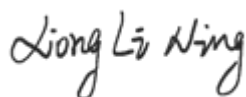


TEST REPORT

Applicant: Franklin Technology Inc.
Address: 906 JEI Platz, 186, Gasan digital 1-ro, Geumcheon-Gu, Seoul 08502 Korea
Equipment Type: Mobile Hotspot
Model Name: RG350
Brand Name: JEXtream
FCC ID: XHG-RG350
Test Standard: FCC 47 CFR Part 2.1093
(refer to section 3.1)
Maximum SAR: Hotspot (1 g@10mm): 0.85 W/kg
Sample Arrival Date: Oct. 14, 2024
Test Date: Oct. 20, 2024 - Nov. 13, 2024
Date of Issue: Nov. 29, 2024

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Xiong Lining**Checked by:** Xu Rui**Approved by:** Tolan Tu
(Testing Director)

Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Nov. 26, 2024</u>	<u>Initial Issue</u>
<u>Rev. 02</u>	<u>Nov. 29, 2024</u>	<u>Updated SAR test results table in sections 11.19-11.20.</u>

TABLE OF CONTENTS

1	GENERAL INFORMATION	5
1.1	Test Laboratory	5
1.2	Test Location	5
1.3	Test Environment Condition	5
2	PRODUCT INFORMATION	6
2.1	Applicant Information	6
2.2	Manufacturer Information	6
2.3	General Description for Equipment under Test (EUT)	6
2.4	Ancillary Equipment	6
2.5	Technical Information	7
3	SUMMARY OF TEST RESULT	9
3.1	Test Standards	9
3.2	Device Category and SAR Limit	10
3.3	Test Result Summary	11
3.4	Test Uncertainty	12
4	MEASUREMENT SYSTEM	13
4.1	Specific Absorption Rate (SAR) Definition	13
4.2	DASY SAR System	14
5	SYSTEM VERIFICATION	21
5.1	Purpose of System Check	21
5.2	System Check Setup	21
6	TEST POSITION CONFIGURATIONS	22
6.1	Hotspot Mode Exposure Position Conditions	22

7	MEASUREMENT PROCEDURE.....	23
7.1	Measurement Process Diagram.....	23
7.2	SAR Scan General Requirement	24
7.3	Measurement Procedure.....	25
7.4	Area & Zoom Scan Procedure	25
7.5	LTE (TDD) Considerations	26
8	CONDUCTED RF OUPUT POWER.....	28
8.1	LTE.....	28
8.2	NR	28
8.3	WIFI.....	29
8.4	Power Reduction List	47
9	TEST EXCLUSION CONSIDERATION.....	52
9.1	SAR Test Exclusion Consideration Table	53
9.2	10g Extremity Exposure Consideration	57
10	PROXIMITY SENSOR TRIGGERING TEST	58
10.1	Procedures for determining proximity sensor distance	58
10.2	Procedures for determining EUT tilt angle influences to proximity sensor triggering ...	60
11	TEST RESULT	61
11.1	LTE Band 2 (20MHz Bandwidth).....	61
11.2	LTE Band 4 (20MHz Bandwidth).....	62
11.3	LTE Band 5 (10MHz Bandwidth).....	63
11.4	LTE Band 12 (10MHz Bandwidth).....	64
11.5	LTE Band 14 (10MHz Bandwidth).....	65
11.6	LTE Band 25 (20MHz Bandwidth).....	66
11.7	LTE Band 66 (20MHz Bandwidth).....	67
11.8	LTE Band 71 (20MHz Bandwidth).....	68
11.9	LTE Band 41 (20MHz Bandwidth).....	69
11.10	5G n2 (20MHz Bandwidth)	70
11.11	5G n5 (20MHz Bandwidth)	71
11.12	5G n12 (15MHz Bandwidth).....	72

11.13	5G n14 (10MHz Bandwidth)	73
11.14	5G n25 (20MHz Bandwidth)	74
11.15	5G n66 (20MHz Bandwidth)	75
11.16	5G n41 (20MHz Bandwidth)	76
11.17	5G n71 (20MHz Bandwidth)	77
11.18	5G n77 (20MHz Bandwidth)	78
11.19	WIFI 2.4GHz.....	79
11.20	WIFI 5GHz.....	81
12	SAR Measurement Variability	83
13	SIMULTANEOUS TRANSMISSION	84
13.1	Simultaneous Transmission Mode Consider	84
13.2	Sum SAR of Simultaneous Transmission	85
14	TEST EQUIPMENTS LIST	88
ANNEX A	SIMULATING LIQUID VERIFICATION RESULT	89
ANNEX B	SYSTEM CHECK RESULT	90
ANNEX C	TEST DATA.....	101
ANNEX D	EUT EXTERNAL PHOTOS	122
ANNEX E	SAR TEST SETUP PHOTOS.....	122
ANNEX F	CALIBRATION REPORT	122
ANNEX G	TUNE-UP PROCEDURE	122

1 GENERAL INFORMATION

1.1 Test Laboratory

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

1.2 Test Location

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

1.3 Test Environment Condition

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

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Franklin Technology Inc.
Address	906 JEI Platz, 186, Gasan digital 1-ro, Geumcheon-Gu, Seoul 08502 Korea

2.2 Manufacturer Information

Manufacturer	Franklin Technology Inc.
Address	906 JEI Platz, 186, Gasan digital 1-ro, Geumcheon-Gu, Seoul 08502 Korea

2.3 General Description for Equipment under Test (EUT)

EUT Name	Mobile Hotspot
Model Name Under Test	RG350
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	A9811M1A2-1
Software Version	RG350.TM.0017
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	N/A
	Model No.	IBC050NA
	Serial No.	N/A
	Capacity	3000 mAh
	Rated Voltage	3.80 V
	Limit Charge Voltage	4.35 V

2.5 Technical Information

Network and Wireless connectivity	4G Network FDD LTE Band 2/4/5/12/14/25/66/71
	TDD LTE Band 41
	5G Network SA: NR n2/n5/n12/n14/n25/n41/n66/n71/n77
	WIFI 802.11a, 802.11b, 802.11g, 802.11n, 802.11ac and 802.11ax

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

Operating Mode	LTE, NR, 2.4G WIFI, 5G WIFI		
Frequency Range	LTE Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	LTE Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	LTE Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 12	TX: 699 ~ 716 MHz	RX: 729 ~ 746 MHz
	LTE Band 14	TX: 788 ~ 798 MHz	RX: 758 ~ 768 MHz
	LTE Band 25	TX: 1850 ~ 1915 MHz	RX: 1930 ~ 1995 MHz
	LTE Band 41	TX: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz
	LTE Band 66	TX: 1710 ~ 1780 MHz	RX: 2110 ~ 2200 MHz
	LTE Band 71	TX: 663 ~ 698 MHz	RX: 617 ~ 652 MHz
	NR n2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	NR n5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	NR n12	TX: 699 ~ 716 MHz	RX: 729 ~ 746 MHz
	NR n14	TX: 777 ~ 787 MHz	RX: 746 ~ 756 MHz
	NR n25	TX: 1850 ~ 1915 MHz	RX: 1930 ~ 1995 MHz
	NR n41	TX: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz
	NR n66	TX: 1710 ~ 1780 MHz	RX: 2110 ~ 2200 MHz
	NR n71	TX: 663 ~ 698 MHz	RX: 617 ~ 652 MHz
	NR n77	TX: 3450 ~ 3550 MHz	RX: 3450 ~ 3550 MHz
		TX: 3700 ~ 3980 MHz	RX: 3700 ~ 3980 MHz
	802.11b/g	2412 ~ 2462 MHz	
	802.11n(HT20/HT40)	2412 ~ 2462 MHz	
	802.11ax(HE20/HE40)	2412 ~ 2462 MHz	
	802.11a	5150 ~ 5250 MHz	
		5725 ~ 5850 MHz	
	802.11n(HT20/HT40)	5150 ~ 5250 MHz	
		5725 ~ 5850 MHz	
	802.11ac(VHT20/VHT40/VHT80)	5150 ~ 5250 MHz	
		5725 ~ 5850 MHz	
	802.11ax(HE20/HE40/HE80)	5150 ~ 5250 MHz	
		5725 ~ 5850 MHz	
Antenna Type	WWAN	ANT 0	FPC Antenna
		ANT 3	FPC Antenna
	WLAN	ANT 1	FPC Antenna
		ANT 2	Ceramic Antenna

DTM	N/A	
Hotspot Function	Support	
Power Reduction	Support	
Exposure Category	General Population/Uncontrolled exposure	
Product Type	Portable Device	
EUT Type	☒ Production unit	☐ Identical prototype
Note: 1. The device utilizes independent power reduction mechanisms for SAR compliance for the 4/5G transmitter for held-to-ear exposure conditions. 2. The device utilizes independent power reduction mechanisms for SAR compliance for the 4/5G transmitter for near to body exposure conditions. 3. The reduction power details please refer section 8.4.		

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	KDB 447498 D04 v01	447498 D04 Interim General RF Exposure Guidance v01
4	KDB 941225 D05 v02r05	SAR Evaluation Considerations for LTE Devices
5	KDB 941225 D06 v02r01	SAR EVALUATION PROCEDURES FOR PORTABLE DEVICES WITH WIRELESS ROUTER CAPABILITIES
6	KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
7	KDB 865664 D02 v01r02	RF Exposure Reporting
8	KDB 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)
		Hotspot (10 mm)	Hotspot (10 mm)
		1g SAR	1g SAR
PCB	LTE Band 2	0.56	0.85
	LTE Band 4	0.30	
	LTE Band 5	0.58	
	LTE Band 12	0.67	
	LTE Band 14	0.73	
	LTE Band 25	0.27	
	LTE Band 41	0.22	
	LTE Band 66	0.71	
	LTE Band 71	0.27	
	NR n2	0.40	
	NR n5	0.56	
	NR n12	0.30	
	NR n14	0.58	
	NR n25	0.38	
	NR n41	0.21	
	NR n66	0.35	
	NR n71	0.43	
	NR n77	0.57	
	DTS	2.4G WIFI	
NII	5G WIFI	0.31	
Limit (W/kg)		1.60	
Verdict		Pass	

3.3.2 Highest Simultaneous Transmission SAR Values

Equipment Class	Maximum Scaled SAR (W/kg)
	Hotspot 1g (10mm)
PCB	1.58
DTS	1.58
NII	1.58
Limit (W/Kg)	1.60
Verdict	Pass
Note: The highest simultaneous SAR please refer section 13.2.	

3.4 Test Uncertainty

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

The maximum 1 g SAR for the EUT in this report is 0.85 W/kg, which is lower than 1.5 W/kg, so the extensive SAR measurement uncertainty analysis is not required in this report.

4 MEASUREMENT SYSTEM

4.1 Specific Absorption Rate (SAR) Definition

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

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

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

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

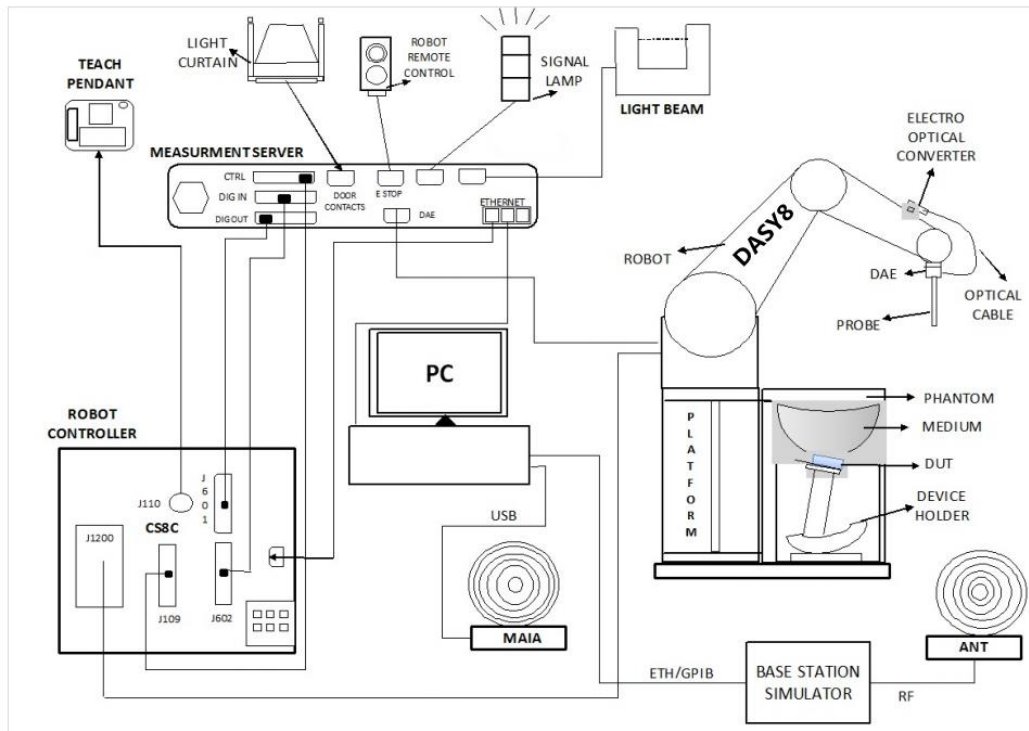
$$\text{SAR} = \frac{\sigma E^2}{\rho}$$

Where: σ is the conductivity of the tissue,

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

4.2 DASY SAR System

4.2.1 DASY SAR System Diagram



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

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

4.2.2 Robot

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



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

4.2.3 E-Field Probe

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

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



E-Field Probe Calibration Process

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

4.2.4 Data Acquisition Electronics

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



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

4.2.5 Phantoms

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



- Left head
- Right head
- Flat phantom

Photo of Phantom SN1859



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

4.2.6 Device Holder

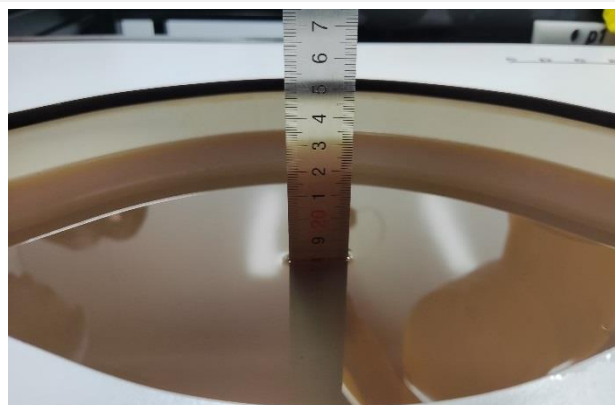
The DASY device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65° . The bottom plate contains three pair of bolts for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



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

4.2.7 Simulating Liquid

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

Head Liquid Depth**Body Liquid Depth**

The following table gives the recipes for tissue simulating liquid.

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

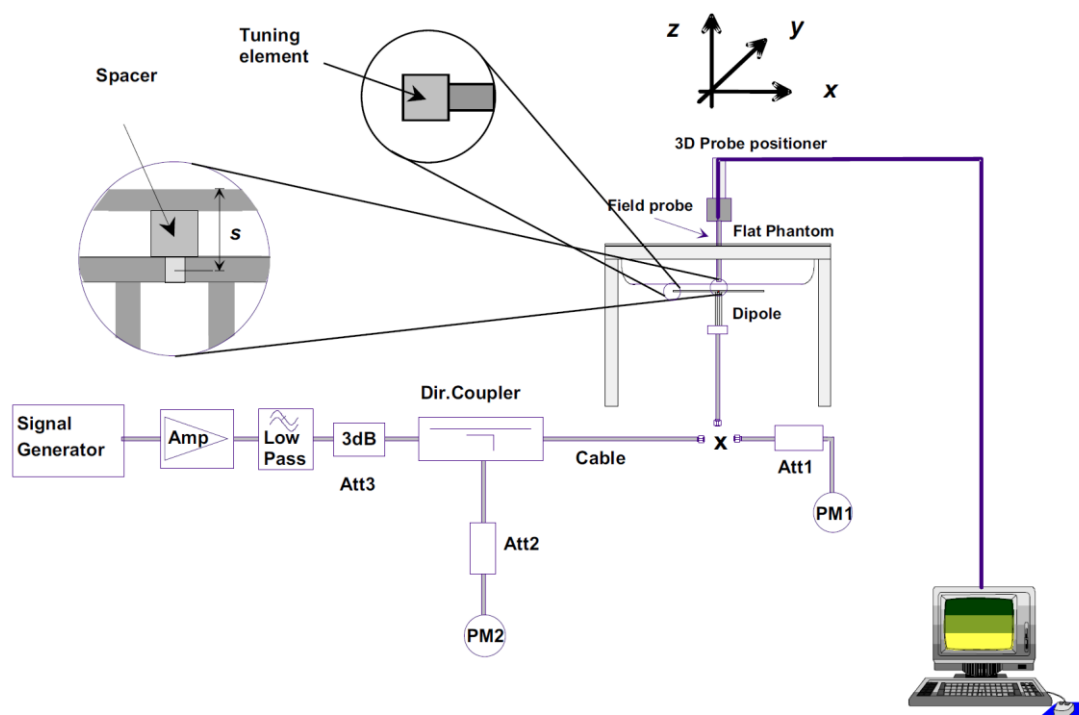
5 SYSTEM VERIFICATION

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:

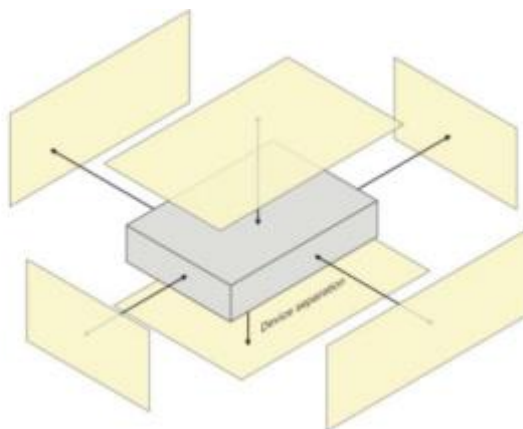


6 TEST POSITION CONFIGURATIONS

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.

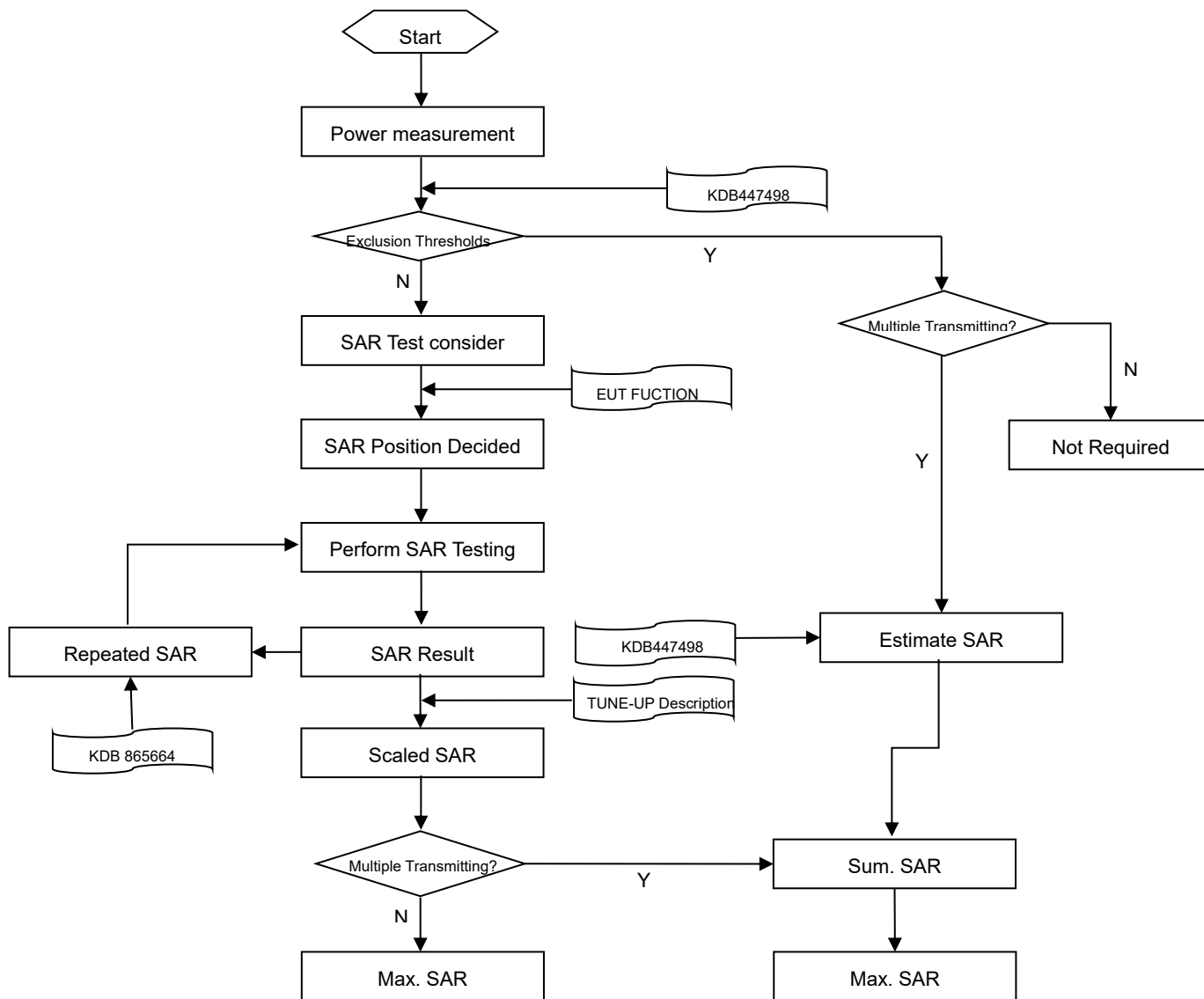
6.1 Hotspot Mode Exposure Position Conditions

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).



7 MEASUREMENT PROCEDURE

7.1 Measurement Process Diagram



7.2 SAR Scan General Requirement

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

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

Note:

1. δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.
2. * When zoom scan is required and the reported SAR from the area scan based 1 g SAR estimation procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

7.3 Measurement Procedure

The following steps are used for each test position

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

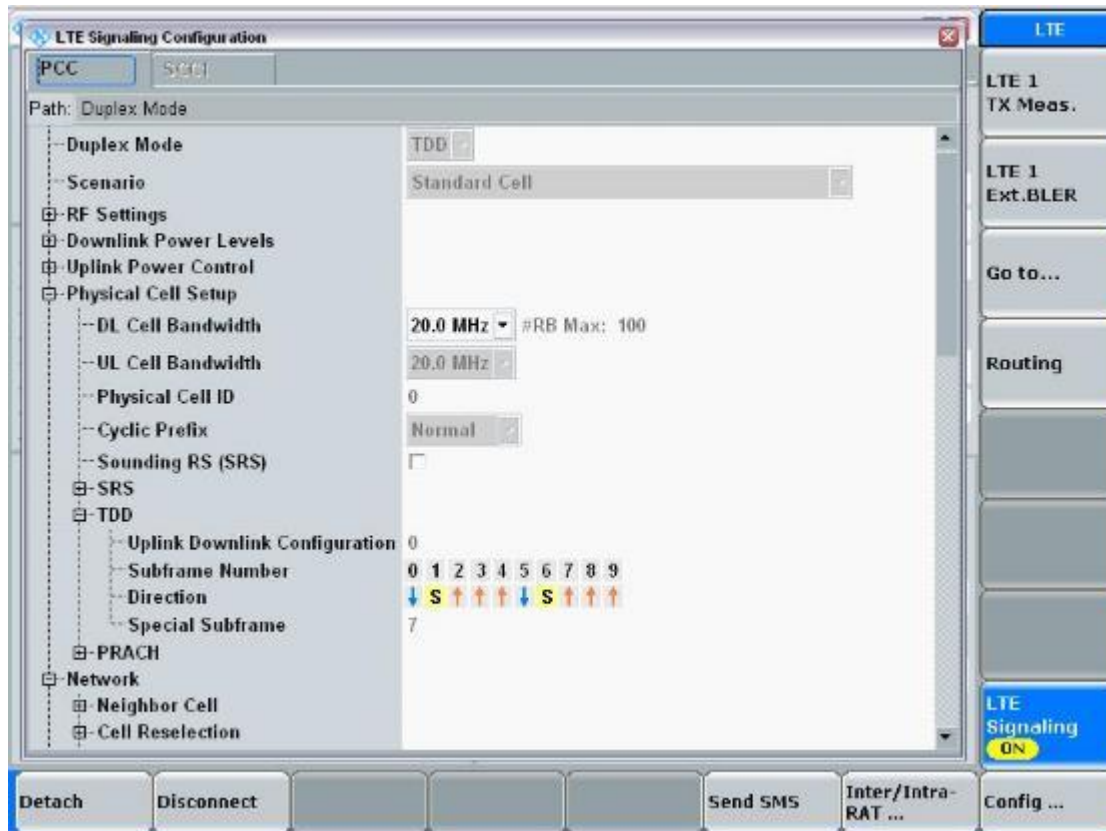
7.4 Area & Zoom Scan Procedure

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

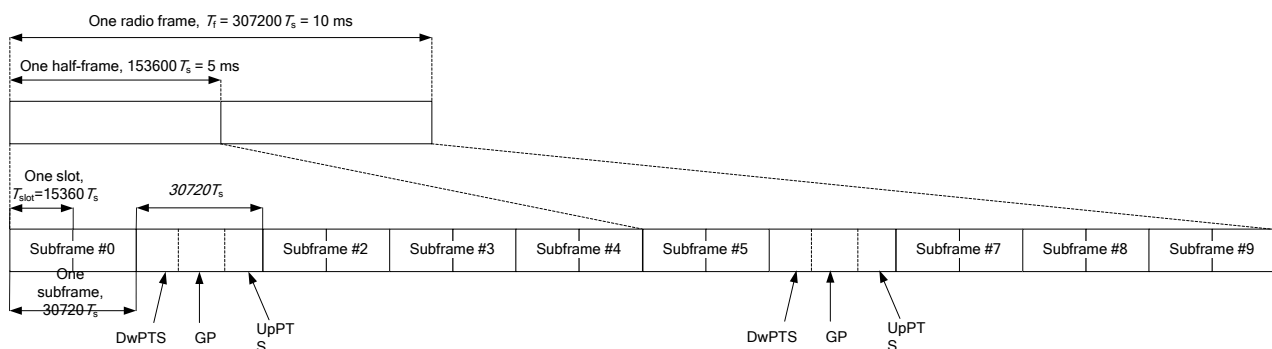
When the 1 g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

7.5 LTE (TDD) Considerations

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



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



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

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

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

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

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

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

One radio frame with 6 uplink sub-frames and two special sub-frame,

there for the maximum Uplink time in one radio frame is: **$6 \cdot 1\text{ ms} + 2 \cdot 0.167\text{ ms} = 6.334\text{ms}$**

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

8 CONDUCTED RF OUPUT POWER

8.1 LTE

Please refer the document “BL-SZ24A0296-AP.pdf”.

8.2 NR

Please refer the document “BL-SZ24A0296-AP.pdf”.

8.3 WIFI

8.3.1 2.4G WIFI-Full Power&State1-ANT1

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	17.20	18.00	Yes
		6	2437	17.52	18.00	Yes
		11	2462	17.07	18.00	Yes
	802.11g	1	2412	15.05	16.00	No
		6	2437	15.38	16.00	No
		11	2462	15.05	16.00	No
	802.11n(HT20)	1	2412	13.94	14.00	No
		6	2437	13.23	14.00	No
		11	2462	13.90	14.00	No
	802.11n(HT40)	3	2422	13.26	14.00	No
		6	2437	13.25	14.00	No
		9	2452	13.83	14.00	No
	802.11ax(HE20) (SU)	1	2412	10.10	11.00	No
		6	2437	10.44	11.00	No
		11	2462	10.91	11.00	No
	802.11ax(HE40) (SU)	3	2422	10.40	11.00	No
		6	2437	10.28	11.00	No
		9	2452	10.59	11.00	No

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

- 1) The largest channel bandwidth configuration is selected between the multiple configurations in a frequency band with the same maximum tune-up output power.
- 2) When multiple transmission modes (802.11b/g/n) have the same maximum tune-up output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11b is chosen over 802.11g, and 802.11g chosen over 802.11n.
- 3) According KDB 247228, when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, OFDM SAR test is not required.
Adjusted SAR = $0.850 * (39.81\text{mW}/63.10\text{mW}) = 0.536$ W/Kg, so 2.4G OFDM SAR test is not required.

8.3.2 2.4G WIFI-Full Power&State1-ANT2

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	17.85	18.00	Yes
		6	2437	17.95	18.00	Yes
		11	2462	17.94	18.00	Yes
	802.11g	1	2412	15.57	16.00	No
		6	2437	15.67	16.00	No
		11	2462	15.66	16.00	No
	802.11n(HT20)	1	2412	13.62	14.00	No
		6	2437	13.60	14.00	No
		11	2462	13.56	14.00	No
	802.11n(HT40)	3	2422	13.72	14.00	No
		6	2437	13.58	14.00	No
		9	2452	14.02	14.00	No
	802.11ax(HE20) (SU)	1	2412	10.97	11.00	No
		6	2437	10.38	11.00	No
		11	2462	10.53	11.00	No
	802.11ax(HE40) (SU)	3	2422	10.77	11.00	No
		6	2437	10.84	11.00	No
		9	2452	10.75	11.00	No

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

- 1) The largest channel bandwidth configuration is selected between the multiple configurations in a frequency band with the same maximum tune-up output power.
- 2) When multiple transmission modes (802.11b/g/n) have the same maximum tune-up output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11b is chosen over 802.11g, and 802.11g chosen over 802.11n.
- 3) According KDB 247228, when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, OFDM SAR test is not required.

Adjusted SAR = $0.413 * (39.81\text{mW}/63.10\text{mW}) = 0.261$ W/Kg, so 2.4G OFDM SAR test is not required.

8.3.3 2.4G WIFI-Full Power&State1-MIMO

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	20.55	21.00	Yes
		6	2437	20.75	21.00	Yes
		11	2462	20.54	21.00	Yes
	802.11g	1	2412	18.33	19.00	No
		6	2437	18.54	19.00	No
		11	2462	18.38	19.00	No
	802.11n(HT20)	1	2412	16.79	17.00	No
		6	2437	16.43	17.00	No
		11	2462	16.74	17.00	No
	802.11n(HT40)	3	2422	16.51	17.00	No
		6	2437	16.43	17.00	No
		9	2452	16.94	17.00	No
	802.11ax(HE20) (SU)	1	2412	13.57	14.00	No
		6	2437	13.42	14.00	No
		11	2462	13.73	14.00	No
	802.11ax(HE40) (SU)	3	2422	13.60	14.00	No
		6	2437	13.58	14.00	No
		9	2452	13.68	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) 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 = $0.852 * (79.43\text{mW}/125.89\text{mW}) = 0.538$ W/Kg, so 2.4G OFDM SAR test is not required.

8.3.4 2.4G WIFI-State2-ANT1

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	15.15	16.00	Yes
		6	2437	15.43	16.00	Yes
		11	2462	15.01	16.00	Yes
	802.11g	1	2412	15.05	16.00	No
		6	2437	15.38	16.00	No
		11	2462	15.05	16.00	No
	802.11n(HT20)	1	2412	13.94	14.00	No
		6	2437	13.23	14.00	No
		11	2462	13.90	14.00	No
	802.11n(HT40)	3	2422	13.26	14.00	No
		6	2437	13.25	14.00	No
		9	2452	13.83	14.00	No
	802.11ax(HE20) (SU)	1	2412	10.10	11.00	No
		6	2437	10.44	11.00	No
		11	2462	10.91	11.00	No
	802.11ax(HE40) (SU)	3	2422	10.40	11.00	No
		6	2437	10.28	11.00	No
		9	2452	10.59	11.00	No

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

- 1) The largest channel bandwidth configuration is selected between the multiple configurations in a frequency band with the same maximum tune-up output power.
- 2) When multiple transmission modes (802.11b/g/n) have the same maximum tune-up output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11b is chosen over 802.11g, and 802.11g chosen over 802.11n.
- 3) According KDB 247228, when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, OFDM SAR test is not required.

Adjusted SAR = $0.543 * (39.81\text{mW}/39.81\text{mW}) = 0.543$ W/Kg, so 2.4G OFDM SAR test is not required.

8.3.5 2.4G WIFI-State2-ANT2

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	15.73	16.00	Yes
		6	2437	15.86	16.00	Yes
		11	2462	15.82	16.00	Yes
	802.11g	1	2412	15.57	16.00	No
		6	2437	15.67	16.00	No
		11	2462	15.66	16.00	No
	802.11n(HT20)	1	2412	13.62	14.00	No
		6	2437	13.60	14.00	No
		11	2462	13.56	14.00	No
	802.11n(HT40)	3	2422	13.72	14.00	No
		6	2437	13.58	14.00	No
		9	2452	14.02	14.00	No
	802.11ax(HE20) (SU)	1	2412	10.97	11.00	No
		6	2437	10.38	11.00	No
		11	2462	10.53	11.00	No
	802.11ax(HE40) (SU)	3	2422	10.77	11.00	No
		6	2437	10.84	11.00	No
		9	2452	10.75	11.00	No

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

- 1) The largest channel bandwidth configuration is selected between the multiple configurations in a frequency band with the same maximum tune-up output power.
- 2) When multiple transmission modes (802.11b/g/n) have the same maximum tune-up output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11b is chosen over 802.11g, and 802.11g chosen over 802.11n.
- 3) According KDB 247228, when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, OFDM SAR test is not required.

Adjusted SAR = $0.327 * (39.81\text{mW}/39.81\text{mW}) = 0.327$ W/Kg, so 2.4G OFDM SAR test is not required.

8.3.6 2.4G WIFI-State2-MIMO

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	18.46	19.00	Yes
		6	2437	18.66	19.00	Yes
		11	2462	18.44	19.00	Yes
	802.11g	1	2412	18.33	19.00	No
		6	2437	18.54	19.00	No
		11	2462	18.38	19.00	No
	802.11n(HT20)	1	2412	16.79	17.00	No
		6	2437	16.43	17.00	No
		11	2462	16.74	17.00	No
	802.11n(HT40)	3	2422	16.51	17.00	No
		6	2437	16.43	17.00	No
		9	2452	16.94	17.00	No
	802.11ax(HE20) (SU)	1	2412	13.57	14.00	No
		6	2437	13.42	14.00	No
		11	2462	13.73	14.00	No
	802.11ax(HE40) (SU)	3	2422	13.60	14.00	No
		6	2437	13.58	14.00	No
		9	2452	13.68	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) 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 = $0.669 * (79.43\text{mW}/79.43\text{mW}) = 0.669$ W/Kg, so 2.4G OFDM SAR test is not required.

8.3.7 2.4G WIFI-Full Power&State1&State2-ANT1

Band (GHz)	Mode	Channel	Freq. (MHz)	RU Config	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11ax (HE20)	1	2412	26	10.62	11.00	No
				52	10.72	11.00	No
				106	10.57	11.00	No
		6	2437	26	10.73	11.00	No
				52	10.61	11.00	No
				106	10.56	11.00	No
		11	2462	26	10.86	11.00	No
				52	10.66	11.00	No
				106	10.80	11.00	No
	802.11ax (HE40)	3	2422	26	10.93	11.00	No
				52	10.62	11.00	No
				106	10.68	11.00	No
				242	10.56	11.00	No
		6	2437	26	10.60	11.00	No
				52	10.73	11.00	No
				106	10.64	11.00	No
				242	10.48	11.00	No
		9	2452	26	10.66	11.00	No
				52	10.86	11.00	No
				106	10.87	11.00	No
				242	10.96	11.00	No

8.3.8 2.4G WIFI-Full Power&State1&State2-ANT2

Band (GHz)	Mode	Channel	Freq. (MHz)	RU Config	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11ax (HE20)	1	2412	26	10.56	11.00	No
				52	10.50	11.00	No
				106	10.59	11.00	No
		6	2437	26	10.73	11.00	No
				52	10.59	11.00	No
				106	10.66	11.00	No
		11	2462	26	10.88	11.00	No
				52	10.82	11.00	No
				106	10.85	11.00	No
	802.11ax (HE40)	3	2422	26	10.43	11.00	No
				52	10.51	11.00	No
				106	10.55	11.00	No
				242	10.42	11.00	No
		6	2437	26	10.60	11.00	No
				52	10.64	11.00	No
				106	10.63	11.00	No
				242	10.47	11.00	No
		9	2452	26	10.76	11.00	No
				52	10.87	11.00	No
				106	10.87	11.00	No
				242	10.92	11.00	No

8.3.9 2.4G WIFI-Full Power&State1&State2-MIMO

Band (GHz)	Mode	Channel	Freq. (MHz)	RU Config	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11ax (HE20)	1	2412	26	13.60	14.00	No
				52	13.62	14.00	No
				106	13.59	14.00	No
		6	2437	26	13.74	14.00	No
				52	13.61	14.00	No
				106	13.62	14.00	No
		11	2462	26	13.88	14.00	No
				52	13.75	14.00	No
				106	13.84	14.00	No
	802.11ax (HE40)	3	2422	26	13.70	14.00	No
				52	13.58	14.00	No
				106	13.63	14.00	No
				242	13.50	14.00	No
		6	2437	26	13.61	14.00	No
				52	13.70	14.00	No
				106	13.65	14.00	No
				242	13.49	14.00	No
		9	2452	26	13.72	14.00	No
				52	13.88	14.00	No
				106	13.88	14.00	No
				242	13.95	14.00	No

8.3.10 5G WIFI-Full Power&State1&State2-ANT1

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	14.25	15.00	Yes
		44	5220	14.23	15.00	Yes
		48	5240	14.11	15.00	Yes
	802.11n(HT20)	36	5180	12.46	13.00	No
		44	5220	12.83	13.00	No
		48	5240	12.78	13.00	No
	802.11n(HT40)	38	5190	12.72	13.00	No
		46	5230	12.87	13.00	No
	802.11ac(VHT20)	36	5180	11.52	12.00	No
		44	5220	11.14	12.00	No
		48	5240	11.45	12.00	No
	802.11ac(VHT40)	38	5190	11.34	12.00	No
		46	5230	11.62	12.00	No
	802.11ac(VHT80)	42	5210	11.59	12.00	No
	802.11ax(HE20) (SU)	36	5180	10.38	11.00	No
		44	5220	10.24	11.00	No
		48	5240	10.64	11.00	No
	802.11ax(HE40) (SU)	38	5190	10.55	11.00	No
		46	5230	10.25	11.00	No
	802.11ax(HE80) (SU)	42	5210	10.58	11.00	No
5.8 (5.725~5.85)	802.11a	149	5745	14.32	15.00	Yes
		157	5785	14.85	15.00	Yes
		165	5825	14.52	15.00	Yes
	802.11n(HT20)	149	5745	12.63	13.00	No
		157	5785	12.74	13.00	No
		165	5825	12.35	13.00	No
	802.11n(HT40)	151	5755	12.74	13.00	No
		159	5795	12.54	13.00	No
	802.11ac(VHT20)	149	5745	11.56	12.00	No
		157	5785	11.75	12.00	No
		165	5825	11.83	12.00	No
	802.11ac(VHT40)	151	5755	11.17	12.00	No
		159	5795	11.14	12.00	No
	802.11ac(VHT80)	155	5775	11.70	12.00	No
	802.11ax(HE20)	149	5745	10.44	11.00	No

	(SU)	157	5785	10.44	11.00	No
		165	5825	10.54	11.00	No
	802.11ax(HE40) (SU)	151	5755	10.58	11.00	No
		159	5795	10.42	11.00	No
	802.11ax(HE80) (SU)	155	5775	10.66	11.00	No

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

Band (GHz)	Mode	Channel	Freq. (MHz)	RU Config	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11ax (HE20)	36	5180	26	10.68	11.00	No
				52	10.23	11.00	No
				106	10.35	11.00	No
		44	5220	26	10.18	11.00	No
				52	10.26	11.00	No
				106	10.33	11.00	No
		48	5240	26	10.39	11.00	No
				52	10.55	11.00	No
				106	10.54	11.00	No
	802.11ax (HE40)	38	5190	26	10.47	11.00	No
				52	10.61	11.00	No
				106	10.29	11.00	No
				242	10.24	11.00	No
		46	5230	26	10.44	11.00	No
				52	10.59	11.00	No
				106	10.38	11.00	No
				242	10.53	11.00	No
	802.11ax (HE80)	42	5210	26	10.29	11.00	No
				52	10.29	11.00	No
				106	10.32	11.00	No
				242	10.28	11.00	No
				484	10.17	11.00	No
5.8 (5.725~5.85)	802.11ax (HE20)	149	5745	26	10.42	11.00	No
				52	10.43	11.00	No
				106	10.57	11.00	No
		157	5785	26	10.17	11.00	No
				52	10.21	11.00	No

		165	5825	106	10.35	11.00	No
				26	10.51	11.00	No
				52	10.45	11.00	No
				106	10.54	11.00	No
	802.11ax (HE40)	151	5755	26	10.30	11.00	No
				52	10.36	11.00	No
				106	10.61	11.00	No
				242	10.30	11.00	No
		159	5795	26	10.67	11.00	No
				52	10.45	11.00	No
				106	10.54	11.00	No
				242	10.49	11.00	No
	802.11ax (HE80)	155	5775	26	10.25	11.00	No
				52	10.26	11.00	No
				106	10.26	11.00	No
				242	10.35	11.00	No
				484	10.41	11.00	No

8.3.11 5G WIFI-Full Power&State1&State2-ANT2

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	14.31	15.00	Yes
		44	5220	14.23	15.00	Yes
		48	5240	14.31	15.00	Yes
	802.11n(HT20)	36	5180	12.06	13.00	No
		44	5220	12.93	13.00	No
		48	5240	12.38	13.00	No
	802.11n(HT40)	38	5190	12.32	13.00	No
		46	5230	12.47	13.00	No
	802.11ac(VHT20)	36	5180	11.12	12.00	No
		44	5220	11.14	12.00	No
		48	5240	11.65	12.00	No
	802.11ac(VHT40)	38	5190	11.37	12.00	No
		46	5230	11.42	12.00	No
	802.11ac(VHT80)	42	5210	11.79	12.00	No
	802.11ax(HE20) (SU)	36	5180	10.48	11.00	No
		44	5220	10.24	11.00	No
		48	5240	10.44	11.00	No
	802.11ax(HE40) (SU)	38	5190	10.45	11.00	No
		46	5230	10.35	11.00	No
	802.11ax(HE80) (SU)	42	5210	10.78	11.00	No
5.8 (5.725~5.85)	802.11a	149	5745	14.32	15.00	Yes
		157	5785	14.62	15.00	Yes
		165	5825	14.72	15.00	Yes
	802.11n(HT20)	149	5745	12.43	13.00	No
		157	5785	12.84	13.00	No
		165	5825	12.05	13.00	No
	802.11n(HT40)	151	5755	12.94	13.00	No
		159	5795	12.34	13.00	No
	802.11ac(VHT20)	149	5745	11.66	12.00	No
		157	5785	11.75	12.00	No
		165	5825	11.53	12.00	No
	802.11ac(VHT40)	151	5755	11.07	12.00	No
		159	5795	11.14	12.00	No
	802.11ac(VHT80)	155	5775	11.60	12.00	No
	802.11ax(HE20)	149	5745	10.34	11.00	No

	(SU)	157	5785	10.24	11.00	No
		165	5825	10.54	11.00	No
	802.11ax(HE40) (SU)	151	5755	10.18	11.00	No
		159	5795	10.32	11.00	No
	802.11ax(HE80) (SU)	155	5775	10.66	11.00	No

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

Band (GHz)	Mode	Channel	Freq. (MHz)	RU Config	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11ax (HE20)	36	5180	26	10.34	11.00	No
				52	10.43	11.00	No
				106	10.65	11.00	No
		44	5220	26	10.48	11.00	No
				52	10.26	11.00	No
				106	10.23	11.00	No
		48	5240	26	10.49	11.00	No
				52	10.25	11.00	No
				106	10.34	11.00	No
	802.11ax (HE40)	38	5190	26	10.77	11.00	No
				52	10.41	11.00	No
				106	10.59	11.00	No
				242	10.24	11.00	No
		46	5230	26	10.44	11.00	No
				52	10.39	11.00	No
				106	10.58	11.00	No
				242	10.53	11.00	No
	802.11ax (HE80)	42	5210	26	10.18	11.00	No
				52	10.19	11.00	No
				106	10.42	11.00	No
				242	10.48	11.00	No
				484	10.37	11.00	No
5.8 (5.725~5.85)	802.11ax (HE20)	149	5745	26	10.52	11.00	No
				52	10.13	11.00	No
				106	10.27	11.00	No
		157	5785	26	10.47	11.00	No
				52	10.31	11.00	No

		165	5825	106	10.55	11.00	No
				26	10.51	11.00	No
				52	10.25	11.00	No
				106	10.54	11.00	No
	802.11ax (HE40)	151	5755	26	10.20	11.00	No
				52	10.46	11.00	No
				106	10.71	11.00	No
				242	10.30	11.00	No
		159	5795	26	10.67	11.00	No
				52	10.45	11.00	No
				106	10.64	11.00	No
				242	10.59	11.00	No
	802.11ax (HE80)	155	5775	26	10.45	11.00	No
				52	10.34	11.00	No
				106	10.56	11.00	No
				242	10.35	11.00	No
				484	10.21	11.00	No

8.3.12 5G WIFI-Full Power&State1&State2-MIMO

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	17.29	18.00	Yes
		44	5220	17.24	18.00	Yes
		48	5240	17.22	18.00	Yes
	802.11n(HT20)	36	5180	15.27	16.00	No
		44	5220	15.89	16.00	No
		48	5240	15.59	16.00	No
	802.11n(HT40)	38	5190	15.53	16.00	No
		46	5230	15.68	16.00	No
	802.11ac(VHT20)	36	5180	14.33	15.00	No
		44	5220	14.15	15.00	No
		48	5240	14.56	15.00	No
	802.11ac(VHT40)	38	5190	14.37	15.00	No
		46	5230	14.53	15.00	No
	802.11ac(VHT80)	42	5210	14.70	15.00	No
	802.11ax(HE20) (SU)	36	5180	13.44	14.00	No
		44	5220	13.25	14.00	No
		48	5240	13.55	14.00	No
	802.11ax(HE40) (SU)	38	5190	13.51	14.00	No
		46	5230	13.31	14.00	No
	802.11ax(HE80) (SU)	42	5210	13.69	14.00	No
5.8 (5.725~5.85)	802.11a	149	5745	17.33	18.00	Yes
		157	5785	17.75	18.00	Yes
		165	5825	17.63	18.00	Yes
	802.11n(HT20)	149	5745	15.54	16.00	No
		157	5785	15.80	16.00	No
		165	5825	15.21	16.00	No
	802.11n(HT40)	151	5755	15.85	16.00	No
		159	5795	15.45	16.00	No
	802.11ac(VHT20)	149	5745	14.62	15.00	No
		157	5785	14.76	15.00	No
		165	5825	14.69	15.00	No
	802.11ac(VHT40)	151	5755	14.13	15.00	No
		159	5795	14.15	15.00	No
	802.11ac(VHT80)	155	5775	14.66	15.00	No
	802.11ax(HE20)	149	5745	13.40	14.00	No

	(SU)	157	5785	13.35	14.00	No
		165	5825	13.55	14.00	No
	802.11ax(HE40) (SU)	151	5755	13.39	14.00	No
		159	5795	13.38	14.00	No
	802.11ax(HE80) (SU)	155	5775	13.67	14.00	No

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

Band (GHz)	Mode	Channel	Freq. (MHz)	RU Config	Average Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11ax (HE20)	36	5180	26	13.52	14.00	No
				52	13.34	14.00	No
				106	13.51	14.00	No
		44	5220	26	13.34	14.00	No
				52	13.27	14.00	No
				106	13.29	14.00	No
		48	5240	26	13.45	14.00	No
				52	13.41	14.00	No
				106	13.45	14.00	No
	802.11ax (HE40)	38	5190	26	13.63	14.00	No
				52	13.52	14.00	No
				106	13.45	14.00	No
				242	13.25	14.00	No
		46	5230	26	13.45	14.00	No
				52	13.50	14.00	No
				106	13.49	14.00	No
				242	13.54	14.00	No
	802.11ax (HE80)	42	5210	26	13.25	14.00	No
				52	13.25	14.00	No
				106	13.38	14.00	No
				242	13.39	14.00	No
				484	13.28	14.00	No
5.8 (5.725~5.85)	802.11ax (HE20)	149	5745	26	13.48	14.00	No
				52	13.29	14.00	No
				106	13.43	14.00	No
		157	5785	26	13.33	14.00	No
				52	13.27	14.00	No

		165	5825	106	13.46	14.00	No
				26	13.52	14.00	No
				52	13.36	14.00	No
				106	13.55	14.00	No
	802.11ax (HE40)	151	5755	26	13.26	14.00	No
				52	13.42	14.00	No
				106	13.67	14.00	No
				242	13.31	14.00	No
		159	5795	26	13.68	14.00	No
				52	13.46	14.00	No
				106	13.60	14.00	No
				242	13.55	14.00	No
	802.11ax (HE80)	155	5775	26	13.36	14.00	No
				52	13.31	14.00	No
				106	13.42	14.00	No
				242	13.36	14.00	No
				484	13.32	14.00	No

8.4 Power Reduction List

1. When this device used data mode only, and the receiver will not work too, the reduced the power are same as body exposure.
2. The device employs proximity sensors that detect the presence of the user's body of the device. When these conditions are detected, Body reduced power will be active.
3. When the proximity sensor fails, the power is reduced to the corresponding Sensor On scenario.

WWAN Reduced Power Level Table

Reduced level	Sensor state	Receiver state	Transmitting conditions	Antenna	Position
State1	Sensor(CS1) On + Sensor(CS2) On	Off (Body scenario)	WWAN Use Only	Ant.0	Front Side; Back Side; Left Edge; Bottom Edge
				Ant.3	Front Side; Back Side; Top Edge
State2	Sensor(CS1) On + Sensor(CS2) On	Off (Body scenario)	WWAN + WLAN2.4G+WLAN5 G	Ant.0	Front Side; Back Side; Left Edge; Bottom Edge
				Ant.3	Front Side; Back Side; Top Edge

Note:

1. EUT has three SAR Sensor signal channels.
2. The antenna triggered by sensor(CS1) has Ant.0, The antenna triggered by sensor(CS2) has Ant.3.

WLAN Reduced Power Level Table

Reduced level	Sensor state	Receiver state	Transmitting conditions	Antenna	Position
State1	Sensor(CS3) On	Off (Body scenario)	Only WLAN	Ant.1	Front Side; Back Side; Right Edge
				Ant.2	All Position
State2		Off (Body scenario)	WWAN + WLAN2.4G+WLAN5G	Ant.1	Front Side; Back Side; Right Edge
				Ant.2	All Position

Note:

1. The antenna triggered by sensor(CS3) has Ant.1.

WWAN Antenna Power Table

Mode	Antenna	WWAN Antenna	
		Full Power	Receiver off
			Hotspot
			Standalone & Simultaneous transmission
		Off	State1&2
LTE Band 2	Ant.0	23.50	21.00
LTE Band 4	Ant.0	23.50	21.00
LTE Band 5	Ant.0	23.50	21.00
LTE Band 12	Ant.0	23.50	21.00
LTE Band 14	Ant.0	23.50	21.00
LTE Band 25	Ant.0	23.50	21.00
LTE Band 66	Ant.0	23.50	21.00
LTE Band 71	Ant.0	23.50	21.00
LTE Band 41	Ant.0	23.00	20.50
NR Band2	Ant.0	23.00	21.00
NR Band5	Ant.0	23.00	21.00
NR Band12	Ant.0	23.00	21.00
NR Band14	Ant.0	23.00	21.00
NR Band25	Ant.0	23.00	21.00
NR Band66	Ant.0	23.00	21.00
NR Band41	Ant.0	23.00	21.00
NR Band71	Ant.0	23.00	21.00
NR Band77	Ant.3	23.00	21.00

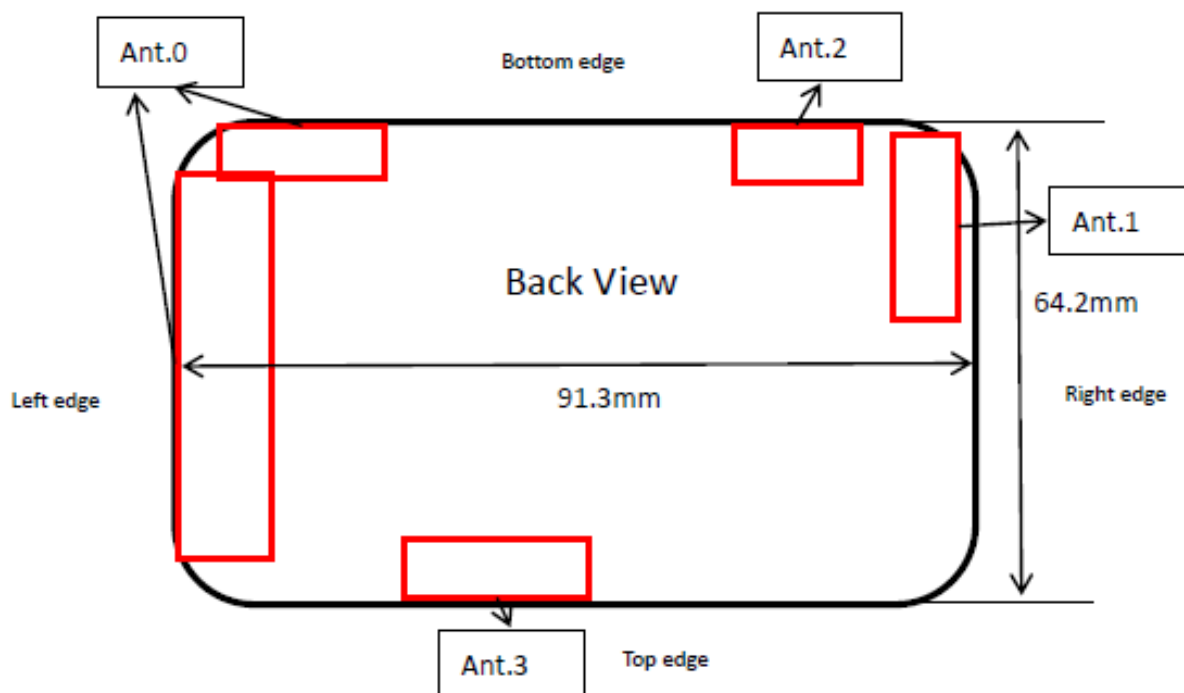
WLAN Antenna Power Table

Mode	WLAN Antenna 1		
	Full Power	Receiver off	
		Hotspot	
		Standalone	Simultaneous transmission
		Only WLAN	WWAN+WLAN
	Off	State1	State2
2.4G WLAN 802.11b	18.00	18.00	16.00
2.4G WLAN 802.11g	16.00	16.00	16.00
2.4G WLAN 802.11n20	14.00	14.00	14.00
2.4G WLAN 802.11n40	14.00	14.00	14.00
2.4G WLAN 802.11ax20	11.00	11.00	11.00
2.4G WLAN 802.11ax40	11.00	11.00	11.00
5.2G WLAN 802.11a	15.00	15.00	15.00
5.2 WLAN 802.11n20	13.00	13.00	13.00
5.2 WLAN 802.11n40	13.00	13.00	13.00
5.2 WLAN 802.11ac20	12.00	12.00	12.00
5.2 WLAN 802.11ac40	12.00	12.00	12.00
5.2 WLAN 802.11ac80	12.00	12.00	12.00
5.2 WLAN 802.11ax20	11.00	11.00	11.00
5.2 WLAN 802.11ax40	11.00	11.00	11.00
5.2 WLAN 802.11ax80	11.00	11.00	11.00
5.8G WLAN 802.11a	15.00	15.00	15.00
5.8G WLAN 802.11n20	13.00	13.00	13.00
5.8G WLAN 802.11n40	13.00	13.00	13.00
5.8G WLAN 802.11ac20	12.00	12.00	12.00
5.8G WLAN 802.11ac40	12.00	12.00	12.00
5.8G WLAN 802.11ac80	12.00	12.00	12.00
5.8G WLAN 802.11ax20	11.00	11.00	11.00
5.8G WLAN 802.11ax40	11.00	11.00	11.00
5.8G WLAN 802.11ax80	11.00	11.00	11.00

Mode	WLAN Antenna 2		
	Full Power	Receiver off	
		Hotspot	
		Standalone	Simultaneous transmission
		Only WLAN	WWAN+WLAN
	Off	State1	State2
2.4G WLAN 802.11b	18.00	18.00	16.00
2.4G WLAN 802.11g	16.00	16.00	16.00
2.4G WLAN 802.11n20	14.00	14.00	14.00
2.4G WLAN 802.11n40	14.00	14.00	14.00
2.4G WLAN 802.11ax20	11.00	11.00	11.00
2.4G WLAN 802.11ax40	11.00	11.00	11.00
5.2G WLAN 802.11a	15.00	15.00	15.00
5.2 WLAN 802.11n20	13.00	13.00	13.00
5.2 WLAN 802.11n40	13.00	13.00	13.00
5.2 WLAN 802.11ac20	12.00	12.00	12.00
5.2 WLAN 802.11ac40	12.00	12.00	12.00
5.2 WLAN 802.11ac80	12.00	12.00	12.00
5.2 WLAN 802.11ax20	11.00	11.00	11.00
5.2 WLAN 802.11ax40	11.00	11.00	11.00
5.2 WLAN 802.11ax80	11.00	11.00	11.00
5.8G WLAN 802.11a	15.00	15.00	15.00
5.8G WLAN 802.11n20	13.00	13.00	13.00
5.8G WLAN 802.11n40	13.00	13.00	13.00
5.8G WLAN 802.11ac20	12.00	12.00	12.00
5.8G WLAN 802.11ac40	12.00	12.00	12.00
5.8G WLAN 802.11ac80	12.00	12.00	12.00
5.8G WLAN 802.11ax20	11.00	11.00	11.00
5.8G WLAN 802.11ax40	11.00	11.00	11.00
5.8G WLAN 802.11ax80	11.00	11.00	11.00

Mode	WLAN MIMO		
	Full Power	Receiver off	
		Hotspot	
		Standalone	Simultaneous transmission
		Only WLAN	WWAN+WLAN
	Off	State1	State2
2.4G WLAN 802.11b	21.00	21.00	19.00
2.4G WLAN 802.11g	19.00	19.00	19.00
2.4G WLAN 802.11n20	17.00	17.00	17.00
2.4G WLAN 802.11n40	17.00	17.00	17.00
2.4G WLAN 802.11ax20	14.00	14.00	14.00
2.4G WLAN 802.11ax40	14.00	14.00	14.00
5.2G WLAN 802.11a	18.00	18.00	18.00
5.2 WLAN 802.11n20	16.00	16.00	16.00
5.2 WLAN 802.11n40	16.00	16.00	16.00
5.2 WLAN 802.11ac20	15.00	15.00	15.00
5.2 WLAN 802.11ac40	15.00	15.00	15.00
5.2 WLAN 802.11ac80	15.00	15.00	15.00
5.2 WLAN 802.11ax20	14.00	14.00	14.00
5.2 WLAN 802.11ax40	14.00	14.00	14.00
5.2 WLAN 802.11ax80	14.00	14.00	14.00
5.8G WLAN 802.11a	18.00	18.00	18.00
5.8G WLAN 802.11n20	16.00	16.00	16.00
5.8G WLAN 802.11n40	16.00	16.00	16.00
5.8G WLAN 802.11ac20	15.00	15.00	15.00
5.8G WLAN 802.11ac40	15.00	15.00	15.00
5.8G WLAN 802.11ac80	15.00	15.00	15.00
5.8G WLAN 802.11ax20	14.00	14.00	14.00
5.8G WLAN 802.11ax40	14.00	14.00	14.00
5.8G WLAN 802.11ax80	14.00	14.00	14.00

9 TEST EXCLUSION CONSIDERATION



Antenna	Support Bands
Antenna 0	LTE Band 2/4/5/12/14/25/66/71/41 NR n2/n5/n12/n14/n25/n41/n66/n71
Antenna 1	WIFI2.4G&WIFI5G
Antenna 2	WIFI2.4G&WIFI5G
Antenna 3	NR n77

Antenna	Front Side (mm)	Back Side (mm)	Left Edge (mm)	Right Edge (mm)	Top Edge (mm)	Bottom Edge (mm)
Antenna 0	<25mm	<25mm	<25mm	>25mm	<25mm	<25mm
Antenna 1	<25mm	<25mm	>25mm	<25mm	>25mm	<25mm
Antenna 2	<25mm	<25mm	>25mm	<25mm	>25mm	<25mm
Antenna 3	<25mm	<25mm	<25mm	>25mm	<25mm	>25mm

Note: Per KDB 941225 D06, When the overall length and width of a device is > 9 cm * 5 cm, a test separation distance of 10 mm is required for hotspot mode SAR measurements and hotspot mode SAR is measured for all edges and surfaces of the device with a transmitting antenna located within 25 mm from that surface or edge.

9.1 SAR Test Exclusion Consideration Table

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

Antenna 0

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Front Side	Back Side	Left Edge	Right Edge	Top Edge	Bottom Edge
LTE Band 2	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	<25mm
	QPSK	21.00	125.89	Yes	Yes	Yes	No	Yes	Yes
LTE Band 4	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	<25mm
	QPSK	21.00	125.89	Yes	Yes	Yes	No	Yes	Yes
LTE Band 5	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	<25mm
	QPSK	21.00	125.89	Yes	Yes	Yes	No	Yes	Yes
LTE Band 12	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	<25mm
	QPSK	21.00	125.89	Yes	Yes	Yes	No	Yes	Yes
LTE Band 14	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	<25mm
	QPSK	21.00	125.89	Yes	Yes	Yes	No	Yes	Yes
LTE Band 25	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	<25mm
	QPSK	21.00	125.89	Yes	Yes	Yes	No	Yes	Yes
LTE Band 66	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	<25mm
	QPSK	21.00	125.89	Yes	Yes	Yes	No	Yes	Yes
LTE Band 71	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	<25mm
	QPSK	21.00	125.89	Yes	Yes	Yes	No	Yes	Yes
LTE Band 41	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	<25mm
	QPSK	20.50	112.20	Yes	Yes	Yes	No	Yes	Yes
NR n2	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	<25mm
	DFT-s-OFDM BPSK	21.00	125.89	Yes	Yes	Yes	No	Yes	Yes
NR n5	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	<25mm
	DFT-s-OFDM BPSK	21.00	125.89	Yes	Yes	Yes	No	Yes	Yes
NR n12	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	<25mm
	DFT-s-OFDM BPSK	21.00	125.89	Yes	Yes	Yes	No	Yes	Yes
NR n14	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	<25mm
	DFT-s-OFDM BPSK	21.00	125.89	Yes	Yes	Yes	No	Yes	Yes
NR n25	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	<25mm
	DFT-s-OFDM BPSK	21.00	125.89	Yes	Yes	Yes	No	Yes	Yes

NR n41	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	<25mm
	DFT-s-OFDM BPSK	21.00	125.89	Yes	Yes	Yes	No	Yes	Yes
NR n66	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	<25mm
	DFT-s-OFDM BPSK	21.00	125.89	Yes	Yes	Yes	No	Yes	Yes
NR n71	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	<25mm
	DFT-s-OFDM BPSK	21.00	125.89	Yes	Yes	Yes	No	Yes	Yes

Antenna 1

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Front Side	Back Side	Left Edge	Right Edge	Top Edge	Bottom Edge
WLAN 2.4 G	Distance to User			<25mm	<25mm	>25mm	<25mm	>25mm	<25mm
	802.11b	18.00	63.10	Yes	Yes	No	Yes	No	Yes
	802.11g	16.00	39.81	No	No	No	No	No	No
	802.11n(HT20)	14.00	25.12	No	No	No	No	No	No
	802.11n(HT40)	14.00	25.12	No	No	No	No	No	No
	802.11ax(HE20)	11.00	12.59	No	No	No	No	No	No
	802.11ax(HE40)	11.00	12.59	No	No	No	No	No	No
WLAN 5.2 G	Distance to User			<25mm	<25mm	>25mm	<25mm	>25mm	<25mm
	802.11a	15.00	31.62	Yes	Yes	No	Yes	No	Yes
	802.11n(HT20)	13.00	19.95	No	No	No	No	No	No
	802.11n(HT40)	13.00	19.95	No	No	No	No	No	No
	802.11ac(VHT20)	12.00	15.85	No	No	No	No	No	No
	802.11ac(VHT40)	12.00	15.85	No	No	No	No	No	No
	802.11ac(VHT80)	12.00	15.85	No	No	No	No	No	No
	802.11ax(HE20)	11.00	12.59	No	No	No	No	No	No
	802.11ax(HE40)	11.00	12.59	No	No	No	No	No	No
WLAN 5.8 G	Distance to User			<25mm	<25mm	>25mm	<25mm	>25mm	<25mm
	802.11a	15.00	31.62	Yes	Yes	No	Yes	No	Yes
	802.11n(HT20)	13.00	19.95	No	No	No	No	No	No
	802.11n(HT40)	13.00	19.95	No	No	No	No	No	No
	802.11ac(VHT20)	12.00	15.85	No	No	No	No	No	No
	802.11ac(VHT40)	12.00	15.85	No	No	No	No	No	No
	802.11ac(VHT80)	12.00	15.85	No	No	No	No	No	No
	802.11ax(HE20)	11.00	12.59	No	No	No	No	No	No
	802.11ax(HE40)	11.00	12.59	No	No	No	No	No	No
WLAN 5.8 G	Distance to User			<25mm	<25mm	>25mm	<25mm	>25mm	<25mm
	802.11a	15.00	31.62	Yes	Yes	No	Yes	No	Yes
	802.11n(HT20)	13.00	19.95	No	No	No	No	No	No
	802.11n(HT40)	13.00	19.95	No	No	No	No	No	No
	802.11ac(VHT20)	12.00	15.85	No	No	No	No	No	No
	802.11ac(VHT40)	12.00	15.85	No	No	No	No	No	No
	802.11ac(VHT80)	12.00	15.85	No	No	No	No	No	No
	802.11ax(HE20)	11.00	12.59	No	No	No	No	No	No
	802.11ax(HE40)	11.00	12.59	No	No	No	No	No	No
WLAN 5.8 G	Distance to User			<25mm	<25mm	>25mm	<25mm	>25mm	<25mm
	802.11a	15.00	31.62	Yes	Yes	No	Yes	No	Yes
	802.11n(HT20)	13.00	19.95	No	No	No	No	No	No
	802.11n(HT40)	13.00	19.95	No	No	No	No	No	No
	802.11ac(VHT20)	12.00	15.85	No	No	No	No	No	No
	802.11ac(VHT40)	12.00	15.85	No	No	No	No	No	No
	802.11ac(VHT80)	12.00	15.85	No	No	No	No	No	No
	802.11ax(HE20)	11.00	12.59	No	No	No	No	No	No
	802.11ax(HE40)	11.00	12.59	No	No	No	No	No	No

Antenna 2

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Front Side	Back Side	Left Edge	Right Edge	Top Edge	Bottom Edge
WLAN 2.4 G	Distance to User			<25mm	<25mm	>25mm	<25mm	>25mm	<25mm
	802.11b	18.00	63.10	Yes	Yes	No	Yes	No	Yes
	802.11g	16.00	39.81	No	No	No	No	No	No
	802.11n(HT20)	14.00	25.12	No	No	No	No	No	No
	802.11n(HT40)	14.00	25.12	No	No	No	No	No	No
	802.11ax(HE20)	11.00	12.59	No	No	No	No	No	No
	802.11ax(HE40)	11.00	12.59	No	No	No	No	No	No
WLAN 5.2 G	Distance to User			<25mm	<25mm	>25mm	<25mm	>25mm	<25mm
	802.11a	15.00	31.62	Yes	Yes	No	Yes	No	Yes
	802.11n(HT20)	13.00	19.95	No	No	No	No	No	No
	802.11n(HT40)	13.00	19.95	No	No	No	No	No	No
	802.11ac(VHT20)	12.00	15.85	No	No	No	No	No	No
	802.11ac(VHT40)	12.00	15.85	No	No	No	No	No	No
	802.11ac(VHT80)	12.00	15.85	No	No	No	No	No	No
	802.11ax(HE20)	11.00	12.59	No	No	No	No	No	No
	802.11ax(HE40)	11.00	12.59	No	No	No	No	No	No
	802.11ax(HE80)	11.00	12.59	No	No	No	No	No	No
WLAN 5.8 G	Distance to User			<25mm	<25mm	>25mm	<25mm	>25mm	<25mm
	802.11a	15.00	31.62	Yes	Yes	No	Yes	No	Yes
	802.11n(HT20)	13.00	19.95	No	No	No	No	No	No
	802.11n(HT40)	13.00	19.95	No	No	No	No	No	No
	802.11ac(VHT20)	12.00	15.85	No	No	No	No	No	No
	802.11ac(VHT40)	12.00	15.85	No	No	No	No	No	No
	802.11ac(VHT80)	12.00	15.85	No	No	No	No	No	No
	802.11ax(HE20)	11.00	12.59	No	No	No	No	No	No
	802.11ax(HE40)	11.00	12.59	No	No	No	No	No	No
	802.11ax(HE80)	11.00	12.59	No	No	No	No	No	No

Antenna 3

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Front Side	Back Side	Left Edge	Right Edge	Top Edge	Bottom Edge
NR n77	Distance to User			<25mm	<25mm	<25mm	>25mm	<25mm	>25mm
	DFT-s-OFDM BPSK	21.00	125.89	Yes	Yes	Yes	No	Yes	No

Note:

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

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

where

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

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

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

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

9.2 10g Extremity 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.

Conclusion:

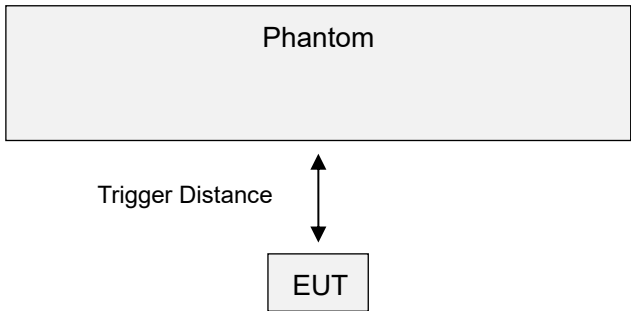
The EUT hotspot mode 1-g reported SAR is 0.85 W/kg, which is less than 1.2 W/kg, 10 g extremity SAR is not required.

10 PROXIMITY SENSOR TRIGGERING TEST

10.1Procedures for determining proximity sensor distance

Proximity sensor triggering distance testing was performed, EUT moving further away from the phantom and EUT moving toward the phantom were both assessed, and the shortest triggering distances were reported and used for SAR assessment.

10.1.1 proximity sensor channel-1

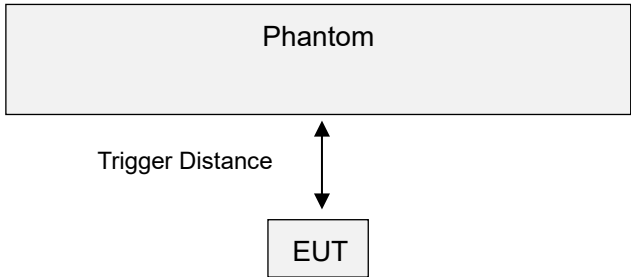


EUT moving toward Phantom

Distance in mm	18	19	20	21	22~30	31	32-35	36	37	38
Front Side	On	On	On	On	On	Off	Off	Off	Off	Off
Back Side	On	On	On	On	On	Off	Off	Off	Off	Off
Left Edge	On	On	On	On	On	On	On	Off	Off	Off
Bottom Edge	On	On	On	Off	Off	Off	Off	Off	Off	Off

Note: Power reduction is only applicable for ANT0.

10.1.2 proximity sensor channel-2

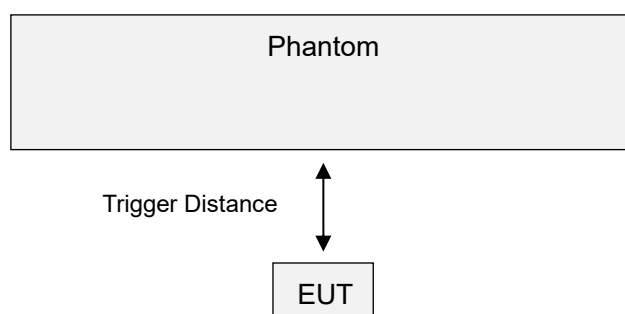


EUT moving toward Phantom

Distance in mm	8	9	10	11	12~24	25	26	27	28
Front Side	On	On	On	Off	Off	Off	Off	Off	Off
Back Side	On	On	On	Off	Off	Off	Off	Off	Off
Top Edge	On	On	On	On	On	On	Off	Off	Off

Note: Power reduction is only applicable for ANT3.

proximity sensor channel-3



EUT moving toward Phantom

Distance in mm	7	8	9	10	11	12~20	21	22~25	26
Front Side	On	On	On	On	Off	Off	Off	Off	Off
Back Side	On	On	On	On	Off	Off	Off	Off	Off
Right Edge	On	On	On	On	On	On	Off	Off	Off

Note: Power reduction is only applicable for Ant.1.

For verification of compliance of power reduction scheme, additional SAR test with EUT transmitting at full RF power at a separation of “the triggering distance – 1 mm”

ANT0 of proximity sensor channel-1

EUT Sides	Additional SAR test Distance in mm
Front Side	29
Back Side	29
Left Edge	34
Bottom Edge	19

ANT3 of proximity sensor channel-2

EUT Sides	Additional SAR test Distance in mm
Front Side	9
Back Side	9
Top Edge	24

ANT1 of proximity sensor channel-3

EUT Sides	Additional SAR test Distance in mm
Front Side	9
Back Side	9
Right Edge	19

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

The influence of EUT tilt angles to proximity sensor channel-1 triggering was determined by positioning each EUT edge that contains a transmitting antenna 0, perpendicular to the flat phantom, at 30 mm separation for the front side, 30 mm separation for the back side, 35 mm separation for the left edge and 20 mm separation for the bottom edge.

The influence of EUT tilt angles to proximity sensor channel-2 triggering was determined by positioning each EUT edge that contains a transmitting antenna 3, perpendicular to the flat phantom, at 10 mm separation for the front side, 10 mm separation for the back side, at 25 mm separation for the top edge.

The influence of EUT tilt angles to proximity sensor channel-3 triggering was determined by positioning each EUT edge that contains a transmitting antenna 1, perpendicular to the flat phantom, at 10 mm separation for the front side, 10 mm separation for the back side, at 20 mm separation for the right edge. Rotating the EUT around the edge next to the phantom in $\leq 10^\circ$ increments until the EUT is $\pm 45^\circ$ from the vertical position at 0° , and the maximum output power remains in the reduced mode.

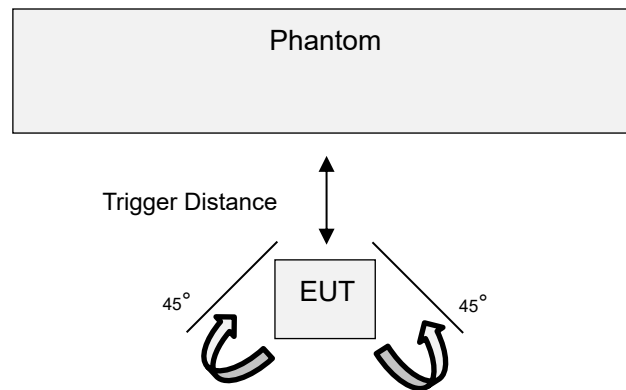


Table: Summary of Phone Tilt Angle Influence to Proximity Sensor Triggering
(Left/Right/Top/bottom edge)

Antenna	Posltion	Minimum trigger distance at which power reduction was maintained over $\pm 45^\circ$	Power Reduction Status										
			-45°	-35°	-25°	-15°	-5°	0°	5°	15°	25°	35°	45°
ANT0	Left Edge	35mm	on	on	on	on	on	on	on	on	on	on	on
ANT0	Bottom Edge	20mm	on	on	on	on	on	on	on	on	on	on	on
ANT3	Top Edge	25mm	on	on	on	on	on	on	on	on	on	on	on
ANT1	Right Edge	20mm	on	on	on	on	on	on	on	on	on	on	on

11 TEST RESULT

11.1LTE Band 2 (20MHz Bandwidth)

Antenna	Power Reductio n	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Hotspot															
Ant.0	State1&2	QPSK	Front Side	10	19100	1900	1	Mid	-0.09	0.143	20.47	21.00	1.130	0.162	/
	State1&2		Back Side	10	19100	1900	1	Mid	-0.16	0.223	20.47	21.00	1.130	0.252	/
	State1&2		Left Edge	10	19100	1900	1	Mid	0.05	0.491	20.47	21.00	1.130	0.555	1#
	Full Power		Top Edge	10	19100	1900	1	Mid	-0.14	0.035	22.74	23.50	1.191	0.042	/
	State1&2		Bottom Edge	10	19100	1900	1	Mid	0.06	0.156	20.47	21.00	1.130	0.176	/
	State1&2		Front Side	10	19100	1900	50	Low	0.19	0.105	19.48	20.00	1.127	0.118	/
	State1&2		Back Side	10	19100	1900	50	Low	-0.08	0.168	19.48	20.00	1.127	0.189	/
	State1&2		Left Edge	10	19100	1900	50	Low	-0.05	0.383	19.48	20.00	1.127	0.432	/
	Full Power		Top Edge	10	19100	1900	50	Low	-0.10	0.035	21.55	22.50	1.245	0.044	/
	State1&2		Bottom Edge	10	19100	1900	50	Low	0.09	0.119	19.48	20.00	1.127	0.134	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Sensor N-1															
Ant.0	Full Power	QPSK	Front Side	29	19100	1900	1	Mid	0.14	0.071	22.74	23.50	1.191	0.085	/
			Back Side	29	19100	1900	1	Mid	-0.07	0.088	22.74	23.50	1.191	0.105	/
			Left Edge	34	19100	1900	1	Mid	0.13	0.017	22.74	23.50	1.191	0.020	/
			Bottom Edge	19	19100	1900	1	Mid	0.04	0.275	22.74	23.50	1.191	0.328	/
			Front Side	29	19100	1900	50	Mid	-0.14	0.057	21.55	22.50	1.245	0.071	/
			Back Side	29	19100	1900	50	Mid	-0.04	0.071	21.55	22.50	1.245	0.088	/
			Left Edge	34	19100	1900	50	Mid	-0.15	0.013	21.55	22.50	1.245	0.016	/
			Bottom Edge	19	19100	1900	50	Mid	0.05	0.219	21.55	22.50	1.245	0.273	/

11.2LTE Band 4 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Hotspot															
Ant.0	State1&2	QPSK	Front Side	10	20300	1745	1	Mid	0.02	0.109	20.55	21.00	1.109	0.121	/
	State1&2		Back Side	10	20300	1745	1	Mid	-0.01	0.273	20.55	21.00	1.109	0.303	2#
	State1&2		Left Edge	10	20300	1745	1	Mid	-0.16	0.106	20.55	21.00	1.109	0.118	/
	Full Power		Top Edge	10	20300	1745	1	Mid	-0.02	0.031	22.89	23.50	1.151	0.036	/
	State1&2		Bottom Edge	10	20300	1745	1	Mid	-0.15	0.113	20.55	21.00	1.109	0.125	/
	State1&2		Front Side	10	20300	1745	50	Low	-0.18	0.085	19.55	20.00	1.109	0.094	/
	State1&2		Back Side	10	20300	1745	50	Low	0.11	0.203	19.55	20.00	1.109	0.225	/
	State1&2		Left Edge	10	20300	1745	50	Low	0.07	0.077	19.55	20.00	1.109	0.085	/
	Full Power		Top Edge	10	20300	1745	50	Low	-0.08	0.210	21.57	22.50	1.239	0.260	/
	State1&2		Bottom Edge	10	20300	1745	50	Low	0.18	0.093	19.55	20.00	1.109	0.103	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Sensor N-1															
Ant.0	Full Power	QPSK	Front Side	29	20300	1745	1	High	0.10	0.103	22.89	23.50	1.151	0.119	/
			Back Side	29	20300	1745	1	High	0.12	0.111	22.89	23.50	1.151	0.128	/
			Left Edge	34	20300	1745	1	High	0.16	0.015	22.89	23.50	1.151	0.017	/
			Bottom Edge	19	20300	1745	1	High	-0.09	0.098	22.89	23.50	1.151	0.113	/
			Front Side	29	20300	1745	50	Mid	0.00	0.078	21.57	22.50	1.239	0.097	/
			Back Side	29	20300	1745	50	Mid	0.18	0.099	21.57	22.50	1.239	0.123	/
			Left Edge	34	20300	1745	50	Mid	0.10	0.012	21.57	22.50	1.239	0.015	/
			Bottom Edge	19	20300	1745	50	Mid	-0.02	0.081	21.57	22.50	1.239	0.100	/

11.3LTE Band 5 (10MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Hotspot															
Ant.0	State1&2	QPSK	Front Side	10	20525	836.5	1	Mid	0.13	0.218	20.09	21.00	1.233	0.269	/
	State1&2		Back Side	10	20525	836.5	1	Mid	-0.01	0.472	20.09	21.00	1.233	0.582	3#
	State1&2		Left Edge	10	20525	836.5	1	Mid	0.08	0.298	20.09	21.00	1.233	0.367	/
	Full Power		Top Edge	10	20525	836.5	1	Mid	-0.13	0.084	22.87	23.50	1.156	0.097	/
	State1&2		Bottom Edge	10	20525	836.5	1	Mid	-0.03	0.258	20.09	21.00	1.233	0.318	/
	State1&2		Front Side	10	20525	836.5	25	Mid	-0.04	0.172	19.13	20.00	1.222	0.210	/
	State1&2		Back Side	10	20525	836.5	25	Mid	0.16	0.373	19.13	20.00	1.222	0.456	/
	State1&2		Left Edge	10	20525	836.5	25	Mid	-0.13	0.212	19.13	20.00	1.222	0.259	/
	Full Power		Top Edge	10	20525	836.5	25	Mid	0.04	0.065	21.52	22.50	1.253	0.081	/
	State1&2		Bottom Edge	10	20525	836.5	25	Mid	0.10	0.196	19.13	20.00	1.222	0.240	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Sensor N-1															
Ant.0	Full Power	QPSK	Front Side	29	20525	836.5	1	Mid	0.16	0.140	22.87	23.50	1.156	0.162	/
			Back Side	29	20525	836.5	1	Mid	0.15	0.115	22.87	23.50	1.156	0.133	/
			Left Edge	34	20525	836.5	1	Mid	0.01	0.013	22.87	23.50	1.156	0.015	/
			Bottom Edge	19	20525	836.5	1	Mid	-0.04	0.059	22.87	23.50	1.156	0.068	/
			Front Side	29	20450	829	25	High	0.03	0.116	21.52	22.50	1.253	0.145	/
			Back Side	29	20450	829	25	High	-0.06	0.094	21.52	22.50	1.253	0.118	/
			Left Edge	34	20450	829	25	High	-0.04	0.008	21.52	22.50	1.253	0.010	/
			Bottom Edge	19	20450	829	25	High	0.11	0.048	21.52	22.50	1.253	0.060	/

11.4LTE Band 12 (10MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Hotspot															
Ant.0	State1&2	QPSK	Front Side	10	23095	707.5	1	Mid	-0.08	0.254	20.15	21.00	1.216	0.309	/
	State1&2		Back Side	10	23095	707.5	1	Mid	-0.01	0.549	20.15	21.00	1.216	0.668	4#
	State1&2		Left Edge	10	23095	707.5	1	Mid	0.00	0.130	20.15	21.00	1.216	0.158	/
	Full Power		Top Edge	10	23095	707.5	1	Mid	0.11	0.091	22.90	23.50	1.148	0.104	/
	State1&2		Bottom Edge	10	23095	707.5	1	Mid	-0.16	0.331	20.15	21.00	1.216	0.402	/
	State1&2		Front Side	10	23095	707.5	25	Low	-0.12	0.200	19.22	20.00	1.197	0.239	/
	State1&2		Back Side	10	23095	707.5	25	Low	-0.09	0.427	19.22	20.00	1.197	0.511	/
	State1&2		Left Edge	10	23095	707.5	25	Low	-0.10	0.102	19.22	20.00	1.197	0.122	/
	Full Power		Top Edge	10	23095	707.5	25	Low	0.07	0.067	21.40	22.50	1.288	0.086	/
	State1&2		Bottom Edge	10	23095	707.5	25	Low	-0.15	0.257	19.22	20.00	1.197	0.308	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Sensor N-1															
Ant.0	Full Power	QPSK	Front Side	29	23095	707.5	1	Mid	0.04	0.267	22.90	23.50	1.148	0.307	/
			Back Side	29	23095	707.5	1	Mid	-0.19	0.197	22.90	23.50	1.148	0.226	/
			Left Edge	34	23095	707.5	1	Mid	-0.10	0.016	22.90	23.50	1.148	0.018	/
			Bottom Edge	19	23095	707.5	1	Mid	-0.10	0.053	22.90	23.50	1.148	0.061	/
			Front Side	29	23095	707.5	25	High	-0.07	0.227	21.40	22.50	1.288	0.292	/
			Back Side	29	23095	707.5	25	High	0.10	0.168	21.40	22.50	1.288	0.216	/
			Left Edge	34	23095	707.5	25	High	0.18	0.011	21.40	22.50	1.288	0.014	/
			Bottom Edge	19	23095	707.5	25	High	0.08	0.044	21.40	22.50	1.288	0.057	/

11.5LTE Band 14 (10MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Hotspot															
Ant.0	State1&2	QPSK	Front Side	10	23330	793	1	Mid	0.07	0.298	20.12	21.00	1.225	0.365	/
	State1&2		Back Side	10	23330	793	1	Mid	-0.07	0.592	20.12	21.00	1.225	0.725	5#
	State1&2		Left Edge	10	23330	793	1	Mid	-0.11	0.230	20.12	21.00	1.225	0.282	/
	Full Power		Top Edge	10	23330	793	1	Mid	0.10	0.102	22.83	23.50	1.167	0.119	/
	State1&2		Bottom Edge	10	23330	793	1	Mid	-0.03	0.336	20.12	21.00	1.225	0.412	/
	State1&2		Front Side	10	23330	793	25	High	-0.06	0.231	19.15	20.00	1.216	0.281	/
	State1&2		Back Side	10	23330	793	25	High	0.03	0.462	19.15	20.00	1.216	0.562	/
	State1&2		Left Edge	10	23330	793	25	High	-0.05	0.175	19.15	20.00	1.216	0.213	/
	Full Power		Top Edge	10	23330	793	25	High	-0.16	0.085	21.12	22.50	1.374	0.117	/
	State1&2		Bottom Edge	10	23330	793	25	High	0.09	0.255	19.15	20.00	1.216	0.310	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Sensor N-1															
Ant.0	Full Power	QPSK	Front Side	29	23330	793	1	Low	-0.12	0.165	22.83	23.50	1.167	0.193	/
			Back Side	29	23330	793	1	Low	-0.15	0.134	22.83	23.50	1.167	0.156	/
			Left Edge	34	23330	793	1	Low	0.19	0.017	22.83	23.50	1.167	0.020	/
			Bottom Edge	19	23330	793	1	Low	0.10	0.051	22.83	23.50	1.167	0.060	/
			Front Side	29	23330	793	25	Mid	0.18	0.132	21.12	22.50	1.374	0.181	/
			Back Side	29	23330	793	25	Mid	0.18	0.107	21.12	22.50	1.374	0.147	/
			Left Edge	34	23330	793	25	Mid	-0.01	0.014	21.12	22.50	1.374	0.019	/
			Bottom Edge	19	23330	793	25	Mid	-0.12	0.044	21.12	22.50	1.374	0.060	/

11.6LTE Band 25 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Hotspot															
Ant.0	State1&2	QPSK	Front Side	10	26365	1882.5	1	Mid	0.05	0.103	20.48	21.00	1.127	0.116	/
	State1&2		Back Side	10	26365	1882.5	1	Mid	-0.05	0.239	20.48	21.00	1.127	0.269	6#
	State1&2		Left Edge	10	26365	1882.5	1	Mid	0.07	0.137	20.48	21.00	1.127	0.154	/
	Full Power		Top Edge	10	26365	1882.5	1	Mid	-0.14	0.066	23.21	23.50	1.069	0.071	/
	State1&2		Bottom Edge	10	26365	1882.5	1	Mid	-0.04	0.112	20.48	21.00	1.127	0.126	/
	State1&2		Front Side	10	26365	1882.5	50	Low	-0.11	0.079	19.48	20.00	1.127	0.089	/
	State1&2		Back Side	10	26365	1882.5	50	Low	0.12	0.193	19.48	20.00	1.127	0.218	/
	State1&2		Left Edge	10	26365	1882.5	50	Low	-0.08	0.106	19.48	20.00	1.127	0.119	/
	Full Power		Top Edge	10	26365	1882.5	50	Low	-0.11	0.055	21.65	22.50	1.216	0.067	/
	State1&2		Bottom Edge	10	26365	1882.5	50	Low	-0.06	0.092	19.48	20.00	1.127	0.104	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Sensor N-1															
Ant.0	Full Power	QPSK	Front Side	29	26365	1882.5	1	Mid	-0.17	0.063	23.21	23.50	1.069	0.067	/
			Back Side	29	26365	1882.5	1	Mid	-0.17	0.074	23.21	23.50	1.069	0.079	/
			Left Edge	34	26365	1882.5	1	Mid	0.05	0.013	23.21	23.50	1.069	0.014	/
			Bottom Edge	19	26365	1882.5	1	Mid	-0.02	0.248	23.21	23.50	1.069	0.265	/
			Front Side	29	26365	1882.5	50	Mid	0.15	0.048	21.65	22.50	1.216	0.058	/
			Back Side	29	26365	1882.5	50	Mid	-0.09	0.054	21.65	22.50	1.216	0.066	/
			Left Edge	34	26365	1882.5	50	Mid	-0.09	0.009	21.65	22.50	1.216	0.011	/
			Bottom Edge	19	26365	1882.5	50	Mid	0.18	0.200	21.65	22.50	1.216	0.243	/

11.7LTE Band 66 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Hotspot															
Ant.0	State1&2	QPSK	Front Side	10	132322	1745	1	High	-0.01	0.631	20.47	21.00	1.130	0.713	7#
	State1&2		Back Side	10	132322	1745	1	High	-0.14	0.506	20.47	21.00	1.130	0.572	/
	State1&2		Left Edge	10	132322	1745	1	High	0.15	0.200	20.47	21.00	1.130	0.226	/
	Full Power		Top Edge	10	132322	1745	1	High	0.10	0.122	23.17	23.50	1.079	0.132	/
	State1&2		Bottom Edge	10	132322	1745	1	High	-0.03	0.206	20.47	21.00	1.130	0.233	/
	State1&2		Front Side	10	132322	1745	50	Low	0.19	0.481	19.51	20.00	1.119	0.538	/
	State1&2		Back Side	10	132322	1745	50	Low	-0.08	0.394	19.51	20.00	1.119	0.441	/
	State1&2		Left Edge	10	132322	1745	50	Low	-0.07	0.155	19.51	20.00	1.119	0.173	/
	Full Power		Top Edge	10	132322	1745	50	Low	0.13	0.096	21.47	22.50	1.268	0.122	/
	State1&2		Bottom Edge	10	132322	1745	50	Low	-0.09	0.162	19.51	20.00	1.119	0.181	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Sensor N-1															
Ant.0	Full Power	QPSK	Front Side	29	132322	1745	1	Mid	0.16	0.091	23.17	23.50	1.079	0.098	/
			Back Side	29	132322	1745	1	Mid	-0.12	0.127	23.17	23.50	1.079	0.137	/
			Left Edge	34	132322	1745	1	Mid	-0.16	0.015	23.17	23.50	1.079	0.016	/
			Bottom Edge	19	132322	1745	1	Mid	0.04	0.101	23.17	23.50	1.079	0.109	/
			Front Side	29	132322	1745	50	Mid	0.11	0.075	21.47	22.50	1.268	0.095	/
			Back Side	29	132322	1745	50	Mid	0.18	0.095	21.47	22.50	1.268	0.120	/
			Left Edge	34	132322	1745	50	Mid	0.19	0.008	21.47	22.50	1.268	0.010	/
			Bottom Edge	19	132322	1745	50	Mid	0.13	0.079	21.47	22.50	1.268	0.100	/

11.8LTE Band 71 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Hotspot															
Ant.0	State1&2	QPSK	Front Side	10	133322	683	1	Mid	0.11	0.118	20.18	21.00	1.208	0.143	/
	State1&2		Back Side	10	133322	683	1	Mid	0.01	0.222	20.18	21.00	1.208	0.268	8#
	State1&2		Left Edge	10	133322	683	1	Mid	0.14	0.064	20.18	21.00	1.208	0.077	/
	Full Power		Top Edge	10	133322	683	1	Mid	-0.07	0.045	23.08	23.50	1.102	0.050	/
	State1&2		Bottom Edge	10	133322	683	1	Mid	-0.04	0.082	20.18	21.00	1.208	0.099	/
	State1&2		Front Side	10	133322	683	50	Low	0.19	0.091	19.34	20.00	1.164	0.106	/
	State1&2		Back Side	10	133322	683	50	Low	0.18	0.173	19.34	20.00	1.164	0.201	/
	State1&2		Left Edge	10	133322	683	50	Low	-0.12	0.043	19.34	20.00	1.164	0.050	/
	Full Power		Top Edge	10	133322	683	50	Low	-0.13	0.032	21.78	22.50	1.180	0.038	/
	State1&2		Bottom Edge	10	133322	683	50	Low	-0.14	0.063	19.34	20.00	1.164	0.073	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Sensor N-1															
Ant.0	Full Power	QPSK	Front Side	29	133322	683	1	Mid	0.16	0.127	23.08	23.50	1.102	0.140	/
			Back Side	29	133322	683	1	Mid	-0.03	0.091	23.08	23.50	1.102	0.100	/
			Left Edge	34	133322	683	1	Mid	-0.12	0.019	23.08	23.50	1.102	0.021	/
			Bottom Edge	19	133322	683	1	Mid	-0.01	0.015	23.08	23.50	1.102	0.017	/
			Front Side	29	133322	683	50	Mid	-0.11	0.128	21.78	22.50	1.180	0.151	/
			Back Side	29	133322	683	50	Mid	-0.01	0.092	21.78	22.50	1.180	0.109	/
			Left Edge	34	133322	683	50	Mid	-0.16	0.015	21.78	22.50	1.180	0.018	/
			Bottom Edge	19	133322	683	50	Mid	0.05	0.009	21.78	22.50	1.180	0.011	/

11.9LTE Band 41 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Hotspot															
Ant.0	State1&2	QPSK	Front Side	10	40620	2593	1	Low	-0.19	0.208	20.18	20.50	1.076	0.224	9#
	State1&2		Back Side	10	40620	2593	1	Low	-0.06	0.194	20.18	20.50	1.076	0.209	/
	State1&2		Left Edge	10	40620	2593	1	Low	-0.05	0.102	20.18	20.50	1.076	0.110	/
	Full Power		Top Edge	10	40620	2593	1	Low	0.13	0.038	23.08	23.50	1.102	0.050	/
	State1&2		Bottom Edge	10	40620	2593	1	Low	-0.12	0.115	20.18	21.00	1.208	0.099	/
	State1&2		Front Side	10	40620	2593	50	Mid	-0.05	0.161	19.34	20.00	1.164	0.106	/
	State1&2		Back Side	10	40620	2593	50	Mid	0.07	0.152	19.34	20.00	1.164	0.201	/
	State1&2		Left Edge	10	40620	2593	50	Mid	-0.07	0.076	19.34	20.00	1.164	0.050	/
	Full Power		Top Edge	10	40620	2593	50	Mid	-0.16	0.035	21.78	22.50	1.180	0.038	/
	State1&2		Bottom Edge	10	40620	2593	50	Mid	-0.11	0.094	19.34	20.00	1.164	0.073	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.															

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Sensor N-1															
Ant.0	Full Power	QPSK	Front Side	29	40620	2593	1	Low	-0.12	0.059	22.73	23.00	1.064	0.063	/
			Back Side	29	40620	2593	1	Low	-0.11	0.054	22.73	23.00	1.064	0.057	/
			Left Edge	34	40620	2593	1	Low	-0.04	0.016	22.73	23.00	1.064	0.017	/
			Bottom Edge	19	40620	2593	1	Low	-0.10	0.052	22.73	23.00	1.064	0.055	/
			Front Side	29	40620	2593	50	Mid	0.15	0.046	21.65	22.00	1.084	0.050	/
			Back Side	29	40620	2593	50	Mid	0.16	0.041	21.65	22.00	1.084	0.044	/
			Left Edge	34	40620	2593	50	Mid	0.14	0.009	21.65	22.00	1.084	0.010	/
			Bottom Edge	19	40620	2593	50	Mid	0.11	0.041	21.65	22.00	1.084	0.044	/

11.10 5G n2 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Hotspot																
Ant.0	State1&2	DFT-s-OFDM BPSK	SA	Front Side	10	376000	1880	1	53	-0.05	0.368	20.69	21.00	1.074	0.395	10#
	State1&2			Back Side	10	376000	1880	1	53	0.16	0.138	20.69	21.00	1.074	0.148	/
	State1&2			Left Edge	10	376000	1880	1	53	-0.11	0.313	20.69	21.00	1.074	0.336	/
	Full Power			Top Edge	10	376000	1880	1	1	-0.06	0.115	22.03	23.00	1.250	0.144	/
	State1&2			Bottom Edge	10	376000	1880	1	53	-0.10	0.100	20.69	21.00	1.074	0.107	/
	State1&2			Front Side	10	376000	1880	50	28	-0.12	0.352	20.59	21.00	1.099	0.387	/
	State1&2			Back Side	10	376000	1880	50	28	0.04	0.128	20.59	21.00	1.099	0.141	/
	State1&2			Left Edge	10	376000	1880	50	28	-0.09	0.301	20.59	21.00	1.099	0.331	/
	Full Power			Top Edge	10	376000	1880	50	56	0.02	0.102	21.97	23.00	1.268	0.129	/
	State1&2			Bottom Edge	10	376000	1880	50	28	0.15	0.096	20.59	21.00	1.099	0.106	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

Antenna	Power Reduction	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Sensor N-1																
Ant.0	Full Power	DFT-s-OFDM BPSK	SA	Front Side	29	376000	1880	1	1	-0.04	0.134	22.03	23.00	1.250	0.168	/
				Back Side	29	376000	1880	1	1	0.04	0.050	22.03	23.00	1.250	0.063	/
				Left Edge	34	376000	1880	1	1	0.02	0.114	22.03	23.00	1.250	0.143	/
				Bottom Edge	19	376000	1880	1	1	-0.05	0.036	22.03	23.00	1.250	0.045	/
				Front Side	29	376000	1880	50	56	-0.09	0.128	21.97	23.00	1.268	0.162	/
				Back Side	29	376000	1880	50	56	0.15	0.047	21.97	23.00	1.268	0.060	/
				Left Edge	34	376000	1880	50	56	0.16	0.108	21.97	23.00	1.268	0.137	/
				Bottom Edge	19	376000	1880	50	56	0.08	0.032	21.97	23.00	1.268	0.041	/

11.11 5G n5 (20MHz Bandwidth)

Antenn a	Power Reductio n	Mode	Inform ation	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Hotspot																
Ant.0	State1&2	DFT- S- OFD M BPSK	SA	Front Side	10	167300	836.5	1	104	-0.02	0.510	20.63	21.00	1.089	0.555	11#
	State1&2			Back Side	10	167300	836.5	1	104	0.03	0.331	20.63	21.00	1.089	0.360	/
	State1&2			Left Edge	10	167300	836.5	1	104	0.11	0.334	20.63	21.00	1.089	0.364	/
	Full Power			Top Edge	10	167300	836.5	1	1	0.09	0.213	22.51	23.00	1.119	0.238	/
	State1&2			Bottom Edge	10	167300	836.5	1	104	0.18	0.122	20.63	21.00	1.089	0.133	/
	State1&2			Front Side	10	167300	836.5	50	0	0.18	0.492	20.82	21.00	1.042	0.513	/
	State1&2			Back Side	10	167300	836.5	50	0	0.01	0.301	20.82	21.00	1.042	0.314	/
	State1&2			Left Edge	10	167300	836.5	50	0	-0.17	0.314	20.82	21.00	1.042	0.327	/
	Full Power			Top Edge	10	167300	836.5	50	0	0.16	0.207	22.62	23.00	1.091	0.226	/
	State1&2			Bottom Edge	10	167300	836.5	50	0	-0.17	0.117	20.82	21.00	1.042	0.122	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

Antenna	Power Reduction	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Sensor N-1																
Ant.0	Full Power	DFT-s-OFDM BPSK	SA	Front Side	29	167300	836.5	1	1	0.07	0.082	22.51	23.00	1.119	0.092	/
				Back Side	29	167300	836.5	1	1	0.18	0.052	22.51	23.00	1.119	0.058	/
				Left Edge	34	167300	836.5	1	1	0.17	0.042	22.51	23.00	1.119	0.047	/
				Bottom Edge	19	167300	836.5	1	1	-0.16	0.039	22.51	23.00	1.119	0.044	/
				Front Side	29	167300	836.5	50	0	0.01	0.076	22.62	23.00	1.091	0.083	/
				Back Side	29	167300	836.5	50	0	0.10	0.047	22.62	23.00	1.091	0.051	/
				Left Edge	34	167300	836.5	50	0	0.16	0.035	22.62	23.00	1.091	0.038	/
				Bottom Edge	19	167300	836.5	50	0	-0.15	0.036	22.62	23.00	1.091	0.039	/

11.12 5G n12 (15MHz Bandwidth)

Antenna	Power Reduction	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Hotspot																
Ant.0	State1&2	DFT-s-OFDM	SA	Front Side	10	141500	707.5	1	77	-0.07	0.288	20.78	21.00	1.052	0.303	12#
	State1&2			Back Side	10	141500	707.5	1	77	-0.09	0.167	20.78	21.00	1.052	0.176	/
	State1&2			Left Edge	10	141500	707.5	1	77	0.18	0.050	20.78	21.00	1.052	0.053	/
	Full Power			Top Edge	10	141500	707.5	1	77	-0.14	0.084	22.52	23.00	1.117	0.094	/
	State1&2			Bottom Edge	10	141500	707.5	1	77	-0.06	0.071	20.78	21.00	1.052	0.075	/
	State1&2			Front Side	10	141500	707.5	36	0	-0.17	0.262	20.92	21.00	1.019	0.267	/
	State1&2			Back Side	10	141500	707.5	36	0	0.01	0.142	20.92	21.00	1.019	0.145	/
	State1&2			Left Edge	10	141500	707.5	36	0	-0.01	0.041	20.92	21.00	1.019	0.042	/
	Full Power			Top Edge	10	141500	707.5	36	0	0.03	0.071	22.78	23.00	1.052	0.075	/
	State1&2			Bottom Edge	10	141500	707.5	36	0	-0.01	0.064	20.92	21.00	1.019	0.065	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

Antenna	Power Reduction	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Sensor N-1																
Ant.0	Full Power	DFT-s-OFDM BPSK	SA	Front Side	29	141500	707.5	1	77	0.04	0.129	22.52	23.00	1.117	0.144	/
				Back Side	29	141500	707.5	1	77	-0.07	0.076	22.52	23.00	1.117	0.085	/
				Left Edge	34	141500	707.5	1	77	0.09	0.017	22.52	23.00	1.117	0.019	/
				Bottom Edge	19	141500	707.5	1	77	0.04	0.060	22.52	23.00	1.117	0.067	/
				Front Side	29	141500	707.5	36	0	0.01	0.127	22.78	23.00	1.052	0.134	/
				Back Side	29	141500	707.5	36	0	-0.19	0.074	22.78	23.00	1.052	0.078	/
				Left Edge	34	141500	707.5	36	0	-0.03	0.015	22.78	23.00	1.052	0.016	/
				Bottom Edge	19	141500	707.5	36	0	-0.09	0.058	22.78	23.00	1.052	0.061	/

11.13 5G n14 (10MHz Bandwidth)

Antenna	Power Reduction	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Hotspot																
Ant.0	State1&2	DFT-s-OFDM BPSK	SA	Front Side	10	158600	793	1	50	-0.03	0.557	20.81	21.00	1.045	0.582	13#
	State1&2			Back Side	10	158600	793	1	50	-0.01	0.385	20.81	21.00	1.045	0.402	/
	State1&2			Left Edge	10	158600	793	1	50	-0.07	0.277	20.81	21.00	1.045	0.289	/
	Full Power			Top Edge	10	158600	793	1	1	0.16	0.072	22.45	23.00	1.135	0.082	/
	State1&2			Bottom Edge	10	158600	793	1	50	0.01	0.187	20.81	21.00	1.045	0.195	/
	State1&2			Front Side	10	158600	793	25	0	-0.18	0.481	20.69	21.00	1.074	0.517	/
	State1&2			Back Side	10	158600	793	25	0	-0.10	0.281	20.69	21.00	1.074	0.302	/
	State1&2			Left Edge	10	158600	793	25	0	-0.16	0.141	20.69	21.00	1.074	0.151	/
	Full Power			Top Edge	10	158600	793	25	14	0.09	0.053	22.54	23.00	1.112	0.059	/
	State1&2			Bottom Edge	10	158600	793	25	0	0.11	0.092	20.69	21.00	1.074	0.099	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

Antenna	Power Reduction	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Sensor N-1																
Ant.0	Full Power	DFT-s-OFDM BPSK	SA	Front Side	29	158600	793	1	1	-0.16	0.088	22.45	23.00	1.135	0.100	/
				Back Side	29	158600	793	1	1	-0.13	0.061	22.45	23.00	1.135	0.069	/
				Left Edge	34	158600	793	1	1	-0.06	0.035	22.45	23.00	1.135	0.040	/
				Bottom Edge	19	158600	793	1	1	-0.04	0.059	22.45	23.00	1.135	0.067	/
				Front Side	29	158600	793	25	14	-0.17	0.087	22.54	23.00	1.112	0.097	/
				Back Side	29	158600	793	25	14	-0.11	0.056	22.54	23.00	1.112	0.062	/
				Left Edge	34	158600	793	25	14	-0.11	0.032	22.54	23.00	1.112	0.036	/
				Bottom Edge	19	158600	793	25	14	0.04	0.057	22.54	23.00	1.112	0.063	/

11.14 5G n25 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Hotspot																
Ant.0	State1 &2	DFT-s-OFDM BPSK	SA	Front Side	10	376500	1882.5	1	104	0.01	0.349	20.65	21.00	1.084	0.378	14#
	State1 &2			Back Side	10	376500	1882.5	1	104	0.11	0.127	20.65	21.00	1.084	0.138	/
	State1 &2			Left Edge	10	376500	1882.5	1	104	0.02	0.298	20.65	21.00	1.084	0.323	/
	Full Power			Top Edge	10	376500	1882.5	1	53	0.13	0.100	22.17	23.00	1.211	0.121	/
	State1 &2			Bottom Edge	10	376500	1882.5	1	104	0.06	0.081	20.65	21.00	1.084	0.088	/
	State1 &2			Front Side	10	376500	1882.5	50	0	-0.05	0.283	20.86	21.00	1.033	0.292	/
	State1 &2			Back Side	10	376500	1882.5	50	0	0.02	0.114	20.86	21.00	1.033	0.118	/
	State1 &2			Left Edge	10	376500	1882.5	50	0	-0.18	0.152	20.86	21.00	1.033	0.157	/
	Full Power			Top Edge	10	376500	1882.5	50	28	0.04	0.084	22.21	23.00	1.199	0.101	/
	State1 &2			Bottom Edge	10	376500	1882.5	50	0	0.18	0.067	20.86	21.00	1.033	0.069	/

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

Antenna	Power Reduction	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Sensor N-1																
Ant.0	Full Power	DFT-s-OFDM BPSK	SA	Front Side	29	376500	1882.5	1	53	-0.16	0.127	22.17	23.00	1.211	0.154	/
				Back Side	29	376500	1882.5	1	53	-0.19	0.047	22.17	23.00	1.211	0.057	/
				Left Edge	34	376500	1882.5	1	53	-0.03	0.091	22.17	23.00	1.211	0.110	/
				Bottom Edge	19	376500	1882.5	1	53	0.10	0.060	22.17	23.00	1.211	0.073	/
				Front Side	29	376500	1882.5	50	28	0.19	0.127	22.21	23.00	1.199	0.152	/
				Back Side	29	376500	1882.5	50	28	0.04	0.045	22.21	23.00	1.199	0.054	/
				Left Edge	34	376500	1882.5	50	28	0.03	0.086	22.21	23.00	1.199	0.103	/
				Bottom Edge	19	376500	1882.5	50	28	0.18	0.058	22.21	23.00	1.199	0.070	/

11.15 5G n66 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Hotspot																
Ant.0	State1&2	DFT-s-OFDM	SA	Front Side	10	349000	1745	1	53	-0.17	0.324	20.69	21.00	1.074	0.348	15#
	State1&2			Back Side	10	349000	1745	1	53	-0.18	0.248	20.69	21.00	1.074	0.266	/
	State1&2			Left Edge	10	349000	1745	1	53	0.17	0.099	20.69	21.00	1.074	0.106	/
	Full Power			Top Edge	10	349000	1745	1	104	0.14	0.091	22.01	23.00	1.256	0.114	/
	State1&2			Bottom Edge	10	349000	1745	1	53	-0.06	0.150	20.69	21.00	1.074	0.161	/
	State1&2			Front Side	10	349000	1745	50	0	0.02	0.282	20.45	21.00	1.135	0.320	/
	State1&2			Back Side	10	349000	1745	50	0	0.02	0.145	20.45	21.00	1.135	0.165	/
	State1&2			Left Edge	10	349000	1745	50	0	-0.16	0.081	20.45	21.00	1.135	0.092	/
	Full Power			Top Edge	10	349000	1745	50	0	-0.15	0.067	22.03	23.00	1.250	0.084	/
	State1&2			Bottom Edge	10	349000	1745	50	0	0.15	0.106	20.45	21.00	1.135	0.120	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

Antenna	Power Reduction	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Sensor N-1																
Ant.0	Full Power	DFT-s-OFDM BPSK	SA	Front Side	29	349000	1745	1	104	-0.11	0.127	22.01	23.00	1.256	0.160	/
				Back Side	29	349000	1745	1	104	0.07	0.098	22.01	23.00	1.256	0.123	/
				Left Edge	34	349000	1745	1	104	-0.07	0.031	22.01	23.00	1.256	0.039	/
				Bottom Edge	19	349000	1745	1	104	0.08	0.118	22.01	23.00	1.256	0.148	/
				Front Side	29	349000	1745	50	0	-0.03	0.122	22.03	23.00	1.250	0.153	/
				Back Side	29	349000	1745	50	0	0.12	0.095	22.03	23.00	1.250	0.119	/
				Left Edge	34	349000	1745	50	0	-0.01	0.027	22.03	23.00	1.250	0.034	/
				Bottom Edge	19	349000	1745	50	0	0.15	0.117	22.03	23.00	1.250	0.146	/

11.16 5G n41 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Hotspot																
Ant.0	State1&2	DFT-s-OFDM	SA	Front Side	10	518598	2592.99	1	1	-0.14	0.209	20.97	21.00	1.007	0.210	16#
	State1&2			Back Side	10	518598	2592.99	1	1	0.07	0.189	20.97	21.00	1.007	0.190	/
	State1&2			Left Edge	10	518598	2592.99	1	1	0.10	0.074	20.97	21.00	1.007	0.075	/
	Full Power			Top Edge	10	518598	2592.99	1	1	-0.13	0.024	21.96	23.00	1.271	0.031	/
	State1&2			Bottom Edge	10	518598	2592.99	1	1	-0.08	0.106	20.97	21.00	1.007	0.107	/
	State1&2			Front Side	10	501204	2506.02	50	0	-0.04	0.187	20.81	21.00	1.045	0.195	/
	State1&2			Back Side	10	501204	2506.02	50	0	0.02	0.174	20.81	21.00	1.045	0.182	/
	State1&2			Left Edge	10	501204	2506.02	50	0	0.16	0.064	20.81	21.00	1.045	0.067	/
	Full Power			Top Edge	10	501204	2506.02	50	0	-0.17	0.012	21.95	21.81	0.968	0.012	/
	State1&2			Bottom Edge	10	501204	2506.02	50	0	0.03	0.086	20.81	21.00	1.045	0.090	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

Antenna	Power Reduction	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Sensor N-1																
Ant.0	Full Power	DFT-s-OFDM BPSK	SA	Front Side	29	518598	2592.99	1	1	-0.17	0.135	21.96	23.00	1.271	0.172	/
				Back Side	29	518598	2592.99	1	1	-0.07	0.082	21.96	23.00	1.271	0.104	/
				Left Edge	34	518598	2592.99	1	1	0.09	0.021	21.96	23.00	1.271	0.027	/
				Bottom Edge	19	518598	2592.99	1	1	-0.14	0.064	21.96	23.00	1.271	0.081	/
				Front Side	29	518598	2592.99	50	0	0.04	0.131	21.95	21.81	0.968	0.127	/
				Back Side	29	518598	2592.99	50	0	0.05	0.078	21.95	21.81	0.968	0.076	/
				Left Edge	34	518598	2592.99	50	0	-0.04	0.018	21.95	21.81	0.968	0.017	/
				Bottom Edge	19	518598	2592.99	50	0	0.03	0.062	21.95	21.81	0.968	0.060	/

11.17 5G n71 (20MHz Bandwidth)

Antenna	Power Reduction	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Hotspot																
Ant.0	State1&2	DFT-S-OFDM BPSK	SA	Front Side	10	136100	680.5	1	53	-0.01	0.406	20.76	21.00	1.057	0.429	17#
	State1&2			Back Side	10	136100	680.5	1	53	0.10	0.189	20.76	21.00	1.057	0.200	/
	State1&2			Left Edge	10	136100	680.5	1	53	-0.01	0.051	20.76	21.00	1.057	0.054	/
	Full Power			Top Edge	10	136100	680.5	1	53	0.02	0.232	22.22	23.00	1.197	0.278	/
	State1&2			Bottom Edge	10	136100	680.5	1	53	-0.16	0.036	20.76	21.00	1.057	0.038	/
	State1&2			Front Side	10	136100	680.5	50	28	0.10	0.385	20.64	21.00	1.086	0.418	/
	State1&2			Back Side	10	136100	680.5	50	28	-0.15	0.132	20.64	21.00	1.086	0.143	/
	State1&2			Left Edge	10	136100	680.5	50	28	0.19	0.025	20.64	21.00	1.086	0.027	/
	Full Power			Top Edge	10	136100	680.5	50	28	0.05	0.216	22.42	23.00	1.143	0.247	/
	State1&2			Bottom Edge	10	136100	680.5	50	28	0.16	0.031	20.64	21.00	1.086	0.034	/
Note: Refer to ANNEX C for the detailed test data for each test configuration.																

Antenna	Power Reduction	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Sensor N-1																
Ant.0	Full Power	DFT-s-OFDM BPSK	SA	Front Side	29	136100	580.24	1	104	-0.13	0.086	22.22	23.00	1.197	0.103	/
				Back Side	29	136100	580.24	1	104	0.11	0.040	22.22	23.00	1.197	0.048	/
				Left Edge	34	136100	580.24	1	104	-0.03	0.015	22.22	23.00	1.197	0.018	/
				Bottom Edge	19	136100	580.24	1	104	0.04	0.015	22.22	23.00	1.197	0.018	/
				Front Side	29	136100	580.24	50	28	0.10	0.082	22.42	23.00	1.143	0.094	/
				Back Side	29	136100	580.24	50	28	0.07	0.035	22.42	23.00	1.143	0.040	/
				Left Edge	34	136100	580.24	50	28	0.05	0.012	22.42	23.00	1.143	0.014	/
				Bottom Edge	19	136100	580.24	50	28	-0.04	0.013	22.42	23.00	1.143	0.015	/

11.18 5G n77 (20MHz Bandwidth)

Antenn a	Power Reduction	Mode	Infor mati on	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Hotspot																
Ant.3	State1&2	DFT- s- OFD M BPSK	SA	Front Side	10	650000	3750	1	53	-0.02	0.547	20.81	21.00	1.045	0.572	18#
	State1&2			Back Side	10	650000	3750	1	53	-0.13	0.387	20.81	21.00	1.045	0.404	/
	Full Power			Left Edge	10	650000	3750	1	1	0.02	0.137	22.14	23.00	1.219	0.167	/
	State1&2			Top Edge	10	650000	3750	1	53	-0.05	0.462	20.81	21.00	1.045	0.483	/
	State1&2			Front Side	10	650000	3750	50	0	0.12	0.479	20.63	21.00	1.089	0.522	/
	State1&2			Back Side	10	650000	3750	50	0	-0.12	0.276	20.63	21.00	1.089	0.301	/
	Full Power			Left Edge	10	650000	3750	50	0	-0.13	0.124	22.22	23.00	1.197	0.148	/
	State1&2			Top Edge	10	650000	3750	50	0	-0.08	0.387	20.63	21.00	1.089	0.421	/
	Note: Refer to ANNEX C for the detailed test data for each test configuration.															

Antenna	Power Reduction	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Sensor N-1																
Ant.0	Full Power	DFT-s-OFDM BPSK	SA	Top Edge	24	650000	3750	1	1	-0.01	0.294	22.14	23.00	1.219	0.358	/
				Top Edge	24	650000	3750	50	0	0.14	0.277	22.22	23.00	1.197	0.332	/

Antenna	Power Reduction	Mode	Information	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num.	RB Start	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Sensor N-1																
Ant.0	Full Power	DFT-s-OFDM BPSK	SA	Front Side	9	650000	3750	1	1	0.05	0.513	22.14	23.00	1.219	0.625	/
				Back Side	9	650000	3750	1	1	0.11	0.462	22.14	23.00	1.219	0.563	/
				Front Side	9	650000	3750	50	0	-0.11	0.492	22.22	23.00	1.197	0.589	/
				Back Side	9	650000	3750	50	0	0.06	0.445	22.22	23.00	1.197	0.533	/

11.19 WIFI 2.4GHZ

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	Duty Cycle (%)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Hotspot															
Ant.1	State1	802.11b	Front Side	10	6	2437	-0.17	0.754	17.52	18.00	1.117	99.06	1.009	0.850	/
			Back Side	10	6	2437	-0.11	0.557	17.52	18.00	1.117	99.06	1.009	0.628	/
			Right Edge	10	6	2437	0.16	0.394	17.52	18.00	1.117	99.06	1.009	0.444	/
			Bottom Edge	10	6	2437	0.06	0.691	17.52	18.00	1.117	99.06	1.009	0.779	/
			Front Side	10	1	2412	0.03	0.697	17.20	18.00	1.202	99.06	1.009	0.845	/
			Front Side	10	11	2462	-0.12	0.671	17.07	18.00	1.239	99.06	1.009	0.839	/
	State2	802.11b	Front Side	10	6	2437	0.05	0.472	15.43	16.00	1.140	99.06	1.009	0.543	/
			Back Side	10	6	2437	-0.08	0.346	15.43	16.00	1.140	99.06	1.009	0.398	/
			Right Edge	10	6	2437	0.11	0.245	15.43	16.00	1.140	99.06	1.009	0.282	/
			Bottom Edge	10	6	2437	0.17	0.432	15.43	16.00	1.140	99.06	1.009	0.497	/
			Front Side	10	1	2412	-0.15	0.435	15.15	16.00	1.216	99.06	1.009	0.534	/
			Front Side	10	11	2462	-0.06	0.416	15.01	16.00	1.256	99.06	1.009	0.527	/
Ant.2	State1	802.11b	Front Side	10	6	2437	0.14	0.214	17.95	18.00	1.012	99.06	1.009	0.219	/
			Back Side	10	6	2437	-0.18	0.047	17.95	18.00	1.012	99.06	1.009	0.048	/
			Right Edge	10	6	2437	-0.16	0.050	17.95	18.00	1.012	99.06	1.009	0.051	/
			Bottom Edge	10	6	2437	-0.04	0.192	17.95	18.00	1.012	99.06	1.009	0.196	/
			Front Side	10	1	2412	-0.15	0.395	17.85	18.00	1.035	99.06	1.009	0.413	/
			Front Side	10	11	2462	0.19	0.170	17.94	18.00	1.014	99.06	1.009	0.174	/
	State2	802.11b	Front Side	10	6	2437	0.06	0.163	15.86	16.00	1.033	99.06	1.009	0.170	/
			Back Side	10	6	2437	0.11	0.035	15.86	16.00	1.033	99.06	1.009	0.036	/
			Right Edge	10	6	2437	0.13	0.039	15.86	16.00	1.033	99.06	1.009	0.041	/
			Bottom Edge	10	6	2437	-0.05	0.153	15.86	16.00	1.033	99.06	1.009	0.159	/
			Front Side	10	1	2412	-0.06	0.305	15.73	16.00	1.064	99.06	1.009	0.327	/
			Front Side	10	11	2462	0.17	0.129	15.82	16.00	1.042	99.06	1.009	0.136	/
MIMO	State1	802.11b	Front Side	10	6	2437	-0.16	0.755	20.75	21.00	1.059	99.06	1.009	0.807	/
			Back Side	10	6	2437	-0.10	0.564	20.75	21.00	1.059	99.06	1.009	0.603	/
			Right Edge	10	6	2437	-0.04	0.358	20.75	21.00	1.059	99.06	1.009	0.383	/
			Bottom Edge	10	6	2437	0.09	0.673	20.75	21.00	1.059	99.06	1.009	0.719	/
			Front Side	10	1	2412	-0.01	0.761	20.55	21.00	1.109	99.06	1.009	0.852	19#
			Front Side	10	11	2462	0.14	0.651	20.54	21.00	1.112	99.06	1.009	0.730	/
	State2	802.11b	Front Side	10	6	2437	0.02	0.592	18.66	19.00	1.081	99.06	1.009	0.646	/
			Back Side	10	6	2437	0.06	0.422	18.66	19.00	1.081	99.06	1.009	0.460	/
			Right Edge	10	6	2437	-0.08	0.272	18.66	19.00	1.081	99.06	1.009	0.297	/
			Bottom Edge	10	6	2437	0.11	0.526	18.66	19.00	1.081	99.06	1.009	0.574	/
			Front Side	10	1	2412	-0.05	0.586	18.46	19.00	1.132	99.06	1.009	0.669	/
			Front Side	10	11	2462	-0.06	0.524	18.44	19.00	1.138	99.06	1.009	0.602	/

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

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	Duty Cycle (%)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Sensor N-1															
Ant.1	Full Power	802.11b	Right Edge	19	6	2437	0.10	0.132	17.52	18.00	1.117	99.06	1.009	0.149	/
			Right Edge	19	1	2412	-0.06	0.122	17.20	18.00	1.202	99.06	1.009	0.148	/
			Right Edge	19	11	2462	0.13	0.129	17.07	18.00	1.239	99.06	1.009	0.161	/

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

Antenna	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune- power (dBm)	Scaling Factor	Duty Cycle (%)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Sensor N-1															
Ant.1	Full Power	802.11b	Front Side	9	6	2437	0.06	0.352	17.52	18.00	1.117	99.06	1.009	0.397	/
			Back Side	9	6	2437	0.03	0.313	17.52	18.00	1.117	99.06	1.009	0.353	/
			Front Side	9	1	2412	-0.15	0.332	17.20	18.00	1.202	99.06	1.009	0.403	/
			Front Side	9	11	2462	0.11	0.318	17.07	18.00	1.239	99.06	1.009	0.398	/

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

11.20 WIFI 5GHz

Antenna	Band	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	Duty Cycle (%)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Hotspot																
Ant.1	5.2G	State1 &2	802.11 a	Front Side	10	44	5220	-0.01	0.041	14.25	15.00	1.189	99.14	1.009	0.049	/
				Back Side	10	44	5220	0.00	0.049	14.25	15.00	1.189	99.14	1.009	0.059	/
				Right Edge	10	44	5220	0.02	0.111	14.25	15.00	1.189	99.14	1.009	0.133	/
				Bottom Edge	10	44	5220	-0.18	0.021	14.25	15.00	1.189	99.14	1.009	0.025	/
				Right Edge	10	36	5180	0.06	0.128	14.23	15.00	1.194	99.14	1.009	0.154	/
				Right Edge	10	48	5240	-0.08	0.142	14.11	15.00	1.227	99.14	1.009	0.176	/
Ant.2	5.2G	State1 &2	802.11 a	Front Side	10	48	5240	0.16	0.151	14.31	15.00	1.172	99.14	1.009	0.179	/
				Back Side	10	48	5240	-0.06	0.047	14.31	15.00	1.172	99.14	1.009	0.056	/
				Right Edge	10	48	5240	0.15	0.072	14.31	15.00	1.172	99.14	1.009	0.085	/
				Bottom Edge	10	48	5240	-0.05	0.263	14.31	15.00	1.172	99.14	1.009	0.311	20#
				Bottom Edge	10	36	5180	-0.07	0.250	14.23	15.00	1.194	99.14	1.009	0.301	/
				Bottom Edge	10	44	5220	-0.06	0.240	14.31	15.00	1.172	99.14	1.009	0.284	/
MIMO	5.2G	State1 &2	802.11 a	Front Side	10	44	5220	-0.03	0.167	17.29	18.00	1.178	99.14	1.009	0.198	/
				Back Side	10	44	5220	0.11	0.076	17.29	18.00	1.178	99.14	1.009	0.090	/
				Right Edge	10	44	5220	-0.02	0.165	17.29	18.00	1.178	99.14	1.009	0.196	/
				Bottom Edge	10	44	5220	0.04	0.228	17.29	18.00	1.178	99.14	1.009	0.271	/
				Bottom Edge	10	36	5180	0.14	0.228	17.24	18.00	1.191	99.14	1.009	0.274	/
				Bottom Edge	10	48	5240	-0.12	0.237	17.22	18.00	1.197	99.14	1.009	0.286	/
Ant.1	5.8G	State1 &2	802.11 a	Front Side	10	157	5785	0.01	0.023	14.85	15.00	1.035	99.14	1.009	0.024	/
				Back Side	10	157	5785	-0.03	0.045	14.85	15.00	1.035	99.14	1.009	0.047	/
				Right Edge	10	157	5785	-0.05	0.088	14.85	15.00	1.035	99.14	1.009	0.092	/
				Bottom Edge	10	157	5785	0.02	0.016	14.85	15.00	1.035	99.14	1.009	0.017	/
				Right Edge	10	149	5745	-0.07	0.086	14.32	15.00	1.169	99.14	1.009	0.101	/
				Right Edge	10	165	5825	-0.01	0.088	14.52	15.00	1.117	99.14	1.009	0.099	/
Ant.2	5.8G	State1 &2	802.11 a	Front Side	10	165	5825	0.02	0.129	14.72	15.00	1.067	99.14	1.009	0.139	/
				Back Side	10	165	5825	-0.12	0.068	14.72	15.00	1.067	99.14	1.009	0.073	/
				Right Edge	10	165	5825	0.19	0.041	14.72	15.00	1.067	99.14	1.009	0.044	/
				Bottom Edge	10	165	5825	-0.06	0.186	14.72	15.00	1.067	99.14	1.009	0.200	/
				Bottom Edge	10	149	5745	0.12	0.188	14.32	15.00	1.169	99.14	1.009	0.222	/
				Bottom Edge	10	157	5785	-0.18	0.213	14.62	15.00	1.091	99.14	1.009	0.234	/
MIMO	5.8G	State1 &2	802.11 a	Front Side	10	157	5785	0.13	0.149	17.75	18.00	1.059	99.14	1.009	0.159	/
				Back Side	10	157	5785	-0.18	0.114	17.75	18.00	1.059	99.14	1.009	0.122	/
				Right Edge	10	157	5785	0.06	0.088	17.75	18.00	1.059	99.14	1.009	0.094	/
				Bottom Edge	10	157	5785	-0.17	0.188	17.75	18.00	1.059	99.14	1.009	0.201	/
				Bottom Edge	10	149	5745	-0.13	0.186	17.33	18.00	1.167	99.14	1.009	0.219	/
				Bottom Edge	10	165	5825	0.07	0.224	17.63	18.00	1.089	99.14	1.009	0.246	21#

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

Antenna	Band	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	Duty Cycle (%)	Scaling Factor	1g Scaled SAR (W/kg)	Meas. No.
Sensor N-1																
Ant.1	5.2G	Full Power	802.11a	Right Edge	19	36	5180	0.16	0.042	14.23	15.00	1.194	99.14	1.009	0.051	/
				Right Edge	19	44	5220	0.05	0.035	14.25	15.00	1.189	99.14	1.009	0.042	/
				Right Edge	19	48	5240	-0.03	0.032	14.11	15.00	1.227	99.14	1.009	0.040	/
				Right Edge	19	157	5785	-0.11	0.035	14.85	15.00	1.035	99.14	1.009	0.037	/
				Right Edge	19	149	5745	0.08	0.028	14.32	15.00	1.169	99.14	1.009	0.033	/
				Right Edge	19	165	5825	-0.02	0.031	14.52	15.00	1.117	99.14	1.009	0.035	/

Antenna	Band	Power Reduction	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (dB)	10g Meas SAR (W/kg)	Meas. Power (dBm)	Max. tune-power (dBm)	Scaling Factor	Duty Cycle (%)	Scaling Factor	10g Scaled SAR (W/kg)	Meas. No.
Sensor N-1																
Ant.1	5.2G	Full Power	802.11a	Front Side	9	44	5220	-0.05	0.020	14.25	15.00	1.189	99.14	1.009	0.024	/
	5.2G			Back Side	9	44	5220	0.16	0.023	14.25	15.00	1.189	99.14	1.009	0.028	/
	5.2G			Back Side	9	36	5180	0.13	0.018	14.23	15.00	1.194	99.14	1.009	0.022	/
	5.2G			Back Side	9	48	5240	0.07	0.021	14.11	15.00	1.227	99.14	1.009	0.026	/
	5.8G			Front Side	9	157	5785	0.15	0.016	14.85	15.00	1.035	99.14	1.009	0.017	/
	5.8G			Back Side	9	157	5785	-0.06	0.028	14.85	15.00	1.035	99.14	1.009	0.029	/
	5.8G			Back Side	9	149	5745	-0.03	0.026	14.32	15.00	1.169	99.14	1.009	0.031	/
	5.8G			Back Side	9	165	5825	0.17	0.023	14.52	15.00	1.117	99.14	1.009	0.026	/
	5.8G			Back Side	9	165	5825	0.17	0.023	14.52	15.00	1.117	99.14	1.009	0.026	/

12 SAR Measurement Variability

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

SAR repeated measurement procedure:

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

Note: For 1g SAR, the highest measured 1g SAR is $0.761 < 0.80$ W/kg, repeated measurement is not required.

13 SIMULTANEOUS TRANSMISSION

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

13.1 Simultaneous Transmission Mode Consider

No.	Simultaneous Tx Combination	Hotspot
1	WWAN+WIFI2.4G	Yes
2	WWAN+WIFI5G	Yes
3	WWAN+WIFI2.4G+WIFI5G	Yes

Note:

1. When stand-alone SAR is not required for a side of antenna, its SAR is considered zero in the SAR summing process to assess Multi-band transmission SAR compliance.
2. The maximum SAR summation is calculated based on the same configuration and test position.

13.2 Sum SAR of Simultaneous Transmission

13.2.1 Hotspot Simultaneous Transmission SAR Evaluation for WWAN and WLAN

Band	Antenna	Position	Stand alone SAR			SUM SAR		
			1	2	3	1+2	1+3	1+2+3
			WWAN	MAX.2.4GWIFI	MAX.5GWIFI			
			State2	State2	State2			
LTE B2	0	Front Side 10mm	0.162	0.669	0.198	0.831	0.360	1.029
	0	Back Side 10mm	0.252	0.460	0.122	0.712	0.374	0.834
	0	Left Side 10mm	0.555	0.000	0.000	0.555	0.555	0.555
	0	Right Side 10mm	0.000	0.297	0.196	0.297	0.196	0.493
	0	Top Side 10mm	0.042	0.000	0.000	0.042	0.042	0.042
	0	Bottom Side 10mm	0.176	0.574	0.311	0.750	0.487	1.061
LTE B4	0	Front Side 10mm	0.121	0.669	0.198	0.790	0.319	0.988
	0	Back Side 10mm	0.303	0.460	0.122	0.763	0.425	0.885
	0	Left Side 10mm	0.118	0.000	0.000	0.118	0.118	0.118
	0	Right Side 10mm	0.000	0.297	0.196	0.297	0.196	0.493
	0	Top Side 10mm	0.036	0.000	0.000	0.036	0.036	0.036
	0	Bottom Side 10mm	0.125	0.574	0.311	0.699	0.436	1.010
LTE B5	0	Front Side 10mm	0.269	0.669	0.198	0.938	0.467	1.136
	0	Back Side 10mm	0.582	0.460	0.122	1.042	0.704	1.164
	0	Left Side 10mm	0.367	0.000	0.000	0.367	0.367	0.367
	0	Right Side 10mm	0.000	0.297	0.196	0.297	0.196	0.493
	0	Top Side 10mm	0.097	0.000	0.000	0.097	0.097	0.097
	0	Bottom Side 10mm	0.318	0.574	0.311	0.892	0.629	1.203
LTE B12	0	Front Side 10mm	0.309	0.669	0.198	0.978	0.507	1.176
	0	Back Side 10mm	0.668	0.460	0.122	1.128	0.790	1.250
	0	Left Side 10mm	0.158	0.000	0.000	0.158	0.158	0.158
	0	Right Side 10mm	0.000	0.297	0.196	0.297	0.196	0.493
	0	Top Side 10mm	0.104	0.000	0.000	0.104	0.104	0.104
	0	Bottom Side 10mm	0.402	0.574	0.311	0.976	0.713	1.287
LTE B14	0	Front Side 10mm	0.365	0.669	0.198	1.034	0.563	1.232
	0	Back Side 10mm	0.725	0.460	0.122	1.185	0.847	1.307
	0	Left Side 10mm	0.282	0.000	0.000	0.282	0.282	0.282
	0	Right Side 10mm	0.000	0.297	0.196	0.297	0.196	0.493
	0	Top Side 10mm	0.119	0.000	0.000	0.119	0.119	0.119
	0	Bottom Side 10mm	0.412	0.574	0.311	0.986	0.723	1.297
LTE B25	0	Front Side 10mm	0.116	0.669	0.198	0.785	0.314	0.983
	0	Back Side 10mm	0.269	0.460	0.122	0.729	0.391	0.851
	0	Left Side 10mm	0.154	0.000	0.000	0.154	0.154	0.154
	0	Right Side 10mm	0.000	0.297	0.196	0.297	0.196	0.493
	0	Top Side 10mm	0.071	0.000	0.000	0.071	0.071	0.071
	0	Bottom Side 10mm	0.126	0.574	0.311	0.700	0.437	1.011

LTE B66	0	Front Side 10mm	0.713	0.669	0.198	1.382	0.911	1.580
	0	Back Side 10mm	0.572	0.460	0.122	1.032	0.694	1.154
	0	Left Side 10mm	0.226	0.000	0.000	0.226	0.226	0.226
	0	Right Side 10mm	0.000	0.297	0.196	0.297	0.196	0.493
	0	Top Side 10mm	0.132	0.000	0.000	0.132	0.132	0.132
	0	Bottom Side 10mm	0.233	0.574	0.311	0.807	0.544	1.118
LTE B71	0	Front Side 10mm	0.143	0.669	0.198	0.812	0.341	1.010
	0	Back Side 10mm	0.268	0.460	0.122	0.728	0.390	0.850
	0	Left Side 10mm	0.077	0.000	0.000	0.077	0.077	0.077
	0	Right Side 10mm	0.000	0.297	0.196	0.297	0.196	0.493
	0	Top Side 10mm	0.050	0.000	0.000	0.050	0.050	0.050
	0	Bottom Side 10mm	0.099	0.574	0.311	0.673	0.410	0.984
LTE B41	0	Front Side 10mm	0.224	0.669	0.198	0.893	0.422	1.091
	0	Back Side 10mm	0.209	0.460	0.122	0.669	0.331	0.791
	0	Left Side 10mm	0.110	0.000	0.000	0.110	0.110	0.110
	0	Right Side 10mm	0.000	0.297	0.196	0.297	0.196	0.493
	0	Top Side 10mm	0.040	0.000	0.000	0.040	0.040	0.040
	0	Bottom Side 10mm	0.124	0.574	0.311	0.698	0.435	1.009
NR B2	0	Front Side 10mm	0.395	0.669	0.198	1.064	0.593	1.262
	0	Back Side 10mm	0.148	0.460	0.122	0.608	0.270	0.730
	0	Left Side 10mm	0.336	0.000	0.000	0.336	0.336	0.336
	0	Right Side 10mm	0.000	0.297	0.196	0.297	0.196	0.493
	0	Top Side 10mm	0.144	0.000	0.000	0.144	0.144	0.144
	0	Bottom Side 10mm	0.107	0.574	0.311	0.681	0.418	0.992
NR B5	0	Front Side 10mm	0.555	0.669	0.198	1.224	0.753	1.422
	0	Back Side 10mm	0.360	0.460	0.122	0.820	0.482	0.942
	0	Left Side 10mm	0.364	0.000	0.000	0.364	0.364	0.364
	0	Right Side 10mm	0.000	0.297	0.196	0.297	0.196	0.493
	0	Top Side 10mm	0.238	0.000	0.000	0.238	0.238	0.238
	0	Bottom Side 10mm	0.133	0.574	0.311	0.707	0.444	1.018
NR B12	0	Front Side 10mm	0.303	0.669	0.198	0.972	0.501	1.170
	0	Back Side 10mm	0.176	0.460	0.122	0.636	0.298	0.758
	0	Left Side 10mm	0.053	0.000	0.000	0.053	0.053	0.053
	0	Right Side 10mm	0.000	0.297	0.196	0.297	0.196	0.493
	0	Top Side 10mm	0.094	0.000	0.000	0.094	0.094	0.094
	0	Bottom Side 10mm	0.075	0.574	0.311	0.649	0.386	0.960
NR B14	0	Front Side 10mm	0.582	0.669	0.198	1.251	0.780	1.449
	0	Back Side 10mm	0.402	0.460	0.122	0.862	0.524	0.984
	0	Left Side 10mm	0.289	0.000	0.000	0.289	0.289	0.289
	0	Right Side 10mm	0.000	0.297	0.196	0.297	0.196	0.493
	0	Top Side 10mm	0.082	0.000	0.000	0.082	0.082	0.082
	0	Bottom Side 10mm	0.195	0.574	0.311	0.769	0.506	1.080
NR B25	0	Front Side 10mm	0.378	0.669	0.198	1.047	0.576	1.245

	0	Back Side 10mm	0.138	0.460	0.122	0.598	0.260	0.720
	0	Left Side 10mm	0.323	0.000	0.000	0.323	0.323	0.323
	0	Right Side 10mm	0.000	0.297	0.196	0.297	0.196	0.493
	0	Top Side 10mm	0.121	0.000	0.000	0.121	0.121	0.121
	0	Bottom Side 10mm	0.088	0.574	0.311	0.662	0.399	0.973
NR B66	0	Front Side 10mm	0.348	0.669	0.198	1.017	0.546	1.215
	0	Back Side 10mm	0.266	0.460	0.122	0.726	0.388	0.848
	0	Left Side 10mm	0.106	0.000	0.000	0.106	0.106	0.106
	0	Right Side 10mm	0.000	0.297	0.196	0.297	0.196	0.493
	0	Top Side 10mm	0.114	0.000	0.000	0.114	0.114	0.114
	0	Bottom Side 10mm	0.161	0.574	0.311	0.735	0.472	1.046
NR B41	0	Front Side 10mm	0.210	0.669	0.198	0.879	0.408	1.077
	0	Back Side 10mm	0.190	0.460	0.122	0.650	0.312	0.772
	0	Left Side 10mm	0.075	0.000	0.000	0.075	0.075	0.075
	0	Right Side 10mm	0.000	0.297	0.196	0.297	0.196	0.493
	0	Top Side 10mm	0.031	0.000	0.000	0.031	0.031	0.031
	0	Bottom Side 10mm	0.107	0.574	0.311	0.681	0.418	0.992
NR B71	0	Front Side 10mm	0.429	0.669	0.198	1.098	0.627	1.296
	0	Back Side 10mm	0.200	0.460	0.122	0.660	0.322	0.782
	0	Left Side 10mm	0.054	0.000	0.000	0.054	0.054	0.054
	0	Right Side 10mm	0.000	0.297	0.196	0.297	0.196	0.493
	0	Top Side 10mm	0.278	0.000	0.000	0.278	0.278	0.278
	0	Bottom Side 10mm	0.038	0.574	0.311	0.612	0.349	0.923
NR B77	3	Front Side 10mm	0.572	0.669	0.198	1.241	0.770	1.439
	3	Back Side 10mm	0.404	0.460	0.122	0.864	0.526	0.986
	3	Left Side 10mm	0.167	0.000	0.000	0.167	0.167	0.167
	3	Right Side 10mm	0.000	0.297	0.196	0.297	0.196	0.493
	3	Top Side 10mm	0.483	0.000	0.000	0.483	0.483	0.483
	3	Bottom Side 10mm	0.000	0.574	0.311	0.574	0.311	0.885

Note:

1: The highest Summed 1g SAR is 1.580 W/Kg < 1.6 W/kg, so Simultaneous Transmission SAR test is not required.

14 TEST EQUIPMENTS LIST

Description	Manufacturer	Model	Serial No./Version	Cal. Date	Cal. Due
PC	Dell	N/A	N/A	N/A	N/A
Test Software	Speag	DASY8	16.2.2.1588	N/A	N/A
750MHz Validation Dipole	Speag	D750V3	SN: 1208	2024/08/19	2027/08/18
835MHz Validation Dipole	Speag	D835V2	SN: 4d187	2024/05/08	2027/05/07
1750MHz Validation Dipole	Speag	D1750V2	SN: 1130	2024/05/08	2027/05/07
1950MHz Validation Dipole	Speag	D1950V3	SN: 1240	2024/08/22	2027/08/21
2450MHz Validation Dipole	Speag	D2450V2	SN: 952	2024/05/07	2027/05/06
2600MHz Validation Dipole	Speag	D2600V2	SN: 1095	2024/05/08	2027/05/07
3700MHz Validation Dipole	Speag	D3700V2	SN: 1101	2024/07/18	2027/07/17
5GHz Validation Dipole	Speag	D5GHzV2	SN: 1200	2024/05/09	2027/05/08
Data Acquisition Electronicsr	Speag	DAE4	SN: 1711	2024/03/18	2025/03/17
E-Field Probe	Speag	EX3DV4	SN: 7510	2024/06/25	2025/06/24
Signal Generator	R&S	SMB100A	177746	2024/04/24	2025/04/23
Power Meter	R&S	NRVD-B2	835843/014	2024/08/08	2025/08/07
Power Sensor	R&S	NRV-Z4	100381	2024/08/08	2025/08/07
Power Sensor	R&S	NRV-Z2	100211	2024/08/08	2025/08/07
Wireless Communication Test Set	Anritsu	MT8820C	6201144551	2024/05/14	2025/05/13
Network Analyzer	Agilent	E5071C	MY46103472	2024/09/11	2025/09/10
Thermometer	Elitech	RC-4HC	EF7239002655	2024/10/31	2025/10/30
Thermometer	Elitech	RC-4HC	EF7216002974	2024/10/31	2025/10/30
Power Amplifier	SATIMO	6552B	22374	N/A	N/A
Dielectric Probe Kit	Speag	DAK3.5	SN: 1312	N/A	N/A
Phantom	Speag	SAM	SN: 1859	N/A	N/A
Attenuator	COM-MW	ZA-S1-31	1305003187	N/A	N/A
Directional coupler	AA-MCS	AAMCS-UDC	000272	N/A	N/A

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

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

ANNEX A SIMULATING LIQUID VERIFICATION RESULT

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

Dielectric Probe Kit.

Head Liquid

Date	Liquid Type	Fre. (MHz)	Temp. (°C)	Meas. Conductivity (σ) (S/m)	Meas. Permittivity (ϵ)	Target Conductivity (σ) (S/m)	Target Permittivity (ϵ)	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2024.10.20	Head	750	21.1	0.89	43.21	0.89	41.94	0.00	3.03
2024.10.21	Head	750	21.4	0.88	42.28	0.89	41.94	-1.12	0.81
2024.10.22	Head	835	21.4	0.92	42.00	0.90	41.50	2.22	1.20
2024.11.11	Head	1750	21.3	1.33	40.85	1.37	40.08	-2.92	1.92
2024.11.12	Head	1950	21.4	1.38	38.73	1.40	40.00	-1.43	-3.18
2024.11.13	Head	2600	21.7	2.01	39.67	1.96	39.01	2.55	1.69
2024.10.26	Head	3700	21.4	3.11	37.06	3.12	37.70	-0.32	-1.70
2024.10.27	Head	2450	21.7	1.75	38.41	1.80	39.20	-2.78	-2.02
2024.10.28	Head	5250	21.1	4.77	36.54	4.71	35.93	1.27	1.70
2024.10.29	Head	5750	21.4	5.31	35.93	5.22	35.36	1.72	1.61

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

ANNEX B SYSTEM CHECK RESULT

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

Head liquid 1g

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)
2024.10.20	Head	750	100	0.853	8.53	8.46	0.83
2024.10.21	Head	750	100	0.858	8.58	8.46	1.42
2024.10.22	Head	835	100	0.957	9.57	9.74	-1.75
2024.11.11	Head	1750	100	3.620	36.20	37.00	-2.16
2024.11.12	Head	1950	100	4.140	41.40	41.70	-0.72
2024.11.13	Head	2600	100	5.460	54.60	55.90	-2.33
2024.10.26	Head	3700	100	6.850	68.50	66.70	2.70
2024.10.27	Head	2450	100	5.330	53.30	52.60	1.33
2024.10.28	Head	5250	100	7.870	78.70	77.70	1.29
2024.10.29	Head	5750	100	7.760	77.60	77.60	0.00
Note: The tolerance limit of System validation $\pm 10\%$.							

System Performance Check Data (750MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		CD75 0	CW, 0--	750.0, 100	10.29	0.892	43.2	22.4	21.1

Hardware Setup

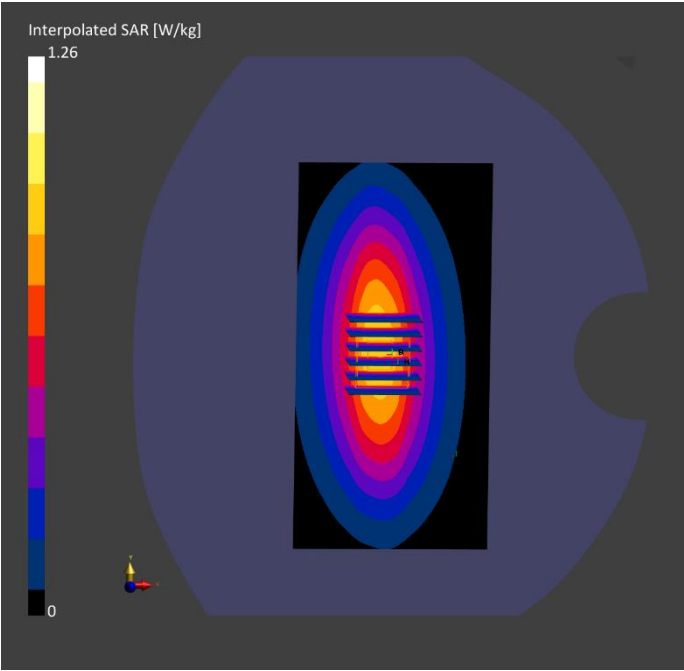
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-10-20	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 160.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-10-20	2024-10-20
psSAR1g [W/kg]	0.843	0.853
psSAR10g [W/kg]	0.515	0.551
Power Drift [dB]	0.04	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		86.6
Dist 3dB Peak [mm]		20.2



System Performance Check Data (750MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		CD75 0	CW, 0--	750.0, 100	10.29	0.883	42.3	22.3	21.4

Hardware Setup

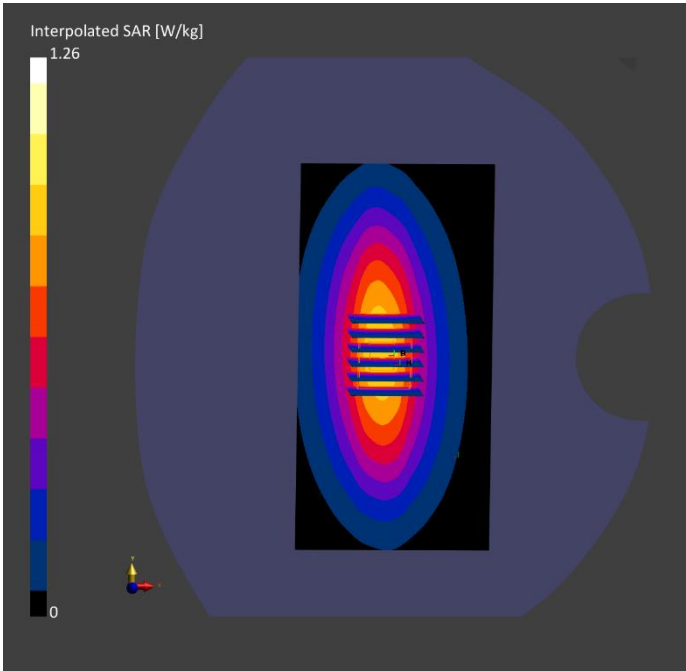
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-10-21	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 160.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-10-21	2024-10-21
psSAR1g [W/kg]	0.847	0.858
psSAR10g [W/kg]	0.519	0.560
Power Drift [dB]	0.04	0.03
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		86.6
Dist 3dB Peak [mm]		20.1



System Performance Check Data (835MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		CD83 5	CW, 0--	835.0, 50	9.99	0.915	42.0	22.6	21.4

Hardware Setup

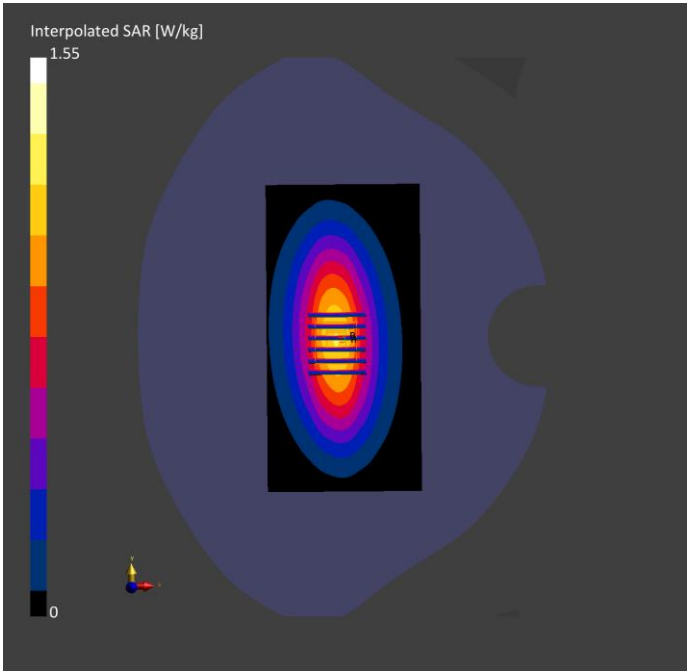
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-10-22	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 160.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-10-22	2024-10-22
psSAR1g [W/kg]	0.936	0.957
psSAR10g [W/kg]	0.628	0.624
Power Drift [dB]	0.05	0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		81.7
Dist 3dB Peak [mm]		12.2



System Performance Check Data (1750MHz)

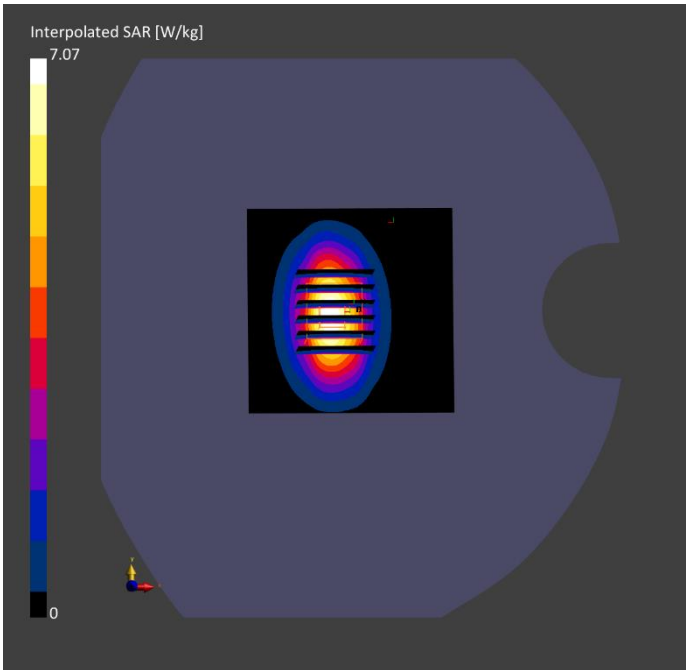
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		D175 0	CW, 0--	1750.0, 50	8.67	1.33	40.8	22.1	21.3

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-11-11	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2024-11-11	2024-11-11
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5	psSAR1g [W/kg]	3.39	3.62
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	1.85	1.93
Graded Grid	Yes	Yes	Power Drift [dB]	0.03	0.04
Grading Ratio	1.5	1.5	Power Scaling	Disabled	Disabled
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface Detection	VMS + 6p	VMS + 6p	TSL Correction	No correction	No correction
Scan Method	Measured	Measured	M2/M1 [%]		82.2
			Dist 3dB Peak [mm]		9.5



System Performance Check Data (1950MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		D195 0	CW, 0--	1950.0, 50	8.33	1.38	38.7	22.5	21.4

Hardware Setup

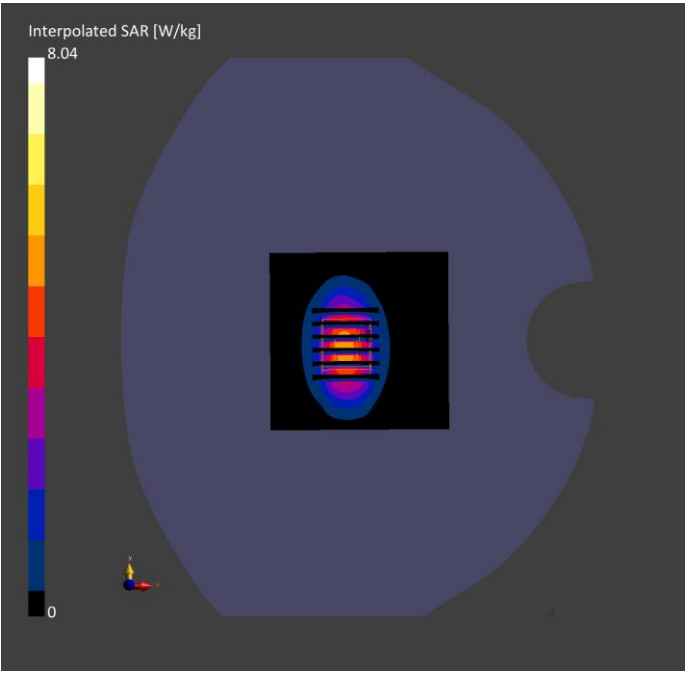
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-11-12	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	6.0 x 6.0 x 1.5
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-11-12	2024-11-12
psSAR1g [W/kg]	3.88	4.14
psSAR10g [W/kg]	1.92	2.07
Power Drift [dB]	0.01	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		81.7
Dist 3dB Peak [mm]		9.4



System Performance Check Data (2450MHz)

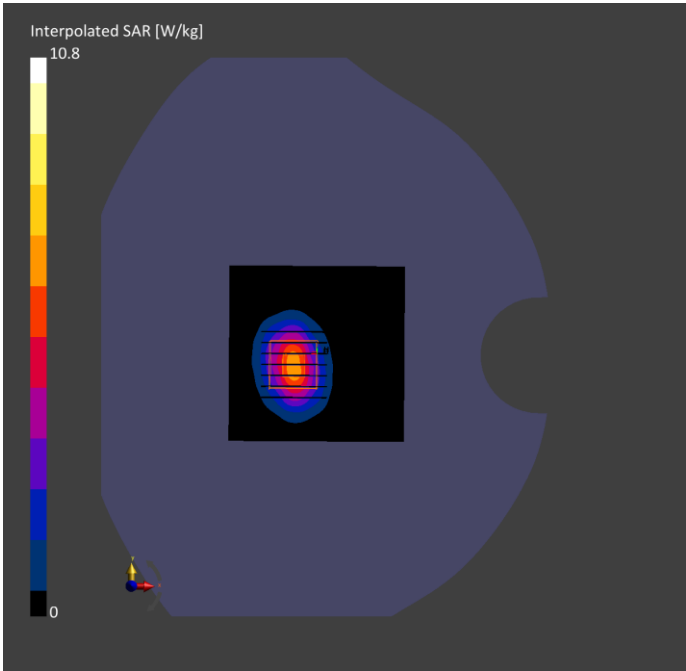
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		D245 0	CW, 0--	2450.0, 50	7.75	1.75	38.4	22.3	21.7

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-10-27	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2024-10-27	2024-10-27
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5	psSAR1g [W/kg]	5.25	5.33
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.31	2.51
Graded Grid	Yes	Yes	Power Drift [dB]	0.04	-0.02
Grading Ratio	1.5	1.5	Power Scaling	Disabled	Disabled
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface Detection	VMS + 6p	VMS + 6p	TSL Correction	No correction	No correction
Scan Method	Measured	Measured	M2/M1 [%]		81.4
			Dist 3dB Peak [mm]		9.4



System Performance Check Data (2600MHz)

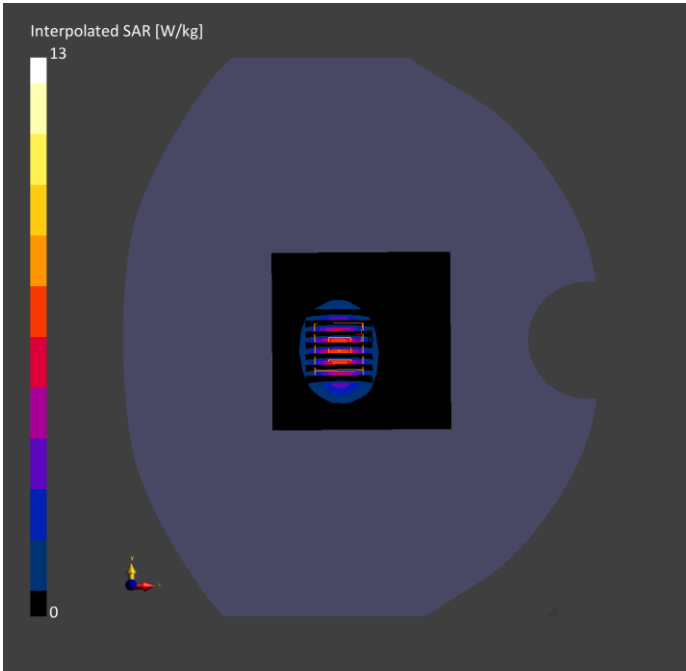
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		CD26 00	CW, 0--	2600.0, 50	7.59	2.01	39.7	22.6	21.7

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-11-13	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	30.0 x 30.0 x 30.0	Date	2024-11-13	2024-11-13
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5	psSAR1g [W/kg]	5.39	5.46
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.48	2.58
Graded Grid	Yes	Yes	Power Drift [dB]	0.04	0.03
Grading Ratio	1.5	1.5	Power Scaling	Disabled	Disabled
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface Detection	VMS + 6p	VMS + 6p	TSL Correction	No correction	No correction
Scan Method	Measured	Measured	M2/M1 [%]		79.5
			Dist 3dB Peak [mm]		8.9



System Performance Check Data (3700MHz)

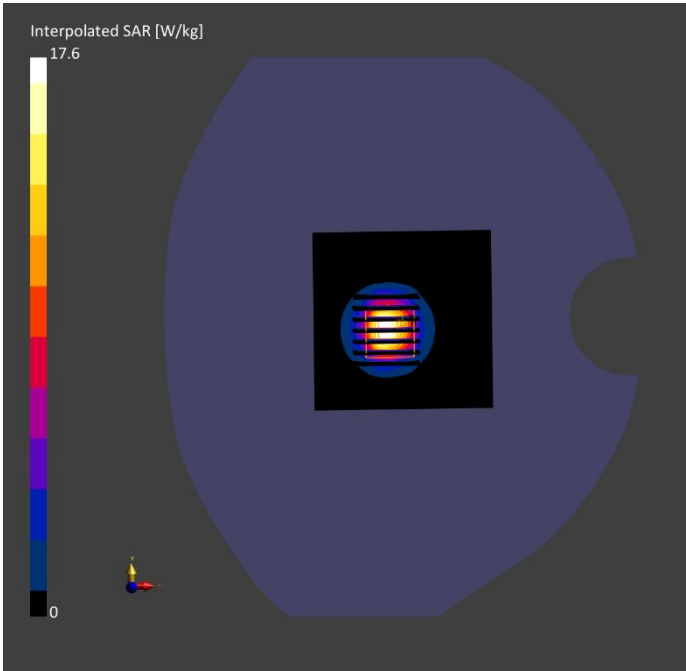
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		CD37 00	CW, 0--	3700.0, 50	6.94	3.11	37.1	22.9	21.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-10-26	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 80.0	28.0 x 28.0 x 28.0	Date	2024-10-26	2024-10-26
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.4	psSAR1g [W/kg]	6.38	6.85
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	2.41	2.55
Graded Grid	Yes	Yes	Power Drift [dB]	0.02	0.06
Grading Ratio	1.5	1.5	Power Scaling	Disabled	Disabled
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface Detection	VMS + 6p	VMS + 6p	TSL Correction	No correction	No correction
Scan Method	Measured	Measured	M2/M1 [%]		75.3
			Dist 3dB Peak [mm]		8.2



System Performance Check Data (5250MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		D5GH z	CW, 0--	5250.0, 30	5.74	4.77	36.5	22.6	21.1

Hardware Setup

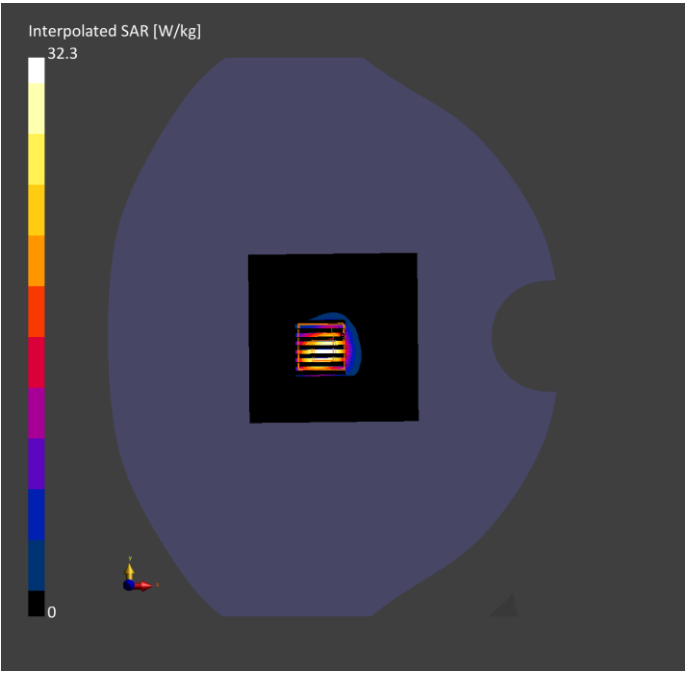
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-10-28	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

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

Measurement Results

	Area Scan	Zoom Scan
Date	2024-10-28	2024-10-28
psSAR1g [W/kg]	7.65	7.87
psSAR10g [W/kg]	2.14	2.23
Power Drift [dB]	-0.01	-0.04
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		69.5
Dist 3dB Peak [mm]		7.5



System Performance Check Data (5750MHz)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL		D5GH z	CW, 0--	5750.0, 80	5.04	5.31	35.9	22.4	21.4

Hardware Setup

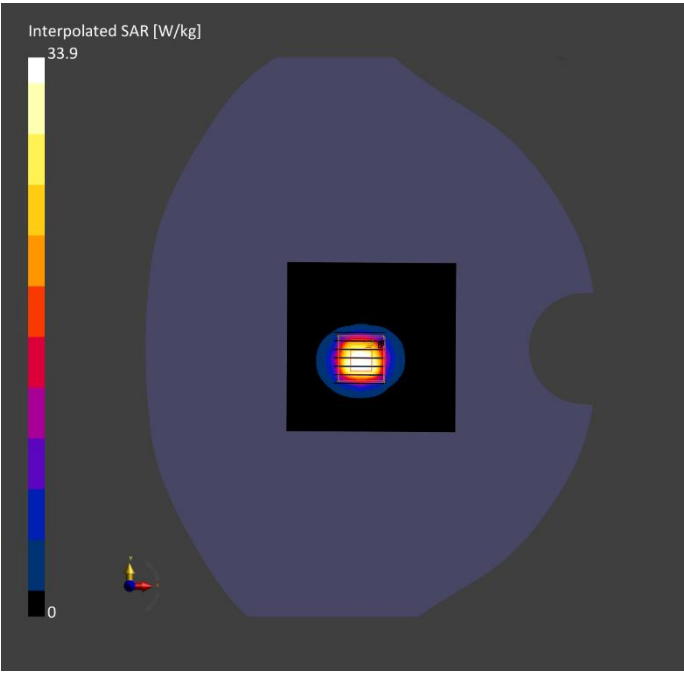
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-10-29	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

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

Measurement Results

	Area Scan	Zoom Scan
Date	2024-10-29	2024-10-29
psSAR1g [W/kg]	7.63	7.76
psSAR10g [W/kg]	2.08	2.15
Power Drift [dB]	-0.08	-0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		61.2
Dist 3dB Peak [mm]		7.7



ANNEX C TEST DATA

Meas.1 Hotspot Plane with Left Edge 10mm on Middle Channel in LTE Band2 mode with Antenna 0

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL	EDGE TOP, 10.00	Band 2	LTE-FDD, 10169- CAF	1900.0, 19100	8.33	1.38	38.9	22.5	21.4

Hardware Setup

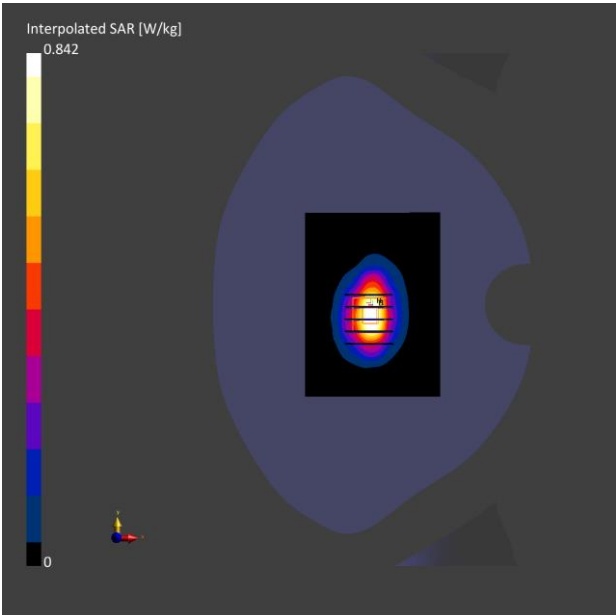
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-11-12	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	90.0 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	2024-11-12	2024-11-12
psSAR1g [W/kg]	0.473	0.491
psSAR10g [W/kg]	0.252	0.271
Power Drift [dB]	-0.00	0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		56.5
Dist 3dB Peak [mm]		11.2



Meas.2 Hotspot Plane with Back Side 10mm on Middle Channel in LTE Band4 mode with Antenna 0

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL	BACK, 10.00	Band 4	LTE-FDD, 10169- CAF	1745.0, 20300	8.67	1.33	41.0	22.1	21.3

Hardware Setup

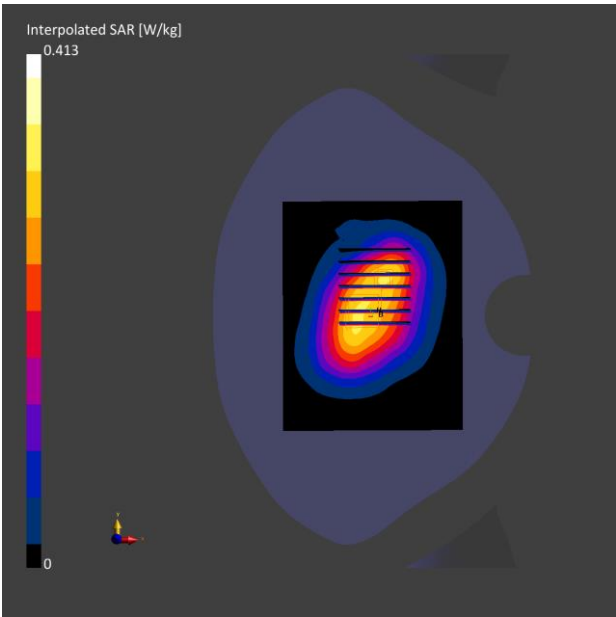
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-11-11	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 150.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-11-11	2024-11-11
psSAR1g [W/kg]	0.269	0.273
psSAR10g [W/kg]	0.171	0.186
Power Drift [dB]	-0.09	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		65.1
Dist 3dB Peak [mm]		16.5



Meas.3 Hotspot Plane with Back Side 10mm on Middle Channel in LTE Band5 mode with Antenna 0

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL	BACK, 10.00	Band 5	LTE-FDD, 10175- CAH	836.5, 20525	9.99	0.918	41.9	22.6	21.4

Hardware Setup

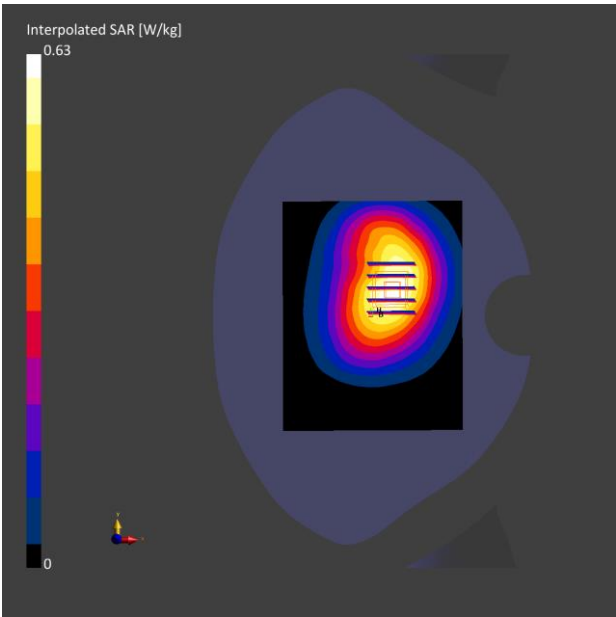
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-10-22	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 150.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-10-22	2024-10-22
psSAR1g [W/kg]	0.454	0.472
psSAR10g [W/kg]	0.310	0.339
Power Drift [dB]	0.01	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		75.5
Dist 3dB Peak [mm]		> 16.0



Meas.4 Hotspot Plane with Back Side 10mm on Middle Channel in LTE Band12 mode with Antenna 0
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	BACK, 10.00	Band 12	LTE-FDD, 10175-CAH	707.5, 23095	10.29	0.886	43.4	22.4	21.1

Hardware Setup

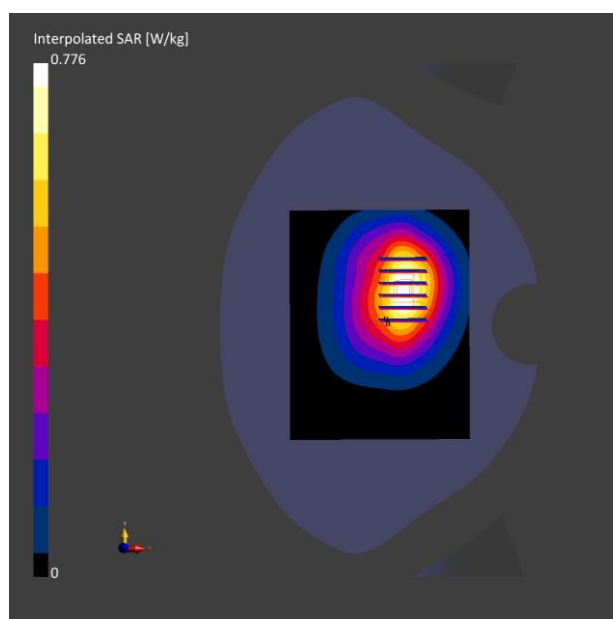
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-10-20	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 150.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-10-20	2024-10-20
psSAR1g [W/kg]	0.684	0.549
psSAR10g [W/kg]	0.463	0.388
Power Drift [dB]	-0.15	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		69.9
Dist 3dB Peak [mm]		26.0



Meas.5 Hotspot Plane with Back Side 10mm on Middle Channel in LTE Band14 mode with Antenna 0

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL	BACK, 10.00	Band 14	LTE-FDD, 10175- CAH	793.0, 23330	10.29	0.900	42.9	22.4	21.1

Hardware Setup

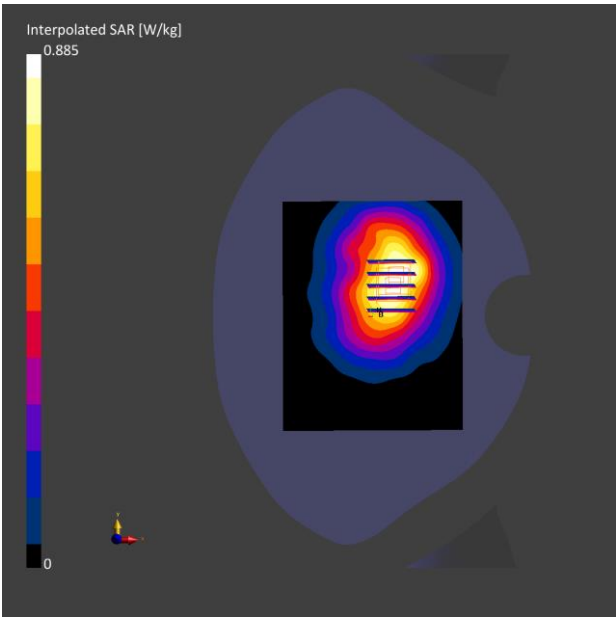
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-10-20	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 150.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-10-20	2024-10-20
psSAR1g [W/kg]	0.607	0.592
psSAR10g [W/kg]	0.415	0.425
Power Drift [dB]	0.08	-0.07
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		57.2
Dist 3dB Peak [mm]		15.1



Meas.6 Hotspot Plane with Back Side 10mm on Middle Channel in LTE Band25 mode with Antenna 0

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL	BACK, 10.00	Band 25	LTE-FDD, 10169- CAF	1882.5, 26365	8.33	1.37	39.0	22.5	21.4

Hardware Setup

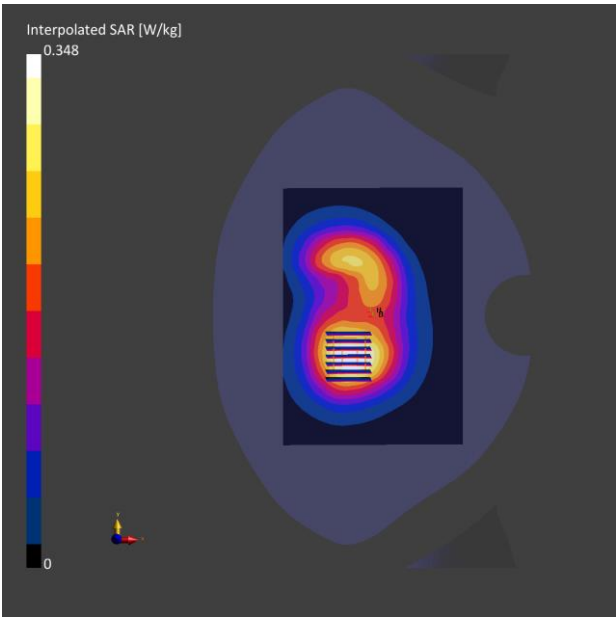
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-11-12	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 168.0	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	2024-11-12	2024-11-12
psSAR1g [W/kg]	0.222	0.239
psSAR10g [W/kg]	0.135	0.156
Power Drift [dB]	0.02	-0.05
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		68.5
Dist 3dB Peak [mm]		> 15.0



Meas.7 Hotspot Plane with Front Side 10mm on Middle Channel in LTE Band66 mode with Antenna 0

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL	FRONT, 10.00	Band 66	LTE-FDD, 10169- CAF	1745.0, 132322	8.67	1.33	41.0	22.1	21.3

Hardware Setup

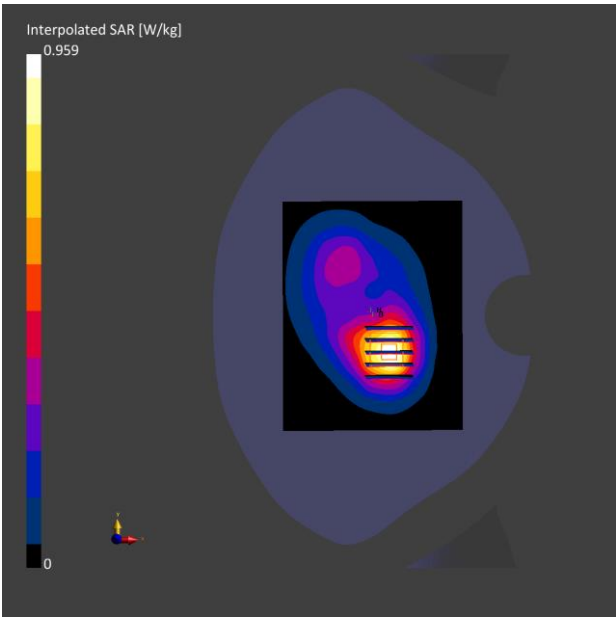
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-11-11	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 150.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-11-11	2024-11-11
psSAR1g [W/kg]	0.590	0.631
psSAR10g [W/kg]	0.347	0.378
Power Drift [dB]	-0.02	-0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		65.8
Dist 3dB Peak [mm]		16.1



Meas.8 Hotspot Plane with Back Side 10mm on Middle Channel in LTE Band71 mode with Antenna 0

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL	BACK, 10.00	Band 71	LTE-FDD, 10169- CAF	683.0, 133322	10.29	0.812	42.9	22.4	21.1

Hardware Setup

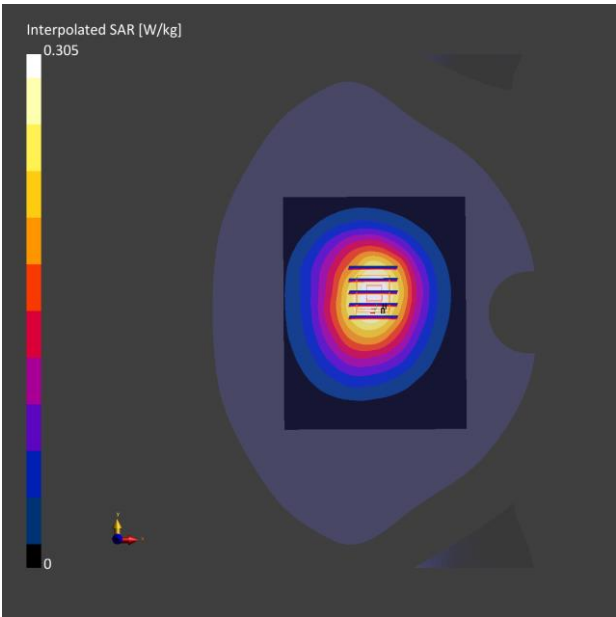
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-10-20	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 150.0	32.0 x 32.0 x 30.0
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	All points	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-10-20	2024-10-20
psSAR1g [W/kg]	0.219	0.222
psSAR10g [W/kg]	0.153	0.158
Power Drift [dB]	-0.08	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		69.7
Dist 3dB Peak [mm]		> 16.0



Meas.9 Hotspot Plane with Front Side 10mm on Middle Channel in LTE Band41 mode with Antenna 0

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL	FRONT, 10.00	Band 41	LTE-TDD, 10172- CAH	2593.0, 40620	7.59	2.00	39.9	22.6	21.7

Hardware Setup

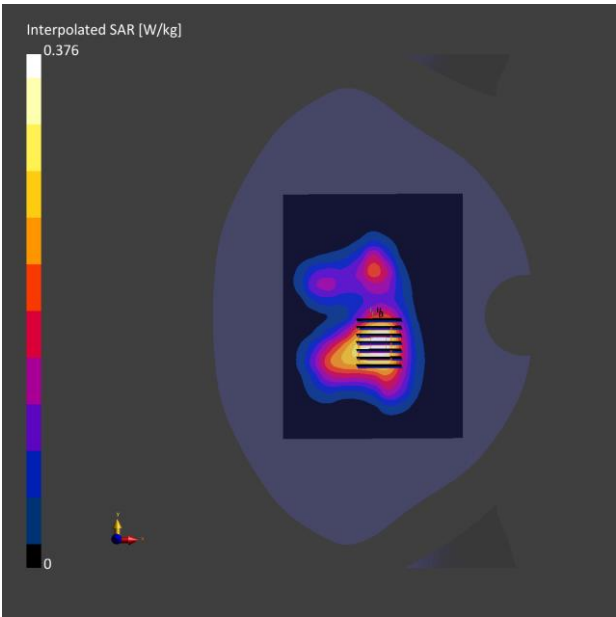
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-11- 13	EX3DV4 - SN7510, 2024-06- 25	DAE4 Sn1711, 2024-03- 18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 160.0	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	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	All points	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-11-13	2024-11-13
psSAR1g [W/kg]	0.205	0.208
psSAR10g [W/kg]	0.112	0.116
Power Drift [dB]	-0.02	-0.19
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		53.9
Dist 3dB Peak [mm]		14.0



Meas.10 Hotspot Plane with Front Side 10mm on 376000 Channel in NR Band2 mode with Antenna 0

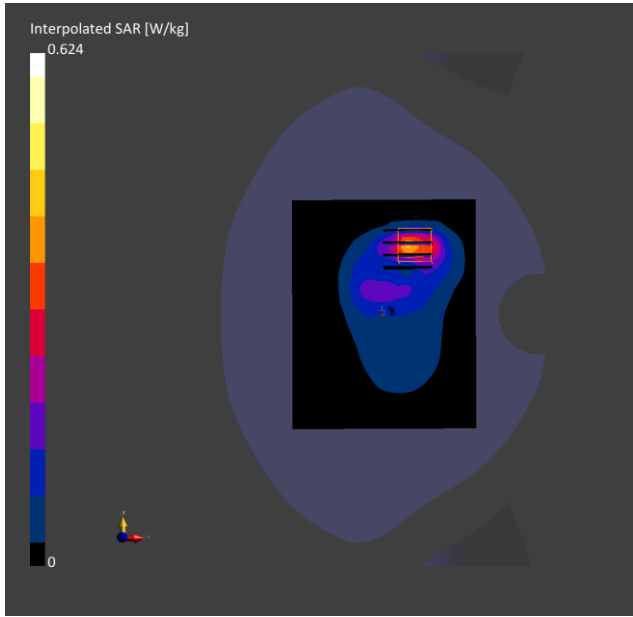
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	FRONT, 10.00	Band n2	5G NR FR1 FDD, 10931- AAC	1880.0, 376000	8.33	1.37	39.2	22.5	21.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-11-12	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 150.0	32.0 x 32.0 x 30.0	Date	2024-11-12	2024-11-12
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.318	0.368
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.160	0.186
Graded Grid	Yes	Yes	Power Drift [dB]	0.01	-0.05
Grading Ratio	1.5	1.5	Power Scaling	Disabled	Disabled
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface Detection	VMS + 6p	VMS + 6p	TSL Correction	No correction	No correction
Scan Method	Measured	Measured	M2/M1 [%]		62.3
			Dist 3dB Peak [mm]		9.6



Meas.11 Hotspot Plane with Front Side 10mm on 167300 Channel in NR Band5 mode with Antenna 0

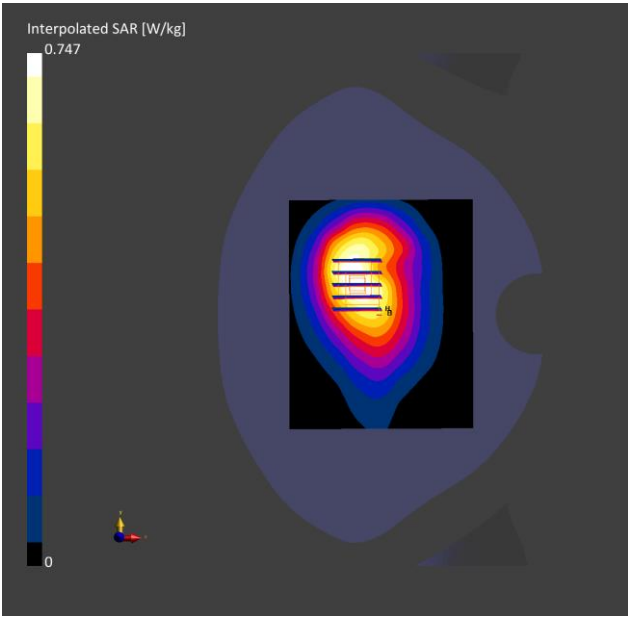
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	FRONT, 10.00	Band n5	5G NR FR1 FDD, 10931- AAC	836.5, 167300	9.99	0.918	41.9	22.6	21.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-10-22	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 150.0	32.0 x 32.0 x 30.0	Date	2024-10-22	2024-10-22
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.474	0.510
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.325	0.352
Graded Grid	Yes	Yes	Power Drift [dB]	-0.05	-0.02
Grading Ratio	1.5	1.5	Power Scaling	Disabled	Disabled
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface Detection	VMS + 6p	VMS + 6p	TSL Correction	No correction	No correction
Scan Method	Measured	Measured	M2/M1 [%]		61.5
			Dist 3dB Peak [mm]		25.0



Meas.12 Hotspot Plane with Front Side 10mm on 141500 Channel in NR Band12 mode with Antenna 0

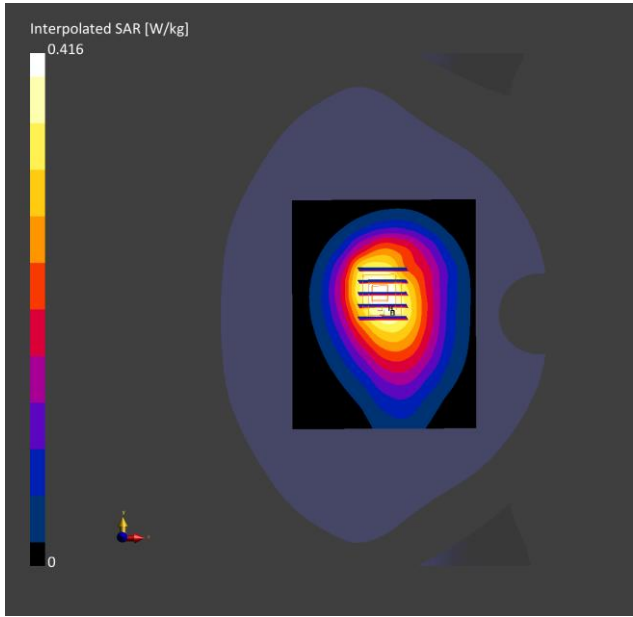
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	FRONT, 10.00	Band n12	5G NR FR1 FDD, 10930- AAC	707.5, 141500	10.29	0.875	42.5	22.3	21.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-10-21	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 150.0	32.0 x 32.0 x 30.0	Date	2024-10-21	2024-10-21
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.272	0.288
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.188	0.203
Graded Grid	Yes	Yes	Power Drift [dB]	0.01	-0.07
Grading Ratio	1.5	1.5	Power Scaling	Disabled	Disabled
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface Detection	VMS + 6p	VMS + 6p	TSL Correction	No correction	No correction
Scan Method	Measured	Measured	M2/M1 [%]		65.9
			Dist 3dB Peak [mm]		> 16.0



Meas.13 Hotspot Plane with Front Side 10mm on 158600 Channel in NR Band14 mode with Antenna 0

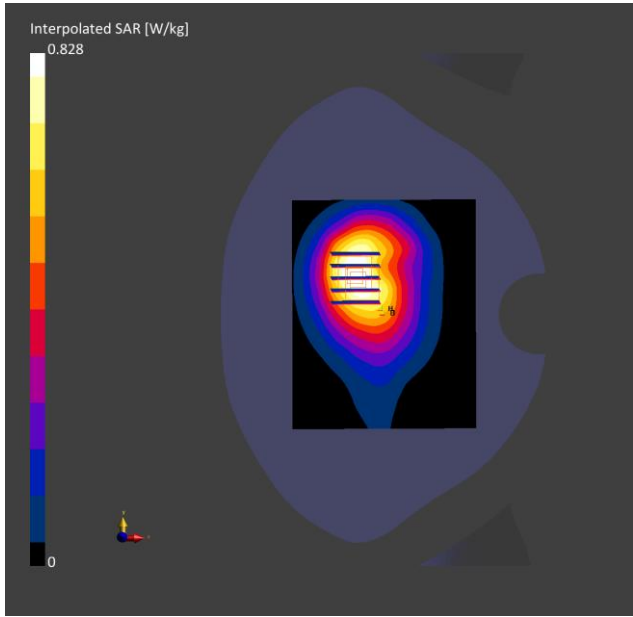
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	FRONT, 10.00	Band n14	5G NR FR1 FDD, 10929- AAD	793.0, 158600	10.29	0.889	42.2	22.3	21.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-10-21	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 150.0	32.0 x 32.0 x 30.0	Date	2024-10-21	2024-10-21
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.507	0.557
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.350	0.378
Graded Grid	Yes	Yes	Power Drift [dB]	0.06	-0.03
Grading Ratio	1.5	1.5	Power Scaling	Disabled	Disabled
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface Detection	VMS + 6p	VMS + 6p	TSL Correction	No correction	No correction
Scan Method	Measured	Measured	M2/M1 [%]		67.5
			Dist 3dB Peak [mm]		21.5



Meas.14 Hotspot Plane with Front Side 10mm on 376500 Channel in NR Band25 mode with Antenna 0

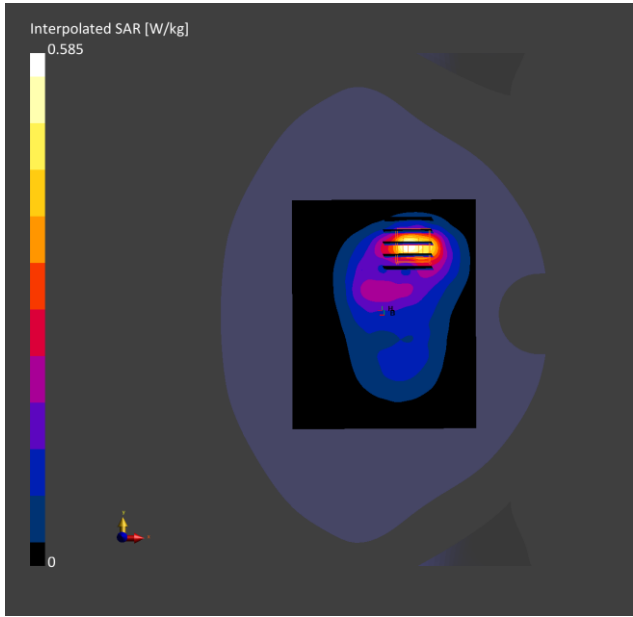
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	FRONT, 10.00	Band n25	5G NR FR1 FDD, 10931- AAC	1882.5, 376500	8.33	1.37	39.0	22.5	21.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-11-12	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 150.0	32.0 x 32.0 x 30.0	Date	2024-11-12	2024-11-12
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.313	0.349
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.158	0.178
Graded Grid	Yes	Yes	Power Drift [dB]	-0.03	0.01
Grading Ratio	1.5	1.5	Power Scaling	Disabled	Disabled
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface Detection	VMS + 6p	VMS + 6p	TSL Correction	No correction	No correction
Scan Method	Measured	Measured	M2/M1 [%]		63.3
			Dist 3dB Peak [mm]		9.6



Meas.15 Hotspot Plane with Front Side 10mm on 349000 Channel in NR Band66 mode with Antenna 0

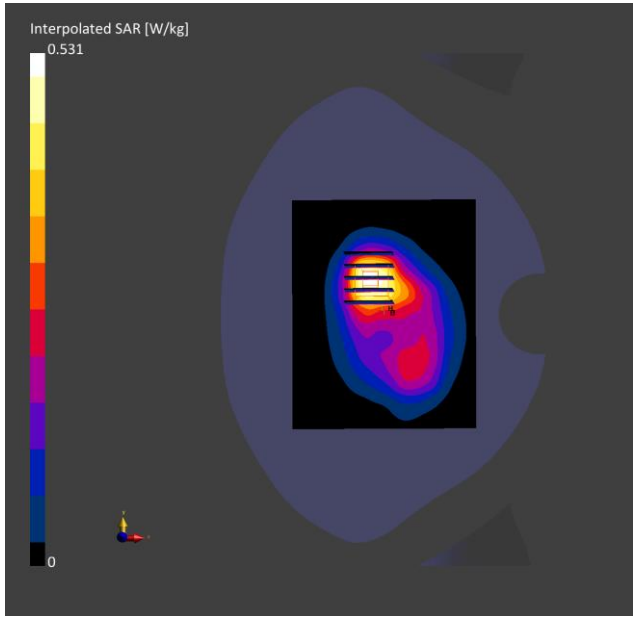
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	FRONT, 10.00	Band n66	5G NR FR1 FDD, 10931- AAC	1745.0, 349000	8.67	1.33	41.0	22.1	21.3

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-11-11	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 150.0	32.0 x 32.0 x 30.0	Date	2024-11-11	2024-11-11
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.291	0.324
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.172	0.188
Graded Grid	Yes	Yes	Power Drift [dB]	0.12	-0.17
Grading Ratio	1.5	1.5	Power Scaling	Disabled	Disabled
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface Detection	VMS + 6p	VMS + 6p	TSL Correction	No correction	No correction
Scan Method	Measured	Measured	M2/M1 [%]		60.2
			Dist 3dB Peak [mm]		15.2



Meas.16 Hotspot Plane with Front Side 10mm on 518598 Channel in NR Band41 mode with Antenna 0

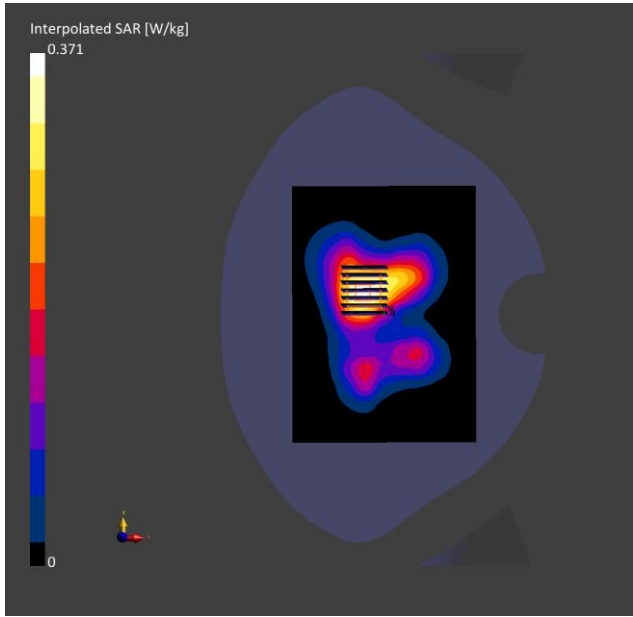
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	FRONT, 10.00	Band n41	5G NR FR1 TDD, 10803- AAF	2593.0, 518598	7.59	2.00	39.9	22.6	21.7

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-11-13	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 168.0	30.0 x 30.0 x 30.0	Date	2024-11-13	2024-11-13
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.207	0.209
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.113	0.117
Graded Grid	Yes	Yes	Power Drift [dB]	0.06	-0.14
Grading Ratio	1.5	1.5	Power Scaling	Disabled	Disabled
MAIA	Y	N/A	Scaling Factor [dB]		
Surface Detection	VMS + 6p	VMS + 6p	TSL Correction	No correction	No correction
Scan Method	Measured	Measured	M2/M1 [%]		55.9
			Dist 3dB Peak [mm]		17.8



Meas.17 Hotspot Plane with Front Side 10mm on 136100 Channel in NR Band71 mode with Antenna 0

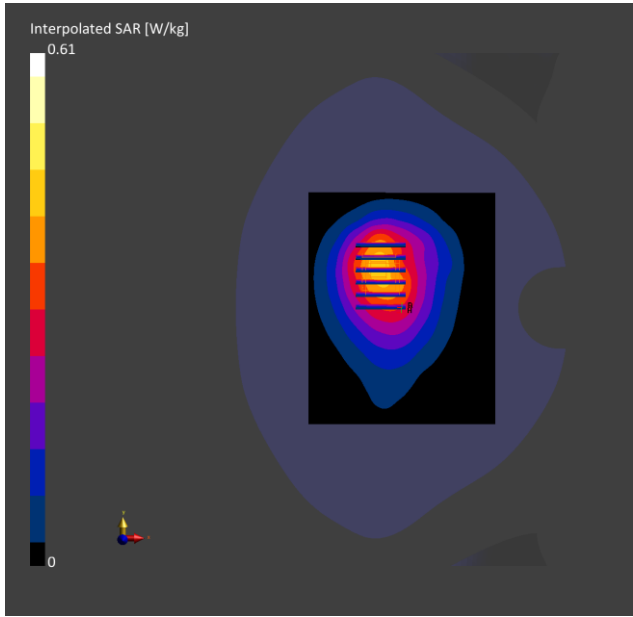
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	FRONT, 10.00	Band n71	5G NR FR1 FDD, 10931- AAC	680.5, 136100	10.29	0.805	42.0	22.3	21.4

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-10-21	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 150.0	32.0 x 32.0 x 30.0	Date	2024-10-21	2024-10-21
Grid Steps [mm]	15.0 x 15.0	8.0 x 8.0 x 5.0	psSAR1g [W/kg]	0.384	0.406
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.264	0.277
Graded Grid	Yes	Yes	Power Drift [dB]	-0.06	-0.01
Grading Ratio	1.5	1.5	Power Scaling	Disabled	Disabled
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface Detection	VMS + 6p	VMS + 6p	TSL Correction	No correction	No correction
Scan Method	Measured	Measured	M2/M1 [%]		66.1
			Dist 3dB Peak [mm]		30.1



Meas.18 Hotspot Plane with Front Side 10mm on 650000 Channel in NR Band77 mode with Antenna 0

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity	Ambient Temperature [°C]	Liquid Temperature [°C]
Flat, HSL	FRONT, 10.00	Band n77	5G NR FR1 TDD, 10770- AAE	3750.0, 650000	6.94	3.17	36.9	22.9	21.4

Hardware Setup

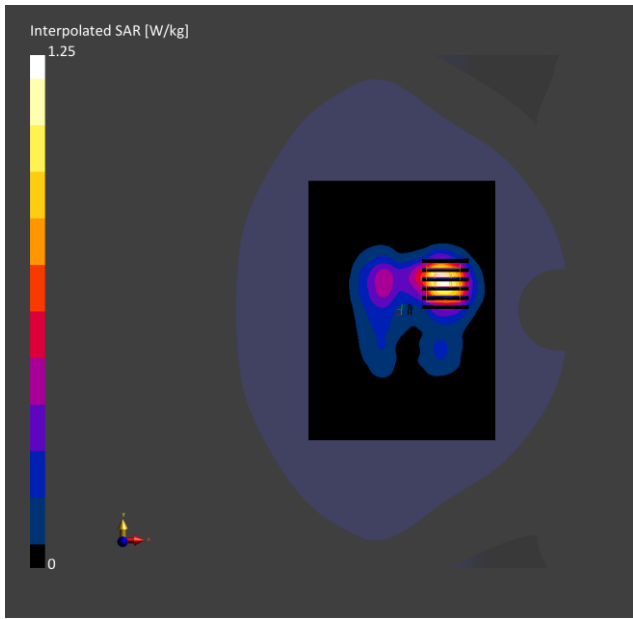
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-10-26	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 168.0	24.0 x 24.0 x 24.0
Grid Steps [mm]	12.0 x 12.0	6.0 x 6.0 x 4.0
Sensor Surface [mm]	3.0	1.4
Graded Grid	Yes	Yes
Grading Ratio	1.5	1.5
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-10-26	2024-10-26
psSAR1g [W/kg]	0.513	0.547
psSAR10g [W/kg]	0.223	0.237
Power Drift [dB]	0.05	-0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		48.0
Dist 3dB Peak [mm]		11.8



Meas.19 Hotspot Plane with Front Side 10mm on 1 Channel in IEEE802.11b mode with Antenna MIMO

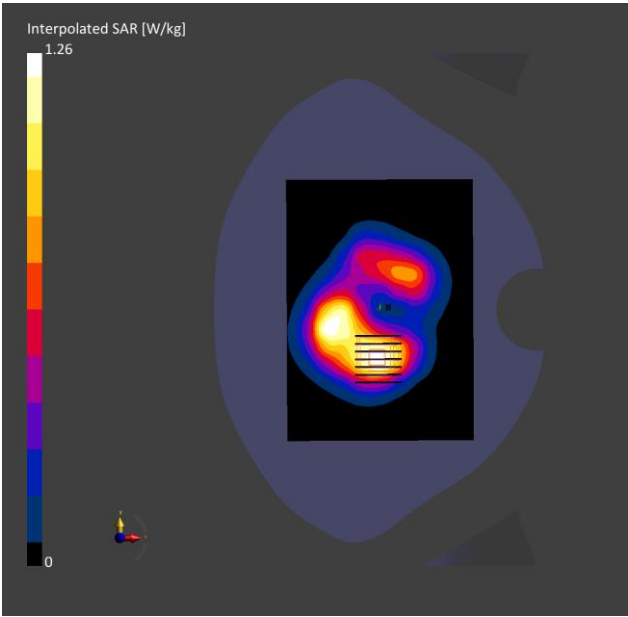
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL	FRONT, 10.00	WLA N 2.4G Hz	WLAN, 10012- CAB	2412.0, 1	7.75	1.71	38.7	22.3	21.7

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-10-27	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 168.0	30.0 x 30.0 x 30.0	Date	2024-10-27	2024-10-27
Grid Steps [mm]	12.0 x 12.0	5.0 x 5.0 x 5.0	psSAR1g [W/kg]	0.728	0.761
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.400	0.408
Graded Grid	Yes	Yes	Power Drift [dB]	0.03	-0.01
Grading Ratio	1.5	1.5	Power Scaling	Disabled	Disabled
MAIA	N/A	N/A	Scaling Factor [dB]		
Surface Detection	VMS + 6p	VMS + 6p	TSL Correction	No correction	No correction
Scan Method	Measured	Measured	M2/M1 [%]		55.8
			Dist 3dB Peak [mm]		12.1



Meas.20 Hotspot Plane with Bottom Edge 10mm on 48 Channel in IEEE802.11a mode with Antenna 2

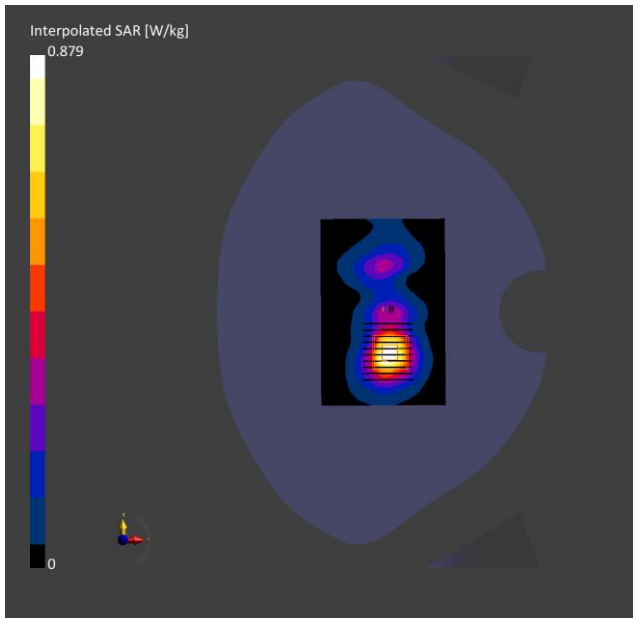
Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL	EDGE BOTTOM , 0.00	WLA N 5GHz	WLAN, 10062- CAE	5240.0, 48	5.74	4.75	36.7	22.6	21.1

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-10-28	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup			Measurement Results		
	Area Scan	Zoom Scan		Area Scan	Zoom Scan
Grid Extents [mm]	80.0 x 120.0	24.0 x 24.0 x 22.0	Date	2024-10-28	2024-10-28
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 2.0	psSAR1g [W/kg]	0.241	0.263
Sensor Surface [mm]	3.0	1.4	psSAR10g [W/kg]	0.093	0.099
Graded Grid	Yes	Yes	Power Drift [dB]	0.10	-0.05
Grading Ratio	1.5	1.4	Power Scaling	Disabled	Disabled
MAIA	Y	Y	Scaling Factor [dB]		
Surface Detection	VMS + 6p	VMS + 6p	TSL Correction	No correction	No correction
Scan Method	Measured	Measured	M2/M1 [%]		55.2
			Dist 3dB Peak [mm]		9.7



Meas.21 Hotspot Plane with Bottom Edge 10mm on 165 Channel in IEEE802.11a mode with Antenna MIMO

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequenc y [MHz], Channel Number	Conversi on Factor	TSL Conduct ivity [S/m]	TSL Permitti vity	Ambient Tempera ture [°C]	Liquid Tempera ture [°C]
Flat, HSL	EDGE BOTTOM , 0.00	WLA N 5GHz	WLAN, 10062- CAE	5825.0, 165	5.04	5.42	35.6	22.4	21.4

Hardware Setup

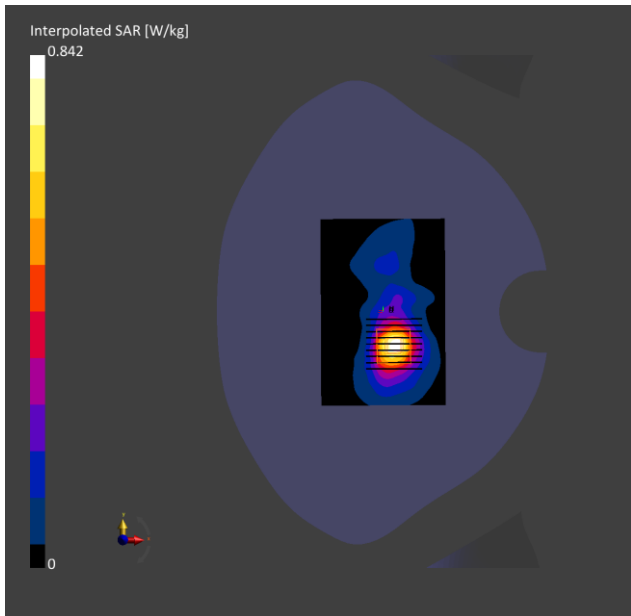
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - 1859	HBBL-600-10000 2024-10-29	EX3DV4 - SN7510, 2024-06-25	DAE4 Sn1711, 2024-03-18

Scan Setup

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

Measurement Results

	Area Scan	Zoom Scan
Date	2024-10-29	2024-10-29
psSAR1g [W/kg]	0.209	0.224
psSAR10g [W/kg]	0.077	0.082
Power Drift [dB]	-0.09	0.07
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		51.6
Dist 3dB Peak [mm]		9.7



ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ24A0296-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SZ24A0296-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “BL-SZ24A0296-AC.pdf”.

ANNEX G TUNE-UP PROCEDURE

Please refer the document “BL-SZ24A0296-AT.pdf”.

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--END OF REPORT--