



FCC SAR TEST REPORT

Report No: STS1611009H01

Issued for

WANLIDA GROUP CO., LTD

No. 618 JIAHE ROAD XIAMEN FUJIAN China

Product Name:	Tablet PC
Brand Name:	N/A
Model Name:	NTMC17
Series Model:	N/A
FCC ID:	SMFOMCNTMC17
Test Standard:	ANSI/IEEE Std. C95.1
	FCC 47 CFR Part 2 (2.1093)
	IEEE 1528: 2013
Max. Report SAR (1g):	Body:1.182 W/kg

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Test Report Certification

Applicant's name : WANLIDA GROUP CO., LTD

Address : No. 618 JIAHE ROAD XIAMEN FUJIAN China

Manufacture's Name : ICON Health & Fitness Inc

Address : 1500 South 1000 West, Logan, UT 84321,USA

Product description

Product name : Tablet PC

Trademark : N/A

Model and/or type reference : NTMC17

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 : 16 Nov. 2016

Date of Issue : 17 Nov. 2016

Test Result : **Pass**

Testing Engineer :

Aaron Bu

(Aaron Bu)

Technical Manager :

Vita Li

(Vita Li)

Authorized Signatory :

Bovey Yang

(Bovey Yang)





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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

Equipment	Tablet PC		
Brand Name	N/A		
Model No.	NTMC17		
Series Model	N/A		
FCC ID	SMFOMCNTMC17		
Model Difference	N/A		
Adapter	Input: AC100-240V,300mA, 50/60 Hz Output: DC 5V,2000mA		
Battery	Rated Voltage: 3.8V; Charge Limit: 4.35V; Capacity: 7280mAh		
Device Category	Portable		
Product stage	Production unit		
RF Exposure Environment	General Population / Uncontrolled		
Hardware Version	9122C		
Software Version	MRA58K test-keys		
Frequency Range	WLAN 802.11b/g/n(HT20/40):2412~2462MHz WLAN 802.11a/n(HT20/40): 5150 MHz to 5250 MHz; WLAN 802.11a/n(HT20/40): 5250 MHz to 5350 MHz; WLAN 802.11a/n(HT20/40): 5470 MHz to 5725 MHz; WLAN 802.11a/n(HT20/40): 5725 MHz to 5875 MHz Bluetooth:2402~ 2480MHz		
Tx power	2.4G WLAN 802.11: 14.5 dBm 5G WLAN 802.11: 14.0 dBm		
Max. Reported SAR(1g): (Limit:1.6W/kg)	Band	Mode	Body Worn and Hotspot(W/kg)
	DTS	WIFI (2.4 G)	1.156
	DTS	WIFI (5.2 G)	1.182
	DTS	WIFI (5.3 G)	1.164
	DTS	WIFI (5.6 G)	0.879
	DTS	WIFI (5.8 G)	0.832
	DSS	Bluetooth ^{Note}	0.231
FCC Equipment Class	Part 15 Spread Spectrum Transmitter (DSS) Digital Transmission System (DTS)		
Operating Mode:	WLAN: 802.11 b/g/n(HT20/40); WLAN: 802.11 a/n(HT20/40); Bluetooth: V3.0 + EDR (GFSK, π/4DQPSK, 8DPSK) ; Bluetooth: V4.0		
Antenna Specification:	BT,WIFI: PIFA Antenna		
Hotspot Mode:	Support		
DTM Mode:	Not Support		
Note: 1. Bluetooth SAR was estimated 2. The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power			



1.2 Test Environment

Ambient conditions in the SAR laboratory:

Items	Required	Actual
Temperature (°C)	18-25	22~23
Humidity (%RH)	30-70	55~65

1.3 Test Factory

Shenzhen STS Test Services Co., Ltd.

Add. : 1/F, Building B, Zhuoke Science Park, No.190, Chongqing Road, Fuyong, Bao'an District, Shenzhen, Guangdong, China

CNAS Registration No.: L7649;

FCC Registration No.: 842334;

IC Registration No.: 12108A-1





2. Test Standards And Limits

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 941225 D06 v02r01	Hotspot Mode SAR
8	FCC KDB 648474 D04 v01r03	SAR Evaluation Considerations for Wireless Handsets
9	FCC KDB 248227 D01 Wi-Fi SAR v02r02	SAR Considerations for 802.11 Devices

(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:

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

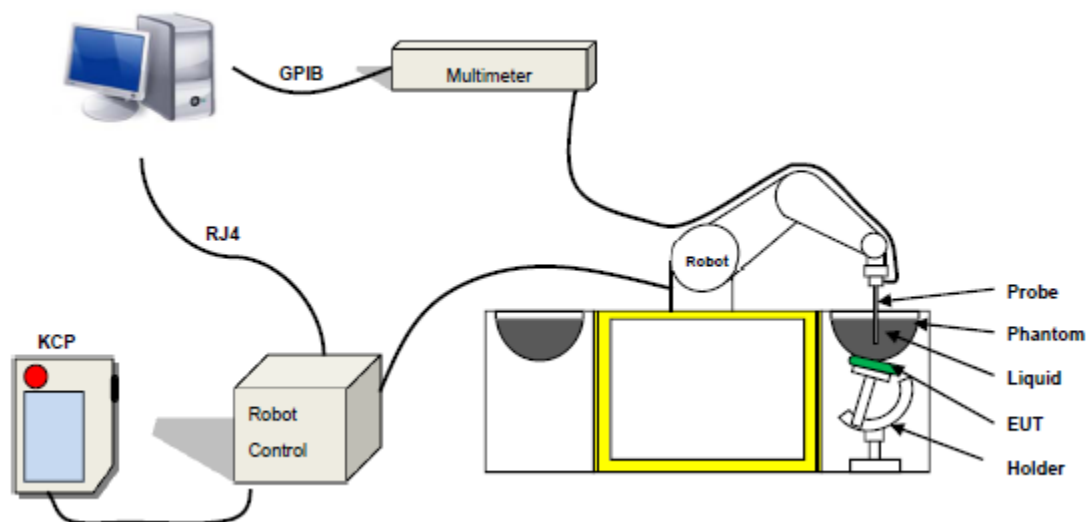
SAR is expressed in units of Watts per kilogram (W/kg) SAR measurement can be related to the electrical field in the tissue by

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

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

SATIMO 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 OpenSAR 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 45/15 EPGO281 with following specifications is used

- Dynamic range: 0.01-100 W/kg
 - Tip Diameter: 2.5 mm
 - Length of Individual Dipoles: 2 mm
 - Maximum external diameter: 8 mm
 - Distance between dipoles / probe extremity: 2.7 mm (repeatability better than +/- 1mm)
 - Probe linearity: $0 \pm 2.60\%$ (± 0.11 dB)
 - Axial Isotropy: < 0.25 dB
 - Spherical Isotropy: < 0.25 dB
 - Calibration range: 450MHz to 6GHz 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 \pm 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.

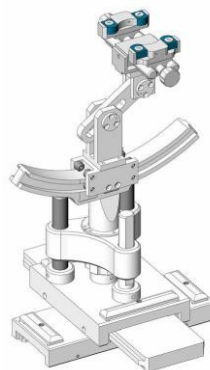


Figure-SN 32/14 SAM115



Figure-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.

Frequency (MHz)	Bactericide %	DGBE %	HEC %	NaCl %	Sucrose %	1,2-Propenediol %	X100 %	Water %	Conductivity σ	Permittivity ϵ_r
750	/	/	/	0.79	/	64.81	/	34.40	0.97	41.8
835	/	/	/	0.79	/	64.81	/	34.40	0.97	41.8
900	/	/	/	0.79	/	64.81	/	34.40	0.97	41.8
1800	/	13.84	/	0.35	/	/	30.45	55.36	1.38	41.0
1900	/	13.84	/	0.35	/	/	30.45	55.36	1.38	41.0
2000	/	7.99	/	0.16	/	/	19.97	71.88	1.55	41.1
2450	/	7.99	/	0.16	/	/	19.97	71.88	1.88	40.3
2600	/	7.99	/	0.16	/	/	19.97	71.88	1.88	40.3

Tissue dielectric parameters for head and body phantoms				
Frequency	ϵ_r		σ S/m	
	Head	Body	Head	Body
300	45.3	58.2	0.87	0.92
450	43.5	58.7	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: 16 Nov. 2016 **Ambient condition:** Temperature 22.7°C Relative humidity: 49%

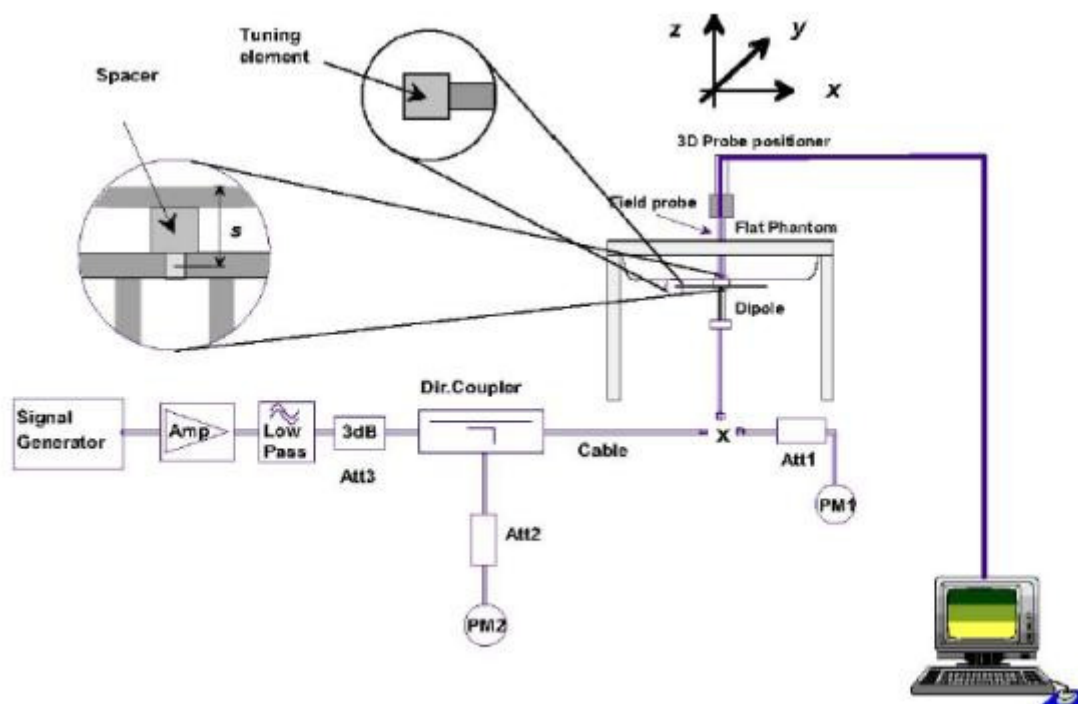
Body Simulating Liquid		Parameters	Target	Measured	Deviation[%]	Limited[%]
Frequency	Temp. [°C]					
2450 MHz	22.30	Permittivity:	52.70	52.30	-0.76	± 5
		Conductivity:	1.95	1.97	1.03	± 5
5200 MHz	22.30	Permittivity:	49.00	48.80	-0.41	± 5
		Conductivity:	5.30	5.26	-0.75	± 5
5600 MHz	22.30	Permittivity:	48.50	49.20	1.44	± 5
		Conductivity:	5.77	5.80	0.52	± 5
5800 MHz	22.30	Permittivity:	48.20	48.00	-0.41	± 5
		Conductivity:	6.00	5.99	-0.17	± 5

5. SAR System Validation

5.1 Validation System

Each SATIMO system is equipped with one or more system validation kits. These units, together with the predefined measurement procedures within the SATIMO 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 SATIMO, the validation data should be within its specification of 10 %.

Ambient condition: Temperature 22.7°C Relative humidity: 49%

Freq.(MHz)	Power(mW)	Tested Value (W/Kg)	Normalized SAR (W/kg)	Target(W/Kg)	Tolerance(%)	Date
2450 Body	100	5.317	53.17	52.4	1.47	2016-11-16
5200 Body	100	15.801	158.01	158.49	-0.30	2016-11-16
5600 Body	100	17.432	174.32	175.65	-0.76	2016-11-16
5800 Body	100	18.562	185.62	183.06	1.40	2016-11-16

Note: The tolerance limit of System validation $\pm 10\%$.



6. SAR Evaluation Procedures

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

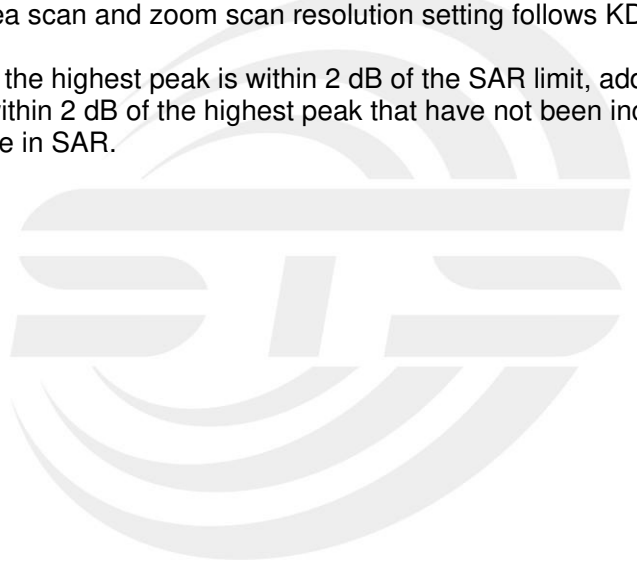
The following steps are used for each test position

- 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 D01v01r01 quoted below.

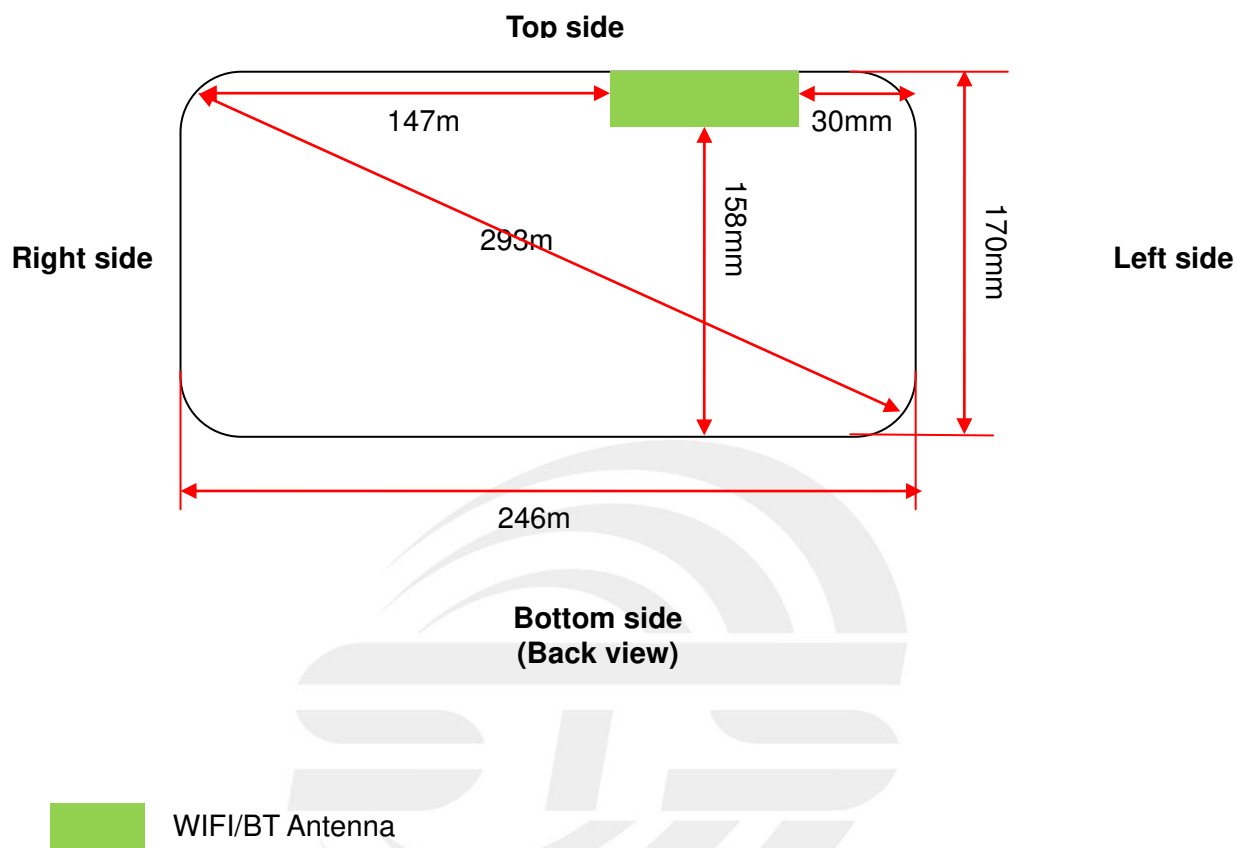
When the 1-g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.





7. EUT Antenna Location Sketch

It is a Tablet PC, support WIFI/BT mode.





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	Test position configurations					
	Front	Back	Right edge	Left edge	Top edge	Bottom edge
WIFI/BT	<5mm	<5mm	147mm	30mm	<5mm	158mm
	Yes	Yes	No	No	Yes	No

Note:

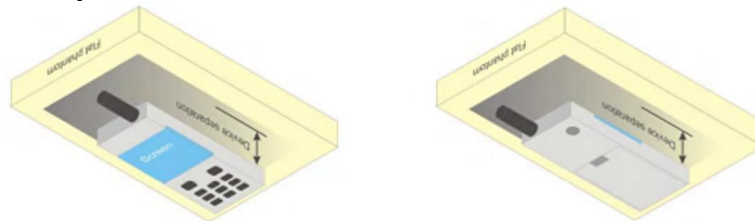
1. maximum power is the source-based time-average power and represents the maximum RF output power among production units.
2. per KDB 447498 D01, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
3. 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:
$$[(\text{max.power of channel, including tune-up tolerance, Mw})/(\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, } f(\text{GHz}) \text{ is the RF channel transmit frequency in GHz. Power and distance are rounded to the nearest mW and mm before calculation. The result is rounded to one decimal place for comparison. For } <50\text{mm distance, we just calculate mW of the exclusion threshold value (3.0) to do compare}$$
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 step 1] + (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 further 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 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. EUT Test Position

8.1 This EUT was tested in Front Face and Rear Face.

Body-worn Position Conditions:

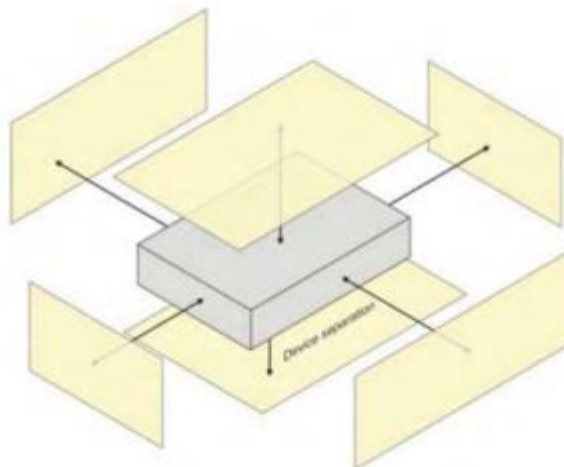
Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in KDB Publication 447498 D01 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. When the same 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 $k=2$.

NO	Source	Tol(%)	Prob. Dist.	Div. k	ci (1g)	ci (10g)	1gUi	10gUi	Veff
Measurement System									
1	Probe calibration	5.8	N	1	1	1	5.8	5.8	∞
2	Axial isotropy	3.5	R	$\sqrt{3}$	$(1-cp)^{1/2}$	$(1-cp)^{1/2}$	1.43	1.43	∞
3	Hemispherical isotropy	5.9	R	$\sqrt{3}$	$\sqrt{C_p}$	$\sqrt{C_p}$	2.41	2.41	∞
4	Boundary effect	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
5	Linearity	4.7	R	$\sqrt{3}$	1	1	2.71	2.71	∞
6	System Detection limits	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
7	Readout electronics	0.5	N	1	1	1	0.50	0.50	∞
8	Response time	0	R	$\sqrt{3}$	1	1	0	0	∞
9	Integration time	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
10	Ambient noise	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
11	Ambient reflections	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
12	Probe positioner mech. restrictions	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
13	Probe positioning with respect to phantom shell	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
14	Max.SAR evaluation	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
Test sample related									
15	Device positioning	2.6	N	1	1	1	2.6	2.6	11



16	Device holder	3	N	1	1	1	3.0	3.0	7
17	Drift of output power	5.0	R	√3	1	1	2.89	2.89	∞
Phantom and set-up									
18	Phantom uncertainty	4.0	R	√3	1	1	2.31	2.31	∞
19	Liquid conductivity (target)	2.5	N	1	0.78	0.71	1.95	1.78	5
20	Liquid conductivity (meas)	4	N	1	0.23	0.26	0.92	1.04	5
21	Liquid Permittivity (target)	2.5	N	1	0.78	0.71	1.95	1.78	∞
22	Liquid Permittivity (meas)	5.0	N	1	0.23	0.26	1.15	1.30	∞
Combined standard			RSS	$U_c = \sqrt{\sum_{i=1}^n C_i^2 U_i^2}$			10.63%	10.54%	
Expanded uncertainty (P=95%)		$U = k U_c, k=2$					21.26%	21.08%	



9.2 System validation Uncertainty

NO	Source	Tol(%)	Prob. Dist.	Div. k	ci (1g)	ci (10g)	1gUi	10gUi	Veff
Measurement System <input type="checkbox"/>									
1	Probe calibration	5.8	N	1	1	1	5.8	5.8	∞
2	Axial isotropy	3.5	R	$\sqrt{3}$	$(1-c_p)^{1/2}$	$(1-c_p)^{1/2}$	1.43	1.43	∞
3	Hemispherical isotropy	5.9	R	$\sqrt{3}$	$\sqrt{C_p}$	$\sqrt{C_p}$	2.41	2.41	∞
4	Boundary effect	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
5	Linearity	4.7	R	$\sqrt{3}$	1	1	2.71	2.71	∞
6	System Detection limits	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
7	Modulation response	0	N	1	1	1	0	0	∞
8	Readout electronics	0.5	N	1	1	1	0.50	0.50	∞
9	Response time	0	R	$\sqrt{3}$	1	1	0	0	∞
10	Integration time	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
11	Ambient noise	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
12	Ambient reflections	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
13	Probe positioner mech. restrictions	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
14	Probe positioning with respect to phantom shell	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
15	Max.SAR evaluation	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
Dipole									
16	Deviation of experimental source from	4	N	1	1	1	4.00	4.00	∞



17	Input power and SAR drif measurement	5	R	√3	1	1	2.89	2.89	∞
18	Dipole Axis to liquid Distance	2	R	√3	1	1			∞
Phantom and set-up									
19	Phantom uncertainty	4.0	R	√3	1	1	2.31	2.31	∞
20	Uncertainty in SAR correction for deviation(in	2.0	N	1	1	0.84	2	1.68	∞
21	Liquid conductivity (target)	2	N	1	1	0.84	2.00	1.68	∞
22	Liquid conductivity (temperature uncertainty)	2.5	N	1	0.78	0.71	1.95	1.78	5
23	Liquid conductivity (meas)	4	N	1	0.23	0.26	0.92	1.04	5
24	Liquid Permittivity (target)	2.5	N	1	0.78	0.71	1.95	1.78	∞
25	Liquid Permittivity (temperature uncertainty)	2.5	N	1	0.78	0.71	1.95	1.78	5
26	Liquid Permittivity (meas)	5.0	N	1	0.23	0.26	1.15	1.30	∞
Combined standard			RSS	$U_c = \sqrt{\sum_{i=1}^n C_i^2 U_i^2}$			10.15%	10.05%	
Expanded uncertainty (P=95%)		$U = k U_c, k=2$					20.29%	20.10%	



10. Conducted Power Measurement

10.1 Test Result

WIFI (2.4Gband)

Mode	Channel Number	Frequency (MHz)	Average Power (dBm)
802.11b	1	2412	14.24
	6	2437	14.25
	11	2462	14.12
802.11g	1	2412	13.88
	6	2437	13.85
	11	2462	13.64
802.11n(HT 20)	1	2412	13.37
	6	2437	14.00
	11	2462	13.84
802.11n(HT 40)	3	2422	14.09
	6	2437	14.17
	9	2452	14.33

WIFI (5.2Gband)

Mode	Channel Number	Frequency (MHz)	Average EIRP Power (dBm)
802.11a	36	5180	12.32
	40	5200	11.59
	48	5240	11.51
802.11 n-HT20	36	5180	11.51
	40	5200	11.08
	48	5240	11.29
802.11 n-HT40	38	5190	11.13
	46	5230	11.41

WIFI (5.3Gband)

Mode	Channel Number	Frequency (MHz)	Average EIRP Power (dBm)
802.11a	52	5260	11.59
	60	5300	11.63
	64	5320	11.89
802.11 n-HT20	52	5260	11.60
	60	5300	12.02
	64	5320	12.14
802.11 n-HT40	54	5270	11.63
	62	5310	12.14

**WIFI (5.6Gband)**

Mode	Channel Number	Frequency (MHz)	Average EIRP Power (dBm)
802.11a	100	5500	10.78
	116	5580	9.66
	140	5700	9.65
802.11 n-HT20	100	5500	10.59
	116	5580	9.60
	140	5700	9.86
802.11 n-HT40	102	5510	10.14
	110	5550	10.05
	134	5670	9.27

WIFI (5.8Gband)

Mode	Channel Number	Frequency (MHz)	Average EIRP Power (dBm)
802.11a	149	5745	9.61
	157	5785	10.67
	165	5825	11.45
802.11 n-HT20	149	5745	10.16
	157	5785	10.76
	165	5825	11.42
802.11 n-HT40	151	5755	10.03
	159	5795	10.46

Bluetooth

Mode	Channel Number	Frequency (MHz)	Average Power (dBm)
GFSK(1Mbps)	0	2402	7.30
	39	2441	6.32
	78	2480	5.79
$\pi/4$ -DQPSK(2Mbps)	0	2402	6.45
	39	2441	5.68
	78	2480	4.81
8DPSK(3Mbps)	0	2402	5.40
	39	2441	4.50
	78	2480	3.74

BT 4.0

Mode	Channel Number	Frequency (MHz)	Average Power (dBm)
GFSK(1Mbps)	0	2402	0.34
	19	2440	-0.68
	39	2480	-1.78



10.2 Tune-up Power

WIFI (2.4Gband)

Mode	WIFI(AVG)
IEEE 802.11b	14±1dBm
IEEE 802.11g	13±1dBm
IEEE 802.11n(HT 20)	14±1dBm
IEEE 802.11n(HT 40)	14±1dBm

WIFI (5.2Gband)

Mode	WIFI(AVG)
IEEE 802.11a	12±1dBm
IEEE 802.11n HT20	11±1dBm
IEEE 802.11n HT40	11±1dBm

WIFI (5.3Gband)

Mode	WIFI(AVG)
IEEE 802.11a	11±1dBm
IEEE 802.11n HT20	12±1dBm
IEEE 802.11n HT40	12±1dBm

WIFI (5.6Gband)

Mode	WIFI(AVG)
IEEE 802.11a	10±1dBm
IEEE 802.11n HT20	10±1dBm
IEEE 802.11n HT40	10±1dBm

WIFI (5.8Gband)

Mode	WIFI(AVG)
IEEE 802.11a	10.5±1dBm
IEEE 802.11n HT20	10.5±1dBm
IEEE 802.11n HT40	10±1dBm

BT

Mode	BT(AVG)
GFSK	6.4±1dBm
$\pi/4$ -DQPSK(2Mbps)	5.5±1dBm
8DPSK	4.5±1dBm

BT4.0

Mode	BT4.0(AVG)		
Channel Number	0	19	39
GFSK	0±1dBm	0±1dBm	-1±1dBm



10.3 SAR Test Exclusions Applied

Per 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.

$$\frac{\text{Max Power of Channel (mW)}}{\text{Test Separation Dist (mm)}} * \sqrt{\text{Frequency (GHz)}} \leq 3.0$$

Based on the maximum conducted power of **Bluetooth Body** (rounded to the nearest mW) and the antenna to user separation distance,

Bluetooth Body SAR was not required; $[(5.495/5) * \sqrt{2.480}] = 1.73 < 3.0$.

Based on the maximum conducted power of **2.4 GHz WIFI Body** (rounded to the nearest mW) and the antenna to user separation distance,

2.4 GHz WIFI Body SAR was required; $[(31.623/5) * \sqrt{2.462}] = 9.92 > 3.0$.

Based on the maximum conducted power of **5.2 GHz WIFI Body** (rounded to the nearest mW) and the antenna to user separation distance,

5.2 GHz WIFI Body SAR was required; $[(19.953/5) * \sqrt{5.240}] = 9.20 > 3.0$.

Based on the maximum conducted power of **5.3 GHz WIFI Body** (rounded to the nearest mW) and the antenna to user separation distance,

5.3 GHz WIFI Body SAR was required; $[(16.368/5) * \sqrt{5.320}] = 7.55 > 3.0$.

Based on the maximum conducted power of **5.5 GHz WIFI Body** (rounded to the nearest mW) and the antenna to user separation distance,

5.6GHz WIFI Body SAR was required; $[(11.967/5) * \sqrt{5.700}] = 6.01 > 3.0$.

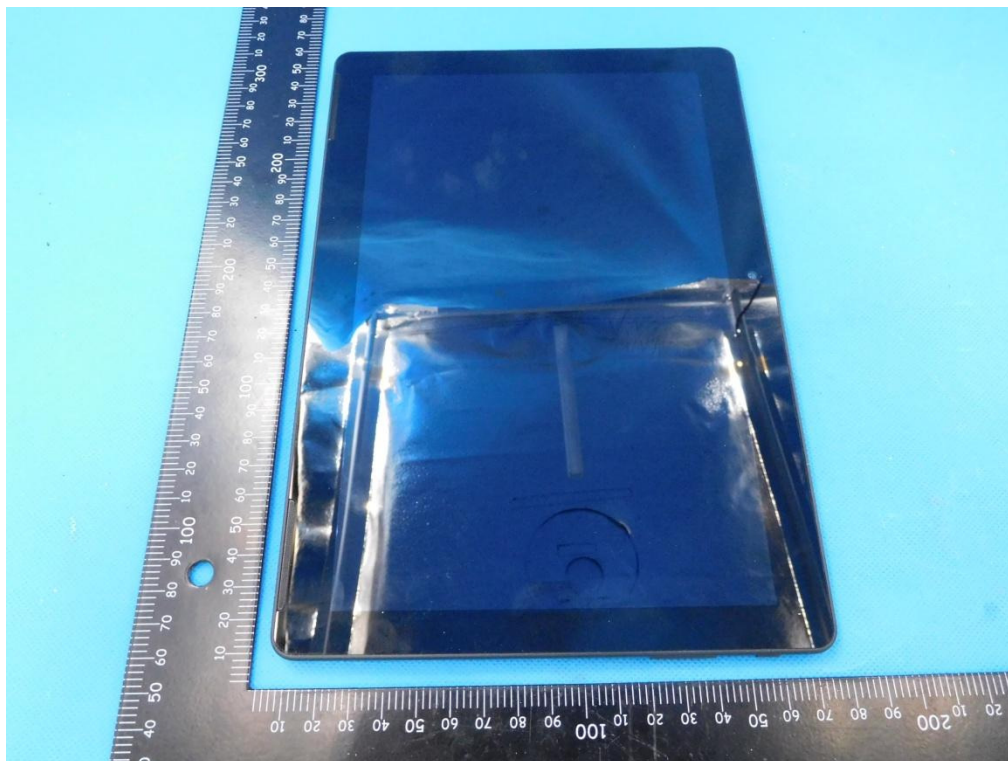
Based on the maximum conducted power of **5.7 GHz WIFI Body** (rounded to the nearest mW) and the antenna to user separation distance,

5.8 GHz WIFI Body SAR was required; $[(11.02/5) * \sqrt{5.825}] = 6.82 > 3.0$.

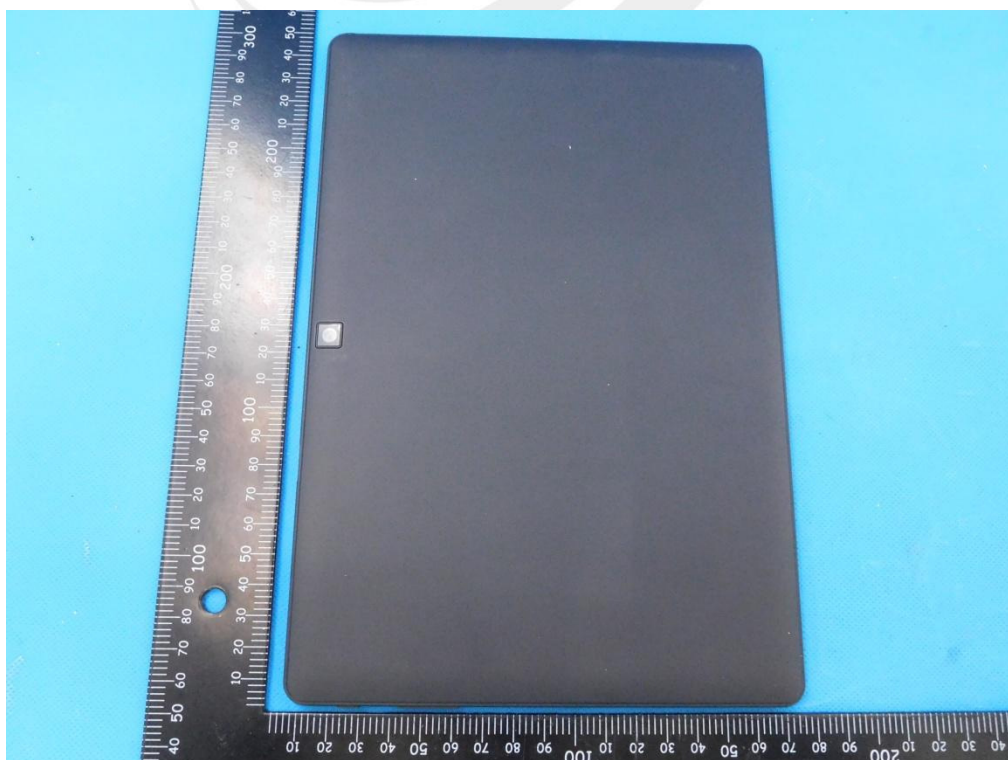
11. EUT And Test Setup Photo

11.1 EUT Photo

Front side

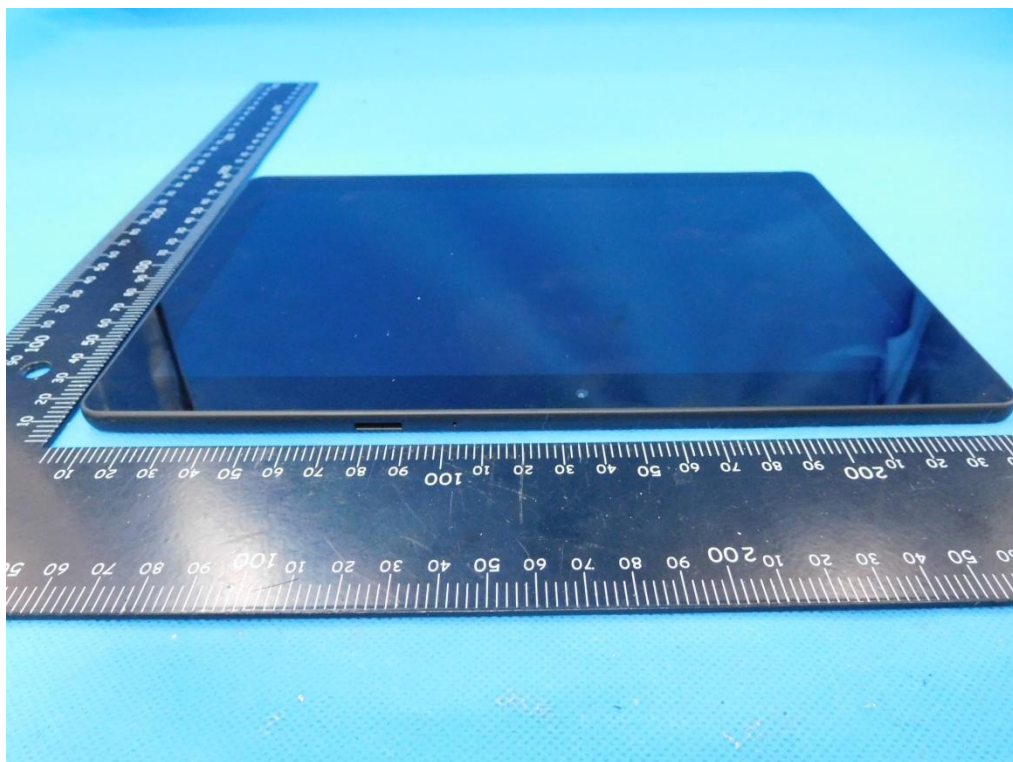


Back side

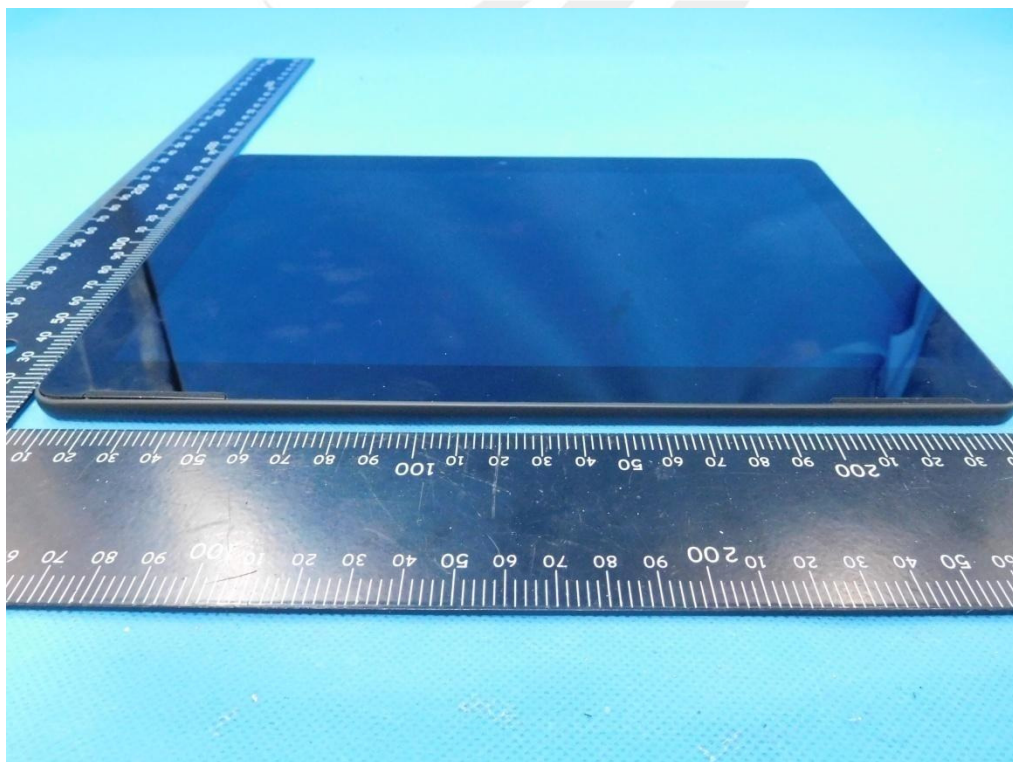




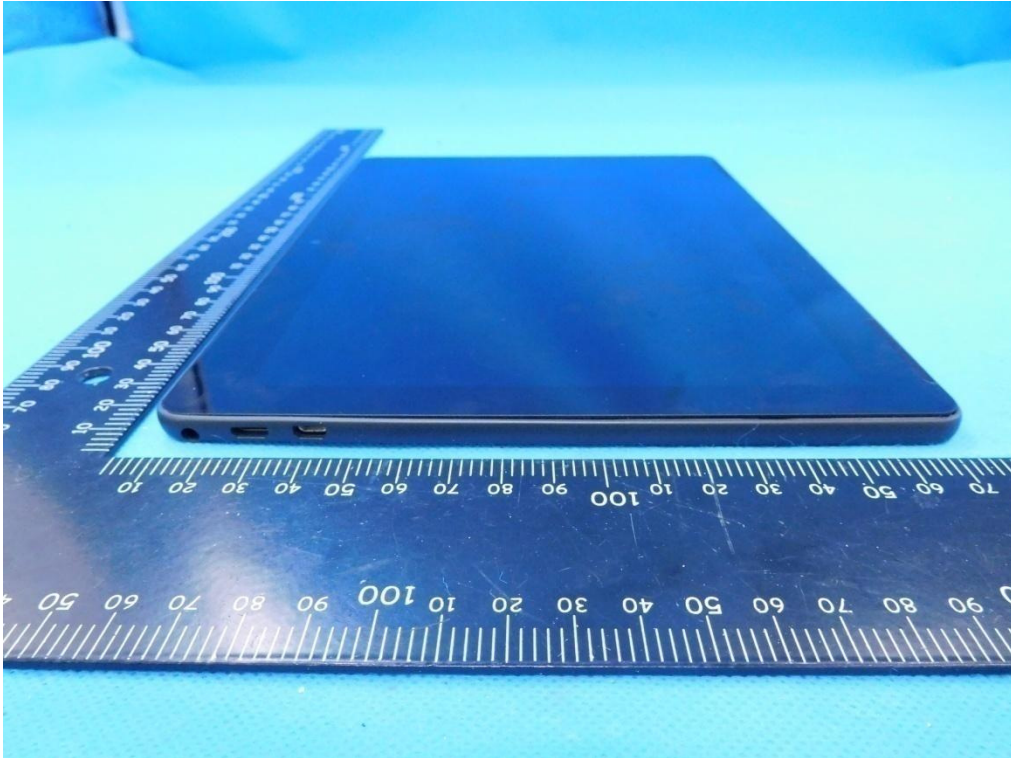
Top side



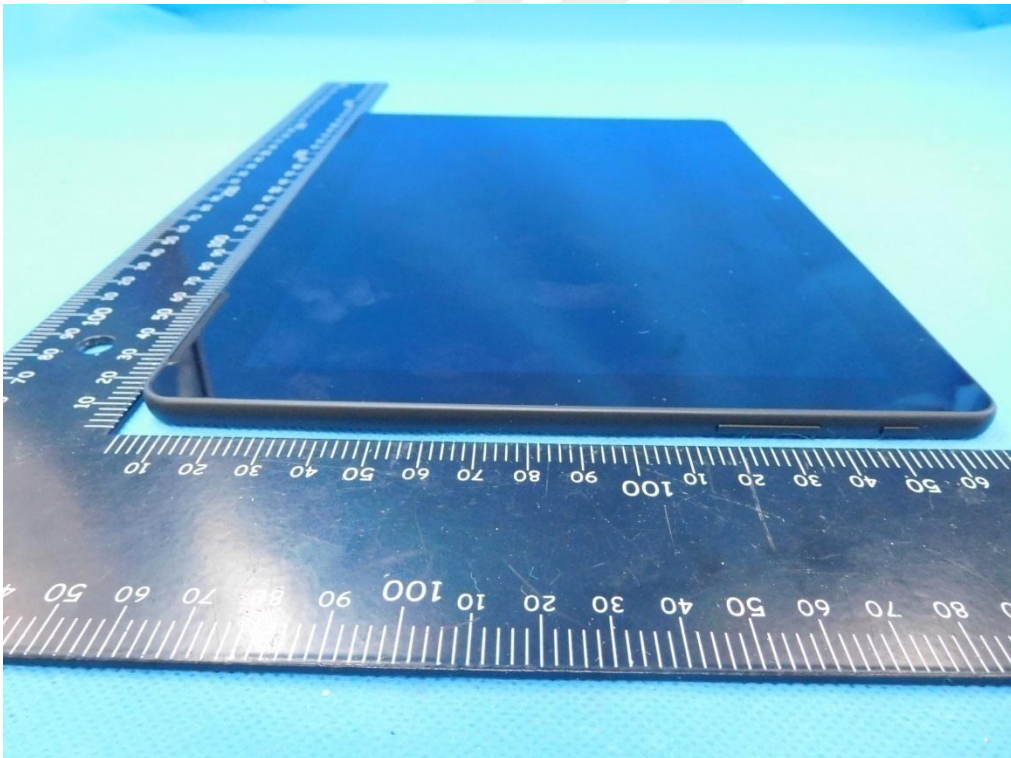
Bottom side



Left side

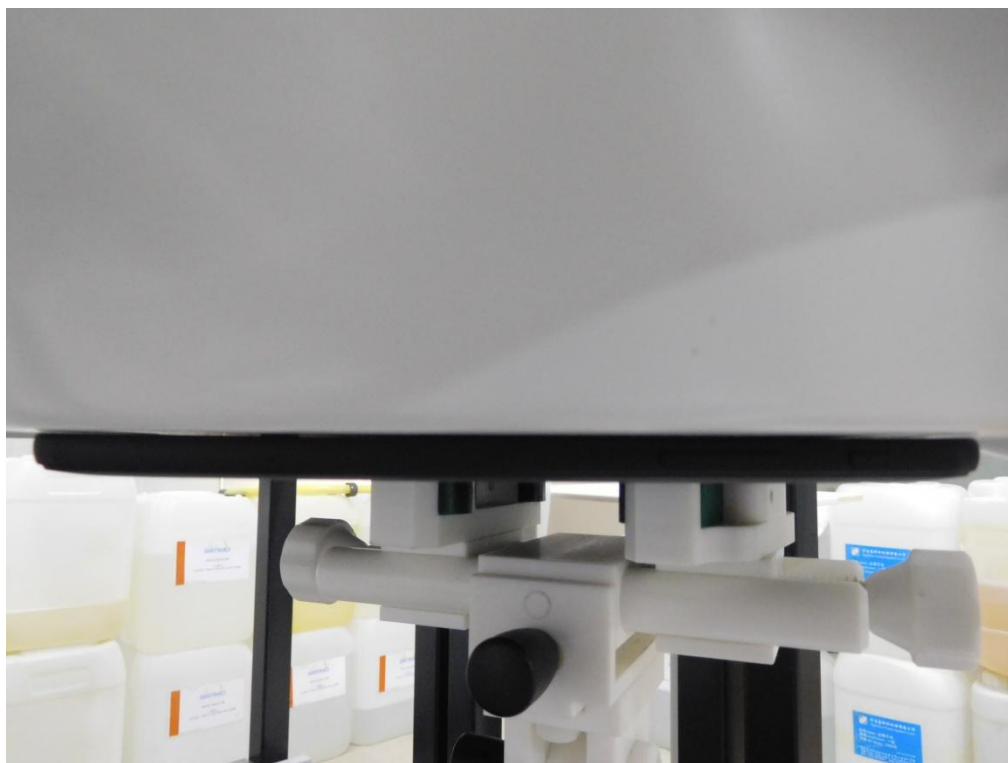


Right side

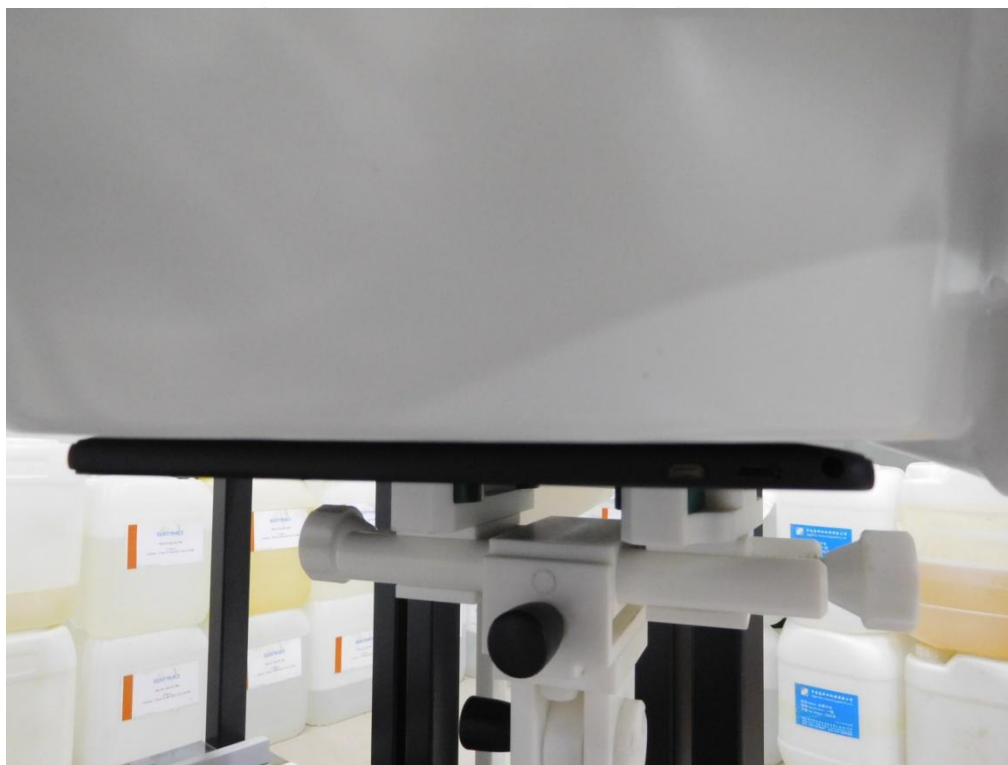


11.2 Setup Photo

Body Front side(separation distance is 0mm)



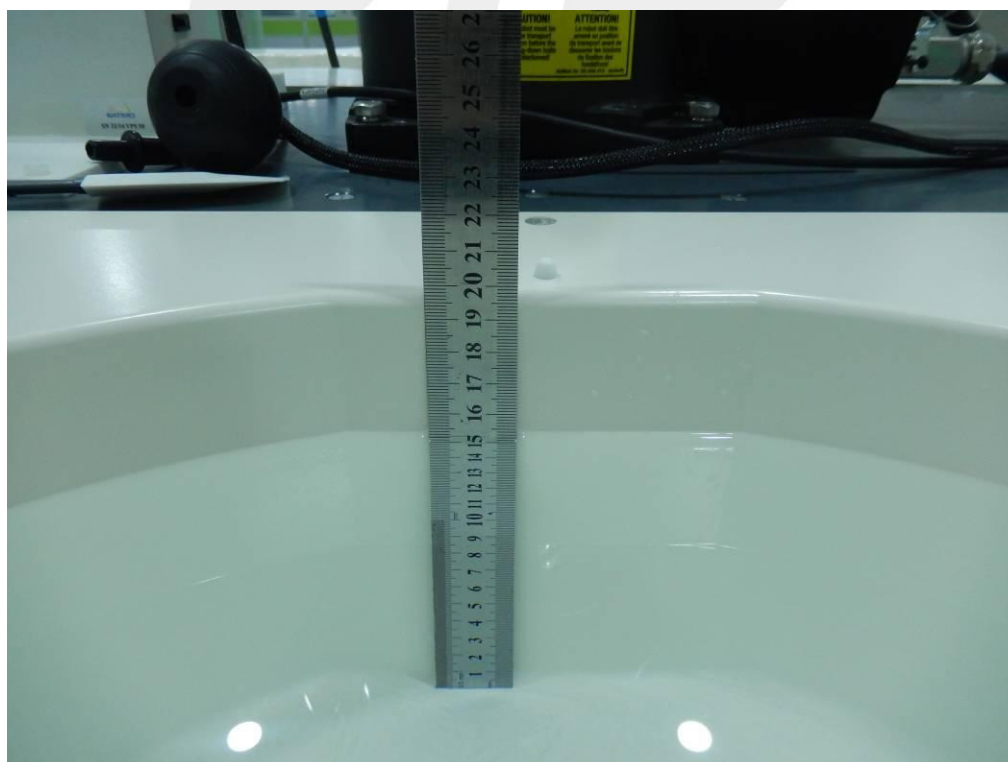
Body Back side(separation distance is 0mm)



Body top side(separation distance is 0mm)



Liquid depth (15 cm)





12. SAR Result Summary

12.1 Body-worn and Hotspot SAR 2.4GHz

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.
WIFI 2.4 G	802.11b	Front side	1	0.804	1.26	15	14.24	100	0.958	/
		Front side	6	0.973	-0.07	15	14.25	100	1.156	1
		Front side	11	0.859	-0.92	15	14.12	100	1.052	/
		Back side	6	0.734	0.86	15	14.25	100	0.872	/
		Top side	6	0.542	1.77	15	14.25	100	0.644	/

Note:

1. The test separation of all above table is 0mm.
2. 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 ≤ 1.2 W/kg. (The highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power was **1.180** W/Kg for Body)
3. When the user enables the personal Wireless router functions for the handsets, actual operations include simultaneous transmission of both the Wi-Fi transmitting frequency and thus cannot be evaluated for SAR under actual use conditions. The "Portable Hotspot" feature on the handset was NOT activated, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal.

**5G GHz**

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.
WIFI 5.2 G	802.11a	Front side	36	1.011	-0.62	13	12.32	100	1.182	2
		Front side	40	0.831	1.36	13	11.59	100	1.150	/
		Front side	48	0.802	2.50	13	11.51	100	1.130	/
		Back side	36	0.491	2.53	13	12.32	100	0.574	/
		Top side	36	0.387	-1.64	13	12.32	100	0.453	/
WIFI 5.3 G	802.11n	Front side	52	0.713	-1.52	13	11.60	100	0.984	/
		Front side	60	0.826	2.01	13	12.02	100	1.035	/
		Front side	64	0.955	-3.04	13	12.14	100	1.164	3
		Back side	64	0.409	2.06	13	12.14	100	0.499	/
		Top side	64	0.312	-3.01	13	12.14	100	0.380	/
WIFI 5.6 G	802.11a	Front side	100	0.836	-1.34	11	10.78	100	0.879	4
		Front side	116	0.582	0.66	11	9.66	100	0.792	/
		Front side	140	0.641	-2.10	11	9.65	100	0.875	/
		Back side	100	0.565	0.74	11	10.78	100	0.594	/
		Top side	100	0.409	-1.08	11	10.78	100	0.430	/
WIFI 5.8 G	802.11a	Front side	149	0.501	1.00	11.5	9.61	100	0.774	/
		Front side	157	0.612	-0.52	11.5	10.67	100	0.741	/
		Front side	165	0.822	-2.87	11.5	11.45	100	0.832	5
		Back side	165	0.456	2.34	11.5	11.45	100	0.461	/
		Top side	165	0.338	-1.00	11.5	11.45	100	0.342	/

Note:

1. The test separation of all above table is 0mm.
2. When the user enables the personal Wireless router functions for the handsets, actual operations include simultaneous transmission of both the Wi-Fi transmitting frequency and thus cannot be evaluated for SAR under actual use conditions. The "Portable Hotspot" feature on the handset was NOT activated, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal.

**Repeated SAR**

Band	Mode	Test Position	Ch.	Result 1g (W/Kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaled SAR(W/Kg)	Meas. No.
WIFI 2.4 G	802.11b	Front Side	6	0.964	-1.10	15	14.25	1.146	/
WIFI 5.2 G	802.11a	Front Side	36	0.998	-1.44	13	12.32	1.167	/
WIFI 5.3 G	802.11a	Front Side	64	0.934	2.40	13	12.14	1.139	/
WIFI 5.5 G	802.11n	Front Side	100	0.828	2.02	11	10.78	0.871	/
WIFI 5.8 G	802.11a	Front Side	165	0.809	1.81	11.5	11.5	0.809	/

12.3 repeated SAR measurement

Band	Mode	Test Position	Ch.	Original Measured SAR 1g(mW/g)	1 st Repeated SAR 1g	Ratio	Original Measured SAR 1g(mW/g)	2nd Repeated SAR 1g	Ratio
WIFI 2.4 G	802.11b	Front Side	6	0.973	0.964	1.01	-	-	-
WIFI 5.2 G	802.11a	Front Side	36	1.011	0.998	1.01	-	-	-
WIFI 5.3 G	802.11a	Front Side	64	0.955	0.934	1.02	-	-	-
WIFI 5.5 G	802.11n	Front Side	100	0.836	0.828	1.01	-	-	-
WIFI 5.8 G	802.11a	Front Side	165	0.822	0.809	1.02	-	-	-

Note:

1. Per KDB 865664 D01V01, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/Kg.
2. Per KDB 865664 D01V01, if the ratio of largest to smallest SAR for the original and first repeated measurement is ≤ 1.2 and the measured SAR < 1.45 W/Kg, only one repeated measurement is required.
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
4. The ratio is the difference in percentage between original and repeated measured SAR.

**Simultaneous Multi-band Transmission Evaluation:**

Application Simultaneous Transmission information:

Position	Simultaneous state
Body	1. Bluetooth + WIFI

NOTE:

1. Bluetooth and WIFI can't simultaneous transmission at the same time.
2. 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 W/Kg for 1-g SAR and 1.0 W/Kg for 10-g SAR, when the separation distance is $> 50 \text{ mm}$.

Estimated SAR		Maximum Power		Antenna to user(mm)	Frequency(GHz)	Stand alone SAR(1g) [W/kg]
		dBm	mW			
BT	Body	7.40	5.495	5	2.480	0.231



13. Equipment List

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
2450MHzDipole	SATIMO	SID2450	SN 30/14 DIP2G450-335	2014.09.01	2017.08.31
E-Field Probe	MVG	SSE2	SN 45/15 EPMO281	2015.12.10	2016.12.09
Antenna	SATIMO	ANTA3	SN 07/13 ZNTA52	2014.09.01	2017.08.31
Waveguide	SATIMO	SWG5500	SN 13/14 WGA32	2014.09.01	2017.08.31
Phantom1	SATIMO	SAM	SN 32/14 SAM115	N/A	N/A
Phantom2	SATIMO	SAM	SN 32/14 SAM116	N/A	N/A
SAR TEST BENCH	SATIMO	GSM and WCDMA mobile phone POSITIONNIN G SYSTEM	SN 32/14 MSH97	N/A	N/A
SAR TEST BENCH	SATIMO	LAPTOP POSITIONNIN G SYSTEM	SN 32/14 LSH29	N/A	N/A
Dielectric Probe Kit	SATIMO	SCLMP	SN 32/14 OCPG52	2016.08.30	2017.08.29
Multi Meter	Keithley	Multi Meter 2000	4050073	2016.10.23	2017.10.22
Signal Generator	Agilent	N5182A	MY50140530	2016.10.23	2017.10.22
Power Meter	R&S	NRP	100510	2016.10.23	2017.10.22
Power Meter	HP	EPM-442A	GB37170267	2016.10.23	2017.10.22
Power Sensor	R&S	NRP-Z11	101919	2016.10.09	2017.10.08
Power Sensor	HP	8481A	2702A65976	2016.10.09	2017.10.08
Network Analyzer	Agilent	5071C	EMY46103472	2015.12.12	2016.12.11
Attenuator 1	PE	PE7005-10	N/A	2016.10.23	2017.10.22
Attenuator 2	PE	PE7005-3	N/A	2016.10.23	2017.10.22
Attenuator 3	Woken	WK0602-XX	N/A	2015.12.12	2016.12.11
Dual Directional Coupler	Agilent	778D	50422	2015.11.18	2016.11.17



Appendix A. System Validation Plots

System Performance Check Data (2450MHz Body)

Type: Phone measurement (Complete)

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

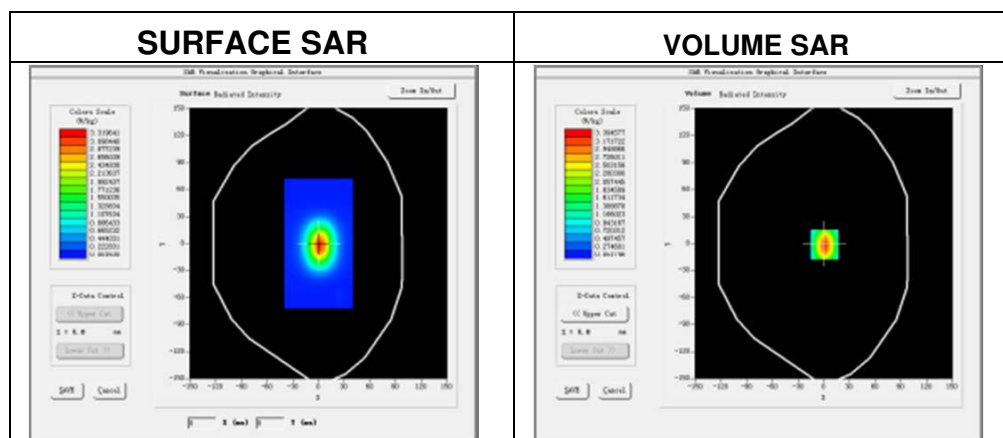
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2016-11-16

Measurement duration: 14 minutes 23 seconds

Experimental conditions.

Device Position	Validation plane
Band	2450 MHz
Channels	-
Signal	CW
Frequency (MHz)	2450
Relative permittivity (real part)	52.316002
Relative permittivity	12.930000
Conductivity (S/m)	1.92
Power drift (%)	-1.200000
Ambient Temperature	22.7°C
Liquid Temperature	22.3°C
Probe	SN 45/15 EPGO281
ConvF	2.28
Crest factor:	1:1

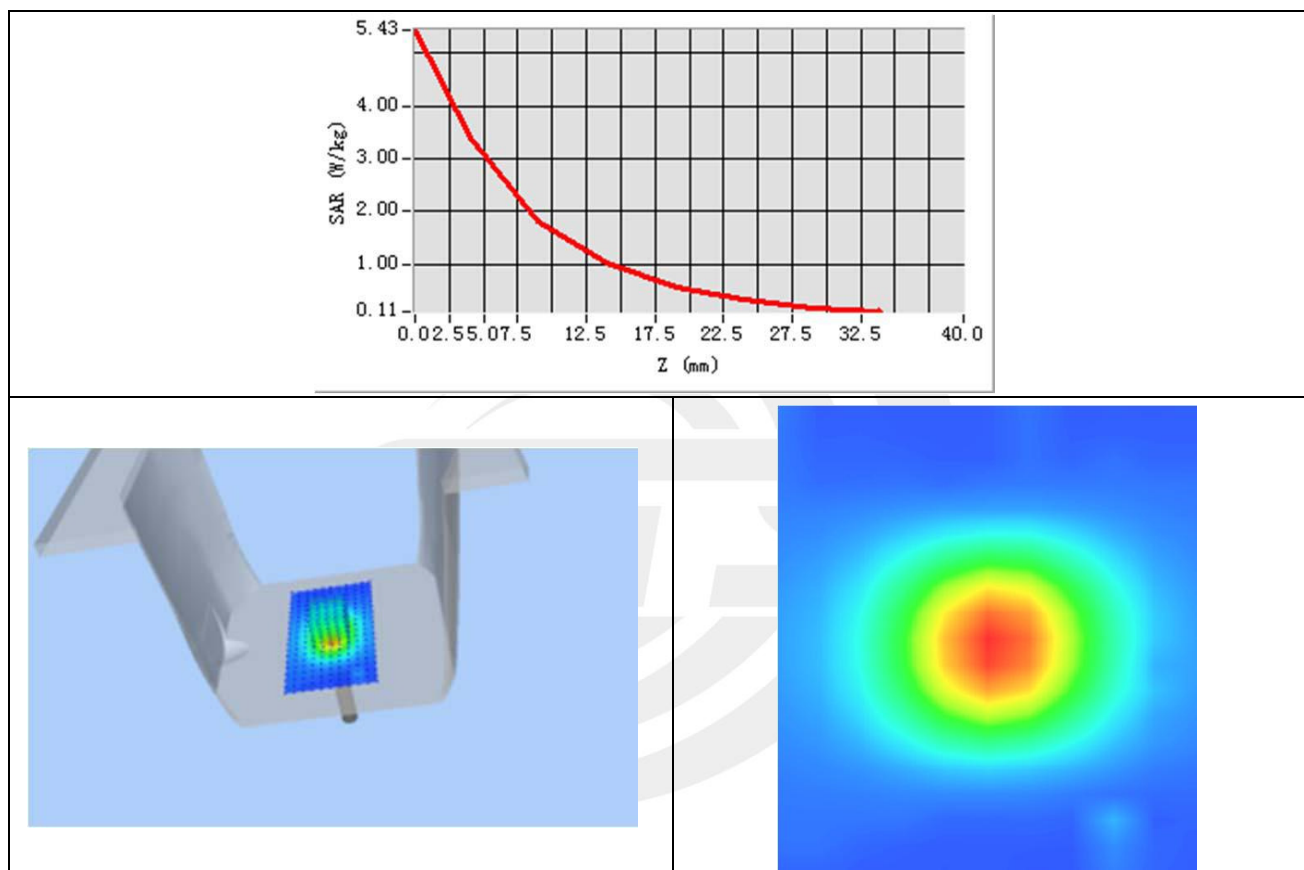




Maximum location: X=3.00, Y=1.00

SAR 10g (W/Kg)	2.338810
SAR 1g (W/Kg)	5.316861

Z Axis Scan



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

Type: Phone measurement (Complete)

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

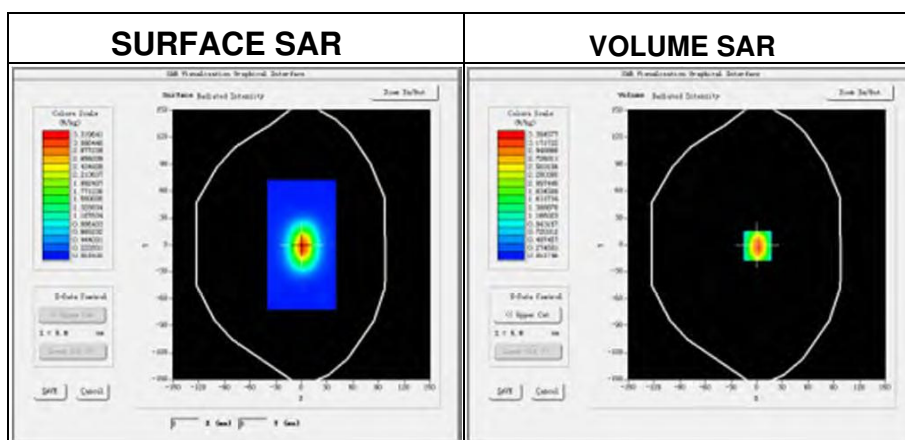
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2016-11-16

Measurement duration: 14 minutes 12 seconds

Experimental conditions.

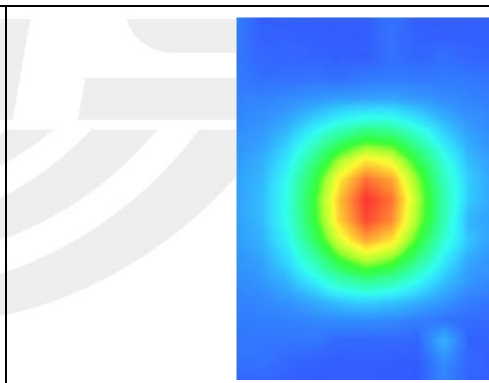
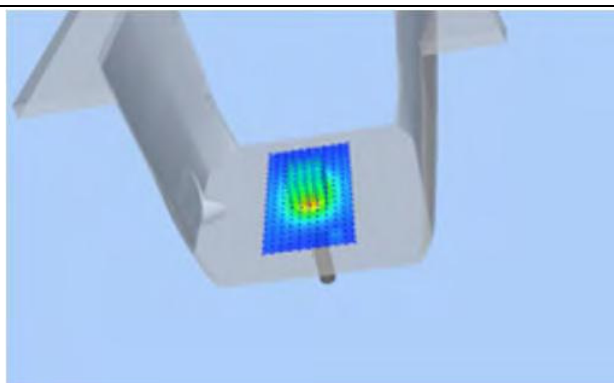
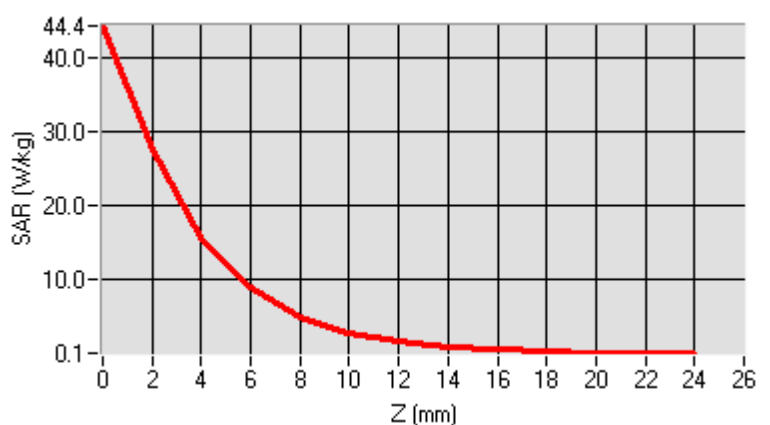
Probe	
Phantom	Validation plane
Device Position	-
Band	5200MHz
Channels	-
Signal	CW
Frequency (MHz)	5200MHz
Relative permittivity (real part)	49.00
Relative permittivity	23.251187
Conductivity (S/m)	5.30
Power drift (%)	1.020000
Ambient Temperature:	23.2°C
Liquid Temperature:	22.3°C
Probe	SN 45/15 EPGO281
ConvF:	1.59
Crest factor:	1:1



Maximum location: X=1.00, Y=0.00

SAR 10g (W/Kg)	7.576142
SAR 1g (W/Kg)	15.801325

Z Axis Scan



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

Type: Phone measurement (Complete)

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

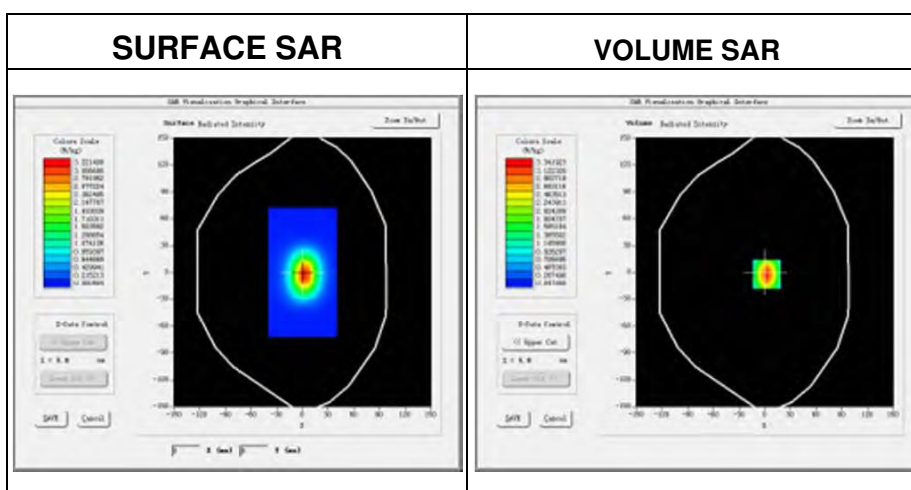
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2016-11-16

Measurement duration: 14 minutes 13 seconds

Experimental conditions.

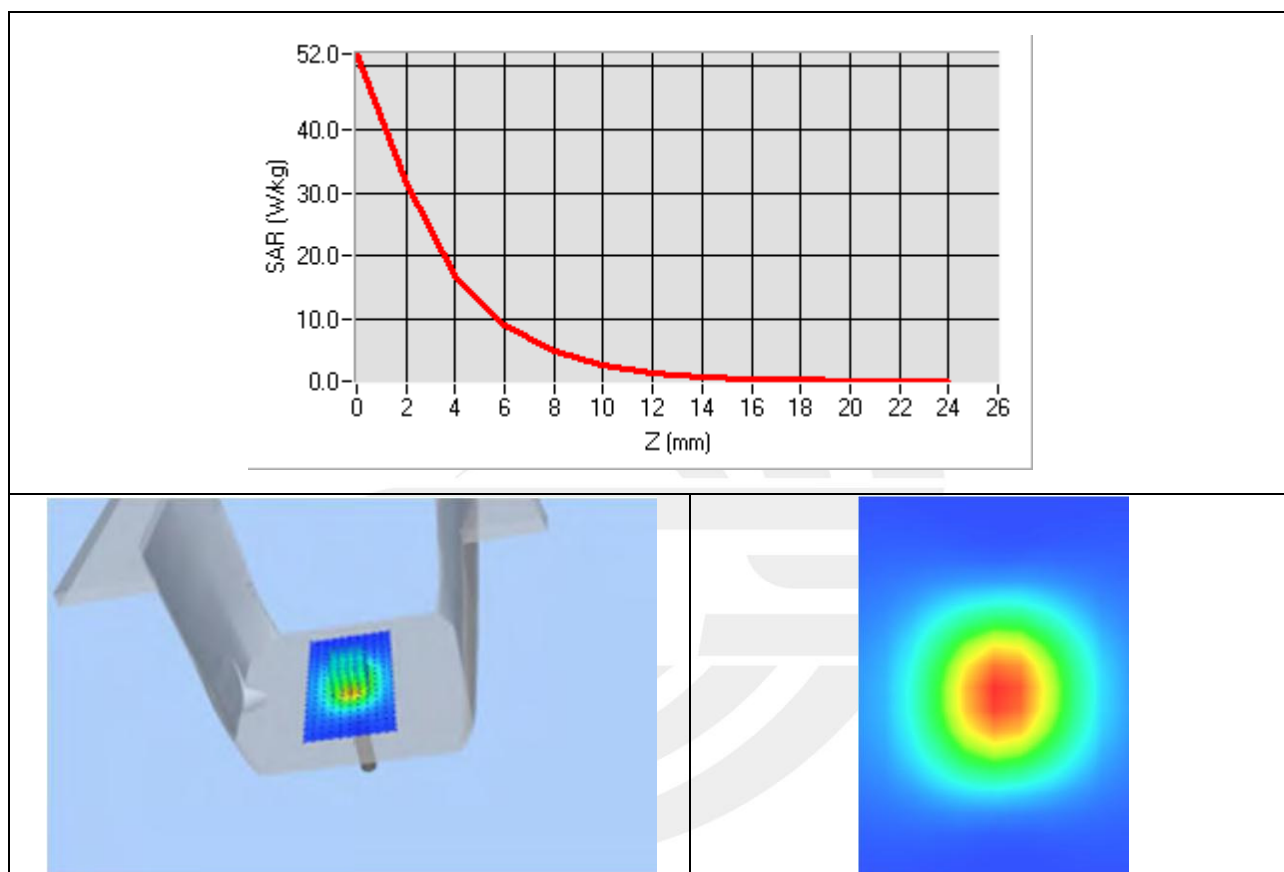
Probe	
Phantom	Validation plane
Device Position	-
Band	5600MHz
Channels	-
Signal	CW
Frequency (MHz)	5600MHz
Relative permittivity (real part)	48.50
Relative permittivity	21.408187
Conductivity (S/m)	5.77
Power drift (%)	0.090000
Ambient Temperature:	23.2°C
Liquid Temperature:	22.3°C
Probe	SN 45/15 EPGO281
ConvF:	1.85
Crest factor:	1:1



Maximum location: X=2.00, Y=2.00

SAR 10g (W/Kg)	8.603221
SAR 1g (W/Kg)	17.432458

Z Axis Scan



**System Performance Check Data(5800MHz Body)**

Type: Phone measurement (Complete)

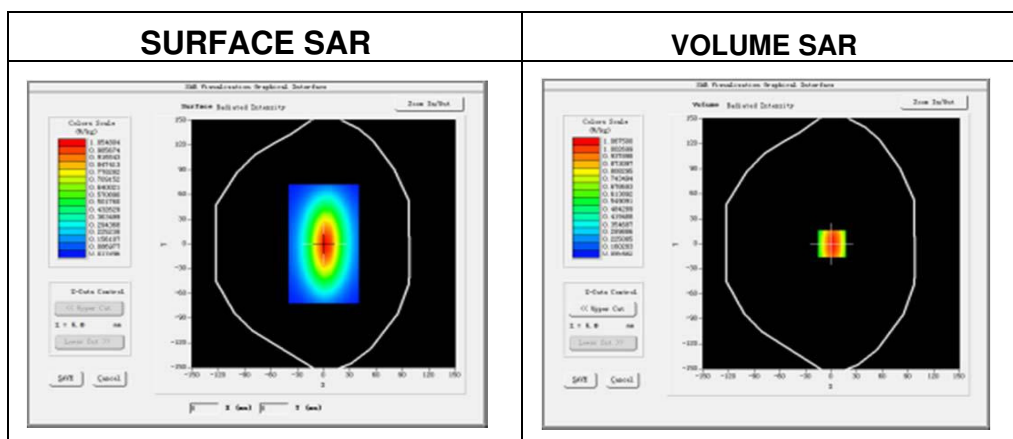
Area scan resolution: dx=8mm,dy=8mm

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

Date of measurement: 2016-11-16

Experimental conditions.

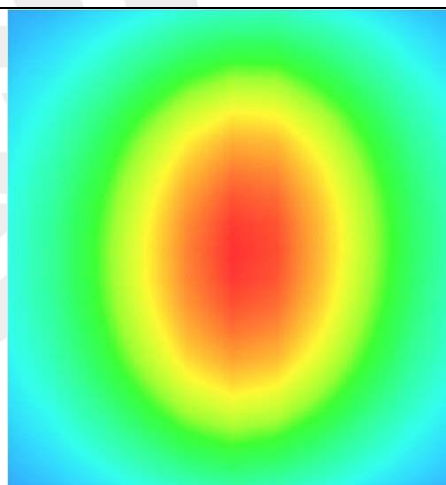
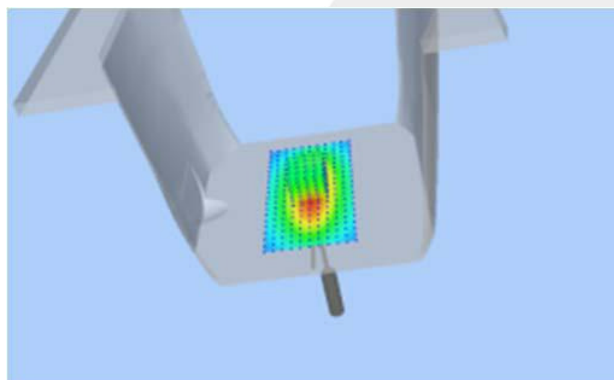
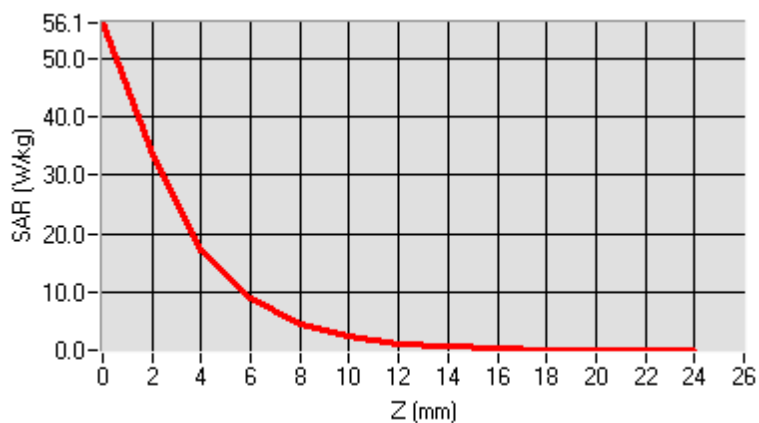
Phantom	Validation plane
Device Position	-
Band	5800MHz
Channels	-
Signal	CW
Frequency (MHz)	5800MHz
Relative permittivity (real part)	48.20
Relative permittivity	15.08356
Conductivity (S/m)	6.00
Power drift (%)	2.351
Ambient Temperature	23.2°C
Liquid Temperature	22.3°C
Probe	SN 45/15 EPGO281
ConvF	1.87
Crest factor:	1:1



Maximum location: X=6.00, Y=2.00

SAR 10g (W/Kg)	8.98768
SAR 1g (W/Kg)	18.56217

Z Axis Scan



Appendix B. SAR Test Plots

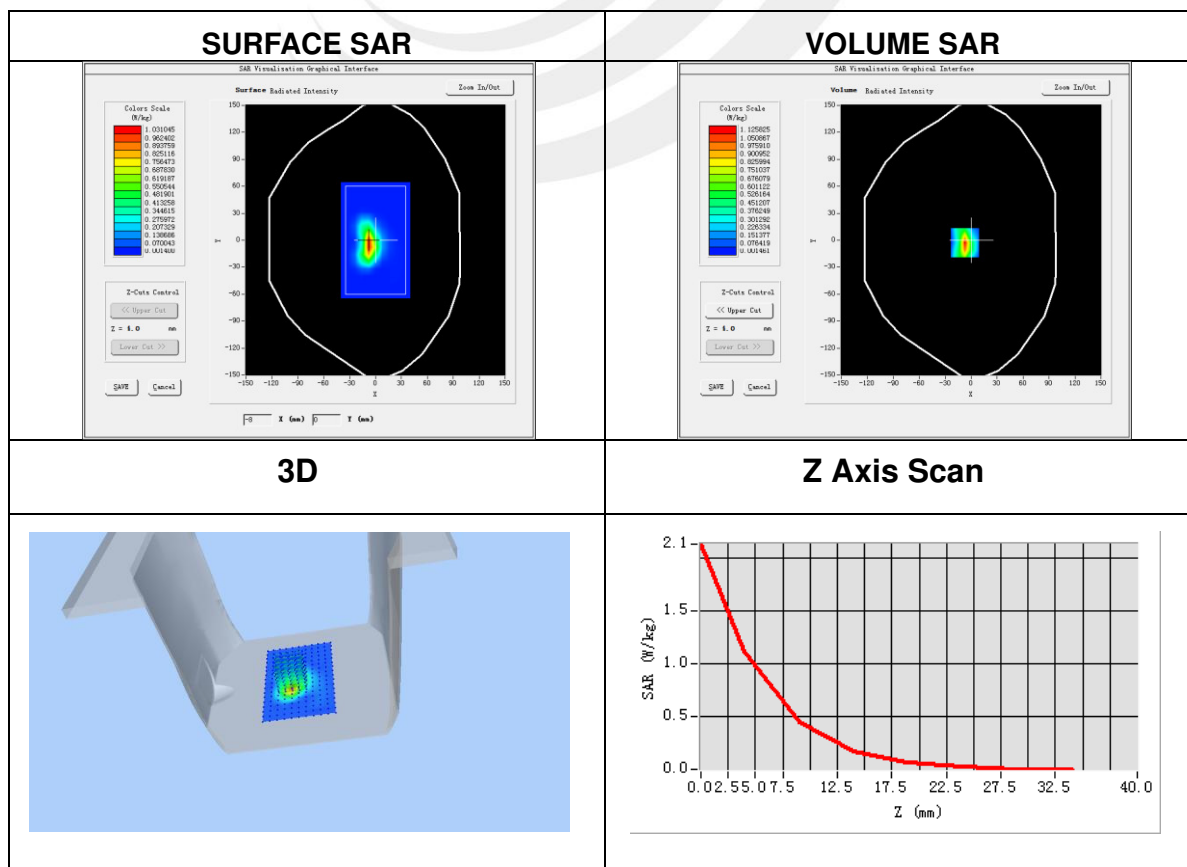
Plot 1: DUT: Tablet PC; EUT Model: NTMC17

Test Date	2016-11-16
Probe	SN 45/15 EPGO281
ConvF	2.28
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 Front side
Band	IEEE 802.11b ISM
Channels	Middle
Signal	IEEE802.b (Crest factor: 1.0)
Frequency (MHz)	2437
Relative permittivity (real part)	52.40
Conductivity (S/m)	1.94
Variation (%)	-0.07

Maximum location: X=-7.00, Y=-3.00

SAR Peak: 2.11 W/kg

SAR 10g (W/Kg)	0.353629
SAR 1g (W/Kg)	0.972979





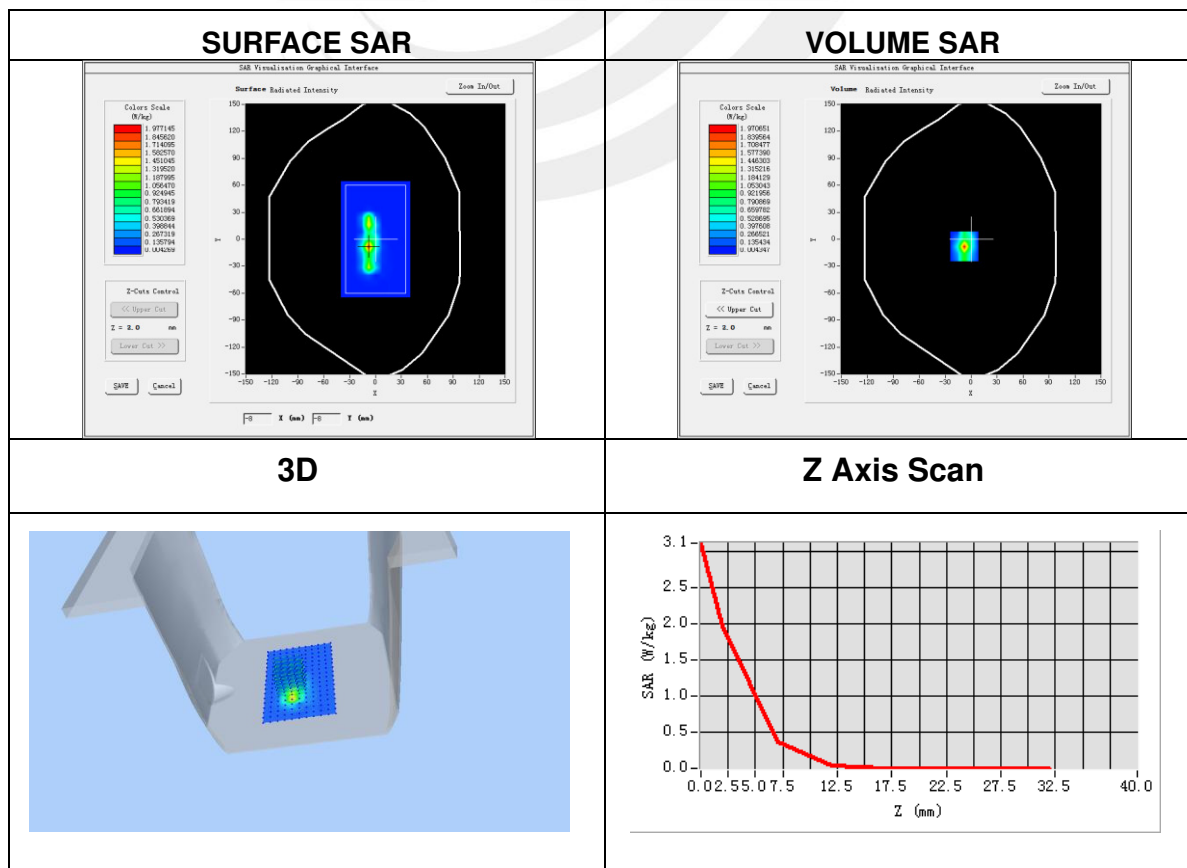
Plot 2: DUT: Tablet PC; EUT Model: NTMC17

Test Date	2016-11-16
Probe	SN 45/15 EPGO281
ConvF	2.28
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 Front side
Band	IEEE 802.11a U-NII
Channels	Low
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5180
Relative permittivity (real part)	49.0
Conductivity (S/m)	5.30
Variation (%)	-0.62

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

SAR Peak: 3.25 W/kg

SAR 10g (W/Kg)	0.237406
SAR 1g (W/Kg)	1.011208



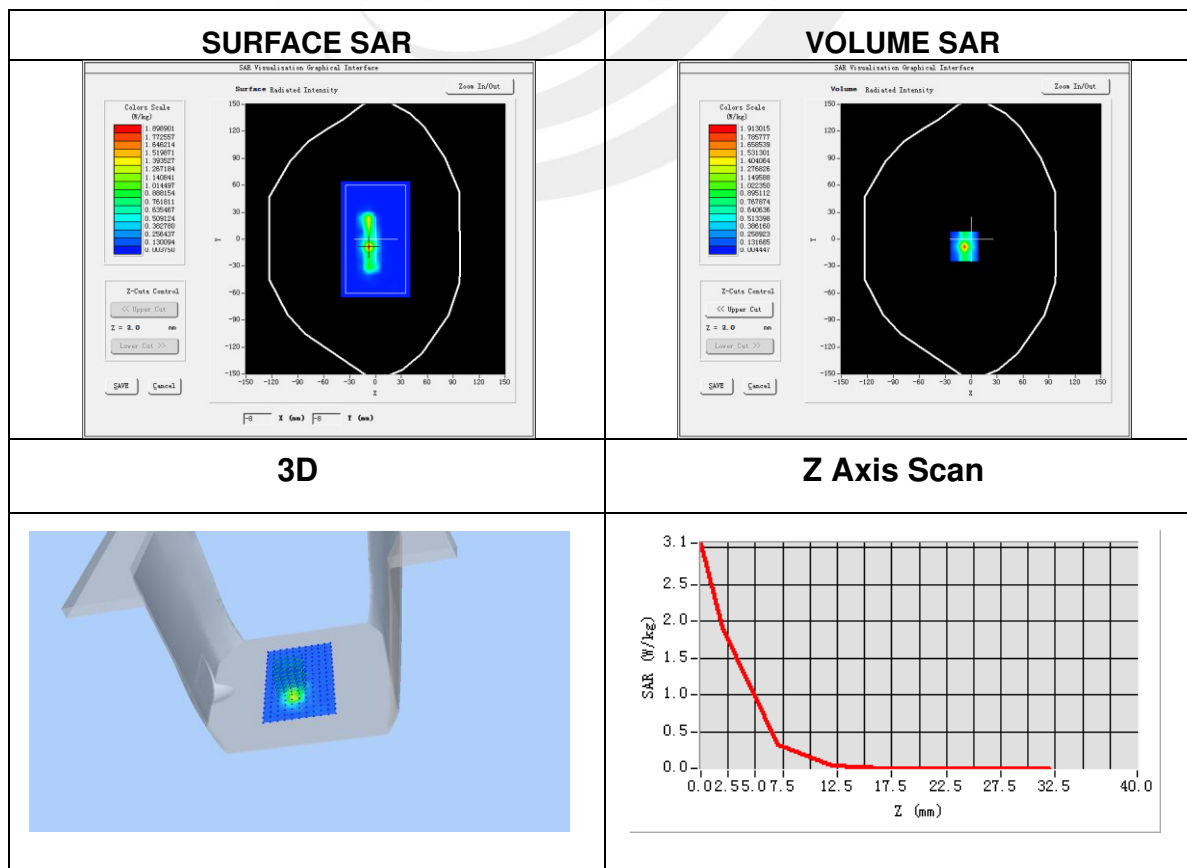

Plot 3: DUT: Tablet PC; EUT Model: NTMC17

Test Date	2016-11-16
Probe	SN 45/15 EPGO281
ConvF	2.28
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 Front side
Band	IEEE 802.11n U-NII
Channels	High
Signal	IEEE802.n (Crest factor: 1.0)
Frequency (MHz)	5320
Relative permittivity (real part)	48.9
Conductivity (S/m)	5.42
Variation (%)	-3.04

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

SAR Peak: 3.19 W/kg

SAR 10g (W/Kg)	0.212775
SAR 1g (W/Kg)	0.955110



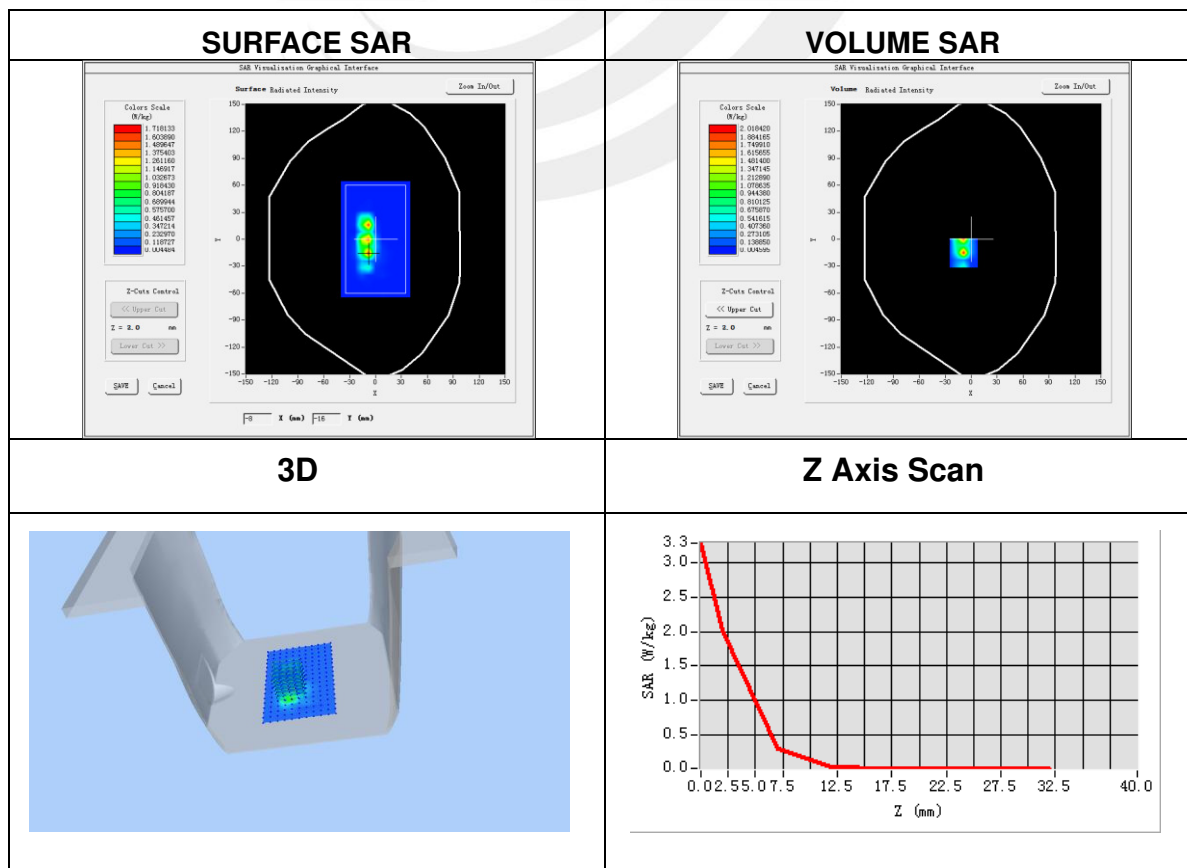

Plot 4: DUT: Tablet PC; EUT Model: NTMC17

Test Date	2016-11-16
Probe	SN 45/15 EPGO281
ConvF	2.28
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 Front side
Band	IEEE 802.11a ISM
Channels	Low
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5500
Relative permittivity (real part)	48.6
Conductivity (S/m)	5.65
Variation (%)	-1.34

Maximum location: X=-9.00, Y=-15.00

SAR Peak: 3.51 W/kg

SAR 10g (W/Kg)	0.225307
SAR 1g (W/Kg)	0.835900



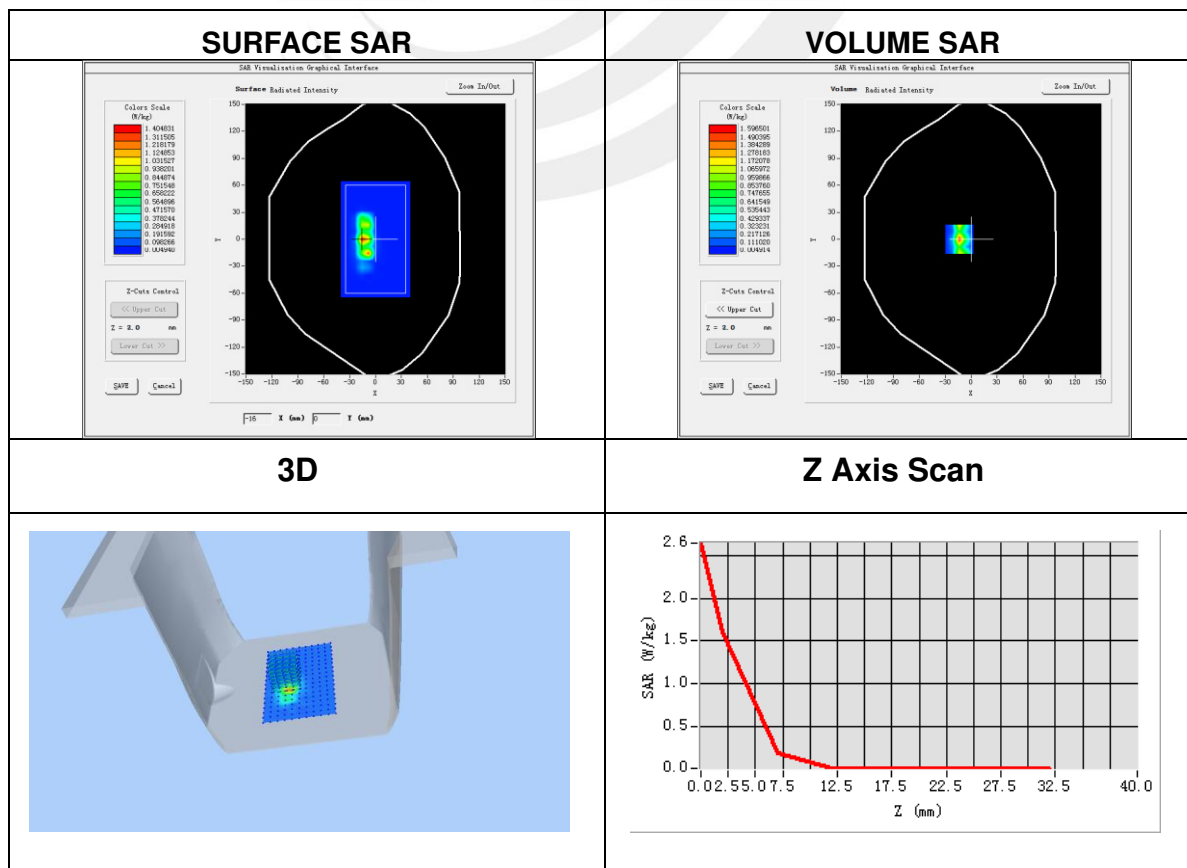

Plot 5: DUT: Tablet PC; EUT Model: NTMC17

Test Date	2016-11-16
Probe	SN 45/15 EPGO281
ConvF	2.28
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 Front side
Band	IEEE 802.11 a U-NII
Channels	High
Signal	IEEE802.a (Crest factor: 1.0)
Frequency (MHz)	5825
Relative permittivity (real part)	48.2
Conductivity (S/m)	6.00
Variation (%)	-2.87

Maximum location: X=-14.00, Y=0.00

SAR Peak: 2.80 W/kg

SAR 10g (W/Kg)	0.182973
SAR 1g (W/Kg)	0.822403





Appendix C. Probe Calibration And Dipole Calibration Report

Refer the appendix Calibration Report.

※※※※END OF THE REPORT※※※※

