

TEST REPORT

Applicant: Lunar USA Inc.
Address: 1721 W Plano Parkway, Suite 128, Plano, TX 75075
Equipment Type: Lunar Eclipse L1
Model Name: Eclipse L1
Brand Name: Lunar Eclipse L1
FCC ID: 2A5SE-ECLIPSE-L1
Test Standard: FCC 47 CFR Part 2.1093
(refer section 3.1)
Maximum SAR: Head (1 g@0mm): 1.09 W/kg
Body-worn (1 g@15mm): 0.44 W/kg
Hotspot (1 g@10mm): 0.86 W/kg
Specific (10 g@10mm): 0.33 W/kg
Sample Arrival Date: Apr. 30, 2024
Test Date: May 10, 2024 - Jun. 28, 2024
Date of Issue: Jul. 26, 2024

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Ruan Zhaoyi

Checked by: Xu Rui

Approved by: Tolan Tu
(Testing Director)



Revision History		
Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Jul. 26, 2024</u>	<u>Initial Issue</u>

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1 GENERAL INFORMATION

1.1 Test Laboratory

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

1.2 Test Location

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

1.3 Test Environment Condition

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

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Lunar USA Inc.
Address	1721 W Plano Parkway, Suite 128, Plano, TX 75075

2.2 Manufacturer Information

Manufacturer	Lunar USA Inc.
Address	1721 W Plano Parkway, Suite 128, Plano, TX 75075

2.3 General Description for Equipment under Test (EUT)

EUT Name	Lunar Eclipse L1
Model Name Under Test	Eclipse L1
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	M155-MUB-V2
Software Version	R03
Dimensions (Approx.)	169mm*76.3mm*8.8mm
Weight (Approx.)	N/A

2.4 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	N/A
	Model No.	EBT476591HV
	Serial No.	N/A
	Capacity	5000mAh/19.35Wh
	Rated Voltage	3.87 V
	Limit Charge Voltage	4.45 V
	Manufacturer	Jiangxi Guihang New Energy Technology Co., Ltd.

2.5 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/1900 MHz 3G Network WCDMA/HSDPA Band 2/4/5 4G Network LTE FDD Band 2/4/5/12/17/25/26/66/71 LTE TDD Band 41 LTE CA Uplink (UL): CA_5B, CA_41C, CA_66B, CA_66C LTE Downlink (DL): CA_2B, CA_2C, CA_4B, CA_4C, CA_5B, CA_12B, CA_41C, CA_66B, CA_66C, CA_71B, CA_2A-2A, CA_2A-4A, CA_2A-5A, CA_2A-66A, CA_4A-4A, CA_4A-5A, CA_4A-12A, CA_5A-66A, CA_25A-25A, CA_41A-41A, CA_66A-66 5G Network SA: NR n2/n5/n25/n66/n71/n41/n77 NSA(EN-DC): DC_2A_n41A, DC_2A_n66A, DC_2A_n71A, DC_66A_25A, DC_66A_n41A, DC_66A_n71A DL(EN-DC): DC_2A_n41A, DC_2C_n41A, DC_2A_n66A, DC_2A_n71A, DC_2C_n71A, DC_66A_n25A, DC_66A_n41A, DC_66A_n71A, DC_66C_n71A Bluetooth (BR+EDR+BLE) 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20) 5G WIFI 802.11a, 802.11n(HT20/40), 802.11ac(VHT20/40/80) U-NII-1/2A/2C/3, GPS, GLONASS, BDS, Galileo
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 WIFI, 5G WIFI, 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 12	TX: 699 ~ 716 MHz	RX: 729 ~ 746 MHz
	LTE Band 17	TX: 704 ~ 716 MHz	RX: 734 ~ 746 MHz
	LTE Band 25	TX: 1850 ~ 1915 MHz	RX: 1930 ~ 1995 MHz
	LTE Band 26	TX: 814 ~ 849 MHz	RX: 859 ~ 894 MHz
	LTE Band 41	TX: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz
	LTE Band 66	TX: 1710 ~ 1780 MHz	RX: 2110 ~ 2180 MHz
	LTE Band 71	TX: 663 ~ 698 MHz	RX: 617 ~ 652 MHz
NR n2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz	

	NR n5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	NR n25	TX: 1850 ~ 1915 MHz	RX: 1930 ~ 1995 MHz
	NR n41	TX: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz
	NR n66	TX: 1710 ~ 1780 MHz	RX: 2110 ~ 2180 MHz
	NR n71	TX: 663 ~ 698 MHz	RX: 617 ~ 652 MHz
	NR n77	TX: 3700 ~ 3980MHz	RX: 3700 ~ 3980MHz
	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	
	VHT80)	5725 ~ 5850 MHz	
	Bluetooth	2402 ~ 2480 MHz	
Antenna Type	WWAN: FPC Antenna WIFI: FPC Antenna Bluetooth: FPC Antenna		
DTM	N/A		
Hotspot Function	Support		
Power Reduction	Support		
Exposure Category	General Population/Uncontrolled exposure		
Product Type	Portable Device		
EUT Type	<input checked="" type="checkbox"/> Production unit	<input type="checkbox"/> Identical prototype	

3 SUMMARY OF TEST RESULT

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices
2	ANSI C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
3	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 D05A v01r02	REL. 10 LTE SAR TEST GUIDANCE AND KDB INQUIRIES
8	KDB 941225 D06 v02r01	SAR EVALUATION PROCEDURES FOR PORTABLE DEVICES WITH WIRELESS ROUTER CAPABILITIES
9	KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
10	KDB 865664 D02 v01r02	RF Exposure Reporting
11	KDB 648474 D04 v01r03	SAR EVALUATION CONSIDERATIONS FOR WIRELESS HANDSETS
12	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	0.43	0.44	0.86	/	1.09	0.44	0.86	0.33
	GSM 1900	0.12	0.03	0.06	/				
	WCDMA Band 2	1.09	0.32	0.59	/				
	WCDMA Band 4	1.06	0.19	0.41	/				
	WCDMA Band 5	0.21	0.24	0.56	/				
	LTE Band 2	0.70	0.21	0.41	/				
	LTE Band 4	0.79	0.12	0.25	/				
	LTE Band 5	0.22	0.21	0.34	/				
	LTE Band 12	0.16	0.27	0.18	/				
	LTE Band 17	0.16	0.28	0.18	/				
	LTE Band 25	0.82	0.20	0.39	/				
	LTE Band 26	0.25	0.26	0.45	/				
	LTE Band 66	0.72	0.15	0.34	/				
	LTE Band 41	0.03	0.06	0.22	/				
	NR 2	0.50	0.17	0.45	/				
	NR 5	0.10	0.13	0.28	/				
	NR 25	0.28	0.06	0.18	/				
	NR 66	0.33	0.09	0.16	/				
	NR 71	0.04	0.07	0.13	/				
NR 41	0.12	0.21	0.30	/					
NR 77	0.90	0.12	0.23	/					
DTS	2.4G WIFI	0.52	0.10	0.23	/				
NII	5G WIFI	0.34	0.05	0.10	0.33				
DSS	Bluetooth	0.58	0.10	0.23	/				
Limit (W/kg)		1.6			4.0	1.6			4.0
Verdict		PASS							

3.3.2 Highest Simultaneous Transmission SAR Values

Equipment Class	Maximum Scaled SAR (W/kg)		
	Head 1g (0mm)	Body-worn 1g (15mm)	Hotspot 1g (10mm)
PCE	1.57	0.65	1.10
DTS	1.57	0.65	1.10
NII	1.55	0.59	0.96
DSS	1.57	0.65	1.10
Limit (W/Kg)	1.60		
Verdict	Pass		
Note: The highest simultaneous SAR please refer section 12.2			

3.4 Test Uncertainty

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

The maximum 1 g SAR for the EUT in this report is 1.09 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 0.33 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

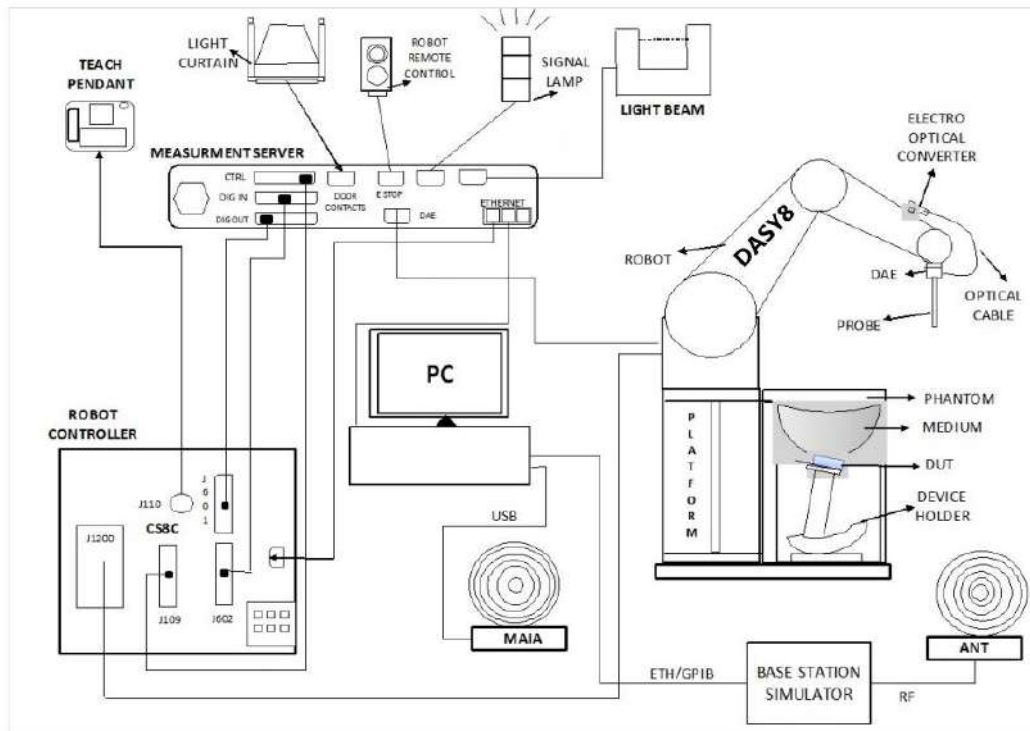
$$\text{SAR} = \frac{\sigma E^2}{\rho}$$

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 DASY 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, Antennassa proprietary calibration system. The calibration is performed with the IEC/IEEE 62209-1528 annexe technique using reference guide at the five frequencies.

4.2.4 Data Acquisition Electronics

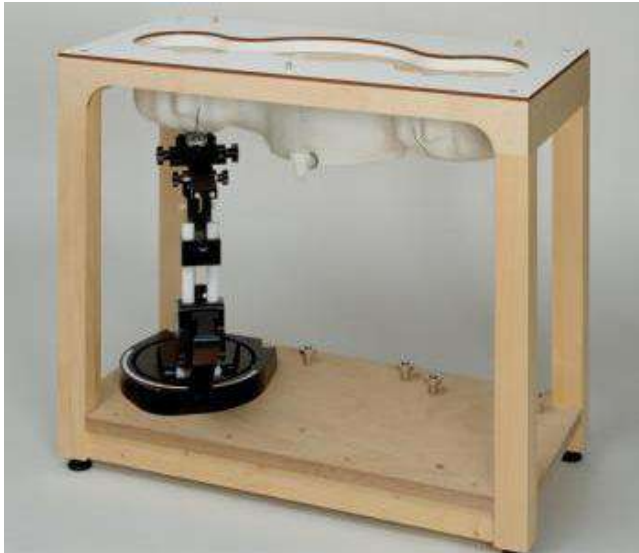
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an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



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

4.2.5 Phantoms

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



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



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

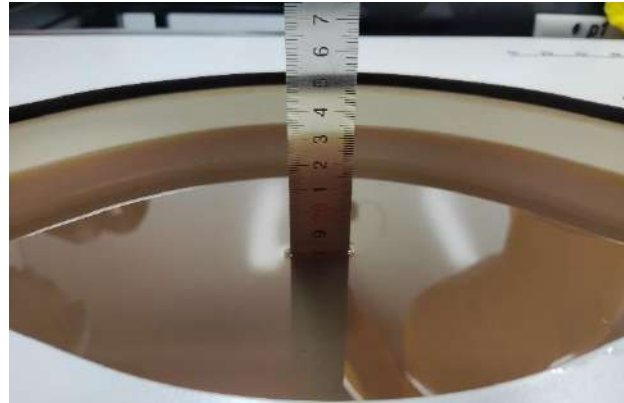
4.2.7 Simulating Liquid

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

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	Ethenediol, Sodium petroleum sulfonate, Hexylene Glycol / 2-Methyl-pentane-2.4-diol, Alkoxylated alcohol

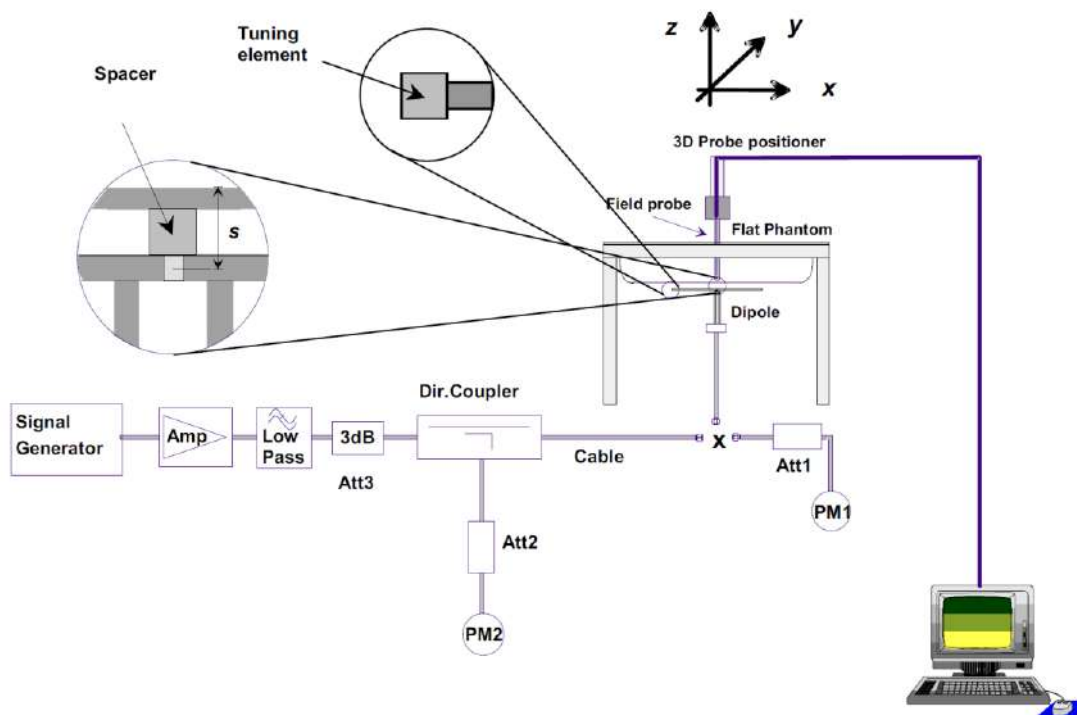
5 SYSTEM VERIFICATION

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

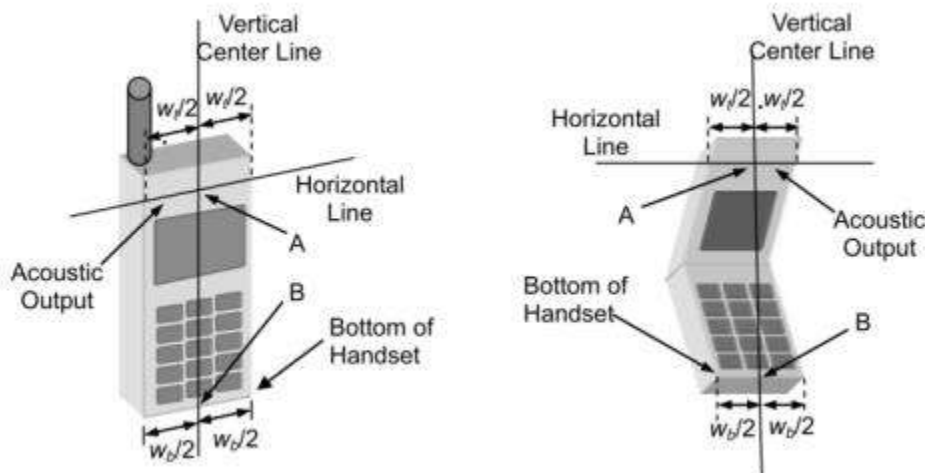
According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

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.

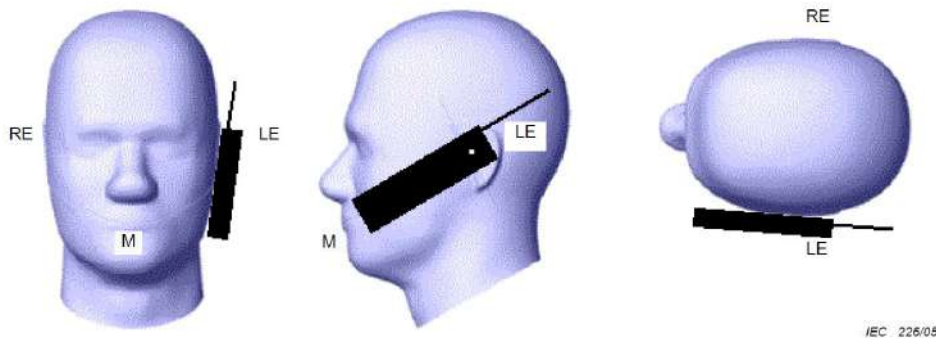
6.1.1 Two Imaginary Lines on the Handset

- 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.

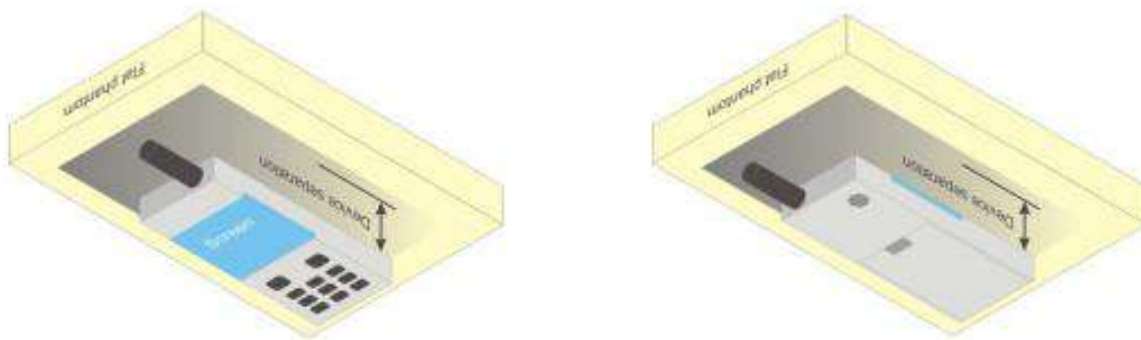


6.2 Body-worn Position Conditions

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.

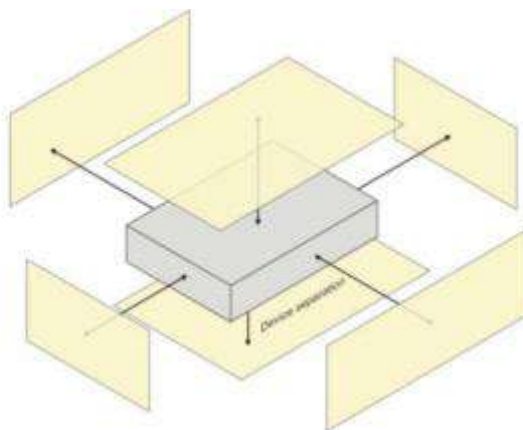
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics.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



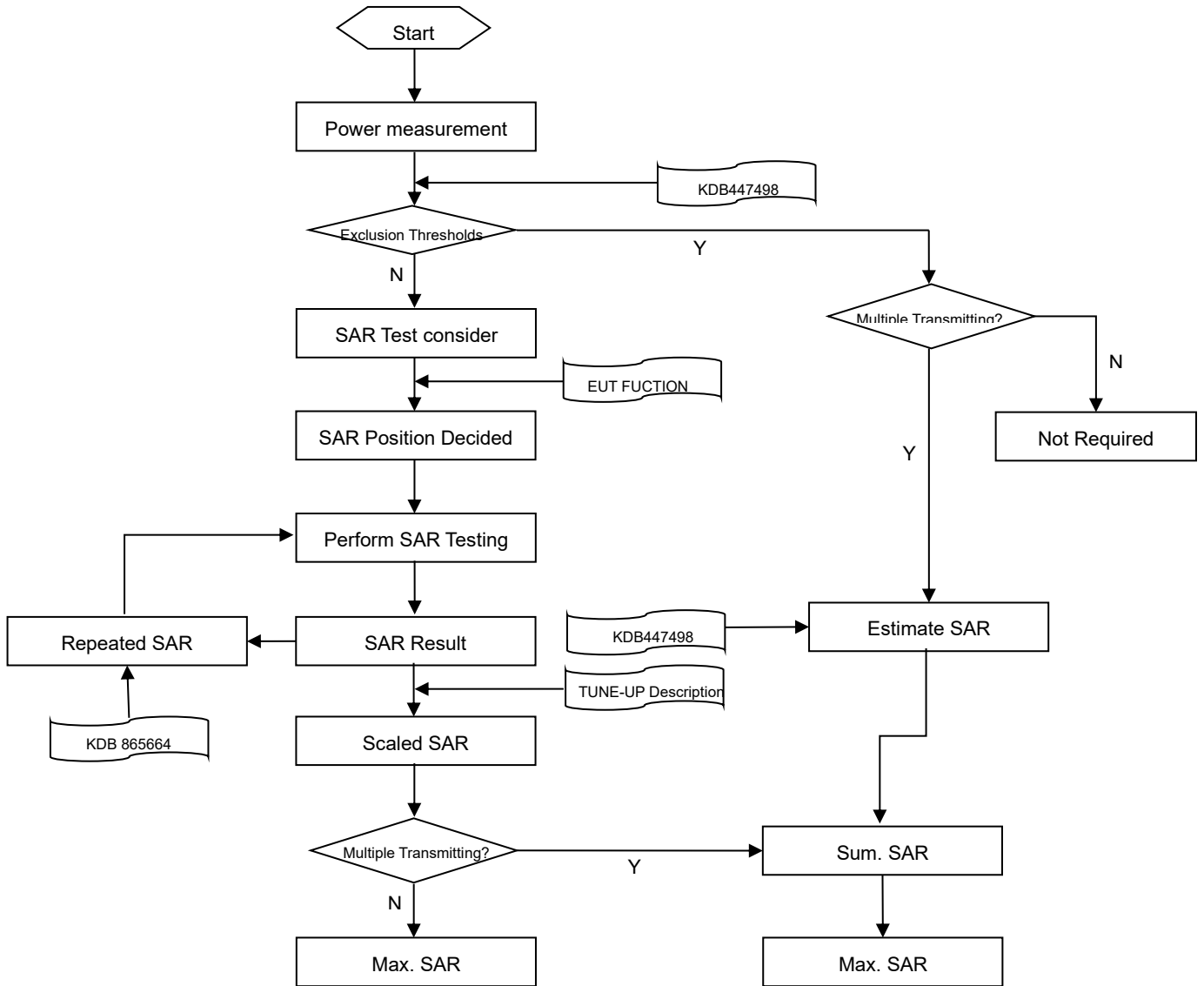
6.4 Product Specific 10g Exposure Consideration

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°
		≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3–4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
Maximum area scan spatial resolution: Δx Area , Δy Area		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*
	uniform grid: Δz Zoom (n)	≤ 5 mm	3–4 GHz: ≤ 4 mm 4–5 GHz: ≤ 3 mm 5–6 GHz: ≤ 2 mm
Maximum zoom scan spatial resolution, normal to phantom surface	graded grid	Δz Zoom (1): between 1st two points closest to phantom surface Δz Zoom (n>1): between subsequent points	3–4 GHz: ≤ 3 mm 4–5 GHz: ≤ 2.5 mm 5–6 GHz: ≤ 2 mm
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.

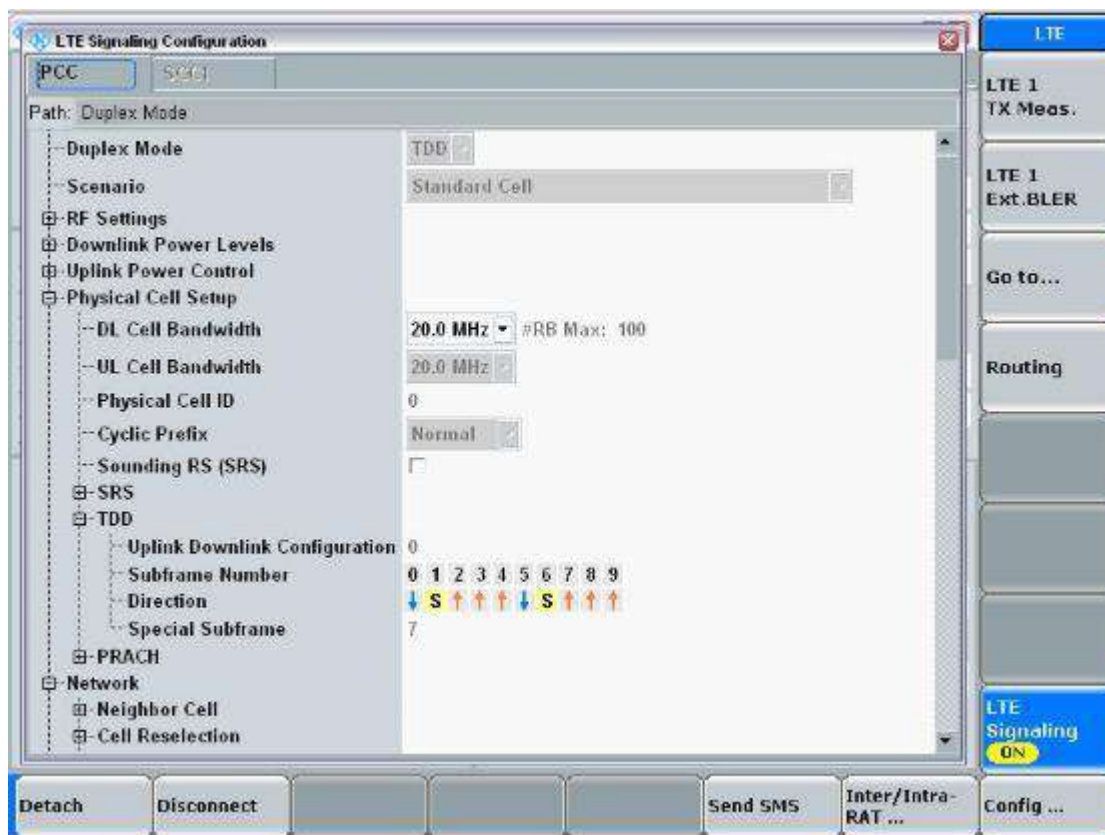
7.4 Area & Zoom Scan Procedure

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.

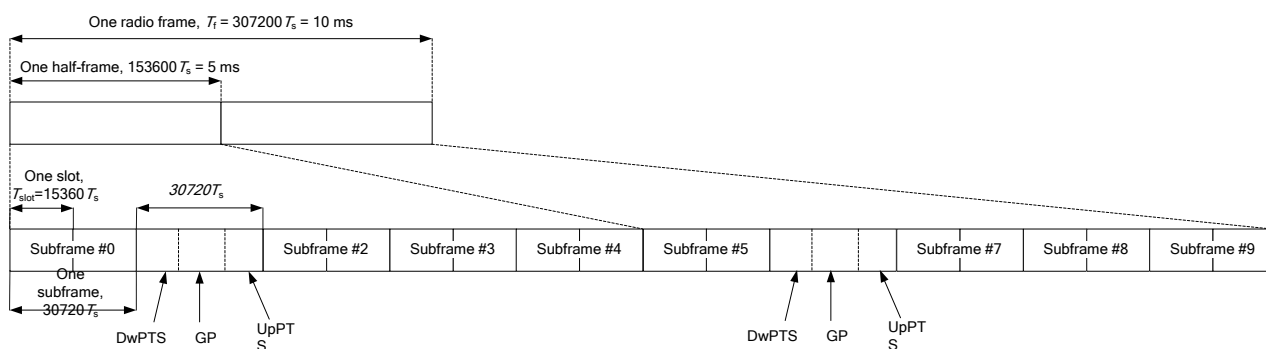
When the 1 g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

7.5 LTE (TDD) Considerations

During TDD-LTE SAR testing, the EUT was commanded to transmit on maximum output power and maximum transmitting bandwidth. The uplink and downlink slot configuration as below in one radio frame.



According to 3GPP Per 3GPP TS 36.211. Each radio frame of length ($T_f=307200 T_s = 10\text{ms}$) of two half-frames of length ($153600 T_s = 5\text{ms}$). Each half-frame consists of five sub-frames of length ($30720 T_s = 1\text{ms}$)



And the special sub-frame with the three fields DwPTS, GP and UpPTS.

The length of DwPTS and UpPTS is given by below table subject to the total length of DwPTS, GP and UpPTS being equal to $30720 T_s = 1\text{ms}$.

Configuration of special sub-frame (lengths of DwPTS/GP/UpPTS)

Special sub-frame configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21592 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$7680 \cdot T_s$	$2560 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$			$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21592 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-		
9	$13168 \cdot T_s$	-	-	-	-	-

For special sub-frame uplink time we used the largest cyclic prefix for duty cycle calculate;

Maximum uplink time of one special sub-frame=(largest cyclic prefix)/(one sub-frame of length)* time of one sub-frame= $5120 \cdot T_s / 30720 \cdot T_s \cdot 1\text{ms} = 0.167\text{ms}$

One radio frame with 6 uplink sub-frames and two special sub-frame, there for the maximum Uplink time in one radio frame is: **$6 \cdot 1\text{ ms} + 2 \cdot 0.167\text{ ms} = 6.334\text{ms}$**

So, the duty cycle for TDD-LTE is: **$6.334\text{ms} / 10\text{ms} = 1: 1.58$**

8 CONDUCTED RF OUPUT POWER

8.1 GSM

Please refer the document “BL-SZ2450047-AP Power List.pdf”.

8.2 WCDMA

Please refer the document “BL-SZ2450047-AP Power List.pdf”.

8.3 LTE

Please refer the document “BL-SZ2450047-AP Power List.pdf”.

8.4 Intra-Band Uplink CA Normal Power

Note:

1. This devices supports intra-band uplink CA of 7C/38C/41C.
2. For intra-band uplink carrier aggregation power verification and measurement is selected highest PCC and SCC bandwidth combination to do and was according to 3GPP 36.52101 sectino6.2.2A.1 and section 6.2.2A.2 test procedure.
3. For intra-band uplink CA output power was measured high / middle / low channel combination, and for SAR verification is selected highest output power combination with each exposure condition in each frequency band using the highest SAR configuration test in standalone LTE mode.

Please refer the document “BL-SZ2450047-AP Power List.pdf”.

8.5 Downlink CA Normal Power

Note:

1. This devices supports Downlink carrier aggregation (CA).

Please refer the document “BL-SZ2450047-AP Power List.pdf”.

8.6 5G NR

Please refer the document “BL-SZ2450047-AP Power List.pdf”.

8.7 WIFI

8.7.1 2.4G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	AV Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	17.40	19.00	Yes
		6	2437	17.67	19.00	Yes
		11	2462	17.70	19.00	Yes
	802.11g	1	2412	15.38	18.00	No
		6	2437	15.64	18.00	No
		11	2462	15.00	18.00	No
	802.11n(HT20)	1	2412	14.17	17.00	No
		6	2437	15.50	17.00	No
		11	2462	13.96	17.00	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 = $0.521 * (63.10\text{mW}/79.43\text{mW}) = 0.414$ W/Kg, so 2.4G OFDM SAR test is not required.

8.7.2 5G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	AV Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	14.37	15.50	No
		44	5220	14.43	15.50	No
		48	5240	14.40	15.50	No
	802.11n(HT20)	36	5180	14.23	15.00	No
		44	5220	14.31	15.00	No
		48	5240	14.31	15.00	No
	802.11n(HT40)	38	5190	14.15	15.00	No
		46	5230	14.21	15.00	No
	802.11ac(VHT20)	36	5180	14.35	15.00	No
		44	5220	14.56	15.00	No
		48	5240	14.34	15.00	No
	802.11ac(VHT40)	38	5190	14.29	15.00	No
		46	5230	14.24	15.00	No
	802.11ac(VHT80)	42	5210	13.54	15.00	No
	5.3 (5.25~5.35)	802.11a	52	5260	14.40	15.50
60			5300	14.42	15.50	Yes
64			5320	14.22	15.50	Yes
802.11n(HT20)		52	5260	14.27	15.00	No
		60	5300	14.26	15.00	No
		64	5320	14.03	15.00	No
802.11n(HT40)		54	5270	14.18	15.00	No
		62	5310	14.10	15.00	No
802.11ac(VHT20)		52	5260	14.35	15.00	No
		60	5300	14.24	15.00	No
		64	5320	14.03	15.00	No
802.11ac(VHT40)		54	5270	14.20	15.00	No
		62	5310	14.10	15.00	No
802.11ac(VHT80)		58	5290	12.22	15.00	No
5.6 (5.47~5.725)		802.11a	100	5500	14.05	15.50
	116		5580	14.60	15.50	Yes
	140		5700	15.36	15.50	Yes
	802.11n(HT20)	100	5500	13.97	15.00	No
		116	5580	14.44	15.00	No
		140	5700	14.72	15.00	No
	802.11n(HT40)	102	5510	14.13	15.00	No
		118	5590	14.52	15.00	No

		134	5670	14.50	15.00	No
	802.11ac(VHT20)	100	5500	13.85	15.00	No
		116	5580	14.34	15.00	No
		140	5700	14.76	15.00	No
	802.11ac(VHT40)	102	5510	13.92	15.00	No
		118	5590	14.47	15.00	No
		134	5670	14.50	15.00	No
	802.11ac(VHT80)	106	5530	13.13	15.00	No
		122	5690	14.35	15.00	No
	5.8 (5.725~5.850)	802.11a	149	5745	15.42	15.50
157			5785	15.12	15.50	Yes
165			5825	15.17	15.50	Yes
802.11n(HT20)		149	5745	14.84	15.00	No
		157	5785	14.93	15.00	No
		165	5825	14.97	15.00	No
802.11n(HT40)		151	5755	14.90	15.00	No
		159	5795	14.95	15.00	No
802.11ac(VHT20)		149	5745	14.84	15.00	No
		157	5785	14.88	15.00	No
		165	5825	14.48	15.00	No
802.11ac(VHT40)		151	5755	14.84	15.00	No
		159	5795	14.92	15.00	No
802.11ac(VHT80)		155	5775	14.60	15.00	No
5.3 (5.25~5.35)		802.11a	144	5720	14.62	15.50
	802.11n(HT20)	144	5720	13.88	15.00	No
	802.11n(HT40)	142	5710	14.74	15.00	No
	802.11ac(VHT20)	144	5720	13.87	15.00	No
	802.11ac(VHT40)	142	5710	14.77	15.00	No
	802.11ac(VHT80)	138	5690	14.87	15.00	No
<p>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.</p>						

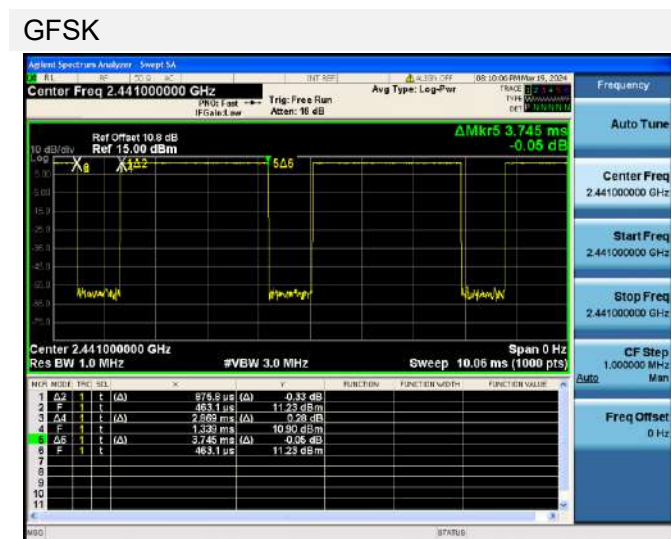
8.8 Bluetooth

Mode	GFSK			π/4-DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
AV Power (dBm)	11.27	10.92	10.28	7.87	7.52	6.80
Tune-Up Limit (dBm)	13.00	13.00	13.00	12.00	12.00	12.00
SAR Test Require	YES	NO	NO	NO	NO	NO
Mode	8-DPSK			/		
Channel	0	39	78	/	/	/
Frequency (MHz)	2402	2441	2480	/	/	/
AV Power (dBm)	7.70	7.39	6.62	/	/	/
Tune-Up Limit (dBm)	12.00	12.00	12.00	/	/	/
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
AV Power (dBm)	6.38	7.01	6.91	2.58	3.32	3.12
Tune-Up Limit (dBm)	9.00	9.00	9.00	2.00	2.00	2.00
SAR Test Require	NO	NO	NO	NO	NO	NO

Note 1: 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.

The Bluetooth duty cycle is 76.61 % 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



9 TEST EXCLUSION CONSIDERATION

For antenna location and support bands please refer the document "BL-SZ2450047-AI EUT internal photo.pdf".

10 TEST RESULT

10.1 GSM 850

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Head												
Ant.0	DATA 2slots	Left Cheek	0	190	836.6	0.07	0.299	32.07	32.50	1.104	0.330	/
		Left Tilt	0	190	836.6	-0.18	0.185	32.07	32.50	1.104	0.204	/
		Right Cheek	0	190	836.6	0.00	0.386	32.07	32.50	1.104	0.426	1#
		Right Tilt	0	190	836.6	0.03	0.241	32.07	32.50	1.104	0.266	/
		Right Cheek	0	128	824.2	0.01	0.266	32.07	32.50	1.104	0.294	/
		Right Cheek	0	251	848.8	0.10	0.348	32.07	32.50	1.104	0.384	/
Body-worn												
Ant.0	DATA 2slots	Front Side	15	190	836.6	0.15	0.294	32.07	32.50	1.104	0.325	/
		Back Side	15	190	836.6	0.02	0.399	32.07	32.50	1.104	0.440	2#
		Back Side	15	128	824.2	0.06	0.363	32.07	32.50	1.104	0.401	/
		Back Side	15	251	848.8	-0.10	0.346	32.07	32.50	1.104	0.382	/
Hotspot												
Ant.0	DATA 2slots	Front Side	10	190	836.6	0.15	0.423	32.07	32.50	1.104	0.467	/
		Back Side	10	190	836.6	-0.04	0.743	32.07	32.50	1.104	0.820	/
		Left Edge	10	190	836.6	-0.12	0.333	32.07	32.50	1.104	0.368	/
		Right Edge	10	190	836.6	0.04	0.002	32.07	32.50	1.104	0.002	/
		Bottom Edge	10	190	836.6	-0.07	0.481	32.07	32.50	1.104	0.531	/
		Back Side	10	128	824.2	0.10	0.554	32.07	32.50	1.104	0.612	/
		Back Side	10	251	848.8	0.02	0.778	32.07	32.50	1.104	0.859	3#
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.2 GSM 1900

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Head												
Ant.1	DATA 4slots	Left Cheek	0	512	1850.2	0.19	0.071	16.35	17.00	1.161	0.082	/
		Left Tilt	0	512	1850.2	0.16	0.067	16.35	17.00	1.161	0.078	/
		Right Cheek	0	512	1850.2	0.03	0.107	16.35	17.00	1.161	0.124	4#
		Right Tilt	0	512	1850.2	0.19	0.087	16.35	17.00	1.161	0.101	/
Body-worn												
Ant.1	DATA 4slots	Front Side	15	512	1850.2	-0.16	0.012	16.35	17.00	1.161	0.014	/
		Back Side	15	512	1850.2	0.06	0.026	16.35	17.00	1.161	0.030	5#
Hotspot												
Ant.1	DATA 4slots	Front Side	10	512	1850.2	0.03	0.022	16.35	17.00	1.161	0.026	/
		Back Side	10	512	1850.2	0.02	0.047	16.35	17.00	1.161	0.055	6#
		Right Edge	10	512	1850.2	0.07	0.017	16.35	17.00	1.161	0.020	/
		Top Edge	10	512	1850.2	-0.11	0.032	16.35	17.00	1.161	0.037	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.3WCDMA Band 2

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Head												
Ant.1	RMC	Left Cheek	0	9400	1880	0.00	0.468	19.74	20.50	1.191	0.557	/
		Left Tilt	0	9400	1880	-0.05	0.396	19.74	20.50	1.191	0.472	/
		Right Cheek	0	9400	1880	0.00	0.911	19.74	20.50	1.191	1.085	7#
		Right Tilt	0	9400	1880	0.00	0.679	19.74	20.50	1.191	0.809	/
		Right Cheek	0	9262	1852.4	0.13	0.856	19.56	20.50	1.242	1.063	/
		Right Cheek	0	9538	1907.6	-0.16	0.844	19.45	20.50	1.274	1.075	/
Body-worn												
Ant.1	RMC	Front Side	15	9400	1880	0.13	0.140	19.50	20.50	1.259	0.176	/
		Back Side	15	9400	1880	0.00	0.256	19.50	20.50	1.259	0.322	8#
Hotspot												
Ant.1	RMC	Front Side	10	9400	1880	0.01	0.220	19.50	20.50	1.259	0.277	/
		Back Side	10	9400	1880	0.00	0.472	19.50	20.50	1.259	0.594	9#
		Right Edge	10	9400	1880	-0.06	0.165	19.50	20.50	1.259	0.208	/
		Top Edge	10	9400	1880	-0.04	0.310	19.50	20.50	1.259	0.390	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.4WCDMA Band 4

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Head												
Ant.1	RMC	Left Cheek	0	1312	1712.4	0.01	0.446	19.20	20.50	1.349	0.602	/
		Left Tilt	0	1312	1712.4	-0.03	0.375	19.20	20.50	1.349	0.506	/
		Right Cheek	0	1312	1712.4	0.01	0.789	19.20	20.50	1.349	1.064	10#
		Right Tilt	0	1312	1712.4	-0.01	0.413	19.20	20.50	1.349	0.557	/
		Right Cheek	0	1412	1712.4	-0.11	0.746	19.00	20.50	1.413	1.054	/
		Right Cheek	0	1513	1712.4	0.12	0.720	19.14	20.50	1.368	0.985	/
Body-worn												
Ant.1	RMC	Front Side	15	1312	1712.4	0.06	0.059	19.20	20.50	1.349	0.080	/
		Back Side	15	1312	1712.4	-0.02	0.144	19.20	20.50	1.349	0.194	11#
Hotspot												
Ant.1	RMC	Front Side	10	1312	1712.4	-0.07	0.158	19.20	20.50	1.349	0.213	/
		Back Side	10	1312	1712.4	0.01	0.301	19.20	20.50	1.349	0.406	12#
		Right Edge	10	1312	1712.4	-0.02	0.121	19.20	20.50	1.349	0.163	/
		Top Edge	10	1312	1712.4	0.06	0.117	19.20	20.50	1.349	0.158	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.5WCDMA Band 5

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Head												
Ant.0	RMC	Left Cheek	0	4182	836.4	0.03	0.146	23.24	24.00	1.191	0.174	/
		Left Tilt	0	4182	836.4	-0.11	0.082	23.24	24.00	1.191	0.098	/
		Right Cheek	0	4182	836.4	-0.02	0.180	23.24	24.00	1.191	0.214	13#
		Right Tilt	0	4182	836.4	-0.07	0.107	23.24	24.00	1.191	0.127	/
Body-worn												
Ant.0	RMC	Front Side	15	4182	836.4	-0.13	0.169	23.24	24.00	1.191	0.201	/
		Back Side	15	4182	836.4	0.17	0.201	23.24	24.00	1.191	0.239	14#
		Back Side	15	4132	826.4	0.00	0.205	23.24	24.00	1.191	0.244	/
		Back Side	15	4233	846.6	0.12	0.198	23.24	24.00	1.191	0.236	/
Hotspot												
Ant.0	RMC	Front Side	10	4182	836.4	0.06	0.298	23.24	24.00	1.191	0.355	/
		Back Side	10	4182	836.4	0.00	0.473	23.24	24.00	1.191	0.563	15#
		Left Edge	10	4182	836.4	0.00	0.239	23.24	24.00	1.191	0.285	/
		Right Edge	10	4182	836.4	-0.17	0.008	23.24	24.00	1.191	0.010	/
		Bottom Edge	10	4182	836.4	0.05	0.341	23.24	24.00	1.191	0.406	/
		Back Side	10	4132	826.4	0.15	0.438	23.24	24.00	1.191	0.522	/
		Back Side	10	4233	846.6	0.16	0.005	23.24	24.00	1.191	0.006	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.												

10.7LTE Band 2 (20MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Head														
Ant.1	QPSK	Left Cheek	0	18900	1880	1	Mid	0.07	0.349	19.25	19.50	1.059	0.370	/
		Left Tilt	0	18900	1880	1	Mid	-0.01	0.316	19.25	19.50	1.059	0.335	/
		Right Cheek	0	18900	1880	1	Mid	0.02	0.662	19.25	19.50	1.059	0.701	14#
		Right Tilt	0	18900	1880	1	Mid	-0.16	0.431	19.25	19.50	1.059	0.456	/
		Left Cheek	0	18900	1880	50	Low	-0.18	0.275	18.19	18.50	1.074	0.295	/
		Left Tilt	0	18900	1880	50	Low	0.01	0.259	18.19	18.50	1.074	0.278	/
		Right Cheek	0	18900	1880	50	Low	-0.08	0.468	18.19	18.50	1.074	0.503	/
		Right Tilt	0	18900	1880	50	Low	0.08	0.352	18.19	18.50	1.074	0.378	/
		Right Cheek	0	18700	1860	1	Mid	0.12	0.633	19.15	19.50	1.084	0.686	/
		Right Cheek	0	19100	1900	1	Mid	-0.06	0.639	19.11	19.50	1.094	0.699	/
Body-worn														
Ant.1	QPSK	Front Side	15	18900	1900	1	Mid	-0.10	0.107	19.25	19.50	1.059	0.113	/
		Back Side	15	18900	1900	1	Mid	0.01	0.198	19.25	19.50	1.059	0.210	15#
		Front Side	15	18900	1900	50	Low	0.19	0.088	19.25	19.50	1.059	0.093	/
		Back Side	15	18900	1900	50	Low	-0.08	0.164	19.25	19.50	1.059	0.174	/
Hotspot														
Ant.1	QPSK	Front Side	10	18900	1900	1	Mid	-0.02	0.189	19.25	19.50	1.059	0.200	/
		Back Side	10	18900	1900	1	Mid	0.02	0.390	19.25	19.50	1.059	0.413	16#
		Right Edge	10	18900	1900	1	Mid	0.01	0.149	19.25	19.50	1.059	0.158	/
		Top Edge	10	18900	1900	1	Mid	-0.09	0.248	19.25	19.50	1.059	0.263	/
		Front Side	10	18900	1900	50	Low	0.09	0.158	18.19	18.50	1.074	0.170	/
		Back Side	10	18900	1900	50	Low	-0.09	0.316	18.19	18.50	1.074	0.339	/
		Right Edge	10	18900	1900	50	Low	-0.14	0.121	18.19	18.50	1.074	0.130	/
		Top Edge	10	18900	1900	50	Low	-0.08	0.231	18.19	18.50	1.074	0.248	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.8LTE Band 4 (20MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Head														
Ant.1	QPSK	Left Cheek	0	20175	1732.5	1	Mid	0.08	0.488	19.48	19.50	1.005	0.490	/
		Left Tilt	0	20175	1732.5	1	Mid	-0.09	0.384	19.48	19.50	1.005	0.386	/
		Right Cheek	0	20175	1732.5	1	Mid	0.00	0.788	19.48	19.50	1.005	0.792	17#
		Right Tilt	0	20175	1732.5	1	Mid	-0.16	0.478	19.48	19.50	1.005	0.480	/
		Left Cheek	0	20175	1732.5	50	Mid	-0.14	0.406	18.49	18.50	1.002	0.407	/
		Left Tilt	0	20175	1732.5	50	Mid	0.17	0.299	18.49	18.50	1.002	0.300	/
		Right Cheek	0	20175	1732.5	50	Mid	-0.08	0.611	18.49	18.50	1.002	0.612	/
		Right Tilt	0	20175	1732.5	50	Mid	-0.16	0.381	18.49	18.50	1.002	0.382	/
Body-worn														
Ant.1	QPSK	Front Side	15	20175	1732.5	1	Mid	0.13	0.068	19.48	19.50	1.005	0.068	/
		Back Side	15	20175	1732.5	1	Mid	0.04	0.114	19.48	19.50	1.005	0.115	18#
		Front Side	15	20175	1732.5	50	Mid	-0.01	0.057	18.49	18.50	1.002	0.057	/
		Back Side	15	20175	1732.5	50	Mid	0.08	0.099	18.49	18.50	1.002	0.099	/
Hotspot														
Ant.1	QPSK	Front Side	10	20175	1732.5	1	Mid	-0.02	0.134	19.48	19.50	1.005	0.135	/
		Back Side	10	20175	1732.5	1	Mid	0.01	0.247	19.48	19.50	1.005	0.248	19#
		Right Edge	10	20175	1732.5	1	Mid	0.09	0.087	19.48	19.50	1.005	0.087	/
		Top Edge	10	20175	1732.5	1	Mid	-0.05	0.137	19.48	19.50	1.005	0.138	/
		Front Side	10	20175	1732.5	50	Mid	-0.13	0.111	18.49	18.50	1.002	0.111	/
		Back Side	10	20175	1732.5	50	Mid	0.19	0.210	18.49	18.50	1.002	0.210	/
		Right Edge	10	20175	1732.5	50	Mid	0.09	0.076	18.49	18.50	1.002	0.076	/
		Top Edge	10	20175	1732.5	50	Mid	-0.10	0.118	18.49	18.50	1.002	0.118	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.9LTE Band 5 (10MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR(W/kg)	Meas. Power(dBm)	Max. tune-power(dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Head														
Ant.0	QPSK	Left Cheek	0	20525	836.5	1	Low	0.05	0.149	23.13	24.00	1.222	0.182	/
		Left Tilt	0	20525	836.5	1	Low	0.02	0.090	23.13	24.00	1.222	0.110	/
		Right Cheek	0	20525	836.5	1	Low	0.01	0.178	23.13	24.00	1.222	0.218	20#
		Right Tilt	0	20525	836.5	1	Low	-0.17	0.110	23.13	24.00	1.222	0.134	/
		Left Cheek	0	20525	836.5	25	Low	0.16	0.118	23.13	24.00	1.222	0.144	/
		Left Tilt	0	20525	836.5	25	Low	-0.13	0.070	23.13	24.00	1.222	0.086	/
		Right Cheek	0	20525	836.5	25	Low	-0.05	0.140	23.13	24.00	1.222	0.171	/
		Right Tilt	0	20525	836.5	25	Low	0.08	0.089	23.13	24.00	1.222	0.109	/
Body-worn														
Ant.0	QPSK	Front Side	15	20525	836.5	1	Low	0.11	0.140	23.13	24.00	1.222	0.171	/
		Back Side	15	20525	836.5	1	Low	-0.02	0.174	23.13	24.00	1.222	0.213	22#
		Front Side	15	20525	836.5	25	Low	0.08	0.108	23.13	24.00	1.222	0.132	/
		Back Side	15	20525	836.5	25	Low	0.05	0.131	23.13	24.00	1.222	0.160	/
Hotspot														
Ant.0	QPSK	Front Side	10	20525	836.5	1	Low	0.03	0.213	23.13	24.00	1.222	0.260	/
		Back Side	10	20525	836.5	1	Low	0.01	0.278	23.13	24.00	1.222	0.340	24#
		Left Edge	10	20525	836.5	1	Low	-0.14	0.175	23.13	24.00	1.222	0.214	/
		Right Edge	10	20525	836.5	1	Low	0.16	0.050	23.13	24.00	1.222	0.061	/
		Bottom Edge	10	20525	836.5	1	Low	0.15	0.247	23.13	24.00	1.222	0.302	/
		Front Side	10	20525	836.5	25	Low	0.17	0.171	23.13	24.00	1.222	0.209	/
		Back Side	10	20525	836.5	25	Low	-0.12	0.255	23.13	24.00	1.222	0.312	/
		Left Edge	10	20525	836.5	25	Low	-0.09	0.125	23.13	24.00	1.222	0.153	/
		Right Edge	10	20525	836.5	25	Low	0.19	0.085	23.13	24.00	1.222	0.104	/
		Bottom Edge	10	20525	836.5	25	Low	0.08	0.198	23.13	24.00	1.222	0.242	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.10 LTE Band 5 Worse case for CA Test

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Head-CA														
Ant.0	QPSK	Right Cheek	0	20600+20525	844+836.5	1+1	Low+High	-0.01	0.177	23.16	24.00	1.213	0.215	21#
Body-worn-CA														
Ant.0	QPSK	Back Side	0	20600+20525	844+836.5	1+1	Low+High	0.01	0.166	23.16	24.00	1.213	0.201	23#
Hotspot-CA														
Ant.0	QPSK	Back Side	0	20600+20525	844+836.5	1+1	Low+High	0.00	0.234	23.16	24.00	1.213	0.284	25#
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.11 LTE Band 12 (10MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Head														
Ant.0	QPSK	Left Cheek	0	23095	707.5	1	Low	0.02	0.123	23.04	24.00	1.247	0.153	/
		Left Tilt	0	23095	707.5	1	Low	0.01	0.065	23.04	24.00	1.247	0.081	/
		Right Cheek	0	23095	707.5	1	Low	0.01	0.127	23.04	24.00	1.247	0.158	26#
		Right Tilt	0	23095	707.5	1	Low	0.17	0.071	23.04	24.00	1.247	0.089	/
		Left Cheek	0	23095	707.5	25	Low	0.06	0.099	23.04	24.00	1.247	0.123	/
		Left Tilt	0	23095	707.5	25	Low	0.06	0.055	23.04	24.00	1.247	0.069	/
		Right Cheek	0	23095	707.5	25	Low	-0.14	0.096	23.04	24.00	1.247	0.120	/
		Right Tilt	0	23095	707.5	25	Low	0.05	0.057	23.04	24.00	1.247	0.071	/
Body-worn														
Ant.0	QPSK	Front Side	15	23095	707.5	1	Low	0.02	0.167	23.04	24.00	1.247	0.208	/
		Back Side	15	23095	707.5	1	Low	-0.13	0.220	23.04	24.00	1.247	0.274	27#
		Front Side	15	23095	707.5	25	Low	-0.13	0.136	23.04	24.00	1.247	0.170	/
		Back Side	15	23095	707.5	25	Low	-0.10	0.177	23.04	24.00	1.247	0.221	/
Hotspot														
Ant.0	QPSK	Front Side	10	23095	707.5	1	Low	0.02	0.092	23.04	24.00	1.247	0.115	/
		Back Side	10	23095	707.5	1	Low	0.05	0.141	23.04	24.00	1.247	0.176	/
		Left Edge	10	23095	707.5	1	Low	0.01	0.147	23.04	24.00	1.247	0.183	28#
		Right Edge	10	23095	707.5	1	Low	-0.12	0.093	23.04	24.00	1.247	0.116	/
		Bottom Edge	10	23095	707.5	1	Low	0.16	0.042	23.04	24.00	1.247	0.052	/
		Front Side	10	23095	707.5	25	Low	0.19	0.074	23.04	24.00	1.247	0.092	/
		Back Side	10	23095	707.5	25	Low	-0.03	0.113	23.04	24.00	1.247	0.141	/
		Left Edge	10	23095	707.5	25	Low	0.10	0.116	23.04	24.00	1.247	0.145	/
		Right Edge	10	23095	707.5	25	Low	0.15	0.073	23.04	24.00	1.247	0.091	/
		Bottom Edge	10	23095	707.5	25	Low	-0.11	0.034	23.04	24.00	1.247	0.042	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.12 LTE Band 17 (10MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Head														
Ant.0	QPSK	Left Cheek	0	23780	709	1	Low	0.05	0.122	23.03	24.00	1.250	0.153	/
		Left Tilt	0	23780	709	1	Low	0.06	0.067	23.03	24.00	1.250	0.084	/
		Right Cheek	0	23780	709	1	Low	-0.01	0.130	23.03	24.00	1.250	0.163	29#
		Right Tilt	0	23780	709	1	Low	-0.05	0.071	23.03	24.00	1.250	0.089	/
		Left Cheek	0	23780	709	25	Low	-0.08	0.100	23.03	24.00	1.250	0.125	/
		Left Tilt	0	23780	709	25	Low	0.02	0.057	23.03	24.00	1.250	0.071	/
		Right Cheek	0	23780	709	25	Low	-0.17	0.102	23.03	24.00	1.250	0.128	/
		Right Tilt	0	23780	709	25	Low	-0.17	0.057	23.03	24.00	1.250	0.071	/
Body-worn														
Ant.0	QPSK	Front Side	15	23780	709	1	Low	0.04	0.178	23.03	24.00	1.250	0.223	/
		Back Side	15	23780	709	1	Low	-0.05	0.223	23.03	24.00	1.250	0.279	30#
		Front Side	15	23780	709	25	Low	-0.02	0.143	23.03	24.00	1.250	0.179	/
		Back Side	15	23780	709	25	Low	0.09	0.189	23.03	24.00	1.250	0.236	/
Hotspot														
Ant.0	QPSK	Front Side	10	23780	709	1	Low	0.01	0.092	23.03	24.00	1.250	0.115	/
		Back Side	10	23780	709	1	Low	0.00	0.132	23.03	24.00	1.250	0.165	/
		Left Edge	10	23780	709	1	Low	0.03	0.147	23.03	24.00	1.250	0.184	31#
		Right Edge	10	23780	709	1	Low	-0.15	0.092	23.03	24.00	1.250	0.115	/
		Bottom Edge	10	23780	709	1	Low	-0.04	0.041	23.03	24.00	1.250	0.051	/
		Front Side	10	23780	709	25	Low	0.09	0.074	23.03	24.00	1.250	0.093	/
		Back Side	10	23780	709	25	Low	0.17	0.106	23.03	24.00	1.250	0.133	/
		Left Edge	10	23780	709	25	Low	0.10	0.117	23.03	24.00	1.250	0.146	/
		Right Edge	10	23780	709	25	Low	0.09	0.073	23.03	24.00	1.250	0.091	/
		Bottom Edge	10	23780	709	25	Low	0.06	0.034	23.03	24.00	1.250	0.043	/

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

10.13 LTE Band 25 (20MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Head														
Ant.1	QPSK	Left Cheek	0	26365	1882.5	1	Mid	0.00	0.537	18.95	19.00	1.012	0.543	/
		Left Tilt	0	26365	1882.5	1	Mid	0.12	0.509	18.95	19.00	1.012	0.515	/
		Right Cheek	0	26365	1882.5	1	Mid	0.00	0.808	18.95	19.00	1.012	0.818	32#
		Right Tilt	0	26365	1882.5	1	Mid	0.03	0.664	18.95	19.00	1.012	0.672	/
		Left Cheek	0	26365	1882.5	50	High	0.09	0.423	17.96	18.00	1.009	0.427	/
		Left Tilt	0	26365	1882.5	50	High	-0.01	0.400	17.96	18.00	1.009	0.404	/
		Right Cheek	0	26365	1882.5	50	High	0.13	0.659	17.96	18.00	1.009	0.665	/
		Right Tilt	0	26365	1882.5	50	High	-0.14	0.564	17.96	18.00	1.009	0.569	/
		Right Cheek	0	26140	1860	1	Mid	0.19	0.774	18.89	19.00	1.026	0.794	/
		Right Cheek	0	26590	1905	1	Mid	0.14	0.786	18.92	19.00	1.019	0.801	/
Body-worn														
Ant.1	QPSK	Front Side	15	26365	1882.5	1	Mid	0.17	0.107	18.95	19.00	1.012	0.108	/
		Back Side	15	26365	1882.5	1	Mid	0.01	0.193	18.95	19.00	1.012	0.195	33#
		Front Side	15	26365	1882.5	50	High	0.07	0.090	17.96	18.00	1.009	0.091	/
		Back Side	15	26365	1882.5	50	High	-0.03	0.165	17.96	18.00	1.009	0.166	/
Hotspot														
Ant.1	QPSK	Front Side	10	26365	1882.5	1	Mid	-0.06	0.187	18.95	19.00	1.012	0.189	/
		Back Side	10	26365	1882.5	1	Mid	-0.01	0.381	18.95	19.00	1.012	0.386	34#
		Right Edge	10	26365	1882.5	1	Mid	0.03	0.146	18.95	19.00	1.012	0.148	/
		Top Edge	10	26365	1882.5	1	Mid	0.15	0.249	18.95	19.00	1.012	0.252	/
		Front Side	10	26365	1882.5	50	High	-0.04	0.158	17.96	18.00	1.009	0.159	/
		Back Side	10	26365	1882.5	50	High	-0.08	0.320	17.96	18.00	1.009	0.323	/
		Right Edge	10	26365	1882.5	50	High	-0.11	0.123	17.96	18.00	1.009	0.124	/
		Top Edge	10	26365	1882.5	50	High	0.16	0.216	17.96	18.00	1.009	0.218	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.14 LTE Band 26 (15MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Head														
Ant.0	QPSK	Left Cheek	0	26865	831.5	1	Low	0.05	0.156	23.03	24.00	1.250	0.195	/
		Left Tilt	0	26865	831.5	1	Low	0.01	0.092	23.03	24.00	1.250	0.115	/
		Right Cheek	0	26865	831.5	1	Low	0.01	0.200	23.03	24.00	1.250	0.250	35#
		Right Tilt	0	26865	831.5	1	Low	-0.12	0.117	23.03	24.00	1.250	0.146	/
		Left Cheek	0	26865	831.5	36	Low	0.18	0.121	23.03	24.00	1.250	0.151	/
		Left Tilt	0	26865	831.5	36	Low	-0.16	0.073	23.03	24.00	1.250	0.091	/
		Right Cheek	0	26865	831.5	36	Low	-0.16	0.147	23.03	24.00	1.250	0.184	/
		Right Tilt	0	26865	831.5	36	Low	-0.08	0.093	23.03	24.00	1.250	0.116	/
Body-worn														
Ant.0	QPSK	Front Side	15	26865	831.5	1	Low	0.12	0.174	23.03	24.00	1.250	0.218	/
		Back Side	15	26865	831.5	1	Low	0.02	0.208	23.03	24.00	1.250	0.260	36#
		Front Side	15	26865	831.5	36	Low	0.04	0.156	23.03	24.00	1.250	0.195	/
		Back Side	15	26865	831.5	36	Low	0.15	0.156	23.03	24.00	1.250	0.195	/
Hotspot														
Ant.0	QPSK	Front Side	10	26865	831.5	1	Low	-0.10	0.230	23.03	24.00	1.250	0.288	/
		Back Side	10	26865	831.5	1	Low	0.01	0.357	23.03	24.00	1.250	0.446	37#
		Left Edge	10	26865	831.5	1	Low	0.08	0.189	23.03	24.00	1.250	0.236	/
		Right Edge	10	26865	831.5	1	Low	0.02	0.069	23.03	24.00	1.250	0.086	/
		Bottom Edge	10	26865	831.5	1	Low	0.01	0.241	23.03	24.00	1.250	0.301	/
		Front Side	10	26865	831.5	36	Low	-0.02	0.182	23.03	24.00	1.250	0.228	/
		Back Side	10	26865	831.5	36	Low	0.05	0.278	23.03	24.00	1.250	0.348	/
		Left Edge	10	26865	831.5	36	Low	-0.13	0.167	23.03	24.00	1.250	0.209	/
		Right Edge	10	26865	831.5	36	Low	0.10	0.000	23.03	24.00	1.250	0.000	/
		Bottom Edge	10	26865	831.5	36	Low	0.00	0.194	23.03	24.00	1.250	0.243	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.15 LTE Band 66 (20MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Head														
Ant.1	QPSK	Left Cheek	0	132322	1745	1	Mid	0.15	0.390	19.49	19.50	1.002	0.391	/
		Left Tilt	0	132322	1745	1	Mid	-0.16	0.311	19.49	19.50	1.002	0.312	/
		Right Cheek	0	132322	1745	1	Mid	0.01	0.715	19.49	19.50	1.002	0.716	38#
		Right Tilt	0	132322	1745	1	Mid	-0.17	0.397	19.49	19.50	1.002	0.398	/
		Left Cheek	0	132072	1720	50	High	-0.03	0.300	18.49	18.50	1.002	0.301	/
		Left Tilt	0	132072	1720	50	High	-0.15	0.244	18.49	18.50	1.002	0.244	/
		Right Cheek	0	132072	1720	50	High	-0.19	0.486	18.49	18.50	1.002	0.487	/
		Right Tilt	0	132072	1720	50	High	0.15	0.306	18.49	18.50	1.002	0.307	/
Body-worn														
Ant.1	QPSK	Front Side	15	132322	1745	1	Mid	0.11	0.102	19.49	19.50	1.002	0.102	/
		Back Side	15	132322	1745	1	Mid	0.00	0.085	19.49	19.50	1.002	0.085	/
		Front Side	15	132072	1720	50	High	-0.09	0.084	18.49	18.50	1.002	0.084	/
		Back Side	15	132072	1720	50	High	-0.04	0.154	18.49	18.50	1.002	0.154	40#
Hotspot														
Ant.1	QPSK	Front Side	10	132322	1745	1	Mid	0.14	0.177	19.49	19.50	1.002	0.177	/
		Back Side	10	132322	1745	1	Mid	-0.01	0.343	19.49	19.50	1.002	0.344	41#
		Right Edge	10	132322	1745	1	Mid	0.10	0.109	19.49	19.50	1.002	0.109	/
		Top Edge	10	132322	1745	1	Mid	0.10	0.240	19.49	19.50	1.002	0.240	/
		Front Side	10	132072	1720	50	High	0.08	0.148	18.49	18.50	1.002	0.148	/
		Back Side	10	132072	1720	50	High	-0.04	0.282	18.49	18.50	1.002	0.283	/
		Right Edge	10	132072	1720	50	High	-0.19	0.089	18.49	18.50	1.002	0.089	/
		Top Edge	10	132072	1720	50	High	-0.10	0.209	18.49	18.50	1.002	0.209	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.16 LTE Band 66 Worse case for CA Test

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Head-CA														
Ant.1	QPSK	Right Cheek	0	132322+132124	1745+1725.2	1+1	High+Low	0.01	0.611	19.46	19.50	1.009	0.616	39#
Ant.1	QPSK	Right Cheek	0	132572+132322	1770+1745	1+1	Low+High	0.00	0.615	19.49	19.50	1.002	0.616	/
Body-worn-CA														
Ant.1	QPSK	Back Side	15	132322+132124	1745+1725.2	1+1	High+Low	0.03	0.136	19.46	19.50	1.009	0.137	/
Ant.1	QPSK	Back Side	15	132572+132322	1770+1745	1+1	Low+High	-0.01	0.114	19.49	19.50	1.002	0.114	/
Hotspot-CA														
Back Side	QPSK	Back Side	10	132322+132124	1745+1725.2	1+1	High+Low	-0.11	0.307	19.46	19.50	1.009	0.310	42#
Back Side	QPSK	Back Side	10	132572+132322	1770+1745	1+1	Low+High	0.02	0.298	19.49	19.50	1.002	0.299	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.17 LTE Band 71 (20MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Head														
Ant.0	QPSK	Left Cheek	0	133322	683	1	Low	0.03	0.106	22.98	24.00	1.265	0.134	/
		Left Tilt	0	133322	683	1	Low	0.03	0.057	22.98	24.00	1.265	0.072	/
		Right Cheek	0	133322	683	1	Low	0.01	0.115	22.98	24.00	1.265	0.145	43#
		Right Tilt	0	133322	683	1	Low	0.07	0.065	22.98	24.00	1.265	0.082	/
		Left Cheek	0	133322	683	50	Low	0.03	0.082	22.98	24.00	1.265	0.104	/
		Left Tilt	0	133322	683	50	Low	0.15	0.043	22.98	24.00	1.265	0.054	/
		Right Cheek	0	133322	683	50	Low	0.19	0.097	22.98	24.00	1.265	0.123	/
		Right Tilt	0	133322	683	50	Low	0.04	0.056	22.98	24.00	1.265	0.071	/
Body-worn														
Ant.0	QPSK	Front Side	15	133322	683	1	Low	0.06	0.159	22.98	24.00	1.265	0.201	/
		Back Side	15	133322	683	1	Low	0.01	0.197	22.98	24.00	1.265	0.249	44#
		Front Side	15	133322	683	50	Low	-0.12	0.128	22.98	24.00	1.265	0.162	/
		Back Side	15	133322	683	50	Low	-0.08	0.158	22.98	24.00	1.265	0.200	/
Hotspot														
Ant.0	QPSK	Front Side	10	133322	683	1	Low	-0.05	0.159	22.98	24.00	1.265	0.201	/
		Back Side	10	133322	683	1	Low	0.01	0.203	22.98	24.00	1.265	0.257	45#
		Left Edge	10	133322	683	1	Low	0.14	0.161	22.98	24.00	1.265	0.204	/
		Right Edge	10	133322	683	1	Low	-0.05	0.134	22.98	24.00	1.265	0.170	/
		Bottom Edge	10	133322	683	1	Low	0.12	0.099	22.98	24.00	1.265	0.125	/
		Front Side	10	133322	683	50	Low	0.05	0.133	22.98	24.00	1.265	0.168	/
		Back Side	10	133322	683	50	Low	-0.10	0.178	22.98	24.00	1.265	0.225	/
		Left Edge	10	133322	683	50	Low	0.09	0.082	22.98	24.00	1.265	0.104	/
		Right Edge	10	133322	683	50	Low	0.04	0.070	22.98	24.00	1.265	0.089	/
		Bottom Edge	10	133322	683	50	Low	0.10	0.071	22.98	24.00	1.265	0.090	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.18 LTE Band 41 (20MHz Bandwidth)

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Head														
Ant.5	QPSK	Left Cheek	0	40620	2593	1	Low	-0.10	0.008	23.11	24.50	1.377	0.011	/
		Left Tilt	0	40620	2593	1	Low	0.06	0.005	23.11	24.50	1.377	0.007	/
		Right Cheek	0	40620	2593	1	Low	0.08	0.020	23.11	24.50	1.377	0.028	46#
		Right Tilt	0	40620	2593	1	Low	0.19	0.011	23.11	24.50	1.377	0.015	/
		Left Cheek	0	40620	2593	50	Low	-0.16	0.005	23.11	24.50	1.377	0.007	/
		Left Tilt	0	40620	2593	50	Low	-0.13	0.002	23.11	24.50	1.377	0.003	/
		Right Cheek	0	40620	2593	50	Low	0.06	0.011	23.11	24.50	1.377	0.015	/
		Right Tilt	0	40620	2593	50	Low	-0.18	0.004	23.11	24.50	1.377	0.006	/
Body-worn														
Ant.5	QPSK	Front Side	15	40620	2593	1	Low	0.02	0.010	23.11	24.50	1.377	0.014	/
		Back Side	15	40620	2593	1	Low	0.00	0.046	23.11	24.50	1.377	0.063	48#
		Front Side	15	40620	2593	50	Low	0.01	0.020	23.11	24.50	1.377	0.028	/
		Back Side	15	40620	2593	50	Low	0.02	0.010	23.11	24.50	1.377	0.014	/
Hotspot														
Ant.5	QPSK	Front Side	10	40185	40185	1	Low	0.18	0.057	23.11	24.50	1.377	0.078	/
		Back Side	10	40185	40185	1	Low	0.06	0.159	23.11	24.50	1.377	0.219	50#
		Right Edge	10	40185	40185	1	Low	0.16	0.083	23.11	24.50	1.377	0.114	/
		Top Edge	10	40185	40185	1	Low	-0.11	0.001	23.11	24.50	1.377	0.001	/
		Front Side	10	40185	40185	50	Low	0.05	0.033	23.11	24.50	1.377	0.045	/
		Back Side	10	40185	40185	50	Low	0.11	0.091	23.11	24.50	1.377	0.125	/
		Right Edge	10	40185	40185	50	Low	-0.10	0.060	23.11	24.50	1.377	0.083	/
		Top Edge	10	40185	40185	50	Low	-0.13	0.001	23.11	24.50	1.377	0.001	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.19 LTE Band 41 Worse case for CA Test

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Head-CA														
Ant.5	QPSK	Right Cheek	0	40620+40818	2593+2612.8	1	High+Low	-0.04	0.016	23.18	24.50	1.355	0.022	47#
Body-worn-CA														
Ant.5	QPSK	Back Side	15	40620+40818	2593+2612.8	1	High+Low	0.00	0.040	23.18	24.50	1.355	0.054	49#
Hotspot-CA														
Ant.5	QPSK	Back Side	10	40620+40818	2593+2612.8	1	High+Low	-0.05	0.142	23.18	24.50	1.355	0.192	51#
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.20 5G n2 (20Hz Bandwidth)

Antenna	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Setting	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																
Ant.5	DFT-s- OFDM BPSK	SA	Left Cheek	0	376000	1880	1	1	230	0.07	0.223	22.97	23.00	1.007	0.225	/
			Left Tilt	0	376000	1880	1	1	230	-0.10	0.079	22.97	23.00	1.007	0.080	/
			Right Cheek	0	376000	1880	1	1	230	0.02	0.432	22.97	23.00	1.007	0.435	/
			Right Tilt	0	376000	1880	1	1	230	0.10	0.132	22.97	23.00	1.007	0.133	/
			Left Cheek	0	376000	1880	50	0	230	0.02	0.240	22.97	23.00	1.007	0.242	/
			Left Tilt	0	376000	1880	50	0	230	0.18	0.079	22.97	23.00	1.007	0.080	/
			Right Cheek	0	376000	1880	50	0	230	-0.02	0.495	22.97	23.00	1.007	0.498	52#
			Right Tilt	0	376000	1880	50	0	230	0.00	0.137	22.97	23.00	1.007	0.138	/
Body-worn																
Ant.5	DFT-s- OFDM BPSK	SA	Front Side	15	376000	1880	1	1	230	0.13	0.064	22.97	23.00	1.007	0.064	/
			Back Side	15	376000	1880	1	1	230	0.00	0.167	22.97	23.00	1.007	0.168	53#
			Front Side	15	376000	1880	50	0	230	-0.09	0.054	22.97	23.00	1.007	0.054	/
			Back Side	15	376000	1880	50	0	230	-0.06	0.152	22.97	23.00	1.007	0.153	/
Hotspot																
Ant.5	DFT-s- OFDM BPSK	SA	Front Side	10	376000	1880	1	1	230	-0.10	0.133	22.97	23.00	1.007	0.134	/
			Back Side	10	376000	1880	1	1	230	0.03	0.450	22.97	23.00	1.007	0.453	54#
			Right Edge	10	376000	1880	1	1	230	-0.13	0.387	22.97	23.00	1.007	0.390	/
			Top Edge	10	376000	1880	1	1	230	0.02	0.038	22.97	23.00	1.007	0.038	/
			Front Side	10	376000	1880	50	0	230	-0.03	0.127	22.97	23.00	1.007	0.128	/
			Back Side	10	376000	1880	50	0	230	0.02	0.416	22.97	23.00	1.007	0.419	/
			Right Edge	10	376000	1880	50	0	230	-0.18	0.393	22.97	23.00	1.007	0.396	/
			Top Edge	10	376000	1880	50	0	230	0.11	0.051	22.97	23.00	1.007	0.051	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

10.21 5G n5 (20Hz Bandwidth)

Antenna	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Setting	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																
Ant.0	DFT-s-OFDM BPSK	SA	Left Cheek	0	167800	839	1	1	230	0.18	0.058	22.89	23.00	1.026	0.060	/
			Left Tilt	0	167800	839	1	1	230	0.13	0.047	22.89	23.00	1.026	0.048	/
			Right Cheek	0	167800	839	1	1	230	0.00	0.098	22.89	23.00	1.026	0.101	55#
			Right Tilt	0	167800	839	1	1	230	-0.07	0.068	22.89	23.00	1.026	0.070	/
			Left Cheek	0	167800	839	50	0	230	-0.12	0.047	22.89	23.00	1.026	0.048	/
			Left Tilt	0	167800	839	50	0	230	-0.17	0.037	22.89	23.00	1.026	0.038	/
			Right Cheek	0	167800	839	50	0	230	0.00	0.083	22.89	23.00	1.026	0.085	/
			Right Tilt	0	167800	839	50	0	230	-0.14	0.049	22.89	23.00	1.026	0.050	/
Body-worn																
Ant.0	DFT-s-OFDM BPSK	SA	Front Side	15	167800	839	1	1	230	-0.17	0.082	22.89	23.00	1.026	0.084	/
			Back Side	15	167800	839	1	1	230	0.00	0.126	22.89	23.00	1.026	0.129	56#
			Front Side	15	167800	839	50	0	230	-0.18	0.080	22.89	23.00	1.026	0.082	/
			Back Side	15	167800	839	50	0	230	-0.05	0.099	22.89	23.00	1.026	0.102	/
Hotspot																
Ant.0	DFT-s-OFDM BPSK	SA	Front Side	10	167800	839	1	1	230	0.05	0.162	22.89	23.00	1.026	0.166	/
			Back Side	10	167800	839	1	1	230	-0.01	0.269	22.89	23.00	1.026	0.276	58#
			Left Edge	10	167800	839	1	1	230	-0.07	0.134	22.89	23.00	1.026	0.137	/
			Right Edge	10	167800	839	1	1	230	-0.01	0.000	22.89	23.00	1.026	0.000	/
			Bottom Edge	10	167800	839	1	1	230	0.08	0.212	22.89	23.00	1.026	0.218	/
			Front Side	10	167800	839	50	0	230	0.07	0.155	22.89	23.00	1.026	0.159	/
			Back Side	10	167800	839	50	0	230	-0.09	0.243	22.89	23.00	1.026	0.249	/
			Left Edge	10	167800	839	50	0	230	0.06	0.109	22.89	23.00	1.026	0.112	/
			Right Edge	10	167800	839	50	0	230	0.06	0.000	22.89	23.00	1.026	0.000	/
			Bottom Edge	10	167800	839	50	0	230	0.07	0.203	22.89	23.00	1.026	0.208	/

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

10.22 5G n25 (20Hz Bandwidth)

Antenna	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Setting	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																
Ant.5	DFT-s-OFDM BPSK	SA	Left Cheek	0	376500	1882.5	1	53	190	-0.01	0.092	18.24	19.00	1.191	0.110	/
			Left Tilt	0	376500	1882.5	1	53	190	0.18	0.012	18.24	19.00	1.191	0.014	/
			Right Cheek	0	376500	1882.5	1	53	190	-0.14	0.233	18.24	19.00	1.191	0.278	59#
			Right Tilt	0	376500	1882.5	1	53	190	-0.04	0.053	18.24	19.00	1.191	0.063	/
			Left Cheek	0	376500	1882.5	50	38	190	0.04	0.089	18.33	19.00	1.167	0.104	/
			Left Tilt	0	376500	1882.5	50	38	190	0.08	0.007	18.33	19.00	1.167	0.008	/
			Right Cheek	0	376500	1882.5	50	38	190	0.07	0.219	18.33	19.00	1.167	0.256	/
			Right Tilt	0	376500	1882.5	50	38	190	0.13	0.050	18.33	19.00	1.167	0.058	/
Body-worn																
Ant.5	DFT-s-OFDM BPSK	SA	Front Side	15	376500	1882.5	1	53	190	0.14	0.007	18.24	19.00	1.191	0.008	/
			Back Side	15	376500	1882.5	1	53	190	-0.14	0.052	18.24	19.00	1.191	0.062	/
			Front Side	15	376500	1882.5	50	38	190	-0.11	0.012	18.33	19.00	1.167	0.014	/
			Back Side	15	376500	1882.5	50	38	190	0.10	0.055	18.33	19.00	1.167	0.064	60#
Hotspot																
Ant.5	DFT-s-OFDM BPSK	SA	Front Side	10	376500	1882.5	1	53	190	0.16	0.045	18.24	19.00	1.191	0.054	/
			Back Side	10	376500	1882.5	1	53	190	0.04	0.144	18.24	19.00	1.191	0.172	/
			Right Edge	10	376500	1882.5	1	53	190	-0.09	0.132	18.24	19.00	1.191	0.157	/
			Top Edge	10	376500	1882.5	1	53	190	-0.07	0.012	18.24	19.00	1.191	0.014	/
			Front Side	10	376500	1882.5	50	38	190	0.05	0.048	18.33	19.00	1.167	0.056	/
			Back Side	10	376500	1882.5	50	38	190	0.01	0.151	18.33	19.00	1.167	0.176	61#
			Right Edge	10	376500	1882.5	50	38	190	0.19	0.145	18.33	19.00	1.167	0.169	/
			Top Edge	10	376500	1882.5	50	38	190	-0.11	0.007	18.33	19.00	1.167	0.008	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

10.23 5G n66 (40Hz Bandwidth)

Antenna	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Setting	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																
Ant.5	DFT-s-OFDM BPSK	SA	Left Cheek	0	352000	1760	1	214	150	-0.07	0.164	18.95	19.00	1.012	0.166	/
			Left Tilt	0	352000	1760	1	214	150	-0.02	0.093	18.95	19.00	1.012	0.094	/
			Right Cheek	0	352000	1760	1	214	150	-0.01	0.330	18.95	19.00	1.012	0.334	62#
			Right Tilt	0	352000	1760	1	214	150	-0.19	0.082	18.95	19.00	1.012	0.083	/
			Left Cheek	0	352000	1760	108	54	150	0.00	0.135	18.82	19.00	1.042	0.141	/
			Left Tilt	0	352000	1760	108	54	150	-0.06	0.082	18.82	19.00	1.042	0.085	/
			Right Cheek	0	352000	1760	108	54	150	0.17	0.284	18.82	19.00	1.042	0.296	/
			Right Tilt	0	352000	1760	108	54	150	-0.17	0.068	18.82	19.00	1.042	0.071	/
Body-worn																
Ant.5	DFT-s-OFDM BPSK	SA	Front Side	15	352000	1760	1	214	150	0.13	0.004	18.95	19.00	1.012	0.004	/
			Back Side	15	352000	1760	1	214	150	0.18	0.079	18.95	19.00	1.012	0.080	/
			Front Side	15	352000	1760	108	54	150	-0.10	0.005	18.82	19.00	1.042	0.005	/
			Back Side	15	352000	1760	108	54	150	0.05	0.085	18.82	19.00	1.042	0.089	63#
Hotspot																
Ant.5	DFT-s-OFDM BPSK	SA	Front Side	10	352000	1760	1	214	150	-0.03	0.050	18.95	19.00	1.012	0.051	/
			Back Side	10	352000	1760	1	214	150	0.10	0.155	18.95	19.00	1.012	0.157	/
			Right Edge	10	352000	1760	1	214	150	0.01	0.152	18.95	19.00	1.012	0.154	/
			Top Edge	10	352000	1760	1	214	150	-0.16	0.004	18.95	19.00	1.012	0.004	/
			Front Side	10	352000	1760	108	54	150	-0.02	0.053	18.82	19.00	1.042	0.055	/
			Back Side	10	352000	1760	108	54	150	-0.19	0.153	18.82	19.00	1.042	0.159	/
			Right Edge	10	352000	1760	108	54	150	0.02	0.156	18.82	19.00	1.042	0.163	64#
			Top Edge	10	352000	1760	108	54	150	0.18	0.008	18.82	19.00	1.042	0.008	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

10.24 5G n71 (20Hz Bandwidth)

Antenna	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Setting	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																
Ant.0	DFT-s- OFDM BPSK	SA	Left Cheek	0	136100	680.5	1	1	230	-0.12	0.005	22.92	23.00	1.019	0.005	/
			Left Tilt	0	136100	680.5	1	1	230	-0.08	0.001	22.92	23.00	1.019	0.001	/
			Right Cheek	0	136100	680.5	1	1	230	0.02	0.035	22.92	23.00	1.019	0.036	65#
			Right Tilt	0	136100	680.5	1	1	230	-0.07	0.011	22.92	23.00	1.019	0.011	/
			Left Cheek	0	136100	680.5	50	0	230	-0.08	0.004	22.92	23.00	1.019	0.004	/
			Left Tilt	0	136100	680.5	50	0	230	-0.09	0.001	22.92	23.00	1.019	0.001	/
			Right Cheek	0	136100	680.5	50	0	230	-0.03	0.028	22.92	23.00	1.019	0.029	/
			Right Tilt	0	136100	680.5	50	0	230	0.17	0.008	22.92	23.00	1.019	0.008	/
Body-worn																
Ant.0	DFT-s- OFDM BPSK	SA	Front Side	15	136100	680.5	1	1	230	0.10	0.044	22.92	23.00	1.019	0.045	/
			Back Side	15	136100	680.5	1	1	230	-0.05	0.067	22.92	23.00	1.019	0.068	66#
			Front Side	15	136100	680.5	50	0	230	-0.06	0.038	22.92	23.00	1.019	0.039	/
			Back Side	15	136100	680.5	50	0	230	0.09	0.053	22.92	23.00	1.019	0.054	/
Hotspot																
Ant.0	DFT-s- OFDM BPSK	SA	Front Side	10	136100	680.5	1	1	230	0.09	0.071	22.92	23.00	1.019	0.072	/
			Back Side	10	136100	680.5	1	1	230	0.01	0.125	22.92	23.00	1.019	0.127	67#
			Left Edge	10	136100	680.5	1	1	230	-0.17	0.102	22.92	23.00	1.019	0.104	/
			Right Edge	10	136100	680.5	1	1	230	0.19	0.041	22.92	23.00	1.019	0.042	/
			Bottom Edge	10	136100	680.5	1	1	230	-0.08	0.106	22.92	23.00	1.019	0.108	/
			Front Side	10	136100	680.5	50	0	230	-0.10	0.060	22.92	23.00	1.019	0.061	/
			Back Side	10	136100	680.5	50	0	230	-0.14	0.097	22.92	23.00	1.019	0.099	/
			Left Edge	10	136100	680.5	50	0	230	-0.11	0.073	22.92	23.00	1.019	0.074	/
			Right Edge	10	136100	680.5	50	0	230	0.08	0.055	22.92	23.00	1.019	0.056	/
			Bottom Edge	10	136100	680.5	50	0	230	0.02	0.101	22.92	23.00	1.019	0.103	/

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

10.25 5G n41 (100Hz Bandwidth)

Antenna	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Setting	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																
Ant.3	DFT-s-OFDM BPSK	SA	Left Cheek	0	518598	2592.99	1	1	260	0.07	0.122	24.98	25.00	1.005	0.123	68#
			Left Tilt	0	518598	2592.99	1	1	260	0.12	0.045	24.98	25.00	1.005	0.045	/
			Right Cheek	0	518598	2592.99	1	1	260	0.16	0.081	24.98	25.00	1.005	0.081	/
			Right Tilt	0	518598	2592.99	1	1	260	0.08	0.063	24.98	25.00	1.005	0.063	/
			Left Cheek	0	518598	2592.99	135	0	260	-0.11	0.104	24.98	25.00	1.005	0.105	/
			Left Tilt	0	518598	2592.99	135	0	260	0.00	0.036	24.98	25.00	1.005	0.036	/
			Right Cheek	0	518598	2592.99	135	0	260	-0.04	0.059	24.98	25.00	1.005	0.059	/
			Right Tilt	0	518598	2592.99	135	0	260	-0.14	0.059	24.98	25.00	1.005	0.059	/
Body-worn																
Ant.3	DFT-s-OFDM BPSK	SA	Front Side	15	518598	2592.99	1	1	260	-0.05	0.122	24.98	25.00	1.005	0.123	/
			Back Side	15	518598	2592.99	1	1	260	0.02	0.208	24.98	25.00	1.005	0.209	69#
			Front Side	15	518598	2592.99	135	0	260	0.05	0.094	24.98	25.00	1.005	0.094	/
			Back Side	15	518598	2592.99	135	0	260	-0.13	0.164	24.98	25.00	1.005	0.165	/
Hotspot																
Ant.3	DFT-s-OFDM BPSK	SA	Front Side	10	518598	2592.99	1	1	260	0.03	0.170	24.98	25.00	1.005	0.171	/
			Back Side	10	518598	2592.99	1	1	260	0.02	0.302	24.98	25.00	1.005	0.304	70#
			Left Edge	10	518598	2592.99	1	1	260	-0.13	0.008	24.98	25.00	1.005	0.008	/
			Top Edge	10	518598	2592.99	1	1	260	0.03	0.292	24.98	25.00	1.005	0.293	/
			Front Side	10	518598	2592.99	135	0	260	0.06	0.074	24.98	25.00	1.005	0.074	/
			Back Side	10	518598	2592.99	135	0	260	-0.10	0.115	24.98	25.00	1.005	0.116	/
			Left Edge	10	518598	2592.99	135	0	260	-0.06	0.002	24.98	25.00	1.005	0.002	/
			Top Edge	10	518598	2592.99	135	0	260	-0.04	0.247	24.98	25.00	1.005	0.248	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

10.26 5G n77 (100Hz Bandwidth)

Antenna	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Setting	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Head																
Ant.2	DFT-s-OFDM BPSK	SA	Left Cheek	0	650000	3750	1	137	180	-0.18	0.307	20.45	20.50	1.012	0.311	/
			Left Tilt	0	650000	3750	1	137	180	0.04	0.243	20.45	20.50	1.012	0.246	/
			Right Cheek	0	650000	3750	1	137	180	-0.10	0.828	20.45	20.50	1.012	0.838	/
			Right Tilt	0	650000	3750	1	137	180	-0.18	0.564	20.45	20.50	1.012	0.571	/
			Left Cheek	0	650000	3750	135	0	180	0.12	0.275	20.36	20.50	1.033	0.284	/
			Left Tilt	0	650000	3750	135	0	180	0.00	0.245	20.36	20.50	1.033	0.253	/
			Right Cheek	0	650000	3750	135	0	180	-0.01	0.872	20.36	20.50	1.033	0.901	71#
			Right Tilt	0	650000	3750	135	0	180	0.09	0.559	20.36	20.50	1.033	0.577	/
			Right Cheek	0	623334	3350.01	1	1	180	-0.04	0.353	20.28	20.50	1.052	0.371	/
			Right Cheek	0	676666	4149.99	1	217	180	0.09	0.806	20.22	20.50	1.067	0.860	/
			Right Cheek	0	623334	3350.01	135	0	180	-0.01	0.370	20.02	20.50	1.117	0.413	/
			Right Cheek	0	676666	4149.99	135	0	180	-0.08	0.795	20.08	20.50	1.102	0.876	/
			Right Cheek	0	650000	3750	270	0	180	0.14	0.806	20.07	20.50	1.104	0.890	/
Body-worn																
Ant.2	DFT-s-OFDM BPSK	SA	Front Side	15	650000	3750	1	1	180	-0.19	0.100	20.45	20.50	1.012	0.101	/
			Back Side	15	650000	3750	1	1	180	-0.01	0.107	20.45	20.50	1.012	0.108	/
			Front Side	15	650000	3750	135	0	180	0.10	0.112	20.36	20.50	1.033	0.116	/
			Back Side	15	650000	3750	135	0	180	0.04	0.115	20.36	20.50	1.033	0.119	72#
Hotspot																
Ant.2	DFT-s-OFDM BPSK	SA	Front Side	10	650000	3750	1	1	180	-0.08	0.133	20.45	20.50	1.012	0.135	/
			Back Side	10	650000	3750	1	1	180	0.01	0.187	20.45	20.50	1.012	0.189	/
			Right Edge	10	650000	3750	1	1	180	0.12	0.145	20.45	20.50	1.012	0.147	/
			Top Edge	10	650000	3750	1	1	180	-0.06	0.078	20.45	20.50	1.012	0.079	/
			Front Side	10	650000	3750	135	0	180	-0.12	0.144	20.36	20.50	1.033	0.149	/
			Back Side	10	650000	3750	135	0	180	-0.01	0.227	20.36	20.50	1.033	0.234	73#
			Right Edge	10	650000	3750	135	0	180	-0.06	0.174	20.36	20.50	1.033	0.180	/
			Top Edge	10	650000	3750	135	0	180	0.16	0.077	20.36	20.50	1.033	0.080	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

10.27 WIFI 2.4GHz

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	Duty Cycle (%)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Head														
Ant.6	802.11 b	Left Cheek	0	11	2462	-0.02	0.287	17.70	19.00	1.349	99.59	1.004	0.389	/
	802.11 b	Left Tilt	0	11	2462	0.10	0.385	17.70	19.00	1.349	99.59	1.004	0.521	74#
	802.11 b	Right Cheek	0	11	2462	0.08	0.154	17.70	19.00	1.349	99.59	1.004	0.209	/
	802.11 b	Right Tilt	0	11	2462	-0.10	0.218	17.70	19.00	1.349	99.59	1.004	0.295	/
	802.11 b	Left Tilt	0	1	2412	0.11	0.270	17.40	19.00	1.445	99.59	1.004	0.392	/
	802.11 b	Left Tilt	0	6	2437	0.19	0.263	17.67	19.00	1.358	99.59	1.004	0.359	/
Body-Wron														
Ant.6	802.11 b	Front Side	15	11	2462	0.00	0.050	17.70	19.00	1.349	99.59	1.004	0.068	/
	802.11 b	Back Side	15	11	2462	-0.02	0.076	17.70	19.00	1.349	99.59	1.004	0.103	/
	802.11 b	Back Side	15	1	2412	0.06	0.072	17.40	19.00	1.445	99.59	1.004	0.104	75#
	802.11 b	Back Side	15	6	2437	0.09	0.072	17.67	19.00	1.358	99.59	1.004	0.098	/
Hotspot														
Ant.6	802.11 b	Front Side	10	11	2462	-0.02	0.082	17.70	19.00	1.349	99.59	1.004	0.111	/
	802.11 b	Back Side	10	11	2462	0.01	0.166	17.70	19.00	1.349	99.59	1.004	0.225	76#
	802.11 b	Left Edge	10	11	2462	0.09	0.061	17.70	19.00	1.349	99.59	1.004	0.083	/
	802.11 b	Top Edge	10	11	2462	-0.18	0.148	17.70	19.00	1.349	99.59	1.004	0.200	/
	802.11 b	Back Side	10	1	2412	0.10	0.143	17.40	19.00	1.445	99.59	1.004	0.207	/
	802.11 b	Back Side	10	6	2437	-0.10	0.141	17.67	19.00	1.358	99.59	1.004	0.192	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

10.28 WIFI 5GHz

Antenna	Band	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	Duty Cycle (%)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Head															
Ant.6	5.3G	802.11 a	Left Cheek	0	60	5300	0.16	0.261	14.42	15.50	1.282	97.55	1.025	0.343	77#
	5.3G	802.11 a	Left Tilt	0	60	5300	-0.11	0.188	14.42	15.50	1.282	97.55	1.025	0.247	/
	5.3G	802.11 a	Right Cheek	0	60	5300	0.17	0.150	14.42	15.50	1.282	97.55	1.025	0.197	/
	5.3G	802.11 a	Right Tilt	0	60	5300	-0.12	0.133	14.42	15.50	1.282	97.55	1.025	0.175	/
	5.3G	802.11 a	Left Cheek	0	52	5260	0.06	0.251	14.40	15.50	1.288	97.55	1.025	0.331	/
	5.3G	802.11 a	Left Cheek	0	64	5320	-0.05	0.218	14.22	15.50	1.343	97.55	1.025	0.300	/
Ant.6	5.6G	802.11 a	Left Cheek	0	140	5700	-0.02	0.056	15.36	15.50	1.033	97.55	1.025	0.059	/
	5.6G	802.11 a	Left Tilt	0	140	5700	-0.020	0.117	15.36	15.50	1.033	97.55	1.025	0.124	78#
	5.6G	802.11 a	Right Cheek	0	140	5700	-0.11	0.054	15.36	15.50	1.033	97.55	1.025	0.057	/
	5.6G	802.11 a	Right Tilt	0	140	5700	-0.09	0.072	15.36	15.50	1.033	97.55	1.025	0.076	/
	5.6G	802.11 a	Left Tilt	0	100	5500	0.11	0.047	14.05	15.50	1.396	97.55	1.025	0.067	/
	5.6G	802.11 a	Left Tilt	0	116	5580	0.06	0.059	14.60	15.50	1.230	97.55	1.025	0.074	/
Ant.6	5.8G	802.11 a	Left Cheek	0	149	5745	-0.05	0.045	15.42	15.50	1.019	97.55	1.025	0.047	79#
	5.8G	802.11 a	Left Tilt	0	149	5745	0.18	0.021	15.42	15.50	1.019	97.55	1.025	0.022	/
	5.8G	802.11 a	Right Cheek	0	149	5745	-0.18	0.027	15.42	15.50	1.019	97.55	1.025	0.028	/
	5.8G	802.11 a	Right Tilt	0	149	5745	0.09	0.026	15.42	15.50	1.019	97.55	1.025	0.027	/
	5.8G	802.11 a	Left Cheek	0	157	5785	0.05	0.041	15.12	15.50	1.091	97.55	1.025	0.046	/
	5.8G	802.11 a	Left Cheek	0	165	5825	0.02	0.025	15.17	15.50	1.079	97.55	1.025	0.028	/
Body-worn															
Ant.6	5.3G	802.11 a	Front Side	15	60	5300	-0.16	0.029	14.42	15.50	1.282	97.55	1.025	0.038	/
	5.3G	802.11 a	Back Side	15	60	5300	0.09	0.035	14.42	15.50	1.282	97.55	1.025	0.046	80#
	5.3G	802.11 a	Back Side	15	52	5260	0.11	0.027	14.40	15.50	1.288	97.55	1.025	0.036	/
	5.3G	802.11 a	Back Side	15	64	5320	0.15	0.021	14.22	15.50	1.343	97.55	1.025	0.029	/
Ant.6	5.6G	802.11 a	Front Side	15	140	5700	-0.11	0.015	15.36	15.50	1.033	97.55	1.025	0.016	81#
	5.6G	802.11 a	Back Side	15	140	5700	-0.01	0.011	15.36	15.50	1.033	97.55	1.025	0.012	/
	5.6G	802.11 a	Front Side	15	100	5500	0.04	0.008	14.05	15.50	1.396	97.55	1.025	0.011	/
	5.6G	802.11 a	Front Side	15	116	5580	0.16	0.010	14.60	15.50	1.230	97.55	1.025	0.013	/
Ant.6	5.8G	802.11 a	Front Side	15	149	5745	-0.12	0.013	15.42	15.50	1.019	97.55	1.025	0.014	82#
	5.8G	802.11 a	Back Side	15	149	5745	-0.12	0.008	15.42	15.50	1.019	97.55	1.025	0.008	/
	5.8G	802.11 a	Front Side	15	157	5785	-0.12	0.009	15.12	15.50	1.091	97.55	1.025	0.010	/
	5.8G	802.11 a	Front Side	15	165	5825	-0.06	0.008	15.17	15.50	1.079	97.55	1.025	0.009	/
Hotspot															
Ant.6	5.2G	802.11 a	Front Side	10	44	5220	-0.15	0.071	14.43	15.50	1.279	97.55	1.025	0.093	/
	5.2G	802.11 a	Back Side	10	44	5220	0.14	0.069	14.43	15.50	1.279	97.55	1.025	0.090	/
	5.2G	802.11 a	Left Edge	10	44	5220	0.06	0.078	14.43	15.50	1.279	97.55	1.025	0.102	83#
	5.2G	802.11 a	Top Edge	10	44	5220	0.02	0.005	14.43	15.50	1.279	97.55	1.025	0.007	/

	5.2G	802.11 a	Left Edge	10	36	5180	0.17	0.076	14.37	15.50	1.297	97.55	1.025	0.101	/
	5.2G	802.11 a	Left Edge	10	48	5240	0.17	0.072	14.40	15.50	1.288	97.55	1.025	0.095	/
Ant.6	5.8G	802.11 a	Front Side	10	149	5745	0.11	0.001	15.42	15.50	1.019	97.55	1.025	0.001	/
	5.8G	802.11 a	Back Side	10	149	5745	-0.16	0.025	15.42	15.50	1.019	97.55	1.025	0.026	/
	5.8G	802.11 a	Left Edge	10	149	5745	-0.12	0.027	15.42	15.50	1.019	97.55	1.025	0.028	/
	5.8G	802.11 a	Top Edge	10	149	5745	0.07	0.058	15.42	15.50	1.019	97.55	1.025	0.061	84#
	5.8G	802.11 a	Top Edge	10	157	5785	-0.18	0.052	15.12	15.50	1.091	97.55	1.025	0.058	/
	5.8G	802.11 a	Top Edge	10	165	5825	-0.02	0.050	15.17	15.50	1.079	97.55	1.025	0.055	/

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

Antenna	Band	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	Duty Cycle (%)	Scaling Factor	10 g Scaled SAR (W/kg)	Meas. No.
Specific															
Ant.6	5.3G	802.11 a	Front Side	0	60	5300	0.06	0.091	14.42	15.50	1.282	97.55	1.025	0.120	/
	5.3G	802.11 a	Back Side	0	60	5300	0.12	0.098	14.42	15.50	1.282	97.55	1.025	0.129	/
	5.3G	802.11 a	Left Edge	0	60	5300	0.06	0.089	14.42	15.50	1.282	97.55	1.025	0.117	/
	5.3G	802.11 a	Right Edge	0	60	5300	0.02	0.008	14.42	15.50	1.282	97.55	1.025	0.011	/
	5.3G	802.11 a	Top Edge	0	60	5300	0.04	0.247	14.42	15.50	1.282	97.55	1.025	0.325	85#
	5.3G	802.11 a	Bottom Edge	0	60	5300	0.18	0.005	14.42	15.50	1.282	97.55	1.025	0.007	/
	5.3G	802.11 a	Top Edge	0	52	5260	0.12	0.194	14.40	15.50	1.288	97.55	1.025	0.256	/
	5.3G	802.11 a	Top Edge	0	64	5320	0.08	0.180	14.22	15.50	1.343	97.55	1.025	0.248	/
Ant.6	5.6G	802.11 a	Front Side	0	140	5700	-0.15	0.071	15.36	15.50	1.033	97.55	1.025	0.075	/
	5.6G	802.11 a	Back Side	0	140	5700	0.02	0.102	15.36	15.50	1.033	97.55	1.025	0.108	/
	5.6G	802.11 a	Left Edge	0	140	5700	-0.02	0.063	15.36	15.50	1.033	97.55	1.025	0.067	/
	5.6G	802.11 a	Right Edge	0	140	5700	0.05	0.012	15.36	15.50	1.033	97.55	1.025	0.013	/
	5.6G	802.11 a	Top Edge	0	140	5700	0.03	0.217	15.36	15.50	1.033	97.55	1.025	0.230	86#
	5.6G	802.11 a	Bottom Edge	0	140	5700	0.16	0.001	15.36	15.50	1.033	97.55	1.025	0.001	/
	5.6G	802.11 a	Top Edge	0	100	5500	-0.02	0.123	14.05	15.50	1.396	97.55	1.025	0.176	/
	5.6G	802.11 a	Top Edge	0	116	5580	0.16	0.143	14.60	15.50	1.230	97.55	1.025	0.180	/

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

10.29 Bluetooth

Antenna	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	Duty Cycle (%)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Head														
Ant.6	DH5	Left Cheek	0	0	2402	0.04	0.297	11.27	13.00	1.489	76.61	1.305	0.577	87#
Ant.6	DH5	Left Tilt	0	0	2402	-0.08	0.267	11.27	13.00	1.489	76.61	1.305	0.519	/
Ant.6	DH5	Right Cheek	0	0	2402	0.09	0.137	11.27	13.00	1.489	76.61	1.305	0.266	/
Ant.6	DH5	Right Tilt	0	0	2402	-0.16	0.179	11.27	13.00	1.489	76.61	1.305	0.348	/
Body-worn														
Ant.6	DH5	Front Side	15	0	2402	-0.05	0.044	11.27	13.00	1.489	76.61	1.305	0.066	/
Ant.6	DH5	Back Side	15	0	2402	0.00	0.069	11.27	13.00	1.489	76.61	1.305	0.103	88#
Hotspot														
Ant.6	DH5	Front Side	10	0	2402	0.12	0.002	11.27	13.00	1.489	76.61	1.305	0.003	/
Ant.6	DH5	Back Side	10	0	2402	-0.04	0.104	11.27	13.00	1.489	76.61	1.305	0.155	/
Ant.6	DH5	Left Edge	10	0	2402	-0.14	0.002	11.27	13.00	1.489	76.61	1.305	0.003	/
Ant.6	DH5	Top Edge	10	0	2402	0.06	0.155	11.27	13.00	1.489	76.61	1.305	0.231	89#
Note: Refer to ANNEX C for the detailed test data for each test configuration.														

11 SAR Measurement Variability

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

SAR repeated measurement procedure:

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

Frequency Band (MHz)	Wireless Band	RF Exposure Conditions	Test Position	Highest Measured SAR (W/kg)	Repeated SAR (Yes/No)	Repeated ^{1st} Measured SAR (W/kg)	Largest to Smallest SAR Ratio
1900	WCDMA band 2	Head	Right Cheek	0.911	Yes	0.859	1.06
1850	LTE band 25	Head	Right Cheek	0.808	Yes	0.803	1.01
3700	NR n77	Head	Right Cheek	0.872	Yes	0.846	1.03

Note: The ratio of largest to smallest SAR for the original and first repeated measurements is < 1.20 , the second repeated measurement. is not required.

12 SIMULTANEOUS TRANSMISSION

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

12.1 Simultaneous Transmission Mode Consider

No.	Simultaneous Tx Combination	Head	Body-worn	Hotspot
1	WWAN+2.4G WiFi+Bluetooth	Yes	Yes	Yes
2	WWAN+5G WiFi+Bluetooth	Yes	Yes	Yes

Note:

1. When stand-alone SAR is not required for a side of antenna, its SAR is considered zero in the SAR summing process to assess Multi-band transmission SAR compliance.
2. The maximum SAR summation is calculated based on the same configuration and test position.
3. The simultaneous transmission combinations of the more antennas contain combinations of less antennas, so only the worst simultaneous transmission combinations is shown in this report.

12.2 Sum SAR of Simultaneous Transmission

12.2.1 Head Simultaneous Transmission SAR Evaluation for WWAN and WLAN and BT

Band	Antenna	Position	Stand alone SAR				SUM SAR	
			1	2	3	4	1+2+4	1+3+4
			WWAN	2.4GWIFI Max.	5GWIFI Max.	Bluetooth Max.		
GSM850	Ant.0	Left Cheek	0.330	0.389	0.343	0.577	1.296	1.250
		Left Tilt	0.204	0.521	0.247	0.519	1.244	0.970
		Right Cheek	0.426	0.209	0.197	0.266	0.901	0.889
		Right Tilt	0.266	0.295	0.175	0.348	0.909	0.789
GSM1900	Ant.1	Left Cheek	0.082	0.389	0.343	0.577	1.048	1.002
		Left Tilt	0.078	0.521	0.247	0.519	1.118	0.844
		Right Cheek	0.124	0.209	0.197	0.266	0.599	0.587
		Right Tilt	0.101	0.295	0.175	0.348	0.744	0.624
WCDMA B2	Ant.1	Left Cheek	0.557	0.389	0.343	0.577	1.523	1.477
		Left Tilt	0.472	0.521	0.247	0.519	1.512	1.238
		Right Cheek	1.085	0.209	0.197	0.266	1.560	1.548
		Right Tilt	0.809	0.295	0.175	0.348	1.452	1.332
WCDMA B4	Ant.1	Left Cheek	0.602	0.389	0.343	0.577	1.568	1.522
		Left Tilt	0.506	0.521	0.247	0.519	1.546	1.272
		Right Cheek	1.064	0.209	0.197	0.266	1.539	1.527
		Right Tilt	0.557	0.295	0.175	0.348	1.200	1.080
WCDMA B5	Ant.0	Left Cheek	0.174	0.389	0.343	0.577	1.140	1.094
		Left Tilt	0.098	0.521	0.247	0.519	1.138	0.864
		Right Cheek	0.214	0.209	0.197	0.266	0.689	0.677
		Right Tilt	0.127	0.295	0.175	0.348	0.770	0.650
LTE B2	Ant.1	Left Cheek	0.370	0.389	0.343	0.577	1.336	1.290
		Left Tilt	0.335	0.521	0.247	0.519	1.375	1.101
		Right Cheek	0.701	0.209	0.197	0.266	1.176	1.164
		Right Tilt	0.456	0.295	0.175	0.348	1.099	0.979
LTE B4	Ant.1	Left Cheek	0.490	0.389	0.343	0.577	1.456	1.410
		Left Tilt	0.386	0.521	0.247	0.519	1.426	1.152
		Right Cheek	0.792	0.209	0.197	0.266	1.267	1.255
		Right Tilt	0.480	0.295	0.175	0.348	1.123	1.003
LTE B5	Ant.0	Left Cheek	0.182	0.389	0.343	0.577	1.148	1.102
		Left Tilt	0.110	0.521	0.247	0.519	1.150	0.876
		Right Cheek	0.218	0.209	0.197	0.266	0.693	0.681
		Right Tilt	0.134	0.295	0.175	0.348	0.777	0.657
LTE B12	Ant.0	Left Cheek	0.153	0.389	0.343	0.577	1.119	1.073
		Left Tilt	0.081	0.521	0.247	0.519	1.121	0.847
		Right Cheek	0.158	0.209	0.197	0.266	0.633	0.621
		Right Tilt	0.089	0.295	0.175	0.348	0.732	0.612

LTE B17	Ant.0	Left Cheek	0.153	0.389	0.343	0.577	1.119	1.073
		Left Tilt	0.084	0.521	0.247	0.519	1.124	0.850
		Right Cheek	0.163	0.209	0.197	0.266	0.638	0.626
		Right Tilt	0.089	0.295	0.175	0.348	0.732	0.612
LTE B25	Ant.1	Left Cheek	0.543	0.389	0.343	0.577	1.509	1.463
		Left Tilt	0.515	0.521	0.247	0.519	1.555	1.281
		Right Cheek	0.818	0.209	0.197	0.266	1.293	1.281
		Right Tilt	0.672	0.295	0.175	0.348	1.315	1.195
LTE B26	Ant.0	Left Cheek	0.195	0.389	0.343	0.577	1.161	1.115
		Left Tilt	0.115	0.521	0.247	0.519	1.155	0.881
		Right Cheek	0.250	0.209	0.197	0.266	0.725	0.713
		Right Tilt	0.146	0.295	0.175	0.348	0.789	0.669
LTE B66	Ant.1	Left Cheek	0.391	0.389	0.343	0.577	1.357	1.311
		Left Tilt	0.312	0.521	0.247	0.519	1.352	1.078
		Right Cheek	0.612	0.209	0.197	0.266	1.087	1.075
		Right Tilt	0.398	0.295	0.175	0.348	1.041	0.921
LTE B71	Ant.0	Left Cheek	0.134	0.389	0.343	0.577	1.100	1.054
		Left Tilt	0.072	0.521	0.247	0.519	1.112	0.838
		Right Cheek	0.145	0.209	0.197	0.266	0.620	0.608
		Right Tilt	0.082	0.295	0.175	0.348	0.725	0.605
LTE B41	Ant.1	Left Cheek	0.011	0.389	0.343	0.577	0.977	0.931
		Left Tilt	0.007	0.521	0.247	0.519	1.047	0.773
		Right Cheek	0.028	0.209	0.197	0.266	0.503	0.491
		Right Tilt	0.015	0.295	0.175	0.348	0.658	0.538
n2	Ant.5	Left Cheek	0.242	0.389	0.343	0.577	1.208	1.162
		Left Tilt	0.080	0.521	0.247	0.519	1.120	0.846
		Right Cheek	0.498	0.209	0.197	0.266	0.973	0.961
		Right Tilt	0.138	0.295	0.175	0.348	0.781	0.661
n5	Ant.0	Left Cheek	0.060	0.389	0.343	0.577	1.026	0.980
		Left Tilt	0.048	0.521	0.247	0.519	1.088	0.814
		Right Cheek	0.101	0.209	0.197	0.266	0.576	0.564
		Right Tilt	0.070	0.295	0.175	0.348	0.713	0.593
n25	Ant.0	Left Cheek	0.110	0.389	0.343	0.577	1.076	1.030
		Left Tilt	0.014	0.521	0.247	0.519	1.054	0.780
		Right Cheek	0.278	0.209	0.197	0.266	0.753	0.741
		Right Tilt	0.063	0.295	0.175	0.348	0.706	0.586
n66	Ant.5	Left Cheek	0.166	0.389	0.343	0.577	1.132	1.086
		Left Tilt	0.094	0.521	0.247	0.519	1.134	0.860
		Right Cheek	0.334	0.209	0.197	0.266	0.809	0.797
		Right Tilt	0.083	0.295	0.175	0.348	0.726	0.606
n71	Ant.0	Left Cheek	0.005	0.389	0.343	0.577	0.971	0.925
		Left Tilt	0.001	0.521	0.247	0.519	1.041	0.767
		Right Cheek	0.036	0.209	0.197	0.266	0.511	0.499

		Right Tilt	0.011	0.295	0.175	0.348	0.654	0.534
n41	Ant.3	Left Cheek	0.123	0.389	0.343	0.577	1.089	1.043
		Left Tilt	0.045	0.521	0.247	0.519	1.085	0.811
		Right Cheek	0.081	0.209	0.197	0.266	0.556	0.544
		Right Tilt	0.063	0.295	0.175	0.348	0.706	0.586
n77	Ant.2	Left Cheek	0.311	0.389	0.343	0.577	1.277	1.231
		Left Tilt	0.253	0.521	0.247	0.519	1.293	1.019
		Right Cheek	0.901	0.209	0.197	0.266	1.376	1.364
		Right Tilt	0.577	0.295	0.175	0.348	1.220	1.100

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

12.2.2 Head Simultaneous Transmission SAR Evaluation for ENDC and WLAN and BT

Band	Antenna	WWAN	Band	Antenna	WWAN	Position	Stand alone SAR				SUM SAR	
							1	2	3	4	1+2+4	1+3+4
							ENDC LTE+NR	2.4GWIFI Max.	5GWIFI Max.	Bluetooth Max.		
LTE B2	Ant.1	0.370	n66	Ant.5	0.166	Left Cheek	0.536	0.389	0.343	0.577	1.502	1.456
		0.335			0.094	Left Tilt	0.429	0.521	0.247	0.519	1.469	1.195
		0.701			0.334	Right Cheek	1.035	0.209	0.197	0.266	1.510	1.498
		0.456			0.083	Right Tilt	0.539	0.295	0.175	0.348	1.182	1.062
LTE B2	Ant.1	0.370	n71	Ant.0	0.005	Left Cheek	0.375	0.389	0.343	0.577	1.341	1.295
		0.335			0.001	Left Tilt	0.336	0.521	0.247	0.519	1.376	1.102
		0.701			0.036	Right Cheek	0.737	0.209	0.197	0.266	1.212	1.200
		0.456			0.011	Right Tilt	0.467	0.295	0.175	0.348	1.110	0.990
LTE B2	Ant.1	0.370	n41	Ant.3	0.123	Left Cheek	0.493	0.389	0.343	0.577	1.459	1.413
		0.335			0.045	Left Tilt	0.380	0.521	0.247	0.519	1.420	1.146
		0.701			0.081	Right Cheek	0.782	0.209	0.197	0.266	1.257	1.245
		0.456			0.063	Right Tilt	0.519	0.295	0.175	0.348	1.162	1.042
LTE B66	Ant.1	0.391	n25	Ant.0	0.110	Left Cheek	0.501	0.389	0.343	0.577	1.467	1.421
		0.312			0.014	Left Tilt	0.326	0.521	0.247	0.519	1.366	1.092
		0.612			0.278	Right Cheek	0.890	0.209	0.197	0.266	1.365	1.353
		0.398			0.063	Right Tilt	0.461	0.295	0.175	0.348	1.104	0.984
LTE B66	Ant.1	0.391	n71	Ant.5	0.005	Left Cheek	0.396	0.389	0.343	0.577	1.362	1.316
		0.312			0.001	Left Tilt	0.313	0.521	0.247	0.519	1.353	1.079
		0.612			0.036	Right Cheek	0.648	0.209	0.197	0.266	1.123	1.111
		0.398			0.011	Right Tilt	0.409	0.295	0.175	0.348	1.052	0.932
LTE B66	Ant.1	0.391	n41	Ant.0	0.123	Left Cheek	0.514	0.389	0.343	0.577	1.480	1.434
		0.312			0.045	Left Tilt	0.357	0.521	0.247	0.519	1.397	1.123
		0.612			0.081	Right Cheek	0.693	0.209	0.197	0.266	1.168	1.156
		0.398			0.063	Right Tilt	0.461	0.295	0.175	0.348	1.104	0.984

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

12.2.3 Body-Worn Simultaneous Transmission SAR Evaluation for ENDC and WLAN and BT

Band	Antenna	Position	Stand alone SAR				SUM SAR	
			1	2	3	4	1+2+4	1+3+4
			WWAN	2.4GWIFI Max.	5GWIFI Max.	Bluetooth Max.		
GSM850	Ant.0	Front Side 15mm	0.325	0.068	0.038	0.066	0.459	0.429
		Back Side 15mm	0.440	0.104	0.046	0.103	0.647	0.589
GSM1900	Ant.1	Front Side 15mm	0.014	0.068	0.038	0.066	0.148	0.118
		Back Side 15mm	0.030	0.104	0.046	0.103	0.237	0.179
WCDMA B2	Ant.1	Front Side 15mm	0.176	0.068	0.038	0.066	0.310	0.280
		Back Side 15mm	0.322	0.104	0.046	0.103	0.529	0.471
WCDMA B4	Ant.1	Front Side 15mm	0.080	0.068	0.038	0.066	0.214	0.184
		Back Side 15mm	0.194	0.104	0.046	0.103	0.401	0.343
WCDMA B5	Ant.0	Front Side 15mm	0.201	0.068	0.038	0.066	0.335	0.305
		Back Side 15mm	0.244	0.104	0.046	0.103	0.451	0.393
LTE B2	Ant.1	Front Side 15mm	0.113	0.068	0.038	0.066	0.247	0.217
		Back Side 15mm	0.210	0.104	0.046	0.103	0.417	0.359
LTE B4	Ant.1	Front Side 15mm	0.068	0.068	0.038	0.066	0.202	0.172
		Back Side 15mm	0.115	0.104	0.046	0.103	0.322	0.264
LTE B5	Ant.0	Front Side 15mm	0.171	0.068	0.038	0.066	0.305	0.275
		Back Side 15mm	0.213	0.104	0.046	0.103	0.420	0.362
LTE B12	Ant.0	Front Side 15mm	0.208	0.068	0.038	0.066	0.342	0.312
		Back Side 15mm	0.274	0.104	0.046	0.103	0.481	0.423
LTE B17	Ant.0	Front Side 15mm	0.223	0.068	0.038	0.066	0.357	0.327
		Back Side 15mm	0.279	0.104	0.046	0.103	0.486	0.428
LTE B25	Ant.1	Front Side 15mm	0.108	0.068	0.038	0.066	0.242	0.212
		Back Side 15mm	0.195	0.104	0.046	0.103	0.402	0.344
LTE B26	Ant.0	Front Side 15mm	0.218	0.068	0.038	0.066	0.352	0.322
		Back Side 15mm	0.260	0.104	0.046	0.103	0.467	0.409
LTE B66	Ant.1	Front Side 15mm	0.102	0.068	0.038	0.066	0.236	0.206
		Back Side 15mm	0.154	0.104	0.046	0.103	0.361	0.303
LTE B71	Ant.0	Front Side 15mm	0.201	0.068	0.038	0.066	0.335	0.305
		Back Side 15mm	0.249	0.104	0.046	0.103	0.456	0.398
LTE B41	Ant.5	Front Side 15mm	0.014	0.068	0.038	0.066	0.148	0.118
		Back Side 15mm	0.055	0.104	0.046	0.103	0.262	0.204
n2	Ant.5	Front Side 15mm	0.064	0.068	0.038	0.066	0.198	0.168
		Back Side 15mm	0.168	0.104	0.046	0.103	0.375	0.317
n5	Ant.0	Front Side 15mm	0.084	0.068	0.038	0.066	0.218	0.188
		Back Side 15mm	0.129	0.104	0.046	0.103	0.336	0.278
n25	Ant.5	Front Side 15mm	0.008	0.068	0.038	0.066	0.142	0.112
		Back Side 15mm	0.064	0.104	0.046	0.103	0.271	0.213
n66	Ant.5	Front Side 15mm	0.004	0.068	0.038	0.066	0.138	0.108

		Back Side 15mm	0.089	0.104	0.046	0.103	0.296	0.238
n71	Ant.0	Front Side 15mm	0.045	0.068	0.038	0.066	0.179	0.149
		Back Side 15mm	0.068	0.104	0.046	0.103	0.275	0.217
n41	Ant.3	Front Side 15mm	0.123	0.068	0.038	0.066	0.257	0.227
		Back Side 15mm	0.209	0.104	0.046	0.103	0.416	0.358
n77	Ant.2	Front Side 15mm	0.101	0.068	0.038	0.066	0.235	0.205
		Back Side 15mm	0.119	0.104	0.046	0.103	0.326	0.268

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

12.2.4 Body-Worn Simultaneous Transmission SAR Evaluation for WWAN and WLAN and BT

Band	Antenna	WWAN	Band	Antenna	WWAN	Position	Stand alone SAR				SUM SAR	
							1	2	3	4	1+2+4	1+3+4
							WWAN LTE+NR	2.4GWIFI Max.	5GWIFI Max.	Bluetooth Max.		
LTE B2	Ant.1	0.113	n66	Ant.5	0.004	Front Side 15mm	0.117	0.068	0.038	0.066	0.251	0.221
		0.210			0.089	Back Side 15mm	0.299	0.104	0.046	0.103	0.506	0.448
LTE B2	Ant.1	0.113	n71	Ant.0	0.045	Front Side 15mm	0.158	0.068	0.038	0.066	0.292	0.262
		0.210			0.068	Back Side 15mm	0.278	0.104	0.046	0.103	0.485	0.427
LTE B2	Ant.1	0.113	n41	Ant.3	0.123	Front Side 15mm	0.236	0.068	0.038	0.066	0.370	0.340
		0.210			0.209	Back Side 15mm	0.419	0.104	0.046	0.103	0.626	0.568
LTE B66	Ant.1	0.102	n25	Ant.5	0.008	Front Side 15mm	0.110	0.068	0.038	0.066	0.244	0.214
		0.154			0.064	Back Side 15mm	0.218	0.104	0.046	0.103	0.425	0.367
LTE B66	Ant.1	0.102	n71	Ant.5	0.045	Front Side 15mm	0.147	0.068	0.038	0.066	0.281	0.251
		0.154			0.068	Back Side 15mm	0.222	0.104	0.046	0.103	0.429	0.371
LTE B66	Ant.1	0.102	n41	Ant.0	0.123	Front Side 15mm	0.225	0.068	0.038	0.066	0.359	0.329
		0.154			0.209	Back Side 15mm	0.363	0.104	0.046	0.103	0.570	0.512

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

12.2.5 Hotspot Simultaneous Transmission SAR Evaluation for WWAN and WLAN and BT

Band	Antenna	Position	Stand alone SAR				SUM SAR	
			1	2	3	4	1+2+4	1+3+4
			WWAN	2.4GWIFI Max.	5GWIFI Max.	Bluetooth Max.		
GSM850	Ant.0	Front Side 10mm	0.467	0.111	0.093	0.003	0.581	0.563
		Back Side 10mm	0.859	0.225	0.090	0.155	1.239	1.104
		Left Edge 10mm	0.368	0.083	0.102	0.003	0.454	0.473
		Right Edge 10mm	0.002	0.000	0.000	0.000	0.002	0.002
		Top Edge 10mm	0.531	0.200	0.007	0.231	0.962	0.769
		Bottom Edge 10mm	0.531	0.000	0.000	0.000	0.531	0.531
GSM1900	Ant.1	Front Side 10mm	0.026	0.111	0.093	0.003	0.140	0.122
		Back Side 10mm	0.055	0.225	0.090	0.155	0.435	0.300
		Left Edge 10mm	0.000	0.083	0.102	0.003	0.086	0.105
		Right Edge 10mm	0.020	0.000	0.000	0.000	0.020	0.020
		Top Edge 10mm	0.037	0.200	0.007	0.231	0.468	0.275
		Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
WCDMA B2	Ant.1	Front Side 10mm	0.277	0.111	0.093	0.003	0.391	0.373
		Back Side 10mm	0.594	0.225	0.090	0.155	0.974	0.839
		Left Edge 10mm	0.000	0.083	0.102	0.003	0.086	0.105
		Right Edge 10mm	0.208	0.000	0.000	0.000	0.208	0.208
		Top Edge 10mm	0.390	0.200	0.007	0.231	0.821	0.628
		Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
WCDMA B4	Ant.1	Front Side 10mm	0.213	0.111	0.093	0.003	0.327	0.309
		Back Side 10mm	0.406	0.225	0.090	0.155	0.786	0.651
		Left Edge 10mm	0.000	0.083	0.102	0.003	0.086	0.105
		Right Edge 10mm	0.163	0.000	0.000	0.000	0.163	0.163
		Top Edge 10mm	0.158	0.200	0.007	0.231	0.589	0.396
		Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
WCDMA B5	Ant.0	Front Side 10mm	0.355	0.111	0.093	0.003	0.469	0.451
		Back Side 10mm	0.563	0.225	0.090	0.155	0.943	0.808
		Left Edge 10mm	0.285	0.083	0.102	0.003	0.371	0.390
		Right Edge 10mm	0.010	0.000	0.000	0.000	0.010	0.010
		Top Edge 10mm	0.000	0.200	0.007	0.231	0.431	0.238
		Bottom Edge 10mm	0.406	0.000	0.000	0.000	0.406	0.406
LTE B2	Ant.1	Front Side 10mm	0.200	0.111	0.093	0.003	0.314	0.296
		Back Side 10mm	0.413	0.225	0.090	0.155	0.793	0.658
		Left Edge 10mm	0.000	0.083	0.102	0.003	0.086	0.105
		Right Edge 10mm	0.158	0.000	0.000	0.000	0.158	0.158
		Top Edge 10mm	0.263	0.200	0.007	0.231	0.694	0.501
		Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
LTE B4	Ant.1	Front Side 10mm	0.135	0.111	0.093	0.003	0.249	0.231

		Back Side 10mm	0.248	0.225	0.090	0.155	0.628	0.493
		Left Edge 10mm	0.000	0.083	0.102	0.003	0.086	0.105
		Right Edge 10mm	0.087	0.000	0.000	0.000	0.087	0.087
		Top Edge 10mm	0.138	0.200	0.007	0.231	0.569	0.376
		Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
LTE B5	Ant.0	Front Side 10mm	0.260	0.111	0.093	0.003	0.374	0.356
		Back Side 10mm	0.340	0.225	0.090	0.155	0.720	0.585
		Left Edge 10mm	0.214	0.083	0.102	0.003	0.300	0.319
		Right Edge 10mm	0.061	0.000	0.000	0.000	0.061	0.061
		Top Edge 10mm	0.000	0.200	0.007	0.231	0.431	0.238
		Bottom Edge 10mm	0.302	0.000	0.000	0.000	0.302	0.302
LTE B12	Ant.0	Front Side 10mm	0.115	0.111	0.093	0.003	0.229	0.211
		Back Side 10mm	0.176	0.225	0.090	0.155	0.556	0.421
		Left Edge 10mm	0.183	0.083	0.102	0.003	0.269	0.288
		Right Edge 10mm	0.116	0.000	0.000	0.000	0.116	0.116
		Top Edge 10mm	0.000	0.200	0.007	0.231	0.431	0.238
		Bottom Edge 10mm	0.052	0.000	0.000	0.000	0.052	0.052
LTE B17	Ant.0	Front Side 10mm	0.115	0.111	0.093	0.003	0.229	0.211
		Back Side 10mm	0.165	0.225	0.090	0.155	0.545	0.410
		Left Edge 10mm	0.184	0.083	0.102	0.003	0.270	0.289
		Right Edge 10mm	0.115	0.000	0.000	0.000	0.115	0.115
		Top Edge 10mm	0.000	0.200	0.007	0.231	0.431	0.238
		Bottom Edge 10mm	0.051	0.000	0.000	0.000	0.051	0.051
LTE B25	Ant.1	Front Side 10mm	0.189	0.111	0.093	0.003	0.303	0.285
		Back Side 10mm	0.386	0.225	0.090	0.155	0.766	0.631
		Left Edge 10mm	0.000	0.083	0.102	0.003	0.086	0.105
		Right Edge 10mm	0.148	0.000	0.000	0.000	0.148	0.148
		Top Edge 10mm	0.252	0.200	0.007	0.231	0.683	0.490
		Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
LTE B26	Ant.0	Front Side 10mm	0.288	0.111	0.093	0.003	0.402	0.384
		Back Side 10mm	0.446	0.225	0.090	0.155	0.826	0.691
		Left Edge 10mm	0.236	0.083	0.102	0.003	0.322	0.341
		Right Edge 10mm	0.086	0.000	0.000	0.000	0.086	0.086
		Top Edge 10mm	0.000	0.200	0.007	0.231	0.431	0.238
		Bottom Edge 10mm	0.301	0.000	0.000	0.000	0.301	0.301
LTE B66	Ant.1	Front Side 10mm	0.177	0.111	0.093	0.003	0.291	0.273
		Back Side 10mm	0.344	0.225	0.090	0.155	0.724	0.589
		Left Edge 10mm	0.000	0.083	0.102	0.003	0.086	0.105
		Right Edge 10mm	0.109	0.000	0.000	0.000	0.109	0.109
		Top Edge 10mm	0.240	0.200	0.007	0.231	0.671	0.478
		Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
LTE B71	Ant.5	Front Side 10mm	0.201	0.111	0.093	0.003	0.315	0.297
		Back Side 10mm	0.257	0.225	0.090	0.155	0.637	0.502

		Left Edge 10mm	0.204	0.083	0.102	0.003	0.290	0.309
		Right Edge 10mm	0.170	0.000	0.000	0.000	0.170	0.170
		Top Edge 10mm	0.000	0.200	0.007	0.231	0.431	0.238
		Bottom Edge 10mm	0.125	0.000	0.000	0.000	0.125	0.125
LTE B41	Ant.5	Front Side 10mm	0.078	0.111	0.093	0.003	0.192	0.174
		Back Side 10mm	0.219	0.225	0.090	0.155	0.599	0.464
		Left Edge 10mm	0.000	0.083	0.102	0.003	0.086	0.105
		Right Edge 10mm	0.114	0.000	0.000	0.000	0.114	0.114
		Top Edge 10mm	0.001	0.200	0.007	0.231	0.432	0.239
		Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
n2	Ant.5	Front Side 10mm	0.134	0.111	0.093	0.003	0.248	0.230
		Back Side 10mm	0.453	0.225	0.090	0.155	0.833	0.698
		Left Edge 10mm	0.000	0.083	0.102	0.003	0.086	0.105
		Right Edge 10mm	0.390	0.000	0.000	0.000	0.390	0.390
		Top Edge 10mm	0.038	0.200	0.007	0.231	0.469	0.276
		Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
n5	Ant.0	Front Side 10mm	0.166	0.111	0.093	0.003	0.280	0.262
		Back Side 10mm	0.276	0.225	0.090	0.155	0.656	0.521
		Left Edge 10mm	0.137	0.083	0.102	0.003	0.223	0.242
		Right Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
		Top Edge 10mm	0.000	0.200	0.007	0.231	0.431	0.238
		Bottom Edge 10mm	0.218	0.000	0.000	0.000	0.218	0.218
n25	Ant.5	Front Side 10mm	0.054	0.111	0.093	0.003	0.168	0.150
		Back Side 10mm	0.172	0.225	0.090	0.155	0.552	0.417
		Left Edge 10mm	0.000	0.083	0.102	0.003	0.086	0.105
		Right Edge 10mm	0.157	0.000	0.000	0.000	0.157	0.157
		Top Edge 10mm	0.014	0.200	0.007	0.231	0.445	0.252
		Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
n66	Ant.5	Front Side 10mm	0.055	0.111	0.093	0.003	0.169	0.151
		Back Side 10mm	0.159	0.225	0.090	0.155	0.539	0.404
		Left Edge 10mm	0.000	0.083	0.102	0.003	0.086	0.105
		Right Edge 10mm	0.163	0.000	0.000	0.000	0.163	0.163
		Top Edge 10mm	0.008	0.200	0.007	0.231	0.439	0.246
		Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
n71	Ant.0	Front Side 10mm	0.072	0.111	0.093	0.003	0.186	0.168
		Back Side 10mm	0.127	0.225	0.090	0.155	0.507	0.372
		Left Edge 10mm	0.104	0.083	0.102	0.003	0.190	0.209
		Right Edge 10mm	0.056	0.000	0.000	0.000	0.056	0.056
		Top Edge 10mm	0.000	0.200	0.007	0.231	0.431	0.238
		Bottom Edge 10mm	0.108	0.000	0.000	0.000	0.108	0.108
n41	Ant.3	Front Side 10mm	0.171	0.111	0.093	0.003	0.285	0.267
		Back Side 10mm	0.304	0.225	0.090	0.155	0.684	0.549
		Left Edge 10mm	0.008	0.083	0.102	0.003	0.094	0.113

		Right Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
		Top Edge 10mm	0.293	0.200	0.007	0.231	0.724	0.531
		Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
n77	Ant.2	Front Side 10mm	0.149	0.111	0.093	0.003	0.263	0.245
		Back Side 10mm	0.234	0.225	0.090	0.155	0.614	0.479
		Left Edge 10mm	0.000	0.083	0.102	0.003	0.086	0.105
		Right Edge 10mm	0.180	0.000	0.000	0.000	0.180	0.180
		Top Edge 10mm	0.080	0.200	0.007	0.231	0.511	0.318
		Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000

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

12.2.6 Hotspot Simultaneous Transmission SAR Evaluation for WWAN and WLAN and BT

Band	Antenna	WWAN	Band	Antenna	WWAN	Position	Stand alone SAR				SUM SAR	
							1	2	3	4	1+2+4	1+3+4
							WWAN	2.4GWIFI	5GWIFI	Bluetooth		
							LTE+NR	Max.	Max.	Max.		
LTE B2	Ant.1	0.200	n66	Ant.5	0.055	Front Side 10mm	0.255	0.111	0.093	0.003	0.369	0.351
		0.413			0.159	Back Side 10mm	0.572	0.225	0.090	0.155	0.952	0.817
		0.000			0.000	Left Edge 10mm	0.000	0.083	0.102	0.003	0.086	0.105
		0.158			0.163	Right Edge 10mm	0.321	0.000	0.000	0.000	0.321	0.321
		0.263			0.008	Top Edge 10mm	0.271	0.200	0.007	0.231	0.702	0.509
		0.000			0.000	Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
LTE B2	Ant.1	0.200	n71	Ant.0	0.072	Front Side 10mm	0.272	0.111	0.093	0.003	0.386	0.368
		0.413			0.127	Back Side 10mm	0.540	0.225	0.090	0.155	0.920	0.785
		0.000			0.104	Left Edge 10mm	0.104	0.083	0.102	0.003	0.190	0.209
		0.158			0.056	Right Edge 10mm	0.214	0.000	0.000	0.000	0.214	0.214
		0.263			0.000	Top Edge 10mm	0.263	0.200	0.007	0.231	0.694	0.501
		0.000			0.108	Bottom Edge 10mm	0.108	0.000	0.000	0.000	0.108	0.108
LTE B2	Ant.1	0.200	n41	Ant.3	0.171	Front Side 10mm	0.371	0.111	0.093	0.003	0.485	0.467
		0.413			0.304	Back Side 10mm	0.717	0.225	0.090	0.155	1.097	0.962
		0.000			0.008	Left Edge 10mm	0.008	0.083	0.102	0.003	0.094	0.113
		0.158			0.000	Right Edge 10mm	0.158	0.000	0.000	0.000	0.158	0.158
		0.263			0.293	Top Edge 10mm	0.556	0.200	0.007	0.231	0.987	0.794
		0.000			0.000	Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
LTE B66	Ant.1	0.177	n25	Ant.5	0.054	Front Side 10mm	0.231	0.111	0.093	0.003	0.345	0.327
		0.344			0.172	Back Side 10mm	0.516	0.225	0.090	0.155	0.896	0.761
		0.000			0.000	Left Edge 10mm	0.000	0.083	0.102	0.003	0.086	0.105
		0.109			0.157	Right Edge 10mm	0.266	0.000	0.000	0.000	0.266	0.266
		0.240			0.014	Top Edge 10mm	0.254	0.200	0.007	0.231	0.685	0.492
		0.000			0.000	Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000
LTE B66	Ant.1	0.177	n71	Ant.0	0.072	Front Side 10mm	0.249	0.111	0.093	0.003	0.363	0.345
		0.344			0.127	Back Side 10mm	0.471	0.225	0.090	0.155	0.851	0.716
		0.000			0.104	Left Edge 10mm	0.104	0.083	0.102	0.003	0.190	0.209
		0.109			0.056	Right Edge 10mm	0.165	0.000	0.000	0.000	0.165	0.165
		0.240			0.000	Top Edge 10mm	0.240	0.200	0.007	0.231	0.671	0.478
		0.000			0.108	Bottom Edge 10mm	0.108	0.000	0.000	0.000	0.108	0.108
LTE B66	Ant.1	0.177	n41	Ant.3	0.171	Front Side 10mm	0.348	0.111	0.093	0.003	0.462	0.444
		0.344			0.304	Back Side 10mm	0.648	0.225	0.090	0.155	1.028	0.893
		0.000			0.008	Left Edge 10mm	0.008	0.083	0.102	0.003	0.094	0.113
		0.109			0.000	Right Edge 10mm	0.109	0.000	0.000	0.000	0.109	0.109
		0.240			0.293	Top Edge 10mm	0.533	0.200	0.007	0.231	0.964	0.771
		0.000			0.000	Bottom Edge 10mm	0.000	0.000	0.000	0.000	0.000	0.000

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

13 TEST EQUIPMENTS LIST

Description	Manufacturer	Model	Serial No./Version	Cal. Date	Cal. Due
PC	Dell	N/A	N/A	N/A	N/A
Test Software	Speag	DASY8	16.2.2.1588	N/A	N/A
750MHz Validation Dipole	Speag	D750V3	SN: 1208	2021/07/05	2024/07/04
835MHz Validation Dipole	Speag	D835V2	SN: 4d187	2024/05/08	2027/05/07
1750MHz Validation Dipole	Speag	D1750V2	SN: 1130	2024/05/08	2027/05/07
1950MHz Validation Dipole	Speag	D1950V3	SN: 1240	2021/09/13	2024/09/12
2450MHz Validation Dipole	Speag	D2450V2	SN: 952	2024/05/07	2027/05/06
2600MHz Validation Dipole	Speag	D2600V2	SN: 1095	2024/05/08	2027/05/07
3500MHz Validation Dipole	Speag	D3500V2	SN: 1129	2021/07/07	2024/07/06
3700MHz Validation Dipole	Speag	D3700V2	SN: 1101	2021/07/07	2024/07/06
5GHz Validation Dipole	Speag	D5GHZV2	SN: 1333	2022/03/07	2025/03/06
Data Acquisition Electronicsr	Speag	DAE4	SN: 1711	2024/03/18	2025/03/17
E-Field Probe	Speag	EX3DV4	SN: 7607	2023/07/04	2024/07/03
Signal Generator	R&S	SMB100A	177746	2024/04/24	2025/04/23
Power Meter	R&S	NRVD-B2	835843/014	2023/09/05	2024/09/04
Power Sensor	R&S	NRV-Z4	100381	2023/09/05	2024/09/04
Power Sensor	R&S	NRV-Z2	100211	2023/09/05	2024/09/04
Wireless Communication Test Set	Anritsu	MT8820C	6201502991	2023/11/14	2024/11/13
Network Analyzer	Agilent	E5071C	MY46103472	2023/11/14	2024/11/13
Thermometer	Elitech	RC-4	EF5238001629	2023/10/09	2024/10/08
Thermometer	Elitech	RC-4HC	EF7239002655	2023/11/17	2024/11/16
Power Amplifier	SATIMO	6552B	22374	N/A	N/A
Dielectric Probe Kit	Speag	DAK3.5	SN: 1312	N/A	N/A
Phantom	Speag	SAM	SN: 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 (%)
2024.05.10	Head	750	21.2	0.90	41.59	0.89	41.94	1.12	-0.83
2024.05.13	Head	750	21.3	0.91	41.89	0.89	41.94	2.25	-0.12
2024.05.14	Head	835	21.3	0.90	41.67	0.90	41.50	0.00	0.41
2024.05.15	Head	835	21.4	0.91	41.64	0.90	41.50	1.11	0.34
2024.05.16	Head	835	21.2	0.90	41.96	0.90	41.50	0.00	1.11
2024.06.24	Head	1750	21.5	1.38	39.92	1.37	40.08	0.73	-0.40
2024.06.25	Head	1750	21.3	1.37	40.43	1.37	40.08	0.00	0.87
2024.06.26	Head	1950	21.1	1.42	39.52	1.40	40.00	1.43	-1.20
2024.06.27	Head	1950	21.4	1.42	39.57	1.40	40.00	1.43	-1.08
2024.06.28	Head	1950	21.3	1.42	39.72	1.40	40.00	1.43	-0.70
2024.05.17	Head	2450	21.4	1.82	39.22	1.80	39.20	1.11	0.05
2024.05.20	Head	2600	21.1	1.97	38.91	1.96	39.01	0.51	-0.26
2024.05.21	Head	2600	21.3	1.96	39.14	1.96	39.01	0.00	0.33
2024.06.21	Head	3400	21.4	2.84	38.18	2.81	38.04	1.07	0.37
2024.06.21	Head	3700	21.4	3.10	38.22	3.12	37.70	-0.64	1.38
2024.05.22	Head	5200	21.3	4.72	36.14	4.66	35.99	1.29	0.42
2024.05.23	Head	5300	21.0	4.79	35.77	4.76	35.87	0.63	-0.28
2024.05.24	Head	5600	21.2	5.08	35.64	5.07	35.53	0.20	0.31
2024.05.25	Head	5800	21.3	5.31	35.20	5.27	35.30	0.76	-0.28

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 (%)
2024.05.10	Head	750	100	0.86	8.59	8.51	0.94
2024.05.13	Head	750	100	0.85	8.54	8.51	0.35
2024.05.14	Head	835	100	0.98	9.78	9.74	0.41
2024.05.15	Head	835	100	0.98	9.81	9.74	0.72
2024.05.16	Head	835	100	0.97	9.67	9.74	-0.72
2024.06.24	Head	1750	100	3.69	36.90	37.00	-0.27
2024.06.25	Head	1750	100	3.58	35.80	37.00	-3.24
2024.06.26	Head	1950	100	4.19	41.90	41.40	1.21
2024.06.27	Head	1950	100	4.12	41.20	41.40	-0.48
2024.06.28	Head	1950	100	4.16	41.60	41.40	0.48
2024.05.17	Head	2450	100	5.48	54.80	52.60	4.18
2024.05.20	Head	2600	100	5.68	56.80	55.90	1.61
2024.05.21	Head	2600	100	5.74	57.40	55.90	2.68
2024.06.21	Head	3400	100	6.75	67.50	68.00	-0.74
2024.06.21	Head	3700	100	6.79	67.90	67.70	0.30
2024.05.22	Head	5200	100	8.12	81.20	80.10	1.37
2024.05.23	Head	5300	100	8.14	81.40	81.80	-0.49
2024.05.24	Head	5600	100	8.29	82.90	83.60	-0.84
2024.05.25	Head	5800	100	8.29	82.90	82.30	0.73

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 (%)
2024.05.23	Head	5300	100	2.310	23.10	23.40	-1.28
2024.05.24	Head	5600	100	2.340	23.40	23.80	-1.68

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	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD700	CW, 0--	750.0, 100	10.31	0.904	41.6	22.3	21.2

Hardware Setup

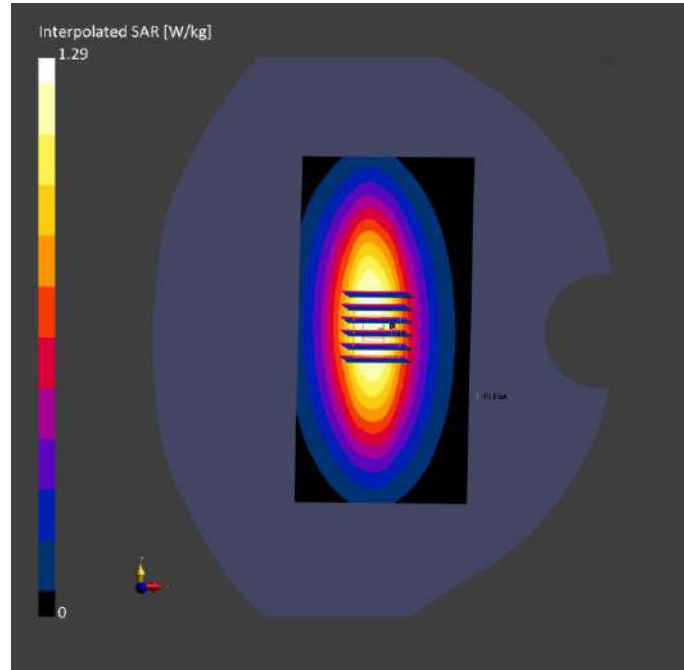
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-10	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 160.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5
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	2024-05-10	2024-05-10
psSAR1g [W/kg]	0.843	0.859
psSAR10g [W/kg]	0.552	0.562
Power Drift [dB]	-0.01	-0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		85.6
Dist 3dB Peak [mm]		20.2



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	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD700	CW, 0--	750.0, 100	10.31	0.911	41.9	22.5	21.3

Hardware Setup

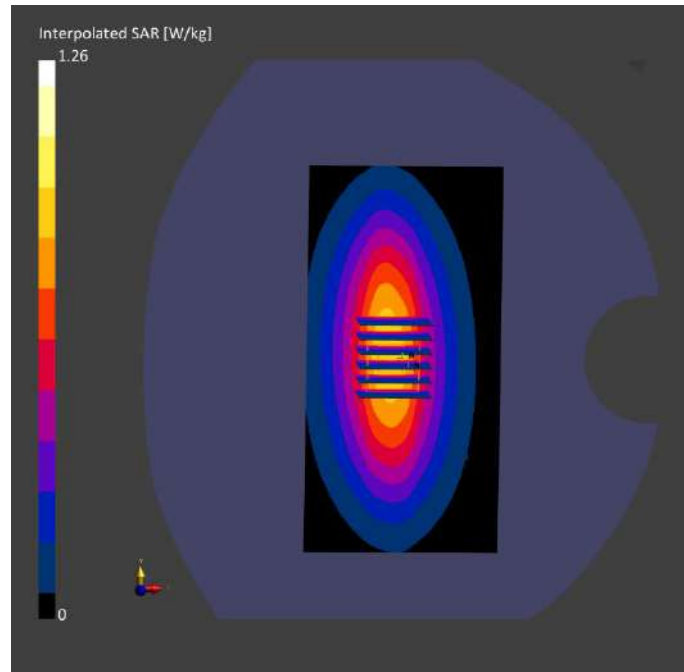
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-13	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 160.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5
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	2024-05-13	2024-05-13
psSAR1g [W/kg]	0.837	0.854
psSAR10g [W/kg]	0.532	0.554
Power Drift [dB]	-0.03	-0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		86.3
Dist 3dB Peak [mm]		20.1



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	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD835	CW, 0--	835.0, 50	9.96	0.896	41.7	22.3	21.3

Hardware Setup

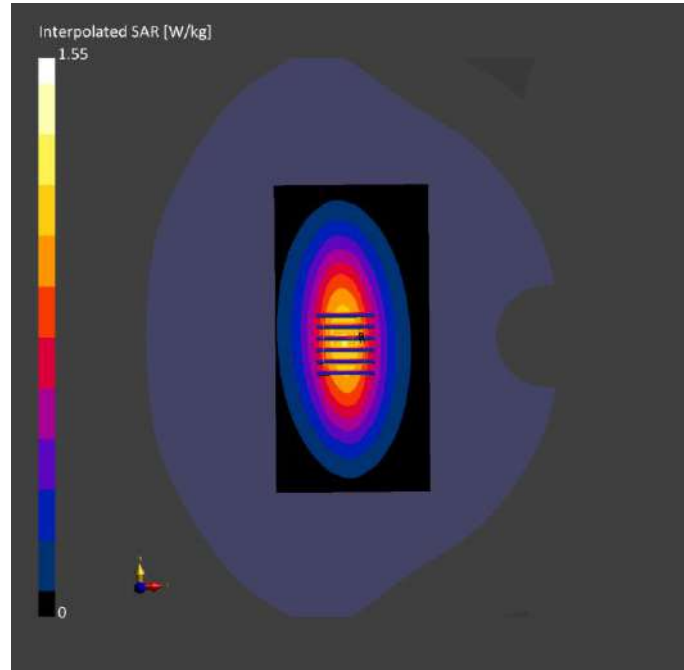
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-14	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 160.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5
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	2024-05-14	2024-05-14
psSAR1g [W/kg]	0.944	0.978
psSAR10g [W/kg]	0.615	0.635
Power Drift [dB]	-0.03	-0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		83.2
Dist 3dB Peak [mm]		12.5



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	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD835	CW, 0--	835.0, 50	9.96	0.911	41.6	22.5	21.4

Hardware Setup

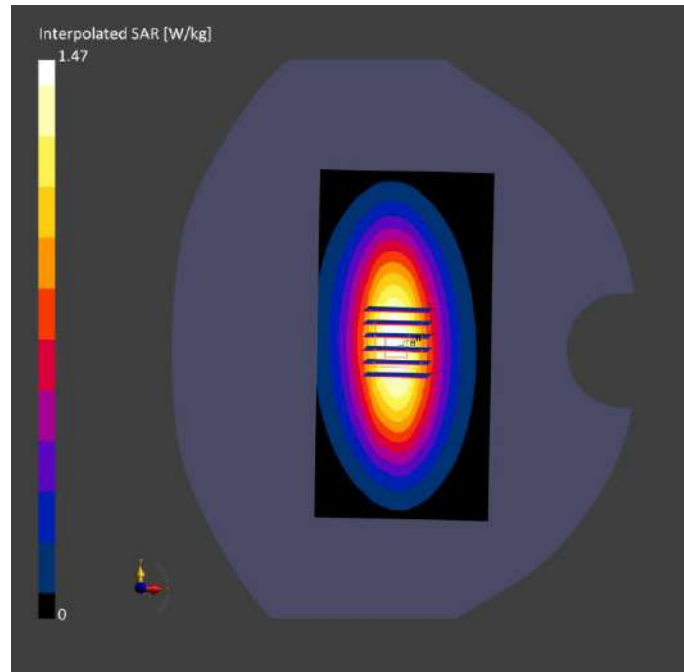
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-15	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 160.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5
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	2024-05-15	2024-05-15
psSAR1g [W/kg]	0.952	0.981
psSAR10g [W/kg]	0.622	0.636
Power Drift [dB]	-0.02	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		85.2
Dist 3dB Peak [mm]		13.0



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	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD835	CW, 0--	835.0, 50	9.96	0.902	42.0	22.4	21.2

Hardware Setup

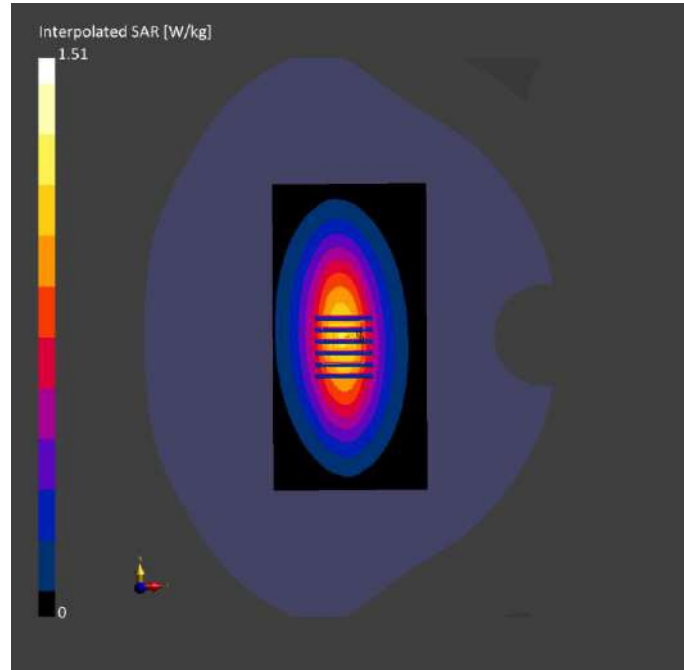
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-16	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 160.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5
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	2024-05-16	2024-05-16
psSAR1g [W/kg]	0.953	0.967
psSAR10g [W/kg]	0.624	0.629
Power Drift [dB]	-0.03	-0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		84.2
Dist 3dB Peak [mm]		12.8



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	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D1750	CW, 0--	1750.0, 50	8.52	1.38	39.9	22.6	21.5

Hardware Setup

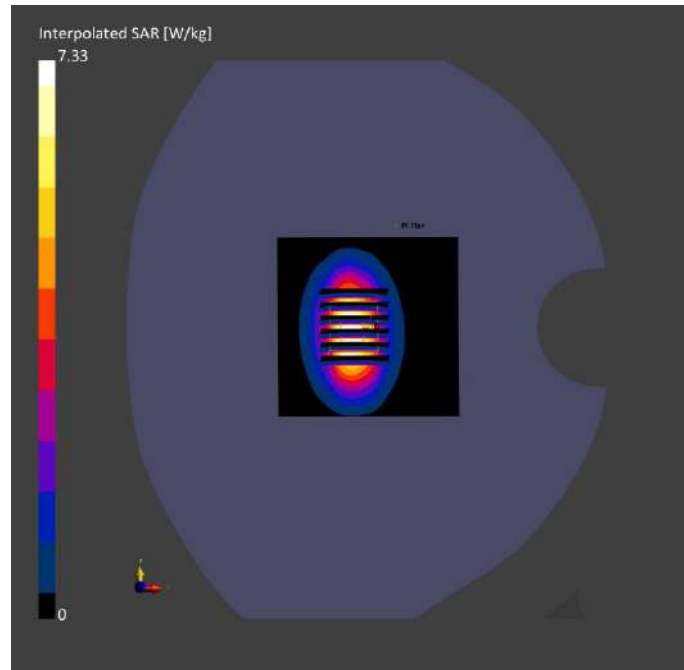
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-24	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5
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	2024-06-24	2024-06-24
psSAR1g [W/kg]	3.29	3.69
psSAR10g [W/kg]	1.82	1.93
Power Drift [dB]	-0.03	-0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		82.1
Dist 3dB Peak [mm]		9.1



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	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D1750	CW, 0--	1750.0, 50	8.52	1.37	40.4	22.5	21.3

Hardware Setup

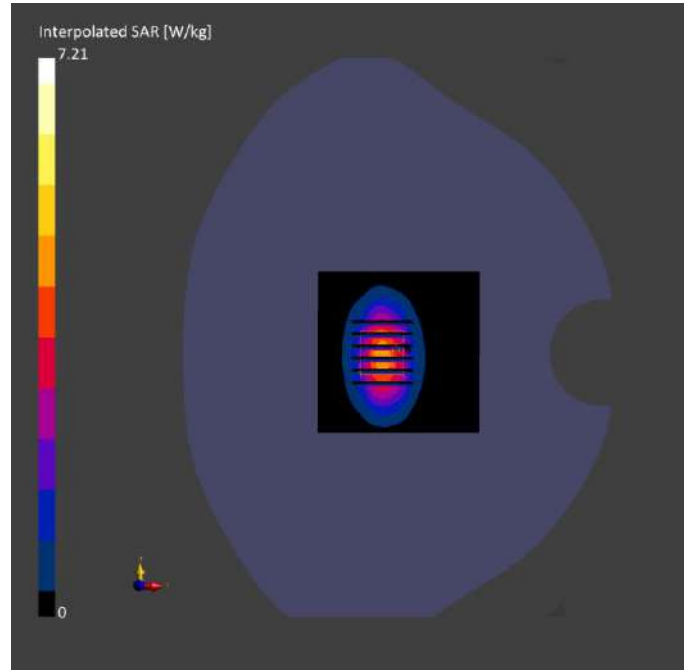
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-25	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5
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	2024-06-25	2024-06-25
psSAR1g [W/kg]	3.37	3.58
psSAR10g [W/kg]	1.86	1.89
Power Drift [dB]	-0.06	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		81.1
Dist 3dB Peak [mm]		10.6



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	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D1950	CW, 0--	1950.0, 50	7.87	1.42	39.5	22.3	21.1

Hardware Setup

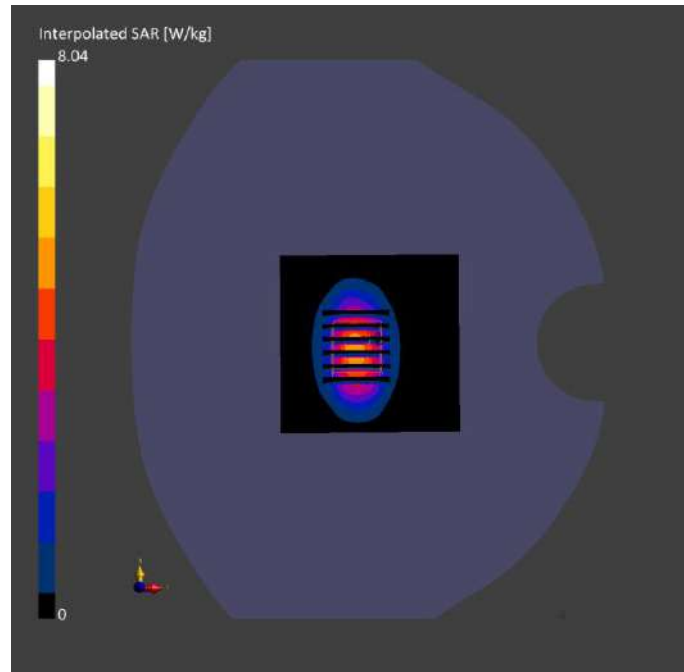
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-26	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5
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	2024-06-26	2024-06-26
psSAR1g [W/kg]	3.96	4.19
psSAR10g [W/kg]	1.99	2.16
Power Drift [dB]	-0.04	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		81.2
Dist 3dB Peak [mm]		9.2



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	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D1950	CW, 0--	1950.0, 50	7.87	1.42	39.6	22.4	21.4

Hardware Setup

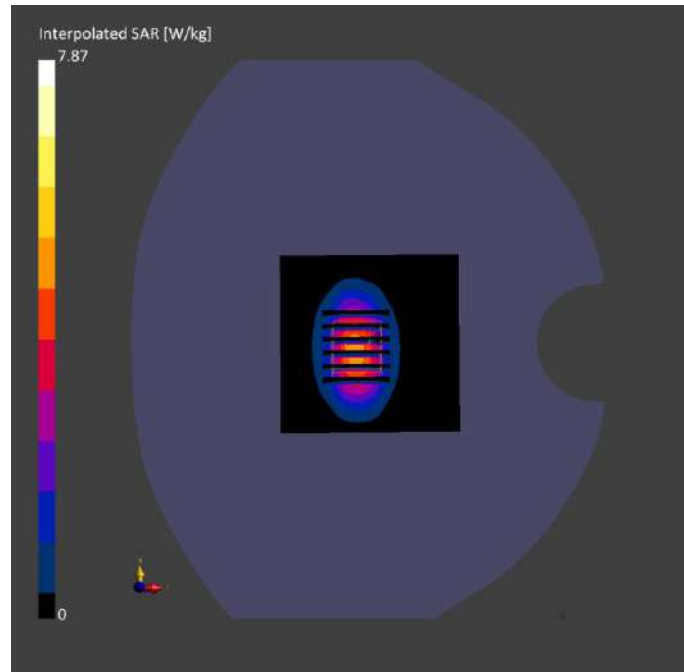
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-27	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5
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	2024-06-27	2024-06-27
psSAR1g [W/kg]	4.02	4.12
psSAR10g [W/kg]	2.06	2.11
Power Drift [dB]	0.02	-0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		81.7
Dist 3dB Peak [mm]		9.4



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	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		D1950	CW, 0--	1950.0, 50	7.87	1.42	39.7	22.3	21.3

Hardware Setup

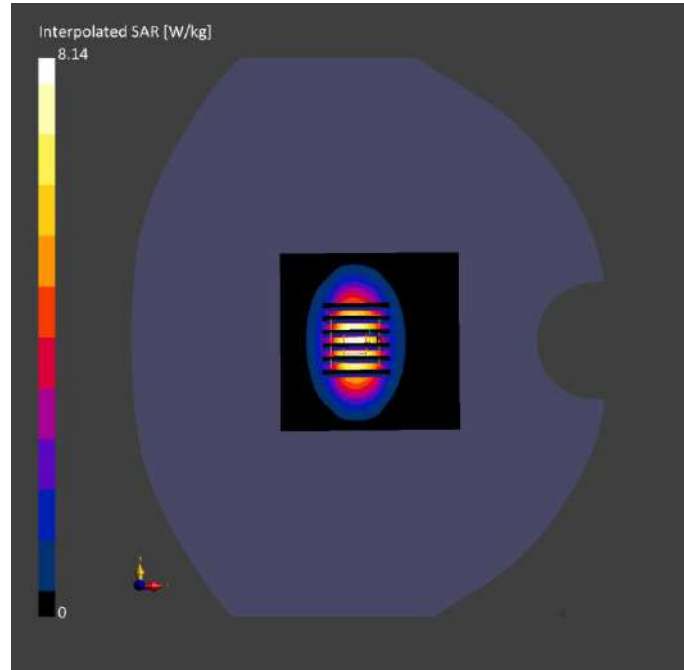
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-28	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5
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	2024-06-28	2024-06-28
psSAR1g [W/kg]	3.94	4.16
psSAR10g [W/kg]	1.98	2.13
Power Drift [dB]	-0.01	-0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		81.2
Dist 3dB Peak [mm]		9.1



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	1.82	39.2	22.5	21.4

Hardware Setup

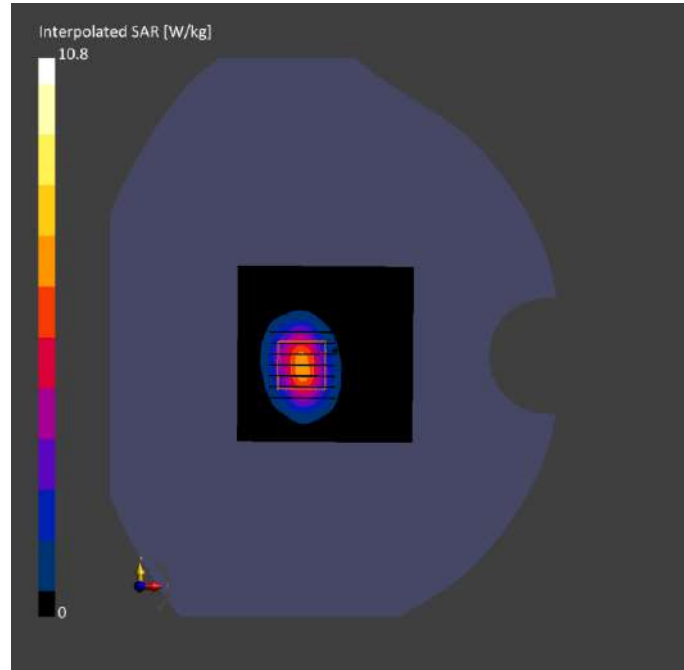
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-17	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
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]	5.25	5.48
psSAR10g [W/kg]	2.23	2.57
Power Drift [dB]	-0.02	-0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		81.1
Dist 3dB Peak [mm]		9.2



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	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD2600 V3	CW, 0--	2600.0, 50	7.41	1.97	38.9	22.2	21.1

Hardware Setup

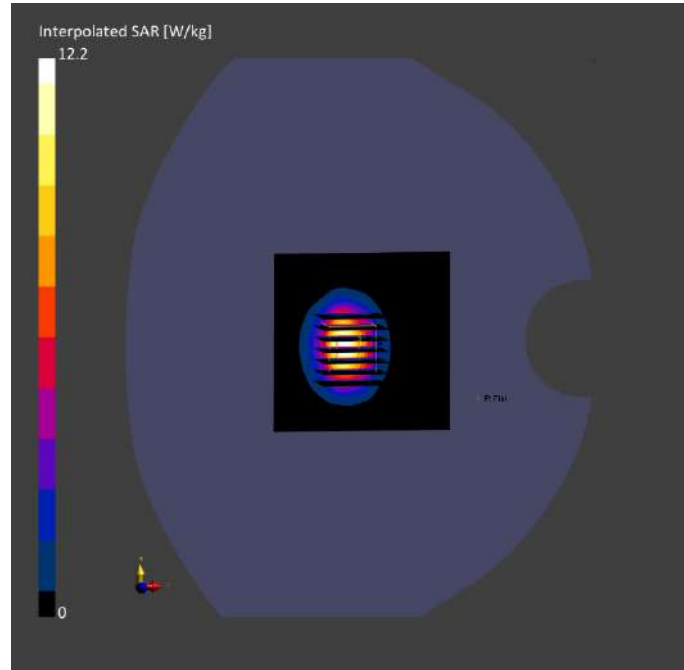
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-20	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	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]	5.51	5.68
psSAR10g [W/kg]	2.39	2.51
Power Drift [dB]	0.06	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		79.6
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	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL		CD2600 V3	CW, 0--	2600.0, 50	7.41	1.96	39.1	22.4	21.3

Hardware Setup

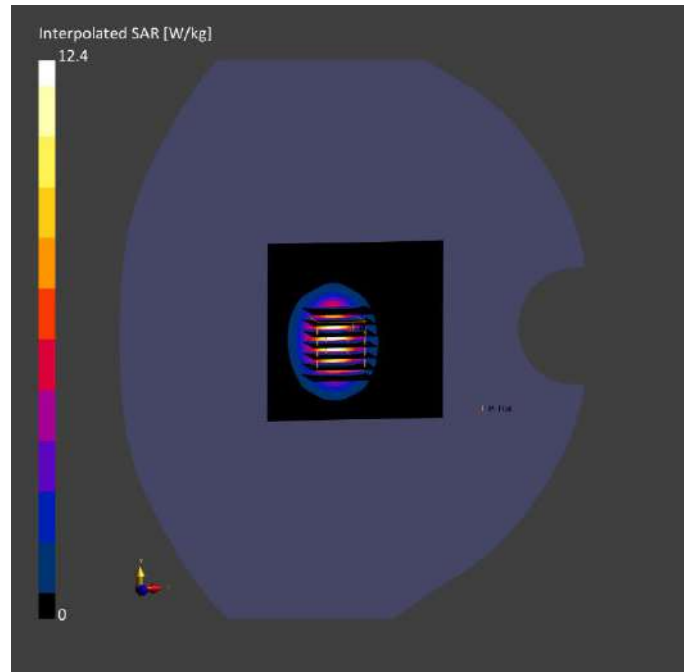
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-21	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

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

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-21	2024-05-21
psSAR1g [W/kg]	5.52	5.74
psSAR10g [W/kg]	2.46	2.58
Power Drift [dB]	0.01	0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		80.1
Dist 3dB Peak [mm]		8.4



System Performance Check Data (3400MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD3400V2, 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		CD3400 V2	CW, 0--	3400.0, 3400000	6.83	2.84	38.2	22.5	21.4

Hardware Setup

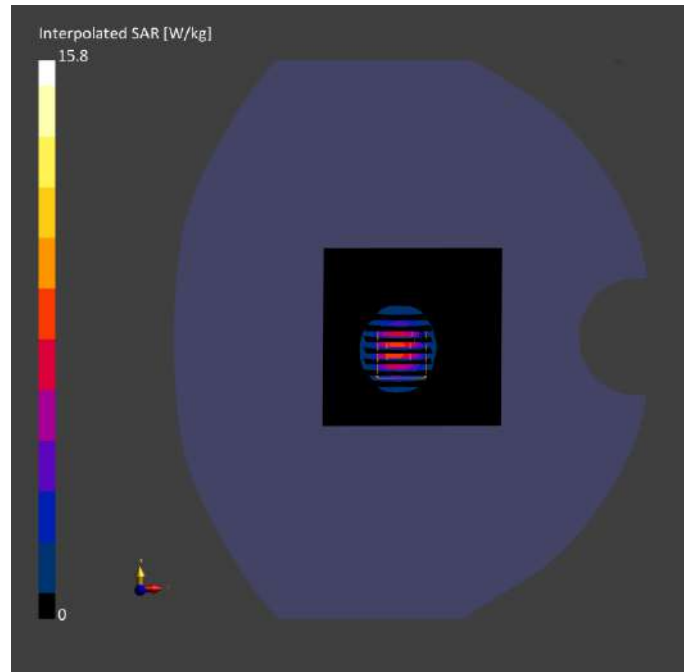
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-21	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	All points	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-21	2024-06-21
psSAR1g [W/kg]	5.96	6.75
psSAR10g [W/kg]	2.42	2.54
Power Drift [dB]	-0.05	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		77.1
Dist 3dB Peak [mm]		8.2



System Performance Check Data (3700MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
CD3700V2, 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		CD3700 V2	CW, 0--	3700.0, 3700000	6.57	3.10	38.2	22.5	21.4

Hardware Setup

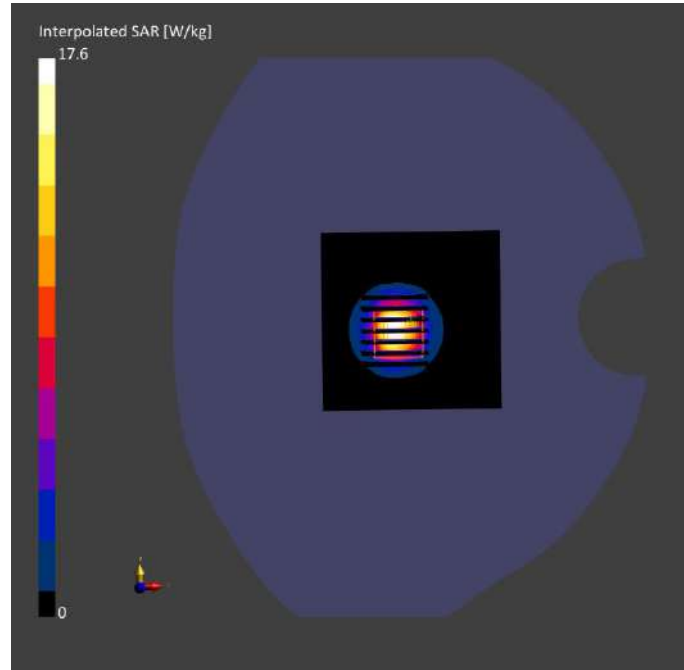
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-21	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	28.0 x 28.0 x 28.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA Surface	N/A	N/A
Detection	All points	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-21	2024-06-21
psSAR1g [W/kg]	6.26	6.79
psSAR10g [W/kg]	2.44	2.42
Power Drift [dB]	0.01	0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		75.3
Dist 3dB Peak [mm]		8.2



System Performance Check Data (5200MHz)

Device under Test Properties

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

Exposure Conditions

Phantom	Position, Test Section, 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		D5GHZ	CW, 0--	5200.0, 20	5.41	4.72	36.1	22.4	21.3

Hardware Setup

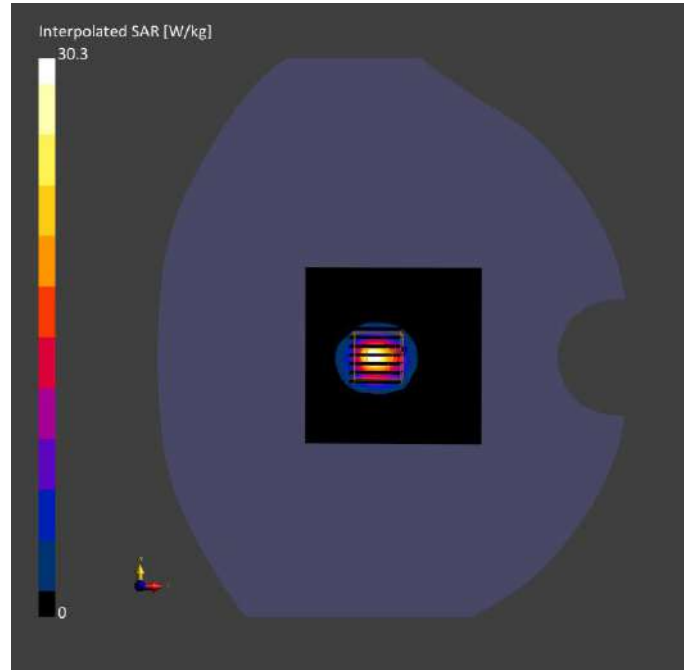
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-22	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

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

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-22	2024-05-22
psSAR1g [W/kg]	7.84	8.12
psSAR10g [W/kg]	2.16	2.29
Power Drift [dB]	-0.05	0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		64.5
Dist 3dB Peak [mm]		6.9



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	Position, Test Section, 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		D5GHZ	CW, 0--	5300.0, 30	5.41	4.79	35.8	22.1	21.0

Hardware Setup

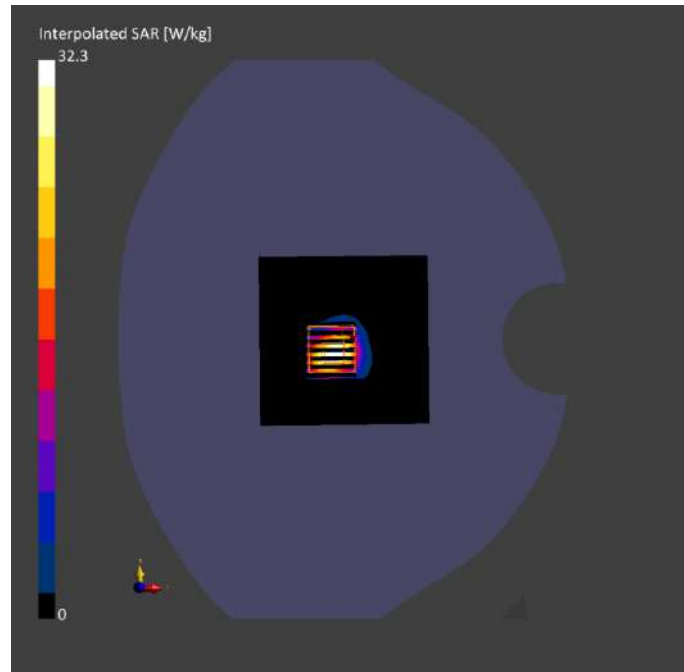
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-23	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

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

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-23	2024-05-23
psSAR1g [W/kg]	7.54	8.14
psSAR10g [W/kg]	2.06	2.31
Power Drift [dB]	-0.04	0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		64.3
Dist 3dB Peak [mm]		7.6



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, Test 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		D5GHZ	CW, 0--	5600.0, 60	4.58	5.07	35.6	22.3	21.2

Hardware Setup

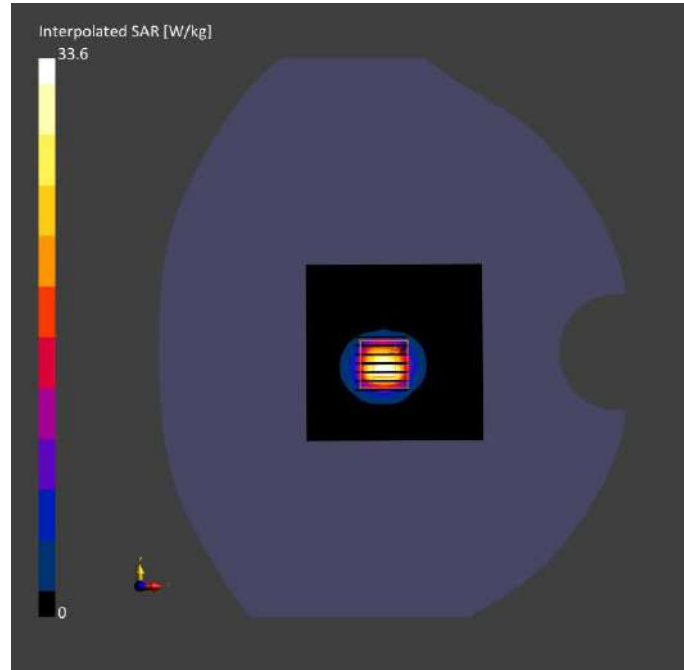
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-24	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

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

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-24	2024-05-24
psSAR1g [W/kg]	7.62	8.29
psSAR10g [W/kg]	2.25	2.34
Power Drift [dB]	0.01	0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		61.3
Dist 3dB Peak [mm]		7.5



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	Position, Test Section, 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		D5GHZ	CW, 0--	5800.0, 80	4.78	5.31	35.2	22.4	21.3

Hardware Setup

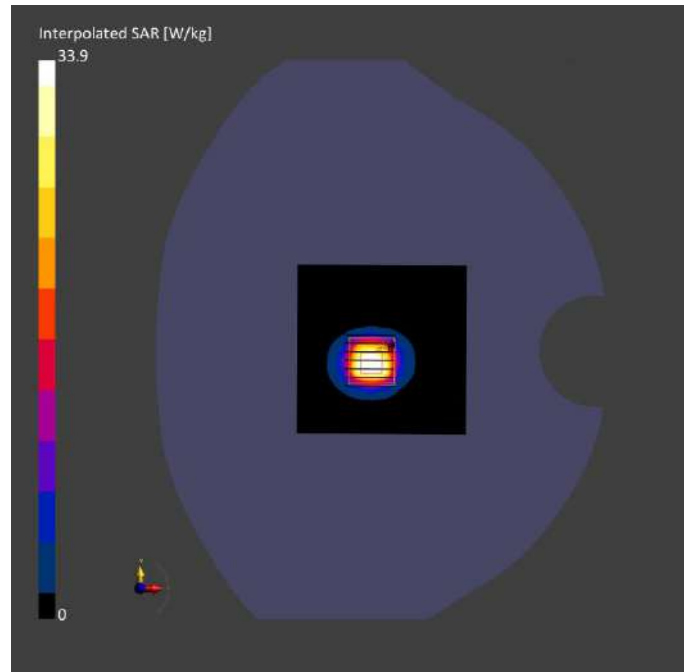
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-25	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

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

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-25	2024-05-25
psSAR1g [W/kg]	7.89	8.29
psSAR10g [W/kg]	2.15	2.32
Power Drift [dB]	-0.06	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		61.4
Dist 3dB Peak [mm]		7.9



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
M155	180.0 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]
Right Head, HSL	CHEEK, 0.00	GSM 850	GSM, 10024-DAC	836.6, 190	9.96	0.908	41.4	22.3	21.3

Hardware Setup

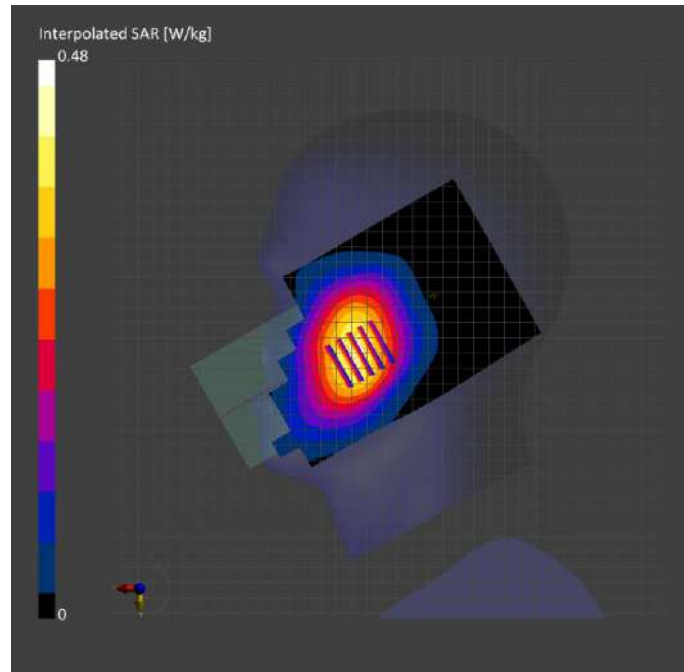
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-14	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-05-14	2024-05-14
psSAR1g [W/kg]	0.363	0.386
psSAR10g [W/kg]	0.252	0.302
Power Drift [dB]	-0.03	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		80.3
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
M155	180.0 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	GSM, 850	GSM, 10024-DAC	836.6, 190	9.96	0.908	41.4	22.3	21.3

Hardware Setup

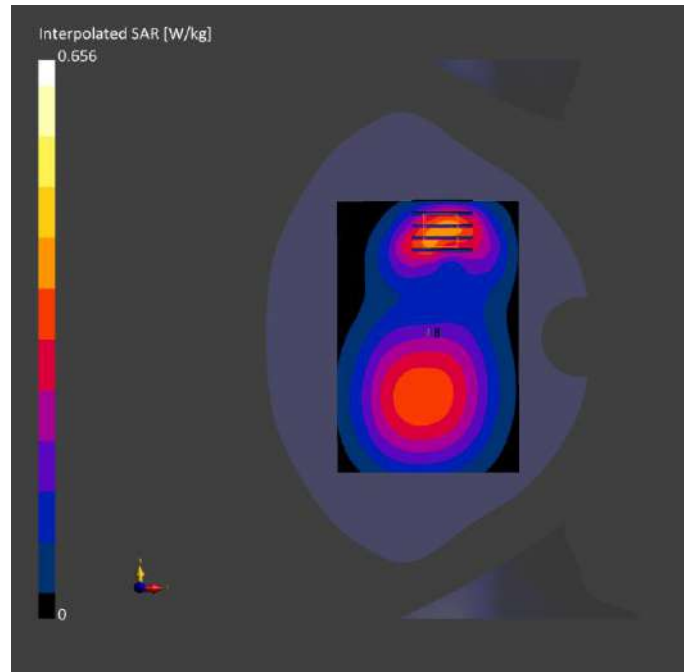
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-14	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-14	2024-05-14
psSAR1g [W/kg]	0.364	0.399
psSAR10g [W/kg]	0.242	0.242
Power Drift [dB]	-0.03	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		60.4
Dist 3dB Peak [mm]		12.9



Meas.3 Body Plane with Back Side 10mm on High Channel in GPRS850 2Slots mode with Antenna 0
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	GSM, 850	GSM, 10024-DAC	848.8, 251	9.96	0.922	41.1	22.3	21.3

Hardware Setup

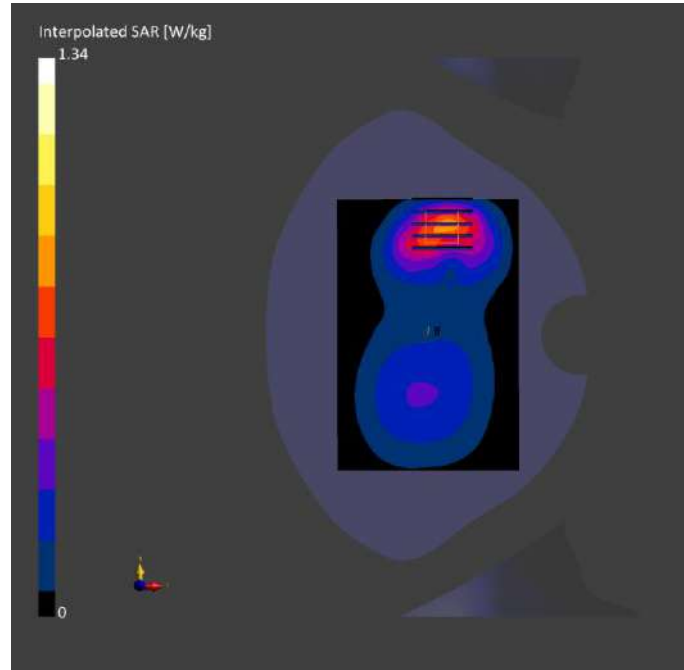
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 Ch2024-05-14	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-14	2024-05-14
psSAR1g [W/kg]	0.708	0.778
psSAR10g [W/kg]	0.459	0.451
Power Drift [dB]	-0.03	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		57.2
Dist 3dB Peak [mm]		12.8



Meas.4 Right Head with Cheek on Low Channel in GPRS1900 4slots mode with Antenna 1
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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]
Right Head, HSL	CHEEK, 0.00	PCS	GSM, 10024-DAC	1850.2, 512	7.98	1.39	40.4	22.3	21.1

Hardware Setup

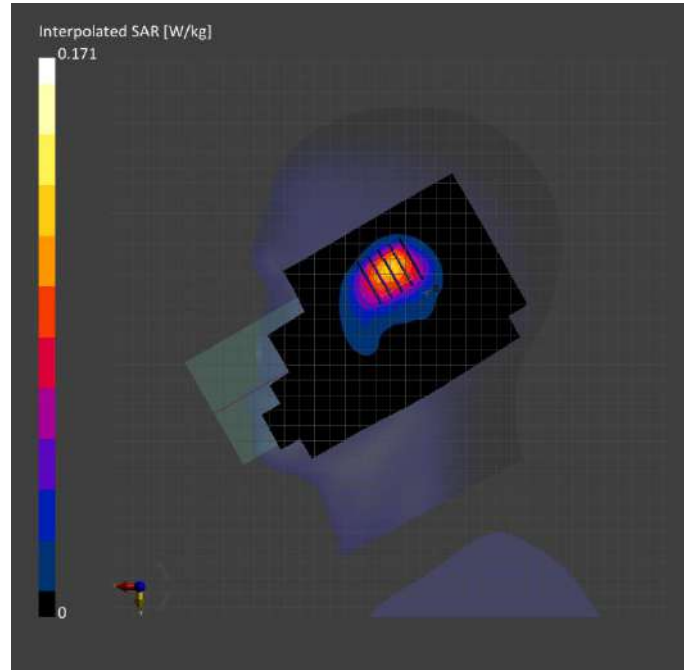
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-26	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1226, 2021-05-17

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	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-26	2024-06-26
psSAR1g [W/kg]	0.10	0.107
psSAR10g [W/kg]	0.057	0.061
Power Drift [dB]	0.01	0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		64.3
Dist 3dB Peak [mm]		12.7



**Meas.5 Body Plane with Back Side 15mm on Low Channel in GPRS1900 4Slots mode with Antenna 1
Device under Test Properties**

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 1900	GSM, 10024-DAC	1850.2, 512	7.98	1.39	40.4	22.3	21.1

Hardware Setup

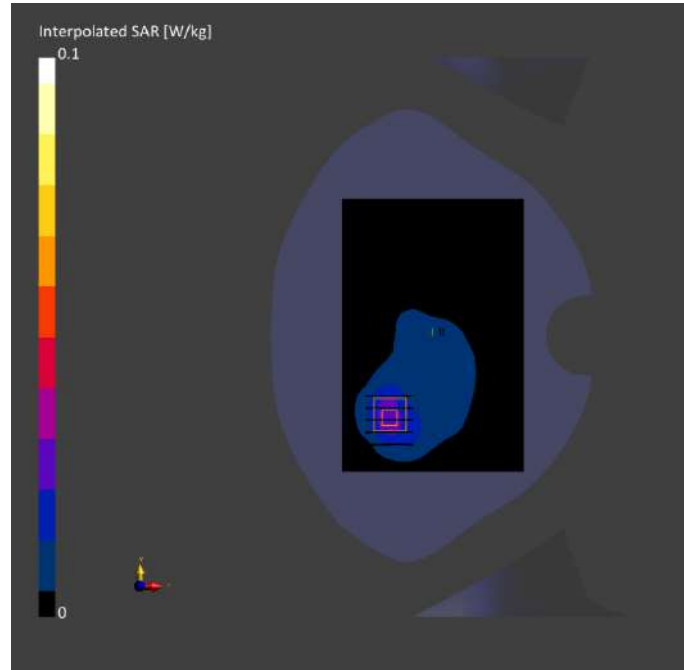
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-26	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1226, 2021-05-17

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	2024-06-26	2024-06-26
psSAR1g [W/kg]	0.026	0.026
psSAR10g [W/kg]	0.015	0.015
Power Drift [dB]	0.00	0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		59.2
Dist 3dB Peak [mm]		> 16.0



Meas.6 Body Plane with Back Side 10mm on Low Channel in GPRS1900 4Slots mode with Antenna 1
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 1900	GSM, 10024-DAC	1850.2, 512	7.98	1.39	40.4	22.3	21.1

Hardware Setup

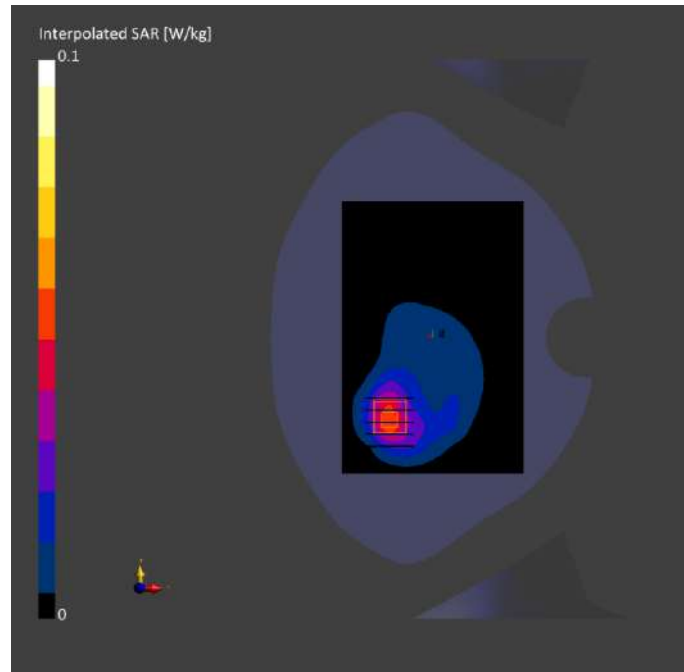
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-26	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1226, 2021-05-17

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	2024-06-26	2024-06-26
psSAR1g [W/kg]	0.046	0.047
psSAR10g [W/kg]	0.025	0.026
Power Drift [dB]	0.01	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		57.9
Dist 3dB Peak [mm]		> 16.0



Meas.7 Right Head with Cheek on Middle Channel in WCDMA Band2 mode with Antenna 1
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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]
Right Head, HSL	CHEEK, 0.00	Band 2	WCDMA, 10011-CAC	1880.0, 9400	7.98	1.40	39.1	22.3	21.1

Hardware Setup

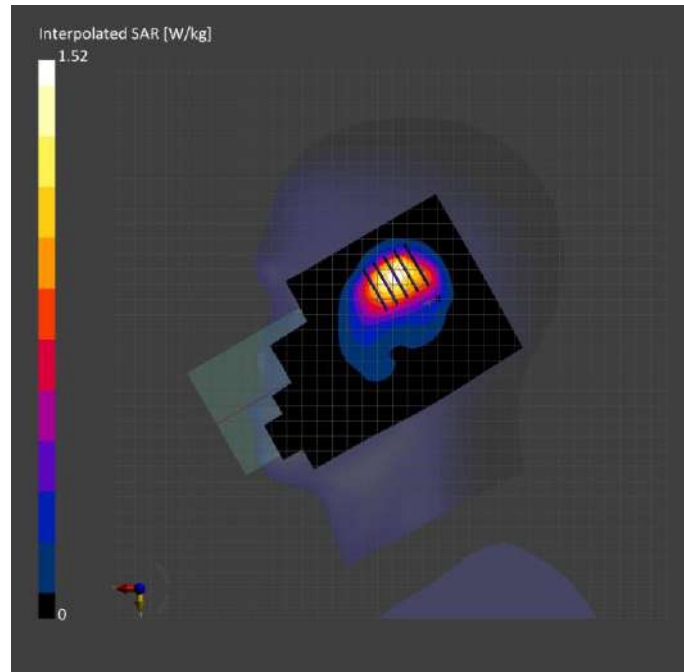
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-26	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-06-26	2024-06-26
psSAR1g [W/kg]	0.841	0.911
psSAR10g [W/kg]	0.474	0.513
Power Drift [dB]	0.01	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		60.1
Dist 3dB Peak [mm]		12.7



Meas.8 Body Plane with Back Side 10mm on Low Channel in WCDMA Band2 mode with Antenna 1
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	1852.4, 9262	7.98	1.39	40.3	22.3	21.1

Hardware Setup

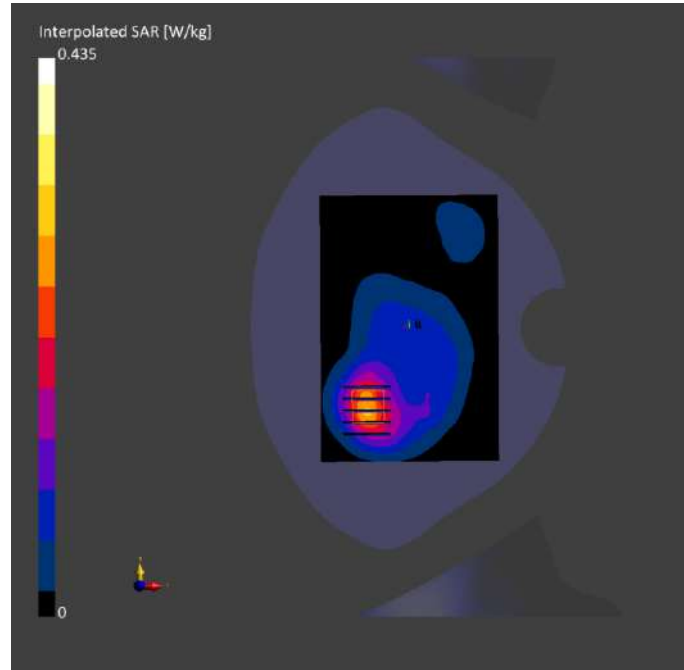
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-26	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-26	2024-06-26
psSAR1g [W/kg]	0.245	0.256
psSAR10g [W/kg]	0.139	0.148
Power Drift [dB]	-0.00	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		57.2
Dist 3dB Peak [mm]		14.3



Meas.9 Body Plane with Back Side 15mm on Low Channel in WCDMA Band2 mode with Antenna 1
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	1852.4, 9262	7.98	1.39	40.3	22.3	21.1

Hardware Setup

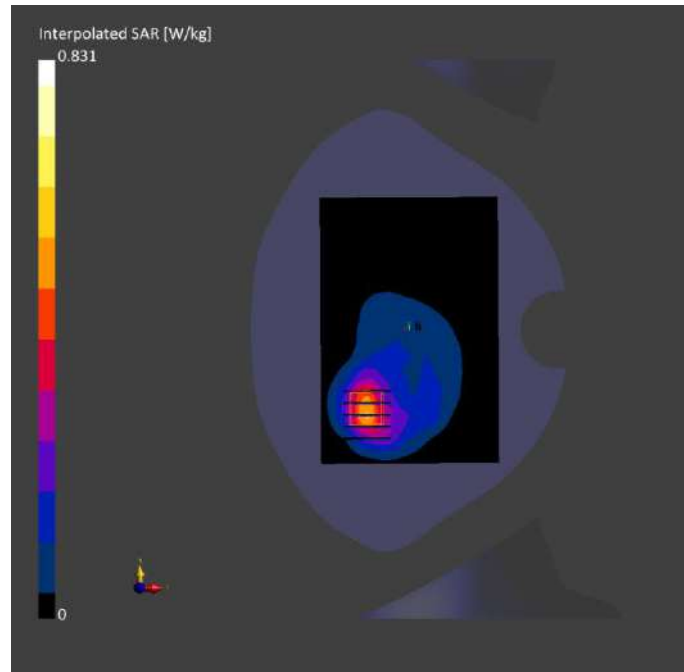
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-26	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-26	2024-06-26
psSAR1g [W/kg]	0.455	0.472
psSAR10g [W/kg]	0.249	0.261
Power Drift [dB]	-0.01	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		54.7
Dist 3dB Peak [mm]		12.5



Meas.10 Right Head with Cheek on Middle Channel in WCDMA Band4 mode with Antenna 1
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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]
Right Head, HSL	CHEEK, 0.00	Band 4	WCDMA, 10011-CAC	1712.4, 1312	8.52	1.33	40.9	22.6	21.5

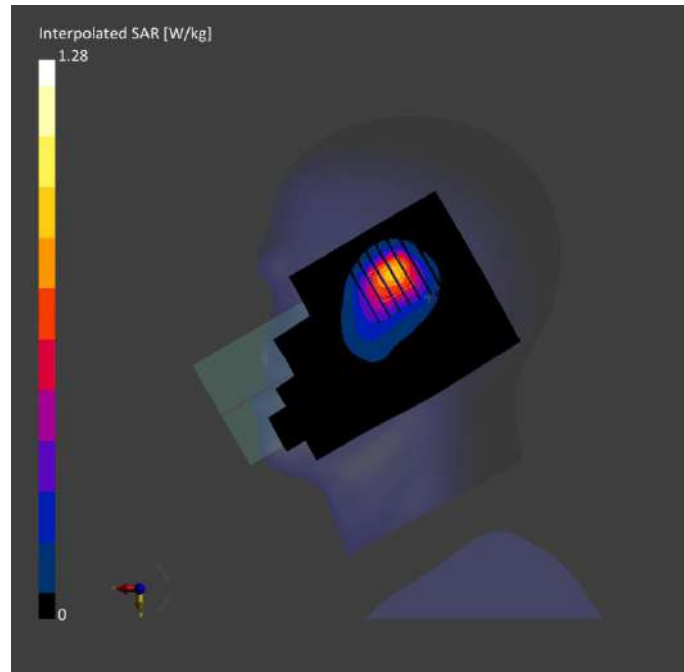
Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-24	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-06-24	2024-06-24
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.742	0.789
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.430	0.458
Graded Grid	Yes	Yes	Power Drift [dB]	0.03	0.01
Grading Ratio	1.5	1.5	Power Scaling	Disabled	Disabled
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 [%]		62.2
			Dist 3dB Peak [mm]		12.7



**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
M155	180.0 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	1.38	39.7	22.6	21.5

Hardware Setup

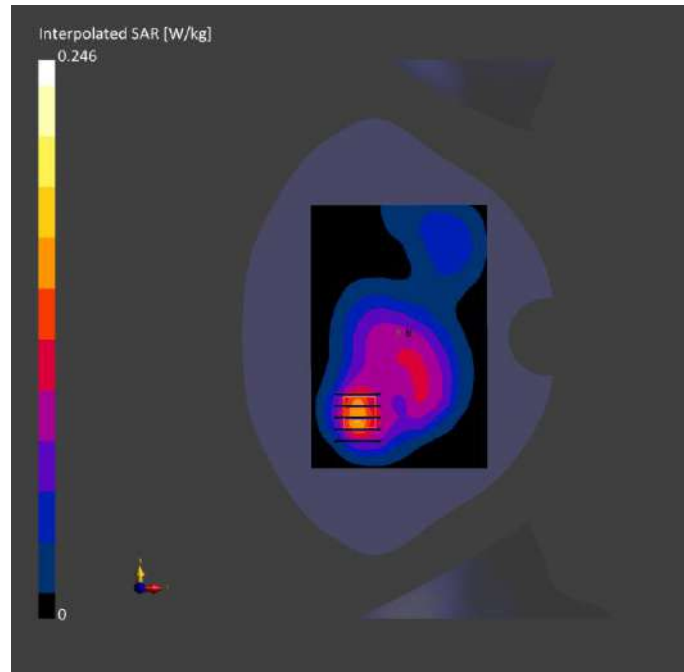
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-24	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-06-24	2024-06-24
psSAR1g [W/kg]	0.137	0.144
psSAR10g [W/kg]	0.078	0.082
Power Drift [dB]	-0.03	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		56.8
Dist 3dB Peak [mm]		13.6



**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
M155	180.0 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	1.38	39.7	22.6	21.5

Hardware Setup

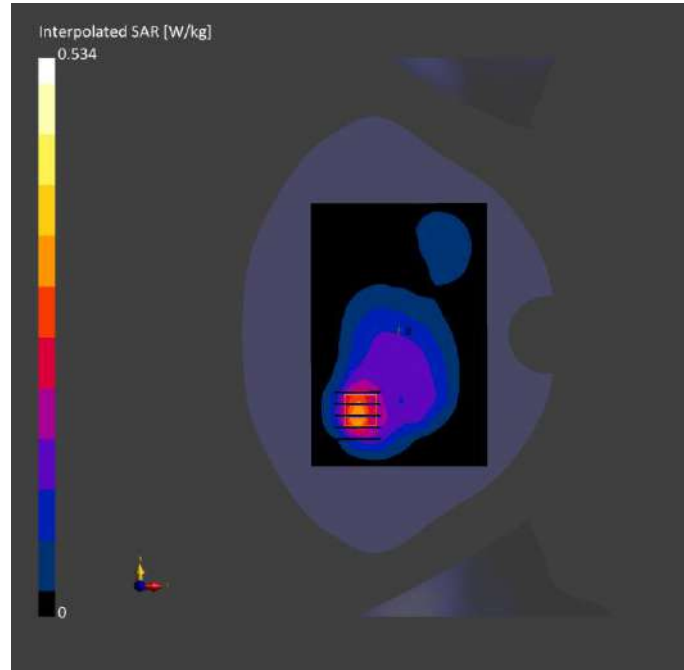
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-24	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-24	2024-06-24
psSAR1g [W/kg]	0.286	0.301
psSAR10g [W/kg]	0.159	0.165
Power Drift [dB]	-0.01	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		54.5
Dist 3dB Peak [mm]		11.5



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
M155	180.0 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	0.904	41.5	22.3	21.3

Hardware Setup

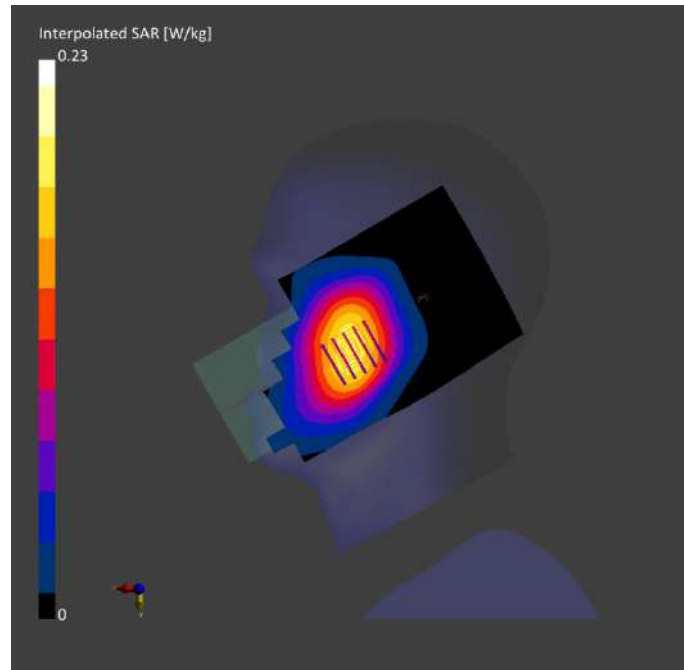
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-14	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-05-14	2024-05-14
psSAR1g [W/kg]	0.166	0.180
psSAR10g [W/kg]	0.115	0.141
Power Drift [dB]	0.01	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		77.9
Dist 3dB Peak [mm]		> 16.0



Meas.14 Body Plane with Back Side 10mm on Low Channel in WCDMA Band5 mode with Antenna 0
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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, 5.00	Band 5	WCDMA, 10011-CAC	826.4, 4132	9.96	0.890	41.9	22.3	21.3

Hardware Setup

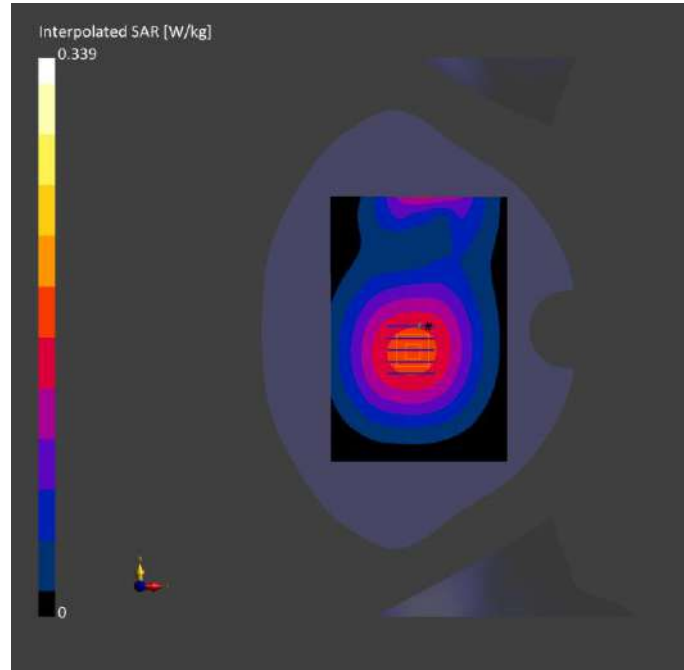
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-14	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-14	2024-05-14
psSAR1g [W/kg]	0.191	0.205
psSAR10g [W/kg]	0.135	0.123
Power Drift [dB]	-0.00	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		59.8
Dist 3dB Peak [mm]		12.9



Meas.15 Body Plane with Back Side 10mm on Low Channel in WCDMA Band5 mode with Antenna 0
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	0.904	41.5	22.3	21.3

Hardware Setup

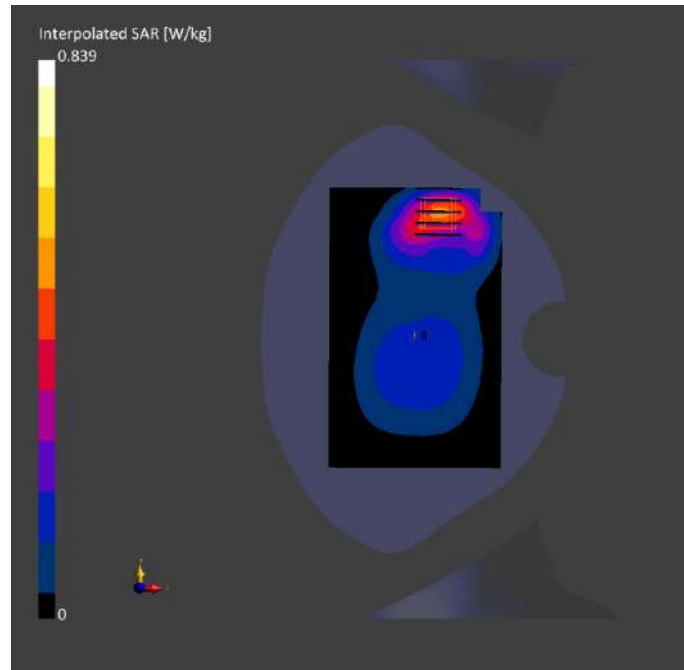
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-14	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-14	2024-05-14
psSAR1g [W/kg]	0.440	0.473
psSAR10g [W/kg]	0.281	0.269
Power Drift [dB]	-0.00	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		53.1
Dist 3dB Peak [mm]		11.3



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
M155	180.0 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	1.39	40.3	22.4	21.4

Hardware Setup

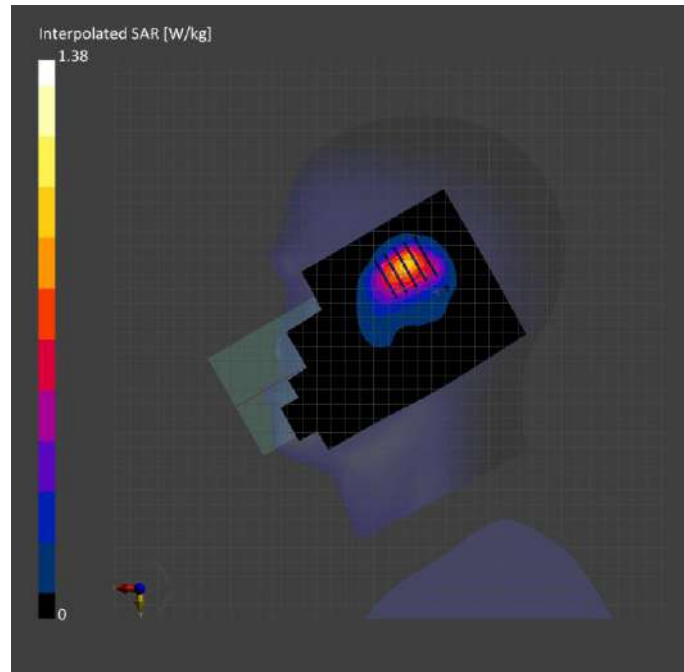
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-27	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-06-27	2024-06-27
psSAR1g [W/kg]	0.769	0.662
psSAR10g [W/kg]	0.461	0.430
Power Drift [dB]	0.00	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		60.4
Dist 3dB Peak [mm]		12.7



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
M155	180.0 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	LTE-FDD, 10169-CAF	1880.0, 18900	7.98	1.39	40.3	22.4	21.4

Hardware Setup

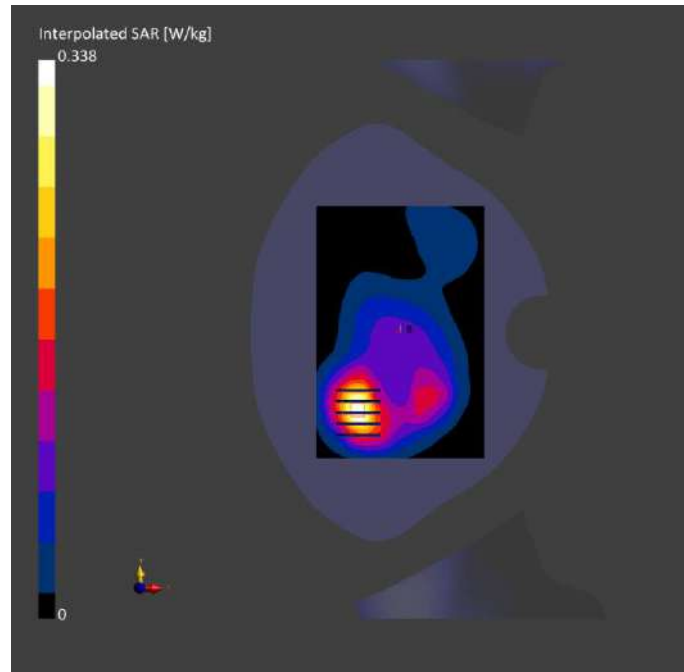
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-27	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-27	2024-06-27
psSAR1g [W/kg]	0.191	0.198
psSAR10g [W/kg]	0.107	0.113
Power Drift [dB]	-0.01	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		56.7
Dist 3dB Peak [mm]		14.3



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
M155	180.0 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	1.39	40.3	22.4	21.4

Hardware Setup

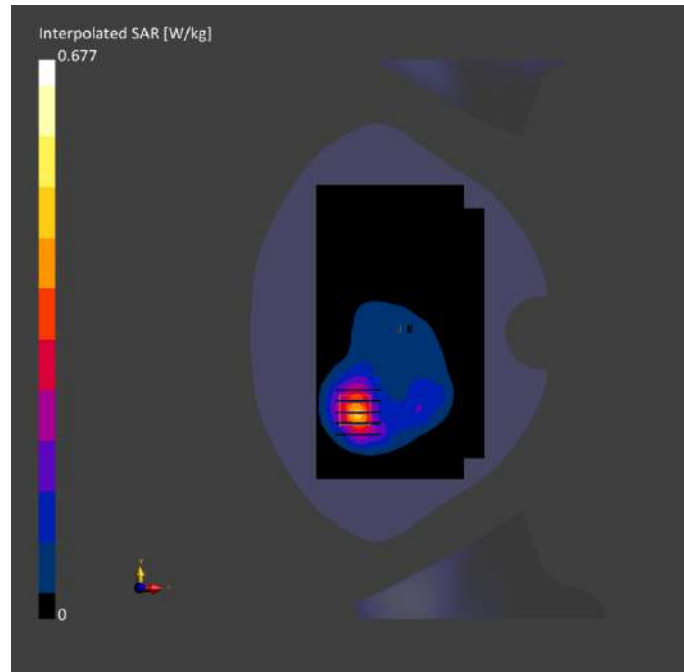
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-27	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-06-27	2024-06-27
psSAR1g [W/kg]	0.375	0.390
psSAR10g [W/kg]	0.202	0.215
Power Drift [dB]	0.00	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		55.9
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
M155	180.0 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	1.35	40.3	22.6	21.5

Hardware Setup

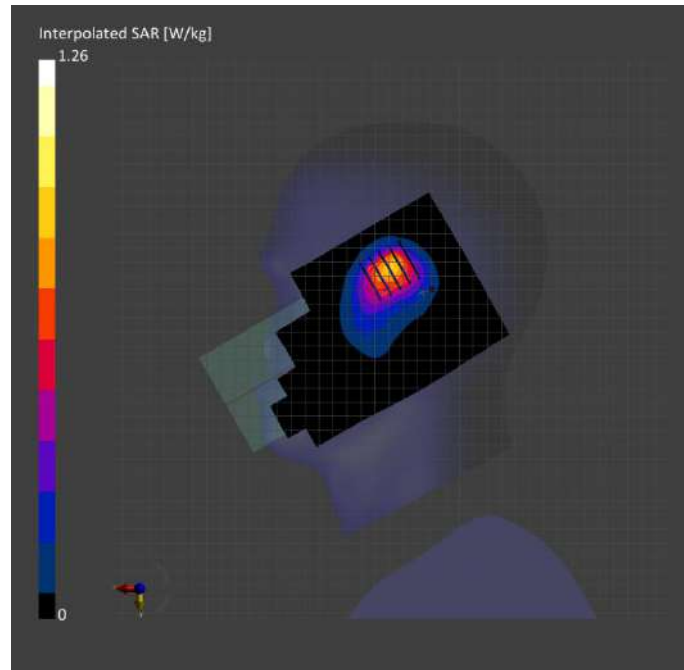
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-24	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-06-24	2024-06-24
psSAR1g [W/kg]	0.745	0.788
psSAR10g [W/kg]	0.427	0.456
Power Drift [dB]	0.00	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		63.5
Dist 3dB Peak [mm]		13.6



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

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	LTE-FDD, 10169-CAF	1732.5, 20175	8.52	1.35	40.3	22.6	21.5

Hardware Setup

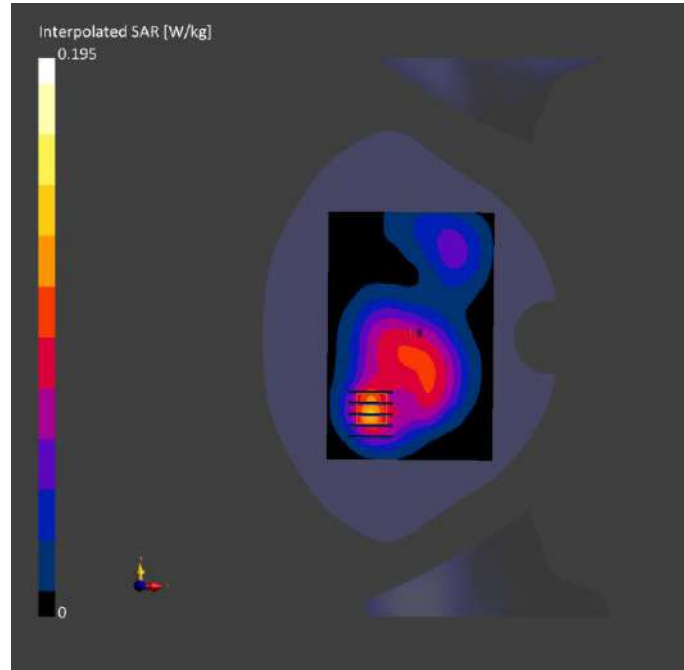
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-24	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-06-24	2024-06-24
psSAR1g [W/kg]	0.110	0.114
psSAR10g [W/kg]	0.063	0.066
Power Drift [dB]	0.02	0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		56.8
Dist 3dB Peak [mm]		14.3



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

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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, 5.00	Band 4	LTE-FDD, 10169-CAF	1732.5, 20175	8.52	1.35	40.3	22.6	21.5

Hardware Setup

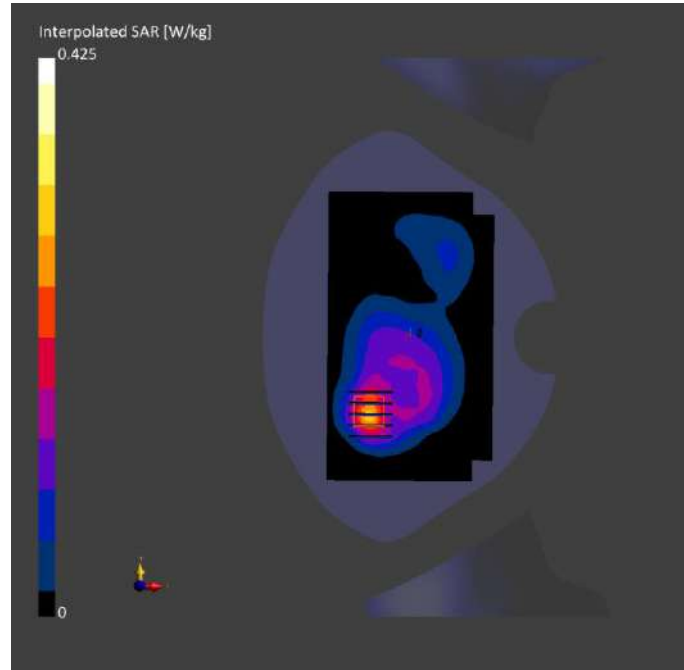
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-24	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-06-24	2024-06-24
psSAR1g [W/kg]	0.243	0.247
psSAR10g [W/kg]	0.133	0.138
Power Drift [dB]	0.01	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		56.4
Dist 3dB Peak [mm]		12.9



Meas.22 Right Head with Cheek on Middle Channel in LTE Band5 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	836.5, 20525	9.96	0.918	41.4	22.5	21.4

Hardware Setup

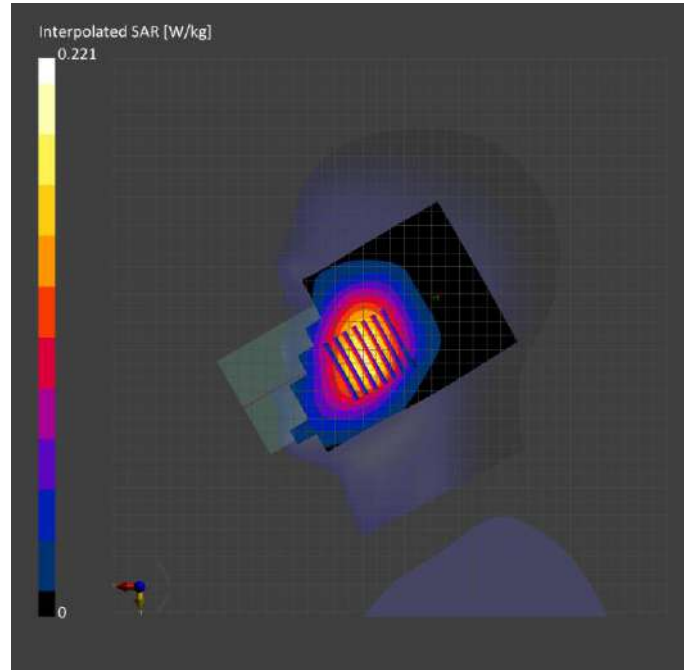
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-15	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-15	2024-05-15
psSAR1g [W/kg]	0.167	0.178
psSAR10g [W/kg]	0.115	0.139
Power Drift [dB]	0.03	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		79.9
Dist 3dB Peak [mm]		26.4



Meas.23 Right Head with Cheek on Middle Channel in LTE Band5 mode with Antenna 0-CA

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	836.5, 20525	9.96	0.918	41.4	22.5	21.4

Hardware Setup

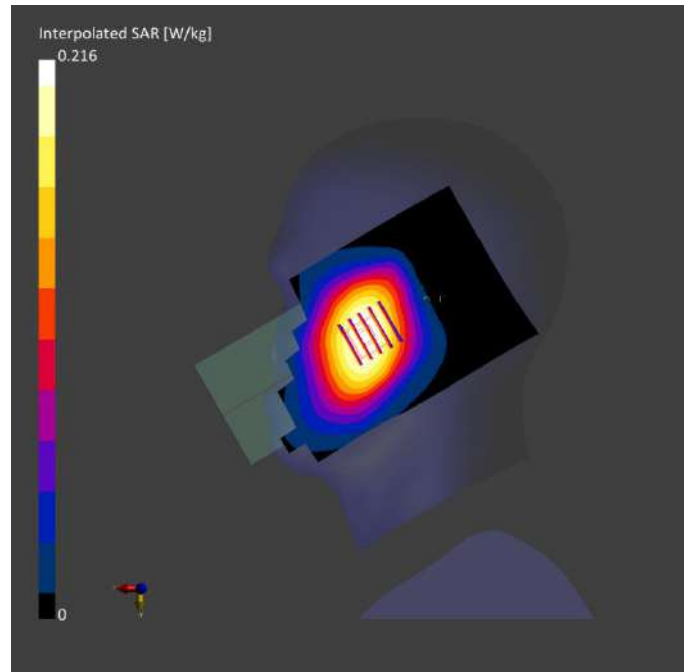
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-15	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-05-15	2024-05-15
psSAR1g [W/kg]	0.166	0.177
psSAR10g [W/kg]	0.116	0.142
Power Drift [dB]	0.03	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		81.9
Dist 3dB Peak [mm]		> 16.0



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
M155	180.0 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, 5.00	Band 5	LTE-FDD, 10175-CAH	836.5, 20525	9.96	0.918	41.4	22.5	21.4

Hardware Setup

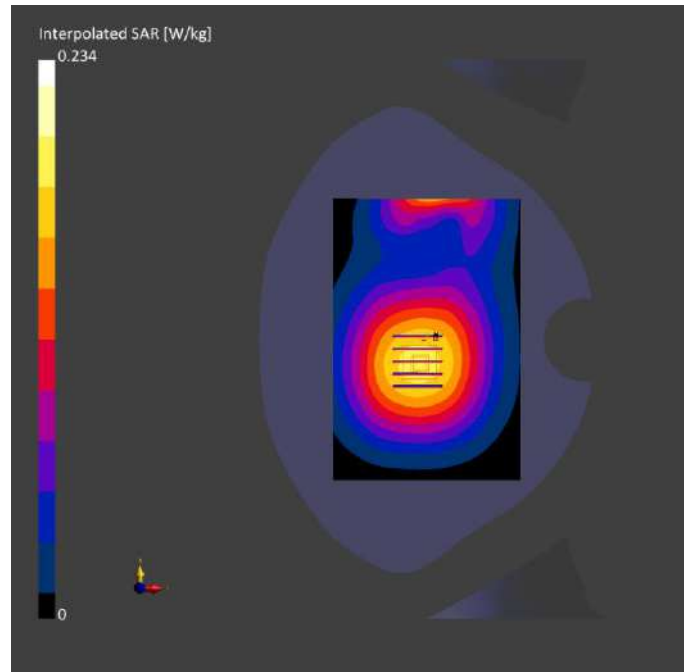
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-15	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-15	2024-05-15
psSAR1g [W/kg]	0.164	0.174
psSAR10g [W/kg]	0.116	0.131
Power Drift [dB]	-0.00	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		73.4
Dist 3dB Peak [mm]		> 16.0



**Meas.25 Body Plane with Back Side 15mm on Middle Channel in LTE Band5 mode with Antenna 0-CA
Device under Test Properties**

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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, 5.00	Band 5	LTE-FDD, 10175-CAH	836.5, 20525	9.96	0.918	41.4	22.5	21.4

Hardware Setup

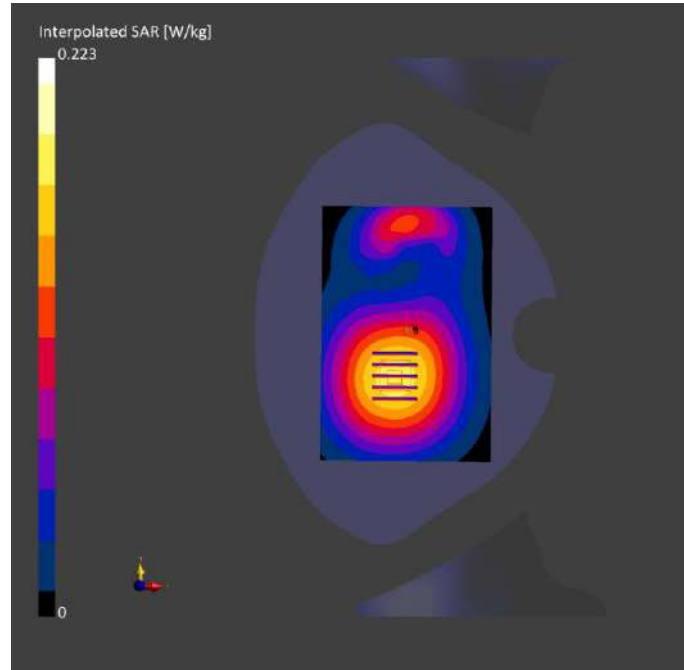
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-15	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-15	2024-05-15
psSAR1g [W/kg]	0.158	0.166
psSAR10g [W/kg]	0.111	0.125
Power Drift [dB]	0.02	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		73.9
Dist 3dB Peak [mm]		> 16.0



Meas.26 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
M155	180.0 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	0.918	41.4	22.5	21.4

Hardware Setup

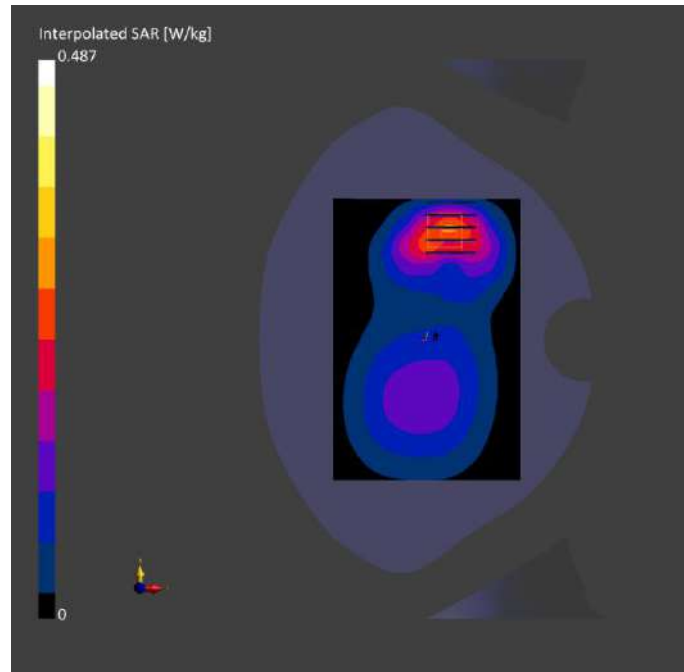
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-15	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-15	2024-05-15
psSAR1g [W/kg]	0.247	0.278
psSAR10g [W/kg]	0.164	0.160
Power Drift [dB]	0.01	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		56.0
Dist 3dB Peak [mm]		12.8



Meas.27 Body Plane with Back Side 10mm on Middle Channel in LTE Band5 mode with Antenna 0-CA
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	0.918	41.4	22.5	21.4

Hardware Setup

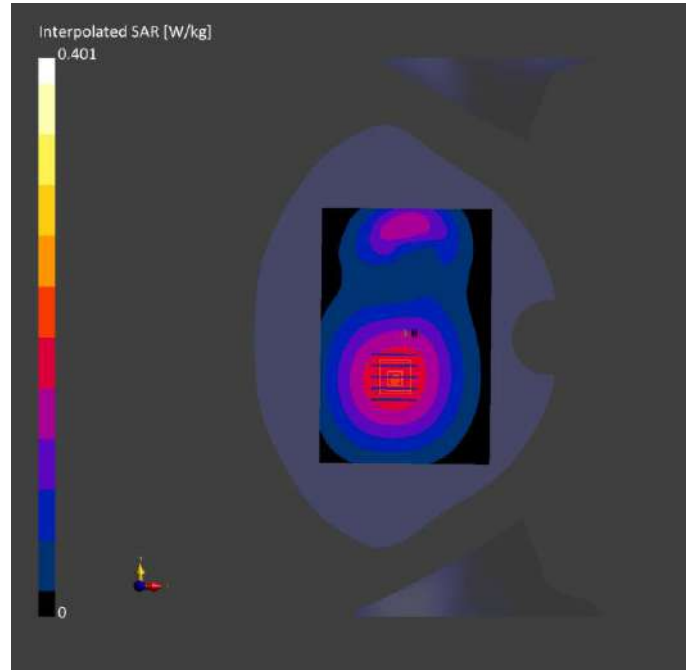
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-15	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-15	2024-05-15
psSAR1g [W/kg]	0.227	0.234
psSAR10g [W/kg]	0.148	0.140
Power Drift [dB]	0.02	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		55.5
Dist 3dB Peak [mm]		12.2



Meas.28 Right Head with Cheek on Middle Channel in LTE Band12 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	0.884	42.4	22.3	21.2

Hardware Setup

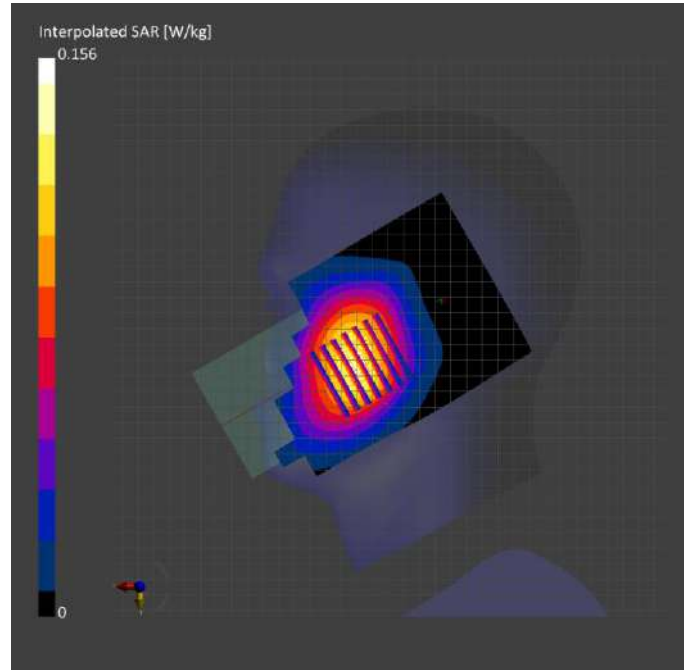
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-10	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-10	2024-05-10
psSAR1g [W/kg]	0.119	0.127
psSAR10g [W/kg]	0.083	0.101
Power Drift [dB]	0.00	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		80.7
Dist 3dB Peak [mm]		31.2



Meas.29 Body Plane with Back Side 15mm on Middle Channel in LTE Band2 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 12	LTE-FDD, 10175-CAH	707.5, 23095	10.31	0.884	42.4	22.3	21.2

Hardware Setup

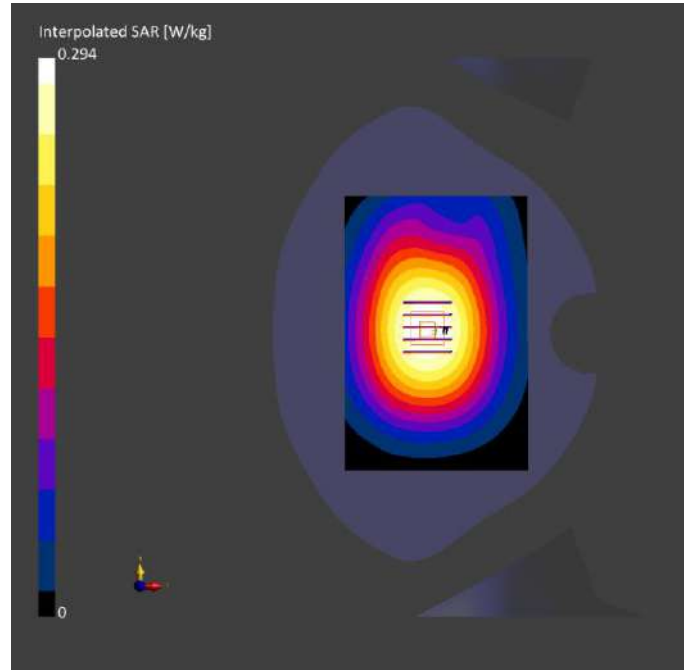
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-10	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-10	2024-05-10
psSAR1g [W/kg]	0.206	0.220
psSAR10g [W/kg]	0.148	0.168
Power Drift [dB]	-0.01	-0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		74.4
Dist 3dB Peak [mm]		> 16.0



Meas.30 Body Plane with Left Edge 10mm on Middle Channel in LTE Band12 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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, LEFT, 10.00	Band 12	LTE-FDD, 10175-CAH	707.5, 23095	10.31	0.884	42.4	22.3	21.2

Hardware Setup

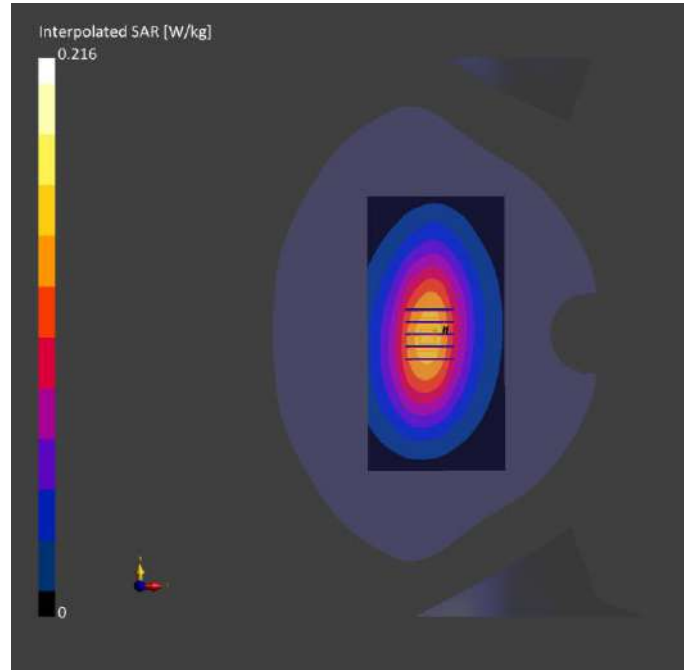
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-10	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	90.0 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	N/A	N/A
Surface Detection	All points	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-10	2024-05-10
psSAR1g [W/kg]	0.139	0.147
psSAR10g [W/kg]	0.097	0.103
Power Drift [dB]	-0.01	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		66.9
Dist 3dB Peak [mm]		> 16.0



Meas.31 Right Head with Cheek on Middle Channel in LTE Band17 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	0.891	42.3	22.3	21.2

Hardware Setup

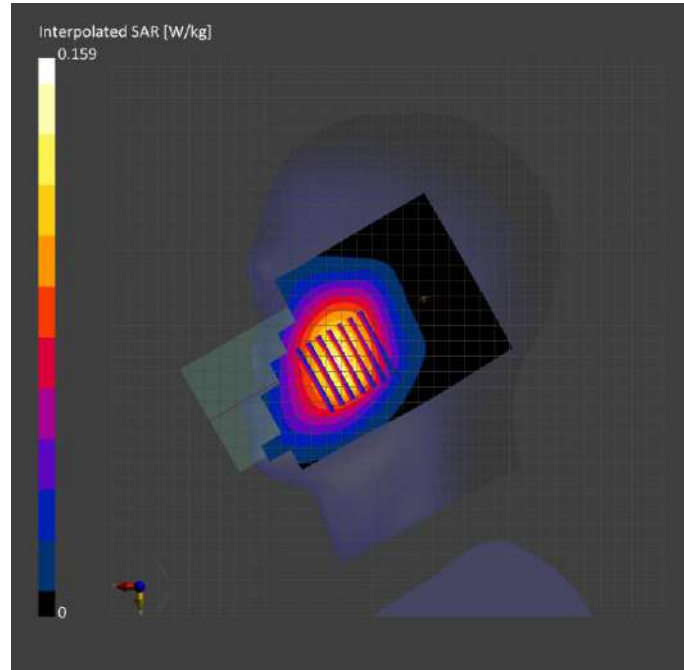
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-10	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-10	2024-05-10
psSAR1g [W/kg]	0.122	0.130
psSAR10g [W/kg]	0.085	0.103
Power Drift [dB]	0.01	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		81.1
Dist 3dB Peak [mm]		31.2



Meas.32 Body Plane with Back Side 15mm on Middle Channel in LTE Band17 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	709.0, 23780	10.31	0.891	42.3	22.3	21.2

Hardware Setup

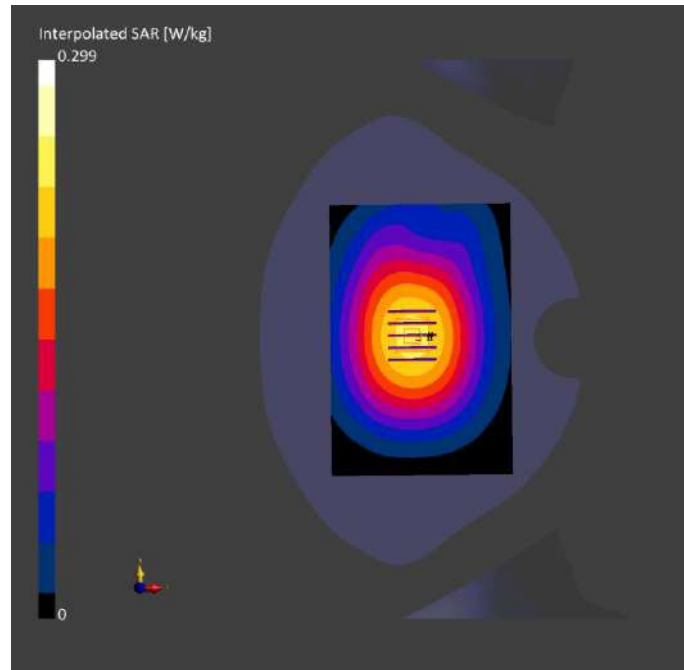
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-10	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-10	2024-05-10
psSAR1g [W/kg]	0.210	0.223
psSAR10g [W/kg]	0.150	0.170
Power Drift [dB]	0.02	-0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		74.1
Dist 3dB Peak [mm]		> 16.0



Meas.33 Body Plane with Back Side 10mm on Middle Channel in LTE Band17 mode with Antenna 0
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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, LEFT, 10.00	Band 17	LTE-FDD, 10175-CAH	709.0, 23780	10.31	0.891	42.3	22.3	21.2

Hardware Setup

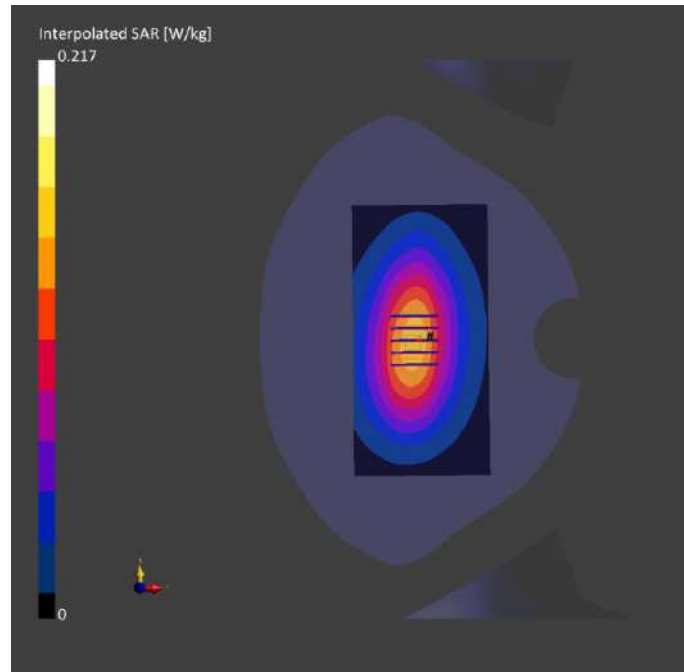
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-10	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	90.0 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	N/A	N/A
Surface Detection	All points	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-10	2024-05-10
psSAR1g [W/kg]	0.139	0.147
psSAR10g [W/kg]	0.097	0.103
Power Drift [dB]	-0.02	0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		66.8
Dist 3dB Peak [mm]		> 16.0



Meas.34 Right Head with Cheek on Middle Channel in LTE Band25 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 25	LTE-FDD, 10169-CAF	1882.5, 26365	7.98	1.39	40.3	22.4	21.4

Hardware Setup

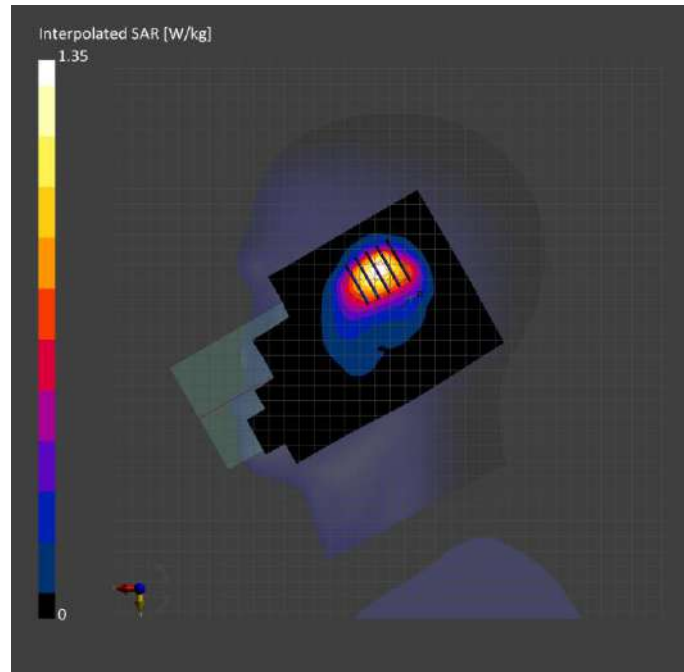
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-27	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-06-27	2024-06-27
psSAR1g [W/kg]	0.751	0.808
psSAR10g [W/kg]	0.420	0.451
Power Drift [dB]	-0.00	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		60.4
Dist 3dB Peak [mm]		12.7



Meas.35 Body Plane with Back Side 15mm on Middle Channel in LTE Band25 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 25	LTE-FDD, 10169-CAF	1882.5, 26365	7.98	1.39	40.3	22.4	21.4

Hardware Setup

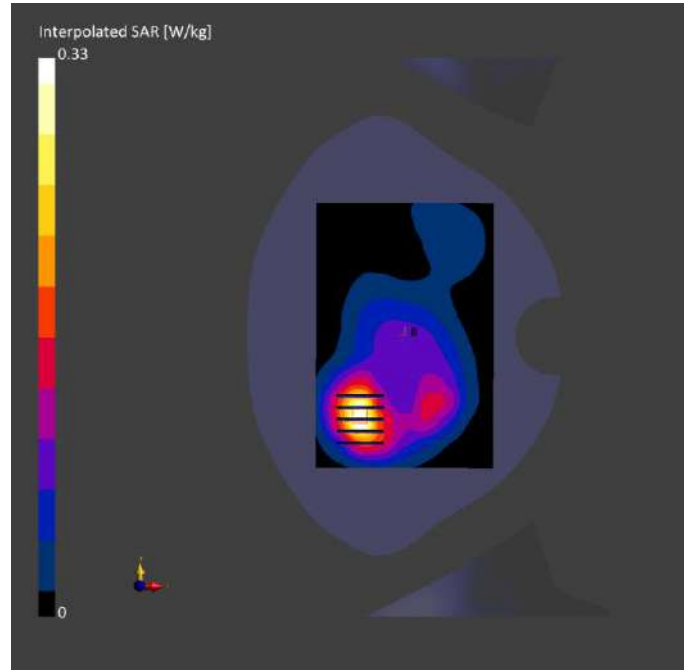
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-27	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-27	2024-06-27
psSAR1g [W/kg]	0.186	0.193
psSAR10g [W/kg]	0.104	0.110
Power Drift [dB]	0.01	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		56.2
Dist 3dB Peak [mm]		14.3



Meas.36 Body Plane with Back Side 10mm on Middle Channel in LTE Band25 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 25	LTE-FDD, 10169-CAF	1882.5, 26365	7.98	1.39	40.3	22.4	21.4

Hardware Setup

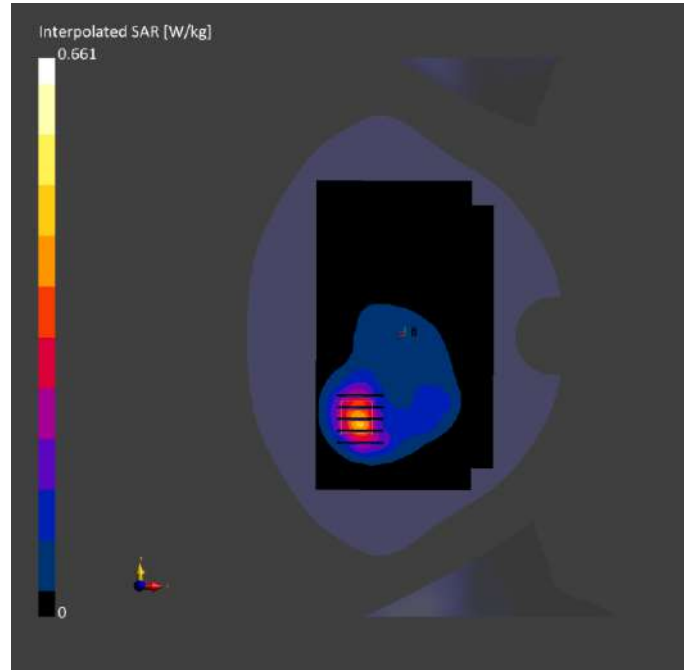
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-27	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-06-27	2024-06-27
psSAR1g [W/kg]	0.364	0.381
psSAR10g [W/kg]	0.196	0.210
Power Drift [dB]	0.00	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		55.9
Dist 3dB Peak [mm]		12.9



Meas.37 Right Head with Cheek on Middle Channel in LTE Band26 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	831.5, 26865	9.96	0.899	41.9	22.5	21.4

Hardware Setup

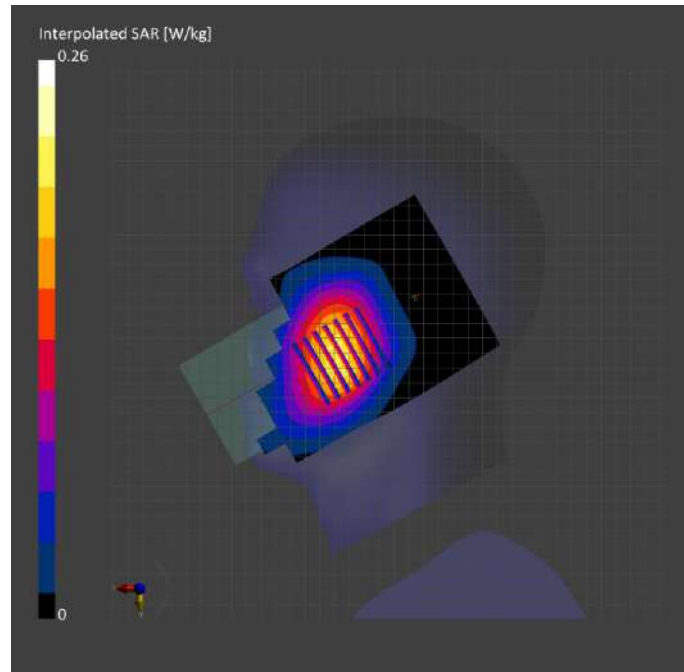
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-15	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-15	2024-05-15
psSAR1g [W/kg]	0.186	0.200
psSAR10g [W/kg]	0.129	0.156
Power Drift [dB]	0.01	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		78.2
Dist 3dB Peak [mm]		21.7



Meas.38 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
M155	180.0 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	0.899	41.9	22.5	21.4

Hardware Setup

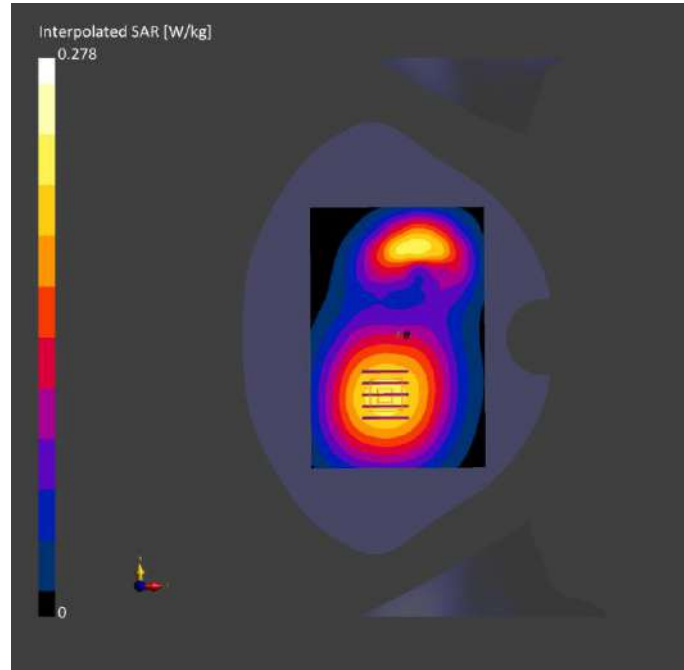
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-15	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-15	2024-05-15
psSAR1g [W/kg]	0.196	0.208
psSAR10g [W/kg]	0.139	0.158
Power Drift [dB]	0.03	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		74.3
Dist 3dB Peak [mm]		> 16.0



Meas.39 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
M155	180.0 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	0.899	41.9	22.5	21.4

Hardware Setup

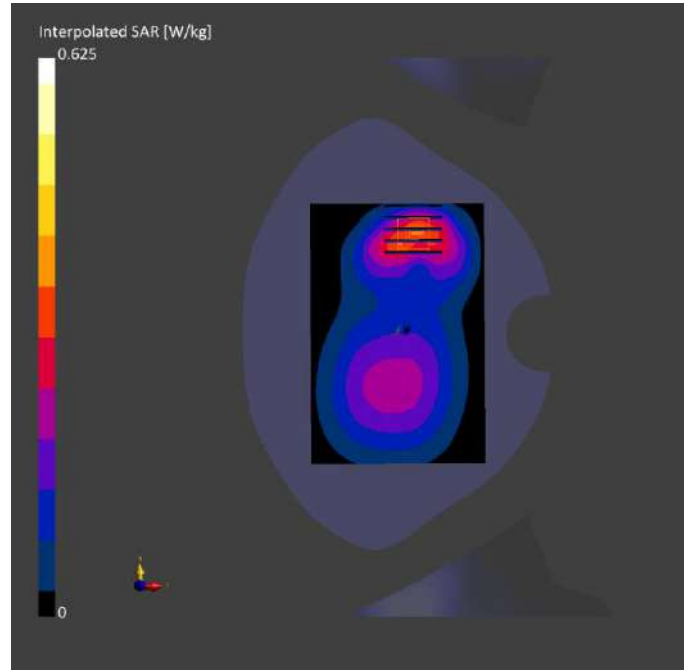
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-15	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-15	2024-05-15
psSAR1g [W/kg]	0.319	0.357
psSAR10g [W/kg]	0.213	0.207
Power Drift [dB]	-0.01	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		55.8
Dist 3dB Peak [mm]		12.8



Meas.40 Right Head with Cheek on Middle Channel in LTE Band66 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	1.35	40.7	22.5	21.3

Hardware Setup

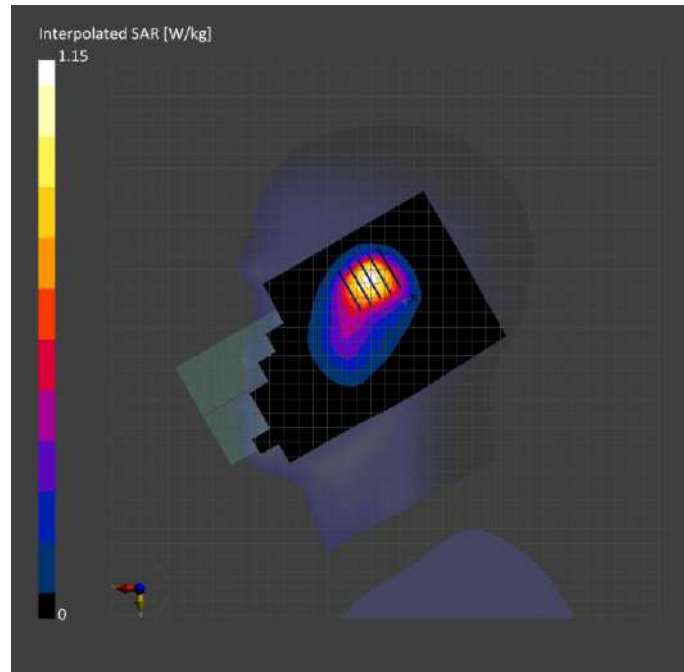
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-25	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-06-25	2024-06-25
psSAR1g [W/kg]	0.669	0.715
psSAR10g [W/kg]	0.378	0.411
Power Drift [dB]	0.02	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		63.5
Dist 3dB Peak [mm]		11.5



Meas.41 Right Head with Cheek on Middle Channel in LTE Ban66 mode with Antenna 1-CA

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	1720.0, 132072	8.52	1.34	40.7	22.5	21.3

Hardware Setup

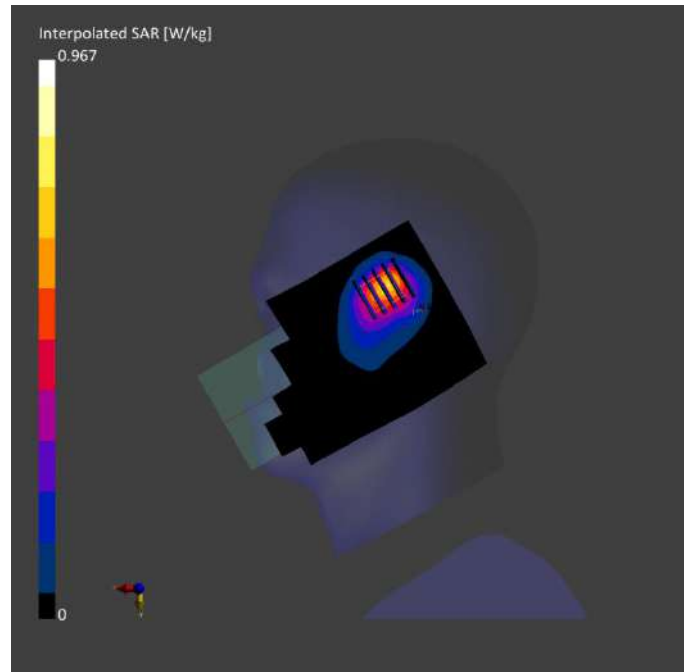
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-25	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-25	2024-06-25
psSAR1g [W/kg]	0.579	0.611
psSAR10g [W/kg]	0.333	0.355
Power Drift [dB]	-0.01	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		63.7
Dist 3dB Peak [mm]		12.8



Meas.42 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
M155	180.0 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	1770.0, 132572	8.52	1.39	39.6	22.5	21.3

Hardware Setup

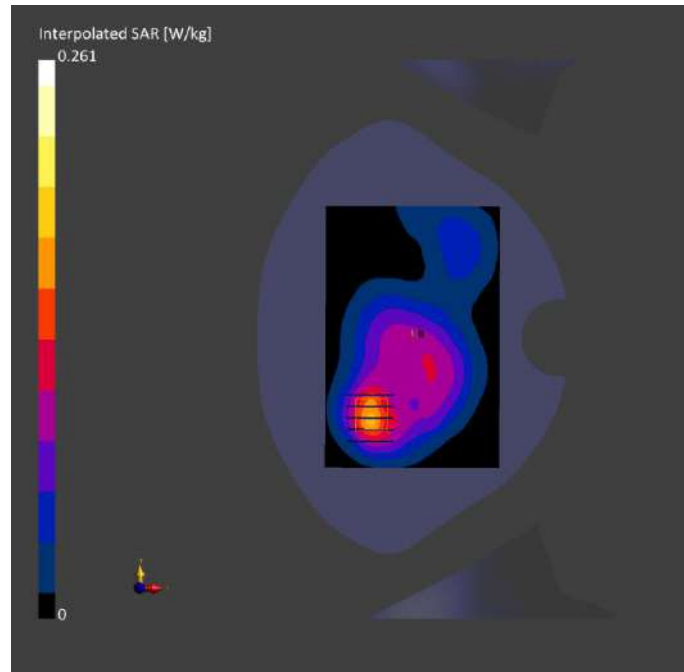
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-25	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-06-25	2024-06-25
psSAR1g [W/kg]	0.149	0.154
psSAR10g [W/kg]	0.085	0.089
Power Drift [dB]	-0.02	-0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		57.6
Dist 3dB Peak [mm]		14.8



**Meas.43 Body Plane with Back Side 15mm on Middle Channel in LTE Band66 mode with Antenna 1-CA
Device under Test Properties**

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	1770.0, 132572	8.52	1.39	39.6	22.5	21.3

Hardware Setup

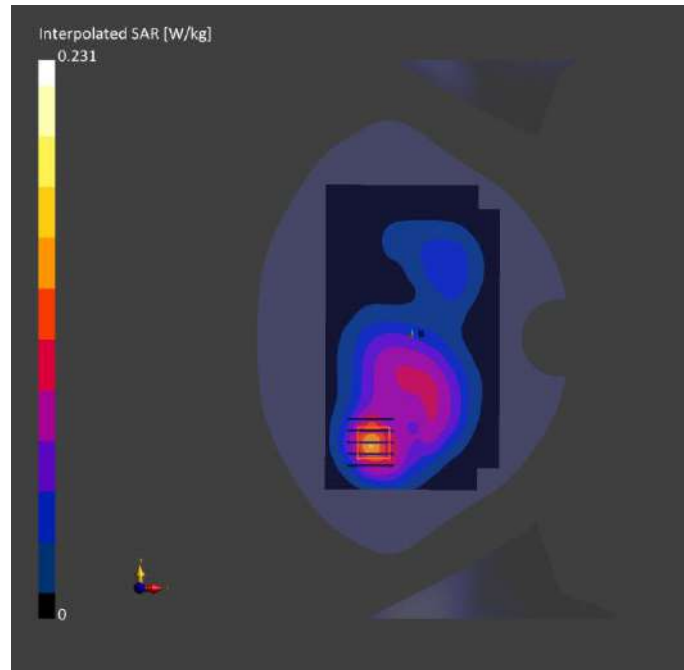
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-25	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

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	All points	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-25	2024-06-25
psSAR1g [W/kg]	0.126	0.136
psSAR10g [W/kg]	0.072	0.079
Power Drift [dB]	-0.09	0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		57.5
Dist 3dB Peak [mm]		15.2



Meas.44 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
M155	180.0 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	1770.0, 132572	8.52	1.39	39.6	22.5	21.3

Hardware Setup

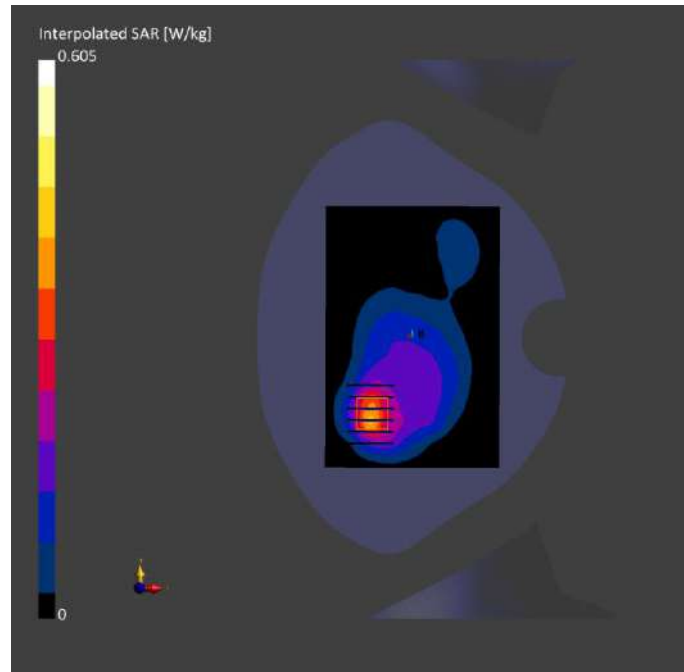
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-25	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-25	2024-06-25
psSAR1g [W/kg]	0.334	0.343
psSAR10g [W/kg]	0.185	0.189
Power Drift [dB]	-0.01	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		54.5
Dist 3dB Peak [mm]		12.2



**Meas.45 Body Plane with Back Side 10mm on Middle Channel in LTE Band66 mode with Antenna 1-CA
Device under Test Properties**

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	1770.0, 132572	8.52	1.39	39.6	22.5	21.3

Hardware Setup

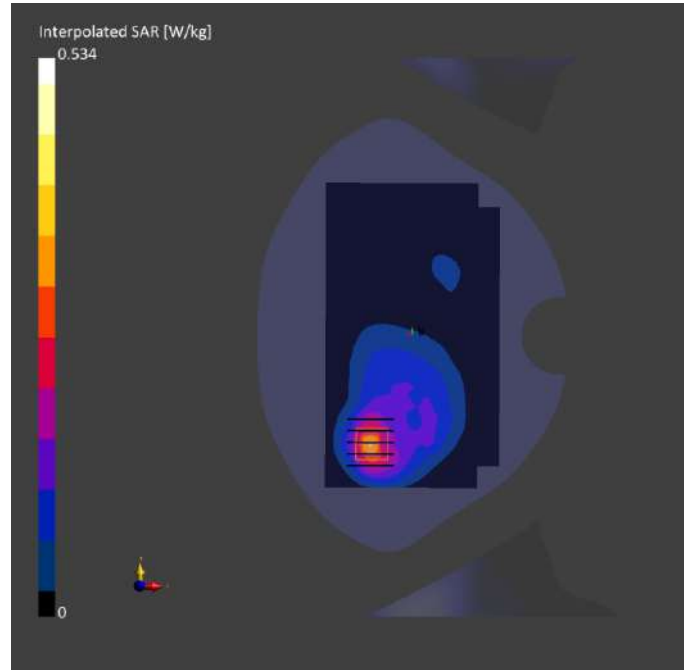
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-25	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

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	All points	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-25	2024-06-25
psSAR1g [W/kg]	0.286	0.307
psSAR10g [W/kg]	0.157	0.170
Power Drift [dB]	-0.03	-0.11
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		56.5
Dist 3dB Peak [mm]		13.2



Meas.46 Right Head with Cheek on Middle Channel in LTE Band71 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 71	LTE-FDD, 10169-CAF	683.0, 133322	10.31	0.892	42.4	22.5	21.3

Hardware Setup

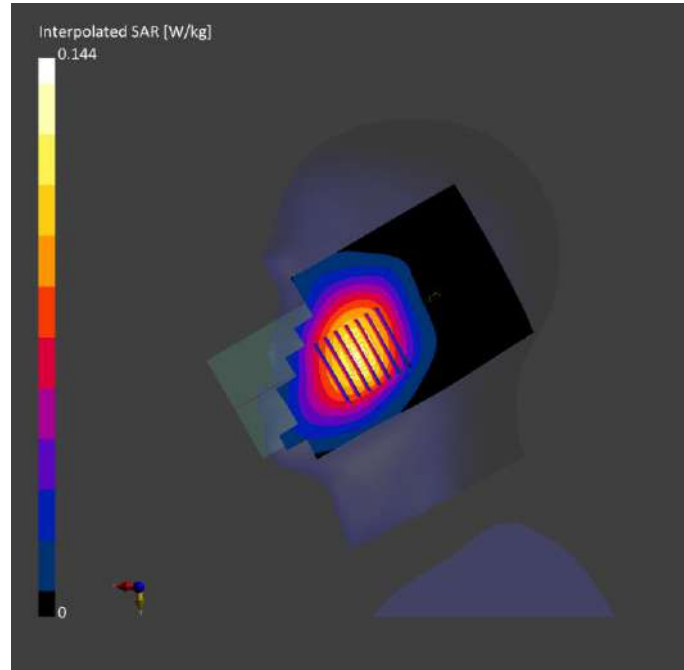
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-13	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-05-13	2024-05-13
psSAR1g [W/kg]	0.109	0.115
psSAR10g [W/kg]	0.077	0.091
Power Drift [dB]	0.03	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		77.7
Dist 3dB Peak [mm]		23.9



Meas.47 Body Plane with Back Side 15mm on Middle Channel in LTE Band71 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 71	LTE-FDD, 10169-CAF	683.0, 133322	10.31	0.892	42.4	22.5	21.3

Hardware Setup

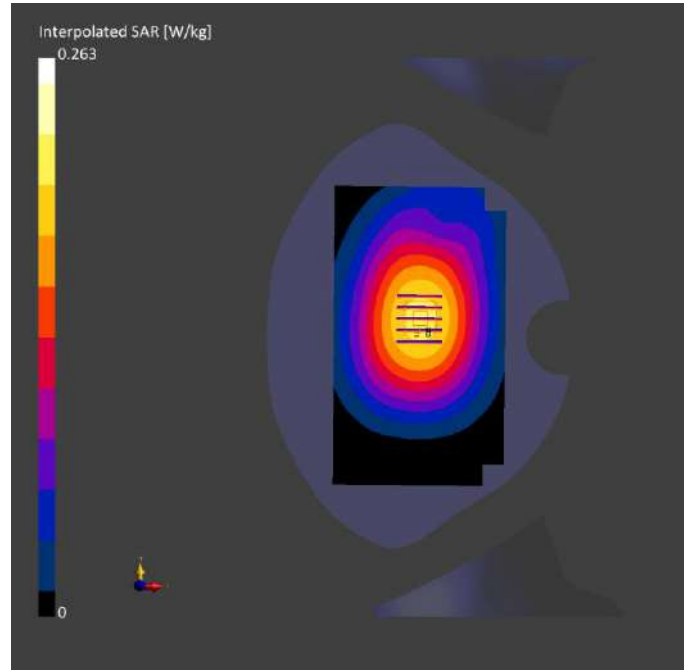
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-13	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-05-13	2024-05-13
psSAR1g [W/kg]	0.184	0.197
psSAR10g [W/kg]	0.132	0.151
Power Drift [dB]	0.01	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		74.1
Dist 3dB Peak [mm]		> 16.0



Meas.48 Body Plane with Back Side 10mm on Middle Channel in LTE Band71 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 71	LTE-FDD, 10169-CAF	683.0, 133322	10.31	0.892	42.4	22.5	21.3

Hardware Setup

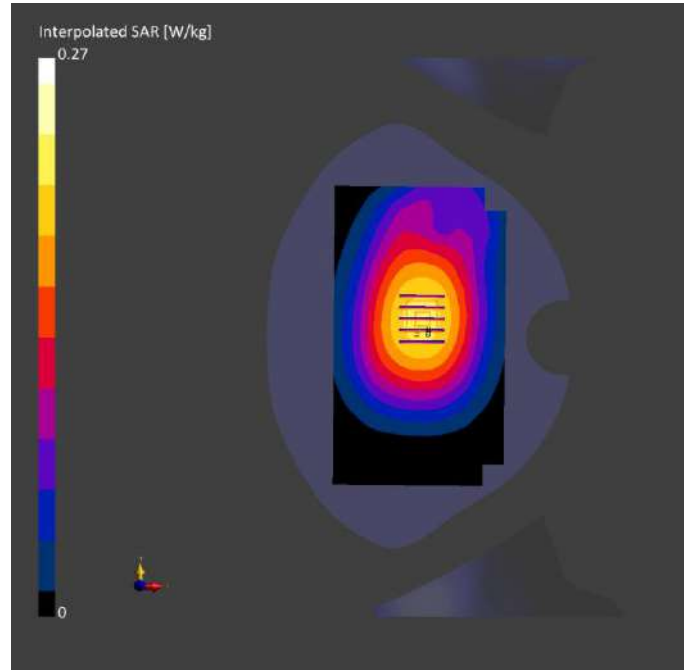
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-13	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-05-13	2024-05-13
psSAR1g [W/kg]	0.190	0.203
psSAR10g [W/kg]	0.137	0.157
Power Drift [dB]	0.00	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		75.0
Dist 3dB Peak [mm]		> 16.0



Meas.49 Right Head with Cheek on Middle Channel in LTE Band41 mode with Antenna 5

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	1.94	39.4	22.2	21.1

Hardware Setup

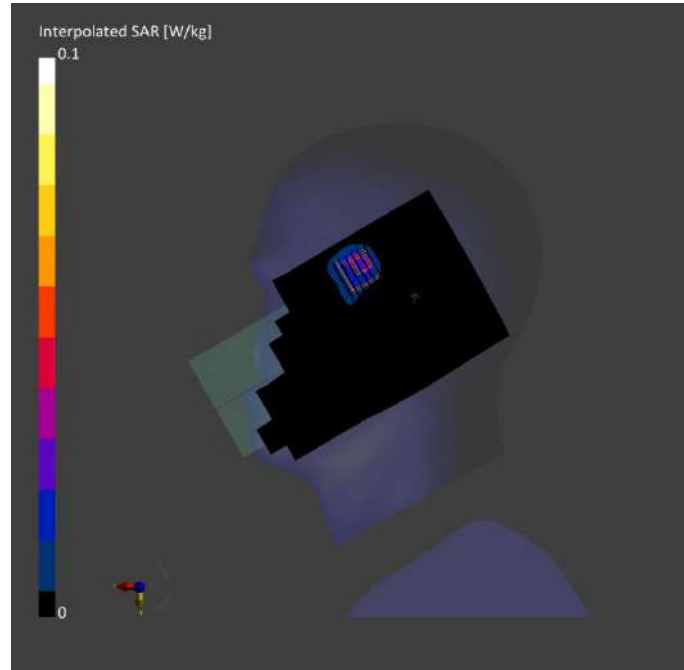
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-20	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	Y	Y
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]	0.023	0.020
psSAR10g [W/kg]	0.012	0.009
Power Drift [dB]	0.06	0.08
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		48.8
Dist 3dB Peak [mm]		> 15.0



Meas.50 Right Head with Cheek on Middle Channel in LTE Band41 mode with Antenna 5-CA

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	1.94	39.4	22.2	21.1

Hardware Setup

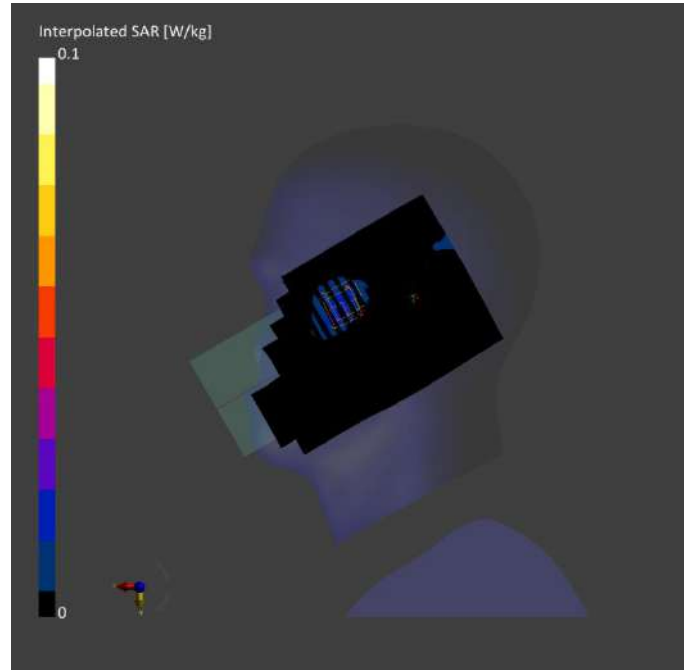
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-20	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-05-20	2024-05-20
psSAR1g [W/kg]	0.016	0.016
psSAR10g [W/kg]	0.008	0.008
Power Drift [dB]	0.18	-0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		62.3
Dist 3dB Peak [mm]		> 16.0



Meas.51 Body Plane with Back Side 15mm on Middle Channel in LTE Band41 mode with Antenna 5

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	2593.0, 40620	7.41	1.94	39.4	22.2	21.1

Hardware Setup

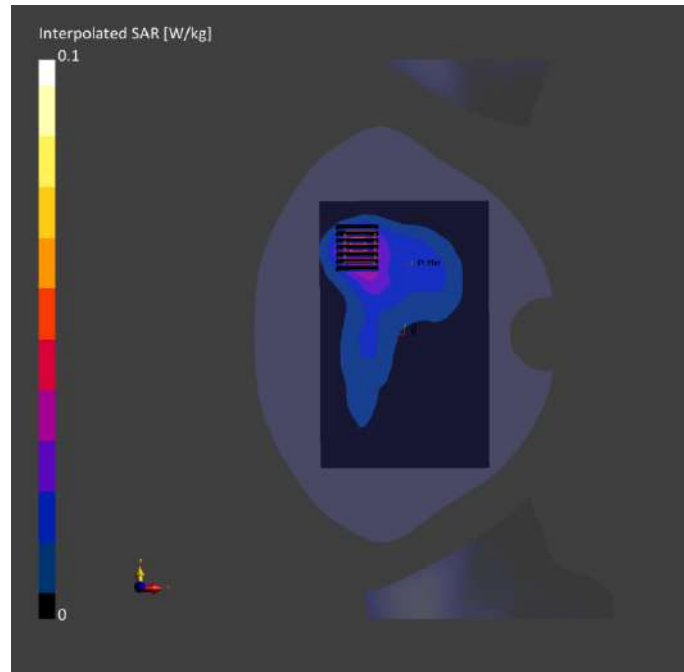
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-20	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

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	Y	Y
Surface Detection	All points	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-20	2024-05-20
psSAR1g [W/kg]	0.043	0.046
psSAR10g [W/kg]	0.023	0.024
Power Drift [dB]	0.12	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		47.8
Dist 3dB Peak [mm]		> 15.0



**Meas.52 Body Plane with Back Side 15mm on Middle Channel in LTE Band41 mode with Antenna 5-CA
Device under Test Properties**

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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, 5.00	Band 41	LTE-TDD, 10172-CAH	2593.0, 40620	7.41	1.94	39.4	22.2	21.1

Hardware Setup

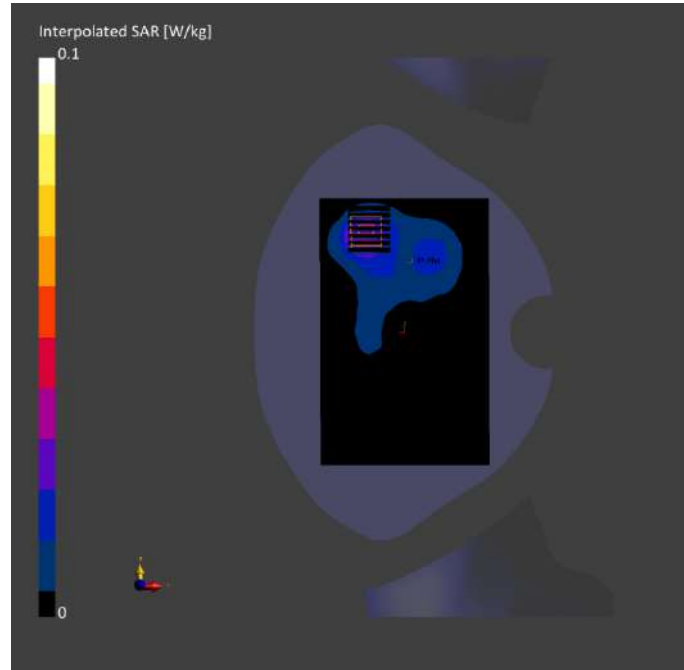
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-20	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	Y	Y
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]	0.040	0.040
psSAR10g [W/kg]	0.020	0.019
Power Drift [dB]	-0.00	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		44.7
Dist 3dB Peak [mm]		> 15.0



Meas.53 Body Plane with Back Side 10mm on Middle Channel in LTE Band41 mode with Antenna 5

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	2549.5, 40185	7.41	1.88	39.6	22.2	21.1

Hardware Setup

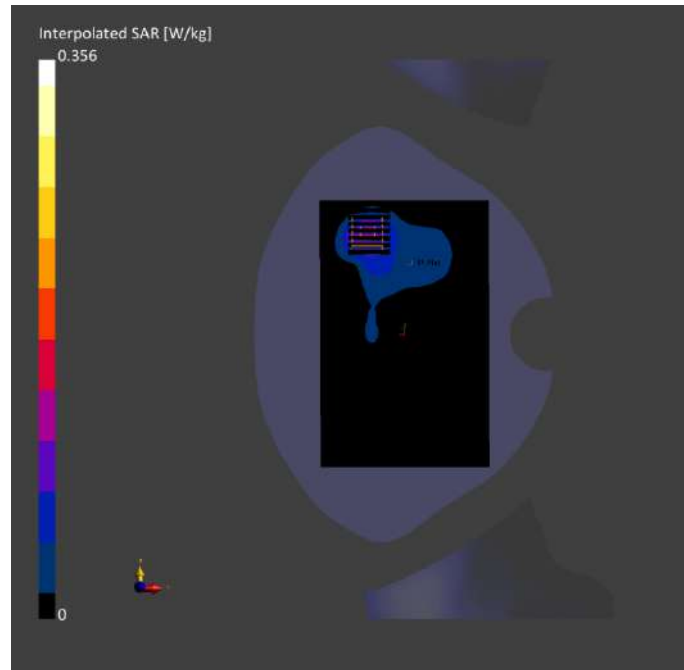
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-20	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	Y	Y
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]	0.155	0.159
psSAR10g [W/kg]	0.072	0.070
Power Drift [dB]	0.02	0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		44.3
Dist 3dB Peak [mm]		8.1



**Meas.54 Body Plane with Back Side 10mm on Middle Channel in LTE Band41 mode with Antenna 5-CA
Device under Test Properties**

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	2549.5, 40185	7.41	1.88	39.6	22.2	21.1

Hardware Setup

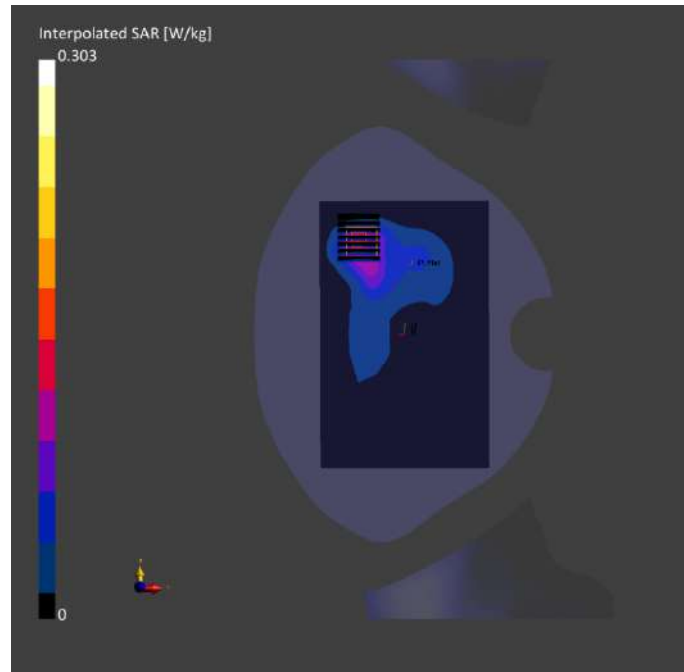
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-20	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

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	Y	Y
Surface Detection	All points	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-20	2024-05-20
psSAR1g [W/kg]	0.130	0.142
psSAR10g [W/kg]	0.066	0.067
Power Drift [dB]	0.01	-0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		44.8
Dist 3dB Peak [mm]		8.9



Meas.55 Right Head with Cheek on 376000 Channel in NR Band2 mode with Antenna 5

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 n2	5G NR FR1	1880.0, 376000	7.98	1.38	40.3	22.3	21.3
			FDD, 10931-AAC						

Hardware Setup

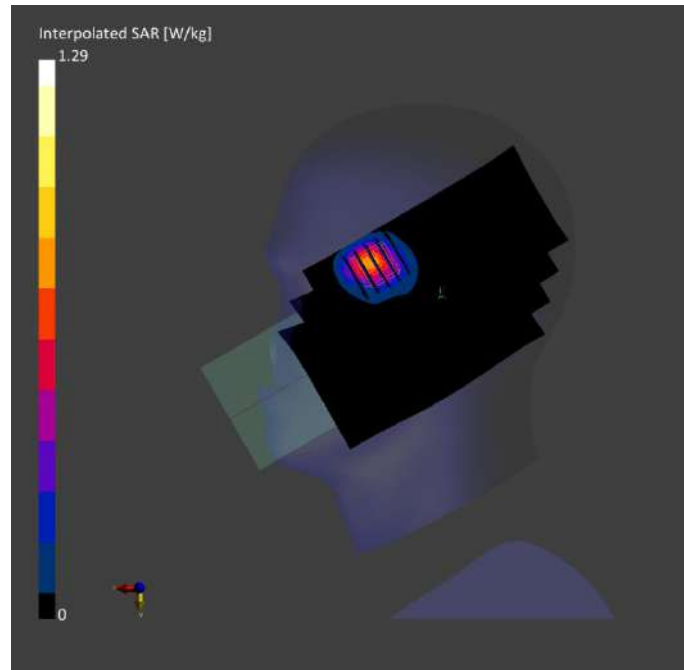
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-28	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-06-28	2024-06-28
psSAR1g [W/kg]	0.449	0.495
psSAR10g [W/kg]	0.240	0.246
Power Drift [dB]	0.02	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		47.9
Dist 3dB Peak [mm]		10.2



Meas.56 Body Plane with Back Side 15mm on 376000 Channel in NR Band2 mode with Antenna 5

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 n2	5G NR FR1	1880.0, 376000	7.98	1.38	40.3	22.3	21.3
			FDD, 10931-AAC						

Hardware Setup

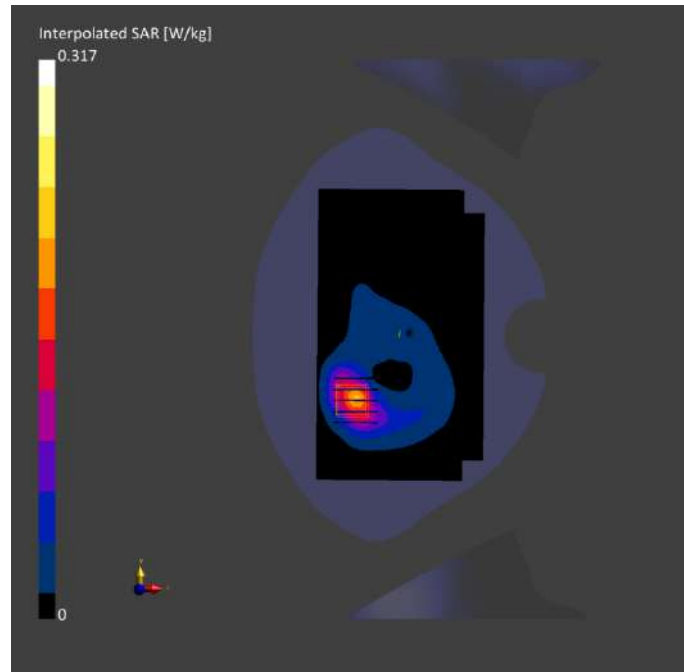
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-28	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-06-28	2024-06-28
psSAR1g [W/kg]	0.172	0.167
psSAR10g [W/kg]	0.092	0.10
Power Drift [dB]	-0.01	-0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		58.3
Dist 3dB Peak [mm]		10.1



Meas.57 Body Plane with Back Side 10mm on 376000 Channel in NR Band2 mode with Antenna 5

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 n2	5G NR FR1	1880.0, 376000	7.98	1.38	40.3	22.3	21.3
			FDD, 10931-AAC						

Hardware Setup

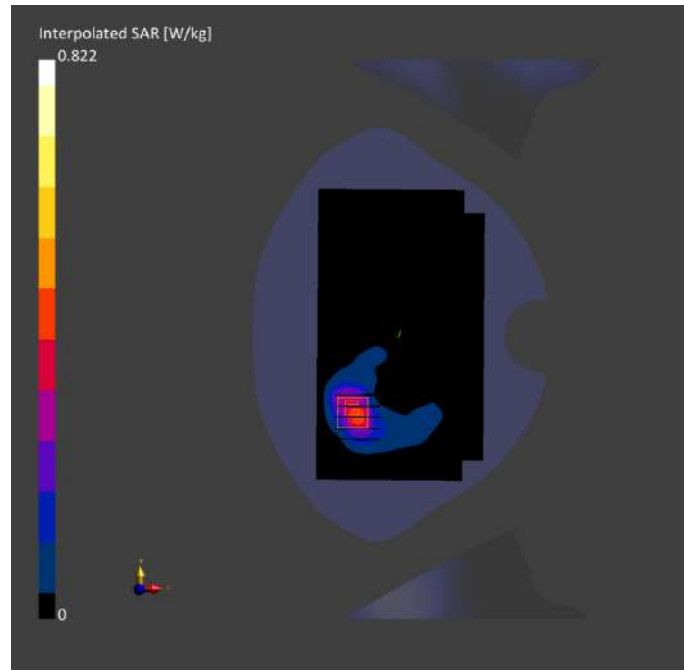
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-28	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-06-28	2024-06-28
psSAR1g [W/kg]	0.376	0.450
psSAR10g [W/kg]	0.195	0.221
Power Drift [dB]	-0.00	0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		54.1
Dist 3dB Peak [mm]		8.0



Meas.58 Right Head with Cheek on 167800 Channel in NR Band5 mode with Antenna 0
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 n5	5G NR FR1	839.0, 167800	9.96	0.914	41.9	22.4	21.2
			FDD, 10931-AAC						

Hardware Setup

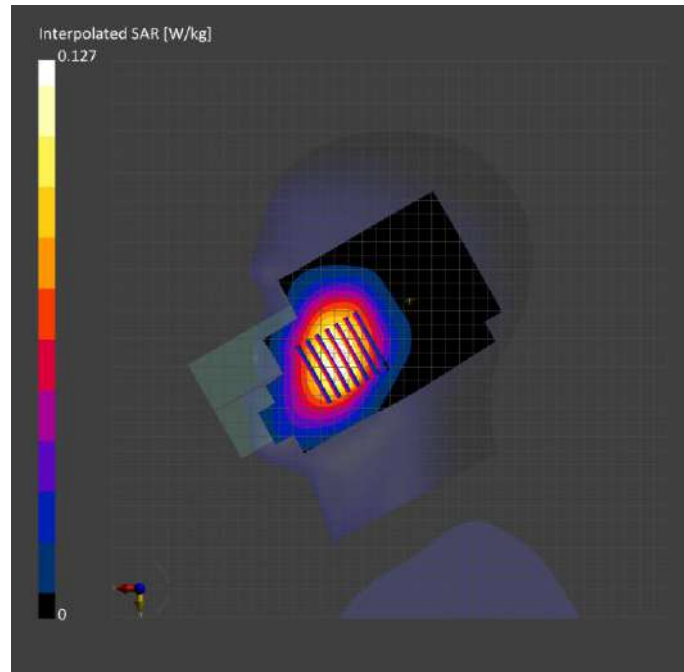
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-16	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-16	2024-05-16
psSAR1g [W/kg]	0.093	0.098
psSAR10g [W/kg]	0.064	0.076
Power Drift [dB]	0.01	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		76.0
Dist 3dB Peak [mm]		19.1



Meas.59 Body Plane with Back Side 15mm on 167800 Channel in NR Band5 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 n5	5G NR FR1	839.0, 167800	9.96	0.914	41.9	22.4	21.2
			FDD, 10931-AAC						

Hardware Setup

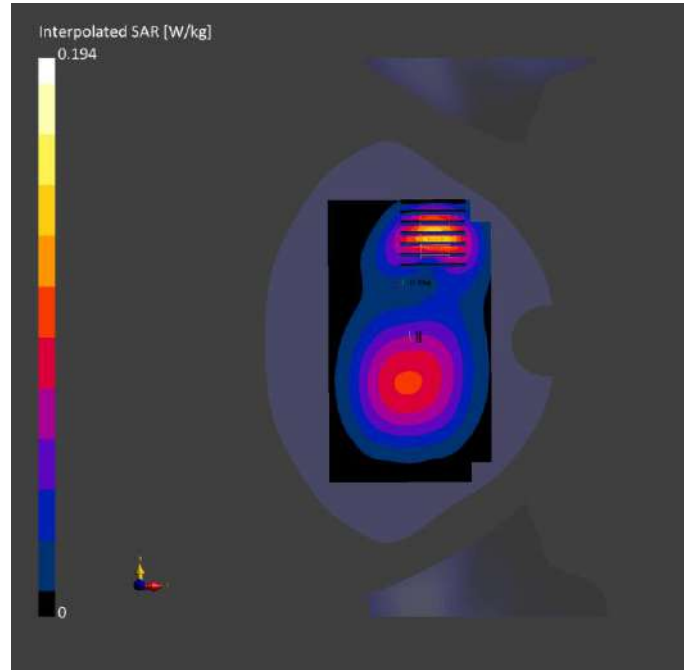
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-16	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-05-16	2024-05-16
psSAR1g [W/kg]	0.124	0.126
psSAR10g [W/kg]	0.080	0.077
Power Drift [dB]	-0.03	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		64.2
Dist 3dB Peak [mm]		14.4



Meas.60 Body Plane with Back Side 10mm on 167800 Channel in NR Band5 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 n5	5G NR FR1	839.0, 167800	9.96	0.914	41.9	22.4	21.2
			FDD, 10931-AAC						

Hardware Setup

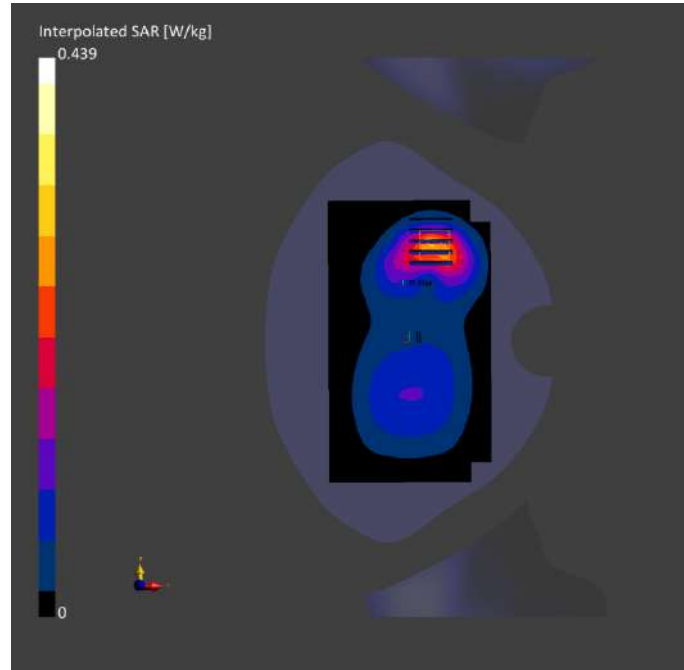
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-16	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-05-16	2024-05-16
psSAR1g [W/kg]	0.252	0.269
psSAR10g [W/kg]	0.163	0.155
Power Drift [dB]	-0.00	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		62.5
Dist 3dB Peak [mm]		11.2



Meas.61 Right Head with Cheek on 376500 Channel in NR Band25 mode with Antenna 5
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 n25	5G NR FR1 FDD, 10931-AAC	1882.5, 376500	7.98	1.39	40.3	22.3	21.3

Hardware Setup

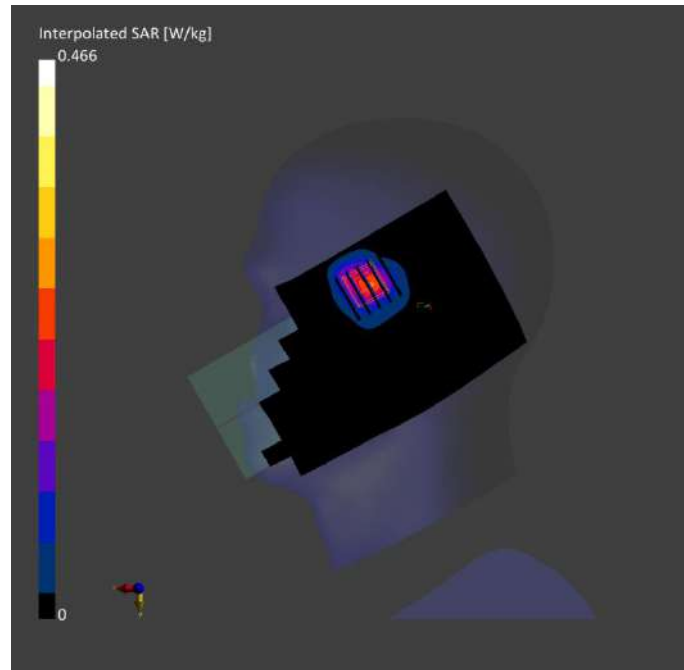
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-28	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-06-28	2024-06-28
psSAR1g [W/kg]	0.212	0.233
psSAR10g [W/kg]	0.111	0.116
Power Drift [dB]	-0.01	-0.14
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		46.0
Dist 3dB Peak [mm]		9.3



Meas.62 Body Plane with Back Side 15mm on 376500 Channel in NR Band25 mode with Antenna 5

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 n25	5G NR FR1, 10931-AAC	1882.5, 376500	7.98	1.39	40.3	22.3	21.3

Hardware Setup

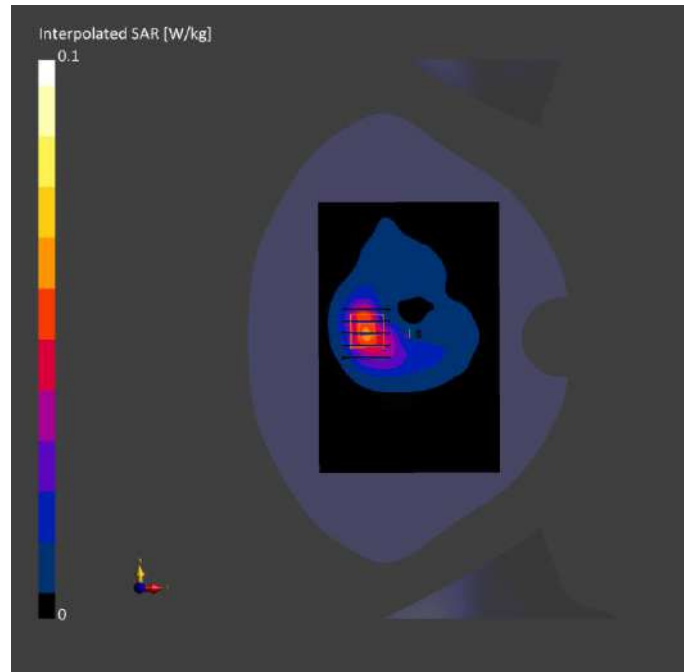
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-28	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-06-28	2024-06-28
psSAR1g [W/kg]	0.050	0.055
psSAR10g [W/kg]	0.027	0.031
Power Drift [dB]	-0.11	0.10
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		56.2
Dist 3dB Peak [mm]		> 16.0



Meas.63 Body Plane with Back Side 10mm on 376500 Channel in NR Band25 mode with Antenna 5

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 n25	5G NR FR1, 10931-AAC	1882.5, 376500	7.98	1.39	40.3	22.3	21.3

Hardware Setup

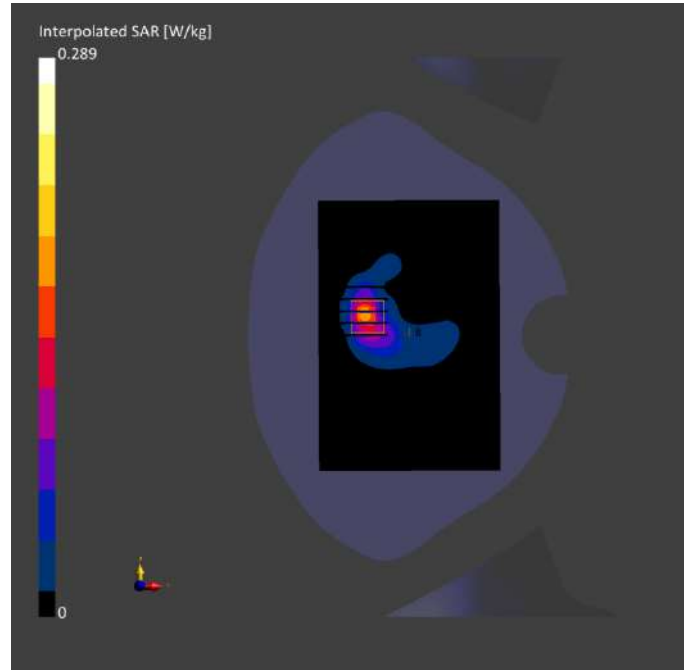
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-28	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-06-28	2024-06-28
psSAR1g [W/kg]	0.143	0.151
psSAR10g [W/kg]	0.070	0.074
Power Drift [dB]	0.01	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.8
Dist 3dB Peak [mm]		8.0



Meas.64 Right Head with Cheek on 352000 Channel in NR Band66 mode with Antenna 5

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 n66	5G NR FR1 FDD, 10934-AAC	1760.0, 352000	8.52	1.38	39.8	22.5	21.3

Hardware Setup

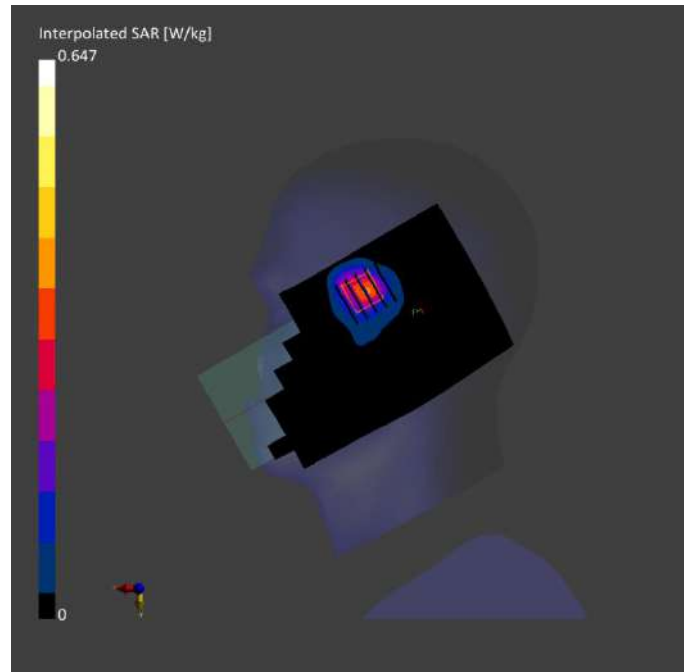
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-25	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-06-25	2024-06-25
psSAR1g [W/kg]	0.304	0.330
psSAR10g [W/kg]	0.163	0.166
Power Drift [dB]	-0.01	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		47.8
Dist 3dB Peak [mm]		9.3



Meas.65 Body Plane with Back Side 10mm on 352000 Channel in NR Band66 mode with Antenna 5

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 n66	5G NR FR1, 10934-AAC	1760.0, 352000	8.52	1.38	39.8	22.5	21.3

Hardware Setup

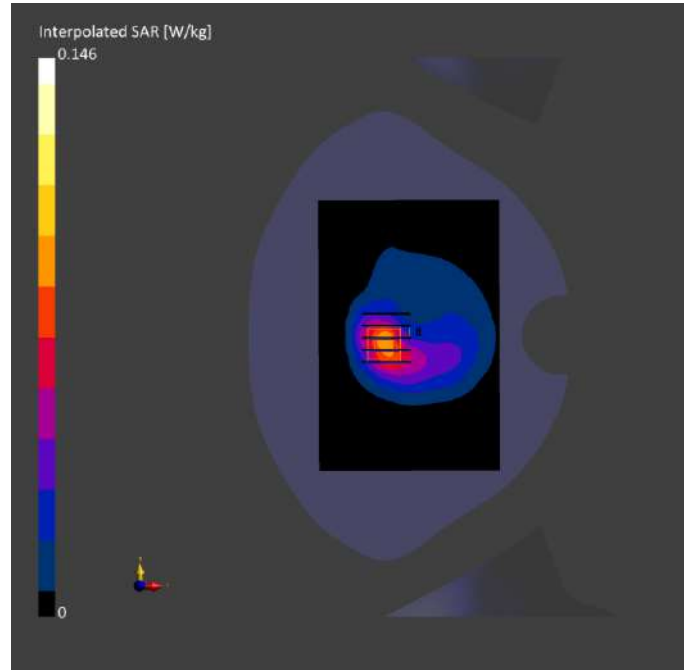
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-25	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-06-25	2024-06-25
psSAR1g [W/kg]	0.078	0.085
psSAR10g [W/kg]	0.045	0.048
Power Drift [dB]	0.09	0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		56.2
Dist 3dB Peak [mm]		11.3



Meas.66 Body Plane with Right Edge 10mm on 352000 Channel in NR Band66 mode with Antenna 5
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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, RIGHT, 10.00	Band n66	5G NR FR1, FDD, 10934-AAC	1760.0, 352000	8.52	1.38	39.8	22.5	21.3

Hardware Setup

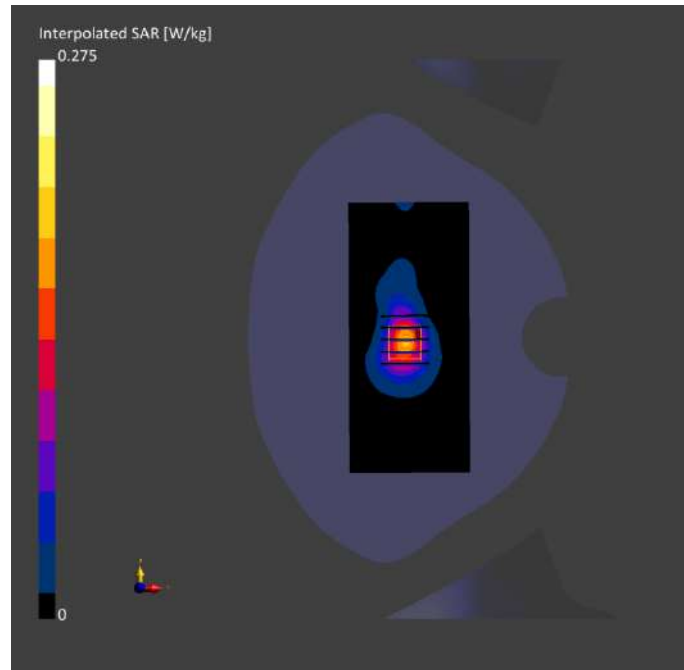
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-25	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 180.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	8.0 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	2024-06-25	2024-06-25
psSAR1g [W/kg]	0.151	0.156
psSAR10g [W/kg]	0.080	0.084
Power Drift [dB]	0.01	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		56.4
Dist 3dB Peak [mm]		10.7



Meas.67 Right Head with Cheek on 136100 Channel in NR Band71 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 n71	5G NR FR1 FDD, 10931-AAC	680.5, 136100	10.31	0.882	42.7	22.5	21.3

Hardware Setup

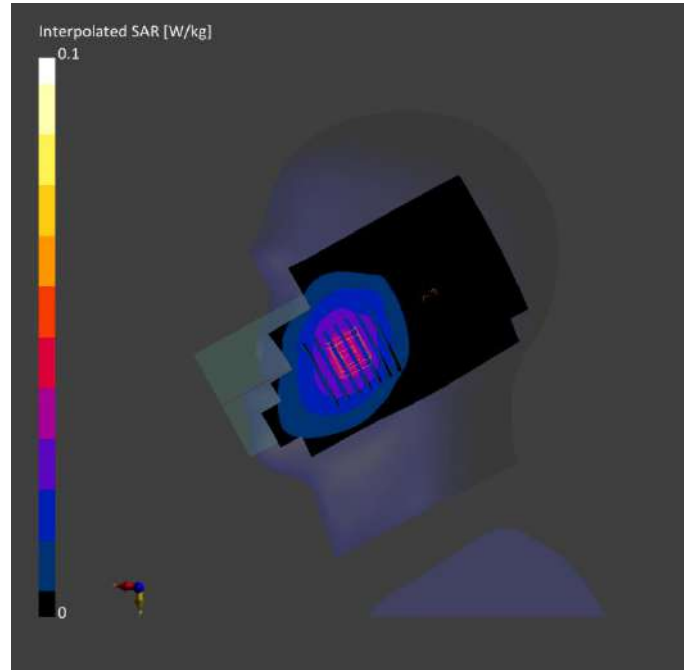
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-13	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-13	2024-05-13
psSAR1g [W/kg]	0.033	0.035
psSAR10g [W/kg]	0.023	0.028
Power Drift [dB]	0.00	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		77.8
Dist 3dB Peak [mm]		> 16.0



Meas.68 Body Plane with Back Side 15mm on 136100 Channel in NR Band71 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 n71	5G NR FR1 FDD, 10931-AAC	680.5, 136100	10.31	0.882	42.7	22.5	21.3

Hardware Setup

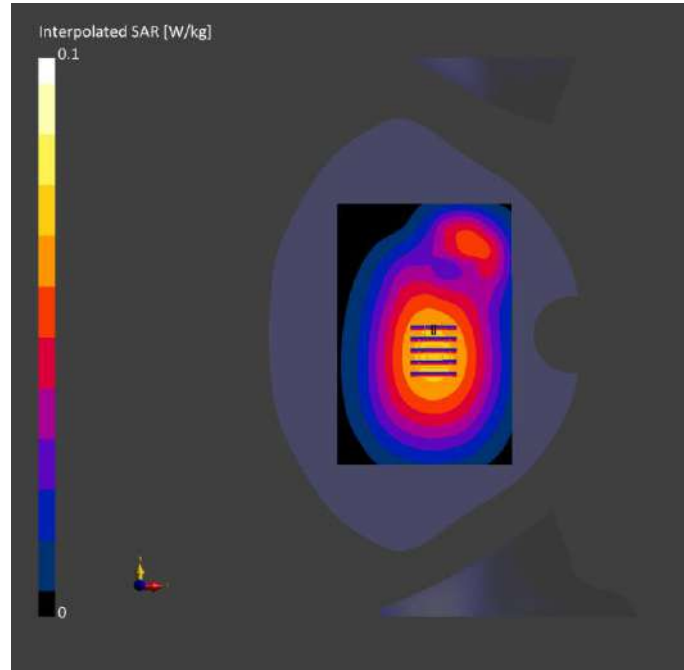
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-13	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-05-13	2024-05-13
psSAR1g [W/kg]	0.063	0.067
psSAR10g [W/kg]	0.045	0.051
Power Drift [dB]	-0.00	-0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		73.7
Dist 3dB Peak [mm]		> 16.0



Meas.69 Body Plane with Back Side 10mm on 136100 Channel in NR Band71 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 n71	5G NR FR1 FDD, 10931-AAC	680.5, 136100	10.31	0.882	42.7	22.5	21.3

Hardware Setup

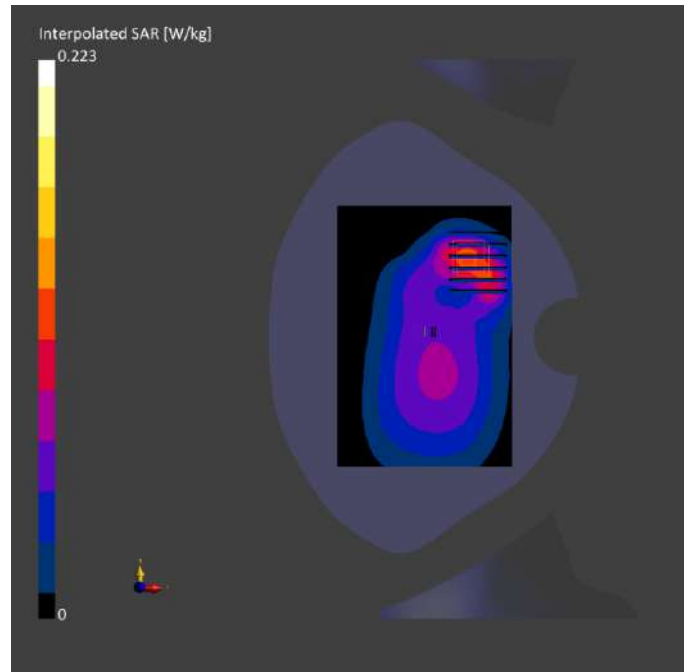
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-13	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-13	2024-05-13
psSAR1g [W/kg]	0.109	0.125
psSAR10g [W/kg]	0.073	0.071
Power Drift [dB]	0.01	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		53.2
Dist 3dB Peak [mm]		11.3



Meas.70 Left Head with Cheek on 518598 Channel in NR Band41 mode with Antenna 3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	Band n41	5G NR FR1 TDD, 10866-AAF	2592.99, 518598	7.41	1.93	39.2	22.4	21.3

Hardware Setup

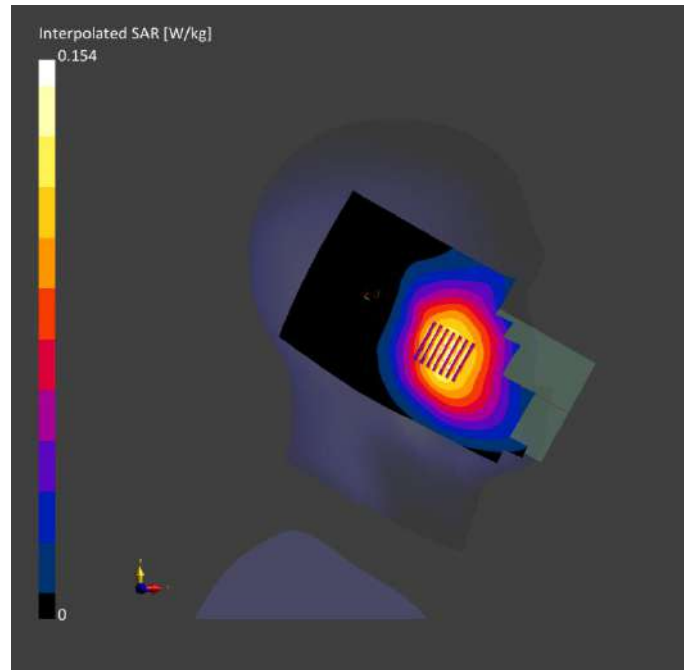
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-21	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-21	2024-05-21
psSAR1g [W/kg]	0.110	0.122
psSAR10g [W/kg]	0.064	0.097
Power Drift [dB]	-0.01	0.07
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		83.7
Dist 3dB Peak [mm]		> 15.0



Meas.71 Body Plane with Back Side 15mm on 518598 Channel in NR Band41 mode with Antenna 3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 n41	5G NR FR1 TDD, 10866-AAF	2592.99, 518598	7.41	1.93	39.2	22.4	21.3

Hardware Setup

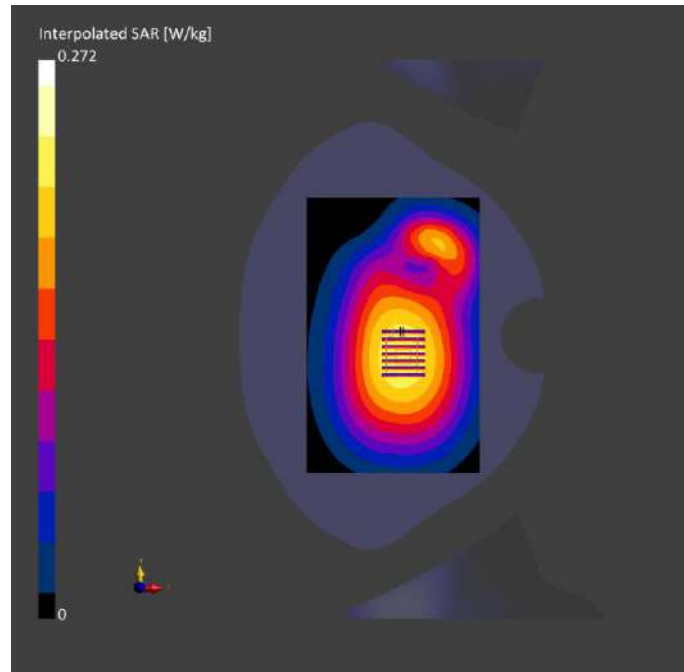
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-21	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	Y	Y
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-21	2024-05-21
psSAR1g [W/kg]	0.186	0.208
psSAR10g [W/kg]	0.111	0.160
Power Drift [dB]	-0.02	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		76.8
Dist 3dB Peak [mm]		> 15.0



Meas.72 Body Plane with Back Side 10mm on 518598 Channel in NR Band41 mode with Antenna 3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 n41	5G NR FR1 TDD, 10866-AAF	2592.99, 518598	7.41	1.93	39.2	22.4	21.3

Hardware Setup

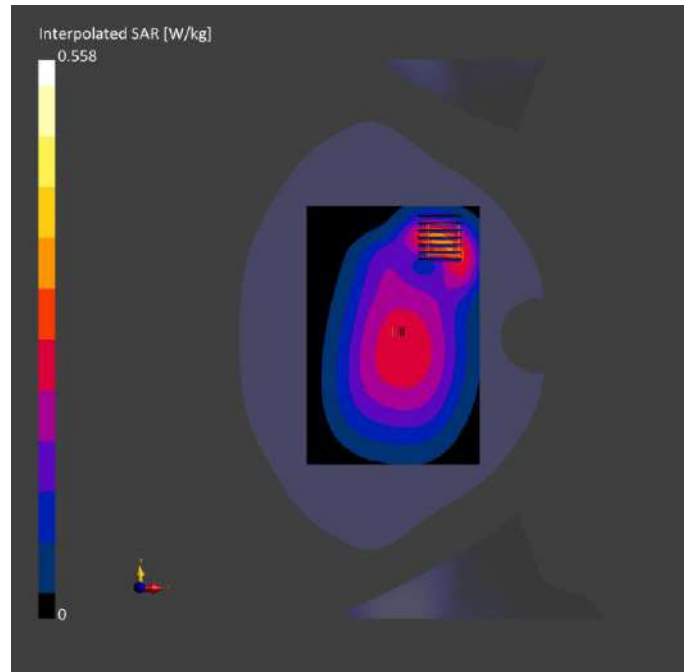
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-21	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-21	2024-05-21
psSAR1g [W/kg]	0.281	0.302
psSAR10g [W/kg]	0.150	0.177
Power Drift [dB]	-0.00	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		80.7
Dist 3dB Peak [mm]		11.7



Meas.73 Right Head with Cheek on 650000 Channel in NR Band77 mode with Antenna 2

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 n77	5G NR FR1 TDD, 10866-AAF	3750.0, 650000	6.57	3.21	37.9	22.5	21.4

Hardware Setup

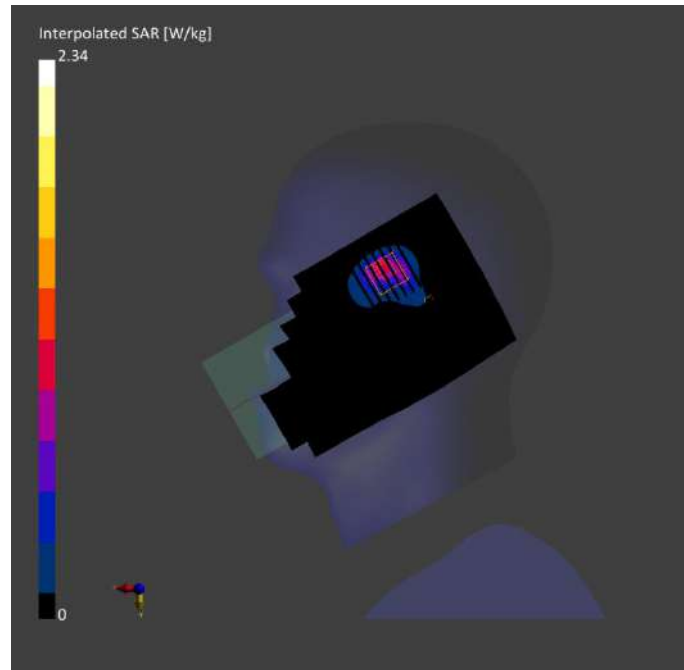
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-21	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	24.0 x 24.0 x 24.0
Grid Steps [mm]	12.0 x 12.0	6.0 x 6.0 x 4.0
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	2024-06-21	2024-06-21
psSAR1g [W/kg]	0.794	0.872
psSAR10g [W/kg]	0.337	0.347
Power Drift [dB]	0.09	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		39.3
Dist 3dB Peak [mm]		7.2



Meas.74 Body Plane with Back Side 15mm on 650000 Channel in NR Band77 mode with Antenna 2

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 n77	5G NR FR1 TDD, 10866-AAF	3750.0, 650000	6.57	3.21	37.9	22.5	21.4

Hardware Setup

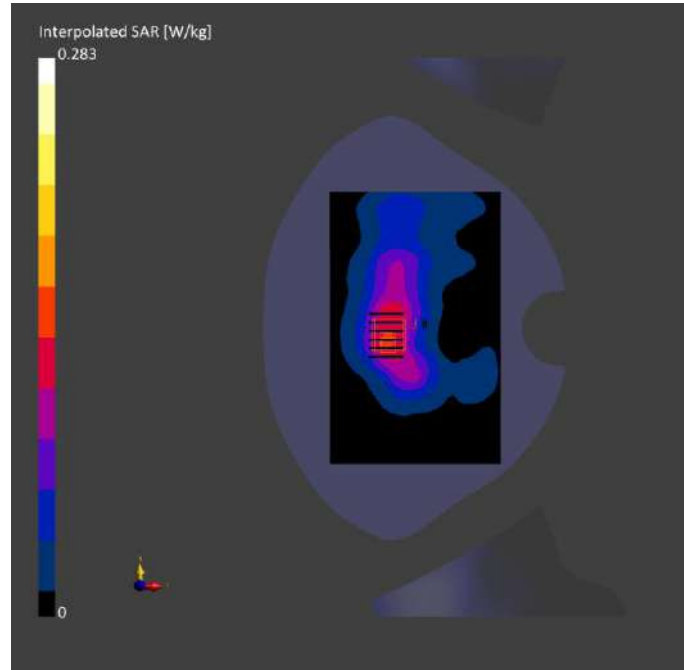
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-21	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	24.0 x 24.0 x 24.0
Grid Steps [mm]	12.0 x 12.0	6.0 x 6.0 x 4.0
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	2024-06-21	2024-06-21
psSAR1g [W/kg]	0.117	0.115
psSAR10g [W/kg]	0.057	0.053
Power Drift [dB]	-0.02	0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		44.7
Dist 3dB Peak [mm]		12.0



Meas.75 Body Plane with Back Side 10mm on 650000 Channel in NR Band77 mode with Antenna 2

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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 n77	5G NR FR1 TDD, 10866-AAF	3750.0, 650000	6.57	3.21	37.9	22.5	21.4

Hardware Setup

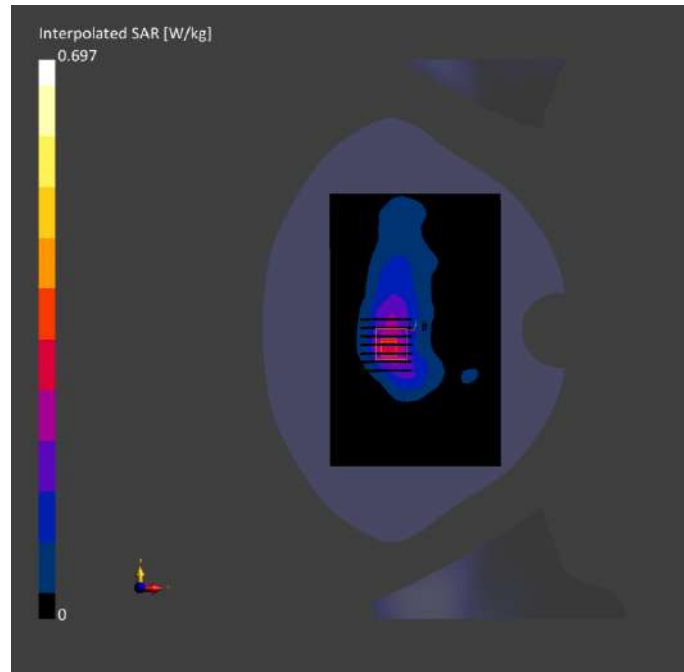
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-06-21	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 192.0	24.0 x 24.0 x 24.0
Grid Steps [mm]	12.0 x 12.0	6.0 x 6.0 x 4.0
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	2024-06-21	2024-06-21
psSAR1g [W/kg]	0.254	0.227
psSAR10g [W/kg]	0.117	0.108
Power Drift [dB]	0.04	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		41.8
Dist 3dB Peak [mm]		10.3



Meas.76 Left Head with Tilt on 11 Channel in IEEE802.11b mode with Antenna 6

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	TILT, 0.00	WLAN	WLAN, 10012-CAB	2462.0, 11	7.47	1.84	39.0	22.5	21.4

Hardware Setup

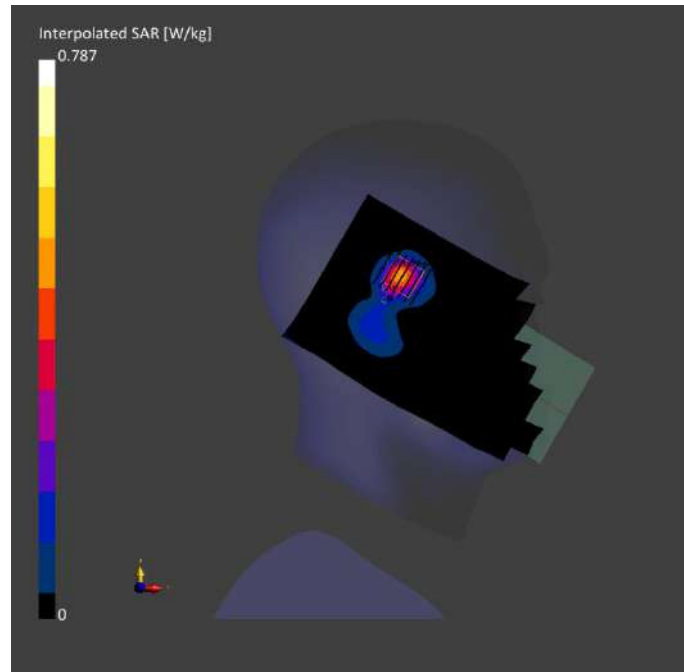
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-17	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	All points	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-17	2024-05-17
psSAR1g [W/kg]	0.385	0.385
psSAR10g [W/kg]	0.177	0.179
Power Drift [dB]	-0.05	0.10
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		48.5
Dist 3dB Peak [mm]		9.5



Meas.77 Body Plane with Back Side 15mm on 11 Channel in IEEE802.11b mode with Antenna 6

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	WLAN, 10012-CAB	2462.0, 11	7.47	1.84	39.0	22.5	21.4

Hardware Setup

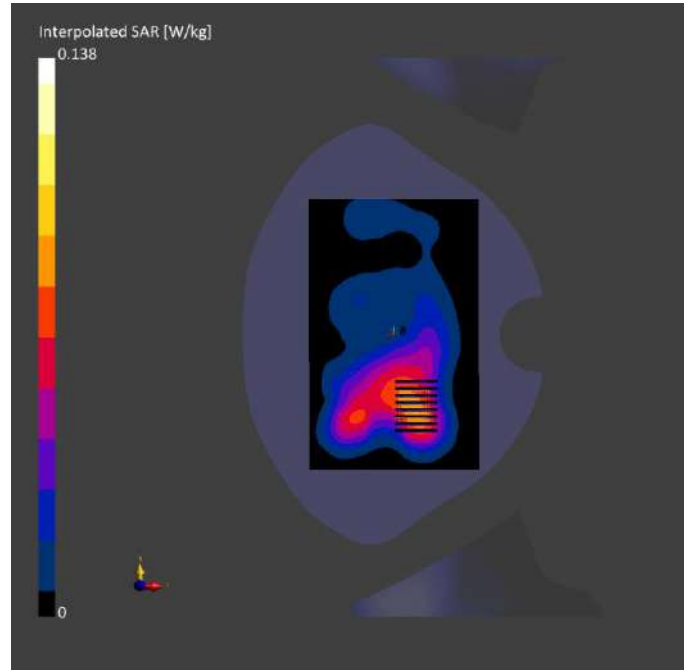
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-17	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	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]	0.076	0.076
psSAR10g [W/kg]	0.042	0.042
Power Drift [dB]	-0.03	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		52.7
Dist 3dB Peak [mm]		14.8



Meas.78 Body Plane with Back Side 10mm on 11 Channel in IEEE802.11b mode with Antenna 6

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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, 10012-CAB	2462.0, 11	7.47	1.84	39.0	22.5	21.4

Hardware Setup

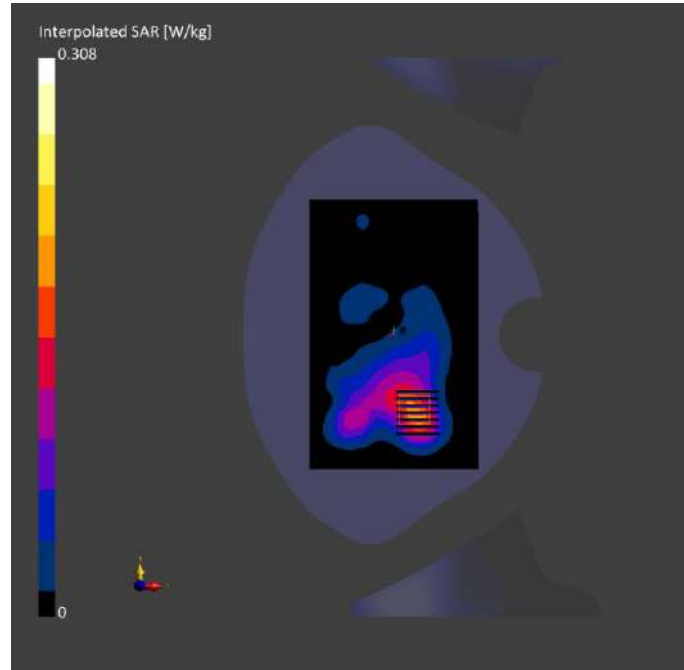
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-17	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	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]	0.158	0.166
psSAR10g [W/kg]	0.086	0.090
Power Drift [dB]	-0.04	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.4
Dist 3dB Peak [mm]		13.3



Meas.79 Left Head with Cheek on 60 Channel in IEEE802.11a mode with Antenna 6

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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, 10062-CAD	5300.0, 60	5.41	4.79	35.8	22.1	21.0

Hardware Setup

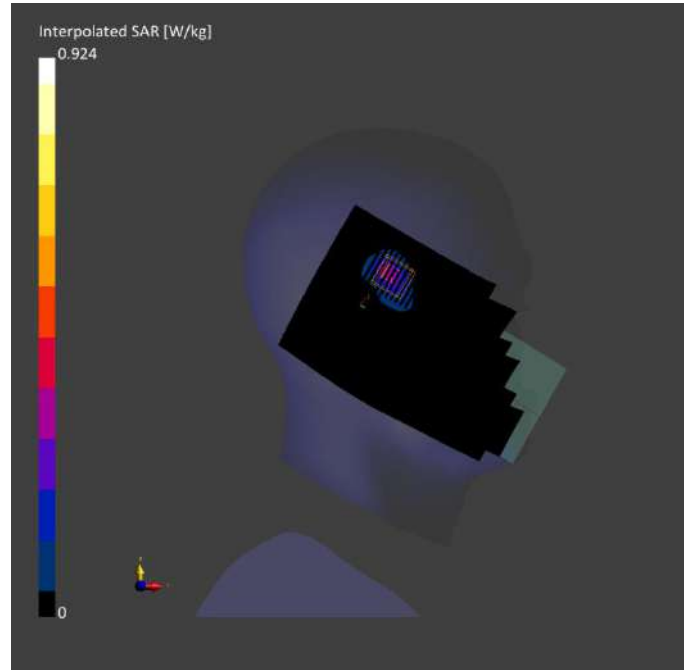
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-23	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	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	2024-05-23	2024-05-23
psSAR1g [W/kg]	0.251	0.261
psSAR10g [W/kg]	0.092	0.090
Power Drift [dB]	0.09	0.16
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		54.7
Dist 3dB Peak [mm]		8.0



Meas.80 Left Head with Tilt on 140 Channel in IEEE802.11a mode with Antenna 6

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	TILT, 0.00	WLAN, 5GHz	WLAN, 10062-CAE	5700.0, 140	4.78	5.20	35.3	22.3	21.2

Hardware Setup

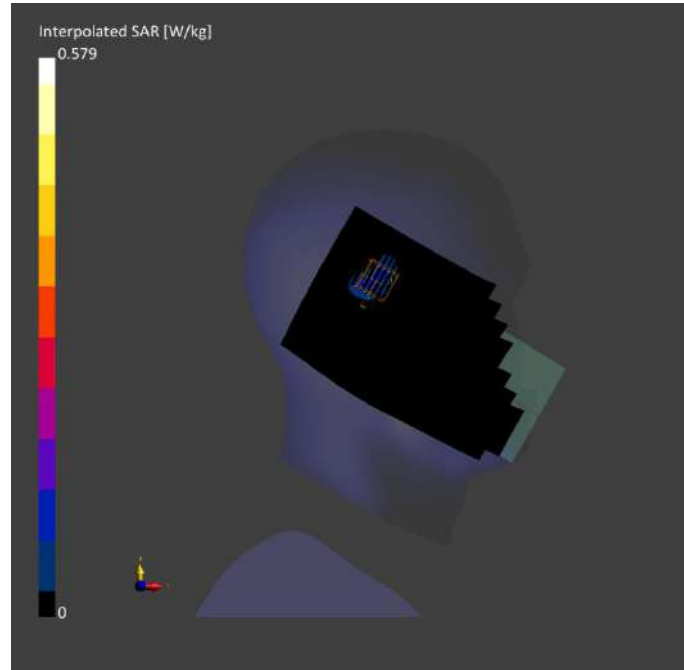
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-24	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	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	2024-05-24	2024-05-24
psSAR1g [W/kg]	0.087	0.117
psSAR10g [W/kg]	0.033	0.032
Power Drift [dB]	-0.12	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.1
Dist 3dB Peak [mm]		3.2



Meas.81 Left Head with Cheek on 149 Channel in IEEE802.11a mode with Antenna 6

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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, 10062-CAD	5745.0, 149	4.78	5.14	35.9	22.4	21.3

Hardware Setup

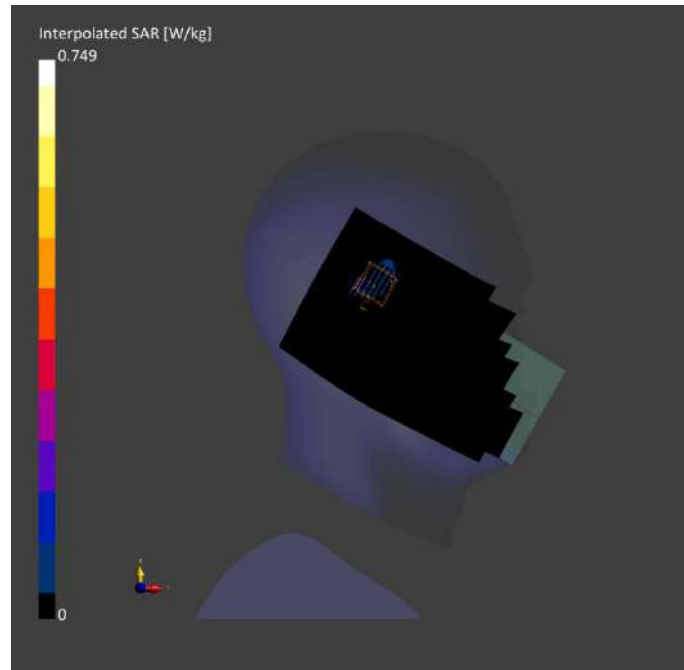
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-25	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	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	2024-05-25	2024-05-25
psSAR1g [W/kg]	0.093	0.045
psSAR10g [W/kg]	0.033	0.027
Power Drift [dB]	0.14	-0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.7
Dist 3dB Peak [mm]		4.0



Meas.82 Body Plane with Back Side 15mm on 60 Channel in IEEE802.11a mode with Antenna 6

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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, 5GHz	WLAN, 10062-CAD	5300.0, 60	5.41	4.79	35.8	22.1	21.0

Hardware Setup

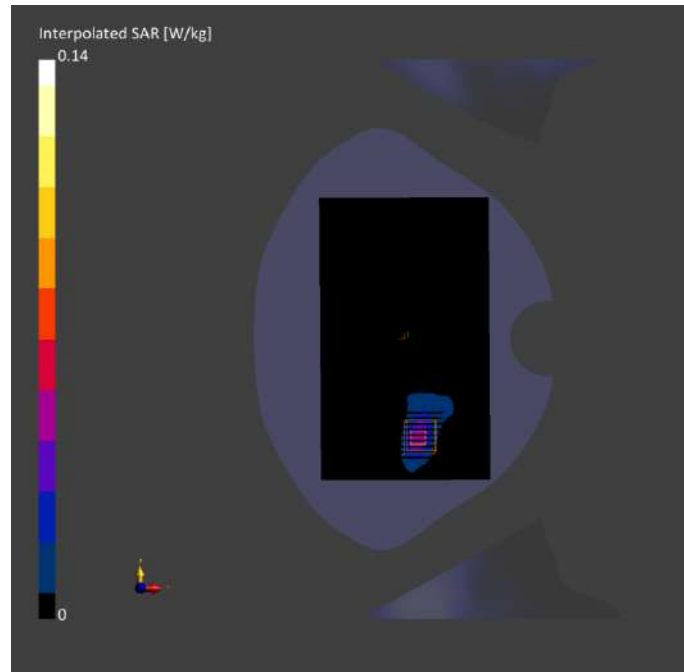
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-23	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-05-23	2024-05-23
psSAR1g [W/kg]	0.037	0.035
psSAR10g [W/kg]	0.013	0.008
Power Drift [dB]	-0.13	0.09
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		54.2
Dist 3dB Peak [mm]		> 12.0



Meas.83 Body Plane with Back Side 15mm on 140 Channel in IEEE802.11a mode with Antenna 6

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	FRONT, 15.00	WLAN, 5GHz	WLAN, 10062-CAE	5700.0, 140	4.78	5.20	35.3	22.3	21.2

Hardware Setup

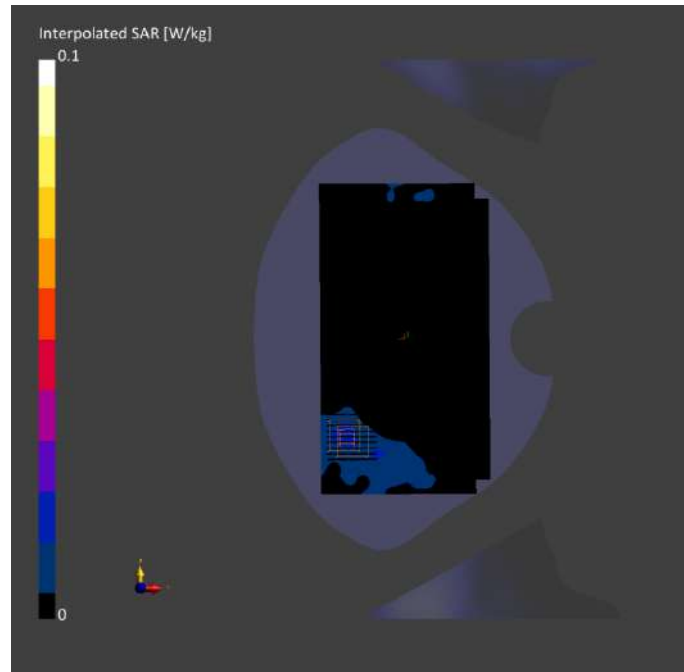
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-24	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 220.0	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	2024-05-24	2024-05-24
psSAR1g [W/kg]	0.016	0.015
psSAR10g [W/kg]	0.006	0.007
Power Drift [dB]	-0.05	-0.11
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		62.1
Dist 3dB Peak [mm]		> 12.0



Meas.84 Body Plane with Back Side 15mm on 149 Channel in IEEE802.11a mode with Antenna 6

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	FRONT, 15.00	WLAN, 5GHz	WLAN, 10062-CAE	5745.0, 149	4.78	5.14	35.9	22.4	21.3

Hardware Setup

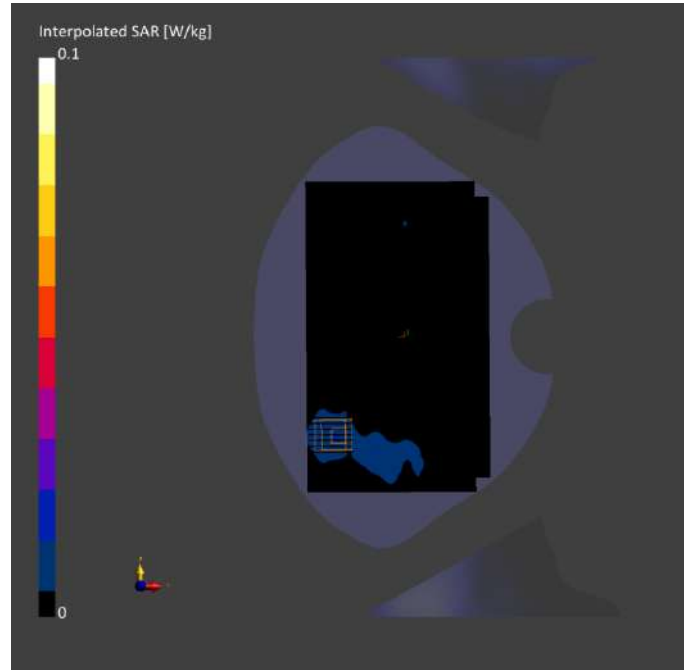
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-25	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 220.0	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	2024-05-25	2024-05-25
psSAR1g [W/kg]	0.013	0.013
psSAR10g [W/kg]	0.005	0.007
Power Drift [dB]	0.11	-0.12
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		57.5
Dist 3dB Peak [mm]		> 12.0



Meas.85 Body Plane with Left Edge 10mm on 44 Channel in IEEE802.11a mode with Antenna 6
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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, LEFT, 10.00	WLAN, 5GHz	WLAN, 10062-CAD	5220.0, 44	5.41	4.69	36.2	22.1	21.0

Hardware Setup

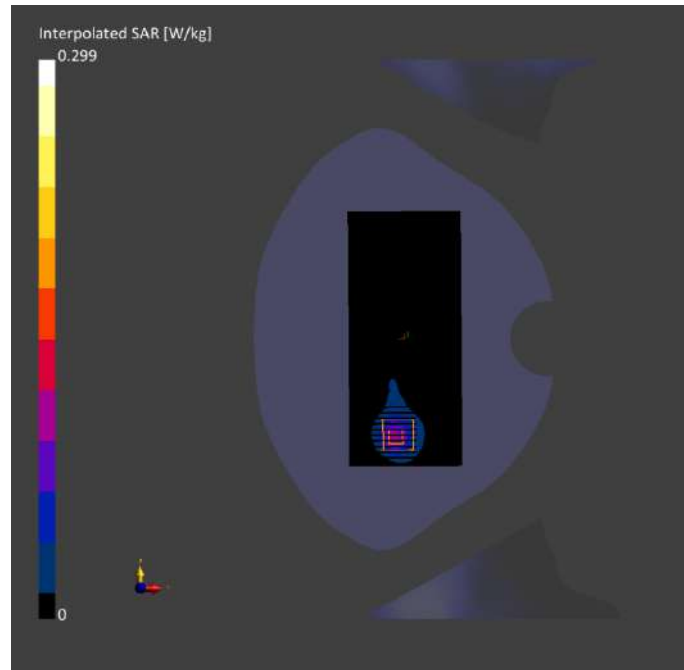
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-23	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 180.0	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	2024-05-23	2024-05-23
psSAR1g [W/kg]	0.082	0.078
psSAR10g [W/kg]	0.030	0.022
Power Drift [dB]	0.03	0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.4
Dist 3dB Peak [mm]		10.4



Meas.86 Body Plane with Top Edge 10mm on 149 Channel in IEEE802.11a mode with Antenna 6
Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	WLAN, 5GHz	WLAN, 10062-CAE	5745.0, 149	4.78	5.14	35.9	22.4	21.3

Hardware Setup

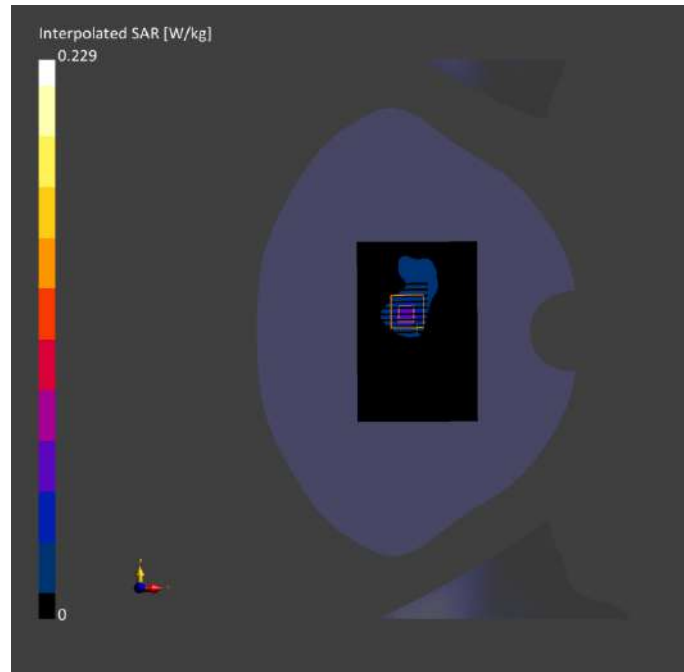
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-25	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 120.0	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	2024-05-25	2024-05-25
psSAR1g [W/kg]	0.052	0.058
psSAR10g [W/kg]	0.018	0.019
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]		7.5



Meas.87 Body Plane with Top Edge 0mm on 60 Channel in IEEE802.11a mode with Antenna 6

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	WLAN, 5GHz	WLAN, 10062-CAD	5300.0, 60	5.41	4.79	35.8	22.1	21.0

Hardware Setup

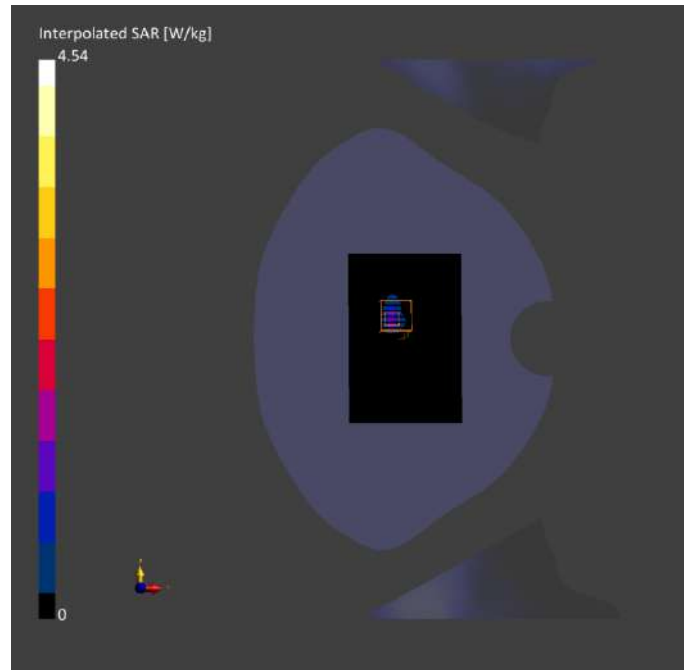
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-23	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 120.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-23	2024-05-23
psSAR1g [W/kg]	0.919	0.994
psSAR10g [W/kg]	0.247	0.247
Power Drift [dB]	-0.01	0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		49.1
Dist 3dB Peak [mm]		4.8



Meas.88 Body Plane with Top Edge 0mm on 140 Channel in IEEE802.11a mode with Antenna 6

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	WLAN, 5GHz	WLAN, 10062-CAD	5700.0, 140	4.78	5.20	35.3	22.3	21.2

Hardware Setup

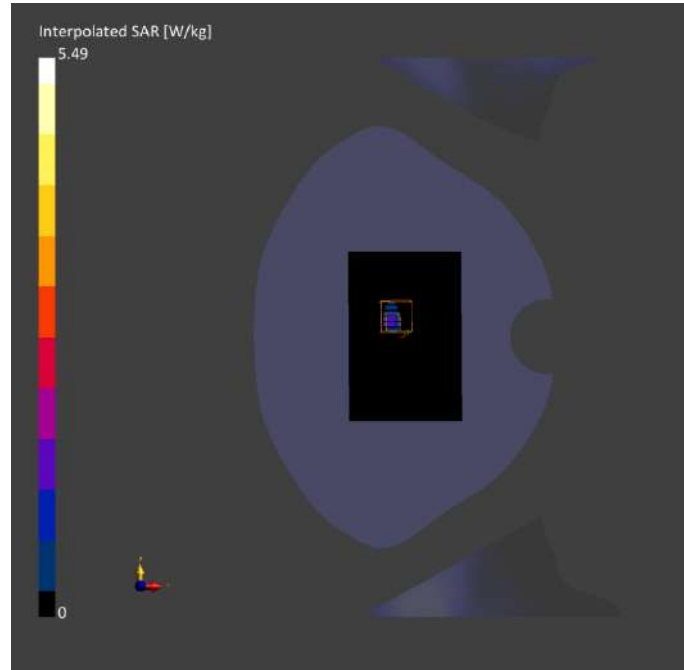
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-24	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 120.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-05-24	2024-05-24
psSAR1g [W/kg]	0.976	1.01
psSAR10g [W/kg]	0.217	0.217
Power Drift [dB]	-0.05	0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		44.5
Dist 3dB Peak [mm]		4.0



Meas.89 Left Head with Cheek on 0 Channel in Bluetooth mode with Antenna 6

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	TILT, 0.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2402.0, 0	7.47	1.73	39.8	22.5	21.4

Hardware Setup

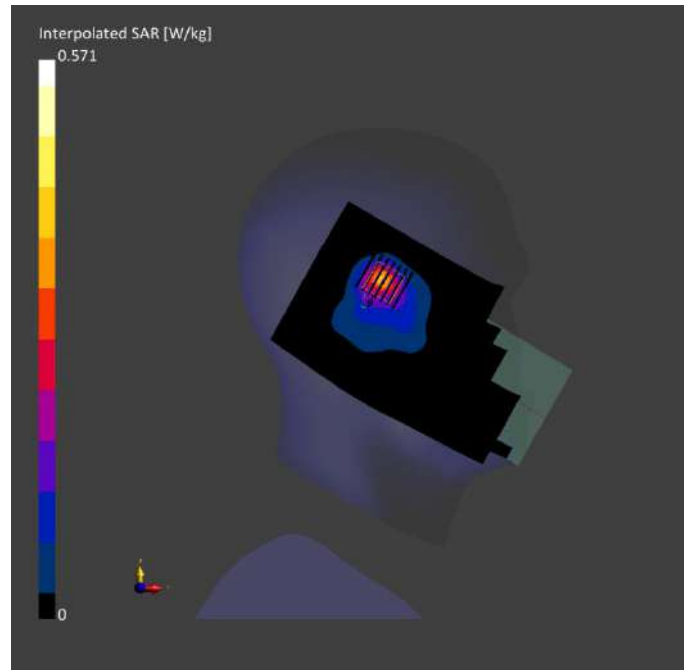
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-17	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

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	2024-05-17	2024-05-17
psSAR1g [W/kg]	0.298	0.297
psSAR10g [W/kg]	0.140	0.142
Power Drift [dB]	0.01	0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		55.2
Dist 3dB Peak [mm]		9.7



Meas.90 Body Plane with Back Side 15mm on 0 Channel in Bluetooth mode with Antenna 6

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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, 10035-CAA	2402.0, 0	7.47	1.73	39.8	22.5	21.4

Hardware Setup

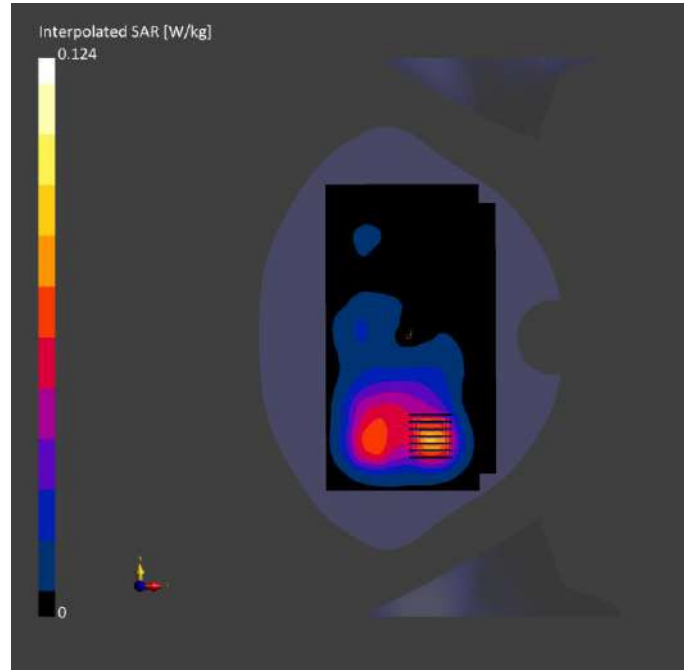
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-17	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 216.0	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	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]	0.069	0.069
psSAR10g [W/kg]	0.037	0.038
Power Drift [dB]	-0.06	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		52.3
Dist 3dB Peak [mm]		16.4



Meas.91 Body Plane with Top Edge 10mm on 0 Channel in Bluetooth mode with Antenna 6

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
M155	180.0 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	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2402.0, 0	7.47	1.73	39.8	22.5	21.4

Hardware Setup

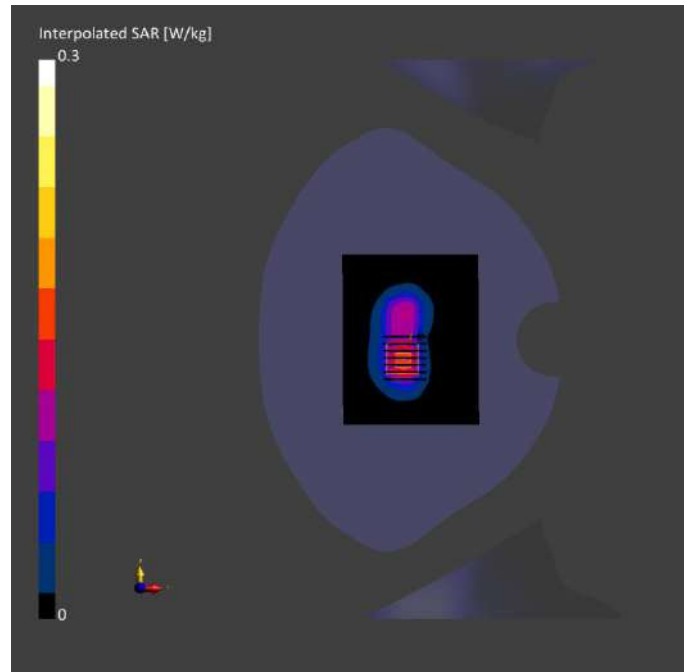
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-05-17	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	96.0 x 120.0	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	Y	N/A
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]	0.136	0.155
psSAR10g [W/kg]	0.070	0.076
Power Drift [dB]	-0.01	0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.2
Dist 3dB Peak [mm]		10.0



ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2450047-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SZ2450047-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “BL-SZ2450047-AC.pdf”.

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