FCC SAR TEST REPORT

Report No: STS1501042H01

Issued for

RM ACQUISITIONS LLC

9855 Woods Drive Skokie. IL 60077 U.S.A

Product Name:	RoadExplorer 70
Brand Name:	Rand Mcnally
Model No.:	RET70,TNDT70
Series Model:	N/A
FCC ID:	A4C10008A
Test Standard:	ANSI/IEEE Std. C95.1
	FCC 47 CFR Part 2 (2.1093)
	IEEE 1528: 2013
Max. SAR (1g):	Body:0.353 W/kg

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Test Report Certification

Applicant's name	:	RM ACQUISITIONS LLC
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Manufacture's Name	:	Apical Technology Research（shenzhen）Co., Ltd
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Product description

Product name	:	RoadExplorer 70
Trademark	:	Rand Mcnally
Model and/or type reference	:	RET70,TNDT70
Serial Model：		N/A
Standards	:	ANSI/IEEE Std. C95.1-1992 FCC 47 CFR Part 2 (2.1093) IEEE 1528: 2003

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.

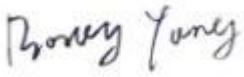
Date of Test	:	
Date (s) of performance of tests	:	22 Jan. 2015
Date of Issue	:	23 Jan. 2015
Test Result	:	**Pass**

Testing Engineer **:** 

(Tony Liu)

Technical Manager **:** 

(Vita Li)

Authorized Signatory **:** 

(Bovey Yang)

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1. General Information

1.1 EUT Description

Equipment	RoadExplorer 70
Brand Name	Rand Mcnally
Model No.	RET70,TNDT70
Serial Model	N/A
FCC ID	A4C10008A
Model Difference	N/A
Adapter	Input: AC100-240V, 0.5 A, 50/60 Hz Output: DC 5V, 2A
Battery	Rated Voltage: 3.7V Charge Limit: 4.2V Capacity: 4000mAh
Hardware Version	N/A
Software Version	N/A
Frequency Range	IEEE 802.11b/g/ n 20: 2412MHz to 2472 MHz IEEE 802.11n40: 2422MHz to 2462 MHz
Transmit Power(Average):	IEEE 802.11b: 14.78 dBm ;IEEE 802.11g: 11.42 dBm IEEE 802.11n20: 9.85 dBm ; IEEE 802.11n40: 10.99 dBm
Max. Reported SAR(1g):	Body: 802.11b:0.353 W/kg
Operating Mode:	Maximum continuous output
Antenna Specification:	WIFI: PIFA Antenna
Test Mode:	Maximum continuous output
Hotspot Mode:	Support
DTM Mode:	Not Support

1.2 Test Environment

Ambient conditions in the SAR laboratory:

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

1.3 Test Facility

Shenzhen STS Test Services Co., Ltd.
Add. : 1/F, Building 2, Zhuoke Science Park, Chongqing Road, Fuyong, Baoan District, Shenzhen, China
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. 1528-2003	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 v05r02	Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies
5	FCC KDB 865664 D01 v01r03	SAR Measurement 100 MHz to 6 GHz
6	FCC KDB 865664 D01 v01r03	SAR Measurement 100 MHz to 6 GHz
7	FCC KDB 941225 D01	SAR Measurement Procedures for 3G Devices
8	FCC KDB 248227 D01	SAR Measurement Procedures for 802.11 a/b/g Transmitters

This device belongs to portable device category because its radiating structure is allowed to be used within 20 centimeters of the body of the user. According to EN 50360 and 1999/519/EC the limit for General Population/Uncontrolled exposure should be applied for this device, it is 2.0 W/kg as averaged over any 10 gram of tissue.

(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 10 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:

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

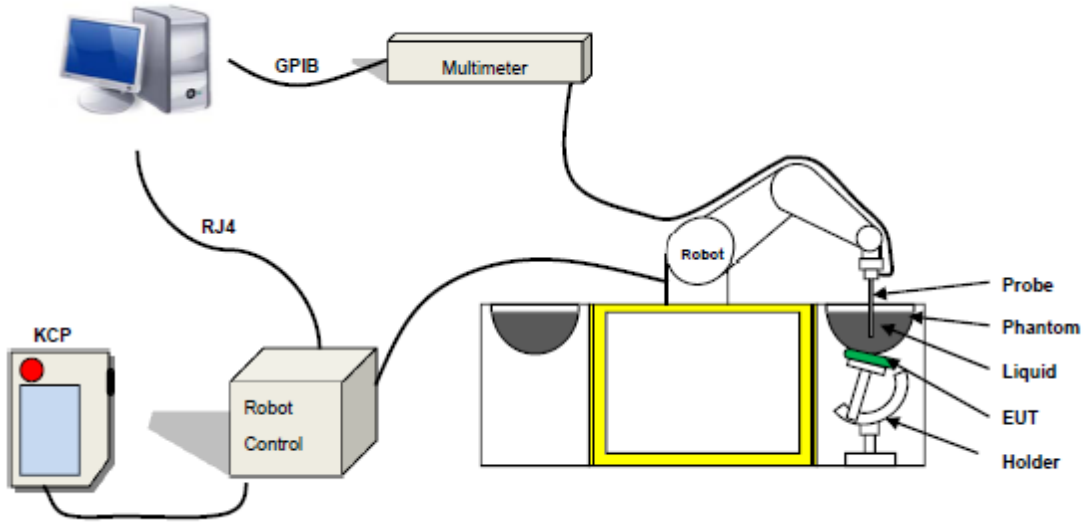
SAR is expressed in units of Watts per kilogram (W/kg) SAR measurement can be related to the electrical field in the tissue by

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

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 17/14 EP221 with following specifications is used

- Dynamic range: 0.01-100 W/kg
- Tip Diameter :5 mm
- Distance between probe tip and sensor center: 2.7mm
- Distance between sensor center and the inner phantom surface: 4 mm (repeatability better than +/- 1mm)
- Probe linearity: ＜0.25 dB
- Axial Isotropy: ＜0.25 dB
- Spherical Isotropy: ＜0.25 dB
- Calibration range: 450MHz to 2600MHz for head & body simulating liquid.

Angle between probe axis (evaluation axis) and suface normal line:less than 30°

Figure 1 – *Satimo COMOSAR Dosimetric E field Dipole*

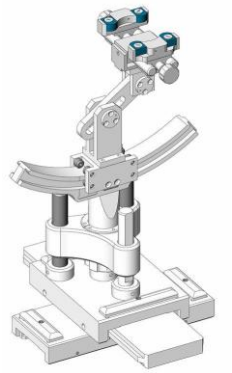
3.2.2 Phantom

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 ± 0.5 mm would produce a SAR uncertainty of ± 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. 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.

LIQUID MEASUREMENT RESULTS

Date: January. 22, 2015 **Ambient condition:** Temperature 22.7°C **Relative humidity:** 49%

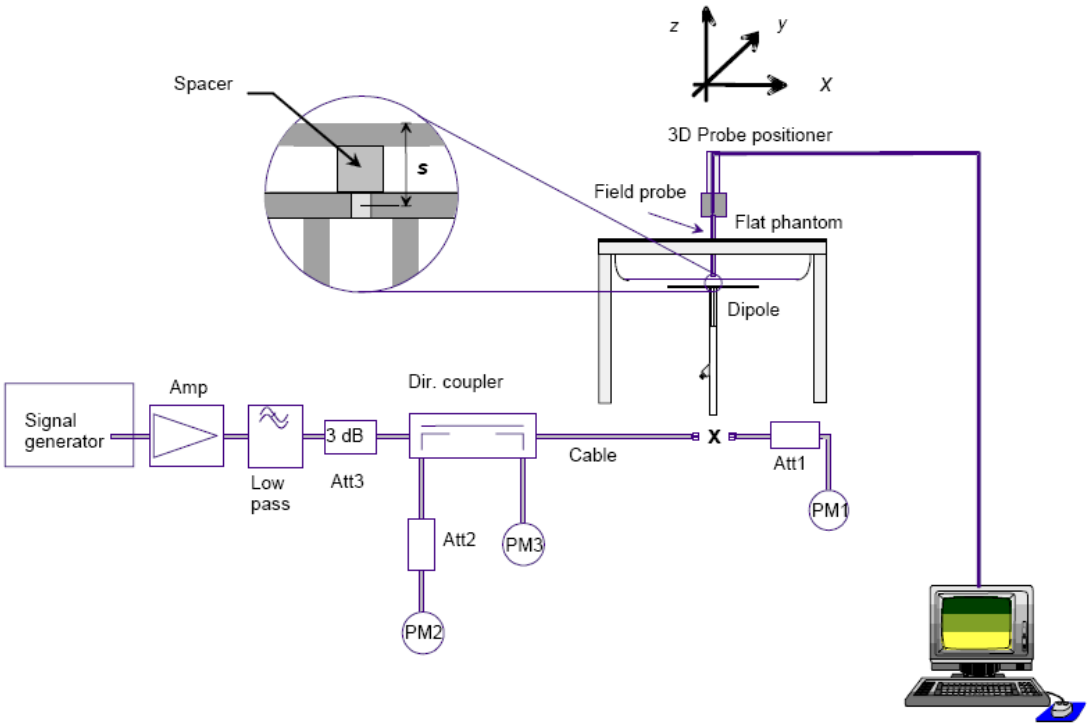
Body Simulating Liquid		Parameters	Target	Measured	Deviation[%]	Limited[%]
Frequency	Temp. [°C]					
2450 MHz	22.30	Permitivity :	52.7	51.2	-2.9	± 5
		Conductivity:	1.95	1.95	0.0	± 5

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)	SAR^{1g} Tested Value (W/Kg)	Normalized SAR^{1g} (W/kg)	Dipole SAR^{1g} (W/kg)	Tolerance (%)	Date
2450 Body	100	5.123	51.23	55.65	-7.94	2015-1-22

Note:

The tolerance limit of System validation ±10%.

6. SAR Evaluation Procedures

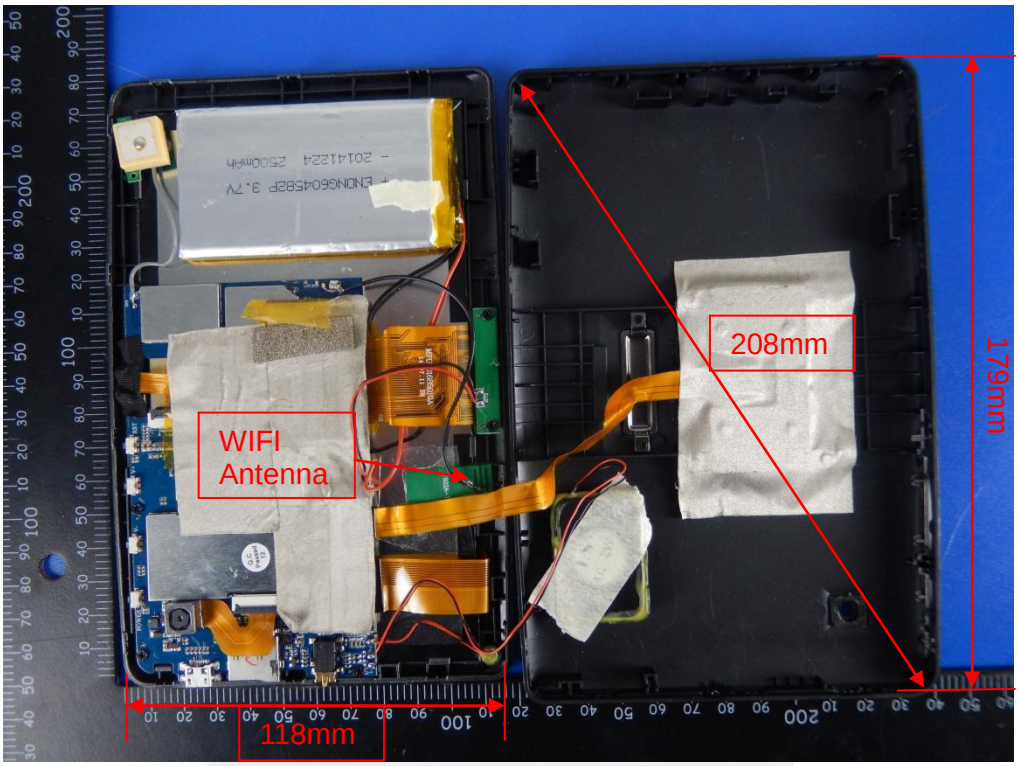
The procedure for assessing the average SAR value consists of the following steps:
The following steps are used for each test position

- 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 to16 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



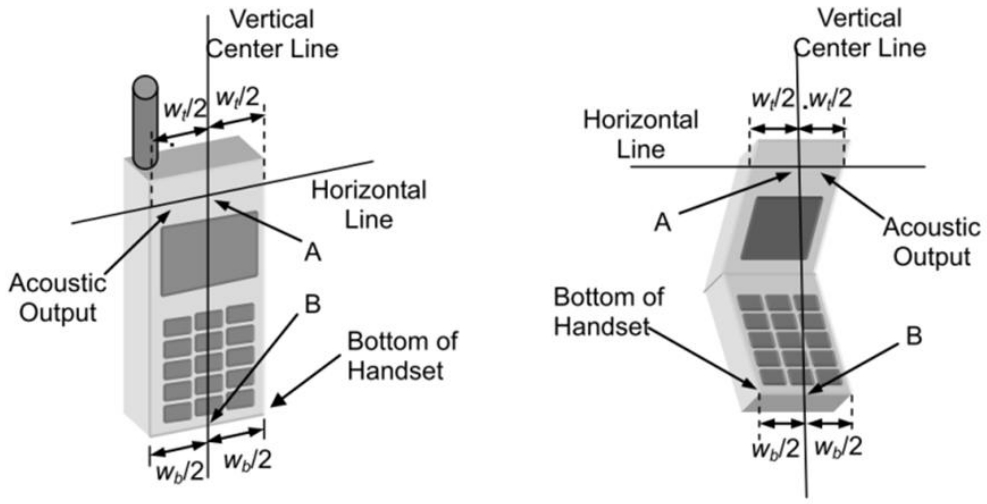
The diagonal dimension is about 208 mm, So test distance is 0mm.

8. EUT Test Position

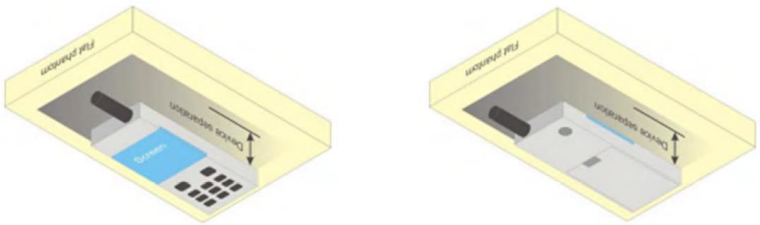
This EUT was tested in Front side, Back side, Lift side, Right side, Top side, and Bottom side.

8.1 Define Two Imaginary Lines On The Handset

(1)The vertical centerline passes through two points on the front side of the handset the midpoint of the width wt of the handset at the level of the acoustic output, and the midpoint of the width wb of the handset.
(2)The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output. The horizontal line is also tangential to the face of the handset at point A.
(3)The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centerline is not necessarily to the front face of the handset, especially for clamshell handsets, handsets with flip covers, and other irregularly shaped handsets.

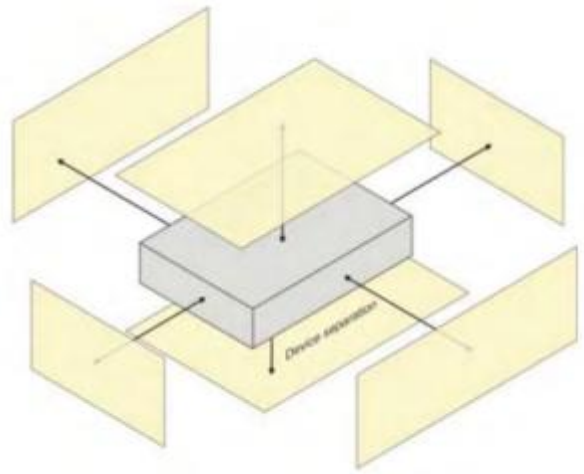


Body-worn Position Conditions
(1) To position the EUT parallel to the phantom surface.
(2) To adjust the EUT parallel to the flat phantom.
(3) To adjust the distance between the EUT surface and the flat phantom to 5mm.



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 form 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. 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	√3	$(1\text{-cp})^{1/2}$	$(1\text{-cp})^{1/2}$	1.43	1.43	∞
3	Hemispherical isotropy	5.9	R	√3	$\sqrt{C_p}$	$\sqrt{C_p}$	2.41	2.41	∞
4	Boundary effect	1.0	R	√3	1	1	0.58	0.58	∞
5	Linearity	4.7	R	√3	1	1	2.71	2.71	∞
6	System Detection limits	1.0	R	√3	1	1	0.58	0.58	∞
7	Probe modulation response uncertainty	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	√3	1	1	0	0	∞
10	Integration time	1.4	R	√3	1	1	0.81	0.81	∞
11	Ambient noise	3.0	R	√3	1	1	1.73	1.73	∞
12	Ambient reflections	3.0	R	√3	1	1	1.73	1.73	∞
13	Probe positioner mech. restrictions	1.4	R	√3	1	1	0.81	0.81	∞
14	Probe positioning with respect to phantom shell	1.4	R	√3	1	1	0.81	0.81	∞
15	Max.SAR evaluation	1.0	R	√3	1	1	0.6	0.6	∞

Test sample related									
16	Device positioning	2.6	N	1	1	1	2.6	2.6	11
17	Device holder	3	N	1	1	1	3.0	3.0	7
18	Drift of output power	5.0	R	√3	1	1	2.89	2.89	∞
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 permittivity and conductivity)	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 conductivity (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	$U_C = \sqrt{\sum_{i=1}^{n} C_i^2 U_i^2}$			10.63%	10.54%	
Expanded uncertainty (P=95%)		$U = k\ U_C$,k=2					21.26%	21.08%	

10. Conducted Power Measurement

WIFI 2.4G power

Mode	Channel Number	Frequency (MHz)	Average EIRP Power (dBm)
802.11b	1	2412	14.44
	6	2437	14.78
	11	2462	14.77
802.11g	1	2412	10.35
	6	2437	11.42
	11	2462	10.79
802.11n(HT-20)	1	2412	9.57
	6	2437	9.67
	11	2462	9.85
802.11n(HT-40)	3	2422	10.99
	6	2437	10.81
	9	2452	10.87

Bluetooth Conducted output power

V 3.0

Mode	Channel Number	Frequency (MHz)	Average EIRP Power (dBm)
1M	0	2402	1.37
	39	2441	1.68
	78	2480	1.39
2M	0	2402	0.80
	39	2441	0.90
	78	2480	1.04
3M	0	2402	0.53
	39	2441	0.59
	78	2480	0.51

V 4.0

Mode	Channel Number	Frequency (MHz)	Average EIRP Power (dBm)
GFSK	0	2402	-1.32
	19	2441	-1.25
	39	2480	-1.51

Turn Power

Wifi:

Mode	WIFI
IEEE 802.11b	14±1dBm
IEEE 802.11g	11±1dBm
IEEE 802.11n HT20	9±1dBm
IEEE 802.11n HT40	10±1dBm

BT 3.0:

Mode	BT
GFSK	1±1dBm
π/4-DQPSK	1±0.5dBm
8DPSK	0.5±0.5dBm

BT 4.0

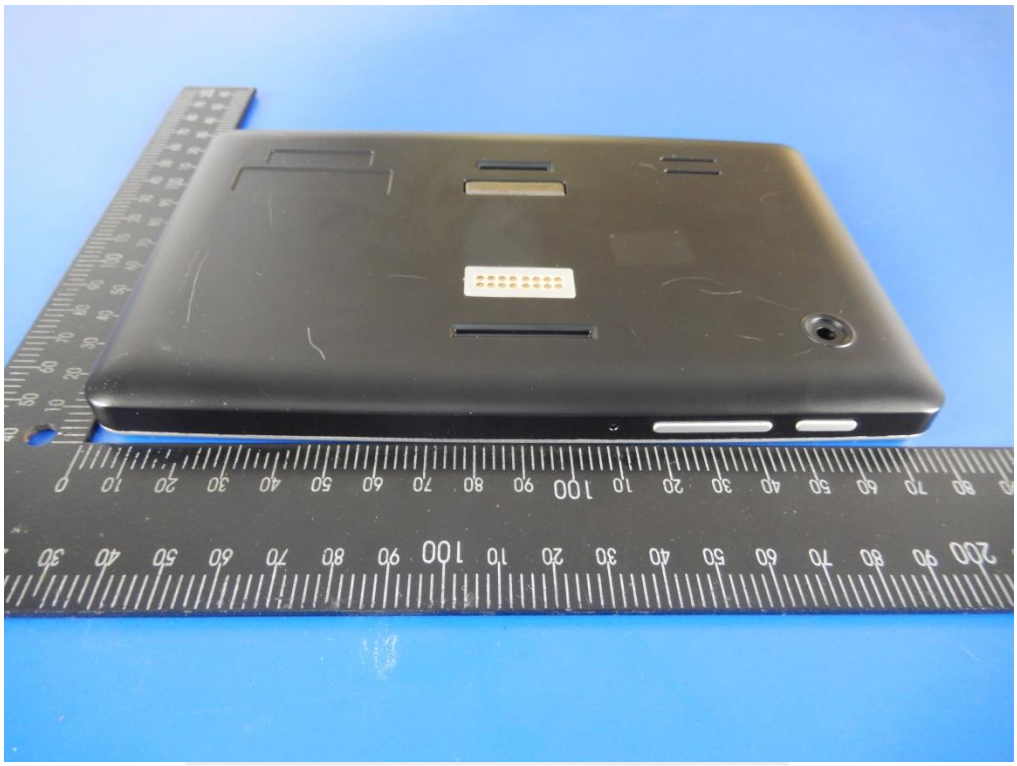
Mode	BT
GFSK	-1±1dBm

11. EUT And Test Setup Photo

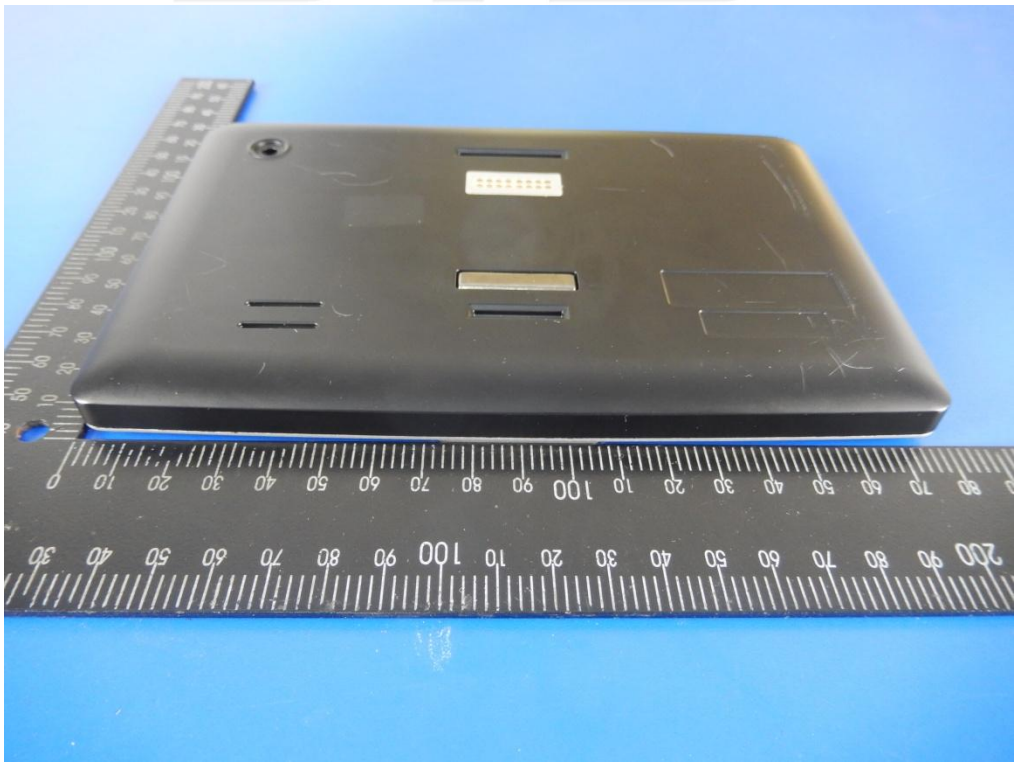
11.1 EUT Photo

Front side

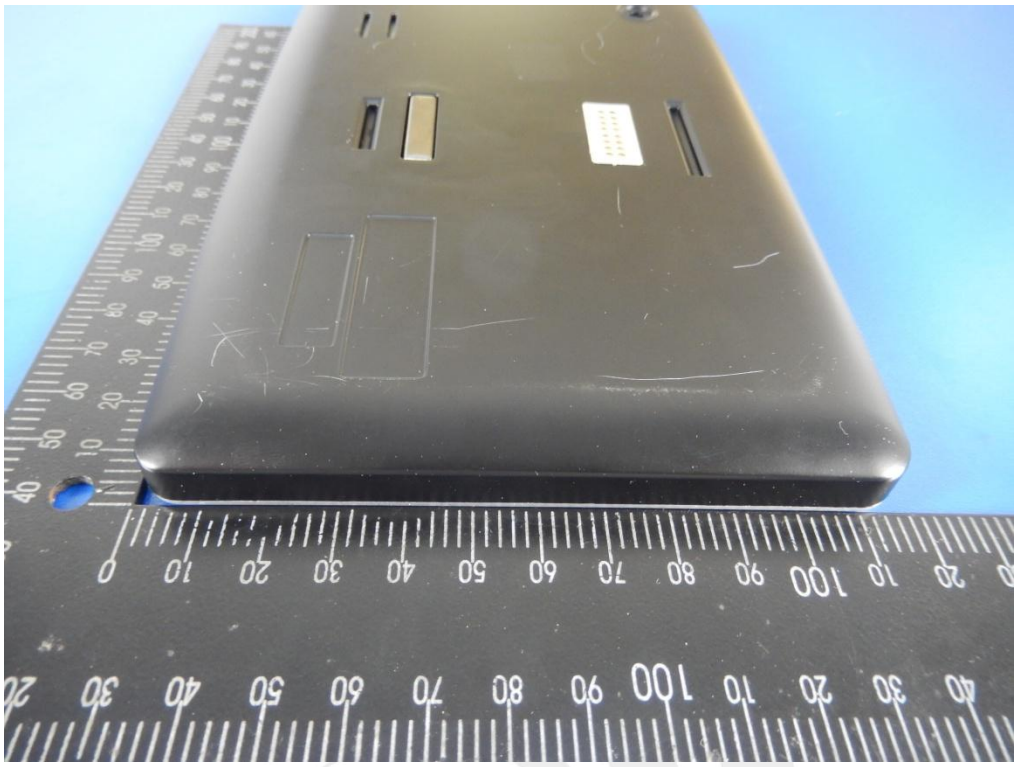
Back side



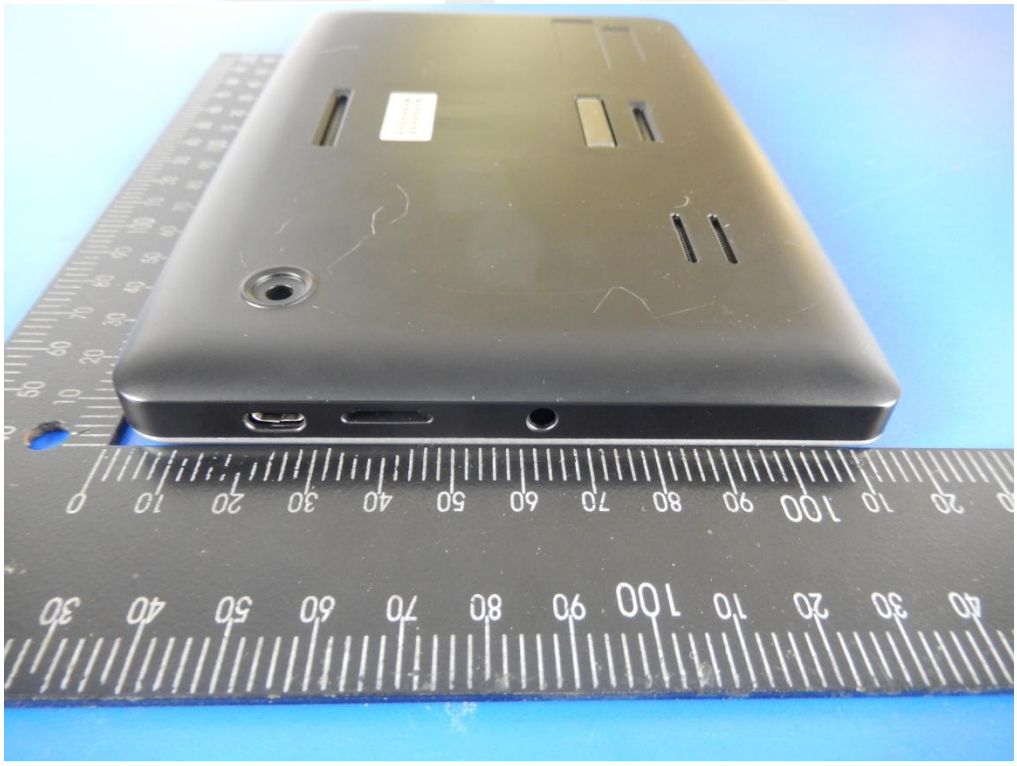
Top side



Bottom side



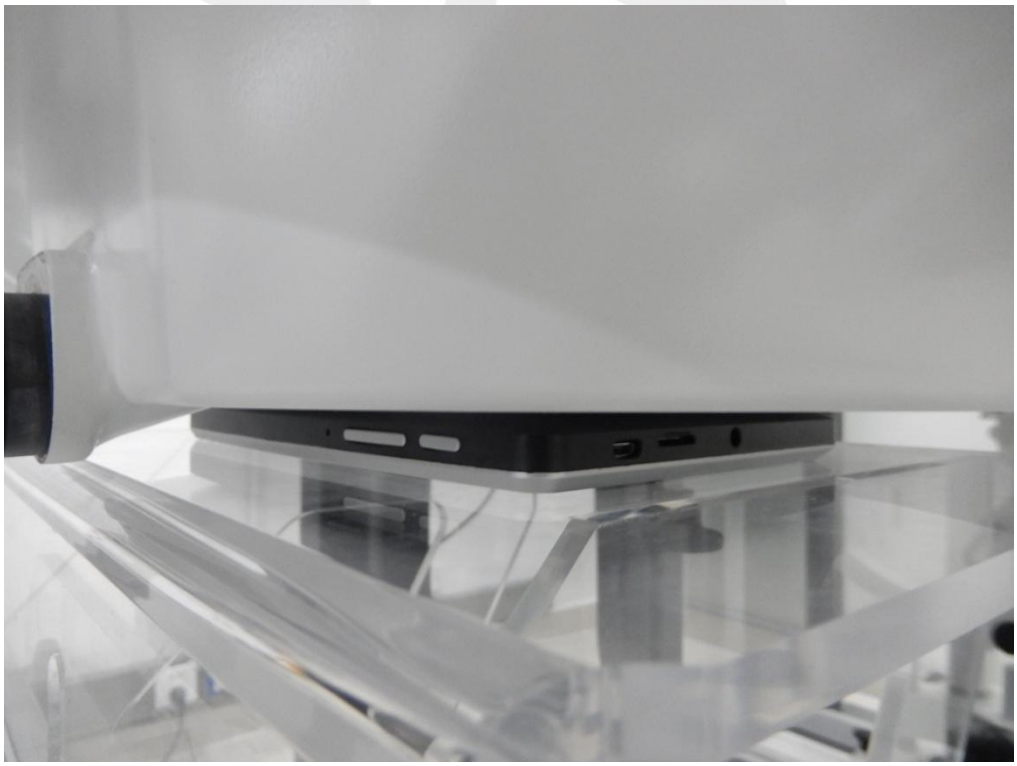
Left side



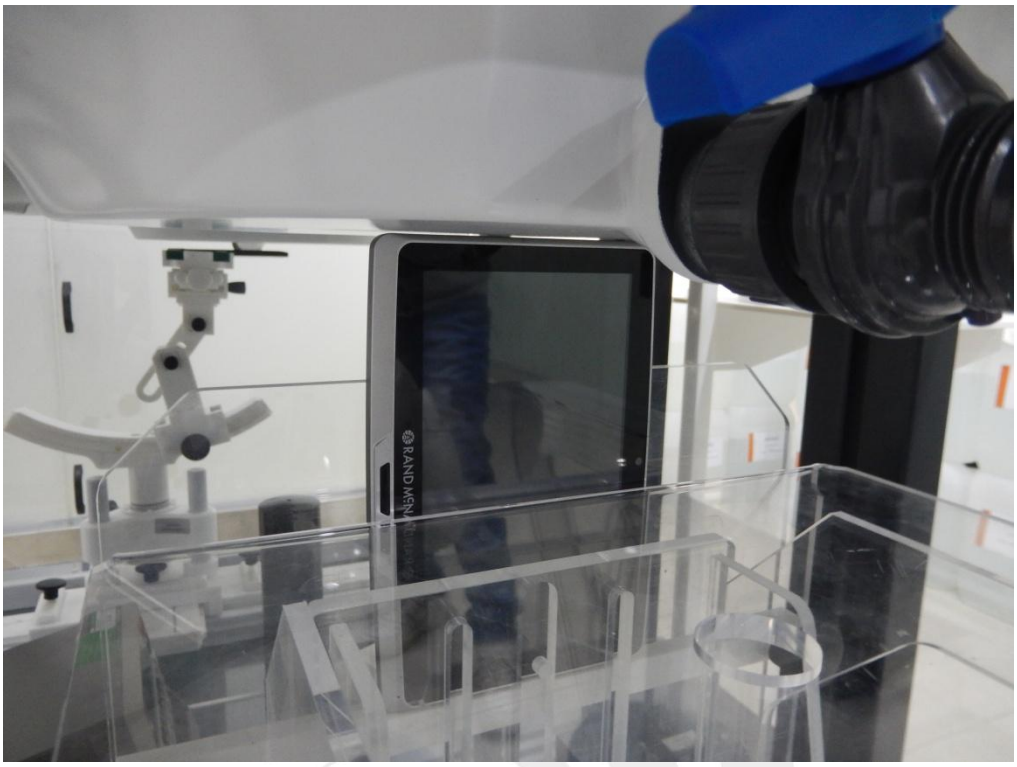
Right side

11.2 Setup Photo

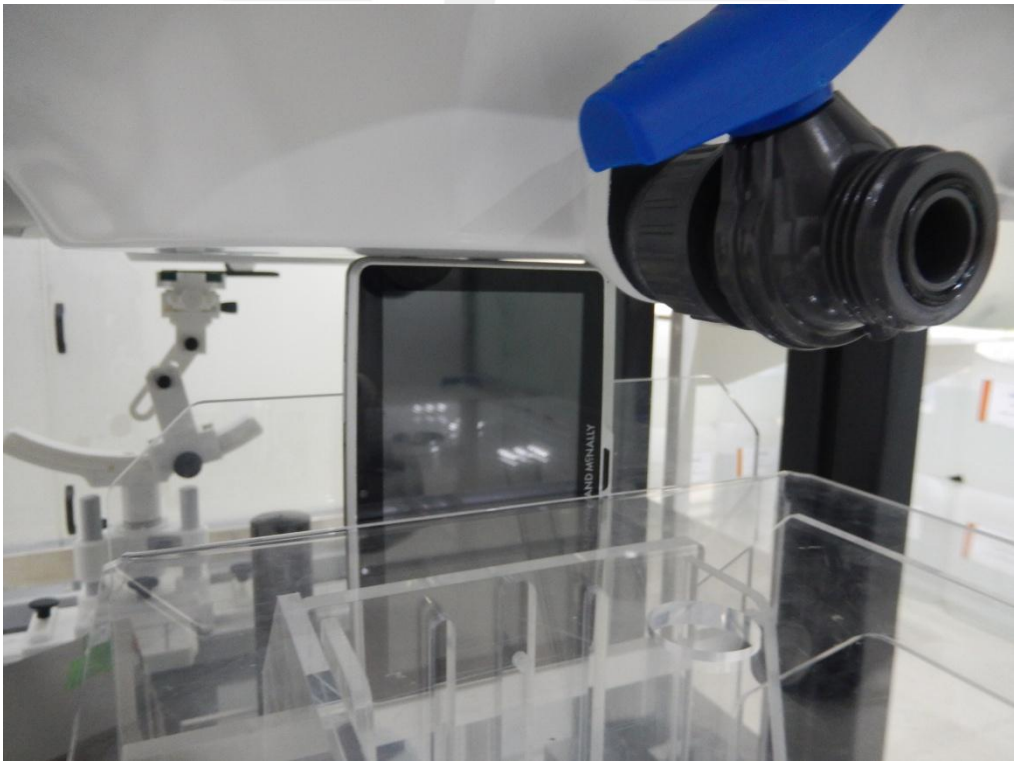
Front side



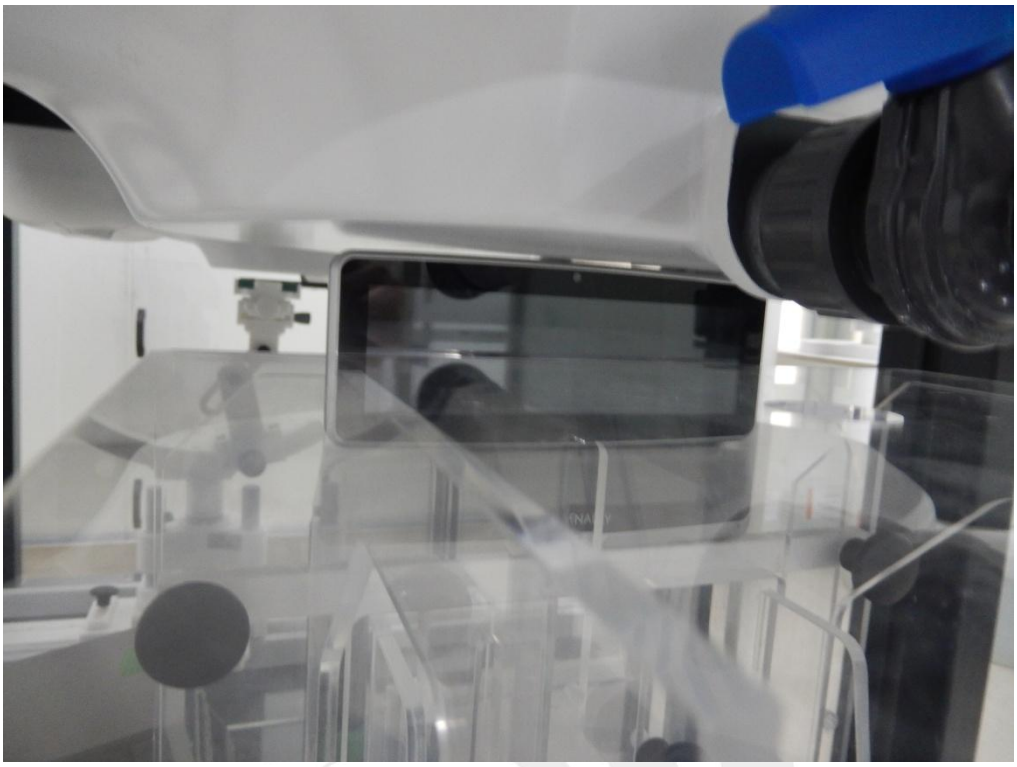
Back side



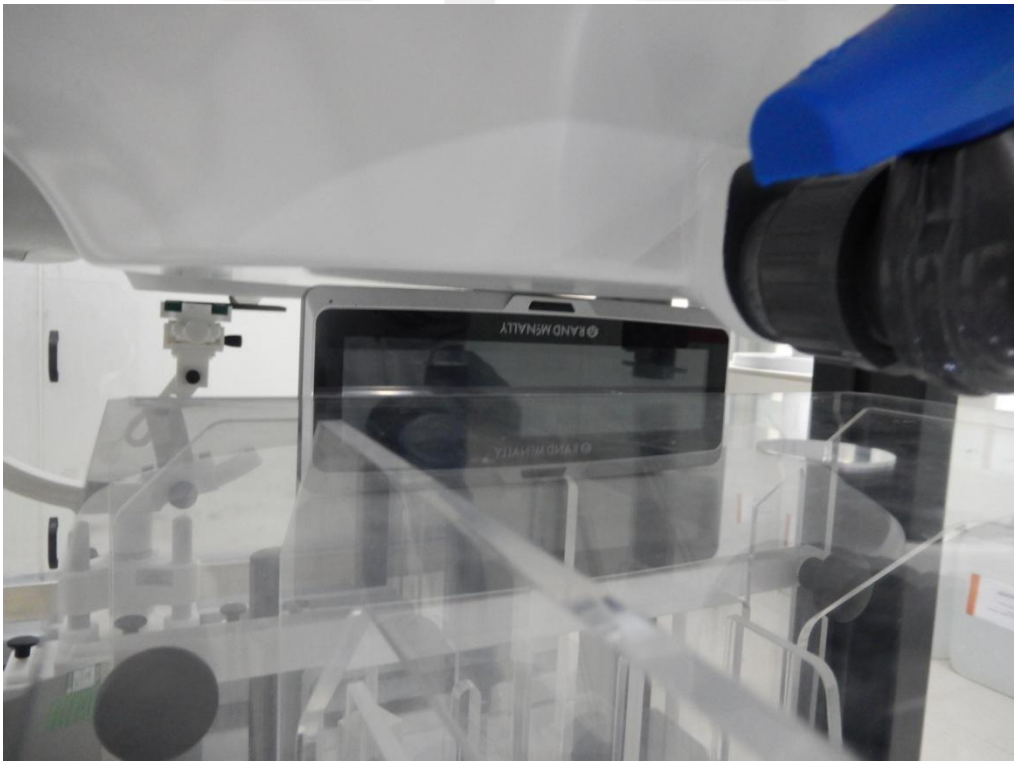
Left side



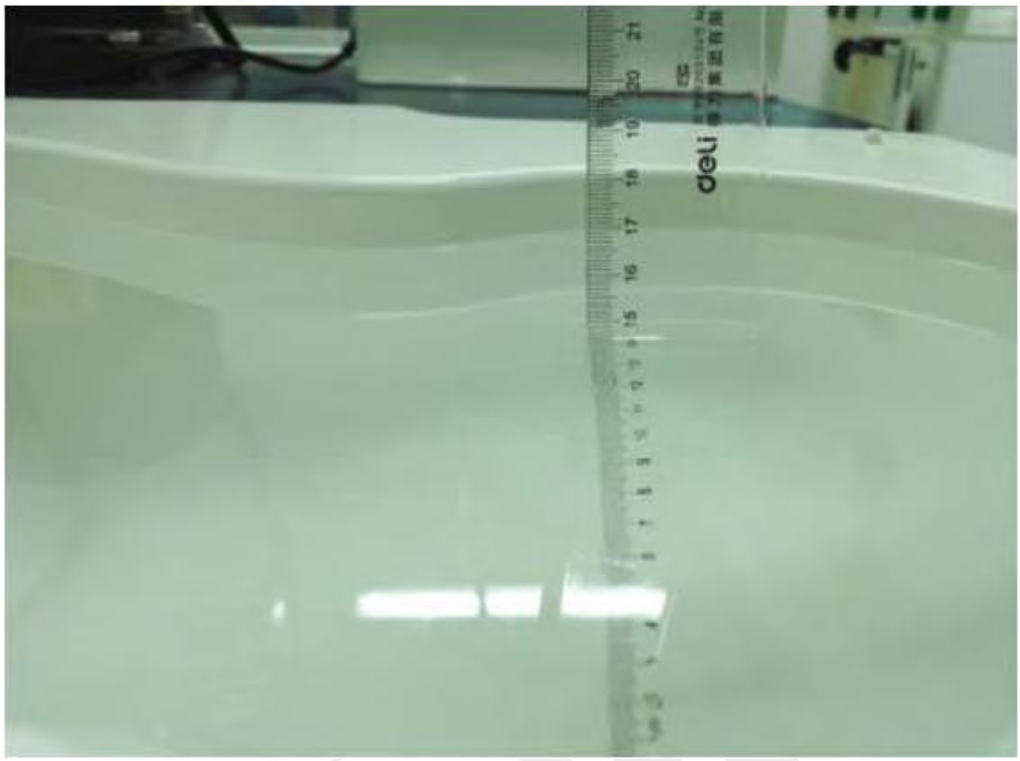
Right side



Top side



Bottom side



Liquid depth (15 cm)

12. SAR Result Summary

Test Case of Body				Freq. (MHz)	Power Drift	SAR (1g) (W/kg)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaled SAR (W/Kg)	Meas. No.
Band	Model	Test Position	Channel							
WIFI	802.11b	Front	CH 6	2437	1.25	0.224	15	14.78	0.236	1
		Back	CH 6	2437	-0.62	0.336	15	14.78	0.353	2
		Left	CH 6	2437	-1.56	0.045	15	14.78	0.047	3
		Right	CH 6	2437	3.54	0.188	15	14.78	0.198	4
		Top	CH 6	2437	-1.41	0.046	15	14.78	0.048	5
		Bottom	CH 6	2437	-3.43	0.043	15	14.78	0.045	6

Note:

The test separation of all above table is 0mm

13. Equipment List

NO.	Instrument	Manufacturer	Model	S/N	Cal. Date	Cal. Due Date
1	2450 MHz Dipole	SATIMO	SID2450	SN 30/14 DIP2G450-335	2014.09.01	2015.08.31
2	E-Field Probe	SATIMO	SSE5	SN 17/14 EP221	2014.09.01	2015.08.31
3	Antenna	SATIMO	ANTA3	SN 07/13 ZNTA52	2014.09.01	2015.08.31
4	Waveguide	SATIMO	SWG5500	SN 13/14 WGA32	2014.09.01	2015.08.31
5	Phantom1	SATIMO	SAM	SN 32/14 SAM115	2014.09.01	2015.08.31
6	Phantom2	SATIMO	SAM	SN 32/14 SAM116	2014.09.01	2015.08.31
7	SAR TEST BENCH	SATIMO	TABLET; ROAD EXPLORER 80 POSITIONNIN	SN 32/14 MSH97	2014.09.01	2015.08.31
8	SAR TEST BENCH	SATIMO	LAPTOP POSITIONNIN G SYSTEM	SN 32/14 LSH29	2014.09.01	2015.08.31
9	Dielectric Probe Kit	SATIMO	SCLMP	SN 32/14 OCPG52	2014.09.01	2015.08.31
10	MultiMeter	Keithley	MultiMeter 2000	4050073	2014.11.20	2015.11.19
11	Signal Generator	R&S	SMF100A	104260	2014.10.27	2015.10.26
12	Power Meter	R&S	NRP	100510	2014.10.25	2015.10.24
13	Power Sensor	R&S	NRP-Z11	101919	2014.10.25	2015.10.24
14	Network Analyzer	R&S	5071C	EMY46103472	2014.12.12	2015.12.11

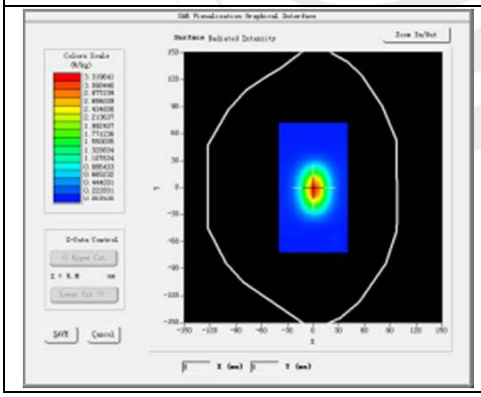
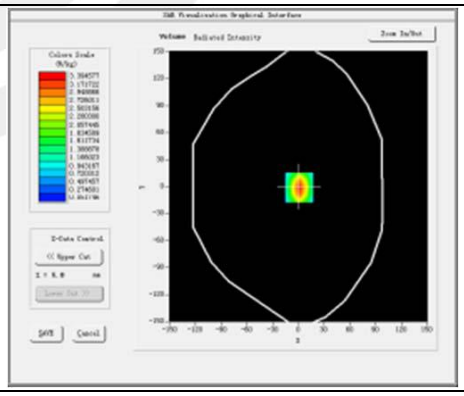
Appendix A. System Validation Plots

System Performance Check Data(2450MHz)

Type: Phone measurement (Complete)
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2015.1.22

Experimental conditions.

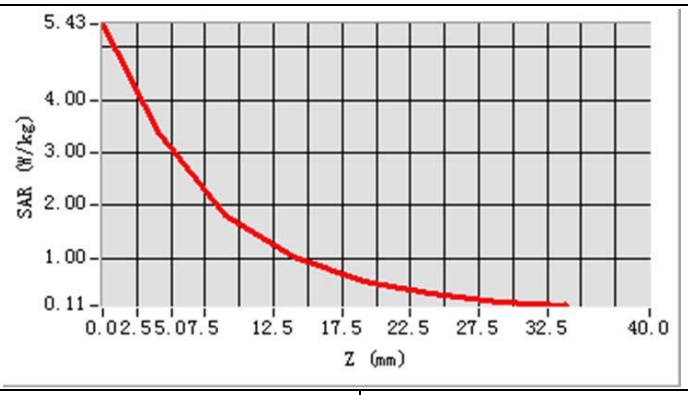
Device Position	Validation plane
Band	2450 MHz
Channels	-
Signal	CW
Frequency (MHz)	2450
Relative permittivity (real part)	51.236002
Relative permittivity	12.930000
Conductivity (S/m)	1.9507000
Power drift (%)	-1.200000
Ambient Temperature	22.7℃
Liquid Temperature	22.3℃
Probe	SN 17/14 EP221
ConvF	4.25
Crest factor:	1:1

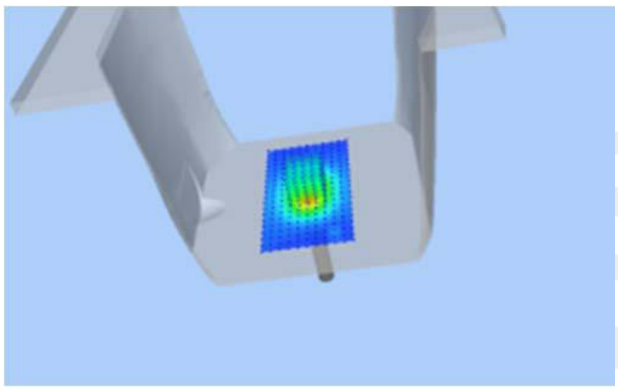
SURFACE SAR	VOLUME SAR
	

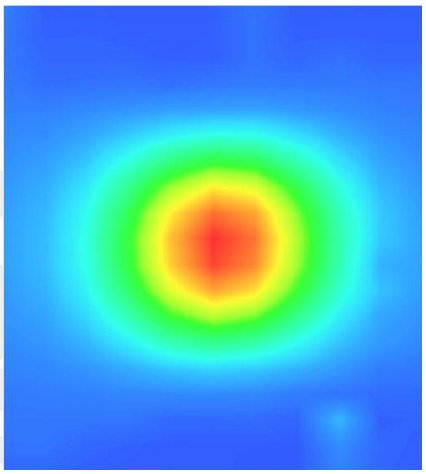
Maximum location: X=3.00, Y=1.00

SAR 10g (W/Kg)	2.189656
SAR 1g (W/Kg)	5.123924

Z Axis Scan


5.43
4.00
3.00
2.00
1.00
0.11
SAR (W/kg)
0.0 2.5 5.0 7.5 12.5 17.5 22.5 27.5 32.5 40.0
Z (mm)





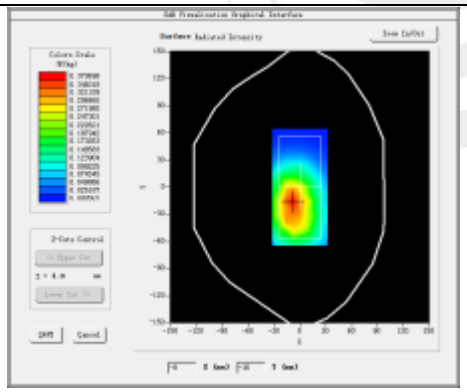
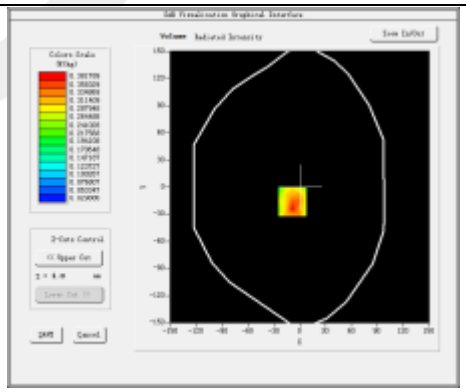
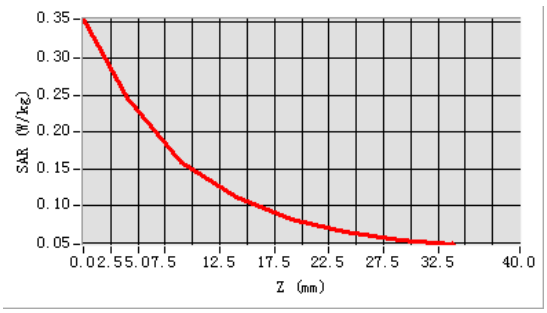
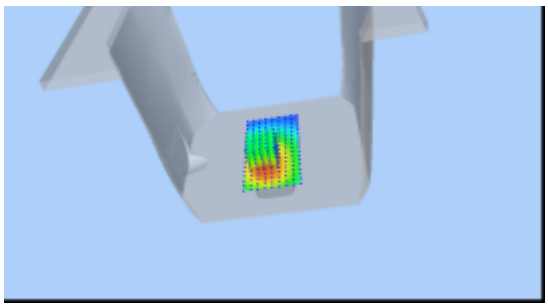
Appendix B. SAR Test Plots

Plot 1: DUT: RoadExplorer 70; EUT Model: RET70,TNDT70

Test Data	2015-1-22
Probe	SN 17/14 EP221
ConvF	4.25
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
Band	IEEE 802.11b ISM
Channels	Middle
Signal	IEEE802.b (Crest factor: 1.0)
Frequency (MHz)	2437
Relative permittivity (real part)	51.2
Conductivity (S/m)	1.95
Variation (%)	1.25

Maximum location: X=43.00, Y=-51.00
SAR Peak: 0.36 W/kg

SAR 10g (W/Kg)	0.115234
SAR 1g (W/Kg)	0.224355

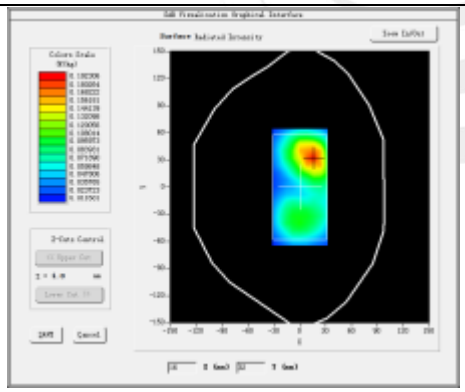
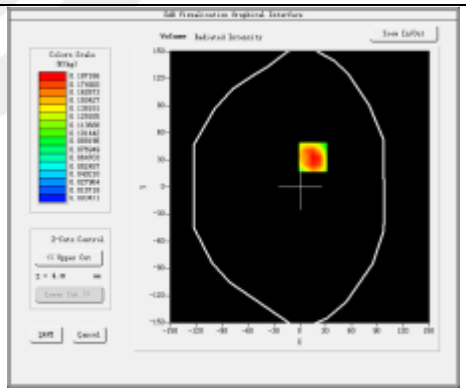
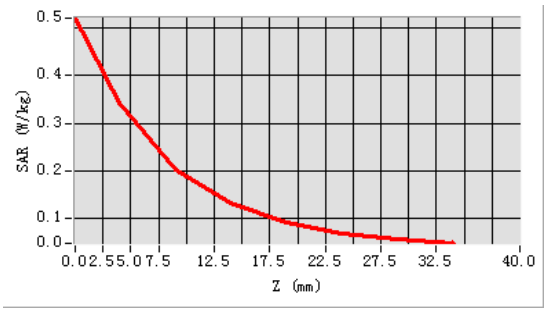
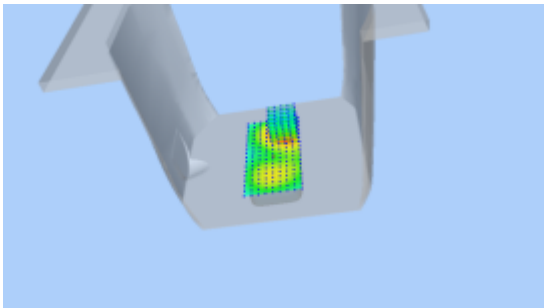
SURFACE SAR	VOLUME SAR
	
Z Axis Scan	**3D**
	

Plot 2: DUT: RoadExplorer 70; EUT Model: RET70,TNDT70

Test Data	2015-1-22
Probe	SN 17/14 EP221
ConvF	4.25
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	Middle
Signal	IEEE802.b (Crest factor: 1.0)
Frequency (MHz)	2437
Relative permittivity (real part)	51.2
Conductivity (S/m)	1.95
Variation (%)	-0.62

Maximum location: X=22.00, Y=-8.00
SAR Peak: 0.50 W/kg

SAR 10g (W/Kg)	0.212345
SAR 1g (W/Kg)	0.336283

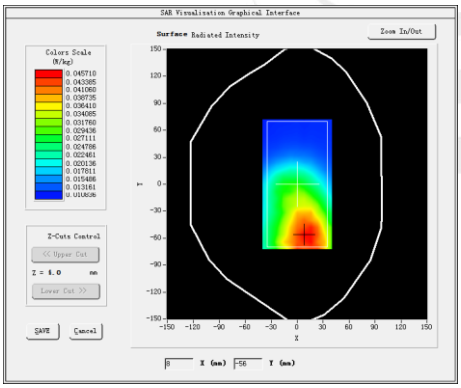
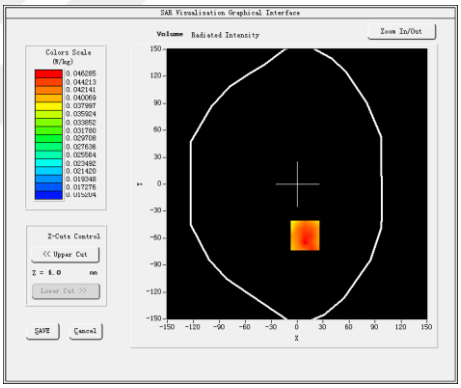
SURFACE SAR	VOLUME SAR
	
Z Axis Scan	**3D**
	

Plot 3: DUT: RoadExplorer 70; EUT Model: RET70,TNDT70

Test Data	2015-1-22
Probe	SN 17/14 EP221
ConvF	4.25
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 left
Band	IEEE 802.11b ISM
Channels	Middle
Signal	IEEE802.b (Crest factor: 1.0)
Frequency (MHz)	2437
Relative permittivity (real part)	51.2
Conductivity (S/m)	1.95
Variation (%)	-1.56

Maximum location: X=40.00, Y=-56.00
SAR Peak: 0.07 W/kg

SAR 10g (W/Kg)	0.032914
SAR 1g (W/Kg)	0.045381

SURFACE SAR	VOLUME SAR
	
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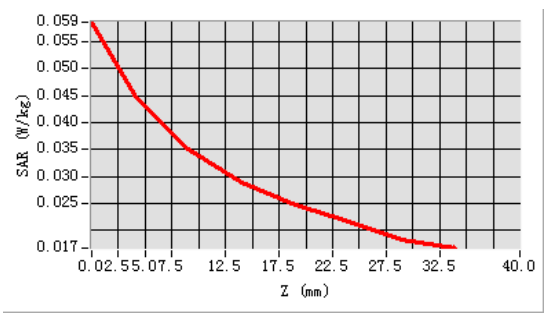
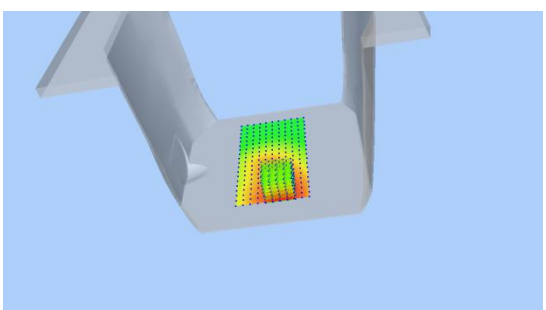
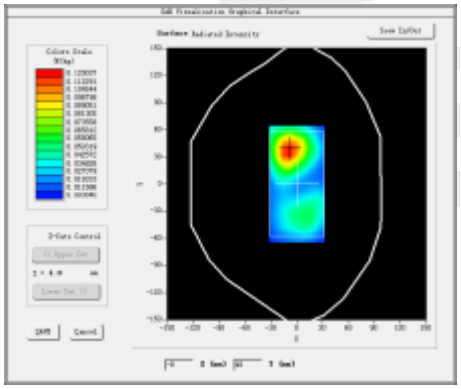
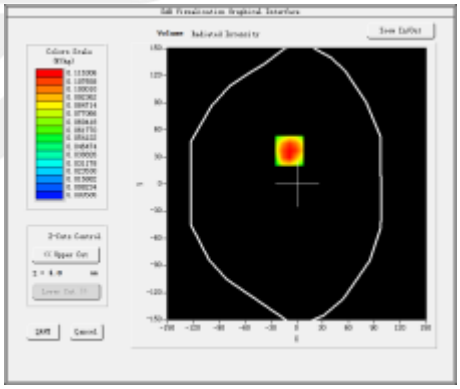
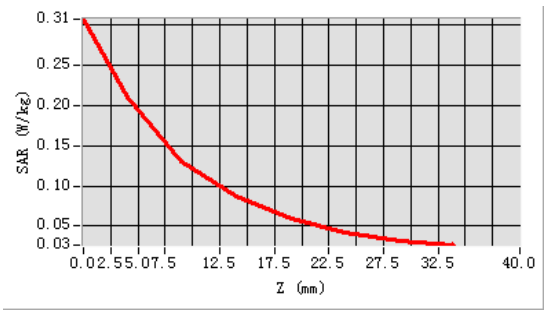
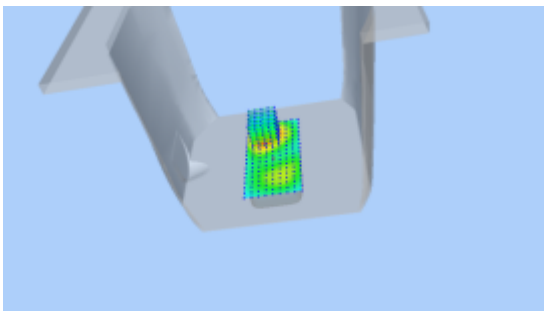
	

Plot 4: DUT: RoadExplorer 70; EUT Model: RET70, TNDT70

Test Data	2015-1-22
Probe	SN 17/14 EP221
ConvF	4.25
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 right
Band	IEEE 802.11b ISM
Channels	Middle
Signal	IEEE802.b (Crest factor: 1.0)
Frequency (MHz)	2437
Relative permittivity (real part)	51.2
Conductivity (S/m)	1.95
Variation (%)	3.54

Maximum location: X=15.00, Y=-13.00
SAR Peak: 0.31 W/kg

SAR 10g (W/Kg)	0.142364
SAR 1g (W/Kg)	0.187635

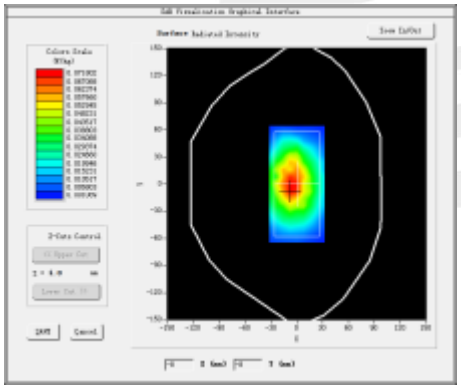
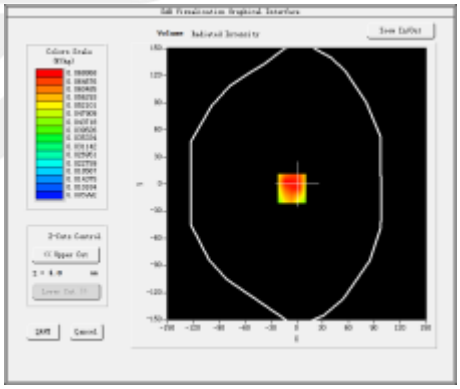
SURFACE SAR	VOLUME SAR
	
Z Axis Scan	**3D**
	

Plot 5: DUT: RoadExplorer 70; EUT Model: RET70, TNDT70

Test Data	2015-1-22
Probe	SN 17/14 EP221
ConvF	4.25
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 top
Band	IEEE 802.11b ISM
Channels	Middle
Signal	IEEE802.b (Crest factor: 1.0)
Frequency (MHz)	2437
Relative permittivity (real part)	51.2
Conductivity (S/m)	1.95
Variation (%)	-1.41

Maximum location: X=-8.00, Y=-32.00
SAR Peak: 0.07 W/kg

SAR 10g (W/Kg)	0.032656
SAR 1g (W/Kg)	0.046325

SURFACE SAR	VOLUME SAR
	
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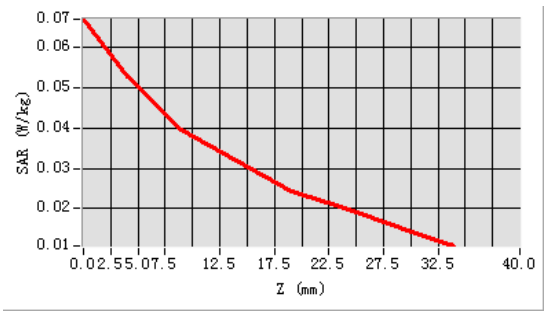
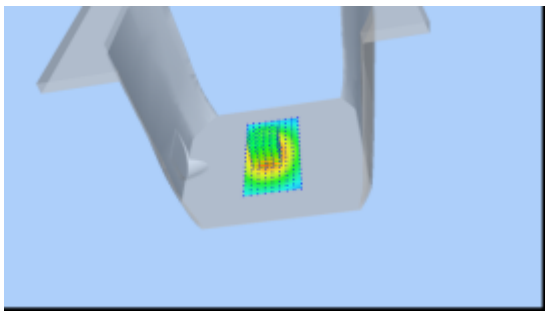
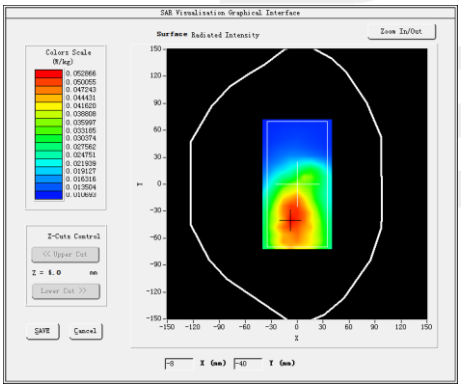
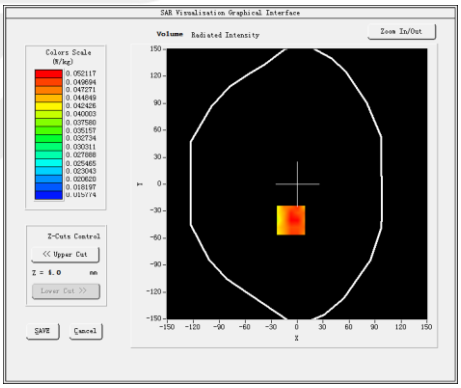
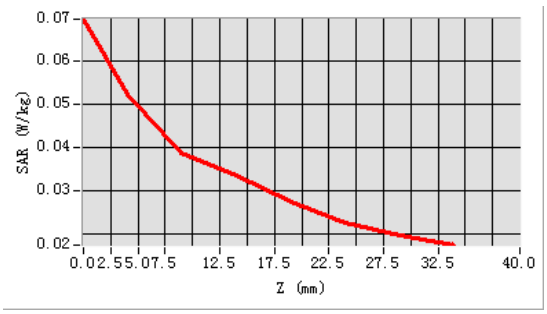
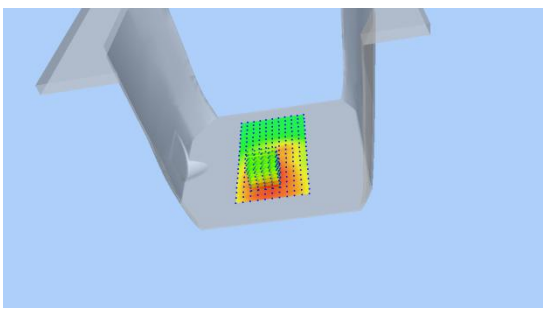
	

Plot 6 :DUT:RoadExplorer 70; EUT Model: RET70,TNDT70

Test Data	2015-1-22
Probe	SN 17/14 EP221
ConvF	4.25
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 bottom
Band	IEEE 802.11b ISM
Channels	Middle
Signal	IEEE802.b (Crest factor: 1.0)
Frequency (MHz)	2437
Relative permittivity (real part)	51.2
Conductivity (S/m)	1.95
Variation (%)	-3.43

Maximum location: X=33.00, Y=-72.00
SAR Peak: 0.05 W/kg

SAR 10g (W/Kg)	0.036251
SAR 1g (W/Kg)	0.043056

SURFACE SAR	VOLUME SAR
	
Z Axis Scan	**3D**
	

Appendix C. Probe C alibration And Dipole Calibration Report

Refer the appendix Calibration Report.