

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 : Smart Phone

Brand Name : OUKITEL

Model Name : WP13

Family Model : N/A

Report No. : S21060402407001

FCC ID : 2ANMU-WP13

Prepared for

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Product description

Product name.....: Smart Phone
Brand Name: OUKITEL
Model and/or type reference : WP13
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

Date (s) of performance of tests.....: Jun. 15, 2021~ Jun. 24, 2021

Date of Issue: Jul. 27, 2021

Test Result: **Pass**

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※ ※ Revision History ※ ※

REV.	DESCRIPTION	ISSUED DATE	REMARK
Rev.1.0	Initial Test Report Release	Jul. 27, 2021	Jacob Chen

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1. General Information

1.1. RF exposure limits

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

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

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

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

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

Occupational/Controlled Environments:

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

General Population/Uncontrolled Environments:

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

NOTE

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 WP13 are as follows.

RF Exposure Conditions		Equipment Class -Highest Reported SAR (W/kg)			
		PCE	DTS	NII	DSS
1-g Head		0.190	0.169	0.640	N/A
1-g Body-Worn (Separation distance of 10mm)		1.314	0.159	0.211	N/A
1-g Hotspot (Separation distance of 10mm)		1.314	0.159	0.211	N/A
Max Simultaneous Tx	Head	0.830	0.359	0.830	0.378
	Body-Worn	1.525	1.473	1.525	1.408
	Hotspot	1.525	1.473	1.525	1.408

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	Smart Phone
Brand Name	OUKITEL
Model Name	WP13
Family Model	N/A
FCC ID	2ANMU-WP13
Device Phase	Identical Prototype
Exposure Category	General population / Uncontrolled environment
Antenna Type	FPC Antenna
Battery Information	DC 3.87V,5280mAh
Device Operating Configurations	
Supporting Mode(s)	GSM 850/1900, WCDMA Band 2/4/5, LTE Band 2/4/5/7/12/17/25/26/66,NR Band N41, WLAN 2.4G/5G, Bluetooth
Test Modulation	GSM(GMSK/8PSK), WCDMA(QPSK), LTE(QPSK/16QAM), 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)
	GSM 850	824-849	869-894
	GSM 1900	1850-1910	1930-1990
	WCDMA Band 2	1850-1910	1930-1990
	WCDMA Band 4	1710-1755	2110-2155
	WCDMA Band 5	824-849	869-894
	LTE Band 2	1850-1910	1930-1990
	LTE Band 4	1710-1755	2110-2155
	LTE Band 5	824-849	869-894
	LTE Band 7	2500-2570	2620-2690
	LTE Band 12	699-716	729-746
	LTE Band 17	704-716	734-746
	LTE Band 25	1850-1915	1930-1995
	LTE Band 26	814-849	859-894
	LTE Band 66	1710-1780	2110-2200
	NR Band N41	2496-2690	
	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	
GPRS Multislot Class(12)	Max Number of Timeslots in Uplink		4
	Max Number of Timeslots in Downlink		4
	Max Total Timeslot		5
EDGE Multislot Class(12)	Max Number of Timeslots in Uplink		4
	Max Number of Timeslots in Downlink		4
	Max Total Timeslot		5
Power Class	4, tested with power level 5(GSM 850)		
	1, tested with power level 0(GSM 1900)		
	3, tested with power control "all 1"(WCDMA Band 2)		
	3, tested with power control "all 1"(WCDMA Band 4)		
	3, tested with power control "all 1"(WCDMA Band 5)		
	3, tested with power control all Max.(LTE Band 2)		
	3, tested with power control all Max.(LTE Band 4)		
	3, tested with power control all Max.(LTE Band 5)		
	3, tested with power control all Max.(LTE Band 7)		
	3, tested with power control all Max.(LTE Band 12)		
	3, tested with power control all Max.(LTE Band 17)		
	3, tested with power control all Max.(LTE Band 25)		

	3, tested with power control all Max.(LTE Band 26)
	3, tested with power control all Max.(LTE Band 66)
	3, tested with power control all Max.(NR Band N41)

1.4. Test specification(s)

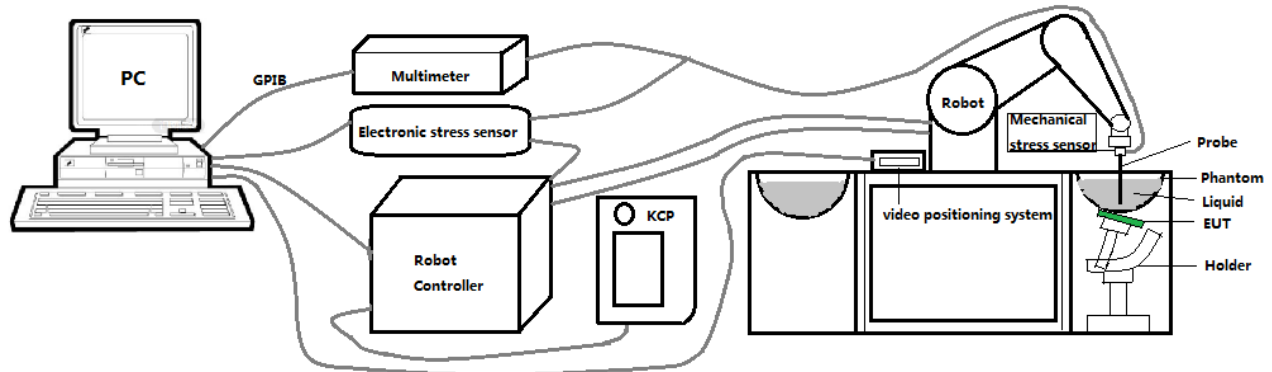
FCC 47 CFR Part 2(2.1093)
ANSI/IEEE C95.1-1992
IEEE Std 1528-2013
KDB 865664 D01 SAR measurement 100 MHz to 6 GHz
KDB 865664 D02 RF Exposure Reporting
KDB 447498 D01 General RF Exposure Guidance
KDB 248227 D01 802.11 Wi-Fi SAR
KDB 941225 D01 3G SAR Procedures
KDB 941225 D05 SAR for LTE Devices
KDB 941225 D06 Hotspot SAR
KDB 648474 D04 Handset SAR

1.5. Ambient Condition

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

2. SAR Measurement System

2.1. SATIMO SAR Measurement Set-up Diagram



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

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

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

2.2. Robot

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



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

2.3. 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: ± 0.01 dB
 - Hemispherical Isotropy: ± 0.01 dB
 - Calibration range: 650MHz to 5900MHz for head & body simulating liquid.
 - Lower detection limit: 8mW/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

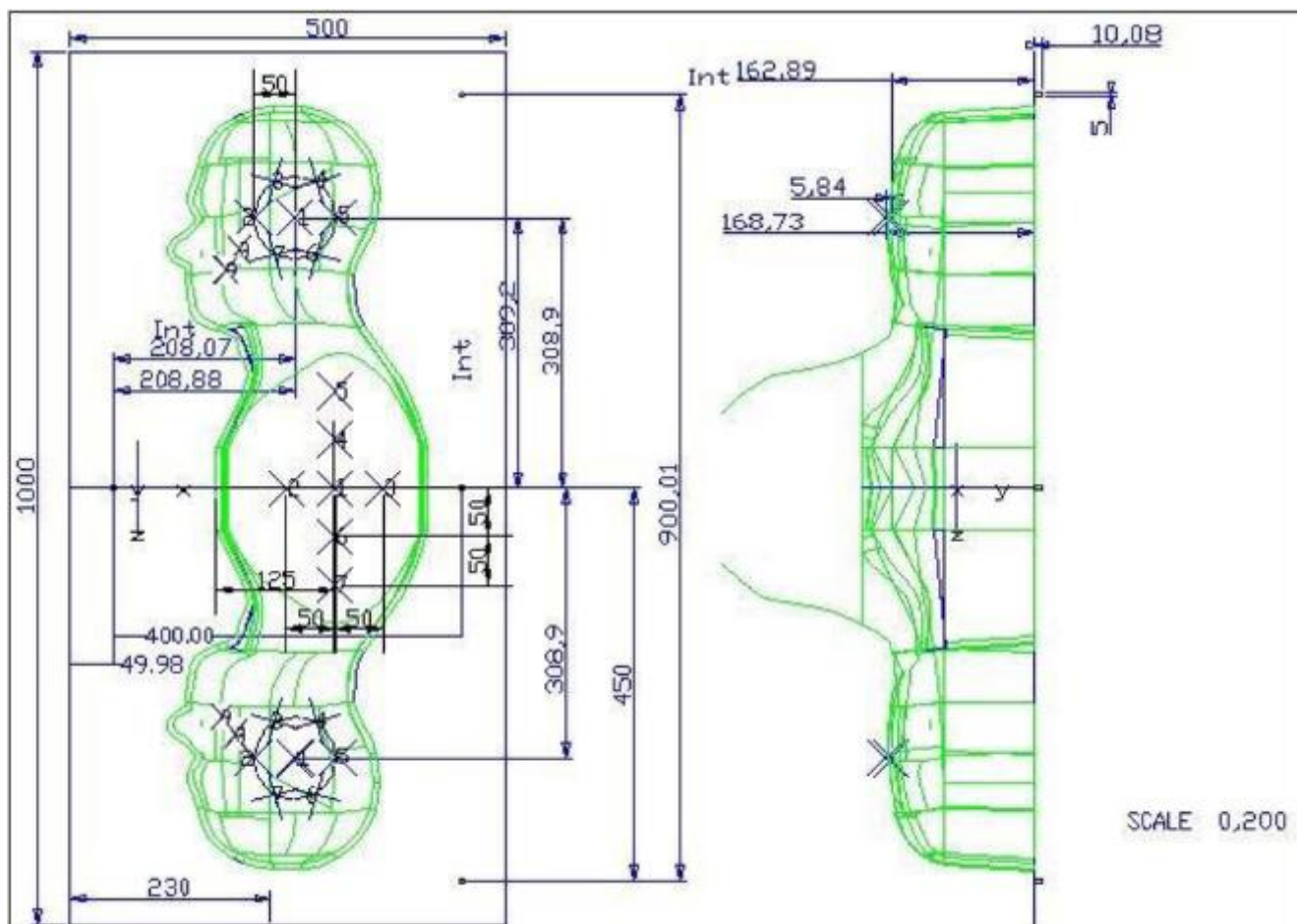
Photo of SAM phantom SN 16/15 SAM119



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

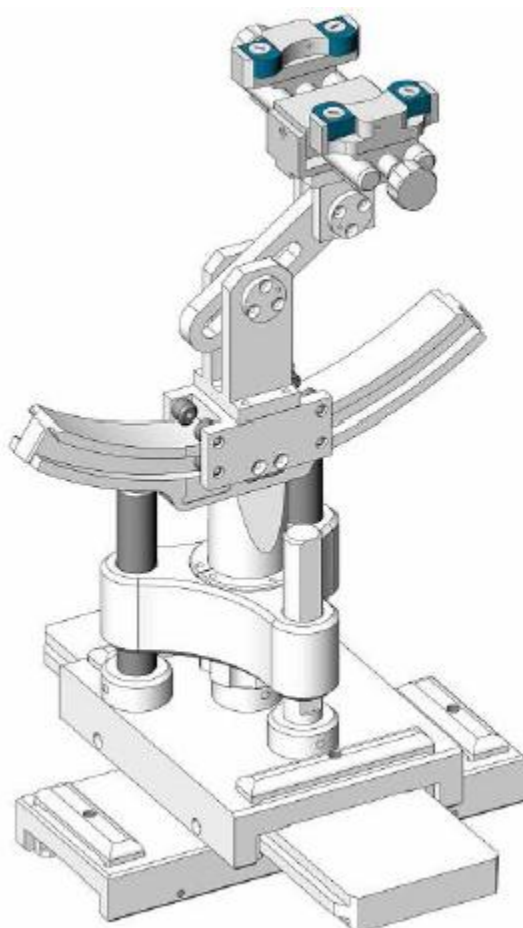


Serial Number	Left Head(mm)		Right Head(mm)		Flat Part(mm)	
SN 16/15 SAM119	2	2.02	2	2.08	1	2.09
	3	2.05	3	2.06	2	2.06
	4	2.07	4	2.07	3	2.08
	5	2.08	5	2.08	4	2.10
	6	2.05	6	2.07	5	2.10
	7	2.05	7	2.05	6	2.07
	8	2.07	8	2.06	7	2.07
	9	2.08	9	2.06	-	-

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	SN 08/16 EPGO287	Mar. 01, 2021	Feb. 28, 2022
☒	MVG	750 MHz Dipole	SID750	SN 03/15 DIP 0G750-355	Mar. 01, 2021	Feb. 28, 2024
☒	MVG	835 MHz Dipole	SID835	SN 03/15 DIP 0G835-347	Mar. 01, 2021	Feb. 28, 2024
☐	MVG	900 MHz Dipole	SID900	SN 03/15 DIP 0G900-348	Mar. 01, 2021	Feb. 28, 2024
☒	MVG	1800 MHz Dipole	SID1800	SN 03/15 DIP 1G800-349	Mar. 01, 2021	Feb. 28, 2024
☒	MVG	1900 MHz Dipole	SID1900	SN 03/15 DIP 1G900-350	Mar. 01, 2021	Feb. 28, 2024
☐	MVG	2000 MHz Dipole	SID2000	SN 03/15 DIP 2G000-351	Mar. 01, 2021	Feb. 28, 2024
☒	MVG	2450 MHz Dipole	SID2450	SN 03/15 DIP 2G450-352	Mar. 01, 2021	Feb. 28, 2024
☒	MVG	2600 MHz Dipole	SID2600	SN 03/15 DIP 2G600-356	Mar. 01, 2021	Feb. 28, 2024
☒	MVG	5000 MHz Dipole	SWG5500	SN 13/14 WGA 33	Mar. 01, 2021	Feb. 28, 2024
☒	MVG	Liquid measurement Kit	SCLMP	SN 21/15 OCPG 72	NCR	NCR
☒	MVG	Power Amplifier	N.A	AMPLISAR_28/14_003	NCR	NCR
☒	KEITHLEY	Millivoltmeter	2000	4072790	NCR	NCR
☒	R&S	Universal radio communication tester	CMU200	117858	Jul. 13, 2020	Jul. 12, 2021
☒	R&S	Wideband radio communication tester	CMW500	103917	Jul. 13, 2020	Jul. 12, 2021
☒	HP	Network Analyzer	8753D	3410J01136	Jul. 13, 2020	Jul. 12, 2021
☒	Agilent	PSG Analog Signal Generator	E8257D	MY51110112	Jul. 13, 2020	Jul. 12, 2021

☒	Agilent	Power meter	E4419B	MY45102538	Jul. 13, 2020	Jul. 12, 2021
☒	Agilent	Power sensor	E9301A	MY41495644	Jul. 13, 2020	Jul. 12, 2021
☒	Agilent	Power sensor	E9301A	US39212148	Jul. 13, 2020	Jul. 12, 2021
☒	MCLI/USA	Directional Coupler	CB11-20	0D2L51502	Jul. 17, 2020	Jul. 16, 2023
☒	Anritsu	Radio Communication Analyzer	MT8821C	SN 6262186364	Oct. 13, 2020	Oct. 12, 2021
☒	Anritsu	Radio Communication Test Station	MT8000A	SN 6262192315	Oct. 13, 2020	Oct. 12, 2021

3. SAR Measurement Procedures

The measurement procedures are as follows:

<Conducted power measurement>

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

<SAR measurement>

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

According to the test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

- (a) Power reference measurement
- (b) Area scan
- (c) Zoom scan
- (d) Power drift measurement

3.1. Power Reference

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

3.2. Area scan & Zoom scan

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

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

Measurement of the SAR distribution with a grid of 8 to 16 mm * 8 to 16 mm and a constant distance to the inner surface of the phantom. Since the sensors cannot directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolation scheme. Around this point, a cube of 30 * 30 * 30 mm or 32 * 32 * 32 mm is assessed by measuring 5 or 8 * 5 or 8 * 4 or 5 mm. With these data, the peak spatial-average SAR value can be calculated.

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

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

			≤ 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: Δx_{Area} , Δy_{Area}			≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
			When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be $\leq$ 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: Δx_{Zoom} , Δy_{Zoom}			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{Zoom}(1)$: 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
		$\Delta z_{Zoom}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$	
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 used to determine this highest local SAR values. The extrapolation is based on a fourth-order least-square polynomial fit of measured data. The local SAR value is then extrapolated from the liquid surface with a 1 mm step.

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

3.4. Volumetric Scan

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

3.5. Power Drift

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

4. System Verification Procedure

4.1. Tissue Verification

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

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

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For head SAR testing, the liquid depth from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm.

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.

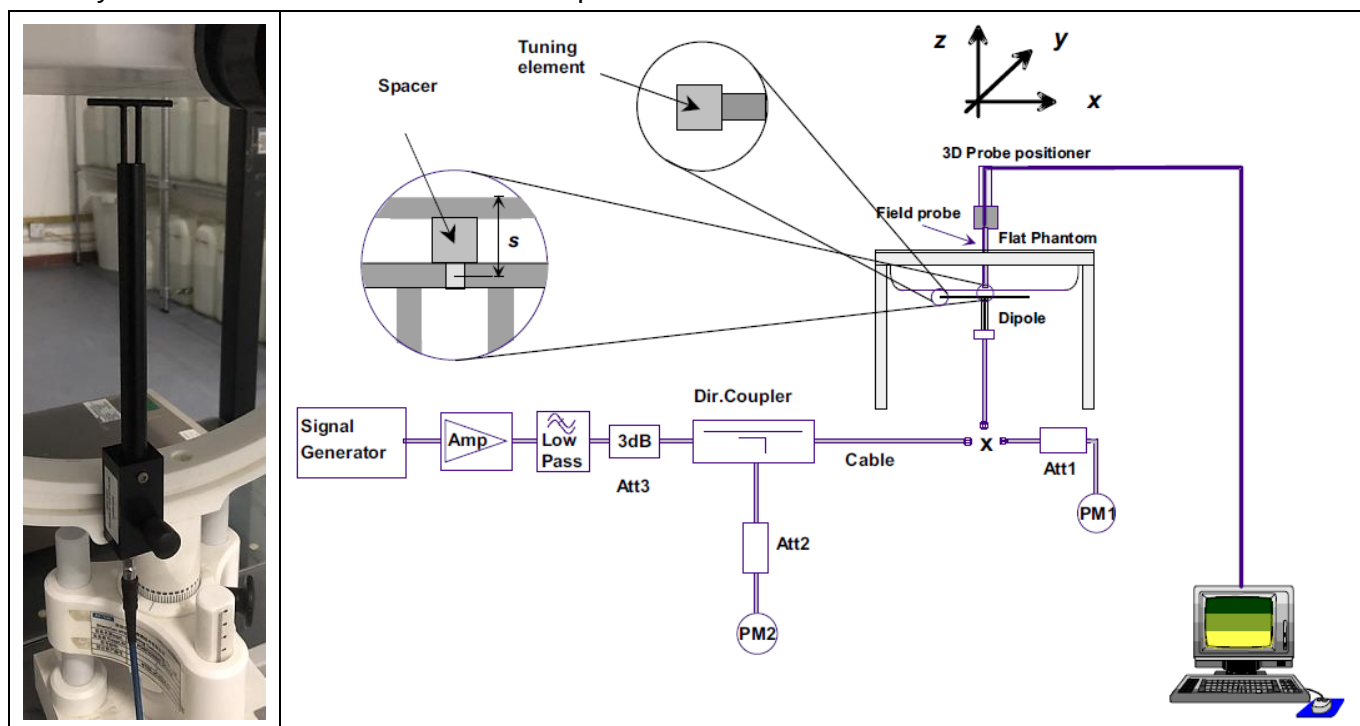
Tissue Type	Measured Frequency (MHz)	Target Tissue		Measured Tissue		Liquid Temp.	Test Date
		$\epsilon_r (\pm 5\%)$	σ (S/m) ($\pm 5\%$)	ϵ_r	σ (S/m)		
Head 750	750	41.96 (39.86~44.06)	0.89 (0.85~0.93)	41.29	0.89	21.5 °C	Jun. 23, 2021
Head 850	835	41.50 (39.43~43.58)	0.90 (0.86~0.95)	42.61	0.94	21.5 °C	Jun. 21, 2021
Head 1800	1800	40.00 (38.00~42.00)	1.40 (1.33~1.47)	40.55	1.40	21.7 °C	Jun. 17, 2021
Head 1900	1900	40.00 (38.00~42.00)	1.40 (1.33~1.47)	38.95	1.46	21.5 °C	Jun. 16, 2021
Head 2450	2450	39.20 (37.24~41.16)	1.80 (1.71~1.89)	40.72	1.86	21.5 °C	Jun. 18, 2021
Head 2600	2600	39.01 (37.06~40.96)	1.96 (1.86~2.06)	40.36	1.99	21.4 °C	Jun. 21, 2021
Head 5200	5200	36.00 (34.20~37.80)	4.66 (4.43~4.89)	36.94	4.74	21.5 °C	Jun. 24, 2021
Head 5600	5600	35.50 (33.73~37.28)	5.07 (4.82~5.32)	36.17	5.12	21.6 °C	Jun. 16, 2021
Head 5800	5800	35.30 (33.54~37.07)	5.27 (5.01~5.53)	36.01	5.27	21.9 °C	Jun. 15, 2021

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

4.2. System Verification Procedure

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

The system verification is shown as below picture:



4.2.1. System Verification Results

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

System Verification	Target SAR (1W) ($\pm 10\%$)		Measured SAR (Normalized to 1W)		Liquid Temp.	Test Date
	1-g (W/Kg)	10-g (W/Kg)	1-g (W/Kg)	10-g (W/Kg)		
750MHz	8.53 (7.68~9.38)	5.56 (5.01~6.11)	8.34	5.53	21.5 °C	Jun. 23, 2021
835MHz	9.84 (8.86~10.82)	6.22 (5.60~6.84)	9.31	6.14	21.5 °C	Jun. 21, 2021
1800MHz	37.96 (34.17~41.75)	19.81 (17.83~21.79)	37.51	20.05	21.7 °C	Jun. 17, 2021
1900MHz	40.37 (36.34~44.40)	20.48 (18.44~22.52)	38.77	21.21	21.5 °C	Jun. 16, 2021
2450MHz	53.69 (48.33~59.05)	23.94 (21.55~26.33)	51.83	23.66	21.5 °C	Jun. 18, 2021
2600MHz	55.83 (50.25~61.41)	24.19 (21.78~26.60)	54.63	24.15	21.4 °C	Jun. 21, 2021
5200MHz	162.34 (146.11~178.57)	55.42 (49.88~60.96)	162.86	55.62	21.5 °C	Jun. 24, 2021
5600MHz	174.92 (157.43~192.41)	58.63 (52.77~64.49)	179.94	60.85	21.6 °C	Jun. 16, 2021
5800MHz	178.89 (161.01~196.77)	59.32 (53.39~65.25)	168.86	57.46	21.9 °C	Jun. 15, 2021

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. Ear and handset reference point

Figure 6.1.1 shows the front, back, and side views of the SAM phantom. The center-of-mouth reference point is labeled “M”, the left ear reference point (ERP) is marked “LE”, and the right ERP is marked “RE”.



Fig 6.1.1 Front, back, and side views of SAM phantom

6.2. Definition of the cheek position

1. Define two imaginary lines on the handset, the vertical centerline and the horizontal line. The vertical centerline passes through two points on the front side of the handset: the midpoint of the width w_t of the handset at the level of the acoustic output (point A in Figure 6.2.1 and Figure 6.2.2), and the midpoint of the width w_b of the bottom of the handset (point B). The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output (see Figure 6.2.1). The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centerline is not necessarily parallel to the front face of the handset (see Figure 6.2.2), especially for clamshell handsets, handsets with flip covers, and other irregularly-shaped handsets.
2. Position the handset close to the surface of the phantom such that point A is on the (virtual) extension of the line passing through points RE and LE on the phantom (see Figure 6.2.3), such that the plane defined by the vertical centerline and the horizontal line of the handset is approximately parallel to the sagittal plane of the phantom.
3. Translate the handset towards the phantom along the line passing through RE and LE until handset point A touches the pinna at the ERP
4. While maintaining the handset in this plane, rotate it around the LE-RE line until the vertical centerline is in the plane normal to the plane containing B-M and N-F lines, i.e., the Reference Plane.
5. Rotate the handset around the vertical centerline until the handset (horizontal line) is parallel to the N-F line.

6. While maintaining the vertical centerline in the Reference Plane, keeping point A on the line passing through RE and LE, and maintaining the handset contact with the pinna, rotate the handset about the N-F line until any point on the handset is in contact with a phantom point below the pinna on the cheek. See Figure 6.2.3. The actual rotation angles should be documented in the test report.

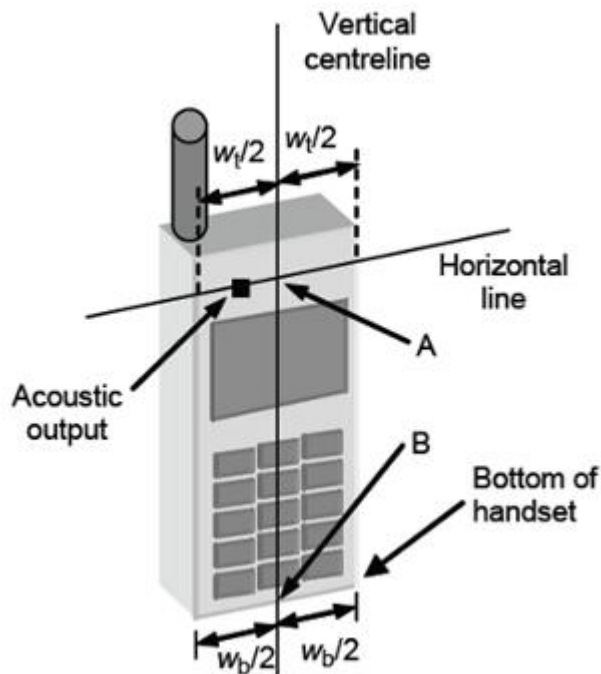


Fig 6.2.1 Handset vertical and horizontal reference lines—"fixed case"

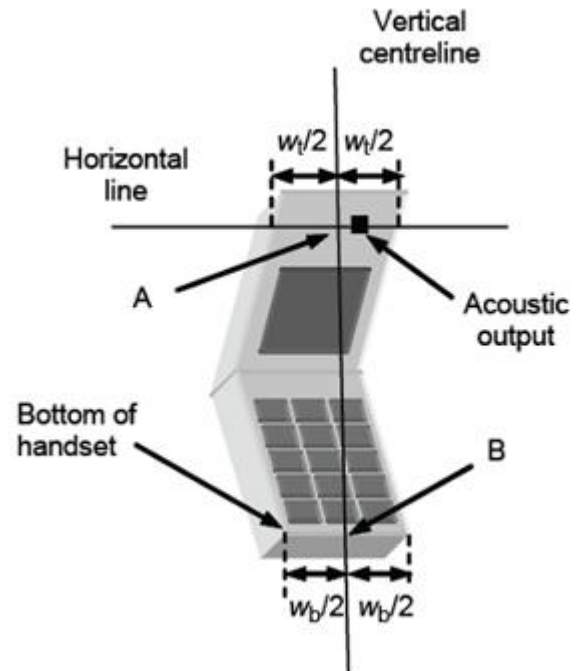


Fig 6.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

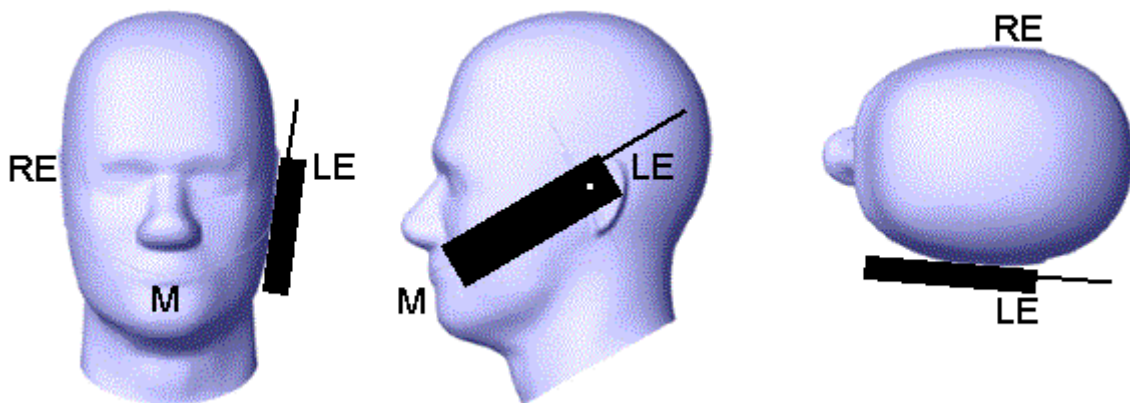


Fig 6.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

6.3. Definition of the tilt position

1. While maintaining the orientation of the handset, retract the handset parallel to the reference plane far enough away from the phantom to enable a rotation of the device by 15 degree.
2. Rotate the Handset around the horizontal line by 15 degree (see Figure 6.3.1).
3. While maintaining the orientation of the handset, move the handset towards the phantom on a line passing through RE and LE until any part of the handset touches the ear. The tilt position is obtained when the contact is on the pinna. If the contact is at any location other than the pinna, e.g., the antenna with the back of the phantom head, the angle of the handset shall be reduced. In this case, the tilt position is obtained if any part of the handset is in contact with the pinna as well as a second part of the handset is in contact with the phantom, e.g., the antenna with the back of the head.

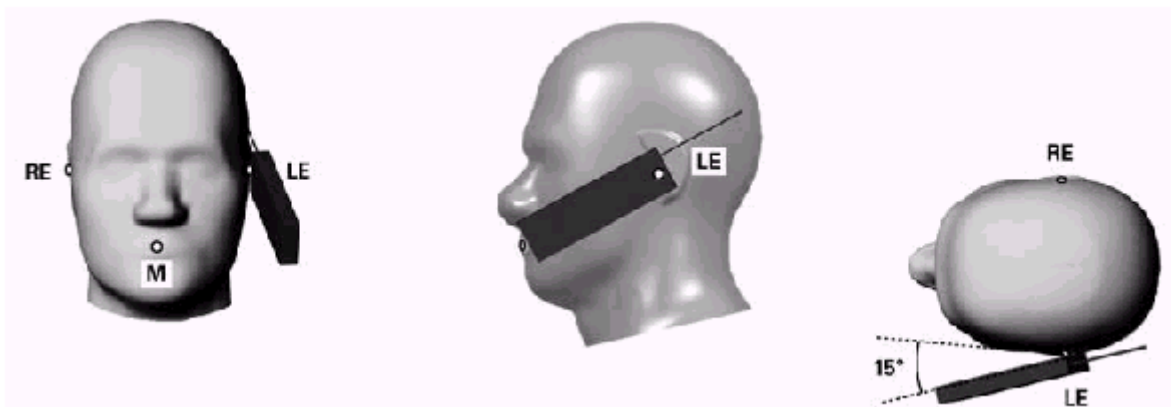


Figure 6.3.1 – Tilt position of the wireless device on the left side of SAM

6.4. Body Worn Accessory

1. Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 6.4.1). Per KDB 648474 D04, body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB 447498 D01 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for body-worn accessory, measured without a headset connected to the handset is $< 1.2 \text{ W/kg}$, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a handset attached to the handset.
2. Accessories for body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest

spacing to the body. Then multiple accessories that contain metallic components are test with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

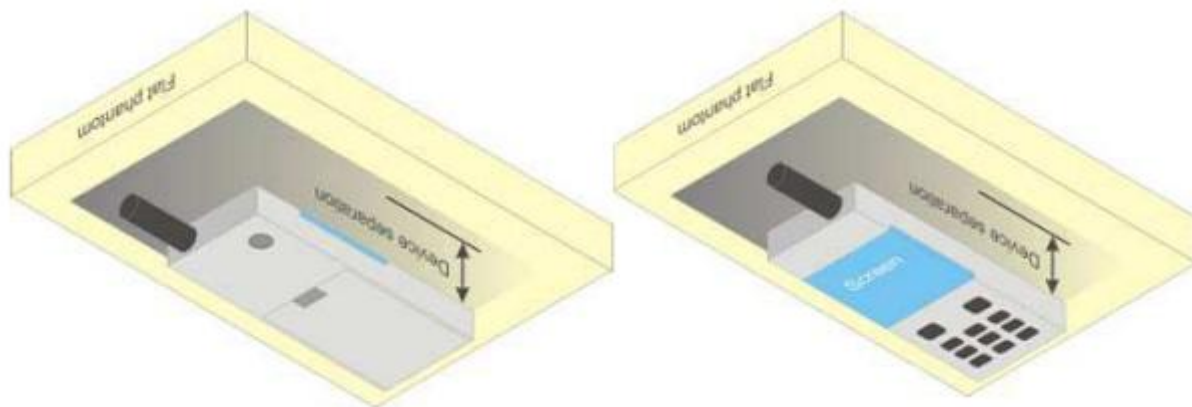


Figure 6.4.1 – Test positions for body-worn devices

6.5. 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

7.1. GSM Conducted Power

Band GSM850	Burst-Averaged output Power (dBm)				Frame-Averaged output Power (dBm)			
Tx Channel	Tune-up	128	189	251	Tune-up	128	189	251
Frequency (MHz)	(dBm)	824.2	836.4	848.8	(dBm)	824.2	836.4	848.8
GSM (GMSK)	32.50	32.03	31.93	31.72	23.47	23.00	22.90	22.69
GPRS(GMSK, 1 TS)	32.50	32.02	31.91	31.71	23.47	22.99	22.88	22.68
GPRS(GMSK, 2 TS)	32.00	31.51	31.38	31.19	25.98	25.49	25.36	25.17
GPRS(GMSK, 3 TS)	30.00	29.67	29.55	29.34	25.74	25.41	25.29	25.08
GPRS(GMSK, 4 TS)	29.00	28.61	28.52	28.33	25.99	25.60	25.51	25.32
EDGE(GMSK, 1 TS)	26.50	25.56	26.21	25.42	17.47	16.53	17.18	16.39
EDGE(GMSK, 2 TS)	24.50	24.31	24.40	24.33	18.48	18.29	18.38	18.31
EDGE(GMSK, 3 TS)	22.50	22.10	22.12	22.49	18.24	17.84	17.86	18.23
EDGE(GMSK, 4 TS)	21.00	20.55	20.48	20.57	17.99	17.54	17.47	17.56
Band GSM1900	Burst-Averaged output Power (dBm)				Frame-Averaged output Power (dBm)			
Tx Channel	Tune-up	512	661	810	Tune-up	512	661	810
Frequency (MHz)	(dBm)	1850.2	1880.0	1909.8	(dBm)	1850.2	1880.0	1909.8
GSM (GMSK)	29.00	28.92	28.43	27.98	19.97	19.89	19.40	18.95
GPRS(GMSK, 1 TS)	29.00	28.89	28.43	27.97	19.97	19.86	19.40	18.94
GPRS(GMSK, 2 TS)	28.50	28.18	27.72	27.27	22.48	22.16	21.70	21.25
GPRS(GMSK, 3 TS)	26.50	26.41	26.00	25.61	22.24	22.15	21.74	21.35
GPRS(GMSK, 4 TS)	25.50	25.28	24.93	24.56	22.49	22.27	21.92	21.55
EDGE(GMSK, 1 TS)	24.00	23.00	23.12	23.69	14.97	13.97	14.09	14.66
EDGE(GMSK, 2 TS)	23.00	22.57	22.43	22.21	16.98	16.55	16.41	16.19
EDGE(GMSK, 3 TS)	20.50	20.20	19.88	20.19	16.24	15.94	15.62	15.93
EDGE(GMSK, 4 TS)	19.00	18.69	18.40	18.96	15.99	15.68	15.39	15.95

Note: The frame-averaged power is linearly scaled the maximum burst averaged power over 8 time slots.
The calculated method are shown as below:

Frame-averaged power = Maximum burst averaged power (1 TS) - 9.03 dB

Frame-averaged power = Maximum burst averaged power (2 TS) - 6.02 dB

Frame-averaged power = Maximum burst averaged power (3 TS) - 4.26 dB

Frame-averaged power = Maximum burst averaged power (4 TS) - 3.01 dB

7.2. WCDMA Conducted Power

Band	WCDMA Band 2			
Tx Channel	Tune-up	9262	9400	9538
Frequency (MHz)		1852.4	1880	1907.6

RMC 12.2Kbps	22.50	22.31	22.45	22.48
HSDPA Subtest-1	21.50	21.30	21.43	21.46
HSDPA Subtest-2	21.50	20.90	20.96	21.06
HSDPA Subtest-3	20.50	19.67	20.04	19.94
HSDPA Subtest-4	20.00	19.79	19.60	19.74
HSUPA Subtest-1	21.50	20.19	21.27	21.29
HSUPA Subtest-2	21.50	21.17	21.37	21.36
HSUPA Subtest-3	20.50	19.78	20.13	20.20
HSUPA Subtest-4	21.50	21.27	21.42	21.46
HSUPA Subtest-5	21.00	19.74	20.55	20.72
Band	WCDMA Band 4			
Tx Channel	Tune-up	1312	1413	1513
Frequency (MHz)		1712.4	1732.6	1752.6
RMC 12.2Kbps	22.00	21.75	21.68	21.99
HSDPA Subtest-1	21.00	20.82	20.70	21.00
HSDPA Subtest-2	21.00	20.42	20.15	20.58
HSDPA Subtest-3	19.50	19.33	19.38	19.22
HSDPA Subtest-4	19.50	19.45	19.45	19.36
HSUPA Subtest-1	21.00	19.58	20.52	20.83
HSUPA Subtest-2	21.00	20.80	20.60	20.86
HSUPA Subtest-3	20.00	18.80	19.44	19.79
HSUPA Subtest-4	21.00	20.82	20.70	20.99
HSUPA Subtest-5	20.50	19.39	19.96	20.04
Band	WCDMA Band 5			
Tx Channel	Tune-up	4132	4182	4233
Frequency (MHz)		826.4	836.4	846.6
RMC 12.2Kbps	23.00	22.91	22.84	22.82
HSDPA Subtest-1	22.00	21.98	21.88	21.80
HSDPA Subtest-2	22.00	21.59	21.53	21.43
HSDPA Subtest-3	21.00	20.52	20.03	20.40
HSDPA Subtest-4	21.00	20.59	20.35	20.40
HSUPA Subtest-1	22.00	21.20	21.77	21.61
HSUPA Subtest-2	22.00	21.85	21.78	21.64
HSUPA Subtest-3	21.00	19.95	20.60	20.53
HSUPA Subtest-4	22.00	21.95	21.87	21.80
HSUPA Subtest-5	21.50	20.36	21.30	21.18

7.3. LTE Conducted Power

Band	Band	Modulation	RB	Tune-up	Channel/Frequency(MHz)
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	Width		Configuration					
			RB Size	RB Offset		18607/1850.7	18900/1880	19193/1909.3
LTE Band 2	1.4MHz	QPSK	1	0	23.00	22.45	22.91	22.64
			1	2	23.00	22.48	22.89	22.60
			1	5	23.00	22.43	22.84	22.63
			3	0	23.00	22.50	22.59	22.76
			3	1	23.00	22.49	22.59	22.78
			3	2	23.00	22.46	22.53	22.74
			6	0	22.00	21.42	21.62	21.73
		16QAM	1	0	22.00	21.35	21.79	21.88
			1	2	22.00	21.34	21.80	21.85
			1	5	22.00	21.32	21.79	21.89
			3	0	22.00	21.55	21.80	21.84
			3	1	22.00	21.55	21.80	21.84
			3	2	22.00	21.58	21.77	21.85
			6	0	21.00	20.57	20.77	20.77
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		18615/1851.5	18900/1880	19185/1908.5
LTE Band 2	3MHz	QPSK	1	0	23.00	22.38	22.53	22.59
			1	7	23.00	22.38	22.59	22.76
			1	14	23.00	22.31	22.56	22.64
			8	0	22.00	21.38	21.51	21.67
			8	4	22.00	21.34	21.53	21.68
			8	7	22.00	21.33	21.48	21.69
			15	0	22.00	21.38	21.55	21.70
		16QAM	1	0	22.00	21.79	21.73	21.57
			1	7	22.00	21.83	21.75	21.61
			1	14	22.00	21.75	21.74	21.53
			8	0	21.00	20.38	20.58	20.65
			8	4	21.00	20.35	20.59	20.64
			8	7	21.00	20.36	20.55	20.67
			15	0	21.00	20.40	20.51	20.72
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		18625/1852.5	18900/1880	19175/1907.5
LTE	5MHz	QPSK	1	0	23.00	22.55	22.59	22.77

Band 2			1	12	23.00	22.53	22.57	22.76
			1	24	23.00	22.51	22.56	22.77
			12	0	22.00	21.38	21.60	21.63
			12	6	22.00	21.36	21.58	21.67
			12	11	22.00	21.34	21.66	21.73
			25	0	22.00	21.38	21.64	21.72
		16QAM	1	0	22.50	21.89	22.13	21.97
			1	12	22.50	21.82	22.13	21.97
			1	24	22.50	21.82	22.13	22.04
			12	0	21.00	20.34	20.52	20.68
			12	6	21.00	20.34	20.53	20.70
			12	11	21.00	20.33	20.55	20.75
			25	0	21.00	20.33	20.61	20.69
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		18650/1855	18900/1880	19150/1905
LTE Band 2	10MHz	QPSK	1	0	23.00	22.46	22.47	22.21
			1	24	23.00	22.41	22.55	22.23
			1	49	23.00	22.47	22.53	22.25
			25	0	22.00	21.32	21.53	21.61
			25	12	22.00	21.35	21.56	21.67
			25	24	22.00	21.27	21.68	21.80
			50	0	22.00	21.34	21.61	21.76
		16QAM	1	0	22.00	21.55	21.24	21.48
			1	24	22.00	21.53	21.06	21.49
			1	49	22.00	21.54	21.16	21.52
			25	0	21.00	20.33	20.53	20.62
			25	12	21.00	20.35	20.56	20.65
			25	24	21.00	20.28	20.67	20.84
			50	0	21.00	20.34	20.56	20.71
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		18675/1857.5	18900/1880	19125/1902.5
LTE Band 2	15MHz	QPSK	1	0	23.00	21.80	22.10	22.02
			1	37	23.00	21.86	22.17	22.08
			1	74	23.00	21.88	22.07	22.06
			36	0	22.00	21.35	21.49	21.65
			36	18	22.00	21.34	21.55	21.59

			36	37	22.00	21.31	21.61	21.68
			75	0	22.00	21.39	21.57	21.71
		16QAM	1	0	22.00	21.08	21.42	21.21
			1	37	22.00	21.13	21.53	21.28
			1	74	22.00	21.22	21.41	21.21
			36	0	21.00	20.33	20.57	20.77
			36	18	21.00	20.32	20.62	20.69
			36	37	21.00	20.30	20.68	20.81
			75	0	21.00	20.37	20.55	20.65
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		18700/1860	18900/1880	19100/1900
LTE Band 2	20MHz	QPSK	1	0	23.00	21.95	22.02	22.04
			1	49	23.00	22.69	22.80	22.70
			1	99	23.00	22.06	22.02	22.03
			50	0	22.00	21.48	21.48	21.91
			50	24	22.00	21.48	21.61	21.65
			50	49	22.00	21.34	21.77	21.78
			100	0	22.00	21.41	21.62	21.78
		16QAM	1	0	22.00	21.11	21.51	21.26
			1	49	22.00	21.19	21.59	21.31
			1	99	22.00	21.22	21.51	21.23
			50	0	21.00	20.49	20.52	20.87
			50	24	21.00	20.48	20.65	20.62
			50	49	21.00	20.34	20.83	20.76
			100	0	21.00	20.42	20.62	20.76

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		19957/1710.7	20175/1732.5	20393/1754.3
LTE Band 4	1.4MHz	QPSK	1	0	22.50	22.04	22.12	22.16
			1	2	22.50	22.12	22.14	22.14
			1	5	22.50	22.04	22.09	22.14
			3	0	22.50	22.11	21.93	22.28
			3	1	22.50	22.09	21.95	22.27
			3	2	22.50	22.05	21.94	22.26
			6	0	21.50	21.02	20.95	21.21
			1	0	21.50	20.95	21.15	21.40
		16QAM	1	0	21.50	20.95	21.15	21.40

			1	2	21.50	20.99	21.16	21.37
			1	5	21.50	20.95	21.15	21.42
			3	0	21.50	21.17	21.12	21.39
			3	1	21.50	21.18	21.10	21.40
			3	2	21.50	21.20	21.08	21.39
			6	0	20.50	20.17	20.08	20.34
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		19965/1711.5	20175/1732.5	20385/1753.5
LTE Band 4	3MHz	QPSK	1	0	22.50	22.04	22.04	22.13
			1	7	22.50	22.03	22.03	22.18
			1	14	22.50	22.10	22.00	22.15
			8	0	21.50	20.98	20.86	21.16
			8	4	21.50	20.97	20.88	21.20
			8	7	21.50	20.96	20.88	21.15
			15	0	21.50	20.95	20.90	21.19
		16QAM	1	0	21.50	20.99	21.34	21.38
			1	7	21.50	20.93	21.38	21.42
			1	14	21.50	20.88	21.34	21.36
			8	0	20.50	19.97	19.92	20.21
			8	4	20.50	19.95	19.89	20.19
			8	7	20.50	19.96	19.93	20.18
			15	0	20.50	20.00	19.93	20.16
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		19975/1712.5	20175/1732.5	20375/1752.5
LTE Band 4	5MHz	QPSK	1	0	22.50	22.03	22.03	22.19
			1	12	22.50	22.01	22.07	22.22
			1	24	22.50	21.99	22.06	22.20
			12	0	21.50	20.99	20.89	21.23
			12	6	21.50	20.98	20.91	21.24
			12	11	21.50	20.95	20.92	21.16
			25	0	21.50	20.97	20.91	21.24
		16QAM	1	0	22.00	21.35	21.38	21.71
			1	12	22.00	21.32	21.44	21.75
			1	24	22.00	21.35	21.47	21.74
			12	0	20.50	20.02	19.87	20.17
			12	6	20.50	19.99	19.86	20.15

			12	11	20.50	19.93	19.91	20.11
			25	0	20.50	19.92	19.88	20.23
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		20000/1715	20175/1732.5	20350/1750
LTE Band 4	10MHz	QPSK	1	0	22.50	22.09	22.04	22.09
			1	24	22.50	22.09	22.04	22.08
			1	49	22.50	22.05	22.07	22.15
			25	0	21.50	20.96	20.86	21.16
			25	12	21.50	20.98	20.93	21.15
			25	24	21.50	20.94	20.96	21.16
			50	0	21.50	20.97	20.93	21.17
		16QAM	1	0	21.50	20.92	21.32	21.15
			1	24	21.50	20.90	21.34	21.19
			1	49	21.50	20.87	21.38	21.25
			25	0	20.50	19.94	19.88	20.16
			25	12	20.50	19.96	19.92	20.17
			25	24	20.50	19.89	20.00	20.17
			50	0	20.50	19.92	19.90	20.18
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		20025/1717.5	20175/1732.5	20325/1747.5
LTE Band 4	15MHz	QPSK	1	0	22.50	22.07	21.52	21.51
			1	37	22.50	22.13	21.49	21.70
			1	74	22.50	21.93	21.52	21.68
			36	0	21.50	20.95	20.83	21.05
			36	18	21.50	20.93	20.92	21.11
			36	37	21.50	20.84	20.98	21.09
			75	0	21.50	20.91	20.96	21.09
		16QAM	1	0	21.50	21.03	20.51	20.87
			1	37	21.50	21.04	20.65	21.08
			1	74	21.50	20.96	20.65	21.06
			36	0	20.50	20.03	19.82	20.07
			36	18	20.50	20.00	19.87	20.14
			36	37	20.50	19.93	19.93	20.14
			75	0	20.50	19.91	19.97	20.07
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		

			RB Size	RB Offset		20050/1720	20175/1732.5	20300/1745
LTE Band 4	20MHz	QPSK	1	0	22.50	21.49	21.37	21.42
			1	49	22.50	21.42	21.52	21.64
			1	99	22.50	21.42	21.54	21.69
			50	0	21.50	21.04	20.91	21.03
			50	24	21.50	20.94	20.93	21.13
			50	49	21.50	20.88	21.07	21.04
			100	0	21.50	20.91	20.97	21.06
		16QAM	1	0	21.50	20.66	20.58	20.84
			1	49	21.50	20.62	20.72	21.10
			1	99	21.50	20.67	20.78	21.13
			50	0	20.50	20.00	19.90	20.03
			50	24	20.50	19.92	19.95	20.15
			50	49	20.50	19.86	20.09	20.09
			100	0	20.50	19.89	19.97	20.03

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		20407/824.7	20525/836.5	20643/848.3
LTE Band 5	1.4MHz	QPSK	1	0	23.50	21.99	23.00	22.90
			1	2	23.50	23.16	22.99	22.89
			1	5	23.50	23.21	23.00	22.89
			3	0	23.50	22.95	23.10	22.91
			3	1	23.50	22.97	23.12	22.93
			3	2	23.50	22.97	23.06	22.90
			6	0	22.50	21.97	22.03	21.92
		16QAM	1	0	22.50	22.18	22.27	21.78
			1	2	22.50	22.18	22.24	21.80
			1	5	22.50	22.21	22.26	21.77
			3	0	22.50	22.18	22.27	22.02
			3	1	22.50	22.19	22.26	22.06
			3	2	22.50	22.19	22.20	22.05
			6	0	21.50	21.13	21.17	21.05
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		20415/825.5	20525/836.5	20635/847.5
LTE	3MHz	QPSK	1	0	23.50	22.97	23.01	22.94

Band 5			1	7	23.50	23.03	23.01	22.97
			1	14	23.50	23.04	23.09	22.90
			8	0	22.00	21.99	21.98	21.87
			8	4	22.00	21.99	22.00	21.88
			8	7	22.00	21.99	21.96	21.84
			15	0	22.50	22.00	22.02	21.92
		16QAM	1	0	22.50	22.38	22.27	21.86
			1	7	22.50	22.44	22.26	21.83
			1	14	22.50	22.49	22.21	21.77
			8	0	21.50	21.02	21.01	20.93
			8	4	21.50	21.04	21.01	20.85
			8	7	21.50	21.03	21.00	20.86
			15	0	21.50	21.04	20.96	20.92
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		20425/826.5	20525/836.5	20625/846.5
LTE Band 5	5MHz	QPSK	1	0	23.50	23.10	23.09	22.99
			1	12	23.50	23.19	23.06	22.97
			1	24	23.50	23.25	23.01	22.94
			12	0	22.50	22.03	22.07	21.97
			12	6	22.50	22.04	22.01	21.90
			12	11	22.50	22.02	21.97	21.84
			25	0	22.50	22.05	22.06	21.92
		16QAM	1	0	23.00	22.47	22.58	22.32
			1	12	23.00	22.46	22.50	22.27
			1	24	23.00	22.58	22.46	22.25
			12	0	21.50	21.00	21.02	21.02
			12	6	21.50	20.97	20.97	20.89
			12	11	21.50	20.98	20.91	20.82
			25	0	21.50	21.01	21.07	20.89
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		20450/829	20525/836.5	20600/844
LTE Band 5	10MHz	QPSK	1	0	23.50	23.02	23.08	23.08
			1	24	23.50	23.15	23.07	23.04
			1	49	23.50	23.18	23.01	22.98
			25	0	22.50	22.04	22.07	22.01
			25	12	22.50	22.04	22.06	21.93

			25	24	22.50	22.07	21.96	21.80
			50	0	22.50	22.09	22.05	21.94
		16QAM	1	0	22.50	22.14	21.98	22.42
			1	24	22.50	22.30	22.05	22.33
			1	49	22.50	22.27	21.90	22.29
			25	0	21.50	21.07	21.06	21.05
			25	12	21.50	21.05	21.03	20.98
			25	24	21.50	21.09	20.98	20.87
			50	0	21.50	21.08	21.04	20.93

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		20775/2502.5	21100/2535	21425/2567.5
LTE Band 7	5MHz	QPSK	1	0	23.00	22.95	22.45	22.34
			1	12	23.00	22.91	22.29	22.37
			1	24	23.00	22.92	22.26	22.37
			12	0	22.00	21.78	21.84	21.85
			12	6	22.00	21.71	21.78	21.78
			12	11	22.00	21.74	21.74	21.77
			25	0	22.00	21.72	21.74	21.80
		16QAM	1	0	22.50	22.19	21.81	21.62
			1	12	22.50	22.11	21.78	21.66
			1	24	22.50	22.18	21.81	21.69
			12	0	21.00	20.71	20.72	20.86
			12	6	21.00	20.65	20.69	20.81
			12	11	21.00	20.68	20.63	20.79
			25	0	21.00	20.68	20.77	20.80
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		20800/2505	21100/2535	21400/2565
LTE Band 7	10MHz	QPSK	1	0	23.00	22.26	22.24	22.37
			1	24	23.00	22.26	22.27	22.43
			1	49	23.00	22.28	22.24	22.39
			25	0	22.00	21.64	21.83	21.87
			25	12	22.00	21.65	21.80	21.79
			25	24	22.00	21.79	21.77	21.76
			50	0	22.00	21.76	21.82	21.80
		16QAM	1	0	22.00	21.35	21.17	21.61

			1	24	22.00	21.33	21.17	21.66
			1	49	22.00	21.36	21.17	21.64
			25	0	21.00	20.65	20.82	20.88
			25	12	21.00	20.71	20.76	20.83
			25	24	21.00	20.76	20.75	20.77
			50	0	21.00	20.74	20.78	20.78
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		20825/2507.5	21100/2535	21375/2562.5
LTE Band 7	15MHz	QPSK	1	0	23.00	22.12	22.27	22.17
			1	37	23.00	22.14	22.32	22.27
			1	74	23.00	22.11	22.26	22.28
			36	0	22.00	21.61	21.78	21.75
			36	18	22.00	21.64	21.73	21.76
			36	37	22.00	21.74	21.74	21.76
			75	0	22.00	21.68	21.76	21.77
		16QAM	1	0	22.00	21.37	21.59	21.35
			1	37	22.00	21.44	21.63	21.50
			1	74	22.00	21.33	21.61	21.44
			36	0	21.00	20.60	20.79	20.85
			36	18	21.00	20.62	20.78	20.86
			36	37	21.00	20.71	20.80	20.84
			75	0	21.00	20.73	20.79	20.77
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		20850/2510	21100/2535	21350/2560
LTE Band 7	20MHz	QPSK	1	0	23.00	22.18	22.28	22.17
			1	49	23.00	22.23	22.37	22.28
			1	99	23.00	22.16	22.32	22.29
			50	0	22.00	21.58	21.90	21.77
			50	24	22.00	21.70	21.80	21.82
			50	49	22.00	21.78	21.80	21.66
			100	0	22.00	21.69	21.82	21.72
		16QAM	1	0	22.00	21.31	21.43	21.64
			1	49	22.00	21.41	21.52	21.79
			1	99	22.00	21.36	21.48	21.79
			50	0	21.00	20.56	20.91	20.80

			50	24	21.00	20.69	20.82	20.85
			50	49	21.00	20.77	20.79	20.70
			100	0	21.00	20.67	20.83	20.73

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		23017/699.7	23095/707.5	23173/715.3
LTE Band 12	1.4MHz	QPSK	1	0	24.00	22.41	23.33	23.29
			1	2	24.00	23.82	23.32	23.25
			1	5	24.00	23.74	23.30	23.18
			3	0	23.50	23.38	23.41	23.30
			3	1	23.50	23.41	23.41	23.31
			3	2	23.50	23.39	23.35	23.39
			6	0	22.50	22.43	22.32	22.27
		16QAM	1	0	23.00	22.64	22.57	22.18
			1	2	23.00	22.66	22.56	22.20
			1	5	23.00	22.63	22.54	22.10
			3	0	23.00	22.62	22.54	22.37
			3	1	23.00	22.62	22.55	22.38
			3	2	23.00	22.59	22.48	22.36
			6	0	22.00	21.58	21.46	21.36
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		23025/700.5	23095/707.5	23165/714.5
LTE Band 12	3MHz	QPSK	1	0	24.00	23.42	23.37	23.27
			1	7	24.00	23.48	23.32	23.30
			1	14	24.00	23.37	23.28	23.26
			8	0	22.50	22.39	22.27	22.23
			8	4	22.50	22.37	22.31	22.22
			8	7	22.50	22.35	22.26	22.24
			15	0	22.50	22.37	22.32	22.26
		16QAM	1	0	23.00	22.81	22.58	22.23
			1	7	23.00	22.85	22.56	22.20
			1	14	23.00	22.77	22.48	22.19
			8	0	21.50	21.42	21.30	21.28
			8	4	21.50	21.38	21.32	21.19
			8	7	21.50	21.37	21.32	21.22
			15	0	21.50	21.40	21.28	21.30

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		23035/701.5	23095/707.5	23155/713.5
LTE Band 12	5MHz	QPSK	1	0	24.00	23.60	23.37	23.31
			1	12	24.00	23.57	23.36	23.32
			1	24	24.00	23.54	23.26	23.31
			12	0	22.50	22.47	22.32	22.30
			12	6	22.50	22.40	22.35	22.23
			12	11	22.50	22.36	22.31	22.25
			25	0	22.50	22.43	22.33	22.29
		16QAM	1	0	23.00	22.92	22.84	22.70
			1	12	23.00	22.86	22.85	22.61
			1	24	23.00	22.90	22.83	22.56
			12	0	21.50	21.40	21.21	21.31
			12	6	21.50	21.34	21.24	21.21
			12	11	21.50	21.31	21.24	21.27
			25	0	21.50	21.37	21.31	21.28
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		23060/704	23095/707.5	23130/711
LTE Band 12	10MHz	QPSK	1	0	24.00	23.52	23.48	23.45
			1	24	24.00	23.45	23.56	23.37
			1	49	24.00	23.43	23.40	23.26
			25	0	22.50	22.41	22.25	22.22
			25	12	22.50	22.38	22.33	22.26
			25	24	22.50	22.45	22.27	22.19
			50	0	22.50	22.45	22.25	22.24
		16QAM	1	0	23.00	22.40	22.79	22.58
			1	24	23.00	22.29	22.76	22.41
			1	49	23.00	22.21	22.70	22.41
			25	0	21.50	21.37	21.28	21.26
			25	12	21.50	21.37	21.32	21.26
			25	24	21.50	21.44	21.30	21.20
			50	0	21.50	21.40	21.24	21.24

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB	RB		23755/706.5	23790/710	23825/713.5

			Size	Offset				
LTE Band 17	5MHz	QPSK	1	0	24.00	23.52	23.43	23.37
			1	12	24.00	23.55	23.37	23.35
			1	24	24.00	23.56	23.31	23.37
			12	0	22.50	22.37	22.31	22.35
			12	6	22.50	22.38	22.27	22.26
			12	11	22.50	22.38	22.20	22.30
			25	0	22.50	22.41	22.26	22.32
		16QAM	1	0	23.00	22.89	22.90	22.64
			1	12	23.00	22.90	22.79	22.63
			1	24	23.00	22.93	22.76	22.61
			12	0	21.50	21.33	21.24	21.34
			12	6	21.50	21.36	21.19	21.25
			12	11	21.50	21.35	21.10	21.32
			25	0	21.50	21.36	21.29	21.29
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		23780/709	23790/710	23800/711
LTE Band 17	10MHz	QPSK	1	0	24.00	23.45	23.09	22.93
			1	24	24.00	23.46	22.95	22.87
			1	49	24.00	23.27	23.04	22.81
			25	0	22.50	22.27	22.30	22.28
			25	12	22.50	22.34	22.29	22.27
			25	24	22.50	22.19	22.14	22.21
			50	0	22.50	22.25	22.26	22.27
		16QAM	1	0	22.50	22.17	22.30	22.02
			1	24	22.50	22.23	22.24	21.95
			1	49	22.50	22.06	22.20	21.98
			25	0	21.50	21.28	21.30	21.29
			25	12	21.50	21.31	21.32	21.25
			25	24	21.50	21.18	21.15	21.21
			50	0	21.50	21.20	21.22	21.28

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26047/1850.7	26365/1882.5	26683/1914.3
LTE Band	1.4MHz	QPSK	1	0	23.00	22.49	22.91	22.79
			1	2	23.00	22.47	22.90	22.75

25			1	5	23.00	22.48	22.88	22.79
			3	0	23.00	22.58	22.64	22.94
			3	1	23.00	22.55	22.64	22.92
			3	2	23.00	22.56	22.62	22.94
			6	0	22.00	21.55	21.63	21.91
		16QAM	1	0	22.50	21.43	21.85	22.04
			1	2	22.50	21.44	21.88	22.03
			1	5	22.50	21.41	21.85	22.03
			3	0	22.50	21.63	21.84	22.03
			3	1	22.50	21.65	21.84	22.04
			3	2	22.50	21.65	21.83	22.02
			6	0	21.00	20.65	20.80	20.96
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26055/1851.5	26365/1882.5	26675/1913.5
LTE Band 25	3MHz	QPSK	1	0	23.00	22.54	22.80	22.78
			1	7	23.00	22.53	22.77	22.85
			1	14	23.00	22.62	22.71	22.80
			8	0	22.00	21.53	21.60	21.76
			8	4	22.00	21.47	21.60	21.76
			8	7	22.00	21.51	21.60	21.75
			15	0	22.00	21.52	21.64	21.83
		16QAM	1	0	22.50	21.48	22.03	22.01
			1	7	22.50	21.45	22.07	22.05
			1	14	22.50	21.47	21.98	21.99
			8	0	21.00	20.52	20.64	20.90
			8	4	21.00	20.49	20.64	20.87
			8	7	21.00	20.49	20.65	20.85
			15	0	21.00	20.57	20.66	20.80
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26065/1852.5	26365/1882.5	26665/1912.5
LTE Band 25	5MHz	QPSK	1	0	23.00	22.55	22.86	22.79
			1	12	23.00	22.59	22.80	22.82
			1	24	23.00	22.53	22.80	22.80
			12	0	22.00	21.50	21.62	21.86
			12	6	22.00	21.51	21.63	21.84
			12	11	22.00	21.48	21.69	21.75

			25	0	22.00	21.51	21.67	21.84
		16QAM	1	0	22.50	21.90	22.09	22.38
			1	12	22.50	21.95	22.11	22.39
			1	24	22.50	21.89	22.13	22.43
			12	0	21.00	20.54	20.59	20.77
			12	6	21.00	20.55	20.61	20.76
			12	11	21.00	20.51	20.66	20.67
			25	0	21.00	20.50	20.66	20.84
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26090/1855	26365/1882.5	26640/1910
LTE Band 25	10MHz	QPSK	1	0	23.00	22.59	22.78	22.73
			1	24	23.00	22.57	22.78	22.78
			1	49	23.00	22.67	22.78	22.80
			25	0	22.00	21.47	21.57	21.65
			25	12	22.00	21.50	21.66	21.76
			25	24	22.00	21.47	21.78	21.75
			50	0	22.00	21.48	21.70	21.76
		16QAM	1	0	22.50	21.45	22.02	21.90
			1	24	22.50	21.42	22.03	21.94
			1	49	22.50	21.50	22.02	21.99
			25	0	21.00	20.49	20.61	20.69
			25	12	21.00	20.50	20.66	20.83
			25	24	21.00	20.41	20.82	20.81
			50	0	21.00	20.43	20.68	20.73
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26115/1857.5	26365/1882.5	26615/1907.5
LTE Band 25	15MHz	QPSK	1	0	23.00	22.30	22.54	22.05
			1	37	23.00	22.43	22.67	22.09
			1	74	23.00	22.37	22.49	22.17
			36	0	22.00	21.51	21.57	21.72
			36	18	22.00	21.52	21.63	21.78
			36	37	22.00	21.45	21.68	21.86
			75	0	22.00	21.47	21.71	21.78
		16QAM	1	0	22.00	21.87	21.38	21.44
			1	37	22.00	21.97	21.48	21.58
			1	74	22.00	21.85	21.38	21.53

			36	0	21.00	20.51	20.67	20.71
			36	18	21.00	20.53	20.74	20.77
			36	37	21.00	20.47	20.78	20.84
			75	0	21.00	20.47	20.64	20.83
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26140/1860	26365/1882.5	26590/1905
LTE Band 25	20MHz	QPSK	1	0	23.00	22.04	22.26	22.19
			1	49	23.00	22.87	22.99	22.88
			1	99	23.00	22.15	22.17	22.29
			50	0	22.00	21.58	21.55	21.91
			50	24	22.00	21.59	21.72	21.83
			50	49	22.00	21.41	21.78	21.98
			100	0	22.00	21.51	21.69	21.91
		16QAM	1	0	22.00	21.15	21.32	21.69
			1	49	22.00	21.30	21.44	21.78
			1	99	22.00	21.24	21.33	21.84
			50	0	21.50	20.54	20.57	20.93
			50	24	21.50	20.54	20.74	20.87
			50	49	21.50	20.35	20.81	21.03
			100	0	21.00	20.46	20.69	20.93

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26047/1850.7	26365/1882.5	26683/1914.3
LTE Band 25	1.4MHz	QPSK	1	0	21.50	21.20	21.22	21.36
			1	2	21.50	21.33	21.40	21.47
			1	5	21.50	21.16	21.22	21.31
			3	0	21.50	21.27	21.28	21.37
			3	1	21.50	21.26	21.28	21.42
			3	2	21.50	21.19	21.27	21.38
			6	0	20.50	20.21	20.28	20.35
		16QAM	1	0	21.00	20.35	20.10	20.49
			1	2	21.00	20.47	20.24	20.59
			1	5	21.00	20.36	20.11	20.52
			3	0	21.00	20.47	20.46	20.55
			3	1	21.00	20.45	20.44	20.58

			3	2	21.00	20.49	20.47	20.52
			6	0	20.00	19.35	19.45	19.50
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26055/1851.5	26365/1882.5	26675/1913.5
LTE Band 25	3MHz	QPSK	1	0	21.50	21.19	21.20	21.36
			1	7	21.50	21.50	21.43	21.50
			1	14	21.50	21.18	21.20	21.33
			8	0	20.50	20.21	20.21	20.35
			8	4	20.50	20.25	20.27	20.38
			8	7	20.50	20.17	20.23	20.29
			15	0	20.50	20.15	20.23	20.30
		16QAM	1	0	21.00	20.67	20.50	20.23
			1	7	21.00	20.90	20.72	20.55
			1	14	21.00	20.65	20.45	20.20
			8	0	19.50	19.24	19.30	19.32
			8	4	19.50	19.23	19.27	19.33
			8	7	19.50	19.19	19.25	19.32
			15	0	19.50	19.21	19.17	19.35
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26065/1852.5	26365/1882.5	26665/1912.5
LTE Band 25	5MHz	QPSK	1	0	21.50	21.05	21.18	21.18
			1	12	21.50	21.23	21.50	21.50
			1	24	21.50	21.09	21.16	21.23
			12	0	20.50	20.17	20.28	20.38
			12	6	20.50	20.25	20.27	20.39
			12	11	20.50	20.13	20.19	20.35
			25	0	20.50	20.19	20.22	20.32
		16QAM	1	0	21.50	20.40	20.72	20.54
			1	12	21.50	20.84	21.12	20.90
			1	24	21.50	20.46	20.68	20.54
			12	0	19.50	19.19	19.32	19.25
			12	6	19.50	19.23	19.30	19.32
			12	11	19.50	19.14	19.22	19.28
			25	0	19.50	19.17	19.24	19.33
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		

			RB Size	RB Offset		26090/1855	26365/1882.5	26640/1910
LTE Band 25	10MHz	QPSK	1	0	21.50	21.26	21.26	21.23
			1	24	21.50	21.41	21.37	21.43
			1	49	21.50	21.26	21.20	21.28
			25	0	20.50	20.31	20.34	20.49
			25	12	20.50	20.22	20.26	20.36
			25	24	20.50	20.25	20.19	20.32
			50	0	20.50	20.28	20.25	20.42
		16QAM	1	0	21.00	20.03	20.64	20.49
			1	24	21.00	20.23	20.75	20.59
			1	49	21.00	20.05	20.65	20.49
			25	0	20.00	19.35	19.34	19.52
			25	12	20.00	19.23	19.31	19.35
			25	24	20.00	19.26	19.23	19.36
			50	0	19.50	19.24	19.25	19.47
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26115/1857.5	26365/1882.5	26615/1907.5
LTE Band 25	15MHz	QPSK	1	0	21.50	21.15	21.20	21.25
			1	37	21.50	21.49	21.46	21.49
			1	74	21.50	21.14	21.14	21.18
			36	0	20.50	20.32	20.30	20.35
			36	18	20.50	20.27	20.30	20.39
			36	37	20.50	20.23	20.20	20.30
			75	0	20.50	20.27	20.29	20.35
		16QAM	1	0	21.00	20.29	20.63	20.45
			1	37	21.00	20.67	20.98	20.75
			1	74	21.00	20.27	20.63	20.44
			36	0	19.50	19.24	19.32	19.37
			36	18	19.50	19.22	19.27	19.41
			36	37	19.50	19.22	19.21	19.34
			75	0	19.50	19.31	19.25	19.32
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26140/1860	26365/1882.5	26590/1905
LTE Band	20MHz	QPSK	1	0	21.50	21.14	21.18	21.19
			1	49	21.50	21.33	21.35	21.36

25			1	99	21.50	21.16	21.07	21.18
			50	0	20.50	20.32	20.23	20.14
			50	24	20.50	20.22	20.25	20.26
			50	49	20.50	20.32	20.07	20.07
			100	0	20.50	20.28	20.16	20.07
		16QAM	1	0	21.00	20.38	20.51	20.46
			1	49	21.00	20.57	20.68	20.58
			1	99	21.00	20.45	20.43	20.47
			50	0	19.50	19.38	19.26	19.10
			50	24	19.50	19.29	19.31	19.29
			50	49	19.50	19.35	19.10	19.07
			100	0	19.50	19.32	19.16	19.06

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26697/814.7	26740/819	26783/823.3
LTE Band 26a	1.4MHz	QPSK	1	0	23.50	22.97	22.96	23.05
			1	2	23.50	23.11	22.94	23.07
			1	5	23.50	23.11	22.94	23.08
			3	0	23.50	22.88	23.00	23.09
			3	1	23.50	22.91	22.99	23.08
			3	2	23.50	22.92	22.99	23.09
		16QAM	6	0	22.50	21.92	21.97	22.07
			1	0	22.50	22.14	22.22	21.96
			1	2	22.50	22.15	22.20	21.96
			1	5	22.50	22.13	22.22	21.99
			3	0	22.50	22.15	22.16	22.18
			3	1	22.50	22.14	22.19	22.19
			3	2	22.50	22.15	22.17	22.20
			6	0	21.50	21.07	21.10	21.20
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26705/818.5	26740/819	26775/822.5
LTE Band 26a	3MHz	QPSK	1	0	23.50	22.93	22.98	23.03
			1	7	23.50	22.97	23.02	23.08
			1	14	23.50	22.99	23.01	23.07
			8	0	22.50	21.91	21.97	21.96
			8	4	22.50	21.92	21.95	21.98

			8	7	22.50	21.95	21.95	22.01
			15	0	22.50	21.94	21.97	22.04
		16QAM	1	0	23.00	22.14	21.88	22.45
			1	7	23.00	22.17	21.86	22.52
			1	14	23.00	22.17	21.89	22.47
			8	0	21.50	20.93	20.96	21.03
			8	4	21.50	20.95	20.95	21.04
			8	7	21.50	20.94	20.93	21.05
			15	0	21.50	20.88	21.02	21.08
			RB Configuration		Tune-up	Channel/Frequency(MHz)		
Band	Band Width	Modulation	RB Size	RB Offset		26715/816.5	26740/819	26765/821.5
LTE Band 26a	5MHz	QPSK	1	0	23.50	22.97	23.04	22.99
			1	12	23.50	22.99	23.08	23.07
			1	24	23.50	22.99	23.09	23.07
			12	0	22.50	21.95	21.96	22.04
			12	6	22.50	21.97	21.96	22.01
			12	11	22.50	21.95	21.96	22.01
			25	0	22.50	21.96	21.97	22.03
		16QAM	1	0	23.00	22.29	22.47	22.39
			1	12	23.00	22.31	22.48	22.46
			1	24	23.00	22.34	22.55	22.61
			12	0	21.00	20.96	20.93	20.93
			12	6	21.00	20.99	20.94	20.94
			12	11	21.00	20.95	20.96	20.96
			25	0	21.50	20.93	20.94	21.03
			RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset			26740/819	
LTE Band 26a	10MHz	QPSK	1	0	23.50		22.95	
			1	24	23.50		23.00	
			1	49	23.50		23.17	
			25	0	22.50		21.92	
			25	12	22.50		21.98	
			25	24	22.50		22.03	
			50	0	22.50		22.02	
		16QAM	1	0	22.50		22.10	
			1	24	22.50		22.17	

			1	49	22.50		22.27	
			25	0	21.50		20.94	
			25	12	21.50		20.99	
			25	24	21.50		21.05	
			50	0	21.00		20.99	

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26797/824.7	26915/836.5	27033/848.3
LTE Band 26b	1.4MHz	QPSK	1	0	23.50	23.36	23.12	23.04
			1	2	23.50	23.32	23.11	23.00
			1	5	23.50	23.30	23.10	23.02
			3	0	23.50	23.03	23.18	23.05
			3	1	23.50	23.06	23.19	23.04
			3	2	23.50	23.09	23.14	23.04
		16QAM	6	0	22.50	22.06	22.15	22.04
			1	0	22.50	22.33	22.38	21.90
			1	2	22.50	22.30	22.33	21.93
			1	5	22.50	22.25	22.36	21.91
			3	0	22.50	22.26	22.34	22.11
			3	1	22.50	22.29	22.34	22.14
			3	2	22.50	22.27	22.31	22.14
			6	0	21.50	21.24	21.26	21.17
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26805/825.5	26915/836.5	27025/847.5
LTE Band 26b	3MHz	QPSK	1	0	23.50	23.09	23.20	22.98
			1	7	23.50	23.14	23.16	23.02
			1	14	23.50	23.09	23.10	22.98
			8	0	22.50	22.09	22.10	21.94
			8	4	22.50	22.06	22.11	21.93
			8	7	22.50	22.10	22.08	21.95
			15	0	22.50	22.10	22.10	22.00
		16QAM	1	0	23.00	22.01	22.60	22.21
			1	7	23.00	22.08	22.59	22.23
			1	14	23.00	22.03	22.53	22.21
			8	0	21.50	21.10	21.15	21.05
			8	4	21.50	21.05	21.14	21.00

			8	7	21.50	21.06	21.13	20.97
			15	0	21.50	21.13	21.17	20.97
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26815/826.5	26915/836.5	27015/846.5
LTE Band 26b	5MHz	QPSK	1	0	23.50	23.07	23.24	23.07
			1	12	23.50	23.11	23.24	23.06
			1	24	23.50	23.21	23.18	23.02
			12	0	22.50	22.13	22.13	22.05
			12	6	22.50	22.07	22.11	22.01
			12	11	22.50	22.10	22.06	21.96
			25	0	22.50	22.13	22.14	22.04
		16QAM	1	0	23.00	22.48	22.68	22.48
			1	12	23.00	22.44	22.66	22.47
			1	24	23.00	22.54	22.62	22.58
			12	0	21.50	21.13	21.14	20.98
			12	6	21.50	21.10	21.12	20.92
			12	11	21.50	21.09	21.05	20.89
			25	0	21.50	21.11	21.12	21.07
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26840/829	26915/836.5	26990/844
LTE Band 26b	10MHz	QPSK	1	0	23.50	23.09	23.21	23.14
			1	24	23.50	23.25	23.22	23.09
			1	49	23.50	23.19	23.11	23.07
			25	0	22.50	22.15	22.20	22.08
			25	12	22.50	22.17	22.13	22.01
			25	24	22.50	22.20	22.06	21.96
			50	0	22.50	22.19	22.16	22.01
		16QAM	1	0	23.00	22.26	22.14	22.54
			1	24	23.00	22.40	22.09	22.46
			1	49	23.00	22.40	21.99	22.43
			25	0	21.50	21.14	21.20	21.12
			25	12	21.50	21.20	21.11	21.03
			25	24	21.50	21.19	21.05	20.97
			50	0	21.50	21.19	21.10	21.03
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		

			RB Size	RB Offset		26865/831.5	26915/836.5	26965/841.5
LTE Band 26b	15MHz	QPSK	1	0	23.50	23.01	23.23	23.12
			1	37	23.50	23.13	23.15	23.02
			1	74	23.50	23.03	23.02	22.93
			36	0	22.50	22.08	22.10	22.06
			36	18	22.50	22.14	22.07	22.04
			36	37	22.50	22.10	21.98	21.91
			75	0	22.50	22.13	22.10	22.02
		16QAM	1	0	23.00	22.21	22.62	22.33
			1	37	23.00	22.36	22.55	22.22
			1	74	23.00	22.21	22.44	22.13
			36	0	21.50	21.07	21.15	21.17
			36	18	21.50	21.10	21.12	21.12
			36	37	21.50	21.04	21.03	21.03
			75	0	21.50	21.14	21.03	21.02

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		131979/1710 .7	132322/174 5	132665/1779 .3
LTE Band 66	1.4MHz	QPSK	1	0	22.50	21.06	22.31	22.29
			1	2	22.50	22.10	22.31	22.26
			1	5	22.50	22.04	22.27	22.29
			3	0	22.50	22.13	22.18	22.41
			3	1	22.50	22.10	22.20	22.39
			3	2	22.50	22.08	22.20	22.45
			6	0	21.50	21.03	21.15	21.34
		16QAM	1	0	22.00	20.95	21.41	21.55
			1	2	22.00	20.95	21.39	21.50
			1	5	22.00	20.98	21.40	21.57
			3	0	22.00	21.17	21.38	21.51
			3	1	22.00	21.17	21.37	21.49
			3	2	22.00	21.17	21.36	21.51
			6	0	20.50	20.18	20.34	20.46
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		131987/1711.5	132322/1745	132657/17 78.5
LTE Band 66	3MHz	QPSK	1	0	22.50	22.04	22.14	22.32
			1	7	22.50	22.04	22.17	22.37
			1	14	22.50	22.03	22.16	22.38
			8	0	21.50	20.98	21.10	21.31
			8	4	21.50	21.00	21.11	21.32

			8	7	21.50	20.98	21.11	21.29
			15	0	21.50	21.00	21.16	21.34
		16QAM	1	0	22.00	21.42	21.38	21.27
			1	7	22.00	21.52	21.42	21.25
			1	14	22.00	21.51	21.39	21.25
			8	0	20.50	20.02	20.17	20.36
			8	4	20.50	20.00	20.14	20.34
			8	7	20.50	20.03	20.17	20.33
			15	0	20.50	20.05	20.12	20.38
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		131997/1712.5	132322/1745	132647/1777.5
LTE Band 66	5MHz	QPSK	1	0	22.50	22.18	22.18	22.36
			1	12	22.50	22.18	22.20	22.41
			1	24	22.50	22.19	22.21	22.45
			12	0	21.50	21.05	21.19	21.40
			12	6	21.50	21.05	21.17	21.32
			12	11	21.50	21.07	21.15	21.21
			25	0	21.50	21.04	21.20	21.33
		16QAM	1	0	22.00	21.47	21.67	21.65
			1	12	22.00	21.51	21.67	21.67
			1	24	22.00	21.55	21.69	21.69
			12	0	20.50	20.01	20.10	20.41
			12	6	20.50	19.99	20.09	20.35
			12	11	20.50	19.98	20.07	20.23
			25	0	20.50	19.99	20.20	20.31
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		132022/1715	132322/1745	132622/1775
LTE Band 66	10MHz	QPSK	1	0	22.50	22.08	22.12	22.03
			1	24	22.50	22.05	22.15	22.13
			1	49	22.50	22.00	22.24	22.22
			25	0	21.50	21.01	21.11	21.28
			25	12	21.50	20.99	21.14	21.27
			25	24	21.50	20.96	21.16	21.18
			50	0	21.50	21.01	21.18	21.29
		16QAM	1	0	21.50	21.44	21.23	20.67
			1	24	21.50	21.46	21.27	20.83
			1	49	21.50	21.42	21.27	20.89
			25	0	20.50	20.03	20.14	20.31
			25	12	20.50	20.02	20.16	20.26
			25	24	20.50	19.97	20.17	20.17
			50	0	20.50	19.98	20.18	20.27
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB	RB		132047/1717.	132322/1745	132597/17

Band	Band Width	Modulation	Size	Offset		5		72.5
LTE Band 66	15MHz	QPSK	1	0	22.50	21.82	21.42	21.66
			1	37	22.50	21.84	21.63	21.74
			1	74	22.50	21.58	21.54	21.80
			36	0	21.50	20.99	21.04	21.09
			36	18	21.50	20.96	21.11	21.20
			36	37	21.50	20.89	21.11	21.16
			75	0	21.50	20.93	21.12	21.16
		16QAM	1	0	21.50	20.81	20.64	21.05
			1	37	21.50	20.72	20.86	21.17
			1	74	21.50	20.63	20.82	21.14
			36	0	20.50	20.07	20.01	20.15
			36	18	20.50	20.04	20.12	20.25
			36	37	20.50	19.99	20.10	20.21
			75	0	20.50	19.93	20.14	20.14
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		132072/1720	132322/1745	132572/1770
LTE Band 66	20MHz	QPSK	1	0	22.50	21.45	21.45	21.61
			1	49	22.50	21.49	21.72	21.68
			1	99	22.50	22.42	22.44	22.17
			50	0	21.50	21.07	21.06	21.09
			50	24	21.50	21.00	21.19	21.24
			50	49	21.50	20.95	21.13	21.09
			100	0	21.50	20.98	21.08	21.11
		16QAM	1	0	21.50	20.69	20.70	21.06
			1	49	21.50	20.69	20.91	21.13
			1	99	21.50	20.68	20.92	21.30
			50	0	20.50	20.02	20.10	20.13
			50	24	20.50	19.97	20.18	20.26
			50	49	20.50	19.91	20.13	20.10
			100	0	20.50	19.94	20.07	20.09

7.4. NR Conducted Power

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		500202/2501.01	518598/2592.99	537000/2685
NR Band n41	10MHz	DFT BPSK	1	1	21.50	21.37	21.49	21.22
		DFT QPSK	24	0	21.50	20.51	20.32	21.41
			12	6	21.50	21.49	21.42	21.46
			1	1	21.50	21.38	21.48	21.48
			1	22	21.50	21.48	21.40	21.46
		DFT	1	1	21.50	20.39	21.49	21.46

		QAM16						
		DFT QAM64	1	1	20.50	18.93	20.49	19.97
		DFT QAM256	1	1	20.50	18.93	20.46	19.96
		CP QPSK	1	1	20.50	18.62	20.47	19.79
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		500700/2503.5	518598/2592.99	536496/2682.48
NR Band n41	15MHz	DFT BPSK	1	1	21.50	19.94	21.43	21.03
		DFT QPSK	36	0	20.50	18.73	20.35	19.85
			18	9	21.50	20.23	21.50	21.18
			1	1	21.50	19.95	21.44	21.02
			1	36	21.50	20.37	21.50	21.19
		DFT QAM16	1	1	21.50	19.93	21.43	21.00
		DFT QAM64	1	1	21.50	19.96	21.44	21.01
		DFT QAM256	1	1	21.50	19.94	21.44	21.00
		CP QPSK	1	1	21.50	19.95	21.44	20.98
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		501204/2506.02	518598/2592.99	535998/2679.99
NR Band n41	20MHz	DFT BPSK	1	1	21.50	19.91	21.29	20.99
		DFT QPSK	50	0	20.50	18.79	20.28	19.84
			25	12	21.50	20.28	21.50	21.18
			1	1	21.50	19.91	21.32	20.99
			1	49	21.50	19.51	21.31	21.21
		DFT QAM16	1	1	21.50	19.92	21.32	21.05
		DFT QAM64	1	1	21.50	19.91	21.28	21.01
		DFT QAM256	1	1	21.50	19.93	21.33	21.04
		CP QPSK	1	1	21.50	19.89	21.35	21.04
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		503202/2516.01	518598/2592.99	534000/2670
NR Band n41	40MHz	DFT BPSK	1	1	21.00	19.53	20.75	20.76
		DFT QPSK	100	0	20.50	18.97	20.14	19.89
			50	25	22.00	20.58	21.79	21.32
			1	1	21.50	19.53	20.76	20.80

			1	104	21.50	19.55	21.10	20.98
		DFT QAM16	1	1	21.00	19.54	20.76	20.72
		DFT QAM64	1	1	21.00	19.57	20.71	20.74
		DFT QAM256	1	1	21.00	19.53	20.70	20.73
		CP QPSK	1	1	21.00	19.53	20.73	20.70
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		504204/2521.02	518598/2592.99	532998/2664.99
NR Band n41	50MHz	DFT BPSK	1	1	21.50	19.92	21.03	20.96
		DFT QPSK	128	0	20.50	19.20	20.25	20.00
			64	32	21.50	20.81	21.50	21.41
			1	1	21.50	19.91	21.12	20.95
			1	131	21.50	21.03	19.60	21.25
		DFT QAM16	1	1	21.50	19.92	21.07	20.92
		DFT QAM64	1	1	21.50	19.94	21.12	20.95
		DFT QAM256	1	1	21.50	19.93	21.10	20.92
		CP QPSK	1	1	21.50	19.94	21.13	20.90
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		505200/2526	518598/2592.99	531996/2659.98
NR Band n41	60MHz	DFT BPSK	1	1	21.50	21.47	19.96	21.47
		DFT QPSK	162	0	21.50	21.25	21.45	21.47
			81	40	21.50	21.27	21.28	21.49
			1	1	21.50	21.09	21.28	21.44
			1	160	21.50	21.49	21.49	21.48
		DFT QAM16	1	1	22.00	20.14	21.43	21.50
		DFT QAM64	1	1	20.50	18.73	20.00	20.11
		DFT QAM256	1	1	20.50	18.69	19.87	20.14
		CP QPSK	1	1	20.00	18.72	19.94	19.96
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		507204/2536.02	518598/2592.99	529998/2649.99
NR Band n41	80MHz	DFT BPSK	1	1	21.00	19.72	20.87	20.66
		DFT	216	0	20.50	19.48	20.16	20.07

		QPSK	108	54	21.50	21.12	21.49	21.45
			1	1	21.50	19.68	20.88	20.63
			1	215	21.50	20.88	21.18	21.10
		DFT QAM16	1	1	21.00	19.68	20.88	20.66
		DFT QAM64	1	1	21.00	19.76	20.89	20.62
		DFT QAM256	1	1	21.00	19.69	20.89	20.67
		CP QPSK	1	1	21.00	19.71	20.88	20.65
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		508200/2541	518598/2592.99	528996/2644.98
NR Band n41	90MHz	DFT BPSK	1	1	21.00	19.63	20.74	20.63
		DFT QPSK	240	0	20.50	19.55	20.13	20.04
			120	60	21.50	21.17	21.49	21.38
			1	1	21.50	19.59	20.75	20.69
			1	243	21.50	19.53	19.55	21.03
		DFT QAM16	1	1	21.00	19.59	20.75	20.61
		DFT QAM64	1	1	21.00	19.63	20.74	20.68
		DFT QAM256	1	1	21.00	19.62	20.71	20.62
		CP QPSK	1	1	21.00	19.64	20.71	20.62
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		509202/2546.01	518598/2592.99	528000/2640
NR Band n41	100MHz	DFT BPSK	1	1	21.00	19.51	20.44	20.70
		DFT QPSK	270	0	20.50	19.57	20.05	20.01
			135	67	21.50	21.23	21.50	21.38
			1	1	21.50	19.51	20.45	20.74
			1	271	21.50	21.21	19.96	19.71
		DFT QAM16	1	1	21.00	19.50	20.49	20.74
		DFT QAM64	1	1	21.00	19.48	20.48	20.74
		DFT QAM256	1	1	21.00	19.54	20.50	20.75
		CP QPSK	1	1	21.00	19.50	20.48	20.74

7.5. WLAN & Bluetooth Output Power

Mode	Channel	Frequency (MHz)	Tune-up	Output Power (dBm)
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802.11b	1	2412	15.50	14.48
	6	2437	15.50	15.01
	11	2462	15.50	14.57
802.11g	1	2412	14.50	13.78
	6	2437	14.50	14.20
	11	2462	14.50	13.87
802.11n HT20	1	2412	14.50	14.06
	6	2437	14.50	14.30
	11	2462	14.50	13.99
802.11n HT40	3	2422	14.00	13.10
	6	2437	14.00	13.78
	9	2452	14.00	12.27

NOTE: Power measurement results of WLAN 2.4G.

Mode	Channel	Frequency (MHz)	Tune-up	Output Power (dBm)
802.11a	36	5180	13.00	12.78
	40	5200	13.00	11.83
	48	5240	13.00	12.86
802.11n HT20	36	5180	11.80	11.55
	40	5200	11.80	9.99
	48	5240	11.80	11.35
802.11n HT40	38	5190	11.50	10.81
	46	5230	11.50	11.08
802.11ac VHT20	36	5180	12.00	11.58
	40	5200	12.00	10.25
	48	5240	12.00	11.37
802.11ac VHT40	38	5190	11.50	10.95
	46	5230	11.50	11.27
802.11ac VHT80	42	5210	10.50	10.04

NOTE: Power measurement results of WLAN 5.2G.

Mode	Channel	Frequency (MHz)	Tune-up	Output Power (dBm)
802.11a	52	5260	11.00	10.82
	56	5280	11.00	10.60
	64	5320	11.00	10.53
802.11n HT20	52	5260	9.50	9.27
	56	5280	9.50	9.11
	64	5320	9.50	8.42

802.11n HT40	54	5270	9.00	8.56
	62	5310	9.00	8.31
802.11ac VHT20	52	5260	9.50	9.35
	56	5280	9.50	9.05
	64	5320	9.50	8.46
802.11ac VHT40	54	5270	9.00	8.64
	62	5310	9.00	8.07
802.11ac VHT80	58	5290	7.50	7.22

NOTE: Power measurement results of WLAN 5.3G.

Mode	Channel	Frequency (MHz)	Tune-up	Output Power (dBm)
802.11a	100	5500	9.00	8.62
	120	5600	9.00	8.36
	140	5700	9.00	7.97
802.11n HT20	100	5500	7.50	7.07
	120	5600	7.50	7.32
	140	5700	7.50	6.89
802.11n HT40	102	5510	6.50	5.71
	118	5590	6.50	5.79
	134	5670	6.50	6.23
802.11ac VHT20	100	5500	0.00	7.00
	120	5600	0.00	7.27
	140	5700	0.00	6.91
802.11ac VHT40	102	5510	6.50	5.55
	118	5590	6.50	5.79
	134	5670	6.50	6.24
802.11ac VHT80	106	5530	6.50	5.10
	122	5610	6.50	6.26

NOTE: Power measurement results of WLAN 5.6G.

Mode	Channel	Frequency (MHz)	Tune-up	Output Power (dBm)
802.11a	149	5745	12.50	12.04
	157	5785	12.50	11.89
	165	5825	12.50	12.28
802.11n HT20	149	5745	11.00	10.70
	157	5785	11.00	9.38

	165	5825	11.00	10.59
802.11n HT40	151	5755	10.50	10.46
	159	5795	10.50	10.21
802.11ac VHT20	149	5745	11.00	10.75
	157	5785	11.00	9.41
	165	5825	11.00	10.65
802.11ac VHT40	151	5755	10.50	10.49
	159	5795	10.50	10.15
802.11ac VHT80	155	5775	9.00	8.87

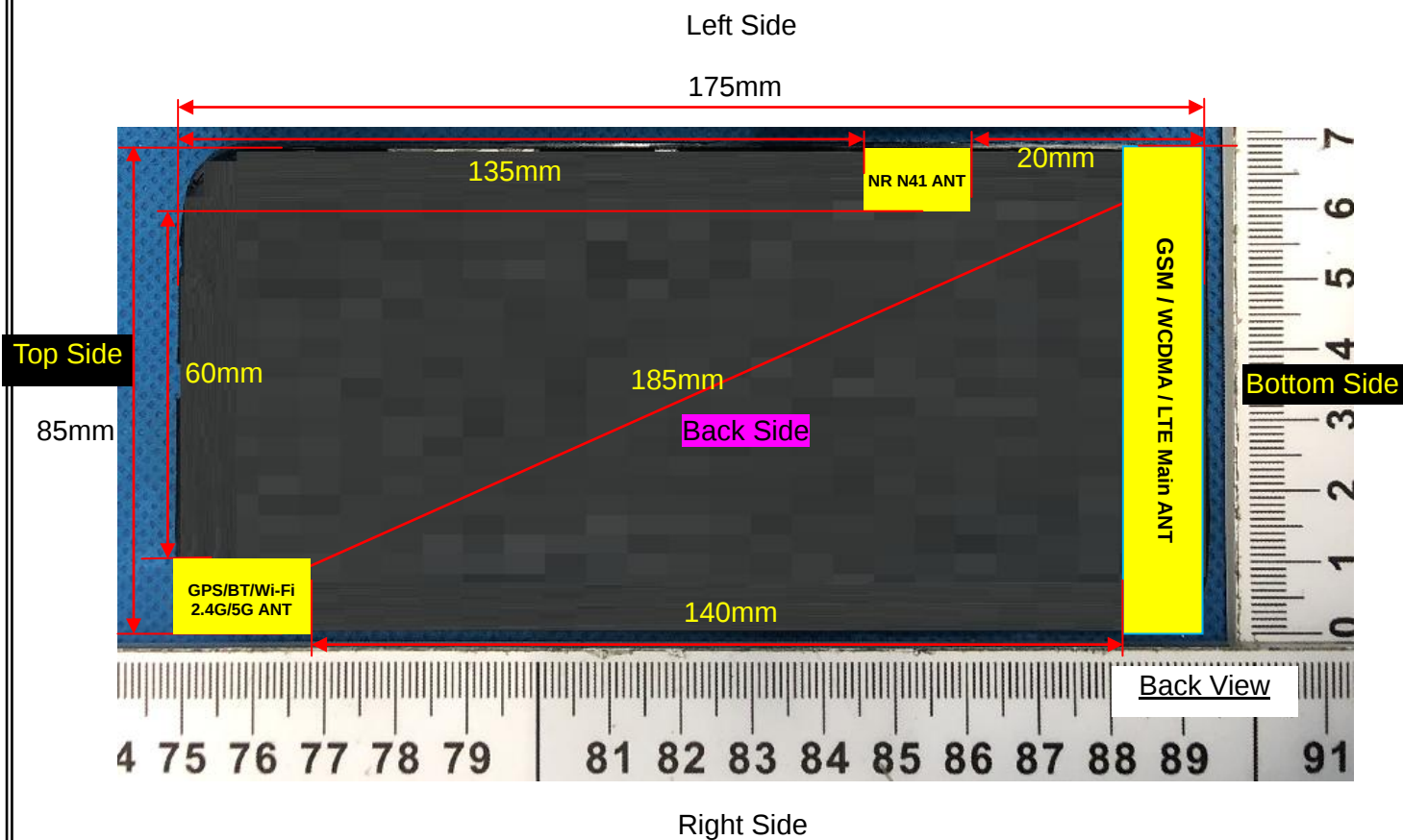
NOTE: Power measurement results of WLAN 5.8G.

BR+EDR	Output Power (dBm)				
	Channel	Tune-up	Data Rates		
			1M	2M	3M
	0CH	6.500	5.449	6.091	6.029
	39CH	6.500	6.101	5.405	5.802
	78CH	5.500	5.400	5.250	5.230

BLE	Channel	Tune-up	Output Power (dBm)
	0CH	2.500	2.237
	19CH	3.500	3.033
	39CH	2.000	1.600

NOTE: Power measurement results of Bluetooth.

8. Antenna Location



Note: Since the confidentiality request of EUT, the antenna location example diagram see as above.

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
NR N41	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	>25mm	≤ 25mm
WLAN & Bluetooth	≤ 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	NO	Yes
NR N41	Yes	Yes	Yes	NO	NO	Yes
WLAN & Bluetooth	Yes	Yes	NO	Yes	Yes	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	6.50	4.47	5	2.480	1.41	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:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f_{\text{(GHz)}}}/x] \text{ W/kg}$ 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 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	Head	6.50	4.47	5	2.48	7.5	0.188
Bluetooth	Body	6.50	4.47	10	2.48	7.5	0.094
Bluetooth	Hotspot	6.50	4.47	10	2.48	7.5	0.094

NOTE: Estimated SAR calculation for Bluetooth

10. SAR Results

10.1. SAR measurement Result

10.1.1. SAR measurement Result of GSM850

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Left Cheek	189/836.4	GPRS(GMSK 4TS)	0.110	0.086	3.89	28.52	29.00	0.123	2021/6/21
Left Tilt 15 Degree	189/836.4	GPRS(GMSK 4TS)	0.060	0.046	-2.48	28.52	29.00	0.067	2021/6/21
Right Cheek	189/836.4	GPRS(GMSK 4TS)	0.100	0.075	2.80	28.52	29.00	0.112	2021/6/21
Right Tilt 15 Degree	189/836.4	GPRS(GMSK 4TS)	0.050	0.039	-2.02	28.52	29.00	0.056	2021/6/21

NOTE: Head SAR test results of GSM850.

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Front Side	189/836.4	GPRS(GMSK 4TS)	0.244	0.145	4.18	28.52	29.00	0.273	2021/6/21
Back Side	189/836.4	GPRS(GMSK 4TS)	0.294	0.180	-1.34	28.52	29.00	0.328	2021/6/21

NOTE: Body-Worn SAR test results of GSM850

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Front Side	189/836.4	GPRS(GMSK 4TS)	0.244	0.145	4.18	28.52	29.00	0.273	2021/6/21
Back Side	189/836.4	GPRS(GMSK 4TS)	0.294	0.180	-1.34	28.52	29.00	0.328	2021/6/21
Left Side	189/836.4	GPRS(GMSK 4TS)	0.128	0.077	-3.57	28.52	29.00	0.143	2021/6/21
Right Side	189/836.4	GPRS(GMSK 4TS)	0.105	0.066	-2.96	28.52	29.00	0.117	2021/6/21
Bottom Side	189/836.4	GPRS(GMSK 4TS)	0.215	0.135	-2.15	28.52	29.00	0.240	2021/6/21

NOTE: Hotspot SAR test results of GSM850

10.1.2. SAR measurement Result of GSM1900

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Left	661/1880	GPRS(GMSK	0.110	0.072	-0.36	24.93	25.00	0.112	2021/6/16

Cheek		4TS)							
Left Tilt 15 Degree	661/1880	GPRS(GMSK 4TS)	0.057	0.039	1.01	24.93	25.00	0.058	2021/6/16
Right Cheek	661/1880	GPRS(GMSK 4TS)	0.099	0.063	1.13	24.93	25.00	0.101	2021/6/16
Right Tilt 15 Degree	661/1880	GPRS(GMSK 4TS)	0.053	0.031	1.35	24.93	25.00	0.054	2021/6/16

NOTE: Head SAR test results of GSM1900

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Front Side	661/1880	GPRS(GMSK 4TS)	0.770	0.425	2.30	24.93	25.00	0.783	2021/6/16
Back Side	661/1880	GPRS(GMSK 4TS)	0.948	0.520	0.69	24.93	25.00	0.963	2021/6/16
Back Side	512/1850.2	GPRS(GMSK 4TS)	1.104	0.588	-2.58	25.28	25.00	1.035	2021/6/16
Back Side Repeated	512/1850.2	GPRS(GMSK 4TS)	1.086	0.580	1.25	25.28	25.00	1.018	2021/6/16
Back Side	810/1909.8	GPRS(GMSK 4TS)	0.906	0.483	-1.89	24.56	25.00	1.003	2021/6/16

NOTE: Body-Worn SAR test results of GSM1900

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Front Side	661/1880	GPRS(GMSK 4TS)	0.770	0.425	2.30	24.93	25.00	0.783	2021/6/16
Back Side	661/1880	GPRS(GMSK 4TS)	0.948	0.520	0.69	24.93	25.00	0.963	2021/6/16
Left Side	661/1880	GPRS(GMSK 4TS)	0.420	0.235	-3.62	24.93	25.00	0.427	2021/6/16
Right Side	661/1880	GPRS(GMSK 4TS)	0.364	0.197	4.63	24.93	25.00	0.370	2021/6/16
Bottom Side	661/1880	GPRS(GMSK 4TS)	0.665	0.364	2.61	24.93	25.00	0.676	2021/6/16
Back Side	512/1850.2	GPRS(GMSK 4TS)	1.104	0.588	-2.58	25.28	25.00	1.035	2021/6/16
Back Side Repeated	512/1850.2	GPRS(GMSK 4TS)	1.086	0.580	1.25	25.28	25.00	1.018	2021/6/16
Back Side	810/1909.8	GPRS(GMSK 4TS)	0.906	0.483	-1.89	24.56	25.00	1.003	2021/6/16

NOTE: Hotspot SAR test results of GSM1900

10.1.3. SAR measurement Result of WCDMA Band 2

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Left Cheek	9400/1880	RMC12.2K	0.106	0.068	-4.70	22.45	22.50	0.107	2021/6/16
Left Tilt 15 Degree	9400/1880	RMC12.2K	0.058	0.036	0.97	22.45	22.50	0.059	2021/6/16
Right Cheek	9400/1880	RMC12.2K	0.096	0.058	-3.30	22.45	22.50	0.097	2021/6/16
Right Tilt 15 Degree	9400/1880	RMC12.2K	0.046	0.034	4.16	22.45	22.50	0.047	2021/6/16

NOTE: Head SAR test results of WCDMA Band 2

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Front Side	9400/1880	RMC12.2K	0.771	0.427	-0.34	22.45	22.50	0.780	2021/6/16
Back Side	9400/1880	RMC12.2K	0.908	0.498	-0.84	22.45	22.50	0.919	2021/6/16
Back Side	9262/1852.4	RMC12.2K	0.961	0.529	1.71	22.31	22.50	1.004	2021/6/16
Back Side	9538/1907.6	RMC12.2K	1.011	0.549	-1.92	22.48	22.50	1.016	2021/6/16
Back Side Repeated	9538/1907.6	RMC12.2K	1.008	0.545	2.34	22.48	22.50	1.013	2021/6/16

NOTE: Body-Worn SAR test results of WCDMA Band 2

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Front Side	9400/1880	RMC12.2K	0.771	0.427	-0.34	22.45	22.50	0.780	2021/6/16
Back Side	9400/1880	RMC12.2K	0.908	0.498	-0.84	22.45	22.50	0.919	2021/6/16
Left Side	9400/1880	RMC12.2K	0.437	0.240	0.92	22.45	22.50	0.442	2021/6/16
Right Side	9400/1880	RMC12.2K	0.341	0.188	-2.50	22.45	22.50	0.345	2021/6/16
Bottom Side	9400/1880	RMC12.2K	0.711	0.387	-3.80	22.45	22.50	0.719	2021/6/16
Back Side	9262/1852.4	RMC12.2K	0.961	0.529	1.71	22.31	22.50	1.004	2021/6/16
Back Side	9538/1907.6	RMC12.2K	1.011	0.549	-1.92	22.48	22.50	1.016	2021/6/16

Back Side Repeated	9538/1907.6	RMC12.2K	1.008	0.545	2.34	22.48	22.50	1.013	2021/6/16
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NOTE: Hotspot SAR test results of WCDMA Band 2

10.1.4. SAR measurement Result of WCDMA Band 4

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Left Cheek	1413/1732.6	RMC12.2K	0.069	0.046	-3.86	21.68	22.00	0.074	2021/6/17
Left Tilt 15 Degree	1413/1732.6	RMC12.2K	0.040	0.026	1.58	21.68	22.00	0.043	2021/6/17
Right Cheek	1413/1732.6	RMC12.2K	0.064	0.041	-4.81	21.68	22.00	0.069	2021/6/17
Right Tilt 15 Degree	1413/1732.6	RMC12.2K	0.029	0.024	1.24	21.68	22.00	0.031	2021/6/17

NOTE: Head SAR test results of WCDMA Band 4

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Front Side	1413/1732.6	RMC12.2K	0.662	0.375	2.38	21.68	22.00	0.713	2021/6/17
Back Side	1413/1732.6	RMC12.2K	0.987	0.559	-0.35	21.68	22.00	1.062	2021/6/17
Back Side	1312/1712.4	RMC12.2K	0.980	0.555	-0.38	21.75	22.00	1.038	2021/6/17
Back Side	1513/1752.6	RMC12.2K	1.004	0.566	-0.42	21.99	22.00	1.006	2021/6/17
Back Side Repeated	1513/1752.6	RMC12.2K	0.997	0.560	-2.34	21.99	22.00	0.999	2021/6/17

NOTE: Body-Worn SAR test results of WCDMA Band 4

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Front Side	1413/1732.6	RMC12.2K	0.662	0.375	2.38	21.68	22.00	0.713	2021/6/17
Back Side	1413/1732.6	RMC12.2K	0.987	0.559	-0.35	21.68	22.00	1.062	2021/6/17
Left Side	1413/1732.6	RMC12.2K	0.472	0.267	2.61	21.68	22.00	0.508	2021/6/17
Right Side	1413/1732.6	RMC12.2K	0.360	0.201	-2.45	21.68	22.00	0.388	2021/6/17
Bottom Side	1413/1732.6	RMC12.2K	0.679	0.386	-4.38	21.68	22.00	0.731	2021/6/17
Back Side	1312/1712.4	RMC12.2K	0.980	0.555	-0.38	21.75	22.00	1.038	2021/6/17

Back Side	1513/1752.6	RMC12.2K	1.004	0.566	-0.42	21.99	22.00	1.006	2021/6/17
Back Side Repeated	1513/1752.6	RMC12.2K	0.997	0.560	-2.34	21.99	22.00	0.999	2021/6/17

NOTE: Hotspot SAR test results of WCDMA Band 4

10.1.5. SAR measurement Result of WCDMA Band 5

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Left Cheek	4182/836.4	RMC12.2K	0.064	0.053	-4.85	22.84	23.00	0.066	2021/6/21
Left Tilt 15 Degree	4182/836.4	RMC12.2K	0.037	0.027	-0.67	22.84	23.00	0.038	2021/6/21
Right Cheek	4182/836.4	RMC12.2K	0.056	0.047	-2.93	22.84	23.00	0.058	2021/6/21
Right Tilt 15 Degree	4182/836.4	RMC12.2K	0.029	0.019	0.86	22.84	23.00	0.030	2021/6/21

NOTE: Head SAR test results of WCDMA Band 5

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Front Side	4182/836.4	RMC12.2K	0.142	0.090	1.32	22.84	23.00	0.147	2021/6/21
Back Side	4182/836.4	RMC12.2K	0.170	0.105	1.25	22.84	23.00	0.176	2021/6/21

NOTE: Body-Worn SAR test results of WCDMA Band 5

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Front Side	4182/836.4	RMC12.2K	0.142	0.090	1.32	22.84	23.00	0.147	2021/6/21
Back Side	4182/836.4	RMC12.2K	0.170	0.105	1.25	22.84	23.00	0.176	2021/6/21
Left Side	4182/836.4	RMC12.2K	0.083	0.047	-2.12	22.84	23.00	0.086	2021/6/21
Right Side	4182/836.4	RMC12.2K	0.064	0.041	-4.73	22.84	23.00	0.066	2021/6/21
Bottom Side	4182/836.4	RMC12.2K	0.130	0.080	0.39	22.84	23.00	0.135	2021/6/21

NOTE: Hotspot SAR test results of WCDMA Band 5

10.1.6. SAR measurement Result of LTE Band 2

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Left Cheek	18900/1880	20M QPSK(1,49)	0.153	0.097	-3.96	22.80	23.00	0.160	2021/6/16
Left Tilt 15 Degree	18900/1880	20M QPSK(1,49)	0.088	0.057	-1.98	22.80	23.00	0.092	2021/6/16
Right Cheek	18900/1880	20M QPSK(1,49)	0.143	0.087	-3.03	22.80	23.00	0.150	2021/6/16
Right Tilt 15 Degree	18900/1880	20M QPSK(1,49)	0.070	0.043	-3.91	22.80	23.00	0.073	2021/6/16
50%RB									
Left Cheek	18900/1880	20M QPSK(50,0)	0.087	0.054	3.66	21.48	22.00	0.098	2021/6/16
Left Tilt 15 Degree	18900/1880	20M QPSK(50,0)	0.047	0.031	2.72	21.48	22.00	0.053	2021/6/16
Right Cheek	18900/1880	20M QPSK(50,0)	0.079	0.051	-2.43	21.48	22.00	0.089	2021/6/16
Right Tilt 15 Degree	18900/1880	20M QPSK(50,0)	0.039	0.025	-4.52	21.48	22.00	0.044	2021/6/16

NOTE: Head SAR test results of LTE Band 2

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Front Side	18900/1880	20M QPSK(1,49)	0.686	0.394	-2.04	22.80	23.00	0.718	2021/6/16
Back Side	18900/1880	20M QPSK(1,49)	1.145	0.624	-0.42	22.80	23.00	1.199	2021/6/16
Back Side	18700/1860	20M QPSK(1,49)	1.147	0.628	-0.68	22.69	23.00	1.232	2021/6/16
Back Side	19100/1900	20M	1.185	0.642	-0.50	22.70	23.00	1.270	2021/6/16

		QPSK(1,49)							
Back Side Repeated	19100/1900	20M QPSK(1,49)	1.180	0.638	1.23	22.70	23.00	1.264	2021/6/16
50%RB									
Front Side	18900/1880	20M QPSK(50,0)	0.357	0.203	4.46	21.48	22.00	0.402	2021/6/16
Back Side	18900/1880	20M QPSK(50,0)	0.599	0.319	3.60	21.48	22.00	0.675	2021/6/16
100%RB									
Back Side	18900/1880	20M QPSK(100,0)	0.550	0.301	2.34	21.62	22.00	0.600	2021/6/16

NOTE: Body-Worn SAR test results of LTE Band 2

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Front Side	18900/1880	20M QPSK(1,49)	0.686	0.394	-2.04	22.80	23.00	0.718	2021/6/16
Back Side	18900/1880	20M QPSK(1,49)	1.145	0.624	-0.42	22.80	23.00	1.199	2021/6/16
Left Side	18900/1880	20M QPSK(1,49)	0.398	0.229	0.90	22.80	23.00	0.417	2021/6/16
Right Side	18900/1880	20M QPSK(1,49)	0.300	0.166	-0.43	22.80	23.00	0.314	2021/6/16
Bottom Side	18900/1880	20M QPSK(1,49)	0.600	0.342	3.59	22.80	23.00	0.628	2021/6/16
Back Side	18700/1860	20M QPSK(1,49)	1.147	0.628	-0.68	22.69	23.00	1.232	2021/6/16
Back Side	19100/1900	20M QPSK(1,49)	1.185	0.642	-0.50	22.70	23.00	1.270	2021/6/16
Back Side Repeated	19100/1900	20M QPSK(1,49)	1.180	0.638	1.23	22.70	23.00	1.264	2021/6/16
50%RB									
Front Side	18900/1880	20M QPSK(50,0)	0.357	0.203	4.46	21.48	22.00	0.402	2021/6/16
Back Side	18900/1880	20M QPSK(50,0)	0.599	0.319	3.60	21.48	22.00	0.675	2021/6/16
Left Side	18900/1880	20M	0.221	0.120	0.19	21.48	22.00	0.249	2021/6/16

		QPSK(50,0)							
Right Side	18900/1880	20M QPSK(50,0)	0.162	0.088	-0.85	21.48	22.00	0.183	2021/6/16
Bottom Side	18900/1880	20M QPSK(50,0)	0.306	0.197	-3.52	21.48	22.00	0.345	2021/6/16
100%RB									
Back Side	18900/1880	20M QPSK(100,0)	0.550	0.301	2.34	21.62	22.00	0.600	2021/6/16

NOTE: Hotspot SAR test results of LTE Band 2

10.1.7. SAR measurement Result of LTE Band 4

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Left Cheek	20175/1732.5	20M QPSK(1,99)	0.063	0.043	-3.73	21.54	22.50	0.079	2021/6/17
Left Tilt 15 Degree	20175/1732.5	20M QPSK(1,99)	0.036	0.028	2.27	21.54	22.50	0.045	2021/6/17
Right Cheek	20175/1732.5	20M QPSK(1,99)	0.057	0.042	-4.44	21.54	22.50	0.071	2021/6/17
Right Tilt 15 Degree	20175/1732.5	20M QPSK(1,99)	0.027	0.023	-3.41	21.54	22.50	0.034	2021/6/17
50%RB									
Left Cheek	20175/1732.5	20M QPSK(50,24)	0.035	0.025	-0.71	20.93	21.50	0.040	2021/6/17
Left Tilt 15 Degree	20175/1732.5	20M QPSK(50,24)	0.021	0.014	2.13	20.93	21.50	0.024	2021/6/17
Right Cheek	20175/1732.5	20M QPSK(50,24)	0.029	0.023	4.58	20.93	21.50	0.033	2021/6/17
Right Tilt 15 Degree	20175/1732.5	20M QPSK(50,24)	0.014	0.012	-4.56	20.93	21.50	0.016	2021/6/17

NOTE: Head SAR test results of LTE Band 4

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Front Side	20175/1732.5	20M QPSK(1,99)	0.640	0.356	-0.46	21.54	22.50	0.798	2021/6/17
Back Side	20175/1732.5	20M QPSK(1,99)	0.998	0.612	-0.04	21.54	22.50	1.245	2021/6/17
Back Side	20050/1720	20M QPSK(1,99)	0.995	0.592	-0.73	21.42	22.50	1.276	2021/6/17
Back Side	20300/1745	20M QPSK(1,99)	1.091	0.632	-0.35	21.69	22.50	1.314	2021/6/17
Back Side Repeated	20300/1745	20M QPSK(1,99)	1.026	0.628	1.23	21.69	22.50	1.236	2021/6/17
50%RB									
Front Side	20175/1732.5	20M QPSK(50,24)	0.340	0.187	4.05	20.93	21.50	0.388	2021/6/17
Back Side	20175/1732.5	20M QPSK(50,24)	0.565	0.351	4.00	20.93	21.50	0.644	2021/6/17
100%RB									
Back Side	20175/1732.5	20M QPSK(100,0)	0.520	0.303	1.43	20.97	21.50	0.587	2021/6/17

NOTE: Body-Worn SAR test results of LTE Band 4

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Front Side	20175/1732.5	20M QPSK(1,99)	0.640	0.356	-0.46	21.54	22.50	0.798	2021/6/17
Back Side	20175/1732.5	20M QPSK(1,99)	0.998	0.612	-0.04	21.54	22.50	1.245	2021/6/17
Left Side	20175/1732.5	20M QPSK(1,99)	0.404	0.228	-0.31	21.54	22.50	0.504	2021/6/17
Right Side	20175/1732.5	20M QPSK(1,99)	0.318	0.178	-0.28	21.54	22.50	0.397	2021/6/17
Bottom Side	20175/1732.5	20M QPSK(1,99)	0.586	0.329	3.63	21.54	22.50	0.731	2021/6/17
Back Side	20050/1720	20M QPSK(1,99)	0.995	0.592	-0.73	21.42	22.50	1.276	2021/6/17
Back Side	20300/1745	20M QPSK(1,99)	1.091	0.632	-0.35	21.69	22.50	1.314	2021/6/17
Back Side	20300/1745	20M	1.026	0.628	1.23	21.69	22.50	1.236	2021/6/17

Repeated		QPSK(1,99)							
50%RB									
Front Side	20175/1732.5	20M QPSK(50,24)	0.340	0.187	4.05	20.93	21.50	0.388	2021/6/17
Back Side	20175/1732.5	20M QPSK(50,24)	0.565	0.351	4.00	20.93	21.50	0.644	2021/6/17
Left Side	20175/1732.5	20M QPSK(50,24)	0.204	0.116	0.26	20.93	21.50	0.233	2021/6/17
Right Side	20175/1732.5	20M QPSK(50,24)	0.166	0.103	-2.68	20.93	21.50	0.189	2021/6/17
Bottom Side	20175/1732.5	20M QPSK(50,24)	0.299	0.175	1.99	20.93	21.50	0.341	2021/6/17
100%RB									
Back Side	20175/1732.5	20M QPSK(100,0)	0.520	0.303	1.43	20.97	21.50	0.587	2021/6/17

NOTE: Hotspot SAR test results of LTE Band 4

10.1.8. SAR measurement Result of LTE Band 5

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Left Cheek	20525/836.5	10M QPSK(1,49)	0.064	0.051	-3.78	23.01	23.50	0.072	2021/6/21
Left Tilt 15 Degree	20525/836.5	10M QPSK(1,49)	0.033	0.027	1.66	23.01	23.50	0.037	2021/6/21
Right Cheek	20525/836.5	10M QPSK(1,49)	0.059	0.047	-1.91	23.01	23.50	0.066	2021/6/21
Right Tilt 15 Degree	20525/836.5	10M QPSK(1,49)	0.027	0.017	-4.59	23.01	23.50	0.030	2021/6/21
50%RB									
Left Cheek	20525/836.5	10M QPSK(25,0)	0.035	0.027	2.95	22.07	22.50	0.039	2021/6/21
Left Tilt 15 Degree	20525/836.5	10M QPSK(25,0)	0.018	0.015	-3.95	22.07	22.50	0.020	2021/6/21
Right	20525/836.5	10M	0.030	0.023	-3.69	22.07	22.50	0.033	2021/6/21

Cheek		QPSK(25,0)							
Right Tilt 15 Degree	20525/836.5	10M QPSK(25,0)	0.014	0.012	-2.11	22.07	22.50	0.015	2021/6/21

NOTE: Head SAR test results of LTE Band 5

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Front Side	20525/836.5	10M QPSK(1,49)	0.120	0.086	-1.22	23.01	23.50	0.134	2021/6/21
Back Side	20525/836.5	10M QPSK(1,49)	0.141	0.098	0.03	23.01	23.50	0.158	2021/6/21
50%RB									
Front Side	20525/836.5	10M QPSK(25,0)	0.061	0.047	1.83	22.07	22.50	0.067	2021/6/21
Back Side	20525/836.5	10M QPSK(25,0)	0.072	0.053	-0.07	22.07	22.50	0.079	2021/6/21

NOTE: Body-Worn SAR test results of LTE Band 5

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Front Side	20525/836.5	10M QPSK(1,49)	0.120	0.086	-1.22	23.01	23.50	0.134	2021/6/21
Back Side	20525/836.5	10M QPSK(1,49)	0.141	0.098	0.03	23.01	23.50	0.158	2021/6/21
Left Side	20525/836.5	10M QPSK(1,49)	0.063	0.041	4.44	23.01	23.50	0.071	2021/6/21
Right Side	20525/836.5	10M QPSK(1,49)	0.052	0.035	-3.81	23.01	23.50	0.058	2021/6/21
Bottom Side	20525/836.5	10M QPSK(1,49)	0.104	0.068	4.30	23.01	23.50	0.116	2021/6/21
50%RB									
Front	20525/836.5	10M	0.061	0.047	1.83	22.07	22.50	0.067	2021/6/21

Side		QPSK(25,0)							
Back Side	20525/836.5	10M QPSK(25,0)	0.072	0.053	-0.07	22.07	22.50	0.079	2021/6/21
Left Side	20525/836.5	10M QPSK(25,0)	0.034	0.021	3.34	22.07	22.50	0.038	2021/6/21
Right Side	20525/836.5	10M QPSK(25,0)	0.026	0.021	-4.31	22.07	22.50	0.029	2021/6/21
Bottom Side	20525/836.5	10M QPSK(25,0)	0.054	0.040	-4.05	22.07	22.50	0.060	2021/6/21

NOTE: Hotspot SAR test results of LTE Band 5

10.1.9. SAR measurement Result of LTE Band 7

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Left Cheek	21100/2535	20M QPSK(1,49)	0.119	0.069	-4.68	22.37	23.00	0.138	2021/6/21
Left Tilt 15 Degree	21100/2535	20M QPSK(1,49)	0.060	0.039	-1.40	22.37	23.00	0.069	2021/6/21
Right Cheek	21100/2535	20M QPSK(1,49)	0.107	0.063	3.40	22.37	23.00	0.124	2021/6/21
Right Tilt 15 Degree	21100/2535	20M QPSK(1,49)	0.048	0.027	-3.35	22.37	23.00	0.055	2021/6/21
50%RB									
Left Cheek	21100/2535	20M QPSK(50,0)	0.066	0.038	-3.94	21.90	22.00	0.068	2021/6/21
Left Tilt 15 Degree	21100/2535	20M QPSK(50,0)	0.035	0.023	-0.49	21.90	22.00	0.036	2021/6/21
Right Cheek	21100/2535	20M QPSK(50,0)	0.060	0.033	0.93	21.90	22.00	0.061	2021/6/21
Right Tilt 15 Degree	21100/2535	20M QPSK(50,0)	0.027	0.015	1.29	21.90	22.00	0.028	2021/6/21

NOTE: Head SAR test results of LTE Band 7

Test	Test channel	Test Mode	SAR Value	Power	Conducted	Tune-up	Scaled	Date
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Position of Body-Worn with 10mm	/Freq.		(W/kg)		Drift (±5%)	power (dBm)	power (dBm)	SAR 1g (W/Kg)	
			1g	10g					
1RB									
Front Side	21100/2535	20M QPSK(1,49)	0.619	0.311	-2.21	22.37	23.00	0.716	2021/6/21
Back Side	21100/2535	20M QPSK(1,49)	0.815	0.409	1.58	22.37	23.00	0.942	2021/6/21
Back Side Repeated	21100/2535	20M QPSK(1,49)	0.810	0.399	0.34	22.37	23.00	0.936	2021/6/21
Back Side	20850/2510	20M QPSK(1,49)	0.756	0.383	-4.66	22.23	23.00	0.903	2021/6/21
Back Side	21350/2560	20M QPSK(1,49)	0.690	0.346	1.29	22.28	23.00	0.814	2021/6/21
50%RB									
Front Side	21100/2535	20M QPSK(50,0)	0.355	0.181	4.46	21.90	22.00	0.363	2021/6/21
Back Side	21100/2535	20M QPSK(50,0)	0.432	0.223	-3.72	21.90	22.00	0.442	2021/6/21
100%RB									
Back Side	21100/2535	20M QPSK(100,0)	0.401	0.203	1.25	21.82	22.00	0.418	2021/6/21

NOTE: Body-Worn SAR test results of LTE Band 7

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Front Side	21100/2535	20M QPSK(1,49)	0.619	0.311	-2.21	22.37	23.00	0.716	2021/6/21
Back Side	21100/2535	20M QPSK(1,49)	0.815	0.409	1.58	22.37	23.00	0.942	2021/6/21
Back Side Repeated	21100/2535	20M QPSK(1,49)	0.810	0.399	0.34	22.37	23.00	0.936	2021/6/21
Left Side	21100/2535	20M QPSK(1,49)	0.372	0.190	1.18	22.37	23.00	0.430	2021/6/21
Right Side	21100/2535	20M QPSK(1,49)	0.305	0.149	-1.23	22.37	23.00	0.353	2021/6/21

Bottom Side	21100/2535	20M QPSK(1,49)	0.617	0.307	-1.94	22.37	23.00	0.713	2021/6/21
Back Side	20850/2510	20M QPSK(1,49)	0.756	0.383	-4.66	22.23	23.00	0.903	2021/6/21
Back Side	21350/2560	20M QPSK(1,49)	0.690	0.346	1.29	22.28	23.00	0.814	2021/6/21
50%RB									
Front Side	21100/2535	20M QPSK(50,0)	0.355	0.181	4.46	21.90	22.00	0.363	2021/6/21
Back Side	21100/2535	20M QPSK(50,0)	0.432	0.223	-3.72	21.90	22.00	0.442	2021/6/21
Left Side	21100/2535	20M QPSK(50,0)	0.194	0.106	2.47	21.90	22.00	0.199	2021/6/21
Right Side	21100/2535	20M QPSK(50,0)	0.155	0.082	-3.34	21.90	22.00	0.159	2021/6/21
Bottom Side	21100/2535	20M QPSK(50,0)	0.345	0.175	-4.34	21.90	22.00	0.353	2021/6/21
100%RB									
Back Side	21100/2535	20M QPSK(100,0)	0.401	0.203	1.25	21.82	22.00	0.418	2021/6/21

NOTE: Hotspot SAR test results of LTE Band 7

10.1.10. SAR measurement Result of LTE Band 12

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Left Cheek	23095/707.5	10M QPSK(1,24)	0.077	0.065	0.89	23.56	24.00	0.085	2021/6/23
Left Tilt 15 Degree	23095/707.5	10M QPSK(1,24)	0.042	0.033	-1.76	23.56	24.00	0.046	2021/6/23
Right Cheek	23095/707.5	10M QPSK(1,24)	0.069	0.054	4.60	23.56	24.00	0.076	2021/6/23
Right Tilt 15 Degree	23095/707.5	10M QPSK(1,24)	0.033	0.028	3.94	23.56	24.00	0.037	2021/6/23
50%RB									
Left	23095/707.5	10M	0.042	0.036	-0.15	22.27	22.50	0.044	2021/6/23

Cheek		QPSK(25,24)							
Left Tilt 15 Degree	23095/707.5	10M QPSK(25,24)	0.025	0.018	-3.00	22.27	22.50	0.026	2021/6/23
Right Cheek	23095/707.5	10M QPSK(25,24)	0.035	0.028	2.16	22.27	22.50	0.037	2021/6/23
Right Tilt 15 Degree	23095/707.5	10M QPSK(25,24)	0.017	0.015	-0.20	22.27	22.50	0.018	2021/6/23

NOTE: Head SAR test results of LTE Band 12

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Front Side	23095/707.5	10M QPSK(1,24)	0.138	0.100	-1.03	23.56	24.00	0.153	2021/6/23
Back Side	23095/707.5	10M QPSK(1,24)	0.155	0.121	-1.49	23.56	24.00	0.172	2021/6/23
50%RB									
Front Side	23095/707.5	10M QPSK(25,24)	0.071	0.050	2.80	22.27	22.50	0.075	2021/6/23
Back Side	23095/707.5	10M QPSK(25,24)	0.083	0.063	-3.27	22.27	22.50	0.088	2021/6/23

NOTE: Body-Worn SAR test results of LTE Band 12

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Front Side	23095/707.5	10M QPSK(1,24)	0.138	0.100	-1.03	23.56	24.00	0.153	2021/6/23
Back Side	23095/707.5	10M QPSK(1,24)	0.155	0.121	-1.49	23.56	24.00	0.172	2021/6/23
Left Side	23095/707.5	10M QPSK(1,24)	0.081	0.061	-1.40	23.56	24.00	0.090	2021/6/23
Right	23095/707.5	10M	0.060	0.041	0.17	23.56	24.00	0.066	2021/6/23

Side		QPSK(1,24)							
Bottom Side	23095/707.5	10M QPSK(1,24)	0.122	0.091	-1.40	23.56	24.00	0.135	2021/6/23
50%RB									
Front Side	23095/707.5	10M QPSK(25,24)	0.071	0.050	2.80	22.27	22.50	0.075	2021/6/23
Back Side	23095/707.5	10M QPSK(25,24)	0.083	0.063	-3.27	22.27	22.50	0.088	2021/6/23
Left Side	23095/707.5	10M QPSK(25,24)	0.046	0.037	-2.48	22.27	22.50	0.049	2021/6/23
Right Side	23095/707.5	10M QPSK(25,24)	0.032	0.022	1.07	22.27	22.50	0.034	2021/6/23
Bottom Side	23095/707.5	10M QPSK(25,24)	0.071	0.047	-3.50	22.27	22.50	0.075	2021/6/23

NOTE: Hotspot SAR test results of LTE Band 12

10.1.11. SAR measurement Result of LTE Band 17

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Left Cheek	23790/710	10M QPSK(1,24)	0.065	0.053	2.91	22.95	24.00	0.083	2021/6/23
Left Tilt 15 Degree	23790/710	10M QPSK(1,24)	0.036	0.033	1.63	22.95	24.00	0.046	2021/6/23
Right Cheek	23790/710	10M QPSK(1,24)	0.061	0.051	-3.94	22.95	24.00	0.078	2021/6/23
Right Tilt 15 Degree	23790/710	10M QPSK(1,24)	0.031	0.026	1.28	22.95	24.00	0.039	2021/6/23
50%RB									
Left Cheek	23790/710	10M QPSK(25,12)	0.037	0.028	-0.02	22.29	22.50	0.039	2021/6/23
Left Tilt 15 Degree	23790/710	10M QPSK(25,12)	0.019	0.018	3.77	22.29	22.50	0.020	2021/6/23
Right Cheek	23790/710	10M QPSK(25,12)	0.032	0.028	-2.98	22.29	22.50	0.034	2021/6/23

Right Tilt 15 Degree	23790/710	10M QPSK(25,12)	0.017	0.015	-3.63	22.29	22.50	0.018	2021/6/23
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NOTE: Head SAR test results of LTE Band17

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Front Side	23790/710	10M QPSK(1,24)	0.127	0.094	3.62	22.95	24.00	0.162	2021/6/23
Back Side	23790/710	10M QPSK(1,24)	0.161	0.124	-0.12	22.95	24.00	0.205	2021/6/23
50%RB									
Front Side	23790/710	10M QPSK(25,12)	0.068	0.047	-4.90	22.29	22.50	0.071	2021/6/23
Back Side	23790/710	10M QPSK(25,12)	0.083	0.069	1.73	22.29	22.50	0.087	2021/6/23

NOTE: Body-Worn SAR test results of LTE Band 17

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Front Side	23790/710	10M QPSK(1,24)	0.127	0.094	3.62	22.95	24.00	0.162	2021/6/23
Back Side	23790/710	10M QPSK(1,24)	0.161	0.124	-0.12	22.95	24.00	0.205	2021/6/23
Left Side	23790/710	10M QPSK(1,24)	0.074	0.055	2.15	22.95	24.00	0.094	2021/6/23
Right Side	23790/710	10M QPSK(1,24)	0.055	0.041	-2.60	22.95	24.00	0.070	2021/6/23
Bottom Side	23790/710	10M QPSK(1,24)	0.129	0.099	4.77	22.95	24.00	0.164	2021/6/23
50%RB									
Front Side	23790/710	10M QPSK(25,12)	0.068	0.047	-4.90	22.29	22.50	0.071	2021/6/23

Back Side	23790/710	10M QPSK(25,12)	0.083	0.069	1.73	22.29	22.50	0.087	2021/6/23
Left Side	23790/710	10M QPSK(25,12)	0.041	0.030	-0.83	22.29	22.50	0.043	2021/6/23
Right Side	23790/710	10M QPSK(25,12)	0.028	0.021	-2.68	22.29	22.50	0.029	2021/6/23
Bottom Side	23790/710	10M QPSK(25,12)	0.069	0.057	3.95	22.29	22.50	0.072	2021/6/23

NOTE: Hotspot SAR test results of LTE Band 17

10.1.12. SAR measurement Result of LTE Band 25

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Left Cheek	26365/1882.5	20M QPSK(1,49)	0.143	0.089	-3.45	22.99	23.00	0.143	2021/6/16
Left Tilt 15 Degree	26365/1882.5	20M QPSK(1,49)	0.085	0.051	3.65	22.99	23.00	0.085	2021/6/16
Right Cheek	26365/1882.5	20M QPSK(1,49)	0.128	0.079	-3.47	22.99	23.00	0.128	2021/6/16
Right Tilt 15 Degree	26365/1882.5	20M QPSK(1,49)	0.066	0.046	-1.57	22.99	23.00	0.066	2021/6/16
50%RB									
Left Cheek	26365/1882.5	20M QPSK(50,49)	0.073	0.048	3.24	21.78	22.00	0.077	2021/6/16
Left Tilt 15 Degree	26365/1882.5	20M QPSK(50,49)	0.043	0.027	4.97	21.78	22.00	0.045	2021/6/16
Right Cheek	26365/1882.5	20M QPSK(50,49)	0.071	0.042	-4.43	21.78	22.00	0.075	2021/6/16
Right Tilt 15 Degree	26365/1882.5	20M QPSK(50,49)	0.034	0.025	-4.68	21.78	22.00	0.036	2021/6/16

NOTE: Head SAR test results of LTE Band 25

Test	Test channel	Test Mode	SAR Value	Power	Conducted	Tune-up	Scaled	Date
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Position of Body-Worn with 10mm	/Freq.		(W/kg)		Drift (±5%)	power (dBm)	power (dBm)	SAR 1g (W/Kg)	
			1g	10g					
1RB									
Front Side	26365/1882.5	20M QPSK(1,49)	0.657	0.354	-4.96	22.99	23.00	0.659	2021/6/16
Back Side	26365/1882.5	20M QPSK(1,49)	1.038	0.558	-2.51	22.99	23.00	1.040	2021/6/16
Back Side	26140/1860	20M QPSK(1,49)	1.044	0.566	-0.26	22.87	23.00	1.076	2021/6/16
Back Side	26590/1905	20M QPSK(1,49)	1.168	0.620	-0.28	22.88	23.00	1.201	2021/6/16
Back Side Repeated	26590/1905	20M QPSK(1,49)	1.160	0.615	1.25	22.88	23.00	1.192	2021/6/16
50%RB									
Front Side	26365/1882.5	20M QPSK(50,49)	0.389	0.209	2.35	21.78	22.00	0.409	2021/6/16
Back Side	26365/1882.5	20M QPSK(50,49)	0.528	0.307	-3.17	21.78	22.00	0.555	2021/6/16
100%RB									
Back Side	26365/1882.5	20M QPSK(100,0)	0.515	0.298	2.34	21.69	22.00	0.553	2021/6/16

NOTE: Body-Worn SAR test results of LTE Band 25

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Front Side	26365/1882.5	20M QPSK(1,49)	0.657	0.354	-4.96	22.99	23.00	0.659	2021/6/16
Back Side	26365/1882.5	20M QPSK(1,49)	1.038	0.558	-2.51	22.99	23.00	1.040	2021/6/16
Left Side	26365/1882.5	20M QPSK(1,49)	0.404	0.213	4.27	22.99	23.00	0.405	2021/6/16
Right Side	26365/1882.5	20M QPSK(1,49)	0.339	0.186	1.76	22.99	23.00	0.340	2021/6/16
Bottom Side	26365/1882.5	20M QPSK(1,49)	0.653	0.351	-3.75	22.99	23.00	0.655	2021/6/16
Back Side	26140/1860	20M	1.044	0.566	-0.26	22.87	23.00	1.076	2021/6/16

		QPSK(1,49)							
Back Side	26590/1905	20M QPSK(1,49)	1.168	0.620	-0.28	22.88	23.00	1.201	2021/6/16
Back Side Repeated	26590/1905	20M QPSK(1,49)	1.160	0.615	1.25	22.88	23.00	1.192	2021/6/16
50%RB									
Front Side	26365/1882.5	20M QPSK(50,49)	0.389	0.209	2.35	21.78	22.00	0.409	2021/6/16
Back Side	26365/1882.5	20M QPSK(50,49)	0.528	0.307	-3.17	21.78	22.00	0.555	2021/6/16
Left Side	26365/1882.5	20M QPSK(50,49)	0.202	0.116	-0.57	21.78	22.00	0.212	2021/6/16
Right Side	26365/1882.5	20M QPSK(50,49)	0.202	0.098	1.00	21.78	22.00	0.212	2021/6/16
Bottom Side	26365/1882.5	20M QPSK(50,49)	0.387	0.195	3.76	21.78	22.00	0.407	2021/6/16
100%RB									
Back Side	26365/1882.5	20M QPSK(100,0)	0.515	0.298	2.34	21.69	22.00	0.553	2021/6/16

NOTE: Hotspot SAR test results of LTE Band 25

10.1.13. SAR measurement Result of LTE Band 26A

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Left Cheek	26740/819	10M QPSK(1,24)	0.065	0.054	4.08	23.00	23.50	0.073	2021/6/21
Left Tilt 15 Degree	26740/819	10M QPSK(1,24)	0.038	0.031	-1.91	23.00	23.50	0.043	2021/6/21
Right Cheek	26740/819	10M QPSK(1,24)	0.058	0.043	-0.08	23.00	23.50	0.065	2021/6/21
Right Tilt 15 Degree	26740/819	10M QPSK(1,24)	0.031	0.028	-4.70	23.00	23.50	0.035	2021/6/21
50%RB									
Left Cheek	26740/819	10M QPSK(25,24)	0.034	0.027	0.57	22.03	22.50	0.038	2021/6/21

Left Tilt 15 Degree	26740/819	10M QPSK(25,24)	0.021	0.018	2.47	22.03	22.50	0.023	2021/6/21
Right Cheek	26740/819	10M QPSK(25,24)	0.032	0.024	-2.58	22.03	22.50	0.036	2021/6/21
Right Tilt 15 Degree	26740/819	10M QPSK(25,24)	0.017	0.015	-0.59	22.03	22.50	0.019	2021/6/21

NOTE: Head SAR test results of LTE Band 26A

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Front Side	26740/819	15M QPSK(1,24)	0.119	0.071	-2.47	23.00	23.50	0.134	2021/6/21
Back Side	26740/819	15M QPSK(1,24)	0.157	0.098	0.06	23.00	23.50	0.176	2021/6/21
50%RB									
Front Side	26740/819	10M QPSK(25,24)	0.064	0.037	-0.85	22.03	22.50	0.071	2021/6/21
Back Side	26740/819	10M QPSK(25,24)	0.091	0.051	-2.56	22.03	22.50	0.101	2021/6/21

NOTE: Body-Worn SAR test results of LTE Band 26A

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Front Side	26740/819	15M QPSK(1,24)	0.119	0.071	-2.47	23.00	23.50	0.134	2021/6/21
Back Side	26740/819	15M QPSK(1,24)	0.157	0.098	0.06	23.00	23.50	0.176	2021/6/21
Left Side	26740/819	15M QPSK(1,24)	0.075	0.045	0.68	23.00	23.50	0.084	2021/6/21
Right Side	26740/819	15M QPSK(1,24)	0.061	0.041	-2.32	23.00	23.50	0.068	2021/6/21

Bottom Side	26740/819	15M QPSK(1,24)	0.123	0.080	4.41	23.00	23.50	0.138	2021/6/21
50%RB									
Front Side	26740/819	10M QPSK(25,24)	0.064	0.037	-0.85	22.03	22.50	0.071	2021/6/21
Back Side	26740/819	10M QPSK(25,24)	0.091	0.051	-2.56	22.03	22.50	0.101	2021/6/21
Left Side	26740/819	10M QPSK(25,24)	0.041	0.024	3.46	22.03	22.50	0.046	2021/6/21
Right Side	26740/819	10M QPSK(25,24)	0.032	0.021	0.06	22.03	22.50	0.036	2021/6/21
Bottom Side	26740/819	10M QPSK(25,24)	0.072	0.041	-1.27	22.03	22.50	0.080	2021/6/21

NOTE: Hotspot SAR test results of LTE Band 26A

10.1.14. SAR measurement Result of LTE Band 26B

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Left Cheek	26915/836.5	15M QPSK(1,0)	0.026	0.022	-2.07	23.23	23.50	0.028	2021/6/21
Left Tilt 15 Degree	26915/836.5	15M QPSK(1,0)	0.016	0.011	-2.81	23.23	23.50	0.017	2021/6/21
Right Cheek	26915/836.5	15M QPSK(1,0)	0.024	0.017	0.68	23.23	23.50	0.026	2021/6/21
Right Tilt 15 Degree	26915/836.5	15M QPSK(1,0)	0.012	0.012	3.54	23.23	23.50	0.013	2021/6/21
50%RB									
Left Cheek	26915/836.5	15M QPSK(36,18)	0.015	0.012	4.98	22.07	22.50	0.017	2021/6/21
Left Tilt 15 Degree	26915/836.5	15M QPSK(36,18)	0.012	0.010	2.36	22.07	22.50	0.013	2021/6/21
Right Cheek	26915/836.5	15M QPSK(36,18)	0.013	0.010	4.93	22.07	22.50	0.014	2021/6/21
Right Tilt 15	26915/836.5	15M QPSK(36,18)	0.011	0.010	2.85	22.07	22.50	0.012	2021/6/21

Degree									
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NOTE: Head SAR test results of LTE Band 26B

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Front Side	26915/836.5	15M QPSK(1,0)	0.088	0.056	2.75	23.23	23.50	0.094	2021/6/21
Back Side	26915/836.5	15M QPSK(1,0)	0.116	0.073	-0.95	23.23	23.50	0.123	2021/6/21
50%RB									
Front Side	26915/836.5	15M QPSK(36,18)	0.051	0.033	-3.59	22.07	22.50	0.056	2021/6/21
Back Side	26915/836.5	15M QPSK(36,18)	0.067	0.039	3.95	22.07	22.50	0.074	2021/6/21

NOTE: Body-Worn SAR test results of LTE Band 26B

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Front Side	26915/836.5	15M QPSK(1,0)	0.088	0.056	2.75	23.23	23.50	0.094	2021/6/21
Back Side	26915/836.5	15M QPSK(1,0)	0.116	0.073	-0.95	23.23	23.50	0.123	2021/6/21
Left Side	26915/836.5	15M QPSK(1,0)	0.055	0.037	-2.71	23.23	23.50	0.059	2021/6/21
Right Side	26915/836.5	15M QPSK(1,0)	0.041	0.029	-1.56	23.23	23.50	0.044	2021/6/21
Bottom Side	26915/836.5	15M QPSK(1,0)	0.092	0.056	-1.91	23.23	23.50	0.098	2021/6/21
50%RB									
Front Side	26915/836.5	15M QPSK(36,18)	0.051	0.033	-3.59	22.07	22.50	0.056	2021/6/21
Back Side	26915/836.5	15M QPSK(36,18)	0.067	0.039	3.95	22.07	22.50	0.074	2021/6/21

Left Side	26915/836.5	15M QPSK(36,18)	0.030	0.019	4.89	22.07	22.50	0.033	2021/6/21
Right Side	26915/836.5	15M QPSK(36,18)	0.022	0.017	-2.79	22.07	22.50	0.024	2021/6/21
Bottom Side	26915/836.5	15M QPSK(36,18)	0.049	0.031	3.96	22.07	22.50	0.054	2021/6/21

NOTE: Hotspot SAR test results of LTE Band 26B

10.1.15. SAR measurement Result of LTE Band 66

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Left Cheek	132322/1745	20M QPSK(1,99)	0.050	0.036	0.48	22.44	22.50	0.051	2021/6/17
Left Tilt 15 Degree	132322/1745	20M QPSK(1,99)	0.025	0.015	-4.71	22.44	22.50	0.025	2021/6/17
Right Cheek	132322/1745	20M QPSK(1,99)	0.047	0.038	-4.38	22.44	22.50	0.048	2021/6/17
Right Tilt 15 Degree	132322/1745	20M QPSK(1,99)	0.021	0.014	-1.83	22.44	22.50	0.021	2021/6/17
50%RB									
Left Cheek	132322/1745	20M QPSK(50,24)	0.029	0.020	-3.43	21.19	21.50	0.031	2021/6/17
Left Tilt 15 Degree	132322/1745	20M QPSK(50,24)	0.014	0.012	-1.62	21.19	21.50	0.015	2021/6/17
Right Cheek	132322/1745	20M QPSK(50,24)	0.024	0.022	-0.76	21.19	21.50	0.026	2021/6/17
Right Tilt 15 Degree	132322/1745	20M QPSK(50,24)	0.013	0.010	-2.63	21.19	21.50	0.014	2021/6/17

NOTE: Head SAR test results of LTE Band 66

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

1RB									
Front Side	132322/1745	20M QPSK(1,99)	0.681	0.383	2.97	22.44	22.50	0.690	2021/6/17
Back Side	132322/1745	20M QPSK(1,99)	1.121	0.633	-0.22	22.44	22.50	1.137	2021/6/17
Back Side	132072/1720	20M QPSK(1,99)	1.190	0.668	0.27	22.42	22.50	1.212	2021/6/17
Back Side Repeated	132072/1720	20M QPSK(1,99)	1.185	0.664	0.20	22.42	22.50	1.207	2021/6/17
Back Side	132572/1770	20M QPSK(1,99)	1.077	0.598	2.12	22.17	22.50	1.162	2021/6/17
50%RB									
Front Side	132322/1745	20M QPSK(50,24)	0.349	0.213	-2.57	21.19	21.50	0.375	2021/6/17
Back Side	132322/1745	20M QPSK(50,24)	0.566	0.356	0.91	21.19	21.50	0.608	2021/6/17
100%RB									
Back Side	132322/1745	20M QPSK(100,0)	0.506	0.320	1.34	21.08	21.50	0.557	2021/6/17

NOTE: Body-Worn SAR test results of LTE Band 66

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Front Side	132322/1745	20M QPSK(1,99)	0.681	0.383	2.97	22.44	22.50	0.690	2021/6/17
Back Side	132322/1745	20M QPSK(1,99)	1.121	0.633	-0.22	22.44	22.50	1.137	2021/6/17
Left Side	132322/1745	20M QPSK(1,99)	0.393	0.218	-3.18	22.44	22.50	0.398	2021/6/17
Right Side	132322/1745	20M QPSK(1,99)	0.326	0.181	0.06	22.44	22.50	0.331	2021/6/17
Bottom Side	132322/1745	20M QPSK(1,99)	0.661	0.371	-1.32	22.44	22.50	0.670	2021/6/17
Back Side	132072/1720	20M QPSK(1,99)	1.190	0.668	0.27	22.42	22.50	1.212	2021/6/17
Back	132072/1720	20M	1.185	0.664	0.20	22.42	22.50	1.207	2021/6/17

Side Repeated		QPSK(1,99)							
Back Side	132572/1770	20M QPSK(1,99)	1.077	0.598	2.12	22.17	22.50	1.162	2021/6/17
50%RB									
Front Side	132322/1745	20M QPSK(50,24)	0.349	0.213	-2.57	21.19	21.50	0.375	2021/6/17
Back Side	132322/1745	20M QPSK(50,24)	0.566	0.356	0.91	21.19	21.50	0.608	2021/6/17
Left Side	132322/1745	20M QPSK(50,24)	0.225	0.116	-3.71	21.19	21.50	0.242	2021/6/17
Right Side	132322/1745	20M QPSK(50,24)	0.163	0.099	0.28	21.19	21.50	0.175	2021/6/17
Bottom Side	132322/1745	20M QPSK(50,24)	0.336	0.204	4.03	21.19	21.50	0.361	2021/6/17
100%RB									
Back Side	132322/1745	20M QPSK(100,0)	0.506	0.320	1.34	21.08	21.50	0.557	2021/6/17

NOTE: Hotspot SAR test results of LTE Band 66

10.1.16. SAR measurement Result of NR Band N41

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Left Cheek	518598/2592.99	100M QPSK(1,1)	0.149	0.084	-0.21	20.45	21.50	0.190	2021/6/21
Left Tilt 15 Degree	518598/2592.99	100M QPSK(1,1)	0.082	0.051	1.17	20.45	21.50	0.104	2021/6/21
Right Cheek	518598/2592.99	100M QPSK(1,1)	0.138	0.080	-3.56	20.45	21.50	0.176	2021/6/21
Right Tilt 15 Degree	518598/2592.99	100M QPSK(1,1)	0.064	0.040	-1.81	20.45	21.50	0.082	2021/6/21
50%RB									
Left Cheek	518598/2592.99	100M QPSK(135,67)	0.136	0.076	0.10	21.50	21.50	0.136	2021/6/21
Left Tilt 15	518598/2592.99	100M QPSK(135,67)	0.077	0.048	2.40	21.50	21.50	0.077	2021/6/21

Degree									
Right Cheek	518598/ 2592.99	100M QPSK(135,67)	0.127	0.074	-1.88	21.50	21.50	0.127	2021/6/21
Right Tilt 15 Degree	518598/ 2592.99	100M QPSK(135,67)	0.056	0.034	-1.30	21.50	21.50	0.056	2021/6/21

NOTE: Head SAR test results of NR Band 41

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Front Side	518598/ 2592.99	100M QPSK(1,1)	0.406	0.186	4.55	20.45	21.50	0.517	2021/6/21
Back Side	518598/ 2592.99	100M QPSK(1,1)	0.529	0.247	-0.62	20.45	21.50	0.674	2021/6/21
50%RB									
Front Side	518598/ 2592.99	100M QPSK(135,67)	0.350	0.172	4.98	21.50	21.50	0.350	2021/6/21
Back Side	518598/ 2592.99	100M QPSK(135,67)	0.473	0.211	-3.92	21.50	21.50	0.473	2021/6/21

NOTE: Body-Worn SAR test results of NR Band 41

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
1RB									
Front Side	518598/ 2592.99	100M QPSK(1,1)	0.406	0.186	4.55	20.45	21.50	0.517	2021/6/21
Back Side	518598/ 2592.99	100M QPSK(1,1)	0.529	0.247	-0.62	20.45	21.50	0.674	2021/6/21
Left Side	518598/ 2592.99	100M QPSK(1,1)	0.401	0.184	4.64	20.45	21.50	0.511	2021/6/21
Bottom Side	518598/ 2592.99	100M QPSK(1,1)	0.184	0.085	-1.60	20.45	21.50	0.234	2021/6/21
50%RB									
Front	518598/	100M	0.350	0.172	4.98	21.50	21.50	0.350	2021/6/21

Side	2592.99	QPSK(135,67)							
Back Side	518598/ 2592.99	100M QPSK(135,67)	0.473	0.211	-3.92	21.50	21.50	0.473	2021/6/21
Left Side	518598/ 2592.99	100M QPSK(135,67)	0.374	0.174	-4.39	21.50	21.50	0.374	2021/6/21
Bottom Side	518598/ 2592.99	100M QPSK(135,67)	0.171	0.075	-2.75	21.50	21.50	0.171	2021/6/21

NOTE: Hotspot SAR test results of NR Band 41

10.1.17. SAR measurement Result of WLAN 2.4G

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Left Cheek	6/2437	802.11b	0.151	0.089	-1.45	15.01	15.50	0.169	2021/6/18
Left Tilt 15 Degree	6/2437	802.11b	0.085	0.046	-4.96	15.01	15.50	0.095	2021/6/18
Right Cheek	6/2437	802.11b	0.134	0.075	0.02	15.01	15.50	0.150	2021/6/18
Right Tilt 15 Degree	6/2437	802.11b	0.064	0.039	-3.09	15.01	15.50	0.072	2021/6/18

NOTE: Head SAR test results of WLAN 2.4G

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Front Side	6/2437	802.11b	0.087	0.051	-4.67	15.01	15.50	0.097	2021/6/18
Back Side	6/2437	802.11b	0.142	0.083	-0.14	15.01	15.50	0.159	2021/6/18

NOTE: Body-Worn SAR test results of WLAN 2.4G

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Front Side	6/2437	802.11b	0.087	0.051	-4.67	15.01	15.50	0.097	2021/6/18
Back Side	6/2437	802.11b	0.142	0.083	-0.14	15.01	15.50	0.159	2021/6/18
Right Side	6/2437	802.11b	0.031	0.017	3.94	15.01	15.50	0.035	2021/6/18
Top Side	6/2437	802.11b	0.047	0.027	4.40	15.01	15.50	0.053	2021/6/18

NOTE: Hotspot SAR test results of WLAN 2.4G

10.1.18. SAR measurement Result of WLAN 5.2G

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Left Cheek	40/5200	802.11a	0.489	0.188	-1.05	11.83	13.00	0.640	2021/6/24
Left Tilt 15 Degree	40/5200	802.11a	0.286	0.091	-1.46	11.83	13.00	0.374	2021/6/24
Right Cheek	40/5200	802.11a	0.463	0.161	0.14	11.83	13.00	0.606	2021/6/24
Right Tilt 15 Degree	40/5200	802.11a	0.234	0.076	3.13	11.83	13.00	0.306	2021/6/24

NOTE: Head SAR test results of WLAN 5.2G

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Front Side	40/5200	802.11a	0.081	0.043	-0.11	11.83	13.00	0.106	2021/6/24
Back Side	40/5200	802.11a	0.133	0.071	0.46	11.83	13.00	0.174	2021/6/24

NOTE: Body-Worn SAR test results of WLAN 5.2G

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Front Side	40/5200	802.11a	0.081	0.043	-0.11	11.83	13.00	0.106	2021/6/24
Back Side	40/5200	802.11a	0.133	0.071	0.46	11.83	13.00	0.174	2021/6/24
Right Side	40/5200	802.11a	0.032	0.015	-1.68	11.83	13.00	0.042	2021/6/24
Top Side	40/5200	802.11a	0.041	0.024	-0.69	11.83	13.00	0.054	2021/6/24

NOTE: Hotspot SAR test results of WLAN 5.2G

10.1.19. SAR measurement Result of WLAN 5.3G

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Left Cheek	56/5280	802.11a	0.561	0.165	2.54	10.60	11.00	0.615	2021/6/24
Left Tilt 15 Degree	56/5280	802.11a	0.305	0.088	-0.04	10.60	11.00	0.334	2021/6/24
Right Cheek	56/5280	802.11a	0.492	0.142	-4.60	10.60	11.00	0.539	2021/6/24

Right Tilt 15 Degree	56/5280	802.11a	0.268	0.076	-2.54	10.60	11.00	0.294	2021/6/24
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NOTE: Head SAR test results of WLAN 5.3G

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Front Side	56/5280	802.11a	0.095	0.055	0.45	10.60	11.00	0.104	2021/6/24
Back Side	56/5280	802.11a	0.148	0.090	0.26	10.60	11.00	0.162	2021/6/24

NOTE: Body-Worn SAR test results of WLAN 5.3G

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Front Side	56/5280	802.11a	0.095	0.055	0.45	10.60	11.00	0.104	2021/6/24
Back Side	56/5280	802.11a	0.148	0.090	0.26	10.60	11.00	0.162	2021/6/24
Right Side	56/5280	802.11a	0.031	0.021	-1.49	10.60	11.00	0.034	2021/6/24
Top Side	56/5280	802.11a	0.051	0.028	0.19	10.60	11.00	0.056	2021/6/24

NOTE: Hotspot SAR test results of WLAN 5.3G

10.1.20. SAR measurement Result of WLAN 5.6G

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Left Cheek	120/5600	802.11a	0.368	0.137	1.46	8.36	9.00	0.426	2021/6/16
Left Tilt 15 Degree	120/5600	802.11a	0.208	0.077	5.58	8.36	9.00	0.241	2021/6/16
Right Cheek	120/5600	802.11a	0.336	0.120	-0.14	8.36	9.00	0.389	2021/6/16
Right Tilt 15 Degree	120/5600	802.11a	0.165	0.061	-4.60	8.36	9.00	0.191	2021/6/16

NOTE: Head SAR test results of WLAN 5.6G

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Front Side	120/5600	802.11a	0.114	0.069	-1.37	8.36	9.00	0.132	2021/6/16
Back Side	120/5600	802.11a	0.182	0.109	-1.72	8.36	9.00	0.211	2021/6/16

NOTE: Body-Worn SAR test results of WLAN 5.6G

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Front Side	120/5600	802.11a	0.114	0.069	-1.37	8.36	9.00	0.132	2021/6/16
Back Side	120/5600	802.11a	0.182	0.109	-1.72	8.36	9.00	0.211	2021/6/16
Right Side	120/5600	802.11a	0.038	0.023	-4.49	8.36	9.00	0.044	2021/6/16
Top Side	120/5600	802.11a	0.062	0.033	-3.13	8.36	9.00	0.072	2021/6/16

NOTE: Hotspot SAR test results of WLAN 5.6G

10.1.21. SAR measurement Result of WLAN 5.8G

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Left Cheek	157/5785	802.11a	0.254	0.112	-0.79	11.89	12.50	0.292	2021/6/15
Left Tilt 15 Degree	157/5785	802.11a	0.132	0.056	5.59	11.89	12.50	0.152	2021/6/15
Right Cheek	157/5785	802.11a	0.222	0.093	2.42	11.89	12.50	0.255	2021/6/15
Right Tilt 15 Degree	157/5785	802.11a	0.118	0.050	-0.20	11.89	12.50	0.136	2021/6/15

NOTE: Head SAR test results of WLAN 5.8G

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Front Side	157/5785	802.11a	0.084	0.056	-0.34	11.89	12.50	0.097	2021/6/15
Back Side	157/5785	802.11a	0.140	0.092	0.78	11.89	12.50	0.161	2021/6/15

NOTE: Body-Worn SAR test results of WLAN 5.8G

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date
			1g	10g					
Front Side	157/5785	802.11a	0.084	0.056	-0.34	11.89	12.50	0.097	2021/6/15
Back Side	157/5785	802.11a	0.140	0.092	0.78	11.89	12.50	0.161	2021/6/15
Right Side	157/5785	802.11a	0.034	0.019	-0.28	11.89	12.50	0.039	2021/6/15
Top Side	157/5785	802.11a	0.047	0.029	-3.40	11.89	12.50	0.054	2021/6/15

NOTE: Hotspot SAR test results of WLAN 5.8G

10.2. Simultaneous Transmission Analysis

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

- 1) Scalar SAR summation $< 1.6\text{W/kg}$.
- 2) $\text{SPLSR} = (\text{SAR}_1 + \text{SAR}_2)^{1.5} / (\text{min. separation distance, mm})$, 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}		$\Sigma 1\text{-g SAR}$ (W/Kg)	SPLSR	Remark
		WWAN	DTS			
Head	Left Cheek	0.190	0.169	0.359	N/A	N/A
	Left Tilt 15 Degree	0.104	0.095	0.199	N/A	N/A
	Right Cheek	0.176	0.150	0.326	N/A	N/A
	Right Tilt 15 Degree	0.082	0.072	0.154	N/A	N/A
Body-Worn	Front Side	0.798	0.097	0.895	N/A	N/A
	Back Side	1.314	0.159	1.473	N/A	N/A
Hotspot	Front Side	0.798	0.097	0.895	N/A	N/A
	Back Side	1.314	0.159	1.473	N/A	N/A
	Left Side	0.511	N/A	0.511	N/A	N/A
	Right Side	0.397	0.035	0.432	N/A	N/A
	Top Side	N/A	0.053	0.053	N/A	N/A
	Bottom Side	0.731	N/A	0.731	N/A	N/A

Test Position		Scaled SAR _{MAX}		$\Sigma 1\text{-g SAR}$ (W/Kg)	SPLSR	Remark
		WWAN	NII			
Head	Left Cheek	0.190	0.640	0.830	N/A	N/A
	Left Tilt 15 Degree	0.104	0.374	0.478	N/A	N/A
	Right Cheek	0.176	0.606	0.782	N/A	N/A
	Right Tilt 15 Degree	0.082	0.306	0.388	N/A	N/A

Body-Worn	Front Side	0.798	0.132	0.930	N/A	N/A
	Back Side	1.314	0.211	1.525	N/A	N/A
Hotspot	Front Side	0.798	0.132	0.930	N/A	N/A
	Back Side	1.314	0.211	1.525	N/A	N/A
	Left Side	0.511	N/A	0.511	N/A	N/A
	Right Side	0.397	0.044	0.441	N/A	N/A
	Top Side	N/A	0.072	0.072	N/A	N/A
	Bottom Side	0.731	N/A	0.731	N/A	N/A

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		WWAN	DSS			
Head	Left Cheek	0.190	0.188	0.378	N/A	N/A
	Left Tilt 15 Degree	0.104	0.188	0.292	N/A	N/A
	Right Cheek	0.176	0.188	0.364	N/A	N/A
	Right Tilt 15 Degree	0.082	0.188	0.270	N/A	N/A
Body-Worn	Front Side	0.798	0.094	0.892	N/A	N/A
	Back Side	1.314	0.094	1.408	N/A	N/A
Hotspot	Front Side	0.798	0.094	0.892	N/A	N/A
	Back Side	1.314	0.094	1.408	N/A	N/A
	Left Side	0.511	N/A	0.511	N/A	N/A
	Right Side	0.397	0.094	0.491	N/A	N/A
	Top Side	N/A	0.094	0.094	N/A	N/A
	Bottom Side	0.731	N/A	0.731	N/A	N/A

11. Appendix A. Photo documentation

Refer to appendix Test Setup photo---SAR

12. Appendix B. System Check Plots

Table of contents
MEASUREMENT 1 System Performance Check - 750MHz
MEASUREMENT 2 System Performance Check - 835MHz
MEASUREMENT 3 System Performance Check - 1800MHz
MEASUREMENT 4 System Performance Check - 1900MHz
MEASUREMENT 5 System Performance Check - 2450MHz
MEASUREMENT 6 System Performance Check - 2600MHz
MEASUREMENT 7 System Performance Check - 5200MHz
MEASUREMENT 8 System Performance Check - 5600MHz
MEASUREMENT 9 System Performance Check - 5800MHz

MEASUREMENT 1

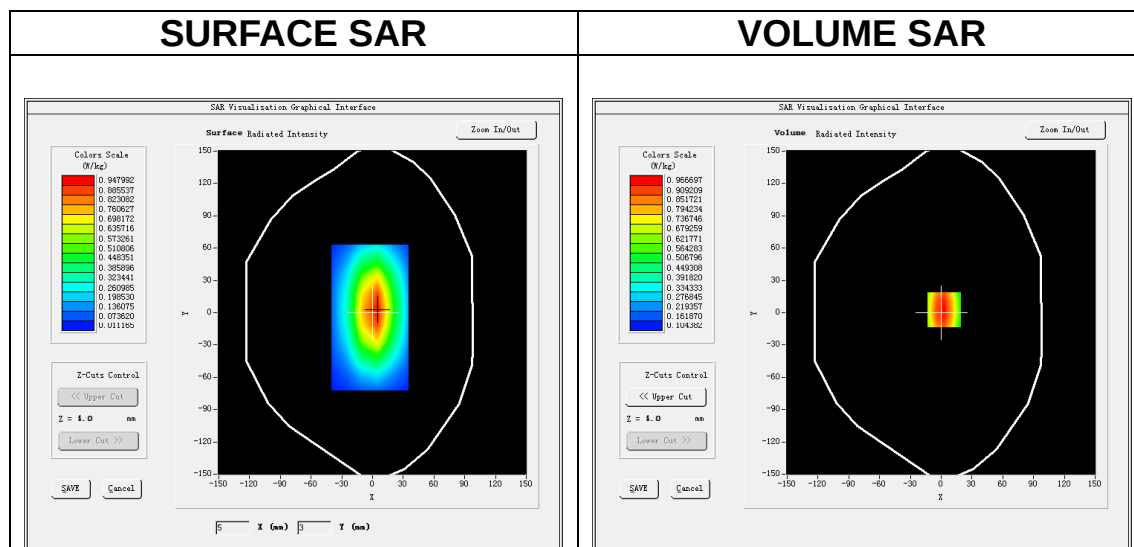
Date of measurement: 23/6/2021

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>

B. SAR Measurement Results

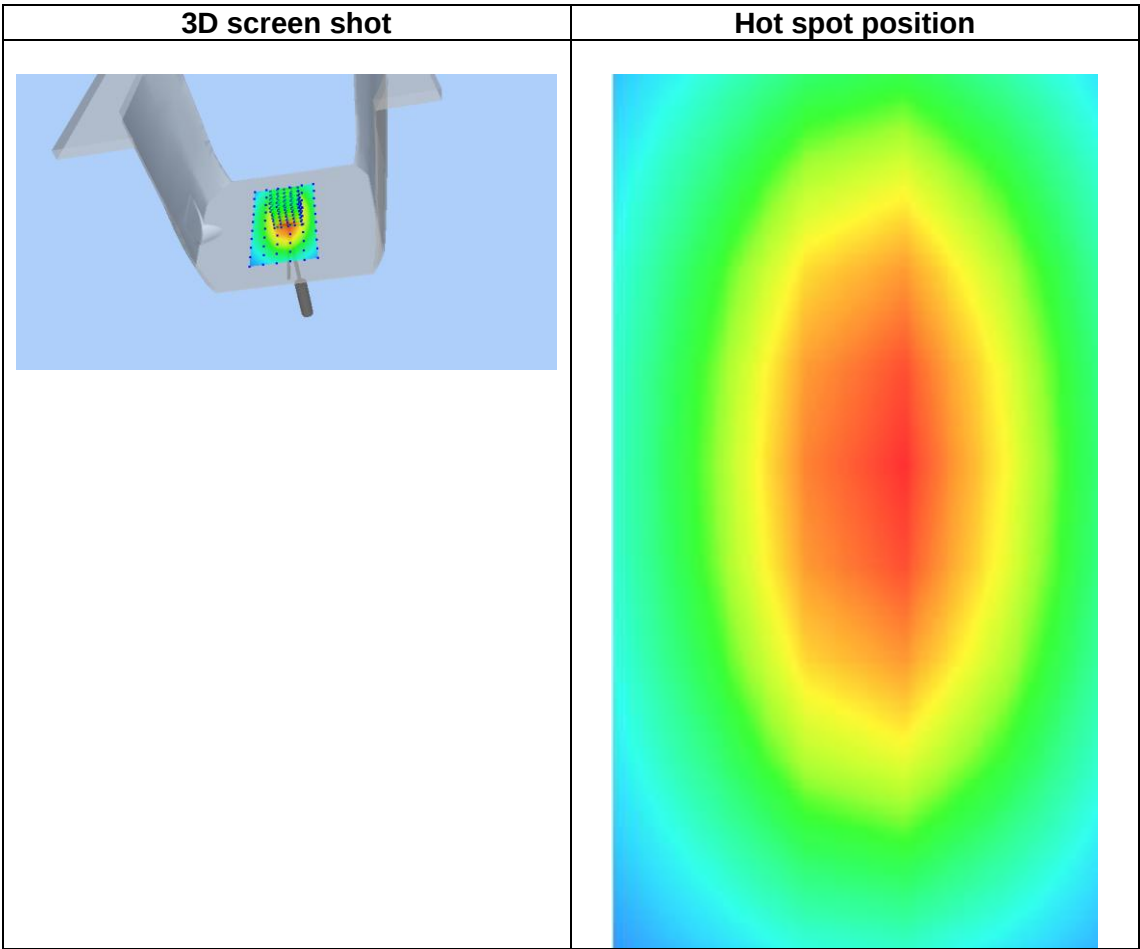
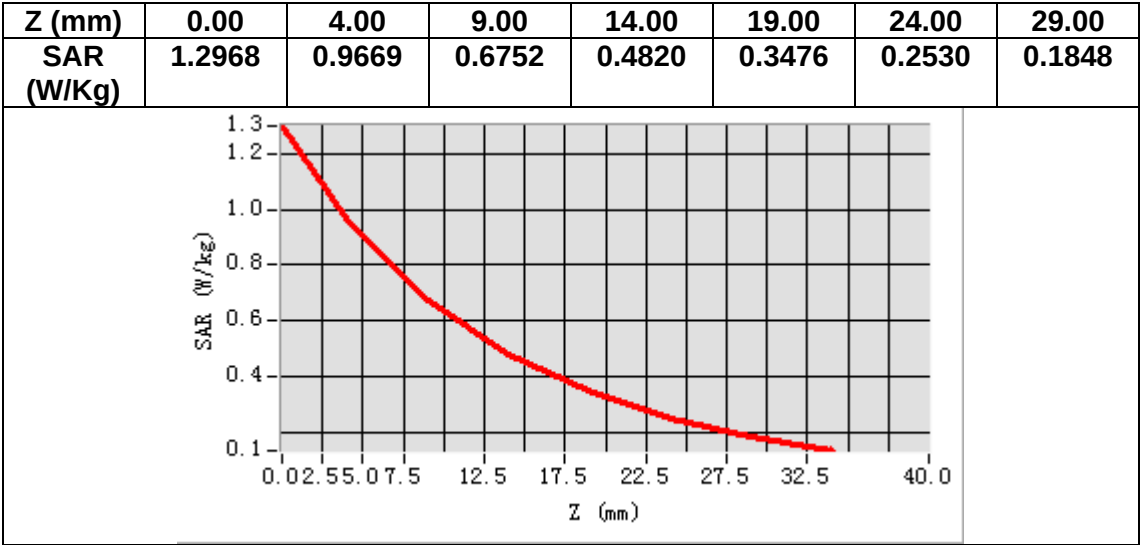
Frequency (MHz)	750.000000
Relative permittivity (real part)	41.294690
Relative permittivity (imaginary part)	21.450763
Conductivity (S/m)	0.893782
Variation (%)	3.840000



Maximum location: X=3.00, Y=3.00

SAR Peak: 1.30 W/kg

SAR 10g (W/Kg)	0.553238
SAR 1g (W/Kg)	0.834162



MEASUREMENT 2

Date of measurement: 21/6/2021

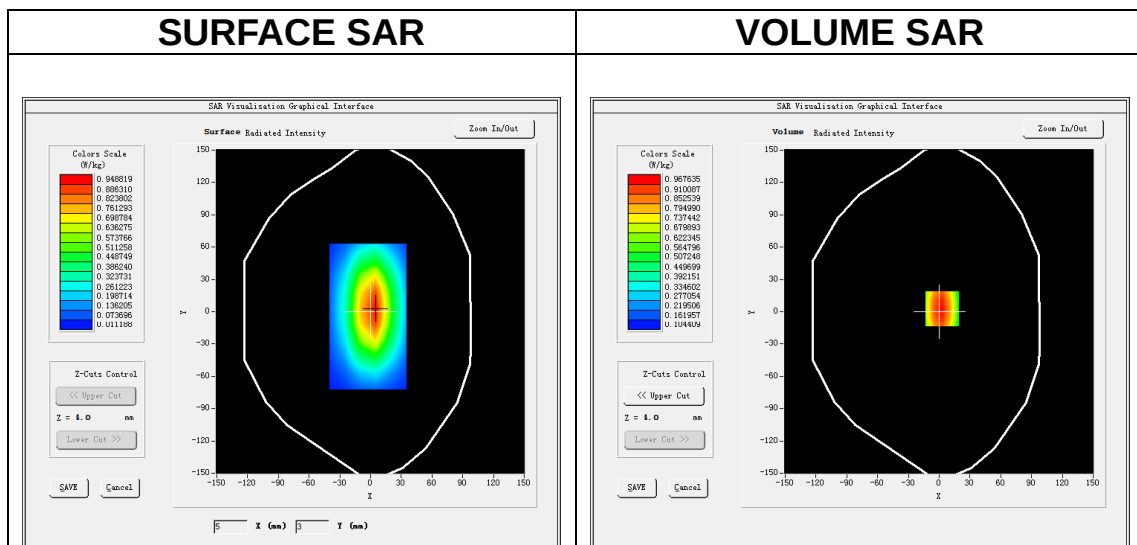
A. Experimental conditions.

<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>

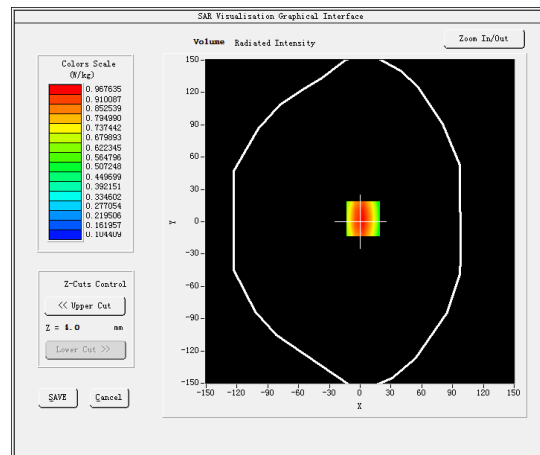
B. SAR Measurement Results

Frequency (MHz)	835.000000
Relative permittivity (real part)	42.612652
Relative permittivity (imaginary part)	20.171503
Conductivity (S/m)	0.935734
Variation (%)	1.690000

SURFACE SAR



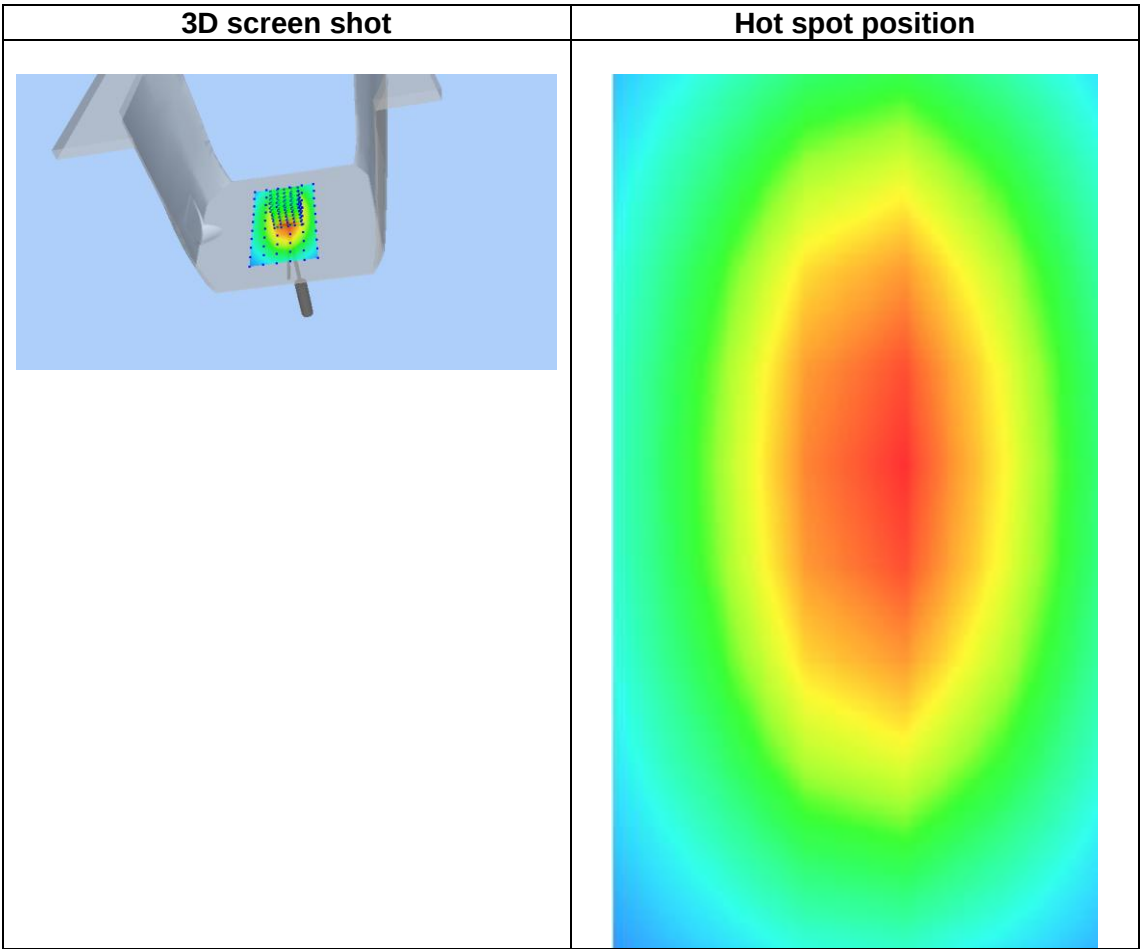
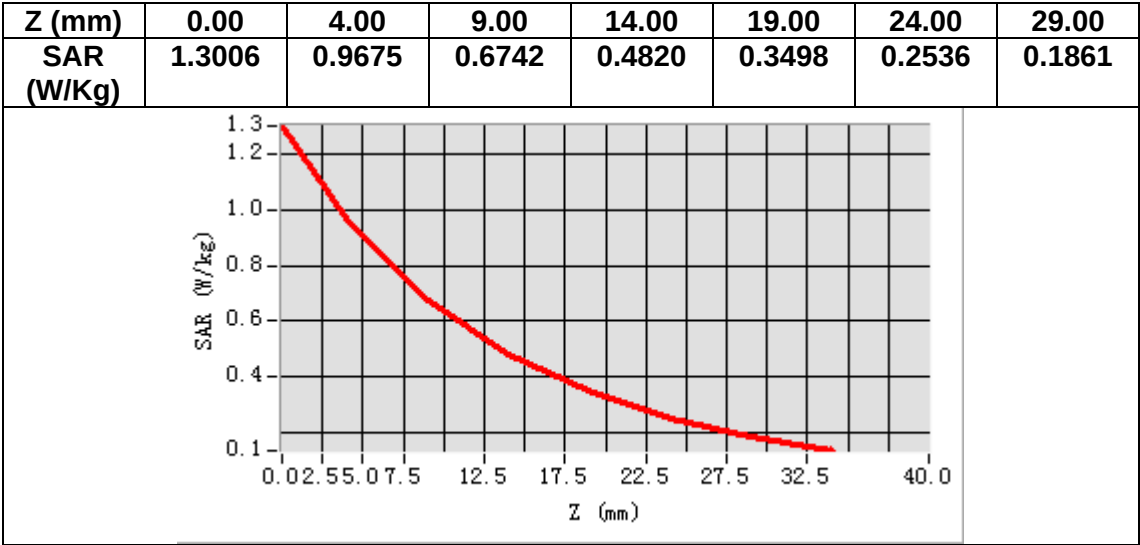
VOLUME SAR



Maximum location: X=3.00, Y=3.00

SAR Peak: 1.30 W/kg

SAR 10g (W/Kg)	0.614492
SAR 1g (W/Kg)	0.931448



MEASUREMENT 3

Date of measurement: 17/6/2021

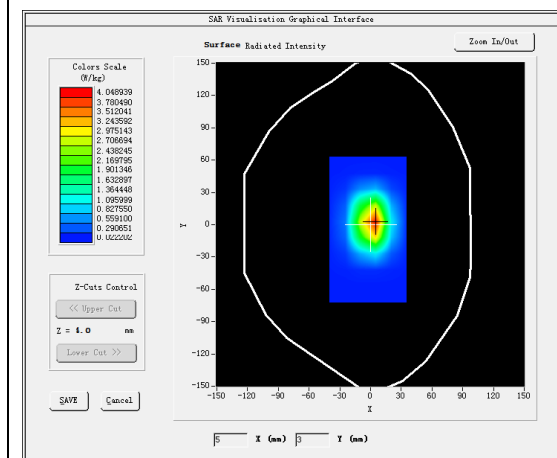
A. Experimental conditions.

<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>

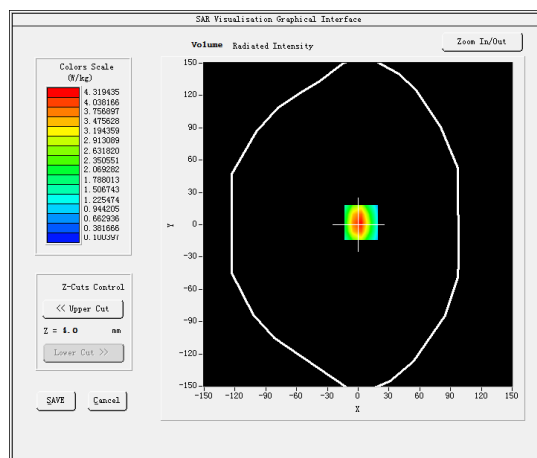
B. SAR Measurement Results

Frequency (MHz)	1800.000000
Relative permittivity (real part)	40.551064
Relative permittivity (imaginary part)	14.018583
Conductivity (S/m)	1.401858
Variation (%)	2.180000

SURFACE SAR



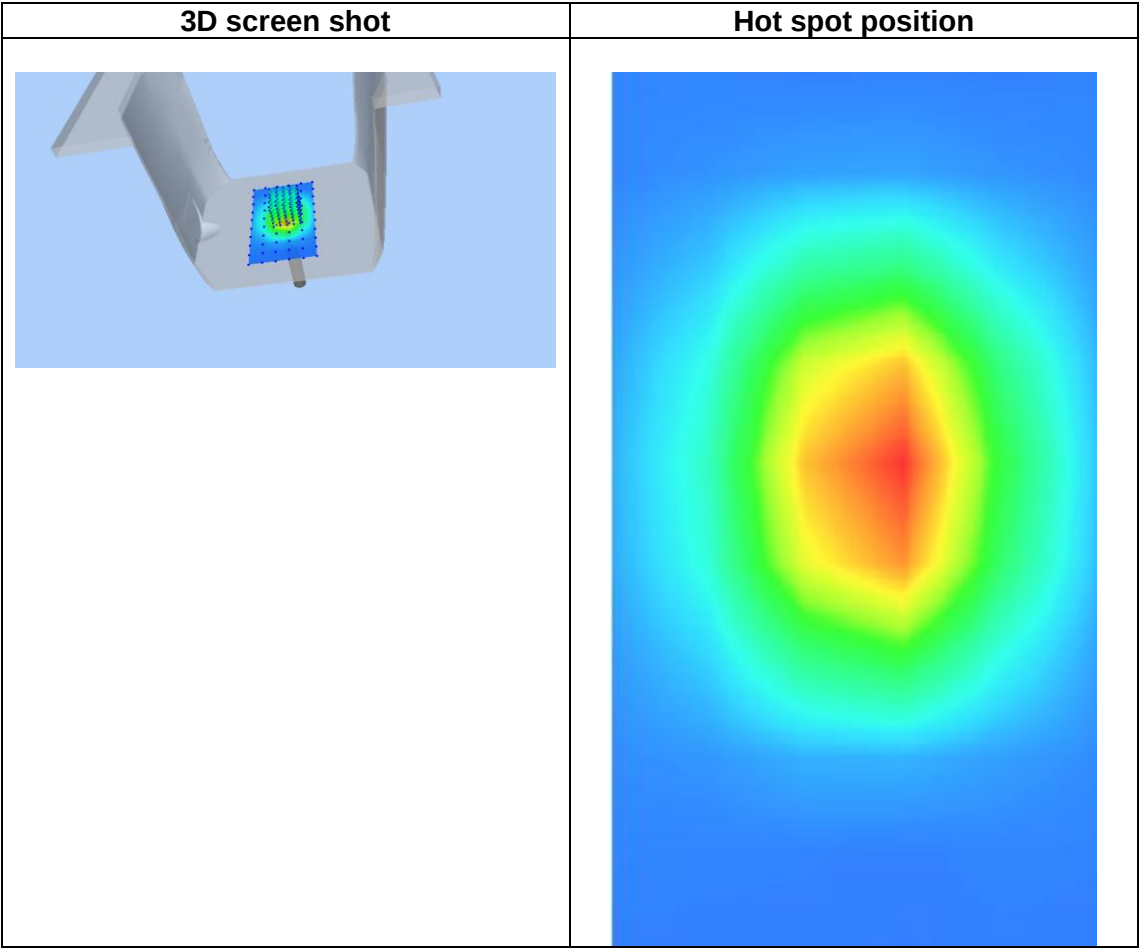
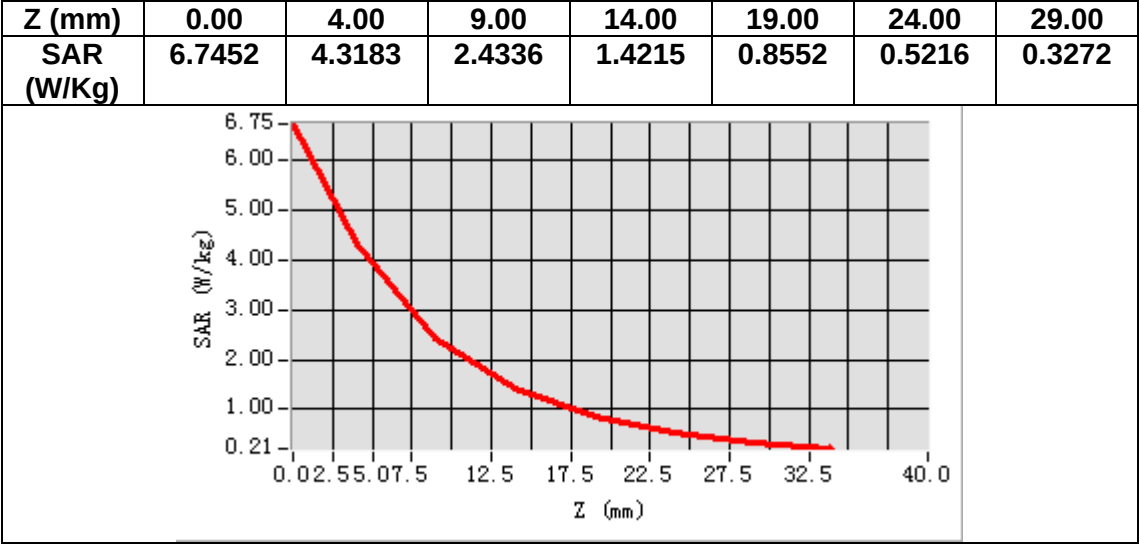
VOLUME SAR



Maximum location: X=3.00, Y=2.00

SAR Peak: 6.82 W/kg

SAR 10g (W/Kg)	2.005416
SAR 1g (W/Kg)	3.751438



MEASUREMENT 4

Date of measurement: 16/6/2021

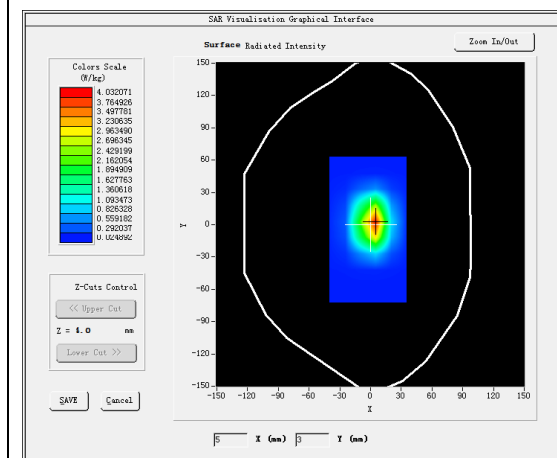
A. Experimental conditions.

<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>

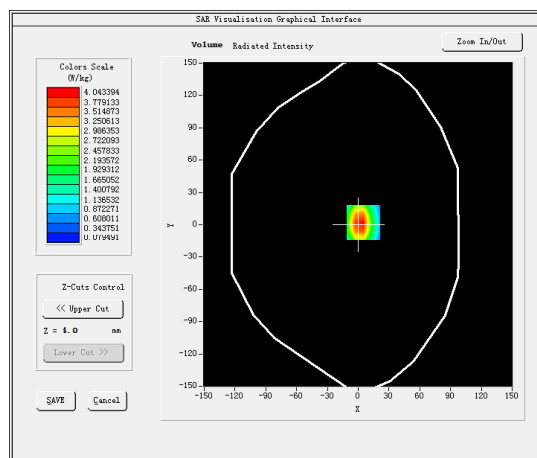
B. SAR Measurement Results

Frequency (MHz)	1900.000000
Relative permittivity (real part)	38.954846
Relative permittivity (imaginary part)	13.943366
Conductivity (S/m)	1.461800
Variation (%)	1.360000

SURFACE SAR



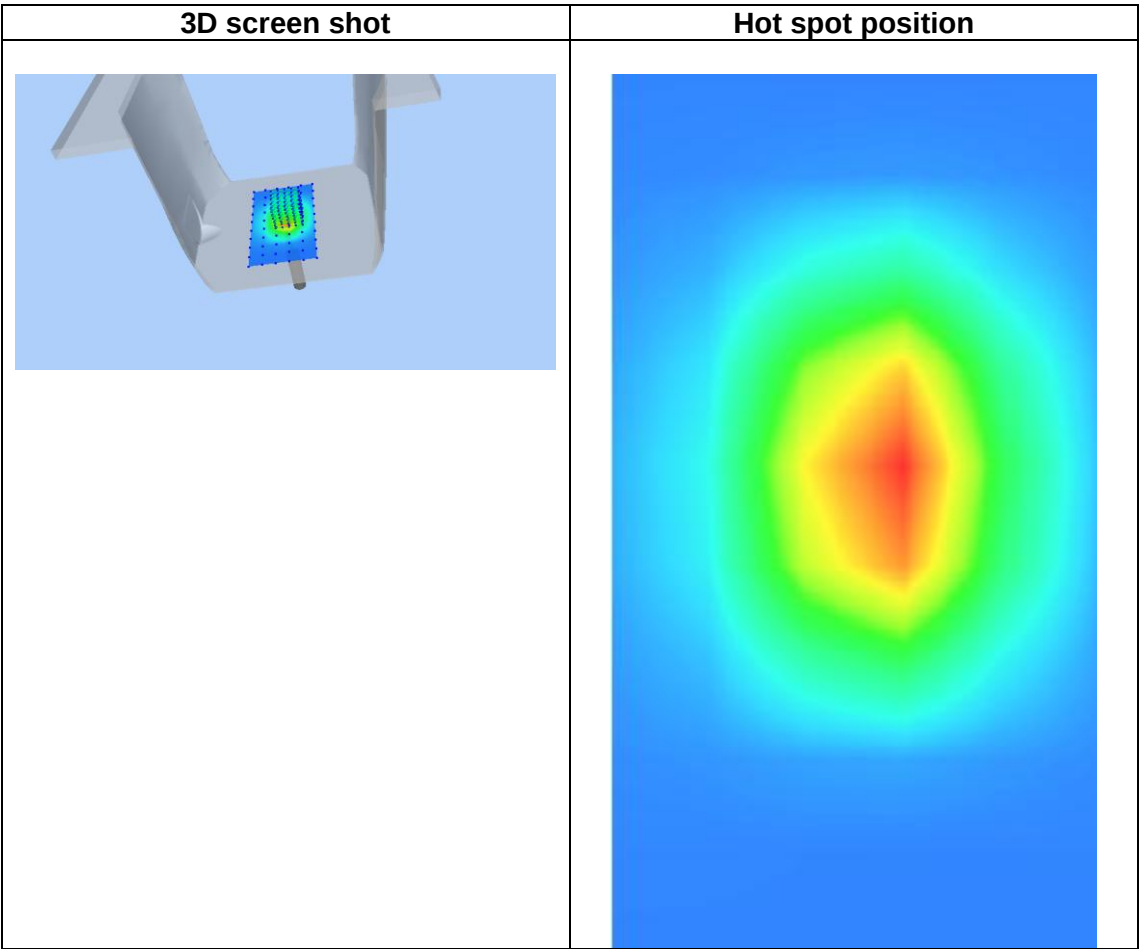
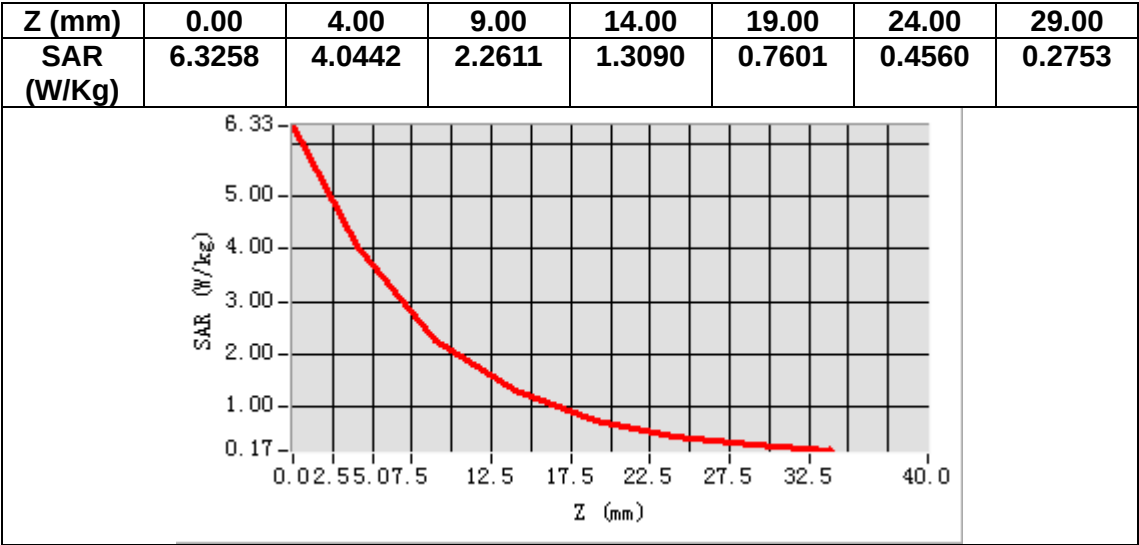
VOLUME SAR



Maximum location: X=5.00, Y=2.00

SAR Peak: 6.70 W/kg

SAR 10g (W/Kg)	2.121336
SAR 1g (W/Kg)	3.876982



MEASUREMENT 5

Date of measurement: 18/6/2021

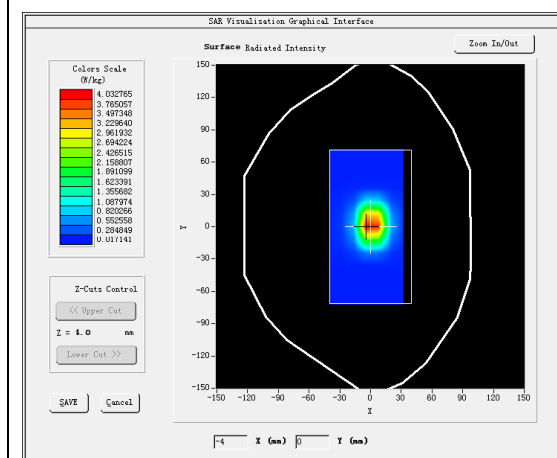
A. Experimental conditions.

<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>

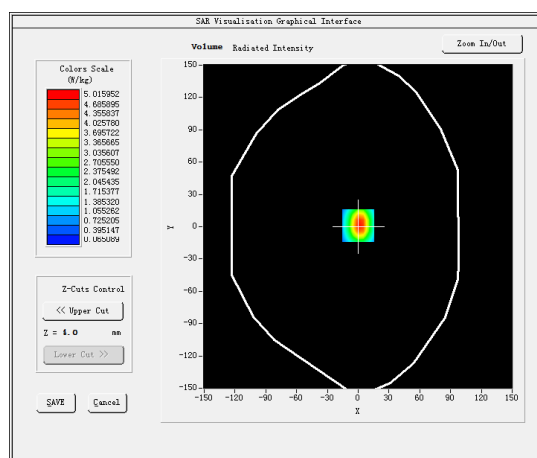
B. SAR Measurement Results

Frequency (MHz)	2450.000000
Relative permittivity (real part)	40.716575
Relative permittivity (imaginary part)	13.671496
Conductivity (S/m)	1.860843
Variation (%)	1.310000

SURFACE SAR



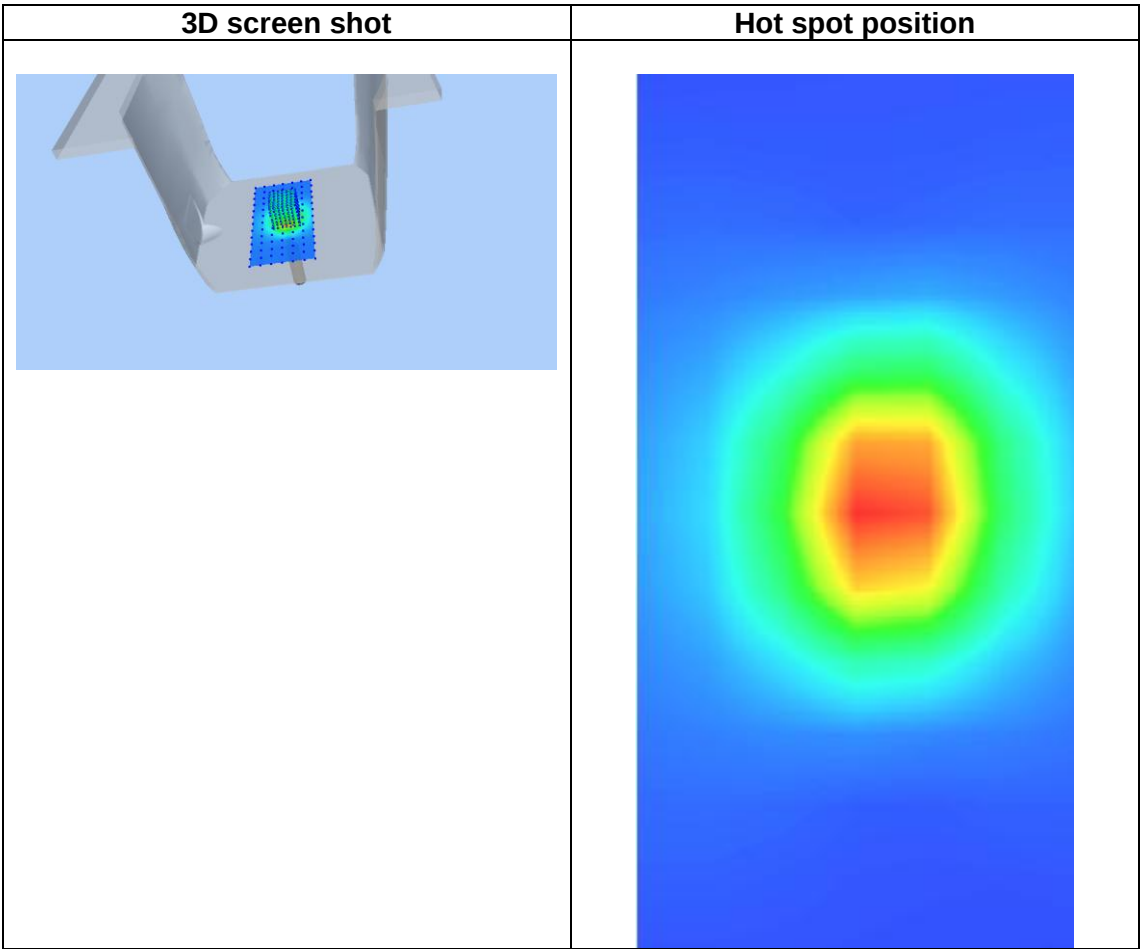
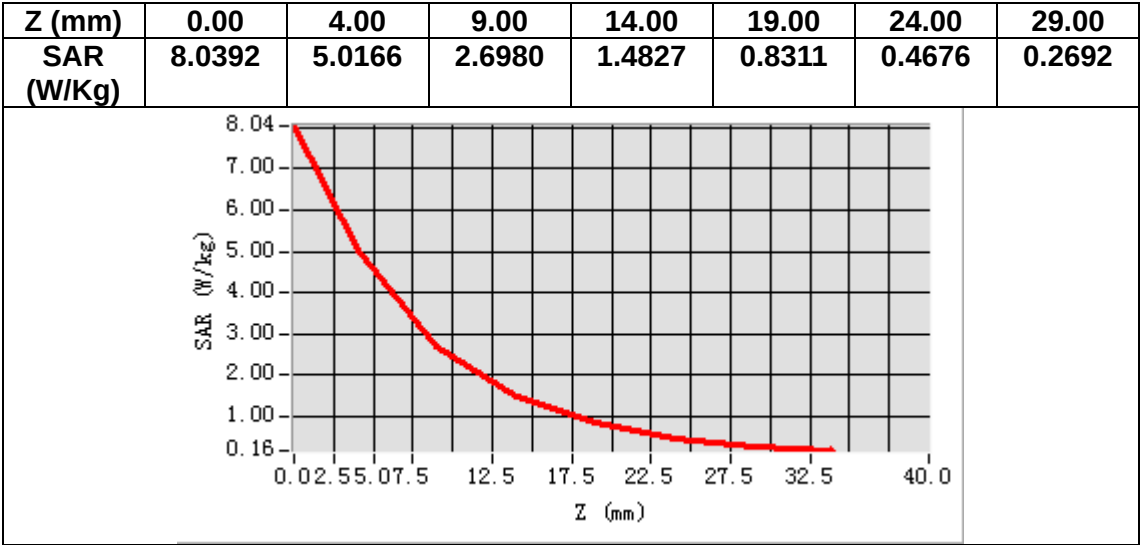
VOLUME SAR



Maximum location: X=0.00, Y=1.00

SAR Peak: 8.14 W/kg

SAR 10g (W/Kg)	2.366248
SAR 1g (W/Kg)	5.183462



MEASUREMENT 6

Date of measurement: 21/6/2021

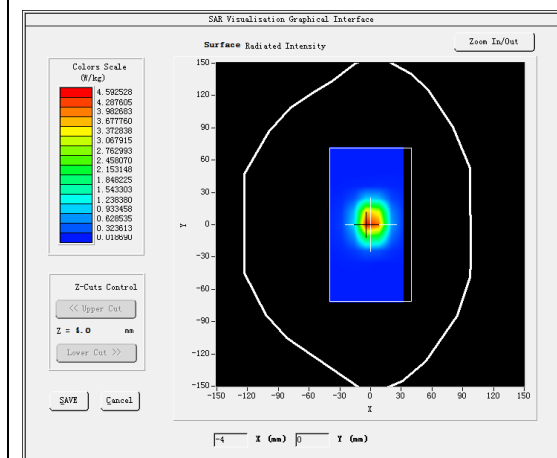
A. Experimental conditions.

<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>

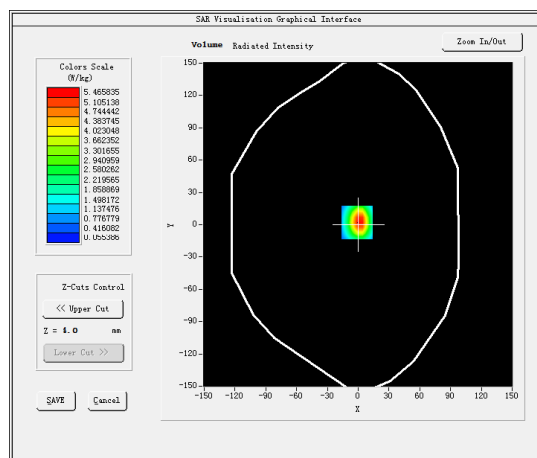
B. SAR Measurement Results

Frequency (MHz)	2600.000000
Relative permittivity (real part)	40.362843
Relative permittivity (imaginary part)	13.757326
Conductivity (S/m)	1.987169
Variation (%)	1.940000

SURFACE SAR



VOLUME SAR



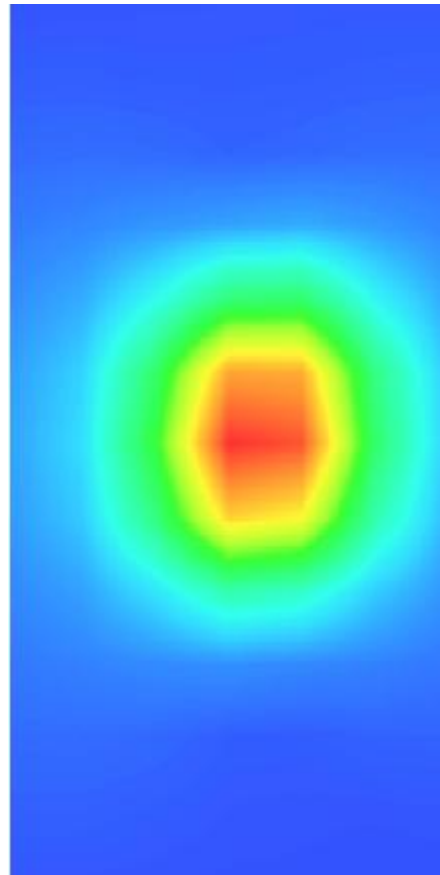
Maximum location: X=-1.00, Y=2.00

SAR Peak: 9.07 W/kg

SAR 10g (W/Kg)	2.415252
SAR 1g (W/Kg)	5.462883

Graph of SAR (W/kg) vs Z (mm) for the 100% case. The SAR starts at approximately 8.2 W/kg at Z=0 and decreases to about 0.15 W/kg at Z=32.5 mm.

Hot spot position



MEASUREMENT 7

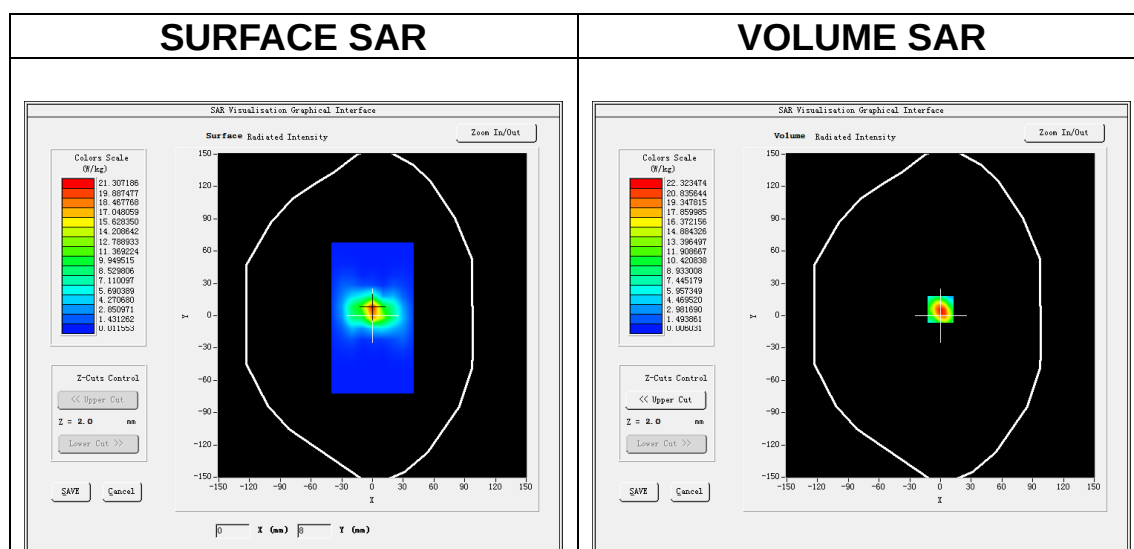
Date of measurement: 24/6/2021

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>

B. SAR Measurement Results

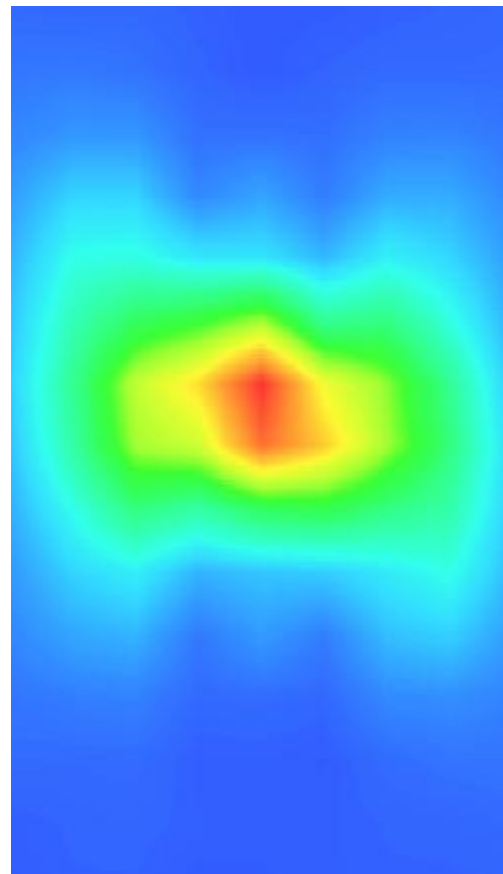
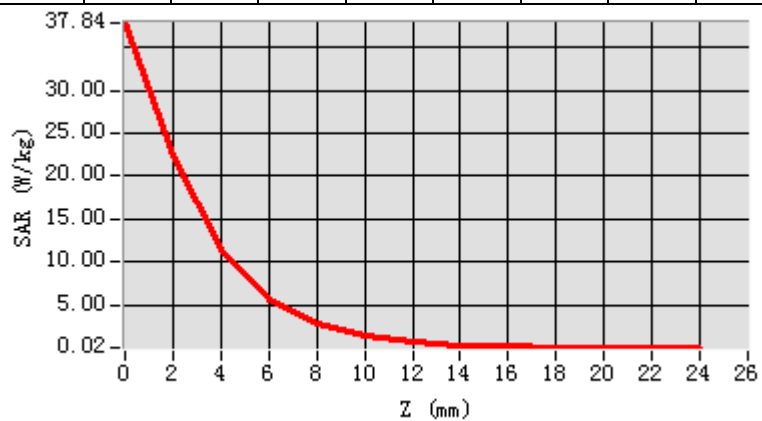
Frequency (MHz)	5200.000000
Relative permittivity (real part)	36.938497
Relative permittivity (imaginary part)	16.419311
Conductivity (S/m)	4.743357
Variation (%)	1.660000



Maximum location: X=0.00, Y=6.00

SAR Peak: 40.06 W/kg

SAR 10g (W/Kg)	5.562495
SAR 1g (W/Kg)	16.286221



MEASUREMENT 8

Date of measurement: 16/6/2021

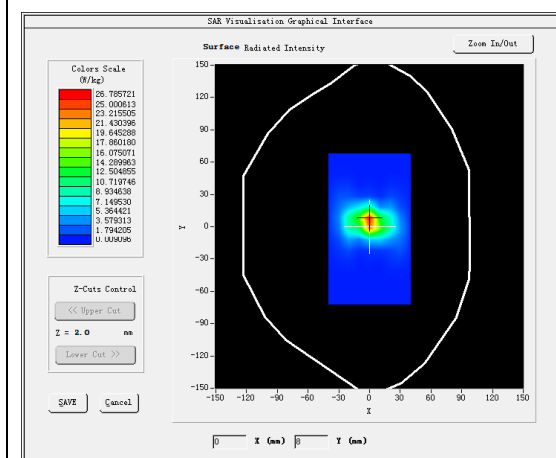
A. Experimental conditions.

<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>

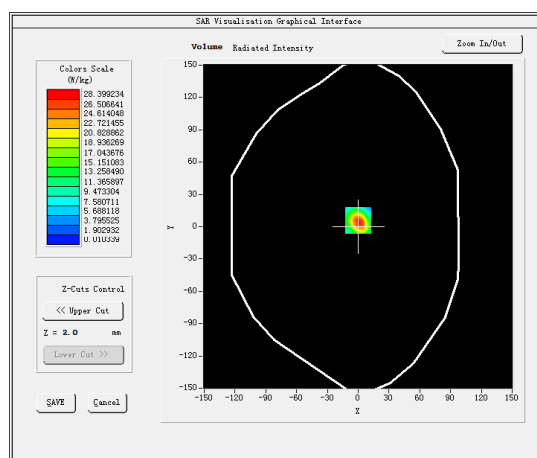
B. SAR Measurement Results

Frequency (MHz)	5600.000000
Relative permittivity (real part)	36.165790
Relative permittivity (imaginary part)	16.472167
Conductivity (S/m)	5.124674
Variation (%)	-3.120000

SURFACE SAR



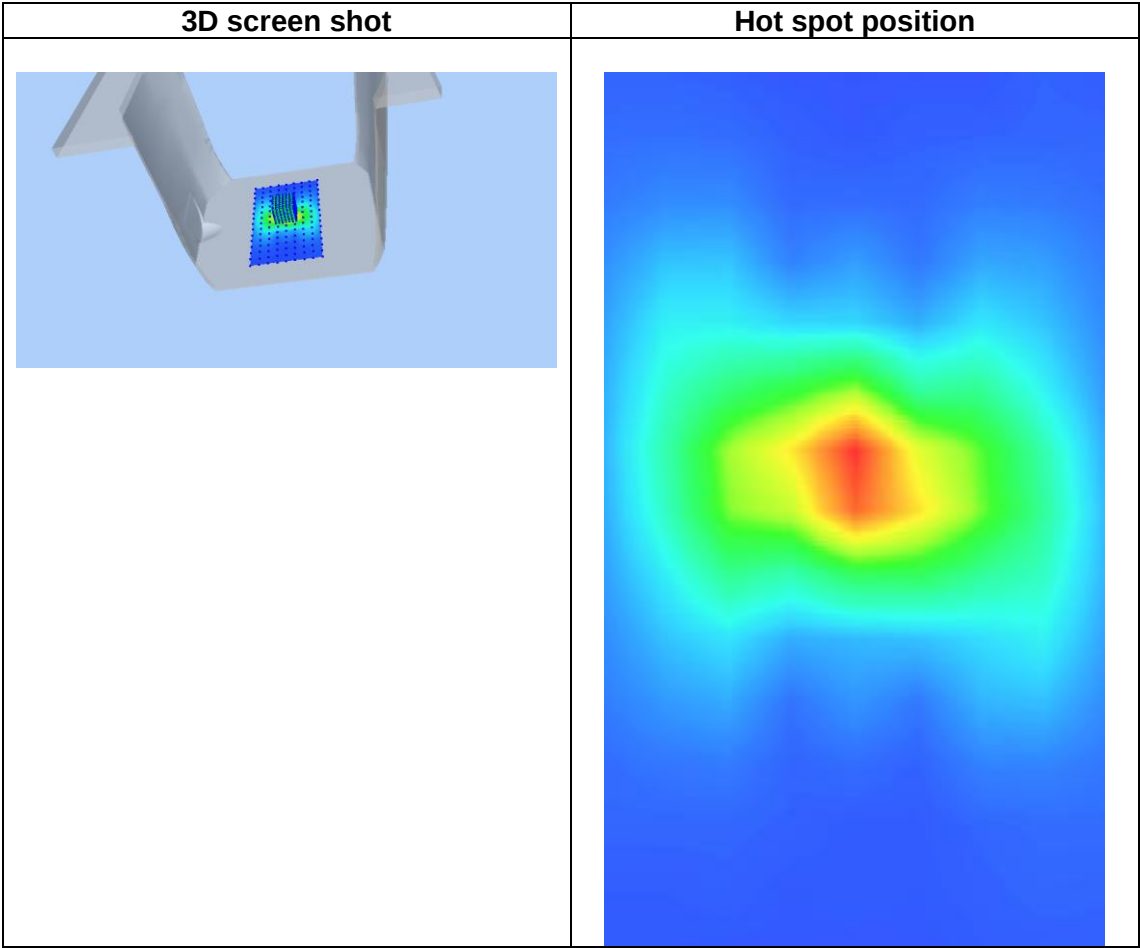
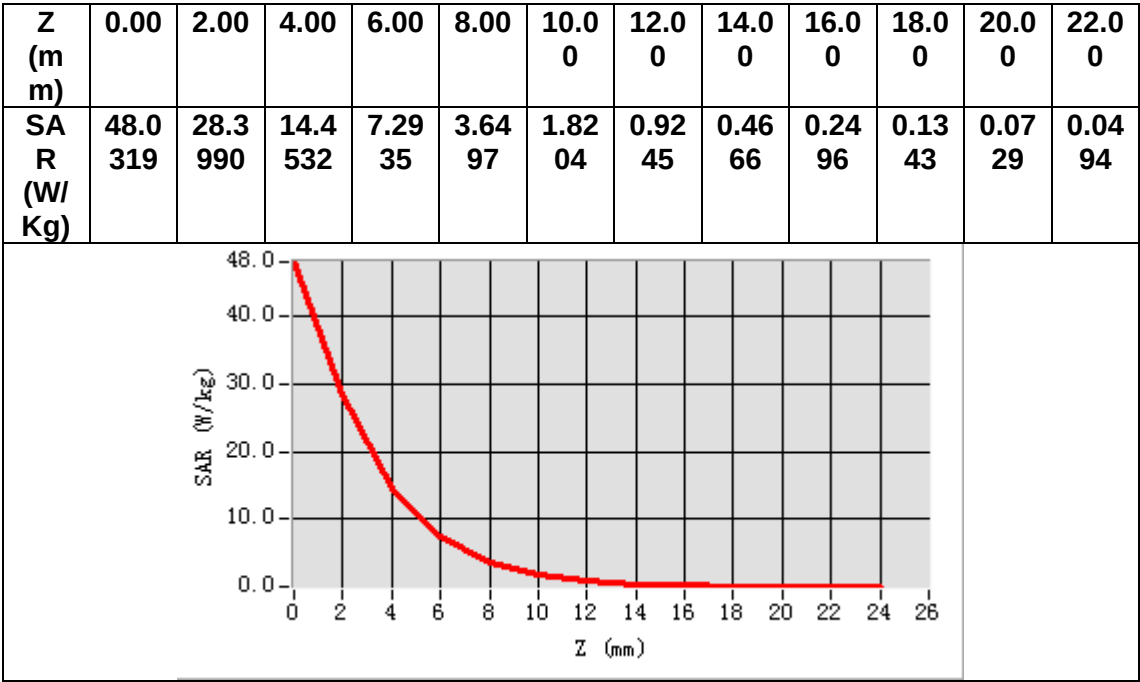
VOLUME SAR



Maximum location: X=0.00, Y=6.00

SAR Peak: 50.97 W/kg

SAR 10g (W/Kg)	6.085019
SAR 1g (W/Kg)	17.994075



MEASUREMENT 9

Date of measurement: 15/6/2021

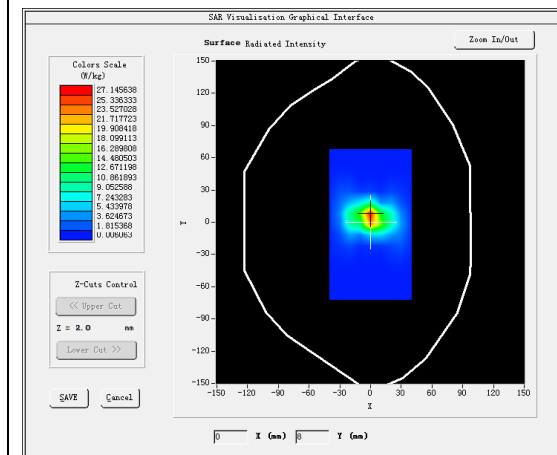
A. Experimental conditions.

<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>

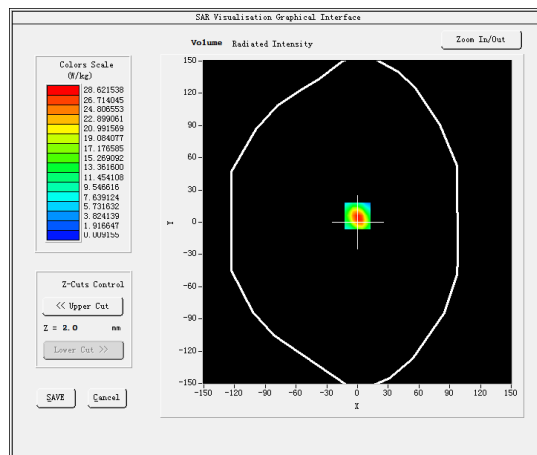
B. SAR Measurement Results

Frequency (MHz)	5800.000000
Relative permittivity (real part)	36.013115
Relative permittivity (imaginary part)	16.347563
Conductivity (S/m)	5.267548
Variation (%)	1.340000

SURFACE SAR



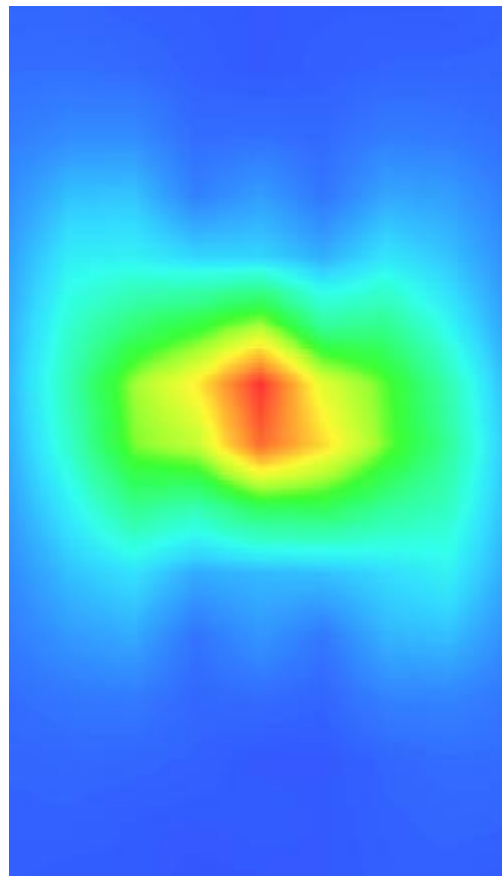
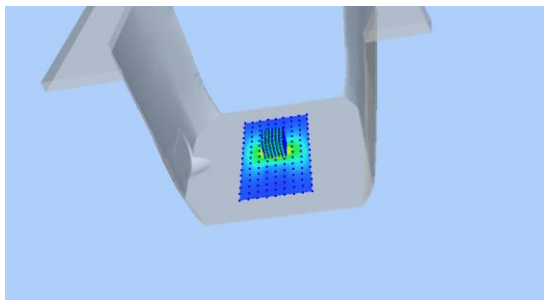
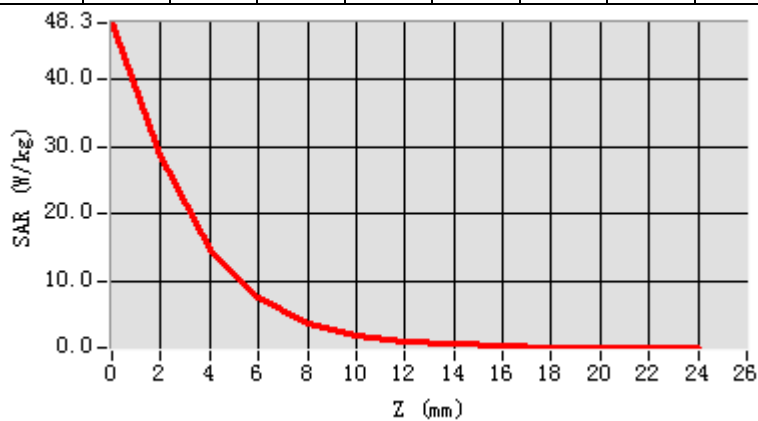
VOLUME SAR



Maximum location: X=0.00, Y=6.00

SAR Peak: 51.30 W/kg

SAR 10g (W/Kg)	5.746184
SAR 1g (W/Kg)	16.886052



13. Appendix C. Plots of High SAR Measurement

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MEASUREMENT 23 LTE Band 4 Head
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MEASUREMENT 42 NR Band N41 Body

MEASUREMENT 1

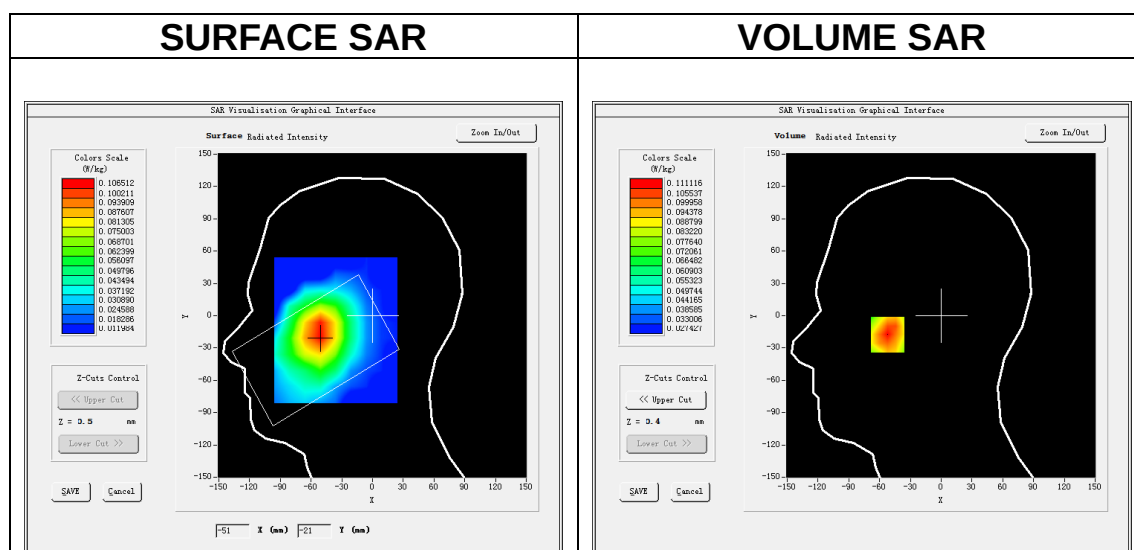
Date of measurement: 21/6/2021

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>Left head</u>
<u>Device Position</u>	<u>Cheek</u>
<u>Band</u>	<u>GSM850</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>TDMA (Crest factor: 2.0)</u>

B. SAR Measurement Results

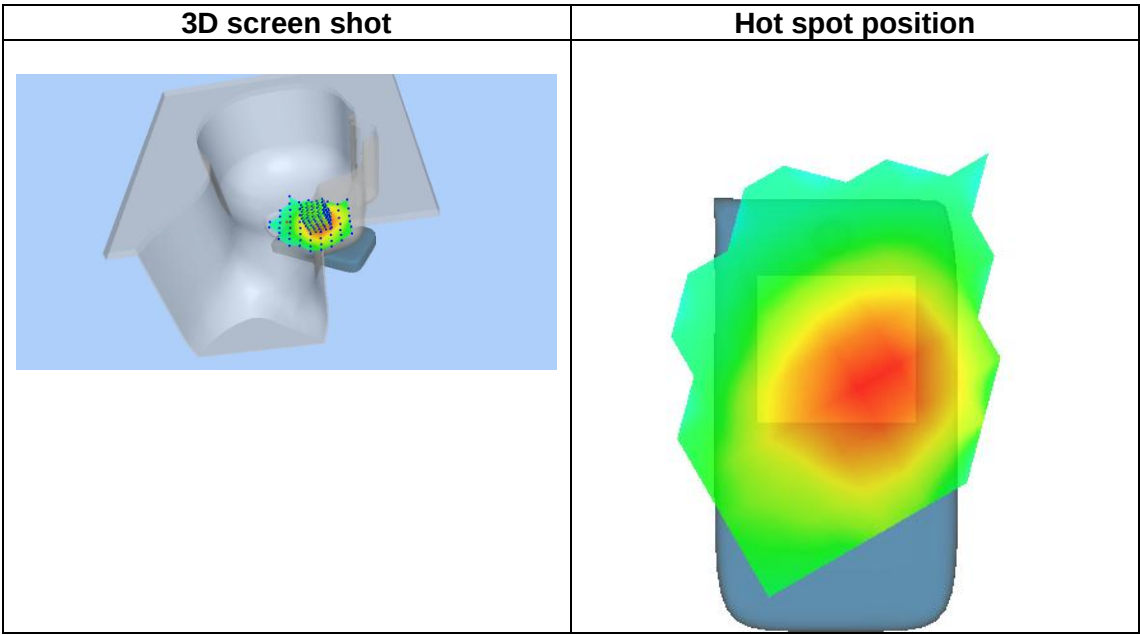
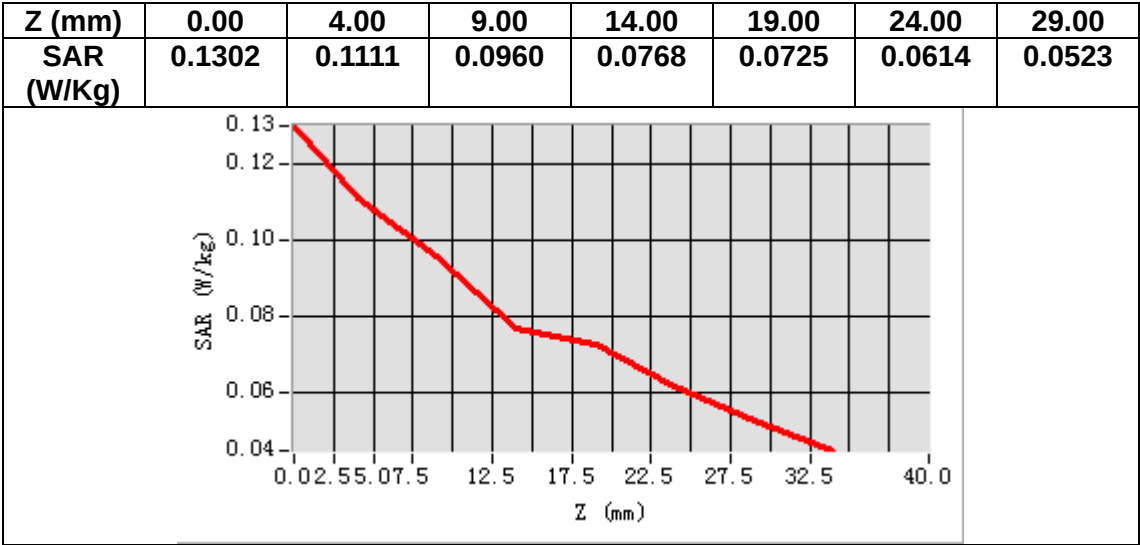
Frequency (MHz)	836.400000
Relative permittivity (real part)	42.528313
Relative permittivity (imaginary part)	20.197344
Conductivity (S/m)	0.938503
Variation (%)	3.890000



Maximum location: X=-52.00, Y=-17.00

SAR Peak: 0.13 W/kg

SAR 10g (W/Kg)	0.086197
SAR 1g (W/Kg)	0.109772



MEASUREMENT 2

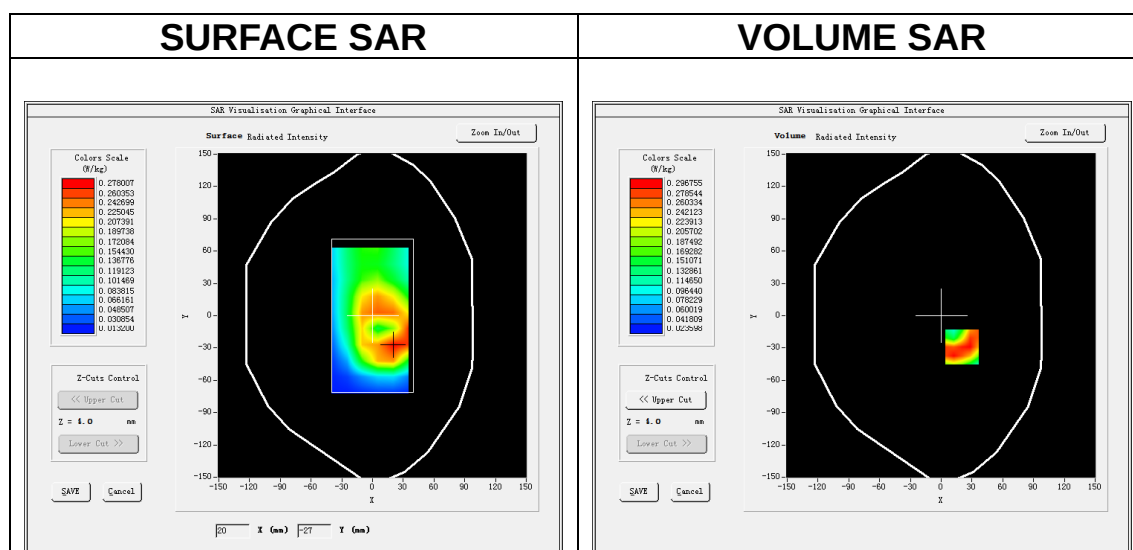
Date of measurement: 21/6/2021

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>GSM850</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>TDMA (Crest factor: 2.0)</u>

B. SAR Measurement Results

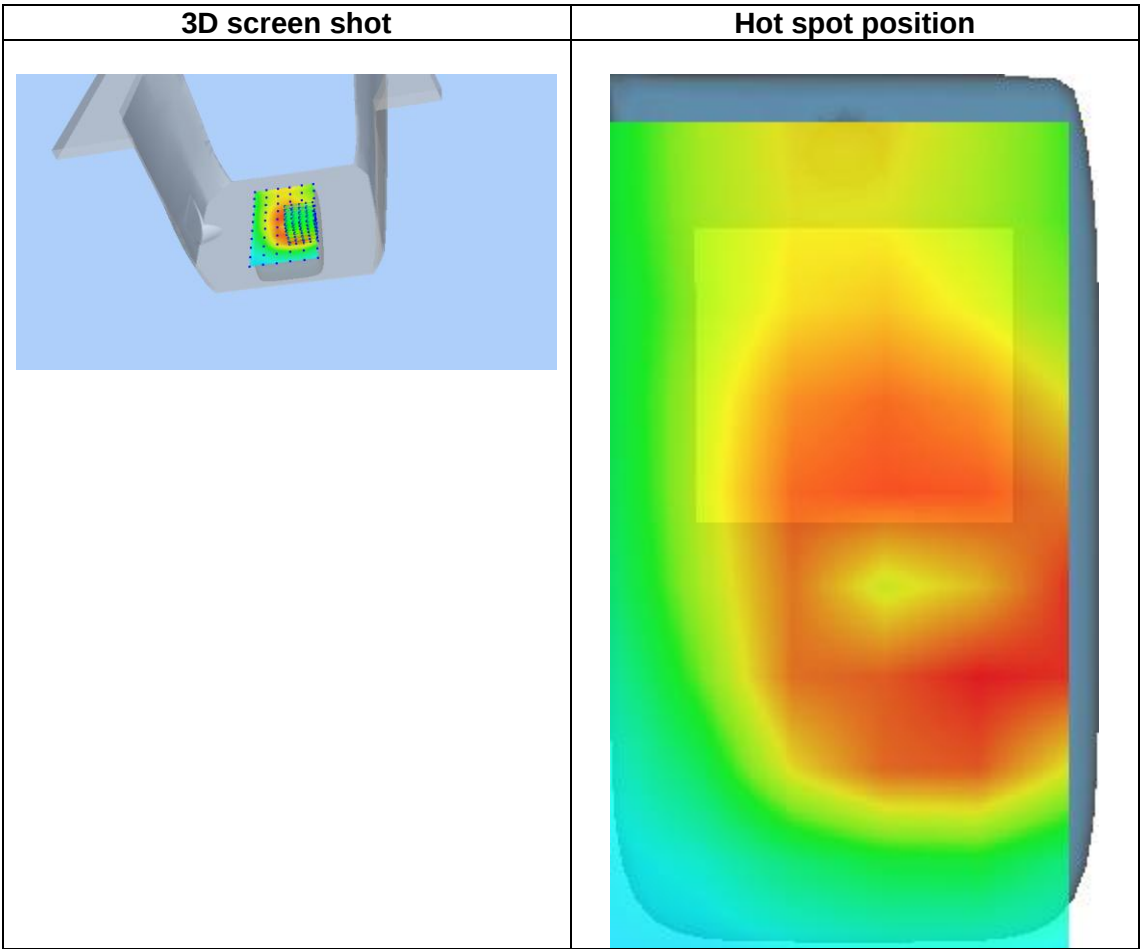
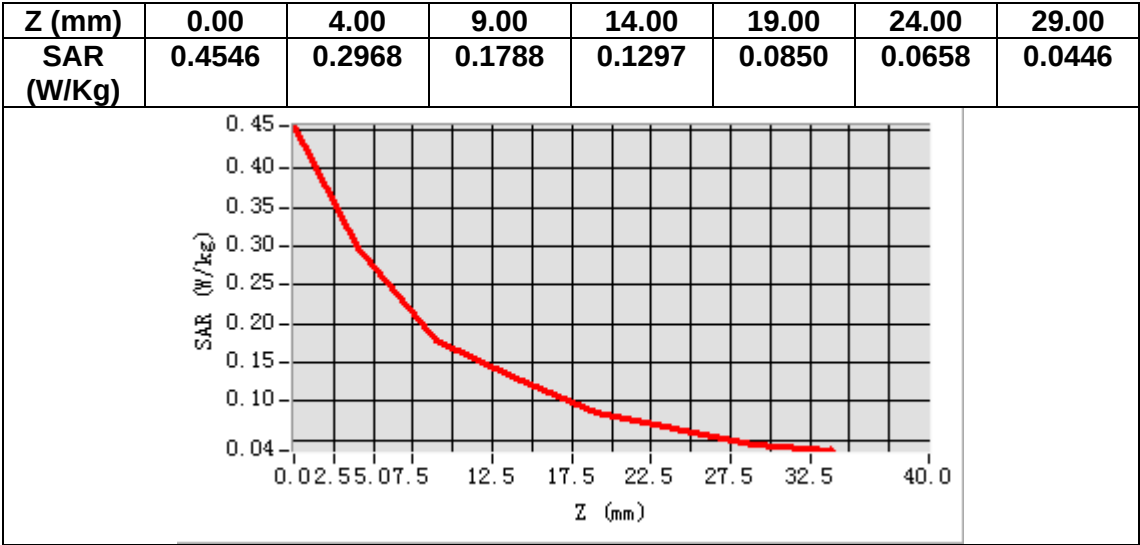
Frequency (MHz)	836.400000
Relative permittivity (real part)	42.528313
Relative permittivity (imaginary part)	20.197344
Conductivity (S/m)	0.938503
Variation (%)	-1.340000



Maximum location: X=20.00, Y=-29.00

SAR Peak: 0.44 W/kg

SAR 10g (W/Kg)	0.180242
SAR 1g (W/Kg)	0.294358



MEASUREMENT 3

Date of measurement: 16/6/2021

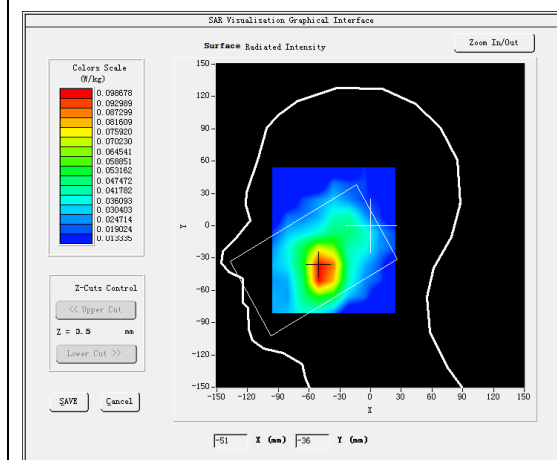
A. Experimental conditions.

<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>Left head</u>
<u>Device Position</u>	<u>Cheek</u>
<u>Band</u>	<u>GSM1900</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>TDMA (Crest factor: 2.0)</u>

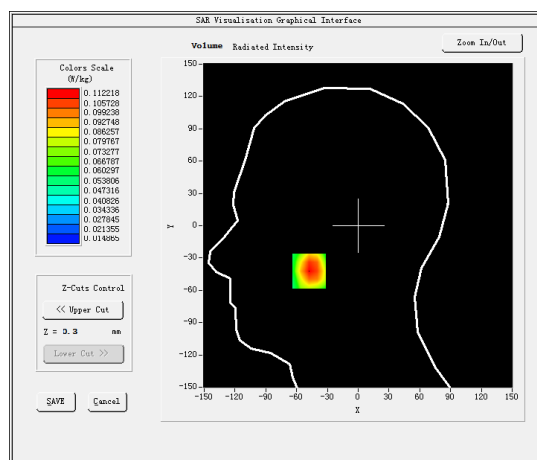
B. SAR Measurement Results

Frequency (MHz)	1880.000000
Relative permittivity (real part)	39.041245
Relative permittivity (imaginary part)	13.961166
Conductivity (S/m)	1.458166
Variation (%)	-0.360000

SURFACE SAR



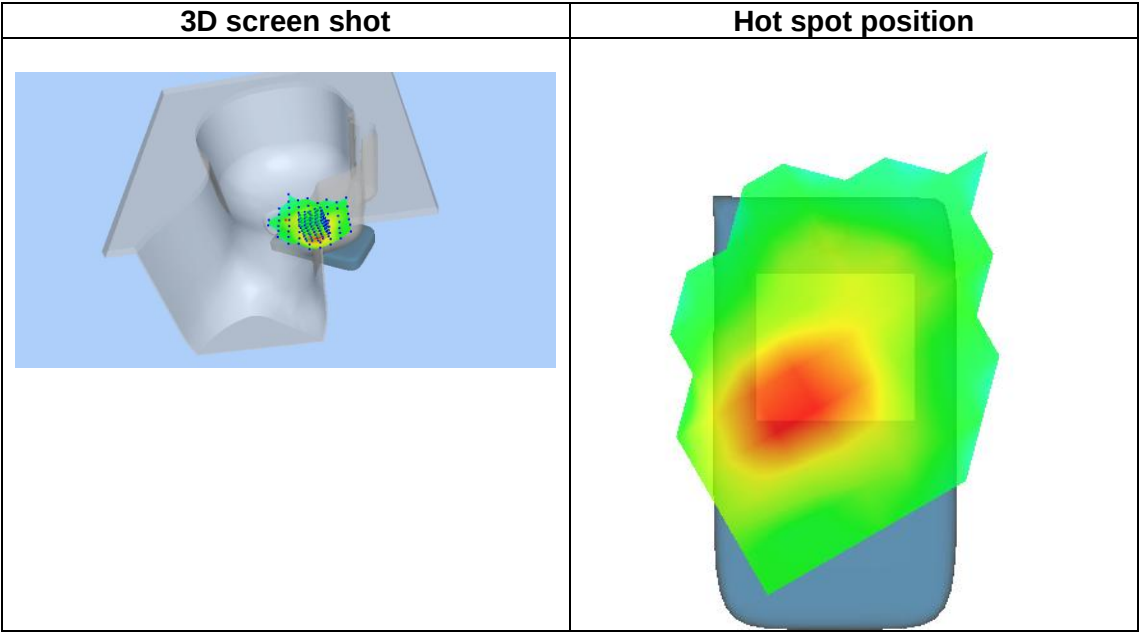
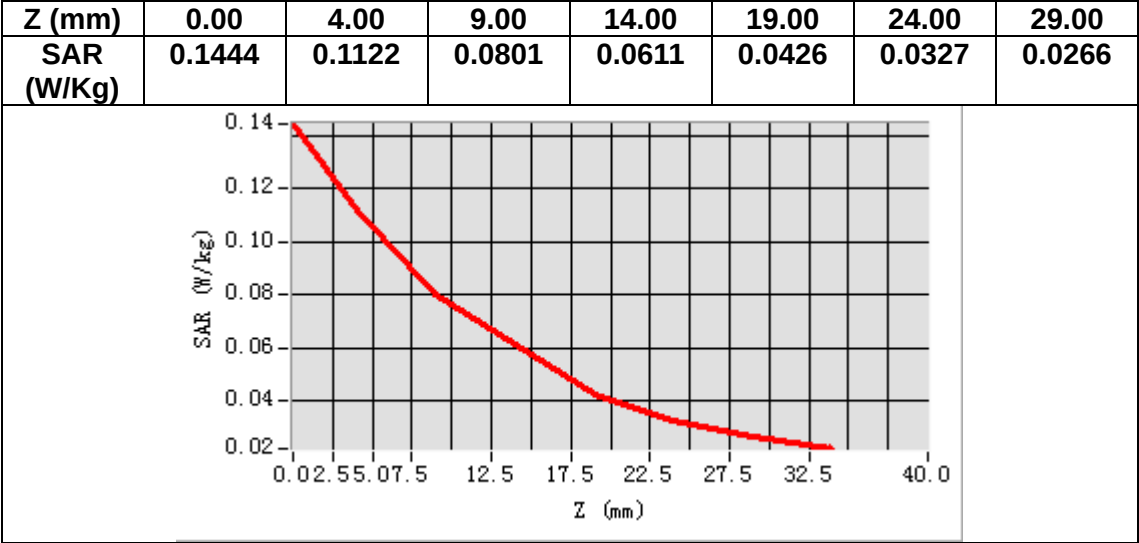
VOLUME SAR



Maximum location: X=-48.00, Y=-42.00

SAR Peak: 0.15 W/kg

SAR 10g (W/Kg)	0.072187
SAR 1g (W/Kg)	0.110448



MEASUREMENT 4

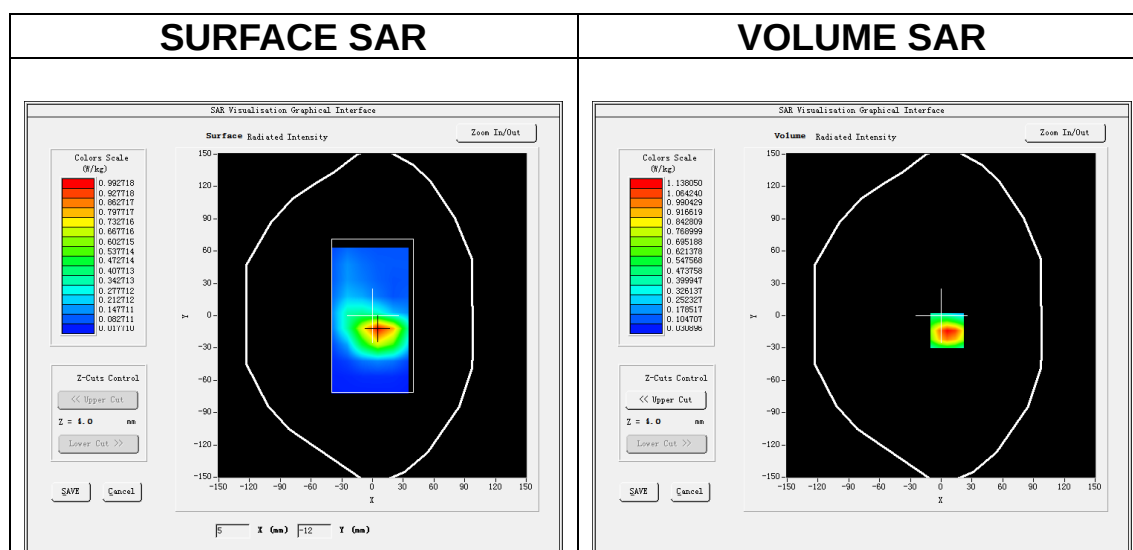
Date of measurement: 16/6/2021

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>GSM1900</u>
<u>Channels</u>	<u>Low</u>
<u>Signal</u>	<u>TDMA (Crest factor: 2.0)</u>

B. SAR Measurement Results

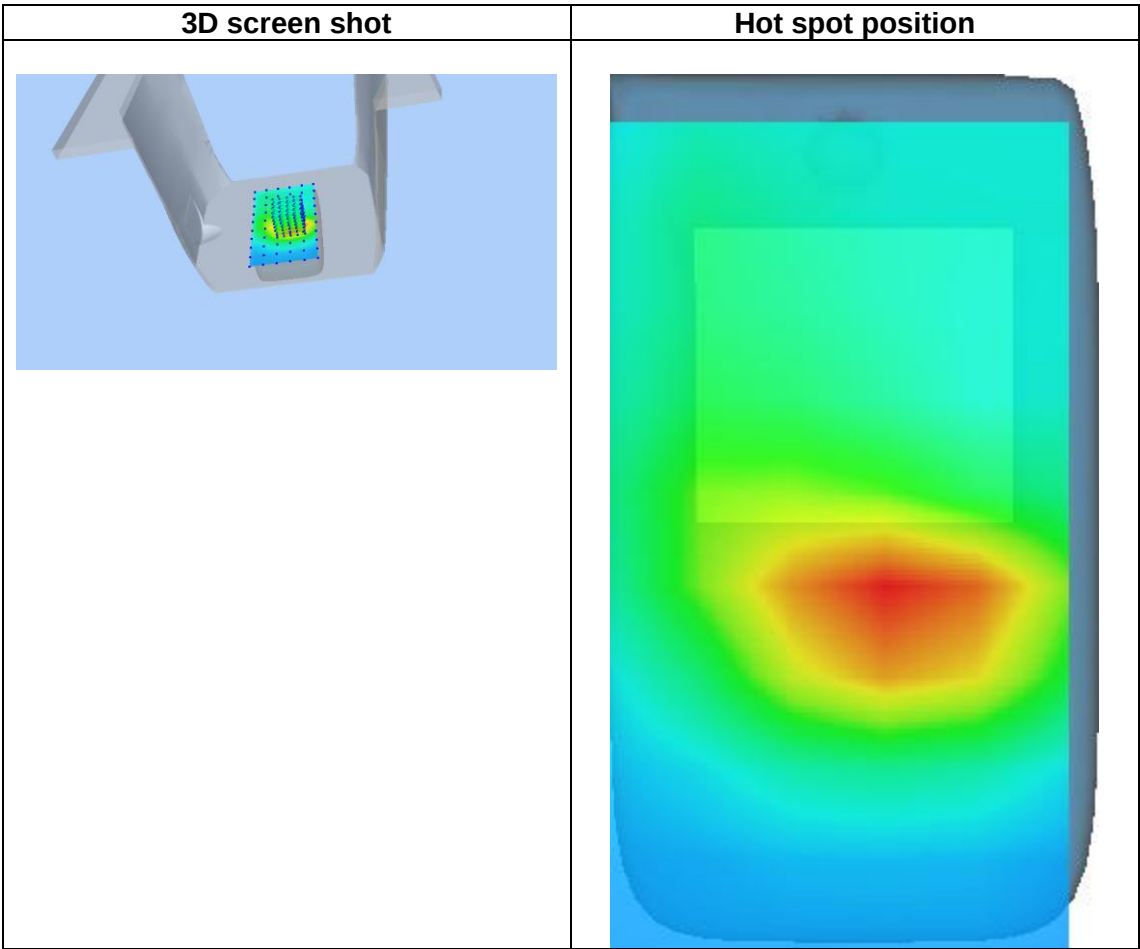
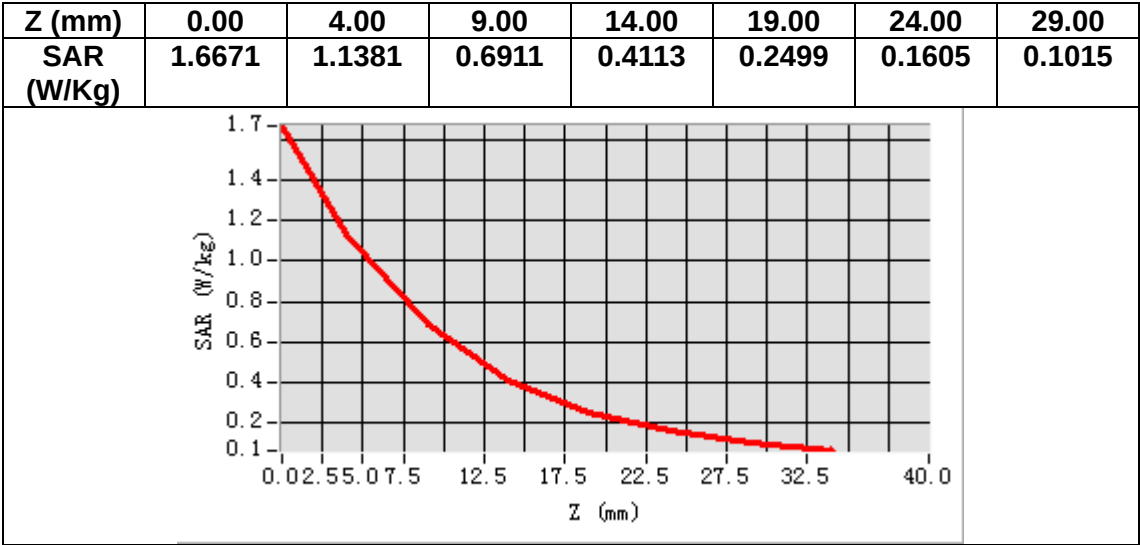
Frequency (MHz)	1850.200000
Relative permittivity (real part)	39.235245
Relative permittivity (imaginary part)	13.981746
Conductivity (S/m)	1.437168
Variation (%)	-2.580000



Maximum location: X=6.00, Y=-14.00

SAR Peak: 1.79 W/kg

SAR 10g (W/Kg)	0.588010
SAR 1g (W/Kg)	1.103822



MEASUREMENT 5

Date of measurement: 16/6/2021

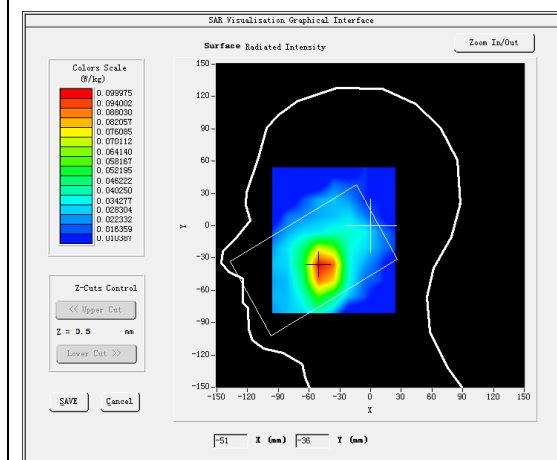
A. Experimental conditions.

<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>Left head</u>
<u>Device Position</u>	<u>Cheek</u>
<u>Band</u>	<u>Band2 WCDMA1900</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>WCDMA (Crest factor: 1.0)</u>

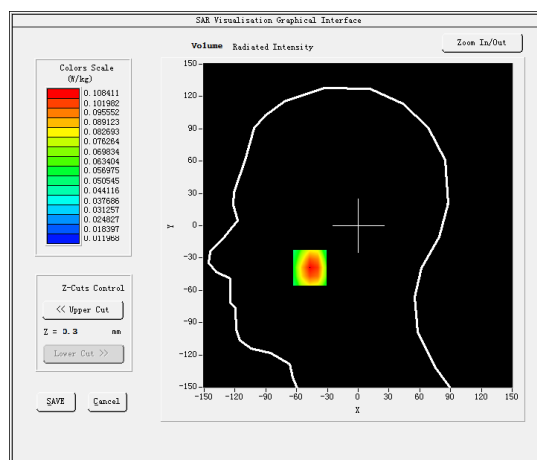
B. SAR Measurement Results

Frequency (MHz)	1880.000000
Relative permittivity (real part)	39.041245
Relative permittivity (imaginary part)	13.961166
Conductivity (S/m)	1.458166
Variation (%)	-4.700000

SURFACE SAR



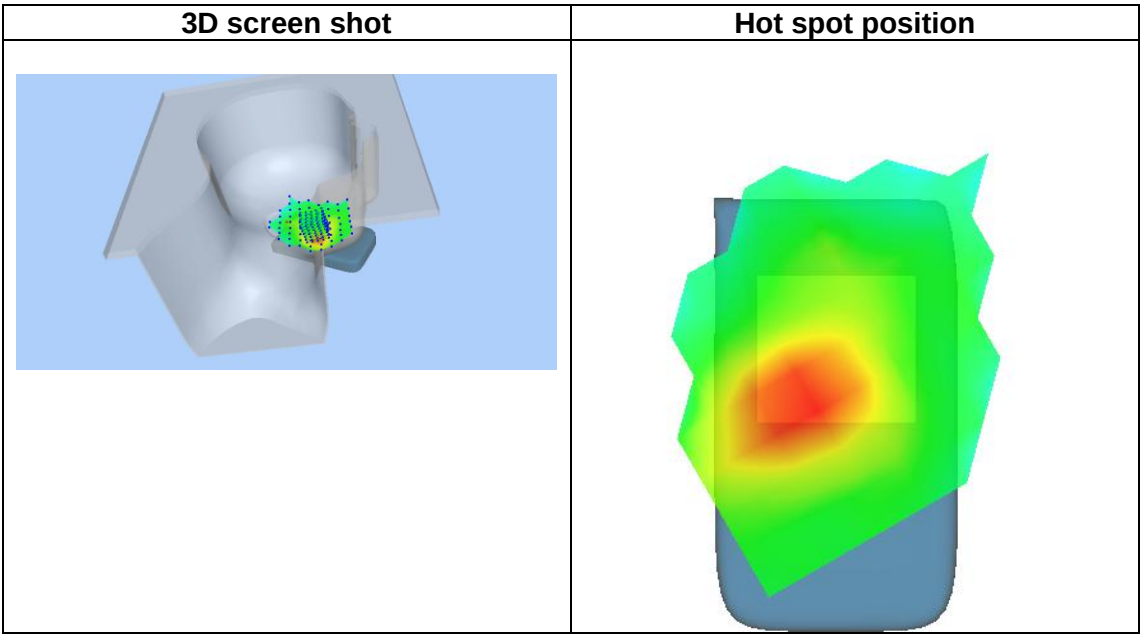
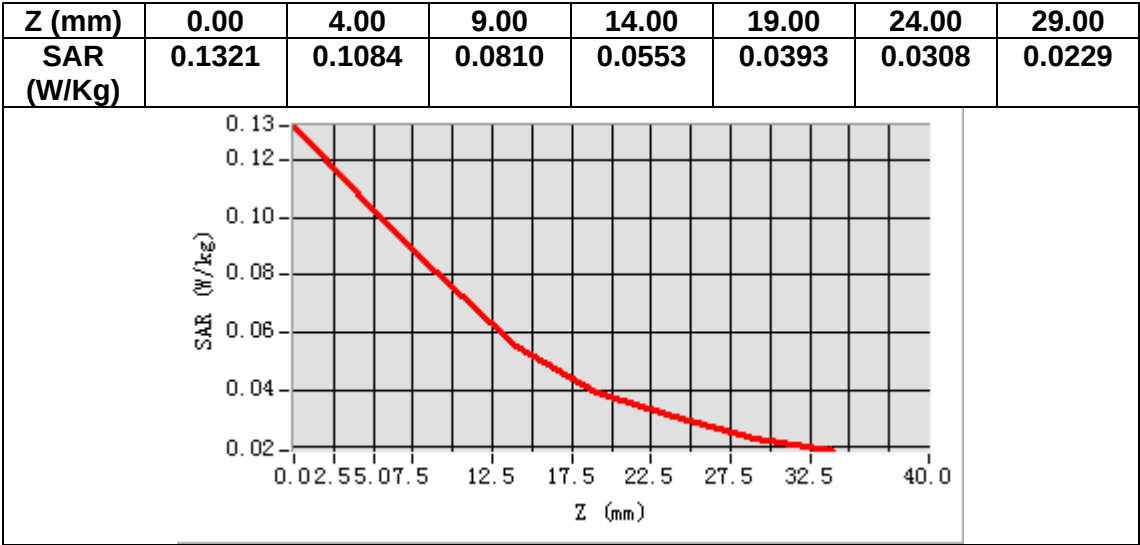
VOLUME SAR



Maximum location: X=-47.00, Y=-39.00

SAR Peak: 0.14 W/kg

SAR 10g (W/Kg)	0.067975
SAR 1g (W/Kg)	0.106344



MEASUREMENT 6

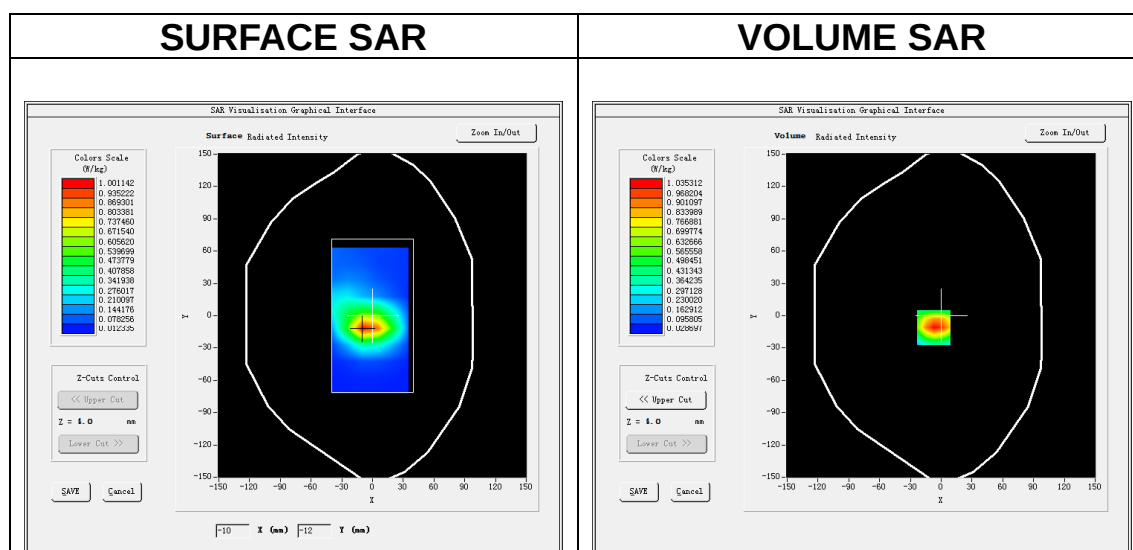
Date of measurement: 16/6/2021

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>Band2 WCDMA1900</u>
<u>Channels</u>	<u>High</u>
<u>Signal</u>	<u>WCDMA (Crest factor: 1.0)</u>

B. SAR Measurement Results

Frequency (MHz)	1907.600000
Relative permittivity (real part)	38.927605
Relative permittivity (imaginary part)	13.897666
Conductivity (S/m)	1.472844
Variation (%)	-1.920000

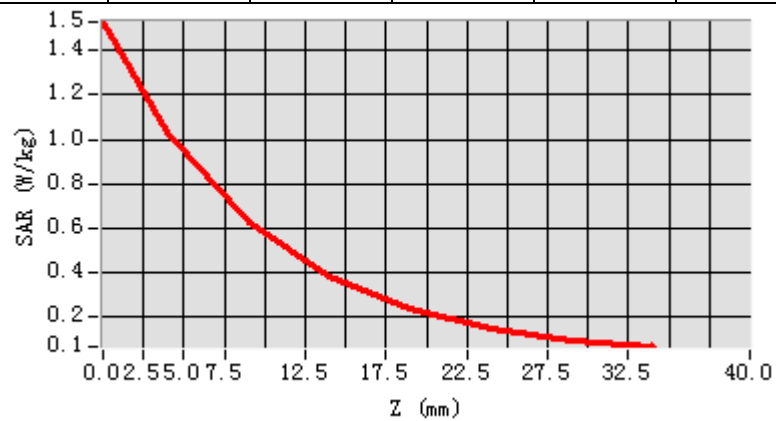


Maximum location: X=-7.00, Y=-11.00

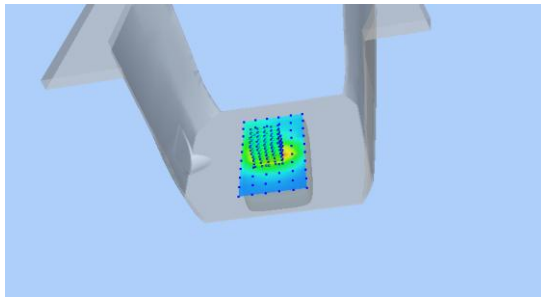
SAR Peak: 1.54 W/kg

SAR 10g (W/Kg)	0.548824
SAR 1g (W/Kg)	1.010536

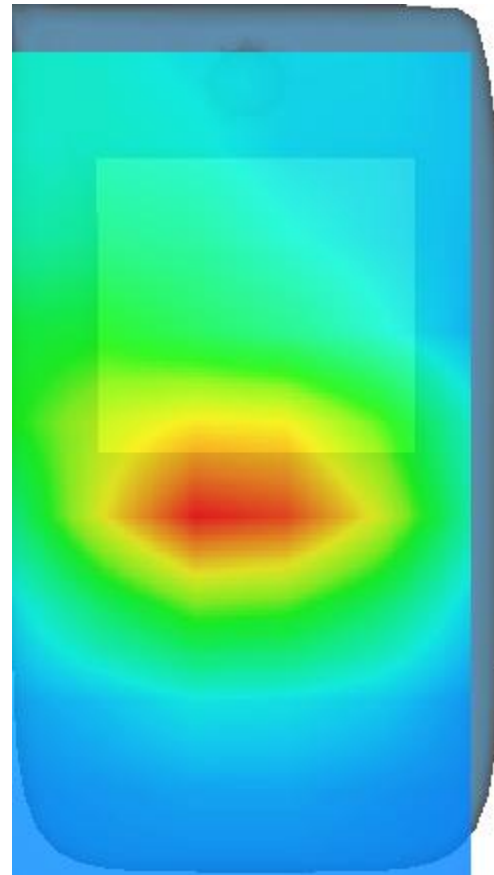
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	1.5312	1.0353	0.6274	0.3767	0.2304	0.1436	0.0858



3D screen shot



Hot spot position



MEASUREMENT 7

Date of measurement: 17/6/2021

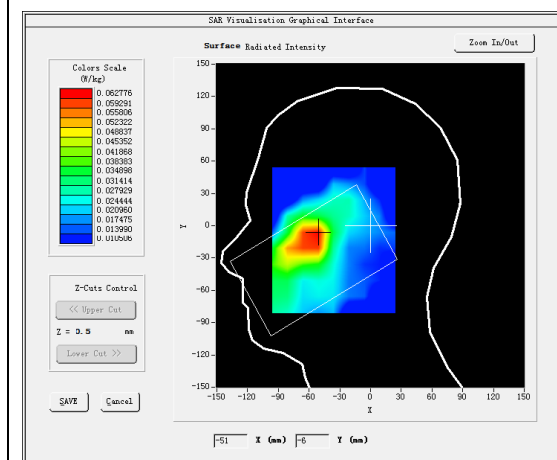
A. Experimental conditions.

<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>Left head</u>
<u>Device Position</u>	<u>Cheek</u>
<u>Band</u>	<u>Band4 WCDMA1700</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>WCDMA (Crest factor: 1.0)</u>

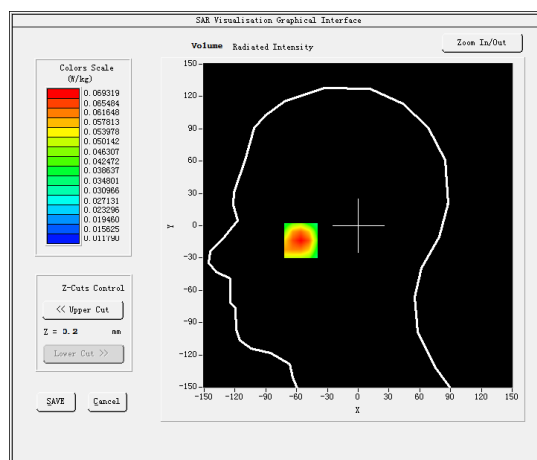
B. SAR Measurement Results

Frequency (MHz)	1732.600000
Relative permittivity (real part)	41.010765
Relative permittivity (imaginary part)	13.970883
Conductivity (S/m)	1.344309
Variation (%)	-3.860000

SURFACE SAR



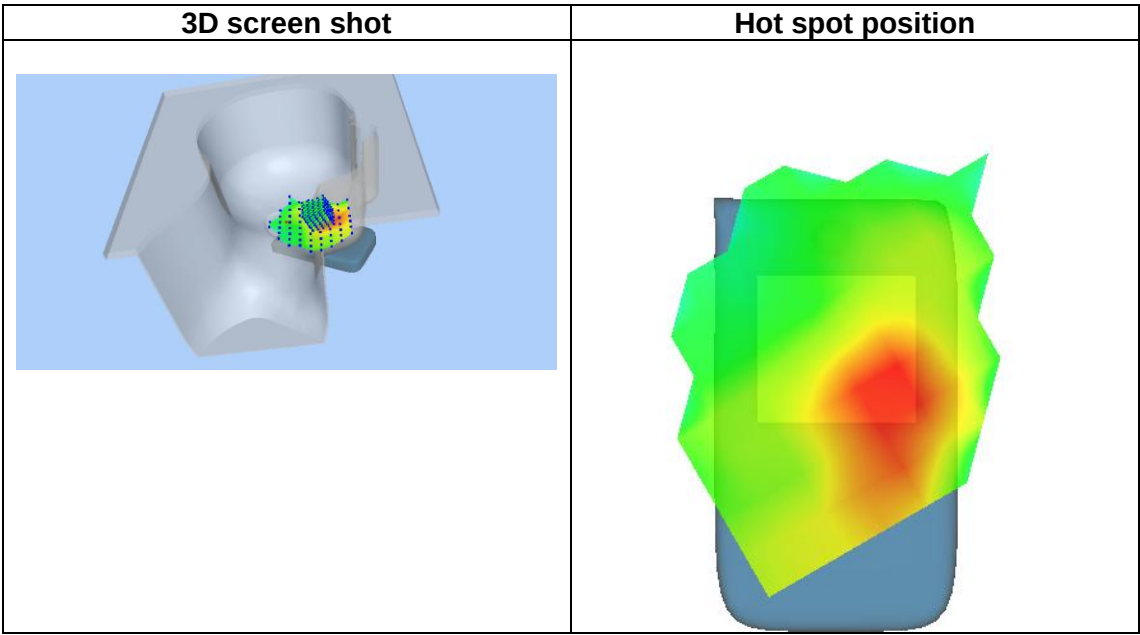
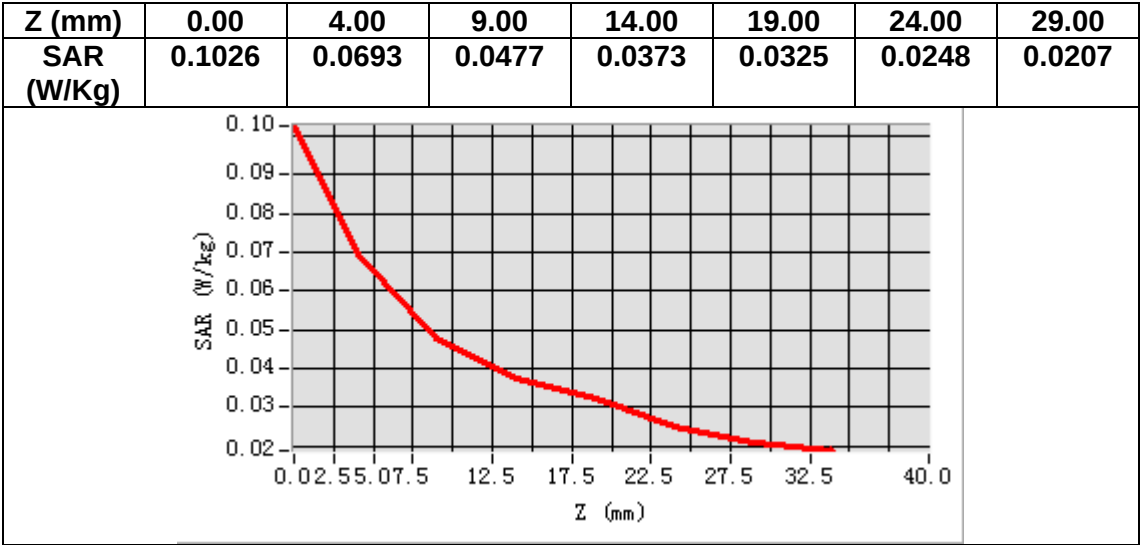
VOLUME SAR



Maximum location: X=-56.00, Y=-12.00

SAR Peak: 0.10 W/kg

SAR 10g (W/Kg)	0.045600
SAR 1g (W/Kg)	0.068642



MEASUREMENT 8

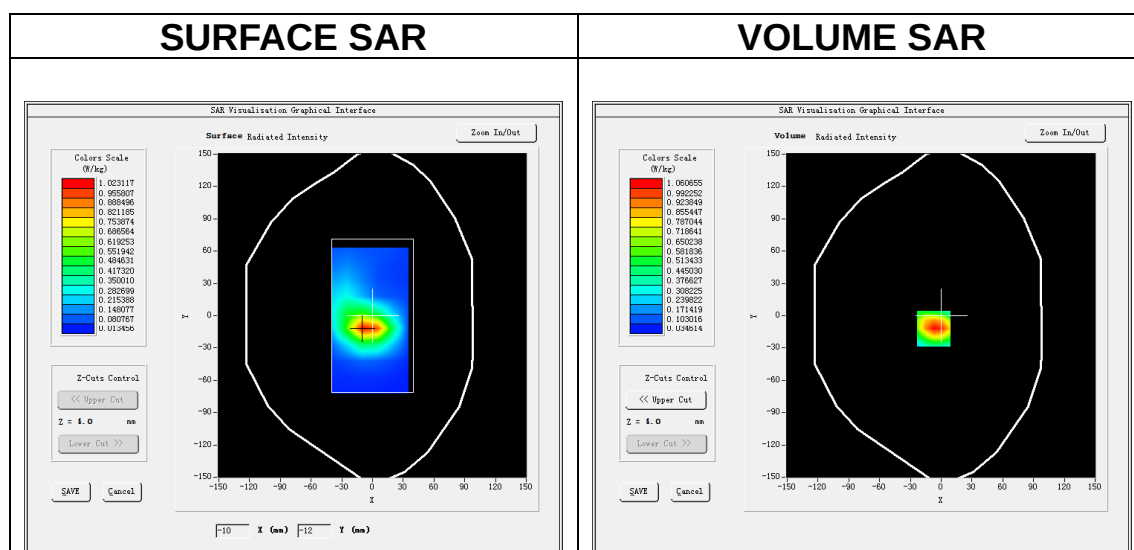
Date of measurement: 17/6/2021

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>Band4 WCDMA1700</u>
<u>Channels</u>	<u>High</u>
<u>Signal</u>	<u>WCDMA (Crest factor: 1.0)</u>

B. SAR Measurement Results

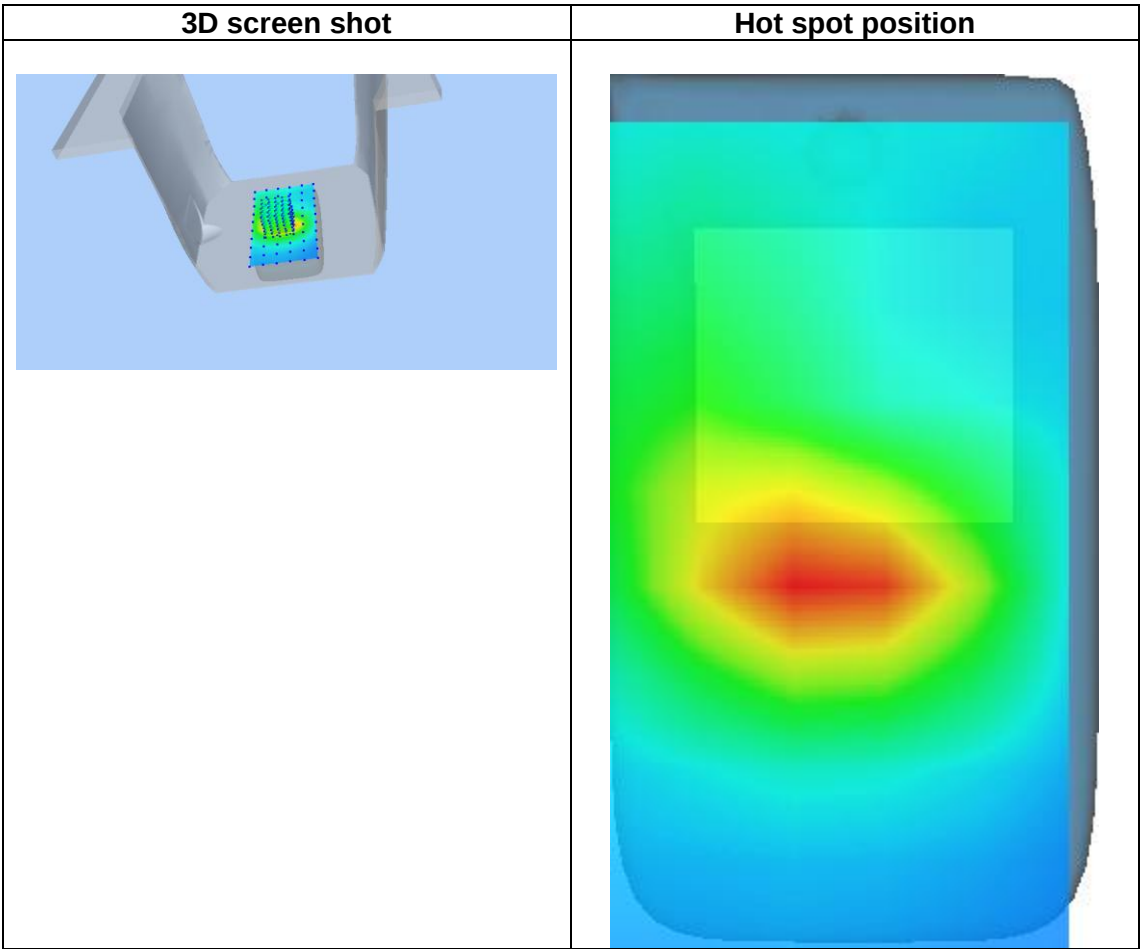
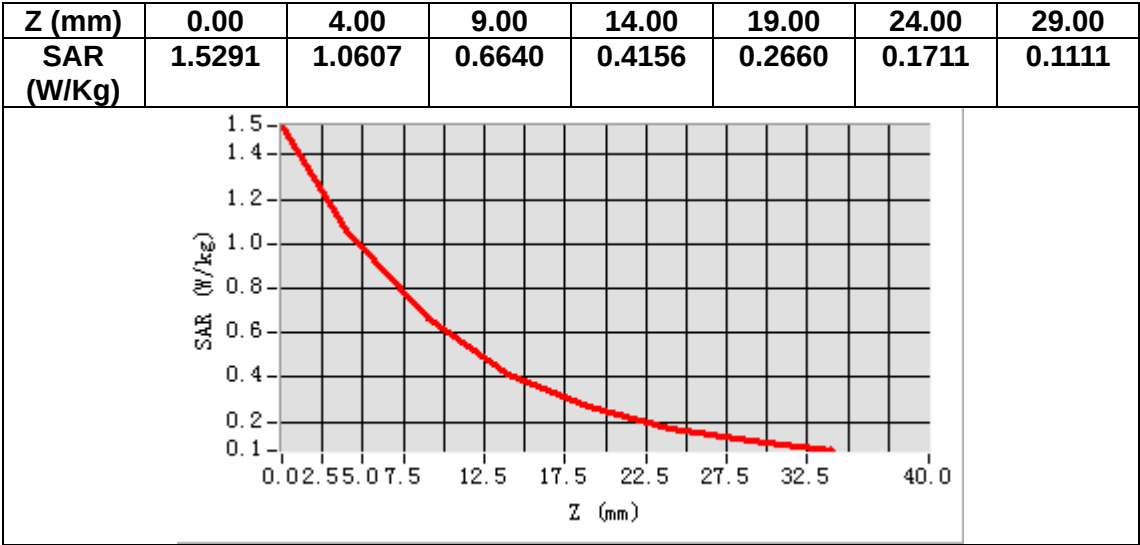
Frequency (MHz)	1752.600000
Relative permittivity (real part)	40.880463
Relative permittivity (imaginary part)	13.981583
Conductivity (S/m)	1.360874
Variation (%)	-0.420000



Maximum location: X=-7.00, Y=-12.00

SAR Peak: 1.57 W/kg

SAR 10g (W/Kg)	0.566300
SAR 1g (W/Kg)	1.003550



MEASUREMENT 9

Date of measurement: 21/6/2021

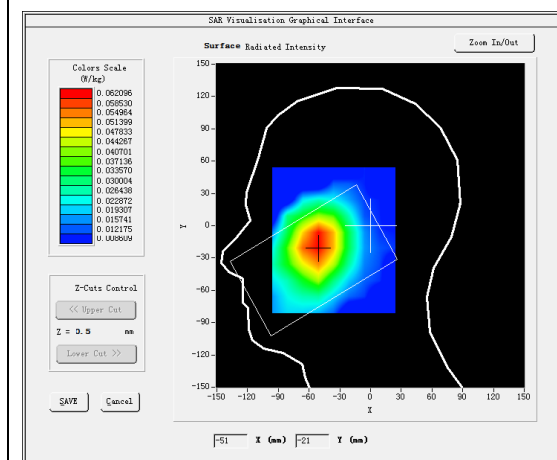
A. Experimental conditions.

<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>Left head</u>
<u>Device Position</u>	<u>Cheek</u>
<u>Band</u>	<u>Band5 WCDMA850</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>WCDMA (Crest factor: 1.0)</u>

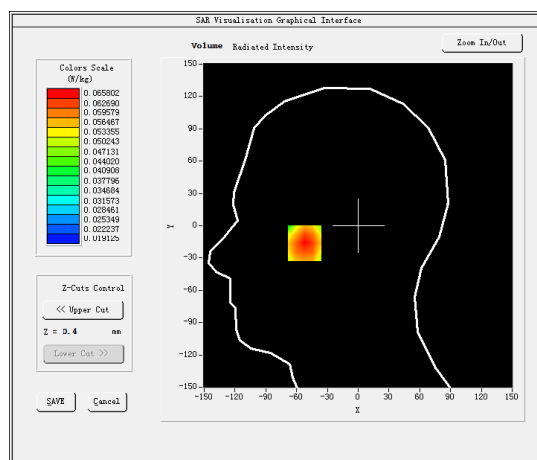
B. SAR Measurement Results

Frequency (MHz)	836.400000
Relative permittivity (real part)	42.528313
Relative permittivity (imaginary part)	20.197344
Conductivity (S/m)	0.938503
Variation (%)	-4.850000

SURFACE SAR



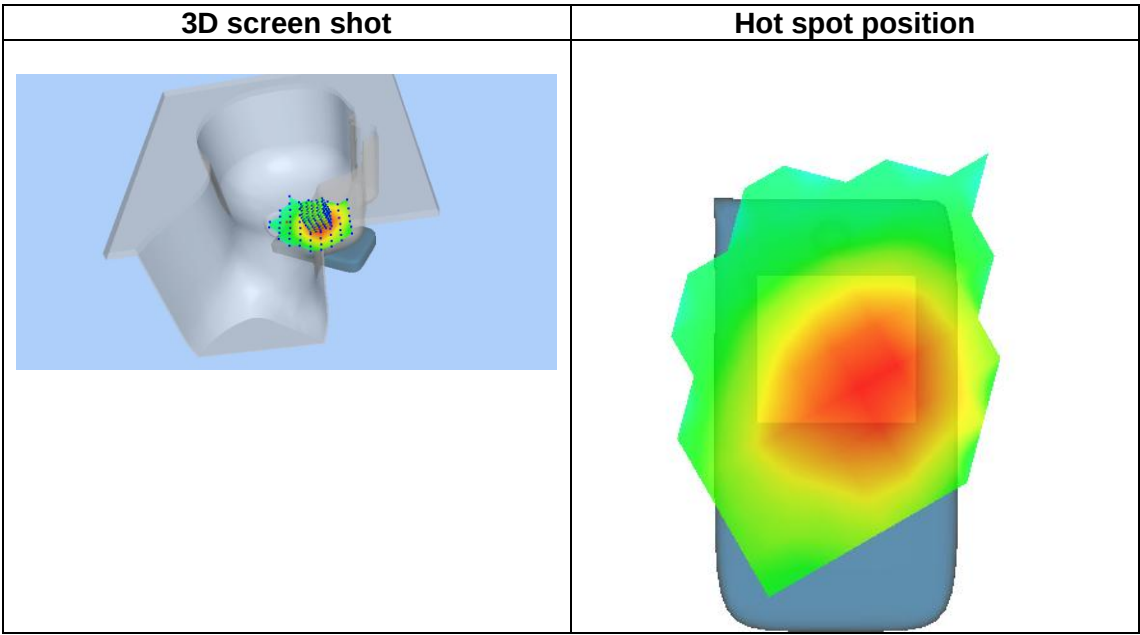
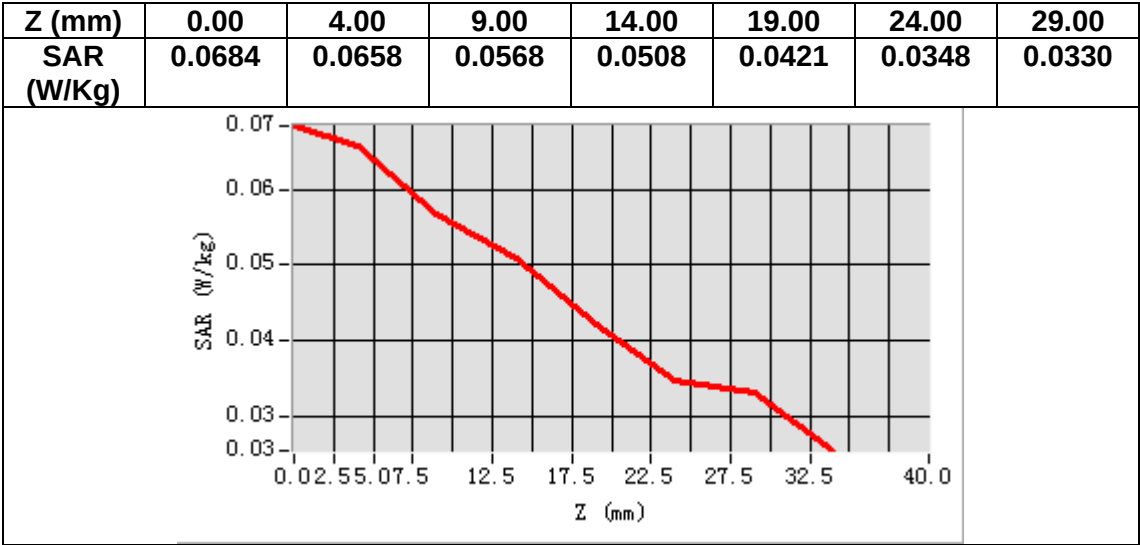
VOLUME SAR



Maximum location: X=-52.00, Y=-15.00

SAR Peak: 0.07 W/kg

SAR 10g (W/Kg)	0.052531
SAR 1g (W/Kg)	0.064204



MEASUREMENT 10

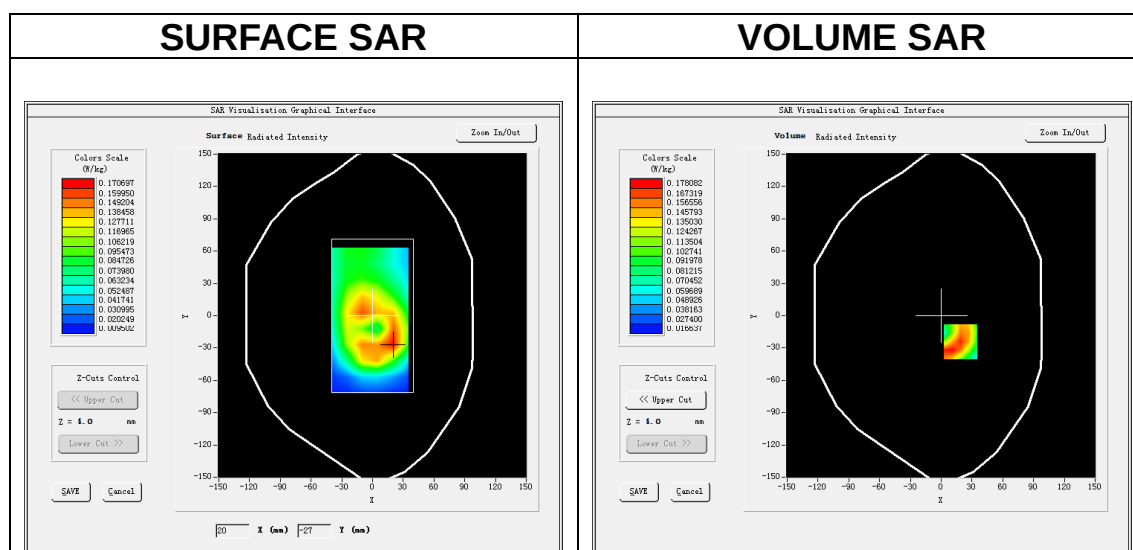
Date of measurement: 21/6/2021

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>Band5 WCDMA850</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	<u>WCDMA (Crest factor: 1.0)</u>

B. SAR Measurement Results

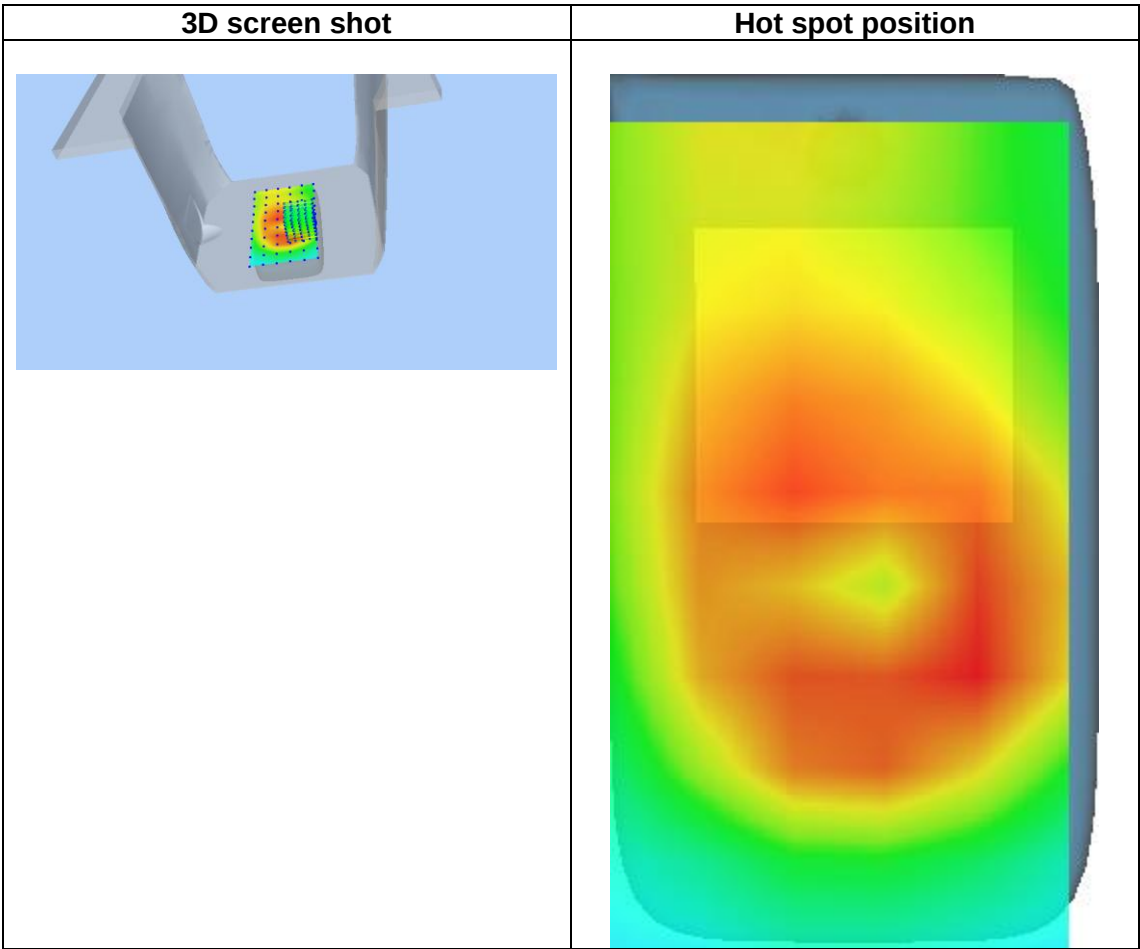
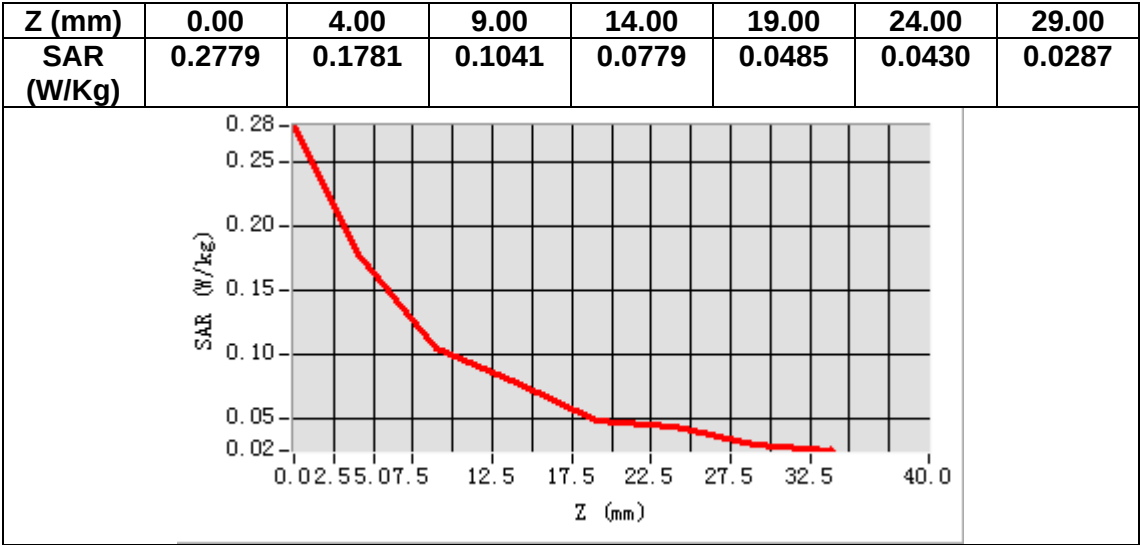
Frequency (MHz)	836.400000
Relative permittivity (real part)	42.528313
Relative permittivity (imaginary part)	20.197344
Conductivity (S/m)	0.938503
Variation (%)	1.250000



Maximum location: X=19.00, Y=-24.00

SAR Peak: 0.25 W/kg

SAR 10g (W/Kg)	0.105359
SAR 1g (W/Kg)	0.169643



MEASUREMENT 11

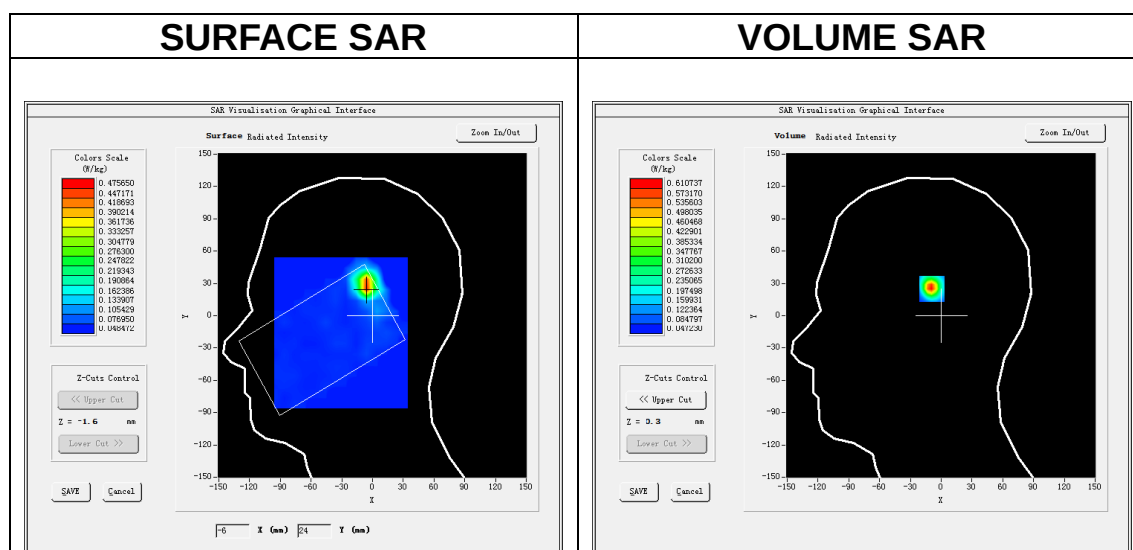
Date of measurement: 24/6/2021

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>Left head</u>
<u>Device Position</u>	<u>Cheek</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>

B. SAR Measurement Results

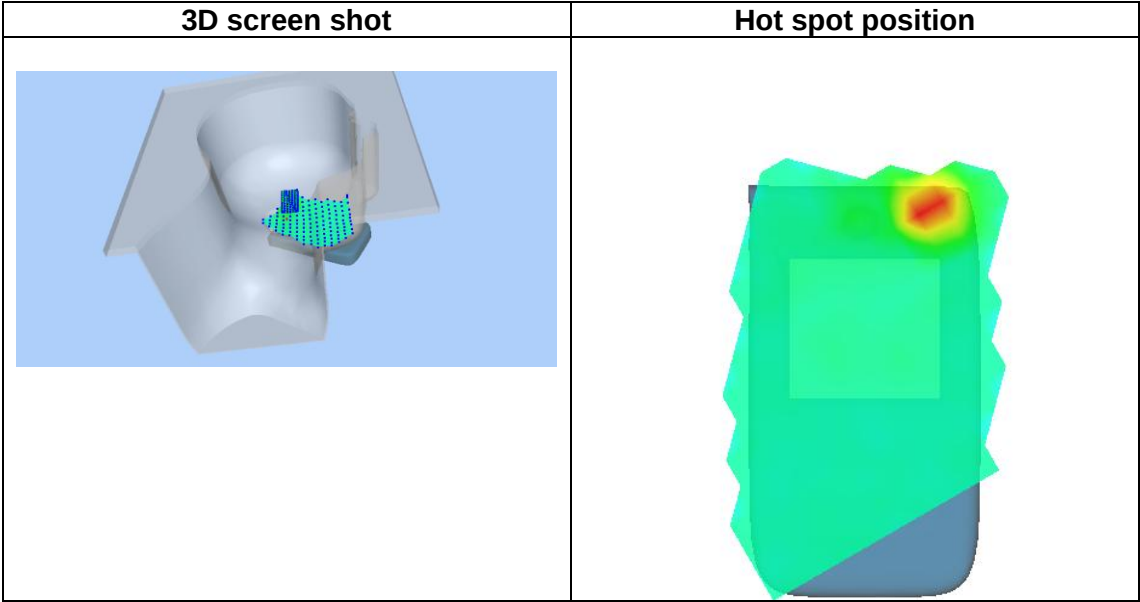
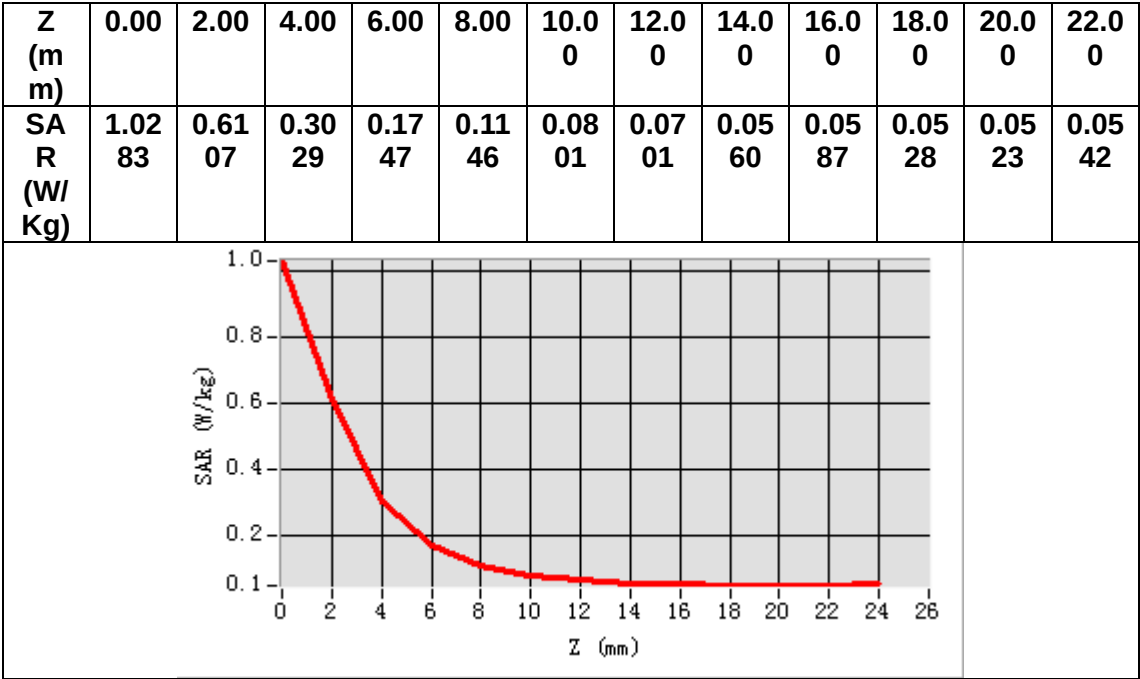
Frequency (MHz)	5200.000000
Relative permittivity (real part)	36.938497
Relative permittivity (imaginary part)	16.419311
Conductivity (S/m)	4.743357
Variation (%)	-1.050000



Maximum location: X=-6.00, Y=27.00

SAR Peak: 1.66 W/kg

SAR 10g (W/Kg)	0.188054
SAR 1g (W/Kg)	0.489177



MEASUREMENT 12

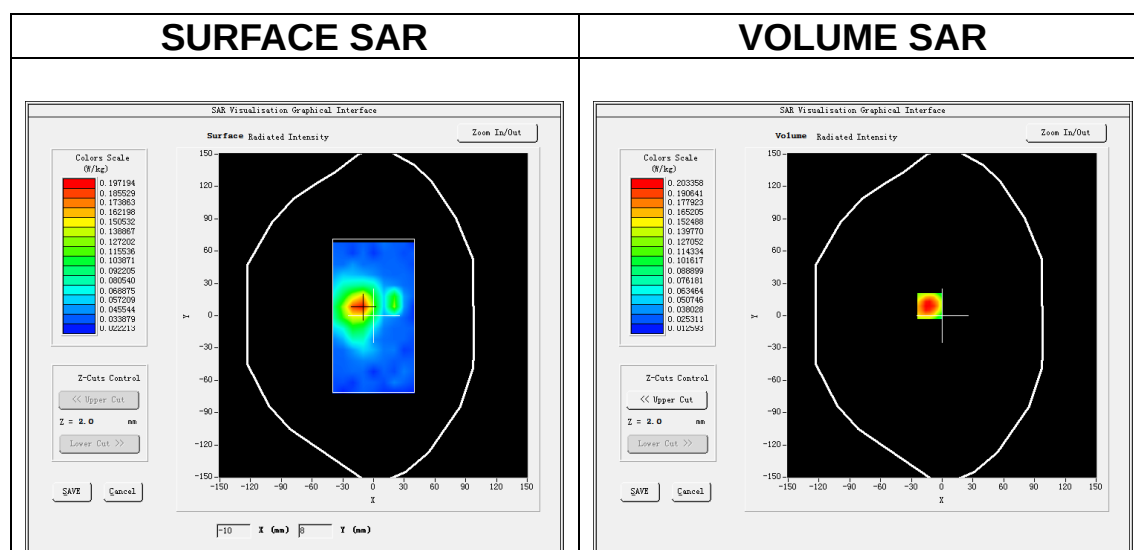
Date of measurement: 24/6/2021

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>

B. SAR Measurement Results

Frequency (MHz)	5200.000000
Relative permittivity (real part)	36.938497
Relative permittivity (imaginary part)	16.419311
Conductivity (S/m)	4.743357
Variation (%)	0.460000

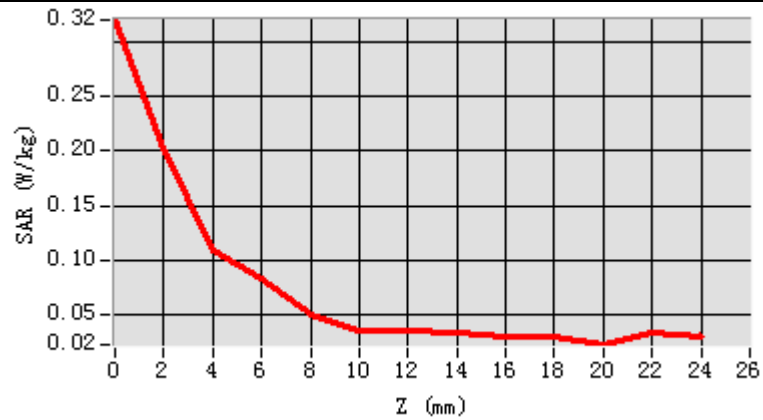


Maximum location: X=-12.00, Y=9.00

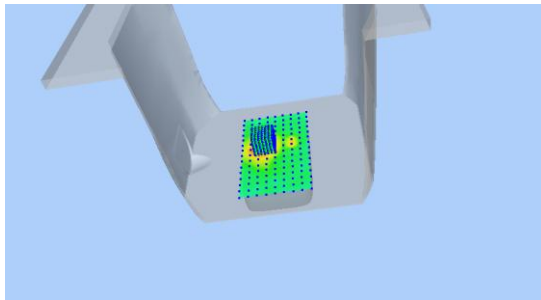
SAR Peak: 0.35 W/kg

SAR 10g (W/Kg)	0.071012
SAR 1g (W/Kg)	0.133441

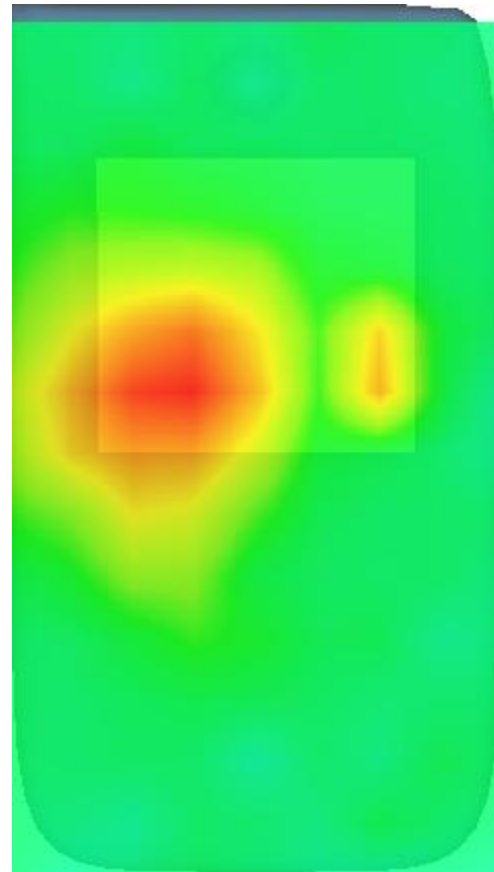
Z (m m)	0.00	2.00	4.00	6.00	8.00	10.0 0	12.0 0	14.0 0	16.0 0	18.0 0	20.0 0	22.0 0
SA R (W/ Kg)	0.32 04	0.20 34	0.10 85	0.08 37	0.05 11	0.03 64	0.03 53	0.03 36	0.03 09	0.03 05	0.02 27	0.03 34



3D screen shot



Hot spot position



MEASUREMENT 13

Date of measurement: 24/6/2021

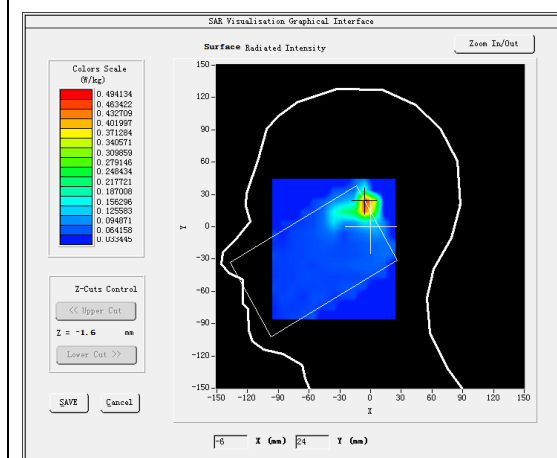
A. Experimental conditions.

<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>Left head</u>
<u>Device Position</u>	<u>Cheek</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>

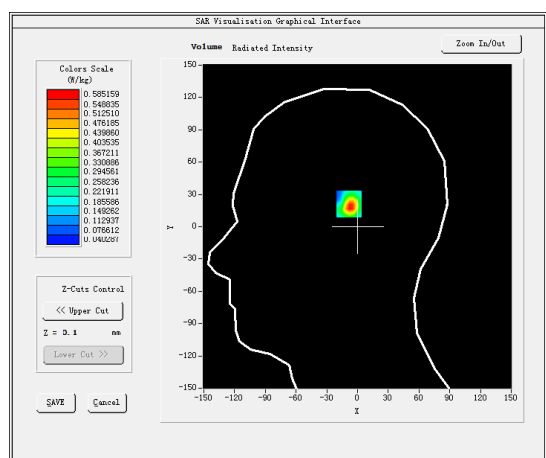
B. SAR Measurement Results

Frequency (MHz)	5280.000000
Relative permittivity (real part)	36.829302
Relative permittivity (imaginary part)	16.504470
Conductivity (S/m)	4.841311
Variation (%)	2.540000

SURFACE SAR



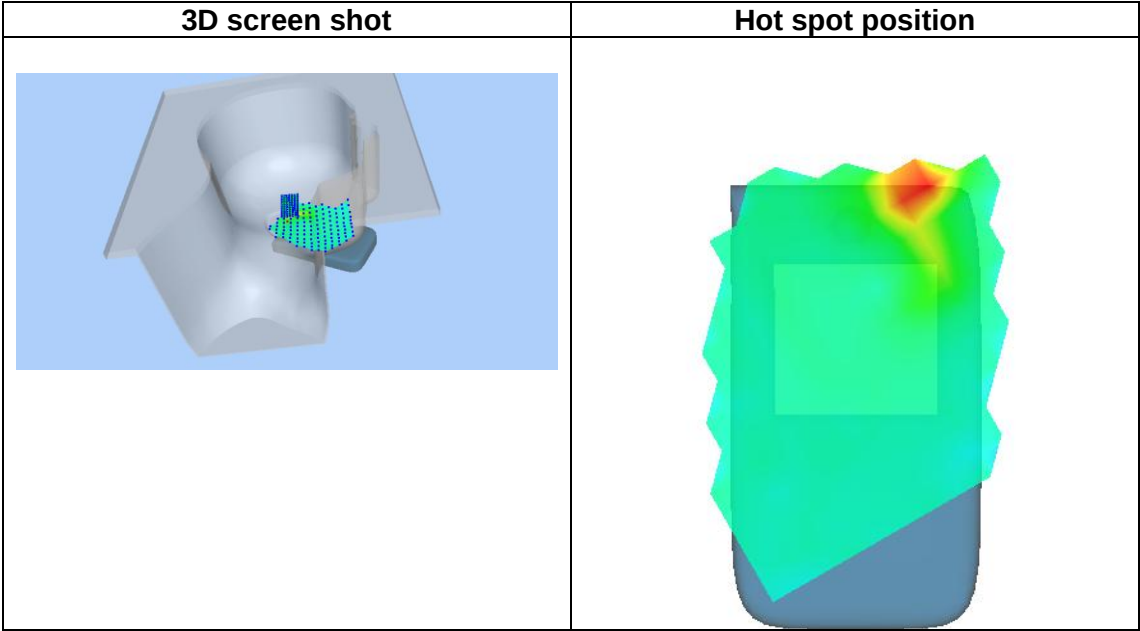
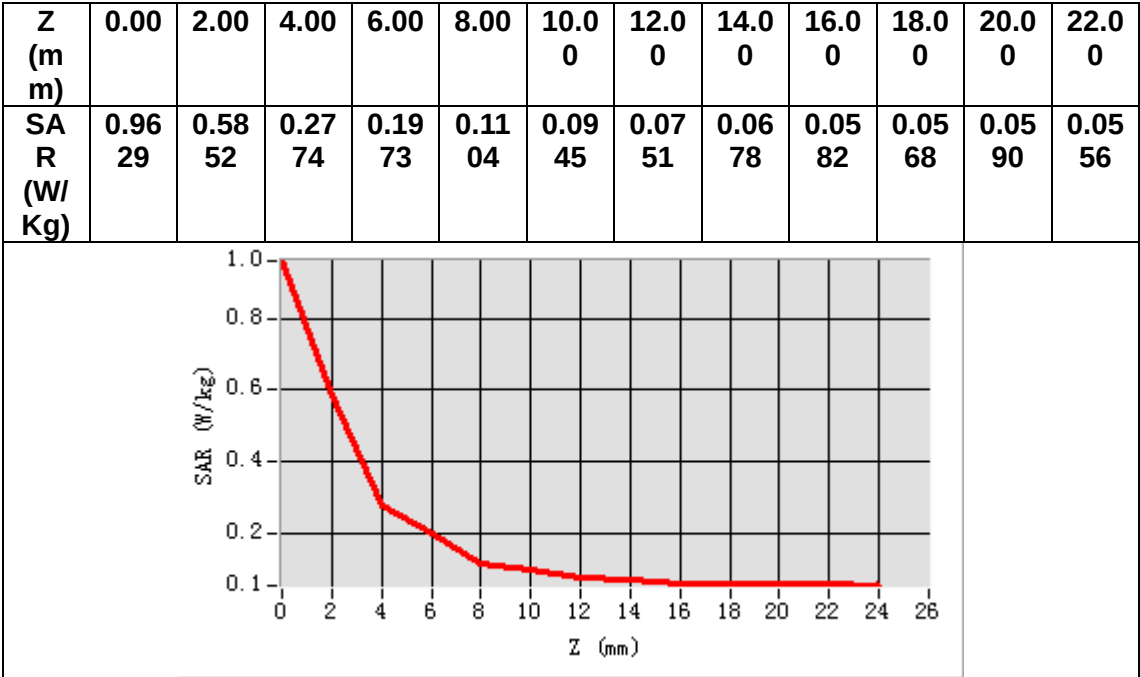
VOLUME SAR



Maximum location: X=-5.00, Y=22.00

SAR Peak: 1.47 W/kg

SAR 10g (W/Kg)	0.165382
SAR 1g (W/Kg)	0.560888



MEASUREMENT 14

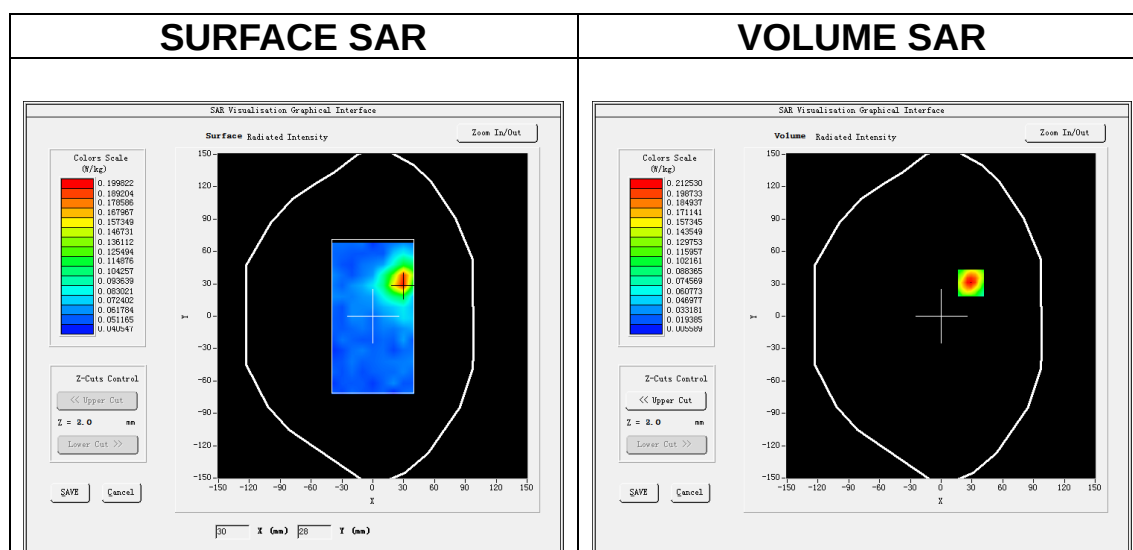
Date of measurement: 24/6/2021

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>

B. SAR Measurement Results

Frequency (MHz)	5280.000000
Relative permittivity (real part)	36.829302
Relative permittivity (imaginary part)	16.504470
Conductivity (S/m)	4.841311
Variation (%)	0.260000

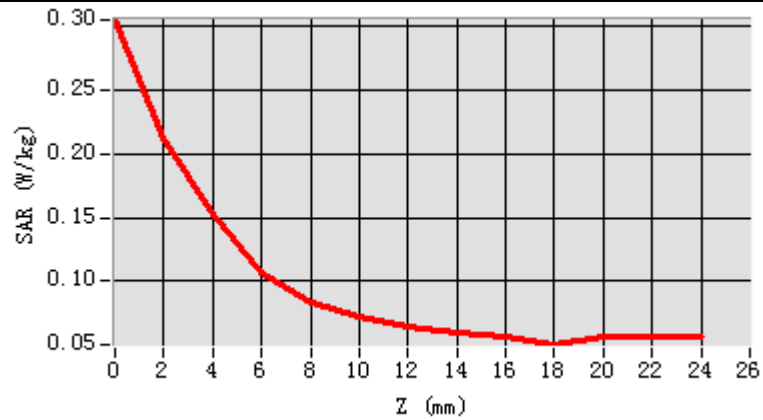


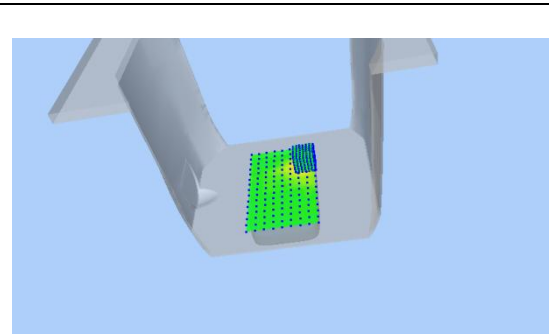
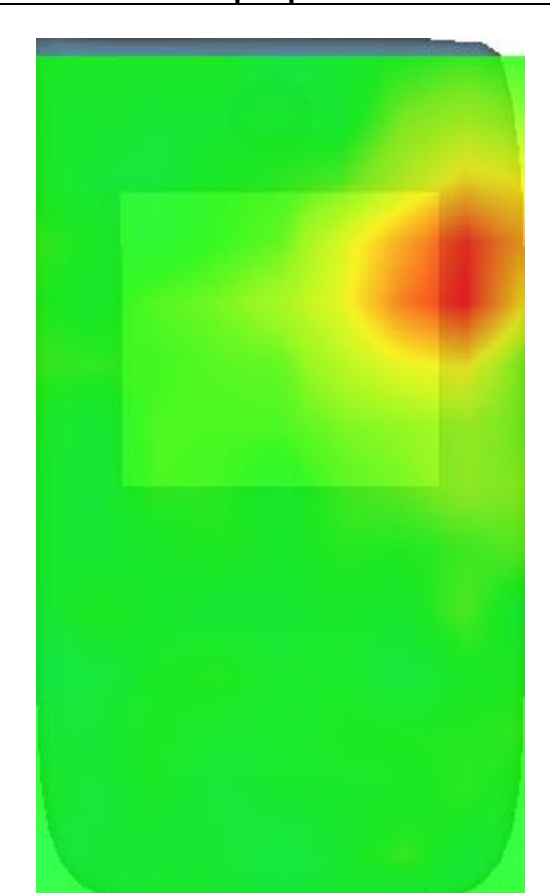
Maximum location: X=29.00, Y=31.00

SAR Peak: 0.32 W/kg

SAR 10g (W/Kg)	0.089760
SAR 1g (W/Kg)	0.148414

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)	0.30 42	0.21 25	0.15 22	0.10 63	0.08 41	0.07 32	0.06 49	0.05 96	0.05 69	0.05 07	0.05 76	0.05 65



3D screen shot	Hot spot position
 A 3D rendering of a robotic gripper holding a rectangular tray. The tray contains a grid of small cubes, mostly green with a small cluster of blue cubes on the right side. The gripper is light gray and the background is a solid light blue.	 A heatmap visualization showing the spatial distribution of a 'hot spot'. The color scale ranges from green (low intensity) to red (high intensity). A prominent red and yellow hot spot is located on the right side of the tray, corresponding to the position of the blue cubes in the 3D view. The rest of the tray area is predominantly green.

MEASUREMENT 15

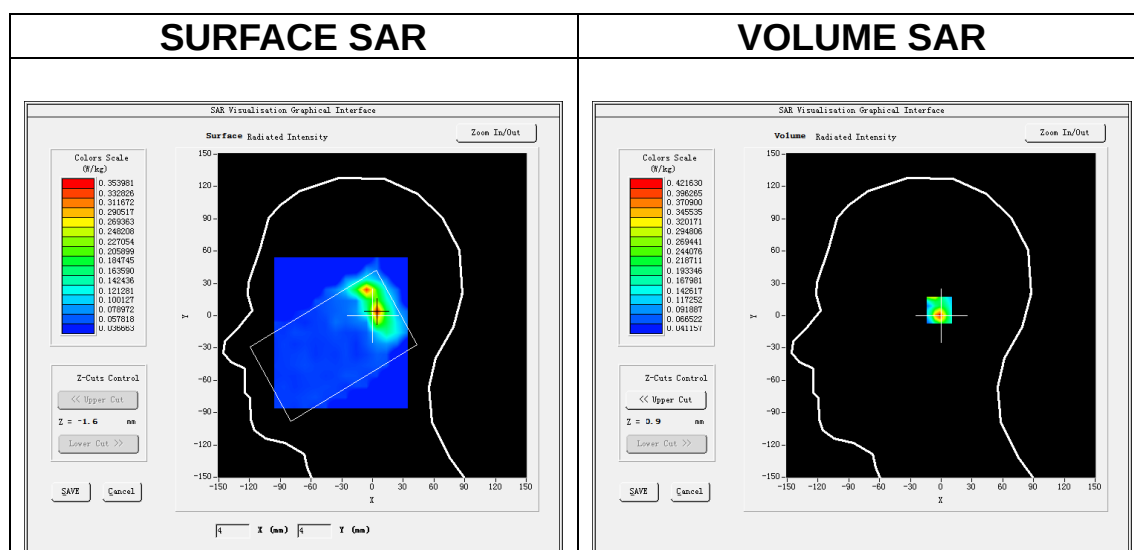
Date of measurement: 16/6/2021

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>Left head</u>
<u>Device Position</u>	<u>Cheek</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>

B. SAR Measurement Results

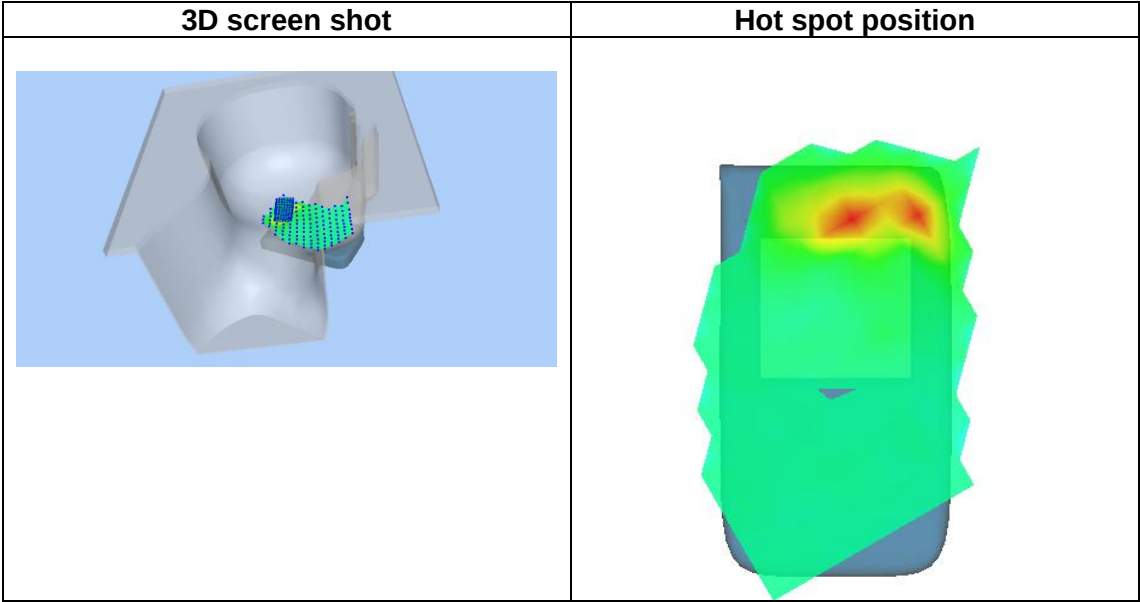
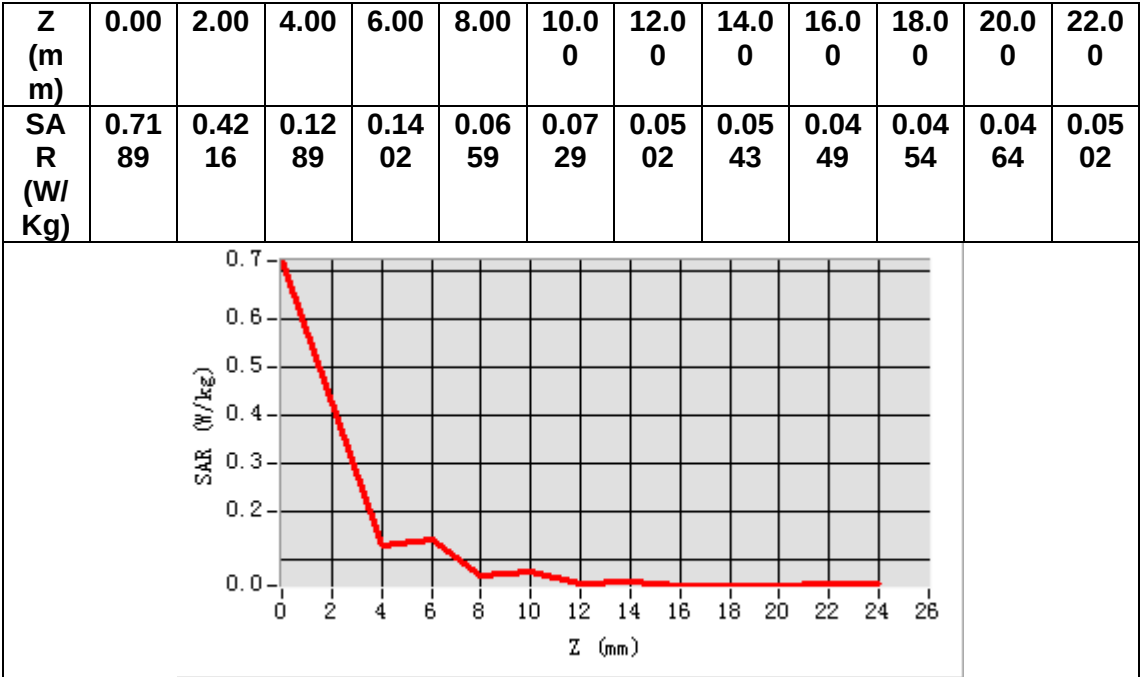
Frequency (MHz)	5600.000000
Relative permittivity (real part)	36.165791
Relative permittivity (imaginary part)	16.472166
Conductivity (S/m)	5.124674
Variation (%)	1.460000



Maximum location: X=5.00, Y=5.00

SAR Peak: 1.06 W/kg

SAR 10g (W/Kg)	0.136960
SAR 1g (W/Kg)	0.368291



MEASUREMENT 16

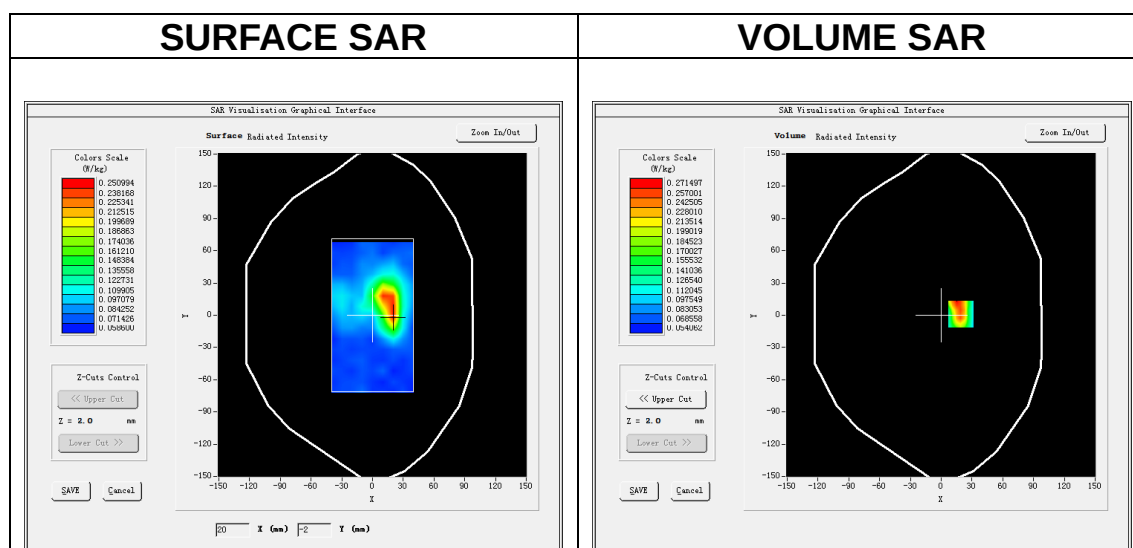
Date of measurement: 16/6/2021

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>

B. SAR Measurement Results

Frequency (MHz)	5600.000000
Relative permittivity (real part)	36.165791
Relative permittivity (imaginary part)	16.472166
Conductivity (S/m)	5.124674
Variation (%)	-1.720000

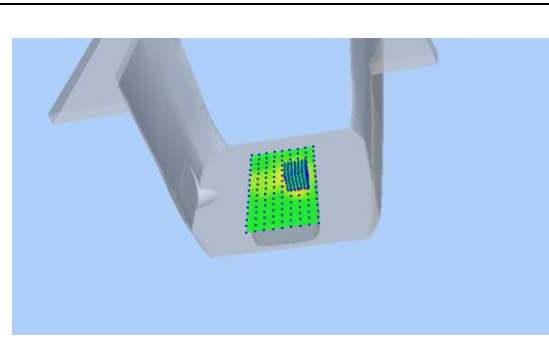
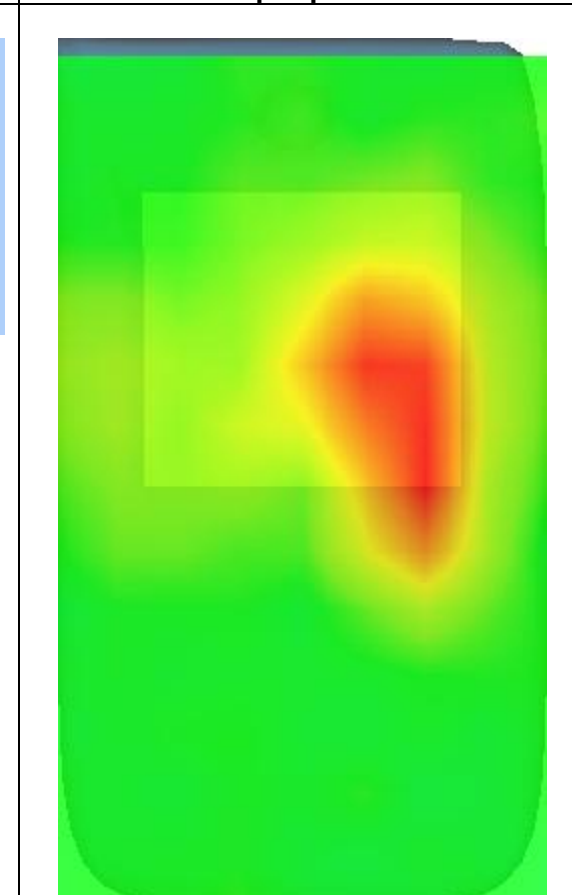


Maximum location: X=19.00, Y=1.00

SAR Peak: 0.42 W/kg

SAR 10g (W/Kg)	0.108592
SAR 1g (W/Kg)	0.181995

Z (mm)	SAR (W/kg)
0	0.41
1	0.30
2	0.26
3	0.20
4	0.13
5	0.13
6	0.13
7	0.12
8	0.10
9	0.08
10	0.07
12	0.07
14	0.07
16	0.06
18	0.06
20	0.06
22	0.06
24	0.06

3D screen shot	Hot spot position
 A 3D perspective view of a robotic arm, specifically the gripper section, rendered in a light blue-grey color. The gripper is positioned to hold a rectangular object. On the top surface of this object, there is a grid of small, colored dots in green, yellow, and blue, representing a sensor array or a data map. The background is a solid light blue.	 A heatmap visualization showing the spatial distribution of a 'hot spot'. The background is a solid green color. A large, irregularly shaped region of high intensity is visible, colored in shades of yellow, orange, and red, indicating the location of the hot spot. This region is centered within a rectangular frame that is slightly offset from the center of the image.

MEASUREMENT 17

Date of measurement: 15/6/2021

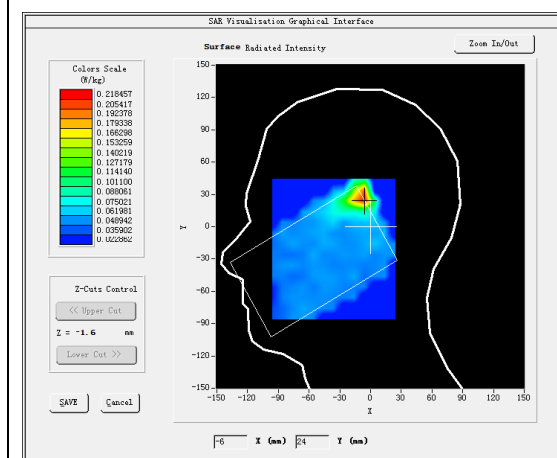
A. Experimental conditions.

<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>Left head</u>
<u>Device Position</u>	<u>Cheek</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>

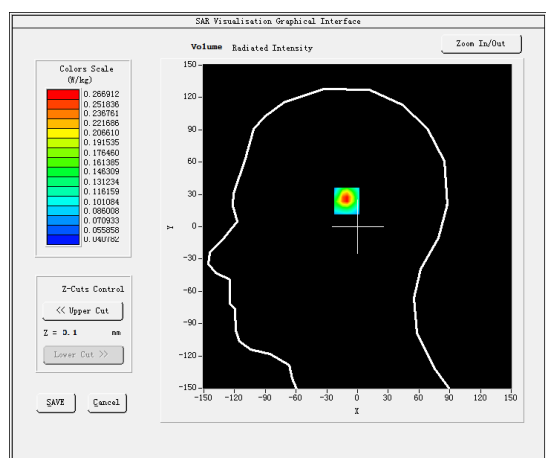
B. SAR Measurement Results

Frequency (MHz)	5785.000000
Relative permittivity (real part)	36.089066
Relative permittivity (imaginary part)	16.223120
Conductivity (S/m)	5.213931
Variation (%)	-0.790000

SURFACE SAR



VOLUME SAR

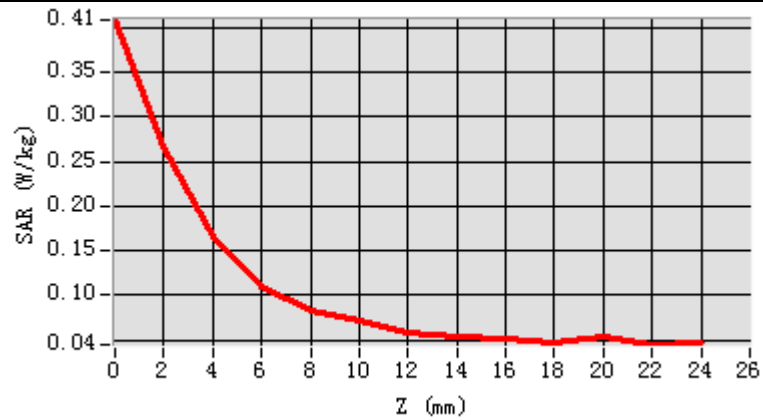


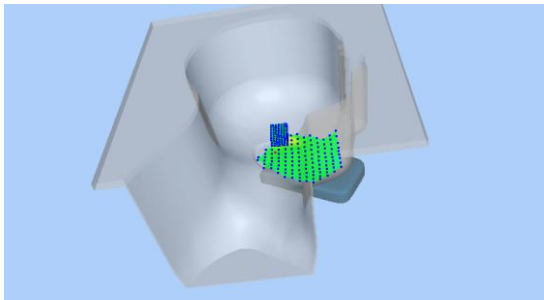
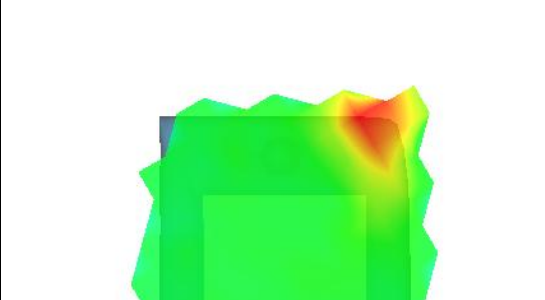
Maximum location: X=-8.00, Y=26.00

SAR Peak: 0.62 W/kg

SAR 10g (W/Kg)	0.111788
SAR 1g (W/Kg)	0.253572

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)	0.40 92	0.26 69	0.16 51	0.10 90	0.08 21	0.07 06	0.05 75	0.05 34	0.05 14	0.04 66	0.05 34	0.04 44



3D screen shot	Hot spot position
 A 3D perspective view of a hand holding a device. A grid of green dots is overlaid on the device's surface, indicating the location of the sensor array. A small blue rectangular area is also visible on the grid.	 A visualization of the hot spot position. It shows a hand model with a green rectangular area representing the sensor field. A red and yellow region in the upper right corner of the green area indicates the location of the hot spot.

MEASUREMENT 18

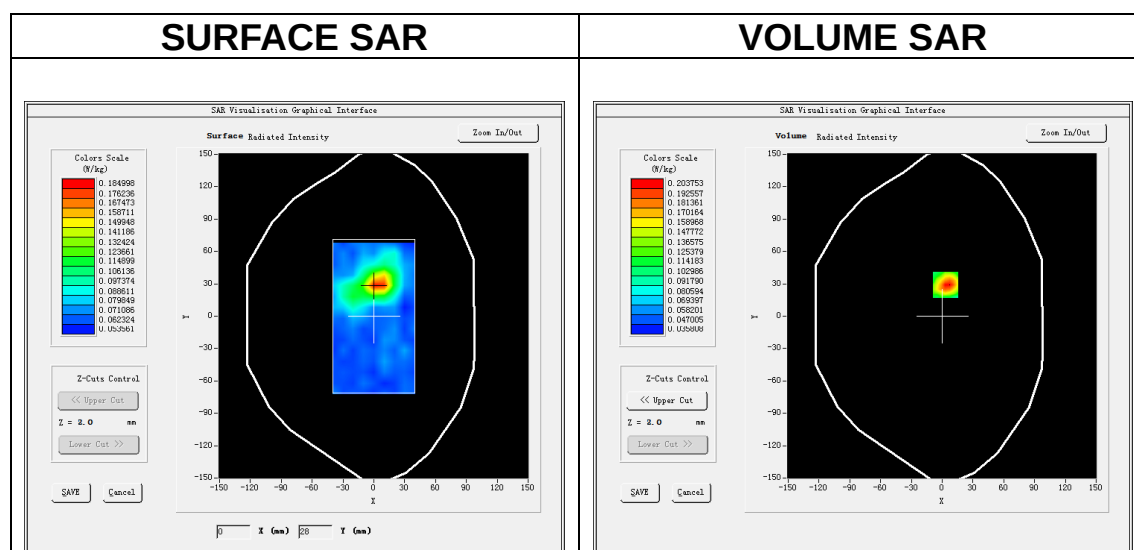
Date of measurement: 15/6/2021

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>

B. SAR Measurement Results

Frequency (MHz)	5785.000000
Relative permittivity (real part)	36.089066
Relative permittivity (imaginary part)	16.223120
Conductivity (S/m)	5.213931
Variation (%)	0.780000

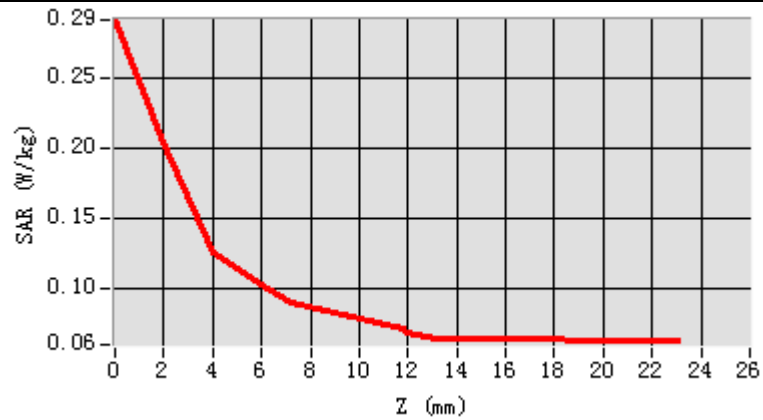


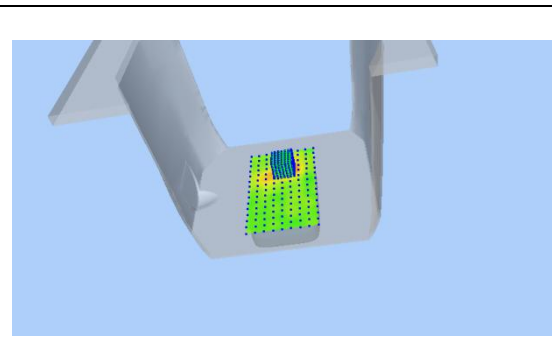
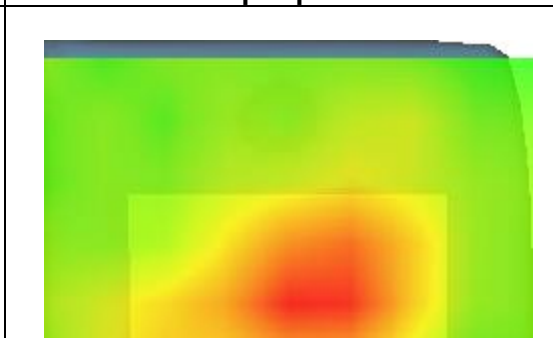
Maximum location: X=3.00, Y=29.00

SAR Peak: 0.31 W/kg

SAR 10g (W/Kg)	0.091815
SAR 1g (W/Kg)	0.140396

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)	0.29 19	0.20 38	0.12 52	0.10 27	0.08 04	0.07 89	0.07 61	0.06 80	0.06 75	0.06 51	0.06 43	0.06 12



3D screen shot	Hot spot position
 A 3D rendering of a robotic arm holding a tray. The tray contains a grid of colored dots (red, yellow, green, blue) arranged in a pattern. The background is a light blue sky.	 A visualization of the hot spot position. It shows a rectangular area with a red and yellow center, indicating the hot spot, surrounded by a green background.

MEASUREMENT 19

Date of measurement: 18/6/2021

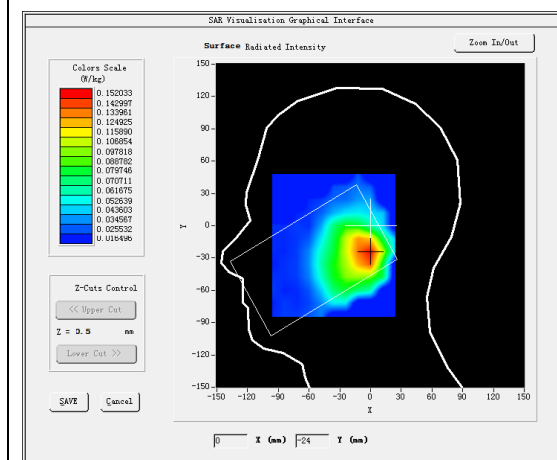
A. Experimental conditions.

<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>Left head</u>
<u>Device Position</u>	<u>Cheek</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>

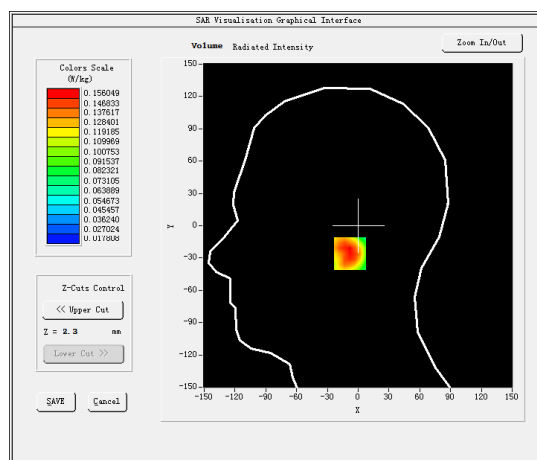
B. SAR Measurement Results

Frequency (MHz)	2437.000000
Relative permittivity (real part)	40.768675
Relative permittivity (imaginary part)	13.589996
Conductivity (S/m)	1.839934
Variation (%)	-1.450000

SURFACE SAR



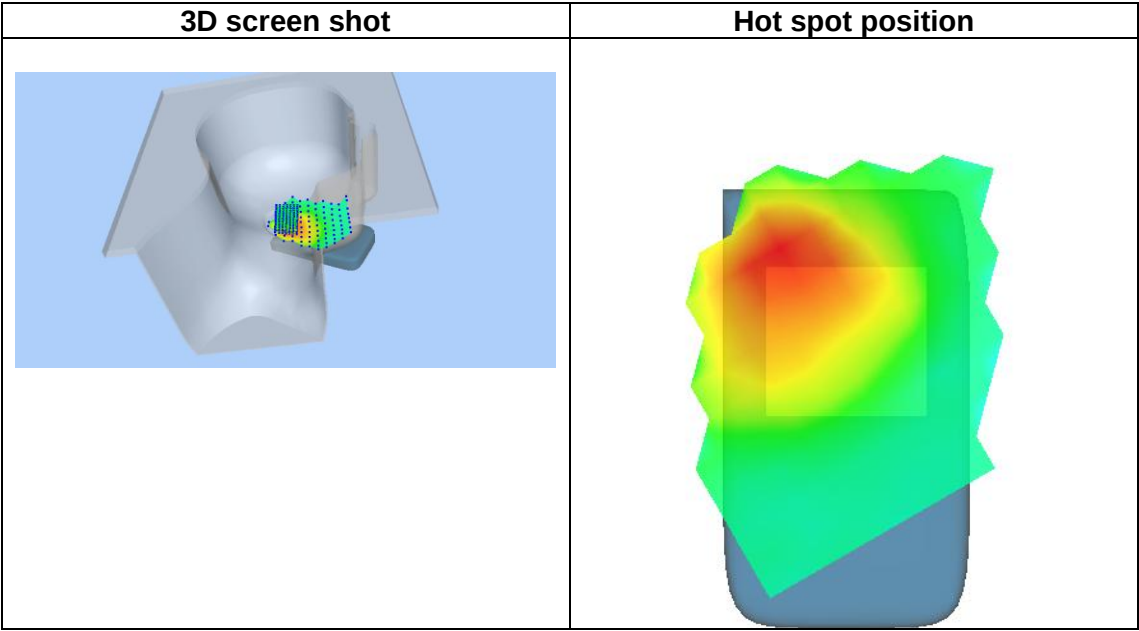
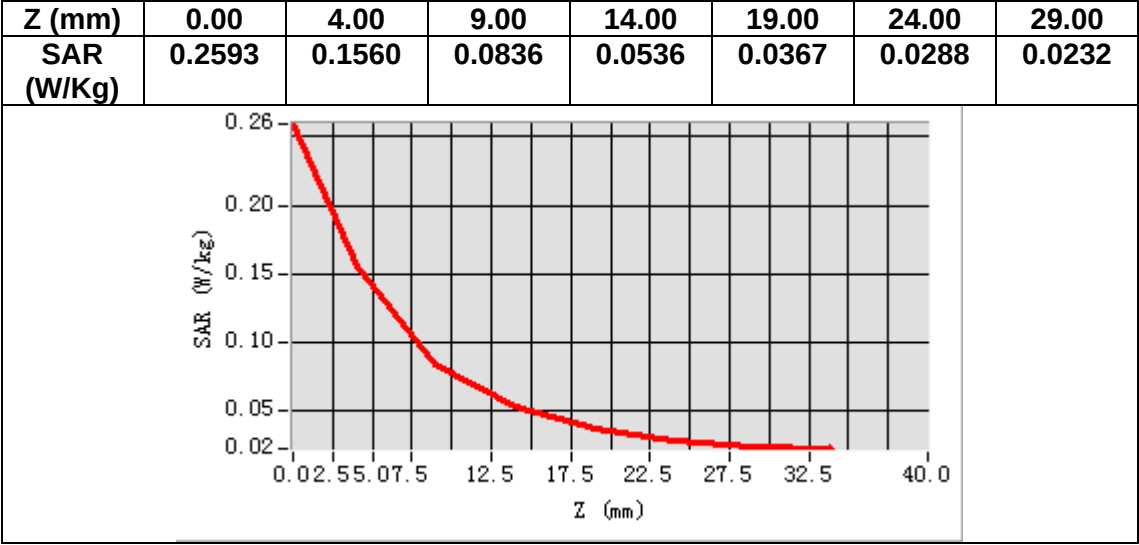
VOLUME SAR



Maximum location: X=-2.00, Y=-26.00

SAR Peak: 0.25 W/kg

SAR 10g (W/Kg)	0.088973
SAR 1g (W/Kg)	0.151256



MEASUREMENT 20

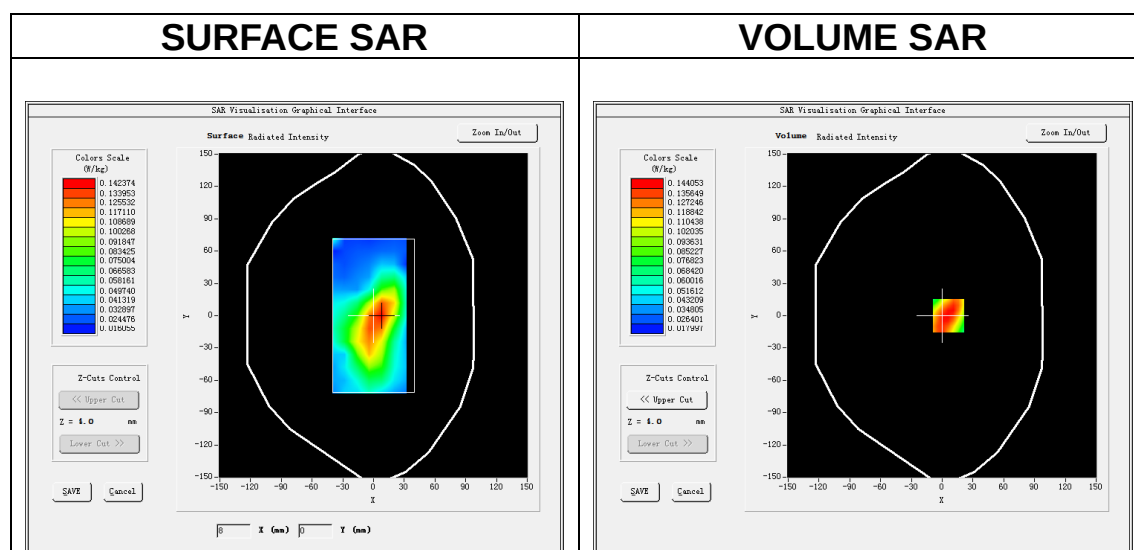
Date of measurement: 18/6/2021

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>

B. SAR Measurement Results

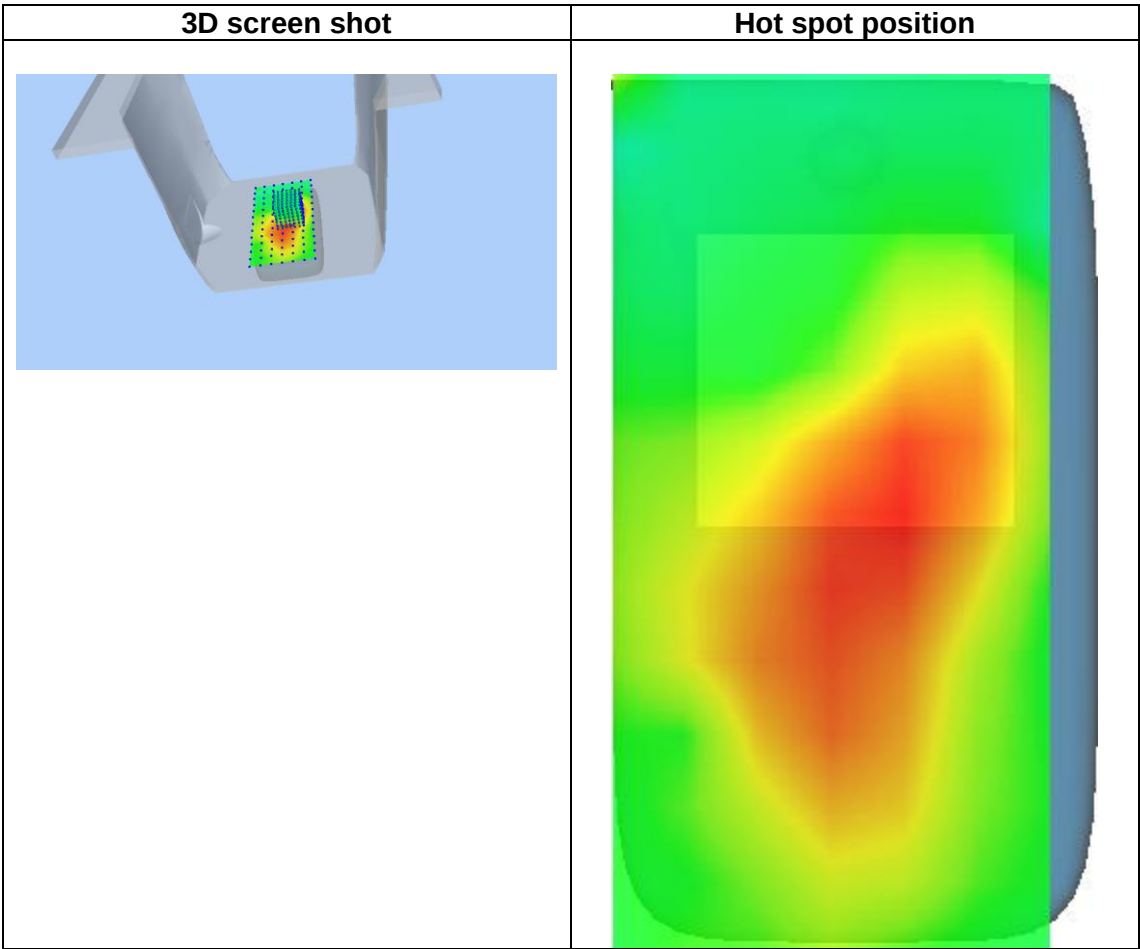
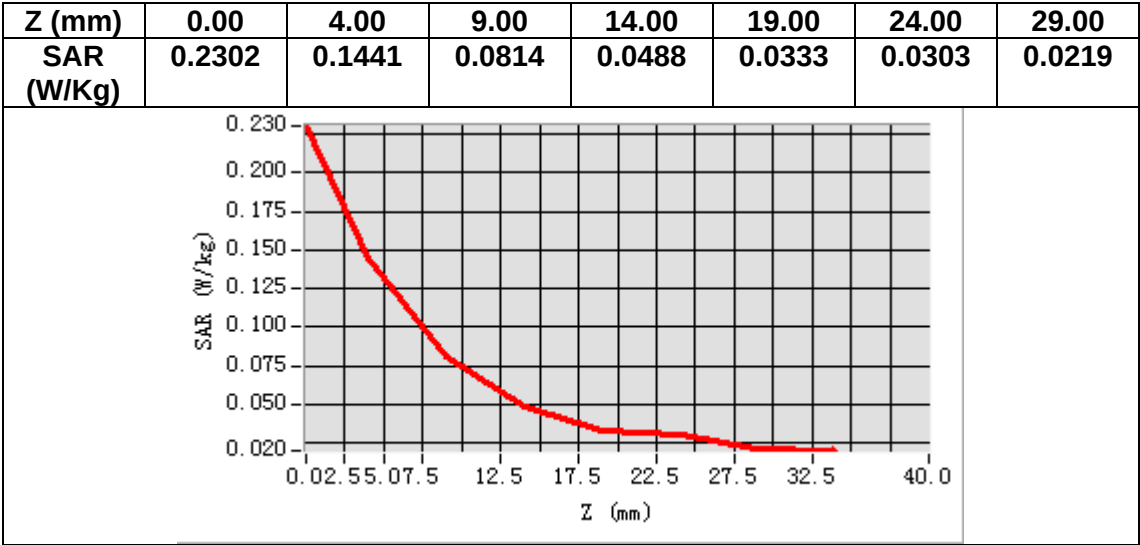
Frequency (MHz)	2437.000000
Relative permittivity (real part)	40.768675
Relative permittivity (imaginary part)	13.589996
Conductivity (S/m)	1.839934
Variation (%)	-0.140000



Maximum location: X=6.00, Y=0.00

SAR Peak: 0.24 W/kg

SAR 10g (W/Kg)	0.083274
SAR 1g (W/Kg)	0.142013



MEASUREMENT 21

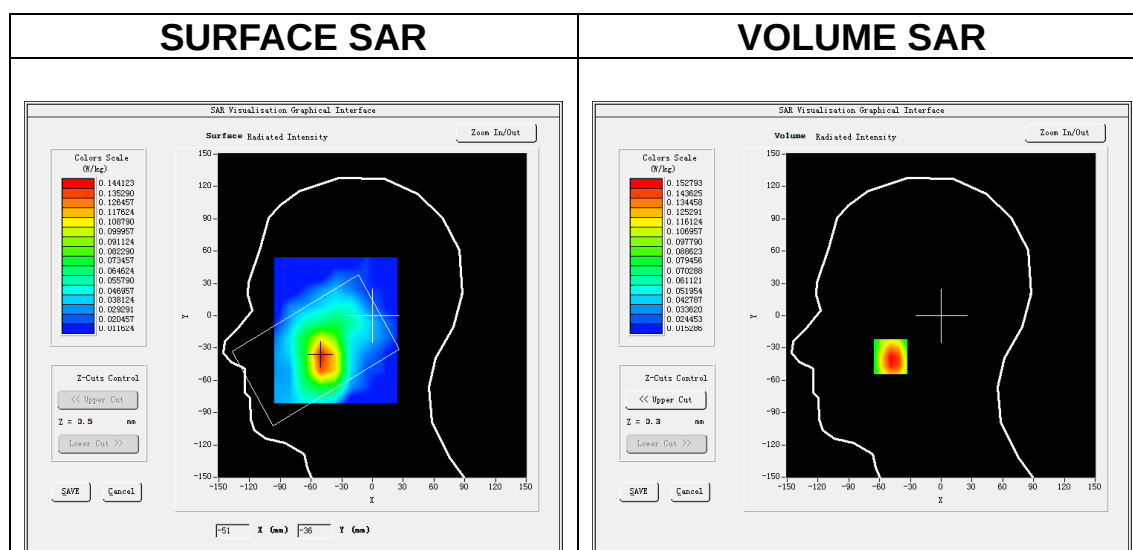
Date of measurement: 16/6/2021

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>Left head</u>
<u>Device Position</u>	<u>Cheek</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>

B. SAR Measurement Results

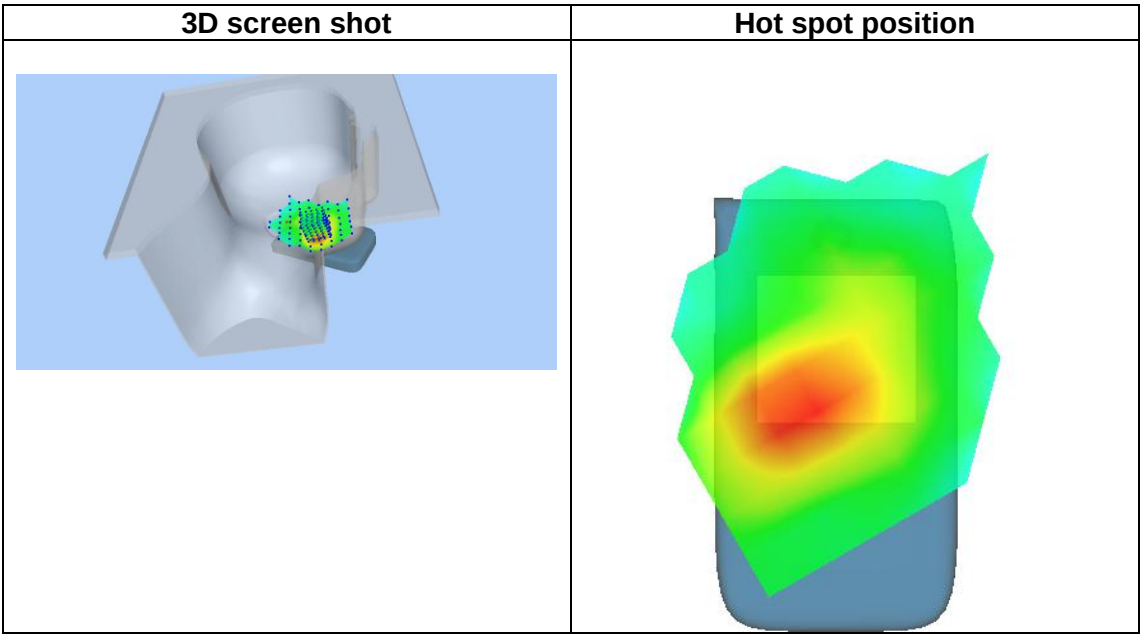
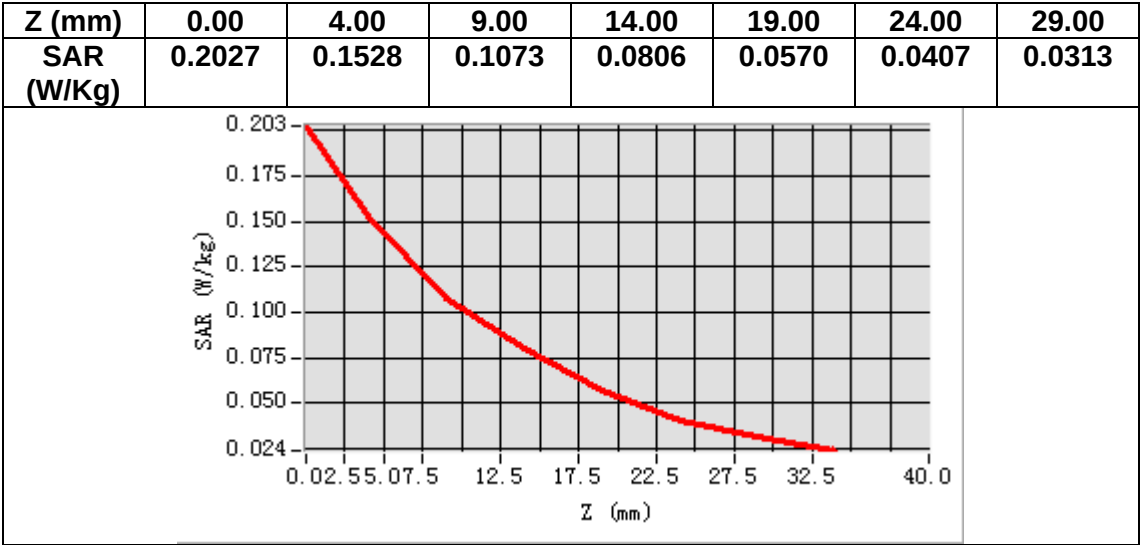
Frequency (MHz)	1880.000000
Relative permittivity (real part)	39.041245
Relative permittivity (imaginary part)	13.961166
Conductivity (S/m)	1.458166
Variation (%)	-3.960000



Maximum location: X=-49.00, Y=-38.00

SAR Peak: 0.21 W/kg

SAR 10g (W/Kg)	0.097440
SAR 1g (W/Kg)	0.153462



MEASUREMENT 22

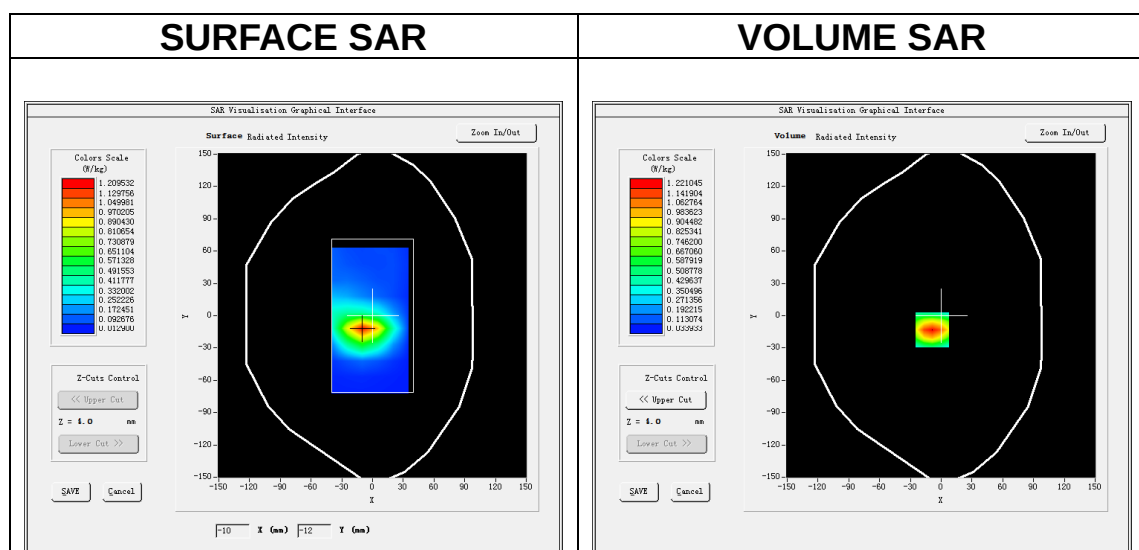
Date of measurement: 16/6/2021

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>High</u>
<u>Signal</u>	<u>LTE (Crest factor: 1.0)</u>

B. SAR Measurement Results

Frequency (MHz)	1900.000000
Relative permittivity (real part)	38.963795
Relative permittivity (imaginary part)	13.948816
Conductivity (S/m)	1.471988
Variation (%)	-0.500000



Maximum location: X=-9.00, Y=-13.00

SAR Peak: 1.79 W/kg

SAR 10g (W/Kg)	0.642107
SAR 1g (W/Kg)	1.184694