



# FCC SAR TEST REPORT

Report No.: STS2009228H01

Issued for

JACS Solutions, Inc.

8808 Centre Park Drive Suite 305, Columbia Maryland 21045,  
United States

Product Name:	8inch Tablet
Brand Name:	N/A
Model Name:	TG0803V1
Series Model:	N/A
FCC ID:	2AGCDJACSTG0803V1
Test Standard:	ANSI/IEEE Std. C95.1
	FCC 47 CFR Part 2 ( 2.1093)
	IEEE 1528: 2013
Max. Report SAR (1g):	Body: 0.594 W/kg

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## Test Report Certification

**Applicant's name** ..... : JACS Solutions, Inc.  
**Address** ..... : 8808 Centre Park Drive Suite 305, Columbia Maryland 21045,  
United States  
**Manufacture's Name** ..... : JACS Solutions, Inc.  
**Address** ..... : 8808 Centre Park Drive Suite 305, Columbia Maryland 21045,  
United States

### Product description

**Product name** ..... : 8inch Tablet  
**Brand name** ..... : N/A  
**Model name** ..... : TG0803V1  
**Series Model** ..... : N/A

**Standards** ..... : ANSI/IEEE Std. C95.1-1992  
FCC 47 CFR Part 2 ( 2.1093)  
IEEE 1528: 2013

The device was tested by Shenzhen STS Test Services Co., Ltd. in accordance with the measurement methods and procedures specified in KDB 865664 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.

**Date of Test** ..... :  
**Date (s) of performance of tests** ..... : 18 Sept. 2020~22 Sept. 2020  
**Date of Issue** ..... : 25 Sept. 2020  
**Test Result** ..... : **Pass**

Testing Engineer :

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(Sean She)

Authorized Signatory :

*Vita Li*

(Vita Li)





## Table of Contents

<b>1. General Information</b>	<b>5</b>
1.1 EUT Description	5
1.2 Test Environment	6
1.3 Test Factory	6
<b>2. Test Standards</b>	<b>7</b>
<b>3. SAR Measurement System</b>	<b>8</b>
3.1 Definition of Specific Absorption Rate (SAR)	8
3.2 SAR System	8
<b>4. Tissue Simulating Liquids</b>	<b>11</b>
4.1 Simulating Liquids Parameter Check	11
<b>5. SAR System Validation</b>	<b>13</b>
5.1 Validation System	13
5.2 Validation Result	13
<b>6. SAR Evaluation Procedures</b>	<b>14</b>
<b>7. EUT Antenna Location Sketch</b>	<b>15</b>
7.1 SAR test exclusion consider table	16
<b>8. EUT Test Position</b>	<b>18</b>
8.1 Define Two Imaginary Lines on the Handset	18
8.2 Hotspot mode exposure position condition	18
<b>9. Uncertainty</b>	<b>19</b>
9.1 Measurement Uncertainty	19
9.2 System validation Uncertainty	20
<b>10. Conducted Power Measurement</b>	<b>21</b>
10.1 Test Result	21
10.2 Tune-up Power	24
<b>11. EUT and Test Setup Photo</b>	<b>26</b>
11.1 EUT Photo	26
11.2 Setup Photo	29
<b>12. SAR Result Summary</b>	<b>31</b>
12.1 Body SAR	31
<b>13. Equipment List</b>	<b>33</b>
<b>Appendix A. System Validation Plots</b>	<b>34</b>
<b>Appendix B. SAR Test Plots</b>	<b>44</b>
<b>Appendix C. Probe Calibration And Dipole Calibration Report</b>	<b>50</b>



### Revision History

Rev.	Issue Date	Report No.	Effect Page	Contents
00	25 Sept. 2020	STS2009228H01	ALL	Initial Issue

Note: **Format version** of the report -V01





## 1. General Information

Environmental evaluation measurements of specific absorption rate (SAR) distributions in emulated human head and body tissues exposed to radio frequency (RF) radiation from wireless portable devices for compliance with the rules and regulations of the U.S. Federal Communications Commission (FCC).

### 1.1 EUT Description

Product Name	8inch Tablet		
Brand Name	N/A		
Model Name	TG0803V1		
Series Model	N/A		
FCC ID	2AGCDJACSTG0803V1		
Model Difference	N/A		
Battery	Rated Voltage: 3.7V Charge Limit: 4.2V Capacity: 8000mAh		
Device Category	Portable		
Product stage	Production unit		
RF Exposure Environment	General Population / Uncontrolled		
Hardware Version	N/A		
Software Version	N/A		
Frequency Range	WLAN802.11b/g/n(HT20): 2412~2462MHz WLAN 802.11a/n/ac(HT20/40/80): 5150~5250 MHz; WLAN 802.11a/n/ac(HT20/40/80): 5250~5350 MHz; WLAN 802.11a/n/ac(HT20/40/80): 5500~5700 MHz; WLAN 802.11a/n/ac(HT20/40/80): 5725~5875 MHz; Bluetooth: 2402~ 2480MHz		
Max. Reported SAR(1g): (Limit:1.6W/kg)	Band	Mode	Body SAR (W/kg)
	DTS	2.4G WLAN	0.594
	NII	5.2G WLAN	0.105
	NII	5.3G WLAN	0.157
	NII	5.6G WLAN	0.238
	NII	5.8G WLAN	0.206
	DTS	Bluetooth	0.194
FCC Equipment Class	Part 15 Spread Spectrum Transmitter (DSS) Digital Transmission System (DTS) Unlicensed National Information Infrastructure TX (NII)		
Operating Mode:	802.11a(OFDM): BPSK,QPSK,16-QAM,64-QAM 802.11n(OFDM): BPSK,QPSK,16-QAM,64-QAM 802.11ac(OFDM): BPSK,QPSK,16-QAM,64-QAM,256-QAM Bluetooth: (GFSK + $\pi$ /4DQPSK+8DPSK) BLE:GFSK		
Antenna Specification:	BT, WLAN: PIFA Antenna		
Hotspot Mode:	Not Support		
DTM Mode:	Not Support		



## 1.2 Test Environment

Ambient conditions in the SAR laboratory:

Items	Required
Temperature (°C)	18-25
Humidity (%RH)	30-70

## 1.3 Test Factory

ShenZhen STS Test Services Co.,Ltd.

A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ, Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration No.: 625569

IC Registration No.: 12108A

A2LA Certificate No.: 4338.01





## 2. Test Standards

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	ANSI/IEEE Std. C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
3	IEEE Std. 1528-2013	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
4	FCC KDB 447498 D01 v06	Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies
5	FCC KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
6	FCC KDB 865664 D02 v01r02	RF Exposure Reporting
7	FCC KDB 648474 D04 v01r03	SAR Evaluation Considerations for Wireless Handsets
8	FCC KDB 248227 D01 Wi-Fi SAR v02r02	SAR Considerations for 802.11 Devices
9	FCC KDB 616217 D04 v01r02	SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers

### And 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.

#### **Population/Uncontrolled Environments:**

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

#### **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).

### NOTE

#### GENERAL POPULATION/UNCONTROLLED EXPOSURE

#### PARTIAL BODY LIMIT

1.6 W/kg



### 3. SAR Measurement System

#### 3.1 Definition of Specific Absorption Rate (SAR)

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

$$SAR = \frac{d}{dt} \left( \frac{dW}{dm} \right) = \frac{d}{dt} \left( \frac{dW}{\rho dv} \right)$$

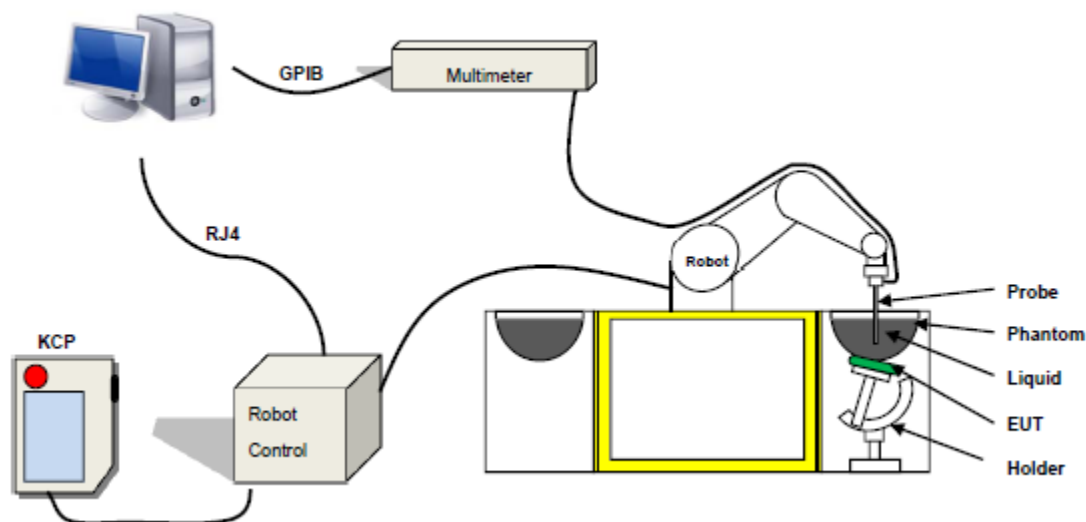
SAR is expressed in units of Watts per kilogram (W/kg) SAR measurement can be related to the electrical field in the tissue by

$$SAR = \frac{\sigma E^2}{\rho}$$

Where: σ is the conductivity of the tissue,  
ρ is the mass density of the tissue and E is the RMS electrical field strength.

#### 3.2 SAR System

MVG SAR System Diagram:



COMOSAR is a system that is able to determine the SAR distribution inside a phantom of human being according to different standards. The COMOSAR system consists of the following items:

- Main computer to control all the system
- 6 axis robot
- Data acquisition system
- Miniature E-field probe
- Phone holder
- Head simulating tissue



The following figure shows the system.



The EUT under test operating at the maximum power level is placed in the phone holder, under the phantom, which is filled with head simulating liquid. The E-Field probe measures the electric field inside the phantom. The Open SAR software computes the results to give a SAR value in a 1g or 10g mass.

### 3.2.1 Probe

For the measurements the Specific Dosimetric E-Field Probe SN 41/18 EPG0334 with following specifications is used

- Probe Length: 330 mm
- Length of Individual Dipoles: 2 mm
- Maximum external diameter: 8 mm
- Probe Tip External Diameter: 2.5 mm
- Distance between dipole/probe extremity: 1 mm
- Dynamic range: 0.01-100 W/kg
- Probe linearity: 3%
- Axial Isotropy: < 0.10 dB
- Spherical Isotropy: < 0.10 dB
- Calibration range: 450 MHz to 6 GHz for head & body simulating liquid.
- Angle between probe axis (evaluation axis) and surface normal line: less than 30°



Figure 1-MVG COMOSAR Dosimetric E field Dipole

### 3.2.2 Phantom

For the measurements the Specific Anthropomorphic Mannequin (SAM) defined by the IEEE SCC-34/SC2 group is used. The phantom is a polyurethane shell integrated in a wooden table. The thickness of the phantom amounts to 2mm +/- 0.2mm. It enables the dosimetric evaluation of left and right phone usage and includes an additional flat phantom part for the simplified performance check. The phantom set-up includes a cover, which prevents the evaporation of the liquid.

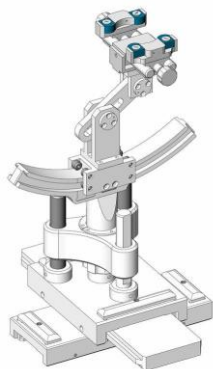
SN 32/14 SAM115



SN 32/14 SAM116



### 3.2.3 Device Holder



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



## 4. Tissue Simulating Liquids

### 4.1 Simulating Liquids Parameter Check

The head tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 in P1528 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness variations in a human head. Other head and body tissue parameters that have not been specified in P1528 are derived from the tissue dielectric parameters computed from the 4-Cole-Cole equations described in Reference [12] and extrapolated according to the head parameters specified in P1528.

#### Head Tissue

Frequency (MHz)	cellulose %	DGBE %	HEC %	NaCl %	Preventol %	Sugar %	X100 %	Water %	Conductivity $\sigma$	Permittivity $\epsilon_r$
750	0.2	/	/	1.4	0.2	57.0	/	41.1	0.89	41.9
835	0.2	/	/	1.4	0.2	57.9	/	40.3	0.90	41.5
900	0.2	/	/	1.4	0.2	57.9	/	40.3	0.97	41.5
1800	/	44.5	/	0.3	/	/	30.45	55.2	1.4	40.0
1900	/	44.5	/	0.3	/	/	30.45	55.2	1.4	40.0
2000	/	44.5	/	0.3	/	/	/	55.2	1.4	40.0
2450	/	44.9	/	0.1	/	/	/	55.0	1.80	39.2
2600	/	45.0	/	0.1	/	/	/	54.9	1.96	39.0

#### Body Tissue

Frequency (MHz)	cellulose %	DGBE %	HEC %	NaCl %	Preventol %	Sugar %	X100 %	Water %	Conductivity $\sigma$	Permittivity $\epsilon_r$
750	0.2	/	/	0.9	0.1	47.2	/	51.7	0.96	55.5
835	0.2	/	/	0.9	0.1	48.2	/	50.8	0.97	55.2
900	0.2	/	/	0.9	0.1	48.2	/	50.8	1.05	55.0
1800	/	29.4	/	0.4	/	/	30.45	70.2	1.52	53.3
1900	/	29.4	/	0.4	/	/	30.45	70.2	1.52	53.3
2000	/	29.4	/	0.4	/	/	/	70.2	1.52	53.3
2450	/	31.3	/	0.1	/	/	/	68.6	1.95	52.7
2600	/	31.7	/	0.1	/	/	/	68.2	2.16	52.3

Tissue dielectric parameters for head and body phantoms				
Frequency	$\epsilon_r$		$\sigma$ S/m	
	Head	Body	Head	Body
300	45.3	58.2	0.87	0.92
450	43.5	56.7	0.87	0.94
900	41.5	55.0	0.97	1.05
1450	40.5	54.0	1.20	1.30
1800	40.0	53.3	1.40	1.52
2450	39.2	52.7	1.80	1.95
3000	38.5	52.0	2.40	2.73
5800	35.3	48.2	5.27	6.00

**LIQUID MEASUREMENT RESULTS**

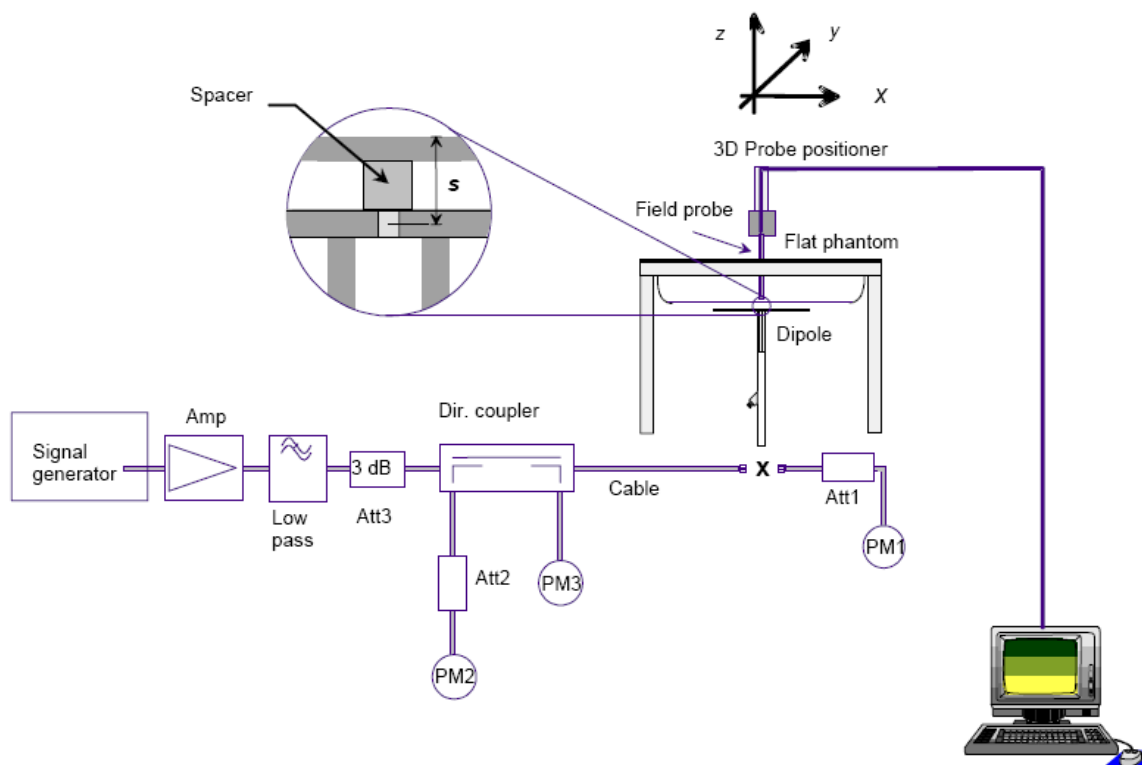
Date	Ambient condition		Body Simulating Liquid		Parameters	Target	Measured	Deviation [%]	Limited [%]
	Temp. [°C]	Humidity [%]	Frequency	Temp. [°C]					
2020-09-18	22.6	54	2450 MHz	22.3	Permittivity:	52.7	52.92	0.42	±5
					Conductivity:	1.95	1.98	1.54	±5
2020-09-21	23.1	49	5200 MHz	22.8	Permittivity:	49.0	48.30	-1.43	±5
					Conductivity:	5.30	5.17	-2.45	±5
2020-09-21	23.1	49	5300 MHz	22.8	Permittivity:	48.70	49.12	0.86	±5
					Conductivity:	5.53	5.38	-2.71	±5
2020-09-22	23.3	52	5600 MHz	22.9	Permittivity:	48.5	48.90	0.82	±5
					Conductivity:	5.77	5.84	1.21	±5
2020-09-22	23.3	52	5800 MHz	22.9	Permittivity:	48.2	47.87	-0.68	±5
					Conductivity:	6.00	6.14	2.33	±5

## 5. SAR System Validation

### 5.1 Validation System

Each MVG system is equipped with one or more system validation kits. These units, together with the predefined measurement procedures within the MVG software, enable the user to conduct the system performance check and system validation. System kit includes a dipole, and dipole device holder.

The system check verifies that the system operates within its specifications. It's performed daily or before every SAR measurement. The system check uses normal SAR measurement in the flat section of the phantom with a matched dipole at a specified distance. The system validation setup is shown as below.



### 5.2 Validation Result

Comparing to the original SAR value provided by MVG, the validation data should be within its specification of 10 %.

Freq.(MHz)	Power (mW)	Tested Value (W/Kg)	Normalized SAR (W/kg/W)	Target (W/Kg/W)	Tolerance (%)	Date
2450 Body	100	5.344	53.44	52.4	1.98	2020-09-18
5200 Body	100	15.684	156.84	159	-1.36	2020-09-21
5300 Body	100	16.641	166.41	166.4	0.01	2020-09-21
5600 Body	100	17.548	175.48	173.8	0.97	2020-09-22
5800 Body	100	18.187	181.87	181.2	0.37	2020-09-22

Note:

1. The tolerance limit of System validation  $\pm 10\%$ .
2. The dipole input power (forward power) was 100 mW.
3. The results are normalized to 1 W input power.



## 6. SAR Evaluation Procedures

The procedure for assessing the average SAR value consists of the following steps:

The following steps are used for each test position

- Establish a call with the maximum output power with a base station simulator. The connection between the mobile and the base station simulator is established via air interface
- Measurement of the local E-field value at a fixed location. This value serves as a reference value for calculating a possible power drift.
- Measurement of the SAR distribution with a grid of 8 to 16mm \* 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.

➤ Area Scan& Zoom Scan

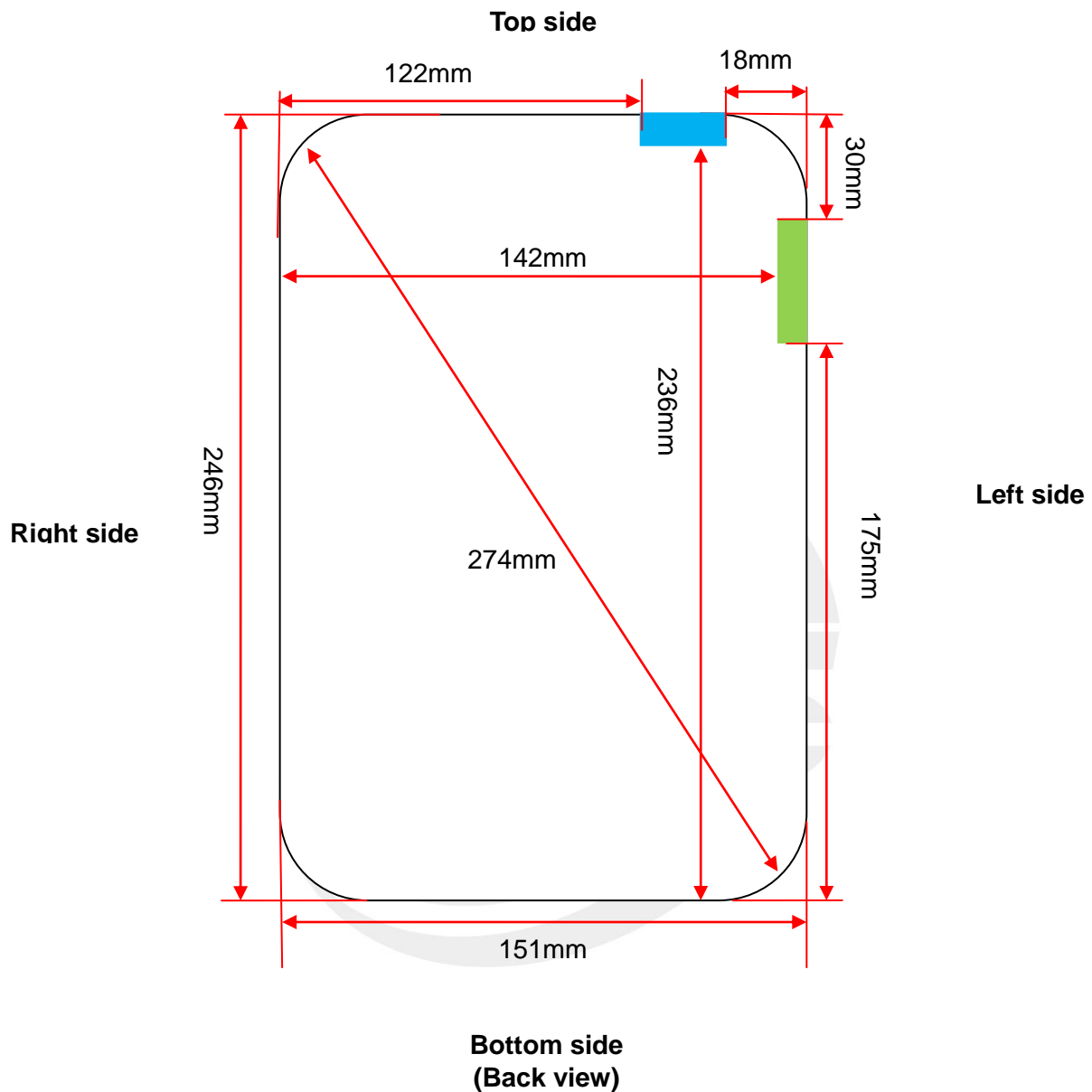
First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g. Area scan and zoom scan resolution setting follows KDB 865664 D01 quoted below.

When the 1-g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.



## 7. EUT Antenna Location Sketch

It is a 8inch Tablet, support WIFI/BT mode.



- 5G WLAN Antenna
- 2.4G WLAN/BT Antenna

Note:

1. The antenna information refer the manufacturer provide report, applicable only to the tested sample identified in the report.
2. The EUT has no Power Grip.





## 7.1 SAR test exclusion consider table

According with FCC KDB 447498 D01, appendix A, <SAR test exclusion thresholds for 100MHz ~6GHz and ≤50mm> table, this device SAR test configurations consider as following:

Band	Mode	Maxim um power		Test Position Configurations				
		dBm	mW	Back Side	Left Edge	Right Edge	Top Edge	Bottom Edge
WLAN 2.4 G	Distance to User			<5mm	<5mm	142mm	30mm	175mm
	exclusion threshold			10	10	1016	57	1346
	802.11b	25.00	316.228	Yes	Yes	No	Yes	No
WLAN 5.2 G	Distance to User			<5mm	18mm	122mm	<5mm	236mm
	exclusion threshold			7	20	986	7	1926
	802.11a	16.83	48.195	Yes	Yes	No	Yes	No
WLAN 5.3 G	Distance to User			<5mm	18mm	122mm	<5mm	236mm
	exclusion threshold			6	20	985	6	1925
	802.11a	16.40	43.652	Yes	Yes	No	Yes	No
WLAN 5.6 G	Distance to User			<5mm	18mm	122mm	<5mm	236mm
	exclusion threshold			6	20	985	6	1925
	802.11a	17.37	54.576	Yes	Yes	No	Yes	No
WLAN 5.8 G	Distance to User			<5mm	18mm	122mm	<5mm	236mm
	exclusion threshold			6	20	982	6	1922
	802.11a	17.32	53.951	Yes	Yes	No	Yes	No
Bluetooth	Distance to User			<5mm	<5mm	142mm	30mm	175mm
	exclusion threshold			10	10	1016	57	1346
	GFSK	7.06	5.082	No	No	No	No	No

### Note:

1. Paximum power is the source-based time-average power and represents the maximum RF output power among production units.
2. Per KDB 447498 D01, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
3. per KDB 447498 D01, standalone SAR test exclusion threshold is applied; if the distance of the antenna to the user is <5mm, 5mm is user to determine SAR exclusion threshold
4. per KDB 447498 D01, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distance ≤50mm are determined by:

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

$$f(\text{GHz}) \text{ is the RF channel transmit frequency in GHz. Power and distance are rounded to the nearest mW and mm before calculation. The result is rounded to one decimal place for}$$



comparison

For <50mm distance, we just calculate mW of the exclusion threshold value(3.0)to do compare

5. per KDB 447498 D01, at 100 MHz to 6GHz and for test separation distances >50mm, the SAR test exclusion threshold is determined according to the following
  - a)[threshold at 50mm in step 1]+(test separation distance -50mm)\*(f (MHz)/150)]mW, at 100 MHz to 1500 MHz
  - b) [threshold at 50mm in step1]+( test separation distance -50mm) \*10]mW at > 1500MHz and ≤6GHz
6. Per KDB 447498 D02, RMC 12.2kbps setting is used to evaluate SAR. If HSDPA/ HSUPA/DC-HSDPA output power is<0.25db higher than RMC 12.2Kbps,or reported SAR with RMC 12.2kbps setting is ≤1.2W/Kg, HSDPA/HSUPA/DC-HSDPA SAR evaluation can be excluded.
7. Per KDB 248227 D01, choose the highest output power channel to test SAR and determine futher SAR exclusion 8.for each frequency band, testing at higher data rates and higher order modulations is not required when the maximum average output power for each of each of these configurations is less than 1/4db higher than those measured at the lower data rate than 11b mode, thus the SAR can be excluded.
8. Per KDB 616217 D04 Exposures from antennas through the front (top) surface of the display section of a full-size tablet, away from the edges, are generally limited to the user's hands. Exposures to hands for typical consumer transmitters used in tablets are not expected to exceed the extremity SAR limit; therefore, SAR evaluation for the front surface of tablet display screens are generally not necessary.

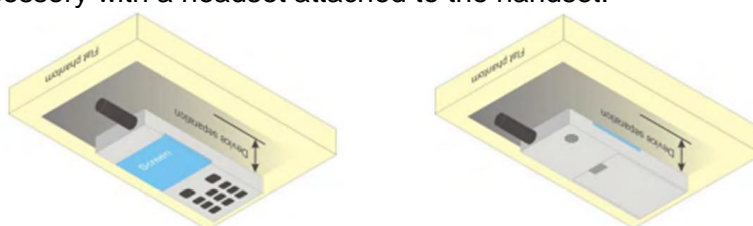
## 8. EUT Test Position

This EUT was tested in Front Face and Rear Face.

### 8.1 Define Two Imaginary Lines on the Handset

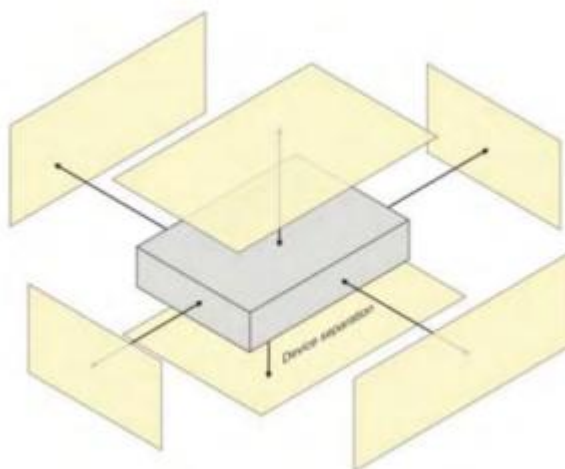
Body-worn Position Conditions:

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 KDB Publication 447498 D01 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. When the same wireless transmission configuration is used for testing body-worn accessory and hotspot mode SAR, respectively, in voice and data mode, SAR results for the most conservative *test separation distance* configuration may be used to support both SAR conditions. When the *reported SAR* for a body-worn accessory, measured without a headset connected to the handset, is  $> 1.2 \text{ W/kg}$ , the highest *reported SAR* configuration for that wireless mode and frequency band should be repeated for the body-worn accessory with a headset attached to the handset.



### 8.2 Hotspot mode exposure position condition

For handsets that support hotspot mode operations, with wireless router capabilities and various web browsing function, the relevant hand and body exposure condition are tested according to the hotspot SAR procedures in KDB 941225. A test separation distance of 10 mm is required between the phantom and all surface and edges with a transmitting antenna located within 25 mm from that surface or edge. When form factor of a handset is smaller than 9cm x 5cm, a test separation distance of 5mm (instead of 10mm) is required for testing hotspot mode. When the separate distance required for body-worn accessory testing is larger than or equal to that tested for hotspot mode, in the same wireless mode and for the same surface of the phone, the hotspot mode SAR data may be used to support body-worn accessory SAR compliance for that particular configuration (surface).





## 9. Uncertainty

### 9.1 Measurement Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in IEEE 1528: 2013. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=2$ .

Uncertainty Component	Tol (+/- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+/-%)	10g Ui (+/-%)	vi
<b>Measurement System</b>								
Probe calibration	5.831	N	1	1	1	5.83	5.83	$\infty$
Axial Isotropy	0.695	R	$\sqrt{3}$	$\sqrt{0.5}$	$\sqrt{0.5}$	0.28	0.28	$\infty$
Hemispherical Isotropy	1.045	R	$\sqrt{3}$	$\sqrt{0.5}$	$\sqrt{0.5}$	0.43	0.43	$\infty$
Boundary effect	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	$\infty$
Linearity	0.685	R	$\sqrt{3}$	1	1	0.40	0.40	$\infty$
System detection limits	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	$\infty$
Modulation response	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	$\infty$
Readout Electronics	0.021	N	1	1	1	0.021	0.021	$\infty$
Response Time	0	R	$\sqrt{3}$	1	1	0	0	$\infty$
Integration Time	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	$\infty$
RF ambient conditions-Noise	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	$\infty$
RF ambient conditions-reflections	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	$\infty$
Probe positioner mechanical tolerance	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	$\infty$
Probe positioning with respect to phantom shell	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	$\infty$
Post-processing	2.3	R	$\sqrt{3}$	1	1	1.33	1.33	$\infty$
<b>Test sample Related</b>								
Test sample positioning	2.6	N	1	1	1	2.6	2.6	$\infty$
Device holder uncertainty	3	N	1	1	1	3	3	$\infty$
SAR drift measurement	5	R	$\sqrt{3}$	1	1	2.89	2.89	$\infty$
SAR scaling	5	R	$\sqrt{3}$	1	1	2.89	2.89	$\infty$
<b>Phantom and tissue parameters</b>								
Phantom uncertainty (shape and thickness uncertainty)	4	R	$\sqrt{3}$	1	1	2.31	2.31	$\infty$
Uncertainty in SAR correction for deviations in permittivity and conductivity	1.9	N	1	1	0.84	1.90	1.60	$\infty$
Liquid conductivity (temperature uncertainty)	2.5	R	$\sqrt{3}$	0.78	0.71	1.13	1.02	$\infty$
Liquid conductivity (measured)	4	N	1	0.78	0.71	3.12	2.84	M
Liquid permittivity (temperature uncertainty)	2.5	R	$\sqrt{3}$	0.23	0.26	0.33	0.38	$\infty$
Liquid permittivity (measured)	5	N	1	0.23	0.26	1.15	1.30	M
Combined Standard Uncertainty		RSS				9.79	9.59	
Expanded Uncertainty (95% Confidence interval)		K=2				19.58	19.18	



## 9.2 System validation Uncertainty

Uncertainty Component	Tol (+-%)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	vi
<b>Measurement System</b>								
Probe calibration	5.831	N	1	1	1	5.83	5.83	∞
Axial Isotropy	0.695	R	$\sqrt{3}$	1	1	0.40	0.40	∞
Hemispherical Isotropy	1.045	R	$\sqrt{3}$	0	0	0.00	0.00	∞
Boundary effect	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Linearity	0.685	R	$\sqrt{3}$	1	1	0.40	0.40	∞
System detection limits	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Modulation response	3.0	R	$\sqrt{3}$	0	0	0.00	0.00	∞
Readout Electronics	0.021	N	1	1	1	0.021	0.021	∞
Response Time	0.0	R	$\sqrt{3}$	0	0	0.00	0.00	∞
Integration Time	1.4	R	$\sqrt{3}$	0	0	0.00	0.00	∞
RF ambient conditions-Noise	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
RF ambient conditions-reflections	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Probe positioner mechanical tolerance	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Probe positioning with respect to phantom shell	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Post-Processing	2.3	R	$\sqrt{3}$	1	1	1.33	1.33	∞
<b>System validation source</b>								
Deviation of experimental dipole from numerical dipole	5.0	N	1	1	1	5.00	5.00	∞
Input power and SAR drift measurement	5.0	R	$\sqrt{3}$	1	1	2.89	2.89	∞
Other source contribution Uncertainty	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	∞
<b>Phantom and set-up</b>								
Phantom uncertainty (shape and thickness uncertainty)	4.0	R	$\sqrt{3}$	1	1	2.31	2.31	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	1.9	N	1	1	0.84	1.90	1.60	∞
Liquid conductivity (temperature uncertainty)	2.5	R	$\sqrt{3}$	0.78	0.71	1.13	1.02	∞
Liquid conductivity (measured)	4	N	1	0.78	0.71	3.12	2.84	M
Liquid permittivity (temperature uncertainty)	2.5	R	$\sqrt{3}$	0.23	0.26	0.33	0.38	∞
Liquid permittivity (measured)	5	N	1	0.23	0.26	1.15	1.30	M
Combined Standard Uncertainty		RSS				9.718	9.517	
Expanded Uncertainty (95% Confidence interval)		K=2				19.44	19.04	



## 10. Conducted Power Measurement

### 10.1 Test Result

#### WLAN (2.4Gband)

Mode	Channel Number	Frequency (MHz)	Measured Peak Output Power (dBm)
802.11b	1	2412	20.38
	6	2437	23.27
	11	2462	23.50
802.11g	1	2412	24.78
	7	2442	24.67
	11	2462	25.00
802.11n (HT20)	1	2412	23.85
	7	2442	24.04
	11	2462	24.12
802.11n (HT40)	3	2422	20.38
	7	2442	23.27
	11	2462	23.50

#### WLAN (5.2Gband)

Mode	Channel Number	Frequency (MHz)	Measured Peak Output Power (dBm)
802.11a	36	5180	16.83
	40	5200	16.72
	48	5240	16.39
802.11 n-HT20	36	5180	16.49
	40	5200	16.54
	48	5240	16.34
802.11 n-HT40	38	5190	15.42
	46	5230	15.25
802.11 ac-VHT20	36	5180	16.53
	40	5200	16.26
	48	5240	16.13
802.11 ac-VHT40	38	5190	15.30
	46	5230	15.25
802.11 ac-VHT80	42	5210	14.38



**WLAN (5.3Gband)**

Mode	Channel Number	Frequency (MHz)	Measured Peak Output Power (dBm)
802.11a	52	5260	16.40
	60	5300	16.16
	64	5320	16.27
802.11 n-HT20	52	5260	16.01
	60	5300	15.87
	64	5320	15.97
802.11 n-HT40	54	5270	14.85
	62	5310	14.72
802.11 ac-VHT20	52	5260	15.92
	60	5300	15.86
	64	5320	15.91
802.11 ac-VHT40	54	5270	14.78
	62	5310	14.62
802.11 ac-VHT80	58	5290	14.01

**WLAN (5.6Gband)**

Mode	Channel Number	Frequency (MHz)	Measured Peak Output Power (dBm)
802.11a	100	5500	17.37
	116	5580	17.33
	140	5700	17.10
802.11 n20-HT0	100	5500	17.22
	116	5580	17.23
	140	5700	16.78
802.11 n40-HT0	102	5510	16.71
	110	5550	16.75
	134	5670	16.56
802.11 ac20-VHT0	100	5500	17.02
	116	5580	17.06
	140	5700	16.81
802.11 ac40-VHT0	102	5510	16.70
	110	5550	16.72
	134	5670	16.58
802.11 ac80-VHT0	106	5530	15.42
	122	5610	15.37



**WLAN (5.8Gband)**

Mode	Channel Number	Frequency (MHz)	Measured Peak Output Power (dBm)
802.11a	149	5745	17.27
	157	5785	17.32
	165	5825	16.51
802.11 n20-HT0	149	5745	17.18
	157	5785	17.10
	165	5825	16.36
802.11 n40-HT0	151	5755	16.29
	159	5795	16.02
802.11 ac20-VHT0	149	5745	17.04
	157	5785	16.84
	165	5825	16.19
802.11 ac40-VHT0	151	5755	16.41
	159	5795	16.15
802.11 ac80-VHT0	155	5775	15.94

**Bluetooth**

Mode	Channel Number	Frequency (MHz)	Measured Peak Output Power (dBm)
GFSK(1Mbps)	0	2402	5.61
	39	2441	4.94
	78	2480	3.83
$\pi/4$ -DQPSK(2Mbps)	0	2402	5.27
	39	2441	4.59
	78	2480	3.43
8DPSK(3Mbps)	0	2402	5.74
	39	2441	5.05
	78	2480	3.84

**BLE**

Mode	Channel Number	Frequency (MHz)	Measured Peak Output Power (dBm)
GFSK(1Mbps)	0	2402	7.06
	19	2440	6.65
	39	2480	5.08



## 10.2 Tune-up Power

### WLAN (2.4Gband)

Mode	WLAN(AVG)		
Channel	L	M	H
802.11 a	$20 \pm 1\text{mm}$	$23 \pm 1\text{mm}$	$23 \pm 1\text{mm}$
802.11 g	$24 \pm 1\text{mm}$	$24 \pm 1\text{mm}$	$24.5 \pm 1\text{mm}$
802.11 n20-HT0	$23 \pm 1\text{mm}$	$24 \pm 1\text{mm}$	$24 \pm 1\text{mm}$

### WLAN (5.2Gband)

Mode	WLAN(AVG)
802.11a	$16 \pm 1\text{mm}$
802.11 n20-HT0	$16 \pm 1\text{mm}$
802.11 n40-HT0	$15 \pm 1\text{mm}$
802.11 ac20-VHT0	$16 \pm 1\text{mm}$
802.11 ac40-VHT0	$15 \pm 1\text{mm}$
802.11 ac80-VHT0	$14 \pm 1\text{mm}$

### WLAN (5.3Gband)

Mode	WLAN(AVG)
802.11a	$16 \pm 1\text{mm}$
802.11 n20-HT0	$15.5 \pm 1\text{mm}$
802.11 n40-HT0	$14 \pm 1\text{mm}$
802.11 ac20-VHT0	$15 \pm 1\text{mm}$
802.11 ac40-VHT0	$14 \pm 1\text{mm}$
802.11 ac80-VHT0	$14 \pm 1\text{mm}$

### WLAN (5.6Gband)

Mode	WLAN(AVG)
802.11a	$17 \pm 1\text{mm}$
802.11 n20-HT0	$17 \pm 1\text{mm}$
802.11 n40-HT0	$16 \pm 1\text{mm}$
802.11 ac20-VHT0	$17 \pm 1\text{mm}$
802.11 ac40-VHT0	$16 \pm 1\text{mm}$
802.11 ac80-VHT0	$15 \pm 1\text{mm}$



## WLAN (5.8Gband)

Mode	WLAN(AVG)
802.11a	$17 \pm 1\text{mm}$
802.11 n20-HT0	$17 \pm 1\text{mm}$
802.11 n40-HT0	$16 \pm 1\text{mm}$
802.11 ac20-VHT0	$16.5 \pm 1\text{mm}$
802.11 ac40-VHT0	$16 \pm 1\text{mm}$
802.11 ac80-VHT0	$15 \pm 1\text{mm}$

## BT

Mode	BT(AVG)		
Channel	L	M	H
GFSK	$5 \pm 1\text{mm}$	$4 \pm 1\text{mm}$	$3 \pm 1\text{mm}$
$\pi/4$ -DQPSK	$5 \pm 1\text{mm}$	$4 \pm 1\text{mm}$	$3 \pm 1\text{mm}$
8DPSK	$5 \pm 1\text{mm}$	$5 \pm 1\text{mm}$	$3 \pm 1\text{mm}$

## BLE

Mode	BLE(AVG)		
Channel	L	M	H
GFSK	$6.5 \pm 1\text{mm}$	$6 \pm 1\text{mm}$	$5 \pm 1\text{mm}$

## 11. EUT and Test Setup Photo

### 11.1 EUT Photo

Front side

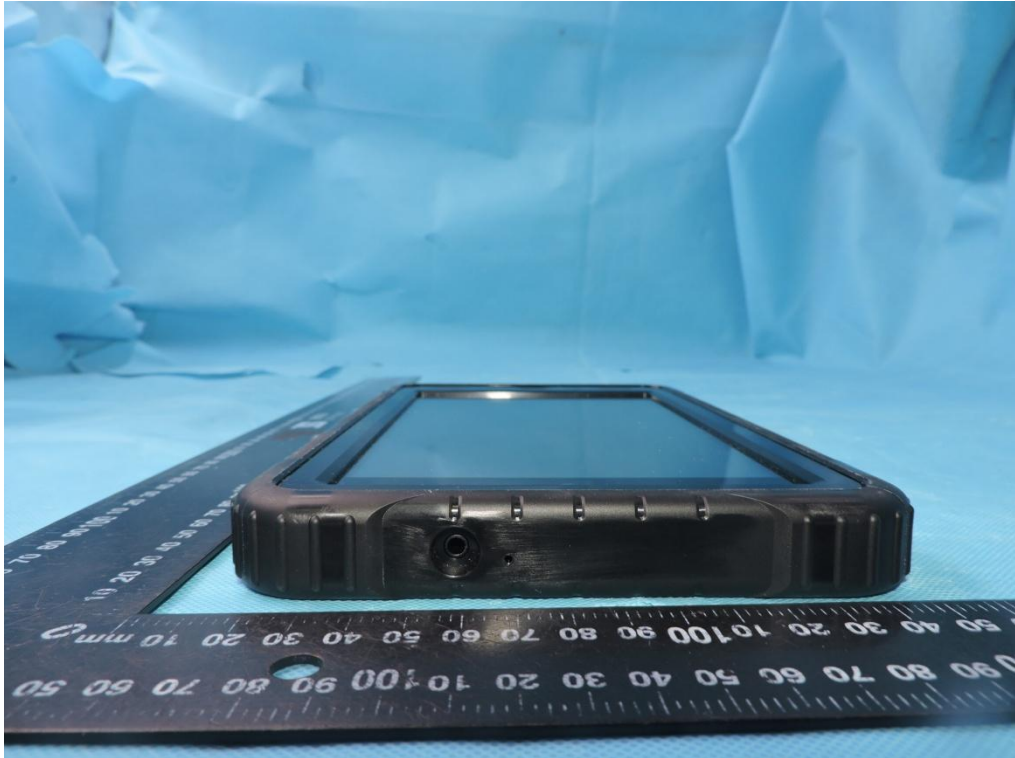


Back side

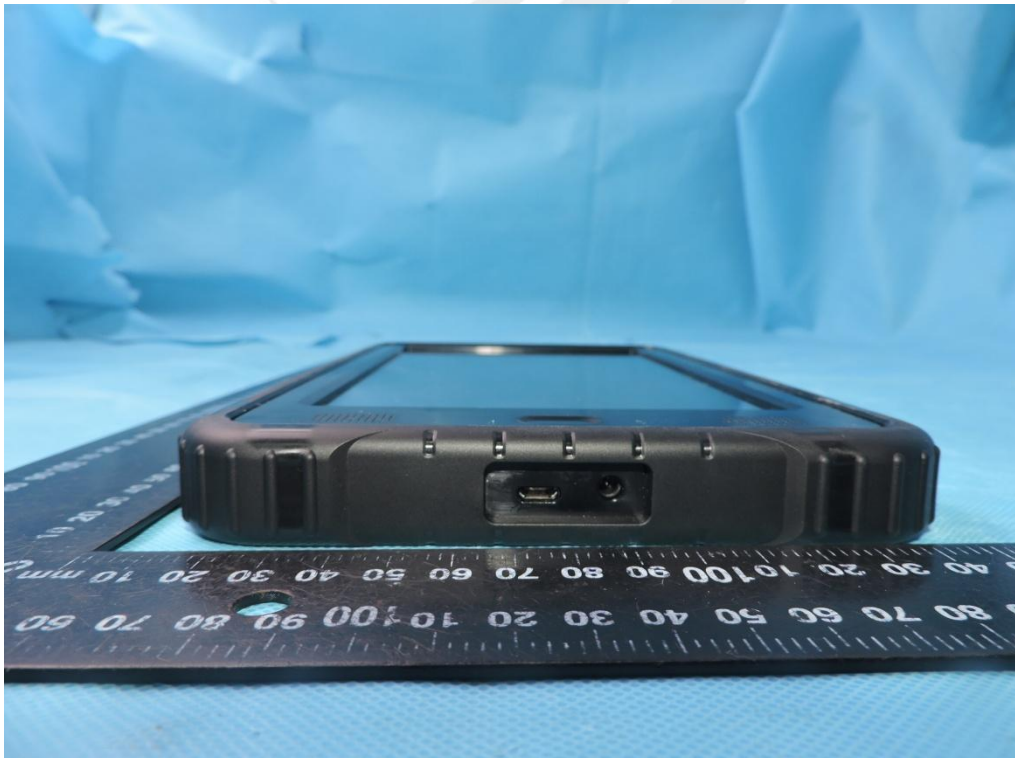




Top Edge



Bottom Edge



Left Edge

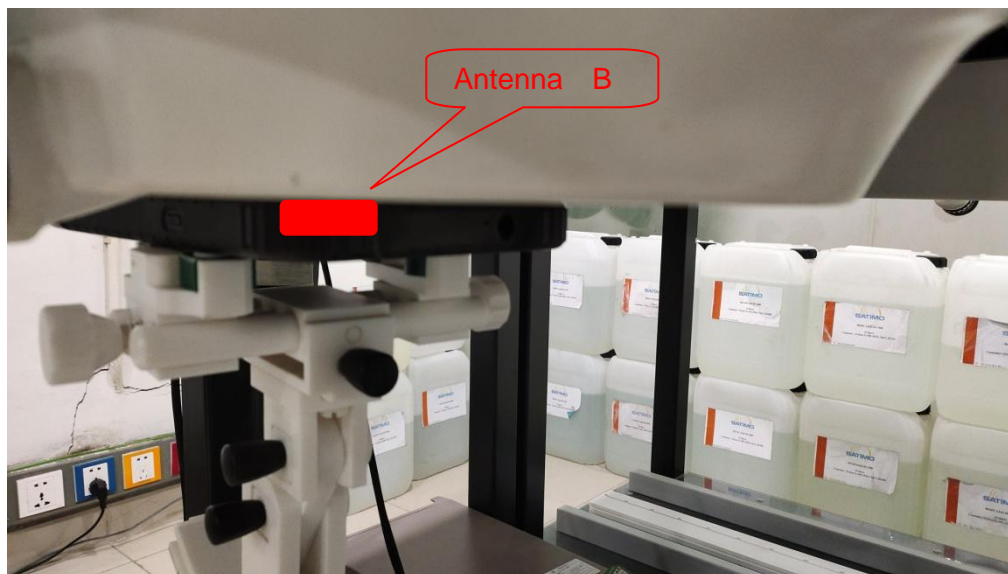


Right Edge



## 11.2 Setup Photo

Back side(separation distance is 0mm)

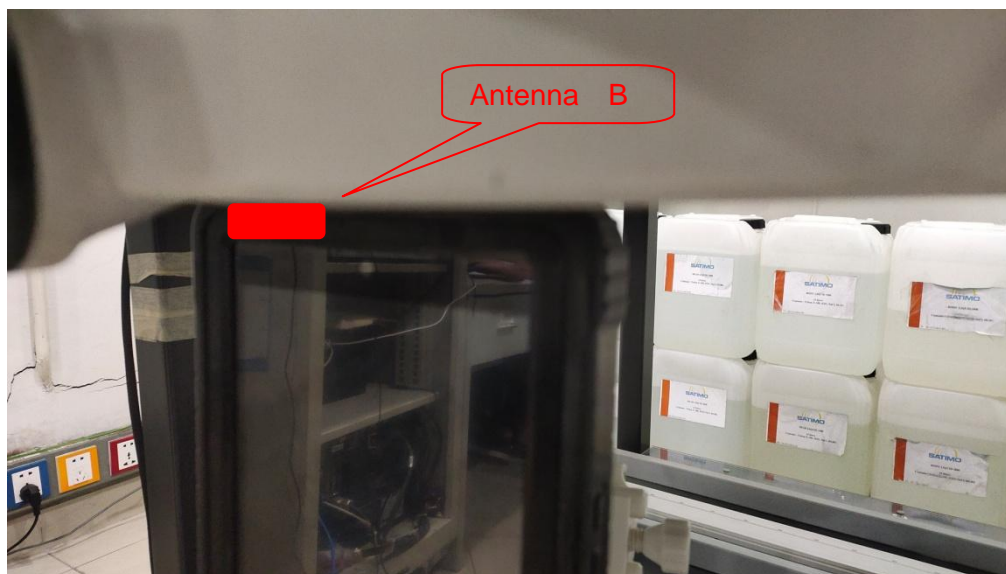


Left Edge(separation distance is 0mm)

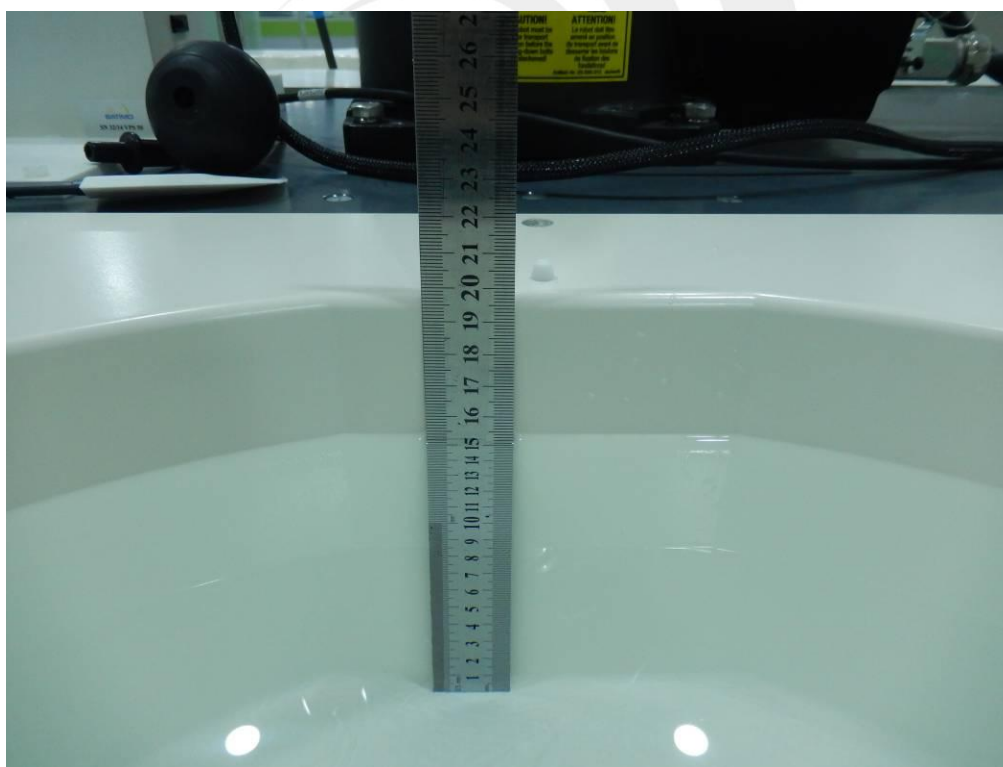




Top Edge(separation distance is 0mm)



Liquid depth (15 cm)





## 12. SAR Result Summary

### 12.1 Body SAR

Band	Mode	Test Position	Ch.	Result 1g (W/Kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Duty cycle(%)	Scaled SAR (W/Kg)	Meas. No.
2.4G WLAN	802.11b	Back side	11	0.168	-1.55	24	23.50	100	<b>0.188</b>	1
		Left side	11	0.141	1.41	24	23.50	100	0.158	-
		Top side	11	0.035	0.39	24	23.50	100	0.039	-
	802.11g	Back side	11	0.529	2.96	25.5	25.00	100	<b>0.594</b>	2
		Left side	11	0.416	-2.58	25.5	25.00	100	0.467	-
		Top side	11	0.112	1.63	25.5	25.00	100	0.126	-
5.2G WLAN	802.11a	Back side	36	0.101	0.96	17	16.83	100	<b>0.105</b>	3
		Left side	36	0.026	0.38	17	16.83	100	0.027	-
		Top side	36	0.074	0.28	17	16.83	100	0.077	-
5.3G WLAN	802.11a	Back side	52	0.137	0.68	17	16.40	100	<b>0.157</b>	4
		Left side	52	0.034	-1.95	17	16.40	100	0.039	-
		Top side	52	0.088	2.96	17	16.40	100	0.101	-
5.6G WLAN	802.11a	Back side	100	0.206	-1.19	18	17.37	100	<b>0.238</b>	5
		Left side	100	0.041	-3.54	18	17.37	100	0.047	-
		Top side	100	0.127	-0.95	18	17.37	100	0.147	-
5.8G WLAN	802.11a	Back side	157	0.176	2.98	18	17.32	100	<b>0.206</b>	6
		Left side	157	0.042	-0.18	18	17.32	100	0.049	-
		Top side	157	0.069	-2.63	18	17.32	100	0.081	-

Note:

- The test separation of all above table is 0mm.
- Bluetooth, 2.4G WLAN and 5G WLAN can't simultaneous transmission at the same time.
- Per KDB 447498 D01, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
  - Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
  - For WWAN: Scaled SAR(W/kg)= Measured SAR(W/kg)\*Tune-up Scaling Factor
- Per KDB 248227- When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is  $\leq 1.2$  W/kg.
- Bluetooth and WLAN can't simultaneous transmission at the same time.
- If the test separation distance is <5mm, 5mm is used for excluded SAR calculation
- For minimum test separation distance  $\leq 50$ mm, Bluetooth standalone SAR is excluded according to  $[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot \sqrt{f \text{ (GHz)}} \leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR
- The reported SAR summation is calculated based on the same configuration and test position.
- KDB 447498 / 4.3.2 (2) 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:

a)  $(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm}) \cdot [\sqrt{f} \text{ (GHz)} / x] \text{ W/kg}$  for test separation distances  $\leq 50 \text{ mm}$ ;

Where  $x = 7.5$  for 1-g SAR, and  $x = 18.75$  for 10-g SAR.

b)  $0.4 \text{ W/Kg}$  for 1-g SAR and  $1.0 \text{ W/Kg}$  for 10-g SAR, when the separation distance is  $> 50 \text{ mm}$ .

Estimated SAR		Maximum Power		Antenna to user(mm)	Frequency(G Hz)	Stand alone SAR(1g) [W/kg]
		dBm	mW			
BT	Body	7.06	5.082	5	2.48	0.194





### 13. Equipment List

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
2450MHzDipole	MVG	SID2450	SN 30/14 DIP2G450-335	2020.07.14	2023.07.13
Waveguide	MVG	SWG5500	SN 13/14 WGA32	2020.07.14	2023.07.13
E-Field Probe	MVG	SSE2	SN 41/18 EPGO334	2020.07.14	2021.07.13
Dielectric Probe Kit	MVG	SCLMP	SN 32/14 OCPG67	2019.11.25	2020.11.24
Antenna	MVG	ANTA3	SN 07/13 ZNTA52	N/A	N/A
Phantom1	MVG	SAM	SN 32/14 SAM115	N/A	N/A
Phantom2	MVG	SAM	SN 32/14 SAM116	N/A	N/A
Laptop holder	MVG	N/A	SN 32/14 LSH29	N/A	N/A
Attenuator	Agilent	99899	DC-18GHz	N/A	N/A
Directional coupler	Narda	4226-20	3305	N/A	N/A
Network Analyzer	Agilent	8753ES	US38432810	2019.10.11	2020.10.10
Multi Meter	Keithley	Multi Meter 2000	4050073	2019.10.11	2020.10.10
Signal Generator	Agilent	N5182A	MY50140530	2019.10.09	2020.10.08
Power Amplifier	DESAY	ZHL-42W	9638	2019.10.09	2020.10.08
Power Meter	R&S	NRP	100510	2019.10.16	2020.10.15
Power Meter	Agilent	E4418B	GB43312526	2019.10.16	2020.10.15
Power Sensor	R&S	NRP-Z11	101919	2019.10.09	2020.10.08
Power Sensor	Agilent	E9301A	MY41497725	2019.10.09	2020.10.08
Temperature hygrometer	SuWei	SW-108	N/A	2019.10.13	2020.10.12
Thermograph	Elitech	RC-4	S/N EF7176501537	2019.10.11	2020.10.10

**Note:**

Per KDB 865664 D01, Dipole SAR Validation Verification, STS LAB has adopted 3 years calibration intervals. On annual basis, every measurement dipole has been evaluated and is in compliance with the following criteria:

1. There is no physical damage on the dipole
  2. System validation with specific dipole is within 10% of calibrated value
- Return-loss in within 20% of calibrated measurement



## Appendix A. System Validation Plots

### System Performance Check Data (2450MHz Body)

Type: Phone measurement (Complete)

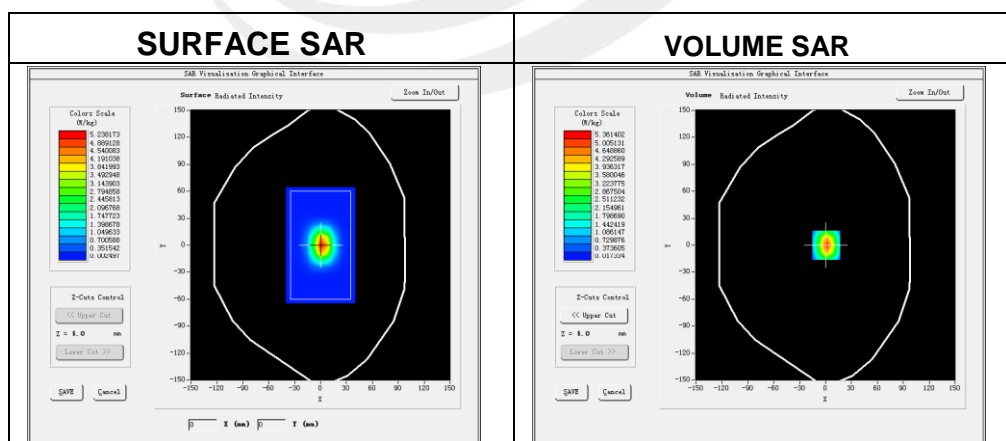
Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2020-09-18

### Experimental conditions.

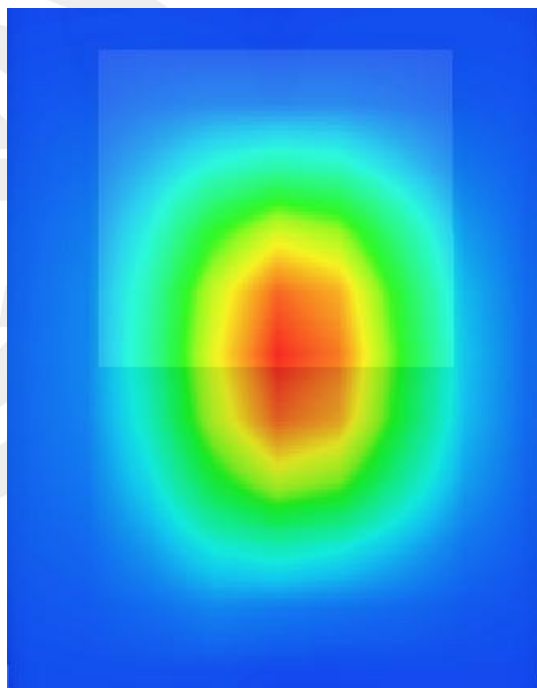
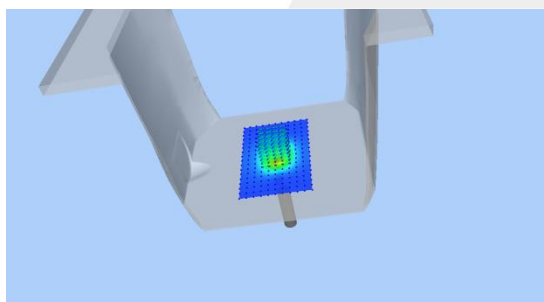
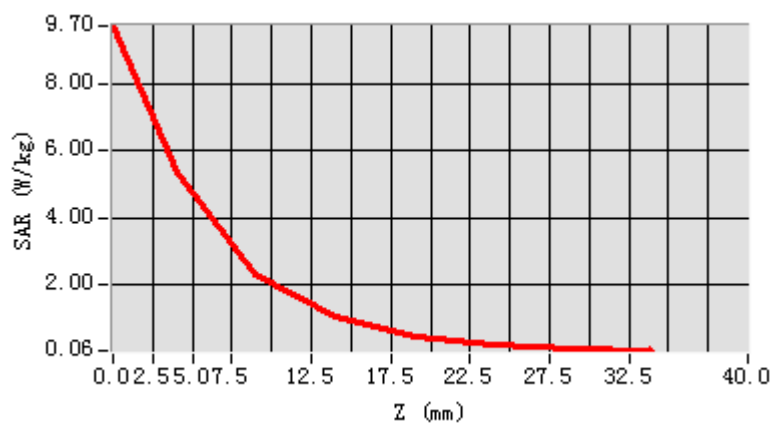
Device Position	Validation plane
Band	2450 MHz
Channels	-
Signal	CW
Frequency (MHz)	2450
Relative permittivity	52.92
Conductivity (S/m)	1.98
Power drift (%)	1.98
Probe	SN 41/18 EPGO334
ConvF	2.02
Crest factor:	1:1



Maximum location: X=1.00, Y=0.00

SAR 10g (W/Kg)	2.410178
SAR 1g (W/Kg)	5.343687

## Z Axis Scan



**System Performance Check Data(5200MHz Body)**

Type: Phone measurement (Complete)

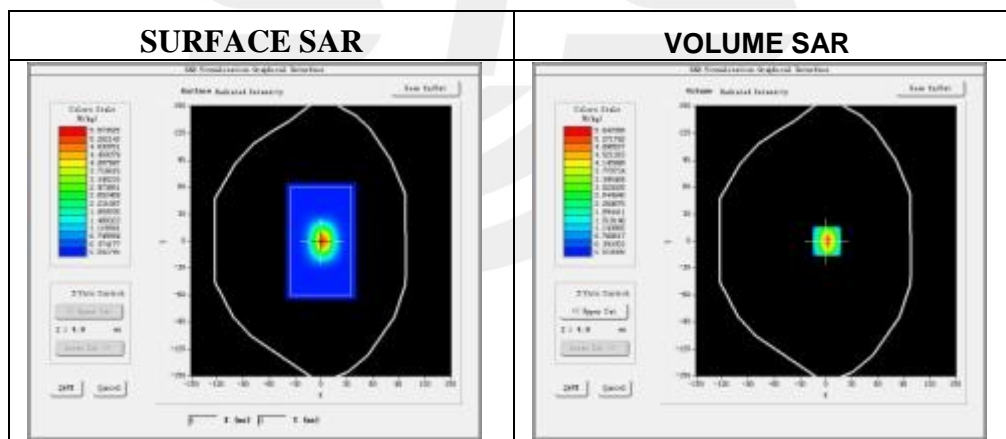
Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=4mm, dy=4mm, dz=2mm

Date of measurement: 2020-09-21

**Experimental conditions.**

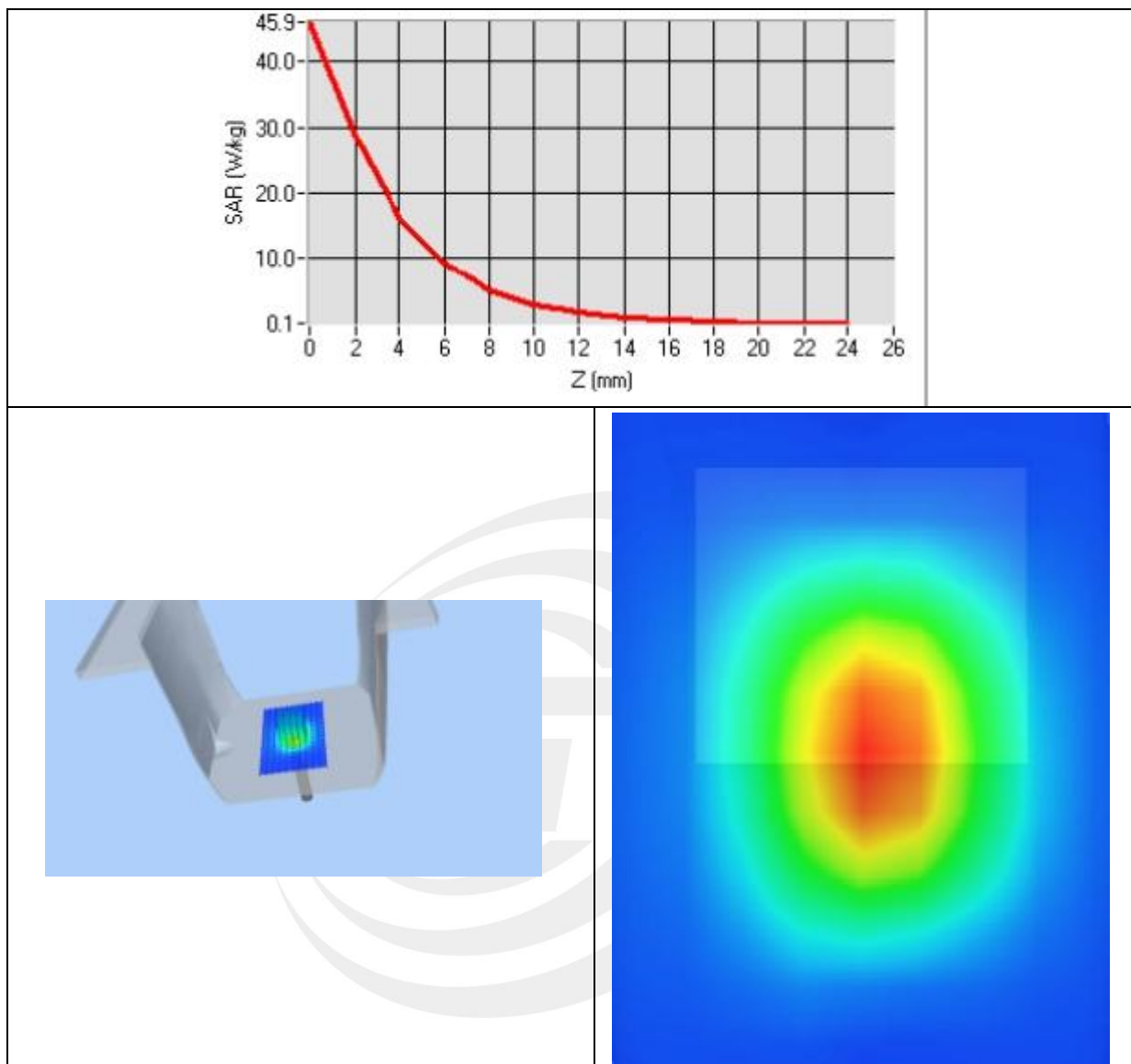
Device Position	Validation plane
Band	5200 MHz
Channels	-
Signal	CW
Frequency (MHz)	5200
Relative permittivity	48.30
Conductivity (S/m)	5.17
Power drift (%)	-1.36
Probe	SN 41/18 EPGO334
ConvF	1.92
Crest factor:	1:1

**Maximum location: X=7.00, Y=2.00**

SAR 10g (W/Kg)	5.407891
SAR 1g (W/Kg)	15.683502



## Z Axis Scan



**System Performance Check Data(5400MHz Body)**

Type: Dipole measurement (Complete)

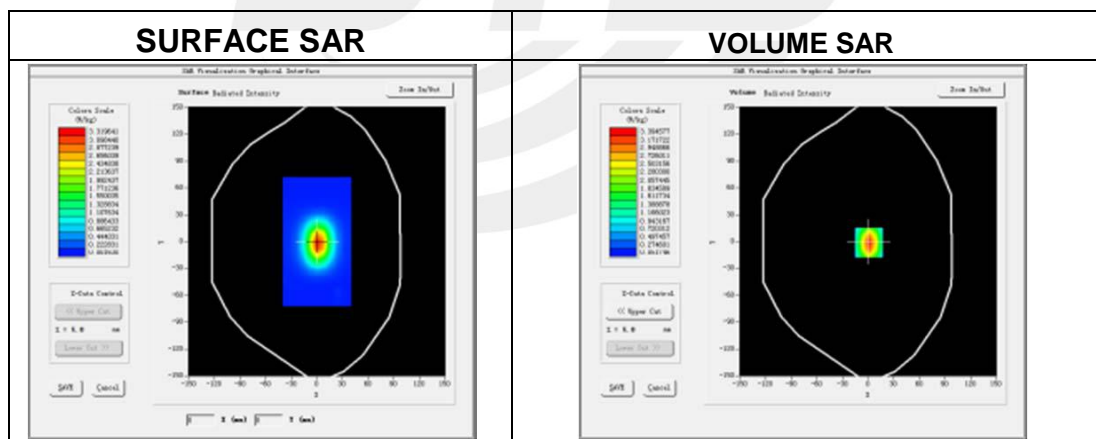
Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=4mm, dy=4mm, dz=2mm

Date of measurement: 2020-09-21

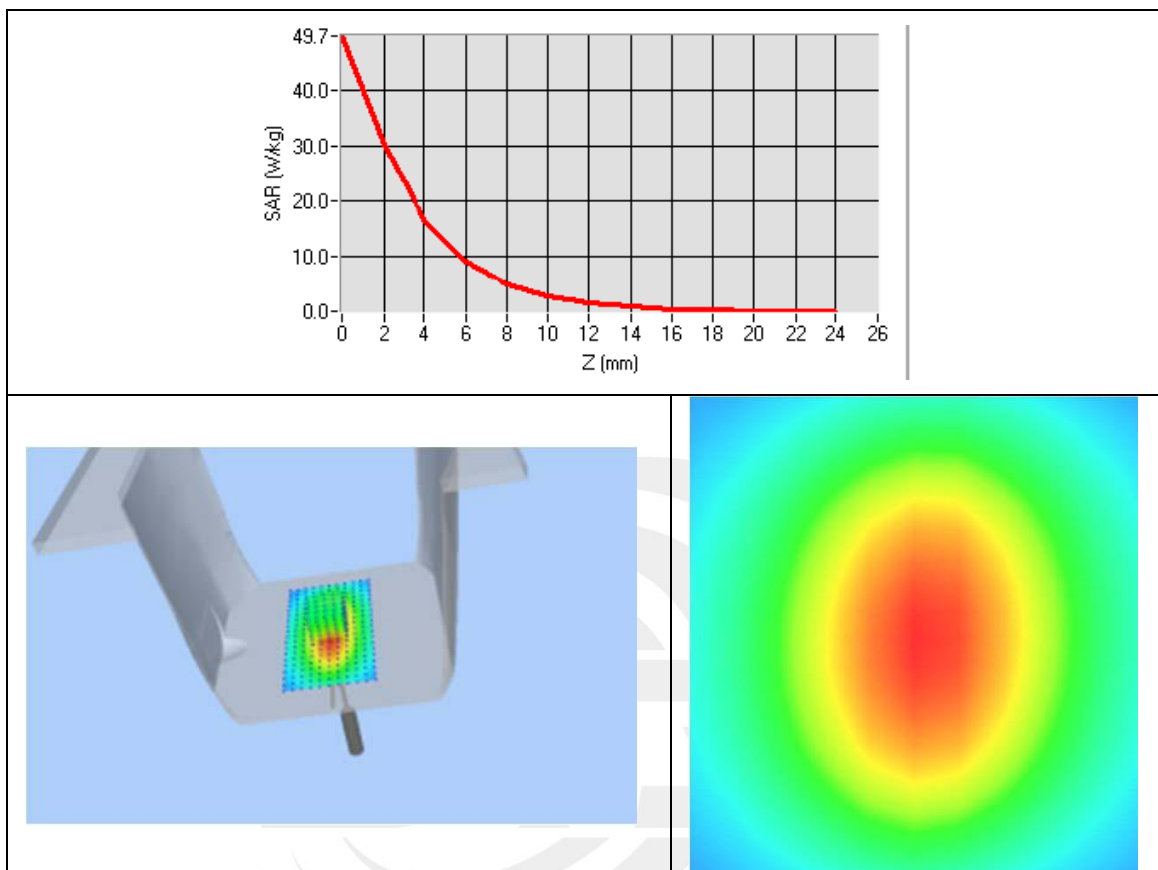
**Experimental conditions.**

Device Position	Validation plane
Band	5300 MHz
Channels	-
Signal	CW
Frequency (MHz)	5400
Relative permittivity	49.12
Conductivity (S/m)	5.38
Power drift (%)	0.01
Probe	SN 41/18 EPGO334
ConvF	2.12
Crest factor:	1:1

**Maximum location: X=7.00, Y=2.00**

SAR 10g (W/Kg)	5.970184
SAR 1g (W/Kg)	16.641056

## Z Axis Scan



**System Performance Check Data(5600MHz Body)**

Type: Dipole measurement (Complete)

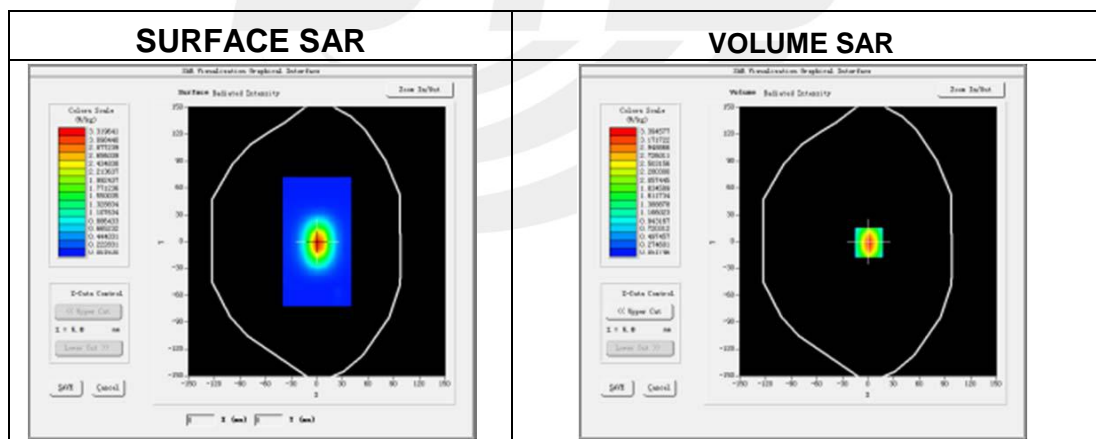
Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=4mm, dy=4mm, dz=2mm

Date of measurement: 2020-09-22

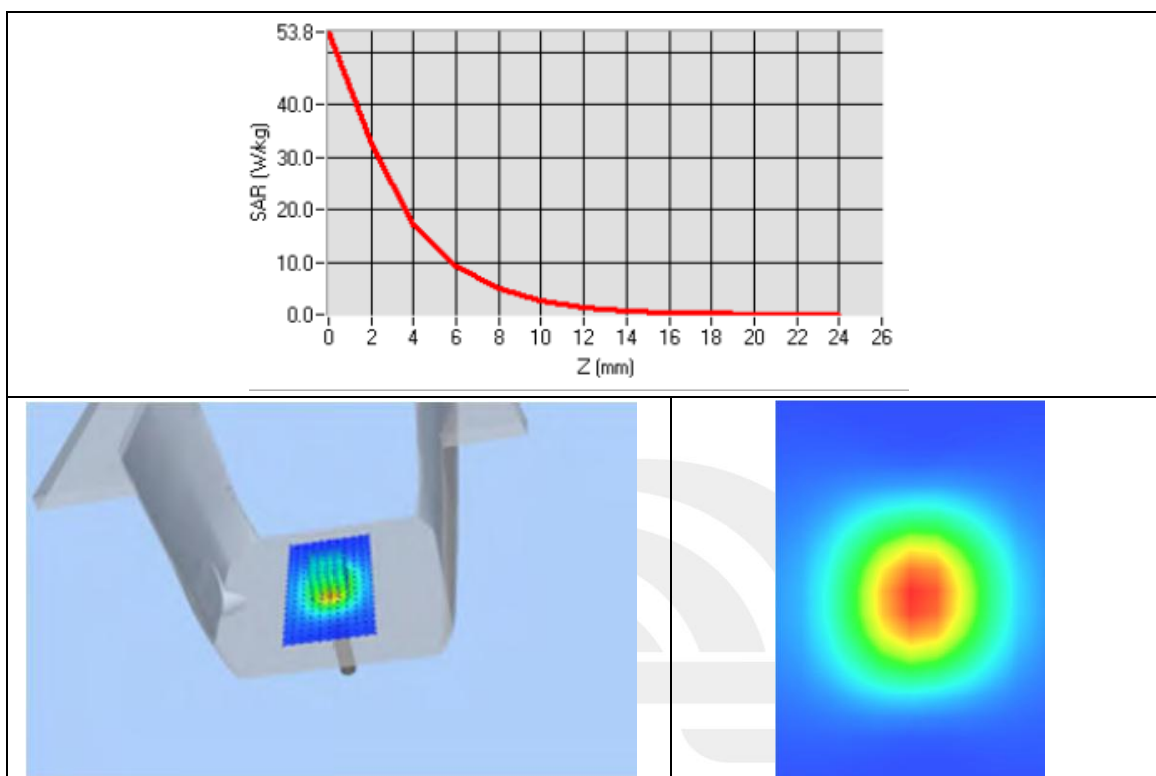
**Experimental conditions.**

Device Position	Validation plane
Band	5600 MHz
Channels	-
Signal	CW
Frequency (MHz)	5600
Relative permittivity	47.87
Conductivity (S/m)	6.14
Power drift (%)	0.97
Probe	SN 41/18 EPGO334
ConvF	2.21
Crest factor:	1:1

**Maximum location: X=7.00, Y=2.00**

SAR 10g (W/Kg)	6.124701
SAR 1g (W/Kg)	17.548236

## Z Axis Scan





## System Performance Check Data(5800MHz Body)

Type: Dipole measurement (Complete)

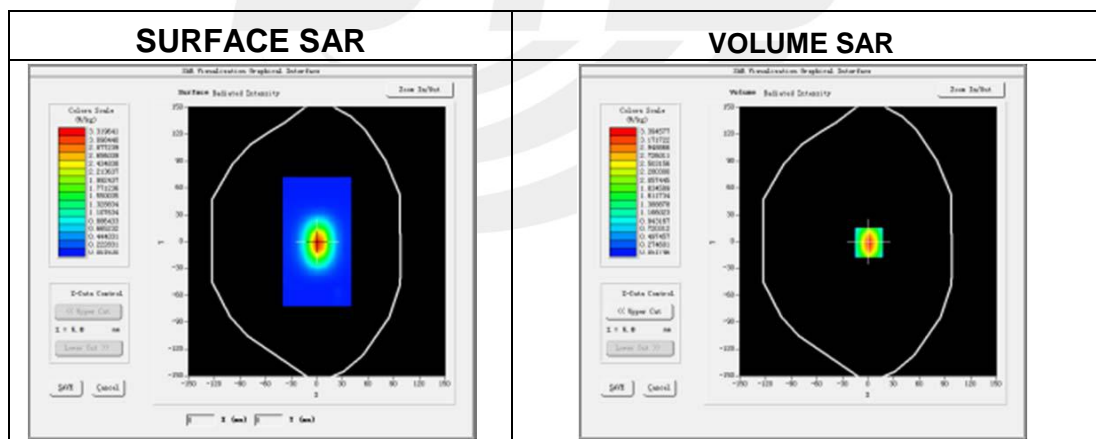
Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=4mm, dy=4mm, dz=2mm

Date of measurement: 2020-09-22

### Experimental conditions.

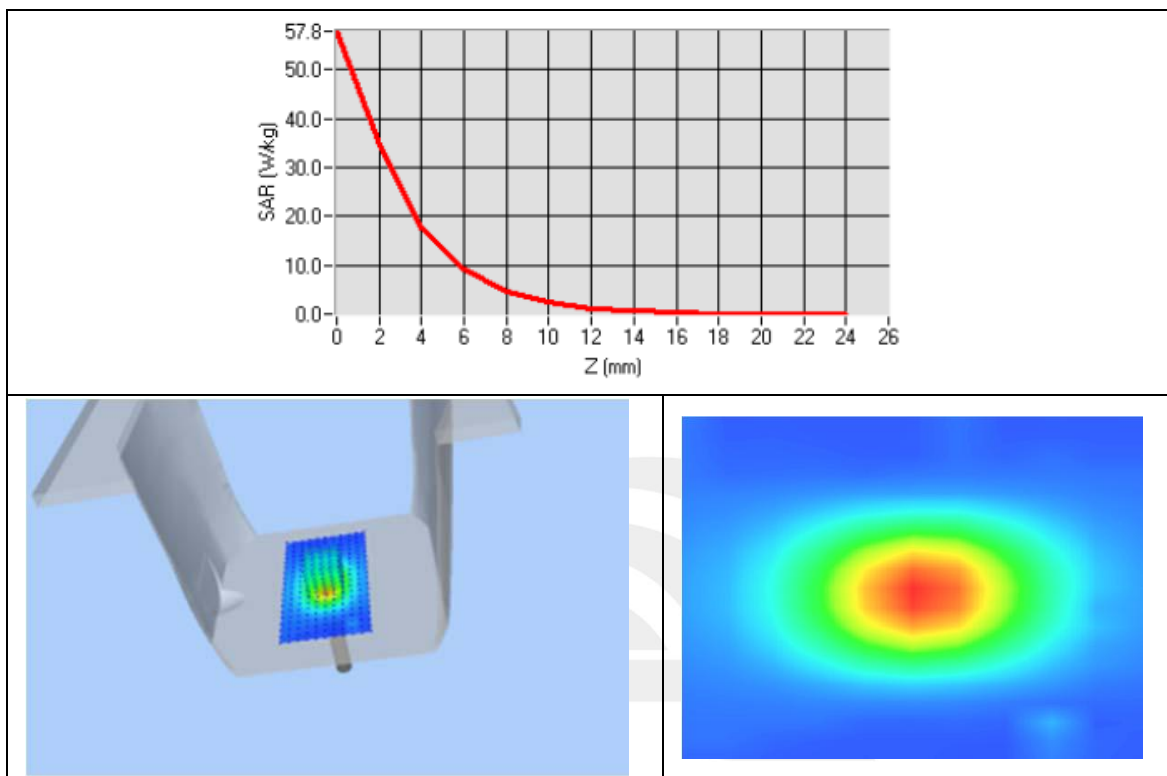
Device Position	Validation plane
Band	5800 MHz
Channels	-
Signal	CW
Frequency (MHz)	5800
Relative permittivity	47.87
Conductivity (S/m)	6.14
Power drift (%)	0.37
Probe	SN 41/18 EPGO334
ConvF	2.16
Crest factor:	1:1



Maximum location: X=7.00, Y=2.00

SAR 10g (W/Kg)	6.296481
SAR 1g (W/Kg)	18.184154

## Z Axis Scan





## Appendix B. SAR Test Plots

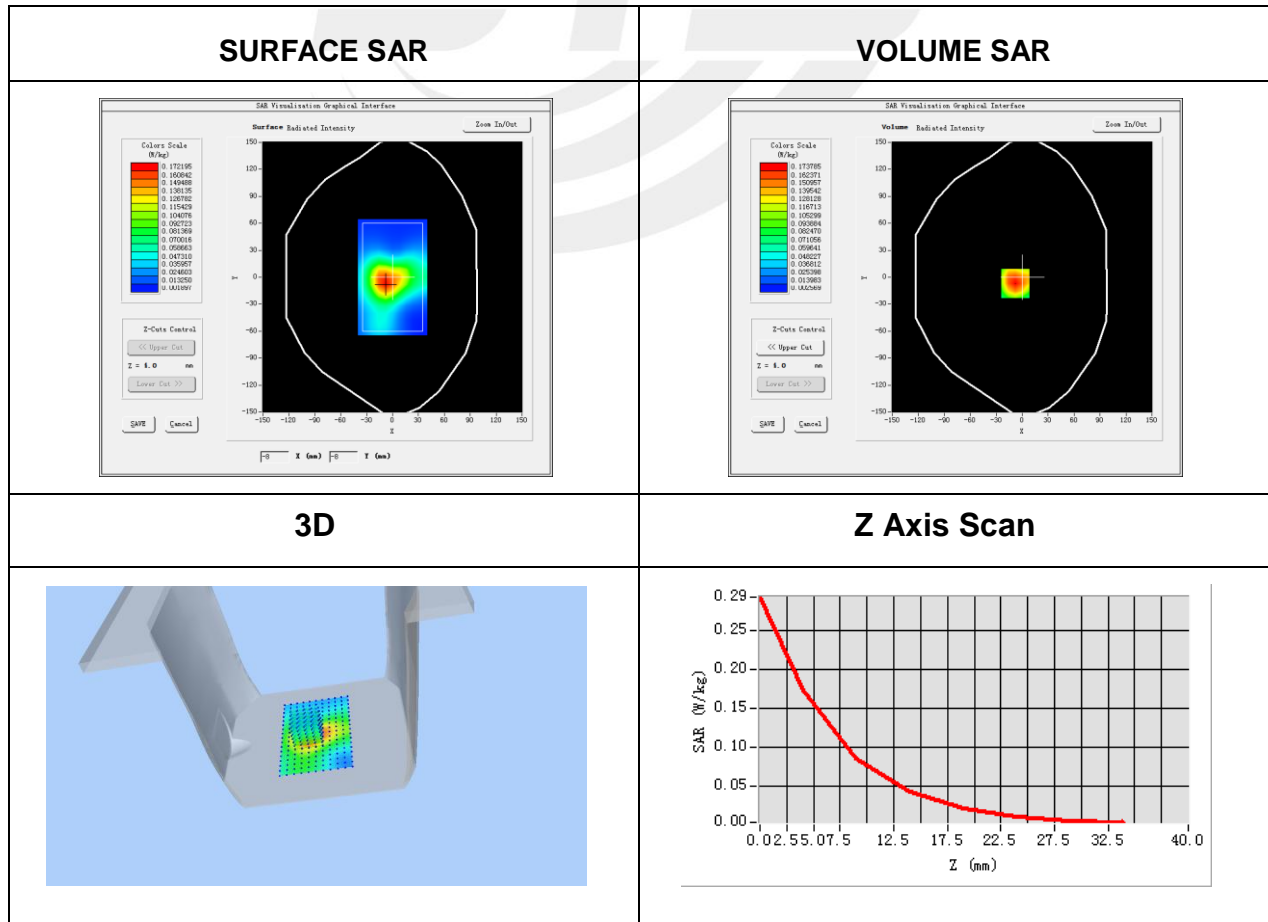
Plot 1: DUT: 8inch Tablet; EUT Model: TG0803V1

Test Date	2020-09-18
Probe	SN 41/18 EPGO334
ConvF	2.02
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back
Band	IEEE 802.11b ISM
Channels	High
Signal	IEEE802.b (Crest factor: 1.0)
Frequency (MHz)	2462
Relative permittivity (real part)	52.92
Conductivity (S/m)	1.98
Variation (%)	2.96

Maximum location: X=-8.00, Y=-7.00

SAR Peak: 0.29 W/kg

SAR 10g (W/Kg)	0.085900
SAR 1g (W/Kg)	0.167846



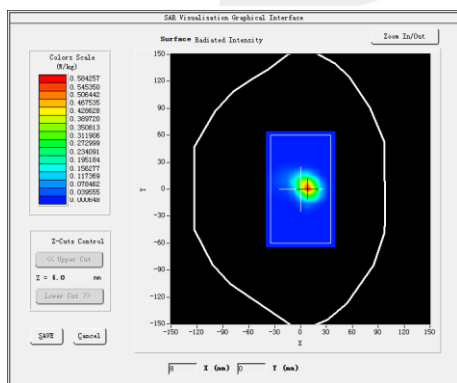
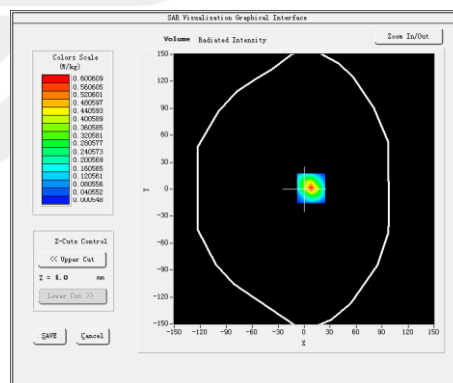
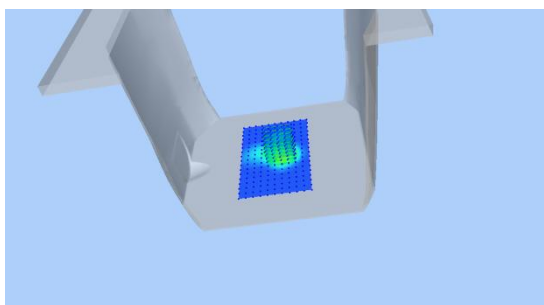
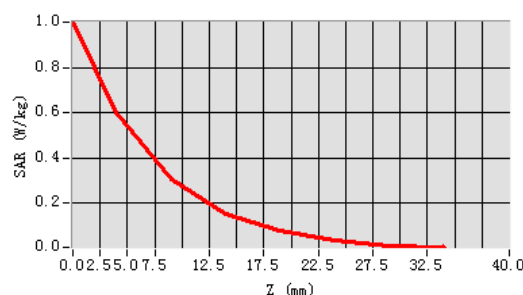
**Plot 2: DUT: 8inch Tablet; EUT Model: TG0803V1**

Test Date	2020-09-18
Probe	SN 41/18 EPGO334
ConvF	2.02
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back
Band	IEEE 802.11g ISM
Channels	High
Signal	IEEE802.g (Crest factor: 1.0)
Frequency (MHz)	2462
Relative permittivity (real part)	52.92
Conductivity (S/m)	1.98
Variation (%)	2.96

Maximum location: X=8.00, Y=1.00

SAR Peak: 0.99 W/kg

SAR 10g (W/Kg)	0.218180
SAR 1g (W/Kg)	0.528890

**SURFACE SAR**

**VOLUME SAR**

**3D**

**Z Axis Scan**


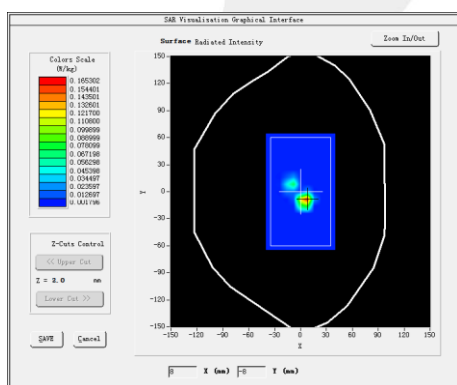
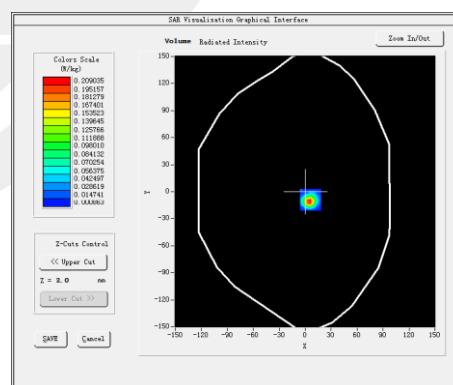
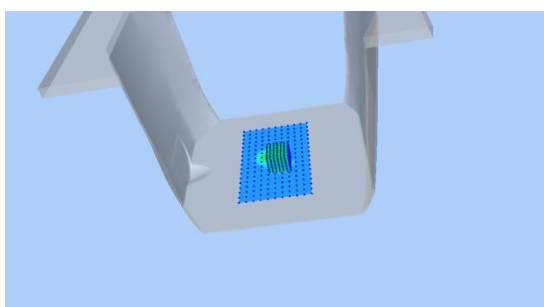
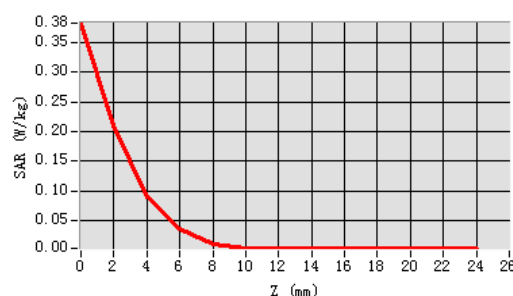

**Plot 3: DUT: 8inch Tablet; EUT Model: TG0803V1**

Test Date	2020-09-21
Probe	SN 41/18 EPGO334
ConvF	1.92
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x12,dx=4mm dy=4mm dz=2mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back
Band	IEEE 802.11a ISM
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5180
Relative permittivity (real part)	48.30
Conductivity (S/m)	5.17
Variation (%)	0.96

Maximum location: X=6.00, Y=-9.00

SAR Peak: 0.45 W/kg

SAR 10g (W/Kg)	0.020977
SAR 1g (W/Kg)	0.101499

**SURFACE SAR**

**VOLUME SAR**

**3D**

**Z Axis Scan**


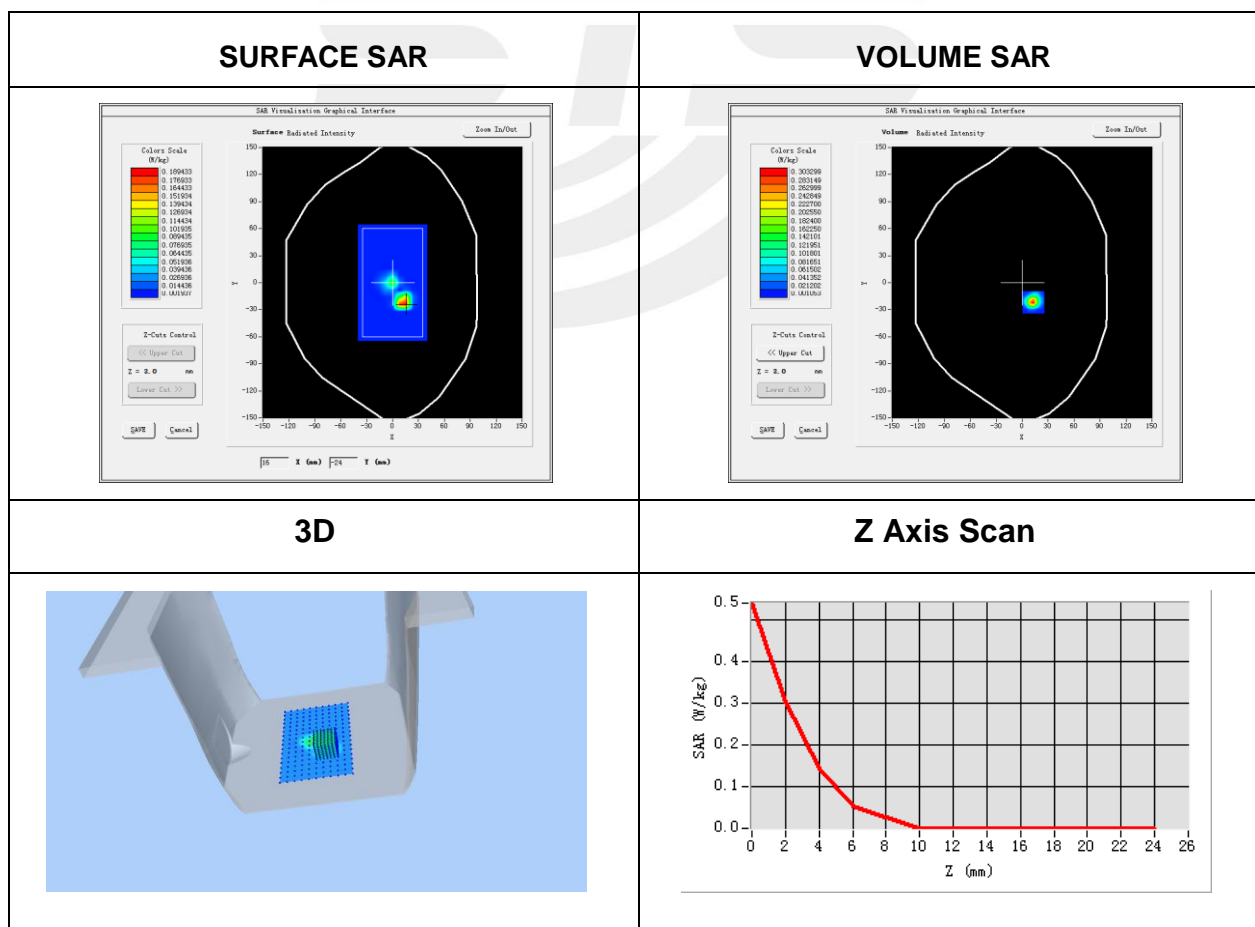
**Plot 4: DUT: 8inch Tablet; EUT Model: TG0803V1**

Test Date	2020-09-21
Probe	SN 41/18 EPGO334
ConvF	2.12
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x12,dx=4mm dy=4mm dz=2mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back
Band	IEEE 802.11a ISM
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5260
Relative permittivity (real part)	49.12
Conductivity (S/m)	5.38
Variation (%)	0.68

Maximum location: X=13.00, Y=-22.00

SAR Peak: 0.59 W/kg

SAR 10g (W/Kg)	0.028049
SAR 1g (W/Kg)	0.136744



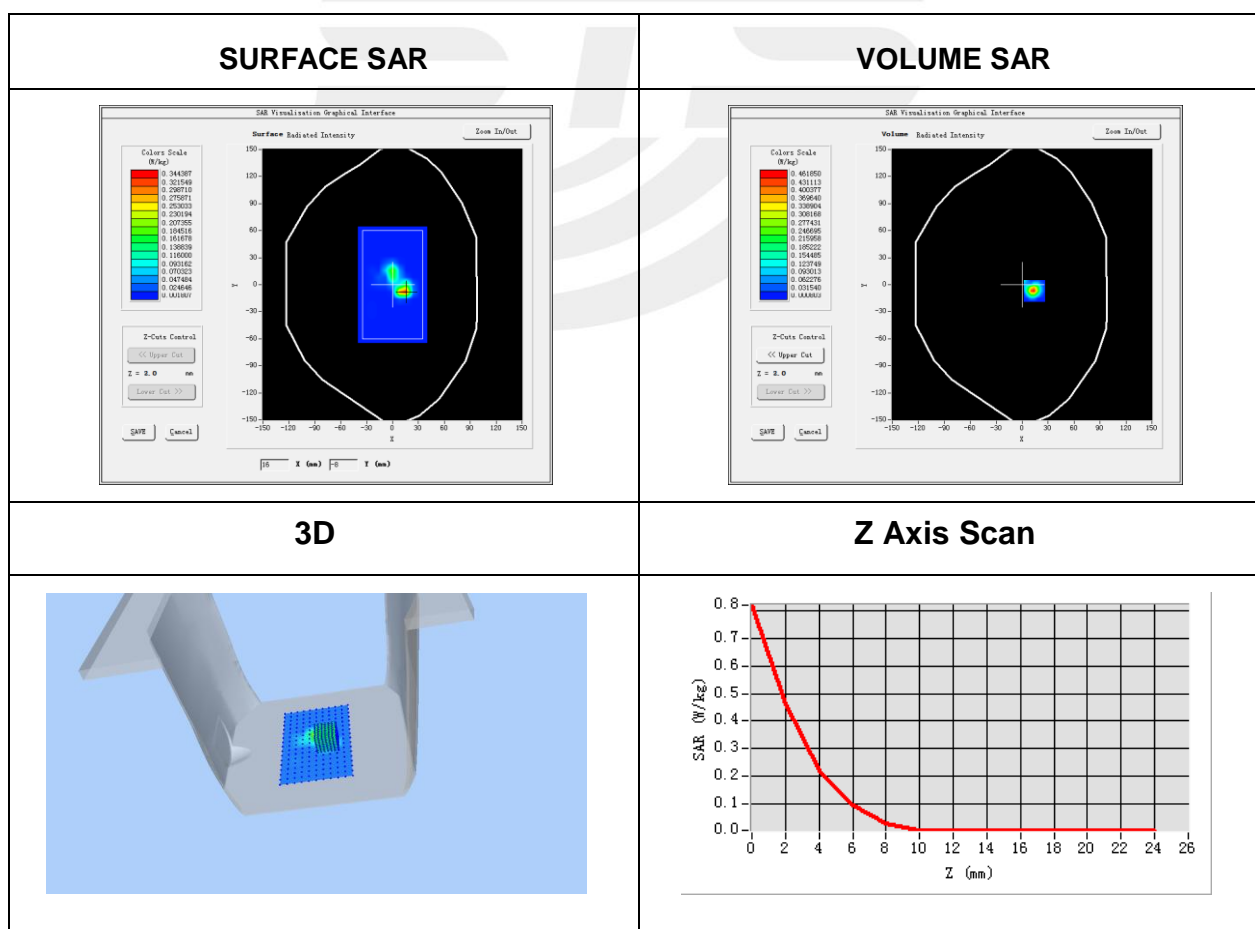
**Plot 5: DUT: 8inch Tablet; EUT Model: TG0803V1**

Test Date	2020-09-22
Probe	SN 41/18 EPGO334
ConvF	2.21
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x12,dx=4mm dy=4mm dz=2mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back
Band	IEEE 802.11a ISM
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5500
Relative permittivity (real part)	48.90
Conductivity (S/m)	5.84
Variation (%)	-1.19

Maximum location: X=14.00, Y=-7.00

SAR Peak: 0.90 W/kg

SAR 10g (W/Kg)	0.042833
SAR 1g (W/Kg)	0.205887



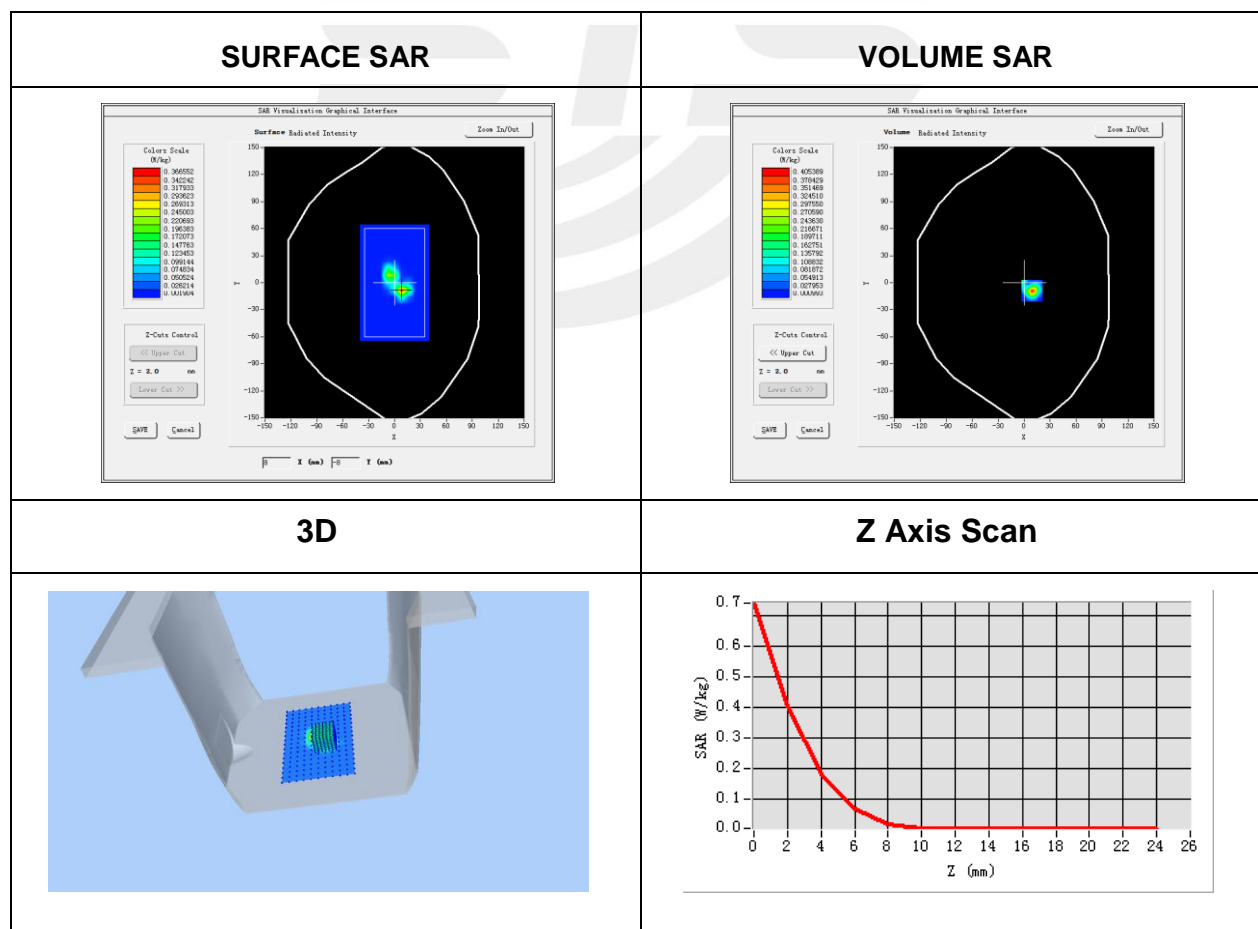
**Plot 6: DUT: 8inch Tablet; EUT Model: TG0803V1**

Test Date	2020-09-22
Probe	SN 41/18 EPGO334
ConvF	2.16
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	7x7x12,dx=4mm dy=4mm dz=2mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back
Band	IEEE 802.11a ISM
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5785
Relative permittivity (real part)	47.87
Conductivity (S/m)	6.14
Variation (%)	2.98

Maximum location: X=9.00, Y=-9.00

SAR Peak: 0.79 W/kg

SAR 10g (W/Kg)	0.037244
SAR 1g (W/Kg)	0.175540





## Appendix C. Probe Calibration And Dipole Calibration Report

Refer the appendix Calibration Report.

※※※※END OF THE REPORT※※※※

