TEST REPORT

Applicant:	Realme Chongqing Mobile Telecommunications Corp., Ltd.
Address:	No.178 Yulong Avenue, Yufengshan, Yubei District, Chongqing, China
Equipment Type:	Mobile Phone
Model Name:	RMX3890
Brand Name:	realme
FCC ID:	2AUYFRMX3890
Test Standard:	FCC 47 CFR Part 2.1093 (refer to section 3.1)
Maximum SAR:	Head (1 g@0mm): 1.18 W/kg Body-worn (1 g@15mm): 0.63 W/kg Hotspot (1 g@10mm): 1.09 W/kg Specific (10 g@0mm): 2.06 W/kg
Sample Arrival Date:	Oct. 07, 2023
Test Date:	Oct. 08, 2023 - Oct. 26, 2023
Date of Issue:	Nov. 09, 2023

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

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

(Testing Director)

Revision History

Version	Issue Date	Revisions Content
Rev. 01	Nov. 09, 2023	Initial Issue

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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	☑ Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	☐ 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.

1.3 Test Environment Condition

Ambient Temperature	18℃ to 25℃
Ambient Relative Humidity	30% to 70%

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Realme Chongqing Mobile Telecommunications Corp., Ltd.
Address	No.178 Yulong Avenue, Yufengshan, Yubei District, Chongqing, China

2.2 Manufacturer Information

Manufacturer	Realme Chongqing Mobile Telecommunications Corp., Ltd.
Address	No.178 Yulong Avenue, Yufengshan, Yubei District, Chongqing, China

2.3 General Description for Equipment under Test (EUT)

EUT Name	Mobile Phone
Model Name Under Test	RMX3890
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	11
Software Version	U Edition
Dimensions (Approx.)	164.6mm×75.4mm×7.59mm
Weight (Approx.)	185g(with battery)
EUT ID	S01, S02, S03, S04, S14, S15
IMEI Number	S01: IMEI1 863463060019839, IMEI2 863463060019821
	S02: IMEI1 863463060019797, IMEI2 863463060019789
	S03: IMEI1 863463060019813, IMEI2 863463060019805
	S04: IMEI1 863463060019854, IMEI2 863463060019847
	S14: IMEI1 863463060019631, IMEI2 863463060019623
	S15: IMEI1 863463060019656, IMEI2 863463060019649
Note1: EUT ID is used to identify the test sample in the lab internally. Note2: It is performed to test SAR with the EUT S01, S02, S03, S04 and conducted power with the EUT S14 & S15.	

2.4 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	SUPERVOOC
	Model No.	BLPA17
	Serial No.	N/A
	Capacity	Rated: 4880mAh, Typical: 5000mAh
	Rated Voltage	3.89V
	Limit Charge Voltage	4.48V

2.5 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/1900 MHz 3G Network WCDMA/HSDPA/HSUPA Band 2/4/5 4G Network LTE FDD Band 2/4/5/7/13/66 LTE TDD Band 38/41 Bluetooth (BR+EDR+BLE) 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20/40), VHT20/40 5G WIFI 802.11a, 802.11n(HT20/40), 802.11ac(VHT20/40/80) U-NII-1/2A/2C/3, Beidou, Galileo, GLONASS, GPS, NFC
Note: The EUT is a mobile phone, which supports dual SIM card under the same transceiver. Each SIM supports GSM, WCDMA and LTE, and both SIM share the same transmitting electro circuit, NV parameters, so only SIM1 was tested in this report.	

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

Operating Mode	GSM, WCDMA, LTE, 2.4G WLAN, 5G WLAN, Bluetooth		
Frequency Range	GSM 850	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	GSM 1900	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	WCDMA Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	LTE Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	LTE Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 7	TX: 2500 ~ 2570 MHz	RX: 2620 ~ 2690 MHz
	LTE Band 13	TX: 777 ~ 787 MHz	RX: 746 ~ 756 MHz
	LTE Band 66	TX: 1710 ~ 1780 MHz	RX: 2110 ~ 2180 MHz
	LTE Band 38	TX: 2570 ~ 2620 MHz	RX: 2570 ~ 2620 MHz
	LTE Band 41	TX: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz
	802.11b/g /n(HT20/HT40)/ VHT20/40	2412 ~ 2462 MHz	
	802.11a/ /n(HT20/HT40) /ac(VHT20/VHT40 /VHT80)	5150 ~ 5250 MHz	
		5250 ~ 5350 MHz	
		5470 ~ 5725 MHz	
		5725 ~ 5850 MHz	
	Bluetooth	2402 ~ 2480 MHz	
Antenna Type	WWAN: IFA Antenna WLAN: IFA Antenna Bluetooth: IFA Antenna		
DTM	N/A		
Hotspot Function	Support		
Power Reduction	Support		

Exposure Category	General Population/Uncontrolled exposure	
Product Type	Portable Device	
EUT Type	☒ Production unit	☐ Identical prototype

3 SUMMARY OF TEST RESULT

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices
2	ANSI C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
3	IEEE Std. 1528-2013	IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate(SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
4	KDB 447498 D04 v01	447498 D04 Interim General RF Exposure Guidance v01
5	KDB 941225 D01 v03r01	3G SAR MEAUREMENT PROCEDURES
6	KDB 941225 D05 v02r05	SAR Evaluation Considerations for LTE Devices
7	KDB 941225 D06 v02r01	SAR EVALUATION PROCEDURES FOR PORTABLE DEVICES WITH WIRELESS ROUTER CAPABILITIES
8	KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
9	KDB 865664 D02 v01r02	RF Exposure Reporting
10	KDB 648474 D04 v01r03	SAR EVALUATION CONSIDERATIONS FOR WIRELESS HANDSETS
11	KDB 248227 D01 v02r02	SAR GUIDANCE FOR IEEE 802.11 (Wi-Fi) TRANSMITTERS

3.2 Device Category and SAR Limit

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

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

Table of Exposure Limits:

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

NOTE:

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

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

3.3 Test Result Summary

3.3.1 Highest SAR Values

Equipment Class	Band	Maximum Scaled SAR (W/kg)				Maximum Report SAR (W/kg)			
		Head (0mm)	Body-worn (15mm)	Hotspot (10mm)	Specific (0mm)	Head (0mm)	Body-worn (15mm)	Hotspot (10mm)	Specific (0mm)
		1g SAR			10g SAR	1g SAR			10g SAR
PCE	GSM 850	0.51	0.17	0.35	/	1.18	0.63	1.09	2.06
	GSM 1900	**1.18**	0.43	**1.09**	/				
	WCDMA Band 2	0.90	0.34	0.57	1.85				
	WCDMA Band 4	1.02	0.31	0.48	**2.06**				
	WCDMA Band 5	0.48	0.18	0.37	/				
	LTE Band 2	0.75	0.33	0.38	/				
	LTE Band 4	0.88	0.31	0.52	/				
	LTE Band 5	0.51	0.19	0.46	/				
	LTE Band 7	0.96	0.32	0.56	1.89				
	LTE Band 13	0.33	0.19	0.22	/				
	LTE Band 66	1.14	0.32	0.50	1.96				
	LTE Band 38	0.74	0.34	0.51	/				
	LTE Band 41	0.96	0.37	0.47	/				
DTS	2.4G WLAN	1.08	0.34	0.18	/				
NII	5.2G WLAN	/	/	0.35	/				
	5.3G WLAN	0.56	0.59	/	1.22				
	5.6G WLAN	0.73	0.60	/	1.13				
	5.8G WLAN	0.73	**0.63**	0.59	/				
DSS	Bluetooth	0.30	0.07	0.15	/				
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 (0mm)	Hotspot 1g (10mm)	Specific 10g (0mm)
PCE	**1.18**	**0.75**	**1.35**	**2.44**
DTS	1.16	0.55	1.17	**/**
NII	**1.18**	**0.75**	**1.35**	**2.44**
DSS	**1.06**	**0.49**	**1.15**	**/**
Limit (W/Kg)	1.6	1.6	1.6	4.0
Verdict	Pass			
Note: The highest simultaneous SAR please refer section 12.2				

3.4 Test Uncertainty

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

The maximum 1 g SAR for the EUT in this report is 1.18 W/kg, which is lower than 1.5 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.
The maximum 10 g SAR for the EUT in this report is 2.06 W/kg, which is lower than 3.75 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

4 MEASUREMENT SYSTEM

4.1 Specific Absorption Rate (SAR) Definition

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

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

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

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

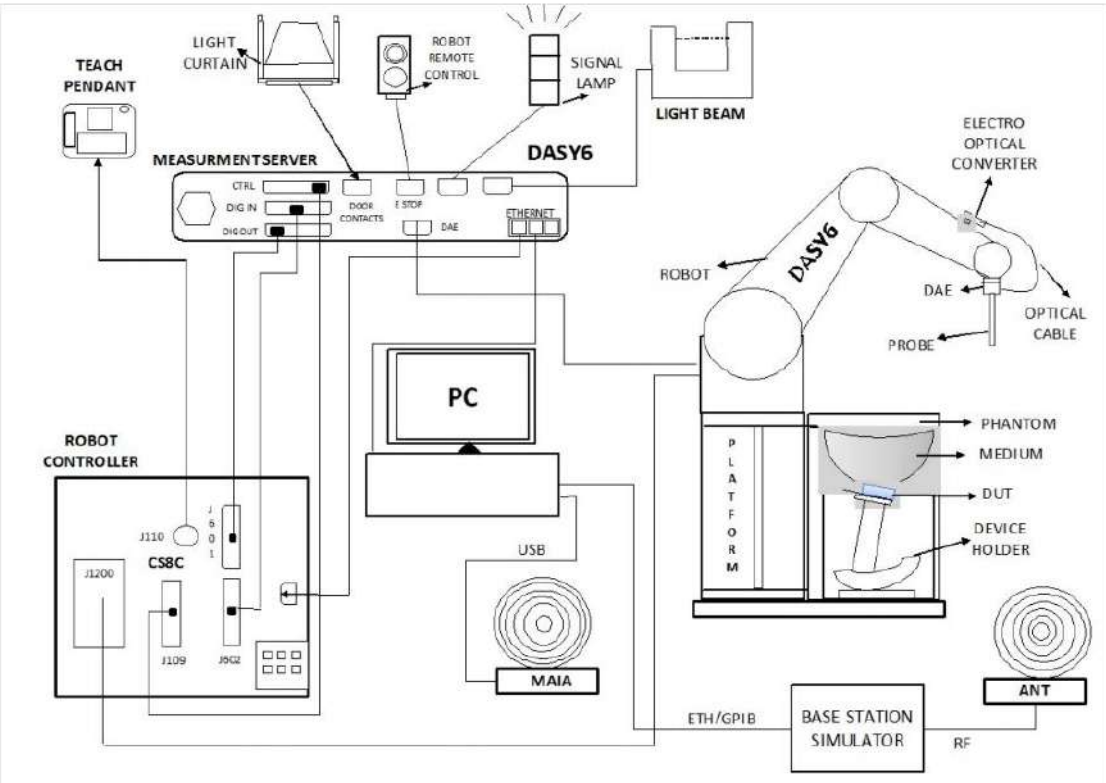
$$\mathbf{SAR} = \frac{\boldsymbol{\sigma}\mathbf{E}^{2}}{\boldsymbol{\rho}}$$

Where: σ is the conductivity of the tissue,

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

4.2 DASY SAR System

4.2.1 DASY SAR System Diagram



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

1. A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
2. A dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
3. A data acquisition electronic (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
4. A unit to operate the optical surface detector which is connected to the EOC.
5. The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DASY5 measurement server.
6. The DASY5 measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation.
7. DASY5 software and SEMCAD data evaluation software.
8. Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
9. The generic twin phantom enabling the testing of left-hand and right-hand usage.
10. The device holder for handheld mobile phones.
11. Tissue simulating liquid mixed according to the given recipes.
12. System validation dipoles allowing to validate the proper functioning of the system.

4.2.2 Robot

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

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

4.2.3 E-Field Probe

The probe is specially designed and calibrated for use in liquids with high permittivities for the measurements the Specific Dosimetric E-Field Probe EX3DV4-SN:7510&7607 with following specifications is used.

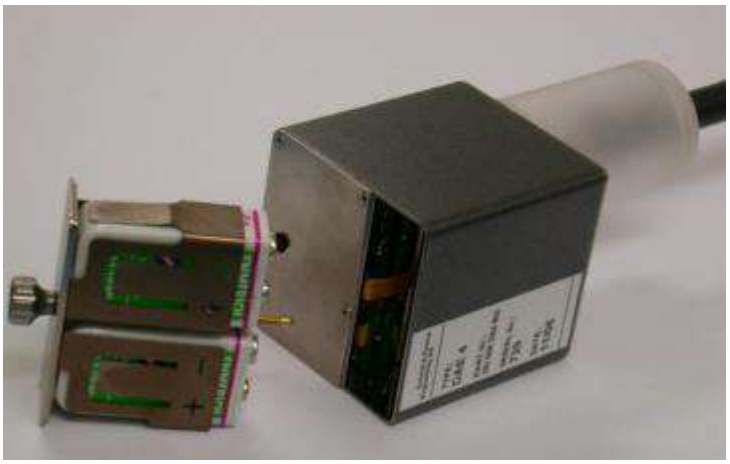
Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection system Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., glycolether)
Calibration	ISO/IEC 17025 calibration service available
Frequency	4 MHz to 10 GHz;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

E-Field Probe Calibration Process

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

4.2.4 Data Acquisition Electronics

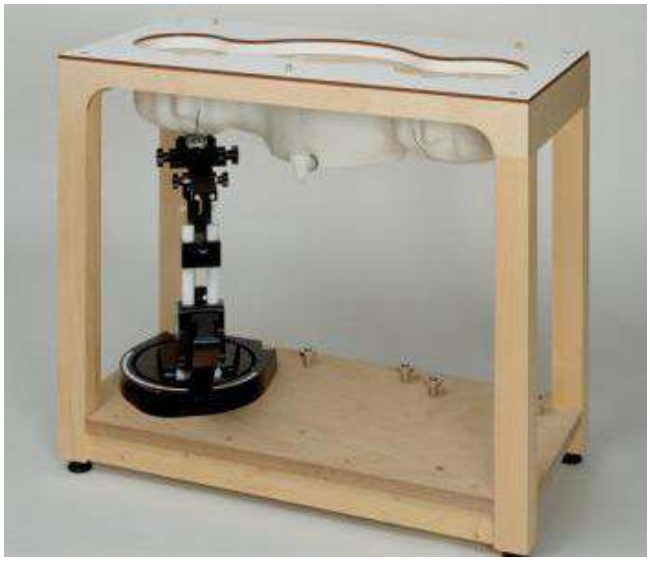
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an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



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

4.2.5 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 SN1857

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

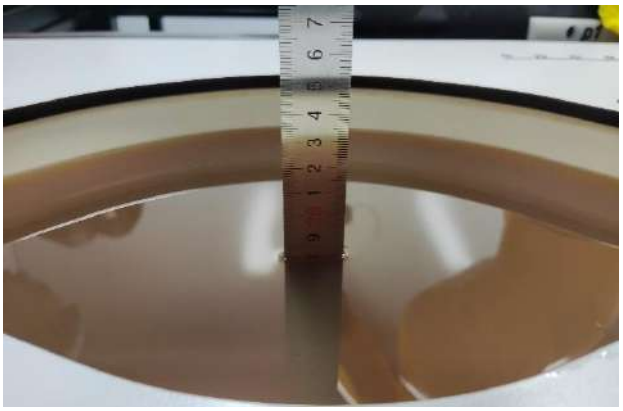
4.2.6 Device Holder

The DASY5 device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65°. The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. This device holder is used for standard mobile phones or PDA"s only. If necessary an additional support of polystyrene material is used. Larger DUT"s (e.g. notebooks) cannot be tested using this device holder. Instead a support of bigger polystyrene cubes and thin polystyrene plates is used to position the DUT in all relevant positions to find and measure spots with maximum SAR values. Therefore those devices are normally only tested at the flat part of the SAM.

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

4.2.7 Simulating Liquid

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

Head Liquid Depth	Body Liquid Depth
	

The following table gives the recipes for tissue simulating liquid.

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

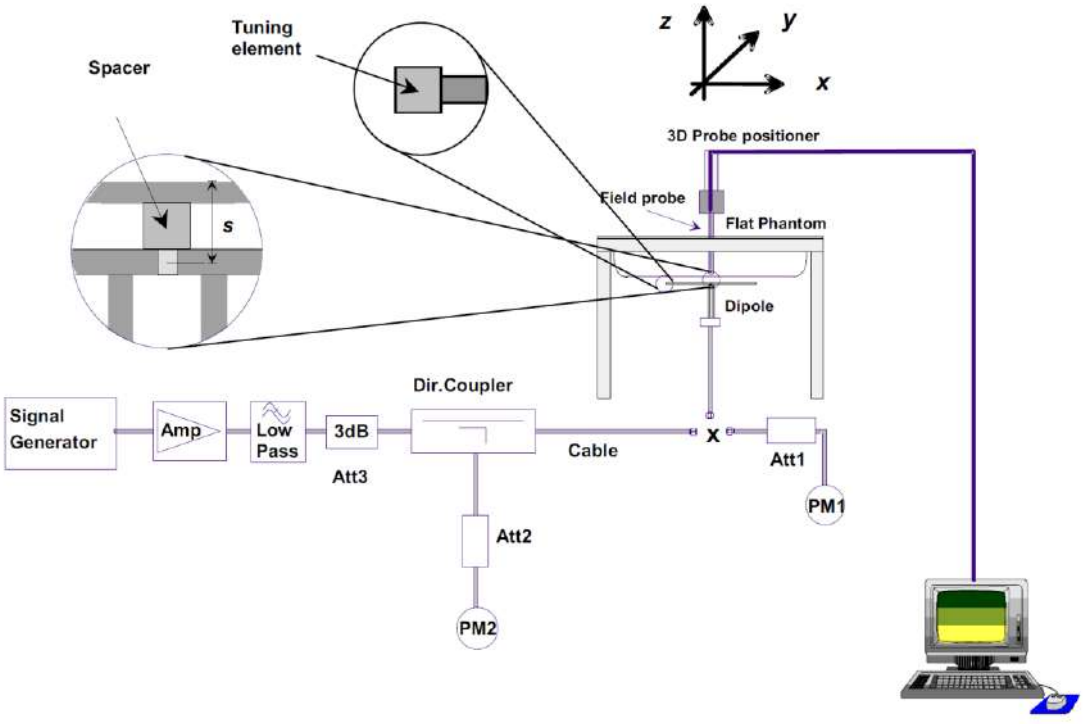
5 SYSTEM VERIFICATION

5.1 Purpose of System Check

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

5.2 System Check Setup

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



6 TEST POSITION CONFIGURATIONS

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

6.1 Head Exposure Conditions

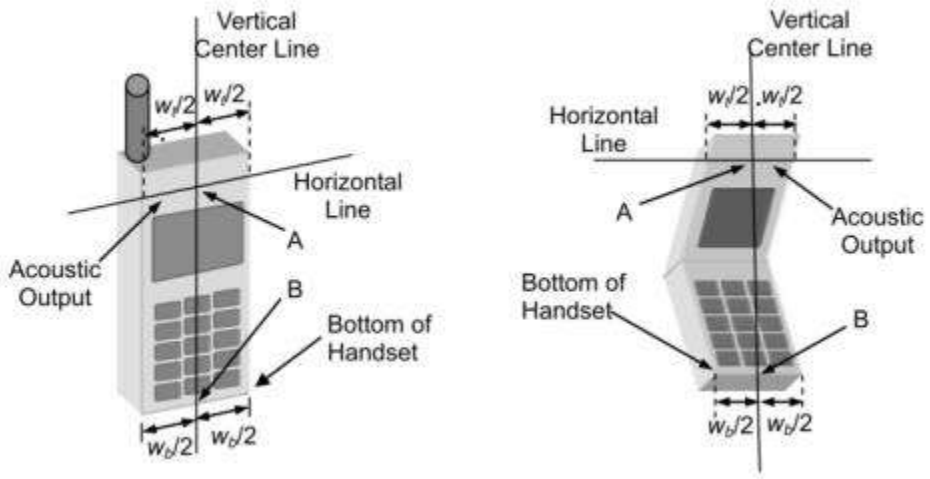
Head exposure is limited to next to the ear voice mode operations. Head SAR compliance is tested according to the test positions defined in IEEE Std 1528-2013 using the SAM phantom illustrated as below.

6.1.1 Two Imaginary Lines on the Handset

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

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

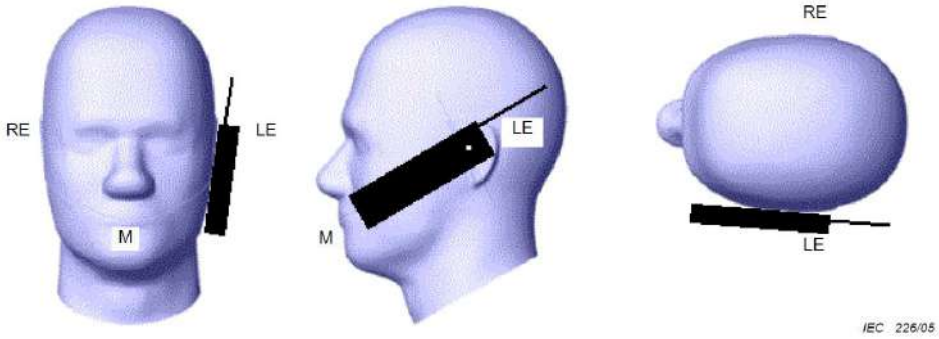
(c) The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical center line is not necessarily parallel to the front face of the handset,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



6.1.2 Cheek Position

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

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



6.1.3 Tilted Position

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

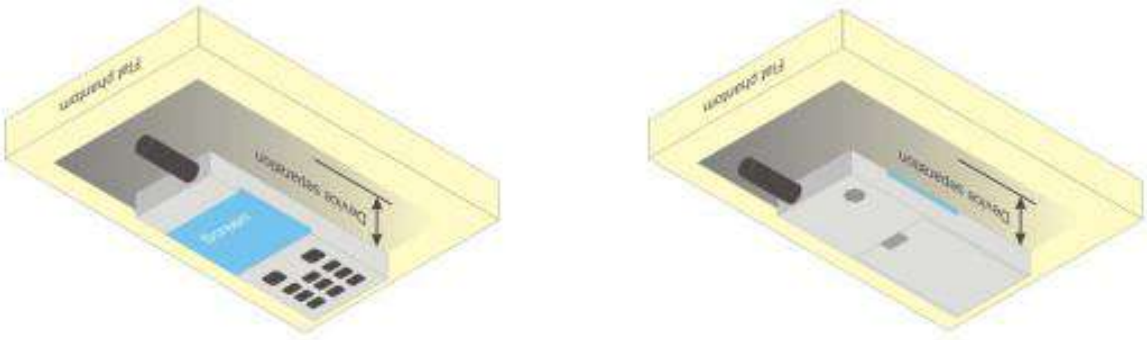
(b) While maintaining the device the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until contact with the ear is lost.

6.2 Body-worn Position Conditions

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

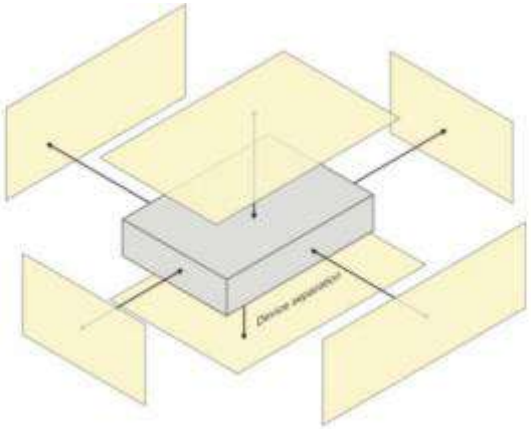
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics.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

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



6.3 Hotspot Mode Exposure Position Conditions

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



6.4 Product Specific 10g Exposure Consideration

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

The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 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.

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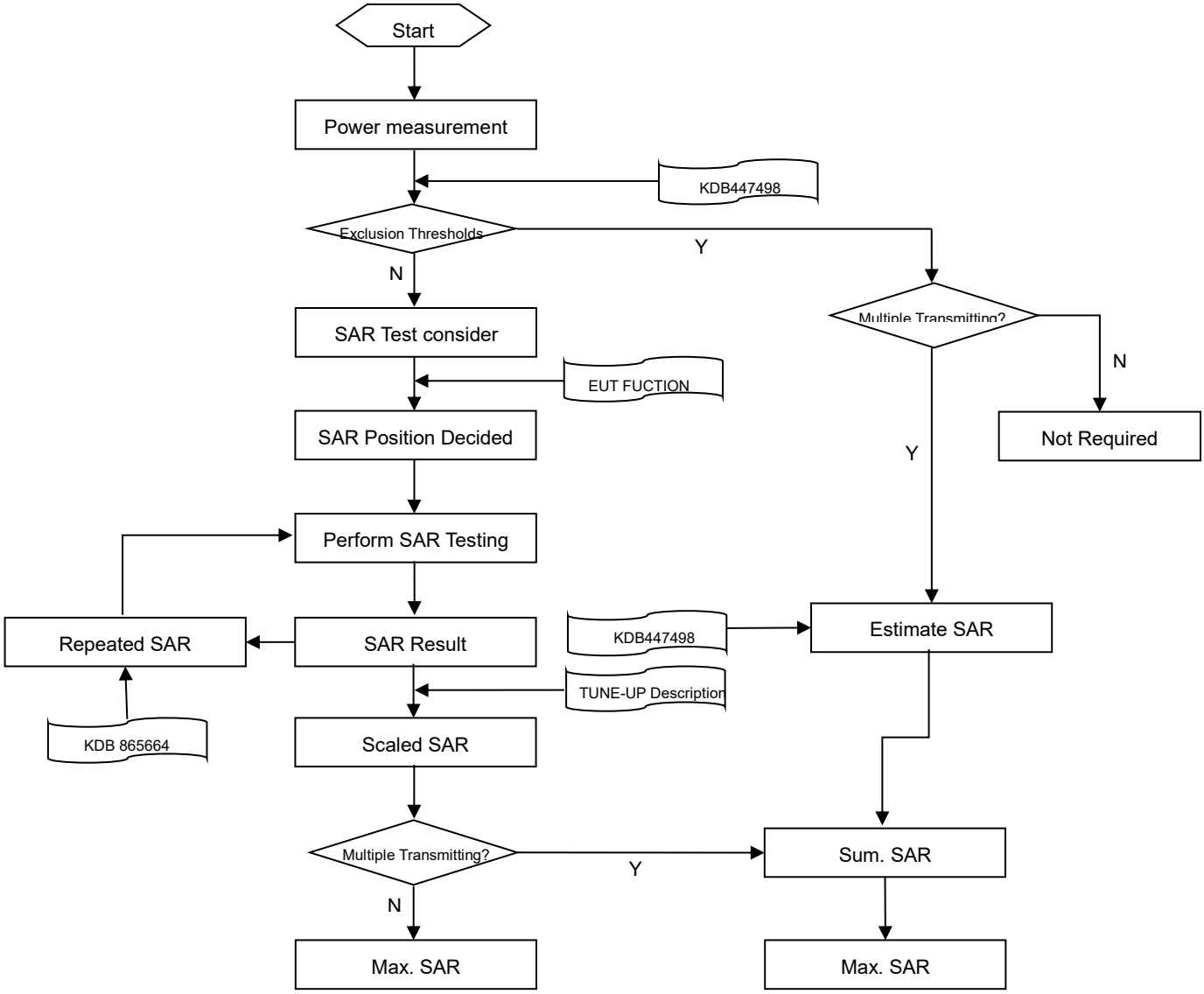
7 MEASUREMENT PROCEDURE

7.1 Measurement Process Diagram



7.2 SAR Scan General Requirement

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

<table>
<tr><th colspan="3"></th><th>≤3GHz</th><th>>3GHz</th></tr>
<tr><td colspan="3">Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface</td><td>5±1 mm</td><td>½·δ·ln(2)±0.5 mm</td></tr>
<tr><td colspan="3">Maximum probe angle from probe axis to phantom surface normal at the measurement location</td><td>30°±1°</td><td>20°±1°</td></tr>
<tr><td colspan="3" rowspan="2">Maximum area scan spatial resolution: Δx Area , Δy Area</td><td>≤ 2 GHz: ≤ 15 mm
2 – 3 GHz: ≤ 12 mm</td><td>3–4 GHz: ≤ 12 mm
4 – 6 GHz: ≤ 10 mm</td></tr>
<tr><td colspan="2">When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.</td></tr>
<tr><td colspan="3">Maximum zoom scan spatial resolution: Δx Zoom , Δy Zoom</td><td>≤ 2 GHz: ≤ 8 mm
2 –3 GHz: ≤ 5 mm*</td><td>3–4 GHz: ≤ 5 mm*
4 – 6 GHz: ≤ 4 mm*</td></tr>
<tr><td rowspan="7">Maximum zoom scan spatial resolution, normal to phantom surface</td><td colspan="2" rowspan="3">uniform grid: Δz Zoom (n)</td><td rowspan="3">≤ 5 mm</td><td>3–4 GHz: ≤ 4 mm</td></tr>
<tr><td>4–5 GHz: ≤ 3 mm</td></tr>
<tr><td>5–6 GHz: ≤ 2 mm</td></tr>
<tr><td rowspan="4">graded grid</td><td rowspan="2">Δz Zoom (1): between 1st two points closest to phantom surface</td><td rowspan="2">≤ 4 mm</td><td>3–4 GHz: ≤ 3 mm</td></tr>
<tr><td>4–5 GHz: ≤ 2.5 mm</td></tr>
<tr><td>5–6 GHz: ≤ 2 mm</td></tr>
<tr><td>Δz Zoom (n>1): between subsequent points</td><td colspan="2">≤ 1.5·Δz Zoom (n-1)</td></tr>
<tr><td rowspan="3">Minimum zoom scan volume</td><td colspan="2" rowspan="3">x, y, z</td><td rowspan="3">≥30 mm</td><td>3–4 GHz: ≥ 28 mm</td></tr>
<tr><td>4–5 GHz: ≥ 25 mm</td></tr>
<tr><td>5–6 GHz: ≥ 22 mm</td></tr>
<tr><td colspan="5">Note:
1. δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.
2. * When zoom scan is required and the reported SAR from the area scan based 1 g SAR estimation procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.</td></tr>
</table>

7.3 Measurement Procedure

The following steps are used for each test position

a. Establish a call with the maximum output power with a base station simulator. The connection between the mobile and the base station simulator is established via air interface

b. Measurement of the local E-field value at a fixed location. This value serves as a reference value for calculating a possible power drift.

c. Measurement of the SAR distribution with a grid of 8 to 16mm * 8 to16 mm and a constant distance to the inner surface of the phantom. Since the sensors cannot directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolation scheme.

d. Around this point, a cube of 30 * 30 * 30 mm or 32 * 32 *32 mm is assessed by measuring 5 or 8 * 5 or 8*4 or 5 mm. With these data, the peak spatial-average SAR value can be calculated.

7.4 Area & Zoom Scan Procedure

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g. Area scan and zoom scan resolution setting follows KDB 865664 D01v01r04 quoted below.
When the 1 g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

8 CONDUCTED RF OUPUT POWER

8.1 GSM

Please refer the document “Conducted RF Output Power List.pdf”.

8.2 WCDMA

Please refer the document “Conducted RF Output Power List.pdf”.

8.3 LTE

Please refer the document “Conducted RF Output Power List.pdf”.

8.4 WIFI

8.4.1 2.4G WLAN-Ant.3-Full power

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power(dBm)	Tune-up Limit (dBm)
2.4 (2.4~2.4835)	802.11b	1	2412	19.19	20.00
		6	2437	**19.30**	20.00
		10	2457	19.08	20.00
		11	2462	18.58	19.50
	802.11g	1	2412	14.52	16.00
		2	2417	18.12	19.00
		6	2437	18.10	19.00
		9	2452	17.67	19.00
		10	2457	17.22	18.50
		11	2462	13.54	15.00
	802.11n(HT20)	1	2412	13.89	15.50
		2	2417	17.82	19.00
		6	2437	17.93	19.00
		9	2452	17.38	19.00
		10	2457	16.42	18.00
		11	2462	13.09	14.50
	802.11n(HT40)	3	2422	11.93	13.50
		4	2427	12.51	14.00
		5	2432	14.04	15.50
		6	2437	14.34	16.00
		8	2447	13.79	15.50
		9	2452	12.13	14.00
	VHT20	1	2412	14.28	16.00
		2	2417	17.08	18.50
		6	2437	17.28	18.50
		9	2452	16.72	18.50
		10	2457	16.44	18.00
		11	2462	13.09	14.50
	VHT40	3	2422	11.95	13.50
		4	2427	12.52	14.00
		5	2432	14.05	15.50
		6	2437	14.37	16.00
		8	2447	14.13	16.00
		9	2452	12.09	14.00
Note: When multiple channel bandwidth configurations in a frequency band have the same maximum tune-up output power,					

the test configuration is determined by applying the following steps sequentially.

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

2) When multiple transmission modes (802.11b/g/n/VHT) 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 = 1.078 * (100.00mW/22.39mW) =4.815 W/Kg, so 2.4G OFDM SAR test is not required.

8.4.2 2.4G WLAN-Ant.3-Leve1

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power(dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	17.71	19.00	Yes
		6	2437	18.18	19.00	Yes
		10	2457	18.12	19.00	No
		11	2462	17.88	19.00	Yes
	802.11g	1	2412	14.52	16.00	No
		2	2417	18.12	19.00	No
		6	2437	18.10	19.00	No
		9	2452	17.67	19.00	No
		10	2457	17.22	18.50	No
		11	2462	13.54	15.00	No
	802.11n(HT20)	1	2412	13.89	15.50	No
		2	2417	17.82	19.00	No
		6	2437	17.93	19.00	No
		9	2452	17.38	19.00	No
		10	2457	16.42	18.00	No
		11	2462	13.09	14.50	No
	802.11n(HT40)	3	2422	11.93	13.50	No
		4	2427	12.51	14.00	No
		5	2432	14.04	15.50	No
		6	2437	14.34	16.00	No
		8	2447	13.79	15.50	No
		9	2452	12.13	14.00	No
	VHT20	1	2412	14.28	16.00	No
		2	2417	17.08	18.50	No
		6	2437	17.28	18.50	No
		9	2452	16.72	18.50	No
		10	2457	16.44	18.00	No
		11	2462	13.09	14.50	No
	VHT40	3	2422	11.95	13.50	No
		4	2427	12.52	14.00	No
		5	2432	14.05	15.50	No
		6	2437	14.37	16.00	No
		8	2447	14.13	16.00	No
		9	2452	12.09	14.00	No
Note: When multiple channel bandwidth configurations in a frequency band have the same maximum tune-up output power,						

the test configuration is determined by applying the following steps sequentially.

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

2) When multiple transmission modes (802.11b/g/n/VHT) 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 = 1.078 * (100.00mW/22.39mW) =4.815 W/Kg, so 2.4G OFDM SAR test is not required.

8.4.3 2.4G WLAN-Ant.3-Leve2

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power(dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	14.85	16.50	No
		6	2437	**15.02**	16.50	Yes
		10	2457	14.73	16.50	No
		11	2462	14.75	16.50	No
	802.11g	1	2412	14.52	16.00	No
		2	2417	15.46	16.50	No
		6	2437	15.46	16.50	No
		9	2452	14.99	16.50	No
		10	2457	15.41	16.50	No
		11	2462	13.54	15.00	No
	802.11n(HT20)	1	2412	13.89	15.50	No
		2	2417	15.25	16.50	No
		6	2437	15.34	16.50	No
		9	2452	14.92	16.50	No
		10	2457	15.03	16.50	No
		11	2462	13.09	14.50	No
	802.11n(HT40)	3	2422	11.93	13.50	No
		4	2427	12.51	14.00	No
		5	2432	14.04	15.50	No
		6	2437	14.34	16.00	No
		8	2447	13.79	15.50	No
		9	2452	12.13	14.00	No
	VHT20	1	2412	14.28	16.00	No
		2	2417	15.05	16.50	No
		6	2437	15.41	16.50	No
		9	2452	14.81	16.50	No
		10	2457	14.95	16.50	No
		11	2462	13.09	14.50	No
	VHT40	3	2422	11.95	13.50	No
		4	2427	12.52	14.00	No
		5	2432	14.05	15.50	No
		6	2437	14.37	16.00	No
		8	2447	14.13	16.00	No
		9	2452	12.09	14.00	No

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

1) The largest channel bandwidth configuration is selected between the multiple configurations in a frequency band with the

same maximum tune-up output power.

2) When multiple transmission modes (802.11b/g/n/VHT) 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 = 0.516 * (100.00mW/22.39mW) =1.029 W/Kg, so 2.4G OFDM SAR test is not required.

8.4.4 2.4G WLAN-Ant.3-Leve3

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power(dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	19.19	20.00	No
		6	2437	**19.30**	20.00	Yes
		10	2457	19.08	20.00	No
		11	2462	18.58	19.50	No
	802.11g	1	2412	14.52	16.00	No
		2	2417	18.12	19.00	No
		6	2437	18.10	19.00	No
		9	2452	17.67	19.00	No
		10	2457	17.22	18.50	No
		11	2462	13.54	15.00	No
	802.11n(HT20)	1	2412	13.89	15.50	No
		2	2417	17.82	19.00	No
		6	2437	17.93	19.00	No
		9	2452	17.38	19.00	No
		10	2457	16.42	18.00	No
		11	2462	13.09	14.50	No
	802.11n(HT40)	3	2422	11.93	13.50	No
		4	2427	12.51	14.00	No
		5	2432	14.04	15.50	No
		6	2437	14.34	16.00	No
		8	2447	13.79	15.50	No
		9	2452	12.13	14.00	No
	VHT20	1	2412	14.28	16.00	No
		2	2417	17.08	18.50	No
		6	2437	17.28	18.50	No
		9	2452	16.72	18.50	No
		10	2457	16.44	18.00	No
		11	2462	13.09	14.50	No
	VHT40	3	2422	11.95	13.50	No
		4	2427	12.52	14.00	No
		5	2432	14.05	15.50	No
		6	2437	14.37	16.00	No
		8	2447	14.13	16.00	No
		9	2452	12.09	14.00	No

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

1) The largest channel bandwidth configuration is selected between the multiple configurations in a frequency band with the

same maximum tune-up output power.

2) When multiple transmission modes (802.11b/g/n/VHT) 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 = 0.341 * (100.00mW/22.39mW) =1.210 W/Kg, so 2.4G OFDM SAR test is not required.

8.4.5 2.4G WLAN-Ant.3-Leve4

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power(dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	14.38	16.00	No
		6	2437	**14.55**	16.00	Yes
		10	2457	14.31	16.00	No
		11	2462	14.24	16.00	No
	802.11g	1	2412	14.52	16.00	No
		2	2417	14.98	16.00	No
		6	2437	14.91	16.00	No
		9	2452	14.66	16.00	No
		10	2457	14.76	16.00	No
		11	2462	13.54	15.00	No
	802.11n(HT20)	1	2412	13.89	15.50	No
		2	2417	14.79	16.00	No
		6	2437	15.08	16.00	No
		9	2452	14.53	16.00	No
		10	2457	14.61	16.00	No
		11	2462	13.09	14.50	No
	802.11n(HT40)	3	2422	11.93	13.50	No
		4	2427	12.51	14.00	No
		5	2432	14.04	15.50	No
		6	2437	14.34	16.00	No
		8	2447	13.79	15.50	No
		9	2452	12.13	14.00	No
	VHT20	1	2412	14.28	16.00	No
		2	2417	14.52	16.00	No
		6	2437	14.74	16.00	No
		9	2452	14.10	16.00	No
		10	2457	14.56	16.00	No
		11	2462	13.09	14.50	No
	VHT40	3	2422	11.95	13.50	No
		4	2427	12.52	14.00	No
		5	2432	14.05	15.50	No
		6	2437	14.37	16.00	No
		8	2447	14.13	16.00	No
		9	2452	12.09	14.00	No

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

1) The largest channel bandwidth configuration is selected between the multiple configurations in a frequency band with the

same maximum tune-up output power.

2) When multiple transmission modes (802.11b/g/n/VHT) 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 = 0.180 * (100.00mW/22.39mW) =0.320 W/Kg, so 2.4G OFDM SAR test is not required.

8.4.6 5G WLAN-Ant.3-Full power

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power(dBm)	Tune-up Limit (dBm)
5.2 (5.15~5.25)	802.11a	36	5180	15.75	17.00
		44	5220	17.98	19.00
		48	5240	17.90	19.00
	802.11n(HT20)	36	5180	15.72	17.00
		44	5220	16.61	18.00
		48	5240	16.38	18.00
	802.11n(HT40)	38	5190	12.93	13.50
		46	5230	15.91	17.00
	802.11ac(VHT20)	36	5180	16.11	17.50
		44	5220	17.79	19.00
		48	5240	17.71	19.00
	802.11ac(VHT40)	38	5190	12.88	13.50
		46	5230	16.73	18.00
	802.11ac(VHT80)	42	5210	11.03	12.00
5.3 (5.25~5.35)	802.11a	52	5260	18.10	19.00
		60	5300	18.02	19.00
		64	5320	16.26	18.00
	802.11n(HT20)	52	5260	16.91	18.00
		60	5300	16.82	18.00
		64	5320	15.57	17.50
	802.11n(HT40)	54	5270	16.13	17.00
		62	5310	12.29	13.00
	802.11ac(VHT20)	52	5260	17.73	19.00
		60	5300	17.66	19.00
		64	5320	16.21	18.00
	802.11ac(VHT40)	54	5270	17.17	18.00
		62	5310	12.40	13.00
	802.11ac(VHT80)	58	5290	8.75	10.50
5.6 (5.47~5.725)	802.11a	100	5500	17.11	18.00
		116	5580	18.20	19.00
		140	5700	16.92	17.50
	802.11n(HT20)	100	5500	17.07	18.00
		116	5580	17.15	18.00
		140	5700	16.27	17.00
	802.11n(HT40)	102	5510	14.18	14.50
		118	5590	16.51	17.00

		134	5670	15.65	16.00
	802.11ac(VHT20)	100	5500	17.01	18.00
		116	5580	17.91	19.00
		140	5700	16.23	17.00
	802.11ac(VHT40)	102	5510	14.14	14.50
		118	5590	17.22	18.00
		134	5670	15.75	16.00
	802.11ac(VHT80)	106	5530	10.57	11.00
		122	5690	15.93	17.00
5.8 (5.725~5.850)	802.11a	149	5745	18.23	19.00
		157	5785	18.30	19.00
		165	5825	18.21	19.00
	802.11n(HT20)	149	5745	17.25	18.00
		157	5785	17.31	18.00
		165	5825	17.28	18.00
	802.11n(HT40)	151	5755	16.66	17.00
		159	5795	16.75	17.00
	802.11ac(VHT20)	149	5745	17.99	19.00
		157	5785	18.04	19.00
		165	5825	18.15	19.00
	802.11ac(VHT40)	151	5755	17.35	18.00
		159	5795	17.43	18.00
	802.11ac(VHT80)	155	5775	16.31	17.00
Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.					

8.4.7 5G WLAN-Ant.3-Leve1

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power(dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	15.75	17.00	No
		44	5220	**17.98**	19.00	No
		48	5240	17.90	19.00	No
	802.11n(HT20)	36	5180	15.72	17.00	No
		44	5220	16.61	18.00	No
		48	5240	16.38	18.00	No
	802.11n(HT40)	38	5190	12.93	13.50	No
		46	5230	15.91	17.00	No
	802.11ac(VHT20)	36	5180	16.11	17.50	No
		44	5220	17.79	19.00	No
		48	5240	17.71	19.00	No
	802.11ac(VHT40)	38	5190	12.88	13.50	No
		46	5230	16.73	18.00	No
	802.11ac(VHT80)	42	5210	11.03	12.00	No
5.3 (5.25~5.35)	802.11a	52	5260	**18.10**	19.00	Yes
		60	5300	18.02	19.00	No
		64	5320	16.26	18.00	No
	802.11n(HT20)	52	5260	16.91	18.00	No
		60	5300	16.82	18.00	No
		64	5320	15.57	17.50	No
	802.11n(HT40)	54	5270	16.13	17.00	No
		62	5310	12.29	13.00	No
	802.11ac(VHT20)	52	5260	17.73	19.00	No
		60	5300	17.66	19.00	No
		64	5320	16.21	18.00	No
	802.11ac(VHT40)	54	5270	17.17	18.00	No
		62	5310	12.40	13.00	No
	802.11ac(VHT80)	58	5290	8.75	10.50	No
5.6 (5.47~5.725)	802.11a	100	5500	17.11	18.00	No
		116	5580	**18.20**	19.00	Yes
		140	5700	16.92	17.50	No
	802.11n(HT20)	100	5500	17.07	18.00	No
		116	5580	17.15	18.00	No
		140	5700	16.27	17.00	No
	802.11n(HT40)	102	5510	14.18	14.50	No
		118	5590	16.51	17.00	No

		134	5670	15.65	16.00	No
	802.11ac(VHT20)	100	5500	17.01	18.00	No
		116	5580	17.91	19.00	No
		140	5700	16.23	17.00	No
	802.11ac(VHT40)	102	5510	14.14	14.50	No
		118	5590	17.22	18.00	No
		134	5670	15.75	16.00	No
	802.11ac(VHT80)	106	5530	10.57	11.00	No
		122	5690	15.93	17.00	No
5.8 (5.725~5.850)	802.11a	149	5745	18.23	19.00	No
		157	5785	**18.30**	19.00	Yes
		165	5825	18.21	19.00	No
	802.11n(HT20)	149	5745	17.25	18.00	No
		157	5785	17.31	18.00	No
		165	5825	17.28	18.00	No
	802.11n(HT40)	151	5755	16.66	17.00	No
		159	5795	16.75	17.00	No
	802.11ac(VHT20)	149	5745	17.99	19.00	No
		157	5785	18.04	19.00	No
		165	5825	18.15	19.00	No
	802.11ac(VHT40)	151	5755	17.35	18.00	No
		159	5795	17.43	18.00	No
	802.11ac(VHT80)	155	5775	16.31	17.00	No
Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.						

8.4.8 5G WLAN-Ant.3-Leve2

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power(dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	15.75	17.00	No
		44	5220	15.81	17.00	No
		48	5240	15.92	17.00	No
	802.11n(HT20)	36	5180	15.72	17.00	No
		44	5220	15.64	17.00	No
		48	5240	15.40	17.00	No
	802.11n(HT40)	38	5190	12.93	13.50	No
		46	5230	**15.91**	17.00	No
	802.11ac(VHT20)	36	5180	15.73	17.00	No
		44	5220	15.61	17.00	No
		48	5240	15.55	17.00	No
	802.11ac(VHT40)	38	5190	12.88	13.50	No
		46	5230	16.73	17.00	No
	802.11ac(VHT80)	42	5210	11.03	12.00	No
5.3 (5.25~5.35)	802.11a	52	5260	15.98	17.00	No
		60	5300	15.92	17.00	No
		64	5320	15.75	17.00	No
	802.11n(HT20)	52	5260	16.03	17.00	No
		60	5300	15.86	17.00	No
		64	5320	15.27	17.00	No
	802.11n(HT40)	54	5270	**16.13**	17.00	Yes
		62	5310	12.29	13.00	Yes
	802.11ac(VHT20)	52	5260	15.92	17.00	No
		60	5300	15.63	17.00	No
		64	5320	15.01	17.00	No
	802.11ac(VHT40)	54	5270	16.29	17.00	No
		62	5310	12.40	13.00	No
	802.11ac(VHT80)	58	5290	8.75	10.50	No
5.6 (5.47~5.725)	802.11a	100	5500	14.62	16.00	No
		116	5580	14.91	16.00	No
		140	5700	14.98	16.00	No
	802.11n(HT20)	100	5500	14.90	16.00	No
		116	5580	15.29	16.00	No
		140	5700	15.15	16.00	No
	802.11n(HT40)	102	5510	14.18	14.50	No
		118	5590	**15.69**	16.00	Yes

		134	5670	15.65	16.00	No
	802.11ac(VHT20)	100	5500	14.90	16.00	No
		116	5580	14.83	16.00	No
		140	5700	15.19	16.00	No
	802.11ac(VHT40)	102	5510	14.14	14.50	No
		118	5590	15.02	16.00	No
		134	5670	15.75	16.00	No
	802.11ac(VHT80)	106	5530	10.57	11.00	No
		122	5690	14.95	16.00	No
5.8 (5.725~5.850)	802.11a	149	5745	16.82	17.50	No
		157	5785	16.75	17.50	No
		165	5825	16.63	17.50	No
	802.11n(HT20)	149	5745	16.94	17.50	No
		157	5785	16.79	17.50	No
		165	5825	16.70	17.50	No
	802.11n(HT40)	151	5755	16.66	17.00	No
		159	5795	16.75	17.00	No
	802.11ac(VHT20)	149	5745	16.59	17.50	No
		157	5785	16.67	17.50	No
		165	5825	16.56	17.50	No
	802.11ac(VHT40)	151	5755	16.78	17.50	No
		159	5795	**16.83**	17.50	Yes
	802.11ac(VHT80)	155	5775	16.31	17.00	No
Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.						

8.4.9 5G WLAN-Ant.3-Leve3

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power(dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	13.98	15.50	No
		44	5220	14.25	15.50	No
		48	5240	14.68	15.50	No
	802.11n(HT20)	36	5180	14.10	15.50	No
		44	5220	14.10	15.50	No
		48	5240	13.87	15.50	No
	802.11n(HT40)	38	5190	12.93	13.50	No
		46	5230	**14.43**	15.50	No
	802.11ac(VHT20)	36	5180	13.97	15.50	No
		44	5220	14.42	15.50	No
		48	5240	14.13	15.50	No
	802.11ac(VHT40)	38	5190	12.88	13.50	No
		46	5230	14.06	15.50	No
	802.11ac(VHT80)	42	5210	11.03	12.00	No
5.3 (5.25~5.35)	802.11a	52	5260	14.54	15.50	No
		60	5300	14.67	15.50	No
		64	5320	14.51	15.50	No
	802.11n(HT20)	52	5260	14.46	15.50	No
		60	5300	14.18	15.50	No
		64	5320	13.73	15.50	No
	802.11n(HT40)	54	5270	**14.48**	15.50	Yes
		62	5310	12.29	13.00	No
	802.11ac(VHT20)	52	5260	14.34	15.50	No
		60	5300	14.08	15.50	No
		64	5320	13.67	15.50	No
	802.11ac(VHT40)	54	5270	14.53	15.50	No
		62	5310	12.84	13.00	No
	802.11ac(VHT80)	58	5290	8.75	10.50	No
5.6 (5.47~5.725)	802.11a	100	5500	12.12	13.50	No
		116	5580	12.54	13.50	No
		140	5700	12.75	13.50	No
	802.11n(HT20)	100	5500	12.49	13.50	No
		116	5580	12.68	13.50	No
		140	5700	12.71	13.50	No
	802.11n(HT40)	102	5510	13.00	13.50	No
		118	5590	12.94	13.50	No

		134	5670	13.26	13.50	No
	802.11ac(VHT20)	100	5500	12.38	13.50	No
		116	5580	12.27	13.50	No
		140	5700	12.57	13.50	No
	802.11ac(VHT40)	102	5510	13.21	13.50	No
		118	5590	12.77	13.50	No
		134	5670	13.24	13.50	No
	802.11ac(VHT80)	106	5530	10.57	11.00	No
		122	5690	**12.38**	13.50	Yes
5.8 (5.725~5.850)	802.11a	149	5745	13.93	14.50	No
		157	5785	13.83	14.50	No
		165	5825	13.74	14.50	No
	802.11n(HT20)	149	5745	13.85	14.50	No
		157	5785	13.92	14.50	No
		165	5825	13.58	14.50	No
	802.11n(HT40)	151	5755	14.26	14.50	No
		159	5795	14.32	14.50	No
	802.11ac(VHT20)	149	5745	13.47	14.50	No
		157	5785	13.40	14.50	No
		165	5825	13.75	14.50	No
	802.11ac(VHT40)	151	5755	13.75	14.50	No
		159	5795	14.02	14.50	No
	802.11ac(VHT80)	155	5775	**13.35**	14.50	Yes
Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.						

8.4.10 5G WLAN-Ant.3-Leve4

Band (GHz)	Mode	Channel	Freq. (MHz)	Average Power(dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	12.28	13.00	No
		44	5220	11.82	13.00	No
		48	5240	11.83	13.00	No
	802.11n(HT20)	36	5180	11.82	13.00	No
		44	5220	11.52	13.00	No
		48	5240	11.22	13.00	No
	802.11n(HT40)	38	5190	**12.13**	13.00	Yes
		46	5230	12.05	13.00	No
	802.11ac(VHT20)	36	5180	11.66	13.00	No
		44	5220	11.75	13.00	No
		48	5240	11.83	13.00	No
	802.11ac(VHT40)	38	5190	12.25	13.00	No
		46	5230	11.58	13.00	No
	802.11ac(VHT80)	42	5210	11.03	12.00	No
5.3 (5.25~5.35)	802.11a	52	5260	11.84	13.00	No
		60	5300	11.98	13.00	No
		64	5320	11.82	13.00	No
	802.11n(HT20)	52	5260	11.97	13.00	No
		60	5300	11.92	13.00	No
		64	5320	11.20	13.00	No
	802.11n(HT40)	54	5270	12.15	13.00	No
		62	5310	**12.29**	13.00	Yes
	802.11ac(VHT20)	52	5260	11.70	13.00	No
		60	5300	11.56	13.00	No
		64	5320	11.10	13.00	No
	802.11ac(VHT40)	54	5270	12.30	13.00	No
		62	5310	12.40	13.00	No
	802.11ac(VHT80)	58	5290	8.75	10.50	No
5.6 (5.47~5.725)	802.11a	100	5500	9.57	11.00	No
		116	5580	10.03	11.00	No
		140	5700	9.93	11.00	No
	802.11n(HT20)	100	5500	9.88	11.00	No
		116	5580	10.13	11.00	No
		140	5700	10.42	11.00	No
	802.11n(HT40)	102	5510	10.64	11.00	No
		118	5590	10.62	11.00	No

		134	5670	10.70	11.00	No
	802.11ac(VHT20)	100	5500	9.94	11.00	No
		116	5580	9.76	11.00	No
		140	5700	10.26	11.00	No
	802.11ac(VHT40)	102	5510	10.63	11.00	No
		118	5590	10.36	11.00	No
		134	5670	10.86	11.00	No
	802.11ac(VHT80)	106	5530	9.95	11.00	No
		122	5690	**10.13**	11.00	Yes
5.8 (5.725~5.850)	802.11a	149	5745	11.30	12.00	No
		157	5785	11.44	12.00	No
		165	5825	11.38	12.00	No
	802.11n(HT20)	149	5745	11.17	12.00	No
		157	5785	11.40	12.00	No
		165	5825	11.13	12.00	No
	802.11n(HT40)	151	5755	11.73	12.00	No
		159	5795	11.55	12.00	No
	802.11ac(VHT20)	149	5745	10.81	12.00	No
		157	5785	11.22	12.00	No
		165	5825	11.14	12.00	No
	802.11ac(VHT40)	151	5755	11.46	12.00	No
		159	5795	11.29	12.00	No
	802.11ac(VHT80)	155	5775	**11.16**	12.00	Yes
Note: When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, each band is tested independently for SAR.						

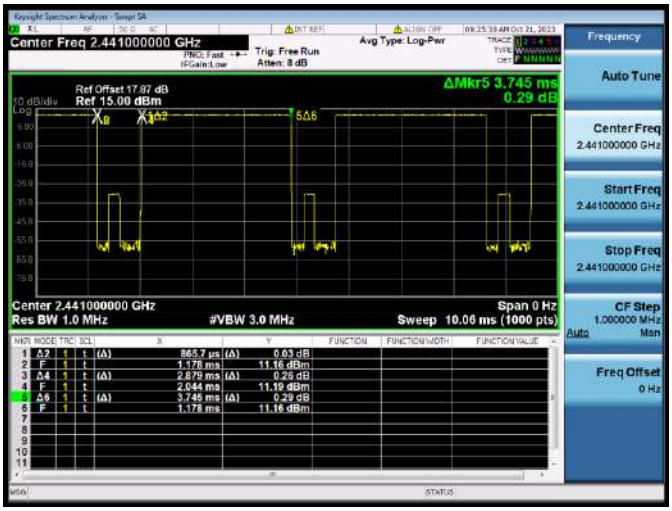
8.5 Bluetooth

Mode	GFSK			π/4-DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
Average Power(dBm)	12.05	**12.70**	12.01	10.01	10.53	10.02
Tune-Up Limit (dBm)	14.00	14.00	14.00	12.00	12.00	12.00
SAR Test Require	YES	YES	YES	NO	NO	NO
Mode	8-DPSK			BLE-1Mbps		
Channel	0	39	78	0	19	39
Frequency (MHz)	2402	2441	2480	2402	2440	2480
Average Power(dBm)	10.03	10.51	10.04	5.26	6.46	5.93
Tune-Up Limit (dBm)	12.00	12.00	12.00	7.00	7.00	7.00
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 ≤ ¼ dB higher than the primary mode.						

Bluetooth SAR scaling need further consideration and the maximum duty cycle is 76.88%, therefore the actual duty cycle will be scaled up to 100% for Bluetooth reported SAR calculation.

Duty Cycle

GFSK



8.6 Power Reduction List

1. This mobile phone device supports the receiver detection mechanism .This device uses the receiver to indicate whether the user is making a call in head.
2. When device is making call in head, and the receiver will work, the power reduction will applied for SAR compliance.
3. When there is a voice call (including VOIP), the audio is actively routed through the headset or speaker, and the receiver will not work, which indicating the body exposure conditions will trigger the body/Limbs exposure reduced the power.
4. When this device used data mode only, and the receiver will not work too, the reduced the power are same as body exposure.

Mode	Antenna	WWAN Antenna Up				
		Full Power	Head		Body	
			Receiver on		Receiver off	
			State2	State4	State1	State3
GSM 850	ANT1	33.50	33.50	33.50	33.50	33.50
GPRS850 1 Tx Slot	ANT1	33.50	33.50	33.50	33.50	33.50
GPRS850 2 Tx Slots	ANT1	31.00	31.00	31.00	31.00	31.00
GPRS850 3 Tx Slots	ANT1	29.00	29.00	29.00	29.00	29.00
GPRS850 4 Tx Slots	ANT1	28.00	28.00	28.00	28.00	28.00
EGPRS850 1 Tx Slot	ANT1	27.50	27.50	27.50	27.50	27.50
EGPRS850 2 Tx Slots	ANT1	25.00	25.00	25.00	25.00	25.00
EGPRS850 3 Tx Slots	ANT1	23.00	23.00	23.00	23.00	23.00
EGPRS850 4 Tx Slots	ANT1	22.50	22.50	22.50	22.50	22.50
GSM 1900	ANT1	30.50	28.50	27.50	30.50	30.50
GPRS1900 1 Tx Slot	ANT1	30.50	28.50	27.50	30.50	30.50
GPRS1900 2 Tx Slots	ANT1	28.00	26.00	25.00	28.00	28.00
GPRS1900 3 Tx Slots	ANT1	26.00	24.00	23.00	26.00	26.00
GPRS1900 4 Tx Slots	ANT1	25.00	23.00	22.00	25.00	25.00
EGPRS1900 1 Tx Slot	ANT1	26.50	24.50	23.50	26.50	26.50
EGPRS1900 2 Tx Slots	ANT1	24.00	22.00	21.00	24.00	24.00
EGPRS1900 3 Tx Slots	ANT1	22.00	20.00	19.00	22.00	22.00
EGPRS1900 4 Tx Slots	ANT1	21.50	19.50	18.50	21.50	21.50
WCDMA Band2 RMC	ANT1	23.80	18.80	18.80	20.30	17.30
AMR	ANT1	23.80	18.80	18.80	20.30	17.30
HSDPA Subtest-1	ANT1	23.30	18.30	18.30	19.80	16.80
HSDPA Subtest-2	ANT1	23.30	18.30	18.30	19.80	16.80
HSDPA Subtest-3	ANT1	22.80	17.80	17.80	19.30	16.30
HSDPA Subtest-4	ANT1	22.80	17.80	17.80	19.30	16.30
DC-HSDPA Subtest-1	ANT1	23.30	18.30	18.30	19.80	16.80
DC-HSDPA Subtest-2	ANT1	23.30	18.30	18.30	19.80	16.80
DC-HSDPA Subtest-3	ANT1	22.80	17.80	17.80	19.30	16.30
DC-HSDPA Subtest-4	ANT1	22.80	17.80	17.80	19.30	16.30

HSUPA Subtest-1	ANT1	22.30	17.30	17.30	18.80	15.80
HSUPA Subtest-2	ANT1	22.30	17.30	17.30	18.80	15.80
HSUPA Subtest-3	ANT1	22.30	17.30	17.30	18.80	15.80
HSUPA Subtest-4	ANT1	21.80	16.80	16.80	18.30	15.30
HSUPA Subtest-5	ANT1	23.30	18.30	18.30	19.80	16.80
WCDMA Band4 RMC	ANT1	23.80	20.30	18.80	20.30	19.80
AMR	ANT1	23.80	20.30	18.80	20.30	19.80
HSDPA Subtest-1	ANT1	23.30	19.80	18.30	19.80	19.30
HSDPA Subtest-2	ANT1	23.30	19.80	18.30	19.80	19.30
HSDPA Subtest-3	ANT1	22.80	19.30	17.80	19.30	18.80
HSDPA Subtest-4	ANT1	22.80	19.30	17.80	19.30	18.80
DC-HSDPA Subtest-1	ANT1	23.30	19.80	18.30	19.80	19.30
DC-HSDPA Subtest-2	ANT1	23.30	19.80	18.30	19.80	19.30
DC-HSDPA Subtest-3	ANT1	22.80	19.30	17.80	19.30	18.80
DC-HSDPA Subtest-4	ANT1	22.80	19.30	17.80	19.30	18.80
HSUPA Subtest-1	ANT1	22.30	18.80	17.30	18.80	18.30
HSUPA Subtest-2	ANT1	22.30	18.80	17.30	18.80	18.30
HSUPA Subtest-3	ANT1	22.30	18.80	17.30	18.80	18.30
HSUPA Subtest-4	ANT1	21.80	18.30	16.80	18.30	17.80
HSUPA Subtest-5	ANT1	23.30	19.80	18.30	19.80	19.30
WCDMA Band5 RMC	ANT1	24.30	24.30	24.30	24.30	24.30
AMR	ANT1	24.30	24.30	24.30	24.30	24.30
HSDPA Subtest-1	ANT1	23.30	23.30	23.30	23.30	23.30
HSDPA Subtest-2	ANT1	23.30	23.30	23.30	23.30	23.30
HSDPA Subtest-3	ANT1	22.80	22.80	22.80	22.80	22.80
HSDPA Subtest-4	ANT1	22.80	22.80	22.80	22.80	22.80
DC-HSDPA Subtest-1	ANT1	23.30	23.30	23.30	23.30	23.30
DC-HSDPA Subtest-2	ANT1	23.30	23.30	23.30	23.30	23.30
DC-HSDPA Subtest-3	ANT1	22.80	22.80	22.80	22.80	22.80
DC-HSDPA Subtest-4	ANT1	22.80	22.80	22.80	22.80	22.80
HSUPA Subtest-1	ANT1	22.30	22.30	22.30	22.30	22.30
HSUPA Subtest-2	ANT1	22.30	22.30	22.30	22.30	22.30
HSUPA Subtest-3	ANT1	22.30	22.30	22.30	22.30	22.30
HSUPA Subtest-4	ANT1	21.80	21.80	21.80	21.80	21.80
HSUPA Subtest-5	ANT1	23.30	23.30	23.30	23.30	23.30
LTE Band2	ANT1	23.30	18.80	18.30	20.80	18.30
LTE Band4	ANT1	23.30	20.30	18.80	20.30	20.30
LTE Band5	ANT1	24.30	24.30	24.30	24.30	24.30
LTE Band7	ANT1	23.30	19.30	18.80	20.80	18.30
LTE Band13	ANT1	24.30	24.30	24.30	24.30	24.30
LTE Band66	ANT1	23.80	20.30	18.80	20.80	20.30
LTE Band38	ANT1	23.80	21.30	21.30	23.30	20.80
LTE Band41	ANT1	23.80	21.80	21.80	23.30	20.30

Mode	Antenna	WWAN Antenna Down				
		Full Power	Head		Body	
			Receiver on		Receiver off	
			State2	State4	State1	State3
GSM 850	ANT0	33.50	33.50	33.50	33.50	33.50
GPRS850 1 Tx Slot	ANT0	33.50	33.50	33.50	33.50	33.50
GPRS850 2 Tx Slots	ANT0	31.00	31.00	31.00	31.00	31.00
GPRS850 3 Tx Slots	ANT0	29.00	29.00	29.00	29.00	29.00
GPRS850 4 Tx Slots	ANT0	28.00	28.00	28.00	28.00	28.00
EGPRS850 1 Tx Slot	ANT0	27.50	27.50	27.50	27.50	27.50
EGPRS850 2 Tx Slots	ANT0	25.00	25.00	25.00	25.00	25.00
EGPRS850 3 Tx Slots	ANT0	23.00	23.00	23.00	23.00	23.00
EGPRS850 4 Tx Slots	ANT0	22.50	22.50	22.50	22.50	22.50
GSM 1900	ANT0	30.50	30.50	30.50	30.50	30.50
GPRS1900 1 Tx Slot	ANT0	30.50	30.50	30.50	30.50	30.50
GPRS1900 2 Tx Slots	ANT0	28.00	28.00	28.00	28.00	28.00
GPRS1900 3 Tx Slots	ANT0	26.00	26.00	26.00	26.00	26.00
GPRS1900 4 Tx Slots	ANT0	25.00	25.00	25.00	25.00	25.00
EGPRS1900 1 Tx Slot	ANT0	26.50	26.50	26.50	26.50	26.50
EGPRS1900 2 Tx Slots	ANT0	24.00	24.00	24.00	24.00	24.00
EGPRS1900 3 Tx Slots	ANT0	22.00	22.00	22.00	22.00	22.00
EGPRS1900 4 Tx Slots	ANT0	21.50	21.50	21.50	21.50	21.50
WCDMA Band2 RMC	ANT0	23.80	23.80	23.80	22.30	21.30
AMR	ANT0	23.80	23.80	23.80	22.30	21.30
HSDPA Subtest-1	ANT0	23.30	23.30	23.30	21.80	20.80
HSDPA Subtest-2	ANT0	23.30	23.30	23.30	21.80	20.80
HSDPA Subtest-3	ANT0	22.80	22.80	22.80	21.30	20.30
HSDPA Subtest-4	ANT0	22.80	22.80	22.80	21.30	20.30
DC-HSDPA Subtest-1	ANT0	23.30	23.30	23.30	21.80	20.80
DC-HSDPA Subtest-2	ANT0	23.30	23.30	23.30	21.80	20.80
DC-HSDPA Subtest-3	ANT0	22.80	22.80	22.80	21.30	20.30
DC-HSDPA Subtest-4	ANT0	22.80	22.80	22.80	21.30	20.30
HSUPA Subtest-1	ANT0	22.30	22.30	22.30	20.80	19.80
HSUPA Subtest-2	ANT0	22.30	22.30	22.30	20.80	19.80
HSUPA Subtest-3	ANT0	22.30	22.30	22.30	20.80	19.80
HSUPA Subtest-4	ANT0	21.80	21.80	21.80	20.30	19.30
HSUPA Subtest-5	ANT0	23.30	23.30	23.30	21.80	20.80
WCDMA Band4 RMC	ANT0	23.80	23.80	23.80	21.30	18.80
AMR	ANT0	23.80	23.80	23.80	21.30	18.80
HSDPA Subtest-1	ANT0	23.30	23.30	23.30	20.80	18.30
HSDPA Subtest-2	ANT0	23.30	23.30	23.30	20.80	18.30
HSDPA Subtest-3	ANT0	22.80	22.80	22.80	20.30	17.80

HSDPA Subtest-4	ANT0	22.80	22.80	22.80	20.30	17.80
DC-HSDPA Subtest-1	ANT0	23.30	23.30	23.30	20.80	18.30
DC-HSDPA Subtest-2	ANT0	23.30	23.30	23.30	20.80	18.30
DC-HSDPA Subtest-3	ANT0	22.80	22.80	22.80	20.30	17.80
DC-HSDPA Subtest-4	ANT0	22.80	22.80	22.80	20.30	17.80
HSUPA Subtest-1	ANT0	22.30	22.30	22.30	19.80	17.30
HSUPA Subtest-2	ANT0	22.30	22.30	22.30	19.80	17.30
HSUPA Subtest-3	ANT0	22.30	22.30	22.30	19.80	17.30
HSUPA Subtest-4	ANT0	21.80	21.80	21.80	19.30	16.80
HSUPA Subtest-5	ANT0	23.30	23.30	23.30	20.80	18.30
WCDMA Band5 RMC	ANT0	24.30	24.30	24.30	24.30	24.30
AMR	ANT0	24.30	24.30	24.30	24.30	24.30
HSDPA Subtest-1	ANT0	23.30	23.30	23.30	23.30	23.30
HSDPA Subtest-2	ANT0	23.30	23.30	23.30	23.30	23.30
HSDPA Subtest-3	ANT0	22.80	22.80	22.80	22.80	22.80
HSDPA Subtest-4	ANT0	22.80	22.80	22.80	22.80	22.80
DC-HSDPA Subtest-1	ANT0	23.30	23.30	23.30	23.30	23.30
DC-HSDPA Subtest-2	ANT0	23.30	23.30	23.30	23.30	23.30
DC-HSDPA Subtest-3	ANT0	22.80	22.80	22.80	22.80	22.80
DC-HSDPA Subtest-4	ANT0	22.80	22.80	22.80	22.80	22.80
HSUPA Subtest-1	ANT0	22.30	22.30	22.30	22.30	22.30
HSUPA Subtest-2	ANT0	22.30	22.30	22.30	22.30	22.30
HSUPA Subtest-3	ANT0	22.30	22.30	22.30	22.30	22.30
HSUPA Subtest-4	ANT0	21.80	21.80	21.80	21.80	21.80
HSUPA Subtest-5	ANT0	23.30	23.30	23.30	23.30	23.30
LTE Band2	ANT0	23.30	23.30	23.30	22.30	21.30
LTE Band4	ANT0	23.30	23.30	23.30	21.30	19.30
LTE Band5	ANT0	24.30	24.30	24.30	24.30	24.30
LTE Band7	ANT0	23.30	23.30	23.30	23.30	20.80
LTE Band13	ANT0	24.30	24.30	24.30	24.30	24.30
LTE Band66	ANT0	23.80	23.80	23.80	21.80	19.30
LTE Band38	ANT0	23.80	23.80	23.80	23.80	23.30
LTE Band41	ANT0	23.80	23.80	23.80	23.80	23.80

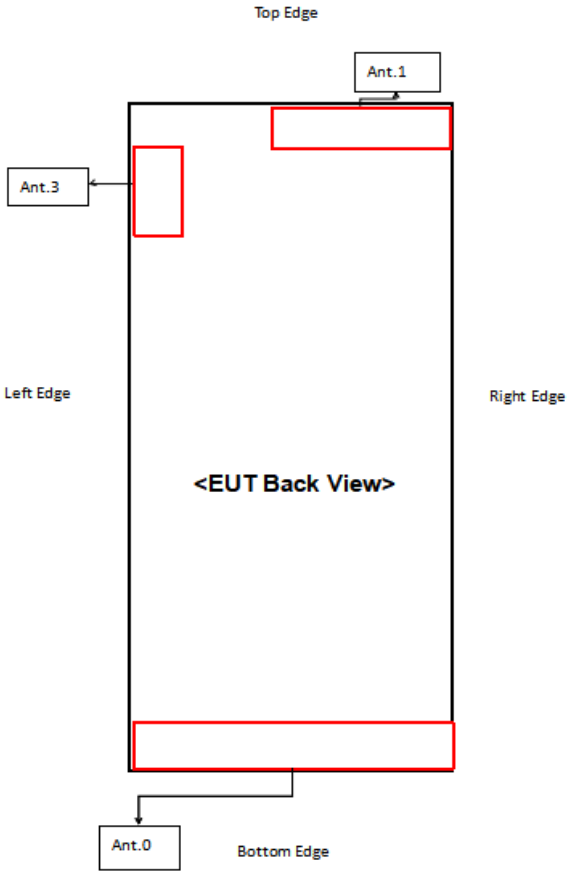
WLAN&BT Reduced power level table

Reduced State	Receiver state	Transmitting conditions
Level1	On (Head scenario)	WLAN 2.4G Only WLAN 5G Only BT Only
Level2	On (Head scenario)	WWAN+ WLAN2.4G; WWAN + WLAN 5G;
Level3	Off (Body scenario)	WLAN 2.4G Only WLAN 5G Only
Level4	Off (Body scenario)	WWAN+ WLAN2.4G; WWAN + WLAN 5G;

Mode	Antenna	WLAN Antenna Chain0				
		Full Power	Head		Body	
			Receiver on		Receiver off	
			Level1	Level2	Level3	Level4
2.4G WLAN 802.11b	ANT3	20.00	19.00	16.50	20.00	16.00
2.4G WLAN 802.11g	ANT3	19.00	19.00	16.50	19.00	16.00
2.4G WLAN 802.11n20	ANT3	19.00	19.00	16.50	19.00	16.00
2.4G WLAN 802.11n40	ANT3	16.00	16.00	15.50	16.00	16.00
2.4G WLAN 802.11ac20	ANT3	18.50	18.50	16.50	18.50	16.00
2.4G WLAN 802.11ac40	ANT3	16.00	16.00	16.00	16.00	16.00
5.2G WLAN 802.11a	ANT3	19.00	19.00	17.00	15.50	13.00
5.2G WLAN 802.11n20	ANT3	18.00	18.00	17.00	15.50	13.00
5.2G WLAN 802.11n40	ANT3	17.00	17.00	17.00	15.50	13.00
5.2G WLAN 802.11ac20	ANT3	19.00	19.00	17.00	15.50	13.00
5.2G WLAN 802.11ac40	ANT3	18.00	18.00	17.00	15.50	13.00
5.2G WLAN 802.11ac80	ANT3	12.00	12.00	12.00	15.50	13.00
5.3G WLAN 802.11a	ANT3	19.00	19.00	17.00	12.00	13.00
5.3G WLAN 802.11n20	ANT3	18.00	18.00	17.00	15.50	13.00
5.3G WLAN 802.11n40	ANT3	17.00	17.00	17.00	15.50	13.00
5.3G WLAN 802.11ac20	ANT3	19.00	19.00	17.00	15.50	13.00
5.3G WLAN 802.11ac40	ANT3	18.00	18.00	17.00	15.50	13.00
5.3G WLAN 802.11ac80	ANT3	10.50	10.50	10.50	15.50	13.00
5.6G WLAN 802.11a	ANT3	19.00	19.00	16.00	10.50	11.00
5.6G WLAN 802.11n20	ANT3	18.00	18.00	16.00	13.50	11.00
5.6G WLAN 802.11n40	ANT3	17.00	17.00	16.00	13.50	11.00
5.6G WLAN 802.11ac20	ANT3	19.00	19.00	16.00	13.50	11.00
5.6G WLAN 802.11ac40	ANT3	18.00	18.00	16.00	13.50	11.00
5.6G WLAN 802.11ac80	ANT3	17.00	17.00	16.00	13.50	11.00
5.8G WLAN 802.11a	ANT3	19.00	19.00	17.50	13.50	12.00
5.8G WLAN 802.11n20	ANT3	18.00	18.00	17.50	14.50	12.00

5.8G WLAN 802.11n40	ANT3	17.00	17.00	17.00	14.50	12.00
5.8G WLAN 802.11ac20	ANT3	19.00	19.00	17.50	14.50	12.00
5.8G WLAN 802.11ac40	ANT3	18.00	18.00	17.50	14.50	12.00
5.8G WLAN 802.11ac80	ANT3	17.00	17.00	17.00	14.50	12.00
Bluetooth	ANT3	14.00	14.00	14.00	14.00	14.00

9 TEST EXCLUSION CONSIDERATION



Antenna	Support Bands
Antenna 0	GSM850/1900, WCDMA 2/4/5, LTE B2/4/5/7/13/38/41/66,
Antenna 1	GSM850/1900, WCDMA 2/4/5, LTE B2/4/5/7/13/38/41/66,
Antenna 3	WIFI2.4G/5G; Bluetooth

9.1 SAR Test Exclusion Consideration Table

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

Antenna	Front Side(mm)	Back Side(mm)	Left Edge(mm)	Right Edge(mm)	Top Edge(mm)	Bottom Edge(mm)
Ant.0	<25	<25	<25	<25	>25	<25
Ant.1	<25	<25	>25	<25	<25	>25
Ant.3	<25	<25	<25	>25	<25	>25
Note: 1.Per KDB 941225 DO6,When the overall length and width of a device is > 9 cm *5 cm, a test separation distance of 10 mm is required for hotspot mode SAR measurements and hotspot mode SAR is measured for all edges and surfaces of the device with a transmitting antenna located within 25 mm from that surface or edge.						

10 TEST RESULT

10.1 GSM 850

Antenna	Power Reduction	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	State2&4	DATA 2slots	Left Cheek	0	128	824.2	-0.02	0.239	29.15	31.00	1.531	0.366	/
Ant.1	State2&4	DATA 2slots	Left Tilt	0	128	824.2	-0.17	0.192	29.15	31.00	1.531	0.294	/
Ant.1	State2&4	DATA 2slots	Right Cheek	0	128	824.2	0.03	0.330	29.15	31.00	1.531	**0.505**	1#
Ant.1	State2&4	DATA 2slots	Right Tilt	0	128	824.2	-0.19	0.232	29.15	31.00	1.531	0.355	/
Ant.0	State2&4	DATA 2slots	Left Cheek	0	251	848.8	-0.12	0.066	29.74	31.00	1.337	0.088	/
Ant.0	State2&4	DATA 2slots	Left Tilt	0	251	848.8	0.07	0.023	29.74	31.00	1.337	0.031	/
Ant.0	State2&4	DATA 2slots	Right Cheek	0	251	848.8	-0.14	0.048	29.74	31.00	1.337	0.064	/
Ant.0	State2&4	DATA 2slots	Right Tilt	0	251	848.8	-0.07	0.018	29.74	31.00	1.337	0.024	/
Body-worn													
Ant.1	State1&3	DATA 2slots	Front Side	15	128	824.2	-0.11	0.073	29.15	31.00	1.531	0.112	/
Ant.1	State1&3	DATA 2slots	Back Side	15	128	824.2	0.11	0.101	29.15	31.00	1.531	0.155	/
Ant.0	State1&3	DATA 2slots	Front Side	15	251	848.8	-0.19	0.057	29.74	31.00	1.337	0.076	/
Ant.0	State1&3	DATA 2slots	Back Side	15	251	848.8	-0.01	0.125	29.74	31.00	1.337	**0.167**	2#
Hotspot													
Ant.1	State3	DATA 2slots	Front Side	10	128	824.2	0.13	0.045	29.15	31.00	1.531	0.069	/
Ant.1	State3	DATA 2slots	Back Side	10	128	824.2	0.05	0.094	29.15	31.00	1.531	0.144	/
Ant.1	State3	DATA 2slots	Right Edge	10	128	824.2	-0.05	0.068	29.15	31.00	1.531	0.104	/
Ant.1	State3	DATA 2slots	Top Edge	10	128	824.2	0.16	0.067	29.15	31.00	1.531	0.103	/
Ant.0	State3	DATA 2slots	Front Side	10	251	848.8	0.04	0.064	29.74	31.00	1.337	0.086	/
Ant.0	State3	DATA 2slots	Back Side	10	251	848.8	0.02	0.264	29.74	31.00	1.337	**0.353**	3#
Ant.0	State3	DATA 2slots	Left Edge	10	251	848.8	0.03	0.056	29.74	31.00	1.337	0.075	/
Ant.0	State3	DATA 2slots	Right Edge	10	251	848.8	0.01	0.115	29.74	31.00	1.337	0.154	/
Ant.0	State3	DATA 2slots	Bottom Edge	10	251	848.8	-0.07	0.117	29.74	31.00	1.337	0.156	/

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

10.2 GSM 1900

Antenna	Power Reduction	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	State2	DATA 2slots	Left Cheek	0	810	1909.8	0.02	0.545	25.46	26.00	1.132	0.617	/
Ant.1	State2	DATA 2slots	Left Tilt	0	810	1909.8	-0.02	0.649	25.46	26.00	1.132	0.735	/
Ant.1	State2	DATA 2slots	Right Cheek	0	810	1909.8	0.01	0.751	25.46	26.00	1.132	0.850	/
Ant.1	State2	DATA 2slots	Right Tilt	0	810	1909.8	-0.07	1.040	25.46	26.00	1.132	**1.177**	4#
Ant.1	State2	DATA 2slots	Right Tilt	0	512	1850.2	-0.03	0.625	25.35	26.00	1.161	0.726	/
Ant.1	State2	DATA 2slots	Right Tilt	0	661	1880	0.01	0.819	25.41	26.00	1.146	0.939	/
Ant.1	State4	DATA 2slots	Left Cheek	0	810	1909.8	0.01	0.412	24.41	25.00	1.146	0.472	/
Ant.1	State4	DATA 2slots	Left Tilt	0	810	1909.8	0.05	0.501	24.41	25.00	1.146	0.574	/
Ant.1	State4	DATA 2slots	Right Cheek	0	810	1909.8	0.01	0.587	24.41	25.00	1.146	0.673	/
Ant.1	State4	DATA 2slots	Right Tilt	0	810	1909.8	0.03	0.758	24.41	25.00	1.146	0.869	/
Ant.1	State4	DATA 2slots	Right Tilt	0	512	1850.2	0.01	0.515	24.07	25.00	1.239	0.638	/
Ant.1	State4	DATA 2slots	Right Tilt	0	661	1880	0.01	0.603	24.35	25.00	1.161	0.700	/
Ant.0	State2&4	DATA 2slots	Left Cheek	0	810	1909.8	0.12	0.040	27.30	28.00	1.175	**0.047**	/
Ant.0	State2&4	DATA 2slots	Left Tilt	0	810	1909.8	0.13	0.015	27.30	28.00	1.175	0.018	/
Ant.0	State2&4	DATA 2slots	Right Cheek	0	810	1909.8	0.01	0.037	27.30	28.00	1.175	0.043	/
Ant.0	State2&4	DATA 2slots	Right Tilt	0	810	1909.8	0.02	0.015	27.30	28.00	1.175	0.018	/
Body-worn													
Ant.1	State1&3	DATA 2slots	Front Side	15	810	1909.8	-0.04	0.109	27.50	27.50	1.000	0.109	/
Ant.1	State1&3	DATA 2slots	Back Side	15	810	1909.8	0.00	0.425	27.50	27.50	1.000	**0.425**	5#
Ant.0	State1&3	DATA 2slots	Front Side	15	810	1909.8	-0.14	0.028	27.30	28.00	1.175	0.033	/
Ant.0	State1&3	DATA 2slots	Back Side	15	810	1909.8	-0.05	0.179	27.30	28.00	1.175	0.210	/
Hotspot													
Ant.1	State3	DATA 2slots	Front Side	10	810	1909.8	-0.15	0.226	27.50	28.00	1.122	0.254	/
Ant.1	State3	DATA 2slots	Back Side	10	810	1909.8	-0.16	0.680	27.50	28.00	1.122	0.763	/
Ant.1	State3	DATA 2slots	Right Edge	10	810	1909.8	0.11	0.067	27.50	28.00	1.122	0.075	/
Ant.1	State3	DATA 2slots	Top Edge	10	810	1909.8	0.02	0.974	27.50	28.00	1.122	**1.093**	6#
Ant.1	State3	DATA 2slots	Top Edge	10	512	1850.2	-0.07	0.621	27.28	28.00	1.180	0.733	
Ant.1	State3	DATA 2slots	Top Edge	10	661	1880	0.05	0.776	27.31	28.00	1.172	0.909	
Ant.0	State3	DATA 2slots	Front Side	10	810	1909.8	-0.02	0.053	27.30	28.00	1.175	0.062	/
Ant.0	State3	DATA 2slots	Back Side	10	810	1909.8	0.10	0.366	27.30	28.00	1.175	0.430	/
Ant.0	State3	DATA 2slots	Left Edge	10	810	1909.8	-0.02	0.038	27.30	28.00	1.175	0.045	/
Ant.0	State3	DATA 2slots	Right Edge	10	810	1909.8	-0.06	0.035	27.30	28.00	1.175	0.041	/
Ant.0	State3	DATA 2slots	Bottom Edge	10	810	1909.8	-0.06	0.344	27.30	28.00	1.175	0.404	/

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

10.3WCDMA Band 2

Antenna	Power Reduction	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	State2&4	RMC	Left Cheek	0	9400	1880	0.16	0.430	18.20	18.80	1.148	0.494	/
Ant.1	State2&4	RMC	Left Tilt	0	9400	1880	-0.02	0.588	18.20	18.80	1.148	0.675	/
Ant.1	State2&4	RMC	Right Cheek	0	9400	1880	-0.15	0.576	18.20	18.80	1.148	0.661	/
Ant.1	State2&4	RMC	Right Tilt	0	9400	1880	-0.01	0.782	18.20	18.80	1.148	**0.898**	7#
Ant.1	State2&4	RMC	Right Tilt	0	9262	1852.4	-0.12	0.712	18.11	18.80	1.172	0.834	/
Ant.1	State2&4	RMC	Right Tilt	0	9538	1907.6	0.09	0.721	18.17	18.80	1.156	0.833	/
Ant.0	State2&4	RMC	Left Cheek	0	9400	1880	-0.08	0.043	23.72	23.80	1.019	0.044	/
Ant.0	State2&4	RMC	Left Tilt	0	9400	1880	-0.01	0.021	23.72	23.80	1.019	0.021	/
Ant.0	State2&4	RMC	Right Cheek	0	9400	1880	-0.11	0.040	23.72	23.80	1.019	0.041	/
Ant.0	State2&4	RMC	Right Tilt	0	9400	1880	0.18	0.018	23.72	23.80	1.019	0.018	/
Body-worn													
Ant.1	State1	RMC	Front Side	15	9400	1880	0.15	0.101	19.67	20.30	1.156	0.117	/
Ant.1	State1	RMC	Back Side	15	9400	1880	-0.18	0.288	19.67	20.30	1.156	0.333	/
Ant.1	State3	RMC	Front Side	15	9400	1880	-0.10	0.041	16.69	17.30	1.151	0.047	/
Ant.1	State3	RMC	Back Side	15	9400	1880	0.07	0.122	16.69	17.30	1.151	0.140	/
Ant.0	State1	RMC	Front Side	15	9400	1880	-0.06	0.061	21.94	22.30	1.086	0.066	/
Ant.0	State1	RMC	Back Side	15	9400	1880	0.02	0.310	21.94	22.30	1.086	**0.337**	8#
Ant.0	State3	RMC	Front Side	15	9400	1880	-0.13	0.035	20.80	21.30	1.122	0.039	/
Ant.0	State3	RMC	Back Side	15	9400	1880	-0.15	0.221	20.80	21.30	1.122	0.248	/
Hotspot													
Ant.1	State3	RMC	Front Side	10	9400	1880	0.09	0.110	16.69	17.30	1.151	0.127	/
Ant.1	State3	RMC	Back Side	10	9400	1880	0.19	0.325	16.69	17.30	1.151	0.374	/
Ant.1	State3	RMC	Right Edge	10	9400	1880	-0.12	0.032	16.69	17.30	1.151	0.037	/
Ant.1	State3	RMC	Top Edge	10	9400	1880	-0.12	0.387	16.69	17.30	1.151	0.445	/
Ant.0	State3	RMC	Front Side	10	9400	1880	-0.18	0.072	20.80	21.30	1.122	0.081	/
Ant.0	State3	RMC	Back Side	10	9400	1880	0.11	0.392	20.80	21.30	1.122	0.440	/
Ant.0	State3	RMC	Left Edge	10	9400	1880	0.08	0.050	20.80	21.30	1.122	0.056	/
Ant.0	State3	RMC	Right Edge	10	9400	1880	0.04	0.044	20.80	21.30	1.122	0.049	/
Ant.0	State3	RMC	Bottom Edge	10	9400	1880	0.03	0.408	20.80	21.30	1.122	**0.458**	9#
Specific													
Antenna	Power Reduction	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	10 g Scaled SAR (W/kg)	Meas. No.
Ant.1	State1	RMC	Back Side	0	9400	1880	0.02	1.380	19.67	20.30	1.156	1.595	/
Ant.1	State1	RMC	Top Edge	0	9400	1880	-0.07	1.600	19.67	20.30	1.156	**1.850**	10#

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

10.4WCDMA Band 4

Antenna	Power Reduction	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	State2	RMC	Left Cheek	0	1312	1712.4	-0.02	0.496	19.76	20.30	1.132	0.561	/
Ant.1	State2	RMC	Left Tilt	0	1312	1712.4	0.17	0.657	19.76	20.30	1.132	0.744	/
Ant.1	State2	RMC	Right Cheek	0	1312	1712.4	0.11	0.630	19.76	20.30	1.132	0.713	/
Ant.1	State2	RMC	Right Tilt	0	1312	1712.4	-0.07	0.764	19.76	20.30	1.132	0.865	/
Ant.1	State2	RMC	Right Tilt	0	1412	1732.4	0.02	0.853	19.52	20.30	1.197	1.021	/
Ant.1	State2	RMC	Right Tilt	0	1513	1752.6	-0.01	0.898	19.73	20.30	1.140	**1.024**	11#
Ant.1	State4	RMC	Left Cheek	0	1312	1712.4	0.06	0.331	18.24	18.80	1.138	0.377	/
Ant.1	State4	RMC	Left Tilt	0	1312	1712.4	0.08	0.472	18.24	18.80	1.138	0.537	/
Ant.1	State4	RMC	Right Cheek	0	1312	1712.4	0.13	0.456	18.24	18.80	1.138	0.519	/
Ant.1	State4	RMC	Right Tilt	0	1312	1712.4	-0.08	0.523	18.24	18.80	1.138	0.595	/
Ant.0	State2&4	RMC	Left Cheek	0	1312	1712.4	0.11	0.041	23.79	23.80	1.002	0.041	/
Ant.0	State2&4	RMC	Left Tilt	0	1312	1712.4	0.19	0.020	23.79	23.80	1.002	0.020	/
Ant.0	State2&4	RMC	Right Cheek	0	1312	1712.4	0.11	0.039	23.79	23.80	1.002	0.039	/
Ant.0	State2&4	RMC	Right Tilt	0	1312	1712.4	-0.12	0.015	23.79	23.80	1.002	0.015	/
Body-worn													
Ant.1	State1	RMC	Front Side	15	1312	1712.4	0.01	0.093	19.76	20.30	1.132	0.105	/
Ant.1	State1	RMC	Back Side	15	1312	1712.4	0.13	0.180	19.76	20.30	1.132	0.204	/
Ant.1	State3	RMC	Front Side	15	1312	1712.4	0.14	0.075	19.35	19.80	1.109	0.083	/
Ant.1	State3	RMC	Back Side	15	1312	1712.4	-0.09	0.152	19.35	19.80	1.109	0.169	/
Ant.0	State1	RMC	Front Side	15	1312	1712.4	0.04	0.053	20.88	21.30	1.102	0.058	/
Ant.0	State1	RMC	Back Side	15	1312	1712.4	-0.08	0.282	20.88	21.30	1.102	**0.311**	12#
Ant.0	State3	RMC	Front Side	15	1312	1712.4	-0.15	0.025	18.40	18.80	1.096	0.027	/
Ant.0	State3	RMC	Back Side	15	1312	1712.4	-0.05	0.169	18.40	18.80	1.096	0.185	/
Hotspot													
Ant.1	State3	RMC	Front Side	10	1312	1712.4	0.09	0.171	19.35	19.80	1.109	0.190	/
Ant.1	State3	RMC	Back Side	10	1312	1712.4	-0.06	0.345	19.35	19.80	1.109	0.383	/
Ant.1	State3	RMC	Right Edge	10	1312	1712.4	0.16	0.038	19.35	19.80	1.109	0.042	/
Ant.1	State3	RMC	Top Edge	10	1312	1712.4	0.09	0.428	19.35	19.80	1.109	**0.475**	13#
Ant.0	State3	RMC	Front Side	10	1312	1712.4	-0.07	0.050	18.40	18.80	1.096	0.055	/
Ant.0	State3	RMC	Back Side	10	1312	1712.4	-0.16	0.376	18.40	18.80	1.096	0.412	/
Ant.0	State3	RMC	Left Edge	10	1312	1712.4	-0.02	0.027	18.40	18.80	1.096	0.030	/
Ant.0	State3	RMC	Right Edge	10	1312	1712.4	-0.08	0.027	18.40	18.80	1.096	0.030	/
Ant.0	State3	RMC	Bottom Edge	10	1312	1712.4	0.05	0.257	18.40	18.80	1.096	0.282	/
Specific													

Antenna	Power Reduction	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	10 g Scaled SAR (W/kg)	Meas. No.
Ant.0	State1	RMC	Back Side	0	1312	1712.4	0.00	1.870	20.88	21.30	1.102	**2.061**	14#
Ant.0	State1	RMC	Back Side	0	1412	1732.4	0.02	1.810	20.76	21.30	1.132	2.049	/
Ant.0	State1	RMC	Back Side	0	1513	1752.6	0.11	1.750	20.85	21.30	1.109	1.941	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.5WCDMA Band 5

Antenna	Power Reduction	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	State2&4	RMC	Left Cheek	0	4182	836.4	0.07	0.391	24.10	24.30	1.047	0.409	/
Ant.1	State2&4	RMC	Left Tilt	0	4182	836.4	-0.11	0.309	24.10	24.30	1.047	0.324	/
Ant.1	State2&4	RMC	Right Cheek	0	4182	836.4	-0.01	0.455	24.10	24.30	1.047	**0.476**	15#
Ant.1	State2&4	RMC	Right Tilt	0	4182	836.4	0.11	0.378	24.10	24.30	1.047	0.396	/
Ant.0	State2&4	RMC	Left Cheek	0	4182	836.4	-0.11	0.110	24.17	24.30	1.030	0.113	/
Ant.0	State2&4	RMC	Left Tilt	0	4182	836.4	0.07	0.065	24.17	24.30	1.030	0.067	/
Ant.0	State2&4	RMC	Right Cheek	0	4182	836.4	-0.06	0.085	24.17	24.30	1.030	0.088	/
Ant.0	State2&4	RMC	Right Tilt	0	4182	836.4	0.15	0.054	24.17	24.30	1.030	0.056	/
Body-worn													
Ant.1	State1&3	RMC	Front Side	15	4182	836.4	0.07	0.110	24.10	24.30	1.047	0.115	/
Ant.1	State1&3	RMC	Back Side	15	4182	836.4	0.16	0.151	24.10	24.30	1.047	0.158	/
Ant.0	State1&3	RMC	Front Side	15	4182	836.4	-0.15	0.083	24.17	24.30	1.030	0.085	/
Ant.0	State1&3	RMC	Back Side	15	4182	836.4	0.00	0.170	24.17	24.30	1.030	**0.175**	16#
Hotspot													
Ant.1	State3	RMC	Front Side	10	4182	836.4	-0.08	0.108	24.10	24.30	1.047	0.113	/
Ant.1	State3	RMC	Back Side	10	4182	836.4	0.14	0.198	24.10	24.30	1.047	0.207	/
Ant.1	State3	RMC	Right Edge	10	4182	836.4	0.04	0.154	24.10	24.30	1.047	0.161	/
Ant.1	State3	RMC	Top Edge	10	4182	836.4	0.19	0.156	24.10	24.30	1.047	0.163	/
Ant.0	State3	RMC	Front Side	10	4182	836.4	-0.03	0.091	24.17	24.30	1.030	0.094	/
Ant.0	State3	RMC	Back Side	10	4182	836.4	0.02	0.362	24.17	24.30	1.030	**0.373**	17#
Ant.0	State3	RMC	Left Edge	10	4182	836.4	0.15	0.081	24.17	24.30	1.030	0.083	/
Ant.0	State3	RMC	Right Edge	10	4182	836.4	0.12	0.160	24.17	24.30	1.030	0.165	/
Ant.0	State3	RMC	Bottom Edge	10	4182	836.4	-0.11	0.167	24.17	24.30	1.030	0.172	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.													

10.6 LTE Band 2 (20MHz Bandwidth)

Antenna	Power Reduction	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	State2	QPSK	Left Cheek	0	19100	1900	1	Mid	-0.14	0.404	18.49	18.80	1.074	0.434	/
Ant.1	State2	QPSK	Left Tilt	0	19100	1900	1	Mid	0.10	0.525	18.49	18.80	1.074	0.564	/
Ant.1	State2	QPSK	Right Cheek	0	19100	1900	1	Mid	0.05	0.514	18.49	18.80	1.074	0.552	/
Ant.1	State2	QPSK	Right Tilt	0	19100	1900	1	Mid	0.12	0.696	18.49	18.80	1.074	**0.748**	18#
Ant.1	State2	QPSK	Left Cheek	0	19100	1900	50	Mid	-0.11	0.392	18.29	18.80	1.125	0.441	/
Ant.1	State2	QPSK	Left Tilt	0	19100	1900	50	Mid	-0.01	0.488	18.29	18.80	1.125	0.549	/
Ant.1	State2	QPSK	Right Cheek	0	19100	1900	50	Mid	0.00	0.495	18.29	18.80	1.125	0.557	/
Ant.1	State2	QPSK	Right Tilt	0	19100	1900	50	Mid	-0.12	0.628	18.29	18.80	1.125	0.707	/
Ant.1	State4	QPSK	Left Cheek	0	19100	1900	1	Mid	0.03	0.345	18.19	18.30	1.026	0.354	/
Ant.1	State4	QPSK	Left Tilt	0	19100	1900	1	Mid	-0.04	0.433	18.19	18.30	1.026	0.444	/
Ant.1	State4	QPSK	Right Cheek	0	19100	1900	1	Mid	0.05	0.445	18.19	18.30	1.026	0.457	/
Ant.1	State4	QPSK	Right Tilt	0	19100	1900	1	Mid	-0.04	0.567	18.19	18.30	1.026	0.582	/
Ant.1	State4	QPSK	Left Cheek	0	19100	1900	50	Mid	0.04	0.322	17.95	18.30	1.084	0.349	/
Ant.1	State4	QPSK	Left Tilt	0	19100	1900	50	Mid	0.08	0.415	17.95	18.30	1.084	0.450	/
Ant.1	State4	QPSK	Right Cheek	0	19100	1900	50	Mid	0.11	0.438	17.95	18.30	1.084	0.475	/
Ant.1	State4	QPSK	Right Tilt	0	19100	1900	50	Mid	-0.07	0.523	17.95	18.30	1.084	0.567	/
Ant.0	State2&4	QPSK	Left Cheek	0	19100	1900	1	Mid	-0.08	0.036	22.69	23.30	1.151	0.041	/
Ant.0	State2&4	QPSK	Left Tilt	0	19100	1900	1	Mid	0.03	0.015	22.69	23.30	1.151	0.017	/
Ant.0	State2&4	QPSK	Right Cheek	0	19100	1900	1	Mid	-0.06	0.032	22.69	23.30	1.151	0.037	/
Ant.0	State2&4	QPSK	Right Tilt	0	19100	1900	1	Mid	-0.07	0.015	22.69	23.30	1.151	0.017	/
Ant.0	State2&4	QPSK	Left Cheek	0	19100	1900	50	Mid	-0.03	0.028	21.63	22.30	1.167	0.033	/
Ant.0	State2&4	QPSK	Left Tilt	0	19100	1900	50	Mid	0.00	0.012	21.63	22.30	1.167	0.014	/
Ant.0	State2&4	QPSK	Right Cheek	0	19100	1900	50	Mid	0.01	0.029	21.63	22.30	1.167	0.034	/
Ant.0	State2&4	QPSK	Right Tilt	0	19100	1900	50	Mid	-0.15	0.013	21.63	22.30	1.167	0.015	/
Body-worn															
Ant.1	State1	QPSK	Front Side	15	19100	1900	1	Mid	-0.10	0.111	20.50	20.80	1.072	0.119	/
Ant.1	State1	QPSK	Back Side	15	19100	1900	1	Mid	0.06	0.311	20.50	20.80	1.072	**0.333**	19#
Ant.1	State1	QPSK	Front Side	15	19100	1900	50	Mid	0.04	0.102	20.39	20.80	1.099	0.112	/
Ant.1	State1	QPSK	Back Side	15	19100	1900	50	Mid	0.16	0.301	20.39	20.80	1.099	0.331	/
Ant.1	State3	QPSK	Front Side	15	19100	1900	1	Mid	-0.12	0.057	18.19	18.30	1.026	0.058	/
Ant.1	State3	QPSK	Back Side	15	19100	1900	1	Mid	-0.10	0.169	18.19	18.30	1.026	0.173	/
Ant.1	State3	QPSK	Front Side	15	19100	1900	50	Mid	-0.14	0.055	17.95	18.30	1.084	0.060	/
Ant.1	State3	QPSK	Back Side	15	19100	1900	50	Mid	0.04	0.161	17.95	18.30	1.084	0.175	/
Ant.0	State1	QPSK	Front Side	15	19100	1900	1	Mid	0.14	0.052	21.96	22.30	1.081	0.056	/
Ant.0	State1	QPSK	Back Side	15	19100	1900	1	Mid	0.00	0.268	21.96	22.30	1.081	0.290	/
Ant.0	State1	QPSK	Front Side	15	19100	1900	50	Mid	0.02	0.047	21.65	22.30	1.161	0.055	/

Ant.0	State1	QPSK	Back Side	15	19100	1900	50	Mid	0.12	0.242	21.65	22.30	1.161	0.281	/
Ant.0	State3	QPSK	Front Side	15	19100	1900	1	Mid	0.07	0.038	21.01	21.30	1.069	0.041	/
Ant.0	State3	QPSK	Back Side	15	19100	1900	1	Mid	-0.18	0.202	21.01	21.30	1.069	0.216	/
Ant.0	State3	QPSK	Front Side	15	19100	1900	50	Mid	0.09	0.041	20.72	21.30	1.143	0.047	/
Ant.0	State3	QPSK	Back Side	15	19100	1900	50	Mid	-0.05	0.195	20.72	21.30	1.143	0.223	/
Hotspot															
Ant.1	State3	QPSK	Front Side	10	19100	1900	1	Mid	-0.16	0.095	18.19	18.30	1.026	0.097	/
Ant.1	State3	QPSK	Back Side	10	19100	1900	1	Mid	0.12	0.316	18.19	18.30	1.026	0.324	/
Ant.1	State3	QPSK	Right Edge	10	19100	1900	1	Mid	-0.13	0.025	18.19	18.30	1.026	0.026	/
Ant.1	State3	QPSK	Top Edge	10	19100	1900	1	Mid	0.12	0.368	18.19	18.30	1.026	**0.378**	20#
Ant.1	State3	QPSK	Front Side	10	19100	1900	50	Mid	0.01	0.083	17.95	18.30	1.084	0.090	/
Ant.1	State3	QPSK	Back Side	10	19100	1900	50	Mid	-0.12	0.265	17.95	18.30	1.084	0.287	/
Ant.1	State3	QPSK	Right Edge	10	19100	1900	50	Mid	-0.12	0.034	17.95	18.30	1.084	0.037	/
Ant.1	State3	QPSK	Top Edge	10	19100	1900	50	Mid	-0.05	0.332	17.95	18.30	1.084	0.360	/
Ant.0	State3	QPSK	Front Side	10	19100	1900	1	Mid	0.08	0.068	21.01	21.30	1.069	0.073	/
Ant.0	State3	QPSK	Back Side	10	19100	1900	1	Mid	0.13	0.349	21.01	21.30	1.069	0.373	/
Ant.0	State3	QPSK	Left Edge	10	19100	1900	1	Mid	0.08	0.041	21.01	21.30	1.069	0.044	/
Ant.0	State3	QPSK	Right Edge	10	19100	1900	1	Mid	-0.02	0.043	21.01	21.30	1.069	0.046	/
Ant.0	State3	QPSK	Bottom Edge	10	19100	1900	1	Mid	0.15	0.324	21.01	21.30	1.069	0.346	/
Ant.0	State3	QPSK	Front Side	10	19100	1900	50	Mid	0.19	0.061	20.72	21.30	1.143	0.070	/
Ant.0	State3	QPSK	Back Side	10	19100	1900	50	Mid	-0.12	0.321	20.72	21.30	1.143	0.367	/
Ant.0	State3	QPSK	Left Edge	10	19100	1900	50	Mid	0.18	0.039	20.72	21.30	1.143	0.045	/
Ant.0	State3	QPSK	Right Edge	10	19100	1900	50	Mid	0.16	0.041	20.72	21.30	1.143	0.047	/
Ant.0	State3	QPSK	Bottom Edge	10	19100	1900	50	Mid	0.14	0.295	20.72	21.30	1.143	0.337	/

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

10.7 LTE Band 4 (20MHz Bandwidth)

Antenna	Power Reduction	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	State2	QPSK	Left Cheek	0	20175	1732.5	1	Mid	0.16	0.621	20.30	20.30	1.000	0.621	/
Ant.1	State2	QPSK	Left Tilt	0	20175	1732.5	1	Mid	-0.06	0.799	20.30	20.30	1.000	0.799	/
Ant.1	State2	QPSK	Right Cheek	0	20175	1732.5	1	Mid	-0.15	0.755	20.30	20.30	1.000	0.755	/
Ant.1	State2	QPSK	Right Tilt	0	20175	1732.5	1	Mid	-0.09	0.881	20.30	20.30	1.000	**0.881**	21#
Ant.1	State2	QPSK	Left Cheek	0	20300	1745	50	Mid	0.01	0.543	20.30	20.30	1.000	0.543	/
Ant.1	State2	QPSK	Left Tilt	0	20300	1745	50	Mid	0.12	0.711	20.30	20.30	1.000	0.711	/
Ant.1	State2	QPSK	Right Cheek	0	20300	1745	50	Mid	0.15	0.695	20.30	20.30	1.000	0.695	/
Ant.1	State2	QPSK	Right Tilt	0	20300	1745	50	Mid	0.11	0.812	20.30	20.30	1.000	0.812	/
Ant.1	State2	QPSK	Right Tilt	0	20050	1720	1	Low	0.15	0.802	20.20	20.30	1.023	0.820	/
Ant.1	State2	QPSK	Right Tilt	0	20300	1745	1	Low	0.05	0.822	20.25	20.30	1.012	0.832	/
Ant.1	State2	QPSK	Right Tilt	0	20050	1720	50	Mid	-0.08	0.793	20.29	20.30	1.002	0.795	/
Ant.1	State2	QPSK	Right Tilt	0	20175	1732.5	50	Low	0.04	0.785	20.25	20.30	1.012	0.794	/
Ant.1	State2	QPSK	Right Tilt	0	20175	1732.5	100	Low	-0.19	0.823	20.25	20.30	1.012	0.833	/
Ant.1	State4	QPSK	Left Cheek	0	20175	1732.5	1	High	-0.06	0.373	18.77	18.80	1.007	0.376	/
Ant.1	State4	QPSK	Left Tilt	0	20175	1732.5	1	High	-0.08	0.497	18.77	18.80	1.007	0.500	/
Ant.1	State4	QPSK	Right Cheek	0	20175	1732.5	1	High	0.02	0.447	18.77	18.80	1.007	0.450	/
Ant.1	State4	QPSK	Right Tilt	0	20175	1732.5	1	High	-0.06	0.514	18.77	18.80	1.007	0.518	/
Ant.1	State4	QPSK	Left Cheek	0	20300	1745	50	High	0.19	0.325	18.79	18.80	1.002	0.326	/
Ant.1	State4	QPSK	Left Tilt	0	20300	1745	50	High	0.09	0.438	18.79	18.80	1.002	0.439	/
Ant.1	State4	QPSK	Right Cheek	0	20300	1745	50	High	-0.03	0.415	18.79	18.80	1.002	0.416	/
Ant.1	State4	QPSK	Right Tilt	0	20300	1745	50	High	-0.05	0.472	18.79	18.80	1.002	0.473	/
Ant.0	State2&4	QPSK	Left Cheek	0	20050	1720	1	High	-0.12	0.032	22.29	23.30	1.262	0.040	/
Ant.0	State2&4	QPSK	Left Tilt	0	20050	1720	1	High	0.05	0.016	22.29	23.30	1.262	0.020	/
Ant.0	State2&4	QPSK	Right Cheek	0	20050	1720	1	High	0.02	0.033	22.29	23.30	1.262	0.042	/
Ant.0	State2&4	QPSK	Right Tilt	0	20050	1720	1	High	0.11	0.014	22.29	23.30	1.262	0.018	/
Ant.0	State2&4	QPSK	Left Cheek	0	20300	1745	50	Low	0.08	0.023	21.26	23.30	1.600	0.037	/
Ant.0	State2&4	QPSK	Left Tilt	0	20300	1745	50	Low	0.03	0.013	21.26	23.30	1.600	0.021	/
Ant.0	State2&4	QPSK	Right Cheek	0	20300	1745	50	Low	0.10	0.025	21.26	23.30	1.600	0.040	/
Ant.0	State2&4	QPSK	Right Tilt	0	20300	1745	50	Low	-0.05	0.012	21.26	23.30	1.600	0.019	/
Body-worn															
Ant.1	State1&3	QPSK	Front Side	15	20175	1732.5	1	Mid	0.07	0.091	20.30	20.30	1.000	0.091	/
Ant.1	State1&3	QPSK	Back Side	15	20175	1732.5	1	Mid	0.04	0.179	20.30	20.30	1.000	0.179	/
Ant.1	State1&3	QPSK	Front Side	15	20300	1745	50	Mid	0.10	0.083	20.30	20.30	1.000	0.083	/
Ant.1	State1&3	QPSK	Back Side	15	20300	1745	50	Mid	0.00	0.161	20.30	20.30	1.000	0.161	/
Ant.0	State1	QPSK	Front Side	15	20050	1720	1	Mid	-0.18	0.054	21.30	21.30	1.000	0.054	/
Ant.0	State1	QPSK	Back Side	15	20050	1720	1	Mid	0.02	0.312	21.30	21.30	1.000	**0.312**	22#

Ant.0	State1	QPSK	Front Side	15	20050	1720	50	Low	-0.16	0.045	21.27	21.30	1.007	0.045	/
Ant.0	State1	QPSK	Back Side	15	20050	1720	50	Low	-0.14	0.301	21.27	21.30	1.007	0.303	/
Ant.0	State3	QPSK	Front Side	15	20050	1720	1	Mid	-0.15	0.031	19.27	19.30	1.007	0.031	/
Ant.0	State3	QPSK	Back Side	15	20050	1720	1	Mid	0.12	0.205	19.27	19.30	1.007	0.206	/
Ant.0	State3	QPSK	Front Side	15	20050	1720	50	Low	-0.02	0.029	19.28	19.30	1.005	0.029	/
Ant.0	State3	QPSK	Back Side	15	20050	1720	50	Low	-0.14	0.195	19.28	19.30	1.005	0.196	/
Hotspot															
Ant.1	State3	QPSK	Front Side	10	20175	1732.5	1	Mid	0.12	0.202	20.30	20.30	1.000	0.202	/
Ant.1	State3	QPSK	Back Side	10	20175	1732.5	1	Mid	-0.13	0.432	20.30	20.30	1.000	0.432	/
Ant.1	State3	QPSK	Right Edge	10	20175	1732.5	1	Mid	0.13	0.045	20.30	20.30	1.000	0.045	/
Ant.1	State3	QPSK	Top Edge	10	20175	1732.5	1	Mid	0.01	0.520	20.30	20.30	1.000	**0.520**	23#
Ant.1	State3	QPSK	Front Side	10	20300	1745	50	Mid	0.01	0.195	20.30	20.30	1.000	0.195	/
Ant.1	State3	QPSK	Back Side	10	20300	1745	50	Mid	-0.04	0.402	20.30	20.30	1.000	0.402	/
Ant.1	State3	QPSK	Right Edge	10	20300	1745	50	Mid	-0.18	0.041	20.30	20.30	1.000	0.041	/
Ant.1	State3	QPSK	Top Edge	10	20300	1745	50	Mid	0.07	0.487	20.30	20.30	1.000	0.487	/
Ant.0	State3	QPSK	Front Side	10	20050	1720	1	Mid	0.16	0.057	19.27	19.30	1.007	0.057	/
Ant.0	State3	QPSK	Back Side	10	20050	1720	1	Mid	-0.02	0.430	19.27	19.30	1.007	0.433	/
Ant.0	State3	QPSK	Left Edge	10	20050	1720	1	Mid	0.17	0.027	19.27	19.30	1.007	0.027	/
Ant.0	State3	QPSK	Right Edge	10	20050	1720	1	Mid	0.19	0.031	19.27	19.30	1.007	0.031	/
Ant.0	State3	QPSK	Bottom Edge	10	20050	1720	1	Mid	-0.09	0.293	19.27	19.30	1.007	0.295	/
Ant.0	State3	QPSK	Front Side	10	20050	1720	50	Low	0.14	0.051	19.28	19.30	1.005	0.051	/
Ant.0	State3	QPSK	Back Side	10	20050	1720	50	Low	-0.05	0.402	19.28	19.30	1.005	0.404	/
Ant.0	State3	QPSK	Left Edge	10	20050	1720	50	Low	0.00	0.025	19.28	19.30	1.005	0.025	/
Ant.0	State3	QPSK	Right Edge	10	20050	1720	50	Low	-0.14	0.032	19.28	19.30	1.005	0.032	/
Ant.0	State3	QPSK	Bottom Edge	10	20050	1720	50	Low	0.04	0.288	19.28	19.30	1.005	0.289	/

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

10.8 LTE Band 5 (20MHz Bandwidth)

Antenna	Power Reduction	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	State2&4	QPSK	Left Cheek	0	20525	836.5	1	Mid	-0.10	0.375	23.65	24.30	1.161	0.435	/
Ant.1	State2&4	QPSK	Left Tilt	0	20525	836.5	1	Mid	0.11	0.301	23.65	24.30	1.161	0.349	/
Ant.1	State2&4	QPSK	Right Cheek	0	20525	836.5	1	Mid	-0.01	0.439	23.65	24.30	1.161	**0.510**	24#
Ant.1	State2&4	QPSK	Right Tilt	0	20525	836.5	1	Mid	-0.14	0.285	23.65	24.30	1.161	0.331	/
Ant.1	State2&4	QPSK	Left Cheek	0	20525	836.5	25	Mid	-0.17	0.244	22.43	23.30	1.222	0.298	/
Ant.1	State2&4	QPSK	Left Tilt	0	20525	836.5	25	Mid	-0.03	0.222	22.43	23.30	1.222	0.271	/
Ant.1	State2&4	QPSK	Right Cheek	0	20525	836.5	25	Mid	-0.06	0.249	22.43	23.30	1.222	0.304	/
Ant.1	State2&4	QPSK	Right Tilt	0	20525	836.5	25	Mid	-0.08	0.213	22.43	23.30	1.222	0.260	/
Ant.0	State2&4	QPSK	Left Cheek	0	20525	836.5	1	Mid	-0.07	0.106	23.40	24.30	1.230	0.130	/
Ant.0	State2&4	QPSK	Left Tilt	0	20525	836.5	1	Mid	-0.16	0.064	23.40	24.30	1.230	0.079	/
Ant.0	State2&4	QPSK	Right Cheek	0	20525	836.5	1	Mid	0.11	0.089	23.40	24.30	1.230	0.109	/
Ant.0	State2&4	QPSK	Right Tilt	0	20525	836.5	1	Mid	-0.04	0.052	23.40	24.30	1.230	0.064	/
Ant.0	State2&4	QPSK	Left Cheek	0	20525	836.5	25	Mid	-0.14	0.078	22.21	23.30	1.285	0.100	/
Ant.0	State2&4	QPSK	Left Tilt	0	20525	836.5	25	Mid	-0.13	0.051	22.21	23.30	1.285	0.066	/
Ant.0	State2&4	QPSK	Right Cheek	0	20525	836.5	25	Mid	0.17	0.063	22.21	23.30	1.285	0.081	/
Ant.0	State2&4	QPSK	Right Tilt	0	20525	836.5	25	Mid	0.03	0.038	22.21	23.30	1.285	0.049	/
Body-worn															
Ant.1	State1&3	QPSK	Front Side	15	20525	836.5	1	Mid	-0.13	0.102	23.65	24.30	1.161	0.118	/
Ant.1	State1&3	QPSK	Back Side	15	20525	836.5	1	Mid	-0.13	0.139	23.65	24.30	1.161	0.161	/
Ant.1	State1&3	QPSK	Front Side	15	20525	836.5	25	Mid	-0.04	0.080	22.43	23.30	1.222	0.098	/
Ant.1	State1&3	QPSK	Back Side	15	20525	836.5	25	Mid	0.09	0.111	22.43	23.30	1.222	0.136	/
Ant.0	State1&3	QPSK	Front Side	15	20525	836.5	1	Mid	-0.01	0.075	23.40	24.30	1.230	0.092	/
Ant.0	State1&3	QPSK	Back Side	15	20525	836.5	1	Mid	0.01	0.150	23.40	24.30	1.230	**0.185**	25#
Ant.0	State1&3	QPSK	Front Side	15	20525	836.5	25	Mid	-0.17	0.062	22.21	23.30	1.285	0.080	/
Ant.0	State1&3	QPSK	Back Side	15	20525	836.5	25	Mid	0.05	0.123	22.21	23.30	1.285	0.158	/
Hotspot															
Ant.1	State3	QPSK	Front Side	10	20525	836.5	1	Mid	-0.12	0.100	23.65	24.30	1.161	0.116	/
Ant.1	State3	QPSK	Back Side	10	20525	836.5	1	Mid	0.04	0.189	23.65	24.30	1.161	0.219	/
Ant.1	State3	QPSK	Right Edge	10	20525	836.5	1	Mid	0.06	0.146	23.65	24.30	1.161	0.170	/
Ant.1	State3	QPSK	Top Edge	10	20525	836.5	1	Mid	-0.09	0.174	23.65	24.30	1.161	0.202	/
Ant.1	State3	QPSK	Front Side	10	20525	836.5	25	Mid	-0.19	0.079	22.43	23.30	1.222	0.097	/
Ant.1	State3	QPSK	Back Side	10	20525	836.5	25	Mid	-0.16	0.145	22.43	23.30	1.222	0.177	/
Ant.1	State3	QPSK	Right Edge	10	20525	836.5	25	Mid	-0.15	0.114	22.43	23.30	1.222	0.139	/
Ant.1	State3	QPSK	Top Edge	10	20525	836.5	25	Mid	0.04	0.132	22.43	23.30	1.222	0.161	/
Ant.0	State3	QPSK	Front Side	10	20525	836.5	1	Mid	-0.07	0.082	23.40	24.30	1.230	0.101	/
Ant.0	State3	QPSK	Back Side	10	20525	836.5	1	Mid	0.06	0.372	23.40	24.30	1.230	**0.458**	26#

Ant.0	State3	QPSK	Left Edge	10	20525	836.5	1	Mid	0.18	0.073	23.40	24.30	1.230	0.090	/
Ant.0	State3	QPSK	Right Edge	10	20525	836.5	1	Mid	0.19	0.141	23.40	24.30	1.230	0.173	/
Ant.0	State3	QPSK	Bottom Edge	10	20525	836.5	1	Mid	-0.19	0.140	23.40	24.30	1.230	0.172	/
Ant.0	State3	QPSK	Front Side	10	20525	836.5	25	Mid	0.02	0.061	22.21	23.30	1.285	0.078	/
Ant.0	State3	QPSK	Back Side	10	20525	836.5	25	Mid	-0.11	0.300	22.21	23.30	1.285	0.386	/
Ant.0	State3	QPSK	Left Edge	10	20525	836.5	25	Mid	-0.11	0.051	22.21	23.30	1.285	0.066	/
Ant.0	State3	QPSK	Right Edge	10	20525	836.5	25	Mid	-0.18	0.108	22.21	23.30	1.285	0.139	/
Ant.0	State3	QPSK	Bottom Edge	10	20525	836.5	25	Mid	0.11	0.112	22.21	23.30	1.285	0.144	/

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

10.9 LTE Band 7 (20MHz Bandwidth)

Antenna	Power Reduction	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	State2	QPSK	Left Cheek	0	21100	2535	1	Mid	0.03	0.352	18.68	19.30	1.153	0.406	/
Ant.1	State2	QPSK	Left Tilt	0	21100	2535	1	Mid	0.05	0.293	18.68	19.30	1.153	0.338	/
Ant.1	State2	QPSK	Right Cheek	0	21100	2535	1	Mid	0.02	0.830	18.68	19.30	1.153	**0.957**	27#
Ant.1	State2	QPSK	Right Tilt	0	21100	2535	1	Mid	0.09	0.602	18.68	19.30	1.153	0.694	/
Ant.1	State2	QPSK	Left Cheek	0	21100	2535	50	Low	-0.11	0.322	18.29	19.30	1.262	0.406	/
Ant.1	State2	QPSK	Left Tilt	0	21100	2535	50	Low	-0.19	0.253	18.29	19.30	1.262	0.319	/
Ant.1	State2	QPSK	Right Cheek	0	21100	2535	50	Low	-0.03	0.741	18.29	19.30	1.262	0.935	/
Ant.1	State2	QPSK	Right Tilt	0	21100	2535	50	Low	0.14	0.532	18.29	19.30	1.262	0.671	/
Ant.1	State2	QPSK	Right Cheek	0	20850	2510	1	Mid	0.18	0.605	18.28	19.30	1.265	0.765	/
Ant.1	State2	QPSK	Right Cheek	0	21350	2560	1	Low	0.13	0.625	18.34	19.30	1.247	0.779	/
Ant.1	State2	QPSK	Right Cheek	0	20850	2510	50	Low	0.06	0.585	18.17	19.30	1.297	0.759	/
Ant.1	State2	QPSK	Right Cheek	0	21350	2560	50	Low	0.13	0.579	18.32	19.30	1.253	0.725	/
Ant.1	State2	QPSK	Right Cheek	0	21350	2560	100	Mid	-0.19	0.593	18.30	19.30	1.259	0.747	/
Ant.1	Stat4	QPSK	Left Cheek	0	20850	2510	1	Mid	-0.19	0.279	18.40	18.80	1.096	0.306	/
Ant.1	Stat4	QPSK	Left Tilt	0	20850	2510	1	Mid	-0.07	0.211	18.40	18.80	1.096	0.231	/
Ant.1	Stat4	QPSK	Right Cheek	0	20850	2510	1	Mid	0.13	0.658	18.40	18.80	1.096	0.721	/
Ant.1	Stat4	QPSK	Right Tilt	0	20850	2510	1	Mid	-0.13	0.462	18.40	18.80	1.096	0.506	/
Ant.1	Stat4	QPSK	Left Cheek	0	21100	2535	50	Low	-0.18	0.281	18.17	18.80	1.156	0.325	/
Ant.1	Stat4	QPSK	Left Tilt	0	21100	2535	50	Low	-0.19	0.205	18.17	18.80	1.156	0.237	/
Ant.1	Stat4	QPSK	Right Cheek	0	21100	2535	50	Low	0.19	0.603	18.17	18.80	1.156	0.697	/
Ant.1	Stat4	QPSK	Right Tilt	0	21100	2535	50	Low	-0.04	0.452	18.17	18.80	1.156	0.523	/
Ant.0	State2&4	QPSK	Left Cheek	0	21100	2535	1	Mid	-0.08	0.069	22.31	23.30	1.256	0.087	/
Ant.0	State2&4	QPSK	Left Tilt	0	21100	2535	1	Mid	-0.16	0.045	22.31	23.30	1.256	0.057	/
Ant.0	State2&4	QPSK	Right Cheek	0	21100	2535	1	Mid	0.11	0.105	22.31	23.30	1.256	0.132	/
Ant.0	State2&4	QPSK	Right Tilt	0	21100	2535	1	Mid	-0.05	0.055	22.31	23.30	1.256	0.069	/
Ant.0	State2&4	QPSK	Left Cheek	0	21100	2535	50	High	0.05	0.053	20.92	22.30	1.374	0.073	/
Ant.0	State2&4	QPSK	Left Tilt	0	21100	2535	50	High	-0.18	0.038	20.92	22.30	1.374	0.052	/
Ant.0	State2&4	QPSK	Right Cheek	0	21100	2535	50	High	0.17	0.091	20.92	22.30	1.374	0.125	/
Ant.0	State2&4	QPSK	Right Tilt	0	21100	2535	50	High	-0.09	0.042	20.92	22.30	1.374	0.058	/
Body-worn															
Ant.1	State1	QPSK	Front Side	15	21100	2535	1	Mid	0.02	0.147	20.15	20.80	1.161	0.171	/
Ant.1	State1	QPSK	Back Side	15	21100	2535	1	Mid	-0.05	0.274	20.15	20.80	1.161	**0.318**	28#
Ant.1	State1	QPSK	Front Side	15	21100	2535	50	Mid	-0.17	0.120	19.76	20.80	1.271	0.153	/
Ant.1	State1	QPSK	Back Side	15	21100	2535	50	Mid	-0.18	0.231	19.76	20.80	1.271	0.294	/
Ant.1	State3	QPSK	Front Side	15	21100	2535	1	Mid	-0.14	0.091	17.84	18.30	1.112	0.101	/
Ant.1	State3	QPSK	Back Side	15	21100	2535	1	Mid	-0.02	0.168	17.84	18.30	1.112	0.187	/

Ant.1	State3	QPSK	Front Side	15	21100	2535	50	Mid	0.18	0.085	17.72	18.30	1.143	0.097	/
Ant.1	State3	QPSK	Back Side	15	21100	2535	50	Mid	0.00	0.159	17.72	18.30	1.143	0.182	/
Ant.0	State1	QPSK	Front Side	15	21100	2535	1	Mid	0.04	0.065	22.31	23.30	1.256	0.082	/
Ant.0	State1	QPSK	Back Side	15	21100	2535	1	Mid	0.18	0.242	22.31	23.30	1.256	0.304	/
Ant.0	State1	QPSK	Front Side	15	21100	2535	50	Mid	-0.10	0.051	20.92	22.30	1.374	0.070	/
Ant.0	State1	QPSK	Back Side	15	21100	2535	50	Mid	0.18	0.190	20.92	22.30	1.374	0.261	/
Ant.0	State3	QPSK	Front Side	15	21100	2535	1	Mid	-0.04	0.035	20.21	20.80	1.146	0.040	/
Ant.0	State3	QPSK	Back Side	15	21100	2535	1	Mid	-0.05	0.132	20.21	20.80	1.146	0.151	/
Ant.0	State3	QPSK	Front Side	15	21100	2535	50	Low	0.14	0.031	19.96	20.80	1.213	0.038	/
Ant.0	State3	QPSK	Back Side	15	21100	2535	50	Low	-0.01	0.105	19.96	20.80	1.213	0.127	/
Hotspot															
Ant.1	State3	QPSK	Front Side	10	21100	2535	1	Mid	-0.12	0.177	17.84	18.30	1.112	0.197	/
Ant.1	State3	QPSK	Back Side	10	21100	2535	1	Mid	0.02	0.505	17.84	18.30	1.112	**0.562**	29#
Ant.1	State3	QPSK	Right Edge	10	21100	2535	1	Mid	-0.07	0.238	17.84	18.30	1.112	0.265	/
Ant.1	State3	QPSK	Top Edge	10	21100	2535	1	Mid	0.14	0.245	17.84	18.30	1.112	0.272	/
Ant.1	State3	QPSK	Front Side	10	21100	2535	50	Mid	0.04	0.170	17.72	18.30	1.143	0.194	/
Ant.1	State3	QPSK	Back Side	10	21100	2535	50	Mid	0.18	0.462	17.72	18.30	1.143	0.528	/
Ant.1	State3	QPSK	Right Edge	10	21100	2535	50	Mid	-0.01	0.233	17.72	18.30	1.143	0.266	/
Ant.1	State3	QPSK	Top Edge	10	21100	2535	50	Mid	0.16	0.238	17.72	18.30	1.143	0.272	/
Ant.0	State3	QPSK	Front Side	10	21100	2535	1	Mid	-0.07	0.058	20.21	20.80	1.146	0.066	/
Ant.0	State3	QPSK	Back Side	10	21100	2535	1	Mid	-0.05	0.256	20.21	20.80	1.146	0.293	/
Ant.0	State3	QPSK	Left Edge	10	21100	2535	1	Mid	0.15	0.098	20.21	20.80	1.146	0.112	/
Ant.0	State3	QPSK	Right Edge	10	21100	2535	1	Mid	0.11	0.028	20.21	20.80	1.146	0.032	/
Ant.0	State3	QPSK	Bottom Edge	10	21100	2535	1	Mid	0.09	0.116	20.21	20.80	1.146	0.133	/
Ant.0	State3	QPSK	Front Side	10	21100	2535	50	Low	0.06	0.055	19.96	20.80	1.213	0.067	/
Ant.0	State3	QPSK	Back Side	10	21100	2535	50	Low	0.02	0.243	19.96	20.80	1.213	0.295	/
Ant.0	State3	QPSK	Left Edge	10	21100	2535	50	Low	-0.12	0.079	19.96	20.80	1.213	0.096	/
Ant.0	State3	QPSK	Right Edge	10	21100	2535	50	Low	-0.15	0.022	19.96	20.80	1.213	0.027	/
Ant.0	State3	QPSK	Bottom Edge	10	21100	2535	50	Low	0.13	0.103	19.96	20.80	1.213	0.125	/
Specific															
Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Ant.1	State1	QPSK	Back Side	0	21100	2535	1	Mid	0.03	1.630	20.15	20.80	1.161	**1.892**	30#
Ant.1	State1	QPSK	Back Side	0	21100	2535	50	Mid	0.03	1.480	19.76	20.80	1.271	1.881	/

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

10.10 LTE Band 13 (10MHz Bandwidth)

Antenna	Power Reduction	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	State2&4	QPSK	Left Cheek	0	23230	782	1	Mid	-0.01	0.253	23.76	24.30	1.132	0.286	/
Ant.1	State2&4	QPSK	Left Tilt	0	23230	782	1	Mid	0.00	0.213	23.76	24.30	1.132	0.241	/
Ant.1	State2&4	QPSK	Right Cheek	0	23230	782	1	Mid	-0.02	0.292	23.76	24.30	1.132	**0.331**	31#
Ant.1	State2&4	QPSK	Right Tilt	0	23230	782	1	Mid	0.19	0.209	23.76	24.30	1.132	0.237	/
Ant.1	State2&4	QPSK	Left Cheek	0	23230	782	25	Low	-0.01	0.195	22.59	23.30	1.178	0.230	/
Ant.1	State2&4	QPSK	Left Tilt	0	23230	782	25	Low	-0.04	0.162	22.59	23.30	1.178	0.191	/
Ant.1	State2&4	QPSK	Right Cheek	0	23230	782	25	Low	0.10	0.257	22.59	23.30	1.178	0.303	/
Ant.1	State2&4	QPSK	Right Tilt	0	23230	782	25	Low	0.03	0.158	22.59	23.30	1.178	0.186	/
Ant.0	State2&4	QPSK	Left Cheek	0	23230	782	1	Mid	-0.11	0.055	23.86	24.30	1.107	0.061	/
Ant.0	State2&4	QPSK	Left Tilt	0	23230	782	1	Mid	-0.10	0.025	23.86	24.30	1.107	0.028	/
Ant.0	State2&4	QPSK	Right Cheek	0	23230	782	1	Mid	0.12	0.033	23.86	24.30	1.107	0.037	/
Ant.0	State2&4	QPSK	Right Tilt	0	23230	782	1	Mid	0.08	0.019	23.86	24.30	1.107	0.021	/
Ant.0	State2&4	QPSK	Left Cheek	0	23230	782	25	High	-0.18	0.047	22.74	23.30	1.138	0.053	/
Ant.0	State2&4	QPSK	Left Tilt	0	23230	782	25	High	-0.11	0.021	22.74	23.30	1.138	0.024	/
Ant.0	State2&4	QPSK	Right Cheek	0	23230	782	25	High	-0.17	0.028	22.74	23.30	1.138	0.032	/
Ant.0	State2&4	QPSK	Right Tilt	0	23230	782	25	High	-0.05	0.016	22.74	23.30	1.138	0.018	/
Body-worn															
Ant.1	State1&3	QPSK	Front Side	15	23230	782	1	Mid	0.06	0.103	23.76	24.30	1.132	0.117	/
Ant.1	State1&3	QPSK	Back Side	15	23230	782	1	Mid	-0.02	0.171	23.76	24.30	1.132	**0.194**	32#
Ant.1	State1&3	QPSK	Front Side	15	23230	782	25	Low	-0.10	0.083	22.59	23.30	1.178	0.098	/
Ant.1	State1&3	QPSK	Back Side	15	23230	782	25	Low	-0.16	0.151	22.59	23.30	1.178	0.178	/
Ant.0	State1&3	QPSK	Front Side	15	23230	782	1	Mid	-0.12	0.052	23.86	24.30	1.107	0.058	/
Ant.0	State1&3	QPSK	Back Side	15	23230	782	1	Mid	-0.09	0.105	23.86	24.30	1.107	0.116	/
Ant.0	State1&3	QPSK	Front Side	15	23230	782	25	High	-0.03	0.034	22.74	23.30	1.138	0.039	/
Ant.0	State1&3	QPSK	Back Side	15	23230	782	25	High	0.14	0.091	22.74	23.30	1.138	0.104	/
Hotspot															
Ant.1	State3	QPSK	Front Side	10	23230	782	1	Mid	0.17	0.097	23.76	24.30	1.132	0.110	/
Ant.1	State3	QPSK	Back Side	10	23230	782	1	Mid	-0.14	0.169	23.76	24.30	1.132	0.191	/
Ant.1	State3	QPSK	Right Edge	10	23230	782	1	Mid	0.12	0.175	23.76	24.30	1.132	0.198	/
Ant.1	State3	QPSK	Top Edge	10	23230	782	1	Mid	-0.06	0.104	23.76	24.30	1.132	0.118	/
Ant.1	State3	QPSK	Front Side	10	23230	782	25	Low	0.19	0.075	22.59	23.30	1.178	0.088	/
Ant.1	State3	QPSK	Back Side	10	23230	782	25	Low	0.17	0.134	22.59	23.30	1.178	0.158	/
Ant.1	State3	QPSK	Right Edge	10	23230	782	25	Low	0.09	0.136	22.59	23.30	1.178	0.160	/
Ant.1	State3	QPSK	Top Edge	10	23230	782	25	Low	0.03	0.081	23.86	24.30	1.107	0.090	/
Ant.0	State3	QPSK	Front Side	10	23230	782	1	Low	-0.04	0.059	23.86	24.30	1.107	0.065	/
Ant.0	State3	QPSK	Back Side	10	23230	782	1	Low	0.01	0.195	23.86	24.30	1.107	**0.216**	33#

Ant.0	State3	QPSK	Left Edge	10	23230	782	1	Low	-0.06	0.048	23.86	24.30	1.107	0.053	/
Ant.0	State3	QPSK	Right Edge	10	23230	782	1	Low	0.03	0.116	23.86	24.30	1.107	0.128	/
Ant.0	State3	QPSK	Bottom Edge	10	23230	782	1	Low	-0.05	0.102	23.86	24.30	1.107	0.113	/
Ant.0	State3	QPSK	Front Side	10	23230	782	25	High	-0.05	0.042	22.74	23.30	1.138	0.048	/
Ant.0	State3	QPSK	Back Side	10	23230	782	25	High	0.17	0.169	22.74	23.30	1.138	0.192	/
Ant.0	State3	QPSK	Left Edge	10	23230	782	25	High	-0.19	0.000	22.74	23.30	1.138	0.000	/
Ant.0	State3	QPSK	Right Edge	10	23230	782	25	High	-0.15	0.088	22.74	23.30	1.138	0.100	/
Ant.0	State3	QPSK	Bottom Edge	10	23230	782	25	High	0.16	0.079	22.74	23.30	1.138	0.090	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.11 LTE Band 66 (20MHz Bandwidth)

Antenna	Power Reduction	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	State2	QPSK	Left Cheek	0	132322	1745	1	Mid	0.18	0.532	19.69	20.30	1.151	0.612	/
Ant.1	State2	QPSK	Left Tilt	0	132322	1745	1	Mid	0.11	0.621	19.69	20.30	1.151	0.715	/
Ant.1	State2	QPSK	Right Cheek	0	132322	1745	1	Mid	-0.06	0.848	19.69	20.30	1.151	0.976	/
Ant.1	State2	QPSK	Right Tilt	0	132322	1745	1	Mid	-0.04	0.915	19.69	20.30	1.151	1.053	/
Ant.1	State2	QPSK	Left Cheek	0	132322	1745	50	Mid	-0.16	0.485	19.38	20.30	1.236	0.599	/
Ant.1	State2	QPSK	Left Tilt	0	132322	1745	50	Mid	-0.11	0.566	19.38	20.30	1.236	0.700	/
Ant.1	State2	QPSK	Right Cheek	0	132322	1745	50	Mid	0.06	0.781	19.38	20.30	1.236	0.965	/
Ant.1	State2	QPSK	Right Tilt	0	132322	1745	50	Mid	0.04	0.795	19.38	20.30	1.236	0.983	/
Ant.1	State2	QPSK	Right Cheek	0	132072	1720	1	Mid	0.03	0.725	19.44	20.30	1.219	0.884	/
Ant.1	State2	QPSK	Right Cheek	0	132572	1770	1	Mid	0.02	0.835	19.52	20.30	1.197	0.999	/
Ant.1	State2	QPSK	Right Cheek	0	132072	1720	50	Low	0.01	0.573	19.38	20.30	1.236	0.708	/
Ant.1	State2	QPSK	Right Cheek	0	132572	1770	50	High	0.05	0.701	19.32	20.30	1.253	0.878	/
Ant.1	State2	QPSK	Right Cheek	0	132322	1745	100	Low	0.07	0.835	19.38	20.30	1.236	1.032	/
Ant.1	State2	QPSK	Right Tilt	0	132072	1720	1	Mid	-0.16	0.801	19.44	20.30	1.219	0.976	/
Ant.1	State2	QPSK	Right Tilt	0	132572	1770	1	Mid	0.07	0.956	19.52	20.30	1.197	**1.144**	34#
Ant.1	State2	QPSK	Right Tilt	0	132072	1720	50	Low	-0.12	0.655	19.38	20.30	1.236	0.810	/
Ant.1	State2	QPSK	Right Tilt	0	132572	1770	50	High	-0.18	0.805	19.32	20.30	1.253	1.009	/
Ant.1	State2	QPSK	Right Tilt	0	132322	1745	100	Low	0.18	0.835	19.38	20.30	1.236	1.032	/
Ant.1	State4	QPSK	Left Cheek	0	132572	1770	1	Mid	-0.15	0.368	18.43	18.80	1.089	0.401	/
Ant.1	State4	QPSK	Left Tilt	0	132572	1770	1	Mid	0.10	0.413	18.43	18.80	1.089	0.450	/
Ant.1	State4	QPSK	Right Cheek	0	132572	1770	1	Mid	0.05	0.595	18.43	18.80	1.089	0.648	/
Ant.1	State4	QPSK	Right Tilt	0	132572	1770	1	Mid	0.19	0.617	18.43	18.80	1.089	0.672	/
Ant.1	State4	QPSK	Left Cheek	0	132572	1770	50	Mid	0.07	0.340	18.15	18.80	1.161	0.395	/
Ant.1	State4	QPSK	Left Tilt	0	132572	1770	50	Mid	-0.15	0.395	18.15	18.80	1.161	0.459	/
Ant.1	State4	QPSK	Right Cheek	0	132572	1770	50	Mid	-0.09	0.513	18.15	18.80	1.161	0.596	/
Ant.1	State4	QPSK	Right Tilt	0	132572	1770	50	Mid	0.07	0.546	18.15	18.80	1.161	0.634	/
Ant.0	State2&4	QPSK	Left Cheek	0	132322	1745	1	Mid	-0.05	0.034	23.52	23.80	1.067	0.036	/
Ant.0	State2&4	QPSK	Left Tilt	0	132322	1745	1	Mid	-0.09	0.017	23.52	23.80	1.067	0.018	/
Ant.0	State2&4	QPSK	Right Cheek	0	132322	1745	1	Mid	0.14	0.032	23.52	23.80	1.067	0.034	/
Ant.0	State2&4	QPSK	Right Tilt	0	132322	1745	1	Mid	-0.08	0.015	23.52	23.80	1.067	0.016	/
Ant.0	State2&4	QPSK	Left Cheek	0	132322	1745	50	Mid	-0.07	0.027	22.27	22.80	1.130	0.031	/
Ant.0	State2&4	QPSK	Left Tilt	0	132322	1745	50	Mid	0.10	0.012	22.27	22.80	1.130	0.014	/
Ant.0	State2&4	QPSK	Right Cheek	0	132322	1745	50	Mid	-0.06	0.024	22.27	22.80	1.130	0.027	/
Ant.0	State2&4	QPSK	Right Tilt	0	132322	1745	50	Mid	-0.04	0.013	22.27	22.80	1.130	0.015	/
Body-worn															
Ant.1	State1	QPSK	Front Side	15	132322	1745	1	Low	-0.13	0.106	20.13	20.80	1.167	0.124	/

Ant.1	State1	QPSK	Back Side	15	132322	1745	1	Low	-0.05	0.209	20.13	20.80	1.167	0.244	/
Ant.1	State1	QPSK	Front Side	15	132322	1745	50	Mid	0.08	0.102	19.91	20.80	1.227	0.125	/
Ant.1	State1	QPSK	Back Side	15	132322	1745	50	Mid	-0.09	0.201	19.91	20.80	1.227	0.247	/
Ant.1	State3	QPSK	Front Side	15	132322	1745	1	Mid	-0.02	0.093	19.69	20.30	1.151	0.107	/
Ant.1	State3	QPSK	Back Side	15	132322	1745	1	Mid	0.14	0.182	19.69	20.30	1.151	0.209	/
Ant.1	State3	QPSK	Front Side	15	132322	1745	50	Mid	-0.08	0.085	19.38	20.30	1.236	0.105	/
Ant.1	State3	QPSK	Back Side	15	132322	1745	50	Mid	0.03	0.170	19.38	20.30	1.236	0.210	/
Ant.0	State1	QPSK	Front Side	15	132322	1745	1	Mid	0.11	0.046	21.46	21.80	1.081	0.050	/
Ant.0	State1	QPSK	Back Side	15	132322	1745	1	Mid	-0.20	0.291	21.46	21.80	1.081	**0.315**	35#
Ant.0	State1	QPSK	Front Side	15	132322	1745	50	Mid	-0.06	0.042	21.21	21.80	1.146	0.048	/
Ant.0	State1	QPSK	Back Side	15	132322	1745	50	Mid	-0.07	0.271	21.21	21.80	1.146	0.311	/
Ant.0	State3	QPSK	Front Side	15	132322	1745	1	Mid	0.13	0.026	19.04	19.30	1.062	0.028	/
Ant.0	State3	QPSK	Back Side	15	132322	1745	1	Mid	-0.09	0.188	19.04	19.30	1.062	0.200	/
Ant.0	State3	QPSK	Front Side	15	132322	1745	50	Mid	-0.08	0.025	18.74	19.30	1.138	0.028	/
Ant.0	State3	QPSK	Back Side	15	132322	1745	50	Mid	0.07	0.175	18.74	19.30	1.138	0.199	/
Hotspot															
Ant.1	State3	QPSK	Front Side	10	132322	1745	1	Mid	0.08	0.175	19.69	20.30	1.151	0.201	/
Ant.1	State3	QPSK	Back Side	10	132322	1745	1	Mid	0.04	0.388	19.69	20.30	1.151	0.447	/
Ant.1	State3	QPSK	Right Edge	10	132322	1745	1	Mid	0.04	0.053	19.69	20.30	1.151	0.061	/
Ant.1	State3	QPSK	Top Edge	10	132322	1745	1	Mid	0.04	0.436	19.69	20.30	1.151	**0.502**	36#
Ant.1	State3	QPSK	Front Side	10	132322	1745	50	Mid	0.08	0.163	19.38	20.30	1.236	0.201	/
Ant.1	State3	QPSK	Back Side	10	132322	1745	50	Mid	0.05	0.372	19.38	20.30	1.236	0.460	/
Ant.1	State3	QPSK	Right Edge	10	132322	1745	50	Mid	0.03	0.051	19.38	20.30	1.236	0.063	/
Ant.1	State3	QPSK	Top Edge	10	132322	1745	50	Mid	0.04	0.402	19.38	20.30	1.236	0.497	/
Ant.0	State3	QPSK	Front Side	10	132322	1745	1	Mid	-0.11	0.049	19.04	19.30	1.062	0.052	/
Ant.0	State3	QPSK	Back Side	10	132322	1745	1	Mid	-0.15	0.425	19.04	19.30	1.062	0.451	/
Ant.0	State3	QPSK	Left Edge	10	132322	1745	1	Mid	0.17	0.031	19.04	19.30	1.062	0.033	/
Ant.0	State3	QPSK	Right Edge	10	132322	1745	1	Mid	0.06	0.034	19.04	19.30	1.062	0.036	/
Ant.0	State3	QPSK	Bottom Edge	10	132322	1745	1	Mid	-0.02	0.273	19.04	19.30	1.062	0.290	/
Ant.0	State3	QPSK	Front Side	10	132322	1745	50	Mid	0.15	0.042	18.74	19.30	1.138	0.048	/
Ant.0	State3	QPSK	Back Side	10	132322	1745	50	Mid	-0.05	0.401	18.74	19.30	1.138	0.456	/
Ant.0	State3	QPSK	Left Edge	10	132322	1745	50	Mid	0.10	0.022	18.74	19.30	1.138	0.025	/
Ant.0	State3	QPSK	Right Edge	10	132322	1745	50	Mid	0.16	0.030	18.74	19.30	1.138	0.034	/
Ant.0	State3	QPSK	Bottom Edge	10	132322	1745	50	Mid	-0.19	0.263	18.74	19.30	1.138	0.299	/
Specific															
Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10 g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1 g Scaled SAR (W/kg)	Meas. No.
Ant.0	State1	QPSK	Back Side	0	132322	1745	1	Mid	0.01	1.810	21.46	21.80	1.081	**1.957**	37#
Ant.0	State1	QPSK	Back Side	0	132322	1745	50	Mid	0.03	1.700	21.21	21.80	1.146	1.948	/

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

10.12 LTE Band 38 (20MHz Bandwidth)

Antenna	Power Reduction	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	State2&4	QPSK	Left Cheek	0	37850	2580	1	Mid	0.01	0.302	21.26	21.30	1.009	0.305	/
Ant.1	State2&4	QPSK	Left Tilt	0	37850	2580	1	Mid	0.08	0.256	21.26	21.30	1.009	0.258	/
Ant.1	State2&4	QPSK	Right Cheek	0	37850	2580	1	Mid	0.01	0.736	21.26	21.30	1.009	**0.743**	38#
Ant.1	State2&4	QPSK	Right Tilt	0	37850	2580	1	Mid	0.06	0.653	21.26	21.30	1.009	0.659	/
Ant.1	State2&4	QPSK	Left Cheek	0	38150	2610	50	High	0.05	0.282	20.96	21.30	1.081	0.305	/
Ant.1	State2&4	QPSK	Left Tilt	0	38150	2610	50	High	0.12	0.233	20.96	21.30	1.081	0.252	/
Ant.1	State2&4	QPSK	Right Cheek	0	38150	2610	50	High	0.11	0.665	20.96	21.30	1.081	0.719	/
Ant.1	State2&4	QPSK	Right Tilt	0	38150	2610	50	High	-0.11	0.598	20.96	21.30	1.081	0.646	/
Ant.0	State2&4	QPSK	Left Cheek	0	38150	2610	1	High	-0.12	0.060	23.72	23.80	1.019	0.061	/
Ant.0	State2&4	QPSK	Left Tilt	0	38150	2610	1	High	-0.10	0.056	23.72	23.80	1.019	0.057	/
Ant.0	State2&4	QPSK	Right Cheek	0	38150	2610	1	High	0.01	0.089	23.72	23.80	1.019	0.091	/
Ant.0	State2&4	QPSK	Right Tilt	0	38150	2610	1	High	0.08	0.046	23.72	23.80	1.019	0.047	/
Ant.0	State2&4	QPSK	Left Cheek	0	37850	2580	50	Low	-0.19	0.046	22.50	22.80	1.072	0.049	/
Ant.0	State2&4	QPSK	Left Tilt	0	37850	2580	50	Low	0.16	0.041	22.50	22.80	1.072	0.044	/
Ant.0	State2&4	QPSK	Right Cheek	0	37850	2580	50	Low	0.00	0.066	22.50	22.80	1.072	0.071	/
Ant.0	State2&4	QPSK	Right Tilt	0	37850	2580	50	Low	0.10	0.035	22.50	22.80	1.072	0.038	/
Body-worn															
Ant.1	State1	QPSK	Front Side	15	38000	2595	1	Mid	-0.18	0.189	23.26	23.30	1.009	0.191	/
Ant.1	State1	QPSK	Back Side	15	38000	2595	1	Mid	0.03	0.332	23.26	23.30	1.009	**0.335**	39#
Ant.1	State1	QPSK	Front Side	15	38000	2595	50	Mid	-0.03	0.125	22.60	22.80	1.047	0.131	/
Ant.1	State1	QPSK	Back Side	15	38000	2595	50	Mid	-0.13	0.220	22.60	22.80	1.047	0.230	/
Ant.1	State3	QPSK	Front Side	15	38000	2595	1	Mid	0.03	0.112	20.74	20.80	1.014	0.114	/
Ant.1	State3	QPSK	Back Side	15	38000	2595	1	Mid	0.05	0.185	20.74	20.80	1.014	0.188	/
Ant.1	State3	QPSK	Front Side	15	38000	2595	50	Mid	0.11	0.101	20.45	20.80	1.084	0.109	/
Ant.1	State3	QPSK	Back Side	15	38000	2595	50	Mid	-0.12	0.172	20.45	20.80	1.084	0.186	/
Ant.0	State1	QPSK	Front Side	15	38150	2610	1	High	-0.06	0.045	23.72	23.80	1.019	0.046	/
Ant.0	State1	QPSK	Back Side	15	38150	2610	1	High	0.19	0.177	23.72	23.80	1.019	0.180	/
Ant.0	State1	QPSK	Front Side	15	37850	2580	50	Low	0.09	0.032	22.50	22.80	1.072	0.034	/
Ant.0	State1	QPSK	Back Side	15	37850	2580	50	Low	-0.01	0.132	22.50	22.80	1.072	0.142	/
Ant.0	State3	QPSK	Front Side	15	37850	2580	1	Mid	0.12	0.041	23.03	23.30	1.064	0.044	/
Ant.0	State3	QPSK	Back Side	15	37850	2580	1	Mid	-0.17	0.145	23.03	23.30	1.064	0.154	/
Ant.0	State3	QPSK	Front Side	15	38150	2610	50	Mid	-0.14	0.030	22.45	22.80	1.084	0.033	/
Ant.0	State3	QPSK	Back Side	15	38150	2610	50	Mid	-0.05	0.125	22.45	22.80	1.084	0.136	/
Hotspot															
Ant.1	State3	QPSK	Front Side	10	37850	2580	1	Mid	0.10	0.223	20.74	20.80	1.014	0.226	/
Ant.1	State3	QPSK	Back Side	10	37850	2580	1	Mid	-0.04	0.501	20.74	20.80	1.014	**0.508**	40#

Ant.1	State3	QPSK	Right Edge	10	37850	2580	1	Mid	0.09	0.349	20.74	20.80	1.014	0.354	/
Ant.1	State3	QPSK	Top Edge	10	37850	2580	1	Mid	-0.13	0.255	20.74	20.80	1.014	0.259	/
Ant.1	State3	QPSK	Front Side	10	37850	2580	50	Mid	0.12	0.208	20.45	20.80	1.084	0.225	/
Ant.1	State3	QPSK	Back Side	10	37850	2580	50	Mid	0.10	0.44	20.45	20.80	1.084	0.477	/
Ant.1	State3	QPSK	Right Edge	10	37850	2580	50	Mid	-0.16	0.305	20.45	20.80	1.084	0.331	/
Ant.1	State3	QPSK	Top Edge	10	37850	2580	50	Mid	-0.05	0.195	20.45	20.80	1.084	0.211	/
Ant.0	State3	QPSK	Front Side	10	37850	2580	1	Mid	-0.10	0.066	23.03	23.30	1.064	0.070	/
Ant.0	State3	QPSK	Back Side	10	37850	2580	1	Mid	0.08	0.292	23.03	23.30	1.064	0.311	/
Ant.0	State3	QPSK	LeftEdge	10	37850	2580	1	Mid	0.14	0.119	23.03	23.30	1.064	0.127	/
Ant.0	State3	QPSK	Right Edge	10	37850	2580	1	Mid	0.09	0.005	23.03	23.30	1.064	0.005	/
Ant.0	State3	QPSK	Bottom Edge	10	37850	2580	1	Mid	0.12	0.137	23.03	23.30	1.064	0.146	/
Ant.0	State3	QPSK	Front Side	10	38150	2610	50	Mid	0.10	0.057	22.45	22.80	1.084	0.062	/
Ant.0	State3	QPSK	Back Side	10	38150	2610	50	Mid	0.08	0.264	22.45	22.80	1.084	0.286	/
Ant.0	State3	QPSK	Left Edge	10	38150	2610	50	Mid	-0.14	0.102	22.45	22.80	1.084	0.111	/
Ant.0	State3	QPSK	Right Edge	10	38150	2610	50	Mid	0.01	0.004	22.45	22.80	1.084	0.004	/
Ant.0	State3	QPSK	Bottom Edge	10	38150	2610	50	Mid	-0.08	0.113	22.45	22.80	1.084	0.122	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.13 LTE Band 41 (20MHz Bandwidth)

Antenna	Power Reduction	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	State2&4	QPSK	Left Cheek	0	40765	2607.5	1	High	-0.15	0.394	21.75	21.80	1.012	0.399	/
Ant.1	State2&4	QPSK	Left Tilt	0	40765	2607.5	1	High	0.10	0.347	21.75	21.80	1.012	0.351	/
Ant.1	State2&4	QPSK	Right Cheek	0	40765	2607.5	1	High	-0.04	0.877	21.75	21.80	1.012	0.888	/
Ant.1	State2&4	QPSK	Right Tilt	0	40765	2607.5	1	High	0.04	0.742	21.75	21.80	1.012	0.751	/
Ant.1	State2&4	QPSK	Left Cheek	0	40140	2545	50	High	-0.04	0.366	21.51	21.80	1.069	0.391	/
Ant.1	State2&4	QPSK	Left Tilt	0	40140	2545	50	High	-0.08	0.325	21.51	21.80	1.069	0.347	/
Ant.1	State2&4	QPSK	Right Cheek	0	40140	2545	50	High	0.14	0.896	21.51	21.80	1.069	**0.958**	41#
Ant.1	State2&4	QPSK	Right Tilt	0	40140	2545	50	High	0.02	0.743	21.51	21.80	1.069	0.794	/
Ant.1	State2&4	QPSK	Right Cheek	0	40140	2545	1	Mid	-0.14	0.789	21.62	21.80	1.042	0.822	/
Ant.1	State2&4	QPSK	Right Cheek	0	41140	2645	1	Mid	0.14	0.821	21.21	21.80	1.146	0.941	/
Ant.1	State2&4	QPSK	Right Cheek	0	40765	2607.5	50	High	-0.07	0.833	21.45	21.80	1.084	0.903	/
Ant.1	State2&4	QPSK	Right Cheek	0	41140	2645	50	Low	-0.05	0.805	21.34	21.80	1.112	0.895	/
Ant.1	State2&4	QPSK	Right Cheek	0	40140	2545	100	Low	0.13	0.849	21.52	21.80	1.067	0.906	/
Ant.0	State2&4	QPSK	Left Cheek	0	40140	2545	1	Mid	-0.14	0.055	23.60	23.80	1.047	0.058	/
Ant.0	State2&4	QPSK	Left Tilt	0	40140	2545	1	Mid	0.07	0.050	23.60	23.80	1.047	0.052	/
Ant.0	State2&4	QPSK	Right Cheek	0	40140	2545	1	Mid	-0.11	0.095	23.60	23.80	1.047	0.099	/
Ant.0	State2&4	QPSK	Right Tilt	0	40140	2545	1	Mid	0.15	0.038	23.60	23.80	1.047	0.040	/
Ant.0	State2&4	QPSK	Left Cheek	0	40765	2607.5	50	High	-0.05	0.044	22.58	22.80	1.052	0.046	/
Ant.0	State2&4	QPSK	Left Tilt	0	40765	2607.5	50	High	-0.18	0.043	22.58	22.80	1.052	0.045	/
Ant.0	State2&4	QPSK	Right Cheek	0	40765	2607.5	50	High	-0.03	0.075	22.58	22.80	1.052	0.079	/
Ant.0	State2&4	QPSK	Right Tilt	0	40765	2607.5	50	High	0.19	0.032	22.58	22.80	1.052	0.034	/
Body-worn															
Ant.1	State1	QPSK	Front Side	15	40765	2607.5	1	Mid	-0.01	0.198	22.85	23.30	1.109	0.220	/
Ant.1	State1	QPSK	Back Side	15	40765	2607.5	1	Mid	0.01	0.333	22.85	23.30	1.109	**0.369**	42#
Ant.1	State1	QPSK	Front Side	15	40140	2545	50	High	-0.06	0.135	22.35	22.80	1.109	0.150	/
Ant.1	State1	QPSK	Back Side	15	40140	2545	50	High	0.19	0.228	22.35	22.80	1.109	0.253	/
Ant.1	State3	QPSK	Front Side	15	40765	2607.5	1	Mid	0.09	0.085	20.23	20.30	1.016	0.086	/
Ant.1	State3	QPSK	Back Side	15	40765	2607.5	1	Mid	0.05	0.143	20.23	20.30	1.016	0.145	/
Ant.1	State3	QPSK	Front Side	15	40765	2607.5	50	Mid	-0.12	0.079	20.03	20.30	1.064	0.084	/
Ant.1	State3	QPSK	Back Side	15	40765	2607.5	50	Mid	0.12	0.135	20.03	20.30	1.064	0.144	/
Ant.0	State1&3	QPSK	Front Side	15	40140	2545	1	Mid	0.02	0.046	23.60	23.80	1.047	0.048	/
Ant.0	State1&3	QPSK	Back Side	15	40140	2545	1	Mid	-0.14	0.162	23.60	23.80	1.047	0.170	/
Ant.0	State1&3	QPSK	Front Side	15	40765	2607.5	50	High	0.06	0.032	22.58	22.80	1.052	0.034	/
Ant.0	State1&3	QPSK	Back Side	15	40765	2607.5	50	High	0.01	0.127	22.58	22.80	1.052	0.134	/
Hotspot															
Ant.1	State3	QPSK	Front Side	10	40765	2607.5	1	Mid	-0.04	0.198	20.23	20.30	1.016	0.201	/

Ant.1	State3	QPSK	Back Side	10	40765	2607.5	1	Mid	0.00	0.463	20.23	20.30	1.016	**0.470**	43#
Ant.1	State3	QPSK	Right Edge	10	40765	2607.5	1	Mid	-0.04	0.259	20.23	20.30	1.016	0.263	/
Ant.1	State3	QPSK	Top Edge	10	40765	2607.5	1	Mid	-0.17	0.202	20.23	20.30	1.016	0.205	/
Ant.1	State3	QPSK	Front Side	10	40765	2607.5	50	Mid	-0.14	0.178	20.03	20.30	1.064	0.189	/
Ant.1	State3	QPSK	Back Side	10	40765	2607.5	50	Mid	-0.01	0.421	20.03	20.30	1.064	0.448	/
Ant.1	State3	QPSK	Right Edge	10	40765	2607.5	50	Mid	0.01	0.232	20.03	20.30	1.064	0.247	/
Ant.1	State3	QPSK	Top Edge	10	40765	2607.5	50	Mid	-0.11	0.179	20.03	20.30	1.064	0.190	/
Ant.0	State3	QPSK	Front Side	10	40140	2545	1	Mid	0.18	0.075	23.60	23.80	1.047	0.079	/
Ant.0	State3	QPSK	Back Side	10	40140	2545	1	Mid	0.13	0.347	23.60	23.80	1.047	0.363	/
Ant.0	State3	QPSK	LeftEdge	10	40140	2545	1	Mid	-0.01	0.156	23.60	23.80	1.047	0.163	/
Ant.0	State3	QPSK	Right Edge	10	40140	2545	1	Mid	-0.12	0.006	23.60	23.80	1.047	0.006	/
Ant.0	State3	QPSK	Bottom Edge	10	40140	2545	1	Mid	0.11	0.150	23.60	23.80	1.047	0.157	/
Ant.0	State3	QPSK	Front Side	10	40765	2607.5	50	High	0.04	0.061	22.58	22.80	1.052	0.064	/
Ant.0	State3	QPSK	Back Side	10	40765	2607.5	50	High	-0.16	0.271	22.58	22.80	1.052	0.285	/
Ant.0	State3	QPSK	Left Edge	10	40765	2607.5	50	High	0.05	0.112	22.58	22.80	1.052	0.118	/
Ant.0	State3	QPSK	Right Edge	10	40765	2607.5	50	High	-0.09	0.004	22.58	22.80	1.052	0.004	/
Ant.0	State3	QPSK	Bottom Edge	10	40765	2607.5	50	High	0.02	0.119	22.58	22.80	1.052	0.125	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.14 WIFI 2.4GHz

Antenna	Power Reduction	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.3	Leve1	802.11 b	Left Cheek	0	6	2437	0.02	0.723	18.18	19.00	1.208	93.75	1.067	0.932	/
Ant.3	Leve1	802.11 b	Left Tilt	0	6	2437	0.11	0.291	18.18	19.00	1.208	93.75	1.067	0.375	/
Ant.3	Leve1	802.11 b	Right Cheek	0	6	2437	0.03	0.225	18.18	19.00	1.208	93.75	1.067	0.290	/
Ant.3	Leve1	802.11 b	Right Tilt	0	6	2437	0.11	0.118	18.18	19.00	1.208	93.75	1.067	0.152	/
Ant.3	Leve1	802.11 b	Left Cheek	0	1	2412	0.12	0.655	17.71	19.00	1.346	93.75	1.067	0.941	/
Ant.3	Leve1	802.11 b	Left Cheek	0	11	2462	-0.08	0.781	17.88	19.00	1.294	93.75	1.067	**1.078**	44#
Ant.3	Leve2	802.11 b	Left Cheek	0	6	2437	0.02	0.344	15.02	16.50	1.406	93.75	1.067	0.516	/
Ant.3	Leve2	802.11 b	Left Tilt	0	6	2437	-0.19	0.123	15.02	16.50	1.406	93.75	1.067	0.185	/
Ant.3	Leve2	802.11 b	Right Cheek	0	6	2437	-0.07	0.134	15.02	16.50	1.406	93.75	1.067	0.201	/
Ant.3	Leve2	802.11 b	Right Tilt	0	6	2437	0.06	0.058	15.02	16.50	1.406	93.75	1.067	0.087	/
Body-worn															
Ant.3	Leve3	802.11 b	Front Side	15	6	2437	0.02	0.115	19.30	20.00	1.175	93.75	1.067	0.144	/
Ant.3	Leve3	802.11 b	Back Side	15	6	2437	0.02	0.272	19.30	20.00	1.175	93.75	1.067	**0.341**	45#
Ant.3	Leve4	802.11 b	Front Side	15	6	2437	-0.11	0.043	15.44	16.00	1.138	93.75	1.067	0.052	/
Ant.3	Leve4	802.11 b	Back Side	15	6	2437	-0.11	0.103	15.44	16.00	1.138	93.75	1.067	0.125	/
Hotspot															
Ant.3	Leve4	802.11 b	Front Side	10	6	2437	0.04	0.062	15.44	16.00	1.138	93.75	1.067	0.075	/
Ant.3	Leve4	802.11 b	Back Side	10	6	2437	0.01	0.148	15.44	16.00	1.138	93.75	1.067	**0.180**	46#
Ant.3	Leve4	802.11 b	Left Edge	10	6	2437	0.10	0.128	15.44	16.00	1.138	93.75	1.067	0.155	/
Ant.3	Leve4	802.11 b	Right Edge	10	6	2437	0.11	0.011	15.44	16.00	1.138	93.75	1.067	0.013	/
Ant.3	Leve4	802.11 b	Top Edge	10	6	2437	-0.19	0.065	15.44	16.00	1.138	93.75	1.067	0.079	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

10.15 WIFI 5GHz

Antenna	Power Reduction	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.3	Leve1	802.11 a	Left Cheek	0	52	5260	-0.06	0.446	18.10	19.00	1.230	98.52	1.015	**0.557**	47#
Ant.3	Leve1	802.11 a	Left Tilt	0	52	5260	0.16	0.166	18.10	19.00	1.230	98.52	1.015	0.207	/
Ant.3	Leve1	802.11 a	Right Cheek	0	52	5260	0.01	0.134	18.10	19.00	1.230	98.52	1.015	0.167	/
Ant.3	Leve1	802.11 a	Right Tilt	0	52	5260	0.14	0.112	18.10	19.00	1.230	98.52	1.015	0.140	/
Ant.3	Leve2	802.11 n40	Left Cheek	0	54	5270	-0.14	0.275	16.13	17.00	1.222	96.53	1.036	0.348	/
Ant.3	Leve2	802.11 n40	Left Tilt	0	54	5270	-0.07	0.091	16.13	17.00	1.222	96.53	1.036	0.115	/
Ant.3	Leve2	802.11 n40	Right Cheek	0	54	5270	0.15	0.085	16.13	17.00	1.222	96.53	1.036	0.108	/
Ant.3	Leve2	802.11 n40	Right Tilt	0	54	5270	-0.11	0.068	16.13	17.00	1.222	96.53	1.036	0.086	/
Ant.3	Leve1	802.11 a	Left Cheek	0	116	5580	-0.10	0.600	18.20	19.00	1.202	98.52	1.015	**0.732**	48#
Ant.3	Leve1	802.11 a	Left Tilt	0	116	5580	0.02	0.211	18.20	19.00	1.202	98.52	1.015	0.257	/
Ant.3	Leve1	802.11 a	Right Cheek	0	116	5580	0.17	0.165	18.20	19.00	1.202	98.52	1.015	0.201	/
Ant.3	Leve1	802.11 a	Right Tilt	0	116	5580	-0.16	0.103	18.20	19.00	1.202	98.52	1.015	0.126	/
Ant.3	Leve2	802.11 n40	Left Cheek	0	118	5590	0.13	0.295	15.69	16.00	1.074	96.53	1.036	0.328	/
Ant.3	Leve2	802.11 n40	Left Tilt	0	118	5590	-0.15	0.115	15.69	16.00	1.074	96.53	1.036	0.128	/
Ant.3	Leve2	802.11 n40	Right Cheek	0	118	5590	0.14	0.081	15.69	16.00	1.074	96.53	1.036	0.090	/
Ant.3	Leve2	802.11 n40	Right Tilt	0	118	5590	-0.11	0.059	15.69	16.00	1.074	96.53	1.036	0.066	/
Ant.3	Leve1	802.11 a	Left Cheek	0	157	5785	0.02	0.611	18.30	19.00	1.175	98.52	1.015	**0.729**	49#
Ant.3	Leve1	802.11 a	Left Tilt	0	157	5785	0.19	0.234	18.30	19.00	1.175	98.52	1.015	0.279	/
Ant.3	Leve1	802.11 a	Right Cheek	0	157	5785	-0.14	0.188	18.30	19.00	1.175	98.52	1.015	0.224	/
Ant.3	Leve1	802.11 a	Right Tilt	0	157	5785	0.11	0.135	18.30	19.00	1.175	98.52	1.015	0.161	/
Ant.3	Leve2	802.11 ac40	Left Cheek	0	159	5795	0.06	0.352	16.83	17.50	1.167	96.28	1.039	0.427	/
Ant.3	Leve2	802.11 ac40	Left Tilt	0	159	5795	-0.07	0.174	16.83	17.50	1.167	96.28	1.039	0.211	/
Ant.3	Leve2	802.11 ac40	Right Cheek	0	159	5795	0.10	0.185	16.83	17.50	1.167	96.28	1.039	0.224	/
Ant.3	Leve2	802.11 ac40	Right Tilt	0	159	5795	-0.08	0.116	16.83	17.50	1.167	96.28	1.039	0.141	/
Body-worn															
Ant.3	Leve3	802.11 n40	Front Side	15	54	5270	-0.19	0.043	14.48	15.50	1.265	96.53	1.036	0.056	/
Ant.3	Leve3	802.11 n40	Back Side	15	54	5270	0.07	0.447	14.48	15.50	1.265	96.53	1.036	**0.586**	50#
Ant.3	Leve4	802.11 n40	Front Side	15	62	5310	0.15	0.019	12.29	13.00	1.178	96.53	1.036	0.023	/
Ant.3	Leve4	802.11 n40	Back Side	15	62	5310	-0.05	0.193	12.29	13.00	1.178	96.53	1.036	0.236	/
Ant.3	Leve3	802.11 ac80	Front Side	15	122	5610	-0.11	0.042	12.38	13.50	1.294	93.13	1.074	0.058	/
Ant.3	Leve3	802.11 ac80	Back Side	15	122	5610	-0.01	0.431	12.38	13.50	1.294	93.13	1.074	**0.599**	51#
Ant.3	Leve4	802.11 ac80	Front Side	15	122	5610	-0.17	0.021	10.13	11.00	1.222	93.13	1.074	0.028	/
Ant.3	Leve4	802.11 ac80	Back Side	15	122	5610	0.18	0.199	10.13	11.00	1.222	93.13	1.074	0.261	/
Ant.3	Leve3	802.11 ac80	Front Side	15	155	5775	0.01	0.062	13.35	14.50	1.303	93.13	1.074	0.087	/
Ant.3	Leve3	802.11 ac80	Back Side	15	155	5775	0.09	0.448	13.35	14.50	1.303	93.13	1.074	**0.627**	52#
Ant.3	Leve4	802.11 ac80	Front Side	15	155	5775	0.03	0.042	11.16	12.00	1.213	93.13	1.074	0.055	/

Ant.3	Leve4	802.11 ac80	Back Side	15	155	5775	0.01	0.249	11.16	12.00	1.213	93.13	1.074	0.324	/
Hotspot															
Ant.3	Leve4	802.11 n40	Front Side	10	38	5190	0.14	0.027	12.13	13.00	1.222	96.53	1.036	0.034	/
Ant.3	Leve4	802.11 n40	Back Side	10	38	5190	-0.02	0.280	12.13	13.00	1.222	96.53	1.036	**0.354**	53#
Ant.3	Leve4	802.11 n40	Left Edge	10	38	5190	-0.12	0.138	12.13	13.00	1.222	96.53	1.036	0.175	/
Ant.3	Leve4	802.11 n40	Right Edge	10	38	5190	0.01	0.005	12.13	13.00	1.222	96.53	1.036	0.006	/
Ant.3	Leve4	802.11 n40	Top Edge	10	38	5190	0.08	0.032	12.13	13.00	1.222	96.53	1.036	0.041	/
Ant.3	Leve4	802.11 ac80	Front Side	10	155	5775	0.02	0.045	11.16	12.00	1.213	93.13	1.074	0.059	/
Ant.3	Leve4	802.11 ac80	Back Side	10	155	5775	0.01	0.452	11.16	12.00	1.213	93.13	1.074	**0.589**	54#
Ant.3	Leve4	802.11 ac80	Left Edge	10	155	5775	-0.08	0.295	11.16	12.00	1.213	93.13	1.074	0.384	/
Ant.3	Leve4	802.11 ac80	Right Edge	10	155	5775	0.12	0.013	11.16	12.00	1.213	93.13	1.074	0.017	/
Ant.3	Leve4	802.11 ac80	Top Edge	10	155	5775	0.01	0.039	11.16	12.00	1.213	93.13	1.074	0.051	/
Antenna	Power Reduction	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.
Specify															
Ant.3	Level3	802.11 n40	Front Side	0	54	5270	-0.02	0.159	14.48	15.50	1.265	96.53	1.036	0.208	/
Ant.3	Level3	802.11 n40	Back Side	0	54	5270	0.02	0.558	14.48	15.50	1.265	96.53	1.036	0.731	/
Ant.3	Level3	802.11 n40	Left Edge	0	54	5270	0.04	0.928	14.48	15.50	1.265	96.53	1.036	**1.216**	55#
Ant.3	Level3	802.11 n40	Right Edge	0	54	5270	-0.15	0.002	14.48	15.50	1.265	96.53	1.036	0.003	/
Ant.3	Level3	802.11 n40	Top Edge	0	54	5270	-0.11	0.168	14.48	15.50	1.265	96.53	1.036	0.220	/
Ant.3	Level4	802.11 n40	Front Side	0	62	5310	0.03	0.088	12.29	13.00	1.178	96.53	1.036	0.107	/
Ant.3	Level4	802.11 n40	Back Side	0	62	5310	-0.03	0.311	12.29	13.00	1.178	96.53	1.036	0.380	/
Ant.3	Level4	802.11 n40	Left Edge	0	62	5310	0.03	0.518	12.29	13.00	1.178	96.53	1.036	0.632	/
Ant.3	Level4	802.11 n40	Right Edge	0	62	5310	-0.19	0.001	12.29	13.00	1.178	96.53	1.036	0.001	/
Ant.3	Level4	802.11 n40	Top Edge	0	62	5310	-0.10	0.094	12.29	13.00	1.178	96.53	1.036	0.115	/
Ant.3	Level3	802.11 ac80	Front Side	0	122	5690	0.03	0.127	12.38	13.50	1.294	93.13	1.074	0.176	/
Ant.3	Level3	802.11 ac80	Back Side	0	122	5610	0.11	0.499	12.38	13.50	1.294	93.13	1.074	0.693	/
Ant.3	Level3	802.11 ac80	Left Edge	0	122	5610	0.03	0.811	12.38	13.50	1.294	93.13	1.074	**1.127**	56#
Ant.3	Level3	802.11 ac80	Right Edge	0	122	5610	0.13	0.007	12.38	13.50	1.294	93.13	1.074	0.010	/
Ant.3	Level3	802.11 ac80	Top Edge	0	122	5610	0.06	0.042	12.38	13.50	1.294	93.13	1.074	0.058	/
Ant.3	Level4	802.11 ac80	Front Side	0	122	5610	-0.17	0.077	10.13	11.00	1.222	93.13	1.074	0.101	/
Ant.3	Level4	802.11 ac80	Back Side	0	122	5610	-0.10	0.282	10.13	11.00	1.222	93.13	1.074	0.370	/
Ant.3	Level4	802.11 ac80	Left Edge	0	122	5610	-0.07	0.432	10.13	11.00	1.222	93.13	1.074	0.567	/
Ant.3	Level4	802.11 ac80	Right Edge	0	122	5610	0.12	0.005	10.13	11.00	1.222	93.13	1.074	0.007	/
Ant.3	Level4	802.11 ac80	Top Edge	0	122	5610	0.15	0.029	10.13	11.00	1.222	93.13	1.074	0.038	/

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

10.16 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.3	DH5	Left Cheek	0	39	2441	0.04	0.169	12.70	14.00	1.349	76.88	1.301	**0.297**	57#
Ant.3	DH5	Left Tilt	0	39	2441	-0.10	0.045	12.70	14.00	1.349	76.88	1.301	0.079	/
Ant.3	DH5	Right Cheek	0	39	2441	0.01	0.056	12.70	14.00	1.349	76.88	1.301	0.098	/
Ant.3	DH5	Right Tilt	0	39	2441	0.08	0.022	12.70	14.00	1.349	76.88	1.301	0.039	/
Body-worn														
Ant.3	DH5	Front Side	15	39	2441	0.02	0.017	12.70	14.00	1.349	76.88	1.301	0.023	/
Ant.3	DH5	Back Side	15	39	2441	0.08	0.048	12.70	14.00	1.349	76.88	1.301	**0.065**	58#
Hotspot														
Ant.3	DH5	Front Side	10	39	2441	0.03	0.045	12.70	14.00	1.349	76.88	1.301	0.061	/
Ant.3	DH5	Back Side	10	39	2441	0.07	0.113	12.70	14.00	1.349	76.88	1.301	**0.152**	59#
Ant.3	DH5	Left Edge	10	39	2441	0.02	0.091	12.70	14.00	1.349	76.88	1.301	0.123	/
Ant.3	DH5	Right Edge	10	39	2441	-0.01	0.008	12.70	14.00	1.349	76.88	1.301	0.011	/
Ant.3	DH5	Top Edge	10	39	2441	-0.02	0.042	12.70	14.00	1.349	76.88	1.301	0.057	/
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^{1th} Measured SAR (W/kg)	Largest to Smallest SAR Radio
1900	GSM 1900	Head	Right Tilt	1.040	Yes	1.010	1.03
1900	GSM 1900	Body	Top Edge	0.974	Yes	0.928	1.05
1700	WDCMAB4	Head	Right Tilt	0.898	Yes	0.835	1.08
1700	LTE band 4	Head	Right Tilt	0.881	Yes	0.825	1.07
2600	LTE band 7	Head	Right Cheek	0.830	Yes	0.792	1.05
1900	LTE band 66	Head	Right Tilt	0.956	Yes	0.898	1.06
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.							

Note: For product specific 10g SAR, the highest measured 10g SAR is 0.61 < 2.0 W/kg, repeated measurement is not required.

12 SIMULTANEOUS TRANSMISSION

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

12.1 Simultaneous Transmission Mode Consider

No.	Simultaneous Tx Combination	Head	Body-worn	Hotspot	Specific
1	WWAN+WLAN 2.4G	Yes	Yes	Yes	Yes
2	WWAN+WLAN5G	Yes	Yes	Yes	Yes
3	WWAN+ BT	Yes	Yes	Yes	Yes

Note:

1. Two WWAN antennas can switch automatically, but two WWAN antenna can't transmit simultaneously.
2. WLAN 2.4G and Bluetooth share the same antenna, and can't transmit simultaneously.
3. WLAN 5G and Bluetooth share the same antenna, and can't transmit simultaneously.
4. When stand-alone SAR is not required for a transmitter or antenna, its SAR is considered zero in the SAR summing process to assess Multi-band transmission SAR compliance.
5. The maximum SAR summation is calculated based on the same configuration and test position.
6. 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 Mode and 2.4G WLAN or 5G WLAN and BT

Band	Antenna	Power Reduction	Position	Stand alone SAR				SUM SAR		
				1	2	3	4	1+2	1+3	1+4
				WWAN	2.4G WIFI	5G WIFI Max .	Bluetooth	WWAN+2.4G WIFI	WWAN+5G WIFI	WWAN+Bluetooth
					Ant.3	Ant.3	Ant.3			
					Leve2	Leve2	Leve2			
GSM850	Ant.0	State4	Left Cheek	0.088	0.516	0.427	0.297	0.604	0.515	0.385
GSM850	Ant.0	State4	Left Tilt	0.031	0.185	0.211	0.079	0.216	0.242	0.110
GSM850	Ant.0	State4	Right Cheek	0.064	0.201	0.224	0.098	0.265	0.288	0.162
GSM850	Ant.0	State4	Right Tilt	0.024	0.087	0.141	0.039	0.111	0.165	0.063
GSM850	Ant.1	State4	Left Cheek	0.366	0.516	0.427	0.297	0.882	0.793	0.663
GSM850	Ant.1	State4	Left Tilt	0.294	0.185	0.211	0.079	0.479	0.505	0.373
GSM850	Ant.1	State4	Right Cheek	0.505	0.201	0.224	0.098	0.706	0.729	0.603
GSM850	Ant.1	State4	Right Tilt	0.355	0.087	0.141	0.039	0.442	0.496	0.394
GSM 1900	Ant.0	State4	Left Cheek	0.047	0.516	0.427	0.297	0.563	0.474	0.344
GSM 1900	Ant.0	State4	Left Tilt	0.018	0.185	0.211	0.079	0.203	0.229	0.097
GSM 1900	Ant.0	State4	Right Cheek	0.043	0.201	0.224	0.098	0.244	0.267	0.141
GSM 1900	Ant.0	State4	Right Tilt	0.018	0.087	0.141	0.039	0.105	0.159	0.057
GSM 1900	Ant.1	State4	Left Cheek	0.472	0.516	0.427	0.297	0.988	0.899	0.769
GSM 1900	Ant.1	State4	Left Tilt	0.574	0.185	0.211	0.079	0.759	0.785	0.653
GSM 1900	Ant.1	State4	Right Cheek	0.673	0.201	0.224	0.098	0.874	0.897	0.771
GSM 1900	Ant.1	State4	Right Tilt	0.869	0.087	0.141	0.039	0.956	1.010	0.908
WCDMA B2	Ant.0	State4	Left Cheek	0.044	0.516	0.427	0.297	0.560	0.471	0.341
WCDMA B2	Ant.0	State4	Left Tilt	0.021	0.185	0.211	0.079	0.206	0.232	0.100
WCDMA B2	Ant.0	State4	Right Cheek	0.041	0.201	0.224	0.098	0.242	0.265	0.139
WCDMA B2	Ant.0	State4	Right Tilt	0.018	0.087	0.141	0.039	0.105	0.159	0.057
WCDMA B2	Ant.1	State4	Left Cheek	0.494	0.516	0.427	0.297	1.010	0.921	0.791
WCDMA B2	Ant.1	State4	Left Tilt	0.675	0.185	0.211	0.079	0.860	0.886	0.754
WCDMA B2	Ant.1	State4	Right Cheek	0.661	0.201	0.224	0.098	0.862	0.885	0.759
WCDMA B2	Ant.1	State4	Right Tilt	0.898	0.087	0.141	0.039	0.985	1.039	0.937
WCDMA B4	Ant.0	State4	Left Cheek	0.041	0.516	0.427	0.297	0.557	0.468	0.338
WCDMA B4	Ant.0	State4	Left Tilt	0.020	0.185	0.211	0.079	0.205	0.231	0.099
WCDMA B4	Ant.0	State4	Right Cheek	0.039	0.201	0.224	0.098	0.240	0.263	0.137
WCDMA B4	Ant.0	State4	Right Tilt	0.015	0.087	0.141	0.039	0.102	0.156	0.054
WCDMA B4	Ant.1	State4	Left Cheek	0.377	0.516	0.427	0.297	0.893	0.804	0.674
WCDMA B4	Ant.1	State4	Left Tilt	0.537	0.185	0.211	0.079	0.722	0.748	0.616
WCDMA B4	Ant.1	State4	Right Cheek	0.519	0.201	0.224	0.098	0.720	0.743	0.617
WCDMA B4	Ant.1	State4	Right Tilt	0.595	0.087	0.141	0.039	0.682	0.736	0.634

WCDMA B5	Ant.0	State4	Left Cheek	0.113	0.516	0.427	0.297	0.629	0.540	0.410
WCDMA B5	Ant.0	State4	Left Tilt	0.067	0.185	0.211	0.079	0.252	0.278	0.146
WCDMA B5	Ant.0	State4	Right Cheek	0.088	0.201	0.224	0.098	0.289	0.312	0.186
WCDMA B5	Ant.0	State4	Right Tilt	0.056	0.087	0.141	0.039	0.143	0.197	0.095
WCDMA B5	Ant.1	State4	Left Cheek	0.409	0.516	0.427	0.297	0.925	0.836	0.706
WCDMA B5	Ant.1	State4	Left Tilt	0.324	0.185	0.211	0.079	0.509	0.535	0.403
WCDMA B5	Ant.1	State4	Right Cheek	0.476	0.201	0.224	0.098	0.677	0.700	0.574
WCDMA B5	Ant.1	State4	Right Tilt	0.396	0.087	0.141	0.039	0.483	0.537	0.435
LTE B2	Ant.0	State4	Left Cheek	0.041	0.516	0.427	0.297	0.557	0.468	0.338
LTE B2	Ant.0	State4	Left Tilt	0.017	0.185	0.211	0.079	0.202	0.228	0.096
LTE B2	Ant.0	State4	Right Cheek	0.037	0.201	0.224	0.098	0.238	0.261	0.135
LTE B2	Ant.0	State4	Right Tilt	0.017	0.087	0.141	0.039	0.104	0.158	0.056
LTE B2	Ant.1	State4	Left Cheek	0.354	0.516	0.427	0.297	0.870	0.781	0.651
LTE B2	Ant.1	State4	Left Tilt	0.450	0.185	0.211	0.079	0.635	0.661	0.529
LTE B2	Ant.1	State4	Right Cheek	0.475	0.201	0.224	0.098	0.676	0.699	0.573
LTE B2	Ant.1	State4	Right Tilt	0.582	0.087	0.141	0.039	0.669	0.723	0.621
LTE B4	Ant.0	State4	Left Cheek	0.040	0.516	0.427	0.297	0.556	0.467	0.337
LTE B4	Ant.0	State4	Left Tilt	0.020	0.185	0.211	0.079	0.205	0.231	0.099
LTE B4	Ant.0	State4	Right Cheek	0.042	0.201	0.224	0.098	0.243	0.266	0.140
LTE B4	Ant.0	State4	Right Tilt	0.018	0.087	0.141	0.039	0.105	0.159	0.057
LTE B4	Ant.1	State4	Left Cheek	0.376	0.516	0.427	0.297	0.892	0.803	0.673
LTE B4	Ant.1	State4	Left Tilt	0.500	0.185	0.211	0.079	0.685	0.711	0.579
LTE B4	Ant.1	State4	Right Cheek	0.450	0.201	0.224	0.098	0.651	0.674	0.548
LTE B4	Ant.1	State4	Right Tilt	0.518	0.087	0.141	0.039	0.605	0.659	0.557
LTE B5	Ant.0	State4	Left Cheek	0.130	0.516	0.427	0.297	0.646	0.557	0.427
LTE B5	Ant.0	State4	Left Tilt	0.079	0.185	0.211	0.079	0.264	0.290	0.158
LTE B5	Ant.0	State4	Right Cheek	0.109	0.201	0.224	0.098	0.310	0.333	0.207
LTE B5	Ant.0	State4	Right Tilt	0.064	0.087	0.141	0.039	0.151	0.205	0.103
LTE B5	Ant.1	State4	Left Cheek	0.435	0.516	0.427	0.297	0.951	0.862	0.732
LTE B5	Ant.1	State4	Left Tilt	0.349	0.185	0.211	0.079	0.534	0.560	0.428
LTE B5	Ant.1	State4	Right Cheek	0.510	0.201	0.224	0.098	0.711	0.734	0.608
LTE B5	Ant.1	State4	Right Tilt	0.331	0.087	0.141	0.039	0.418	0.472	0.370
LTE B7	Ant.0	State4	Left Cheek	0.087	0.516	0.427	0.297	0.603	0.514	0.384
LTE B7	Ant.0	State4	Left Tilt	0.057	0.185	0.211	0.079	0.242	0.268	0.136
LTE B7	Ant.0	State4	Right Cheek	0.132	0.201	0.224	0.098	0.333	0.356	0.230
LTE B7	Ant.0	State4	Right Tilt	0.069	0.087	0.141	0.039	0.156	0.210	0.108
LTE B7	Ant.1	State4	Left Cheek	0.325	0.516	0.427	0.297	0.841	0.752	0.622
LTE B7	Ant.1	State4	Left Tilt	0.237	0.185	0.211	0.079	0.422	0.448	0.316
LTE B7	Ant.1	State4	Right Cheek	0.721	0.201	0.224	0.098	0.922	0.945	0.819
LTE B7	Ant.1	State4	Right Tilt	0.523	0.087	0.141	0.039	0.610	0.664	0.562
LTE B13	Ant.0	State4	Left Cheek	0.061	0.516	0.427	0.297	0.577	0.488	0.358
LTE B13	Ant.0	State4	Left Tilt	0.028	0.185	0.211	0.079	0.213	0.239	0.107
LTE B13	Ant.0	State4	Right Cheek	0.037	0.201	0.224	0.098	0.238	0.261	0.135

LTE B13	Ant.0	State4	Right Tilt	0.021	0.087	0.141	0.039	0.108	0.162	0.060
LTE B13	Ant.1	State4	Left Cheek	0.286	0.516	0.427	0.297	0.802	0.713	0.583
LTE B13	Ant.1	State4	Left Tilt	0.241	0.185	0.211	0.079	0.426	0.452	0.320
LTE B13	Ant.1	State4	Right Cheek	0.331	0.201	0.224	0.098	0.532	0.555	0.429
LTE B13	Ant.1	State4	Right Tilt	0.237	0.087	0.141	0.039	0.324	0.378	0.276
LTE B66	Ant.0	State4	Left Cheek	0.036	0.516	0.427	0.297	0.552	0.463	0.333
LTE B66	Ant.0	State4	Left Tilt	0.018	0.185	0.211	0.079	0.203	0.229	0.097
LTE B66	Ant.0	State4	Right Cheek	0.034	0.201	0.224	0.098	0.235	0.258	0.132
LTE B66	Ant.0	State4	Right Tilt	0.016	0.087	0.141	0.039	0.103	0.157	0.055
LTE B66	Ant.1	State4	Left Cheek	0.401	0.516	0.427	0.297	0.917	0.828	0.698
LTE B66	Ant.1	State4	Left Tilt	0.459	0.185	0.211	0.079	0.644	0.670	0.538
LTE B66	Ant.1	State4	Right Cheek	0.648	0.201	0.224	0.098	0.849	0.872	0.746
LTE B66	Ant.1	State4	Right Tilt	0.672	0.087	0.141	0.039	0.759	0.813	0.711
LTE B38	Ant.0	State4	Left Cheek	0.061	0.516	0.427	0.297	0.577	0.488	0.358
LTE B38	Ant.0	State4	Left Tilt	0.057	0.185	0.211	0.079	0.242	0.268	0.136
LTE B38	Ant.0	State4	Right Cheek	0.091	0.201	0.224	0.098	0.292	0.315	0.189
LTE B38	Ant.0	State4	Right Tilt	0.047	0.087	0.141	0.039	0.134	0.188	0.086
LTE B38	Ant.1	State4	Left Cheek	0.305	0.516	0.427	0.297	0.821	0.732	0.602
LTE B38	Ant.1	State4	Left Tilt	0.258	0.185	0.211	0.079	0.443	0.469	0.337
LTE B38	Ant.1	State4	Right Cheek	0.743	0.201	0.224	0.098	0.944	0.967	0.841
LTE B38	Ant.1	State4	Right Tilt	0.659	0.087	0.141	0.039	0.746	0.800	0.698
LTE B41	Ant.0	State4	Left Cheek	0.058	0.516	0.427	0.297	0.574	0.485	0.355
LTE B41	Ant.0	State4	Left Tilt	0.052	0.185	0.211	0.079	0.237	0.263	0.131
LTE B41	Ant.0	State4	Right Cheek	0.099	0.201	0.224	0.098	0.300	0.323	0.197
LTE B41	Ant.0	State4	Right Tilt	0.040	0.087	0.141	0.039	0.127	0.181	0.079
LTE B41	Ant.1	State4	Left Cheek	0.399	0.516	0.427	0.297	0.915	0.826	0.696
LTE B41	Ant.1	State4	Left Tilt	0.351	0.185	0.211	0.079	0.536	0.562	0.430
LTE B41	Ant.1	State4	Right Cheek	0.958	0.201	0.224	0.098	1.159	**1.182**	1.056
LTE B41	Ant.1	State4	Right Tilt	0.794	0.087	0.141	0.039	0.881	0.935	0.833

Note:

1: The simultaneous transmission combinations of the three 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 1.182 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

12.2.2 Body Simultaneous Transmission SAR Evaluation for WWAN Mode and 2.4G WLAN or 5G WLAN and BT

Band	Antenna	Power Reduction	Position	Stand alone SAR				SUM SAR		
				1	2	3	4	1+2	1+3	1+4
				WWAN	2.4G WIFI	5G WIFI Max .	Bluetooth	WWAN+2.4G WIFI	WWAN+5G WIFI	WWAN+Bluetooth
					Ant.3	Ant.3	Ant.3			
					Leve4	Leve4	Leve4			
GSM850	Ant.0	State3	Front Side15mm	0.076	0.052	0.055	0.023	0.128	0.131	0.099
GSM850	Ant.0	State3	Back Side15mm	0.167	0.125	0.324	0.065	0.292	0.491	0.232
GSM850	Ant.1	State3	Front Side15mm	0.112	0.052	0.055	0.023	0.164	0.167	0.135
GSM850	Ant.1	State3	Back Side15mm	0.155	0.125	0.324	0.065	0.280	0.479	0.220
GSM 1900	Ant.0	State3	Front Side15mm	0.033	0.052	0.055	0.023	0.085	0.088	0.056
GSM 1900	Ant.0	State3	Back Side15mm	0.210	0.125	0.324	0.065	0.335	0.534	0.275
GSM 1900	Ant.1	State3	Front Side15mm	0.109	0.052	0.055	0.023	0.161	0.164	0.132
GSM 1900	Ant.1	State3	Back Side15mm	0.425	0.125	0.324	0.065	0.550	**0.749**	0.490
WCDMA B2	Ant.0	State3	Front Side15mm	0.039	0.052	0.055	0.023	0.091	0.094	0.062
WCDMA B2	Ant.0	State3	Back Side15mm	0.248	0.125	0.324	0.065	0.373	0.572	0.313
WCDMA B2	Ant.1	State3	Front Side15mm	0.047	0.052	0.055	0.023	0.099	0.102	0.070
WCDMA B2	Ant.1	State3	Back Side15mm	0.140	0.125	0.324	0.065	0.265	0.464	0.205
WCDMA B4	Ant.0	State3	Front Side15mm	0.027	0.052	0.055	0.023	0.079	0.082	0.050
WCDMA B4	Ant.0	State3	Back Side15mm	0.185	0.125	0.324	0.065	0.310	0.509	0.250
WCDMA B4	Ant.1	State3	Front Side15mm	0.083	0.052	0.055	0.023	0.135	0.138	0.106
WCDMA B4	Ant.1	State3	Back Side15mm	0.169	0.125	0.324	0.065	0.294	0.493	0.234
WCDMA B5	Ant.0	State3	Front Side15mm	0.085	0.052	0.055	0.023	0.137	0.140	0.108
WCDMA B5	Ant.0	State3	Back Side15mm	0.175	0.125	0.324	0.065	0.300	0.499	0.240
WCDMA B5	Ant.1	State3	Front Side15mm	0.115	0.052	0.055	0.023	0.167	0.170	0.138
WCDMA B5	Ant.1	State3	Back Side15mm	0.158	0.125	0.324	0.065	0.283	0.482	0.223
LTE B2	Ant.0	State3	Front Side15mm	0.047	0.052	0.055	0.023	0.099	0.102	0.070
LTE B2	Ant.0	State3	Back Side15mm	0.223	0.125	0.324	0.065	0.348	0.547	0.288
LTE B2	Ant.1	State3	Front Side15mm	0.060	0.052	0.055	0.023	0.112	0.115	0.083
LTE B2	Ant.1	State3	Back Side15mm	0.175	0.125	0.324	0.065	0.300	0.499	0.240
LTE B4	Ant.0	State3	Front Side15mm	0.031	0.052	0.055	0.023	0.083	0.086	0.054
LTE B4	Ant.0	State3	Back Side15mm	0.206	0.125	0.324	0.065	0.331	0.530	0.271
LTE B4	Ant.1	State3	Front Side15mm	0.091	0.052	0.055	0.023	0.143	0.146	0.114
LTE B4	Ant.1	State3	Back Side15mm	0.179	0.125	0.324	0.065	0.304	0.503	0.244
LTE B5	Ant.0	State3	Front Side15mm	0.092	0.052	0.055	0.023	0.144	0.147	0.115
LTE B5	Ant.0	State3	Back Side15mm	0.185	0.125	0.324	0.065	0.310	0.509	0.250
LTE B5	Ant.1	State3	Front Side15mm	0.118	0.052	0.055	0.023	0.170	0.173	0.141
LTE B5	Ant.1	State3	Back Side15mm	0.161	0.125	0.324	0.065	0.286	0.485	0.226
LTE B7	Ant.0	State3	Front Side15mm	0.040	0.052	0.055	0.023	0.092	0.095	0.063

LTE B7	Ant.0	State3	Back Side15mm	0.151	0.125	0.324	0.065	0.276	0.475	0.216
LTE B7	Ant.1	State3	Front Side15mm	0.101	0.052	0.055	0.023	0.153	0.156	0.124
LTE B7	Ant.1	State3	Back Side15mm	0.187	0.125	0.324	0.065	0.312	0.511	0.252
LTE B13	Ant.0	State3	Front Side15mm	0.058	0.052	0.055	0.023	0.110	0.113	0.081
LTE B13	Ant.0	State3	Back Side15mm	0.116	0.125	0.324	0.065	0.241	0.440	0.181
LTE B13	Ant.1	State3	Front Side15mm	0.117	0.052	0.055	0.023	0.169	0.172	0.140
LTE B13	Ant.1	State3	Back Side15mm	0.194	0.125	0.324	0.065	0.319	0.518	0.259
LTE B66	Ant.0	State3	Front Side15mm	0.028	0.052	0.055	0.023	0.080	0.083	0.051
LTE B66	Ant.0	State3	Back Side15mm	0.200	0.125	0.324	0.065	0.325	0.524	0.265
LTE B66	Ant.1	State3	Front Side15mm	0.107	0.052	0.055	0.023	0.159	0.162	0.130
LTE B66	Ant.1	State3	Back Side15mm	0.210	0.125	0.324	0.065	0.335	0.534	0.275
LTE B38	Ant.0	State3	Front Side15mm	0.044	0.052	0.055	0.023	0.096	0.099	0.067
LTE B38	Ant.0	State3	Back Side15mm	0.154	0.125	0.324	0.065	0.279	0.478	0.219
LTE B38	Ant.1	State3	Front Side15mm	0.114	0.052	0.055	0.023	0.166	0.169	0.137
LTE B38	Ant.1	State3	Back Side15mm	0.188	0.125	0.324	0.065	0.313	0.512	0.253
LTE B41	Ant.0	State3	Front Side15mm	0.048	0.052	0.055	0.023	0.100	0.103	0.071
LTE B41	Ant.0	State3	Back Side15mm	0.170	0.125	0.324	0.065	0.295	0.494	0.235
LTE B41	Ant.1	State3	Front Side15mm	0.086	0.052	0.055	0.023	0.138	0.141	0.109
LTE B41	Ant.1	State3	Back Side15mm	0.145	0.125	0.324	0.065	0.270	0.469	0.210

Note:

1: The simultaneous transmission combinations of the three 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 0.749 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

12.2.3 Hotspot Simultaneous Transmission SAR Evaluation for WWAN Mode and 2.4G WLAN or 5G WLAN and BT

Band	Antenna	Power Reduction	Position	Stand alone SAR				SUM SAR		
				1	2	3	4	1+2	1+3	1+4
				WWAN	2.4G WIFI	5G WIFI Max	Bluetooth	WWAN+2.4G WIFI	WWAN+5G WIFI	WWAN+Bluetooth
					Ant.3	Ant.3	Ant.3			
					Leve4	Leve4	Leve4			
GSM850	Ant.0	State3	Front Side 10mm	0.086	0.075	0.059	0.061	0.161	0.145	0.147
GSM850	Ant.0	State3	Back Side 10mm	0.353	0.180	0.589	0.152	0.533	0.942	0.505
GSM850	Ant.0	State3	Left Edge 10mm	0.075	0.155	0.384	0.123	0.230	0.459	0.198
GSM850	Ant.0	State3	Right Edge 10mm	0.154	0.013	0.017	0.011	0.167	0.171	0.165
GSM850	Ant.0	State3	Top Edge 10mm	/	0.079	0.051	0.057	0.079	0.051	0.057
GSM850	Ant.0	State3	Bottom Edge 10mm	0.156	0.000	0.000	0.000	0.156	0.156	0.156
GSM850	Ant.1	State3	Front Side 10mm	0.069	0.075	0.059	0.061	0.144	0.128	0.130
GSM850	Ant.1	State3	Back Side 10mm	0.144	0.180	0.589	0.152	0.324	0.733	0.296
GSM850	Ant.1	State3	Left Edge 10mm	/	0.155	0.384	0.123	0.155	0.384	0.123
GSM850	Ant.1	State3	Right Edge 10mm	0.104	0.013	0.017	0.011	0.117	0.121	0.115
GSM850	Ant.1	State3	Top Edge 10mm	0.103	0.079	0.051	0.057	0.182	0.154	0.160
GSM 1900	Ant.0	State3	Front Side 10mm	0.062	0.075	0.059	0.061	0.137	0.121	0.123
GSM 1900	Ant.0	State3	Back Side 10mm	0.430	0.180	0.589	0.152	0.610	1.019	0.582
GSM 1900	Ant.0	State3	Left Edge 10mm	0.045	0.155	0.384	0.123	0.200	0.429	0.168
GSM 1900	Ant.0	State3	Right Edge 10mm	0.041	0.013	0.017	0.011	0.054	0.058	0.052
GSM 1900	Ant.0	State3	Top Edge 10mm	/	0.079	0.051	0.057	0.079	0.051	0.057
GSM 1900	Ant.0	State3	Bottom Edge 10mm	0.404	0.000	0.000	0.000	0.404	0.404	0.404
GSM 1900	Ant.1	State3	Front Side 10mm	0.254	0.075	0.059	0.061	0.329	0.313	0.315
GSM 1900	Ant.1	State3	Back Side 10mm	0.763	0.180	0.589	0.152	0.943	**1.352**	0.915
GSM 1900	Ant.1	State3	Left Edge 10mm	/	0.155	0.384	0.123	0.155	0.384	0.123
GSM 1900	Ant.1	State3	Right Edge 10mm	0.075	0.013	0.017	0.011	0.088	0.092	0.086
GSM 1900	Ant.1	State3	Top Edge 10mm	1.093	0.079	0.051	0.057	1.172	1.144	1.150
WCDMA B2	Ant.0	State3	Front Side 10mm	0.081	0.075	0.059	0.061	0.156	0.140	0.142
WCDMA B2	Ant.0	State3	Back Side 10mm	0.440	0.180	0.589	0.152	0.620	1.029	0.592
WCDMA B2	Ant.0	State3	Left Edge 10mm	0.056	0.155	0.384	0.123	0.211	0.440	0.179
WCDMA B2	Ant.0	State3	Right Edge 10mm	0.049	0.013	0.017	0.011	0.062	0.066	0.060
WCDMA B2	Ant.0	State3	Top Edge 10mm	/	0.079	0.051	0.057	0.079	0.051	0.057
WCDMA B2	Ant.0	State3	Bottom Edge 10mm	0.458	0.000	0.000	0.000	0.458	0.458	0.458
WCDMA B2	Ant.1	State3	Front Side 10mm	0.127	0.075	0.059	0.061	0.202	0.186	0.188
WCDMA B2	Ant.1	State3	Back Side 10mm	0.374	0.180	0.589	0.152	0.554	0.963	0.526
WCDMA B2	Ant.1	State3	Left Edge 10mm	/	0.155	0.384	0.123	0.155	0.384	0.123
WCDMA B2	Ant.1	State3	Right Edge 10mm	0.037	0.013	0.017	0.011	0.050	0.054	0.048

WCDMA B2	Ant.1	State3	Top Edge 10mm	0.445	0.079	0.051	0.057	0.524	0.496	0.502
WCDMA B4	Ant.0	State3	Front Side 10mm	0.055	0.075	0.059	0.061	0.130	0.114	0.116
WCDMA B4	Ant.0	State3	Back Side 10mm	0.412	0.180	0.589	0.152	0.592	1.001	0.564
WCDMA B4	Ant.0	State3	Left Edge 10mm	0.030	0.155	0.384	0.123	0.185	0.414	0.153
WCDMA B4	Ant.0	State3	Right Edge 10mm	0.030	0.013	0.017	0.011	0.043	0.047	0.041
WCDMA B4	Ant.0	State3	Top Edge 10mm	/	0.079	0.051	0.057	0.079	0.051	0.057
WCDMA B4	Ant.0	State3	Bottom Edge 10mm	0.282	0.000	0.000	0.000	0.282	0.282	0.282
WCDMA B4	Ant.1	State3	Front Side 10mm	0.190	0.075	0.059	0.061	0.265	0.249	0.251
WCDMA B4	Ant.1	State3	Back Side 10mm	0.383	0.180	0.589	0.152	0.563	0.972	0.535
WCDMA B4	Ant.1	State3	Left Edge 10mm	/	0.155	0.384	0.123	0.155	0.384	0.123
WCDMA B4	Ant.1	State3	Right Edge 10mm	0.042	0.013	0.017	0.011	0.055	0.059	0.053
WCDMA B4	Ant.1	State3	Top Edge 10mm	0.475	0.079	0.051	0.057	0.554	0.526	0.532
WCDMA B5	Ant.0	State3	Front Side 10mm	0.094	0.075	0.059	0.061	0.169	0.153	0.155
WCDMA B5	Ant.0	State3	Back Side 10mm	0.373	0.180	0.589	0.152	0.553	0.962	0.525
WCDMA B5	Ant.0	State3	Left Edge 10mm	0.083	0.155	0.384	0.123	0.238	0.467	0.206
WCDMA B5	Ant.0	State3	Right Edge 10mm	0.165	0.013	0.017	0.011	0.178	0.182	0.176
WCDMA B5	Ant.0	State3	Top Edge 10mm	/	0.079	0.051	0.057	0.079	0.051	0.057
WCDMA B5	Ant.0	State3	Bottom Edge 10mm	0.172	0.000	0.000	0.000	0.172	0.172	0.172
WCDMA B5	Ant.1	State3	Front Side 10mm	0.113	0.075	0.059	0.061	0.188	0.172	0.174
WCDMA B5	Ant.1	State3	Back Side 10mm	0.207	0.180	0.589	0.152	0.387	0.796	0.359
WCDMA B5	Ant.1	State3	Left Edge 10mm	/	0.155	0.384	0.123	0.155	0.384	0.123
WCDMA B5	Ant.1	State3	Right Edge 10mm	0.161	0.013	0.017	0.011	0.174	0.178	0.172
WCDMA B5	Ant.1	State3	Top Edge 10mm	0.163	0.079	0.051	0.057	0.242	0.214	0.220
LTE B2	Ant.0	State3	Front Side 10mm	0.073	0.075	0.059	0.061	0.148	0.132	0.134
LTE B2	Ant.0	State3	Back Side 10mm	0.373	0.180	0.589	0.152	0.553	0.962	0.525
LTE B2	Ant.0	State3	Left Edge 10mm	0.045	0.155	0.384	0.123	0.200	0.429	0.168
LTE B2	Ant.0	State3	Right Edge 10mm	0.047	0.013	0.017	0.011	0.060	0.064	0.058
LTE B2	Ant.0	State3	Top Edge 10mm	/	0.079	0.051	0.057	0.079	0.051	0.057
LTE B2	Ant.0	State3	Bottom Edge 10mm	0.346	0.000	0.000	0.000	0.346	0.346	0.346
LTE B2	Ant.1	State3	Front Side 10mm	0.097	0.075	0.059	0.061	0.172	0.156	0.158
LTE B2	Ant.1	State3	Back Side 10mm	0.324	0.180	0.589	0.152	0.504	0.913	0.476
LTE B2	Ant.1	State3	Left Edge 10mm	/	0.155	0.384	0.123	0.155	0.384	0.123
LTE B2	Ant.1	State3	Right Edge 10mm	0.037	0.013	0.017	0.011	0.050	0.054	0.048
LTE B2	Ant.1	State3	Top Edge 10mm	0.378	0.079	0.051	0.057	0.457	0.429	0.435
LTE B4	Ant.0	State3	Front Side 10mm	0.057	0.075	0.059	0.061	0.132	0.116	0.118
LTE B4	Ant.0	State3	Back Side 10mm	0.433	0.180	0.589	0.152	0.613	1.022	0.585
LTE B4	Ant.0	State3	Left Edge 10mm	0.027	0.155	0.384	0.123	0.182	0.411	0.150
LTE B4	Ant.0	State3	Right Edge 10mm	0.032	0.013	0.017	0.011	0.045	0.049	0.043
LTE B4	Ant.0	State3	Top Edge 10mm	/	0.079	0.051	0.057	0.079	0.051	0.057
LTE B4	Ant.0	State3	Bottom Edge 10mm	0.295	0.000	0.000	0.000	0.295	0.295	0.295
LTE B4	Ant.1	State3	Front Side 10mm	0.202	0.075	0.059	0.061	0.277	0.261	0.263

LTE B4	Ant.1	State3	Back Side 10mm	0.432	0.180	0.589	0.152	0.612	1.021	0.584
LTE B4	Ant.1	State3	Left Edge 10mm	/	0.155	0.384	0.123	0.155	0.384	0.123
LTE B4	Ant.1	State3	Right Edge 10mm	0.045	0.013	0.017	0.011	0.058	0.062	0.056
LTE B4	Ant.1	State3	Top Edge 10mm	0.520	0.079	0.051	0.057	0.599	0.571	0.577
LTE B5	Ant.0	State3	Front Side 10mm	0.101	0.075	0.059	0.061	0.176	0.160	0.162
LTE B5	Ant.0	State3	Back Side 10mm	0.458	0.180	0.589	0.152	0.638	1.047	0.610
LTE B5	Ant.0	State3	Left Edge 10mm	0.090	0.155	0.384	0.123	0.245	0.474	0.213
LTE B5	Ant.0	State3	Right Edge 10mm	0.173	0.013	0.017	0.011	0.186	0.190	0.184
LTE B5	Ant.0	State3	Top Edge 10mm	/	0.079	0.051	0.057	0.079	0.051	0.057
LTE B5	Ant.0	State3	Bottom Edge 10mm	0.172	0.000	0.000	0.000	0.172	0.172	0.172
LTE B5	Ant.1	State3	Front Side 10mm	0.116	0.075	0.059	0.061	0.191	0.175	0.177
LTE B5	Ant.1	State3	Back Side 10mm	0.219	0.180	0.589	0.152	0.399	0.808	0.371
LTE B5	Ant.1	State3	Left Edge 10mm	/	0.155	0.384	0.123	0.155	0.384	0.123
LTE B5	Ant.1	State3	Right Edge 10mm	0.170	0.013	0.017	0.011	0.183	0.187	0.181
LTE B5	Ant.1	State3	Top Edge 10mm	0.202	0.079	0.051	0.057	0.281	0.253	0.259
LTE B7	Ant.0	State3	Front Side 10mm	0.067	0.075	0.059	0.061	0.142	0.126	0.128
LTE B7	Ant.0	State3	Back Side 10mm	0.295	0.180	0.589	0.152	0.475	0.884	0.447
LTE B7	Ant.0	State3	Left Edge 10mm	0.112	0.155	0.384	0.123	0.267	0.496	0.235
LTE B7	Ant.0	State3	Right Edge 10mm	0.032	0.013	0.017	0.011	0.045	0.049	0.043
LTE B7	Ant.0	State3	Top Edge 10mm	/	0.079	0.051	0.057	0.079	0.051	0.057
LTE B7	Ant.0	State3	Bottom Edge 10mm	0.133	0.000	0.000	0.000	0.133	0.133	0.133
LTE B7	Ant.1	State3	Front Side 10mm	0.197	0.075	0.059	0.061	0.272	0.256	0.258
LTE B7	Ant.1	State3	Back Side 10mm	0.562	0.180	0.589	0.152	0.742	1.151	0.714
LTE B7	Ant.1	State3	Left Edge 10mm	/	0.155	0.384	0.123	0.155	0.384	0.123
LTE B7	Ant.1	State3	Right Edge 10mm	0.266	0.013	0.017	0.011	0.279	0.283	0.277
LTE B7	Ant.1	State3	Top Edge 10mm	0.272	0.079	0.051	0.057	0.351	0.323	0.329
LTE B13	Ant.0	State3	Front Side 10mm	0.065	0.075	0.059	0.061	0.140	0.124	0.126
LTE B13	Ant.0	State3	Back Side 10mm	0.216	0.180	0.589	0.152	0.396	0.805	0.368
LTE B13	Ant.0	State3	Left Edge 10mm	0.053	0.155	0.384	0.123	0.208	0.437	0.176
LTE B13	Ant.0	State3	Right Edge 10mm	0.128	0.013	0.017	0.011	0.141	0.145	0.139
LTE B13	Ant.0	State3	Top Edge 10mm	/	0.079	0.051	0.057	0.079	0.051	0.057
LTE B13	Ant.0	State3	Bottom Edge 10mm	0.113	0.000	0.000	0.000	0.113	0.113	0.113
LTE B13	Ant.1	State3	Front Side 10mm	0.110	0.075	0.059	0.061	0.185	0.169	0.171
LTE B13	Ant.1	State3	Back Side 10mm	0.191	0.180	0.589	0.152	0.371	0.780	0.343
LTE B13	Ant.1	State3	Left Edge 10mm	/	0.155	0.384	0.123	0.155	0.384	0.123
LTE B13	Ant.1	State3	Right Edge 10mm	0.198	0.013	0.017	0.011	0.211	0.215	0.209
LTE B13	Ant.1	State3	Top Edge 10mm	0.118	0.079	0.051	0.057	0.197	0.169	0.175
LTE B66	Ant.0	State3	Front Side 10mm	0.052	0.075	0.059	0.061	0.127	0.111	0.113
LTE B66	Ant.0	State3	Back Side 10mm	0.456	0.180	0.589	0.152	0.636	1.045	0.608
LTE B66	Ant.0	State3	Left Edge 10mm	0.033	0.155	0.384	0.123	0.188	0.417	0.156
LTE B66	Ant.0	State3	Right Edge 10mm	0.036	0.013	0.017	0.011	0.049	0.053	0.047

LTE B66	Ant.0	State3	Top Edge 10mm	/	0.079	0.051	0.057	0.079	0.051	0.057
LTE B66	Ant.0	State3	Bottom Edge 10mm	0.299	0.000	0.000	0.000	0.299	0.299	0.299
LTE B66	Ant.1	State3	Front Side 10mm	0.201	0.075	0.059	0.061	0.276	0.260	0.262
LTE B66	Ant.1	State3	Back Side 10mm	0.460	0.180	0.589	0.152	0.640	1.049	0.612
LTE B66	Ant.1	State3	Left Edge 10mm	/	0.155	0.384	0.123	0.155	0.384	0.123
LTE B66	Ant.1	State3	Right Edge 10mm	0.063	0.013	0.017	0.011	0.076	0.080	0.074
LTE B66	Ant.1	State3	Top Edge 10mm	0.502	0.079	0.051	0.057	0.581	0.553	0.559
LTE B38	Ant.0	State3	Front Side 10mm	0.070	0.075	0.059	0.061	0.145	0.129	0.131
LTE B38	Ant.0	State3	Back Side 10mm	0.311	0.180	0.589	0.152	0.491	0.900	0.463
LTE B38	Ant.0	State3	Left Edge 10mm	0.127	0.155	0.384	0.123	0.282	0.511	0.250
LTE B38	Ant.0	State3	Right Edge 10mm	0.005	0.013	0.017	0.011	0.018	0.022	0.016
LTE B38	Ant.0	State3	Top Edge 10mm	/	0.079	0.051	0.057	0.079	0.051	0.057
LTE B38	Ant.0	State3	Bottom Edge 10mm	0.146	0.000	0.000	0.000	0.146	0.146	0.146
LTE B38	Ant.1	State3	Front Side 10mm	0.225	0.075	0.059	0.061	0.300	0.284	0.286
LTE B38	Ant.1	State3	Back Side 10mm	0.508	0.180	0.589	0.152	0.688	1.097	0.660
LTE B38	Ant.1	State3	Left Edge 10mm	/	0.155	0.384	0.123	0.155	0.384	0.123
LTE B38	Ant.1	State3	Right Edge 10mm	0.354	0.013	0.017	0.011	0.367	0.371	0.365
LTE B38	Ant.1	State3	Top Edge 10mm	0.259	0.079	0.051	0.057	0.338	0.310	0.316
LTE B41	Ant.0	State3	Front Side 10mm	0.079	0.075	0.059	0.061	0.154	0.138	0.140
LTE B41	Ant.0	State3	Back Side 10mm	0.363	0.180	0.589	0.152	0.543	0.952	0.515
LTE B41	Ant.0	State3	Left Edge 10mm	0.163	0.155	0.384	0.123	0.318	0.547	0.286
LTE B41	Ant.0	State3	Right Edge 10mm	0.006	0.013	0.017	0.011	0.019	0.023	0.017
LTE B41	Ant.0	State3	Top Edge 10mm	/	0.079	0.051	0.057	0.079	0.051	0.057
LTE B41	Ant.0	State3	Bottom Edge 10mm	0.157	0.000	0.000	0.000	0.157	0.157	0.157
LTE B41	Ant.1	State3	Front Side 10mm	0.201	0.075	0.059	0.061	0.276	0.260	0.262
LTE B41	Ant.1	State3	Back Side 10mm	0.470	0.180	0.589	0.152	0.650	1.059	0.622
LTE B41	Ant.1	State3	Left Edge 10mm	/	0.155	0.384	0.123	0.155	0.384	0.123
LTE B41	Ant.1	State3	Right Edge 10mm	0.263	0.013	0.017	0.011	0.276	0.280	0.274
LTE B41	Ant.1	State3	Top Edge 10mm	0.205	0.079	0.051	0.057	0.284	0.256	0.262

Note:

1: The simultaneous transmission combinations of the three 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 1.352 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

12.2.4 Specific Simultaneous Transmission SAR Evaluation for WWAN Mode and 2.4G WLAN or 5G WLAN and BT

Band	Antenna	Position	Stand alone SAR		SUM SAR
			1	2	1+2
			WWAN	5G WIFI Max . Ant.3 Leve4	WWAN+5G WIFI
WCDMA B2	Ant.1	Back Side 0mm	1.595	0.380	1.975
WCDMA B2	Ant.1	Top Edge 0mm	1.850	0.115	1.965
WCDMA B4	Ant.0	Back Side 0mm	2.061	0.380	**2.441**
LTE B7	Ant.1	Back Side 0mm	1.892	0.380	2.272
LTE B66	Ant.0	Back Side 0mm	1.957	0.380	2.337

Note:

1: The simultaneous transmission combinations of the three 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 0.749 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	DASY6	16.0.0.116	N/A	N/A
750MHz Validation Dipole	Speag	D750V3	SN: 1201	2020/11/11	2023/11/10
835MHz Validation Dipole	Speag	D835V2	SN: 4d187	2021/05/17	2024/05/16
1750MHz Validation Dipole	Speag	D1750V2	SN: 1130	2021/05/17	2024/05/16
1900MHz Validation Dipole	Speag	D1900V2	SN: 5d193	2021/05/20	2024/05/19
2450MHz Validation Dipole	Speag	D2450V2	SN: 952	2021/05/19	2024/05/18
2600MHz Validation Dipole	Speag	D2600V2	SN: 1095	2021/05/19	2024/05/18
5GHz Validation Dipole	Speag	D5GHzV2	SN: 1200	2021/05/18	2024/05/17
E-Field Probe	Speag	EX3DV4	SN: 7607	2023/07/04	2024/07/03
Data Acquisition Electronicsr	Speag	DAE4	SN: 878	2023/03/20	2024/03/19
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	6201502974	2022/12/28	2023/12/27
Network Analyzer	Agilent	E5071C	MY46103472	2022/12/06	2023/12/05
Thermometer	Elitech	RC-4HC	EF7225003029	2023/07/14	2024/07/13
Thermometer	Elitech	RC-4HC	EF720B004820	2022/11/25	2023/11/24
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. (℃)	Meas. Conductivity (σ) (S/m)	Meas. Permittivity (ε)	Target Conductivity (σ) (S/m)	Target Permittivity (ε)	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2023.10.18	Head	750	21.4	0.90	41.87	0.89	41.94	1.12	-0.16
2023.10.08	Head	835	21.5	0.90	41.69	0.90	41.50	-0.44	0.45
2023.10.10	Head	835	21.5	0.89	41.72	0.90	41.50	-0.67	0.52
2023.10.13	Head	835	21.3	0.90	41.86	0.90	41.50	-0.44	0.86
2023.10.26	Head	835	21.5	0.90	41.94	0.90	41.50	-0.44	1.05
2023.10.12	Head	1750	21.6	1.38	40.02	1.37	40.08	0.44	-0.15
2023.10.15	Head	1750	21.4	1.38	40.19	1.37	40.08	0.66	0.28
2023.10.19	Head	1750	21.5	1.38	39.98	1.37	40.08	0.66	-0.25
2023.10.09	Head	1900	21.6	1.39	39.84	1.40	40.00	-0.57	-0.39
2023.10.11	Head	1900	21.4	1.40	39.96	1.40	40.00	0.00	-0.11
2023.10.14	Head	1900	21.2	1.40	39.90	1.40	40.00	-0.14	-0.25
2023.10.22	Head	2450	21.8	1.81	39.71	1.80	39.20	0.28	1.31
2023.10.17	Head	2600	21.6	1.97	38.37	1.96	39.01	0.41	-1.63
2023.10.20	Head	2600	21.4	1.98	38.44	1.96	39.01	0.87	-1.46
2023.10.21	Head	2600	21.7	1.97	38.63	1.96	39.01	0.71	-0.97
2023.10.23	Head	5250	21.5	4.70	35.80	4.71	35.93	-0.21	-0.38
2023.10.24	Head	5600	21.4	5.05	35.33	5.07	35.53	-0.39	-0.57
2023.10.25	Head	5750	21.6	5.17	35.53	5.22	35.36	-0.88	0.47
Note: The tolerance limit of Conductivity and Permittivity is± 5%.									

ANNEX B SYSTEM CHECK RESULT

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

Head liquid 1g

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2023.10.18	Head	750	100	0.81	8.05	8.29	-2.90
2023.10.08	Head	835	100	0.99	9.85	9.76	0.92
2023.10.10	Head	835	100	0.96	9.58	9.76	-1.84
2023.10.13	Head	835	100	0.95	9.51	9.76	-2.56
2023.10.26	Head	835	100	0.95	9.45	9.76	-3.18
2023.10.12	Head	1750	100	3.77	37.70	36.70	2.72
2023.10.15	Head	1750	100	3.91	39.10	36.70	6.54
2023.10.19	Head	1750	100	3.52	35.20	36.70	-4.09
2023.10.09	Head	1900	100	4.12	41.20	40.30	2.23
2023.10.11	Head	1900	100	4.14	41.40	40.30	2.73
2023.10.14	Head	1900	100	4.25	42.50	40.30	5.46
2023.10.22	Head	2450	100	5.12	51.20	53.00	-3.40
2023.10.17	Head	2600	100	5.41	54.10	56.80	-4.75
2023.10.20	Head	2600	100	5.88	58.80	56.80	3.52
2023.10.21	Head	2600	100	5.91	59.10	56.80	4.05
2023.10.23	Head	5250	100	7.71	77.10	77.80	-0.90
2023.10.24	Head	5600	100	7.89	78.90	81.20	-2.83
2023.10.25	Head	5750	100	7.45	74.50	77.20	-3.50
Note: The tolerance limit of System validation ±10%.							

Head liquid 10g

Date	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2023.10.09	1900	100	2.11	21.10	20.30	3.94
2023.10.11	1900	100	2.12	21.20	20.30	4.43
2023.10.14	1900	100	2.14	21.40	20.30	5.42
2023.10.12	1750	100	1.94	19.40	19.10	1.57
2023.10.15	1750	100	2.05	20.50	19.10	7.33
2023.10.19	1750	100	1.85	18.50	19.10	-3.14
2023.10.22	2450	100	2.34	23.40	24.10	-2.90
2023.10.23	5250	100	2.18	21.80	22.10	-1.36
2023.10.24	5600	100	2.22	22.20	23.10	-3.90
2023.10.25	5750	100	2.05	20.50	21.70	-5.53
Note: The tolerance limit of System validation ±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 [℃]	Liquid Temperature [℃]
Flat, HSL		CD700	CW, 0--	750.0, 100	10.31	0.900	41.9	22.4	21.4

Hardware Setup

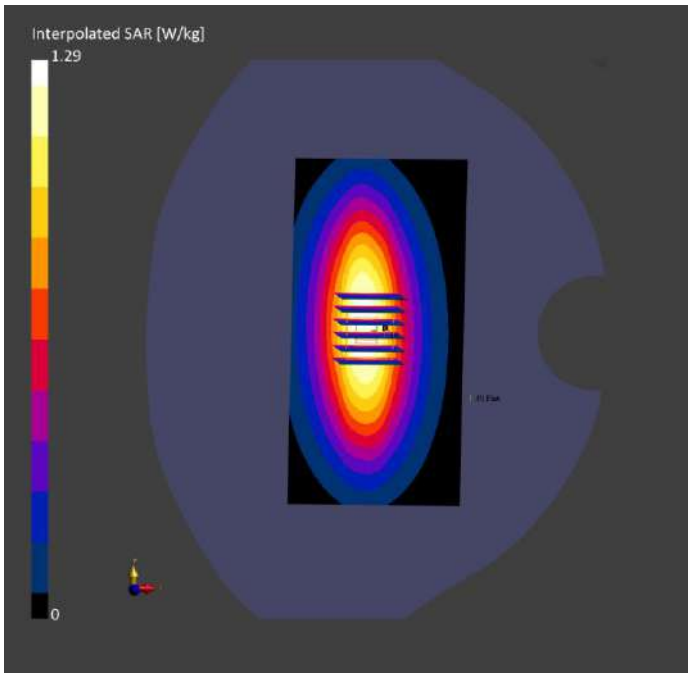
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-18	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-18	2023-10-18
psSAR1g [W/kg]	0.840	0.805
psSAR10g [W/kg]	0.562	0.507
Power Drift [dB]	-0.06	-0.01
Power Scaling Scaling Factor [dB]	Disabled	Disabled
TSL Correction	No correction	No correction
M2/M1 [%]		86.0
Dist 3dB Peak [mm]		20.4


Interpolated SAR [W/kg]
1.29
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 [℃]	Liquid Temperature [℃]
Flat, HSL		CD835	CW, 0--	835.0, 50	9.96	0.896	41.7	22.8	21.5

Hardware Setup

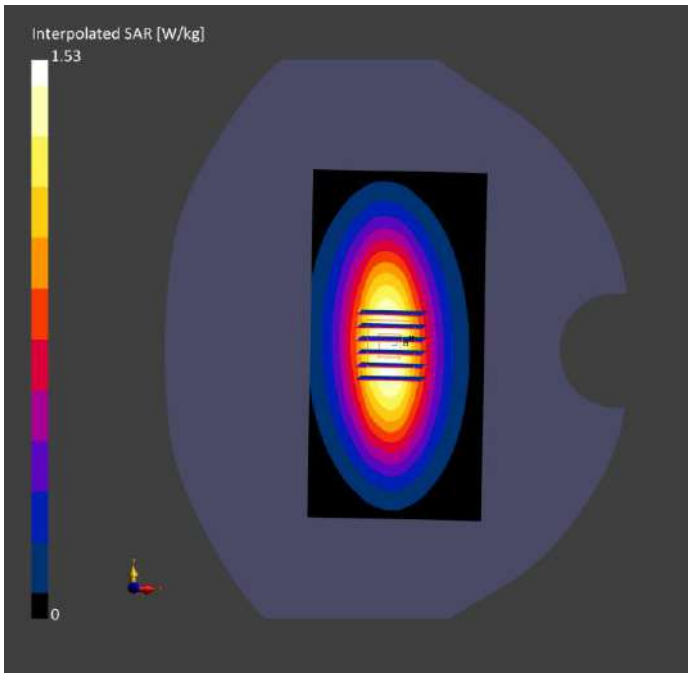
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-08	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-08	2023-10-08
psSAR1g [W/kg]	1.01	0.985
psSAR10g [W/kg]	0.645	0.623
Power Drift [dB]	-0.02	0.01
Power Scaling Scaling Factor [dB]	Disabled	Disabled
TSL Correction	No correction	No correction
M2/M1 [%]		84.8
Dist 3dB Peak [mm]		13.2


Interpolated SAR [W/kg]
1.53
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 [℃]	Liquid Temperature [℃]
Flat, HSL		CD835	CW, 0--	835.0, 50	9.96	0.894	41.7	22.4	21.5

Hardware Setup

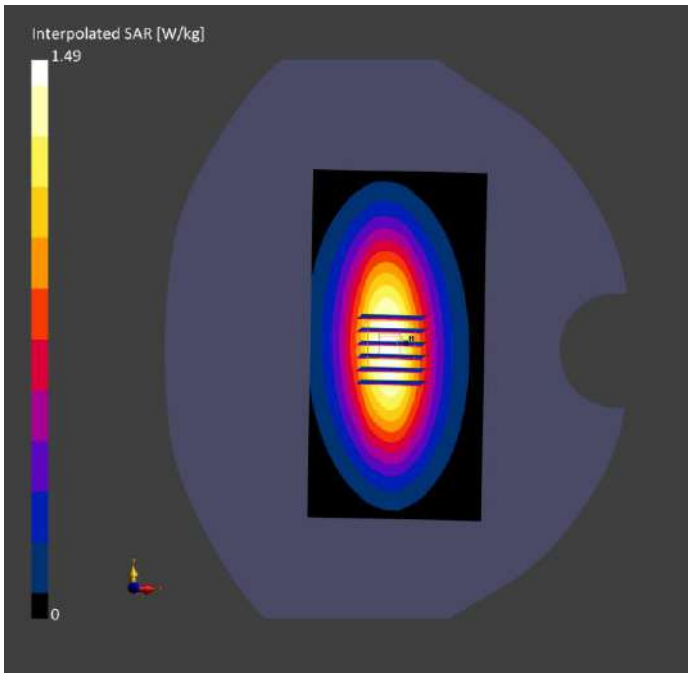
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-10	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-10	2023-10-10
psSAR1g [W/kg]	0.982	0.958
psSAR10g [W/kg]	0.625	0.612
Power Drift [dB]	-0.01	0.00
Power Scaling Scaling Factor [dB]	Disabled	Disabled
TSL Correction	No correction	No correction
M2/M1 [%]		85.9
Dist 3dB Peak [mm]		13.2


Interpolated SAR [W/kg]
1.49
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 [℃]	Liquid Temperature [℃]
Flat, HSL		CD835	CW, 0--	835.0, 50	9.96	0.896	41.9	22.5	21.3

Hardware Setup

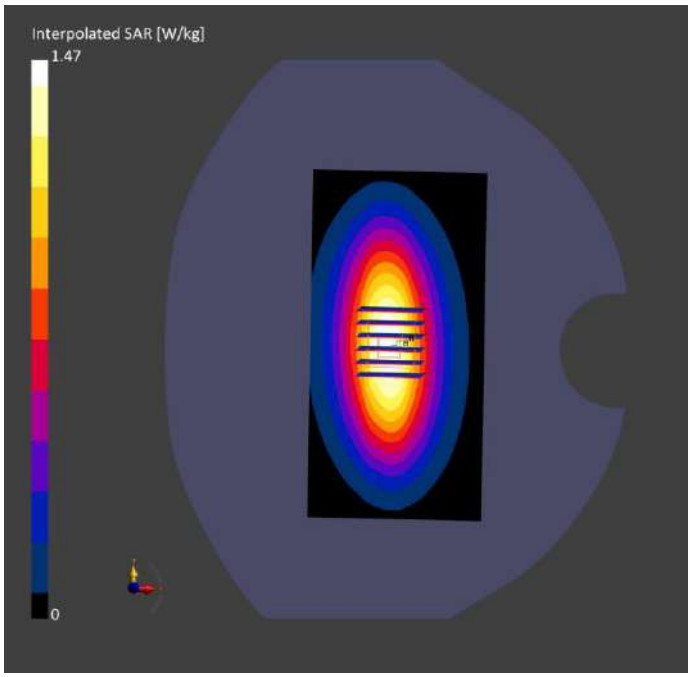
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-13	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-13	2023-10-13
psSAR1g [W/kg]	0.992	0.951
psSAR10g [W/kg]	0.631	0.610
Power Drift [dB]	0.00	0.02
Power Scaling Scaling Factor [dB]	Disabled	Disabled
TSL Correction	No correction	No correction
M2/M1 [%]		84.8
Dist 3dB Peak [mm]		13.2


Interpolated SAR [W/kg]
1.47
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 [℃]	Liquid Temperature [℃]
Flat, HSL		CD835	CW, 0--	835.0, 50	9.96	0.896	41.9	22.8	21.5

Hardware Setup

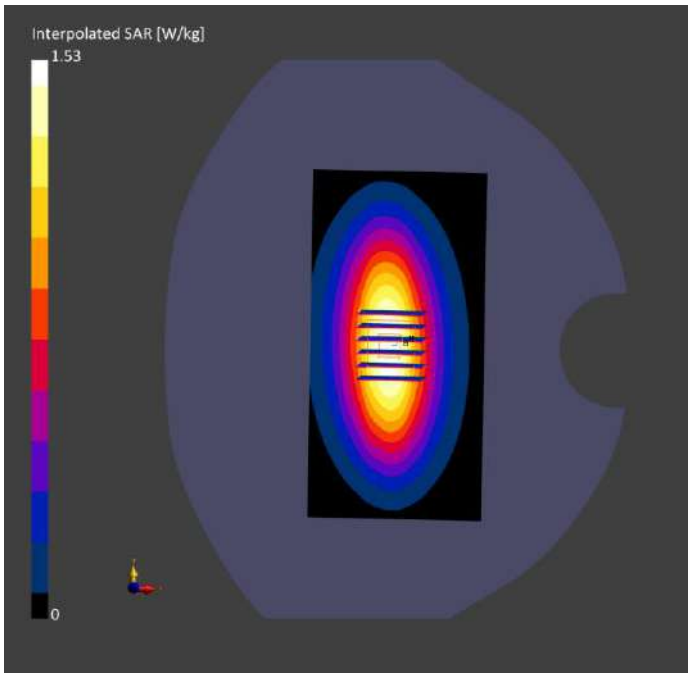
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-26	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-26	2023-10-26
psSAR1g [W/kg]	1.02	0.945
psSAR10g [W/kg]	0.641	0.602
Power Drift [dB]	-0.04	0.05
Power Scaling Scaling Factor [dB]	Disabled	Disabled
TSL Correction	No correction	No correction
M2/M1 [%]		84.8
Dist 3dB Peak [mm]		13.2


Interpolated SAR [W/kg]
1.53
0

System Performance Check Data (1750MHz)

Device under Test Properties

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

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL		D1750	CW, 0--	1750.0, 50	8.52	1.38	40.0	22.6	21.6

Hardware Setup

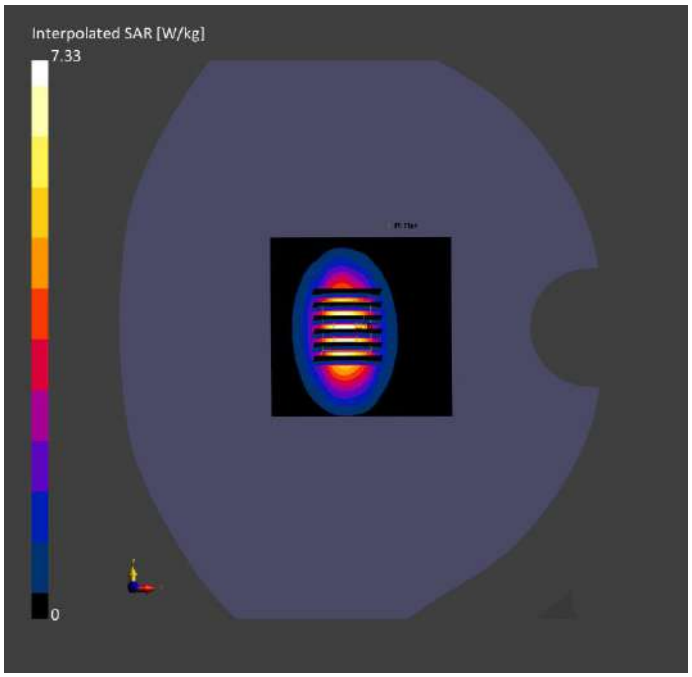
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-12	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-12	2023-10-12
psSAR1g [W/kg]	4.01	3.77
psSAR10g [W/kg]	2.17	1.94
Power Drift [dB]	-0.03	-0.02
Power Scaling Scaling Factor [dB]	Disabled	Disabled
TSL Correction	No correction	No correction
M2/M1 [%]		82.3
Dist 3dB Peak [mm]		9.9


Interpolated SAR [W/kg]
7.33
0

System Performance Check Data (1750MHz)

Device under Test Properties

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

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL		D1750	CW, 0--	1750.0, 50	8.52	1.38	40.2	22.4	21.4

Hardware Setup

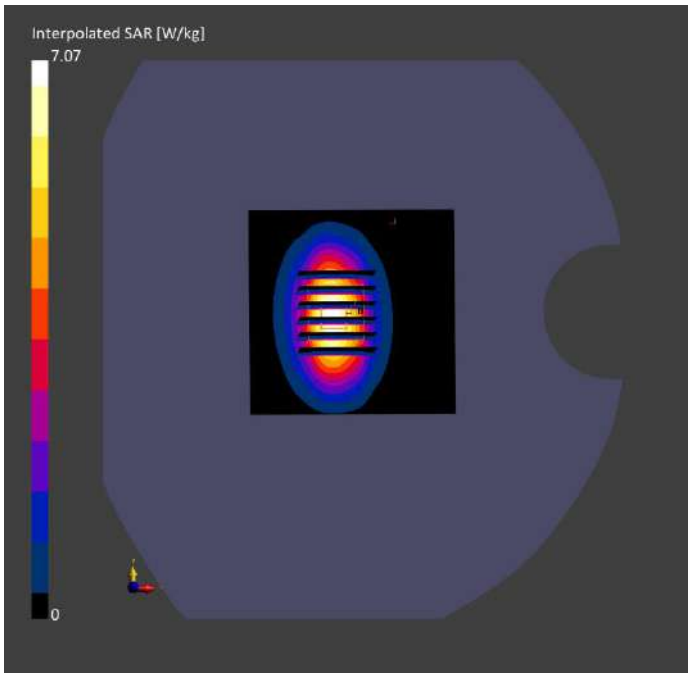
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-15	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-15	2023-10-15
psSAR1g [W/kg]	3.77	3.91
psSAR10g [W/kg]	2.05	2.05
Power Drift [dB]	-0.06	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		81.9
Dist 3dB Peak [mm]		10.7


Interpolated SAR [W/kg]
7.07
0

System Performance Check Data (1750MHz)

Device under Test Properties

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

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL		D1750	CW, 0--	1750.0, 50	8.52	1.38	40.0	22.4	21.5

Hardware Setup

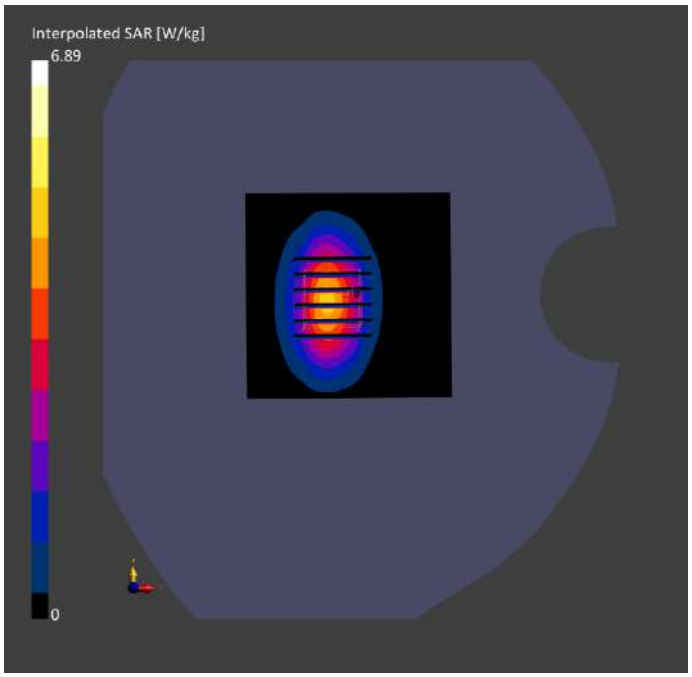
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-19	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-19	2023-10-19
psSAR1g [W/kg]	3.94	3.52
psSAR10g [W/kg]	2.13	1.85
Power Drift [dB]	-0.08	-0.02
Power Scaling Scaling Factor [dB]	Disabled	Disabled
TSL Correction	No correction	No correction
M2/M1 [%]		81.9
Dist 3dB Peak [mm]		10.3


Interpolated SAR [W/kg]
6.89
0

System Performance Check Data (1900MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D1900V2, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL		D1900	CW, 0--	1900.0, 50	7.98	1.39	39.8	22.6	21.6

Hardware Setup

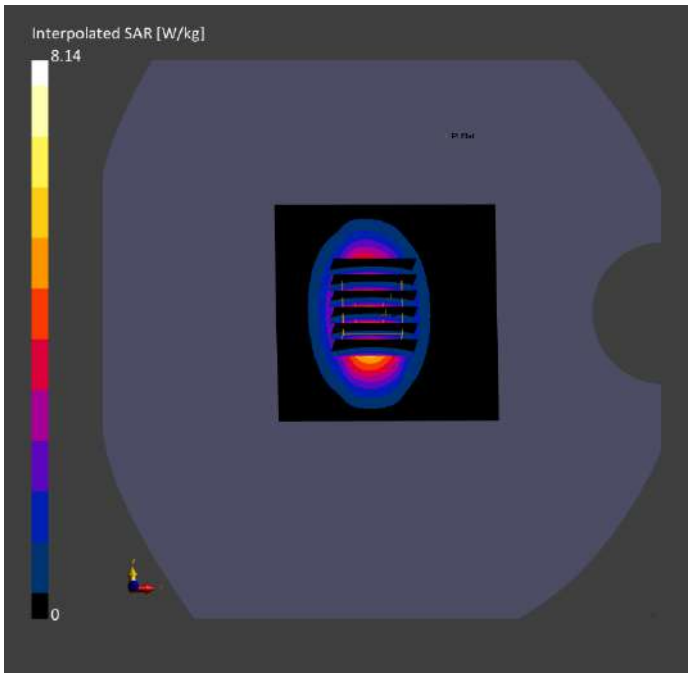
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-09	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-09	2023-10-09
psSAR1g [W/kg]	4.44	4.12
psSAR10g [W/kg]	2.36	2.11
Power Drift [dB]	-0.05	-0.01
Power Scaling Scaling Factor [dB]	Disabled	Disabled
TSL Correction	No correction	No correction
M2/M1 [%]		81.1
Dist 3dB Peak [mm]		9.6


Interpolated SAR [W/kg]
8.14
0

System Performance Check Data (1900MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D1900V2, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL		D1900	CW, 0--	1900.0, 50	7.98	1.40	40.0	22.7	21.4

Hardware Setup

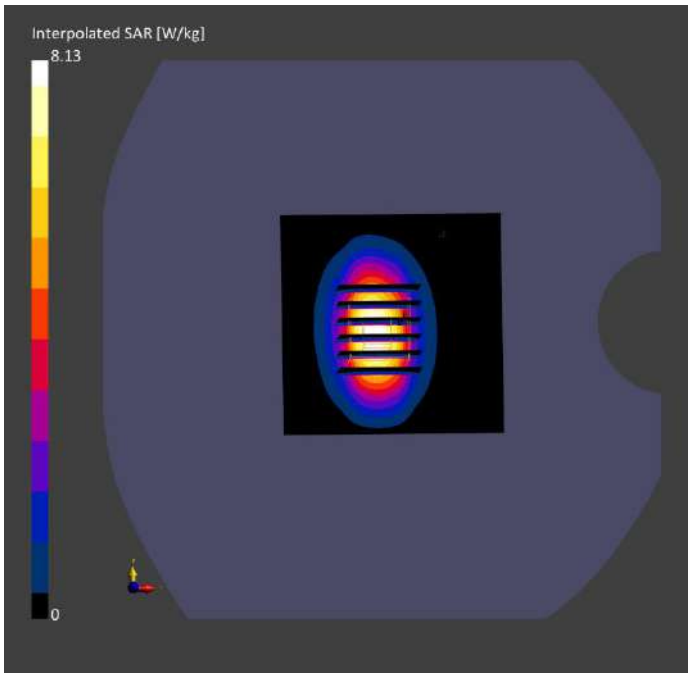
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-11	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-11	2023-10-11
psSAR1g [W/kg]	4.21	4.14
psSAR10g [W/kg]	2.24	2.12
Power Drift [dB]	-0.16	-0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		81.6
Dist 3dB Peak [mm]		9.6


Interpolated SAR [W/kg]
8.13
0

System Performance Check Data (1900MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
D1900V2, SPEAG	10.0 x 10.0 x 3.0	Dipole

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL		D1900	CW, 0--	1900.0, 50	7.98	1.40	39.9	22.6	21.2

Hardware Setup

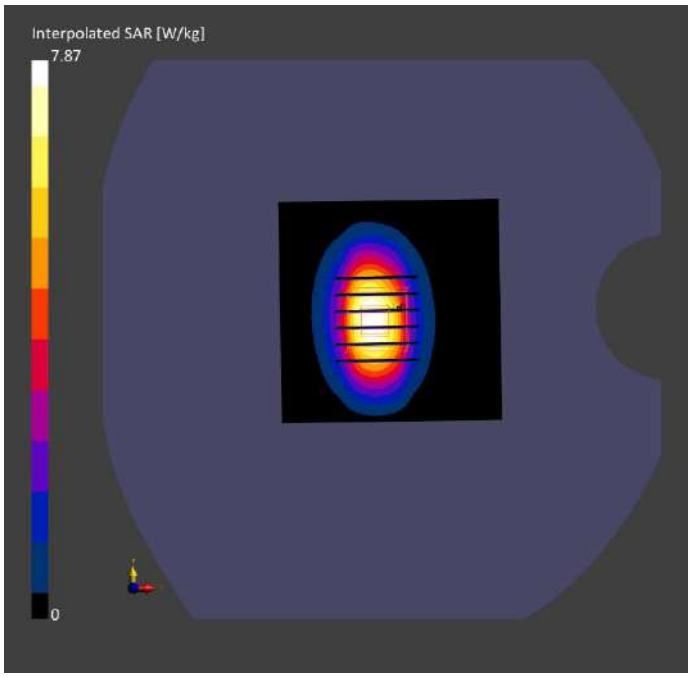
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-14	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-14	2023-10-14
psSAR1g [W/kg]	4.08	4.25
psSAR10g [W/kg]	2.17	2.14
Power Drift [dB]	-0.08	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		82.0
Dist 3dB Peak [mm]		9.6


Interpolated SAR [W/kg]
7.87
0

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 [℃]	Liquid Temperature [℃]
Flat, HSL		D2450	CW, 0--	2450.0, 50	7.47	1.81	39.7	22.8	21.8

Hardware Setup

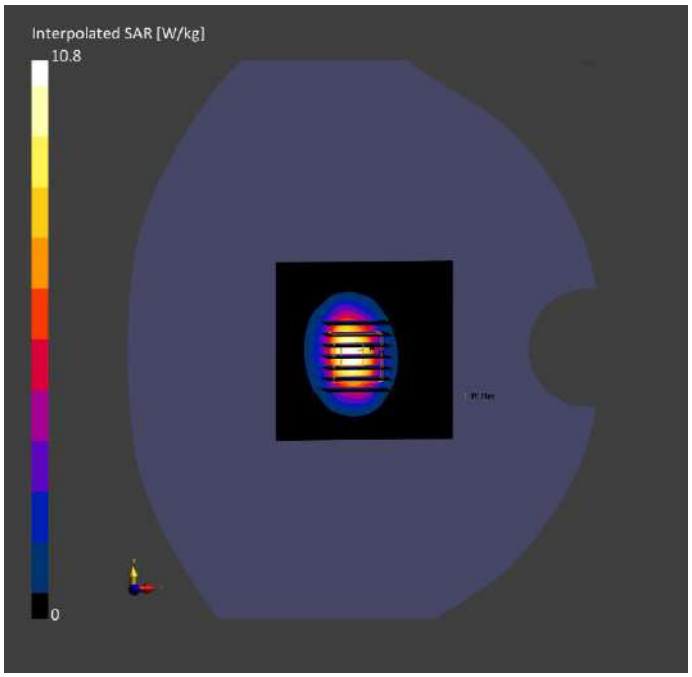
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-22	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-22	2023-10-22
psSAR1g [W/kg]	5.45	5.12
psSAR10g [W/kg]	2.61	2.34
Power Drift [dB]	-0.12	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		80.5
Dist 3dB Peak [mm]		9.0


Interpolated SAR [W/kg]
10.8
0

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 [℃]	Liquid Temperature [℃]
Flat, HSL		CD2600V3	CW, 0--	2600.0, 50	7.41	1.97	38.4	22.9	21.6

Hardware Setup

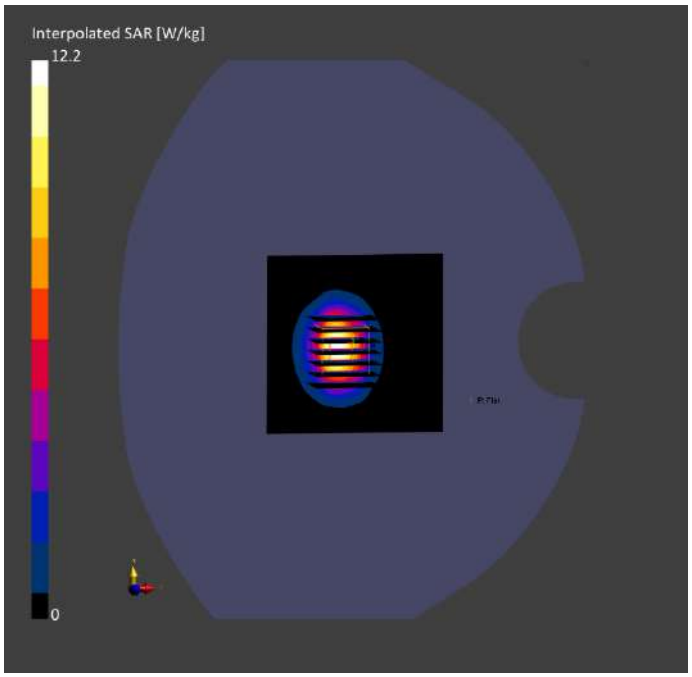
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-17	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-17	2023-10-17
psSAR1g [W/kg]	5.71	5.41
psSAR10g [W/kg]	2.60	2.29
Power Drift [dB]	0.00	-0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		79.6
Dist 3dB Peak [mm]		9.0


Interpolated SAR [W/kg]
12.2
0

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 [℃]	Liquid Temperature [℃]
Flat, HSL		CD2600V3	CW, 0--	2600.0, 50	7.41	1.98	38.4	22.8	21.4

Hardware Setup

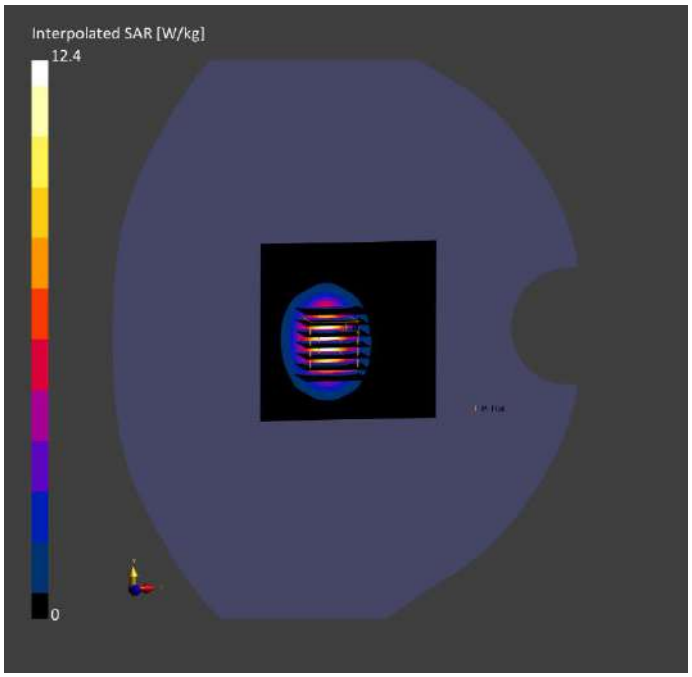
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-20	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-20	2023-10-20
psSAR1g [W/kg]	5.86	5.88
psSAR10g [W/kg]	2.63	2.55
Power Drift [dB]	0.00	0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		80.4
Dist 3dB Peak [mm]		8.9


Interpolated SAR [W/kg]
12.4
0

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 [℃]	Liquid Temperature [℃]
Flat, HSL		CD2600V3	CW, 0--	2600.0, 50	7.41	1.97	38.6	22.4	21.7

Hardware Setup

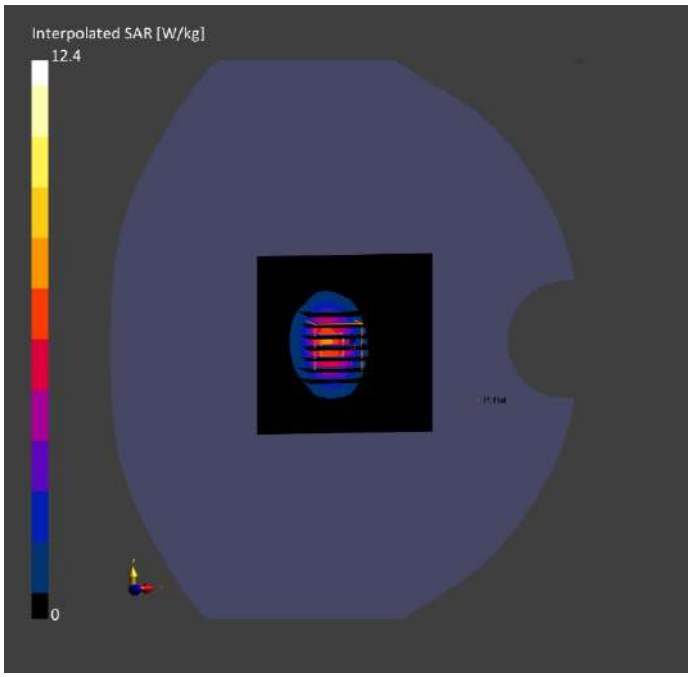
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-21	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-21	2023-10-21
psSAR1g [W/kg]	5.81	5.91
psSAR10g [W/kg]	2.65	2.59
Power Drift [dB]	0.01	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		79.6
Dist 3dB Peak [mm]		9.0


Interpolated SAR [W/kg]
12.4
0

System Performance Check Data (5250MHz)

Device under Test Properties

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

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL		D5GHz	CW, 0--	5250.0, 25	5.41	4.70	35.8	22.6	21.5

Hardware Setup

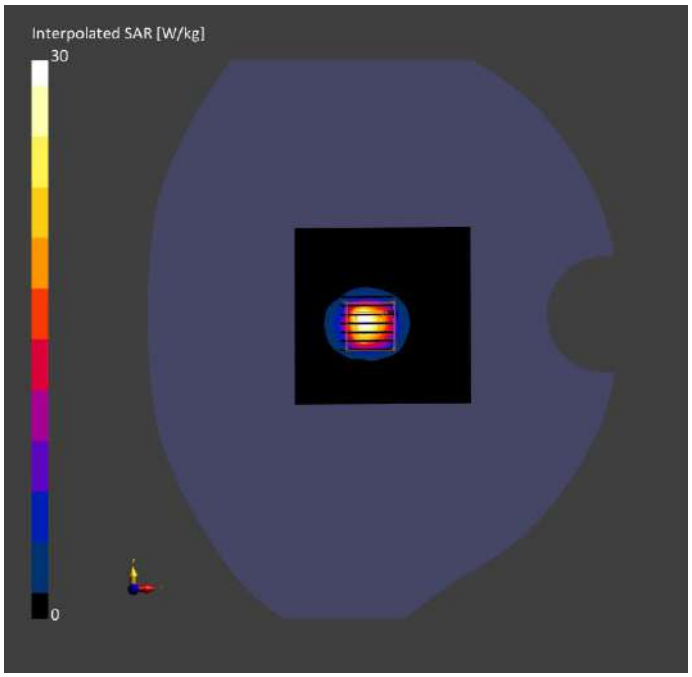
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-23	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

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

Measurement Results

	Area Scan	Zoom Scan
Date	2023-10-23	2023-10-23
psSAR1g [W/kg]	6.84	7.71
psSAR10g [W/kg]	2.16	2.18
Power Drift [dB]	-0.14	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		64.6
Dist 3dB Peak [mm]		6.8


Interpolated SAR [W/kg]
30
0

System Performance Check Data (5600MHz)

Device under Test Properties

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

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL		D5GHz	CW, 0--	5600.0, 60	4.58	5.05	35.3	22.7	21.4

Hardware Setup

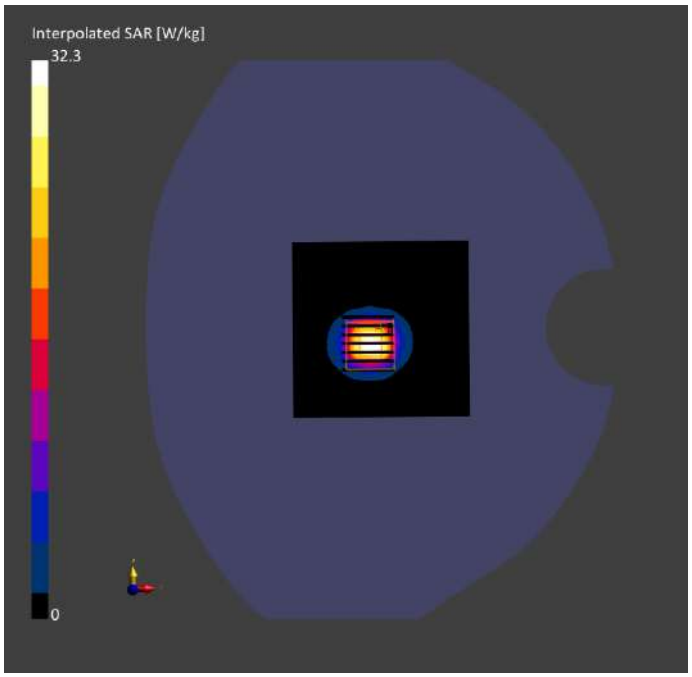
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-24	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

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

Measurement Results

	Area Scan	Zoom Scan
Date	2023-10-24	2023-10-24
psSAR1g [W/kg]	6.73	7.89
psSAR10g [W/kg]	2.15	2.22
Power Drift [dB]	0.01	0.03
Power Scaling Scaling Factor [dB]	Disabled	Disabled
TSL Correction	No correction	No correction
M2/M1 [%]		64.2
Dist 3dB Peak [mm]		7.4


Interpolated SAR [W/kg]
32.3
0

System Performance Check Data (5750MHz)

Device under Test Properties

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

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL		D5GHz	CW, 0--	5750.0, 75	4.78	5.17	35.5	22.5	21.6

Hardware Setup

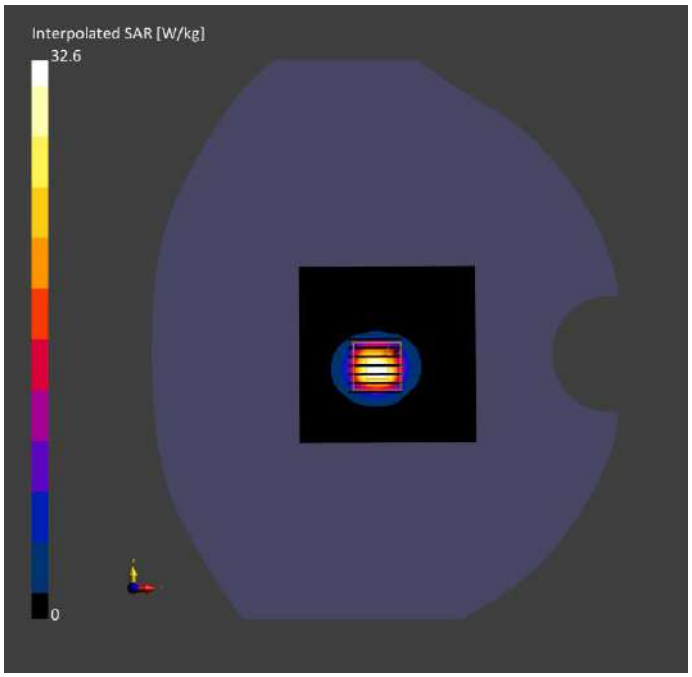
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-25	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

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

Measurement Results

	Area Scan	Zoom Scan
Date	2023-10-25	2023-10-25
psSAR1g [W/kg]	6.83	7.45
psSAR10g [W/kg]	2.19	2.05
Power Drift [dB]	-0.01	-0.05
Power Scaling Scaling Factor [dB]	Disabled	Disabled
TSL Correction	No correction	No correction
M2/M1 [%]		61.4
Dist 3dB Peak [mm]		7.4


Interpolated SAR [W/kg]
32.6
0

ANNEX C TEST DATA

Meas.1 Right Head with Cheek on Low Channel in GPRS850 2slots mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Right Head, HSL	CHEEK, 0.00	GSM 850	GSM, 10028-DAC	824.2, 128	9.96	0.888	41.9	22.8	21.5

Hardware Setup

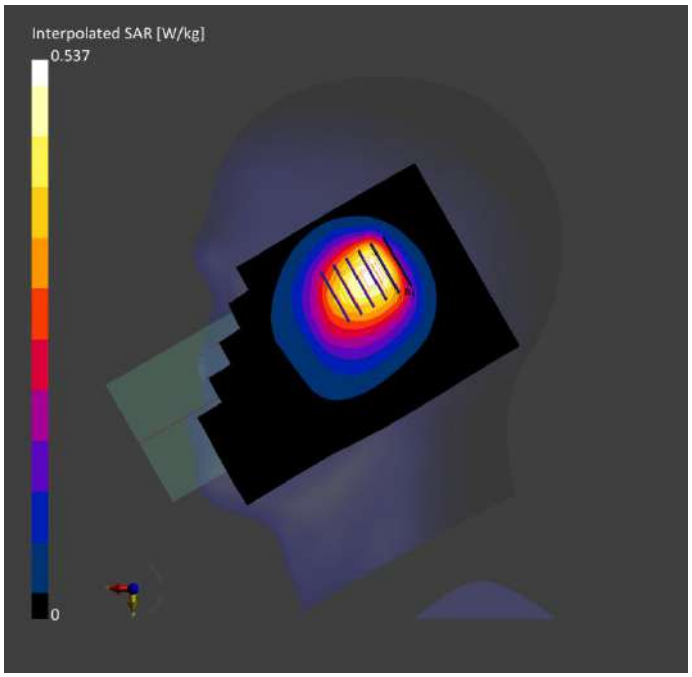
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-08	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-08	2023-10-08
psSAR1g [W/kg]	0.327	0.330
psSAR10g [W/kg]	0.218	0.223
Power Drift [dB]	0.02	0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		66.7
Dist 3dB Peak [mm]		9.6


Interpolated SAR [W/kg]
0.537
0

Meas.1 Body Plane with Back Side 15mm on High Channel in GPRS850 2slots mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 15.00	GSM 850	GSM, 10028-DAC	848.8, 251	9.96	0.910	41.3	22.8	21.5

Hardware Setup

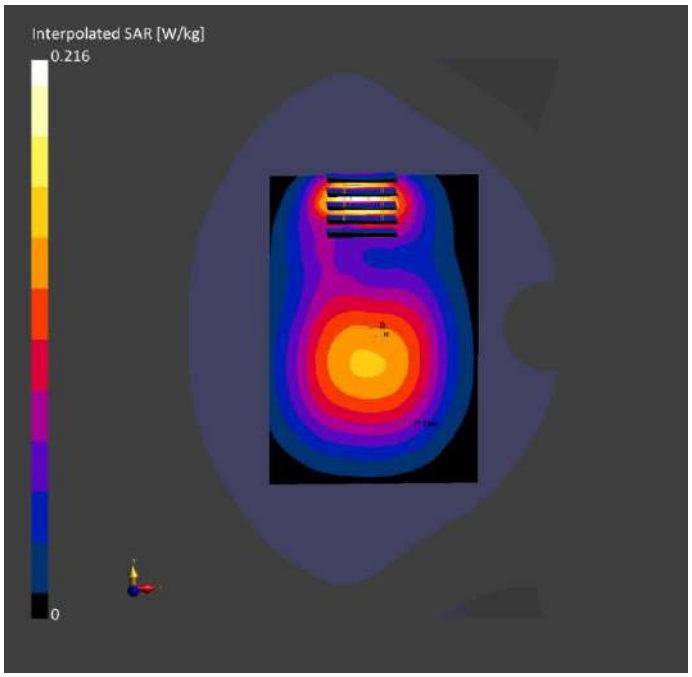
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-08	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-08	2023-10-08
psSAR1g [W/kg]	0.121	0.125
psSAR10g [W/kg]	0.077	0.072
Power Drift [dB]	-0.03	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		54.7
Dist 3dB Peak [mm]		11.5


Interpolated SAR [W/kg]
0.216
0

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
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 10.00	GSM 850	GSM, 10028-DAC	848.8, 251	9.96	0.910	41.3	22.8	21.5

Hardware Setup

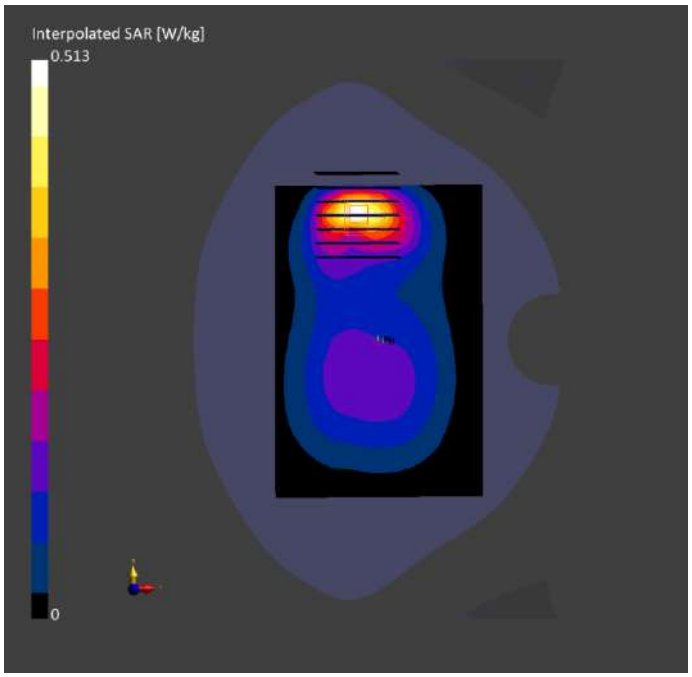
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-08	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-08	2023-10-08
psSAR1g [W/kg]	0.265	0.264
psSAR10g [W/kg]	0.160	0.141
Power Drift [dB]	0.00	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		48.2
Dist 3dB Peak [mm]		10.1


Interpolated SAR [W/kg]
0.513
0

Meas.4 Right Head with Tilt on High Channel in GPRS1900 2slots mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
RightHead, HSL	TILT, 0.00	PCS 1900	GSM, 10024-DAC	1909.8, 810	7.98	1.40	39.6	22.6	21.6

Hardware Setup

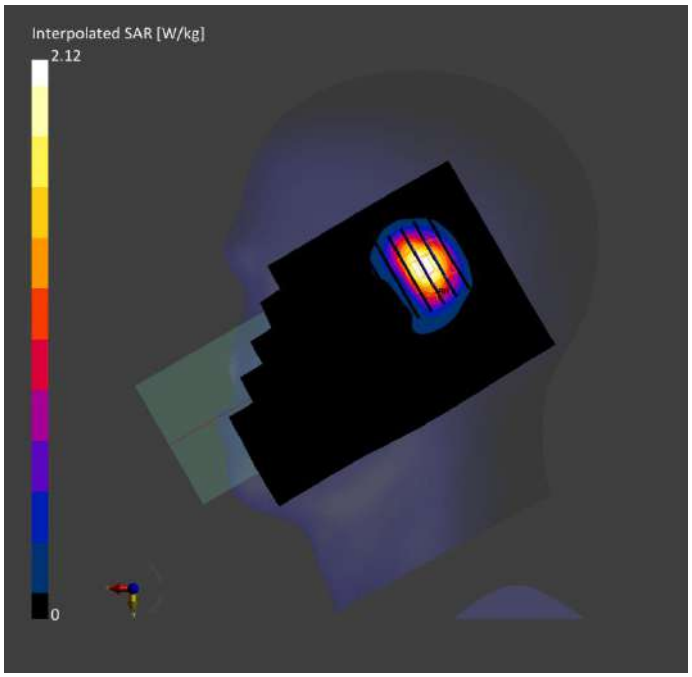
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-09	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-09	2023-10-09
psSAR1g [W/kg]	0.780	1.04
psSAR10g [W/kg]	0.413	0.464
Power Drift [dB]	-0.10	-0.07
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		47.5
Dist 3dB Peak [mm]		6.4


Interpolated SAR [W/kg]
2.12
0

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

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 15.00	PCS 1900	GSM, 10028-DAC	1909.8, 810	7.98	1.40	39.6	22.6	21.6

Hardware Setup

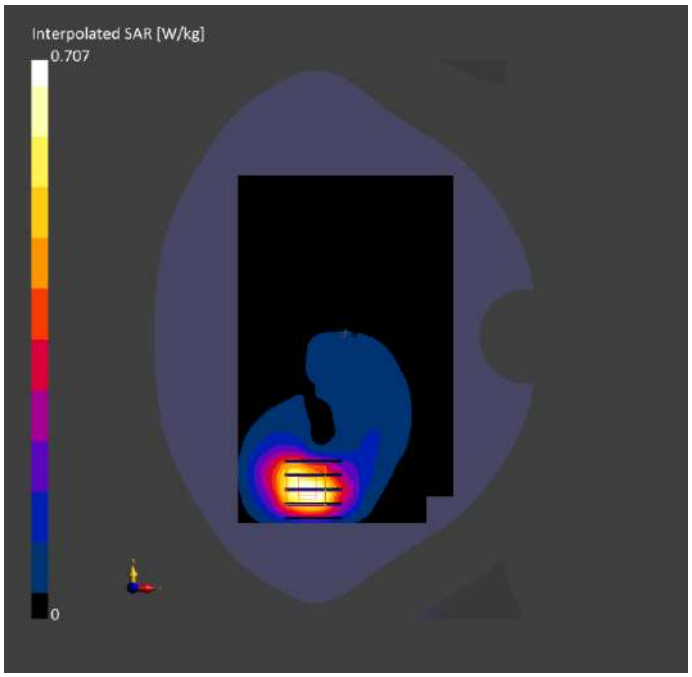
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-09	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-09	2023-10-09
psSAR1g [W/kg]	0.375	0.425
psSAR10g [W/kg]	0.211	0.231
Power Drift [dB]	0.02	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		59.4
Dist 3dB Peak [mm]		11.3


Interpolated SAR [W/kg]
0.707
0

Meas.6 Body Plane with Top Edge 10mm on High Channel in GPRS1900 2slots mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	81.0 x 78.0 x 10.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	EDGE TOP, 10.00	PCS 1900	GSM, 10028-DAC	1909.8, 810	7.98	1.40	39.6	22.6	21.6

Hardware Setup

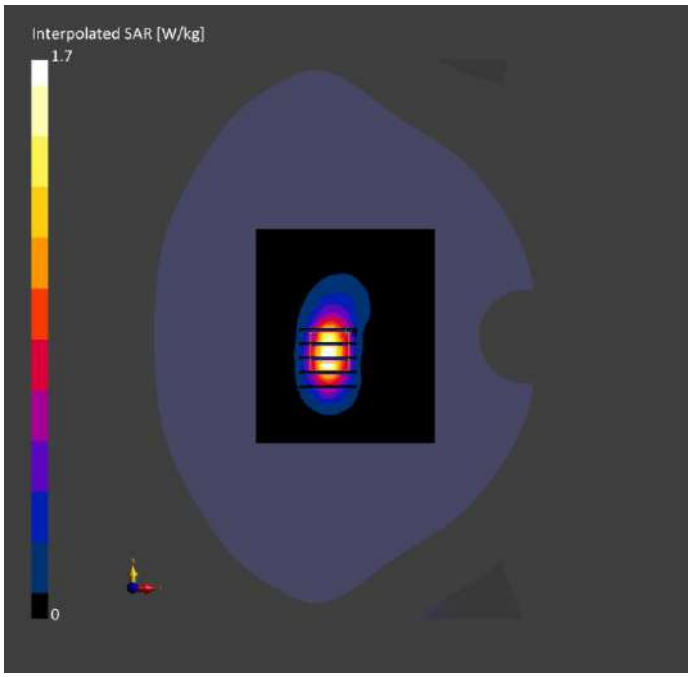
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-09	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	100.0 x 120.0	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	2023-10-09	2023-10-09
psSAR1g [W/kg]	0.951	0.973
psSAR10g [W/kg]	0.464	0.484
Power Drift [dB]	-0.07	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		55.9
Dist 3dB Peak [mm]		8.0


Interpolated SAR [W/kg]
1.7
0

Meas.7 Right Head with Tilt on Middle Channel in WCDMA Band2 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
RightHead, HSL	TILT, 0.00	Band 2	WCDMA, 10011-CAC	1880.0, 9400	7.98	1.39	40.2	22.7	21.4

Hardware Setup

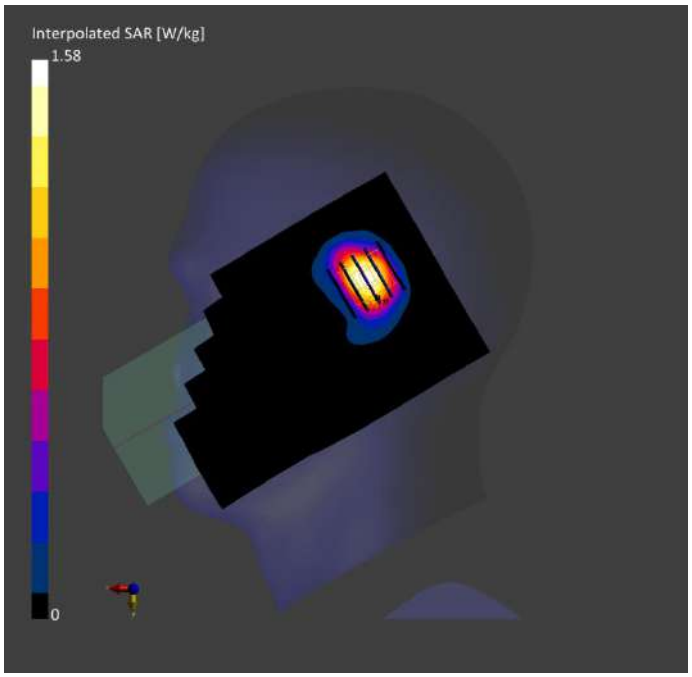
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-11	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-11	2023-10-11
psSAR1g [W/kg]	0.567	0.782
psSAR10g [W/kg]	0.305	0.356
Power Drift [dB]	-0.01	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		49.1
Dist 3dB Peak [mm]		6.4


Interpolated SAR [W/kg]
1.58
0

Meas.8 Body Plane with Back Side 15mm on Middle Channel in WCDMA Band2 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 15.00	Band 2	WCDMA, 10011-CAC	1880.0, 9400	7.98	1.39	40.2	22.7	21.4

Hardware Setup

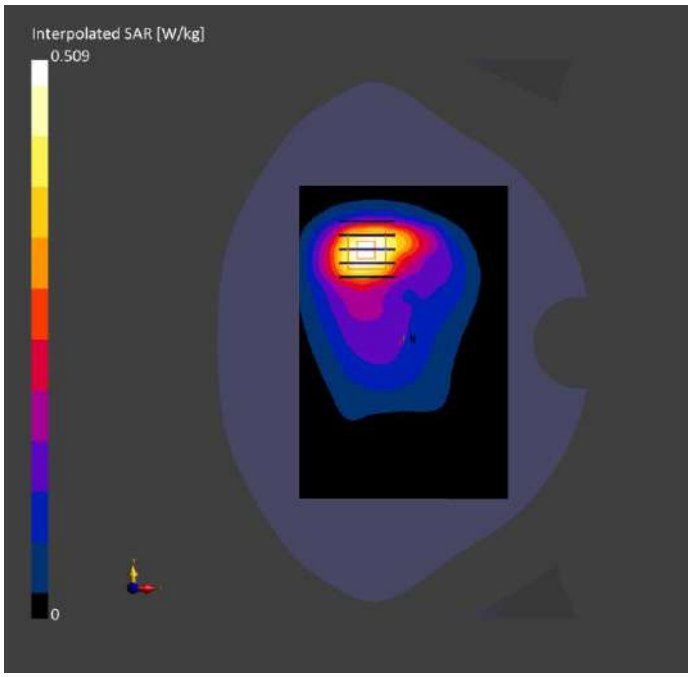
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-11	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-11	2023-10-11
psSAR1g [W/kg]	0.273	0.310
psSAR10g [W/kg]	0.160	0.179
Power Drift [dB]	-0.01	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		59.5
Dist 3dB Peak [mm]		12.8


Interpolated SAR [W/kg]
0.509
0

Meas.9 Body Plane with Bottom Edge 10mm on Middle Channel in WCDMA Band2 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	81.0 x 78.0 x 10.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	EDGE BOTTOM, 10.00	Band 2	WCDMA, 10011-CAC	1880.0, 9400	7.98	1.39	40.2	22.7	21.4

Hardware Setup

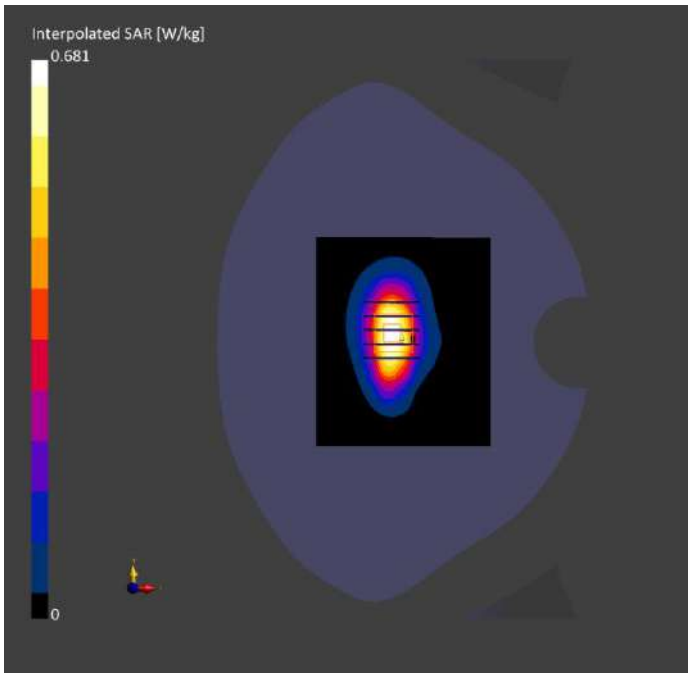
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-11	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	100.0 x 120.0	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	2023-10-11	2023-10-11
psSAR1g [W/kg]	0.392	0.408
psSAR10g [W/kg]	0.216	0.228
Power Drift [dB]	0.02	0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		59.6
Dist 3dB Peak [mm]		11.2


Interpolated SAR [W/kg]
0.681
0

Meas.10 Body Plane with Top Edge 0mm on Middle Channel in WCDMA Band2 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	165.0 x 75.0 x 7.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	EDGE TOP, 0.00	Band 2	WCDMA, 10011-CAC	1880.0, 9400	7.98	1.39	40.2	22.7	21.4

Hardware Setup

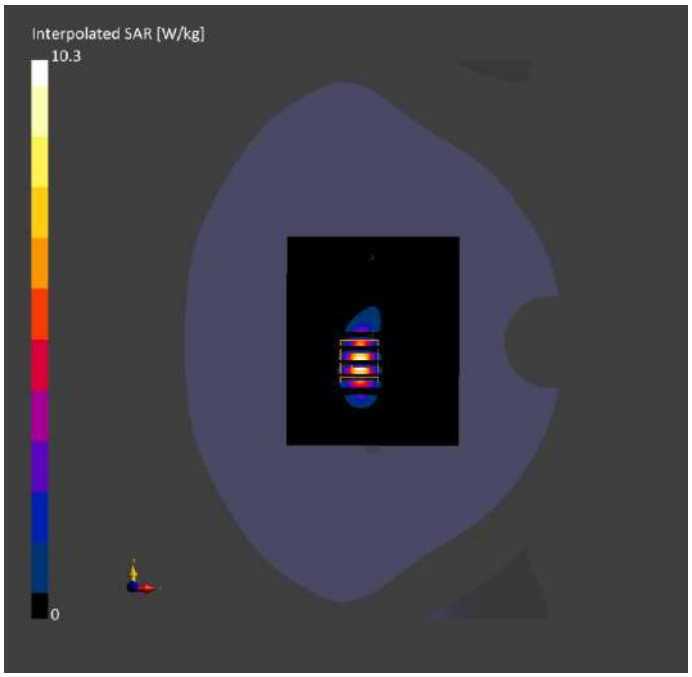
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-11	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	98.0 x 120.0	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	2023-10-11	2023-10-11
psSAR1g [W/kg]	4.54	4.20
psSAR10g [W/kg]	1.78	1.60
Power Drift [dB]	-0.10	-0.07
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		38.3
Dist 3dB Peak [mm]		4.8


Interpolated SAR [W/kg]
10.3
0

Meas.11 Right Head with Tilt on High Channel in WCDMA Band4 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
RightHead, HSL	TILT, 0.00	Band 4	WCDMA, 10011-CAC	1752.6, 1513	8.52	1.38	40.0	22.6	21.6

Hardware Setup

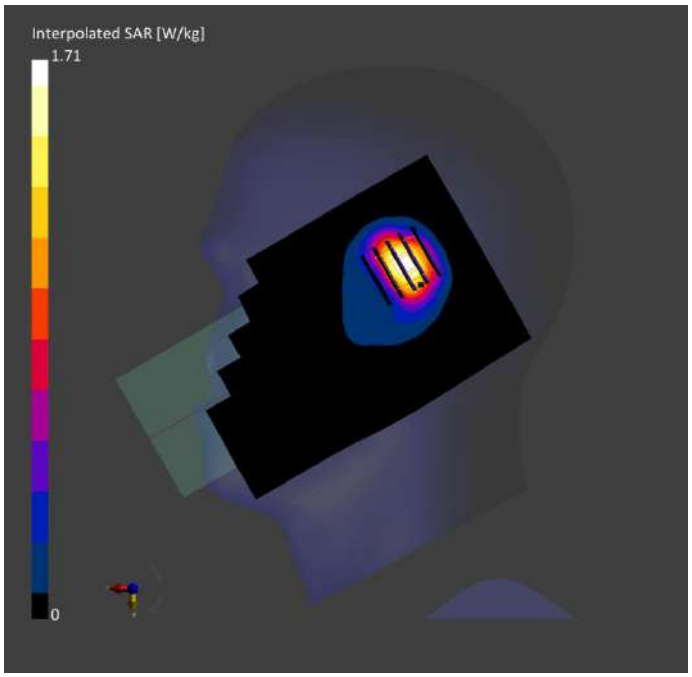
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-12	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-12	2023-10-12
psSAR1g [W/kg]	0.704	0.898
psSAR10g [W/kg]	0.383	0.429
Power Drift [dB]	-0.00	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		49.1
Dist 3dB Peak [mm]		6.4


Interpolated SAR [W/kg]
1.71
0

Meas.12 Body Plane with Back Side 15mm on Low Channel in WCDMA Band4 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 15.00	Band 4	WCDMA, 10011-CAC	1712.4, 1312	8.52	1.33	40.6	22.6	21.6

Hardware Setup

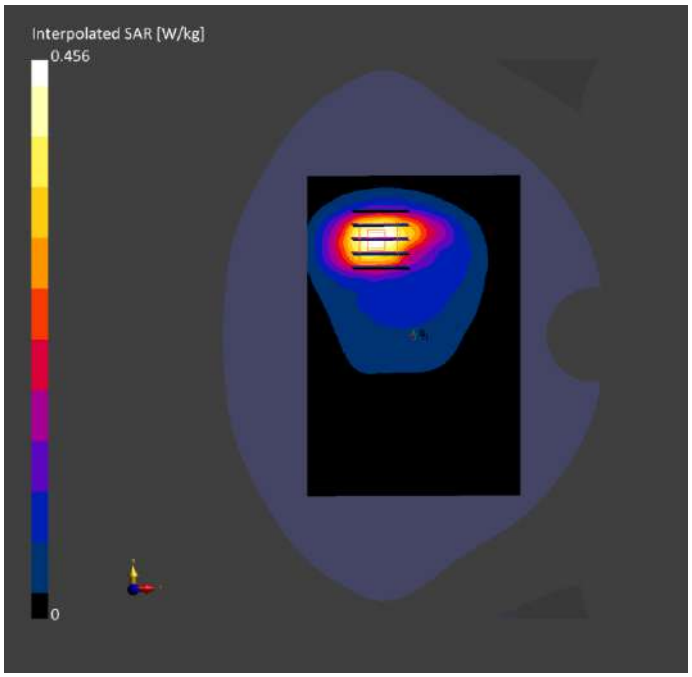
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-12	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-12	2023-10-12
psSAR1g [W/kg]	0.253	0.282
psSAR10g [W/kg]	0.148	0.162
Power Drift [dB]	-0.01	-0.08
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		61.0
Dist 3dB Peak [mm]		12.8


Interpolated SAR [W/kg]
0.456
0

Meas.13 Body Plane with Top Edge 10mm on Low Channel in WCDMA Band4 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	81.0 x 78.0 x 10.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	EDGE TOP, 10.00	Band 4	WCDMA, 10011-CAC	1712.4, 1312	8.52	1.33	40.6	22.6	21.6

Hardware Setup

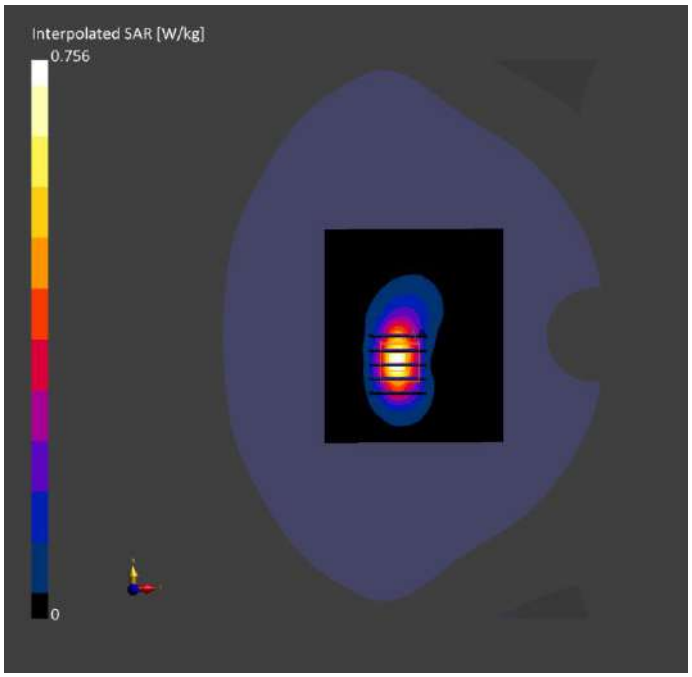
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-12	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	100.0 x 120.0	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	2023-10-12	2023-10-12
psSAR1g [W/kg]	0.423	0.428
psSAR10g [W/kg]	0.209	0.217
Power Drift [dB]	-0.01	0.09
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		56.2
Dist 3dB Peak [mm]		8.0


Interpolated SAR [W/kg]
0.756
0

Meas.14 Body Plane with Back Side 0mm on Low Channel in WCDMA Band4 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 0.00	Band 4	WCDMA, 10011-CAC	1712.4, 1312	8.52	1.34	40.6	22.6	21.6

Hardware Setup

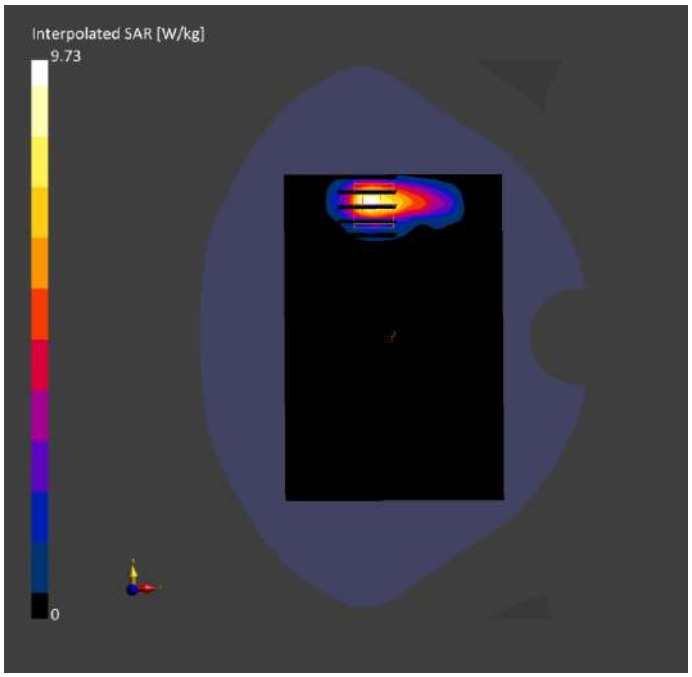
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-12	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-12	2023-10-12
psSAR1g [W/kg]	4.49	4.19
psSAR10g [W/kg]	2.24	1.87
Power Drift [dB]	0.02	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		37.6
Dist 3dB Peak [mm]		6.4


Interpolated SAR [W/kg]
9.73
0

Meas.15 Right Head with Cheek on Middle Channel in WCDMA Band5 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
RightHead, HSL	CHEEK, 0.00	Band 5	WCDMA, 10011-CAC	836.4, 4182	9.96	0.896	41.7	22.4	21.5

Hardware Setup

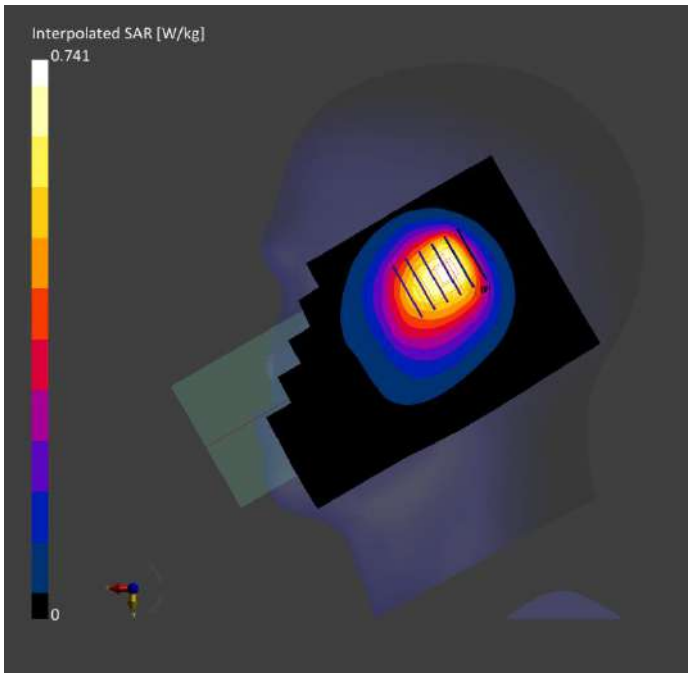
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-10	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-10	2023-10-10
psSAR1g [W/kg]	0.462	0.455
psSAR10g [W/kg]	0.307	0.312
Power Drift [dB]	0.08	-0.13
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		51.8
Dist 3dB Peak [mm]		11.2


Interpolated SAR [W/kg]
0.741
0

Meas.16 Body Plane with Back Side 15mm on Middle Channel in WCDMA Band5 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 15.00	Band 5	WCDMA, 10011-CAC	836.4, 4182	9.96	0.896	41.7	22.4	21.5

Hardware Setup

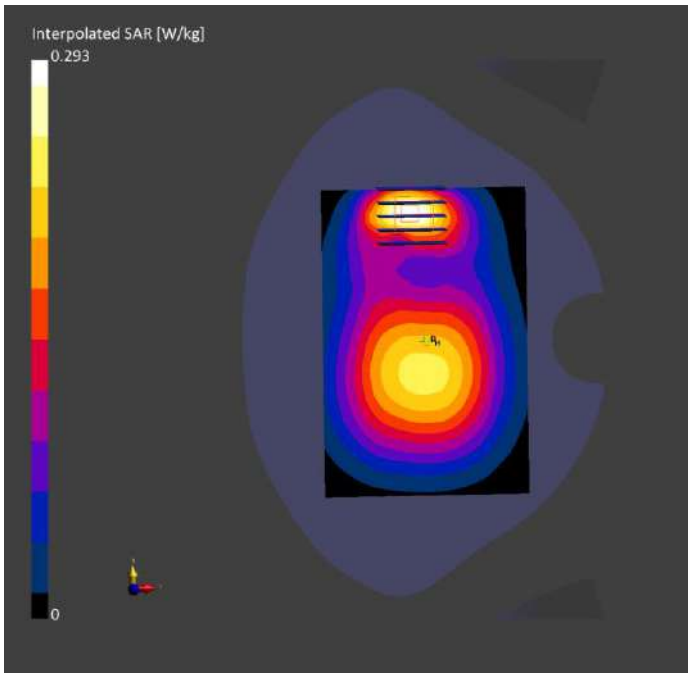
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-10	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-10	2023-10-10
psSAR1g [W/kg]	0.169	0.170
psSAR10g [W/kg]	0.108	0.099
Power Drift [dB]	0.00	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		54.8
Dist 3dB Peak [mm]		12.9


Interpolated SAR [W/kg]
0.293
0

Meas.17 Body Plane with Back Side 10mm on Middle Channel in WCDMA Band5 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 10.00	Band 5	WCDMA, 10011-CAC	836.4, 4182	9.96	0.896	41.7	22.4	21.5

Hardware Setup

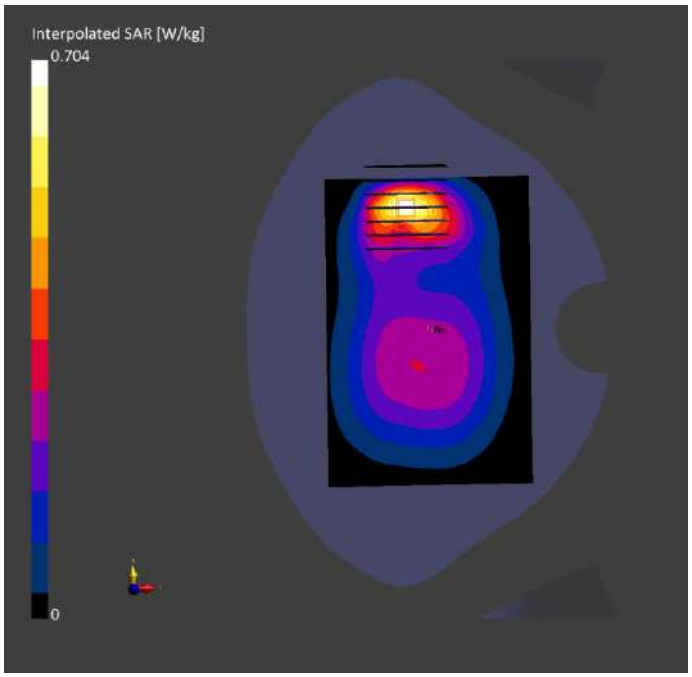
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-10	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-10	2023-10-10
psSAR1g [W/kg]	0.351	0.362
psSAR10g [W/kg]	0.214	0.195
Power Drift [dB]	0.00	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		48.1
Dist 3dB Peak [mm]		10.7


Interpolated SAR [W/kg]
0.704
0

Meas.18 Right Head with Tilt on High Channel in LTE Band2 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
RightHead, HSL	TILT, 0.00	Band 2	LTE-FDD, 10169-CAF	1900.0, 19100	7.98	1.40	40.0	22.6	21.2

Hardware Setup

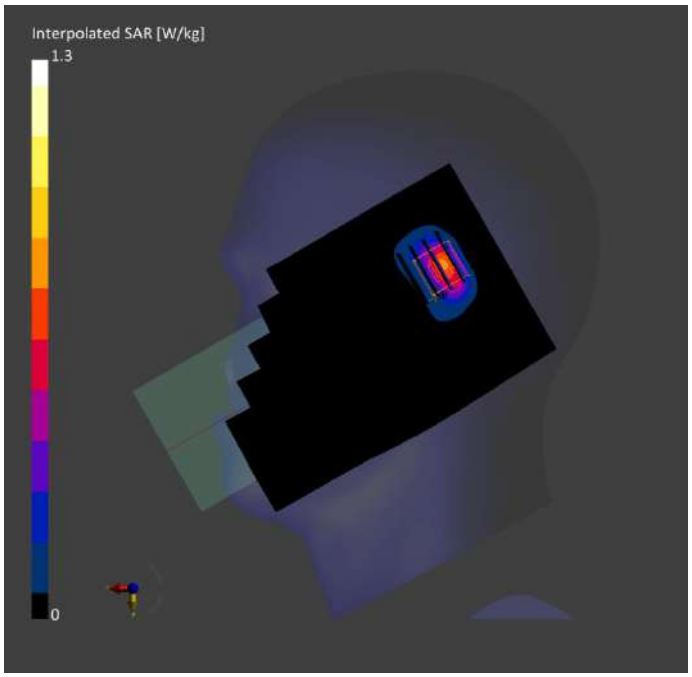
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-14	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-14	2023-10-14
psSAR1g [W/kg]	0.584	0.696
psSAR10g [W/kg]	0.276	0.324
Power Drift [dB]	0.18	0.12
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		54.5
Dist 3dB Peak [mm]		8.0


Interpolated SAR [W/kg]
1.3
0

Meas.19 Body Plane with Back Side 15mm on High Channel in LTE Band2 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 15.00	Band 2	LTE-FDD, 10169-CAF	1900.0, 19100	7.98	1.40	40.0	22.6	21.2

Hardware Setup

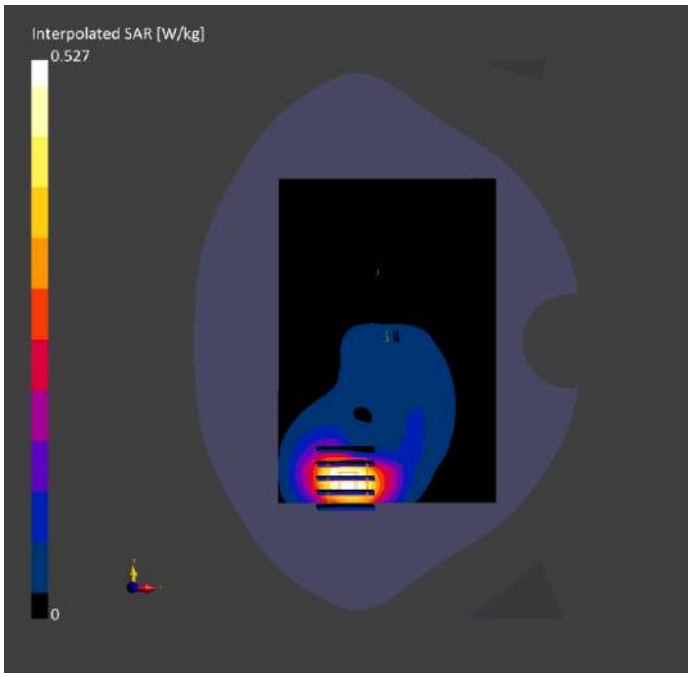
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-14	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-14	2023-10-14
psSAR1g [W/kg]	0.290	0.311
psSAR10g [W/kg]	0.162	0.169
Power Drift [dB]	-0.03	0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		57.8
Dist 3dB Peak [mm]		10.7


Interpolated SAR [W/kg]
0.527
0

Meas.20 Body Plane with Top Edge 10mm on High Channel in LTE Band2 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	81.0 x 78.0 x 10.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	EDGE TOP, 10.00	Band 2	LTE-FDD, 10169-CAF	1900.0, 19100	7.98	1.40	40.0	22.6	21.2

Hardware Setup

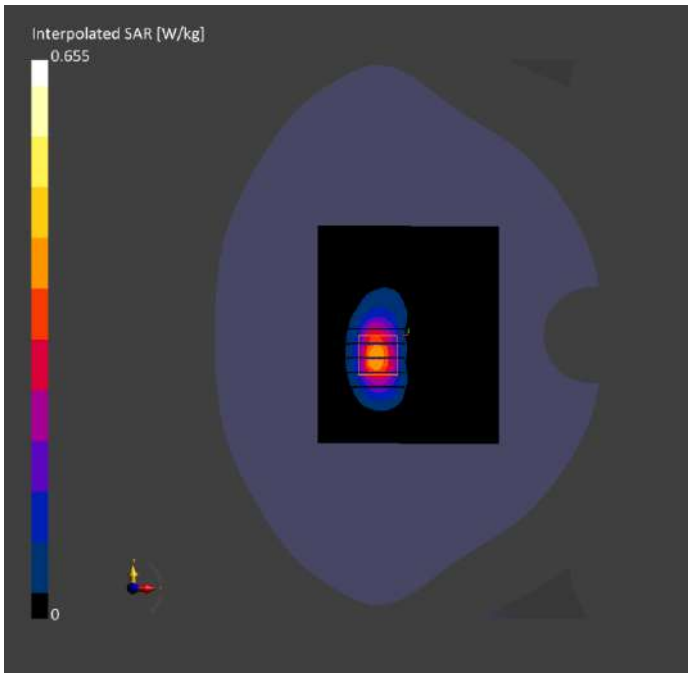
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-14	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	100.0 x 120.0	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	2023-10-14	2023-10-14
psSAR1g [W/kg]	0.347	0.368
psSAR10g [W/kg]	0.173	0.182
Power Drift [dB]	0.01	0.12
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		56.0
Dist 3dB Peak [mm]		8.0


Interpolated SAR [W/kg]
0.655
0

Meas.21 Right Head with Tilt on Middle Channel in LTE Band4 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
RightHead, HSL	TILT, 0.00	Band 4	LTE-FDD, 10169-CAF	1732.5, 20175	8.52	1.36	40.4	22.4	21.4

Hardware Setup

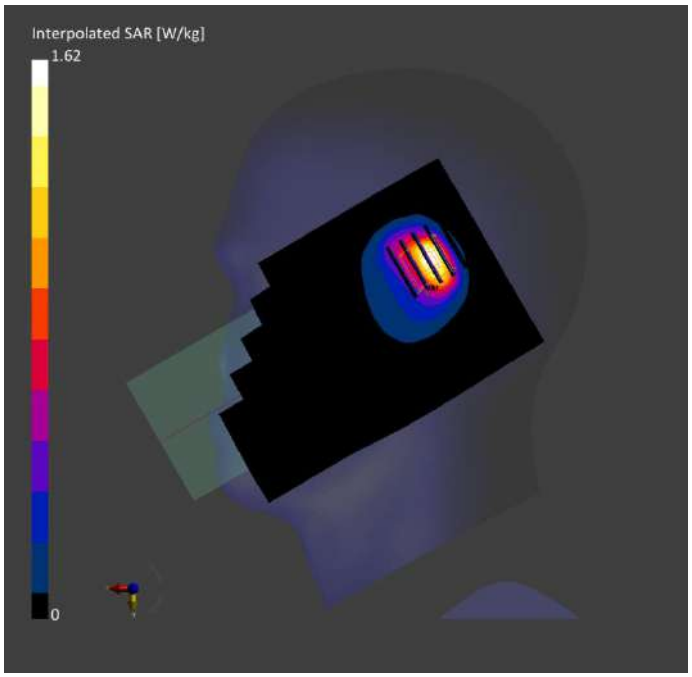
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-15	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-15	2023-10-15
psSAR1g [W/kg]	0.766	0.881
psSAR10g [W/kg]	0.388	0.430
Power Drift [dB]	0.12	-0.09
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		55.8
Dist 3dB Peak [mm]		8.0


Interpolated SAR [W/kg]
1.62
0

Meas.22 Body Plane with Back Side 15mm on Low Channel in LTE Band4 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 15.00	Band 4	LTE-FDD, 10169-CAF	1720.0, 20050	8.52	1.36	40.6	22.4	21.4

Hardware Setup

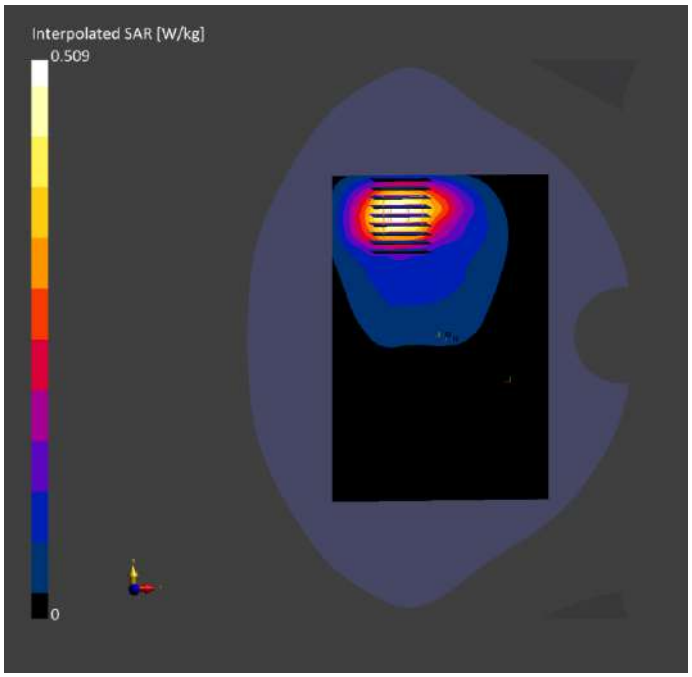
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-15	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 180.0	32.0 x 40.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 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	2023-10-15	2023-10-15
psSAR1g [W/kg]	0.264	0.312
psSAR10g [W/kg]	0.156	0.179
Power Drift [dB]	-0.15	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		61.0
Dist 3dB Peak [mm]		12.0


Interpolated SAR [W/kg]
0.509
0

Meas.23 Body Plane with Top Edge 10mm on Middle Channel in LTE Band4 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	81.0 x 78.0 x 10.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	EDGE TOP, 10.00	Band 4	LTE-FDD, 10169-CAF	1732.5, 20175	8.52	1.36	40.4	22.4	21.4

Hardware Setup

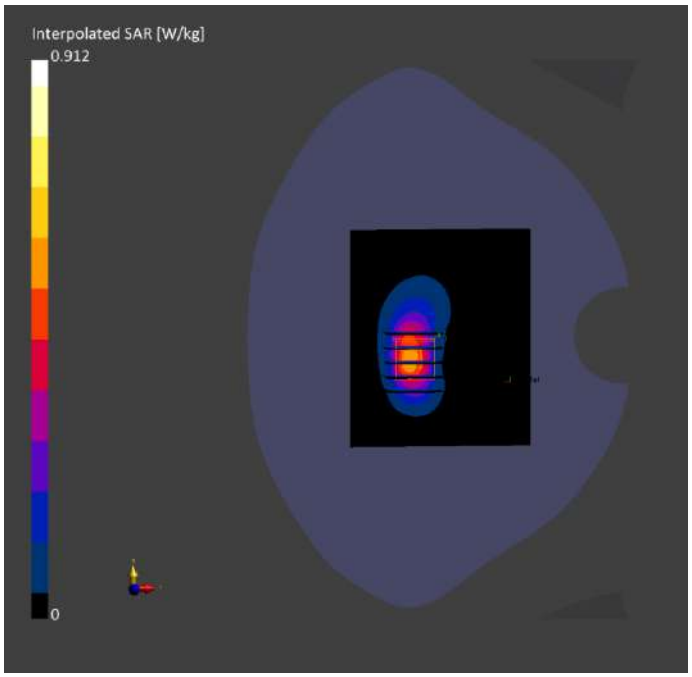
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-15	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	100.0 x 120.0	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	2023-10-15	2023-10-15
psSAR1g [W/kg]	0.487	0.520
psSAR10g [W/kg]	0.254	0.266
Power Drift [dB]	0.00	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		57.0
Dist 3dB Peak [mm]		8.0


Interpolated SAR [W/kg]
0.912
0

Meas.24 Right Head with Cheek on Middle Channel in LTE Band5 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
RightHead, HSL	CHEEK, 0.00	Band 5	LTE-FDD, 10175-CAH	836.5, 20525	9.96	0.898	41.9	22.8	21.5

Hardware Setup

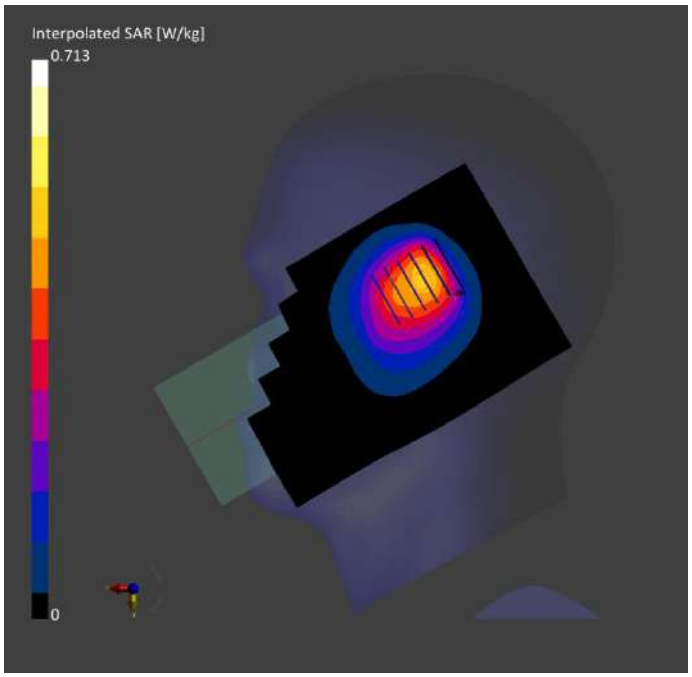
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-26	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-26	2023-10-26
psSAR1g [W/kg]	0.444	0.439
psSAR10g [W/kg]	0.297	0.298
Power Drift [dB]	0.11	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		65.5
Dist 3dB Peak [mm]		9.7


Interpolated SAR [W/kg]
0.713
0

Meas.25 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
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 15.00	Band 5	LTE-FDD, 10175-CAH	836.5, 20525	9.96	0.898	41.9	22.8	21.5

Hardware Setup

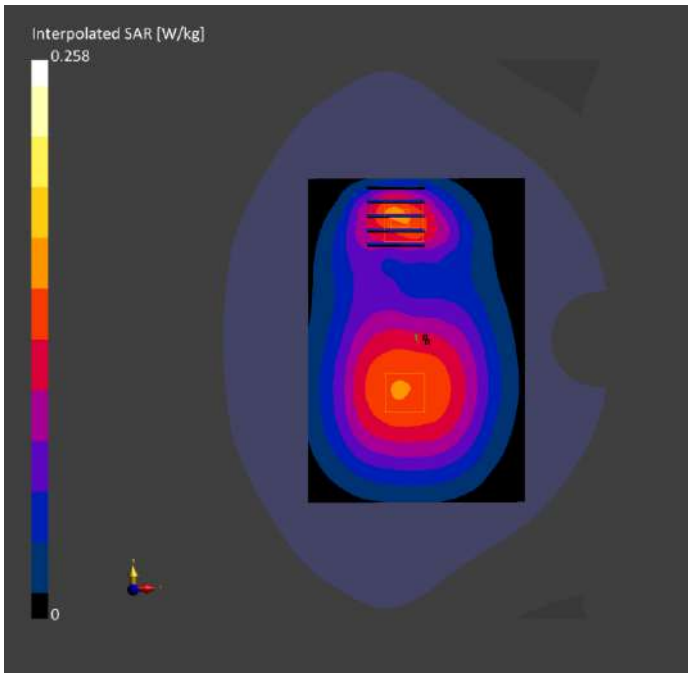
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-26	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-26	2023-10-26
psSAR1g [W/kg]	0.136	0.150
psSAR10g [W/kg]	0.095	0.087
Power Drift [dB]	-0.09	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		56.4
Dist 3dB Peak [mm]		12.8


Interpolated SAR [W/kg]
0.258
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
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 10.00	Band 5	LTE-FDD, 10175-CAH	836.5, 20525	9.96	0.898	41.9	22.8	21.5

Hardware Setup

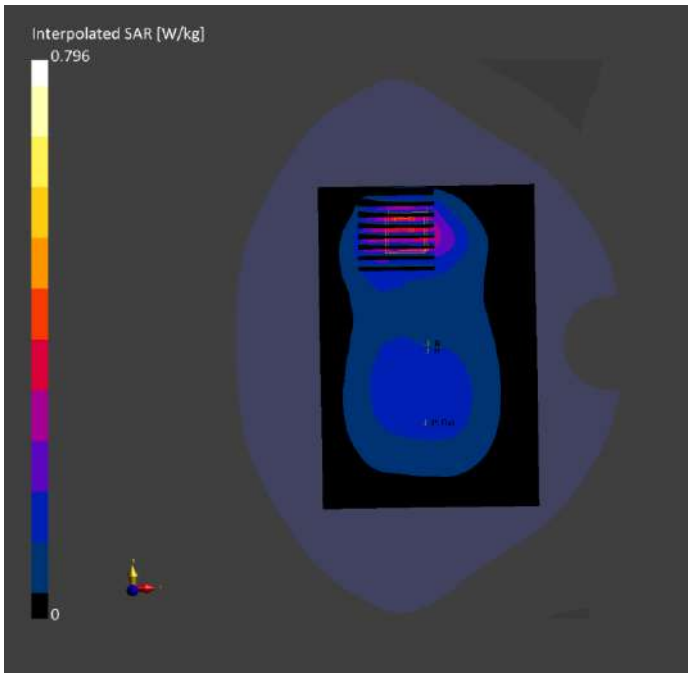
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-26	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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]	15.0 x 15.0	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	2023-10-26	2023-10-26
psSAR1g [W/kg]	0.317	0.372
psSAR10g [W/kg]	0.210	0.200
Power Drift [dB]	-0.09	0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		77.1
Dist 3dB Peak [mm]		9.6


Interpolated SAR [W/kg]
0.796
0

Meas.27 Right Head with Cheek on Middle Channel in LTE Band7 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
RightHead, HSL	CHEEK, 0.00	Band 7	LTE-FDD, 10169-CAF	2535.0, 21100	7.41	1.90	38.9	22.9	21.6

Hardware Setup

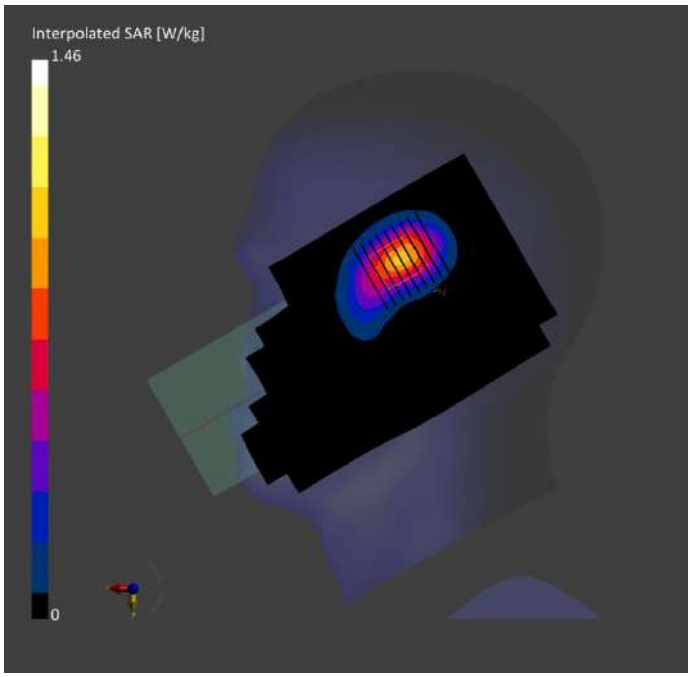
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-17	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-17	2023-10-17
psSAR1g [W/kg]	0.798	0.830
psSAR10g [W/kg]	0.412	0.424
Power Drift [dB]	-0.13	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		54.2
Dist 3dB Peak [mm]		12.9


Interpolated SAR [W/kg]
1.46
0

Meas.28 Body Plane with Back Side 15mm on Middle Channel in LTE Band7 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 15.00	Band 7	LTE-FDD, 10169-CAF	2535.0, 21100	7.41	1.90	38.9	22.9	21.6

Hardware Setup

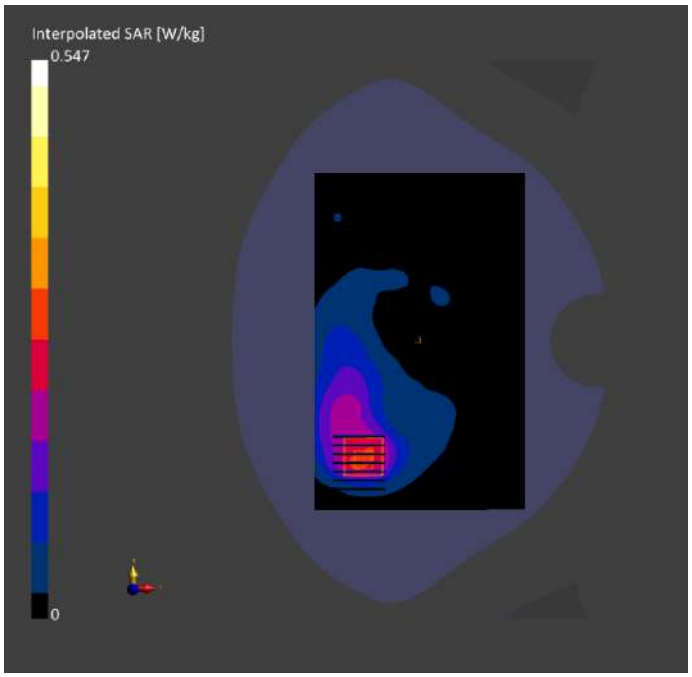
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-17	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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

Measurement Results

	Area Scan	Zoom Scan
Date	2023-10-17	2023-10-17
psSAR1g [W/kg]	0.242	0.274
psSAR10g [W/kg]	0.129	0.133
Power Drift [dB]	0.08	-0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.4
Dist 3dB Peak [mm]		10.8


Interpolated SAR [W/kg]
0.547
0

Meas.29 Body Plane with Back Side 10mm on Middle Channel in LTE Band7 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 10.00	Band 7	LTE-FDD, 10169-CAF	2535.0, 21100	7.41	1.90	38.9	22.9	21.6

Hardware Setup

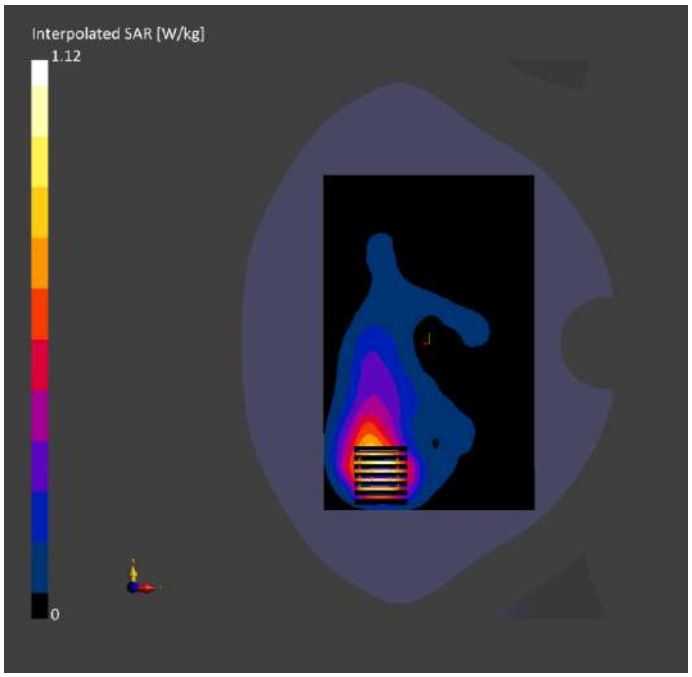
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-17	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-17	2023-10-17
psSAR1g [W/kg]	0.447	0.505
psSAR10g [W/kg]	0.232	0.225
Power Drift [dB]	-0.02	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		43.0
Dist 3dB Peak [mm]		8.1


Interpolated SAR [W/kg]
1.12
0

Meas.30 Body Plane with Back Side 0mm on Middle Channel in LTE Band7 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 0.00	Band 7	LTE-FDD, 10169-CAF	2535.0, 21100	7.41	1.90	38.9	22.9	21.6

Hardware Setup

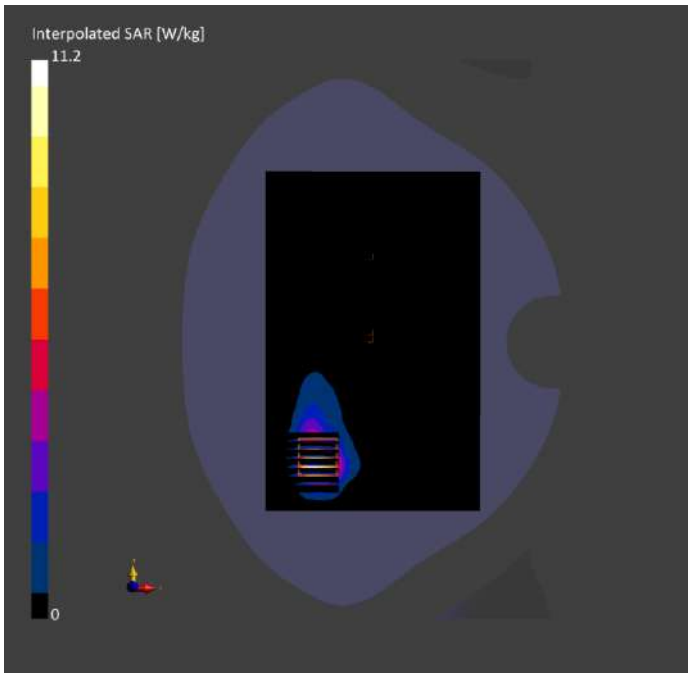
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-17	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-17	2023-10-17
psSAR1g [W/kg]	4.16	3.90
psSAR10g [W/kg]	1.80	1.63
Power Drift [dB]	0.03	0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		29.8
Dist 3dB Peak [mm]		5.0


Interpolated SAR [W/kg]
11.2
0

Meas.31 Right Head with Cheek on Middle Channel in LTE Band13 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
RightHead, HSL	CHEEK, 0.00	Band 13	LTE-FDD, 10175-CAH	782.0, 23230	10.31	0.905	41.7	22.4	21.4

Hardware Setup

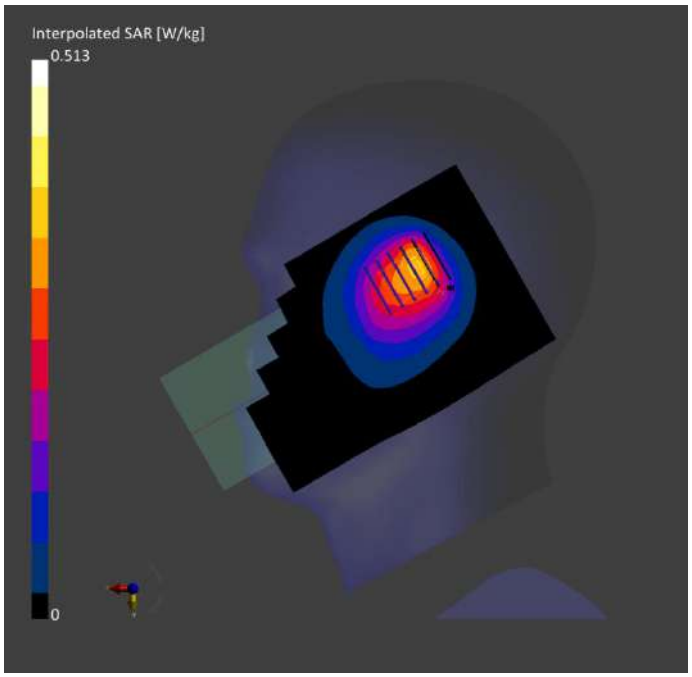
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-18	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-18	2023-10-18
psSAR1g [W/kg]	0.311	0.292
psSAR10g [W/kg]	0.207	0.202
Power Drift [dB]	-0.05	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		45.1
Dist 3dB Peak [mm]		9.3


Interpolated SAR [W/kg]
0.513
0

Meas.32 Body Plane with Back Side 15mm on Middle Channel in LTE Band13 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 15.00	Band 13	LTE-FDD, 10175-CAH	782.0, 23230	10.31	0.905	41.7	22.4	21.4

Hardware Setup

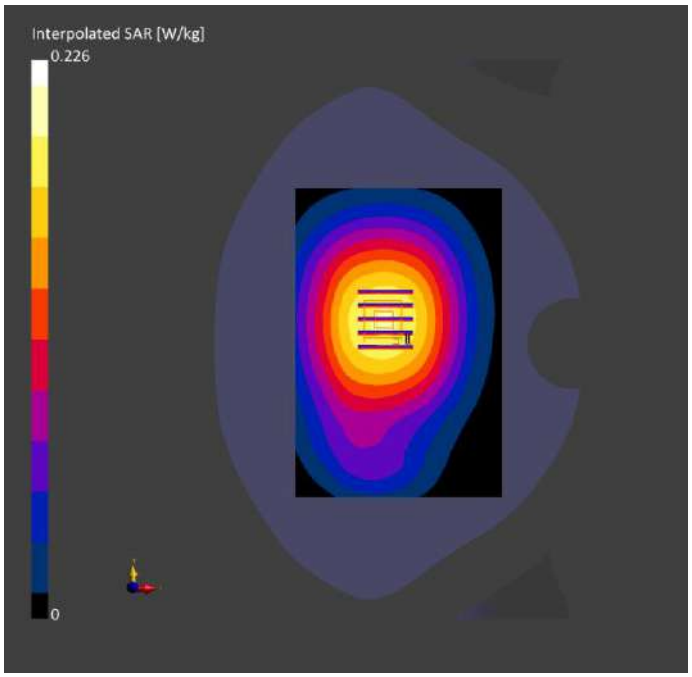
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-18	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-18	2023-10-18
psSAR1g [W/kg]	0.170	0.171
psSAR10g [W/kg]	0.121	0.132
Power Drift [dB]	-0.12	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		75.3
Dist 3dB Peak [mm]		> 16.0


Interpolated SAR [W/kg]
0.226
0

Meas.33 Body Plane with Back Side 10mm on Middle Channel in LTE Band13 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 10.00	Band 13	LTE-FDD, 10175-CAH	782.0, 23230	10.31	0.905	41.7	22.4	21.4

Hardware Setup

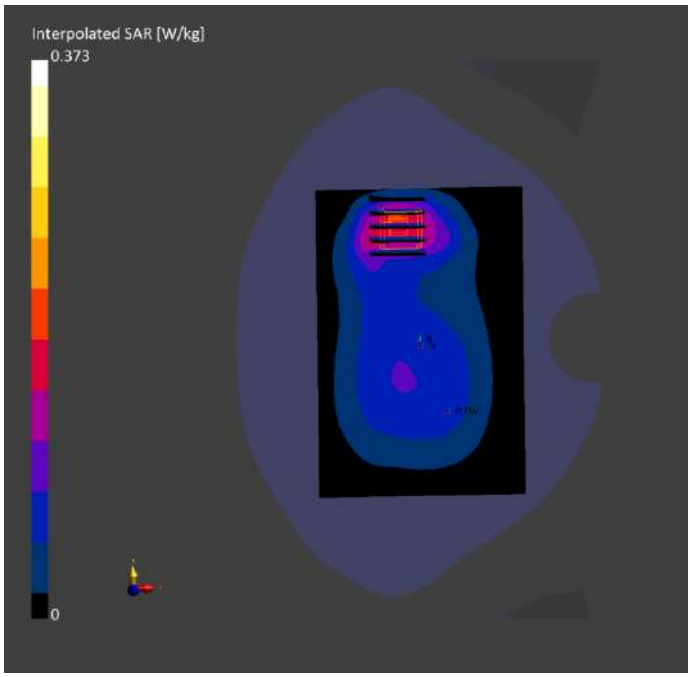
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-18	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-18	2023-10-18
psSAR1g [W/kg]	0.166	0.195
psSAR10g [W/kg]	0.109	0.105
Power Drift [dB]	0.00	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		49.6
Dist 3dB Peak [mm]		9.6


Interpolated SAR [W/kg]
0.373
0

Meas.34 Right Head with Tilt on High Channel in LTE Band66 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
RightHead, HSL	TILT, 0.00	Band 66	LTE-FDD, 10169-CAF	1770.0, 132572	8.52	1.40	39.7	22.4	21.5

Hardware Setup

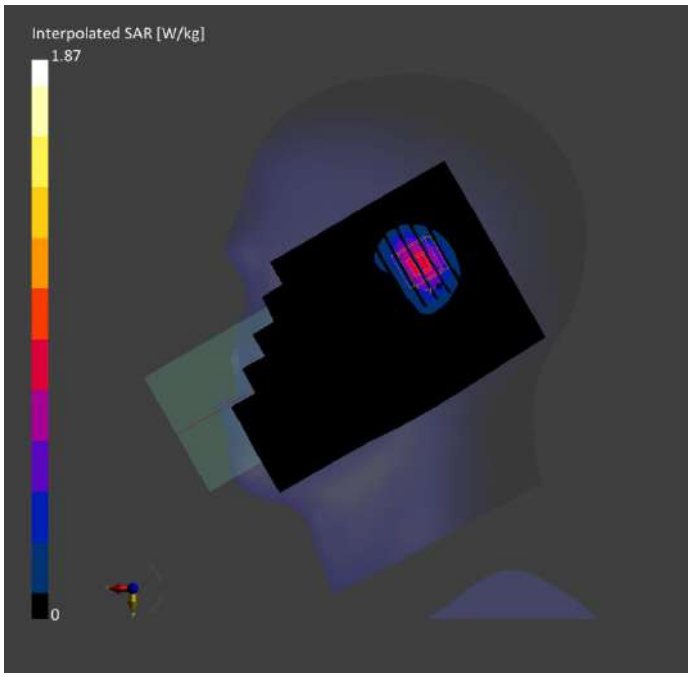
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-19	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-19	2023-10-19
psSAR1g [W/kg]	0.699	0.956
psSAR10g [W/kg]	0.376	0.447
Power Drift [dB]	0.11	0.07
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		47.9
Dist 3dB Peak [mm]		6.4


Interpolated SAR [W/kg]
1.87
0

Meas.35 Body Plane with Back Side 15mm on Middle Channel in LTE Band66 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 15.00	Band 66	LTE-FDD, 10169-CAF	1745.0, 132322	8.52	1.37	40.1	22.4	21.5

Hardware Setup

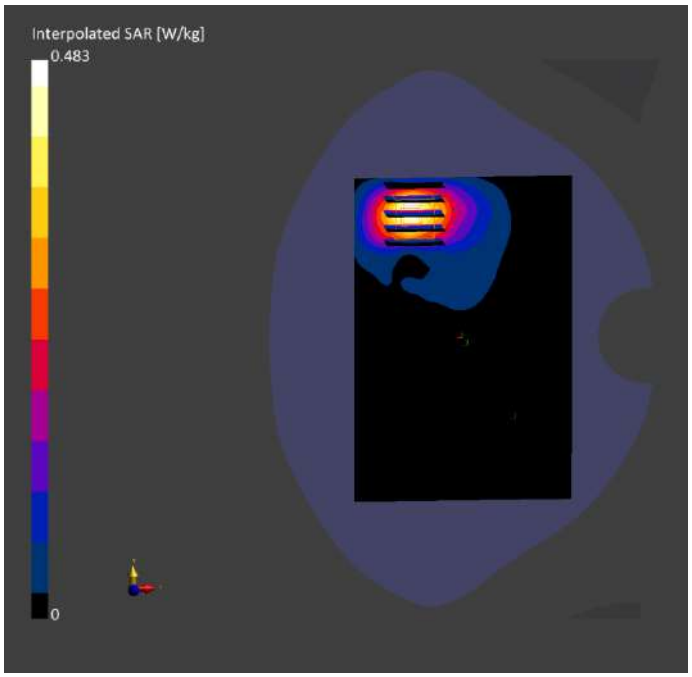
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-19	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-19	2023-10-19
psSAR1g [W/kg]	0.243	0.291
psSAR10g [W/kg]	0.137	0.156
Power Drift [dB]	0.06	-0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		61.2
Dist 3dB Peak [mm]		10.7


Interpolated SAR [W/kg]
0.483
0

Meas.36 Body Plane with Top Edge 10mm on Middle Channel in LTE Band66 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	81.0 x 78.0 x 10.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	EDGE TOP, 10.00	Band 66	LTE-FDD, 10169-CAF	1745.0, 132322	8.52	1.37	40.1	22.4	21.5

Hardware Setup

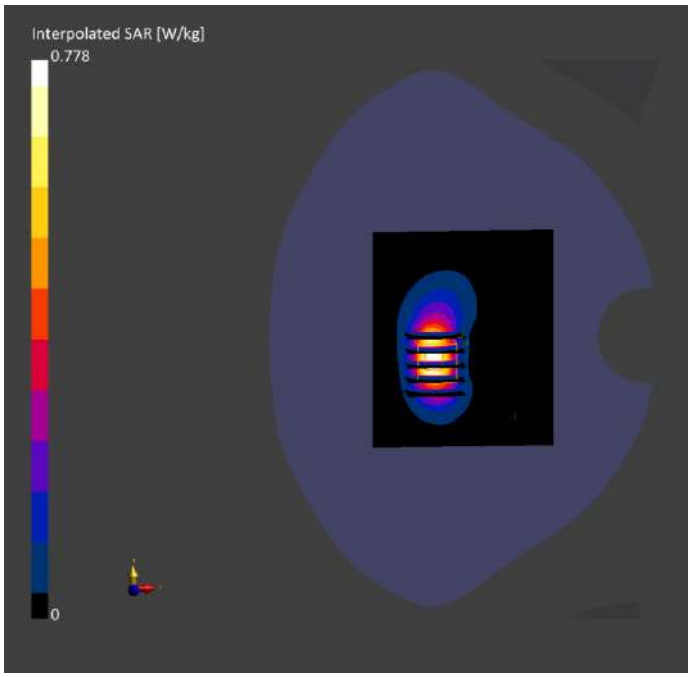
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-19	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	100.0 x 120.0	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	2023-10-19	2023-10-19
psSAR1g [W/kg]	0.407	0.436
psSAR10g [W/kg]	0.210	0.219
Power Drift [dB]	0.01	0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		55.9
Dist 3dB Peak [mm]		8.0


Interpolated SAR [W/kg]
0.778
0

Meas.37 Body Plane with Top Edge 0mm on Middle Channel in LTE Band66 mode with Antenna 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 0.00	Band 66	LTE-FDD, 10169-CAF	1745.0, 132322	8.52	1.37	40.1	22.4	21.5

Hardware Setup

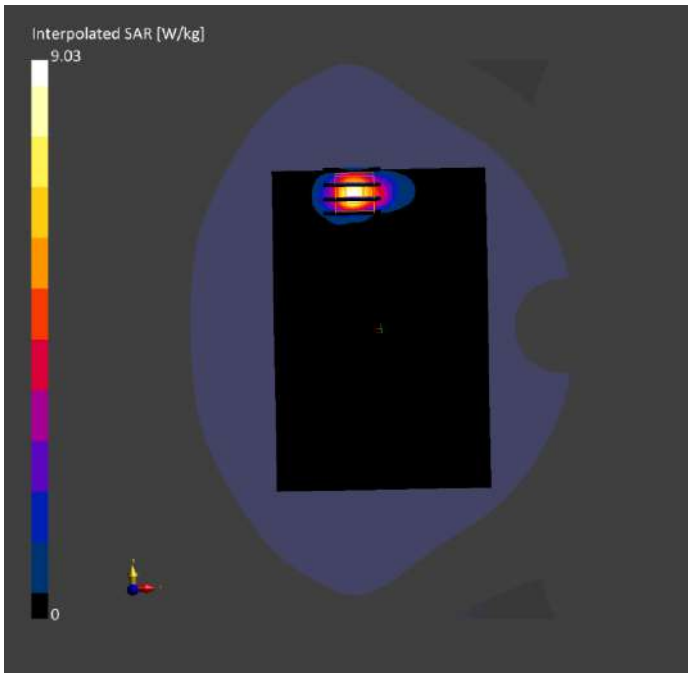
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-19	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-19	2023-10-19
psSAR1g [W/kg]	3.62	4.37
psSAR10g [W/kg]	1.70	1.81
Power Drift [dB]	0.07	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		42.4
Dist 3dB Peak [mm]		7.2


Interpolated SAR [W/kg]
9.03
0

Meas.38 Right Head with Cheek on Low Channel in LTE Band38 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
RightHead, HSL	CHEEK, 0.00	Band 38	LTE-TDD, 10172-CAH	2580.0, 37850	7.41	1.96	38.6	22.8	21.4

Hardware Setup

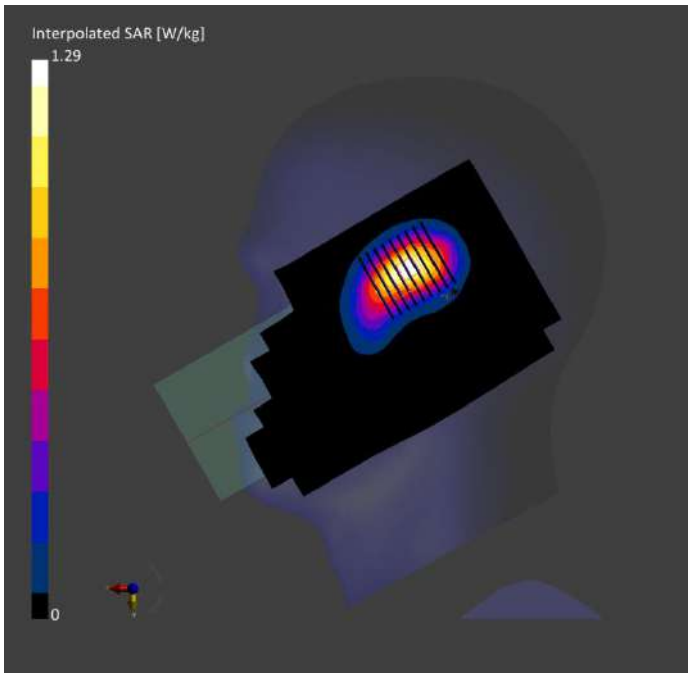
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-20	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-20	2023-10-20
psSAR1g [W/kg]	0.718	0.736
psSAR10g [W/kg]	0.363	0.376
Power Drift [dB]	0.09	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		58.3
Dist 3dB Peak [mm]		12.9


Interpolated SAR [W/kg]
1.29
0

Meas.39 Body Plane with Back Side 15mm on Middle Channel in LTE Band38 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 15.00	Band 38	LTE-TDD, 10172-CAH	2595.0, 38000	7.41	1.97	38.5	22.8	21.4

Hardware Setup

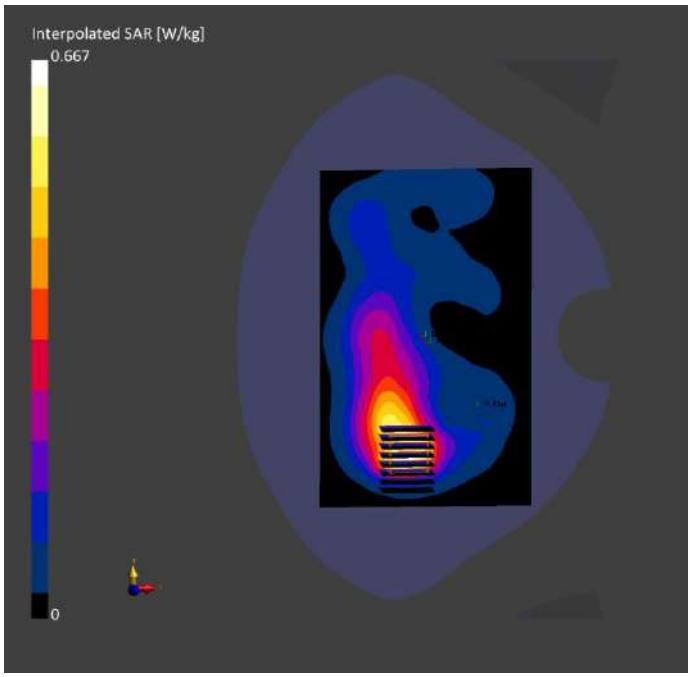
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-20	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-20	2023-10-20
psSAR1g [W/kg]	0.312	0.332
psSAR10g [W/kg]	0.165	0.165
Power Drift [dB]	-0.02	0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		47.1
Dist 3dB Peak [mm]		10.4


Interpolated SAR [W/kg]
0.667
0

Meas.40 Body Plane with Back Side 10mm on Low Channel in LTE Band38 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 10.00	Band 38	LTE-TDD, 10172-CAH	2580.0, 37850	7.41	1.96	38.6	22.8	21.4

Hardware Setup

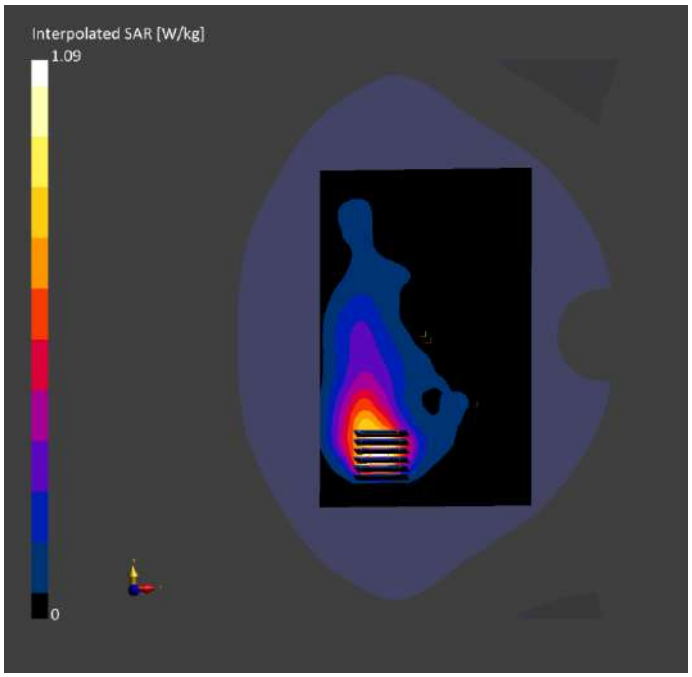
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-20	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-20	2023-10-20
psSAR1g [W/kg]	0.454	0.501
psSAR10g [W/kg]	0.232	0.225
Power Drift [dB]	-0.15	-0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		44.6
Dist 3dB Peak [mm]		8.2


Interpolated SAR [W/kg]
1.09
0

Meas.41 Right Head with Cheek on Low Channel in LTE Band41 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
RightHead, HSL	CHEEK, 0.00	Band 41	LTE-TDD, 10172-CAH	2545.0, 40140	7.41	1.92	39.0	22.4	21.7

Hardware Setup

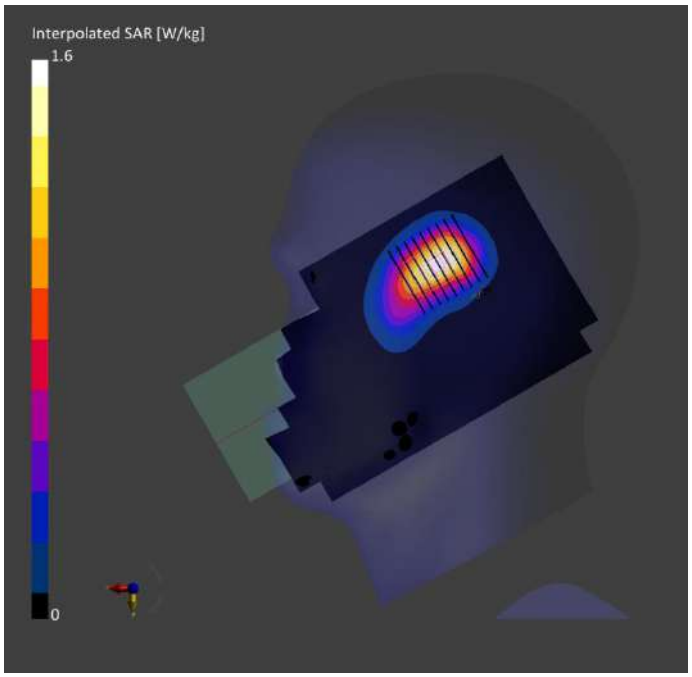
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-21	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-10-21	2023-10-21
psSAR1g [W/kg]	0.877	0.896
psSAR10g [W/kg]	0.454	0.454
Power Drift [dB]	-0.04	0.14
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		54.3
Dist 3dB Peak [mm]		12.3


Interpolated SAR [W/kg]
1.6
0

Meas.42 Body Plane with Back Side 15mm on Middle Channel in LTE Band41 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 15.00	Band 41	LTE-TDD, 10172-CAH	2607.5, 40765	7.41	2.01	38.4	22.4	21.7

Hardware Setup

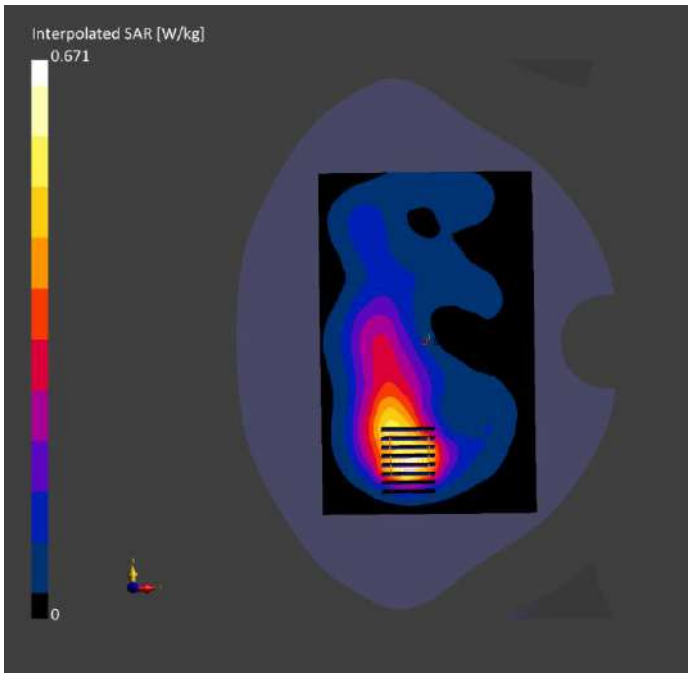
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-21	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-21	2023-10-21
psSAR1g [W/kg]	0.320	0.333
psSAR10g [W/kg]	0.169	0.165
Power Drift [dB]	0.00	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		46.9
Dist 3dB Peak [mm]		10.3


Interpolated SAR [W/kg]
0.671
0

Meas.43 Body Plane with Back Side 10mm on Middle Channel in LTE Band41 mode with Antenna 1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 10.00	Band 41	LTE-TDD, 10172-CAH	2607.5, 40765	7.41	2.01	38.4	22.4	21.7

Hardware Setup

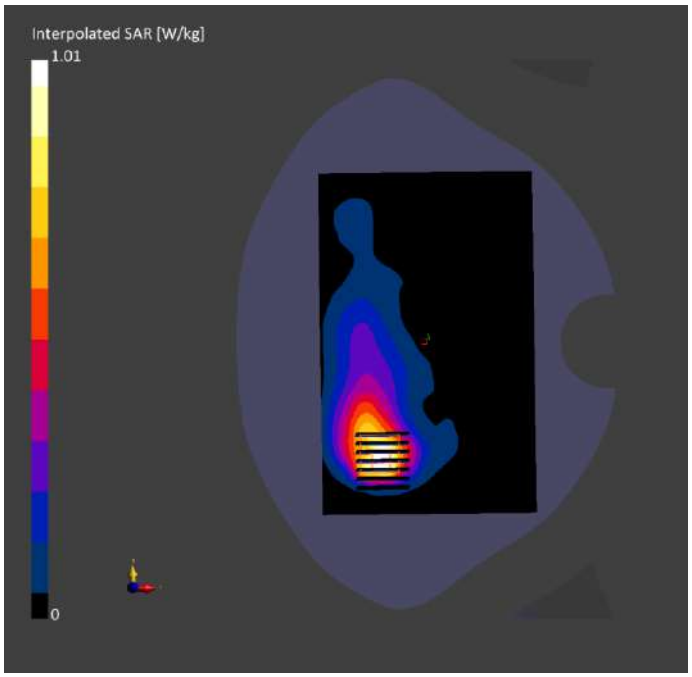
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-21	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-21	2023-10-21
psSAR1g [W/kg]	0.417	0.463
psSAR10g [W/kg]	0.214	0.207
Power Drift [dB]	-0.01	0.00
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		44.3
Dist 3dB Peak [mm]		8.5


Interpolated SAR [W/kg]
1.01
0

Meas.44 Left Head with Cheek on 11 Channel in IEEE802.11b mode with Antenna 3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	168.0 x 78.0 x 10.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
LeftHead, HSL	CHEEK, 0.00	WLAN 2.4GHz	WLAN, 10012-CAB	2462.0, 11	7.47	1.84	39.5	22.8	21.8

Hardware Setup

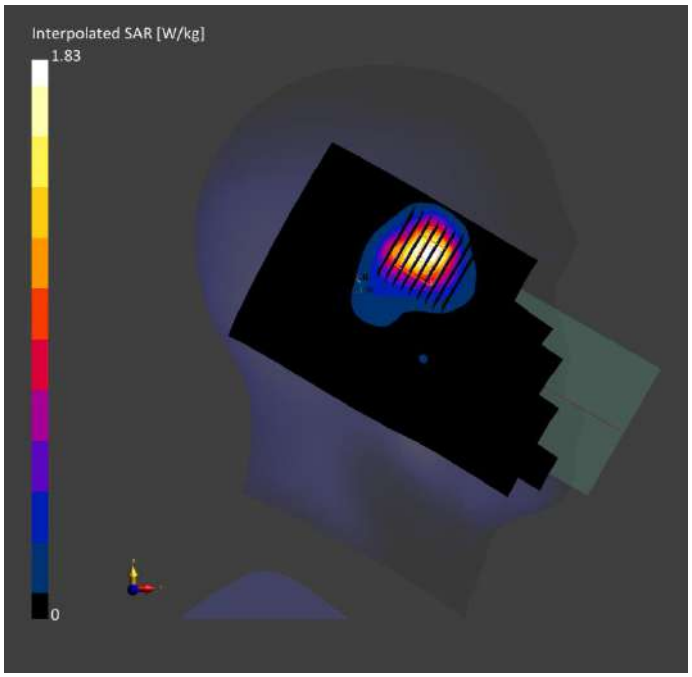
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-22	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-22	2023-10-22
psSAR1g [W/kg]	0.728	0.781
psSAR10g [W/kg]	0.374	0.372
Power Drift [dB]	-0.02	-0.08
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		39.2
Dist 3dB Peak [mm]		8.5


Interpolated SAR [W/kg]
1.83
0

Meas.45 Body Plan with Back Side 15mm on 6 Channel in IEEE802.11b mode with Antenna 3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 15.00	WLAN 2.4GHz	WLAN, 10012-CAB	2437.0, 6	7.47	1.79	39.8	22.8	21.8

Hardware Setup

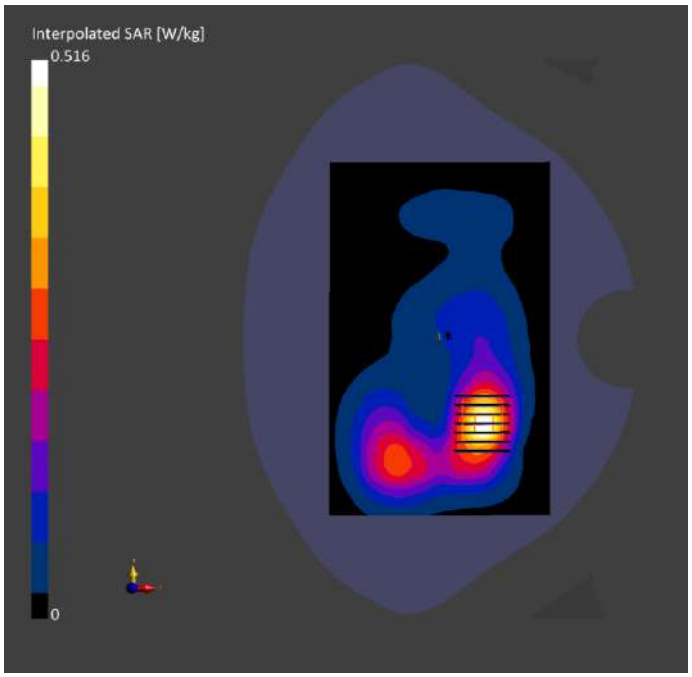
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-22	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-22	2023-10-22
psSAR1g [W/kg]	0.266	0.272
psSAR10g [W/kg]	0.135	0.138
Power Drift [dB]	0.00	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.2
Dist 3dB Peak [mm]		13.0


Interpolated SAR [W/kg]
0.516
0

Meas.46 Body Plan with Back Side 10mm on 6 Channel in IEEE802.11b mode with Antenna 3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 10.00	WLAN 2.4GHz	WLAN, 10012-CAB	2437.0, 6	2437.0, 6	7.47	1.79	39.8	22.8

Hardware Setup

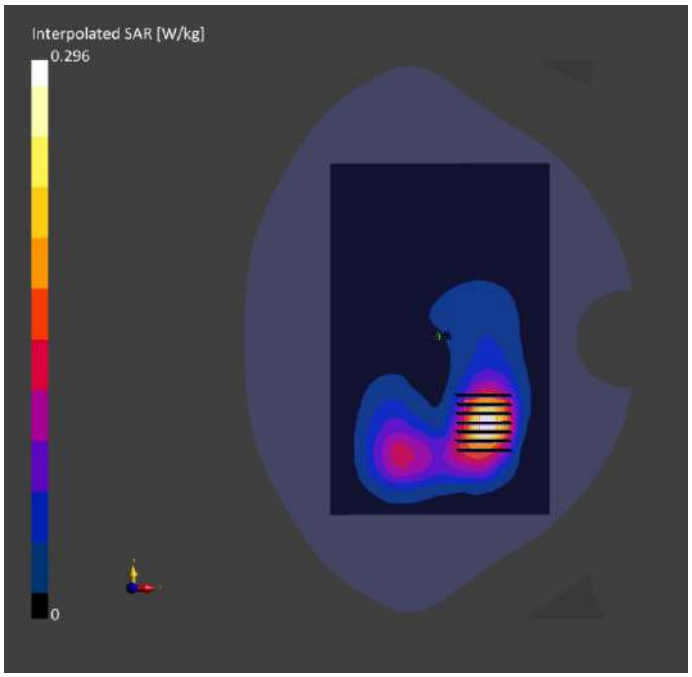
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-22	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-22	2023-10-22
psSAR1g [W/kg]	0.141	0.148
psSAR10g [W/kg]	0.071	0.071
Power Drift [dB]	0.07	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		48.2
Dist 3dB Peak [mm]		10.8


Interpolated SAR [W/kg]
0.296
0

Meas.47 Left Head with Cheek on 52 Channel in IEEE802.11a mode with Antenna 3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	168.0 x 78.0 x 10.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
LeftHead, HSL	CHEEK, 0.00	WLAN 5GHz	WLAN, 10062-CAD	5260.0, 52	5.41	4.72	35.7	22.6	21.5

Hardware Setup

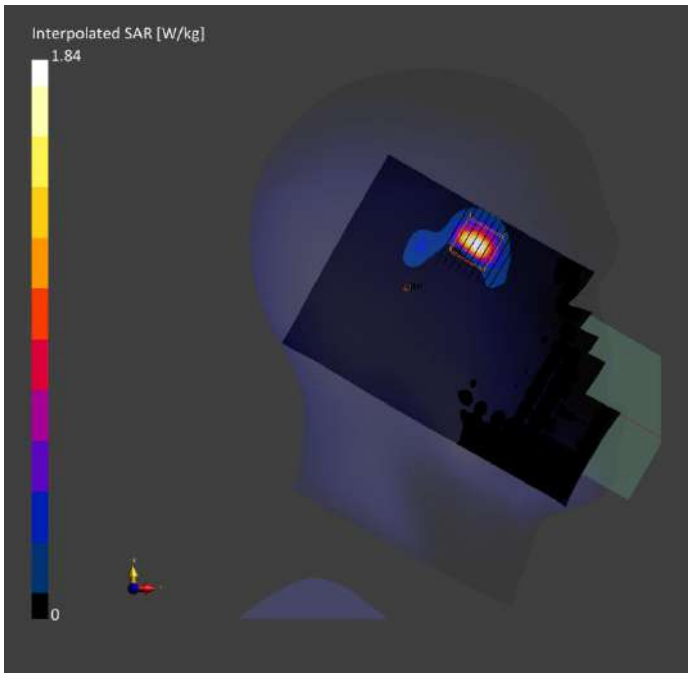
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-23	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	N/A
Surface Detection	All points	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-10-23	2023-10-23
psSAR1g [W/kg]	0.402	0.446
psSAR10g [W/kg]	0.116	0.119
Power Drift [dB]	-0.04	-0.06
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		53.0
Dist 3dB Peak [mm]		5.0


Interpolated SAR [W/kg]
1.84
0

Meas.48 Left Head with Cheek on 116 Channel in IEEE802.11a mode with Antenna 3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	168.0 x 78.0 x 10.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
LeftHead, HSL	CHEEK, 0.00	WLAN 5GHz	WLAN, 10062-CAD	5580.0, 116	4.58	5.02	35.6	22.7	21.4

Hardware Setup

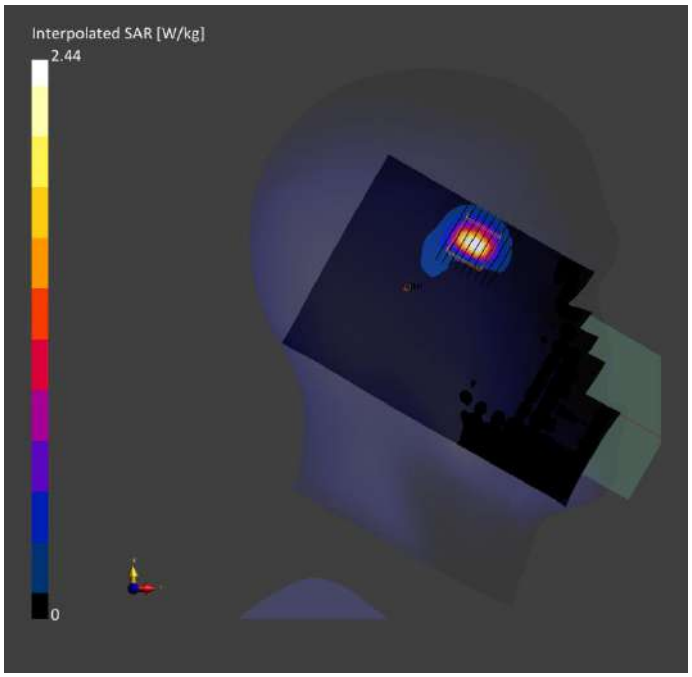
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-24	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	N/A
Surface Detection	All points	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-10-24	2023-10-24
psSAR1g [W/kg]	0.560	0.600
psSAR10g [W/kg]	0.169	0.167
Power Drift [dB]	0.02	-0.10
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		52.7
Dist 3dB Peak [mm]		5.8


Interpolated SAR [W/kg]
2.44
0

Meas.49 Left Head with Cheek on 157 Channel in IEEE802.11a mode with Antenna 3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	168.0 x 78.0 x 10.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
LeftHead, HSL	CHEEK, 0.00	WLAN 5GHz	WLAN, 10062-CAD	5785.0, 157	4.78	5.23	35.1	22.5	21.6

Hardware Setup

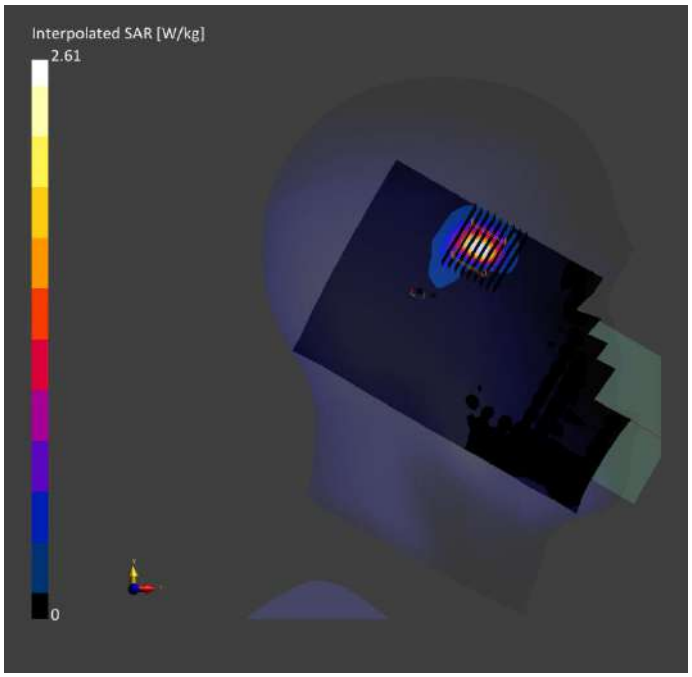
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-25	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	N/A
Surface Detection	All points	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-10-25	2023-10-25
psSAR1g [W/kg]	0.581	0.611
psSAR10g [W/kg]	0.178	0.172
Power Drift [dB]	0.04	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.9
Dist 3dB Peak [mm]		6.5


Interpolated SAR [W/kg]
2.61
0

Meas.50 Body Plan with Back Side 15mm on 54 Channel in IEEE802.11n40 mode with Antenna 3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 15.00	WLAN 5GHz	WLAN, 10599-AAC	5270.0, 54	5.41	4.72	35.7	22.6	21.5

Hardware Setup

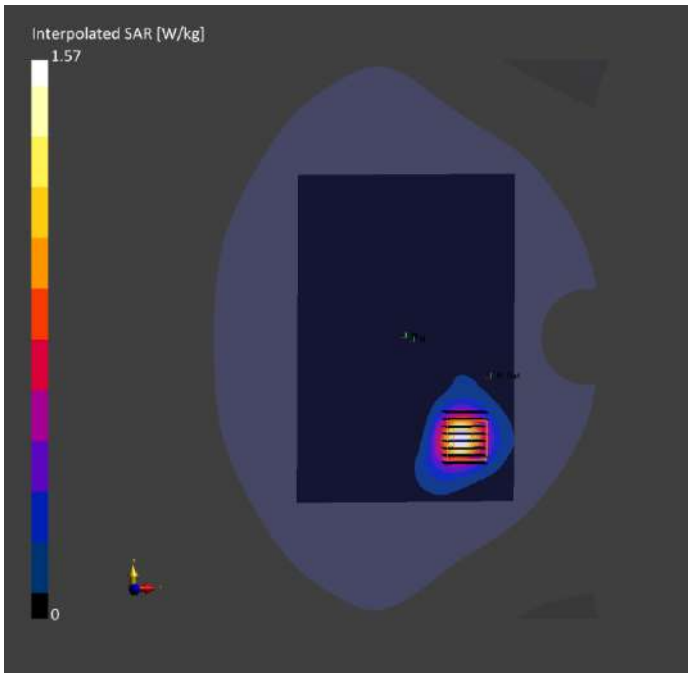
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-23	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	N/A
Surface Detection	All points	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2023-10-23	2023-10-23
psSAR1g [W/kg]	0.417	0.447
psSAR10g [W/kg]	0.153	0.160
Power Drift [dB]	0.09	0.07
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		53.9
Dist 3dB Peak [mm]		10.4


Interpolated SAR [W/kg]
1.57
0

Meas.51 Body Plan with Back Side 15mm on 122 Channel in IEEE802.11ac80 mode with Antenna 3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 15.00	WLAN 5GHz	WLAN, 10544-AAC	5610.0, 122	4.58	5.12	34.1	22.7	21.4

Hardware Setup

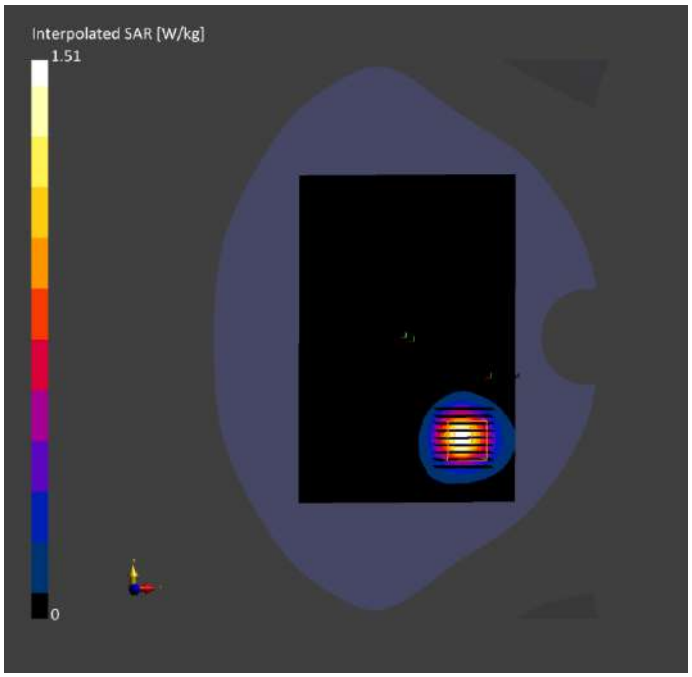
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-24	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-24	2023-10-24
psSAR1g [W/kg]	0.423	0.431
psSAR10g [W/kg]	0.153	0.150
Power Drift [dB]	0.06	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		52.7
Dist 3dB Peak [mm]		10.4


Interpolated SAR [W/kg]
1.51
0

Meas.52 Body Plan with Back Side 15mm on 155 Channel in IEEE802.11ac80 mode with Antenna 3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 15.00	WLAN 5GHz	WLAN, 10544-AAC	5775.0, 155	4.78	5.20	35.3	22.5	21.6

Hardware Setup

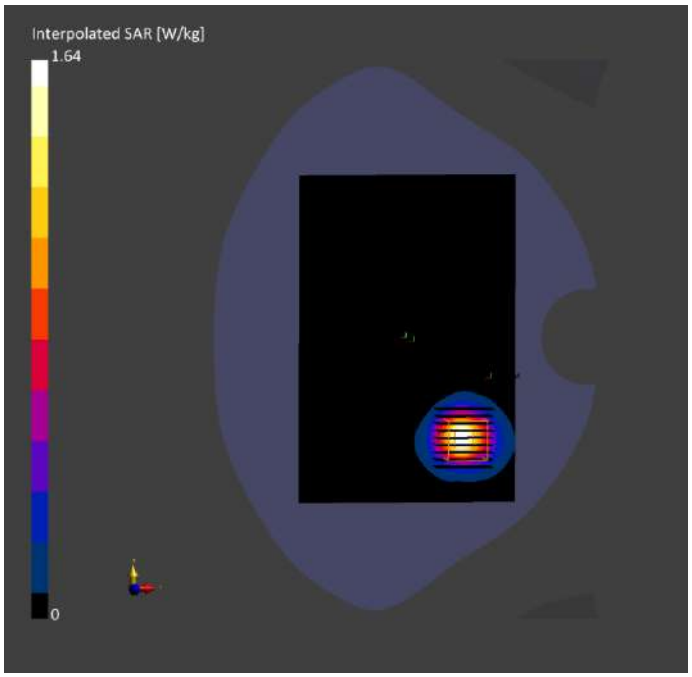
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-25	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-25	2023-10-25
psSAR1g [W/kg]	0.440	0.448
psSAR10g [W/kg]	0.159	0.155
Power Drift [dB]	0.01	0.09
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.8
Dist 3dB Peak [mm]		10.2


Interpolated SAR [W/kg]
1.64
0

Meas.53 Body Plan with Back Side 10mm on 38 Channel in IEEE802.11n40 mode with Antenna 3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 10.00	WLAN 5GHz	WLAN, 10599-AAC	5190.0, 38	5.41	4.56	36.7	22.6	21.5

Hardware Setup

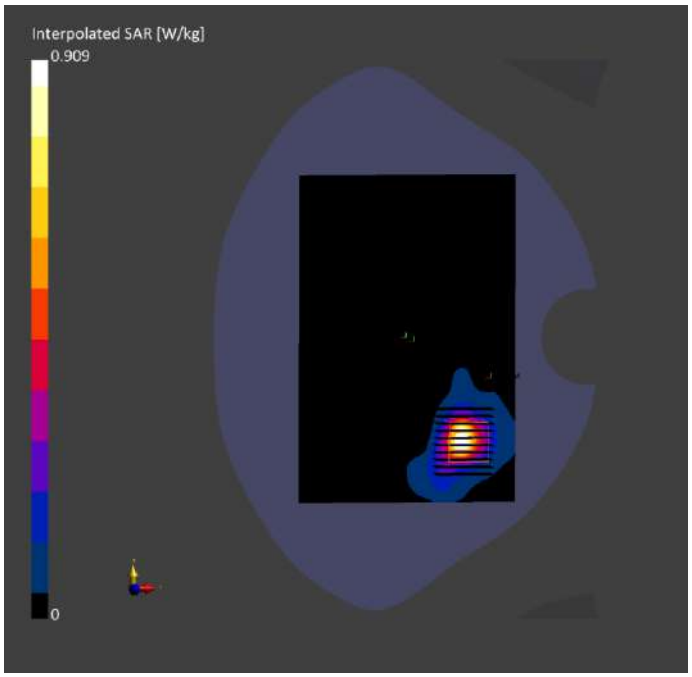
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-23	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-23	2023-10-23
psSAR1g [W/kg]	0.264	0.280
psSAR10g [W/kg]	0.089	0.100
Power Drift [dB]	-0.11	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		58.0
Dist 3dB Peak [mm]		7.4


Interpolated SAR [W/kg]
0.909
0

Meas.54 Body Plan with Back Side 10mm on 155 Channel in IEEE802.11ac80 mode with Antenna 3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 10.00	WLAN 5GHz	WLAN, 10544-AAC	5775.0, 155	4.78	5.20	35.3	22.5	21.6

Hardware Setup

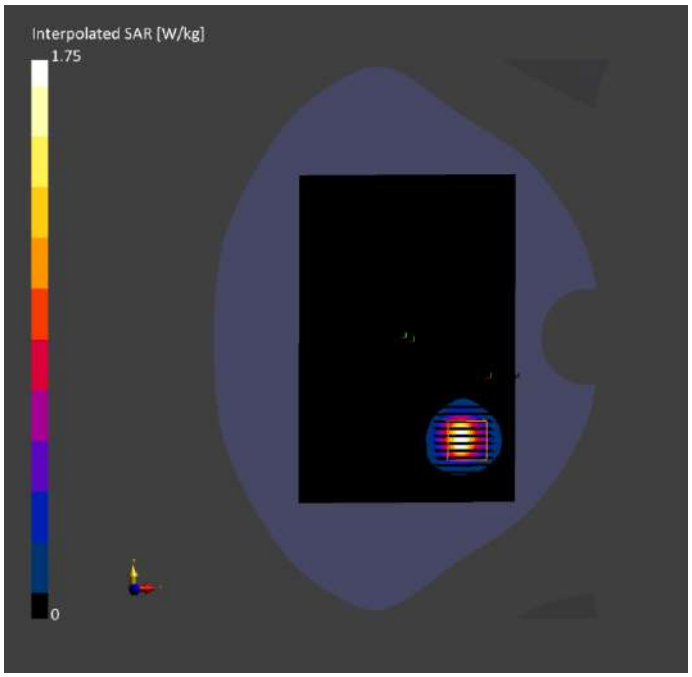
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-25	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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

Measurement Results

	Area Scan	Zoom Scan
Date	2023-10-25	2023-10-25
psSAR1g [W/kg]	0.426	0.452
psSAR10g [W/kg]	0.136	0.134
Power Drift [dB]	0.03	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		51.3
Dist 3dB Peak [mm]		7.6


Interpolated SAR [W/kg]
1.75
0

Meas.55 Body Plan with Left Edge 0mm on 54 Channel in IEEE802.11n40 mode with Antenna 3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	EDGE LEFT, 0.00	WLAN 5GHz	WLAN, 10599-AAC	5270.0, 54	5.41	4.85	34.9	22.6	21.5

Hardware Setup

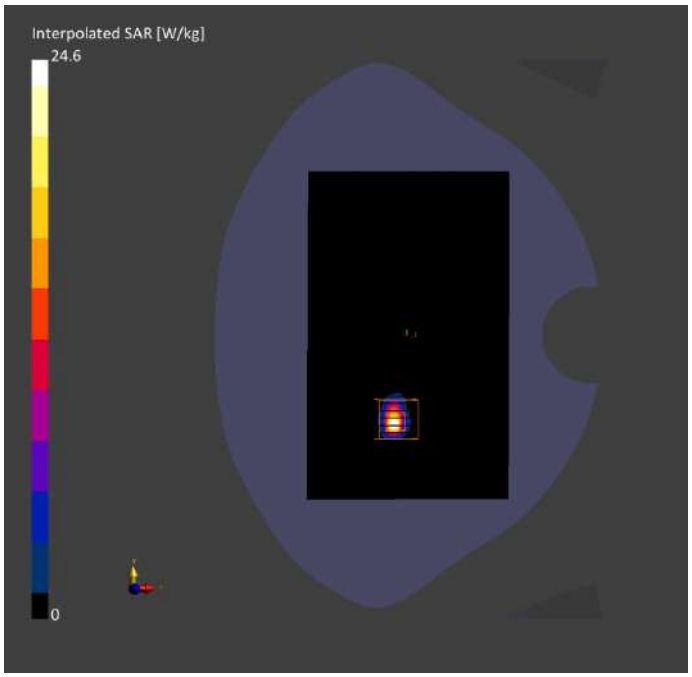
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-23	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	112.0 x 180.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	8.0 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	2023-10-23	2023-10-23
psSAR1g [W/kg]	4.12	4.99
psSAR10g [W/kg]	0.861	0.928
Power Drift [dB]	0.06	0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		51.6
Dist 3dB Peak [mm]		4.0


Interpolated SAR [W/kg]
24.6
0

Meas.56 Body Plan with Left Edge 0mm on 122 Channel in IEEE802.11ac80 mode with Antenna 3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	EDGE LEFT, 0.00	WLAN 5GHz	WLAN, 10544-AAC	5610.0, 122	4.58	5.21	34.1	22.7	21.4

Hardware Setup

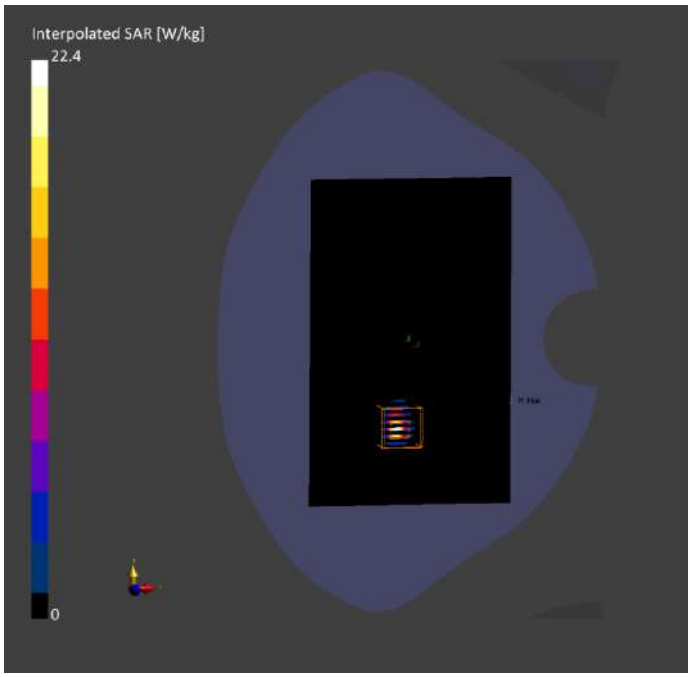
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-24	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	112.0 x 180.0	24.0 x 24.0 x 22.0
Grid Steps [mm]	8.0 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	2023-10-24	2023-10-24
psSAR1g [W/kg]	3.73	4.42
psSAR10g [W/kg]	0.780	0.811
Power Drift [dB]	0.04	0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.7
Dist 3dB Peak [mm]		4.0


Interpolated SAR [W/kg]
22.4
0

Meas.57 Left Head with Cheek on 39 Channel in Bluetooth mode with Antenna 3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	168.0 x 78.0 x 10.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
LeftHead, HSL	CHEEK, 0.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2441.0, 39	7.47	1.80	39.8	22.8	21.8

Hardware Setup

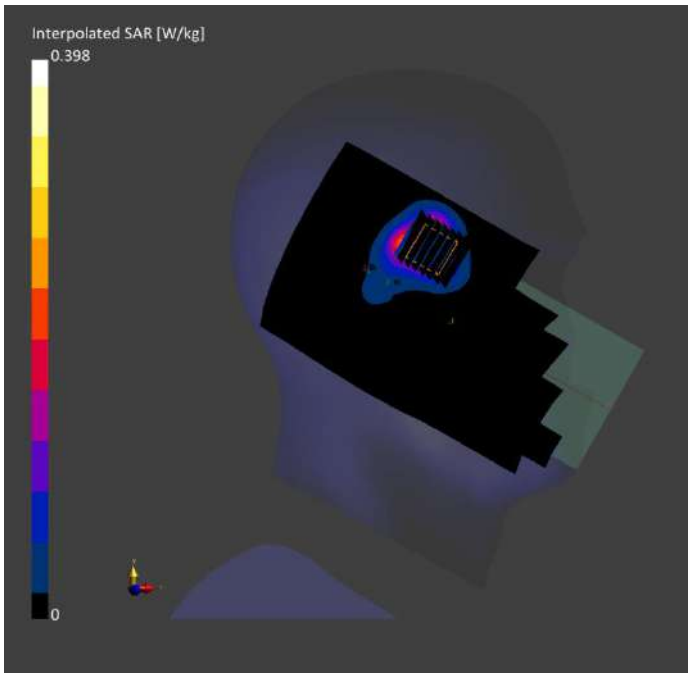
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-22	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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

Measurement Results

	Area Scan	Zoom Scan
Date	2023-10-22	2023-10-22
psSAR1g [W/kg]	0.158	0.169
psSAR10g [W/kg]	0.078	0.076
Power Drift [dB]	0.01	0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		39.5
Dist 3dB Peak [mm]		8.1


Interpolated SAR [W/kg]
0.398
0

Meas.58 Body Plan with Back Side 15mm on 39 Channel in Bluetooth mode with Antenna 3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 15.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2441.0, 39	7.47	1.80	39.8	22.8	21.8

Hardware Setup

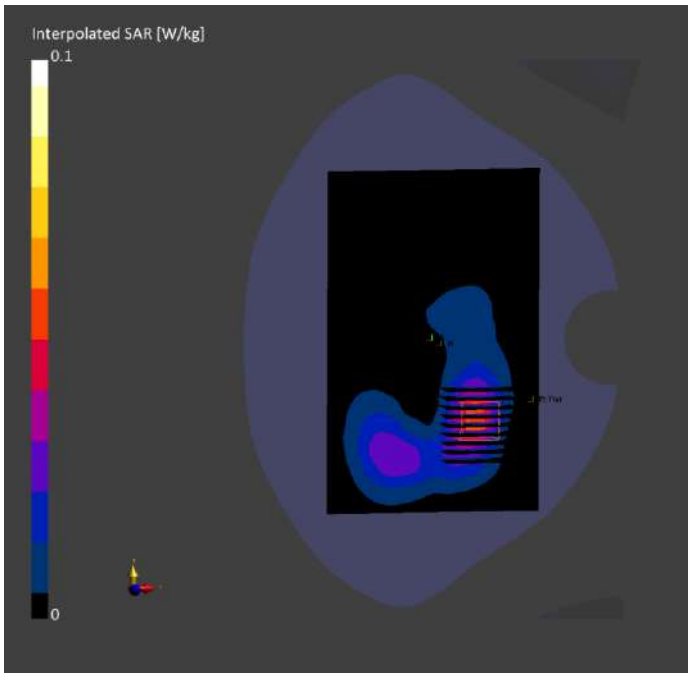
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-22	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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	2023-10-22	2023-10-22
psSAR1g [W/kg]	0.046	0.048
psSAR10g [W/kg]	0.024	0.023
Power Drift [dB]	0.05	0.08
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		47.6
Dist 3dB Peak [mm]		> 15.0


Interpolated SAR [W/kg]
0.1
0

Meas.59 Body Plan with Back Side 10mm on 39 Channel in Bluetooth mode with Antenna 3

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	DUT Type
RMX3890	160.0 x 75.0 x 8.0	Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [℃]	Liquid Temperature [℃]
Flat, HSL	BACK, 10.00	ISM 2.4 GHz Band	Bluetooth, 10032-CAA	2441.0, 39	7.47	1.80	39.8	22.8	21.8

Hardware Setup

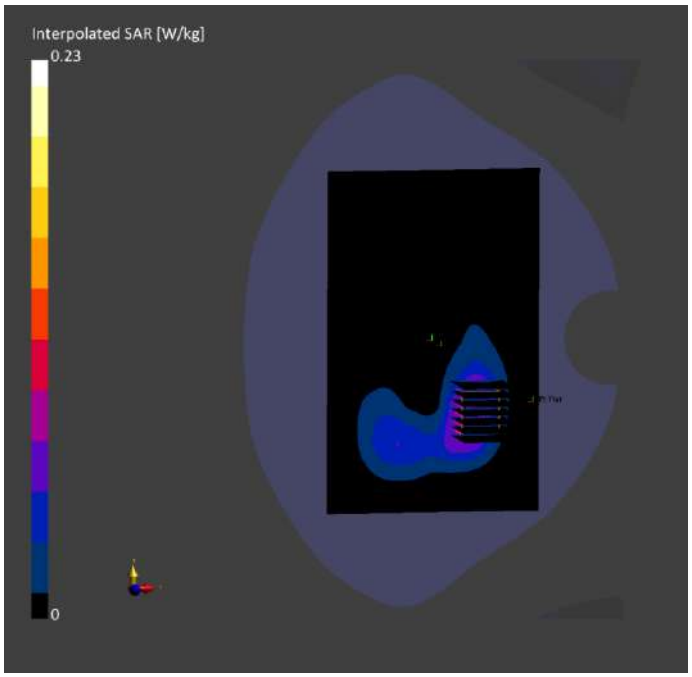
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 , 2023-10-22	EX3DV4 - SN7607, 2023-07-04	DAE4 Sn878, 2023-03-23

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 6.0
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	2023-10-22	2023-10-22
psSAR1g [W/kg]	0.109	0.113
psSAR10g [W/kg]	0.053	0.052
Power Drift [dB]	-0.05	0.07
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		40.8
Dist 3dB Peak [mm]		10.0


Interpolated SAR [W/kg]
0.23
0

ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ23A0041-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SZ23A0041-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “BL-SZ23A0041-AC.pdf”.

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