

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 : 4G Smart phone

Trademark : CommuniTake

Model Name : CTIP401

Family Model : N/A

Report No. : S19082902501001

FCC ID : 2AUHC-CTIP401

Prepared for

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TEST RESULT CERTIFICATION

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Product description

Product name.....: 4G Smart phone
 Trademark: CommuniTake
 Model Name: CTIP401
 Family Model.....: N/A
 FCC 47 CFR Part 2(2.1093)

Standards.....: ANSI/IEEE C95.1-1992
 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..... : Nov. 01, 2019 ~ Nov. 14, 2019
 Date of Issue : Mar. 16, 2020
 Test Result : **Pass**

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※ ※ Revision History ※ ※

REV.	DESCRIPTION	ISSUED DATE	REMARK
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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 CTIP401 are as follows.

Band	Max Reported SAR Value(W/kg)			Max Simultaneous Tx
	1-g Head	1-g Body-Worn (Separation distance of 10mm)	1-g Hotspot (Separation distance of 10mm)	
GSM 850	0.376	0.396	0.396	1.569
GSM 1900	0.276	0.369	0.369	
WCDMA Band 2	0.938	0.728	0.728	
WCDMA Band 4	0.613	0.380	0.380	
WCDMA Band 5	0.763	0.948	0.948	
LTE Band 2	0.310	0.483	0.483	
LTE Band 4	0.394	0.585	0.585	
LTE Band 5	0.184	0.191	0.191	
LTE Band 7	0.404	0.454	0.454	
LTE Band 12	0.029	0.034	0.034	
LTE Band 13	0.077	0.093	0.093	
LTE Band 25	0.276	0.021	0.021	
LTE Band 26	0.156	0.191	0.191	
LTE Band 41	0.114	0.136	0.136	
WLAN 2.4G	0.428	0.621	0.621	
WLAN 5.2G	0.253	0.194	0.194	
WLAN 5.8G	0.469	0.347	0.347	

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	4G Smart phone
Trade Name	CommuniTake
Model Name	CTIP401
Family Model	N/A
FCC ID	2AUHC-CTIP401
Device Phase	Identical Prototype

Exposure Category	General population / Uncontrolled environment		
Antenna	FPC Antenna		
Battery Information	DC 3.8V, 2950mAh, 11.21Wh		
Device Operating Configurations			
Supporting Mode(s)	GSM 850/1900, WCDMA Band 2/4/5, LTE Band 2/4/5/7/12/13/25/26/41, WLAN 2.4G/5.2G/5.8G, Bluetooth		
Test Modulation	GSM(GMSK/8PSK), WCDMA(QPSK), LTE(QPSK/16QAM), 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 13	777-787	746-756
	LTE Band 25	1850-1915	1930-1995
	LTE Band 26	814-849	859-894
	LTE Band 41	2555-2655	
	WLAN 2.4G	2412-2462	
	WLAN 5.2G	5180-5240	
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 13)
	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 41)
Test Channels (low-mid-high)	128-189-251(GSM 850)
	512-661-810(GSM 1900)
	9262-9400-9538(WCDMA Band 2)
	1312-1413-1513(WCDMA Band 4)
	4132-4182-4233(WCDMA Band 5)
	18607-18900-19193(LTE Band 2 BW=1.4MHz)
	18615-18900-19185(LTE Band 2 BW=3MHz)
	18625-18900-19175(LTE Band 2 BW=5MHz)
	18650-18900-19150(LTE Band 2 BW=10MHz)
	18675-18900-19125(LTE Band 2 BW=15MHz)
	18700-18900-19100(LTE Band 2 BW=20MHz)
	19957-20175-20393(LTE Band 4 BW=1.4MHz)
	19965-20175-20385(LTE Band 4 BW=3MHz)
	19975-20175-20375(LTE Band 4 BW=5MHz)
	20000-20175-20350(LTE Band 4 BW=10MHz)
	20025-20175-20325(LTE Band 4 BW=15MHz)
	20050-20175-20300(LTE Band 4 BW=20MHz)
	20407-20525-20643(LTE Band 5 BW=1.4MHz)
	20415-20525-20635(LTE Band 5 BW=3MHz)
	20425-20525-20625(LTE Band 5 BW=5MHz)
	20450-20525-20600(LTE Band 5 BW=10MHz)
	20775-21100-21425(LTE Band 7 BW=5MHz)
	20800-21100-21400(LTE Band 7 BW=10MHz)
	20825-21100-21375(LTE Band 7 BW=15MHz)
	20850-21100-21350(LTE Band 7 BW=20MHz)
	23017-23095-23173(LTE Band 12 BW=1.4MHz)
	23025-23095-23165(LTE Band 12 BW=3MHz)
	23035-23095-23155(LTE Band 12 BW=5MHz)
	23060-23095-23130(LTE Band 12 BW=10MHz)
	23205-23230-23255(LTE Band 13 BW=5MHz)
23230(LTE Band 13 BW=10MHz)	
26047-26365-26683(LTE Band 25 BW=1.4MHz)	

26055-26365-26675(LTE Band 25 BW=3MHz)
26065-26365-26665(LTE Band 25 BW=5MHz)
26090-26365-26640(LTE Band 25 BW=10MHz)
26115-26365-26615(LTE Band 25 BW=15MHz)
26140-26365-26590(LTE Band 25 BW=20MHz)
26697-26865-27033(LTE Band 26 BW=1.4MHz)
26705-26865-27025(LTE Band 26 BW=3MHz)
26715-26865-27015(LTE Band 26 BW=5MHz)
26740-26865-26990(LTE Band 26 BW=10MHz)
40265-40740-41215(LTE Band 41 BW=5MHz)
40290-40740-41190(LTE Band 41 BW=10MHz)
40315-40740-41165(LTE Band 41 BW=15MHz)
40340-40740-41140(LTE Band 41 BW=20MHz)
1-3-6-9-11(WLAN 2.4G)
36-38-40-42-46-48(WLAN 5.2G)
149-151-155-157-159-165(WLAN 5.8G)

1.4. Test specification(s)

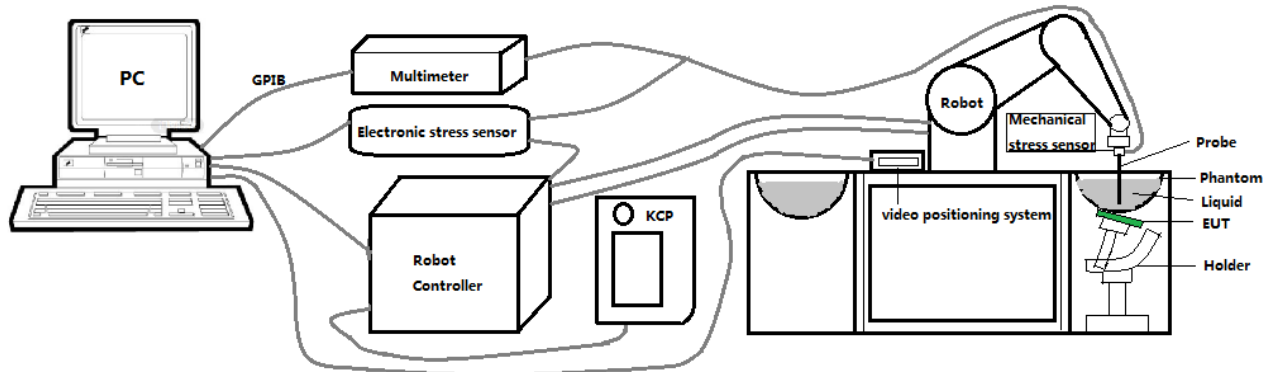
FCC 47 CFR Part 2(2.1093)
ANSI/IEEE C95.1-1992
IEEE Std 1528-2013
KDB 865664 D01 SAR measurement 100 MHz to 6 GHz
KDB 865664 D02 RF Exposure Reporting
KDB 447498 D01 General RF Exposure Guidance
KDB 248227 D01 802.11 Wi-Fi SAR
KDB 941225 D01 3G SAR Procedures
KDB 941225 D05 SAR for LTE Devices
KDB 941225 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 41/18 EPGO330 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: ± 0.10 dB
 - Axial isotropy: 0.06 dB
 - Hemispherical Isotropy: 0.09 dB
 - Calibration range: 650MHz to 5900MHz for head & body simulating liquid.
 - Lower detection limit: 9mW/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

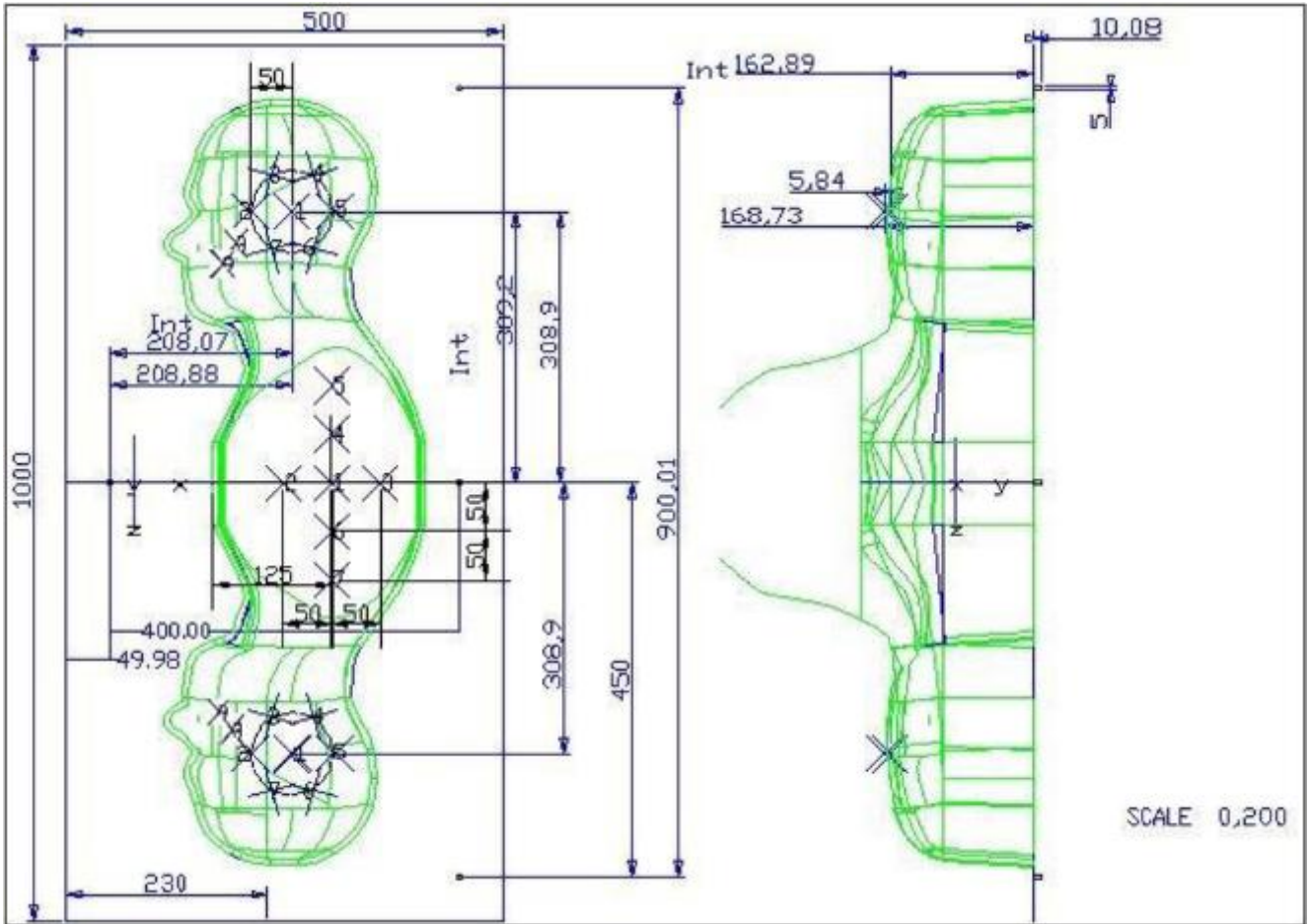
Photo of SAM phantom SN 16/15 SAM119



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 ±0.2 mm	27 liters	Length:1000 mm Width:500 mm Height:200 mm	Gelcoat with fiberglass	3.4	0.02

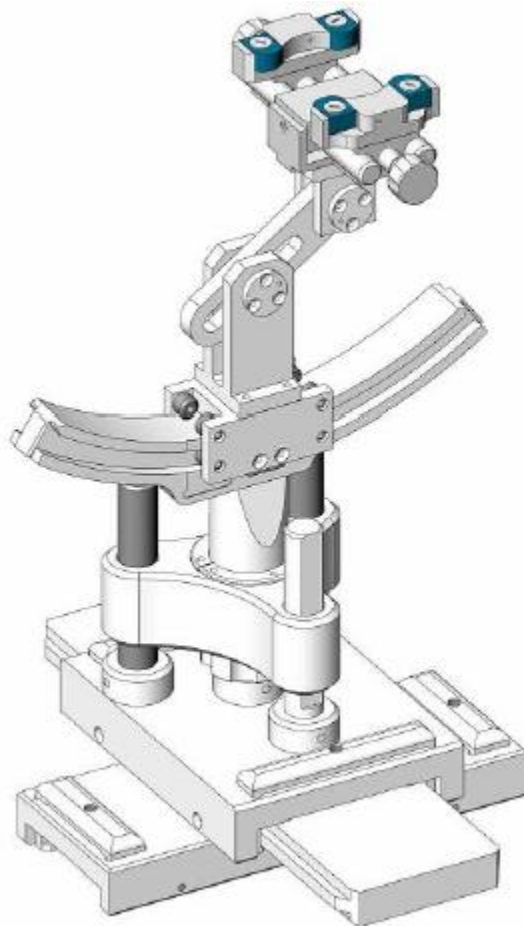


Serial Number	Left Head(mm)		Right Head(mm)		Flat Part(mm)	
	1	2	1	2	1	2
SN 16/15 SAM119	2	2.02	2	2.08	1	2.09
	3	2.05	3	2.06	2	2.06
	4	2.07	4	2.07	3	2.08
	5	2.08	5	2.08	4	2.10
	6	2.05	6	2.07	5	2.10
	7	2.05	7	2.05	6	2.07
	8	2.07	8	2.06	7	2.07
	9	2.08	9	2.06	-	-

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

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
<input checked="" type="checkbox"/>	MVG	E FIELD PROBE	SSE2	SN 41/18 EPGO330	May 21, 2019	May 20, 2020
<input checked="" type="checkbox"/>	MVG	750 MHz Dipole	SID750	SN 03/15 DIP 0G750-355	Apr. 19, 2018	Apr. 18, 2021
<input checked="" type="checkbox"/>	MVG	835 MHz Dipole	SID835	SN 03/15 DIP 0G835-347	Apr. 19, 2018	Apr. 18, 2021
<input type="checkbox"/>	MVG	900 MHz Dipole	SID900	SN 03/15 DIP 0G900-348	Apr. 19, 2018	Apr. 18, 2021
<input checked="" type="checkbox"/>	MVG	1800 MHz Dipole	SID1800	SN 03/15 DIP 1G800-349	Apr. 19, 2018	Apr. 18, 2021
<input checked="" type="checkbox"/>	MVG	1900 MHz Dipole	SID1900	SN 03/15 DIP 1G900-350	Apr. 19, 2018	Apr. 18, 2021
<input type="checkbox"/>	MVG	2000 MHz Dipole	SID2000	SN 03/15 DIP 2G000-351	Apr. 19, 2018	Apr. 18, 2021
<input checked="" type="checkbox"/>	MVG	2450 MHz Dipole	SID2450	SN 03/15 DIP 2G450-352	Apr. 19, 2018	Apr. 18, 2021
<input checked="" type="checkbox"/>	MVG	2600 MHz Dipole	SID2600	SN 03/15 DIP 2G600-356	Apr. 19, 2018	Apr. 18, 2021
<input checked="" type="checkbox"/>	MVG	5000 MHz Dipole	SWG5500	SN 13/14 WGA 33	Apr. 19, 2018	Apr. 18, 2021
<input checked="" type="checkbox"/>	MVG	Liquid measurement Kit	SCLMP	SN 21/15 OCPG 72	NCR	NCR
<input checked="" type="checkbox"/>	MVG	Power Amplifier	N.A	AMPLISAR_28/14_003	NCR	NCR
<input checked="" type="checkbox"/>	KEITHLEY	Millivoltmeter	2000	4072790	NCR	NCR
<input checked="" type="checkbox"/>	R&S	Universal radio communication tester	CMU200	117858	Aug. 06, 2019	Aug. 05, 2020
<input checked="" type="checkbox"/>	R&S	Wideband radio communication tester	CMW500	103917	Aug. 28, 2019	Aug. 27, 2020
<input checked="" type="checkbox"/>	HP	Network Analyzer	8753D	3410J01136	Aug. 06, 2019	Aug. 05, 2020
<input checked="" type="checkbox"/>	Agilent	PSG Analog Signal Generator	E8257D	MY51110112	Aug. 06, 2019	Aug. 05, 2020

<input checked="" type="checkbox"/>	Agilent	Power meter	E4419B	MY45102538	Aug. 06, 2019	Aug. 05, 2020
<input checked="" type="checkbox"/>	Agilent	Power sensor	E9301A	MY41495644	Aug. 06, 2019	Aug. 05, 2020
<input checked="" type="checkbox"/>	Agilent	Power sensor	E9301A	US39212148	Aug. 06, 2019	Aug. 05, 2020
<input checked="" type="checkbox"/>	MCLI/USA	Directional Coupler	CB11-20	0D2L51502	Aug. 06, 2019	Aug. 05, 2020

3. SAR Measurement Procedures

The measurement procedures are as follows:

<Conducted power measurement>

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

<SAR measurement>

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

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

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

3.1. Power Reference

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

3.2. Area scan & Zoom scan

The area scan is a 2D scan to find the hot spot location on the DUT. The zoom scan is a 3D scan above the hot spot to calculate the 1g and 10g SAR value.

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

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

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

		≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface		5 ± 1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location		$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
Maximum area scan spatial resolution: 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
		$\Delta z_{Zoom}(n>1)$: 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 using to determinate this highest local SAR values. The extrapolation is based on a fourth-order least-square polynomial fit of measured data. The local SAR value is then extrapolated from the liquid surface with a 1 mm step.

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

3.4. Volumetric Scan

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

3.5. Power Drift

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

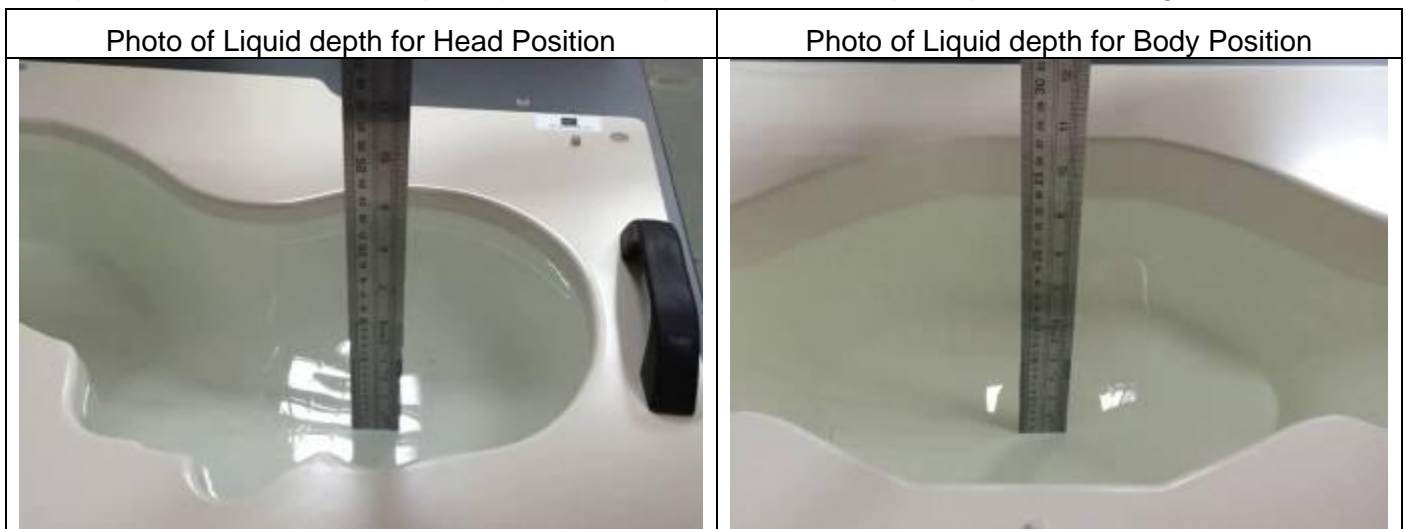
4. System Verification Procedure

4.1. Tissue Verification

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

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

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



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 parameter are within the tolerances of the specified target values. The measured conductivity and relative permittivity should be within $\pm 5\%$ of the target values.

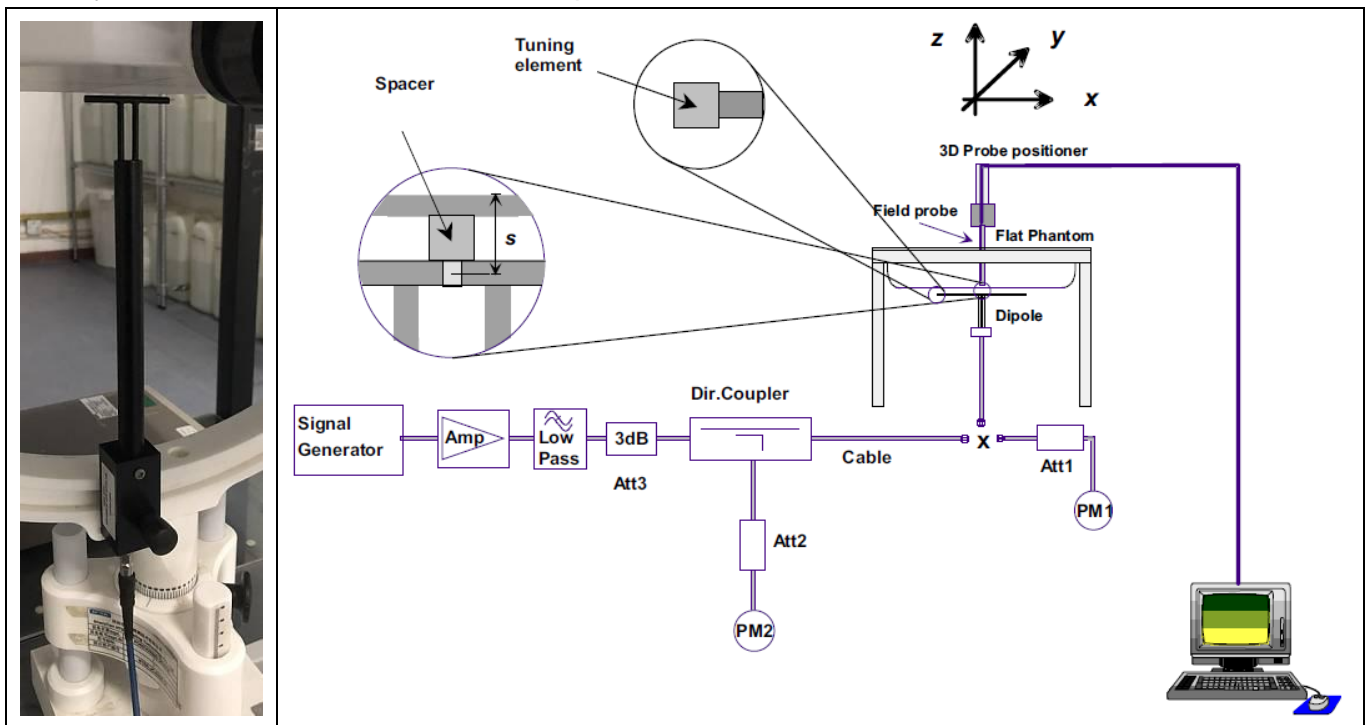
Tissue Type	Measured Frequency (MHz)	Target Tissue		Measured Tissue		Liquid Temp.	Test Date
		ϵ_r ($\pm 5\%$)	σ (S/m) ($\pm 5\%$)	ϵ_r	σ (S/m)		
Head 750	750	41.90 (39.81~43.99)	0.89 (0.85~0.93)	41.18	0.91	21.5°C	Nov. 10, 2019
Body 750	750	55.50 (52.73~58.27)	0.96 (0.91~1.01)	55.25	0.97	21.7°C	Nov. 03, 2019
Head 850	835	41.50 (39.43~43.57)	0.90 (0.86~0.94)	40.50	0.94	21.5°C	Nov. 11, 2019
Body 850	835	55.20 (52.44~57.96)	0.97 (0.92~1.01)	54.23	1.01	21.3°C	Nov. 04, 2019
Head 1800	1800	40.00 (38.00~42.00)	1.40 (1.33~1.47)	38.60	1.40	21.4°C	Nov. 01, 2019
Body 1800	1800	53.30 (50.64~55.96)	1.52 (1.44~1.59)	53.19	1.57	21.6°C	Nov. 05, 2019
Head 1900	1900	40.00 (38.00~42.00)	1.40 (1.33~1.47)	40.93	1.46	21.8°C	Nov. 09, 2019
Body 1900	1900	53.30 (50.64~55.96)	1.52 (1.44~1.59)	52.52	1.58	21.5°C	Nov. 06, 2019
Head 2450	2450	39.20 (37.24~41.16)	1.80 (1.71~1.89)	38.73	1.86	21.4°C	Nov. 08, 2019
Body 2450	2450	52.70 (50.07~55.33)	1.95 (1.85~2.04)	52.04	2.03	21.3°C	Nov. 02, 2019
Head 2600	2600	39.00 (37.05~40.95)	1.96 (1.86~2.05)	38.41	2.01	21.1°C	Nov. 07, 2019
Body 2600	2600	52.50 (49.88~55.13)	2.16 (2.05~2.27)	52.62	2.21	21.3°C	Nov. 12, 2019
Head 5000	5200	36.00 (34.20~37.80)	4.66 (4.43~4.89)	35.74	4.66	21.6 °C	Nov. 13, 2019
Body 5000	5200	49.00 (46.55~51.45)	5.30 (5.04~5.57)	49.57	5.31	21.5 °C	Nov. 14, 2019
Head 5000	5800	35.30 (33.54~37.07)	5.27 (5.01~5.53)	34.65	5.21	21.4 °C	Nov. 13, 2019
Body 5000	5800	48.20 (45.79~50.61)	6.00 (5.70~6.30)	48.26	6.09	21.2 °C	Nov. 14, 2019

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) (±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 Head	8.49 (7.64~9.34)	5.55 (4.99~6.11)	8.50	5.49	21.5°C	Nov. 10, 2019
750MHz Body	8.55 (7.69~9.41)	5.75 (5.17~6.33)	8.84	5.90	21.7°C	Nov. 03, 2019
835MHz Head	9.56 (8.60~10.51)	6.22 (5.60~6.84)	9.61	6.23	21.5°C	Nov. 11, 2019
835MHz Body	9.48 (8.53~10.42)	6.29 (5.66~6.91)	9.80	6.53	21.3°C	Nov. 04, 2019
1800MHz Head	38.40 (34.56~42.24)	20.10 (18.09~22.11)	38.22	20.15	21.4°C	Nov. 01, 2019
1800MHz Body	37.04 (33.34~40.74)	20.26 (18.23~22.29)	38.18	20.49	21.6°C	Nov. 05, 2019
1900MHz Head	39.70 (35.73~43.67)	20.50 (18.45~22.55)	38.77	20.01	21.8°C	Nov. 09, 2019
1900MHz Body	38.43 (34.59~42.27)	20.34 (18.31~22.37)	39.22	20.41	21.5°C	Nov. 06, 2019
2450MHz Head	52.40 (47.16~57.64)	24.00 (21.60~26.40)	53.56	24.05	21.4°C	Nov. 08, 2019
2450MHz Body	49.32 (44.39~54.25)	22.89 (20.60~25.17)	52.77	23.97	21.3°C	Nov. 02, 2019
2600MHz Head	55.30 (49.77~60.83)	24.60 (22.14~27.06)	55.38	24.46	21.1°C	Nov. 07, 2019
2600MHz Body	52.95 (47.66~58.25)	23.64 (21.28~26.00)	52.10	23.59	21.3°C	Nov. 12, 2019
5200MHz Head	159.00 (143.10~174.90)	56.90 (51.21~62.59)	160.84	55.99	21.6 °C	Nov. 13, 2019
5200MHz Body	156.85 (141.17~172.54)	55.20 (49.68~60.72)	156.90	55.19	21.5 °C	Nov. 14, 2019
5800MHz Head	181.20 (163.08~199.32)	61.50 (55.35~67.65)	184.01	62.78	21.4 °C	Nov. 13, 2019
5800MHz Body	169.30 (152.37~186.23)	58.49 (52.64~64.34)	169.27	58.43	21.2 °C	Nov. 14, 2019

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 (~ 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.

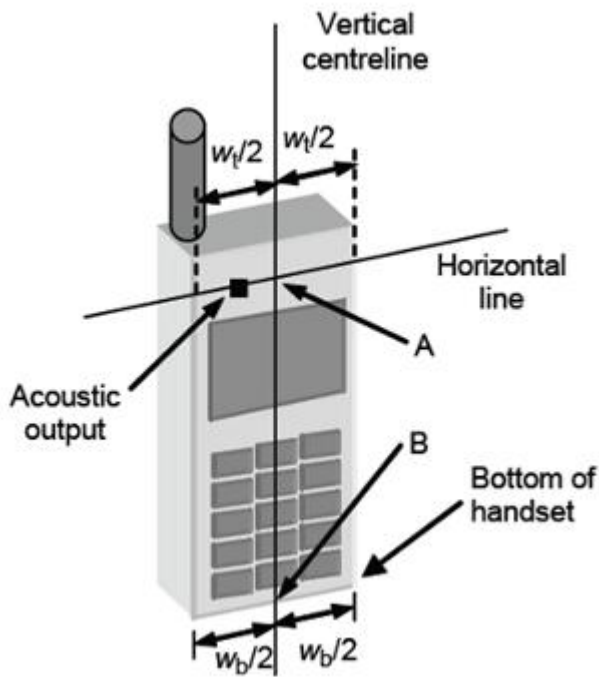


Fig 6.2.1 Handset vertical and horizontal reference lines—“fixed case”

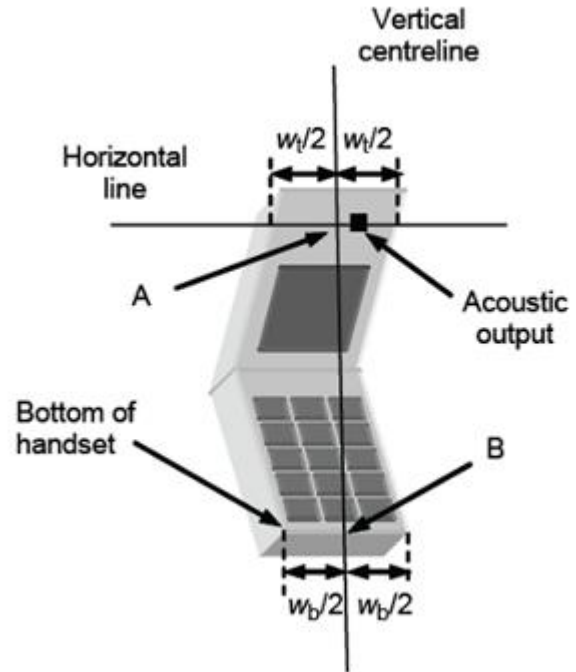


Fig 6.2.2 Handset vertical and horizontal reference lines—“clam-shell case”

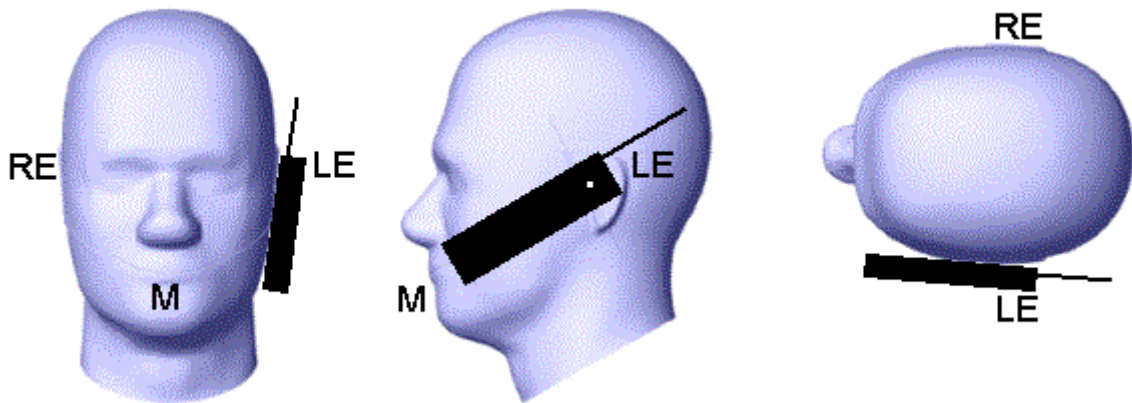


Fig 6.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

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.

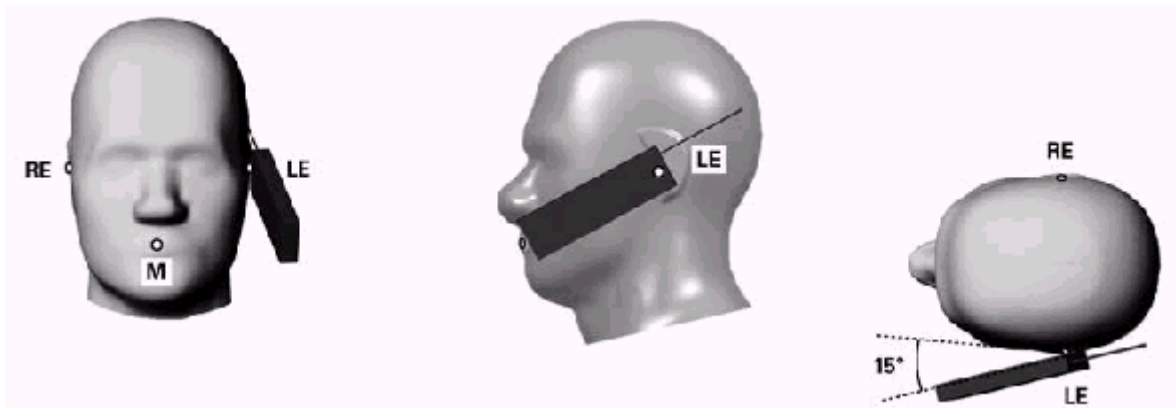


Figure 6.3.1 – Tilt position of the wireless device on the left side of SAM

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 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.

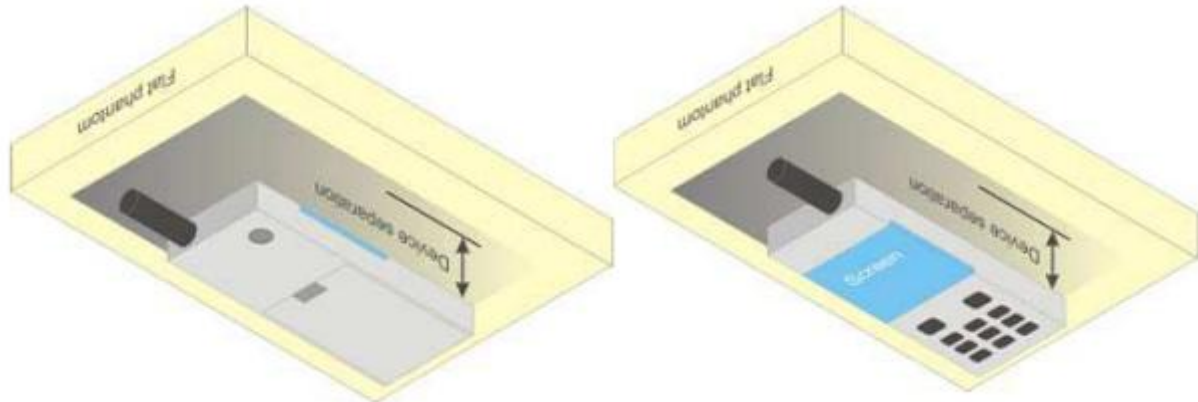


Figure 6.4.1 – Test positions for body-worn devices

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 (dBm)	128	189	251	Tune-up	128	189	251
Frequency (MHz)		824.2	836.4	848.8	(dBm)	824.2	836.4	848.8
GSM (GMSK)	32.00	31.94	31.94	31.77	22.97	22.91	22.91	22.74
GPRS(GMSK, 1 TS)	32.00	31.76	31.87	31.75	22.97	22.73	22.84	22.72
GPRS(GMSK, 2 TS)	32.00	31.03	31.12	31.01	25.98	25.01	25.10	24.99
GPRS(GMSK, 3 TS)	30.00	29.21	29.32	29.22	25.74	24.95	25.06	24.96
GPRS(GMSK, 4 TS)	29.00	28.05	28.16	28.07	25.99	25.04	25.15	25.06
EDGE(GMSK, 1 TS)	27.00	26.58	26.44	26.74	17.97	17.55	17.41	17.71
EDGE(GMSK, 2 TS)	26.00	25.57	25.31	25.59	19.98	19.55	19.29	19.57
EDGE(GMSK, 3 TS)	24.00	23.20	23.35	23.58	19.74	18.94	19.09	19.32
EDGE(GMSK, 4 TS)	23.00	21.87	22.05	22.29	19.99	18.86	19.04	19.28
Band GSM1900		Burst-Averaged output Power (dBm)			Frame-Averaged output Power (dBm)			
Tx Channel	Tune-up (dBm)	512	661	810	Tune-up	512	661	810
Frequency (MHz)		1850.2	1880.0	1909.8	(dBm)	1850.2	1880.0	1909.8
GSM (GMSK)	29.00	28.42	28.31	28.35	19.97	19.39	19.28	19.32
GPRS(GMSK, 1 TS)	29.00	28.44	28.33	28.37	19.97	19.41	19.30	19.34
GPRS(GMSK, 2 TS)	28.00	27.72	27.62	27.65	21.98	21.70	21.60	21.63
GPRS(GMSK, 3 TS)	26.00	25.96	25.89	25.92	21.74	21.70	21.63	21.66
GPRS(GMSK, 4 TS)	25.00	24.87	24.80	24.85	21.99	21.86	21.79	21.84
EDGE(GMSK, 1 TS)	26.00	25.53	25.45	25.04	16.97	16.50	16.42	16.01
EDGE(GMSK, 2 TS)	25.00	24.60	24.65	24.26	18.98	18.58	18.63	18.24
EDGE(GMSK, 3 TS)	23.00	22.50	22.28	21.92	18.74	18.24	18.02	17.66
EDGE(GMSK, 4 TS)	22.00	21.35	21.10	20.68	18.99	18.34	18.09	17.67

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	22.00	21.46	21.47	21.58
HSDPA Subtest-1	21.00	20.55	20.49	20.62
HSDPA Subtest-2	20.00	19.96	19.71	19.99
HSDPA Subtest-3	20.00	19.03	18.92	19.08
HSDPA Subtest-4	20.00	18.75	18.96	19.20
HSUPA Subtest-1	21.00	20.16	20.12	20.22
HSUPA Subtest-2	21.00	20.39	20.38	20.45
HSUPA Subtest-3	20.00	19.19	19.09	19.11
HSUPA Subtest-4	21.00	20.47	20.44	20.60
HSUPA Subtest-5	20.00	19.47	19.53	19.61
Band	WCDMA Band 4			
Tx Channel	Tune-up	1312	1413	1513
Frequency (MHz)		1712.4	1732.6	1752.6
RMC 12.2Kbps	22.00	21.81	21.76	21.80
HSDPA Subtest-1	21.00	20.83	20.80	20.86
HSDPA Subtest-2	21.00	20.13	20.46	20.27
HSDPA Subtest-3	20.00	19.26	19.24	19.13
HSDPA Subtest-4	20.00	19.09	19.05	19.25
HSUPA Subtest-1	21.00	20.19	20.41	20.53
HSUPA Subtest-2	21.00	20.75	20.67	20.61
HSUPA Subtest-3	20.00	19.59	19.60	19.54
HSUPA Subtest-4	21.00	20.85	20.84	20.86
HSUPA Subtest-5	20.00	19.87	19.92	19.88
Band	WCDMA Band 5			
Tx Channel	Tune-up	4132	4182	4233
Frequency (MHz)		826.4	836.4	846.6
RMC 12.2Kbps	23.00	22.26	22.16	22.20
HSDPA Subtest-1	22.00	21.27	21.16	21.21
HSDPA Subtest-2	21.00	20.58	20.81	20.63
HSDPA Subtest-3	20.00	19.72	19.76	19.31
HSDPA Subtest-4	20.00	19.95	19.81	19.67
HSUPA Subtest-1	22.00	21.12	20.74	20.94
HSUPA Subtest-2	22.00	21.19	21.10	21.13
HSUPA Subtest-3	21.00	19.79	20.05	20.02
HSUPA Subtest-4	22.00	21.26	21.18	21.23
HSUPA Subtest-5	21.00	20.34	20.46	20.17

7.3. LTE Conducted Power

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		18607/1850.7	18900/1880	19193/1909.3
LTE Band 2	1.4MHz	QPSK	1	0	23.00	22.08	22.23	22.30
			1	2	23.00	22.24	22.32	22.43
			1	5	23.00	22.11	22.22	22.32
			3	0	23.00	22.21	22.33	22.38
			3	1	23.00	22.18	22.33	22.42
			3	2	23.00	22.15	22.31	22.42
			6	0	22.00	21.12	21.20	21.32
		16QAM	1	0	22.00	20.95	21.43	21.50
			1	2	22.00	21.09	21.45	21.61
			1	5	22.00	20.96	21.39	21.52
			3	0	22.00	21.29	21.48	21.61
			3	1	22.00	21.32	21.44	21.67
			3	2	22.00	21.34	21.46	21.66
			6	0	21.00	20.34	20.46	20.54
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	22.15	22.20	22.35
			1	7	23.00	22.43	22.50	22.65
			1	14	23.00	22.06	22.22	22.35
			8	0	22.00	21.07	21.20	21.35
			8	4	22.00	21.08	21.33	21.37
			8	7	22.00	21.08	21.20	21.29
			15	0	22.00	21.05	21.19	21.31
		16QAM	1	0	22.00	21.49	21.47	21.27
			1	7	22.00	21.76	21.76	21.69
			1	14	22.00	21.53	21.40	21.20
			8	0	21.00	20.22	20.29	20.39
			8	4	21.00	20.20	20.30	20.43
			8	7	21.00	20.17	20.28	20.34
			15	0	21.00	20.16	20.25	20.45
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		

2			1	74	23.00	22.11	22.03	22.22
			36	0	22.00	21.28	21.19	21.23
			36	18	22.00	21.24	21.29	21.32
			36	37	22.00	21.18	21.20	21.23
			75	0	22.00	21.25	21.18	21.25
		16QAM	1	0	23.00	21.22	21.29	21.68
			1	37	23.00	21.60	21.69	22.02
			1	74	23.00	21.27	21.24	21.62
			36	0	21.00	20.36	20.17	20.28
			36	18	21.00	20.32	20.29	20.39
			36	37	21.00	20.33	20.17	20.27
			75	0	21.00	20.27	20.26	20.25
			Band	Band Width	Modulation	RB Configuration		Tune-up
RB Size	RB Offset	18700/1860				18900/1880	19100/1900	
LTE Band 2	20MHz	QPSK	1	0	23.00	21.82	21.98	22.08
			1	49	23.00	22.26	22.34	22.45
			1	99	23.00	21.91	21.98	22.12
			50	0	22.00	21.30	21.00	21.22
			50	24	22.00	21.18	21.22	21.37
			50	49	22.00	21.16	20.94	21.20
			100	0	22.00	21.23	21.01	21.19
		16QAM	1	0	22.00	21.22	21.28	21.34
			1	49	22.00	21.61	21.62	21.71
			1	99	22.00	21.26	21.29	21.34
			50	0	21.00	20.40	20.05	20.33
			50	24	21.00	20.30	20.27	20.48
			50	49	21.00	20.31	20.05	20.32
			100	0	21.00	20.30	20.07	20.31

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	23.00	22.11	22.22	22.13
			1	2	23.00	22.27	22.38	22.29
			1	5	23.00	22.11	22.21	22.14
			3	0	23.00	22.13	22.08	22.15
			3	1	23.00	22.12	22.08	22.18

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		19965/1711.5	20175/1732.5	20385/1753.5
		16QAM	3	2	23.00	22.15	22.06	22.16
			6	0	22.00	21.14	21.18	21.19
			1	0	22.00	20.92	21.06	21.23
			1	2	22.00	21.03	21.18	21.35
			1	5	22.00	20.92	21.06	21.25
			3	0	22.00	21.25	21.10	21.32
			3	1	22.00	21.24	21.09	21.35
			3	2	22.00	21.27	21.08	21.32
			6	0	21.00	20.29	20.23	20.32
LTE Band 4	3MHz	QPSK	1	0	23.00	22.19	22.22	22.21
			1	7	23.00	22.41	22.56	22.60
			1	14	23.00	22.20	22.14	22.22
			8	0	22.00	21.20	21.17	21.23
			8	4	22.00	21.23	21.21	21.27
			8	7	22.00	21.16	21.15	21.25
			15	0	22.00	21.11	21.09	21.17
		16QAM	1	0	22.00	21.00	21.39	21.28
			1	7	22.00	21.27	21.61	21.50
			1	14	22.00	21.03	21.35	21.28
			8	0	21.00	20.19	20.12	20.24
			8	4	21.00	20.22	20.17	20.26
			8	7	21.00	20.17	20.12	20.22
			15	0	21.00	20.24	20.09	20.14
						RB Configuration		Tune-up
RB Size	RB Offset	19975/1712.5				20175/1732.5	20375/1752.5	
LTE Band 4	5MHz	QPSK	1	0	23.00	22.05	22.10	22.11
			1	12	23.00	22.52	22.53	22.45
			1	24	23.00	22.08	22.11	22.15
			12	0	22.00	21.20	21.08	21.17
			12	6	22.00	21.19	21.15	21.26
			12	11	22.00	21.12	21.08	21.18
			25	0	22.00	21.17	21.05	21.15
		16QAM	1	0	22.00	21.31	21.39	21.33
			1	12	22.00	21.72	21.68	21.69

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		20000/1715	20175/1732.5	20350/1750
			1	24	22.00	21.35	21.36	21.35
			12	0	21.00	20.24	20.01	20.17
			12	6	21.00	20.27	20.12	20.20
			12	11	21.00	20.18	20.01	20.12
			25	0	21.00	20.14	20.01	20.25
LTE Band 4	10MHz	QPSK	1	0	23.00	22.15	22.17	22.13
			1	24	23.00	22.37	22.28	22.32
			1	49	23.00	22.21	22.17	22.22
			25	0	22.00	21.23	21.09	21.21
			25	12	22.00	21.16	21.10	21.19
			25	24	22.00	21.21	21.16	21.17
			50	0	22.00	21.16	21.06	21.18
		16QAM	1	0	22.00	20.97	21.40	21.17
			1	24	22.00	21.12	21.50	21.45
			1	49	22.00	20.99	21.31	21.26
			25	0	21.00	20.27	20.10	20.24
			25	12	21.00	20.21	20.12	20.23
			25	24	21.00	20.23	20.17	20.21
			50	0	21.00	20.18	20.07	20.24
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	23.00	22.04	22.17	22.04
			1	37	23.00	22.54	22.57	22.34
			1	74	23.00	22.09	22.06	22.07
			36	0	22.00	21.30	21.29	21.34
			36	18	22.00	21.31	21.29	21.33
			36	37	22.00	21.34	21.34	21.27
			75	0	22.00	21.29	21.30	21.27
		16QAM	1	0	22.00	21.44	21.19	21.10
			1	37	22.00	21.77	21.36	21.47
			1	74	22.00	21.36	21.06	21.04
			36	0	21.00	20.28	20.21	20.20
			36	18	21.00	20.31	20.28	20.21
			36	37	21.00	20.30	20.27	20.18

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		20050/1720	20175/1732.5	20300/1745
			75	0		21.00	20.29	20.20
LTE Band 4	20MHz	QPSK	1	0	23.00	21.91	21.91	21.93
			1	49	23.00	22.30	22.22	22.31
			1	99	23.00	21.97	21.62	21.86
			50	0	22.00	21.21	20.81	21.06
			50	24	22.00	21.20	20.96	21.09
			50	49	22.00	21.17	20.98	21.00
			100	0	22.00	21.16	20.93	20.93
		16QAM	1	0	22.00	21.18	20.82	20.85
			1	49	22.00	21.56	20.94	21.33
			1	99	22.00	21.10	20.66	20.89
			50	0	21.00	20.30	19.72	20.15
			50	24	21.00	20.28	19.90	20.18
			50	49	21.00	20.26	20.05	20.07
			100	0	21.00	20.22	20.03	19.98

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		20407/824.7	20525/836.5	20643/848.3
			1	0		23.00	22.48	22.38
LTE Band 5	1.4MHz	QPSK	1	2	23.00	22.61	22.58	22.44
			1	5	23.00	22.51	22.38	22.29
			3	0	23.00	22.53	22.52	22.39
			3	1	23.00	22.51	22.53	22.45
			3	2	23.00	22.51	22.51	22.34
			6	0	22.00	21.52	21.44	21.35
			16QAM	1	0	22.00	21.33	21.66
		1		2	22.00	21.45	21.76	21.59
		1		5	22.00	21.42	21.61	21.44
		3		0	22.00	21.67	21.73	21.59
		3		1	22.00	21.67	21.78	21.61
		3		2	22.00	21.71	21.75	21.56
		6		0	21.00	20.70	20.64	20.51
		Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)

5			1	49	23.00	22.48	22.36	22.30	
			25	0	22.00	21.54	21.53	21.35	
			25	12	22.00	21.53	21.43	21.36	
			25	24	22.00	21.62	21.30	21.17	
			50	0	22.00	21.57	21.41	21.29	
	16QAM			1	0	22.00	21.87	21.67	21.26
				1	24	22.00	21.98	21.77	21.28
				1	49	22.00	21.93	21.60	21.17
				25	0	21.00	20.58	20.58	20.35
				25	12	21.00	20.56	20.50	20.37
				25	24	21.00	20.73	20.34	20.21
				50	0	21.00	20.65	20.47	20.29

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	22.29	22.40	22.40
			1	12	23.00	22.76	22.82	22.82
			1	24	23.00	22.36	22.35	22.40
			12	0	22.00	21.47	21.52	21.55
			12	6	22.00	21.49	21.55	21.60
			12	11	22.00	21.43	21.43	21.51
		16QAM	1	0	23.00	21.58	21.68	21.86
			1	12	23.00	22.08	21.99	22.10
			1	24	23.00	21.64	21.66	21.74
			12	0	21.00	20.42	20.48	20.53
			12	6	21.00	20.43	20.51	20.56
			12	11	21.00	20.33	20.47	20.50
			25	0	21.00	20.48	20.44	20.51

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	22.36	22.39	22.36
			1	24	23.00	22.51	22.59	22.40
			1	49	23.00	22.40	22.45	22.06
			25	0	22.00	21.53	21.49	21.21
			25	12	22.00	21.48	21.40	21.26

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)					
			RB Size	RB Offset		20825/2507.5	21100/2535	21375/2562.5			
		16QAM	25	24	22.00	21.51	21.45	21.28			
			50	0	22.00	21.50	21.50	21.16			
			1	0	22.00	21.49	21.33	21.43			
			1	24	22.00	21.68	21.34	21.50			
			1	49	22.00	21.65	21.22	21.33			
			25	0	21.00	20.55	20.57	20.06			
			25	12	21.00	20.51	20.41	20.08			
			25	24	21.00	20.48	20.40	20.16			
			50	0	21.00	20.54	20.41	20.12			
			LTE Band 7	15MHz	QPSK	1	0	23.00	22.25	21.91	21.97
1	37	23.00				22.69	22.30	22.33			
1	74	23.00				22.25	21.90	21.97			
36	0	22.00				21.61	21.34	21.07			
36	18	22.00				21.59	21.37	21.12			
36	37	22.00				21.52	21.27	21.18			
75	0	22.00				21.40	21.16	21.18			
16QAM	1	0			22.00	21.07	21.28	21.15			
	1	37			22.00	21.46	21.56	21.45			
	1	74			22.00	21.14	21.25	21.06			
	36	0			21.00	20.00	20.39	20.09			
	36	18			21.00	20.02	20.38	20.16			
	36	37			21.00	20.12	20.16	20.19			
	75	0			21.00	20.08	20.31	20.08			
					QPSK	1	0	23.00	22.15	21.80	21.77
						1	49	23.00	22.56	22.11	22.17
					16QAM	1	99	23.00	22.15	21.76	21.82
						50	0	22.00	21.32	20.95	20.95
50			24	22.00		21.17	21.05	21.13			
50			49	22.00		21.10	20.91	21.17			
100			0	22.00		21.08	20.88	21.09			
1			0	22.00		20.86	21.08	21.04			
1			49	22.00		21.38	21.41	21.44			

			1	99	22.00	20.99	21.06	20.99
			50	0	21.00	20.08	19.97	19.94
			50	24	21.00	20.08	20.06	20.09
			50	49	21.00	20.11	19.94	20.15
			100	0	21.00	20.10	19.92	20.09

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	23.00	22.27	22.11	22.13
			1	2	23.00	22.38	22.20	22.27
			1	5	23.00	22.23	22.09	22.19
			3	0	23.00	22.35	22.25	22.26
			3	1	23.00	22.38	22.23	22.25
			3	2	23.00	22.31	22.24	22.22
		16QAM	6	0	22.00	21.20	21.13	21.19
			1	0	22.00	21.33	21.34	21.02
			1	2	22.00	21.46	21.44	21.19
			1	5	22.00	21.35	21.35	21.02
			3	0	22.00	21.45	21.48	21.39
			3	1	22.00	21.46	21.50	21.41
			3	2	22.00	21.44	21.49	21.40
			6	0	21.00	20.45	20.37	20.35

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	23.00	22.25	22.18	22.14
			1	7	23.00	22.46	22.48	22.69
			1	14	23.00	22.14	22.14	22.22
			8	0	22.00	21.23	21.14	21.22
			8	4	22.00	21.22	21.20	21.23
			8	7	22.00	21.16	21.20	21.21
			15	0	22.00	21.16	21.18	21.19
		16QAM	1	0	22.00	21.62	21.40	21.06
			1	7	22.00	21.95	21.73	21.47
			1	14	22.00	21.65	21.35	21.05
			8	0	21.00	20.33	20.26	20.28
			8	4	21.00	20.35	20.30	20.32

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		23035/701.5	23095/707.5	23155/713.5
			8	7	21.00	20.32	20.31	20.25
			15	0	21.00	20.34	20.22	20.32
LTE Band 12	5MHz	QPSK	1	0	23.00	22.18	22.11	22.02
			1	12	23.00	22.58	22.31	22.49
			1	24	23.00	22.16	22.09	22.11
			12	0	22.00	21.26	21.13	21.32
			12	6	22.00	21.29	21.23	21.24
			12	11	22.00	21.05	21.35	21.10
			25	0	22.00	21.22	21.27	21.23
		16QAM	1	0	23.00	21.65	21.50	21.38
			1	12	23.00	22.07	22.02	21.87
			1	24	23.00	21.75	21.47	21.45
			12	0	21.00	20.38	20.18	20.43
			12	6	21.00	20.41	20.26	20.36
			12	11	21.00	20.17	20.34	20.22
			25	0	21.00	20.25	20.33	20.31
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	23.00	22.20	22.10	22.15
			1	24	23.00	22.32	22.32	22.26
			1	49	23.00	22.13	22.09	22.19
			25	0	22.00	21.54	21.20	20.98
			25	12	22.00	21.27	21.24	21.18
			25	24	22.00	21.43	21.40	20.86
			50	0	22.00	21.43	21.36	20.93
		16QAM	1	0	22.00	21.58	21.38	21.06
			1	24	22.00	21.74	21.50	21.15
			1	49	22.00	21.61	21.31	21.08
			25	0	21.00	20.62	20.30	20.06
			25	12	21.00	20.42	20.31	20.26
			25	24	21.00	20.54	20.49	19.97
			50	0	21.00	20.56	20.47	20.02

Band	Band	Modulation	RB	Tune-up	Channel/Frequency(MHz)
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	Width	Configuration	RB		Tune-up	Channel/Frequency(MHz)		
			Size	Offset		23205/779.5	23230/782	23255/784.5
LTE Band 13	5MHz	QPSK	1	0	23.00	22.34	22.34	22.40
			1	12	23.00	22.87	22.71	22.73
			1	24	23.00	22.39	22.35	22.46
			12	0	22.00	21.52	21.46	21.50
			12	6	22.00	21.57	21.54	21.51
			12	11	22.00	21.52	21.51	21.49
		16QAM	25	0	22.00	21.53	21.51	21.51
			1	0	23.00	21.76	21.70	21.89
			1	12	23.00	22.06	21.98	22.16
			1	24	23.00	21.71	21.67	21.89
			12	0	21.00	20.44	20.52	20.46
			12	6	21.00	20.53	20.58	20.56
			12	11	21.00	20.46	20.52	20.56
			25	0	21.00	20.58	20.45	20.28

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		23230/782		
LTE Band 13	10MHz	QPSK	1	0	23.00	22.50		
			1	24	23.00	22.62		
			1	49	23.00	22.49		
			25	0	22.00	21.53		
			25	12	22.00	21.51		
			25	24	22.00	21.58		
			50	0	22.00	21.55		
		16QAM	1	0	22.00	21.91		
			1	24	22.00	21.96		
			1	49	22.00	21.90		
			25	0	21.00	20.57		
			25	12	21.00	20.54		
			25	24	21.00	20.58		
			50	0	21.00	20.54		

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	23.00	22.49	22.50	22.69
			1	2	23.00	22.65	22.70	22.82
			1	5	23.00	22.48	22.53	22.71
			3	0	23.00	22.57	22.65	22.68
			3	1	23.00	22.58	22.60	22.65
			3	2	23.00	22.56	22.59	22.63
			6	0	22.00	21.43	21.56	21.75
		16QAM	1	0	22.00	21.62	21.73	21.44
			1	2	22.00	21.75	21.84	21.55
			1	5	22.00	21.55	21.73	21.41
			3	0	22.00	21.67	21.85	21.76
			3	1	22.00	21.72	21.86	21.76
			3	2	22.00	21.67	21.87	21.73
			6	0	21.00	20.66	20.76	20.84
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	22.53	22.55	22.75
			1	7	23.00	22.80	22.78	22.92
			1	14	23.00	22.46	22.55	22.76
			8	0	22.00	21.48	21.60	21.77
			8	4	22.00	21.51	21.62	21.78
			8	7	22.00	21.46	21.58	21.76
			15	0	22.00	21.47	21.55	21.75
		16QAM	1	0	23.00	21.92	21.77	21.58
			1	7	23.00	22.19	22.03	21.68
			1	14	23.00	21.88	21.77	21.44
			8	0	21.00	20.57	20.66	20.74
			8	4	21.00	20.57	20.69	20.73
			8	7	21.00	20.56	20.60	20.72
			15	0	21.00	20.56	20.57	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	22.42	22.47	22.67
			1	12	23.00	22.91	22.88	23.00
			1	24	23.00	22.38	22.49	22.66
			12	0	22.00	21.52	21.62	21.71

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26090/1855	26365/1882.5	26640/1910
		16QAM	12	6	22.00	21.50	21.67	21.79
			12	11	22.00	21.40	21.55	21.80
			25	0	22.00	21.48	21.60	21.76
			1	0	23.00	21.73	21.77	22.13
			1	12	23.00	22.12	22.18	22.51
			1	24	23.00	21.70	21.86	21.96
			12	0	21.00	20.50	20.71	20.64
			12	6	21.00	20.48	20.73	20.67
			12	11	21.00	20.43	20.62	20.71
			25	0	21.00	20.58	20.61	20.56
LTE Band 25	10MHz	QPSK	1	0	23.00	22.52	22.57	22.69
			1	24	23.00	22.61	22.67	22.87
			1	49	23.00	22.56	22.61	22.68
			25	0	22.00	21.66	21.67	22.00
			25	12	22.00	21.49	21.61	21.79
			25	24	22.00	21.47	21.50	21.86
		16QAM	50	0	22.00	21.50	21.59	21.98
			1	0	23.00	21.36	21.98	21.85
			1	24	23.00	21.46	22.07	21.81
			1	49	23.00	21.39	22.03	21.46
			25	0	21.00	20.71	20.73	20.83
			25	12	21.00	20.57	20.71	20.76
			25	24	21.00	20.52	20.60	20.77
			50	0	21.00	20.51	20.65	20.71
		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	22.46	22.39	22.61
			1	37	23.00	22.77	22.74	23.00
			1	74	23.00	22.50	22.42	22.42
			36	0	22.00	21.69	21.68	21.77
			36	18	22.00	21.63	21.72	21.77
			36	37	22.00	21.62	21.60	21.59
			75	0	22.00	21.66	21.67	21.25
		16QAM	1	0	23.00	21.62	21.65	21.65

			1	37	23.00	21.94	22.00	22.07
			1	74	23.00	21.67	21.59	21.48
			36	0	21.00	20.68	20.63	20.70
			36	18	21.00	20.55	20.70	20.73
			36	37	21.00	20.59	20.57	20.40
			75	0	21.00	20.54	20.70	20.32
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26140/1860	26365/1882.5	26590/1905
LTE Band 25	20MHz	QPSK	1	0	23.00	22.27	21.97	22.03
			1	49	23.00	22.63	22.65	22.56
			1	99	23.00	22.28	22.04	22.01
			50	0	22.00	21.66	21.42	21.05
			50	24	22.00	21.62	21.59	21.53
			50	49	22.00	21.60	21.07	20.89
			100	0	22.00	21.51	21.34	20.93
		16QAM	1	0	22.00	21.26	21.24	21.26
			1	49	22.00	21.73	21.72	21.66
			1	99	22.00	21.24	21.27	21.15
			50	0	21.00	20.26	20.46	20.08
			50	24	21.00	20.36	20.72	20.47
			50	49	21.00	20.35	20.19	20.07
			100	0	21.00	20.20	20.53	19.99

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26697/814.7	26865/831.5	27033/848.3
LTE Band 26	1.4MHz	QPSK	1	0	23.00	22.46	22.38	22.37
			1	2	23.00	22.66	22.54	22.49
			1	5	23.00	22.42	22.37	22.40
			3	0	23.00	22.52	22.51	22.34
			3	1	23.00	22.58	22.54	22.37
			3	2	23.00	22.52	22.52	22.32
			6	0	22.00	21.41	21.44	21.42
		16QAM	1	0	22.00	21.59	21.61	21.19
			1	2	22.00	21.69	21.74	21.32
			1	5	22.00	21.56	21.60	21.13
			3	0	22.00	21.70	21.75	21.50

			3	1	22.00	21.67	21.76	21.51
			3	2	22.00	21.67	21.76	21.51
			6	0	21.00	20.61	20.61	20.59
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26705/815.5	26865/831.5	27025/847.5
LTE Band 26	3MHz	QPSK	1	0	23.00	22.44	22.46	22.35
			1	7	23.00	22.62	22.74	22.69
			1	14	23.00	22.37	22.45	22.45
			8	0	22.00	21.44	21.48	21.47
			8	4	22.00	21.46	21.56	21.47
			8	7	22.00	21.49	21.55	21.34
			15	0	22.00	21.42	21.53	21.40
		16QAM	1	0	23.00	21.91	21.64	21.29
			1	7	23.00	22.20	21.97	21.81
			1	14	23.00	21.87	21.67	21.19
			8	0	21.00	20.51	20.53	20.47
			8	4	21.00	20.54	20.59	20.45
			8	7	21.00	20.54	20.54	20.39
			15	0	21.00	20.48	20.54	20.50
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		26715/816.5	26865/831.5	27015/846.5
LTE Band 26	5MHz	QPSK	1	0	23.00	22.34	22.43	22.33
			1	12	23.00	22.82	22.88	22.72
			1	24	23.00	22.36	22.40	22.33
			12	0	22.00	21.41	21.43	21.37
			12	6	22.00	21.54	21.57	21.43
			12	11	22.00	21.42	21.52	21.16
			25	0	22.00	21.48	21.53	21.30
		16QAM	1	0	23.00	21.70	21.91	21.53
			1	12	23.00	22.15	22.25	22.00
			1	24	23.00	21.76	21.98	21.56
			12	0	21.00	20.46	20.48	20.31
			12	6	21.00	20.58	20.60	20.39
			12	11	21.00	20.46	20.58	20.08
			25	0	21.00	20.46	20.52	20.32
Band	Band	Modulation	RB		Tune-up	Channel/Frequency(MHz)		

LTE Band 41	5MHz	QPSK	1	0	23.00	22.16	22.32	22.51
			1	12	23.00	22.35	22.54	22.83
			1	24	23.00	22.14	22.31	22.51
			12	0	22.00	21.15	21.39	21.52
			12	6	22.00	21.19	21.41	21.54
			12	11	22.00	21.17	21.37	21.44
			25	0	22.00	21.16	21.37	21.48
		16QAM	1	0	22.00	21.71	21.61	21.62
			1	12	22.00	21.90	21.83	21.84
			1	24	22.00	21.72	21.62	21.61
			12	0	21.00	20.17	20.33	20.52
			12	6	21.00	20.21	20.39	20.54
			12	11	21.00	20.19	20.31	20.46
			25	0	21.00	20.18	20.42	20.46
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		40290/2560	40740/2605	41190/2650
LTE Band 41	10MHz	QPSK	1	0	23.00	22.26	22.40	22.55
			1	24	23.00	22.33	22.52	22.65
			1	49	23.00	22.26	22.43	22.59
			25	0	22.00	21.20	21.48	21.55
			25	12	22.00	21.22	21.43	21.55
			25	24	22.00	21.31	21.46	21.48
			50	0	22.00	21.25	21.46	21.50
		16QAM	1	0	22.00	21.69	21.59	21.43
			1	24	22.00	21.77	21.67	21.50
			1	49	22.00	21.69	21.61	21.44
			25	0	21.00	20.24	20.47	20.58
			25	12	21.00	20.26	20.45	20.53
			25	24	21.00	20.31	20.47	20.51
			50	0	21.00	20.25	20.50	20.50
Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		40315/2562.5	40740/2605	41165/2647.5
LTE Band 41	15MHz	QPSK	1	0	23.00	22.15	22.34	22.44
			1	37	23.00	22.41	22.61	22.75
			1	74	23.00	22.18	22.34	22.45
			36	0	22.00	21.23	21.44	21.69

Band	Band Width	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		
			RB Size	RB Offset		40340/2565.0	40740/2605	41140/2645
		16QAM	36	18	22.00	21.25	21.43	21.69
			36	37	22.00	21.28	21.46	21.68
			75	0	22.00	21.27	21.47	21.75
			1	0	22.00	21.60	21.49	21.63
			1	37	22.00	21.86	21.77	21.84
			1	74	22.00	21.65	21.54	21.57
			36	0	21.00	20.22	20.48	20.55
			36	18	21.00	20.27	20.48	20.54
			36	37	21.00	20.31	20.50	20.50
			75	0	21.00	20.24	20.43	20.65
LTE Band 41	20MHz	QPSK	1	0	23.00	21.97	22.09	22.33
			1	49	23.00	22.35	22.47	22.71
			1	99	23.00	22.05	22.15	22.41
			50	0	22.00	21.15	21.40	21.48
			50	24	22.00	21.24	21.40	21.50
			50	49	22.00	21.28	21.43	21.42
			100	0	22.00	21.22	21.42	21.45
		16QAM	1	0	22.00	21.23	21.39	21.43
			1	49	22.00	21.60	21.78	21.68
			1	99	22.00	21.33	21.48	21.36
			50	0	21.00	20.25	20.41	20.56
			50	24	21.00	20.29	20.42	20.57
			50	49	21.00	20.34	20.45	20.47
			100	0	21.00	20.26	20.47	20.50

7.4. WLAN & Bluetooth Output Power

7.4.1. Output Power Results Of WLAN

Mode	Channel	Frequency (MHz)	Tune-up	Output Power (dBm)
802.11b	1	2412	17.00	16.64
	6	2437	17.00	16.87
	11	2462	17.00	16.85
802.11g	1	2412	17.00	16.24
	6	2437	17.00	16.47
	11	2462	17.00	16.38

802.11n HT20	1	2412	17.00	16.11
	6	2437	17.00	16.25
	11	2462	17.00	16.45
802.11n HT40	3	2422	17.00	16.52
	6	2437	17.00	16.62
	9	2452	17.00	16.64

NOTE: Power measurement results of WLAN 2.4G.

Mode	Channel	Frequency (MHz)	Tune-up	Output Power (dBm)
802.11a	36	5180	11.00	9.76
	40	5200	12.00	11.34
	48	5240	12.00	11.03
802.11n HT20	36	5180	11.00	9.47
	40	5200	12.00	11.17
	48	5240	12.00	10.99
802.11n HT40	38	5190	11.00	9.75
	46	5230	12.00	11.38
802.11ac VHT20	36	5180	11.00	9.53
	40	5200	12.00	11.21
	48	5240	12.00	11.12
802.11ac VHT40	38	5190	11.00	10.18
	46	5230	12.00	11.41
802.11ac VHT80	42	5210	11.00	10.97

NOTE: Power measurement results of WLAN 5.2G.

Mode	Channel	Frequency (MHz)	Tune-up	Output Power (dBm)
802.11a	149	5745	11.00	10.86
	157	5785	11.00	10.53
	165	5825	11.00	9.33
802.11n HT20	149	5745	11.00	10.79
	157	5785	11.00	10.52
	165	5825	11.00	9.11
802.11n HT40	151	5755	11.00	10.43
	159	5795	11.00	10.68
802.11ac VHT20	149	5745	11.00	10.51
	157	5785	11.00	10.52
	165	5825	11.00	9.12
802.11ac VHT40	151	5755	11.00	10.49
	159	5795	11.00	10.70
802.11ac	155	5775	11.00	10.20

VHT80				
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NOTE: Power measurement results of WLAN 5.8G.

7.4.2. Output Power Results Of Bluetooth

BR+EDR	Output Power (dBm)				
	Channel	Tune-up	Data Rates		
			1M	2M	3M
0CH	7.00	6.85	5.67	5.59	
39CH	6.00	5.49	5.04	4.93	
78CH	7.00	6.12	6.36	6.69	

BLE	Channel	Tune-up	Output Power (dBm)
	0CH	0.000	-1.618
	19CH	0.000	-0.517
	39CH	0.000	-1.734

8. Antenna Location

Right Side

154mm

145mm

143mm

165mm

10mm

Top Side

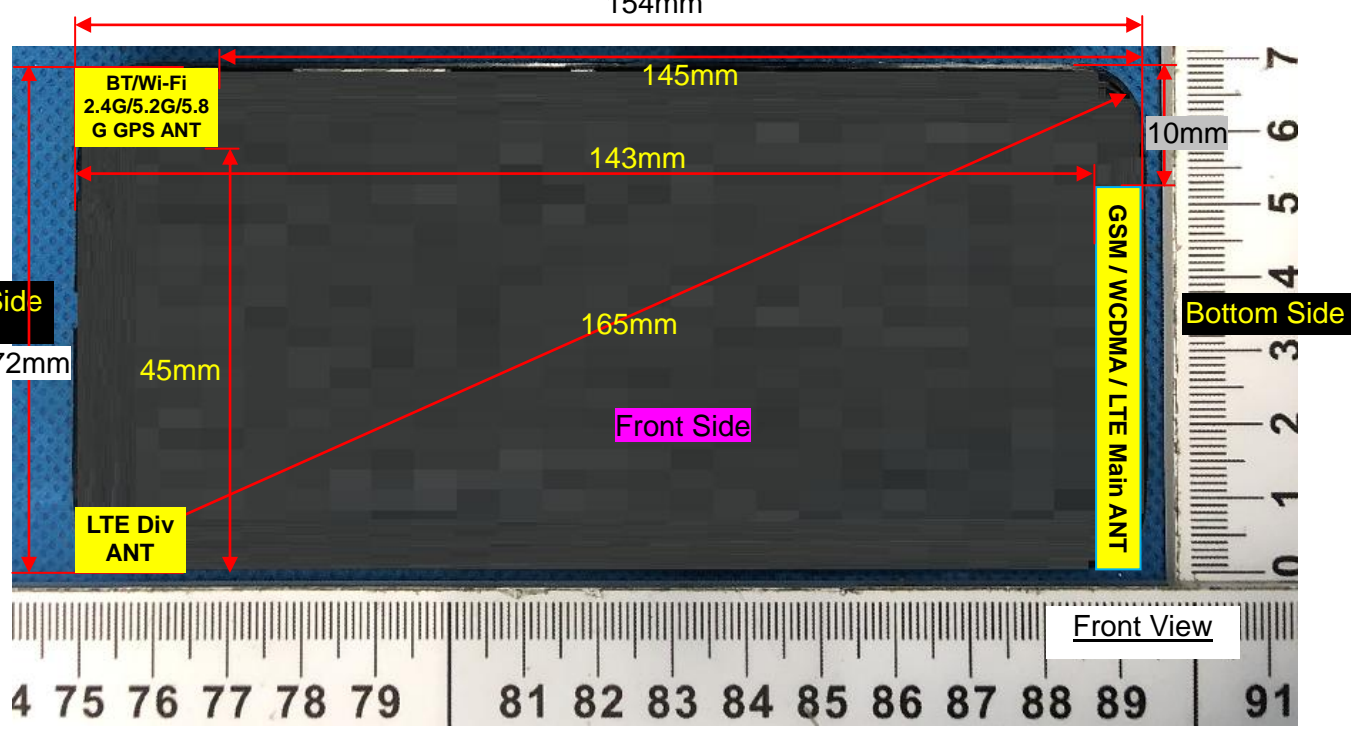
Bottom Side

Front Side

Front View

Left Side

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
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
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	7.00	5.01	5	2.480	1.6	3.0	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 ≤ 50mm, where $x = 7.5$ for 1-g SAR and $x = 18.75$ for 10-g SAR.

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

Mode	Position	P_{max} (dBm)	P_{max} (mW)	Distance (mm)	f (GHz)	x	Estimated SAR (W/Kg)
Bluetooth	Head	7.00	5.01	5	2.480	7.5	0.210
Bluetooth	Body	7.00	5.01	10	2.480	7.5	0.105
Bluetooth	Hotspot	7.00	5.01	10	2.480	7.5	0.105

NOTE: Estimated SAR calculation for Bluetooth

10. SAR Results

10.1. SAR measurement results

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)
			1g	10g				
Left Cheek	189/836.4	GPRS(GMSK 4TS)	0.310	0.224	0.87	28.16	29.00	0.376
Left Tilt 15 Degree	189/836.4	GPRS(GMSK 4TS)	0.156	0.112	1.15	28.16	29.00	0.189
Right Cheek	189/836.4	GPRS(GMSK 4TS)	0.288	0.212	-3.06	28.16	29.00	0.349
Right Tilt 15 Degree	189/836.4	GPRS(GMSK 4TS)	0.143	0.097	3.27	28.16	29.00	0.174

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)
			1g	10g				
Front Side	189/836.4	GPRS(GMSK 4TS)	0.275	0.204	4.46	28.16	29.00	0.334
Back Side	189/836.4	GPRS(GMSK 4TS)	0.326	0.244	0.60	28.16	29.00	0.396

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)
			1g	10g				
Front Side	189/836.4	GPRS(GMSK 4TS)	0.275	0.204	4.46	28.16	29.00	0.334
Back Side	189/836.4	GPRS(GMSK 4TS)	0.326	0.244	0.60	28.16	29.00	0.396
Left Side	189/836.4	GPRS(GMSK 4TS)	0.174	0.135	-0.42	28.16	29.00	0.211
Right Side	189/836.4	GPRS(GMSK 4TS)	0.086	0.065	1.03	28.16	29.00	0.104
Bottom Side	189/836.4	GPRS(GMSK 4TS)	0.075	0.057	0.17	28.16	29.00	0.091

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 ($\pm 5\%$)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)
			1g	10g				
Left Cheek	661/1880	GPRS(GMSK 4TS)	0.264	0.158	1.87	24.80	25.00	0.276
Left Tilt 15 Degree	661/1880	GPRS(GMSK 4TS)	0.132	0.079	-3.22	24.80	25.00	0.138
Right Cheek	661/1880	GPRS(GMSK 4TS)	0.259	0.152	0.37	24.80	25.00	0.271
Right Tilt 15 Degree	661/1880	GPRS(GMSK 4TS)	0.128	0.076	-4.12	24.80	25.00	0.134

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 ($\pm 5\%$)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)
			1g	10g				
Front Side	661/1880	GPRS(GMSK 4TS)	0.276	0.158	-1.32	24.80	25.00	0.289
Back Side	661/1880	GPRS(GMSK 4TS)	0.352	0.201	-0.46	24.80	25.00	0.369

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 ($\pm 5\%$)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)
			1g	10g				
Front Side	661/1880	GPRS(GMSK 4TS)	0.276	0.158	-1.32	24.80	25.00	0.289
Back Side	661/1880	GPRS(GMSK 4TS)	0.352	0.201	-0.46	24.80	25.00	0.369
Left Side	661/1880	GPRS(GMSK 4TS)	0.177	0.109	3.39	24.80	25.00	0.185
Right Side	661/1880	GPRS(GMSK 4TS)	0.089	0.051	1.18	24.80	25.00	0.093
Bottom Side	661/1880	GPRS(GMSK 4TS)	0.067	0.038	2.97	24.80	25.00	0.070

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)
			1g	10g				
Left Cheek	9400/1880	RMC12.2K	0.830	0.490	-1.68	21.47	22.00	0.938
Left Cheek Repeated	9400/1880	RMC12.2K	0.818	0.487	0.03	21.47	22.00	0.924
Left Tilt 15 Degree	9400/1880	RMC12.2K	0.451	0.268	1.93	21.47	22.00	0.510
Right Cheek	9400/1880	RMC12.2K	0.701	0.459	-2.97	21.47	22.00	0.792
Right Tilt 15 Degree	9400/1880	RMC12.2K	0.362	0.216	2.07	21.47	22.00	0.409
Left Cheek	9262/1852.4	RMC12.2K	0.680	0.406	1.44	21.46	22.00	0.770
Left Cheek	9538/1907.6	RMC12.2K	0.749	0.441	3.43	21.58	22.00	0.825

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)
			1g	10g				
Front Side	9400/1880	RMC12.2K	0.491	0.258	3.87	21.47	22.00	0.555
Back Side	9400/1880	RMC12.2K	0.644	0.342	-0.05	21.47	22.00	0.728

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)
			1g	10g				
Front Side	9400/1880	RMC12.2K	0.491	0.258	3.87	21.47	22.00	0.555
Back Side	9400/1880	RMC12.2K	0.644	0.342	-0.05	21.47	22.00	0.728
Left Side	9400/1880	RMC12.2K	0.515	0.272	-0.08	21.47	22.00	0.582
Right Side	9400/1880	RMC12.2K	0.305	0.159	-4.95	21.47	22.00	0.345
Bottom Side	9400/1880	RMC12.2K	0.245	0.131	3.54	21.47	22.00	0.277

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)
			1g	10g				
Left Cheek	1413/1732.6	RMC12.2K	0.580	0.363	-1.64	21.76	22.00	0.613

Left Tilt 15 Degree	1413/1732.6	RMC12.2K	0.305	0.187	-0.60	21.76	22.00	0.322
Right Cheek	1413/1732.6	RMC12.2K	0.530	0.335	4.09	21.76	22.00	0.560
Right Tilt 15 Degree	1413/1732.6	RMC12.2K	0.260	0.158	3.81	21.76	22.00	0.275

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)
			1g	10g				
Front Side	1413/1732.6	RMC12.2K	0.275	0.176	4.88	21.76	22.00	0.291
Back Side	1413/1732.6	RMC12.2K	0.360	0.233	0.51	21.76	22.00	0.380

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)
			1g	10g				
Front Side	1413/1732.6	RMC12.2K	0.275	0.176	4.88	21.76	22.00	0.291
Back Side	1413/1732.6	RMC12.2K	0.360	0.233	0.51	21.76	22.00	0.380
Left Side	1413/1732.6	RMC12.2K	0.285	0.188	0.41	21.76	22.00	0.301
Right Side	1413/1732.6	RMC12.2K	0.177	0.117	3.05	21.76	22.00	0.187
Bottom Side	1413/1732.6	RMC12.2K	0.134	0.083	-2.90	21.76	22.00	0.142

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)
			1g	10g				
Left Cheek	4182/836.4	RMC12.2K	0.629	0.475	-0.12	22.16	23.00	0.763
Left Tilt 15 Degree	4182/836.4	RMC12.2K	0.347	0.263	0.01	22.16	23.00	0.421
Right Cheek	4182/836.4	RMC12.2K	0.540	0.412	4.93	22.16	23.00	0.655
Right Tilt 15 Degree	4182/836.4	RMC12.2K	0.268	0.204	4.32	22.16	23.00	0.325

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)
			1g	10g				
Front Side	4182/836.4	RMC12.2K	0.603	0.412	-0.44	22.16	23.00	0.732

Back Side	4182/836.4	RMC12.2K	0.781	0.539	-0.05	22.16	23.00	0.948
Back Side	4132/826.4	RMC12.2K	0.776	0.522	-0.08	22.26	23.00	0.920
Back Side	4233/846.6	RMC12.2K	0.755	0.500	-1.99	22.20	23.00	0.908

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)
			1g	10g				
Front Side	4182/836.4	RMC12.2K	0.603	0.412	-0.44	22.16	23.00	0.732
Back Side	4182/836.4	RMC12.2K	0.781	0.539	-0.05	22.16	23.00	0.948
Left Side	4182/836.4	RMC12.2K	0.616	0.421	2.69	22.16	23.00	0.747
Right Side	4182/836.4	RMC12.2K	0.349	0.239	-3.18	22.16	23.00	0.423
Bottom Side	4182/836.4	RMC12.2K	0.266	0.179	-2.59	22.16	23.00	0.323
Back Side	4132/826.4	RMC12.2K	0.776	0.522	-0.08	22.26	23.00	0.920
Back Side	4233/846.6	RMC12.2K	0.755	0.500	-1.99	22.20	23.00	0.908

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)
			1g	10g				
1RB								
Left Cheek	18900/1880	20M QPSK(1,49)	0.266	0.162	-1.56	22.34	23.00	0.310
Left Tilt 15 Degree	18900/1880	20M QPSK(1,49)	0.133	0.081	1.67	22.34	23.00	0.155
Right Cheek	18900/1880	20M QPSK(1,49)	0.251	0.152	2.50	22.34	23.00	0.292
Right Tilt 15 Degree	18900/1880	20M QPSK(1,49)	0.123	0.074	-3.98	22.34	23.00	0.143
50%RB								
Left Cheek	18900/1880	1.4M QPSK(3,1)	0.244	0.148	2.67	22.33	23.00	0.285
Left Tilt 15 Degree	18900/1880	1.4M QPSK(3,1)	0.122	0.074	3.39	22.33	23.00	0.142
Right	18900/1880	1.4M QPSK(3,1)	0.234	0.134	1.18	22.33	23.00	0.273

Cheek								
Right Tilt 15 Degree	18900/1880	1.4M QPSK(3,1)	0.089	0.054	2.97	22.33	23.00	0.104

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)
			1g	10g				
1RB								
Front Side	18900/1880	20M QPSK(1,49)	0.234	0.130	-3.93	22.34	23.00	0.272
Back Side	18900/1880	20M QPSK(1,49)	0.415	0.231	-1.26	22.34	23.00	0.483
50%RB								
Front Side	18900/1880	1.4M QPSK(3,1)	0.221	0.123	3.39	22.33	23.00	0.258
Back Side	18900/1880	1.4M QPSK(3,1)	0.401	0.223	1.18	22.33	23.00	0.468

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)
			1g	10g				
1RB								
Front Side	18900/1880	20M QPSK(1,49)	0.234	0.130	-3.93	22.34	23.00	0.272
Back Side	18900/1880	20M QPSK(1,49)	0.415	0.231	-1.26	22.34	23.00	0.483
Left Side	18900/1880	20M QPSK(1,49)	0.255	0.146	-3.22	22.34	23.00	0.297
Right Side	18900/1880	20M QPSK(1,49)	0.241	0.135	0.37	22.34	23.00	0.281
Bottom Side	18900/1880	20M QPSK(1,49)	0.257	0.146	-4.12	22.34	23.00	0.299
50%RB								
Front Side	18900/1880	1.4M QPSK(3,1)	0.221	0.123	3.39	22.33	23.00	0.258
Back Side	18900/1880	1.4M QPSK(3,1)	0.401	0.223	1.18	22.33	23.00	0.468
Left Side	18900/1880	1.4M QPSK(3,1)	0.234	0.132	2.97	22.33	23.00	0.273
Right Side	18900/1880	1.4M QPSK(3,1)	0.216	0.121	-3.53	22.33	23.00	0.252
Bottom Side	18900/1880	1.4M QPSK(3,1)	0.241	0.131	-2.63	22.33	23.00	0.281

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)
			1g	10g				
1RB								
Left Cheek	20175/1732.5	20M QPSK(1,49)	0.329	0.209	0.43	22.22	23.00	0.394
Left Tilt 15 Degree	20175/1732.5	20M QPSK(1,49)	0.163	0.105	3.14	22.22	23.00	0.195
Right Cheek	20175/1732.5	20M QPSK(1,49)	0.276	0.176	2.25	22.22	23.00	0.330
Right Tilt 15 Degree	20175/1732.5	20M QPSK(1,49)	0.189	0.123	-2.53	22.22	23.00	0.226
50%RB								
Left Cheek	20175/1732.5	1.4M QPSK(3,1)	0.301	0.195	-4.82	22.08	23.00	0.372
Left Tilt 15 Degree	20175/1732.5	1.4M QPSK(3,1)	0.142	0.092	-0.87	22.08	23.00	0.176
Right Cheek	20175/1732.5	1.4M QPSK(3,1)	0.254	0.163	-2.95	22.08	23.00	0.314
Right Tilt 15 Degree	20175/1732.5	1.4M QPSK(3,1)	0.163	0.104	4.99	22.08	23.00	0.201

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)
			1g	10g				
1RB								
Front Side	20175/1732.5	20M QPSK(1,49)	0.084	0.051	-1.43	22.22	23.00	0.101
Back Side	20175/1732.5	20M QPSK(1,49)	0.489	0.292	-0.53	22.22	23.00	0.585

50%RB								
Front Side	20175/1732. 5	1.4M QPSK(3,1)	0.063	0.037	0.66	22.08	23.00	0.078
Back Side	20175/1732. 5	1.4M QPSK(3,1)	0.413	0.246	-3.20	22.08	23.00	0.510

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)
			1g	10g				
1RB								
Front Side	20175/1732. 5	20M QPSK(1,49)	0.084	0.051	-1.43	22.22	23.00	0.101
Back Side	20175/1732. 5	20M QPSK(1,49)	0.489	0.292	-0.53	22.22	23.00	0.585
Left Side	20175/1732. 5	20M QPSK(1,49)	0.063	0.037	-1.63	22.22	23.00	0.075
Right Side	20175/1732. 5	20M QPSK(1,49)	0.079	0.047	-4.28	22.22	23.00	0.095
Bottom Side	20175/1732. 5	20M QPSK(1,49)	0.246	0.146	4.06	22.22	23.00	0.294
50%RB								
Front Side	20175/1732. 5	1.4M QPSK(3,1)	0.063	0.037	0.66	22.08	23.00	0.078
Back Side	20175/1732. 5	1.4M QPSK(3,1)	0.413	0.246	-3.20	22.08	23.00	0.510
Left Side	20175/1732. 5	1.4M QPSK(3,1)	0.042	0.025	3.03	22.08	23.00	0.052
Right Side	20175/1732. 5	1.4M QPSK(3,1)	0.051	0.030	-3.13	22.08	23.00	0.063
Bottom Side	20175/1732. 5	1.4M QPSK(3,1)	0.205	0.122	2.62	22.08	23.00	0.253

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)
			1g	10g				

1RB								
Left Cheek	20525/836.5	10M QPSK(1,24)	0.165	0.128	-1.13	22.52	23.00	0.184
Left Tilt 15 Degree	20525/836.5	10M QPSK(1,24)	0.088	0.068	1.67	22.52	23.00	0.098
Right Cheek	20525/836.5	10M QPSK(1,24)	0.156	0.121	2.50	22.52	23.00	0.174
Right Tilt 15 Degree	20525/836.5	10M QPSK(1,24)	0.078	0.061	-3.98	22.52	23.00	0.087
50%RB								
Left Cheek	20525/836.5	1.4M QPSK(3,0)	0.144	0.112	4.71	22.52	23.00	0.161
Left Tilt 15 Degree	20525/836.5	1.4M QPSK(3,0)	0.066	0.051	2.83	22.52	23.00	0.074
Right Cheek	20525/836.5	1.4M QPSK(3,0)	0.142	0.110	-3.02	22.52	23.00	0.159
Right Tilt 15 Degree	20525/836.5	1.4M QPSK(3,0)	0.053	0.041	-4.53	22.52	23.00	0.059

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)
			1g	10g				
1RB								
Front Side	20525/836.5	10M QPSK(1,24)	0.143	0.108	-0.83	22.52	23.00	0.160
Back Side	20525/836.5	10M QPSK(1,24)	0.171	0.132	0.05	22.52	23.00	0.191
50%RB								
Front Side	20525/836.5	1.4M QPSK(3,0)	0.124	0.094	-2.80	22.52	23.00	0.138
Back Side	20525/836.5	1.4M QPSK(3,0)	0.157	0.121	1.62	22.52	23.00	0.175

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

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

Hotspot with 10mm								(W/Kg)
1RB								
Front Side	20525/836.5	10M QPSK(1,24)	0.143	0.108	-0.83	22.52	23.00	0.160
Back Side	20525/836.5	10M QPSK(1,24)	0.171	0.132	0.05	22.52	23.00	0.191
Left Side	20525/836.5	10M QPSK(1,24)	0.127	0.085	-0.09	22.52	23.00	0.142
Right Side	20525/836.5	10M QPSK(1,24)	0.078	0.055	-1.93	22.52	23.00	0.087
Bottom Side	20525/836.5	10M QPSK(1,24)	0.062	0.037	-0.62	22.52	23.00	0.069
50%RB								
Front Side	20525/836.5	1.4M QPSK(3,0)	0.124	0.094	-2.80	22.52	23.00	0.138
Back Side	20525/836.5	1.4M QPSK(3,0)	0.157	0.121	1.62	22.52	23.00	0.175
Left Side	20525/836.5	1.4M QPSK(3,0)	0.103	0.079	-4.77	22.52	23.00	0.115
Right Side	20525/836.5	1.4M QPSK(3,0)	0.052	0.040	3.14	22.52	23.00	0.058
Bottom Side	20525/836.5	1.4M QPSK(3,0)	0.041	0.033	0.21	22.52	23.00	0.046

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)
			1g	10g				
1RB								
Left Cheek	21100/2535	20M QPSK(1,49)	0.329	0.177	-2.36	22.11	23.00	0.404
Left Tilt 15 Degree	21100/2535	20M QPSK(1,49)	0.165	0.088	-3.10	22.11	23.00	0.203
Right Cheek	21100/2535	20M QPSK(1,49)	0.304	0.163	1.76	22.11	23.00	0.373
Right Tilt 15	21100/2535	20M QPSK(1,49)	0.153	0.082	-1.31	22.11	23.00	0.188

Degree								
50%RB								
Left Cheek	21100/2535	20M QPSK(50,0)	0.301	0.161	2.85	20.95	22.00	0.383
Left Tilt 15 Degree	21100/2535	20M QPSK(50,0)	0.142	0.076	-1.72	20.95	22.00	0.181
Right Cheek	21100/2535	20M QPSK(50,0)	0.287	0.150	1.03	20.95	22.00	0.365
Right Tilt 15 Degree	21100/2535	20M QPSK(50,0)	0.132	0.071	0.73	20.95	22.00	0.168

NOTE: Head SAR test results of LTE Band 7

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)
			1g	10g				
1RB								
Front Side	21100/2535	20M QPSK(1,49)	0.238	0.117	-2.42	22.11	23.00	0.292
Back Side	21100/2535	20M QPSK(1,49)	0.370	0.183	-0.09	22.11	23.00	0.454
50%RB								
Front Side	21100/2535	20M QPSK(50,0)	0.217	0.107	0.41	20.95	22.00	0.276
Back Side	21100/2535	20M QPSK(50,0)	0.354	0.175	-2.87	20.95	22.00	0.451

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)
			1g	10g				
1RB								
Front Side	21100/2535	20M QPSK(1,49)	0.238	0.117	-2.42	22.11	23.00	0.292
Back Side	21100/2535	20M QPSK(1,49)	0.370	0.183	-0.09	22.11	23.00	0.454
Left Side	21100/2535	20M QPSK(1,49)	0.179	0.088	-0.63	22.11	23.00	0.220
Right Side	21100/2535	20M QPSK(1,49)	0.087	0.043	-3.12	22.11	23.00	0.107

Bottom Side	21100/2535	20M QPSK(1,49)	0.065	0.032	4.79	22.11	23.00	0.080
50%RB								
Front Side	21100/2535	20M QPSK(50,0)	0.217	0.107	0.41	20.95	22.00	0.276
Back Side	21100/2535	20M QPSK(50,0)	0.354	0.175	-2.87	20.95	22.00	0.451
Left Side	21100/2535	20M QPSK(50,0)	0.158	0.078	1.23	20.95	22.00	0.201
Right Side	21100/2535	20M QPSK(50,0)	0.062	0.030	4.33	20.95	22.00	0.079
Bottom Side	21100/2535	20M QPSK(50,0)	0.049	0.024	4.62	20.95	22.00	0.062

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)
			1g	10g				
1RB								
Left Cheek	23095/707.5	10M QPSK(1,24)	0.025	0.022	-1.77	22.32	23.00	0.029
Left Tilt 15 Degree	23095/707.5	10M QPSK(1,24)	0.013	0.011	-3.98	22.32	23.00	0.015
Right Cheek	23095/707.5	10M QPSK(1,24)	0.022	0.019	-4.42	22.32	23.00	0.026
Right Tilt 15 Degree	23095/707.5	10M QPSK(1,24)	0.010	0.009	1.86	22.32	23.00	0.012
50%RB								
Left Cheek	23095/707.5	1.4M QPSK(3,1)	0.022	0.019	-0.71	22.23	23.00	0.026
Left Tilt 15 Degree	23095/707.5	1.4M QPSK(3,1)	0.011	0.009	0.89	22.23	23.00	0.013
Right Cheek	23095/707.5	1.4M QPSK(3,1)	0.019	0.016	0.78	22.23	23.00	0.023
Right Tilt	23095/707.5	1.4M QPSK(3,1)	0.009	0.008	-4.87	22.23	23.00	0.011

15								
Degree								

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 ($\pm 5\%$)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)
			1g	10g				
1RB								
Front Side	23095/707.5	10M QPSK(1,24)	0.018	0.015	2.20	22.32	23.00	0.021
Back Side	23095/707.5	10M QPSK(1,24)	0.029	0.025	0.89	22.32	23.00	0.034
50%RB								
Front Side	23095/707.5	1.4M QPSK(3,1)	0.011	0.009	-1.25	22.23	23.00	0.013
Back Side	23095/707.5	1.4M QPSK(3,1)	0.025	0.021	4.04	22.23	23.00	0.030

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 ($\pm 5\%$)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)
			1g	10g				
1RB								
Front Side	23095/707.5	10M QPSK(1,24)	0.018	0.015	2.20	22.32	23.00	0.021
Back Side	23095/707.5	10M QPSK(1,24)	0.029	0.025	0.89	22.32	23.00	0.034
Left Side	23095/707.5	10M QPSK(1,24)	0.011	0.009	3.92	22.32	23.00	0.013
Right Side	23095/707.5	10M QPSK(1,24)	0.008	0.007	-0.82	22.32	23.00	0.009
Bottom Side	23095/707.5	10M QPSK(1,24)	0.006	0.005	0.75	22.32	23.00	0.007
50%RB								
Front Side	23095/707.5	1.4M QPSK(3,1)	0.011	0.009	-1.25	22.23	23.00	0.013
Back Side	23095/707.5	1.4M QPSK(3,1)	0.025	0.021	4.04	22.23	23.00	0.030
Left Side	23095/707.5	1.4M QPSK(3,1)	0.009	0.008	-3.58	22.23	23.00	0.011
Right Side	23095/707.5	1.4M QPSK(3,1)	0.008	0.006	0.04	22.23	23.00	0.010
Bottom	23095/707.5	1.4M QPSK(3,1)	0.006	0.005	3.72	22.23	23.00	0.007

Side								
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NOTE: Hotspot SAR test results of LTE Band 12

10.1.11. SAR measurement Result of LTE Band 13

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)
			1g	10g				
1RB								
Left Cheek	23230/782	10M QPSK(1,24)	0.071	0.058	-0.81	22.62	23.00	0.077
Left Tilt 15 Degree	23230/782	10M QPSK(1,24)	0.035	0.028	0.38	22.62	23.00	0.038
Right Cheek	23230/782	10M QPSK(1,24)	0.068	0.055	-2.48	22.62	23.00	0.074
Right Tilt 15 Degree	23230/782	10M QPSK(1,24)	0.034	0.027	4.44	22.62	23.00	0.037
50%RB								
Left Cheek	23230/782	10M QPSK(25,24)	0.067	0.054	1.97	21.58	22.00	0.074
Left Tilt 15 Degree	23230/782	10M QPSK(25,24)	0.031	0.025	-2.77	21.58	22.00	0.034
Right Cheek	23230/782	10M QPSK(25,24)	0.058	0.047	-3.67	21.58	22.00	0.064
Right Tilt 15 Degree	23230/782	10M QPSK(25,24)	0.029	0.023	2.20	21.58	22.00	0.032

NOTE: Head SAR test results of LTE Band 13

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)
			1g	10g				
1RB								
Front Side	23230/782	10M QPSK(1,24)	0.068	0.052	2.59	22.62	23.00	0.074
Back Side	23230/782	10M QPSK(1,24)	0.085	0.066	-1.21	22.62	23.00	0.093
50%RB								

Front Side	23230/782	10M QPSK(25,24)	0.041	0.032	0.03	21.58	22.00	0.045
Back Side	23230/782	10M QPSK(25,24)	0.066	0.051	2.09	21.58	22.00	0.073

NOTE: Body-Worn SAR test results of LTE Band 13

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)
			1g	10g				
1RB								
Front Side	23230/782	10M QPSK(1,24)	0.068	0.052	2.59	22.62	23.00	0.074
Back Side	23230/782	10M QPSK(1,24)	0.085	0.066	-1.21	22.62	23.00	0.093
Left Side	23230/782	10M QPSK(1,24)	0.043	0.033	-4.47	22.62	23.00	0.047
Right Side	23230/782	10M QPSK(1,24)	0.006	0.005	-2.24	22.62	23.00	0.007
Bottom Side	23230/782	10M QPSK(1,24)	0.008	0.006	-1.81	22.62	23.00	0.009
50%RB								
Front Side	23230/782	10M QPSK(25,24)	0.041	0.032	0.03	21.58	22.00	0.045
Back Side	23230/782	10M QPSK(25,24)	0.066	0.051	2.09	21.58	22.00	0.073
Left Side	23230/782	10M QPSK(25,24)	0.028	0.022	2.99	21.58	22.00	0.031
Right Side	23230/782	10M QPSK(25,24)	0.005	0.004	1.58	21.58	22.00	0.006
Bottom Side	23230/782	10M QPSK(25,24)	0.006	0.005	3.91	21.58	22.00	0.007

NOTE: Hotspot SAR test results of LTE Band 13

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)
			1g	10g				

1RB								
Left Cheek	26365/1882.5	20M QPSK(1,49)	0.255	0.134	-0.16	22.65	23.00	0.276
Left Tilt 15 Degree	26365/1882.5	20M QPSK(1,49)	0.145	0.078	-3.64	22.65	23.00	0.157
Right Cheek	26365/1882.5	20M QPSK(1,49)	0.226	0.122	1.44	22.65	23.00	0.245
Right Tilt 15 Degree	26365/1882.5	20M QPSK(1,49)	0.110	0.059	-3.67	22.65	23.00	0.119
50%RB								
Left Cheek	26365/1882.5	1.4M QPSK(3,0)	0.239	0.126	-0.66	22.65	23.00	0.259
Left Tilt 15 Degree	26365/1882.5	1.4M QPSK(3,0)	0.120	0.063	-0.84	22.65	23.00	0.130
Right Cheek	26365/1882.5	1.4M QPSK(3,0)	0.202	0.103	-4.87	22.65	23.00	0.219
Right Tilt 15 Degree	26365/1882.5	1.4M QPSK(3,0)	0.109	0.055	-2.78	22.65	23.00	0.118

NOTE: Head SAR test results of LTE Band 25

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)
			1g	10g				
1RB								
Front Side	26365/1882.5	20M QPSK(1,49)	0.015	0.011	-2.82	22.65	23.00	0.016
Back Side	26365/1882.5	20M QPSK(1,49)	0.019	0.017	-4.57	22.65	23.00	0.021
50%RB								
Front Side	26365/1882.5	1.4M QPSK(3,0)	0.014	0.011	-0.50	22.65	23.00	0.015
Back Side	26365/1882.5	1.4M QPSK(3,0)	0.017	0.015	2.56	22.65	23.00	0.018

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

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

Hotspot with 10mm								(W/Kg)
1RB								
Front Side	26365/1882.5	20M QPSK(1,49)	0.015	0.011	-2.82	22.65	23.00	0.016
Back Side	26365/1882.5	20M QPSK(1,49)	0.019	0.017	-4.57	22.65	23.00	0.021
Left Side	26365/1882.5	20M QPSK(1,49)	0.013	0.011	-1.67	22.65	23.00	0.014
Right Side	26365/1882.5	20M QPSK(1,49)	0.009	0.006	4.54	22.65	23.00	0.010
Bottom Side	26365/1882.5	20M QPSK(1,49)	0.007	0.003	-4.28	22.65	23.00	0.008
50%RB								
Front Side	26365/1882.5	1.4M QPSK(3,0)	0.014	0.011	-0.50	22.65	23.00	0.015
Back Side	26365/1882.5	1.4M QPSK(3,0)	0.017	0.015	2.56	22.65	23.00	0.018
Left Side	26365/1882.5	1.4M QPSK(3,0)	0.012	0.007	3.97	22.65	23.00	0.013
Right Side	26365/1882.5	1.4M QPSK(3,0)	0.008	0.008	-0.88	22.65	23.00	0.009
Bottom Side	26365/1882.5	1.4M QPSK(3,0)	0.007	0.001	3.00	22.65	23.00	0.008

NOTE: Hotspot SAR test results of LTE Band 25

10.1.13. SAR measurement Result of LTE Band 26

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)
			1g	10g				
1RB								
Left Cheek	26865/831.5	15M QPSK(1,37)	0.144	0.112	0.51	22.66	23.00	0.156
Left Tilt 15 Degree	26865/831.5	15M QPSK(1,37)	0.073	0.056	-4.80	22.66	23.00	0.079
Right Cheek	26865/831.5	15M QPSK(1,37)	0.137	0.106	2.30	22.66	23.00	0.148

Right Tilt 15 Degree	26865/831.5	15M QPSK(1,37)	0.068	0.052	0.19	22.66	23.00	0.074
50%RB								
Left Cheek	26865/831.5	1.4M QPSK(3,1)	0.122	0.095	3.25	22.54	23.00	0.136
Left Tilt 15 Degree	26865/831.5	1.4M QPSK(3,1)	0.061	0.047	3.23	22.54	23.00	0.068
Right Cheek	26865/831.5	1.4M QPSK(3,1)	0.118	0.091	-0.10	22.54	23.00	0.131
Right Tilt 15 Degree	26865/831.5	1.4M QPSK(3,1)	0.056	0.043	-2.67	22.54	23.00	0.062

NOTE: Head SAR test results of LTE Band 26

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)
			1g	10g				
1RB								
Front Side	26865/831.5	15M QPSK(1,37)	0.152	0.117	2.90	22.66	23.00	0.164
Back Side	26865/831.5	15M QPSK(1,37)	0.177	0.137	0.04	22.66	23.00	0.191
50%RB								
Front Side	26865/831.5	1.4M QPSK(3,1)	0.137	0.106	0.29	22.54	23.00	0.152
Back Side	26865/831.5	1.4M QPSK(3,1)	0.155	0.119	4.68	22.54	23.00	0.172

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

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)
			1g	10g				
1RB								
Front Side	26865/831.5	15M QPSK(1,37)	0.152	0.117	2.90	22.66	23.00	0.164
Back Side	26865/831.5	15M QPSK(1,37)	0.177	0.137	0.04	22.66	23.00	0.191
Left Side	26865/831.5	15M QPSK(1,37)	0.122	0.094	0.12	22.66	23.00	0.132
Right	26865/831.5	15M QPSK(1,37)	0.089	0.068	4.13	22.66	23.00	0.096

Side								
Bottom Side	26865/831.5	15M QPSK(1,37)	0.079	0.061	-2.88	22.66	23.00	0.085
50%RB								
Front Side	26865/831.5	1.4M QPSK(3,1)	0.137	0.106	0.29	22.54	23.00	0.152
Back Side	26865/831.5	1.4M QPSK(3,1)	0.155	0.119	4.68	22.54	23.00	0.172
Left Side	26865/831.5	1.4M QPSK(3,1)	0.111	0.083	-2.51	22.54	23.00	0.123
Right Side	26865/831.5	1.4M QPSK(3,1)	0.080	0.061	-0.23	22.54	23.00	0.089
Bottom Side	26865/831.5	1.4M QPSK(3,1)	0.078	0.060	-0.99	22.54	23.00	0.087

NOTE: Hotspot SAR test results of LTE Band 26

10.1.14. SAR measurement Result of LTE Band 41

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)
			1g	10g				
1RB								
Left Cheek	40740/2605	20M QPSK(1,49)	0.101	0.065	2.65	22.47	23.00	0.114
Left Tilt 15 Degree	40740/2605	20M QPSK(1,49)	0.051	0.032	2.97	22.47	23.00	0.058
Right Cheek	40740/2605	20M QPSK(1,49)	0.100	0.064	-2.92	22.47	23.00	0.113
Right Tilt 15 Degree	40740/2605	20M QPSK(1,49)	0.048	0.030	3.19	22.47	23.00	0.054
50%RB								
Left Cheek	40740/2605	20M QPSK(50,24)	0.096	0.062	2.08	21.40	22.00	0.110
Left Tilt 15 Degree	40740/2605	20M QPSK(50,24)	0.047	0.030	-0.93	21.40	22.00	0.054
Right Cheek	40740/2605	20M QPSK(50,24)	0.091	0.058	1.05	21.40	22.00	0.104
Right Tilt	40740/2605	20M	0.041	0.026	3.18	21.40	22.00	0.047

15 Degree		QPSK(50,24)						
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NOTE: Head SAR test results of LTE 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)
			1g	10g				
1RB								
Front Side	40740/2605	20M QPSK(1,49)	0.084	0.047	-0.04	22.47	23.00	0.095
Back Side	40740/2605	20M QPSK(1,49)	0.120	0.068	-2.32	22.47	23.00	0.136
50%RB								
Front Side	40740/2605	20M QPSK(50,24)	0.063	0.035	-0.47	21.40	22.00	0.072
Back Side	40740/2605	20M QPSK(50,24)	0.115	0.065	-4.00	21.40	22.00	0.132

NOTE: Body-Worn SAR test results of LTE 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)
			1g	10g				
1RB								
Front Side	40740/2605	20M QPSK(1,49)	0.084	0.047	-0.04	22.47	23.00	0.095
Back Side	40740/2605	20M QPSK(1,49)	0.120	0.068	-2.32	22.47	23.00	0.136
Left Side	40740/2605	20M QPSK(1,49)	0.063	0.035	4.00	22.47	23.00	0.071
Right Side	40740/2605	20M QPSK(1,49)	0.015	0.008	-0.04	22.47	23.00	0.017
Bottom Side	40740/2605	20M QPSK(1,49)	0.018	0.010	-2.88	22.47	23.00	0.020
50%RB								
Front Side	40740/2605	20M QPSK(50,24)	0.063	0.035	-0.47	21.40	22.00	0.072
Back Side	40740/2605	20M QPSK(50,24)	0.115	0.065	-4.00	21.40	22.00	0.132
Left Side	40740/2605	20M QPSK(50,24)	0.048	0.027	3.53	21.40	22.00	0.055

Right Side	40740/2605	20M QPSK(50,24)	0.014	0.007	2.64	21.40	22.00	0.016
Bottom Side	40740/2605	20M QPSK(50,24)	0.012	0.006	-0.91	21.40	22.00	0.014

NOTE: Hotspot SAR test results of LTE Band 41

10.1.15. 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)
			1g	10g				
Left Cheek	6/2437	802.11b	0.415	0.206	0.12	16.87	17.00	0.428
Left Tilt 15 Degree	6/2437	802.11b	0.209	0.103	-0.75	16.87	17.00	0.215
Right Cheek	6/2437	802.11b	0.408	0.203	-0.23	16.87	17.00	0.420
Right Tilt 15 Degree	6/2437	802.11b	0.201	0.099	1.65	16.87	17.00	0.207

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)
			1g	10g				
Front Side	6/2437	802.11b	0.424	0.212	-4.22	16.87	17.00	0.437
Back Side	6/2437	802.11b	0.603	0.333	-3.03	16.87	17.00	0.621

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)
			1g	10g				
Front Side	6/2437	802.11b	0.424	0.212	-4.22	16.87	17.00	0.437
Back Side	6/2437	802.11b	0.603	0.333	-3.03	16.87	17.00	0.621
Right Side	6/2437	802.11b	0.211	0.105	-0.70	16.87	17.00	0.217
Top Side	6/2437	802.11b	0.157	0.078	-1.94	16.87	17.00	0.162

NOTE: Hotspot SAR test results of WLAN 2.4G

10.1.16. SAR measurement Result of WLAN 5.2G

Test Position of Head	Test channel	Test Mode	SAR Value (W/kg)	Power Drift	Conducted power	Tune-up power	Scaled SAR
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	/Freq.		1g	10g	(±5%)	(dBm)	(dBm)	1g (W/Kg)
Right Cheek	40/5200	802.11a	0.217	0.100	-0.47	11.34	12.00	0.253
Right Tilt 15 Degree	40/5200	802.11a	0.127	0.056	0.50	11.34	12.00	0.148
Left Cheek	40/5200	802.11a	0.202	0.091	-4.68	11.34	12.00	0.235
Left Tilt 15 Degree	40/5200	802.11a	0.107	0.048	0.47	11.34	12.00	0.125

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)
			1g	10g				
Front Side	40/5200	802.11a	0.102	0.069	3.01	11.34	12.00	0.119
Back Side	40/5200	802.11a	0.167	0.111	-3.39	11.34	12.00	0.194

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)
			1g	10g				
Front Side	40/5200	802.11a	0.102	0.069	3.01	11.34	12.00	0.119
Back Side	40/5200	802.11a	0.167	0.111	-3.39	11.34	12.00	0.194
Right Side	40/5200	802.11a	0.034	0.027	0.44	11.34	12.00	0.040
Top Side	40/5200	802.11a	0.051	0.038	0.21	11.34	12.00	0.059

NOTE: Hotspot SAR test results of WLAN 5.2G

10.1.17. 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)
			1g	10g				
Right Cheek	157/5785	802.11a	0.421	0.155	2.63	10.53	11.00	0.469
Right Tilt 15 Degree	157/5785	802.11a	0.212	0.074	-1.10	10.53	11.00	0.236
Left Cheek	157/5785	802.11a	0.369	0.137	-2.87	10.53	11.00	0.411
Left Tilt 15 Degree	157/5785	802.11a	0.182	0.066	3.94	10.53	11.00	0.203

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)
			1g	10g				
Front Side	157/5785	802.11a	0.192	0.100	0.97	10.53	11.00	0.214
Back Side	157/5785	802.11a	0.311	0.164	-1.00	10.53	11.00	0.347

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)
			1g	10g				
Front Side	157/5785	802.11a	0.192	0.100	0.97	10.53	11.00	0.214
Back Side	157/5785	802.11a	0.311	0.164	-1.00	10.53	11.00	0.347
Right Side	157/5785	802.11a	0.074	0.038	0.68	10.53	11.00	0.082
Top Side	157/5785	802.11a	0.102	0.057	2.67	10.53	11.00	0.114

NOTE: Hotspot SAR test results of WLAN 5.2G

10.2. SAR Summation Scenario

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

- Scalar SAR summation < 1.6W/kg.
- $SPLSR = (SAR_1 + SAR_2)^{1.5} / (\text{min. separation distance, mm})$, 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 $SPLSR \leq 0.04$, simultaneously transmission SAR measurement is not necessary.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		GSM 850	WLAN 2.4G			
Head	Left Cheek	0.376	0.428	0.804	N/A	N/A
	Left Tilt 15 Degree	0.189	0.215	0.404	N/A	N/A
	Right Cheek	0.349	0.420	0.769	N/A	N/A
	Right Tilt 15 Degree	0.174	0.207	0.381	N/A	N/A
Body-Worn	Front Side	0.334	0.437	0.771	N/A	N/A
	Back Side	0.396	0.621	1.017	N/A	N/A
Hotspot	Front Side	0.334	0.437	0.771	N/A	N/A
	Back Side	0.396	0.621	1.017	N/A	N/A
	Left Side	0.211	N/A	0.211	N/A	N/A
	Right Side	0.104	0.217	0.321	N/A	N/A
	Top Side	N/A	0.162	0.162	N/A	N/A
	Bottom Side	0.091	N/A	0.091	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of GSM850 and WLAN 2.4G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		GSM 1900	WLAN 2.4G			
Head	Left Cheek	0.276	0.428	0.704	N/A	N/A
	Left Tilt 15 Degree	0.138	0.215	0.353	N/A	N/A
	Right Cheek	0.271	0.420	0.691	N/A	N/A
	Right Tilt 15 Degree	0.134	0.207	0.341	N/A	N/A
Body-Worn	Front Side	0.289	0.437	0.726	N/A	N/A
	Back Side	0.369	0.621	0.990	N/A	N/A
Hotspot	Front Side	0.289	0.437	0.726	N/A	N/A
	Back Side	0.369	0.621	0.990	N/A	N/A
	Left Side	0.185	N/A	0.185	N/A	N/A
	Right Side	0.093	0.217	0.310	N/A	N/A
	Top Side	N/A	0.162	0.162	N/A	N/A
	Bottom Side	0.070	N/A	0.070	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of GSM1900 and WLAN 2.4G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		WCDMA Band 2	WLAN 2.4G			
Head	Left Cheek	0.938	0.428	1.366	N/A	N/A
	Left Tilt 15 Degree	0.510	0.215	0.725	N/A	N/A
	Right Cheek	0.792	0.420	1.212	N/A	N/A
	Right Tilt 15 Degree	0.409	0.207	0.616	N/A	N/A
Body-Worn	Front Side	0.555	0.437	0.992	N/A	N/A
	Back Side	0.728	0.621	1.349	N/A	N/A
Hotspot	Front Side	0.555	0.437	0.992	N/A	N/A
	Back Side	0.728	0.621	1.349	N/A	N/A
	Left Side	0.582	N/A	0.582	N/A	N/A
	Right Side	0.345	0.217	0.562	N/A	N/A
	Top Side	N/A	0.162	0.162	N/A	N/A
	Bottom Side	0.277	N/A	0.277	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of WCDMA Band 2 and WLAN 2.4G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		WCDMA Band 4	WLAN 2.4G			
Head	Left Cheek	0.613	0.428	1.041	N/A	N/A
	Left Tilt 15 Degree	0.322	0.215	0.537	N/A	N/A

	Right Cheek	0.560	0.420	0.980	N/A	N/A
	Right Tilt 15 Degree	0.275	0.207	0.482	N/A	N/A
Body-Worn	Front Side	0.291	0.437	0.728	N/A	N/A
	Back Side	0.380	0.621	1.001	N/A	N/A
Hotspot	Front Side	0.291	0.437	0.728	N/A	N/A
	Back Side	0.380	0.621	1.001	N/A	N/A
	Left Side	0.301	N/A	0.301	N/A	N/A
	Right Side	0.187	0.217	0.404	N/A	N/A
	Top Side	N/A	0.162	0.162	N/A	N/A
	Bottom Side	0.142	N/A	0.142	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of WCDMA Band 4 and WLAN 2.4G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		WCDMA Band 5	WLAN 2.4G			
Head	Left Cheek	0.763	0.428	1.191	N/A	N/A
	Left Tilt 15 Degree	0.421	0.215	0.636	N/A	N/A
	Right Cheek	0.655	0.420	1.075	N/A	N/A
	Right Tilt 15 Degree	0.325	0.207	0.532	N/A	N/A
Body-Worn	Front Side	0.732	0.437	1.169	N/A	N/A
	Back Side	0.948	0.621	1.569	N/A	N/A
Hotspot	Front Side	0.732	0.437	1.169	N/A	N/A
	Back Side	0.948	0.621	1.569	N/A	N/A
	Left Side	0.747	N/A	0.747	N/A	N/A
	Right Side	0.423	0.217	0.640	N/A	N/A
	Top Side	N/A	0.162	0.162	N/A	N/A
	Bottom Side	0.323	N/A	0.323	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of WCDMA Band 5 and WLAN 2.4G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 2	WLAN 2.4G			
Head	Left Cheek	0.310	0.428	0.738	N/A	N/A
	Left Tilt 15 Degree	0.155	0.215	0.370	N/A	N/A
	Right Cheek	0.292	0.420	0.712	N/A	N/A
	Right Tilt 15 Degree	0.143	0.207	0.350	N/A	N/A
Body-Worn	Front Side	0.272	0.437	0.709	N/A	N/A
	Back Side	0.483	0.621	1.104	N/A	N/A
Hotspot	Front Side	0.272	0.437	0.709	N/A	N/A
	Back Side	0.483	0.621	1.104	N/A	N/A

	Left Side	0.297	N/A	0.297	N/A	N/A
	Right Side	0.281	0.217	0.498	N/A	N/A
	Top Side	N/A	0.162	0.162	N/A	N/A
	Bottom Side	0.299	N/A	0.299	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 2 and WLAN 2.4G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 4	WLAN 2.4G			
Head	Left Cheek	0.394	0.428	0.822	N/A	N/A
	Left Tilt 15 Degree	0.195	0.215	0.410	N/A	N/A
	Right Cheek	0.330	0.420	0.750	N/A	N/A
	Right Tilt 15 Degree	0.226	0.207	0.433	N/A	N/A
Body-Worn	Front Side	0.101	0.437	0.538	N/A	N/A
	Back Side	0.585	0.621	1.206	N/A	N/A
Hotspot	Front Side	0.101	0.437	0.538	N/A	N/A
	Back Side	0.585	0.621	1.206	N/A	N/A
	Left Side	0.075	N/A	0.075	N/A	N/A
	Right Side	0.095	0.217	0.312	N/A	N/A
	Top Side	N/A	0.162	0.162	N/A	N/A
	Bottom Side	0.294	N/A	0.294	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 4 and WLAN 2.4G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 5	WLAN 2.4G			
Head	Left Cheek	0.184	0.428	0.612	N/A	N/A
	Left Tilt 15 Degree	0.098	0.215	0.313	N/A	N/A
	Right Cheek	0.174	0.420	0.594	N/A	N/A
	Right Tilt 15 Degree	0.087	0.207	0.294	N/A	N/A
Body-Worn	Front Side	0.160	0.437	0.597	N/A	N/A
	Back Side	0.191	0.621	0.812	N/A	N/A
Hotspot	Front Side	0.160	0.437	0.597	N/A	N/A
	Back Side	0.191	0.621	0.812	N/A	N/A
	Left Side	0.142	N/A	0.142	N/A	N/A
	Right Side	0.087	0.217	0.304	N/A	N/A
	Top Side	N/A	0.162	0.162	N/A	N/A
	Bottom Side	0.069	N/A	0.069	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 5 and WLAN 2.4G.

Test Position	Scaled SAR _{MAX}		Σ 1-g SAR	SPLSR	Remark
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		LTE Band 7	WLAN 2.4G	(W/Kg)		
Head	Left Cheek	0.404	0.428	0.832	N/A	N/A
	Left Tilt 15 Degree	0.203	0.215	0.418	N/A	N/A
	Right Cheek	0.373	0.420	0.793	N/A	N/A
	Right Tilt 15 Degree	0.188	0.207	0.395	N/A	N/A
Body-Worn	Front Side	0.292	0.437	0.729	N/A	N/A
	Back Side	0.454	0.621	1.075	N/A	N/A
Hotspot	Front Side	0.292	0.437	0.729	N/A	N/A
	Back Side	0.454	0.621	1.075	N/A	N/A
	Left Side	0.220	N/A	0.220	N/A	N/A
	Right Side	0.107	0.217	0.324	N/A	N/A
	Top Side	N/A	0.162	0.162	N/A	N/A
	Bottom Side	0.080	N/A	0.080	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 7 and WLAN 2.4G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 12	WLAN 2.4G			
Head	Left Cheek	0.029	0.428	0.457	N/A	N/A
	Left Tilt 15 Degree	0.015	0.215	0.230	N/A	N/A
	Right Cheek	0.026	0.420	0.446	N/A	N/A
	Right Tilt 15 Degree	0.012	0.207	0.219	N/A	N/A
Body-Worn	Front Side	0.021	0.437	0.458	N/A	N/A
	Back Side	0.034	0.621	0.655	N/A	N/A
Hotspot	Front Side	0.021	0.437	0.458	N/A	N/A
	Back Side	0.034	0.621	0.655	N/A	N/A
	Left Side	0.013	N/A	0.013	N/A	N/A
	Right Side	0.010	0.217	0.227	N/A	N/A
	Top Side	N/A	0.162	0.162	N/A	N/A
	Bottom Side	0.007	N/A	0.007	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 12 and WLAN 2.4G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 13	WLAN 2.4G			
Head	Left Cheek	0.077	0.428	0.505	N/A	N/A
	Left Tilt 15 Degree	0.038	0.215	0.253	N/A	N/A
	Right Cheek	0.074	0.420	0.494	N/A	N/A
	Right Tilt 15	0.037	0.207	0.244	N/A	N/A

	Degree					
Body-Worn	Front Side	0.074	0.437	0.511	N/A	N/A
	Back Side	0.093	0.621	0.714	N/A	N/A
Hotspot	Front Side	0.074	0.437	0.511	N/A	N/A
	Back Side	0.093	0.621	0.714	N/A	N/A
	Left Side	0.047	N/A	0.047	N/A	N/A
	Right Side	0.007	0.217	0.224	N/A	N/A
	Top Side	N/A	0.162	0.162	N/A	N/A
	Bottom Side	0.009	N/A	0.009	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 13 and WLAN 2.4G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 25	WLAN 2.4G			
Head	Left Cheek	0.276	0.428	0.704	N/A	N/A
	Left Tilt 15 Degree	0.157	0.215	0.372	N/A	N/A
	Right Cheek	0.245	0.420	0.665	N/A	N/A
	Right Tilt 15 Degree	0.119	0.207	0.326	N/A	N/A
Body-Worn	Front Side	0.016	0.437	0.453	N/A	N/A
	Back Side	0.021	0.621	0.642	N/A	N/A
Hotspot	Front Side	0.016	0.437	0.453	N/A	N/A
	Back Side	0.021	0.621	0.642	N/A	N/A
	Left Side	0.014	N/A	0.014	N/A	N/A
	Right Side	0.010	0.217	0.227	N/A	N/A
	Top Side	N/A	0.162	0.162	N/A	N/A
	Bottom Side	0.008	N/A	0.008	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 25 and WLAN 2.4G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 26	WLAN 2.4G			
Head	Left Cheek	0.156	0.428	0.584	N/A	N/A
	Left Tilt 15 Degree	0.079	0.215	0.294	N/A	N/A
	Right Cheek	0.148	0.420	0.568	N/A	N/A
	Right Tilt 15 Degree	0.074	0.207	0.281	N/A	N/A
Body-Worn	Front Side	0.164	0.437	0.601	N/A	N/A
	Back Side	0.191	0.621	0.812	N/A	N/A
Hotspot	Front Side	0.164	0.437	0.601	N/A	N/A
	Back Side	0.191	0.621	0.812	N/A	N/A
	Left Side	0.132	N/A	0.132	N/A	N/A

	Right Side	0.096	0.217	0.313	N/A	N/A
	Top Side	N/A	0.162	0.162	N/A	N/A
	Bottom Side	0.087	N/A	0.087	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 26 and WLAN 2.4G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 41	WLAN 2.4G			
Head	Left Cheek	0.114	0.428	0.542	N/A	N/A
	Left Tilt 15 Degree	0.058	0.215	0.273	N/A	N/A
	Right Cheek	0.113	0.420	0.533	N/A	N/A
	Right Tilt 15 Degree	0.054	0.207	0.261	N/A	N/A
Body-Worn	Front Side	0.095	0.437	0.532	N/A	N/A
	Back Side	0.136	0.621	0.757	N/A	N/A
Hotspot	Front Side	0.095	0.437	0.532	N/A	N/A
	Back Side	0.136	0.621	0.757	N/A	N/A
	Left Side	0.071	N/A	0.071	N/A	N/A
	Right Side	0.017	0.217	0.234	N/A	N/A
	Top Side	N/A	0.162	0.162	N/A	N/A
	Bottom Side	0.020	N/A	0.020	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 41 and WLAN 2.4G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		GSM 850	Bluetooth			
Head	Left Cheek	0.376	0.210	0.586	N/A	N/A
	Left Tilt 15 Degree	0.189	0.210	0.399	N/A	N/A
	Right Cheek	0.349	0.210	0.559	N/A	N/A
	Right Tilt 15 Degree	0.174	0.210	0.384	N/A	N/A
Body-Worn	Front Side	0.334	0.105	0.439	N/A	N/A
	Back Side	0.396	0.105	0.501	N/A	N/A
Hotspot	Front Side	0.334	0.105	0.439	N/A	N/A
	Back Side	0.396	0.105	0.501	N/A	N/A
	Left Side	0.211	N/A	0.211	N/A	N/A
	Right Side	0.104	0.105	0.209	N/A	N/A
	Top Side	N/A	0.105	0.105	N/A	N/A
	Bottom Side	0.091	N/A	0.091	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of GSM850 and Bluetooth.

Test Position	Scaled SAR _{MAX}		Σ 1-g SAR	SPLSR	Remark
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		GSM 1900	Bluetooth	(W/Kg)		
Head	Left Cheek	0.276	0.210	0.486	N/A	N/A
	Left Tilt 15 Degree	0.138	0.210	0.348	N/A	N/A
	Right Cheek	0.271	0.210	0.481	N/A	N/A
	Right Tilt 15 Degree	0.134	0.210	0.344	N/A	N/A
Body-Worn	Front Side	0.289	0.105	0.394	N/A	N/A
	Back Side	0.369	0.105	0.474	N/A	N/A
Hotspot	Front Side	0.289	0.105	0.394	N/A	N/A
	Back Side	0.369	0.105	0.474	N/A	N/A
	Left Side	0.185	N/A	0.185	N/A	N/A
	Right Side	0.093	0.105	0.198	N/A	N/A
	Top Side	N/A	0.105	0.105	N/A	N/A
	Bottom Side	0.070	N/A	0.070	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of GSM1900 and Bluetooth.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		WCDMA Band 2	Bluetooth			
Head	Left Cheek	0.938	0.210	1.148	N/A	N/A
	Left Tilt 15 Degree	0.510	0.210	0.720	N/A	N/A
	Right Cheek	0.792	0.210	1.002	N/A	N/A
	Right Tilt 15 Degree	0.409	0.210	0.619	N/A	N/A
Body-Worn	Front Side	0.555	0.105	0.660	N/A	N/A
	Back Side	0.728	0.105	0.833	N/A	N/A
Hotspot	Front Side	0.555	0.105	0.660	N/A	N/A
	Back Side	0.728	0.105	0.833	N/A	N/A
	Left Side	0.582	N/A	0.582	N/A	N/A
	Right Side	0.345	0.105	0.450	N/A	N/A
	Top Side	N/A	0.105	0.105	N/A	N/A
	Bottom Side	0.277	N/A	0.277	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of WCDMA Band 2 and Bluetooth.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		WCDMA Band 4	Bluetooth			
Head	Left Cheek	0.613	0.210	0.823	N/A	N/A
	Left Tilt 15 Degree	0.322	0.210	0.532	N/A	N/A
	Right Cheek	0.560	0.210	0.770	N/A	N/A
	Right Tilt 15 Degree	0.275	0.210	0.485	N/A	N/A

Body-Worn	Front Side	0.291	0.105	0.396	N/A	N/A
	Back Side	0.380	0.105	0.485	N/A	N/A
Hotspot	Front Side	0.291	0.105	0.396	N/A	N/A
	Back Side	0.380	0.105	0.485	N/A	N/A
	Left Side	0.301	N/A	0.301	N/A	N/A
	Right Side	0.187	0.105	0.292	N/A	N/A
	Top Side	N/A	0.105	0.105	N/A	N/A
	Bottom Side	0.142	N/A	0.142	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of WCDMA Band 4 and Bluetooth.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		WCDMA Band 5	Bluetooth			
Head	Left Cheek	0.763	0.210	0.973	N/A	N/A
	Left Tilt 15 Degree	0.421	0.210	0.631	N/A	N/A
	Right Cheek	0.655	0.210	0.865	N/A	N/A
	Right Tilt 15 Degree	0.325	0.210	0.535	N/A	N/A
Body-Worn	Front Side	0.732	0.105	0.837	N/A	N/A
	Back Side	0.948	0.105	1.053	N/A	N/A
Hotspot	Front Side	0.732	0.105	0.837	N/A	N/A
	Back Side	0.948	0.105	1.053	N/A	N/A
	Left Side	0.747	N/A	0.747	N/A	N/A
	Right Side	0.423	0.105	0.528	N/A	N/A
	Top Side	N/A	0.105	0.105	N/A	N/A
	Bottom Side	0.323	N/A	0.323	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of WCDMA Band 5 and Bluetooth.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 2	Bluetooth			
Head	Left Cheek	0.310	0.210	0.520	N/A	N/A
	Left Tilt 15 Degree	0.155	0.210	0.365	N/A	N/A
	Right Cheek	0.292	0.210	0.502	N/A	N/A
	Right Tilt 15 Degree	0.143	0.210	0.353	N/A	N/A
Body-Worn	Front Side	0.272	0.105	0.377	N/A	N/A
	Back Side	0.483	0.105	0.588	N/A	N/A
Hotspot	Front Side	0.272	0.105	0.377	N/A	N/A
	Back Side	0.483	0.105	0.588	N/A	N/A
	Left Side	0.297	N/A	0.297	N/A	N/A
	Right Side	0.281	0.105	0.386	N/A	N/A

	Top Side	N/A	0.105	0.105	N/A	N/A
	Bottom Side	0.299	N/A	0.299	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 2 and Bluetooth.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 4	Bluetooth			
Head	Left Cheek	0.394	0.210	0.604	N/A	N/A
	Left Tilt 15 Degree	0.195	0.210	0.405	N/A	N/A
	Right Cheek	0.330	0.210	0.540	N/A	N/A
	Right Tilt 15 Degree	0.226	0.210	0.436	N/A	N/A
Body-Worn	Front Side	0.101	0.105	0.206	N/A	N/A
	Back Side	0.585	0.105	0.690	N/A	N/A
Hotspot	Front Side	0.101	0.105	0.206	N/A	N/A
	Back Side	0.585	0.105	0.690	N/A	N/A
	Left Side	0.075	N/A	0.075	N/A	N/A
	Right Side	0.095	0.105	0.200	N/A	N/A
	Top Side	N/A	0.105	0.105	N/A	N/A
	Bottom Side	0.294	N/A	0.294	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 4 and Bluetooth.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 5	Bluetooth			
Head	Left Cheek	0.184	0.210	0.394	N/A	N/A
	Left Tilt 15 Degree	0.098	0.210	0.308	N/A	N/A
	Right Cheek	0.174	0.210	0.384	N/A	N/A
	Right Tilt 15 Degree	0.087	0.210	0.297	N/A	N/A
Body-Worn	Front Side	0.160	0.105	0.265	N/A	N/A
	Back Side	0.191	0.105	0.296	N/A	N/A
Hotspot	Front Side	0.160	0.105	0.265	N/A	N/A
	Back Side	0.191	0.105	0.296	N/A	N/A
	Left Side	0.142	N/A	0.142	N/A	N/A
	Right Side	0.087	0.105	0.192	N/A	N/A
	Top Side	N/A	0.105	0.105	N/A	N/A
	Bottom Side	0.069	N/A	0.069	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 5 and Bluetooth.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 7	Bluetooth			

Head	Left Cheek	0.404	0.210	0.614	N/A	N/A
	Left Tilt 15 Degree	0.203	0.210	0.413	N/A	N/A
	Right Cheek	0.373	0.210	0.583	N/A	N/A
	Right Tilt 15 Degree	0.188	0.210	0.398	N/A	N/A
Body-Worn	Front Side	0.292	0.105	0.397	N/A	N/A
	Back Side	0.454	0.105	0.559	N/A	N/A
Hotspot	Front Side	0.292	0.105	0.397	N/A	N/A
	Back Side	0.454	0.105	0.559	N/A	N/A
	Left Side	0.220	N/A	0.220	N/A	N/A
	Right Side	0.107	0.105	0.212	N/A	N/A
	Top Side	N/A	0.105	0.105	N/A	N/A
	Bottom Side	0.080	N/A	0.080	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 7 and Bluetooth.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 12	Bluetooth			
Head	Left Cheek	0.029	0.210	0.239	N/A	N/A
	Left Tilt 15 Degree	0.015	0.210	0.225	N/A	N/A
	Right Cheek	0.026	0.210	0.236	N/A	N/A
	Right Tilt 15 Degree	0.012	0.210	0.222	N/A	N/A
Body-Worn	Front Side	0.021	0.105	0.126	N/A	N/A
	Back Side	0.034	0.105	0.139	N/A	N/A
Hotspot	Front Side	0.021	0.105	0.126	N/A	N/A
	Back Side	0.034	0.105	0.139	N/A	N/A
	Left Side	0.013	N/A	0.013	N/A	N/A
	Right Side	0.010	0.105	0.115	N/A	N/A
	Top Side	N/A	0.105	0.105	N/A	N/A
	Bottom Side	0.007	N/A	0.007	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 12 and Bluetooth.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 13	Bluetooth			
Head	Left Cheek	0.077	0.210	0.287	N/A	N/A
	Left Tilt 15 Degree	0.038	0.210	0.248	N/A	N/A
	Right Cheek	0.074	0.210	0.284	N/A	N/A
	Right Tilt 15 Degree	0.037	0.210	0.247	N/A	N/A

Body-Worn	Front Side	0.074	0.105	0.179	N/A	N/A
	Back Side	0.093	0.105	0.198	N/A	N/A
Hotspot	Front Side	0.074	0.105	0.179	N/A	N/A
	Back Side	0.093	0.105	0.198	N/A	N/A
	Left Side	0.047	N/A	0.047	N/A	N/A
	Right Side	0.007	0.105	0.112	N/A	N/A
	Top Side	N/A	0.105	0.105	N/A	N/A
	Bottom Side	0.009	N/A	0.009	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 13 and Bluetooth.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 25	Bluetooth			
Head	Left Cheek	0.276	0.210	0.486	N/A	N/A
	Left Tilt 15 Degree	0.157	0.210	0.367	N/A	N/A
	Right Cheek	0.245	0.210	0.455	N/A	N/A
	Right Tilt 15 Degree	0.119	0.210	0.329	N/A	N/A
Body-Worn	Front Side	0.016	0.105	0.121	N/A	N/A
	Back Side	0.021	0.105	0.126	N/A	N/A
Hotspot	Front Side	0.016	0.105	0.121	N/A	N/A
	Back Side	0.021	0.105	0.126	N/A	N/A
	Left Side	0.014	N/A	0.014	N/A	N/A
	Right Side	0.010	0.105	0.115	N/A	N/A
	Top Side	N/A	0.105	0.105	N/A	N/A
	Bottom Side	0.008	N/A	0.008	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 25 and Bluetooth.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 26	Bluetooth			
Head	Left Cheek	0.156	0.210	0.366	N/A	N/A
	Left Tilt 15 Degree	0.079	0.210	0.289	N/A	N/A
	Right Cheek	0.148	0.210	0.358	N/A	N/A
	Right Tilt 15 Degree	0.074	0.210	0.284	N/A	N/A
Body-Worn	Front Side	0.164	0.105	0.269	N/A	N/A
	Back Side	0.191	0.105	0.296	N/A	N/A
Hotspot	Front Side	0.164	0.105	0.269	N/A	N/A
	Back Side	0.191	0.105	0.296	N/A	N/A
	Left Side	0.132	N/A	0.132	N/A	N/A
	Right Side	0.096	0.105	0.201	N/A	N/A

	Top Side	N/A	0.105	0.105	N/A	N/A
	Bottom Side	0.087	N/A	0.087	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 26 and Bluetooth.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 41	Bluetooth			
Head	Left Cheek	0.114	0.210	0.324	N/A	N/A
	Left Tilt 15 Degree	0.058	0.210	0.268	N/A	N/A
	Right Cheek	0.113	0.210	0.323	N/A	N/A
	Right Tilt 15 Degree	0.054	0.210	0.264	N/A	N/A
Body-Worn	Front Side	0.095	0.105	0.200	N/A	N/A
	Back Side	0.136	0.105	0.241	N/A	N/A
Hotspot	Front Side	0.095	0.105	0.200	N/A	N/A
	Back Side	0.136	0.105	0.241	N/A	N/A
	Left Side	0.071	N/A	0.071	N/A	N/A
	Right Side	0.017	0.105	0.122	N/A	N/A
	Top Side	N/A	0.105	0.105	N/A	N/A
	Bottom Side	0.020	N/A	0.020	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 41 and Bluetooth.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		GSM 850	WLAN 5.2G			
Head	Left Cheek	0.376	0.253	0.629	N/A	N/A
	Left Tilt 15 Degree	0.189	0.148	0.337	N/A	N/A
	Right Cheek	0.349	0.235	0.584	N/A	N/A
	Right Tilt 15 Degree	0.174	0.125	0.299	N/A	N/A
Body-Worn	Front Side	0.334	0.119	0.453	N/A	N/A
	Back Side	0.396	0.194	0.590	N/A	N/A
Hotspot	Front Side	0.334	0.119	0.453	N/A	N/A
	Back Side	0.396	0.194	0.590	N/A	N/A
	Left Side	0.211	N/A	0.211	N/A	N/A
	Right Side	0.104	0.040	0.144	N/A	N/A
	Top Side	N/A	0.059	0.059	N/A	N/A
	Bottom Side	0.091	N/A	0.091	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of GSM850 and WLAN 5.2G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		GSM 1900	WLAN 5.2G			

Head	Left Cheek	0.276	0.253	0.529	N/A	N/A
	Left Tilt 15 Degree	0.138	0.148	0.286	N/A	N/A
	Right Cheek	0.271	0.235	0.506	N/A	N/A
	Right Tilt 15 Degree	0.134	0.125	0.259	N/A	N/A
Body-Worn	Front Side	0.289	0.119	0.408	N/A	N/A
	Back Side	0.369	0.194	0.563	N/A	N/A
Hotspot	Front Side	0.289	0.119	0.408	N/A	N/A
	Back Side	0.369	0.194	0.563	N/A	N/A
	Left Side	0.185	N/A	0.185	N/A	N/A
	Right Side	0.093	0.040	0.133	N/A	N/A
	Top Side	N/A	0.059	0.059	N/A	N/A
	Bottom Side	0.070	N/A	0.070	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of GSM1900 and WLAN 5.2G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		WCDMA Band 2	WLAN 5.2G			
Head	Left Cheek	0.938	0.253	1.191	N/A	N/A
	Left Tilt 15 Degree	0.510	0.148	0.658	N/A	N/A
	Right Cheek	0.792	0.235	1.027	N/A	N/A
	Right Tilt 15 Degree	0.409	0.125	0.534	N/A	N/A
Body-Worn	Front Side	0.555	0.119	0.674	N/A	N/A
	Back Side	0.728	0.194	0.922	N/A	N/A
Hotspot	Front Side	0.555	0.119	0.674	N/A	N/A
	Back Side	0.728	0.194	0.922	N/A	N/A
	Left Side	0.582	N/A	0.582	N/A	N/A
	Right Side	0.345	0.040	0.385	N/A	N/A
	Top Side	N/A	0.059	0.059	N/A	N/A
	Bottom Side	0.277	N/A	0.277	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of WCDMA Band 2 and WLAN 5.2G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		WCDMA Band 4	WLAN 5.2G			
Head	Left Cheek	0.613	0.253	0.866	N/A	N/A
	Left Tilt 15 Degree	0.322	0.148	0.470	N/A	N/A
	Right Cheek	0.560	0.235	0.795	N/A	N/A
	Right Tilt 15 Degree	0.275	0.125	0.400	N/A	N/A
Body-Worn	Front Side	0.291	0.119	0.410	N/A	N/A

	Back Side	0.380	0.194	0.574	N/A	N/A
Hotspot	Front Side	0.291	0.119	0.410	N/A	N/A
	Back Side	0.380	0.194	0.574	N/A	N/A
	Left Side	0.301	N/A	0.301	N/A	N/A
	Right Side	0.187	0.040	0.227	N/A	N/A
	Top Side	N/A	0.059	0.059	N/A	N/A
	Bottom Side	0.142	N/A	0.142	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of WCDMA Band 4 and WLAN 5.2G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		WCDMA Band 5	WLAN 5.2G			
Head	Left Cheek	0.763	0.253	1.016	N/A	N/A
	Left Tilt 15 Degree	0.421	0.148	0.569	N/A	N/A
	Right Cheek	0.655	0.235	0.890	N/A	N/A
	Right Tilt 15 Degree	0.325	0.125	0.450	N/A	N/A
Body-Worn	Front Side	0.732	0.119	0.851	N/A	N/A
	Back Side	0.948	0.194	1.142	N/A	N/A
Hotspot	Front Side	0.732	0.119	0.851	N/A	N/A
	Back Side	0.948	0.194	1.142	N/A	N/A
	Left Side	0.747	N/A	0.747	N/A	N/A
	Right Side	0.423	0.040	0.463	N/A	N/A
	Top Side	N/A	0.059	0.059	N/A	N/A
	Bottom Side	0.323	N/A	0.323	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of WCDMA Band 5 and WLAN 5.2G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 2	WLAN 5.2G			
Head	Left Cheek	0.310	0.253	0.563	N/A	N/A
	Left Tilt 15 Degree	0.155	0.148	0.303	N/A	N/A
	Right Cheek	0.292	0.235	0.527	N/A	N/A
	Right Tilt 15 Degree	0.143	0.125	0.268	N/A	N/A
Body-Worn	Front Side	0.272	0.119	0.391	N/A	N/A
	Back Side	0.483	0.194	0.677	N/A	N/A
Hotspot	Front Side	0.272	0.119	0.391	N/A	N/A
	Back Side	0.483	0.194	0.677	N/A	N/A
	Left Side	0.297	N/A	0.297	N/A	N/A
	Right Side	0.281	0.040	0.321	N/A	N/A
	Top Side	N/A	0.059	0.059	N/A	N/A

	Bottom Side	0.299	N/A	0.299	N/A	N/A
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NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 2 and WLAN 5.2G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 4	WLAN 5.2G			
Head	Left Cheek	0.394	0.253	0.647	N/A	N/A
	Left Tilt 15 Degree	0.195	0.148	0.343	N/A	N/A
	Right Cheek	0.330	0.235	0.565	N/A	N/A
	Right Tilt 15 Degree	0.226	0.125	0.351	N/A	N/A
Body-Worn	Front Side	0.101	0.119	0.220	N/A	N/A
	Back Side	0.585	0.194	0.779	N/A	N/A
Hotspot	Front Side	0.101	0.119	0.220	N/A	N/A
	Back Side	0.585	0.194	0.779	N/A	N/A
	Left Side	0.075	N/A	0.075	N/A	N/A
	Right Side	0.095	0.040	0.135	N/A	N/A
	Top Side	N/A	0.059	0.059	N/A	N/A
	Bottom Side	0.294	N/A	0.294	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 4 and WLAN 5.2G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 5	WLAN 5.2G			
Head	Left Cheek	0.184	0.253	0.437	N/A	N/A
	Left Tilt 15 Degree	0.098	0.148	0.246	N/A	N/A
	Right Cheek	0.174	0.235	0.409	N/A	N/A
	Right Tilt 15 Degree	0.087	0.125	0.212	N/A	N/A
Body-Worn	Front Side	0.160	0.119	0.279	N/A	N/A
	Back Side	0.191	0.194	0.385	N/A	N/A
Hotspot	Front Side	0.160	0.119	0.279	N/A	N/A
	Back Side	0.191	0.194	0.385	N/A	N/A
	Left Side	0.142	N/A	0.142	N/A	N/A
	Right Side	0.087	0.040	0.127	N/A	N/A
	Top Side	N/A	0.059	0.059	N/A	N/A
	Bottom Side	0.069	N/A	0.069	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 5 and WLAN 5.2G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 7	WLAN 5.2G			
Head	Left Cheek	0.404	0.253	0.657	N/A	N/A

	Left Tilt 15 Degree	0.203	0.148	0.351	N/A	N/A
	Right Cheek	0.373	0.235	0.608	N/A	N/A
	Right Tilt 15 Degree	0.188	0.125	0.313	N/A	N/A
Body-Worn	Front Side	0.292	0.119	0.411	N/A	N/A
	Back Side	0.454	0.194	0.648	N/A	N/A
Hotspot	Front Side	0.292	0.119	0.411	N/A	N/A
	Back Side	0.454	0.194	0.648	N/A	N/A
	Left Side	0.220	N/A	0.220	N/A	N/A
	Right Side	0.107	0.040	0.147	N/A	N/A
	Top Side	N/A	0.059	0.059	N/A	N/A
	Bottom Side	0.080	N/A	0.080	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 7 and WLAN 5.2G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 12	WLAN 5.2G			
Head	Left Cheek	0.029	0.253	0.282	N/A	N/A
	Left Tilt 15 Degree	0.015	0.148	0.163	N/A	N/A
	Right Cheek	0.026	0.235	0.261	N/A	N/A
	Right Tilt 15 Degree	0.012	0.125	0.137	N/A	N/A
Body-Worn	Front Side	0.021	0.119	0.140	N/A	N/A
	Back Side	0.034	0.194	0.228	N/A	N/A
Hotspot	Front Side	0.021	0.119	0.140	N/A	N/A
	Back Side	0.034	0.194	0.228	N/A	N/A
	Left Side	0.013	N/A	0.013	N/A	N/A
	Right Side	0.010	0.040	0.050	N/A	N/A
	Top Side	N/A	0.059	0.059	N/A	N/A
	Bottom Side	0.007	N/A	0.007	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 12 and WLAN 5.2G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 13	WLAN 5.2G			
Head	Left Cheek	0.077	0.253	0.330	N/A	N/A
	Left Tilt 15 Degree	0.038	0.148	0.186	N/A	N/A
	Right Cheek	0.074	0.235	0.309	N/A	N/A
	Right Tilt 15	0.037	0.125	0.162	N/A	N/A

	Degree					
Body-Worn	Front Side	0.074	0.119	0.193	N/A	N/A
	Back Side	0.093	0.194	0.287	N/A	N/A
Hotspot	Front Side	0.074	0.119	0.193	N/A	N/A
	Back Side	0.093	0.194	0.287	N/A	N/A
	Left Side	0.047	N/A	0.047	N/A	N/A
	Right Side	0.007	0.040	0.047	N/A	N/A
	Top Side	N/A	0.059	0.059	N/A	N/A
	Bottom Side	0.009	N/A	0.009	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 13 and WLAN 5.2G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 25	WLAN 5.2G			
Head	Left Cheek	0.276	0.253	0.529	N/A	N/A
	Left Tilt 15 Degree	0.157	0.148	0.305	N/A	N/A
	Right Cheek	0.245	0.235	0.480	N/A	N/A
	Right Tilt 15 Degree	0.119	0.125	0.244	N/A	N/A
Body-Worn	Front Side	0.016	0.119	0.135	N/A	N/A
	Back Side	0.021	0.194	0.215	N/A	N/A
Hotspot	Front Side	0.016	0.119	0.135	N/A	N/A
	Back Side	0.021	0.194	0.215	N/A	N/A
	Left Side	0.014	N/A	0.014	N/A	N/A
	Right Side	0.010	0.040	0.050	N/A	N/A
	Top Side	N/A	0.059	0.059	N/A	N/A
	Bottom Side	0.008	N/A	0.008	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 25 and WLAN 5.2G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 26	WLAN 5.2G			
Head	Left Cheek	0.156	0.253	0.409	N/A	N/A
	Left Tilt 15 Degree	0.079	0.148	0.227	N/A	N/A
	Right Cheek	0.148	0.235	0.383	N/A	N/A
	Right Tilt 15 Degree	0.074	0.125	0.199	N/A	N/A
Body-Worn	Front Side	0.164	0.119	0.283	N/A	N/A
	Back Side	0.191	0.194	0.385	N/A	N/A
Hotspot	Front Side	0.164	0.119	0.283	N/A	N/A
	Back Side	0.191	0.194	0.385	N/A	N/A
	Left Side	0.132	N/A	0.132	N/A	N/A

	Right Side	0.096	0.040	0.136	N/A	N/A
	Top Side	N/A	0.059	0.059	N/A	N/A
	Bottom Side	0.087	N/A	0.087	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 26 and WLAN 5.2G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 41	WLAN 5.2G			
Head	Left Cheek	0.114	0.253	0.367	N/A	N/A
	Left Tilt 15 Degree	0.058	0.148	0.206	N/A	N/A
	Right Cheek	0.113	0.235	0.348	N/A	N/A
	Right Tilt 15 Degree	0.054	0.125	0.179	N/A	N/A
Body-Worn	Front Side	0.095	0.119	0.214	N/A	N/A
	Back Side	0.136	0.194	0.330	N/A	N/A
Hotspot	Front Side	0.095	0.119	0.214	N/A	N/A
	Back Side	0.136	0.194	0.330	N/A	N/A
	Left Side	0.071	N/A	0.071	N/A	N/A
	Right Side	0.017	0.040	0.057	N/A	N/A
	Top Side	N/A	0.059	0.059	N/A	N/A
	Bottom Side	0.020	N/A	0.020	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 41 and WLAN 5.2G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		GSM 850	WLAN 5.8G			
Head	Left Cheek	0.376	0.469	0.845	N/A	N/A
	Left Tilt 15 Degree	0.189	0.236	0.425	N/A	N/A
	Right Cheek	0.349	0.411	0.760	N/A	N/A
	Right Tilt 15 Degree	0.174	0.203	0.377	N/A	N/A
Body-Worn	Front Side	0.334	0.214	0.548	N/A	N/A
	Back Side	0.396	0.347	0.743	N/A	N/A
Hotspot	Front Side	0.334	0.214	0.548	N/A	N/A
	Back Side	0.396	0.347	0.743	N/A	N/A
	Left Side	0.211	N/A	0.211	N/A	N/A
	Right Side	0.104	0.082	0.186	N/A	N/A
	Top Side	N/A	0.114	0.114	N/A	N/A
	Bottom Side	0.091	N/A	0.091	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of GSM850 and WLAN 5.8G.

Test Position	Scaled SAR _{MAX}		Σ 1-g SAR	SPLSR	Remark
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		GSM 1900	WLAN 5.8G	(W/Kg)		
Head	Left Cheek	0.276	0.469	0.745	N/A	N/A
	Left Tilt 15 Degree	0.138	0.236	0.374	N/A	N/A
	Right Cheek	0.271	0.411	0.682	N/A	N/A
	Right Tilt 15 Degree	0.134	0.203	0.337	N/A	N/A
Body-Worn	Front Side	0.289	0.214	0.503	N/A	N/A
	Back Side	0.369	0.347	0.716	N/A	N/A
Hotspot	Front Side	0.289	0.214	0.503	N/A	N/A
	Back Side	0.369	0.347	0.716	N/A	N/A
	Left Side	0.185	N/A	0.185	N/A	N/A
	Right Side	0.093	0.082	0.175	N/A	N/A
	Top Side	N/A	0.114	0.114	N/A	N/A
	Bottom Side	0.070	N/A	0.070	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of GSM1900 and WLAN 5.8G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		WCDMA Band 2	WLAN 5.8G			
Head	Left Cheek	0.938	0.469	1.407	N/A	N/A
	Left Tilt 15 Degree	0.510	0.236	0.746	N/A	N/A
	Right Cheek	0.792	0.411	1.203	N/A	N/A
	Right Tilt 15 Degree	0.409	0.203	0.612	N/A	N/A
Body-Worn	Front Side	0.555	0.214	0.769	N/A	N/A
	Back Side	0.728	0.347	1.075	N/A	N/A
Hotspot	Front Side	0.555	0.214	0.769	N/A	N/A
	Back Side	0.728	0.347	1.075	N/A	N/A
	Left Side	0.582	N/A	0.582	N/A	N/A
	Right Side	0.345	0.082	0.427	N/A	N/A
	Top Side	N/A	0.114	0.114	N/A	N/A
	Bottom Side	0.277	N/A	0.277	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of WCDMA Band 2 and WLAN 5.8G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		WCDMA Band 4	WLAN 5.8G			
Head	Left Cheek	0.613	0.469	1.082	N/A	N/A
	Left Tilt 15 Degree	0.322	0.236	0.558	N/A	N/A
	Right Cheek	0.560	0.411	0.971	N/A	N/A
	Right Tilt 15 Degree	0.275	0.203	0.478	N/A	N/A

Body-Worn	Front Side	0.291	0.214	0.505	N/A	N/A
	Back Side	0.380	0.347	0.727	N/A	N/A
Hotspot	Front Side	0.291	0.214	0.505	N/A	N/A
	Back Side	0.380	0.347	0.727	N/A	N/A
	Left Side	0.301	N/A	0.301	N/A	N/A
	Right Side	0.187	0.082	0.269	N/A	N/A
	Top Side	N/A	0.114	0.114	N/A	N/A
	Bottom Side	0.142	N/A	0.142	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of WCDMA Band 4 and WLAN 5.8G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		WCDMA Band 5	WLAN 5.8G			
Head	Left Cheek	0.763	0.469	1.232	N/A	N/A
	Left Tilt 15 Degree	0.421	0.236	0.657	N/A	N/A
	Right Cheek	0.655	0.411	1.066	N/A	N/A
	Right Tilt 15 Degree	0.325	0.203	0.528	N/A	N/A
Body-Worn	Front Side	0.732	0.214	0.946	N/A	N/A
	Back Side	0.948	0.347	1.295	N/A	N/A
Hotspot	Front Side	0.732	0.214	0.946	N/A	N/A
	Back Side	0.948	0.347	1.295	N/A	N/A
	Left Side	0.747	N/A	0.747	N/A	N/A
	Right Side	0.423	0.082	0.505	N/A	N/A
	Top Side	N/A	0.114	0.114	N/A	N/A
	Bottom Side	0.323	N/A	0.323	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of WCDMA Band 5 and WLAN 5.8G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 2	WLAN 5.8G			
Head	Left Cheek	0.310	0.469	0.779	N/A	N/A
	Left Tilt 15 Degree	0.155	0.236	0.391	N/A	N/A
	Right Cheek	0.292	0.411	0.703	N/A	N/A
	Right Tilt 15 Degree	0.143	0.203	0.346	N/A	N/A
Body-Worn	Front Side	0.272	0.214	0.486	N/A	N/A
	Back Side	0.483	0.347	0.830	N/A	N/A
Hotspot	Front Side	0.272	0.214	0.486	N/A	N/A
	Back Side	0.483	0.347	0.830	N/A	N/A
	Left Side	0.297	N/A	0.297	N/A	N/A
	Right Side	0.281	0.082	0.363	N/A	N/A

	Top Side	N/A	0.114	0.114	N/A	N/A
	Bottom Side	0.299	N/A	0.299	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 2 and WLAN 5.8G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 4	WLAN 5.8G			
Head	Left Cheek	0.394	0.469	0.863	N/A	N/A
	Left Tilt 15 Degree	0.195	0.236	0.431	N/A	N/A
	Right Cheek	0.330	0.411	0.741	N/A	N/A
	Right Tilt 15 Degree	0.226	0.203	0.429	N/A	N/A
Body-Worn	Front Side	0.101	0.214	0.315	N/A	N/A
	Back Side	0.585	0.347	0.932	N/A	N/A
Hotspot	Front Side	0.101	0.214	0.315	N/A	N/A
	Back Side	0.585	0.347	0.932	N/A	N/A
	Left Side	0.075	N/A	0.075	N/A	N/A
	Right Side	0.095	0.082	0.177	N/A	N/A
	Top Side	N/A	0.114	0.114	N/A	N/A
	Bottom Side	0.294	N/A	0.294	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 4 and WLAN 5.8G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 5	WLAN 5.8G			
Head	Left Cheek	0.184	0.469	0.653	N/A	N/A
	Left Tilt 15 Degree	0.098	0.236	0.334	N/A	N/A
	Right Cheek	0.174	0.411	0.585	N/A	N/A
	Right Tilt 15 Degree	0.087	0.203	0.290	N/A	N/A
Body-Worn	Front Side	0.160	0.214	0.374	N/A	N/A
	Back Side	0.191	0.347	0.538	N/A	N/A
Hotspot	Front Side	0.160	0.214	0.374	N/A	N/A
	Back Side	0.191	0.347	0.538	N/A	N/A
	Left Side	0.142	N/A	0.142	N/A	N/A
	Right Side	0.087	0.082	0.169	N/A	N/A
	Top Side	N/A	0.114	0.114	N/A	N/A
	Bottom Side	0.069	N/A	0.069	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 5 and WLAN 5.8G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 7	WLAN 5.8G			
Head	Left Cheek	0.404	0.469	0.873	N/A	N/A

	Left Tilt 15 Degree	0.203	0.236	0.439	N/A	N/A
	Right Cheek	0.373	0.411	0.784	N/A	N/A
	Right Tilt 15 Degree	0.188	0.203	0.391	N/A	N/A
Body-Worn	Front Side	0.292	0.214	0.506	N/A	N/A
	Back Side	0.454	0.347	0.801	N/A	N/A
Hotspot	Front Side	0.292	0.214	0.506	N/A	N/A
	Back Side	0.454	0.347	0.801	N/A	N/A
	Left Side	0.220	N/A	0.220	N/A	N/A
	Right Side	0.107	0.082	0.189	N/A	N/A
	Top Side	N/A	0.114	0.114	N/A	N/A
	Bottom Side	0.080	N/A	0.080	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 7 and WLAN 5.8G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 12	WLAN 5.8G			
Head	Left Cheek	0.029	0.469	0.498	N/A	N/A
	Left Tilt 15 Degree	0.015	0.236	0.251	N/A	N/A
	Right Cheek	0.026	0.411	0.437	N/A	N/A
	Right Tilt 15 Degree	0.012	0.203	0.215	N/A	N/A
Body-Worn	Front Side	0.021	0.214	0.235	N/A	N/A
	Back Side	0.034	0.347	0.381	N/A	N/A
Hotspot	Front Side	0.021	0.214	0.235	N/A	N/A
	Back Side	0.034	0.347	0.381	N/A	N/A
	Left Side	0.013	N/A	0.013	N/A	N/A
	Right Side	0.010	0.082	0.092	N/A	N/A
	Top Side	N/A	0.114	0.114	N/A	N/A
	Bottom Side	0.007	N/A	0.007	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 12 and WLAN 5.8G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 13	WLAN 5.8G			
Head	Left Cheek	0.077	0.469	0.546	N/A	N/A
	Left Tilt 15 Degree	0.038	0.236	0.274	N/A	N/A
	Right Cheek	0.074	0.411	0.485	N/A	N/A
	Right Tilt 15 Degree	0.037	0.203	0.240	N/A	N/A
Body-Worn	Front Side	0.074	0.214	0.288	N/A	N/A

	Back Side	0.093	0.347	0.440	N/A	N/A
Hotspot	Front Side	0.074	0.214	0.288	N/A	N/A
	Back Side	0.093	0.347	0.440	N/A	N/A
	Left Side	0.047	N/A	0.047	N/A	N/A
	Right Side	0.007	0.082	0.089	N/A	N/A
	Top Side	N/A	0.114	0.114	N/A	N/A
	Bottom Side	0.009	N/A	0.009	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 13 and WLAN 5.8G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 25	WLAN 5.8G			
Head	Left Cheek	0.276	0.469	0.745	N/A	N/A
	Left Tilt 15 Degree	0.157	0.236	0.393	N/A	N/A
	Right Cheek	0.245	0.411	0.656	N/A	N/A
	Right Tilt 15 Degree	0.119	0.203	0.322	N/A	N/A
Body-Worn	Front Side	0.016	0.214	0.230	N/A	N/A
	Back Side	0.021	0.347	0.368	N/A	N/A
Hotspot	Front Side	0.016	0.214	0.230	N/A	N/A
	Back Side	0.021	0.347	0.368	N/A	N/A
	Left Side	0.014	N/A	0.014	N/A	N/A
	Right Side	0.010	0.082	0.092	N/A	N/A
	Top Side	N/A	0.114	0.114	N/A	N/A
	Bottom Side	0.008	N/A	0.008	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 25 and WLAN 5.8G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 26	WLAN 5.8G			
Head	Left Cheek	0.156	0.469	0.625	N/A	N/A
	Left Tilt 15 Degree	0.079	0.236	0.315	N/A	N/A
	Right Cheek	0.148	0.411	0.559	N/A	N/A
	Right Tilt 15 Degree	0.074	0.203	0.277	N/A	N/A
Body-Worn	Front Side	0.164	0.214	0.378	N/A	N/A
	Back Side	0.191	0.347	0.538	N/A	N/A
Hotspot	Front Side	0.164	0.214	0.378	N/A	N/A
	Back Side	0.191	0.347	0.538	N/A	N/A
	Left Side	0.132	N/A	0.132	N/A	N/A
	Right Side	0.096	0.082	0.178	N/A	N/A
	Top Side	N/A	0.114	0.114	N/A	N/A

	Bottom Side	0.087	N/A	0.087	N/A	N/A
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NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 26 and WLAN 5.8G.

Test Position		Scaled SAR _{MAX}		Σ 1-g SAR (W/Kg)	SPLSR	Remark
		LTE Band 41	WLAN 5.8G			
Head	Left Cheek	0.114	0.469	0.583	N/A	N/A
	Left Tilt 15 Degree	0.058	0.236	0.294	N/A	N/A
	Right Cheek	0.113	0.411	0.524	N/A	N/A
	Right Tilt 15 Degree	0.054	0.203	0.257	N/A	N/A
Body-Worn	Front Side	0.095	0.214	0.309	N/A	N/A
	Back Side	0.136	0.347	0.483	N/A	N/A
Hotspot	Front Side	0.095	0.214	0.309	N/A	N/A
	Back Side	0.136	0.347	0.483	N/A	N/A
	Left Side	0.071	N/A	0.071	N/A	N/A
	Right Side	0.017	0.082	0.099	N/A	N/A
	Top Side	N/A	0.114	0.114	N/A	N/A
	Bottom Side	0.020	N/A	0.020	N/A	N/A

NOTE: 1-g SAR Simultaneous Tx Combination of LTE Band 41 and WLAN 5.8G.

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 - SID750 - Head
MEASUREMENT 2 System Performance Check - SID750 - Body
MEASUREMENT 3 System Performance Check - SID835 - Head
MEASUREMENT 4 System Performance Check - SID835 - Body
MEASUREMENT 5 System Performance Check - SID1800 - Head
MEASUREMENT 6 System Performance Check - SID1800 - Body
MEASUREMENT 7 System Performance Check - SID1900 - Head
MEASUREMENT 8 System Performance Check - SID1900 - Body
MEASUREMENT 9 System Performance Check - SID2450 - Head
MEASUREMENT 10 System Performance Check - SID2450 - Body
MEASUREMENT 11 System Performance Check - SID2600 - Head
MEASUREMENT 12 System Performance Check - SID2600 - Body
MEASUREMENT 13 System Performance Check - SID5200 - Head
MEASUREMENT 14 System Performance Check - SID5200 - Body
MEASUREMENT 15 System Performance Check - SID5800 - Head
MEASUREMENT 16 System Performance Check - SID5800 - Body

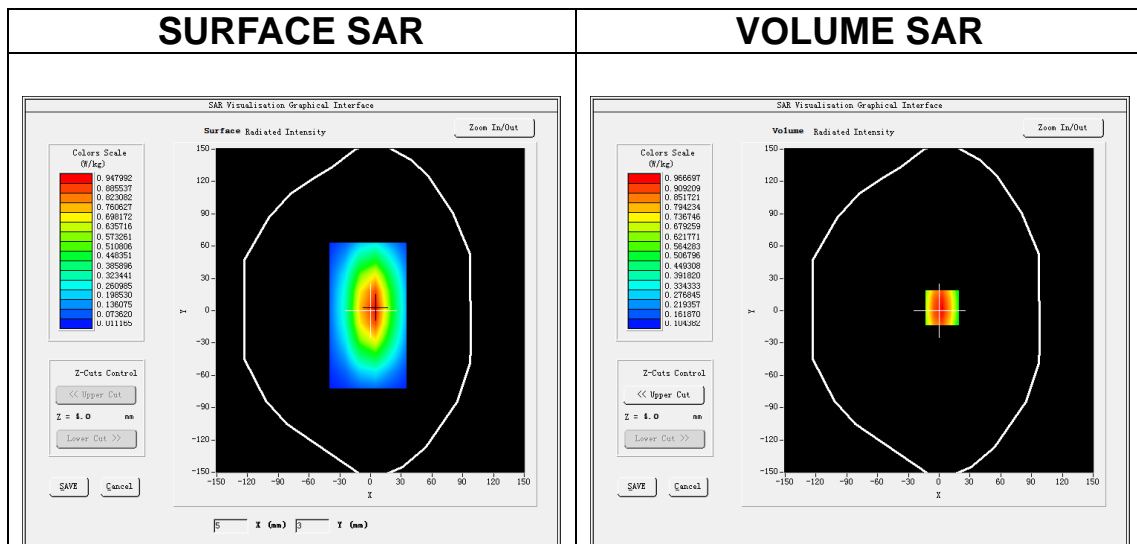
MEASUREMENT 1

A. Experimental conditions.

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

B. SAR Measurement Results

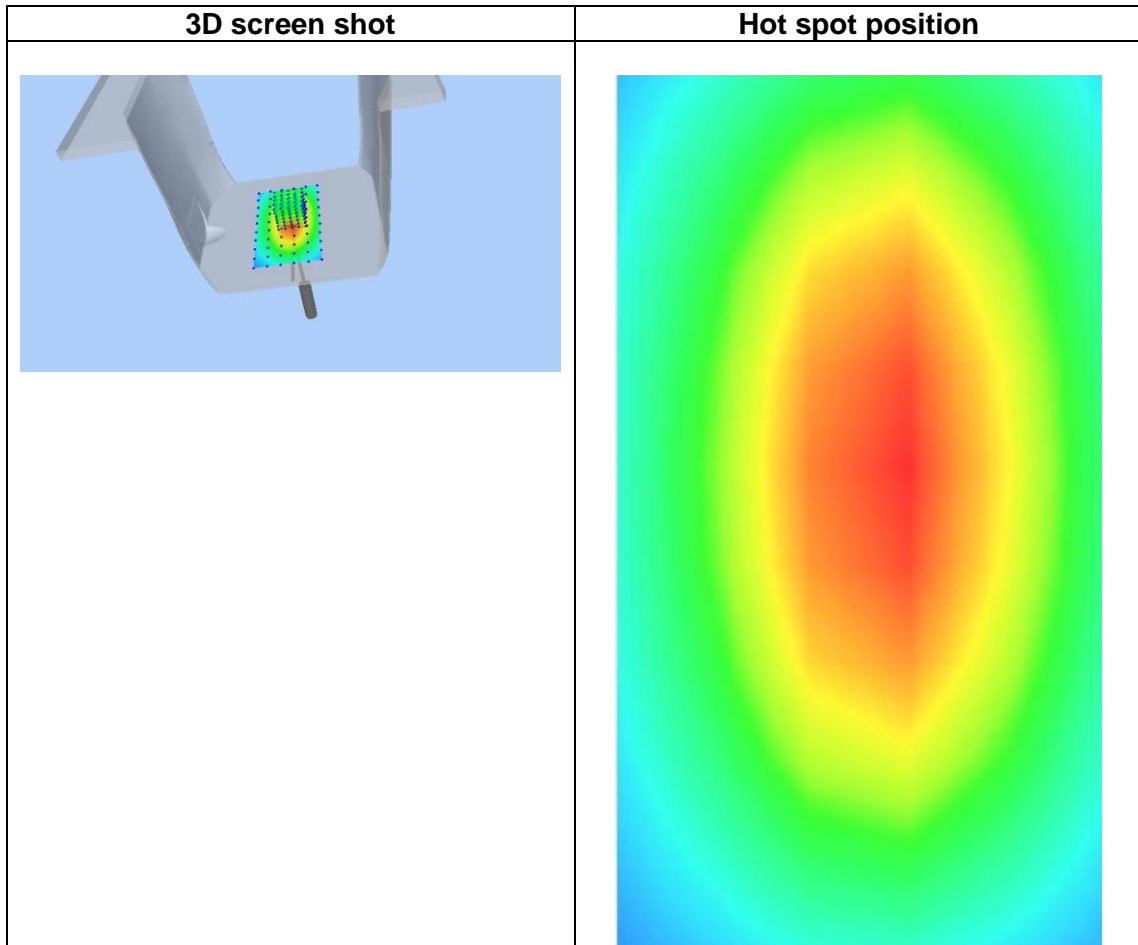
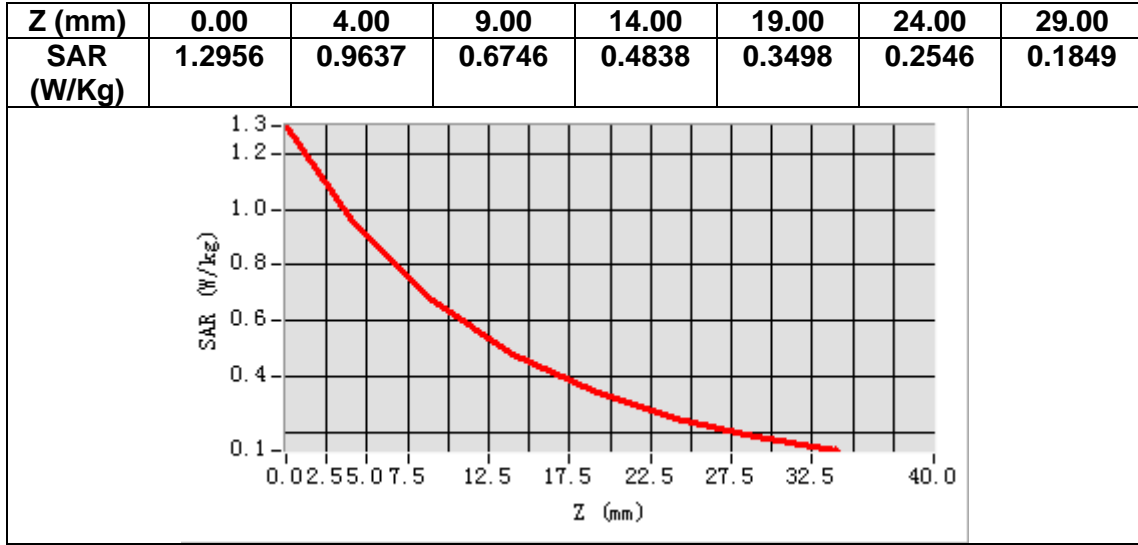
Frequency (MHz)	750.000000
Relative permittivity (real part)	41.183162
Relative permittivity (imaginary part)	21.941263
Conductivity (S/m)	0.913862
Variation (%)	-3.880000



Maximum location: X=3.00, Y=3.00

SAR Peak: 1.30 W/kg

SAR 10g (W/Kg)	0.549218
SAR 1g (W/Kg)	0.850362



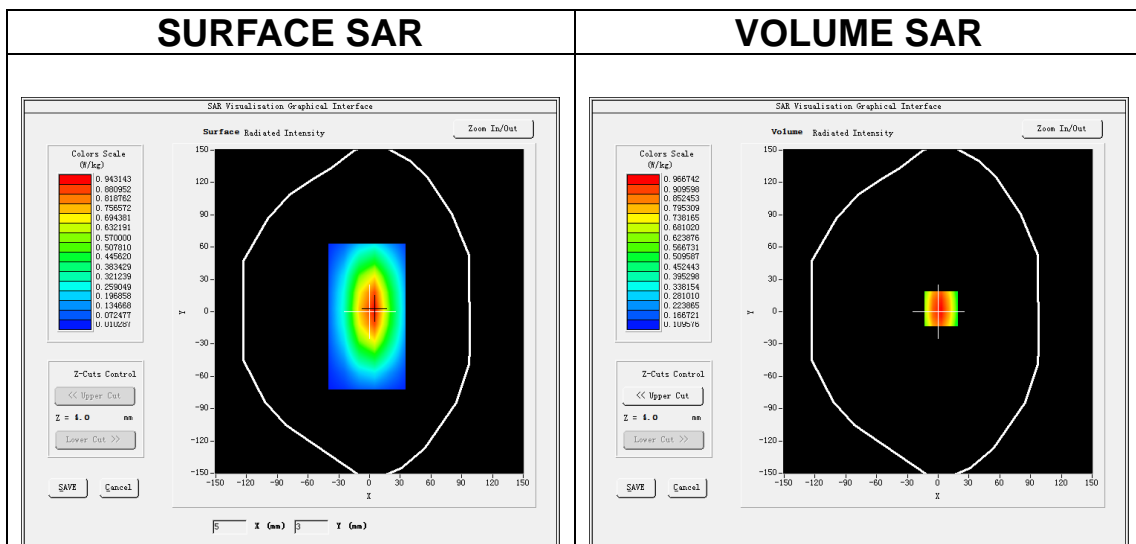
MEASUREMENT 2

A. Experimental conditions.

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

B. SAR Measurement Results

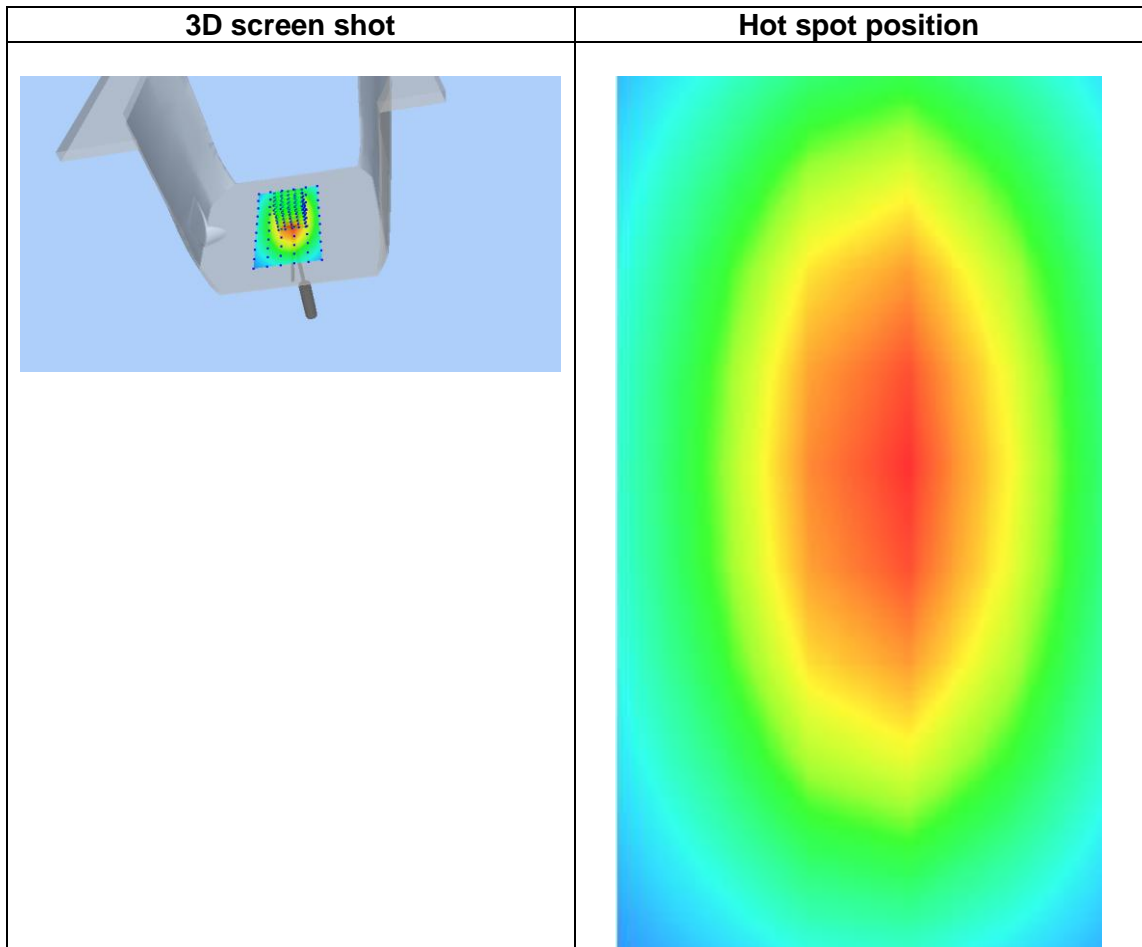
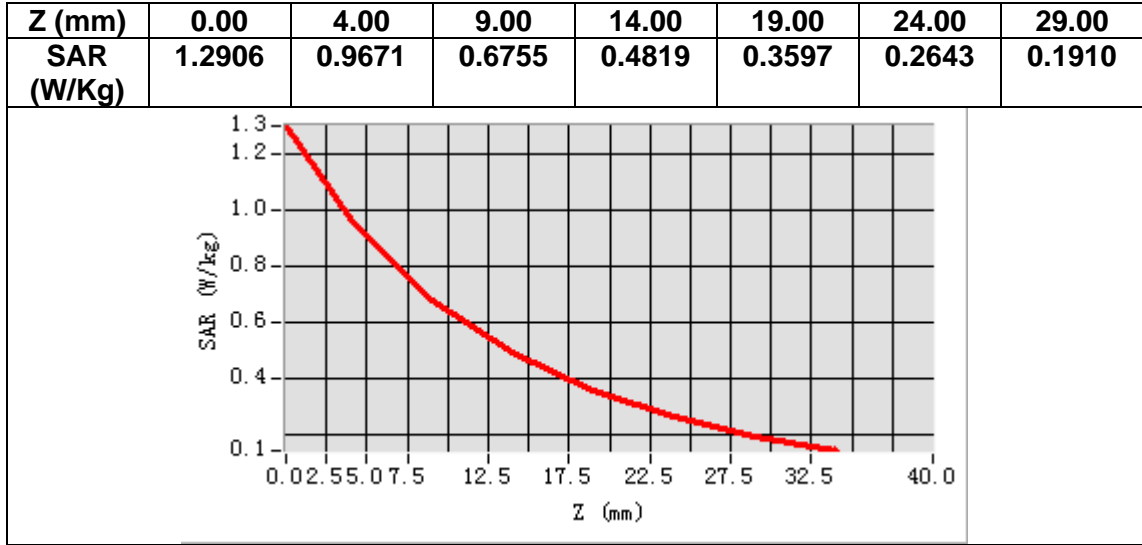
Frequency (MHz)	750.000000
Relative permittivity (real part)	55.250248
Relative permittivity (imaginary part)	23.353842
Conductivity (S/m)	0.971318
Variation (%)	-1.560000



Maximum location: X=3.00, Y=3.00

SAR Peak: 1.30 W/kg

SAR 10g (W/Kg)	0.590281
SAR 1g (W/Kg)	0.884263



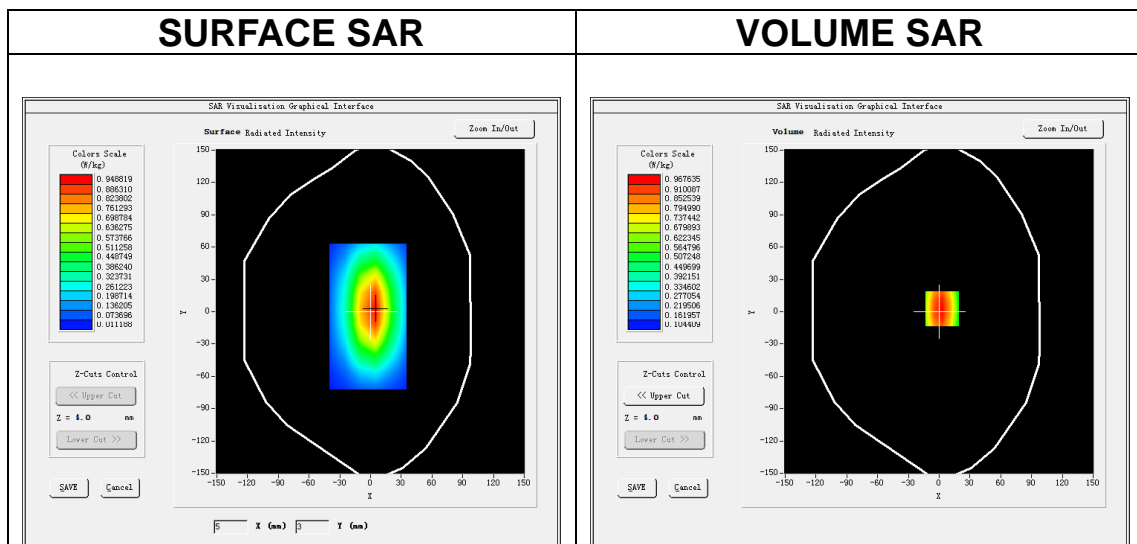
MEASUREMENT 3

A. Experimental conditions.

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

B. SAR Measurement Results

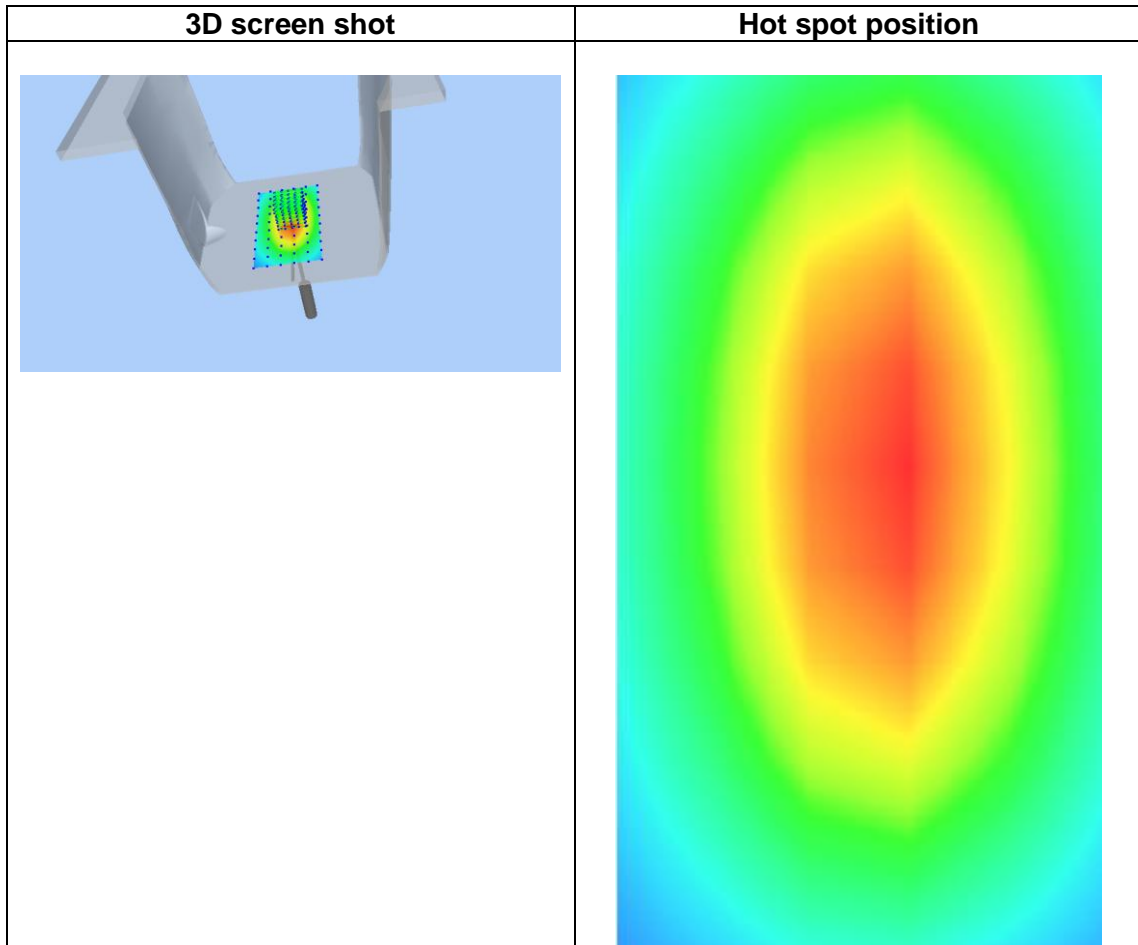
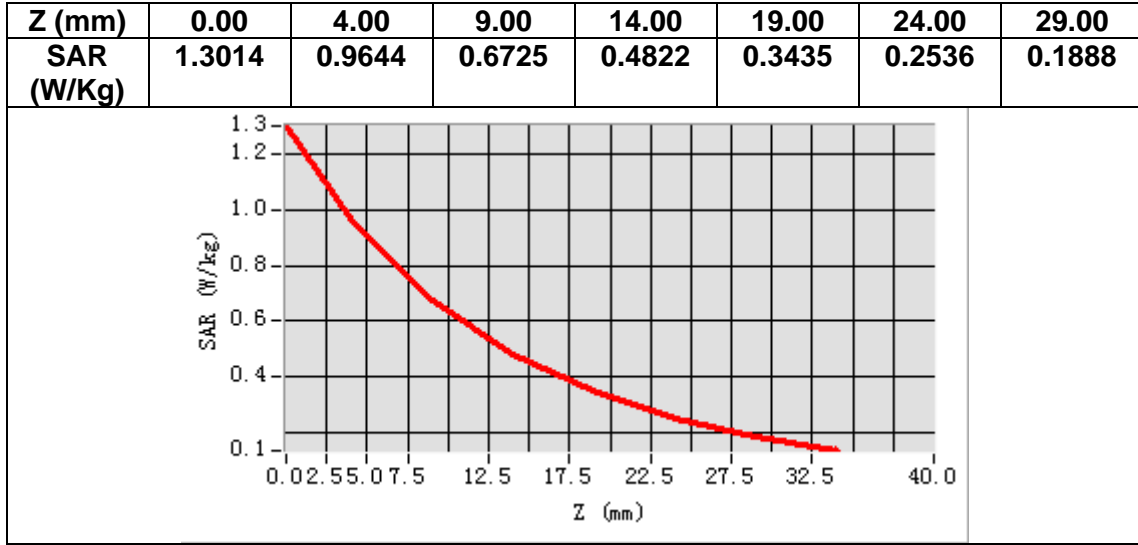
Frequency (MHz)	835.000000
Relative permittivity (real part)	40.503541
Relative permittivity (imaginary part)	20.179613
Conductivity (S/m)	0.941742
Variation (%)	2.190000



Maximum location: X=3.00, Y=3.00

SAR Peak: 1.30 W/kg

SAR 10g (W/Kg)	0.622966
SAR 1g (W/Kg)	0.961235



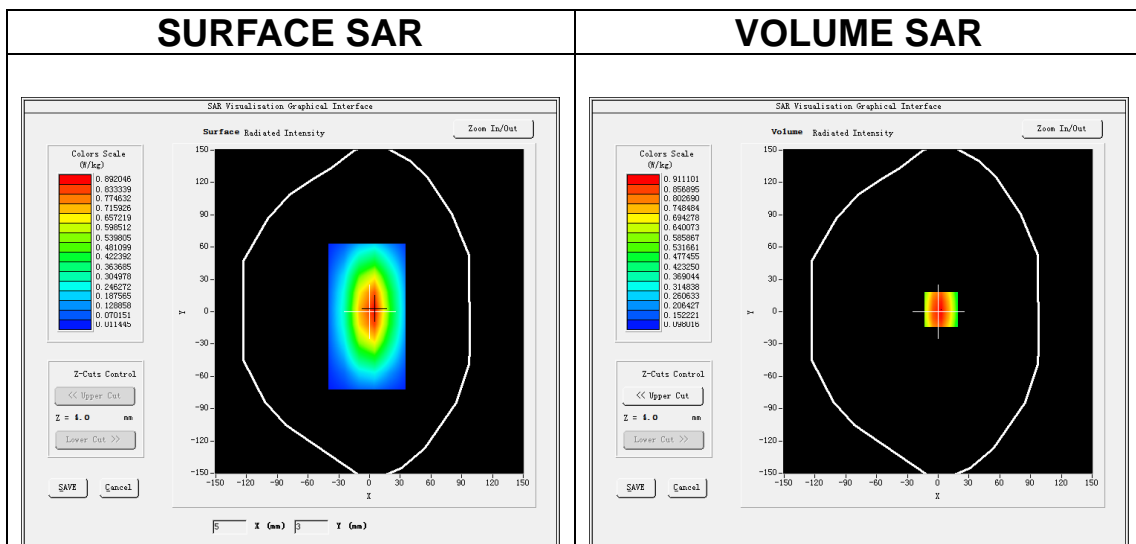
MEASUREMENT 4

A. Experimental conditions.

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

B. SAR Measurement Results

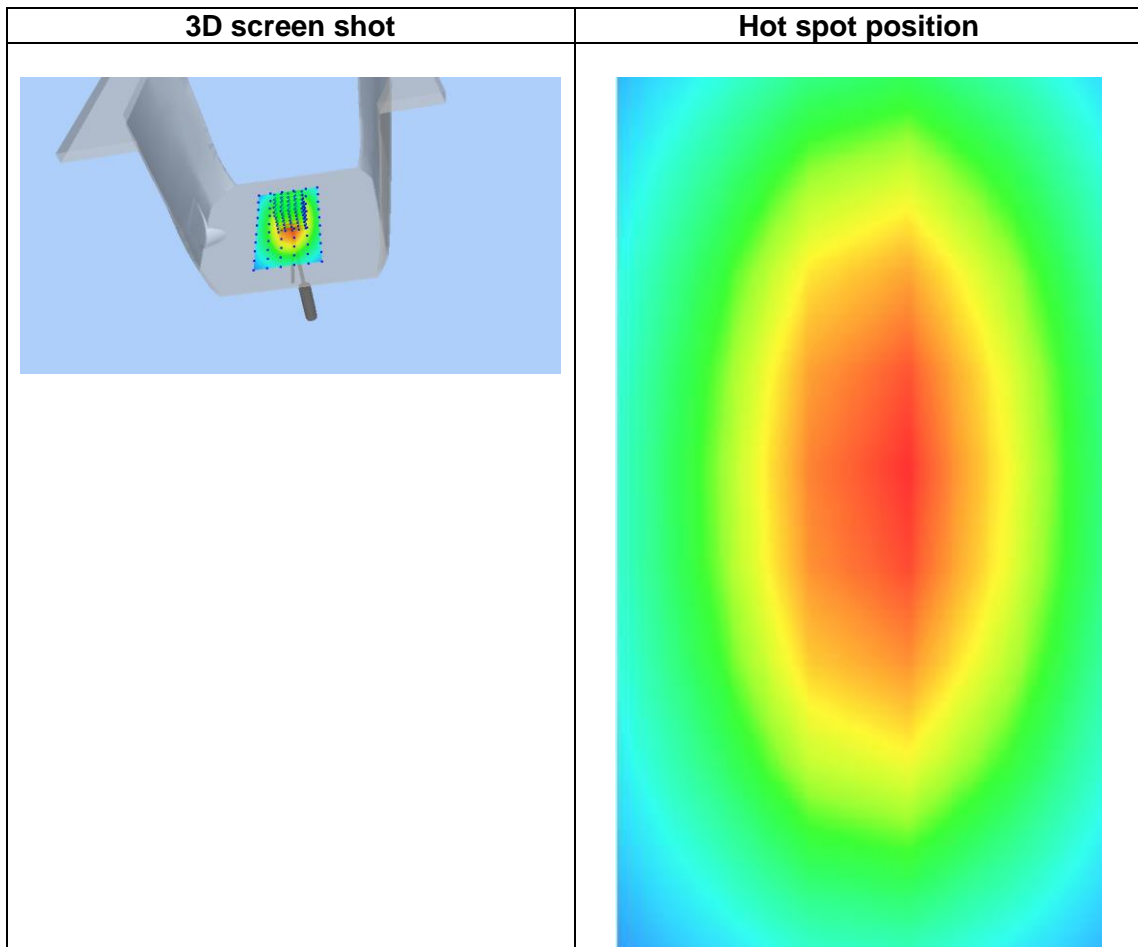
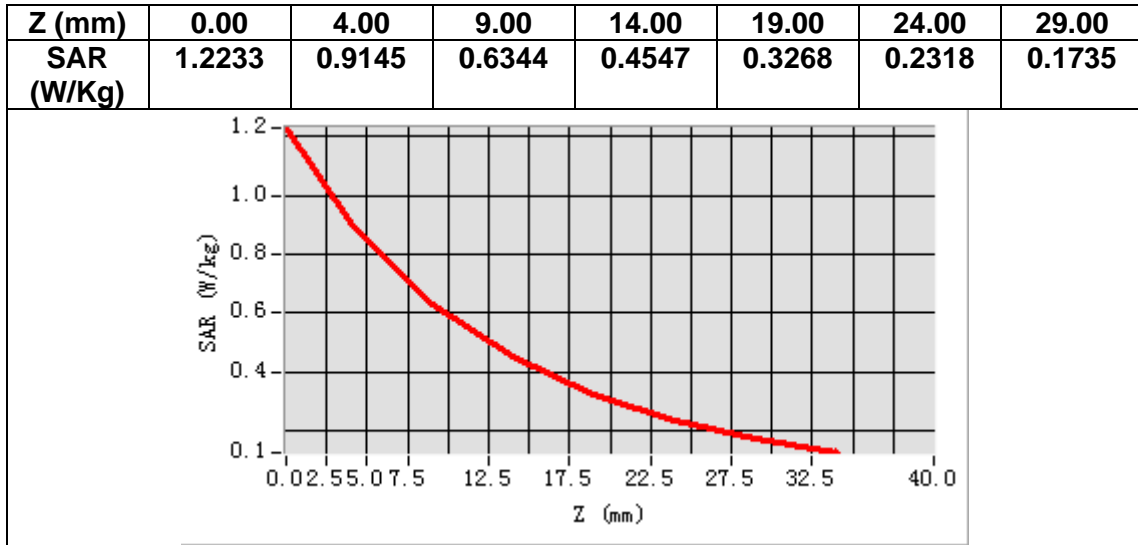
Frequency (MHz)	835.000000
Relative permittivity (real part)	54.231111
Relative permittivity (imaginary part)	21.863359
Conductivity (S/m)	1.011236
Variation (%)	-4.330000



Maximum location: X=3.00, Y=2.00

SAR Peak: 1.23 W/kg

SAR 10g (W/Kg)	0.653123
SAR 1g (W/Kg)	0.980356



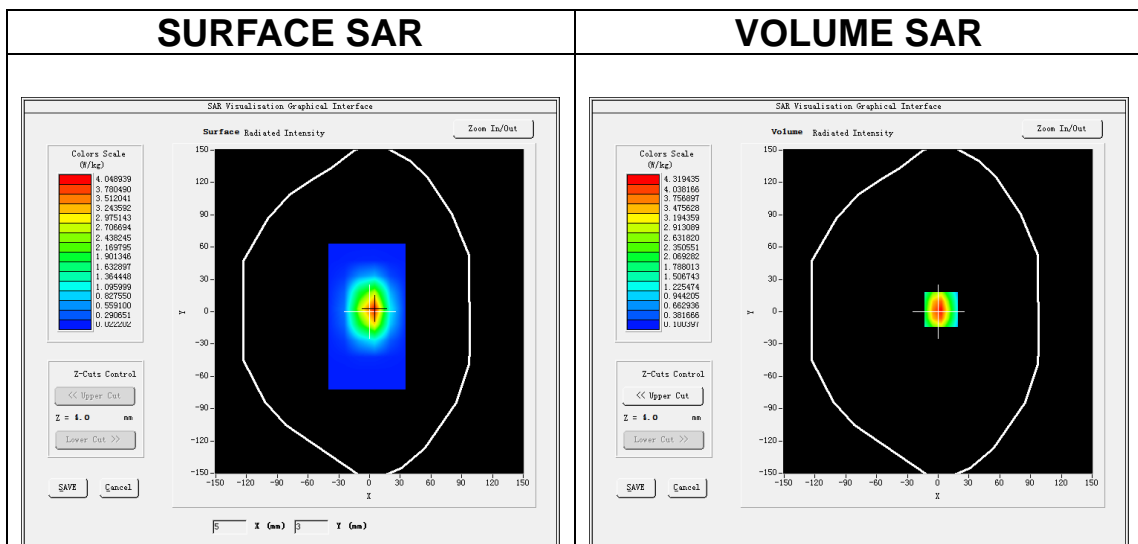
MEASUREMENT 5

A. Experimental conditions.

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

B. SAR Measurement Results

Frequency (MHz)	1800.000000
Relative permittivity (real part)	38.601237
Relative permittivity (imaginary part)	14.033229
Conductivity (S/m)	1.402367
Variation (%)	-3.160000

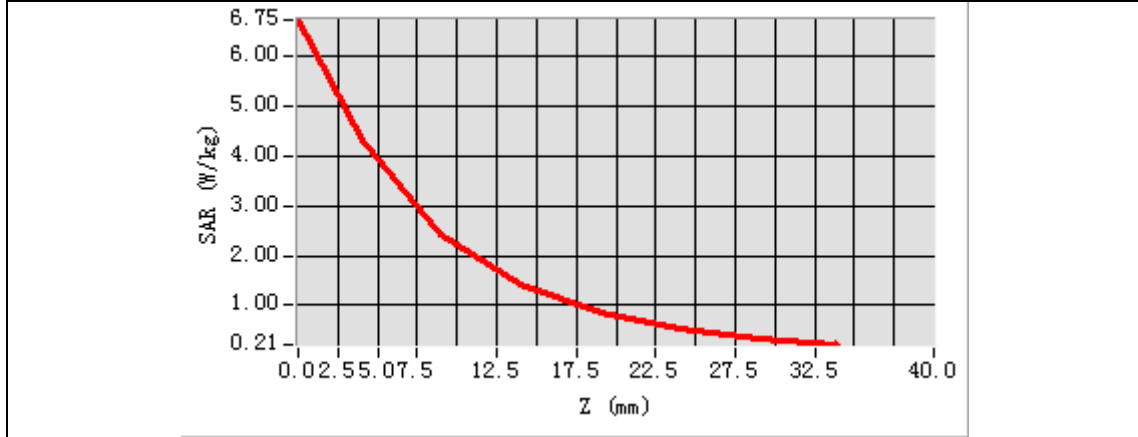


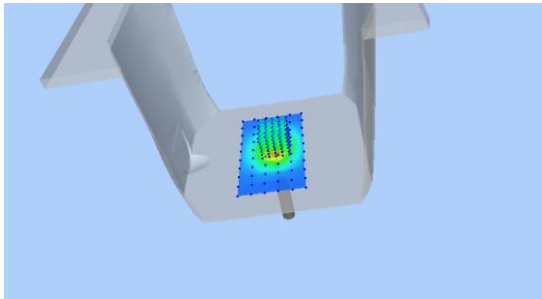
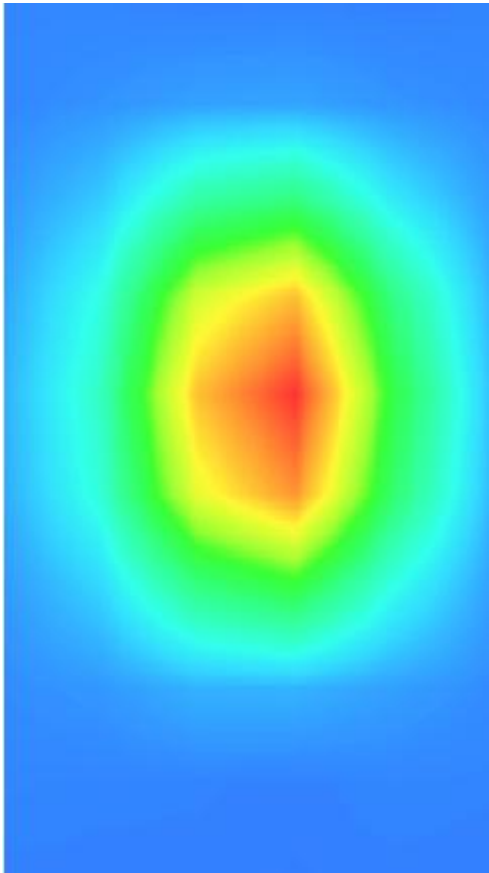
Maximum location: X=3.00, Y=2.00

SAR Peak: 6.82 W/kg

SAR 10g (W/Kg)	2.015397
SAR 1g (W/Kg)	3.822551

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	6.7414	4.3166	2.4339	1.4253	0.8563	0.5214	0.3238



3D screen shot	Hot spot position
	

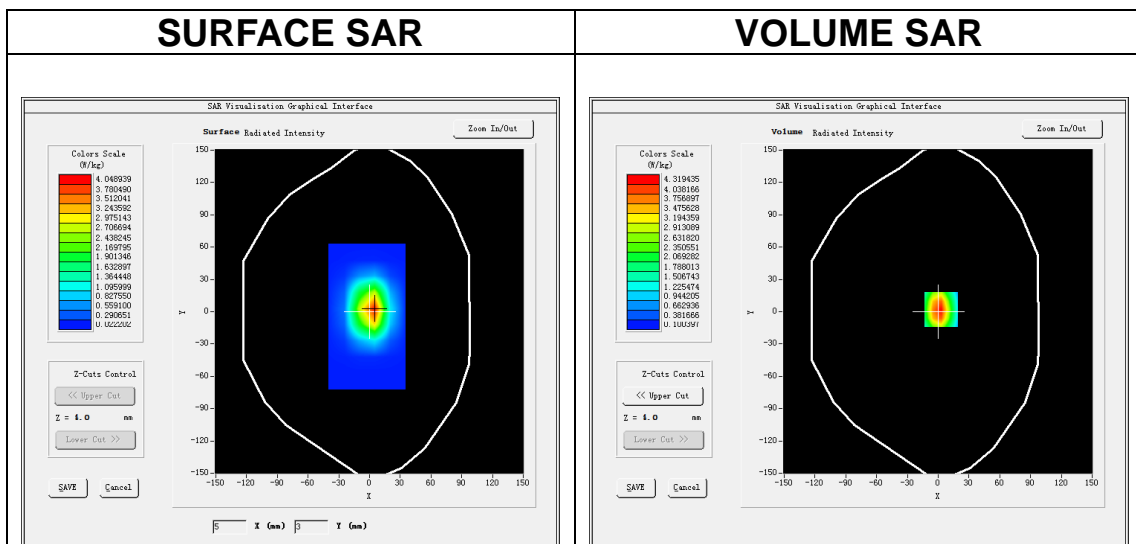
MEASUREMENT 6

A. Experimental conditions.

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

B. SAR Measurement Results

Frequency (MHz)	1800.000000
Relative permittivity (real part)	53.193510
Relative permittivity (imaginary part)	15.674016
Conductivity (S/m)	1.573096
Variation (%)	3.220000

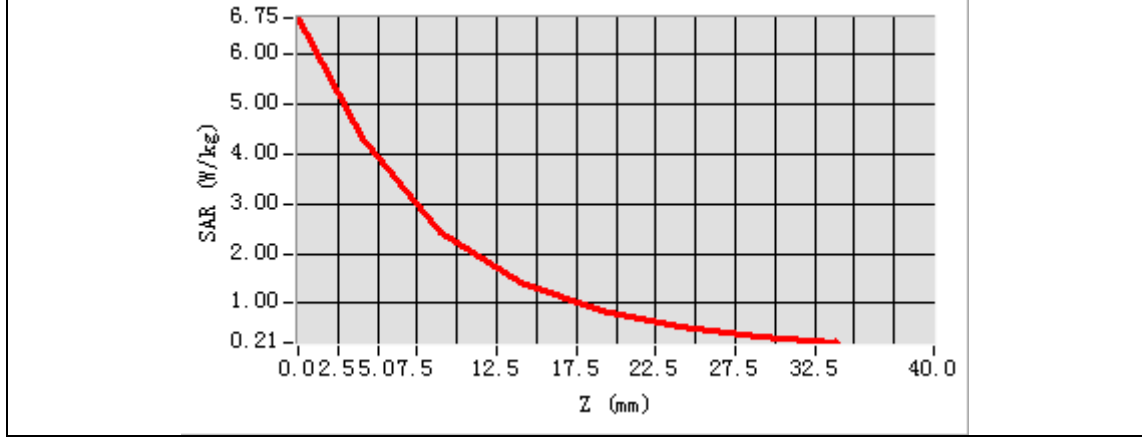


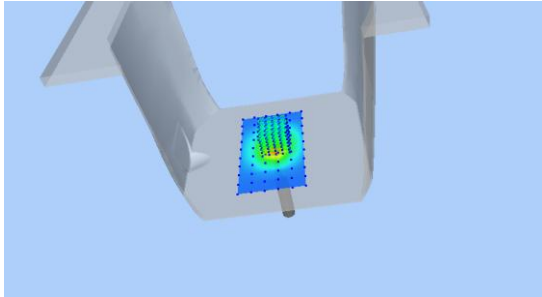
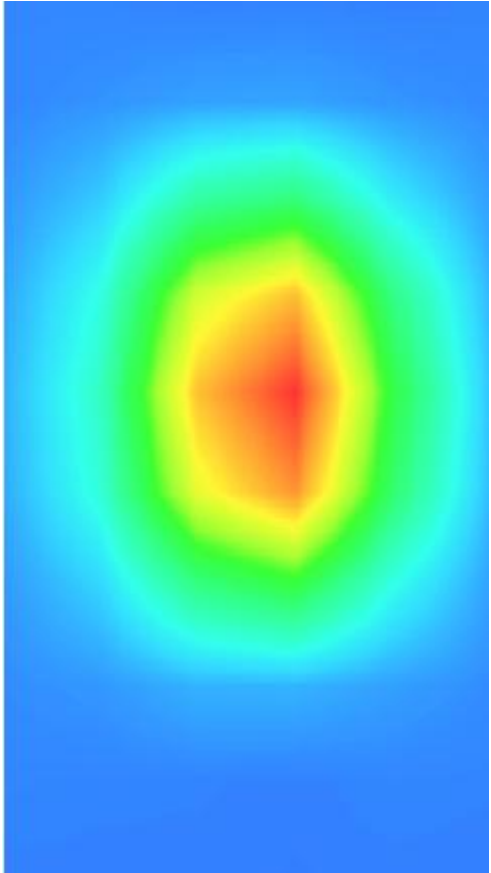
Maximum location: X=3.00, Y=2.00

SAR Peak: 6.82 W/kg

SAR 10g (W/Kg)	2.049379
SAR 1g (W/Kg)	3.818268

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	6.7414	4.3135	2.4363	1.4247	0.8577	0.5244	0.3266



3D screen shot	Hot spot position
	

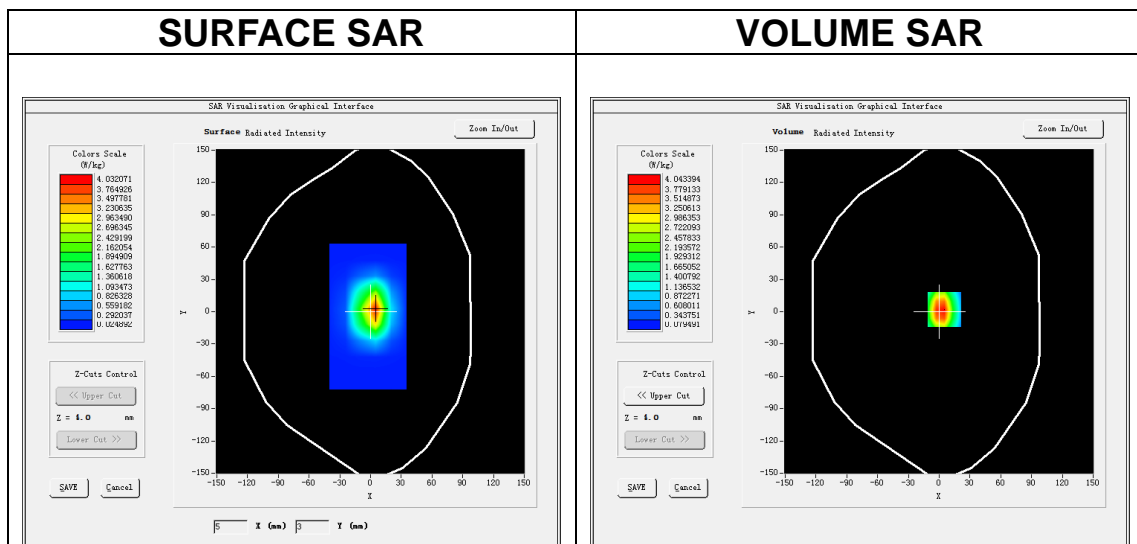
MEASUREMENT 7

A. Experimental conditions.

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

B. SAR Measurement Results

Frequency (MHz)	1900.000000
Relative permittivity (real part)	40.931287
Relative permittivity (imaginary part)	13.843008
Conductivity (S/m)	1.460336
Variation (%)	-1.430000

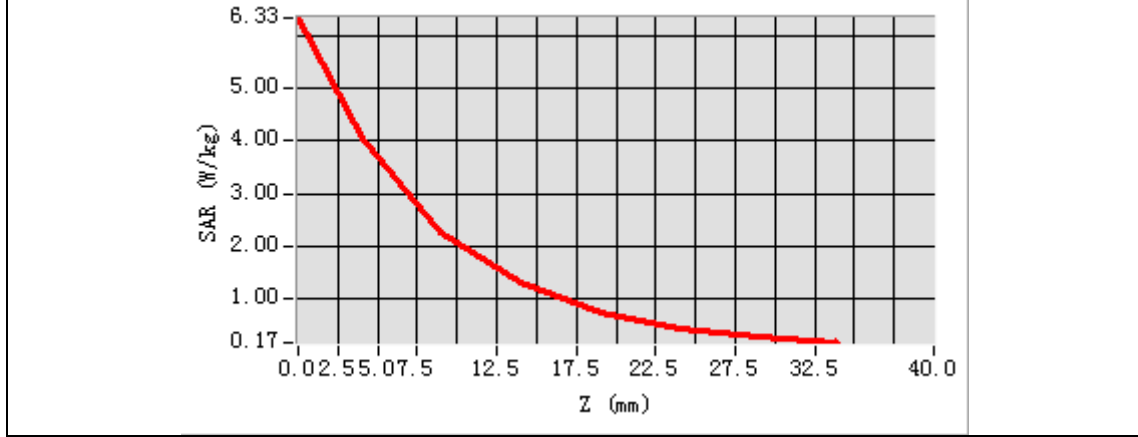


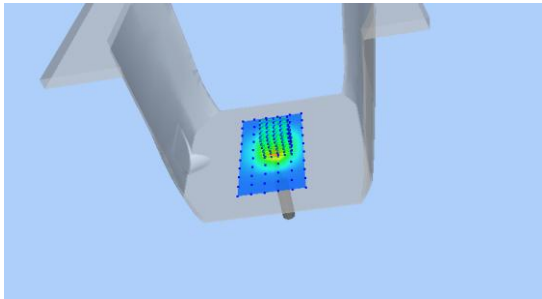
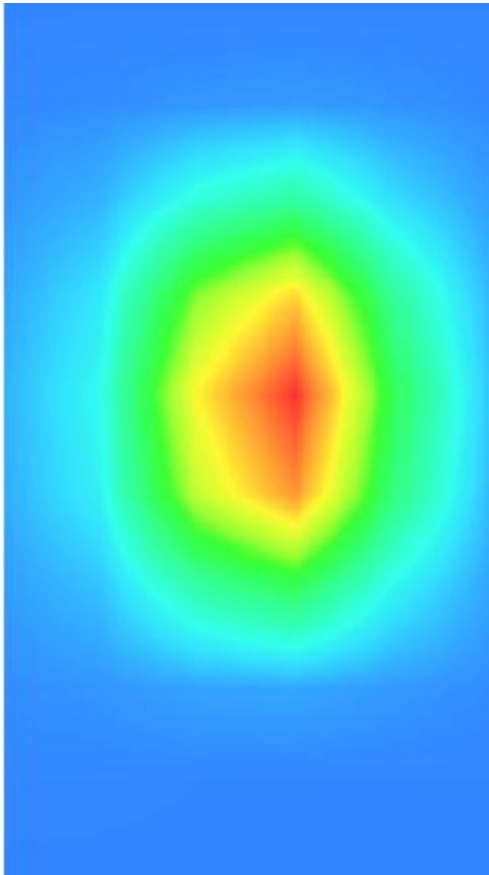
Maximum location: X=5.00, Y=2.00

SAR Peak: 6.70 W/kg

SAR 10g (W/Kg)	2.001456
SAR 1g (W/Kg)	3.877365

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	6.3214	4.0435	2.2657	1.3078	0.7635	0.4533	0.2735



3D screen shot	Hot spot position
	

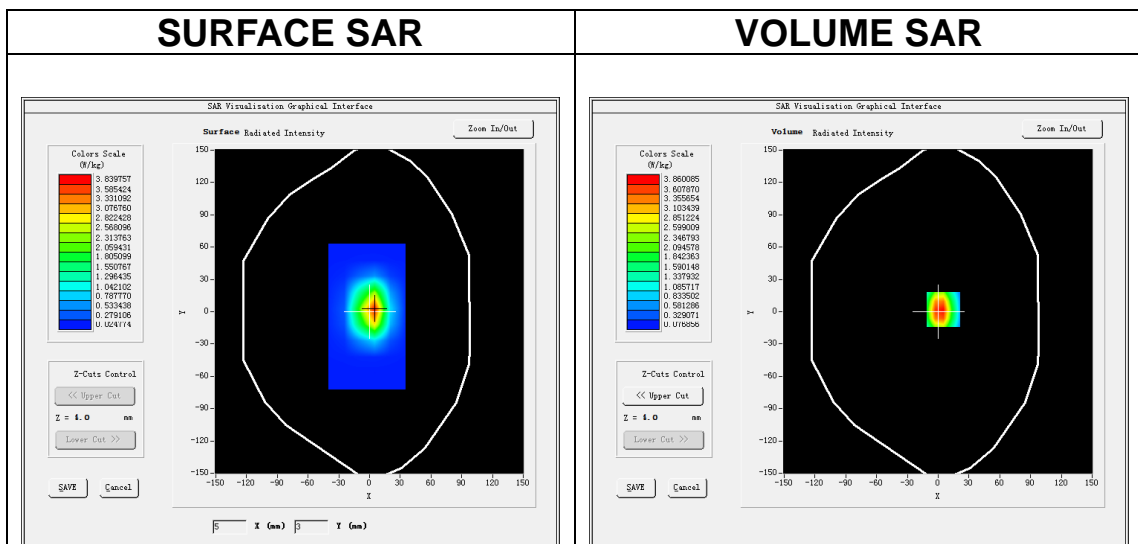
MEASUREMENT 8

A. Experimental conditions.

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

B. SAR Measurement Results

Frequency (MHz)	1900.000000
Relative permittivity (real part)	52.523335
Relative permittivity (imaginary part)	14.943503
Conductivity (S/m)	1.582566
Variation (%)	3.660000

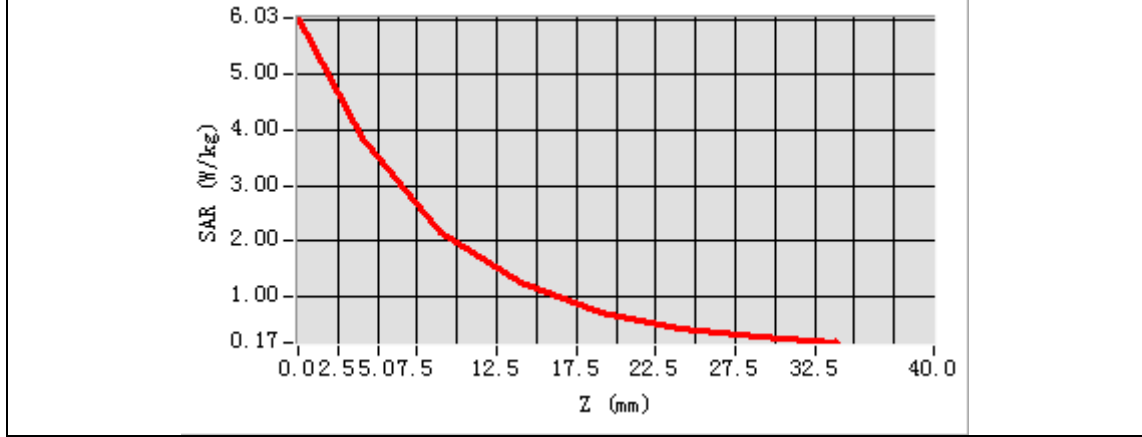


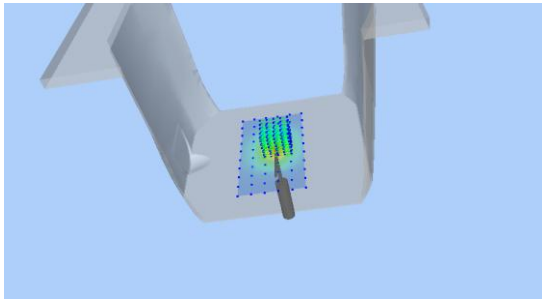
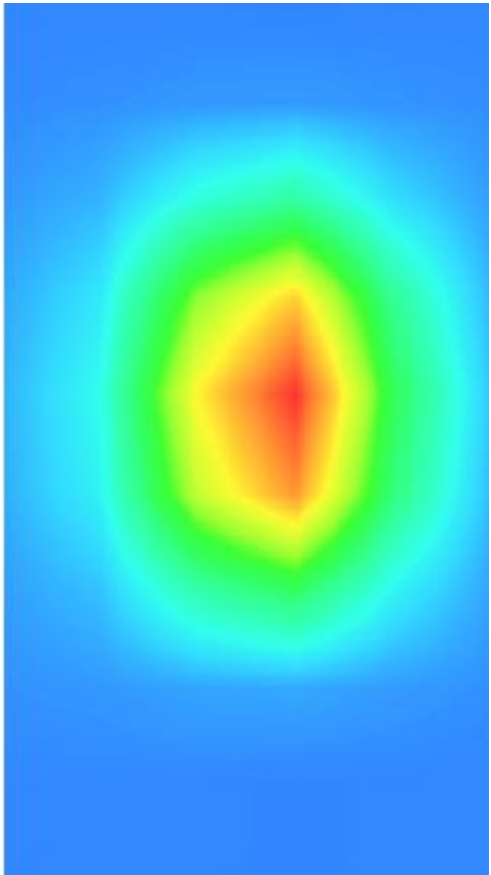
Maximum location: X=5.00, Y=2.00

SAR Peak: 6.39 W/kg

SAR 10g (W/Kg)	2.041329
SAR 1g (W/Kg)	3.922402

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	6.0345	3.8665	2.1638	1.2445	0.7278	0.4335	0.2644



3D screen shot	Hot spot position
	

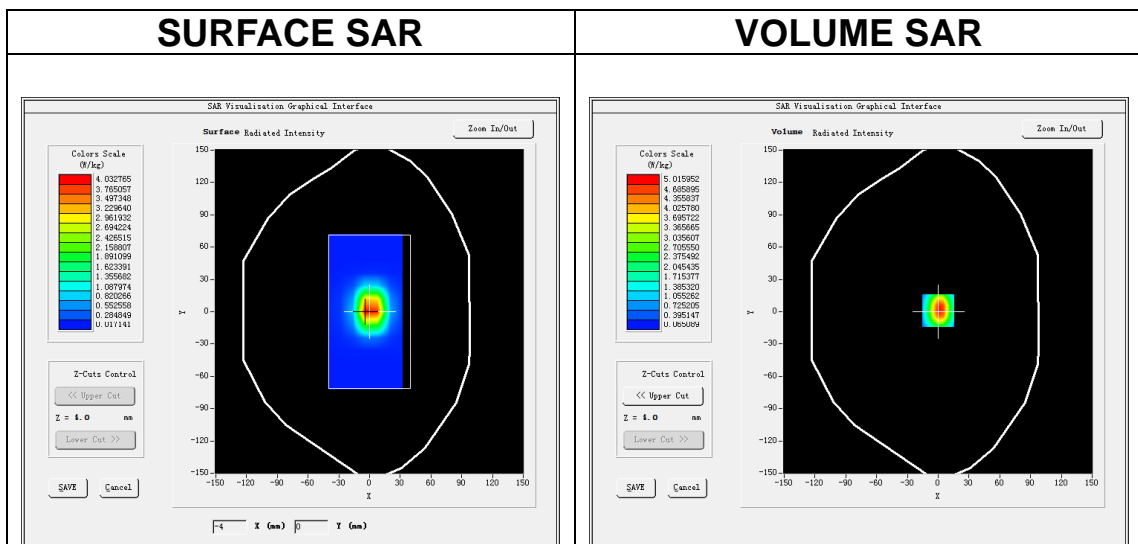
MEASUREMENT 9

A. Experimental conditions.

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

B. SAR Measurement Results

Frequency (MHz)	2450.000000
Relative permittivity (real part)	38.731421
Relative permittivity (imaginary part)	13.682631
Conductivity (S/m)	1.862663
Variation (%)	-3.350000

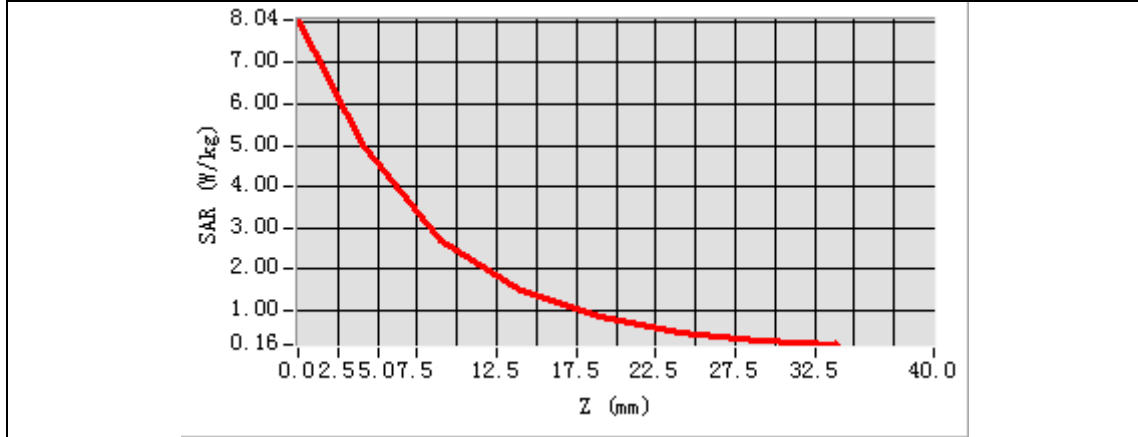


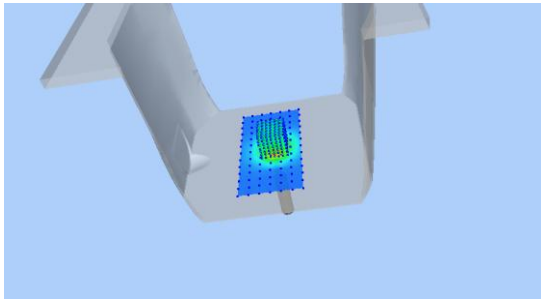
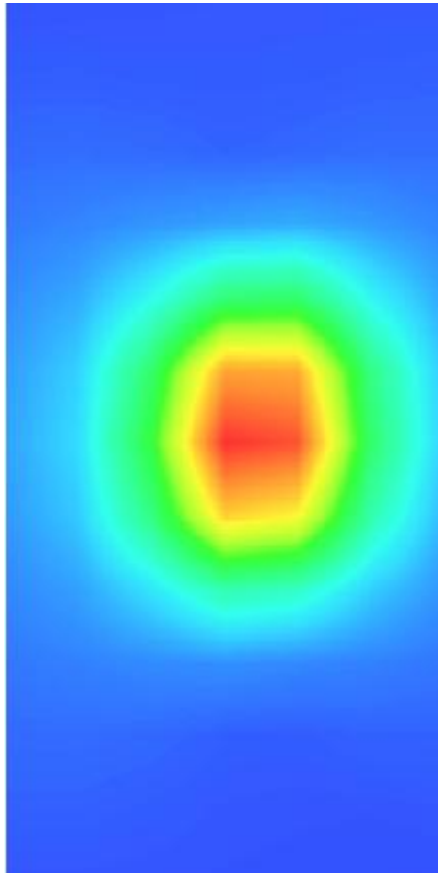
Maximum location: X=0.00, Y=1.00

SAR Peak: 8.14 W/kg

SAR 10g (W/Kg)	2.405375
SAR 1g (W/Kg)	5.356435

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	8.0342	5.0144	2.6935	1.4878	0.8365	0.4635	0.2617



3D screen shot	Hot spot position
	

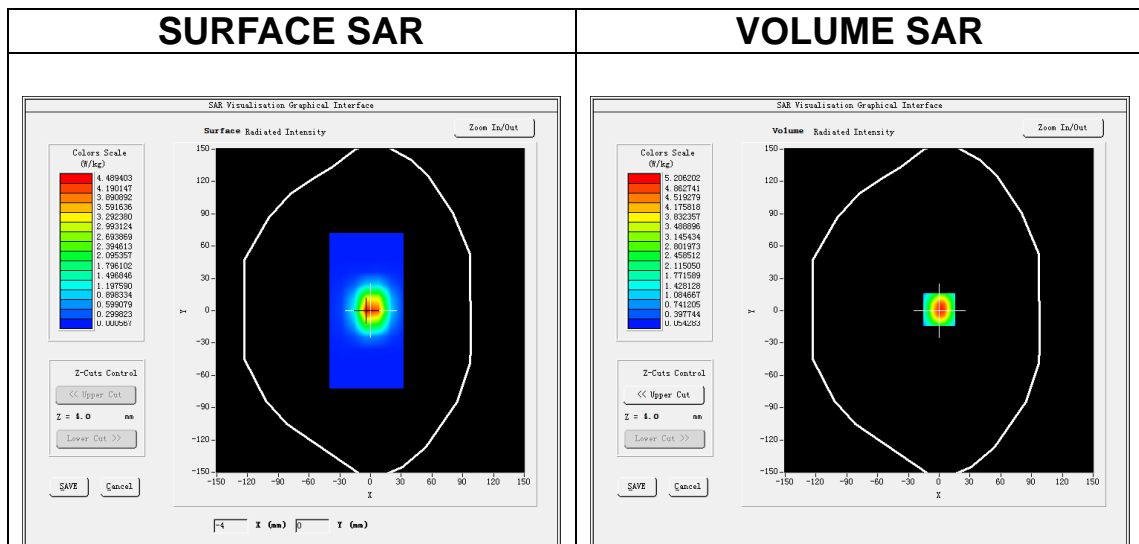
MEASUREMENT 10

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

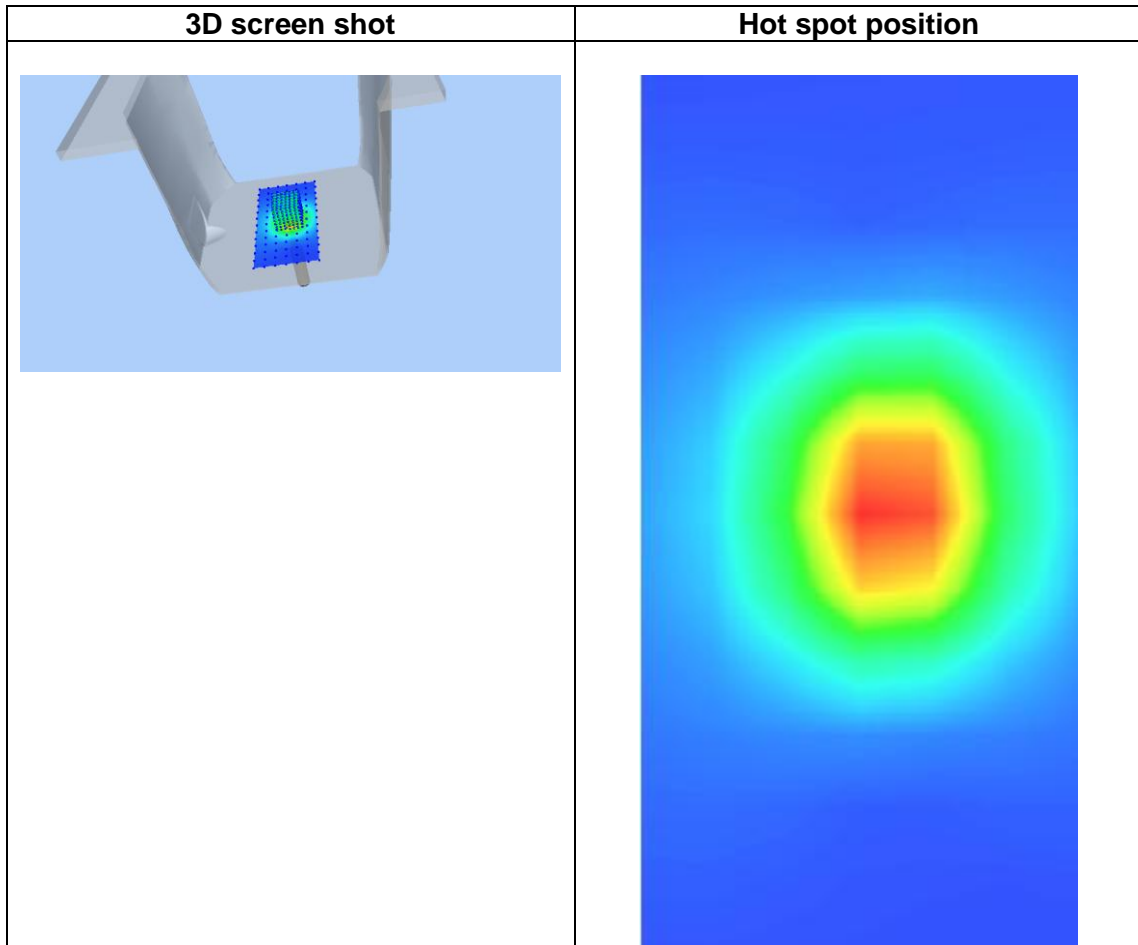
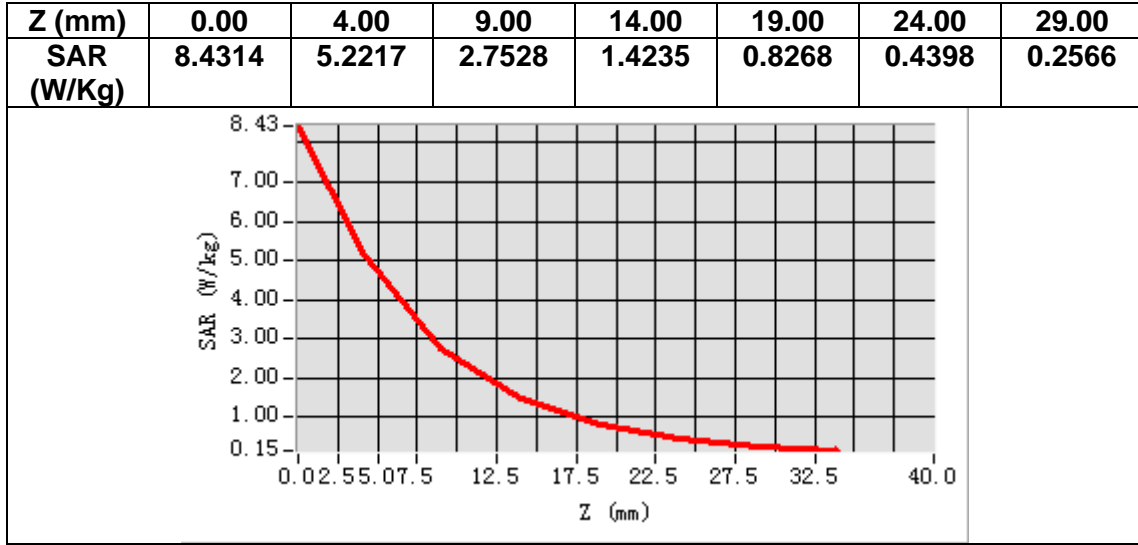
Frequency (MHz)	2450.000000
Relative permittivity (real part)	52.041497
Relative permittivity (imaginary part)	14.923566
Conductivity (S/m)	2.032816
Variation (%)	3.420000



Maximum location: X=0.00, Y=1.00

SAR Peak: 8.46 W/kg

SAR 10g (W/Kg)	2.397285
SAR 1g (W/Kg)	5.277270



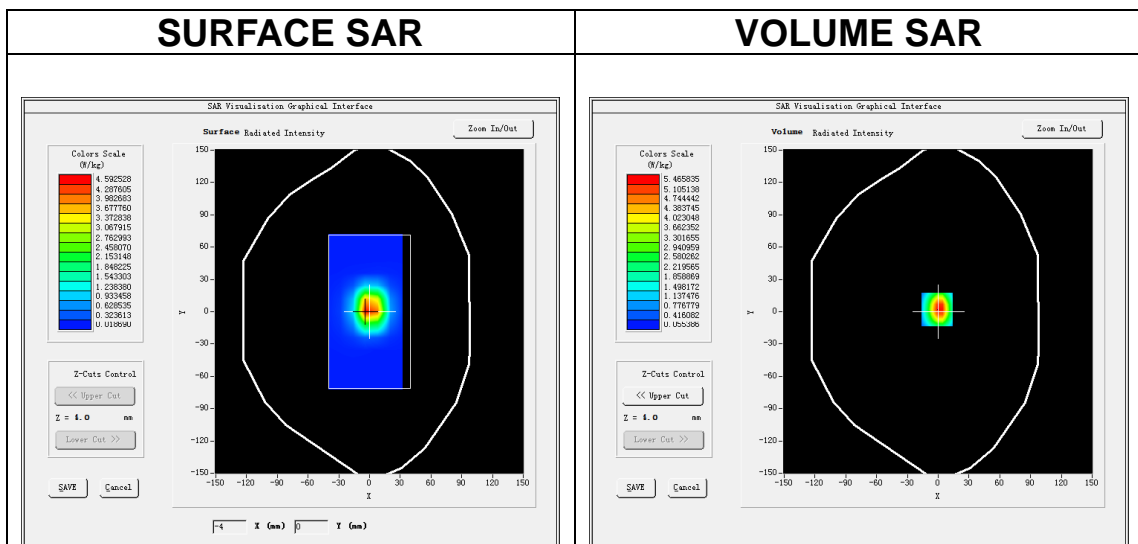
MEASUREMENT 11

A. Experimental conditions.

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

B. SAR Measurement Results

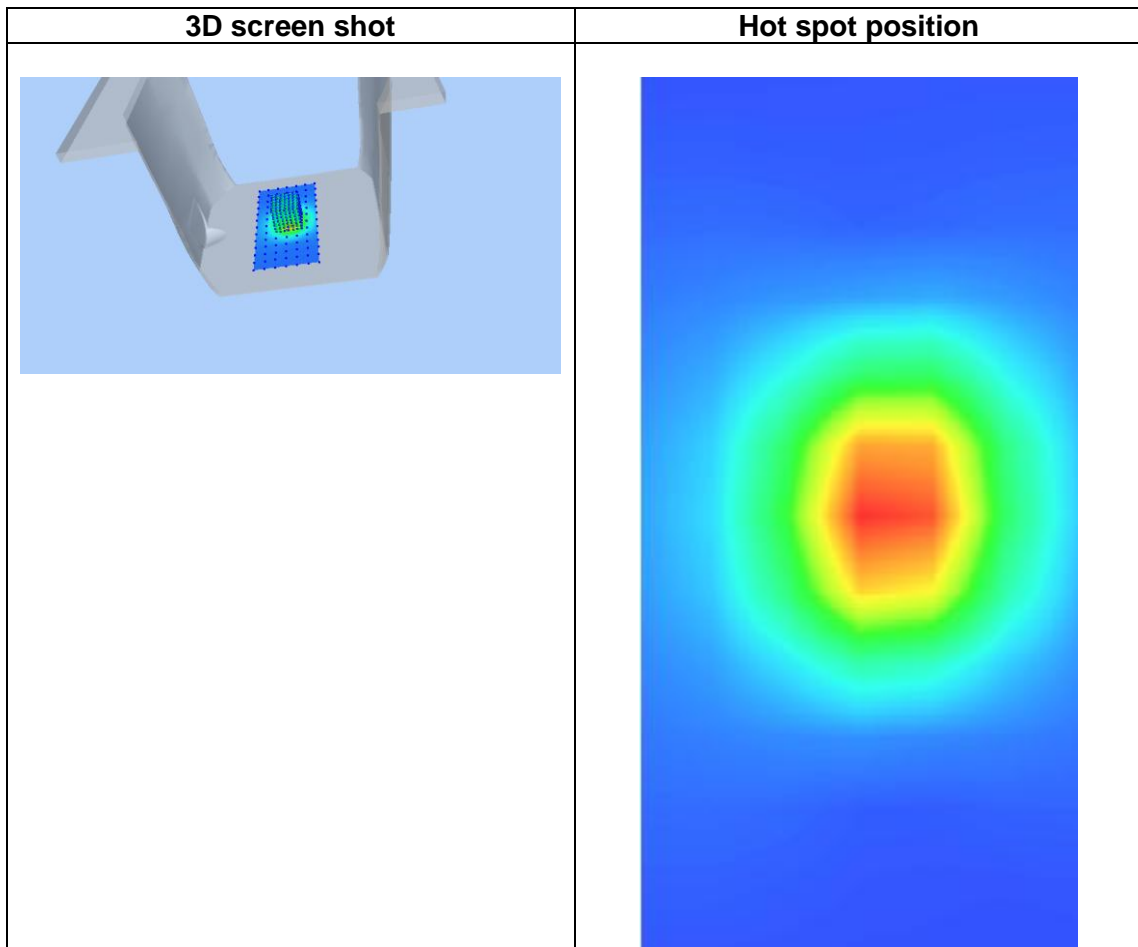
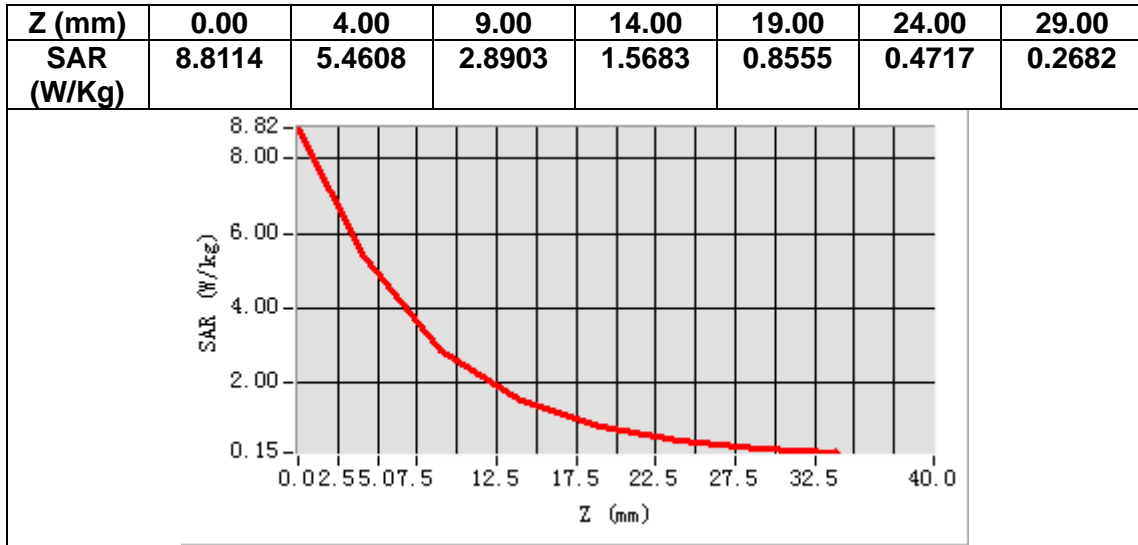
Frequency (MHz)	2600.000000
Relative permittivity (real part)	38.412638
Relative permittivity (imaginary part)	13.913997
Conductivity (S/m)	2.013631
Variation (%)	-4.040000



Maximum location: X=-1.00, Y=2.00

SAR Peak: 9.07 W/kg

SAR 10g (W/Kg)	2.446205
SAR 1g (W/Kg)	5.538267



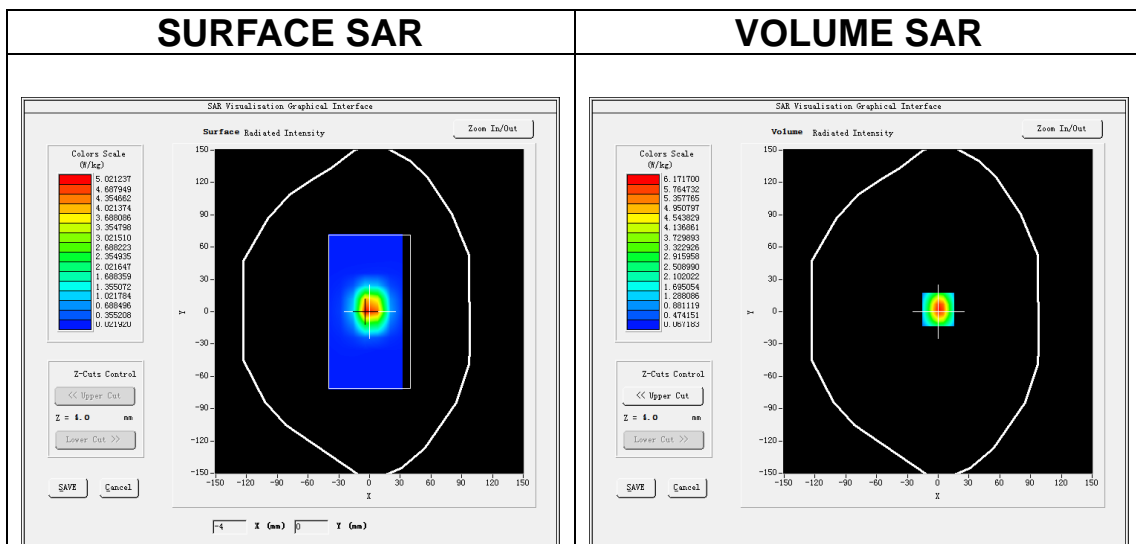
MEASUREMENT 12

A. Experimental conditions.

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

B. SAR Measurement Results

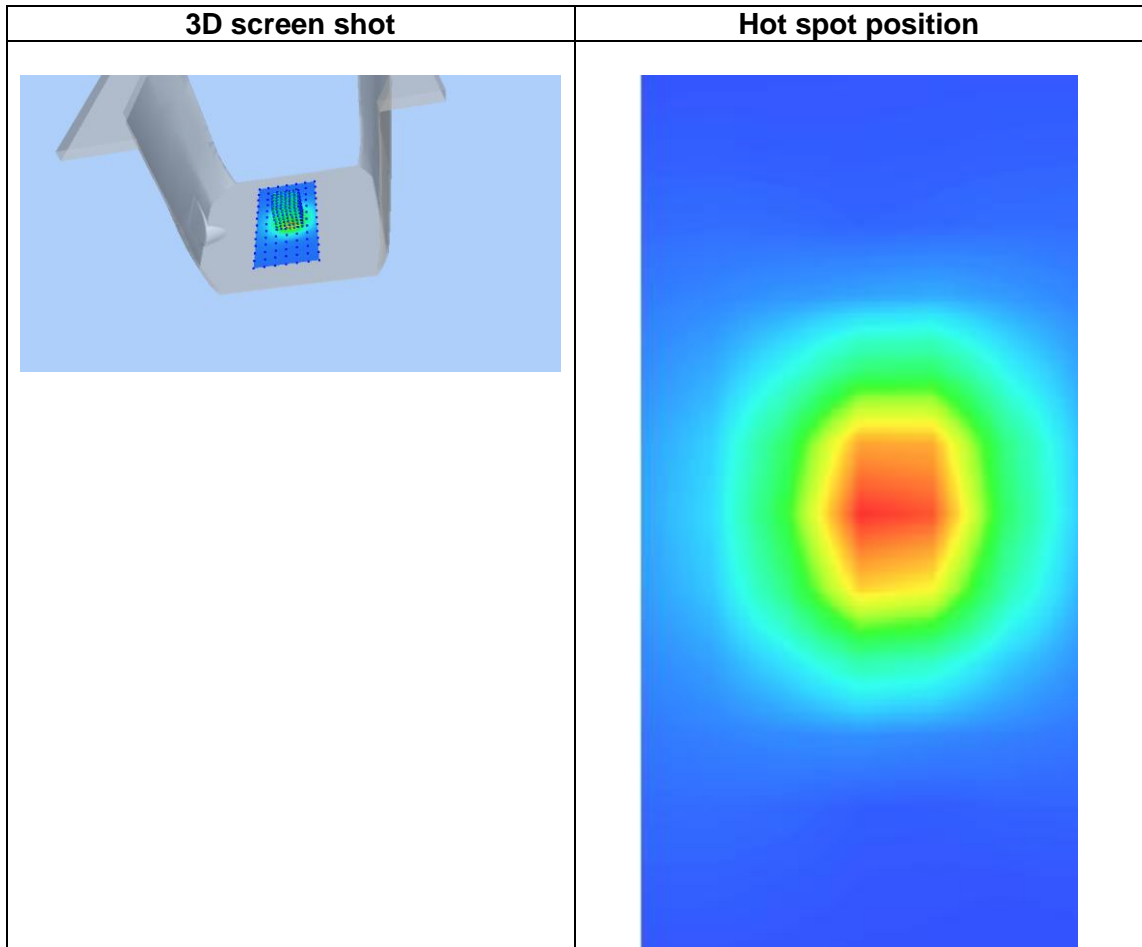
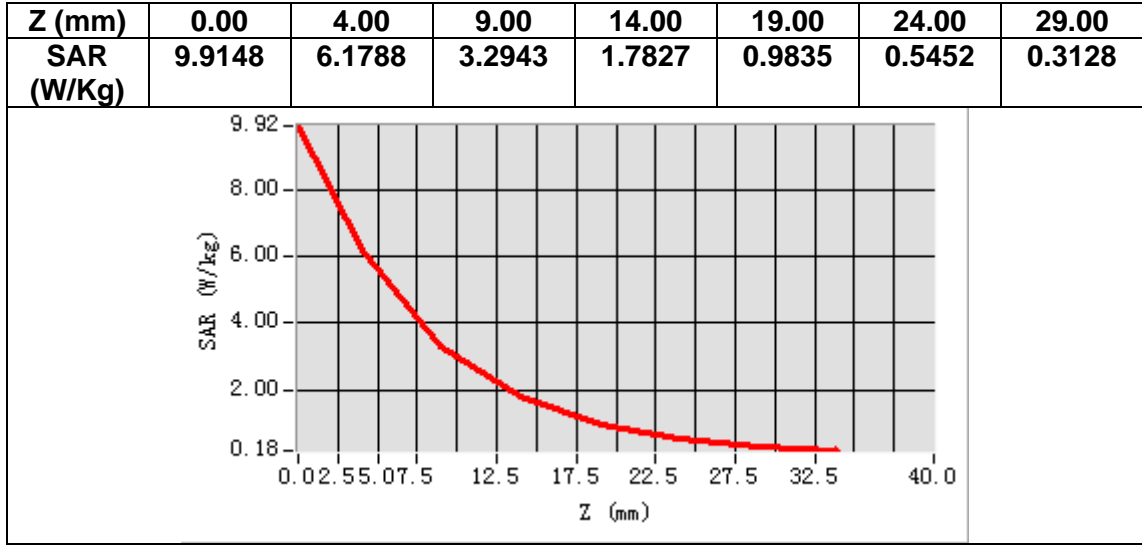
Frequency (MHz)	2600.000000
Relative permittivity (real part)	52.622866
Relative permittivity (imaginary part)	15.270101
Conductivity (S/m)	2.213465
Variation (%)	-1.220000



Maximum location: X=0.00, Y=2.00

SAR Peak: 9.99 W/kg

SAR 10g (W/Kg)	2.359324
SAR 1g (W/Kg)	5.210188



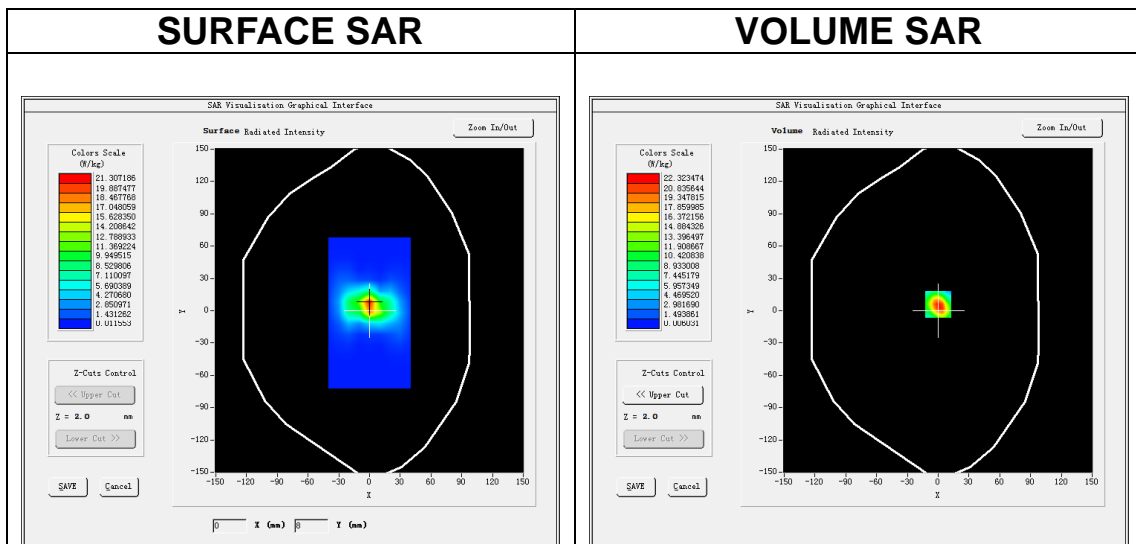
MEASUREMENT 13

A. Experimental conditions.

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

B. SAR Measurement Results

Frequency (MHz)	5200.000000
Relative permittivity (real part)	35.742204
Relative permittivity (imaginary part)	16.123542
Conductivity (S/m)	4.662321
Variation (%)	3.790000

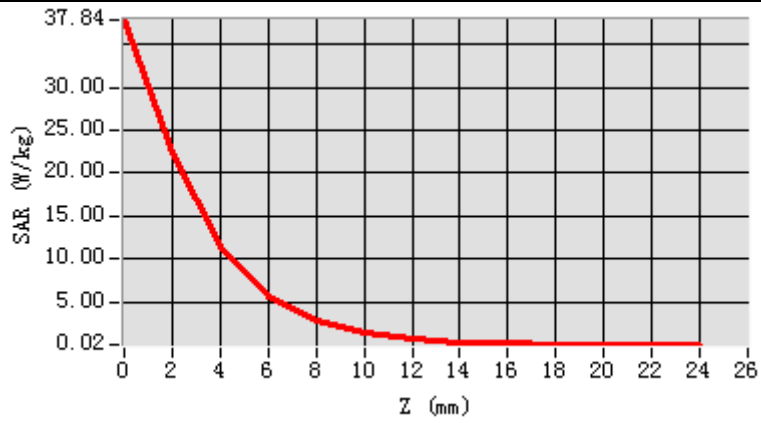


Maximum location: X=0.00, Y=6.00

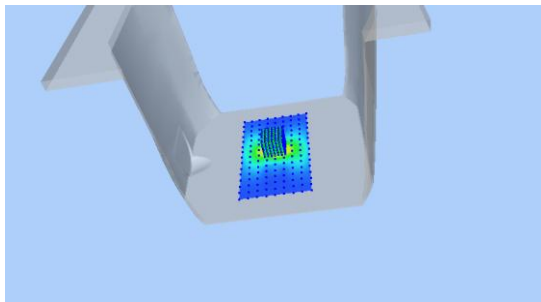
SAR Peak: 40.06 W/kg

SAR 10g (W/Kg)	5.599495
SAR 1g (W/Kg)	16.084221

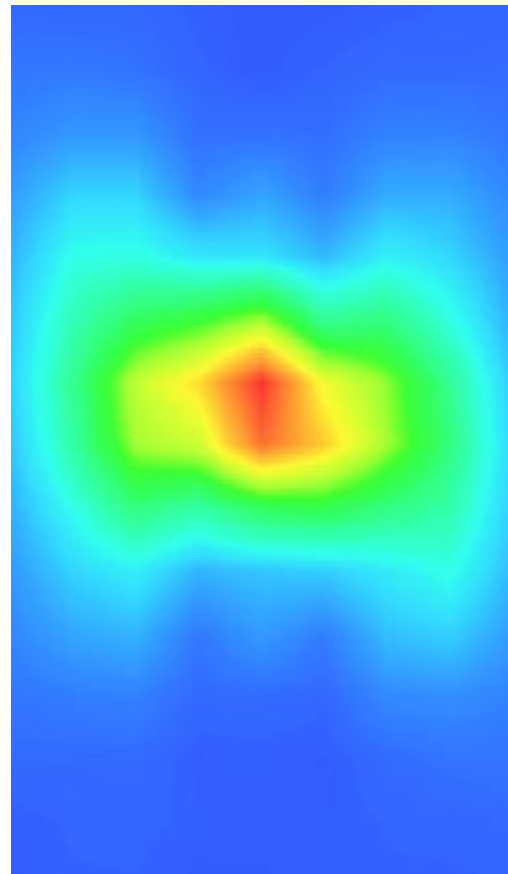
Z (m)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00
SAR (W/Kg)	37.8325	22.3215	11.3735	5.6689	2.8275	1.4089	0.7125	0.3638	0.1889	0.1078	0.0515	0.0389



3D screen shot



Hot spot position



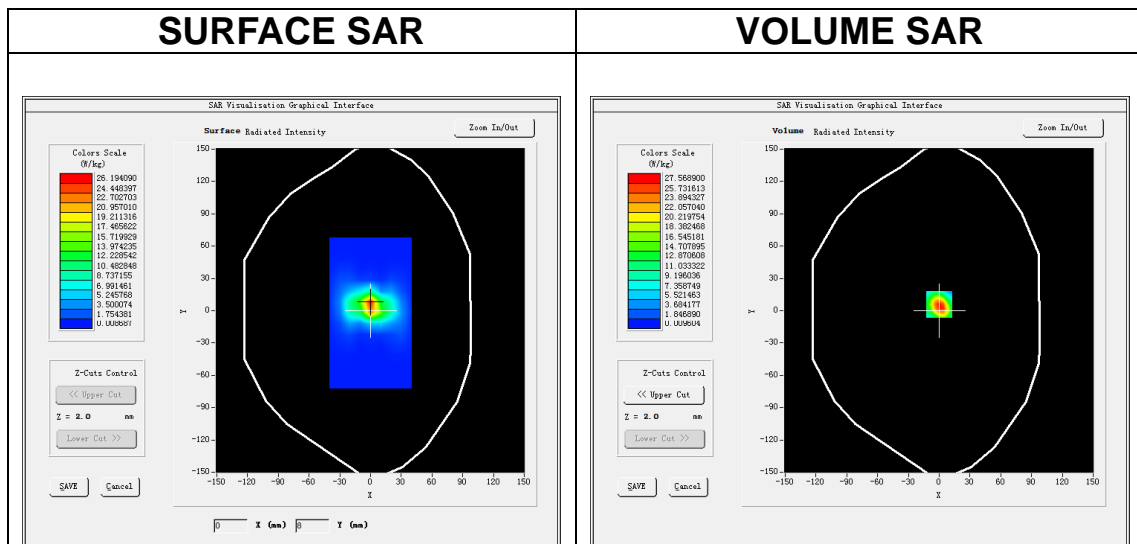
MEASUREMENT 14

A. Experimental conditions.

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

B. SAR Measurement Results

Frequency (MHz)	5200.000000
Relative permittivity (real part)	49.572845
Relative permittivity (imaginary part)	18.381441
Conductivity (S/m)	5.313842
Variation (%)	2.480000

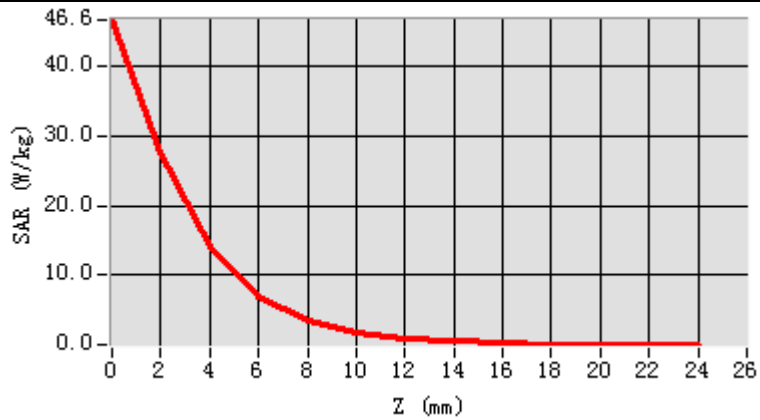


Maximum location: X=0.00, Y=6.00

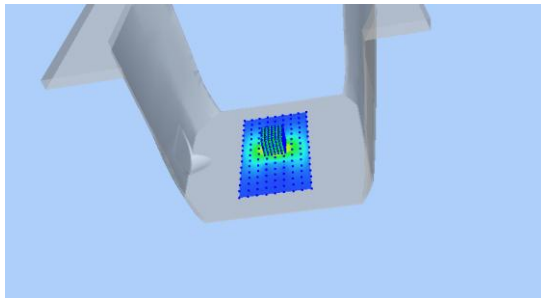
SAR Peak: 49.61 W/kg

SAR 10g (W/Kg)	5.519184
SAR 1g (W/Kg)	15.690246

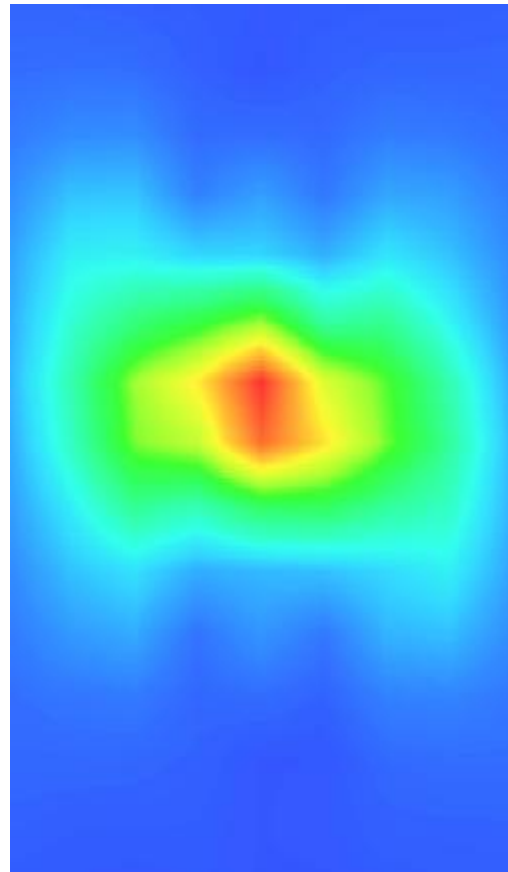
Z (m)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00
SAR (W/Kg)	46.6123	27.5694	14.0603	7.0578	3.5937	1.7865	0.8983	0.4604	0.2437	0.1374	0.0621	0.0473



3D screen shot



Hot spot position



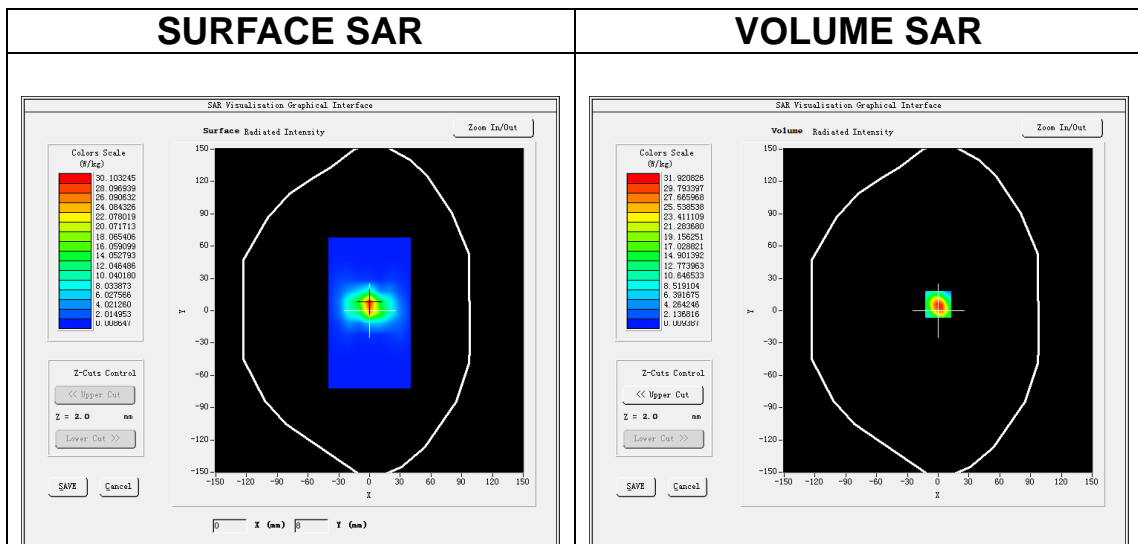
MEASUREMENT 15

A. Experimental conditions.

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

B. SAR Measurement Results

Frequency (MHz)	5800.000000
Relative permittivity (real part)	34.651512
Relative permittivity (imaginary part)	16.163082
Conductivity (S/m)	5.214981
Variation (%)	1.880000

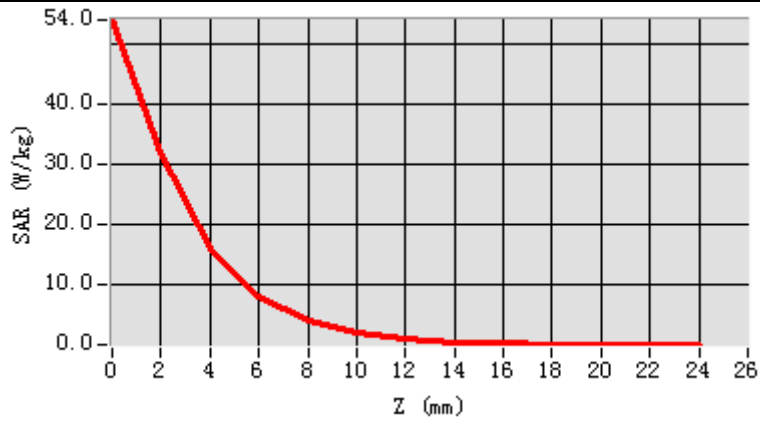


Maximum location: X=0.00, Y=6.00

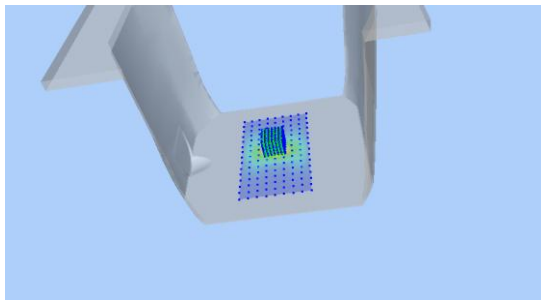
SAR Peak: 57.37 W/kg

SAR 10g (W/Kg)	6.278095
SAR 1g (W/Kg)	18.401093

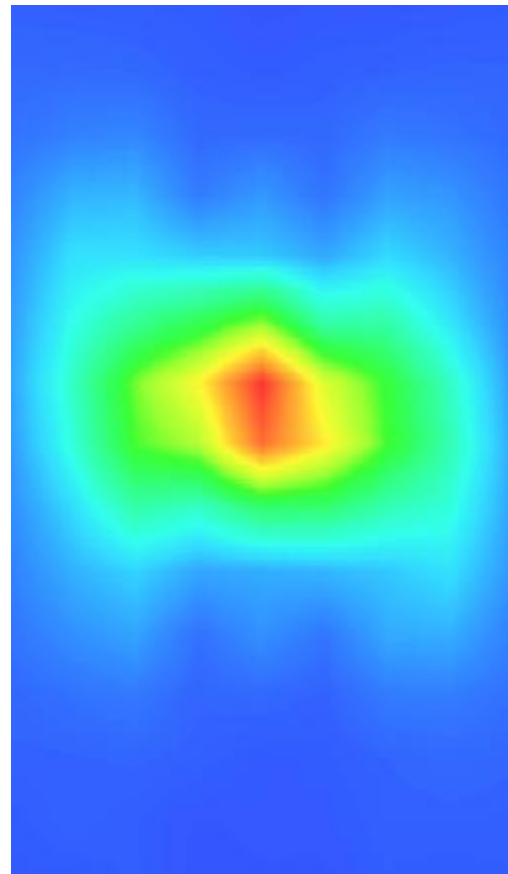
Z (m)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00
SAR (W/Kg)	54.0 314	31.9 255	16.1 778	8.17 36	4.08 78	2.05 89	1.03 25	0.51 36	0.27 78	0.15 89	0.07 25	0.04 46



3D screen shot



Hot spot position



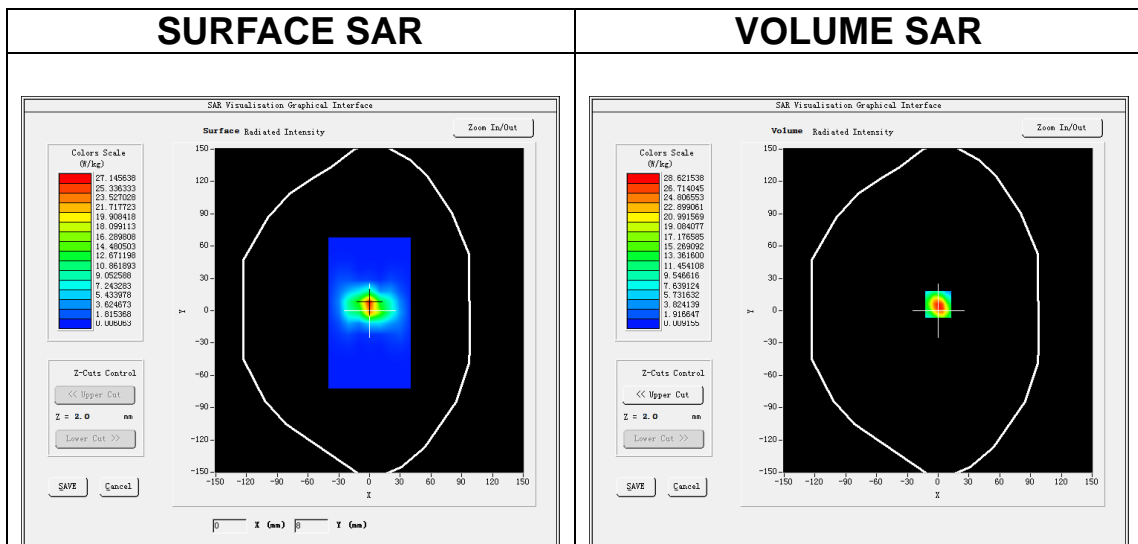
MEASUREMENT 16

A. Experimental conditions.

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

B. SAR Measurement Results

Frequency (MHz)	5800.000000
Relative permittivity (real part)	48.260523
Relative permittivity (imaginary part)	18.900043
Conductivity (S/m)	6.091524
Variation (%)	-3.340000

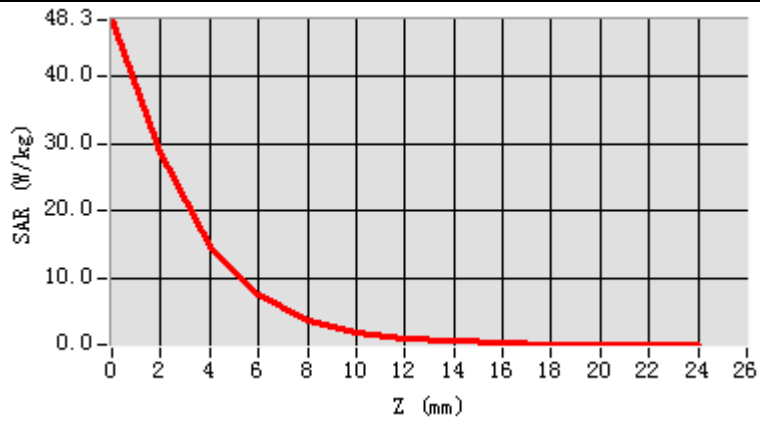


Maximum location: X=0.00, Y=6.00

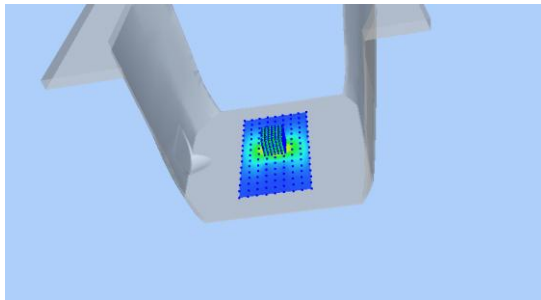
SAR Peak: 51.30 W/kg

SAR 10g (W/Kg)	5.843184
SAR 1g (W/Kg)	16.927052

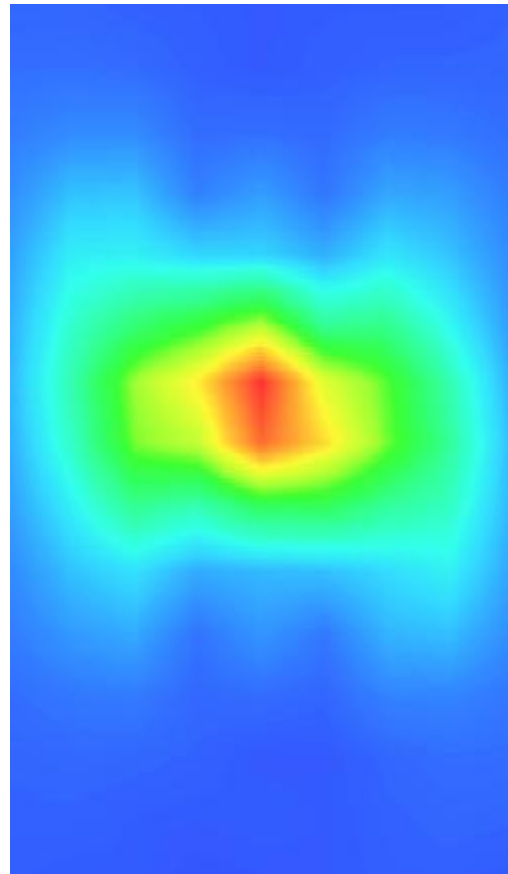
Z (m)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00
SAR (W/Kg)	48.3452	28.6216	14.6550	7.4031	3.6852	1.8342	0.9370	0.4758	0.2531	0.1300	0.0718	0.0502



3D screen shot



Hot spot position



13. Appendix C. Plots of High SAR Measurement

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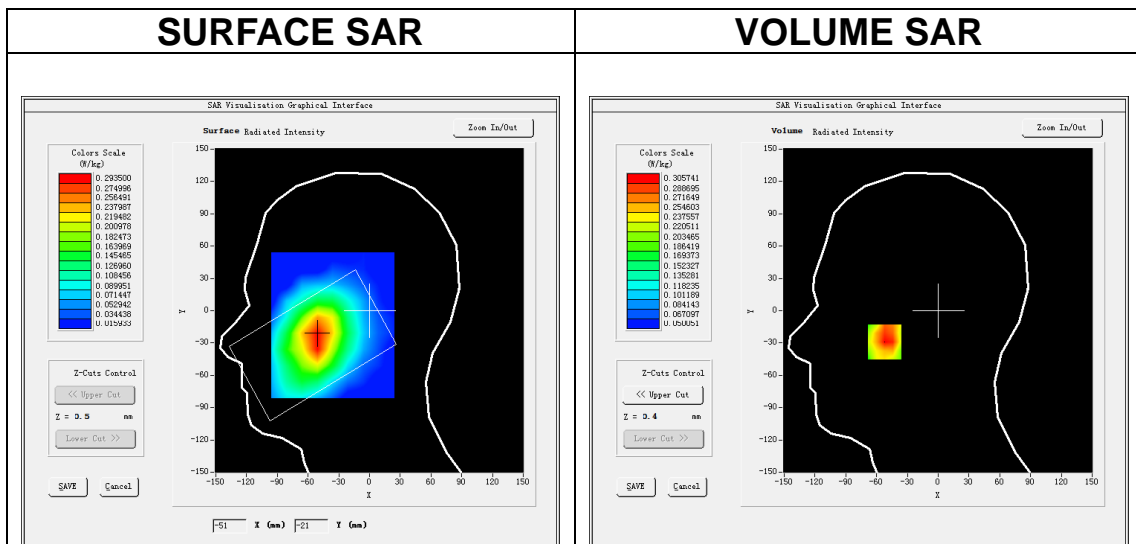
MEASUREMENT 1

A. Experimental conditions.

Area Scan	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
Phantom	<u>Left head</u>
Device Position	<u>Cheek</u>
Band	<u>GSM850</u>
Channels	<u>Middle</u>
Signal	<u>TDMA (Crest factor: 2.0)</u>

B. SAR Measurement Results

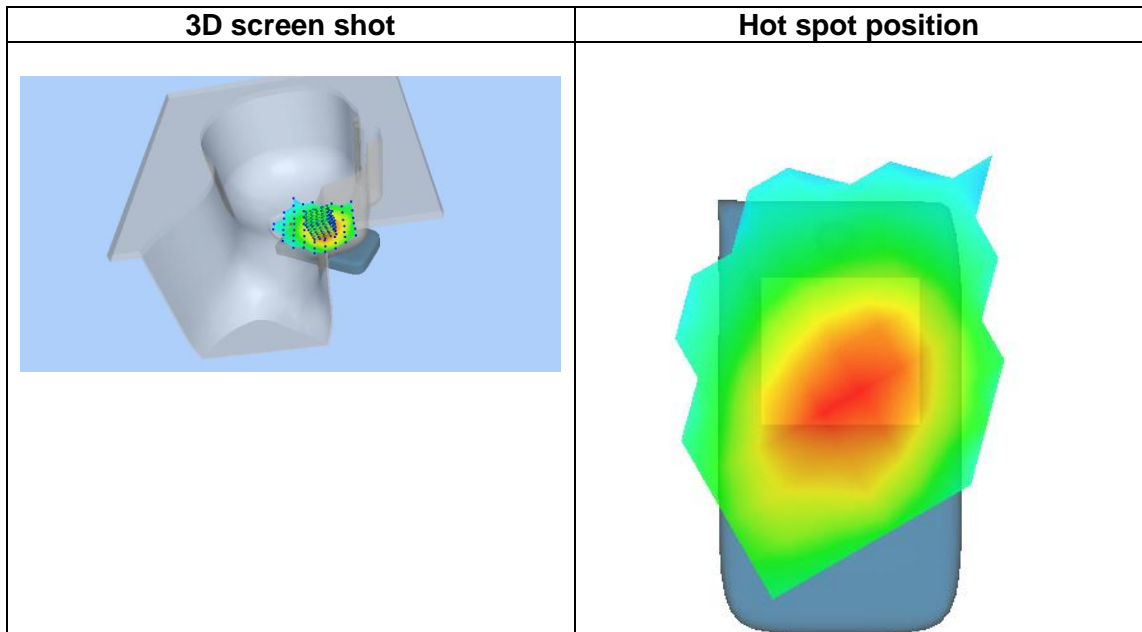
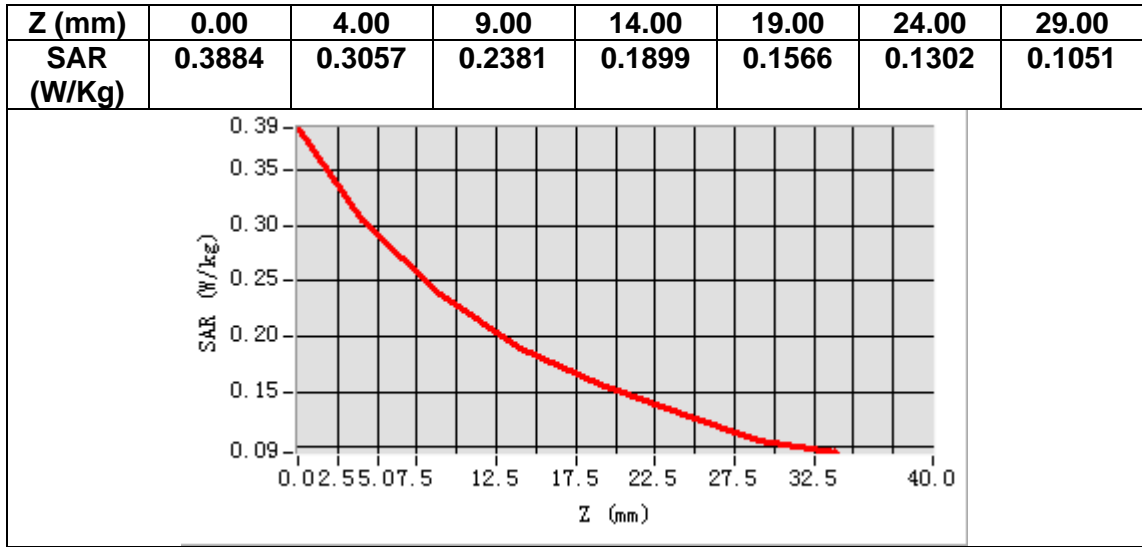
Frequency (MHz)	836.400000
Relative permittivity (real part)	40.410961
Relative permittivity (imaginary part)	20.201540
Conductivity (S/m)	0.938698
Variation (%)	0.870000



Maximum location: X=-52.00, Y=-29.00

SAR Peak: 0.41 W/kg

SAR 10g (W/Kg)	0.224235
SAR 1g (W/Kg)	0.310482



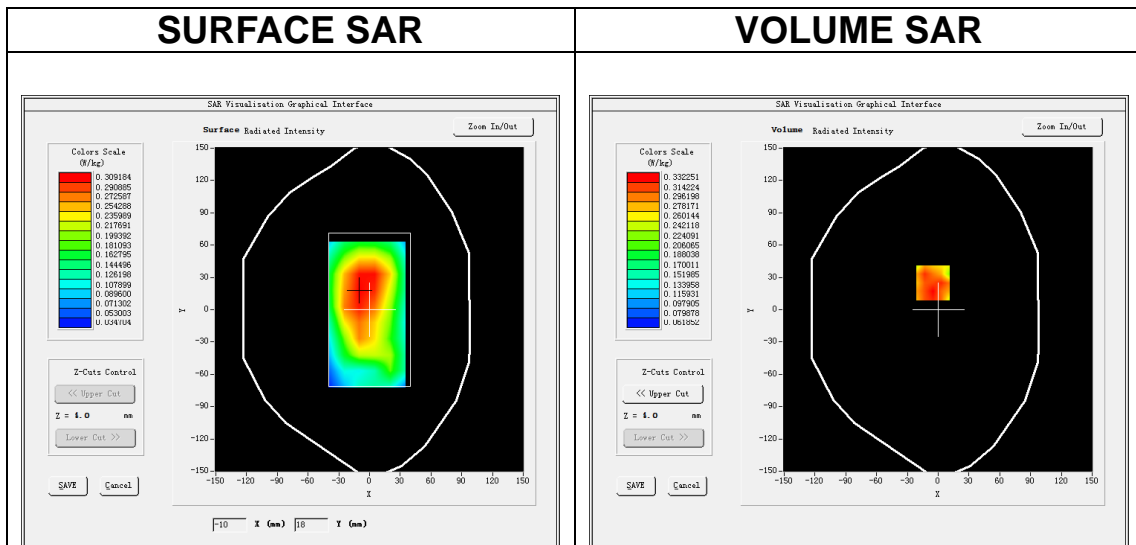
MEASUREMENT 2

A. Experimental conditions.

Area Scan	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
Phantom	<u>Validation plane</u>
Device Position	<u>Body</u>
Band	<u>GSM850</u>
Channels	<u>Middle</u>
Signal	<u>TDMA (Crest factor: 2.0)</u>

B. SAR Measurement Results

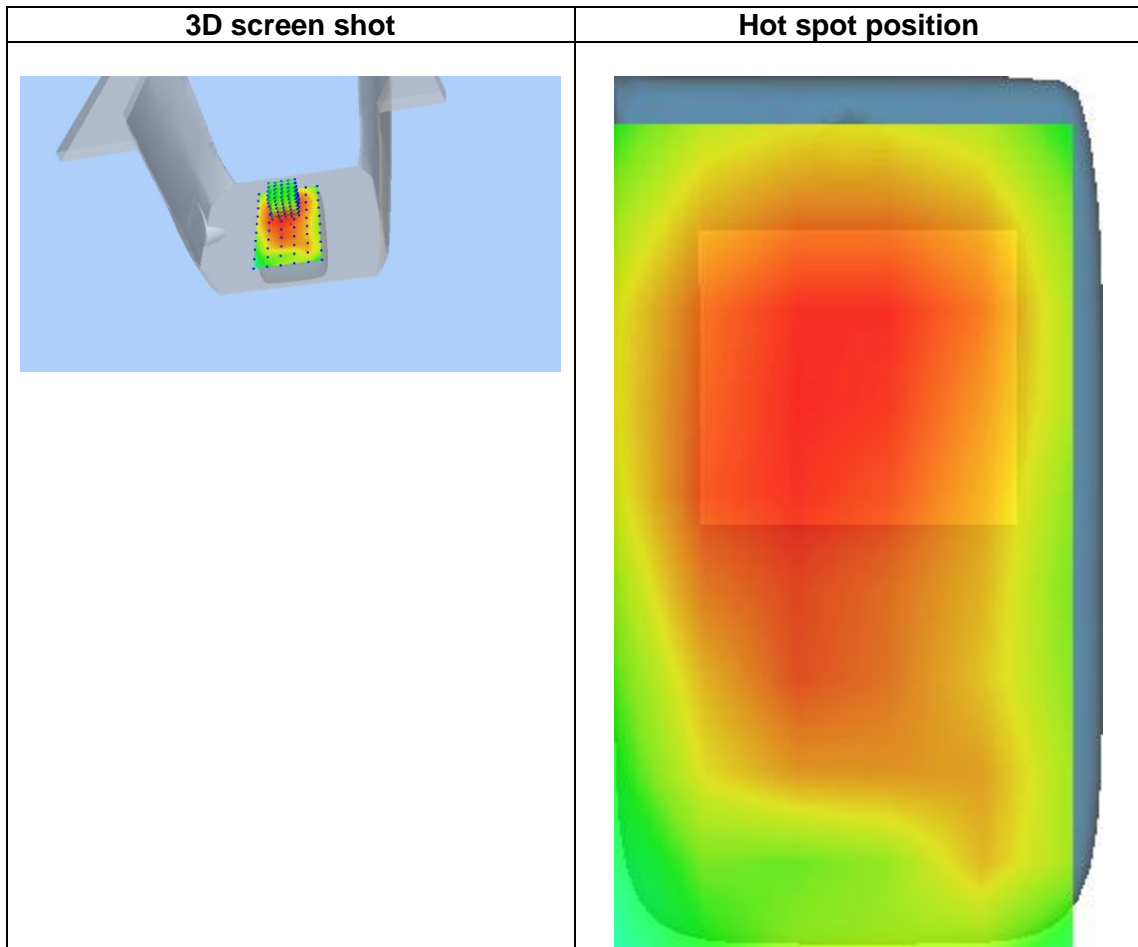
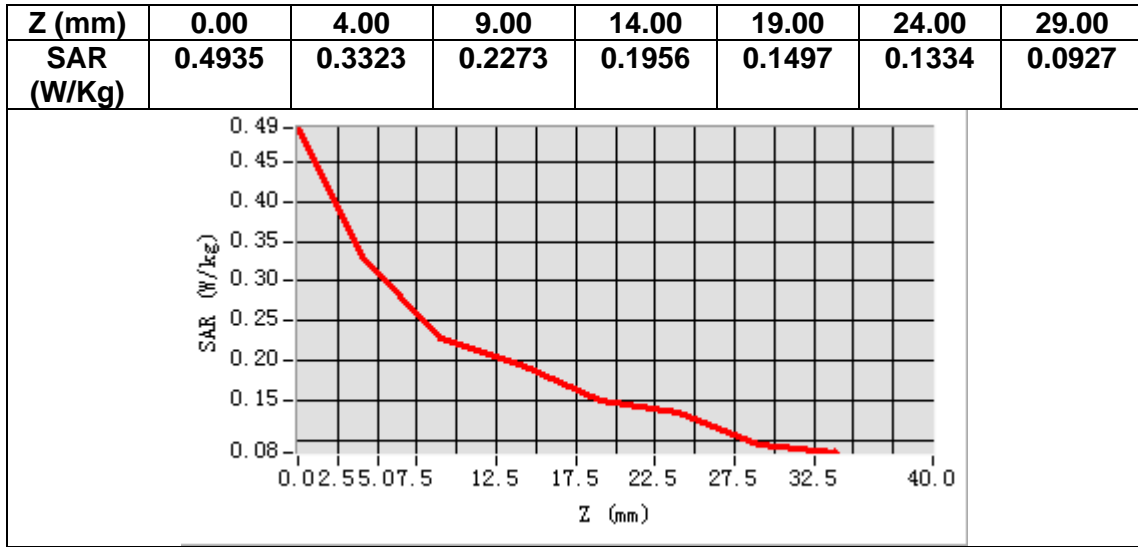
Frequency (MHz)	836.400000
Relative permittivity (real part)	54.239578
Relative permittivity (imaginary part)	21.842739
Conductivity (S/m)	1.014959
Variation (%)	0.600000



Maximum location: X=-5.00, Y=25.00

SAR Peak: 0.43 W/kg

SAR 10g (W/Kg)	0.243936
SAR 1g (W/Kg)	0.326448



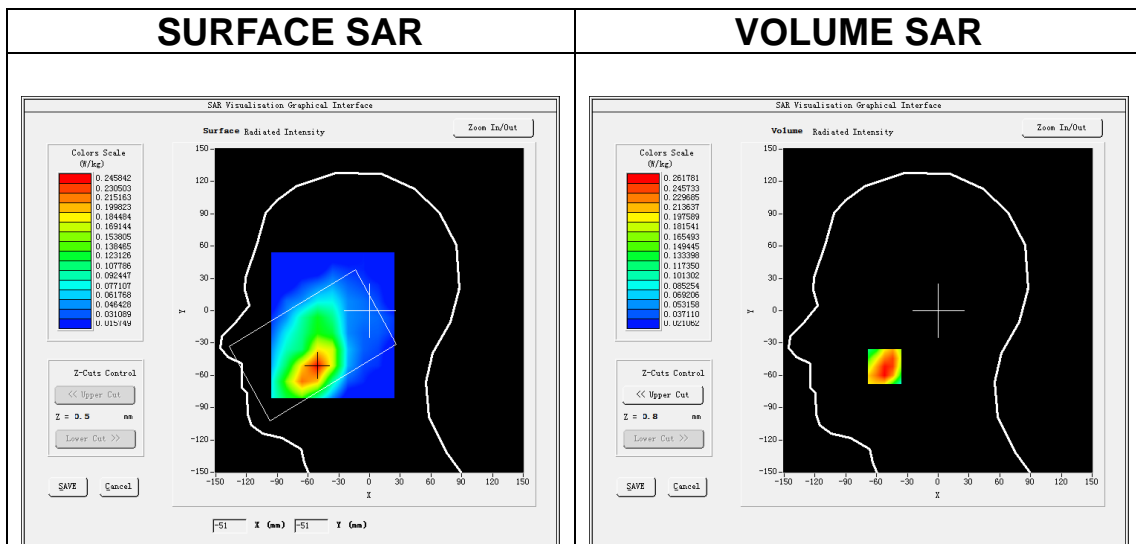
MEASUREMENT 3

A. Experimental conditions.

Area Scan	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
Phantom	<u>Left head</u>
Device Position	<u>Cheek</u>
Band	<u>GSM1900</u>
Channels	<u>Middle</u>
Signal	<u>TDMA (Crest factor: 2.0)</u>

B. SAR Measurement Results

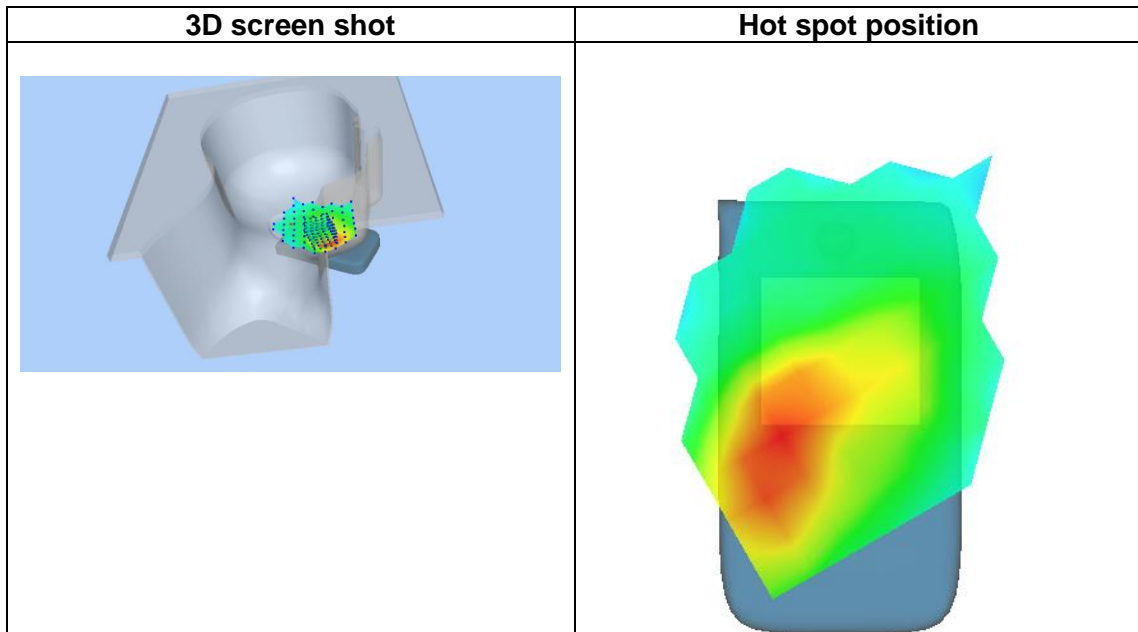
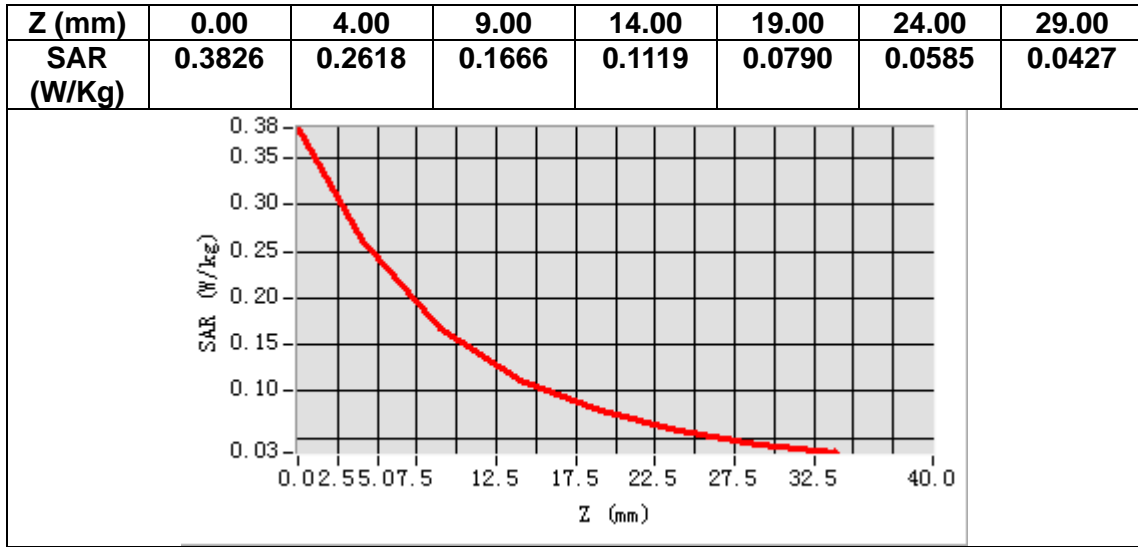
Frequency (MHz)	1880.000000
Relative permittivity (real part)	40.968201
Relative permittivity (imaginary part)	13.784300
Conductivity (S/m)	1.439694
Variation (%)	1.870000



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

SAR Peak: 0.42 W/kg

SAR 10g (W/Kg)	0.157804
SAR 1g (W/Kg)	0.263753



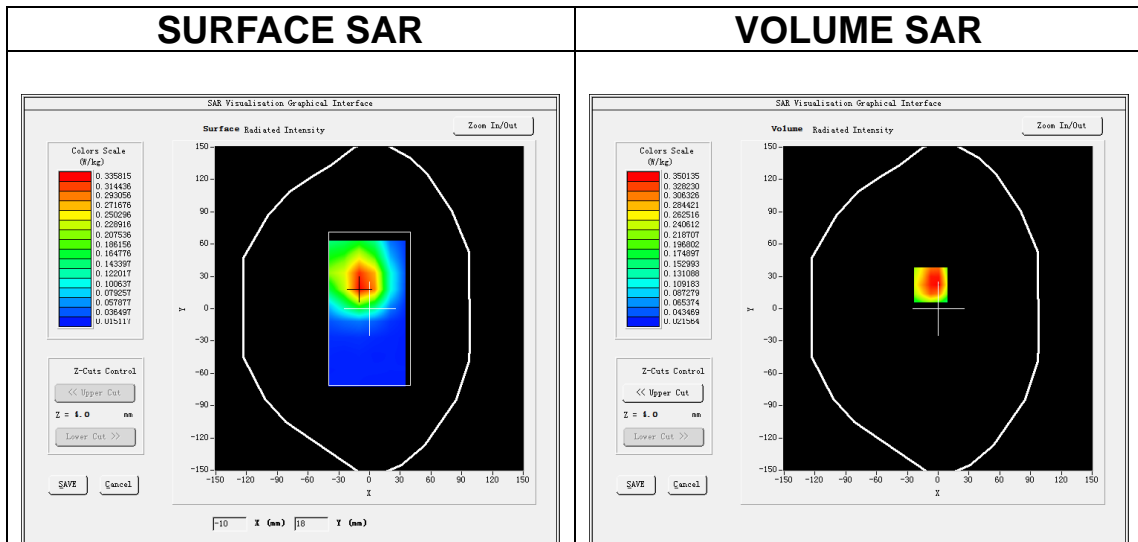
MEASUREMENT 4

A. Experimental conditions.

Area Scan	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
Phantom	<u>Validation plane</u>
Device Position	<u>Body</u>
Band	<u>GSM1900</u>
Channels	<u>Middle</u>
Signal	<u>TDMA (Crest factor: 2.0)</u>

B. SAR Measurement Results

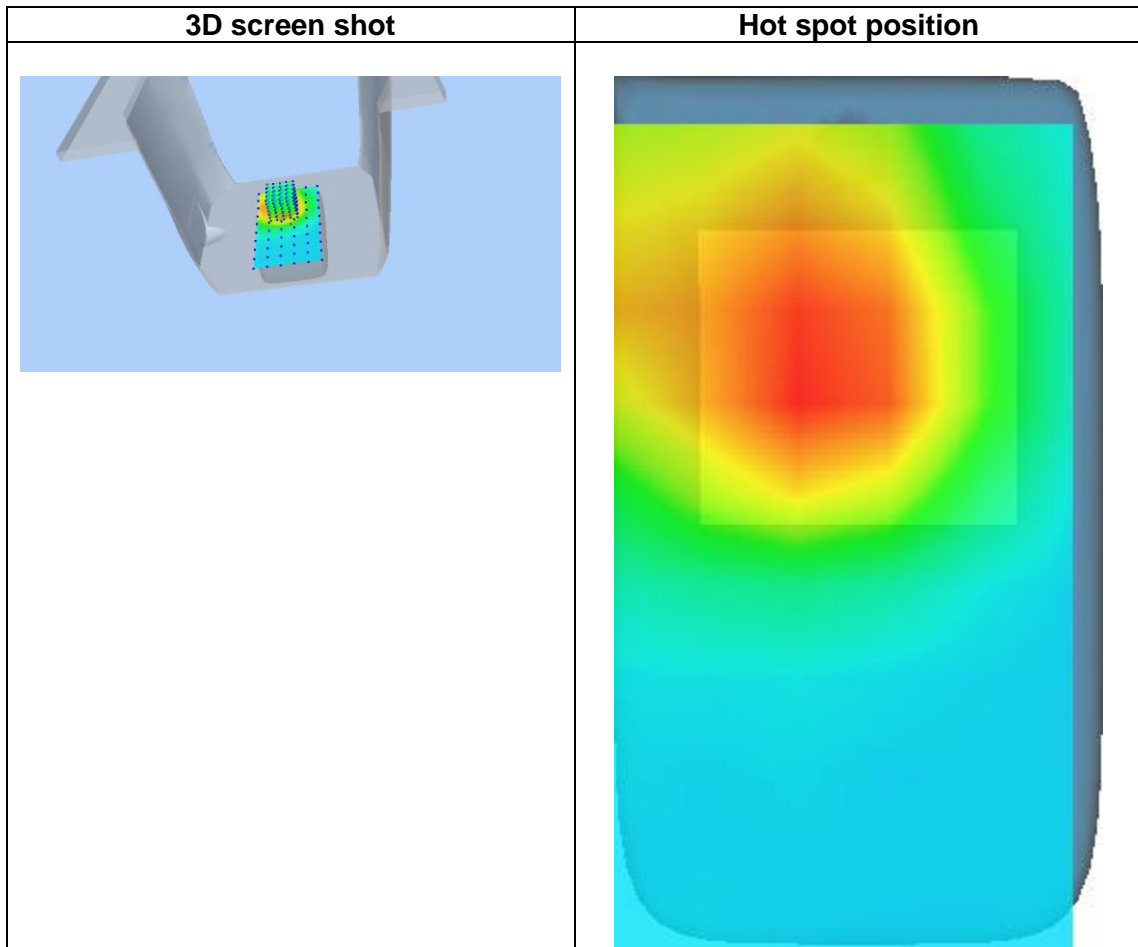
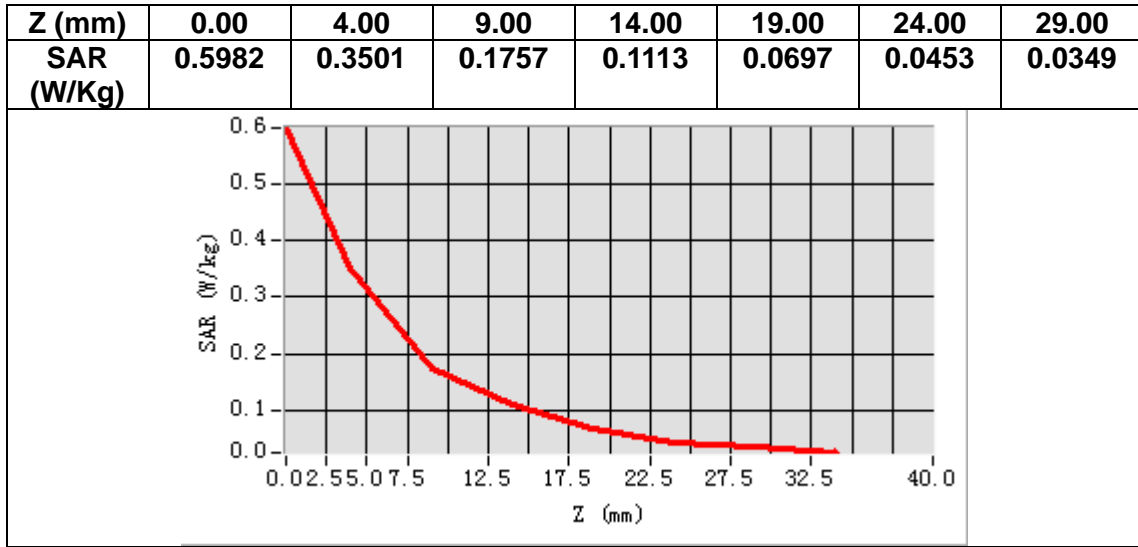
Frequency (MHz)	1880.000000
Relative permittivity (real part)	52.598900
Relative permittivity (imaginary part)	15.027700
Conductivity (S/m)	1.569560
Variation (%)	-0.460000



Maximum location: X=-7.00, Y=22.00

SAR Peak: 0.57 W/kg

SAR 10g (W/Kg)	0.201019
SAR 1g (W/Kg)	0.351780



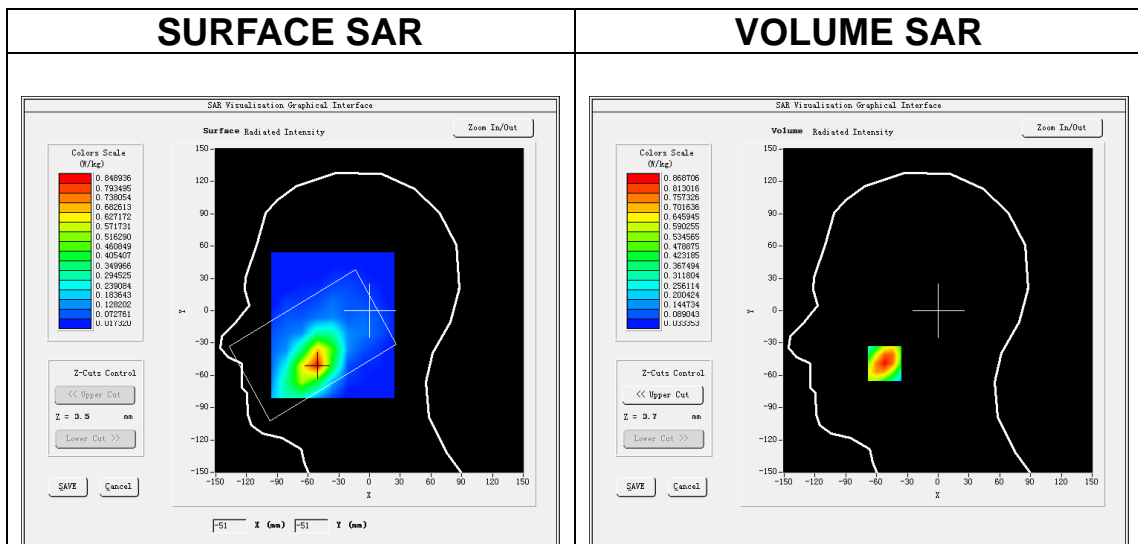
MEASUREMENT 5

A. Experimental conditions.

Area Scan	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
Phantom	<u>Left head</u>
Device Position	<u>Cheek</u>
Band	<u>Band2_WCDMA1900</u>
Channels	<u>Middle</u>
Signal	<u>WCDMA (Crest factor: 1.0)</u>

B. SAR Measurement Results

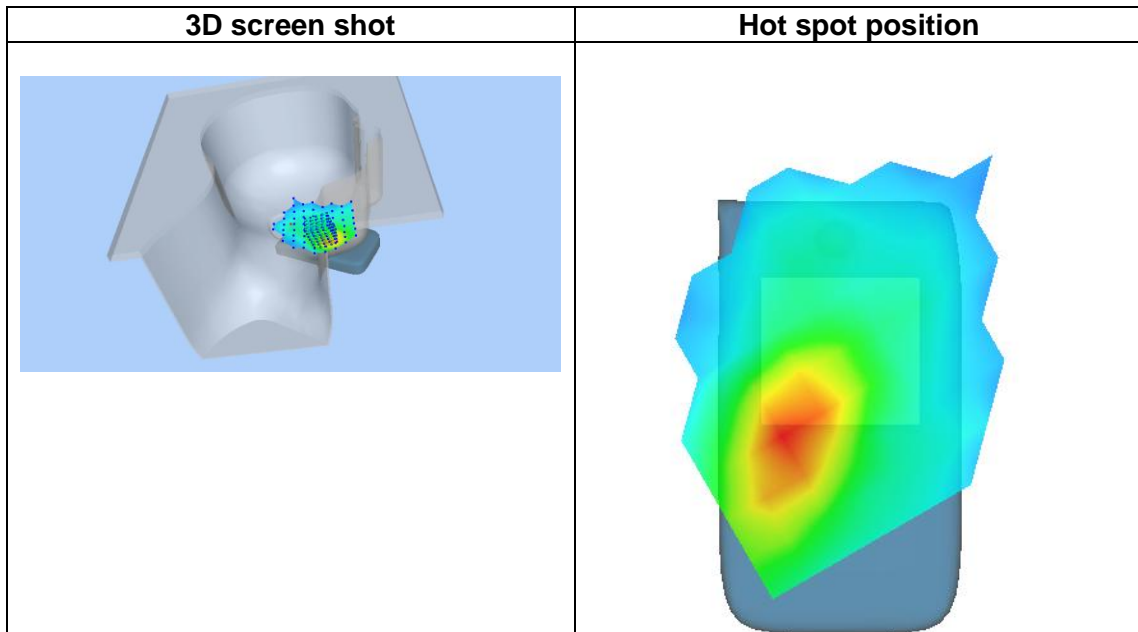
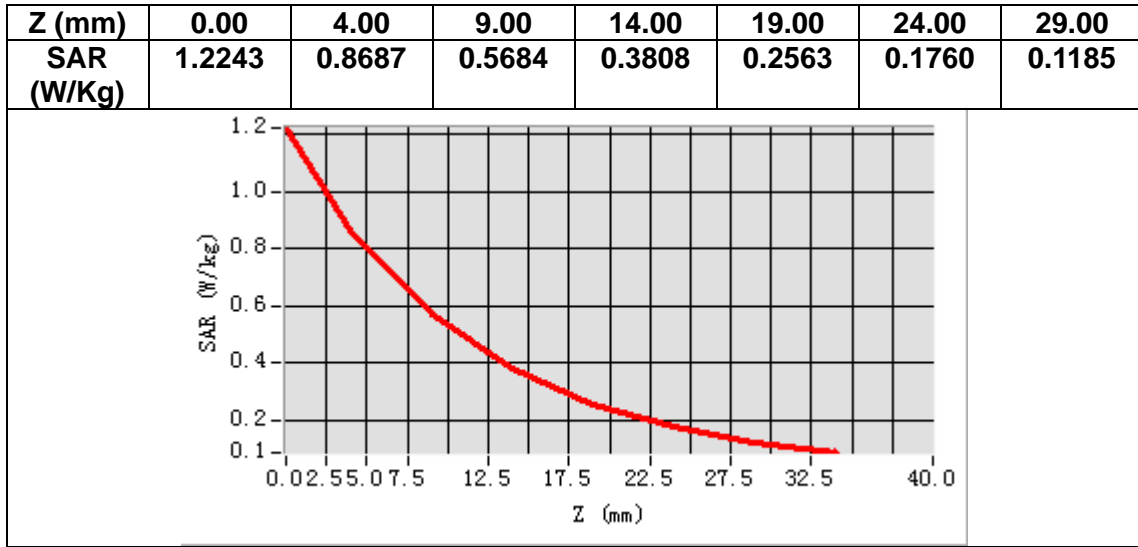
Frequency (MHz)	1880.000000
Relative permittivity (real part)	40.968201
Relative permittivity (imaginary part)	13.784300
Conductivity (S/m)	1.439694
Variation (%)	-1.680000



Maximum location: X=-52.00, Y=-49.00

SAR Peak: 1.23 W/kg

SAR 10g (W/Kg)	0.490005
SAR 1g (W/Kg)	0.830315



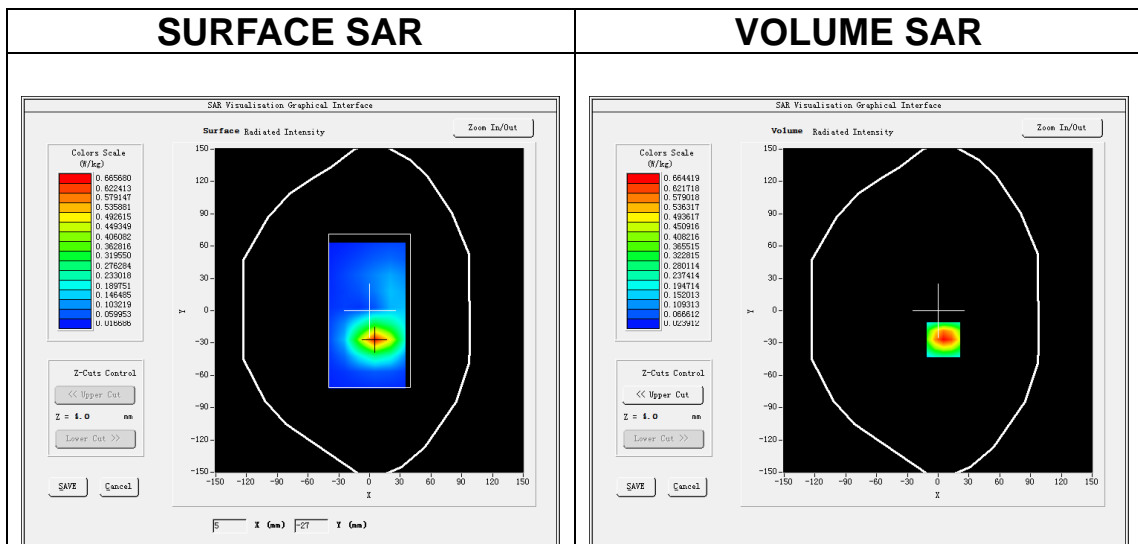
MEASUREMENT 6

A. Experimental conditions.

Area Scan	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
Phantom	<u>Validation plane</u>
Device Position	<u>Body</u>
Band	<u>Band2_WCDMA1900</u>
Channels	<u>Middle</u>
Signal	<u>WCDMA (Crest factor: 1.0)</u>

B. SAR Measurement Results

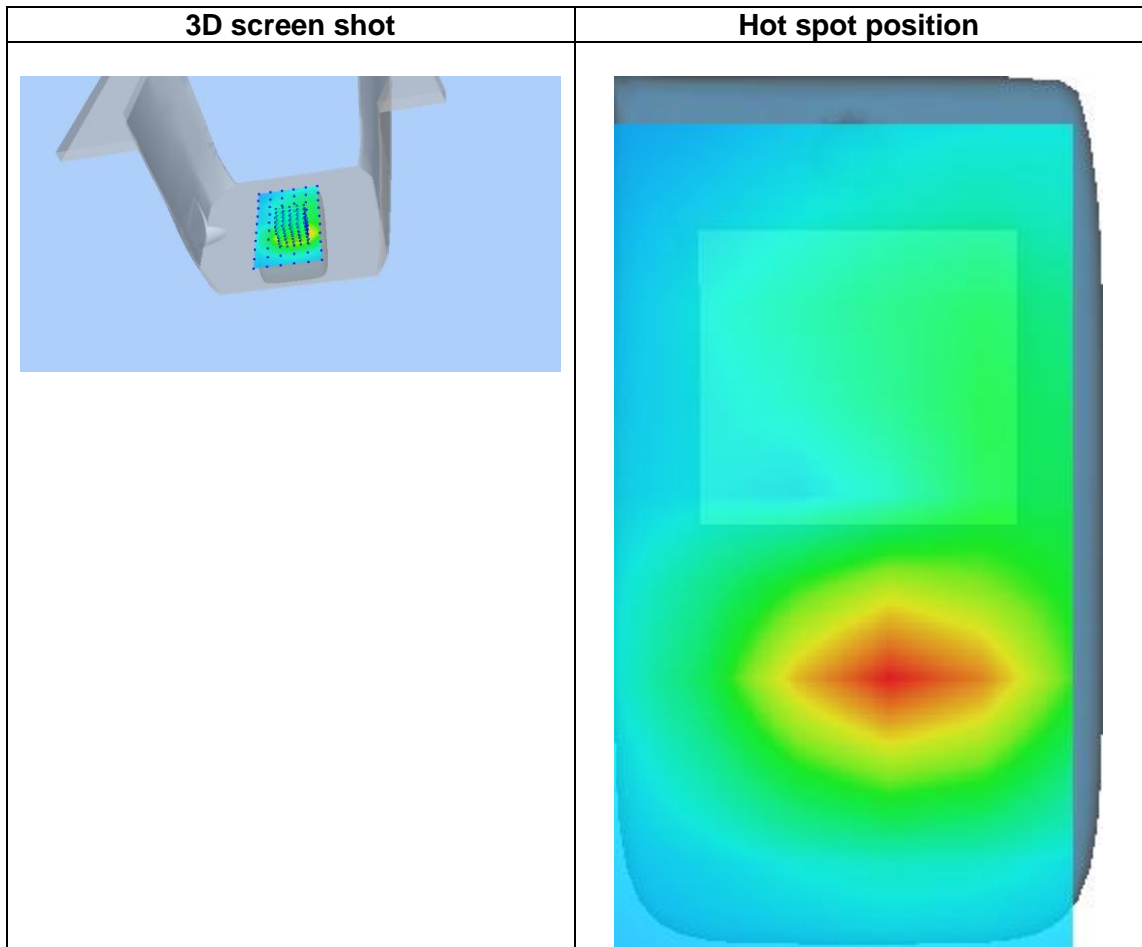
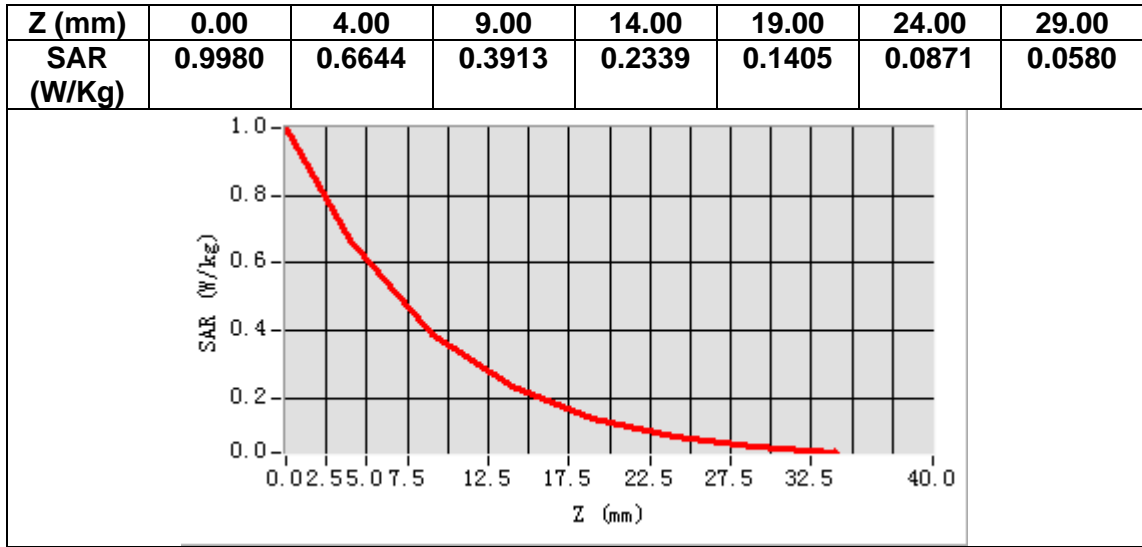
Frequency (MHz)	1880.000000
Relative permittivity (real part)	52.598900
Relative permittivity (imaginary part)	15.027700
Conductivity (S/m)	1.569560
Variation (%)	-0.050000



Maximum location: X=5.00, Y=-27.00

SAR Peak: 1.04 W/kg

SAR 10g (W/Kg)	0.341522
SAR 1g (W/Kg)	0.644242



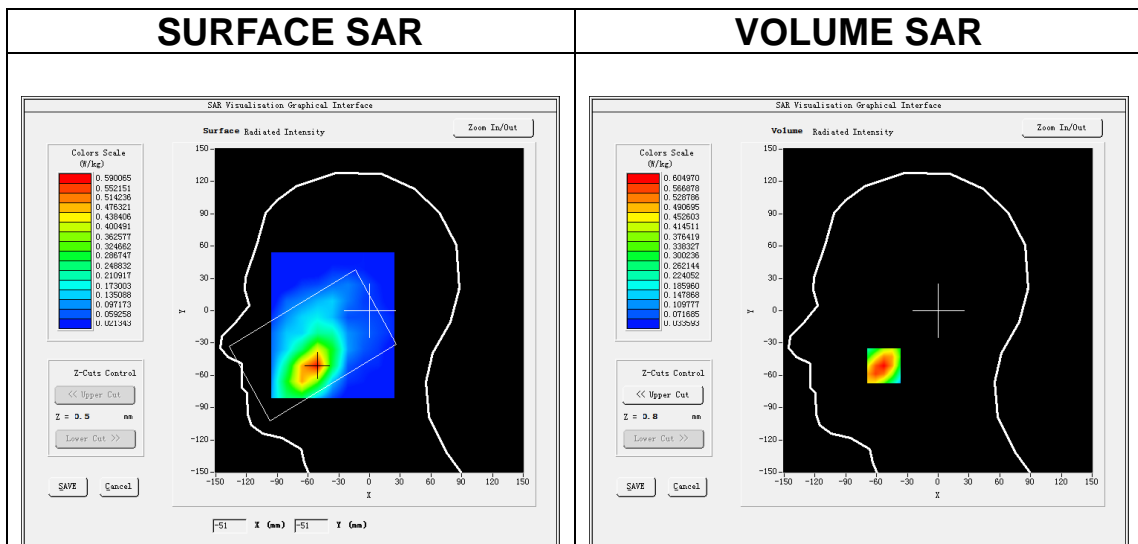
MEASUREMENT 7

A. Experimental conditions.

Area Scan	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
Phantom	<u>Left head</u>
Device Position	<u>Cheek</u>
Band	<u>Band4 WCDMA1700</u>
Channels	<u>Middle</u>
Signal	<u>WCDMA (Crest factor: 1.0)</u>

B. SAR Measurement Results

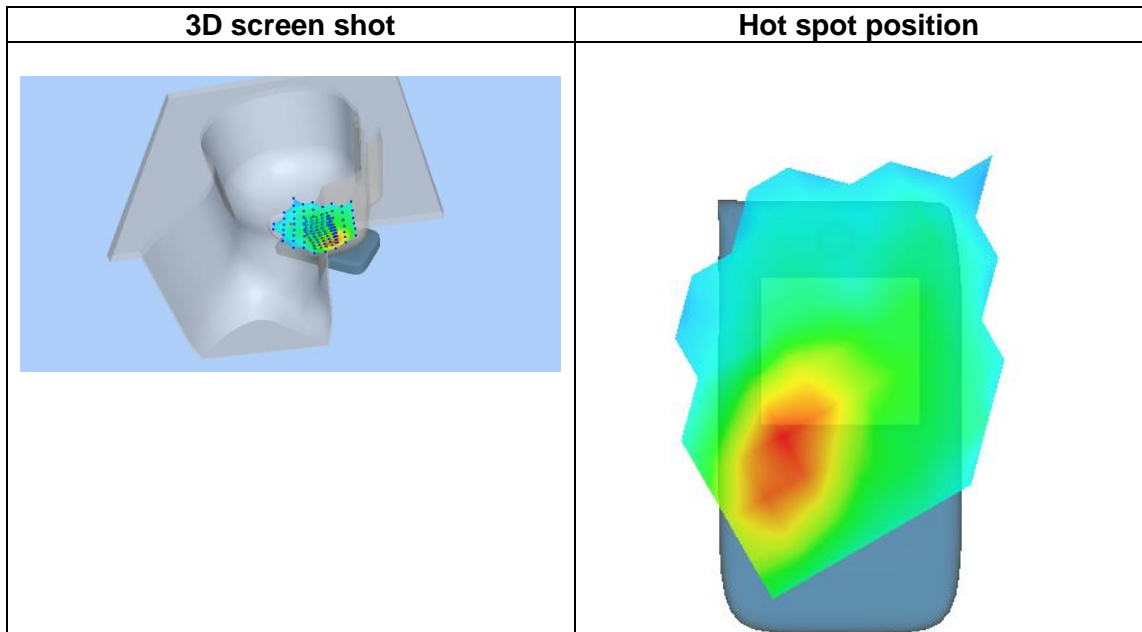
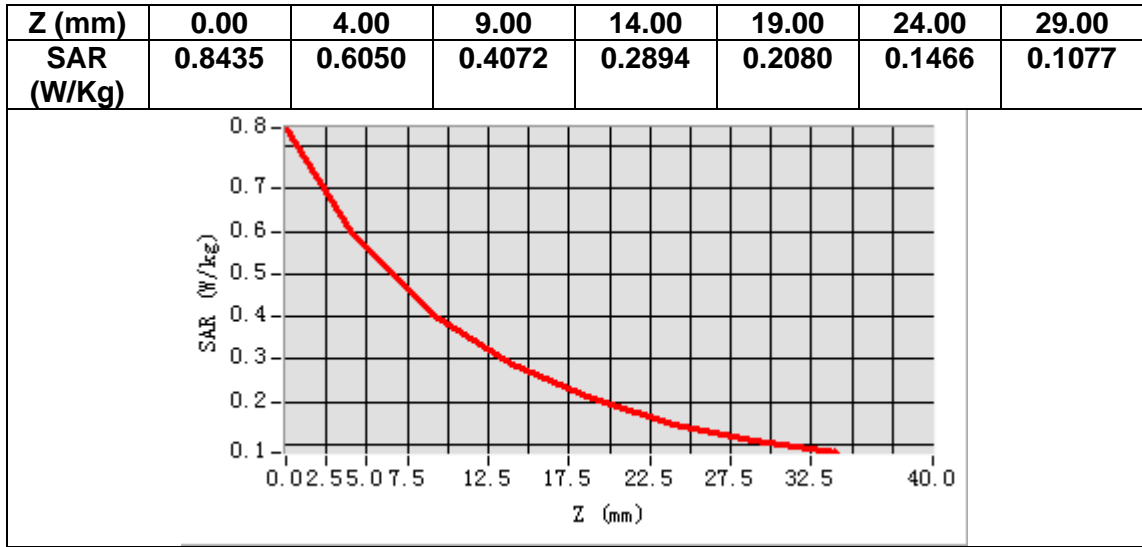
Frequency (MHz)	1732.600000
Relative permittivity (real part)	39.065289
Relative permittivity (imaginary part)	13.970592
Conductivity (S/m)	1.344669
Variation (%)	-1.640000



Maximum location: X=-53.00, Y=-51.00

SAR Peak: 0.84 W/kg

SAR 10g (W/Kg)	0.362523
SAR 1g (W/Kg)	0.579524



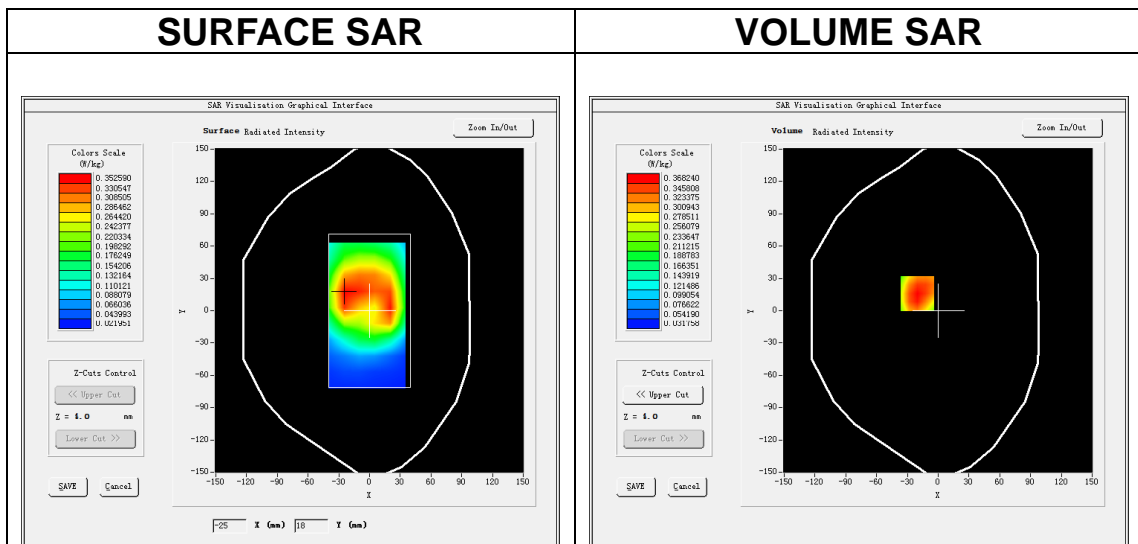
MEASUREMENT 8

A. Experimental conditions.

Area Scan	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
Phantom	<u>Validation plane</u>
Device Position	<u>Body</u>
Band	<u>Band4 WCDMA1700</u>
Channels	<u>Middle</u>
Signal	<u>WCDMA (Crest factor: 1.0)</u>

B. SAR Measurement Results

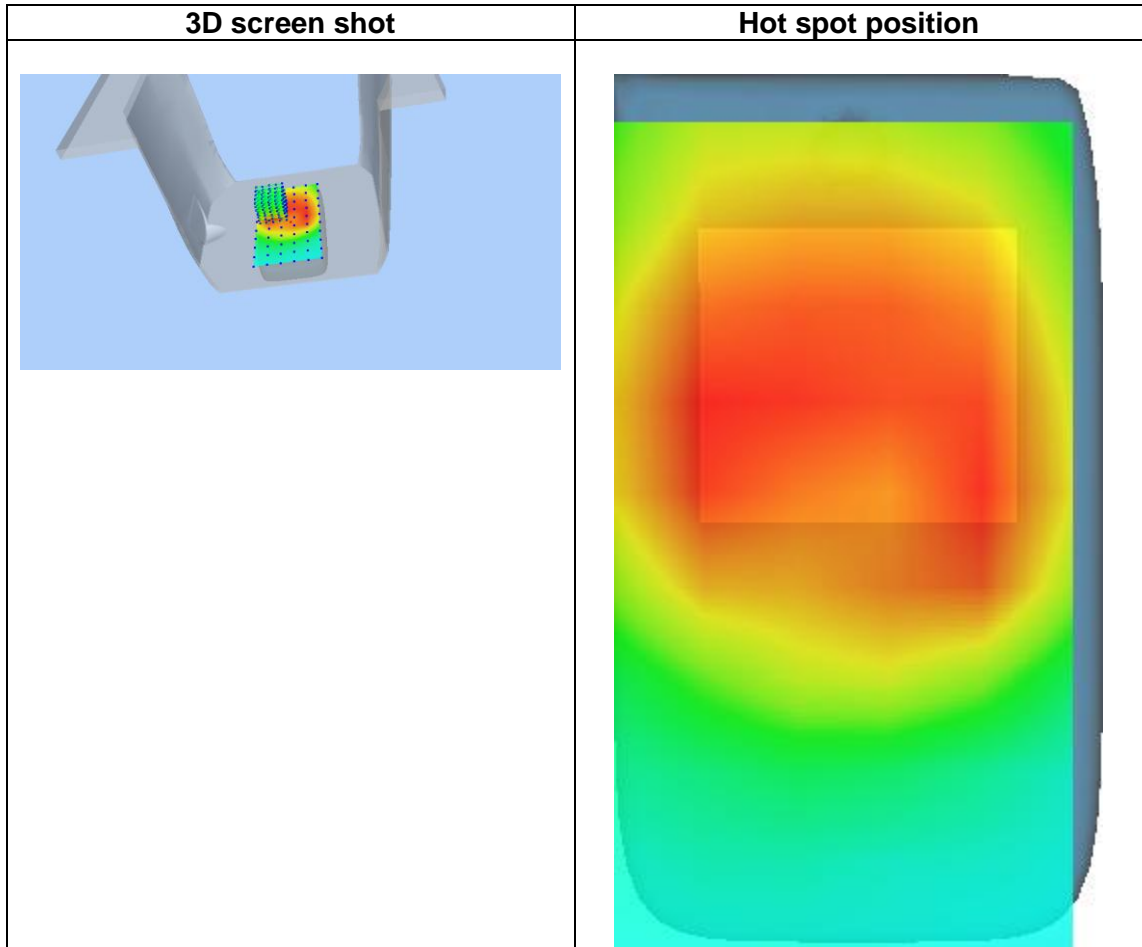
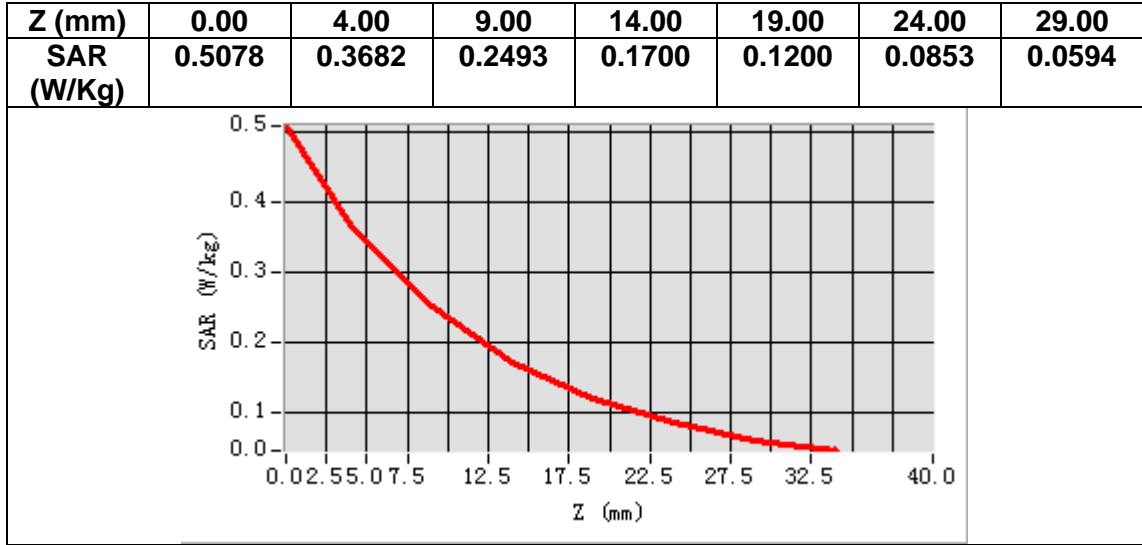
Frequency (MHz)	1732.600000
Relative permittivity (real part)	53.573364
Relative permittivity (imaginary part)	15.693220
Conductivity (S/m)	1.510472
Variation (%)	0.510000



Maximum location: X=-20.00, Y=16.00

SAR Peak: 0.51 W/kg

SAR 10g (W/Kg)	0.233051
SAR 1g (W/Kg)	0.360076



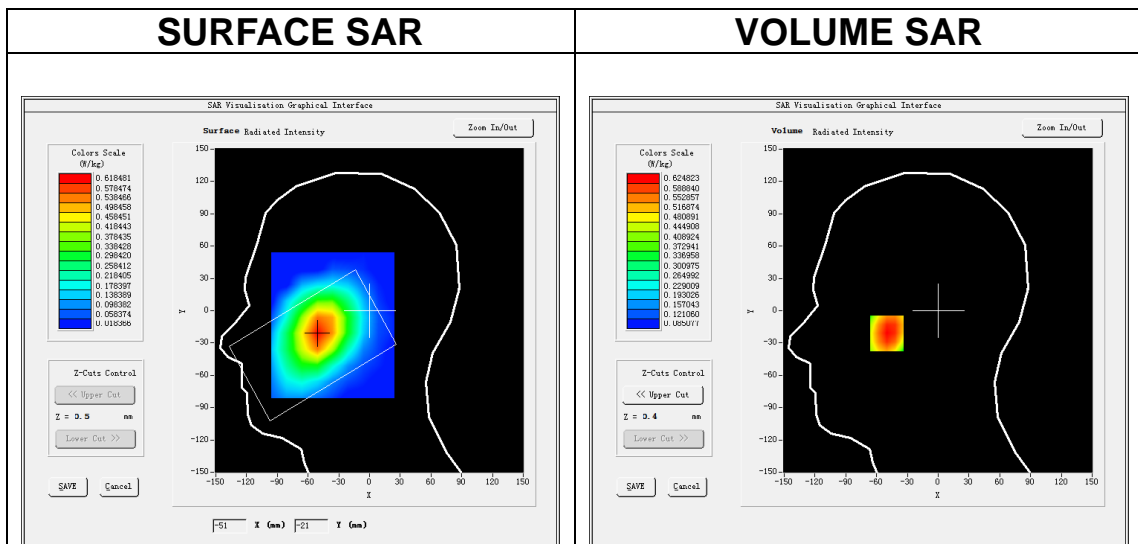
MEASUREMENT 9

A. Experimental conditions.

Area Scan	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
Phantom	<u>Left head</u>
Device Position	<u>Cheek</u>
Band	<u>Band5 WCDMA850</u>
Channels	<u>Middle</u>
Signal	<u>WCDMA (Crest factor: 1.0)</u>

B. SAR Measurement Results

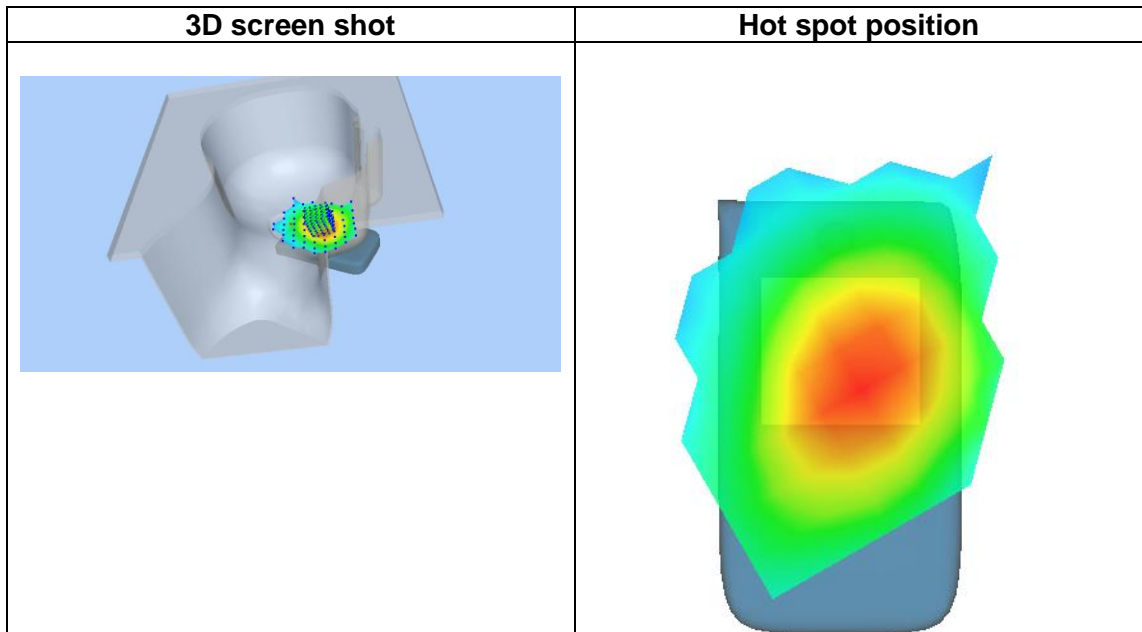
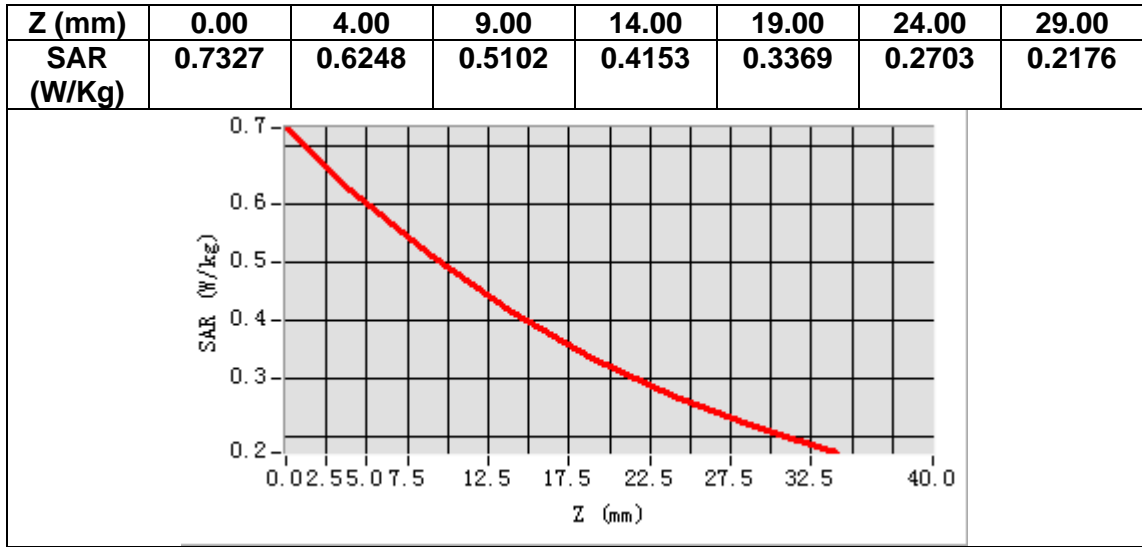
Frequency (MHz)	836.400000
Relative permittivity (real part)	40.410961
Relative permittivity (imaginary part)	20.201540
Conductivity (S/m)	0.938698
Variation (%)	-0.120000



Maximum location: X=-50.00, Y=-21.00

SAR Peak: 0.75 W/kg

SAR 10g (W/Kg)	0.475073
SAR 1g (W/Kg)	0.629133



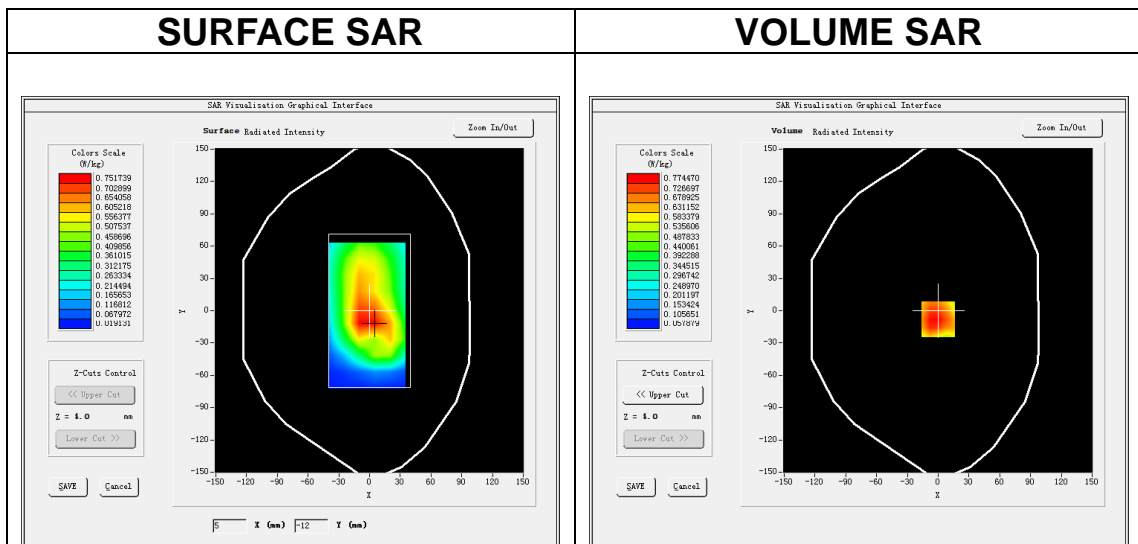
MEASUREMENT 10

A. Experimental conditions.

Area Scan	<u>dx=15mm dy=15mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7,dx=8mm dy=8mm dz=5mm</u>
Phantom	<u>Validation plane</u>
Device Position	<u>Body</u>
Band	<u>Band5 WCDMA850</u>
Channels	<u>Middle</u>
Signal	<u>WCDMA (Crest factor: 1.0)</u>

B. SAR Measurement Results

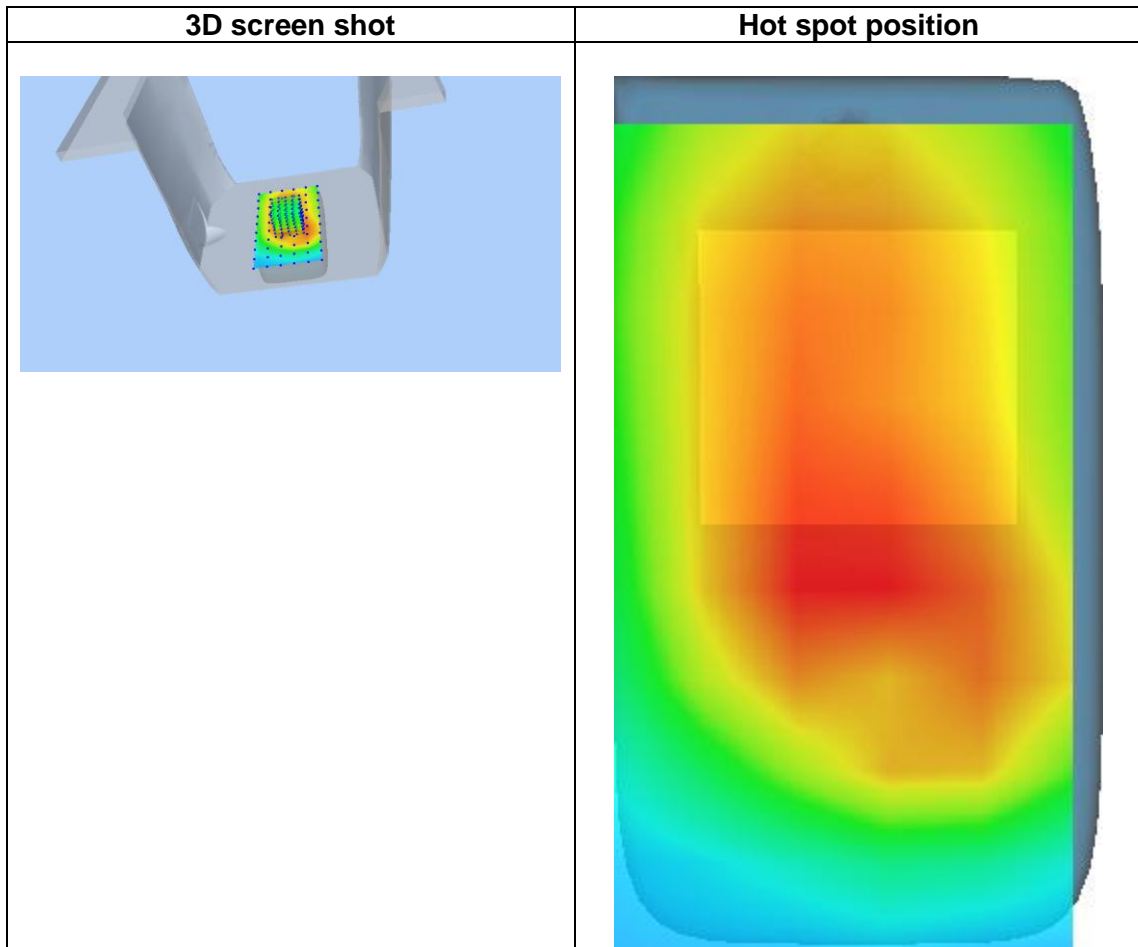
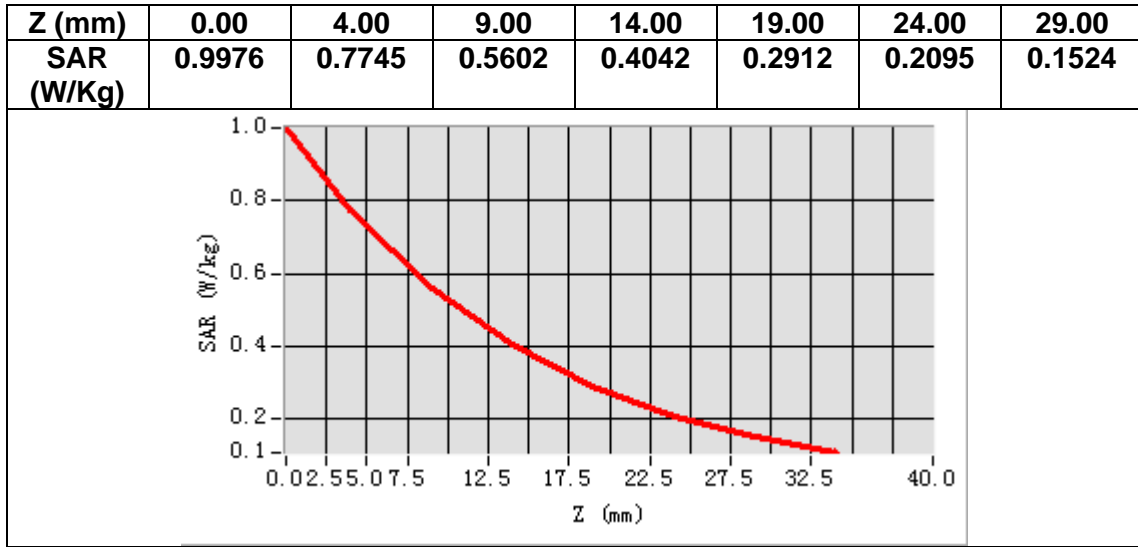
Frequency (MHz)	836.400000
Relative permittivity (real part)	54.239578
Relative permittivity (imaginary part)	21.842739
Conductivity (S/m)	1.014959
Variation (%)	-0.050000



Maximum location: X=0.00, Y=-8.00

SAR Peak: 1.03 W/kg

SAR 10g (W/Kg)	0.539434
SAR 1g (W/Kg)	0.780882



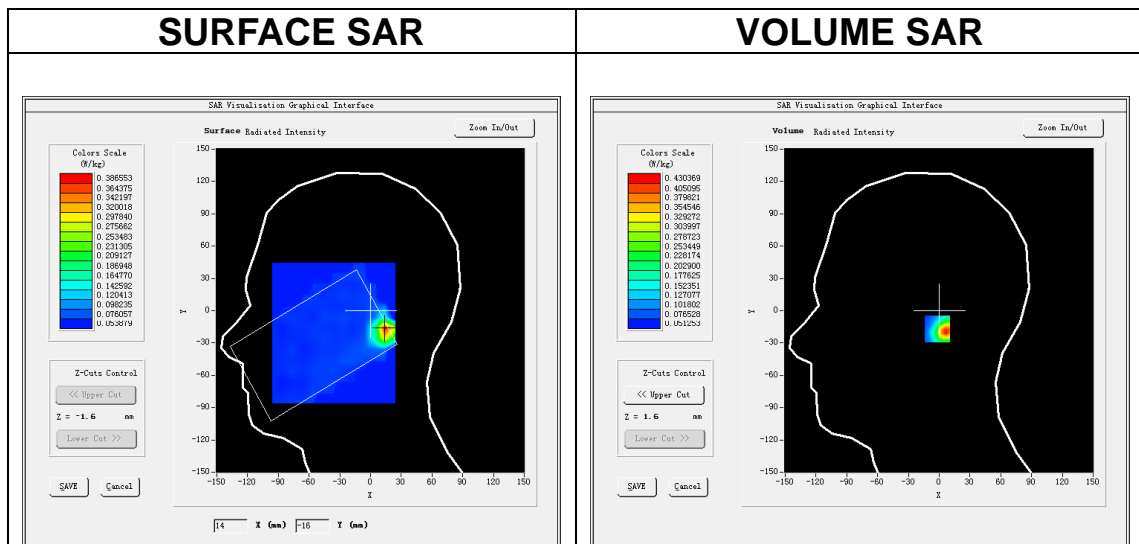
MEASUREMENT 11

A. Experimental conditions.

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

B. SAR Measurement Results

Frequency (MHz)	5785.000000
Relative permittivity (real part)	34.724788
Relative permittivity (imaginary part)	16.035266
Conductivity (S/m)	5.153556
Variation (%)	2.630000

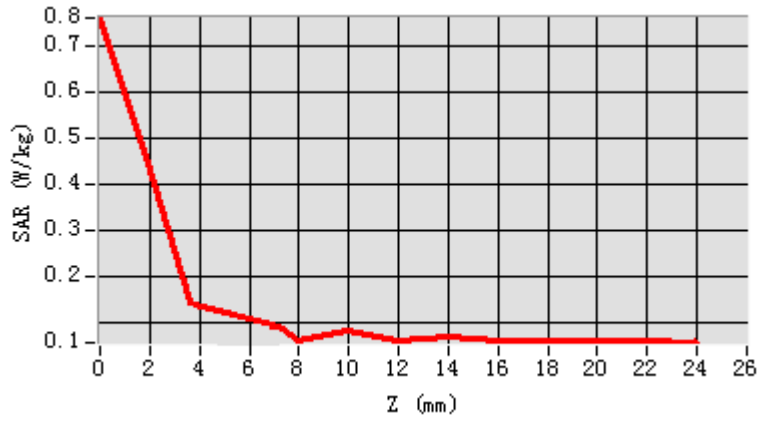


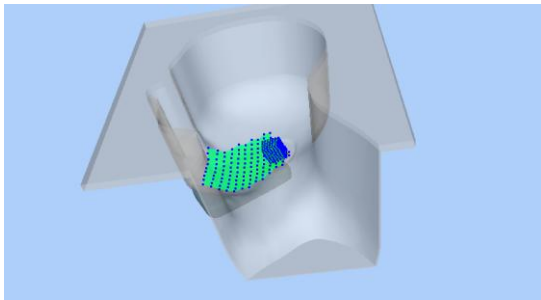
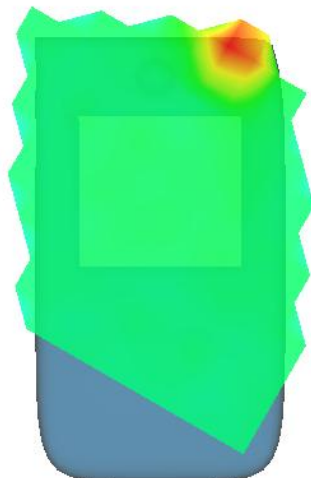
Maximum location: X=7.00, Y=-17.00

SAR Peak: 1.13 W/kg

SAR 10g (W/Kg)	0.154997
SAR 1g (W/Kg)	0.421162

Z (m m)	0.00	2.00	4.00	6.00	8.00	10.0	12.0	14.0	16.0	18.0	20.0	22.0
SAR (W/Kg)	0.7598	0.4304	0.0710	0.1398	0.0587	0.0803	0.0580	0.0678	0.0588	0.0605	0.0602	0.0593



3D screen shot	Hot spot position
	

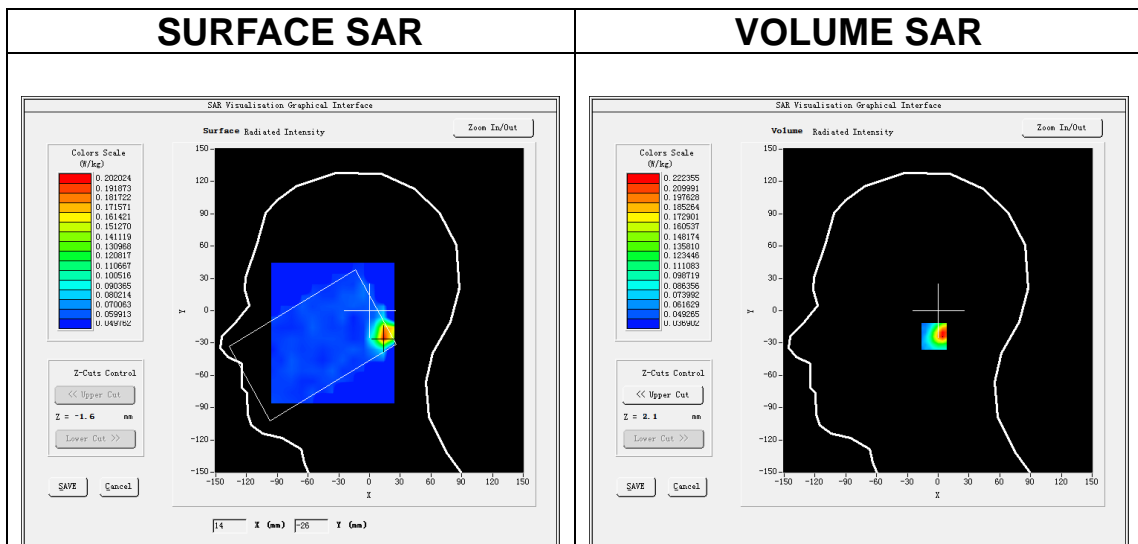
MEASUREMENT 12

A. Experimental conditions.

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

B. SAR Measurement Results

Frequency (MHz)	5200.000000
Relative permittivity (real part)	35.742204
Relative permittivity (imaginary part)	16.123542
Conductivity (S/m)	4.662321
Variation (%)	-0.470000

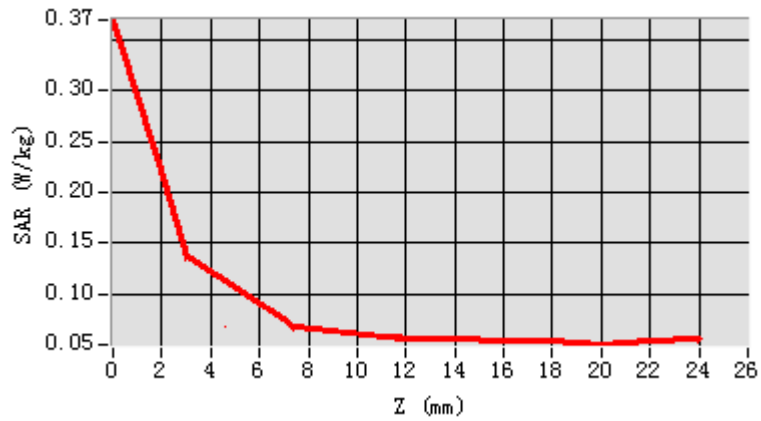


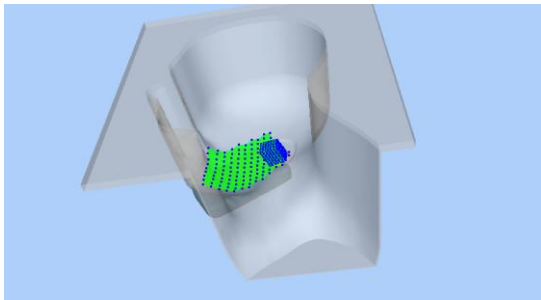
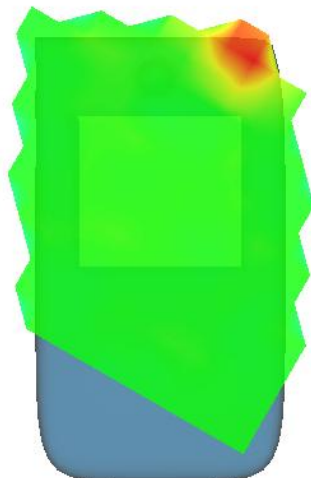
Maximum location: X=7.00, Y=-24.00

SAR Peak: 0.52 W/kg

SAR 10g (W/Kg)	0.100497
SAR 1g (W/Kg)	0.216975

Z (m m)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00
SAR (W/Kg)	0.3690	0.2224	0.1094	0.0988	0.0585	0.0669	0.0561	0.0560	0.0552	0.0540	0.0506	0.0500



3D screen shot	Hot spot position
	

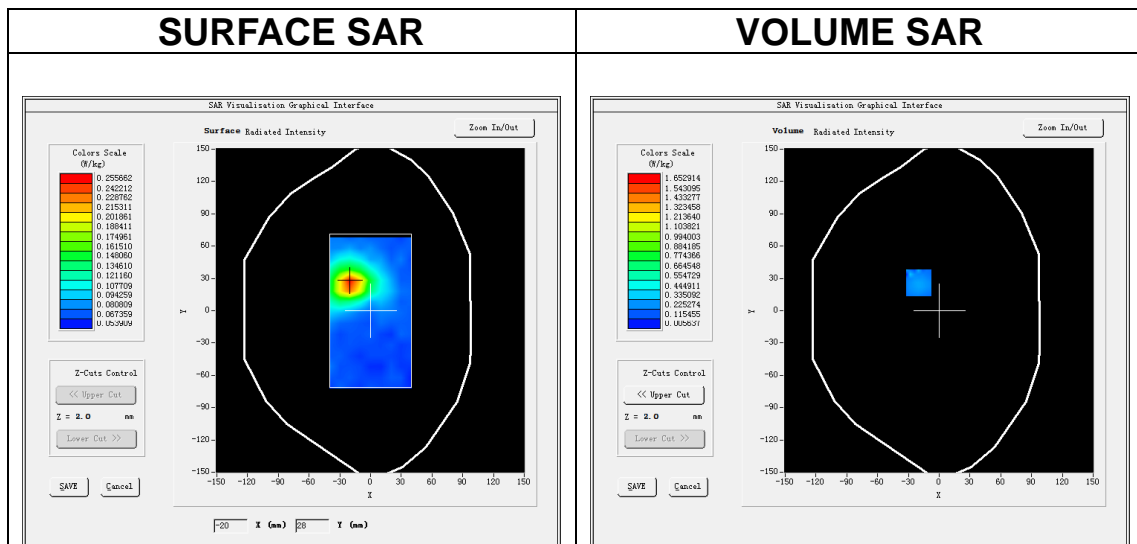
MEASUREMENT 13

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)	49.572845
Relative permittivity (imaginary part)	18.381441
Conductivity (S/m)	5.313842
Variation (%)	-3.390000

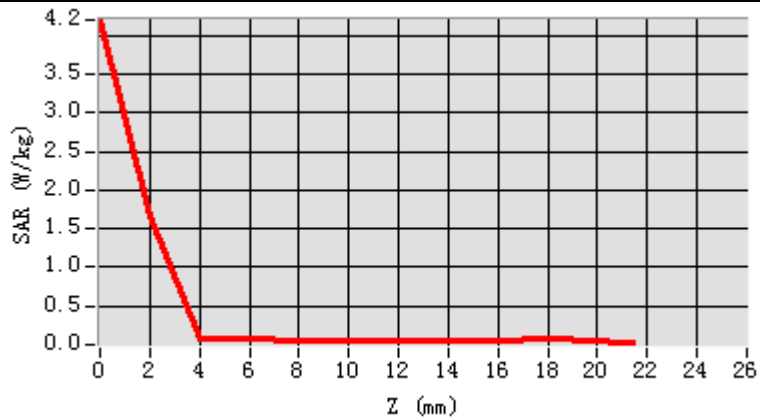


Maximum location: X=-20.00, Y=26.00

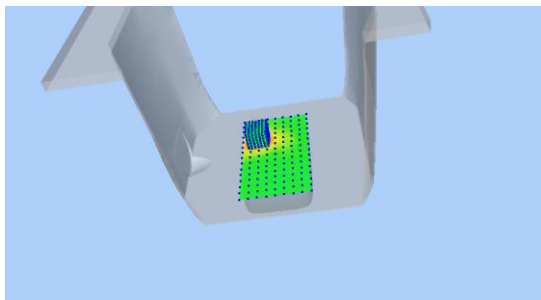
SAR Peak: 0.64 W/kg

SAR 10g (W/Kg)	0.111205
SAR 1g (W/Kg)	0.167448

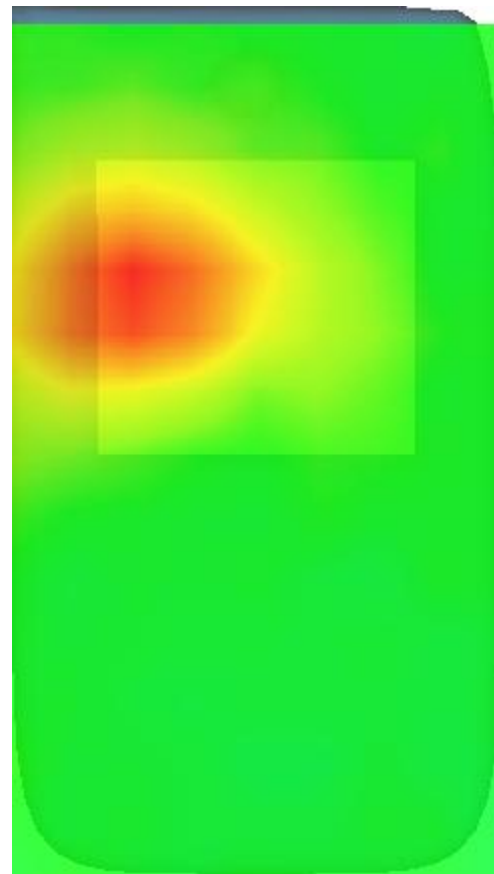
Z (m m)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00
SAR (W/Kg)	4.2073	1.6529	0.0702	0.0660	0.0645	0.0608	0.0629	0.0598	0.0643	0.0655	0.0634	0.0000



3D screen shot



Hot spot position



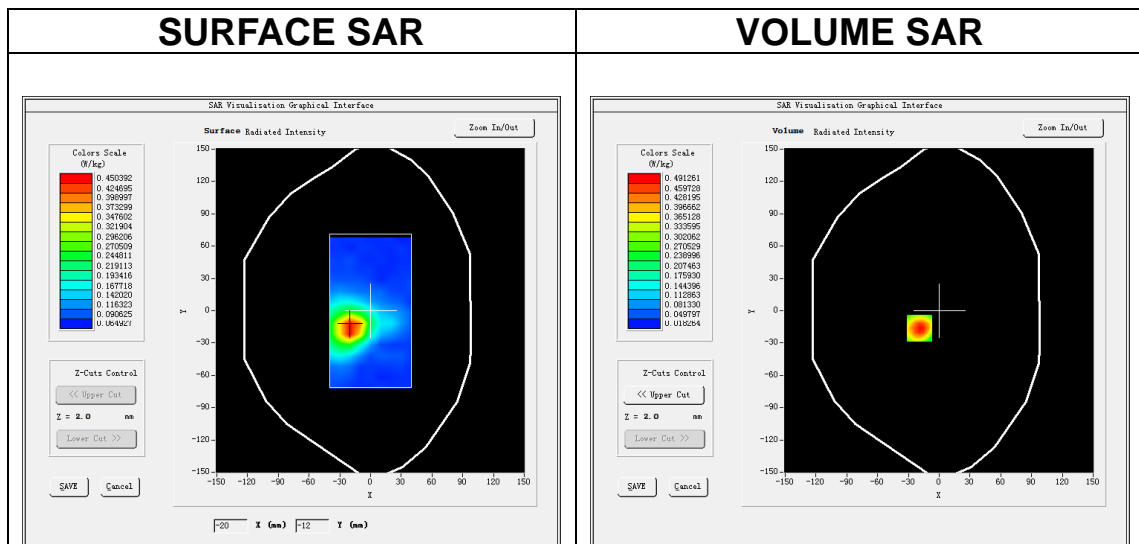
MEASUREMENT 14

A. Experimental conditions.

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

B. SAR Measurement Results

Frequency (MHz)	5785.000000
Relative permittivity (real part)	48.338702
Relative permittivity (imaginary part)	18.776766
Conductivity (S/m)	6.034644
Variation (%)	-1.000000

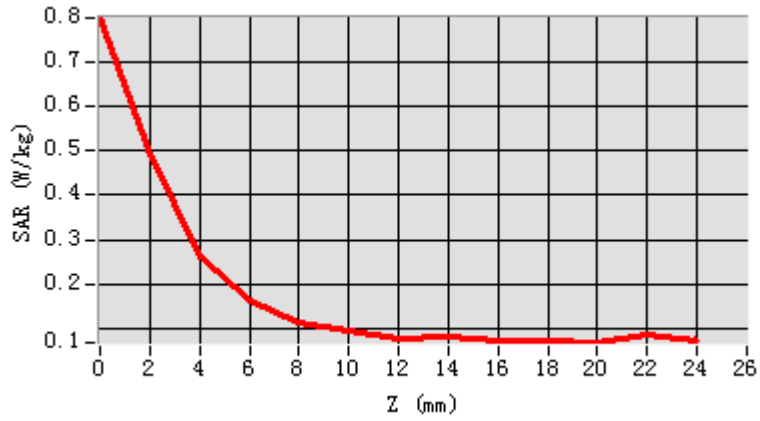


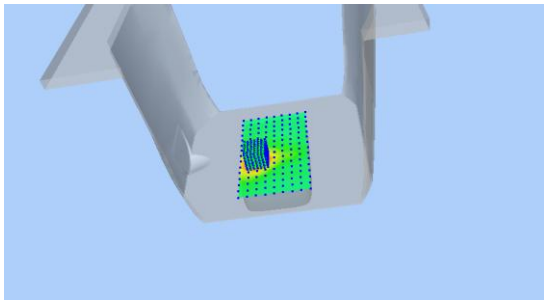
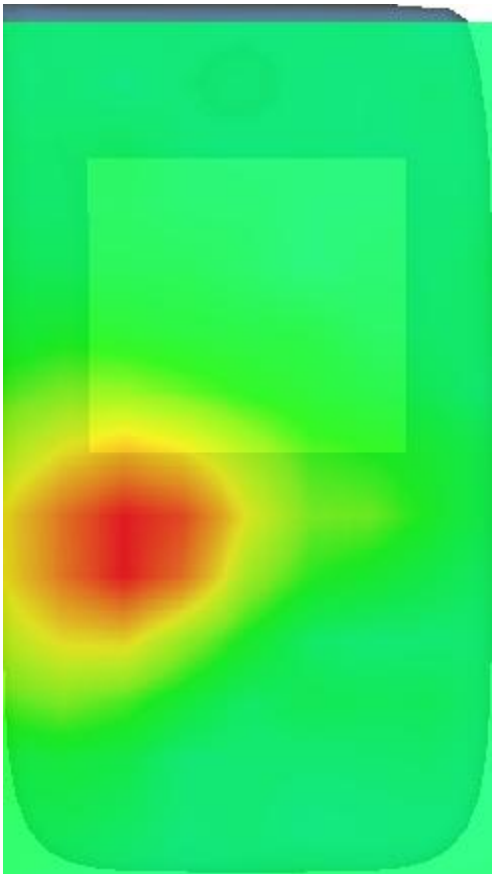
Maximum location: X=-19.00, Y=-16.00

SAR Peak: 0.85 W/kg

SAR 10g (W/Kg)	0.164036
SAR 1g (W/Kg)	0.310917

Z (m m)	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00
SAR (W/Kg)	0.7986	0.4913	0.2619	0.1648	0.1150	0.0963	0.0780	0.0795	0.0730	0.0725	0.0682	0.0841



3D screen shot	Hot spot position
	

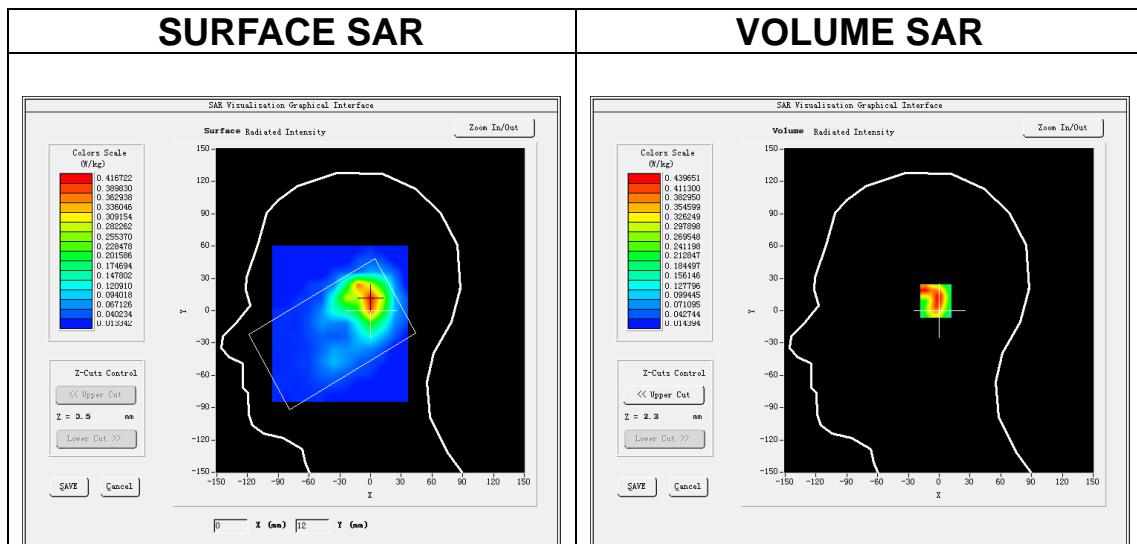
MEASUREMENT 15

A. Experimental conditions.

Area Scan	<u>dx=12mm dy=12mm, h= 5.00 mm</u>
ZoomScan	<u>7x7x7,dx=5mm dy=5mm dz=5mm</u>
Phantom	<u>Left head</u>
Device Position	<u>Cheek</u>
Band	<u>IEEE 802.11b ISM</u>
Channels	<u>Middle</u>
Signal	<u>IEEE802.11b (Crest factor: 1.0)</u>

B. SAR Measurement Results

Frequency (MHz)	2437.000000
Relative permittivity (real part)	38.780998
Relative permittivity (imaginary part)	13.600300
Conductivity (S/m)	1.841330
Variation (%)	0.120000

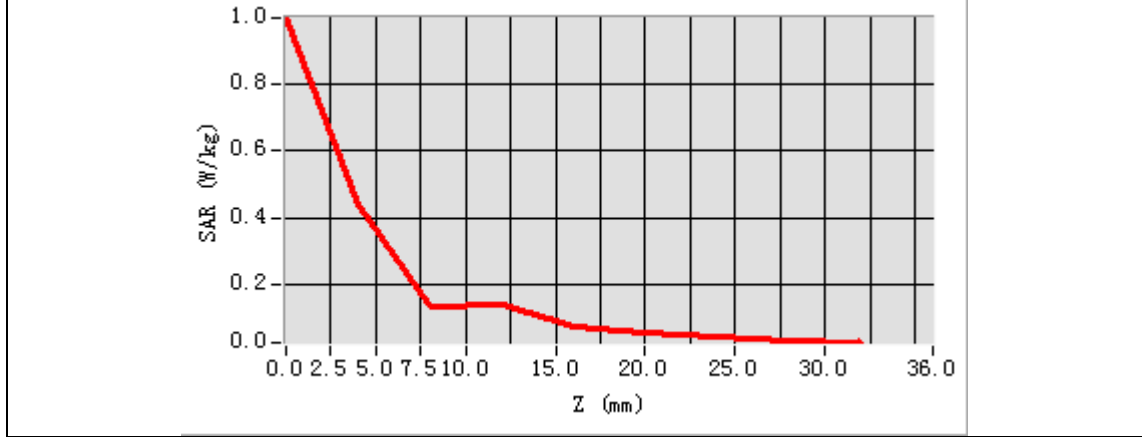


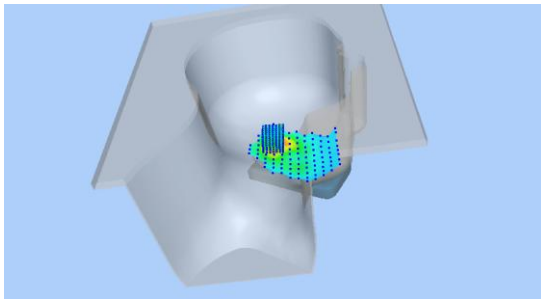
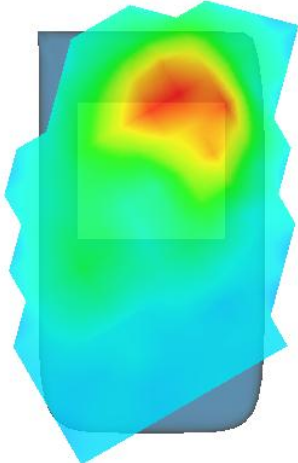
Maximum location: X=1.00, Y=9.00

SAR Peak: 0.81 W/kg

SAR 10g (W/Kg)	0.205785
SAR 1g (W/Kg)	0.415116

Z (mm)	0.00	4.00	8.00	12.00	16.00	20.00	24.00	28.00
SAR (W/Kg)	1.0013	0.4397	0.1317	0.1378	0.0678	0.0535	0.0408	0.0287



3D screen shot	Hot spot position
	

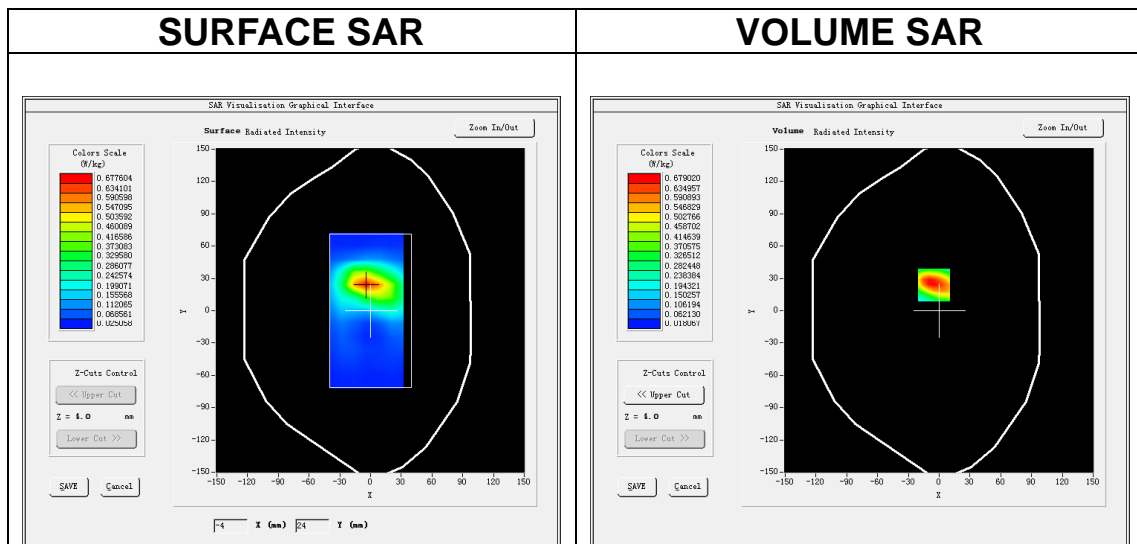
MEASUREMENT 16

A. Experimental conditions.

Area Scan	<u>dx=12mm dy=12mm, h= 5.00 mm</u>
ZoomScan	<u>7x7x7,dx=5mm dy=5mm dz=5mm</u>
Phantom	<u>Validation plane</u>
Device Position	<u>Body</u>
Band	<u>IEEE 802.11b ISM</u>
Channels	<u>Middle</u>
Signal	<u>IEEE802.11b (Crest factor: 1.0)</u>

B. SAR Measurement Results

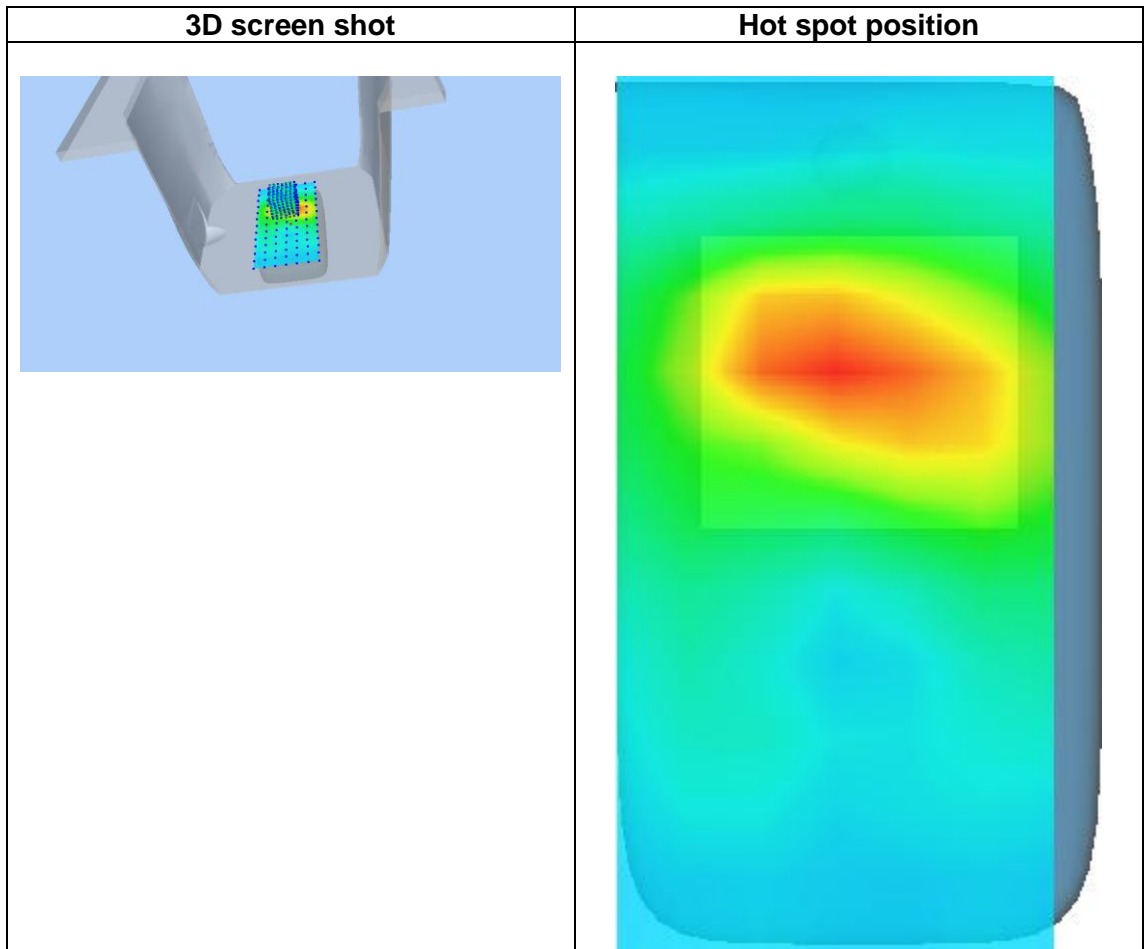
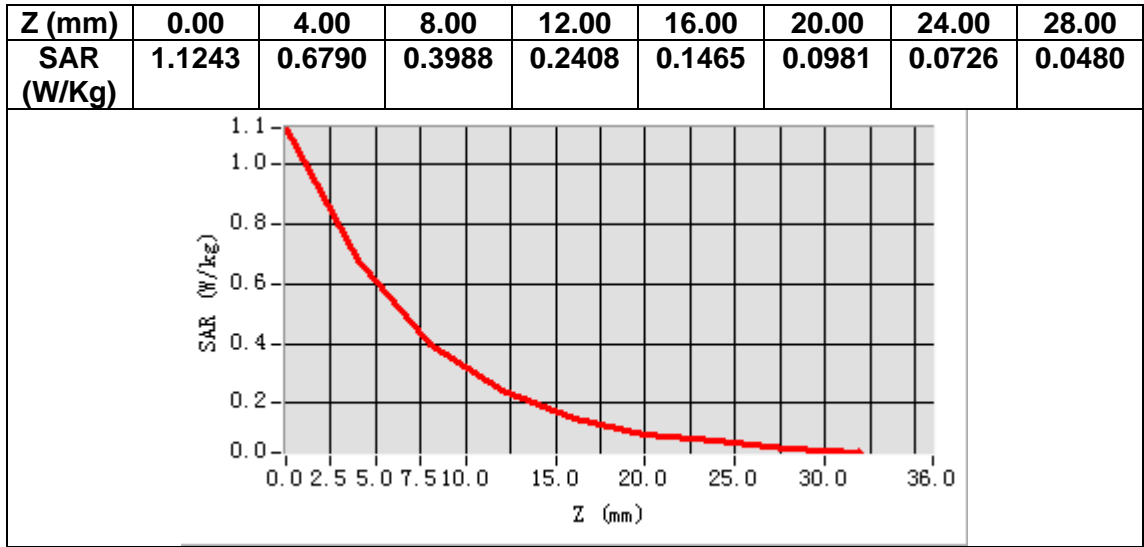
Frequency (MHz)	2437.000000
Relative permittivity (real part)	52.101601
Relative permittivity (imaginary part)	14.875620
Conductivity (S/m)	2.013994
Variation (%)	-3.030000



Maximum location: X=-5.00, Y=24.00

SAR Peak: 1.14 W/kg

SAR 10g (W/Kg)	0.333357
SAR 1g (W/Kg)	0.662964



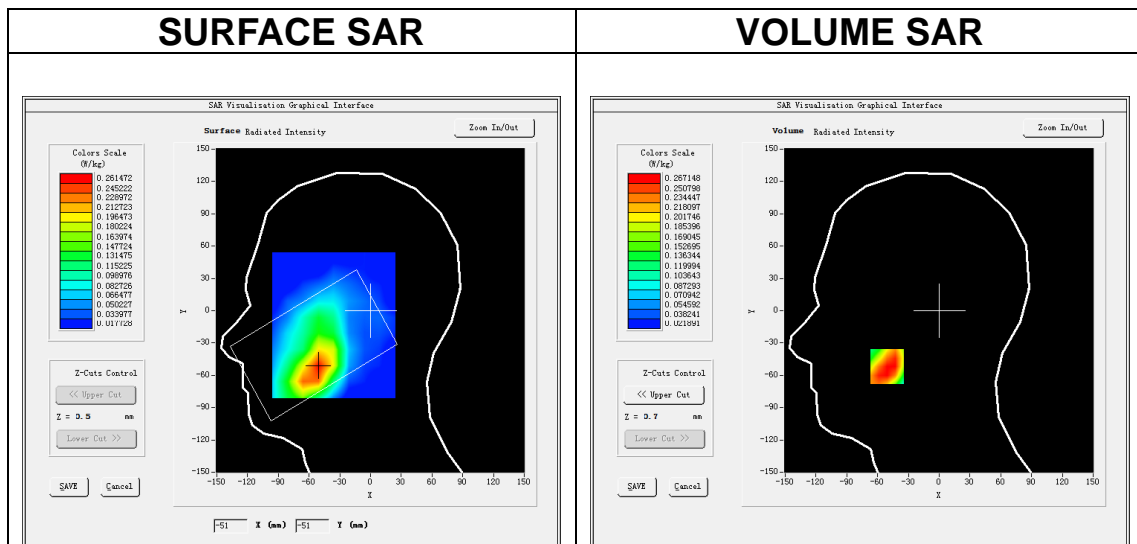
MEASUREMENT 17

A. Experimental conditions.

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

B. SAR Measurement Results

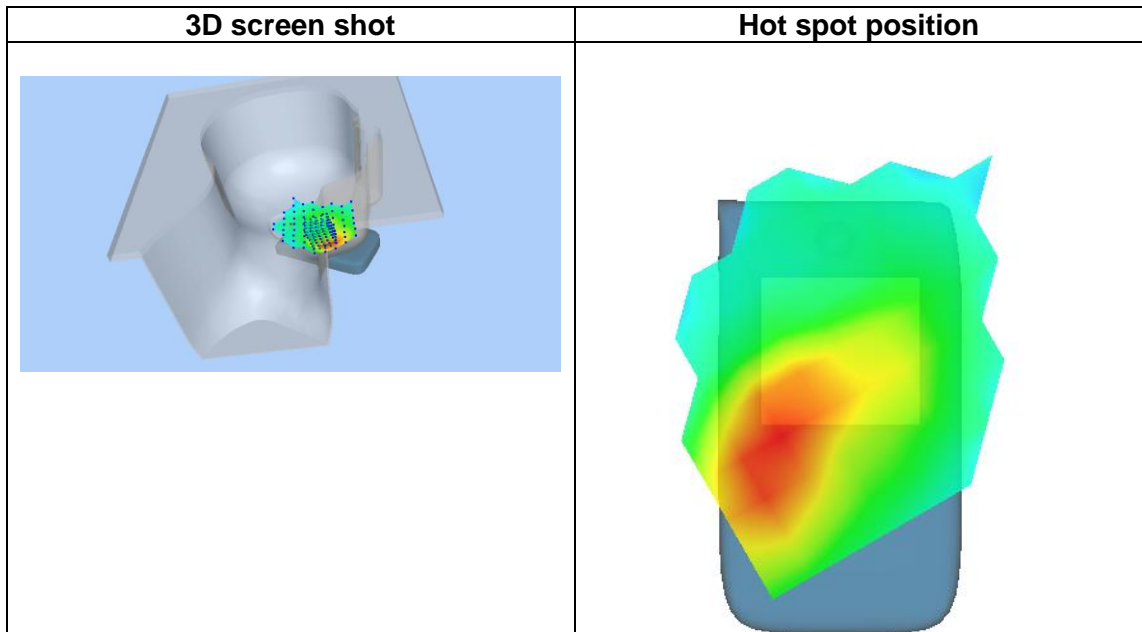
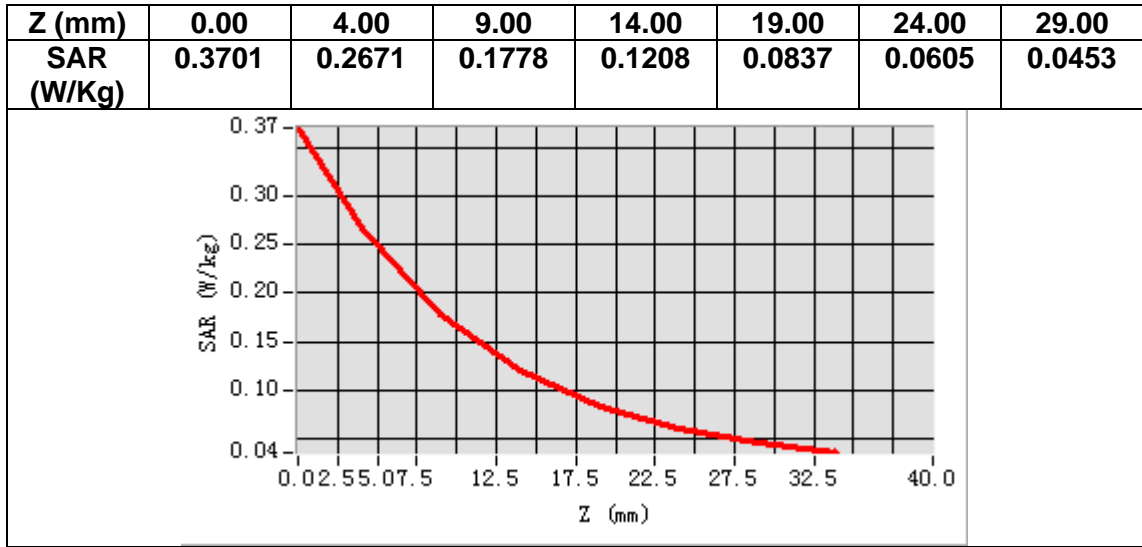
Frequency (MHz)	1880.000000
Relative permittivity (real part)	41.013802
Relative permittivity (imaginary part)	13.778100
Conductivity (S/m)	1.438663
Variation (%)	-1.560000



Maximum location: X=-51.00, Y=-52.00

SAR Peak: 0.40 W/kg

SAR 10g (W/Kg)	0.162107
SAR 1g (W/Kg)	0.266299



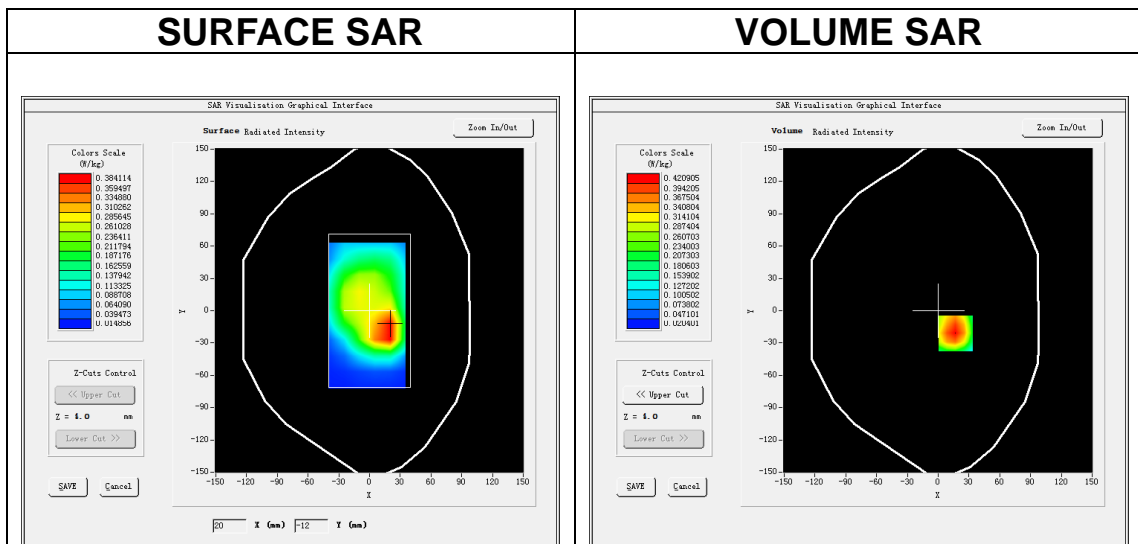
MEASUREMENT 18

A. Experimental conditions.

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

B. SAR Measurement Results

Frequency (MHz)	1880.000000
Relative permittivity (real part)	52.605949
Relative permittivity (imaginary part)	15.036150
Conductivity (S/m)	1.570025
Variation (%)	-1.260000



Maximum location: X=17.00, Y=-21.00

SAR Peak: 0.68 W/kg

SAR 10g (W/Kg)	0.230515
SAR 1g (W/Kg)	0.415241