid

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

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

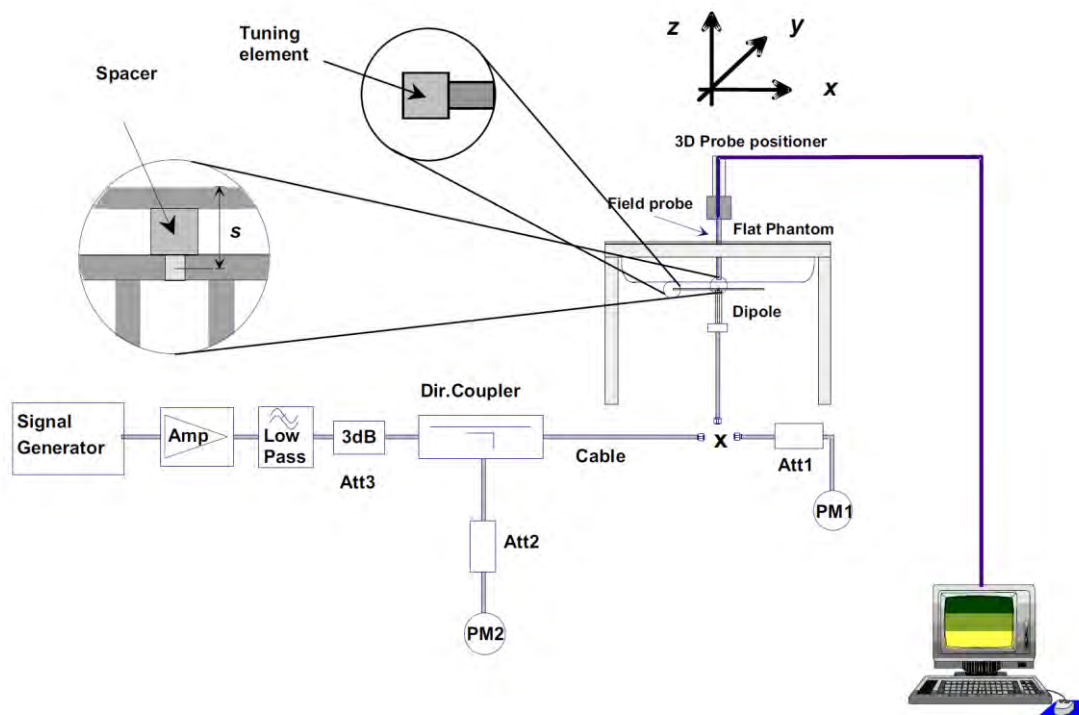
5 SYSTEM VERIFICATION

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

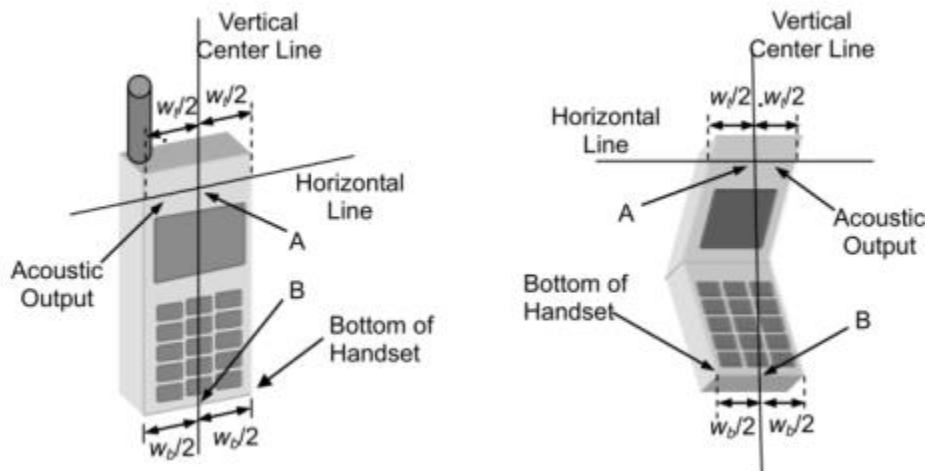
According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

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.

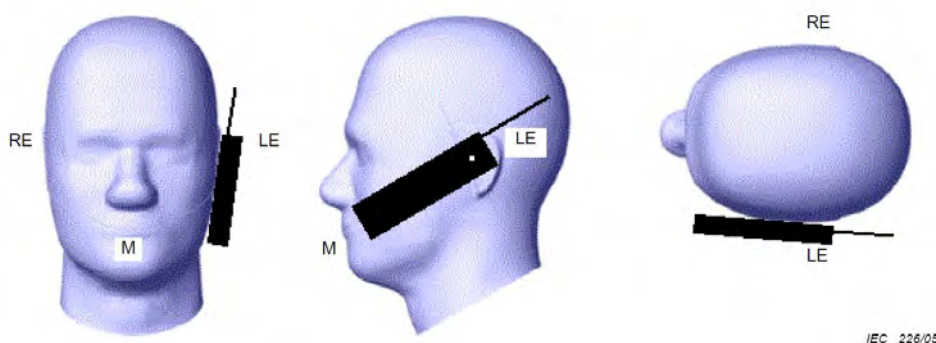
6.1.1 Two Imaginary Lines on the Handset

- 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.
- 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.
- 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.

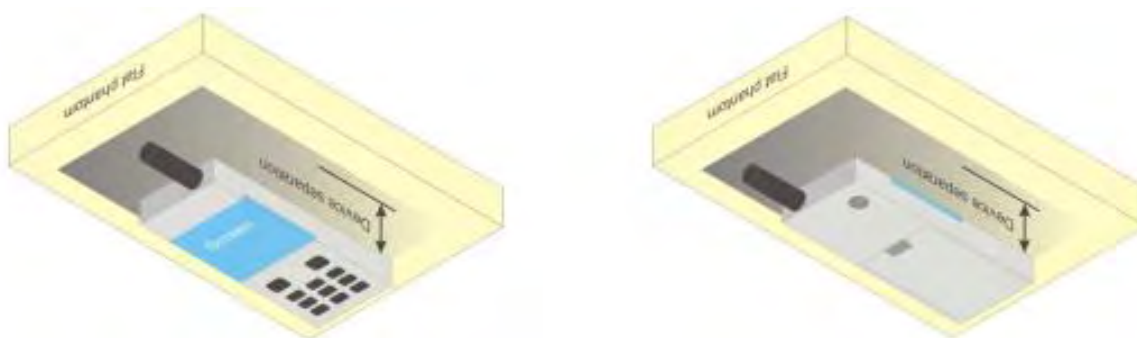


6.2 Body-worn Position Conditions

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.

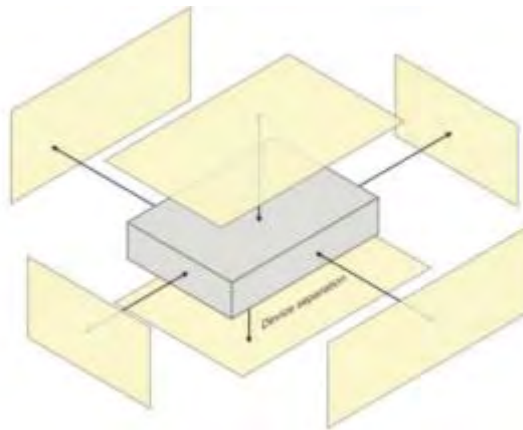
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics.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



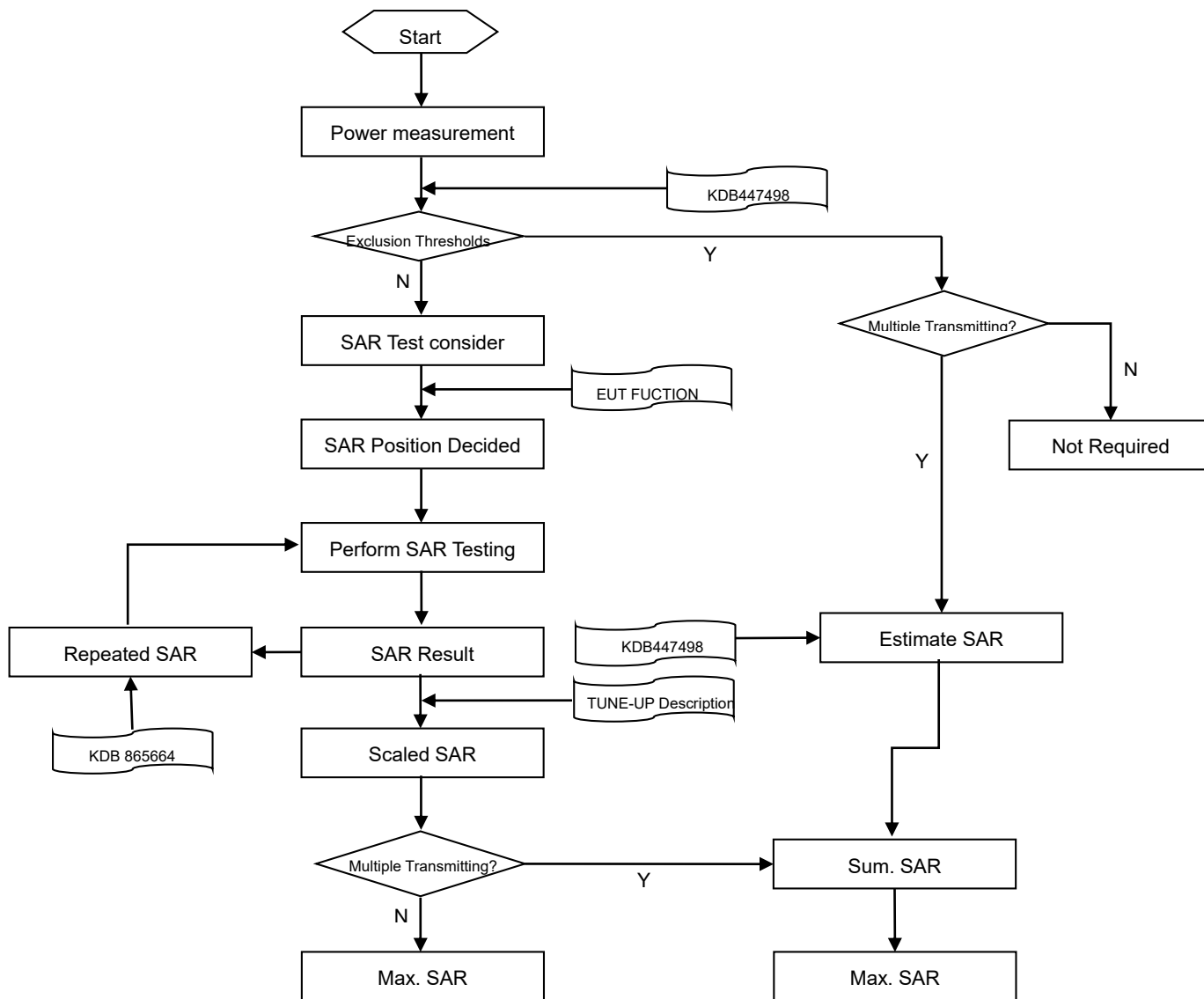
6.4 Product Specific 10g Exposure Consideration

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

			≤3GHz	>3GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			5±1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location			30°±1°	20°±1°
Maximum area scan spatial resolution: Δx Area , Δy Area			≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3–4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
			When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: Δx Zoom , Δy Zoom			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3–4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: Δz Zoom (n)		≤ 5 mm	3–4 GHz: ≤ 4 mm
				4–5 GHz: ≤ 3 mm
				5–6 GHz: ≤ 2 mm
	graded grid	Δz Zoom (1): between 1st two points closest to phantom surface	≤ 4 mm	3–4 GHz: ≤ 3 mm
				4–5 GHz: ≤ 2.5 mm
		Δz Zoom (n>1): between subsequent points	≤ 1.5·Δz Zoom (n-1)	
Minimum zoom scan volume	x, y, z		≥30 mm	3–4 GHz: ≥ 28 mm
				4–5 GHz: ≥ 25 mm
				5–6 GHz: ≥ 22 mm

Note:

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.

7.3 Measurement Procedure

The following steps are used for each test position

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

7.4 Area & Zoom Scan Procedure

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

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

8 CONDUCTED RF OUPUT POWER

8.1 GSM

Please refer the document “BL-SZ2441239-AP.pdf”.

8.2 WCDMA

Please refer the document “BL-SZ2441239-AP.pdf”.

8.3 LTE

Please refer the document “BL-SZ2441239-AP.pdf”.

8.4 WIFI

8.4.1 2.4G WIFI-Full power

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	13.58	14.00	No
		6	2437	13.62	14.00	Yes
		11	2462	13.29	14.00	No
	802.11g	1	2412	12.76	13.00	No
		6	2437	12.55	13.00	No
		11	2462	12.19	13.00	No
	802.11n(HT20)	1	2412	11.48	12.00	No
		6	2437	11.28	12.00	No
		11	2462	11.31	12.00	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) 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 ≤ 1.2 W/kg, OFDM SAR test is not required.
Adjusted SAR = $0.732 * (19.95\text{mW}/25.12\text{mW}) = 0.581$ W/Kg, so 2.4G OFDM SAR test is not required.

8.4.2 2.4G WIFI-Level1

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	13.58	14.00	No
		6	2437	13.62	14.00	Yes
		11	2462	13.29	14.00	No
	802.11g	1	2412	12.76	13.00	No
		6	2437	12.55	13.00	No
		11	2462	12.19	13.00	No
	802.11n(HT20)	1	2412	11.48	12.00	No
		6	2437	11.28	12.00	No
		11	2462	11.31	12.00	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) 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 ≤ 1.2 W/kg, OFDM SAR test is not required.
Adjusted SAR = $0.732 * (19.95\text{mW}/25.12\text{mW}) = 0.581$ W/Kg, so 2.4G OFDM SAR test is not required.

8.4.3 2.4G WIFI-Level2

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	13.58	14.00	No
		6	2437	13.62	14.00	Yes
		11	2462	13.29	14.00	No
	802.11g	1	2412	12.76	13.00	No
		6	2437	12.55	13.00	No
		11	2462	12.19	13.00	No
	802.11n(HT20)	1	2412	11.48	12.00	No
		6	2437	11.28	12.00	No
		11	2462	11.31	12.00	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) 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 ≤ 1.2 W/kg, OFDM SAR test is not required.
Adjusted SAR = $0.187 * (19.95\text{mW}/25.12\text{mW}) = 0.149$ W/Kg, so 2.4G OFDM SAR test is not required.

8.4.4 5G WIFI-Full power

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	11.19	12.00	No
		44	5220	11.38	12.00	No
		48	5240	11.59	12.00	Yes
	802.11n(HT20)	36	5180	10.35	11.00	No
		44	5220	10.31	11.00	No
		48	5240	10.23	11.00	No
	802.11n(HT40)	38	5190	10.11	11.00	No
		46	5230	10.08	11.00	No
	802.11ac(VHT20)	36	5180	9.58	10.00	No
		44	5220	9.38	10.00	No
		48	5240	9.31	10.00	No
	802.11ac(VHT40)	38	5190	9.38	10.00	No
		46	5230	9.13	10.00	No
	802.11ac(VHT80)	42	5210	9.02	10.00	No
5.3 (5.25~5.35)	802.11a	52	5260	11.55	12.00	Yes
		60	5300	11.45	12.00	Yes
		64	5320	11.58	12.00	Yes
	802.11n(HT20)	52	5260	10.62	11.00	No
		60	5300	10.58	11.00	No
		64	5320	10.64	11.00	No
	802.11n(HT40)	54	5270	10.06	11.00	No
		62	5310	10.07	11.00	No
	802.11ac(VHT20)	52	5260	9.74	10.00	No
		60	5300	9.73	10.00	No
		64	5320	9.88	10.00	No
	802.11ac(VHT40)	54	5270	9.12	10.00	No
		62	5310	9.08	10.00	No
	802.11ac(VHT80)	58	5290	9.57	10.00	No
5.6 (5.47~5.725)	802.11a	100	5500	11.53	12.00	Yes
		116	5580	11.28	12.00	Yes
		140	5700	11.30	12.00	Yes
	802.11n(HT20)	100	5500	10.43	11.00	No
		136	5680	10.41	11.00	No
		140	5700	10.23	11.00	No
	802.11n(HT40)	102	5510	10.53	11.00	No
		110	5550	10.34	11.00	No

	802.11ac(VHT20)	134	5670	10.32	11.00	No
		100	5500	9.57	10.00	No
		116	5580	9.31	10.00	No
		140	5700	9.25	10.00	No
	802.11ac(VHT40)	102	5510	9.03	10.00	No
		110	5550	9.15	10.00	No
		134	5670	9.39	10.00	No
	802.11ac(VHT80)	106	5530	9.03	10.00	No
		122	5610	9.10	10.00	No
		138	5690	9.08	10.00	No
5.8 (5.725~5.850)	802.11a	149	5745	11.60	12.00	Yes
		157	5785	11.57	12.00	No
		165	5825	11.56	12.00	No
	802.11n(HT20)	149	5745	10.49	11.00	No
		157	5785	10.46	11.00	No
		165	5825	10.63	11.00	No
	802.11n(HT40)	151	5755	10.22	11.00	No
		159	5795	10.27	11.00	No
	802.11ac(VHT20)	149	5745	9.73	10.00	No
		157	5785	9.52	10.00	No
		165	5825	9.52	10.00	No
	802.11ac(VHT40)	151	5755	9.66	10.00	No
		159	5795	9.86	10.00	No
	802.11ac(VHT80)	155	5775	9.96	10.00	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.

8.4.5 5G WIFI-Level1

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	11.19	12.00	No
		44	5220	11.38	12.00	No
		48	5240	11.59	12.00	No
	802.11n(HT20)	36	5180	10.35	11.00	No
		44	5220	10.31	11.00	No
		48	5240	10.23	11.00	No
	802.11n(HT40)	38	5190	10.11	11.00	No
		46	5230	10.08	11.00	No
	802.11ac(VHT20)	36	5180	9.58	10.00	No
		44	5220	9.38	10.00	No
		48	5240	9.31	10.00	No
	802.11ac(VHT40)	38	5190	9.38	10.00	No
		46	5230	9.13	10.00	No
	802.11ac(VHT80)	42	5210	9.02	10.00	No
5.3 (5.25~5.35)	802.11a	52	5260	11.55	12.00	Yes
		60	5300	11.45	12.00	Yes
		64	5320	11.58	12.00	Yes
	802.11n(HT20)	52	5260	10.62	11.00	No
		60	5300	10.58	11.00	No
		64	5320	10.64	11.00	No
	802.11n(HT40)	54	5270	10.06	11.00	No
		62	5310	10.07	11.00	No
	802.11ac(VHT20)	52	5260	9.74	10.00	No
		60	5300	9.73	10.00	No
		64	5320	9.88	10.00	No
	802.11ac(VHT40)	54	5270	9.12	10.00	No
		62	5310	9.08	10.00	No
	802.11ac(VHT80)	58	5290	9.57	10.00	No
5.6 (5.47~5.725)	802.11a	100	5500	11.53	12.00	Yes
		116	5580	11.28	12.00	Yes
		140	5700	11.30	12.00	Yes
	802.11n(HT20)	100	5500	10.43	11.00	No
		136	5680	10.41	11.00	No
		140	5700	10.23	11.00	No
	802.11n(HT40)	102	5510	10.53	11.00	No
		110	5550	10.34	11.00	No

	802.11ac(VHT20)	134	5670	10.32	11.00	No
		100	5500	9.57	10.00	No
		116	5580	9.31	10.00	No
		140	5700	9.25	10.00	No
	802.11ac(VHT40)	102	5510	9.03	10.00	No
		110	5550	9.15	10.00	No
		134	5670	9.39	10.00	No
	802.11ac(VHT80)	106	5530	9.03	10.00	No
		122	5610	9.10	10.00	No
		138	5690	9.08	10.00	No
5.8 (5.725~5.850)	802.11a	149	5745	11.60	12.00	Yes
		157	5785	11.57	12.00	No
		165	5825	11.56	12.00	No
	802.11n(HT20)	149	5745	10.49	11.00	No
		157	5785	10.46	11.00	No
		165	5825	10.63	11.00	No
	802.11n(HT40)	151	5755	10.22	11.00	No
		159	5795	10.27	11.00	No
	802.11ac(VHT20)	149	5745	9.73	10.00	No
		157	5785	9.52	10.00	No
		165	5825	9.52	10.00	No
	802.11ac(VHT40)	151	5755	9.66	10.00	No
		159	5795	9.86	10.00	No
	802.11ac(VHT80)	155	5775	9.96	10.00	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.

8.4.6 5G WIFI-Level2

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	11.19	12.00	No
		44	5220	11.38	12.00	No
		48	5240	11.59	12.00	Yes
	802.11n(HT20)	36	5180	10.35	11.00	No
		44	5220	10.31	11.00	No
		48	5240	10.23	11.00	No
	802.11n(HT40)	38	5190	10.11	11.00	No
		46	5230	10.08	11.00	No
	802.11ac(VHT20)	36	5180	9.58	10.00	No
		44	5220	9.38	10.00	No
		48	5240	9.31	10.00	No
	802.11ac(VHT40)	38	5190	9.38	10.00	No
		46	5230	9.13	10.00	No
	802.11ac(VHT80)	42	5210	9.02	10.00	No
5.3 (5.25~5.35)	802.11a	52	5260	11.55	12.00	No
		60	5300	11.45	12.00	No
		64	5320	11.58	12.00	Yes
	802.11n(HT20)	52	5260	10.62	11.00	No
		60	5300	10.58	11.00	No
		64	5320	10.64	11.00	No
	802.11n(HT40)	54	5270	10.06	11.00	No
		62	5310	10.07	11.00	No
	802.11ac(VHT20)	52	5260	9.74	10.00	No
		60	5300	9.73	10.00	No
		64	5320	9.88	10.00	No
	802.11ac(VHT40)	54	5270	9.12	10.00	No
		62	5310	9.08	10.00	No
	802.11ac(VHT80)	58	5290	9.57	10.00	No
5.6 (5.47~5.725)	802.11a	100	5500	11.53	12.00	Yes
		116	5580	11.28	12.00	No
		140	5700	11.30	12.00	No
	802.11n(HT20)	100	5500	10.43	11.00	No
		136	5680	10.41	11.00	No
		140	5700	10.23	11.00	No
	802.11n(HT40)	102	5510	10.53	11.00	No
		110	5550	10.34	11.00	No

	802.11ac(VHT20)	134	5670	10.32	11.00	No
		100	5500	9.57	10.00	No
		116	5580	9.31	10.00	No
		140	5700	9.25	10.00	No
	802.11ac(VHT40)	102	5510	9.03	10.00	No
		110	5550	9.15	10.00	No
		134	5670	9.39	10.00	No
	802.11ac(VHT80)	106	5530	9.03	10.00	No
		122	5610	9.10	10.00	No
		138	5690	9.08	10.00	No
5.8 (5.725~5.850)	802.11a	149	5745	11.60	12.00	Yes
		157	5785	11.57	12.00	No
		165	5825	11.56	12.00	No
	802.11n(HT20)	149	5745	10.49	11.00	No
		157	5785	10.46	11.00	No
		165	5825	10.63	11.00	No
	802.11n(HT40)	151	5755	10.22	11.00	No
		159	5795	10.27	11.00	No
	802.11ac(VHT20)	149	5745	9.73	10.00	No
		157	5785	9.52	10.00	No
		165	5825	9.52	10.00	No
	802.11ac(VHT40)	151	5755	9.66	10.00	No
		159	5795	9.86	10.00	No
	802.11ac(VHT80)	155	5775	9.96	10.00	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.						

8.5 Bluetooth

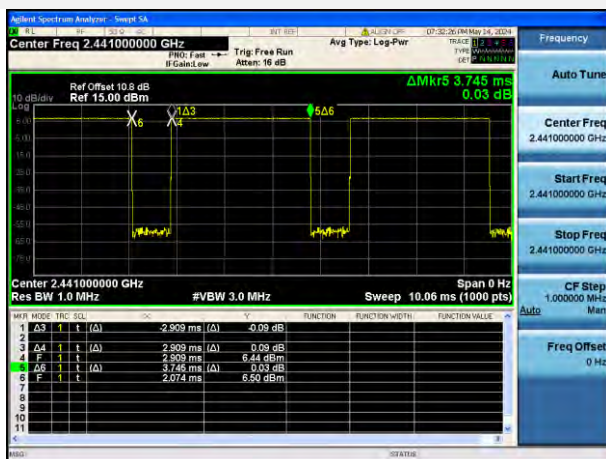
Mode	GFSK			$\pi/4$ -DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
Conducted Power (dBm)	7.59	7.54	7.47	4.52	4.69	4.44
Tune-Up Limit (dBm)	8.00	8.00	8.00	5.00	5.00	5.00
SAR Test Require	Yes	No	No	No	No	No
Mode	8-DPSK			/		
Channel	0	39	78	/	/	/
Frequency (MHz)	2402	2441	2480	/	/	/
Conducted Power (dBm)	4.53	4.63	4.40	/	/	/
Tune-Up Limit (dBm)	5.00	5.00	5.00	/	/	/
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
Conducted Power (dBm)	0.82	0.35	1.03	0.72	0.46	1.41
Tune-Up Limit (dBm)	2.00	2.00	2.00	2.00	2.00	2.00
SAR Test Require	No	No	No	No	No	No

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

Note: The Bluetooth BT DH5 duty cycle is 77.69 % as following figure, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the maximum duty cycle is 100%, therefore the actual duty cycle will be scaled up to 100% for Bluetooth reported SAR calculation.

Duty Cycle

Bluetooth-GFSK



8.6 Power Reduction List

1. This mobile phone device supports the receiver detection mechanism .This device uses the receiver to indicate whether the user is making a call in head.
2. When device is making call in head, and the receiver will work, the power reduction will applied for SAR compliance.
3. When there is a voice call (including VOIP), the audio is actively routed through the headset or speaker, and the receiver will not work, which indicating the body exposure conditions will trigger the body exposure reduced the power.
4. When this device used data mode only, and the receiver will not work too, the reduced the power are same as body exposure.
5. The device employs proximity sensors that detect the presence of the user's body of the device. When these conditions are detected, body reduced power will be active.
6. When the proximity sensor fails, the power is reduced to the corresponding level2 scenario.

WWAN Reduced Power Level Table

Reduced Level	Sensor State	Receiver State	Transmitting Conditions	Antenna	Position
Level1	N/A	On (head scenario)	WWAN Use Only & WWAN + WLAN	Ant.0	Head
				Ant.1	
Level2	Sensor On	Off (Body scenario)	WWAN Use Only & WWAN + WLAN	Ant.0	Front Side; Back Side; Left Edge; Right Edge; Top Edge; Bottom Edge
				Ant.1	
Off	Sensor Off	Off (Body scenario)	WWAN Use Only & WWAN + WLAN	Ant.0	Front Side; Back Side; Left Edge; Right Edge; Top Edge; Bottom Edge
				Ant.1	
Note: The WWAN 2G/3G/4G up antenna includes antenna 1; The WWAN 2G/3G/4G down antenna includes antenna 0.					

WWAN Antenna Power Table

Mode	Antenna	WWAN Antenna							
		Full Power	Receiver on		Receiver off(Sensor On)				
			Head		Body-worn		Hotspot	Specific	
			Standalone	Simultaneous transmission	Standalone	Simultaneous transmission	Simultaneous transmission	Standalone	Simultaneous transmission
				+WLAN		+WLAN	+WLAN		+WLAN
		Off	Level1	Level1	Level2	Level2	Level2	Level2	Level2
GSM 850	Ant.0	33.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50
GPRS850 1 Tx Slot	Ant.0	33.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50
GPRS850 2 Tx Slot	Ant.0	31.50	28.50	28.50	28.50	28.50	28.50	28.50	28.50
GPRS850 3 Tx Slot	Ant.0	29.50	26.50	26.50	26.50	26.50	26.50	26.50	26.50
GPRS850 4 Tx Slot	Ant.0	27.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50
EGPRS850 1 Tx Slot	Ant.0	27.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50
EGPRS850 2 Tx Slot	Ant.0	25.50	22.50	22.50	22.50	22.50	22.50	22.50	22.50
EGPRS850 3 Tx Slot	Ant.0	23.50	20.50	20.50	20.50	20.50	20.50	20.50	20.50
EGPRS850 4 Tx Slot	Ant.0	21.50	18.50	18.50	18.50	18.50	18.50	18.50	18.50
GSM1900	Ant. 1	30.50	25.50	25.50	27.50	27.50	27.50	27.50	27.50
GPRS1900 1 Tx Slot	Ant. 1	30.50	25.50	25.50	27.50	27.50	27.50	27.50	27.50
GPRS1900 2 Tx Slot	Ant. 1	28.50	23.50	23.50	25.50	25.50	25.50	25.50	25.50
GPRS1900 3 Tx Slot	Ant. 1	27.00	21.50	21.50	23.50	23.50	23.50	23.50	23.50
GPRS1900 4 Tx Slot	Ant. 1	25.00	19.50	19.50	21.50	21.50	21.50	21.50	21.50
EGPRS1900 1 Tx Slot	Ant. 1	27.00	22.00	22.00	24.00	24.00	24.00	24.00	24.00
EGPRS1900 2 Tx Slot	Ant. 1	25.00	20.00	20.00	22.00	22.00	22.00	22.00	22.00
EGPRS1900 3 Tx Slot	Ant. 1	23.00	18.00	18.00	20.00	20.00	20.00	20.00	20.00
EGPRS1900 4 Tx Slot	Ant. 1	21.00	16.00	16.00	18.00	18.00	18.00	18.00	18.00
WCDMA Band2 RMC	Ant. 1	23.50	14.50	14.50	20.50	20.50	20.50	20.50	20.50
WCDMA Band2 AMR	Ant. 1	23.50	14.50	14.50	20.50	20.50	20.50	20.50	20.50
HSDPA Subtest-1	Ant. 1	23.50	14.50	14.50	20.50	20.50	20.50	20.50	20.50
HSDPA Subtest-2	Ant. 1	23.50	14.50	14.50	20.50	20.50	20.50	20.50	20.50
HSDPA Subtest-3	Ant. 1	23.50	14.50	14.50	20.50	20.50	20.50	20.50	20.50
HSDPA Subtest-4	Ant. 1	23.50	14.50	14.50	20.50	20.50	20.50	20.50	20.50
HSUPA Subtest-1	Ant. 1	21.00	12.00	12.00	18.00	18.00	18.00	18.00	18.00
HSUPA Subtest-2	Ant. 1	21.00	12.00	12.00	18.00	18.00	18.00	18.00	18.00
HSUPA Subtest-3	Ant. 1	21.00	12.00	12.00	18.00	18.00	18.00	18.00	18.00
HSUPA Subtest-4	Ant. 1	21.00	12.00	12.00	18.00	18.00	18.00	18.00	18.00
HSUPA Subtest-5	Ant. 1	23.50	14.50	14.50	20.50	20.50	20.50	20.50	20.50
WCDMA Band4 RMC	Ant. 1	23.50	16.50	16.50	20.50	20.50	20.50	20.50	20.50

WCDMA Band4 AMR	Ant.1	23.50	16.50	16.50	20.50	20.50	20.50	20.50	20.50
HSDPA Subtest-1	Ant.1	23.50	16.50	16.50	20.50	20.50	20.50	20.50	20.50
HSDPA Subtest-2	Ant.1	23.50	16.50	16.50	20.50	20.50	20.50	20.50	20.50
HSDPA Subtest-3	Ant.1	23.50	16.50	16.50	20.50	20.50	20.50	20.50	20.50
HSDPA Subtest-4	Ant.1	23.50	16.50	16.50	20.50	20.50	20.50	20.50	20.50
HSUPA Subtest-1	Ant.1	21.00	14.00	14.00	18.00	18.00	18.00	18.00	18.00
HSUPA Subtest-2	Ant.1	21.00	14.00	14.00	18.00	18.00	18.00	18.00	18.00
HSUPA Subtest-3	Ant.1	21.00	14.00	14.00	18.00	18.00	18.00	18.00	18.00
HSUPA Subtest-4	Ant.1	21.00	14.00	14.00	18.00	18.00	18.00	18.00	18.00
HSUPA Subtest-5	Ant.1	23.50	16.50	16.50	20.50	20.50	20.50	20.50	20.50
WCDMA Band5 RMC	Ant.0	24.50	19.50	19.50	21.50	21.50	21.50	21.50	21.50
WCDMA Band5 AMR	Ant.0	24.50	19.50	19.50	21.50	21.50	21.50	21.50	21.50
HSDPA Subtest-1	Ant.0	24.50	19.50	19.50	21.50	21.50	21.50	21.50	21.50
HSDPA Subtest-2	Ant.0	24.50	19.50	19.50	21.50	21.50	21.50	21.50	21.50
HSDPA Subtest-3	Ant.0	24.50	19.50	19.50	21.50	21.50	21.50	21.50	21.50
HSDPA Subtest-4	Ant.0	24.50	19.50	19.50	21.50	21.50	21.50	21.50	21.50
HSUPA Subtest-1	Ant.0	22.00	17.00	17.00	19.00	19.00	19.00	19.00	19.00
HSUPA Subtest-2	Ant.0	22.00	17.00	17.00	19.00	19.00	19.00	19.00	19.00
HSUPA Subtest-3	Ant.0	22.00	17.00	17.00	19.00	19.00	19.00	19.00	19.00
HSUPA Subtest-4	Ant.0	22.00	17.00	17.00	19.00	19.00	19.00	19.00	19.00
HSUPA Subtest-5	Ant.0	24.50	19.50	19.50	21.50	21.50	21.50	21.50	21.50
LTE Band2	Ant.1	24.00	15.00	15.00	21.00	21.00	21.00	21.00	21.00
LTE Band4	Ant.1	24.00	17.00	17.00	21.00	21.00	21.00	21.00	21.00
LTE Band5	Ant.0	24.50	19.50	19.50	19.50	21.50	21.50	21.50	21.50
LTE Band7	Ant.1	24.00	17.00	17.00	21.00	21.00	21.00	21.00	21.00
LTE Band12	Ant.0	24.50	19.50	19.50	21.50	21.50	21.50	21.50	21.50
LTE Band17	Ant.0	24.50	19.50	19.50	21.50	21.50	21.50	21.50	21.50
LTE Band26	Ant.0	24.50	19.50	19.50	21.50	21.50	21.50	21.50	21.50
LTE Band66	Ant.1	24.00	17.00	17.00	21.00	21.00	21.00	21.00	21.00
LTE Band38	Ant.1	24.50	19.50	19.50	21.50	21.50	21.50	21.50	21.50
LTE Band41	Ant.1	24.50	19.50	19.50	21.50	21.50	21.50	21.50	21.50

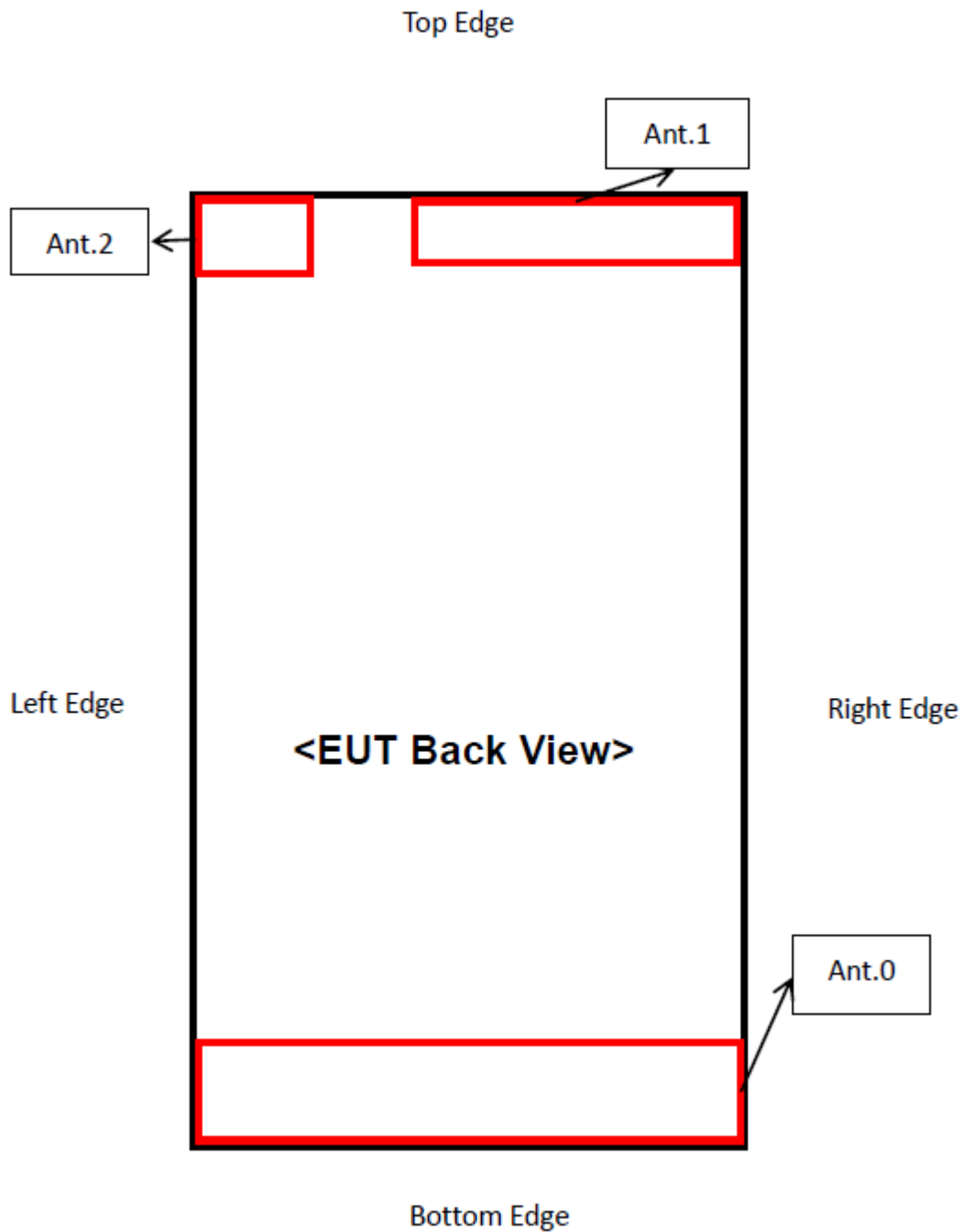
WLAN Reduced Power Level Table

Reduced Level	Receiver State	Transmitting Conditions	Antenna	Position
Level1	On (head scenario)	WLAN Use Only & WWAN + WLAN	Ant.2	Head
Level2	Off (Body scenario)	WLAN Use Only & WWAN + WLAN	Ant.2	Front Side; Back Side; Left Edge; Right Edge; Top Edge; Bottom Edge

WLAN Antenna Power Table

Mode	WLAN Antenna							
	Full Power	Receiver on		Receiver off				
		Head		Body-worn		Hotspot	Specific	
		Standalone	Simultaneous transmission	Standalone	Simultaneous transmission	Simultaneous transmission	Standalone	Simultaneous transmission
			+WWAN		+WWAN	+WWAN		+WWAN
	Off	Level1	Level1	Level2	Level2	Level2	Level2	Level2
2.4G WLAN 802.11b	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
2.4G WLAN 802.11g	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00
2.4G WLAN 802.11n20	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
5.2G WLAN 802.11a	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
5.2G WLAN 802.11n20	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
5.2G WLAN 802.11n40	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
5.2G WLAN 802.11ac20	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
5.2G WLAN 802.11ac40	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
5.2G WLAN 802.11ac80	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
5.3G WLAN 802.11a	12.00	12.00	12.00	12.00	12.00	/	12.00	12.00
5.3G WLAN 802.11n20	11.00	11.00	11.00	11.00	11.00	/	11.00	11.00
5.3G WLAN 802.11n40	11.00	11.00	11.00	11.00	11.00	/	11.00	11.00
5.3G WLAN 802.11ac20	10.00	10.00	10.00	10.00	10.00	/	10.00	10.00
5.3G WLAN 802.11ac40	10.00	10.00	10.00	10.00	10.00	/	10.00	10.00
5.3G WLAN 802.11ac80	10.00	10.00	10.00	10.00	10.00	/	10.00	10.00
5.6G WLAN 802.11a	12.00	12.00	12.00	12.00	12.00	/	12.00	12.00
5.6G WLAN 802.11n20	11.00	11.00	11.00	11.00	11.00	/	11.00	11.00
5.6G WLAN 802.11n40	11.00	11.00	11.00	11.00	11.00	/	11.00	11.00
5.6G WLAN 802.11ac20	10.00	10.00	10.00	10.00	10.00	/	10.00	10.00
5.6G WLAN 802.11ac40	10.00	10.00	10.00	10.00	10.00	/	10.00	10.00
5.6G WLAN 802.11ac80	10.00	10.00	10.00	10.00	10.00	/	10.00	10.00
5.8G WLAN 802.11a	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
5.8G WLAN 802.11n20	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
5.8G WLAN 802.11n40	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
5.8G WLAN 802.11ac20	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
5.8G WLAN 802.11ac40	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
5.8G LAN 802.11ac80	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Bluetooth	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00

9 TEST EXCLUSION CONSIDERATION



Antenna	Description	Support Bands
Antenna 0	2/3/4G LB TX Antenna	GSM 850 WCDMA Band 5 LTE Band 5/12/17/26
Antenna 1	2/3/4G MHB TX Antenna	GSM 1900 WCDMA Band 2/4 LTE Band 2/4/7/66/38/41
Antenna 2	WLAN 2.4G TX Antenna WLAN 5G TX Antenna Bluetooth TX Antenna	2.4G WLAN 5G WLAN Bluetooth

Note 1: WWAN TX antennas for certain frequency band can switch automatically, but only one antenna can transmit at same time.

Note 2: Middle and High frequency Band (MHB).

Note 3: Low frequency Band (LB).

Antenna	Front Side (mm)	Back Side (mm)	Left Edge (mm)	Right Edge (mm)	Top Edge (mm)	Bottom Edge (mm)
Antenna 0	<25	<25	<25	<25	>25	<25
Antenna 1	<25	<25	<25	<25	<25	>25
Antenna 2	<25	<25	<25	>25	<25	>25

Note: 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.

9.1 SAR Test Exclusion Consideration Table

According with FCC KDB 447498 D04, Appendix B, The SAR-based exemption formula applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold P_{th} (mW), this Device SAR test configurations consider as following :

Antenna 0

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Front Side	Back Side	Left Edge	Right Edge	Top Edge	Bottom Edge
GSM 850	Distance to User			<25mm	<25mm	<25mm	<25mm	>25mm	<25mm
	Voice	33.50	2238.72	Yes	Yes	Yes	Yes	No	Yes
	Data	33.50	2238.72	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 5	Distance to User			<25mm	<25mm	<25mm	<25mm	>25mm	<25mm
	RMC	24.50	281.84	Yes	Yes	Yes	Yes	No	Yes
LTE Band 5	Distance to User			<25mm	<25mm	<25mm	<25mm	>25mm	<25mm
	QPSK	24.50	281.84	Yes	Yes	Yes	Yes	No	Yes
LTE Band 12	Distance to User			<25mm	<25mm	<25mm	<25mm	>25mm	<25mm
	QPSK	24.50	281.84	Yes	Yes	Yes	Yes	No	Yes
LTE Band 17	Distance to User			<25mm	<25mm	<25mm	<25mm	>25mm	<25mm
	QPSK	24.50	281.84	Yes	Yes	Yes	Yes	No	Yes
LTE Band 26	Distance to User			<25mm	<25mm	<25mm	<25mm	>25mm	<25mm
	QPSK	24.50	281.84	Yes	Yes	Yes	Yes	No	Yes

Antenna 1

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Front Side	Back Side	Left Edge	Right Edge	Top Edge	Bottom Edge
GSM 1900	Distance to User			<25mm	<25mm	<25mm	<25mm	<25mm	>25mm
	Voice	30.50	1122.02	Yes	Yes	Yes	Yes	Yes	No
	Data	30.50	1122.02	Yes	Yes	Yes	Yes	Yes	No
WCDMA Band 2	Distance to User			<25mm	<25mm	<25mm	<25mm	<25mm	>25mm
	RMC	23.50	223.87	Yes	Yes	Yes	Yes	Yes	No
WCDMA Band 4	Distance to User			<25mm	<25mm	<25mm	<25mm	<25mm	>25mm
	RMC	23.50	223.87	Yes	Yes	Yes	Yes	Yes	No
LTE Band 2	Distance to User			<25mm	<25mm	<25mm	<25mm	<25mm	>25mm
	QPSK	24.00	251.19	Yes	Yes	Yes	Yes	Yes	No
LTE Band 4	Distance to User			<25mm	<25mm	<25mm	<25mm	<25mm	>25mm
	QPSK	24.00	251.19	Yes	Yes	Yes	Yes	Yes	No
LTE Band 7	Distance to User			<25mm	<25mm	<25mm	<25mm	<25mm	>25mm
	QPSK	24.00	251.19	Yes	Yes	Yes	Yes	Yes	No
LTE Band 66	Distance to User			<25mm	<25mm	<25mm	<25mm	<25mm	>25mm
	QPSK	24.00	251.19	Yes	Yes	Yes	Yes	Yes	No
LTE Band 38	Distance to User			<25mm	<25mm	<25mm	<25mm	<25mm	>25mm
	QPSK	24.50	281.84	Yes	Yes	Yes	Yes	Yes	No
LTE Band 41	Distance to User			<25mm	<25mm	<25mm	<25mm	<25mm	>25mm
	QPSK	24.50	281.84	Yes	Yes	Yes	Yes	Yes	No

Antenna 2

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Front Side	Back Side	Left Edge	Right Edge	Top Edge	Bottom Edge
WLAN 2.4 G	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	>25mm
	802.11b	14.00	25.12	Yes	Yes	Yes	No	Yes	No
	802.11g	13.00	19.95	No	No	No	No	No	No
	802.11n(HT20)	12.00	15.85	No	No	No	No	No	No
WLAN 5.2 G	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	>25mm
	802.11a	12.00	15.85	Yes	Yes	Yes	No	Yes	No
	802.11n(HT20)	11.00	12.59	No	No	No	No	No	No
	802.11n(HT40)	11.00	12.59	No	No	No	No	No	No
	802.11ac(VHT20)	10.00	10.00	No	No	No	No	No	No
	802.11ac(VHT40)	10.00	10.00	No	No	No	No	No	No
	802.11ac(VHT80)	10.00	10.00	No	No	No	No	No	No
WLAN 5.3 G	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	>25mm
	802.11a	12.00	15.85	Yes	Yes	Yes	No	Yes	No
	802.11n(HT20)	11.00	12.59	No	No	No	No	No	No
	802.11n(HT40)	11.00	12.59	No	No	No	No	No	No
	802.11ac(VHT20)	10.00	10.00	No	No	No	No	No	No
	802.11ac(VHT40)	10.00	10.00	No	No	No	No	No	No
	802.11ac(VHT80)	10.00	10.00	No	No	No	No	No	No
WLAN 5.6 G	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	>25mm
	802.11a	12.00	15.85	Yes	Yes	Yes	No	Yes	No
	802.11n(HT20)	11.00	12.59	No	No	No	No	No	No
	802.11n(HT40)	11.00	12.59	No	No	No	No	No	No
	802.11ac(VHT20)	10.00	10.00	No	No	No	No	No	No
	802.11ac(VHT40)	10.00	10.00	No	No	No	No	No	No
	802.11ac(VHT80)	10.00	10.00	No	No	No	No	No	No
WLAN 5.8 G	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	>25mm
	802.11a	12.00	15.85	Yes	Yes	Yes	No	Yes	No
	802.11n(HT20)	11.00	12.59	No	No	No	No	No	No
	802.11n(HT40)	11.00	12.59	No	No	No	No	No	No
	802.11ac(VHT20)	10.00	10.00	No	No	No	No	No	No
	802.11ac(VHT40)	10.00	10.00	No	No	No	No	No	No
	802.11ac(VHT80)	10.00	10.00	No	No	No	No	No	No
Bluetooth	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	>25mm
	BR+EDR	8.00	6.31	Yes	Yes	Yes	No	Yes	No
	BLE	2.00	1.58	No	No	No	No	No	No

Note:

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

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

where

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

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

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

5. Per KDB 941225 D01, RMC 12.2kbps setting is used to evaluate SAR. If HSDPA /HSUPA /DC-HSDPA output power is < 0.25dB higher than RMC12.2Kbps, or reported SAR with RMC 12.2kbps setting is $\leq 1.2W/kg$, HSDPA/HSUPA/DC-HSDPA SAR evaluation can be excluded.
6. Per KDB 248227 D01, choose the highest output power channel to test SAR and determine further SAR exclusion.8. For each frequency band, testing at higher data rates and higher order modulations is not required when the maximum average output power for each of these configurations is less than 1/4dB higher than those measured at the lowest data rate
7. Per KDB 248227 D01 SAR is not required for the following 2.4 GHz OFDM conditions.
 - a. When KDB Publication 447498 D04 SAR test exclusion applies to the OFDM configuration.
 - b. When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is $\leq 1.2 W/kg$.
8. Per KDB 248227 D01 SAR is not required for the following U-NII-1 and U-NII-2A bands conditions.
 - a. When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is $\leq 1.2 W/kg$, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.
 - b. When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest reported SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is $\leq 1.2 W/kg$, SAR is not required for the band with lower maximum output power in that test configuration; otherwise, each band is tested independently for SAR.

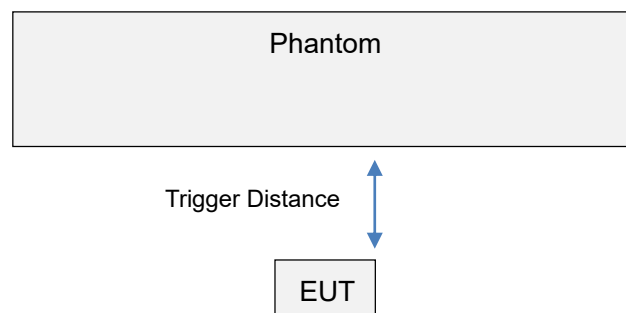
10 PROXIMITY SENSOR TRIGGERING TEST

10.1 Procedures for determining proximity sensor distance

The device uses one proximity sensors to reduce the maximum output power in selected wireless mode and operating configurations to ensure SAR compliance. The sensor implementation can identify and facilitate triggering different max power levels for different scenarios including the device held by hand(Extremity) and different exposure test positions test positions when the device is closed to a user's body.

Proximity sensor triggering distance testing was performed, EUT moving further away from the phantom and EUT moving toward the phantom were both assessed, and the shortest triggering distances were reported and used for SAR assessment. Note that while sensor is failed and it sets the output power to the lowest one in the sensor trigger state ,to make sure the SAR requirements can still be satisfied.

10.1.1 proximity sensor



EUT moving toward Phantom

Distance in mm	1~25	26	27	28	29	30	31	32	33	34	35~40
Front Side	On	On	On	On	On	On	Off	Off	Off	Off	Off
Back Side	On	On	On	On	On	On	Off	Off	Off	Off	Off
Right Edge	On	On	On	On	On	On	Off	Off	Off	Off	Off
Top Edge	On	On	On	On	On	On	Off	Off	Off	Off	Off

Note: Power reduction is only applicable for ANT1.

Distance in mm	1~25	26	27	28	29	30	31	32	33	34	35~40
Front Side	On	On	On	On	On	On	Off	Off	Off	Off	Off
Back Side	On	On	On	On	On	On	Off	Off	Off	Off	Off
Left Edge	On	On	On	On	On	On	Off	Off	Off	Off	Off
Bottom Edge	On	On	On	On	On	On	Off	Off	Off	Off	Off

Note: Power reduction is only applicable for ANT0.

To ensure all production units are compliant, it is generally necessary to reduce the triggering distance determined from the triggering tests by 1 mm, or more if it is necessary, and use the smallest distance for EUT moving toward the phantom, minus 1 mm, as the sensor triggering distance for determining the SAR measurement distance.

ANT1 of proximity sensor

EUT Sides	Additional SAR test Distance in mm
Front Side	29
Back Side	29
Right Edge	29
Top Edge	29

ANT0 of proximity sensor

EUT Sides	Additional SAR test Distance in mm
Front Side	29
Back Side	29
Left Edge	29
Bottom Edge	29

10.2 Procedures for determining EUT tilt angle influences to proximity sensor triggering

The influence of EUT tilt angles to proximity sensor triggering was determined by positioning each EUT edge that contains a transmitting antenna 1, perpendicular to the flat phantom, at 30 mm separation for the front side, at 30 mm separation for the back side, at 30 mm separation for the right edge and 30 mm separation for the top edge.

The influence of EUT tilt angles to proximity sensor triggering was determined by positioning each EUT edge that contains a transmitting antenna 0, perpendicular to the flat phantom, at 30 mm separation for the front side, at 30 mm separation for the back side, at 30 mm separation for the left edge and 30 mm separation for the bottom edge.

Rotating the EUT around the edge next to the phantom in $\leq 10^\circ$ increments until the EUT is $\pm 45^\circ$ from the vertical position at 0° , and the maximum output power remains in the reduced mode.

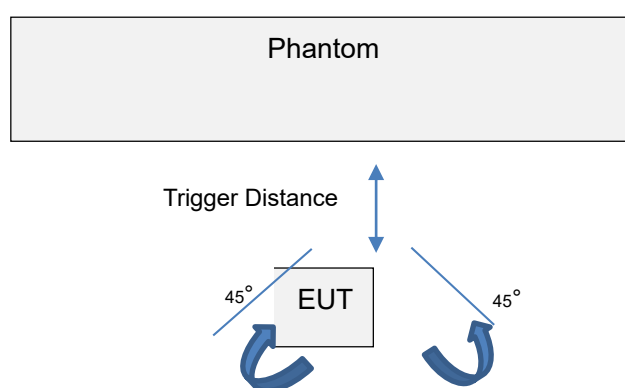


Table: Summary of Phone Tilt Angle Influence to Proximity Sensor Triggering(Left/Right/Top/Bottom edge)

Antenna	Posltion	Minimum trigger distance at which power reduction was maintained over $\pm 45^\circ$	Power Reduction Status											
			-45°	-35°	-25°	-15°	-5°	0°	5°	15°	25°	35°	45°	
ANT1	Right Edge	30mm	on	on	on	on	on	on	on	on	on	on	on	
ANT1	Top Edge	30mm	on	on	on	on	on	on	on	on	on	on	on	
ANT0	Left Edge	30mm	on	on	on	on	on	on	on	on	on	on	on	
ANT0	Bottom Edge	30mm	on	on	on	on	on	on	on	on	on	on	on	

11 TEST RESULT

11.1 GSM 850

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Head													
Ant.0	Level1	GPRS 2slots	Left Cheek	0	190	836.6	-0.04	0.161	27.91	28.50	1.146	0.185	/
	Level1		Left Tilt	0	190	836.6	-0.14	0.099	27.91	28.50	1.146	0.113	/
	Level1		Right Cheek	0	190	836.6	0.05	0.170	27.91	28.50	1.146	0.195	1#
	Level1		Right Tilt	0	190	836.6	-0.11	0.110	27.91	28.50	1.146	0.126	/
Body-Worn													
Ant.0	Level2	GPRS	Front Side	15	190	836.6	0.05	0.273	27.91	28.50	1.146	0.313	/
	Level2	2slots	Back Side	15	190	836.6	0.02	0.349	27.91	28.50	1.146	0.400	2#
Hotspot													
Ant.0	Level2	GPRS 2slots	Front Side	10	190	836.6	-0.05	0.285	27.91	28.50	1.146	0.327	/
	Level2		Back Side	10	190	836.6	0.02	0.414	27.91	28.50	1.146	0.474	3#
	Level2		Left Edge	10	190	836.6	-0.04	0.267	27.91	28.50	1.146	0.306	/
	Off		Right Edge	10	251	848.8	-0.14	0.059	30.21	31.50	1.346	0.079	/
	Level2		Bottom Edge	10	190	836.6	-0.11	0.245	27.91	28.50	1.146	0.281	/
Body(Sensor Off)													
Ant.0	Off	GPRS 2slots	Front Side	29	251	848.8	0.04	0.243	30.21	31.50	1.346	0.327	/
	Off		Back Side	29	251	848.8	-0.01	0.271	30.21	31.50	1.346	0.365	/
	Off		Left Edge	29	251	848.8	0.02	0.118	30.21	31.50	1.346	0.159	/
	Off		Bottom Edge	29	251	848.8	0.06	0.008	30.21	31.50	1.346	0.011	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

11.2 GSM 1900

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Head													
Ant.1	Level1	GPRS 2slots	Left Cheek	0	512	1850.2	-0.07	0.279	22.64	23.50	1.219	0.340	/
	Level1		Left Tilt	0	512	1850.2	-0.07	0.231	22.64	23.50	1.219	0.282	/
	Level1		Right Cheek	0	512	1850.2	0.03	0.496	22.64	23.50	1.219	0.605	4#
	Level1		Right Tilt	0	512	1850.2	-0.14	0.358	22.64	23.50	1.219	0.436	/
Body-Worn													
Ant.1	Level2	GPRS	Front Side	15	512	1850.2	0.06	0.162	24.36	25.50	1.300	0.211	/
	Level2	2slots	Back Side	15	512	1850.2	0.02	0.187	24.36	25.50	1.300	0.243	5#
Hotspot													
Ant.1	Level2	GPRS 2slots	Front Side	10	512	1850.2	0.27	0.265	24.36	25.50	1.300	0.345	/
	Level2		Back Side	10	512	1850.2	0.01	0.368	24.36	25.50	1.300	0.478	6#
	Off		Left Edge	10	512	1850.2	0.05	0.045	25.60	27.00	1.380	0.062	/
	Level2		Right Edge	10	512	1850.2	0.16	0.159	24.36	25.50	1.300	0.207	/
	Level2		Top Edge	10	512	1850.2	0.17	0.171	24.36	25.50	1.300	0.222	/
Body(Sensor Off)													
Ant.1	Off	GPRS 2slots	Front Side	29	512	1850.2	0.13	0.052	25.60	27.00	1.380	0.072	/
	Off		Back Side	29	512	1850.2	0.06	0.067	25.60	27.00	1.380	0.092	/
	Off		Right Edge	29	512	1850.2	-0.09	0.052	25.60	27.00	1.380	0.072	/
	Off		Top Edge	29	512	1850.2	-0.11	0.002	25.60	27.00	1.380	0.003	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

11.3WCDMA Band 2

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Head													
Ant.1	Level1	RMC	Left Cheek	0	9538	1907.6	-0.16	0.187	13.15	14.50	1.365	0.255	/
	Level1		Left Tilt	0	9538	1907.6	0.07	0.148	13.15	14.50	1.365	0.202	/
	Level1		Right Cheek	0	9538	1907.6	0.00	0.293	13.15	14.50	1.365	0.400	7#
	Level1		Right Tilt	0	9538	1907.6	0.11	0.239	13.15	14.50	1.365	0.326	/
Body-Worn													
Ant.1	Level2	RMC	Front Side	15	9538	1907.6	-0.09	0.145	19.06	20.50	1.393	0.202	/
	Level2		Back Side	15	9538	1907.6	0.00	0.182	19.06	20.50	1.393	0.254	8#
Hotspot													
Ant.1	Level2	RMC	Front Side	10	9538	1907.6	0.05	0.255	19.06	20.50	1.393	0.355	/
	Level2		Back Side	10	9538	1907.6	-0.04	0.359	19.06	20.50	1.393	0.500	9#
	Off		Left Edge	10	9538	1907.6	0.06	0.062	22.03	23.50	1.403	0.087	/
	Level2		Right Edge	10	9538	1907.6	0.09	0.170	19.06	20.50	1.393	0.237	/
	Level2		Top Edge	10	9538	1907.6	-0.01	0.171	19.06	20.50	1.393	0.238	/
Body(Sensor Off)													
Ant.1	Off	RMC	Front Side	29	9538	1907.6	0.01	0.131	22.03	23.50	1.403	0.184	/
	Off		Back Side	29	9538	1907.6	-0.01	0.140	22.03	23.50	1.403	0.196	/
	Off		Right Edge	29	9538	1907.6	-0.14	0.091	22.03	23.50	1.403	0.128	/
	Off		Top Edge	29	9538	1907.6	-0.05	0.051	22.03	23.50	1.403	0.072	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

11.4WCDMA Band 4

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Head													
Ant.1	Level1	RMC	Left Cheek	0	1412	1732.4	0.11	0.258	15.59	16.50	1.233	0.318	/
	Level1		Left Tilt	0	1412	1732.4	0.15	0.223	15.59	16.50	1.233	0.275	/
	Level1		Right Cheek	0	1412	1732.4	-0.01	0.495	15.59	16.50	1.233	0.610	10#
	Level1		Right Tilt	0	1412	1732.4	-0.11	0.352	15.59	16.50	1.233	0.434	/
Body-Worn													
Ant.1	Level2	RMC	Front Side	15	1513	1752.6	0.02	0.103	19.54	20.50	1.247	0.128	/
	Level2		Back Side	15	1513	1752.6	0.01	0.152	19.54	20.50	1.247	0.190	11#
Hotspot													
Ant.1	Level2	RMC	Front Side	10	1513	1752.6	-0.12	0.221	19.54	20.50	1.247	0.276	/
	Level2		Back Side	10	1513	1752.6	-0.01	0.339	19.54	20.50	1.247	0.423	12#
	Off		Left Edge	10	1513	1752.6	0.16	0.053	22.38	23.50	1.294	0.069	/
	Level2		Right Edge	10	1513	1752.6	-0.16	0.145	19.54	20.50	1.247	0.181	/
	Level2		Top Edge	10	1513	1752.6	0.14	0.198	19.54	20.50	1.247	0.247	/
Body(Sensor Off)													
Ant.1	Off	RMC	Front Side	29	1513	1752.6	0.05	0.088	22.38	23.50	1.294	0.114	/
	Off		Back Side	29	1513	1752.6	-0.11	0.106	22.38	23.50	1.294	0.137	/
	Off		Right Edge	29	1513	1752.6	-0.09	0.083	22.38	23.50	1.294	0.107	/
	Off		Top Edge	29	1513	1752.6	-0.06	0.051	22.38	23.50	1.294	0.066	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

11.5WCDMA Band 5

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Head													
Ant.0	Level1	RMC	Left Cheek	0	4182	836.4	0.05	0.217	18.62	19.50	1.225	0.266	/
	Level1		Left Tilt	0	4182	836.4	-0.16	0.121	18.62	19.50	1.225	0.148	/
	Level1		Right Cheek	0	4182	836.4	-0.09	0.251	18.62	19.50	1.225	0.307	13#
	Level1		Right Tilt	0	4182	836.4	-0.10	0.135	18.62	19.50	1.225	0.165	/
Body-Worn													
Ant.0	Level2	RMC	Front Side	15	4182	836.4	-0.01	0.194	20.61	21.50	1.227	0.238	/
	Level2		Back Side	15	4182	836.4	-0.08	0.243	20.61	21.50	1.227	0.298	14#
Hotspot													
Ant.0	Level2	RMC	Front Side	10	4182	836.4	0.12	0.192	20.61	21.50	1.227	0.236	/
	Level2		Back Side	10	4182	836.4	0.01	0.292	20.61	21.50	1.227	0.358	15#
	Level2		Left Edge	10	4182	836.4	-0.01	0.242	20.61	21.50	1.227	0.297	/
	Off		Right Edge	10	4182	836.4	-0.12	0.133	23.88	24.50	1.153	0.153	/
	Level2		Bottom Edge	10	4182	836.4	0.16	0.181	20.61	21.50	1.227	0.222	/
Body(Sensor Off)													
Ant.0	Off	RMC	Front Side	29	4182	836.4	0.07	0.141	23.88	24.50	1.153	0.163	/
	Off		Back Side	29	4182	836.4	-0.02	0.153	23.88	24.50	1.153	0.176	/
	Off		Left Edge	29	4182	836.4	-0.13	0.067	23.88	24.50	1.153	0.077	/
	Off		Bottom Edge	29	4182	836.4	0.07	0.003	23.88	24.50	1.153	0.003	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

11.6LTE Band 2 (20MHz Bandwidth)

Antenna	Power Reductio n	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Head															
Ant.1	Level1	QPSK	Left Cheek	0	18900	1880	1	Low	0.02	0.181	14.69	15.00	1.074	0.194	/
	Level1		Left Tilt	0	18900	1880	1	Low	0.10	0.147	14.69	15.00	1.074	0.158	/
	Level1		Right Cheek	0	18900	1880	1	Low	0.01	0.293	14.69	15.00	1.074	0.315	16#
	Level1		Right Tilt	0	18900	1880	1	Low	0.01	0.210	14.69	15.00	1.074	0.226	/
	Level1		Left Cheek	0	18900	1880	50	High	-0.07	0.154	13.58	14.00	1.102	0.170	/
	Level1		Left Tilt	0	18900	1880	50	High	0.03	0.125	13.58	14.00	1.102	0.138	/
	Level1		Right Cheek	0	18900	1880	50	High	0.16	0.244	13.58	14.00	1.102	0.269	/
	Level1		Right Tilt	0	18900	1880	50	High	-0.03	0.191	13.58	14.00	1.102	0.210	/
Body-Worn															
Ant.1	Level2	QPSK	Front Side	15	18900	1880	1	High	-0.11	0.227	20.80	21.00	1.047	0.238	/
	Level2		Back Side	15	18900	1880	1	High	0.00	0.315	20.80	21.00	1.047	0.330	17#
	Level2		Front Side	15	18900	1880	50	Mid	-0.14	0.172	19.67	20.00	1.079	0.186	/
	Level2		Back Side	15	18900	1880	50	Mid	0.03	0.231	19.67	20.00	1.079	0.249	/
Hotspot															
Ant.1	Level2	QPSK	Front Side	10	18900	1880	1	High	-0.05	0.425	20.80	21.00	1.047	0.445	/
	Level2		Back Side	10	18900	1880	1	High	0.05	0.568	20.80	21.00	1.047	0.595	18#
	Off		Left Edge	10	18900	1880	1	Mid	-0.07	0.083	23.70	24.00	1.072	0.089	/
	Level2		Right Edge	10	18900	1880	1	High	0.03	0.282	20.80	21.00	1.047	0.295	/
	Level2		Top Edge	10	18900	1880	1	High	-0.12	0.334	20.80	21.00	1.047	0.350	/
	Level2		Front Side	10	18900	1880	50	Mid	0.11	0.340	19.67	20.00	1.079	0.367	/
	Level2		Back Side	10	18900	1880	50	Mid	0.03	0.490	19.67	20.00	1.079	0.529	/
	Off		Left Edge	10	19100	1900	50	High	0.01	0.056	22.54	23.00	1.112	0.062	/
	Level2		Right Edge	10	18900	1880	50	Mid	0.15	0.207	19.67	20.00	1.079	0.223	/
	Level2		Top Edge	10	18900	1880	50	Mid	-0.01	0.258	19.67	20.00	1.079	0.278	/
Body(Sensor Off)															
Ant.1	Off	QPSK	Front Side	29	18900	1880	1	Mid	-0.13	0.183	23.70	24.00	1.072	0.196	/
	Off		Back Side	29	18900	1880	1	Mid	-0.04	0.208	23.70	24.00	1.072	0.223	/
	Off		Right Edge	29	18900	1880	1	Mid	0.05	0.140	23.70	24.00	1.072	0.150	/
	Off		Top Edge	29	18900	1880	1	Mid	-0.06	0.075	23.70	24.00	1.072	0.080	/
	Off		Front Side	29	19100	1900	50	High	-0.06	0.165	22.54	23.00	1.112	0.183	/
	Off		Back Side	29	19100	1900	50	High	0.13	0.187	22.54	23.00	1.112	0.208	/
	Off		Right Edge	29	19100	1900	50	High	0.06	0.126	22.54	23.00	1.112	0.140	/
	Off		Top Edge	29	19100	1900	50	High	0.08	0.068	22.54	23.00	1.112	0.076	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

11.7LTE Band 4 (20MHz Bandwidth)

Antenna	Power Reductio n	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Head															
Ant.1	Level1	QPSK	Left Cheek	0	20175	1732.5	1	High	-0.03	0.239	16.84	17.00	1.038	0.248	/
	Level1		Left Tilt	0	20175	1732.5	1	High	0.04	0.187	16.84	17.00	1.038	0.194	/
	Level1		Right Cheek	0	20175	1732.5	1	High	0.01	0.637	16.84	17.00	1.038	0.661	19#
	Level1		Right Tilt	0	20175	1732.5	1	High	-0.10	0.446	16.84	17.00	1.038	0.463	/
	Level1		Left Cheek	0	20175	1732.5	50	Low	-0.14	0.207	15.63	16.00	1.089	0.225	/
	Level1		Left Tilt	0	20175	1732.5	50	Low	0.14	0.152	15.63	16.00	1.089	0.166	/
	Level1		Right Cheek	0	20175	1732.5	50	Low	-0.06	0.494	15.63	16.00	1.089	0.538	/
	Level1		Right Tilt	0	20175	1732.5	50	Low	-0.08	0.394	15.63	16.00	1.089	0.429	/
Body-Worn															
Ant.1	Level2	QPSK	Front Side	15	20050	1720	1	Low	-0.03	0.276	20.33	21.00	1.167	0.322	/
	Level2		Back Side	15	20050	1720	1	Low	-0.01	0.315	20.33	21.00	1.167	0.368	20#
	Level2		Front Side	15	20050	1720	50	High	0.01	0.207	19.23	20.00	1.194	0.247	/
	Level2		Back Side	15	20050	1720	50	High	0.05	0.246	19.23	20.00	1.194	0.294	/
Hotspot															
Ant.1	Level2	QPSK	Front Side	10	20050	1720	1	Low	0.01	0.381	20.33	21.00	1.167	0.445	/
	Level2		Back Side	10	20050	1720	1	Low	-0.13	0.623	20.33	21.00	1.167	0.727	21#
	Off		Left Edge	10	20175	1732.5	1	High	-0.12	0.075	23.55	24.00	1.109	0.083	/
	Level2		Right Edge	10	20050	1720	1	Low	-0.16	0.312	20.33	21.00	1.167	0.364	/
	Level2		Top Edge	10	20050	1720	1	Low	0.13	0.410	20.33	21.00	1.167	0.478	/
	Level2		Front Side	10	20050	1720	50	High	-0.10	0.308	19.23	20.00	1.194	0.368	/
	Level2		Back Side	10	20050	1720	50	High	-0.01	0.482	19.23	20.00	1.194	0.576	/
	Off		Left Edge	10	20175	1732.5	50	High	-0.16	0.059	22.34	23.00	1.164	0.069	/
	Level2		Right Edge	10	20050	1720	50	High	0.14	0.252	19.23	20.00	1.194	0.301	/
	Level2		Top Edge	10	20050	1720	50	High	-0.09	0.313	19.23	20.00	1.194	0.374	/
Body(Sensor Off)															
Ant.1	Off	QPSK	Front Side	29	20175	1732.5	1	High	-0.11	0.120	23.55	24.00	1.109	0.133	/
	Off		Back Side	29	20175	1732.5	1	High	0.01	0.126	23.55	24.00	1.109	0.140	/
	Off		Right Edge	29	20175	1732.5	1	High	0.09	0.109	23.55	24.00	1.109	0.121	/
	Off		Top Edge	29	20175	1732.5	1	High	0.00	0.057	23.55	24.00	1.109	0.063	/
	Off		Front Side	29	20175	1732.5	50	High	0.05	0.096	22.34	23.00	1.164	0.112	/
	Off		Back Side	29	20175	1732.5	50	High	0.04	0.100	22.34	23.00	1.164	0.116	/
	Off		Right Edge	29	20175	1732.5	50	High	-0.05	0.086	22.34	23.00	1.164	0.100	/
	Off		Top Edge	29	20175	1732.5	50	High	0.01	0.045	22.34	23.00	1.164	0.052	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Report SAR (W/kg)	Meas. No.
Specific															
Ant.1	Level2	QPSK	Back Side	0	20050	1720	1	Low	-0.01	1.960	20.33	21.00	1.167	2.287	22#
	Level2		Back Side	0	20175	1732.5	1	Mid	0.05	1.920	20.27	21.00	1.183	2.271	/
	Level2		Back Side	0	20300	1745	1	High	-0.06	1.900	20.21	21.00	1.199	2.278	/
	Level2		Back Side	0	20050	1720	50	High	-0.07	1.580	19.23	20.00	1.194	1.887	/
	Level2		Back Side	0	20050	1720	100	Low	0.06	1.550	19.17	20.00	1.211	1.877	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

11.8LTE Band 5 (10MHz Bandwidth)

Antenna	Power Reductio n	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Head															
Ant.0	Level1	QPSK	Left Cheek	0	20600	844	1	Low	0.11	0.058	18.55	19.50	1.245	0.072	/
	Level1		Left Tilt	0	20600	844	1	Low	0.16	0.023	18.55	19.50	1.245	0.029	/
	Level1		Right Cheek	0	20600	844	1	Low	-0.10	0.084	18.55	19.50	1.245	0.105	23#
	Level1		Right Tilt	0	20600	844	1	Low	0.07	0.021	18.55	19.50	1.245	0.026	/
	Level1		Left Cheek	0	20600	844	25	Low	0.03	0.055	18.45	18.50	1.012	0.056	/
	Level1		Left Tilt	0	20600	844	25	Low	-0.02	0.021	18.45	18.50	1.012	0.021	/
	Level1		Right Cheek	0	20600	844	25	Low	0.04	0.076	18.45	18.50	1.012	0.077	/
	Level1		Right Tilt	0	20600	844	25	Low	-0.10	0.020	18.45	18.50	1.012	0.020	/
Body-Worn															
Ant.0	Level2	QPSK	Front Side	15	20525	836.5	1	Low	0.15	0.165	20.13	21.50	1.371	0.226	/
	Level2		Back Side	15	20525	836.5	1	Low	0.02	0.205	20.13	21.50	1.371	0.281	24#
	Level2		Front Side	15	20525	836.5	25	Mid	0.08	0.133	19.15	20.50	1.365	0.182	/
	Level2		Back Side	15	20525	836.5	25	Mid	-0.16	0.163	19.15	20.50	1.365	0.222	/
Hotspot															
Ant.0	Level2	QPSK	Front Side	10	20525	836.5	1	Low	0.01	0.162	20.13	21.50	1.371	0.222	/
	Level2		Back Side	10	20525	836.5	1	Low	0.10	0.246	20.13	21.50	1.371	0.337	25#
	Level2		Left Edge	10	20525	836.5	1	Low	0.00	0.192	20.13	21.50	1.371	0.263	/
	Off		Right Edge	10	20600	844	1	High	-0.02	0.053	23.35	24.50	1.303	0.069	/
	Level2		Bottom Edge	10	20525	836.5	1	Low	0.14	0.150	20.13	21.50	1.371	0.206	/
	Level2		Front Side	10	20525	836.5	25	Mid	-0.09	0.129	19.15	20.50	1.365	0.176	/
	Level2		Back Side	10	20525	836.5	25	Mid	-0.13	0.202	19.15	20.50	1.365	0.276	/
	Level2		Left Edge	10	20525	836.5	25	Mid	0.08	0.155	19.15	20.50	1.365	0.212	/
	Off		Right Edge	10	20525	836.5	25	High	-0.11	0.052	22.40	23.50	1.288	0.067	/
	Level2		Bottom Edge	10	20525	836.5	25	Mid	-0.09	0.108	19.15	20.50	1.365	0.147	/
Body(Sensor Off)															
Ant.0	Off	QPSK	Front Side	29	20600	844	1	High	0.13	0.127	23.35	24.50	1.303	0.165	/
	Off		Back Side	29	20600	844	1	High	0.09	0.138	23.35	24.50	1.303	0.180	/
	Off		Left Edge	29	20600	844	1	High	-0.05	0.060	23.35	24.50	1.303	0.078	/
	Off		Bottom Edge	29	20600	844	1	High	0.15	0.004	23.35	24.50	1.303	0.005	/
	Off		Front Side	29	20525	836.5	25	High	0.07	0.105	22.40	23.50	1.288	0.135	/
	Off		Back Side	29	20525	836.5	25	High	-0.11	0.112	22.40	23.50	1.288	0.144	/
	Off		Left Edge	29	20525	836.5	25	High	-0.08	0.049	22.40	23.50	1.288	0.063	/
	Off		Bottom Edge	29	20525	836.5	25	High	-0.13	0.004	22.40	23.50	1.288	0.005	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

11.9LTE Band 7 (20MHz Bandwidth)

Antenna	Power Reductio n	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Head															
Ant.1	Level1	QPSK	Left Cheek	0	21100	2535	1	Low	-0.03	0.195	15.75	17.00	1.334	0.260	/
	Level1		Left Tilt	0	21100	2535	1	Low	0.02	0.181	15.75	17.00	1.334	0.241	/
	Level1		Right Cheek	0	21100	2535	1	Low	-0.05	0.792	15.75	17.00	1.334	1.057	26#
	Level1		Right Tilt	0	21100	2535	1	Low	0.03	0.467	15.75	17.00	1.334	0.623	/
	Level1		Left Cheek	0	21100	2535	50	Low	0.01	0.183	14.82	16.00	1.312	0.240	/
	Level1		Left Tilt	0	21100	2535	50	Low	-0.05	0.170	14.82	16.00	1.312	0.223	/
	Level1		Right Cheek	0	21100	2535	50	Low	0.09	0.654	14.82	16.00	1.312	0.858	/
	Level1		Right Tilt	0	21100	2535	50	Low	-0.11	0.408	14.82	16.00	1.312	0.535	/
	Level1		Right Cheek	0	20850	2510	1	Low	0.06	0.704	15.50	17.00	1.413	0.995	/
	Level1		Right Cheek	0	21350	2560	1	Low	-0.01	0.680	15.46	17.00	1.426	0.970	/
	Level1		Right Cheek	0	20850	2510	50	Low	-0.04	0.610	14.52	16.00	1.406	0.858	/
	Level1		Right Cheek	0	21350	2560	50	Low	0.13	0.596	14.51	16.00	1.409	0.840	/
	Level1		Right Cheek	0	21350	2560	100	Low	-0.09	0.600	14.78	16.00	1.324	0.794	/
Body-Worn															
Ant.1	Level2	QPSK	Front Side	15	21100	2535	1	Low	0.12	0.341	19.42	21.00	1.439	0.491	/
	Level2		Back Side	15	21100	2535	1	Low	0.00	0.375	19.42	21.00	1.439	0.540	27#
	Level2		Front Side	15	21100	2535	50	Low	-0.05	0.285	18.40	20.00	1.445	0.412	/
	Level2		Back Side	15	21100	2535	50	Low	-0.01	0.291	18.40	20.00	1.445	0.420	/
Hotspot															
Ant.1	Level2	QPSK	Front Side	10	21100	2535	1	Low	-0.09	0.612	19.42	21.00	1.439	0.881	/
	Level2		Back Side	10	21100	2535	1	Low	-0.03	0.688	19.42	21.00	1.439	0.990	28#
	Off		Left Edge	10	20850	2510	1	Low	0.03	0.046	22.93	24.00	1.279	0.059	/
	Level2		Right Edge	10	21100	2535	1	Low	0.05	0.543	19.42	21.00	1.439	0.781	/
	Level2		Top Edge	10	21100	2535	1	Low	0.05	0.352	19.42	21.00	1.439	0.507	/
	Level2		Front Side	10	21100	2535	50	Low	-0.09	0.493	18.40	20.00	1.445	0.712	/
	Level2		Back Side	10	21100	2535	50	Low	0.05	0.542	18.40	20.00	1.445	0.783	/
	Off		Left Edge	10	20850	2510	50	Low	0.10	0.033	21.92	23.00	1.282	0.042	/
	Level2		Right Edge	10	21100	2535	50	Low	0.02	0.532	18.40	20.00	1.445	0.769	/
	Level2		Top Edge	10	21100	2535	50	Low	0.06	0.280	18.40	20.00	1.445	0.405	/
	Level2		Front Side	10	20850	2510	1	Low	-0.03	0.543	19.42	21.00	1.439	0.781	/
	Level2		Front Side	10	21350	2560	1	Mid	0.10	0.554	19.14	21.00	1.535	0.850	/
	Level2		Front Side	10	21350	2560	100	Low	-0.09	0.432	18.39	20.00	1.449	0.626	/
	Level2		Back Side	10	20850	2510	1	Low	-0.16	0.612	19.42	21.00	1.439	0.881	/
	Level2		Back Side	10	21350	2560	1	Mid	-0.09	0.628	19.14	21.00	1.535	0.964	/
	Level2		Back Side	10	21350	2560	100	Low	0.06	0.486	18.39	20.00	1.449	0.704	/
Body(Sensor Off)															

Ant.1	Off	QPSK	Front Side	29	20850	2510	1	Low	-0.01	0.079	22.93	24.00	1.279	0.101	/
	Off		Back Side	29	20850	2510	1	Low	-0.08	0.144	22.93	24.00	1.279	0.184	/
	Off		Right Edge	29	20850	2510	1	Low	0.09	0.168	22.93	24.00	1.279	0.215	/
	Off		Top Edge	29	20850	2510	1	Low	-0.08	0.046	22.93	24.00	1.279	0.059	/
	Off		Front Side	29	20850	2510	50	Low	-0.11	0.064	21.92	23.00	1.282	0.082	/
	Off		Back Side	29	20850	2510	50	Low	0.03	0.115	21.92	23.00	1.282	0.147	/
	Off		Right Edge	29	20850	2510	50	Low	0.13	0.137	21.92	23.00	1.282	0.176	/
	Off		Top Edge	29	20850	2510	50	Low	0.08	0.036	21.92	23.00	1.282	0.046	/

Note: Refer to ANNEX C for the detailed test data for each test configuration.

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Report SAR (W/kg)	Meas. No.
Specific															
Ant.1	Level2	QPSK	Front Side	0	21100	2535	1	Low	-0.07	0.872	19.42	21.00	1.439	1.255	/
	Level2		Back Side	0	21100	2535	1	Low	-0.05	0.933	19.42	21.00	1.439	1.343	29#
	Level2		Right Edge	0	21100	2535	1	Low	-0.04	0.882	19.42	21.00	1.439	1.269	/
	Level2		Front Side	0	21100	2535	50	Low	-0.12	0.698	18.40	20.00	1.445	1.009	/
	Level2		Back Side	0	21100	2535	50	Low	-0.04	0.746	18.40	20.00	1.445	1.078	/
	Level2		Right Edge	0	21100	2535	50	Low	-0.03	0.709	18.40	20.00	1.445	1.025	/

Note: Refer to ANNEX C for the detailed test data for each test configuration.

11.10 LTE Band 12 (10MHz Bandwidth)

Antenna	Power Reductio n	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Head															
Ant.0	Level1	QPSK	Left Cheek	0	23095	707.5	1	Mid	-0.16	0.012	19.15	19.50	1.084	0.013	/
	Level1		Left Tilt	0	23095	707.5	1	Mid	-0.05	0.000	19.15	19.50	1.084	0.000	/
	Level1		Right Cheek	0	23095	707.5	1	Mid	-0.05	0.038	19.15	19.50	1.084	0.041	30#
	Level1		Right Tilt	0	23095	707.5	1	Mid	0.08	0.000	19.15	19.50	1.084	0.000	/
	Level1		Left Cheek	0	23095	707.5	25	High	-0.12	0.009	18.31	18.50	1.045	0.009	/
	Level1		Left Tilt	0	23095	707.5	25	High	-0.14	0.000	18.31	18.50	1.045	0.000	/
	Level1		Right Cheek	0	23095	707.5	25	High	0.04	0.030	18.31	18.50	1.045	0.031	/
	Level1		Right Tilt	0	23095	707.5	25	High	0.13	0.000	18.31	18.50	1.045	0.000	/
Body-Worn															
Ant.0	Level2	QPSK	Front Side	15	23130	711	1	Low	0.05	0.232	20.49	21.50	1.262	0.293	/
	Level2		Back Side	15	23130	711	1	Low	-0.01	0.370	20.49	21.50	1.262	0.467	31#
	Level2		Front Side	15	23095	707.5	25	Mid	0.16	0.198	19.56	20.50	1.242	0.246	/
	Level2		Back Side	15	23095	707.5	25	Mid	0.15	0.293	19.56	20.50	1.242	0.364	/
Hotspot															
Ant.0	Level2	QPSK	Front Side	10	23130	711	1	Low	-0.01	0.218	20.49	21.50	1.262	0.275	/
	Level2		Back Side	10	23130	711	1	Low	0.00	0.362	20.49	21.50	1.262	0.457	32#
	Level2		Left Edge	10	23130	711	1	Low	-0.05	0.341	20.49	21.50	1.262	0.430	/
	Off		Right Edge	10	23130	711	1	High	0.10	0.293	23.81	24.50	1.172	0.343	/
	Level2		Bottom Edge	10	23130	711	1	Low	0.07	0.098	20.49	21.50	1.262	0.124	/
	Level2		Front Side	10	23095	707.5	25	Mid	-0.15	0.181	19.56	20.50	1.242	0.225	/
	Level2		Back Side	10	23095	707.5	25	Mid	-0.15	0.293	19.56	20.50	1.242	0.364	/
	Level2		Left Edge	10	23095	707.5	25	Mid	0.13	0.313	19.56	20.50	1.242	0.389	/
	Off		Right Edge	10	23130	711	25	High	0.07	0.238	22.88	23.50	1.153	0.274	/
	Level2		Bottom Edge	10	23095	707.5	25	Mid	-0.10	0.068	19.56	20.50	1.242	0.084	/
Body(Sensor Off)															
Ant.0	Off	QPSK	Front Side	29	23130	711	1	High	-0.09	0.217	23.81	24.50	1.172	0.254	/
	Off		Back Side	29	23130	711	1	High	-0.06	0.270	23.81	24.50	1.172	0.316	/
	Off		Left Edge	29	23130	711	1	High	0.03	0.094	23.81	24.50	1.172	0.110	/
	Off		Bottom Edge	29	23130	711	1	High	-0.06	0.003	23.81	24.50	1.172	0.004	/
	Off		Front Side	29	23130	711	25	High	0.10	0.172	22.88	23.50	1.153	0.198	/
	Off		Back Side	29	23130	711	25	High	-0.10	0.213	22.88	23.50	1.153	0.246	/
	Off		Left Edge	29	23130	711	25	High	0.09	0.075	22.88	23.50	1.153	0.086	/
	Off		Bottom Edge	29	23130	711	25	High	-0.14	0.002	22.88	23.50	1.153	0.002	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

11.11 LTE Band 17 (10MHz Bandwidth)

Antenna	Power Reductio n	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Head															
Ant.0	Level1	QPSK	Left Cheek	0	23780	709	1	High	-0.15	0.019	19.43	19.50	1.016	0.019	/
	Level1		Left Tilt	0	23780	709	1	High	0.11	0.009	19.43	19.50	1.016	0.009	/
	Level1		Right Cheek	0	23780	709	1	High	0.00	0.050	19.43	19.50	1.016	0.051	33#
	Level1		Right Tilt	0	23780	709	1	High	0.09	0.011	19.43	19.50	1.016	0.011	/
	Level1		Left Cheek	0	23780	709	25	High	0.07	0.016	18.41	18.50	1.021	0.016	/
	Level1		Left Tilt	0	23780	709	25	High	0.06	0.008	18.41	18.50	1.021	0.008	/
	Level1		Right Cheek	0	23780	709	25	High	0.08	0.034	18.41	18.50	1.021	0.035	/
	Level1		Right Tilt	0	23780	709	25	High	0.15	0.007	18.41	18.50	1.021	0.007	/
Body-Worn															
Ant.0	Level2	QPSK	Front Side	15	23800	711	1	Mid	0.01	0.244	20.62	21.50	1.225	0.299	/
	Level2		Back Side	15	23800	711	1	Mid	-0.03	0.369	20.62	21.50	1.225	0.452	34#
	Level2		Front Side	15	23780	709	25	High	-0.14	0.196	19.45	20.50	1.274	0.250	/
	Level2		Back Side	15	23780	709	25	High	-0.14	0.293	19.45	20.50	1.274	0.373	/
Hotspot															
Ant.0	Level2	QPSK	Front Side	10	23800	711	1	Mid	-0.07	0.212	20.62	21.50	1.225	0.260	/
	Level2		Back Side	10	23800	711	1	Mid	-0.09	0.365	20.62	21.50	1.225	0.447	35#
	Level2		Left Edge	10	23800	711	1	Mid	0.15	0.342	20.62	21.50	1.225	0.419	/
	Off		Right Edge	10	23800	711	1	High	-0.13	0.290	23.84	24.50	1.164	0.338	/
	Level2		Bottom Edge	10	23800	711	1	Mid	0.16	0.097	20.62	21.50	1.225	0.119	/
	Level2		Front Side	10	23780	709	25	High	-0.11	0.171	19.45	20.50	1.274	0.218	/
	Level2		Back Side	10	23780	709	25	High	0.11	0.302	19.45	20.50	1.274	0.385	/
	Level2		Left Edge	10	23780	709	25	High	0.14	0.290	19.45	20.50	1.274	0.369	/
	Off		Right Edge	10	23800	711	25	High	-0.05	0.233	22.81	23.50	1.172	0.273	/
	Level2		Bottom Edge	10	23780	709	25	High	0.09	0.068	19.45	20.50	1.274	0.087	/
Body(Sensor Off)															
Ant.0	Off	QPSK	Front Side	29	23800	711	1	High	-0.03	0.219	23.84	24.50	1.164	0.255	/
	Off		Back Side	29	23800	711	1	High	-0.13	0.273	23.84	24.50	1.164	0.318	/
	Off		Left Edge	29	23800	711	1	High	-0.09	0.084	23.84	24.50	1.164	0.098	/
	Off		Bottom Edge	29	23800	711	1	High	0.06	0.004	23.84	24.50	1.164	0.005	/
	Off		Front Side	29	23800	711	25	High	0.02	0.173	22.81	23.50	1.172	0.203	/
	Off		Back Side	29	23800	711	25	High	-0.10	0.219	22.81	23.50	1.172	0.257	/
	Off		Left Edge	29	23800	711	25	High	0.00	0.065	22.81	23.50	1.172	0.076	/
	Off		Bottom Edge	29	23800	711	25	High	0.12	0.004	22.81	23.50	1.172	0.005	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

11.12 LTE Band 26 (15MHz Bandwidth)

Antenna	Power Reductio n	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Head															
Ant.0	Level1	QPSK	Left Cheek	0	26965	841.5	1	Low	0.12	0.056	19.16	19.50	1.081	0.061	/
	Level1		Left Tilt	0	26965	841.5	1	Low	-0.15	0.012	19.16	19.50	1.081	0.013	/
	Level1		Right Cheek	0	26965	841.5	1	Low	0.01	0.092	19.16	19.50	1.081	0.099	36#
	Level1		Right Tilt	0	26965	841.5	1	Low	0.04	0.024	19.16	19.50	1.081	0.026	/
	Level1		Left Cheek	0	26965	841.5	36	Low	-0.16	0.034	18.46	18.50	1.009	0.034	/
	Level1		Left Tilt	0	26965	841.5	36	Low	0.09	0.010	18.46	18.50	1.009	0.010	/
	Level1		Right Cheek	0	26965	841.5	36	Low	0.16	0.062	18.46	18.50	1.009	0.063	/
	Level1		Right Tilt	0	26965	841.5	36	Low	-0.09	0.019	18.46	18.50	1.009	0.019	/
Body-Worn															
Ant.0	Level2	QPSK	Front Side	15	26865	831.5	1	Mid	-0.04	0.172	20.22	21.50	1.343	0.231	/
	Level2		Back Side	15	26865	831.5	1	Mid	-0.01	0.215	20.22	21.50	1.343	0.289	37#
	Level2		Front Side	15	26965	841.5	36	Low	-0.01	0.160	20.19	20.50	1.074	0.172	/
	Level2		Back Side	15	26965	841.5	36	Low	0.07	0.194	20.19	20.50	1.074	0.208	/
Hotspot															
Ant.0	Level2	QPSK	Front Side	10	26865	831.5	1	Mid	-0.02	0.189	20.22	21.50	1.343	0.254	/
	Level2		Back Side	10	26865	831.5	1	Mid	0.03	0.280	20.22	21.50	1.343	0.376	38#
	Level2		Left Edge	10	26865	831.5	1	Mid	-0.12	0.233	20.22	21.50	1.343	0.313	/
	Off		Right Edge	10	26865	831.5	1	High	0.11	0.143	23.29	24.50	1.321	0.189	/
	Level2		Bottom Edge	10	26865	831.5	1	Mid	-0.12	0.163	20.22	21.50	1.343	0.219	/
	Level2		Front Side	10	26965	841.5	36	Low	0.14	0.145	20.19	20.50	1.074	0.156	/
	Level2		Back Side	10	26965	841.5	36	Low	-0.11	0.216	20.19	20.50	1.074	0.232	/
	Level2		Left Edge	10	26965	841.5	36	Low	0.07	0.174	20.19	20.50	1.074	0.187	/
	Off		Right Edge	10	26965	841.5	36	Low	-0.15	0.106	22.40	23.50	1.288	0.137	/
	Level2		Bottom Edge	10	26965	841.5	36	Low	0.08	0.130	20.19	20.50	1.074	0.140	/
Body(Sensor Off)															
Ant.0	Off	QPSK	Front Side	29	26865	831.5	1	High	-0.14	0.126	23.29	24.50	1.321	0.166	/
	Off		Back Side	29	26865	831.5	1	High	0.01	0.143	23.29	24.50	1.321	0.189	/
	Off		Left Edge	29	26865	831.5	1	High	-0.07	0.060	23.29	24.50	1.321	0.079	/
	Off		Bottom Edge	29	26865	831.5	1	High	-0.01	0.003	23.29	24.50	1.321	0.004	/
	Off		Front Side	29	26965	841.5	36	Low	0.04	0.100	22.40	23.50	1.288	0.129	/
	Off		Back Side	29	26965	841.5	36	Low	0.14	0.115	22.40	23.50	1.288	0.148	/
	Off		Left Edge	29	26965	841.5	36	Low	-0.01	0.045	22.40	23.50	1.288	0.058	/
	Off		Bottom Edge	29	26965	841.5	36	Low	0.04	0.003	22.40	23.50	1.288	0.004	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

11.13 LTE Band 66 (20MHz Bandwidth)

Antenna	Power Reductio n	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Head															
Ant.1	Level1	QPSK	Left Cheek	0	132322	1745	1	High	-0.11	0.386	16.91	17.00	1.021	0.394	/
	Level1		Left Tilt	0	132322	1745	1	High	-0.02	0.311	16.91	17.00	1.021	0.318	/
	Level1		Right Cheek	0	132322	1745	1	High	0.07	0.601	16.91	17.00	1.021	0.614	39#
	Level1		Right Tilt	0	132322	1745	1	High	0.10	0.464	16.91	17.00	1.021	0.474	/
	Level1		Left Cheek	0	132322	1745	50	High	0.05	0.298	15.50	16.00	1.122	0.334	/
	Level1		Left Tilt	0	132322	1745	50	High	0.08	0.239	15.50	16.00	1.122	0.268	/
	Level1		Right Cheek	0	132322	1745	50	High	-0.03	0.438	15.50	16.00	1.122	0.491	/
	Level1		Right Tilt	0	132322	1745	50	High	0.12	0.348	15.50	16.00	1.122	0.390	/
Body-Worn															
Ant.1	Level2	QPSK	Front Side	15	132322	1745	1	High	-0.09	0.317	20.69	21.00	1.074	0.340	/
	Level2		Back Side	15	132322	1745	1	High	-0.04	0.412	20.69	21.00	1.074	0.442	40#
	Level2		Front Side	15	132072	1720	50	Low	0.11	0.310	19.65	20.00	1.084	0.336	/
	Level2		Back Side	15	132572	1770	50	Low	0.00	0.324	19.65	20.00	1.084	0.351	/
Hotspot															
Ant.1	Level2	QPSK	Front Side	10	132322	1745	1	High	-0.11	0.457	20.69	21.00	1.074	0.491	/
	Level2		Back Side	10	132322	1745	1	High	0.08	0.736	20.69	21.00	1.074	0.790	41#
	Off		Left Edge	10	132322	1745	1	High	-0.02	0.090	23.96	24.00	1.009	0.091	/
	Level2		Right Edge	10	132322	1745	1	High	-0.09	0.384	20.69	21.00	1.074	0.412	/
	Level2		Top Edge	10	132322	1745	1	High	0.10	0.453	20.69	21.00	1.074	0.487	/
	Level2		Front Side	10	132072	1720	50	Low	0.14	0.391	19.65	20.00	1.084	0.424	/
	Level2		Back Side	10	132072	1720	50	Low	0.04	0.581	19.65	20.00	1.084	0.630	/
	Off		Left Edge	10	132072	1720	50	High	-0.08	0.077	22.75	23.00	1.059	0.082	/
	Level2		Right Edge	10	132072	1720	50	Low	-0.06	0.310	19.65	20.00	1.084	0.336	/
	Level2		Top Edge	10	132072	1720	50	Low	-0.01	0.370	19.65	20.00	1.084	0.401	/
Body(Sensor Off)															
Ant.1	Off	QPSK	Front Side	29	132322	1745	1	High	0.05	0.065	23.96	24.00	1.009	0.066	/
	Off		Back Side	29	132322	1745	1	High	-0.03	0.156	23.96	24.00	1.009	0.157	/
	Off		Right Edge	29	132322	1745	1	High	0.07	0.126	23.96	24.00	1.009	0.127	/
	Off		Top Edge	29	132322	1745	1	High	-0.12	0.063	23.96	24.00	1.009	0.064	/
	Off		Front Side	29	132072	1720	50	High	0.13	0.050	22.75	23.00	1.059	0.053	/
	Off		Back Side	29	132072	1720	50	High	-0.05	0.121	22.75	23.00	1.059	0.128	/
	Off		Right Edge	29	132072	1720	50	High	0.07	0.100	22.75	23.00	1.059	0.106	/
	Off		Top Edge	29	132072	1720	50	High	0.15	0.047	22.75	23.00	1.059	0.050	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Report SAR (W/kg)	Meas. No.
Specific															
Ant.1	Level2	QPSK	Back Side	0	132322	1745	1	High	-0.01	0.956	20.69	21.00	1.074	1.027	42#
	Level2		Back Side	0	132072	1720	50	Low	0.03	0.764	19.65	20.00	1.084	0.828	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

11.14 LTE Band 38 (20MHz Bandwidth)

Antenna	Power Reductio n	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Head															
Ant.1	Level1	QPSK	Left Cheek	0	38150	2610	1	Low	0.04	0.254	19.17	19.50	1.079	0.274	/
	Level1		Left Tilt	0	38150	2610	1	Low	0.08	0.239	19.17	19.50	1.079	0.258	/
	Level1		Right Cheek	0	38150	2610	1	Low	-0.02	0.720	19.17	19.50	1.079	0.777	43#
	Level1		Right Tilt	0	38150	2610	1	Low	-0.05	0.627	19.17	19.50	1.079	0.677	/
	Level1		Left Cheek	0	38000	2595	50	Low	0.07	0.199	17.75	18.50	1.189	0.237	/
	Level1		Left Tilt	0	38000	2595	50	Low	-0.06	0.184	17.75	18.50	1.189	0.219	/
	Level1		Right Cheek	0	38000	2595	50	Low	0.14	0.569	17.75	18.50	1.189	0.677	/
	Level1		Right Tilt	0	38000	2595	50	Low	0.00	0.504	17.75	18.50	1.189	0.599	/
Body-Worn															
Ant.1	Level2	QPSK	Front Side	15	38150	2610	1	High	0.01	0.169	20.02	21.50	1.406	0.238	/
	Level2		Back Side	15	38150	2610	1	High	0.04	0.180	20.02	21.50	1.406	0.253	44#
	Level2		Front Side	15	38150	2610	50	High	0.12	0.131	18.90	20.50	1.445	0.189	/
	Level2		Back Side	15	38150	2610	50	High	0.05	0.142	18.90	20.50	1.445	0.205	/
Hotspot															
Ant.1	Level2	QPSK	Front Side	10	38150	2610	1	High	0.09	0.215	20.02	21.50	1.406	0.302	/
	Level2		Back Side	10	38150	2610	1	High	-0.01	0.278	20.02	21.50	1.406	0.391	45#
	Off		Left Edge	10	38150	2610	1	High	0.09	0.021	23.64	24.50	1.219	0.026	/
	Level2		Right Edge	10	38150	2610	1	High	-0.05	0.243	20.02	21.50	1.406	0.342	/
	Level2		Top Edge	10	38150	2610	1	High	0.16	0.117	20.02	21.50	1.406	0.165	/
	Level2		Front Side	10	38150	2610	50	High	-0.13	0.174	18.90	20.50	1.445	0.251	/
	Level2		Back Side	10	38150	2610	50	High	-0.03	0.210	18.90	20.50	1.445	0.303	/
	Off		Left Edge	10	38150	2610	50	High	-0.13	0.015	22.28	23.50	1.324	0.020	/
	Level2		Right Edge	10	38150	2610	50	High	0.06	0.192	18.90	20.50	1.445	0.277	/
	Level2		Top Edge	10	38150	2610	50	High	-0.05	0.090	18.90	20.50	1.445	0.130	/
Body(Sensor Off)															
Ant.1	Off	QPSK	Front Side	29	38150	2610	1	High	0.05	0.055	23.64	24.50	1.219	0.067	/
	Off		Back Side	29	38150	2610	1	High	-0.11	0.048	23.64	24.50	1.219	0.059	/
	Off		Right Edge	29	38150	2610	1	High	0.14	0.056	23.64	24.50	1.219	0.068	/
	Off		Top Edge	29	38150	2610	1	High	-0.07	0.005	23.64	24.50	1.219	0.006	/
	Off		Front Side	29	38150	2610	50	High	0.02	0.044	22.28	23.50	1.324	0.058	/
	Off		Back Side	29	38150	2610	50	High	0.08	0.039	22.28	23.50	1.324	0.052	/
	Off		Right Edge	29	38150	2610	50	High	0.09	0.045	22.28	23.50	1.324	0.060	/
	Off		Top Edge	29	38150	2610	50	High	-0.08	0.004	22.28	23.50	1.324	0.005	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

11.15 LTE Band 41 (20MHz Bandwidth)

Antenna	Power Reductio n	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Report SAR (W/kg)	Meas. No.
Head															
Ant.1	Level1	QPSK	Left Cheek	0	40620	2593	1	Low	-0.14	0.266	19.02	19.50	1.117	0.297	/
	Level1		Left Tilt	0	40620	2593	1	Low	0.03	0.242	19.02	19.50	1.117	0.270	/
	Level1		Right Cheek	0	40620	2593	1	Low	0.04	0.714	19.02	19.50	1.117	0.798	46#
	Level1		Right Tilt	0	40620	2593	1	Low	0.10	0.632	19.02	19.50	1.117	0.706	/
	Level1		Left Cheek	0	40185	2549.5	50	High	0.03	0.254	18.01	18.50	1.119	0.284	/
	Level1		Left Tilt	0	40185	2549.5	50	High	0.16	0.231	18.01	18.50	1.119	0.258	/
	Level1		Right Cheek	0	40185	2549.5	50	High	-0.03	0.687	18.01	18.50	1.119	0.769	/
	Level1		Right Tilt	0	40185	2549.5	50	High	0.05	0.621	18.01	18.50	1.119	0.695	/
Body-Worn															
Ant.1	Level2	QPSK	Front Side	15	39750	2506	1	Low	-0.09	0.234	20.34	21.50	1.306	0.306	/
	Level2		Back Side	15	39750	2506	1	Low	0.00	0.262	20.34	21.50	1.306	0.342	47#
	Level2		Front Side	15	41490	2680	50	High	0.03	0.221	19.26	20.50	1.330	0.294	/
	Level2		Back Side	15	41490	2680	50	High	0.07	0.234	19.26	20.50	1.330	0.311	/
Hotspot															
Ant.1	Level2	QPSK	Front Side	10	39750	2506	1	Low	-0.14	0.422	20.34	21.50	1.306	0.551	/
	Level2		Back Side	10	39750	2506	1	Low	0.04	0.542	20.34	21.50	1.306	0.708	48#
	Off		Left Edge	10	39750	2506	1	Low	-0.12	0.021	23.60	24.50	1.230	0.026	/
	Level2		Right Edge	10	39750	2506	1	Low	-0.14	0.471	20.34	21.50	1.306	0.615	/
	Level2		Top Edge	10	39750	2506	1	Low	-0.05	0.239	20.34	21.50	1.306	0.312	/
	Level2		Front Side	10	41490	2680	50	High	-0.01	0.358	19.26	20.50	1.330	0.476	/
	Level2		Back Side	10	41490	2680	50	High	0.09	0.421	19.26	20.50	1.330	0.560	/
	Off		Left Edge	10	41490	2680	50	High	0.02	0.016	22.53	23.50	1.250	0.020	/
	Level2		Right Edge	10	41490	2680	50	High	-0.08	0.365	19.26	20.50	1.330	0.485	/
	Level2		Top Edge	10	41490	2680	50	High	-0.15	0.190	19.26	20.50	1.330	0.253	/
Body(Sensor Off)															
Ant.1	Off	QPSK	Front Side	29	39750	2506	1	Low	-0.14	0.056	23.60	24.50	1.230	0.069	/
	Off		Back Side	29	39750	2506	1	Low	0.14	0.049	23.60	24.50	1.230	0.060	/
	Off		Right Edge	29	39750	2506	1	Low	0.09	0.054	23.60	24.50	1.230	0.066	/
	Off		Top Edge	29	39750	2506	1	Low	0.14	0.005	23.60	24.50	1.230	0.006	/
	Off		Front Side	29	41490	2680	50	High	-0.10	0.047	22.53	23.50	1.250	0.059	/
	Off		Back Side	29	41490	2680	50	High	0.04	0.038	22.53	23.50	1.250	0.048	/
	Off		Right Edge	29	41490	2680	50	High	0.13	0.043	22.53	23.50	1.250	0.054	/
	Off		Top Edge	29	41490	2680	50	High	-0.04	0.004	22.53	23.50	1.250	0.005	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	10g Report SAR (W/kg)	Meas. No.
Specific															
Ant. 1	Level2	QPSK	Back Side	0	39750	2506	1	Low	-0.02	0.686	20.34	21.50	1.306	0.896	49#
	Level2		Right Edge	0	39750	2506	1	Low	0.01	0.541	20.34	21.50	1.306	0.707	/
	Level2		Back Side	0	41490	2680	50	High	0.13	0.550	19.26	20.50	1.330	0.732	/
	Level2		Right Edge	0	41490	2680	50	High	0.12	0.437	19.26	20.50	1.330	0.581	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

11.16 WIFI 2.4GHZ

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	Duty Cycle (%)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head															
Ant.2	Level1	802.11b	Left Cheek	0	6	2437	0.01	0.659	13.62	14.00	1.091	98.20	1.018	0.732	50#
	Level1		Left Tilt	0	6	2437	-0.02	0.559	13.62	14.00	1.091	98.20	1.018	0.621	/
	Level1		Right Cheek	0	6	2437	-0.15	0.231	13.62	14.00	1.091	98.20	1.018	0.257	/
	Level1		Right Tilt	0	6	2437	0.01	0.231	13.62	14.00	1.091	98.20	1.018	0.257	/
Body-Worn															
Ant.2	Level2	802.11b	Front Side	15	6	2437	-0.14	0.072	13.62	14.00	1.091	98.20	1.018	0.080	/
	Level2		Back Side	15	6	2437	0.03	0.089	13.62	14.00	1.091	98.20	1.018	0.099	51#
Hotspot															
Ant.2	Level2	802.11b	Front Side	10	6	2437	-0.12	0.130	13.62	14.00	1.091	98.20	1.018	0.144	/
	Level2		Back Side	10	6	2437	0.02	0.168	13.62	14.00	1.091	98.20	1.018	0.187	52#
	Level2		Left Edge	10	6	2437	0.08	0.128	13.62	14.00	1.091	98.20	1.018	0.142	/
	Level2		Right Edge	10	6	2437	0.09	0.018	13.62	14.00	1.091	98.20	1.018	0.020	/
	Level2		Top Edge	10	6	2437	0.04	0.109	13.62	14.00	1.091	98.20	1.018	0.121	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

11.17 WIFI 5GHZ

Antenna	Fre. Band	Power Reducti on	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	Duty Cycle (%)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																
Ant.2	5.3G	Level1	802.11a	Left Cheek	0	64	5320	-0.13	0.521	11.58	12.00	1.102	96.50	1.036	0.595	/
		Level1		Left Tilt	0	64	5320	-0.02	0.702	11.58	12.00	1.102	96.50	1.036	0.801	/
		Level1		Right Cheek	0	64	5320	-0.03	0.321	11.58	12.00	1.102	96.50	1.036	0.366	/
		Level1		Right Tilt	0	64	5320	0.06	0.386	11.58	12.00	1.102	96.50	1.036	0.441	/
		Level1		Left Tilt	0	52	5260	-0.06	0.681	11.55	12.00	1.109	96.50	1.036	0.782	/
		Level1		Left Tilt	0	60	5300	-0.02	0.702	11.45	12.00	1.135	96.50	1.036	0.825	53#
Ant.2	5.6G	Level1	802.11a	Left Cheek	0	100	5500	-0.05	0.480	11.53	12.00	1.114	96.50	1.036	0.554	/
		Level1		Left Tilt	0	100	5500	0.00	0.567	11.53	12.00	1.114	96.50	1.036	0.654	54#
		Level1		Right Cheek	0	100	5500	0.15	0.275	11.53	12.00	1.114	96.50	1.036	0.317	/
		Level1		Right Tilt	0	100	5500	-0.10	0.336	11.53	12.00	1.114	96.50	1.036	0.388	/
Ant.2	5.8G	Level1	802.11a	Left Cheek	0	149	5745	-0.12	0.427	11.60	12.00	1.096	96.50	1.036	0.485	/
		Level1		Left Tilt	0	149	5745	0.07	0.511	11.60	12.00	1.096	96.50	1.036	0.580	55#
		Level1		Right Cheek	0	149	5745	-0.07	0.260	11.60	12.00	1.096	96.50	1.036	0.295	/
		Level1		Right Tilt	0	149	5745	0.08	0.328	11.60	12.00	1.096	96.50	1.036	0.372	/
Body-worn																
Ant.2	5.3G	Level2	802.11a	Front Side	15	64	5320	0.04	0.111	11.58	12.00	1.102	96.50	1.036	0.127	/
		Level2		Back Side	15	64	5320	0.13	0.211	11.58	12.00	1.102	96.50	1.036	0.241	56#
Ant.2	5.6G	Level2	802.11a	Front Side	15	100	5500	0.05	0.092	11.53	12.00	1.114	96.50	1.036	0.106	/
		Level2		Back Side	15	100	5500	0.07	0.171	11.53	12.00	1.114	96.50	1.036	0.197	57#
Ant.2	5.8G	Level2	802.11a	Front Side	15	149	5745	0.06	0.091	11.60	12.00	1.096	96.50	1.036	0.103	/
		Level2		Back Side	15	149	5745	-0.07	0.171	11.60	12.00	1.096	96.50	1.036	0.194	58#
Hotspot																
Ant.2	5.2G	Level2	802.11a	Front Side	10	48	5240	0.07	0.133	11.59	12.00	1.099	96.50	1.036	0.151	/
		Level2		Back Side	10	48	5240	-0.11	0.252	11.59	12.00	1.099	96.50	1.036	0.287	/
		Level2		Left Edge	10	48	5240	0.12	0.152	11.59	12.00	1.099	96.50	1.036	0.173	/
		Level2		Right Edge	10	48	5240	-0.14	0.030	11.59	12.00	1.099	96.50	1.036	0.034	/
		Level2		Top Edge	10	48	5240	0.09	0.363	11.59	12.00	1.099	96.50	1.036	0.413	59#
Ant.2	5.8G	Level2	802.11a	Front Side	10	149	5745	0.09	0.112	11.60	12.00	1.096	96.50	1.036	0.127	/
		Level2		Back Side	10	149	5745	0.12	0.217	11.60	12.00	1.096	96.50	1.036	0.246	/
		Level2		Left Edge	10	149	5745	-0.03	0.130	11.60	12.00	1.096	96.50	1.036	0.148	/
		Level2		Right Edge	10	149	5745	0.11	0.000	11.60	12.00	1.096	96.50	1.036	0.000	/
		Level2		Top Edge	10	149	5745	0.02	0.298	11.60	12.00	1.096	96.50	1.036	0.338	60#
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

Antenna	Fre. Band	Power Reducti on	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	Duty Cycle (%)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Specific																
Ant.2	5.3G	Level2	802.11a	Front Side	0	64	5320	-0.08	0.368	11.58	12.00	1.102	96.50	1.036	0.420	/
		Level2		Back Side	0	64	5320	-0.01	0.414	11.58	12.00	1.102	96.50	1.036	0.473	/
		Level2		Left Edge	0	64	5320	0.10	0.304	11.58	12.00	1.102	96.50	1.036	0.347	/
		Level2		Right Edge	0	64	5320	0.06	0.030	11.58	12.00	1.102	96.50	1.036	0.034	/
		Level2		Top Edge	0	64	5320	-0.04	0.592	11.58	12.00	1.102	96.50	1.036	0.676	61#
Ant.2	5.6G	Level2	802.11a	Front Side	0	100	5500	0.04	0.278	11.53	12.00	1.114	96.50	1.036	0.321	/
		Level2		Back Side	0	100	5500	0.06	0.328	11.53	12.00	1.114	96.50	1.036	0.379	/
		Level2		Left Edge	0	100	5500	0.11	0.191	11.53	12.00	1.114	96.50	1.036	0.220	/
		Level2		Right Edge	0	100	5500	-0.10	0.014	11.53	12.00	1.114	96.50	1.036	0.016	/
		Level2		Top Edge	0	100	5500	-0.08	0.558	11.53	12.00	1.114	96.50	1.036	0.644	62#
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

11.18 Bluetooth

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	Duty Cycle (%)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head														
Ant.2	DH5	Left Cheek	0	0	2402	0.04	0.092	7.59	8.00	1.099	77.69	1.287	0.130	63#
		Left Tilt	0	0	2402	-0.08	0.078	7.59	8.00	1.099	77.69	1.287	0.110	/
		Right Cheek	0	0	2402	0.01	0.029	7.59	8.00	1.099	77.69	1.287	0.041	/
		Right Tilt	0	0	2402	0.10	0.025	7.59	8.00	1.099	77.69	1.287	0.035	/
Body-Worn														
Ant.2	DH5	Front Side	15	0	2402	-0.11	0.013	7.59	8.00	1.099	77.69	1.287	0.018	/
		Back Side	15	0	2402	0.10	0.017	7.59	8.00	1.099	77.69	1.287	0.024	64#
Hotspot														
Ant.2	DH5	Front Side	10	0	2402	-0.06	0.025	7.59	8.00	1.099	77.69	1.287	0.035	/
		Back Side	10	0	2402	0.02	0.031	7.59	8.00	1.099	77.69	1.287	0.044	65#
		Left Edge	10	0	2402	-0.10	0.021	7.59	8.00	1.099	77.69	1.287	0.030	/
		Right Edge	10	0	2402	-0.12	0.004	7.59	8.00	1.099	77.69	1.287	0.006	/
		Top Edge	10	0	2402	-0.08	0.024	7.59	8.00	1.099	77.69	1.287	0.034	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

12 SAR Measurement Variability

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

SAR repeated measurement procedure:

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

Note: For 1g SAR, the highest measured 1g SAR is $0.792 < 0.80$ W/kg, repeated measurement is not required.

Note: For product specific 10g SAR, the highest measured 10g SAR is $1.960 < 2.0$ W/kg, repeated measurement is not required.

13 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).

13.1 Simultaneous Transmission Mode Consider

No.	Simultaneous Tx Combination	Head	Body-Worn	Hotspot	Specific
1	WLAN 5GHz + BT	Yes	Yes	Yes	Yes
2	WWAN + WLAN 2.4GHz	Yes	Yes	Yes	Yes
3	WWAN + WLAN 5GHz	Yes	Yes	Yes	Yes
4	WWAN + BT	Yes	Yes	Yes	Yes
5	WWAN + WLAN 5GHz + BT	Yes	Yes	Yes	Yes

Note:

1. WWAN antennas can switch automatically, the standards supported by WWAN are(GSM Voice/GPRS/EDGE/WCDMA/LTE).
2. The maximum SAR summation is calculated based on the same configuration and test position.
3. WLAN 2.4GHz and Bluetooth will not be transmitting at same time, WLAN 2.4GHz and WLAN 5GHz will not be transmitting at same time.

13.2 Sum SAR of Simultaneous Transmission

13.2.1 Head Simultaneous Transmission SAR Evaluation for WWAN and WLAN

Band	Antenna	Position	Stand alone SAR				SUM SAR	
			1	2	3	4		
			WWAN	2.4GWIFI	5GWIFI	Bluetooth	1+2	1+3+4
GSM850	Ant.0	Left Cheek	0.184	0.732	0.595	0.130	0.916	0.909
		Left Tilt	0.113	0.621	0.825	0.110	0.734	1.048
		Right Cheek	0.195	0.257	0.366	0.041	0.452	0.602
		Right Tilt	0.126	0.257	0.441	0.035	0.383	0.602
GSM1900	Ant.1	Left Cheek	0.340	0.732	0.595	0.130	1.072	1.065
		Left Tilt	0.282	0.621	0.825	0.110	0.903	1.217
		Right Cheek	0.605	0.257	0.366	0.041	0.862	1.012
		Right Tilt	0.436	0.257	0.441	0.035	0.693	0.912
WCDMA B2	Ant.1	Left Cheek	0.255	0.732	0.595	0.130	0.987	0.980
		Left Tilt	0.202	0.621	0.825	0.110	0.823	1.137
		Right Cheek	0.400	0.257	0.366	0.041	0.657	0.807
		Right Tilt	0.326	0.257	0.441	0.035	0.583	0.802
WCDMA B4	Ant.1	Left Cheek	0.318	0.732	0.595	0.130	1.050	1.043
		Left Tilt	0.275	0.621	0.825	0.110	0.896	1.210
		Right Cheek	0.610	0.257	0.366	0.041	0.867	1.017
		Right Tilt	0.434	0.257	0.441	0.035	0.691	0.910
WCDMA B5	Ant.0	Left Cheek	0.266	0.732	0.595	0.130	0.998	0.991
		Left Tilt	0.148	0.621	0.825	0.110	0.769	1.083
		Right Cheek	0.307	0.257	0.366	0.041	0.564	0.714
		Right Tilt	0.165	0.257	0.441	0.035	0.422	0.641
LTE B2	Ant.1	Left Cheek	0.194	0.732	0.595	0.130	0.926	0.919
		Left Tilt	0.158	0.621	0.825	0.110	0.779	1.093
		Right Cheek	0.315	0.257	0.366	0.041	0.572	0.722
		Right Tilt	0.226	0.257	0.441	0.035	0.483	0.702
LTE B4	Ant.1	Left Cheek	0.248	0.732	0.595	0.130	0.980	0.973
		Left Tilt	0.194	0.621	0.825	0.110	0.815	1.129
		Right Cheek	0.661	0.257	0.366	0.041	0.918	1.068
		Right Tilt	0.463	0.257	0.441	0.035	0.720	0.939
LTE B5	Ant.0	Left Cheek	0.072	0.732	0.595	0.130	0.804	0.797
		Left Tilt	0.029	0.621	0.825	0.110	0.650	0.964
		Right Cheek	0.105	0.257	0.366	0.041	0.362	0.512
		Right Tilt	0.026	0.257	0.441	0.035	0.283	0.502
LTE B7	Ant.1	Left Cheek	0.260	0.732	0.595	0.130	0.992	0.985
		Left Tilt	0.241	0.621	0.825	0.110	0.862	1.176

		Right Cheek	1.056	0.257	0.366	0.041	1.313	1.463
		Right Tilt	0.623	0.257	0.441	0.035	0.880	1.099
LTE B12	Ant.0	Left Cheek	0.013	0.732	0.595	0.130	0.745	0.738
		Left Tilt	0.000	0.621	0.825	0.110	0.621	0.935
		Right Cheek	0.041	0.257	0.366	0.041	0.298	0.448
		Right Tilt	0.000	0.257	0.441	0.035	0.257	0.476
LTE B17	Ant.0	Left Cheek	0.019	0.732	0.595	0.130	0.751	0.744
		Left Tilt	0.009	0.621	0.825	0.110	0.630	0.944
		Right Cheek	0.051	0.257	0.366	0.041	0.308	0.458
		Right Tilt	0.011	0.257	0.441	0.035	0.268	0.487
LTE B26	Ant.0	Left Cheek	0.061	0.732	0.595	0.130	0.793	0.786
		Left Tilt	0.013	0.621	0.825	0.110	0.634	0.948
		Right Cheek	0.099	0.257	0.366	0.041	0.356	0.506
		Right Tilt	0.026	0.257	0.441	0.035	0.283	0.502
LTE B66	Ant.1	Left Cheek	0.394	0.732	0.595	0.130	1.126	1.119
		Left Tilt	0.318	0.621	0.825	0.110	0.939	1.253
		Right Cheek	0.614	0.257	0.366	0.041	0.871	1.021
		Right Tilt	0.474	0.257	0.441	0.035	0.731	0.950
LTE B38	Ant.1	Left Cheek	0.274	0.732	0.595	0.130	1.006	0.999
		Left Tilt	0.258	0.621	0.825	0.110	0.879	1.193
		Right Cheek	0.777	0.257	0.366	0.041	1.034	1.184
		Right Tilt	0.676	0.257	0.441	0.035	0.933	1.152
LTE B41	Ant.1	Left Cheek	0.297	0.732	0.595	0.130	1.029	1.022
		Left Tilt	0.270	0.621	0.825	0.110	0.891	1.205
		Right Cheek	0.797	0.257	0.366	0.041	1.054	1.204
		Right Tilt	0.706	0.257	0.441	0.035	0.963	1.182

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 1.463 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

13.2.2 Body-Worn Simultaneous Transmission SAR Evaluation for WWAN and WLAN

Band	Antenna	Position	Stand alone SAR				SUM SAR	
			1	2	3	4		
			WWAN	2.4GWIFI	5GWIFI	Bluetooth	1+2	1+3+4
GSM850	Ant.0	Front Side 15mm	0.313	0.080	0.127	0.018	0.393	0.458
		Back Side 15mm	0.400	0.099	0.241	0.024	0.499	0.665
GSM1900	Ant.1	Front Side 15mm	0.211	0.080	0.127	0.018	0.291	0.356
		Back Side 15mm	0.243	0.099	0.241	0.024	0.342	0.508
WCDMA B2	Ant.1	Front Side 15mm	0.202	0.080	0.127	0.018	0.282	0.347
		Back Side 15mm	0.254	0.099	0.241	0.024	0.353	0.519
WCDMA B4	Ant.1	Front Side 15mm	0.128	0.080	0.127	0.018	0.208	0.273
		Back Side 15mm	0.190	0.099	0.241	0.024	0.289	0.455
WCDMA B5	Ant.0	Front Side 15mm	0.238	0.080	0.127	0.018	0.318	0.383
		Back Side 15mm	0.298	0.099	0.241	0.024	0.397	0.563
LTE B2	Ant.1	Front Side 15mm	0.238	0.080	0.127	0.018	0.318	0.383
		Back Side 15mm	0.330	0.099	0.241	0.024	0.429	0.595
LTE B4	Ant.1	Front Side 15mm	0.322	0.080	0.127	0.018	0.402	0.467
		Back Side 15mm	0.368	0.099	0.241	0.024	0.467	0.633
LTE B5	Ant.0	Front Side 15mm	0.226	0.080	0.127	0.018	0.306	0.371
		Back Side 15mm	0.281	0.099	0.241	0.024	0.380	0.546
LTE B7	Ant.1	Front Side 15mm	0.491	0.080	0.127	0.018	0.571	0.636
		Back Side 15mm	0.540	0.099	0.241	0.024	0.639	0.805
LTE B12	Ant.0	Front Side 15mm	0.293	0.080	0.127	0.018	0.373	0.438
		Back Side 15mm	0.467	0.099	0.241	0.024	0.566	0.732
LTE B17	Ant.0	Front Side 15mm	0.299	0.080	0.127	0.018	0.379	0.444
		Back Side 15mm	0.452	0.099	0.241	0.024	0.551	0.717
LTE B26	Ant.0	Front Side 15mm	0.231	0.080	0.127	0.018	0.311	0.376
		Back Side 15mm	0.289	0.099	0.241	0.024	0.388	0.554
LTE B66	Ant.1	Front Side 15mm	0.340	0.080	0.127	0.018	0.420	0.485
		Back Side 15mm	0.442	0.099	0.241	0.024	0.541	0.707
LTE B38	Ant.1	Front Side 15mm	0.238	0.080	0.127	0.018	0.318	0.383
		Back Side 15mm	0.253	0.099	0.241	0.024	0.352	0.518
LTE B41	Ant.1	Front Side 15mm	0.306	0.080	0.127	0.018	0.386	0.451
		Back Side 15mm	0.342	0.099	0.241	0.024	0.441	0.607

Note:

1: The simultaneous transmission combinations of the 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 0.805 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

13.2.3 Hotspot Simultaneous Transmission SAR Evaluation for WWAN and WLAN

Band	Antenna	Position	Stand alone SAR				SUM SAR	
			1	2	3	4		
			WWAN	2.4GWIFI	5GWIFI	Bluetooth	1+2	1+3+4
GSM850	Ant.0	Front Side 10mm	0.326	0.144	0.151	0.035	0.470	0.512
		Back Side 10mm	0.474	0.187	0.287	0.044	0.661	0.805
		Left Edge 10mm	0.306	0.142	0.173	0.030	0.448	0.509
		Right Edge 10mm	0.079	0.020	0.034	0.006	0.099	0.119
		Top Edge 10mm	0.000	0.121	0.413	0.034	0.121	0.447
		Bottom Edge 10mm	0.281	0.000	0.000	0.000	0.281	0.281
GSM1900	Ant.1	Front Side 10mm	0.345	0.144	0.151	0.035	0.489	0.531
		Back Side 10mm	0.478	0.187	0.287	0.044	0.665	0.809
		Left Edge 10mm	0.062	0.142	0.173	0.030	0.204	0.265
		Right Edge 10mm	0.207	0.020	0.034	0.006	0.227	0.247
		Top Edge 10mm	0.222	0.121	0.413	0.034	0.343	0.669
		Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
WCDMA B2	Ant.1	Front Side 10mm	0.355	0.144	0.151	0.035	0.499	0.541
		Back Side 10mm	0.500	0.187	0.287	0.044	0.687	0.831
		Left Edge 10mm	0.087	0.142	0.173	0.030	0.229	0.290
		Right Edge 10mm	0.237	0.020	0.034	0.006	0.257	0.277
		Top Edge 10mm	0.238	0.121	0.413	0.034	0.359	0.685
		Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
WCDMA B4	Ant.1	Front Side 10mm	0.276	0.144	0.151	0.035	0.420	0.462
		Back Side 10mm	0.423	0.187	0.287	0.044	0.610	0.754
		Left Edge 10mm	0.069	0.142	0.173	0.030	0.211	0.272
		Right Edge 10mm	0.181	0.020	0.034	0.006	0.201	0.221
		Top Edge 10mm	0.247	0.121	0.413	0.034	0.368	0.694
		Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
WCDMA B5	Ant.0	Front Side 10mm	0.236	0.144	0.151	0.035	0.380	0.422
		Back Side 10mm	0.358	0.187	0.287	0.044	0.545	0.689
		Left Edge 10mm	0.297	0.142	0.173	0.030	0.439	0.500
		Right Edge 10mm	0.153	0.020	0.034	0.006	0.173	0.193
		Top Edge 10mm	0.000	0.121	0.413	0.034	0.121	0.447
		Bottom Edge 10mm	0.222	0.000	0.000	0.000	0.222	0.222
LTE B2	Ant.1	Front Side 10mm	0.445	0.144	0.151	0.035	0.589	0.631
		Back Side 10mm	0.595	0.187	0.287	0.044	0.782	0.926
		Left Edge 10mm	0.089	0.142	0.173	0.030	0.231	0.292
		Right Edge 10mm	0.295	0.020	0.034	0.006	0.315	0.335
		Top Edge 10mm	0.350	0.121	0.413	0.034	0.471	0.797

		Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
LTE B4	Ant.1	Front Side 10mm	0.445	0.144	0.151	0.035	0.589	0.631
		Back Side 10mm	0.727	0.187	0.287	0.044	0.914	1.058
		Left Edge 10mm	0.083	0.142	0.173	0.030	0.225	0.286
		Right Edge 10mm	0.364	0.020	0.034	0.006	0.384	0.404
		Top Edge 10mm	0.478	0.121	0.413	0.034	0.599	0.925
		Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
LTE B5	Ant.0	Front Side 10mm	0.222	0.144	0.151	0.035	0.366	0.408
		Back Side 10mm	0.337	0.187	0.287	0.044	0.524	0.668
		Left Edge 10mm	0.263	0.142	0.173	0.030	0.405	0.466
		Right Edge 10mm	0.069	0.020	0.034	0.006	0.089	0.109
		Top Edge 10mm	0.000	0.121	0.413	0.034	0.121	0.447
		Bottom Edge 10mm	0.206	0.000	0.000	0.000	0.206	0.206
LTE B7	Ant.1	Front Side 10mm	0.881	0.144	0.151	0.035	1.025	1.067
		Back Side 10mm	0.990	0.187	0.287	0.044	1.177	1.321
		Left Edge 10mm	0.059	0.142	0.173	0.030	0.201	0.262
		Right Edge 10mm	0.781	0.020	0.034	0.006	0.801	0.821
		Top Edge 10mm	0.506	0.121	0.413	0.034	0.627	0.953
		Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
LTE B12	Ant.0	Front Side 10mm	0.275	0.144	0.151	0.035	0.419	0.461
		Back Side 10mm	0.457	0.187	0.287	0.044	0.644	0.788
		Left Edge 10mm	0.430	0.142	0.173	0.030	0.572	0.633
		Right Edge 10mm	0.343	0.020	0.034	0.006	0.363	0.383
		Top Edge 10mm	0.000	0.121	0.413	0.034	0.121	0.447
		Bottom Edge 10mm	0.124	0.000	0.000	0.000	0.124	0.124
LTE B17	Ant.0	Front Side 10mm	0.260	0.144	0.151	0.035	0.404	0.446
		Back Side 10mm	0.447	0.187	0.287	0.044	0.634	0.778
		Left Edge 10mm	0.419	0.142	0.173	0.030	0.561	0.622
		Right Edge 10mm	0.338	0.020	0.034	0.006	0.358	0.378
		Top Edge 10mm	0.000	0.121	0.413	0.034	0.121	0.447
		Bottom Edge 10mm	0.119	0.000	0.000	0.000	0.119	0.119
LTE B26	Ant.0	Front Side 10mm	0.254	0.144	0.151	0.035	0.398	0.440
		Back Side 10mm	0.376	0.187	0.287	0.044	0.563	0.707
		Left Edge 10mm	0.313	0.142	0.173	0.030	0.455	0.516
		Right Edge 10mm	0.189	0.020	0.034	0.006	0.209	0.229
		Top Edge 10mm	0.000	0.121	0.413	0.034	0.121	0.447
		Bottom Edge 10mm	0.219	0.000	0.000	0.000	0.219	0.219
LTE B66	Ant.1	Front Side 10mm	0.491	0.144	0.151	0.035	0.635	0.677
		Back Side 10mm	0.790	0.187	0.287	0.044	0.977	1.121

		Left Edge 10mm	0.091	0.142	0.173	0.030	0.233	0.294
		Right Edge 10mm	0.412	0.020	0.034	0.006	0.432	0.452
		Top Edge 10mm	0.487	0.121	0.413	0.034	0.608	0.934
		Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
LTE B38	Ant.1	Front Side 10mm	0.302	0.144	0.151	0.035	0.446	0.488
		Back Side 10mm	0.391	0.187	0.287	0.044	0.578	0.722
		Left Edge 10mm	0.026	0.142	0.173	0.030	0.168	0.229
		Right Edge 10mm	0.342	0.020	0.034	0.006	0.362	0.382
		Top Edge 10mm	0.165	0.121	0.413	0.034	0.286	0.612
		Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
LTE B41	Ant.1	Front Side 10mm	0.551	0.144	0.151	0.035	0.695	0.737
		Back Side 10mm	0.708	0.187	0.287	0.044	0.895	1.039
		Left Edge 10mm	0.026	0.142	0.173	0.030	0.168	0.229
		Right Edge 10mm	0.615	0.020	0.034	0.006	0.635	0.655
		Top Edge 10mm	0.312	0.121	0.413	0.034	0.433	0.759
		Bottom Edge 10mm	0.000	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 1.321 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

13.2.4 Specific Simultaneous Transmission SAR Evaluation for WWAN and WLAN

Band	Antenna	Position	Stand alone SAR				SUM SAR	
			1	2	3	4		
			WWAN	2.4GWIFI	5GWIFI	Bluetooth	1+2	1+3+4
LTE B4	Ant.1	Back Side 0mm	2.287	0.000	0.473	0.000	2.287	2.760
LTE B7	Ant.1	Front Side 0mm	1.255	0.000	0.420	0.000	1.255	1.675
		Back Side 0mm	1.343	0.000	0.473	0.000	1.343	1.816
		Right Edge 0mm	1.269	0.000	0.034	0.000	1.269	1.303
LTE B66	Ant.1	Back Side 0mm	1.027	0.000	0.473	0.000	1.027	1.500
LTE B41	Ant.1	Back Side 0mm	0.896	0.000	0.473	0.000	0.896	1.369
		Right Edge 0mm	0.707	0.000	0.034	0.000	0.707	0.741

Note:

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

2: The highest Summed 10g SAR is 2.760 W/Kg < 4.0 W/kg, so Simultaneous Transmission SAR test is not required.

14 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	DASY6	16.0.0.116	N/A	N/A
750MHz Validation Dipole	Speag	D750V3	SN: 1208	2021/07/05	2024/07/05
835MHz Validation Dipole	Speag	D835V2	SN: 4d277	2021/09/09	2024/09/09
1750MHz Validation Dipole	Speag	D1750V2	SN: 1183	2021/07/06	2024/07/06
1950MHz Validation Dipole	Speag	D1950V2	SN: 1240	2021/09/13	2024/09/13
2450MHz Validation Dipole	Speag	D2450V2	SN: 1062	2021/07/05	2024/07/05
2600MHz Validation Dipole	Speag	D2600V2	SN: 1184	2021/07/05	2024/07/05
5GHz Validation Dipole	Speag	D5GHZV2	SN: 1333	2021/09/14	2024/09/14
Data Acquisition Electronicsr	Speag	DAE4	SN: 1710	2024/01/03	2025/01/03
E-Field Probe	Speag	EX3DV4	SN: 7607	2023/07/04	2024/07/04
Signal Generator	R&S	SMB100A	182396	2023/09/05	2024/09/05
Power Meter	R&S	NRVD-B2	835843/014	2023/09/05	2024/09/05
Power Sensor	R&S	NRV-Z4	100381	2023/09/05	2024/09/05
Power Sensor	R&S	NRV-Z2	100211	2023/09/05	2024/09/05
Wireless Communication Test Set	R&S	CMW500	104946	2023/09/01	2024/09/01
Network Analyzer	Agilent	E5071C	MY46103472	2023/11/14	2024/11/14
Thermometer	Elitech	RC-4	EF5238001629	2023/10/09	2024/10/09
Thermometer	Elitech	RC-4HC	EF7239002655	2023/11/17	2024/11/17
Power Amplifier	SATIMO	6552B	22374	N/A	N/A
Dielectric Probe Kit	Speag	DAK3.5	SN: 1312	N/A	N/A
Phantom	Speag	SAM	SN: 1859	N/A	N/A
Attenuator	COM-MW	ZA-S1-31	1305003187	N/A	N/A
Directional coupler	AA-MCS	AAMCS-UDC	000272	N/A	N/A

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

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

ANNEX A SIMULATING LIQUID VERIFICATION RESULT

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

Head Liquid

Date	Liquid Type	Fre. (MHz)	Temp. (°C)	Meas. Conductivity (σ) (S/m)	Meas. Permittivity (ϵ)	Target Conductivity (σ) (S/m)	Target Permittivity (ϵ)	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2024.05.17	Head	750	21.3	0.91	41.67	0.89	41.94	2.25	-0.64
2024.05.20	Head	835	21.4	0.89	41.92	0.90	41.50	-1.11	1.01
2024.05.21	Head	835	21.1	0.89	41.94	0.90	41.50	-1.11	1.06
2024.06.07	Head	1750	21.2	1.39	39.94	1.37	40.08	1.46	-0.35
2024.06.11	Head	1750	21.5	1.38	40.13	1.37	40.08	0.73	0.12
2024.06.05	Head	1950	21.1	1.42	39.74	1.40	40.00	1.43	-0.65
2024.06.06	Head	1950	21.6	1.42	39.63	1.40	40.00	1.43	-0.93
2024.06.04	Head	2450	21.5	1.81	39.41	1.80	39.20	0.56	0.54
2024.06.12	Head	2600	21.3	1.97	38.54	1.96	39.01	0.51	-1.20
2024.06.13	Head	2600	21.2	1.97	38.71	1.96	39.01	0.51	-0.77
2024.05.29	Head	5300	21.6	4.71	35.83	4.76	35.87	-1.05	-0.11
2024.05.30	Head	5600	21.3	5.06	35.34	5.07	35.53	-0.20	-0.53
2024.05.31	Head	5800	21.5	5.23	35.91	5.27	35.30	-0.76	1.73
Note: The tolerance limit of Conductivity and Permittivity is $\pm 5\%$.									

ANNEX B SYSTEM CHECK RESULT

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

Head liquid 1g

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2024.05.17	Head	750	100	0.852	8.52	8.51	0.12
2024.05.20	Head	835	100	0.985	9.85	9.72	1.34
2024.05.21	Head	835	100	0.974	9.74	9.72	0.21
2024.06.07	Head	1750	100	3.610	36.10	36.50	-1.10
2024.06.11	Head	1750	100	3.710	37.10	36.50	1.64
2024.06.05	Head	1950	100	4.190	41.90	41.40	1.21
2024.06.06	Head	1950	100	4.150	41.50	41.40	0.24
2024.06.04	Head	2450	100	5.380	53.80	54.20	-0.74
2024.06.12	Head	2600	100	5.760	57.60	57.20	0.70
2024.06.13	Head	2600	100	5.810	58.10	57.20	1.57
2024.05.29	Head	5300	100	8.200	82.00	81.80	0.24
2024.05.30	Head	5600	100	8.290	82.90	83.60	-0.84
2024.05.31	Head	5800	100	8.250	82.50	82.30	0.24

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

Head liquid 10g

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2024.06.07	Head	1750	100	1.890	18.90	19.20	-1.56
2024.06.11	Head	1750	100	1.930	19.30	19.20	0.52
2024.06.12	Head	2600	100	2.590	25.90	25.50	1.57
2024.06.13	Head	2600	100	2.600	26.00	25.50	1.96
2024.05.29	Head	5300	100	2.390	23.90	23.40	2.14
2024.05.30	Head	5600	100	2.370	23.70	23.80	-0.42

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

System Performance Check Data (750MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD750V2, SPEAG	10.0 x 10.0 x 3.0	Dipole

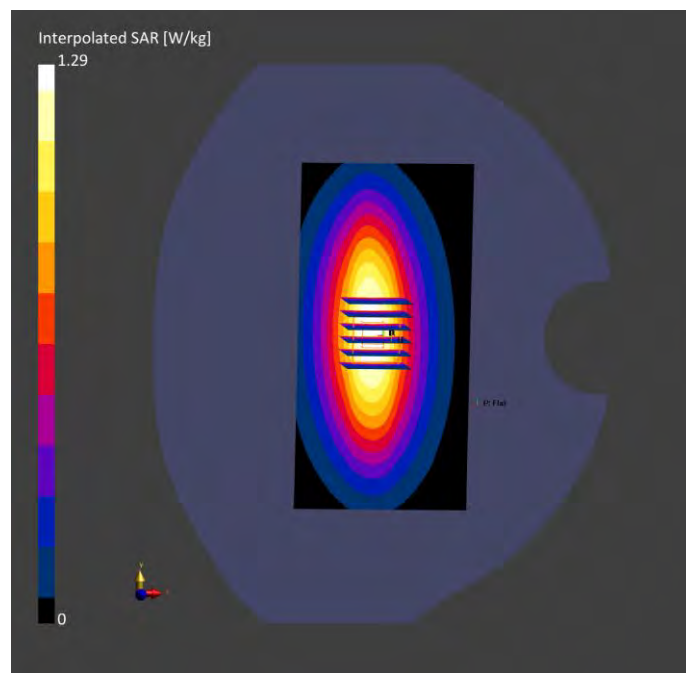
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		CD70 0	CW, 0--	750.0, 100	10.31	0.914	41.7	22.4	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	2024-05-17	EX3DV4 - SN7607,	2023-07-04	DAE4 Sn1710,	2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 160.0	30.0 x 30.0 x 30.0	Date	2024-05-17	2024-05-17
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5	psSAR1g [W/kg]	0.845	0.852
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.551	0.559
Graded Grid	Yes	Yes	Power Drift [dB]	-0.01	-0.03
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Scaling		
Detection			Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		85.5
			Dist 3dB		20.1
			Peak [mm]		



System Performance Check Data (835MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD835V2, SPEAG	10.0 x 10.0 x 3.0	Dipole

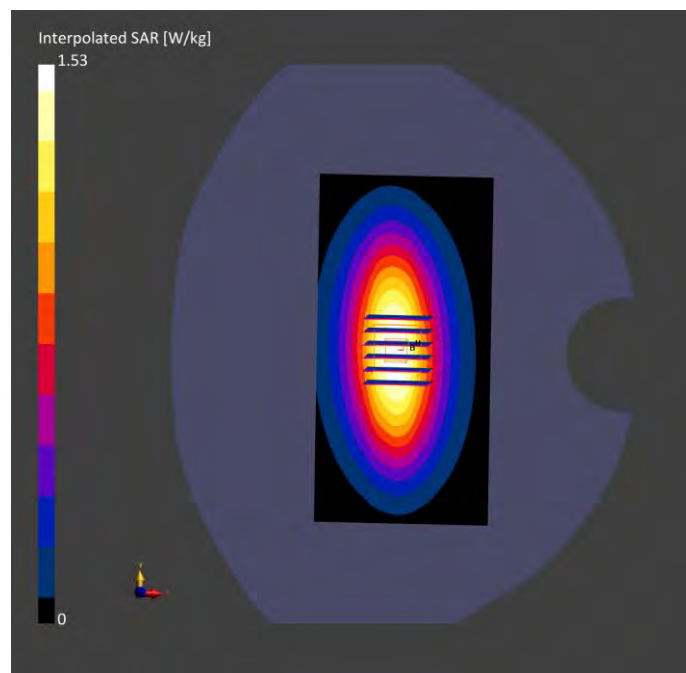
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conducti vity [S/m]	TSL Permittiv ity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		CD83 5	CW, 0--	835.0, 50	9.96	0.887	41.9	22.5	21.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05- 20	EX3DV4 - SN7607, 2023-07- 04	DAE4 Sn1710, 2024-01- 03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 160.0	30.0 x 30.0 x 30.0	Date	2024-05-20	2024-05-20
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5	psSAR1g [W/kg]	0.936	0.985
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.625	0.631
Graded Grid	Yes	Yes	Power Drift [dB]	-0.01	-0.02
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		83.2
			Dist 3dB Peak [mm]		12.8



System Performance Check Data (835MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD835V2, SPEAG	10.0 x 10.0 x 3.0	Dipole

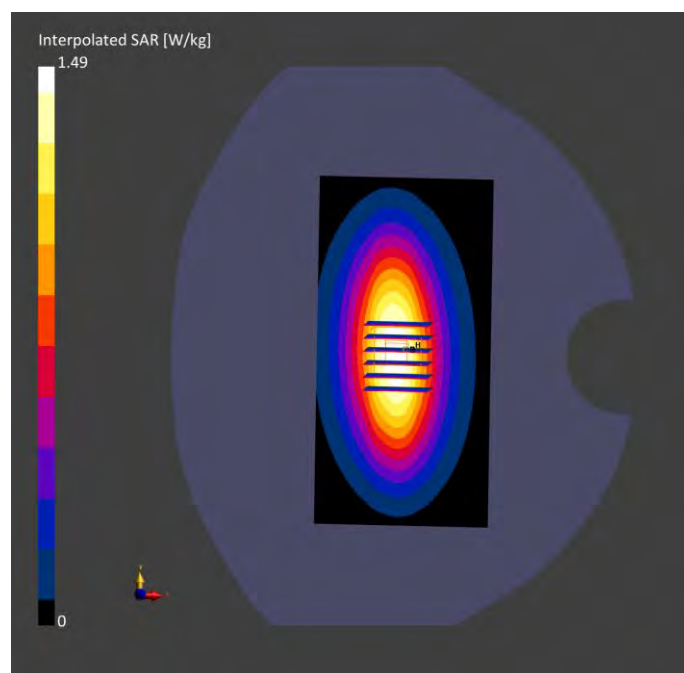
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conducti vity [S/m]	TSL Permittiv ity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		CD83 5	CW, 0--	835.0, 50	9.96	0.894	41.9	22.3	21.1

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05- 21	EX3DV4 - SN7607, 2023-07- 04	DAE4 Sn1710, 2024-01- 03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 160.0	30.0 x 30.0 x 30.0	Date	2024-05-21	2024-05-21
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5	psSAR1g [W/kg]	0.937	0.974
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.613	0.628
Graded Grid	Yes	Yes	Power Drift [dB]	-0.02	0.05
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		85.1
			Dist 3dB Peak [mm]		13.0



System Performance Check Data (1750MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D1750V2, SPEAG	10.0 x 10.0 x 3.0	Dipole

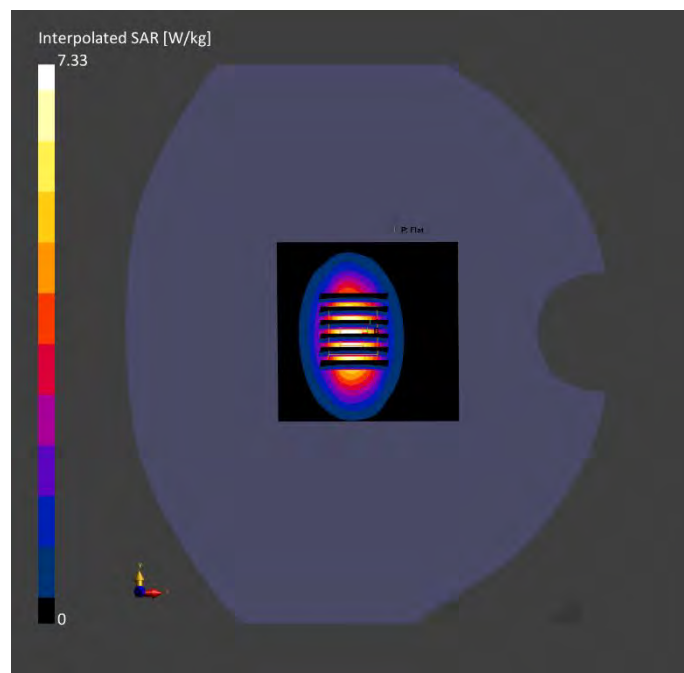
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conducti vity [S/m]	TSL Permittiv ity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		D175 0	CW, 0--	1750.0, 50	8.52	1.39	39.9	22.4	21.2

Hardware Setup

Phantom	TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 07	2024-06-	EX3DV4 - SN7607, 2023-07- 04	DAE4 Sn1710, 2024-01- 03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2024-06-07	2024-06-07
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5	psSAR1g [W/kg]	3.23	3.61
Sensor	3.0	1.4	psSAR10g [W/kg]	1.91	1.89
Surface [mm]			Power Drift [dB]	-0.03	-0.02
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface Detection	VMS + 6p	VMS + 6p	TSL Correction	No correction	No correction
Scan Method	Measured	Measured	M2/M1 [%]		82.1
			Dist 3dB Peak [mm]		9.3



System Performance Check Data (1750MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D1750V2, SPEAG	10.0 x 10.0 x 3.0	Dipole

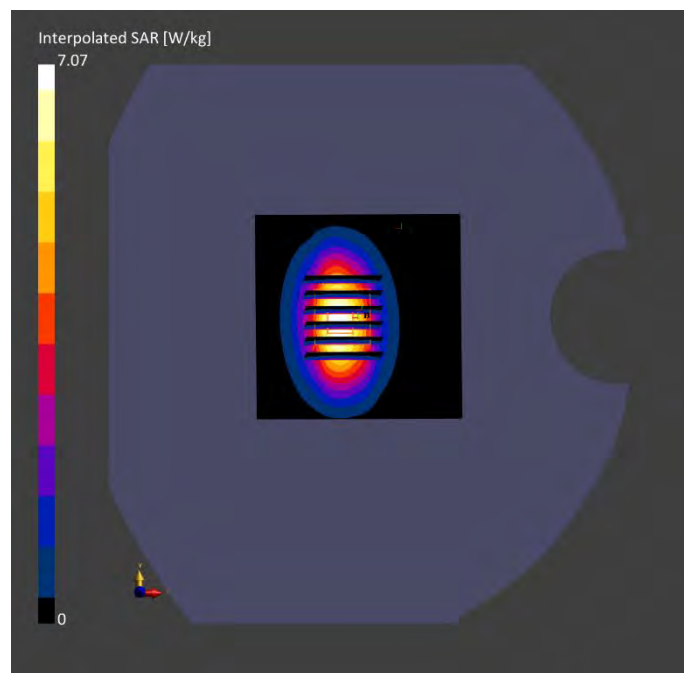
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conducti vity [S/m]	TSL Permittiv ity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		D175 0	CW, 0--	1750.0, 50	8.52	1.38	40.1	22.7	21.5

Hardware Setup

Phantom	TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-06- 11	EX3DV4 - SN7607, 2023-07- 04	DAE4 Sn1710, 2024-01- 03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2024-06-11	2024-06-11
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5	psSAR1g [W/kg]	3.46	3.71
Sensor	3.0	1.4	psSAR10g [W/kg]	1.89	1.93
Surface [mm]			Power Drift [dB]	-0.02	-0.06
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface	VMS + 6p	VMS + 6p	TSL	No correction	No correction
Detection			Correction		
Scan Method	Measured	Measured	M2/M1 [%]		81.1
			Dist 3dB Peak [mm]		10.5



System Performance Check Data (1950MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D1950V2, SPEAG	10.0 x 10.0 x 3.0	Dipole

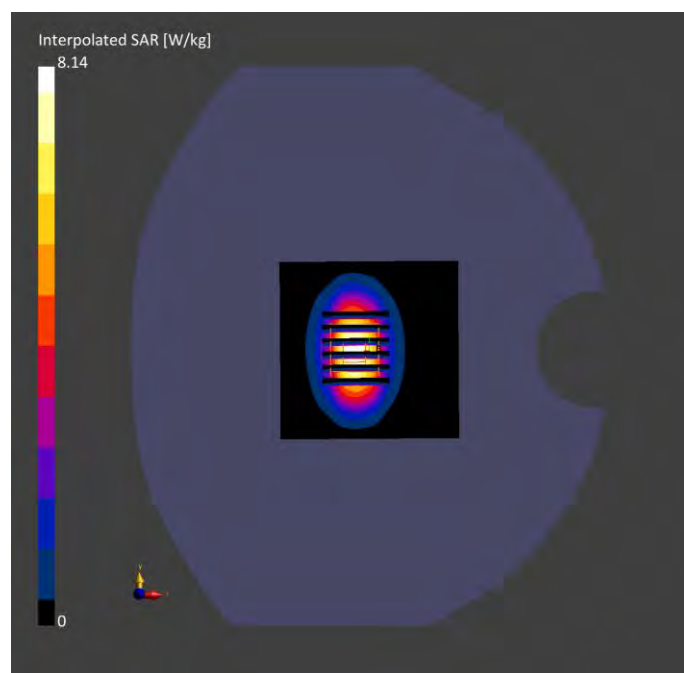
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conducti vity [S/m]	TSL Permittiv ity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		D195 0	CW, 0--	1950.0, 50	7.87	1.42	39.7	22.3	21.1

Hardware Setup

Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-06- 05	EX3DV4 - SN7607, 2023-07- 04		DAE4 Sn1710, 2024-01- 03	

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2024-06-05	2024-06-05
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5	psSAR1g [W/kg]	3.94	4.19
Sensor	3.0	1.4	psSAR10g [W/kg]	1.98	2.16
Surface [mm]			Power Drift [dB]	-0.10	-0.02
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	N/A	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Factor [dB]		
Detection			TSL	No correction	No correction
Scan Method	Measured	Measured	Correction		
			M2/M1 [%]		81.2
			Dist 3dB		9.1
			Peak [mm]		



System Performance Check Data (1950MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D1950V2, SPEAG	10.0 x 10.0 x 3.0	Dipole

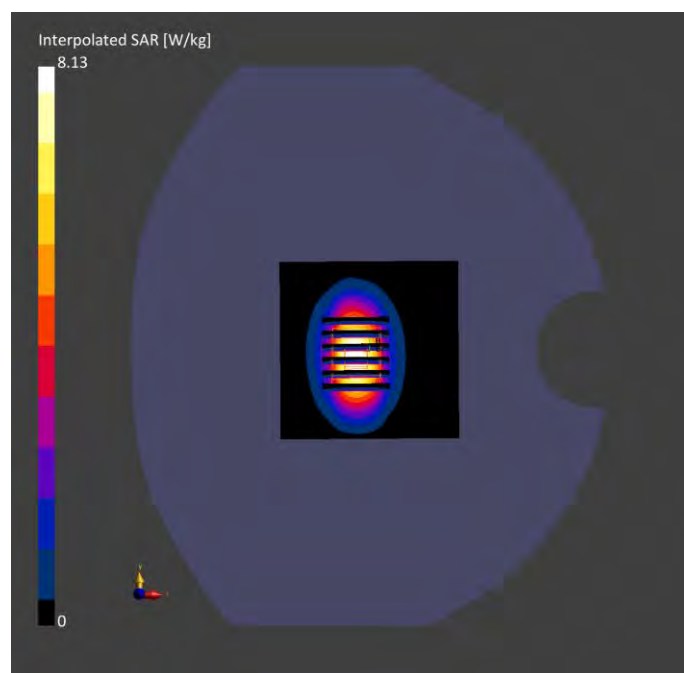
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conducti vity [S/m]	TSL Permittiv ity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		D195 0	CW, 0--	1950.0, 50	7.87	1.42	39.6	22.4	21.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06- 06	EX3DV4 - SN7607, 2023-07- 04	DAE4 Sn1710, 2024-01- 03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2024-06-06	2024-06-06
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5	psSAR1g [W/kg]	4.06	4.15
Sensor	3.0	1.4	psSAR10g [W/kg]	2.02	2.09
Surface [mm]			Power Drift [dB]	0.01	-0.01
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface	VMS + 6p	VMS + 6p	TSL	No correction	No correction
Detection			Correction		
Scan Method	Measured	Measured	M2/M1 [%]		81.7
			Dist 3dB		9.6
			Peak [mm]		



System Performance Check Data (2450MHz)

Device under Test Properties

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

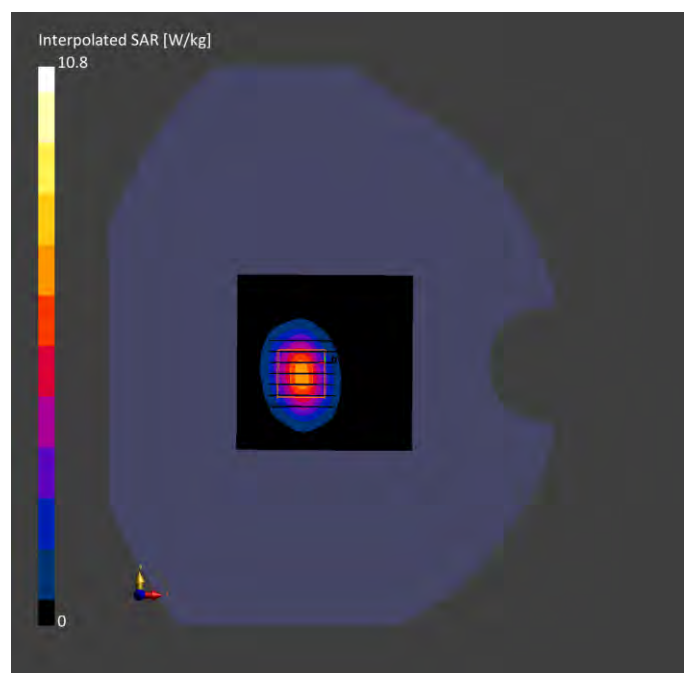
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D2450	CW, 0--	2450.0, 50	7.47	1.81	39.4	22.3	21.5

Hardware Setup

Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-06-04	EX3DV4 - SN7607,	2023-07-04	DAE4 Sn1710,	2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2024-06-04	2024-06-04
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5	psSAR1g [W/kg]	5.13	5.38
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.23	2.49
Graded Grid	Yes	Yes	Power Drift [dB]	-0.02	-0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		81.2
			Dist 3dB Peak [mm]		9.1



System Performance Check Data (2600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD2600V3, SPEAG	10.0 x 10.0 x 3.0	Dipole

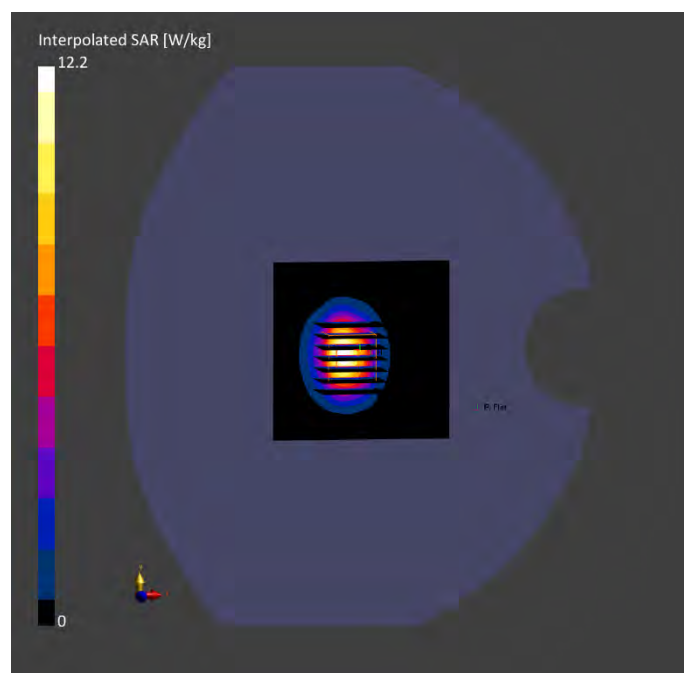
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permittiv ity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		CD260 0V3	CW, 0--	2600.0, 50	7.41	1.97	38.5	22.4	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	2024-06- 12	EX3DV4 - SN7607, 2023-07- 04		DAE4 Sn1710, 2024-01- 03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2024-06-12	2024-06-12
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5	psSAR1g [W/kg]	5.71	5.76
Sensor	3.0	1.4	psSAR10g [W/kg]	2.46	2.59
Surface [mm]			Power Drift [dB]	0.01	-0.01
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface Detection	VMS + 6p	VMS + 6p	TSL	No correction	No correction
Scan Method	Measured	Measured	Correction		
			M2/M1 [%]		79.5
			Dist 3dB Peak [mm]		9.1



System Performance Check Data (2600MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD2600V3, SPEAG	10.0 x 10.0 x 3.0	Dipole

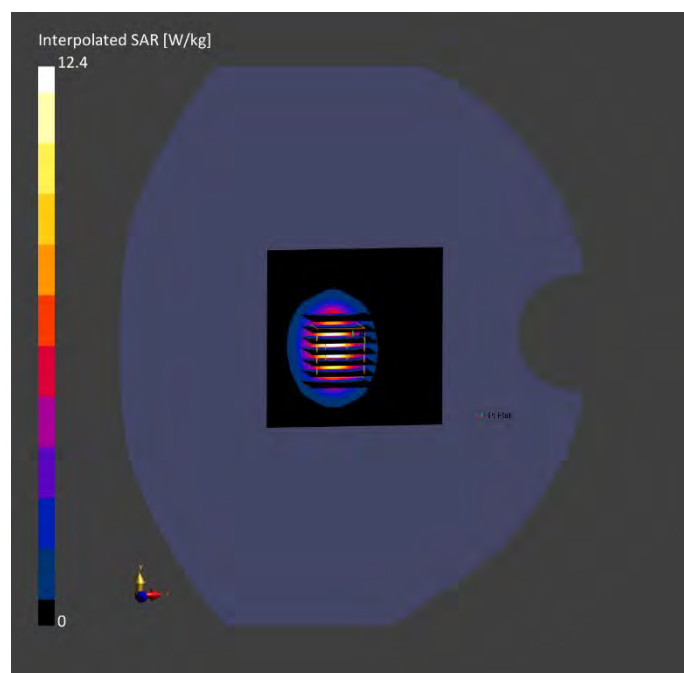
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permittiv ity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		CD260 0V3	CW, 0--	2600.0, 50	7.41	1.97	38.7	22.4	21.2

Hardware Setup

Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-06- 13	EX3DV4 - SN7607, 2023-07- 04		DAE4 Sn1710, 2024-01- 03	

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2024-06-13	2024-06-13
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5	psSAR1g [W/kg]	5.53	5.81
Sensor	3.0	1.4	psSAR10g [W/kg]	2.40	2.60
Surface [mm]			Power Drift [dB]	0.00	0.01
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.5	Scaling		
MAIA	N/A	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Factor [dB]		
Detection			TSL	No correction	No correction
Scan Method	Measured	Measured	Correction		
			M2/M1 [%]		80.1
			Dist 3dB		8.4
			Peak [mm]		



System Performance Check Data (5300MHz)

Device under Test Properties

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

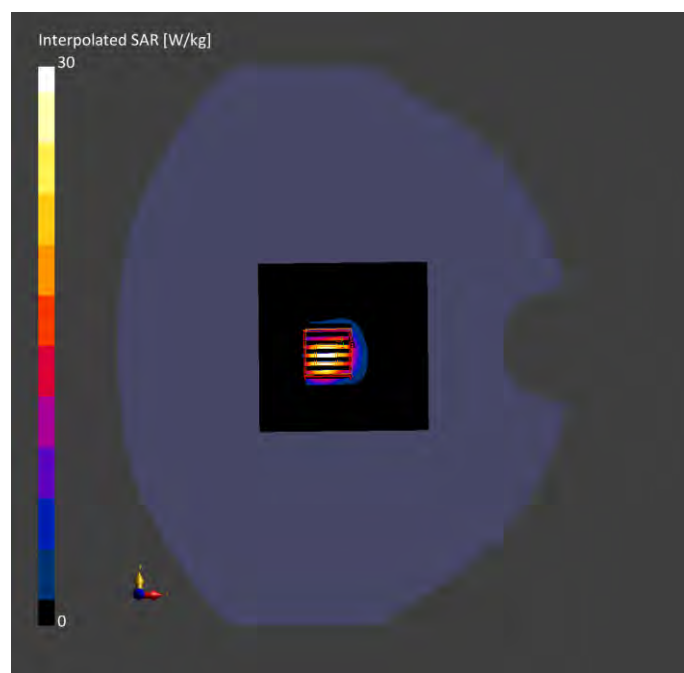
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D5GH z	CW, 0--	5300.0, 30	5.41	4.71	35.8	22.7	21.6

Hardware Setup

Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-05-29	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn1710, 2024-01-03	

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	22.0 x 22.0 x 22.0	Date	2024-05-29	2024-05-29
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4	psSAR1g [W/kg]	7.84	8.20
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.26	2.39
Graded Grid	Yes	Yes	Power Drift [dB]	-0.14	0.01
Grading Ratio	1.5	1.4	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		64.6
			Dist 3dB Peak [mm]		6.8



System Performance Check Data (5600MHz)

Device under Test Properties

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

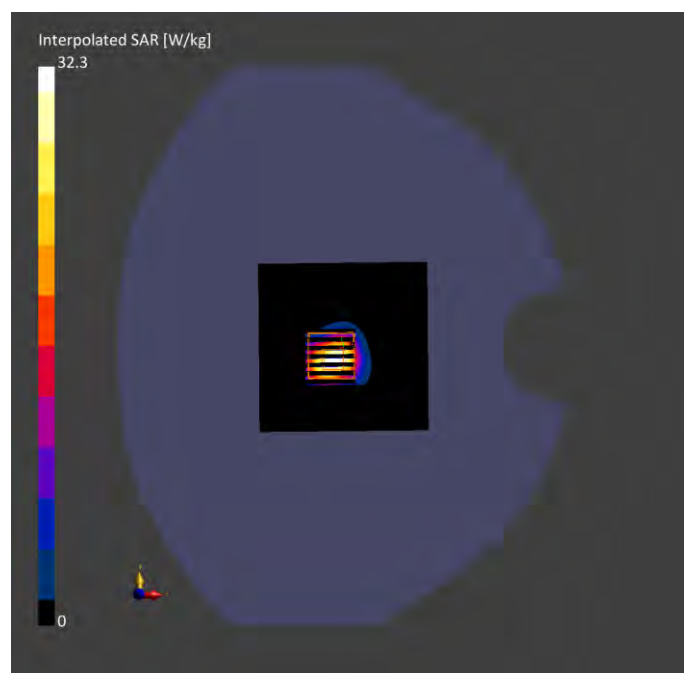
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D5GH z	CW, 0--	5600.0, 60	4.58	5.06	35.3	22.5	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	2024-05-30	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn1710, 2024-01-03	

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	22.0 x 22.0 x 22.0	Date	2024-05-30	2024-05-30
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4	psSAR1g [W/kg]	6.73	8.29
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.15	2.37
Graded Grid	Yes	Yes	Power Drift [dB]	0.01	0.01
Grading Ratio	1.5	1.4	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		64.2
			Dist 3dB Peak [mm]		7.4



System Performance Check Data (5800MHz)

Device under Test Properties

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

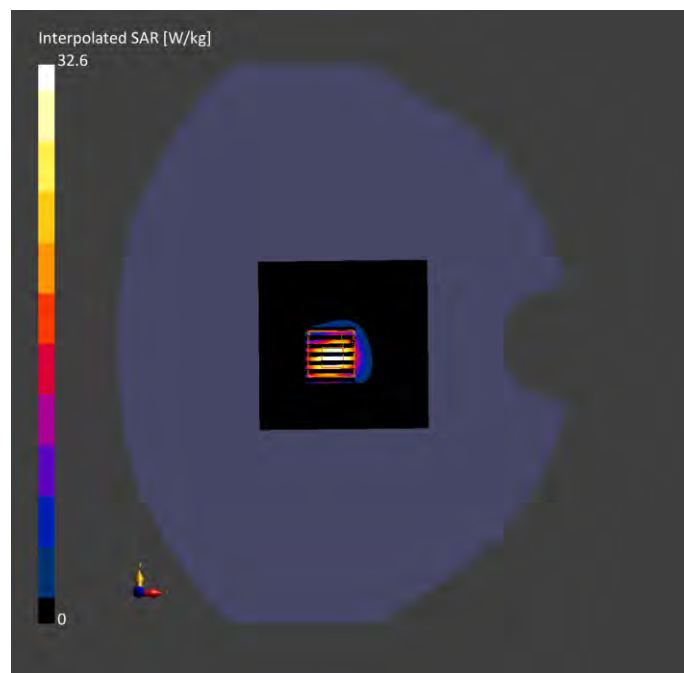
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D5GH z	CW, 0--	5800.0, 80	4.78	5.23	35.9	22.4	21.5

Hardware Setup

Phantom	TSL, Measured Date		Probe, Calibration Date		DAE, Calibration Date	
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-05-31	EX3DV4 - SN7607, 2023-07-04		DAE4 Sn1710, 2024-01-03	

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	22.0 x 22.0 x 22.0	Date	2024-05-31	2024-05-31
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4	psSAR1g [W/kg]	7.83	8.25
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.11	2.33
Graded Grid	Yes	Yes	Power Drift [dB]	-0.01	-0.12
Grading Ratio	1.5	1.4	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		61.4
			Dist 3dB Peak [mm]		7.4



ANNEX C TEST DATA

Meas.1 Right Head with Cheek on Middle Channel in GPRS850 2Slots mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
RightHead, HSL	CHEEK, 0.00	GS, M, 850	GSM, 10024 -DAC	836.6, 190	9.96	0.905	41.5	22.5	21.4

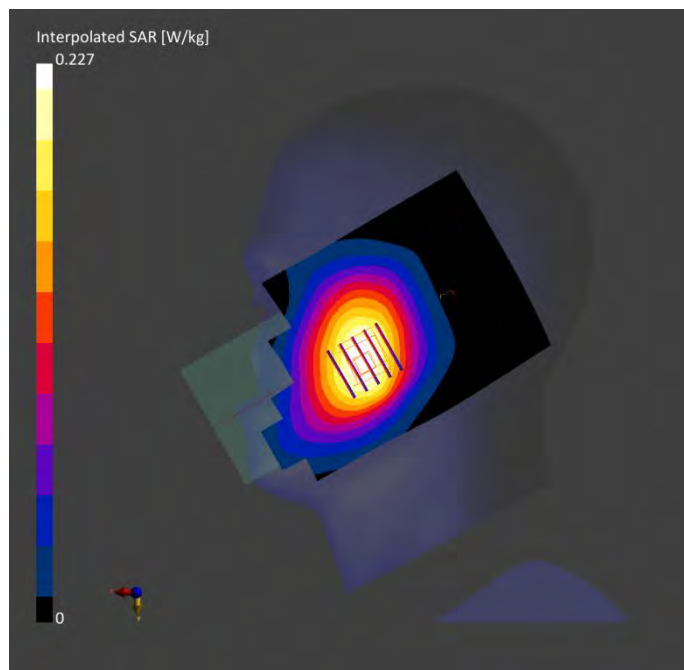
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-20	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0	Date	2024-05-20	2024-05-20
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.157	0.170
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.108	0.130
Graded Grid	Yes	Yes	Power Drift [dB]	-0.03	0.05
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface	VMS + 6p	All points	Scaling		
Detection			Factor [dB]		
Scan Method	Measured	Measured	TSL	No correction	No correction
			Correction		
			M2/M1 [%]		76.1

Dist 3dB
Peak [mm]

> 16.0



Meas.2 Body Plane with Back Side 15mm on Middle Channel in GPRS850 2Slots mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

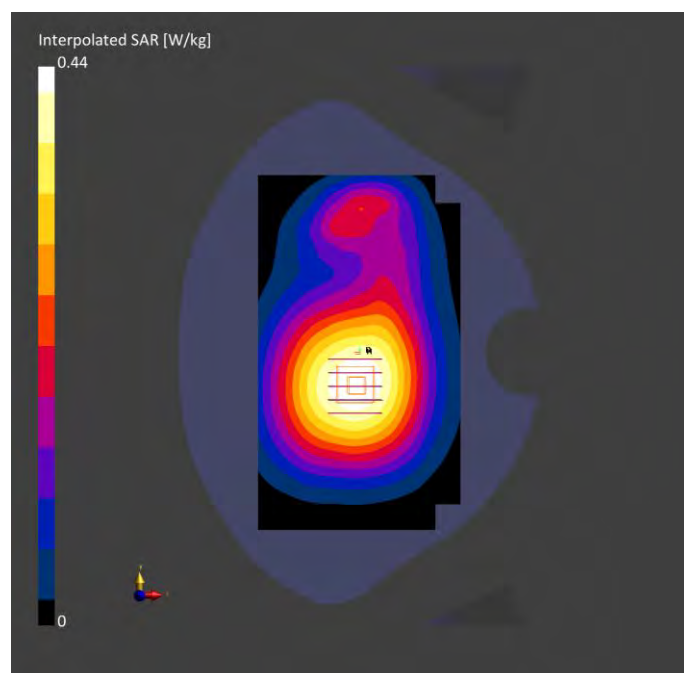
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	GS M 850	GSM, 10024 -DAC	836.6, 190	9.96	0.905	41.5	22.5	21.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-20	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0	Date	2024-05-28	2024-05-28
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.329	0.349
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.232	0.268
Graded Grid	Yes	Yes	Power Drift [dB]	0.04	0.02
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		79.2
			Dist 3dB Peak [mm]		> 16.0



Meas.3 Body Plane with Back Side 10mm on Middle Channel in GPRS850 2Slots mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

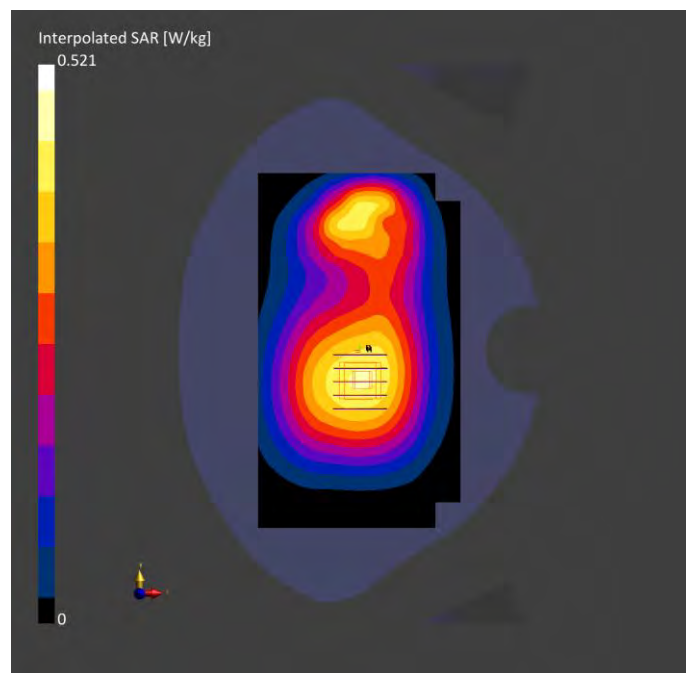
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	GS M 850	GSM, 10024 -DAC	836.6, 190	9.96	0.905	41.5	22.5	21.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-20	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0	Date	2024-05-28	2024-05-28
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.389	0.414
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.275	0.318
Graded Grid	Yes	Yes	Power Drift [dB]	0.00	0.02
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		79.3
			Dist 3dB Peak [mm]		> 16.0



Meas.4 Right Head with Cheek on Low Channel in GPRS1900 2Slots mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

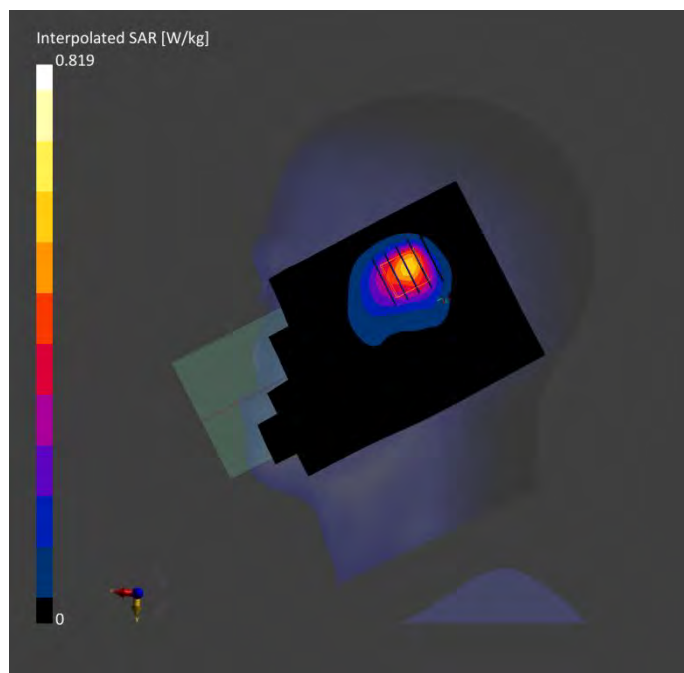
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
RightHead, HSL	CHEEK, 0.00	PCS 190	GSM, 10024 -DAC	1850.2, 512	7.98	1.38	40.5	22.3	21.1

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-05	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0	Date	2024-06-05	2024-06-05
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.472	0.496
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.255	0.272
Graded Grid	Yes	Yes	Power Drift [dB]	0.05	0.03
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA Surface	N/A	N/A	Scaling		
Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		63.5
			Dist 3dB Peak [mm]		9.3



Meas.5 Body Plane with Back Side 15mm on Low Channel in GPRS1900 2Slots mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

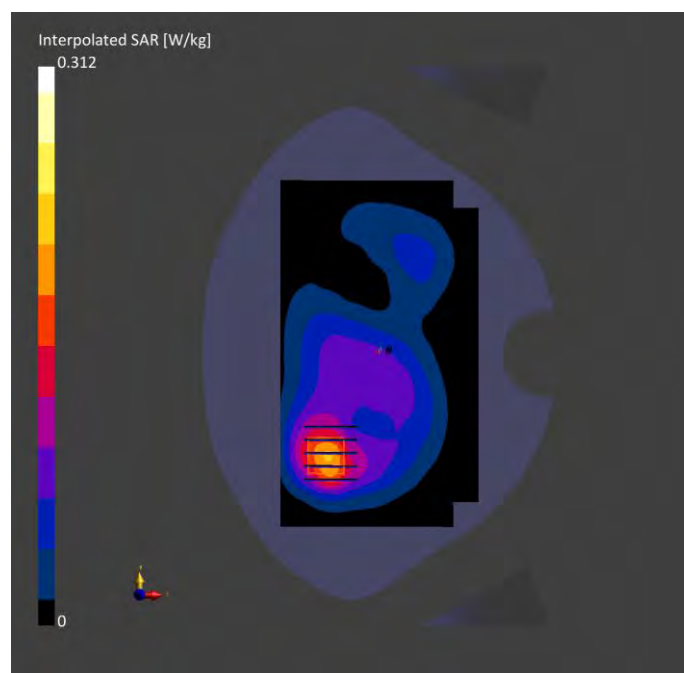
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	PCS 190 0	GSM, 10024 -DAC	1850.2, 512	7.98	1.38	40.5	22.3	21.1

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-05	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0	Date	2024-06-05	2024-06-05
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.178	0.187
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.103	0.107
Graded Grid	Yes	Yes	Power Drift [dB]	-0.03	0.02
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		57.5
			Dist 3dB Peak [mm]		15.1



Meas.6 Body Plane with Back Side 10mm on Low Channel in GPRS1900 2Slots mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

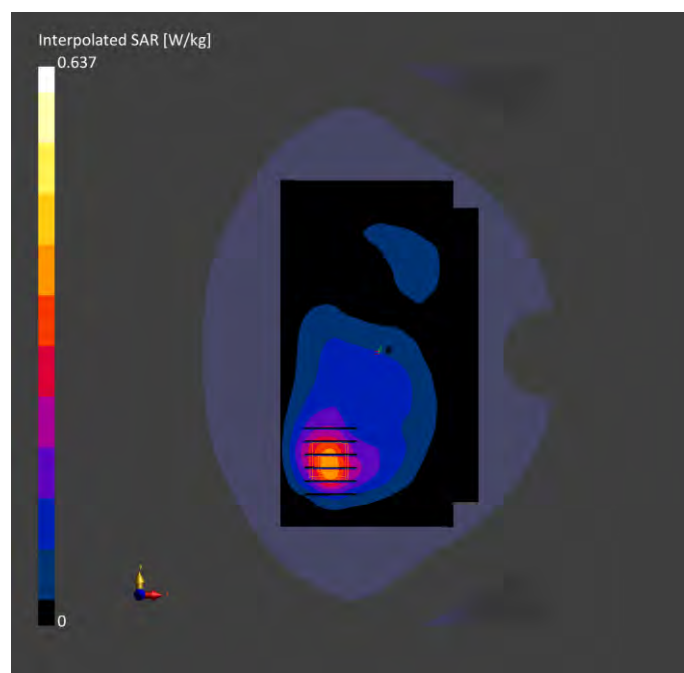
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	PCS 190 0	GSM, 10024 -DAC	1850.2, 512	7.98	1.38	40.5	22.3	21.1

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-05	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0	Date	2024-06-05	2024-06-05
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.347	0.368
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.196	0.198
Graded Grid	Yes	Yes	Power Drift [dB]	-0.04	0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		52.8
			Dist 3dB Peak [mm]		13.6



Meas.7 Right Head with Cheek on High Channel in WCDMA Band2 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
RightHead, HSL	CHEEK, 0.00	Band 2	WCDMA, 10011-CAC	1907.6, 9538	7.98	1.42	40.4	22.3	21.1

Hardware Setup

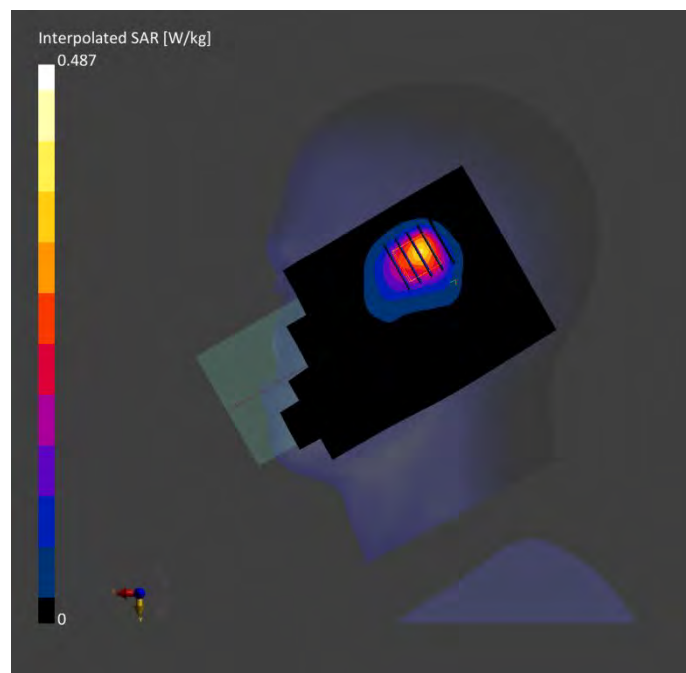
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-05	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-05	2024-06-05
psSAR1g [W/kg]	0.284	0.293
psSAR10g [W/kg]	0.153	0.161
Power Drift [dB]	0.00	0.00
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		63.6
Dist 3dB Peak [mm]		9.3



Meas.8 Body Plane with Back Side 15mm on High Channel in WCDMA Band2 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 2	WCDMA, 10011- CAC	1907.6, 9538	7.98	1.42	40.4	22.3	21.1

Hardware Setup

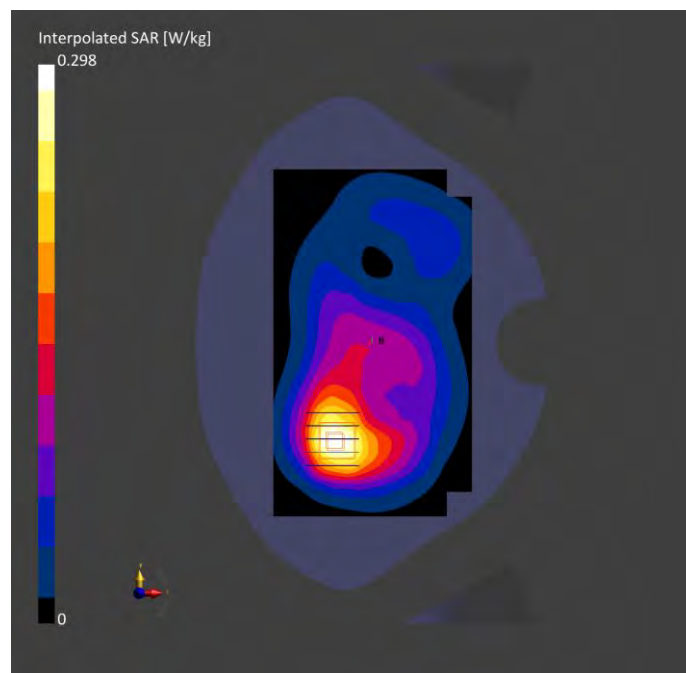
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-05	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-05	2024-06-05
psSAR1g [W/kg]	0.171	0.182
psSAR10g [W/kg]	0.102	0.108
Power Drift [dB]	0.03	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		61.1
Dist 3dB Peak [mm]		15.8



Meas.9 Body Plane with Back Side 10mm on High Channel in WCDMA Band2 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	Band 2	WCDMA, 10011- CAC	1907.6, 9538	7.98	1.42	40.4	22.3	21.1

Hardware Setup

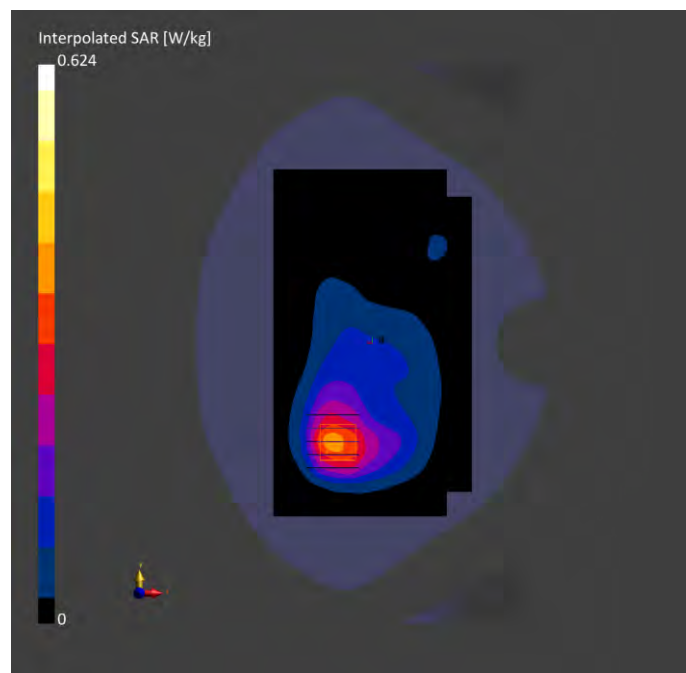
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-05	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-05	2024-06-05
psSAR1g [W/kg]	0.326	0.359
psSAR10g [W/kg]	0.191	0.202
Power Drift [dB]	0.00	-0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		58.3
Dist 3dB Peak [mm]		12.9



Meas.10 Right Head with Cheek on Middle Channel in WCDMA Ban4 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
RightHead, HSL	CHEEK, 0.00	Ban d 4	WCDMA, 10011-CAC	1732.4, 1412	8.52	1.36	40.8	22.4	21.2

Hardware Setup

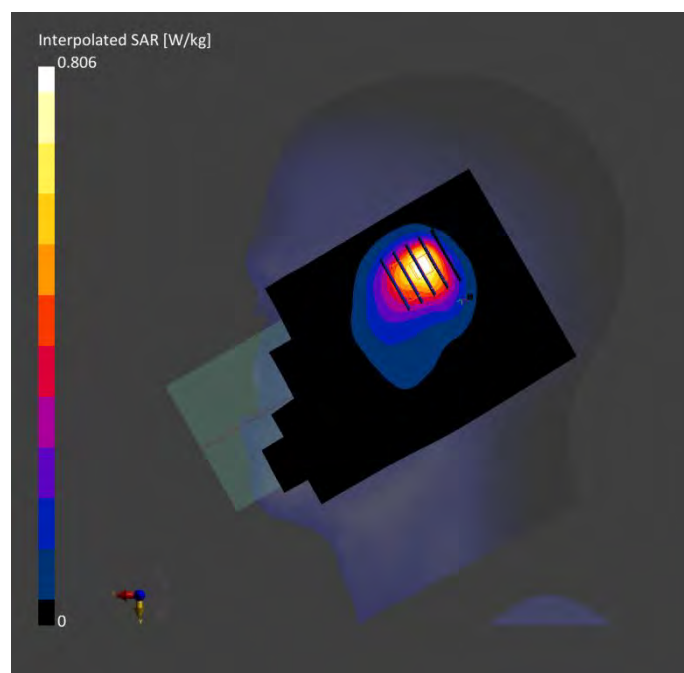
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-07	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-07	2024-06-07
psSAR1g [W/kg]	0.484	0.495
psSAR10g [W/kg]	0.264	0.276
Power Drift [dB]	0.00	-0.01
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		64.6
Dist 3dB Peak [mm]		9.6



Meas.11 Body Plane with Back Side 15mm on High Channel in WCDMA Band4 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 4	WCDMA, 10011- CAC	1752.6, 1513	8.52	1.41	39.5	22.4	21.2

Hardware Setup

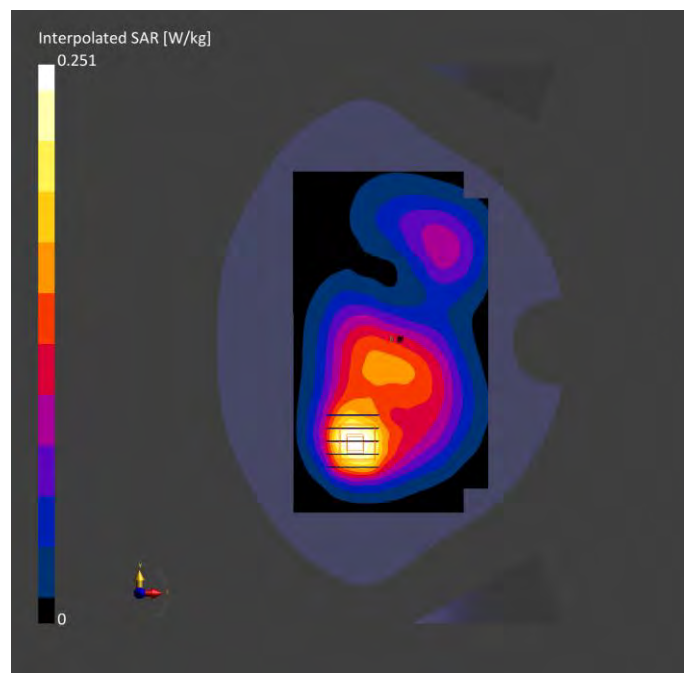
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-07	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-07	2024-06-07
psSAR1g [W/kg]	0.141	0.152
psSAR10g [W/kg]	0.084	0.089
Power Drift [dB]	-0.02	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		60.2
Dist 3dB Peak [mm]		14.3



Meas.12 Body Plane with Back Side 10mm on High Channel in WCDMA Band4 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	Band 4	WCDMA, 10011- CAC	1752.6, 1513	8.52	1.41	39.5	22.4	21.2

Hardware Setup

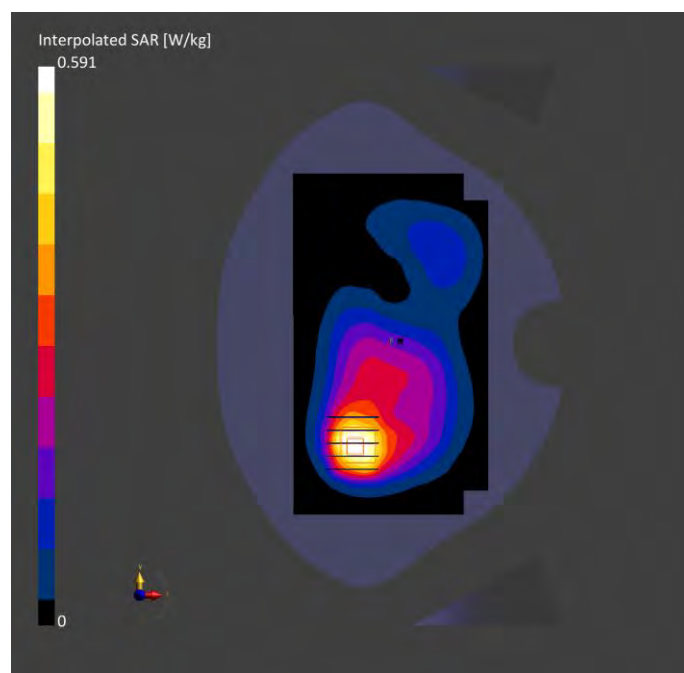
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-07	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-07	2024-06-07
psSAR1g [W/kg]	0.298	0.339
psSAR10g [W/kg]	0.177	0.188
Power Drift [dB]	-0.01	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		58.2
Dist 3dB Peak [mm]		12.2



Meas.13 Right Head with Cheek on Middle Channel in WCDMA Band5 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
RightHead, HSL	CHEEK, 0.00	Band 5	WCDMA, 10011-CAC	836.4, 4182	9.96	0.899	41.8	22.5	21.4

Hardware Setup

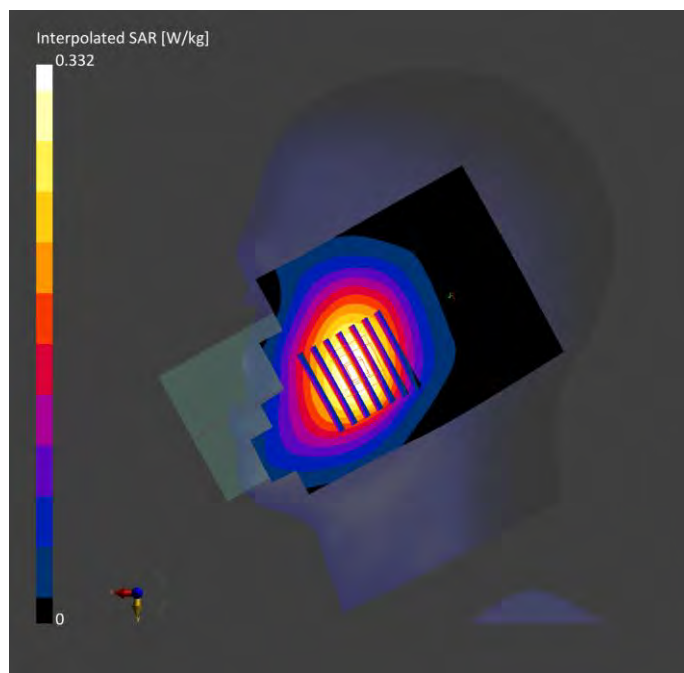
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-20	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-20	2024-05-20
psSAR1g [W/kg]	0.236	0.251
psSAR10g [W/kg]	0.162	0.194
Power Drift [dB]	-0.02	-0.09
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		75.6
Dist 3dB Peak [mm]		23.3



Meas.14 Body Plane with Back Side 15mm on Middle Channel in WCDMA Band5 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 5	WCDMA, 10011- CAC	836.4, 4182	9.96	0.899	41.8	22.5	21.4

Hardware Setup

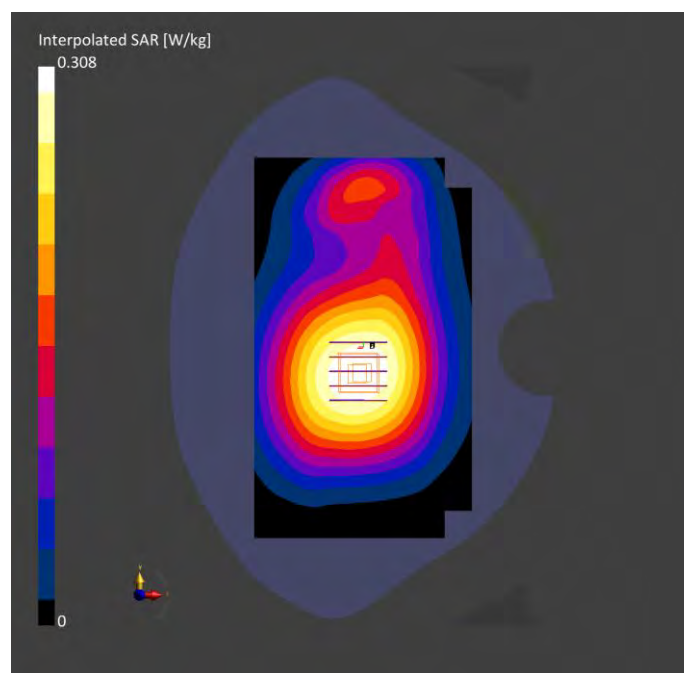
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-20	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-20	2024-05-20
psSAR1g [W/kg]	0.235	0.243
psSAR10g [W/kg]	0.166	0.187
Power Drift [dB]	0.00	-0.08
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		78.2
Dist 3dB Peak [mm]		> 16.0



Meas.15 Body Plane with Back Side 10mm on Middle Channel in WCDMA Band5 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	Band 5	WCDMA, 10011- CAC	836.4, 4182	9.96	0.899	41.8	22.5	21.4

Hardware Setup

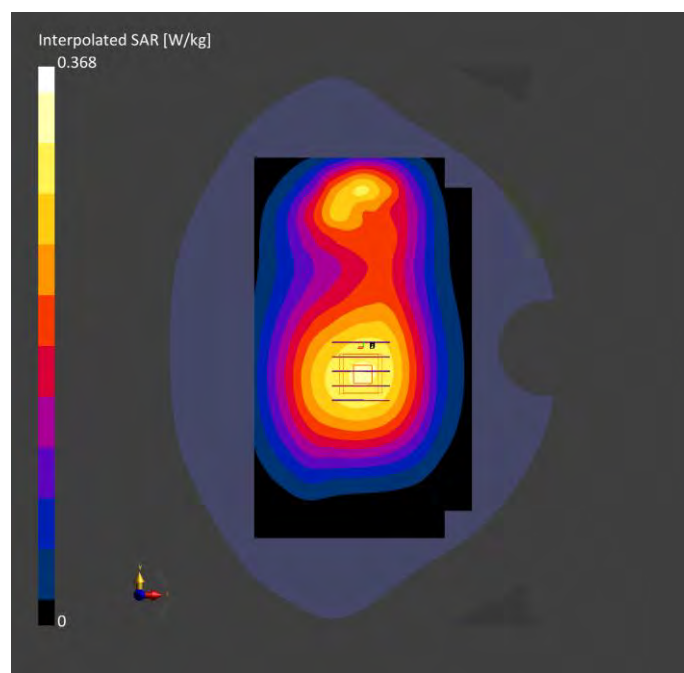
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-20	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-20	2024-05-20
psSAR1g [W/kg]	0.275	0.292
psSAR10g [W/kg]	0.194	0.225
Power Drift [dB]	0.01	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		78.4
Dist 3dB Peak [mm]		> 16.0



Meas.16 Right Head with Cheek on Middle Channel in LTE Band2 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
RightHead, HSL	CHEEK, 0.00	Band 2	LTE-FDD, 10169-CAF	1880.0, 18900	7.98	1.36	40.6	22.4	21.6

Hardware Setup

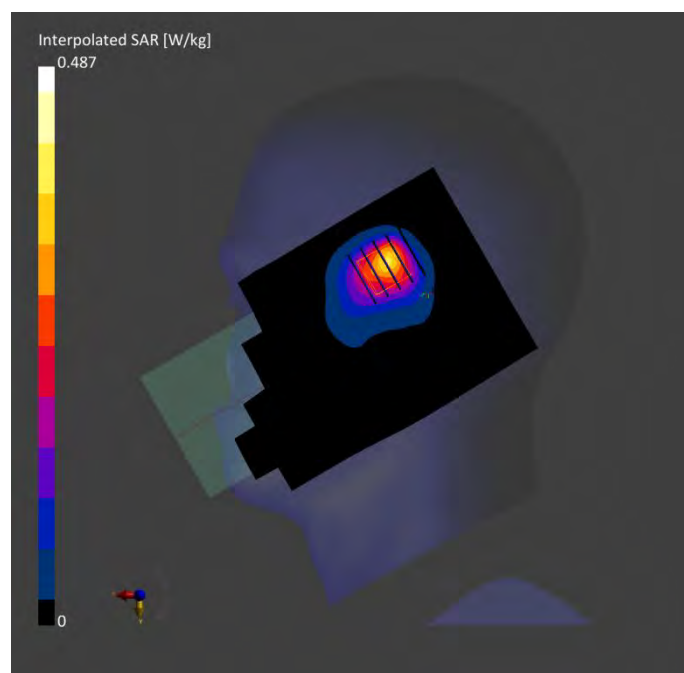
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-06	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-06	2024-06-06
psSAR1g [W/kg]	0.288	0.293
psSAR10g [W/kg]	0.155	0.161
Power Drift [dB]	-0.03	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		63.0
Dist 3dB Peak [mm]		9.3



Meas.17 Body Plane with Back Side 15mm on Middle Channel in LTE Band2 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

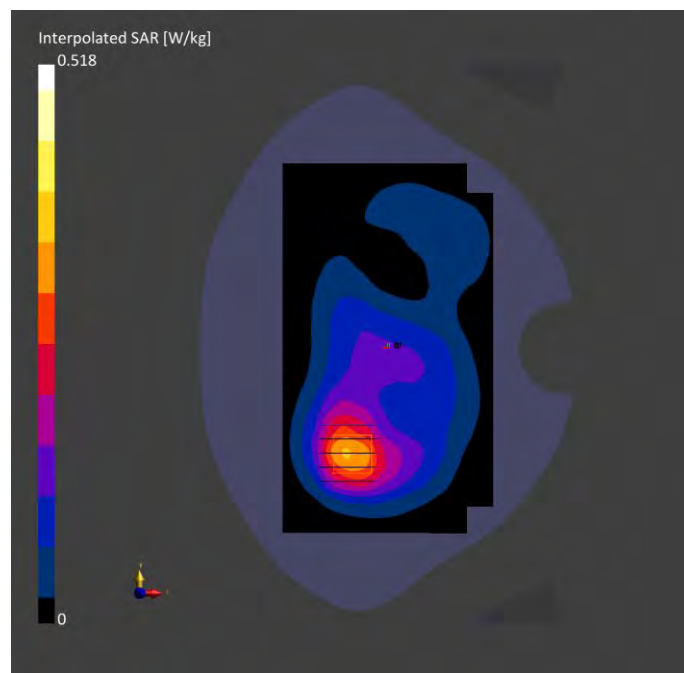
Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 2	LTE-FDD, 10169-CAF	1880.0, 18900	7.98	1.36	40.6	22.4	21.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-06	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0	Date	2024-06-06	2024-06-06
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.294	0.315
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.175	0.185
Graded Grid	Yes	Yes	Power Drift [dB]	-0.02	0.00
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		60.8
			Dist 3dB Peak [mm]		15.2



Meas.18 Body Plane with Back Side 10mm on Middle Channel in LTE Band2 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

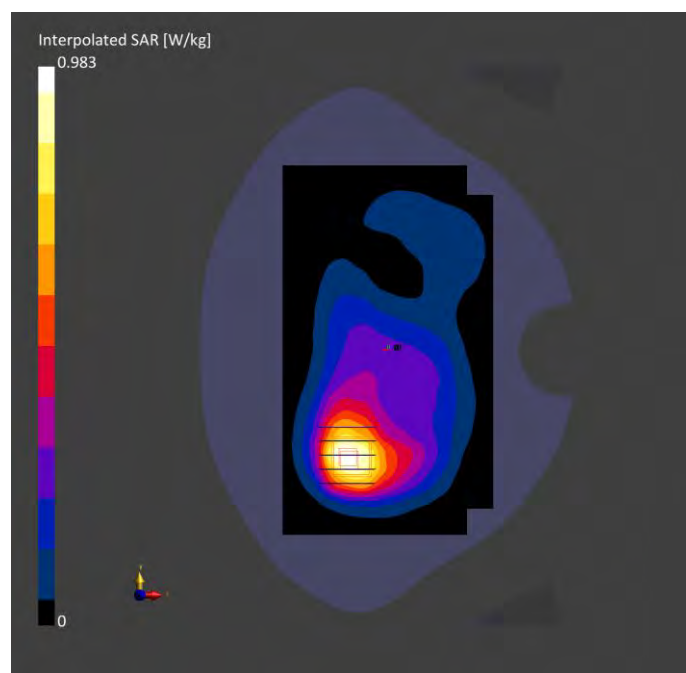
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	Band 2	LTE- FDD, 10169 -CAF	1880.0, 18900	7.98	1.36	40.6	22.4	21.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-06	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0	Date	2024-06-06	2024-06-06
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.505	0.568
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.296	0.318
Graded Grid	Yes	Yes	Power Drift [dB]	-0.02	0.05
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Scaling		
Detection			Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		54.1
			Dist 3dB Peak [mm]		12.9



Meas.19 Right Head with Cheek on Middle Channel in LTE Band4 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
RightHead, HSL	CHEEK, 0.00	Band 4	LTE-FDD, 10169-CAF	1732.5, 20175	8.52	1.37	40.3	22.4	21.2

Hardware Setup

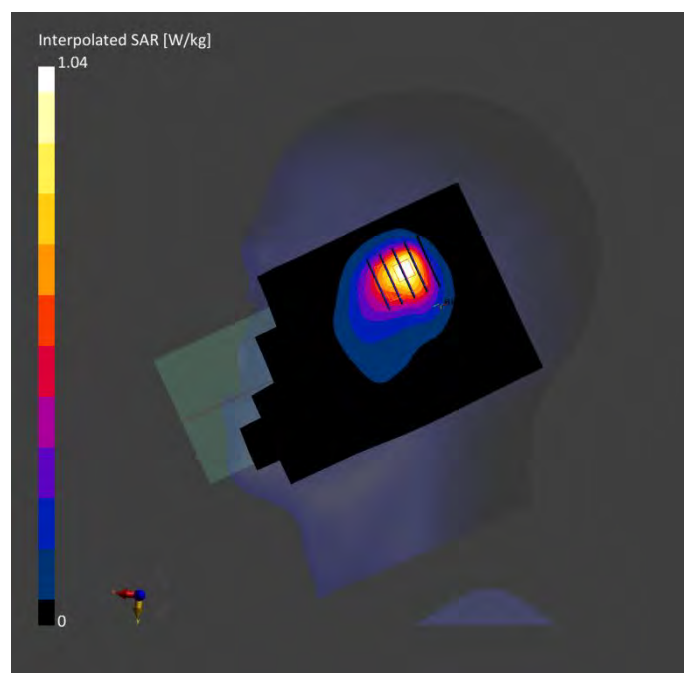
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-07	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-07	2024-06-07
psSAR1g [W/kg]	0.627	0.637
psSAR10g [W/kg]	0.344	0.355
Power Drift [dB]	0.00	0.01
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		64.4
Dist 3dB Peak [mm]		9.6



Meas.20 Body Plane with Back Side 15mm on Low Channel in LTE Band4 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

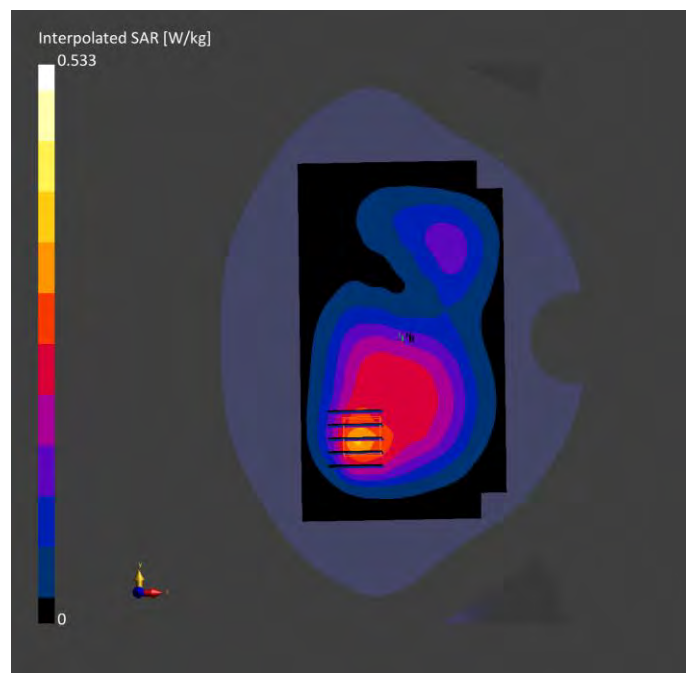
Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 4	LTE-FDD, 10169-CAF	1720.0, 20050	8.52	1.33	40.9	22.4	21.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-07	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0	Date	2024-06-07	2024-06-07
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.297	0.315
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.177	0.187
Graded Grid	Yes	Yes	Power Drift [dB]	0.07	-0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		58.0
			Dist 3dB Peak [mm]		14.8



Meas.21 Body Plane with Back Side 10mm on Low Channel in LTE Band4 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

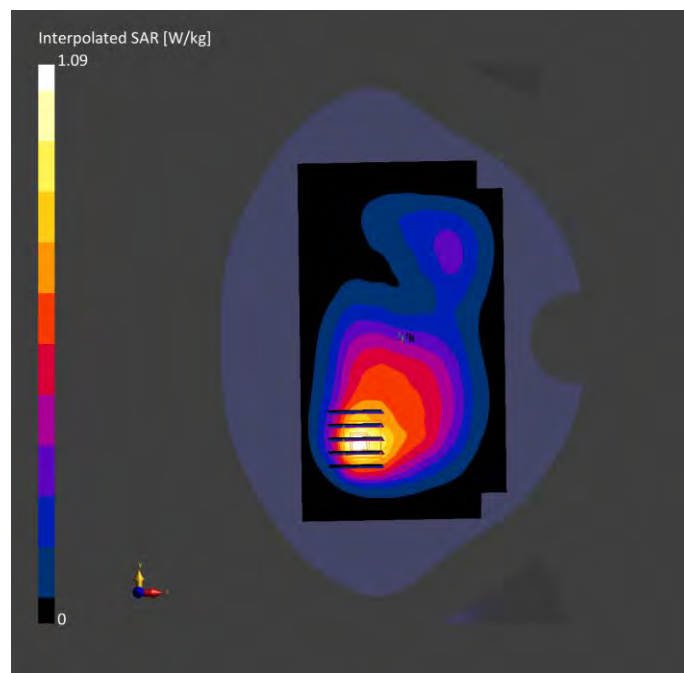
Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	Band 4	LTE-FDD, 10169-CAF	1720.0, 20050	8.52	1.33	40.9	22.4	21.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-07	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0	Date	2024-06-07	2024-06-07
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.569	0.623
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.330	0.354
Graded Grid	Yes	Yes	Power Drift [dB]	-0.11	-0.13
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		57.5
			Dist 3dB Peak [mm]		12.2



Meas.22 Body Plane with Back Side 0mm on Low Channel in LTE Band4 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

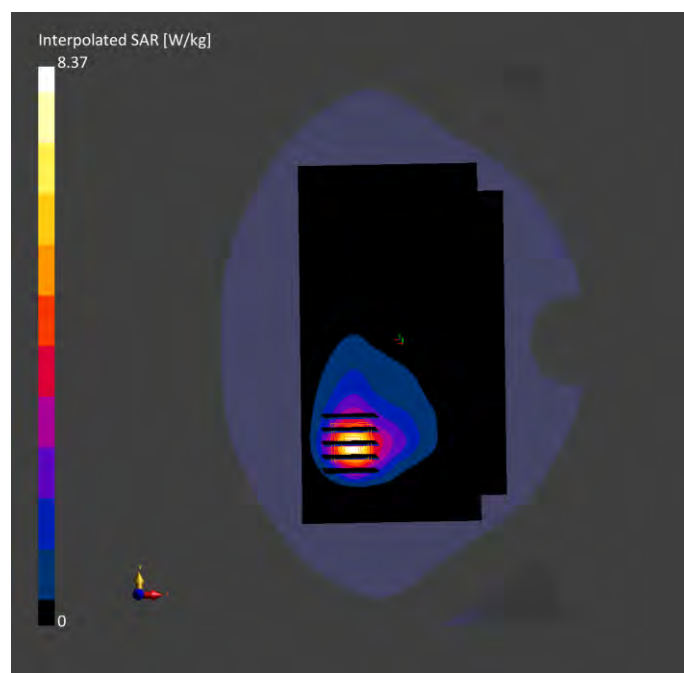
Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 0.00	Band 4	LTE-FDD, 10169-CAF	1720.0, 20050	8.52	1.33	40.9	22.4	21.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-07	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0	Date	2024-06-07	2024-06-07
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	3.82	4.00
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	1.96	1.96
Graded Grid	Yes	Yes	Power Drift [dB]	0.01	-0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	All points	All points	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		49.4
			Dist 3dB Peak [mm]		7.2



Meas.23 Right Head with Cheek on High Channel in LTE Band5 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
RightHead, HSL	CHEEK, 0.00	Band 5	LTE-FDD, 10175-CAH	844.0, 20600	9.96	0.920	41.2	22.3	21.1

Hardware Setup

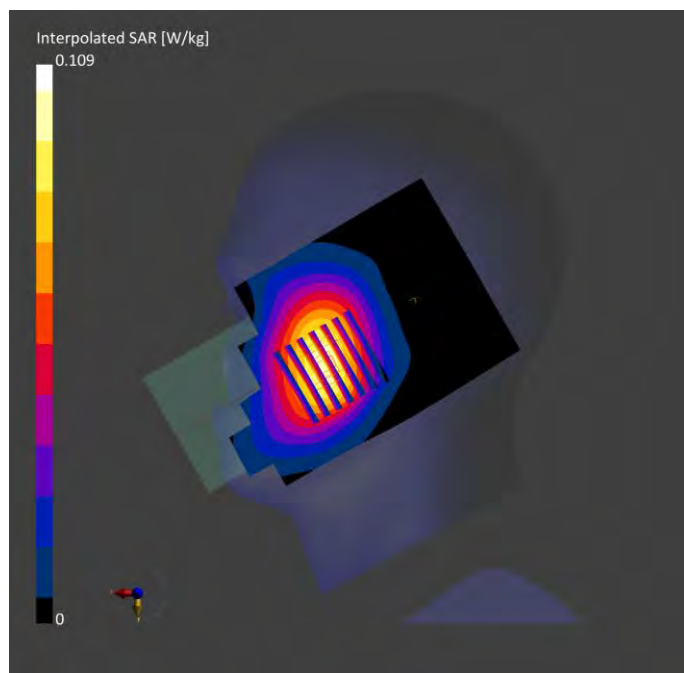
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-21	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-21	2024-05-21
psSAR1g [W/kg]	0.078	0.084
psSAR10g [W/kg]	0.054	0.065
Power Drift [dB]	0.11	-0.10
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		77.1
Dist 3dB Peak [mm]		24.4



Meas.24 Body Plane with Back Side 15mm on Middle Channel in LTE Band5 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

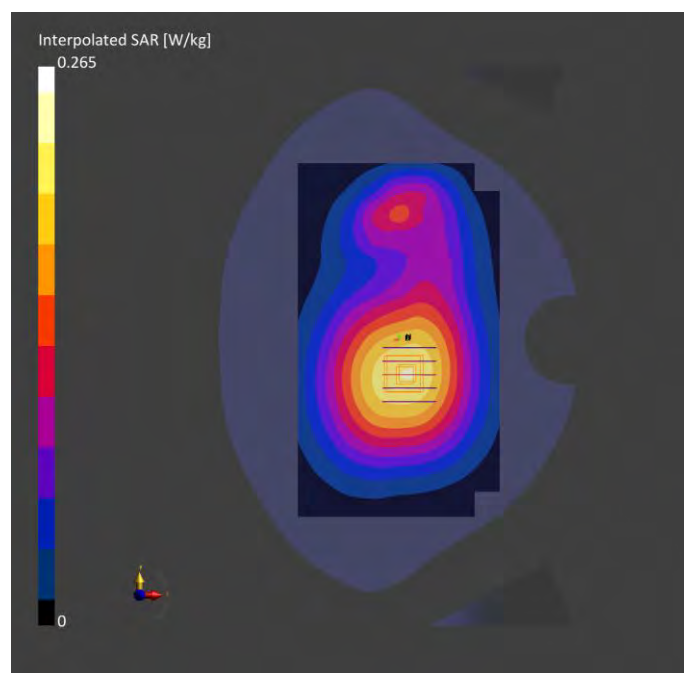
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 5	LTE- FDD, 10175 -CAH	836.5, 20525	9.96	0.904	41.6	22.3	21.1

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-21	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0	Date	2024-05-21	2024-05-21
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.196	0.205
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.139	0.156
Graded Grid	Yes	Yes	Power Drift [dB]	-0.03	0.02
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	All points	All points	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		76.7
			Dist 3dB Peak [mm]		> 16.0



Meas.25 Body Plane with Back Side 10mm on Middle Channel in LTE Band5 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

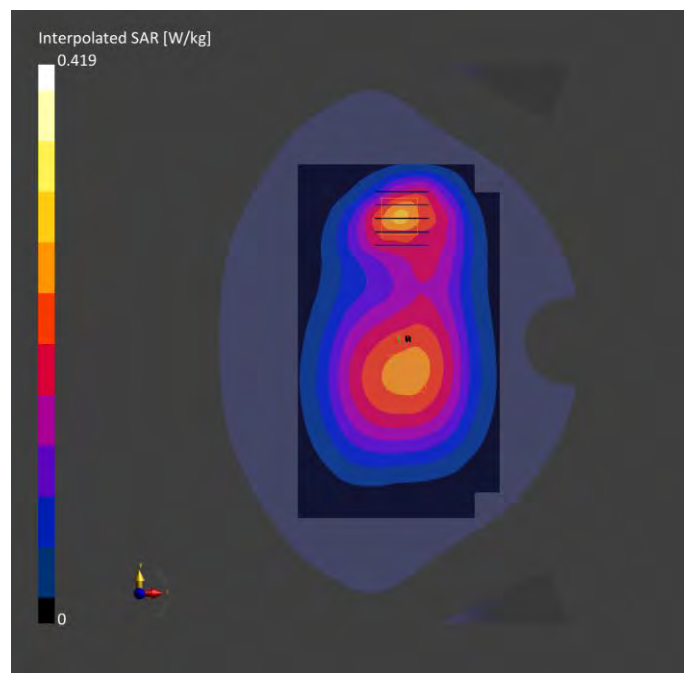
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	Band 5	LTE- FDD, 10175 -CAH	836.5, 20525	9.96	0.904	41.6	22.3	21.1

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-21	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0	Date	2024-05-21	2024-05-21
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.249	0.246
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.163	0.147
Graded Grid	Yes	Yes	Power Drift [dB]	-0.02	0.10
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	All points	All points	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		55.7
			Dist 3dB Peak [mm]		14.8



Meas.26 Right Head with Cheek on Middle Channel in LTE Band7 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
RightHead, HSL	CHEEK, 0.00	Band 7	LTE-FDD, 10169-CAF	2535.0, 21100	7.41	1.87	39.6	22.4	21.3

Hardware Setup

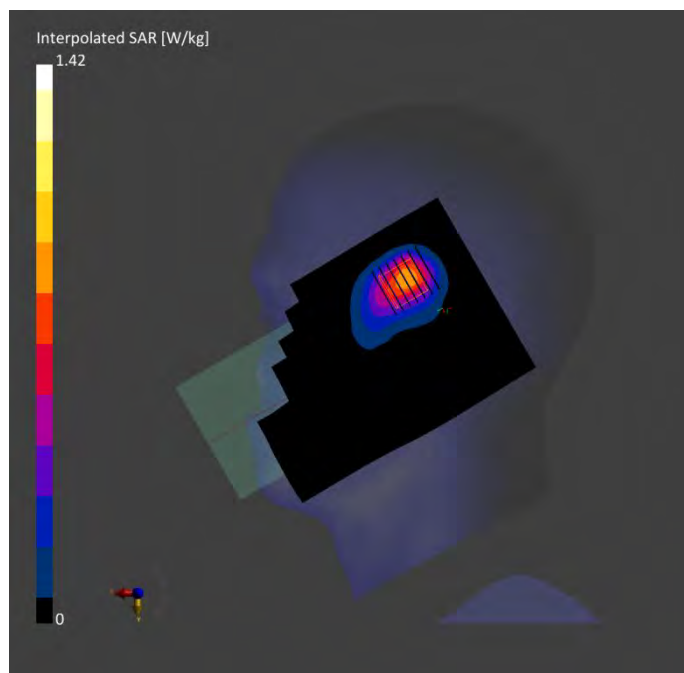
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-12	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-12	2024-06-12
psSAR1g [W/kg]	0.730	0.792
psSAR10g [W/kg]	0.369	0.395
Power Drift [dB]	0.07	-0.05
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		58.3
Dist 3dB Peak [mm]		9.9



Meas.27 Body Plane with Back Side 15mm on Middle Channel in LTE Band7 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

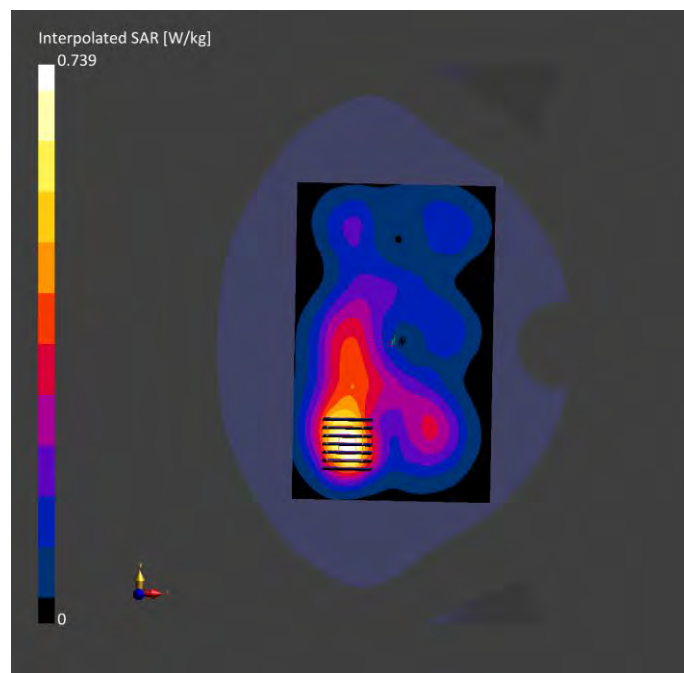
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 7	LTE- FDD, 10169 -CAF	2535.0, 21100	7.41	1.87	39.6	22.4	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 2024-06-12	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0	Date	2024-06-12	2024-06-12
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.371	0.375
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.197	0.197
Graded Grid	Yes	Yes	Power Drift [dB]	0.01	0.00
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		47.9
			Dist 3dB Peak [mm]		13.6



Meas.28 Body Plane with Back Side 10mm on Middle Channel in LTE Band7 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

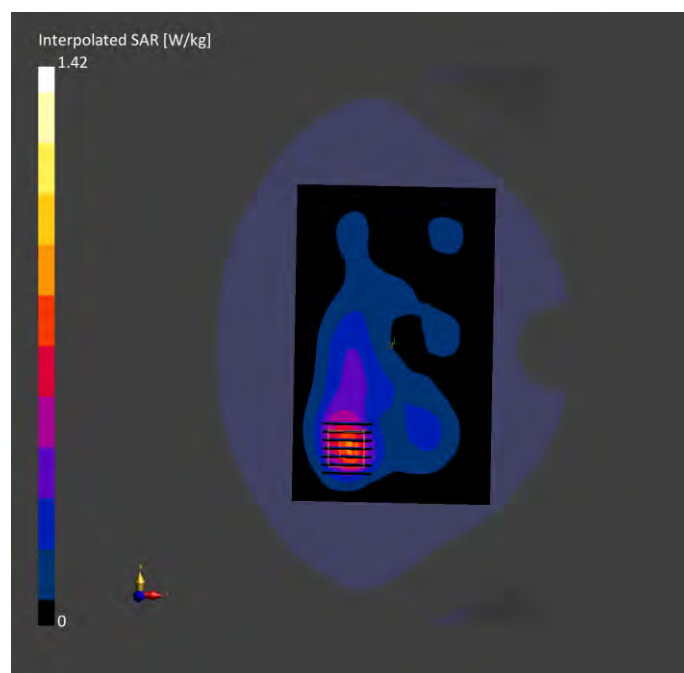
Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	Band 7	LTE-FDD, 10169-CAF	2535.0, 21100	7.41	1.87	39.6	22.4	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 2024-06-12	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0	Date	2024-06-12	2024-06-12
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.679	0.688
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.348	0.344
Graded Grid	Yes	Yes	Power Drift [dB]	-0.07	-0.03
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		47.4
			Dist 3dB Peak [mm]		12.2



Meas.29 Body Plane with Back Side 0mm on Middle Channel in LTE Band7 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

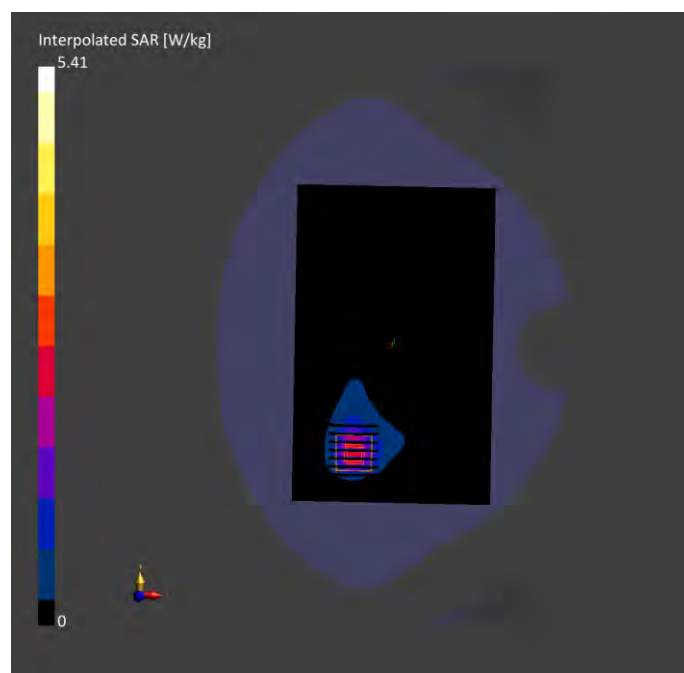
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 0.00	Band 7	LTE- FDD, 10169 -CAF	2535.0, 21100	7.41	1.87	39.6	22.4	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 2024-06-12	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0	Date	2024-06-12	2024-06-12
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	2.12	2.19
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.972	0.933
Graded Grid	Yes	Yes	Power Drift [dB]	0.03	-0.05
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		38.1
			Dist 3dB Peak [mm]		6.7



Meas.30 Right Head with Cheek on Middle Channel in LTE Band12 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
RightHead, HSL	CHEEK, 0.00	Band 12	LTE-FDD, 10175-CAH	707.5, 23095	10.31	0.883	42.5	22.4	21.3

Hardware Setup

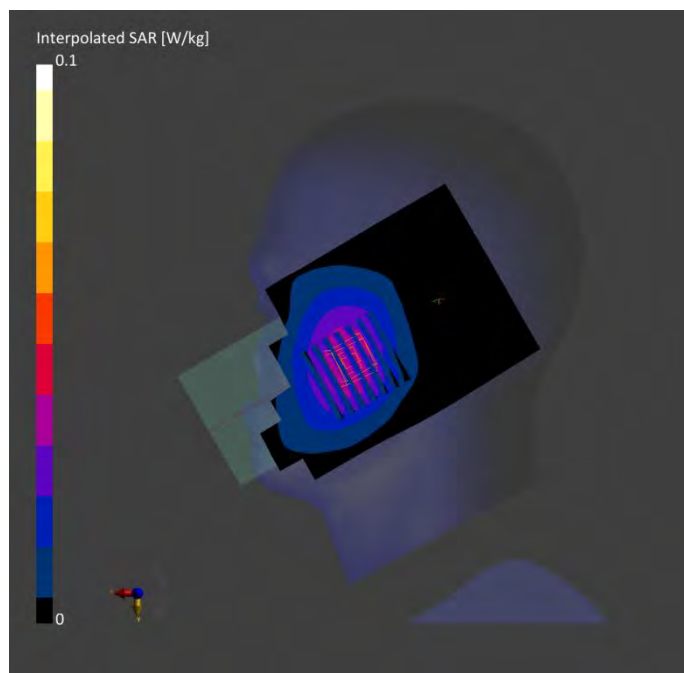
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-17	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-17	2024-05-17
psSAR1g [W/kg]	0.036	0.038
psSAR10g [W/kg]	0.025	0.030
Power Drift [dB]	0.13	-0.05
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		82.6
Dist 3dB Peak [mm]		> 16.0



Meas.31 Body Plane with Back Side 15mm on High Channel in LTE Band12 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

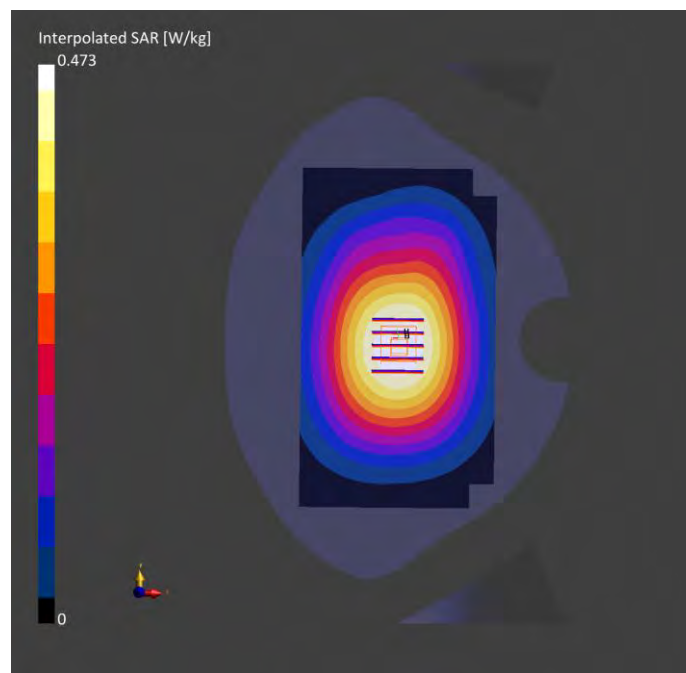
Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 12	LTE-FDD, 10175-CAH	711.0, 23130	10.31	0.906	42.0	22.4	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 2024-05-17	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0	Date	2024-05-17	2024-05-17
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.347	0.370
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.248	0.285
Graded Grid	Yes	Yes	Power Drift [dB]	-0.01	-0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	All points	All points	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		77.8
			Dist 3dB Peak [mm]		> 16.0



Meas.32 Body Plane with Back Side 10mm on High Channel in LTE Band12 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

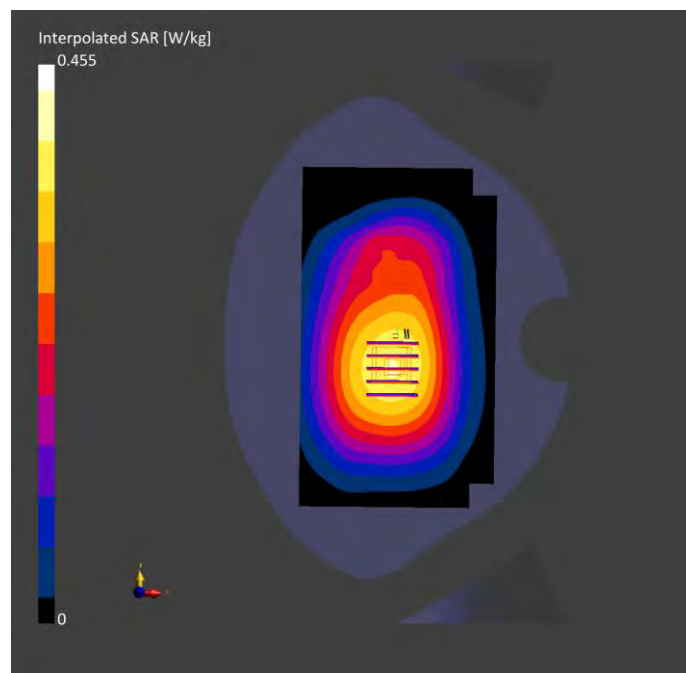
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	Band 12	LTE- FDD, 10175 -CAH	711.0, 23130	10.31	0.906	42.0	22.4	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 2024-05-17	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0	Date	2024-05-17	2024-05-17
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.339	0.362
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.243	0.283
Graded Grid	Yes	Yes	Power Drift [dB]	-0.02	0.00
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		79.3
			Dist 3dB Peak [mm]		> 16.0



Meas.33 Right Head with Cheek on Low Channel in LTE Band17 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
RightHead, HSL	CHEEK, 0.00	Band 17	LTE-FDD, 10175-CAH	709.0, 23780	10.31	0.894	42.3	22.4	21.3

Hardware Setup

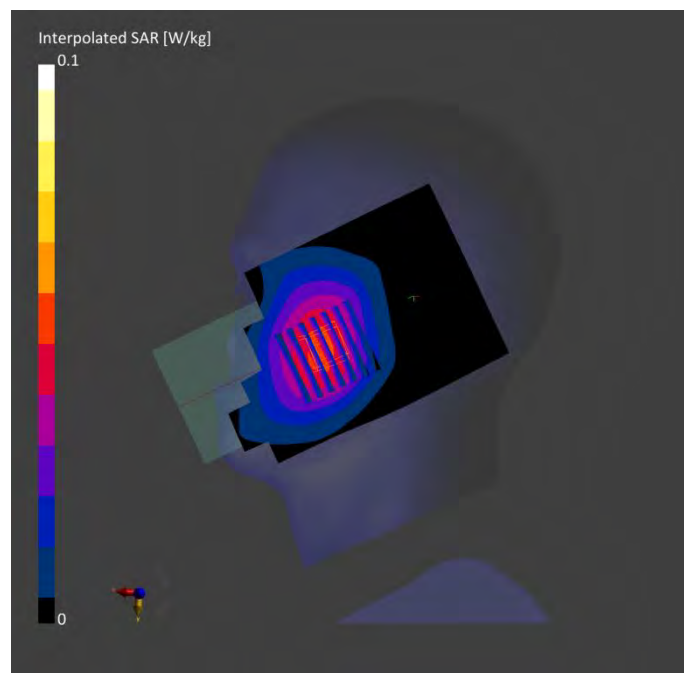
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-17	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-17	2024-05-17
psSAR1g [W/kg]	0.047	0.050
psSAR10g [W/kg]	0.033	0.040
Power Drift [dB]	0.04	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		83.3
Dist 3dB Peak [mm]		> 16.0



Meas.34 Body Plane with Back Side 15mm on High Channel in LTE Band17 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

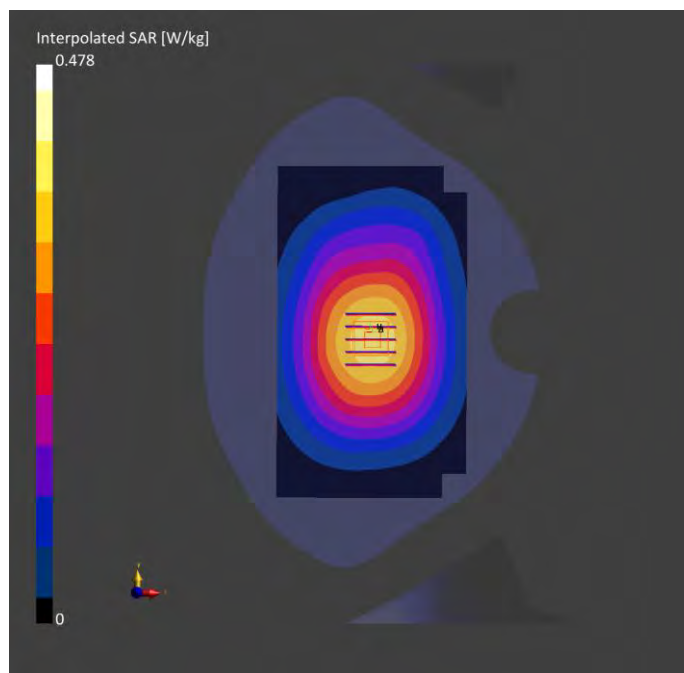
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 17	LTE- FDD, 10175 -CAH	711.0, 23800	10.31	0.906	42.0	22.4	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 2024-05-17	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0	Date	2024-05-17	2024-05-17
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.342	0.369
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.245	0.285
Graded Grid	Yes	Yes	Power Drift [dB]	0.07	-0.03
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	All points	All points	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		75.6
			Dist 3dB Peak [mm]		> 16.0



Meas.35 Body Plane with Back Side 10mm on High Channel in LTE Band17 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

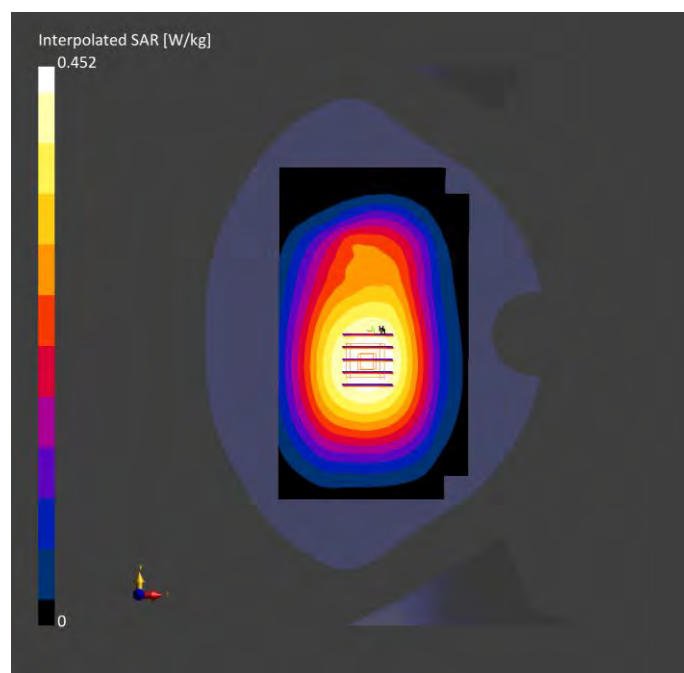
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	Band 17	LTE- FDD, 10175 -CAH	711.0, 23800	10.31	0.906	42.0	22.4	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 2024-05-17	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0	Date	2024-05-17	2024-05-17
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.343	0.365
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.246	0.285
Graded Grid	Yes	Yes	Power Drift [dB]	0.03	-0.09
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		80.6
			Dist 3dB Peak [mm]		> 16.0



Meas.36 Right Head with Cheek on High Channel in LTE Band26 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
RightHead, HSL	CHEEK, 0.00	Band 26	LTE-FDD, 10181-CAF	841.5, 26965	9.96	0.912	41.4	22.3	21.1

Hardware Setup

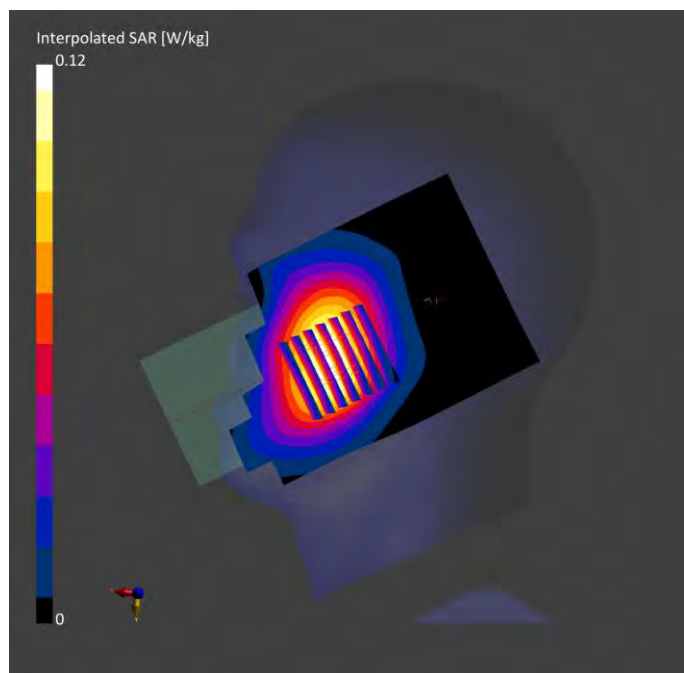
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-21	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-21	2024-05-21
psSAR1g [W/kg]	0.086	0.092
psSAR10g [W/kg]	0.059	0.072
Power Drift [dB]	0.03	0.01
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		77.3
Dist 3dB Peak [mm]		23.5



Meas.37 Body Plane with Back Side 15mm on Middle Channel in LTE Band26 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

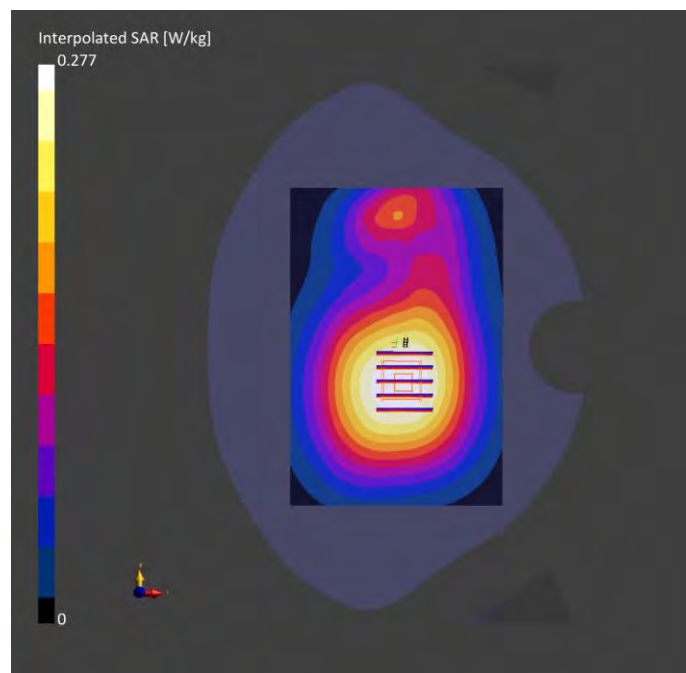
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 26	LTE- FDD, 10181 -CAF	831.5, 26865	9.96	0.883	42.1	22.3	21.1

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-21	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 32.0 x 30.0	Date	2024-05-21	2024-05-21
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.204	0.215
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.144	0.164
Graded Grid	Yes	Yes	Power Drift [dB]	0.02	-0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	All points	All points	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		77.3
			Dist 3dB Peak [mm]		> 16.0



Meas.38 Body Plane with Back Side 10mm on Middle Channel in LTE Band26 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

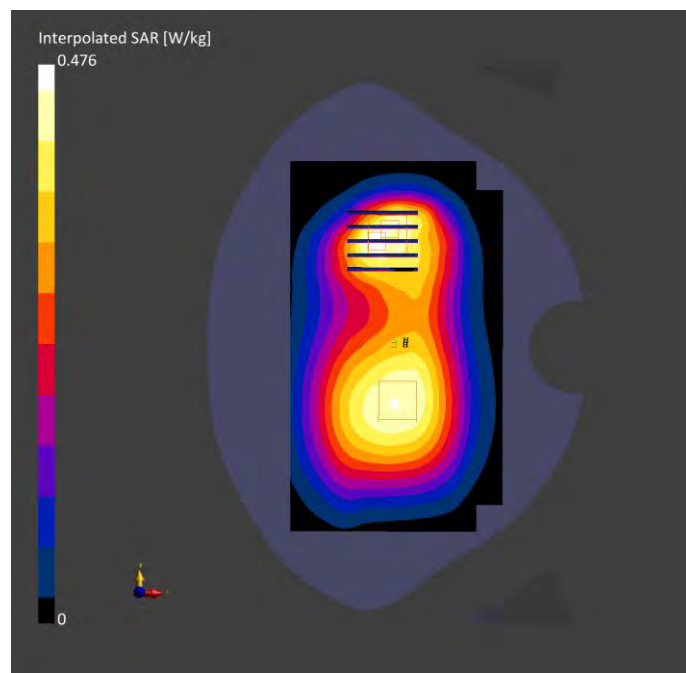
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	Band 26	LTE- FDD, 10181 -CAF	831.5, 26865	9.96	0.883	42.1	22.3	21.1

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-21	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0	Date	2024-05-21	2024-05-21
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.279	0.280
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.189	0.172
Graded Grid	Yes	Yes	Power Drift [dB]	0.03	0.03
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		56.0
			Dist 3dB Peak [mm]		15.1



Meas.39 Right Head with Cheek on Middle Channel in LTE Band66 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
RightHead, HSL	CHEEK, 0.00	Band 66	LTE-FDD, 10169-CAF	1745.0, 132322	8.52	1.37	40.5	22.7	21.5

Hardware Setup

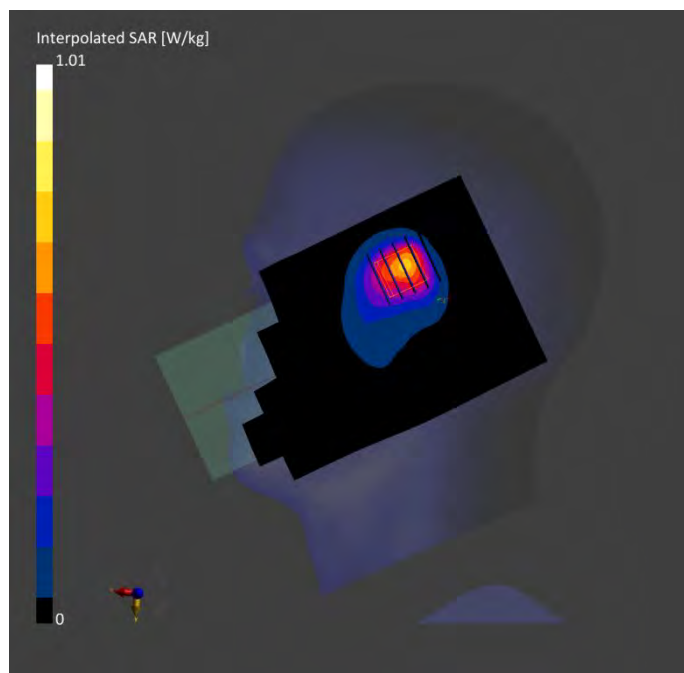
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-11	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-11	2024-06-11
psSAR1g [W/kg]	0.556	0.601
psSAR10g [W/kg]	0.310	0.336
Power Drift [dB]	0.04	0.07
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		60.0
Dist 3dB Peak [mm]		13.2



Meas.40 Body Plane with Back Side 15mm on Middle Channel in LTE Band66 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

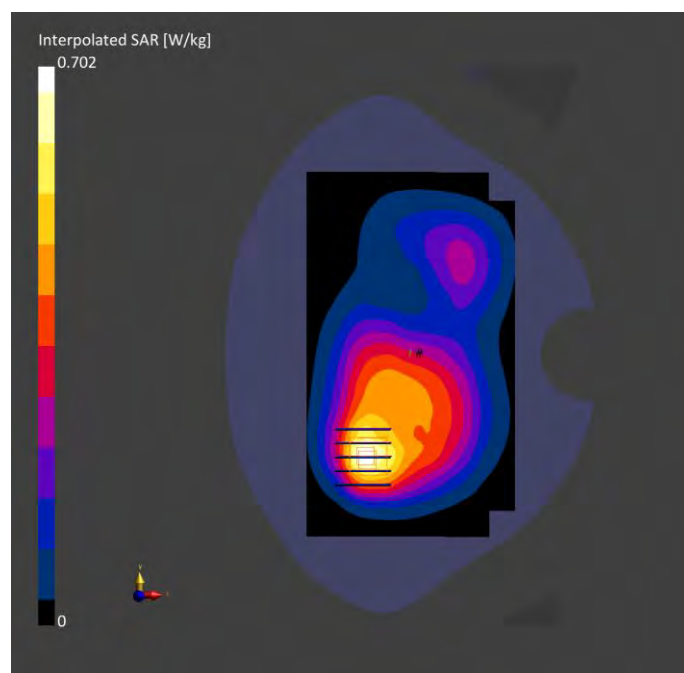
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 66	LTE- FDD, 10169 -CAF	1745.0, 132322	8.52	1.37	40.5	22.7	21.5

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-11	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0	Date	2024-06-11	2024-06-11
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.393	0.412
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.233	0.242
Graded Grid	Yes	Yes	Power Drift [dB]	0.03	-0.04
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		57.5
			Dist 3dB Peak [mm]		14.8



Meas.41 Body Plane with Back Side 10mm on Middle Channel in LTE Band66 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

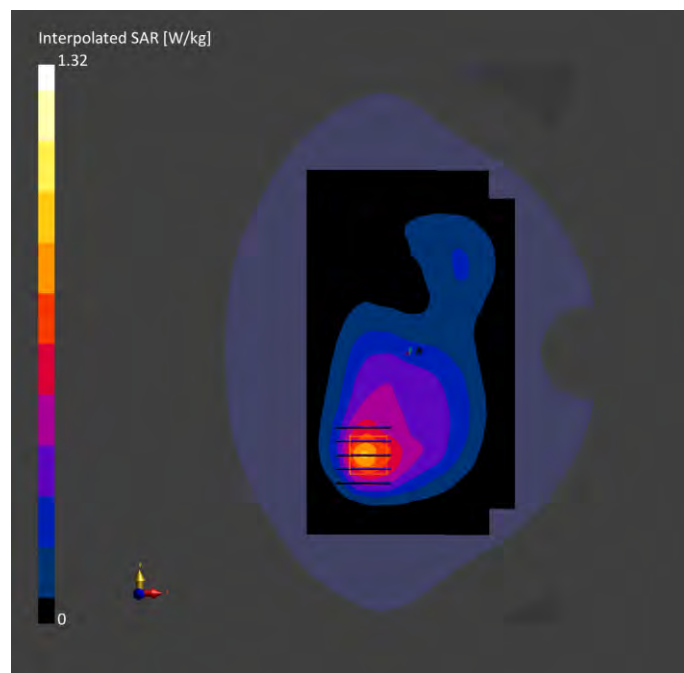
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	Band 66	LTE- FDD, 10169 -CAF	1745.0, 132322	8.52	1.37	40.5	22.7	21.5

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-11	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0	Date	2024-06-11	2024-06-11
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.727	0.736
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.417	0.428
Graded Grid	Yes	Yes	Power Drift [dB]	0.00	0.08
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		57.5
			Dist 3dB Peak [mm]		13.2



Meas.42 Body Plane with Back Side 0mm on Middle Channel in LTE Band66 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

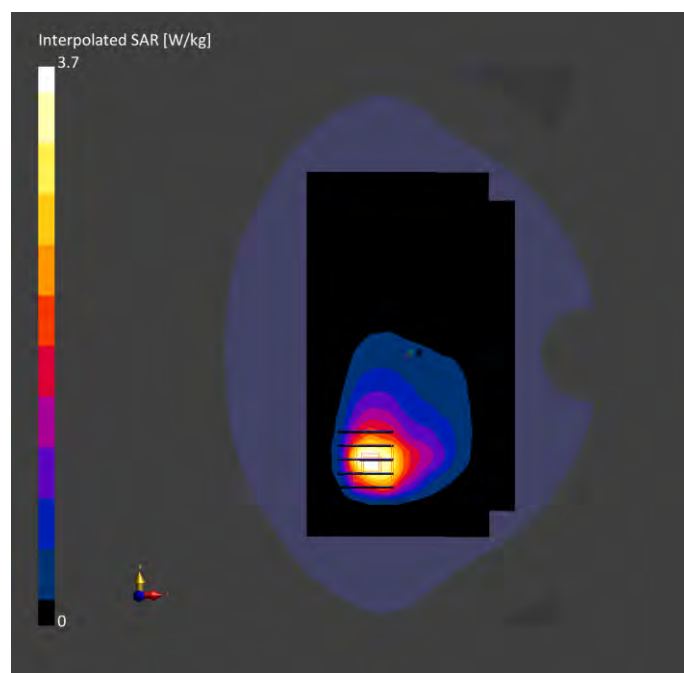
Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 0.00	Band 66	LTE-FDD, 10169-CAF	1745.0, 132322	8.52	1.37	40.5	22.7	21.5

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-11	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	32.0 x 32.0 x 30.0	Date	2024-06-11	2024-06-11
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	1.56	1.89
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.893	0.956
Graded Grid	Yes	Yes	Power Drift [dB]	0.00	-0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		43.4
			Dist 3dB Peak [mm]		10.7



Meas.43 Right Head with Cheek on High Channel in LTE Band38 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
RightHead, HSL	CHEEK, 0.00	Band 38	LTE-TDD, 10172-CAH	2610.0, 38150	7.41	1.99	38.2	22.4	21.3

Hardware Setup

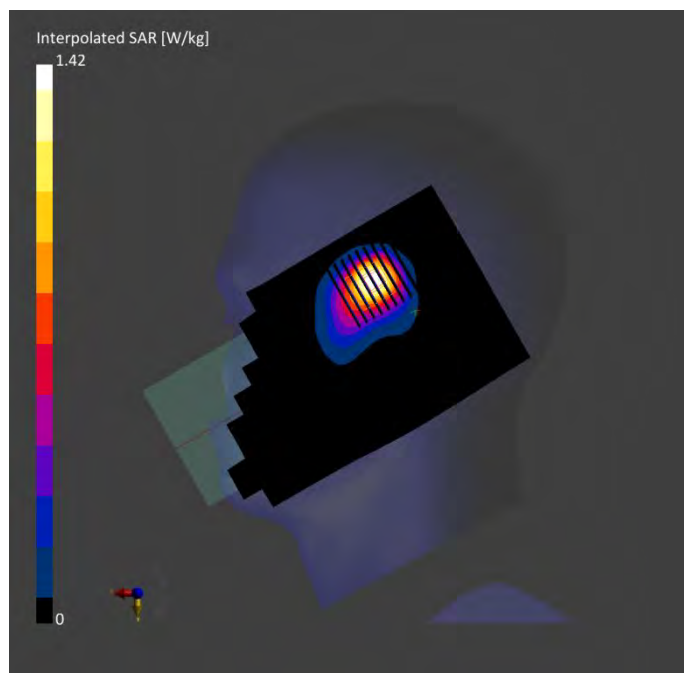
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-12	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-12	2024-06-12
psSAR1g [W/kg]	0.662	0.720
psSAR10g [W/kg]	0.333	0.349
Power Drift [dB]	-0.01	-0.02
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		44.6
Dist 3dB Peak [mm]		10.0



Meas.44 Body Plane with Back Side 15mm on High Channel in LTE Band38 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

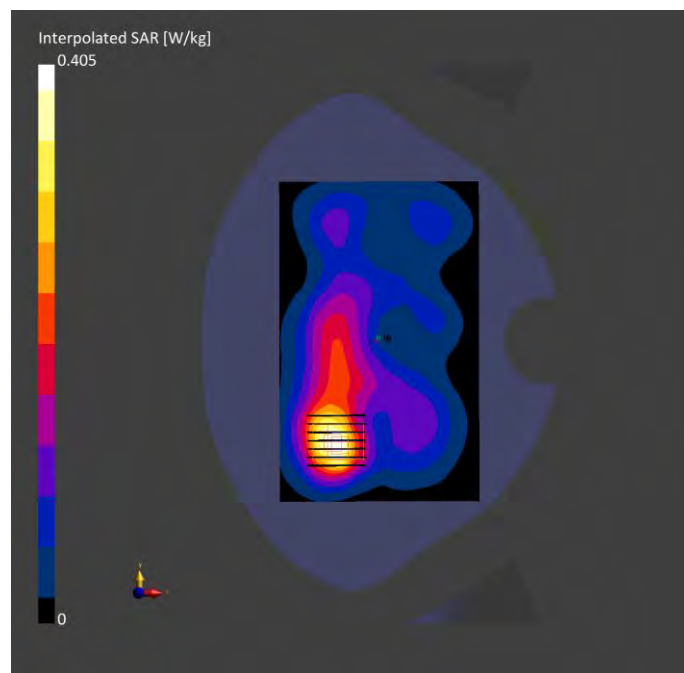
Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 38	LTE-TDD, 10172-CAH	2610.0, 38150	7.41	1.99	38.2	22.4	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 2024-06-12	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0	Date	2024-06-12	2024-06-12
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.184	0.180
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.097	0.075
Graded Grid	Yes	Yes	Power Drift [dB]	0.02	0.04
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	Y	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		45.2
			Dist 3dB Peak [mm]		4.0



Meas.45 Body Plane with Back Side 10mm on High Channel in LTE Band38 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

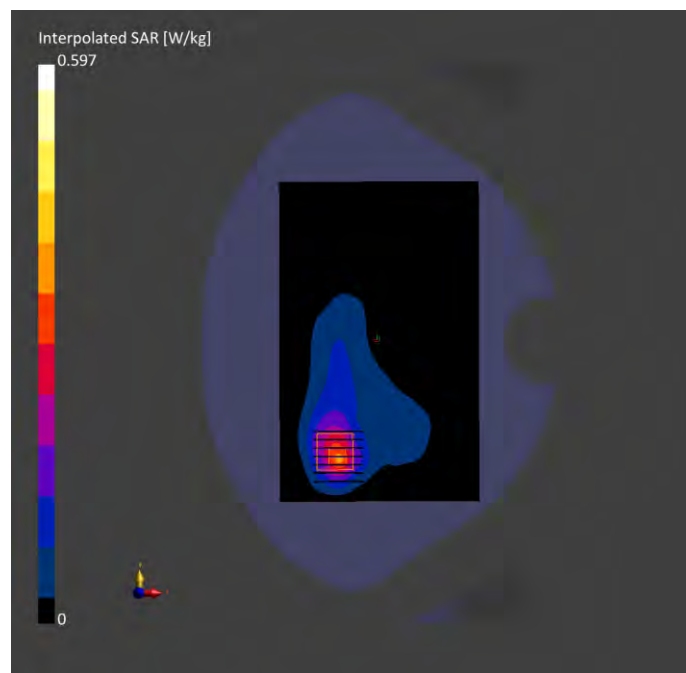
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	Band 38	LTE- TDD, 10172 -CAH	2610.0, 38150	7.41	1.99	38.2	22.4	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 2024-06-12	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0	Date	2024-06-12	2024-06-12
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.276	0.278
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.133	0.133
Graded Grid	Yes	Yes	Power Drift [dB]	0.01	-0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		43.2
			Dist 3dB Peak [mm]		10.0



Meas.46 Right Head with Cheek on Middle Channel in LTE Band41 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
RightHead, HSL	CHEEK, 0.00	Band 41	LTE-TDD, 10172-CAH	2593.0, 40620	7.41	1.96	38.8	22.4	21.2

Hardware Setup

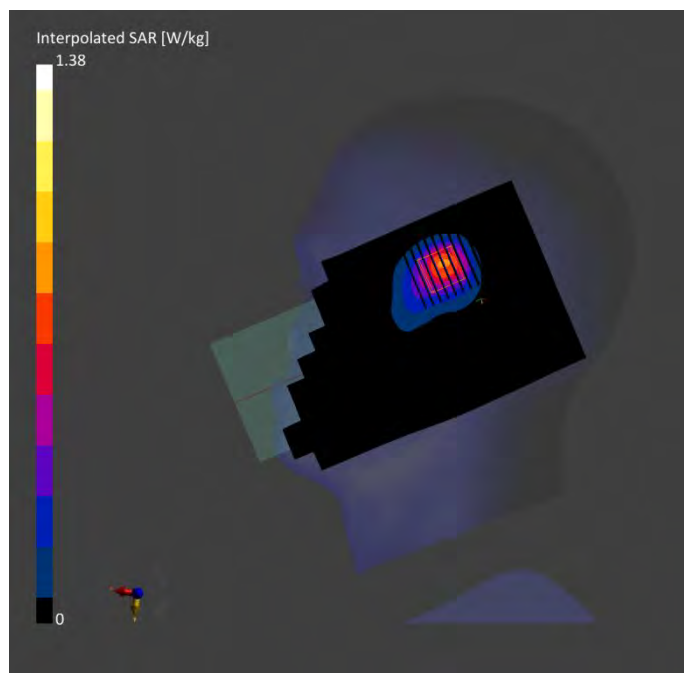
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-13	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-13	2024-06-13
psSAR1g [W/kg]	0.650	0.714
psSAR10g [W/kg]	0.327	0.346
Power Drift [dB]	0.04	0.04
Power	Disabled	Disabled
Scaling		
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		45.4
Dist 3dB Peak [mm]		10.0



Meas.47 Body Plane with Back Side 15mm on Low Channel in LTE Band41 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

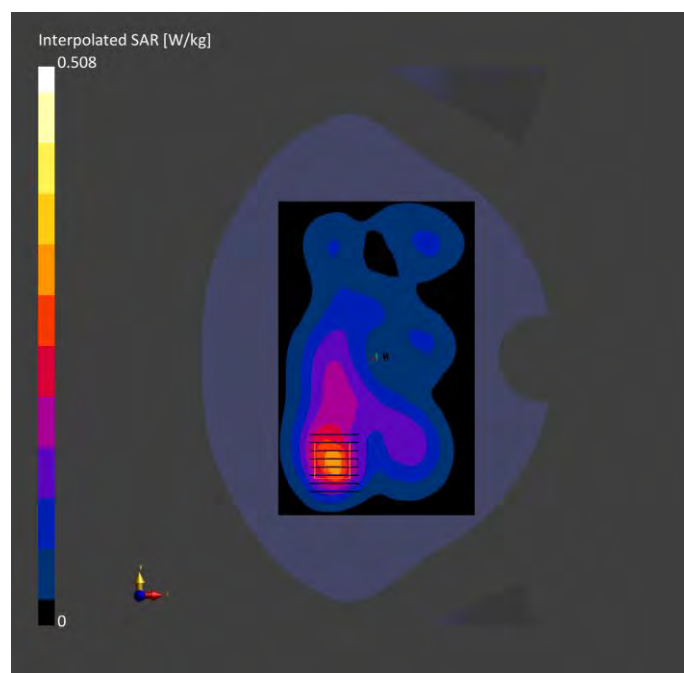
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	Band 41	LTE-TDD, 10172-CAH	2506.0, 39750	7.41	1.84	39.7	22.4	21.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-13	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0	Date	2024-06-13	2024-06-13
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.258	0.262
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.139	0.139
Graded Grid	Yes	Yes	Power Drift [dB]	-0.01	0.00
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		48.3
			Dist 3dB Peak [mm]		14.0



Meas.48 Body Plane with Back Side 10mm on Low Channel in LTE Band41 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

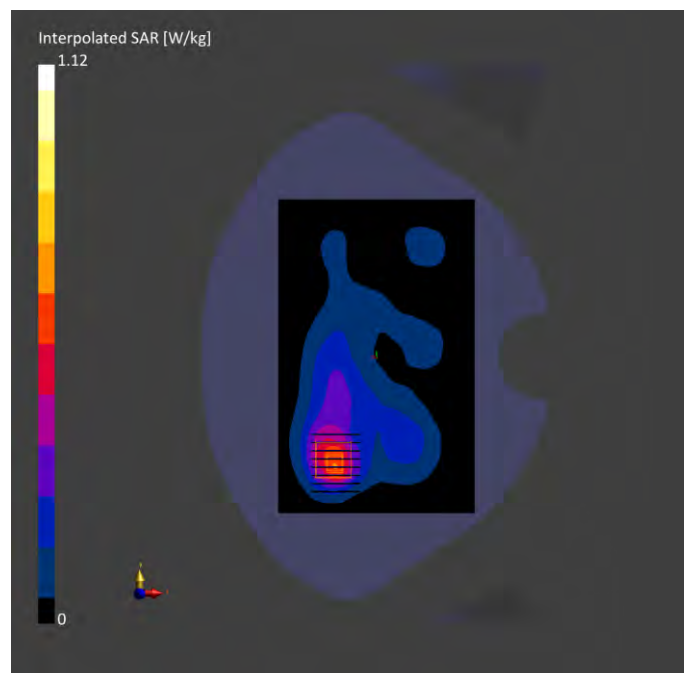
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	Band 41	LTE- TDD, 10172 -CAH	2506.0, 39750	7.41	1.84	39.7	22.4	21.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-13	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0	Date	2024-06-13	2024-06-13
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.534	0.542
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.274	0.270
Graded Grid	Yes	Yes	Power Drift [dB]	-0.07	0.04
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		44.7
			Dist 3dB Peak [mm]		12.0



Meas.49 Body Plane with Back Side 0mm on Low Channel in LTE Band41 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

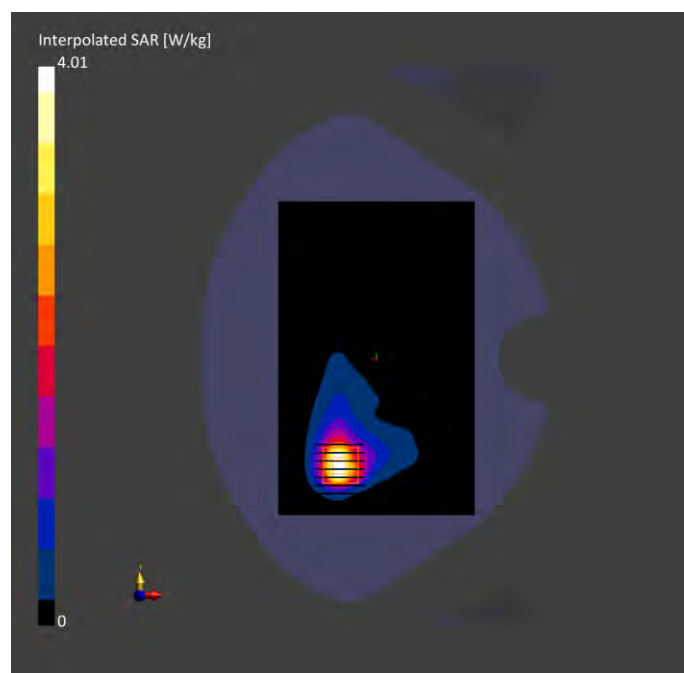
Exposure Conditions

Phantom	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 0.00	Band 41	LTE-TDD, 10172-CAH	2506.0, 39750	7.41	1.84	39.7	22.4	21.2

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-13	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0	Date	2024-06-13	2024-06-13
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	1.58	1.60
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.730	0.686
Graded Grid	Yes	Yes	Power Drift [dB]	-0.04	-0.02
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		38.6
			Dist 3dB Peak [mm]		7.6



Meas.50 Left Head with Cheek on 6 Channel in IEEE802.11b mode with Antenna 2

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

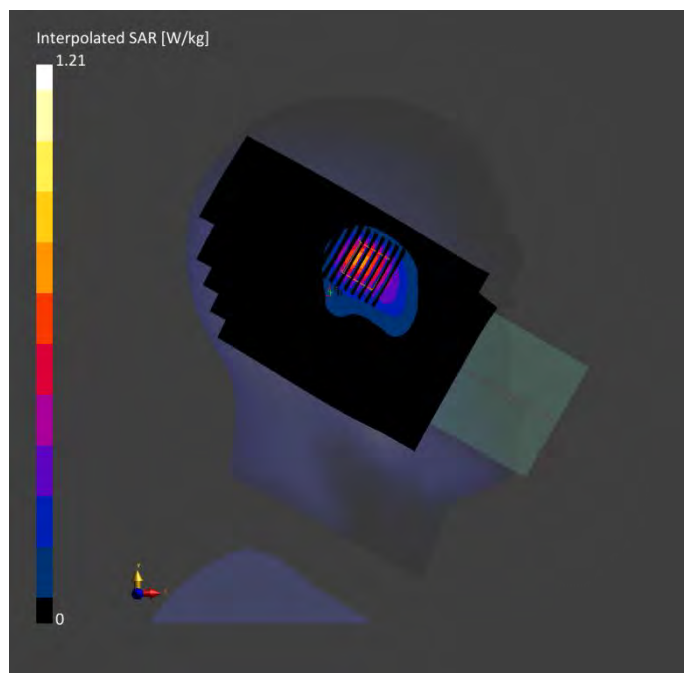
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
LeftHead, HSL	CHEEK, 0.00	WLAN 2.4G Hz	WLAN, 10315 -AAB	2437.0, 6	7.47	1.78	39.5	22.3	21.5

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-04	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0	Date	2024-06-04	2024-06-04
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.599	0.659
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.313	0.338
Graded Grid	Yes	Yes	Power Drift [dB]	0.01	0.01
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Scaling		
Detection			Factor [dB]		
Scan Method	Measured	Measured	TSL	No correction	No correction
			Correction		
			M2/M1 [%]		55.3
			Dist 3dB		9.2
			Peak [mm]		



Meas.51 Body Plane with Back Side 15mm on 6 Channel in IEEE802.11b mode with Antenna 2

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	WLAN 2.4GHz	WLAN, 10415 -AAA	2437.0, 6	7.47	1.78	39.5	22.3	21.5

Hardware Setup

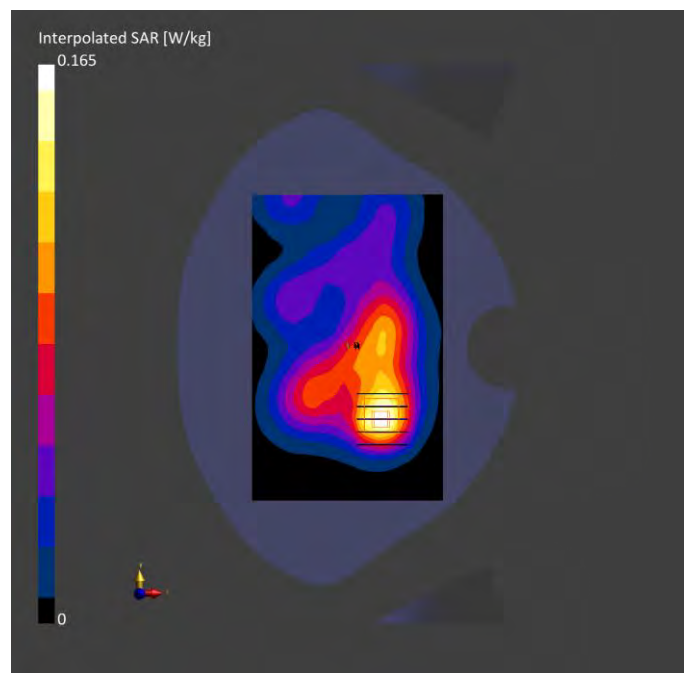
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-04	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	12.0 x 12.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-04	2024-06-04
psSAR1g [W/kg]	0.086	0.089
psSAR10g [W/kg]	0.047	0.048
Power Drift [dB]	0.06	0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.9
Dist 3dB Peak [mm]		16.0



Meas.52 Body Plane with Back Side 10mm on 6 Channel in IEEE802.11b mode with Antenna 2

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

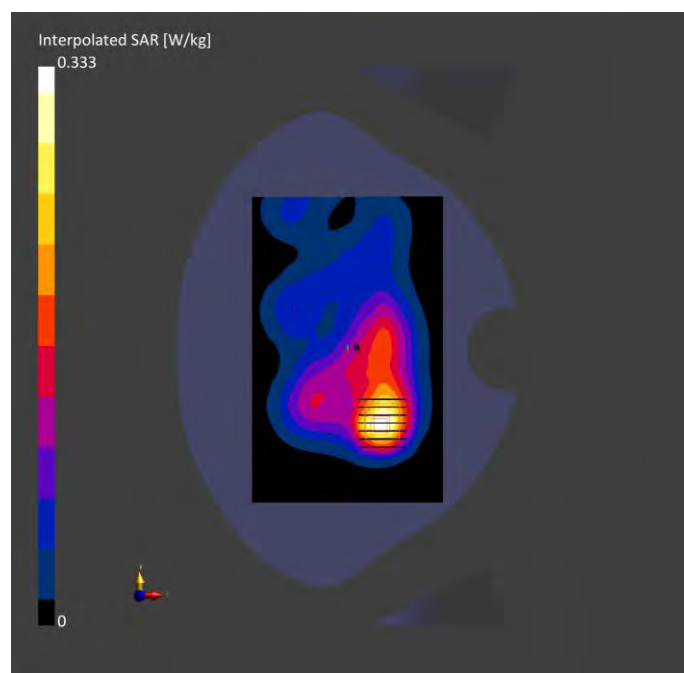
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	WLAN 2.4GHz	WLAN, 10415 -AAA	2437.0, 6	7.47	1.78	39.5	22.3	21.5

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-04	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0	Date	2024-06-04	2024-06-04
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.162	0.168
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.085	0.086
Graded Grid	Yes	Yes	Power Drift [dB]	0.00	0.02
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	Y	Y	Scaling		
Surface	VMS + 6p	VMS + 6p	Scaling		
Detection			Factor [dB]		
Scan Method	Measured	Measured	TSL	No correction	No correction
			Correction		
			M2/M1 [%]		47.8
			Dist 3dB		11.4
			Peak [mm]		



Meas.53 Left Head with Tilt on 60 Channel in IEEE802.11a mode with Antenna 2

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

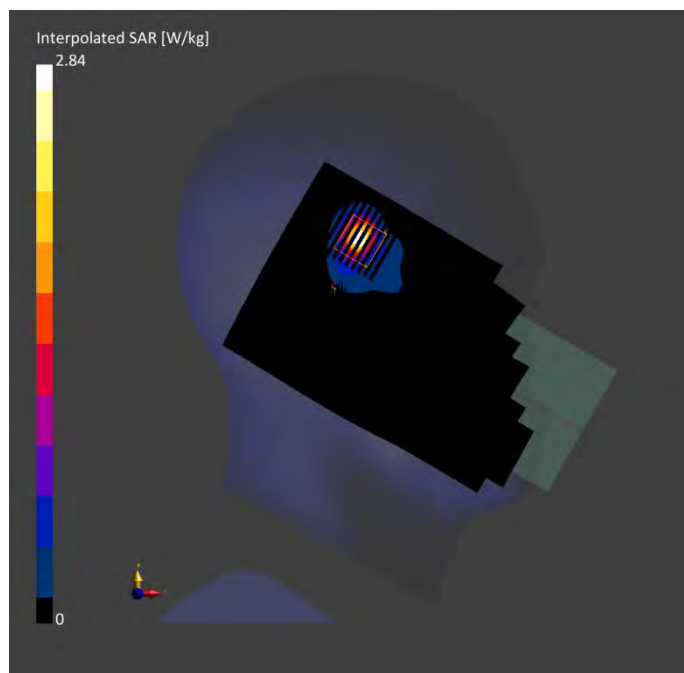
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
LeftHead, HSL	CHEEK, 0.00	WLAN 5GHz	WLAN, 10317-AAD	5300.0, 60	5.41	4.71	35.8	22.7	21.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-29	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	24.0 x 24.0 x 22.0	Date	2024-05-29	2024-05-29
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0	psSAR1g [W/kg]	0.615	0.702
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.186	0.200
Graded Grid	Yes	Yes	Power Drift [dB]	0.01	-0.02
Grading Ratio	1.5	1.4	Power	Disabled	Disabled
MAIA	Y	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Scaling		
Detection			Factor [dB]		
Scan Method	Measured	Measured	TSL	No correction	No correction
			Correction		
			M2/M1 [%]		49.4
			Dist 3dB		6.3
			Peak [mm]		



Meas.54 Left Head with Tilt on 100 Channel in IEEE802.11a mode with Antenna 2

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

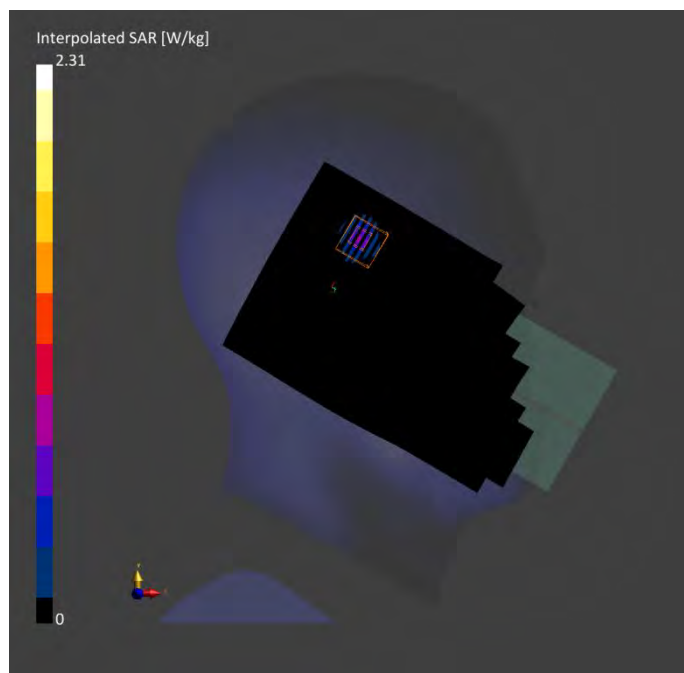
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
LeftHead, HSL	CHEEK, 0.00	WLAN 5GHz	WLAN, 10317 -AAD	5500.0, 100	4.58	4.87	36.1	22.5	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	2024-05-30	EX3DV4 - SN7607,	2023-07-04	DAE4 Sn1710,	2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	24.0 x 24.0 x 22.0	Date	2024-05-30	2024-05-30
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0	psSAR1g [W/kg]	0.503	0.567
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.146	0.157
Graded Grid	Yes	Yes	Power Drift [dB]	-0.03	0.00
Grading Ratio	1.5	1.4	Power	Disabled	Disabled
MAIA	Y	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Scaling		
Detection			Factor [dB]		
Scan Method	Measured	Measured	TSL	No correction	No correction
			Correction		
			M2/M1 [%]		48.8
			Dist 3dB		5.7
			Peak [mm]		



Meas.55 Left Head with Tilt on 149 Channel in IEEE802.11a mode with Antenna 2

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

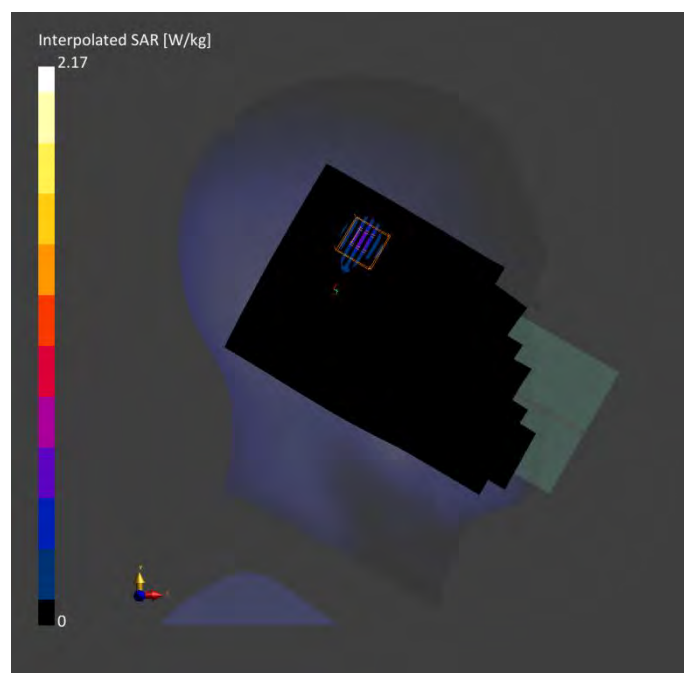
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
LeftHead, HSL	CHEEK, 0.00	WLAN 5GHz	WLAN, 10317 -AAD	5745.0, 149	4.78	5.14	36.1	22.4	21.5

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-31	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	24.0 x 24.0 x 22.0	Date	2024-05-31	2024-05-31
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0	psSAR1g [W/kg]	0.444	0.511
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.134	0.144
Graded Grid	Yes	Yes	Power Drift [dB]	0.00	0.07
Grading Ratio	1.5	1.4	Power	Disabled	Disabled
MAIA	Y	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Scaling		
Detection			Factor [dB]		
Scan Method	Measured	Measured	TSL	No correction	No correction
			Correction		
			M2/M1 [%]		47.0
			Dist 3dB		6.3
			Peak [mm]		



Meas.56 Body Plane with Back Side 15mm on 64 Channel in IEEE802.11a mode with Antenna 2

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

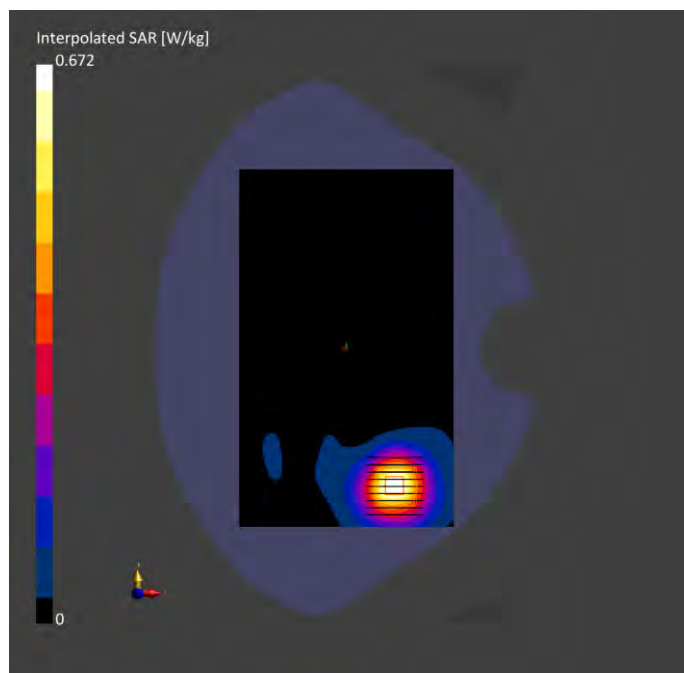
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	WLA N 5GH z	WLA N, 10400 -AAE	5320.0, 64	5.41	4.86	35.6	22.7	21.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-29	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	24.0 x 24.0 x 22.0	Date	2024-05-29	2024-05-29
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0	psSAR1g [W/kg]	0.211	0.211
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.086	0.086
Graded Grid	Yes	Yes	Power Drift [dB]	0.02	0.13
Grading Ratio	1.5	1.4	Power	Disabled	Disabled
MAIA	Y	Y	Scaling		
Surface	VMS + 6p	VMS + 6p	Scaling		
Detection			Factor [dB]		
Scan Method	Measured	Measured	TSL	No correction	No correction
			Correction		
			M2/M1 [%]		55.6
			Dist 3dB		13.2
			Peak [mm]		



Meas.57 Body Plane with Back Side 15mm on 100 Channel in IEEE802.11a mode with Antenna 2

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 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 [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	WLA N 5GH z	WLA N, 10400 -AAE	5500.0, 100	4.58	4.87	36.1	22.5	21.3

Hardware Setup

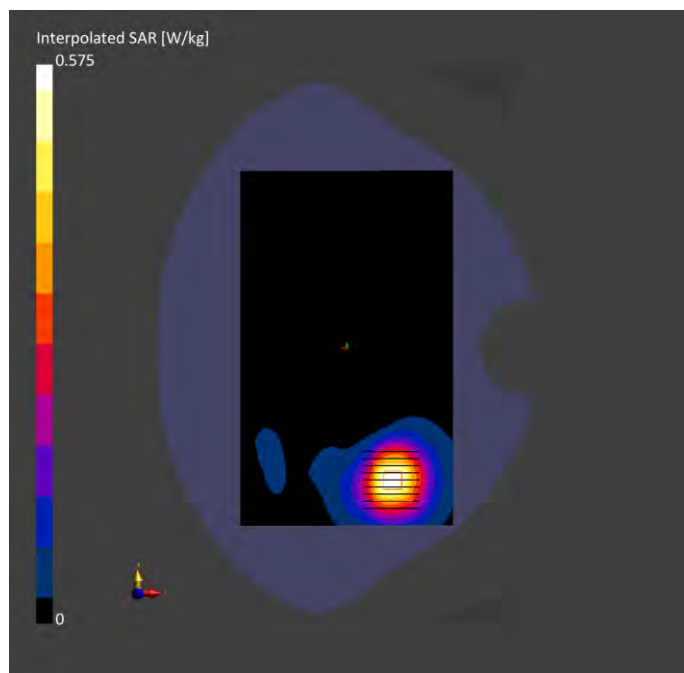
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-30	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-30	2024-05-30
psSAR1g [W/kg]	0.169	0.171
psSAR10g [W/kg]	0.069	0.070
Power Drift [dB]	-0.13	0.07
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		53.4
Dist 3dB Peak [mm]		12.9



Meas.58 Body Plane with Back Side 15mm on 149 Channel in IEEE802.11a mode with Antenna 2

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

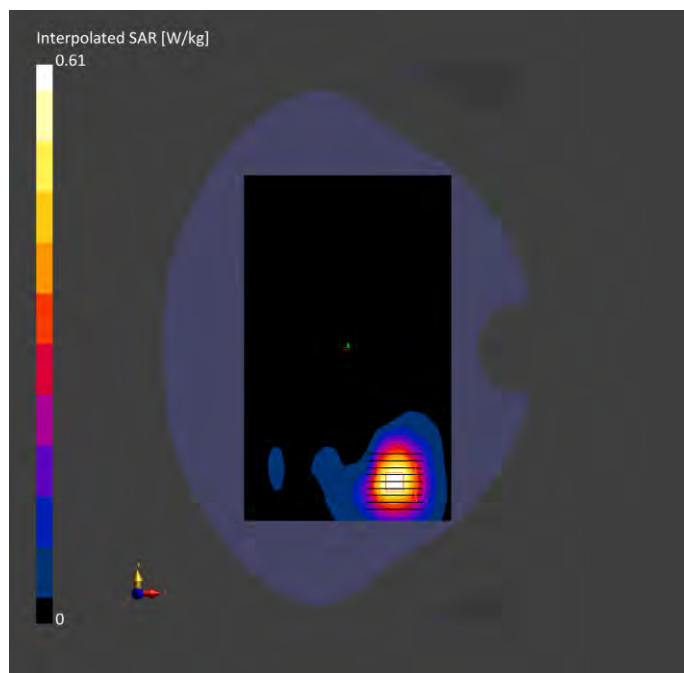
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	WLA N 5GH z	WLA N, 10400 -AAE	5745.0, 149	4.78	5.14	36.1	22.4	21.5

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-31	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 200.0	24.0 x 24.0 x 22.0	Date	2024-05-31	2024-05-31
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0	psSAR1g [W/kg]	0.172	0.171
Sensor	3.0	1.4	psSAR10g [W/kg]	0.068	0.067
Surface [mm]			Power Drift [dB]	0.08	-0.07
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.4	Scaling		
MAIA	Y	Y	Scaling		
Surface	VMS + 6p	VMS + 6p	Factor [dB]		
Detection			TSL	No correction	No correction
Scan Method	Measured	Measured	Correction		
			M2/M1 [%]		50.2
			Dist 3dB		11.5
			Peak [mm]		



Meas.59 Body Plane with Top Edge 10mm on 48 Channel in IEEE802.11a mode with Antenna 2

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

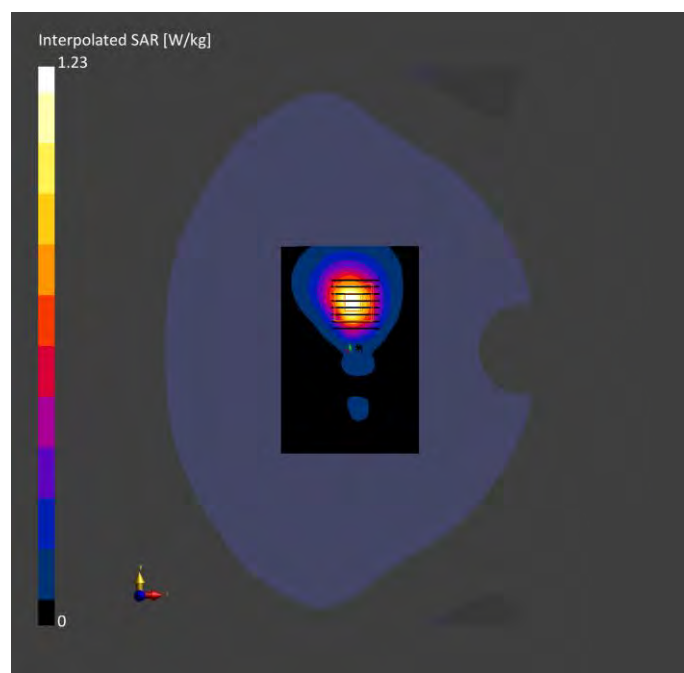
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE TOP, 10.00	WLA N 5GH z	WLA N, 10400 -AAE	5240.0, 48	5.41	4.58	36.9	22.7	21.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-29	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 120.0	24.0 x 24.0 x 22.0	Date	2024-05-29	2024-05-29
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0	psSAR1g [W/kg]	0.346	0.363
Sensor	3.0	1.4	psSAR10g [W/kg]	0.132	0.139
Surface [mm]			Power Drift [dB]	0.02	0.09
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.4	Scaling		
MAIA	Y	Y	Scaling		
Surface	VMS + 6p	VMS + 6p	Factor [dB]		
Detection			TSL	No correction	No correction
Scan Method	Measured	Measured	Correction		
			M2/M1 [%]		55.4
			Dist 3dB		10.1
			Peak [mm]		



Meas.60 Body Plane with Top Edge 10mm on 149 Channel in IEEE802.11a mode with Antenna 2

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

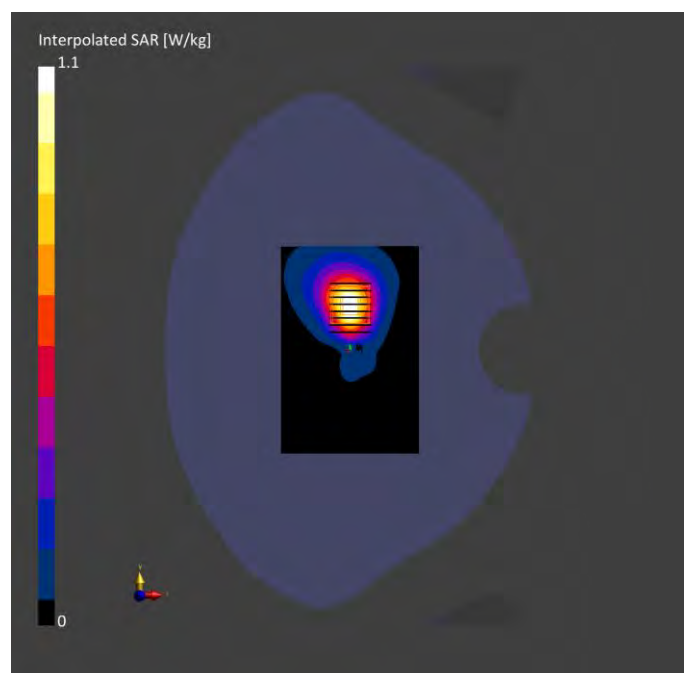
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE TOP, 10.00	WLA N 5GH z	WLA N, 10400 -AAE	5745.0, 149	4.78	5.14	36.1	22.4	21.5

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-31	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 120.0	24.0 x 24.0 x 22.0	Date	2024-05-31	2024-05-31
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0	psSAR1g [W/kg]	0.290	0.298
Sensor	3.0	1.4	psSAR10g [W/kg]	0.109	0.115
Surface [mm]			Power Drift [dB]	0.11	0.02
Graded Grid	Yes	Yes	Power	Disabled	Disabled
Grading Ratio	1.5	1.4	Scaling		
MAIA	Y	Y	Scaling		
Surface	VMS + 6p	VMS + 6p	Factor [dB]		
Detection			TSL	No correction	No correction
Scan Method	Measured	Measured	Correction		
			M2/M1 [%]		50.9
			Dist 3dB		10.9
			Peak [mm]		



Meas.61 Body Plane with Top Edge 0mm on 64 Channel in IEEE802.11a mode with Antenna 2

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

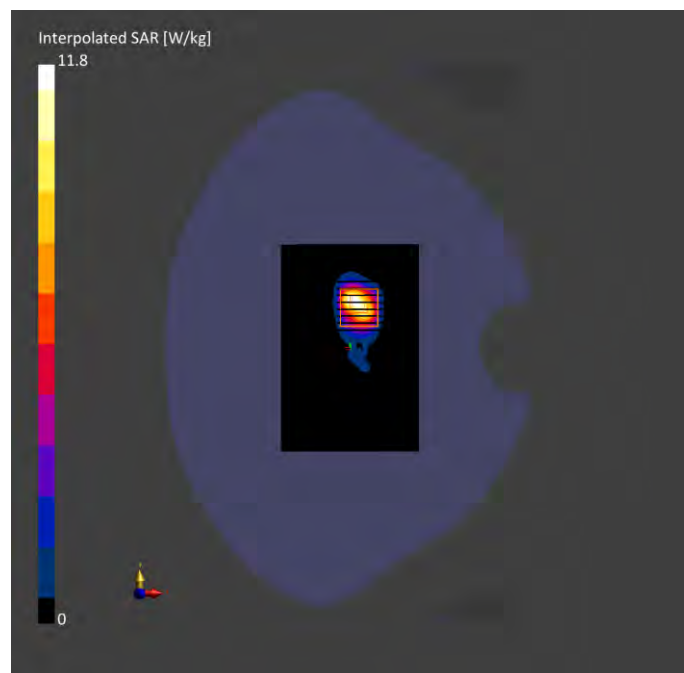
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE TOP, 0.00	WLA N 5GH z	WLA N, 10400 -AAE	5320.0, 64	5.41	4.86	35.6	22.7	21.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-29	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 120.0	24.0 x 24.0 x 22.0	Date	2024-05-29	2024-05-29
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0	psSAR1g [W/kg]	1.44	2.46
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.470	0.592
Graded Grid	Yes	Yes	Power Drift [dB]	-0.01	-0.04
Grading Ratio	1.5	1.4	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Scaling		
Detection			Factor [dB]		
Scan Method	Measured	Measured	TSL	No correction	No correction
			Correction		
			M2/M1 [%]		50.8
			Dist 3dB		4.3
			Peak [mm]		



Meas.62 Body Plane with Top Edge 0mm on 100 Channel in IEEE802.11a mode with Antenna 2

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

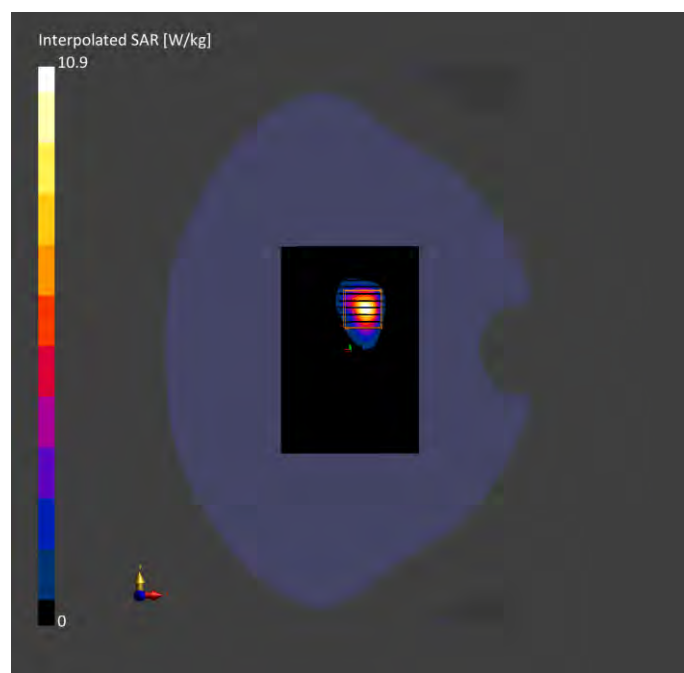
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	EDGE TOP, 0.00	WLA N 5GH z	WLA N, 10400 -AAE	5500.0, 100	4.58	4.87	36.1	22.5	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 2024-05-30	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 120.0	24.0 x 24.0 x 22.0	Date	2024-05-30	2024-05-30
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0	psSAR1g [W/kg]	1.65	2.32
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.474	0.558
Graded Grid	Yes	Yes	Power Drift [dB]	0.00	-0.08
Grading Ratio	1.5	1.4	Power	Disabled	Disabled
MAIA	N/A	N/A	Scaling		
Surface	VMS + 6p	VMS + 6p	Scaling		
Detection			Factor [dB]		
Scan Method	Measured	Measured	TSL	No correction	No correction
			Correction		
			M2/M1 [%]		48.2
			Dist 3dB		5.1
			Peak [mm]		



Meas.63 Left Head with Cheek on 0 Channel in Bluetooth mode with Antenna 2

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

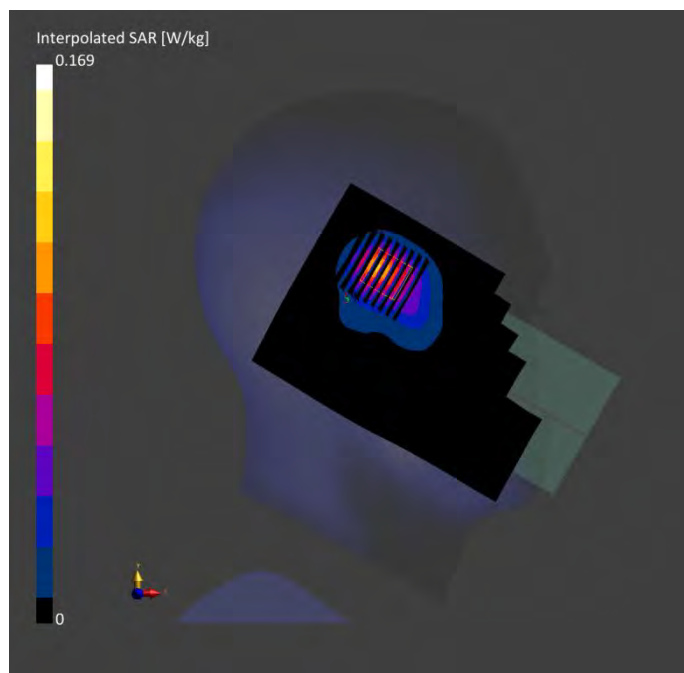
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
LeftHead, HSL	CHEEK, 0.00	ISM 2.4 GHz Band	Bluetooth, 10032- CAA	2402.0, 0	7.47	1.73	39.8	22.3	21.5

Hardware Setup

Phantom	TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-06-04	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0	Date	2024-06-04	2024-06-04
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.089	0.092
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.045	0.049
Graded Grid	Yes	Yes	Power Drift [dB]	-0.01	0.04
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	Y	Y	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		50.5
			Dist 3dB Peak [mm]		9.2



Meas.64 Body Plane with Back Side 15mm on 0 Channel in Bluetooth mode with Antenna 2

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

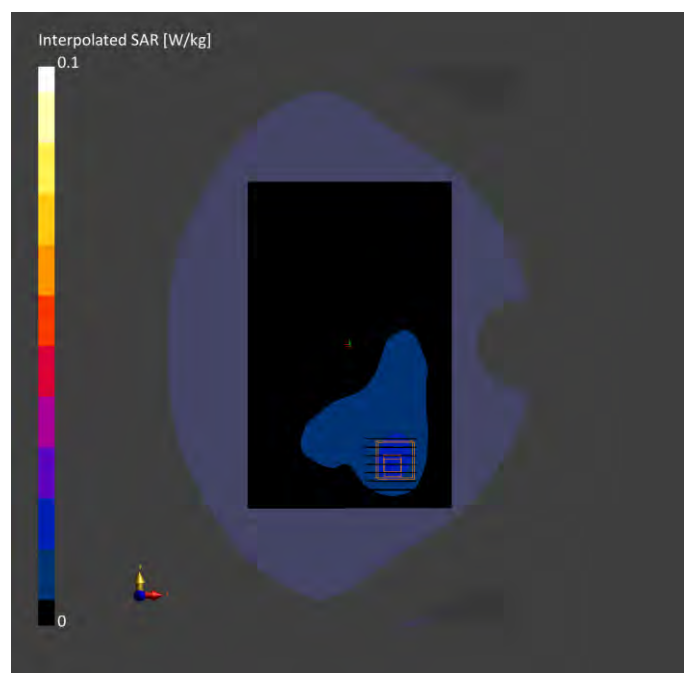
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 15.00	ISM 2.4 GHz Band	Bluetooth, 10032- CAA	2402.0, 0	7.47	1.73	39.8	22.3	21.5

Hardware Setup

Phantom	TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-06-04	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0	Date	2024-06-04	2024-06-04
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.018	0.017
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.01	0.009
Graded Grid	Yes	Yes	Power Drift [dB]	-0.05	0.10
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	Y	Y	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		52.3
			Dist 3dB Peak [mm]		> 15.0



Meas.65 Body Plane with Back Side 10mm on 0 Channel in Bluetooth mode with Antenna 2

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
Device,	167.0 x 78.0 x 8.0	Phone

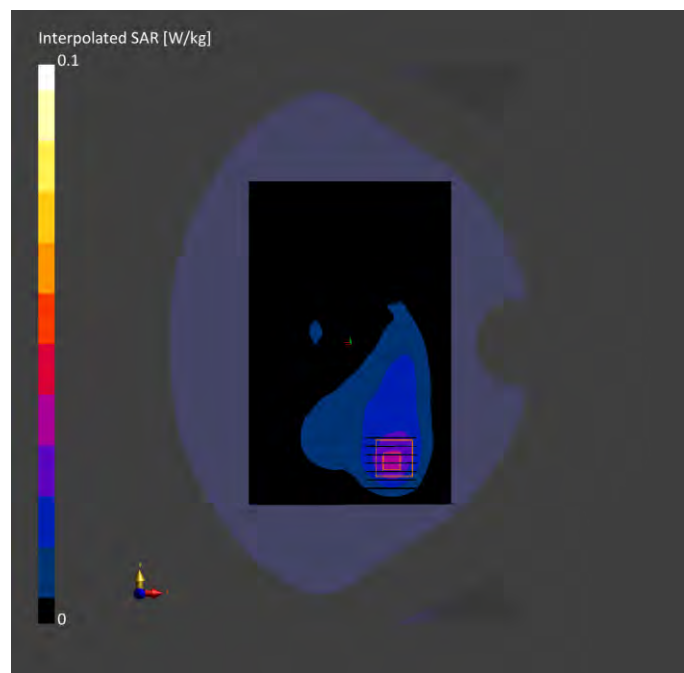
Exposure Conditions

Phantom Section , TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	ISM 2.4 GHz Band	Bluetooth, 10032- CAA	2402.0, 0	7.47	1.73	39.8	22.3	21.5

Hardware Setup

Phantom	TSL, Measured Date		Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000	2024-06-04	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1710, 2024-01-03

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	30.0 x 30.0 x 30.0	Date	2024-06-04	2024-06-04
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.031	0.031
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.016	0.016
Graded Grid	Yes	Yes	Power Drift [dB]	-0.07	0.02
Grading Ratio	1.5	1.5	Power	Disabled	Disabled
MAIA	Y	Y	Scaling		
Surface Detection	VMS + 6p	VMS + 6p	Scaling Factor [dB]		
Scan Method	Measured	Measured	TSL Correction	No correction	No correction
			M2/M1 [%]		45.8
			Dist 3dB Peak [mm]		> 15.0



ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2441239-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SZ2441239-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “BL-SZ2441239-AC.pdf”.

ANNEX G TUNE-UP PROCEDURE

Please refer the document “BL-SZ2441239-AT.pdf”.

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--END OF REPORT--