

FCC SAR EVALUATION REPORT

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

Product Name: TD-LTE/LTE FDD terminal

Model No.: HP-N323

Serial Model: HP-N325,HP-N326,HP-N327,HP-N328

Brand Name: N/A

FCC ID: 2BN5N-HPN323

Prepared for

HPYJ USA LLC

5940 S Rainbow Blvd Ste 400, Las Vegas, NV, USA, 89118

Prepared by

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TEST RESULT CERTIFICATION

Applicant's name: HPYJ USA LLC

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Manufacturer's Name: Shenzhen HPY-J Technology Co., Ltd

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Product description

Product name: TD-LTE/LTE FDD terminal

Trademark: N/A

Model and/or type reference ...: HP-N323

Serial Model.....: HP-N325,HP-N326,HP-N327,HP-N328
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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Date of Test

Date (s) of performance of tests: Feb. 11, 2025 ~ Feb. 16, 2025

Date of Issue.....: Mar. 11, 2025

Test Result: **Pass**

Reviewed by:



Simba Huang

Approved by:



Seal.chen



※ ※ Revision History ※ ※

REV.	DESCRIPTION	ISSUED DATE	REMARK
Rev.1.0	Initial Test Report Release	Mar. 11, 2025	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 10mm)	Max SAR Summation
LTE band 2	0.427	N/A
LTE band 4	0.349	
LTE band 5	0.283	
LTE band 7	0.117	
LTE band 12	0.332	
LTE band 13	0.305	
LTE band 17	0.477	
LTE band 38	0.587	
LTE band 40	0.465	
LTE band 41	0.615	
LTE band 66	0.400	

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	TD-LTE/LTE FDD terminal		
Model Name	HP-N323		
Family Model	HP-N325,HP-N326,HP-N327,HP-N328		
Device Phase	Identical Prototype		
Exposure Category	General population / Uncontrolled environment		
Antenna Type	Internal antenna		
Battery Information	DC 3.70V 3000mAh		
Hardware version	V1.0		
Software version	V1.0		
Device Operating Configurations			
Supporting Mode(s)	LTEBand2/4/5/7/12/13/17/38/40/41/66		
Test Modulation	LTE(QPSK/16QAM)		
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 13	777-787	746-756
	LTE Band 17	704-716	734-746
	LTE Band 38	2570-2620	
	LTE Band 40	2305-2315	
	LTE Band 41	2496-2690	
	LTE Band 66	1710-1780	2110-2200
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 13)		
	3, tested with power control all Max.(LTE Band 17)		
	3, tested with power control all Max.(LTE Band 38)		
	3, tested with power control all Max.(LTE Band 40)		
	3, tested with power control all Max.(LTE Band 41)		
	3, tested with power control all Max.(LTE Band 66)		

1.4. Test specification(s)

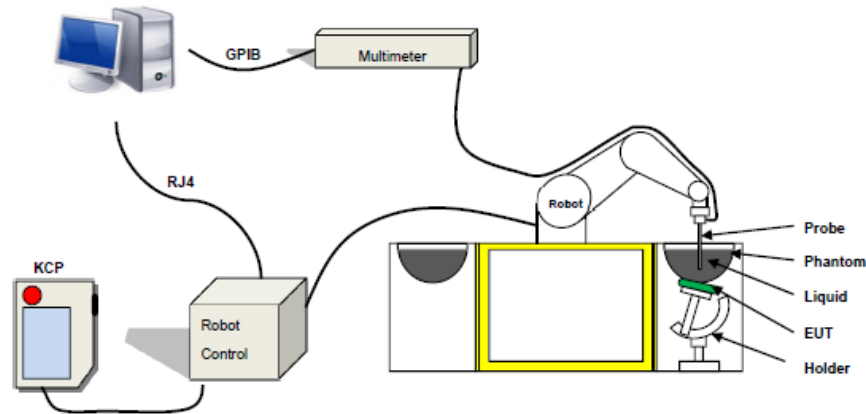
FCC 47 CFR Part 2(2.1093)
IEEE Std 1528-2013
KDB 865664 D01 SAR measurement 100 MHz to 6 GHz
KDB 865664 D02 RF Exposure Reporting
KDB 447498 D01 General RF Exposure Guidance
KDB 941225 D05 SAR for LTE Devices
KDB 648474 D04 Handset SAR

1.5. Ambient Condition

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

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 $\pm 10\%$. The spherical isotropy shall be evaluated and within $\pm 0.25\text{dB}$. 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

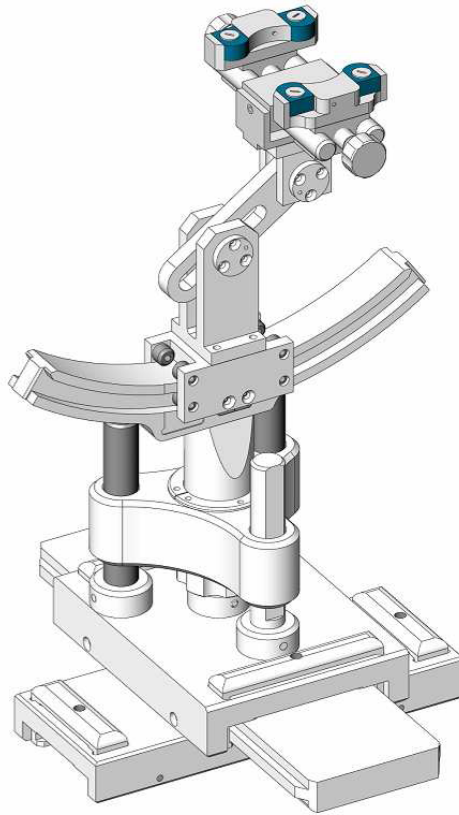
For the measurements the Specific Anthropomorphic Mannequin (SAM) defined by the IEEE SCC-34/SC2 group is used. The phantom is a polyurethane shell integrated in a wooden table. The thickness of the phantom amounts to 2mm +/- 0.2mm. It enables the dosimetric evaluation of left and right phone usage and 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

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	Jul. 01, 2024	Jun. 30, 2025
☒	MVG	Power Amplifier	N.A	AMPLISAR_28/14_003	NCR	NCR
☒	KEITHLEY	Millivoltmeter	2000	4072790	Jul. 01, 2024	Jun. 30, 2025
☐	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 Signal Generator	E8257D	MY51110112	Jul. 01, 2024	Jun. 30, 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 parameters extracted from FCC KDB 865664 D01 SAR measurement 100 MHz to 6 GHz.

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

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 used to determine 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 for 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 defined 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 $\pm 5\%$, 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									
	750	835	900	1800	1900	2000	2450	2600	5200	5800
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 if the dielectric parameters are within the tolerances of the specified target values. The measured conductivity and relative permittivity should be within $\pm 5\%$ of the target values.

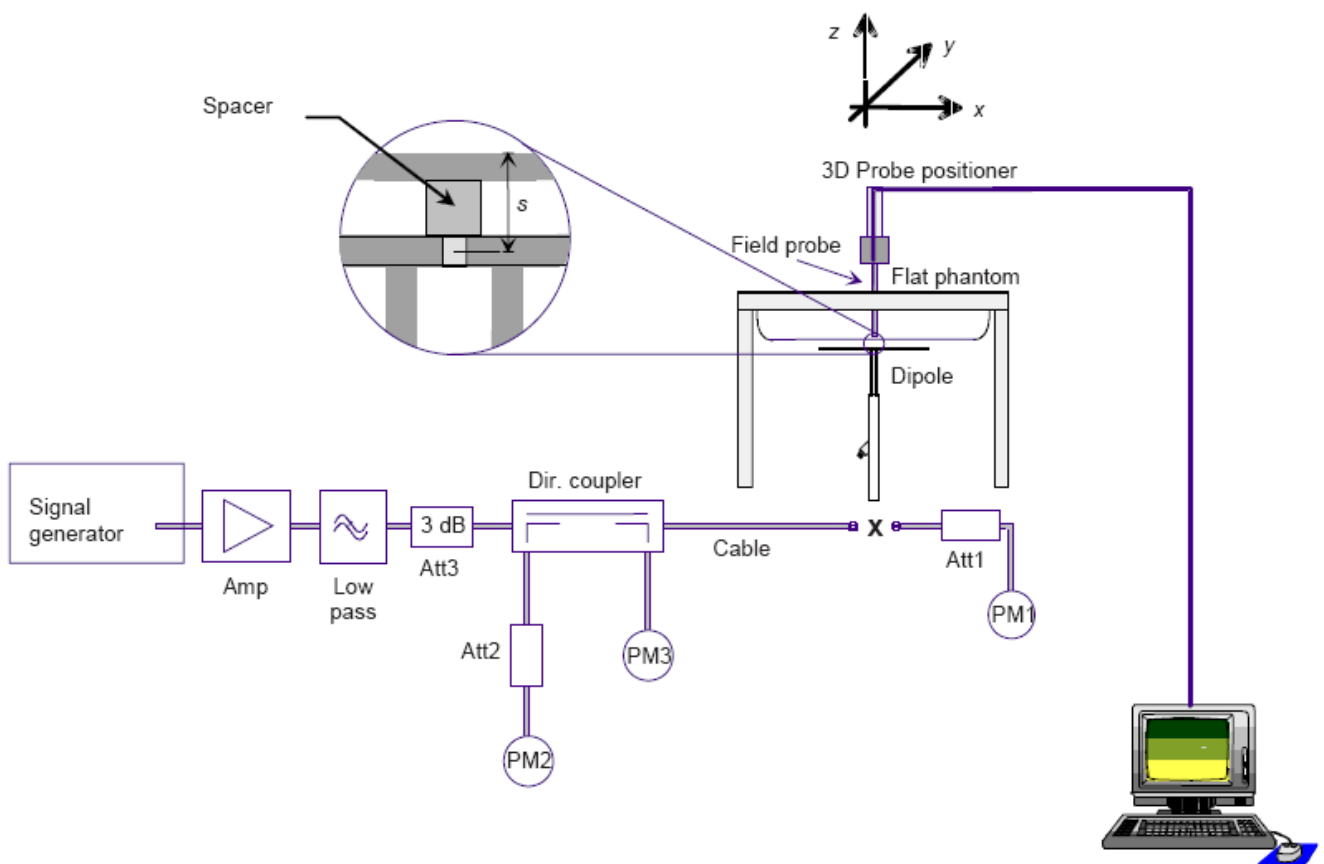
Tissue Type	Measured Frequency (MHz)	Target Tissue		Measured Tissue		Liquid Temp.	Test Date
		ϵ_r ($\pm 5\%$)	σ (S/m) ($\pm 5\%$)	ϵ_r	σ (S/m)		
Head 750	750	41.96 (39.86~44.06)	0.89 (0.85~0.93)	42.56	0.91	21.4 °C	Feb. 11, 2025
Head 850	835	41.50 (39.43~43.58)	0.90 (0.86~0.95)	42.01	0.94	21.1 °C	Feb. 12, 2025
Head 1800	1800	40.00 (38.00~42.00)	1.40 (1.33~1.47)	39.61	1.41	21.2 °C	Feb. 13, 2025
Head 1900	1900	40.00 (38.00~42.00)	1.40 (1.33~1.47)	41.42	1.39	21.3 °C	Feb. 14, 2025
Head 2300	2300	39.47 (37.50~41.44)	1.66 (1.58~1.74)	40.12	1.70	21.0 °C	Feb. 15, 2025
Head 2600	2600	39.01 (37.06~40.96)	1.96 (1.86~2.06)	39.43	1.99	21.6 °C	Feb. 16, 2025

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 $\pm 10\%$. 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	Power fed to reference dipole (mW)	Measured SAR Value		Measured SAR (Normalized to 1W)		Target SAR Value (1W)		Deviation (%)		Test Date
		1-g (W/Kg)	10-g (W/Kg)	1-g (W/Kg)	10-g (W/Kg)	1-g (W/Kg)	10-g (W/Kg)	1-g (W/Kg)	10-g (W/Kg)	
750MHz	100	0.930	0.621	9.30	6.21	8.60	5.78	8.14%	7.44%	Feb. 11, 2025
835MHz	100	1.011	0.612	10.11	6.12	9.40	6.28	7.55%	-2.55%	Feb. 12, 2025
1800MHz	100	3.832	2.025	38.32	20.25	37.06	20.01	3.40%	1.20%	Feb. 13, 2025
1900MHz	100	4.154	2.153	41.54	21.53	39.69	20.92	4.66%	2.92%	Feb. 14, 2025
2300MHz	100	5.172	2.340	51.72	23.40	50.63	23.51	2.15%	-0.47%	Feb. 15, 2025
2600MHz	100	5.433	2.523	54.33	25.23	54.16	24.85	0.31%	1.53%	Feb. 16, 2025

5. SAR measurement variability

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 ($\sim 10\%$ 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. Body Worn Accessory

1. Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 7.4.1). Per KDB 648474 D04, body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB 447498 D01 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for body-worn accessory, measured without a headset connected to the handset is $< 1.2 \text{ W/kg}$, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

2. Accessories for body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are test with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-chip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

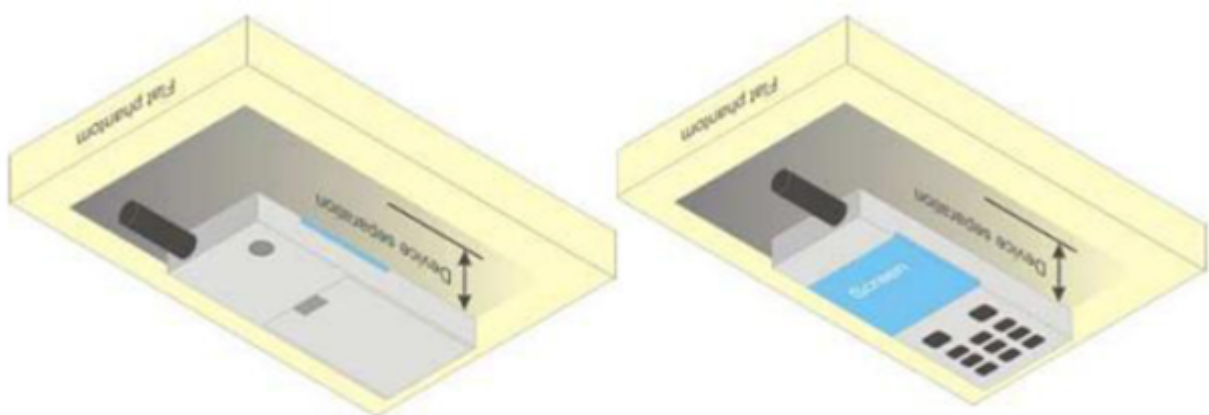


Figure 7.4.1 – Test positions for body-worn devices

7.2. Wireless Router Devices

Some battery-operated handsets have the capability to transmit and receive user through simultaneous transmission of WLAN simultaneously with a separate licensed transmitter. The FCC has provided guidance in FCC KDB Publication 941225 D06 where SAR test considerations for handsets ($L \times W \geq 9 \text{ cm} \times 5 \text{ cm}$) are based on a composite test separation distance of 10mm from the front, back and edges of the device containing transmitting antennas within 2.5cm of their edges, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.

When the user enables the personal wireless router functions for the handset, actual operations include simultaneous transmission of both the WLAN transmitter and another licensed transmitter. Both transmitters often do not transmit at the same transmitting frequency and thus cannot be evaluated for SAR under actual use conditions due to the limitations of the SAR assessment probes. Therefore, SAR must be evaluated for each frequency transmission and mode separately and spatially summed with the WLAN transmitter according to FCC KDB Publication 447498 D01 publication procedures. The —Portable HotspotII feature on the handset was NOT activated during SAR assessments, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal at a time.

8. RF Output Power

8.1. LTE Conducted Power

- 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 # $\left\lceil N_{RB}^{UL} / 2 \right\rceil$ 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	25.50	25.14	23.81	23.94
			1	2	25.50	25.18	23.72	23.87
			1	5	25.50	25.33	23.82	23.72
			3	0	25.50	25.29	23.77	23.82
			3	1	25.50	25.30	23.75	23.80
			3	2	25.50	25.27	23.76	23.71
		16QAM	6	0	24.50	24.15	22.86	22.97
			1	0	24.50	24.01	22.75	22.93
			1	2	24.50	24.08	22.77	22.91
			1	5	24.50	24.09	22.73	22.71
			3	0	24.50	23.95	22.67	22.73
			3	1	24.50	23.93	22.73	22.75
			3	2	24.50	24.01	22.70	22.66
			6	0	23.50	23.33	21.83	22.14
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	26/24/24	25.23	23.77	23.77
			1	7	26/24/24	25.19	23.80	23.71
			1	14	26/24/24	25.05	23.82	23.38
			8	0	24.50	24.10	22.85	22.83
			8	4	24.50	24.12	22.84	22.84
			8	7	24.50	24.06	22.88	22.87
		16QAM	15	0	24.50	24.20	22.85	22.77
			1	0	25/23/23	24.04	22.72	22.63
			1	7	25/23/23	24.12	22.73	22.61
			1	14	25/23/23	24.01	22.77	22.35
			8	0	23.50	23.27	21.97	22.00
			8	4	23.50	23.20	21.98	21.98
			8	7	23.50	23.26	22.02	22.00
			15	0	23.50	23.24	21.91	21.82
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	25.50	25.41	23.98	23.95
			1	12	25.50	25.28	23.74	23.77
			1	24	25.50	25.43	23.84	23.55
			12	0	24.50	24.14	22.86	22.86
			12	6	24.50	24.16	22.91	22.92
			12	11	24.50	24.19	22.86	22.72
			25	0	24.50	24.14	22.80	22.75
		16QAM	1	0	24.50	24.27	23.10	22.87
			1	12	24.50	24.04	23.00	22.82
			1	24	24.50	24.29	23.03	22.61
			12	0	23.50	23.21	22.02	22.05

			12	6	23.50	23.21	22.04	22.08
			12	11	23.50	23.32	21.99	21.89
			25	0	23.50	23.29	21.90	21.92
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	25.50	25.31	23.97	24.47
			1	24	25.50	25.24	23.71	23.73
			1	49	25.50	25.27	24.15	23.55
			25	0	24.50	24.02	22.76	22.90
			25	12	24.50	24.01	22.73	22.91
			25	25	24.50	24.12	22.77	22.60
		16QAM	50	0	24.50	24.18	22.66	22.62
			1	0	25/24/24	24.28	23.01	23.22
			1	24	25/23/23	24.17	22.72	22.66
			1	49	25/24/23	24.20	23.00	22.50
			25	0	23.50	23.09	21.88	22.07
			25	12	23.50	23.08	21.91	22.05
			25	25	23.50	23.17	21.90	21.74
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	25.50	25.31	24.25	25.26
			1	37	25.50	25.30	23.83	24.17
			1	74	25.50	25.22	24.56	23.84
			38	0	24.50	24.44	22.97	23.25
			38	18	24.50	24.40	22.99	23.27
			38	37	24.50	24.39	23.00	23.27
		16QAM	75	0	24.50	24.36	23.01	23.32
			1	0	24.50	24.22	23.58	24.09
			1	37	24.50	24.34	23.10	23.12
			1	74	24.50	24.34	23.79	22.71
			38	0	24.50	24.41	22.98	23.26
			38	18	24.50	24.39	23.00	23.27
			38	37	24.50	24.38	23.00	23.27
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	25.50	25.19	24.35	25.42
			1	49	25.50	25.28	23.92	24.74
			1	99	25.50	24.54	24.92	23.78
			50	0	24.50	24.22	23.19	24.18
			50	25	24.50	24.24	23.16	24.10
			50	50	24.50	24.01	23.30	22.93
		16QAM	100	0	24.50	24.32	22.94	23.71
			1	0	24.50	24.37	23.24	24.29
			1	49	24.50	24.49	22.84	23.86
			1	99	24.50	23.81	23.82	22.78

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	25/25/23	24.31	24.71	22.74
			1	2	25/25/23	24.13	24.60	22.74
			1	5	25/25/23	24.07	24.56	22.83
			3	0	25/25/23	24.12	24.72	22.66
			3	1	25/25/23	24.09	24.72	22.65
			3	2	25/25/23	24.06	24.61	22.74
			6	0	24/24/22	23.06	23.55	21.41
		16QAM	1	0	23/24/22	22.90	23.25	21.26
			1	2	23/24/22	22.93	23.23	21.41
			1	5	23/24/22	22.94	23.20	21.40
			3	0	23/24/22	22.88	23.25	21.13
			3	1	23/24/22	22.89	23.25	21.12
			3	2	23/24/22	22.86	23.20	21.23
			6	0	22/23/21	21.81	22.65	20.56
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	25/25/23	24.27	24.63	22.56
			1	7	25/25/23	24.07	24.72	22.72
			1	14	25/25/23	23.92	24.43	22.81
			8	0	24/24/22	23.09	23.48	21.20
			8	4	24/24/22	23.06	23.49	21.16
			8	7	24/24/22	22.95	23.41	21.36
			15	0	24/24/22	23.06	23.44	21.24
		16QAM	1	0	24/24/21	23.13	23.24	20.84
			1	7	24/24/22	23.02	23.25	21.12
			1	14	23/23/22	22.93	22.93	21.29
			8	0	22/23/21	21.98	22.57	20.32
			8	4	22/23/21	21.99	22.58	20.33
			8	7	22/23/21	21.92	22.55	20.57
			15	0	22/23/21	21.94	22.48	20.35
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	25/25/23	24.36	24.78	22.53
			1	12	25/25/23	24.16	24.71	22.62
			1	24	25/25/23	24.06	24.37	22.99
			12	0	24/24/21	23.00	23.53	20.90
			12	6	24/24/21	23.02	23.55	20.93
			12	11	23/24/22	22.95	23.29	21.32
			25	0	24/24/22	23.00	23.41	21.13
		16QAM	1	0	24/24/22	23.22	23.63	21.11
			1	12	24/24/22	23.10	23.51	21.25
			1	24	23/24/22	22.98	23.14	21.76
			12	0	22/23/21	21.90	22.60	20.37
			12	6	22/23/21	21.83	22.58	20.31
			12	11	22/23/21	21.80	22.45	20.52
			25	0	22/23/21	21.88	22.54	20.38

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	25/25/23	24.27	24.74	22.58
			1	24	25/25/23	23.87	24.65	22.35
			1	49	25/25/23	24.14	23.76	22.69
			25	0	23/24/21	22.75	23.46	20.86
			25	12	23/24/21	22.80	23.43	20.91
			25	25	23/23/21	22.82	22.82	20.88
		16QAM	50	0	23/24/21	22.81	23.18	20.76
			1	0	24/24/21	23.16	23.54	20.90
			1	24	23/24/21	22.89	23.25	20.60
			1	49	24/23/22	23.10	22.31	21.38
			25	0	22/23/20	21.63	22.55	19.68
			25	12	22/23/20	21.64	22.53	19.66
			25	25	22/23/21	21.65	22.08	20.14
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	25/25/23	24.28	24.44	22.97
			1	38	25/25/23	23.98	24.59	22.22
			1	74	25/25/23	24.24	23.29	22.90
			38	0	24/24/22	23.20	23.20	21.23
			38	18	24/24/22	23.16	23.20	21.26
			38	37	24/24/22	23.18	23.20	21.27
		16QAM	75	0	24/24/22	23.23	23.19	21.37
			1	0	24/24/22	23.21	23.53	21.36
			1	38	24/24/21	23.08	23.60	20.97
			1	74	24/23/22	23.38	22.05	21.36
			38	0	24/24/22	23.17	23.19	21.25
			38	18	24/24/22	23.19	23.20	21.27
			38	37	24/24/22	23.18	23.17	21.27
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	25/25/24	24.15	24.37	23.84
			1	49	25/25/23	24.26	24.74	22.43
			1	99	25/25/23	24.67	22.98	22.77
			50	0	23/24/22	22.93	23.53	21.81
			50	25	23/24/22	22.95	23.53	21.75
			50	50	24/23/21	23.35	22.38	20.86
			100	0	24/24/22	23.45	23.13	21.46
		16QAM	1	0	24/24/23	23.08	23.45	22.59
			1	49	24/24/22	23.26	23.69	21.33
			1	99	24/22/22	23.64	21.72	21.33

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	25.00	23.81	24.58	24.40
			1	2	25.00	23.56	24.42	24.18
			1	5	25.00	23.54	24.35	24.14
			3	0	24.50	23.52	24.49	24.14
			3	1	24.50	23.52	24.49	24.12
			3	2	24.50	23.45	24.40	24.17
			6	0	23.50	22.59	23.48	23.30
		16QAM	1	0	23.50	22.59	23.37	23.25
			1	2	23.50	22.55	23.22	23.27
			1	5	23.50	22.42	23.17	23.15
			3	0	23.50	22.40	23.33	23.07
			3	1	23.50	22.48	23.33	23.05
			3	2	23.50	22.35	23.21	23.06
			6	0	23.00	21.53	22.60	22.44
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	25.00	23.56	24.69	23.97
			1	7	25.00	23.38	24.47	24.30
			1	14	25.00	23.16	24.19	24.15
			8	0	24.00	22.52	23.58	23.10
			8	4	24.00	22.58	23.62	23.04
			8	7	24.00	22.40	23.39	23.30
			15	0	24.00	22.49	23.50	23.15
		16QAM	1	0	23.50	22.57	23.48	22.67
			1	7	23.50	22.42	23.35	23.11
			1	14	23.50	22.20	23.10	23.07
			8	0	23.00	21.76	22.82	22.13
			8	4	23.00	21.71	22.83	22.13
			8	7	23.00	21.56	22.62	22.38
			15	0	23.00	21.66	22.57	22.13
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	25.00	23.96	24.75	23.67
			1	12	25.00	23.36	24.46	24.04
			1	24	25.00	23.36	24.15	24.40
			12	0	24.00	22.46	23.58	22.51
			12	6	24.00	22.50	23.57	22.55
			12	11	24.00	22.30	23.29	23.19
			25	0	23.50	22.40	23.41	22.89
		16QAM	1	0	24.00	22.87	23.73	22.46
			1	12	24.00	22.32	23.61	22.97
			1	24	24.00	22.39	23.21	23.35
			12	0	23.00	21.62	22.85	21.72
			12	6	23.00	21.64	22.82	21.73
			12	11	23.00	21.39	22.52	22.26
			25	0	23.00	21.58	22.52	22.03
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	24.50	23.51	24.29	23.72
			1	24	24.50	23.32	24.36	23.31
			1	49	24.50	24.49	23.44	24.36
			25	0	23.50	22.20	23.26	22.10
			25	12	23.50	22.21	23.32	22.17
			25	25	23.50	22.77	22.85	22.68
		16QAM	50	0	23.00	22.58	22.96	22.54
			1	0	24.00	22.59	23.11	22.44
			1	24	24.00	22.32	23.27	22.05
			1	49	24.00	23.62	22.35	23.12
			25	0	23.00	21.34	22.51	21.33
			25	12	23.00	21.34	22.53	21.28
			25	25	23.00	21.94	22.06	21.81

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	26/26/24	25.84	25.20	23.44
			1	12	26/26/25	25.77	25.13	24.00
			1	24	26/26/25	25.84	25.18	24.27
			12	0	25/25/23	24.80	24.14	22.83
			12	6	25/25/23	24.79	24.22	22.86
			12	11	25/25/23	24.89	24.19	23.28
			25	0	25.00	24.79	24.25	23.21
		16QAM	1	0	25/25/24	24.80	24.12	22.59
			1	12	25/25/24	24.95	24.10	23.22
			1	24	25/25/24	24.86	24.11	23.37
			12	0	24/24/23	23.93	23.38	22.07
			12	6	24/24/23	23.99	23.40	22.01
			12	11	25/24/23	24.11	23.36	22.53
			25	0	24.00	23.94	23.42	22.49
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	27/26/25	26.12	25.36	22.99
			1	24	27/26/25	25.67	25.08	23.41
			1	49	27/26/25	25.17	25.31	24.43
			25	0	25/25/24	24.90	24.00	22.16
			25	12	25/25/24	24.89	24.12	22.22
			25	25	25/25/24	24.59	24.10	23.13
			50	0	25/25/23	24.97	24.35	22.65
		16QAM	1	0	25/25/22	24.90	24.16	21.97
			1	24	25/24/23	24.90	23.95	22.42
			1	49	25/24/24	24.51	23.97	23.30
			25	0	24/24/22	23.93	23.22	21.46
			25	12	24/24/22	23.93	23.26	21.51
			25	25	24/24/23	23.77	23.22	22.35
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		

			RB Size	RB Offset		20825/2507.5	21100/253 5	21375/2562.5
LTE Band 7	15MHz	QPSK	1	0	26/26/25	25.95	25.15	24.55
			1	38	26/26/25	25.28	25.22	23.21
			1	74	26/26/25	24.83	25.30	24.40
			38	0	25/25/23	24.70	24.41	22.55
			38	18	25/25/23	24.69	24.39	22.62
			38	37	25/25/23	24.74	24.38	22.60
			75	0	25/25/23	24.78	24.65	22.71
		16QAM	1	0	26/25/24	25.08	24.58	23.48
			1	37	26/25/24	24.83	24.39	22.23
			1	74	26/25/24	24.24	24.45	23.31
			36	0	25/25/23	24.72	24.40	22.60
			36	18	25/25/23	24.75	24.39	22.59
			36	37	25/25/23	24.73	24.37	22.61
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20850/2510	21100/253 5	21350/2560
LTE Band 7	20MHz	QPSK	1	0	27/26/26	26.24	25.14	25.37
			1	49	26/26/24	25.53	25.34	23.17
			1	99	25/26/25	24.54	25.41	24.48
			50	0	26/25/24	25.12	24.53	23.78
			50	25	26/25/24	25.16	24.44	23.71
			50	50	26/25/24	24.17	24.57	22.69
			100	0	25/25/23	24.56	24.55	22.56
		16QAM	1	0	26/25/25	25.07	24.42	24.51
			1	49	25/25/23	24.63	24.52	22.43
			1	99	24/25/24	23.74	24.50	23.37

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	23/25/24	22.71	24.29	23.65
			1	2	23/25/24	22.19	24.11	23.30
			1	5	23/25/23	22.01	24.01	22.93
			3	0	23/25/24	22.33	24.24	23.46
			3	1	23/25/24	22.34	24.23	23.44
			3	2	23/25/24	22.13	24.10	23.03
			6	0	22/24/23	21.34	23.27	22.43
		16QAM	1	0	22/24/23	21.52	23.08	22.59
			1	2	22/24/23	21.21	22.98	22.45
			1	5	22/24/23	20.98	22.87	22.03
			3	0	22/24/23	21.26	23.06	22.39
			3	1	22/24/23	21.27	23.06	22.37
			3	2	22/24/23	21.05	22.92	22.04
			6	0	21/23/22	20.28	22.35	21.67
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	3MHz	QPSK	1	0	23/25/24	22.76	24.35	22.36
			1	7	23/25/24	22.05	24.28	23.59

12			1	14	23/25/24	21.75	23.61	23.26
			8	0	22/24/23	21.46	23.46	22.07
			8	4	22/24/23	21.49	23.44	22.02
			8	7	22/24/23	20.94	23.24	22.72
			15	0	22/24/23	21.23	23.34	22.45
		16QAM	1	0	22/24/23	21.67	23.13	21.42
			1	7	22/24/23	20.92	23.19	22.71
			1	14	22/24/23	20.64	22.52	22.42
			8	0	21/23/22	20.53	22.45	21.15
			8	4	21/23/22	20.56	22.45	21.15
			8	7	21/23/22	20.04	22.24	21.89
			15	0	21/23/22	20.19	22.24	21.56
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	23/25/22	22.93	23.95	22.35
			1	12	23/25/22	21.85	24.36	22.86
			1	24	23/25/22	22.32	23.18	23.64
			12	0	22/24/23	21.22	23.28	21.11
			12	6	22/24/23	21.27	23.25	21.13
			12	11	22/24/23	21.04	22.78	22.59
			25	0	22/24/22	21.10	23.12	21.87
		16QAM	1	0	23/24/23	22.00	22.79	21.29
			1	12	21/24/22	20.99	23.34	21.82
			1	24	23/24/23	21.47	22.20	22.66
			12	0	21/23/21	20.44	22.30	20.16
			12	6	21/23/21	20.42	22.28	20.18
			12	11	21/22/22	20.12	21.90	21.61
			25	0	21/23/21	20.13	22.11	20.93
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	23/22/25	22.65	21.95	24.40
			1	24	23/25/22	22.59	24.32	22.24
			1	49	24/22/24	23.93	22.05	23.90
			25	0	21/23/23	20.95	22.45	22.32
			25	12	21/23/23	20.94	22.44	22.41
			25	25	23/23/22	22.85	22.06	21.70
			50	0	23/23/23	22.01	22.19	22.14
		16QAM	1	0	22/21/24	21.71	20.82	23.11
			1	24	22/24/22	21.60	23.22	21.14
			1	49	24/21/23	23.12	20.90	22.59
			25	0	21/22/22	20.02	21.49	21.44
			25	12	21/22/22	20.00	21.50	21.46
			25	25	22/22/21	21.86	21.15	20.79

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23205/779.5	23230/782	23255/784.5
LTE Band 13	5MHz	QPSK	1	0	24.00	22.65	23.74	22.10
			1	12	24.00	23.63	22.26	22.51
			1	24	24.00	22.55	22.12	23.73
			12	0	22.50	22.36	22.01	20.78
			12	6	22.50	22.39	22.16	20.79
			12	11	22.50	22.21	20.83	21.94
			25	0	22.50	22.39	21.51	21.40
		16QAM	1	0	22/23/21	21.62	22.68	20.90
			1	12	23/22/22	22.75	21.09	21.29
			1	24	22/21/23	21.58	20.92	22.60
			12	0	22/22/20	21.52	21.26	19.89
			12	6	22/22/20	21.50	21.27	19.90
			12	11	22/20/22	21.43	19.98	21.15
			25	0	21.50	21.45	20.72	20.61
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		/	23230/782	/
LTE Band 13	10MHz	QPSK	1	0	24.00	/	22.87	/
			1	24	24.00	/	22.34	/
			1	49	24.00	/	23.74	/
			25	0	22.50	/	22.32	/
			25	12	22.50	/	22.34	/
			25	25	22.50	/	21.39	/
			50	0	22.00	/	21.91	/
		16QAM	1	0	23.00	/	21.87	/
			1	24	23.00	/	21.39	/
			1	49	23.00	/	22.65	/
			25	0	21.50	/	21.40	/
			25	12	21.50	/	21.38	/
			25	25	21.50	/	20.46	/

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	24/25/23	23.21	24.42	22.16
			1	12	25/23/23	24.61	22.68	22.68
			1	24	24/22/24	23.79	21.90	23.71
			12	0	23/23/21	22.92	22.64	20.90
			12	6	23/23/21	22.85	22.70	20.96
			12	11	24/22/23	23.30	21.29	22.45
			25	0	24/22/22	23.19	21.89	21.74
		16QAM	1	0	22/24/22	21.98	23.36	21.16
			1	12	24/22/22	23.53	21.69	21.79
			1	24	23/21/23	22.85	20.92	22.68
			12	0	22/22/21	21.90	21.68	20.10
			12	6	22/22/21	21.93	21.73	20.13
			12	11	23/21/22	22.42	20.28	21.54
			25	0	23/21/21	22.24	20.95	20.80
Band	Band	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		

	Width		RB Size	RB Offset	(dBm)	23780/709	23790/710	23800/711
LTE Band 17	10MHz	QPSK	1	0	24/25/25	23.22	24.15	24.75
			1	24	25/24/23	24.26	23.15	22.52
			1	49	23/24/25	22.76	23.67	24.50
			25	0	23.50	23.33	23.25	22.65
			25	12	23.50	23.35	23.30	22.79
			25	25	23.50	21.96	21.52	21.70
		16QAM	50	0	22.50	22.20	22.12	22.19
			1	0	23/23/24	22.18	22.98	23.48
			1	24	24/23/22	23.39	22.20	21.44
			1	49	22/23/24	21.57	22.30	23.09
			25	0	22.50	22.33	22.29	21.82
			25	12	22.50	22.33	22.29	21.85
			25	25	22.50	20.98	20.63	20.75

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		37775/2572.5	38000/2595	38225/2617.5
LTE Band 38	5MHz	QPSK	1	0	25.50	23.84	25.15	24.64
			1	12	25.50	23.98	25.23	24.48
			1	24	25.50	24.05	25.31	24.26
			12	0	24.50	22.94	24.26	23.57
			12	6	24.50	22.95	24.24	23.59
			12	11	24.50	23.05	24.36	23.45
			25	0	24.50	23.04	24.32	23.52
		16QAM	1	0	24.50	23.25	24.32	23.68
			1	12	24.50	23.43	24.49	23.57
			1	24	24.50	23.40	24.49	23.38
			12	0	24.00	22.05	23.43	22.69
			12	6	24.00	22.05	23.43	22.70
			12	11	24.00	22.19	23.55	22.57
			25	0	23.50	22.16	23.46	22.64
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		37800/2575	38000/2595	38200/2615
LTE Band 38	10MHz	QPSK	1	0	26.00	24.04	25.22	25.11
			1	24	26.00	24.21	25.43	24.86
			1	49	26.00	24.57	25.51	24.39
			25	0	24.50	23.06	24.25	24.01
			25	12	24.50	23.08	24.26	23.94
			25	25	24.50	23.46	24.46	23.60
			50	0	24.50	23.21	24.41	23.85
		16QAM	1	0	24.50	23.26	23.93	24.08
			1	24	24.50	23.50	24.23	23.87
			1	49	24.50	23.78	24.29	23.44
			25	0	24.00	22.24	23.38	23.13
			25	12	24.00	22.24	23.39	23.14
			25	25	24.00	22.63	23.60	22.76
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		37825/2577.5	38000/2595	38175/2615

LTE Band 38	15MHz	QPSK	1	0	26.00	24.16	25.17	25.52
			1	38	26.00	24.64	25.55	25.20
			1	74	26.00	24.97	25.60	24.59
			38	0	25.00	23.61	24.51	24.19
			38	18	25.00	23.64	24.50	24.19
			38	37	25.00	23.64	24.53	24.19
			75	0	25.00	23.66	24.53	24.18
		16QAM	1	0	25.00	23.37	24.17	24.76
			1	38	25.00	23.86	24.59	24.46
			1	74	25.00	24.23	24.64	23.85
			38	0	25.00	23.64	24.50	24.19
			38	18	25.00	23.64	24.53	24.19
			38	37	25.00	23.64	24.53	24.19
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		37850/2580	38000/2595	38150/2610
LTE Band 38	20MHz	QPSK	1	0	26.00	23.99	24.88	25.46
			1	49	26.00	24.75	25.53	25.34
			1	99	26.00	25.14	25.49	24.49
			50	0	25.00	23.32	24.25	24.45
			50	25	25.00	23.30	24.23	24.52
			50	50	25.00	23.97	24.60	24.04
			100	0	24.50	23.74	24.40	24.25
		16QAM	1	0	25.00	23.11	24.02	24.56
			1	49	25.00	23.86	24.63	24.48
			1	99	25.00	24.19	24.58	23.58

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		38725/2307.5	38750/2310	38775/2312.5
LTE Band 40	5MHz	QPSK	1	0	22.50	22.48	22.41	22.42
			1	12	22.50	22.38	22.36	22.45
			1	24	22.50	22.41	22.36	22.33
			12	0	24.00	23.34	23.37	23.57
			12	6	24.00	23.34	23.38	23.59
			12	11	24.00	23.40	23.59	23.78
			25	0	23.50	22.94	23.01	23.25
		16QAM	1	0	24.00	23.51	23.47	23.57
			1	12	24.00	23.57	23.58	23.73
			1	24	24.00	23.68	23.76	23.97
			12	0	23.00	22.50	22.58	22.71
			12	6	23.00	22.49	22.59	22.72
			12	11	23.00	22.62	22.70	22.97
			25	0	22.50	22.19	22.17	22.41
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		/	38750/2310	/
LTE Band 40	10MHz	QPSK	1	0	24.00	/	23.75	/
			1	24	24.00	/	24.00	/
			1	49	24.00	/	22.37	/
			25	0	22.50	/	22.10	/
			25	12	22.50	/	22.10	/

		16QAM	25	25	22.50	/	22.37	/
			50	0	20.50	/	20.31	/
			1	0	23.50	/	22.84	/
			1	24	23.50	/	23.01	/
			1	49	23.50	/	23.37	/
			25	0	22.00	/	21.31	/
			25	12	22.00	/	21.26	/
			25	25	22.00	/	21.58	/

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	24/26/26	23.09	25.29	25.36
			1	12	24/26/26	23.04	25.35	25.32
			1	24	24/26/26	23.19	25.49	25.24
			12	0	23/25/25	22.08	24.26	24.10
			12	6	23/25/25	22.10	24.24	24.13
			12	11	23/25/25	22.17	24.39	24.10
			25	0	23/25/25	22.14	24.32	24.08
		16QAM	1	0	23/25/25	22.23	24.26	24.57
			1	12	23/25/25	22.21	24.38	24.50
			1	24	23/25/25	22.30	24.49	24.47
			12	0	22/24/24	21.18	23.35	23.21
			12	6	22/24/24	21.18	23.27	23.22
			12	11	22/24/24	21.25	23.42	23.18
			25	0	22/24/24	21.17	23.35	23.24
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	24/26/26	23.22	25.19	25.73
			1	24	24/26/26	23.26	25.38	25.64
			1	49	24/26/26	23.59	25.60	25.51
			25	0	23/25/25	22.12	24.22	24.35
			25	12	23/25/25	22.15	24.24	24.29
			25	25	23/25/25	22.37	24.42	24.15
			50	0	23/25/25	22.31	24.33	24.22
		16QAM	1	0	23/24/25	22.44	23.94	24.60
			1	24	23/25/25	22.50	24.07	24.34
			1	49	23/25/25	22.75	24.35	24.36
			25	0	22/24/24	21.23	23.26	23.40
			25	12	22/24/24	21.23	23.26	23.37
			25	25	22/24/24	21.42	23.49	23.27
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	24/26/27	23.29	25.20	26.05
			1	38	24/26/27	23.50	25.59	25.83
			1	74	24/26/27	23.95	25.82	25.64
			38	0	23/25/25	22.53	24.45	24.59
			38	18	23/25/25	22.53	24.45	24.55
			38	37	23/25/25	22.56	24.46	24.56
			75	0	23/25/25	22.62	24.48	24.58
		16QAM	1	0	23/25/25	22.49	24.06	24.87

			1	38	23/25/25	22.70	24.41	24.65
			1	74	24/25/25	23.23	24.59	24.43
			38	0	23/25/25	22.53	24.45	24.60
			38	18	23/25/25	22.56	24.45	24.56
			38	37	23/25/25	22.56	24.46	24.56
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	24/25/26	23.18	24.93	25.94
			1	49	24/26/26	23.63	25.53	25.91
			1	99	25/26/26	24.37	25.64	25.54
			50	0	23/25/25	22.40	24.18	24.66
			50	25	23/25/25	22.35	24.18	24.67
			50	50	24/25/25	23.00	24.58	24.49
			100	0	23/25/25	22.70	24.37	24.59
		16QAM	1	0	23/24/25	22.27	23.97	24.87
			1	49	23/25/25	22.76	24.54	24.82
			1	99	24/25/25	23.45	24.75	24.43

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		131979/1710.7	132322/1745	132665/1779.3
LTE Band 66	1.4MHz	QPSK	1	0	25/23/25	24.16	22.65	24.27
			1	2	25/23/25	24.11	22.53	24.05
			1	5	25/23/24	24.20	22.49	23.95
			3	0	25/23/24	24.25	22.49	23.99
			3	1	25/23/25	24.23	22.47	24.01
			3	2	25/23/24	24.15	22.52	23.94
			6	0	25/23/24	24.21	22.50	23.98
		16QAM	1	0	24/23/25	23.97	22.33	24.06
			1	2	25/23/24	24.03	22.25	23.97
			1	5	25/23/24	24.04	22.19	23.84
			3	0	25/23/24	24.10	22.21	23.84
			3	1	25/23/24	24.06	22.19	23.80
			3	2	25/23/24	24.06	22.20	23.76
			6	0	23/22/24	22.90	21.56	23.00
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		131987/1711.5	132322/1745	132657/1778.5
LTE Band 66	3MHz	QPSK	1	0	25/23/25	24.12	22.49	24.17
			1	7	25/23/25	24.03	22.52	23.82
			1	14	24/23/24	23.90	22.37	23.63
			8	0	25/23/24	24.07	22.38	23.86
			8	4	25/23/24	24.08	22.40	23.90
			8	7	24/23/24	23.99	22.34	23.82
			15	0	25/23/24	24.03	22.42	23.81
		16QAM	1	0	25/23/24	24.13	22.22	23.71
			1	7	25/23/24	24.01	22.23	23.61
			1	14	24/23/24	23.89	22.10	23.43
			8	0	23/22/23	22.99	21.52	22.92
			8	4	24/22/23	23.00	21.50	22.92

			8	7	23/22/23	22.86	21.45	22.83
			15	0	23/22/23	22.90	21.38	22.78
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		131997/1712.5	132322/1745	132647/1777.5
LTE Band 66	5MHz	QPSK	1	0	25/23/25	24.36	22.68	24.47
			1	12	25/23/24	24.09	22.53	23.98
			1	24	25/23/24	24.05	22.45	23.79
			12	0	25/23/24	24.00	22.48	23.92
			12	6	25/23/24	24.06	22.53	23.97
			12	11	25/23/24	23.90	22.38	23.78
			25	0	24/23/24	23.93	22.44	23.89
		16QAM	1	0	25/23/25	24.21	22.64	24.32
			1	12	24/23/24	23.99	22.52	23.98
			1	24	24/23/24	23.95	22.43	23.83
			12	0	23/22/24	22.92	21.55	23.07
			12	6	23/22/24	22.94	21.59	23.07
			12	11	23/22/23	22.82	21.52	22.85
			25	0	23/22/23	22.88	21.42	22.92
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		132022/1715	132322/1745	132622/1775
LTE Band 66	10MHz	QPSK	1	0	25/23/25	24.28	22.86	24.69
			1	24	24/23/25	23.73	22.47	24.10
			1	49	25/23/24	24.00	22.46	23.92
			25	0	24/23/25	23.69	22.36	24.07
			25	12	24/23/25	23.73	22.42	24.09
			25	25	24/23/24	23.71	22.20	23.79
			50	0	24/23/25	23.70	22.34	24.10
		16QAM	1	0	25/23/25	24.17	22.56	24.26
			1	24	24/23/24	23.71	22.18	23.81
			1	49	24/23/24	23.96	22.17	23.63
			25	0	23/22/24	22.62	21.46	23.08
			25	12	23/22/24	22.63	21.47	23.09
			25	25	23/22/23	22.55	21.24	22.87
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		132047/1717.5	132322/1745	132597/1772.5
LTE Band 66	15MHz	QPSK	1	0	25/24/25	24.28	23.24	24.49
			1	38	24/23/25	23.89	22.45	24.35
			1	74	25/23/24	24.26	22.38	23.91
			38	0	25/23/25	24.04	22.47	24.17
			38	18	25/23/25	24.03	22.50	24.17
			38	37	25/23/25	24.06	22.50	24.15
			75	0	24/23/25	24.08	22.52	24.33
		16QAM	1	0	25/24/25	24.18	23.23	24.10
			1	38	24/23/25	23.89	22.52	24.08
			1	74	25/23/24	24.24	22.51	23.64
			38	0	25/23/25	24.04	22.49	24.14
			38	18	25/23/25	24.02	22.50	24.16
			38	37	25/23/25	24.05	22.51	24.14

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		132072/1720	132322/1745	132572/1770
LTE Band 66	20MHz	QPSK	1	0	25/24/24	24.24	23.78	23.62
			1	49	25/23/25	24.16	22.61	24.40
			1	99	25/23/24	24.86	22.72	23.84
			50	0	24/23/25	23.85	22.74	24.08
			50	25	24/23/24	23.83	22.70	23.92
			50	50	25/23/25	24.28	22.36	24.06
			100	0	25/23/25	24.38	22.47	24.16
		16QAM	1	0	25/24/24	24.07	23.72	23.37
			1	49	24/23/25	23.99	22.59	24.18
			1	99	25/23/24	24.75	22.75	23.67

< LTE Band 2>

< LTE Band 4>

Test Position of	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (+5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g	Date	Plot
			1g	10g						

Hotspot with 10mm								(W/Kg)		
1RB										
Front Side	20175/1732.5	20M QPSK(1,49)	0.216	0.133	-0.53	24.74	25.00	0.229	2025/2/13	
Back Side	20175/1732.5	20M QPSK(1,49)	0.329	0.209	-2.36	24.74	25.00	0.349	2025/2/13	2#
Left Side	20175/1732.5	20M QPSK(1,49)	0.099	0.061	0.57	24.74	25.00	0.105	2025/2/13	
Right Side	20175/1732.5	20M QPSK(1,49)	0.097	0.060	3.40	24.74	25.00	0.103	2025/2/13	
Top Side	20175/1732.5	20M QPSK(1,49)	0.084	0.051	2.58	24.74	25.00	0.089	2025/2/13	
Bottom Side	20175/1732.5	20M QPSK(1,49)	0.185	0.114	0.31	24.74	25.00	0.196	2025/2/13	
50%RB										
Front Side	20175/1732.5	20M QPSK(50,24)	0.113	0.074	1.30	23.53	24.00	0.126	2025/2/13	
Back Side	20175/1732.5	20M QPSK(50,24)	0.177	0.108	-0.23	23.53	24.00	0.197	2025/2/13	
Left Side	20175/1732.5	20M QPSK(50,24)	0.058	0.036	2.41	23.53	24.00	0.065	2025/2/13	
Right Side	20175/1732.5	20M QPSK(50,24)	0.053	0.034	4.08	23.53	24.00	0.059	2025/2/13	
Top Side	20175/1732.5	20M QPSK(50,24)	0.041	0.030	2.07	23.53	24.00	0.046	2025/2/13	
Bottom Side	20175/1732.5	20M QPSK(50,24)	0.108	0.060	0.65	23.53	24.00	0.120	2025/2/13	

< LTE Band 5 >

Test Position of Body with 10mm	Test channel /Freq.	Test Mode	SAR Value		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			(W/kg)							
			1g	10g						
1RB										
Front Side	20525/836.5	10M QPSK(1,49)	0.138	0.076	-0.90	23.44	24.50	0.176	2025/2/12	
Back	20525/836.5	10M	0.222	0.128	1.63	23.44	24.50	0.283	2025/2/12	3#

Side		QPSK(1,49)								
Left Side	20525/836.5	10M QPSK(1,49)	0.075	0.043	2.94	23.44	24.50	0.096	2025/2/12	
Right Side	20525/836.5	10M QPSK(1,49)	0.081	0.045	-3.35	23.44	24.50	0.103	2025/2/12	
Top Side	20525/836.5	10M QPSK(1,49)	0.071	0.032	2.08	23.44	24.50	0.091	2025/2/12	
Bottom Side	20525/836.5	10M QPSK(1,49)	0.135	0.074	1.65	23.44	24.50	0.172	2025/2/12	
50%RB										
Front Side	20525/836.5	10M QPSK(25,12)	0.081	0.042	-4.10	23.32	23.50	0.084	2025/2/12	
Back Side	20525/836.5	10M QPSK(25,12)	0.113	0.072	2.78	23.32	23.50	0.118	2025/2/12	
Left Side	20525/836.5	10M QPSK(25,12)	0.042	0.023	0.61	23.32	23.50	0.044	2025/2/12	
Right Side	20525/836.5	10M QPSK(25,12)	0.045	0.024	-0.45	23.32	23.50	0.047	2025/2/12	
Top Side	20525/836.5	10M QPSK(25,12)	0.036	0.017	3.78	23.32	23.50	0.038	2025/2/12	
Bottom Side	20525/836.5	10M QPSK(25,12)	0.073	0.044	-3.84	23.32	23.50	0.076	2025/2/12	

< LTE Band 7 >

Test Position of Body with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1g	10g						
1RB										
Front Side	21100/2535	20M QPSK(1,0)	0.060	0.033	2.79	25.14	26.00	0.073	2025/2/16	
Back Side	21100/2535	20M QPSK(1,0)	0.096	0.055	1.21	25.14	26.00	0.117	2025/2/16	4#
Left Side	21100/2535	20M QPSK(1,0)	0.042	0.024	2.52	25.14	26.00	0.051	2025/2/16	
Right Side	21100/2535	20M QPSK(1,0)	0.040	0.022	3.94	25.14	26.00	0.049	2025/2/16	
Top Side	21100/2535	20M QPSK(1,0)	0.027	0.016	1.14	25.14	26.00	0.033	2025/2/16	

Bottom Side	21100/2535	20M QPSK(1,0)	0.060	0.034	-1.10	25.14	26.00	0.073	2025/2/16	
50%RB										
Front Side	21100/2535	20M QPSK(50,24)	0.034	0.019	2.86	24.44	25.00	0.039	2025/2/16	
Back Side	21100/2535	20M QPSK(50,24)	0.051	0.032	-1.93	24.44	25.00	0.058	2025/2/16	
Left Side	21100/2535	20M QPSK(50,24)	0.025	0.012	-3.00	24.44	25.00	0.028	2025/2/16	
Right Side	21100/2535	20M QPSK(50,24)	0.023	0.011	4.94	24.44	25.00	0.026	2025/2/16	
Top Side	21100/2535	20M QPSK(50,24)	0.016	0.008	1.22	24.44	25.00	0.018	2025/2/16	
Bottom Side	21100/2535	20M QPSK(50,24)	0.033	0.019	-4.05	24.44	25.00	0.038	2025/2/16	

< LTE Band 12>

Test Position of Body with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1g	10g						
1RB										
Front Side	23095/707.5	10M QPSK(1,0)	0.216	0.108	-1.42	21.95	22.00	0.219	2025/2/11	
Back Side	23095/707.5	10M QPSK(1,0)	0.328	0.165	-3.67	21.95	22.00	0.332	2025/2/11	5#
Left Side	23095/707.5	10M QPSK(1,0)	0.102	0.049	0.06	21.95	22.00	0.103	2025/2/11	
Right Side	23095/707.5	10M QPSK(1,0)	0.103	0.050	1.93	21.95	22.00	0.104	2025/2/11	
Top Side	23095/707.5	10M QPSK(1,0)	0.087	0.032	0.65	21.95	22.00	0.088	2025/2/11	
Bottom Side	23095/707.5	10M QPSK(1,0)	0.180	0.091	-1.45	21.95	22.00	0.182	2025/2/11	
50%RB										
Front Side	23095/707.5	10M QPSK(25,24)	0.114	0.064	1.94	22.06	23.00	0.142	2025/2/11	
Back Side	23095/707.5	10M QPSK(25,24)	0.185	0.097	-3.54	22.06	23.00	0.230	2025/2/11	

Left Side	23095/707.5	10M QPSK(25,24)	0.061	0.025	-4.17	22.06	23.00	0.076	2025/2/11	
Right Side	23095/707.5	10M QPSK(25,24)	0.062	0.026	3.23	22.06	23.00	0.077	2025/2/11	
Top Side	23095/707.5	10M QPSK(25,24)	0.050	0.021	3.01	22.06	23.00	0.062	2025/2/11	
Bottom Side	23095/707.5	10M QPSK(25,24)	0.092	0.049	-3.13	22.06	23.00	0.114	2025/2/11	

< LTE Band 13>

Test Position of Body with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1g	10g						
1RB										
Front Side	23230/782	10M QPSK(1,49)	0.180	0.102	0.90	23.74	24.00	0.191	2025/2/12	
Back Side	23230/782	10M QPSK(1,49)	0.287	0.172	-2.28	23.74	24.00	0.305	2025/2/12	9#
Left Side	23230/782	10M QPSK(1,49)	0.096	0.055	2.74	23.74	24.00	0.102	2025/2/12	
Right Side	23230/782	10M QPSK(1,49)	0.087	0.052	0.41	23.74	24.00	0.092	2025/2/12	
Top Side	23230/782	10M QPSK(1,49)	0.071	0.040	1.20	23.74	24.00	0.075	2025/2/12	
Bottom Side	23230/782	10M QPSK(1,49)	0.150	0.090	0.30	23.74	24.00	0.159	2025/2/12	
50%RB										
Front Side	23230/782	10M QPSK(25,12)	0.097	0.053	0.79	22.34	22.50	0.101	2025/2/12	
Back Side	23230/782	10M QPSK(25,12)	0.144	0.097	-1.85	22.34	22.50	0.149	2025/2/12	
Left Side	23230/782	10M QPSK(25,12)	0.048	0.032	-3.04	22.34	22.50	0.050	2025/2/12	
Right Side	23230/782	10M QPSK(25,12)	0.045	0.026	-0.17	22.34	22.50	0.047	2025/2/12	
Top Side	23230/782	10M QPSK(25,12)	0.032	0.019	2.01	22.34	22.50	0.033	2025/2/12	
Bottom	23230/782	10M	0.080	0.053	-3.98	22.34	22.50	0.083	2025/2/12	

Side		QPSK(25,12)								
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< LTE Band 17>

Test Position of Body with 10mm	Test channel /Freq.	Test Mode	SAR Value		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			(W/kg)							
			1g	10g						
1RB										
Front Side	23790/710	10M QPSK(1,0)	0.246	0.154	-0.01	24.15	25.00	0.299	2025/2/11	
Back Side	23790/710	10M QPSK(1,0)	0.392	0.259	-1.27	24.15	25.00	0.477	2025/2/11	6#
Left Side	23790/710	10M QPSK(1,0)	0.123	0.078	0.78	24.15	25.00	0.150	2025/2/11	
Right Side	23790/710	10M QPSK(1,0)	0.129	0.082	2.66	24.15	25.00	0.157	2025/2/11	
Top Side	23790/710	10M QPSK(1,0)	0.102	0.068	0.65	24.15	25.00	0.124	2025/2/11	
Bottom Side	23790/710	10M QPSK(1,0)	0.205	0.129	-1.40	24.15	25.00	0.249	2025/2/11	
50%RB										
Front Side	23790/710	10M QPSK(25,12)	0.137	0.079	3.20	23.30	23.50	0.143	2025/2/11	
Back Side	23790/710	10M QPSK(25,12)	0.209	0.136	-2.60	23.30	23.50	0.219	2025/2/11	
Left Side	23790/710	10M QPSK(25,12)	0.072	0.042	4.61	23.30	23.50	0.075	2025/2/11	
Right Side	23790/710	10M QPSK(25,12)	0.067	0.041	3.93	23.30	23.50	0.070	2025/2/11	
Top Side	23790/710	10M QPSK(25,12)	0.050	0.031	1.14	23.30	23.50	0.052	2025/2/11	
Bottom Side	23790/710	10M QPSK(25,12)	0.106	0.075	-0.98	23.30	23.50	0.111	2025/2/11	

< LTE Band 38>

Test Position of Body	Test channel /Freq.	Test Mode	SAR Value		Power Drift	Conducted power	Tune-up power	Scaled SAR	Date	Plot
			(W/kg)							
			1g	10g	(±5%)	(dBm)	(dBm)	1g		

with 10mm								(W/Kg)		
1RB										
Front Side	38000/2595	20M QPSK(1,49)	0.324	0.192	2.79	25.53	26.00	0.361	2025/2/16	
Back Side	38000/2595	20M QPSK(1,49)	0.527	0.319	-0.97	25.53	26.00	0.587	2025/2/16	10#
Left Side	38000/2595	20M QPSK(1,49)	0.172	0.105	3.35	25.53	26.00	0.192	2025/2/16	
Right Side	38000/2595	20M QPSK(1,49)	0.168	0.101	1.36	25.53	26.00	0.187	2025/2/16	
Top Side	38000/2595	20M QPSK(1,49)	0.142	0.087	0.12	25.53	26.00	0.158	2025/2/16	
Bottom Side	38000/2595	20M QPSK(1,49)	0.270	0.157	-3.67	25.53	26.00	0.301	2025/2/16	
50%RB										
Front Side	38000/2595	20M QPSK(50,49)	0.167	0.101	4.06	24.60	25.00	0.183	2025/2/16	
Back Side	38000/2595	20M QPSK(50,49)	0.293	0.166	-0.49	24.60	25.00	0.321	2025/2/16	
Left Side	38000/2595	20M QPSK(50,49)	0.098	0.055	-2.58	24.60	25.00	0.107	2025/2/16	
Right Side	38000/2595	20M QPSK(50,49)	0.085	0.053	-0.11	24.60	25.00	0.093	2025/2/16	
Top Side	38000/2595	20M QPSK(50,49)	0.070	0.040	3.01	24.60	25.00	0.077	2025/2/16	
Bottom Side	38000/2595	20M QPSK(50,49)	0.151	0.085	-4.94	24.60	25.00	0.166	2025/2/16	

< LTE Band 40 >

Test Position of Body with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1g	10g						
1RB										
Front Side	38750/2310	10M QPSK(1,24)	0.306	0.176	-0.12	24.00	24.00	0.306	2025/2/15	
Back Side	38750/2310	10M QPSK(1,24)	0.465	0.273	4.54	24.00	24.00	0.465	2025/2/15	11#

Left Side	38750/2310	10M QPSK(1,24)	0.141	0.083	1.88	24.00	24.00	0.141	2025/2/15	
Right Side	38750/2310	10M QPSK(1,24)	0.137	0.080	3.43	24.00	24.00	0.137	2025/2/15	
Top Side	38750/2310	10M QPSK(1,24)	0.110	0.067	4.01	24.00	24.00	0.110	2025/2/15	
Bottom Side	38750/2310	10M QPSK(1,24)	0.245	0.137	-3.28	24.00	24.00	0.245	2025/2/15	
50%RB										
Front Side	38750/2310	10M QPSK(25,24)	0.162	0.100	-0.46	22.37	22.50	0.167	2025/2/15	
Back Side	38750/2310	10M QPSK(25,24)	0.260	0.161	-4.38	22.37	22.50	0.268	2025/2/15	
Left Side	38750/2310	10M QPSK(25,24)	0.077	0.044	-0.32	22.37	22.50	0.079	2025/2/15	
Right Side	38750/2310	10M QPSK(25,24)	0.075	0.040	-4.50	22.37	22.50	0.077	2025/2/15	
Top Side	38750/2310	10M QPSK(25,24)	0.065	0.028	0.14	22.37	22.50	0.067	2025/2/15	
Bottom Side	38750/2310	10M QPSK(25,24)	0.126	0.081	-4.71	22.37	22.50	0.130	2025/2/15	

< LTE Band 41>

Test Position of Body with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1g	10g						
1RB										
Front Side	40620/2593	20M QPSK(1,0)	0.366	0.208	-3.05	24.93	25.00	0.372	2025/2/16	
Back Side	40620/2593	20M QPSK(1,0)	0.605	0.351	-3.36	24.93	25.00	0.615	2025/2/16	7#
Left Side	40620/2593	20M QPSK(1,0)	0.183	0.102	-3.74	24.93	25.00	0.186	2025/2/16	
Right Side	40620/2593	20M QPSK(1,0)	0.192	0.109	2.32	24.93	25.00	0.195	2025/2/16	
Top Side	40620/2593	20M QPSK(1,0)	0.174	0.080	0.12	24.93	25.00	0.177	2025/2/16	
Bottom	40620/2593	20M QPSK(1,0)	0.325	0.185	3.59	24.93	25.00	0.330	2025/2/16	

Side										
50%RB										
Front Side	40620/2593	20M QPSK(50,24)	0.207	0.124	-4.81	24.18	25.00	0.250	2025/2/16	
Back Side	40620/2593	20M QPSK(50,24)	0.330	0.187	3.84	24.18	25.00	0.399	2025/2/16	
Left Side	40620/2593	20M QPSK(50,24)	0.092	0.059	3.03	24.18	25.00	0.111	2025/2/16	
Right Side	40620/2593	20M QPSK(50,24)	0.105	0.063	-3.97	24.18	25.00	0.127	2025/2/16	
Top Side	40620/2593	20M QPSK(50,24)	0.075	0.050	3.65	24.18	25.00	0.091	2025/2/16	
Bottom Side	40620/2593	20M QPSK(50,24)	0.192	0.094	2.46	24.18	25.00	0.232	2025/2/16	

< LTE Band 66>

Test Position of Body with 10mm	Test channel /Freq.	Test Mode	SAR Value		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			(W/kg)							
			1g	10g						
1RB										
Front Side	132322/1745	20M QPSK(1,99)	0.252	0.142	-3.34	22.72	23.00	0.269	2025/2/13	
Back Side	132322/1745	20M QPSK(1,99)	0.375	0.222	1.28	22.72	23.00	0.400	2025/2/13	8#
Left Side	132322/1745	20M QPSK(1,99)	0.117	0.066	-2.73	22.72	23.00	0.125	2025/2/13	
Right Side	132322/1745	20M QPSK(1,99)	0.126	0.072	-3.04	22.72	23.00	0.134	2025/2/13	
Top Side	132322/1745	20M QPSK(1,99)	0.101	0.056	1.04	22.72	23.00	0.108	2025/2/13	
Bottom Side	132322/1745	20M QPSK(1,99)	0.205	0.118	-3.86	22.72	23.00	0.219	2025/2/13	
50%RB										
Front Side	132322/1745	20M QPSK(50,49)	0.131	0.081	3.68	22.36	23.00	0.152	2025/2/13	
Back Side	132322/1745	20M QPSK(50,49)	0.192	0.128	-3.41	22.36	23.00	0.222	2025/2/13	
Left	132322/1745	20M	0.064	0.038	3.09	22.36	23.00	0.074	2025/2/13	

Side		QPSK(50,49)								
Right Side	132322/1745	20M QPSK(50,49)	0.065	0.038	-1.42	22.36	23.00	0.075	2025/2/13	
Top Side	132322/1745	20M QPSK(50,49)	0.050	0.031	3.02	22.36	23.00	0.058	2025/2/13	
Bottom Side	132322/1745	20M QPSK(50,49)	0.114	0.070	-0.77	22.36	23.00	0.132	2025/2/13	

10. Simultaneous Transmission Analysis

N/A

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 - 850MHz
MEASUREMENT 3 System Performance Check - 1800MHz
MEASUREMENT 4 System Performance Check - 1900MHz
MEASUREMENT 5 System Performance Check - 2300MHz
MEASUREMENT 6 System Performance Check - 2600MHz

MEASUREMENT 1

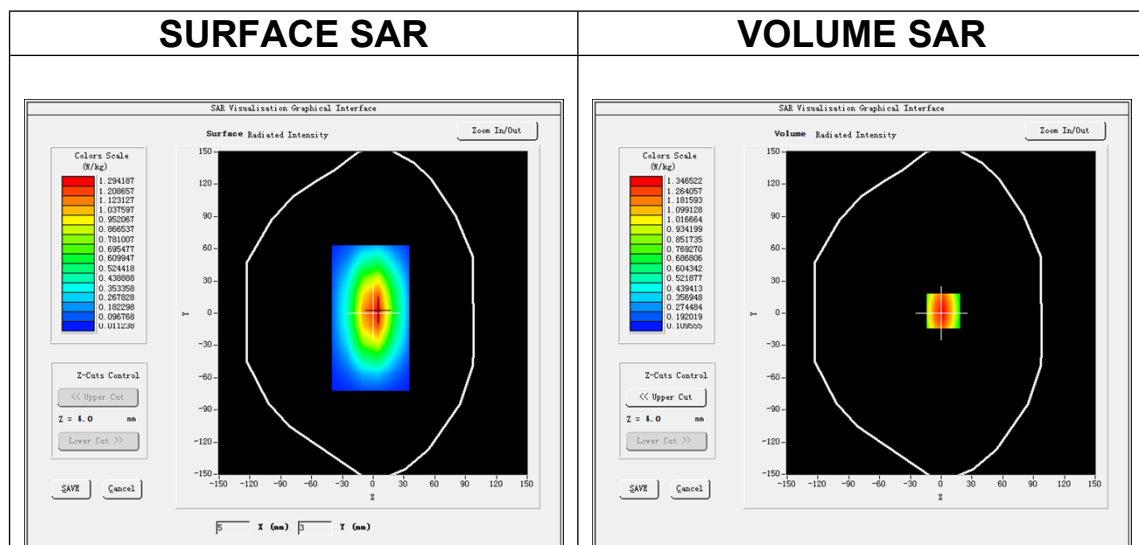
Date of measurement: 11/2/2025

A. Experimental conditions.

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

B. SAR Measurement Results

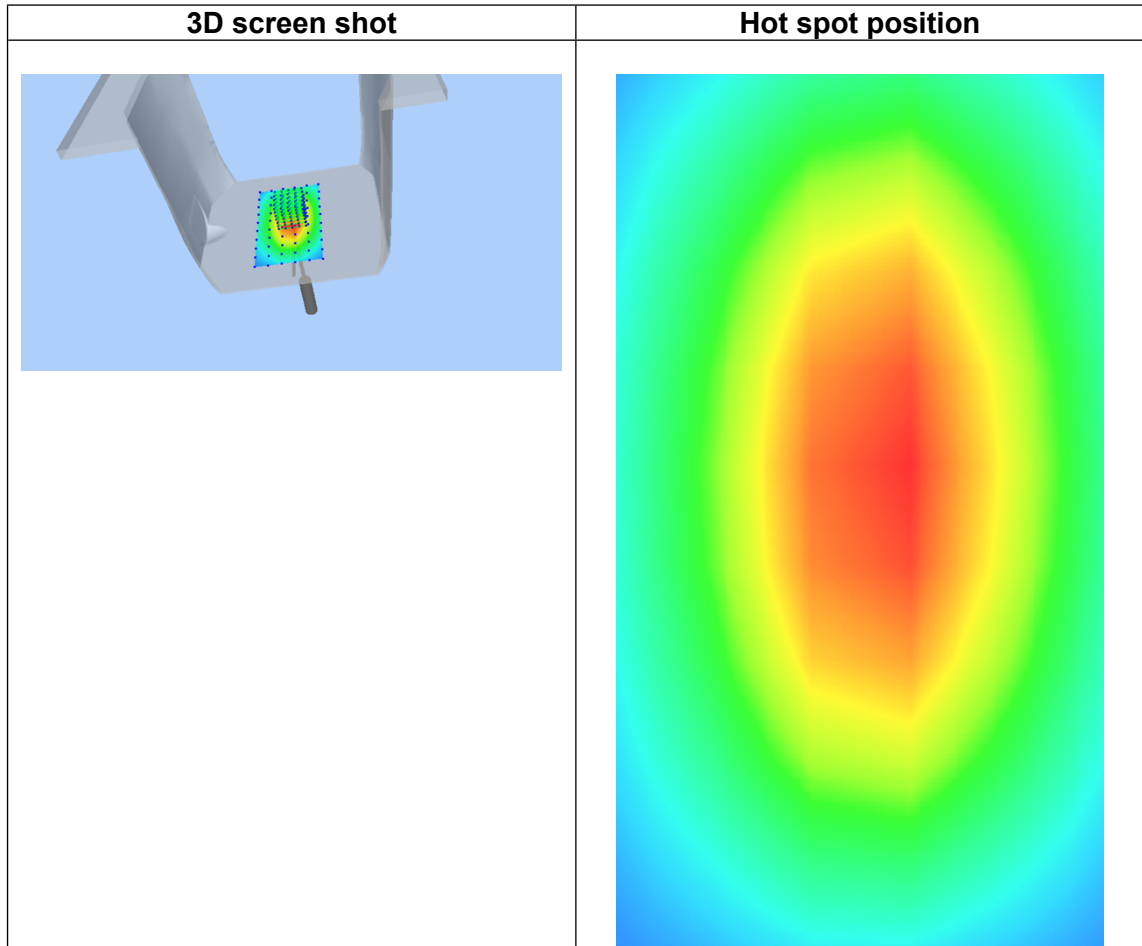
Frequency (MHz)	750.000000
Relative permittivity (real part)	42.562010
Relative permittivity (imaginary part)	19.132740
Conductivity (S/m)	0.912054
Variation (%)	0.210000



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



MEASUREMENT 2

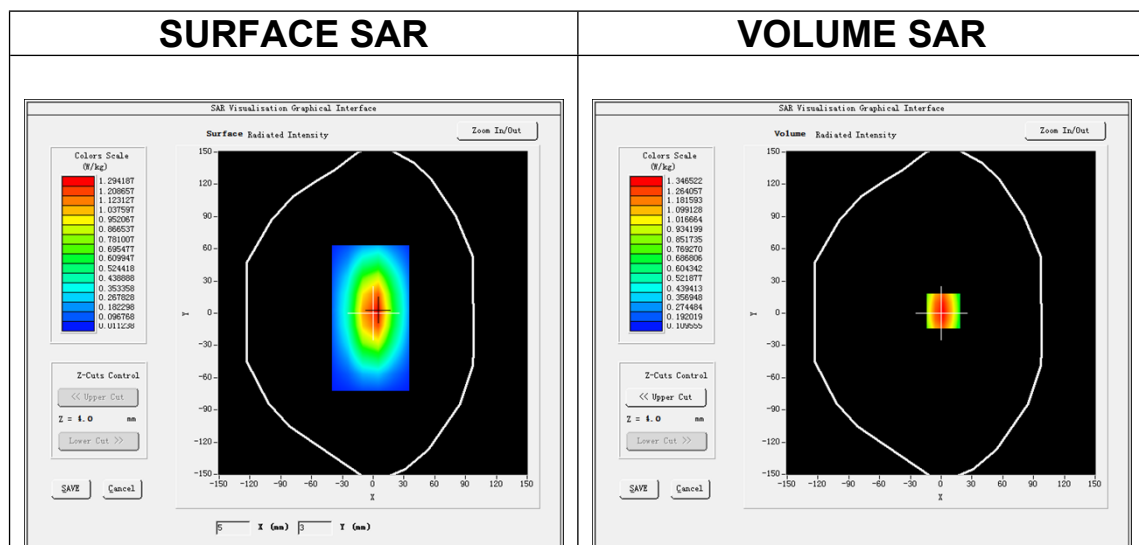
Date of measurement: 12/2/2025

A. Experimental conditions.

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

B. SAR Measurement Results

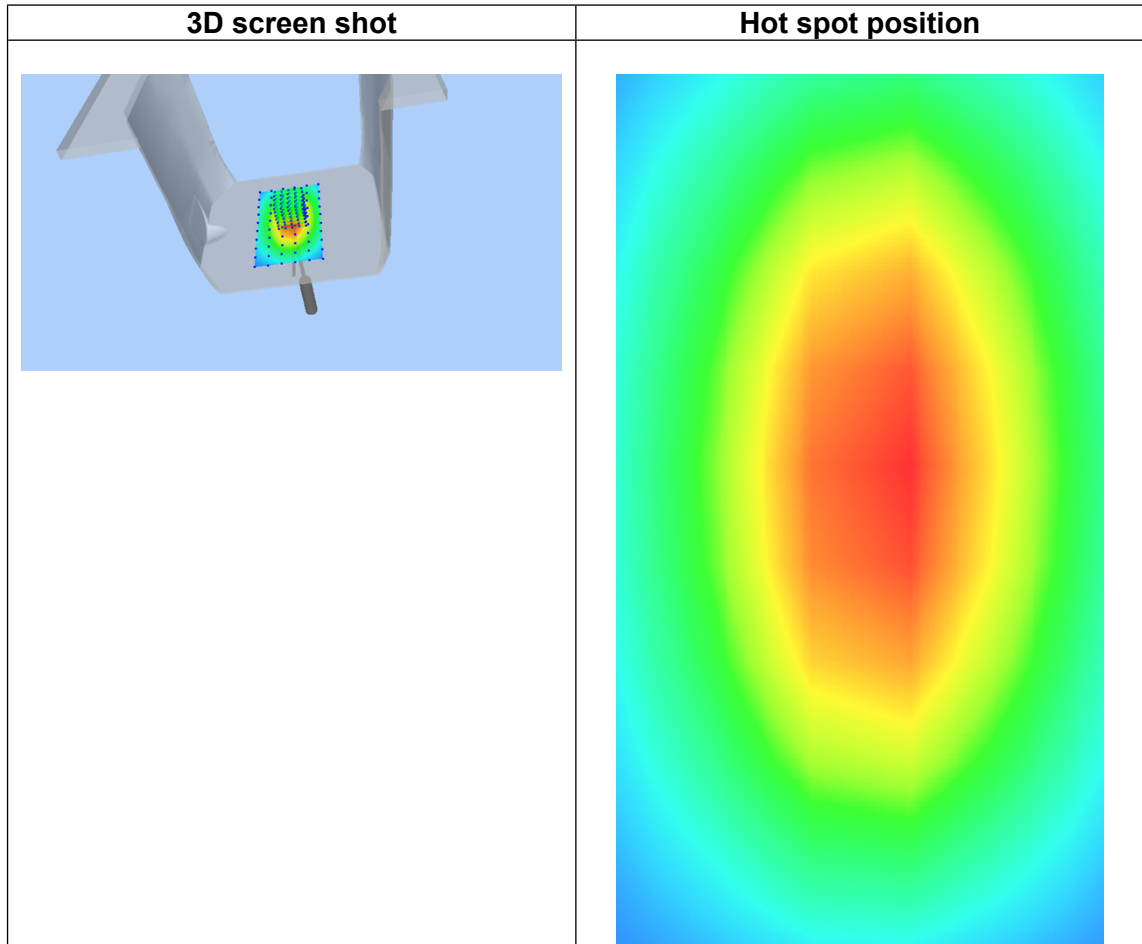
Frequency (MHz)	835.000000
Relative permittivity (real part)	42.012031
Relative permittivity (imaginary part)	19.131021
Conductivity (S/m)	0.941030
Variation (%)	0.310000



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



MEASUREMENT 3

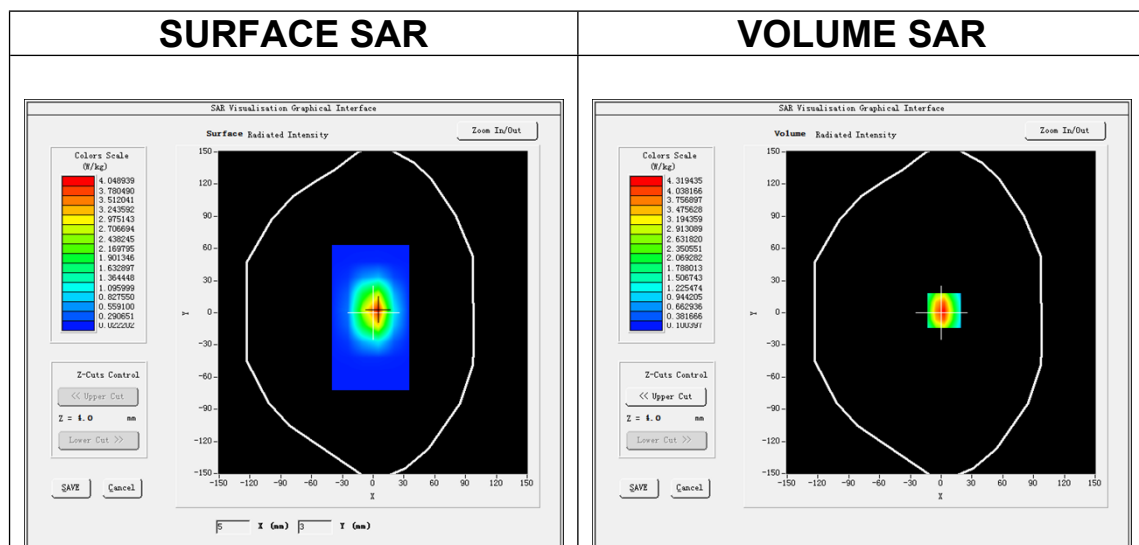
Date of measurement: 13/2/2025

A. Experimental conditions.

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

B. SAR Measurement Results

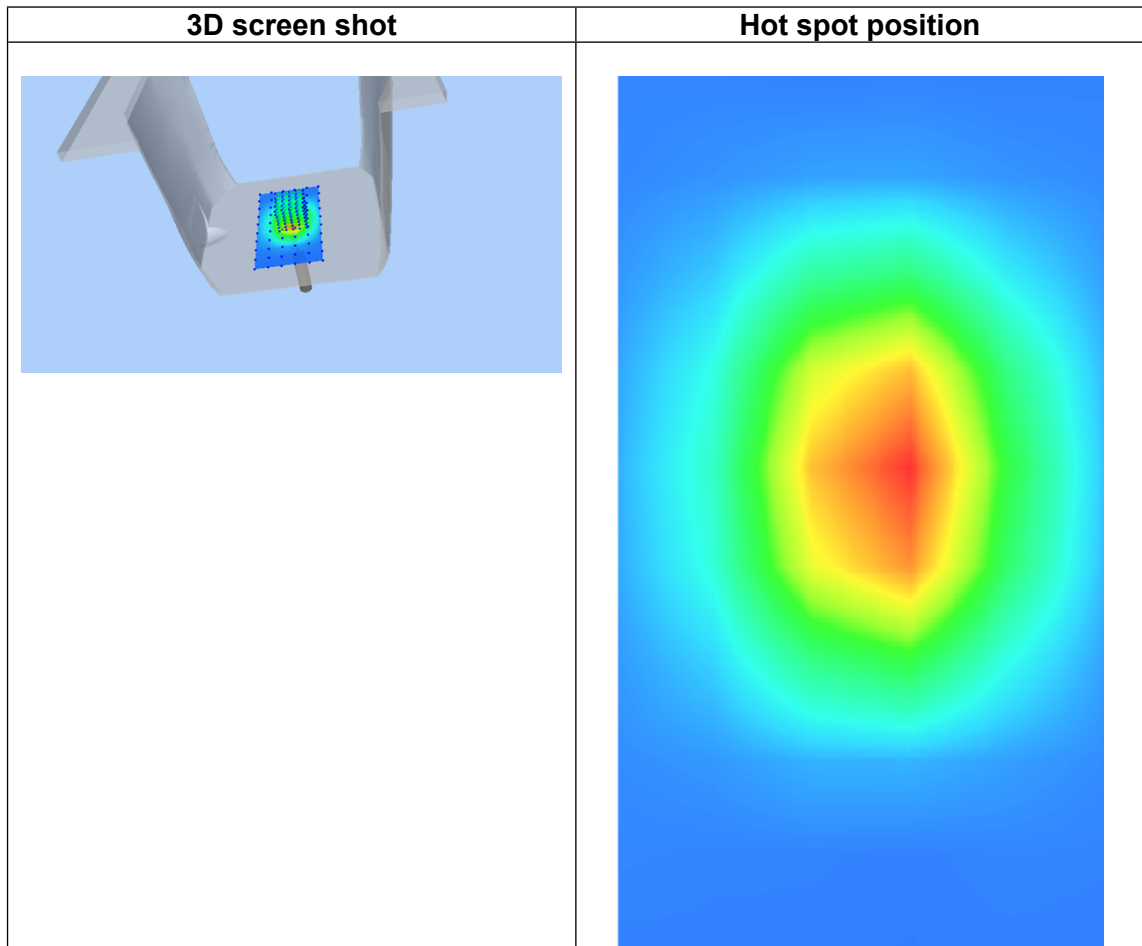
Frequency (MHz)	1800.000000
Relative permittivity (real part)	39.606403
Relative permittivity (imaginary part)	14.067180
Conductivity (S/m)	1.406718
Variation (%)	-0.140000



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



MEASUREMENT 4

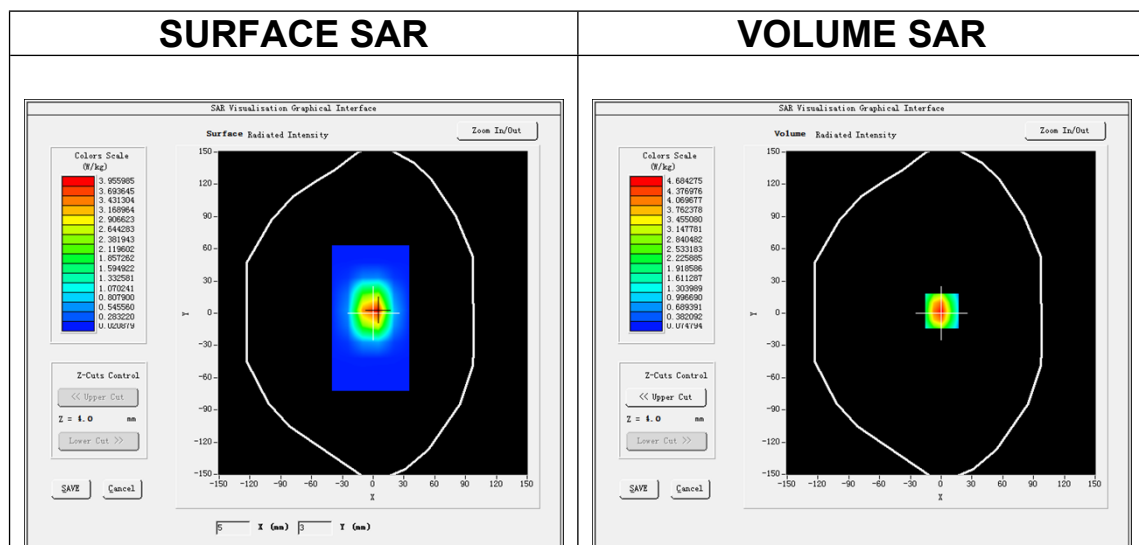
Date of measurement: 14/2/2025

A. Experimental conditions.

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

B. SAR Measurement Results

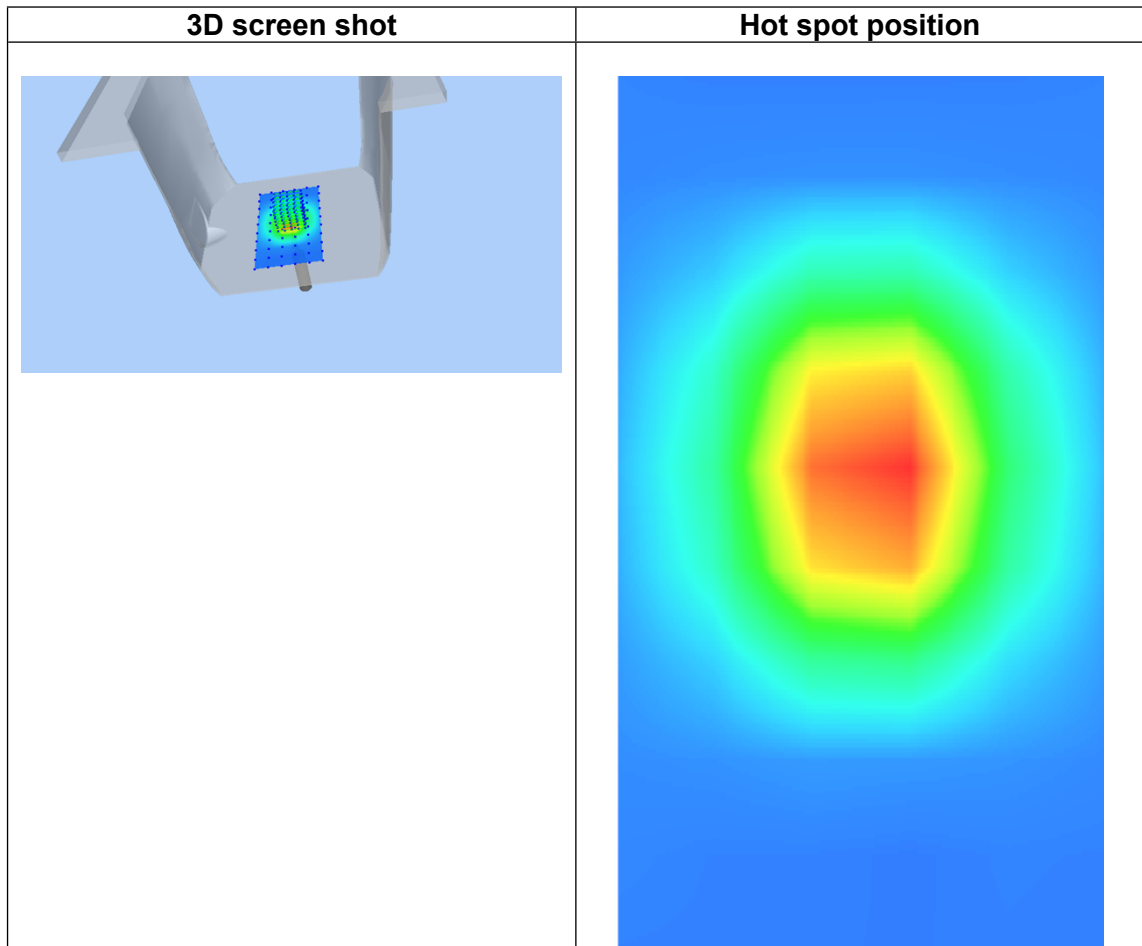
Frequency (MHz)	1900.000000
Relative permittivity (real part)	41.420140
Relative permittivity (imaginary part)	12.570123
Conductivity (S/m)	1.390503
Variation (%)	-0.440000



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



MEASUREMENT 5

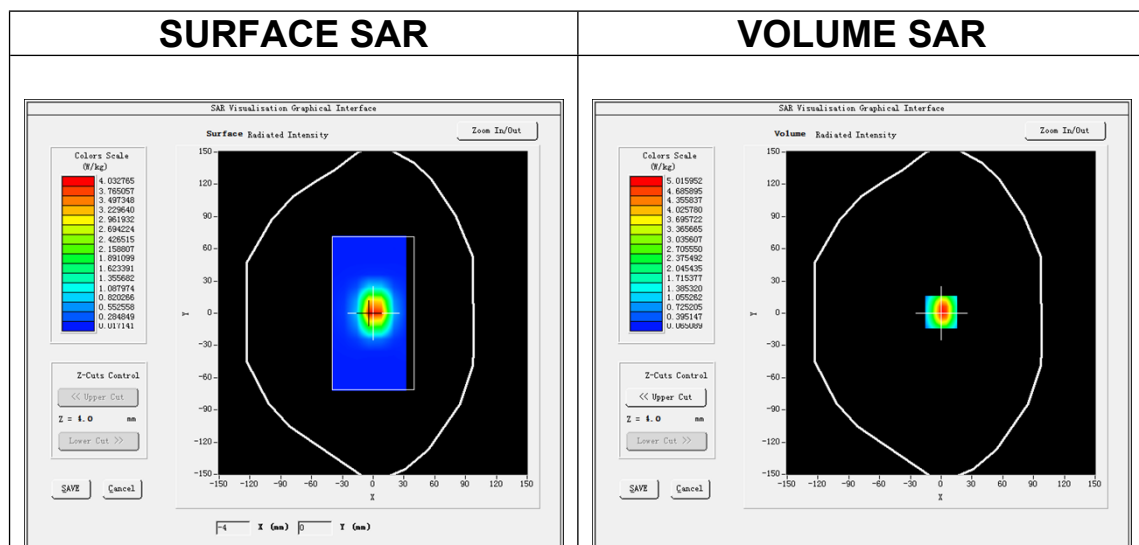
Date of measurement: 15/2/2025

A. Experimental conditions.

Area Scan	<u>dx=12mm dy=12mm, h= 5.00 mm</u>
ZoomScan	<u>7x7x7,dx=5mm dy=5mm dz=5mm</u>
Phantom	<u>Validation plane</u>
Device Position	<u>Dipole</u>
Band	<u>CW2300</u>
Channels	<u>Middle</u>
Signal	<u>CW (Crest factor: 1.0)</u>
ConvF	<u>2.55</u>

B. SAR Measurement Results

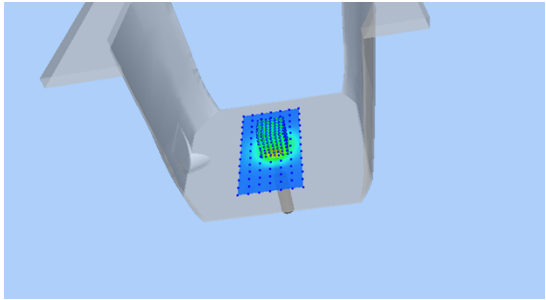
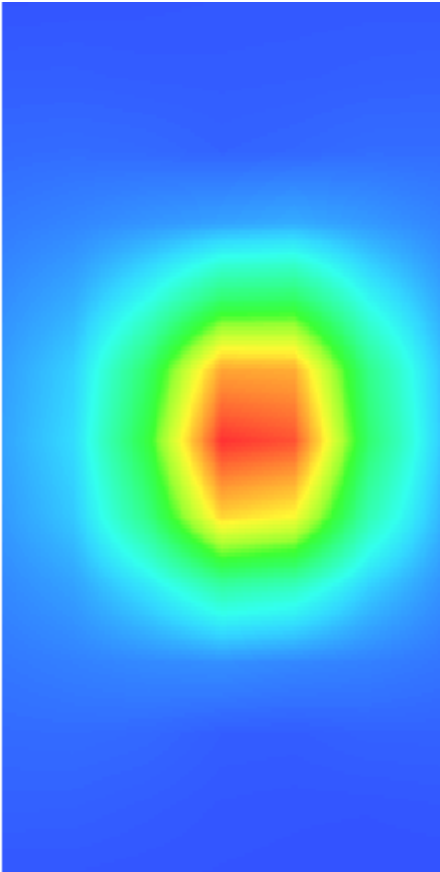
Frequency (MHz)	2300.000000
Relative permittivity (real part)	40.120345
Relative permittivity (imaginary part)	13.392012
Conductivity (S/m)	1.701209
Variation (%)	4.010000



Maximum location: X=0.00, Y=1.00

SAR Peak: 8.14 W/kg

SAR 10g (W/Kg)	2.340123
SAR 1g (W/Kg)	5.172012

3D screen shot	Hot spot position
	

MEASUREMENT 6

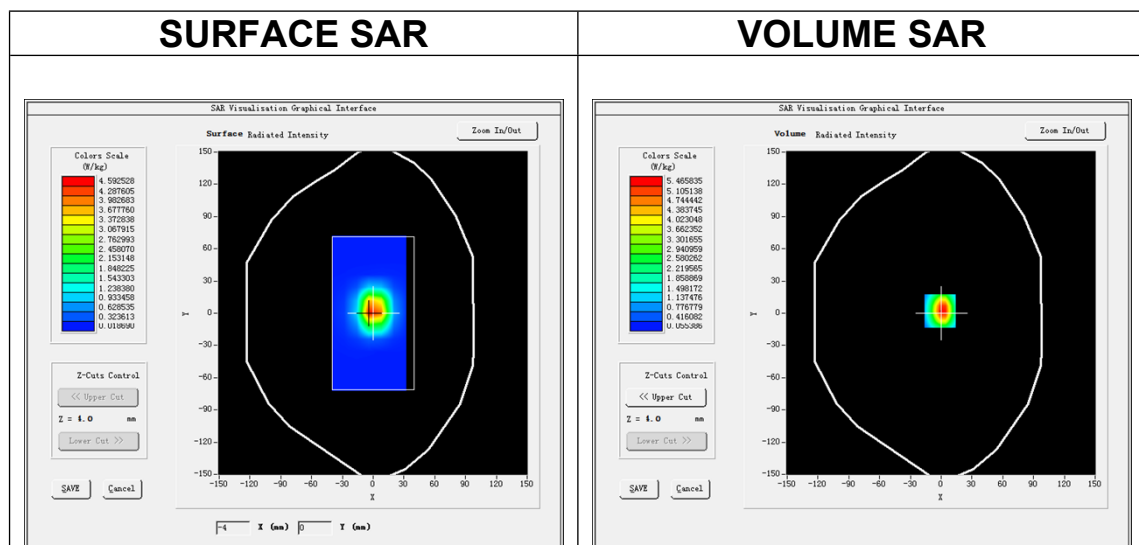
Date of measurement: 16/2/2025

A. Experimental conditions.

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

B. SAR Measurement Results

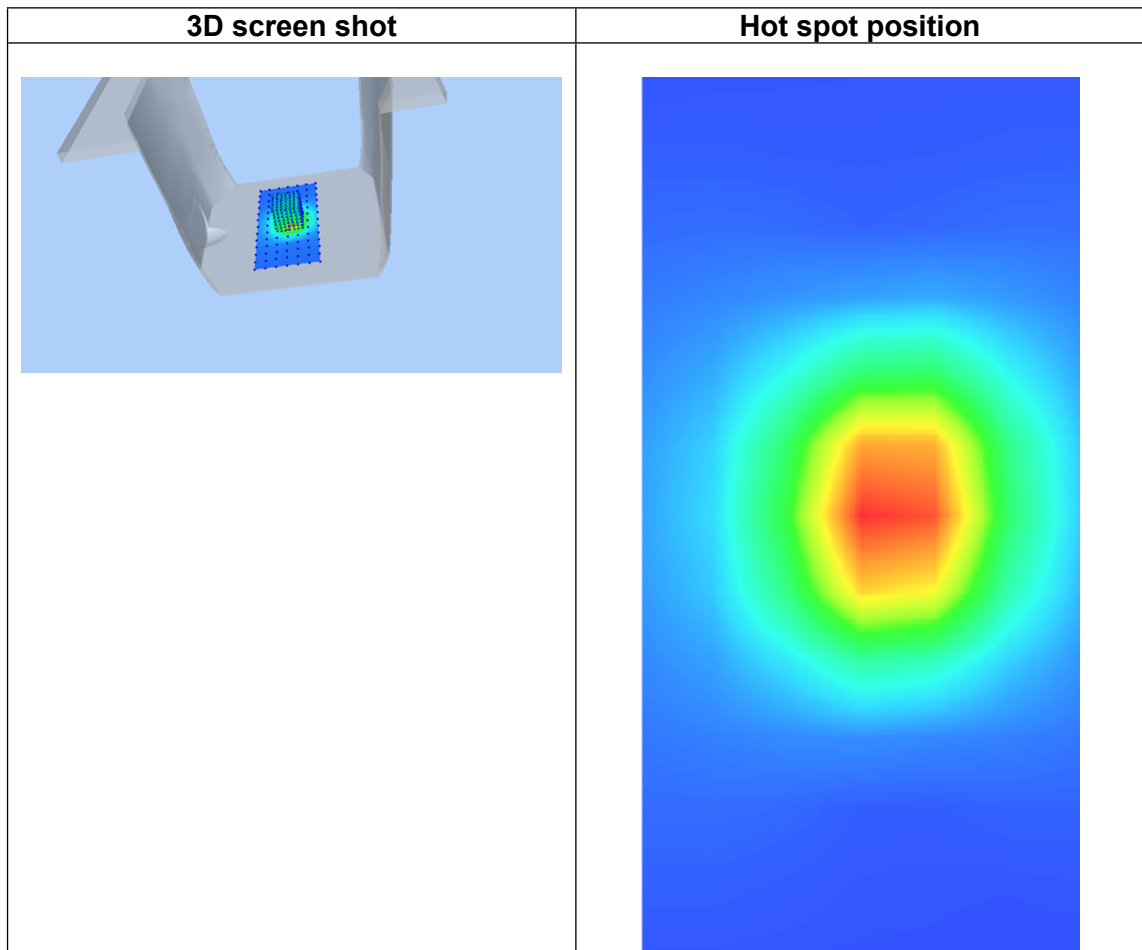
Frequency (MHz)	2600.000000
Relative permittivity (real part)	39.432362
Relative permittivity (imaginary part)	13.768602
Conductivity (S/m)	1.988798
Variation (%)	-3.980000



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



Appendix C. SAR Test Plots

Table of contents
MEASUREMENT 1 LTE Band 2 Body
MEASUREMENT 2 LTE Band 4 Body
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MEASUREMENT 4 LTE Band 7 Body
MEASUREMENT 5 LTE Band 12 Body
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MEASUREMENT 7 LTE Band 41 Body
MEASUREMENT 8 LTE Band 66 Body
MEASUREMENT 9 LTE Band 13 Body
MEASUREMENT 10 LTE Band 38 Body
MEASUREMENT 11 LTE Band 40 Body

MEASUREMENT 1

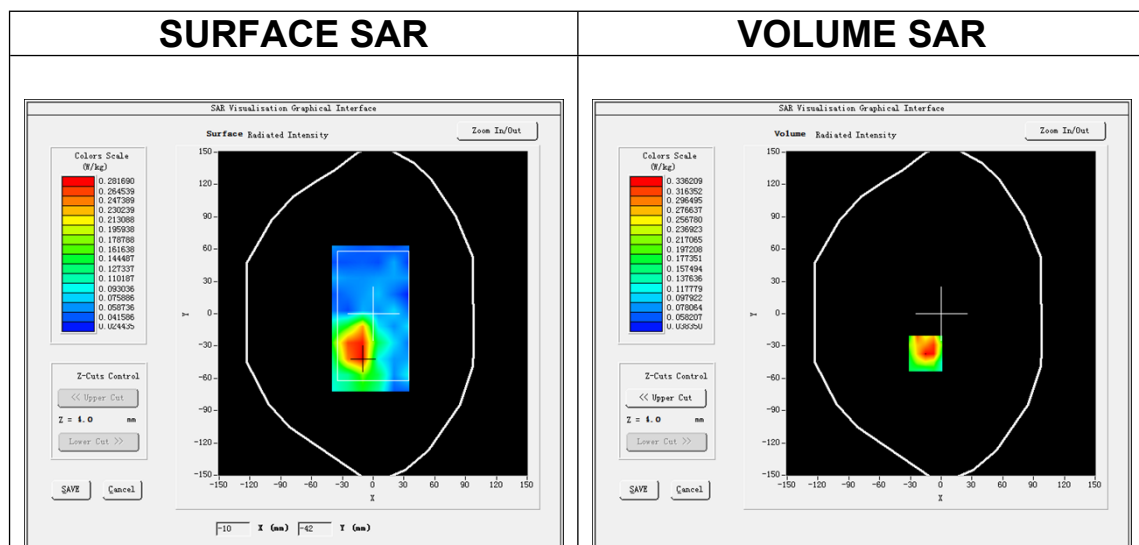
Date of measurement: 14/2/2025

A. Experimental conditions.

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

B. SAR Measurement Results

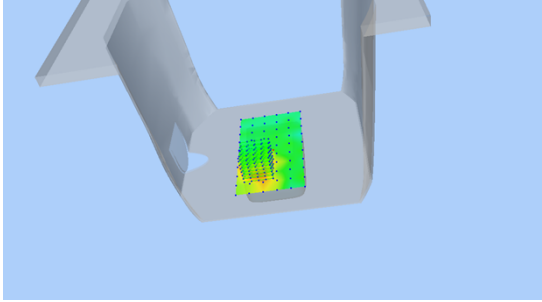
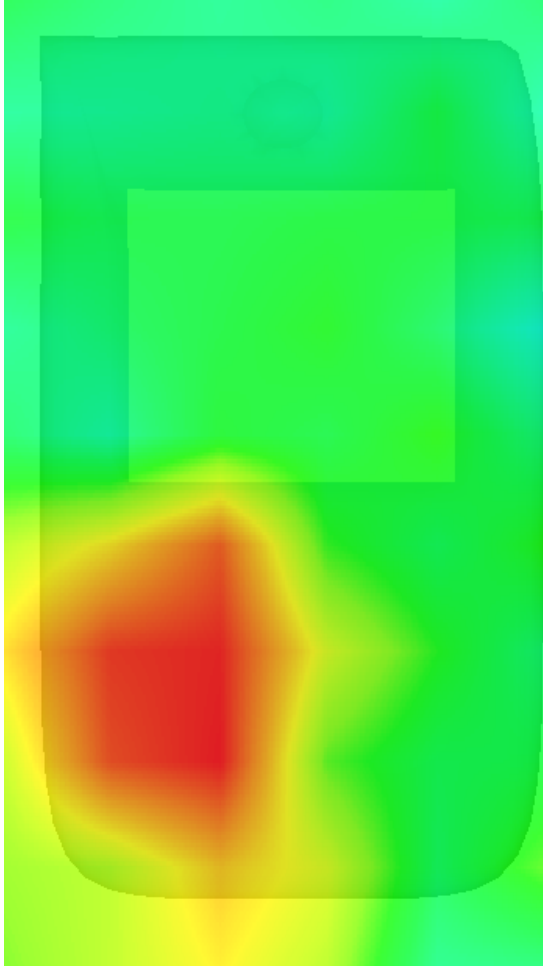
Frequency (MHz)	1879.500000
Relative permittivity (real part)	40.000000
Relative permittivity (imaginary part)	13.411700
Conductivity (S/m)	1.400405
Variation (%)	4.110000



Maximum location: X=-15.00, Y=-37.00

SAR Peak: 0.51 W/kg

SAR 10g (W/Kg)	0.202984
SAR 1g (W/Kg)	0.327523

3D screen shot	Hot spot position
	

MEASUREMENT 2

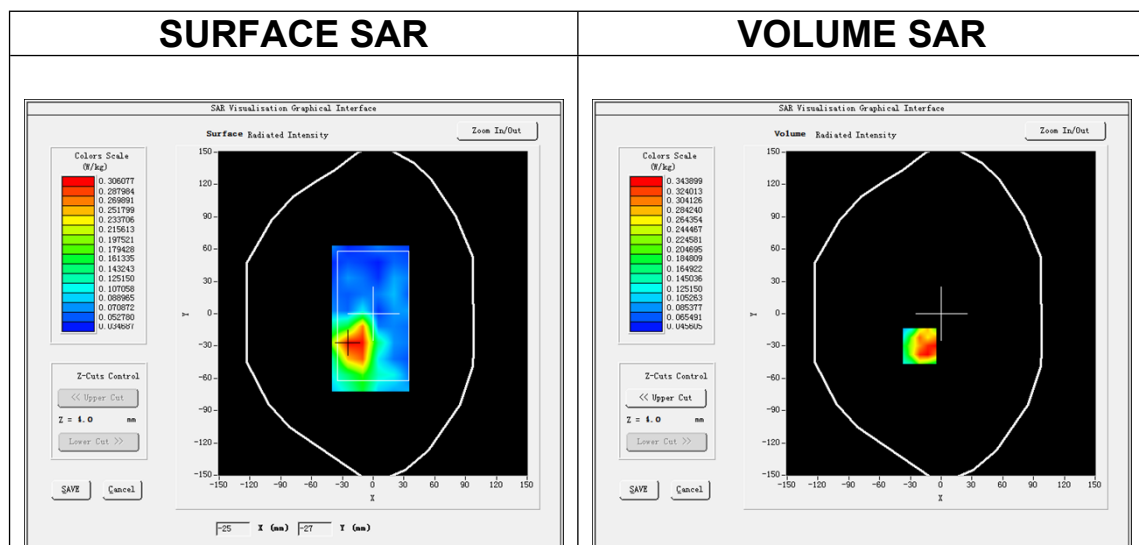
Date of measurement: 13/2/2025

A. Experimental conditions.

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

B. SAR Measurement Results

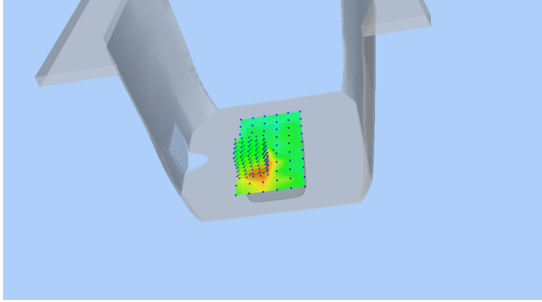
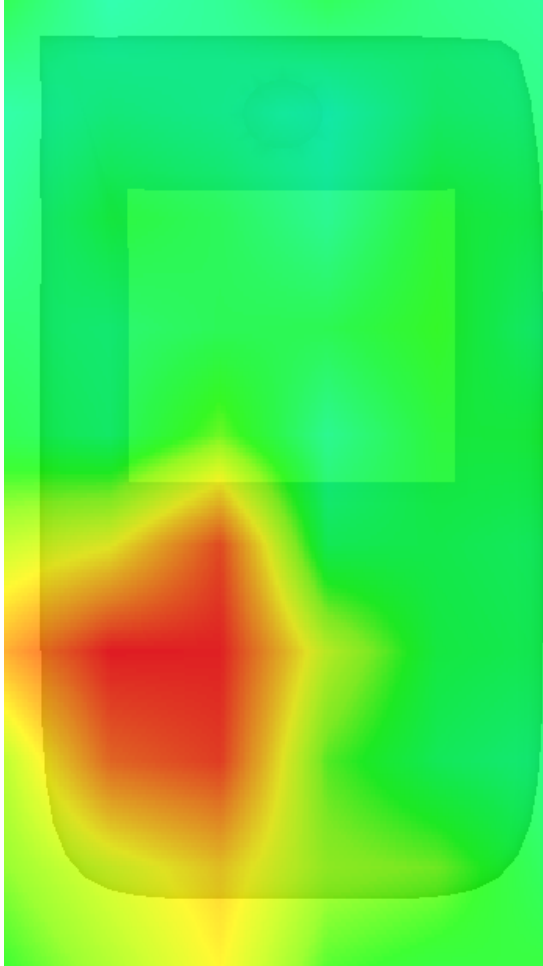
Frequency (MHz)	1732.500000
Relative permittivity (real part)	40.115910
Relative permittivity (imaginary part)	14.136136
Conductivity (S/m)	1.360603
Variation (%)	-2.360001



Maximum location: X=-21.00, Y=-30.00

SAR Peak: 0.53 W/kg

SAR 10g (W/Kg)	0.209244
SAR 1g (W/Kg)	0.328905

3D screen shot	Hot spot position
	

MEASUREMENT 3

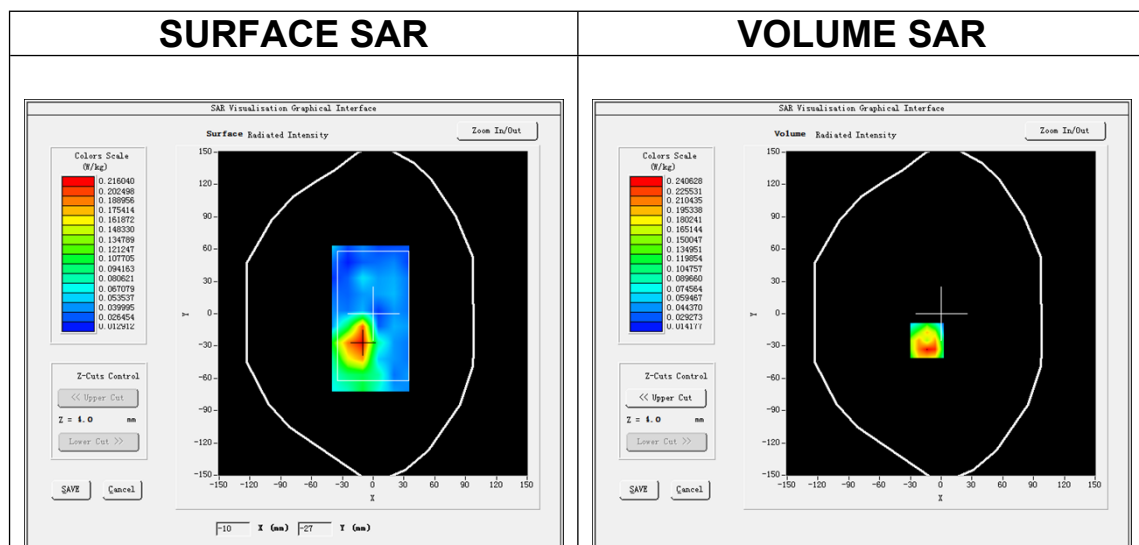
Date of measurement: 12/2/2025

A. Experimental conditions.

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

B. SAR Measurement Results

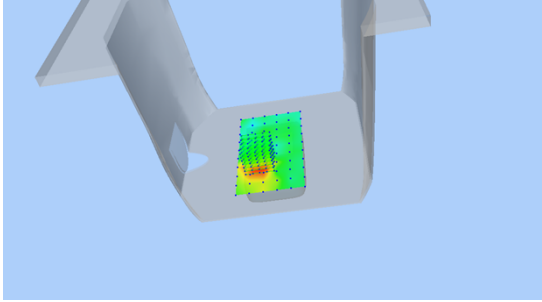
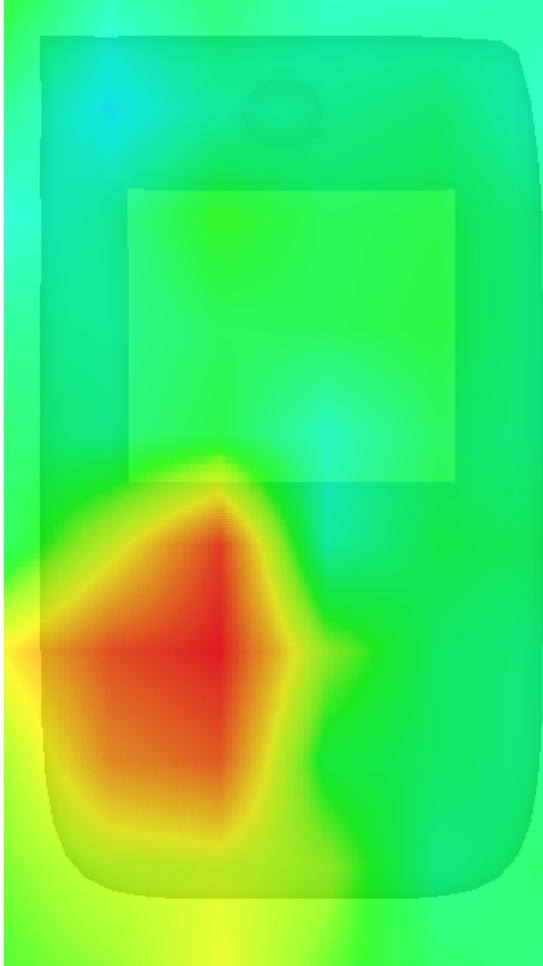
Frequency (MHz)	836.500000
Relative permittivity (real part)	41.500000
Relative permittivity (imaginary part)	19.400000
Conductivity (S/m)	0.901561
Variation (%)	1.629999



Maximum location: X=-14.00, Y=-25.00

SAR Peak: 0.39 W/kg

SAR 10g (W/Kg)	0.127735
SAR 1g (W/Kg)	0.222049

3D screen shot	Hot spot position
	

MEASUREMENT 4

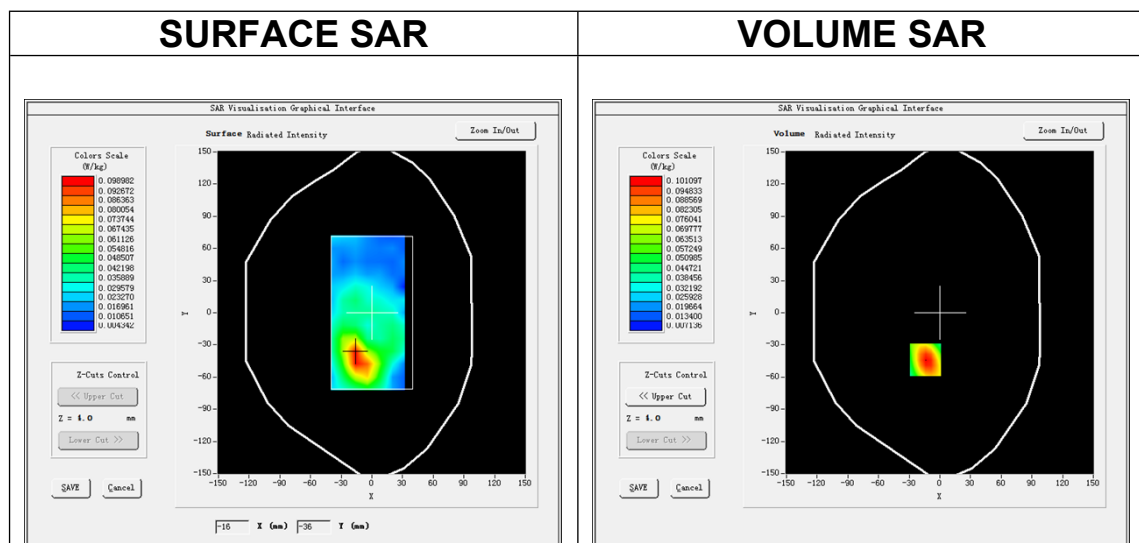
Date of measurement: 16/2/2025

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=12mm dy=12mm, h= 5.00 mm</u>
<u>ZoomScan</u>	<u>7x7x7,dx=5mm dy=5mm dz=5mm</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>LTE band 7</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>LTE (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>2.35</u>

B. SAR Measurement Results

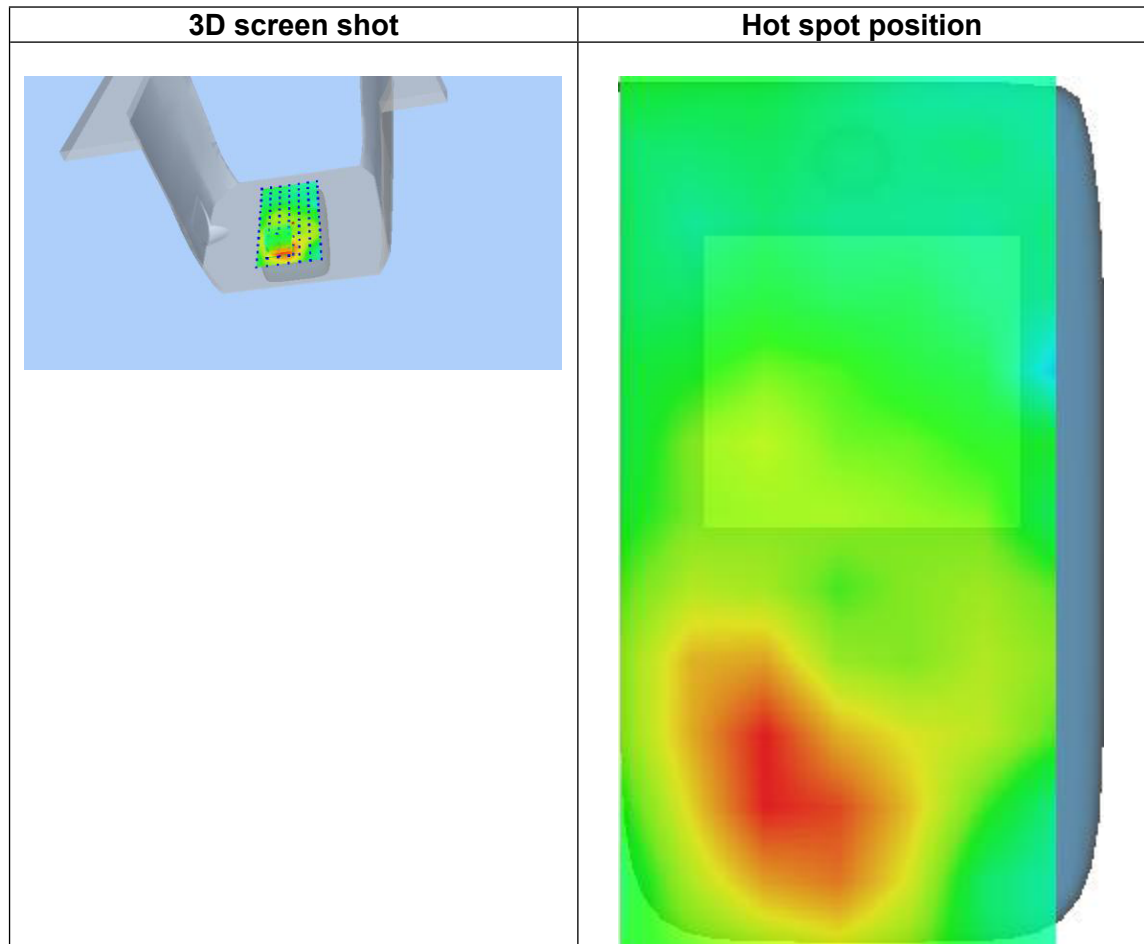
Frequency (MHz)	2535.000000
Relative permittivity (real part)	39.086666
Relative permittivity (imaginary part)	13.418333
Conductivity (S/m)	1.889749
Variation (%)	1.209999



Maximum location: X=17.00, Y=-36.00

SAR Peak: 3.63 W/kg

SAR 10g (W/Kg)	0.054903
SAR 1g (W/Kg)	0.096460



MEASUREMENT 5

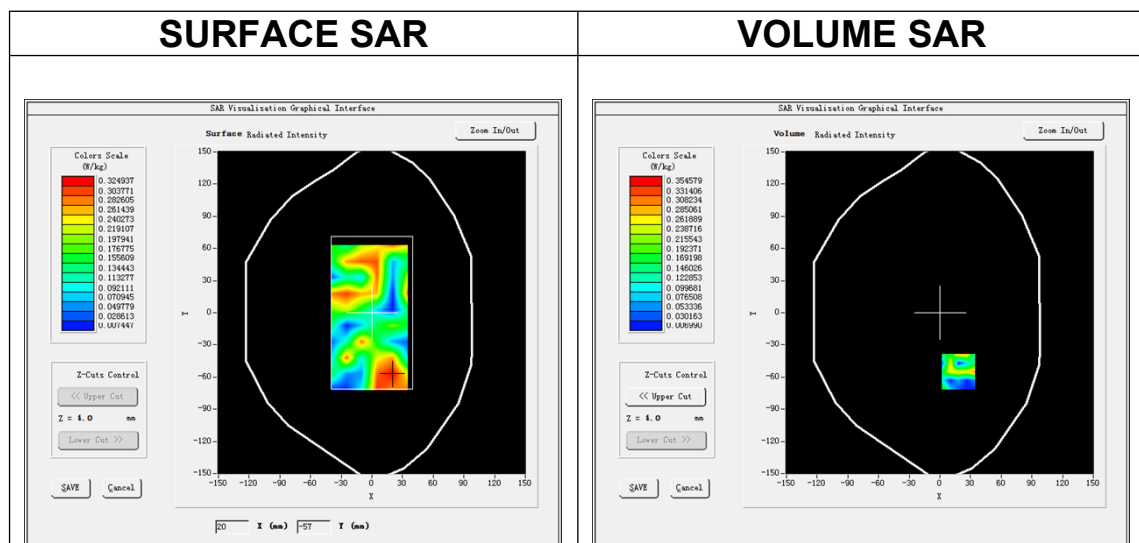
Date of measurement: 11/2/2025

A. Experimental conditions.

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

B. SAR Measurement Results

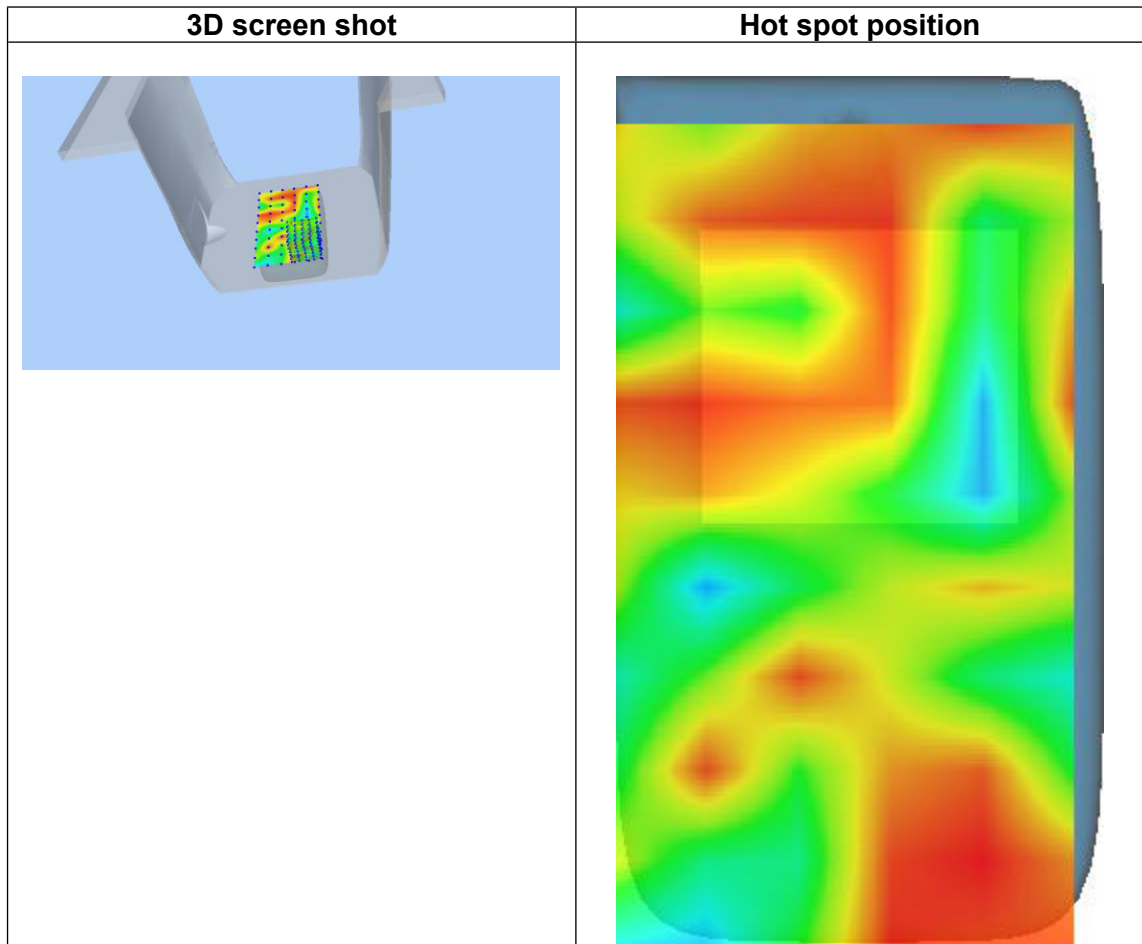
Frequency (MHz)	707.500000
Relative permittivity (real part)	41.427540
Relative permittivity (imaginary part)	21.802214
Conductivity (S/m)	0.856948
Variation (%)	-3.669998



Maximum location: X=18.00, Y=-55.00

SAR Peak: 0.75 W/kg

SAR 10g (W/Kg)	0.165149
SAR 1g (W/Kg)	0.327631



MEASUREMENT 6

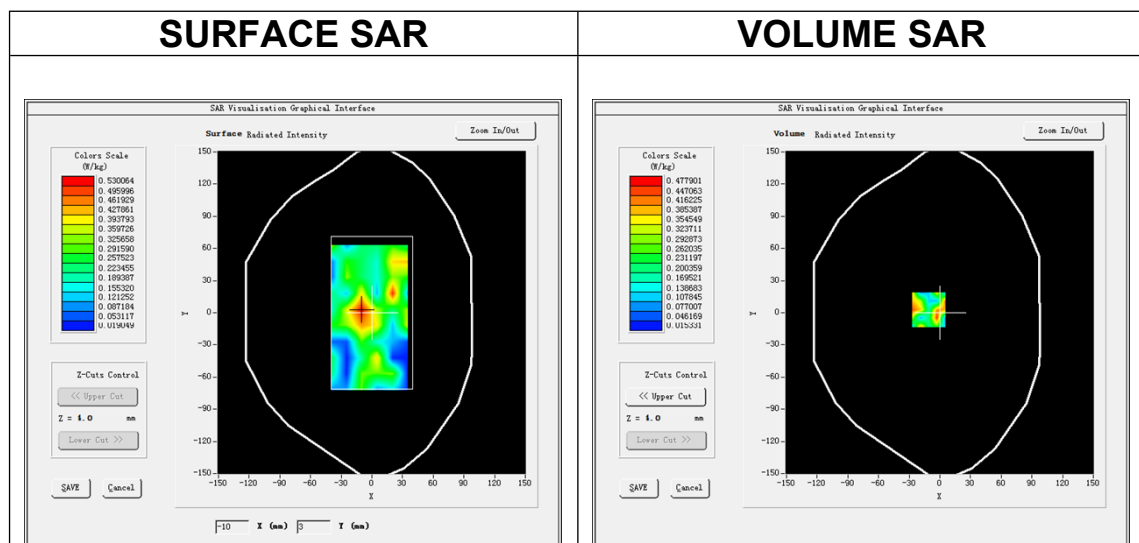
Date of measurement: 11/2/2025

A. Experimental conditions.

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

B. SAR Measurement Results

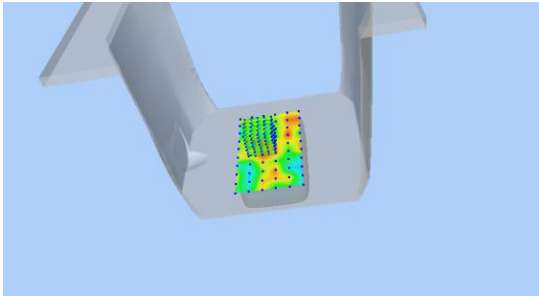
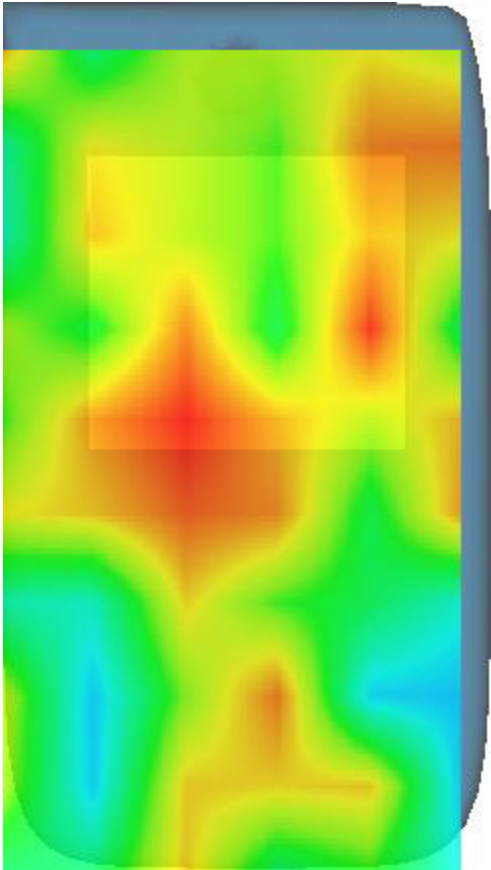
Frequency (MHz)	710.000000
Relative permittivity (real part)	41.412189
Relative permittivity (imaginary part)	21.742662
Conductivity (S/m)	0.857627
Variation (%)	-1.270000



Maximum location: X=-11.00, Y=3.00

SAR Peak: 1.29 W/kg

SAR 10g (W/Kg)	0.259122
SAR 1g (W/Kg)	0.391823

3D screen shot	Hot spot position
	

MEASUREMENT 7

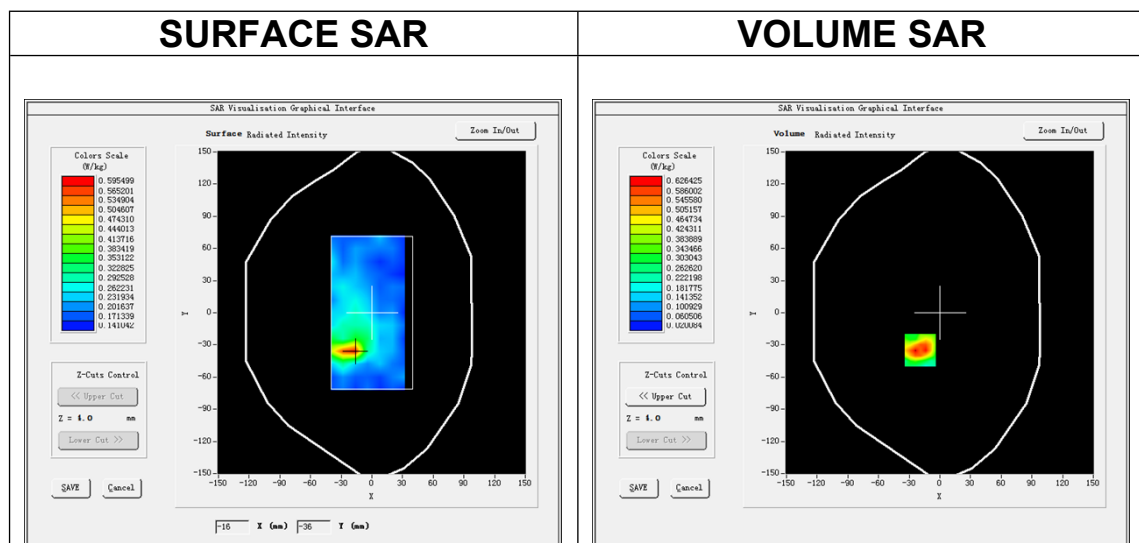
Date of measurement: 16/2/2025

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=12mm dy=12mm, h= 5.00 mm</u>
<u>ZoomScan</u>	<u>7x7x7,dx=5mm dy=5mm dz=5mm</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>LTE band 41</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>LTE (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>2.35</u>

B. SAR Measurement Results

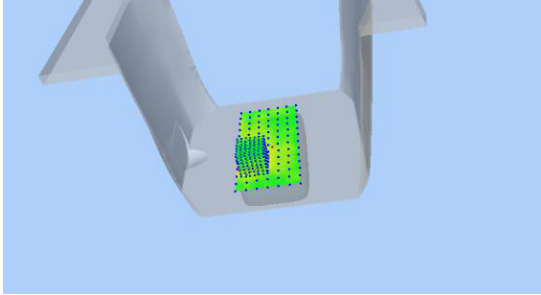
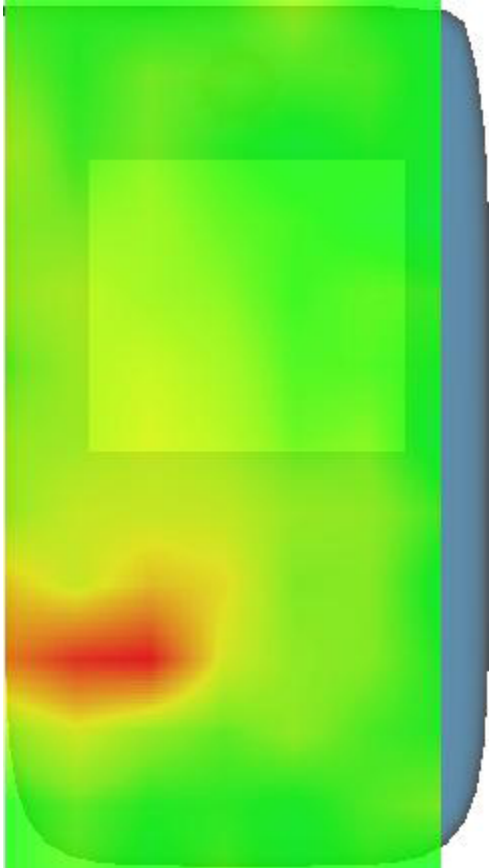
Frequency (MHz)	2593.000000
Relative permittivity (real part)	39.140884
Relative permittivity (imaginary part)	14.048088
Conductivity (S/m)	2.023705
Variation (%)	-3.360000



Maximum location: X=-19.00, Y=-35.00

SAR Peak: 1.27 W/kg

SAR 10g (W/Kg)	0.350998
SAR 1g (W/Kg)	0.604734

3D screen shot	Hot spot position
	

MEASUREMENT 8

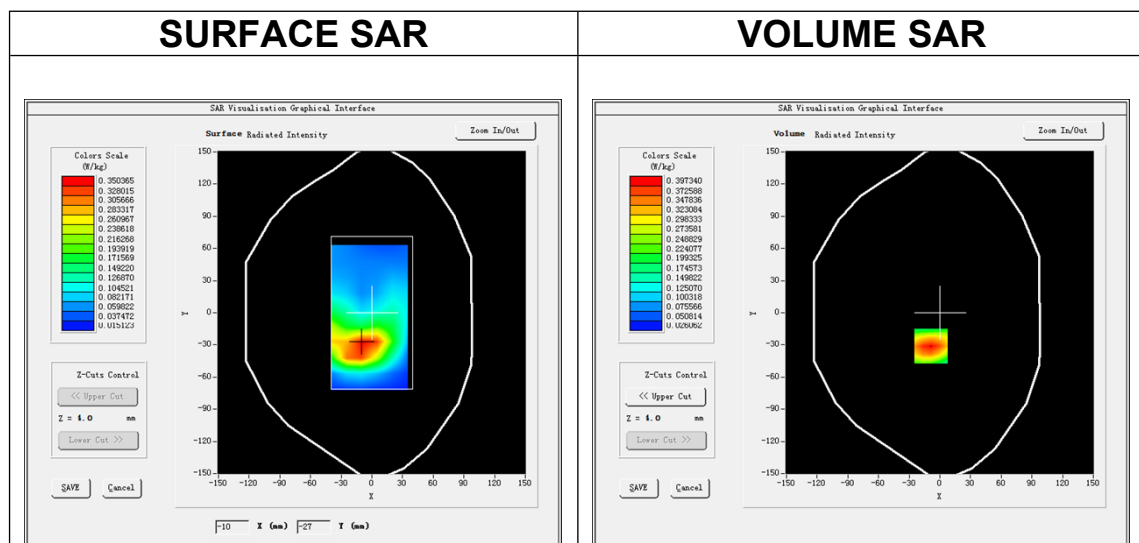
Date of measurement: 13/2/2025

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
<u>ZoomScan</u>	<u>5x5x7, dx=8mm dy=8mm dz=5mm</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>FDDBand66</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>(Crest factor: 1.0)</u>
<u>ConvF</u>	<u>2.05</u>

B. SAR Measurement Results

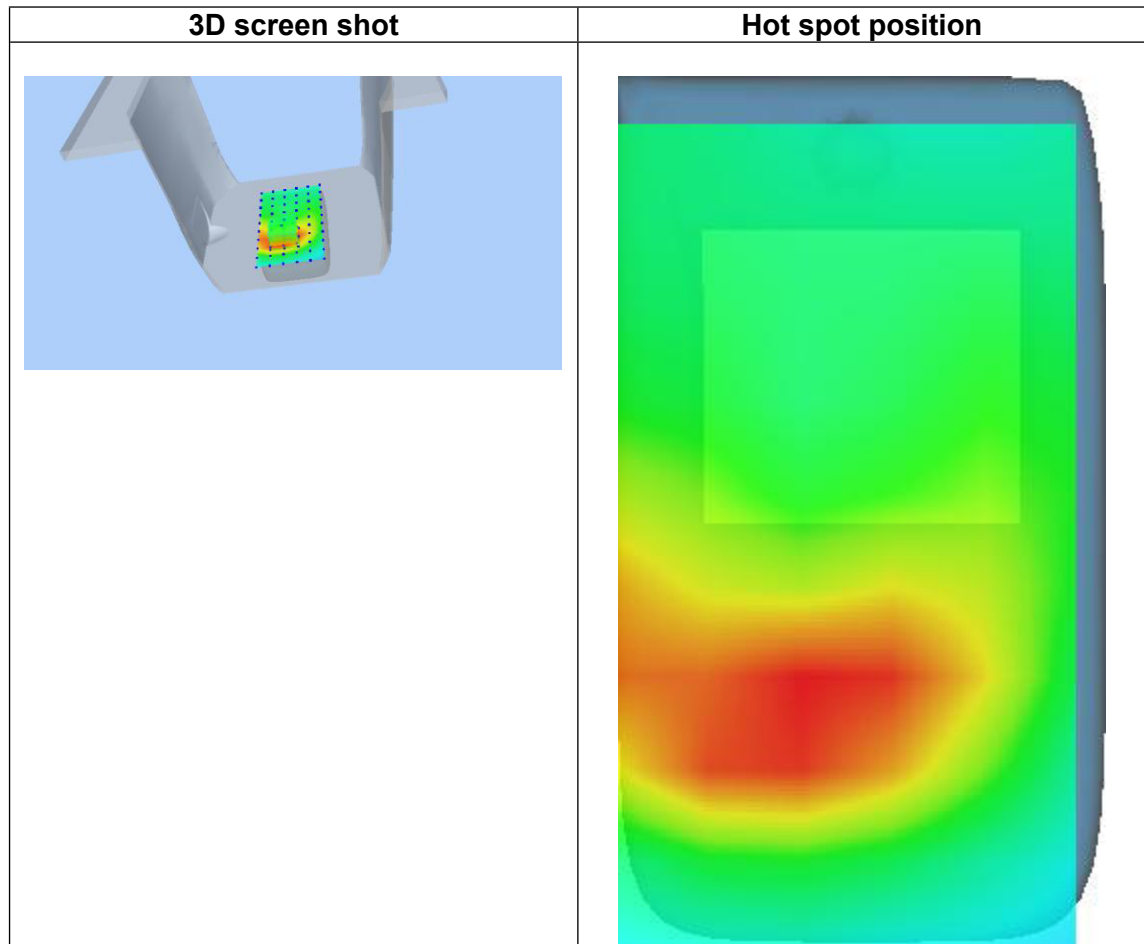
Frequency (MHz)	1745.000000
Relative permittivity (real part)	39.730927
Relative permittivity (imaginary part)	13.903665
Conductivity (S/m)	1.347883
Variation (%)	1.280000



Maximum location: X=-9.00, Y=-31.00

SAR Peak: 0.58 W/kg

SAR 10g (W/Kg)	0.222364
SAR 1g (W/Kg)	0.374754



MEASUREMENT 9

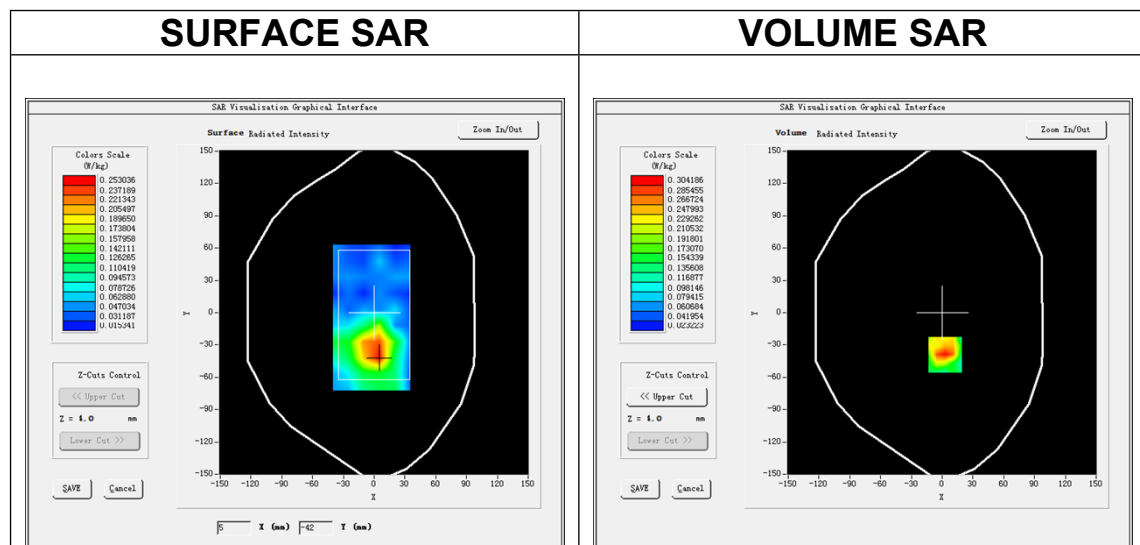
Date of measurement: 12/2/2025

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
<u>ZoomScan</u>	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>LTE band 13</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>LTE (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>1.66</u>

B. SAR Measurement Results

Frequency (MHz)	782.000000
Relative permittivity (real part)	40.500000
Relative permittivity (imaginary part)	20.100000
Conductivity (S/m)	0.873233
Variation (%)	-2.280001



Maximum location: X=3.00, Y=-39.00

SAR Peak: 0.45 W/kg

SAR 10g (W/Kg)	0.171934
SAR 1g (W/Kg)	0.286763

3D screen shot	Hot spot position
