

FCC SAR EVALUATION REPORT

**In accordance with the requirements of
FCC 47 CFR Part 2(2.1093), ANSI/IEEE C95.1-1992 and
IEEE Std 1528-2013**

Product Name : Spatial Computing Box

Trademark : XREAL

Model Name : X4200

Family Model : N/A

Report No. : S24080507318001

FCC ID : 2BBNY-X4200

Prepared for

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TEST RESULT CERTIFICATION**Applicant's name**: Xreal Inc.

Address.....: 440N. Wolfe Rd. Unit E417 Sunnyvale, CA 94085

Manufacturer's Name.....: Xreal Inc

Address.....: 440N. Wolfe Rd. Unit E417 Sunnyvale, CA 94085

Product description

Product name.....: Spatial Computing Box

Trademark: XREAL

Model Name: X4200

Family Model.....: N/A

FCC 47 CFR Part 2(2.1093)

ANSI/IEEE C95.1-1992

Standards: IEEE Std 1528-2013

Published RF exposure KDB procedures

This device described above has been tested by Shenzhen NTEK. 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) and ANSI/IEEE C95.1-1992. 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

Test Sample Number S240805073018

Date (s) of performance of tests: Oct. 12, 2024 ~ Oct. 25, 2024

Date of Issue: Oct. 31, 2024

Test Result.....: Pass

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※ ※ Revision History ※ ※

REV.	DESCRIPTION	ISSUED DATE	REMARK
Rev.1.0	Initial Test Report Release	Oct. 31, 2024	Owen Xiao

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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
 HEAD AND 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 for X4200 are as follows.

RF Exposure Conditions	Equipment Class -Highest Reported SAR (W/kg)			
	PCB	DTS	NII	DSS
1-g Hotspot (Separation distance of 10mm)	0.937	0.373	0.187	N/A
1-g Body (Separation distance of 10mm)	0.937	0.373	0.187	N/A
Max Simultaneous Tx	1.488	1.310	1.124	N/A

Note: The Max Simultaneous Tx 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 ANSI/IEEE C95.1-1992, 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	Spatial Computing Box
Trade Name	XREAL
Model Name	X4200
Family Model	N/A
FCC ID	2BBNY-X4200
Device Phase	Identical Prototype
Exposure Category	General population / Uncontrolled environment
Antenna	PIFA Antenna
Battery Information	DC 3.87V, 4300mAh
HW Version	X4200_DVT2
SW Version	N/A
Device Operating Configurations	
Supporting Mode(s)	LTE Band 2/4/5/7/12/13/14/17/25/26/38/41/66/71 NR SAn2/n5/n7/n12/n25/n41/n66/n77/n78, NR NSA n78A+LTE Band 7, WLAN 2.4G/5G, Bluetooth
Test Modulation	LTE(QPSK/16QAM), WLAN(DSSS/OFDM) , NR(DFT-s-OFDM:PI/2 BPSK/QPSK/16-QAM/64QAM/256QAM CP-OFDM: QPSK/16-QAM/64QAM/256QAM), WLAN(DSSS/OFDM), Bluetooth(GFSK, $\pi/4$ -DQPSK, 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 13	777-787	746-756
LTE Band 14	788-798	758-768
LTE Band 17	704-716	734-746
LTE Band 25	1850-1915	1930-1995
LTE Band 26	814-849	859-894
LTE Band 38	2570	2620
LTE Band 66	1710-1780	2110-2200
LTE Band 41	2570-2640	
LTE Band 71	663-698	617-652
NR n2	1850-1910	1930-1990
NR n5	824-849	869-894
NR n7	2500-2570	2620-2690
NR n12	699-716	729-746
NR n25	1850-1915	1930-1995
NR n41	2496-2690	
NR n66	1710-1780	2110-2180
NR n77	3700-3980	
NR n78	3450 - 3550	
WLAN 2.4G	2412-2462	
WLAN 5.2G	5180-5240	
WLAN 5.3G	5260-5320	
WLAN 5.6G	5500-5700	
WLAN 5.8G	5745-5825	
Bluetooth	2402-2480	
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 14)		
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 26)		

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)
3, tested with power control all Max.(LTE Band 71)
3, tested with power control all Max.(NR n2)
3, tested with power control all Max.(NR n5)
3, tested with power control all Max.(NR n7)
3, tested with power control all Max.(NR n12)
3, tested with power control all Max.(NR n41)
3, tested with power control all Max.(NR n66)
3, tested with power control all Max.(NR n77)
3, tested with power control all Max.(NR n78)

1.4. Test specification(s)

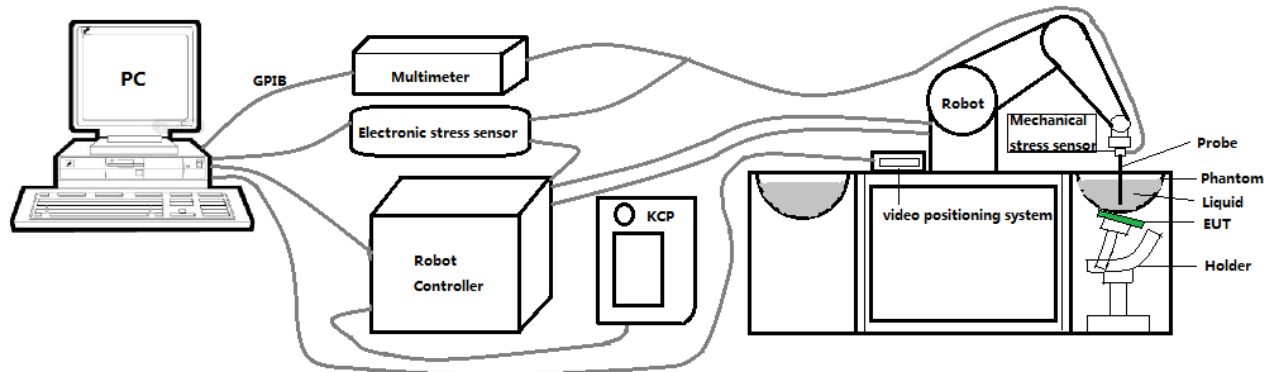
FCC 47 CFR Part 2(2.1093)
ANSI/IEEE C95.1-1992
IEEE Std 1528-2013
KDB 865664 D01 SAR measurement 100 MHz to 6 GHz
KDB 865664 D02 RF Exposure Reporting
KDB 447498 D01 General RF Exposure Guidance
KDB 248227 D01 802.11 Wi-Fi SAR
KDB 941225 D05 SAR for LTE Devices
KDB 941225 D06 Hotspot SAR
KDB 616217 D04 SAR for laptop and tablets

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. E-Field 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 SN 08/16 EPGO287 with following specifications is used



- Dynamic range: 0.01-100 W/kg
 - Tip Diameter: 2.5 mm
 - Distance between probe tip and sensor center: 1 mm
 - Distance between sensor center and the inner phantom surface: 2 mm (repeatability better than ± 1 mm).
 - Probe linearity: ± 0.08 dB
 - Axial isotropy: 0.06 dB
 - Hemispherical Isotropy: 0.08 dB
 - Calibration range: 650MHz to 5900MHz for head & body simulating liquid.
 - Lower detection limit: 7mW/kg
- 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 ± 0.25 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. SAM phantoms

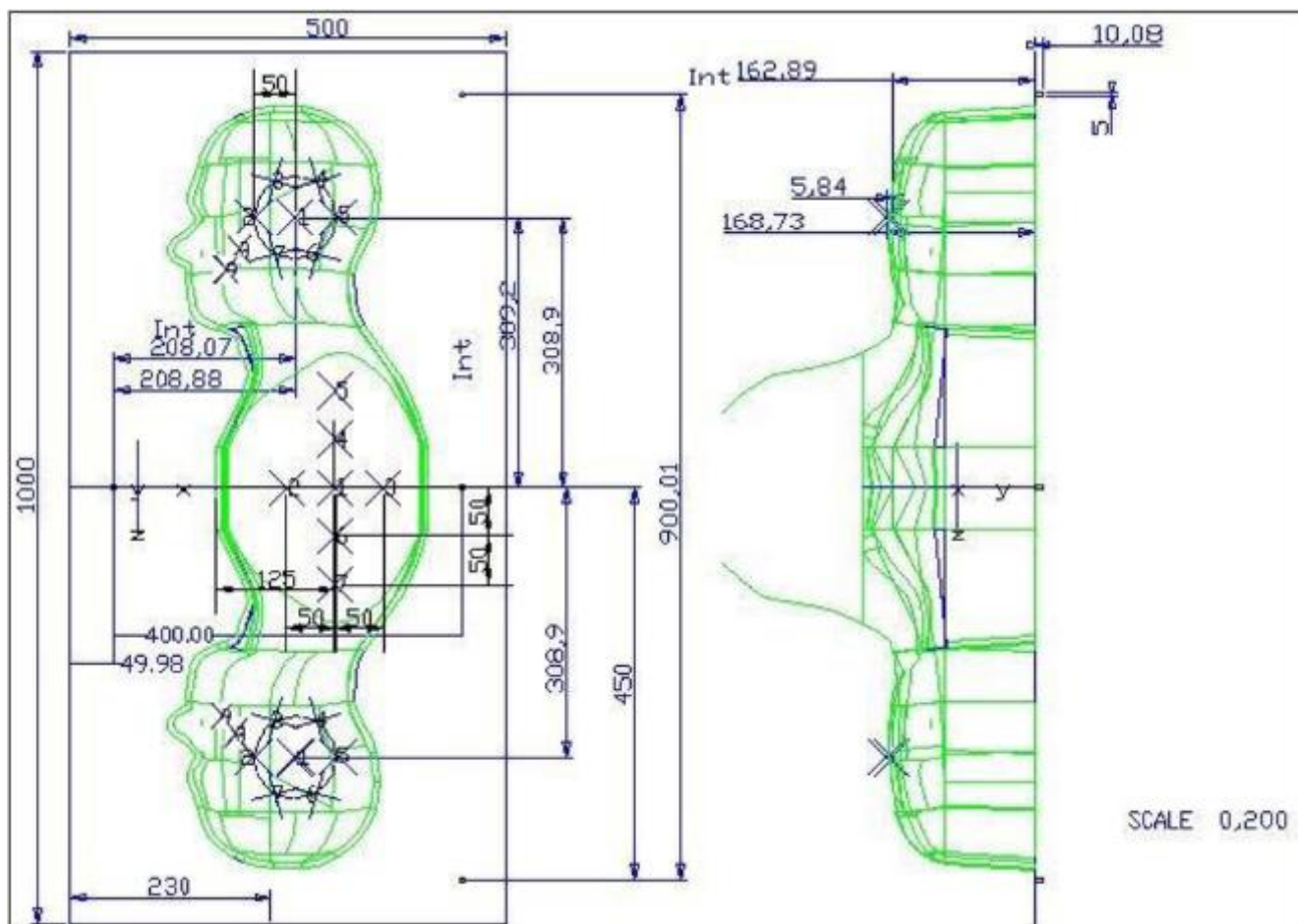
Photo of SAM phantom SN 16/15 SAM119



The SAM phantom is used to measure the SAR relative to people exposed to electro-magnetic field radiated by mobile phones.

2.4.1. Technical Data

Serial Number	Shell thickness	Filling volume	Dimensions	Positionner Material	Permittivity	Loss Tangent
SN 16/15 SAM119	2 mm $\pm$ 0.2 mm	27 liters	Length:1000 mm Width:500 mm Height:200 mm	Gelcoat with fiberglass	3.4	0.02

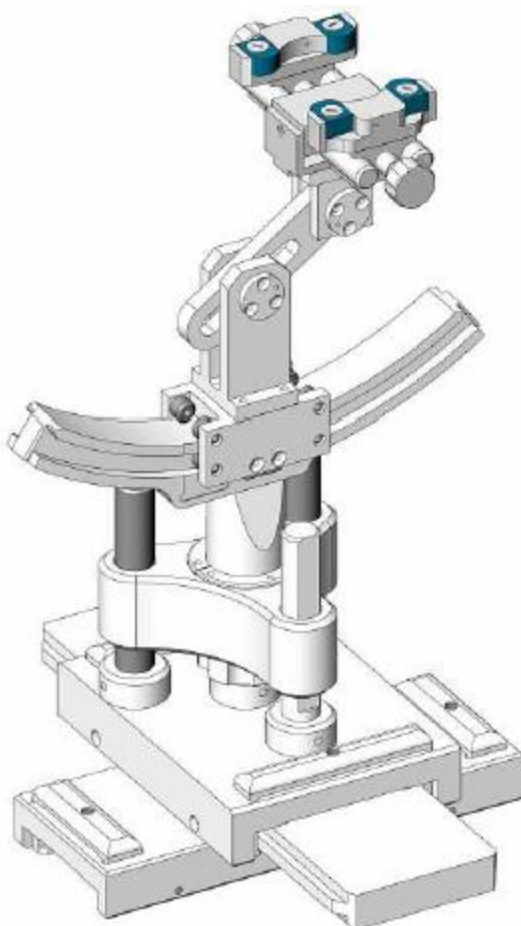


Serial Number	Left Head(mm)		Right Head(mm)		Flat Part(mm)	
SN 16/15 SAM119	2	2.02	2	2.08	1	2.09
	3	2.05	3	2.06	2	2.06
	4	2.07	4	2.07	3	2.08
	5	2.08	5	2.08	4	2.10
	6	2.05	6	2.07	5	2.10
	7	2.05	7	2.05	6	2.07
	8	2.07	8	2.06	7	2.07
	9	2.08	9	2.06	-	-

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

2.5. Device Holder

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



Serial Number	Holder Material	Permittivity	Loss Tangent
SN 16/15 MSH100	Delrin	3.7	0.005

2.6. 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	4024-EPGO-442	Oct.4.2024	Oct.3.2025
☒	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 DIP 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	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	3500 MHz Dipole	SID3500	SN 09/12 DIP 3G500-360	Oct. 15, 2022	Oct. 14, 2025
☒	MVG	3700 MHz Dipole	SID3700	SN 09/12 DIP 3G/700-361	Oct. 15 2022	Oct. 14 2025
☒	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	Apr. 26, 2024	Apr. 25, 2025
☐	R&S	Wideband	CMW500	103917	Apr. 26,	Apr. 25,

		radio communication tester			2024	2025
☒	HP	Network Analyzer	8753D	3410J01136	Apr. 26, 2024	Apr. 25, 2025
☒	Anritsu	5G NR comprehensive tester	MT8000A	6262186364	Apr. 25, 2024	Apr. 24, 2025
☒	Anritsu	4G LTE comprehensive tester	MT8821C	6262192315	Apr. 25, 2024	Apr. 24, 2025
☒	Agilent	MXG Vector Signal Generator	N5182A	MY47070317	Apr. 25, 2024	Apr. 24, 2025
☒	Agilent	Power meter	E4419B	MY45102538	Apr. 25, 2024	Apr. 24, 2025
☒	Agilent	Power sensor	E9301A	MY41495644	Apr. 25, 2024	Apr. 24, 2025
☒	Agilent	Power sensor	E9301A	US39212148	Apr. 25, 2024	Apr. 24, 2025
☒	MCLI/USA	Directional Coupler	CB11-20	0D2L51502	Apr. 26, 2024	Apr. 25, 2027
☒	N/A	Thermometer	N/A	LES-085	Mar. 27, 2023	Mar. 26, 2026
☒	MVG	SAM Phantom	SSM2	SN 16/15 SAM119	NCR	NCR
☒	MVG	Device Holder	SMPPD	SN 16/15 MSH100	NCR	NCR

Measurement Software

Manufacturer	Software Name	Software Version
SATIMO	OpenSAR	V4_02_31

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 WLAN/Bluetooth power measurement, use engineering software to configure EUT WLAN/Bluetooth 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 WLAN/Bluetooth output power.

<SAR measurement>

- (a) Use base station simulator to configure EUT WWAN transmission in radiated connection, and engineering software to configure EUT WLAN/Bluetooth 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.

			≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			5 ± 1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location			$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
Maximum area scan spatial resolution: $\Delta x_{\text{Area}}, \Delta y_{\text{Area}}$			≤ 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 $\leq$ 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: $\Delta x_{\text{Zoom}}, \Delta y_{\text{Zoom}}$			≤ 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: $\Delta z_{\text{Zoom}}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{\text{Zoom}}(1)$: 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
		$\Delta z_{\text{Zoom}}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$	
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 *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.

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 $\pm 5\%$, 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									
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
Ingredients (% of weight)	Body Tissue									
Frequency Band (MHz)	750	835	900	1800	1900	2000	2450	2600	5200	5800
Water	50.30	50.30	50.30	69.91	69.91	71.88	71.88	71.88	79.54	79.54
NaCl	0.60	0.60	0.60	0.13	0.13	0.16	0.16	0.16	0.00	0.00
1,2-Propanediol	49.10	49.10	49.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Triton X-100	0.00	0.00	0.00	9.99	9.99	19.97	19.97	19.97	11.24	11.24
DGBE	0.00	0.00	0.00	19.97	19.97	7.99	7.99	7.99	9.22	9.22

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.

Photo of Liquid depth for Head Position	Photo of Liquid depth for Body Position
	

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.

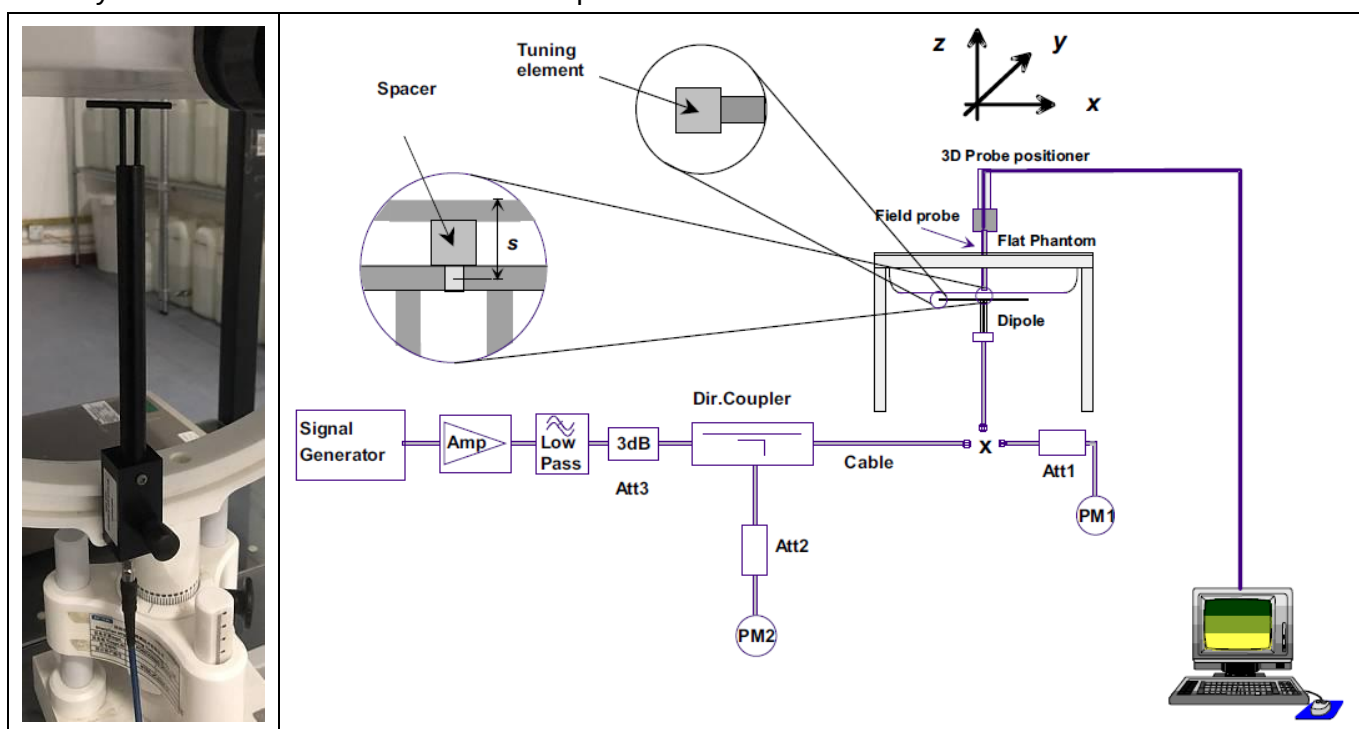
Tissue Type	Measured Frequency (MHz)	Target Tissue		Measured Tissue		Liquid Temp.	Test Date
		$\epsilon_r (\pm 5\%)$	$\sigma \text{ (S/m)} (\pm 5\%)$	ϵ_r	$\sigma \text{ (S/m)}$		
Head 750	750	41.96 (39.86~44.06)	0.89 (0.85~0.93)	40.54	0.90	21.5 °C	Oct. 14, 2024
Head 850	835	41.50 (39.43~43.58)	0.90 (0.86~0.95)	41.96	0.91	21.5 °C	Oct. 15, 2024
Head 1800	1800	40.00 (38.00~42.00)	1.40 (1.33~1.47)	39.26	1.37	21.7 °C	Oct. 22, 2024
Head 1900	1900	40.00 (38.00~42.00)	1.40 (1.33~1.47)	38.57	1.46	21.5 °C	Oct. 16, 2024
Head 2450	2450	39.20 (37.24~41.16)	1.80 (1.71~1.89)	39.84	1.79	21.5 °C	Oct. 23, 2024
Head 2600	2600	39.01 (37.06~40.96)	1.96 (1.86~2.06)	38.91	2.02	21.4 °C	Oct. 17, 2024
Head 3300	3300	38.14 (36.04~39.82)	2.71 (2.77~3.05)	39.47	2.60	21.5 °C	Oct. 27, 2024
Head 3500	3500	37.93 (36.04~39.82)	2.91 (2.77~3.05)	37.72	2.84	21.8 °C	Oct. 19, 2024
Head 3700	3700	37.70 (35.82~39.59)	3.12 (2.97~3.27)	37.18	3.07	21.0 °C	Oct. 20, 2024
Head 5200	5200	36.00 (34.20~37.80)	4.66 (4.43~4.89)	36.62	4.52	21.5 °C	Oct. 24, 2024
Head 5400	5400	35.80 (34.01~37.59)	4.86 (4.62~5.10)	35.59	4.72	21.8 °C	Oct. 25, 2024
Head 5600	5600	35.50 (33.73~37.28)	5.07 (4.82~5.32)	35.89	5.04	21.6 °C	Oct. 12, 2024
Head 5800	5800	35.30 (33.54~37.07)	5.27 (5.01~5.53)	35.47	5.14	21.9 °C	Oct. 26, 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. 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	Target SAR (1W) ($\pm 10\%$)		Measured SAR			Measured SAR (Normalized to 1W)		Liquid Temp.	Test Date
	1-g (W/Kg)	10-g (W/Kg)	Input Power	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)	18dBm	0.545	0.367	8.64	5.82	21.9 °C	Oct. 14, 2024
835MHz	9.40 (8.46~10.34)	6.28 (5.65~6.91)	18dBm	0.574	0.376	9.10	5.96	21.2 °C	Oct. 15, 2024
1800MHz	37.06 (33.35~40.77)	20.01 (18.01~22.01)	18dBm	2.386	1.238	37.81	19.62	21.2 °C	Oct. 22, 2024
1900MHz	39.69 (35.72~43.66)	20.92 (18.83~23.01)	18dBm	2.527	1.243	40.05	19.70	21.7 °C	Oct. 16, 2024
2450MHz	50.05 (45.05~55.06)	23.80 (21.42~26.18)	18dBm	2.966	1.414	47.01	22.41	21.0 °C	Oct. 23, 2024
2600MHz	54.16 (48.74~59.58)	24.85 (22.37~27.34)	18dBm	3.452	1.557	54.71	24.68	21.1 °C	Oct. 17, 2024
3300MHz	67.61 (60.85~74.37)	26.04 (23.44~28.64)	20dBm	6.012	2.443	60.12	24.43	21.5 °C	Oct. 27, 2024
3500MHz	67.18 (60.47~73.89)	24.50 (22.05~26.95)	20dBm	6.984	2.536	69.84	25.36	21.8 °C	Oct. 19, 2024
3700MHz	66.30 (59.67~72.93)	24.16 (22.96~26.57)	20dBm	6.327	2.504	63.27	25.04	21.4 °C	Oct. 20, 2024
5200MHz	162.59 (146.33~178.85)	56.21 (50.59~61.83)	20dBm	15.361	5.563	153.61	55.63	21.9 °C	Oct. 24, 2024
5400MHz	159.81 (143.83~175.79)	55.00 (49.50~60.50)	20dBm	16.607	5.024	166.07	50.24	21.3 °C	Oct. 25, 2024
5600MHz	179.15 (161.24~197.07)	61.01 (54.91~67.11)	20dBm	18.284	6.608	182.84	66.08	21.6 °C	Oct. 12, 2024
5800MHz	182.20 (163.98~200.42)	61.32 (55.19~67.45)	20dBm	18.664	5.755	186.64	57.55	21.7 °C	Oct. 26, 2024

5. SAR Measurement variability and uncertainty

5.1. 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 .

5.2. 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.

6. RF Exposure Positions

6.1. 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 Hotspot" 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.

7. RF Output Power

The proximity sensor is used in this device to reduce the maximum output power (LTE Band 2/4/25) in selected wireless mode and operating configurations to ensure SAR compliance.

7.1. LTE Conducted Power

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	24.50	23.95	23.95	23.97
			1	2	24.50	23.93	24.00	24.08
			1	5	24.50	23.89	23.96	24.07
			3	0	24.50	23.98	23.90	24.03
			3	1	24.50	23.95	23.88	24.04
			3	2	24.50	23.94	23.95	24.02
			6	0	22.00	21.45	21.45	21.50
		16QAM	1	0	22.00	21.94	21.82	21.84
			1	2	22.00	21.88	21.89	21.93
			1	5	22.00	21.73	21.85	21.74
			3	0	22.00	21.67	21.57	21.61
			3	1	22.00	21.72	21.55	21.64
			3	2	22.00	21.62	21.57	21.66
			6	0	21.00	20.63	20.41	20.55
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	24.50	23.89	23.87	23.90
			1	7	24.50	24.11	23.97	24.00
			1	14	24.50	23.89	23.82	23.99
			8	0	22.00	21.55	21.46	21.58
			8	4	22.00	21.53	21.50	21.49
			8	7	22.00	21.53	21.44	21.58
			15	0	22.00	21.51	21.40	21.50
		16QAM	1	0	22.00	21.66	21.73	21.86
			1	7	22.00	21.86	21.78	21.90
			1	14	22.00	21.74	21.79	21.68
			8	0	21.00	20.50	20.42	20.61
			8	4	21.00	20.55	20.55	20.59
			8	7	21.00	20.53	20.54	20.54
			15	0	21.00	20.51	20.38	20.56

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	24.50	23.98	23.91	24.02
			1	12	24.50	24.01	24.12	24.01
			1	24	24.50	23.93	23.91	23.98
			12	0	22.00	21.56	21.47	21.57
			12	6	22.00	21.54	21.51	21.54
			12	11	22.00	21.49	21.45	21.58
			25	0	22.00	21.51	21.36	21.57
		16QAM	1	0	22.00	21.83	21.72	21.73
			1	12	22.00	21.89	21.67	21.79
			1	24	22.00	21.77	21.66	21.76
			12	0	21.00	20.59	20.45	20.58
			12	6	21.00	20.53	20.50	20.59
			12	11	21.00	20.55	20.55	20.59
			25	0	21.00	20.46	20.43	20.52
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	24.50	23.99	23.89	24.10
			1	24	24.50	24.07	23.92	24.06
			1	49	24.50	23.90	23.88	24.01
			25	0	22.00	21.55	21.39	21.50
			25	12	22.00	21.51	21.51	21.48
			25	24	22.00	21.51	21.53	21.54
			50	0	22.00	21.46	21.41	21.56
		16QAM	1	0	22.50	21.87	22.03	21.81
			1	24	22.50	21.80	21.86	21.76
			1	49	22.50	21.89	21.78	21.78
			25	0	21.00	20.56	20.47	20.48
			25	12	21.00	20.57	20.47	20.51
			25	24	21.00	20.44	20.46	20.59
			50	0	21.00	20.51	20.49	20.47
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	24.50	23.93	23.73	23.68
			1	37	24.50	23.76	23.74	24.03
			1	74	24.50	23.80	23.66	23.84

			36	0	21.50	21.31	21.30	21.39		
			36	18	21.50	21.38	21.28	21.35		
			36	37	21.50	21.31	21.42	21.43		
			75	0	21.50	21.35	21.36	21.43		
		16QAM	1	0	22.00	21.60	21.34	21.59		
			1	37	22.00	21.61	21.58	21.64		
			1	74	22.00	21.45	21.36	21.69		
			36	0	20.50	20.33	20.33	20.40		
			36	18	20.50	20.37	20.29	20.42		
			36	37	20.50	20.30	20.30	20.46		
		75	0	20.50	20.31	20.35	20.31			
		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	24.50	24.01	23.52	23.95		
			1	49	24.50	23.89	23.97	24.01		
			1	99	24.50	23.76	23.68	23.82		
			50	0	21.50	21.27	21.32	21.40		
			50	24	21.50	21.33	21.30	21.49		
			50	49	21.50	21.18	21.31	21.47		
			100	0	21.50	21.35	21.31	21.44		
		16QAM	1	0	22.00	21.66	21.48	21.78		
			1	49	22.00	21.60	21.39	21.76		
			1	99	22.00	21.65	21.58	21.62		
			50	0	20.50	20.28	20.29	20.38		
			50	24	20.50	20.27	20.31	20.47		
			50	49	20.50	20.33	20.33	20.47		
			100	0	20.50	20.31	20.38	20.47		

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	25.00	24.21	24.41	24.41
			1	2	25.00	24.19	24.43	24.60
			1	5	25.00	24.22	24.49	24.44
			3	0	25.00	24.28	24.50	24.48
			3	1	25.00	24.28	24.45	24.59
			3	2	25.00	24.30	24.45	24.45
			6	0	22.50	21.74	22.01	21.96
		16QAM	1	0	22.50	21.92	22.33	22.25

			1	2	22.50	22.13	22.34	22.32
			1	5	22.50	22.08	22.18	22.40
			3	0	22.50	21.98	22.08	22.06
			3	1	22.50	21.87	22.06	22.06
			3	2	22.50	21.81	22.03	22.10
			6	0	21.50	20.80	21.04	21.02
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	25.00	24.28	24.30	24.50
			1	7	25.00	24.39	24.53	24.54
			1	14	25.00	24.21	24.48	24.46
			8	0	22.50	21.82	21.91	22.04
			8	4	22.50	21.85	22.04	22.05
			8	7	22.50	21.83	22.01	21.99
			15	0	22.00	21.74	21.92	21.97
		16QAM	1	0	22.50	22.02	22.23	22.33
			1	7	22.50	22.19	22.37	22.30
			1	14	22.50	22.09	22.21	22.22
			8	0	21.50	20.89	20.95	21.07
			8	4	21.50	20.88	21.10	21.11
			8	7	21.50	20.90	21.01	21.06
			15	0	21.00	20.79	21.00	21.00
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	25.00	24.30	24.47	24.39
			1	12	25.00	24.42	24.53	24.65
			1	24	25.00	24.46	24.49	24.52
			12	0	22.50	21.87	21.96	22.08
			12	6	22.50	21.84	22.00	22.03
			12	11	22.50	21.83	21.98	22.09
			25	0	22.00	21.86	21.90	21.98
		16QAM	1	0	22.50	22.10	22.34	22.37
			1	12	22.50	22.11	22.32	22.42
			1	24	22.50	22.15	22.14	22.32
			12	0	21.50	20.84	20.88	21.11
			12	6	21.50	20.85	21.00	21.08
			12	11	21.50	20.85	21.04	21.03
			25	0	21.50	20.85	20.92	21.02

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	25.00	24.26	24.46	24.51
			1	24	25.00	24.41	24.57	24.65
			1	49	25.00	24.37	24.52	24.54
			25	0	22.50	21.84	22.01	21.92
			25	12	22.50	21.83	21.99	21.98
			25	24	22.50	21.88	22.03	22.05
			50	0	22.00	21.85	21.87	21.92
		16QAM	1	0	22.50	22.08	22.19	22.24
			1	24	22.50	22.04	22.26	22.34
			1	49	22.50	22.26	22.35	22.34
			25	0	21.00	20.80	20.95	20.92
			25	12	21.00	20.94	20.93	20.95
			25	24	21.00	20.81	20.97	20.97
			50	0	21.00	20.80	20.96	20.93
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	25.00	23.74	24.14	24.46
			1	37	25.00	24.33	24.28	24.52
			1	74	25.00	24.28	24.56	24.51
			36	0	22.00	21.68	21.89	21.88
			36	18	22.00	21.73	21.75	21.79
			36	37	22.00	21.75	21.96	21.94
			75	0	22.00	21.72	21.78	21.83
		16QAM	1	0	22.50	21.91	22.06	22.10
			1	37	22.50	21.90	22.07	22.09
			1	74	22.50	22.02	22.10	22.11
			36	0	21.00	20.68	20.86	20.81
			36	18	21.00	20.75	20.80	20.87
			36	37	21.00	20.83	20.96	20.98
			75	0	21.00	20.73	20.78	20.81
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	25.00	24.10	24.44	24.33
			1	49	25.00	24.38	24.31	24.45
			1	99	25.00	24.35	24.49	24.58

				50	0	22.00	21.73	21.83	21.75
				50	24	22.00	21.80	21.81	21.89
				50	49	22.00	21.79	21.96	21.92
				100	0	22.00	21.70	21.80	21.82
			16QAM	1	0	22.50	22.11	22.17	22.17
				1	49	22.50	21.89	22.32	22.19
				1	99	22.50	22.31	22.26	22.02
				50	0	21.00	20.64	20.80	20.82
				50	24	21.00	20.82	20.80	20.95
				50	49	21.00	20.84	20.97	20.86
				100	0	21.00	20.77	20.84	20.76

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	24.50	24.53	24.34
			1	2	25.00	24.45	24.53	24.44
			1	5	25.00	24.38	24.40	24.32
			3	0	25.00	24.42	24.50	24.10
			3	1	25.00	24.42	24.49	24.39
			3	2	25.00	24.50	24.48	24.38
			6	0	22.00	21.73	21.56	21.74
		16QAM	1	0	22.50	22.07	22.05	22.04
			1	2	22.50	22.15	22.06	22.23
			1	5	22.50	22.00	22.09	22.09
			3	0	22.00	21.89	21.95	21.79
			3	1	22.00	21.86	21.92	21.86
			3	2	22.00	21.76	21.78	21.80
			6	0	21.00	20.88	20.70	20.79
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	24.42	24.41	24.33
			1	7	25.00	24.57	24.44	24.60
			1	14	25.00	24.47	24.51	24.37
			8	0	22.00	21.81	21.79	21.75
			8	4	22.00	21.79	21.84	21.78
			8	7	22.00	21.72	21.80	21.71
			15	0	22.00	21.72	21.75	21.67
		16QAM	1	0	22.50	21.92	22.25	22.08

			1	7	22.50	22.03	22.17	22.29
			1	14	22.50	22.03	22.01	22.03
			8	0	21.00	20.80	20.87	20.77
			8	4	21.00	20.85	20.88	20.82
			8	7	21.00	20.84	20.82	20.79
			15	0	21.00	20.83	20.77	20.79
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	24.45	24.53	24.45
			1	12	25.00	24.51	24.63	24.48
			1	24	25.00	24.45	24.45	24.53
			12	0	22.00	21.81	21.78	21.73
			12	6	22.00	21.87	21.77	21.66
			12	11	22.00	21.74	21.82	21.73
			25	0	22.00	21.77	21.77	21.67
		16QAM	1	0	22.50	22.13	22.11	22.12
			1	12	22.50	22.00	21.96	22.06
			1	24	22.50	22.02	22.09	22.17
			12	0	21.00	20.76	20.76	20.71
			12	6	21.00	20.88	20.76	20.78
			12	11	21.00	20.77	20.78	20.74
			25	0	21.00	20.86	20.78	20.78
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	25.00	24.52	24.56	24.65
			1	24	25.00	24.47	24.57	24.52
			1	49	25.00	24.39	24.41	24.42
			25	0	22.00	21.77	21.78	21.74
			25	12	22.00	21.82	21.74	21.75
			25	24	22.00	21.79	21.76	21.71
			50	0	22.00	21.85	21.83	21.76
		16QAM	1	0	22.50	21.96	22.13	22.15
			1	24	22.50	22.10	22.12	22.10
			1	49	22.50	22.06	22.05	22.02
			25	0	21.00	20.80	20.82	20.77
			25	12	21.00	20.86	20.83	20.66
			25	24	21.00	20.84	20.76	20.73
			50	0	21.00	20.80	20.85	20.73

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	22.65	23.26	23.20
			1	12	23.50	22.76	23.30	23.43
			1	24	23.50	22.82	23.26	23.44
			12	0	21.50	20.86	21.27	21.37
			12	6	21.50	20.85	21.23	21.36
			12	11	21.50	20.83	21.17	21.33
			25	0	21.50	20.84	21.18	21.31
		16QAM	1	0	22.00	21.10	21.53	21.67
			1	12	22.00	21.22	21.63	21.62
			1	24	22.00	21.19	21.57	21.56
			12	0	20.50	19.82	20.25	20.44
			12	6	20.50	19.96	20.22	20.36
			12	11	20.50	19.90	20.13	20.40
			25	0	20.50	19.87	20.18	20.32
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	23.50	22.89	23.25	23.32
			1	24	23.50	22.97	23.31	23.37
			1	49	23.50	23.04	23.29	23.40
			25	0	21.50	20.90	21.31	21.45
			25	12	21.50	21.02	21.23	21.45
			25	24	21.50	21.01	21.23	21.37
			50	0	21.50	20.94	21.19	21.39
		16QAM	1	0	22.00	21.18	21.54	21.66
			1	24	22.00	21.31	21.56	21.74
			1	49	22.00	21.27	21.59	21.59
			25	0	20.50	19.89	20.31	20.49
			25	12	20.50	20.00	20.27	20.43
			25	24	20.50	20.01	20.24	20.38
			50	0	20.50	19.90	20.21	20.37
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	23.50	22.76	23.04	23.33
			1	37	23.50	22.87	23.31	23.38
			1	74	23.50	22.47	23.21	23.31

			36	0	21.50	20.76	21.17	21.37		
			36	18	21.50	20.85	21.11	21.31		
			36	37	21.50	20.80	21.12	21.29		
			75	0	21.50	20.81	21.12	21.25		
		16QAM	1	0	21.50	20.83	21.34	21.41		
			1	37	21.50	20.96	21.45	21.38		
			1	74	21.50	20.92	21.18	21.34		
			36	0	20.50	19.81	20.17	20.35		
			36	18	20.50	19.93	20.10	20.39		
			36	37	20.50	19.88	20.13	20.29		
			75	0	20.50	19.83	20.11	20.34		
		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	23.50	22.88	23.06	23.28		
			1	49	23.50	22.90	23.25	23.21		
			1	99	23.50	22.83	23.24	23.37		
			50	0	21.50	20.79	21.15	21.29		
			50	24	21.50	20.83	21.13	21.36		
			50	49	21.50	20.75	21.14	21.19		
			100	0	21.50	20.76	21.11	21.31		
		16QAM	1	0	21.50	20.89	21.23	21.44		
			1	49	21.50	20.99	21.38	21.42		
			1	99	21.50	20.92	21.36	21.40		
			50	0	20.50	19.86	20.08	20.34		
			50	24	20.50	19.90	20.13	20.35		
			50	49	20.50	19.74	20.07	20.28		
			100	0	20.50	19.81	20.16	20.32		

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	24.50	24.37	24.31	24.33
			1	2	24.50	24.27	24.25	24.37
			1	5	24.50	24.24	24.21	24.24
			3	0	24.50	24.28	24.16	24.18
			3	1	24.50	24.25	24.18	24.27
			3	2	24.50	24.25	24.18	24.25
			6	0	22.00	21.57	21.42	21.44
		16QAM	1	0	22.00	21.80	21.86	21.88

			1	2	22.00	21.83	21.91	21.79
			1	5	22.00	21.78	21.73	21.69
			3	0	22.00	21.78	21.61	21.61
			3	1	22.00	21.63	21.63	21.66
			3	2	22.00	21.62	21.67	21.63
			6	0	21.00	20.66	20.47	20.63
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	24.50	24.29	24.22	24.32
			1	7	24.50	24.35	24.32	24.28
			1	14	24.50	24.25	24.15	24.25
			8	0	22.00	21.64	21.51	21.45
			8	4	22.00	21.57	21.52	21.54
			8	7	22.00	21.62	21.54	21.48
			15	0	22.00	21.57	21.43	21.43
		16QAM	1	0	22.00	21.90	21.78	21.75
			1	7	22.00	21.81	21.86	21.90
			1	14	22.00	21.91	21.76	21.73
			8	0	21.00	20.71	20.54	20.46
			8	4	21.00	20.69	20.65	20.64
			8	7	21.00	20.62	20.65	20.63
			15	0	21.00	20.69	20.47	20.48
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	24.50	24.32	24.25	24.29
			1	12	24.50	24.34	24.35	24.29
			1	24	24.50	24.19	24.18	24.23
			12	0	22.00	21.58	21.47	21.47
			12	6	22.00	21.55	21.53	21.59
			12	11	22.00	21.57	21.52	21.50
			25	0	22.00	21.57	21.45	21.50
		16QAM	1	0	22.00	21.92	21.80	21.83
			1	12	22.00	21.81	21.89	21.73
			1	24	22.00	21.70	21.75	21.78
			12	0	21.00	20.58	20.43	20.58
			12	6	21.00	20.62	20.63	20.61
			12	11	21.00	20.60	20.49	20.57
			25	0	21.00	20.54	20.46	20.45

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	25.00	24.58	24.52	24.36
			1	24	25.00	24.43	24.15	24.39
			1	49	25.00	24.17	24.25	24.12
			25	0	22.00	21.55	21.51	21.47
			25	12	22.00	21.57	21.60	21.53
			25	24	22.00	21.51	21.46	21.55
			50	0	22.00	21.54	21.46	21.60
		16QAM	1	0	22.00	21.98	21.75	21.98
			1	24	22.00	21.91	21.74	21.84
			1	49	22.00	21.70	21.79	21.61
			25	0	21.00	20.56	20.53	20.48
			25	12	21.00	20.59	20.58	20.57
			25	24	21.00	20.57	20.51	20.59
			50	0	21.00	20.60	20.51	20.56

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	23.00	22.87	22.89	22.87
			1	12	23.00	22.91	22.89	22.86
			1	24	23.00	22.73	22.78	22.75
			12	0	22.00	21.71	21.78	21.76
			12	6	22.00	21.91	21.81	21.83
			12	11	22.00	21.82	21.83	21.82
			25	0	22.00	21.84	21.80	21.74
		16QAM	1	0	22.50	22.38	22.17	22.16
			1	12	22.50	22.26	22.20	22.35
			1	24	22.50	22.11	22.14	21.99
			12	0	21.00	20.82	20.84	20.82
			12	6	21.00	20.91	20.88	20.80
			12	11	21.00	20.83	20.84	20.83
			25	0	21.00	20.87	20.84	20.75
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	23.00	N/A	23.00	N/A
			1	24	23.00	N/A	22.94	N/A

			1	49	23.00	N/A	22.73	N/A
			25	0	22.00	N/A	21.96	N/A
			25	12	22.00	N/A	21.80	N/A
			25	24	22.00	N/A	21.87	N/A
			50	0	22.00	N/A	21.78	N/A
		16QAM	1	0	22.50	N/A	22.32	N/A
			1	24	22.50	N/A	22.15	N/A
			1	49	22.50	N/A	22.05	N/A
			25	0	21.00	N/A	20.89	N/A
			25	12	21.00	N/A	20.88	N/A
			25	24	21.00	N/A	20.85	N/A
			50	0	21.00	N/A	20.83	N/A

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	25.00	24.36	24.34	24.44
			1	2	25.00	24.39	24.44	24.61
			1	5	25.00	24.33	24.41	24.54
			3	0	25.00	24.32	24.48	24.48
			3	1	25.00	24.46	24.50	24.50
			3	2	25.00	24.36	24.55	24.47
			6	0	22.50	21.91	21.94	22.02
		16QAM	1	0	22.50	22.22	22.23	22.33
			1	2	22.50	22.40	22.36	22.28
			1	5	22.50	22.15	22.35	22.30
			3	0	22.50	22.11	22.14	22.08
			3	1	22.50	22.13	22.19	22.21
			3	2	22.50	22.14	22.14	22.15
			6	0	21.50	21.03	21.08	21.08
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	25.00	24.45	24.46	24.44
			1	7	25.00	24.52	24.54	24.59
			1	14	25.00	22.95	24.48	24.43
			8	0	22.50	22.00	21.95	21.97
			8	4	22.50	22.01	22.03	21.97

			8	7	22.50	21.97	22.01	22.04	
				15	0	22.50	21.98	22.02	21.98
			16QAM	1	0	22.50	22.30	22.34	22.40
				1	7	22.50	22.31	22.38	22.38
				1	14	22.50	22.18	22.30	22.22
				8	0	21.50	21.09	21.04	21.02
				8	4	21.50	21.10	21.19	21.12
				8	7	21.50	21.07	21.02	21.09
				15	0	21.50	21.06	21.04	20.97
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	25.00	22.91	24.34	24.40	
			1	12	25.00	23.04	24.51	24.59	
			1	24	25.00	22.98	24.48	24.58	
			12	0	22.50	21.97	21.93	22.02	
			12	6	22.50	22.02	22.05	22.08	
			12	11	22.50	21.99	22.02	22.10	
			25	0	22.50	22.01	22.06	22.11	
		16QAM	1	0	23.00	22.33	22.27	22.39	
			1	12	23.00	22.45	22.35	22.63	
			1	24	23.00	22.35	22.23	22.26	
			12	0	21.50	21.10	21.00	21.00	
			12	6	21.50	21.09	21.15	21.20	
			12	11	21.50	21.02	21.04	21.07	
25	0	21.50	21.06	21.04	21.06				
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	25.00	24.37	24.42	24.66	
			1	24	25.00	24.51	24.61	24.58	
			1	49	25.00	24.44	24.51	24.61	
			25	0	22.50	21.91	22.02	22.04	
			25	12	22.50	22.03	22.08	22.10	
			25	24	22.50	22.03	22.03	22.10	
			50	0	22.50	22.02	21.87	22.00	
		16QAM	1	0	22.50	22.33	22.35	22.36	
			1	24	22.50	22.40	22.43	22.33	

			1	49	22.50	22.34	22.25	22.39
			25	0	21.50	20.99	20.98	21.04
			25	12	21.50	21.00	21.06	21.12
			25	24	21.50	21.03	21.00	21.11
			50	0	21.50	21.00	20.96	21.02
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	24.27	24.12	24.13
			1	37	24.50	24.38	24.22	24.41
			1	74	24.50	24.44	24.31	24.34
			36	0	22.50	21.85	21.82	21.90
			36	18	22.50	21.87	21.90	21.86
			36	37	22.50	21.85	21.89	22.02
			75	0	22.00	21.86	21.87	21.96
		16QAM	1	0	22.50	22.17	22.04	22.19
			1	37	22.50	22.09	22.02	22.30
			1	74	22.50	21.99	22.07	22.25
			36	0	21.00	20.81	20.83	20.92
			36	18	21.00	20.86	20.89	20.92
			36	37	21.00	20.93	20.94	20.95
			75	0	21.00	20.88	20.85	20.92
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	25.00	24.52	24.12	24.18
			1	49	25.00	24.34	24.41	24.46
			1	99	25.00	24.40	24.31	24.42
			50	0	22.00	21.80	21.88	21.94
			50	24	22.00	21.89	21.82	21.96
			50	49	22.00	21.85	21.88	21.98
			100	0	22.50	21.94	21.84	22.01
		16QAM	1	0	22.50	22.00	22.08	22.31
			1	49	22.50	22.00	22.05	22.05
			1	99	22.50	22.06	22.19	22.05
			50	0	21.00	20.86	20.88	20.93
			50	24	21.00	20.86	20.84	21.00
			50	49	21.00	20.97	20.93	20.95

			100	0	21.00	20.90	20.85	20.99
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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	25.00	24.25	24.3	24.27
			1	2	25.00	24.3	24.38	24.5
			1	5	25.00	24.26	24.33	24.38
			3	0	24.50	24.31	24.31	24.4
			3	1	24.50	24.27	24.47	24.39
			3	2	24.50	24.24	24.35	24.38
			6	0	22.00	21.59	21.6	21.73
		16QAM	1	0	22.50	21.85	21.89	21.92
			1	2	22.50	22.02	21.94	21.98
			1	5	22.50	21.83	21.89	21.97
			3	0	22.00	21.59	21.77	21.61
			3	1	22.00	21.76	21.67	21.84
			3	2	22.00	21.71	21.65	21.74
			6	0	21.00	20.65	20.68	20.79
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	25.00	24.32	24.24	24.51
			1	7	25.00	24.41	24.44	24.46
			1	14	25.00	24.21	24.28	24.38
			8	0	22.00	21.69	21.69	21.72
			8	4	22.00	21.64	21.74	21.74
			8	7	22.00	21.61	21.72	21.76
			15	0	22.00	21.65	21.66	21.74
		16QAM	1	0	22.50	21.83	21.92	22.01
			1	7	22.50	21.92	22.08	21.95
			1	14	22.50	21.77	21.91	21.92
			8	0	21.00	20.79	20.76	20.77
			8	4	21.00	20.67	20.76	20.86
			8	7	21.00	20.73	20.74	20.79
			15	0	21.00	20.64	20.66	20.72
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	5MHz	QPSK	1	0	25.00	24.28	24.43	24.49

Band 26a			1	12	25.00	24.36	24.45	24.58
			1	24	25.00	24.25	24.32	24.36
			12	0	22.00	21.68	21.71	21.65
			12	6	22.00	21.68	21.72	21.74
			12	11	22.00	21.64	21.69	21.71
			25	0	22.00	21.62	21.69	21.67
		16QAM	1	0	22.50	21.83	21.83	22.05
			1	12	22.50	21.92	22.06	21.9
			1	24	22.50	21.76	21.88	21.93
			12	0	21.00	20.67	20.8	20.71
			12	6	21.00	20.73	20.75	20.76
			12	11	21.00	20.68	20.72	20.81
			25	0	21.00	20.62	20.71	20.74
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	24.50	N/A	24.48	N/A
			1	24	24.50	N/A	24.45	N/A
			1	49	24.50	N/A	24.19	N/A
			25	0	22.00	N/A	21.78	N/A
			25	12	22.00	N/A	21.79	N/A
			25	24	22.00	N/A	21.7	N/A
			50	0	22.00	N/A	21.73	N/A
		16QAM	1	0	22.50	N/A	22.02	N/A
			1	24	22.50	N/A	21.93	N/A
			1	49	22.50	N/A	21.97	N/A
			25	0	21.00	N/A	20.73	N/A
			25	12	21.00	N/A	20.79	N/A
			25	24	21.00	N/A	20.73	N/A
			50	0	21.00	N/A	20.72	N/A

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	24.50	24.38	24.44	24.26
			1	2	24.50	24.35	24.45	24.34
			1	5	24.50	24.36	24.4	24.28
			3	0	24.50	24.37	24.44	24.28
			3	1	24.50	24.39	24.37	24.3
			3	2	24.50	24.36	24.35	24.3

			6	0	22.00	21.71	21.69	21.36
		16QAM	1	0	22.50	21.83	21.91	21.8
			1	2	22.50	21.93	22.17	22.06
			1	5	22.50	21.88	21.88	21.7
			3	0	22.00	21.72	21.82	21.67
			3	1	22.00	21.7	21.74	21.74
			3	2	22.00	21.79	21.79	21.67
			6	0	21.00	20.72	20.74	20.66
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	25.00	24.36	24.37	24.32
			1	7	25.00	24.5	24.45	24.37
			1	14	25.00	24.38	24.31	24.25
			8	0	22.00	21.76	21.66	21.63
			8	4	22.00	21.74	21.79	21.65
			8	7	22.00	21.76	21.76	21.63
			15	0	22.00	21.75	21.69	21.65
		16QAM	1	0	22.50	21.8	21.94	21.82
			1	7	22.50	22.01	21.96	21.99
			1	14	22.50	21.96	21.92	21.78
			8	0	21.00	20.72	20.75	20.65
			8	4	21.00	20.76	20.78	20.75
			8	7	21.00	20.82	20.82	20.69
			15	0	21.00	20.76	20.79	20.59
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	25.00	24.43	24.43	24.39
			1	12	25.00	24.5	24.54	24.46
			1	24	25.00	24.5	24.4	24.26
			12	0	22.00	21.67	21.72	21.73
			12	6	22.00	21.78	21.78	21.67
			12	11	22.00	21.75	21.72	21.64
			25	0	22.00	21.77	21.68	21.65
		16QAM	1	0	22.50	22	21.99	21.91
			1	12	22.50	22	22.2	21.93
			1	24	22.50	21.95	21.96	21.77
			12	0	21.00	20.69	20.65	20.67
			12	6	21.00	20.79	20.75	20.72

			12	11	21.00	20.82	20.7	20.68
			25	0	21.00	20.69	20.77	20.67
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	25.00	24.41	24.43	24.41
			1	24	25.00	24.56	24.51	24.42
			1	49	25.00	24.3	24.36	24.35
			25	0	22.00	21.7	21.7	21.64
			25	12	22.00	21.79	21.81	21.67
			25	24	22.00	21.76	21.73	21.71
			50	0	22.00	21.73	21.75	21.63
		16QAM	1	0	22.50	21.98	22.02	22.12
			1	24	22.50	21.98	22.04	21.92
			1	49	22.50	21.88	21.8	22.04
			25	0	21.00	20.73	20.75	20.68
			25	12	21.00	20.78	20.8	20.66
			25	24	21.00	20.78	20.74	20.71
			50	0	21.00	20.81	20.79	20.61
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	24.50	24.3	24.24	24.49
			1	37	24.50	24.4	24.38	24.29
			1	74	24.50	24.28	24.11	24.18
			36	0	22.00	21.51	21.55	21.58
			36	18	22.00	21.52	21.59	21.5
			36	37	22.00	21.62	21.65	21.52
			75	0	22.00	21.54	21.67	21.5
		16QAM	1	0	22.00	21.83	21.75	21.85
			1	37	22.00	21.83	21.79	21.67
			1	74	22.00	21.69	21.79	21.56
			36	0	21.00	20.49	20.58	20.54
			36	18	21.00	20.57	20.64	20.5
			36	37	21.00	20.62	20.66	20.53
			75	0	21.00	20.53	20.68	20.49
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	26.00	25.38	25.72	25.79
			1	12	26.00	25.57	25.68	25.96
			1	24	26.00	25.53	25.71	25.77
			12	0	25.00	24.56	24.73	24.85
			12	6	25.00	24.61	24.61	24.88
			12	11	25.00	24.62	24.58	24.84
			25	0	25.00	24.58	24.62	24.81
		16QAM	1	0	25.50	24.91	24.99	25.20
			1	12	25.50	24.96	25.05	25.40
			1	24	25.50	24.94	24.99	25.18
			12	0	24.00	23.66	23.73	23.91
			12	6	24.00	23.72	23.70	23.93
			12	11	24.00	23.72	23.71	23.83
			25	0	24.00	23.59	23.63	23.93
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	26.00	25.59	25.94	25.81
			1	24	26.00	25.83	25.90	25.91
			1	49	26.00	25.73	25.68	25.82
			25	0	25.00	24.68	24.79	24.77
			25	12	25.00	24.67	24.68	24.82
			25	24	25.00	24.66	24.62	24.82
			50	0	25.00	24.62	24.67	24.77
		16QAM	1	0	25.50	25.04	25.12	25.15
			1	24	25.50	25.15	25.14	25.26
			1	49	25.50	25.17	25.01	25.20
			25	0	24.00	23.71	23.77	23.80
			25	12	24.00	23.70	23.69	23.84
			25	24	24.00	23.71	23.69	23.92
			50	0	24.00	23.66	23.70	23.80
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	26.00	25.34	25.52	25.48
			1	37	26.00	25.46	25.49	25.41
			1	74	26.00	25.51	25.44	25.48
			36	0	25.00	24.54	24.68	24.56
			36	18	25.00	24.63	24.52	24.55
			36	37	25.00	24.55	24.50	24.61

		16QAM	75	0	25.00	24.51	24.52	24.56
			1	0	25.50	24.74	24.90	24.92
			1	37	25.50	24.91	24.81	24.91
			1	74	25.50	24.89	24.86	25.03
			36	0	24.00	23.55	23.72	23.63
			36	18	24.00	23.64	23.58	23.61
			36	37	24.00	23.54	23.49	23.65
			75	0	24.00	23.55	23.54	23.58
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	26.00	25.33	25.65	25.58
			1	49	26.00	25.44	25.48	25.45
			1	99	26.00	25.45	25.45	25.54
			50	0	25.00	24.60	24.68	24.58
			50	24	25.00	24.57	24.57	24.58
			50	49	25.00	24.54	24.52	24.62
			100	0	25.00	24.54	24.56	24.58
		16QAM	1	0	25.50	24.69	25.16	24.96
			1	49	25.50	24.98	24.86	24.94
			1	99	25.50	24.85	24.78	24.86
			50	0	24.00	23.60	23.75	23.65
			50	24	24.00	23.61	23.63	23.61
			50	49	24.00	23.59	23.51	23.66
			100	0	24.00	23.54	23.57	23.61

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	25.00	24.21	24.36	24.71
			1	2	25.00	24.35	24.48	24.66
			1	5	25.00	24.26	24.45	24.64
			3	0	25.00	24.15	24.37	24.69
			3	1	25.00	24.22	24.50	24.65
			3	2	25.00	24.26	24.48	24.68
			6	0	22.50	21.75	21.88	22.17
		16QAM	1	0	22.50	22.14	22.26	22.47
			1	2	22.50	22.04	22.33	22.39
			1	5	22.50	22.08	22.33	22.46

			3	0	22.50	21.95	22.13	22.09
			3	1	22.50	22.00	22.06	22.40
			3	2	22.50	21.86	22.03	22.32
			6	0	21.50	20.82	21.04	21.35
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	25.00	24.34	24.32	24.53
			1	7	25.00	24.36	24.57	24.69
			1	14	25.00	24.31	24.39	24.59
			8	0	22.50	21.83	21.92	22.09
			8	4	22.50	21.84	21.99	22.15
			8	7	22.50	21.76	21.97	22.14
			15	0	22.50	21.78	21.88	22.07
		16QAM	1	0	23.00	22.19	22.09	22.28
			1	7	23.00	22.17	22.37	22.43
			1	14	23.00	22.04	22.30	22.55
			8	0	21.50	20.79	20.91	21.20
			8	4	21.50	20.85	21.04	21.18
			8	7	21.50	20.85	21.05	21.20
			15	0	21.50	20.78	20.88	21.10
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	25.00	24.30	24.50	24.44
			1	12	25.00	24.44	24.49	24.66
			1	24	25.00	24.30	24.50	24.67
			12	0	22.50	21.79	21.90	22.10
			12	6	22.50	21.78	21.92	22.23
			12	11	22.50	21.80	22.03	22.12
			25	0	22.50	21.74	21.88	22.16
		16QAM	1	0	23.00	22.10	22.25	22.38
			1	12	23.00	22.13	22.28	22.80
			1	24	23.00	22.20	22.32	22.42
			12	0	21.50	20.79	20.87	21.13
			12	6	21.50	21.04	20.97	21.14
			12	11	21.50	20.79	20.99	21.16
			25	0	21.50	20.84	20.91	21.15

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	25.00	24.20	24.36	24.54
			1	24	25.00	24.39	24.53	24.86
			1	49	25.00	24.29	24.33	24.52
			25	0	22.50	21.82	21.84	22.10
			25	12	22.50	21.85	21.88	22.24
			25	24	22.50	21.86	21.92	22.15
			50	0	22.50	21.83	21.81	22.20
		16QAM	1	0	23.00	22.09	22.22	22.59
			1	24	23.00	22.15	22.32	22.61
			1	49	23.00	22.17	22.35	22.46
			25	0	21.50	20.82	20.87	21.02
			25	12	21.50	20.88	20.91	21.18
			25	24	21.50	20.80	20.97	21.20
			50	0	21.50	20.74	20.94	21.15
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	25.00	24.24	24.29	24.36
			1	37	25.00	24.34	24.48	24.58
			1	74	25.00	24.34	24.49	24.44
			36	0	22.00	21.68	21.69	21.90
			36	18	22.00	21.74	21.77	21.95
			36	37	22.00	21.76	21.91	21.99
			75	0	22.00	21.70	21.72	21.95
		16QAM	1	0	22.50	21.96	22.10	22.05
			1	37	22.50	21.88	22.16	22.20
			1	74	22.50	22.04	22.00	22.20
			36	0	21.50	20.61	20.80	20.87
			36	18	21.50	20.77	20.80	20.96
			36	37	21.50	20.73	20.85	21.02
			75	0	21.00	20.75	20.72	20.99
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	25.00	24.35	24.27	24.50
			1	49	25.00	24.28	24.34	24.51
			1	99	25.00	24.36	24.41	24.55
			50	0	22.00	21.68	21.70	21.82
			50	24	22.00	21.75	21.70	21.98
			50	49	22.00	21.79	21.89	21.98
			100	0	22.00	21.76	21.79	21.99
		16QAM	1	0	22.50	21.82	22.10	22.20
			1	49	22.50	21.97	22.13	22.45
			1	99	22.50	21.97	22.09	22.13
			50	0	21.50	20.57	20.71	20.87
			50	24	21.50	20.78	20.76	20.94
			50	49	21.50	20.79	20.86	21.04
			100	0	21.00	20.77	20.79	20.99

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		133147/665.5	133297/680.5	133447/695.5
LTE Band 71	5MHz	QPSK	1	0	25.00	24.52	24.37	24.33
			1	12	25.00	24.43	24.34	24.31
			1	24	25.00	24.48	24.28	24.24
			12	0	22.00	21.94	21.58	21.58
			12	6	22.00	21.87	21.61	21.61
			12	11	22.00	21.81	21.66	21.58
			25	0	22.00	21.90	21.55	21.59
		16QAM	1	0	22.50	22.18	21.93	21.98
			1	12	22.50	22.15	21.86	21.95
			1	24	22.50	22.19	21.74	21.72
			12	0	21.00	20.97	20.61	20.68
			12	6	21.00	20.95	20.63	20.69
			12	11	21.00	20.89	20.63	20.54
			25	0	21.00	20.92	20.55	20.68
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		133172/668	133297/680.5	133422/693
LTE Band 71	10MHz	QPSK	1	0	25.50	24.49	24.40	24.36
			1	24	25.50	25.06	24.46	24.52
			1	49	25.50	24.33	24.14	24.25

			25	0	22.00	21.88	21.61	21.60		
			25	12	22.00	21.89	21.58	21.67		
			25	24	22.00	21.78	21.59	21.64		
			50	0	22.00	21.86	21.55	21.56		
		16QAM	1	0	22.50	22.22	22.14	21.91		
			1	24	22.50	22.21	21.90	21.96		
			1	49	22.50	21.96	21.95	21.82		
			25	0	21.00	20.87	20.63	20.59		
			25	12	21.00	20.91	20.59	20.61		
			25	24	21.00	20.78	20.63	20.65		
			50	0	21.00	20.80	20.58	20.54		
		Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
					RB Size	RB Offset		133197/670.5	133297/680.5	133397/690.5
LTE Band 71	15MHz	QPSK	1	0	25.00	24.67	24.30	24.40		
			1	37	25.00	24.37	24.29	24.30		
			1	74	25.00	24.04	24.02	24.09		
			36	0	22.00	21.69	21.52	21.49		
			36	18	22.00	21.66	21.42	21.43		
			36	37	22.00	21.50	21.38	21.43		
			75	0	22.00	21.65	21.54	21.46		
		16QAM	1	0	22.00	21.96	21.83	21.87		
			1	37	22.00	21.75	21.72	21.66		
			1	74	22.00	21.77	21.45	21.61		
			36	0	21.00	20.62	20.49	20.50		
			36	18	21.00	20.73	20.44	20.37		
			36	37	21.00	20.49	20.45	20.40		
			75	0	21.00	20.73	20.48	20.41		
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)				
			RB Size	RB Offset		133222/673	133322/683	133372/688		
LTE Band 71	20MHz	QPSK	1	0	25.00	24.57	24.48	24.37		
			1	49	25.00	24.39	24.23	24.12		
			1	99	25.00	24.17	24.21	23.98		
			50	0	22.00	21.72	21.56	21.46		
			50	24	22.00	21.66	21.41	21.60		
			50	49	22.00	21.54	21.41	21.51		
			100	0	22.00	21.65	21.55	21.43		

16QAM	1	0	22.00	21.85	21.71	21.82
	1	49	22.00	21.89	21.75	21.71
	1	99	22.00	21.57	21.59	21.47
	50	0	21.00	20.63	20.47	20.49
	50	24	21.00	20.65	20.49	20.52
	50	49	21.00	20.46	20.46	20.53
	100	0	21.00	20.65	20.48	20.45

7.2. NR Conducted Power

Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					370500/1852.5	376000/1880	381500/1907.5
NR Band n2	5MHz	DFT-PI2BPSK	Edge_1RB_Left	23.00	22.59	22.30	22.22
			Edge_1RB_Right	23.00	21.87	21.53	21.58
			Outer_Full	21.50	21.19	21.26	20.99
			Inner_Full	22.50	22.31	21.32	22.02
		DFT QPSK	Edge_1RB_Left	23.00	22.67	22.27	22.31
			Edge_1RB_Right	23.00	22.56	22.22	22.13
			Outer_Full	22.00	21.55	21.21	21.22
			Inner_Full	23.00	22.61	22.25	22.22
		CP QPSK	Edge_1RB_Left	21.50	21.17	20.87	20.90
			Edge_1RB_Right	21.50	20.21	20.16	20.48
			Outer_Full	20.00	19.24	19.46	19.97
			Inner_Full	21.00	20.19	20.45	20.65
		CP-16QAM	Edge_1RB_Left	22.00	21.63	21.27	21.23
			Edge_1RB_Right	22.00	20.74	20.71	20.42
			Outer_Full	20.00	19.87	19.71	19.47
			Inner_Full	21.50	21.10	20.42	20.30
		CP-64QAM	Edge_1RB_Left	20.50	20.27	20.00	19.92
			Edge_1RB_Right	20.50	20.05	19.05	19.61
			Outer_Full	20.00	19.80	18.39	18.87
			Inner_Full	20.50	20.07	19.38	19.26
		CP-256QAM	Edge_1RB_Left	18.00	17.62	17.37	17.39
			Edge_1RB_Right	18.00	16.95	17.07	16.69
			Outer_Full	17.00	16.69	16.21	16.32
			Inner_Full	17.50	17.13	17.16	16.70
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					371000/1855	376000/1880	381000/1905

NR Band n2	10MHz	DFT-PI2BPSK	Edge_1RB_Left	23.00	22.65	22.25	22.38
			Edge_1RB_Right	23.00	21.91	21.72	21.60
			Outer_Full	21.50	21.42	20.83	20.73
			Inner_Full	22.50	21.90	21.63	22.15
		DFT QPSK	Edge_1RB_Left	23.00	22.69	22.32	22.43
			Edge_1RB_Right	23.00	22.52	22.34	22.26
			Outer_Full	22.00	21.71	21.29	21.31
			Inner_Full	23.00	22.68	22.32	22.35
		CP QPSK	Edge_1RB_Left	21.50	21.25	20.90	20.92
			Edge_1RB_Right	21.50	20.37	20.01	20.43
			Outer_Full	20.00	19.97	19.56	19.89
			Inner_Full	21.00	20.64	20.30	20.07
		CP-16QAM	Edge_1RB_Left	22.00	21.58	21.25	21.36
			Edge_1RB_Right	22.00	20.75	20.83	20.68
			Outer_Full	21.00	20.52	19.93	20.17
			Inner_Full	21.50	21.15	20.75	20.49
		CP-64QAM	Edge_1RB_Left	20.50	20.27	19.94	20.09
			Edge_1RB_Right	20.50	20.01	19.59	19.14
			Outer_Full	20.00	19.51	19.01	18.44
			Inner_Full	20.00	19.67	19.38	19.47
		CP-256QAM	Edge_1RB_Left	18.00	17.60	17.41	17.48
			Edge_1RB_Right	18.00	16.67	16.63	16.71
			Outer_Full	16.50	16.46	16.43	16.45
			Inner_Full	17.50	16.70	17.02	17.12
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					371500/1857.5	376000/1880	380500/1902.5
NR Band n2	15MHz	DFT-PI2BPSK	Edge_1RB_Left	23.00	20.80	22.36	22.55
			Edge_1RB_Right	23.00	20.04	21.44	22.27
			Outer_Full	21.50	19.39	20.44	21.42
			Inner_Full	22.50	20.57	21.97	22.19
		DFT QPSK	Edge_1RB_Left	23.00	22.88	22.45	22.59
			Edge_1RB_Right	23.00	22.71	22.56	22.39
			Outer_Full	22.00	21.77	21.45	21.47
			Inner_Full	23.00	22.81	22.48	22.46
		CP QPSK	Edge_1RB_Left	21.50	21.41	21.02	21.14

				Edge_1RB_Right	21.50	21.04	20.37	20.63
				Outer_Full	21.00	20.70	19.67	19.83
				Inner_Full	21.50	21.20	20.74	20.59
				Edge_1RB_Left	22.00	21.76	21.37	21.54
			CP-16QAM	Edge_1RB_Right	22.00	21.06	20.41	21.24
				Outer_Full	21.50	20.51	19.53	21.02
				Inner_Full	21.50	21.04	20.63	20.63
				Edge_1RB_Left	20.50	20.49	20.04	20.20
			CP-64QAM	Edge_1RB_Right	20.50	20.22	19.30	19.25
				Outer_Full	20.00	19.99	18.61	18.79
				Inner_Full	20.00	19.89	19.67	19.67
				Edge_1RB_Left	18.00	17.82	17.50	17.55
			CP-256QAM	Edge_1RB_Right	18.00	17.15	17.22	16.90
				Outer_Full	17.00	16.22	16.35	16.69
				Inner_Full	17.50	16.98	17.25	17.08
	Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
						372000/1860	376000/1880	380000/1900
NR Band n2	20MHz		DFT-PI2BPSK	Edge_1RB_Left	23.00	22.84	22.42	22.55
				Edge_1RB_Right	23.00	22.29	22.12	21.96
				Outer_Full	21.50	21.33	21.12	21.41
				Inner_Full	23.00	22.58	21.96	22.23
			DFT QPSK	Edge_1RB_Left	23.00	22.87	22.41	22.62
				Edge_1RB_Right	23.00	22.67	22.64	22.40
				Outer_Full	22.00	21.79	21.50	21.54
				Inner_Full	23.00	22.79	22.41	22.48
			CP QPSK	Edge_1RB_Left	21.50	21.44	20.96	21.29
				Edge_1RB_Right	21.50	21.05	20.07	20.50
				Outer_Full	20.50	20.16	19.44	19.85
				Inner_Full	21.00	20.62	20.30	20.58
			CP-16QAM	Edge_1RB_Left	21.78	21.78	20.96	21.58
				Edge_1RB_Right	21.50	21.46	20.09	20.92
				Outer_Full	21.00	20.99	19.59	20.05
				Inner_Full	21.50	21.25	20.15	21.16
			CP-64QAM	Edge_1RB_Left	21.50	21.30	20.02	20.30

			Edge_1RB_Right	21.00	20.60	19.07	20.07
			Outer_Full	20.00	19.83	18.43	19.18
			Inner_Full	21.00	20.78	19.22	19.66
		CP-256QAM	Edge_1RB_Left	20.00	17.93	17.46	17.72
			Edge_1RB_Right	18.00	17.50	16.61	17.18
			Outer_Full	17.50	17.11	16.05	16.96
			Inner_Full	17.50	17.47	17.15	17.24

Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					165300/826.5	167300/836.5	169300/846.5
NR Band n5	5MHz	DFT-PI2BPSK	Edge_1RB_Left	23.50	23.12	23.20	23.29
			Edge_1RB_Right	23.50	22.23	22.27	22.82
			Outer_Full	22.50	21.52	21.58	22.47
			Inner_Full	23.00	22.73	22.97	22.47
		DFT QPSK	Edge_1RB_Left	23.50	23.13	23.08	23.20
			Edge_1RB_Right	23.50	23.02	23.18	23.22
			Outer_Full	22.50	22.08	22.18	22.17
			Inner_Full	23.50	23.08	23.08	23.17
		CP QPSK	Edge_1RB_Left	22.00	21.68	21.65	21.74
			Edge_1RB_Right	22.00	20.98	21.23	20.91
			Outer_Full	21.00	20.68	20.46	20.20
			Inner_Full	21.50	21.44	20.92	21.49
		CP-16QAM	Edge_1RB_Left	22.50	22.03	22.08	22.18
			Edge_1RB_Right	22.50	21.17	21.48	21.40
			Outer_Full	21.00	20.83	20.92	20.50
			Inner_Full	22.00	21.12	21.76	21.88
		CP-64QAM	Edge_1RB_Left	21.00	20.73	20.81	20.86
			Edge_1RB_Right	21.00	20.46	19.85	20.45
			Outer_Full	20.00	19.99	18.93	19.65
			Inner_Full	20.50	20.45	20.32	19.93
		CP-256QAM	Edge_1RB_Left	18.50	18.05	18.18	18.17
			Edge_1RB_Right	18.50	17.13	17.59	17.32
			Outer_Full	17.00	16.31	16.77	16.98
			Inner_Full	18.00	17.24	17.58	17.18
Band	Band	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		

	Width				165800/829	167300/836.5	168800/844
NR Band n5	10MHz	DFT-PI2BPSK	Edge_1RB_Left	23.50	23.10	23.06	23.12
			Edge_1RB_Right	23.50	22.51	22.09	22.34
			Outer_Full	22.50	22.12	21.61	21.80
			Inner_Full	23.00	22.79	22.50	22.15
		DFT QPSK	Edge_1RB_Left	23.50	23.05	23.07	23.15
			Edge_1RB_Right	23.50	22.99	23.18	23.15
			Outer_Full	22.50	21.96	22.15	22.25
			Inner_Full	23.50	23.01	23.15	23.15
		CP QPSK	Edge_1RB_Left	22.00	21.74	21.66	21.84
			Edge_1RB_Right	22.00	20.80	21.43	21.30
			Outer_Full	21.50	20.12	20.50	21.09
			Inner_Full	21.50	21.09	20.91	21.36
		CP-16QAM	Edge_1RB_Left	22.50	21.95	22.03	22.15
			Edge_1RB_Right	22.50	21.51	21.24	21.77
			Outer_Full	21.50	20.97	20.40	21.32
			Inner_Full	21.50	21.25	21.24	21.36
		CP-64QAM	Edge_1RB_Left	21.00	20.67	20.73	20.81
			Edge_1RB_Right	21.00	19.96	19.93	20.09
			Outer_Full	20.00	18.99	19.34	19.71
			Inner_Full	21.00	20.08	20.27	20.55
		CP-256QAM	Edge_1RB_Left	18.50	18.03	18.03	18.14
			Edge_1RB_Right	18.50	17.49	17.38	17.76
			Outer_Full	17.00	16.69	16.46	16.90
			Inner_Full	18.00	17.27	17.35	17.90
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					166300/831.5	167300/836.5	168300/841.5
NR Band n5	15MHz	DFT-PI2BPSK	Edge_1RB_Left	23.50	23.20	23.19	23.16
			Edge_1RB_Right	23.50	22.92	22.82	22.51
			Outer_Full	22.50	22.15	22.48	22.30
			Inner_Full	23.00	22.53	22.57	22.28
		DFT QPSK	Edge_1RB_Left	23.50	23.24	23.24	23.20
			Edge_1RB_Right	23.50	23.16	23.23	23.27
			Outer_Full	22.50	22.13	22.33	22.31
			Inner_Full	23.50	23.15	23.29	23.28

		CP QPSK	Edge_1RB_Left	22.00	21.98	21.95	21.82
			Edge_1RB_Right	22.00	21.46	20.97	20.99
			Outer_Full	21.00	20.76	20.15	20.36
			Inner_Full	22.00	21.72	20.98	21.11
		CP-16QAM	Edge_1RB_Left	22.50	22.14	22.22	22.10
			Edge_1RB_Right	22.50	21.77	21.86	21.43
			Outer_Full	21.50	20.92	21.35	21.12
			Inner_Full	22.00	21.36	21.42	21.81
		CP-64QAM	Edge_1RB_Left	21.00	20.84	20.90	20.84
			Edge_1RB_Right	21.00	20.17	20.24	19.90
			Outer_Full	20.00	19.60	19.60	19.05
			Inner_Full	21.00	19.86	20.62	20.64
		CP-256QAM	Edge_1RB_Left	22.00	21.98	18.23	18.19
			Edge_1RB_Right	22.00	21.02	17.60	17.51
			Outer_Full	20.50	20.27	17.39	16.67
			Inner_Full	21.50	21.24	17.43	17.91
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					166800/834	167300/836.5	167800/839
NR Band n5	20MHz	DFT-PI2BPSK	Edge_1RB_Left	23.50	23.27	23.24	23.17
			Edge_1RB_Right	23.50	22.98	22.25	22.51
			Outer_Full	22.50	22.23	21.35	22.09
			Inner_Full	23.50	23.04	22.34	22.32
		DFT QPSK	Edge_1RB_Left	23.50	23.23	23.21	23.16
			Edge_1RB_Right	23.50	23.14	23.24	23.12
			Outer_Full	22.50	22.14	22.24	22.23
			Inner_Full	23.50	23.11	23.23	23.29
		CP QPSK	Edge_1RB_Left	22.00	21.83	21.87	21.76
			Edge_1RB_Right	22.00	21.32	21.29	21.34
			Outer_Full	21.50	20.84	21.09	20.34
			Inner_Full	21.50	20.84	20.93	21.44
		CP-16QAM	Edge_1RB_Left	22.50	22.15	22.17	22.15
			Edge_1RB_Right	22.50	21.69	21.32	21.69
			Outer_Full	21.50	21.26	20.51	21.05
			Inner_Full	21.50	21.36	21.39	21.45
		CP-64QAM	Edge_1RB_Left	21.00	20.83	20.90	20.90

			Edge_1RB_Right	21.00	19.99	20.07	20.08
			Outer_Full	20.00	19.33	19.67	19.25
			Inner_Full	21.00	20.17	19.94	20.70
		CP-256QAM	Edge_1RB_Left	18.50	18.25	18.26	18.19
			Edge_1RB_Right	18.50	17.61	17.37	17.81
			Outer_Full	17.50	17.00	17.14	17.02
			Inner_Full	18.00	17.54	17.63	17.33

Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					500500/2502.5	507000/2535	513500/2567.5
NR Band n7	5MHz	DFT-PI2BPSK	Edge_1RB_Left	24.00	23.38	23.47	23.65
			Edge_1RB_Right	24.00	23.12	22.48	23.06
			Outer_Full	23.00	22.71	21.85	22.85
			Inner_Full	23.00	22.96	22.88	22.87
		DFT QPSK	Edge_1RB_Left	24.00	23.52	23.57	23.75
			Edge_1RB_Right	24.00	23.57	23.66	23.78
			Outer_Full	22.00	21.48	21.54	21.73
			Inner_Full	24.00	23.46	23.55	23.66
		CP QPSK	Edge_1RB_Left	21.50	21.02	21.12	21.37
			Edge_1RB_Right	21.50	20.12	20.91	20.57
			Outer_Full	20.50	19.72	20.42	20.12
			Inner_Full	21.00	20.58	20.72	20.91
		CP-16QAM	Edge_1RB_Left	22.00	21.43	21.58	21.69
			Edge_1RB_Right	22.00	20.54	21.15	21.07
			Outer_Full	21.00	19.69	20.35	20.53
			Inner_Full	21.00	20.49	20.94	20.73
		CP-64QAM	Edge_1RB_Left	20.50	20.14	20.19	20.38
			Edge_1RB_Right	20.50	19.22	19.83	19.78
			Outer_Full	20.00	18.27	19.58	19.42
			Inner_Full	20.50	19.48	19.97	20.09
		CP-256QAM	Edge_1RB_Left	18.00	17.52	17.62	17.84
			Edge_1RB_Right	18.00	16.91	16.77	16.94
			Outer_Full	17.00	16.29	16.10	16.61
			Inner_Full	18.00	17.07	16.69	17.64
Band	Band	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		

	Width				501000/2505	507000/2535	513000/2565
NR Band n7	10MHz	DFT-PI2BPSK	Edge_1RB_Left	24.00	23.50	23.47	23.69
			Edge_1RB_Right	24.00	22.91	22.66	23.06
			Outer_Full	23.00	22.31	22.30	22.55
			Inner_Full	23.50	22.86	23.16	23.09
		DFT QPSK	Edge_1RB_Left	24.00	23.45	23.58	23.81
			Edge_1RB_Right	24.00	23.52	23.57	23.72
			Outer_Full	22.00	21.50	21.54	21.71
			Inner_Full	24.00	23.54	23.56	23.74
		CP QPSK	Edge_1RB_Left	21.50	20.96	21.09	21.29
			Edge_1RB_Right	21.50	20.64	20.60	20.54
			Outer_Full	20.50	19.70	20.32	19.70
			Inner_Full	21.00	20.36	20.22	20.99
		CP-16QAM	Edge_1RB_Left	22.00	21.39	21.49	21.62
			Edge_1RB_Right	22.00	20.56	20.59	21.20
			Outer_Full	20.50	19.86	19.81	20.43
			Inner_Full	21.50	20.97	21.29	21.25
		CP-64QAM	Edge_1RB_Left	20.50	20.07	20.17	20.32
			Edge_1RB_Right	20.50	19.16	19.33	19.52
			Outer_Full	19.50	18.93	18.87	19.12
			Inner_Full	20.00	19.49	19.79	19.73
		CP-256QAM	Edge_1RB_Left	18.00	17.47	17.53	17.80
			Edge_1RB_Right	18.00	16.51	16.74	17.00
			Outer_Full	16.50	15.91	16.30	16.40
			Inner_Full	17.50	17.01	16.85	17.29
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					501500/2507.5	507000/2535	512500/2562.5
NR Band n7	15MHz	DFT-PI2BPSK	Edge_1RB_Left	24.00	23.58	23.70	23.90
			Edge_1RB_Right	24.00	23.23	23.01	23.32
			Outer_Full	23.00	22.97	22.44	22.97
			Inner_Full	23.50	23.34	23.39	23.15
		DFT QPSK	Edge_1RB_Left	24.50	23.60	23.68	24.05
			Edge_1RB_Right	24.50	23.67	23.72	23.96
			Outer_Full	22.00	21.57	21.65	21.88
			Inner_Full	24.00	23.54	23.67	23.91

		CP QPSK	Edge_1RB_Left	22.00	21.11	21.39	21.51
			Edge_1RB_Right	22.00	20.61	21.04	21.14
			Outer_Full	21.00	19.61	20.57	20.76
			Inner_Full	21.50	20.90	20.51	21.24
		CP-16QAM	Edge_1RB_Left	22.00	21.54	21.68	21.90
			Edge_1RB_Right	22.00	20.57	20.80	21.62
			Outer_Full	21.50	20.12	20.41	21.39
			Inner_Full	22.00	21.05	21.08	21.62
		CP-64QAM	Edge_1RB_Left	21.00	20.21	20.38	20.52
			Edge_1RB_Right	21.00	19.61	19.86	19.81
			Outer_Full	19.50	19.37	19.33	19.05
			Inner_Full	20.50	19.78	19.89	20.07
		CP-256QAM	Edge_1RB_Left	18.50	17.61	17.73	18.02
			Edge_1RB_Right	18.50	16.94	16.88	17.50
			Outer_Full	17.00	16.66	16.52	16.96
			Inner_Full	18.00	16.62	17.08	17.72
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					502000/2510	507000/2535	512000/2560
NR Band n7	20MHz	DFT-PI2BPSK	Edge_1RB_Left	24.00	23.57	23.69	23.93
			Edge_1RB_Right	24.00	22.72	22.88	23.55
			Outer_Full	23.50	22.50	22.44	23.06
			Inner_Full	24.00	23.20	22.75	23.58
		DFT QPSK	Edge_1RB_Left	24.00	23.52	23.78	23.97
			Edge_1RB_Right	24.00	23.72	23.85	24.00
			Outer_Full	22.00	21.54	21.70	21.90
			Inner_Full	24.00	23.55	23.72	23.95
		CP QPSK	Edge_1RB_Left	22.00	21.13	21.35	21.67
			Edge_1RB_Right	22.00	20.93	20.84	20.97
			Outer_Full	20.50	20.11	20.16	20.43
			Inner_Full	21.50	20.88	20.41	21.39
		CP-16QAM	Edge_1RB_Left	22.00	21.54	21.71	21.79
			Edge_1RB_Right	22.00	20.55	20.80	21.59
			Outer_Full	21.50	20.26	20.52	21.29
			Inner_Full	21.50	20.61	21.16	21.36
		CP-64QAM	Edge_1RB_Left	21.00	20.19	20.43	20.56

			Edge_1RB_Right	21.00	19.75	20.10	20.04
			Outer_Full	19.50	19.31	19.26	19.09
			Inner_Full	20.50	19.85	20.23	19.98
		CP-256QAM	Edge_1RB_Left	18.50	17.64	17.73	18.04
			Edge_1RB_Right	18.50	16.66	17.33	17.29
			Outer_Full	17.00	15.98	16.84	16.94
			Inner_Full	17.50	17.30	17.14	17.42

Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					140300/701.5	141500/707.5	142700/713.5
NR Band n12	5MHz	DFT-PI2BPSK	Edge_1RB_Left	25.00	24.71	24.83	24.86
			Edge_1RB_Right	25.00	23.77	23.88	24.20
			Outer_Full	23.50	22.88	23.31	23.27
			Inner_Full	24.50	24.27	24.46	23.90
		DFT QPSK	Edge_1RB_Left	25.00	24.54	24.39	24.86
			Edge_1RB_Right	25.00	24.02	24.82	24.85
			Outer_Full	22.50	22.02	22.07	22.13
			Inner_Full	25.00	24.55	24.56	24.81
		CP QPSK	Edge_1RB_Left	22.00	21.59	21.77	21.67
			Edge_1RB_Right	22.00	21.28	21.45	21.02
			Outer_Full	21.50	20.47	21.03	20.38
			Inner_Full	21.50	20.74	21.08	20.81
		CP-16QAM	Edge_1RB_Left	22.50	21.97	22.00	22.08
			Edge_1RB_Right	22.50	21.18	21.16	21.80
			Outer_Full	21.00	20.62	20.65	20.85
			Inner_Full	22.00	21.70	21.06	21.54
		CP-64QAM	Edge_1RB_Left	21.00	20.72	20.71	20.79
			Edge_1RB_Right	21.00	20.41	20.26	20.36
			Outer_Full	20.50	19.47	19.35	20.01
			Inner_Full	21.00	20.20	19.75	20.50
		CP-256QAM	Edge_1RB_Left	18.50	18.01	18.01	18.13
			Edge_1RB_Right	18.50	17.54	17.59	17.60
			Outer_Full	17.00	16.98	16.81	16.88
			Inner_Full	18.00	17.69	17.39	17.37
Band	Band	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		

	Width				140800/704	141500/707.5	142200/711
NR Band n12	10MHz	DFT-PI2BPSK	Edge_1RB_Left	25.00	24.82	24.80	24.78
			Edge_1RB_Right	25.00	24.61	24.60	24.43
			Outer_Full	24.50	24.01	24.14	24.01
			Inner_Full	25.00	24.52	24.52	24.27
		DFT QPSK	Edge_1RB_Left	25.00	24.34	24.15	24.43
			Edge_1RB_Right	25.00	24.59	24.79	24.82
			Outer_Full	22.50	22.05	22.12	22.17
			Inner_Full	25.00	24.26	24.52	24.86
		CP QPSK	Edge_1RB_Left	22.00	21.60	21.58	21.61
			Edge_1RB_Right	22.00	21.23	20.70	21.11
			Outer_Full	21.00	20.38	20.23	20.80
			Inner_Full	21.50	20.90	21.31	20.91
		CP-16QAM	Edge_1RB_Left	22.50	22.06	21.98	22.01
			Edge_1RB_Right	22.50	21.83	21.28	21.44
			Outer_Full	21.50	21.33	20.61	20.77
			Inner_Full	22.00	21.18	21.60	21.43
		CP-64QAM	Edge_1RB_Left	21.00	20.81	20.74	20.69
			Edge_1RB_Right	21.00	19.87	20.43	20.09
			Outer_Full	20.00	19.63	19.95	19.29
			Inner_Full	20.50	20.34	19.83	19.84
		CP-256QAM	Edge_1RB_Left	18.00	17.93	17.88	17.98
			Edge_1RB_Right	18.00	17.07	17.61	17.25
			Outer_Full	17.00	16.07	16.71	16.61
			Inner_Full	17.50	17.24	16.94	17.17
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					141300/706.5	141500/707.5	141700/708.5
NR Band n12	15MHz	DFT-PI2BPSK	Edge_1RB_Left	25.00	24.93	24.68	24.81
			Edge_1RB_Right	25.00	24.53	23.77	24.40
			Outer_Full	24.50	24.29	23.56	24.16
			Inner_Full	24.50	24.00	24.39	24.23
		DFT QPSK	Edge_1RB_Left	25.00	24.38	24.18	24.26
			Edge_1RB_Right	25.00	24.88	24.83	24.91
			Outer_Full	22.50	22.20	22.21	22.23
			Inner_Full	25.00	24.35	24.37	24.51

		CP QPSK	Edge_1RB_Left	22.00	21.73	21.69	21.78
			Edge_1RB_Right	22.00	21.41	21.05	21.49
			Outer_Full	21.50	21.20	20.58	20.85
			Inner_Full	22.00	21.51	21.15	21.36
		CP-16QAM	Edge_1RB_Left	22.50	22.12	22.31	22.17
			Edge_1RB_Right	22.50	21.71	21.99	21.47
			Outer_Full	21.50	21.47	21.30	21.13
			Inner_Full	22.00	21.56	21.48	21.72
		CP-64QAM	Edge_1RB_Left	21.00	20.75	20.22	20.87
			Edge_1RB_Right	21.00	20.50	19.91	20.05
			Outer_Full	20.00	19.53	19.21	19.62
			Inner_Full	20.50	19.97	19.30	20.15
		CP-256QAM	Edge_1RB_Left	18.50	18.14	18.05	18.17
			Edge_1RB_Right	18.50	17.25	17.78	17.60
			Outer_Full	18.00	16.70	17.55	17.39
			Inner_Full	18.00	17.34	17.75	17.43

Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					370500/1852.5	376500/1882.5	382500/1912.5
NR Band n25	5MHz	DFT-PI2BPSK	Edge_1RB_Left	23.00	22.64	22.47	22.43
			Edge_1RB_Right	23.00	22.11	22.19	21.77
			Outer_Full	22.00	21.82	21.71	21.19
			Inner_Full	22.50	22.25	21.49	21.93
		DFT QPSK	Edge_1RB_Left	23.00	22.75	22.37	22.35
			Edge_1RB_Right	23.00	22.73	22.46	22.32
			Outer_Full	23.00	22.65	21.47	21.43
			Inner_Full	22.50	21.65	22.30	22.34
		CP QPSK	Edge_1RB_Left	21.50	21.28	20.98	20.89
			Edge_1RB_Right	21.50	20.57	20.17	20.37
			Outer_Full	20.50	20.13	19.48	19.73
			Inner_Full	21.00	20.83	20.48	20.61
		CP-16QAM	Edge_1RB_Left	22.00	21.70	21.37	21.34
			Edge_1RB_Right	22.00	21.30	21.01	21.05
			Outer_Full	21.00	20.72	20.32	20.15
			Inner_Full	21.50	21.04	20.47	20.65
		CP-64QAM	Edge_1RB_Left	20.50	20.32	20.03	20.00

			Edge_1RB_Right	20.50	19.74	19.72	19.67
			Outer_Full	19.50	18.84	18.95	19.07
			Inner_Full	20.50	20.12	19.23	19.52
		CP-256QAM	Edge_1RB_Left	18.00	17.55	17.30	17.35
			Edge_1RB_Right	18.00	17.26	16.31	16.70
			Outer_Full	17.00	16.76	15.43	15.89
			Inner_Full	17.50	17.19	16.44	16.46
		Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)
371500/1857.5	376500/1882.5						381500/1907.5
NR Band n25	15MHz	DFT-PI2BPSK	Edge_1RB_Left	23.00	22.77	21.95	22.61
			Edge_1RB_Right	23.00	22.38	20.98	22.25
			Outer_Full	22.00	21.61	20.37	21.36
			Inner_Full	22.50	22.12	21.57	21.96
		DFT QPSK	Edge_1RB_Left	23.00	22.82	22.53	22.55
			Edge_1RB_Right	23.00	22.66	22.65	22.56
			Outer_Full	22.00	21.75	21.51	21.51
			Inner_Full	23.00	22.77	22.48	22.51
		CP QPSK	Edge_1RB_Left	21.50	21.39	21.08	21.07
			Edge_1RB_Right	21.50	20.74	20.13	20.55
			Outer_Full	20.50	20.06	19.50	20.29
			Inner_Full	21.50	21.10	20.39	20.21
		CP-16QAM	Edge_1RB_Left	22.00	21.79	21.44	21.45
			Edge_1RB_Right	22.00	21.50	21.22	20.54
			Outer_Full	21.50	21.11	21.01	19.90
			Inner_Full	22.00	21.57	21.02	21.08
		CP-64QAM	Edge_1RB_Left	21.00	20.50	20.10	20.14
			Edge_1RB_Right	21.00	19.98	19.37	19.61
			Outer_Full	20.00	19.50	19.14	19.02
			Inner_Full	20.00	19.86	19.68	19.17
		CP-256QAM	Edge_1RB_Left	18.00	17.68	17.37	17.57
			Edge_1RB_Right	18.00	17.18	17.13	16.79
			Outer_Full	17.00	16.77	16.26	16.51
			Inner_Full	17.50	17.46	16.88	17.15
Band	Band	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		

	Width				372000/1860	376500/1882.5	381000/1905
NR Band n25	20MHz	DFT-PI2BPSK	Edge_1RB_Left	23.00	22.76	21.02	21.26
			Edge_1RB_Right	23.00	22.53	20.18	20.55
			Outer_Full	22.50	22.06	19.82	20.05
			Inner_Full	22.50	22.26	20.27	20.26
		DFT QPSK	Edge_1RB_Left	23.00	22.80	22.41	22.62
			Edge_1RB_Right	23.00	22.56	22.68	22.50
			Outer_Full	22.00	21.68	21.60	21.58
			Inner_Full	23.00	22.78	22.57	22.57
		CP QPSK	Edge_1RB_Left	21.50	21.34	21.01	21.17
			Edge_1RB_Right	21.50	20.50	20.15	20.69
			Outer_Full	20.50	19.89	19.89	20.06
			Inner_Full	21.00	20.87	20.56	20.72
		CP-16QAM	Edge_1RB_Left	22.00	21.80	21.62	21.80
			Edge_1RB_Right	22.00	20.84	20.85	21.05
			Outer_Full	20.50	20.25	20.21	20.10
			Inner_Full	21.50	21.29	21.23	21.37
		CP-64QAM	Edge_1RB_Left	21.00	20.50	19.55	19.75
			Edge_1RB_Right	21.00	20.16	18.95	18.92
			Outer_Full	19.50	19.32	18.28	17.93
			Inner_Full	20.00	19.52	18.96	18.95
		CP-256QAM	Edge_1RB_Left	18.00	17.73	17.32	17.69
			Edge_1RB_Right	18.00	17.04	16.73	17.47
			Outer_Full	17.50	16.79	16.34	17.09
			Inner_Full	17.00	16.84	16.57	16.91

Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					501200/2506	518600/2593	536000/2680
NR Band n41	20MHz	DFT-PI2BPSK	Edge_1RB_Left	26.50	25.71	25.80	26.14
			Edge_1RB_Right	26.50	25.01	25.09	25.66
			Outer_Full	25.50	24.14	24.32	25.22
			Inner_Full	25.50	25.07	25.17	25.31
		DFT QPSK	Edge_1RB_Left	26.50	25.75	25.80	26.09
			Edge_1RB_Right	26.50	25.82	26.01	26.27

				Outer_Full	25.50	24.80	24.92	25.20
				Inner_Full	26.50	25.79	26.00	26.18
			CP QPSK	Edge_1RB_Left	25.00	24.38	24.37	24.61
				Edge_1RB_Right	25.00	23.65	23.50	24.32
				Outer_Full	24.00	23.28	22.67	23.53
				Inner_Full	24.50	24.15	23.87	23.64
			CP-16QAM	Edge_1RB_Left	25.50	24.85	24.91	25.21
				Edge_1RB_Right	25.50	24.59	23.97	24.48
				Outer_Full	24.00	23.79	23.22	23.78
				Inner_Full	25.00	24.60	24.46	25.00
			CP-64QAM	Edge_1RB_Left	24.00	23.36	23.42	23.73
				Edge_1RB_Right	24.00	22.90	22.51	23.08
				Outer_Full	23.00	22.39	21.99	22.64
				Inner_Full	23.50	23.05	22.63	23.03
			CP-256QAM	Edge_1RB_Left	21.50	21.01	21.08	21.47
				Edge_1RB_Right	21.50	20.42	20.36	20.75
				Outer_Full	20.00	19.75	19.66	19.97
				Inner_Full	21.00	20.69	20.74	20.88
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)			
					502200/2511	518598/2593	534996/2675	
NR Band n41	30MHz	DFT-PI2BPSK	Edge_1RB_Left	26.00	25.79	25.92	24.58	
			Edge_1RB_Right	26.00	24.93	25.35	24.36	
			Outer_Full	25.00	24.30	24.57	23.63	
			Inner_Full	25.50	25.14	25.26	24.06	
		DFT QPSK	Edge_1RB_Left	26.50	25.82	25.93	26.08	
			Edge_1RB_Right	26.50	25.96	26.29	26.34	
			Outer_Full	25.50	24.89	25.14	25.22	
			Inner_Full	26.50	25.84	26.10	26.18	
		CP QPSK	Edge_1RB_Left	25.00	24.39	24.52	24.69	
			Edge_1RB_Right	25.00	24.07	24.30	23.69	
			Outer_Full	23.50	23.30	23.38	23.03	
			Inner_Full	24.50	23.85	24.03	24.20	
		CP-16QAM	Edge_1RB_Left	25.50	24.94	25.11	25.22	
			Edge_1RB_Right	25.50	24.04	24.86	24.92	
			Outer_Full	24.50	23.21	24.22	24.10	

NR Band n41	40MHz	CP-64QAM	Inner_Full	25.00	24.38	24.88	24.33
			Edge_1RB_Left	24.00	23.53	23.61	23.42
			Edge_1RB_Right	24.00	23.32	23.01	22.47
			Outer_Full	23.50	23.07	22.19	21.99
			Inner_Full	23.50	23.14	22.78	22.99
		CP-256QAM	Edge_1RB_Left	21.50	21.16	21.24	21.47
			Edge_1RB_Right	21.50	20.27	20.86	20.47
			Outer_Full	20.50	19.35	20.05	19.50
			Inner_Full	21.00	20.57	20.41	20.75
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					503202/2516	518598/2593	534000/2670
		DFT-PI2BPSK	Edge_1RB_Left	26.00	25.63	25.84	24.80
			Edge_1RB_Right	26.00	24.98	25.63	24.54
			Outer_Full	25.00	24.46	24.76	23.54
			Inner_Full	26.00	24.77	25.57	23.88
		DFT QPSK	Edge_1RB_Left	27.00	25.82	25.87	26.24
			Edge_1RB_Right	27.00	25.81	26.32	26.51
			Outer_Full	25.50	24.83	25.04	25.37
			Inner_Full	26.50	25.83	26.03	26.33
		CP QPSK	Edge_1RB_Left	25.00	24.48	24.39	24.77
			Edge_1RB_Right	25.00	24.06	23.83	23.85
			Outer_Full	24.00	23.80	22.88	22.87
			Inner_Full	24.50	24.07	23.59	23.98
		CP-16QAM	Edge_1RB_Left	25.50	24.98	25.03	25.40
			Edge_1RB_Right	25.50	24.44	24.04	25.11
			Outer_Full	25.00	23.77	23.75	24.59
			Inner_Full	25.00	24.18	24.39	24.67
		CP-64QAM	Edge_1RB_Left	24.00	23.46	23.42	23.59
			Edge_1RB_Right	24.00	22.97	22.88	22.93
			Outer_Full	23.00	22.68	21.91	22.11
			Inner_Full	23.50	23.17	22.49	22.73
		CP-256QAM	Edge_1RB_Left	22.00	21.13	21.14	21.58
			Edge_1RB_Right	22.00	20.42	20.18	20.69
			Outer_Full	20.50	20.18	19.97	19.75
			Inner_Full	21.00	20.71	20.81	20.88

Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					504204/2521	518598/2593	532998/2665
NR Band n41	50MHz	DFT-PI2BPSK	Edge_1RB_Left	26.00	25.73	25.78	26.00
			Edge_1RB_Right	26.00	25.04	25.38	25.77
			Outer_Full	25.50	24.74	25.02	25.13
			Inner_Full	25.50	25.36	25.08	25.22
		DFT QPSK	Edge_1RB_Left	36.50	25.71	25.72	26.03
			Edge_1RB_Right	36.50	25.77	36.34	26.43
			Outer_Full	25.50	24.80	24.98	25.28
			Inner_Full	26.50	25.84	26.06	26.31
		CP QPSK	Edge_1RB_Left	25.00	24.37	24.33	24.60
			Edge_1RB_Right	25.00	23.67	23.34	23.73
			Outer_Full	23.50	22.92	22.43	23.39
			Inner_Full	24.00	23.97	23.78	23.93
		CP-16QAM	Edge_1RB_Left	25.50	24.82	24.85	25.13
			Edge_1RB_Right	25.50	24.24	24.38	24.74
			Outer_Full	24.00	23.72	23.83	23.85
			Inner_Full	24.50	24.23	24.17	24.18
		CP-64QAM	Edge_1RB_Left	24.00	23.34	23.38	23.69
			Edge_1RB_Right	24.00	22.80	22.68	23.43
			Outer_Full	23.00	22.28	21.74	23.04
			Inner_Full	23.50	22.44	22.48	23.22
		CP-256QAM	Edge_1RB_Left	21.50	21.14	21.04	21.35
			Edge_1RB_Right	21.50	20.15	20.57	20.85
			Outer_Full	20.50	19.44	20.21	20.13
			Inner_Full	21.00	20.70	20.53	20.79
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					505200/2526	518598/2593	531996/2660
NR Band n41	60MHz	DFT-PI2BPSK	Edge_1RB_Left	26.00	25.72	25.74	24.65
			Edge_1RB_Right	26.00	25.40	24.74	24.41
			Outer_Full	25.50	24.65	24.42	24.17
			Inner_Full	26.50	24.81	25.05	24.31
		DFT QPSK	Edge_1RB_Left	36.50	25.74	25.75	26.07

				Edge_1RB_Right	36.50	26.00	26.39	26.50
				Outer_Full	26.50	24.93	25.05	25.34
				Inner_Full	26.50	25.92	26.10	26.38
			CP QPSK	Edge_1RB_Left	25.00	24.29	24.33	24.59
				Edge_1RB_Right	24.00	24.08	23.93	24.14
				Outer_Full	24.00	23.49	23.52	23.61
				Inner_Full	25.50	24.07	23.84	23.87
			CP-16QAM	Edge_1RB_Left	25.50	24.93	24.85	25.22
				Edge_1RB_Right	25.00	24.18	24.08	24.23
				Outer_Full	24.50	23.47	23.63	23.27
				Inner_Full	24.50	24.15	23.95	24.63
			CP-64QAM	Edge_1RB_Left	24.00	23.39	23.30	23.35
				Edge_1RB_Right	23.50	23.16	22.34	22.65
				Outer_Full	23.50	22.31	22.14	22.17
				Inner_Full	23.50	22.91	22.51	22.50
			CP-256QAM	Edge_1RB_Left	21.50	21.07	21.09	21.37
				Edge_1RB_Right	21.00	20.43	20.37	20.74
				Outer_Full	21.00	19.54	19.75	20.43
				Inner_Full	21.00	20.58	20.50	20.79
	Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
						506200/2531	518600/2593	531000/2655
	NR Band n41	70MHz	DFT-PI2BPSK	Edge_1RB_Left	23.50	22.84	22.96	23.13
				Edge_1RB_Right	23.50	21.93	22.73	22.59
				Outer_Full	22.50	21.51	21.84	22.23
				Inner_Full	23.00	22.28	22.22	22.81
			DFT QPSK	Edge_1RB_Left	23.50	22.82	22.97	23.15
				Edge_1RB_Right	23.50	22.82	22.99	23.18
				Outer_Full	23.50	22.86	22.96	23.13
				Inner_Full	23.50	22.85	22.94	23.14
			CP QPSK	Edge_1RB_Left	23.50	22.83	22.99	23.17
				Edge_1RB_Right	23.00	22.22	22.13	22.74

				Outer_Full	22.00	21.26	21.89	21.83
				Inner_Full	23.00	22.47	22.71	22.54
			CP-16QAM	Edge_1RB_Left	23.50	22.82	23.02	23.18
				Edge_1RB_Right	23.50	21.87	22.72	22.44
				Outer_Full	22.50	21.45	22.52	21.73
				Inner_Full	23.00	22.05	22.12	22.47
			CP-64QAM	Edge_1RB_Left	23.50	22.80	23.01	23.17
				Edge_1RB_Right	23.50	21.89	22.08	22.90
				Outer_Full	22.50	21.46	21.48	22.67
				Inner_Full	23.00	22.15	22.39	22.73
			CP-256QAM	Edge_1RB_Left	23.50	22.82	22.98	23.17
				Edge_1RB_Right	23.00	22.34	22.13	22.23
				Outer_Full	22.50	21.49	21.70	21.89
				Inner_Full	23.00	22.47	22.19	22.85
	Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
						507200/2536	518600/2593	530000/2650
	NR Band n41	80MHz	DFT-PI2BPSK	Edge_1RB_Left	26.00	25.59	25.71	25.68
				Edge_1RB_Right	26.00	24.88	25.50	25.06
				Outer_Full	25.00	24.61	25.05	24.13
				Inner_Full	25.50	24.82	25.15	25.21
			DFT QPSK	Edge_1RB_Left	26.50	25.59	25.73	25.67
				Edge_1RB_Right	26.50	25.79	26.26	26.32
				Outer_Full	25.50	24.92	24.98	25.16
				Inner_Full	26.00	25.85	25.87	26.15
			CP QPSK	Edge_1RB_Left	24.50	24.19	24.34	24.23
				Edge_1RB_Right	24.50	23.92	23.61	23.59
				Outer_Full	23.50	23.51	23.01	23.12
				Inner_Full	24.00	23.34	23.50	23.25
			CP-16QAM	Edge_1RB_Left	25.00	24.74	24.99	24.84
				Edge_1RB_Right	25.00	23.85	24.73	24.62
				Outer_Full	24.00	23.52	24.28	24.05
				Inner_Full	25.00	24.50	24.76	23.99

			CP-64QAM	Edge_1RB_Left	23.50	23.27	23.38	23.36
				Edge_1RB_Right	23.50	22.57	22.54	22.91
				Outer_Full	23.00	22.02	21.59	22.45
				Inner_Full	23.50	22.54	22.97	22.87
			CP-256QAM	Edge_1RB_Left	21.50	20.94	21.05	21.00
				Edge_1RB_Right	21.50	20.03	20.31	20.60
				Outer_Full	20.00	19.05	19.40	20.00
				Inner_Full	21.00	20.36	20.50	20.45
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)			
					508200/2541	518600/2593	529000/2645	
NR Band n41	90MHz	DFT-PI2BPSK	Edge_1RB_Left	26.00	25.61	25.76	25.57	
			Edge_1RB_Right	26.00	24.98	25.36	25.13	
			Outer_Full	25.00	24.16	24.54	24.74	
			Inner_Full	25.50	24.75	25.32	24.68	
		DFT QPSK	Edge_1RB_Left	26.00	25.67	25.77	25.56	
			Edge_1RB_Right	26.00	26.07	26.39	26.37	
			Outer_Full	25.50	24.97	25.11	25.05	
			Inner_Full	26.50	25.92	25.98	26.08	
		CP QPSK	Edge_1RB_Left	24.50	24.23	24.33	24.12	
			Edge_1RB_Right	24.50	23.80	24.08	23.38	
			Outer_Full	23.50	22.90	23.71	23.15	
			Inner_Full	24.00	23.86	23.88	23.43	
		CP-16QAM	Edge_1RB_Left	25.00	24.85	24.97	24.76	
			Edge_1RB_Right	25.00	24.11	24.23	24.37	
			Outer_Full	24.50	23.77	23.67	23.96	
			Inner_Full	24.50	24.39	24.53	24.27	
		CP-64QAM	Edge_1RB_Left	23.50	23.29	23.43	23.20	
			Edge_1RB_Right	23.50	22.50	22.61	22.78	
			Outer_Full	22.50	22.07	21.82	22.24	
			Inner_Full	23.00	22.97	22.69	22.88	
		CP-256QAM	Edge_1RB_Left	21.50	20.95	21.04	20.88	

			Edge_1RB_Right	21.50	20.53	20.62	20.04
			Outer_Full	21.50	20.24	19.75	19.33
			Inner_Full	21.50	20.53	20.06	20.39
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					509200/2546	518600/2593	528000/2640
NR Band n41	100MHz	DFT-PI2BPSK	Edge_1RB_Left	26.00	25.60	25.63	25.66
			Edge_1RB_Right	26.00	24.61	24.72	25.43
			Outer_Full	25.00	23.69	24.20	24.87
			Inner_Full	25.50	25.19	25.09	24.72
		DFT QPSK	Edge_1RB_Left	26.50	25.56	25.61	25.66
			Edge_1RB_Right	26.50	26.06	26.41	26.21
			Outer_Full	25.50	24.85	25.10	25.06
			Inner_Full	26.00	25.81	25.95	25.71
		CP QPSK	Edge_1RB_Left	24.50	24.18	24.18	24.23
			Edge_1RB_Right	24.50	23.38	23.24	23.49
			Outer_Full	23.50	23.07	22.98	22.61
			Inner_Full	24.00	23.47	23.27	23.65
		CP-16QAM	Edge_1RB_Left	25.00	24.68	24.76	24.85
			Edge_1RB_Right	25.00	23.92	24.38	23.95
			Outer_Full	24.00	23.39	24.06	23.68
			Inner_Full	24.50	23.97	24.35	24.26
		CP-64QAM	Edge_1RB_Left	23.50	23.26	23.26	23.31
			Edge_1RB_Right	23.50	22.34	22.28	22.50
			Outer_Full	23.00	21.41	21.75	22.10
			Inner_Full	23.00	23.02	22.61	22.71
		CP-256QAM	Edge_1RB_Left	21.00	20.89	20.89	20.99
			Edge_1RB_Right	21.00	20.45	20.43	20.46
			Outer_Full	20.5	20.03	19.93	19.55
			Inner_Full	20.5	20.47	20.44	20.29
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					342500/1712.5	349000/1745	355500/1777.5

NR Band n66	5MHz	DFT-PI2BPSK	Edge_1RB_Left	23.50	23.25	23.14	23.12
			Edge_1RB_Right	23.50	22.27	22.80	22.69
			Outer_Full	22.50	22.02	21.88	21.81
			Inner_Full	23.00	22.73	22.38	22.41
		DFT QPSK	Edge_1RB_Left	23.50	23.32	23.12	23.14
			Edge_1RB_Right	23.50	23.25	23.10	23.18
			Outer_Full	22.50	22.26	22.15	22.20
			Inner_Full	23.50	23.31	23.11	23.18
		CP QPSK	Edge_1RB_Left	22.00	21.87	21.75	21.72
			Edge_1RB_Right	22.00	21.53	21.10	20.93
			Outer_Full	21.50	21.32	20.42	20.53
			Inner_Full	22.00	21.59	21.11	21.19
		CP-16QAM	Edge_1RB_Left	22.50	22.27	22.10	22.07
			Edge_1RB_Right	22.50	22.00	21.57	21.65
			Outer_Full	21.50	21.17	20.59	20.88
			Inner_Full	22.00	21.49	21.17	21.81
		CP-64QAM	Edge_1RB_Left	21.50	21.01	20.82	20.83
			Edge_1RB_Right	21.50	20.03	19.83	20.11
			Outer_Full	19.50	19.37	19.27	19.49
			Inner_Full	21.00	20.30	19.93	20.50
		CP-256QAM	Edge_1RB_Left	18.50	18.19	18.16	18.14
			Edge_1RB_Right	18.50	17.93	17.75	17.89
			Outer_Full	17.50	17.01	17.17	17.15
			Inner_Full	18.00	17.92	17.67	17.67
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					343000/1715	349000/1745	355000/1775
NR Band n66	10MHz	DFT-PI2BPSK	Edge_1RB_Left	23.00	23.00	22.91	22.95
			Edge_1RB_Right	23.00	22.79	22.37	22.40
			Outer_Full	22.50	22.28	21.79	21.98
			Inner_Full	23.00	22.07	22.40	22.71
		DFT QPSK	Edge_1RB_Left	23.00	23.00	22.87	22.92
			Edge_1RB_Right	23.00	23.00	22.89	22.97
			Outer_Full	23.00	23.00	22.98	22.93
			Inner_Full	23.00	23.00	22.96	22.89
		CP QPSK	Edge_1RB_Left	21.00	21.00	20.66	20.71

				Edge_1RB_Right	21.00	20.17	20.33	20.33
				Outer_Full	20.00	19.84	19.96	19.59
				Inner_Full	21.00	20.16	20.14	20.50
			CP-16QAM	Edge_1RB_Left	22.00	21.50	21.31	21.36
				Edge_1RB_Right	22.00	20.83	21.06	20.65
				Outer_Full	20.50	20.13	20.24	20.17
				Inner_Full	21.50	21.24	20.41	20.78
			CP-64QAM	Edge_1RB_Left	21.00	20.50	20.10	20.09
				Edge_1RB_Right	21.00	20.21	19.36	19.35
				Outer_Full	20.00	19.74	18.60	18.43
				Inner_Full	20.50	20.08	19.32	19.28
			CP-256QAM	Edge_1RB_Left	18.00	17.50	17.14	17.17
				Edge_1RB_Right	18.00	16.83	16.37	16.88
				Outer_Full	17.00	16.55	15.64	15.91
				Inner_Full	17.00	16.58	16.68	16.70
	Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
						343500/1717.5	349000/1745	354500/1772.5
	NR Band n66	15MHz	DFT-PI2BPSK	Edge_1RB_Left	23.00	22.96	22.97	22.98
				Edge_1RB_Right	23.00	22.55	22.54	22.18
				Outer_Full	22.50	22.13	21.66	21.34
				Inner_Full	23.00	22.67	22.68	22.74
			DFT QPSK	Edge_1RB_Left	23.50	22.89	22.97	22.95
				Edge_1RB_Right	23.50	23.12	23.10	22.92
				Outer_Full	23.50	23.06	23.11	23.06
				Inner_Full	23.50	22.99	23.08	23.03
			CP QPSK	Edge_1RB_Left	21.00	20.86	20.86	20.76
				Edge_1RB_Right	21.00	20.42	20.54	20.29
				Outer_Full	20.50	19.83	19.64	20.04
				Inner_Full	20.50	20.22	19.89	19.82
			CP-16QAM	Edge_1RB_Left	21.50	21.38	21.45	21.46
				Edge_1RB_Right	21.50	20.43	21.06	21.19
				Outer_Full	20.50	19.44	20.44	20.34
				Inner_Full	21.00	20.68	20.94	20.70
			CP-64QAM	Edge_1RB_Left	20.50	20.17	20.25	20.22
				Edge_1RB_Right	20.50	19.60	19.66	19.32

		CP-256QAM	Outer_Full	19.50	19.12	19.33	18.63
			Inner_Full	20.00	19.61	19.73	19.87
			Edge_1RB_Left	17.50	17.20	17.48	17.47
			Edge_1RB_Right	17.50	16.28	16.49	16.73
			Outer_Full	16.50	15.77	15.88	16.40
			Inner_Full	17.50	16.42	16.76	17.23
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					344000/1720	349000/1745	354000/1770
NR Band n66	20MHz	DFT-PI2BPSK	Edge_1RB_Left	23.50	23.27	23.24	23.09
			Edge_1RB_Right	23.50	22.46	22.64	22.53
			Outer_Full	22.50	22.16	21.93	22.16
			Inner_Full	23.00	22.27	22.44	22.51
		DFT QPSK	Edge_1RB_Left	23.50	22.32	23.23	23.24
			Edge_1RB_Right	23.50	20.97	23.20	23.38
			Outer_Full	22.50	22.23	22.22	22.21
			Inner_Full	23.50	23.28	23.21	23.21
		CP QPSK	Edge_1RB_Left	22.00	21.94	21.85	21.74
			Edge_1RB_Right	22.00	21.27	21.25	21.22
			Outer_Full	21.50	21.07	20.95	20.46
			Inner_Full	21.50	21.28	21.44	21.08
		CP-16QAM	Edge_1RB_Left	22.50	21.94	21.85	22.14
			Edge_1RB_Right	22.50	21.42	21.30	21.85
			Outer_Full	21.50	20.49	20.37	21.45
			Inner_Full	22.00	21.50	21.26	21.64
		CP-64QAM	Edge_1RB_Left	21.00	20.97	20.98	20.86
			Edge_1RB_Right	21.00	20.17	20.16	19.97
			Outer_Full	20.00	19.58	19.65	19.24
			Inner_Full	21.00	20.52	20.59	20.46
		CP-256QAM	Edge_1RB_Left	18.50	18.20	18.16	18.11
			Edge_1RB_Right	18.50	17.61	17.56	17.58
			Outer_Full	17.00	16.68	16.60	16.66
			Inner_Full	18.00	17.29	17.54	17.83
Band	Band	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		

NR Band n66		Width				346000/1725	349000/1745	352000/1765
	30MHz	DFT-PI2BPSK	Edge_1RB_Left	23.50	22.82	22.98	22.97	
			Edge_1RB_Right	23.50	22.34	22.67	22.05	
			Outer_Full	23.50	21.93	22.37	21.74	
			Inner_Full	23.50	22.29	22.17	22.36	
		DFT QPSK	Edge_1RB_Left	23.50	22.88	22.97	22.95	
			Edge_1RB_Right	23.50	23.00	23.18	22.84	
			Outer_Full	23.50	23.00	23.13	23.10	
			Inner_Full	23.50	22.95	23.14	23.10	
		CP QPSK	Edge_1RB_Left	21.50	20.77	20.84	20.93	
			Edge_1RB_Right	21.50	19.79	20.55	20.04	
			Outer_Full	21.50	19.00	19.65	19.46	
			Inner_Full	23.00	19.95	20.08	20.22	
		CP-16QAM	Edge_1RB_Left	22.00	21.33	21.43	21.43	
			Edge_1RB_Right	22.00	20.62	20.50	20.94	
			Outer_Full	21.50	20.27	19.68	20.53	
			Inner_Full	22.50	20.50	20.61	21.23	
		CP-64QAM	Edge_1RB_Left	20.50	20.02	20.15	20.06	
			Edge_1RB_Right	20.50	19.67	19.78	19.32	
			Outer_Full	21.00	18.92	18.80	19.07	
			Inner_Full	21.00	19.79	19.74	19.71	
	CP-256QAM	Edge_1RB_Left	18.00	17.14	17.26	17.31		
		Edge_1RB_Right	18.00	16.37	16.47	16.93		
		Outer_Full	18.00	16.02	16.15	16.60		
Inner_Full		18.00	16.73	16.67	16.89			
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)			
					346000/1730	349000/1745	352000/1760	
NR Band n66	40MHz	DFT-PI2BPSK	Edge_1RB_Left	23.50	23.43	23.37	23.36	
			Edge_1RB_Right	23.50	22.64	23.10	22.53	
			Outer_Full	22.50	22.38	22.20	22.31	
			Inner_Full	23.50	22.51	22.49	22.83	

		DFT QPSK	Edge_1RB_Left	23.50	23.47	23.41	23.45
			Edge_1RB_Right	23.50	23.29	23.33	23.40
			Outer_Full	22.50	22.36	22.38	22.37
			Inner_Full	22.50	22.40	22.42	22.27
		CP QPSK	Edge_1RB_Left	22.50	21.97	22.01	21.97
			Edge_1RB_Right	22.50	21.70	21.11	21.47
			Outer_Full	21.50	21.18	20.25	20.87
			Inner_Full	22.00	21.74	21.51	21.15
		CP-16QAM	Edge_1RB_Left	22.50	22.41	22.41	22.38
			Edge_1RB_Right	22.50	21.59	21.72	21.86
			Outer_Full	22.00	21.11	21.41	20.89
			Inner_Full	22.50	21.67	22.16	22.05
		CP-64QAM	Edge_1RB_Left	21.50	21.14	21.07	21.13
			Edge_1RB_Right	21.50	20.21	20.31	20.73
			Outer_Full	20.50	19.59	19.56	20.31
			Inner_Full	21.00	20.36	20.82	20.72
		CP-256QAM	Edge_1RB_Left	18.50	18.29	18.20	18.39
			Edge_1RB_Right	18.50	17.71	17.37	17.39
			Outer_Full	18.00	16.71	16.64	16.47
			Inner_Full	19.00	17.79	17.22	17.92

Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					647000/3705	656000/3840	665000/3975
NR Band n77	10MHz	DFT-PI2BPSK	Edge_1RB_Left	23.00	22.43	22.48	22.58
			Edge_1RB_Right	23.00	21.88	21.71	22.04
			Outer_Full	22.00	21.21	21.15	21.79
			Inner_Full	22.50	21.60	21.67	22.06
		DFT QPSK	Edge_1RB_Left	23.00	22.42	22.48	22.57
			Edge_1RB_Right	23.00	22.49	22.37	22.66
			Outer_Full	21.50	21.07	21.05	21.26
			Inner_Full	23.00	22.47	22.49	22.73
		CP QPSK	Edge_1RB_Left	21.00	20.68	20.71	20.89

				Edge_1RB_Right	21.00	19.83	20.44	20.02
				Outer_Full	20.00	19.59	19.74	19.08
				Inner_Full	20.50	19.92	19.94	20.05
			CP-16QAM	Edge_1RB_Left	21.50	20.93	21.04	21.14
				Edge_1RB_Right	21.50	20.18	20.53	20.18
				Outer_Full	20.50	19.39	20.05	19.21
				Inner_Full	20.50	19.98	20.32	20.16
			CP-64QAM	Edge_1RB_Left	20.00	19.76	19.86	19.94
				Edge_1RB_Right	20.00	19.18	19.03	19.51
				Outer_Full	19.50	18.92	18.77	19.27
				Inner_Full	20.00	19.34	18.90	19.51
			CP-256QAM	Edge_1RB_Left	18.00	17.35	17.48	17.55
				Edge_1RB_Right	18.00	16.48	17.08	17.06
				Outer_Full	17.00	15.86	16.61	16.57
				Inner_Full	17.50	16.91	16.49	17.29
	Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
						647166/3707.5	656000/3840	664833/3972.5
	NR Band n77	15MHz	DFT-PI2BPSK	Edge_1RB_Left	23.00	22.57	22.62	22.67
				Edge_1RB_Right	23.00	22.15	22.35	22.18
				Outer_Full	22.00	21.64	21.80	21.26
				Inner_Full	22.50	21.92	22.09	21.86
			DFT QPSK	Edge_1RB_Left	23.00	22.54	22.61	22.63
				Edge_1RB_Right	23.00	22.55	22.51	22.75
				Outer_Full	21.50	21.17	21.22	21.34
				Inner_Full	23.00	22.61	22.55	22.68
			CP QPSK	Edge_1RB_Left	21.00	20.82	20.86	20.96
				Edge_1RB_Right	21.00	19.97	20.42	20.76

				Outer_Full	20.50	19.69	20.13	20.46
				Inner_Full	21.00	20.56	20.06	20.74
			CP-16QAM	Edge_1RB_Left	21.50	21.12	21.24	21.25
				Edge_1RB_Right	21.50	20.13	20.26	20.47
				Outer_Full	20.50	19.18	20.02	20.23
				Inner_Full	21.00	20.74	20.96	20.89
			CP-64QAM	Edge_1RB_Left	20.50	19.89	20.01	19.98
				Edge_1RB_Right	20.50	18.95	19.20	18.98
				Outer_Full	18.50	18.41	18.30	18.01
				Inner_Full	20.00	19.68	19.41	19.34
			CP-256QAM	Edge_1RB_Left	18.00	17.54	17.68	17.64
				Edge_1RB_Right	18.00	17.07	17.18	16.81
				Outer_Full	16.50	16.08	16.41	16.14
				Inner_Full	17.00	16.66	16.69	17.00
	Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
						647333/3710	656000/3840	664666/3970
	NR Band n77	20MHz	DFT-PI2BPSK	Edge_1RB_Left	23.00	22.54	22.63	22.65
				Edge_1RB_Right	23.00	21.97	21.90	22.23
				Outer_Full	21.50	21.11	21.13	21.38
				Inner_Full	22.50	22.22	22.05	22.26
			DFT QPSK	Edge_1RB_Left	23.00	22.52	22.61	22.64
				Edge_1RB_Right	23.00	22.55	22.46	22.69
				Outer_Full	21.50	21.09	21.23	21.33
				Inner_Full	23.00	22.48	22.55	22.67
			CP QPSK	Edge_1RB_Left	21.00	20.75	20.88	20.94
				Edge_1RB_Right	21.00	20.07	20.06	20.61

				Outer_Full	20.00	19.76	19.30	19.83
				Inner_Full	20.50	20.36	20.44	20.42
			CP-16QAM	Edge_1RB_Left	21.50	21.01	21.18	21.23
				Edge_1RB_Right	21.50	20.15	20.57	20.82
				Outer_Full	20.00	19.67	20.00	19.92
				Inner_Full	21.00	20.52	20.65	20.73
			CP-64QAM	Edge_1RB_Left	20.50	19.78	19.94	20.03
				Edge_1RB_Right	20.50	19.40	18.96	19.52
				Outer_Full	19.00	18.52	18.21	18.53
				Inner_Full	19.50	19.16	19.00	19.42
			CP-256QAM	Edge_1RB_Left	18.00	17.48	17.70	17.70
				Edge_1RB_Right	18.00	16.96	17.10	17.29
				Outer_Full	17.00	16.65	16.49	16.30
				Inner_Full	17.00	16.80	16.82	16.85
	Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
						631333/3470	636666/3549.99	642000/3630
	NR Band n77	40MHz	DFT-PI2BPSK	Edge_1RB_Left	23.00	22.77	22.82	22.79
				Edge_1RB_Right	23.00	22.47	22.43	22.48
				Outer_Full	22.50	21.86	22.12	21.95
				Inner_Full	22.50	22.14	22.18	22.36
			DFT QPSK	Edge_1RB_Left	23.00	22.72	22.73	22.70
				Edge_1RB_Right	23.00	22.57	22.49	22.90
				Outer_Full	21.50	21.20	21.22	21.37
				Inner_Full	23.00	22.61	22.58	22.73
			CP QPSK	Edge_1RB_Left	21.50	20.95	21.03	21.03

				Edge_1RB_Right	21.50	20.05	20.14	20.46
				Outer_Full	20.00	19.72	19.59	19.73
				Inner_Full	21.00	20.00	20.67	20.27
			CP-16QAM	Edge_1RB_Left	21.50	21.37	21.40	21.41
				Edge_1RB_Right	21.50	20.47	21.11	20.46
				Outer_Full	21.00	20.07	20.87	20.05
				Inner_Full	21.50	21.04	20.62	20.92
			CP-64QAM	Edge_1RB_Left	20.50	20.07	20.16	20.13
				Edge_1RB_Right	20.50	19.32	19.22	19.33
				Outer_Full	19.00	18.93	18.85	18.65
				Inner_Full	20.00	19.39	19.30	19.76
			CP-256QAM	Edge_1RB_Left	18.00	17.75	17.79	17.72
				Edge_1RB_Right	18.00	17.20	17.42	16.92
				Outer_Full	17.50	16.86	17.02	16.31
				Inner_Full	17.50	16.94	17.32	16.73
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)			
					631666/3475	636666/3549.99	641666/3625	
NR Band n77	50MHz	DFT-PI2BPSK	Edge_1RB_Left	23.00	22.38	22.64	22.44	
			Edge_1RB_Right	23.00	21.69	22.10	21.74	
			Outer_Full	22.00	21.43	21.18	21.00	
			Inner_Full	22.50	22.18	22.41	21.62	
		DFT QPSK	Edge_1RB_Left	23.00	22.41	22.54	22.43	
			Edge_1RB_Right	23.00	22.24	22.25	22.60	
			Outer_Full	21.50	21.04	21.16	21.04	
			Inner_Full	23.00	22.47	22.55	22.47	
		CP QPSK	Edge_1RB_Left	21.00	20.68	20.88	20.74	

				Edge_1RB_Right	21.00	20.38	20.09	20.13
				Outer_Full	20.50	19.43	19.34	19.54
				Inner_Full	21.00	20.23	19.91	20.06
			CP-16QAM	Edge_1RB_Left	21.50	21.04	21.25	20.97
				Edge_1RB_Right	21.50	20.26	20.31	20.29
				Outer_Full	21.00	19.95	19.69	20.01
				Inner_Full	21.50	20.71	20.87	20.00
			CP-64QAM	Edge_1RB_Left	20.00	19.67	19.93	19.78
				Edge_1RB_Right	20.00	19.07	19.64	19.06
				Outer_Full	19.50	18.78	18.87	18.37
				Inner_Full	20.00	19.25	19.35	18.79
			CP-256QAM	Edge_1RB_Left	18.00	17.36	17.62	17.39
				Edge_1RB_Right	18.00	16.94	16.94	17.05
				Outer_Full	17.00	16.06	16.03	16.78
				Inner_Full	17.50	16.54	16.75	16.77
	Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
						632000/3480	636666/3549.99	641333/3620
	NR Band n77	60MHz	DFT-PI2BPSK	Edge_1RB_Left	23.00	22.39	22.52	22.21
				Edge_1RB_Right	23.00	21.53	21.58	21.91
				Outer_Full	22.00	20.87	20.69	20.96
				Inner_Full	22.50	22.19	22.17	21.40
			DFT QPSK	Edge_1RB_Left	23.00	22.33	22.52	22.19
				Edge_1RB_Right	23.00	22.32	22.21	22.40
				Outer_Full	21.50	20.98	21.11	20.93
				Inner_Full	23.00	22.35	22.53	22.33
			CP QPSK	Edge_1RB_Left	21.00	20.54	20.77	20.50
				Edge_1RB_Right	21.00	20.32	20.51	19.90
				Outer_Full	20.00	19.81	19.99	19.20
				Inner_Full	20.50	20.20	19.78	19.58

			CP-16QAM	Edge_1RB_Left	21.50	20.90	21.02	20.85
				Edge_1RB_Right	21.50	19.94	20.21	20.24
				Outer_Full	20.50	19.57	19.52	20.00
				Inner_Full	21.00	20.44	20.50	20.18
			CP-64QAM	Edge_1RB_Left	20.00	19.69	19.80	19.55
				Edge_1RB_Right	20.00	19.10	19.50	19.13
				Outer_Full	19.00	18.39	19.14	18.78
				Inner_Full	19.50	18.72	19.54	19.14
			CP-256QAM	Edge_1RB_Left	18.00	17.23	17.48	17.27
				Edge_1RB_Right	18.00	16.25	16.73	17.07
				Outer_Full	17.00	15.59	16.05	16.51
				Inner_Full	17.50	16.79	16.65	16.31
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)			
					632333/3485	636666/3549.99	641000/3615	
NR Band n77	70MHz	DFT-PI2BPSK	Edge_1RB_Left	19.50	19.12	19.02	19.05	
			Edge_1RB_Right	19.50	18.48	18.10	18.22	
			Outer_Full	18.50	17.72	17.88	17.70	
			Inner_Full	19.00	18.76	18.15	18.07	
		DFT QPSK	Edge_1RB_Left	19.50	19.17	19.03	19.02	
			Edge_1RB_Right	19.50	19.11	19.04	19.05	
			Outer_Full	19.50	19.23	19.00	19.00	
			Inner_Full	20.00	19.09	19.05	19.00	
		CP QPSK	Edge_1RB_Left	19.50	19.07	19.01	19.05	
			Edge_1RB_Right	19.50	18.78	18.55	18.50	
			Outer_Full	18.50	18.16	18.30	18.28	
			Inner_Full	19.00	18.09	18.02	18.05	
		CP-16QAM	Edge_1RB_Left	19.50	19.13	19.07	19.07	
			Edge_1RB_Right	19.50	18.62	18.14	18.61	
			Outer_Full	18.50	18.20	17.42	17.95	

			Inner_Full	19.00	18.88	18.56	18.13
		CP-64QAM	Edge_1RB_Left	19.50	19.12	19.12	19.07
			Edge_1RB_Right	19.50	18.91	18.72	18.69
			Outer_Full	18.50	18.16	18.11	18.20
			Inner_Full	19.00	18.75	18.87	18.48
		CP-256QAM	Edge_1RB_Left	19.50	19.10	19.11	19.02
			Edge_1RB_Right	19.50	18.84	18.63	18.23
			Outer_Full	18.50	18.44	18.00	17.76
			Inner_Full	19.00	18.46	18.27	18.21
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					632666/3490	636666/3549.99	640666/3610
NR Band n77	80MHz	DFT-PI2BPSK	Edge_1RB_Left	22.50	22.24	22.34	22.07
			Edge_1RB_Right	22.50	21.52	21.68	21.72
			Outer_Full	21.50	20.97	21.15	21.26
			Inner_Full	22.00	21.46	21.58	21.13
		DFT QPSK	Edge_1RB_Left	22.50	22.13	22.34	22.02
			Edge_1RB_Right	22.50	22.30	21.82	22.24
			Outer_Full	21.00	20.97	20.90	20.82
			Inner_Full	22.50	22.39	22.30	22.23
		CP QPSK	Edge_1RB_Left	20.50	20.49	19.37	20.39
			Edge_1RB_Right	20.50	19.72	19.08	20.04
			Outer_Full	20.00	19.51	18.21	19.45
			Inner_Full	20.50	20.14	19.09	19.61
		CP-16QAM	Edge_1RB_Left	21.00	20.76	20.85	20.69
			Edge_1RB_Right	21.00	20.56	20.12	20.03

				Outer_Full	20.00	20.17	19.57	19.74
				Inner_Full	20.50	20.51	20.02	19.87
			CP-64QAM	Edge_1RB_Left	20.00	19.55	19.70	19.51
				Edge_1RB_Right	20.00	19.18	19.08	18.78
				Outer_Full	19.00	18.33	18.68	17.86
				Inner_Full	19.50	18.88	19.39	19.03
			CP-256QAM	Edge_1RB_Left	17.50	17.14	17.67	17.07
				Edge_1RB_Right	17.50	16.55	17.40	16.75
				Outer_Full	17.00	16.15	16.58	15.76
				Inner_Full	17.50	16.70	17.00	16.68
	Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
						633000/3495	636666/3549.99	640333/3605
	NR Band n77	90MHz	DFT-PI2BPSK	Edge_1RB_Left	22.50	22.19	22.34	21.97
				Edge_1RB_Right	22.50	21.72	21.70	21.49
				Outer_Full	21.50	20.93	20.97	20.78
				Inner_Full	22.00	21.42	21.44	21.42
			DFT QPSK	Edge_1RB_Left	22.50	22.18	22.35	21.92
				Edge_1RB_Right	22.50	22.46	21.85	22.29
				Outer_Full	21.00	20.99	20.93	20.74
				Inner_Full	22.50	22.33	22.40	22.22
			CP QPSK	Edge_1RB_Left	21.00	20.46	20.57	20.26
				Edge_1RB_Right	21.00	19.68	19.98	20.03
				Outer_Full	20.00	19.22	19.49	19.83

				Inner_Full	20.50	19.68	20.34	19.31
			CP-16QAM	Edge_1RB_Left	21.00	20.82	20.93	20.56
				Edge_1RB_Right	21.00	20.49	20.10	20.31
				Outer_Full	20.50	19.91	19.85	19.69
				Inner_Full	21.00	20.12	20.69	19.84
			CP-64QAM	Edge_1RB_Left	20.00	19.57	19.76	19.30
				Edge_1RB_Right	20.00	19.15	19.13	19.09
				Outer_Full	19.00	18.43	18.24	18.73
				Inner_Full	19.50	19.33	18.94	18.88
			CP-256QAM	Edge_1RB_Left	17.50	17.18	17.34	16.98
				Edge_1RB_Right	17.50	16.48	16.92	16.24
				Outer_Full	16.50	15.69	16.59	15.75
				Inner_Full	17.50	16.46	16.79	16.32
	Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
						633333/3500	636666/3549.99	640000/3600
	NR Band n77	100MHz	DFT-PI2BPSK	Edge_1RB_Left	22.50	22.18	22.40	22.01
				Edge_1RB_Right	22.50	21.51	22.17	21.16
				Outer_Full	22.00	21.08	21.60	20.30
				Inner_Full	22.00	21.45	21.93	21.20
			DFT QPSK	Edge_1RB_Left	22.50	22.16	22.30	22.02
				Edge_1RB_Right	22.50	22.39	21.97	22.35
				Outer_Full	21.00	20.92	20.92	20.83
				Inner_Full	21.50	21.28	21.37	21.27

			CP QPSK	Edge_1RB_Left	21.00	20.43	20.62	20.28
				Edge_1RB_Right	21.00	19.73	20.05	19.65
				Outer_Full	20.00	19.12	19.65	19.18
				Inner_Full	20.50	19.49	20.32	19.34
			CP-16QAM	Edge_1RB_Left	21.00	20.68	20.92	20.57
				Edge_1RB_Right	21.00	19.90	20.12	20.11
				Outer_Full	20.50	19.09	19.15	19.39
				Inner_Full	21.00	19.97	20.28	20.02
			CP-64QAM	Edge_1RB_Left	20.00	19.54	19.76	19.39
				Edge_1RB_Right	20.00	19.28	19.10	18.42
				Outer_Full	19.00	18.30	18.71	18.09
				Inner_Full	19.50	18.89	19.43	18.63
			CP-256QAM	Edge_1RB_Left	17.50	17.13	17.39	16.94
				Edge_1RB_Right	17.50	16.56	16.77	16.24
				Outer_Full	16.50	15.92	15.78	15.54
				Inner_Full	17.00	16.76	16.80	16.10

Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					630333/3455	633333/3499.995	636333/3545
NR Band n78	10MHz	DFT-PI2BPSK	Edge_1RB_Left	26.00	25.42	25.59	25.62
			Edge_1RB_Right	26.00	25.18	24.61	25.09
			Outer_Full	25.00	24.44	23.66	24.75
			Inner_Full	25.50	25.14	25.26	24.76
		DFT QPSK	Edge_1RB_Left	26.00	25.47	25.52	25.65
			Edge_1RB_Right	26.00	25.48	25.57	25.57
			Outer_Full	24.50	23.96	24.13	24.14
			Inner_Full	26.00	25.48	25.57	25.65

			CP QPSK	Edge_1RB_Left	24.00	23.53	23.66	23.77
				Edge_1RB_Right	24.00	23.19	22.76	23.49
				Outer_Full	23.50	22.35	21.86	23.05
				Inner_Full	23.50	22.84	23.31	23.20
			CP-16QAM	Edge_1RB_Left	24.50	24.11	24.22	24.29
				Edge_1RB_Right	24.50	23.80	23.47	24.01
				Outer_Full	24.00	22.87	23.27	23.81
				Inner_Full	24.00	23.52	23.30	23.75
			CP-64QAM	Edge_1RB_Left	23.00	22.48	22.62	22.72
				Edge_1RB_Right	23.00	21.73	21.79	22.21
				Outer_Full	22.00	21.22	21.20	21.53
				Inner_Full	22.50	22.10	22.14	22.30
			CP-256QAM	Edge_1RB_Left	20.50	20.32	20.38	20.44
				Edge_1RB_Right	20.50	19.33	20.01	20.24
				Outer_Full	20.00	19.04	19.71	19.39
				Inner_Full	20.00	19.78	19.67	19.79
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)			
					630500/3457.5	633333/3499.995	636166/3542.5	
NR Band n78	15MHz		DFT-PI2BPSK	Edge_1RB_Left	26.00	25.74	25.74	25.83
				Edge_1RB_Right	26.00	25.41	25.37	25.00
				Outer_Full	25.00	24.78	24.89	24.68
				Inner_Full	26.00	25.35	25.26	25.52
			DFT QPSK	Edge_1RB_Left	26.00	25.69	25.74	25.84
				Edge_1RB_Right	26.00	25.76	25.77	25.70
				Outer_Full	24.50	24.20	24.28	24.33
				Inner_Full	26.00	25.74	25.76	25.80
			CP QPSK	Edge_1RB_Left	24.00	23.82	23.81	23.92
				Edge_1RB_Right	24.00	23.32	23.33	23.01
				Outer_Full	23.50	23.03	22.50	22.20
				Inner_Full	23.50	22.95	22.94	23.44
			CP-16QAM	Edge_1RB_Left	24.50	24.36	24.38	24.49
				Edge_1RB_Right	24.50	23.43	23.53	23.88
				Outer_Full	23.50	22.94	23.17	23.25
				Inner_Full	24.50	24.00	24.17	23.66
			CP-64QAM	Edge_1RB_Left	23.00	22.79	22.87	22.91
				Edge_1RB_Right	23.00	22.44	22.04	22.16
				Outer_Full	22.50	22.17	21.61	21.70
				Inner_Full	23.00	22.31	22.55	22.25

			CP-256QAM	Edge_1RB_Left	21.00	20.37	20.43	20.60
				Edge_1RB_Right	21.00	19.55	20.23	20.09
				Outer_Full	20.00	18.89	19.83	19.58
				Inner_Full	20.00	19.91	19.77	19.91
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)			
					630666/3460	633333/3499.995	636000/3540	
NR Band n78	20MHz	DFT-PI2BPSK	Edge_1RB_Left	26.00	25.87	25.78	25.90	
			Edge_1RB_Right	26.00	25.38	25.56	25.10	
			Outer_Full	25.50	25.05	24.77	24.70	
			Inner_Full	25.50	25.25	25.08	25.41	
		DFT QPSK	Edge_1RB_Left	26.00	25.82	25.82	25.88	
			Edge_1RB_Right	26.00	25.86	25.80	25.78	
			Outer_Full	24.50	24.32	24.35	24.35	
			Inner_Full	26.00	25.82	25.85	25.83	
		CP QPSK	Edge_1RB_Left	24.00	23.88	23.95	23.97	
			Edge_1RB_Right	24.00	23.13	23.01	23.69	
			Outer_Full	23.50	22.60	22.56	23.37	
			Inner_Full	24.00	22.92	23.66	23.53	
		CP-16QAM	Edge_1RB_Left	25.00	24.39	24.49	24.58	
			Edge_1RB_Right	25.00	23.95	23.50	23.76	
			Outer_Full	24.00	23.61	22.74	23.04	
			Inner_Full	24.00	23.94	23.93	23.79	
		CP-64QAM	Edge_1RB_Left	23.50	22.91	22.86	23.01	
			Edge_1RB_Right	23.50	21.91	22.31	22.47	
			Outer_Full	22.00	21.13	21.49	21.66	
			Inner_Full	23.00	22.62	21.93	22.20	
		CP-256QAM	Edge_1RB_Left	21.00	20.46	20.63	20.72	
			Edge_1RB_Right	21.00	19.92	19.70	20.33	
			Outer_Full	19.50	19.41	19.06	19.38	
			Inner_Full	20.50	19.72	19.66	20.13	
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)			
					631333/3470	636666/3549.99	642000/3630	
NR Band n77	40MHz	DFT-PI2BPSK	Edge_1RB_Left	26.50	26.06	25.99	25.98	
			Edge_1RB_Right	26.50	25.77	25.26	25.02	
			Outer_Full	25.00	24.97	24.47	24.75	
			Inner_Full	26.00	25.25	25.12	25.77	

			DFT QPSK	Edge_1RB_Left	26.50	26.06	25.97	25.99
				Edge_1RB_Right	26.50	25.95	25.92	25.97
				Outer_Full	25.00	24.42	24.49	24.51
				Inner_Full	26.50	25.99	25.99	26.04
			CP QPSK	Edge_1RB_Left	24.50	24.15	24.10	
				Edge_1RB_Right	24.50	23.37	23.83	-0.37
				Outer_Full	23.50	22.87	23.20	-1.17
				Inner_Full	24.00	23.84	23.56	-0.29
			CP-16QAM	Edge_1RB_Left	25.00	24.64	24.62	24.62
				Edge_1RB_Right	25.00	23.69	24.42	23.77
				Outer_Full	24.00	22.98	23.84	23.18
				Inner_Full	24.50	24.10	23.70	24.41
			CP-64QAM	Edge_1RB_Left	23.50	23.09	23.12	23.05
				Edge_1RB_Right	23.50	22.72	22.50	22.56
				Outer_Full	22.50	21.73	22.06	21.70
				Inner_Full	23.00	22.68	22.67	22.27
			CP-256QAM	Edge_1RB_Left	21.00	20.77	20.72	20.74
				Edge_1RB_Right	21.00	20.14	19.93	19.77
				Outer_Full	20.00	19.37	19.62	19.41
				Inner_Full	20.50	20.40	19.96	19.83
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)			
					631666/3475	636666/3549.99	641666/3625	
NR Band n78	50MHz	DFT-PI2BPSK	Edge_1RB_Left	26.00	25.79	25.81	25.76	
			Edge_1RB_Right	26.00	25.32	25.03	24.81	
			Outer_Full	25.50	24.69	24.82	24.12	
			Inner_Full	25.50	25.39	25.57	25.47	
		DFT QPSK	Edge_1RB_Left	26.00	25.73	25.76	25.73	
			Edge_1RB_Right	26.00	25.63	25.61	25.70	
			Outer_Full	24.50	24.27	24.25	24.32	
			Inner_Full	26.00	25.77	25.74	25.79	
		CP QPSK	Edge_1RB_Left	24.00	23.89	23.79	23.78	
			Edge_1RB_Right	24.00	23.29	23.07	23.43	
			Outer_Full	23.50	22.32	22.59	22.95	
			Inner_Full	24.00	23.03	22.90	23.57	
		CP-16QAM	Edge_1RB_Left	24.50	24.39	24.43	24.43	
			Edge_1RB_Right	24.50	24.10	23.47	23.59	
			Outer_Full	23.50	23.81	22.58	23.12	

			Inner_Full	24.50	23.39	23.58	24.09
		CP-64QAM	Edge_1RB_Left	23.00	22.81	22.80	22.79
			Edge_1RB_Right	23.00	22.23	22.05	21.84
			Outer_Full	22.00	21.90	21.58	21.06
			Inner_Full	22.50	22.30	22.16	21.81
		CP-256QAM	Edge_1RB_Left	26.00	20.54	20.61	20.48
			Edge_1RB_Right	26.00	20.13	20.23	19.48
			Outer_Full	26.00	19.65	19.67	18.63
			Inner_Full	26.00	20.17	20.00	19.60
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					632000/3480	636666/3549.99	641333/3620
NR Band n78	60MHz	DFT-PI2BPSK	Edge_1RB_Left	26.00	25.87	25.91	25.83
			Edge_1RB_Right	26.00	25.24	25.22	24.92
			Outer_Full	25.00	24.41	24.55	23.99
			Inner_Full	26.00	24.94	25.29	24.98
		DFT QPSK	Edge_1RB_Left	26.00	25.87	25.87	25.85
			Edge_1RB_Right	26.00	25.73	25.70	25.73
			Outer_Full	24.50	24.32	24.25	24.36
			Inner_Full	26.00	25.74	25.76	25.84
		CP QPSK	Edge_1RB_Left	24.50	23.91	24.04	23.88
			Edge_1RB_Right	24.50	23.59	23.67	23.57
			Outer_Full	23.50	22.67	23.24	22.82
			Inner_Full	24.00	23.56	23.82	23.36
		CP-16QAM	Edge_1RB_Left	25.00	24.53	24.62	24.47
			Edge_1RB_Right	25.00	23.78	23.67	23.61
			Outer_Full	24.00	23.29	23.40	22.94
			Inner_Full	24.50	23.66	24.04	24.18
		CP-64QAM	Edge_1RB_Left	23.00	22.90	22.99	22.83
			Edge_1RB_Right	23.00	22.26	22.11	22.62
			Outer_Full	22.00	21.64	21.11	21.79
			Inner_Full	23.00	22.02	22.14	21.97
		CP-256QAM	Edge_1RB_Left	21.00	20.67	20.70	20.59
			Edge_1RB_Right	21.00	20.36	20.12	19.89
			Outer_Full	20.00	19.67	19.38	19.37
			Inner_Full	20.50	20.24	19.75	20.38

Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					632333/3485	636666/3549.99	641000/3615
NR Band n78	70MHz	DFT-PI2BPSK	Edge_1RB_Left	22.50	22.26	22.22	22.30
			Edge_1RB_Right	22.50	21.81	21.30	22.05
			Outer_Full	22.00	20.82	20.73	21.53
			Inner_Full	22.50	21.67	21.24	21.86
		DFT QPSK	Edge_1RB_Left	22.50	22.30	22.17	22.33
			Edge_1RB_Right	22.50	22.24	22.23	22.33
			Outer_Full	22.50	22.27	22.23	22.38
			Inner_Full	22.50	22.30	22.16	22.37
		CP QPSK	Edge_1RB_Left	22.50	22.23	22.20	22.39
			Edge_1RB_Right	22.50	21.32	21.83	21.78
			Outer_Full	21.50	20.33	21.43	20.91
			Inner_Full	22.00	21.99	21.79	21.93
		CP-16QAM	Edge_1RB_Left	22.50	22.25	22.19	22.30
			Edge_1RB_Right	22.50	21.59	21.29	21.97
			Outer_Full	22.50	21.06	20.30	21.66
			Inner_Full	22.50	21.61	21.82	21.45
		CP-64QAM	Edge_1RB_Left	22.50	22.30	22.25	22.31
			Edge_1RB_Right	22.50	21.30	21.41	21.50
			Outer_Full	21.50	20.75	20.94	20.71
			Inner_Full	22.00	21.58	21.53	21.39
		CP-256QAM	Edge_1RB_Left	22.50	22.28	22.21	22.35
			Edge_1RB_Right	22.50	21.68	21.29	21.92
			Outer_Full	22.50	20.91	21.02	21.51
			Inner_Full	22.50	21.58	21.50	21.51
Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
					632666/3490	636666/3549.99	640666/3610
NR Band n78	80MHz	DFT-PI2BPSK	Edge_1RB_Left	26.00	25.70	25.81	25.92
			Edge_1RB_Right	26.00	24.86	25.44	24.93
			Outer_Full	25.00	24.28	24.84	24.67
			Inner_Full	25.50	24.76	25.61	25.34
		DFT QPSK	Edge_1RB_Left	26.00	25.68	25.79	25.90
			Edge_1RB_Right	26.00	25.59	25.65	25.66

			Outer_Full	24.50	24.21	24.31	24.21		
			Inner_Full	26.00	25.79	25.70	25.71		
		CP QPSK	Edge_1RB_Left	24.00	23.78	23.91	23.92		
			Edge_1RB_Right	24.00	23.52	23.23	23.48		
			Outer_Full	23.50	23.14	22.47	22.64		
			Inner_Full	24.00	22.80	23.43	23.44		
			CP-16QAM	Edge_1RB_Left	25.00	24.38	24.48	24.53	
		Edge_1RB_Right		25.00	23.87	23.85	23.86		
		Outer_Full		24.00	23.32	23.60	23.10		
		Inner_Full		24.00	23.66	23.95	24.16		
		CP-64QAM	Edge_1RB_Left	23.00	22.77	22.90	22.97		
			Edge_1RB_Right	23.00	22.25	22.60	22.48		
			Outer_Full	22.00	21.57	21.67	22.16		
			Inner_Full	22.50	22.43	21.95	22.27		
		CP-256QAM	Edge_1RB_Left	21.00	20.49	20.62	20.72		
			Edge_1RB_Right	21.00	19.73	19.64	19.95		
			Outer_Full	20.00	18.92	19.76	19.37		
			Inner_Full	21.00	20.22	20.08	20.24		
		Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
							633000/3495	636666/3549.99	640333/3605
NR Band n78	90MHz	DFT-PI2BPSK	Edge_1RB_Left	26.00	25.75	25.81	25.84		
			Edge_1RB_Right	26.00	24.84	25.28	25.21		
			Outer_Full	25.00	24.11	24.80	24.41		
			Inner_Full	26.00	24.75	25.03	24.89		
		DFT QPSK	Edge_1RB_Left	26.00	25.77	25.75	25.89		
			Edge_1RB_Right	26.00	25.74	25.75	25.84		
			Outer_Full	24.50	24.26	24.28	24.36		
			Inner_Full	26.00	25.85	25.78	25.77		
		CP QPSK	Edge_1RB_Left	24.00	23.87	23.85	23.96		
			Edge_1RB_Right	24.00	23.53	23.37	23.39		

		CP-16QAM	Outer_Full	23.50	22.86	22.55	22.61		
			Inner_Full	24.00	23.49	23.31	23.45		
			Edge_1RB_Left	25.00	24.46	24.44	24.57		
			Edge_1RB_Right	25.00	23.72	24.12	23.60		
			Outer_Full	24.00	23.51	23.65	23.37		
			Inner_Full	24.50	24.01	23.81	23.71		
		CP-64QAM	Edge_1RB_Left	23.00	22.80	22.82	22.97		
			Edge_1RB_Right	23.00	21.95	22.57	22.70		
			Outer_Full	22.00	21.73	22.25	22.47		
			Inner_Full	23.00	22.13	22.08	22.47		
		CP-256QAM	Edge_1RB_Left	21.00	20.58	20.57	20..71		
			Edge_1RB_Right	21.00	20.29	19.85	20.50		
			Outer_Full	20.50	19.75	19.30	19.72		
			Inner_Full	20.50	19.65	19.93	20.13		
		Band	Band Width	Modulation	RB Configuration	Tune-up	Channel/Frequency(MHz)		
							633333/3500	636666/3549.99	640000/3600
NR Band n78	100MHz	DFT-PI2BPSK	Edge_1RB_Left	26.00	/	25.77	/		
			Edge_1RB_Right	26.00	/	24.78	/		
			Outer_Full	25.50	/	24.25	/		
			Inner_Full	25.50	/	25.23	/		
		DFT QPSK	Edge_1RB_Left	26.00	/	25.82	/		
			Edge_1RB_Right	26.00	/	25.48	/		
			Outer_Full	25.00	/	24.56	/		
			Inner_Full	25.50	/	25.61	/		
		CP QPSK	Edge_1RB_Left	24.00	/	23.97	/		
			Edge_1RB_Right	24.00	/	23.19	/		
			Outer_Full	23.50	/	22.52	/		
			Inner_Full	24.00	/	23.42	/		
		CP-16QAM	Edge_1RB_Left	24.50	/	24.39	/		
			Edge_1RB_Right	24.50	/	23.70	/		
			Outer_Full	23.50	/	23.34	/		

			Inner_Full	24.00	/	23.96	/
		CP-64QAM	Edge_1RB_Left	23.00	/	22.87	/
			Edge_1RB_Right	23.00	/	22.22	/
			Outer_Full	22.00	/	21.91	/
			Inner_Full	22.50	/	22.17	/
		CP-256QAM	Edge_1RB_Left	21.00	/	20.60	/
			Edge_1RB_Right	21.00	/	19.83	/
			Outer_Full	19.50	/	18.91	/
			Inner_Full	20.00	/	20.00	/

7.3. WLAN & Bluetooth Output Power

7.3.1. Output Power Results Of WLAN

Mode	Channel	Frequency (MHz)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)
			Ant1		Ant2		MIMO	
802.11b	1	2412	17.50	16.85	16.50	16.23	N/A	N/A
	6	2437	17.50	17.09	16.50	16.19	N/A	N/A
	11	2462	17.50	16.84	16.50	16.26	N/A	N/A
802.11g	1	2412	15.50	15.06	14.50	14.32	N/A	N/A
	6	2437	15.50	15.13	14.50	14.37	N/A	N/A
	11	2462	15.50	15.05	14.50	14.36	N/A	N/A
802.11n HT20	1	2412	15.00	14.72	14.50	14.01	15.50	15.42
	6	2437	15.00	14.82	14.50	14.05	15.50	15.40
	11	2462	15.00	14.70	14.50	13.94	15.50	15.32
802.11n HT40	3	2422	15.50	15.17	14.50	14.23	16.00	15.69
	6	2437	15.50	15.17	14.50	14.24	16.00	15.57
	9	2452	15.50	14.93	14.50	14.34	16.00	15.49
802.11ax HT20	1	2412	15.50	14.86	14.50	14.29	16.00	15.55
	6	2437	15.50	15.06	14.50	14.17	16.00	15.70
	11	2462	15.50	14.93	14.50	14.13	16.00	15.60
802.11ax HT40	3	2422	15.00	14.84	14.00	13.99	15.50	15.24
	6	2437	15.00	14.88	14.00	13.96	15.50	15.18
	9	2452	15.00	14.72	14.00	14.00	15.50	15.20

NOTE: Power measurement results of WLAN 2.4G.

Mode	Channel	Frequency (MHz)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)
			Ant1		Ant2		MIMO	
802.11a	36	5180	16.50	15.80	15.50	15.39	N/A	N/A
	40	5200	16.50	16.18	15.50	15.30	N/A	N/A
	48	5240	16.50	16.45	15.50	15.11	N/A	N/A
802.11n HT20	36	5180	16.50	15.8	15.50	15.03	16.00	15.60
	40	5200	16.50	15.91	15.50	14.97	16.00	15.74
	48	5240	16.50	16.18	15.50	14.83	16.00	15.78
802.11n HT40	38	5190	17.00	16.19	15.50	15.37	16.50	16.07
	46	5230	17.00	16.53	15.50	15.20	16.50	16.18

802.11ac VHT20	36	5180	16.50	15.46	15.50	15.08	16.00	15.64
	40	5200	16.50	15.82	15.50	15.01	16.00	15.77
	48	5240	16.50	16.25	15.50	14.82	16.00	15.92
802.11ac VHT40	38	5190	17.00	16.15	15.50	15.35	16.50	16.01
	46	5230	17.00	16.6	15.50	15.20	16.50	16.22
802.11ac VHT80	42	5210	17.50	17.28	16.00	16.00	17.00	16.89
802.11ac VHT160	50	5250	17.50	17.42	16.50	16.11	17.50	17.18
802.11ax VHT20	36	5180	17.00	15.85	15.50	15.27	16.00	15.77
	40	5200	17.00	16.16	15.50	15.21	16.00	15.87
	48	5240	17.00	16.57	15.50	14.96	16.00	15.94
802.11ax VHT40	38	5190	16.50	15.8	15.00	14.95	17.00	15.6
	46	5230	16.50	16.19	15.00	14.84	17.00	15.65
802.11ax VHT80	42	5210	17.50	17.01	16.00	15.81	17.00	16.68
802.11ax VHT160	50	5250	17.50	17.48	16.50	16.15	17.50	17.15

NOTE: Power measurement results of WLAN 5.2G.

Mode	Channel	Frequency (MHz)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)
			Ant1		Ant2		MIMO	
802.11a	52	5260	16.50	16.48	15.50	15.19	N/A	N/A
	56	5280	16.50	16.31	15.50	15.26	N/A	N/A
	64	5320	16.50	16.46	15.50	15.46	N/A	N/A
802.11n HT20	52	5260	16.50	16.22	15.50	14.86	16.00	15.80
	56	5280	16.50	16.04	15.50	14.97	16.00	15.90
	64	5320	16.50	16.31	15.50	15.13	16.00	15.94
802.11n HT40	54	5270	17.00	16.58	15.50	15.20	16.50	16.14
	62	5310	17.00	16.82	15.50	15.36	16.50	16.25
802.11ac VHT20	52	5260	16.50	16.16	15.50	14.84	16.00	15.89
	56	5280	16.50	16.18	15.50	15.01	16.00	15.89
	64	5320	16.50	16.36	15.50	15.15	16.00	15.92
802.11ac VHT40	54	5270	17.00	16.64	15.50	15.25	16.50	16.1
	62	5310	17.00	16.65	15.50	15.38	16.50	16.17
802.11ac VHT80	58	5290	17.50	17.13	16.00	15.93	17.00	16.85
802.11ax VHT20	52	5260	16.50	16.20	15.50	15.02	16.50	15.91
	56	5280	16.50	16.21	15.50	15.11	16.50	16.11

	64	5320	16.50	16.45	15.50	15.29	16.50	16.17
802.11ax VHT40	54	5270	16.50	16.04	15.50	14.78	16.00	15.7
	62	5310	16.50	16.24	15.50	15.00	16.00	15.82
802.11ax VHT80	58	5290	17.50	17.02	16.00	15.71	17.00	16.71

NOTE: Power measurement results of WLAN 5.3G.

Mode	Channel	Frequency (MHz)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)
			Ant1		Ant2		MIMO	
802.11a	100	5500	16.00	15.78	15.00	14.55	N/A	N/A
	120	5600	16.00	15.42	15.00	14.20	N/A	N/A
	140	5700	16.00	15.64	15.00	14.52	N/A	N/A
802.11n20	100	5500	16.00	15.62	14.50	14.26	16.50	16.09
	120	5600	16.00	15.35	14.50	13.86	16.50	15.62
	140	5700	16.00	15.16	14.50	14.22	16.50	15.83
802.11n40	102	5510	16.50	16.07	15.00	14.55	16.50	16.40
	118	5590	16.50	15.66	15.00	14.27	16.50	16.02
	134	5670	16.50	15.74	15.00	14.49	16.50	16.20
802.11ac (VHT20)	100	5500	15.50	15.44	14.50	14.27	16.00	16.00
	120	5600	15.50	15.38	14.50	13.83	16.00	15.54
	140	5700	15.50	15.27	14.50	14.26	16.00	15.88
802.11ac (VHT40)	102	5510	16.00	15.88	15.00	14.54	16.50	16.29
	118	5590	16.00	15.68	15.00	14.27	16.50	16.03
	134	5670	16.00	15.52	15.00	14.49	16.50	16.29
802.11ac (VHT80)	106	5530	16.50	16.50	15.50	15.18	17.50	17.12
	122	5610	16.50	16.30	15.50	14.86	17.50	16.64
802.11ac VHT160	114	5570	17.00	16.76	15.50	15.25	17.50	17.20
802.11ax (VHT20)	100	5500	16.00	15.55	14.50	14.37	16.50	16.17
	120	5600	16.00	15.27	14.50	14.05	16.50	15.82
	140	5700	16.00	15.38	14.50	14.34	16.50	15.98
802.11ax (VHT40)	102	5510	16.00	15.60	14.50	14.10	16.00	15.97
	118	5590	16.00	15.29	14.50	13.84	16.00	15.65
	134	5670	16.00	15.31	14.50	14.06	16.00	15.88
802.11ax (VHT80)	106	5530	16.50	16.22	15.00	14.96	17.00	16.83
	122	5610	16.50	15.9	15.00	14.69	17.00	16.47
802.11ax VHT160	114	5570	17.00	16.88	15.50	15.32	17.50	17.22

NOTE: Power measurement results of WLAN 5.6G.

Mode	Channel	Frequency (MHz)	ANT 1		ANT 2		MIMO	
			Tune-up	Output Power (dBm)	Tune-up	Output Power (dBm)	Tune-up	Output Power (dBm)
802.11a	149	5745	15.00	14.25	15.00	14.67	N/A	N/A
	157	5785	15.00	14.29	15.00	14.33	N/A	N/A
	165	5825	15.00	14.72	15.00	14.48	N/A	N/A
802.11n HT20	149	5745	15.00	14.21	15.00	14.61	18.00	17.42
	157	5785	15.00	14.30	15.00	14.22	18.00	17.27
	165	5825	15.00	14.66	15.00	14.51	18.00	17.60
802.11n HT40	151	5755	13.00	12.78	14.00	13.07	16.00	15.94
	159	5795	13.00	12.93	14.00	12.77	16.00	15.86
802.11ac VHT20	149	5745	14.00	13.36	15.00	14.61	18.00	17.04
	157	5785	14.00	13.38	15.00	14.26	18.00	16.85
	165	5825	14.00	13.80	15.00	14.49	18.00	17.17
802.11ac VHT40	151	5755	13.00	12.74	14.00	13.03	16.00	15.90
	159	5795	13.00	12.91	14.00	12.72	16.00	15.83
802.11ac VHT80	155	5775	13.00	12.47	13.00	12.50	16.00	15.50

NOTE: Power measurement results of WLAN 5.8G.

7.3.2. Output Power Results Of Bluetooth

BLE	Output Power (dBm)				
	Data Rates	Tune-up (dBm)	Channel		
			0CH	19CH	39CH
	1M	4.5	4.06	3.47	3.63
	2M	4.5	4.26	3.67	3.81

BR+EDR	Output Power (dBm)				
	Data Rates	Tune-up (dBm)	Channel		
			0CH	39CH	78CH
	1M	8	7.91	7.26	7.33
	2M	7	6.17	5.53	5.60
	3M	7	6.36	5.68	5.77

7.4. Proximity Sensor Considerations

7.4.1. Proximity sensor triggering distances

LTE Band 2 20M QPSK(1,49) CH18900 Back Side	LTE Band 2 20M QPSK(1,49) CH18900 Right Side	LTE Band 2 20M QPSK(1,49) CH18900 Bottom Side
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Moved toward the phantom			Away from the phantom			Moved toward the phantom			Away from the phantom			Moved toward the phantom			Away from the phantom		
Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index
44	Inactive	4	0	Active	6	44	Inactive	4	0	Active	6	44	Inactive	4	0	Active	4
41	Inactive	4	3	Active	6	41	Inactive	4	3	Active	6	41	Inactive	4	3	Active	4
38	Inactive	4	6	Active	6	38	Inactive	4	6	Active	6	38	Inactive	4	6	Active	4
35	Inactive	4	9	Active	6	35	Inactive	4	9	Active	6	35	Inactive	4	9	Active	4
32	Inactive	4	10	Active	6	32	Inactive	4	10	Active	6	32	Inactive	4	10	Active	4
29	Active	6	13	Active	6	29	Inactive	4	13	Active	6	29	Inactive	4	13	Active	4
26	Active	6	16	Active	6	26	Inactive	4	16	Active	6	28	Inactive	4	16	Active	4
25	Active	6	17	Active	6	25	Inactive	4	17	Active	6	27	Inactive	4	19	Active	4
24	Active	6	18	Active	6	24	Inactive	4	18	Active	6	26	Inactive	4	20	Active	4
23	Active	6	19	Active	6	23	Inactive	4	19	Active	6	25	Active	6	21	Active	4
22	Active	6	20	Active	6	22	Inactive	4	20	Active	6	24	Active	6	22	Active	4
21	Active	6	21	Active	6	21	Inactive	4	21	Active	6	23	Active	6	23	Active	4
20	Active	6	22	Active	6	20	Active	6	22	Inactive	4	22	Active	6	24	Active	4
19	Active	6	23	Active	6	19	Active	6	23	Inactive	4	21	Active	6	25	Active	4
18	Active	6	24	Active	6	18	Active	6	24	Inactive	4	20	Active	6	26	Inactive	6
17	Active	6	25	Active	6	17	Active	6	25	Inactive	4	19	Active	6	27	Inactive	6
16	Active	6	26	Active	6	16	Active	6	26	Inactive	4	16	Active	6	28	Inactive	6
15	Active	6	27	Active	6	15	Active	6	27	Inactive	4	13	Active	6	29	Inactive	6
12	Active	6	30	Inactive	4	12	Active	6	30	Inactive	4	10	Active	6	30	Inactive	6
10	Active	6	33	Inactive	4	10	Active	6	33	Inactive	4	7	Active	6	33	Inactive	6
7	Active	6	36	Inactive	4	7	Active	6	36	Inactive	4	5	Active	6	36	Inactive	6
4	Active	6	39	Inactive	4	4	Active	6	39	Inactive	4	4	Active	6	39	Inactive	6
1	Active	6	42	Inactive	4	1	Active	6	42	Inactive	4	3	Active	6	42	Inactive	6
0	Active	6	45	Inactive	4	0	Active	6	45	Inactive	4	0	Active	6	45	Inactive	6

LTE Band 4 20M QPSK(1,0) CH20175 Front Side						LTE Band 4 20M QPSK(1,0) CH20175 Back Side						LTE Band 4 20M QPSK(1,0) CH20175 Right Side					
Moved toward the phantom			Away from the phantom			Moved toward the phantom			Away from the phantom			Moved toward the phantom			Away from the phantom		
Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index
44	Inactive	4	0	Active	6	44	Inactive	4	0	Active	6	44	Inactive	4	0	Active	4
41	Inactive	4	3	Active	6	41	Inactive	4	3	Active	6	41	Inactive	4	3	Active	4
38	Inactive	4	6	Active	6	38	Inactive	4	6	Active	6	38	Inactive	4	6	Active	4
35	Inactive	4	9	Active	6	35	Inactive	4	9	Active	6	35	Inactive	4	9	Active	4
32	Inactive	4	10	Active	6	32	Inactive	4	10	Active	6	32	Inactive	4	10	Active	4

29	Active	6	13	Active	6	29	Inactive	4	13	Active	6	29	Inactive	4	13	Active	4
26	Active	6	16	Active	6	26	Inactive	4	16	Active	6	28	Inactive	4	16	Active	4
25	Active	6	17	Active	6	25	Inactive	4	17	Active	6	27	Inactive	4	19	Active	4
24	Active	6	18	Active	6	24	Inactive	4	18	Active	6	26	Inactive	4	20	Active	4
23	Active	6	19	Active	6	23	Inactive	4	19	Active	6	25	Active	6	21	Active	4
22	Active	6	20	Active	6	22	Inactive	4	20	Active	6	24	Active	6	22	Active	4
21	Active	6	21	Active	6	21	Inactive	4	21	Active	6	23	Active	6	23	Active	4
20	Active	6	22	Active	6	20	Active	6	22	Inactive	4	22	Active	6	24	Active	4
19	Active	6	23	Active	6	19	Active	6	23	Inactive	4	21	Active	6	25	Active	4
18	Active	6	24	Active	6	18	Active	6	24	Inactive	4	20	Active	6	26	Inactive	6
17	Active	6	25	Active	6	17	Active	6	25	Inactive	4	19	Active	6	27	Inactive	6
16	Active	6	26	Active	6	16	Active	6	26	Inactive	4	16	Active	6	28	Inactive	6
15	Active	6	27	Active	6	15	Active	6	27	Inactive	4	13	Active	6	29	Inactive	6
12	Active	6	30	Inactive	4	12	Active	6	30	Inactive	4	10	Active	6	30	Inactive	6
10	Active	6	33	Inactive	4	10	Active	6	33	Inactive	4	7	Active	6	33	Inactive	6
7	Active	6	36	Inactive	4	7	Active	6	36	Inactive	4	5	Active	6	36	Inactive	6
4	Active	6	39	Inactive	4	4	Active	6	39	Inactive	4	4	Active	6	39	Inactive	6
1	Active	6	42	Inactive	4	1	Active	6	42	Inactive	4	3	Active	6	42	Inactive	6
0	Active	6	45	Inactive	4	0	Active	6	45	Inactive	4	0	Active	6	45	Inactive	6

LTE Band 25 20M QPSK(1,49) CH26365						LTE Band 25 20M QPSK(1,49) CH26365						LTE Band 25 20M QPSK(1,49) CH26365					
Front Side						Back Side						Right Side					
Moved toward the phantom			Away from the phantom			Moved toward the phantom			Away from the phantom			Moved toward the phantom			Away from the phantom		
Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index
44	Inactive	4	0	Active	6	44	Inactive	4	0	Active	6	44	Inactive	4	0	Active	4
41	Inactive	4	3	Active	6	41	Inactive	4	3	Active	6	41	Inactive	4	3	Active	4
38	Inactive	4	6	Active	6	38	Inactive	4	6	Active	6	38	Inactive	4	6	Active	4
35	Inactive	4	9	Active	6	35	Inactive	4	9	Active	6	35	Inactive	4	9	Active	4
32	Inactive	4	10	Active	6	32	Inactive	4	10	Active	6	32	Inactive	4	10	Active	4
29	Active	6	13	Active	6	29	Inactive	4	13	Active	6	29	Inactive	4	13	Active	4
26	Active	6	16	Active	6	26	Inactive	4	16	Active	6	28	Inactive	4	16	Active	4
25	Active	6	17	Active	6	25	Inactive	4	17	Active	6	27	Inactive	4	19	Active	4
24	Active	6	18	Active	6	24	Inactive	4	18	Active	6	26	Inactive	4	20	Active	4
23	Active	6	19	Active	6	23	Inactive	4	19	Active	6	25	Active	6	21	Active	4
22	Active	6	20	Active	6	22	Inactive	4	20	Active	6	24	Active	6	22	Active	4
21	Active	6	21	Active	6	21	Inactive	4	21	Active	6	23	Active	6	23	Active	4
20	Active	6	22	Active	6	20	Active	6	22	Inactive	4	22	Active	6	24	Active	4
19	Active	6	23	Active	6	19	Active	6	23	Inactive	4	21	Active	6	25	Active	4

18	Active	6	24	Active	6	18	Active	6	24	Inactive	4	20	Active	6	26	Inactive	6
17	Active	6	25	Active	6	17	Active	6	25	Inactive	4	19	Active	6	27	Inactive	6
16	Active	6	26	Active	6	16	Active	6	26	Inactive	4	16	Active	6	28	Inactive	6
15	Active	6	27	Active	6	15	Active	6	27	Inactive	4	13	Active	6	29	Inactive	6
12	Active	6	30	Inactive	4	12	Active	6	30	Inactive	4	10	Active	6	30	Inactive	6
10	Active	6	33	Inactive	4	10	Active	6	33	Inactive	4	7	Active	6	33	Inactive	6
7	Active	6	36	Inactive	4	7	Active	6	36	Inactive	4	5	Active	6	36	Inactive	6
4	Active	6	39	Inactive	4	4	Active	6	39	Inactive	4	4	Active	6	39	Inactive	6
1	Active	6	42	Inactive	4	1	Active	6	42	Inactive	4	3	Active	6	42	Inactive	6
0	Active	6	45	Inactive	4	0	Active	6	45	Inactive	4	0	Active	6	45	Inactive	6

NR n2 15k,DFT QPSK 20M Edge_1RB_Left CH376000						NR n2 15k,DFT QPSK 20M Edge_1RB_Left CH376000						NR n2 15k,DFT QPSK 20M Edge_1RB_Left CH376000					
Front Side						Back Side						Right Side					
Moved toward the phantom			Away from the phantom			Moved toward the phantom			Away from the phantom			Moved toward the phantom			Away from the phantom		
Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index
44	Inactive	4	0	Active	6	44	Inactive	4	0	Active	6	44	Inactive	4	0	Active	4
41	Inactive	4	3	Active	6	41	Inactive	4	3	Active	6	41	Inactive	4	3	Active	4
38	Inactive	4	6	Active	6	38	Inactive	4	6	Active	6	38	Inactive	4	6	Active	4
35	Inactive	4	9	Active	6	35	Inactive	4	9	Active	6	35	Inactive	4	9	Active	4
32	Inactive	4	10	Active	6	32	Inactive	4	10	Active	6	32	Inactive	4	10	Active	4
29	Active	6	13	Active	6	29	Inactive	4	13	Active	6	29	Inactive	4	13	Active	4
26	Active	6	16	Active	6	26	Inactive	4	16	Active	6	28	Inactive	4	16	Active	4
25	Active	6	17	Active	6	25	Inactive	4	17	Active	6	27	Inactive	4	19	Active	4
24	Active	6	18	Active	6	24	Inactive	4	18	Active	6	26	Inactive	4	20	Active	4
23	Active	6	19	Active	6	23	Inactive	4	19	Active	6	25	Active	6	21	Active	4
22	Active	6	20	Active	6	22	Inactive	4	20	Active	6	24	Active	6	22	Active	4
21	Active	6	21	Active	6	21	Inactive	4	21	Active	6	23	Active	6	23	Active	4
20	Active	6	22	Active	6	20	Active	6	22	Inactive	4	22	Active	6	24	Active	4
19	Active	6	23	Active	6	19	Active	6	23	Inactive	4	21	Active	6	25	Active	4
18	Active	6	24	Active	6	18	Active	6	24	Inactive	4	20	Active	6	26	Inactive	6
17	Active	6	25	Active	6	17	Active	6	25	Inactive	4	19	Active	6	27	Inactive	6
16	Active	6	26	Active	6	16	Active	6	26	Inactive	4	16	Active	6	28	Inactive	6
15	Active	6	27	Active	6	15	Active	6	27	Inactive	4	13	Active	6	29	Inactive	6
12	Active	6	30	Inactive	4	12	Active	6	30	Inactive	4	10	Active	6	30	Inactive	6
10	Active	6	33	Inactive	4	10	Active	6	33	Inactive	4	7	Active	6	33	Inactive	6
7	Active	6	36	Inactive	4	7	Active	6	36	Inactive	4	5	Active	6	36	Inactive	6
4	Active	6	39	Inactive	4	4	Active	6	39	Inactive	4	4	Active	6	39	Inactive	6
1	Active	6	42	Inactive	4	1	Active	6	42	Inactive	4	3	Active	6	42	Inactive	6

0	Active	6	45	Inactive	4	0	Active	6	45	Inactive	4	0	Active	6	45	Inactive	6
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NR n25 15k, DFT QPSK 20M Edge_1RB_Right CH 376500 Front Side						NR n25 15k, DFT QPSK 20M Edge_1RB_Right CH 376500 Back Side						NR n25 15k, DFT QPSK 20M Edge_1RB_Right CH 376500 Right Side					
Moved toward the phantom			Away from the phantom			Moved toward the phantom			Away from the phantom			Moved toward the phantom			Away from the phantom		
Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index	Gap (mm)	P sensor	Index
44	Inactive	4	0	Active	6	44	Inactive	4	0	Active	6	44	Inactive	4	0	Active	4
41	Inactive	4	3	Active	6	41	Inactive	4	3	Active	6	41	Inactive	4	3	Active	4
38	Inactive	4	6	Active	6	38	Inactive	4	6	Active	6	38	Inactive	4	6	Active	4
35	Inactive	4	9	Active	6	35	Inactive	4	9	Active	6	35	Inactive	4	9	Active	4
32	Inactive	4	10	Active	6	32	Inactive	4	10	Active	6	32	Inactive	4	10	Active	4
29	Active	6	13	Active	6	29	Inactive	4	13	Active	6	29	Inactive	4	13	Active	4
26	Active	6	16	Active	6	26	Inactive	4	16	Active	6	28	Inactive	4	16	Active	4
25	Active	6	17	Active	6	25	Inactive	4	17	Active	6	27	Inactive	4	19	Active	4
24	Active	6	18	Active	6	24	Inactive	4	18	Active	6	26	Inactive	4	20	Active	4
23	Active	6	19	Active	6	23	Inactive	4	19	Active	6	25	Active	6	21	Active	4
22	Active	6	20	Active	6	22	Inactive	4	20	Active	6	24	Active	6	22	Active	4
21	Active	6	21	Active	6	21	Inactive	4	21	Active	6	23	Active	6	23	Active	4
20	Active	6	22	Active	6	20	Active	6	22	Inactive	4	22	Active	6	24	Active	4
19	Active	6	23	Active	6	19	Active	6	23	Inactive	4	21	Active	6	25	Active	4
18	Active	6	24	Active	6	18	Active	6	24	Inactive	4	20	Active	6	26	Inactive	6
17	Active	6	25	Active	6	17	Active	6	25	Inactive	4	19	Active	6	27	Inactive	6
16	Active	6	26	Active	6	16	Active	6	26	Inactive	4	16	Active	6	28	Inactive	6
15	Active	6	27	Active	6	15	Active	6	27	Inactive	4	13	Active	6	29	Inactive	6
12	Active	6	30	Inactive	4	12	Active	6	30	Inactive	4	10	Active	6	30	Inactive	6
10	Active	6	33	Inactive	4	10	Active	6	33	Inactive	4	7	Active	6	33	Inactive	6
7	Active	6	36	Inactive	4	7	Active	6	36	Inactive	4	5	Active	6	36	Inactive	6
4	Active	6	39	Inactive	4	4	Active	6	39	Inactive	4	4	Active	6	39	Inactive	6
1	Active	6	42	Inactive	4	1	Active	6	42	Inactive	4	3	Active	6	42	Inactive	6
0	Active	6	45	Inactive	4	0	Active	6	45	Inactive	4	0	Active	6	45	Inactive	6

7.4.2. Proximity sensor coverage range

The WWAN antenna and sensor are collocated.

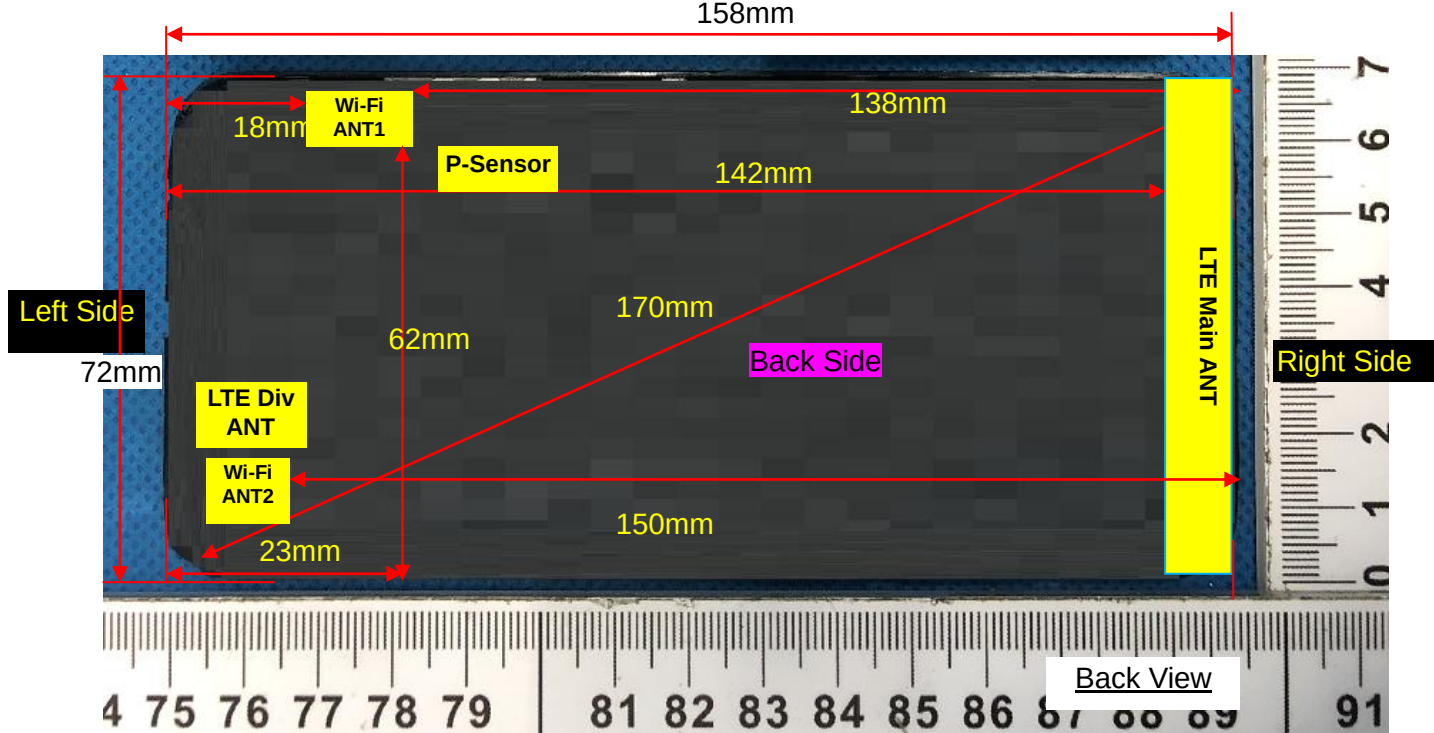
7.4.3. EUT tilt angle influences to proximity sensor triggering

LTE Band 2 20M QPSK(1,49) CH18900			LTE Band 4 20M QPSK(1,0) CH20175			LTE Band 25 20M QPSK(1,49) CH26365		
Right side vertical to phantom with Gap(20mm)			Right side vertical to phantom with Gap(20mm)			Right side vertical to phantom with Gap(20mm)		
Tilt angle (°)	P sensor	Index	Tilt angle (°)	P sensor	Index	Tilt angle (°)	P sensor	Index
0	Active	6	0	Active	6	0	Active	6
10	Active	6	-10	Active	6	10	Active	6
20	Active	6	-20	Active	6	20	Active	6
30	Active	6	-30	Active	6	30	Active	6
40	Active	6	-40	Active	6	40	Active	6
45	Active	6	-45	Active	6	45	Active	6

8. Antenna Location

Bottom Side

158mm



Top Side

Distance of the Antenna to the EUT surface/edge						
Antennas	Front Side	Back Side	Left Side	Right Side	Top Side	Bottom Side
WWAN Main	≤ 25mm	≤ 25mm	≤ 25mm	≤ 25mm	≤ 25mm	≤ 25mm
WLAN 1	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	>25mm
WLAN 2	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	>25mm	>25mm
Positions for SAR tests						
Antennas	Front Side	Back Side	Left Side	Right Side	Top Side	Bottom Side
WWAN Main	Yes	Yes	Yes	Yes	Yes	Yes
WLAN 1	Yes	Yes	Yes	NO	Yes	NO
WLAN 2	Yes	Yes	NO	Yes	NO	NO

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:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where:

- $f_{(\text{GHz})}$ 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	P _{max} (dBm)	P _{max} (mW)	Distance (mm)	f (GHz)	Calculation Result	SAR Exclusion threshold	SAR test exclusion
Bluetooth	8.00	6.31	5	2.480	1.987	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:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f_{\text{(GHz)}}} / x]$ W/kg for test separation distances $\leq 50\text{mm}$, where $x = 7.5$ for 1-g SAR and $x = 18.75$ for 10-g SAR.

When the minimum test separation distance is $< 5\text{ mm}$, a distance of 5 mm is applied to determine SAR test exclusion.

Mode	Position	P _{max} (dBm)	P _{max} (mW)	Distance (mm)	f (GHz)	x	Estimated SAR (W/Kg)
Bluetooth	Body	8	6.31	10	2.48	7.5	0.132
Bluetooth	Hotspot	8	6.31	10	2.48	7.5	0.132

10. NOTE: Estimated SAR calculation for Bluetooth

11. SAR Results

11.1. SAR measurement results

11.1.1. SAR measurement Result of LTE Band 2

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					1g	10g					
1RB											
Front Side	18900/1880	20M QPSK(1,49)	10	Inactive	0.547	0.268	3.87	23.97	24.50	0.618	2024/10/16
Back Side	18900/1880	20M QPSK(1,49)	10	Active	0.619	0.351	-0.70	10.00	10.00	0.619	2024/10/16
Back Side	18900/1880	20M QPSK(1,49)	29	Inactive	0.278	0.135	-0.15	23.97	24.50	0.314	2024/10/16
Left Side	18900/1880	20M QPSK(1,49)	10	Inactive	0.029	0.014	-1.18	23.97	24.50	0.033	2024/10/16
Right Side	18900/1880	20M QPSK(1,49)	10	Active	0.396	0.222	1.25	10.00	10.00	0.396	2024/10/16
Right Side	18900/1880	20M QPSK(1,49)	21	Inactive	0.116	0.054	-0.77	23.97	24.50	0.131	2024/10/16
Bottom Side	18900/1880	20M QPSK(1,49)	10	Active	0.618	0.350	-2.16	10.00	10.00	0.618	2024/10/16
Bottom Side	18900/1880	20M QPSK(1,49)	27	Inactive	0.118	0.054	3.35	23.97	24.50	0.133	2024/10/16
50%RB											
Front Side	18900/1880	20M QPSK(50,0)	10	Inactive	0.492	0.245	4.43	21.32	21.50	0.513	2024/10/16
Back Side	18900/1880	20M QPSK(50,0)	10	Active	0.559	0.301	-1.21	7.35	7.35	0.559	2024/10/16
Back Side	18900/1880	20M QPSK(50,0)	29	Inactive	0.251	0.126	-0.6	21.32	21.50	0.262	2024/10/16
Left Side	18900/1880	20M QPSK(50,0)	10	Inactive	0.025	0.012	-2.1	21.32	21.50	0.026	2024/10/16
Right Side	18900/1880	20M QPSK(50,0)	10	Active	0.348	0.193	1.79	7.35	7.35	0.348	2024/10/16
Right Side	18900/1880	20M QPSK(50,0)	21	Inactive	0.105	0.05	2.28	21.32	21.50	0.109	2024/10/16
Bottom	18900/1880	20M	10	Active	0.545	0.321	-4.84	7.35	7.35	0.545	2024/10/16

Side		QPSK(50,0)									
Bottom Side	18900/1880	20M QPSK(50,0)	27	Inactive	0.107	0.047	-1.88	21.32	21.50	0.112	2024/10/16

NOTE: Hotspot SAR test results of LTE Band 2

11.1.2. SAR measurement Result of LTE Band 4

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					1g	10g					
1RB											
Front Side	20175/1732.5	20M QPSK(1,99)	10	Inactive	0.486	0.247	2.72	24.49	25.00	0.547	2024/10/22
Back Side	20175/1732.5	20M QPSK(1,99)	10	Active	0.629	0.368	-1.34	10.00	10.00	0.629	2024/10/22
Back Side	20175/1732.5	20M QPSK(1,99)	29	Inactive	0.236	0.119	-1.12	24.49	25.00	0.265	2024/10/22
Left Side	20175/1732.5	20M QPSK(1,99)	10	Inactive	0.314	0.142	2.33	24.49	25.00	0.353	2024/10/22
Right Side	20175/1732.5	20M QPSK(1,99)	10	Active	0.512	0.225	-3.57	10.00	10.00	0.512	2024/10/22
Right Side	20175/1732.5	20M QPSK(1,99)	21	Inactive	0.231	0.115	-0.78	24.49	25.00	0.260	2024/10/22
Bottom Side	20175/1732.5	20M QPSK(1,99)	10	Active	0.563	0.238	3.74	10.00	10.00	0.563	2024/10/22
Bottom Side	20175/1732.5	20M QPSK(1,99)	27	Inactive	0.209	0.104	-1.69	24.49	25.00	0.235	2024/10/22
50%RB											
Front Side	20175/1732.5	20M QPSK(50,49)	10	Inactive	0.281	0.13	-4.26	21.96	22.00	0.284	2024/10/22
Back Side	20175/1732.5	20M QPSK(50,49)	10	Active	0.348	0.213	0.15	7.47	7.47	0.351	2024/10/22
Back Side	20175/1732.5	20M QPSK(50,49)	29	Inactive	0.129	0.067	-1.82	21.96	22.00	0.130	2024/10/22
Left Side	20175/1732.5	20M QPSK(50,49)	10	Inactive	0.186	0.076	-1.98	21.96	22.00	0.188	2024/10/22
Right Side	20175/1732.5	20M QPSK(50,49)	10	Active	0.167	0.074	4.31	7.47	7.47	0.169	2024/10/22
Right Side	20175/1732.5	20M QPSK(50,49)	21	Inactive	0.266	0.132	2.45	21.96	22.00	0.268	2024/10/22

Bottom Side	20175/1732.5	20M QPSK(50,49)	10	Active	0.334	0.134	0.43	7.47	7.47	0.337	2024/10/22
Bottom Side	20175/1732.5	20M QPSK(50,49)	27	Inactive	0.114	0.058	0.85	21.96	22.00	0.115	2024/10/22

NOTE: Hotspot SAR test results of LTE Band 4

11.1.3. SAR measurement Result of LTE Band 5

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value		Power Drift (±5%)	Conducted power (dBm)	Tune-u p power (dBm)	Scaled	Date
					(W/kg)					SAR	
					1g	10g				1g (W/Kg)	
1RB											
Front Side	20525/836.5	10M QPSK(1,24)	10	N/A	0.072	0.046	-0.91	24.57	25.00	0.079	2024/10/15
Back Side	20525/836.5	10M QPSK(1,24)	10	N/A	0.116	0.078	-0.21	24.57	25.00	0.128	2024/10/15
Left Side	20525/836.5	10M QPSK(1,24)	10	N/A	0.052	0.034	1.43	24.57	25.00	0.057	2024/10/15
Right Side	20525/836.5	10M QPSK(1,24)	10	N/A	0.084	0.054	3.46	24.57	25.00	0.093	2024/10/15
Bottom Side	20525/836.5	10M QPSK(1,24)	10	N/A	0.014	0.012	-3.78	24.57	25.00	0.015	2024/10/15
50%RB											
Front Side	20525/836.5	10M QPSK(25,0)	10	N/A	0.037	0.026	2.12	21.78	22.00	0.039	2024/10/15
Back Side	20525/836.5	10M QPSK(25,0)	10	N/A	0.059	0.041	-2.83	21.78	22.00	0.062	2024/10/15
Left Side	20525/836.5	10M QPSK(25,0)	10	N/A	0.029	0.019	-4.72	21.78	22.00	0.031	2024/10/15
Right Side	20525/836.5	10M QPSK(25,0)	10	N/A	0.044	0.031	-4.05	21.78	22.00	0.046	2024/10/15
Bottom Side	20525/836.5	10M QPSK(25,0)	10	N/A	0.008	0.007	0.85	21.78	22.00	0.008	2024/10/15

NOTE: Hotspot SAR test results of LTE Band 5

11.1.4. SAR measurement Result of LTE Band 7

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					1g	10g					

										)	
1RB											
Front Side	21100/2535	20M QPSK(1,49)	10	N/A	0.498	0.241	2.23	23.25	23.50	0.528	2024/10/17
Back Side	21100/2535	20M QPSK(1,49)	10	N/A	0.712	0.404	0.52	23.25	23.50	0.754	2024/10/17
Left Side	21100/2535	20M QPSK(1,49)	10	N/A	0.249	0.122	-1.92	23.25	23.50	0.264	2024/10/17
Right Side	21100/2535	20M QPSK(1,49)	10	N/A	0.588	0.294	-3.22	23.25	23.50	0.623	2024/10/17
Bottom Side	21100/2535	20M QPSK(1,49)	10	N/A	0.405	0.196	-0.38	23.25	23.50	0.429	2024/10/17
50%RB											
Front Side	21100/2535	20M QPSK(50,0)	10	N/A	0.142	0.072	-0.14	21.15	21.50	0.154	2024/10/17
Back Side	21100/2535	20M QPSK(50,0)	10	N/A	0.422	0.238	4.03	21.15	21.50	0.457	2024/10/17
Left Side	21100/2535	20M QPSK(50,0)	10	N/A	0.132	0.063	-0.8	21.15	21.50	0.143	2024/10/17
Right Side	21100/2535	20M QPSK(50,0)	10	N/A	0.309	0.157	-1.52	21.15	21.50	0.335	2024/10/17
Bottom Side	21100/2535	20M QPSK(50,0)	10	N/A	0.212	0.11	3.93	21.15	21.50	0.230	2024/10/17

11.1.5. SAR measurement Result of LTE Band 12

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					(W/kg)						
					1g	10g					
1RB											
Front Side	23095/707.5	10M QPSK(1,0)	10	N/A	0.066	0.049	3.72	24.52	25.00	0.074	2024/10/14
Back Side	23095/707.5	10M QPSK(1,0)	10	N/A	0.101	0.075	0.35	24.52	25.00	0.113	2024/10/14
Left Side	23095/707.5	10M QPSK(1,0)	10	N/A	0.094	0.070	-2.90	24.52	25.00	0.105	2024/10/14
Right Side	23095/707.5	10M QPSK(1,0)	10	N/A	0.066	0.047	0.12	24.52	25.00	0.074	2024/10/14
Bottom	23095/707.5	10M	10	N/A	0.011	0.009	-1.04	24.52	25.00	0.012	2024/10/14

Side		QPSK(1,0)									
50%RB											
Front Side	23095/707.5	10M QPSK(25,0)	10	N/A	0.036	0.027	-0.95	21.60	22.00	0.039	2024/10/14
Back Side	23095/707.5	10M QPSK(25,0)	10	N/A	0.059	0.043	2.65	21.60	22.00	0.065	2024/10/14
Left Side	23095/707.5	10M QPSK(25,0)	10	N/A	0.049	0.041	4.51	21.60	22.00	0.054	2024/10/14
Right Side	23095/707.5	10M QPSK(25,0)	10	N/A	0.037	0.025	-3.48	21.60	22.00	0.041	2024/10/14
Bottom Side	23095/707.5	10M QPSK(25,0)	10	N/A	0.006	0.005	1.29	21.60	22.00	0.007	2024/10/14

NOTE: Hotspot SAR test results of LTE Band 12

11.1.6. SAR measurement Result of LTE Band 13

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					1g	10g					
1RB											
Front Side	23230/782	10M QPSK(1,0)	10	N/A	0.154	0.122	3.96	23.00	23.00	0.154	2024/10/14
Back Side	23230/782	10M QPSK(1,0)	10	N/A	0.181	0.146	0.33	23.00	23.00	0.181	2024/10/14
Left Side	23230/782	10M QPSK(1,0)	10	N/A	0.100	0.077	-0.87	23.00	23.00	0.100	2024/10/14
Right Side	23230/782	10M QPSK(1,0)	10	N/A	0.132	0.104	3.65	23.00	23.00	0.132	2024/10/14
Bottom Side	23230/782	10M QPSK(1,0)	10	N/A	0.020	0.018	-1.81	23.00	23.00	0.020	2024/10/14
50%RB											
Front Side	23230/782	10M QPSK(25,0)	10	N/A	0.138	0.111	-1.41	21.96	22.00	0.139	2024/10/14
Back Side	23230/782	10M QPSK(25,0)	10	N/A	0.169	0.124	-0.24	21.96	22.00	0.171	2024/10/14
Left Side	23230/782	10M QPSK(25,0)	10	N/A	0.091	0.072	-0.91	21.96	22.00	0.092	2024/10/14
Right Side	23230/782	10M QPSK(25,0)	10	N/A	0.112	0.097	0.56	21.96	22.00	0.113	2024/10/14
Bottom	23230/782	10M	10	N/A	0.018	0.016	-0.64	21.96	22.00	0.018	2024/10/14

Side		QPSK(25,0)									
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NOTE: Hotspot SAR test results of LTE Band 13

11.1.7. SAR measurement Result of LTE Band 14

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					1g	10g					
1RB											
Front Side	23330/793	10M QPSK(1,24)	10	N/A	0.245	0.209	1.58	24.47	24.50	0.247	2024/10/15
Back Side	23330/793	10M QPSK(1,24)	10	N/A	0.336	0.290	-0.48	24.47	24.50	0.338	2024/10/15
Left Side	23330/793	10M QPSK(1,24)	10	N/A	0.216	0.181	1.52	24.47	24.50	0.217	2024/10/15
Right Side	23330/793	10M QPSK(1,24)	10	N/A	0.245	0.209	-3.24	24.47	24.50	0.247	2024/10/15
Bottom Side	23330/793	10M QPSK(1,24)	10	N/A	0.035	0.030	3.25	24.47	24.50	0.035	2024/10/15
50%RB											
Front Side	23330/793	10M QPSK(25,12)	10	N/A	0.133	0.117	1.82	21.72	22.00	0.142	2024/10/15
Back Side	23330/793	10M QPSK(25,12)	10	N/A	0.182	0.149	0.45	21.72	22.00	0.194	2024/10/15
Left Side	23330/793	10M QPSK(25,12)	10	N/A	0.128	0.101	3.45	21.72	22.00	0.137	2024/10/15
Right Side	23330/793	10M QPSK(25,12)	10	N/A	0.136	0.111	1.82	21.72	22.00	0.145	2024/10/15
Bottom Side	23330/793	10M QPSK(25,12)	10	N/A	0.018	0.015	-0.08	21.72	22.00	0.019	2024/10/15

11.1.8. SAR measurement Result of LTE Band 17

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					1g	10g					
1RB											
Front Side	23790/710	10M QPSK(1,24)	10	N/A	0.077	0.054	3.42	24.17	24.50	0.083	2024/10/14
Back Side	23790/710	10M QPSK(1,24)	10	N/A	0.107	0.078	0.82	24.17	24.50	0.115	2024/10/14

Left Side	23790/710	10M QPSK(1,24)	10	N/A	0.066	0.048	2.91	24.17	24.50	0.071	2024/10/14
Right Side	23790/710	10M QPSK(1,24)	10	N/A	0.113	0.080	0.45	24.17	24.50	0.122	2024/10/14
Bottom Side	23790/710	10M QPSK(1,24)	10	N/A	0.036	0.026	-0.14	24.17	24.50	0.039	2024/10/14
50%RB											
Front Side	23790/710	10M QPSK(25,12)	10	N/A	0.046	0.027	4.12	21.52	22.00	0.051	2024/10/14
Back Side	23790/710	10M QPSK(25,12)	10	N/A	0.055	0.041	4.62	21.52	22.00	0.061	2024/10/14
Left Side	23790/710	10M QPSK(25,12)	10	N/A	0.035	0.025	-2.83	21.52	22.00	0.039	2024/10/14
Right Side	23790/710	10M QPSK(25,12)	10	N/A	0.068	0.047	-4.69	21.52	22.00	0.076	2024/10/14
Bottom Side	23790/710	10M QPSK(25,12)	10	N/A	0.02	0.015	-0.23	21.52	22.00	0.022	2024/10/14

NOTE: Hotspot SAR test results of LTE Band 17

11.1.9. SAR measurement Result of LTE Band 25

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					(W/kg)						
					1g	10g					
1RB											
Front Side	26365/1882.5	20M QPSK(1,49)	10	Inactive	0.512	0.253	-0.54	24.41	25.00	0.587	2024/10/16
Back Side	26365/1882.5	20M QPSK(1,49)	10	Active	0.404	0.177	4.46	10.00	10.00	0.404	2024/10/16
Back Side	26365/1882.5	20M QPSK(1,49)	29	Inactive	0.315	0.152	0.00	24.41	25.00	0.361	2024/10/16
Left Side	26365/1882.5	20M QPSK(1,49)	10	Inactive	0.612	0.315	2.48	24.41	25.00	0.701	2024/10/16
Right Side	26365/1882.5	20M QPSK(1,49)	10	Active	0.341	0.152	1.06	10.00	10.00	0.341	2024/10/16
Right Side	26365/1882.5	20M QPSK(1,49)	21	Inactive	0.132	0.055	-0.71	24.41	25.00	0.151	2024/10/16
Bottom Side	26365/1882.5	20M QPSK(1,49)	10	Active	0.390	0.187	1.47	10.00	10.00	0.390	2024/10/16
Bottom	26365/1882.5	20M	27	Inactive	0.378	0.164	-1.42	24.41	25.00	0.433	2024/10/16

Side		QPSK(1,49)									
50%RB											
Front Side	26365/1882.5	20M QPSK(25,0)	10	Inactive	0.277	0.142	4.12	21.88	22.00	0.285	2024/10/16
Back Side	26365/1882.5	20M QPSK(25,0)	10	Active	0.068	0.03	1.45	7.47	7.47	0.070	2024/10/16
Back Side	26365/1882.5	20M QPSK(25,0)	29	Inactive	0.218	0.098	-1.26	21.88	22.00	0.224	2024/10/16
Left Side	26365/1882.5	20M QPSK(25,0)	10	Inactive	0.336	0.169	-4.23	21.88	22.00	0.345	2024/10/16
Right Side	26365/1882.5	20M QPSK(25,0)	10	Active	0.187	0.08	1.64	7.47	7.47	0.192	2024/10/16
Right Side	26365/1882.5	20M QPSK(25,0)	21	Inactive	0.077	0.033	-0.65	21.88	22.00	0.079	2024/10/16
Bottom Side	26365/1882.5	20M QPSK(25,0)	10	Active	0.224	0.103	4.36	7.47	7.47	0.230	2024/10/16
Bottom Side	26365/1882.5	20M QPSK(25,0)	27	Inactive	0.216	0.086	3.9	21.88	22.00	0.222	2024/10/16

NOTE: Hotspot SAR test results of LTE Band 25

11.1.10. SAR measurement Result of LTE Band 26A

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					1g	10g					
1RB											
Front Side	26740/819	10M QPSK(1,0)	10	N/A	0.066	0.045	-1.35	24.48	24.50	0.066	2024/10/15
Back Side	26740/819	10M QPSK(1,0)	10	N/A	0.092	0.063	0.91	24.48	24.50	0.092	2024/10/15
Left Side	26740/819	10M QPSK(1,0)	10	N/A	0.114	0.077	2.66	24.48	24.50	0.115	2024/10/15
Right Side	26740/819	10M QPSK(1,0)	10	N/A	0.072	0.048	3.34	24.48	24.50	0.072	2024/10/15
Bottom Side	26740/819	10M QPSK(1,0)	10	N/A	0.042	0.028	1.18	24.48	24.50	0.042	2024/10/15
50%RB											
Front Side	26915/836.5	1.4M QPSK(3,0)	10	N/A	0.036	0.026	-0.58	21.79	22.00	0.038	2024/10/15

Front Side	26740/819	10M QPSK(25,12)	10	N/A	0.046	0.034	-2.84	21.79	22.00	0.048	2024/10/15
Back Side	26740/819	10M QPSK(25,12)	10	N/A	0.063	0.046	0.09	21.79	22.00	0.066	2024/10/15
Left Side	26740/819	10M QPSK(25,12)	10	N/A	0.039	0.026	1.78	21.79	22.00	0.041	2024/10/15
Right Side	26740/819	10M QPSK(25,12)	10	N/A	0.023	0.016	-3.92	21.79	22.00	0.024	2024/10/15

NOTE: Hotspot SAR test results of LTE Band 26A

11.1.11. SAR measurement Result of LTE Band 26B

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					1g	10g					
1RB											
Front Side	26740/819	10M QPSK(1,0)	10	N/A	0.066	0.045	-1.35	24.48	24.50	0.066	2024/10/15
Back Side	26740/819	10M QPSK(1,0)	10	N/A	0.092	0.063	0.91	24.48	24.50	0.092	2024/10/15
Left Side	26740/819	10M QPSK(1,0)	10	N/A	0.114	0.077	2.66	24.48	24.50	0.115	2024/10/15
Right Side	26740/819	10M QPSK(1,0)	10	N/A	0.072	0.048	3.34	24.48	24.50	0.072	2024/10/15
Bottom Side	26740/819	10M QPSK(1,0)	10	N/A	0.042	0.028	1.18	24.48	24.50	0.042	2024/10/15

50%RB											
Front Side	26915/836.5	10M QPSK(25,12)	10	N/A	0.036	0.026	-0.58	21.79	22.00	0.038	2024/10/15
Front Side	26740/819	10M QPSK(25,12)	10	N/A	0.046	0.034	-2.84	21.79	22.00	0.048	2024/10/15
Back Side	26740/819	10M QPSK(25,12)	10	N/A	0.063	0.046	0.09	21.79	22.00	0.066	2024/10/15
Left Side	26740/819	10M QPSK(25,12)	10	N/A	0.039	0.026	1.78	21.79	22.00	0.041	2024/10/15
Right Side	26740/819	10M QPSK(25,12)	10	N/A	0.023	0.016	-3.92	21.79	22.00	0.024	2024/10/15

NOTE: Hotspot SAR test results of LTE Band 26B

11.1.12. SAR measurement Result of LTE Band 38

Test	Test	Test Mode	Test	P-sensor	SAR Value	Power	Conducted	Tune-up	Scaled	Date
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Position of Hotspot	channel /Freq.		separation distance (mm)		(W/kg)		Drift (±5%)	power (dBm)	power (dBm)	SAR 1g (W/Kg)	
					1g	10g					
1RB											
Front Side	38000/2595	20M QPSK(1,0)	10	N/A	0.186	0.091	-2.32	22.99	23.00	0.186	2024/10/17
Back Side	38000/2595	20M QPSK(1,0)	10	N/A	0.285	0.146	0.72	22.99	23.00	0.286	2024/10/17
Left Side	38000/2595	20M QPSK(1,0)	10	N/A	0.099	0.050	3.82	22.99	23.00	0.099	2024/10/17
Right Side	38000/2595	20M QPSK(1,0)	10	N/A	0.090	0.044	2.12	22.99	23.00	0.090	2024/10/17
Bottom Side	38000/2595	20M QPSK(1,0)	10	N/A	0.160	0.081	-3.58	22.99	23.00	0.160	2024/10/17
50%RB											
Front Side	38000/2595	20M QPSK(50,0)	10	N/A	0.101	0.05	-4.25	20.76	21.00	0.107	2024/10/17
Back Side	38000/2595	20M QPSK(50,0)	10	N/A	0.147	0.077	-0.96	20.76	21.00	0.155	2024/10/17
Left Side	38000/2595	20M QPSK(50,0)	10	N/A	0.059	0.027	-0.46	20.76	21.00	0.062	2024/10/17
Right Side	38000/2595	20M QPSK(50,0)	10	N/A	0.053	0.024	1.67	20.76	21.00	0.056	2024/10/17
Bottom Side	38000/2595	20M QPSK(50,0)	10	N/A	0.095	0.043	-0.43	20.76	21.00	0.100	2024/10/17

NOTE: Hotspot SAR test results of LTE Band 38

11.1.13. SAR measurement Result of LTE Band 41

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					(W/kg)						
					1g	10g					
1RB											
Front Side	40620/2593	20M QPSK(1,0)	10	N/A	0.192	0.093	-3.78	25.65	26.00	0.208	2024/10/17
Back Side	40620/2593	20M QPSK(1,0)	10	N/A	0.302	0.153	0.70	25.65	26.00	0.327	2024/10/17
Left Side	40620/2593	20M QPSK(1,0)	10	N/A	0.105	0.051	-2.72	25.65	26.00	0.114	2024/10/17

Right Side	40620/2593	20M QPSK(1,0)	10	N/A	0.093	0.045	0.24	25.65	26.00	0.101	2024/10/17
Bottom Side	40620/2593	20M QPSK(1,0)	10	N/A	0.170	0.085	1.61	25.65	26.00	0.184	2024/10/17
50%RB											
Front Side	40620/2593	20M QPSK(50,0)	10	N/A	0.165	0.079	-0.5	24.68	25.00	0.178	2024/10/17
Back Side	40620/2593	20M QPSK(50,0)	10	N/A	0.265	0.144	3.74	24.68	25.00	0.285	2024/10/17
Left Side	40620/2593	20M QPSK(50,0)	10	N/A	0.097	0.044	4.63	24.68	25.00	0.104	2024/10/17
Right Side	40620/2593	20M QPSK(50,0)	10	N/A	0.085	0.04	-3.64	24.68	25.00	0.091	2024/10/17
Bottom Side	40620/2593	20M QPSK(50,0)	10	N/A	0.145	0.075	-4.52	24.68	25.00	0.156	2024/10/17

NOTE: Hotspot SAR test results of LTE Band 41

11.1.14. SAR measurement Result of LTE Band 66

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					1g	10g					
1RB											
Front Side	132322/1745	20M QPSK(1,99)	10	N/A	0.162	0.099	-2.88	24.41	25.00	0.186	2024/10/22
Back Side	132322/1745	20M QPSK(1,99)	10	N/A	0.524	0.320	-2.40	24.41	25.00	0.600	2024/10/22
Left Side	132322/1745	20M QPSK(1,99)	10	N/A	0.053	0.031	1.44	24.41	25.00	0.061	2024/10/22
Right Side	132322/1745	20M QPSK(1,99)	10	N/A	0.159	0.097	-0.03	24.41	25.00	0.182	2024/10/22
Bottom Side	132322/1745	20M QPSK(1,99)	10	N/A	0.199	0.119	0.84	24.41	25.00	0.228	2024/10/22
50%RB											
Front Side	132322/1745	20M QPSK(50,0)	10	N/A	0.087	0.054	-1.36	21.89	22.00	0.089	2024/10/22
Back Side	132322/1745	20M QPSK(50,0)	10	N/A	0.311	0.179	-4.56	21.89	22.00	0.319	2024/10/22
Left Side	132322/1745	20M QPSK(50,0)	10	N/A	0.029	0.018	0.45	21.89	22.00	0.030	2024/10/22

Right Side	132322/1745	20M QPSK(50,0)	10	N/A	0.083	0.052	1.45	21.89	22.00	0.085	2024/10/22
Bottom Side	132322/1745	20M QPSK(50,0)	10	N/A	0.114	0.062	1.12	21.89	22.00	0.117	2024/10/22

NOTE: Hotspot SAR test results of LTE Band 66

11.1.15. SAR measurement Result of LTE Band 71

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					1g	10g					
1RB											
Front Side	133322/683	20M QPSK(1,0)	10	N/A	0.090	0.069	3.55	24.48	25.00	0.101	2024/10/14
Back Side	133322/683	20M QPSK(1,0)	10	N/A	0.104	0.081	-0.26	24.48	25.00	0.117	2024/10/14
Left Side	133322/683	20M QPSK(1,0)	10	N/A	0.103	0.079	-3.61	24.48	25.00	0.116	2024/10/14
Right Side	133322/683	20M QPSK(1,0)	10	N/A	0.090	0.069	-2.19	24.48	25.00	0.101	2024/10/14
Bottom Side	133322/683	20M QPSK(1,0)	10	N/A	0.011	0.009	-2.18	24.48	25.00	0.012	2024/10/14
50%RB											
Front Side	133322/683	20M QPSK(50,0)	10	N/A	0.049	0.038	4.34	21.56	22.00	0.054	2024/10/14
Back Side	133322/683	20M QPSK(50,0)	10	N/A	0.062	0.043	4.8	21.56	22.00	0.069	2024/10/14
Left Side	133322/683	20M QPSK(50,0)	10	N/A	0.052	0.041	4.19	21.56	22.00	0.058	2024/10/14
Right Side	133322/683	20M QPSK(50,0)	10	N/A	0.049	0.04	-2.63	21.56	22.00	0.054	2024/10/14
Bottom Side	133322/683	20M QPSK(50,0)	10	N/A	0.006	0.005	-4	21.56	22.00	0.007	2024/10/14

11.1.16. SAR measurement Result of NR n2

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					(W/kg)						
					1g	10g					
1RB											
Front Side	376000/1880	15k,DFT QPSK 20M Edge_1RB_Left	10	Inactive	0.412	0.202	-0.22	22.64	23.00	0.448	2024/10/16
Back Side	376000/1880	15k,DFT QPSK 20M Edge_1RB_Left	10	Active	0.387	0.152	-1.92	10.00	10.00	0.387	2024/10/16
Back Side	376000/1880	15k,DFT QPSK 20M Edge_1RB_Left	29	Inactive	0.314	0.153	0.00	22.64	23.00	0.341	2024/10/16
Left Side	376000/1880	15k,DFT QPSK 20M Edge_1RB_Left	10	Inactive	0.521	0.219	1.66	22.64	23.00	0.566	2024/10/16
Right Side	376000/1880	15k,DFT QPSK 20M Edge_1RB_Left	10	Active	0.441	0.235	-0.25	10.00	10.00	0.441	2024/10/16
Right Side	376000/1880	15k,DFT QPSK 20M Edge_1RB_Left	21	Inactive	0.268	0.131	3.33	22.64	23.00	0.291	2024/10/16
Bottom Side	376000/1880	15k,DFT QPSK 20M Edge_1RB_Left	10	Active	0.365	0.187	-0.54	10.00	10.00	0.365	2024/10/16
Bottom Side	376000/1880	15k,DFT QPSK 20M Edge_1RB_Left	27	Inactive	0.326	0.157	1.16	22.64	23.00	0.354	2024/10/16
50%RB											
Front Side	376000/1880	15k, DFT QPSK 20M Inner_Full	10	Inactive	0.39	0.173	4.56	22.41	23.00	0.447	2024/10/16
Back Side	376000/1880	15k, DFT QPSK 20M Inner_Full	10	Active	0.341	0.139	3.62	9.77	9.77	0.341	2024/10/16
Back Side	376000/1880	15k, DFT QPSK 20M Inner_Full	29	Inactive	0.279	0.141	3.78	22.41	23.00	0.320	2024/10/16
Left Side	376000/1880	15k, DFT QPSK 20M Inner_Full	10	Inactive	0.471	0.192	-3.7	22.41	23.00	0.540	2024/10/16

Right Side	376000/1880	15k, DFT QPSK 20M Inner_Full	10	Active	0.379	0.218	4.6	9.77	9.77	0.379	2024/10/16
Right Side	376000/1880	15k, DFT QPSK 20M Inner_Full	21	Inactive	0.231	0.122	3.56	22.41	23.00	0.265	2024/10/16
Bottom Side	376000/1880	15k, DFT QPSK 20M Inner_Full	10	Active	0.344	0.169	-3.67	9.77	9.77	0.344	2024/10/16
Bottom Side	376000/1880	15k, DFT QPSK 20M Inner_Full	27	Inactive	0.284	0.136	3.76	22.41	23.00	0.325	2024/10/16

11.1.17. SAR measurement Result of NR n5

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					(W/kg)						
					1g	10g					
1RB											
Front Side	167300/836.5	15k, DFT QPSK 20M Edge_1RB_Right	10	N/A	0.192	0.101	0.74	23.24	23.50	0.204	2024/10/15
Back Side	167300/836.5	15k, DFT QPSK 20M Edge_1RB_Right	10	N/A	0.273	0.148	0.13	23.24	23.50	0.290	2024/10/15
Left Side	167300/836.5	15k, DFT QPSK 20M Edge_1RB_Right	10	N/A	0.090	0.047	-1.45	23.24	23.50	0.096	2024/10/15
Right Side	167300/836.5	15k, DFT QPSK 20M Edge_1RB_Right	10	N/A	0.090	0.049	-2.92	23.24	23.50	0.096	2024/10/15
Bottom Side	167300/836.5	15k, DFT QPSK 20M Edge_1RB_Right	10	N/A	0.140	0.073	0.1	23.24	23.50	0.149	2024/10/15
50%RB											
Front Side	167300/836.5	15k, DFT QPSK 20M Inner_Full	10	N/A	0.175	0.087	-0.38	23.23	23.50	0.186	0.175
Back Side	167300/836.5	15k, DFT QPSK 20M Inner_Full	10	N/A	0.244	0.129	2.21	23.23	23.50	0.260	0.244
Left Side	167300/836.5	15k, DFT QPSK 20M Inner_Full	10	N/A	0.079	0.042	3.36	23.23	23.50	0.084	0.079
Right Side	167300/836.5	15k, DFT QPSK 20M Inner_Full	10	N/A	0.085	0.045	-2.58	23.23	23.50	0.090	0.085

Bottom Side	167300/836.5	15k, DFT QPSK 20M Inner_Full	10	N/A	0.132	0.066	-3.29	23.23	23.50	0.140	0.132
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11.1.18. SAR measurement Result of NR n7

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					1g	10g					

1RB

Front Side	507000/2535	15k, DFT QPSK 20M Edge_1RB_Right	10	N/A	0.366	0.200	1.36	23.85	24.00	0.379	2024/10/17
Back Side	507000/2535	15k, DFT QPSK 20M Edge_1RB_Right	10	N/A	0.591	0.336	0.00	23.85	24.00	0.612	2024/10/17
Left Side	507000/2535	15k, DFT QPSK 20M Edge_1RB_Right	10	N/A	0.183	0.101	-0.48	23.85	24.00	0.189	2024/10/17
Right Side	507000/2535	15k, DFT QPSK 20M Edge_1RB_Right	10	N/A	0.192	0.105	1.71	23.85	24.00	0.199	2024/10/17
Bottom Side	507000/2535	15k, DFT QPSK 20M Edge_1RB_Right	10	N/A	0.305	0.170	-3.85	23.85	24.00	0.316	2024/10/17

50%RB

Front Side	507000/2535	15k, DFT QPSK 20M Inner_Full	10	N/A	0.316	0.181	0.31	23.72	24.00	0.337	2024/10/17
Back Side	507000/2535	15k, DFT QPSK 20M Inner_Full	10	N/A	0.505	0.318	-2.46	23.72	24.00	0.539	2024/10/17
Left Side	507000/2535	15k, DFT QPSK 20M Inner_Full	10	N/A	0.16	0.089	0.87	23.72	24.00	0.171	2024/10/17
Right Side	507000/2535	15k, DFT QPSK 20M Inner_Full	10	N/A	0.168	0.093	-3.36	23.72	24.00	0.179	2024/10/17
Bottom Side	507000/2535	15k, DFT QPSK 20M Inner_Full	10	N/A	0.287	0.153	-2.35	23.72	24.00	0.306	2024/10/17

11.1.19. SAR measurement Result of NR n12

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					1g	10g					

1RB											
Front Side	141500/707.5	15k, DFT QPSK 15M Edge_1RB_Right	10	N/A	0.150	0.088	-3.92	24.83	25.00	0.156	2024/10/14
Back Side	141500/707.5	15k, DFT QPSK 15M Edge_1RB_Right	10	N/A	0.222	0.135	-3.55	24.83	25.00	0.231	2024/10/14
Left Side	141500/707.5	15k, DFT QPSK 15M Edge_1RB_Right	10	N/A	0.081	0.047	2.64	24.83	25.00	0.084	2024/10/14
Right Side	141500/707.5	15k, DFT QPSK 15M Edge_1RB_Right	10	N/A	0.075	0.044	1.44	24.83	25.00	0.078	2024/10/14
Bottom Side	141500/707.5	15k, DFT QPSK 15M Edge_1RB_Right	10	N/A	0.135	0.079	1.84	24.83	25.00	0.140	2024/10/14
50%RB											
Front Side	141500/707.5	15k, DFT QPSK 15M Inner_Full	10	N/A	0.136	0.076	0.76	24.37	25.00	0.157	2024/10/14
Back Side	141500/707.5	15k, DFT QPSK 15M Inner_Full	10	N/A	0.21	0.127	-0.18	24.37	25.00	0.243	2024/10/14
Left Side	141500/707.5	15k, DFT QPSK 15M Inner_Full	10	N/A	0.073	0.041	1.17	24.37	25.00	0.084	2024/10/14
Right Side	141500/707.5	15k, DFT QPSK 15M Inner_Full	10	N/A	0.069	0.039	1.11	24.37	25.00	0.080	2024/10/14
Bottom Side	141500/707.5	15k, DFT QPSK 15M Inner_Full	10	N/A	0.118	0.072	-4.49	24.37	25.00	0.136	2024/10/14
11.1.20. SAR measurement Result of NR n25											
Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					1g	10g					
1RB											
Front Side	376500/1882.5	15k, DFT QPSK 20M Edge_1RB_Right	10	Inactive	0.512	0.251	-1.97	22.68	23.00	0.551	2024/10/16
Back Side	376500/1882.5	15k, DFT QPSK 20M Edge_1RB_Right	10	Active	0.513	0.228	2.07	22.68	23.00	0.552	2024/10/16

Back Side	376500/1882.5	15k, DFT QPSK 20M Edge_1RB_Right	29	Inactive	0.406	0.202	0.00	10.00	10.00	0.406	2024/10/16
Left Side	376500/1882.5	15k, DFT QPSK 20M Edge_1RB_Right	10	Inactive	0.536	0.322	2.41	22.68	23.00	0.577	2024/10/16
Right Side	376500/1882.5	15k, DFT QPSK 20M Edge_1RB_Right	10	Active	0.422	0.210	3.21	10.00	10.00	0.422	2024/10/16
Right Side	376500/1882.5	15k, DFT QPSK 20M Edge_1RB_Right	21	Inactive	0.356	0.171	-2.34	22.68	23.00	0.383	2024/10/16
Bottom Side	376500/1882.5	15k, DFT QPSK 20M Edge_1RB_Right	10	Active	0.403	0.196	-3.2	10.00	10.00	0.403	2024/10/16
Bottom Side	376500/1882.5	15k, DFT QPSK 20M Edge_1RB_Right	27	Inactive	0.371	0.182	-1.99	22.68	23.00	0.399	2024/10/16

50%RB

Front Side	376500/1882.5	15k, DFT QPSK 20M Inner_Full	10	Inactive	0.472	0.226	2.66	22.57	23.00	0.472	2024/10/16
Back Side	376500/1882.5	15k, DFT QPSK 20M Inner_Full	10	Active	0.463	0.198	-0.29	22.57	23.00	0.463	2024/10/16
Back Side	376500/1882.5	15k, DFT QPSK 20M Inner_Full	29	Inactive	0.38	0.177	1.17	10.00	10.00	0.38	2024/10/16
Left Side	376500/1882.5	15k, DFT QPSK 20M Inner_Full	10	Inactive	0.489	0.287	-4.69	22.57	23.00	0.489	2024/10/16
Right Side	376500/1882.5	15k, DFT QPSK 20M Inner_Full	10	Active	0.383	0.183	-2.51	10.00	10.00	0.383	2024/10/16
Right Side	376500/1882.5	15k, DFT QPSK 20M Inner_Full	21	Inactive	0.334	0.157	-3.89	22.57	23.00	0.334	2024/10/16
Bottom Side	376500/1882.5	15k, DFT QPSK 20M Inner_Full	10	Active	0.357	0.175	2.38	10.00	10.00	0.357	2024/10/16
Bottom Side	376500/1882.5	15k, DFT QPSK 20M Inner_Full	27	Inactive	0.345	0.171	-4.74	22.57	23.00	0.345	2024/10/16

11.1.21. SAR measurement Result of NR n41

Test Position of Hotsp	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					1g	10g					

ot											
1RB											
Front Side	518598/2592. 99	30k, DFT QPSK 100M Edge_1RB_Right	10	N/A	0.108	0.055	-0.1	26.41	26.50	0.110	2024/10/17
Back Side	518598/2592. 99	30k, DFT QPSK 100M Edge_1RB_Right	10	N/A	0.159	0.082	-1.45	26.41	26.50	0.162	2024/10/17
Left Side	518598/2592. 99	30k, DFT QPSK 100M Edge_1RB_Right	10	N/A	0.054	0.027	-2.01	26.41	26.50	0.055	2024/10/17
Right Side	518598/2592. 99	30k, DFT QPSK 100M Edge_1RB_Right	10	N/A	0.048	0.025	-2.33	26.41	26.50	0.049	2024/10/17
Botto m Side	518598/2592. 99	30k, DFT QPSK 100M Edge_1RB_Right	10	N/A	0.085	0.043	3.82	26.41	26.50	0.087	2024/10/17
50%RB											
Front Side	518598/2592. 99	30k, DFT QPSK 1000M Inner_Full	10	N/A	0.1	0.051	3.67	25.95	26.00	0.101	2024/10/17
Back Side	518598/2592. 99	30k, DFT QPSK 1000M Inner_Full	10	N/A	0.146	0.075	4.12	25.95	26.00	0.148	2024/10/17
Left Side	518598/2592. 99	30k, DFT QPSK 1000M Inner_Full	10	N/A	0.05	0.025	-1.68	25.95	26.00	0.051	2024/10/17
Right Side	518598/2592. 99	30k, DFT QPSK 1000M Inner_Full	10	N/A	0.044	0.022	-0.3	25.95	26.00	0.045	2024/10/17
Botto m Side	518598/2592. 99	30k, DFT QPSK 1000M Inner_Full	10	N/A	0.075	0.037	-2.22	25.95	26.00	0.076	2024/10/17

11.1.22. SAR measurement Result of NR n66

Test Positi on of Hotsp ot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					(W/kg)						
					1g	10g					
1RB											
Front Side	349000/1745	15k, DFT QPSK 40M Edge_1RB_Left	10	N/A	0.366	0.136	-2.83	23.41	23.50	0.374	2024/10/22

Back Side	349000/1745	15k, DFT QPSK 40M Edge_1RB_Left	10	N/A	0.574	0.213	-1.16	23.41	23.50	0.586	2024/10/22
Left Side	349000/1745	15k, DFT QPSK 40M Edge_1RB_Left	10	N/A	0.183	0.065	2.53	23.41	23.50	0.187	2024/10/22
Right Side	349000/1745	15k, DFT QPSK 40M Edge_1RB_Left	10	N/A	0.183	0.068	-3.86	23.41	23.50	0.187	2024/10/22
Bottom Side	349000/1745	15k, DFT QPSK 40M Edge_1RB_Left	10	N/A	0.305	0.113	1.98	23.41	23.50	0.311	2024/10/22

50%RB

Front Side	349000/1745	15k, DFT QPSK 40M Inner_Full	10	N/A	0.315	0.128	3.9	22.42	22.50	0.321	2024/10/22
Back Side	349000/1745	15k, DFT QPSK 40M Inner_Full	10	N/A	0.512	0.194	2.68	22.42	22.50	0.522	2024/10/22
Left Side	349000/1745	15k, DFT QPSK 40M Inner_Full	10	N/A	0.156	0.057	-2.56	22.42	22.50	0.159	2024/10/22
Right Side	349000/1745	15k, DFT QPSK 40M Inner_Full	10	N/A	0.157	0.059	-3.49	22.42	22.50	0.160	2024/10/22
Bottom Side	349000/1745	15k, DFT QPSK 40M Inner_Full	10	N/A	0.278	0.105	-3.05	22.42	22.50	0.283	2024/10/22

11.1.23. SAR measurement Result of NR n77

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					(W/kg)						
					1g	10g					
1RB											
Front Side	636666/3549.99	30k, DFT QPSK 100M Edge_1RB_Left	10	N/A	0.143	0.057	-3.85	22.30	22.50	0.150	2024/10/20
Back Side	636666/3549.99	30k, DFT QPSK 100M Edge_1RB_Left	10	N/A	0.476	0.201	1.40	22.30	22.50	0.498	2024/10/20
Left Side	636666/3549.99	30k, DFT QPSK 100M Edge_1RB_Left	10	N/A	0.057	0.023	-1.19	22.30	22.50	0.060	2024/10/20

Right Side	636666/3549 .99	30k, DFT QPSK 100M Edge_1RB_Left	10	N/A	0.043	0.018	-3.49	22.30	22.50	0.045	2024/10/20
Top Side	636666/3549 .99	30k, DFT QPSK 100M Edge_1RB_Left	10	N/A	0.357	0.149	-0.72	22.30	22.50	0.374	2024/10/20
50%RB											
Front Side	636666/3549 .99	30k, DFT QPSK 100M Inner_Full	10	N/A	0.126	0.051	3.82	21.37	21.50	0.130	2024/10/20
Back Side	636666/3549 .99	30k, DFT QPSK 100M Inner_Full	10	N/A	0.449	0.177	2.67	21.37	21.50	0.463	2024/10/20
Left Side	636666/3549 .99	30k, DFT QPSK 100M Inner_Full	10	N/A	0.049	0.021	4.68	21.37	21.50	0.050	2024/10/20
Right Side	636666/3549 .99	30k, DFT QPSK 100M Inner_Full	10	N/A	0.037	0.017	-4.38	21.37	21.50	0.038	2024/10/20
Bottom Side	636666/3549 .99	30k, DFT QPSK 100M Inner_Full	10	N/A	0.332	0.137	-2.36	21.37	21.50	0.342	2024/10/20

11.1.24. SAR measurement Result of NR n78

Test Positi on of Hotsp ot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					(W/kg)						
					1g	10g					
1RB											
Front Side	636666/3549 .99	30k, DFT QPSK 50M Edge_1RB_Right	10	N/A	0.384	0.177	-3.85	25.82	26.00	0.400	2024/10/19
Back Side	636666/3549 .99	30k, DFT QPSK 50M Edge_1RB_Right	10	N/A	0.569	0.284	1.40	25.82	26.00	0.593	2024/10/19
Left Side	636666/3549 .99	30k, DFT QPSK 50M Edge_1RB_Right	10	N/A	0.192	0.086	-1.19	25.82	26.00	0.200	2024/10/19
Right Side	636666/3549 .99	30k, DFT QPSK 50M Edge_1RB_Right	10	N/A	0.186	0.082	-3.49	25.82	26.00	0.194	2024/10/19
Botto m	636666/3549 .99	30k, DFT QPSK 50M	10	N/A	0.320	0.146	-0.72	25.82	26.00	0.334	2024/10/19

Side		Edge_1RB_Right									
50%RB											
Front Side	636666/3549 .99	30k, DFT QPSK 30M Inner_Full	10	N/A	0.338	0.158	1.69	25.45	25.50	0.342	2024/10/19
Back Side	636666/3549 .99	30k, DFT QPSK 30M Inner_Full	10	N/A	0.458	0.267	-4.71	25.45	25.50	0.463	2024/10/19
Left Side	636666/3549 .99	30k, DFT QPSK 30M Inner_Full	10	N/A	0.181	0.075	-3.49	25.45	25.50	0.183	2024/10/19
Right Side	636666/3549 .99	30k, DFT QPSK 30M Inner_Full	10	N/A	0.173	0.078	2.35	25.45	25.50	0.175	2024/10/19
Bottom Side	636666/3549 .99	30k, DFT QPSK 30M Inner_Full	10	N/A	0.279	0.138	2.71	25.45	25.50	0.282	2024/10/19

11.1.25. SAR measurement Result of WLAN 2.4G

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					1g	10g					
MIMO											
Front Side	6/2437	802.11 n(HT20)	10	N/A	0.084	0.045	2.84	15.70	16.00	0.090	2024/10/23
Back Side	6/2437	802.11 n(HT20)	10	N/A	0.126	0.068	4.62	15.70	16.00	0.135	2024/10/23
Right Side	6/2437	802.11 n(HT20)	10	N/A	0.045	0.021	3.69	15.70	16.00	0.048	2024/10/23
Left Side	6/2437	802.11 n(HT20)	10	N/A	0.054	0.023	2.93	15.70	16.00	0.058	2024/10/23
Top Side	6/2437	802.11 n(HT20)	10	N/A	0.048	0.025	-0.92	15.70	16.00	0.051	2024/10/23
ANT 1											
Front Side	6/2437	802.11 b	10	N/A	0.078	0.041	1.51	17.09	17.50	0.086	2024/10/23
Back Side	6/2437	802.11 b	10	N/A	0.096	0.052	2.67	17.09	17.50	0.106	2024/10/23
Left Side	6/2437	802.11 b	10	N/A	0.039	0.021	0.88	17.09	17.50	0.043	2024/10/23
Top Side	6/2437	802.11 b	10	N/A	0.033	0.017	3.58	17.09	17.50	0.036	2024/10/23
ANT 2											
Front	6/2437	802.11 b	10	N/A	0.048	0.028	1.53	16.19	16.50	0.052	2024/10/23

Side											
Back Side	6/2437	802.11 b	10	N/A	0.065	0.040	1.73	16.19	16.50	0.070	2024/10/23
Left Side	6/2437	802.11 b	10	N/A	0.024	0.014	-1.38	16.19	16.50	0.026	2024/10/23
Bottom Side	6/2437	802.11 b	10	N/A	0.027	0.016	-2.42	16.19	16.50	0.029	2024/10/23

NOTE: Hotspot SAR test results of WLAN 2.4G

11.1.26. SAR measurement Result of WLAN 5.2G

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					1g	10g					
MIMO											
Front Side	50/5250	802.11ax VHT160	10	N/A	0.208	0.093	-0.23	17.15	17.50	0.225	2024/10/24
Back Side	50/5250	802.11ax VHT160	10	N/A	0.214	0.149	-0.91	17.15	17.50	0.232	2024/10/24
Left Side	50/5250	802.11ax VHT160	10	N/A	0.157	0.058	2.62	17.15	17.50	0.170	2024/10/24
Right Side	50/5250	802.11ax VHT160	10	N/A	0.138	0.047	-1.99	17.15	17.50	0.150	2024/10/24
Top Side	50/5250	802.11ax VHT160	10	N/A	0.135	0.045	-0.29	17.15	17.50	0.146	2024/10/24
ANT 1											
Front Side	50/5250	802.11ax VHT160	10	N/A	0.132	0.054	-1.01	17.48	17.50	0.133	2024/10/24
Back Side	50/5250	802.11ax VHT160	10	N/A	0.207	0.089	1.34	17.48	17.50	0.208	2024/10/24
Left Side	50/5250	802.11ax VHT160	10	N/A	0.069	0.028	3.45	17.48	17.50	0.069	2024/10/24
Top Side	50/5250	802.11ax VHT160	10	N/A	0.075	0.031	3.74	17.48	17.50	0.075	2024/10/24
ANT 2											
Front Side	50/5250	802.11ax VHT160	10	N/A	0.084	0.043	-3.53	16.15	16.50	0.091	2024/10/24
Back Side	50/5250	802.11ax VHT160	10	N/A	0.117	0.062	-2.38	16.15	16.50	0.127	2024/10/24
Right Side	50/5250	802.11ax VHT160	10	N/A	0.039	0.020	-1.59	16.15	16.50	0.042	2024/10/24
Top Side	50/5250	802.11ax VHT160	10	N/A	0.036	0.018	-3.8	16.15	16.50	0.039	2024/10/24

VHT160

NOTE: Hotspot SAR test results of WLAN 5.2G

11.1.27. SAR measurement Result of WLAN 5.3G

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					1g	10g					
MIMO											
Front Side	58/5290	802.11ax VHT80	10	N/A	0.146	0.087	-3.07	16.71	17.00	0.156	2024/10/25
Back Side	58/5290	802.11ax VHT80	10	N/A	0.185	0.140	-1.77	16.71	17.00	0.198	2024/10/25
Right Side	58/5290	802.11ax VHT80	10	N/A	0.120	0.043	3.85	16.71	17.00	0.128	2024/10/25
Top Side	58/5290	802.11ax VHT80	10	N/A	0.117	0.040	3.88	16.71	17.00	0.125	2024/10/25
ANT 1											
Front Side	58/5290	802.11ax VHT80	10	N/A	0.126	0.058	0.22	17.02	17.50	0.141	2024/10/25
Back Side	58/5290	802.11ax VHT80	10	N/A	0.188	0.086	3.03	17.02	17.50	0.210	2024/10/25
Right Side	58/5290	802.11ax VHT80	10	N/A	0.063	0.028	-1.99	17.02	17.50	0.070	2024/10/25
Top Side	58/5290	802.11ax VHT80	10	N/A	0.066	0.030	-3.15	17.02	17.50	0.074	2024/10/25
ANT 2											
Front Side	114/5570	802.11ax VHT160	10	N/A	0.096	0.052	2.23	15.71	16.00	0.103	2024/10/25
Back Side	114/5570	802.11ax VHT160	10	N/A	0.114	0.064	3.95	15.71	16.00	0.122	2024/10/25
Right Side	114/5570	802.11ax VHT160	10	N/A	0.039	0.021	-2.96	15.71	16.00	0.042	2024/10/25
Top Side	114/5570	802.11ax VHT160	10	N/A	0.048	0.026	-0.27	15.71	16.00	0.051	2024/10/25

NOTE: Hotspot SAR test results of WLAN 5.3G

11.1.28. SAR measurement Result of WLAN 5.6G

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

Hotspot			(mm)								
MIMO											
Front Side	114/5570	802.11ax VHT160	10	N/A	0.138	0.062	-1.87	17.22	17.50	0.147	2024/10/12
Back Side	114/5570	802.11ax VHT160	10	N/A	0.193	0.087	-2.23	17.22	17.50	0.206	2024/10/12
Right Side	114/5570	802.11ax VHT160	10	N/A	0.063	0.028	0.37	17.22	17.50	0.067	2024/10/12
Top Side	114/5570	802.11ax VHT160	10	N/A	0.069	0.030	3.33	17.22	17.50	0.074	2024/10/12
ANT 1											
Front Side	114/5570	802.11ax VHT160	10	N/A	0.096	0.051	0.48	16.88	17.00	0.099	2024/10/12
Back Side	114/5570	802.11ax VHT160	10	N/A	0.150	0.080	-0.68	16.88	17.00	0.154	2024/10/12
Left Side	114/5570	802.11ax VHT160	10	N/A	0.054	0.029	0.72	16.88	17.00	0.056	2024/10/12
Top Side	114/5570	802.11ax VHT160	10	N/A	0.060	0.031	-0.54	16.88	17.00	0.062	2024/10/12
ANT 2											
Front Side	114/5570	802.11ax VHT160	10	N/A	0.078	0.051	-2.97	15.32	15.50	0.081	2024/10/12
Back Side	114/5570	802.11ax VHT160	10	N/A	0.114	0.075	1.75	15.32	15.50	0.119	2024/10/12
Right Side	114/5570	802.11ax VHT160	10	N/A	0.048	0.030	0.86	15.32	15.50	0.050	2024/10/12
Top Side	114/5570	802.11ax VHT160	10	N/A	0.036	0.024	1.89	15.32	15.50	0.038	2024/10/12

NOTE: Hotspot SAR test results of WLAN 5.6G

11.1.29. SAR measurement Result of WLAN 5.8G

Test Position of Hotspot	Test channel /Freq.	Test Mode	Test separation distance (mm)	P-sensor	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
					1g	10g					
					MIMO						
Front Side	157/5785	802.11 n(HT20)	10	N/A	0.162	0.062	-0.33	16.59	17.00	0.178	2024/10/26
Back Side	157/5785	802.11 n(HT20)	10	N/A	0.204	0.106	4.88	16.59	17.00	0.224	2024/10/26
Left Side	157/5785	802.11	10	N/A	0.090	0.034	3.69	16.59	17.00	0.099	2024/10/26

		n(HT20)									
Top Side	157/5785	802.11 n(HT20)	10	N/A	0.081	0.032	0.76	16.59	17.00	0.089	2024/10/26
ANT 1											
Front Side	155/5775	802.11ac VHT80	10	N/A	0.084	0.039	-1.51	16.05	16.50	0.093	2024/10/26
Back Side	155/5775	802.11ac VHT80	10	N/A	0.135	0.064	-0.17	16.05	16.50	0.150	2024/10/26
Left Side	155/5775	802.11ac VHT80	10	N/A	0.051	0.023	-1.29	16.05	16.50	0.057	2024/10/26
Top Side	155/5775	802.11ac VHT80	10	N/A	0.042	0.019	-1.3	16.05	16.50	0.047	2024/10/26
ANT 2											
Front Side	157/5785	802.11ax VHT80	10	N/A	0.084	0.054	-3.71	14.73	15.00	0.089	2024/10/26
Back Side	157/5785	802.11ax VHT80	10	N/A	0.109	0.071	-0.91	14.73	15.00	0.116	2024/10/26
Right Side	157/5785	802.11ax VHT80	10	N/A	0.045	0.029	-2.23	14.73	15.00	0.048	2024/10/26
Top Side	157/5785	802.11ax VHT80	10	N/A	0.045	0.028	-3.96	14.73	15.00	0.048	2024/10/26

NOTE: Hotspot SAR test results of WLAN 5.8G

11.2. SAR Summation Scenario

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

- Scalar SAR summation $< 1.6\text{W/kg}$.
- $\text{SPLSR} = (\text{SAR}_1 + \text{SAR}_2)^{1.5} / (\text{min. separation distance, mm})$, 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 $\text{SPLSR} \leq 0.04$, simultaneously transmission SAR measurement is not necessary.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		WWAN	DTS			
Hotspot	Front Side	0.618	0.090	0.708	N/A	N/A
	Back Side	0.754	0.135	0.889	N/A	N/A
	Left Side	0.353	0.048	0.401	N/A	N/A
	Right Side	0.523	0.058	0.581	N/A	N/A
	Top Side	0.374	0.051	0.425	N/A	N/A
	Bottom Side	0.618	N/A	0.618	N/A	N/A

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		WWAN	NII			
Hotspot	Front Side	0.618	0.225	0.843	N/A	N/A
	Back Side	0.754	0.232	0.986	N/A	N/A
	Left Side	0.353	0.170	0.523	N/A	N/A
	Right Side	0.523	0.150	0.673	N/A	N/A
	Top Side	0.374	0.146	0.52	N/A	N/A
	Bottom Side	0.618	N/A	0.618	N/A	N/A

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		WWAN	DSS			
Hotspot	Front Side	0.618	0.132	0.75	N/A	N/A
	Back Side	0.754	0.132	0.886	N/A	N/A
	Left Side	0.353	0.132	0.485	N/A	N/A
	Right Side	0.523	0.132	0.655	N/A	N/A
	Top Side	0.374	0.132	0.506	N/A	N/A
	Bottom Side	0.618	N/A	0.618	N/A	N/A

NSA

Test Position		Scaled SAR _{MAX}			Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 7	NR n78	DTS			
Hotspot	Front Side	0.528	0.400	0.090	1.018	N/A	N/A
	Back Side	0.754	0.593	0.135	1.482	N/A	N/A
	Left Side	0.264	0.200	0.048	0.512	N/A	N/A
	Right Side	0.623	0.194	0.058	0.875	N/A	N/A
	Top Side	N/A	0.334	0.051	0.385	N/A	N/A
	Bottom Side	0.528	N/A	N/A	0.528	N/A	N/A

12. Appendix A. Photo documentation

Refer to appendix Test Setup photo---SAR

13. Appendix B. System Check Plots

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MEASUREMENT 5 System Performance Check - SID2450 - Body
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MEASUREMENT 11 System Performance Check - SID5400 - Body
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MEASUREMENT 13 System Performance Check - SID5800 - Body

MEASUREMENT 1

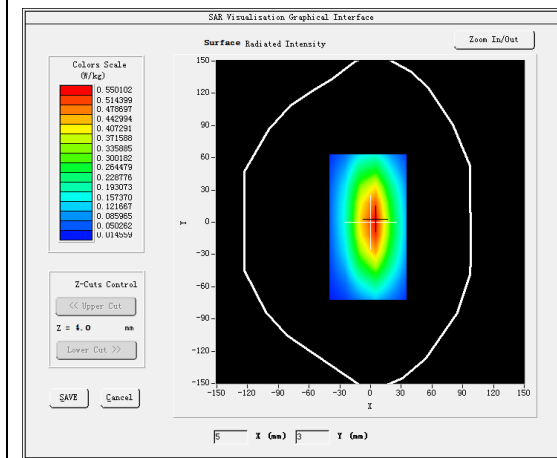
A. Experimental conditions.

<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>CW750</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>2.42</u>

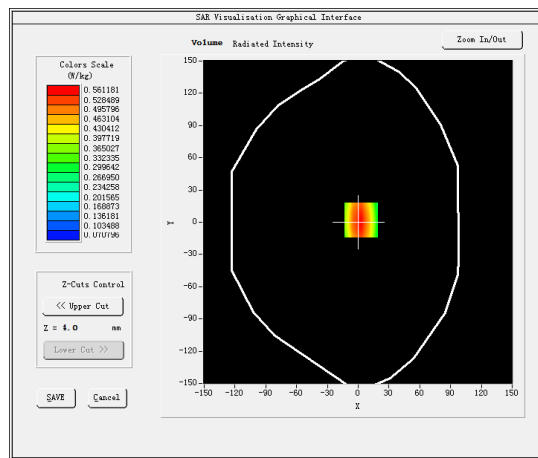
B. SAR Measurement Results

Frequency (MHz)	750.000000
Relative permittivity (real part)	40.536882
Relative permittivity (imaginary part)	21.543746
Conductivity (S/m)	0.897656
Variation (%)	-0.690000

SURFACE SAR



VOLUME SAR

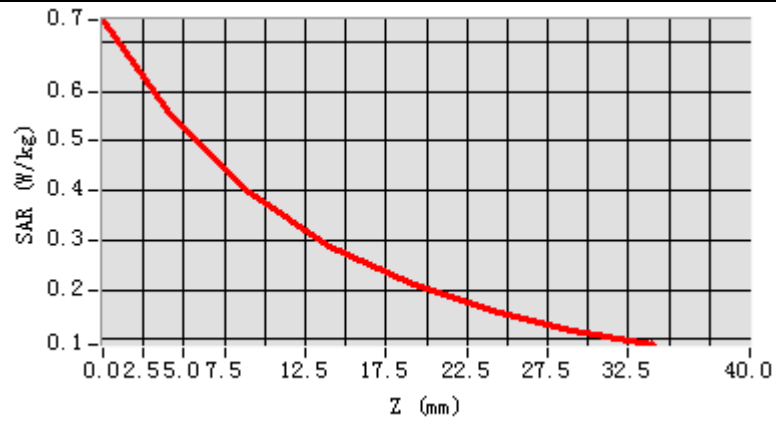


Maximum location: X=3.00, Y=2.00

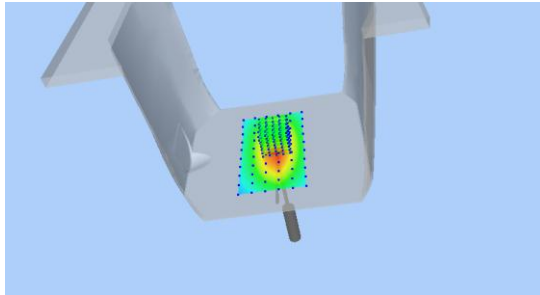
SAR Peak: 0.74 W/kg

SAR 10g (W/Kg)	0.366709
SAR 1g (W/Kg)	0.544567

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.7436	0.5612	0.3981	0.2876	0.2123	0.1570	0.1186



3D screen shot



Hot spot position

MEASUREMENT 2

Date of measurement: 15/10/2024

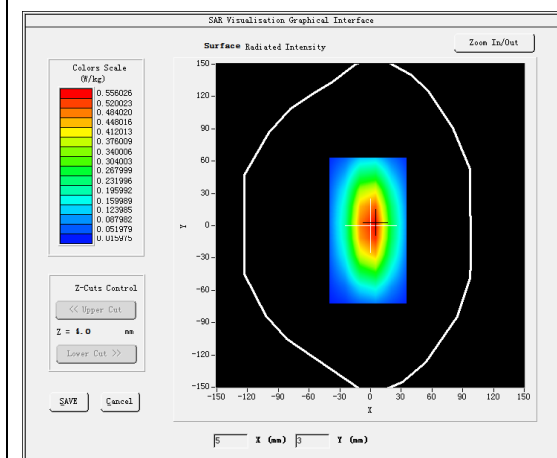
A. Experimental conditions.

<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>CW835</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>2.34</u>

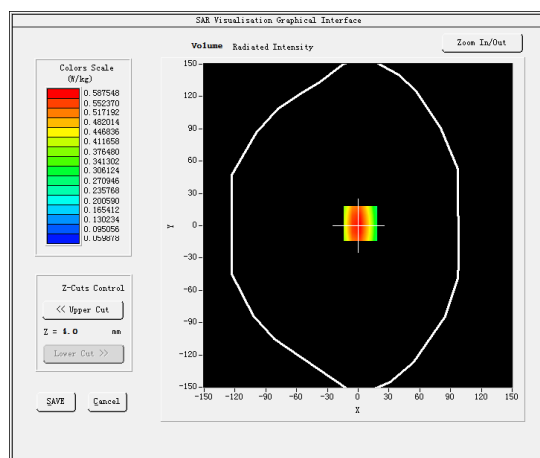
B. SAR Measurement Results

Frequency (MHz)	835.000000
Relative permittivity (real part)	41.962568
Relative permittivity (imaginary part)	19.705231
Conductivity (S/m)	0.914104
Variation (%)	-0.910000

SURFACE SAR



VOLUME SAR

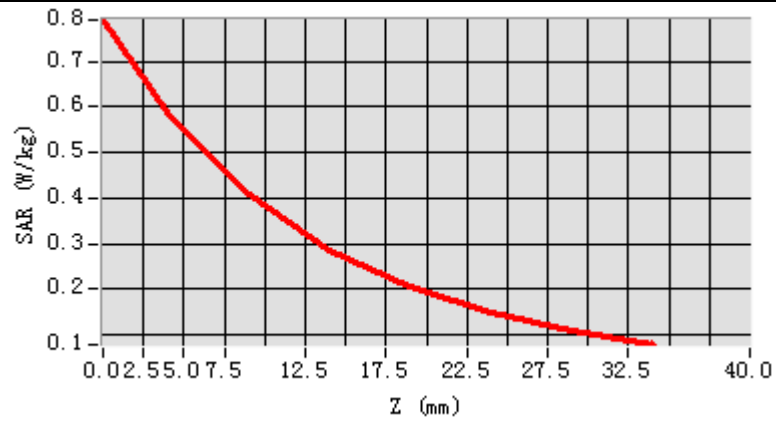


Maximum location: X=2.00, Y=2.00

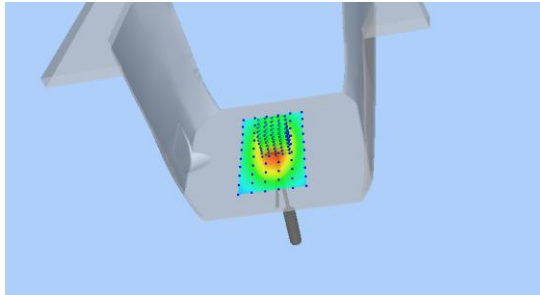
SAR Peak: 0.80 W/kg

SAR 10g (W/Kg)	0.376230
SAR 1g (W/Kg)	0.574431

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.7903	0.5875	0.4073	0.2838	0.2050	0.1483	0.1091



3D screen shot



Hot spot position

MEASUREMENT 3

Date of measurement: 22/10/2024

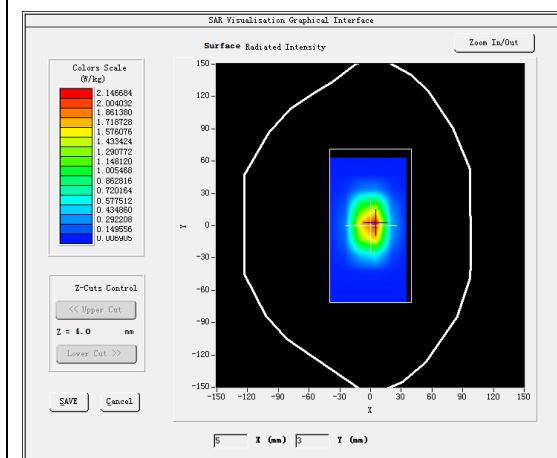
A. Experimental conditions.

<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>CW1800</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>2.51</u>

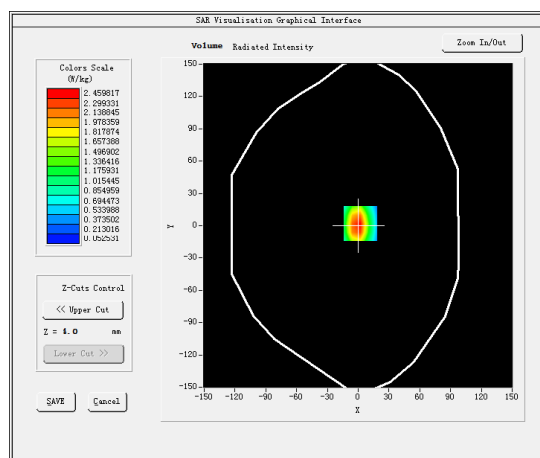
B. SAR Measurement Results

Frequency (MHz)	1800.000000
Relative permittivity (real part)	39.255407
Relative permittivity (imaginary part)	13.685589
Conductivity (S/m)	1.368559
Variation (%)	-0.150000

SURFACE SAR



VOLUME SAR

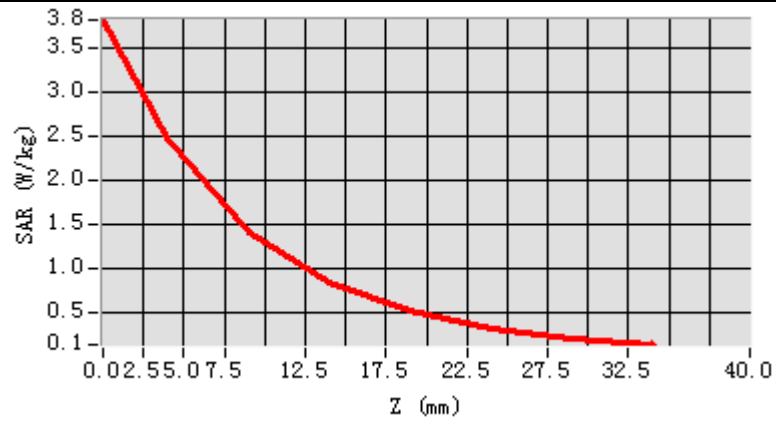


Maximum location: X=2.00, Y=2.00

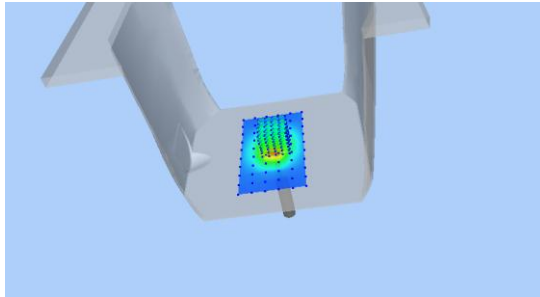
SAR Peak: 3.95 W/kg

SAR 10g (W/Kg)	1.237550
SAR 1g (W/Kg)	2.386384

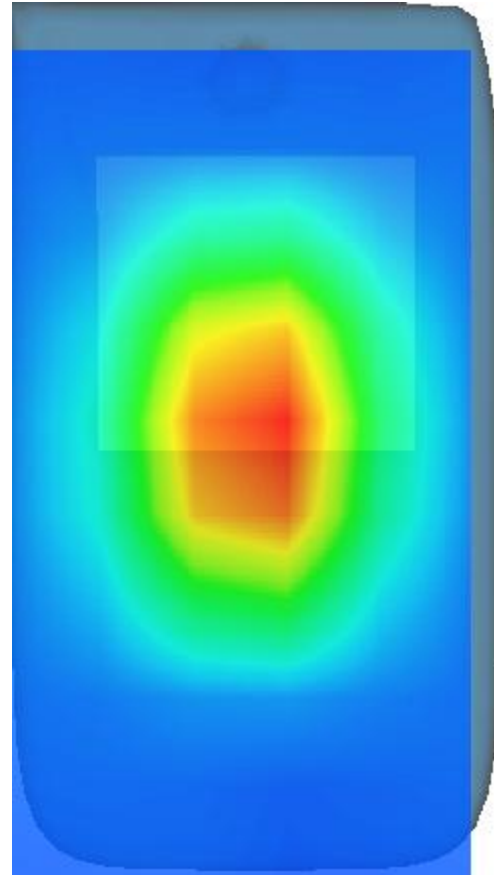
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	3.8106	2.4598	1.4037	0.8269	0.5047	0.3104	0.1978



3D screen shot



Hot spot position



MEASUREMENT 4

Date of measurement: 16/10/2024

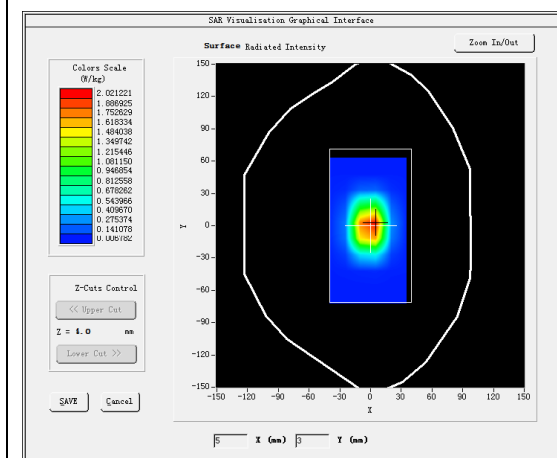
A. Experimental conditions.

<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>2.57</u>

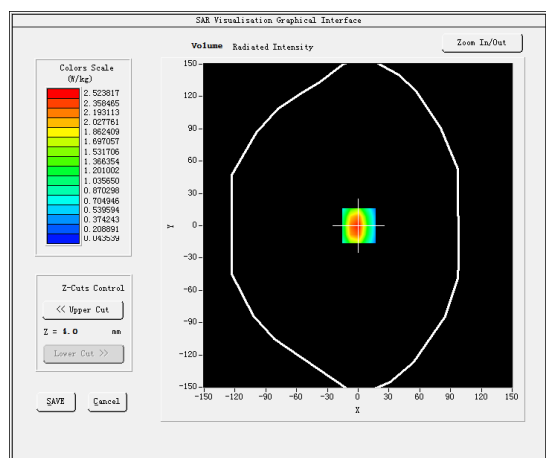
B. SAR Measurement Results

Frequency (MHz)	1900.000000
Relative permittivity (real part)	38.570754
Relative permittivity (imaginary part)	13.854547
Conductivity (S/m)	1.462424
Variation (%)	-0.230000

SURFACE SAR



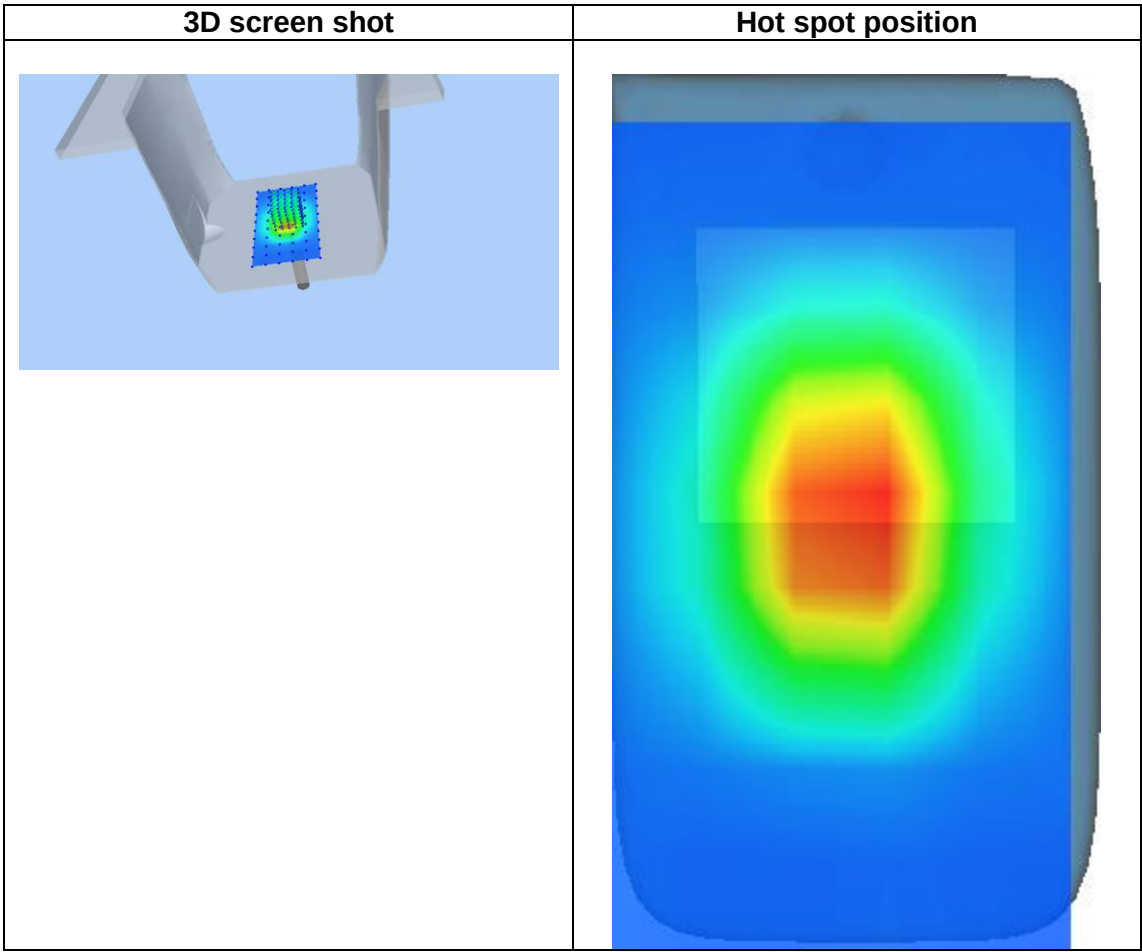
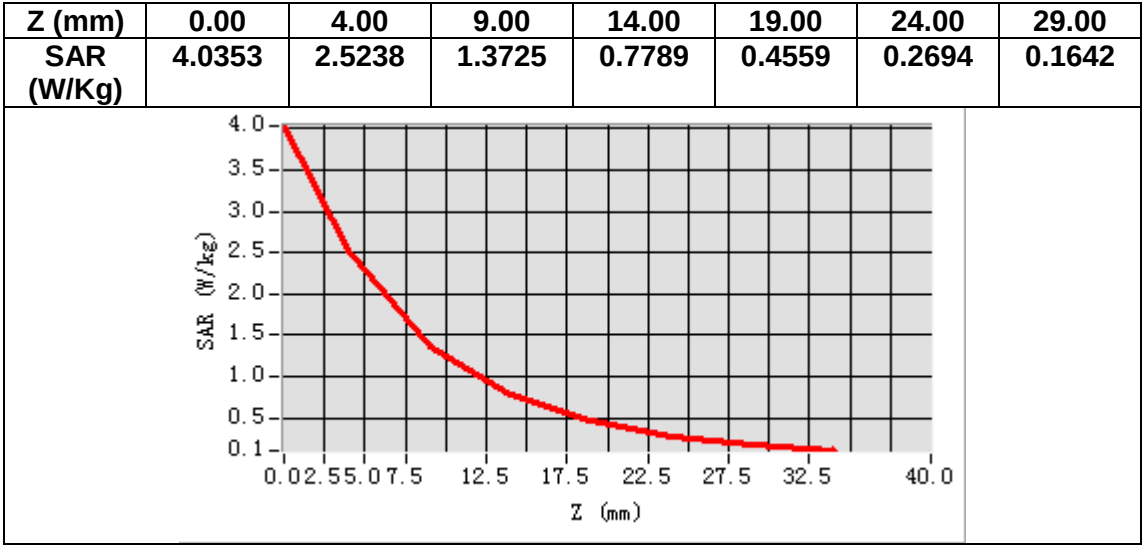
VOLUME SAR



Maximum location: X=1.00, Y=0.00

SAR Peak: 4.17 W/kg

SAR 10g (W/Kg)	1.242750
SAR 1g (W/Kg)	2.526869



MEASUREMENT 5

Date of measurement: 23/10/2024

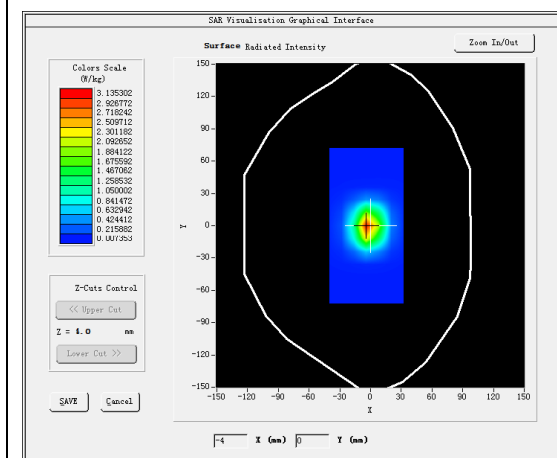
A. Experimental conditions.

<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>CW2450</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>2.74</u>

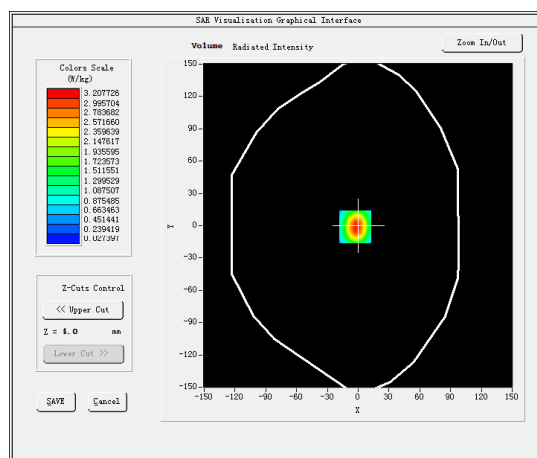
B. SAR Measurement Results

Frequency (MHz)	2450.000000
Relative permittivity (real part)	39.835870
Relative permittivity (imaginary part)	13.186533
Conductivity (S/m)	1.798169
Variation (%)	-2.460000

SURFACE SAR



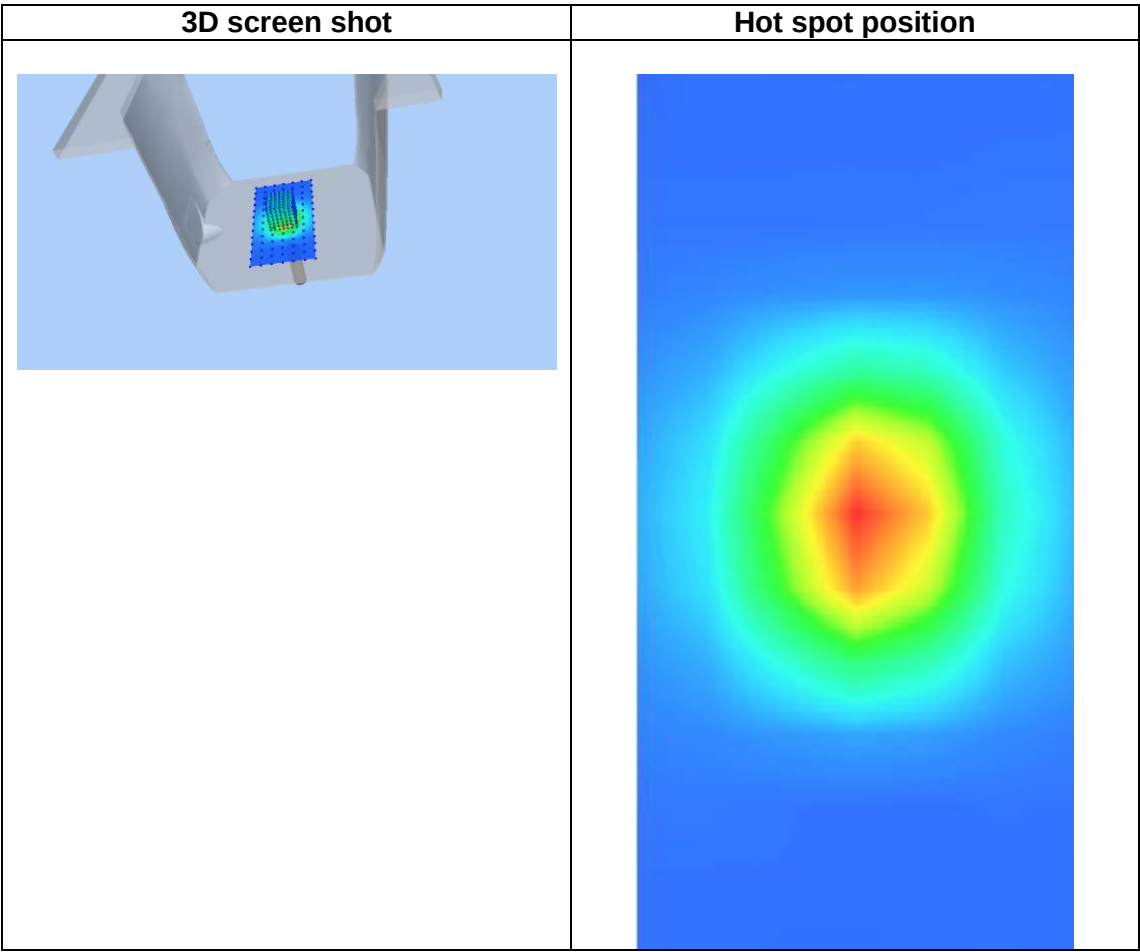
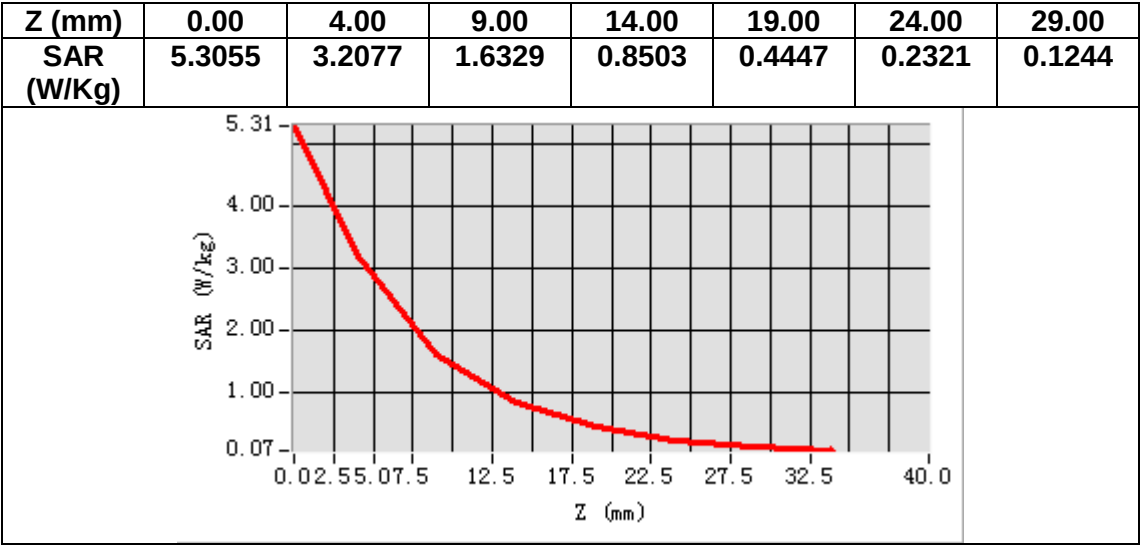
VOLUME SAR



Maximum location: X=-3.00, Y=-1.00

SAR Peak: 5.28 W/kg

SAR 10g (W/Kg)	1.414419
SAR 1g (W/Kg)	2.965748



MEASUREMENT 6

Date of measurement: 17/10/2024

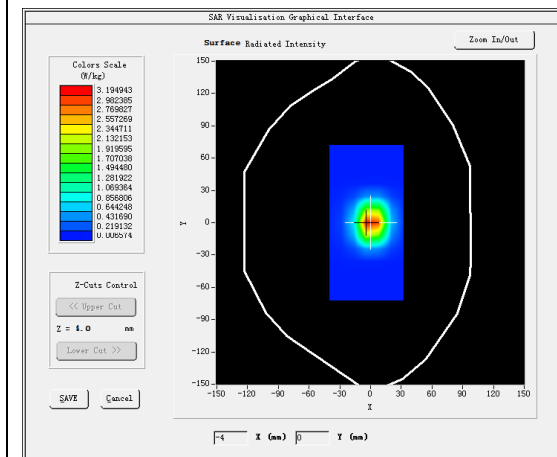
A. Experimental conditions.

<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>2.51</u>

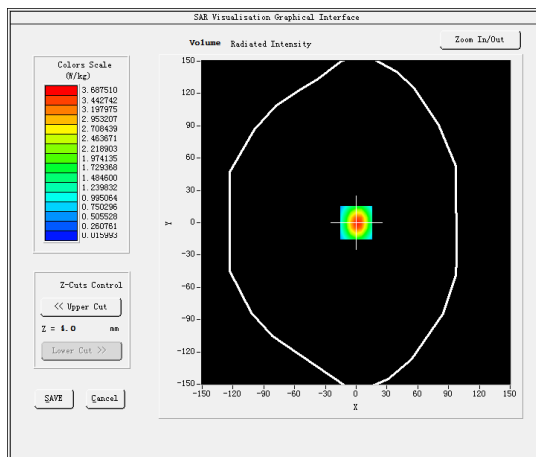
B. SAR Measurement Results

Frequency (MHz)	2600.000000
Relative permittivity (real part)	38.910442
Relative permittivity (imaginary part)	13.999088
Conductivity (S/m)	2.02209
Variation (%)	-1.660000

SURFACE SAR



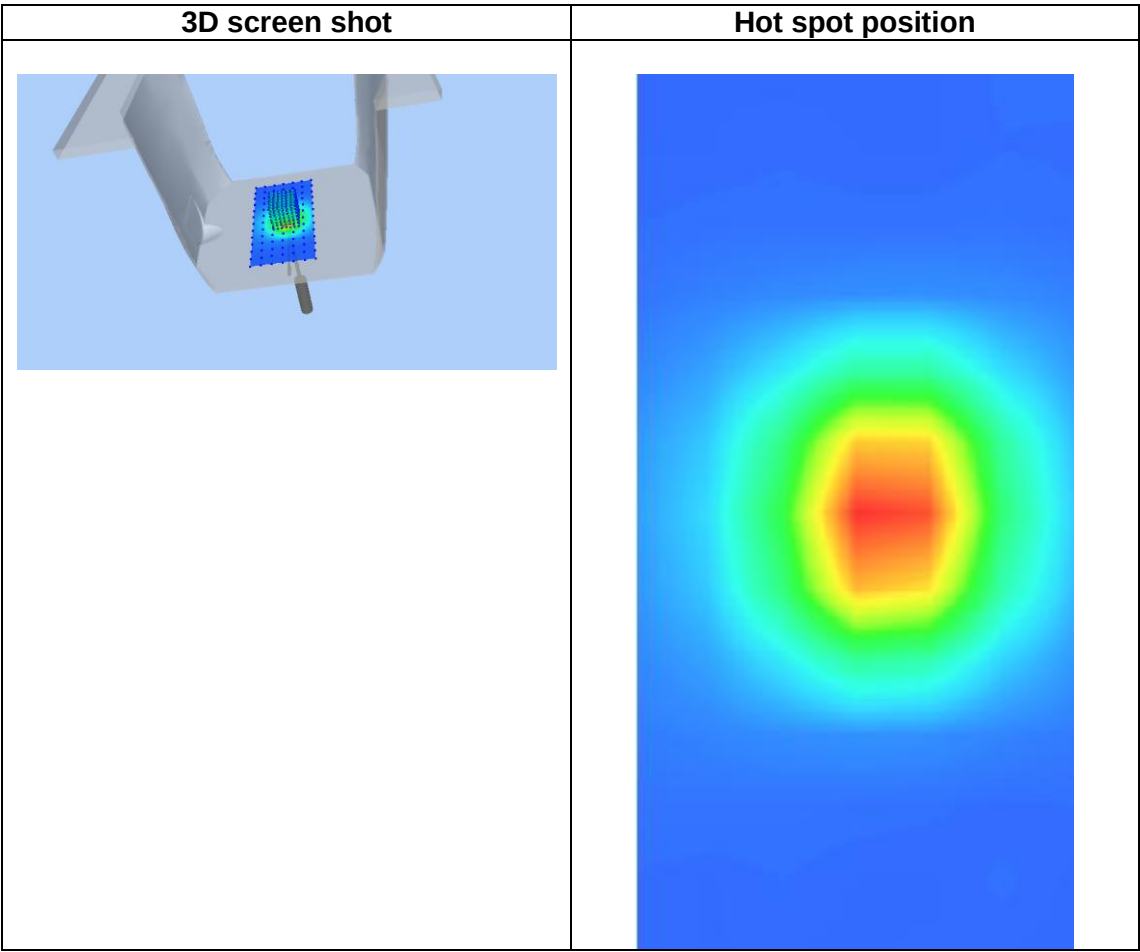
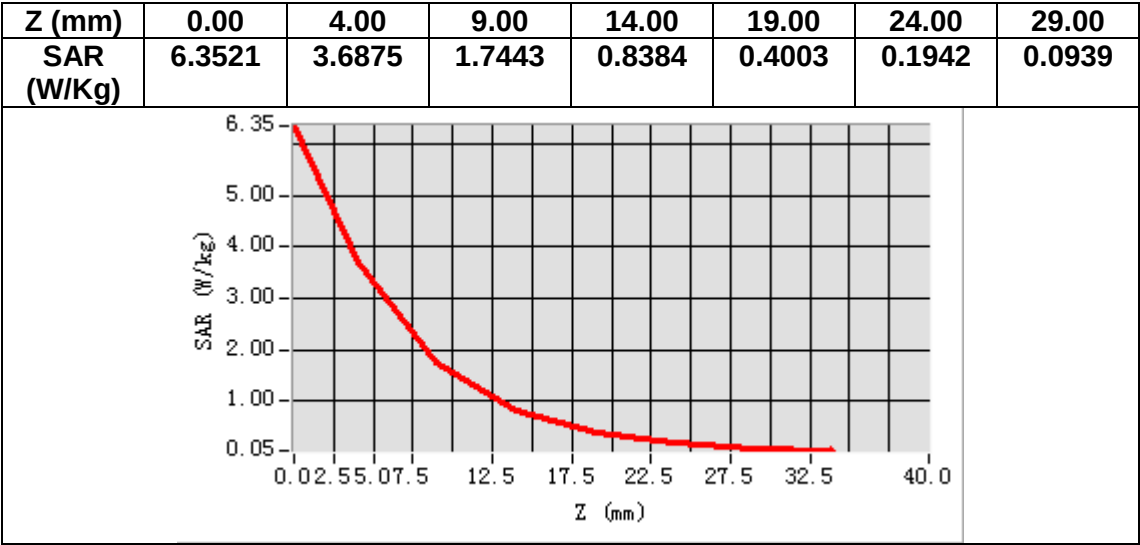
VOLUME SAR



Maximum location: X=0.00, Y=0.00

SAR Peak: 6.32 W/kg

SAR 10g (W/Kg)	1.557075
SAR 1g (W/Kg)	3.451560



MEASUREMENT 7

Date of measurement: 27/10/2024

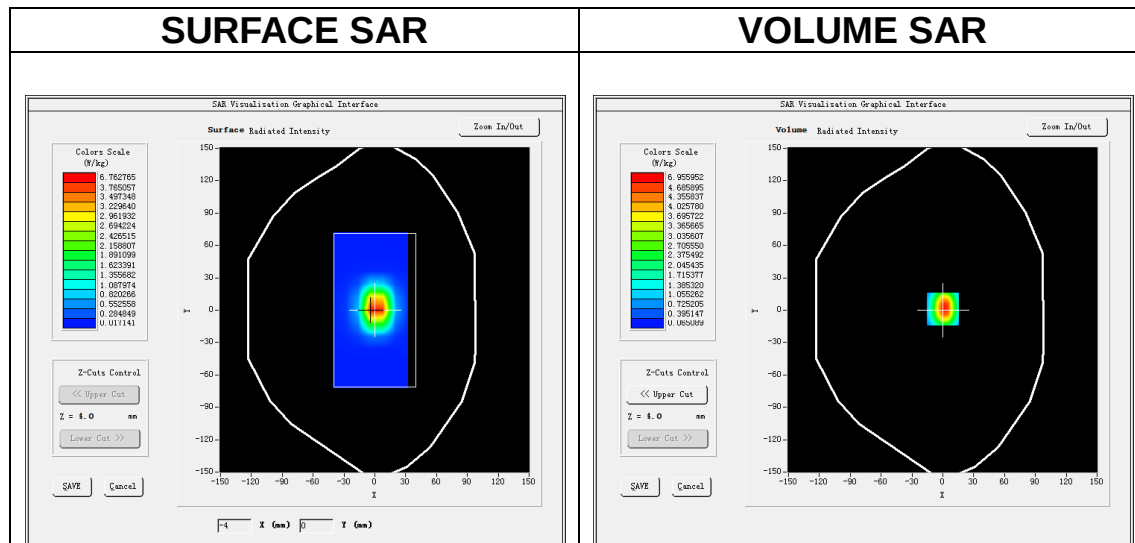
A. Experimental conditions.

<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>CW3300</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>2.11</u>

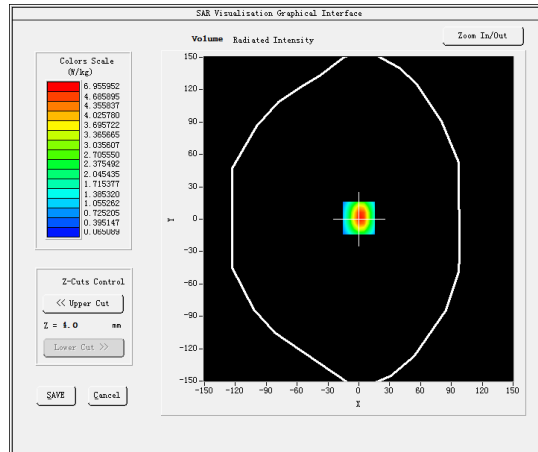
B. SAR Measurement Results

Frequency (MHz)	3300.000000
Relative permittivity (real part)	39.465079
Relative permittivity (imaginary part)	14.199574
Conductivity (S/m)	2.603255
Variation (%)	-1.320000

SURFACE SAR



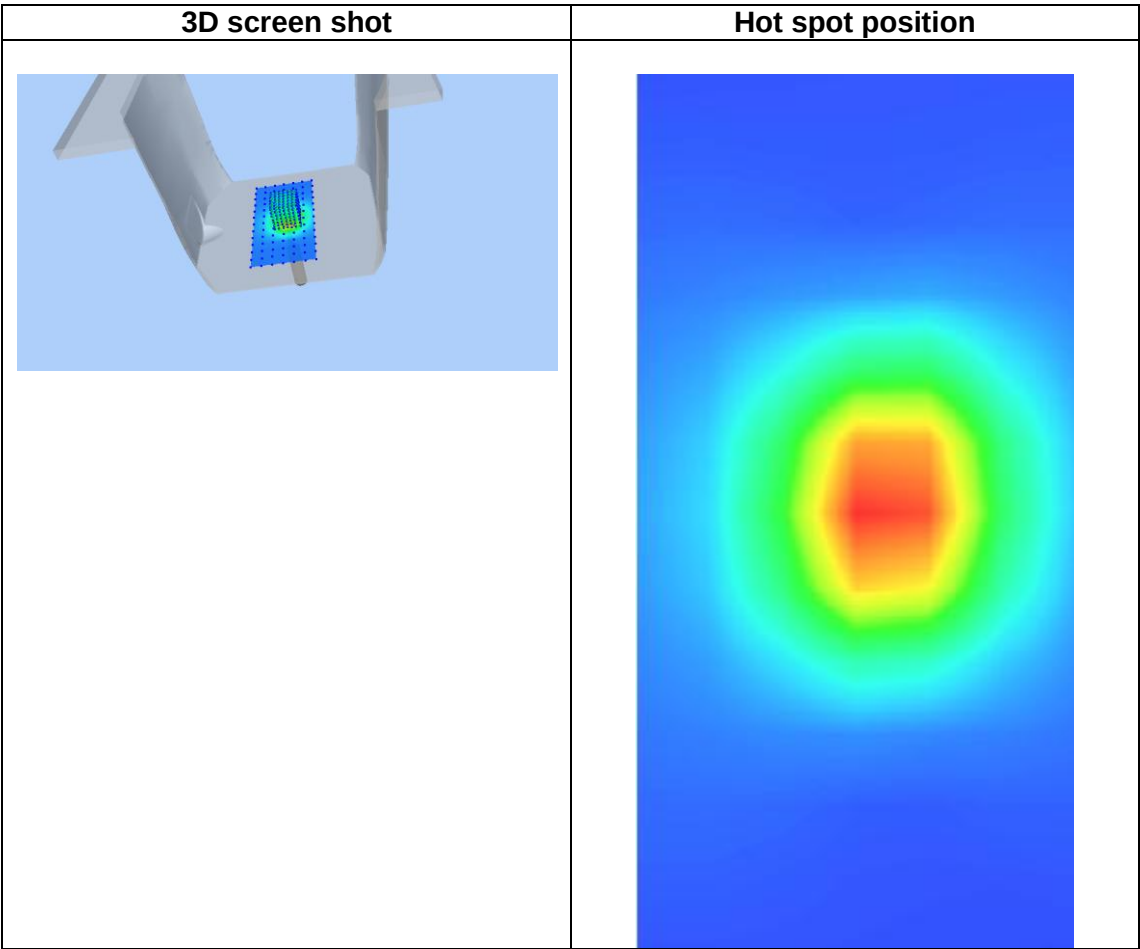
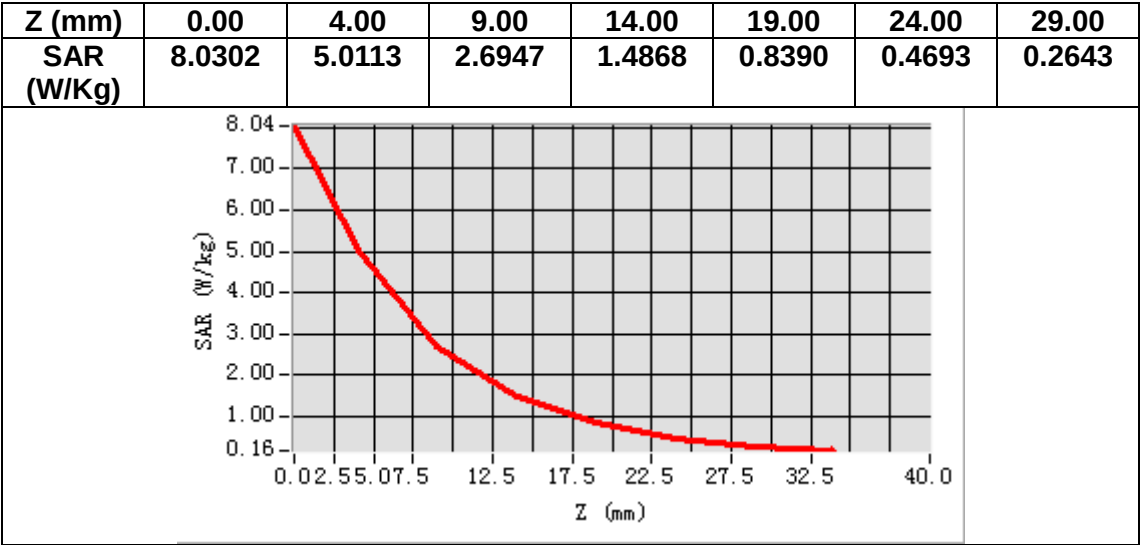
VOLUME SAR



Maximum location: X=0.00, Y=1.00

SAR Peak: 8.14 W/kg

SAR 10g (W/Kg)	2.443140
SAR 1g (W/Kg)	6.011933



MEASUREMENT 8

Date of measurement: 19/10/2024

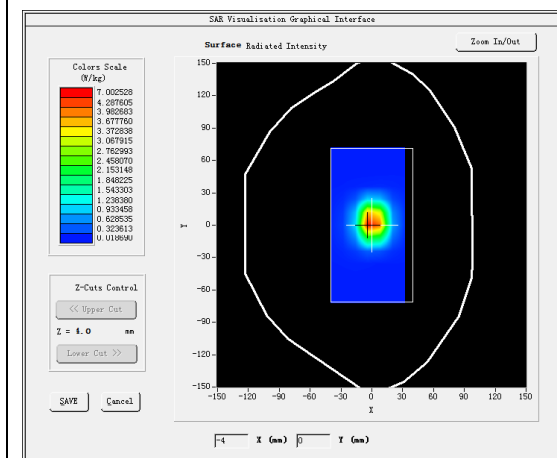
A. Experimental conditions.

<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>CW3500</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>2.15</u>

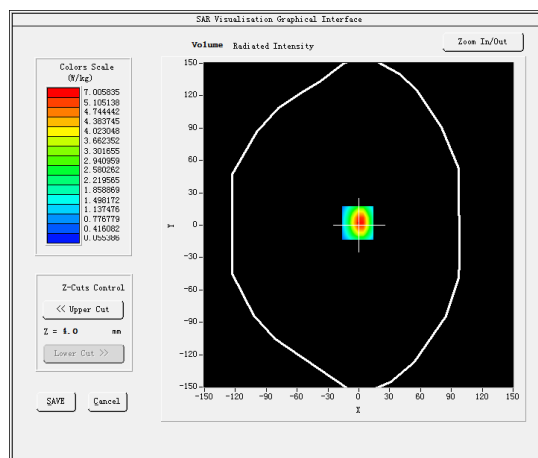
B. SAR Measurement Results

Frequency (MHz)	3500.000000
Relative permittivity (real part)	37.716592
Relative permittivity (imaginary part)	14.627046
Conductivity (S/m)	2.844148
Variation (%)	2.360000

SURFACE SAR



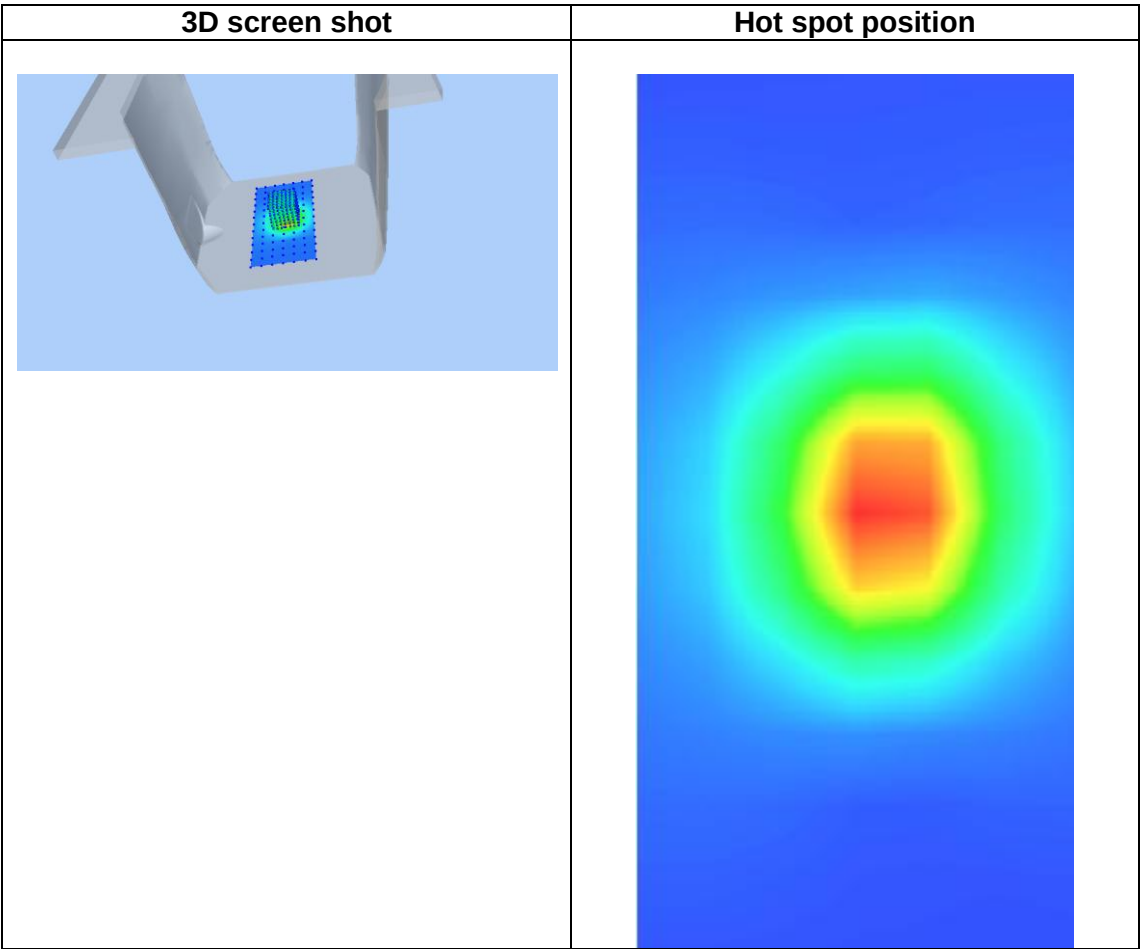
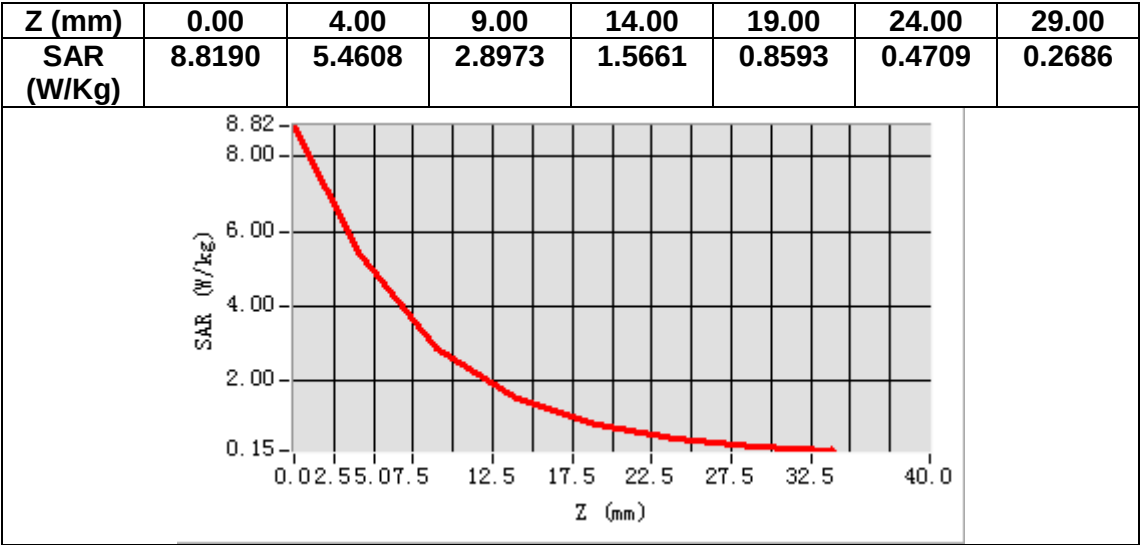
VOLUME SAR



Maximum location: X=-1.00, Y=2.00

SAR Peak: 9.07 W/kg

SAR 10g (W/Kg)	2.535761
SAR 1g (W/Kg)	6.984058



MEASUREMENT 9

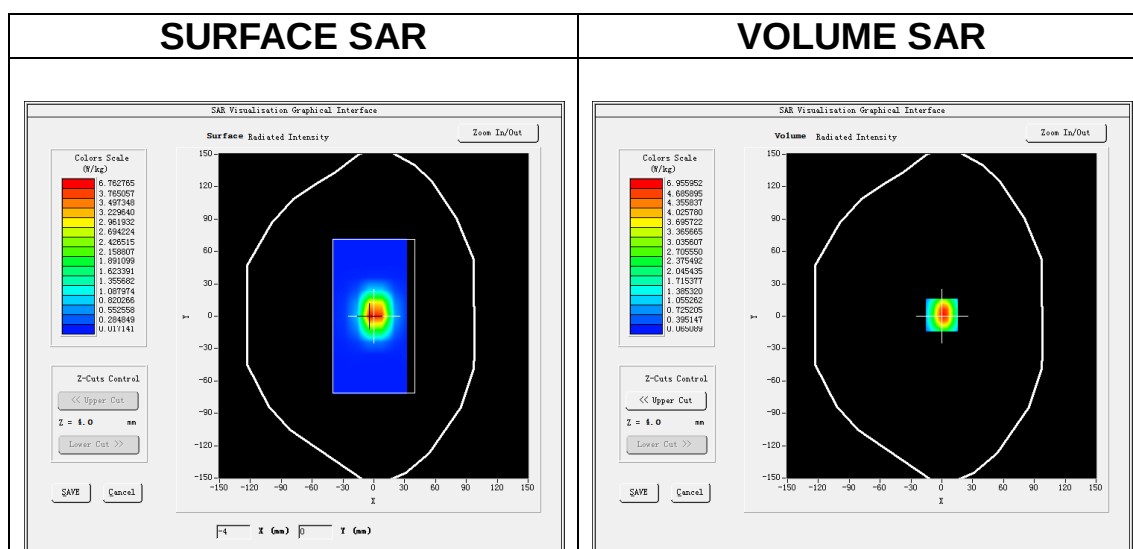
Date of measurement: 20/10/2024

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>CW3700</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>2.08</u>

B. SAR Measurement Results

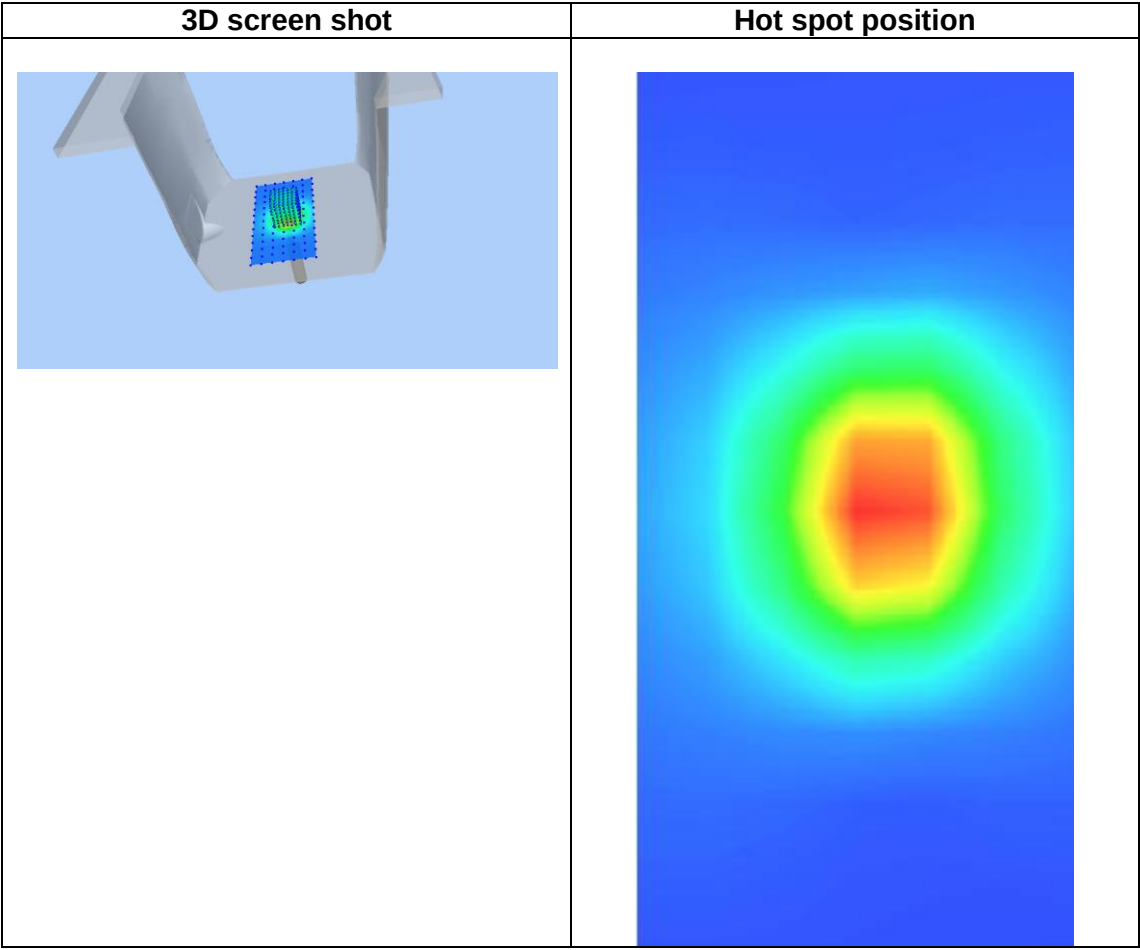
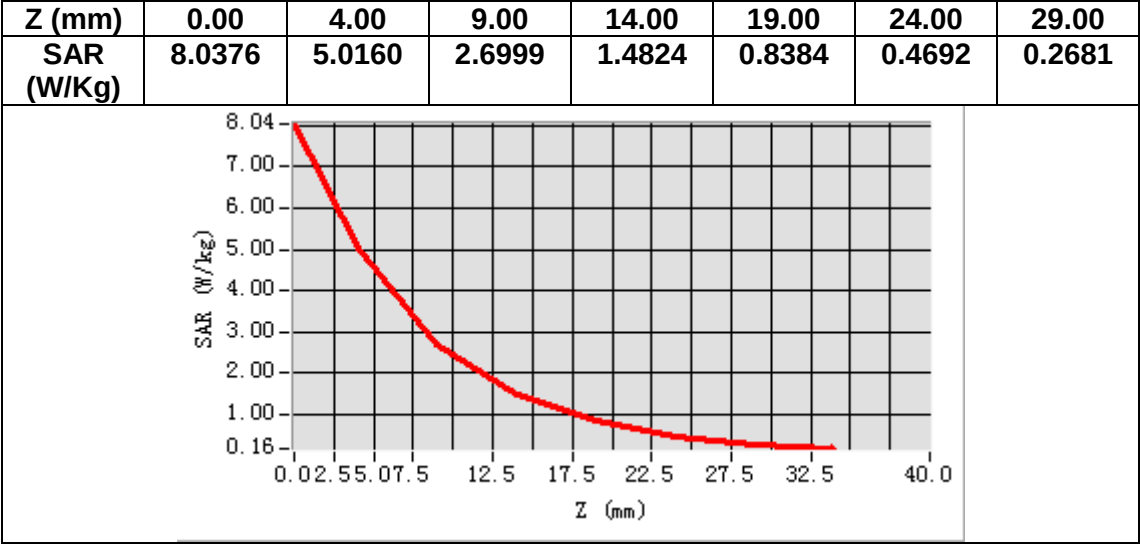
Frequency (MHz)	3700.000000
Relative permittivity (real part)	37.176762
Relative permittivity (imaginary part)	14.936924
Conductivity (S/m)	3.070368
Variation (%)	-2.520000



Maximum location: X=0.00, Y=1.00

SAR Peak: 8.14 W/kg

SAR 10g (W/Kg)	2.503952
SAR 1g (W/Kg)	6.326645



MEASUREMENT 10

Date of measurement: 24/10/2024

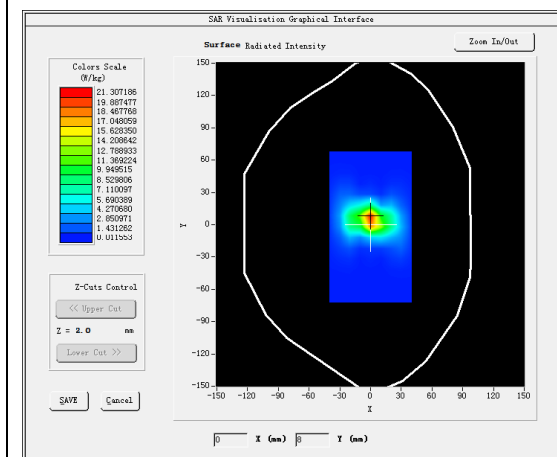
A. Experimental conditions.

<u>Area Scan</u>	<u>dx=10mm dy=10mm, h= 2.00 mm</u>
<u>ZoomScan</u>	<u>7x7x12,dx=4mm dy=4mm dz=2mm</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Dipole</u>
<u>Band</u>	<u>CW5200</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>1.89</u>

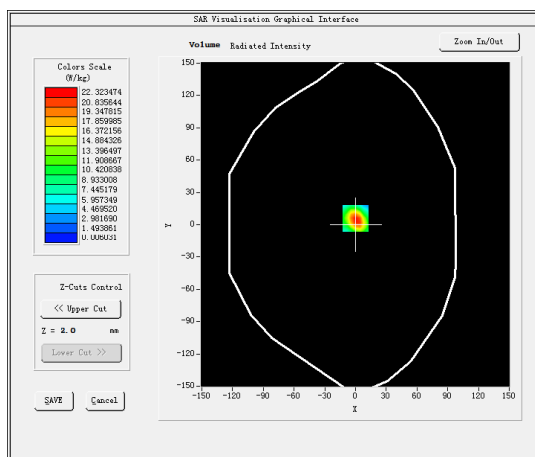
B. SAR Measurement Results

Frequency (MHz)	5200.000000
Relative permittivity (real part)	36.619695
Relative permittivity (imaginary part)	15.632473
Conductivity (S/m)	4.516048
Variation (%)	1.700000

SURFACE SAR



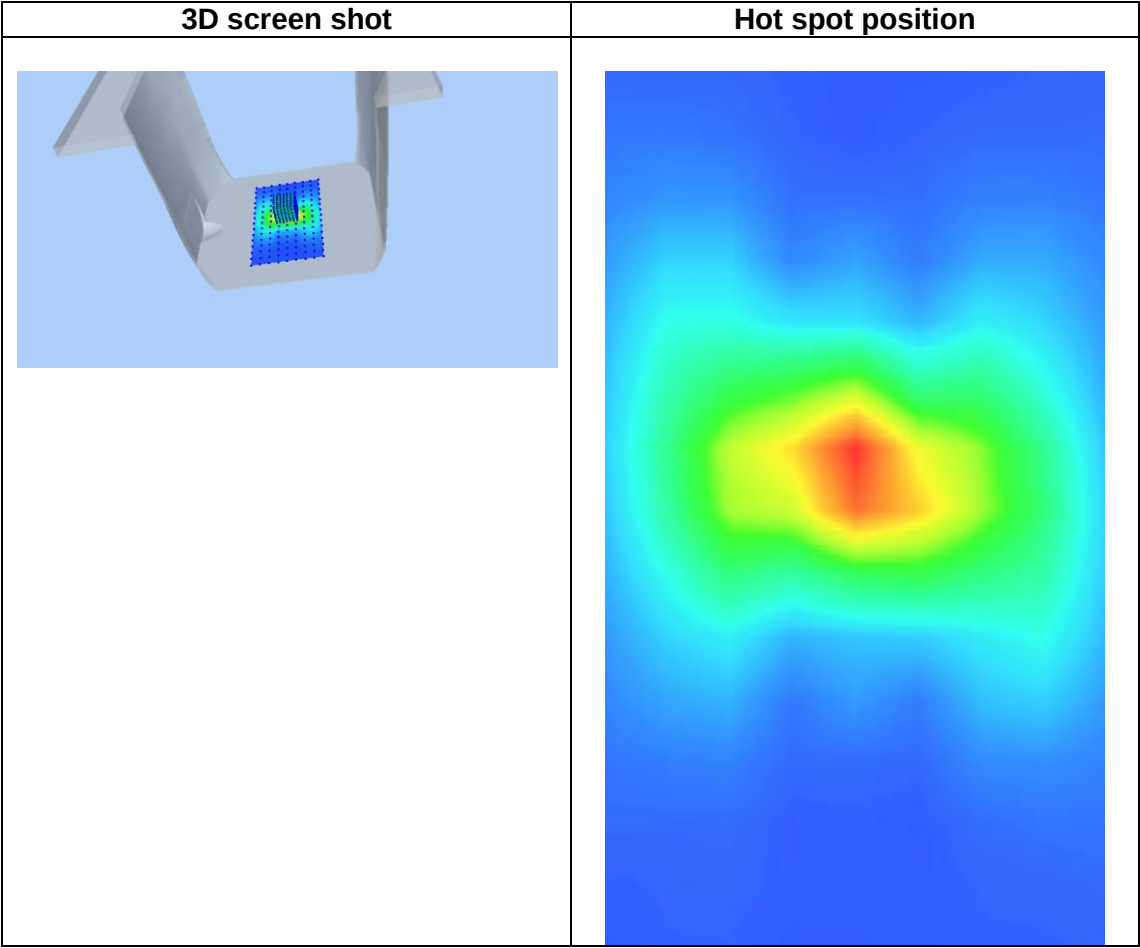
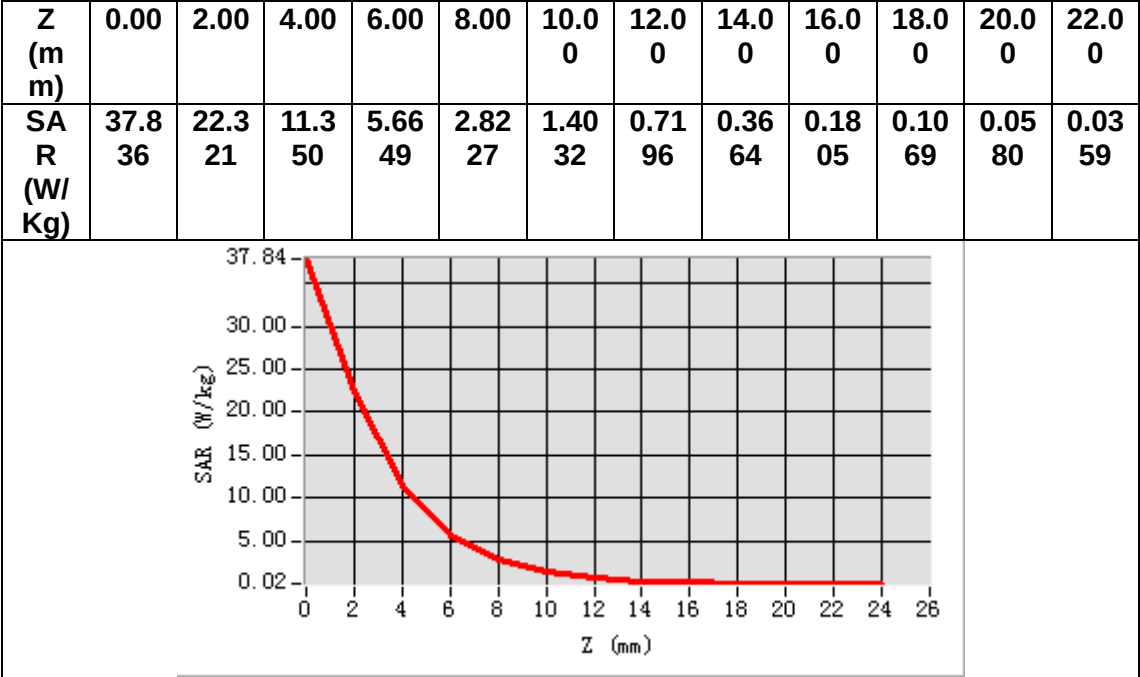
VOLUME SAR



Maximum location: X=0.00, Y=6.00

SAR Peak: 40.06 W/kg

SAR 10g (W/Kg)	5.562995
SAR 1g (W/Kg)	15.361092



MEASUREMENT 11

Date of measurement: 25/10/2024

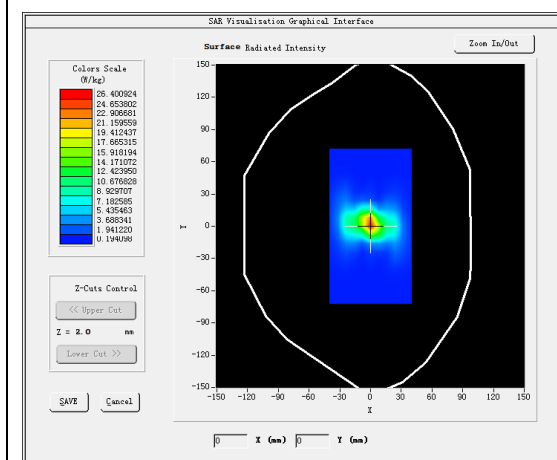
A. Experimental conditions.

<u>Area Scan</u>	<u>dx=10mm dy=10mm, h= 2.00 mm</u>
<u>ZoomScan</u>	<u>7x7x12,dx=4mm dy=4mm dz=2mm</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Dipole</u>
<u>Band</u>	<u>CW5400</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>1.97</u>

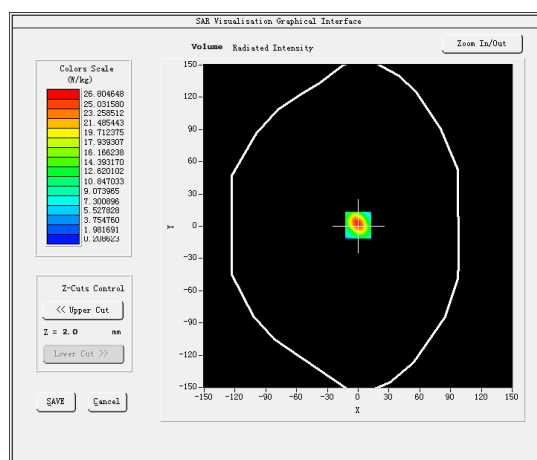
B. SAR Measurement Results

Frequency (MHz)	5400.000000
Relative permittivity (real part)	35.591825
Relative permittivity (imaginary part)	15.728485
Conductivity (S/m)	4.718546
Variation (%)	1.350000

SURFACE SAR



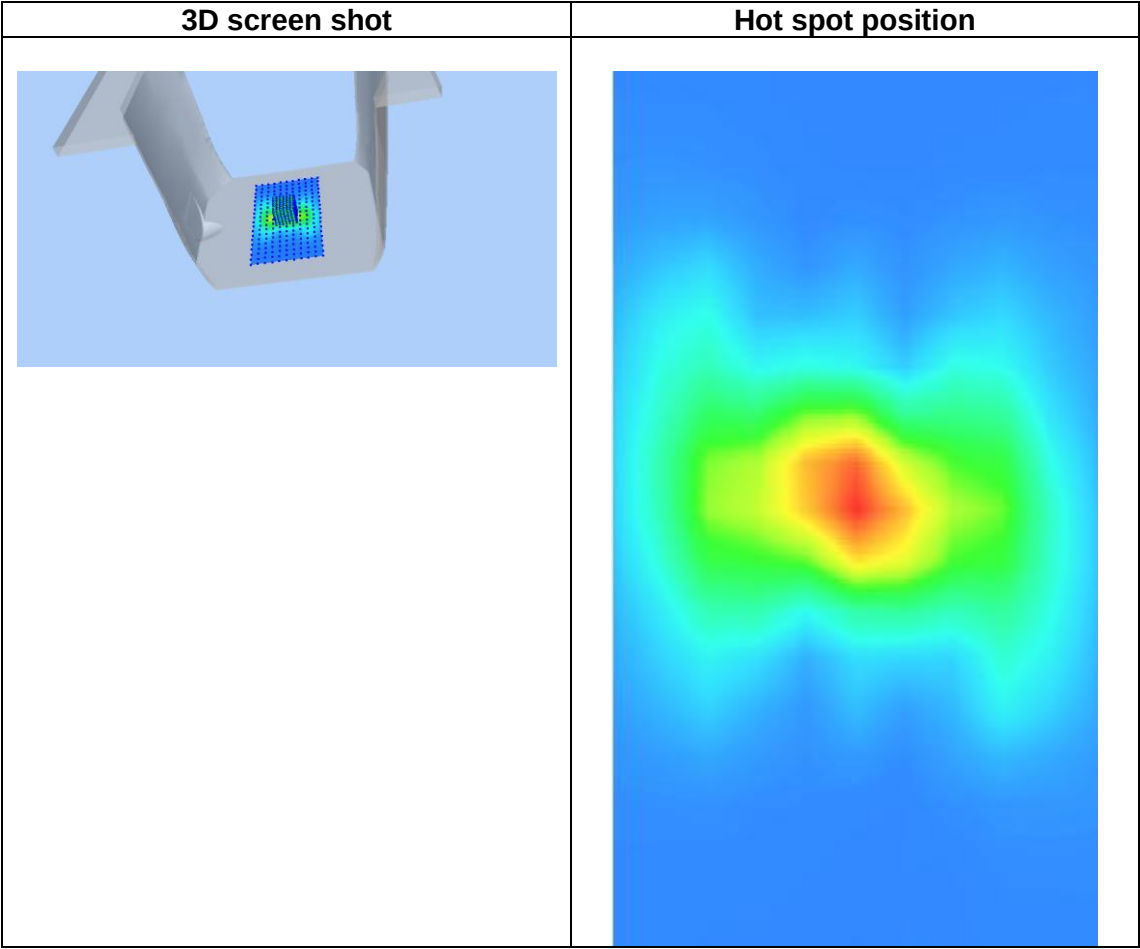
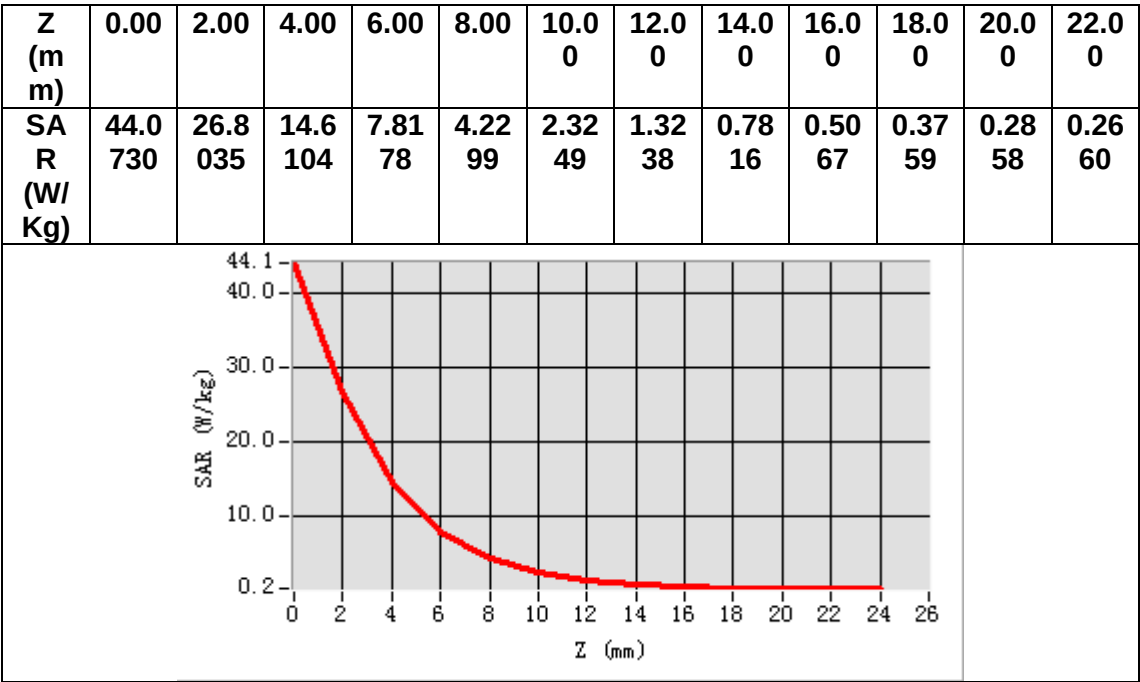
VOLUME SAR



Maximum location: X=0.00, Y=1.00

SAR Peak: 46.18 W/kg

SAR 10g (W/Kg)	5.023927
SAR 1g (W/Kg)	16.606550



MEASUREMENT 12

Date of measurement: 12/10/2024

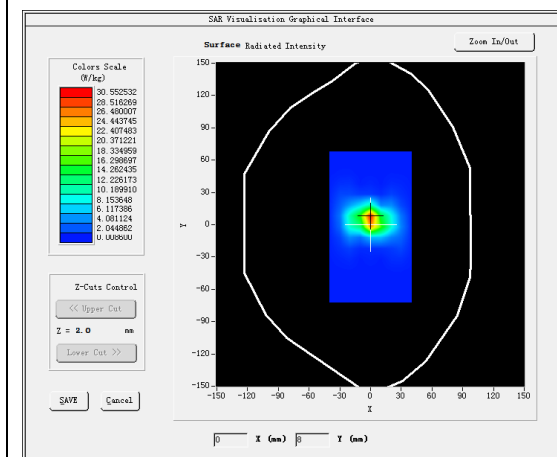
A. Experimental conditions.

<u>Area Scan</u>	<u>dx=10mm dy=10mm, h= 2.00 mm</u>
<u>ZoomScan</u>	<u>7x7x12,dx=4mm dy=4mm dz=2mm</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Dipole</u>
<u>Band</u>	<u>CW5600</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>1.88</u>

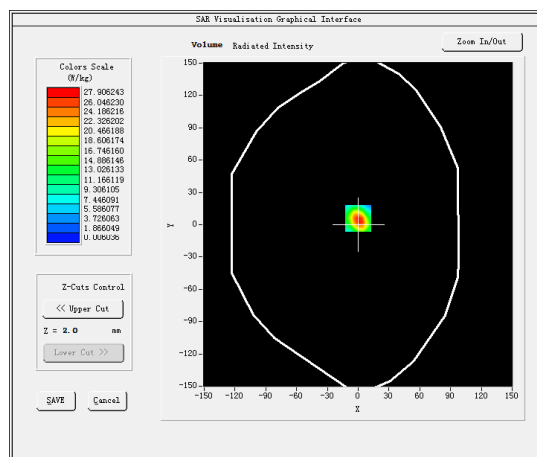
B. SAR Measurement Results

Frequency (MHz)	5600.000000
Relative permittivity (real part)	35.891217
Relative permittivity (imaginary part)	16.195951
Conductivity (S/m)	5.038740
Variation (%)	0.134270

SURFACE SAR



VOLUME SAR

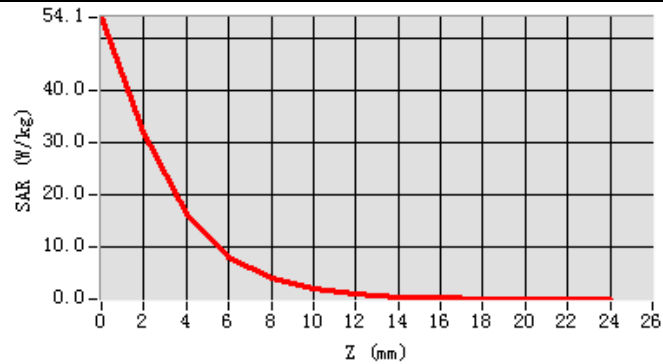


Maximum location: X=0.00, Y=6.00

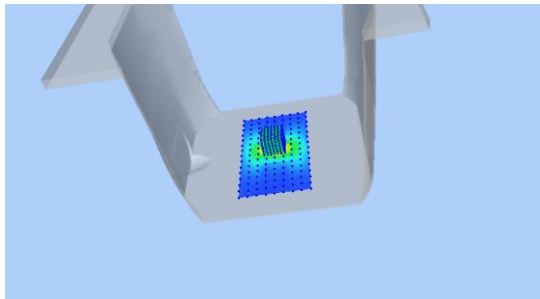
SAR Peak: 51.23 W/kg

SAR 10g (W/Kg)	6.608051
SAR 1g (W/Kg)	18.283690

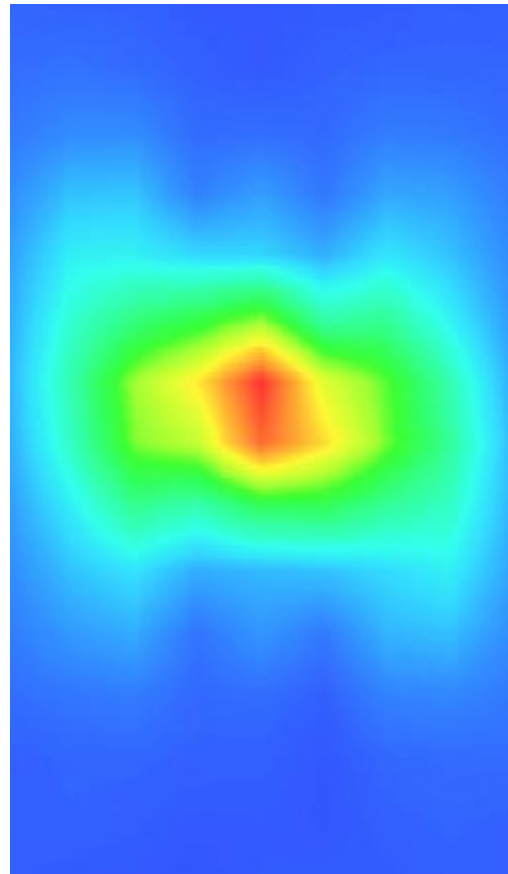
Z (m m)	0.00	2.00	4.00	6.00	8.00	10.0 0	12.0 0	14.0 0	16.0 0	18.0 0	20.0 0	22.0 0
SA R (W/ Kg)	54.1 388	31.9 062	16.3 510	8.17 83	4.08 24	3.81 66	1.03 45	0.46 87	0.27 29	0.13 26	0.07 55	0.05 02



3D screen shot



Hot spot position



MEASUREMENT 13

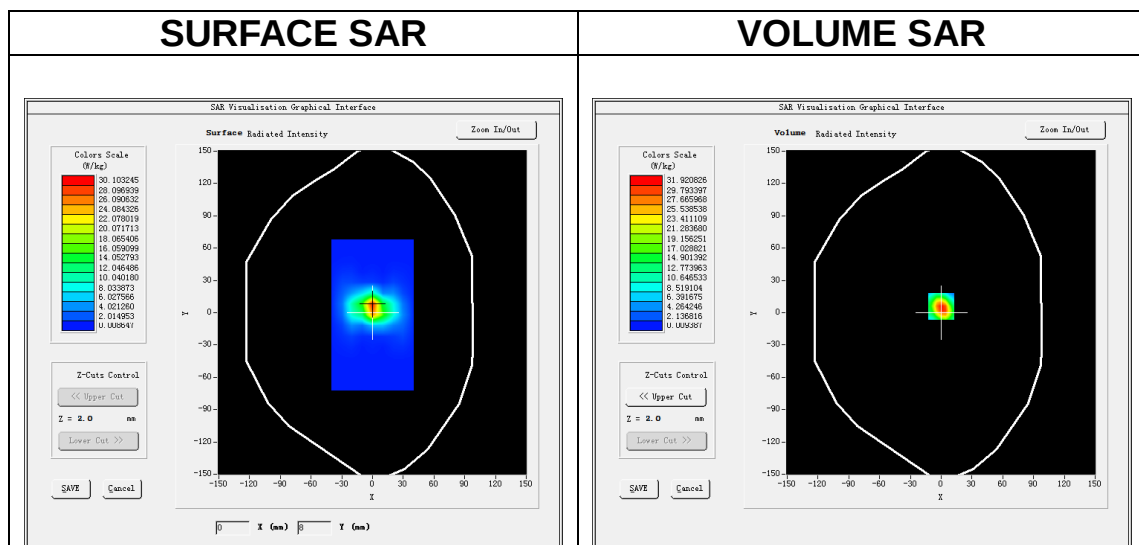
Date of measurement: 26/10/2024

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=10mm dy=10mm, h= 2.00 mm</u>
<u>ZoomScan</u>	<u>7x7x12,dx=4mm dy=4mm dz=2mm</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Dipole</u>
<u>Band</u>	<u>CW5800</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>CW (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>1.90</u>

B. SAR Measurement Results

Frequency (MHz)	5800.000000
Relative permittivity (real part)	35.466855
Relative permittivity (imaginary part)	15.965438
Conductivity (S/m)	5.144419
Variation (%)	-0.760000



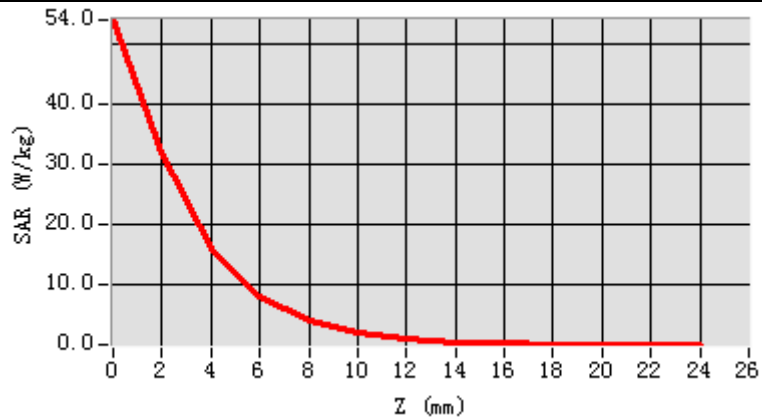
Maximum location: X=0.00, Y=6.00

SAR Peak: 57.37 W/kg

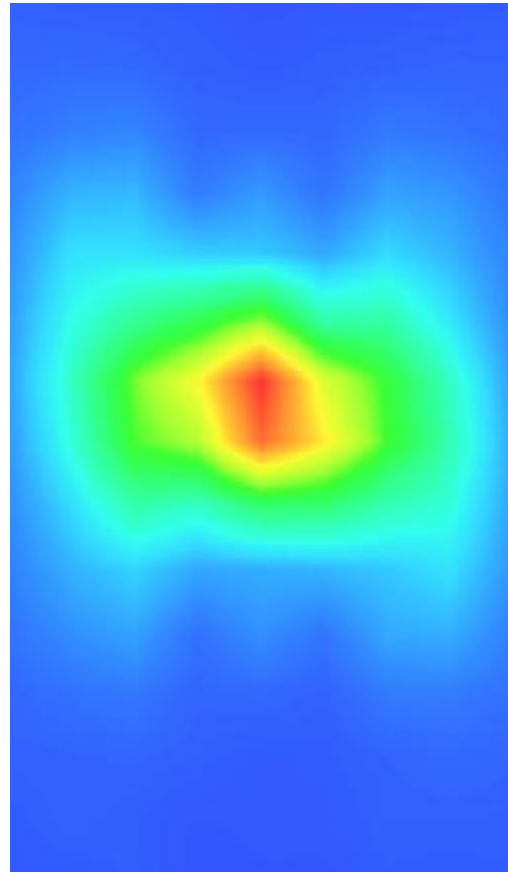
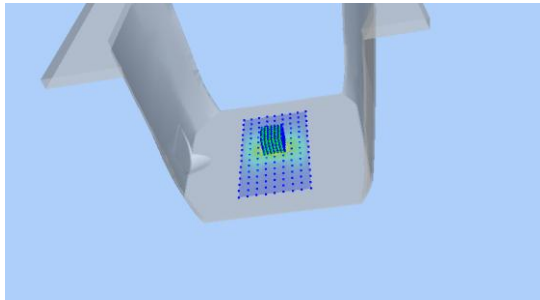
SAR 10g (W/Kg)	5.755422
SAR 1g (W/Kg)	18.664011

A line graph showing the Specific Absorption Rate (SAR) in W/kg as a function of depth Z in mm for a 1000 MHz plane wave. The y-axis ranges from 0.0 to 54.0 W/kg with major grid lines every 10.0 units. The x-axis ranges from 0 to 26 mm with major grid lines every 2 units. A red curve starts at (0, 54.0) and decreases exponentially, reaching approximately 31.5 W/kg at Z=2 mm, 15.0 W/kg at Z=4 mm, 8.0 W/kg at Z=6 mm, and approaching zero by Z=14 mm.

Z (mm)	SAR (W/kg)
0	54.0
2	31.5
4	15.0
6	8.0
8	4.0
10	2.0
12	1.0
14	0.5
16	0.2
18	0.1
20	0.05
22	0.02
24	0.01
26	0.005



Hot spot position



14. Appendix C. Plots of High SAR Measurement

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MEASUREMENT 1

MEASUREMENT 1

Date of measurement: 24/10/2024

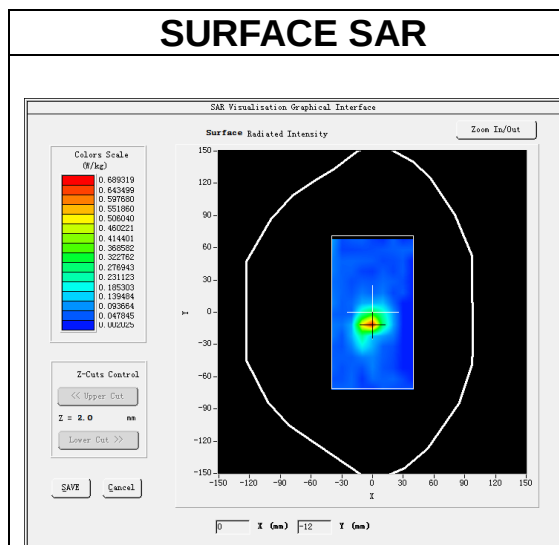
A. Experimental conditions.

<u>Area Scan</u>	<u>dx=10mm dy=10mm, h= 2.00 mm</u>
<u>ZoomScan</u>	<u>7x7x12,dx=4mm dy=4mm dz=2mm</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>IEEE 802.11a U-NII</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>IEEE802.11a (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>1.89</u>

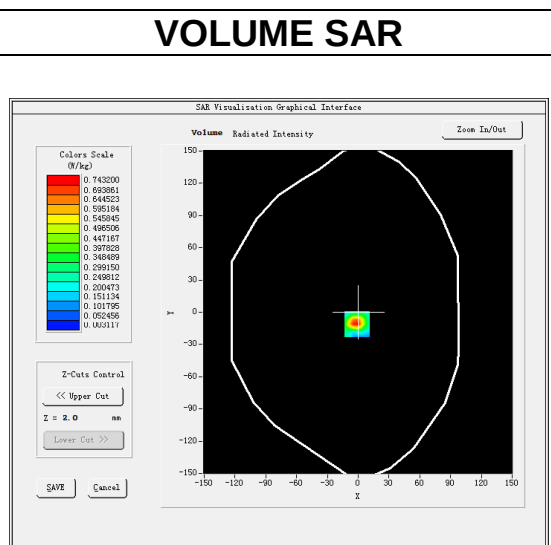
B. SAR Measurement Results

Frequency (MHz)	5250.000000
Relative permittivity (real part)	36.619695
Relative permittivity (imaginary part)	15.632473
Conductivity (S/m)	4.516048
Variation (%)	-0.910000

SURFACE SAR



VOLUME SAR

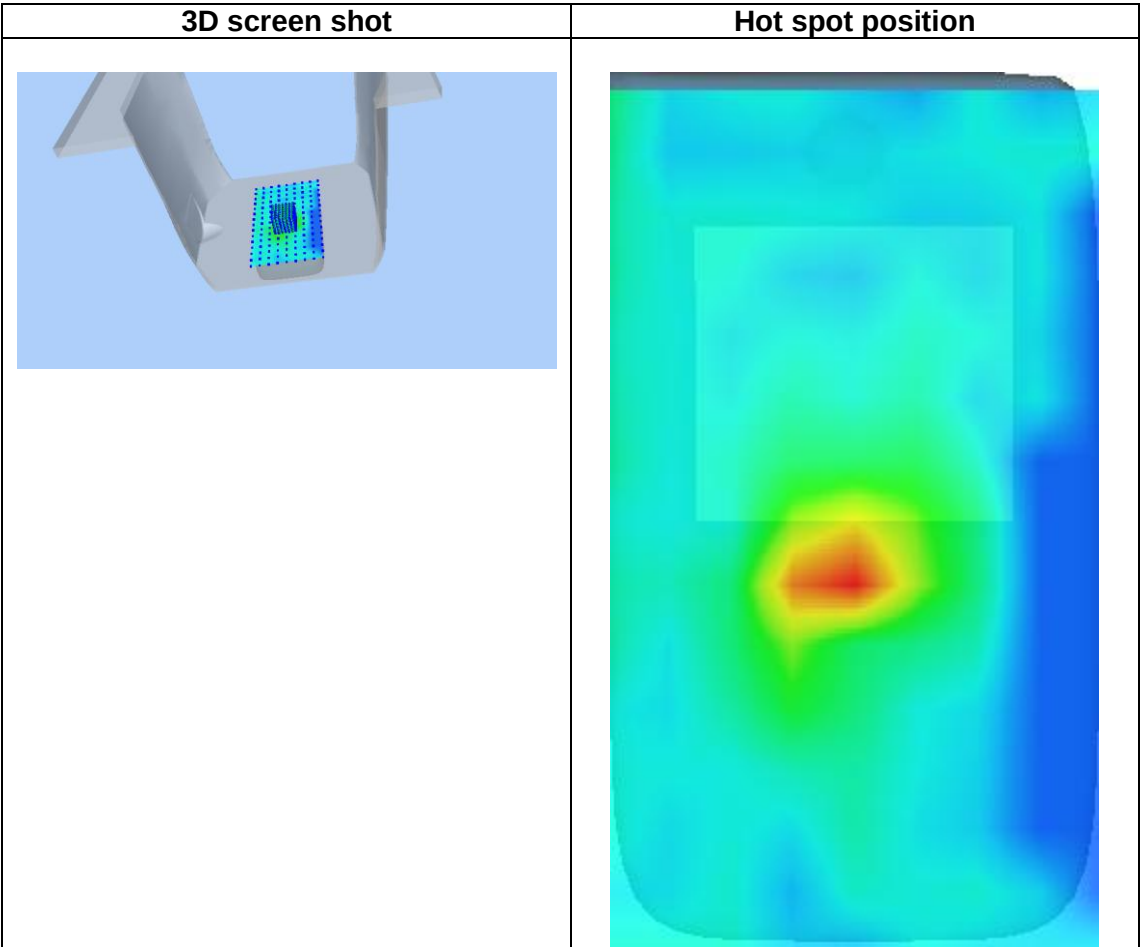
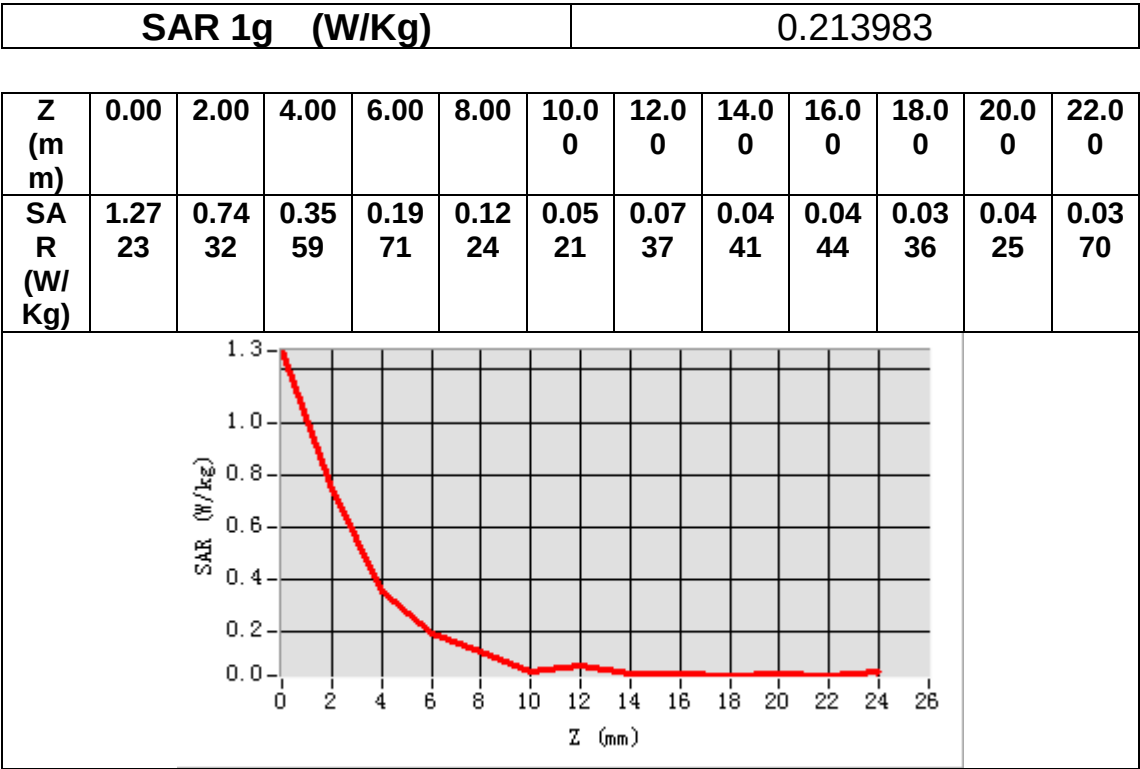


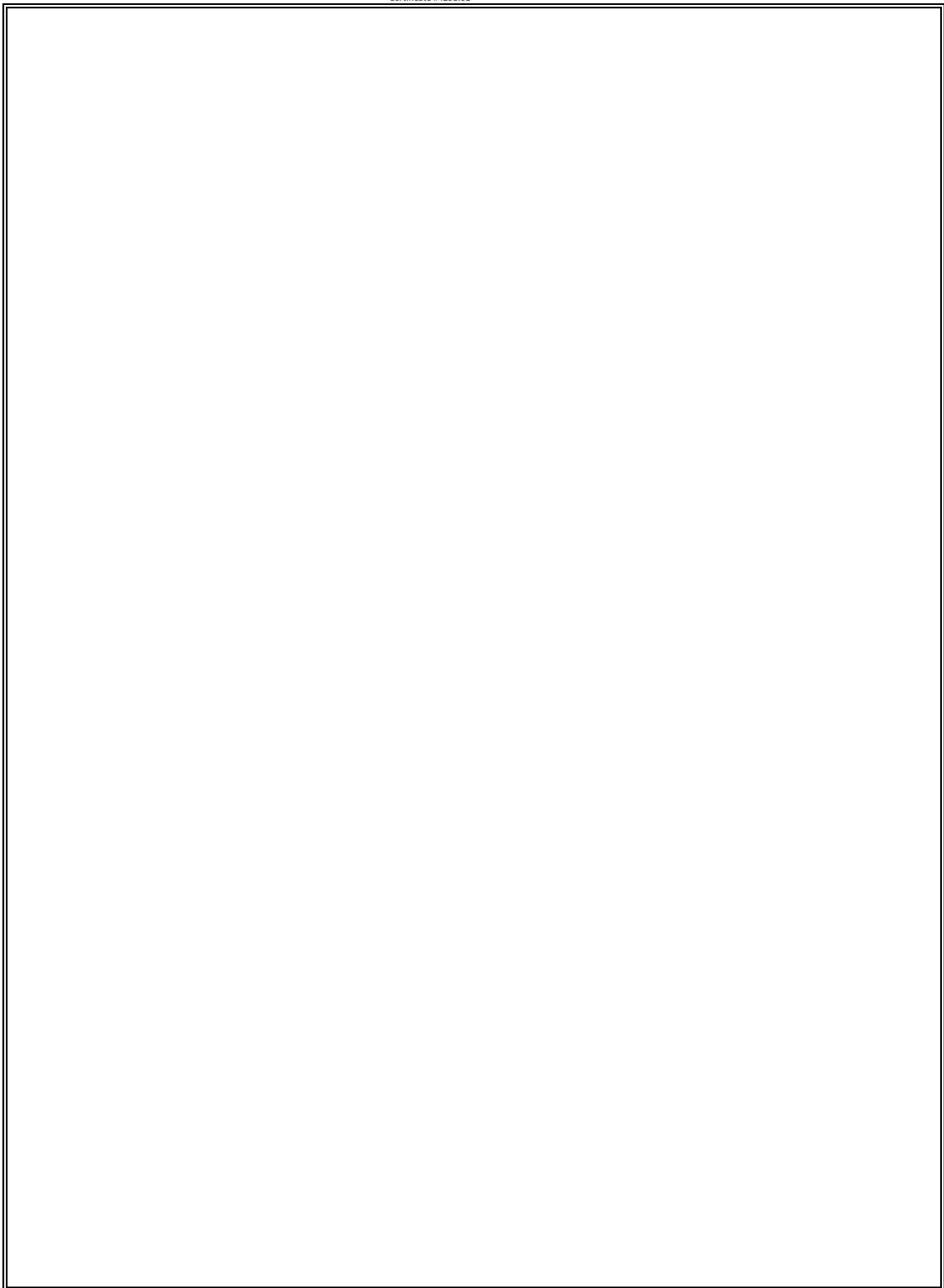
Maximum location: X=-1.00, Y=-11.00

SAR Peak: 1.37 W/kg

SAR 10g (W/Kg)

0.148911





MEASUREMENT 2

Date of measurement: 25/10/2024

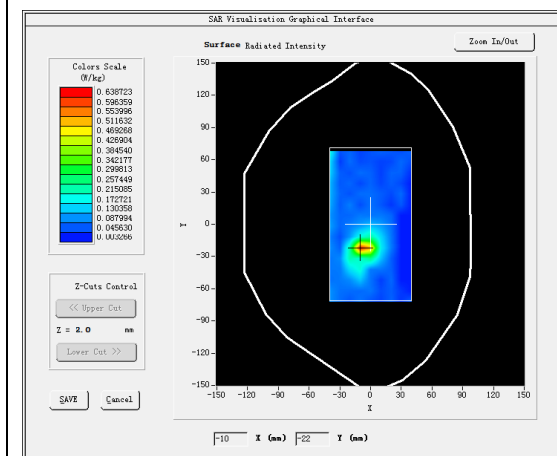
A. Experimental conditions.

<u>Area Scan</u>	<u>dx=10mm dy=10mm, h= 2.00 mm</u>
<u>ZoomScan</u>	<u>7x7x12,dx=4mm dy=4mm dz=2mm</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>IEEE 802.11a U-NII</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>IEEE802.11a (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>1.97</u>

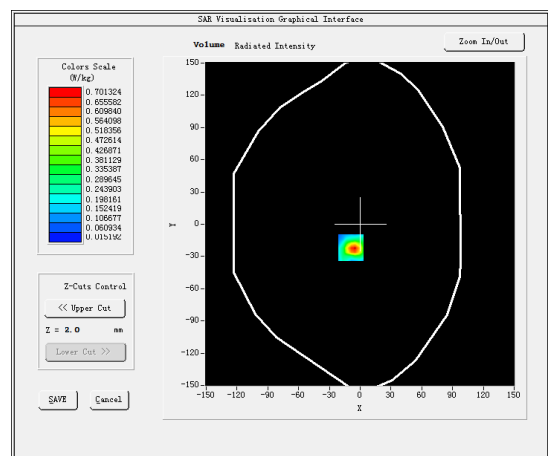
B. SAR Measurement Results

Frequency (MHz)	5290.000000
Relative permittivity (real part)	35.945818
Relative permittivity (imaginary part)	15.480026
Conductivity (S/m)	4.540808
Variation (%)	-1.770000

SURFACE SAR



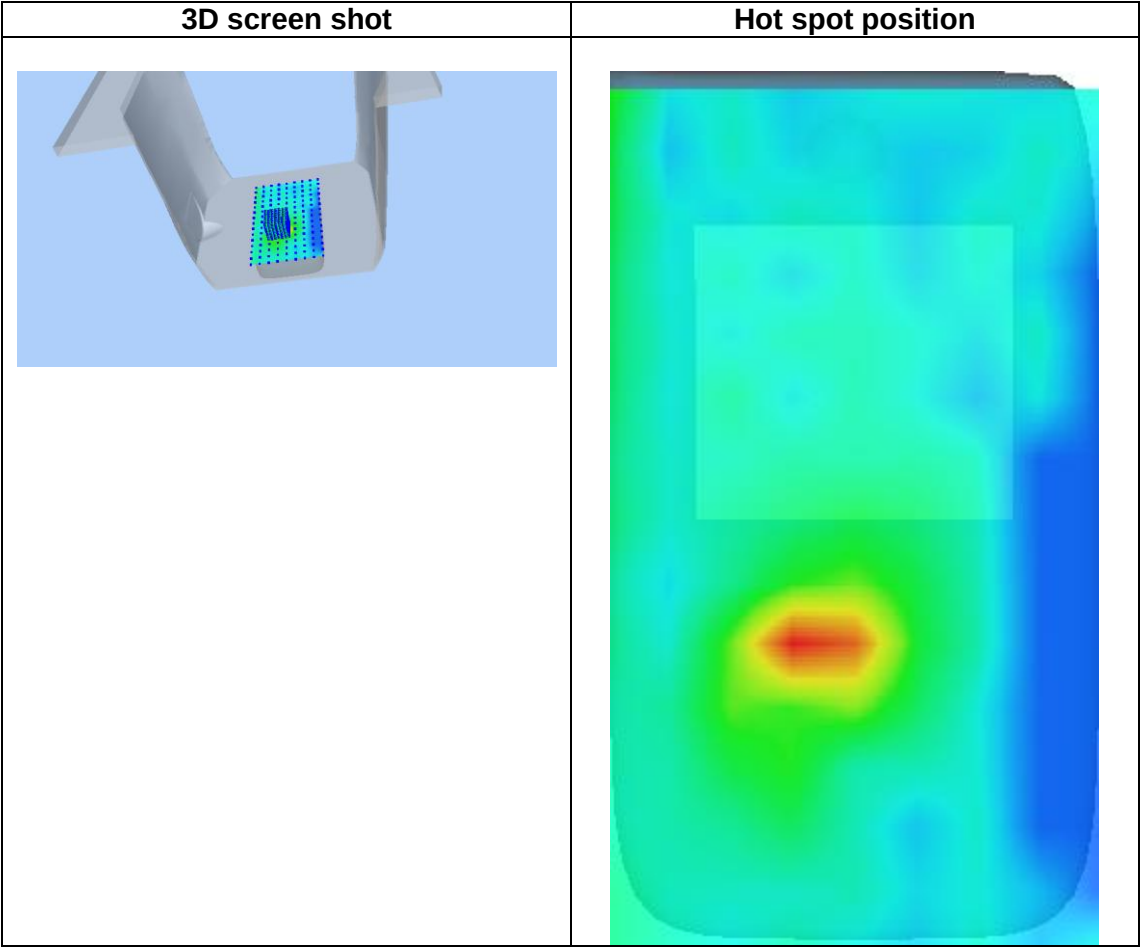
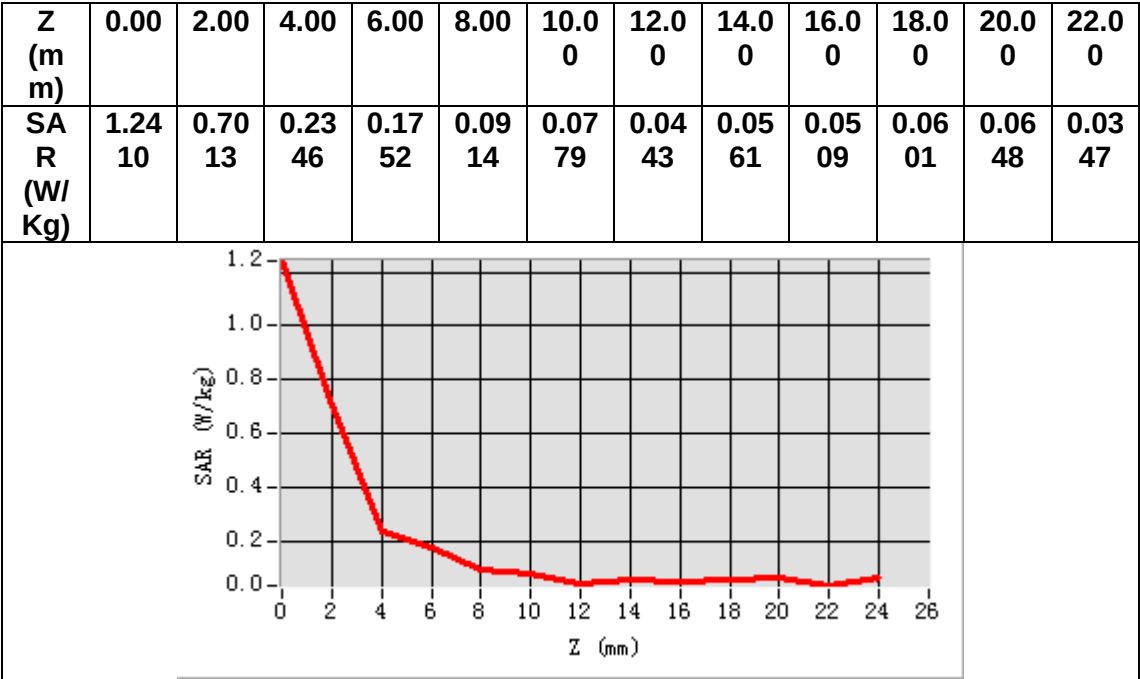
VOLUME SAR



Maximum location: X=-9.00, Y=-22.00

SAR Peak: 1.33 W/kg

SAR 10g (W/Kg)	0.140142
SAR 1g (W/Kg)	0.184705



MEASUREMENT 3

Date of measurement: 12/10/2024

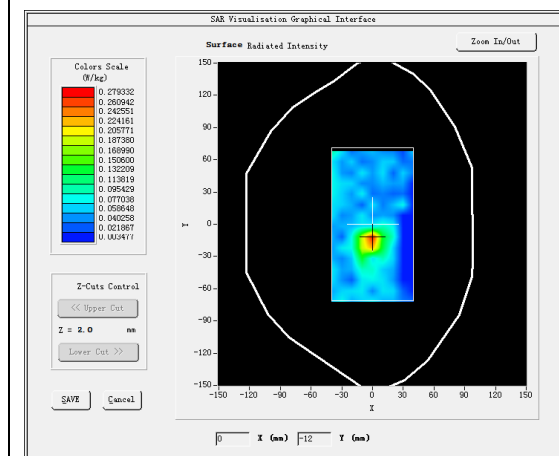
A. Experimental conditions.

<u>Area Scan</u>	<u>dx=10mm dy=10mm, h= 2.00 mm</u>
<u>ZoomScan</u>	<u>7x7x12,dx=4mm dy=4mm dz=2mm</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>IEEE 802.11a U-NII</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>IEEE802.11a (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>1.88</u>

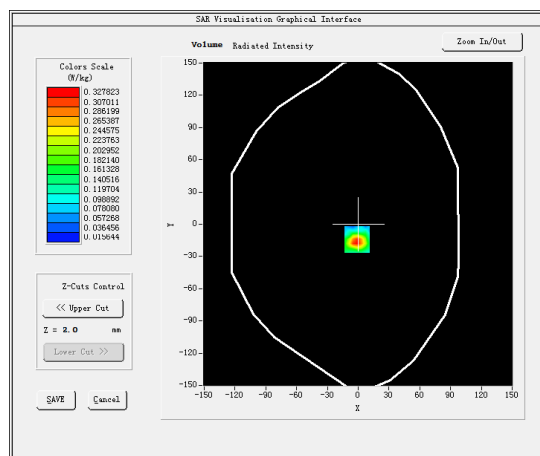
B. SAR Measurement Results

Frequency (MHz)	5570.000000
Relative permittivity (real part)	35.891217
Relative permittivity (imaginary part)	16.195951
Conductivity (S/m)	5.038740
Variation (%)	-2.230000

SURFACE SAR



VOLUME SAR

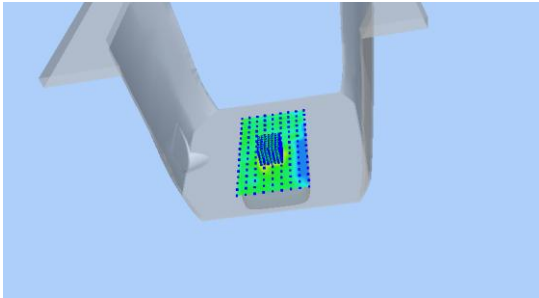
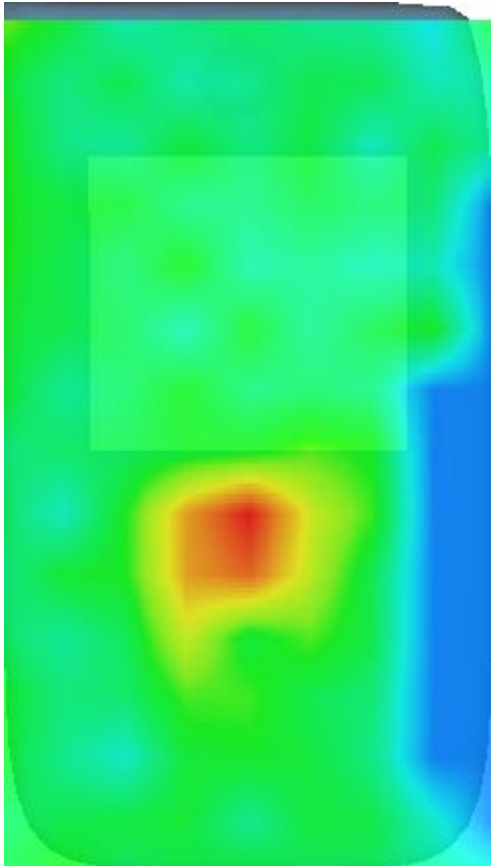


Maximum location: X=-1.00, Y=-14.00

SAR Peak: 0.64 W/kg

SAR 10g (W/Kg)	0.087029
SAR 1g (W/Kg)	0.193330

Z (mm)	SAR (W/kg)
0	0.50
2	0.35
4	0.12
6	0.08
8	0.06
10	0.04
12	0.00
14	0.03
16	0.00
18	0.01
20	0.05
22	0.04
24	0.00

3D screen shot	Hot spot position
	

MEASUREMENT 4

Date of measurement: 26/10/2024

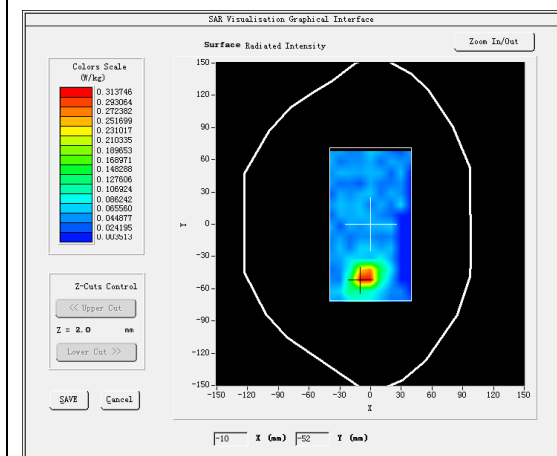
A. Experimental conditions.

<u>Area Scan</u>	<u>dx=10mm dy=10mm, h= 2.00 mm</u>
<u>ZoomScan</u>	<u>7x7x12,dx=4mm dy=4mm dz=2mm</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>IEEE 802.11a U-NII</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>IEEE802.11a (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>1.90</u>

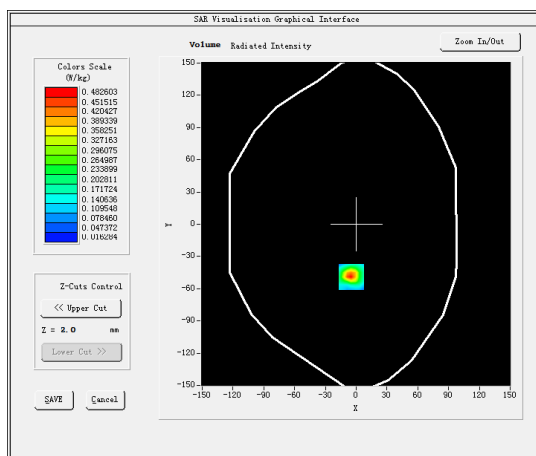
B. SAR Measurement Results

Frequency (MHz)	5785.000000
Relative permittivity (real part)	35.542806
Relative permittivity (imaginary part)	15.840995
Conductivity (S/m)	5.091120
Variation (%)	4.880000

SURFACE SAR



VOLUME SAR

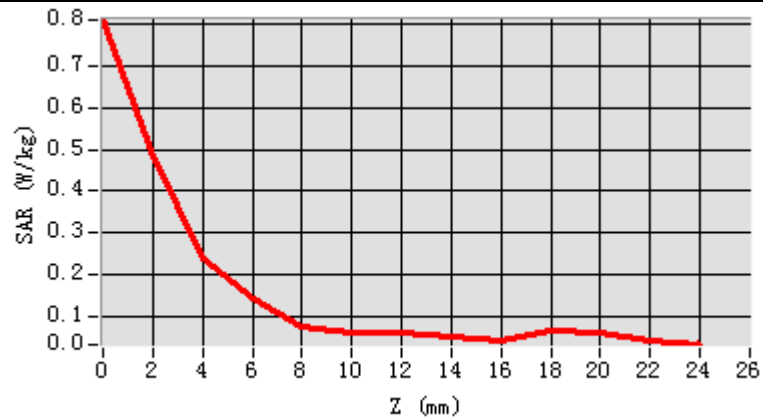


Maximum location: X=-5.00, Y=-49.00

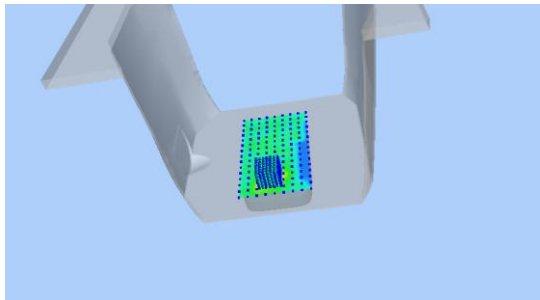
SAR Peak: 0.89 W/kg

SAR 10g (W/Kg)	0.106033
SAR 1g (W/Kg)	0.203905

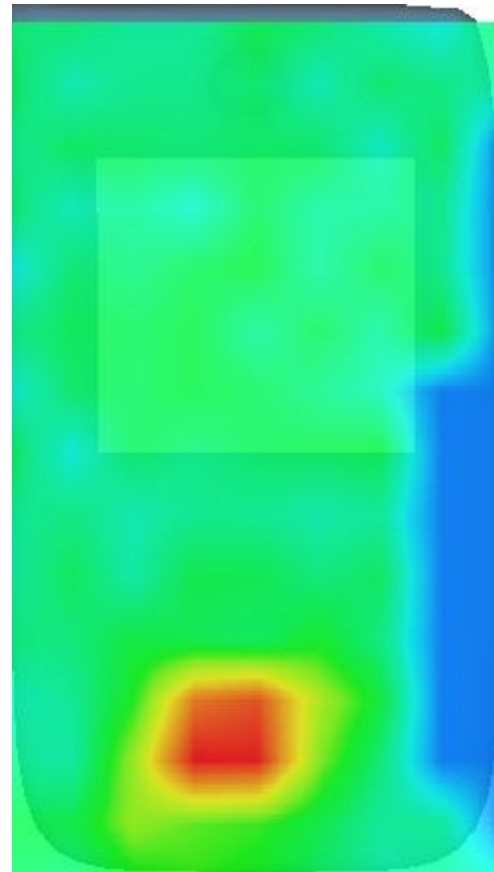
Z (m m)	0.00	2.00	4.00	6.00	8.00	10.0 0	12.0 0	14.0 0	16.0 0	18.0 0	20.0 0	22.0 0
SA R (W/ Kg)	0.81 12	0.48 26	0.23 78	0.14 06	0.07 64	0.06 03	0.05 82	0.05 16	0.04 21	0.06 67	0.05 87	0.04 03



3D screen shot



Hot spot position



MEASUREMENT 5

Date of measurement: 24/10/2024

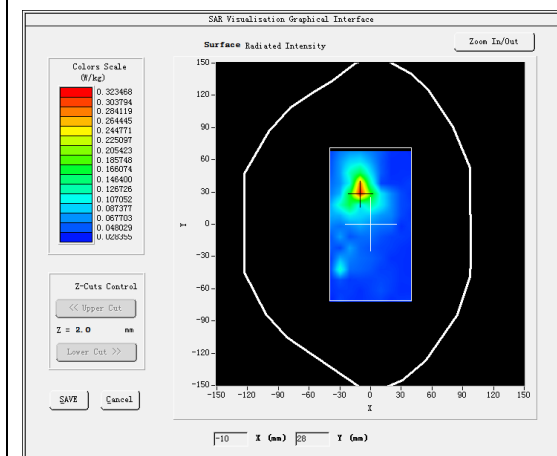
A. Experimental conditions.

<u>Area Scan</u>	<u>dx=10mm dy=10mm, h= 2.00 mm</u>
<u>ZoomScan</u>	<u>7x7x12,dx=4mm dy=4mm dz=2mm</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>IEEE 802.11a U-NII</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>IEEE802.11a (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>1.89</u>

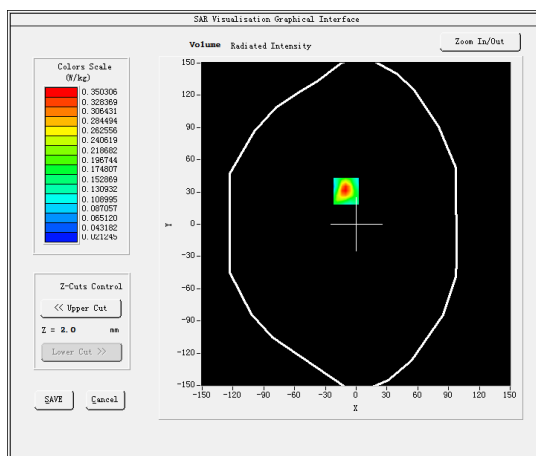
B. SAR Measurement Results

Frequency (MHz)	5250.000000
Relative permittivity (real part)	36.619695
Relative permittivity (imaginary part)	15.632473
Conductivity (S/m)	4.516048
Variation (%)	1.340000

SURFACE SAR



VOLUME SAR

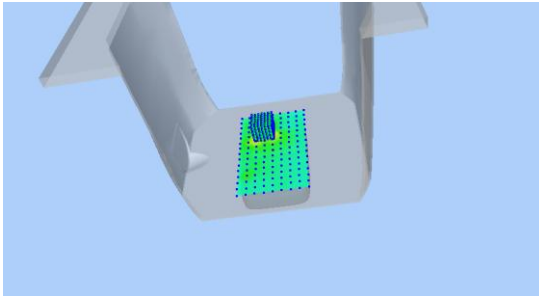
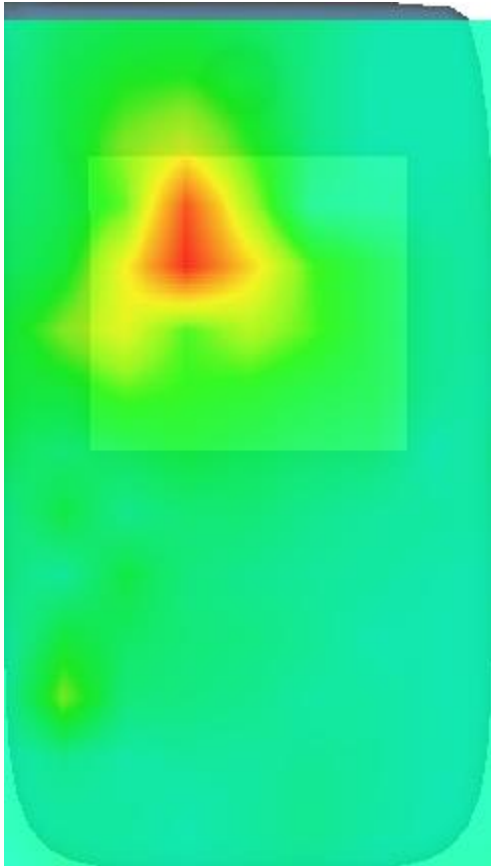


Maximum location: X=-10.00, Y=31.00

SAR Peak: 0.62 W/kg

SAR 10g (W/Kg)	0.089480
SAR 1g (W/Kg)	0.207486

Z (mm)	SAR (W/kg)
0	0.60
2	0.35
4	0.18
6	0.10
8	0.07
10	0.04
12	0.02
14	0.01
16	0.01
18	0.01
20	0.01
22	0.01
24	0.01
26	0.01

3D screen shot	Hot spot position
	

MEASUREMENT 6

Date of measurement: 25/10/2024

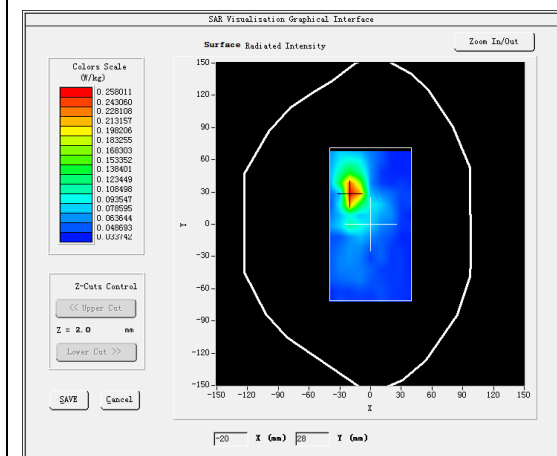
A. Experimental conditions.

<u>Area Scan</u>	<u>dx=10mm dy=10mm, h= 2.00 mm</u>
<u>ZoomScan</u>	<u>7x7x12,dx=4mm dy=4mm dz=2mm</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>IEEE 802.11a U-NII</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>IEEE802.11a (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>1.97</u>

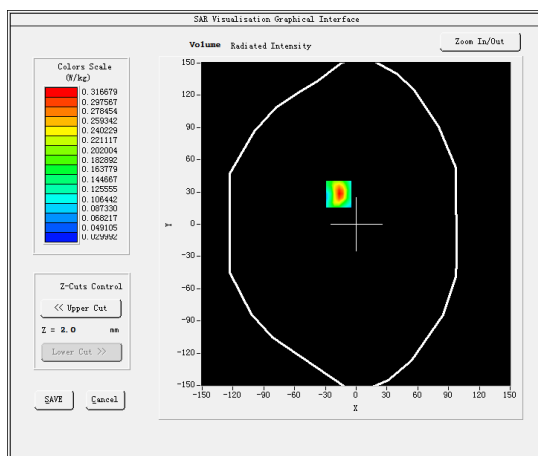
B. SAR Measurement Results

Frequency (MHz)	5290.000000
Relative permittivity (real part)	35.945818
Relative permittivity (imaginary part)	15.480026
Conductivity (S/m)	4.540808
Variation (%)	3.030000

SURFACE SAR



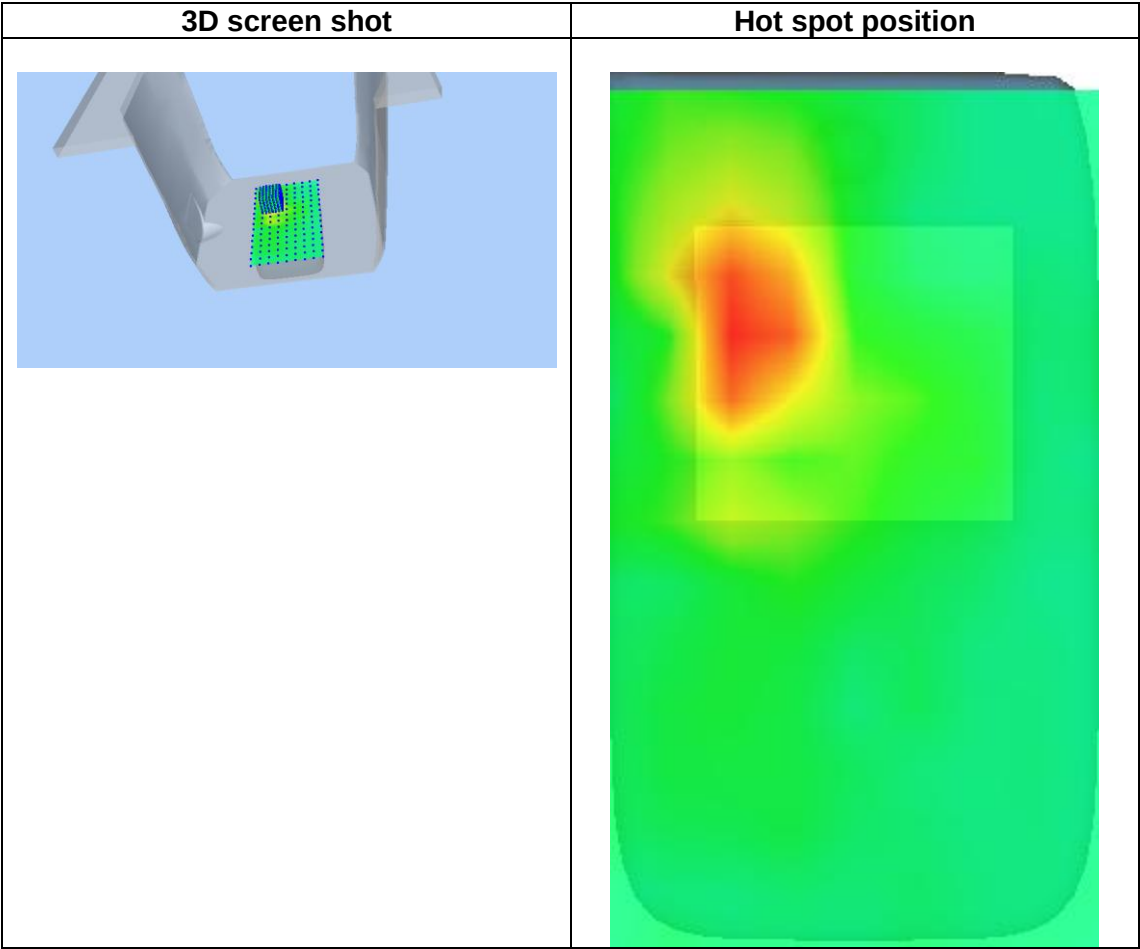
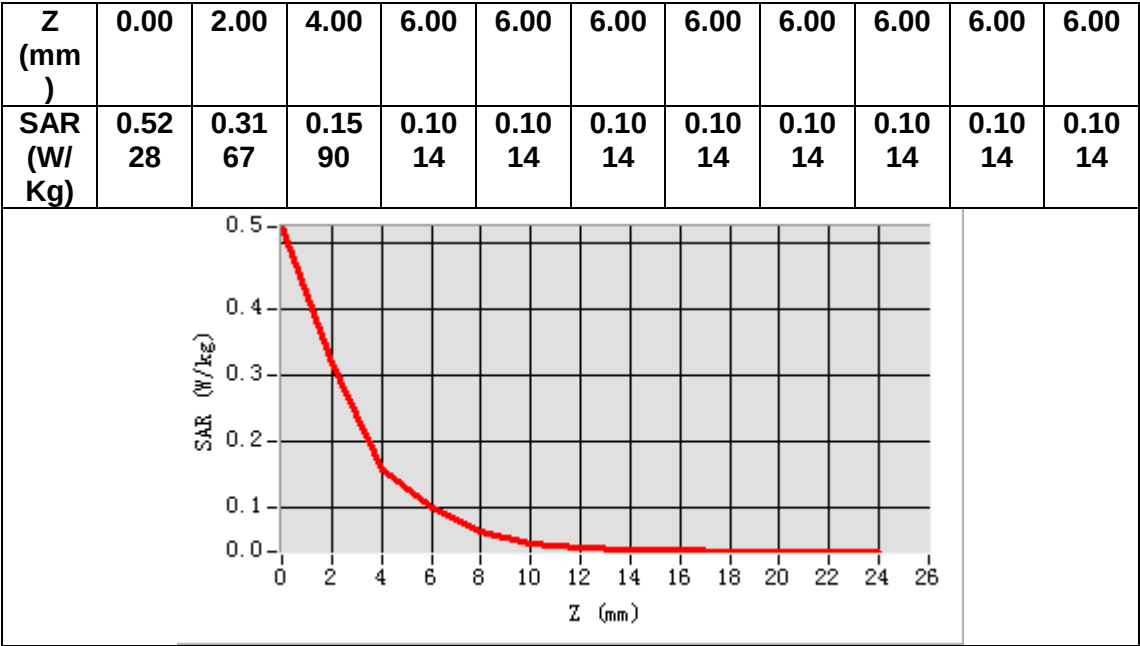
VOLUME SAR



Maximum location: X=-17.00, Y=28.00

SAR Peak: 0.56 W/kg

SAR 10g (W/Kg)	0.085655
SAR 1g (W/Kg)	0.187731



MEASUREMENT 7

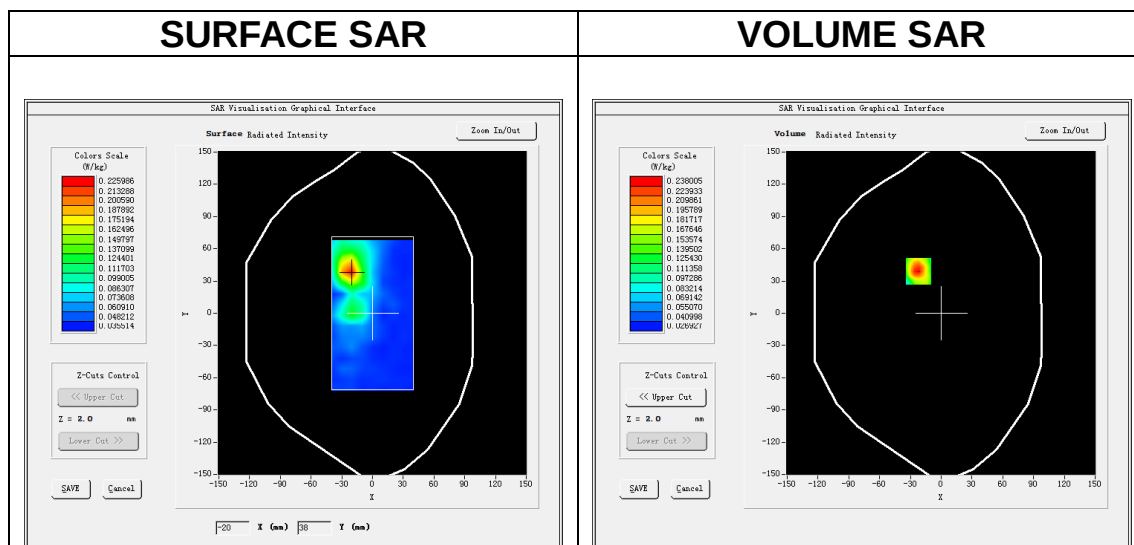
Date of measurement: 12/10/2024

A. Experimental conditions.

<u>Area Scan</u>	<u>dx=10mm dy=10mm, h= 2.00 mm</u>
<u>ZoomScan</u>	<u>7x7x12,dx=4mm dy=4mm dz=2mm</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>IEEE 802.11a U-NII</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>IEEE802.11a (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>1.88</u>

B. SAR Measurement Results

Frequency (MHz)	5570.000000
Relative permittivity (real part)	35.891217
Relative permittivity (imaginary part)	16.195951
Conductivity (S/m)	5.038740
Variation (%)	-0.680000

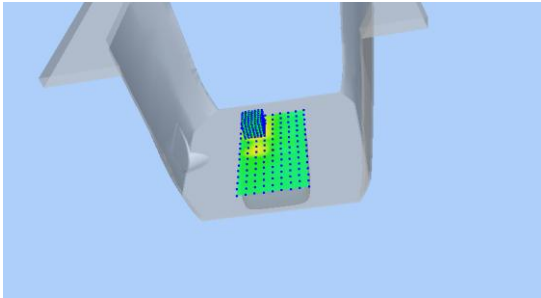
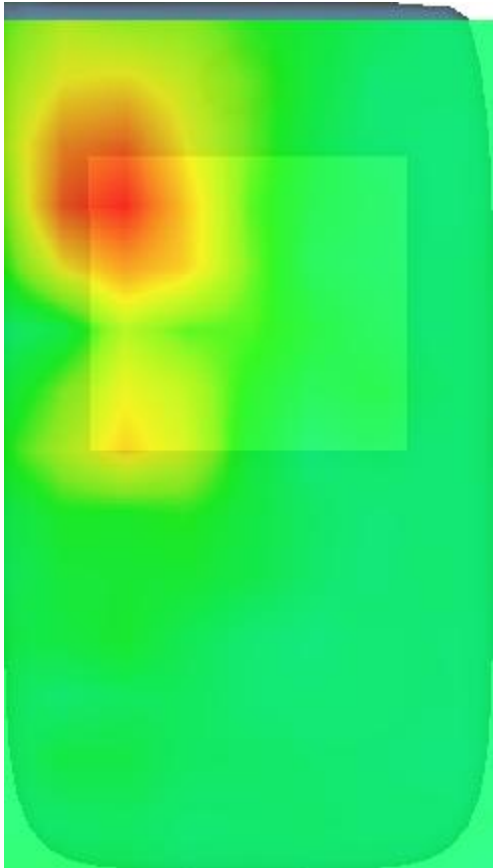


Maximum location: X=-22.00, Y=39.00

SAR Peak: 0.41 W/kg

SAR 10g (W/Kg)	0.079541
SAR 1g (W/Kg)	0.150321

Graph of SAR (W/kg) vs Z (mm) for the 100 MHz case. The SAR starts at approximately 0.38 W/kg at Z=0 and decreases rapidly, reaching a minimum of about 0.04 W/kg at Z=12 mm, and then remains relatively constant up to Z=26 mm.

3D screen shot	Hot spot position
 A 3D perspective view of a robotic arm, rendered in light blue, holding a grey rectangular tray. On the tray, there is a grid of small, colored dots. The dots are primarily green, with a cluster of yellow and red dots in the upper-left quadrant, indicating a hot spot. The background is a solid light blue.	 A heatmap visualization of the hot spot position. The background is a solid green color. A large, irregularly shaped region of high intensity is shown in the upper-left quadrant, with colors ranging from yellow to red. A smaller, rectangular region of high intensity is also visible in the lower-right quadrant, colored yellow. The overall shape of the high-intensity region corresponds to the tray's position in the 3D view.

MEASUREMENT 8

Date of measurement: 26/10/2024

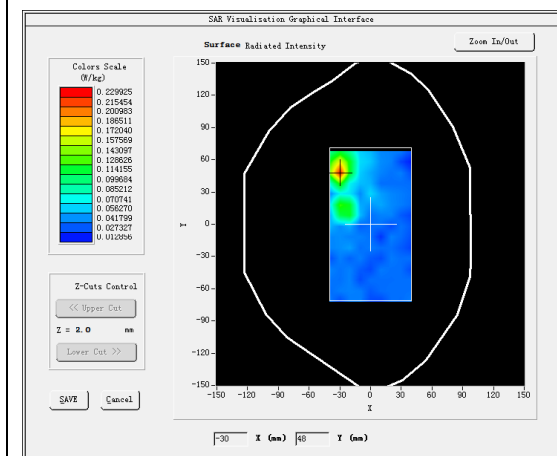
A. Experimental conditions.

<u>Area Scan</u>	<u>dx=10mm dy=10mm, h= 2.00 mm</u>
<u>ZoomScan</u>	<u>7x7x12,dx=4mm dy=4mm dz=2mm</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>IEEE 802.11a U-NII</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>IEEE802.11a (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>1.90</u>

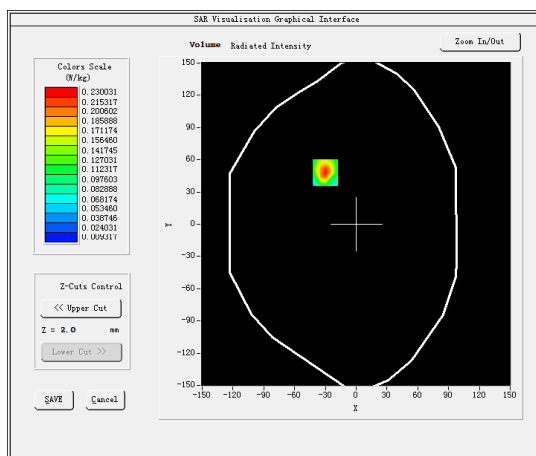
B. SAR Measurement Results

Frequency (MHz)	5785.000000
Relative permittivity (real part)	35.542806
Relative permittivity (imaginary part)	15.840995
Conductivity (S/m)	5.091120
Variation (%)	-0.170000

SURFACE SAR



VOLUME SAR

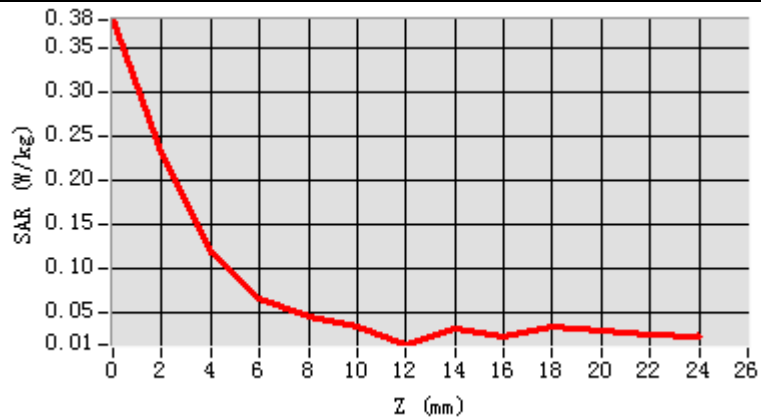


Maximum location: X=-30.00, Y=48.00

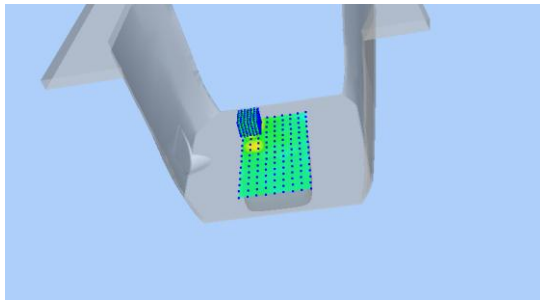
SAR Peak: 0.40 W/kg

SAR 10g (W/Kg)	0.063882
SAR 1g (W/Kg)	0.134805

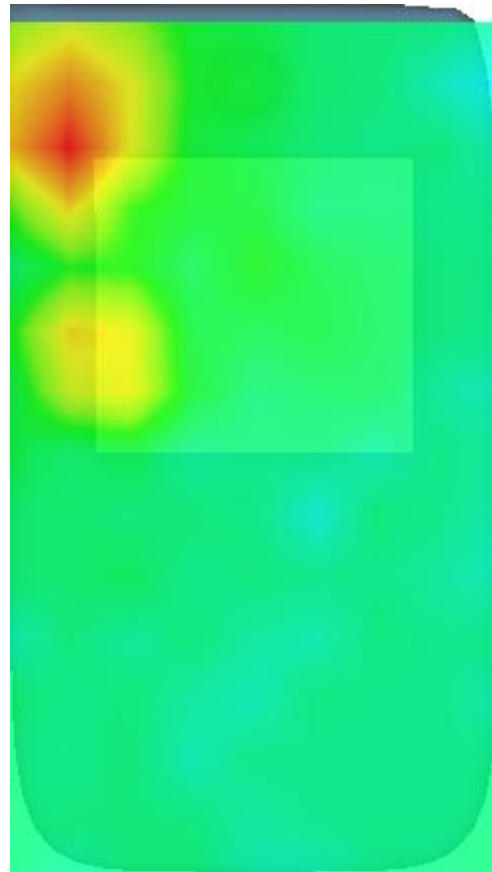
Z (m m)	0.00	2.00	4.00	6.00	8.00	10.0 0	12.0 0	14.0 0	16.0 0	18.0 0	20.0 0	22.0 0
SA R (W/ Kg)	0.38 06	0.23 00	0.11 82	0.06 51	0.04 47	0.03 48	0.01 34	0.03 15	0.02 21	0.03 28	0.02 89	0.02 41



3D screen shot



Hot spot position



MEASUREMENT 9

Date of measurement: 23/10/2024

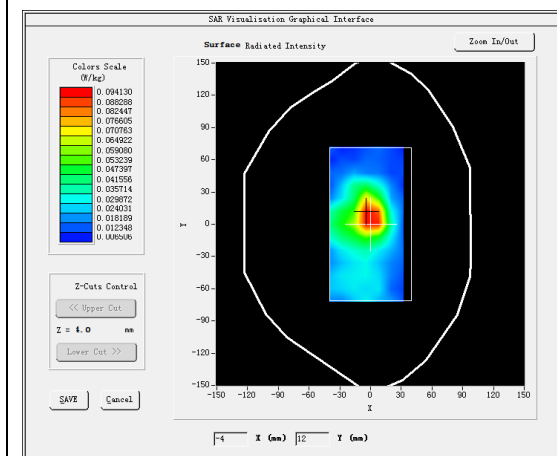
A. Experimental conditions.

<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>IEEE 802.11b ISM</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>IEEE802.11b (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>2.74</u>

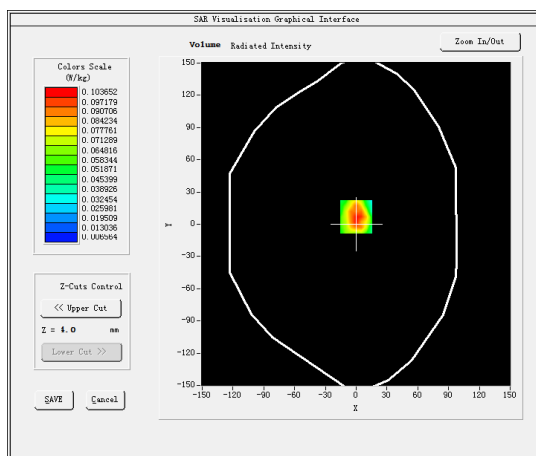
B. SAR Measurement Results

Frequency (MHz)	2437.000000
Relative permittivity (real part)	39.887970
Relative permittivity (imaginary part)	13.105033
Conductivity (S/m)	1.774276
Variation (%)	2.670000

SURFACE SAR



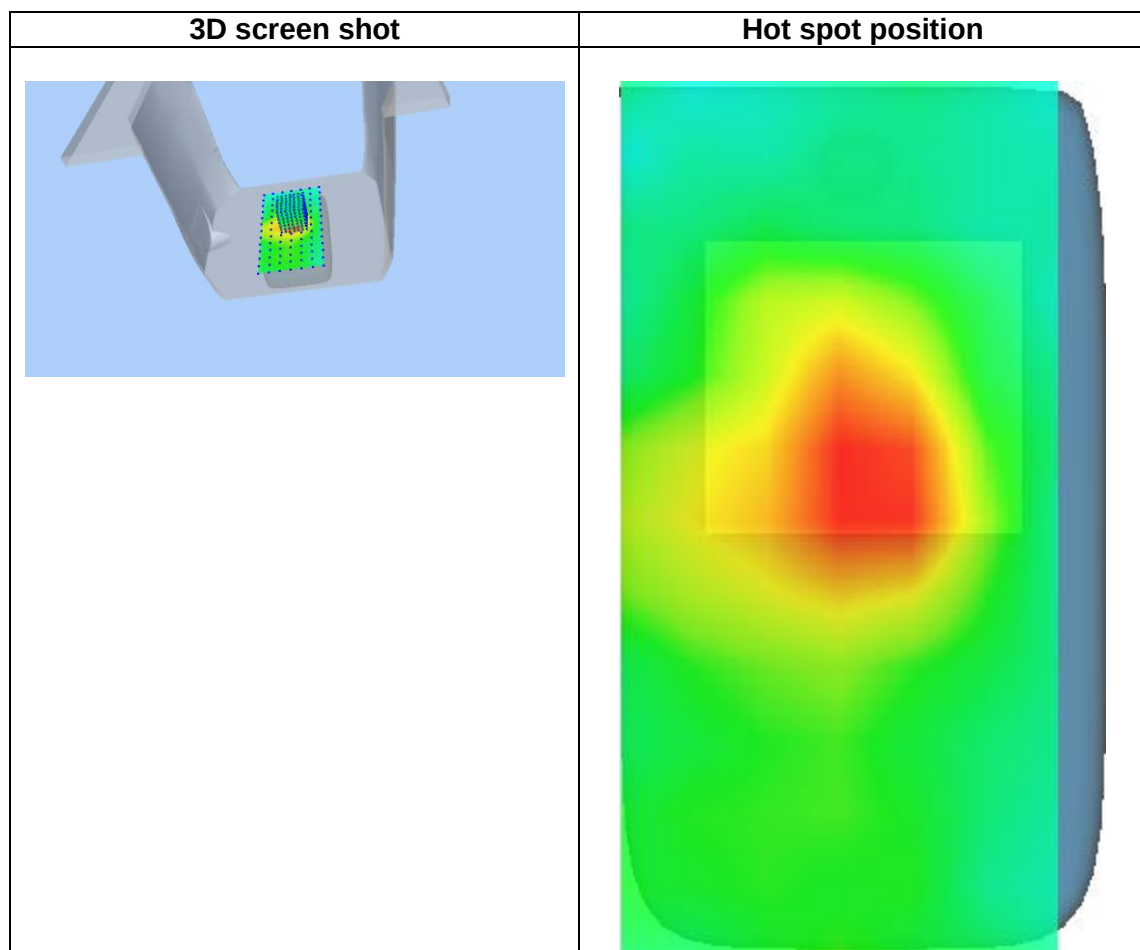
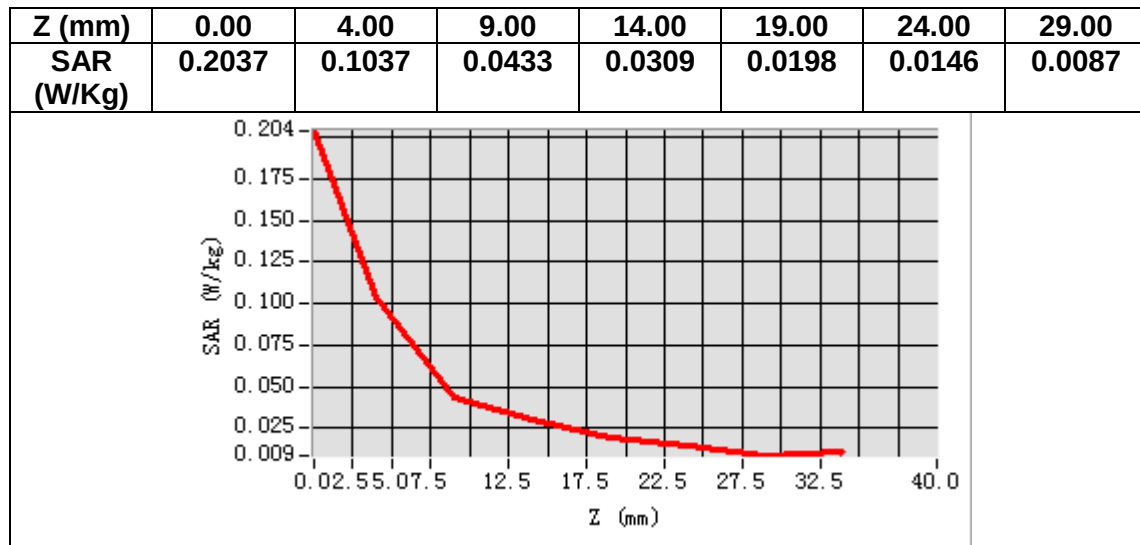
VOLUME SAR



Maximum location: X=0.00, Y=7.00

SAR Peak: 0.18 W/kg

SAR 10g (W/Kg)	0.052497
SAR 1g (W/Kg)	0.095890



MEASUREMENT 15

Date of measurement: 23/10/2024

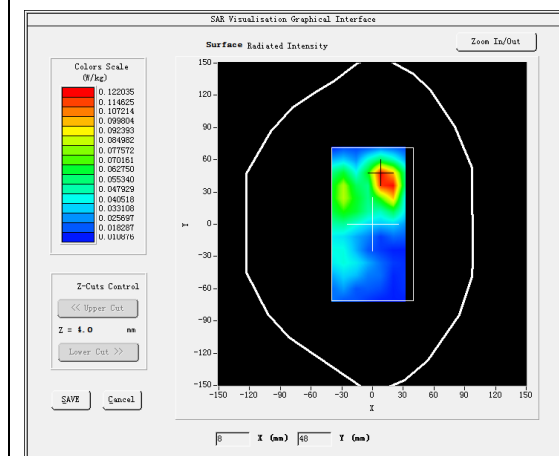
A. Experimental conditions.

<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>IEEE 802.11b ISM</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>IEEE802.11b (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>2.74</u>

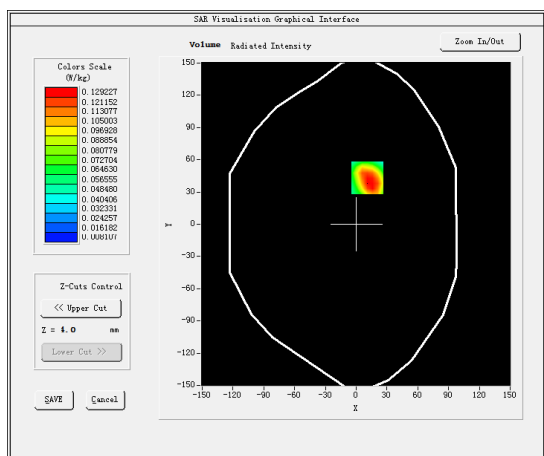
B. SAR Measurement Results

Frequency (MHz)	2437.000000
Relative permittivity (real part)	39.887970
Relative permittivity (imaginary part)	13.105033
Conductivity (S/m)	1.774276
Variation (%)	4.620000

SURFACE SAR



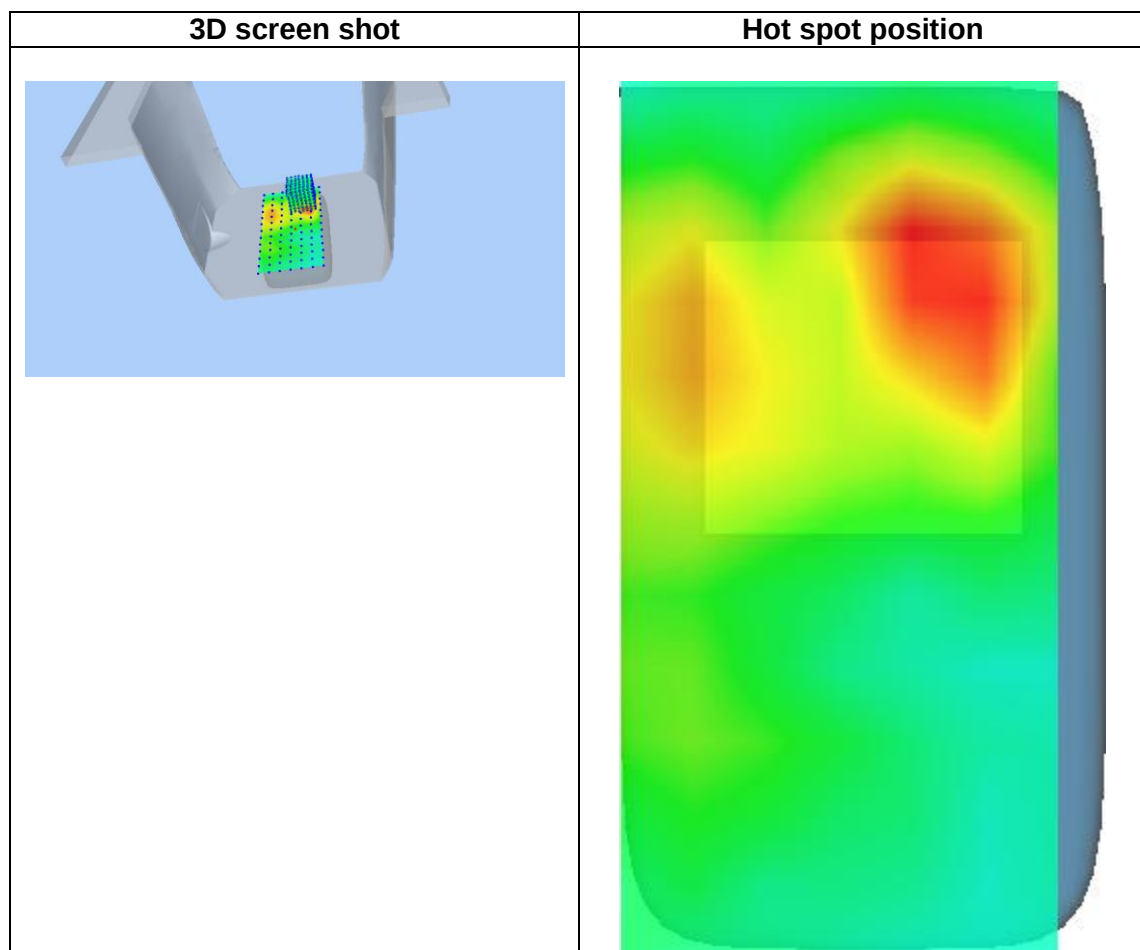
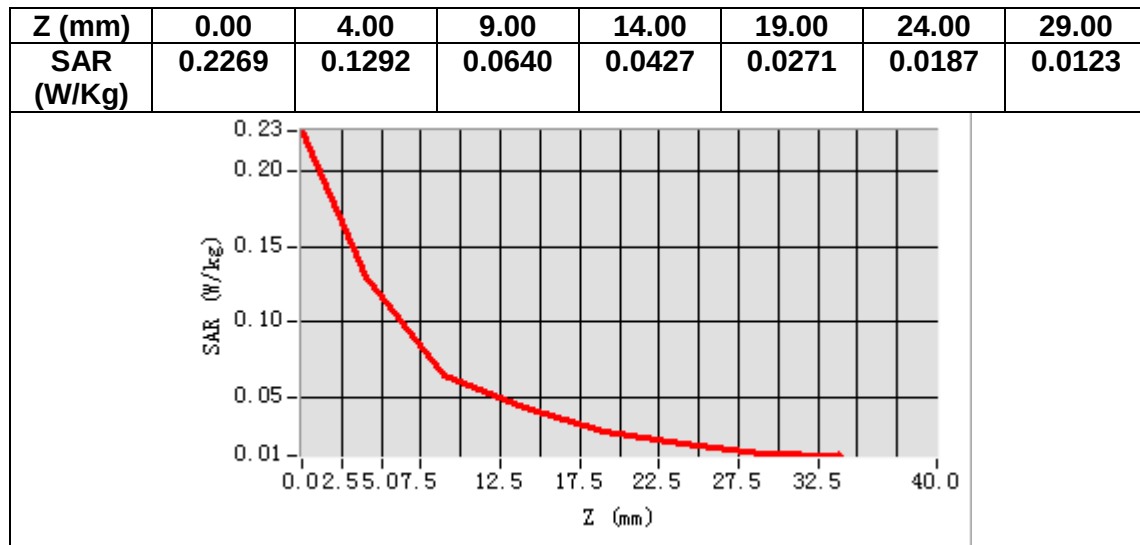
VOLUME SAR



Maximum location: X=11.00, Y=43.00

SAR Peak: 0.22 W/kg

SAR 10g (W/Kg)	0.068419
SAR 1g (W/Kg)	0.125747



MEASUREMENT 11

Date of measurement: 16/10/2024

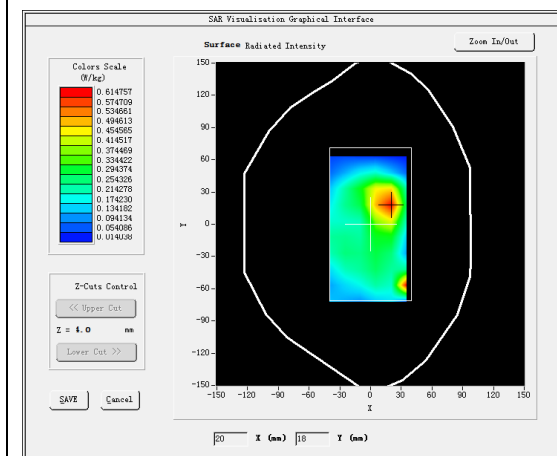
A. Experimental conditions.

<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>2.57</u>

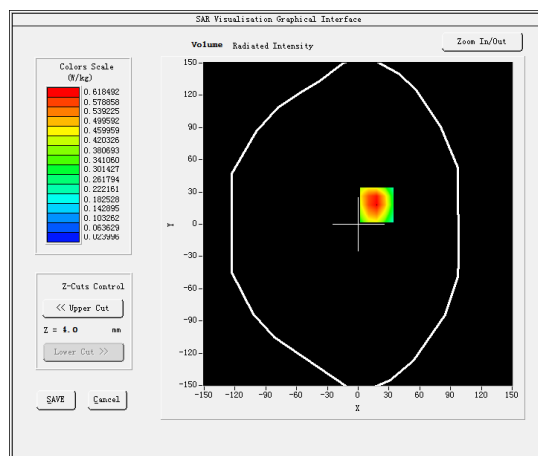
B. SAR Measurement Results

Frequency (MHz)	1880.000000
Relative permittivity (real part)	38.657154
Relative permittivity (imaginary part)	13.872347
Conductivity (S/m)	1.448890
Variation (%)	-0.700000

SURFACE SAR



VOLUME SAR

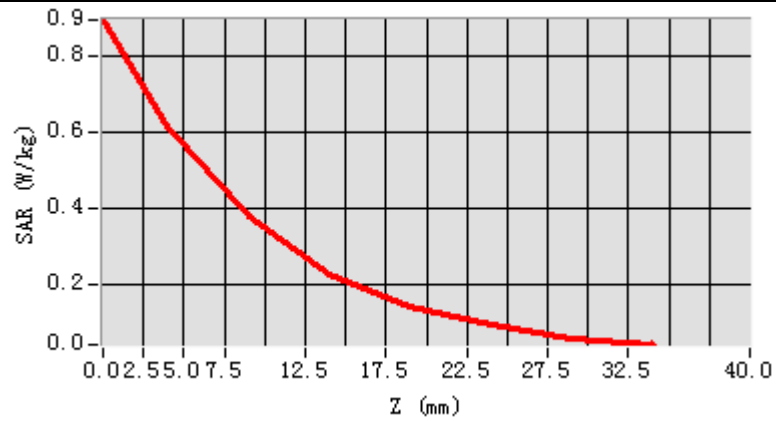


Maximum location: X=18.00, Y=18.00

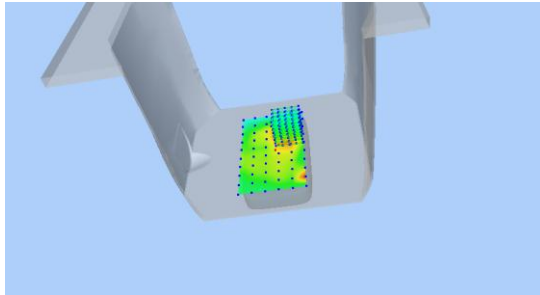
SAR Peak: 0.96 W/kg

SAR 10g (W/Kg)	0.351462
SAR 1g (W/Kg)	0.619308

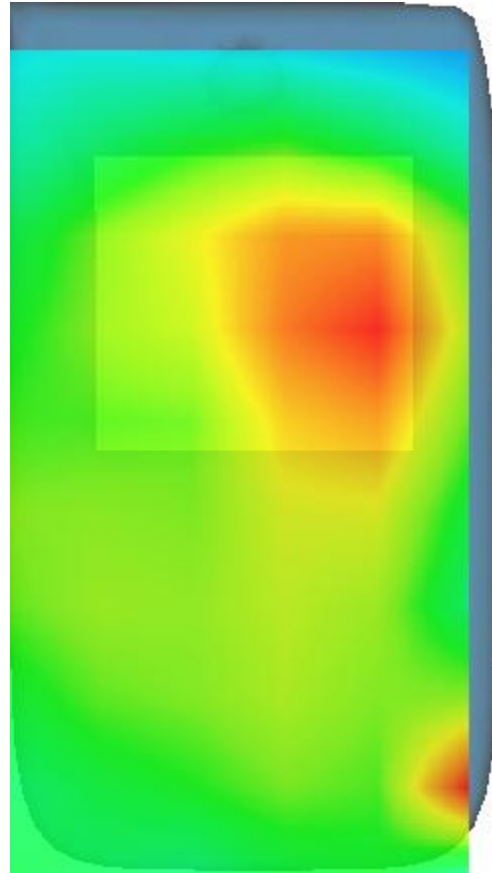
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.8974	0.6185	0.3809	0.2259	0.1387	0.0899	0.0564



3D screen shot



Hot spot position



MEASUREMENT 12

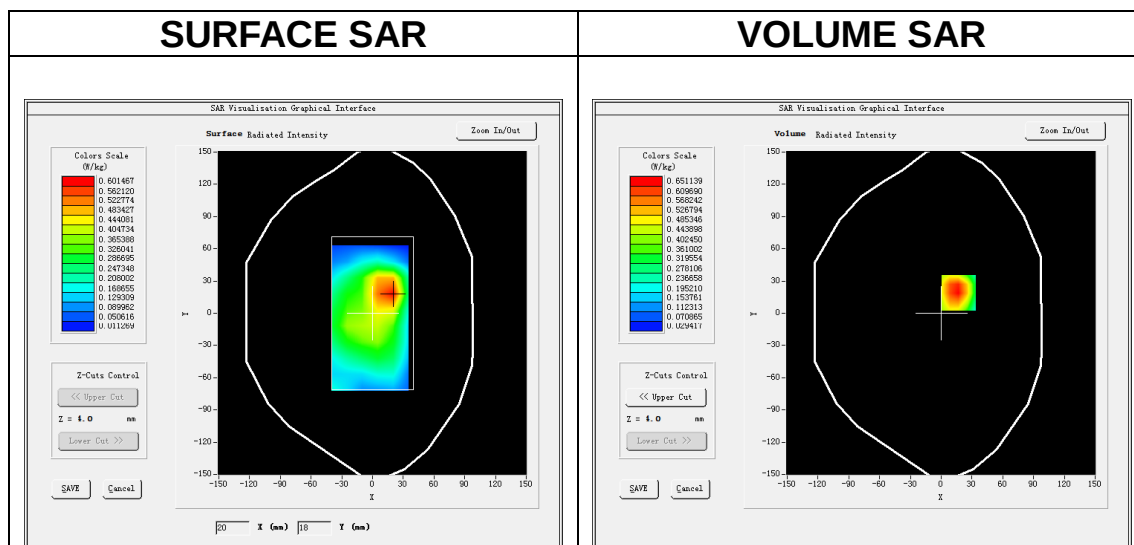
Date of measurement: 22/10/2024

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>2.51</u>

B. SAR Measurement Results

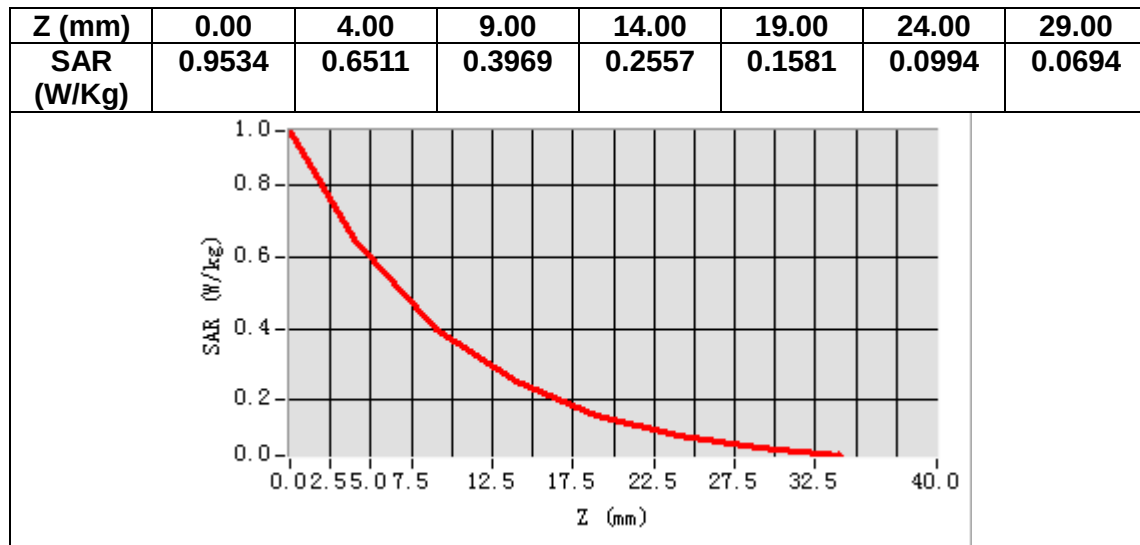
Frequency (MHz)	1732.500000
Relative permittivity (real part)	39.715107
Relative permittivity (imaginary part)	13.637889
Conductivity (S/m)	1.312647
Variation (%)	-1.340000



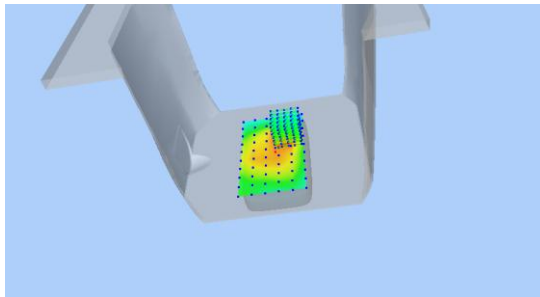
Maximum location: X=17.00, Y=19.00

SAR Peak: 1.00 W/kg

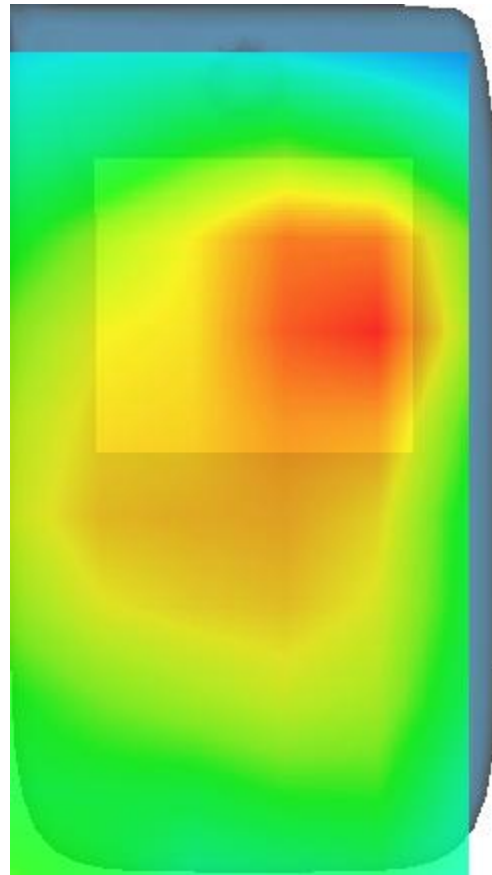
SAR 10g (W/Kg)	0.368399
SAR 1g (W/Kg)	0.629379



3D screen shot



Hot spot position



MEASUREMENT 13

Date of measurement: 15/10/2024

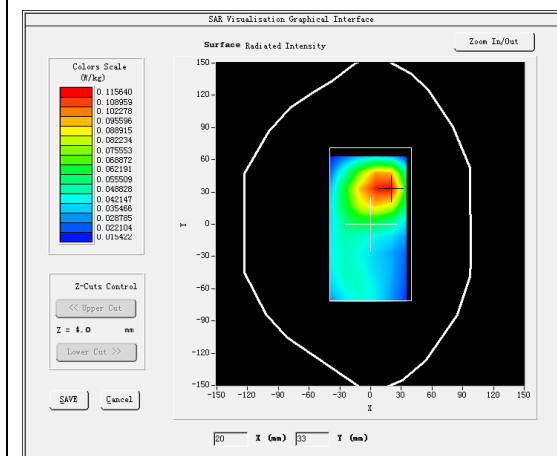
A. Experimental conditions.

<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>2.34</u>

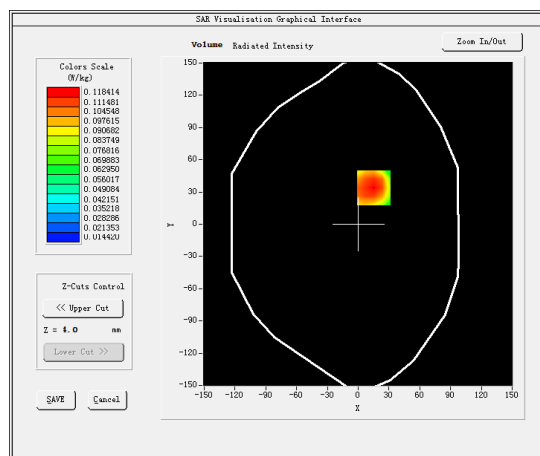
B. SAR Measurement Results

Frequency (MHz)	836.500000
Relative permittivity (real part)	41.880817
Relative permittivity (imaginary part)	19.729731
Conductivity (S/m)	0.916884
Variation (%)	-0.210000

SURFACE SAR



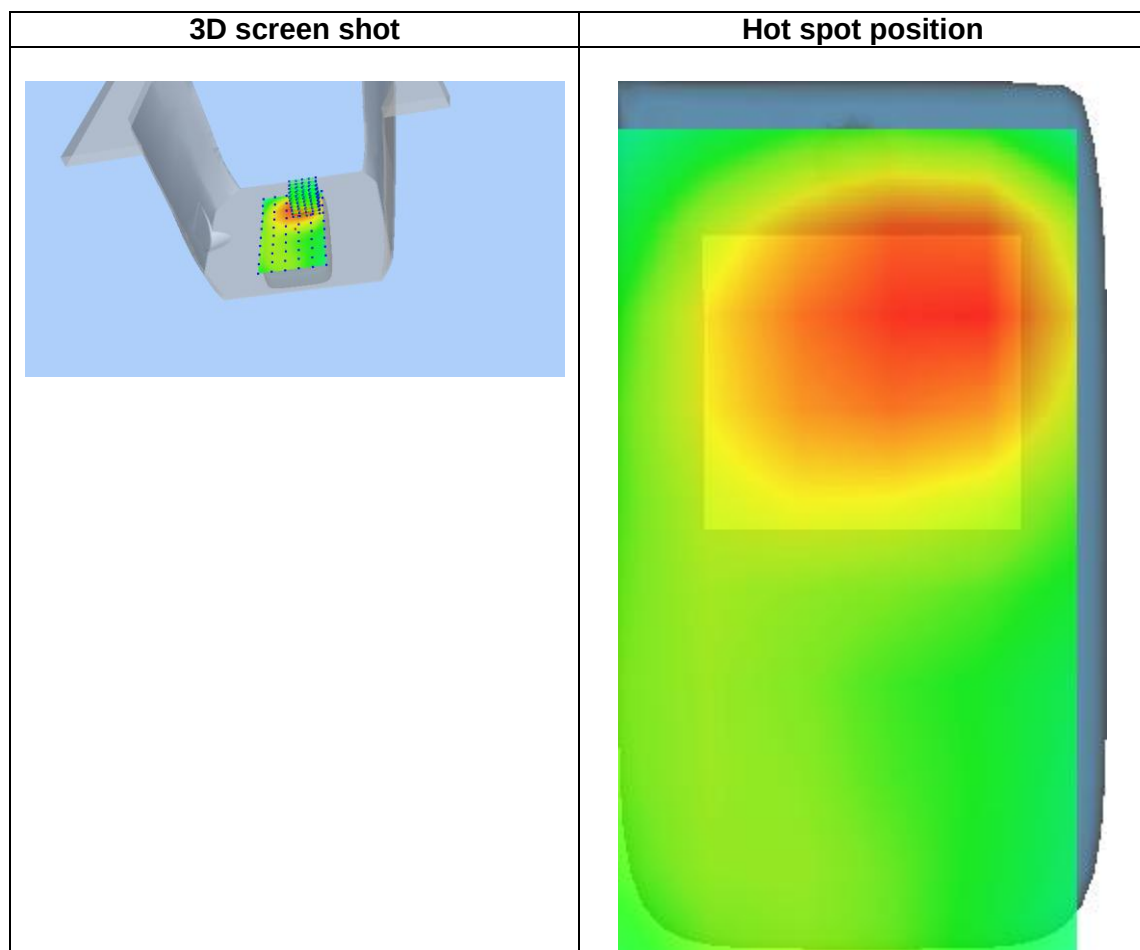
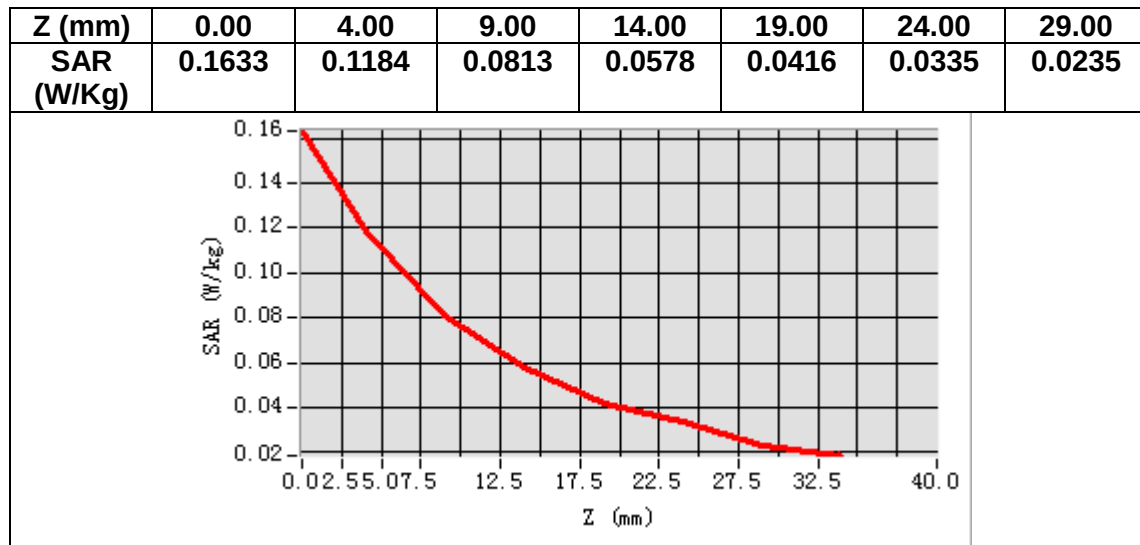
VOLUME SAR



Maximum location: X=15.00, Y=34.00

SAR Peak: 0.17 W/kg

SAR 10g (W/Kg)	0.077982
SAR 1g (W/Kg)	0.115720



MEASUREMENT 14

Date of measurement: 17/10/2024

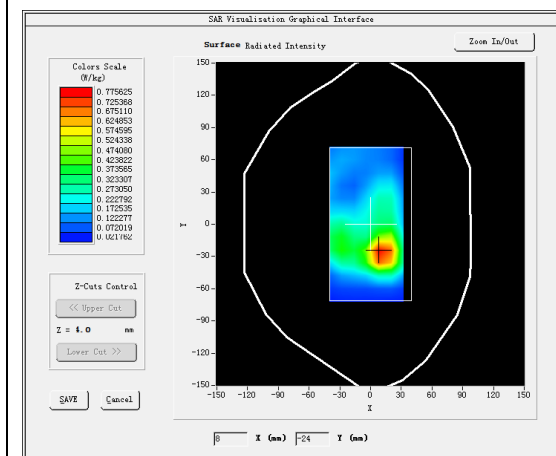
A. Experimental conditions.

<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>2.51</u>

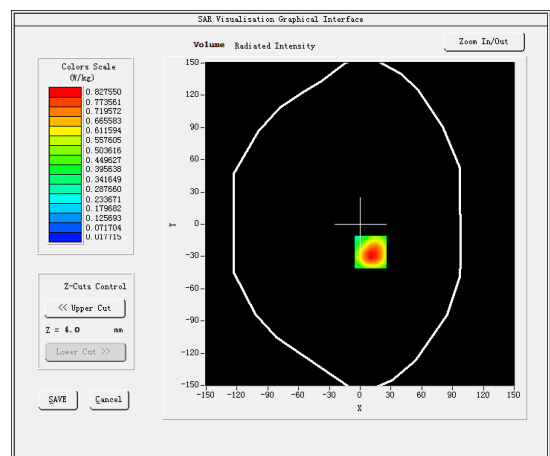
B. SAR Measurement Results

Frequency (MHz)	2535.000000
Relative permittivity (real part)	39.245743
Relative permittivity (imaginary part)	13.866988
Conductivity (S/m)	1.952934
Variation (%)	0.520000

SURFACE SAR



VOLUME SAR

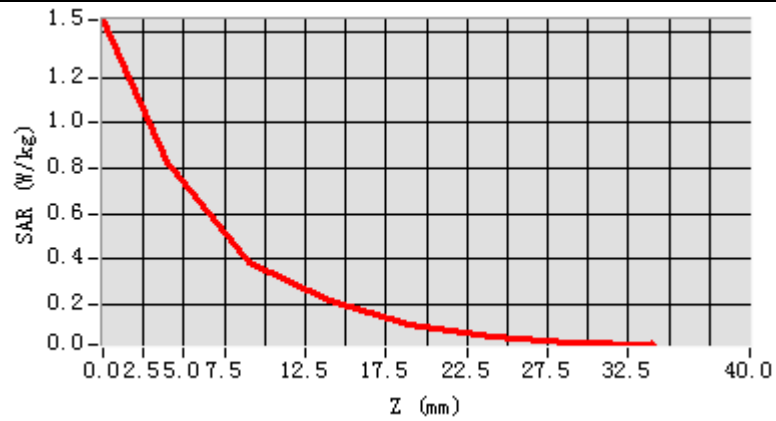


Maximum location: X=10.00, Y=-26.00

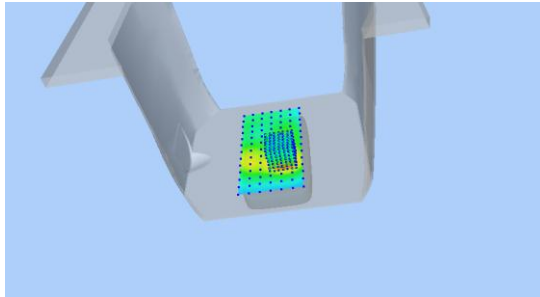
SAR Peak: 1.39 W/kg

SAR 10g (W/Kg)	0.404311
SAR 1g (W/Kg)	0.712005

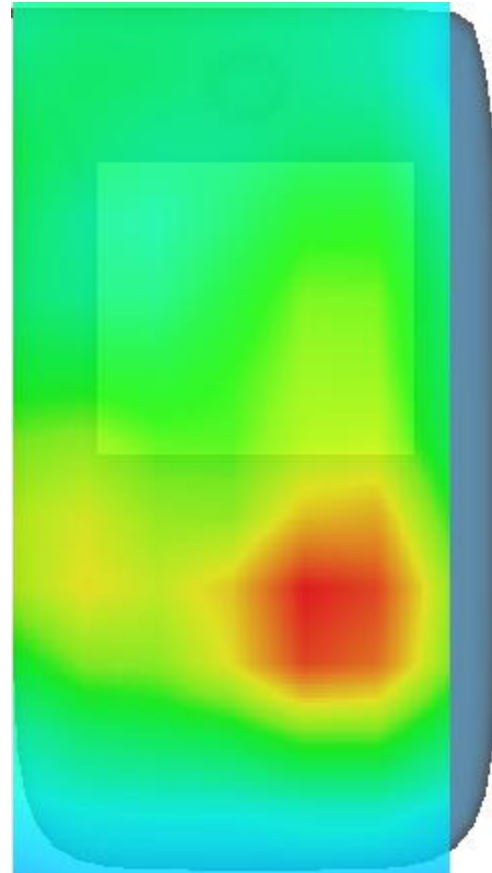
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.4509	0.8276	0.3865	0.2159	0.1114	0.0645	0.0384



3D screen shot



Hot spot position



MEASUREMENT 15

Date of measurement: 14/10/2024

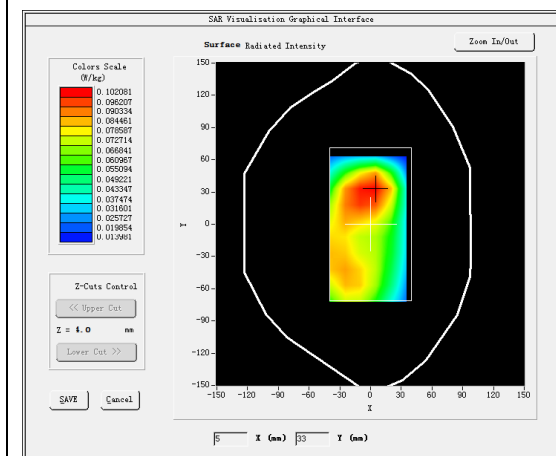
A. Experimental conditions.

<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>2.42</u>

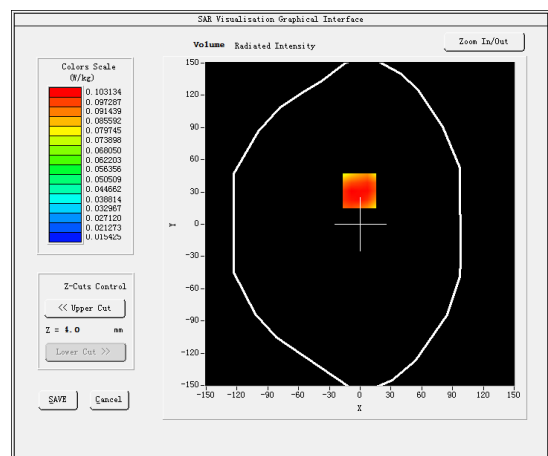
B. SAR Measurement Results

Frequency (MHz)	707.500000
Relative permittivity (real part)	41.079533
Relative permittivity (imaginary part)	21.855495
Conductivity (S/m)	0.859042
Variation (%)	0.350000

SURFACE SAR



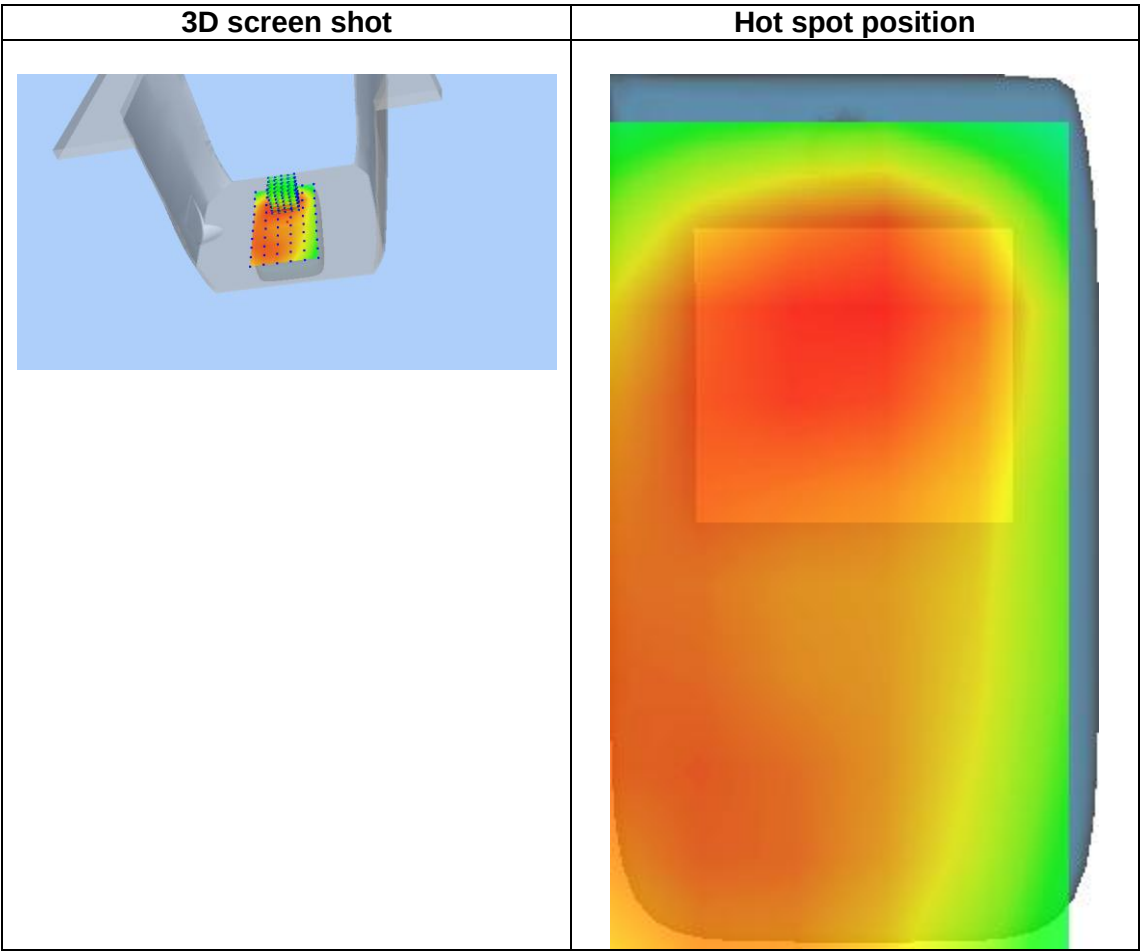
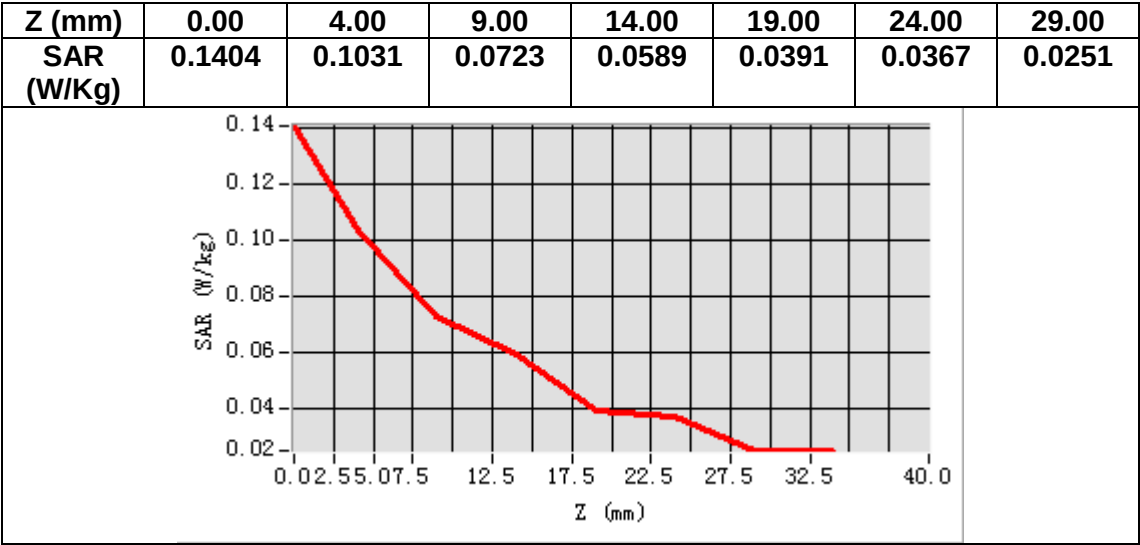
VOLUME SAR



Maximum location: X=-1.00, Y=31.00

SAR Peak: 0.14 W/kg

SAR 10g (W/Kg)	0.075158
SAR 1g (W/Kg)	0.101417



MEASUREMENT 16

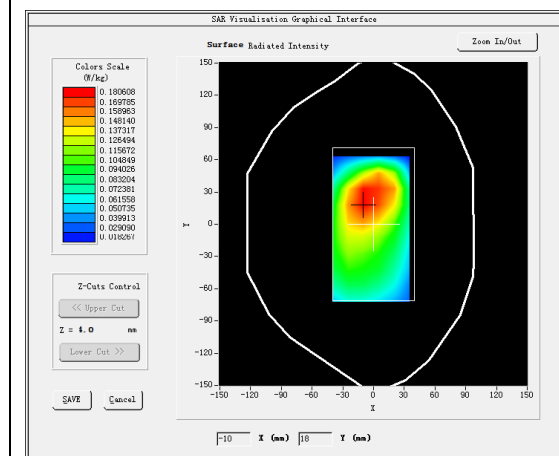
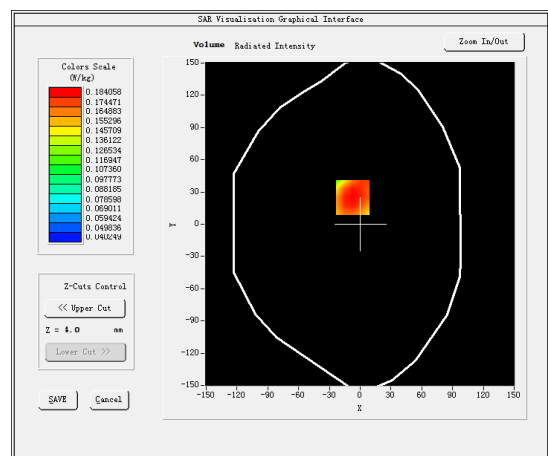
Date of measurement: 14/10/2024

A. Experimental conditions.

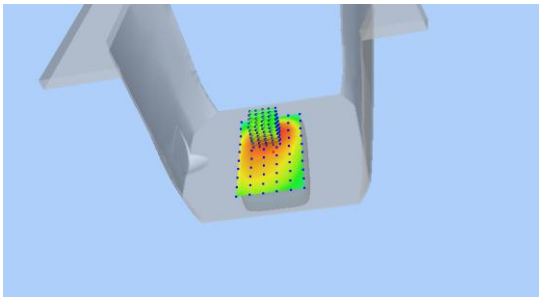
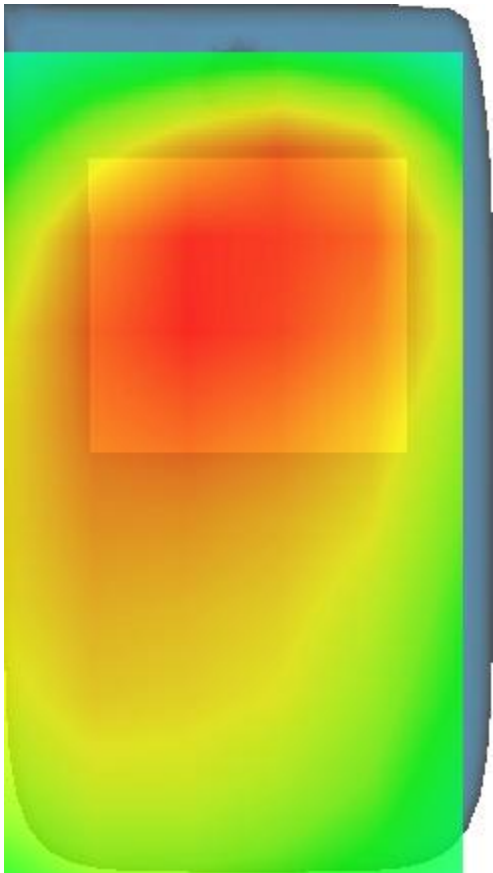
<u>Area Scan</u>	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
<u>ZoomScan</u>	<u>5x5x7, dx=8mm dy=8mm dz=5mm</u>
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>LTE band 13</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>LTE (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>2.42</u>

B. SAR Measurement Results

Frequency (MHz)	782.000000
Relative permittivity (real part)	40.191882
Relative permittivity (imaginary part)	21.113046
Conductivity (S/m)	0.917245
Variation (%)	0.330000

SURFACE SAR**VOLUME SAR****Maximum location: X=-7.00, Y=25.00****SAR Peak: 0.22 W/kg**

SAR 10g (W/Kg)	0.146488
SAR 1g (W/Kg)	0.181407

3D screen shot	Hot spot position
 A 3D perspective view of a grey robotic arm holding a rectangular object. The object's surface is covered with a color-coded map representing a hot spot distribution, with a color gradient from green (low) to red (high). A grid of small black dots is overlaid on the map.	 A 2D heatmap visualization of the hot spot position on the rectangular object. The color scale ranges from green (low intensity) to red (high intensity). The highest intensity (red) is concentrated in the upper-middle section of the object, while the lowest intensity (green) is found at the bottom and sides.

MEASUREMENT 17

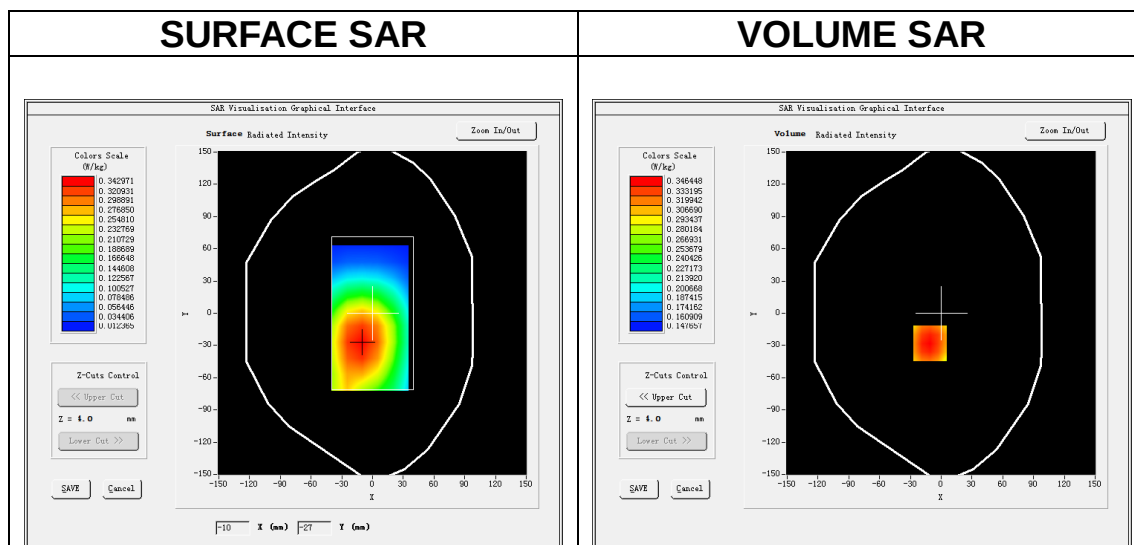
Date of measurement: 15/10/2024

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 14</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>LTE (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>2.34</u>

B. SAR Measurement Results

Frequency (MHz)	792.500000
Relative permittivity (real part)	41.685066
Relative permittivity (imaginary part)	19.831982
Conductivity (S/m)	0.873158
Variation (%)	-0.480000



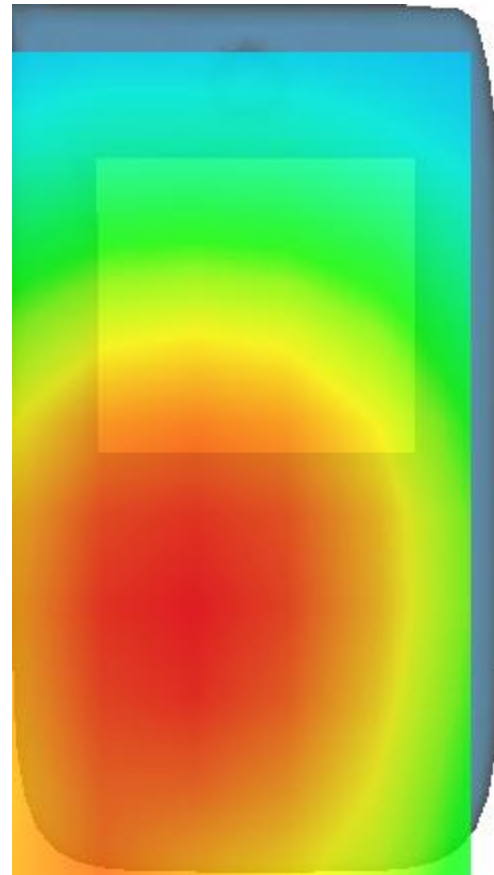
Maximum location: X=-11.00, Y=-28.00

SAR Peak: 0.37 W/kg

SAR 10g (W/Kg)	0.289912
SAR 1g (W/Kg)	0.335846

Z (mm)	SAR (W/kg)
0.0	0.355
2.5	0.350
5.0	0.345
7.5	0.335
10.0	0.325
12.5	0.315
15.0	0.305
17.5	0.295
20.0	0.285
22.5	0.275
25.0	0.265
27.5	0.255
30.0	0.245
32.5	0.235

Hot spot position



MEASUREMENT 18

Date of measurement: 14/10/2024

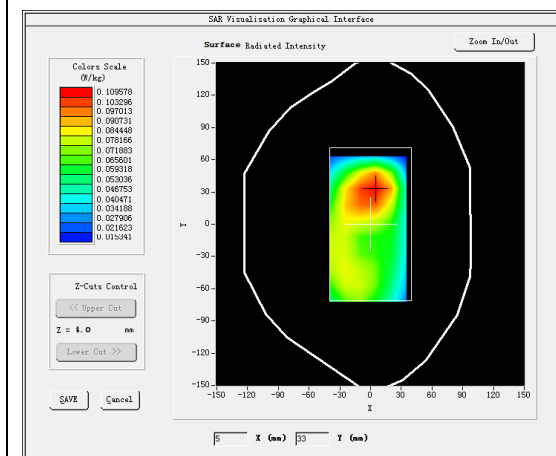
A. Experimental conditions.

<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>2.42</u>

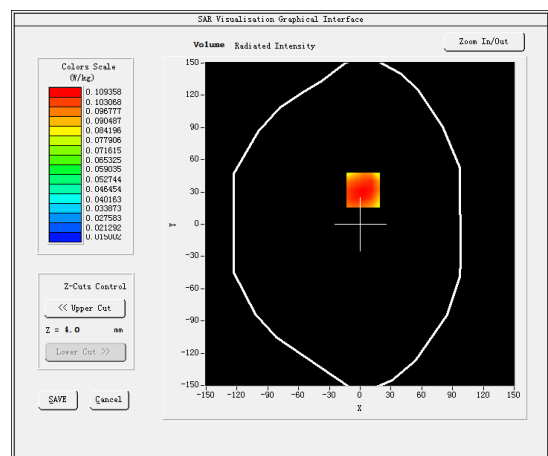
B. SAR Measurement Results

Frequency (MHz)	710.000000
Relative permittivity (real part)	41.064182
Relative permittivity (imaginary part)	21.795946
Conductivity (S/m)	0.859729
Variation (%)	0.820000

SURFACE SAR



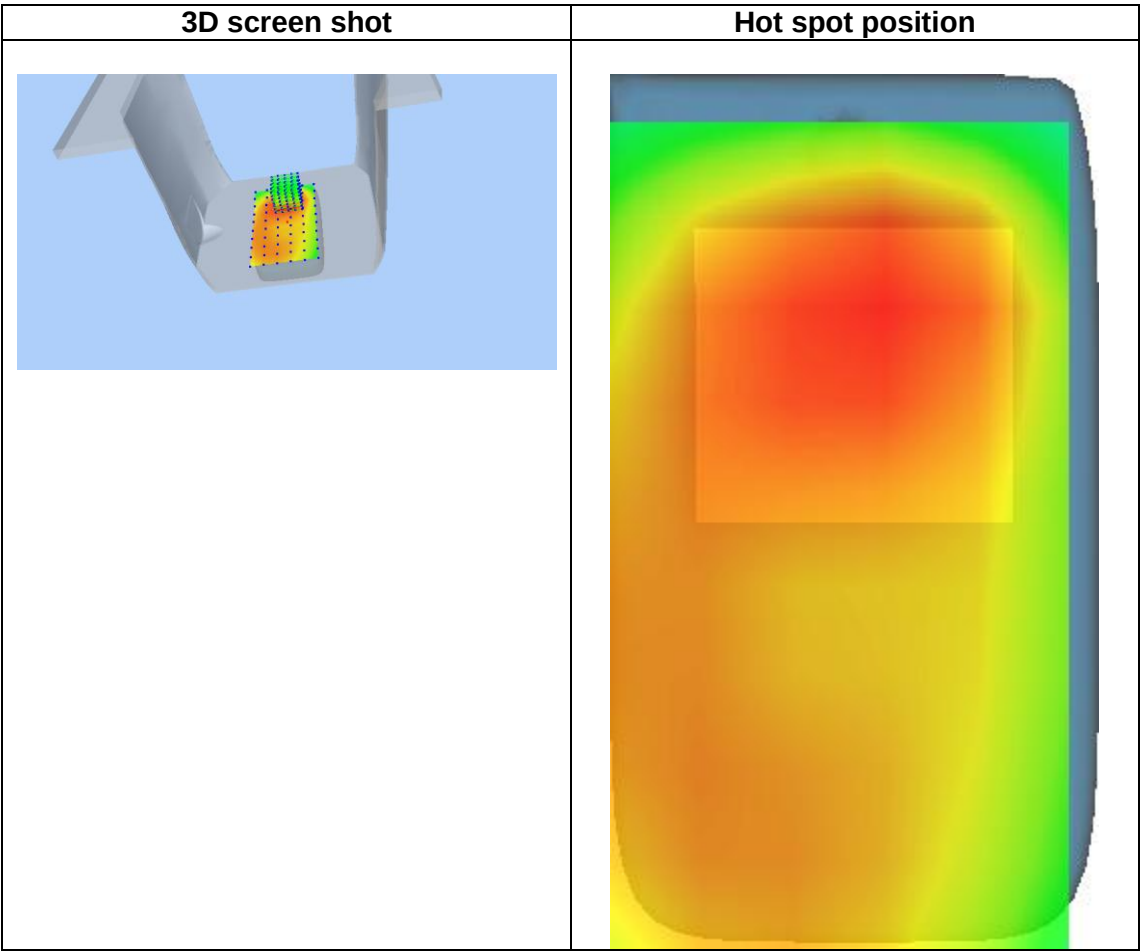
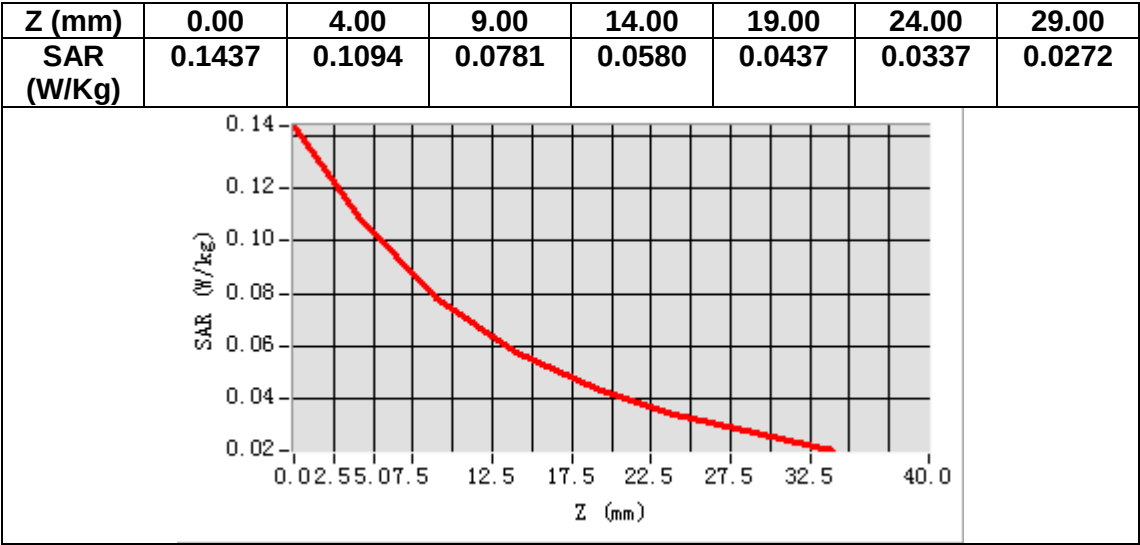
VOLUME SAR



Maximum location: X=3.00, Y=32.00

SAR Peak: 0.15 W/kg

SAR 10g (W/Kg)	0.080264
SAR 1g (W/Kg)	0.113369



MEASUREMENT 19

Date of measurement: 16/10/2024

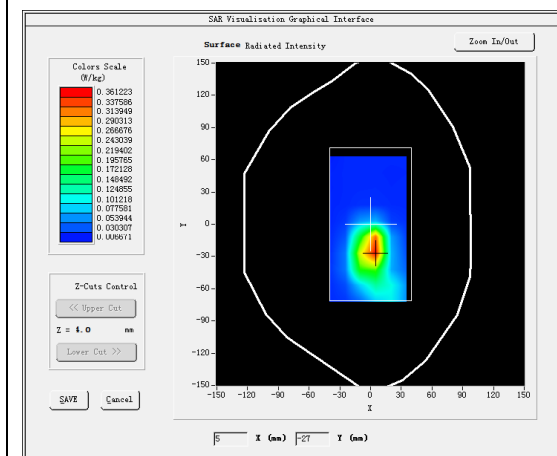
A. Experimental conditions.

<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 25</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>LTE (Crest factor: 1.0)</u>
<u>ConvF</u>	<u>2.57</u>

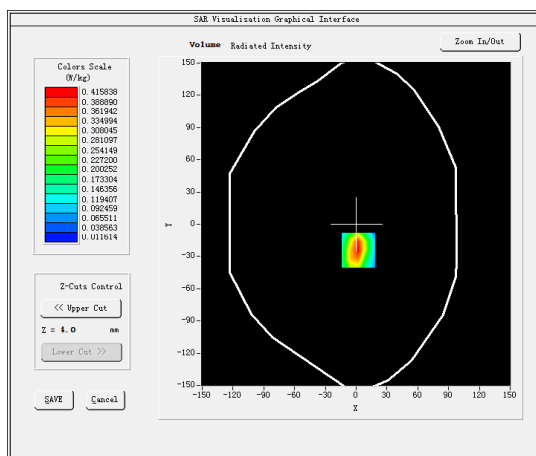
B. SAR Measurement Results

Frequency (MHz)	1882.500000
Relative permittivity (real part)	38.657254
Relative permittivity (imaginary part)	13.901147
Conductivity (S/m)	1.453828
Variation (%)	4.460000

SURFACE SAR



VOLUME SAR

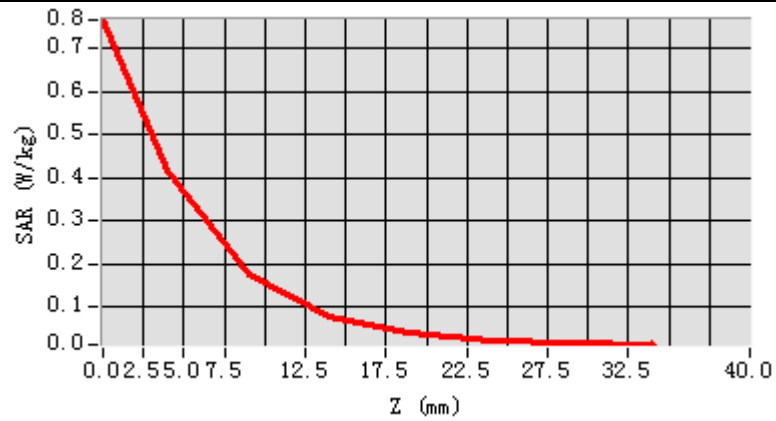


Maximum location: X=2.00, Y=-24.00

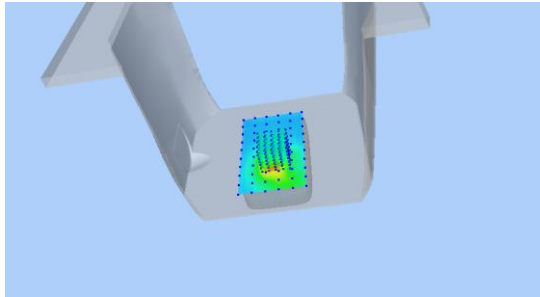
SAR Peak: 0.77 W/kg

SAR 10g (W/Kg)	0.314871
SAR 1g (W/Kg)	0.612363

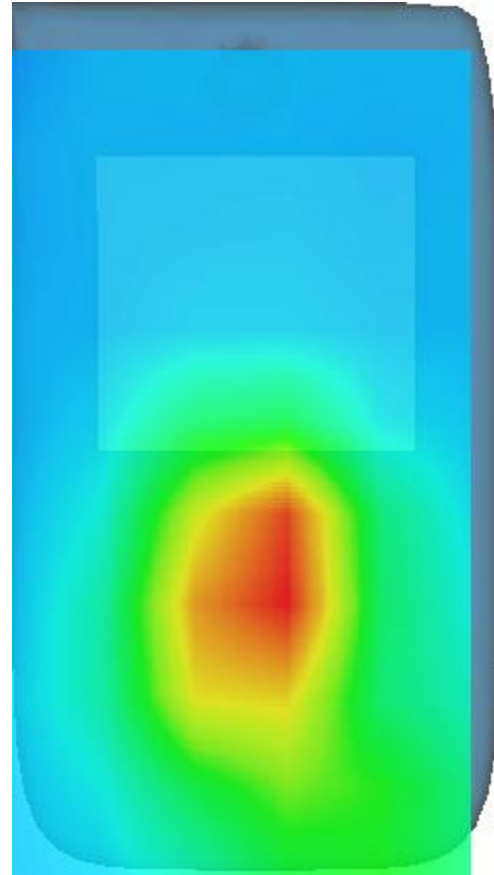
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.7650	0.4158	0.1767	0.0788	0.0409	0.0230	0.0170



3D screen shot



Hot spot position



MEASUREMENT 20

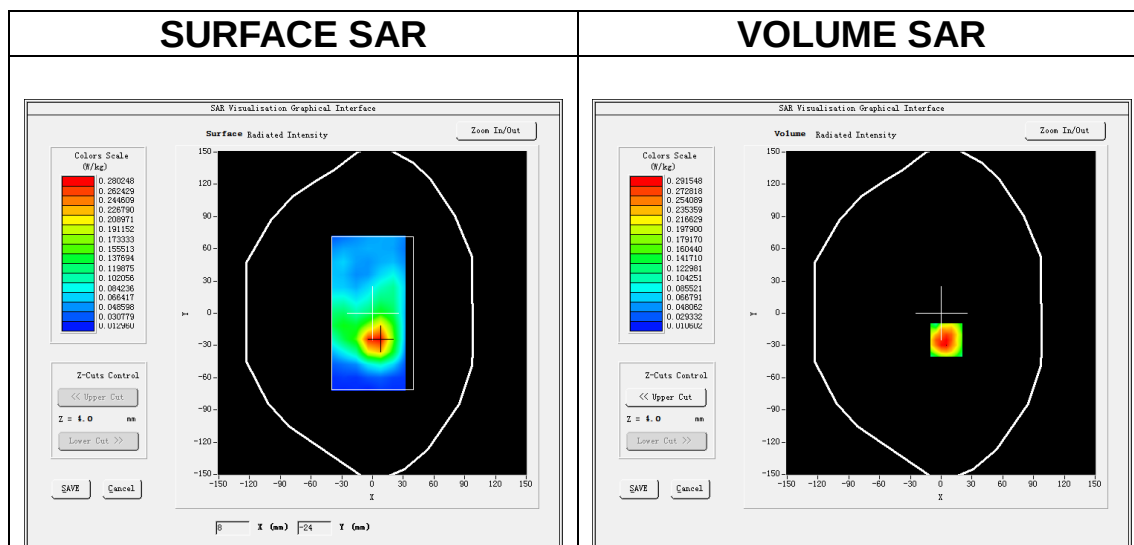
Date of measurement: 17/10/2024

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 38</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>LTE (Crest factor: 1.6)</u>
<u>ConvF</u>	<u>2.51</u>

B. SAR Measurement Results

Frequency (MHz)	2595.000000
Relative permittivity (real part)	38.877842
Relative permittivity (imaginary part)	14.080788
Conductivity (S/m)	2.029980
Variation (%)	0.720000



Maximum location: X=5.00, Y=-25.00

SAR Peak: 0.51 W/kg

SAR 10g (W/Kg)	0.145621
SAR 1g (W/Kg)	0.284589

