FCC SAR EVALUATION REPORT

In accordance with the requirements of
FCC 47 CFR Part 2(2.1093) and
IEEE Std 1528-2013

Product Name: Petloc8

Model No.: MYLC001

Serial Model: N/A

Brand Name: Myloc8, Petloc8

Report No.: AiTSZ-240911024FW4

FCC ID: 2BLZX-MYLC001

Prepared for

Myloc8 Inc

680 Central Ave, suite 108, Cedarhurst, New York 11516, USA

Prepared by

Guangdong Asia Hongke Test Technology Limited

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TEST RESULT CERTIFICATION

Applicant's name .....: Myloc8 Inc

Address .....: 680 Central Ave, suite 108, Cedarhurst, New York 11516, USA

Manufacturer's Name .....: Myloc8 Inc

Address .....: 680 Central Ave, suite 108, Cedarhurst, New York 11516, USA

Product description

Product name .....: Petloc8

Trademark .....: Myloc8, Petloc8

Model and/or type reference ..: MYLC001

Serial Model.....: N/A

FCC 47 CFR Part 2(2.1093)

Standards .....: IEEE Std 1528-2013

Published RF exposure KDB procedures

This device described above has been tested by Guangdong Asia Hongke Test Technology Limited. In accordance with the measurement methods and procedures specified in IEEE Std 1528-2013 and KDB 865664 D01.Testing has shown that this device is capable of compliance with localized specific absorption rate (SAR) specified in FCC 47 CFR Part 2(2.1093). The test results in this report apply only to the tested sample of the stated device/equipment. Other similar device/equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

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Test Sample Number .....: N/A

Date of Test

Date (s) of performance of tests .....: Sep. 13, 2024 ~ Sep. 29, 2024

Date of Issue.....: Oct. 25, 2024

Test Result .....: **Pass**

Reviewed by: Simba Huang

Simba Huang

Approved by: Seal.chen

Seal.chen

※ ※ Revision History ※ ※

REV.	DESCRIPTION	ISSUED DATE	REMARK
Rev.1.0	Initial Test Report Release	Oct. 25, 2024	Seal.chen

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1. General Information

1.1. RF exposure limits

(A).Limits for Occupational/Controlled Exposure (W/kg)

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.4	8.0	20.0

(B).Limits for General Population/Uncontrolled Exposure (W/kg)

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.08	1.6	4.0

NOTE: ***Whole-Body SAR*** is averaged over the entire body, ***partial-body SAR*** is averaged over any 1 gram of tissue defined as a tissue volume in the shape of a cube. ***SAR for hands, wrists, feet and ankles*** is averaged over any 10 grams of tissue defined as a tissue volume in the shape of a cube.

Occupational/Controlled Environments:

Are defined as locations where there is exposure that may be incurred by people who are aware of the potential for exposure, (i.e. as a result of employment or occupation).

General Population/Uncontrolled Environments:

Are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

NOTE TRUNK LIMIT 1.6 W/kg APPLIED TO THIS EUT

1.2. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing as follows.

Band	Max SAR Value Reported(W/kg)	
	1-g Body (Separation distance of 0mm)	Max SAR Summation
LTE band 2	0.270	Body: 0.773
LTE band 4	0.387	
LTE band 5	0.265	
LTE band 7	0.380	
LTE band 12	0.226	
LTE band 17	0.275	
LTE band 25	0.462	
LTE band 26A	0.337	
LTE band 26B	0.267	
LTE band 41	0.435	
2.4GHz WLAN	0.311	

NOTE: The Max SAR Summation is calculated based on the same configuration and test position.

This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg) specified in FCC 47 CFR Part 2(2.1093), and had been tested in accordance with the measurement methods and procedures specified in IEEE Std 1528-2013 & KDB 865664 D01.

1.3. EUT Description

Device Information			
Product Name	Petloc8		
Model Name	MYLC001		
Family Model	N/A		
FCC ID	2BLZX-MYLC001		
Device Phase	Identical Prototype		
Exposure Category	General population / Uncontrolled environment		
Antenna Type	LDS Antenna		
Battery Information	DC 3.8V 530mAh		
Hardware version	VPET PCB V1.1		
Software version	N/A		
Device Operating Configurations			
Supporting Mode(s)	LTE Band 2/4/5/7/12/17/25/26A/26B/41, WLAN 2.4G, Bluetooth		
Test Modulation	LTE(QPSK/16-QAM), WLAN(DSSS/OFDM), Bluetooth(GFSK, π/4DQPSK, 8DPSK)		
Device Class	B		
Operating Frequency Range(s)	Band	Tx (MHz)	Rx (MHz)
	LTE Band 2	1850-1910	1930-1990
	LTE Band 4	1710-1755	2110-2155
	LTE Band 5	824-849	869-894
	LTE Band 7	2500-2570	2620-2690
	LTE Band 12	699-716	729-746
	LTE Band 17	704-716	734-746
	LTE Band 25	1850-1915	1930-1995
	LTE Band 26A	814-824	859-869
	LTE Band 26B	824-849	869-894
	LTE Band 41	2496-2690	
	WLAN 2.4G	2412-2462	
	Bluetooth	2402-2480	
Power Class	3, tested with power control all Max.(LTE Band 2)		
	3, tested with power control all Max.(LTE Band 4)		
	3, tested with power control all Max.(LTE Band 5)		
	3, tested with power control all Max.(LTE Band 7)		
	3, tested with power control all Max.(LTE Band 12)		
	3, tested with power control all Max.(LTE Band 17)		
	3, tested with power control all Max.(LTE Band 25)		
	3, tested with power control all Max.(LTE Band 26A)		

	3, tested with power control all Max.(LTE Band 26B)
	3, tested with power control all Max.(LTE Band 41)

1.4. Test specification(s)

FCC 47 CFR Part 2(2.1093)
IEEE Std 1528-2013
KDB 865664 D01 SAR measurement 100 MHz to 6 GHz
KDB 865664 D02 RF Exposure Reporting
KDB 447498 D01 General RF Exposure Guidance
KDB 248227 D01 802.11 Wi-Fi SAR
KDB 941225 D05 SAR for LTE Devices

1.5. Ambient Condition

Ambient temperature	20°C – 24°C
Relative Humidity	30% – 70%

1.6. Test Facility

Test Laboratory:

Guangdong Asia Hongke Test Technology Limited

B1/F, Building 11, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

The test facility is recognized, certified or accredited by the following organizations:

FCC-Registration No.: 251906 Designation Number: CN1376

Guangdong Asia Hongke Test Technology Limited has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

IC —Registration No.: 31737 CAB identifier: CN0165

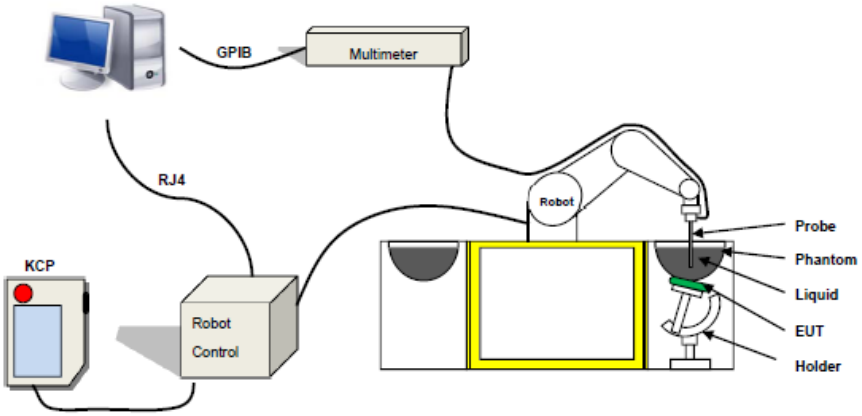
The 3m Semi-anechoic chamber of Guangdong Asia Hongke Test Technology Limited has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 31737

A2LA-Lab Cert. No.: 7133.01

Guangdong Asia Hongke Test Technology Limited has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

2. SAR Measurement System

2.1. SATIMO SAR Measurement Set-up Diagram



These measurements were performed with the automated near-field scanning system OPENSAR from SATIMO. The system is based on a high precision robot (working range: 901 mm), which positions the probes with a positional repeatability of better than ±0.03 mm. The SAR measurements were conducted with dosimetric probe (manufactured by SATIMO), designed in the classical triangular configuration and optimized for dosimetric evaluation.

The first step of the field measurement is the evaluation of the voltages induced on the probe by the device under test. Probe diode detectors are nonlinear. Below the diode compression point, the output voltage is proportional to the square of the applied E-field; above the diode compression point, it is linear to the applied E-field. The compression point depends on the diode, and a calibration procedure is necessary for each sensor of the probe.

The Keithley multimeter reads the voltage of each sensor and send these three values to the PC. The corresponding E field value is calculated using the probe calibration factors, which are stored in the working directory. This evaluation includes linearization of the diode characteristics. The field calculation is done separately for each sensor. Each component of the E field is displayed on the "Dipole Area Scan Interface" and the total E field is displayed on the "3D Interface"

2.2. Robot

The SATIMO SAR system uses the high precision robots from KUKA. For the 6-axis controller system, the robot controller version (KUKA) from KUKA is used. The KUKA robot series have many features that are important for our application:

- High precision (repeatability ±0.03 mm)
- High reliability (industrial design)
- Jerk-free straight movements
- Low ELF interference (the closed metallic construction shields against motor control fields)

2.3. Probe

This E-field detection probe is composed of three orthogonal dipoles linked to special Schottky diodes with low detection thresholds. The probe allows the measurement of electric fields in liquids such as the one defined in the IEEE and CENELEC standards.

For the measurements the Specific Dosimetric E-Field Probe EPGO 0523-403 with following specifications is used.

- Probe Length: 330 mm
- Length of Individual Dipoles: 2 mm
- Maximum external diameter: 8 mm
- Probe Tip External Diameter: 2.5 mm
- Distance between dipole/probe extremity: 1 mm
- Dynamic range: 0.01-100 W/kg
- Probe linearity: 3%
- Axial Isotropy: < 0.10 dB
- Spherical Isotropy: < 0.10 dB
- Calibration range: 150 MHz to 6 GHz for head & body simulating liquid.
- Angle between probe axis (evaluation axis) and surface normal line: less than 30°

2.3.1. E-Field Probe Calibration

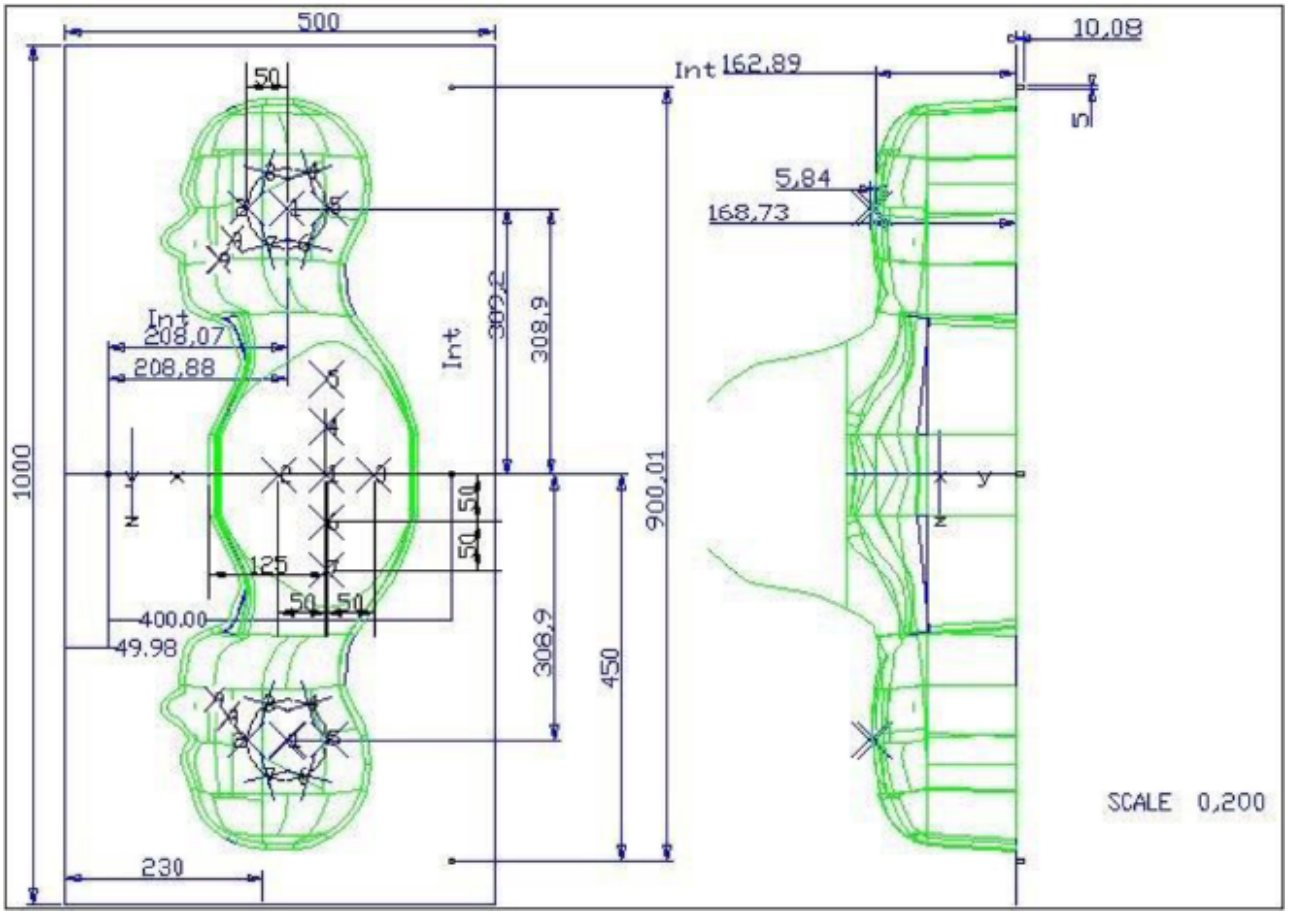
Each probe needs to be calibrated according to a dosimetric assessment procedure with accuracy better than ±10%. The spherical isotropy shall be evaluated and within ±0.25dB. The sensitivity parameters (Norm X, Norm Y, and Norm Z), the diode compression parameter (DCP) and the conversion factor (Conv F) of the probe are tested. The calibration data can be referred to appendix D of this report.

2.4. 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.

SAM

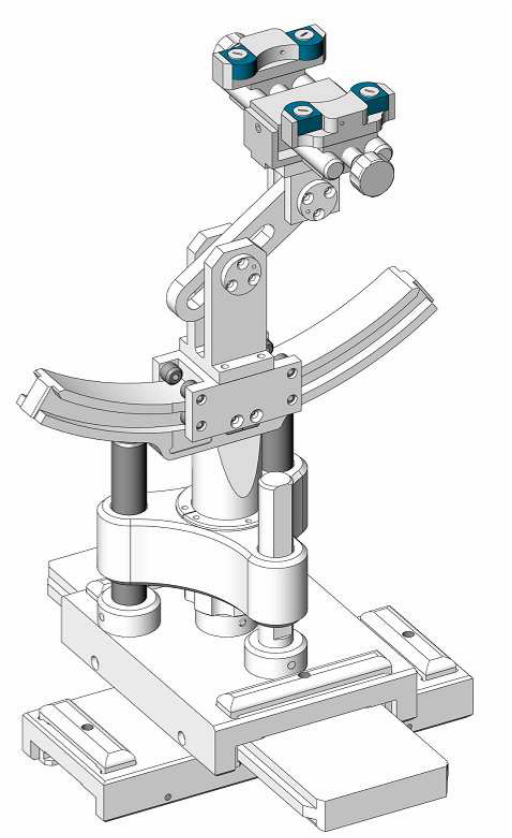
2.5. Technical Data



Left Head(mm)		Right Head(mm)		Flat Part(mm)	
2	2.02	2	2.08	1	2.09
3	2.05	3	2.06	2	2.06
4	2.07	4	2.07	3	2.08
5	2.08	5	2.08	4	2.10
6	2.05	6	2.07	5	2.10
7	2.05	7	2.05	6	2.07
8	2.07	8	2.06	7	2.07
9	2.08	9	2.06	-	-

The test, based on ultrasonic system, allows measuring the thickness with an accuracy of 10 μm.

2.6. Device Holder



The SAR in the phantom is approximately inversely proportional to the square of the distance between the source and the liquid surface. For a source at 5 mm distance, a positioning uncertainty of ± 0.5 mm would produce a SAR uncertainty of ± 20 %. Accurate device positioning is therefore crucial for accurate and repeatable measurements. The positions in which the devices must be measured are defined by the standards.

2.7. Test Equipment List

This table gives a complete overview of the SAR measurement equipment.

Devices used during the test described are marked ☒

	Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
					Last Cal.	Due Date
☒	MVG	E FIELD PROBE	SSE2	EPGO 0523-403	Sep. 11, 2024	Sep. 10, 2025
☒	MVG	750 MHz Dipole	SID750	SN 03/15 DIP 0G750-355	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	835 MHz Dipole	SID835	SN 03/15 DIP 0G835-347	Feb. 21, 2024	Feb. 20, 2027
☐	MVG	900 MHz Dipole	SID900	SN 03/15 DI P 0G900-348	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	1800 MHz Dipole	SID1800	SN 03/15 DIP 1G800-349	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	1900 MHz Dipole	SID1900	SN 03/15 DIP 1G900-350	Feb. 21, 2024	Feb. 20, 2027
☐	MVG	2000 MHz Dipole	SID2000	SN 03/15 DIP 2G000-351	Feb. 21, 2024	Feb. 20, 2027
☐	MVG	2300 MHz Dipole	SID2300	SN 03/16 DIP 2G300-358	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	2450 MHz Dipole	SID2450	SN 03/15 DIP 2G450-352	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	2600 MHz Dipole	SID2600	SN 03/15 DIP 2G600-356	Feb. 21, 2024	Feb. 20, 2027
☐	MVG	5000 MHz Dipole	SWG5500	SN 13/14 WGA 33	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	Liquid measurement Kit	SCLMP	SN 21/15 OCPG 72	NCR	NCR
☒	MVG	Power Amplifier	N.A	AMPLISAR_28/14_003	NCR	NCR
☒	KEITHLEY	Millivoltmeter	2000	4072790	NCR	NCR
☐	R&S	Universal radio communication tester	CMU200	117858	Jul. 01, 2024	Jun. 30, 2025
☒	R&S	Wideband radio communication tester	CMW500	116581	Jul. 01, 2024	Jun. 30, 2025
☒	HP	Network Analyzer	8753D	3410J01136	Jul. 01, 2024	Jun. 30, 2025
☒	Agilent	PSG Analog	E8257D	MY51110112	Jul. 01,	Jun. 30,

		Signal Generator			2024	2025
☒	Agilent	Power meter	E4419B	MY45102538	Jul. 01, 2024	Jun. 30, 2025
☒	Agilent	Power meter	E4419B	MY45102140	Jul. 01, 2024	Jun. 30, 2025
☒	Agilent	Power meter	E4419B	MY45102215	Jul. 01, 2024	Jun. 30, 2025
☒	JFW	attenuator	50FPE-006	4360846-494-4	Jul. 01, 2024	Jun. 30, 2025
☒	JFW	attenuator	50FPE-006	4360846-492-1	Jul. 01, 2024	Jun. 30, 2025
☒	JFW	attenuator	50FPE-006	4360846-490-6	Jul. 01, 2024	Jun. 30, 2025
☒	Agilent	Power sensor	E9301A	MY41495644	Jul. 01, 2024	Jun. 30, 2025
☒	Agilent	Power sensor	E9301A	US39212148	Jul. 01, 2024	Jun. 30, 2025
☒	MCLI/USA	Directional Coupler	CB11-20	0D2L51502	Jul. 17, 2024	Jul. 16, 2027
☒	MVG	SAR Phantom	SSM2	SN 24/11 SAM87	NCR	NCR
☒	MVG	Device Holder	SMPPD	SN 24/11 MSH73	NCR	NCR

3. SAR Measurement Procedures

The measurement procedures are as follows:

<Conducted power measurement>
(a) For WWAN power measurement, use base station simulator to configure EUT WWAN transmission in conducted connection with RF cable, at maximum power in each supported wireless interface and frequency band.
(b) Read the WWAN RF power level from the base station simulator.
(c) For Wi-Fi/BT power measurement, use engineering software to configure EUT Wi-Fi/BT continuously transmission, at maximum RF power in each supported wireless interface and frequency band.
(d) Connect EUT RF port through RF cable to the power meter, and measure Wi-Fi/BT output power.

<SAR measurement>
(a) Use base station simulator to configure EUT WWAN transmission in radiated connection, and engineering software to configure EUT Wi-Fi/BT continuously transmission, at maximum RF power, in the highest power channel.
(b) Place the EUT in the positions as Appendix A demonstrates.
(c) Set scan area, grid size and other setting on the OPENSAR software.
(d) Measure SAR results for the highest power channel on each testing position.
(e) Find out the largest SAR result on these testing positions of each band.
(f) Measure SAR results for other channels in worst SAR testing position if the reported SAR of highest power channel is larger than 0.8 W/kg.

According to the test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:
(a) Power reference measurement
(b) Area scan
(c) Zoom scan
(d) Power drift measurement

3.1. Power Reference

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

3.2. Area scan & Zoom scan

The area scan is a 2D scan to find the hot spot location on the DUT. The zoom scan is a 3D scan

above the hot spot to calculate the 1g and 10g SAR value.

Measurement of the SAR distribution with a grid of 8 to 16 mm * 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. 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.

From the scanned SAR distribution, identify the position of the maximum SAR value, in addition identify the positions of any local maxima with SAR values within 2 dB of the maximum value that will not be within the zoom scan of other peaks; additional peaks shall be measured only when the primary peak is within 2 dB of the SAR compliance limit (e.g., 1 W/kg for 1,6 W/kg 1 g limit, or 1,26 W/kg for 2 W/kg, 10 g limit).

Area scan & Zoom scan scan parameters extracted from FCC KDB 865664 D01 SAR measurement 100 MHz to 6 GHz.

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

3.3. Description of interpolation/extrapolation scheme

The local SAR inside the phantom is measured using small dipole sensing elements inside a probe body. The probe tip must not be in contact with the phantom surface in order to minimise measurements errors, but the highest local SAR will occur at the surface of the phantom.

An extrapolation is using to determinate this highest local SAR values. The extrapolation is based on a fourth-order least-square polynomial fit of measured data. The local SAR value is then extrapolated from the liquid surface with a 1 mm step.

The measurements have to be performed over a limited time (due to the duration of the battery) so the step of measurement is high. It could vary between 5 and 8 mm. To obtain an accurate assessment of the maximum SAR averaged over 10 grams and 1 gram requires a very fine resolution in the three dimensional scanned data array.

3.4. Volumetric Scan

The volumetric scan consists to a full 3D scan over a specific area. This 3D scan is useful form multi Tx SAR measurement. Indeed, it is possible with OpenSAR to add, point by point, several volumetric scan to calculate the SAR value of the combined measurement as it is define in the standard IEEE1528 and IEC62209.

3.5. Power Drift

All SAR testing is under the EUT install full charged battery and transmit maximum output power. In OpenSAR measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of EUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in V/m. If the power drifts more than ±5%, the SAR will be retested.

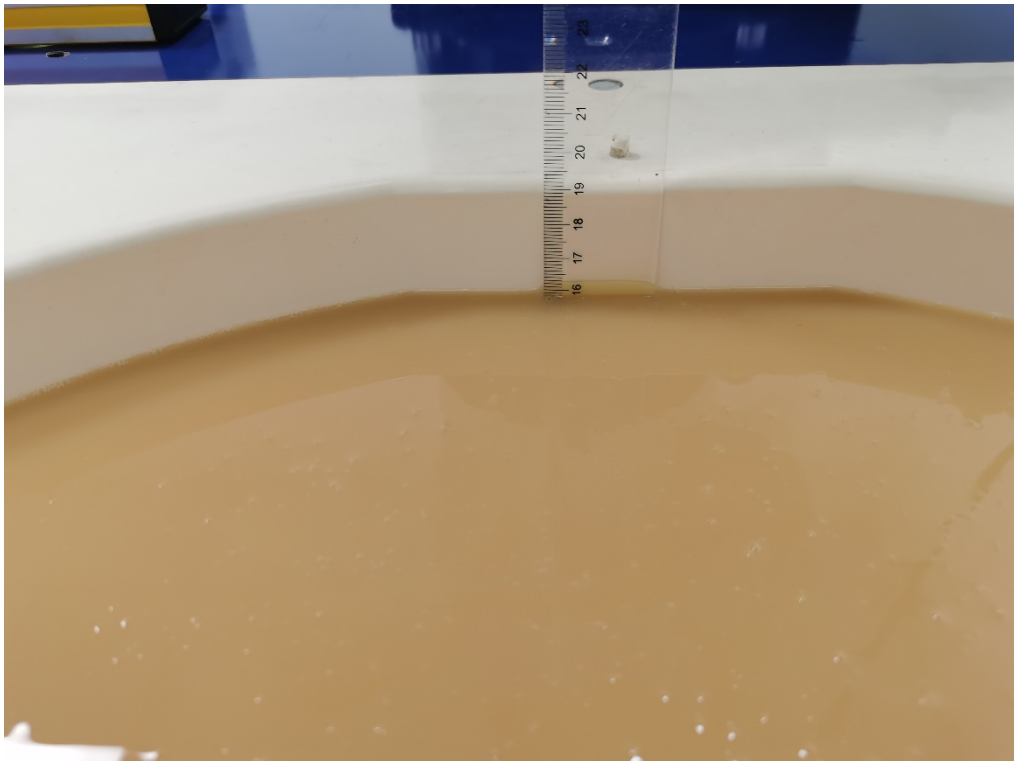
4. System Verification Procedure

4.1. Tissue Verification

The following tissue formulations are provided for reference only as some of the parameters have not been thoroughly verified. The composition of ingredients may be modified accordingly to achieve the desired target tissue parameters required for routine SAR evaluation.

Ingredients (% of weight)	Head Tissue									
Frequency Band (MHz)	750	835	900	1800	1900	2000	2450	2600	5200	5800
Water	34.40	34.40	34.40	55.36	55.36	57.87	57.87	57.87	65.53	65.53
NaCl	0.79	0.79	0.79	0.35	0.35	0.16	0.16	0.16	0.00	0.00
1,2-Propanediol	64.81	64.81	64.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Triton X-100	0.00	0.00	0.00	30.45	30.45	19.97	19.97	19.97	24.24	24.24
DGBE	0.00	0.00	0.00	13.84	13.84	22.00	22.00	22.00	10.23	10.23

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 depth from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm.



4.1.1. Tissue Dielectric Parameter Check Results

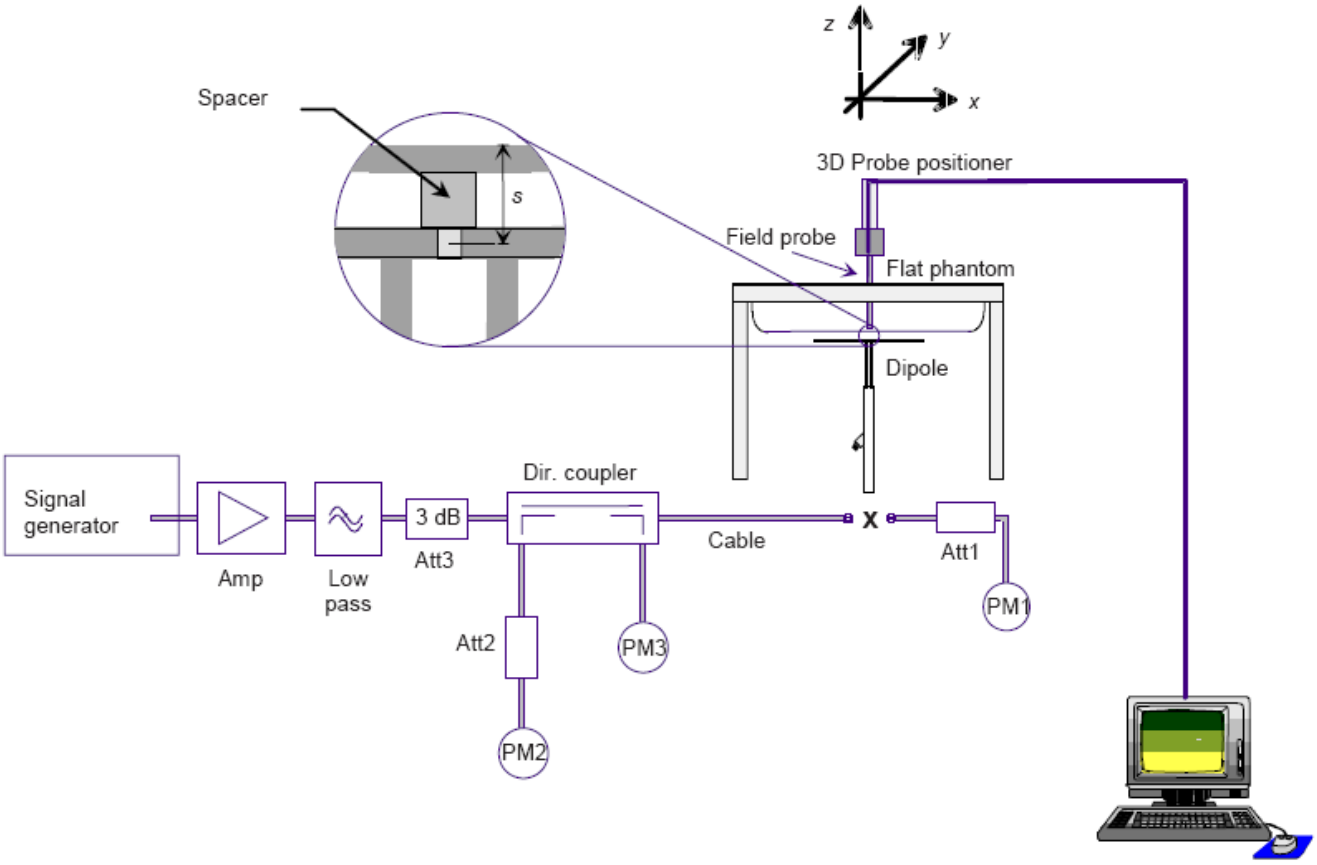
The simulating liquids should be checked at the beginning of a series of SAR measurements to determine of the dielectric parameter are within the tolerances of the specified target values. The measured conductivity and relative permittivity should be within ±5% of the target values.

Tissue Type	Measured Frequency (MHz)	Target Tissue		Measured Tissue		Liquid Temp.	Test Date
		εr (±5%)	σ (S/m) (±5%)	εr	σ (S/m)		
Head 750	750	41.96 (39.86~44.06)	0.89 (0.85~0.93)	42.56	0.91	21.6 °C	Sep. 13, 2024
Head 850	835	41.50 (39.43~43.58)	0.90 (0.86~0.95)	42.01	0.94	21.7 °C	Sep. 17, 2024
Head 1800	1800	40.00 (38.00~42.00)	1.40 (1.33~1.47)	39.61	1.41	21.6 °C	Sep. 20, 2024
Head 1900	1900	40.00 (38.00~42.00)	1.40 (1.33~1.47)	41.42	1.39	21.7 °C	Sep. 21, 2024
Head 2450	2450	39.20 (37.24~41.16)	1.80 (1.71~1.89)	40.41	1.82	21.5 °C	Sep. 24, 2024
Head 2600	2600	39.01 (37.06~40.96)	1.96 (1.86~2.06)	39.43	1.99	21.4 °C	Sep. 29, 2024

NOTE: The dielectric parameters of the tissue-equivalent liquid should be measured under similar ambient conditions and within 2 °C of the conditions expected during the SAR evaluation to satisfy protocol requirements.

4.2. System Verification Procedure

The system verification is performed for verifying the accuracy of the complete measurement system and performance of the software. The dipole is connected to the signal source consisting of signal generator and amplifier via a directional coupler, N-connector cable and adaption to SMA. It is fed with a power of 100mW (below 5GHz) or 100mW (above 5GHz). To adjust this power a power meter is used. The power sensor is connected to the cable before the system verification to measure the power at this point and do adjustments at the signal generator. At the outputs of the directional coupler both return loss as well as forward power are controlled during the system verification to make sure that emitted power at the dipole is kept constant. This can also be checked by the power drift measurement after the test (result on plot).
The system verification is shown as below picture:



4.2.1. System Verification Results

Comparing to the original SAR value provided by SATIMO, the verification data should be within its specification of ±10%. Below table shows the target SAR and measured SAR after normalized to 1W input power. The table below indicates the system performance verification can meet the variation criterion and the plots can be referred to Appendix B of this report.

System Verification	Target SAR (1W) (±10%)		Measured SAR (Normalized to 1W)		Liquid Temp.	Test Date
	1-g (W/Kg)	10-g (W/Kg)	1-g (W/Kg)	10-g (W/Kg)		
750MHz	8.60 (7.74~9.46)	5.78 (5.20~6.36)	9.30	6.21	21.6 °C	Sep. 13, 2024
835MHz	9.40 (8.46~10.34)	6.28 (5.65~6.91)	10.11	6.12	21.7 °C	Sep. 17, 2024
1800MHz	37.06 (33.35~40.77)	20.01 (18.01~22.01)	38.32	20.25	21.6 °C	Sep. 20, 2024
1900MHz	39.69 (35.72~43.66)	20.92 (18.83~23.01)	41.54	21.53	21.7 °C	Sep. 21, 2024
2450MHz	50.05 (45.05~55.06)	23.80 (21.42~26.18)	51.84	23.59	21.5 °C	Sep. 24, 2024
2600MHz	54.16 (48.74~59.58)	24.85 (22.37~27.34)	54.33	25.23	21.4 °C	Sep. 29, 2024

5. SAR measurement variabilit

Per KDB865664 D01 SAR measurement 100 MHz to 6 GHz, SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. The 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.

1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.

2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.

3) Perform a second repeated measurement only 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 (~ 10% from the 1-g SAR limit).

4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

6. SAR Measurement Uncertainty

Per KDB865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. The equivalent ratio (1.5/1.6) is applied to extremity and occupational exposure conditions.

7. RF Exposure Positions

7.1. Generic device

The SAR evaluation shall be performed for surface of the DUT that are accessible during intended use, as indicated in Figure 7.1. Adjust the distance between the device surface and the flat phantom to 0mm.

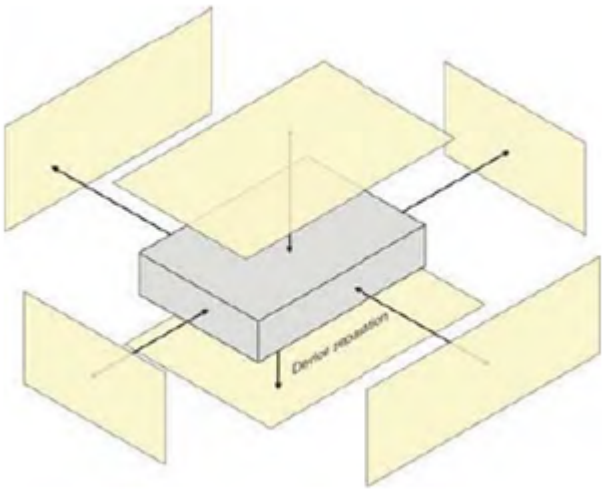


Figure 7.1 – Test positions for generic device

8. RF Output Power

8.1. LTE Conducted Power

1. The following tests were conducted according to the test requirements outlines in 3GPP TS 36.521-1 specification. A summary of these configurations are illustrated below:

Test Parameters for Channel Bandwidths				
	Downlink Configuration	Uplink Configuration		
Ch BW	N/A for Max UE output power testing	Mod'n	RB allocation	
			FDD	TDD
1.4MHz		QPSK	1	1
1.4MHz		QPSK	5	5
3MHz		QPSK	1	1
3MHz		QPSK	4	4
5MHz		QPSK	1	1
5MHz		QPSK	8	8
10MHz		QPSK	1	1
10MHz		QPSK	12	12
15MHz		QPSK	1	1
15MHz		QPSK	16	16
20MHz		QPSK	1	1
20MHz		QPSK	18	18

Note 1: Test Channel Bandwidths are checked separately for each E-UTRA band, the applicable channel bandwidths are specified in Table 5.4.2.1-1.

Note 2: For E-UTRA bands not applied with Note 2 in Table 6.2.2.3-1:

- The 1 RB allocation shall be tested at RB#0 for low and mid range, RB #max for high range test frequency.
- The RBstart of non-1RB allocation shall be RB #0 for low and mid range, RB# (max +1 - RB allocation) for high range test frequency.

Note 3: For E-UTRA bands applied with Note 2 in Table 6.2.2.3-1:

- If the test channel bandwidth is larger than 4MHz, then the 1 RB allocation shall be tested at both RB #0 and RB #max.
- If the test channel bandwidth is smaller or equal to 4MHz, then the 1 RB allocation shall be tested at RB #0.
- If the test channel bandwidth = (FUL_high - FUL_low) specified by the operating band, then only one frequency range shall be tested and the 1 RB allocation shall be tested at RB #0, RB #$\lceil N_{RB}^{UL}/2 \rceil$ and RB #max.
- For non-1RB allocation, test frequency is middle range, and the RBstart shall be RB #0.

2. LTE Conducted Power Results

LTE output list

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18607/1850.7	18900/1880	19193/1909.3
LTE Band 2	1.4MHz	QPSK	1	0	21.00	20.39	20.70	20.73
			1	2	21.00	20.40	20.67	20.70
			1	5	21.00	20.35	20.68	20.69
			3	0	21.50	20.91	21.20	21.17
			3	1	21.50	20.94	21.21	21.17
			3	2	21.50	20.93	21.16	21.17
			6	0	20.50	19.95	20.19	20.07
		16QAM	1	0	20.50	19.49	20.03	19.61
			1	2	20.50	19.46	20.05	19.61
			1	5	20.50	19.48	19.97	19.61
			3	0	20.50	20.03	20.21	19.97
			3	1	20.50	20.00	20.16	20.02
			3	2	20.50	20.00	20.18	20.00
			6	0	19.50	18.99	19.20	19.13
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18615/1851.5	18900/1880	19185/1908.5
LTE Band 2	3MHz	QPSK	1	0	21.00	20.55	20.79	20.60
			1	7	21.00	20.56	20.79	20.57
			1	14	21.00	20.56	20.78	20.62
			8	0	20.50	19.99	20.22	20.14
			8	4	20.50	19.99	20.19	20.16
			8	7	20.50	19.99	20.16	20.16
			15	0	20.50	19.97	20.19	20.17
		16QAM	1	0	20.00	19.84	19.66	19.67
			1	7	20.00	19.89	19.67	19.65
			1	14	20.00	19.94	19.68	19.69
			8	0	19.50	19.06	19.17	19.17
			8	4	19.50	19.04	19.12	19.18
			8	7	19.50	19.03	19.14	19.17
			15	0	19.50	19.03	19.19	19.11
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18625/1852.5	18900/1880	19175/1907.5
LTE Band 2	5MHz	QPSK	1	0	21.00	20.56	20.80	20.70
			1	12	21.00	20.55	20.75	20.68
			1	24	21.00	20.58	20.79	20.73
			12	0	20.50	20.01	20.27	20.22
			12	6	20.50	20.03	20.21	20.20
			12	11	20.50	20.02	20.21	20.14
			25	0	20.50	20.03	20.27	20.19
		16QAM	1	0	20.50	19.60	19.69	20.09
			1	12	20.50	19.62	19.67	20.05
			1	24	20.50	19.68	19.70	20.09
			12	0	19.50	19.00	19.30	19.22

			12	6	19.50	19.01	19.26	19.17
			12	11	19.50	19.03	19.23	19.15
			25	0	19.50	18.98	19.33	19.17
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18650/1855	18900/1880	19150/1905
LTE Band 2	10MHz	QPSK	1	0	21.00	20.61	20.68	20.72
			1	24	21.00	20.67	20.71	20.76
			1	49	21.00	20.66	20.68	20.73
			25	0	20.50	20.00	20.30	20.27
			25	12	20.50	20.05	20.22	20.18
			25	24	20.50	20.13	20.23	20.18
			50	0	20.50	20.12	20.26	20.23
		16QAM	1	0	20.50	19.45	19.71	20.04
			1	24	20.50	19.53	19.78	20.11
			1	49	20.50	19.54	19.73	20.13
			25	0	19.50	19.05	19.31	19.30
			25	12	19.50	19.10	19.29	19.18
			25	24	19.50	19.18	19.26	19.18
			50	0	19.50	19.09	19.24	19.20
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18675/1857.5	18900/1880	19125/1902.5
LTE Band 2	15MHz	QPSK	1	0	21.00	20.37	20.69	20.74
			1	37	21.00	20.49	20.72	20.77
			1	74	21.00	20.59	20.66	20.77
			36	0	20.50	19.90	20.18	20.17
			36	18	20.50	20.01	20.19	20.20
			36	37	20.50	20.06	20.13	20.12
			75	0	20.50	20.06	20.23	20.15
		16QAM	1	0	20.00	19.45	19.65	19.63
			1	37	20.00	19.58	19.69	19.64
			1	74	20.00	19.66	19.64	19.64
			36	0	19.50	18.95	19.22	19.21
			36	18	19.50	18.98	19.20	19.17
			36	37	19.50	19.08	19.15	19.16
			75	0	19.50	19.03	19.23	19.17
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18700/1860	18900/1880	19100/1900
LTE Band 2	20MHz	QPSK	1	0	21.00	20.45	20.68	20.57
			1	49	21.00	20.65	20.77	20.69
			1	99	21.00	20.68	20.68	20.65
			50	0	20.50	19.92	20.28	20.16
			50	24	20.50	20.08	20.25	20.20
			50	49	20.50	20.14	20.25	20.06
			100	0	20.50	20.02	20.25	20.17
		16QAM	1	0	20.50	19.44	19.56	19.96
			1	49	20.50	19.63	19.62	20.06
			1	99	20.50	19.68	19.51	20.04
			50	0	19.50	18.89	19.22	19.17

			50	24	19.50	19.04	19.21	19.19
			50	49	19.50	19.13	19.18	19.06
			100	0	19.50	19.01	19.23	19.11

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		19957/1710.7	20175/1732.5	20393/1754.3
LTE Band 4	1.4MHz	QPSK	1	0	21.00	20.81	20.77	20.70
			1	2	21.00	20.80	20.77	20.70
			1	5	21.00	20.80	20.77	20.69
			3	0	21.00	20.80	20.76	20.68
			3	1	21.00	20.78	20.75	20.69
			3	2	21.00	20.80	20.75	20.69
			6	0	21.00	20.79	20.75	20.69
		16QAM	1	0	21.00	20.80	20.75	20.68
			1	2	21.00	20.79	20.80	20.70
			1	5	21.00	20.80	20.76	20.67
			3	0	21.00	20.81	20.76	20.67
			3	1	21.00	20.80	20.75	20.70
			3	2	21.00	20.80	20.75	20.69
			6	0	21.00	20.80	20.76	20.69
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		19965/1711.5	20175/1732.5	20385/1753.5
LTE Band 4	3MHz	QPSK	1	0	21.50	21.26	21.34	21.24
			1	7	21.50	21.17	21.30	21.31
			1	14	21.50	21.18	21.28	21.29
			8	0	21.00	20.71	20.75	20.71
			8	4	21.00	20.71	20.72	20.73
			8	7	21.00	20.75	20.70	20.72
			15	0	21.00	20.74	20.71	20.72
		16QAM	1	0	21.00	20.35	20.61	20.12
			1	7	21.00	20.26	20.64	20.18
			1	14	21.00	20.29	20.66	20.18
			8	0	20.00	19.72	19.79	19.68
			8	4	20.00	19.73	19.77	19.67
			8	7	20.00	19.74	19.74	19.68
			15	0	20.00	19.66	19.73	19.72
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		19975/1712.5	20175/1732.5	20375/1752.5
LTE Band 4	5MHz	QPSK	1	0	21.50	21.41	21.38	21.27
			1	12	21.50	21.25	21.29	21.21
			1	24	21.50	21.35	21.36	21.32
			12	0	21.00	20.75	20.77	20.75
			12	6	21.00	20.76	20.76	20.71
			12	11	21.00	20.75	20.77	20.72
			25	0	21.00	20.76	20.79	20.76
		16QAM	1	0	21.00	20.49	20.31	20.68
			1	12	21.00	20.34	20.22	20.60
			1	24	21.00	20.45	20.32	20.71

			12	0	20.00	19.74	19.82	19.75
			12	6	20.00	19.72	19.78	19.72
			12	11	20.00	19.73	19.80	19.69
			25	0	20.00	19.72	19.86	19.72
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20000/1715	20175/1732.5	20350/1750
LTE Band 4	10MHz	QPSK	1	0	21.50	21.29	21.38	21.32
			1	24	21.50	21.28	21.34	21.25
			1	49	21.50	21.31	21.33	21.36
			25	0	21.00	20.69	20.74	20.72
			25	12	21.00	20.77	20.78	20.67
			25	24	21.00	20.76	20.80	20.71
			50	0	21.00	20.74	20.81	20.71
		16QAM	1	0	21.00	20.36	20.74	20.17
			1	24	21.00	20.37	20.68	20.12
			1	49	21.00	20.38	20.72	20.24
			25	0	20.00	19.71	19.76	19.75
			25	12	20.00	19.77	19.78	19.70
			25	24	20.00	19.78	19.80	19.71
			50	0	20.00	19.69	19.76	19.70
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20025/1717.5	20175/1732.5	20325/1747.5
LTE Band 4	15MHz	QPSK	1	0	21.50	21.36	21.15	21.18
			1	37	21.50	21.34	21.20	21.18
			1	74	21.50	21.27	21.11	21.17
			36	0	21.00	20.71	20.66	20.68
			36	18	21.00	20.76	20.76	20.63
			36	37	21.00	20.73	20.77	20.62
			75	0	21.00	20.77	20.73	20.69
		16QAM	1	0	20.50	20.20	20.27	20.13
			1	37	20.50	20.19	20.29	20.16
			1	74	20.50	20.12	20.17	20.17
			36	0	20.00	19.72	19.69	19.70
			36	18	20.00	19.72	19.73	19.67
			36	37	20.00	19.74	19.75	19.63
			75	0	20.00	19.72	19.73	19.68
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20050/1720	20175/1732.5	20300/1745
LTE Band 4	20MHz	QPSK	1	0	21.50	21.31	21.20	21.16
			1	49	21.50	21.38	21.30	21.19
			1	99	21.50	21.31	21.18	21.20
			50	0	21.00	20.72	20.72	20.68
			50	24	21.00	20.77	20.77	20.71
			50	49	21.00	20.77	20.83	20.58
			100	0	21.00	20.75	20.76	20.64
		16QAM	1	0	21.00	20.28	20.07	20.56
			1	49	21.00	20.34	20.15	20.57
			1	99	21.00	20.30	20.04	20.60

			50	0	20.00	19.68	19.70	19.64
			50	24	20.00	19.72	19.71	19.66
			50	49	20.00	19.74	19.76	19.55
			100	0	20.00	19.72	19.75	19.60

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20407/824.7	20525/836.5	20643/848.3
LTE Band 5	1.4MHz	QPSK	1	0	24.00	23.03	23.58	23.55
			1	2	24.00	23.03	23.63	23.47
			1	5	24.00	23.03	23.57	23.57
			3	0	24.50	23.03	24.02	24.03
			3	1	24.50	23.02	24.08	24.03
			3	2	24.50	23.02	24.06	24.04
			6	0	23.50	23.01	22.98	22.92
		16QAM	1	0	23.50	23.04	22.45	22.47
			1	2	23.50	23.02	22.55	22.49
			1	5	23.50	23.04	22.48	22.47
			3	0	23.50	23.03	22.84	22.81
			3	1	23.50	23.03	22.90	22.83
			3	2	23.50	23.05	22.89	22.84
			6	0	23.50	23.03	22.01	21.96
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20415/825.5	20525/836.5	20635/847.5
LTE Band 5	3MHz	QPSK	1	0	24.00	23.58	23.58	23.35
			1	7	24.00	23.61	23.62	23.29
			1	14	24.00	23.64	23.60	23.40
			8	0	23.50	23.02	22.97	22.91
			8	4	23.50	23.04	23.00	22.91
			8	7	23.50	23.04	23.01	22.90
			15	0	23.50	23.04	23.03	22.90
		16QAM	1	0	23.00	22.91	22.46	22.39
			1	7	23.00	22.91	22.52	22.43
			1	14	23.00	22.96	22.50	22.45
			8	0	22.50	22.06	21.96	21.93
			8	4	22.50	22.09	21.94	21.90
			8	7	22.50	22.07	21.99	21.90
			15	0	22.50	22.06	22.08	21.84
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20425/826.5	20525/836.5	20625/846.5
LTE Band 5	5MHz	QPSK	1	0	24.00	23.64	23.53	23.52
			1	12	24.00	23.55	23.48	23.46
			1	24	24.00	23.59	23.53	23.60
			12	0	23.50	23.03	22.96	22.98
			12	6	23.50	23.03	22.97	22.95
			12	11	23.50	23.01	23.00	22.88
			25	0	23.50	23.04	22.98	22.93
		16QAM	1	0	23.00	22.52	22.91	22.57
			1	12	23.00	22.45	22.86	22.52
			1	24	23.00	22.51	22.89	22.68

			12	0	22.50	22.09	21.95	21.94
			12	6	22.50	22.05	21.96	21.94
			12	11	22.50	22.06	21.99	21.85
			25	0	22.50	22.13	21.96	21.88
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20450/829	20525/836.5	20600/844
LTE Band 5	10MHz	QPSK	1	0	24.00	23.53	23.59	23.54
			1	24	24.00	23.50	23.56	23.49
			1	49	24.00	23.46	23.51	23.60
			25	0	23.50	23.05	22.95	22.91
			25	12	23.50	22.99	22.99	22.91
			25	24	23.50	22.99	23.02	22.85
			50	0	23.50	23.05	23.03	22.92
		16QAM	1	0	23.00	22.56	22.95	22.43
			1	24	23.00	22.50	22.86	22.36
			1	49	23.00	22.49	22.87	22.48
			25	0	22.50	22.07	21.99	21.95
			25	12	22.50	22.02	22.00	21.93
			25	24	22.50	22.02	22.03	21.89
			50	0	22.50	22.02	22.00	21.88

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20775/2502.5	21100/2535	21425/2567.5
LTE Band 7	5MHz	QPSK	1	0	23.50	23.25	22.77	22.61
			1	12	23.50	23.23	22.76	22.64
			1	24	23.50	23.23	22.75	22.68
			12	0	22.50	22.24	22.07	22.17
			12	6	22.50	22.25	22.06	22.11
			12	11	22.50	22.20	22.04	22.09
			25	0	22.50	22.27	22.09	22.12
		16QAM	1	0	22.50	22.42	21.45	21.66
			1	12	22.50	22.20	21.44	21.70
			1	24	22.50	22.10	21.47	21.74
			12	0	21.50	21.29	21.15	21.13
			12	6	21.50	21.26	21.10	21.12
			12	11	21.50	21.22	21.02	21.09
			25	0	21.50	21.26	21.12	21.17
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20800/2505	21100/2535	21400/2565
LTE Band 7	10MHz	QPSK	1	0	23.00	22.74	22.54	22.43
			1	24	23.00	22.77	22.59	22.55
			1	49	23.00	22.77	22.56	22.59
			25	0	22.50	22.25	22.15	22.11
			25	12	22.50	22.25	22.09	22.10
			25	24	22.50	22.29	22.10	22.06
			50	0	22.50	22.29	22.15	22.11
		16QAM	1	0	22.50	22.22	21.57	21.65
			1	24	22.50	22.26	21.61	21.75
			1	49	22.50	22.22	21.55	21.78

			25	0	21.50	21.30	21.20	21.14
			25	12	21.50	21.29	21.18	21.13
			25	24	21.50	21.33	21.18	21.08
			50	0	21.50	21.31	21.14	21.09
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20825/2507.5	21100/2535	21375/2562.5
LTE Band 7	15MHz	QPSK	1	0	23.00	22.66	22.45	22.37
			1	37	23.00	22.72	22.52	22.52
			1	74	23.00	22.61	22.42	22.52
			36	0	22.50	22.19	22.07	22.04
			36	18	22.50	22.17	22.04	22.05
			36	37	22.50	22.21	22.03	22.02
			75	0	22.50	22.17	22.02	22.02
		16QAM	1	0	22.50	22.17	21.87	21.57
			1	37	22.50	22.24	21.90	21.73
			1	74	22.50	22.09	21.80	21.75
			36	0	21.50	21.25	21.08	21.06
			36	18	21.50	21.21	21.06	21.09
			36	37	21.50	21.21	20.98	21.06
			75	0	21.50	21.21	21.03	21.06
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20850/2510	21100/2535	21350/2560
LTE Band 7	20MHz	QPSK	1	0	23.00	22.55	22.39	22.25
			1	49	23.00	22.67	22.55	22.47
			1	99	23.00	22.57	22.41	22.47
			50	0	22.50	22.17	22.13	22.02
			50	24	22.50	22.22	22.15	22.07
			50	49	22.50	22.19	22.03	21.98
			100	0	22.50	22.20	22.09	21.99
		16QAM	1	0	22.50	21.79	21.62	21.89
			1	49	22.50	21.91	21.82	22.12
			1	99	22.50	21.81	21.69	22.15
			50	0	21.50	21.17	21.10	21.00
			50	24	21.50	21.16	21.13	21.06
			50	49	21.50	21.22	21.00	21.00
			100	0	21.50	21.19	21.06	20.98

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23017/699.7	23095/707.5	23173/715.3
LTE Band 12	1.4MHz	QPSK	1	0	23.00	22.60	22.72	22.66
			1	2	23.00	22.58	22.75	22.67
			1	5	23.00	22.58	22.73	22.66
			3	0	23.00	22.58	22.73	22.65
			3	1	23.00	22.56	22.72	22.67
			3	2	23.00	22.56	22.72	22.67
			6	0	23.00	22.56	22.71	22.67
		16QAM	1	0	23.00	22.55	22.72	22.68
			1	2	23.00	22.56	22.70	22.68
			1	5	23.00	22.56	22.70	22.66

			3	0	23.00	22.55	22.70	22.66
			3	1	23.00	22.57	22.70	22.66
			3	2	23.00	22.54	22.70	22.65
			6	0	23.00	22.55	22.70	22.65
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23025/700.5	23095/707.5	23165/714.5
LTE Band 12	3MHz	QPSK	1	0	23.50	23.09	23.14	23.20
			1	7	23.50	23.09	23.18	23.16
			1	14	23.50	23.12	23.26	23.06
			8	0	23.00	22.54	22.64	22.72
			8	4	23.00	22.53	22.66	22.69
			8	7	23.00	22.53	22.66	22.62
			15	0	23.00	22.54	22.65	22.69
		16QAM	1	0	23.00	22.59	22.18	22.47
			1	7	23.00	22.59	22.24	22.40
			1	14	23.00	22.60	22.26	22.28
			8	0	22.00	21.81	21.70	21.79
			8	4	22.00	21.81	21.73	21.76
			8	7	22.00	21.82	21.72	21.71
			15	0	22.00	21.69	21.68	21.72
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23035/701.5	23095/707.5	23155/713.5
LTE Band 12	5MHz	QPSK	1	0	24.00	23.24	23.23	23.50
			1	12	24.00	23.13	23.19	23.39
			1	24	24.00	23.35	23.36	23.44
			12	0	23.00	22.57	22.68	22.85
			12	6	23.00	22.56	22.70	22.77
			12	11	23.00	22.54	22.76	22.70
			25	0	23.00	22.57	22.73	22.77
		16QAM	1	0	23.00	22.30	22.51	22.27
			1	12	23.00	22.21	22.45	22.12
			1	24	23.00	22.43	22.61	22.20
			12	0	22.00	21.62	21.70	21.96
			12	6	22.00	21.65	21.72	21.85
			12	11	22.00	21.61	21.76	21.72
			25	0	22.00	21.70	21.73	21.91
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23060/704	23095/707.5	23130/711
LTE Band 12	10MHz	QPSK	1	0	23.50	23.12	23.15	23.26
			1	24	23.50	23.20	23.18	23.32
			1	49	23.50	23.38	23.39	23.31
			25	0	23.00	22.62	22.70	22.68
			25	12	23.00	22.63	22.70	22.78
			25	24	23.00	22.73	22.78	22.62
			50	0	23.00	22.69	22.76	22.68
		16QAM	1	0	23.00	22.21	22.35	22.75
			1	24	23.00	22.18	22.38	22.82
			1	49	23.00	22.40	22.57	22.79
			25	0	22.00	21.75	21.74	21.74
			25	12	22.00	21.74	21.73	21.92

			25	24	22.00	21.79	21.91	21.77
			50	0	22.00	21.74	21.75	21.76

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23755/706.5	23790/710	23825/713.5
LTE Band 17	5MHz	QPSK	1	0	23.50	23.28	23.33	23.29
			1	12	23.50	23.30	23.27	23.26
			1	24	23.50	23.46	23.36	23.27
			12	0	23.00	22.69	22.67	22.86
			12	6	23.00	22.63	22.70	22.81
			12	11	23.00	22.71	22.72	22.67
			25	0	23.00	22.66	22.68	22.80
		16QAM	1	0	23.00	22.04	22.39	22.58
			1	12	23.00	22.03	22.31	22.50
			1	24	23.00	22.17	22.43	22.50
			12	0	22.00	21.67	21.65	21.93
			12	6	22.00	21.64	21.76	21.91
			12	11	22.00	21.68	21.80	21.78
			25	0	22.00	21.69	21.81	21.87
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23780/709	23790/710	23800/711
LTE Band 17	10MHz	QPSK	1	0	23.50	23.09	23.14	23.18
			1	24	23.50	23.19	23.29	23.31
			1	49	23.50	23.33	23.39	23.32
			25	0	23.00	22.66	22.67	22.70
			25	12	23.00	22.69	22.72	22.75
			25	24	23.00	22.71	22.64	22.62
			50	0	23.00	22.72	22.70	22.68
		16QAM	1	0	23.00	22.29	22.64	22.21
			1	24	23.00	22.36	22.77	22.31
			1	49	23.00	22.49	22.85	22.33
			25	0	22.00	21.69	21.73	21.78
			25	12	22.00	21.81	21.85	21.89
			25	24	22.00	21.82	21.78	21.81
			50	0	22.00	21.81	21.76	21.73

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26047/1850.7	26365/1882.5	26683/1914.3
LTE Band 25	1.4MHz	QPSK	1	0	24.50	23.88	24.02	24.03
			1	2	24.50	23.91	24.04	24.05
			1	5	24.50	23.88	24.06	24.04
			3	0	25.00	24.39	24.56	24.65
			3	1	25.00	24.41	24.55	24.35
			3	2	25.00	24.41	24.53	24.13
			6	0	24.00	23.40	23.60	23.63
		16QAM	1	0	23.50	22.90	23.24	23.16
			1	2	23.50	22.91	23.23	23.14
			1	5	23.50	22.91	23.25	23.19

			3	0	24.00	23.42	23.57	23.63
			3	1	24.00	23.40	23.55	23.62
			3	2	24.00	23.40	23.54	23.63
			6	0	23.00	22.30	22.66	22.55
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26055/1851.5	26365/1882.5	26675/1913.5
LTE Band 25	3MHz	QPSK	1	0	24.50	23.98	24.16	24.04
			1	7	24.50	23.96	24.16	24.03
			1	14	24.50	23.95	24.16	23.80
			8	0	24.00	23.39	23.65	23.72
			8	4	24.00	23.41	23.61	23.69
			8	7	24.00	23.45	23.60	23.64
			15	0	24.00	23.39	23.61	23.69
		16QAM	1	0	23.50	23.46	23.19	23.33
			1	7	23.50	23.49	23.20	23.34
			1	14	23.50	23.49	23.20	23.36
			8	0	23.00	22.58	22.70	22.66
			8	4	23.00	22.57	22.68	22.64
			8	7	23.00	22.59	22.67	22.62
			15	0	23.00	22.49	22.64	22.63
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26065/1852.5	26365/1882.5	26665/1912.5
LTE Band 25	5MHz	QPSK	1	0	24.50	24.00	24.34	24.22
			1	12	24.50	24.01	24.30	24.23
			1	24	24.50	24.07	24.31	23.62
			12	0	24.00	23.48	23.69	23.70
			12	6	24.00	23.46	23.66	23.67
			12	11	24.00	23.44	23.65	23.53
			25	0	24.00	23.48	23.67	23.63
		16QAM	1	0	23.50	23.25	23.03	23.26
			1	12	23.50	23.25	23.02	23.22
			1	24	23.50	23.30	23.02	23.26
			12	0	23.00	22.46	22.68	22.66
			12	6	23.00	22.51	22.65	22.69
			12	11	23.00	22.48	22.62	22.56
			25	0	23.00	22.48	22.70	22.66
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26090/1855	26365/1882.5	26640/1910
LTE Band 25	10MHz	QPSK	1	0	24.50	23.92	24.17	24.11
			1	24	24.50	24.00	24.18	24.15
			1	49	24.50	23.98	24.14	23.90
			25	0	24.00	23.43	23.69	23.66
			25	12	24.00	23.51	23.66	23.67
			25	24	24.00	23.59	23.72	23.59
			50	0	24.00	23.56	23.72	23.64
		16QAM	1	0	24.00	23.07	23.65	23.08
			1	24	24.00	23.18	23.69	23.18
			1	49	24.00	23.18	23.68	23.19

			25	0	23.00	22.47	22.76	22.78
			25	12	23.00	22.54	22.72	22.74
			25	24	23.00	22.61	22.76	22.67
			50	0	23.00	22.53	22.72	22.64
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26115/1857.5	26365/1882.5	26615/1907.5
LTE Band 25	15MHz	QPSK	1	0	24.50	23.84	24.09	24.02
			1	37	24.50	24.00	24.15	23.99
			1	74	24.50	24.04	24.05	24.05
			36	0	24.00	23.35	23.62	23.63
			36	18	24.00	23.48	23.58	23.60
			36	37	24.00	23.55	23.61	23.58
			75	0	24.00	23.50	23.67	23.62
		16QAM	1	0	24.00	23.03	23.64	23.43
			1	37	24.00	23.18	23.71	23.46
			1	74	24.00	23.21	23.62	23.40
			36	0	23.00	22.39	22.66	22.59
			36	18	23.00	22.49	22.68	22.62
			36	37	23.00	22.61	22.63	22.60
			75	0	23.00	22.48	22.64	22.56
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26140/1860	26365/1882.5	26590/1905
LTE Band 25	20MHz	QPSK	1	0	24.50	23.80	24.10	24.02
			1	49	24.50	24.05	24.17	24.12
			1	99	24.50	24.07	24.11	24.06
			50	0	24.00	23.37	23.68	23.71
			50	24	24.00	23.55	23.71	23.69
			50	49	24.00	23.60	23.76	23.58
			100	0	24.00	23.46	23.66	23.65
		16QAM	1	0	24.00	23.06	23.35	23.61
			1	49	24.00	23.27	23.43	23.70
			1	99	24.00	23.28	23.35	23.70
			50	0	23.00	22.36	22.66	22.71
			50	24	23.00	22.51	22.69	22.66
			50	49	23.00	22.56	22.69	22.55
			100	0	23.00	22.46	22.67	22.62

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26697/814.7	26740/819	26783/823.3
LTE Band 26a	1.4MHz	QPSK	1	0	24.00	23.81	23.77	23.85
			1	2	24.00	23.71	23.78	23.82
			1	5	24.00	23.73	23.69	23.87
			3	0	24.00	23.77	23.89	23.87
			3	1	24.00	23.85	23.83	23.94
			3	2	24.00	23.87	23.87	23.86
			6	0	23.00	22.78	22.83	22.81
		16QAM	1	0	23.50	23.14	22.64	22.82
			1	2	23.50	22.96	22.46	23.21

			1	5	23.50	22.94	22.49	22.90
			3	0	23.00	22.79	22.98	22.65
			3	1	23.00	22.91	22.94	22.92
			3	2	23.00	22.91	22.95	22.93
			6	0	22.00	21.89	21.85	21.85
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26705/818.5	26740/819	26775/822.5
LTE Band 26a	3MHz	QPSK	1	0	24.00	23.73	23.83	23.93
			1	7	24.00	23.92	23.81	23.90
			1	14	24.00	23.84	23.96	23.75
			8	0	23.00	22.78	22.81	22.82
			8	4	23.00	22.81	22.80	22.83
			8	7	23.00	22.78	22.83	22.82
			15	0	23.00	22.81	22.83	22.87
		16QAM	1	0	23.50	22.80	22.78	23.03
			1	7	23.50	23.16	22.86	22.67
			1	14	23.50	22.80	23.23	22.49
			8	0	22.00	21.73	21.80	21.87
			8	4	22.00	21.85	21.79	21.82
			8	7	22.00	21.76	21.89	21.79
			15	0	22.00	21.86	21.78	21.88
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26715/816.5	26740/819	26765/821.5
LTE Band 26a	5MHz	QPSK	1	0	24.00	23.91	23.87	23.86
			1	12	24.00	23.74	23.85	23.74
			1	24	24.00	23.86	23.72	23.72
			12	0	23.00	22.82	22.81	22.84
			12	6	23.00	22.79	22.81	22.80
			12	11	23.00	22.79	22.83	22.83
			25	0	23.00	22.80	22.83	22.87
		16QAM	1	0	23.50	23.13	22.70	22.42
			1	12	23.50	22.65	23.04	22.61
			1	24	23.50	22.86	22.65	22.87
			12	0	22.00	21.82	21.84	21.88
			12	6	22.00	21.80	21.79	21.82
			12	11	22.00	21.81	21.86	21.82
			25	0	22.00	21.80	21.81	21.93
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		/	26740/819	/
LTE Band 26a	10MHz	QPSK	1	0	24.00	/	23.26	/
			1	24	24.00	/	23.61	/
			1	49	24.00	/	23.51	/
			25	0	23.00	/	22.84	/
			25	12	23.00	/	22.84	/
			25	24	23.00	/	22.92	/
			50	0	23.00	/	22.92	/
		16QAM	1	0	23.50	/	22.54	/
			1	24	23.50	/	23.02	/
			1	49	23.50	/	22.75	/
			25	0	22.00	/	21.89	/

			25	12	22.00	/	21.88	/
			25	24	22.00	/	21.94	/
			50	0	22.00	/	21.90	/

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26797/824.7	26915/836.5	27033/848.3
LTE Band 26b	1.4MHz	QPSK	1	0	24.00	23.82	23.81	23.74
			1	2	24.00	23.83	23.77	23.71
			1	5	24.00	23.90	23.66	23.77
			3	0	24.00	23.90	23.84	23.85
			3	1	24.00	23.87	23.89	23.84
			3	2	24.00	22.90	23.80	23.85
			6	0	23.00	22.88	22.77	22.78
		16QAM	1	0	23.50	23.01	22.44	22.80
			1	2	23.50	23.25	22.66	22.75
			1	5	23.50	23.07	22.47	23.12
			3	0	23.00	22.99	22.93	22.85
			3	1	23.00	22.83	23.00	22.63
			3	2	23.00	22.99	22.85	22.85
			6	0	22.00	21.88	21.82	21.84
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26805/825.5	26915/836.5	27025/847.5
LTE Band 26b	3MHz	QPSK	1	0	24.50	23.93	23.94	23.70
			1	7	24.50	23.86	23.87	23.87
			1	14	24.50	24.01	23.80	23.77
			8	0	23.00	22.86	22.83	22.74
			8	4	23.00	22.84	22.82	22.73
			8	7	23.00	22.90	22.81	22.74
			15	0	23.00	22.83	22.85	22.71
		16QAM	1	0	23.50	22.88	23.19	22.54
			1	7	23.50	22.90	22.82	22.82
			1	14	23.50	23.29	22.83	22.41
			8	0	22.00	21.85	21.89	21.71
			8	4	22.00	21.87	21.79	21.78
			8	7	22.00	21.94	21.79	21.74
			15	0	22.00	21.78	21.88	21.77
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26815/826.5	26915/836.5	27015/846.5
LTE Band 26b	5MHz	QPSK	1	0	24.00	23.92	23.80	23.76
			1	12	24.00	23.91	23.85	23.66
			1	24	24.00	23.76	23.82	23.58
			12	0	23.00	22.88	22.81	22.79
			12	6	23.00	22.89	22.77	22.73
			12	11	23.00	22.90	22.82	22.64
			25	0	23.00	22.90	22.81	22.72
		16QAM	1	0	23.50	23.04	22.63	22.83
			1	12	23.50	23.20	22.74	22.33
			1	24	23.50	22.86	23.05	22.50
			12	0	22.00	21.86	21.84	21.78

			12	6	22.00	21.87	21.77	21.74
			12	11	22.00	21.90	21.79	21.67
			25	0	22.00	21.85	21.92	21.71
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26840/829	26915/836.5	26990/844
LTE Band 26b	10MHz	QPSK	1	0	24.00	23.98	23.60	23.85
			1	24	24.00	23.96	23.42	23.71
			1	49	24.00	23.73	23.60	23.45
			25	0	23.00	22.92	22.85	22.78
			25	12	23.00	22.90	22.78	22.75
			25	24	23.00	22.85	22.83	22.71
			50	0	23.00	22.89	22.87	22.77
		16QAM	1	0	23.50	22.41	22.64	22.70
			1	24	23.50	22.44	22.67	22.64
			1	49	23.50	22.40	23.01	22.66
			25	0	22.00	21.95	21.88	21.80
			25	12	22.00	21.93	21.86	21.78
			25	24	22.00	21.85	21.85	21.72
			50	0	22.00	21.87	21.81	21.75
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26865/831.5	26915/836.5	26965/841.5
LTE Band 26b	15MHz	QPSK	1	0	24.00	23.72	23.29	23.27
			1	37	24.00	23.55	23.26	23.28
			1	74	24.00	23.38	23.16	23.22
			36	0	23.00	22.85	22.77	22.75
			36	18	23.00	22.85	22.82	22.74
			36	37	23.00	22.79	22.77	22.67
			75	0	23.00	22.87	22.79	22.75
		16QAM	1	0	22.50	22.27	22.34	22.19
			1	37	22.50	22.30	22.29	22.21
			1	74	22.50	22.21	22.22	22.14
			36	0	22.00	21.84	21.80	21.77
			36	18	22.00	21.82	21.79	21.77
			36	37	22.00	21.80	21.78	21.72
			75	0	22.00	21.81	21.78	21.74

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		39675/2498.5	40620/2593	41565/2687.5
LTE Band 41	5MHz	QPSK	1	0	24.50	23.76	23.62	24.24
			1	12	24.50	23.66	23.81	24.09
			1	24	24.50	23.71	23.72	24.19
			12	0	24.00	23.17	23.13	23.65
			12	6	24.00	23.14	23.05	23.66
			12	11	24.00	23.11	23.07	23.60
			25	0	24.00	23.16	23.10	23.68
		16QAM	1	0	23.50	22.62	22.61	23.18
			1	12	23.50	22.89	22.63	23.13
			1	24	23.50	22.90	22.71	23.27
			12	0	23.00	22.05	22.06	22.66

			12	6	23.00	22.12	22.11	22.58
			12	11	23.00	22.01	22.10	22.69
			25	0	23.00	22.21	22.12	22.67
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		39700/2501	40620/2593	41540/2685
LTE Band 41	10MHz	QPSK	1	0	24.50	23.71	23.58	24.08
			1	24	24.50	23.72	23.62	24.12
			1	49	24.50	23.65	23.51	24.08
			25	0	24.00	23.13	23.09	23.58
			25	12	24.00	23.13	23.05	23.65
			25	24	24.00	23.12	23.11	23.63
			50	0	24.00	23.20	23.09	23.68
		16QAM	1	0	23.50	22.46	22.49	22.99
			1	24	23.50	22.69	22.54	23.04
			1	49	23.50	22.71	22.56	22.89
			25	0	23.00	22.18	22.05	22.66
			25	12	23.00	22.11	22.15	22.65
			25	24	23.00	22.11	22.13	22.72
			50	0	23.00	22.11	22.11	22.70
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		39725/2503.5	40620/2593	41515/2682.5
LTE Band 41	15MHz	QPSK	1	0	24.50	23.57	23.56	24.03
			1	37	24.50	23.61	23.68	24.19
			1	74	24.50	23.54	23.48	24.10
			36	0	24.00	23.09	23.05	23.59
			36	18	24.00	23.06	23.04	23.63
			36	37	24.00	23.00	23.06	23.62
			75	0	24.00	23.08	23.06	23.60
		16QAM	1	0	23.50	22.68	22.39	23.02
			1	37	23.50	22.61	22.52	23.01
			1	74	23.50	22.51	22.32	22.94
			36	0	23.00	22.08	22.00	22.59
			36	18	23.00	22.04	22.11	22.62
			36	37	23.00	22.01	22.14	22.62
			75	0	23.00	22.04	22.06	22.59
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		39750/2506	40620/2593	41490/2680
LTE Band 41	20MHz	QPSK	1	0	24.50	23.43	23.47	24.05
			1	49	24.50	23.62	23.64	24.16
			1	99	24.50	23.45	23.63	24.00
			50	0	24.00	23.08	23.09	23.63
			50	24	24.00	23.07	23.12	23.68
			50	49	24.00	23.06	23.10	23.67
			100	0	24.00	23.10	23.08	23.62
		16QAM	1	0	23.50	22.37	22.38	23.13
			1	49	23.50	22.40	22.90	23.26
			1	99	23.50	22.54	22.55	22.65
			50	0	23.00	22.04	22.05	22.62
			50	24	23.00	22.09	22.12	22.67
			50	49	23.00	21.98	22.10	22.65

			100	0	23.00	22.01	22.09	22.66

8.2. Wi-Fi & BT Output Power

Mode	Channel	Frequency (MHz)	Output Power Peak (dBm)	Output Power AV (dBm)	Tune-up (dBm)
802.11b	1	2412	10.55	9.04	10.00
	6	2437	10.60	9.05	10.00
	11	2462	10.43	8.89	10.00
802.11g	1	2412	15.24	11.78	12.00
	6	2437	15.21	11.68	12.00
	11	2462	14.47	10.98	12.00
802.11n HT20	1	2412	15.08	11.26	12.00
	6	2437	14.97	11.33	12.00
	11	2462	14.38	10.75	12.00
802.11n HT40	3	2422	14.95	11.34	12.00
	6	2437	14.49	10.48	12.00
	9	2452	17.53	13.65	14.00

Mode	Channel	Output Power Peak (dBm)	Output Power AV (dBm)	Tune-up (dBm)
BLE1M	CH00	-4.28	-5.11	-4.00
	CH19	-4.51	-5.35	-4.00
	CH39	-3.33	-4.08	-3.00

9. Stand-alone SAR test exclusion

Refer to FCC KDB 447498D01, the 1-g SAR and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]·[√f(GHZ)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where:

- f(GHZ) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

Mode	Pmax (dBm)	Pmax (mW)	Distance (mm)	f (GHz)	Calculation Result	SAR Exclusion threshold	SAR test exclusion
Bluetooth	-3.00	0.50	5	2.480	0.2	3	Yes

NOTE: Standalone SAR test exclusion for Bluetooth.

When standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] * [√ f(GHZ)/x] W/kg for test separation distances ≤ 50mm, where x = 7.5 for 1-g SAR and x = 18.75 for 10-g SAR.

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

Mode	Position	Pmax (dBm)	Pmax (mW)	Distance (mm)	f (GHz)	x	Estimated SAR (W/kg)
Bluetooth	Body	-3.00	0.50	5	2.48	7.5	0.021

NOTE: Estimated SAR calculation for Bluetooth

10. SAR Measurement Results

< LTE Band2 >

Test Position of Body with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Front Side	18900/1880	20M QPSK(1,49)	0.168	0.092	-3.80	20.77	21.00	0.177	2024/9/21	
Back Side	18900/1880	20M QPSK(1,49)	0.256	0.144	-3.35	20.77	21.00	0.270	2024/9/21	2#
Left Side	18900/1880	20M QPSK(1,49)	0.135	0.075	-2.00	20.77	21.00	0.142	2024/9/21	
Right Side	18900/1880	20M QPSK(1,49)	0.140	0.078	2.83	20.77	21.00	0.148	2024/9/21	
Top Side	18900/1880	20M QPSK(1,49)	0.002	0.001	1.49	20.77	21.00	0.002	2024/9/21	
Bottom Side	18900/1880	20M QPSK(1,49)	0.156	0.087	-1.19	20.77	21.00	0.164	2024/9/21	
50%RB										
Front Side	18900/1880	20M QPSK(50,0)	0.090	0.053	2.97	20.28	20.50	0.095	2024/9/21	
Back Side	18900/1880	20M QPSK(50,0)	0.145	0.074	-1.40	20.28	20.50	0.153	2024/9/21	
Left Side	18900/1880	20M QPSK(50,0)	0.074	0.045	2.24	20.28	20.50	0.078	2024/9/21	
Right Side	18900/1880	20M QPSK(50,0)	0.082	0.043	0.18	20.28	20.50	0.086	2024/9/21	
Top Side	18900/1880	20M QPSK(50,0)	0.002	0.001	-2.73	20.28	20.50	0.002	2024/9/21	
Bottom Side	18900/1880	20M QPSK(50,0)	0.080	0.049	-3.67	20.28	20.50	0.084	2024/9/21	

< LTE Band4 >

Test Position of Body with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Front Side	20175/1732.5	20M QPSK(1,49)	0.222	0.113	-3.69	21.30	21.50	0.232	2024/9/20	□

Back Side	20175/1732.5	20M QPSK(1,49)	0.370	0.198	-1.85	21.30	21.50	0.387	2024/9/20	3#
Left Side	20175/1732.5	20M QPSK(1,49)	0.200	0.102	3.09	21.30	21.50	0.209	2024/9/20	☐
Right Side	20175/1732.5	20M QPSK(1,49)	0.185	0.098	-0.95	21.30	21.50	0.194	2024/9/20	☐
Top Side	20175/1732.5	20M QPSK(1,49)	0.003	0.001	-1.85	21.30	21.50	0.003	2024/9/20	☐
Bottom Side	20175/1732.5	20M QPSK(1,49)	0.240	0.123	1.47	21.30	21.50	0.251	2024/9/20	☐
50%RB										
Front Side	20175/1732.5	20M QPSK(50,49)	0.112	0.064	-1.31	20.83	21.00	0.116	2024/9/20	☐
Back Side	20175/1732.5	20M QPSK(50,49)	0.195	0.118	-1.61	20.83	21.00	0.203	2024/9/20	☐
Left Side	20175/1732.5	20M QPSK(50,49)	0.115	0.057	2.82	20.83	21.00	0.120	2024/9/20	☐
Right Side	20175/1732.5	20M QPSK(50,49)	0.106	0.053	0.04	20.83	21.00	0.110	2024/9/20	☐
Top Side	20175/1732.5	20M QPSK(50,49)	0.003	0.001	2.92	20.83	21.00	0.003	2024/9/20	☐
Bottom Side	20175/1732.5	20M QPSK(50,49)	0.141	0.068	-1.50	20.83	21.00	0.147	2024/9/20	☐

< LTE Band5 >

Test Position of Body with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Front Side	20525/836.5	10M QPSK(1,49)	0.162	0.085	0.97	23.51	24.00	0.181	2024/9/17	☐
Back Side	20525/836.5	10M QPSK(1,49)	0.237	0.128	3.82	23.51	24.00	0.265	2024/9/17	4#
Left Side	20525/836.5	10M QPSK(1,49)	0.135	0.072	-2.06	23.51	24.00	0.151	2024/9/17	☐
Right Side	20525/836.5	10M QPSK(1,49)	0.120	0.062	1.33	23.51	24.00	0.134	2024/9/17	☐
Top Side	20525/836.5	10M QPSK(1,49)	0.005	0.003	2.19	23.51	24.00	0.006	2024/9/17	☐
Bottom Side	20525/836.5	10M QPSK(1,49)	0.156	0.083	3.73	23.51	24.00	0.175	2024/9/17	☐

50%RB										
Front Side	20525/836.5	10M QPSK(25,0)	0.090	0.047	4.25	22.95	23.50	0.102	2024/9/17	☐
Back Side	20525/836.5	10M QPSK(25,0)	0.119	0.066	-4.83	22.95	23.50	0.135	2024/9/17	☐
Left Side	20525/836.5	10M QPSK(25,0)	0.077	0.036	3.17	22.95	23.50	0.087	2024/9/17	☐
Right Side	20525/836.5	10M QPSK(25,0)	0.063	0.034	-1.74	22.95	23.50	0.072	2024/9/17	☐
Top Side	20525/836.5	10M QPSK(25,0)	0.002	0.002	2.12	22.95	23.50	0.002	2024/9/17	☐
Bottom Side	20525/836.5	10M QPSK(25,0)	0.084	0.044	4.40	22.95	23.50	0.095	2024/9/17	☐

< LTE Band7 >

Test Position of Body with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Front Side	21100/2535	20M QPSK(1,49)	0.210	0.128	-3.33	22.55	23.00	0.233	2024/9/29	☐
Back Side	21100/2535	20M QPSK(1,49)	0.343	0.217	-2.74	22.55	23.00	0.380	2024/9/29	5#
Left Side	21100/2535	20M QPSK(1,49)	0.175	0.111	2.44	22.55	23.00	0.194	2024/9/29	☐
Right Side	21100/2535	20M QPSK(1,49)	0.185	0.117	2.98	22.55	23.00	0.205	2024/9/29	☐
Top Side	21100/2535	20M QPSK(1,49)	0.003	0.001	-1.75	22.55	23.00	0.003	2024/9/29	☐
Bottom Side	21100/2535	20M QPSK(1,49)	0.222	0.139	-3.57	22.55	23.00	0.246	2024/9/29	☐
50%RB										
Front Side	21100/2535	20M QPSK(50,24)	0.110	0.067	-4.71	22.15	22.50	0.119	2024/9/29	☐
Back Side	21100/2535	20M QPSK(50,24)	0.186	0.120	-2.32	22.15	22.50	0.202	2024/9/29	☐
Left Side	21100/2535	20M QPSK(50,24)	0.104	0.057	-0.68	22.15	22.50	0.113	2024/9/29	☐
Right Side	21100/2535	20M QPSK(50,24)	0.106	0.061	3.74	22.15	22.50	0.115	2024/9/29	☐
Top Side	21100/2535	20M	0.004	0.002	-1.11	22.15	22.50	0.004	2024/9/29	☐

		QPSK(50,24)								
Bottom Side	21100/2535	20M QPSK(50,24)	0.113	0.073	3.32	22.15	22.50	0.122	2024/9/29	☐

< LTE Band12 >

Test Position of Body with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Front Side	23095/707.5	10M QPSK(1,49)	0.156	0.093	3.11	23.39	23.50	0.160	2024/9/13	☐
Back Side	23095/707.5	10M QPSK(1,49)	0.220	0.136	2.63	23.39	23.50	0.226	2024/9/13	6#
Left Side	23095/707.5	10M QPSK(1,49)	0.113	0.068	0.83	23.39	23.50	0.116	2024/9/13	☐
Right Side	23095/707.5	10M QPSK(1,49)	0.115	0.069	-0.37	23.39	23.50	0.118	2024/9/13	☐
Top Side	23095/707.5	10M QPSK(1,49)	0.003	0.001	-2.33	23.39	23.50	0.003	2024/9/13	☐
Bottom Side	23095/707.5	10M QPSK(1,49)	0.144	0.086	-0.53	23.39	23.50	0.148	2024/9/13	☐
50%RB										
Front Side	23095/707.5	10M QPSK(25,24)	0.093	0.049	-0.10	22.78	23.00	0.098	2024/9/13	☐
Back Side	23095/707.5	10M QPSK(25,24)	0.112	0.080	4.87	22.78	23.00	0.118	2024/9/13	☐
Left Side	23095/707.5	10M QPSK(25,24)	0.067	0.039	-2.71	22.78	23.00	0.070	2024/9/13	☐
Right Side	23095/707.5	10M QPSK(25,24)	0.064	0.039	4.65	22.78	23.00	0.067	2024/9/13	☐
Top Side	23095/707.5	10M QPSK(25,24)	0.002	0.001	-2.33	22.78	23.00	0.002	2024/9/13	☐
Bottom Side	23095/707.5	10M QPSK(25,24)	0.084	0.051	-2.35	22.78	23.00	0.088	2024/9/13	☐

< LTE Band17 >

Test Position of Body with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										

Front Side	23790/710	10M QPSK(1,49)	0.174	0.084	-0.72	23.39	23.50	0.178	2024/9/13	☐
Back Side	23790/710	10M QPSK(1,49)	0.268	0.134	0.07	23.39	23.50	0.275	2024/9/13	7#
Left Side	23790/710	10M QPSK(1,49)	0.142	0.070	-1.73	23.39	23.50	0.146	2024/9/13	☐
Right Side	23790/710	10M QPSK(1,49)	0.145	0.073	-0.46	23.39	23.50	0.149	2024/9/13	☐
Top Side	23790/710	10M QPSK(1,49)	0.002	0.001	2.91	23.39	23.50	0.002	2024/9/13	☐
Bottom Side	23790/710	10M QPSK(1,49)	0.168	0.084	3.45	23.39	23.50	0.172	2024/9/13	☐
50%RB										
Front Side	23790/710	10M QPSK(25,12)	0.093	0.042	0.83	22.72	23.00	0.099	2024/9/13	☐
Back Side	23790/710	10M QPSK(25,12)	0.135	0.073	-1.85	22.72	23.00	0.144	2024/9/13	☐
Left Side	23790/710	10M QPSK(25,12)	0.079	0.041	-1.35	22.72	23.00	0.084	2024/9/13	☐
Right Side	23790/710	10M QPSK(25,12)	0.083	0.043	-3.74	22.72	23.00	0.089	2024/9/13	☐
Top Side	23790/710	10M QPSK(25,12)	0.001	0.001	-0.49	22.72	23.00	0.001	2024/9/13	☐
Bottom Side	23790/710	10M QPSK(25,12)	0.091	0.046	3.91	22.72	23.00	0.097	2024/9/13	☐

< LTE Band25 >

Test Position of Body with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Front Side	26365/1882.5	20M QPSK(1,49)	0.258	0.133	-2.86	24.17	24.50	0.278	2024/9/21	☐
Back Side	26365/1882.5	20M QPSK(1,49)	0.428	0.233	3.65	24.17	24.50	0.462	2024/9/21	8#
Left Side	26365/1882.5	20M QPSK(1,49)	0.235	0.122	-1.87	24.17	24.50	0.254	2024/9/21	☐
Right Side	26365/1882.5	20M QPSK(1,49)	0.230	0.124	-2.31	24.17	24.50	0.248	2024/9/21	☐
Top Side	26365/1882.5	20M QPSK(1,49)	0.003	0.002	-1.18	24.17	24.50	0.003	2024/9/21	☐

Bottom Side	26365/1882.5	20M QPSK(1,49)	0.258	0.136	3.37	24.17	24.50	0.278	2024/9/21	☐
50%RB										
Front Side	26365/1882.5	20M QPSK(50,49)	0.135	0.071	4.77	23.76	24.00	0.143	2024/9/21	☐
Back Side	26365/1882.5	20M QPSK(50,49)	0.218	0.124	-2.13	23.76	24.00	0.230	2024/9/21	☐
Left Side	26365/1882.5	20M QPSK(50,49)	0.121	0.066	4.50	23.76	24.00	0.128	2024/9/21	☐
Right Side	26365/1882.5	20M QPSK(50,49)	0.131	0.070	0.76	23.76	24.00	0.138	2024/9/21	☐
Top Side	26365/1882.5	20M QPSK(50,49)	0.003	0.001	-0.77	23.76	24.00	0.003	2024/9/21	☐
Bottom Side	26365/1882.5	20M QPSK(50,49)	0.153	0.075	-3.81	23.76	24.00	0.162	2024/9/21	☐

< LTE Band26A >

Test Position of Body with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Front Side	26740/819	10M QPSK(1,24)	0.204	0.102	-1.40	23.61	24.00	0.223	2024/9/17	☐
Back Side	26740/819	10M QPSK(1,24)	0.308	0.157	-1.95	23.61	24.00	0.337	2024/9/17	10#
Left Side	26740/819	10M QPSK(1,24)	0.165	0.084	-1.53	23.61	24.00	0.181	2024/9/17	☐
Right Side	26740/819	10M QPSK(1,24)	0.175	0.085	2.78	23.61	24.00	0.191	2024/9/17	☐
Top Side	26740/819	10M QPSK(1,24)	0.004	0.002	-1.04	23.61	24.00	0.004	2024/9/17	☐
Bottom Side	26740/819	10M QPSK(1,24)	0.192	0.094	3.16	23.61	24.00	0.210	2024/9/17	☐
50%RB										
Front Side	26740/819	10M QPSK(25,24)	0.107	0.059	2.63	22.92	23.00	0.109	2024/9/17	☐
Back Side	26740/819	10M QPSK(25,24)	0.170	0.093	-0.37	22.92	23.00	0.173	2024/9/17	☐
Left Side	26740/819	10M QPSK(25,24)	0.091	0.050	2.25	22.92	23.00	0.093	2024/9/17	☐
Right Side	26740/819	10M	0.093	0.050	-1.51	22.92	23.00	0.095	2024/9/17	☐

		QPSK(25,24)								
Top Side	26740/819	10M QPSK(25,24)	0.002	0.001	-3.16	22.92	23.00	0.002	2024/9/17	☐
Bottom Side	26740/819	10M QPSK(25,24)	0.102	0.055	1.46	22.92	23.00	0.104	2024/9/17	☐

< LTE Band26B >

Test Position of Body with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Front Side	26865/831.5	15M QPSK(1,0)	0.162	0.086	0.20	23.29	24.00	0.191	2024/9/17	☐
Back Side	26865/831.5	15M QPSK(1,0)	0.227	0.120	4.76	23.29	24.00	0.267	2024/9/17	11#
Left Side	26865/831.5	15M QPSK(1,0)	0.125	0.063	3.18	23.29	24.00	0.147	2024/9/17	☐
Right Side	26865/831.5	15M QPSK(1,0)	0.120	0.063	0.58	23.29	24.00	0.141	2024/9/17	☐
Top Side	26865/831.5	15M QPSK(1,0)	0.002	0.001	-1.09	23.29	24.00	0.002	2024/9/17	☐
Bottom Side	26865/831.5	15M QPSK(1,0)	0.156	0.081	1.84	23.29	24.00	0.184	2024/9/17	☐
50%RB										
Front Side	26865/831.5	15M QPSK(36,18)	0.088	0.044	-1.59	22.82	23.00	0.092	2024/9/17	☐
Back Side	26865/831.5	15M QPSK(36,18)	0.124	0.063	-3.39	22.82	23.00	0.129	2024/9/17	☐
Left Side	26865/831.5	15M QPSK(36,18)	0.070	0.037	-2.32	22.82	23.00	0.073	2024/9/17	☐
Right Side	26865/831.5	15M QPSK(36,18)	0.071	0.032	-1.10	22.82	23.00	0.074	2024/9/17	☐
Top Side	26865/831.5	15M QPSK(36,18)	0.001	0.001	1.12	22.82	23.00	0.001	2024/9/17	☐
Bottom Side	26865/831.5	15M QPSK(36,18)	0.089	0.046	1.34	22.82	23.00	0.093	2024/9/17	☐

< LTE Band41 >

Test Position of Body with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						

1RB										
Front Side	40620/2593	20M QPSK(1,49)	0.240	0.140	1.60	23.64	24.50	0.293	2024/9/29	☐
Back Side	40620/2593	20M QPSK(1,49)	0.357	0.205	-3.69	23.64	24.50	0.435	2024/9/29	9#
Left Side	40620/2593	20M QPSK(1,49)	0.185	0.109	2.27	23.64	24.50	0.226	2024/9/29	☐
Right Side	40620/2593	20M QPSK(1,49)	0.195	0.112	-1.36	23.64	24.50	0.238	2024/9/29	☐
Top Side	40620/2593	20M QPSK(1,49)	0.045	0.020	-2.76	23.64	24.50	0.055	2024/9/29	☐
Bottom Side	40620/2593	20M QPSK(1,49)	0.216	0.125	2.77	23.64	24.50	0.263	2024/9/29	☐
50%RB										
Front Side	40620/2593	20M QPSK(50,24)	0.127	0.078	4.00	23.12	24.00	0.156	2024/9/29	☐
Back Side	40620/2593	20M QPSK(50,24)	0.188	0.116	-1.03	23.12	24.00	0.230	2024/9/29	☐
Left Side	40620/2593	20M QPSK(50,24)	0.099	0.057	3.84	23.12	24.00	0.121	2024/9/29	☐
Right Side	40620/2593	20M QPSK(50,24)	0.102	0.064	-0.61	23.12	24.00	0.125	2024/9/29	☐
Top Side	40620/2593	20M QPSK(50,24)	0.026	0.011	-0.38	23.12	24.00	0.032	2024/9/29	☐
Bottom Side	40620/2593	20M QPSK(50,24)	0.129	0.066	-1.92	23.12	24.00	0.158	2024/9/29	☐

< WLAN 2.4G >

Test Position of Body with 0mm	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1g	10g						
Front Side	6/2437	802.11b	0.150	0.091	1.09	9.05	10.00	0.187	2024/9/24	
Back Side	6/2437	802.11b	0.250	0.154	-0.36	9.05	10.00	0.311	2024/9/24	1#
Back Side	9/2452	802.11n HT40	0.245	0.147	1.20	13.65	14.00	0.266	2024/9/24	
Left Side	6/2437	802.11b	0.145	0.087	2.09	9.05	10.00	0.180	2024/9/24	
Right Side	6/2437	802.11b	0.150	0.090	0.26	9.05	10.00	0.187	2024/9/24	
Top Side	6/2437	802.11b	0.004	0.002	-2.17	9.05	10.00	0.005	2024/9/24	
Bottom Side	6/2437	802.11b	0.018	0.012	3.80	9.05	10.00	0.022	2024/9/24	

11. Simultaneous Transmission Analysis

Per KDB 447498 D01, simultaneous transmission SAR is compliant if,

1) Scalar SAR summation < 1.6W/kg.

2) SPLSR = $(SAR_1 + SAR_2)^{1.5}$ / (min. separation distance, mm), and the peak separation distance is determined from the square root of $[(x_1-x_2)^2 + (y_1-y_2)^2 + (z_1-z_2)^2]$, where (x_1, y_1, z_1) and (x_2, y_2, z_2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.

If SPLSR ≤ 0.04, simultaneously transmission SAR measurement is not necessary.

Exposure Position		WWAN Band	DTS/DSS Band	Simultaneous Tx SAR(W/Kg)
		SAR(W/Kg)	SAR(W/Kg)	
Body	Front Side	0.293	0.187	0.480
	Back Side	0.462	0.311	0.773
	Left Side	0.254	0.180	0.434
	Right Side	0.248	0.187	0.435
	Top Side	0.055	0.005	0.060
	Bottom Side	0.278	0.022	0.300

Note：The Simultaneous Tx is calculated based on the same configuration and test position.

Appendix A. Photo documentation

Refer to appendix Test Setup photo-SAR

Appendix B. System Check Plots

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MEASUREMENT 1 System Performance Check - 750MHz
MEASUREMENT 2 System Performance Check - 835MHz
MEASUREMENT 3 System Performance Check - 1800MHz
MEASUREMENT 4 System Performance Check - 1900MHz
MEASUREMENT 5 System Performance Check - 2450MHz
MEASUREMENT 6 System Performance Check - 2600MHz

MEASUREMENT 1

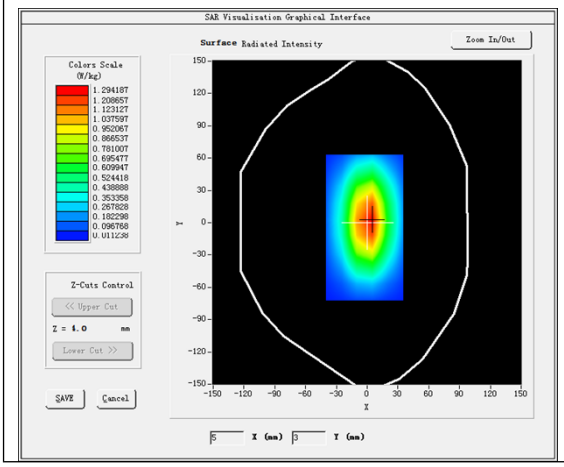
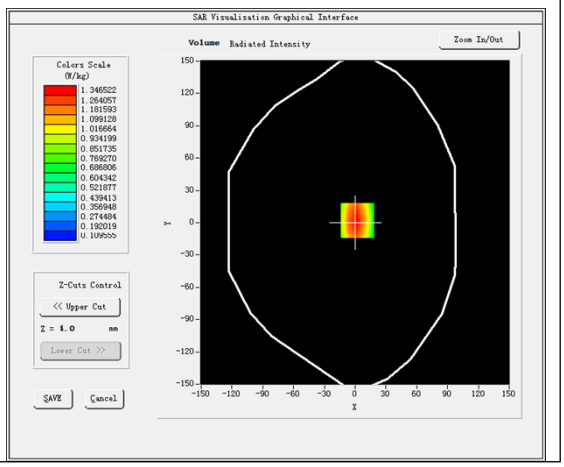
Date of measurement: 13/9/2024

A. Experimental conditions.

Area Scan	dx=15mm dy=15mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Dipole
Band	CW750
Channels	Middle
Signal	CW (Crest factor: 1.0)
ConvF	1.65

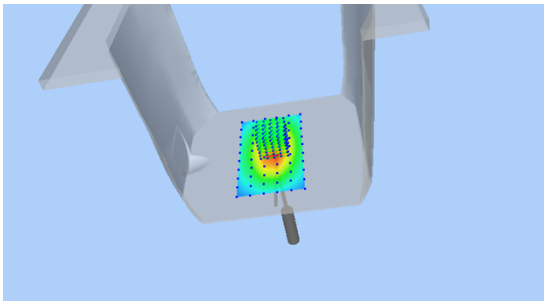
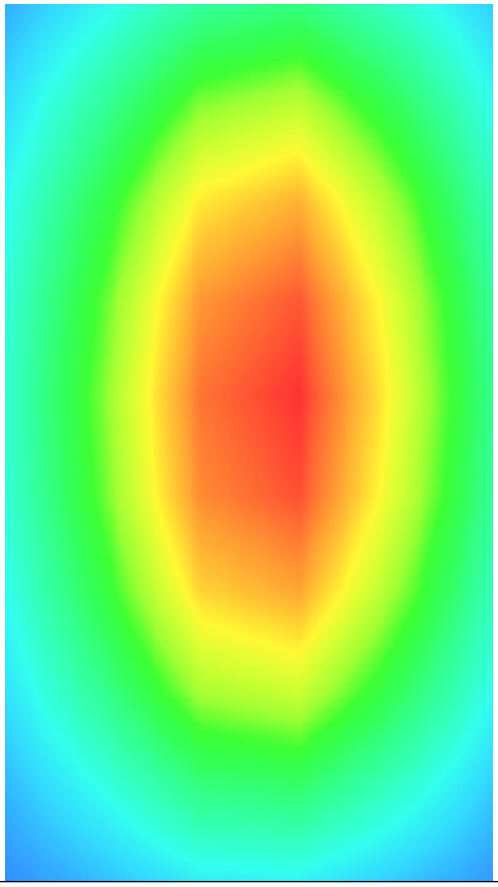
B. SAR Measurement Results

Frequency (MHz)	750.000000
Relative permittivity (real part)	42.562010
Relative permittivity (imaginary part)	19.132740
Conductivity (S/m)	0.912054
Variation (%)	0.210000

SURFACE SAR	VOLUME SAR
	

Maximum location: X=2.00, Y=2.00
SAR Peak: 1.87 W/kg

SAR 10g (W/Kg)	0.621031
SAR 1g (W/Kg)	0.930125

3D screen shot	Hot spot position
	

MEASUREMENT 2

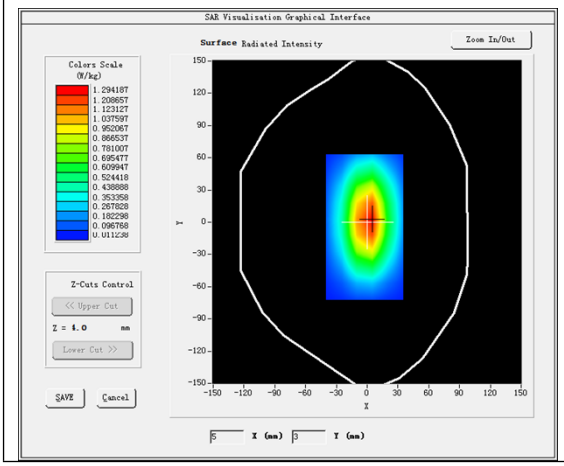
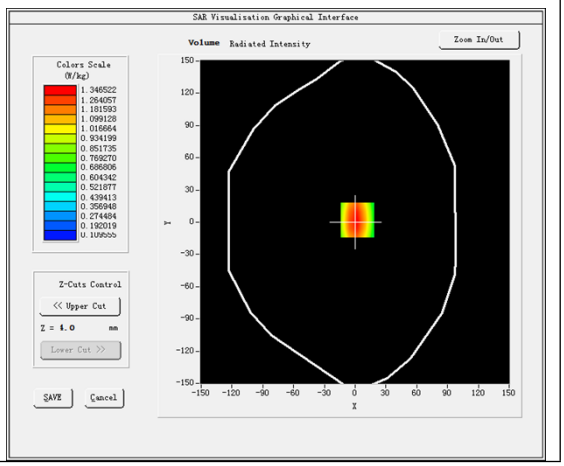
Date of measurement: 17/9/2024

A. Experimental conditions.

Area Scan	dx=15mm dy=15mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Dipole
Band	CW835
Channels	Middle
Signal	CW (Crest factor: 1.0)
ConvF	1.66

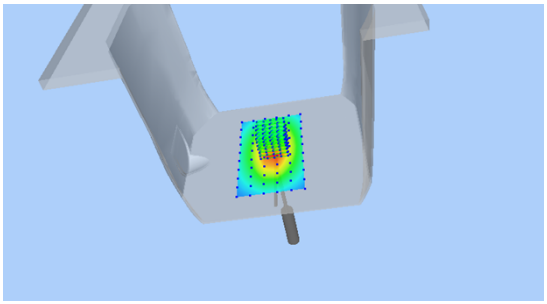
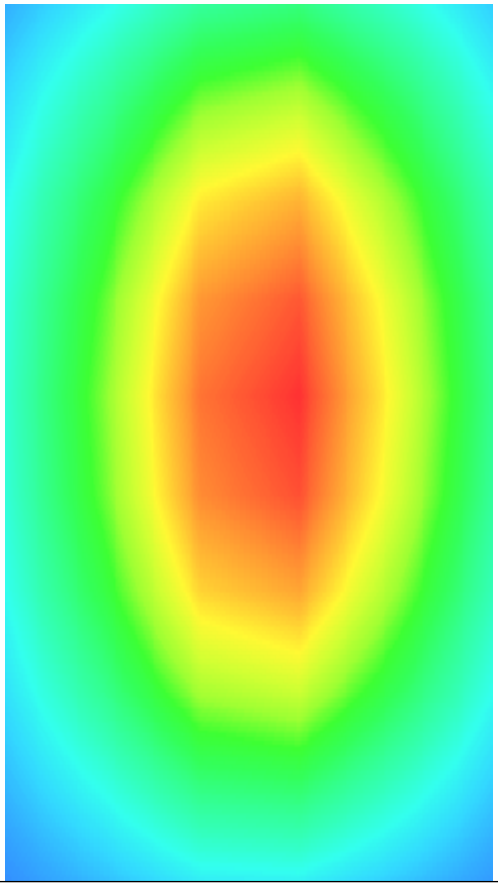
B. SAR Measurement Results

Frequency (MHz)	835.000000
Relative permittivity (real part)	42.012031
Relative permittivity (imaginary part)	19.131021
Conductivity (S/m)	0.941030
Variation (%)	0.310000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=2.00, Y=2.00
SAR Peak: 1.87 W/kg

SAR 10g (W/Kg)	0.612031
SAR 1g (W/Kg)	1.011231

3D screen shot	Hot spot position
	

MEASUREMENT 3

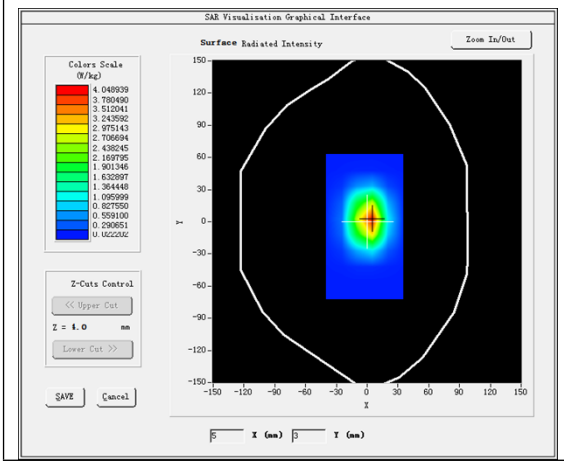
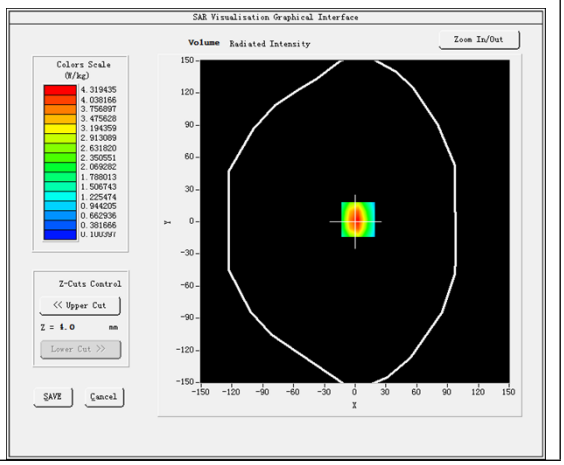
Date of measurement: 20/9/2024

A. Experimental conditions.

Area Scan	dx=15mm dy=15mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Dipole
Band	CW1800
Channels	Middle
Signal	CW (Crest factor: 1.0)
ConvF	2.05

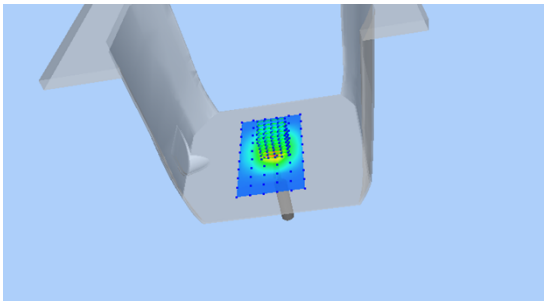
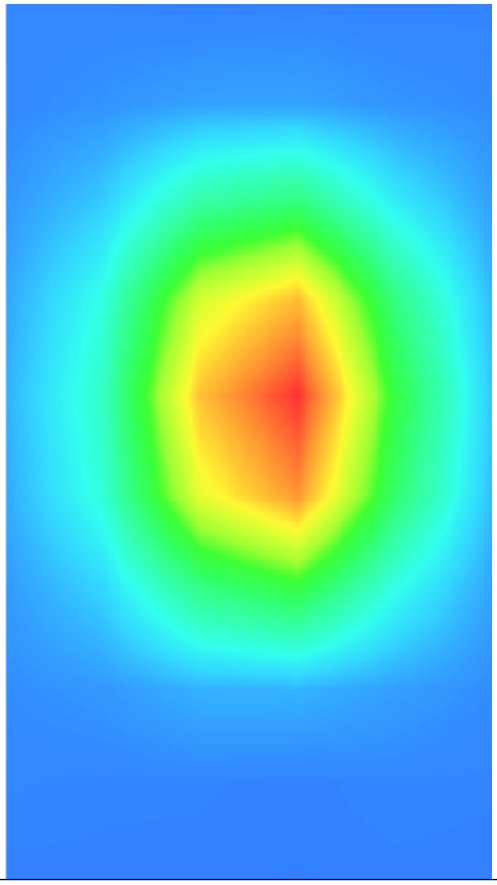
B. SAR Measurement Results

Frequency (MHz)	1800.000000
Relative permittivity (real part)	39.606403
Relative permittivity (imaginary part)	14.067180
Conductivity (S/m)	1.406718
Variation (%)	-0.140000

SURFACE SAR	VOLUME SAR
	

Maximum location: X=3.00, Y=2.00
SAR Peak: 6.82 W/kg

SAR 10g (W/Kg)	2.024557
SAR 1g (W/Kg)	3.832112

3D screen shot	Hot spot position
	

MEASUREMENT 4

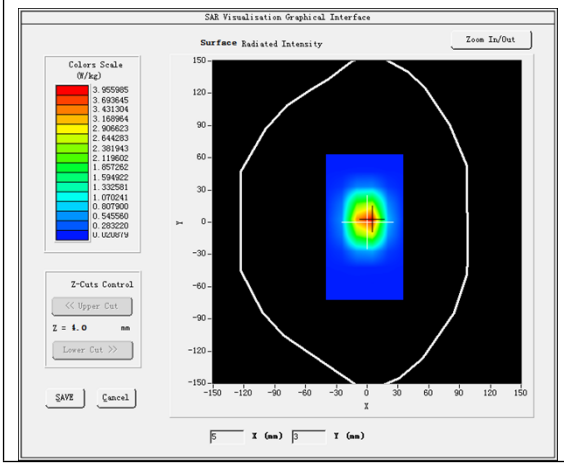
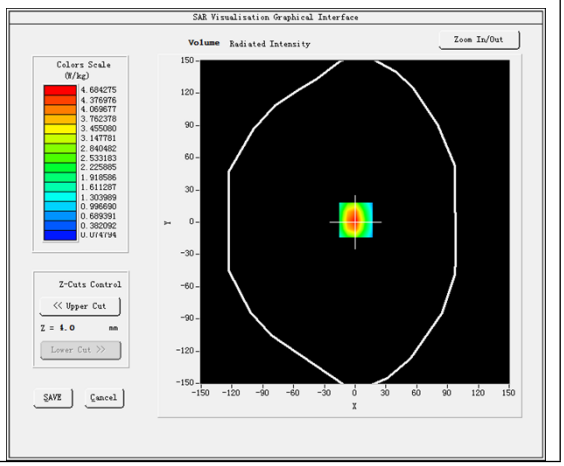
Date of measurement: 21/9/2024

A. Experimental conditions.

Area Scan	dx=15mm dy=15mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Dipole
Band	CW1900
Channels	Middle
Signal	CW (Crest factor: 1.0)
ConvF	2.05

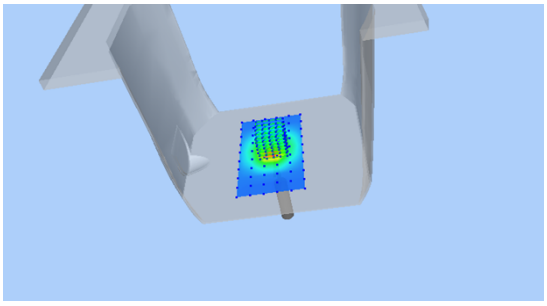
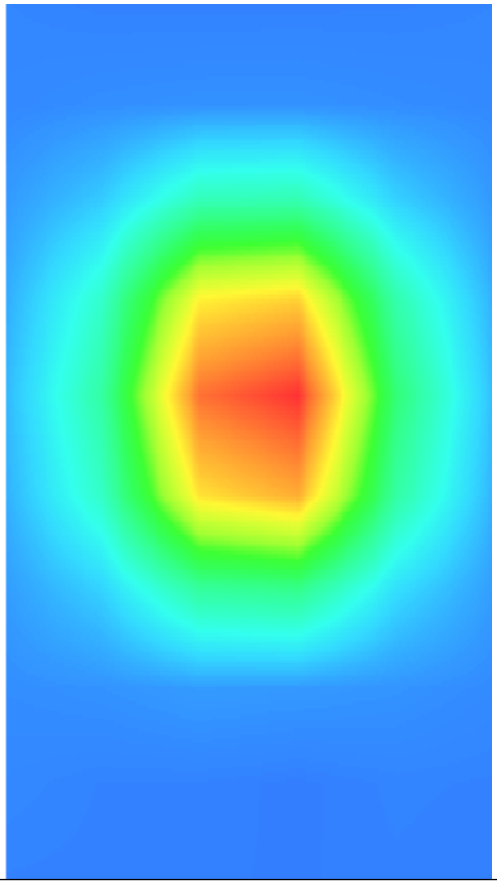
B. SAR Measurement Results

Frequency (MHz)	1900.000000
Relative permittivity (real part)	41.420140
Relative permittivity (imaginary part)	12.570123
Conductivity (S/m)	1.390503
Variation (%)	-0.440000

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=1.00, Y=2.00
SAR Peak: 7.65 W/kg

SAR 10g (W/Kg)	2.153165
SAR 1g (W/Kg)	4.153568

3D screen shot	Hot spot position
	

MEASUREMENT 5

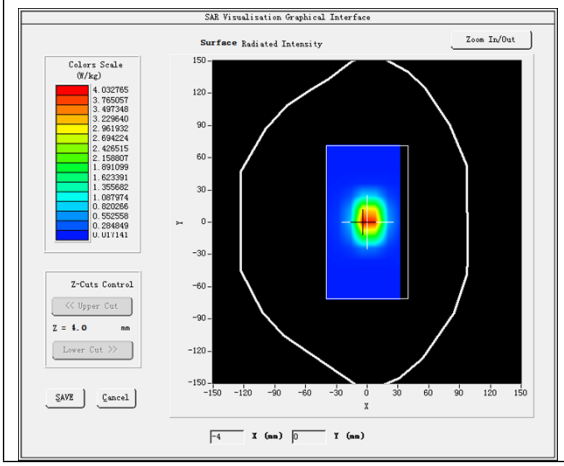
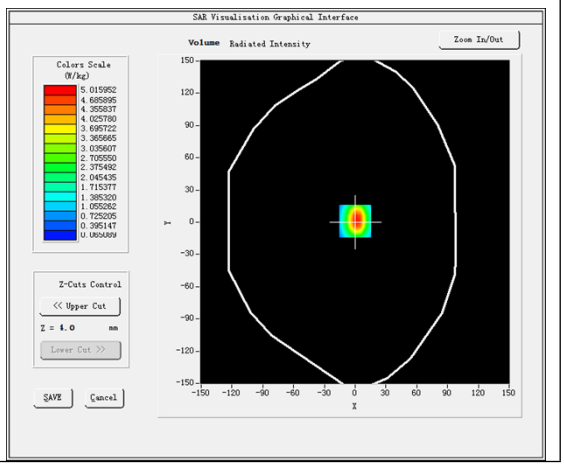
Date of measurement: 24/9/2024

A. Experimental conditions.

Area Scan	dx=12mm dy=12mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm
Phantom	Validation plane
Device Position	Dipole
Band	CW2450
Channels	Middle
Signal	CW (Crest factor: 1.0)
ConvF	2.38

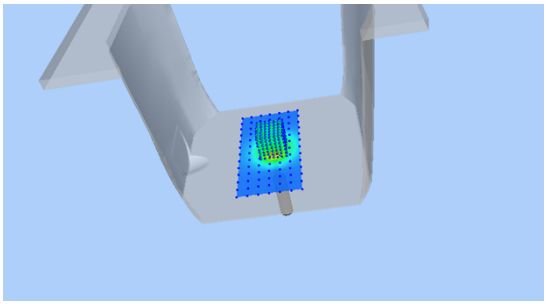
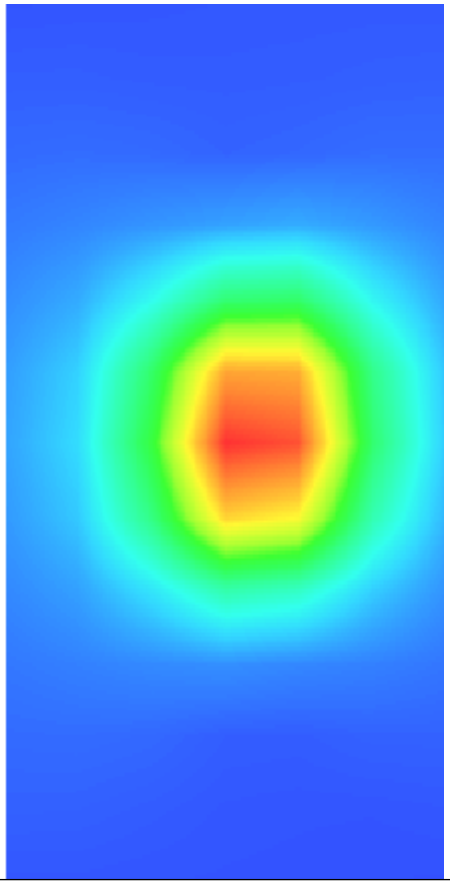
B. SAR Measurement Results

Frequency (MHz)	2450.000000
Relative permittivity (real part)	40.408511
Relative permittivity (imaginary part)	13.399264
Conductivity (S/m)	1.823789
Variation (%)	-1.250000

SURFACE SAR	VOLUME SAR
	

Maximum location: X=0.00, Y=1.00
SAR Peak: 8.14 W/kg

SAR 10g (W/Kg)	2.359425
SAR 1g (W/Kg)	5.183642

3D screen shot	Hot spot position
	

MEASUREMENT 6

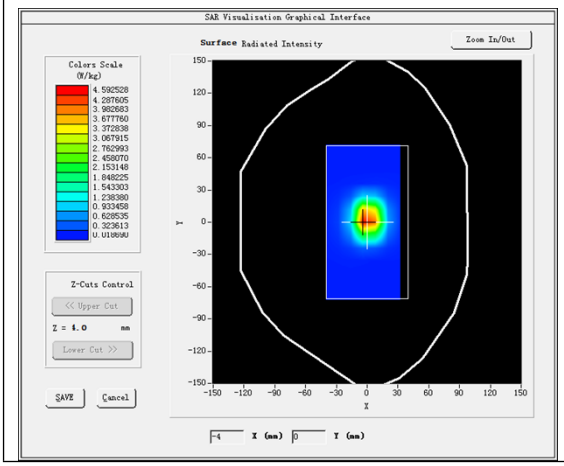
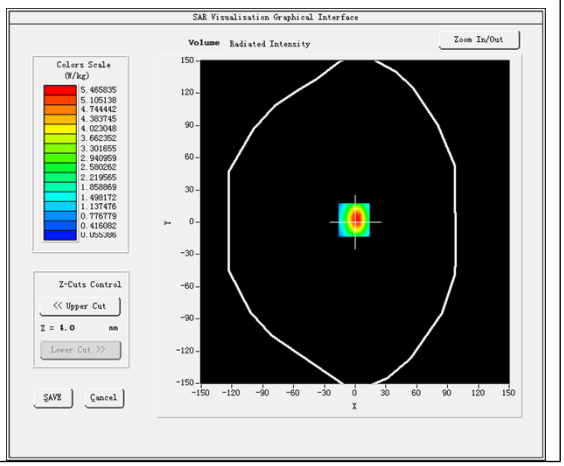
Date of measurement: 29/9/2024

A. Experimental conditions.

Area Scan	dx=12mm dy=12mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm
Phantom	Validation plane
Device Position	Dipole
Band	CW2600
Channels	Middle
Signal	CW (Crest factor: 1.0)
ConvF	2.35

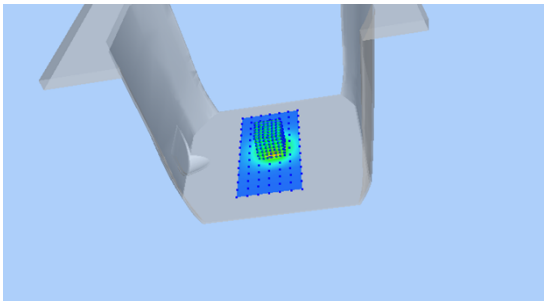
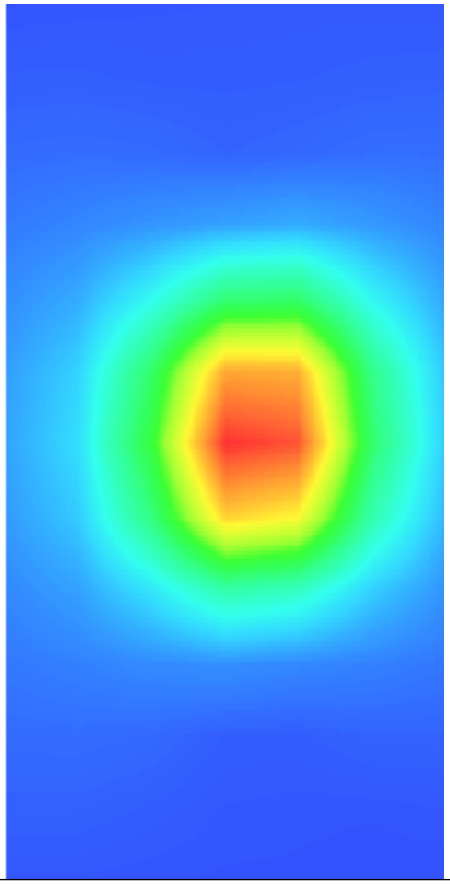
B. SAR Measurement Results

Frequency (MHz)	2600.000000
Relative permittivity (real part)	39.432362
Relative permittivity (imaginary part)	13.768602
Conductivity (S/m)	1.988798
Variation (%)	-3.980000

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-1.00, Y=2.00
SAR Peak: 9.07 W/kg

SAR 10g (W/Kg)	2.523157
SAR 1g (W/Kg)	5.432595

3D screen shot	Hot spot position
	

Appendix C. SAR Test Plots

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MEASUREMENT 10 LTE Band 26A Body
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MEASUREMENT 1

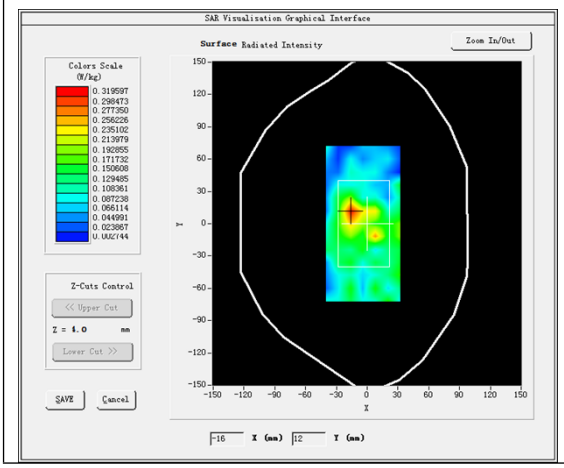
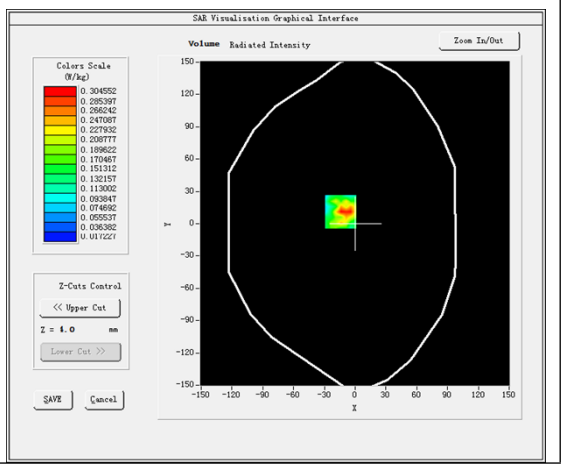
Date of measurement: 24/9/2024

A. Experimental conditions.

Area Scan	dx=12mm dy=12mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm
Phantom	Validation plane
Device Position	Body
Band	IEEE 802.11b ISM
Channels	Middle
Signal	IEEE802.b (Crest factor: 1.0)
ConvF	2.38

B. SAR Measurement Results

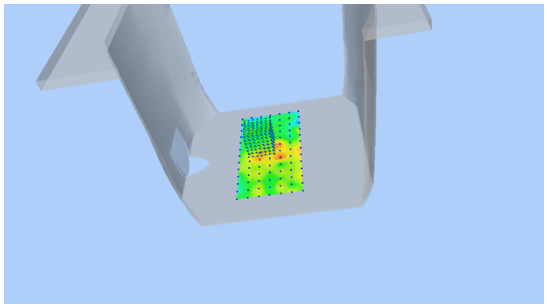
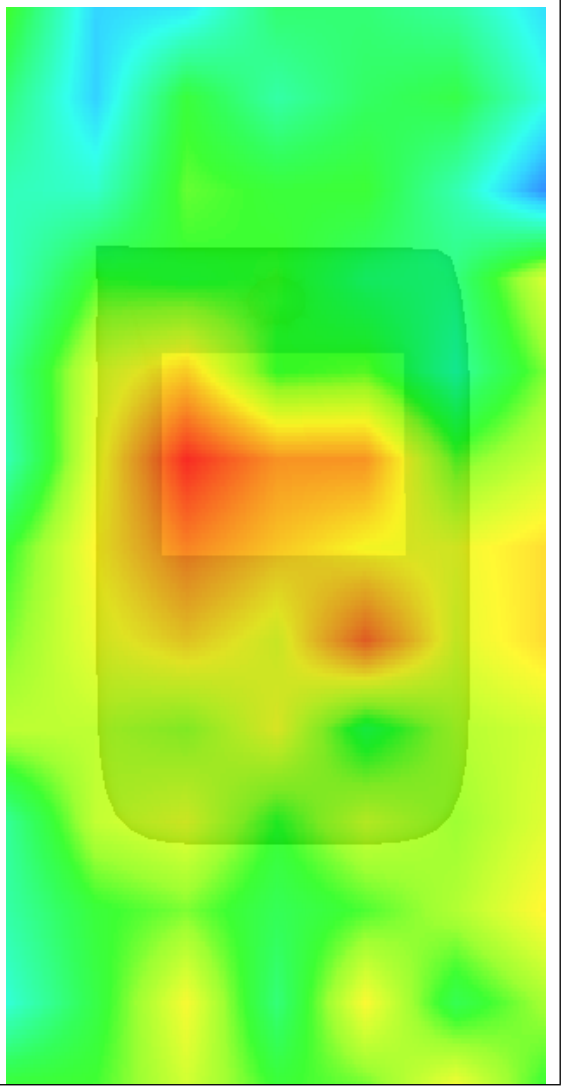
Frequency (MHz)	2437.000000
Relative permittivity (real part)	39.226002
Relative permittivity (imaginary part)	13.207000
Conductivity (S/m)	1.788081
Variation (%)	-0.360001

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-14.00, Y=11.00
SAR Peak: 0.55 W/kg

SAR 10g (W/Kg)	0.154315

SAR 1g (W/Kg)	0.250275

3D screen shot	Hot spot position
	

MEASUREMENT 2

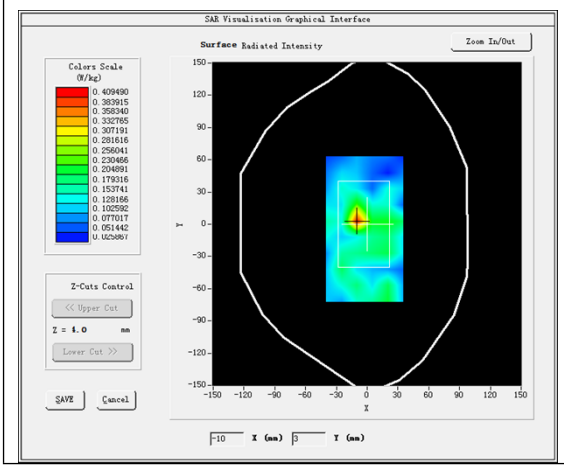
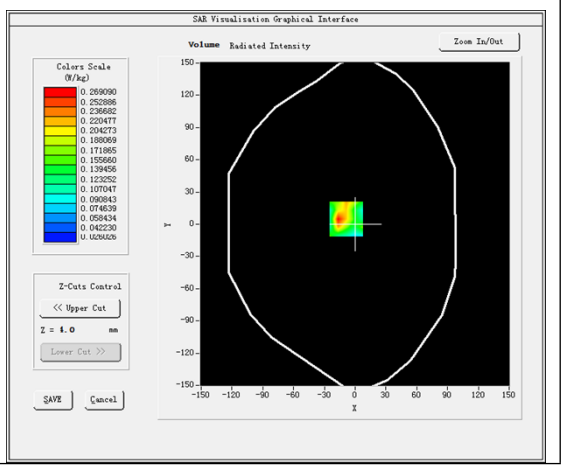
Date of measurement: 21/9/2024

A. Experimental conditions.

Area Scan	dx=15mm dy=15mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Body
Band	LTE band 2
Channels	Middle
Signal	LTE (Crest factor: 1.0)
ConvF	2.05

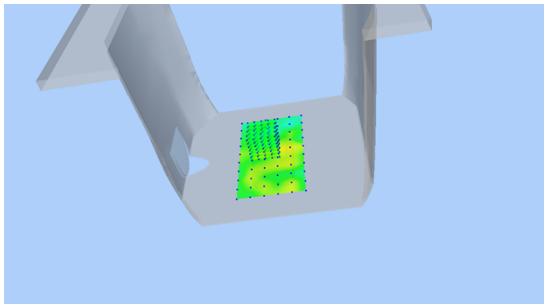
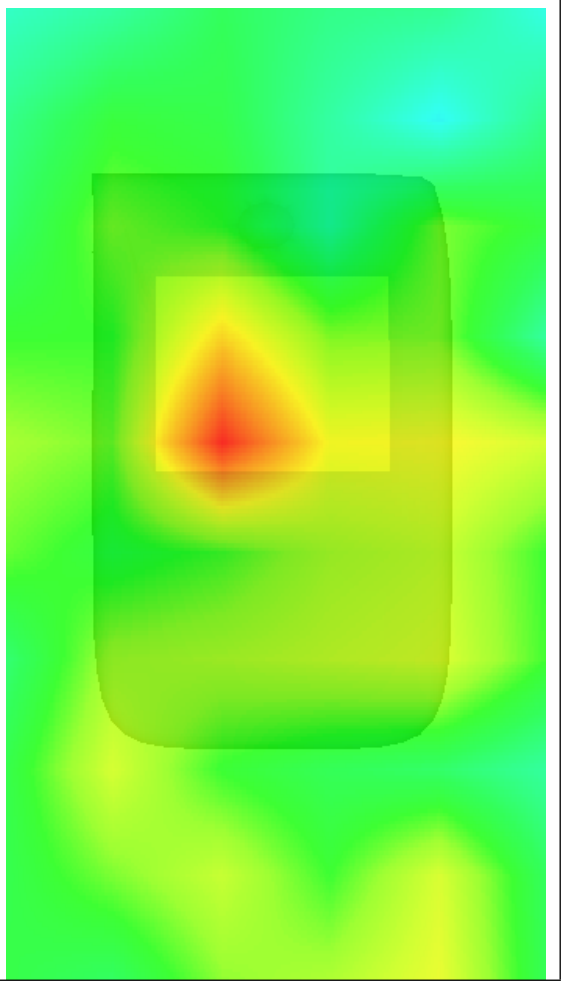
B. SAR Measurement Results

Frequency (MHz)	1879.500000
Relative permittivity (real part)	40.000000
Relative permittivity (imaginary part)	13.411700
Conductivity (S/m)	1.400405
Variation (%)	-3.350000

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-9.00, Y=5.00
SAR Peak: 0.46 W/kg

SAR 10g (W/Kg)	0.143639
SAR 1g (W/Kg)	0.255508

3D screen shot	Hot spot position
	

MEASUREMENT 3

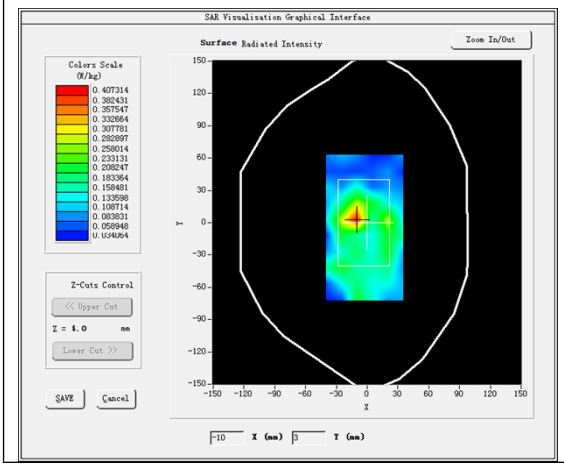
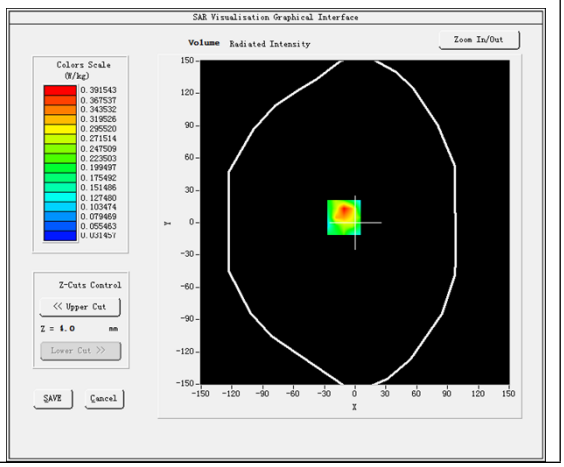
Date of measurement: 20/9/2024

A. Experimental conditions.

Area Scan	dx=15mm dy=15mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Body
Band	LTE band 4
Channels	Middle
Signal	LTE (Crest factor: 1.0)
ConvF	2.05

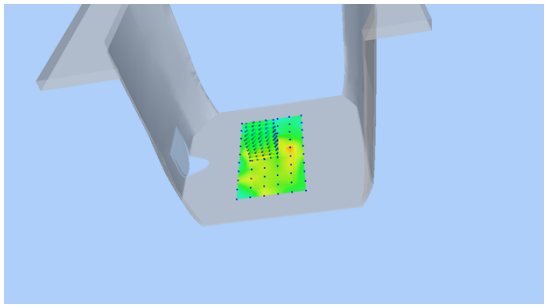
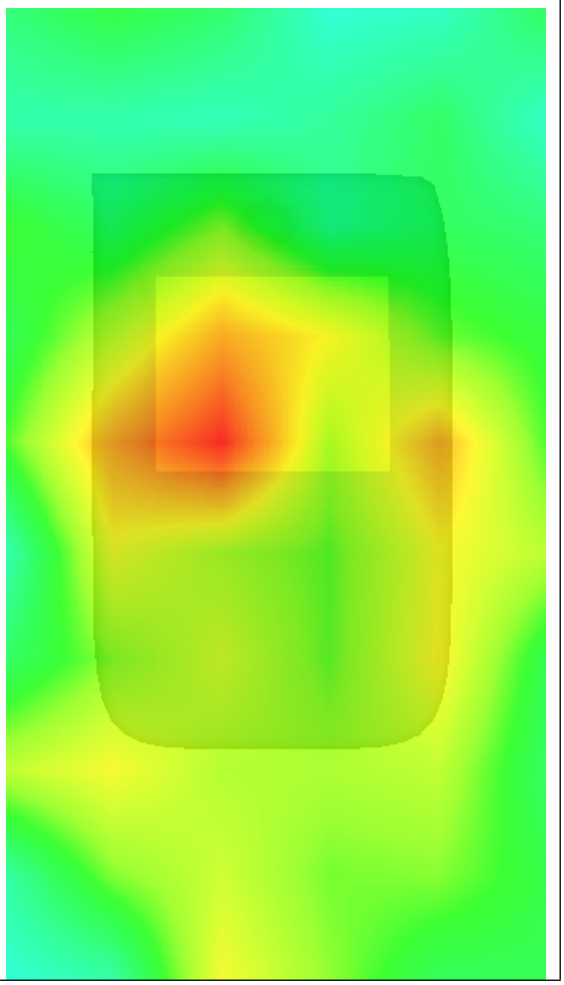
B. SAR Measurement Results

Frequency (MHz)	1732.500000
Relative permittivity (real part)	40.115910
Relative permittivity (imaginary part)	14.136136
Conductivity (S/m)	1.360603
Variation (%)	-1.850000

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-11.00, Y=5.00
SAR Peak: 0.73 W/kg

SAR 10g (W/Kg)	0.198083
SAR 1g (W/Kg)	0.369825

3D screen shot	Hot spot position
	

MEASUREMENT 4

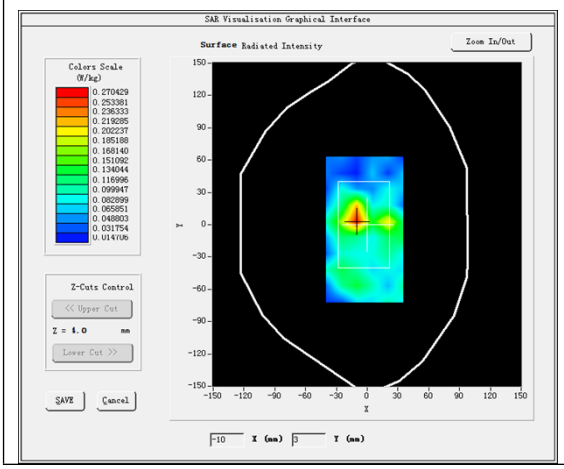
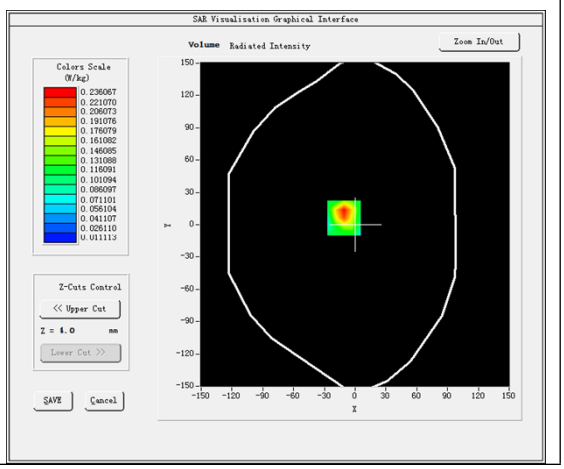
Date of measurement: 17/9/2024

A. Experimental conditions.

Area Scan	dx=15mm dy=15mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Body
Band	LTE band 5
Channels	Middle
Signal	LTE (Crest factor: 1.0)
ConvF	1.66

B. SAR Measurement Results

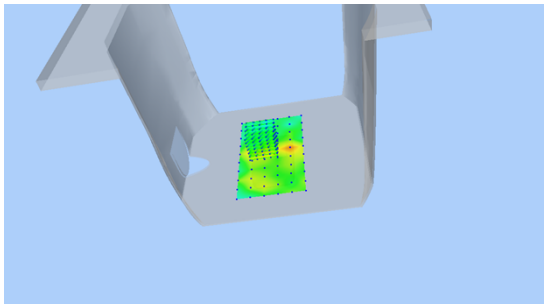
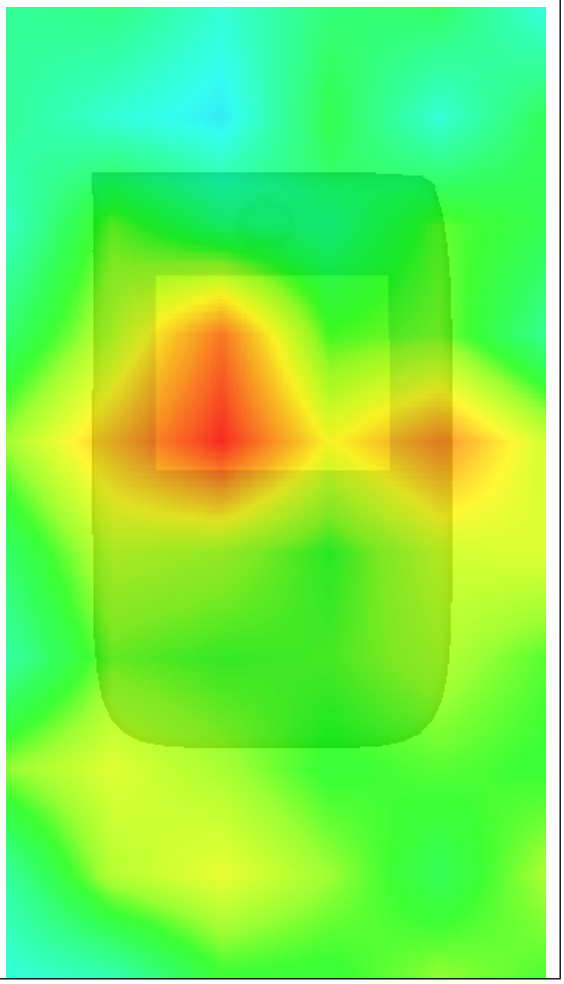
Frequency (MHz)	836.500000
Relative permittivity (real part)	41.500000
Relative permittivity (imaginary part)	19.400000
Conductivity (S/m)	0.901561
Variation (%)	3.820000

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-11.00, Y=6.00
SAR Peak: 0.45 W/kg

SAR 10g (W/Kg)	0.127560

SAR 1g (W/Kg)	0.237053

3D screen shot	Hot spot position
	

MEASUREMENT 5

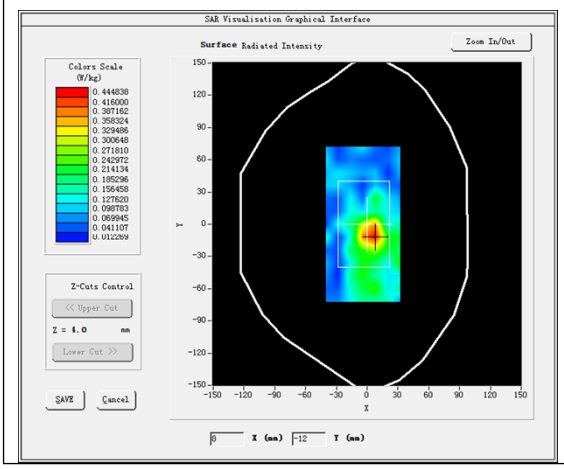
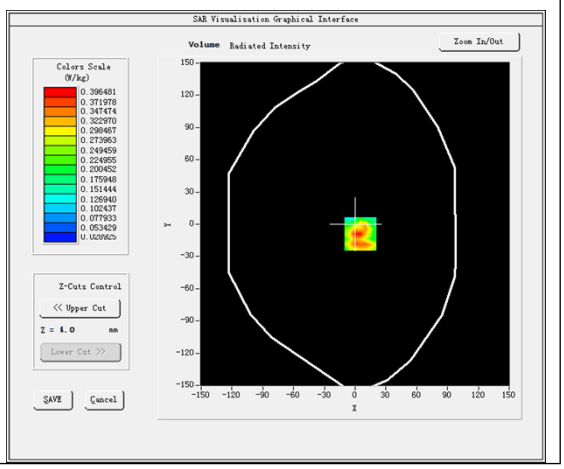
Date of measurement: 29/9/2024

A. Experimental conditions.

Area Scan	dx=12mm dy=12mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm
Phantom	Validation plane
Device Position	Body
Band	LTE band 7
Channels	Middle
Signal	LTE (Crest factor: 1.0)
ConvF	2.05

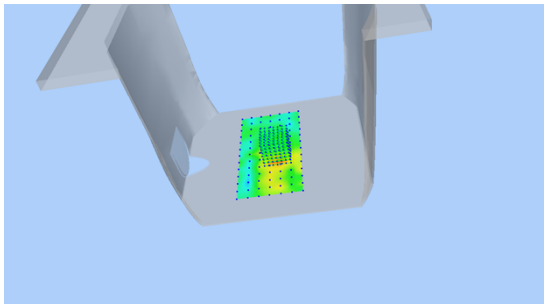
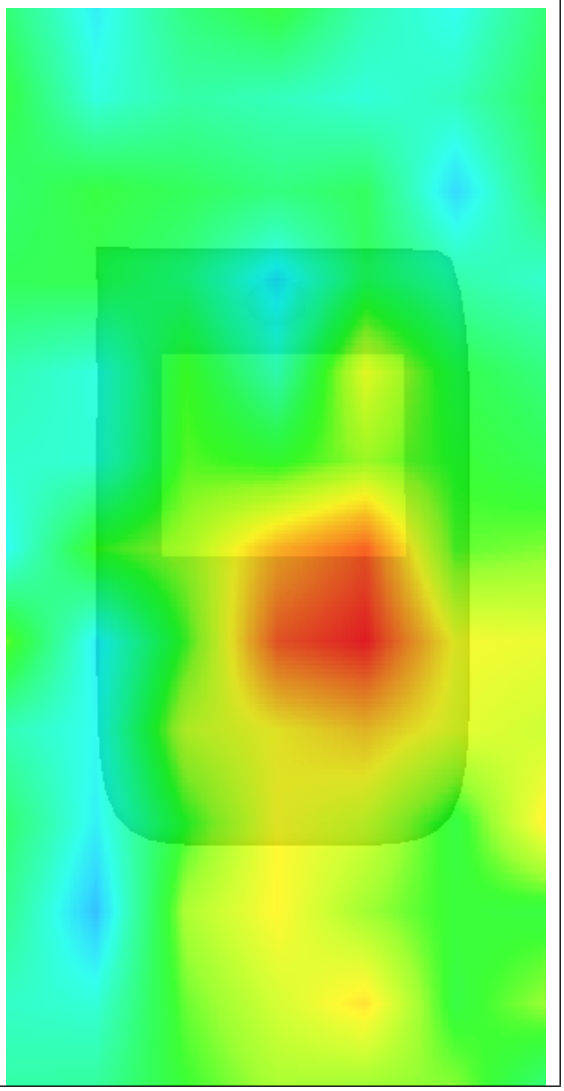
B. SAR Measurement Results

Frequency (MHz)	2535.000000
Relative permittivity (real part)	39.086666
Relative permittivity (imaginary part)	13.418333
Conductivity (S/m)	1.889749
Variation (%)	-2.740000

SURFACE SAR	VOLUME SAR
	

Maximum location: X=5.00, Y=-9.00
SAR Peak: 0.65 W/kg

SAR 10g (W/Kg)	0.217357
SAR 1g (W/Kg)	0.343125

3D screen shot	Hot spot position
	

MEASUREMENT 6

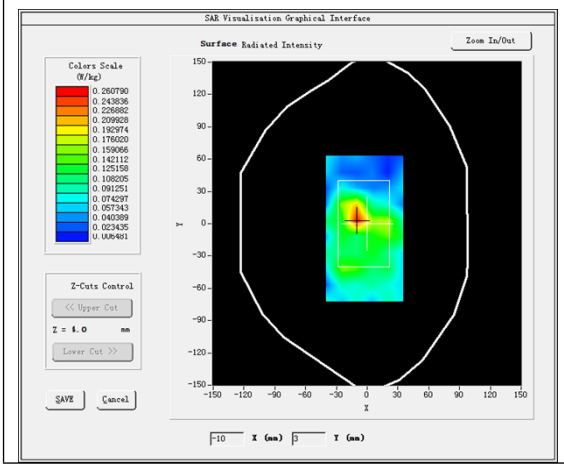
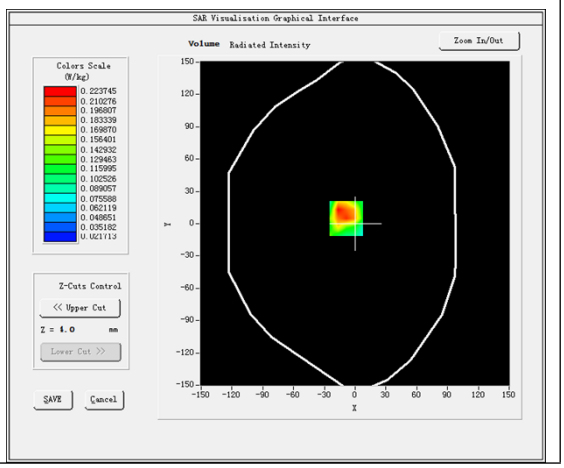
Date of measurement: 13/9/2024

A. Experimental conditions.

Area Scan	dx=15mm dy=15mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Body
Band	LTE band 12
Channels	Middle
Signal	LTE (Crest factor: 1.0)
ConvF	1.65

B. SAR Measurement Results

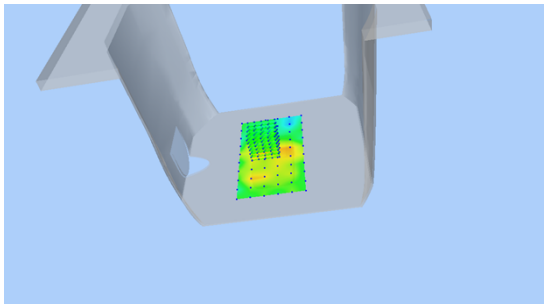
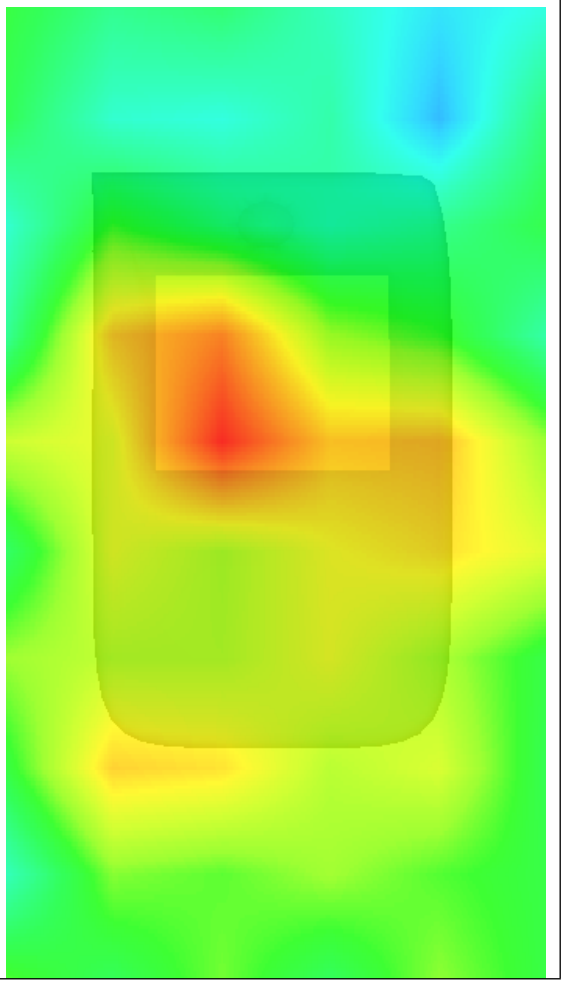
Frequency (MHz)	707.500000
Relative permittivity (real part)	42.126667
Relative permittivity (imaginary part)	23.264000
Conductivity (S/m)	0.914404
Variation (%)	2.630000

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-9.00, Y=5.00
SAR Peak: 0.33 W/kg

SAR 10g (W/Kg)	0.136250

SAR 1g (W/Kg)	0.219579

3D screen shot	Hot spot position
	

MEASUREMENT 7

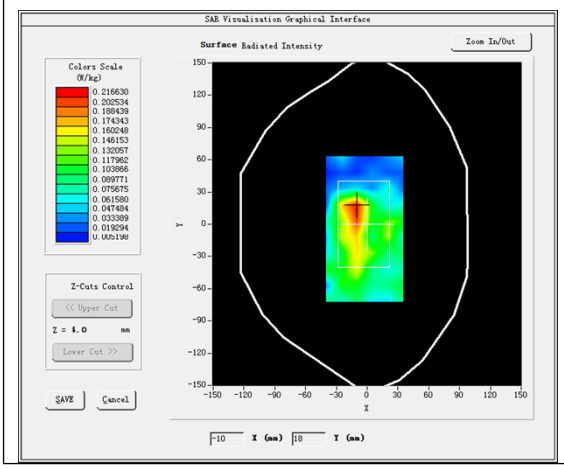
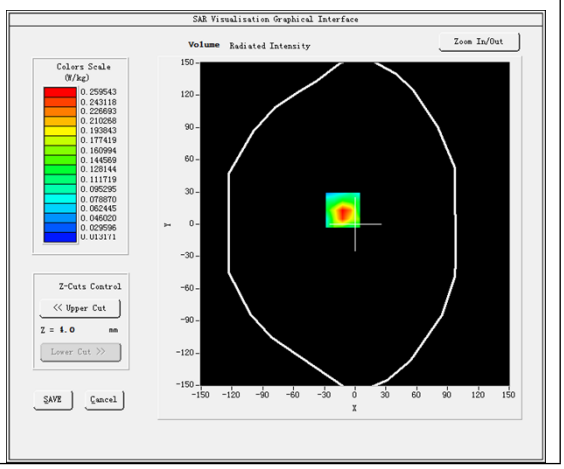
Date of measurement: 13/9/2024

A. Experimental conditions.

Area Scan	dx=15mm dy=15mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Body
Band	LTE band 17
Channels	Middle
Signal	LTE (Crest factor: 1.0)
ConvF	1.65

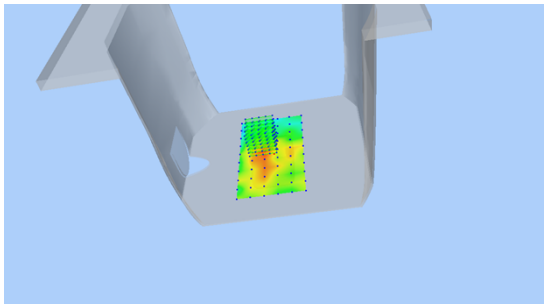
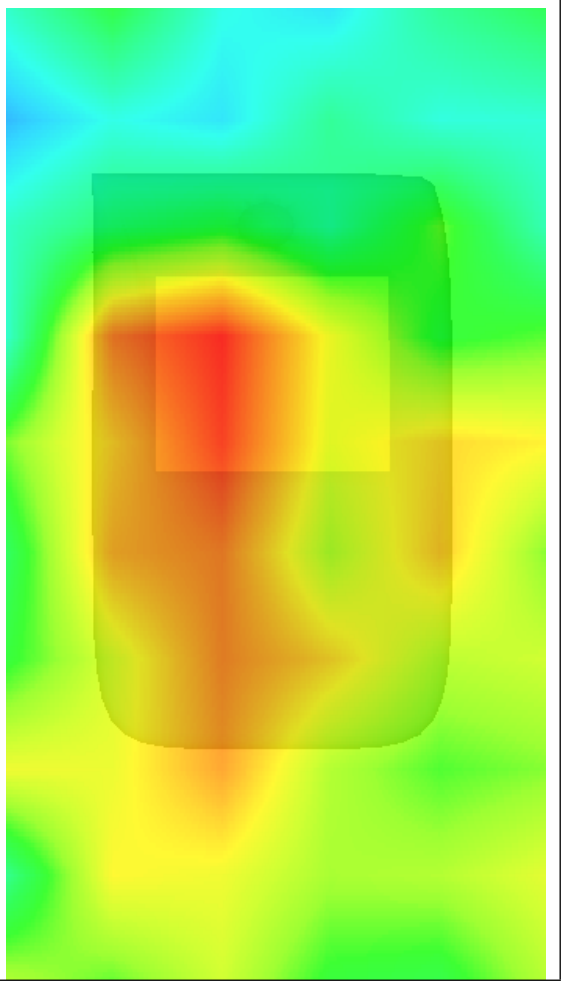
B. SAR Measurement Results

Frequency (MHz)	710.000000
Relative permittivity (real part)	42.113335
Relative permittivity (imaginary part)	23.152000
Conductivity (S/m)	0.913218
Variation (%)	0.070000

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-12.00, Y=13.00
SAR Peak: 0.52 W/kg

SAR 10g (W/Kg)	0.134078
SAR 1g (W/Kg)	0.268156

3D screen shot	Hot spot position
	

MEASUREMENT 8

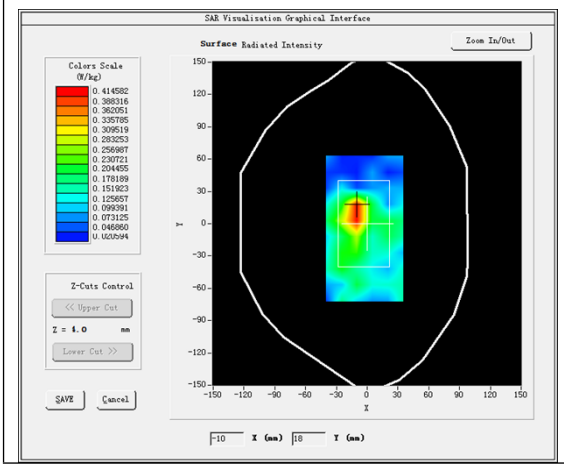
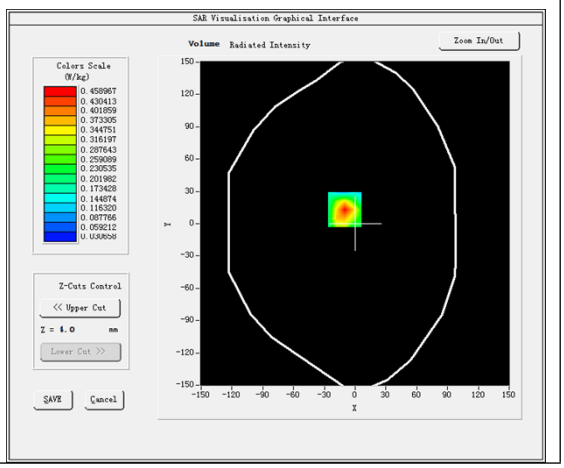
Date of measurement: 21/9/2024

A. Experimental conditions.

Area Scan	dx=15mm dy=15mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Body
Band	LTE band 25
Channels	Middle
Signal	LTE (Crest factor: 1.0)
ConvF	2.05

B. SAR Measurement Results

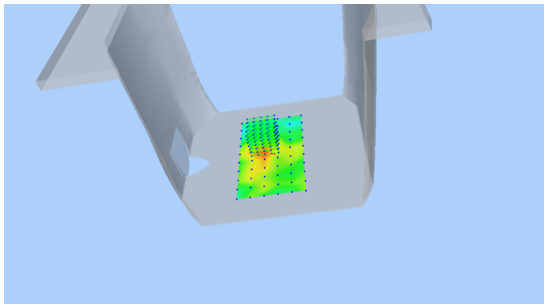
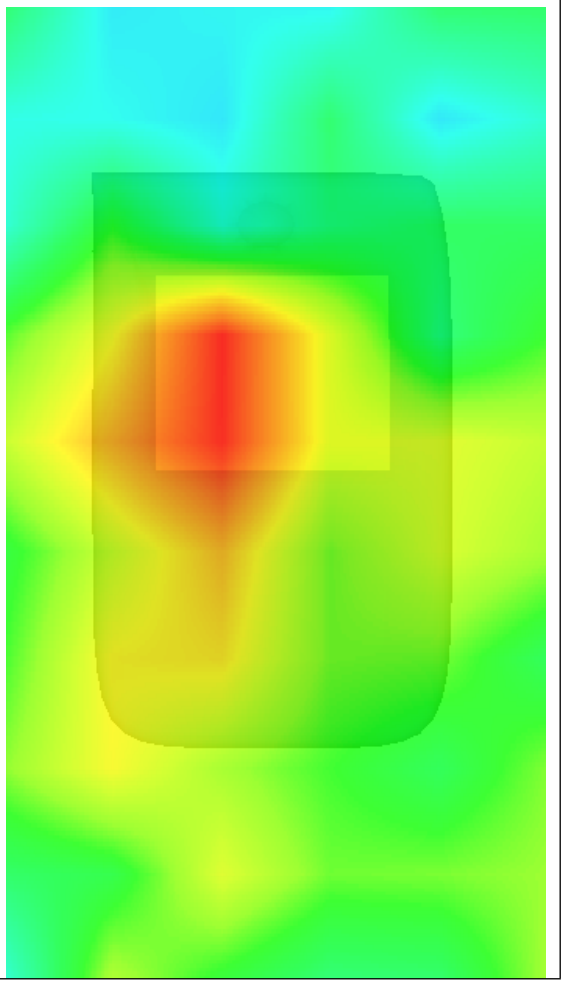
Frequency (MHz)	1882.500000
Relative permittivity (real part)	40.000000
Relative permittivity (imaginary part)	13.393200
Conductivity (S/m)	1.400333
Variation (%)	3.650000

SURFACE SAR	VOLUME SAR
	

Maximum location: X=-10.00, Y=13.00
SAR Peak: 0.82 W/kg

SAR 10g (W/Kg)	0.232536

SAR 1g (W/Kg)	0.427565

3D screen shot	Hot spot position
	

MEASUREMENT 9

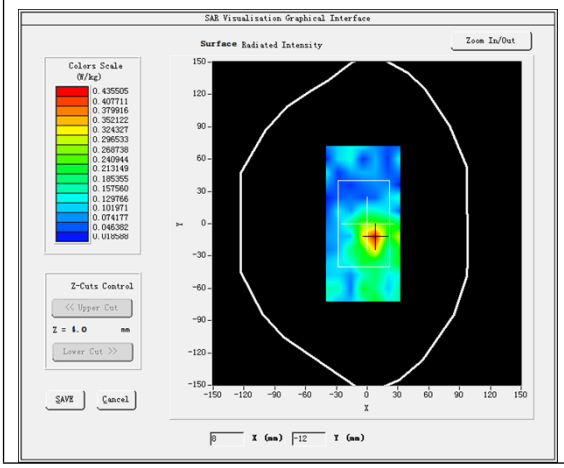
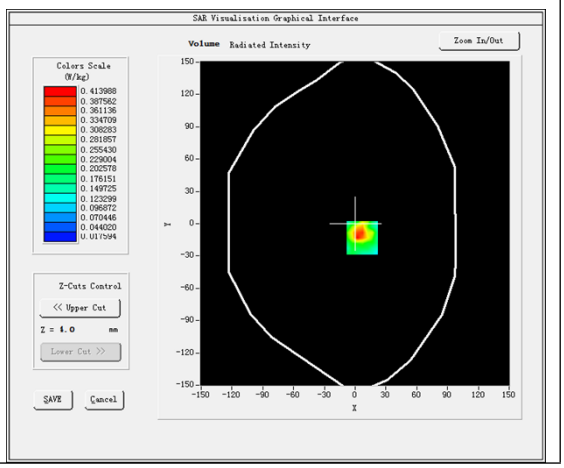
Date of measurement: 29/9/2024

A. Experimental conditions.

Area Scan	dx=12mm dy=12mm, h= 5.00 mm
ZoomScan	7x7x7,dx=5mm dy=5mm dz=5mm
Phantom	Validation plane
Device Position	Body
Band	LTE band 41
Channels	Middle
Signal	LTE (Crest factor: 1.0)
ConvF	2.05

B. SAR Measurement Results

Frequency (MHz)	2593.000000
Relative permittivity (real part)	39.009335
Relative permittivity (imaginary part)	13.553667
Conductivity (S/m)	1.952481
Variation (%)	-3.690000

SURFACE SAR	VOLUME SAR
	

Maximum location: X=7.00, Y=-13.00
SAR Peak: 0.55 W/kg

SAR 10g (W/Kg)	0.204864

SAR 1g (W/Kg)	0.357290

3D screen shot	Hot spot position