



FCC SAR TEST REPORT

Report No: STS1512070H01

Issued for

UNNECTO HOLDING LIMITED

13/F HARBOUR COMMERCIAL BUILDING 122-124
CONNAUGHT ROAD CENTRAL SHEUNG WAN HK

Product Name:	4G MOBILE PHONE
Brand Name:	unnecto ™
Model No.:	U5051
Series Model:	N/A
FCC ID:	2ADR3U5051
Test Standard:	ANSI/IEEE Std. C95.1 FCC 47 CFR Part 2 (2.1093) IEEE 1528: 2013
Max. SAR (1g):	Head:0.246 W/kg Body:1.147 W/kg

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Shenzhen STS Test Services Co., Ltd.

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Test Report Certification

Applicant's name : UNNECTO HOLDING LIMITED
Address : 13/F HARBOUR COMMERCIAL BUILDING 122-124
CONNAUGHT ROAD CENTRAL SHEUNG WAN HK

Manufacture's Name : Shenzhen Uni-one Electronic Co., Ltd
Address : 5/F, Bldg A2, Kexing Science Park, Keyuan Rd., Hi-Tech Park
Shenzhen, P.R. China

Product description

Product name : 4G MOBILE PHONE

Trademark : unnecto ™

Model and/or type reference : U5051

Serial Model : N/A

ANSI/IEEE Std. C95.1-1992

Standards : 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 : 23 Dec. 2015

Date of Issue : 26 Dec. 2015

Test Result : **Pass**

Testing Engineer :

(Allen Chen)

Technical Manager :

(John Zou)

Authorized Signatory :

(Bovey Yang)





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1. General Information

1.1 EUT Description

Equipment	4G MOBILE PHONE	
Brand Name	unnecto™	
Model No.	U5051	
Serial Model	N/A	
FCC ID	2ADR3U5051	
Model Difference	N/A	
Adapter	Input: AC100-240V,180mA, 50/60 Hz Output: DC 5V, 1000mA	
Battery	Rated Voltage: 3.8V; Charge Limit: 4.35V; Capacity: 2300mAh	
Hardware Version	V1.0	
Software Version	UNI-ONE_L551_1527_V01_T09_0807 (USA).zip	
Frequency Range	GSM 850:824.2~848.8MHz PCS1900:1850.2~1909.8MHz WCDMA Band II:1852.4~1907.6MHz WCDMA Band IV:1712.6~1752.4MHz WCDMA Band V:826.4~846.6MHz LTE Band 2:1850.7~1909.3MHz LTE Band 4:1710.7~1754.3MHz	LTE Band 12:699.7~715.3MHz LTE Band 17:706.5~713.5MHz WLAN 802.11b/g/n(HT20):2412~2462MHz WLAN 802.11n(HT40):2422~2452MHz Bluetooth:2402~ 2480MHz
Transmit Power(MAX):	GSM 850: 28.99 dBm GSM 1900: 28.73 dBm WCDMA Band II: 21.69 dBm WCDMA Band IV: 22.05 dBm WCDMA Band V: 21.72 dBm LTE Band 2: 21.52 dBm LTE Band 4: 22.71 dBm	LTE Band 12: 22.71 dBm LTE Band 17: 22.63 dBm 802.11b: 11.5 dBm 802.11g: 7.7 dBm 802.11n(HT20): 7.6 dBm 802.11n(HT40): 6.5 dBm Bluetooth: 1.765 dBm
Max. Reported SAR(1g):	Head: GSM 850: 0.129 W/kg GSM 1900: 0.113 W/kg WCDMA Band II: 0.165 W/kg WCDMA Band IV: 0.199 W/kg WCDMA Band V: 0.150 W/kg LTE Band 2: 0.166 W/kg LTE Band 4: 0.246 W/kg LTE Band 12: 0.094 W/kg LTE Band 17: 0.112 W/kg WIFI: 0.229 W/kg	Body: GSM 850: 0.566 W/kg GSM 1900: 0.998 W/kg WCDMA Band II: 1.005 W/kg WCDMA Band IV: 1.124 W/kg WCDMA Band V: 0.279 W/kg LTE Band 2: 0.997 W/kg LTE Band 4: 1.147 W/kg LTE Band 12: 0.232 W/kg LTE Band 17: 0.212 W/kg WIFI: 0.103 W/kg
Operating Mode:	GSM: GSM Voice; GPRS; EGPRS Class 12; WCDMA:RMC,HSDPA,HSUPA Release 6; LTE:QPSK,16QAM; WLAN: 802.11 b/g/n(HT20) /n(HT40); Bluetooth: V4.0 + EDR (GFSK +π/4DQPSK+8DPSK) ;	
Antenna Specification:	GSM,WCDMA,LTE: PIFA Antenna BT,WIFI: PIFA Antenna	
SIM Card	Support dual-SIM, dual standby, the multiple SIM card with two lines cannot transmitting at the same time	
Hotspot Mode:	Support	
DTM Mode:	Not Support	



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 Facility

Shenzhen STS Test Services Co., Ltd.

Add. : 1/F, Building B, Zhuoke Science Park, No.190, Chongqing Road, Fuyong, Baoan 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 D01 v03r01	SAR Measurement Procedures for 3G Devices
8	FCC KDB 941225 D05 v02r04	SAR for LTE Devices
9	FCC KDB 941225 D06 v02r01	Hotspot Mode SAR
10	FCC KDB 248227 D01 Wi-Fi SAR v02r02	SAR Considerations for 802.11 Devices

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:

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

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

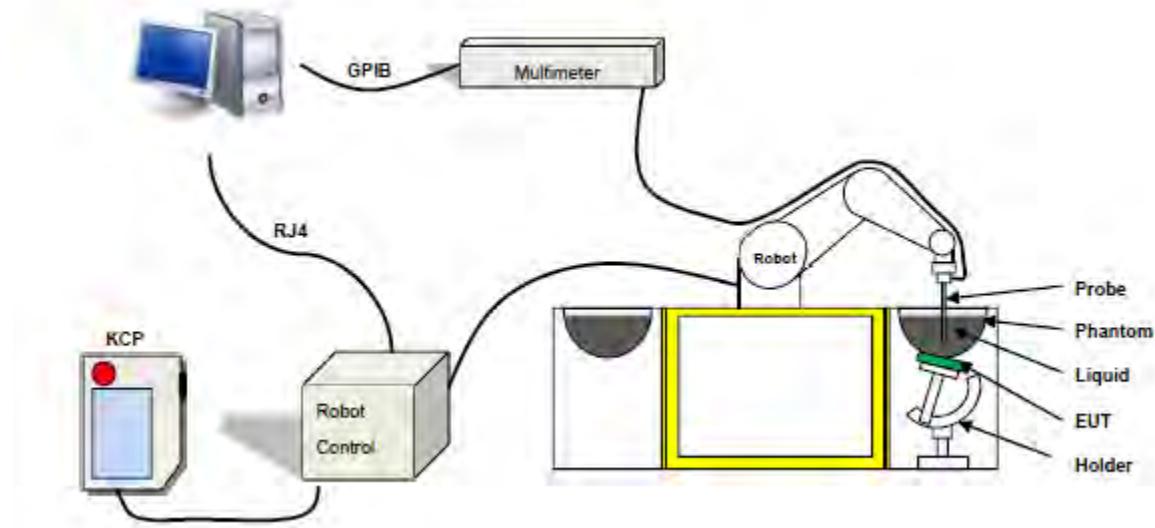
$$\text{SAR} = \frac{\sigma E^2}{\rho}$$

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

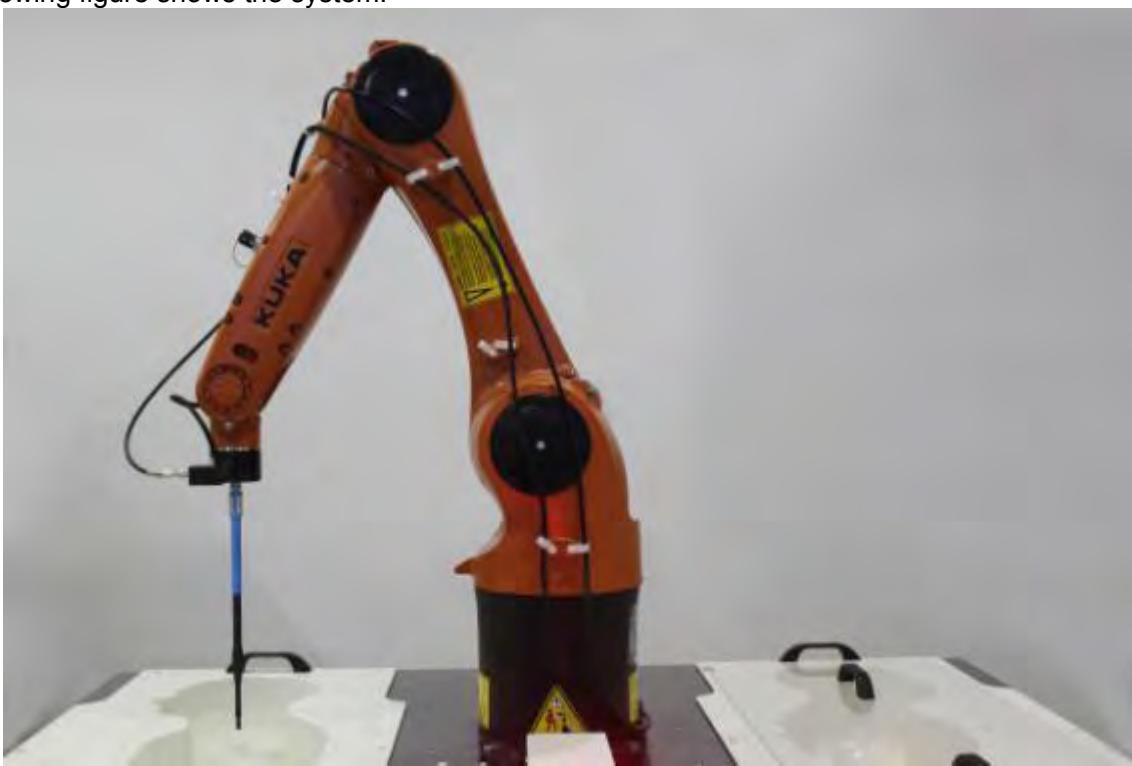
SATIMO SAR System Diagram:



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 $\pm 20\%$. 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.

LIQUID MEASUREMENT RESULTS

Date: Dec 23, 2015 Ambient condition: Temperature 22.7°C Relative humidity: 49%

Head Simulating Liquid		Parameters	Target	Measured	Deviation[%]	Limited[%]
Frequency	Temp. [°C]					
750 MHz	22.30	Permitivity:	41.9	41.2	-1.67	±5
		Conductivity:	0.89	0.91	2.25	± 5
835 MHz	22.30	Permitivity:	41.50	41	-1.20	±5
		Conductivity:	0.90	0.86	-4.44	± 5
1800 MHz	22.30	Permitivity:	40.10	40.2	0.25	±5
		Conductivity:	1.37	1.31	-4.38	± 5
1900 MHz	22.30	Permitivity:	40.00	39.5	-1.25	± 5
		Conductivity:	1.40	1.43	2.14	± 5
2450 MHz	22.30	Permitivity:	39.2	39.18	-0.05	± 5
		Conductivity:	1.80	1.88	4.44	± 5

Body Simulating Liquid		Parameters	Target	Measured	Deviation[%]	Limited[%]
Frequency	Temp. [°C]					
750 MHz	22.30	Permitivity:	55.50	55.26	-0.43	± 5
		Conductivity:	0.96	0.91	-5.21	± 5
835 MHz	22.30	Permitivity:	55.20	54.7	-0.91	± 5
		Conductivity:	0.97	0.98	1.03	± 5
1800 MHz	22.30	Permitivity:	53.40	52.6	-1.50	± 5
		Conductivity:	1.49	1.38	-7.38	± 5
1900 MHz	22.30	Permitivity:	53.30	52.31	-1.86	± 5
		Conductivity:	1.52	1.50	-1.32	± 5
2450 MHz	22.30	Permitivity:	52.7	51.6	-2.09	± 5
		Conductivity:	1.95	1.93	-1.03	± 5

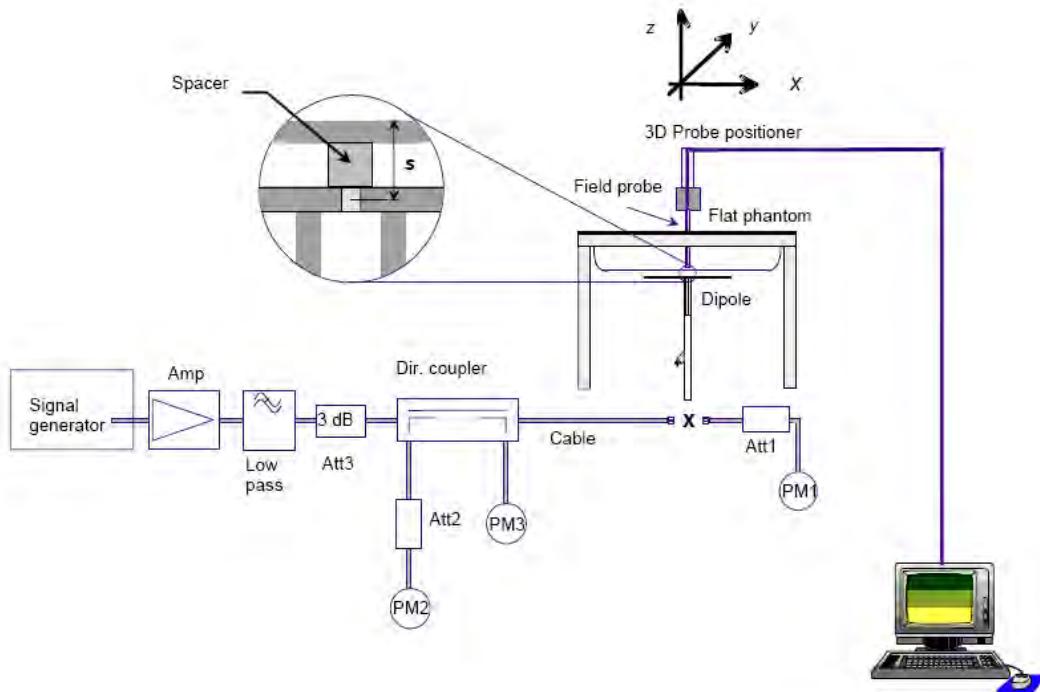


5. SAR System Validation

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
750 Head	100	0.838	8.38	8.49	-1.30	2015-12-23
750 Body	100	0.856	8.56	8.49	0.82	2015-12-23
835 Head	100	0.937	9.37	9.56	-1.99	2015-12-23
835 Body	100	0.947	9.47	9.56	-0.94	2015-12-23
1800 Head	100	3.76	37.6	38.4	-2.08	2015-12-23
1800 Body	100	3.88	38.8	38.4	1.04	2015-12-23
1900 Head	100	3.86	38.6	39.8	-3.02	2015-12-23
1900 Body	100	3.987	39.87	39.8	0.18	2015-12-23
2450 Head	100	5.593	55.93	52.4	6.74	2015-12-23
2450 Body	100	4.864	48.64	52.4	-7.18	2015-12-23

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 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

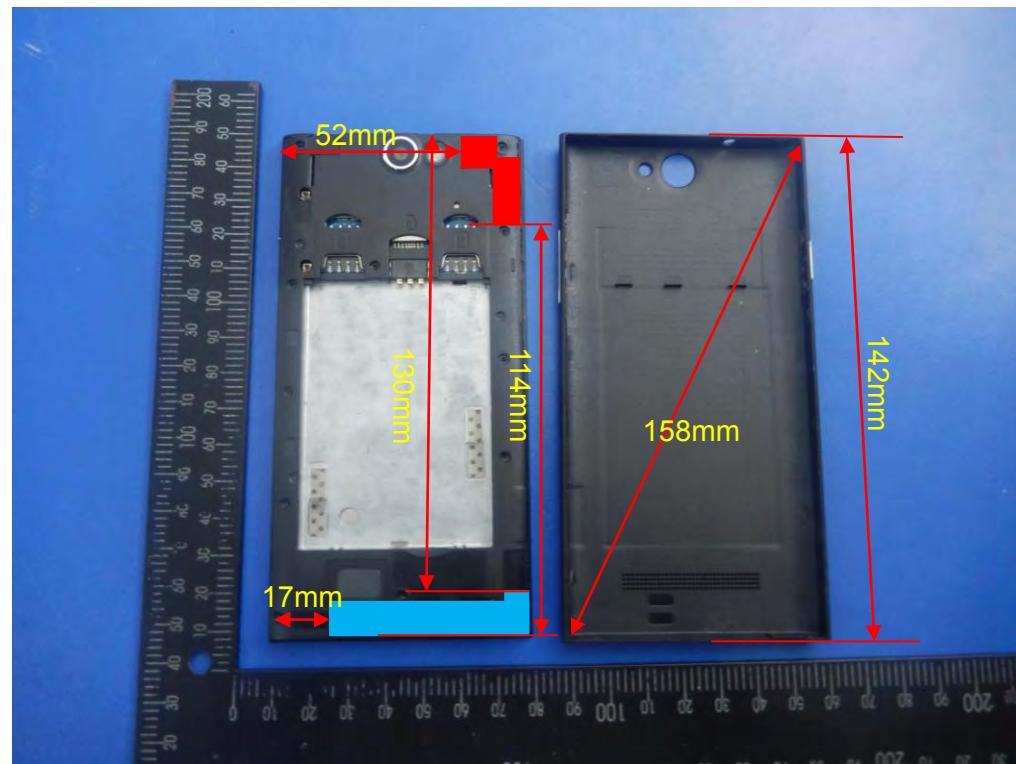
First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan 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

It is a mobile phone, support GSM mode.



WWAN Antenna



WIFI/BT Antenna



7.1 SAR TEST EXCLUSION CONSIDER TABLE

According with FCC KDB 447498 D01v05r02, 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
GSM850	<5mm	<5mm	17mm	<5mm	130mm	<5mm
	Yes	Yes	Yes	Yes	No	Yes
GSM1900	<5mm	<5mm	17mm	<5mm	130mm	<5mm
	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band II	<5mm	<5mm	17mm	<5mm	130mm	<5mm
	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band IV	<5mm	<5mm	17mm	<5mm	130mm	<5mm
	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band V	<5mm	<5mm	17mm	<5mm	130mm	<5mm
	Yes	Yes	Yes	Yes	No	Yes
LTE Band 2	<5mm	<5mm	17mm	<5mm	130mm	<5mm
	Yes	Yes	Yes	Yes	No	Yes
LTE Band 4	<5mm	<5mm	17mm	<5mm	130mm	<5mm
	Yes	Yes	Yes	Yes	No	Yes
LTE Band 7	<5mm	<5mm	17mm	<5mm	130mm	<5mm
	Yes	Yes	Yes	Yes	No	Yes
LTE Band 17	<5mm	<5mm	17mm	<5mm	130mm	<5mm
	Yes	Yes	Yes	Yes	No	Yes
WLAN	<5mm	<5mm	52mm	<5mm	<5mm	114mm
	Yes	Yes	No	Yes	Yes	No
Bluetooth	<5mm	<5mm	52mm	<5mm	<5mm	114mm
	Yes	Yes	No	Yes	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 D01v05r02, 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 D01v05r02, 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 D01v05r02, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distance ≤50mm are determined by:
[(max.power of channel, including tune-up tolerance, Mw)/(min. test separation distance,



mm)]*[$\sqrt{f(\text{GHz})}$) ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR

$f(\text{GHz})$ 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

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

5. per KDB 447498 D01v05r02, at 100 MHz to 6GHz and for test separation distances $>50\text{mm}$, 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 $>1500\text{MHz}$ and $\leq 6\text{GHz}$
6. Per KDB 447498 D02v02r02,RMC 12.2kbps setting is used to evaluate SAR. If HSDPA/HSUPA/DC-HSDPA output power is $<0.25\text{db}$ higher than RMC 12.2Kbps,or reported SAR with RMC 12.2kbps setting is $\leq 1.2\text{W/Kg}$, HSDPA/HSUPA/DC-HSDPA SAR evaluation can be excluded.
7. Per KDB 248227 D01v01r02,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. EUT Test Position

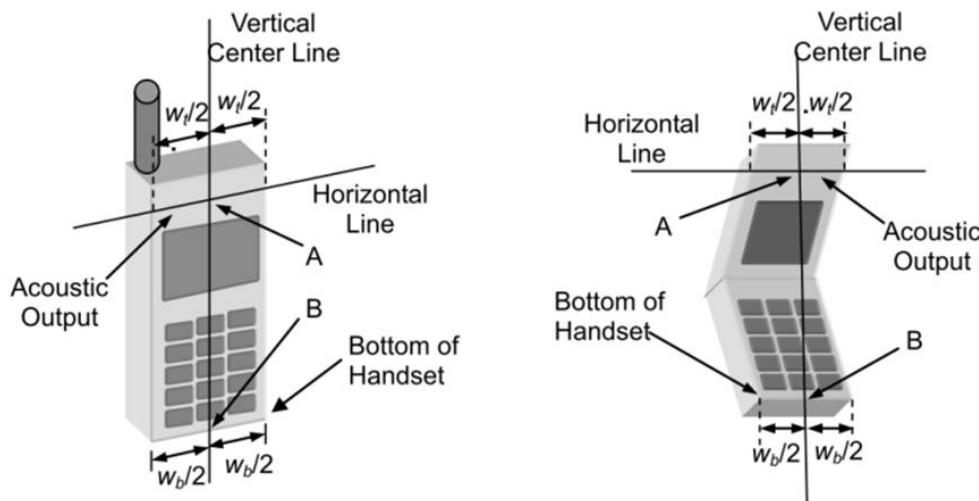
This EUT was tested in Right Cheek, Right Titled, Left Cheek, Left Titled, Front Face and Rear Face.

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 w_t of the handset at the level of the acoustic output, and the midpoint of the width w_b 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.

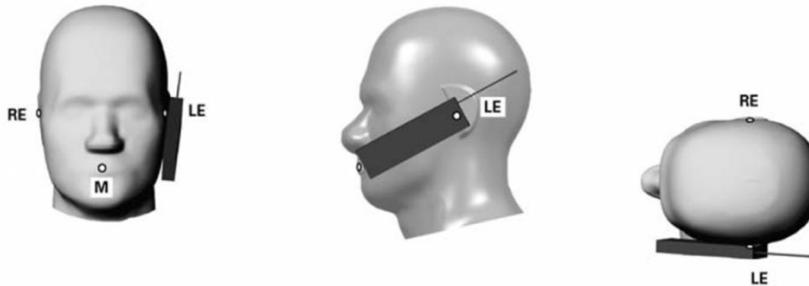
(3)The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centerline is not necessarily to the front face of the handset, especially for clamshell handsets, handsets with flip covers, and other irregularly shaped handsets.



Cheek Position

1)To position the device with the vertical center line of the body of the device and the horizontal line crossing the center piece in a plane parallel to the sagittal plane of the phantom. While maintaining the device in this plane, align the vertical center line with the reference plane containing the ear and mouth reference point (M: Mouth, RE: Right Ear, and LE: Left Ear) and align the center of the ear piece with the line RE-LE.

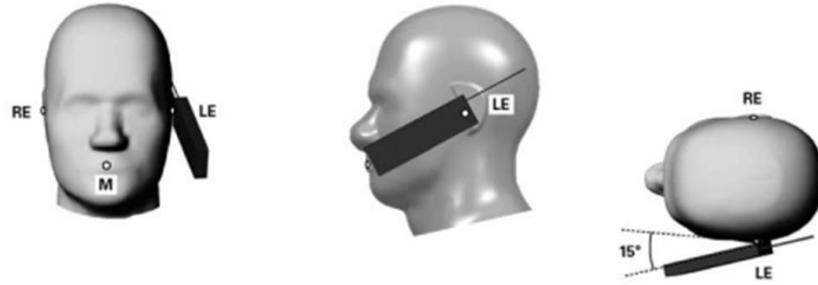
2)To move the device towards the phantom with the ear piece aligned with the line LE-RE until the phone touched the ear. While maintaining the device in the reference plane and maintaining the phone contact with ear, move the bottom of the phone until any point on the front side is in contact with the cheek of the phantom or until contact with the ear is lost



Title Position

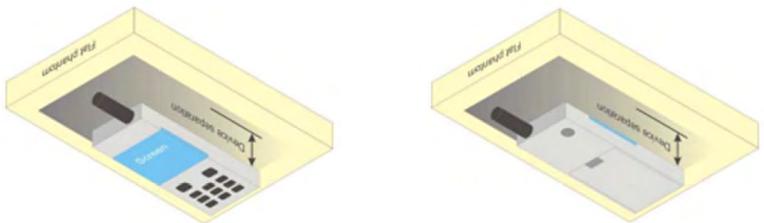
(1)To position the device in the “cheek” position described above.

(2) While maintaining the device in the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until with the ear is lost.



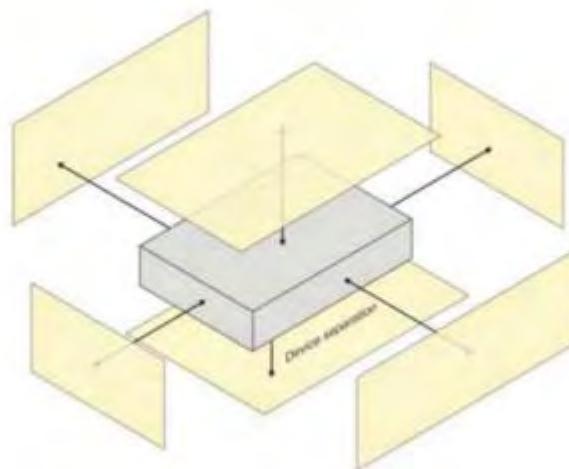
Body-worn Position Conditions

- (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 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: 2003. 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	$\sqrt{3}$	$(1-c_p)^{1/2}$	$(1-c_p)^{1/2}$	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	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	$\sqrt{3}$	1	1	2.89	2.89	∞
Phantom and set-up									
18	Phantom uncertainty	4.0	R	$\sqrt{3}$	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									
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	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 drift measurement	5	R	$\sqrt{3}$	1	1	2.89	2.89	∞
18	Dipole Axis to liquid Distance	2	R	$\sqrt{3}$	1	1			∞
Phantom and set-up									
19	Phantom uncertainty	4.0	R	$\sqrt{3}$	1	1	2.31	2.31	∞
20	Uncertainty in SAR correction for deviation(in mm)	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%)		$U = k U_c, k=2$					21.29%	21.10%	



10. Conducted Power Measurement

Test Result:

Burst Average Power (dBm)						
Band	GSM 850			PCS 1900		
Channel	128	190	251	512	661	810
Frequency (MHz)	824.2	836.6	848.8	1850.2	1880.0	1909.8
GSM(GMSK, 1-Slot)	28.99	28.93	28.90	28.30	28.73	28.69
GPRS (GMSK, 1-Slot)	28.95	28.91	28.82	28.17	28.58	28.54
GPRS (GMSK, 2-Slot)	28.16	27.98	28.03	27.49	27.89	27.87
GPRS (GMSK, 3-Slot)	26.92	26.69	26.78	26.23	26.65	26.51
GPRS (GMSK, 4-Slot)	26.33	26.01	26.14	25.55	26.06	25.97
EGPRS(8PSK, 1-Slot)	28.94	28.89	28.77	28.00	28.42	28.39
EGPRS(8PSK, 2-Slot)	27.98	28.09	27.95	27.18	27.61	27.72
EGPRS(8PSK, 3-Slot)	26.77	26.80	26.62	25.93	26.29	26.51
EGPRS(8PSK, 4-Slot)	26.08	26.28	26.09	25.38	25.65	25.86

Remark: GPRS, CS4 coding scheme. EGPRS, MCS9 coding scheme.
Multi-Slot Class 8 , Support Max 4 downlink, 1 uplink , 5 working link
Multi-Slot Class 10 , Support Max 4 downlink, 2 uplink , 5 working link
Multi-Slot Class 12 , Support Max 4 downlink, 4 uplink , 5 working link

Fram- Average Power(dBm)						
Band	GSM 850			PCS 1900		
Channel	128	190	251	512	661	810
Frequency (MHz)	824.2	836.6	848.8	1850.2	1880.0	1909.8
GSM(GMSK, 1-Slot)	19.99	19.93	19.90	19.30	19.73	19.69
GPRS (GMSK, 1-Slot)	19.95	19.91	19.82	19.17	19.58	19.54
GPRS (GMSK, 2-Slot)	22.16	21.98	22.03	21.49	21.89	21.87
GPRS (GMSK, 3-Slot)	22.66	22.43	22.52	21.97	22.39	22.25
GPRS (GMSK, 4-Slot)	23.33	23.01	23.14	22.55	23.06	22.97
EGPRS(8PSK, 1-Slot)	19.94	19.89	19.77	19.00	19.42	19.39
EGPRS(8PSK, 2-Slot)	21.98	22.09	21.95	21.18	21.61	21.72
EGPRS(8PSK, 3-Slot)	22.51	22.54	22.36	21.67	22.03	22.25
EGPRS(8PSK, 4-Slot)	23.08	23.28	23.09	22.38	22.65	22.86

Remark :

1. SAR testing was performed on the maximum frame-averaged power mode.
2. The frame-averaged power is linearly proportion to the slot number configured and it is linearly scaled the maximum burst-averaged power based on time slots. The calculated method is shown as below:
Frame-averaged power = Burst averaged power (1 Tx Slot) - 9 dB
Frame-averaged power = Burst averaged power (2 Tx Slots) - 6 dB
Frame-averaged power = Burst averaged power (3 Tx Slots) - 4.26 dB
Frame-averaged power = Burst averaged power (4 Tx Slots) - 3 dB

**WCDMA**

Band	WCDMA Band V			WCDMA Band IV			WCDMA Band II		
Channel	4132	4182	4233	1313	1450	1512	9263	9400	9537
Frequency (MHz)	826.4	836.6	846.6	1712.6	1740	1752.4	1852.4	1880.0	1907.6
RMC 12.2Kbps	21.68	21.72	21.67	21.49	21.55	22.05	21.50	21.51	21.69
HSDPA Subtest-1	21.23	21.27	21.24	21.04	21.07	21.56	21.07	21.06	21.26
HSDPA Subtest-2	20.83	20.78	20.68	20.63	20.71	21.25	20.56	20.56	20.86
HSDPA Subtest-3	20.37	20.31	20.21	20.14	20.22	20.80	20.15	20.07	20.41
HSDPA Subtest-4	19.77	19.67	19.63	19.59	19.71	20.13	19.54	19.44	19.82
HSUPA Subtest-1	20.78	20.79	20.74	20.61	20.67	21.10	20.65	20.61	20.79
HSUPA Subtest-2	20.34	20.38	20.37	20.23	20.18	20.75	20.20	20.20	20.31
HSUPA Subtest-3	19.88	19.93	19.88	19.81	19.75	20.28	19.74	19.76	19.86
HSUPA Subtest-4	19.31	19.40	19.23	19.23	19.25	19.65	19.09	19.13	19.34
HSUPA Subtest-5	18.67	18.71	18.68	18.54	18.65	19.04	18.41	18.61	18.68

According to 3GPP 25.101 sub-clause 6.2.2 , the maximum output power is allowed to be reduced by following the table.

Table 6.1A: UE maximum output power with HS-DPCCH and E-DCH

UE Transmit Channel Configuration	CM(db)	MPR(db)
For all combinations of ,DPDCH,DPCCH HS-DPDCH,E-DPDCH and E-DPCCH	0≤ CM≤3.5	MAX(CM-1,0)
Note: CM=1 for $\beta_c/\beta_d=12/15$, $\beta_{hs}/\beta_c=24/15$.For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.		

The device supports MPR to solve linearity issues (ACLR or SEM) due to the higher peak-to average ratios (PAR) of the HSUPA signal. This prevents saturating the full range of the TX DAC inside of device and provides a reduced power output to the RF transceiver chip according to the Cubic Metric (a function of the combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH).

When E-DPDCH channels are present the beta gains on those channels are reduced firsts to try to get the power under the allowed limit. If the beta gains are lowered as far as possible, then a hard limiting is applied at the maximum allowed level.

The SW currently recalculates the cubic metric every time the beta gains on the E-DPDCH are reduced. The cubic metric will likely get lower each time this is done .However, there is no reported reduction of maximum output power in the HSUPA mode since the device also provides a compensation for the power back-off by increasing the gain of TX_AGC in the transceiver (PA) device.

The end effect is that the DUT output power is identical to the case where there is no MPR in the device.

**WIFI**

Mode	Channel Number	Frequency (MHz)	PEAK Power (dBm)
802.11b	1	2412	11.5
	6	2437	10.5
	11	2462	10.8
802.11g	1	2412	7.7
	6	2437	6.6
	11	2462	6.7
802.11n(HT 20)	1	2412	7.6
	6	2437	6.6
	11	2462	6.6
802.11n(HT 40)	3	2422	5.5
	6	2437	6.5
	9	2452	5.2

Bluetooth

Mode	Channel Number	Frequency (MHz)	PEAK Power (dBm)
GFSK(1Mbps)	0	2402	-1.782
	39	2441	-2.381
	78	2480	1.765
$\pi/4$ -DQPSK(2Mbps)	0	2402	-1.866
	39	2441	-2.537
	78	2480	1.221
8-DPSK(3Mbps)	0	2402	-1.952
	39	2441	-2.630
	78	2480	1.079

BT 4.0

Mode	Channel Number	Frequency (MHz)	PEAK Power (dBm)
GFSK(1Mbps)	1	2402	-7.496
	20	2440	-7.978
	40	2480	-5.363



LTE Conducted Power

General Note:

1. Anritsu MT8820C base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05v02r03, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05v02r03, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
4. Per KDB 941225 D05v02r03, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05v02r03, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05v02r03, 16QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r03, 16QAM SAR testing is not required.
7. Per KDB 941225 D05v02r03, Smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r03, smaller bandwidth SAR testing is not required.



LTE Band 2

BW(MHz)	Modulation	RB Size	RB Offset	Power Low CH./Freq.	Power Middle CH./Freq.	Power High CH./Freq.
Channel				18700	18900	19100
Frequency(MHz)				1860	1880	1900
20	QPSK	1	0	21.28	21.23	21.44
20	QPSK	1	50	21.30	21.21	21.46
20	QPSK	1	99	21.42	21.35	21.52
20	QPSK	50	0	20.47	20.36	20.61
20	QPSK	50	24	20.52	20.48	20.71
20	QPSK	50	50	20.45	20.34	20.66
20	QPSK	100	0	20.44	20.30	20.67
20	16QAM	1	0	20.58	20.50	20.77
20	16QAM	1	50	20.61	20.53	20.74
20	16QAM	1	99	20.74	20.66	20.79
20	16QAM	50	0	20.69	20.68	20.89
20	16QAM	50	24	20.75	20.69	20.86
20	16QAM	50	50	20.86	20.81	20.92
20	16QAM	100	0	19.52	19.39	19.62
Channel				18675	18900	19125
Frequency(MHz)				1857.5	1880	1902.5
15	QPSK	1	0	21.28	21.16	21.47
15	QPSK	1	38	21.31	21.17	21.45
15	QPSK	1	75	21.44	21.26	21.53
15	QPSK	36	0	20.31	20.19	20.54
15	QPSK	36	18	20.42	20.32	20.65
15	QPSK	36	75	20.35	20.24	20.58
15	QPSK	75	0	20.32	20.23	20.59
15	16QAM	1	0	20.84	20.72	21.02
15	16QAM	1	38	20.91	20.78	20.94
15	16QAM	1	75	20.93	20.84	21.05
15	16QAM	36	0	21.01	20.92	21.09
15	16QAM	36	18	21.01	20.85	21.10
15	16QAM	36	75	21.07	20.93	21.18
15	16QAM	75	0	19.38	19.27	19.69
Channel				18650	18900	19150
Frequency(MHz)				1855	1880	1905
10	QPSK	1	0	21.24	21.11	21.44
10	QPSK	1	13	21.23	21.12	21.45
10	QPSK	1	24	21.28	21.17	21.48
10	QPSK	12	0	20.35	20.21	20.52
10	QPSK	12	6	20.42	20.36	20.68
10	QPSK	12	13	20.33	20.26	20.56
10	QPSK	25	0	20.31	20.28	20.55
10	16QAM	1	0	20.67	20.53	21.02
10	16QAM	1	13	20.78	20.74	21.04
10	16QAM	1	24	20.94	20.82	20.96
10	16QAM	12	0	20.81	20.63	21.14
10	16QAM	12	6	20.81	20.86	21.15
10	16QAM	12	13	21.05	20.96	21.08
10	16QAM	25	0	19.53	19.41	19.66



Channel			18625	18900	19175
Frequency(MHz)			1852.5	1880	1907.5
5	QPSK	1	0	21.24	21.12
5	QPSK	1	13	21.28	21.16
5	QPSK	1	24	21.26	21.14
5	QPSK	12	0	20.37	20.26
5	QPSK	12	6	20.54	20.35
5	QPSK	12	13	20.39	20.27
5	QPSK	25	0	20.24	20.19
5	16QAM	1	0	20.33	20.21
5	16QAM	1	13	20.37	20.25
5	16QAM	1	24	20.32	20.23
5	16QAM	12	0	20.48	20.36
5	16QAM	12	6	20.51	20.42
5	16QAM	12	13	20.48	20.44
5	16QAM	25	0	19.63	19.54
Channel			18615	18900	19185
Frequency(MHz)			1851.5	1880	1908.5
3	QPSK	1	0	21.23	21.04
3	QPSK	1	8	21.17	21.12
3	QPSK	1	14	21.24	21.08
3	QPSK	8	0	20.42	20.21
3	QPSK	8	4	20.48	20.36
3	QPSK	8	8	20.31	20.21
3	QPSK	15	0	20.28	20.19
3	16QAM	1	0	20.84	20.69
3	16QAM	1	8	20.88	20.73
3	16QAM	1	14	20.87	20.70
3	16QAM	8	0	20.78	20.69
3	16QAM	8	4	20.99	20.87
3	16QAM	8	8	20.93	20.87
3	16QAM	15	0	19.52	19.38
Channel			18607	18900	19193
Frequency(MHz)			1850.7	1880	1909.3
1.4	QPSK	1	0	21.20	21.09
1.4	QPSK	1	3	21.16	21.07
1.4	QPSK	1	5	21.19	21.11
1.4	QPSK	3	0	21.32	21.30
1.4	QPSK	3	1	21.26	21.35
1.4	QPSK	3	3	21.23	21.26
1.4	QPSK	6	0	20.17	20.05
1.4	16QAM	1	0	20.34	20.18
1.4	16QAM	1	3	20.29	20.16
1.4	16QAM	1	5	20.31	20.21
1.4	16QAM	3	0	20.38	20.24
1.4	16QAM	3	1	20.36	20.21
1.4	16QAM	3	3	20.39	20.25
1.4	16QAM	6	0	19.23	19.19



LTE Band 4

BW(MHz)	Modulation	RB Size	RB Offset	Power Low CH./Freq.	Power Middle CH./Freq.	Power High CH./Freq.
Channel				20050	20175	20300
Frequency(MHz)				1720	1732.5	1745
20	QPSK	1	0	22.66	22.62	22.64
20	QPSK	1	50	22.68	22.66	22.71
20	QPSK	1	99	22.59	22.66	22.68
20	QPSK	50	0	21.73	21.56	21.69
20	QPSK	50	24	21.95	21.71	21.80
20	QPSK	50	50	21.75	21.60	21.74
20	QPSK	100	0	21.73	21.55	21.66
20	16QAM	1	0	21.94	21.83	21.71
20	16QAM	1	50	21.96	21.85	21.76
20	16QAM	1	99	22.01	21.86	21.64
20	16QAM	50	0	22.04	21.93	21.85
20	16QAM	50	24	22.16	22.01	21.89
20	16QAM	50	50	22.17	22.02	21.93
20	16QAM	100	0	20.68	20.58	20.61
Channel				20025	20175	20325
Frequency(MHz)				1717.5	1732.5	1747.5
15	QPSK	1	0	22.64	22.57	22.61
15	QPSK	1	38	22.54	22.66	22.59
15	QPSK	1	75	22.58	22.65	22.22
15	QPSK	36	0	21.74	21.63	21.64
15	QPSK	36	18	21.93	21.78	21.80
15	QPSK	36	75	21.70	21.64	21.60
15	QPSK	75	0	21.70	21.63	21.61
15	16QAM	1	0	21.97	21.82	21.65
15	16QAM	1	38	22.02	21.89	21.65
15	16QAM	1	75	22.00	21.86	21.55
15	16QAM	36	0	22.10	22.02	21.90
15	16QAM	36	18	22.15	22.07	21.82
15	16QAM	36	75	22.08	22.00	21.74
15	16QAM	75	0	20.65	20.63	20.59
Channel				20000	20175	20350
Frequency(MHz)				1715	1732.5	1750
10	QPSK	1	0	22.62	22.52	22.69
10	QPSK	1	13	22.62	22.62	22.60
10	QPSK	1	24	22.45	22.57	22.55
10	QPSK	25	0	21.60	21.52	21.58
10	QPSK	25	6	21.74	21.69	21.70
10	QPSK	25	13	21.59	21.55	21.56
10	QPSK	50	0	21.60	21.56	21.55
10	16QAM	1	0	21.68	21.98	21.57
10	16QAM	1	13	21.74	22.03	21.30
10	16QAM	1	24	21.69	21.97	21.51
10	16QAM	25	0	21.81	22.15	21.75
10	16QAM	25	6	21.92	22.15	21.80
10	16QAM	25	13	21.77	22.14	21.69
10	16QAM	50	0	20.58	20.58	20.57



Channel			19975	20175	20375
Frequency(MHz)			1712.5	1732.5	1752.5
5	QPSK	1	0	22.67	22.58
5	QPSK	1	13	22.70	22.62
5	QPSK	1	24	22.74	22.61
5	QPSK	12	0	21.64	21.58
5	QPSK	12	6	21.75	21.68
5	QPSK	12	13	21.65	21.60
5	QPSK	25	0	21.59	21.54
5	16QAM	1	0	21.56	21.64
5	16QAM	1	13	21.59	21.70
5	16QAM	1	24	21.61	21.68
5	16QAM	12	0	21.65	21.71
5	16QAM	12	6	21.75	21.86
5	16QAM	12	13	21.75	21.86
5	16QAM	25	0	20.64	20.51
Channel			19965	20175	20385
Frequency(MHz)			1711.5	1732.5	1753.5
3	QPSK	1	0	22.58	22.47
3	QPSK	1	8	22.63	22.53
3	QPSK	1	14	22.61	22.48
3	QPSK	6	0	21.59	21.54
3	QPSK	6	4	21.75	21.73
3	QPSK	6	8	21.61	21.52
3	QPSK	15	0	21.61	21.50
3	16QAM	1	0	21.92	21.91
3	16QAM	1	8	21.95	21.95
3	16QAM	1	14	21.90	21.89
3	16QAM	6	0	22.14	22.10
3	16QAM	6	4	22.15	22.16
3	16QAM	6	8	22.10	22.04
3	16QAM	15	0	20.62	21.50
Channel			19957	20175	20393
Frequency(MHz)			1710.7	1732.5	1754.3
1.4	QPSK	1	0	22.61	22.49
1.4	QPSK	1	3	22.67	22.56
1.4	QPSK	1	5	22.61	22.52
1.4	QPSK	3	0	22.58	22.55
1.4	QPSK	3	1	22.69	22.68
1.4	QPSK	3	3	22.57	22.52
1.4	QPSK	6	0	21.62	21.53
1.4	16QAM	1	0	21.65	21.45
1.4	16QAM	1	3	21.72	21.49
1.4	16QAM	1	5	21.65	21.48
1.4	16QAM	3	0	21.75	21.69
1.4	16QAM	3	1	21.86	21.59
1.4	16QAM	3	3	21.79	21.65
1.4	16QAM	6	0	20.60	20.51



LTE Band 12

Channel				20800	21100	21400
Frequency(MHz)				2505	2535	2565
10	QPSK	1	0	22.64	22.56	22.65
10	QPSK	1	13	22.71	22.64	22.68
10	QPSK	1	24	22.68	22.54	22.59
10	QPSK	25	0	21.72	21.62	21.74
10	QPSK	25	6	21.89	21.75	21.89
10	QPSK	25	13	21.73	21.65	21.77
10	QPSK	50	0	21.71	21.66	21.75
10	16QAM	1	0	22.08	22.03	22.11
10	16QAM	1	13	22.14	22.15	22.16
10	16QAM	1	24	22.13	22.09	22.09
10	16QAM	25	0	22.17	22.15	22.12
10	16QAM	25	6	22.20	22.18	22.10
10	16QAM	25	13	22.14	22.19	22.17
10	16QAM	50	0	20.82	20.71	22.83
Channel				20775	21100	21425
Frequency(MHz)				2502.5	2535	2567.5
5	QPSK	1	0	22.73	22.65	22.53
5	QPSK	1	13	22.71	22.67	22.71
5	QPSK	1	24	22.69	22.56	22.68
5	QPSK	12	0	21.74	21.67	21.69
5	QPSK	12	6	21.82	21.82	21.84
5	QPSK	12	13	21.76	21.66	21.72
5	QPSK	25	0	21.76	21.64	21.71
5	16QAM	1	0	21.77	21.64	21.79
5	16QAM	1	13	21.76	21.66	21.83
5	16QAM	1	24	21.74	21.62	21.74
5	16QAM	12	0	21.88	21.74	21.89
5	16QAM	12	6	21.85	21.84	21.92
5	16QAM	12	13	21.81	21.77	21.86
5	16QAM	25	0	20.83	20.79	21.85
Channel				20775	21100	21425
Frequency(MHz)				2502.5	2535	2567.5
3	QPSK	1	0	22.58	22.54	22.59
3	QPSK	1	7	22.64	22.59	22.66
3	QPSK	1	14	22.53	22.51	22.54
3	QPSK	8	0	21.71	21.66	21.73
3	QPSK	8	4	21.82	21.71	21.86
3	QPSK	8	7	21.69	21.64	21.68
3	QPSK	15	0	21.67	21.63	21.68
3	16QAM	1	0	22.04	22.01	21.96
3	16QAM	1	7	22.11	22.08	21.97
3	16QAM	1	14	22.10	22.04	22.01
3	16QAM	8	0	22.14	22.18	22.13
3	16QAM	8	4	22.21	22.19	22.12
3	16QAM	8	7	22.21	22.15	22.19
3	16QAM	15	0	20.81	20.73	21.75



Channel				20775	21100	21425
Frequency(MHz)				2502.5	2535	2567.5
1.4	QPSK	1	0	22.66	22.62	22.67
1.4	QPSK	1	2	22.68	22.71	22.64
1.4	QPSK	1	5	22.68	22.60	22.50
1.4	QPSK	3	0	22.82	22.73	22.67
1.4	QPSK	3	1	22.96	22.85	55.81
1.4	QPSK	3	2	22.81	22.72	22.58
1.4	QPSK	6	0	21.67	21.54	21.51
1.4	16QAM	1	0	21.70	21.64	21.73
1.4	16QAM	1	2	21.74	21.74	21.70
1.4	16QAM	1	5	21.73	21.66	21.60
1.4	16QAM	3	0	21.90	21.79	21.85
1.4	16QAM	3	1	21.89	21.88	21.84
1.4	16QAM	3	2	21.87	21.79	21.80
1.4	16QAM	6	0	20.73	20.54	20.54

LTE Band 17

BW(MHz)	Modulation	RB Size	RB Offset	Power Low CH./Freq.	Power Middle CH./Freq.	Power High CH./Freq.
Channel				23780	23790	23800
Frequency(MHz)				709	710	711
10	QPSK	1	0	22.58	22.51	22.60
10	QPSK	1	13	22.63	22.55	22.60
10	QPSK	1	24	22.58	22.49	22.48
10	QPSK	25	0	21.71	21.68	21.67
10	QPSK	25	6	20.74	20.72	20.77
10	QPSK	25	13	21.64	21.60	21.59
10	QPSK	50	0	21.69	21.64	21.65
10	16QAM	1	0	21.85	22.23	21.76
10	16QAM	1	13	21.84	22.24	21.67
10	16QAM	1	24	21.74	22.07	21.54
10	16QAM	25	0	22.96	22.31	21.84
10	16QAM	25	6	21.93	22.31	21.85
10	16QAM	25	13	21.88	22.14	21.65
10	16QAM	50	0	20.76	20.71	20.72
Channel				23755	23790	23825
Frequency(MHz)				706.5	710	713.5
5	QPSK	1	0	22.59	22.66	22.64
5	QPSK	1	13	22.59	22.63	22.71
5	QPSK	1	24	22.62	22.53	22.68
5	QPSK	12	0	21.75	21.71	21.66
5	QPSK	12	6	21.85	21.84	21.76
5	QPSK	12	13	21.77	21.67	21.59
5	QPSK	25	0	21.70	21.65	21.58
5	16QAM	1	0	21.72	21.98	22.04
5	16QAM	1	13	21.75	21.94	21.94
5	16QAM	1	24	21.75	21.86	21.85
5	16QAM	12	0	21.82	22.04	22.10
5	16QAM	12	6	21.95	22.04	22.05
5	16QAM	12	13	21.92	21.93	21.88
5	16QAM	25	0	20.87	20.66	20.55



Turn Power

Mode	GSM850(AVG)	GSM1900(AVG)
GSM/PCS	28.0±1dBm	28.0±1dBm
GPRS (1 Slot)	28.0±1dBm	28.0±1dBm
GPRS (2 Slot)	28.0±1dBm	27.0±1dBm
GPRS (3 Slot)	26.0±1dBm	26.0±1dBm
GPRS (4 Slot)	25.5±1dBm	25.1±1dBm
EDGE (1 Slot)	28.0±1dBm	28.0±1dBm
EDGE (2 Slot)	28.0±1dBm	27.0±1dBm
EDGE (3 Slot)	26.0±1dBm	26.0±1dBm
EDGE (4 Slot)	25.5±1dBm	25.0±1dBm

Mode	WCDMA Band V(AVG)	WCDMA Band IV(AVG)	WCDMA Band II(AVG)
RMC	21.0±1dBm	20.6±1dBm	21.0±1dBm
HSDPA Subtest-1	20.5±1dBm	20.6±1dBm	20.5±1dBm
HSDPA Subtest-2	20.0±1dBm	20.3±1dBm	20.0±1dBm
HSDPA Subtest-3	20.0±1dBm	20.0±1dBm	19.5±1dBm
HSDPA Subtest-4	19.0±1dBm	19.5±1dBm	19.0±1dBm
HSUPA Subtest-1	20.0±1dBm	20.5±1dBm	20.0±1dBm
HSUPA Subtest-2	20.0±1dBm	20.0±1dBm	20.0±1dBm
HSUPA Subtest-3	19.0±1dBm	20.0±1dBm	19.0±1dBm
HSUPA Subtest-4	19.0±1dBm	19.0±1dBm	19.0±1dBm
HSUPA Subtest-5	18.0±1dBm	18.5±1dBm	18.0±1dBm

Mode	WIFI
IEEE 802.11b	11.0±1dBm
IEEE 802.11g	7.0±1dBm
IEEE 802.11n(HT 20)	7.0±1dBm
IEEE 802.11n(HT 40)	6.0±1dBm

Mode	BT		
	Low	Middle	High
GFSK	-1±1dBm	-2±1dBm	1±1dBm
π/4-DQPSK	-1±1dBm	-2±1dBm	1±1dBm
8DPSK	-1±1dBm	-2±1dBm	1±1dBm

Mode	BT 4.0		
	Low	Middle	High
GFSK	-7±1dBm	-7±1dBm	-5±1dBm



LTE

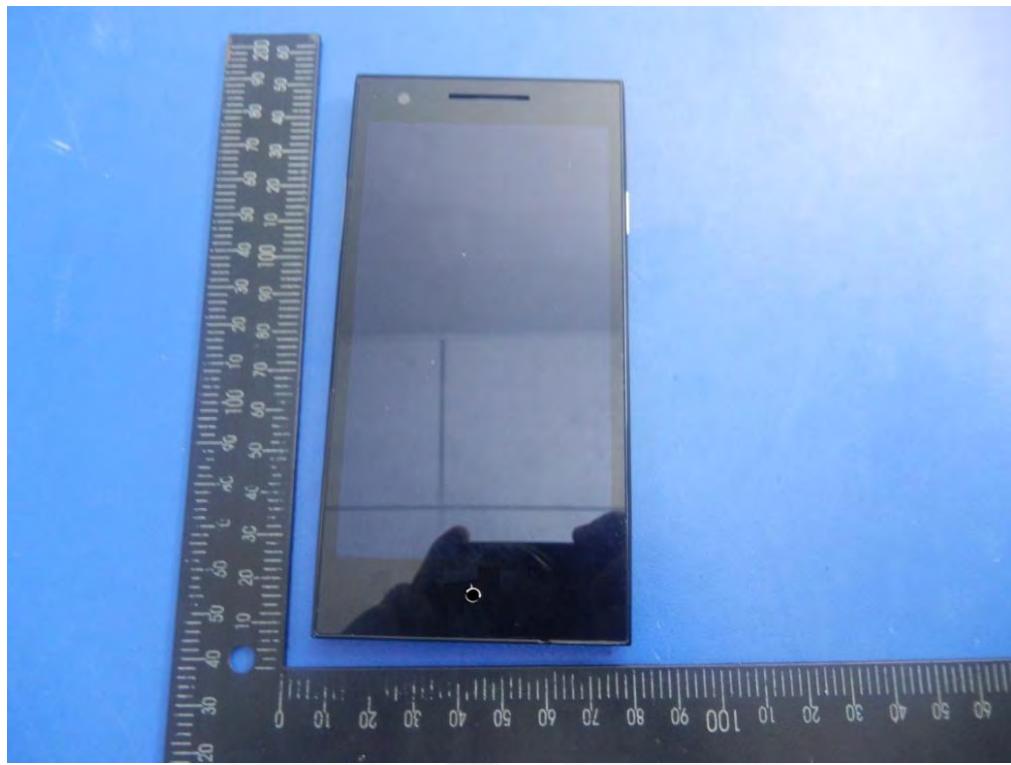
BW[MHz]	RB Size	Mode	Band 2	Band 4	Band 12	Band 17
1.4	1	QPSK	21±1dBm	22±1dBm	22±1dBm	N/A
1.4	3		21±1dBm	22±1dBm	22±1dBm	N/A
1.4	6		20±1dBm	21±1dBm	21±1dBm	N/A
1.4	1	16-QAM	20±1dBm	21±1dBm	21±1dBm	N/A
1.4	3		20±1dBm	21±1dBm	21±1dBm	N/A
1.4	6		19±1dBm	20±1dBm	20±1dBm	N/A
3	1	QPSK	21±1dBm	22±1dBm	22±1dBm	N/A
3	6		20±1dBm	21±1dBm	21±1dBm	N/A
3	15		20±1dBm	21±1dBm	21±1dBm	N/A
3	1	16-QAM	21±1dBm	21±1dBm	22±1dBm	N/A
3	6		21±1dBm	22±1dBm	22±1dBm	N/A
3	15		19±1dBm	21±1dBm	21±1dBm	N/A
5	1	QPSK	21±1dBm	22±1dBm	22±1dBm	22±1dBm
5	12		21±1dBm	22±1dBm	22±1dBm	21±1dBm
5	25		19±1dBm	21±1dBm	21±1dBm	21±1dBm
5	1	16-QAM	20±1dBm	21±1dBm	21±1dBm	22±1dBm
5	12		20±1dBm	21±1dBm	21±1dBm	22±1dBm
5	25		19±1dBm	20±1dBm	21±1dBm	20±1dBm
10	1	QPSK	21±1dBm	22±1dBm	22±1dBm	22±1dBm
10	25		20±1dBm	22±1dBm	21±1dBm	21±1dBm
10	50		20±1dBm	21±1dBm	21±1dBm	21±1dBm
10	1	16-QAM	21±1dBm	22±1dBm	22±1dBm	22±1dBm
10	25		21±1dBm	22±1dBm	22±1dBm	22±1dBm
10	50		19±1dBm	20±1dBm	22±1dBm	20±1dBm
15	1	QPSK	21±1dBm	22±1dBm	N/A	N/A
15	36		20±1dBm	21±1dBm	N/A	N/A
15	75		20±1dBm	21±1dBm	N/A	N/A
15	1	16-QAM	21±1dBm	22±1dBm	N/A	N/A
15	36		21±1dBm	22±1dBm	N/A	N/A
15	75		19±1dBm	20±1dBm	N/A	N/A
20	1	QPSK	20.6±1dBm	22±1dBm	N/A	N/A
20	50		19.8±1dBm	21±1dBm	N/A	N/A
20	100		20±1dBm	21±1dBm	N/A	N/A
20	1	16-QAM	20±1dBm	22±1dBm	N/A	N/A
20	50		20±1dBm	22±1dBm	N/A	N/A
20	100		19±1dBm	20±1dBm	N/A	N/A



11. EUT And Test Setup Photo

11.1 EUT Photo

Front side



Back side





Top side



Bottom side





Left side



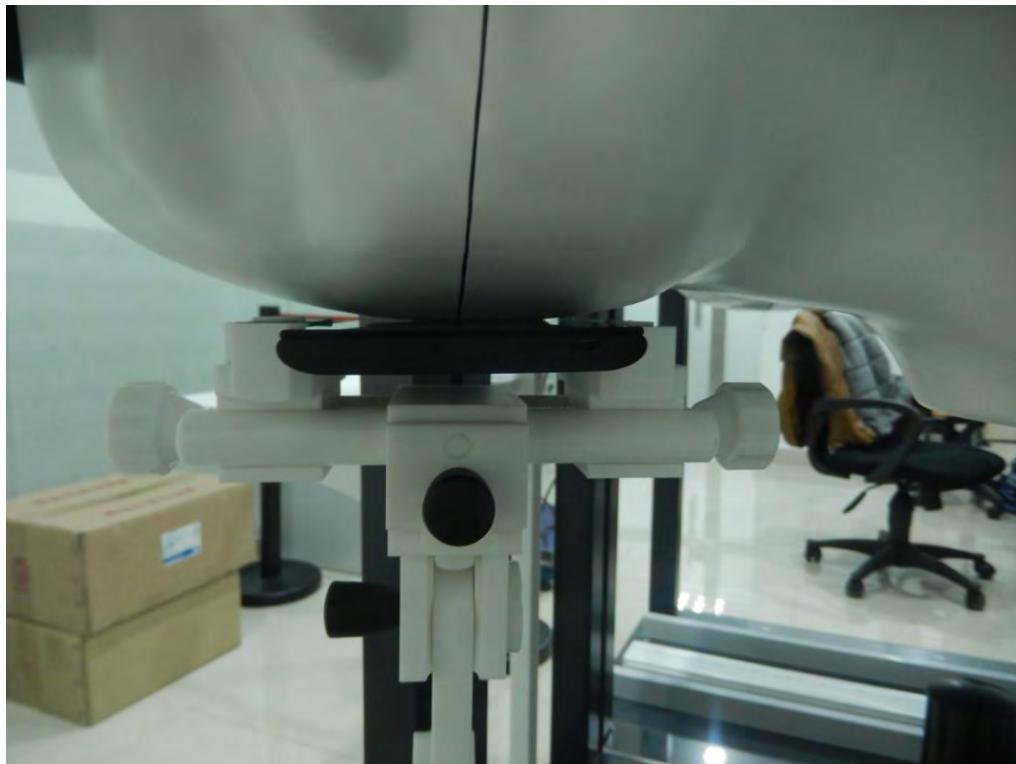
Right side



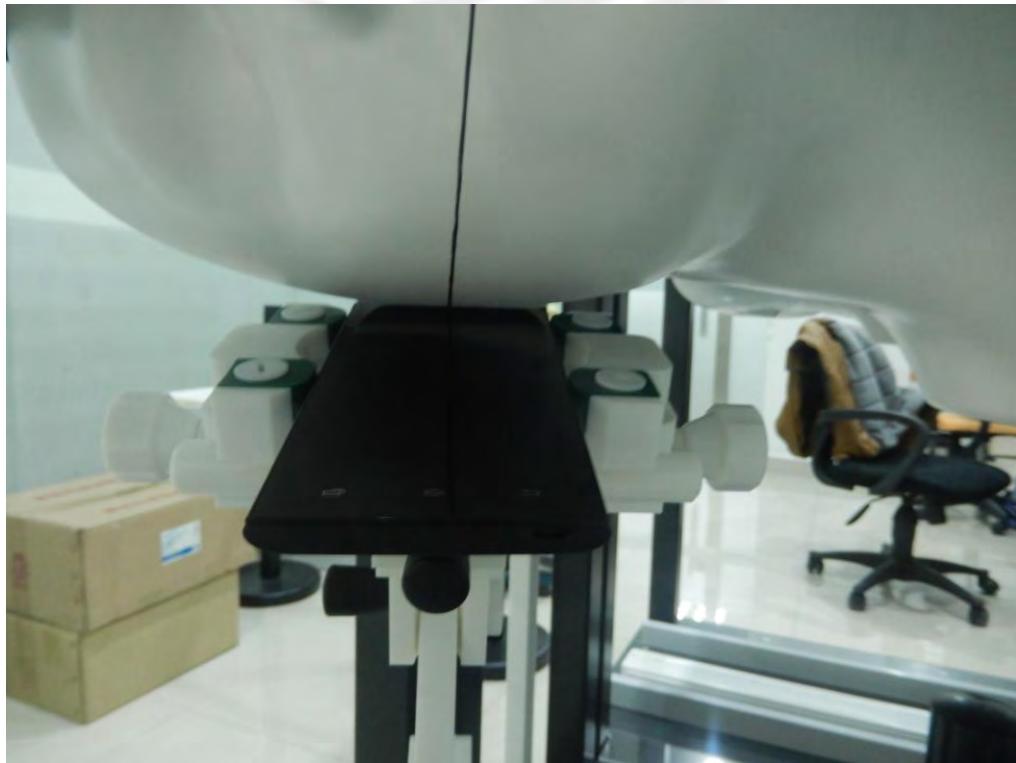


11.2 Setup Photo

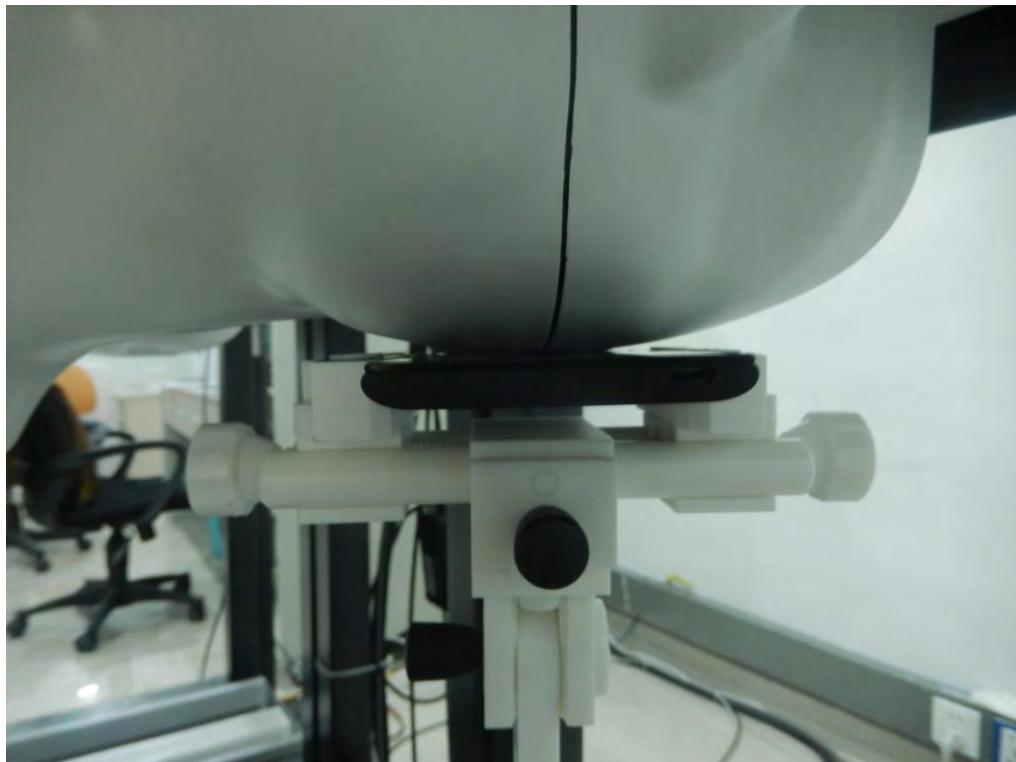
Right Touch



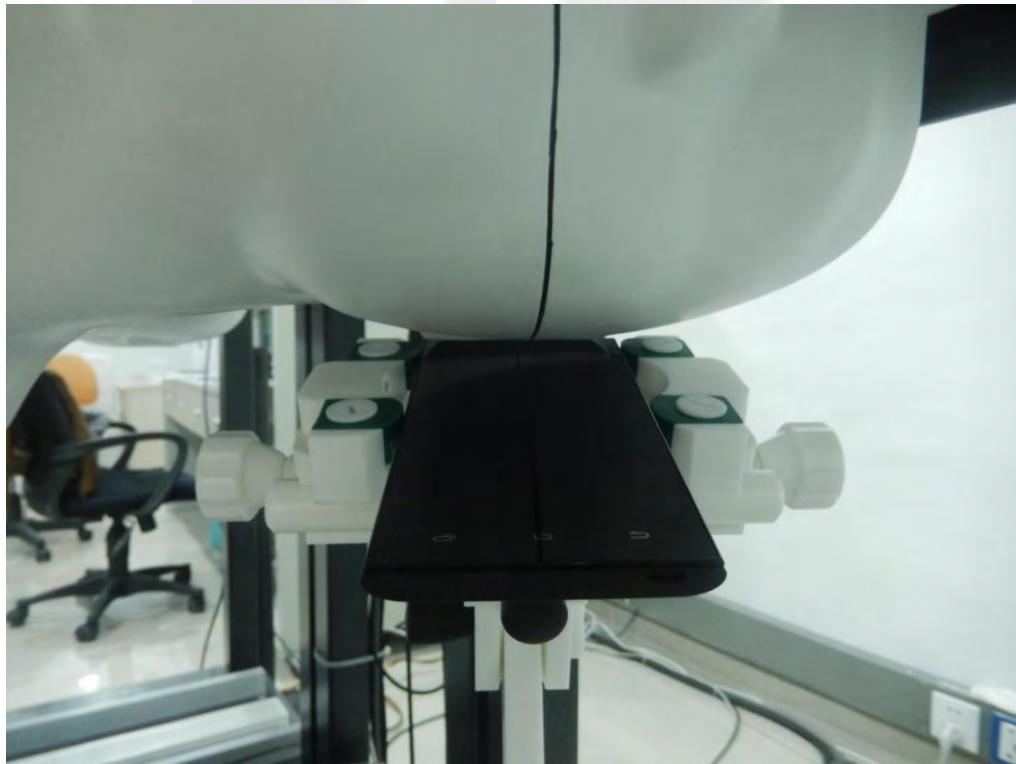
Right Tilt



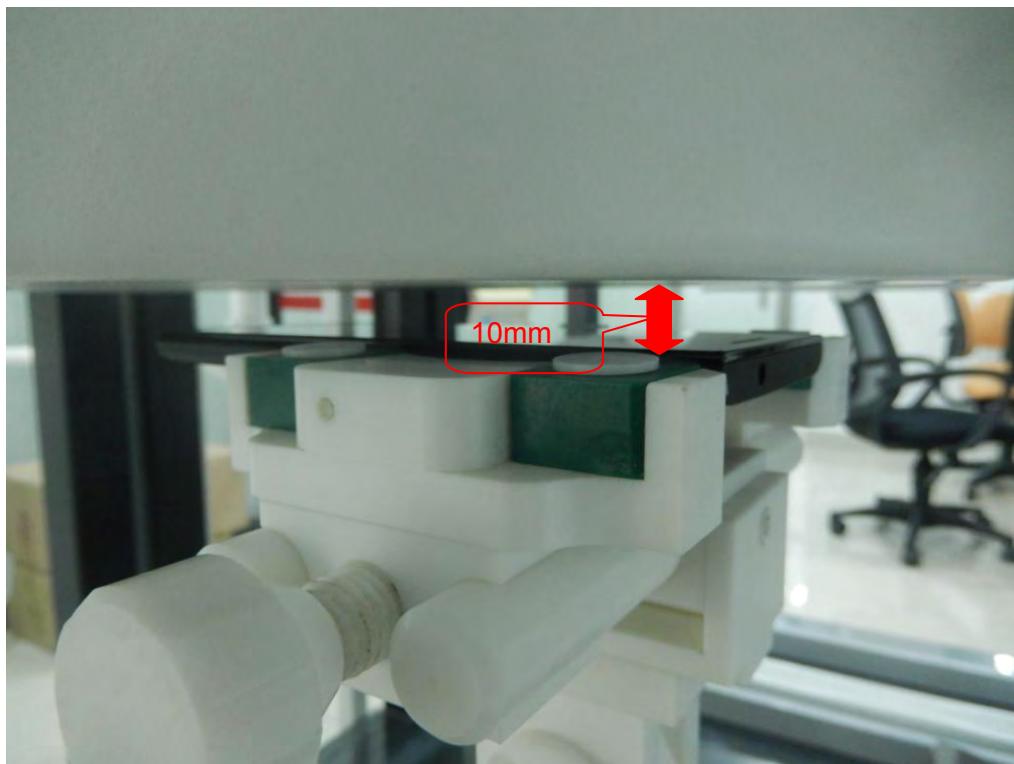
Left Touch



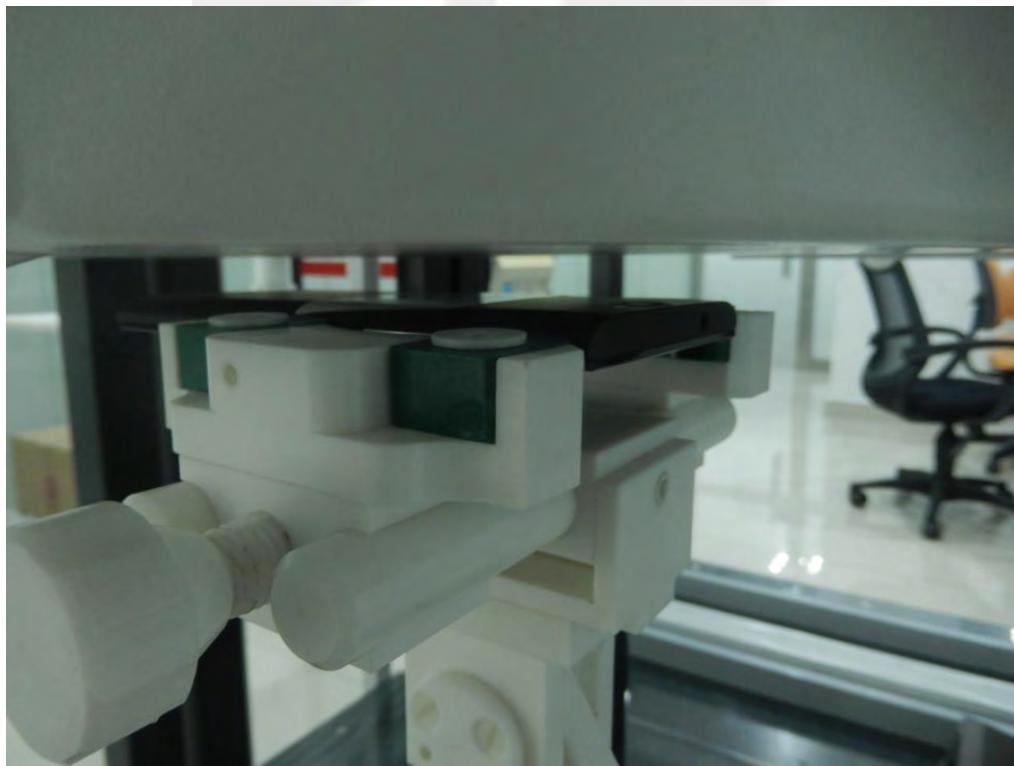
Left Tilt



Body Front side

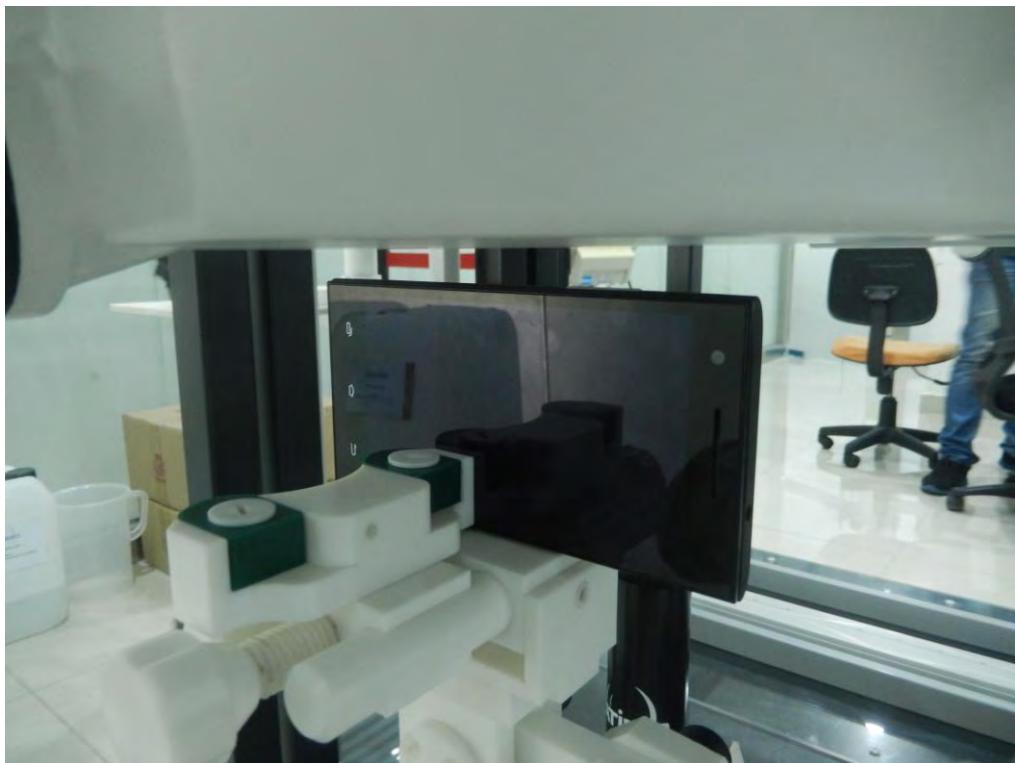


Body Back side

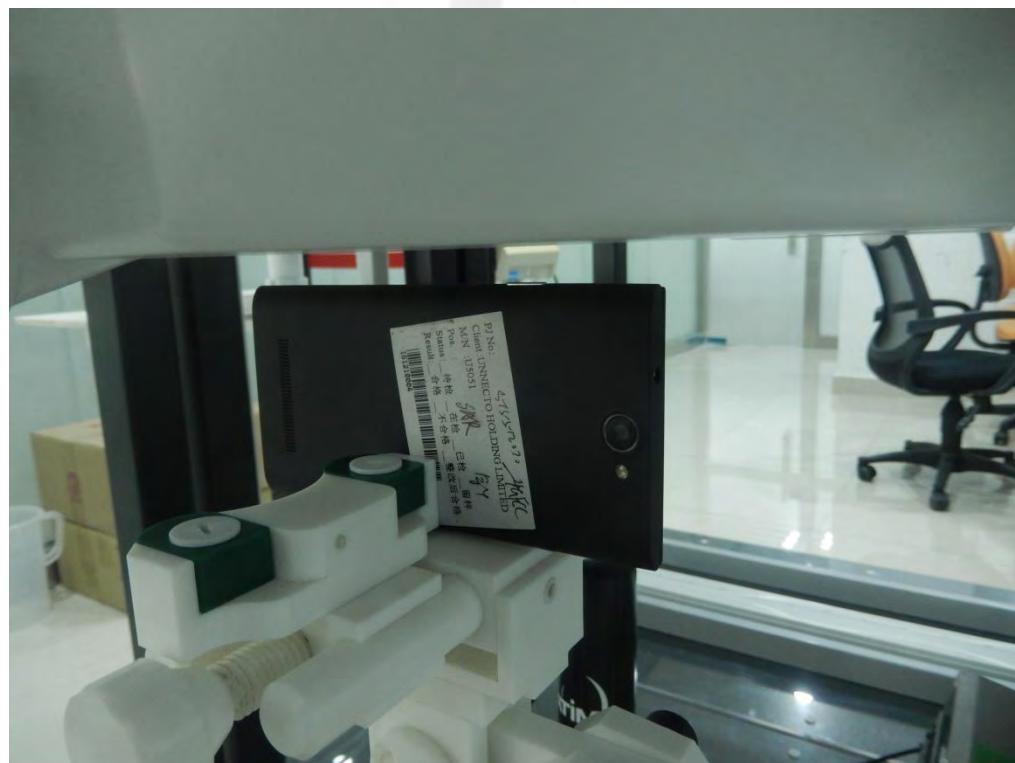




Body left side



Body right side

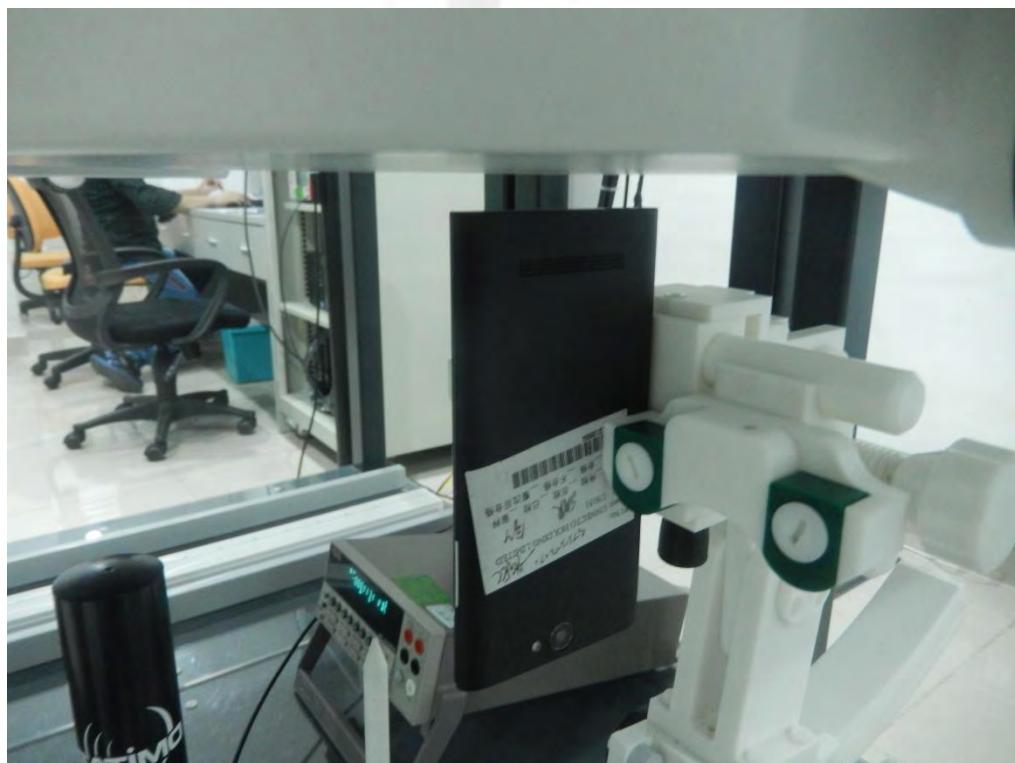




Body top side



Body Bottom side





Liquid depth (15 cm)





12. SAR Result Summary

12.1 Head SAR

Band	Mode	Test Position	Channel	Result 1g (W/Kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaled SAR (W/Kg)	Meas. No.
GSM 850	Voice	Right Cheek	CH 128	0.128	4.15	29	28.99	0.128	1
		Right Tilt	CH 128	0.058	0.10	29	28.99	0.058	2
		Left Cheek	CH 128	0.129	1.65	29	28.99	0.129	3
		Left Tilt	CH 128	0.063	2.84	29	28.99	0.063	4
GSM1900	Voice	Right Cheek	CH 661	0.077	-3.17	29	28.73	0.082	10
		Right Tilt	CH 661	0.030	-1.17	29	28.73	0.032	11
		Left Cheek	CH 661	0.106	3.91	29	28.73	0.113	12
		Left Tilt	CH 661	0.016	1.76	29	28.73	0.017	13
WCDMA II	RMC	Right Cheek	CH 9537	0.150	-1.20	22	21.69	0.161	22
		Right Tilt	CH 9537	0.015	-1.23	22	21.69	0.016	23
		Left Cheek	CH 9537	0.154	0.59	22	21.69	0.165	24
		Left Tilt	CH 9537	0.096	3.21	22	21.69	0.103	25
WCDMA IV	RMC	Right Cheek	CH 1512	0.162	-2.10	22.1	22.05	0.164	34
		Right Tilt	CH 1512	0.018	-3.61	22.1	22.05	0.018	35
		Left Cheek	CH 1512	0.197	0.56	22.1	22.05	0.199	36
		Left Tilt	CH 1512	0.019	0.03	22.1	22.05	0.019	37
WCDMA V	RMC	Right Cheek	CH4182	0.121	4.51	22	21.72	0.129	46
		Right Tilt	CH4182	0.063	-2.80	22	21.72	0.067	47
		Left Cheek	CH4182	0.141	4.62	22	21.72	0.150	48
		Left Tilt	CH4182	0.058	0.98	22	21.72	0.062	49



Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Ch.	Result 1g (W/Kg)	Power Drift(%)	Max. Turn-up Power(dBm)	Meas. Output Power(dBm)	Scaled SAR (W/Kg)	Meas. No.
LTE Band 2	20M	QPSK	1	9	Right Cheek	19100	0.156	-2.46	21.6	21.52	0.159	55
			50	24	Right Cheek	19100	0.140	2.97	20.8	20.71	0.143	/
			1	9	Right Tilt	19100	0.013	-1.63	21.6	21.52	0.013	56
			50	24	Right Tilt	19100	0.011	-0.38	20.8	20.71	0.011	/
			1	9	Left Cheek	19100	0.163	2.29	21.6	21.52	0.166	57
			50	24	Left Cheek	19100	0.148	0.23	20.8	20.71	0.151	/
			1	9	Left Tilt	19100	0.018	-0.03	21.6	21.52	0.018	58
			50	24	Left Tilt	19100	0.012	-1.52	20.8	20.71	0.012	/
LTE Band 4	20M	QPSK	1	50	Right Cheek	20300	0.185	-4.54	23	22.71	0.198	67
			50	24	Right Cheek	20050	0.173	0.25	22	21.95	0.175	/
			1	50	Right Tilt	20300	0.230	-1.76	23	22.71	0.246	68
			50	24	Right Tilt	20050	0.228	1.71	22	21.95	0.231	/
			1	50	Left Cheek	20300	0.214	-0.80	23	22.71	0.229	69
			50	24	Left Cheek	20050	0.203	4.13	22	21.95	0.205	/
			1	50	Left Tilt	20300	0.024	-0.37	23	22.71	0.026	70
			50	24	Left Tilt	20050	0.020	3.30	22	21.95	0.020	/

Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Ch.	Result 1g (W/Kg)	Power Drift(%)	Max. Turn-up Power(dBm)	Meas. Output Power(dBm)	Scaled SAR (W/Kg)	Meas. No.
LTE Band 12	10M	QPSK	1	13	Right Cheek	20800	0.069	-0.44	23	22.71	0.074	79
			25	6	Right Cheek	20800	0.060	0.82	22	21.89	0.062	/
			1	13	Right Tilt	20800	0.040	-3.51	23	22.71	0.043	80
			25	6	Right Tilt	20800	0.031	-0.18	22	21.89	0.032	/
			1	13	Left Cheek	20800	0.088	-0.21	23	22.71	0.094	81
			25	6	Left Cheek	20800	0.076	-0.32	22	21.89	0.078	/
			1	13	Left Tilt	20800	0.036	3.65	23	22.71	0.038	82
			25	6	Left Tilt	20800	0.028	-0.36	22	21.89	0.029	/
LTE Band 17	10M	QPSK	1	13	Right Cheek	23780	0.078	-0.61	23	22.63	0.085	88
			25	0	Right Cheek	23780	0.072	0.75	22	21.71	0.077	/
			1	13	Right Tilt	23780	0.045	-3.29	23	22.63	0.049	89
			25	0	Right Tilt	23780	0.041	-0.92	22	21.71	0.044	/
			1	13	Left Cheek	23780	0.103	-1.19	23	22.63	0.112	90
			25	0	Left Cheek	23780	0.096	-0.70	22	21.71	0.103	/
			1	13	Left Tilt	23780	0.032	-1.69	23	22.63	0.035	91
			25	0	Left Tilt	23780	0.028	-0.25	22	21.71	0.030	/

Band	Mode	Test Position	Channel	Result 1g (W/Kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Duty cycle(%)	Scaled SAR (W/Kg)	Meas. No.
WIFI	DATA	Right Cheek	CH 1	0.204	0.91	12	11.5	100	0.229	97
		Right Tilt	CH 1	0.155	-0.55	12	11.5	100	0.174	98
		Left Cheek	CH 1	0.120	-0.03	12	11.5	100	0.135	99
		Left Tilt	CH 1	0.099	-2.91	12	11.5	100	0.111	100



12.2 Body SAR And Hotspot

Band	Mode	Test Position	Channel	Result 1g (W/Kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaled SAR (W/Kg)	Meas. No.
GSM 850	GPRS Data-4 Slot (hotspot)	Front side	CH 128	0.524	-2.17	26.5	26.33	0.545	5
		Back side	CH 128	0.544	2.17	26.5	26.33	0.566	6
		Left side	CH 128	0.253	-0.68	26.5	26.33	0.263	7
		Right side	CH 128	0.395	-2.63	26.5	26.33	0.411	8
		Bottom side	CH 128	0.282	-0.32	26.5	26.33	0.293	9
GSM1900	GPRS Data-4 Slot (hotspot)	Front side	CH 661	0.684	-4.47	26.1	26.06	0.690	14
		Back side	CH 661	0.691	2.39	26.1	26.06	0.697	15
		Left side	CH 661	0.094	-3.01	26.1	26.06	0.095	16
		Right side	CH 661	0.102	-2.62	26.1	26.06	0.103	17
		Bottom side	CH 512	0.791	-0.61	26.1	25.55	0.898	18
		Bottom side	CH 661	0.889	-3.87	26.1	26.06	0.897	19
		Bottom side	CH 810	0.969	0.56	26.1	25.97	0.998	20
WCDMA II	RMC (body-worn and hotspot)	Front side	CH 9537	0.665	0.04	22	21.69	0.714	26
		Back side	CH9263	0.896	-0.47	22	21.50	1.005	27
		Back side	CH9400	0.585	-0.32	22	21.51	0.655	29
		Back side	CH9537	0.873	-0.41	22	21.69	0.938	30
		Left side	CH 9537	0.069	-1.65	22	21.69	0.074	31
		Right side	CH 9537	0.086	-0.63	22	21.69	0.092	32
		Bottom side	CH 9537	0.784	-3.57	22	21.69	0.842	33
WCDMA IV	RMC (body-worn and hotspot)	Front side	CH1512	0.649	-1.44	22.1	22.05	0.657	38
		Back side	CH1512	0.635	0.16	22.1	22.05	0.642	39
		Left side	CH1512	0.098	-2.75	22.1	22.05	0.099	40
		Right side	CH1512	0.085	-0.86	22.1	22.05	0.086	41
		Bottom side	CH1313	0.971	0.03	22.1	21.49	1.117	42
		Bottom side	CH1450	0.990	-0.37	22.1	21.55	1.124	43
		Bottom side	CH1512	1.049	-0.90	22.1	22.05	1.061	44
WCDMA V	RMC (body-worn and hotspot)	Front side	CH4182	0.110	2.04	22	21.72	0.117	50
		Back side	CH4182	0.126	-3.82	22	21.72	0.134	51
		Left side	CH4182	0.063	-2.42	22	21.72	0.067	52
		Right side	CH4182	0.262	0.86	22	21.72	0.279	53
		Bottom side	CH4182	0.076	-0.94	22	21.72	0.081	54



Band	BW (MHz)	Modulation	RB Size	RB offset	Test Position	Ch.	Result 1g (W/Kg)	Power Drift(%)	Max. Turn-up Power(dBm)	Meas. Output Power(dBm)	Scaled SAR (W/Kg)	Meas. No.
LTE Band 2	20M	QPSK	1	99	Front	19100	0.607	-1.29	21.6	21.52	0.618	59
			50	24	Front	19100	0.591	2.03	20.8	20.71	0.603	/
			1	99	Back	19100	0.645	-0.79	21.6	21.52	0.657	60
			50	24	Back	19100	0.623	0.06	20.8	20.71	0.636	/
			1	99	Left Side	19100	0.082	-1.37	21.6	21.52	0.084	61
			50	24	Left Side	19100	0.072	-0.12	20.8	20.71	0.074	/
			1	99	Right Side	19100	0.077	-1.79	21.6	21.52	0.078	62
			50	24	Right Side	19100	0.070	0.08	20.8	20.71	0.071	/
			1	99	Bottom Side	18700	0.957	-0.70	21.6	21.42	0.997	63
			50	24	Bottom Side	18700	0.931	-1.41	20.8	20.52	0.993	/
			100	0	Bottom Side	18700	0.643	-1.09	21	20.44	0.731	/
			1	99	Bottom Side	18900	0.865	-0.57	21.6	21.35	0.916	65
			50	24	Bottom Side	18900	0.846	1.01	20.8	20.48	0.911	/
			100	0	Bottom Side	18900	0.491	1.72	21	20.30	0.577	/
			1	99	Bottom Side	19100	0.846	0.17	21.6	21.52	0.862	66
			50	24	Bottom Side	19100	0.827	2.68	20.8	20.71	0.844	/
			100	0	Bottom Side	19100	0.406	0.12	21	20.67	0.438	/
LTE Band 4	20M	QPSK	1	50	Front	20300	0.768	-1.03	23	22.71	0.821	71
			50	24	Front	20050	0.721	1.02	22	21.95	0.729	/
			1	50	Back	20300	0.736	0.21	23	22.71	0.787	72
			50	24	Back	20050	0.703	3.15	22	21.95	0.711	/
			1	50	Left Side	20300	0.109	-2.21	23	22.71	0.117	73
			50	24	Left Side	20050	0.081	0.95	22	21.95	0.082	/
			1	50	Right Side	20300	0.093	4.70	23	22.71	0.099	74
			50	24	Right Side	20050	0.076	-3.13	22	21.95	0.077	/
			1	50	Bottom Side	20050	0.947	-1.11	23	22.68	1.019	75
			50	24	Bottom Side	20050	0.896	-2.82	22	21.95	0.906	/
			100	0	Bottom Side	20050	0.536	-1.38	22	21.73	0.570	/
			1	50	Bottom Side	20175	1.004	-0.73	23	22.66	1.086	76
			50	24	Bottom Side	20175	0.846	2.86	22	21.71	0.904	/
			100	0	Bottom Side	20175	0.581	0.32	22	21.55	0.644	/
			1	50	Bottom Side	20300	1.071	-0.83	23	22.71	1.145	77
			50	24	Bottom Side	20300	0.868	3.15	22	21.80	0.909	/
			100	0	Bottom Side	20300	0.582	1.51	22	21.66	0.629	/
LTE Band 12	10M	QPSK	1	13	Front	21100	0.114	-3.93	23	22.71	0.122	83
			25	6	Front	21100	0.086	-0.54	22	21.89	0.088	/
			1	13	Back	21100	0.217	-1.79	23	22.71	0.232	84
			25	6	Back	21100	0.195	-0.81	22	21.89	0.200	/
			1	13	Left Side	21100	0.116	-1.46	23	22.71	0.124	85
			25	6	Left Side	21100	0.095	-0.63	22	21.89	0.097	/
			1	13	Right Side	21100	0.115	-1.25	23	22.71	0.123	86
			25	6	Right Side	21100	0.093	-1.93	22	21.89	0.095	/
			1	13	Bottom Side	21100	0.035	-3.63	23	22.71	0.037	87
			25	6	Bottom Side	21100	0.020	-1.71	22	21.89	0.021	/
LTE Band 17	10M	QPSK	1	13	Front	23780	0.128	-4.44	23	22.63	0.139	92
			25	0	Front	23780	0.109	-4.58	22	21.71	0.117	/
			1	13	Back	23780	0.195	0.57	23	22.63	0.212	93
			25	0	Back	23780	0.175	1.09	22	21.71	0.187	/
			1	13	Left Side	23780	0.100	0.03	23	22.63	0.109	94
			25	0	Left Side	23780	0.086	0.67	22	21.71	0.092	/
			1	13	Right Side	23780	0.122	-2.31	23	22.63	0.133	95
			25	0	Right Side	23780	0.103	0.90	22	21.71	0.110	/
			1	13	Bottom Side	23780	0.040	-3.51	23	22.63	0.044	96
			25	0	Bottom Side	23780	0.031	-1.28	22	21.71	0.033	/



Band	Mode	Test Position	Channel	Result 1g (W/Kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Duty cycle(%)	Scaled SAR (W/Kg)	Meas. No.
WIFI	802.11b	Front side	CH 1	0.087	1.63	12	11.5	100	0.098	101
		Back side	CH 1	0.092	0.14	12	11.5	100	0.103	102
		Left side	CH 1	0.075	1.71	12	11.5	100	0.084	103
		Bottom side	CH 1	0.071	0.65	12	11.5	100	0.080	104

Note:

1. Two card slot can't work at the same time.
2. The test separation of all above table is 10mm.
3. 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 **0.095** W/Kg for Head and **0.043** W/Kg for Body/Hotspot)



Repeated SAR

Band	Mode	Test Position	Channel	Result 1g (W/Kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaled SAR (W/Kg)	Meas. No.
GSM 1900	GRPS Data-4 Slot (hotspot)	Bottom side	810	0.917	3.26	26.1	25.97	0.945	21
WCDMA II	RMC (body-worn and hotspot)	Back side	9263	0.892	-0.13	22	21.50	1.001	28
WCDMA IV	RMC (body-worn and hotspot)	Bottom side	1513	1.040	-1.12	22.1	22.05	1.052	45
LTE Band 2	QPSK,RB 1	Bottom side	18700	0.917	-0.70	21.6	21.42	0.956	64
LTE Band 2	QPSK,RB 1	Bottom side	20300	1.073	-0.85	23	22.71	1.147	78

12.3 repeated SAR measurement

Band	Mode	Test Position	Channel	Original Measured SAR 1g(mW/g)	1 st Repeated SAR 1g	Ratio	Original Measured SAR 1g(mW/g)	2nd Repeated SAR 1g	Ratio
GSM 1900	GRPS Data-4 Slot (hotspot)	Bottom side	810	0.969	0.917	1.06	-	-	-
WCDMA II	RMC (body-worn and hotspot)	Back side	9263	0.896	0.892	1.00	-	-	-
WCDMA IV	RMC (body-worn and hotspot)	Bottom side	1513	1.049	1.040	1.01	-	-	-
LTE Band 2	QPSK,RB 1	Bottom side	18700	0.957	0.917	1.04	-	-	-
LTE Band 2	QPSK,RB 1	Bottom side	20300	1.071	1.073	1.00	-	-	-

Note:

1. Per KDB 865664 D01V01,for each frequency band ,repeated SAR measurement is required only when the measured SAR is $\geq 0.8\text{W/Kg}$.
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 $< 1.45\text{W/Kg}$, 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 $\geq 1.45\text{W/Kg}$
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
Head	1. GSM + WIFI
	2. GSM + Bluetooth
	3. WCDMA + WIFI
	4. WCDMA + Bluetooth
	5. LTE + WIFI
	6. LTE + Bluetooth
Body	1. GSM + WIFI
	2. GSM + Bluetooth
	3. WCDMA + WIFI
	4. WCDMA + Bluetooth
	5. LTE + WIFI
	6. LTE + Bluetooth

NOTE:

1. Bluetooth and WIFI can't simultaneous transmission at the same time.
2. For simultaneous transmission at head and body exposure position, 2 transmitters simultaneous transmission was the worst state.
3. Based upon KDB 447498 D01 v05, BT SAR is excluded as below table.
4. If the test separation distance is <5mm, 5mm is used for excluded SAR calculation.
5. For minimum test separation distance \leq 50mm, Bluetooth standalone SAR is excluded according to $[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})} / x]$ \leq 3.0 for 1-g SAR and \leq 7.5 for 10-g extremity SAR
6. The reported SAR summation is calculated based on the same configuration and test position.
7. 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) $(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm}) \cdot [\sqrt{f(\text{GHz})} / x]$ W/kg for test separation distances \leq 50 mm;
Where x = 7.5 for 1-g SAR, and x = 18.75 for 10-g SAR.
 - b) 0.4W/Kg for 1-g SAR and 1.0W/Kg for 10-g SAR, when the separation distance is $>$ 50mm.

Estimated SAR		Maximum Average Power		Antenna to user(mm)	Frequency(GHz)	Stand alone SAR(1g) [W/kg]
		dBm	mW			
BT	Head	2	1.58	5	2.480	0.066
	Body			10	2.480	0.033



Simultaneous Mode	Position	Mode	Max. 1-g SAR (W/kg)	1-g Sum SAR (W/kg)
GSM + WIFI	Head	GSM Voice	0.129	0.358
		WIFI	0.229	
	Body	GSM Data	0.998	1.001
		WIFI	0.103	
GSM + Bluetooth	Head	GSM Voice	0.129	0.195
		Bluetooth	0.066	
	Body	GSM Data	0.998	1.031
		Bluetooth	0.033	
WCDMA + WIFI	Head	WCDMA RMC	0.199	0.428
		WIFI	0.229	
	Body	WCDMA RMC	1.124	1.227
		WIFI	0.103	
WCDMA + Bluetooth	Head	WCDMA RMC	0.199	0.265
		Bluetooth	0.066	
	Body	WCDMA RMC	1.124	1.157
		Bluetooth	0.033	
LTE + WIFI	Head	LTE RMC	0.246	0.475
		WIFI	0.229	
	Body	LTE RMC	1.147	1.250
		WIFI	0.103	
LTE + Bluetooth	Head	LTE RMC	0.246	0.312
		Bluetooth	0.066	
	Body	LTE RMC	1.147	1.180
		Bluetooth	0.033	

Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneous transmitting antenna.

When the sum of SAR 1g of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the SAR limit (SAR-1g 1.6 W/kg), the simultaneous transmission SAR is not required. When the sum of SAR 1g is greater than the SAR limit (SAR-1g 1.6 W/kg), SAR test exclusion is determined by the SPLSR.



13. Equipment List

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
750MHz Dipole	SATIMO	SID750	SN 30/14 DIP0G750-331	2014.09.01	2017.08.31
835MHz Dipole	SATIMO	SID835	SN 30/14 DIP0G835-332	2014.09.01	2017.08.31
1800MHz Dipole	SATIMO	SID1800	SN 30/14 DIP1G800-329	2014.09.01	2017.08.31
1900MHz Dipole	SATIMO	SID1900	SN 30/14 DIP1G900-333	2014.09.01	2017.08.31
2450MHz Dipole	SATIMO	SID2450	SN 30/14 DIP2G450-335	2014.09.01	2017.08.31
E-Field Probe	SATIMO	SSE5	SN 17/14 EP221	2015.09.01	2016.08.31
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 POSITIONNING SYSTEM	SN 32/14 MSH97	N/A	N/A
SAR TEST BENCH	SATIMO	LAPTOP POSITIONNING SYSTEM	SN 32/14 LSH29	N/A	N/A
Dielectric Probe Kit	SATIMO	SCLMP	SN 32/14 OCPG52	2015.09.01	2016.08.31
Multi Meter	Keithley	Multi Meter 2000	4050073	2015.11.20	2016.11.19
Signal Generator	Agilent	N5182A	MY50140530	2015.11.18	2016.11.17
Power Meter	R&S	NRP	100510	2015.10.25	2016.10.24
Power Sensor	R&S	NRP-Z11	101919	2015.10.24	2016.10.23
Power Sensor	Anritsu	MA2411B	1027253	2015.10.10	2016.10.09
Power Sensor	R&S	NRP-Z21	103971	2015.12.12	2016.12.11
Network Analyzer	Agilent	5071C	EMY46103472	2015.12.12	2016.12.11
Attenuator 1	PE	PE7005-10	N/A	2015.10.25	2016.10.24
Attenuator 2	PE	PE7005-3	N/A	2015.10.24	2016.10.23
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 (750MHz Head)

Type: Phone measurement (Complete)

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

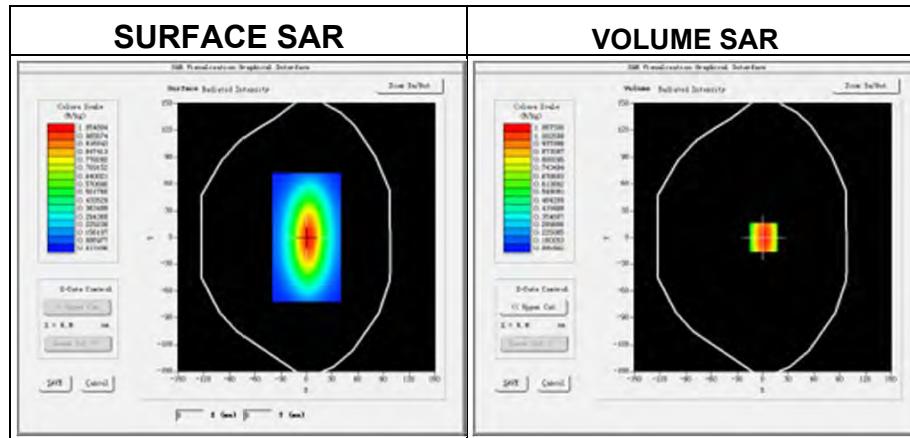
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2015-12-23

Measurement duration: 13 minutes 25 seconds

Experimental conditions

Phantom	Validation plane
Device Position	-
Band	750MHz
Channels	-
Signal	CW
Frequency (MHz)	750MHz
Relative permittivity (real part)	41.2
Relative permittivity	20.8
Conductivity (S/m)	0.91
Power drift (%)	2.35
Ambient Temperature:	22.7°C
Liquid Temperature:	22.3°C
ConvF:	4.53
Crest factor:	1:1



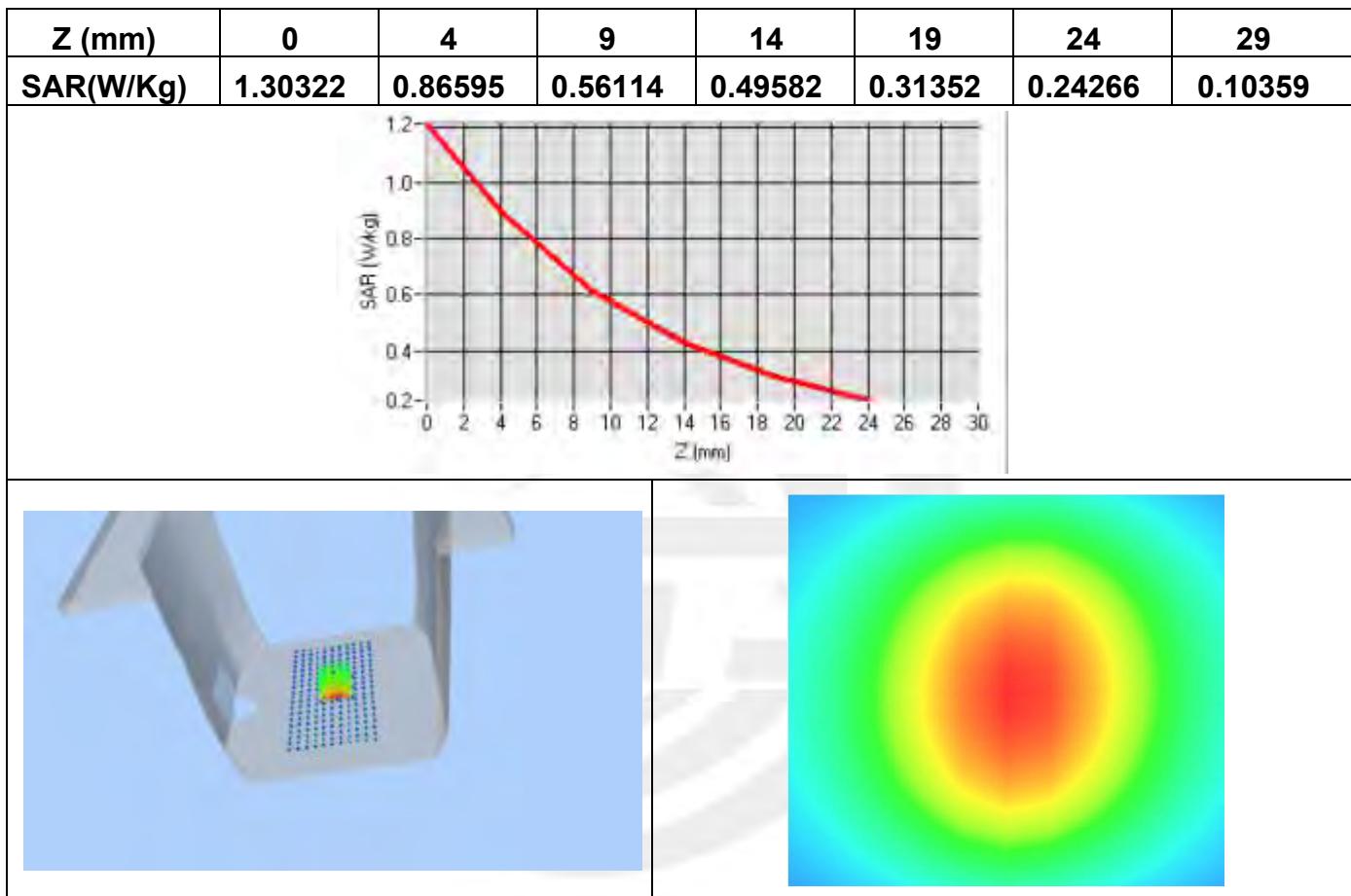


Maximum location: X=1.00, Y=0.00

SAR Peak: 1.30 W/kg

SAR 10g (W/Kg)	0.544560
SAR 1g (W/Kg)	0.838123

Z Axis Scan





System Performance Check Data (835MHz Body)

Type: Phone measurement (Complete)

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

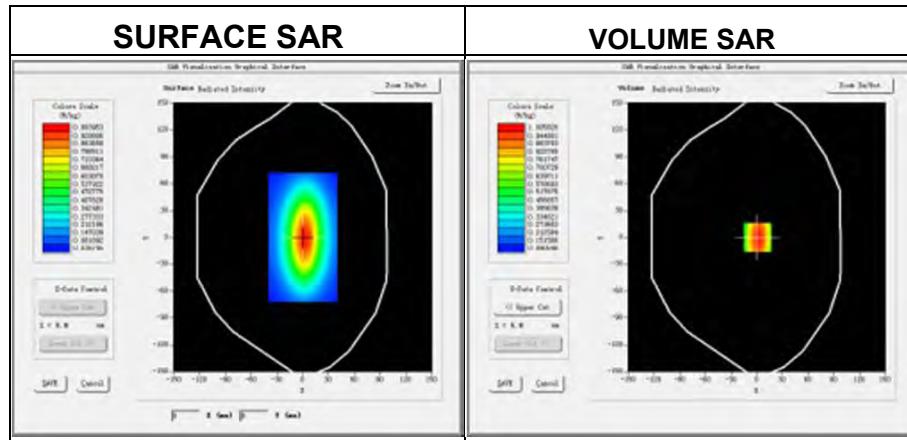
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2015-12-23

Measurement duration: 14 minutes 12 seconds

Experimental conditions.

Probe	
Phantom	Validation plane
Device Position	-
Band	750MHz
Channels	-
Signal	CW
Frequency (MHz)	750MHz
Relative permittivity (real part)	55.26
Relative permittivity	23.251187
Conductivity (S/m)	0.91
Power drift (%)	1.020000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.3°C
ConvF:	4.70
Crest factor:	1:1





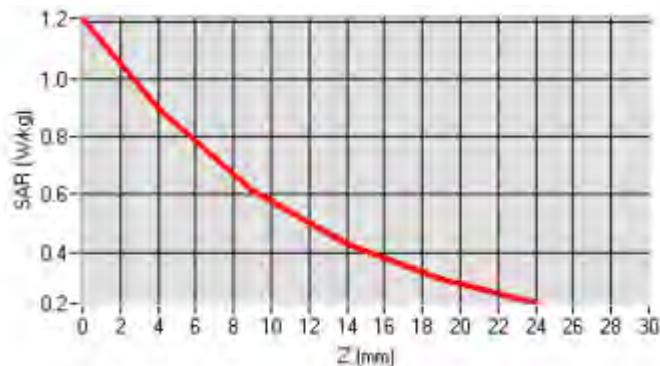
Maximum location: X=1.00, Y=0.00

SAR Peak: 1.30 W/kg

SAR 10g (W/Kg)	0.576142
SAR 1g (W/Kg)	0.856325

Z Axis Scan

Z (mm)	0	4	9	14	19	24	29
SAR(W/Kg)	1.30254	0.85658	0.56325	0.49362	0.31412	0.24366	0.10355





System Performance Check Data (835MHz Head)

Type: Phone measurement (Complete)

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

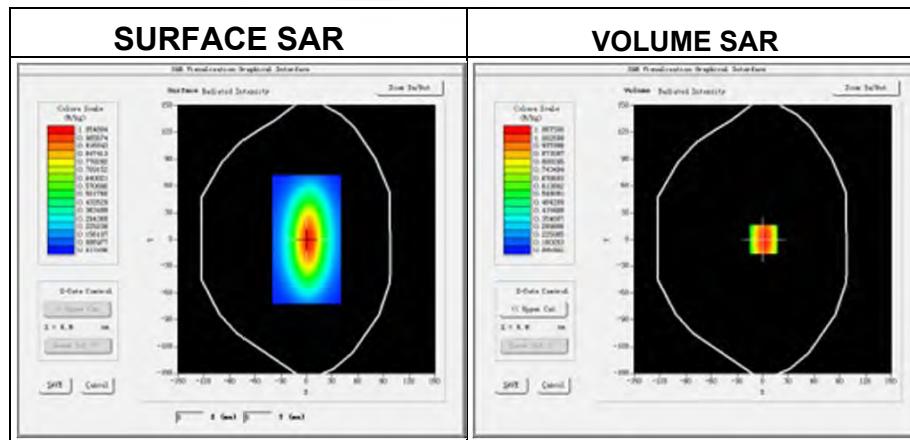
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2015-12-23

Measurement duration: 13 minutes 27 seconds

Experimental conditions

Phantom	Validation plane
Device Position	-
Band	835MHz
Channels	-
Signal	CW
Frequency (MHz)	835MHz
Relative permittivity (real part)	41.00
Relative permittivity	18.72
Conductivity (S/m)	0.86
Power drift (%)	0.45
Ambient Temperature:	22.7°C
Liquid Temperature:	22.3°C
ConvF:	4.83
Crest factor:	1:1



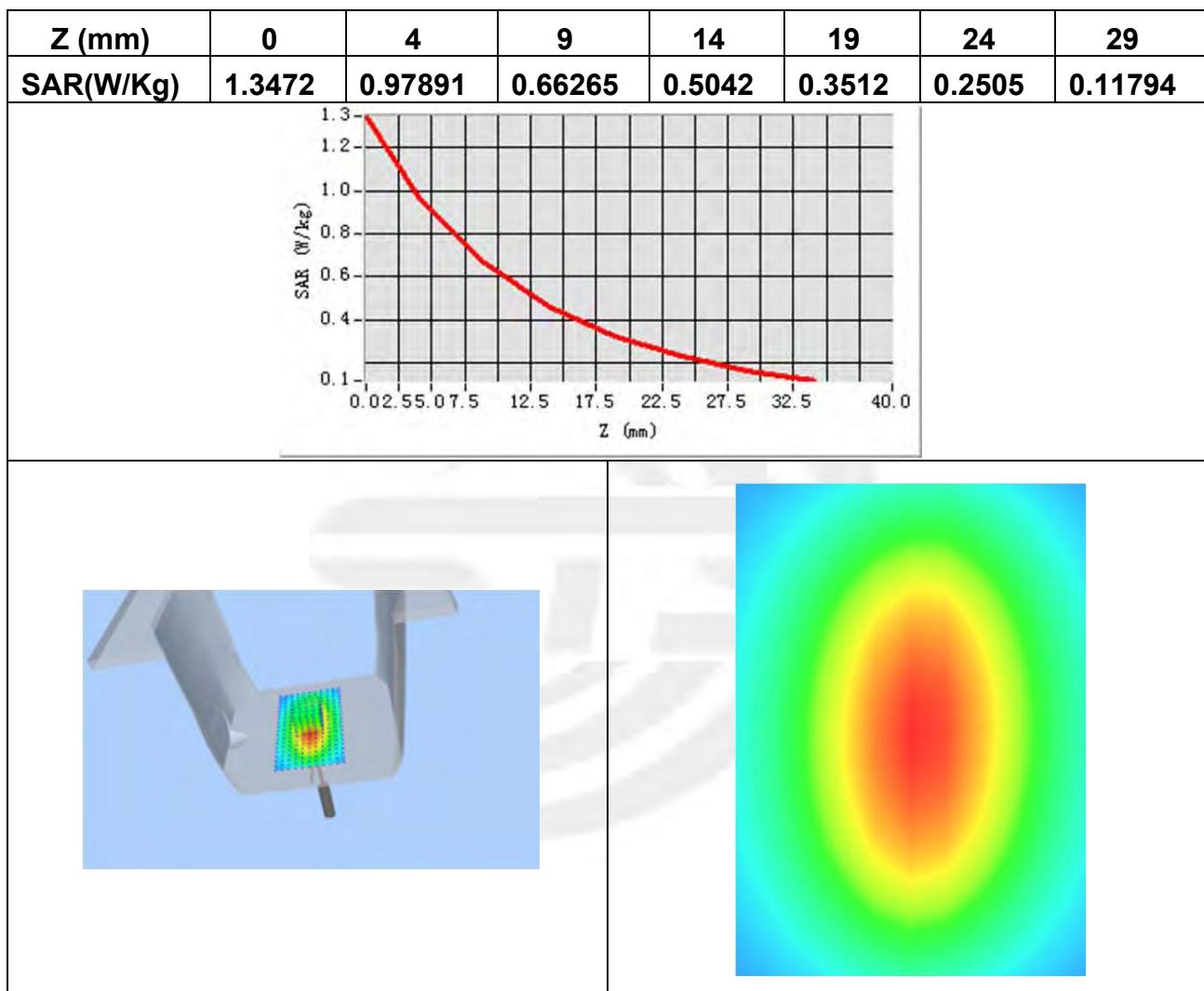


Maximum location: X=1.00, Y=0.00

SAR Peak: 1.39 W/kg

SAR 10g (W/Kg)	0.625623
SAR 1g (W/Kg)	0.937481

Z Axis Scan





System Performance Check Data (835MHz Body)

Type: Phone measurement (Complete)

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

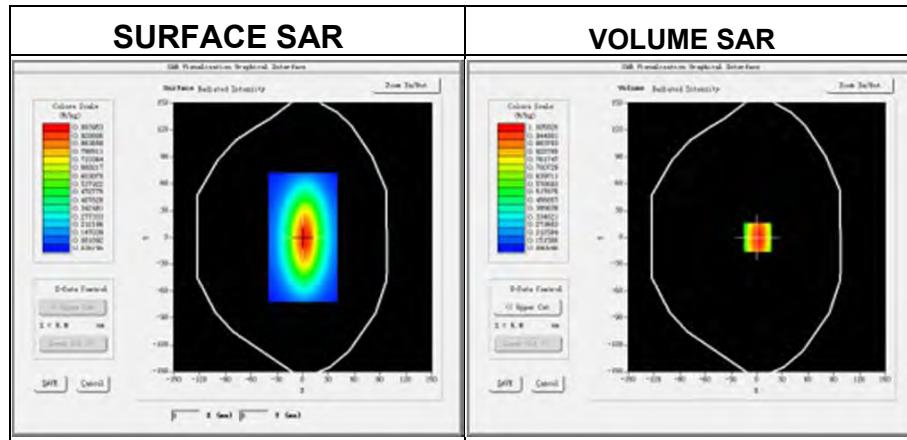
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2015-12-23

Measurement duration: 14 minutes 13 seconds

Experimental conditions.

Probe	
Phantom	Validation plane
Device Position	-
Band	835MHz
Channels	-
Signal	CW
Frequency (MHz)	835MHz
Relative permittivity (real part)	54.70
Relative permittivity	21.408187
Conductivity (S/m)	0.98
Power drift (%)	0.090000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.3°C
ConvF:	5.02
Crest factor:	1:1



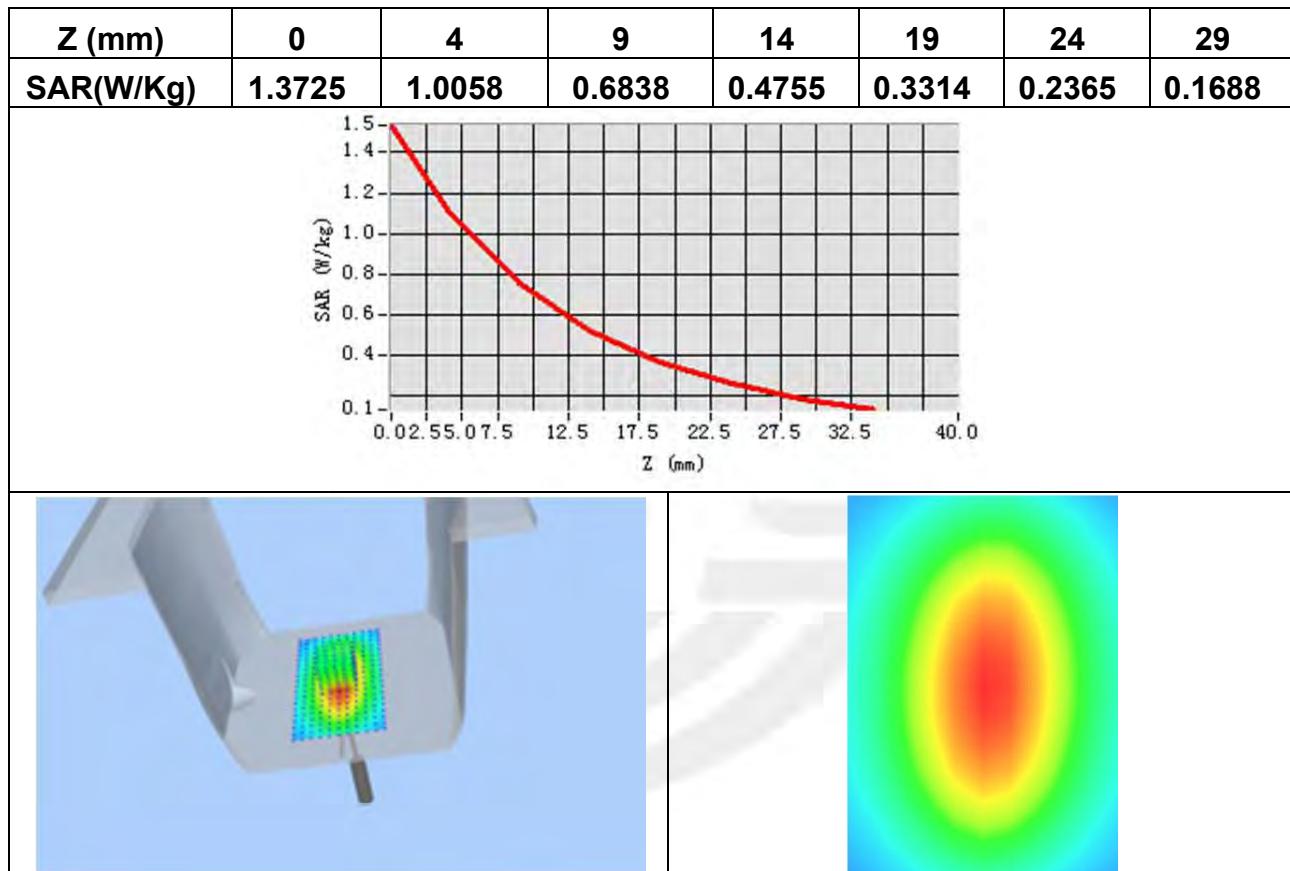


Maximum location: X=1.00, Y=0.00

SAR Peak: 1.50 W/kg

SAR 10g (W/Kg)	0.603221
SAR 1g (W/Kg)	0.946658

Z Axis Scan





System Performance Check Data(1800MHz Head)

Type: Phone measurement (Complete)

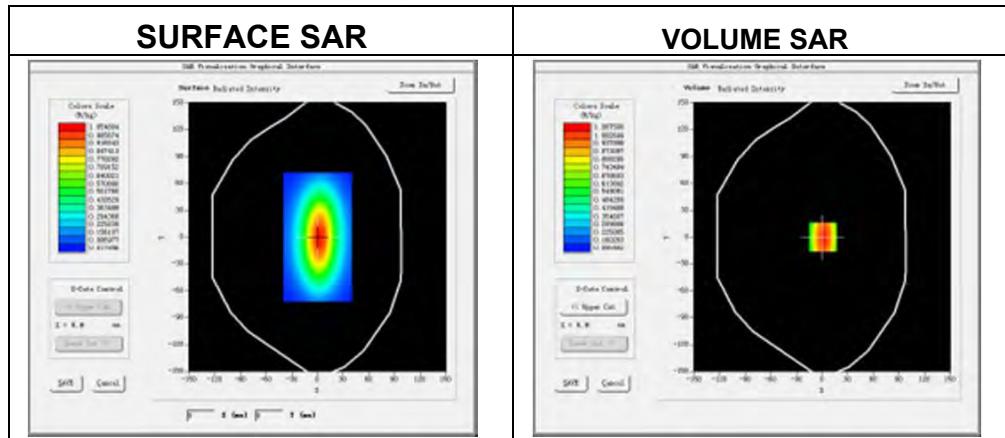
Area scan resolution: dx=8mm,dy=8mm

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

Date of measurement: 2015-12-23

Experimental conditions.

Phantom	Validation plane
Device Position	-
Band	1800MHz
Channels	-
Signal	CW
Frequency (MHz)	1800MHz
Relative permittivity (real part)	40.20
Relative permittivity	14.096855
Conductivity (S/m)	1.308491
Power drift (%)	-1.390000
Ambient Temperature	22.7°C
Liquid Temperature	22.3°C
Probe	SN 17/14 EP221
ConvF	4.25
Crest factor:	1:1

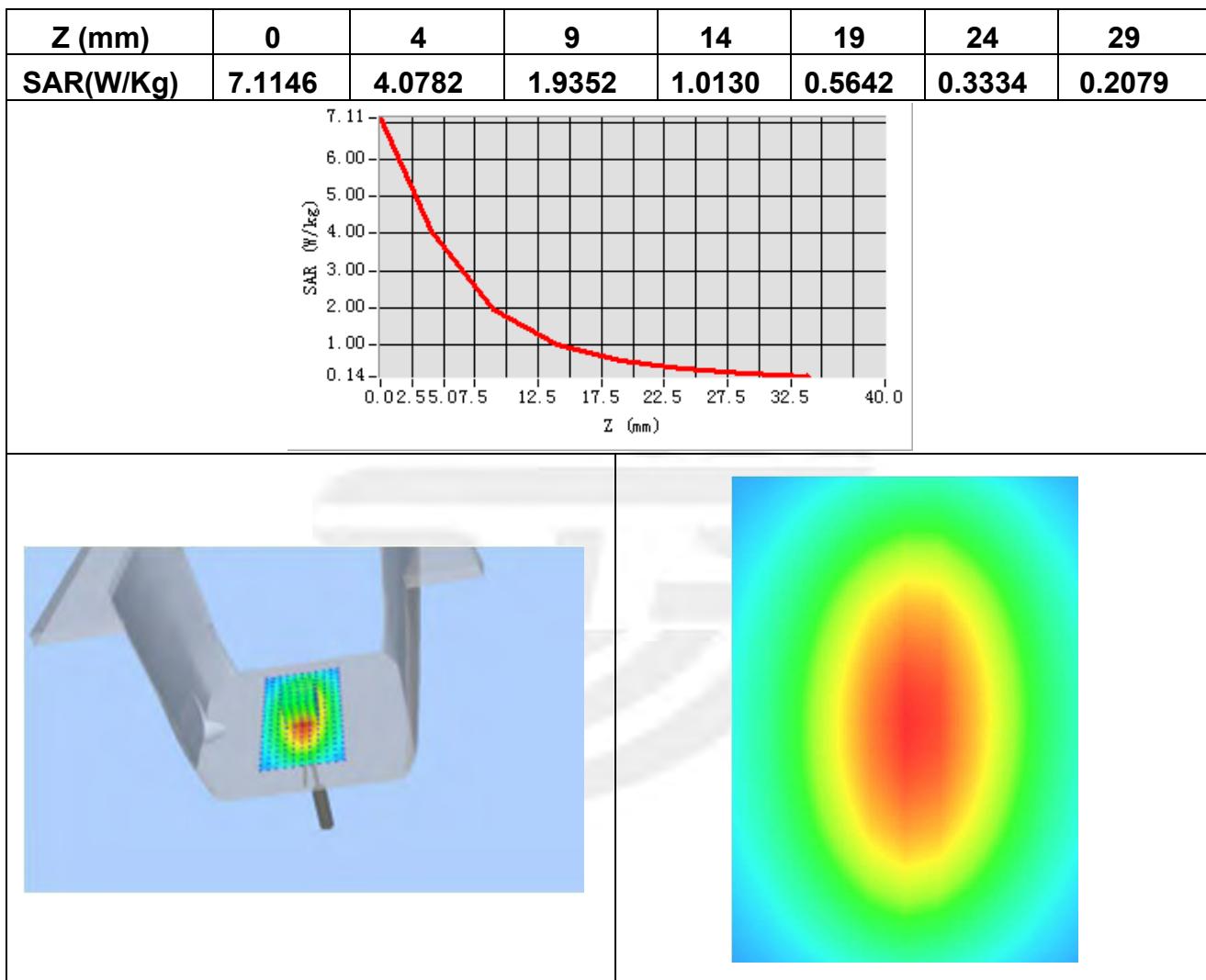




Maximum location: X=7.00, Y=-1.00

SAR 10g (W/Kg)	1.980247
SAR 1g (W/Kg)	3.760154

Z Axis Scan





System Performance Check Data(1800MHz Body)

Type: Phone measurement (Complete)

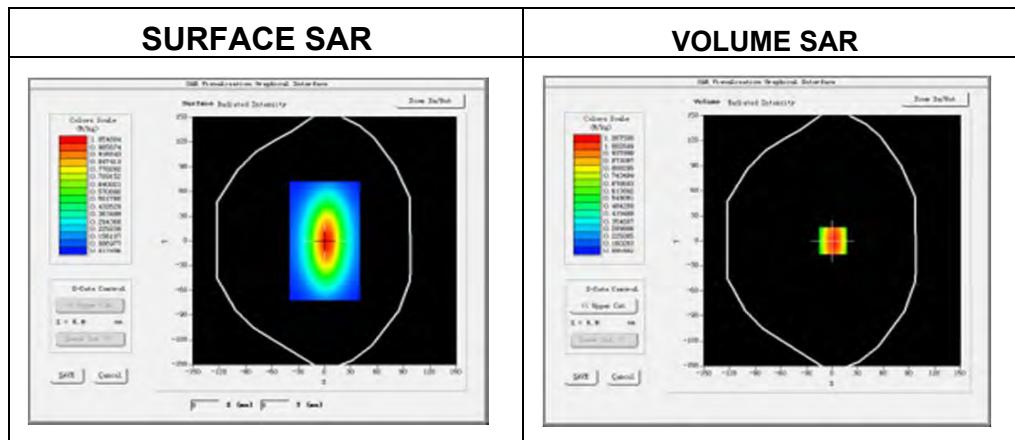
Area scan resolution: dx=8mm,dy=8mm

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

Date of measurement: 2015-12-23

Experimental conditions.

Phantom	Validation plane
Device Position	-
Band	1800MHz
Channels	-
Signal	CW
Frequency (MHz)	1800MHz
Relative permittivity (real part)	52.6
Relative permittivity	15.08356
Conductivity (S/m)	1.376582
Power drift (%)	2.351
Ambient Temperature	22.7°C
Liquid Temperature	22.3°C
Probe	SN 17/14 EP221
ConvF	4.34
Crest factor:	1:1

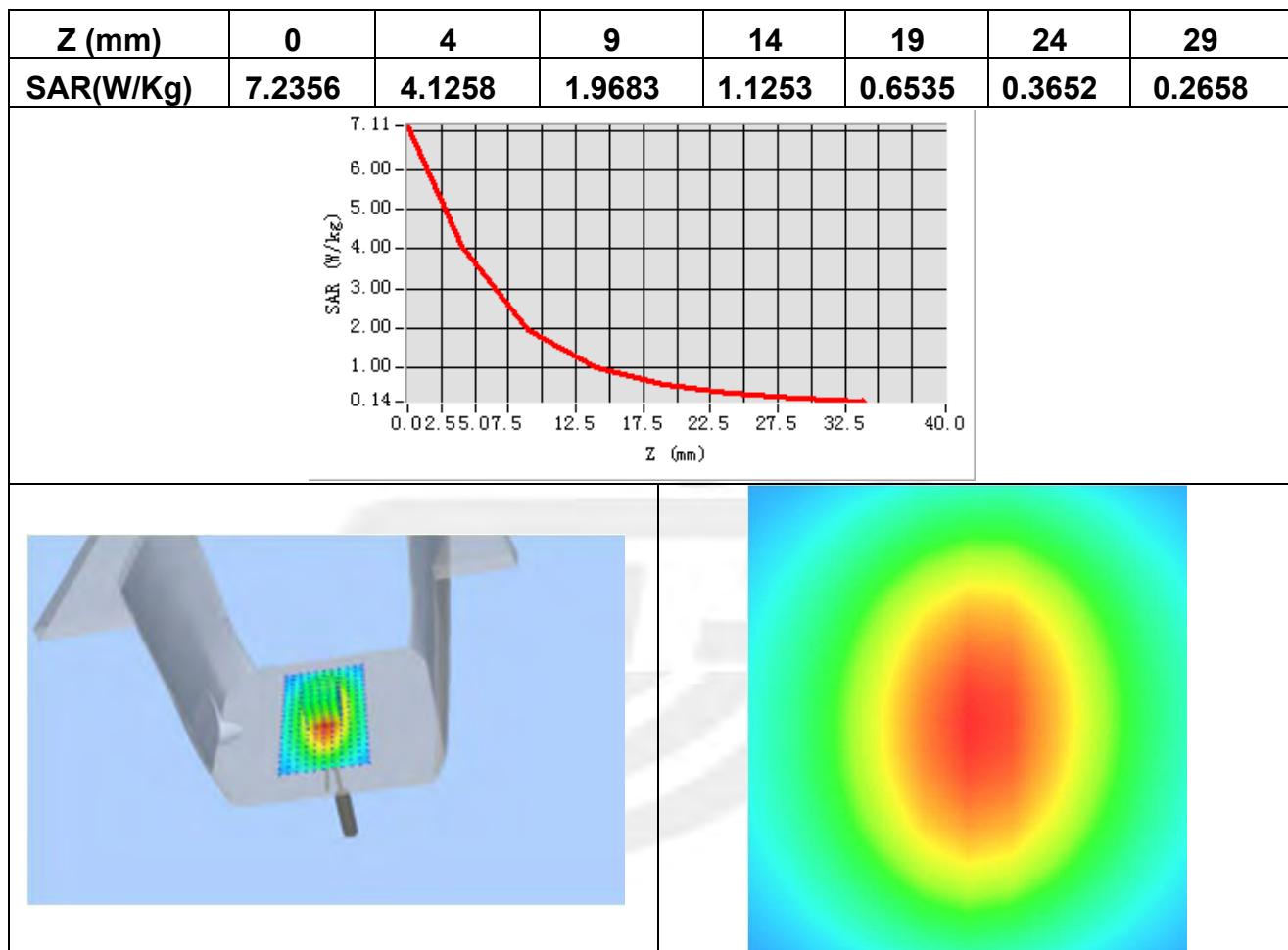




Maximum location: X=6.00, Y=2.00

SAR 10g (W/Kg)	1.99658
SAR 1g (W/Kg)	3.88325

Z Axis Scan





System Performance Check Data (1900MHz Head)

Type: Phone measurement (Complete)

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

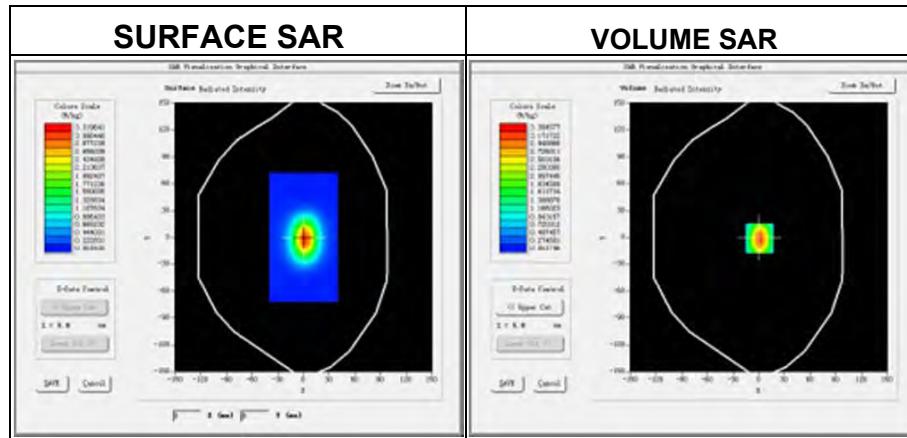
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2015-12-23

Measurement duration: 14 minutes 12 seconds

Experimental conditions.

Phantom	Validation plane
Device Position	-
Band	1900MHz
Channels	-
Signal	CW
Frequency (MHz)	1900MHz
Relative permittivity (real part)	39.50
Relative permittivity	13.26
Conductivity (S/m)	1.43
Power drift (%)	0.47
Ambient Temperature:	22.7°C
Liquid Temperature:	22.3°C
Probe	SN 17/14 EP221
ConvF:	4.71
Crest factor:	1:1



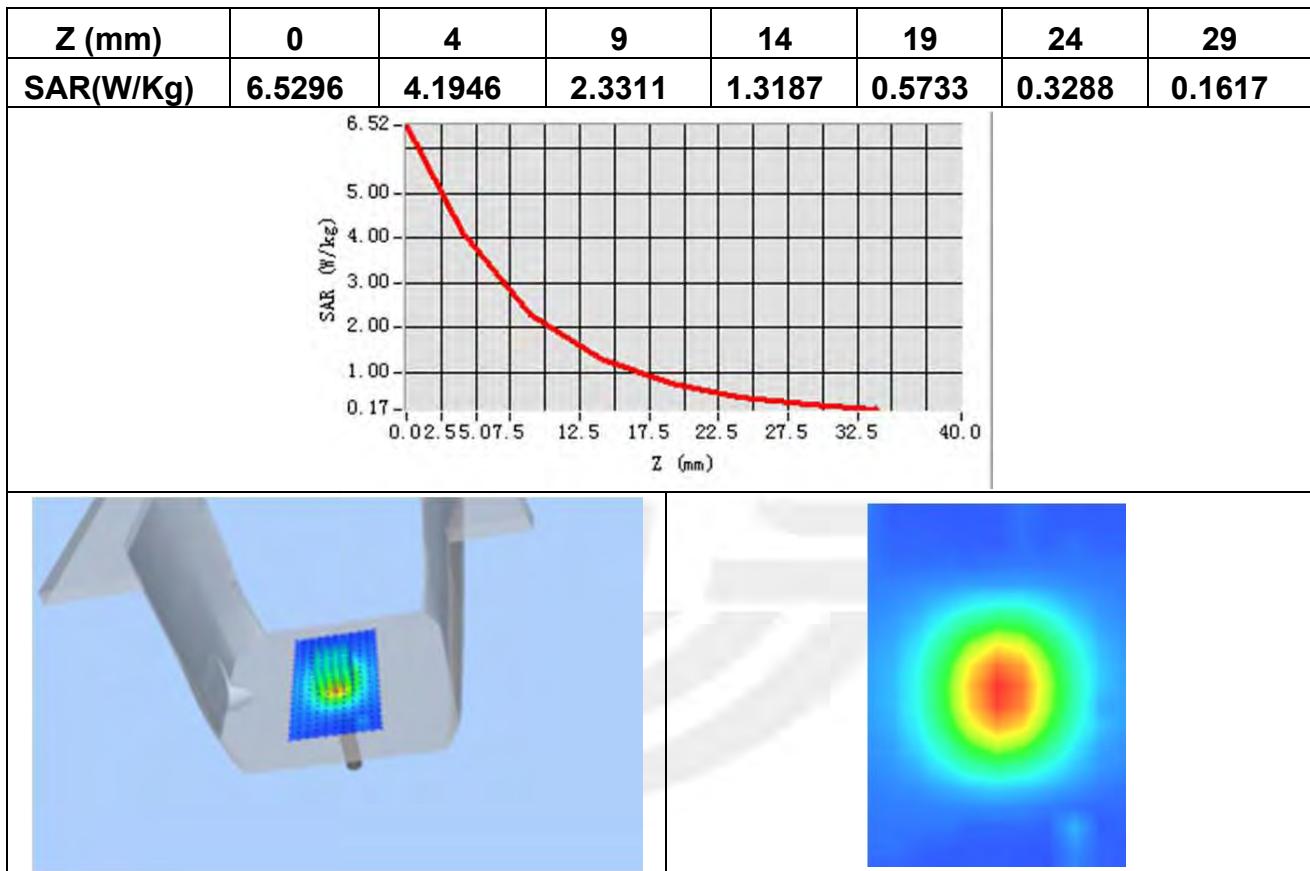


Maximum location: X=1.00, Y=0.00

SAR Peak: 5.41 W/kg

SAR 10g (W/Kg)	1.967525
SAR 1g (W/Kg)	3.856235

Z Axis Scan





System Performance Check Data (1900MHz Body)

Type: Phone measurement (Complete)

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

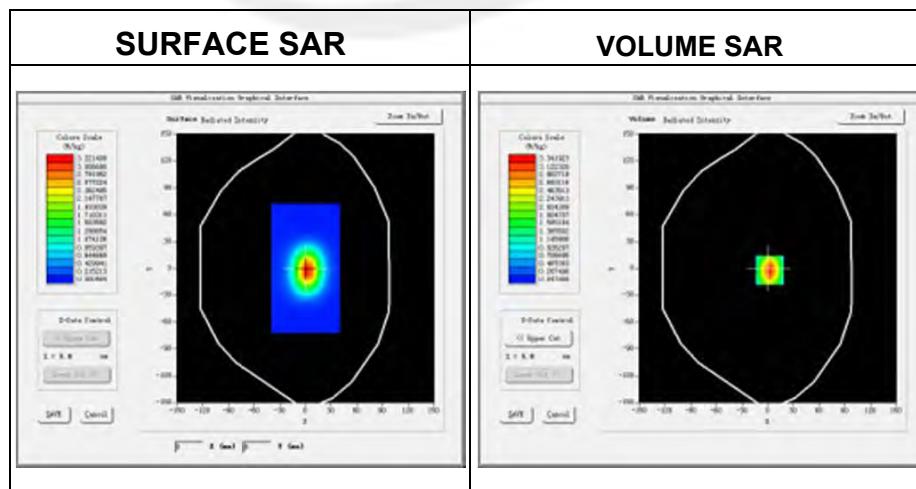
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2015-12-23

Measurement duration: 14 minutes 46 seconds

Experimental conditions.

Device Position	-
Band	1900MHz
Channels	-
Signal	CW
Frequency (MHz)	1900
Relative permittivity (real part)	52.31
Relative permittivity	12.87531
Conductivity (S/m)	1.5
Power drift (%)	0.37
Ambient Temperature:	22.7°C
Liquid Temperature:	22.3°C
Probe	SN 17/14 EP221
ConvF:	4.85
Crest factor:	1:1



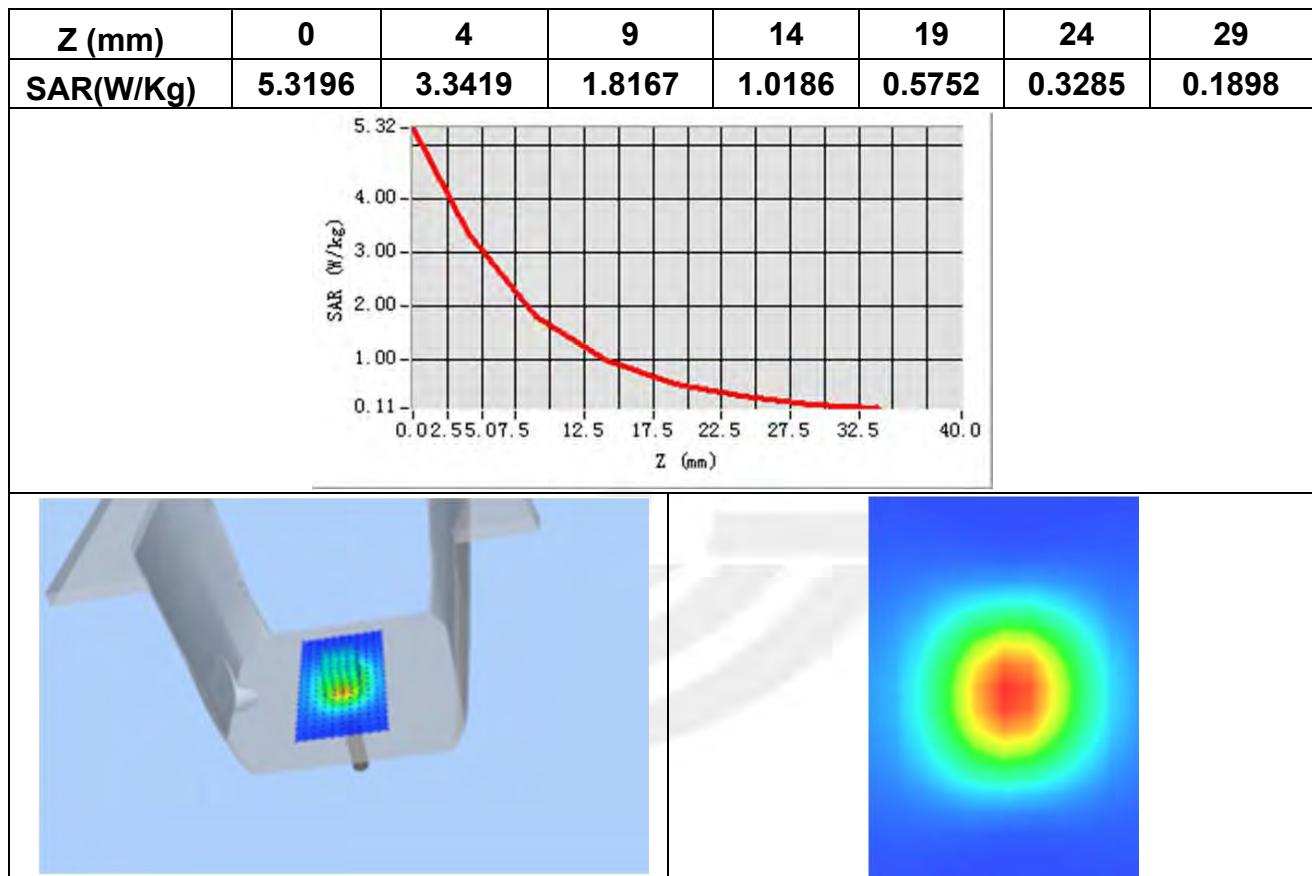


Maximum location: X=2.00, Y=2.00

SAR Peak: 5.27 W/kg

SAR 10g (W/Kg)	2.265354
SAR 1g (W/Kg)	3.986583

Z Axis Scan





System Performance Check Data (2450MHz Head)

Type: Phone measurement (Complete)

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

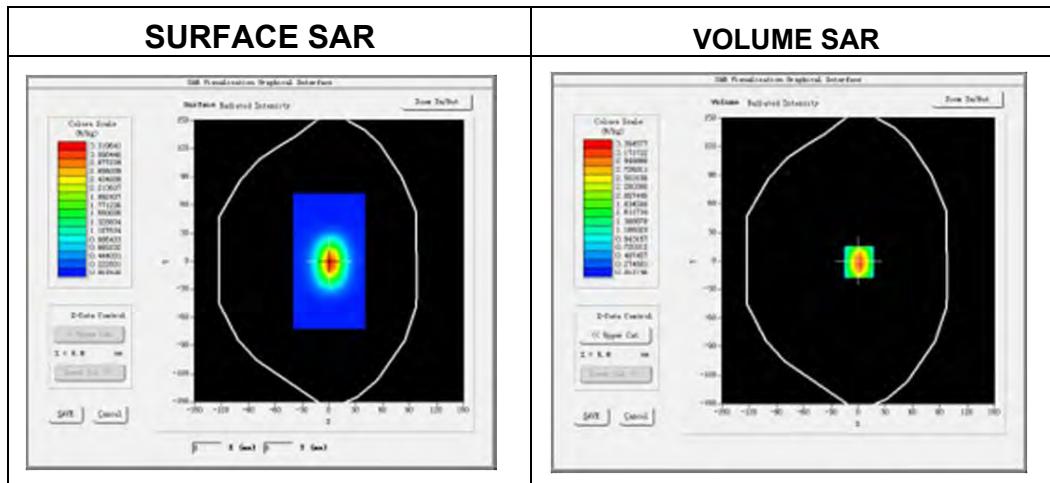
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2015-12-23

Measurement duration: 13 minutes 51seconds

Experimental conditions.

Device Position	Validation plane
Band	2450 MHz
Channels	-
Signal	CW
Frequency (MHz)	2450
Relative permittivity (real part)	39.176002
Relative permittivity	12.930000
Conductivity (S/m)	1.88
Power drift (%)	-1.200000
Ambient Temperature	22.7°C
Liquid Temperature	22.3°C
Probe	SN 17/14 EP221
ConvF	4.11
Crest factor:	1:1

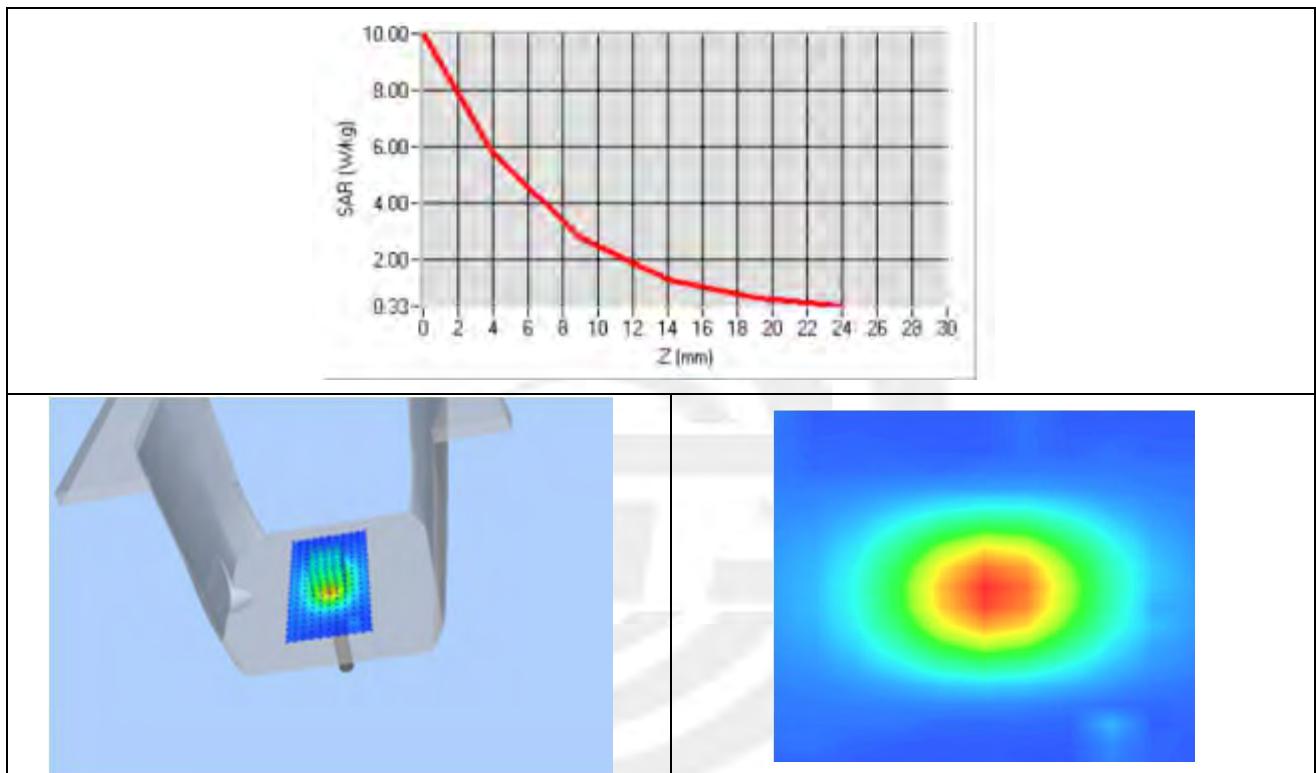




Maximum location: X=7.00, Y=6.00

SAR 10g (W/Kg)	2.659359
SAR 1g (W/Kg)	5.593465

Z Axis Scan





System Performance Check Data (2450MHz Body)

Type: Phone measurement (Complete)

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

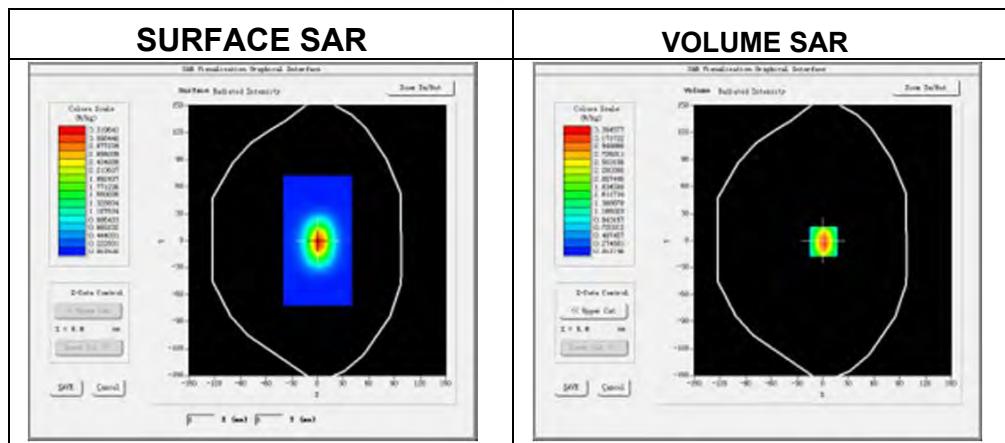
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2015-12-23

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)	2.12
Power drift (%)	-1.200000
Ambient Temperature	22.7°C
Liquid Temperature	22.3°C
Probe	SN 17/14 EP221
ConvF	4.25
Crest factor:	1:1

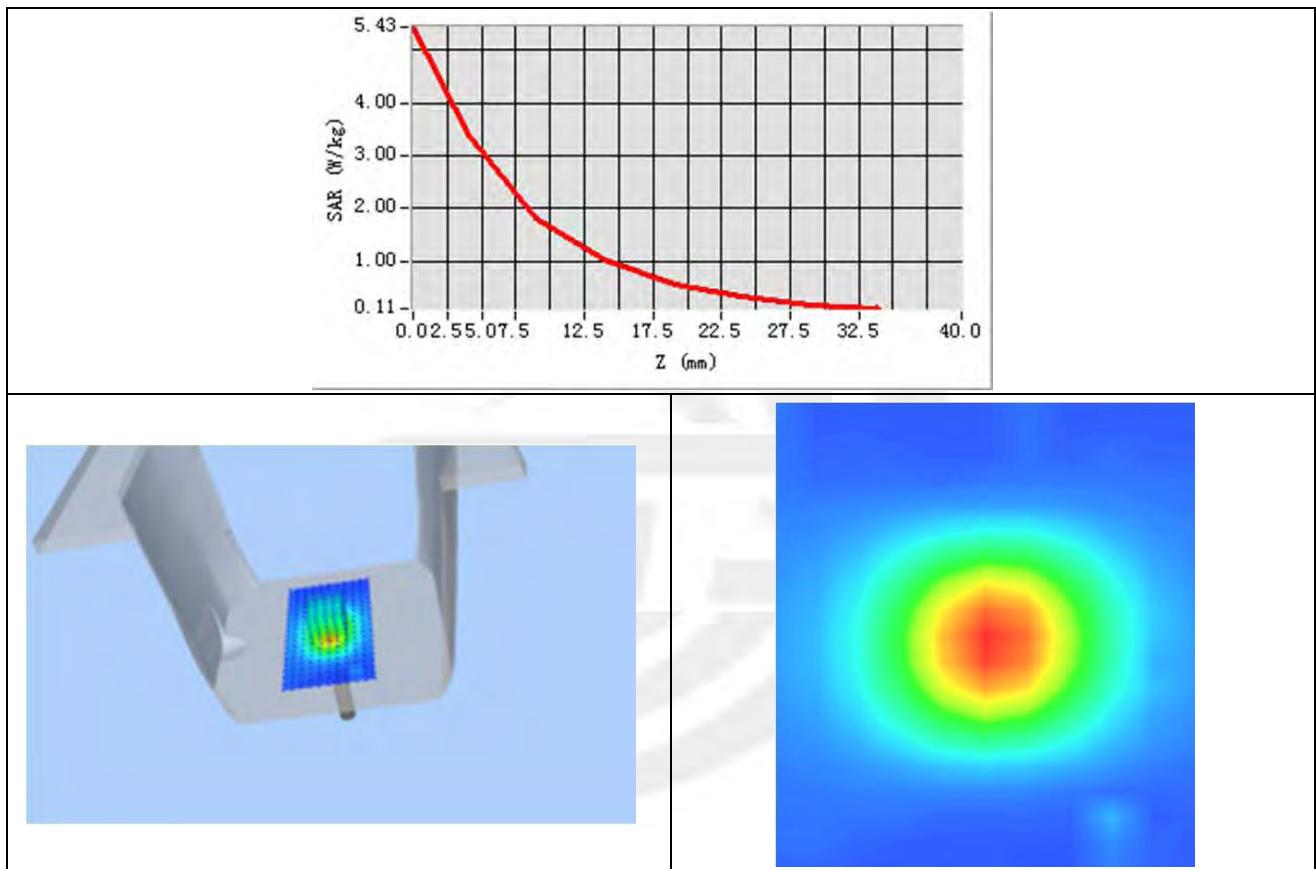




Maximum location: X=3.00, Y=1.00

SAR 10g (W/Kg)	2.156894
SAR 1g (W/Kg)	4.864392

Z Axis Scan





Appendix B. SAR Test Plots

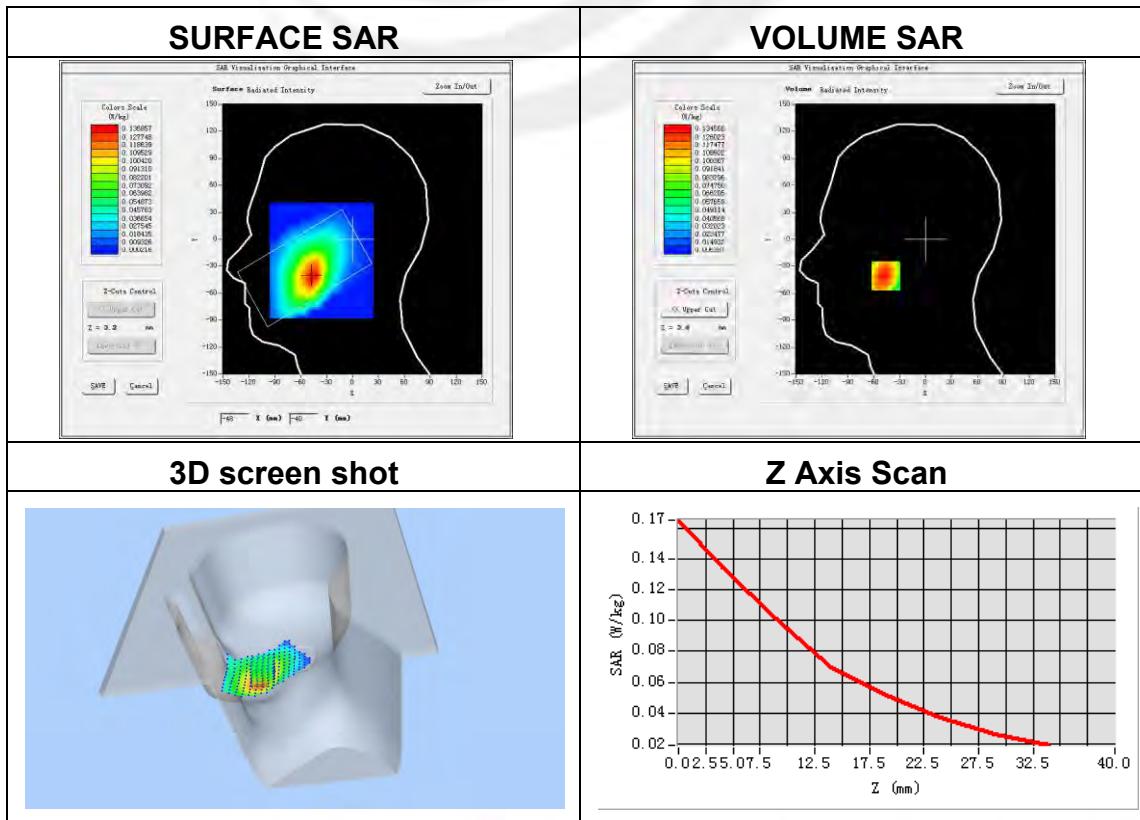
Plot 1: DUT: 4G MOBILE PHONE; EUT Model: U5051

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.83
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	Right head
Device Position	Cheek
Band	GSM850
Channels	Low
Signal	TDMA (Crest factor: 8.32)
Frequency (MHz)	824.2
Relative permittivity (real part)	41.5
Conductivity (S/m)	0.90
Variation (%)	4.15

Maximum location: X=-46.00, Y=-41.00

SAR Peak: 0.18 W/kg

SAR 10g (W/Kg)	0.086241
SAR 1g (W/Kg)	0.128420

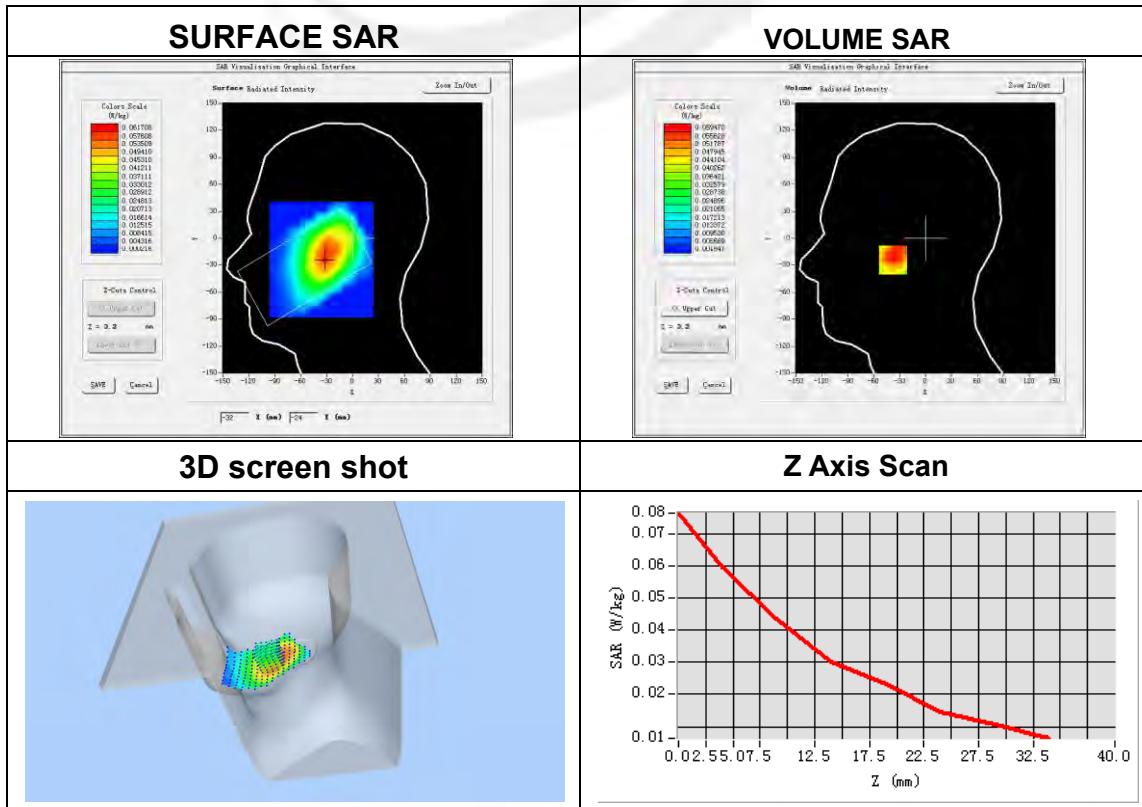


**Plot 2: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.83
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
Zoom Scan	5x5x7,dx=8mmdy=8mmdz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Right head
Device Position	Tilt
Band	GSM850
Channels	Low
Signal	TDMA (Crest factor: 8.32)
Frequency (MHz)	824.2
Relative permittivity (real part)	41.5
Conductivity (S/m)	0.90
Variation (%)	0.10

Maximum location: X=-32.00, Y=-24.00**SAR Peak: 0.08 W/kg**

SAR 10g (W/Kg)	0.038568
SAR 1g (W/Kg)	0.057696

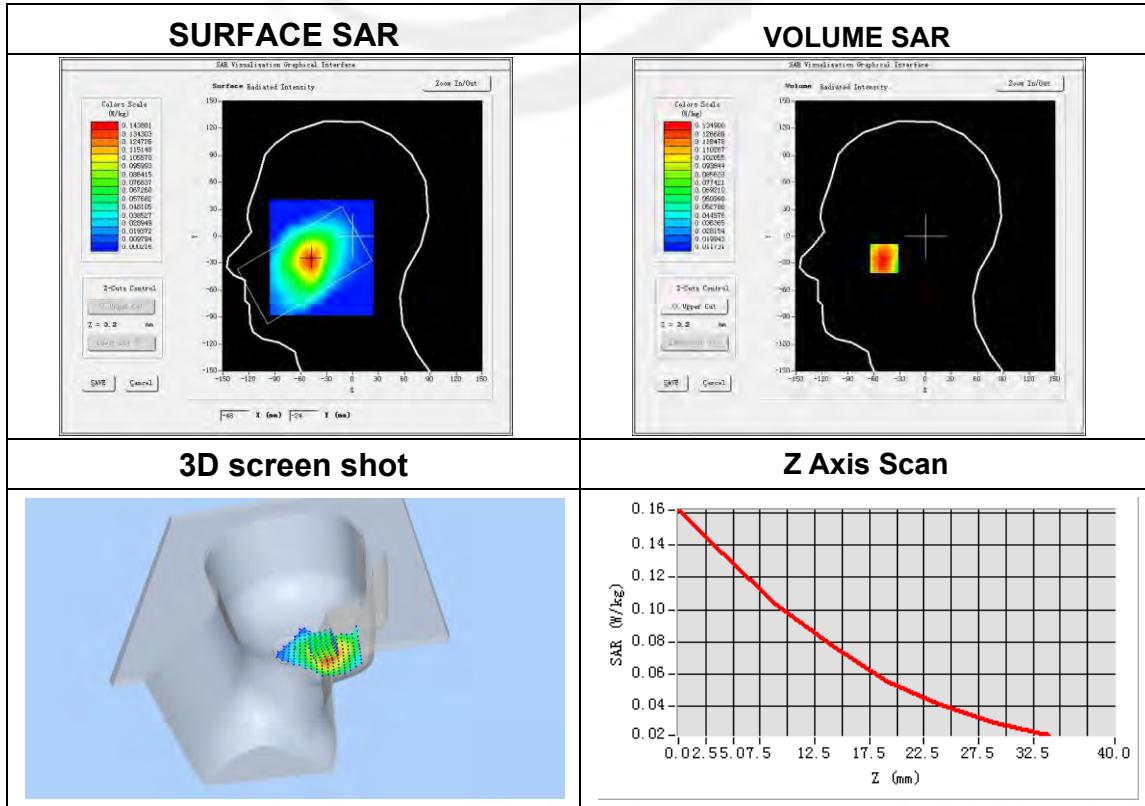


**Plot 3: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.83
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	Left head
Device Position	Cheek
Band	GSM850
Channels	Low
Signal	TDMA (Crest factor: 8.32)
Frequency (MHz)	824.2
Relative permittivity (real part)	41.5
Conductivity (S/m)	0.90
Variation (%)	1.65

Maximum location: X=-48.00, Y=-25.00**SAR Peak: 0.17 W/kg**

SAR 10g (W/Kg)	0.090143
SAR 1g (W/Kg)	0.129238

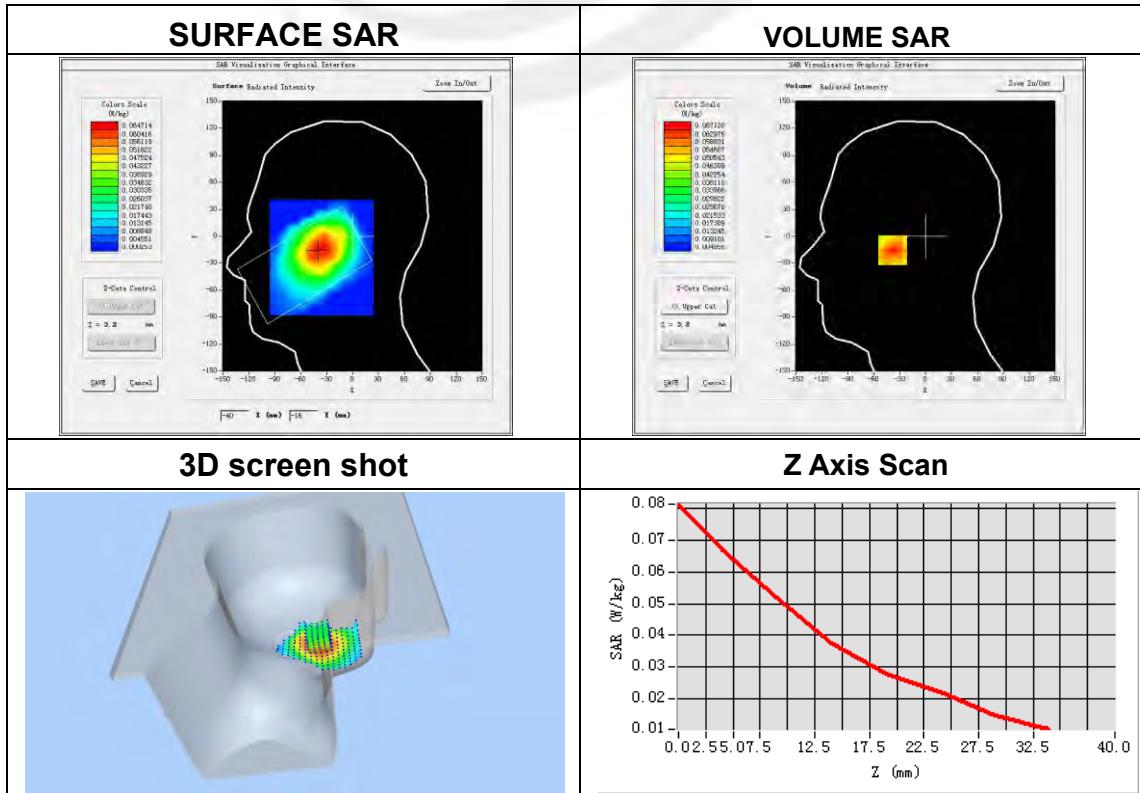


**Plot 4: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.83
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	Left head
Device Position	Tilt
Band	GSM850
Channels	Low
Signal	TDMA (Crest factor: 8.32)
Frequency (MHz)	824.2
Relative permittivity (real part)	41.5
Conductivity (S/m)	0.90
Variation (%)	2.84

Maximum location: X=-38.00, Y=-15.00**SAR Peak: 0.08 W/kg**

SAR 10g (W/Kg)	0.043998
SAR 1g (W/Kg)	0.062584

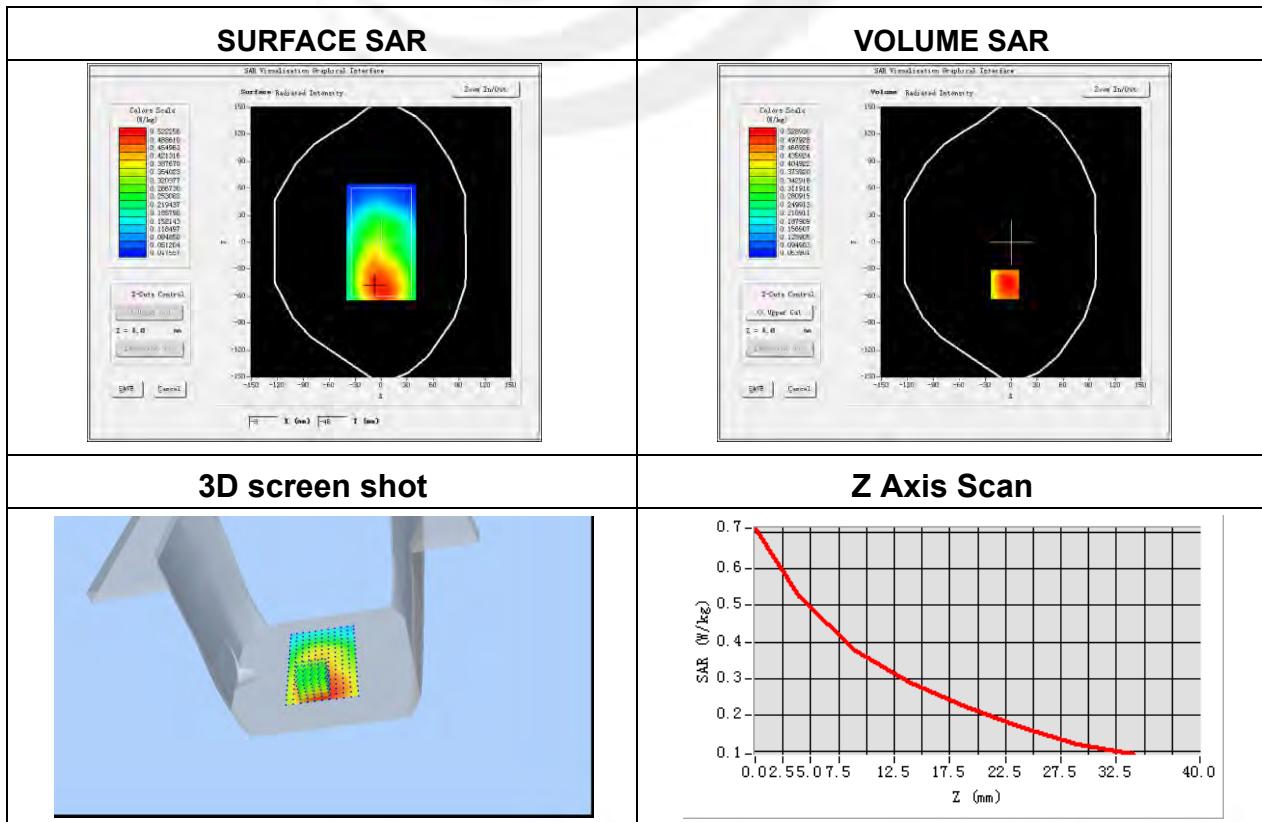


**Plot 5: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	5.02
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 Front
Band	GPRS 850
Channels	Low
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	824.2
Relative permittivity (real part)	55.20
Conductivity (S/m)	0.97
Variation (%)	-2.17

Maximum location: X=-7.00, Y=-47.00**SAR Peak: 0.74 W/kg**

SAR 10g (W/Kg)	0.365907
SAR 1g (W/Kg)	0.523627

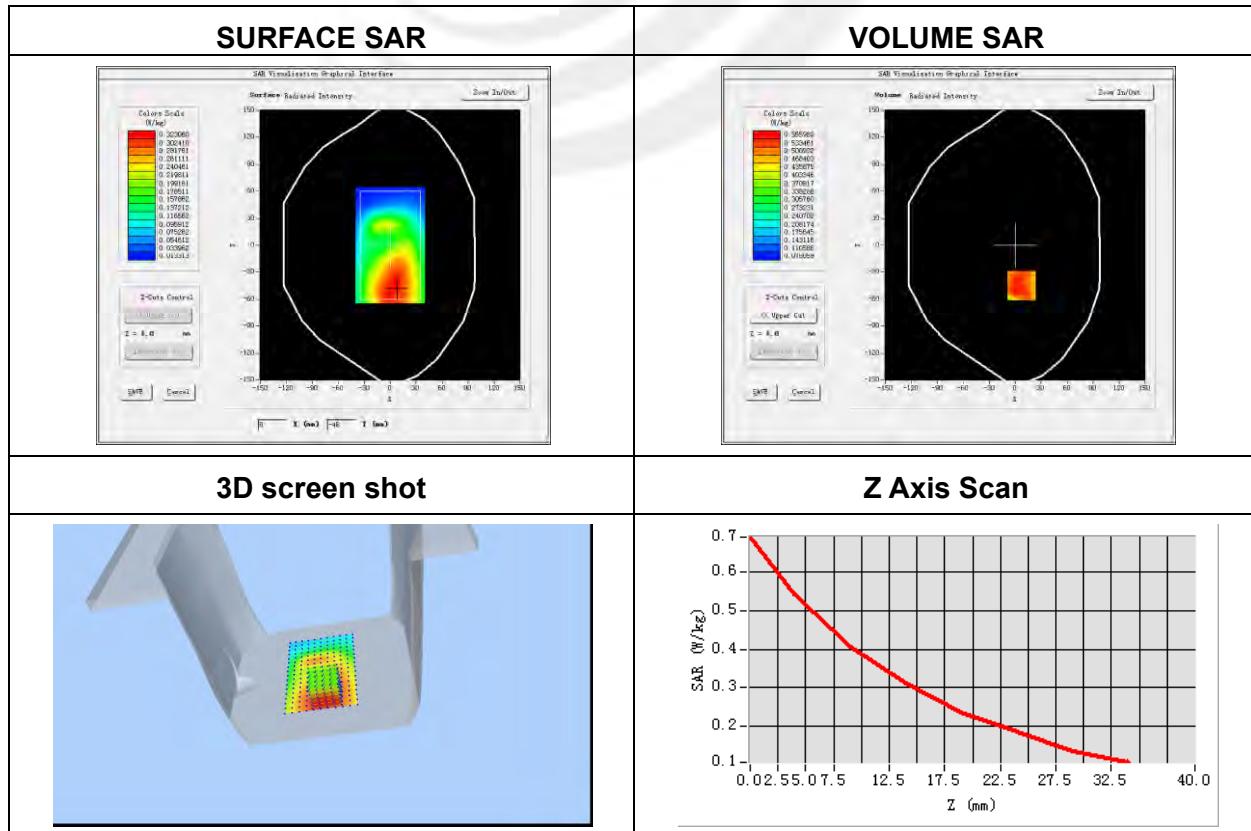


**Plot 6: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	5.02
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	GPRS 850
Channels	Low
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	824.2
Relative permittivity (real part)	55.20
Conductivity (S/m)	0.97
Variation (%)	2.17

Maximum location: X=7.00, Y=-45.00**SAR Peak: 0.74 W/kg**

SAR 10g (W/Kg)	0.390024
SAR 1g (W/Kg)	0.543890

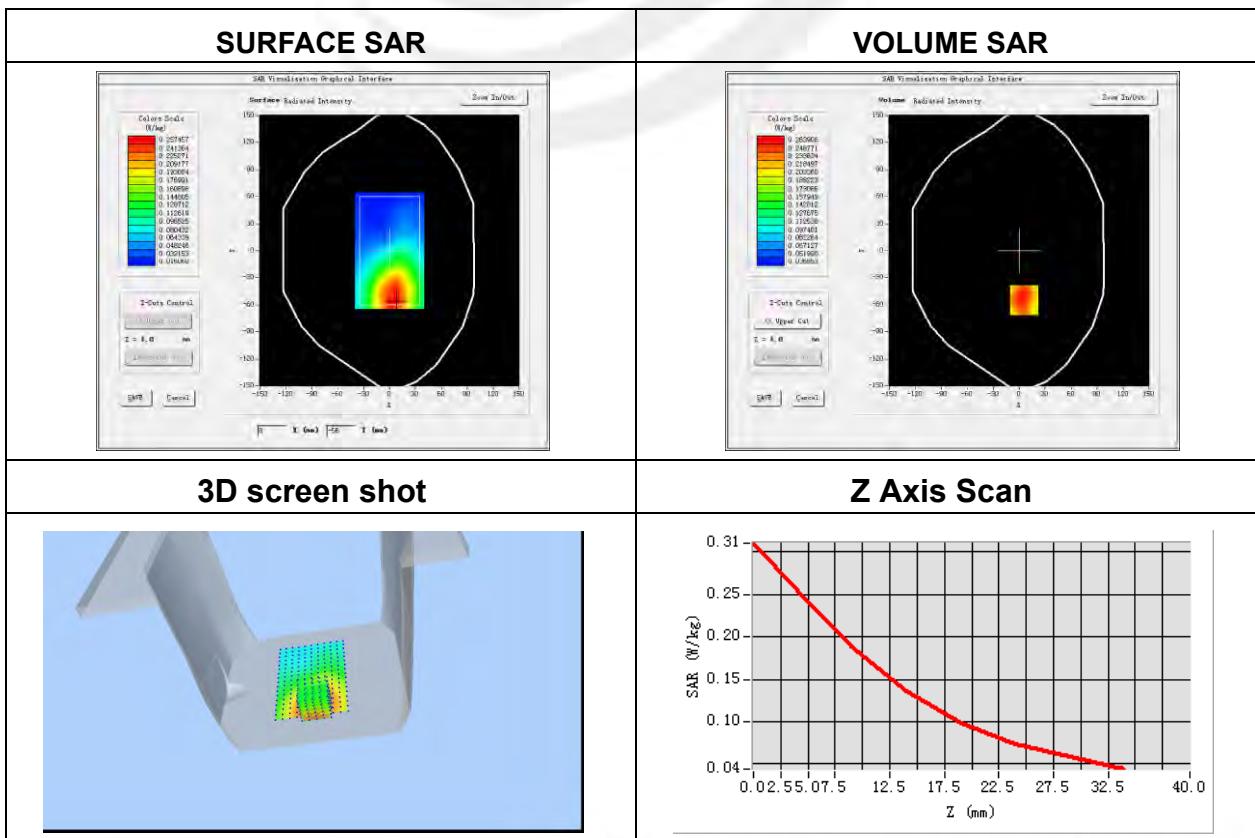


**Plot 7: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	5.02
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 lift side
Band	GPRS 850
Channels	Low
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	824.2
Relative permittivity (real part)	55.20
Conductivity (S/m)	0.97
Variation (%)	-0.68

Maximum location: X=6.00, Y=-55.00**SAR Peak: 0.37 W/kg**

SAR 10g (W/Kg)	0.172672
SAR 1g (W/Kg)	0.253264

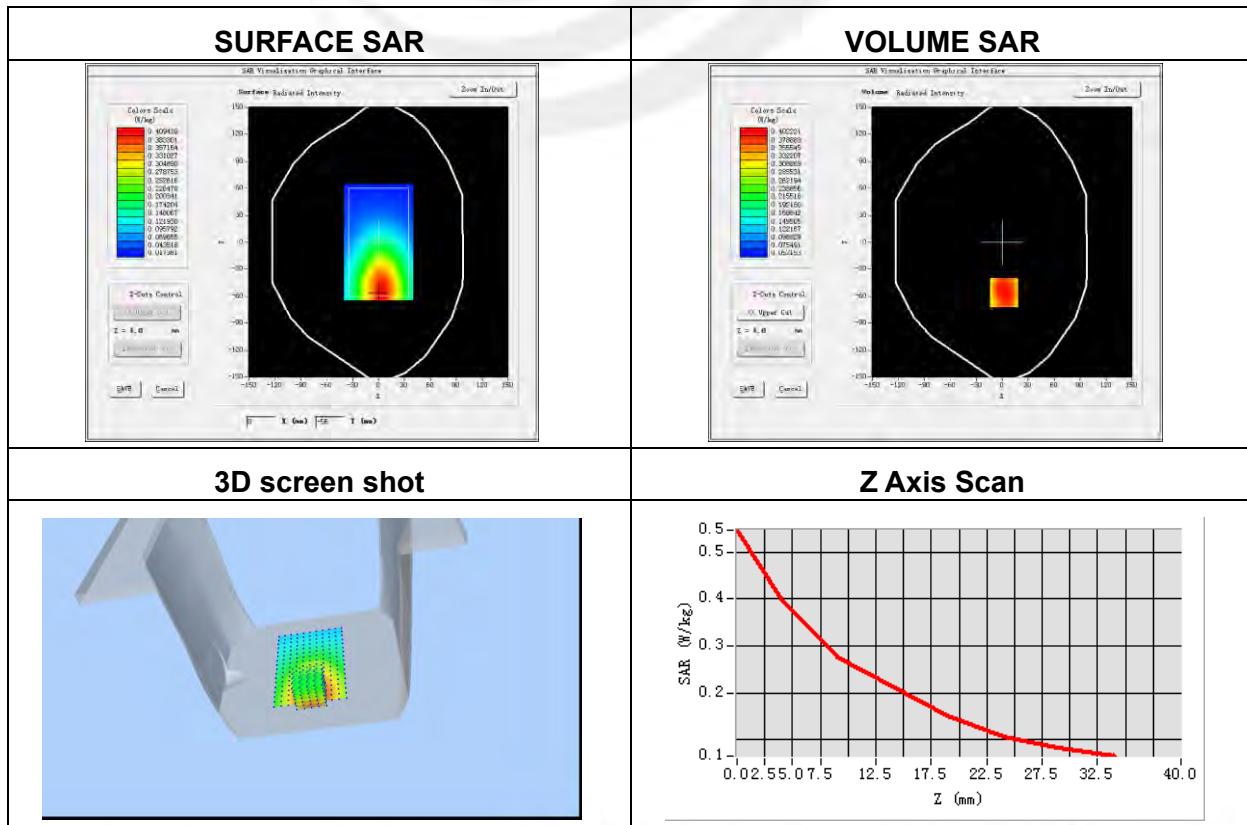


**Plot 8: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	5.02
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 right side
Band	GPRS 850
Channels	Low
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	824.2
Relative permittivity (real part)	55.20
Conductivity (S/m)	0.97
Variation (%)	-2.63

Maximum location: X=2.00, Y=-56.00**SAR Peak: 0.57 W/kg**

SAR 10g (W/Kg)	0.267288
SAR 1g (W/Kg)	0.394539

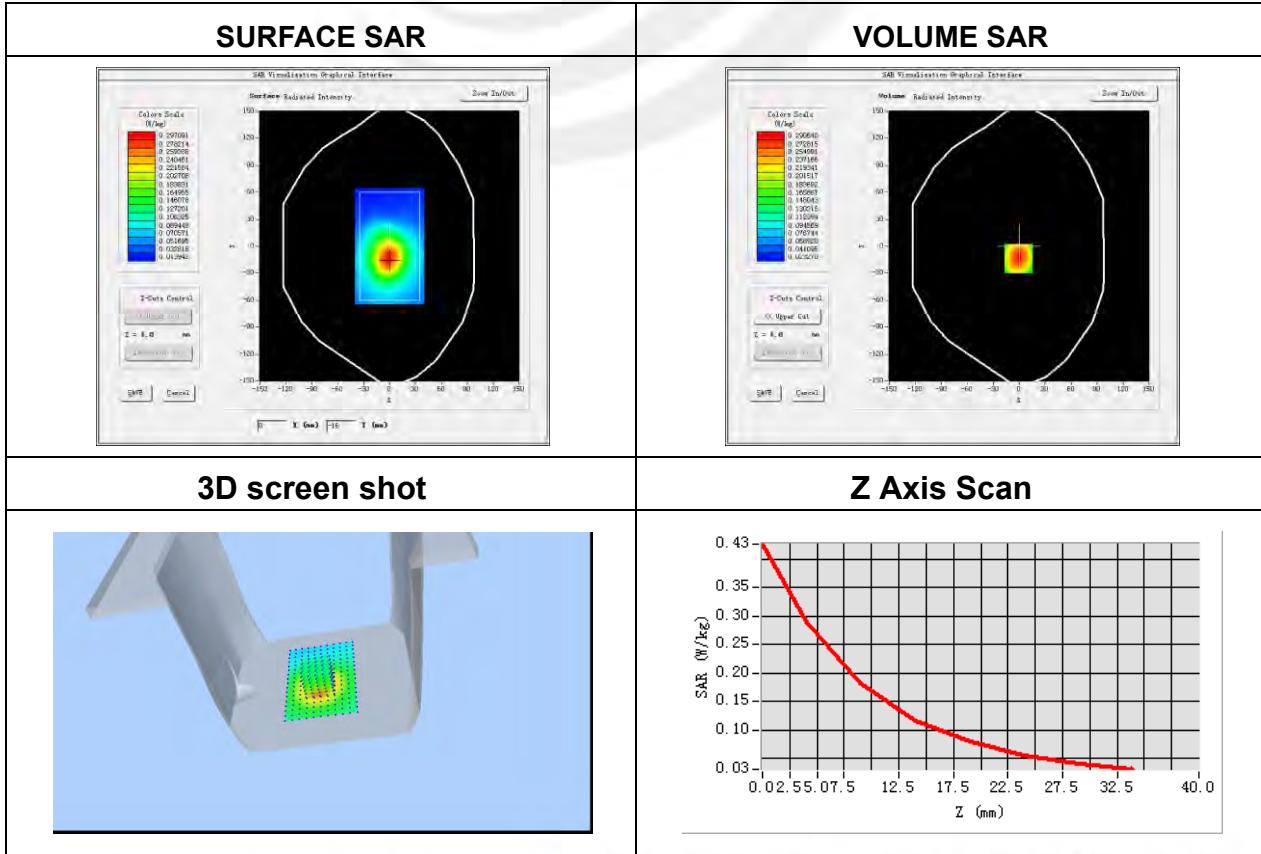


**Plot 9: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	5.02
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 bottom side
Band	GPRS 850
Channels	Low
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	824.2
Relative permittivity (real part)	55.20
Conductivity (S/m)	0.97
Variation (%)	-0.32

Maximum location: X=-1.00, Y=-14.00**SAR Peak: 0.45 W/kg**

SAR 10g (W/Kg)	0.169855
SAR 1g (W/Kg)	0.281918

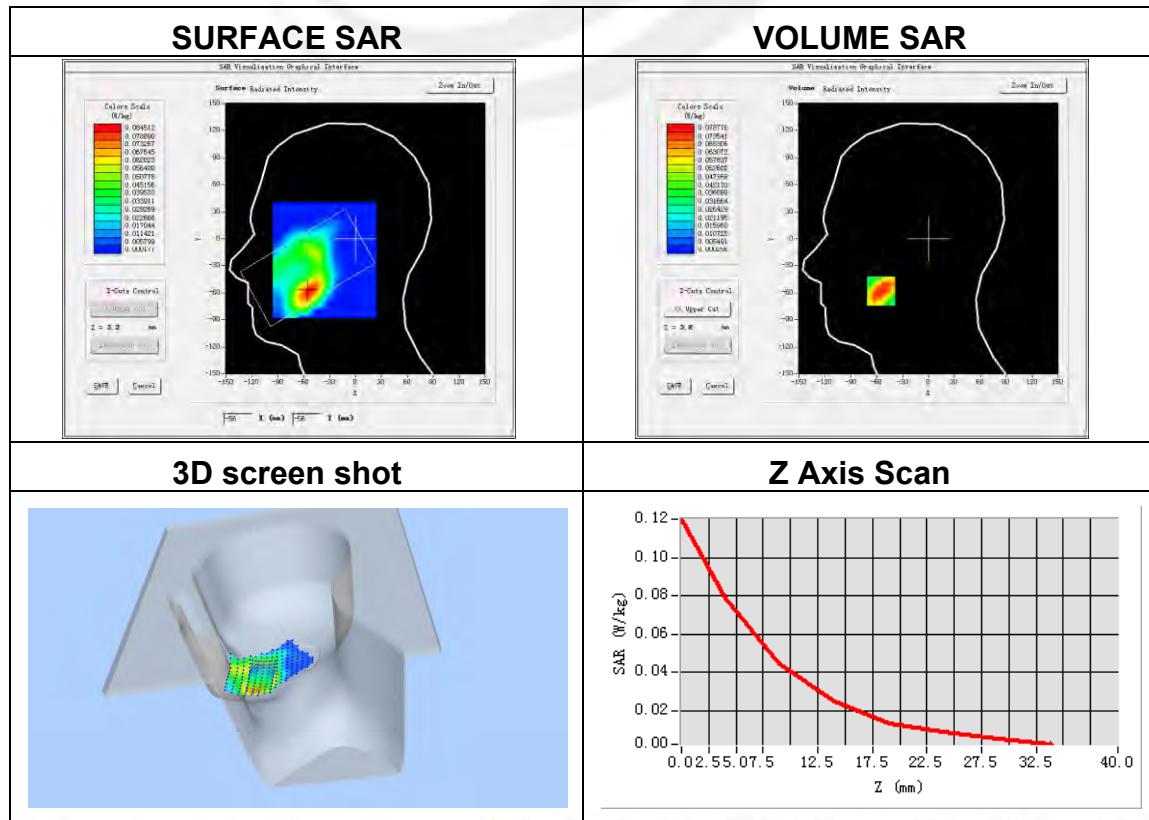


**Plot 10: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.71
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	Right head
Device Position	Cheek
Band	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 4.0)
Frequency (MHz)	1880.0
Relative permittivity (real part)	40.00
Conductivity (S/m)	1.40
Variation (%)	-3.17

Maximum location: X=-55.00, Y=-58.00**SAR Peak: 0.13 W/kg**

SAR 10g (W/Kg)	0.040519
SAR 1g (W/Kg)	0.076744

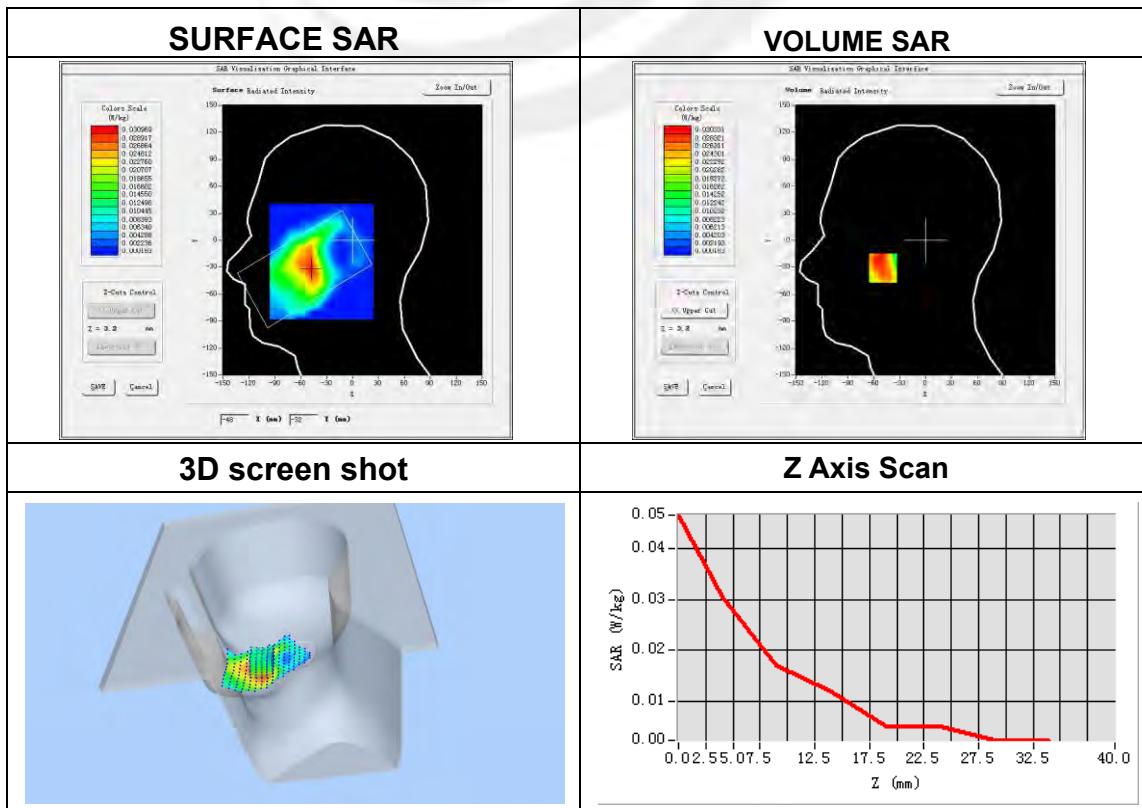


**Plot 11: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.71
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	Right head
Device Position	Tilt
Band	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 4.0)
Frequency (MHz)	1880.0
Relative permittivity (real part)	40.00
Conductivity (S/m)	1.40
Variation (%)	-1.17

Maximum location: X=-49.00, Y=-31.00**SAR Peak: 0.05 W/kg**

SAR 10g (W/Kg)	0.017516
SAR 1g (W/Kg)	0.029876

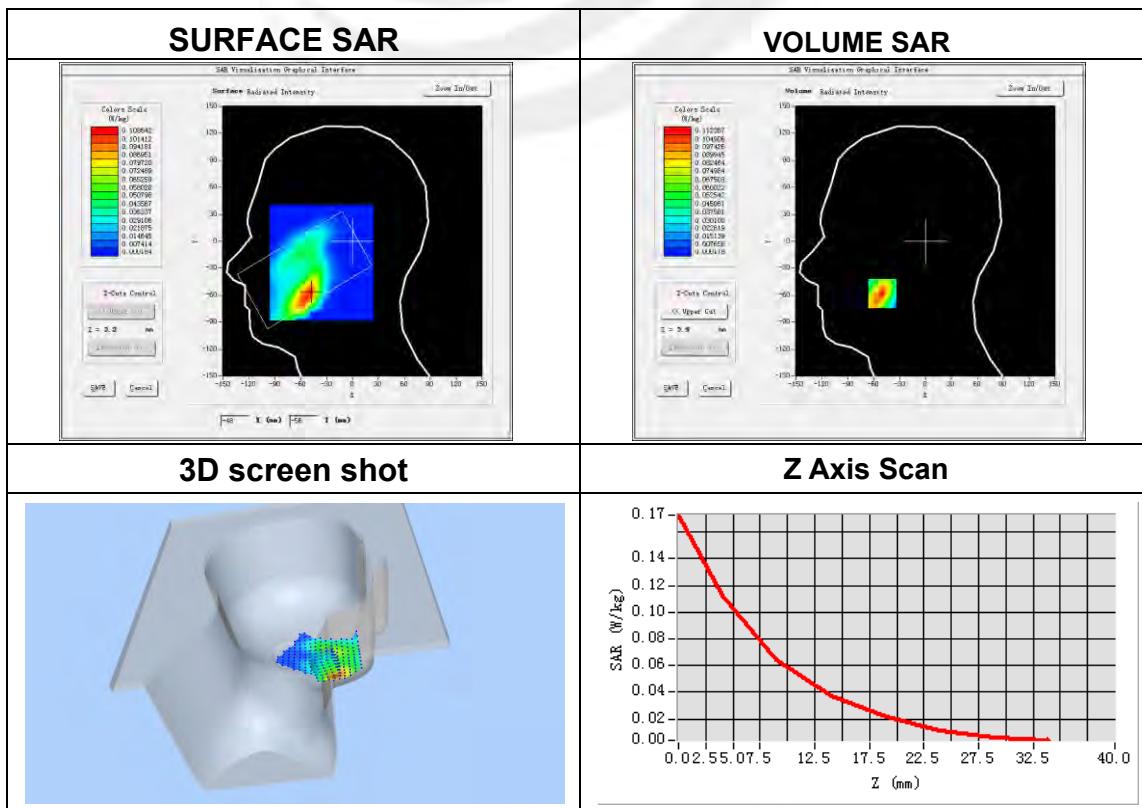


**Plot 12: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.71
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	Left head
Device Position	Cheek
Band	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 4.0)
Frequency (MHz)	1880.0
Relative permittivity (real part)	40.00
Conductivity (S/m)	1.40
Variation (%)	3.91

Maximum location: X=-50.00, Y=-58.00**SAR Peak: 0.17 W/kg**

SAR 10g (W/Kg)	0.055538
SAR 1g (W/Kg)	0.105556

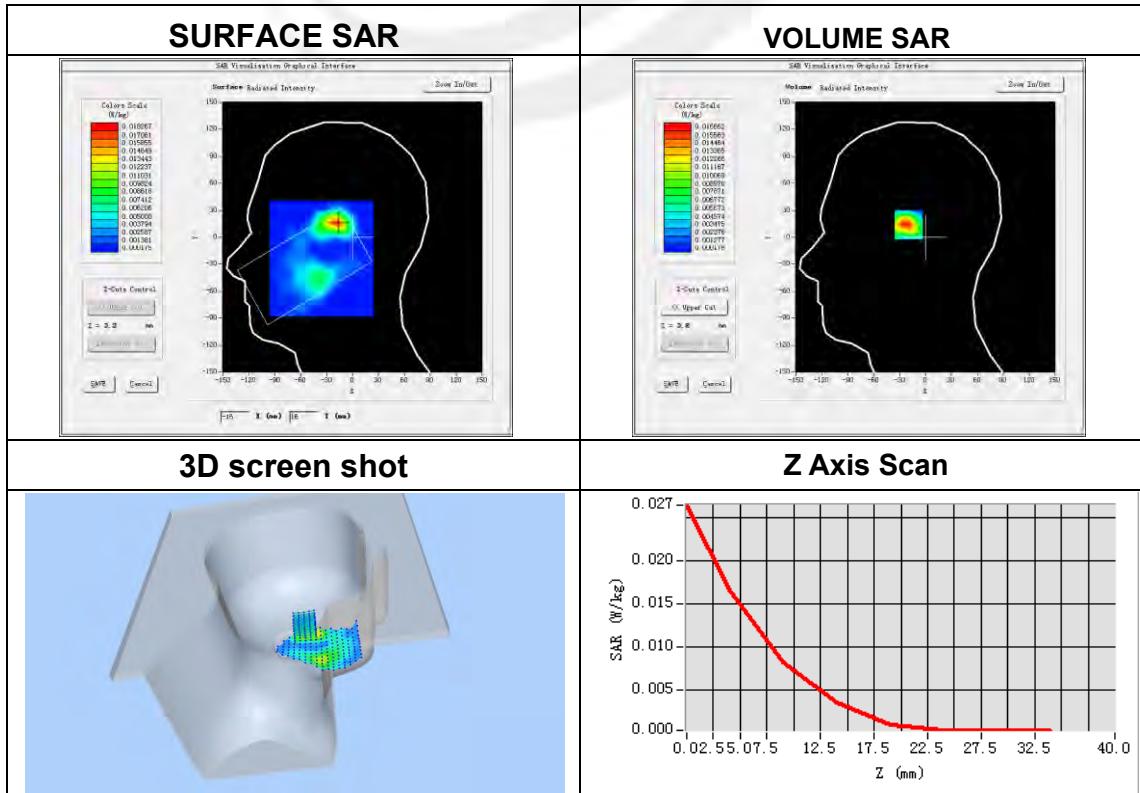


**Plot 13: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.71
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	Left head
Device Position	Tilt
Band	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 4.0)
Frequency (MHz)	1880.0
Relative permittivity (real part)	40.00
Conductivity (S/m)	1.40
Variation (%)	1.76

Maximum location: X=-176.00, Y=16.00**SAR Peak: 0.03 W/kg**

SAR 10g (W/Kg)	0.006928
SAR 1g (W/Kg)	0.015936

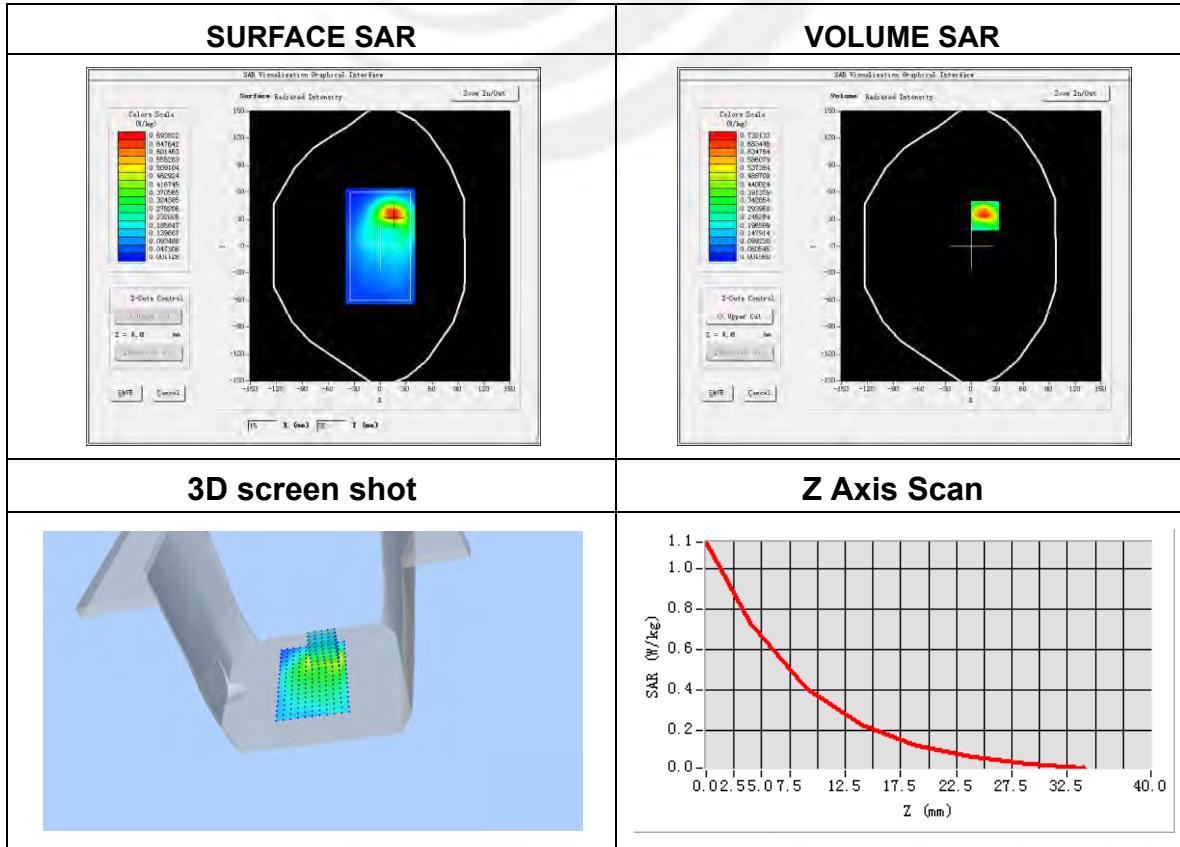


**Plot 14: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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	GPRS 1900
Channels	Middle
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	1880.0
Relative permittivity (real part)	53.30
Conductivity (S/m)	1.52
Variation (%)	-4.47

Maximum location: X=16.00, Y=34.00**SAR Peak:1.14 W/kg**

SAR 10g (W/Kg)	0.342703
SAR 1g (W/Kg)	0.683686

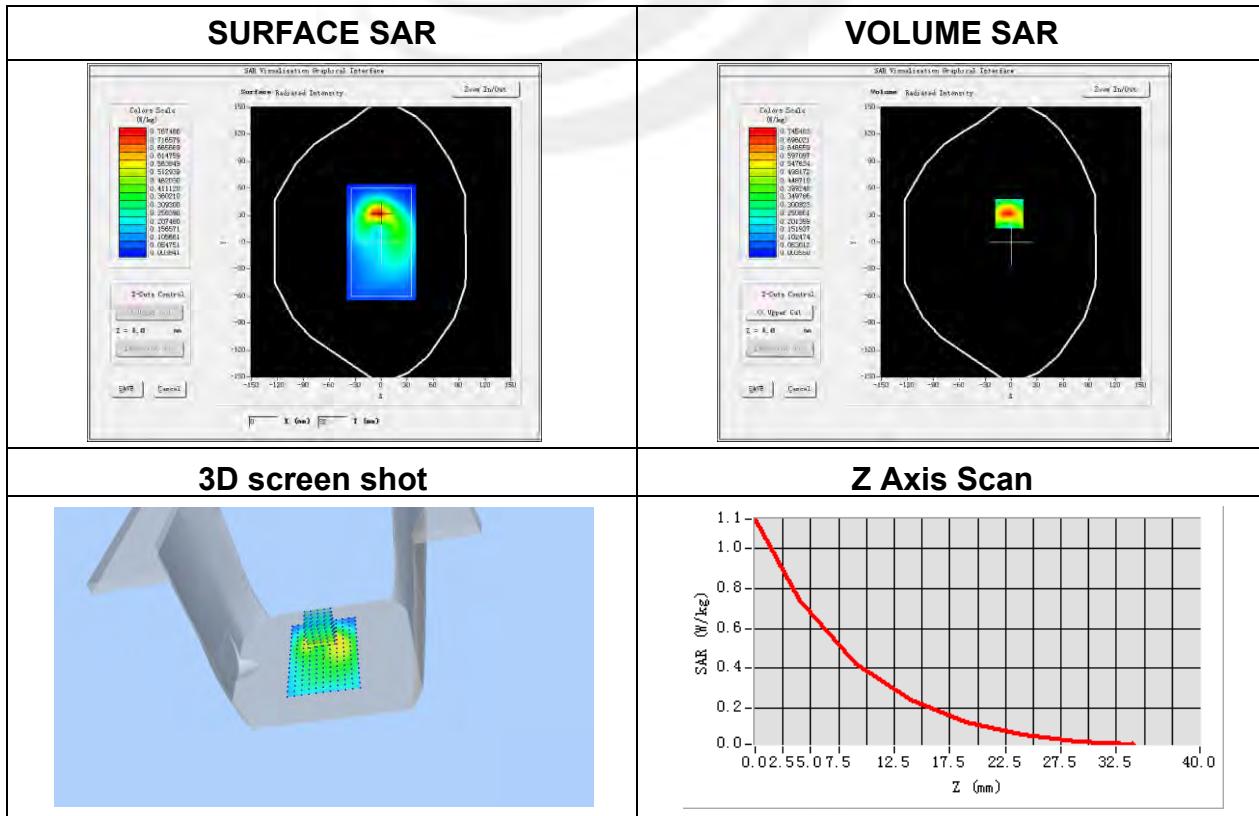


**Plot 15: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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 Behind
Band	GPRS 1900
Channels	Middle
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	1880.0
Relative permittivity (real part)	53.30
Conductivity (S/m)	1.52
Variation (%)	2.39

**Maximum location: X=-2.00, Y=32.00
SAR Peak: 1.14 W/kg**

SAR 10g (W/Kg)	0.352286
SAR 1g (W/Kg)	0.691068

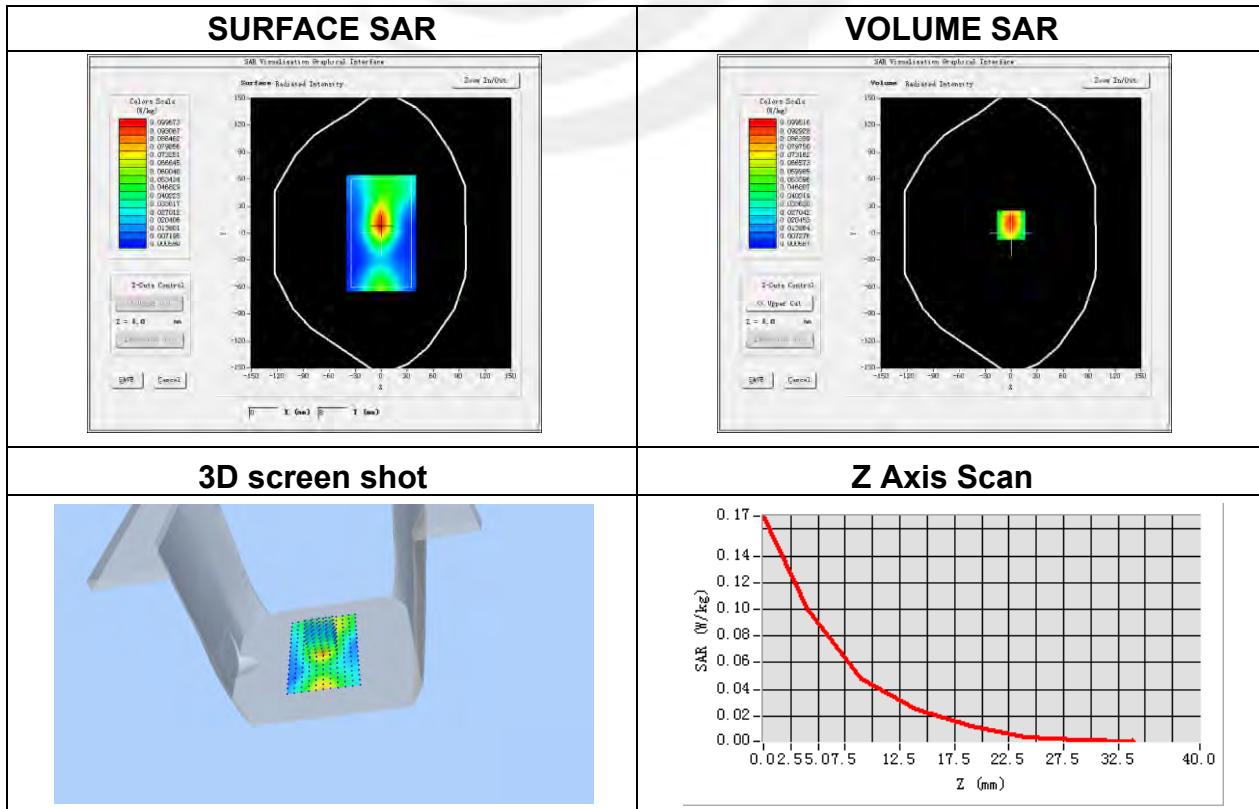


**Plot 16: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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 lift side
Band	GPRS 1900
Channels	Middle
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	1880.0
Relative permittivity (real part)	53.30
Conductivity (S/m)	1.52
Variation (%)	-3.01

**Maximum location: X=0.00, Y=9.00
SAR Peak: 0.16 W/kg**

SAR 10g (W/Kg)	0.047239
SAR 1g (W/Kg)	0.093566

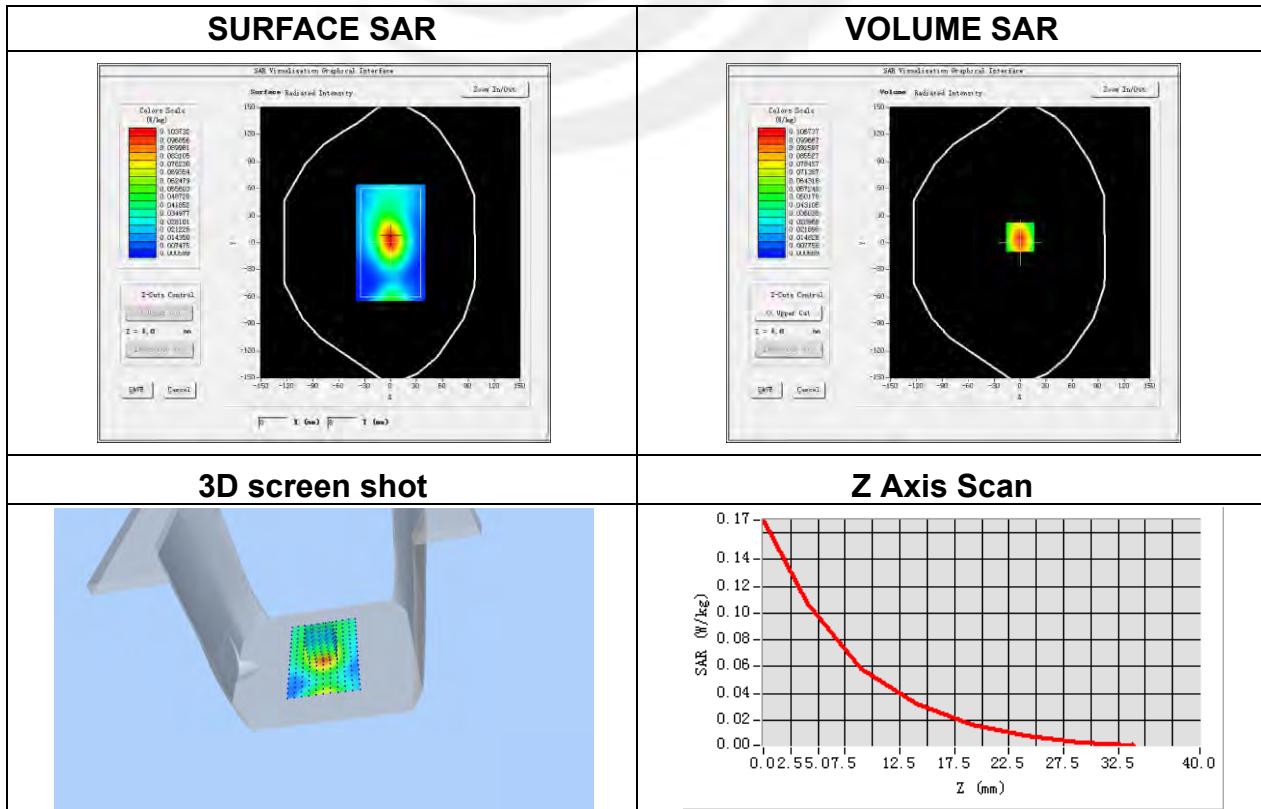


**Plot 17: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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 side
Band	GPRS 1900
Channels	Middle
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	1880.0
Relative permittivity (real part)	53.30
Conductivity (S/m)	1.52
Variation (%)	-2.62

**Maximum location: X=0.00, Y=6.00
SAR Peak: 0.17 W/kg**

SAR 10g (W/Kg)	0.053231
SAR 1g (W/Kg)	0.101647

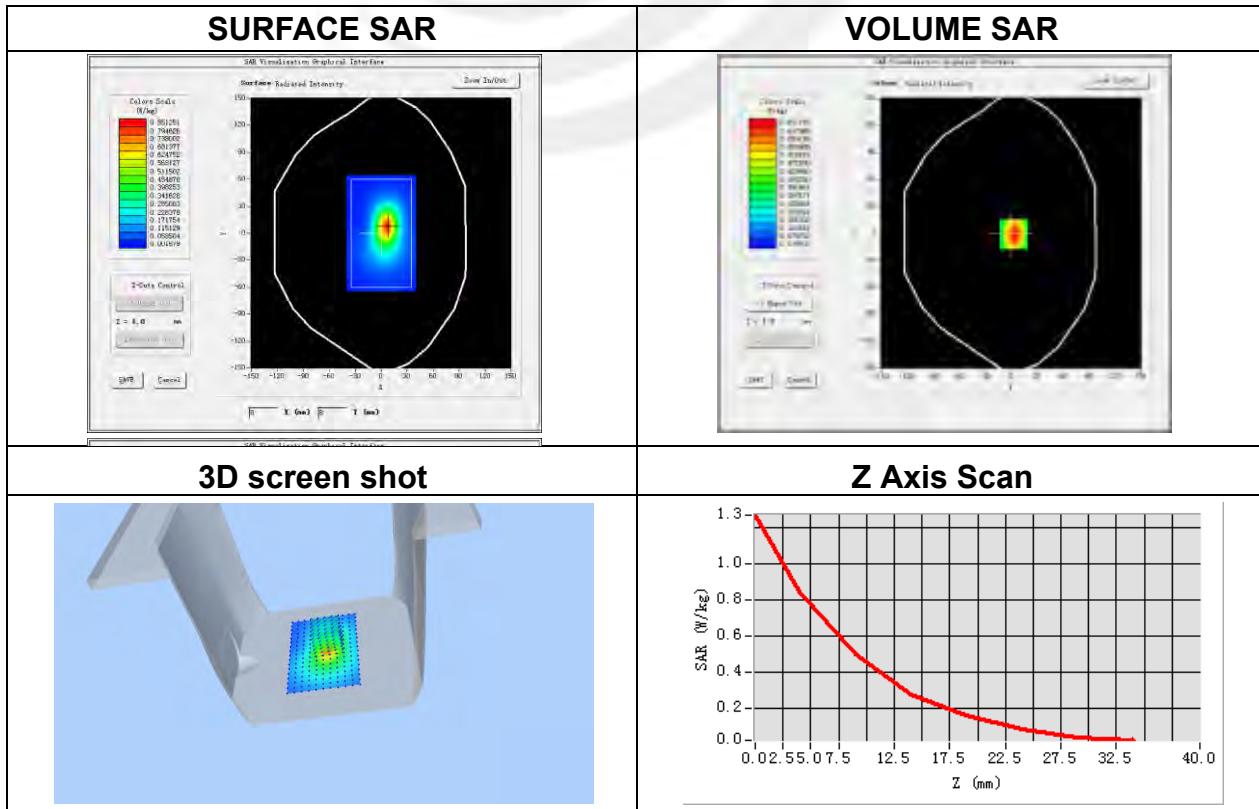


**Plot 18: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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 side
Band	GPRS 1900
Channels	Low
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	1850.0
Relative permittivity (real part)	53.30
Conductivity (S/m)	1.52
Variation (%)	-0.61

Maximum location: X=7.00, Y=8.00**SAR Peak: 1.33 W/kg**

SAR 10g (W/Kg)	0.395232
SAR 1g (W/Kg)	0.790541

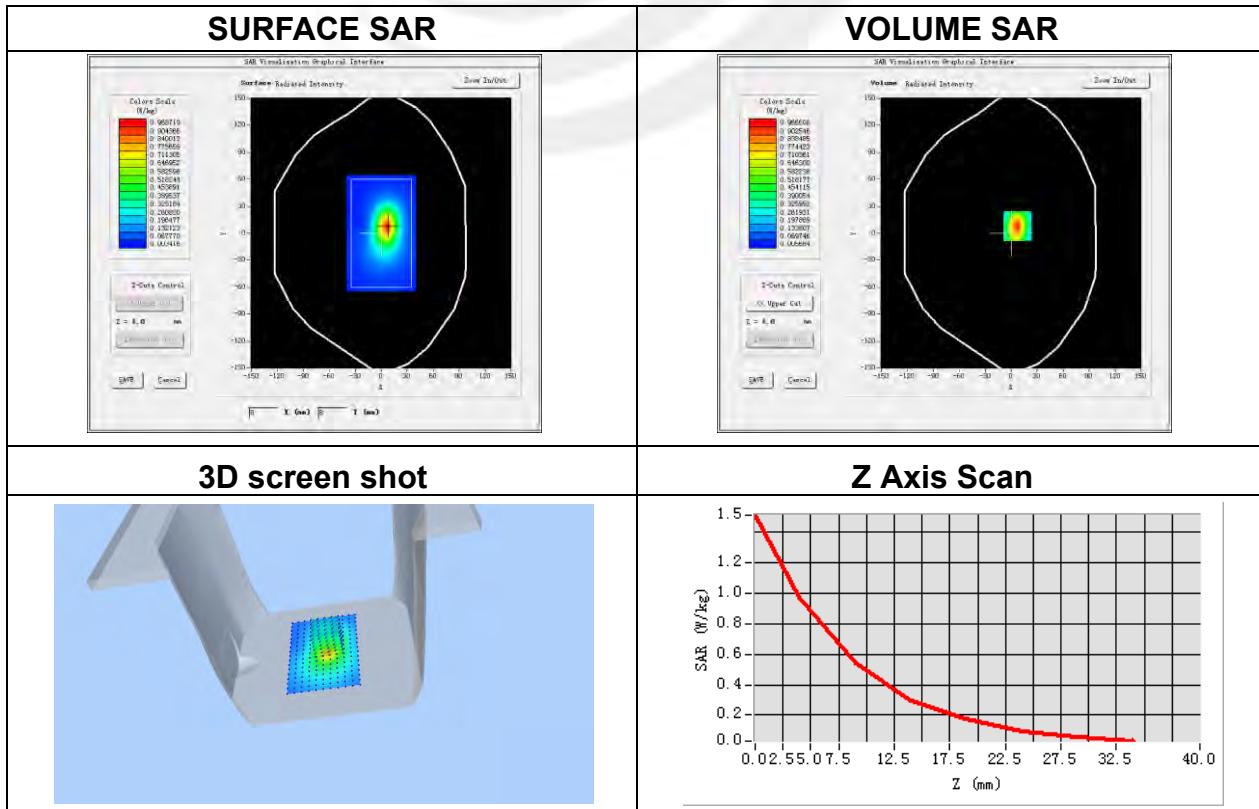


**Plot 19: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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 side
Band	GPRS 1900
Channels	Middle
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	1880.0
Relative permittivity (real part)	53.30
Conductivity (S/m)	1.52
Variation (%)	-3.87

**Maximum location: X=7.00, Y=8.00
SAR Peak: 1.51 W/kg**

SAR 10g (W/Kg)	0.443955
SAR 1g (W/Kg)	0.889346

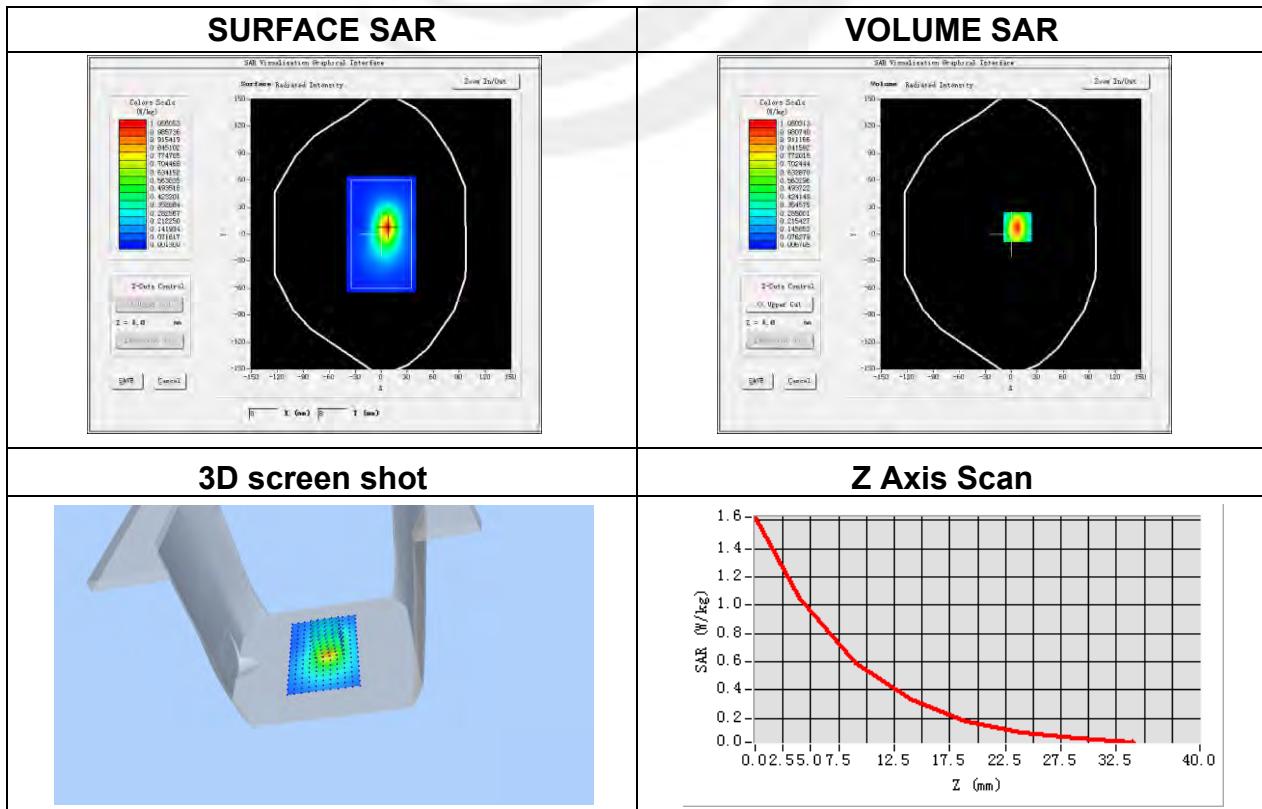


**Plot 20: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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 side
Band	GPRS 1900
Channels	High
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	1909.8
Relative permittivity (real part)	53.30
Conductivity (S/m)	1.52
Variation (%)	0.56

**Maximum location: X=7.00, Y=8.00
SAR Peak: 1.65 W/kg**

SAR 10g (W/Kg)	0.477829
SAR 1g (W/Kg)	0.968702

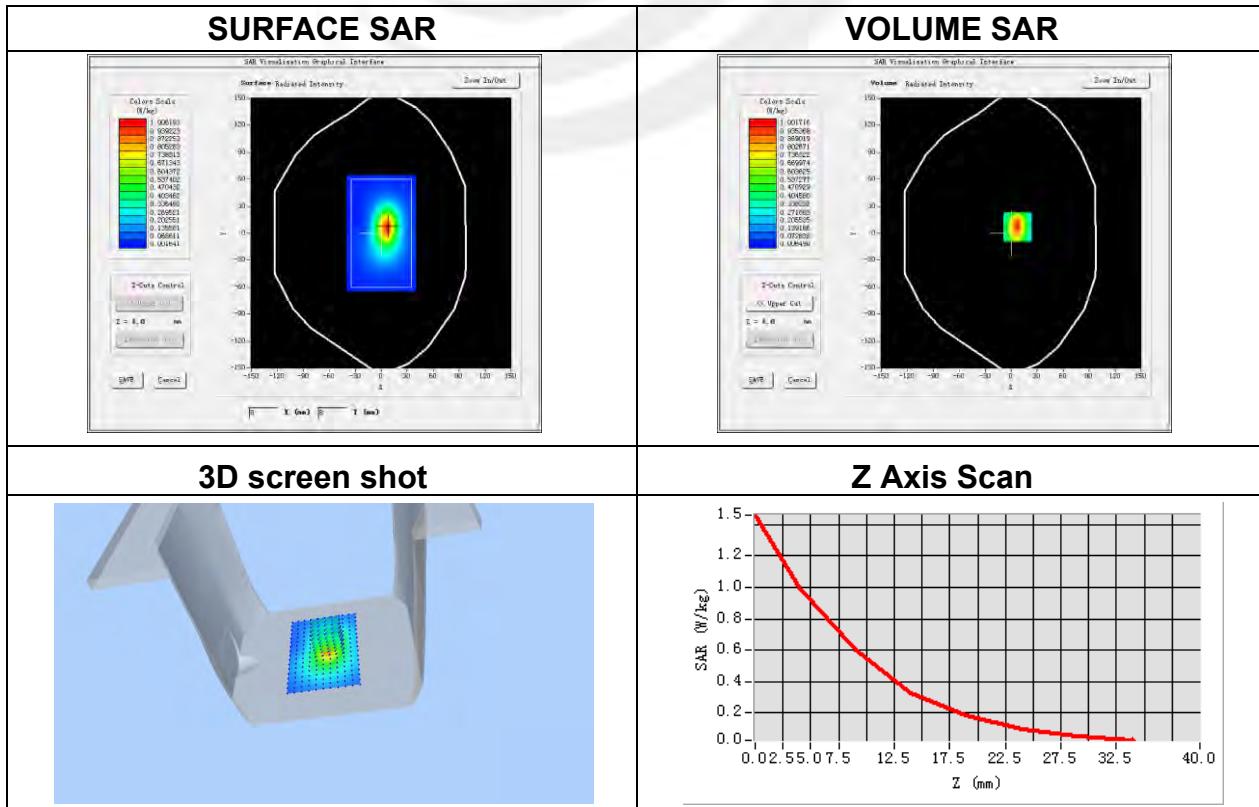


**Plot 21: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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 side-repeated
Band	GPRS 1900
Channels	Middle
Signal	Duty Cycle: 2.00 (Crest factor: 2.0)
Frequency (MHz)	1880.0
Relative permittivity (real part)	53.30
Conductivity (S/m)	1.52
Variation (%)	3.26

**Maximum location: X=7.00, Y=7.00
SAR Peak: 1.48 W/kg**

SAR 10g (W/Kg)	0.468752
SAR 1g (W/Kg)	0.917006

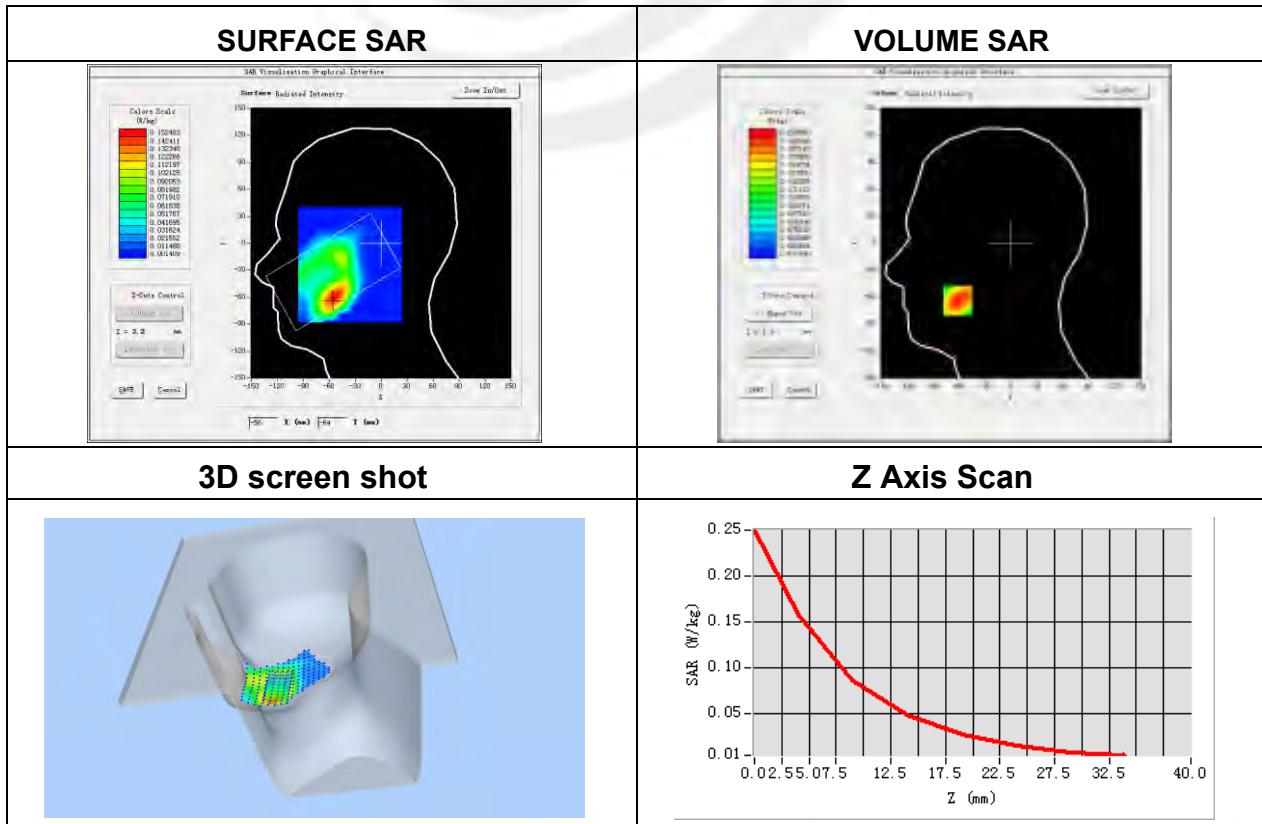


Plot 22: DUT: 4G MOBILE PHONE; EUT Model: U5051

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.71
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	Right head
Device Position	Cheek
Band	WCDMA II
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1907.6
Relative permittivity (real part)	40.00
Conductivity (S/m)	1.40
Variation (%)	-1.20

Maximum location: X=-54.00, Y=-60.00
SAR Peak: 0.25 W/kg

SAR 10g (W/Kg)	0.079476
SAR 1g (W/Kg)	0.150407



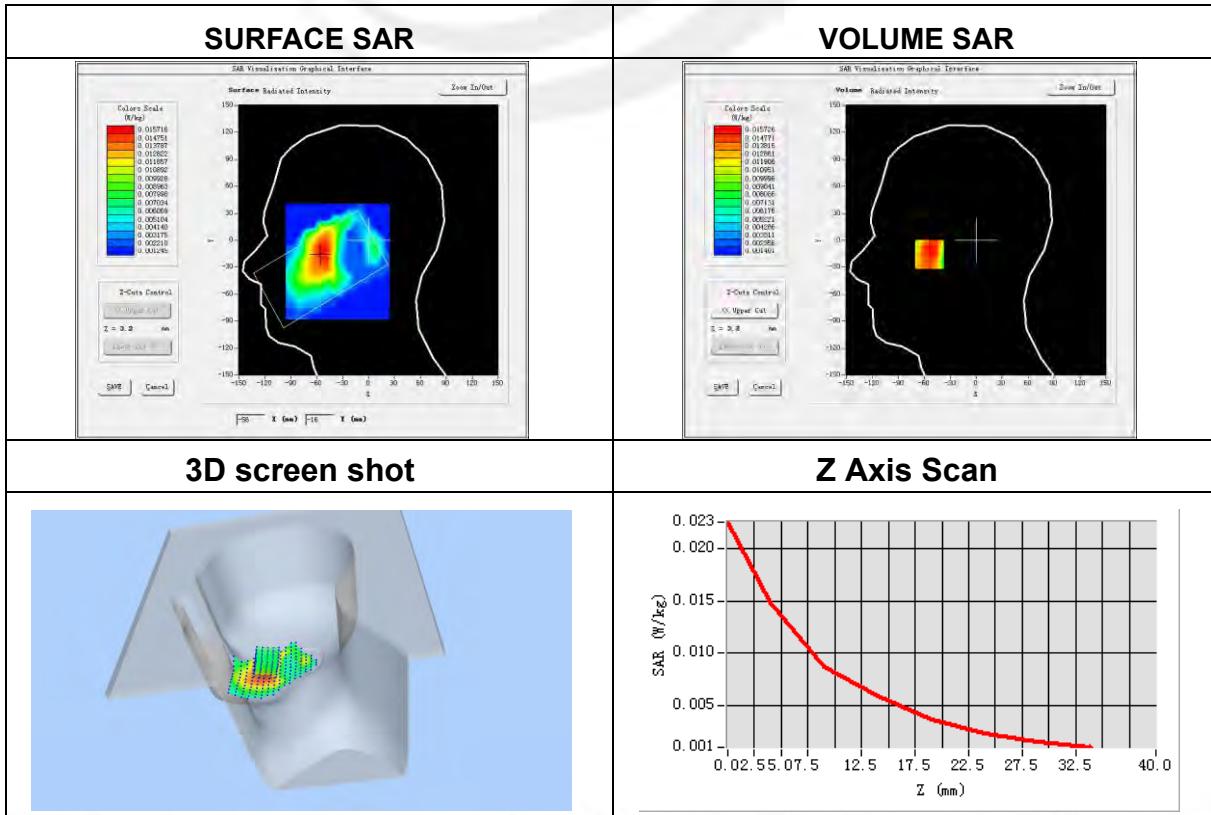
**Plot 23: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.71
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	Right head
Device Position	Tilt
Band	WCDMA II
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1907.6
Relative permittivity (real part)	40.00
Conductivity (S/m)	1.40
Variation (%)	-1.23

Maximum location: X=-54.00, Y=-14.00

SAR Peak: 0.02 W/kg

SAR 10g (W/Kg)	0.008792
SAR 1g (W/Kg)	0.014747



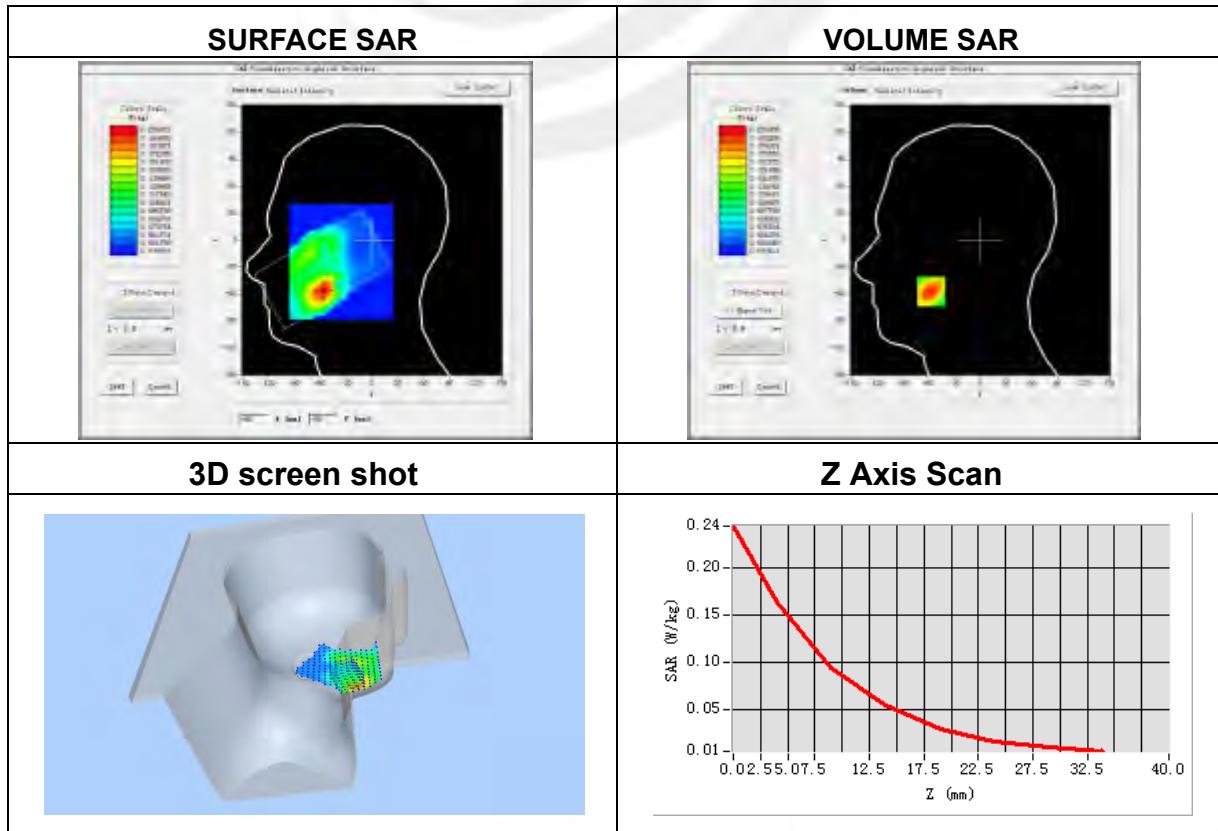
**Plot 24: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.71
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	Left head
Device Position	Cheek
Band	WCDMA II
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1907.6
Relative permittivity (real part)	40.00
Conductivity (S/m)	1.40
Variation (%)	0.59

Maximum location: X=-55.00, Y=-61.00

SAR Peak: 0.25 W/kg

SAR 10g (W/Kg)	0.081368
SAR 1g (W/Kg)	0.153740

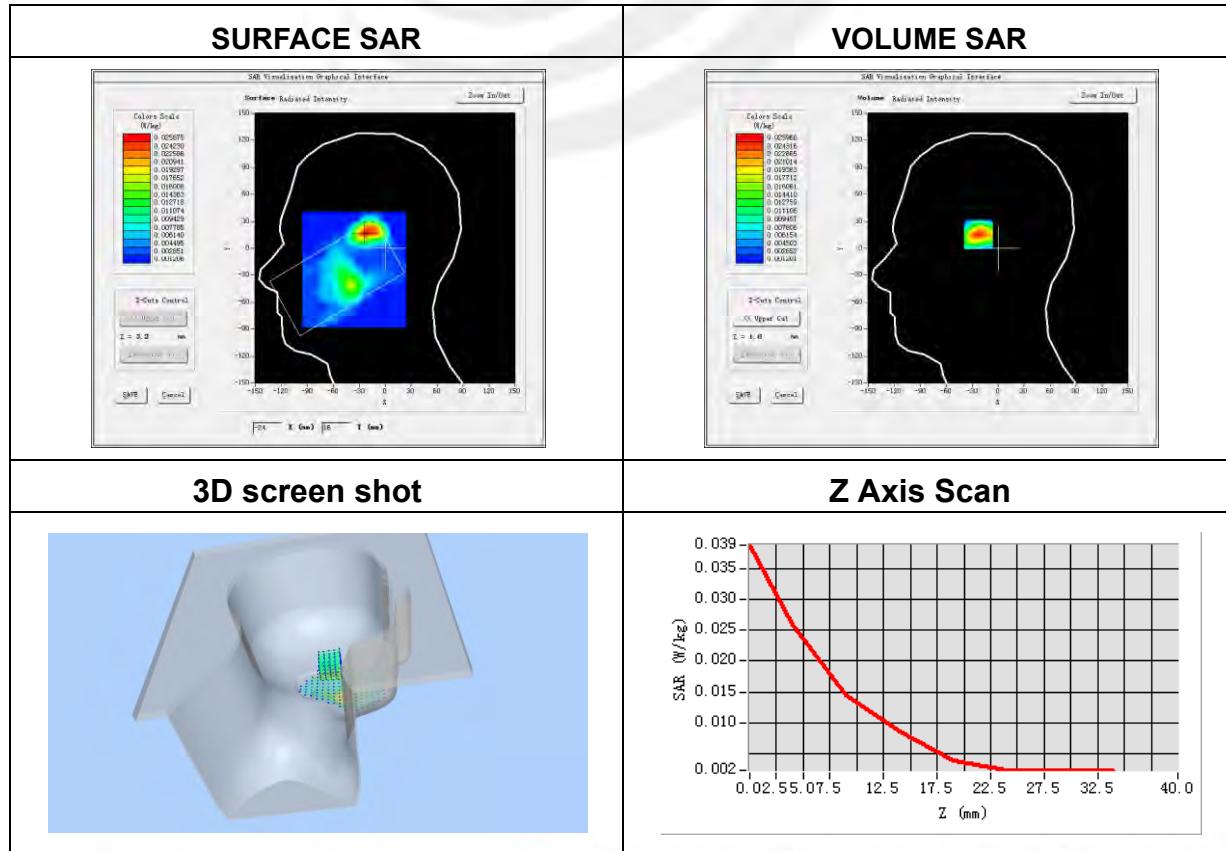


**Plot 25: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.71
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	Left head
Device Position	Tilt
Band	WCDMA II
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1907.6
Relative permittivity (real part)	40.00
Conductivity (S/m)	1.40
Variation (%)	3.21

Maximum location: X=-21.00, Y=18.00**SAR Peak: 0.04 W/kg**

SAR 10g (W/Kg)	0.076069
SAR 1g (W/Kg)	0.096317



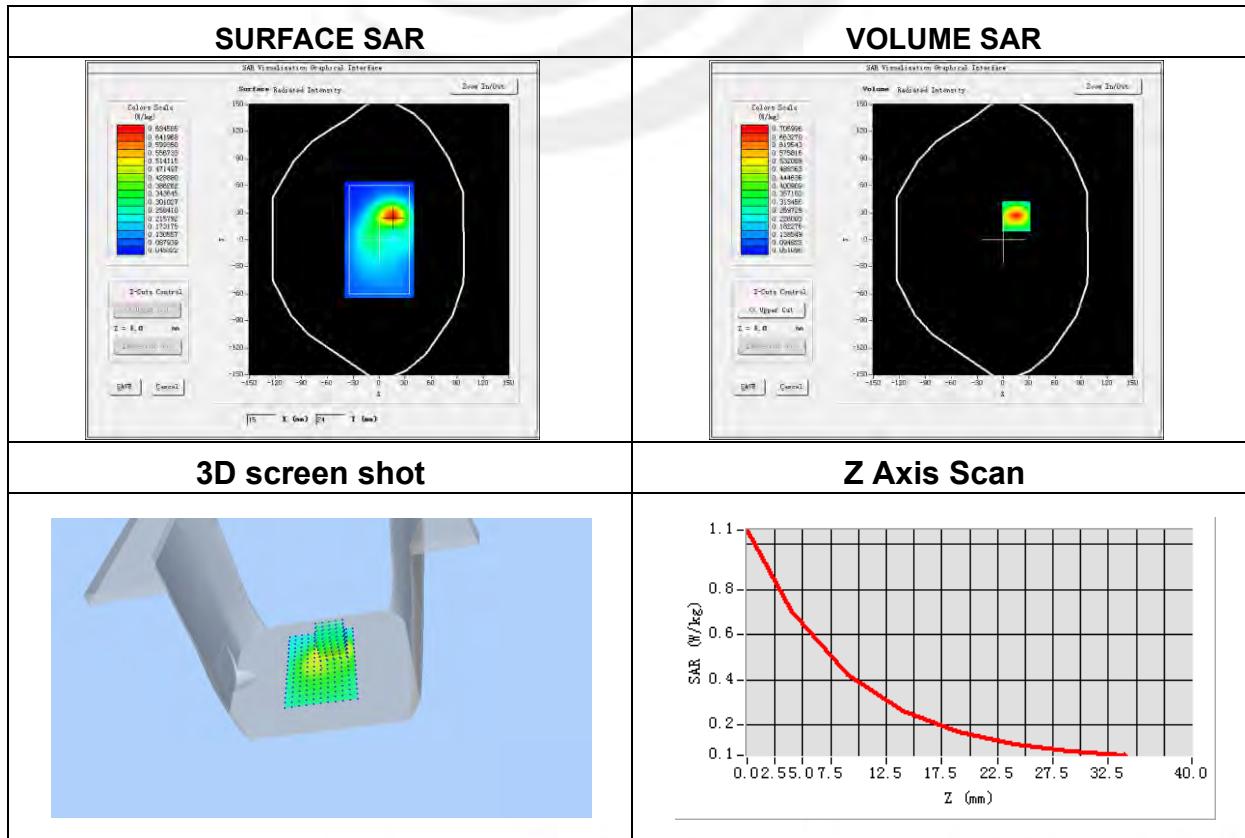
**Plot 26: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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	WCDMA II
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1907.6
Relative permittivity (real part)	53.30
Conductivity (S/m)	1.52
Variation (%)	0.04

Maximum location: X=15.00, Y=26.00

SAR Peak: 1.06 W/kg

SAR 10g (W/Kg)	0.363606
SAR 1g (W/Kg)	0.665370

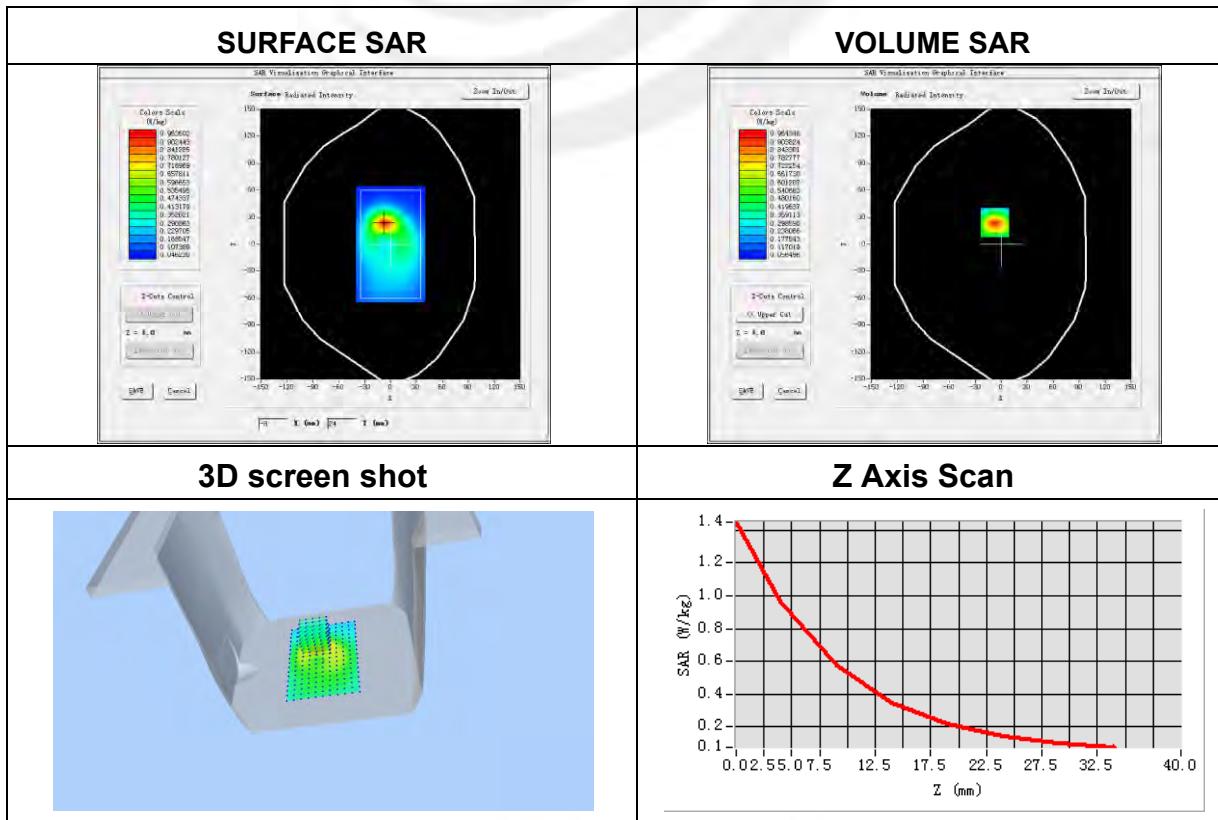


**Plot 27: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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 side
Band	WCDMA II
Channels	Low
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1852.4
Relative permittivity (real part)	39.71
Conductivity (S/m)	1.40
Variation (%)	-0.47

Maximum location: X=-7.00, Y=24.00**SAR Peak: 1.45 W/kg**

SAR 10g (W/Kg)	0.482492
SAR 1g (W/Kg)	0.896329



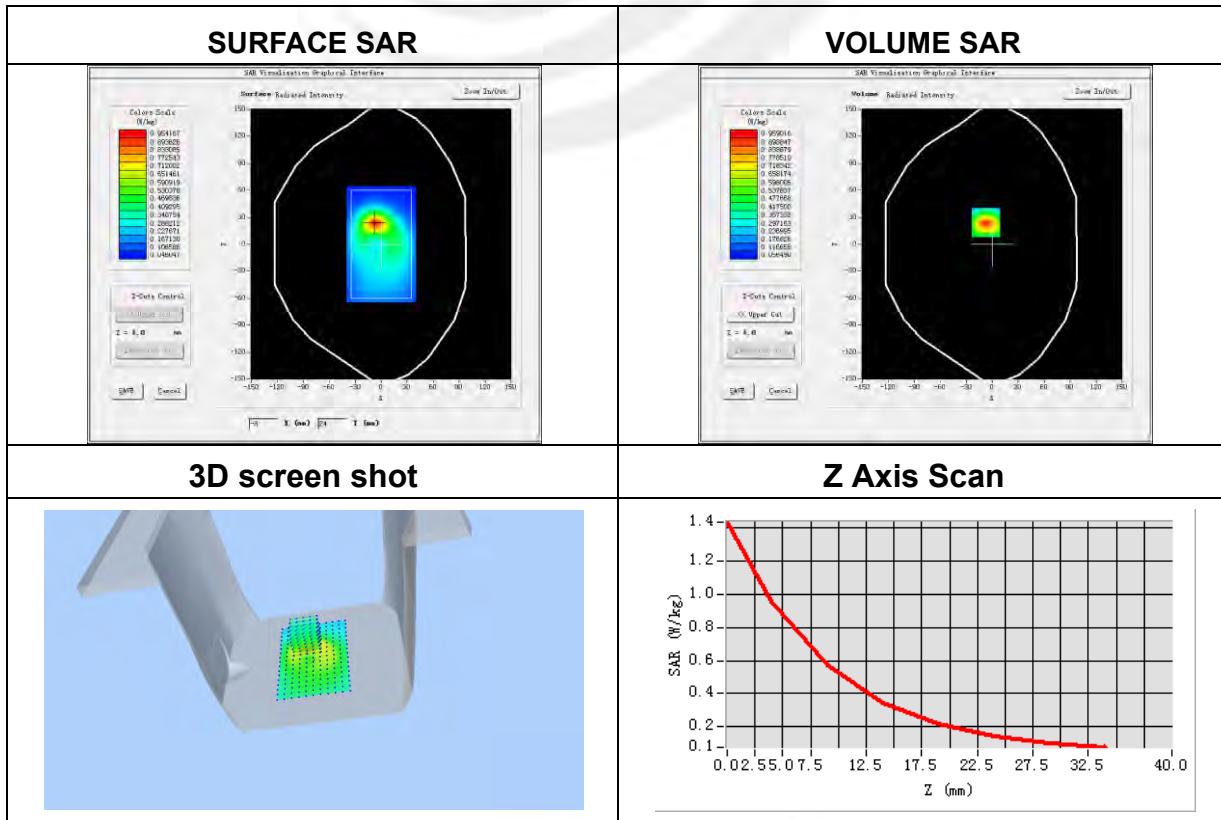
**Plot 28: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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 side-repeated
Band	WCDMA II
Channels	Low
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1852.4
Relative permittivity (real part)	39.71
Conductivity (S/m)	1.40
Variation (%)	-0.13

Maximum location: X=16.00, Y=24.00

SAR Peak: 1.44 W/kg

SAR 10g (W/Kg)	0.480739
SAR 1g (W/Kg)	0.891583

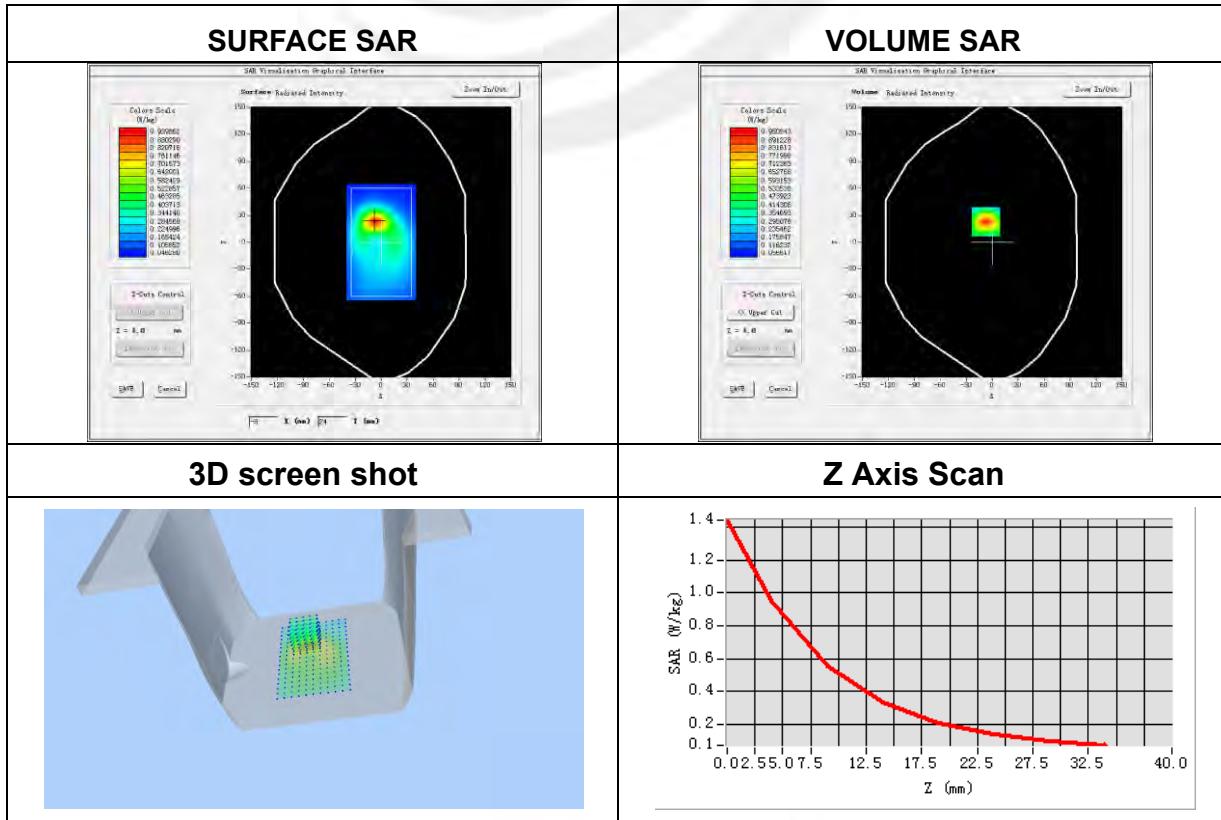


**Plot 29: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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 side
Band	WCDMA II
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1852.4
Relative permittivity (real part)	39.71
Conductivity (S/m)	1.40
Variation (%)	-0.32

Maximum location: X=-7.00, Y=23.00**SAR Peak: 1.43 W/kg**

SAR 10g (W/Kg)	0.348375
SAR 1g (W/Kg)	0.585053

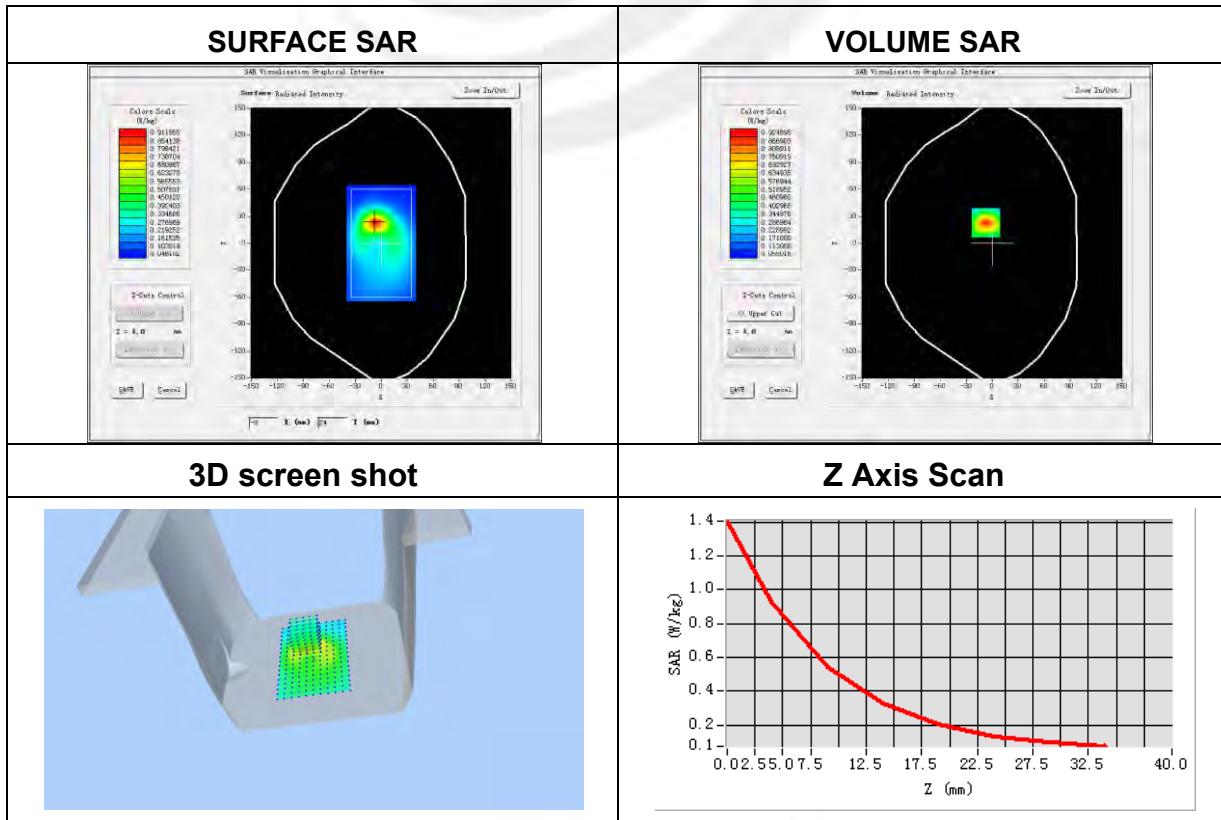


**Plot 30: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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 side
Band	WCDMA II
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1907.6
Relative permittivity (real part)	39.71
Conductivity (S/m)	1.40
Variation (%)	-0.41

Maximum location: X=-7.00, Y=23.00**SAR Peak:1.40 W/kg**

SAR 10g (W/Kg)	0.461759
SAR 1g (W/Kg)	0.872604



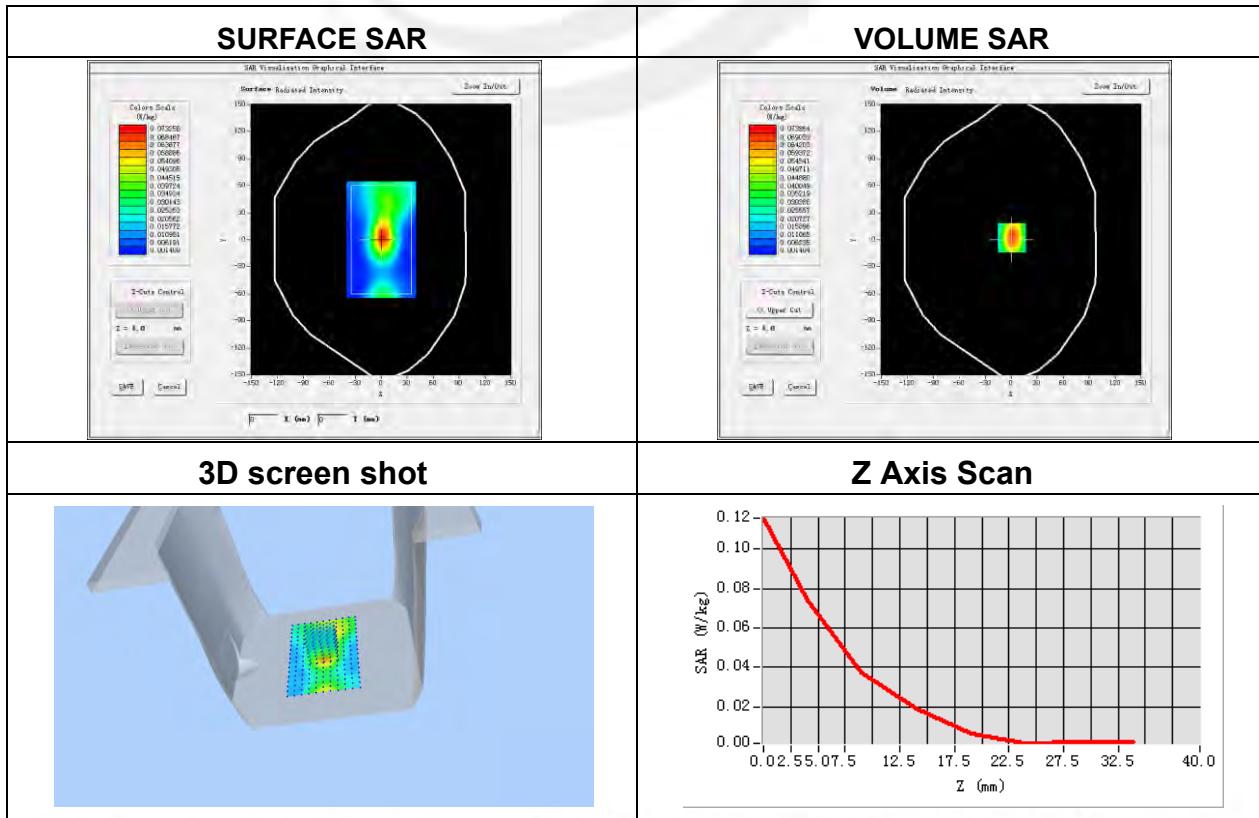
**Plot 31: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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 side
Band	WCDMA II
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1907.6
Relative permittivity (real part)	53.30
Conductivity (S/m)	1.52
Variation (%)	-1.65

Maximum location: X=1.00, Y=2.00

SAR Peak: 0.12 W/kg

SAR 10g (W/Kg)	0.033009
SAR 1g (W/Kg)	0.069143



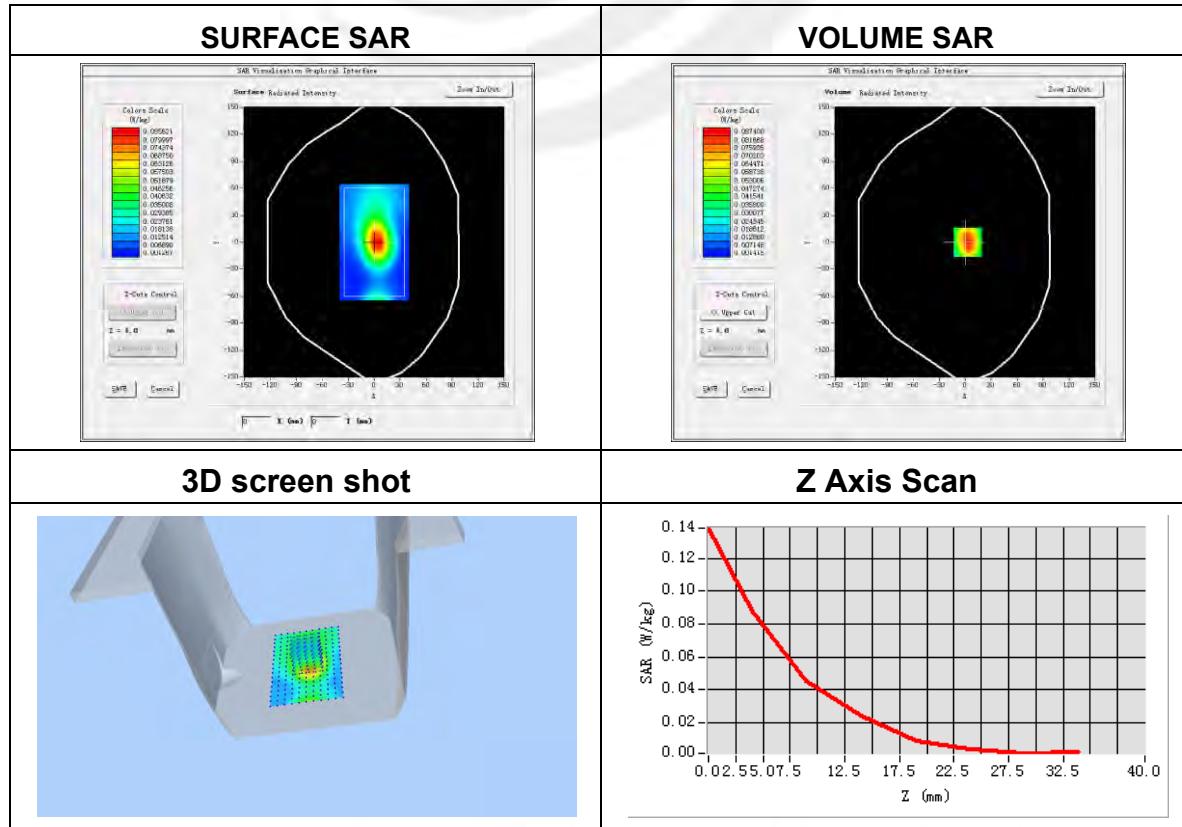
**Plot 32: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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 side
Band	WCDMA II
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1907.6
Relative permittivity (real part)	53.30
Conductivity (S/m)	1.52
Variation (%)	-0.63

Maximum location: X=3.00, Y=0.00

SAR Peak: 0.14 W/kg

SAR 10g (W/Kg)	0.041873
SAR 1g (W/Kg)	0.083472

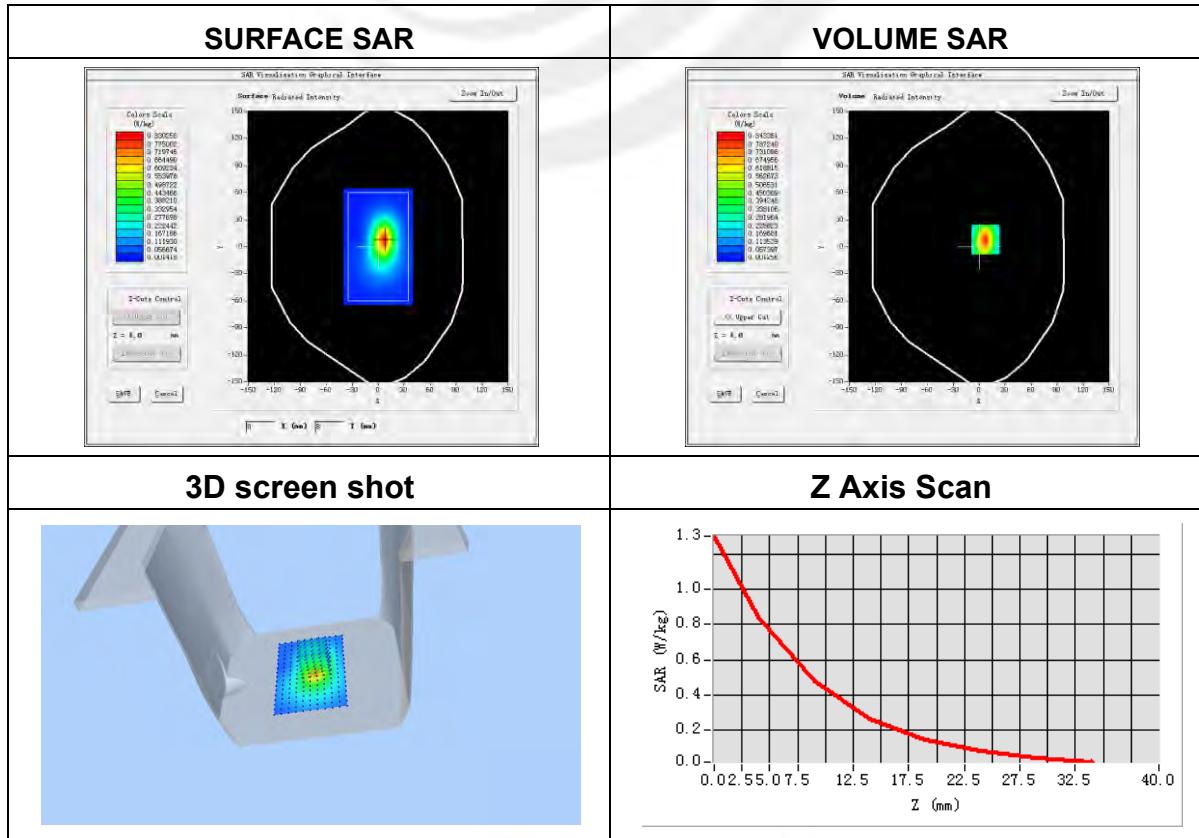


**Plot 33: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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 side
Band	WCDMA II
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1907.6
Relative permittivity (real part)	53.30
Conductivity (S/m)	1.52
Variation (%)	-3.57

Maximum location: X=7.00, Y=8.00**SAR Peak: 1.29 W/kg**

SAR 10g (W/Kg)	0.386717
SAR 1g (W/Kg)	0.783838

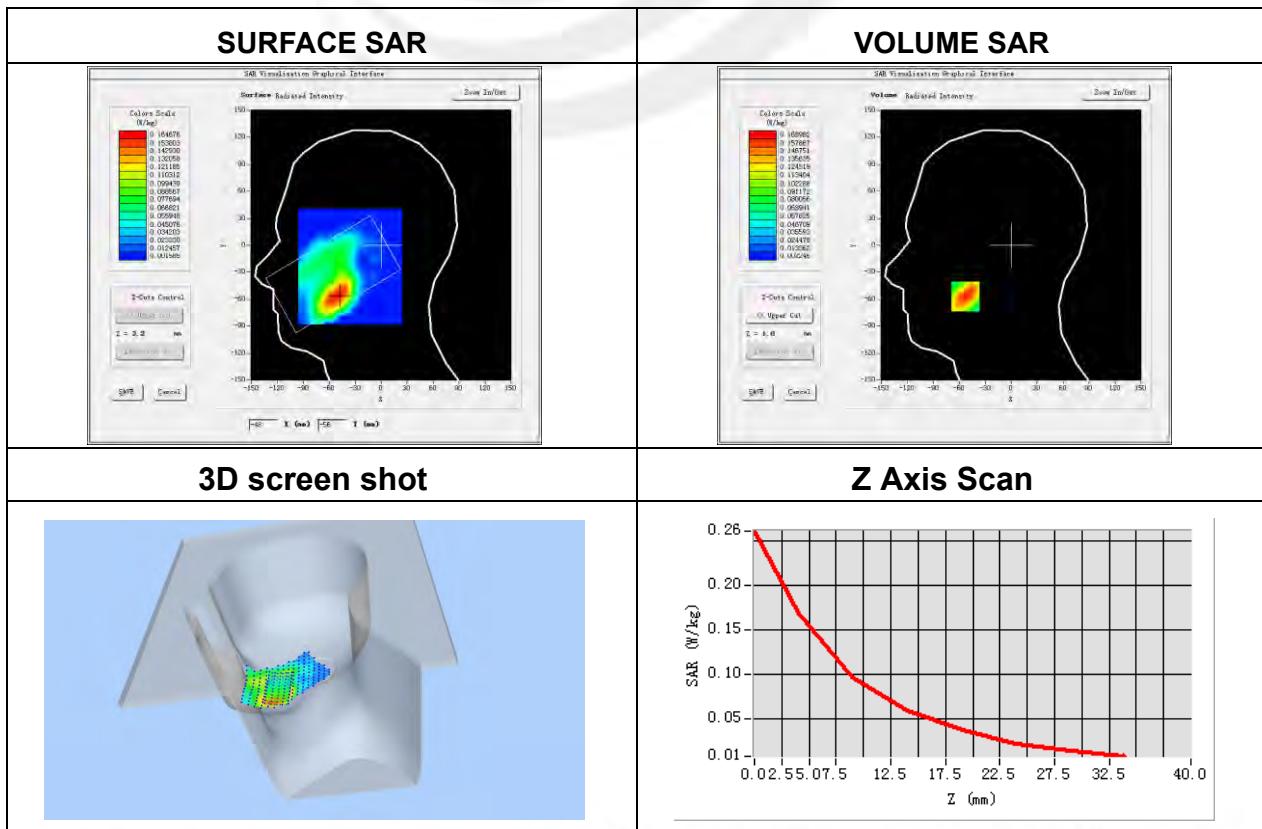


**Plot 34: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
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	Right head
Device Position	Cheek
Band	WCDMA IV
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1752.4
Relative permittivity (real part)	52.6
Conductivity (S/m)	1.38
Variation (%)	-2.10

Maximum location: X=-53.00, Y=-57.00**SAR Peak: 0.26 W/kg**

SAR 10g (W/Kg)	0.090218
SAR 1g (W/Kg)	0.161771



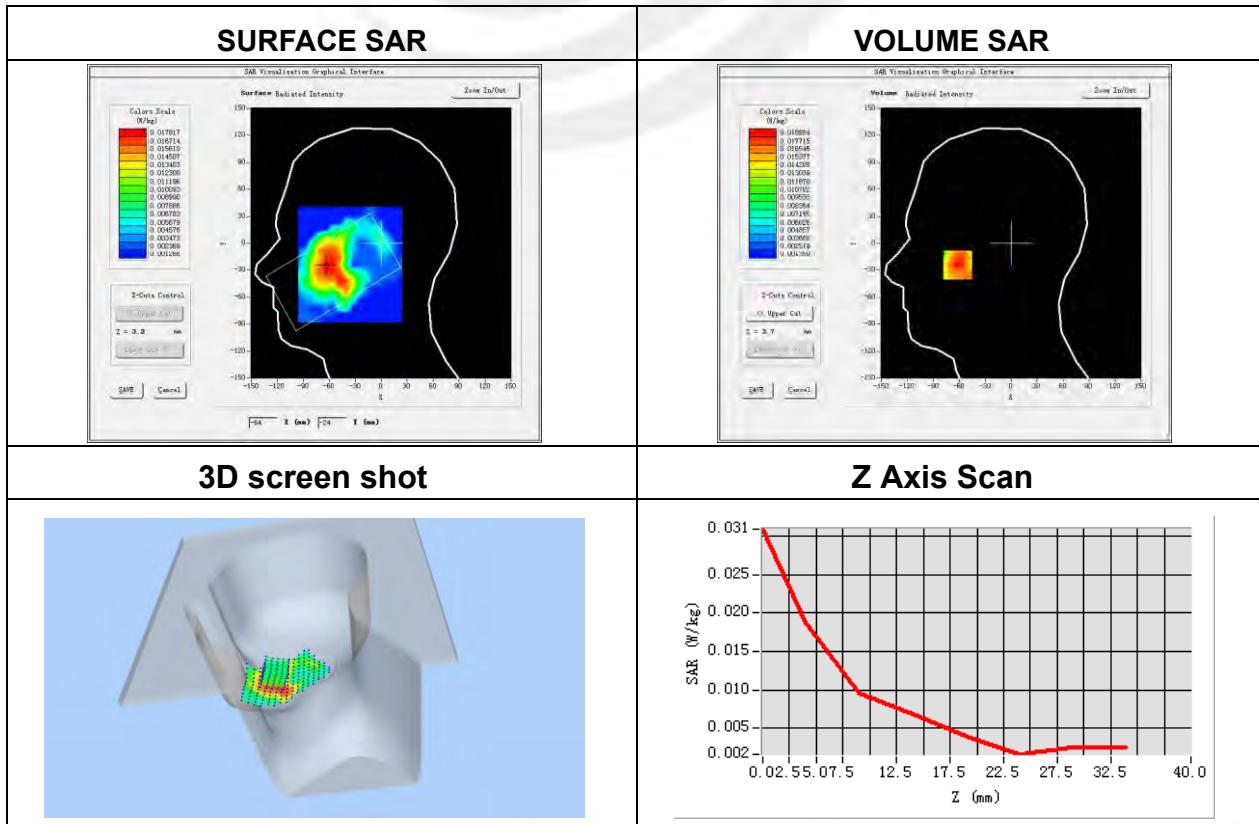
**Plot 35: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
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	Right head
Device Position	Tilt
Band	WCDMA IV
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1752.4
Relative permittivity (real part)	52.6
Conductivity (S/m)	1.38
Variation (%)	-3.61

Maximum location: X=-62.00, Y=-24.00

SAR Peak: 0.03 W/kg

SAR 10g (W/Kg)	0.010419
SAR 1g (W/Kg)	0.018331

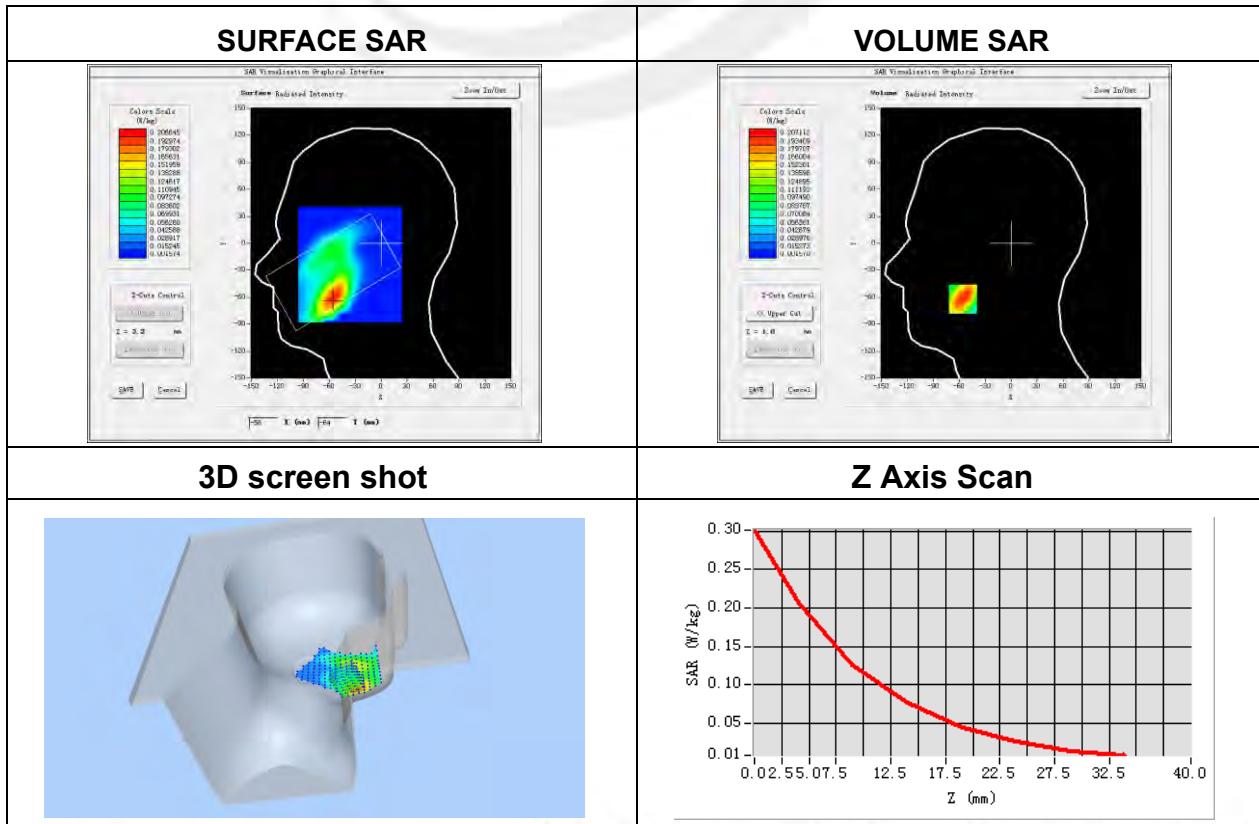


**Plot 36: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
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	Left head
Device Position	Cheek
Band	WCDMA IV
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1752.4
Relative permittivity (real part)	52.6
Conductivity (S/m)	1.38
Variation (%)	0.56

Maximum location: X=-56.00, Y=-62.00**SAR Peak: 0.31 W/kg**

SAR 10g (W/Kg)	0.108082
SAR 1g (W/Kg)	0.196946

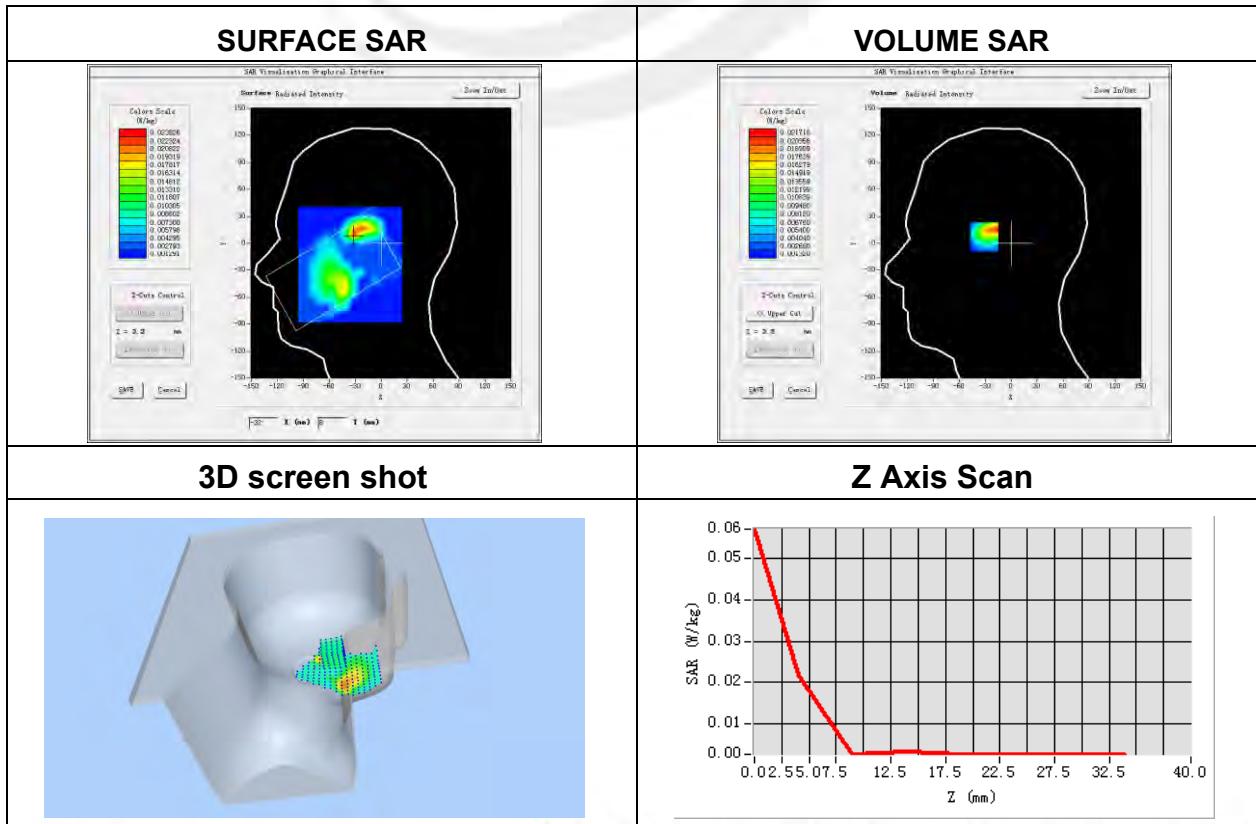


**Plot 37: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
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	Left head
Device Position	Tilt
Band	WCDMA IV
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1752.4
Relative permittivity (real part)	52.6
Conductivity (S/m)	1.38
Variation (%)	0.03

Maximum location: X=-31.00, Y=10.00**SAR Peak: 0.04 W/kg**

SAR 10g (W/Kg)	0.008907
SAR 1g (W/Kg)	0.019468



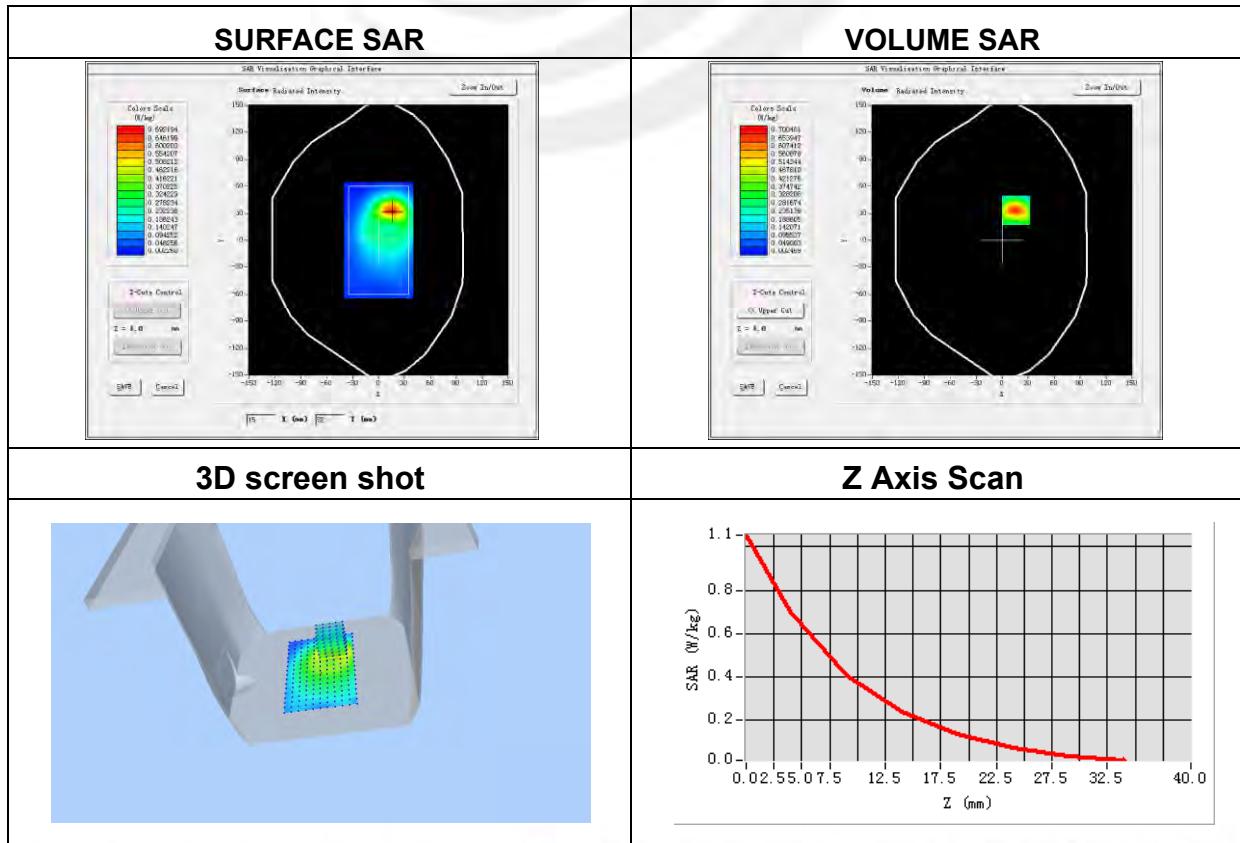
**Plot 38: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.34
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	WCDMA IV
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1752.4
Relative permittivity (real part)	52.6
Conductivity (S/m)	1.38
Variation (%)	-1.44

Maximum location: X=16.00, Y=33.00

SAR Peak: 1.05 W/kg

SAR 10g (W/Kg)	0.337646
SAR 1g (W/Kg)	0.649272

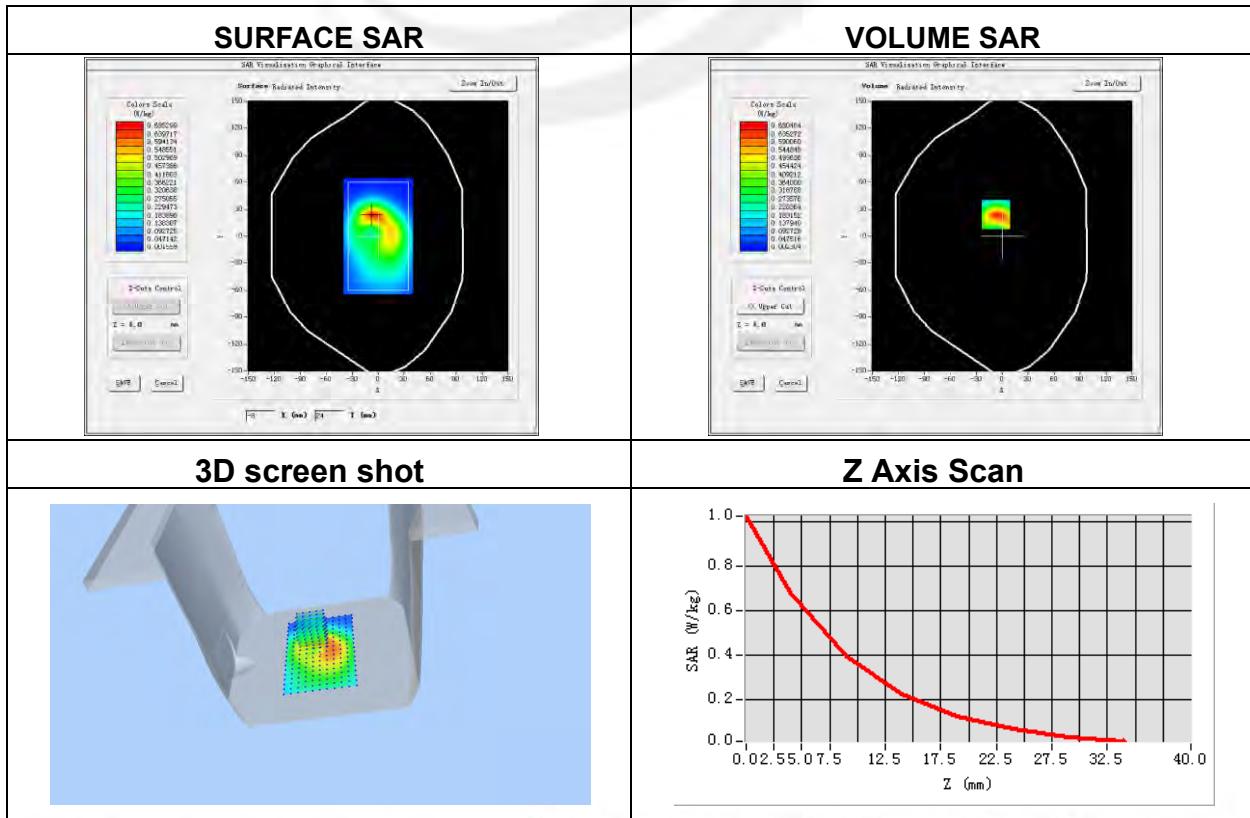


**Plot 39: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.34
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	WCDMA IV
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1752.4
Relative permittivity (real part)	52.6
Conductivity (S/m)	1.38
Variation (%)	0.16

Maximum location: X=-7.00, Y=24.00**SAR Peak: 1.03 W/kg**

SAR 10g (W/Kg)	0.335826
SAR 1g (W/Kg)	0.634828

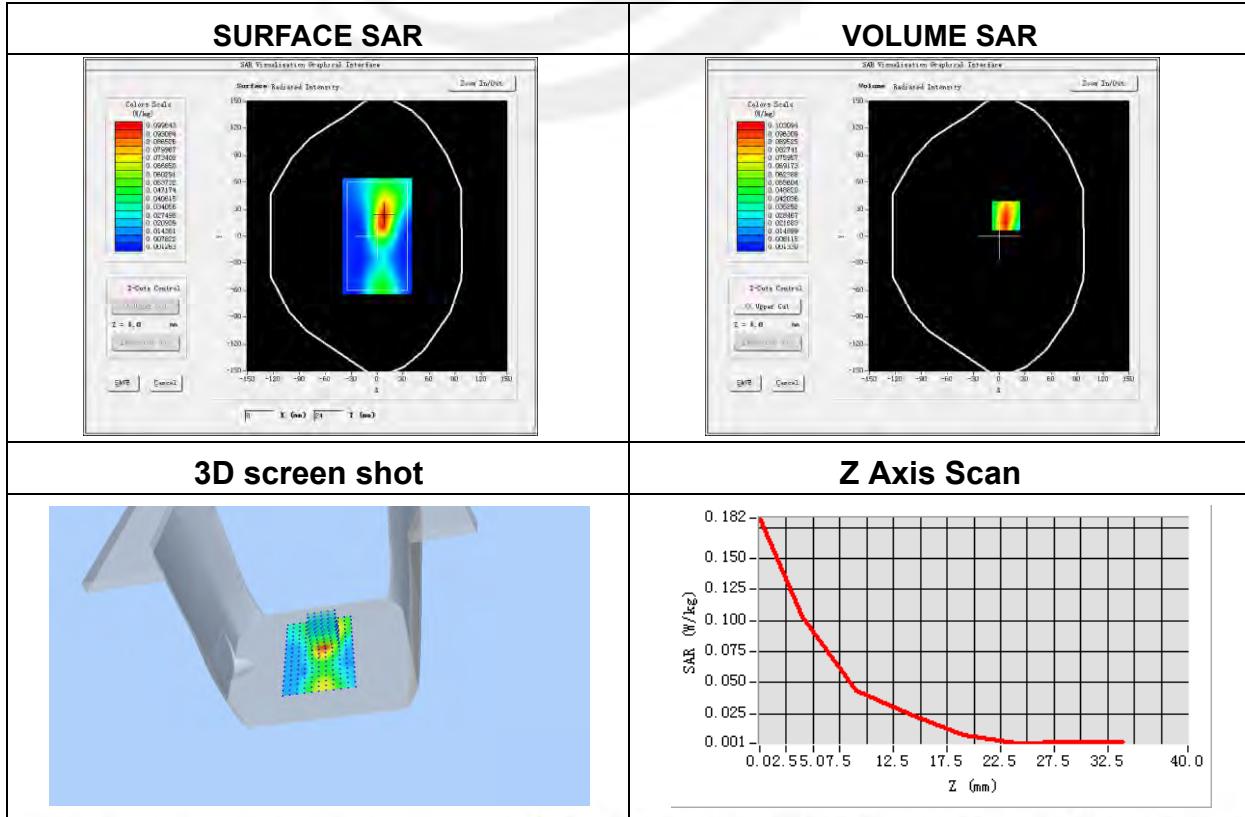


**Plot 40: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.34
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 side
Band	WCDMA IV
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1752.4
Relative permittivity (real part)	52.6
Conductivity (S/m)	1.38
Variation (%)	-2.75

Maximum location: X=8.00, Y=23.00**SAR Peak: 0.17 W/kg**

SAR 10g (W/Kg)	0.046732
SAR 1g (W/Kg)	0.098323



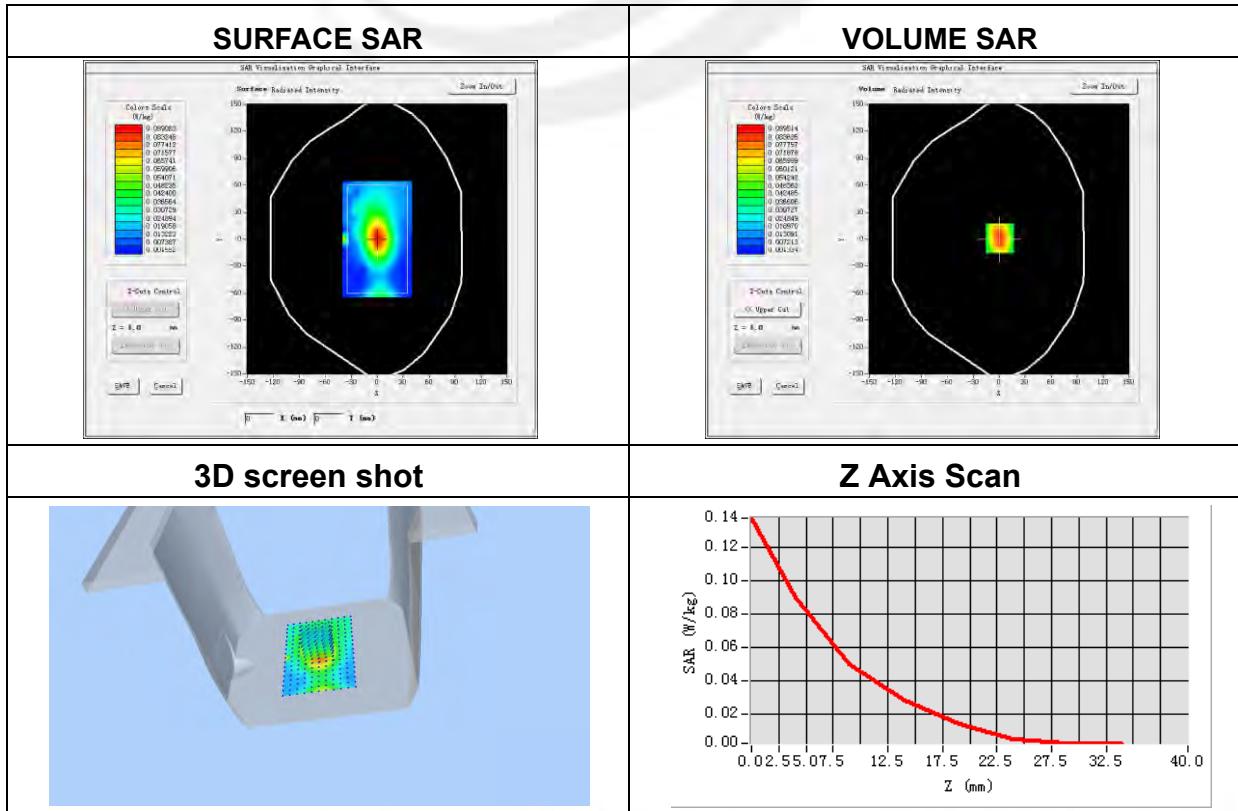
**Plot 41: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.34
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 side
Band	WCDMA IV
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1752.4
Relative permittivity (real part)	52.6
Conductivity (S/m)	1.38
Variation (%)	-0.86

Maximum location: X=1.00, Y=1.00

SAR Peak: 0.14 W/kg

SAR 10g (W/Kg)	0.044564
SAR 1g (W/Kg)	0.085128



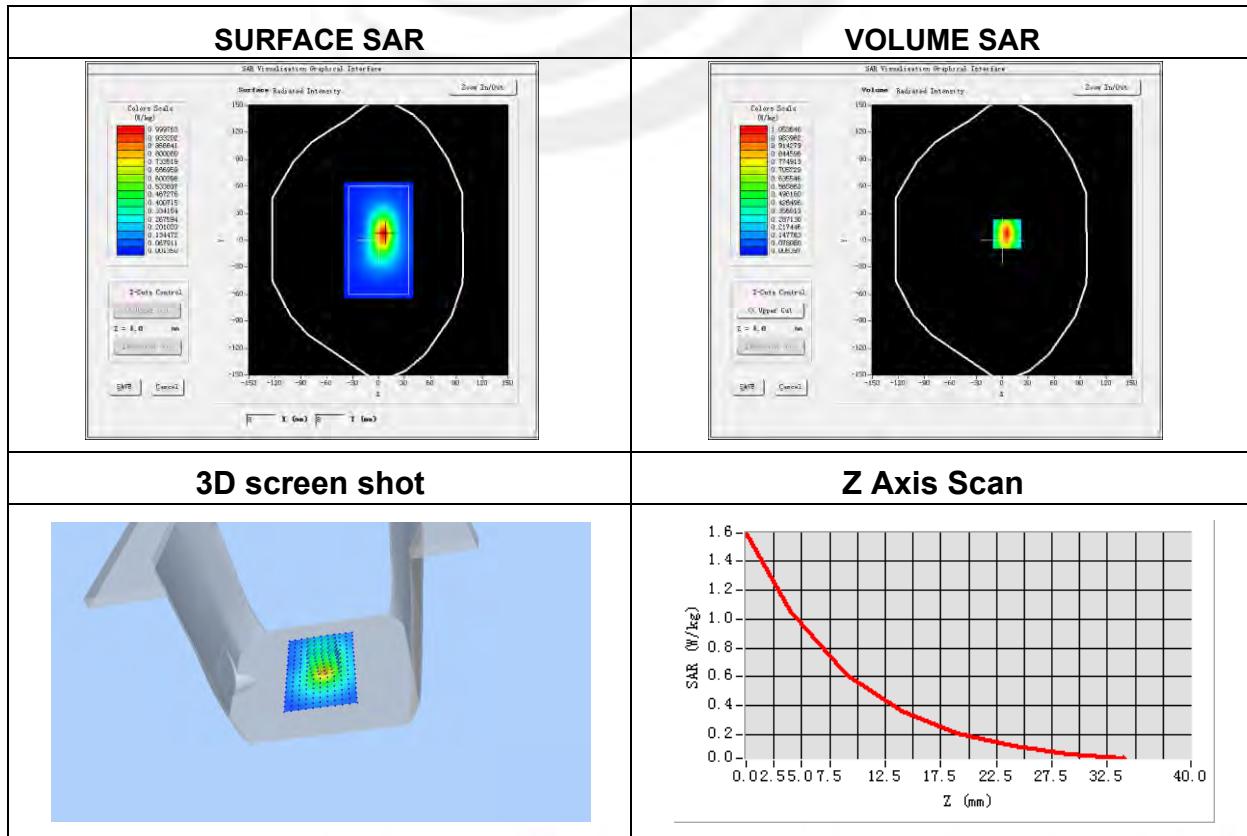
**Plot 42: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.34
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 side
Band	WCDMA IV
Channels	Low
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1712.0
Relative permittivity (real part)	52.6
Conductivity (S/m)	1.38
Variation (%)	0.03

Maximum location: X=6.00, Y=7.00

SAR Peak: 1.59 W/kg

SAR 10g (W/Kg)	0.496938
SAR 1g (W/Kg)	0.970530



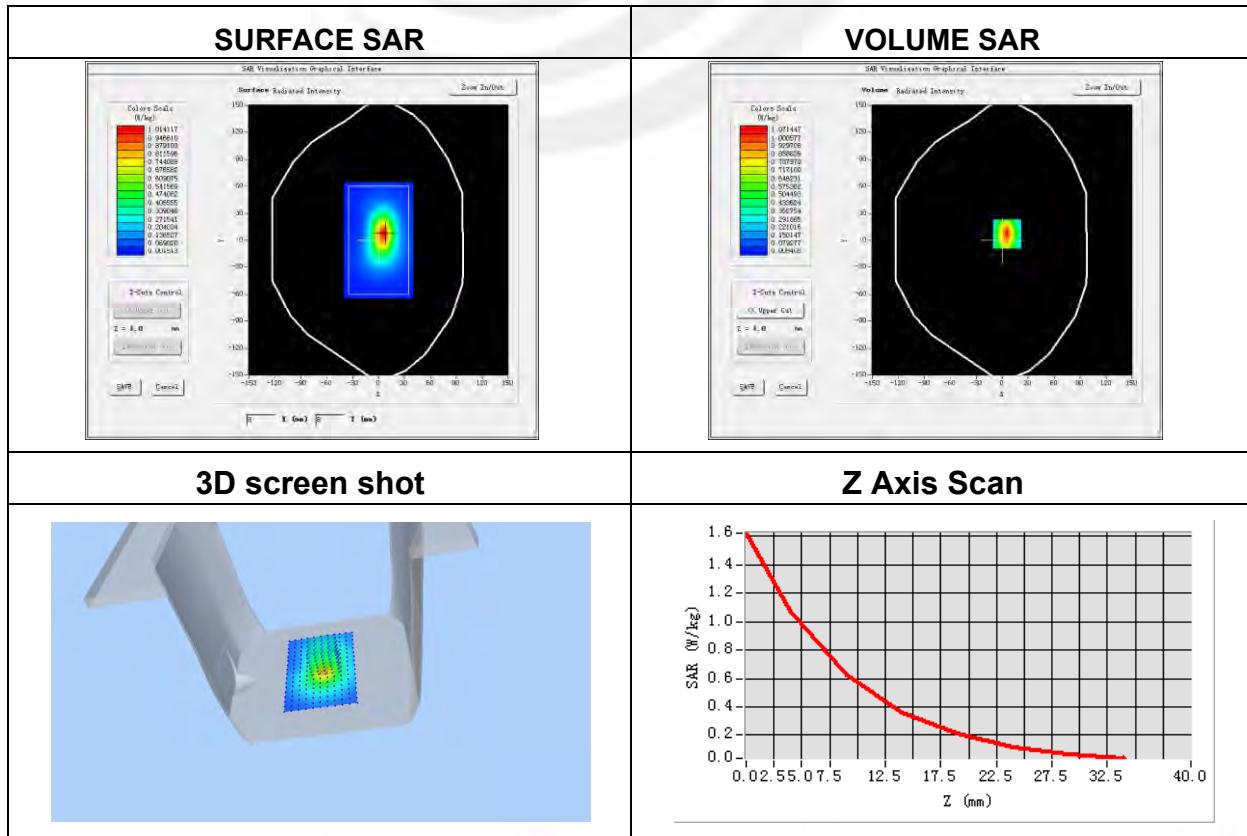
**Plot 43: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.34
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 side
Band	WCDMA IV
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1732.0
Relative permittivity (real part)	52.6
Conductivity (S/m)	1.38
Variation (%)	-0.37

Maximum location: X=6.00, Y=7.00

SAR Peak: 1.62 W/kg

SAR 10g (W/Kg)	0.505305
SAR 1g (W/Kg)	0.989820



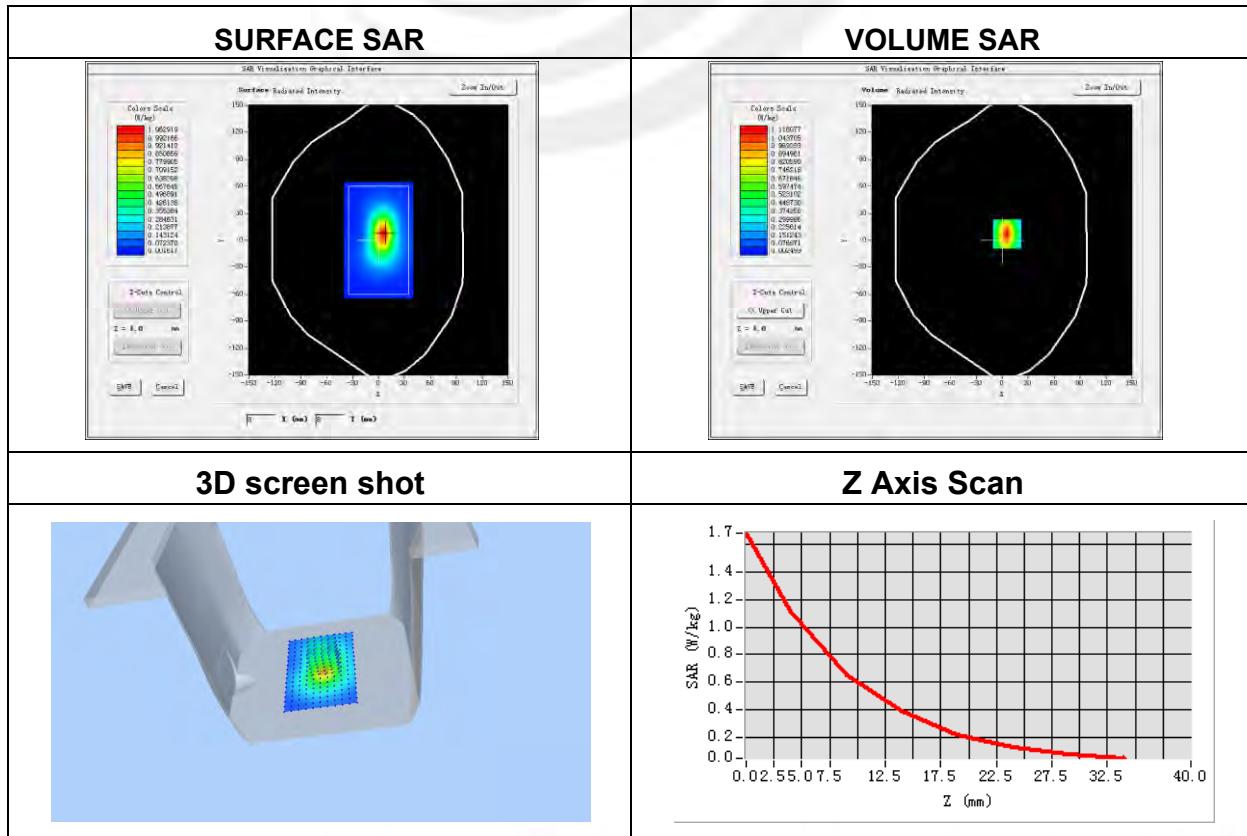
**Plot 44: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.34
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 side
Band	WCDMA IV
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1752.4
Relative permittivity (real part)	52.6
Conductivity (S/m)	1.38
Variation (%)	-0.90

Maximum location: X=6.00, Y=7.00

SAR Peak: 1.73 W/kg

SAR 10g (W/Kg)	0.526773
SAR 1g (W/Kg)	1.048756



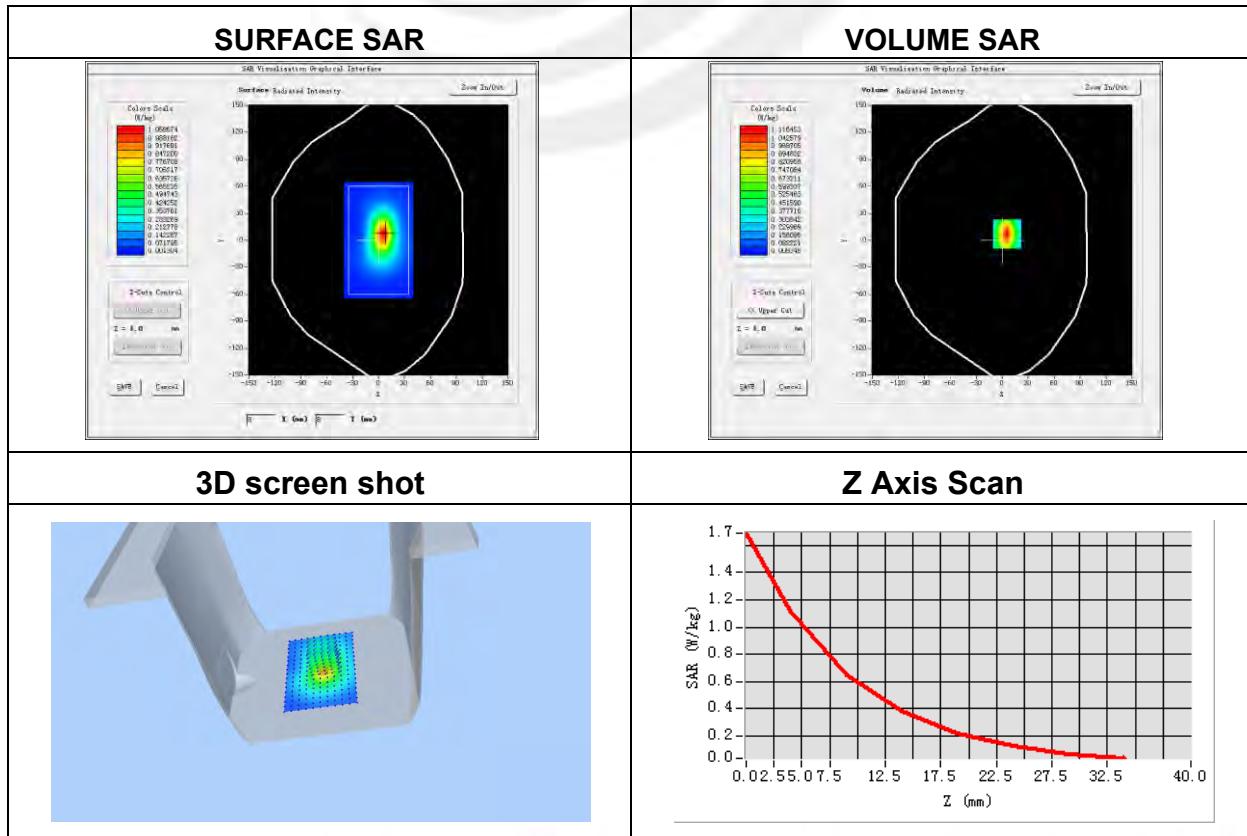
**Plot 45: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.34
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 side-repeated
Band	WCDMA IV
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1752.4
Relative permittivity (real part)	52.6
Conductivity (S/m)	1.38
Variation (%)	-1.12

Maximum location: X=6.00, Y=7.00

SAR Peak: 1.70 W/kg

SAR 10g (W/Kg)	0.532208
SAR 1g (W/Kg)	1.040350



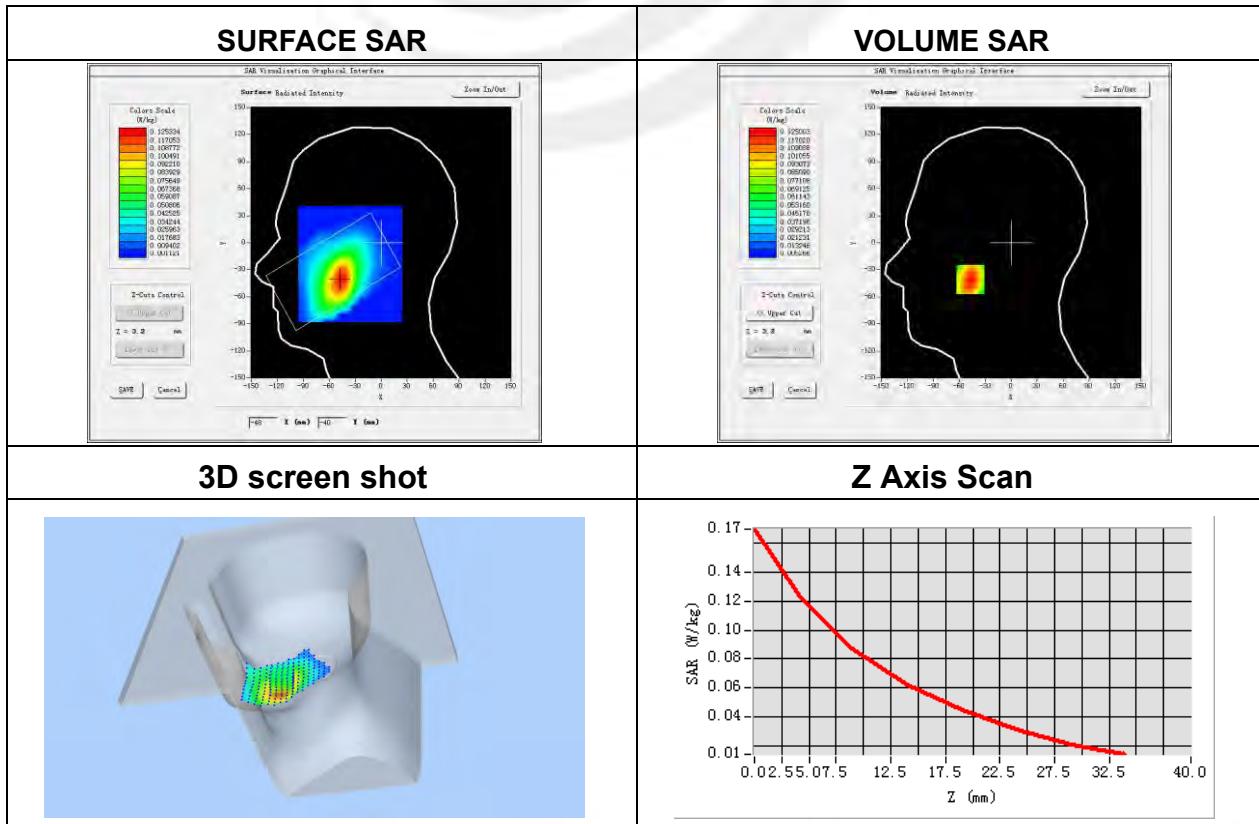
**Plot 46: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.83
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	Right head
Device Position	Cheek
Band	WCDMA V
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.5
Conductivity (S/m)	0.96
Variation (%)	4.51

Maximum location: X=-47.00, Y=-41.00

SAR Peak: 0.17 W/kg

SAR 10g (W/Kg)	0.078749
SAR 1g (W/Kg)	0.120871



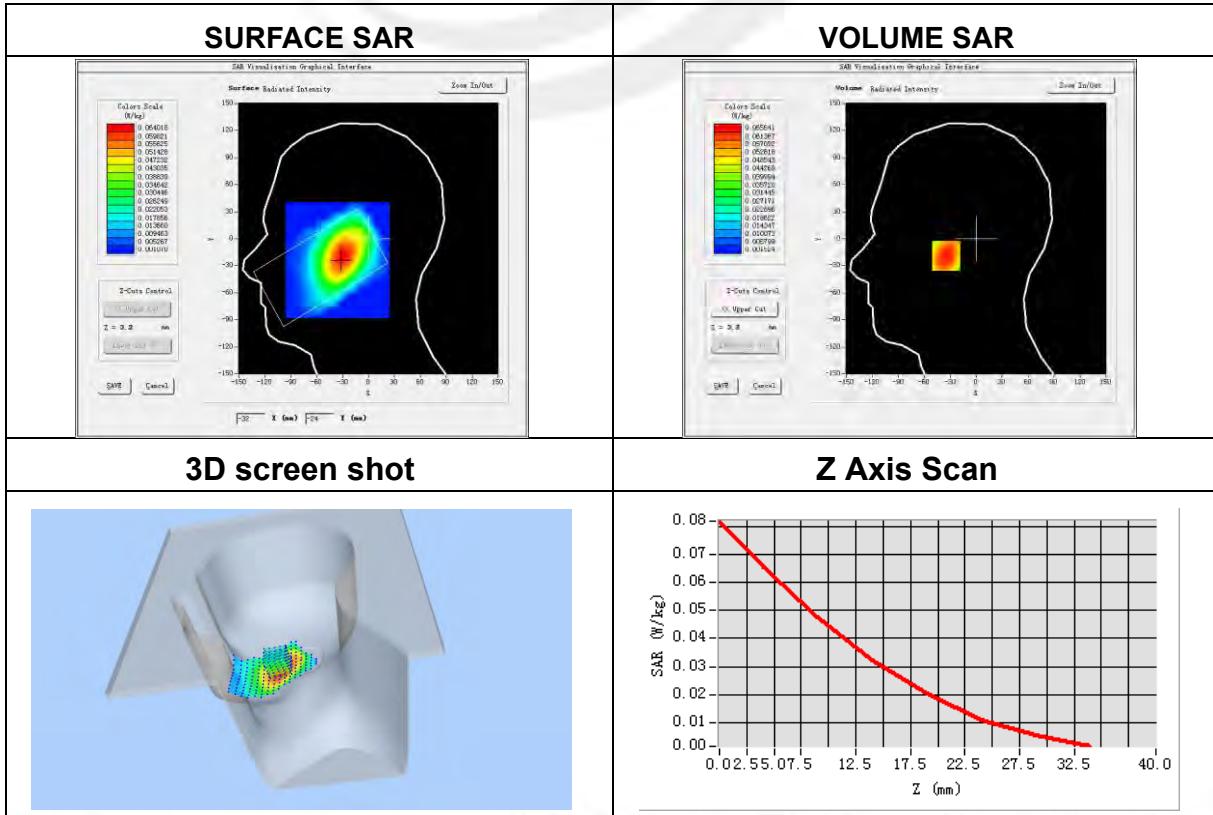
**Plot 47: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.83
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	Right head
Device Position	Tilt
Band	WCDMA V
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.5
Conductivity (S/m)	0.96
Variation (%)	-2.80

Maximum location: X=-30.00, Y=-19.00

SAR Peak: 0.09 W/kg

SAR 10g (W/Kg)	0.041076
SAR 1g (W/Kg)	0.063255

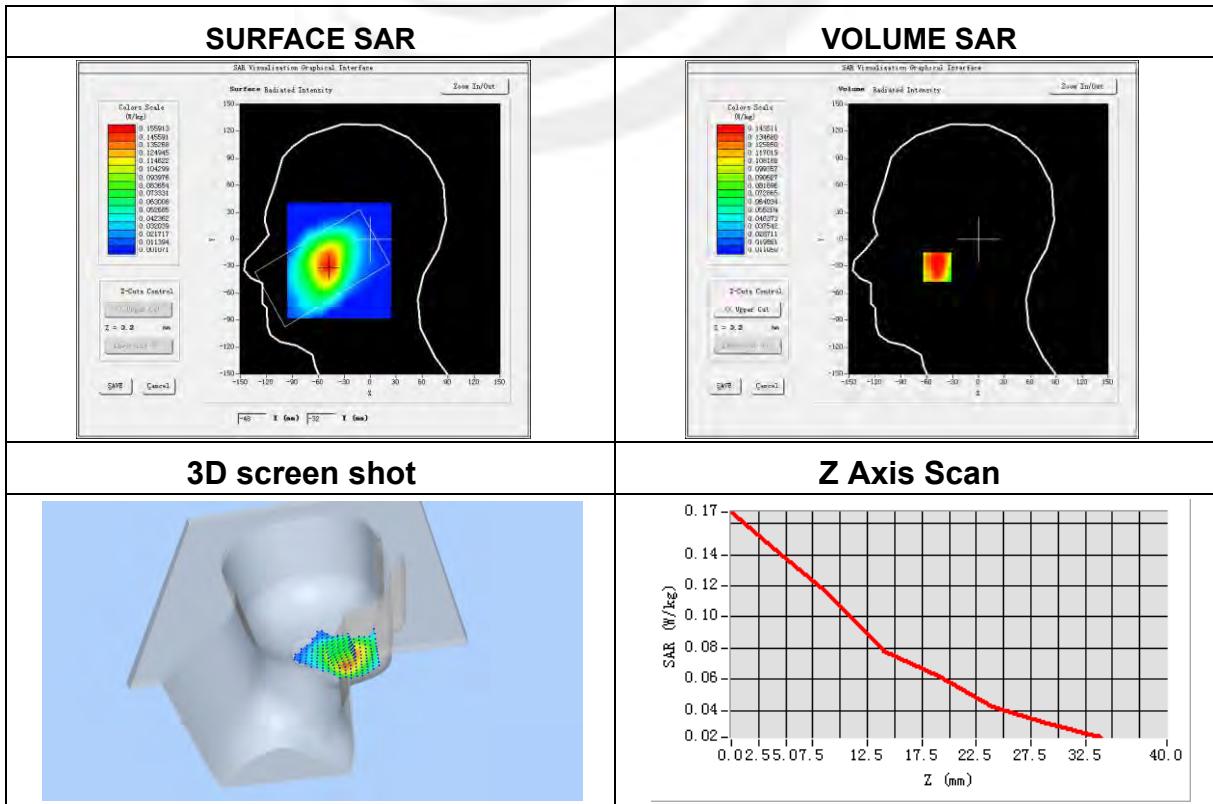


**Plot 48: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.83
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	Left head
Device Position	Cheek
Band	WCDMA V
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.5
Conductivity (S/m)	0.96
Variation (%)	4.62

Maximum location: X=-48.00, Y=-31.00**SAR Peak: 0.19 W/kg**

SAR 10g (W/Kg)	0.099160
SAR 1g (W/Kg)	0.140800

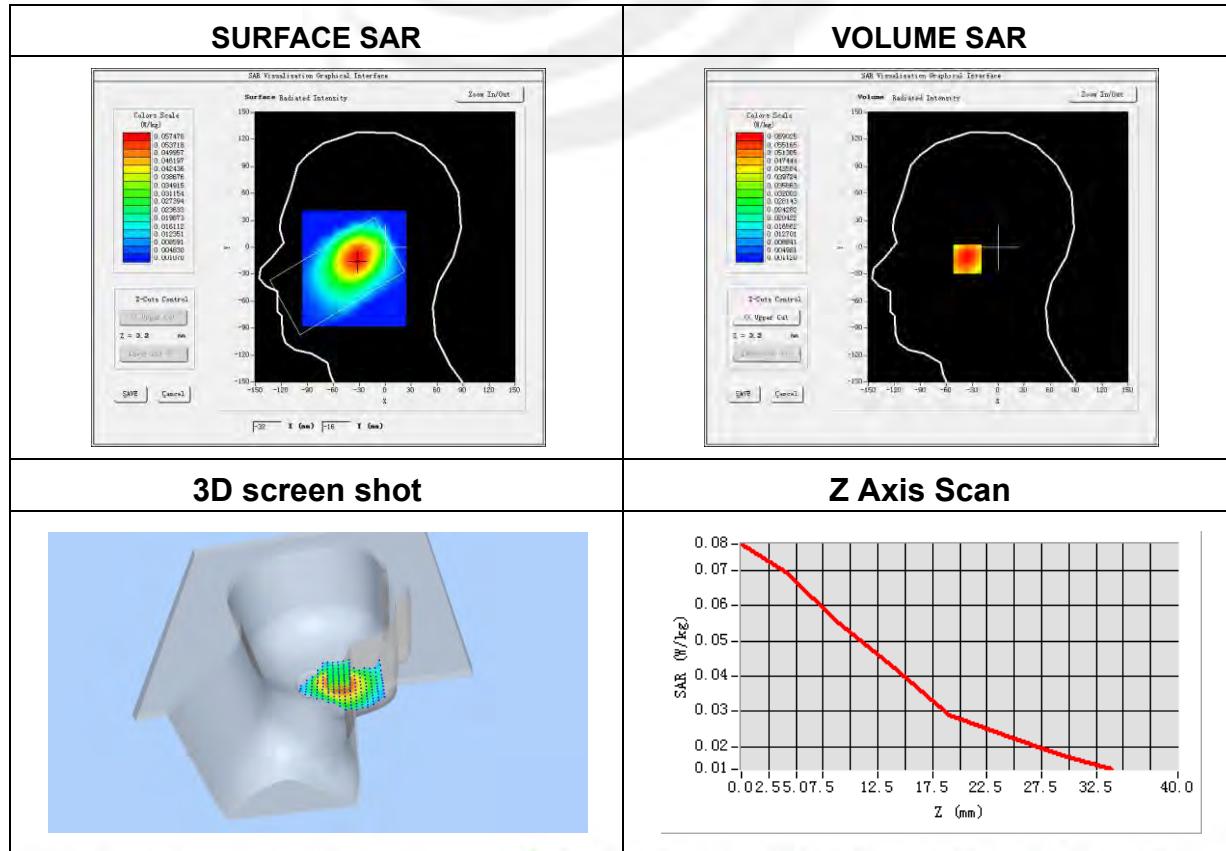


**Plot 49: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.83
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	Left head
Device Position	Tilt
Band	WCDMA V
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.5
Conductivity (S/m)	0.96
Variation (%)	0.98

Maximum location: X=-32.00, Y=-13.00**SAR Peak: 0.09 W/kg**

SAR 10g (W/Kg)	0.038126
SAR 1g (W/Kg)	0.058405



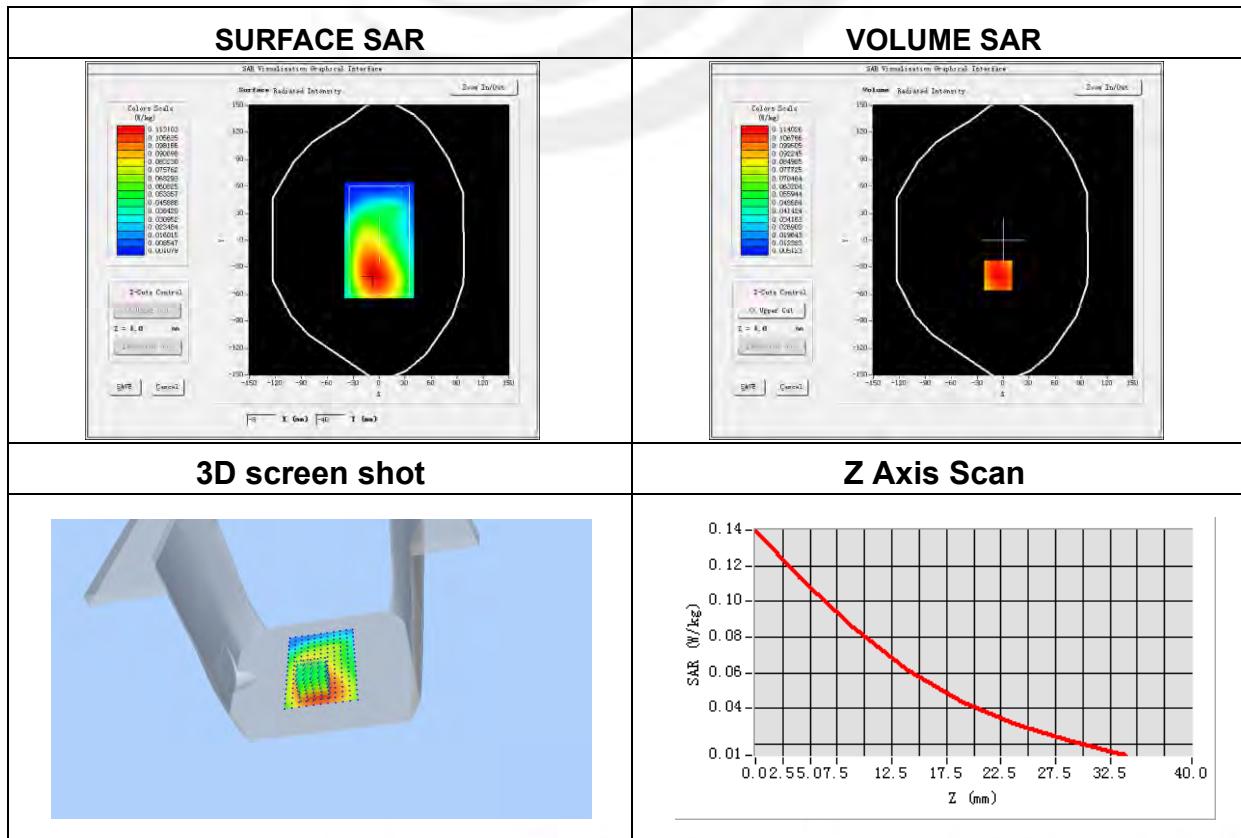
**Plot 50: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	5.02
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 Front
Band	WCDMA V
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.5
Conductivity (S/m)	0.96
Variation (%)	2.04

Maximum location: X=-6.00, Y=39.00

SAR Peak: 0.14 W/kg

SAR 10g (W/Kg)	0.078136
SAR 1g (W/Kg)	0.110184



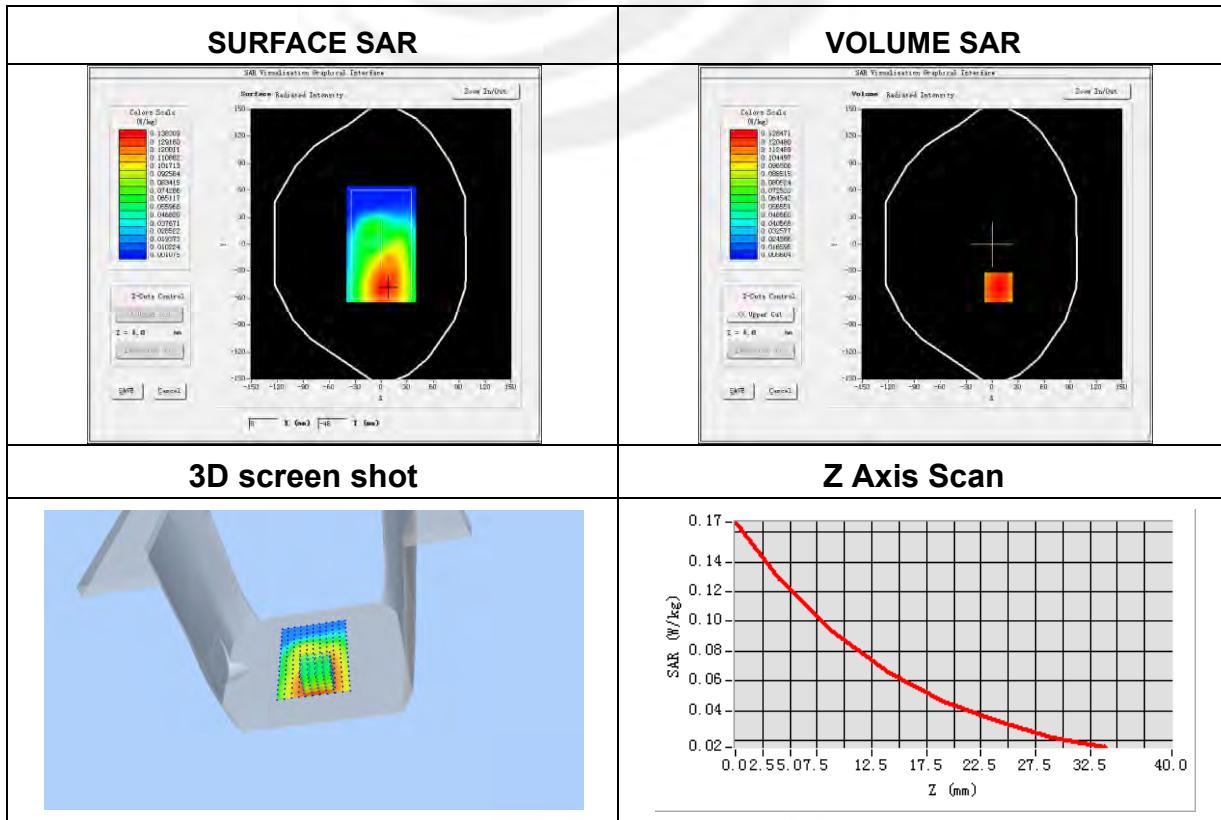
**Plot 51: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	5.02
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 side
Band	WCDMA V
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.5
Conductivity (S/m)	0.96
Variation (%)	-3.82

Maximum location: X=7.00, Y=-48.00

SAR Peak: 0.17 W/kg

SAR 10g (W/Kg)	0.086882
SAR 1g (W/Kg)	0.125884

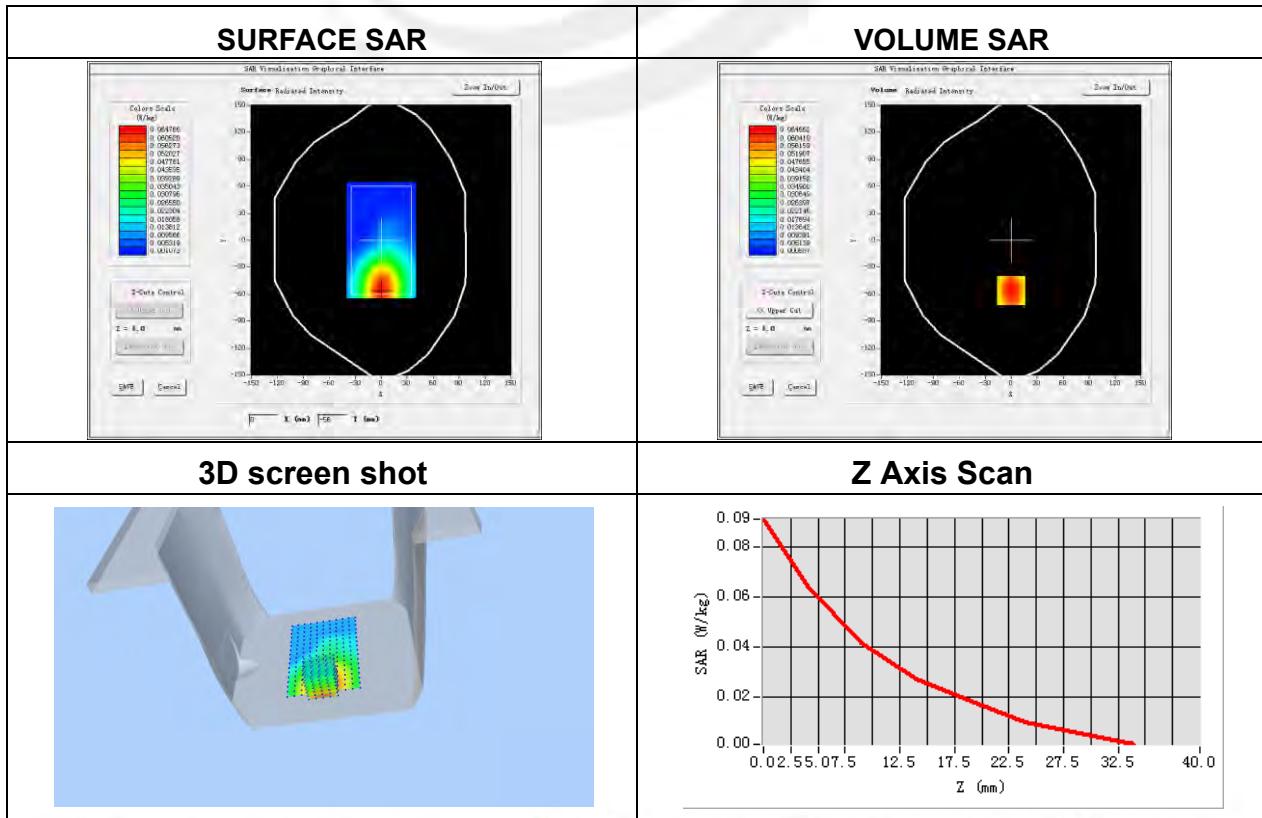


**Plot 52: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	5.02
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 left side
Band	WCDMA V
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.5
Conductivity (S/m)	0.96
Variation (%)	-2.42

Maximum location: X=0.00, Y=-56.00**SAR Peak: 0.09 W/kg**

SAR 10g (W/Kg)	0.038938
SAR 1g (W/Kg)	0.062650

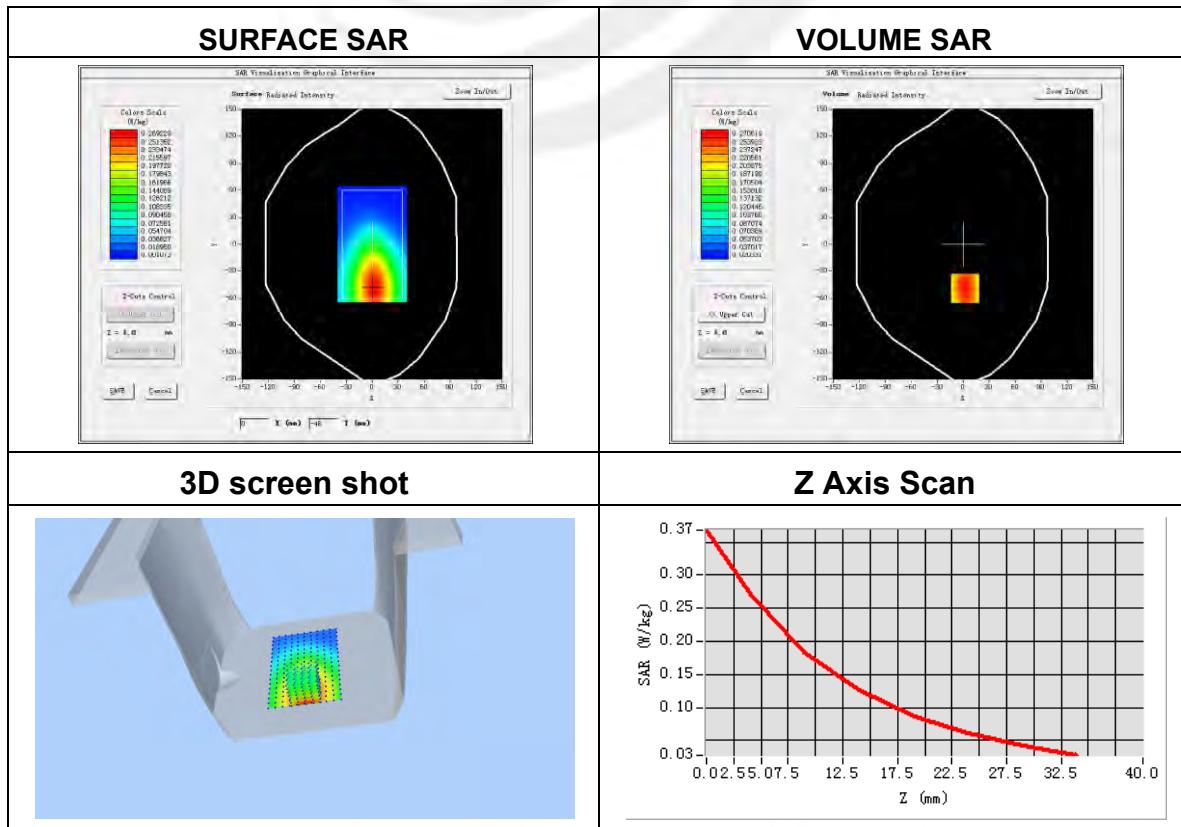


**Plot 53: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	5.02
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 right side
Band	WCDMA V
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.5
Conductivity (S/m)	0.96
Variation (%)	0.86

Maximum location: X=2.00, Y=-49.00**SAR Peak: 0.37 W/kg**

SAR 10g (W/Kg)	0.173013
SAR 1g (W/Kg)	0.261590

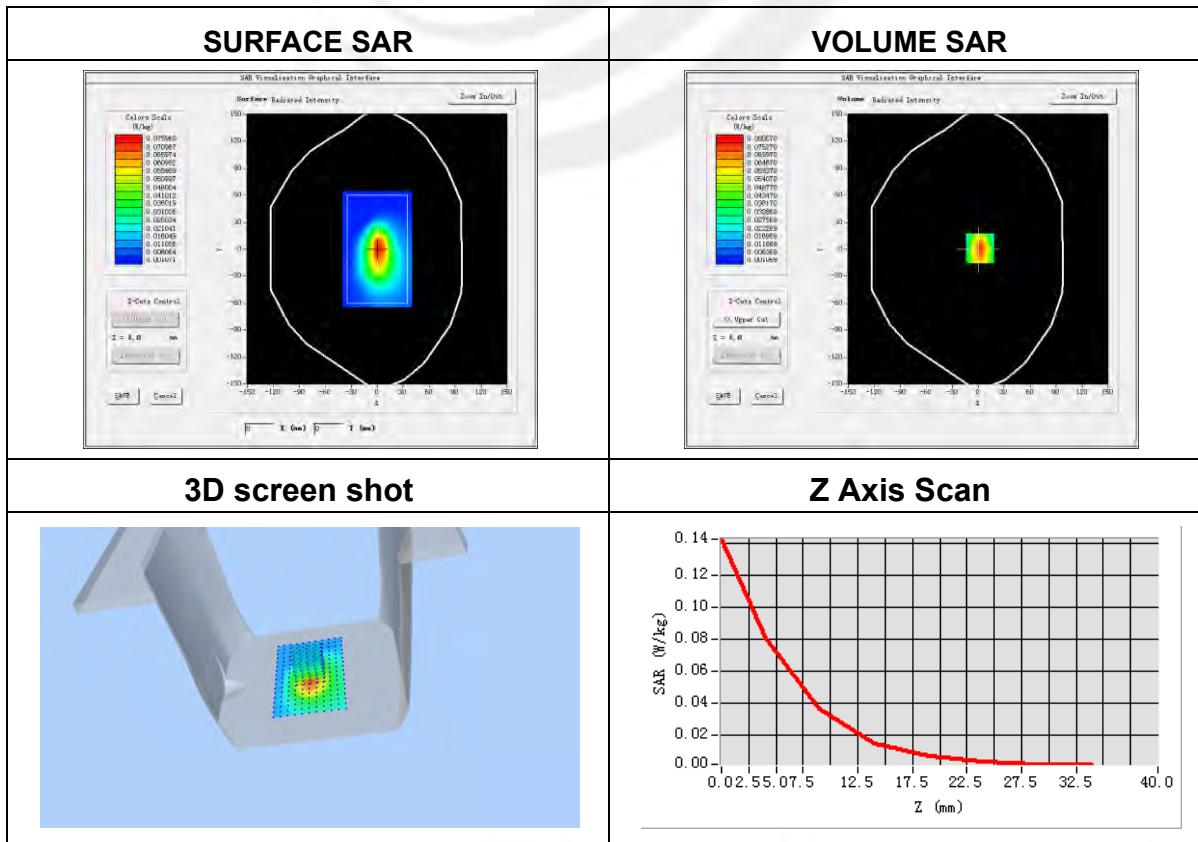


**Plot 54: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	5.02
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 Bottom side
Band	WCDMA V
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.5
Conductivity (S/m)	0.96
Variation (%)	-0.94

Maximum location: X=2.00, Y=1.00**SAR Peak: 0.14 W/kg**

SAR 10g (W/Kg)	0.035843
SAR 1g (W/Kg)	0.076187

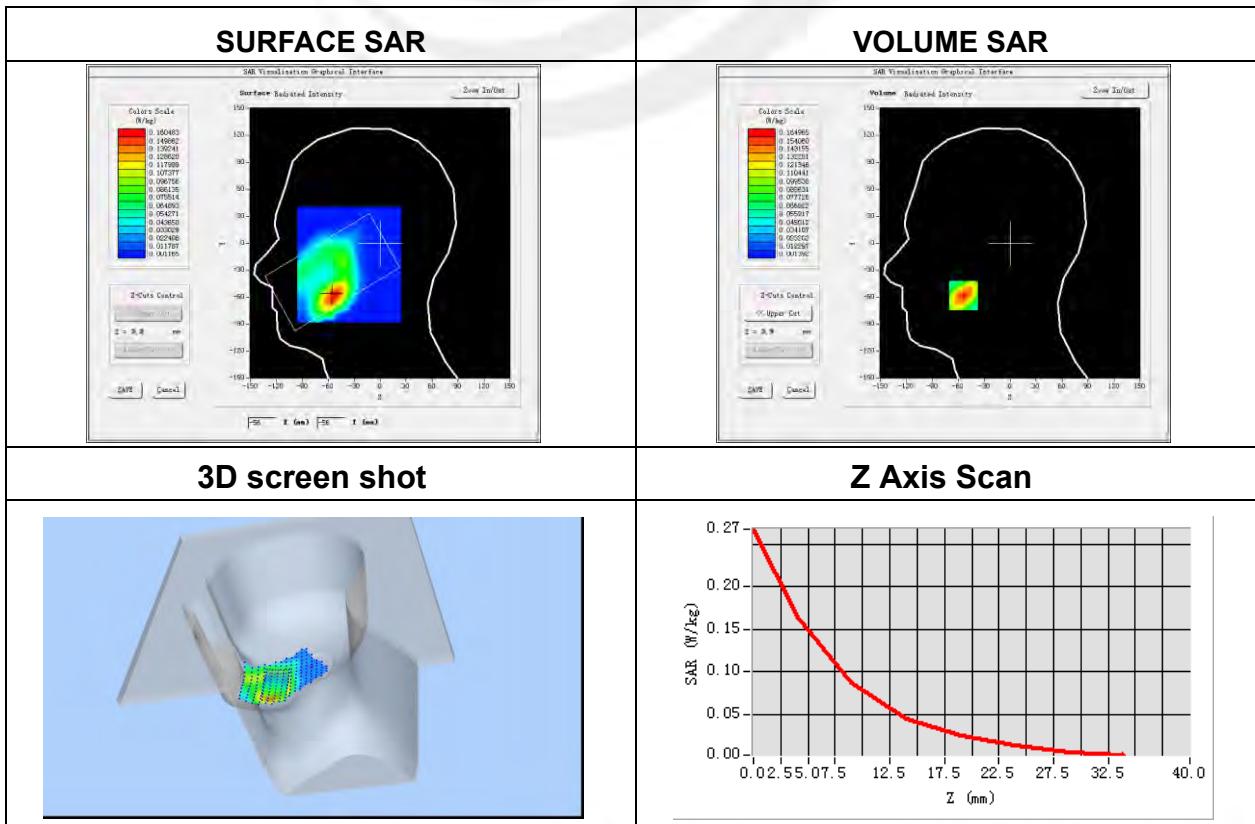


**Plot 55: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.71
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	Right head
Device Position	Cheek
Band	LTE Band 2 (RB 1)
Channels	Middle
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1880
Relative permittivity (real part)	40.0
Conductivity (S/m)	0.91
Variation (%)	-2.46

Maximum location: X=-54.00, Y=-58.00**SAR Peak: 0.27 W/kg**

SAR 10g (W/Kg)	0.080246
SAR 1g (W/Kg)	0.156155



**Plot 56: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.83
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	Right head
Device Position	Tilt
Band	LTE Band 2 (RB 1)
Channels	Middle
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1880
Relative permittivity (real part)	40.0
Conductivity (S/m)	0.91
Variation (%)	-1.63

Maximum location: X=-50.00, Y=-17.00

SAR Peak: 0.02 W/kg

SAR 10g (W/Kg)	0.007169
SAR 1g (W/Kg)	0.013252

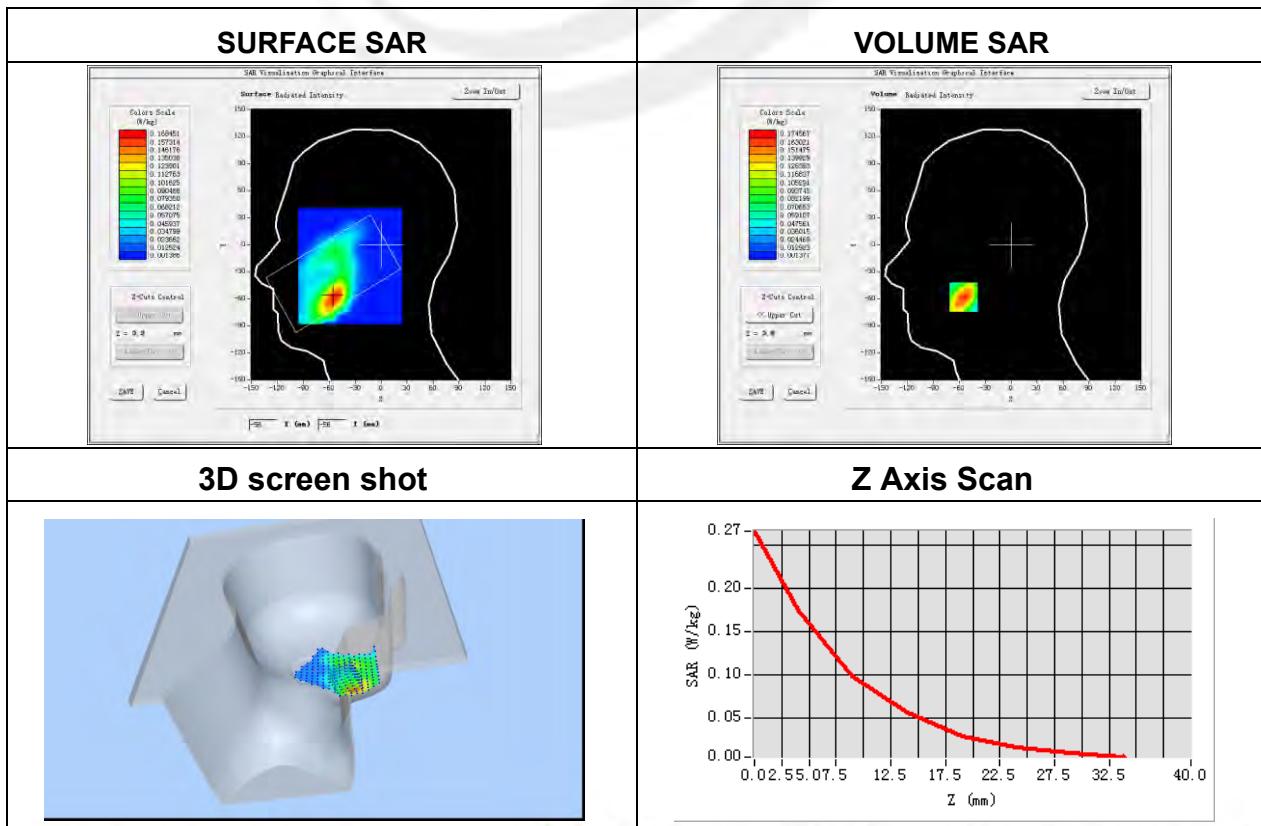


**Plot 57: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.83
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	Left head
Device Position	Cheek
Band	LTE Band 2 (RB 1)
Channels	Middle
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1880
Relative permittivity (real part)	40.0
Conductivity (S/m)	0.91
Variation (%)	2.29

Maximum location: X=-55.00, Y=-58.00**SAR Peak: 0.27 W/kg**

SAR 10g (W/Kg)	0.085041
SAR 1g (W/Kg)	0.162996

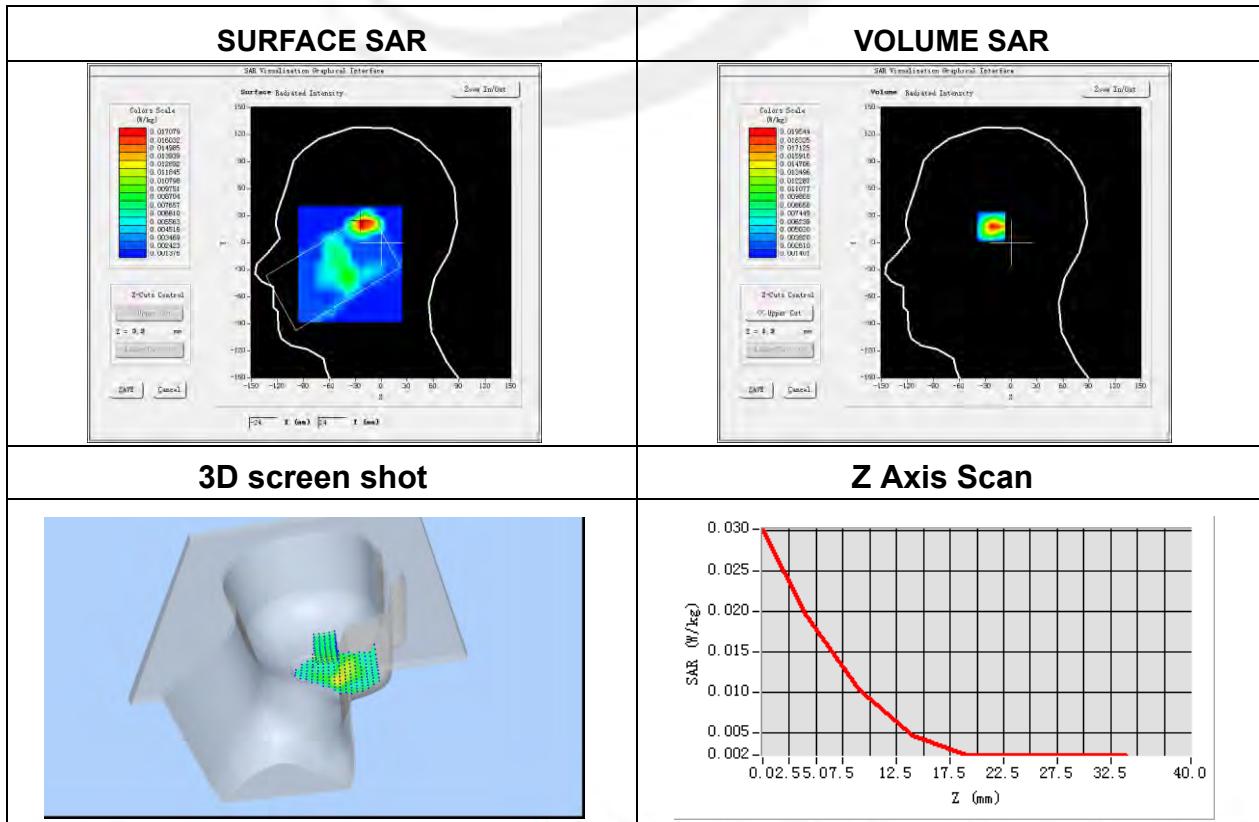


**Plot 58: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.83
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	Left head
Device Position	Tilt
Band	LTE Band 2(RB 1)
Channels	Middle
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1880
Relative permittivity (real part)	40.0
Conductivity (S/m)	0.91
Variation (%)	-0.03

Maximum location: X=-22.00, Y=21.00**SAR Peak: 0.04 W/kg**

SAR 10g (W/Kg)	0.008303
SAR 1g (W/Kg)	0.018240



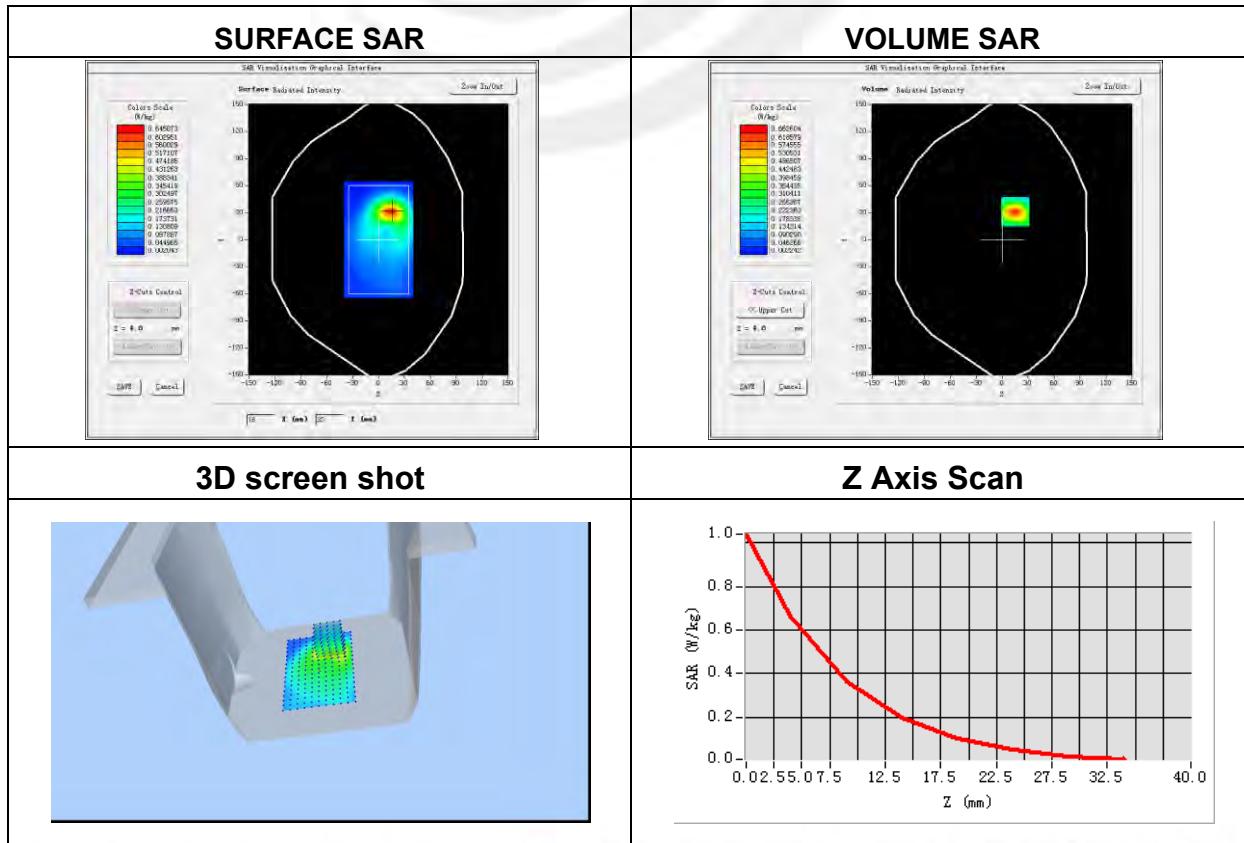
**Plot 59: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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	LTE Band 2(RB 1)
Channels	Middle
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1880
Relative permittivity (real part)	40.0
Conductivity (S/m)	0.91
Variation (%)	-1.29

Maximum location: X=15.00, Y=31.00

SAR Peak: 1.03 W/kg

SAR 10g (W/Kg)	0.298228
SAR 1g (W/Kg)	0.606676

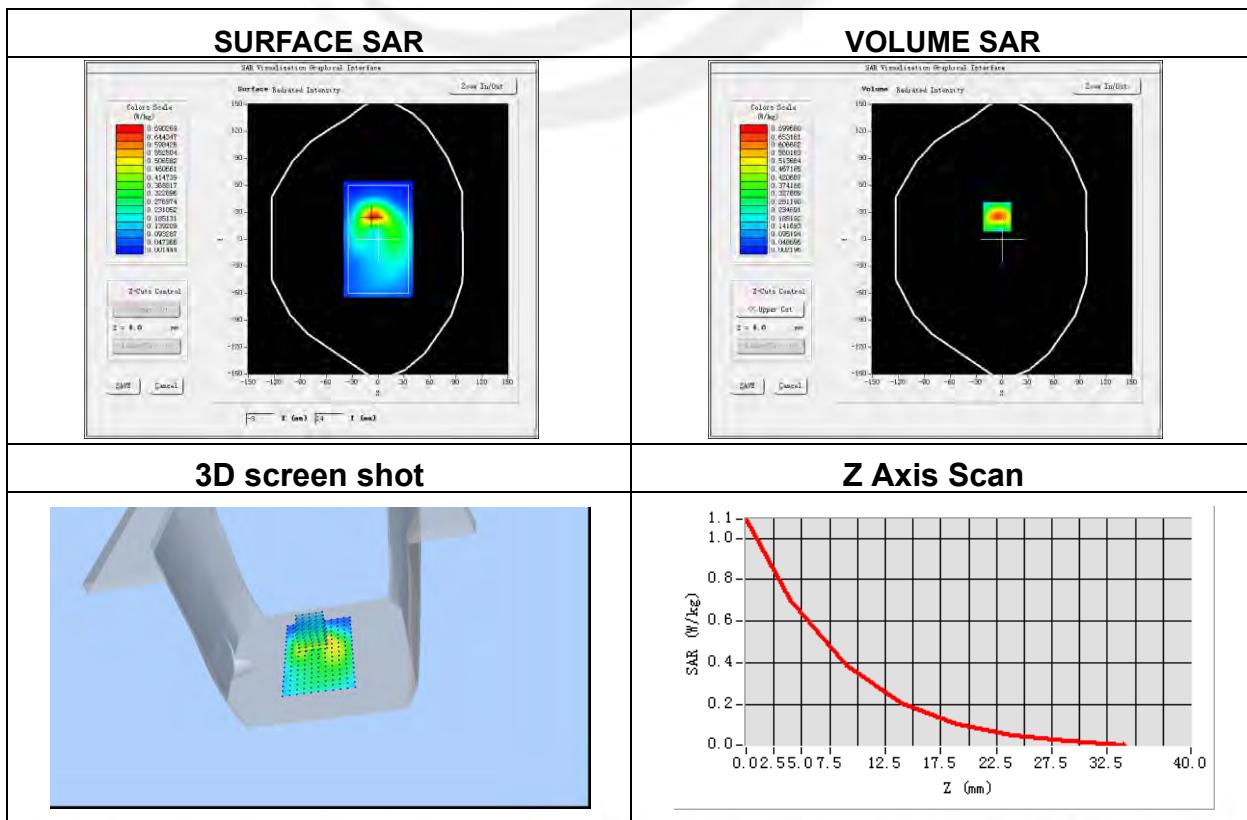


**Plot 60: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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	LTE Band 2(RB 1)
Channels	Middle
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1880
Relative permittivity (real part)	40.0
Conductivity (S/m)	0.91
Variation (%)	-0.79

Maximum location: X=-6.00, Y=25.00**SAR Peak: 1.09 W/kg**

SAR 10g (W/Kg)	0.319945
SAR 1g (W/Kg)	0.645380



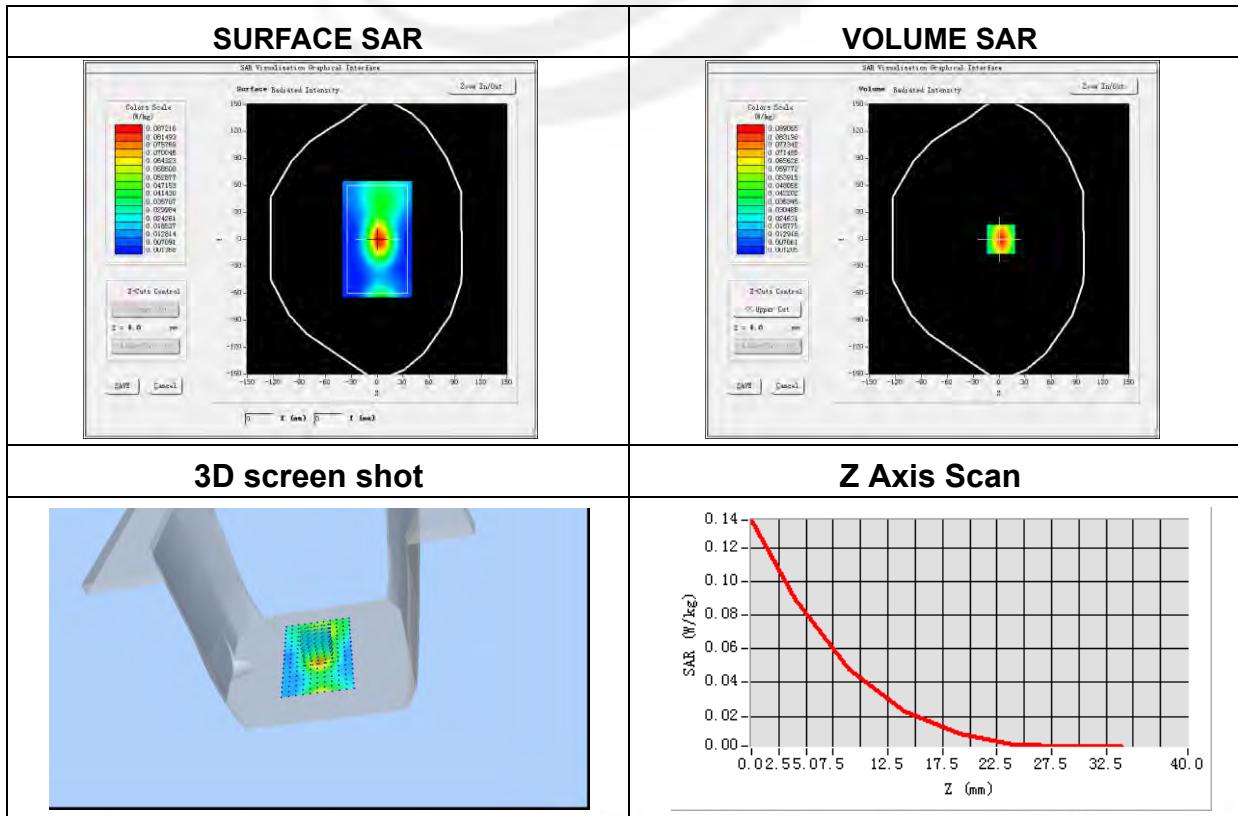
**Plot 61: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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 side
Band	LTE Band 2(RB 1)
Channels	Middle
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1880
Relative permittivity (real part)	40.0
Conductivity (S/m)	0.91
Variation (%)	-1.37

Maximum location: X=2.00, Y=0.00

SAR Peak: 0.14 W/kg

SAR 10g (W/Kg)	0.040734
SAR 1g (W/Kg)	0.082268



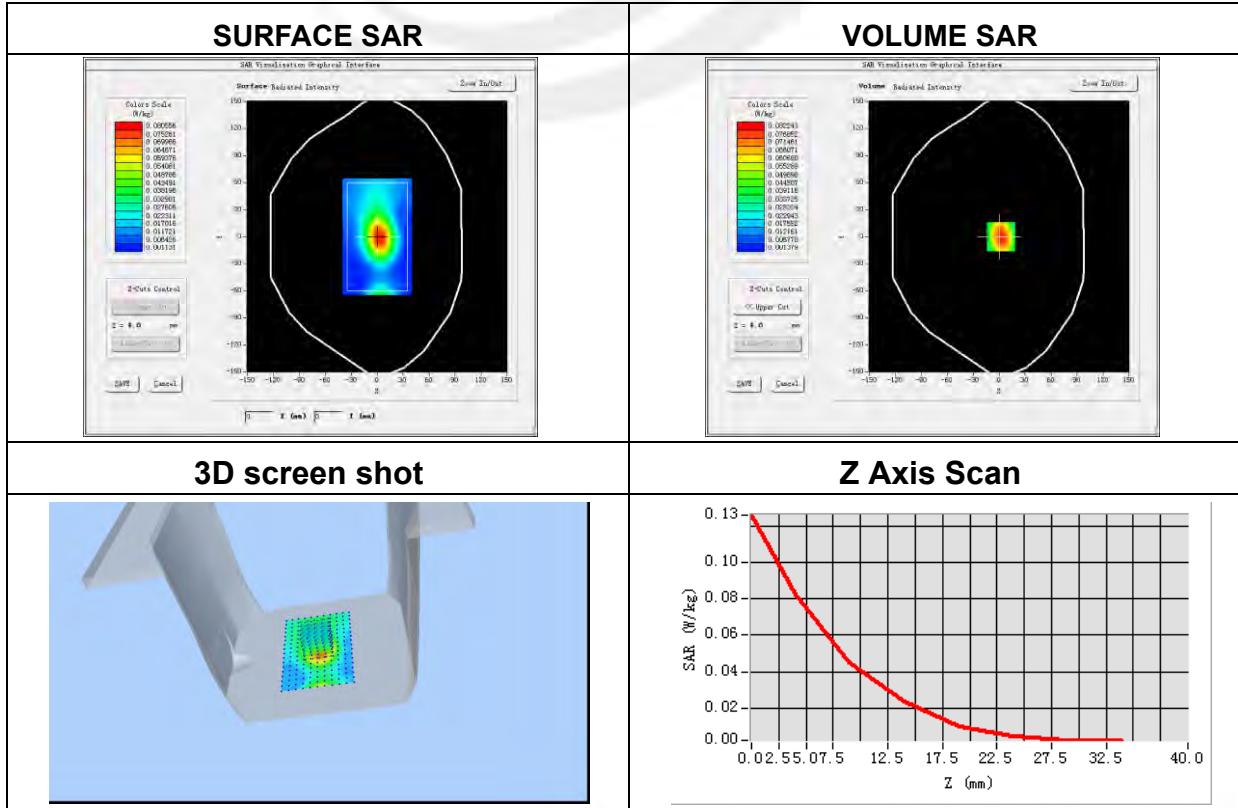
**Plot 62: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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 side
Band	LTE Band 2(RB 1)
Channels	Middle
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1880
Relative permittivity (real part)	40.0
Conductivity (S/m)	0.91
Variation (%)	-1.79

Maximum location: X=2.00, Y=0.00

SAR Peak: 0.13 W/kg

SAR 10g (W/Kg)	0.039382
SAR 1g (W/Kg)	0.077427



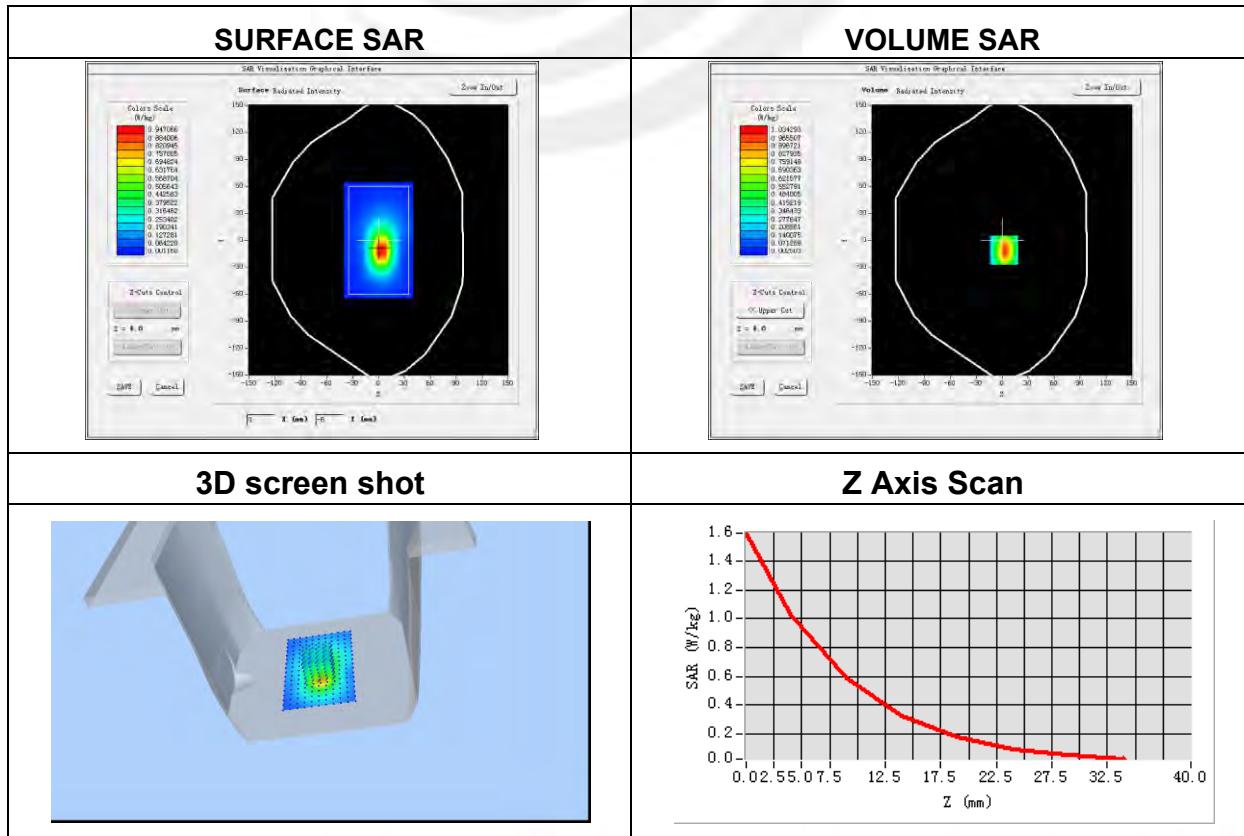
**Plot 63: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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 side
Band	LTE Band 2(RB 1)
Channels	Low
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1859.5
Relative permittivity (real part)	40.0
Conductivity (S/m)	0.91
Variation (%)	-0.52

Maximum location: X=2.00, Y=-11.00

SAR Peak: 1.61 W/kg

SAR 10g (W/Kg)	0.474028
SAR 1g (W/Kg)	0.956976



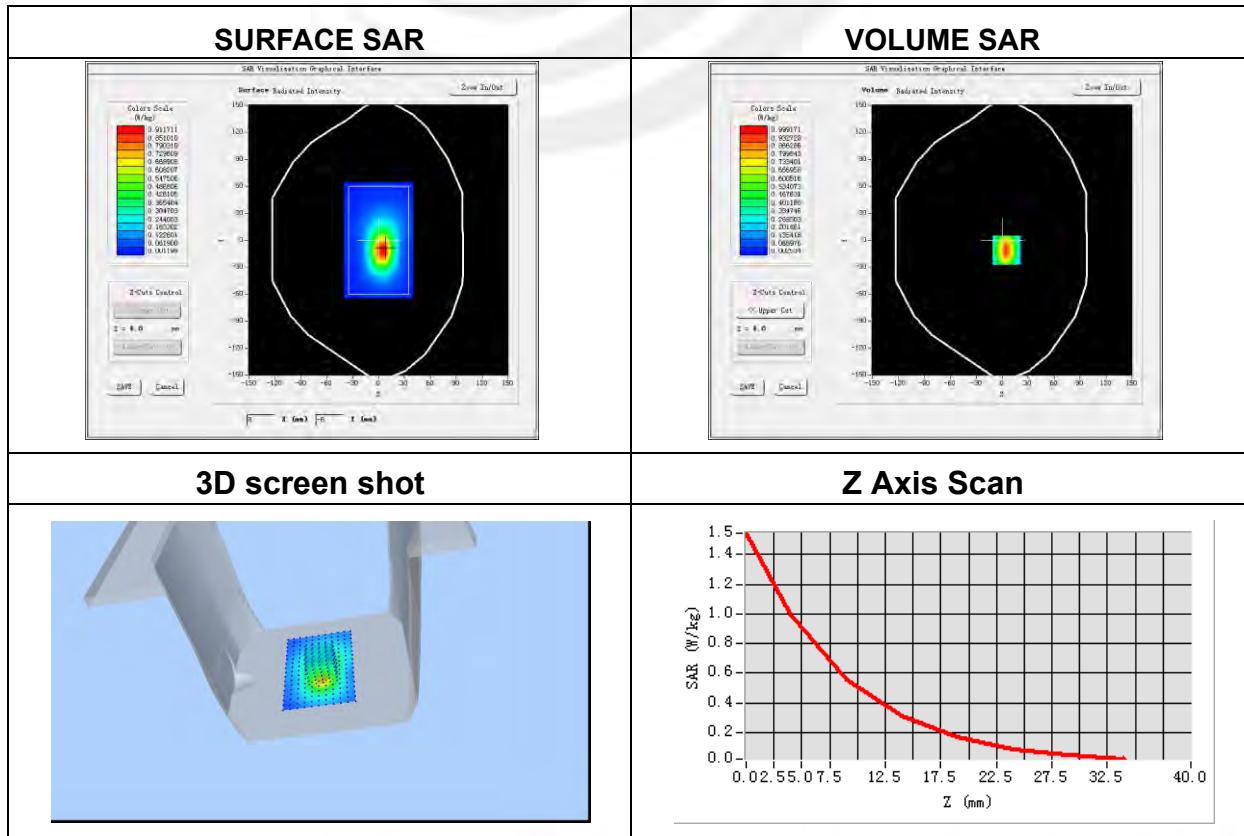
**Plot 64: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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 side-repeated
Band	LTE Band 2(RB 1)
Channels	Low
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1859.5
Relative permittivity (real part)	40.0
Conductivity (S/m)	0.91
Variation (%)	-0.70

Maximum location: X=5.00, Y=-11.00

SAR Peak: 1.54 W/kg

SAR 10g (W/Kg)	0.454919
SAR 1g (W/Kg)	0.917380



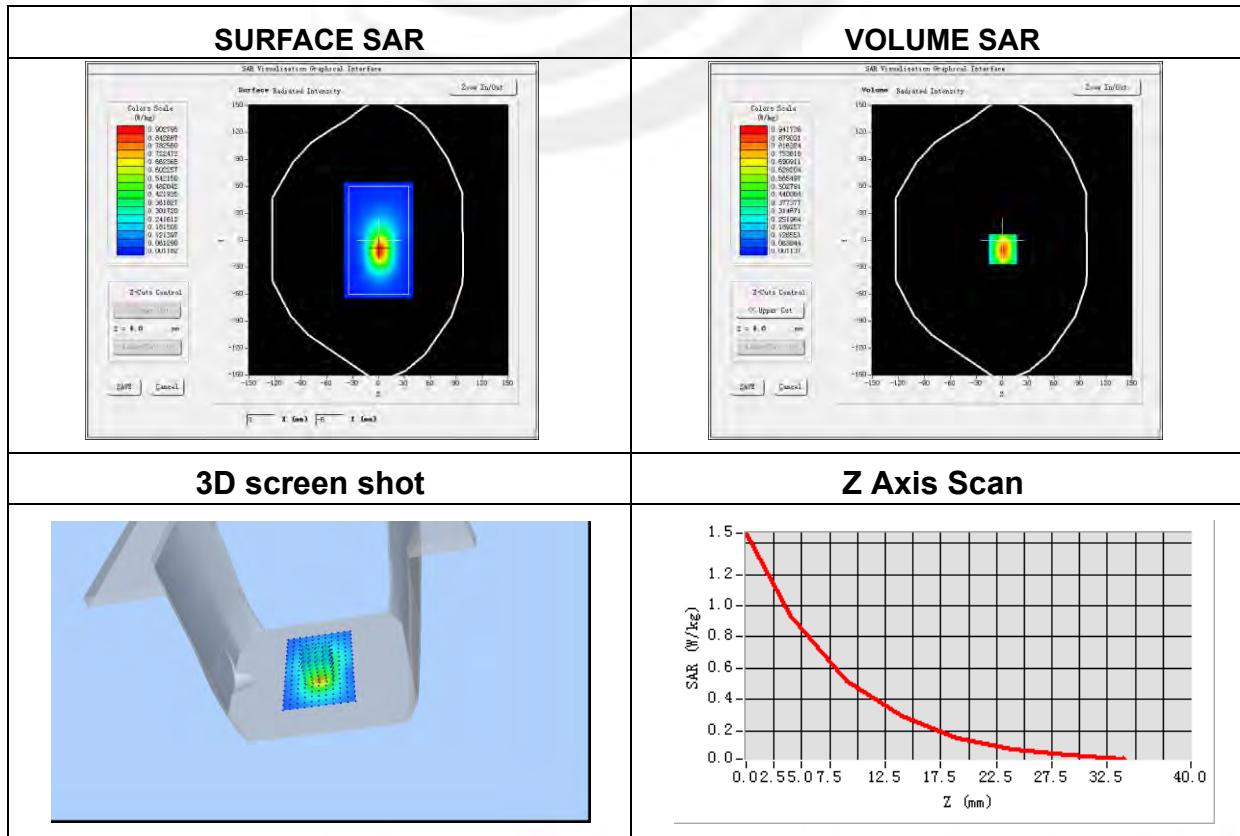
**Plot 65: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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 side
Band	LTE Band 2(RB 1)
Channels	Middle
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1880
Relative permittivity (real part)	40.0
Conductivity (S/m)	0.91
Variation (%)	-0.57

Maximum location: X=1.00, Y=-10.00

SAR Peak: 1.47 W/kg

SAR 10g (W/Kg)	0.424708
SAR 1g (W/Kg)	0.864556



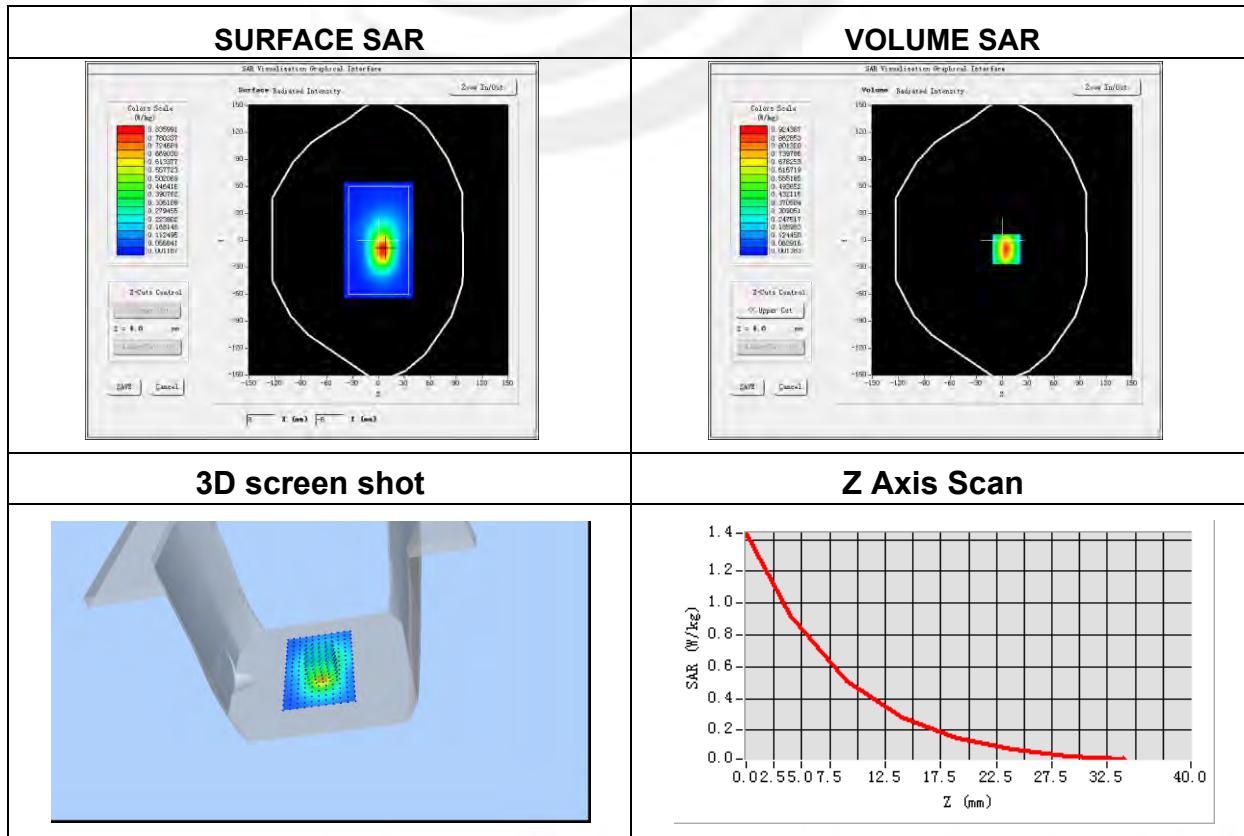
**Plot 66: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.85
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 side
Band	LTE Band 2(RB 1)
Channels	High
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1900.0
Relative permittivity (real part)	40.0
Conductivity (S/m)	0.91
Variation (%)	0.17

Maximum location: X=5.00, Y=-10.00

SAR Peak: 1.43 W/kg

SAR 10g (W/Kg)	0.415687
SAR 1g (W/Kg)	0.846339

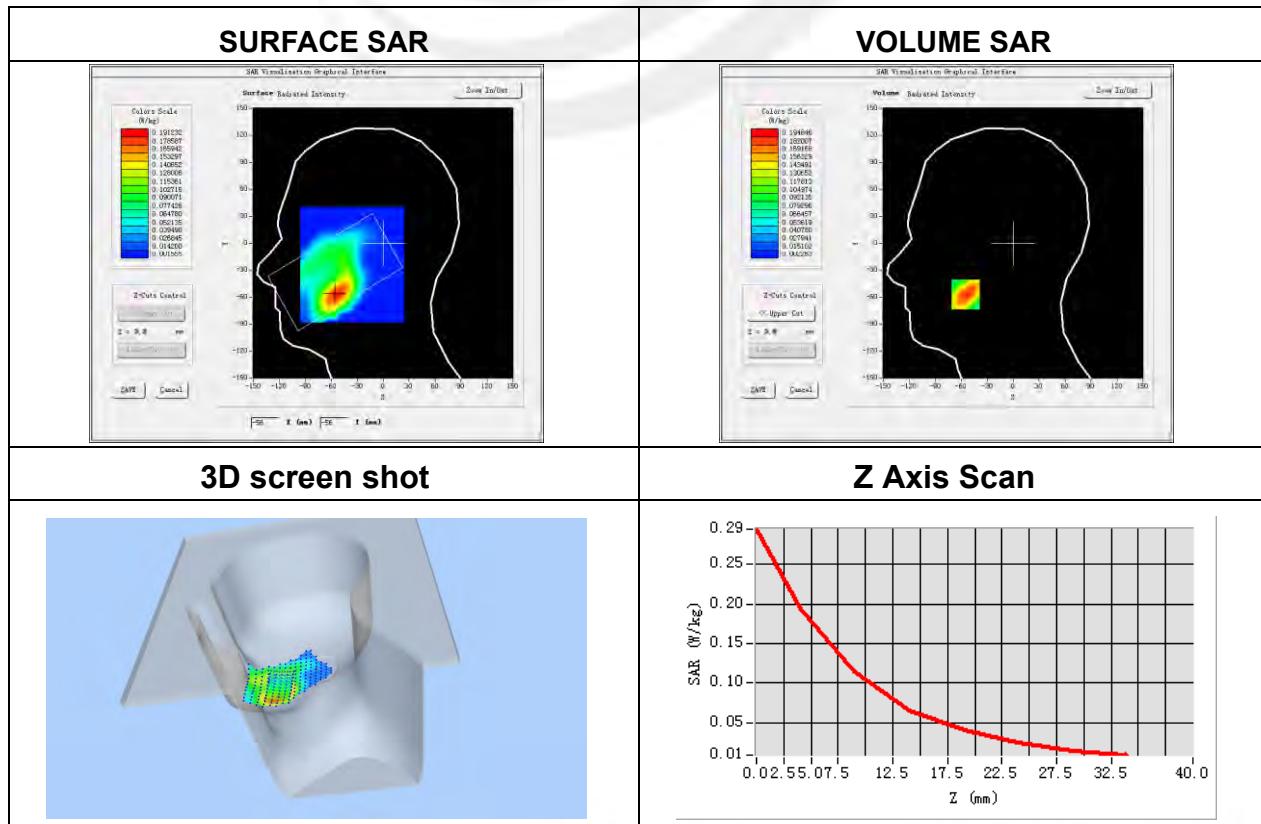


**Plot 67: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
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	Right head
Device Position	Cheek
Band	LTE Band 4 (RB 1)
Channels	Low
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1720
Relative permittivity (real part)	40.2
Conductivity (S/m)	1.31
Variation (%)	-4.54

Maximum location: X=-55.00, Y=-57.00**SAR Peak: 0.30 W/kg**

SAR 10g (W/Kg)	0.103181
SAR 1g (W/Kg)	0.185397



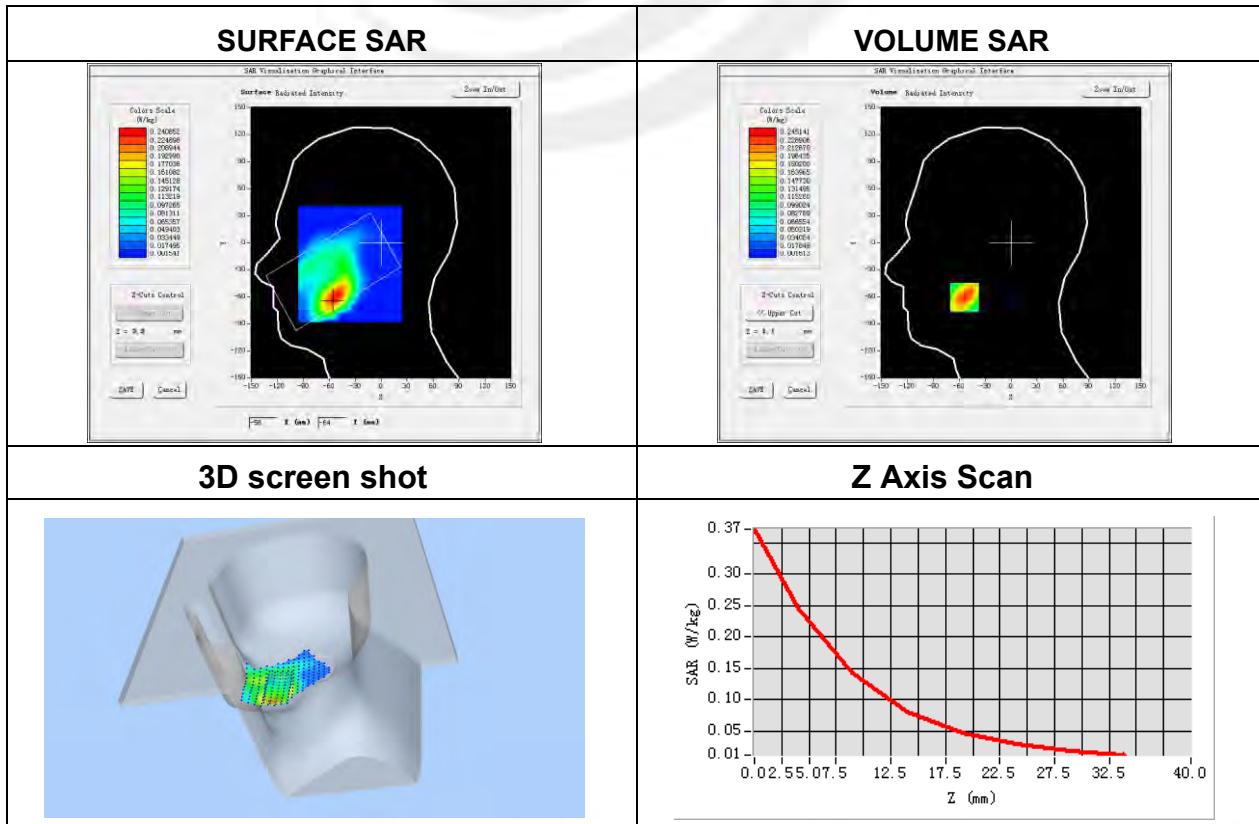
**Plot 68: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
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	Right head
Device Position	Tilt
Band	LTE Band 4 (RB 1)
Channels	Low
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1720
Relative permittivity (real part)	40.2
Conductivity (S/m)	1.31
Variation (%)	-1.76

Maximum location: X=-54.00, Y=-61.00

SAR Peak: 0.37 W/kg

SAR 10g (W/Kg)	0.126277
SAR 1g (W/Kg)	0.229998

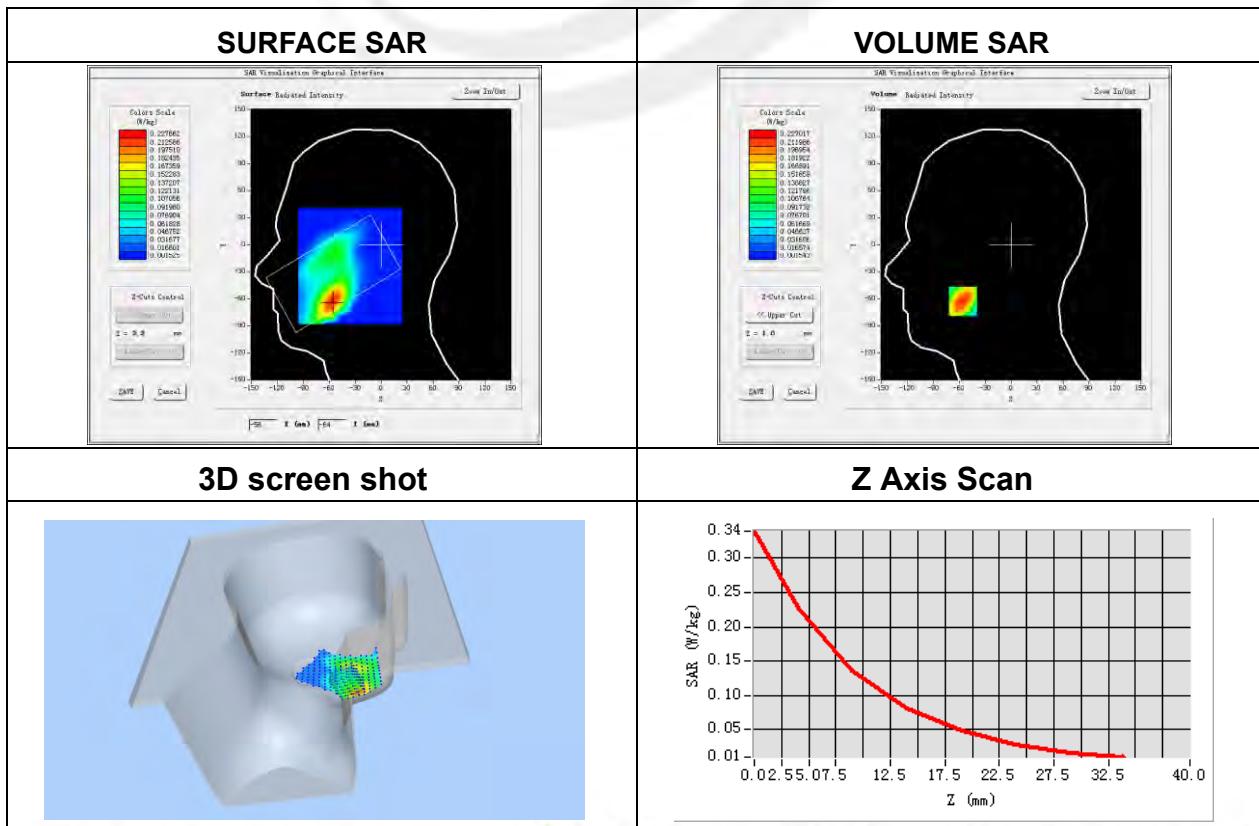


**Plot 69: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
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	Left head
Device Position	Cheek
Band	LTE Band 4 (RB 1)
Channels	Low
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1720
Relative permittivity (real part)	40.2
Conductivity (S/m)	1.31
Variation (%)	-0.80

Maximum location: X=-56.00, Y=-63.00**SAR Peak: 0.34 W/kg**

SAR 10g (W/Kg)	0.117784
SAR 1g (W/Kg)	0.213661

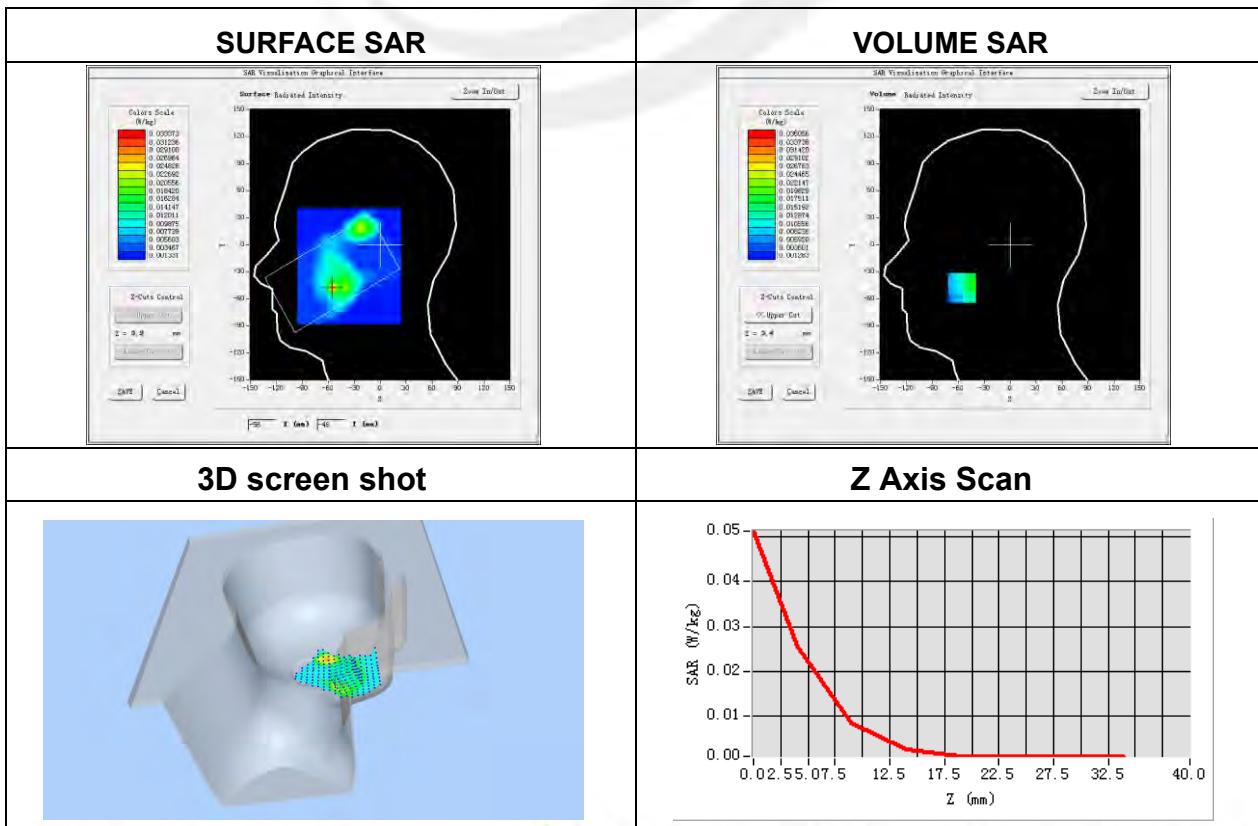


**Plot 70: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
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	Left head
Device Position	Tilt
Band	LTE Band 4 (RB 1)
Channels	Low
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1720
Relative permittivity (real part)	40.2
Conductivity (S/m)	1.31
Variation (%)	-0.37

Maximum location: X=-56.00, Y=-48.00**SAR Peak: 0.06 W/kg**

SAR 10g (W/Kg)	0.009960
SAR 1g (W/Kg)	0.023838



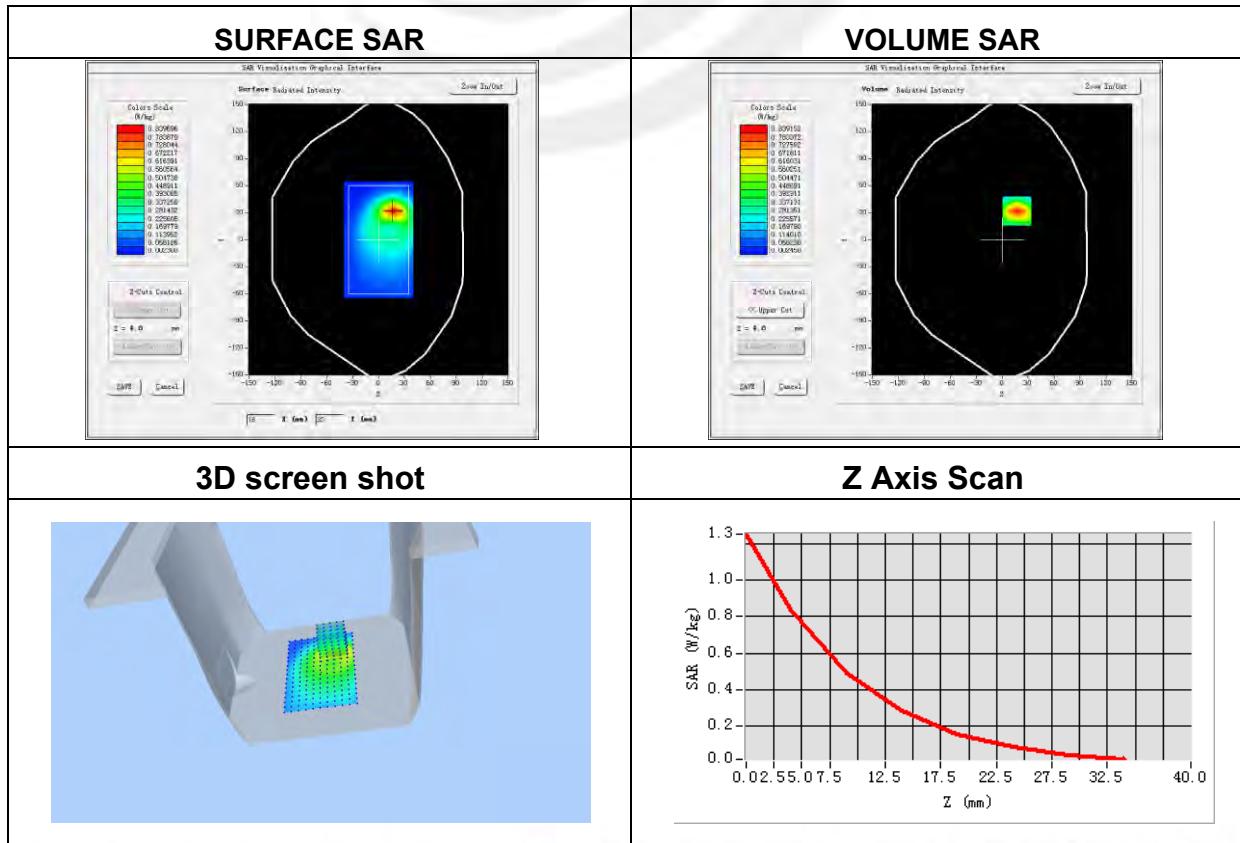
**Plot 71: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.34
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	LTE Band 4 (RB 1)
Channels	Low
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1720
Relative permittivity (real part)	52.6
Conductivity (S/m)	1.38
Variation (%)	-1.03

Maximum location: X=17.00, Y=32.00

SAR Peak: 1.25 W/kg

SAR 10g (W/Kg)	0.399210
SAR 1g (W/Kg)	0.767643

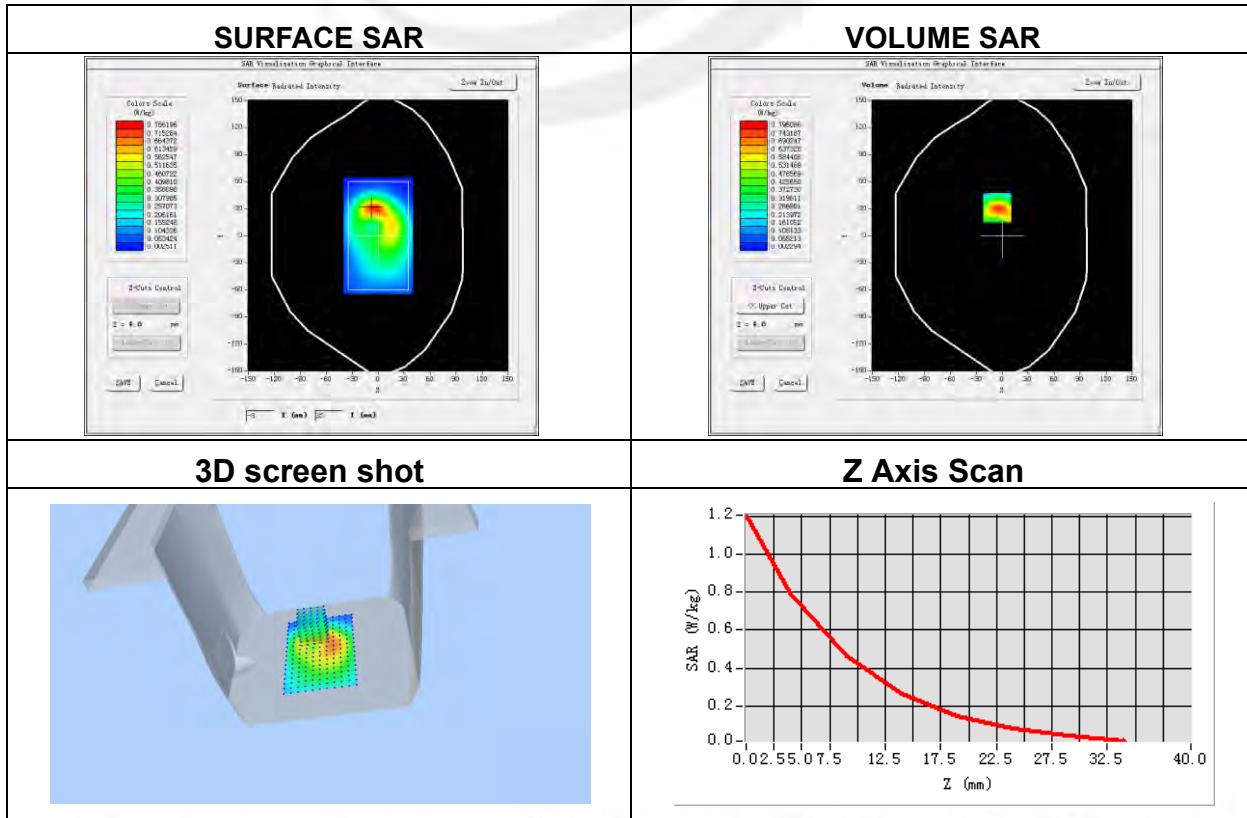


**Plot 72: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.34
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	LTE Band 4 (RB 1)
Channels	Low
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1720
Relative permittivity (real part)	52.6
Conductivity (S/m)	1.38
Variation (%)	0.21

Maximum location: X=-6.00, Y=31.00**SAR Peak: 1.21 W/kg**

SAR 10g (W/Kg)	0.387482
SAR 1g (W/Kg)	0.735888



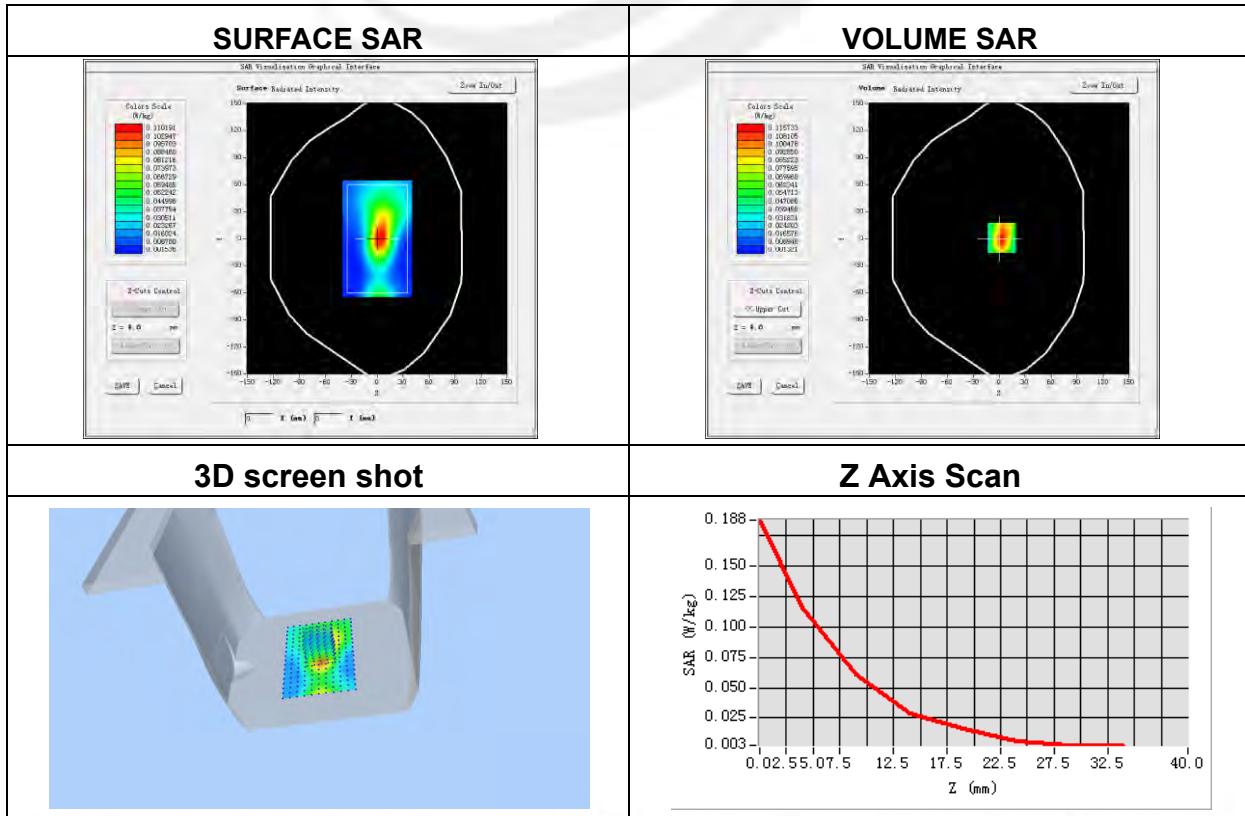
**Plot 73: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.34
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 side
Band	LTE Band 4 (RB 1)
Channels	Low
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1720
Relative permittivity (real part)	52.6
Conductivity (S/m)	1.38
Variation (%)	-2.21

Maximum location: X=3.00, Y=1.00

SAR Peak: 0.19 W/kg

SAR 10g (W/Kg)	0.053510
SAR 1g (W/Kg)	0.109450

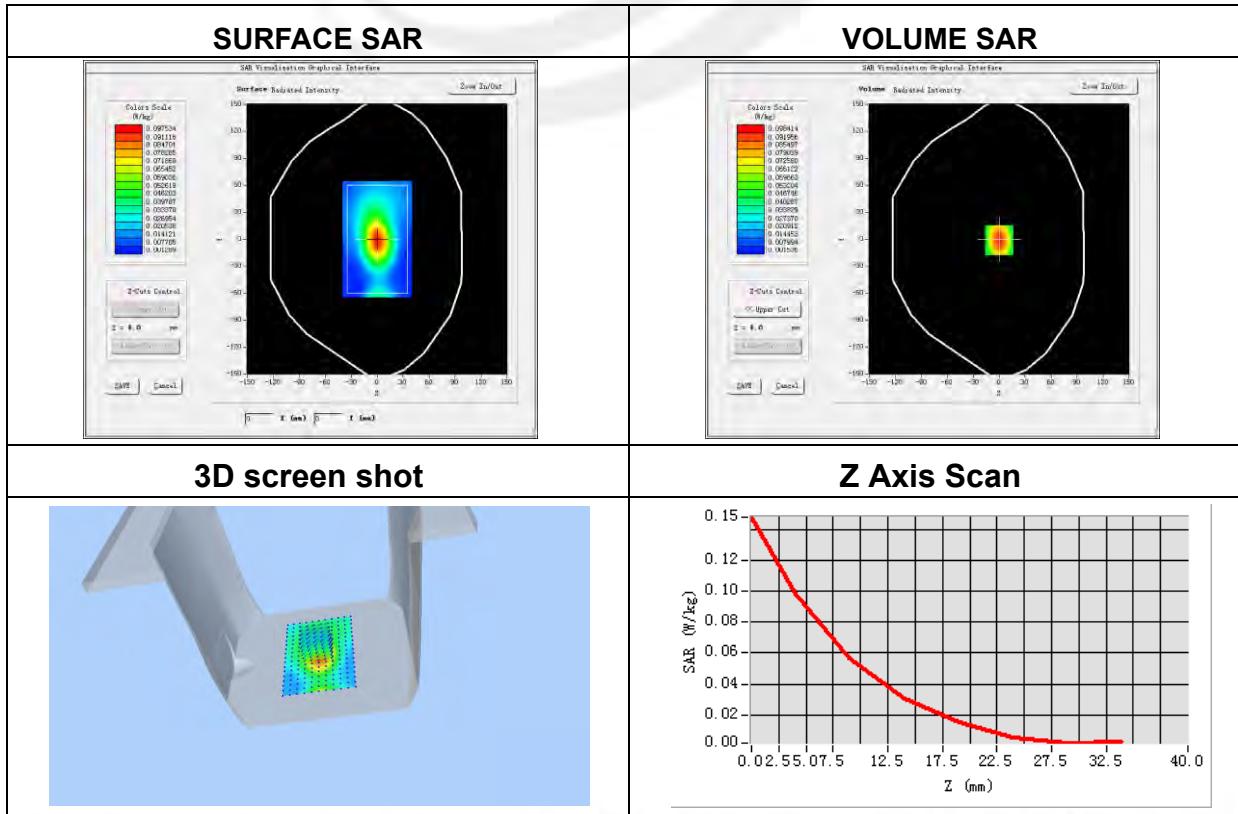


**Plot 74: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.34
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 side
Band	LTE Band 4 (RB 50)
Channels	Low
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1720
Relative permittivity (real part)	52.6
Conductivity (S/m)	1.38
Variation (%)	4.70

Maximum location: X=0.00, Y=-1.00**SAR Peak: 0.15 W/kg**

SAR 10g (W/Kg)	0.049256
SAR 1g (W/Kg)	0.092927



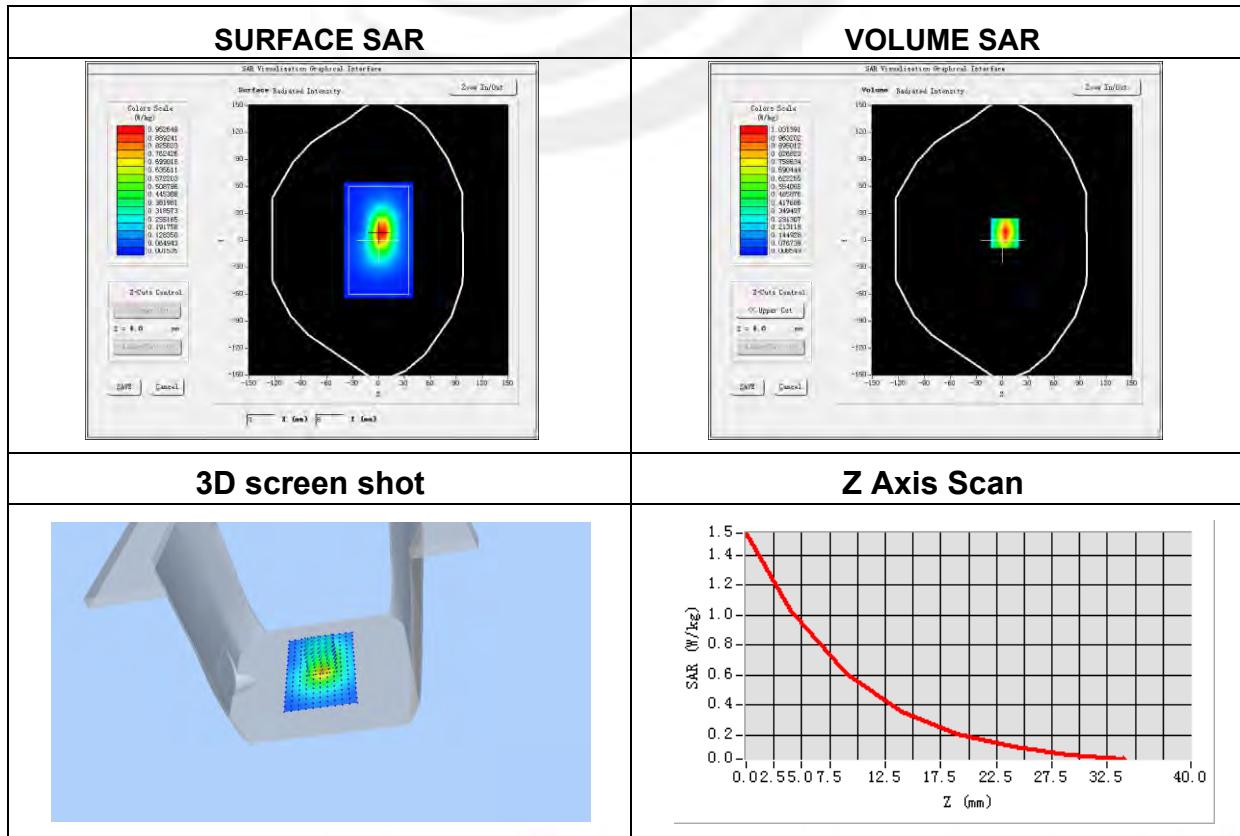
**Plot 75: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.34
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 side
Band	LTE Band 4 (RB 1)
Channels	Low
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1720
Relative permittivity (real part)	52.6
Conductivity (S/m)	1.38
Variation (%)	-1.11

Maximum location: X=3.00, Y=8.00

SAR Peak: 1.55 W/kg

SAR 10g (W/Kg)	0.490309
SAR 1g (W/Kg)	0.947148



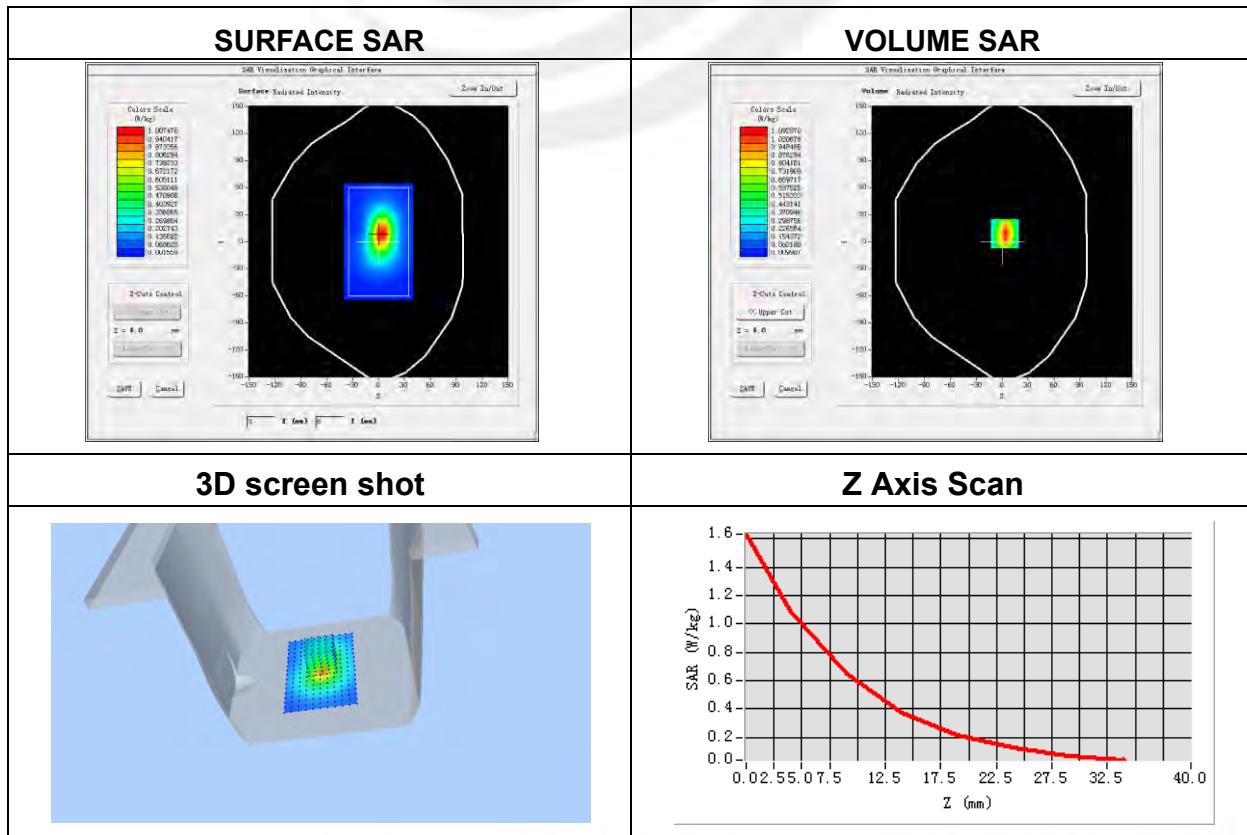
**Plot 76: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.34
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 side
Band	LTE Band 4 (RB 1)
Channels	Middle
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1732.5
Relative permittivity (real part)	52.6
Conductivity (S/m)	1.38
Variation (%)	-0.73

Maximum location: X=3.00, Y=9.00

SAR Peak: 1.63 W/kg

SAR 10g (W/Kg)	0.521989
SAR 1g (W/Kg)	1.003586



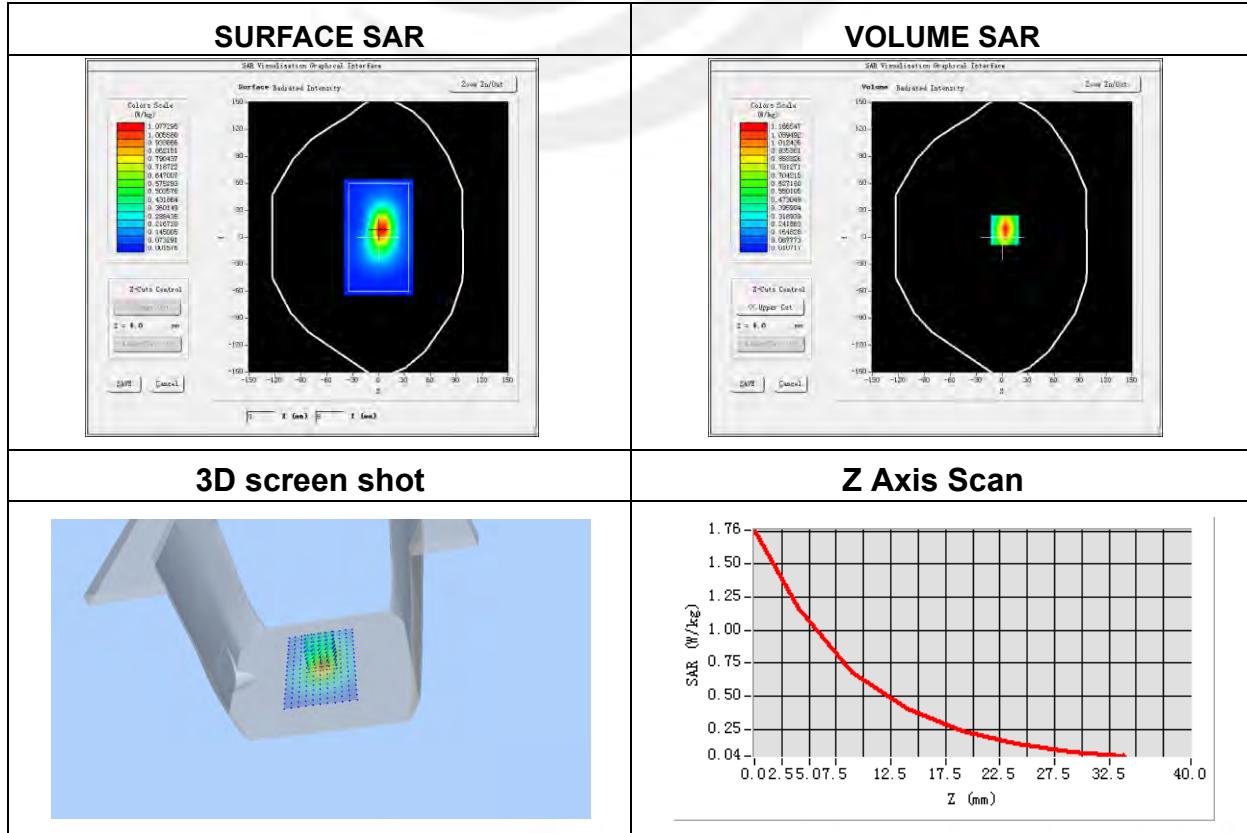
**Plot 77: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.34
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 side
Band	LTE Band 4 (RB 1)
Channels	High
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1745.0
Relative permittivity (real part)	52.6
Conductivity (S/m)	1.38
Variation (%)	-0.83

Maximum location: X=3.00, Y=8.00

SAR Peak: 1.75 W/kg

SAR 10g (W/Kg)	0.555012
SAR 1g (W/Kg)	1.071417



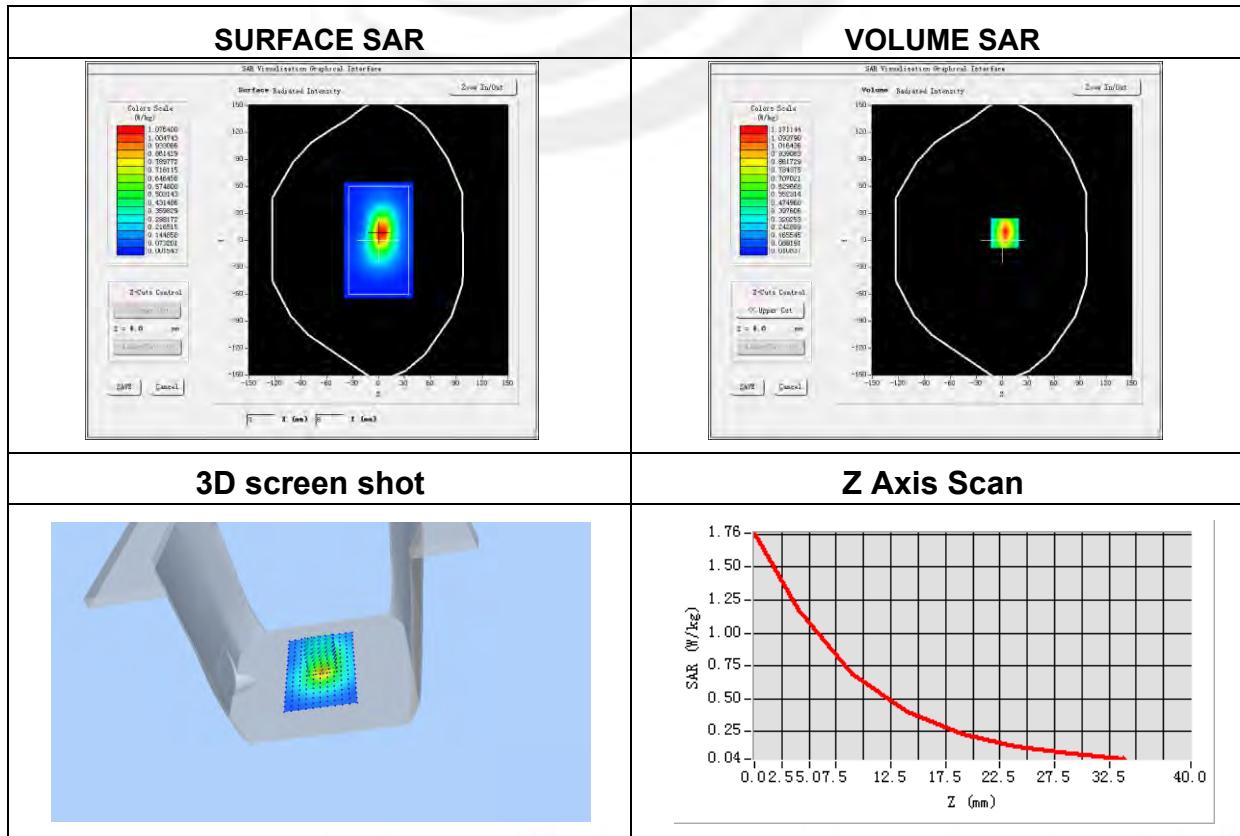
**Plot 78: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.34
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 side
Band	LTE Band 4 (RB 1)
Channels	High
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	1745.0
Relative permittivity (real part)	52.6
Conductivity (S/m)	1.38
Variation (%)	-0.85

Maximum location: X=3.00, Y=8.00

SAR Peak: 1.76 W/kg

SAR 10g (W/Kg)	0.555310
SAR 1g (W/Kg)	1.072823



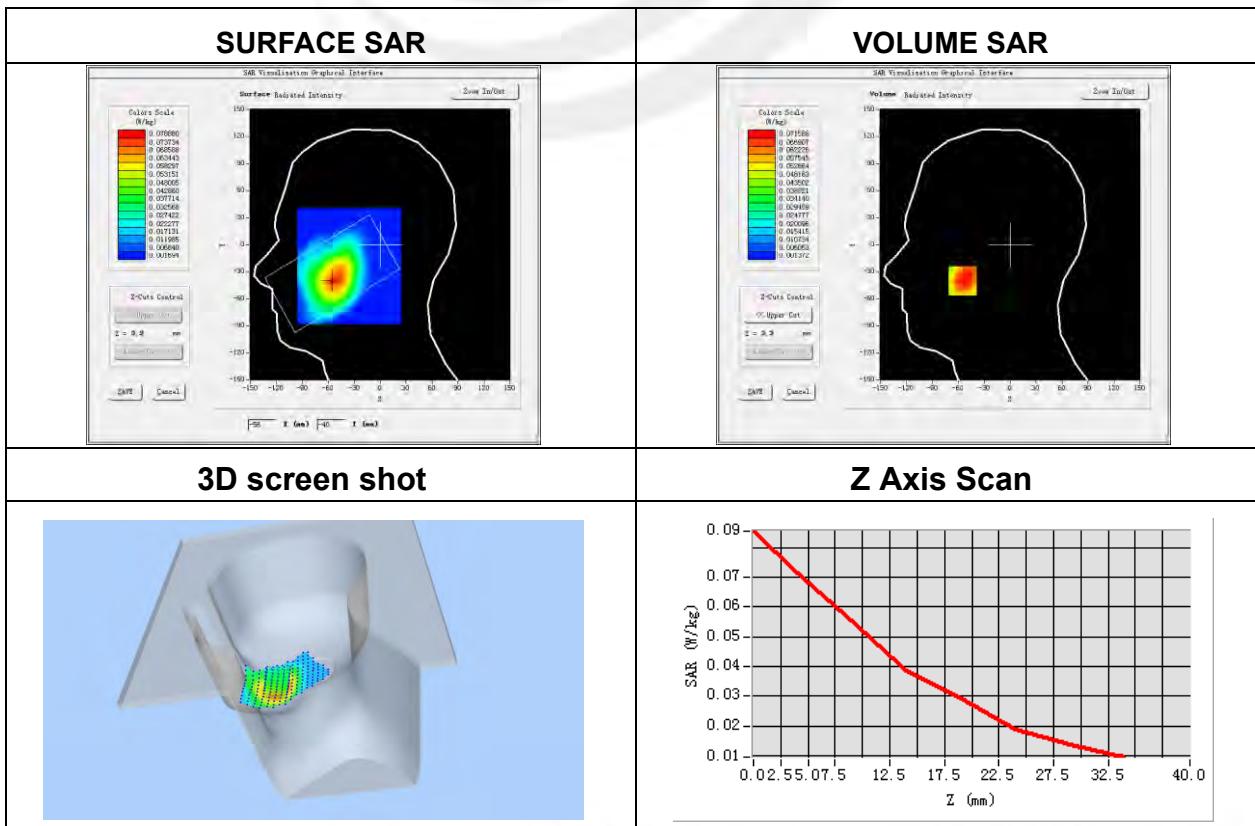
**Plot 79: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.20
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	Right head
Device Position	Cheek
Band	LTE Band 12 (RB 1)
Channels	Middle
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	2535
Relative permittivity (real part)	38.5
Conductivity (S/m)	1.92
Variation (%)	0.44

Maximum location: X=-55.00, Y=-40.00

SAR Peak: 0.09 W/kg

SAR 10g (W/Kg)	0.047285
SAR 1g (W/Kg)	0.069144



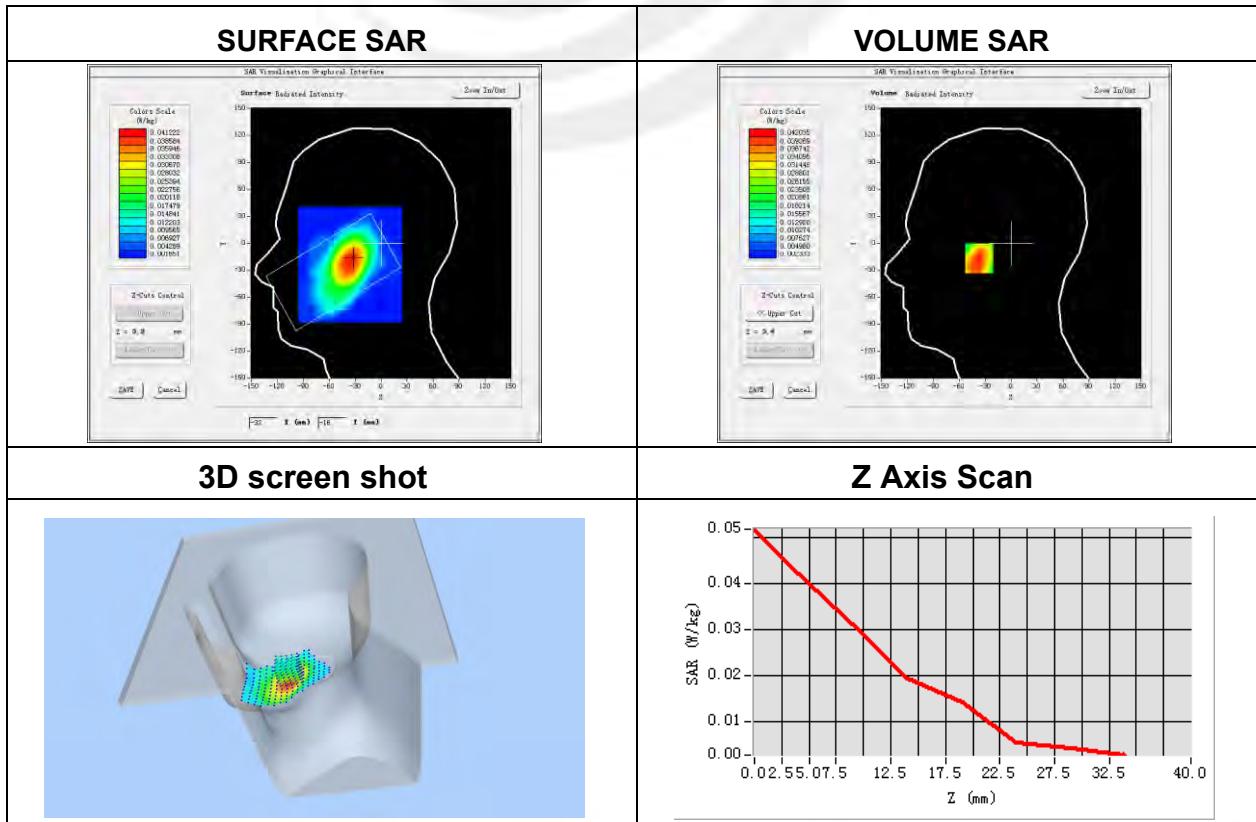
**Plot 80: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.20
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	Right head
Device Position	Tilt
Band	LTE Band 12 (RB 1)
Channels	Middle
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	2535
Relative permittivity (real part)	38.5
Conductivity (S/m)	1.92
Variation (%)	-3.51

Maximum location: X=-34.00, Y=-17.00

SAR Peak: 0.06 W/kg

SAR 10g (W/Kg)	0.025329
SAR 1g (W/Kg)	0.039764

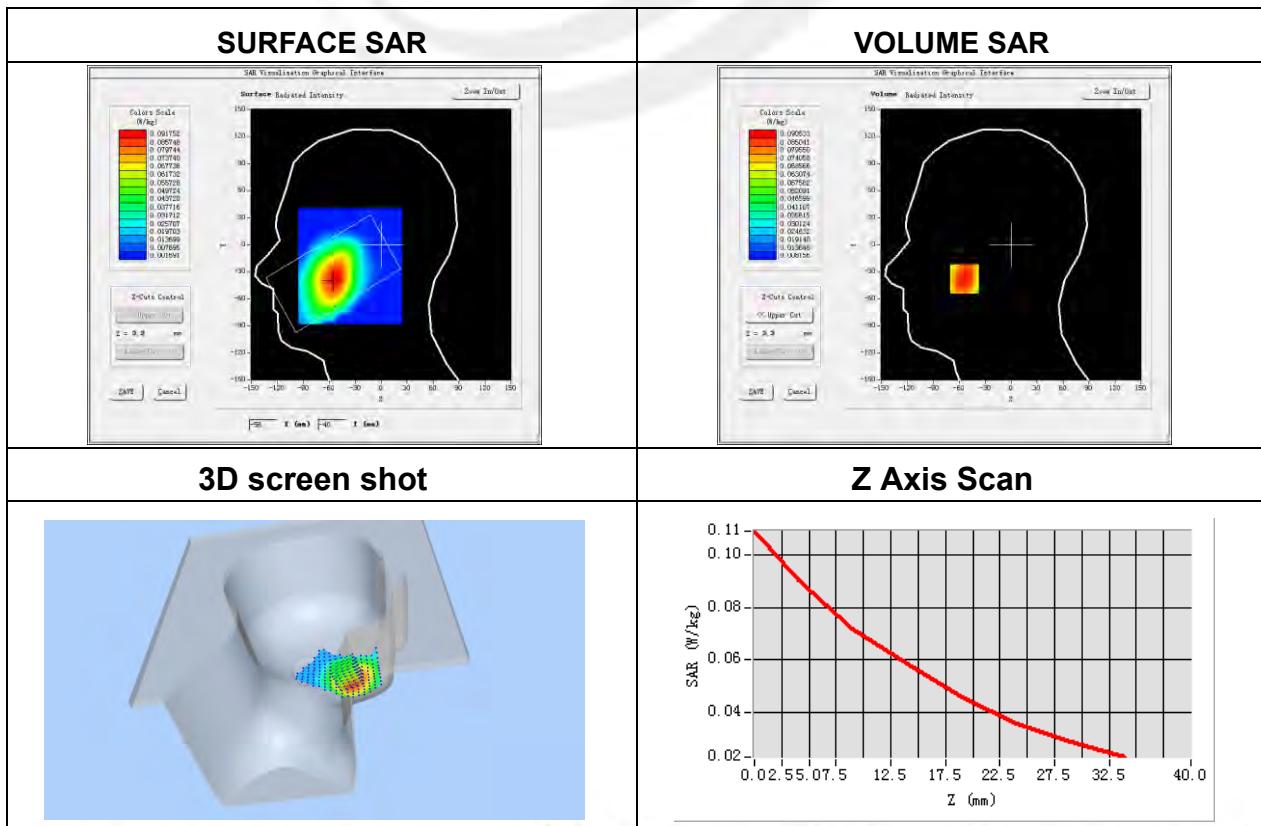


**Plot 81: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.20
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	Left head
Device Position	Cheek
Band	LTE Band 12 (RB 1)
Channels	Middle
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	2535
Relative permittivity (real part)	38.5
Conductivity (S/m)	1.92
Variation (%)	-0.21

Maximum location: X=-54.00, Y=-38.00**SAR Peak: 0.11 W/kg**

SAR 10g (W/Kg)	0.065713
SAR 1g (W/Kg)	0.087729

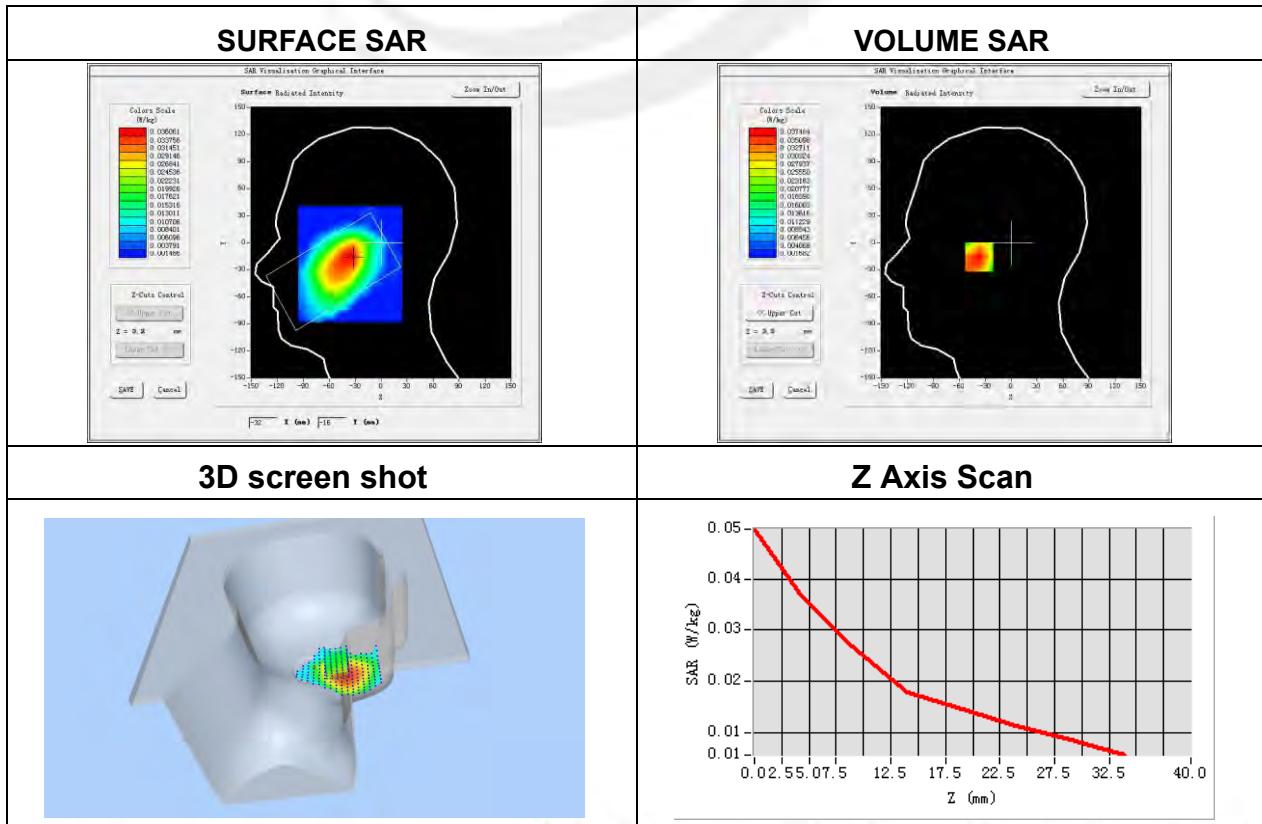


**Plot 82: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.20
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	Left head
Device Position	Tilt
Band	LTE Band 12 (RB 1)
Channels	Middle
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	2535
Relative permittivity (real part)	38.5
Conductivity (S/m)	1.92
Variation (%)	3.65

Maximum location: X=-35.00, Y=-16.00**SAR Peak: 0.05 W/kg**

SAR 10g (W/Kg)	0.025182
SAR 1g (W/Kg)	0.035788



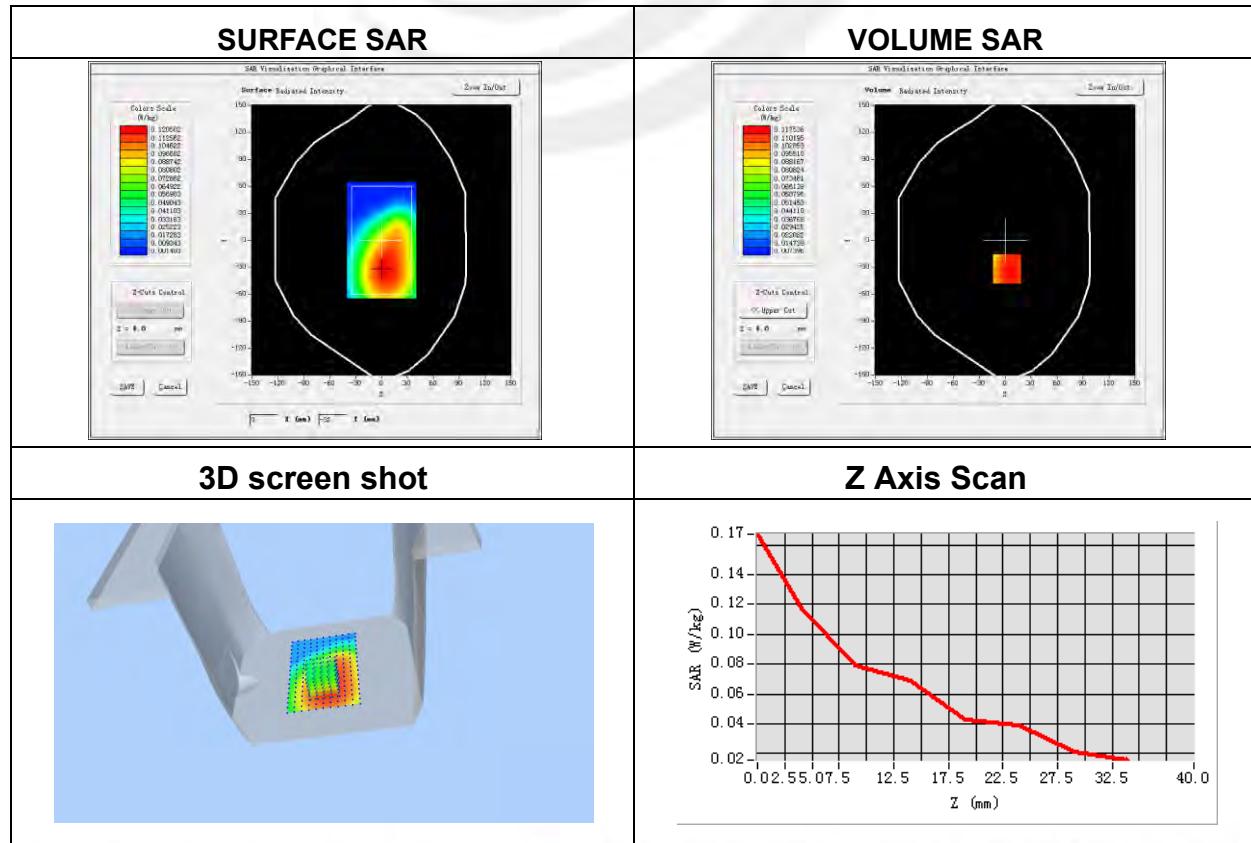
**Plot 83: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.32
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	LTE Band 12 (RB 1)
Channels	Middle
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	2535
Relative permittivity (real part)	52.3
Conductivity (S/m)	2.12
Variation (%)	-3.93

Maximum location: X=2.00, Y=-32.00

SAR Peak: 0.14 W/kg

SAR 10g (W/Kg)	0.084128
SAR 1g (W/Kg)	0.113707

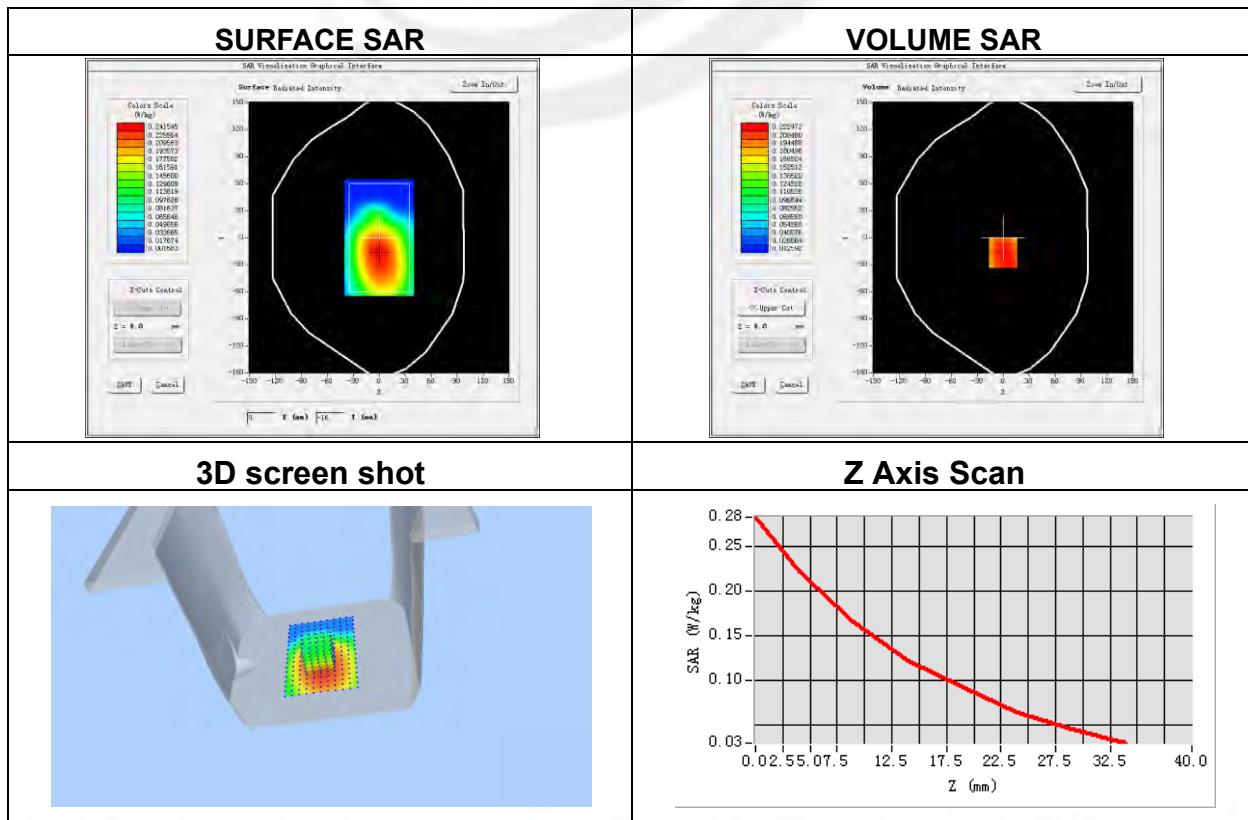


**Plot 84: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.32
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	LTE Band 12 (RB 1)
Channels	Middle
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	2535
Relative permittivity (real part)	52.3
Conductivity (S/m)	2.12
Variation (%)	-1.79

Maximum location: X=0.00, Y=-17.00**SAR Peak: 0.29 W/kg**

SAR 10g (W/Kg)	0.157185
SAR 1g (W/Kg)	0.217065

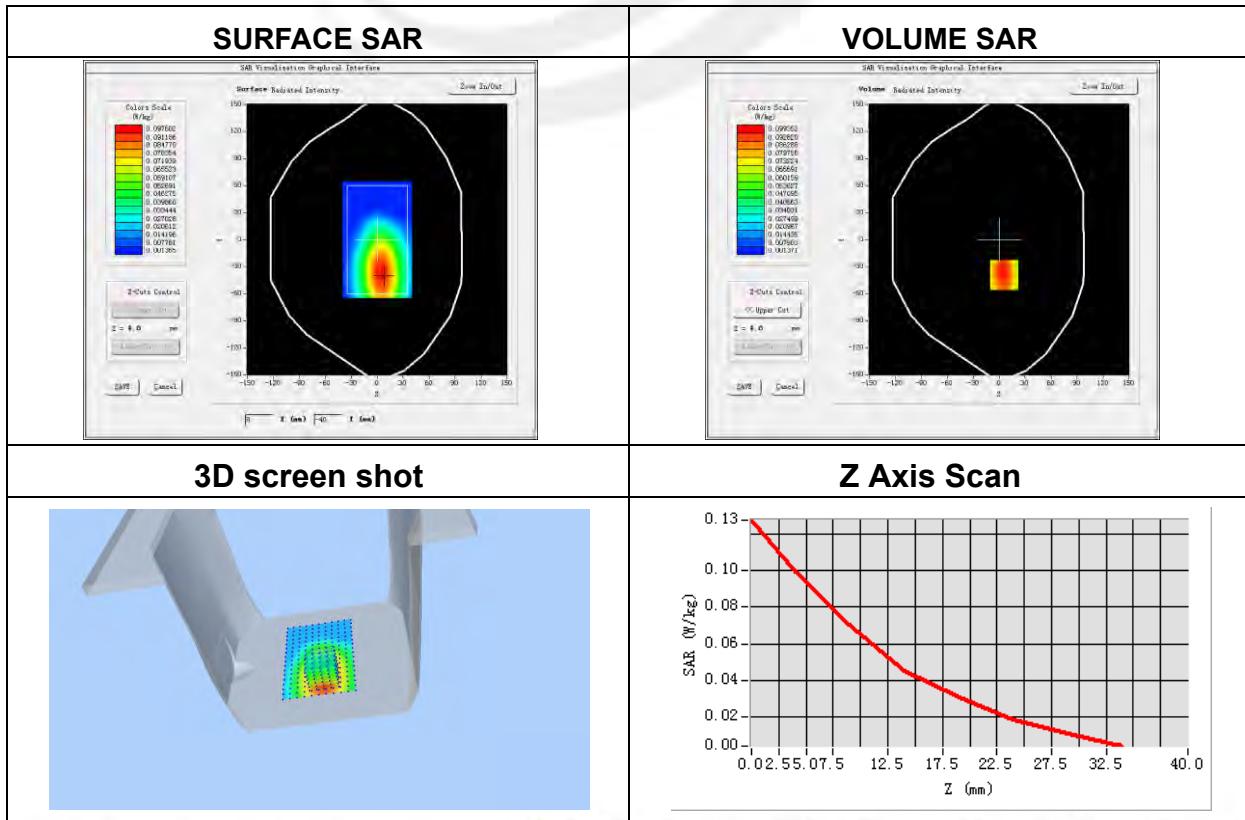


**Plot 85: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.32
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 side
Band	LTE Band 12 (RB 1)
Channels	Middle
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	2535
Relative permittivity (real part)	52.3
Conductivity (S/m)	2.12
Variation (%)	-1.46

Maximum location: X=6.00, Y=-39.00**SAR Peak: 0.13 W/kg**

SAR 10g (W/Kg)	0.088480
SAR 1g (W/Kg)	0.116191

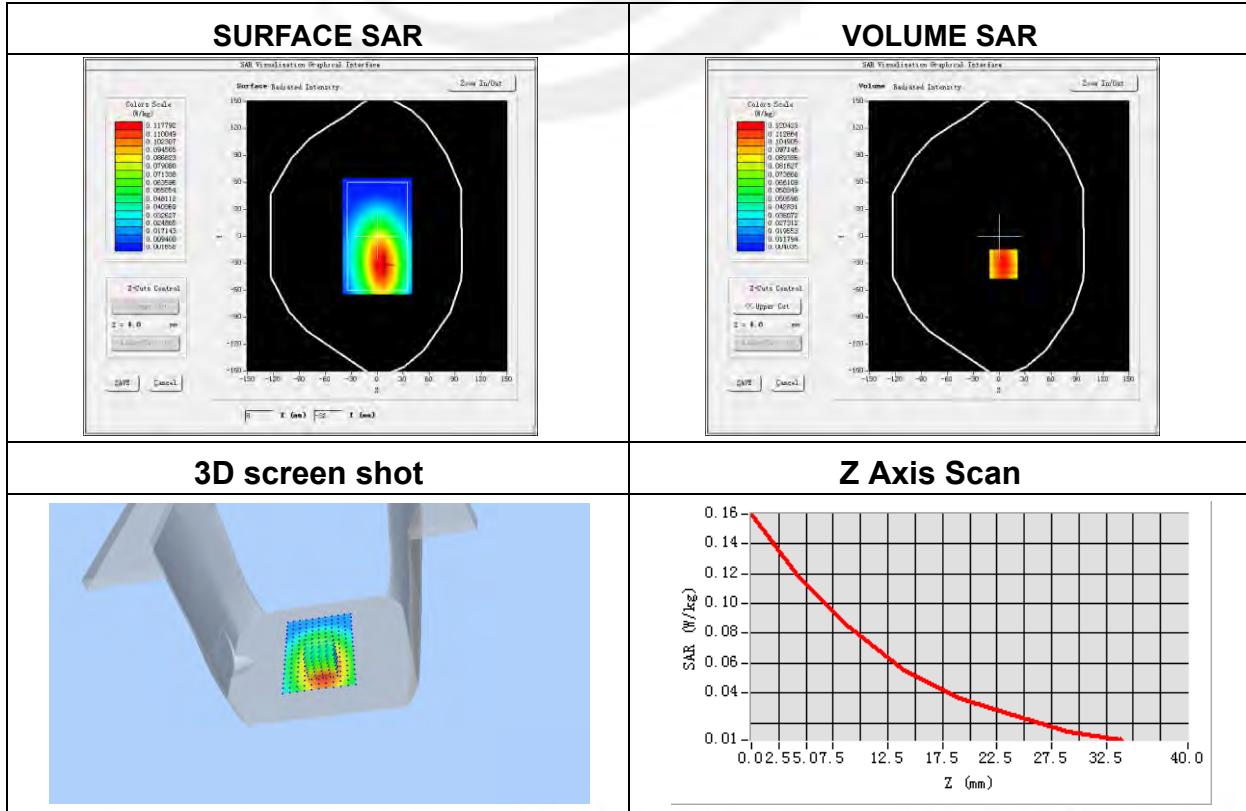


**Plot 86: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.32
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 side
Band	LTE Band 12 (RB 1)
Channels	Middle
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	2535
Relative permittivity (real part)	52.3
Conductivity (S/m)	2.12
Variation (%)	-1.25

Maximum location: X=5.00, Y=-31.00**SAR Peak: 0.16 W/kg**

SAR 10g (W/Kg)	0.075561
SAR 1g (W/Kg)	0.114797



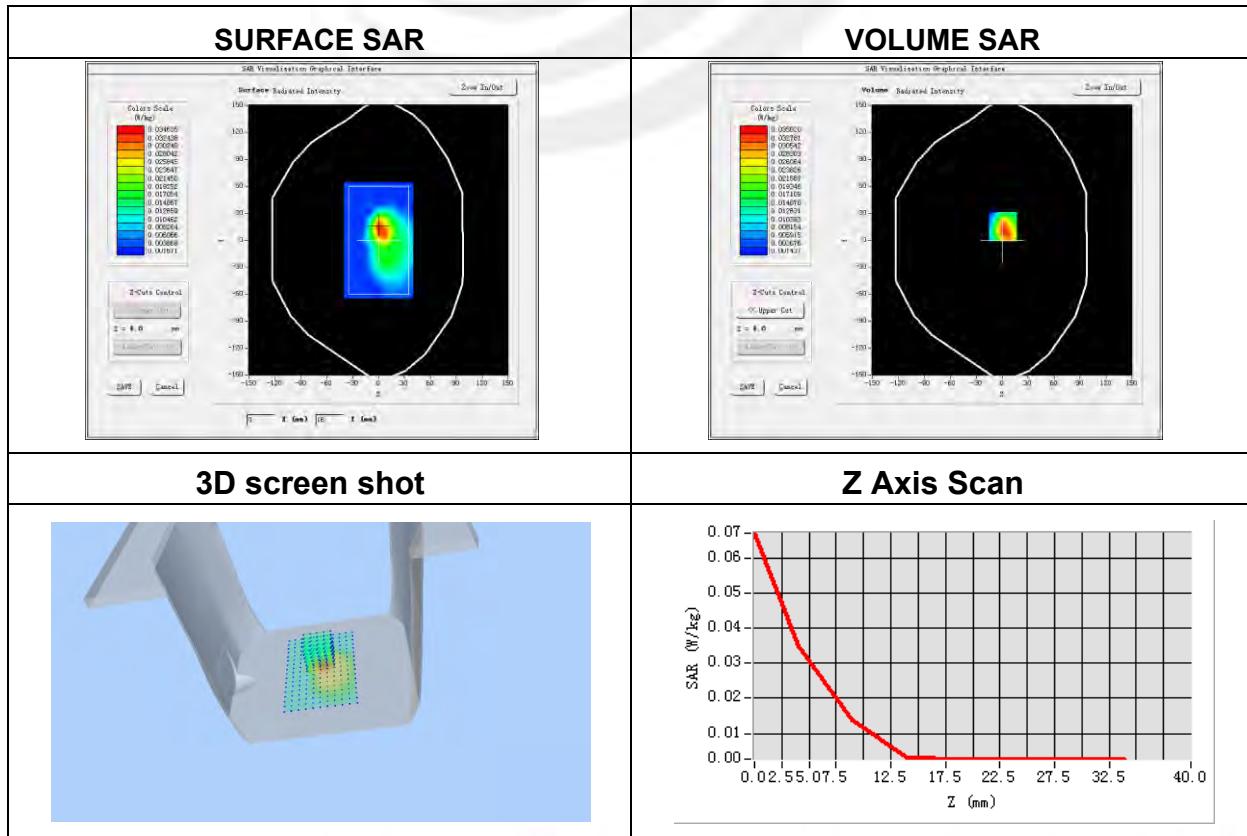
**Plot 87: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.32
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 side
Band	LTE Band 12 (RB 1)
Channels	Middle
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	2535
Relative permittivity (real part)	52.3
Conductivity (S/m)	2.12
Variation (%)	-3.63

Maximum location: X=1.00, Y=15.00

SAR Peak: 0.07 W/kg

SAR 10g (W/Kg)	0.014785
SAR 1g (W/Kg)	0.034601



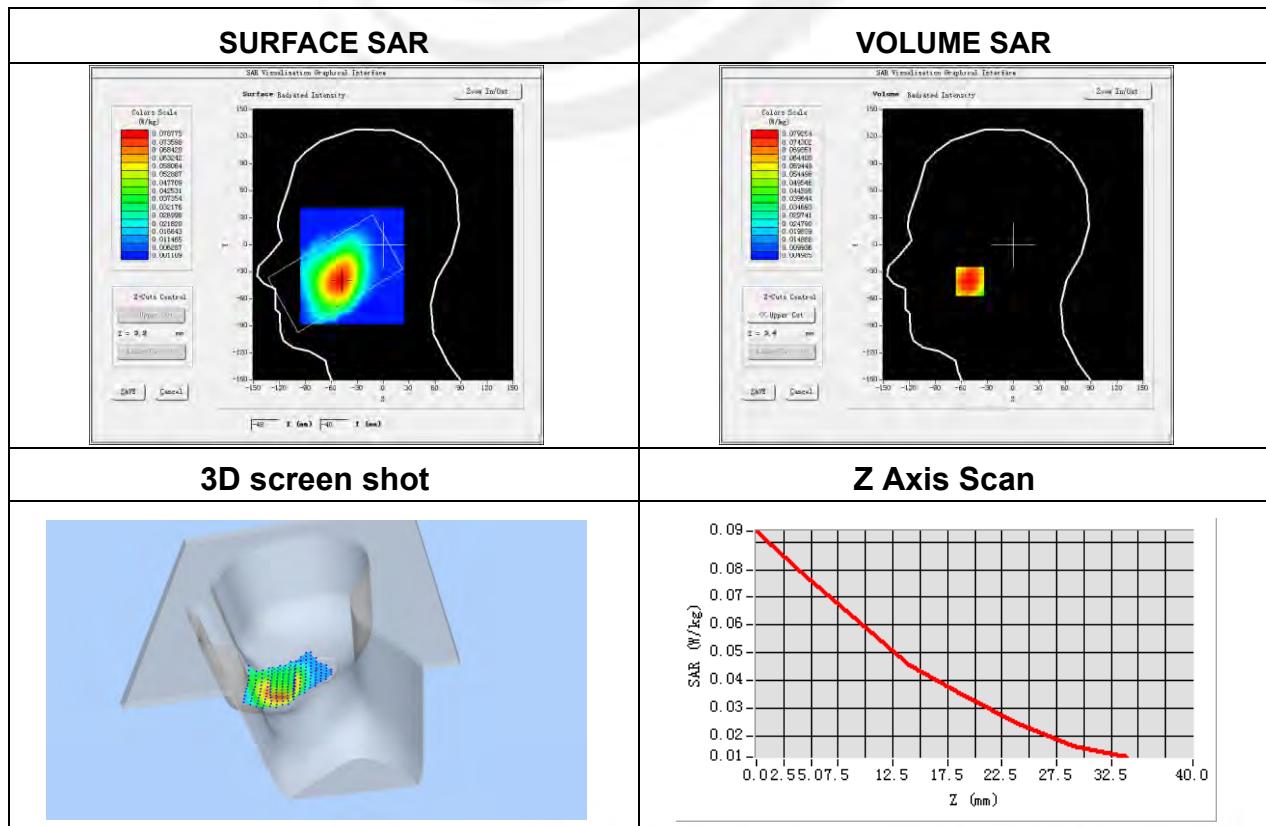
**Plot 88: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.53
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	Right head
Device Position	Cheek
Band	LTE Band 17 (RB 1)
Channels	High
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	711.0
Relative permittivity (real part)	41.2
Conductivity (S/m)	0.91
Variation (%)	-0.61

Maximum location: X=-50.00, Y=-41.00

SAR Peak: 0.10 W/kg

SAR 10g (W/Kg)	0.055657
SAR 1g (W/Kg)	0.078150



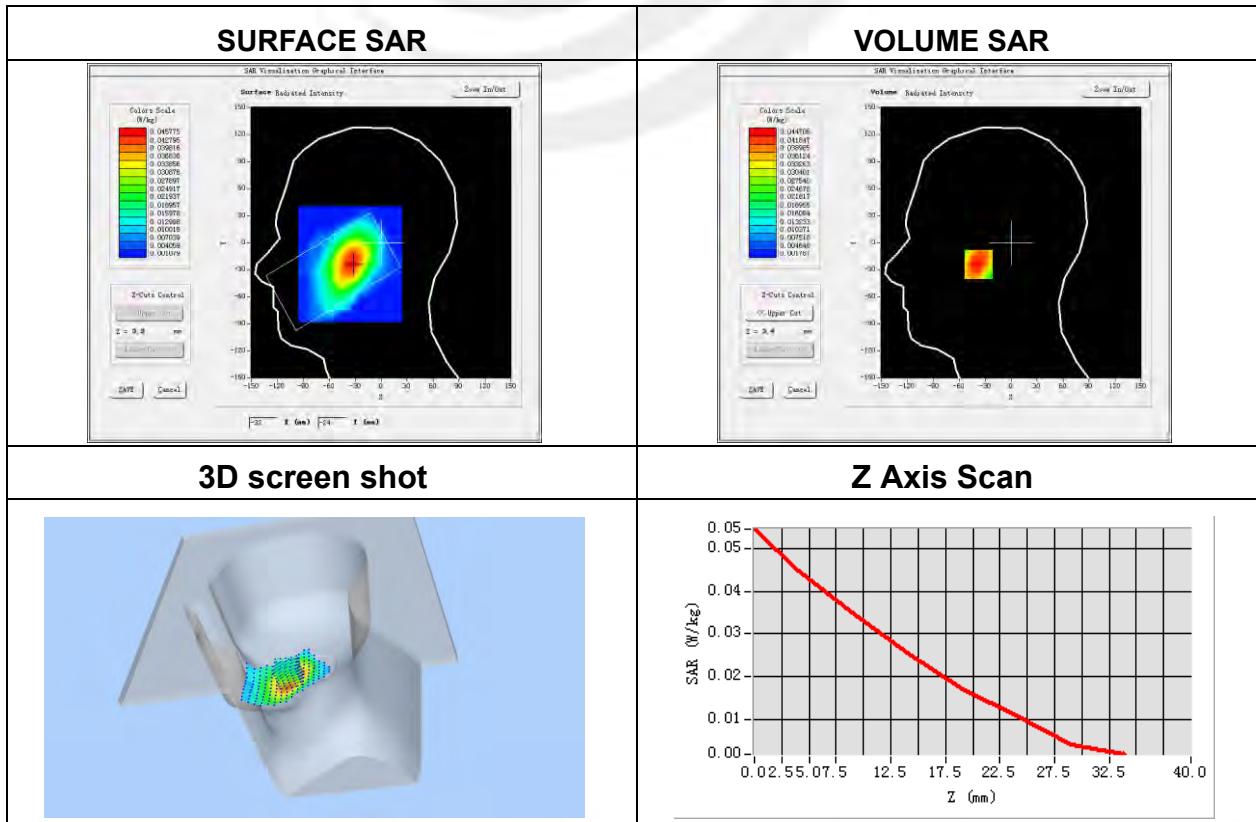
**Plot 89: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.53
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	Right head
Device Position	Tilt
Band	LTE Band 17 (RB 1)
Channels	High
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	711.0
Relative permittivity (real part)	41.2
Conductivity (S/m)	0.91
Variation (%)	-3.29

Maximum location: X=-34.00, Y=-24.00

SAR Peak: 0.06 W/kg

SAR 10g (W/Kg)	0.029905
SAR 1g (W/Kg)	0.045380

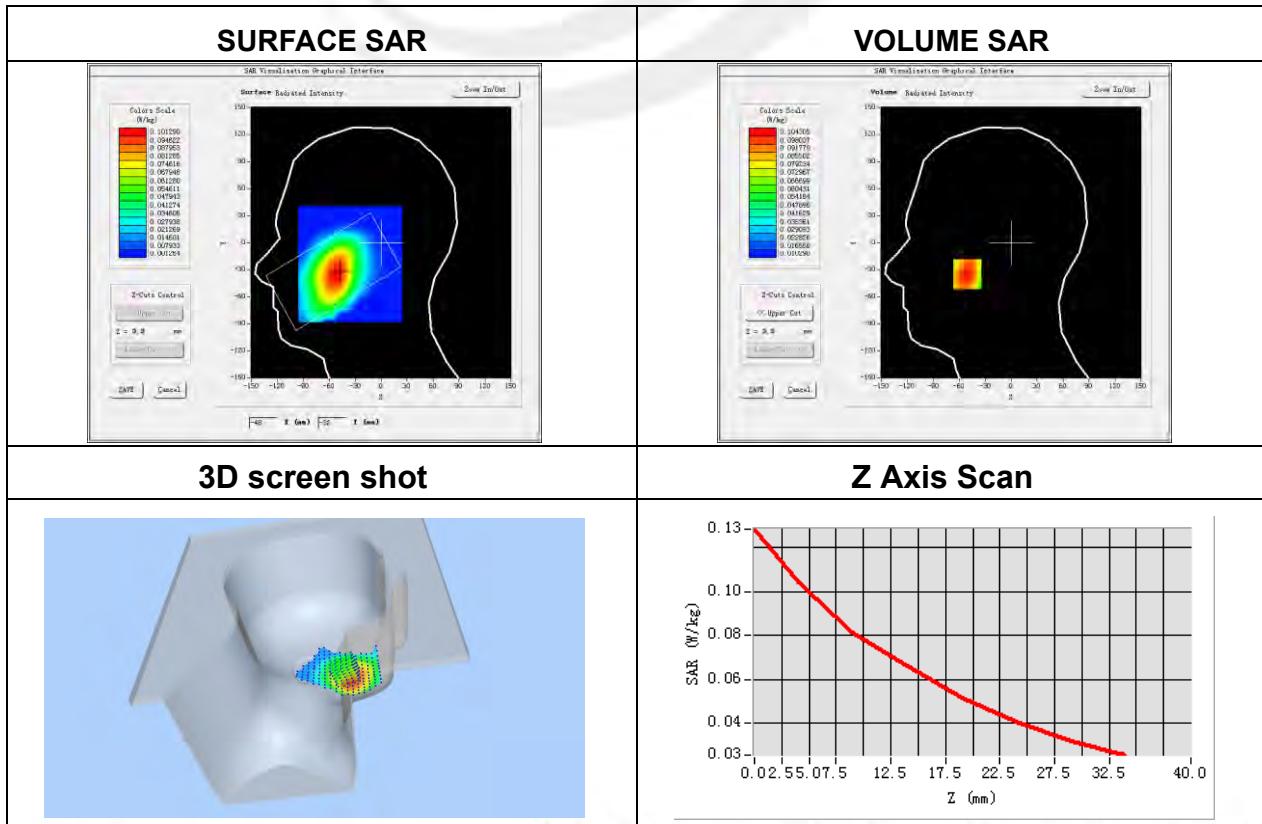


**Plot 90: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.53
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	Left head
Device Position	Cheek
Band	LTE Band 17 (RB 1)
Channels	High
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	711.0
Relative permittivity (real part)	41.2
Conductivity (S/m)	0.91
Variation (%)	-1.19

Maximum location: X=-51.00, Y=-35.00**SAR Peak: 0.13 W/kg**

SAR 10g (W/Kg)	0.076124
SAR 1g (W/Kg)	0.103085

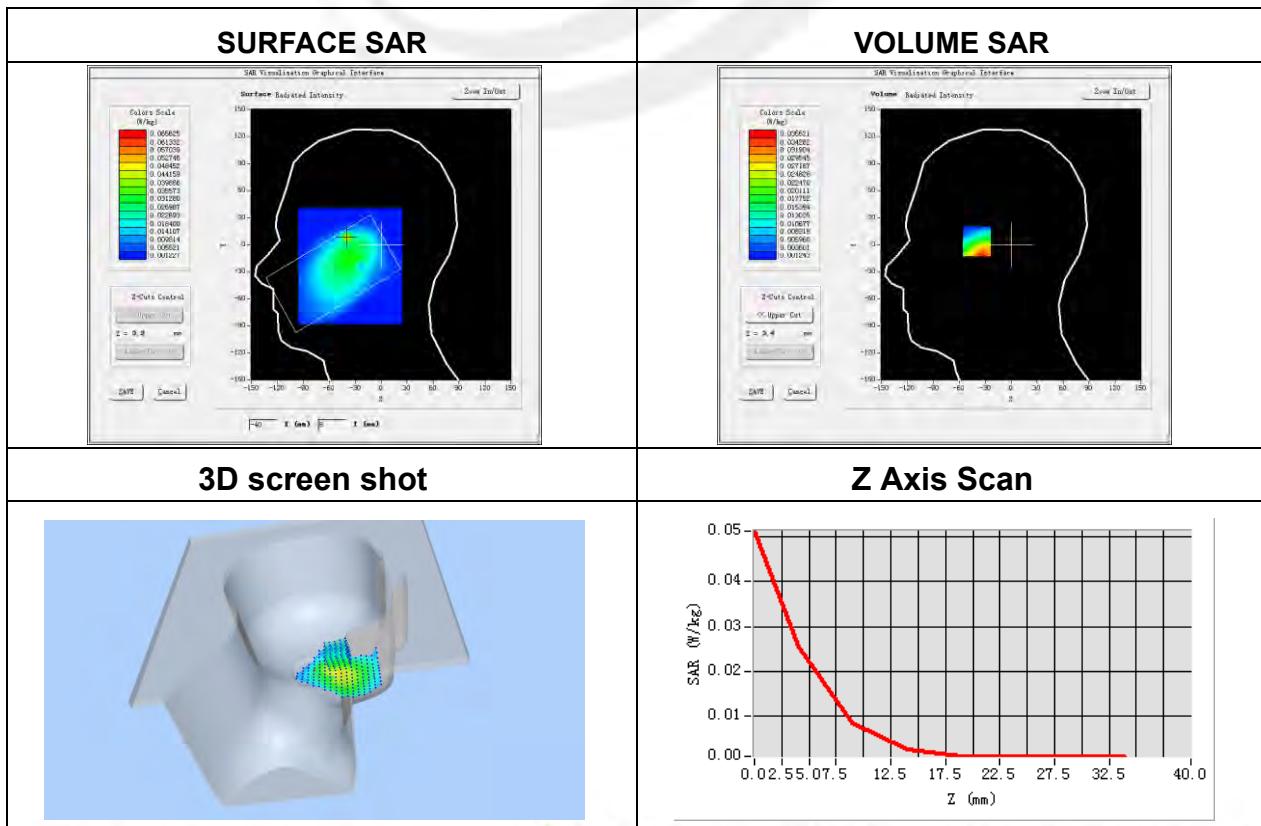


**Plot 91: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.53
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	Left head
Device Position	Tilt
Band	LTE Band 17 (RB 1)
Channels	High
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	711.0
Relative permittivity (real part)	41.2
Conductivity (S/m)	0.91
Variation (%)	-1.69

Maximum location: X=-40.00, Y=8.00**SAR Peak: 0.06 W/kg**

SAR 10g (W/Kg)	0.017011
SAR 1g (W/Kg)	0.032313



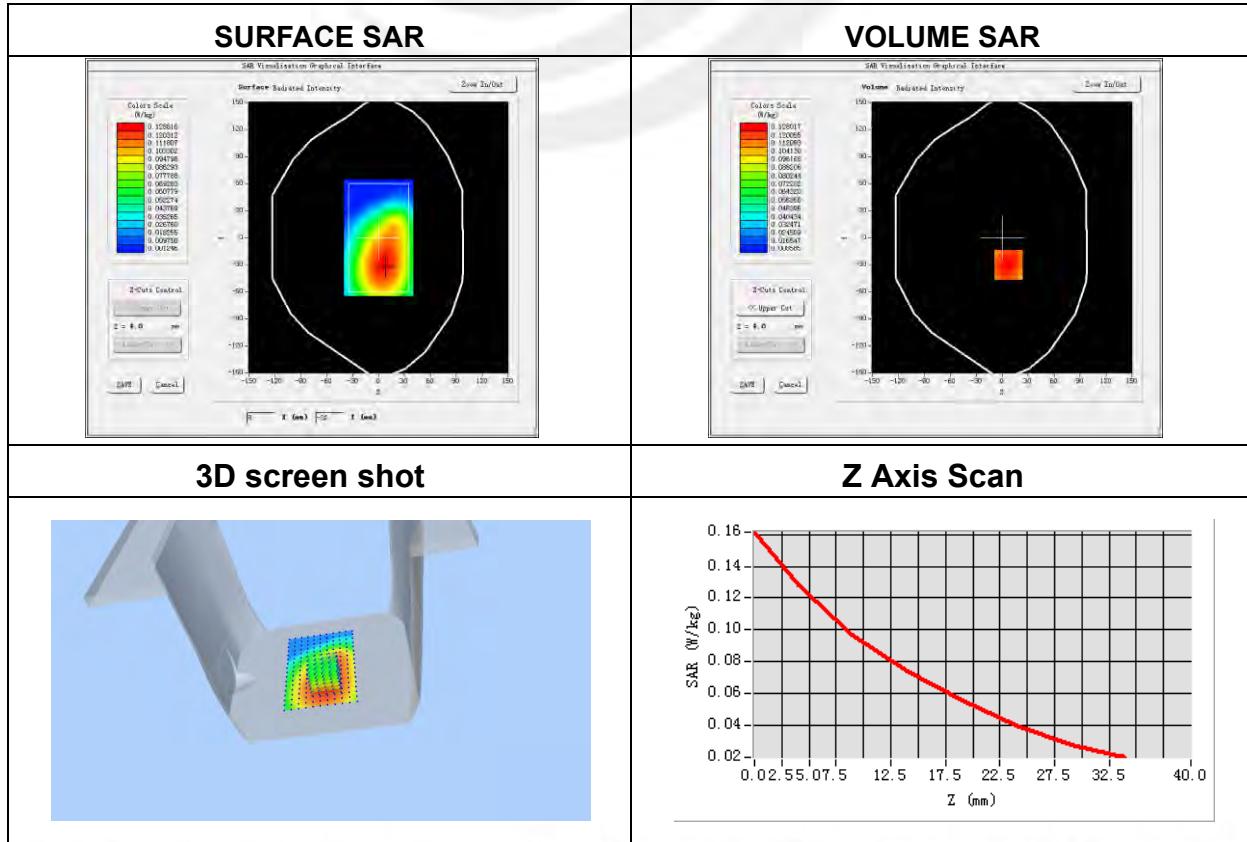
**Plot 92: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.70
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	LTE Band 17 (RB 1)
Channels	High
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	711.0
Relative permittivity (real part)	55.26
Conductivity (S/m)	0.91
Variation (%)	-4.44

Maximum location: X=7.00, Y=-30.00

SAR Peak: 0.16 W/kg

SAR 10g (W/Kg)	0.092019
SAR 1g (W/Kg)	0.127510

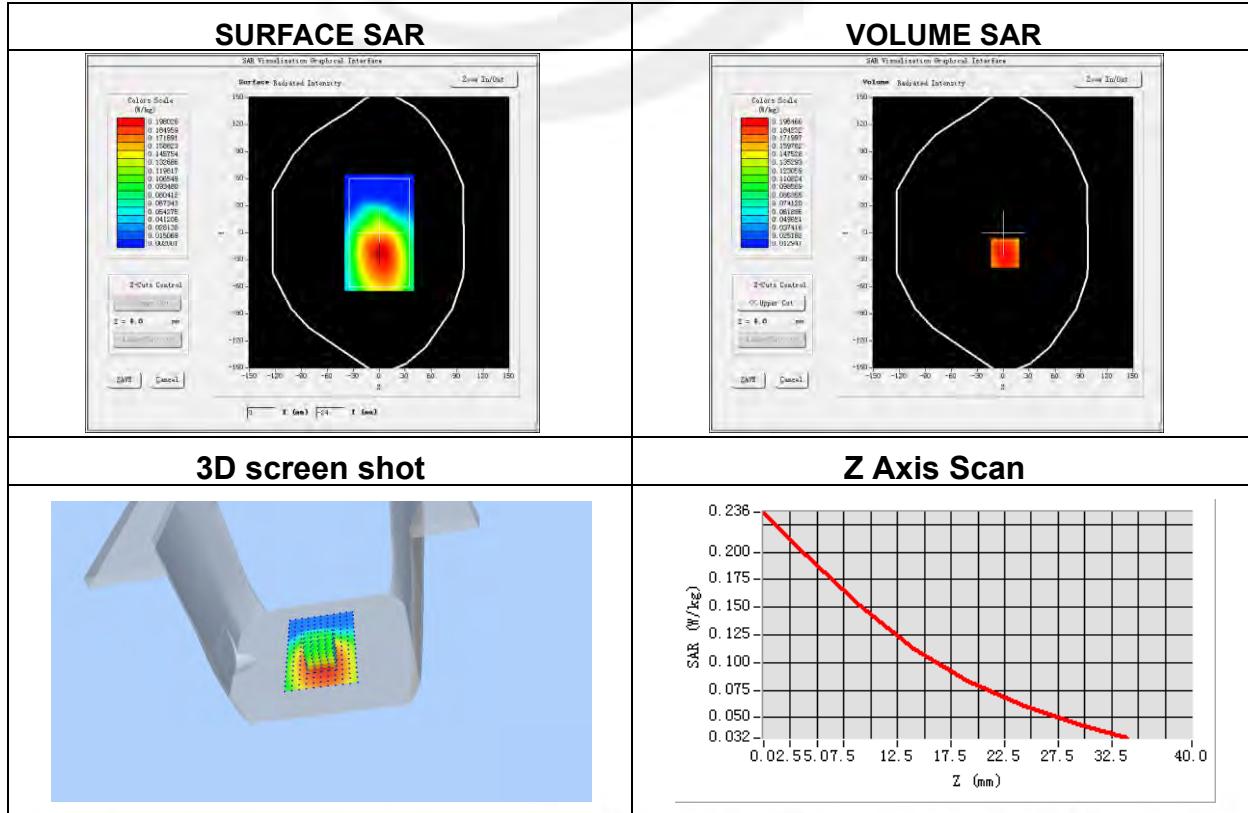


**Plot 93: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(°C)	22.70
Liquid Temperature(°C)	22.30
Probe	SN 17/14 EP221
ConvF	4.70
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	LTE Band 17 (RB 1)
Channels	High
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	711.0
Relative permittivity (real part)	55.26
Conductivity (S/m)	0.91
Variation (%)	0.57

Maximum location: X=2.00, Y=-23.00**SAR Peak: 0.26 W/kg**

SAR 10g (W/Kg)	0.141878
SAR 1g (W/Kg)	0.195006

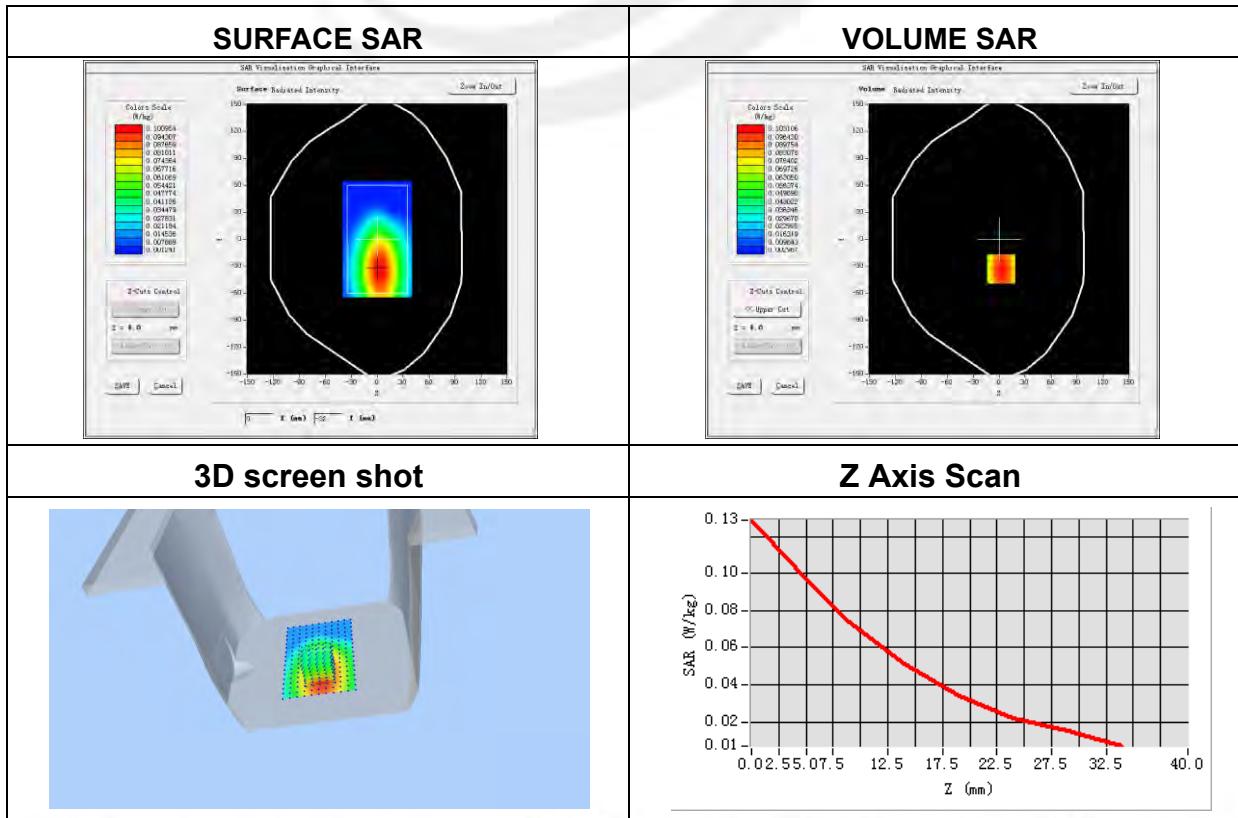


**Plot 94: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.70
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 side
Band	LTE Band 17 (RB 1)
Channels	High
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	711.0
Relative permittivity (real part)	55.26
Conductivity (S/m)	0.91
Variation (%)	0.03

Maximum location: X=2.00, Y=-33.00**SAR Peak: 0.13 W/kg**

SAR 10g (W/Kg)	0.067021
SAR 1g (W/Kg)	0.099541

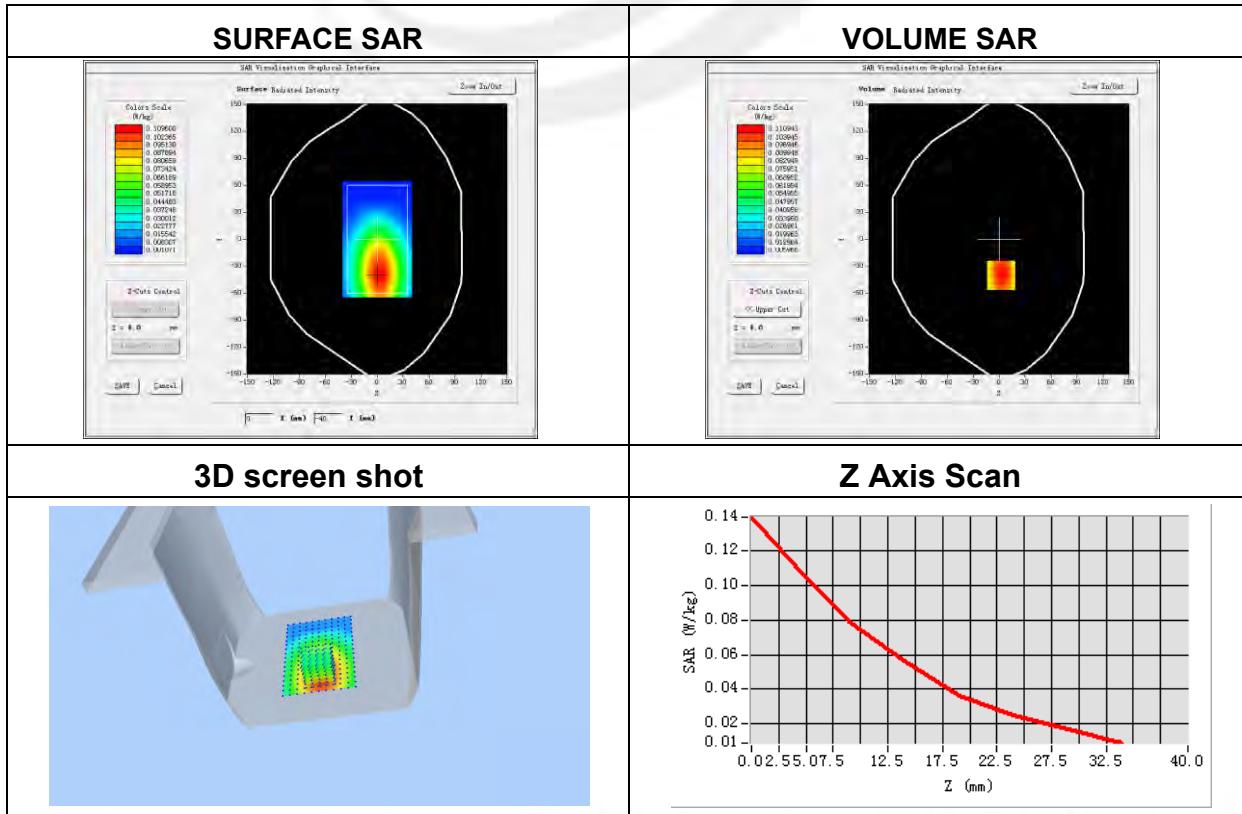


**Plot 95: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.70
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 side
Band	LTE Band 17 (RB 1)
Channels	High
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	711.0
Relative permittivity (real part)	55.26
Conductivity (S/m)	0.91
Variation (%)	-2.31

Maximum location: X=2.00, Y=-41.00**SAR Peak: 0.15 W/kg**

SAR 10g (W/Kg)	0.092534
SAR 1g (W/Kg)	0.121675



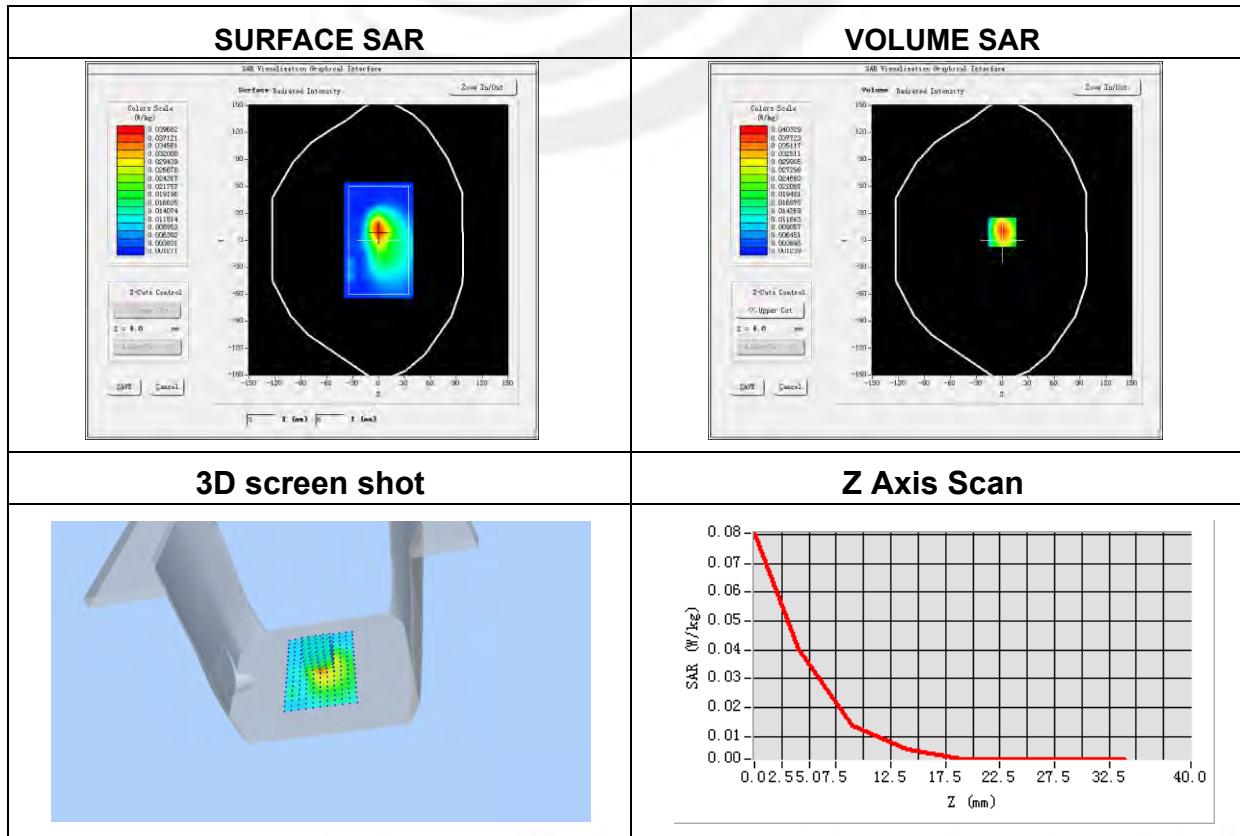
**Plot 96: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Ambient Temperature(℃)	22.70
Liquid Temperature(℃)	22.30
Probe	SN 17/14 EP221
ConvF	4.70
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 side
Band	LTE Band 17 (RB 1)
Channels	High
Signal	LTE (Crest factor: 1.0)
Frequency (MHz)	711.0
Relative permittivity (real part)	55.26
Conductivity (S/m)	0.91
Variation (%)	-3.51

Maximum location: X=0.00, Y=9.00

SAR Peak: 0.08 W/kg

SAR 10g (W/Kg)	0.017163
SAR 1g (W/Kg)	0.039592



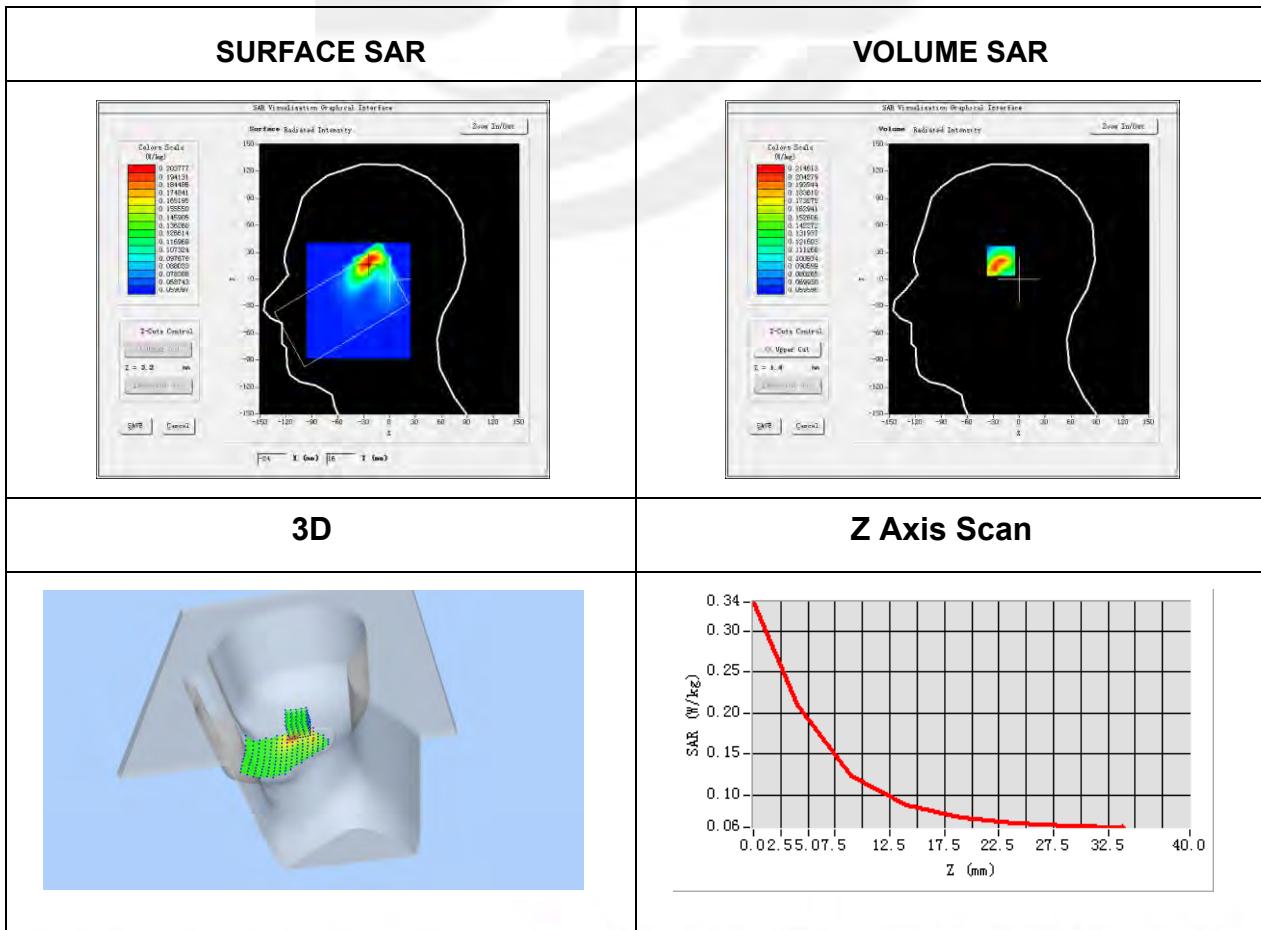
**Plot 97: DUT:4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Probe	SN 17/14 EP221
ConvF	4.11
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	Right head
Device Position	Cheek
Band	IEEE 802.11b ISM
Channels	Low
Signal	<u>IEEE802.b (Crest factor: 1.0)</u>
Frequency (MHz)	2412
Relative permittivity (real part)	39.23
Conductivity (S/m)	1.79
Variation (%)	0.91

Maximum location: X=-20.00, Y=24.00

SAR Peak: 0.34 W/kg

SAR 10g (W/Kg)	0.120995
SAR 1g (W/Kg)	0.203929

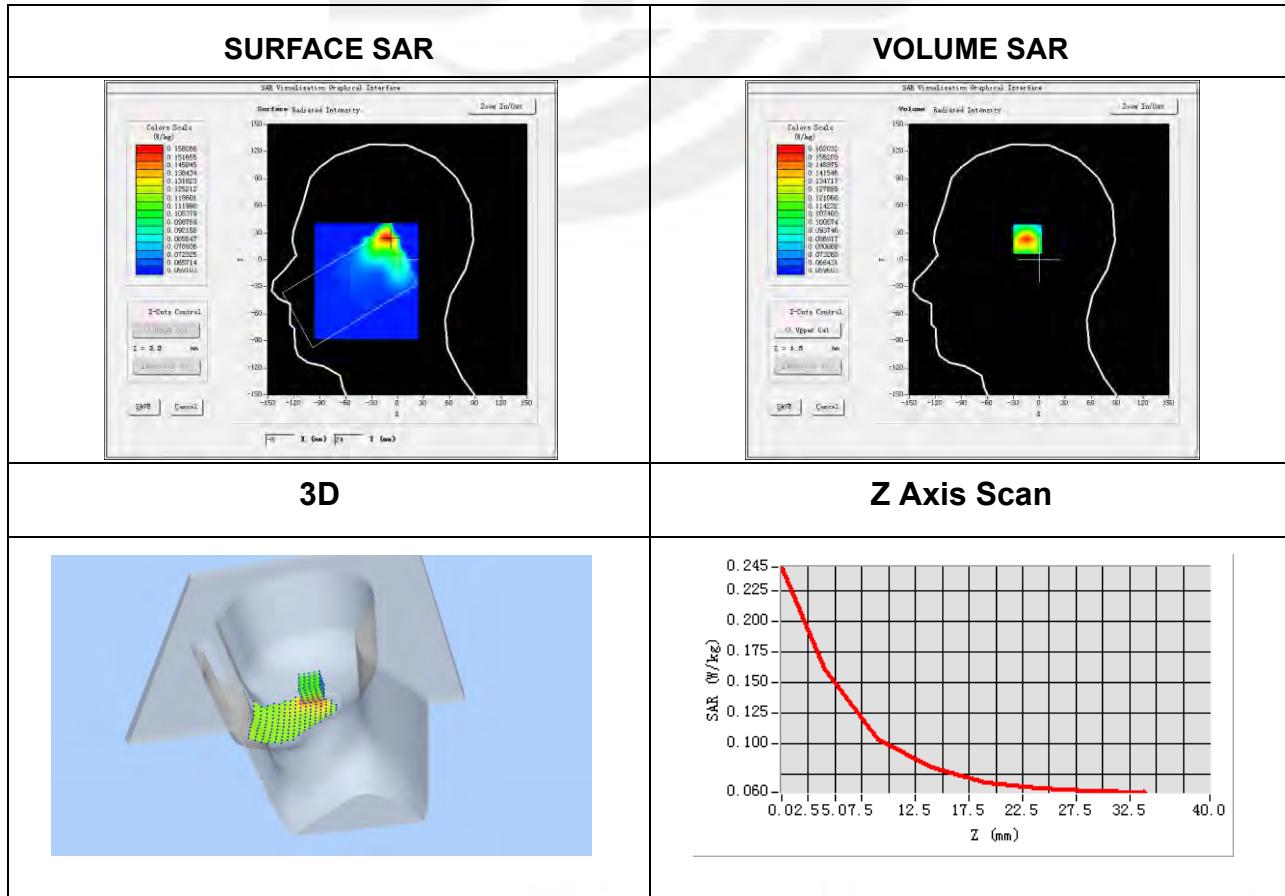


**Plot 98: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Probe	SN 17/14 EP221
ConvF	4.11
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	Right head
Device Position	Tilt
Band	IEEE 802.11b ISM
Channels	Low
Signal	<u>IEEE802.b (Crest factor: 1.0)</u>
Frequency (MHz)	2412
Relative permittivity (real part)	39.23
Conductivity (S/m)	1.79
Variation (%)	-0.55

Maximum location: X=-11.00, Y=25.00
SAR Peak: 0.24 W/kg

SAR 10g (W/Kg)	0.102030
SAR 1g (W/Kg)	0.154828

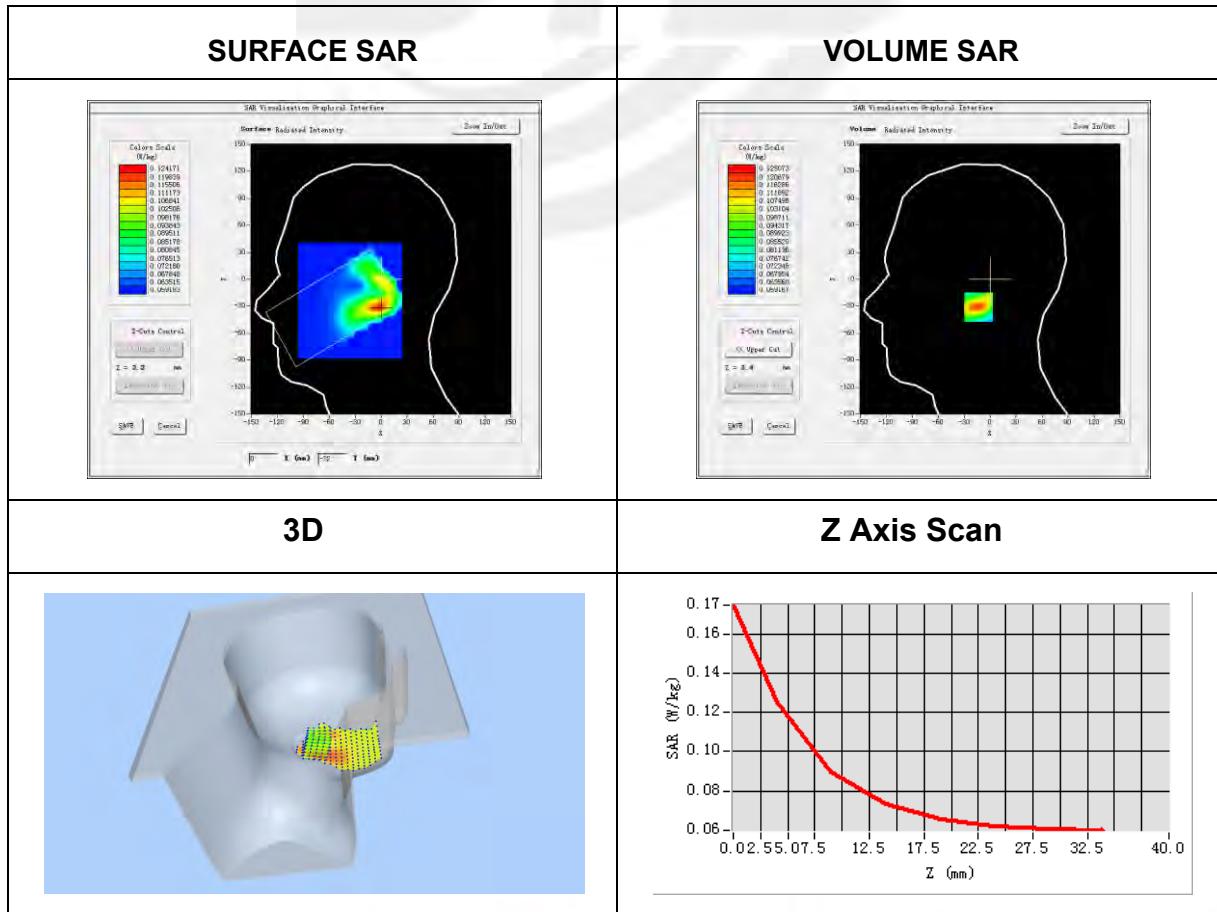


**Plot 99: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Probe	SN 17/14 EP221
ConvF	4.11
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	Left head
Device Position	Cheek
Band	IEEE 802.11b ISM
Channels	Low
Signal	<u>IEEE802.b (Crest factor: 1.0)</u>
Frequency (MHz)	2412
Relative permittivity (real part)	39.23
Conductivity (S/m)	1.79
Variation (%)	-0.03

Maximum location: X=-2.00, Y=-31.00
SAR Peak: 0.17 W/kg

SAR 10g (W/Kg)	0.087345
SAR 1g (W/Kg)	0.120292

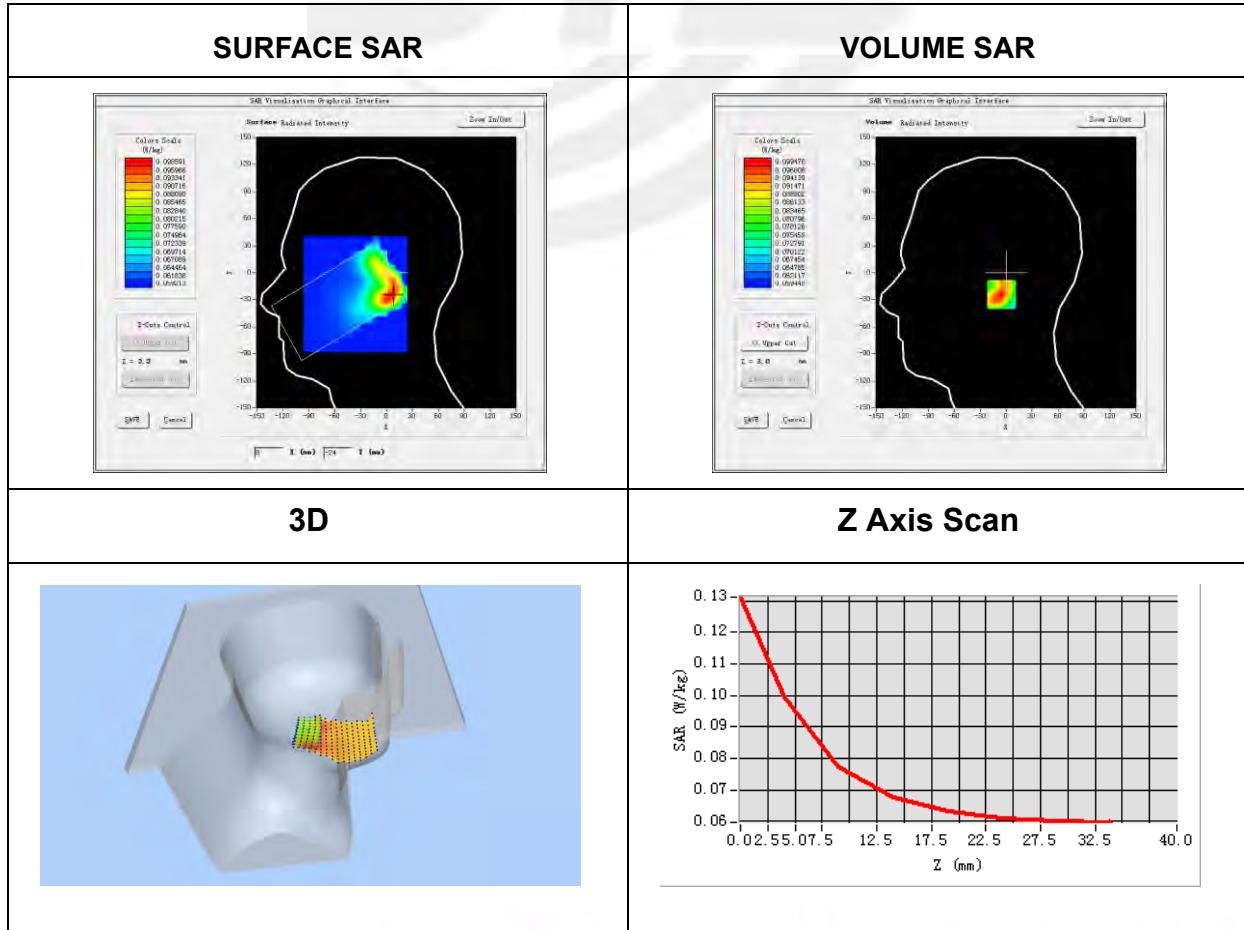


**Plot 100: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
Probe	SN 17/14 EP221
ConvF	4.11
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	Left head
Device Position	Tilt
Band	IEEE 802.11b ISM
Channels	Low
Signal	<u>IEEE802.b (Crest factor: 1.0)</u>
Frequency (MHz)	2412
Relative permittivity (real part)	39.23
Conductivity (S/m)	1.79
Variation (%)	-2.91

Maximum location: X=6.00, Y=-24.00
SAR Peak: 0.13 W/kg

SAR 10g (W/Kg)	0.077385
SAR 1g (W/Kg)	0.098748

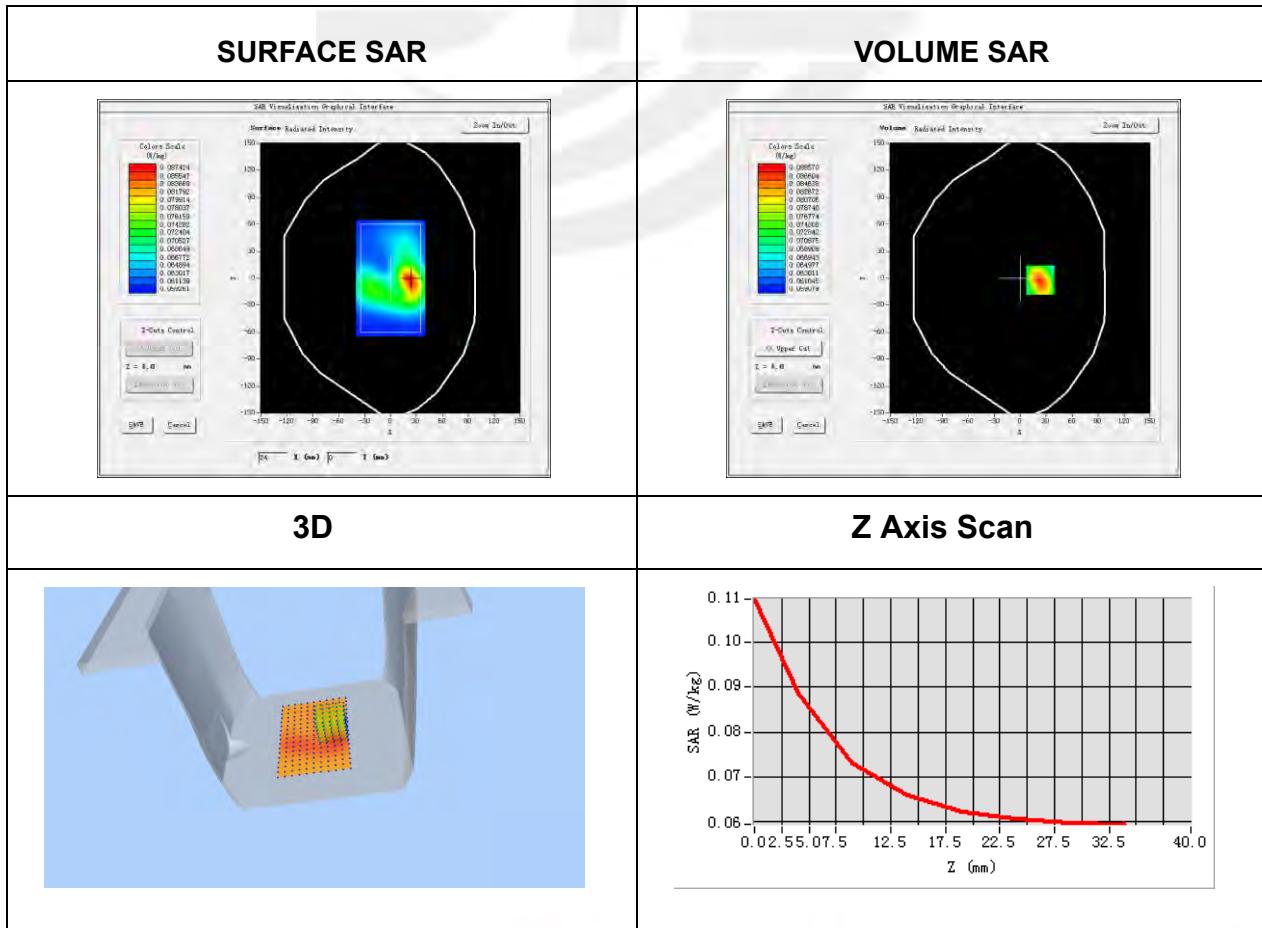


**Plot 101: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
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 side
Band	IEEE 802.11b ISM
Channels	Low
Signal	IEEE802.b (Crest factor: 1.0)
Frequency (MHz)	2412
Relative permittivity (real part)	39.23
Conductivity (S/m)	1.79
Variation (%)	1.63

Maximum location: X=23.00, Y=-2.00
SAR Peak: 0.11 W/kg

SAR 10g (W/Kg)	0.072417
SAR 1g (W/Kg)	0.086992

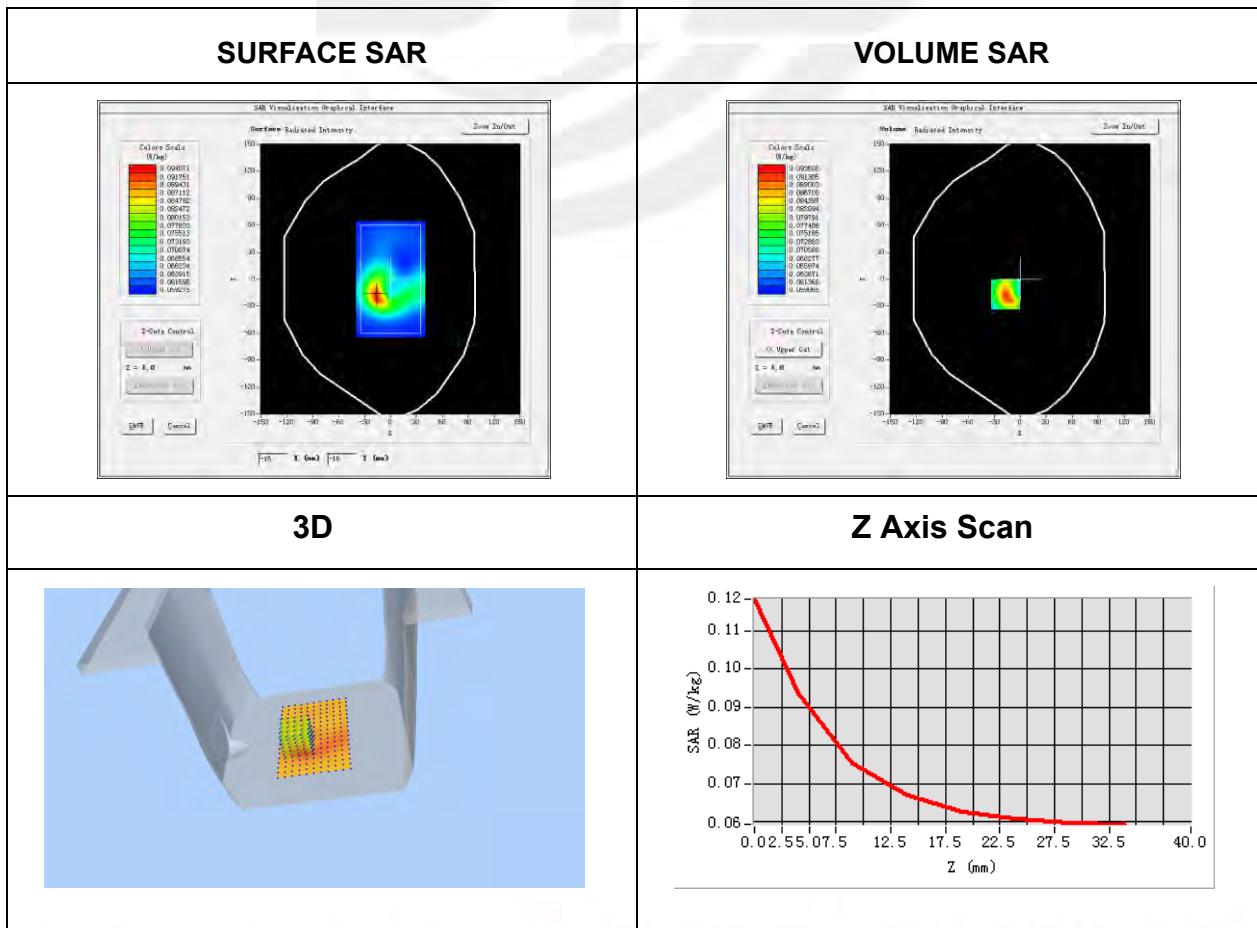


**Plot 102: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
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 side
Band	IEEE 802.11b ISM
Channels	Low
Signal	<u>IEEE802.b (Crest factor: 1.0)</u>
Frequency (MHz)	2412
Relative permittivity (real part)	39.23
Conductivity (S/m)	1.79
Variation (%)	0.14

Maximum location: X=-17.00, Y=-17.00
SAR Peak: 0.12 W/kg

SAR 10g (W/Kg)	0.074097
SAR 1g (W/Kg)	0.091716

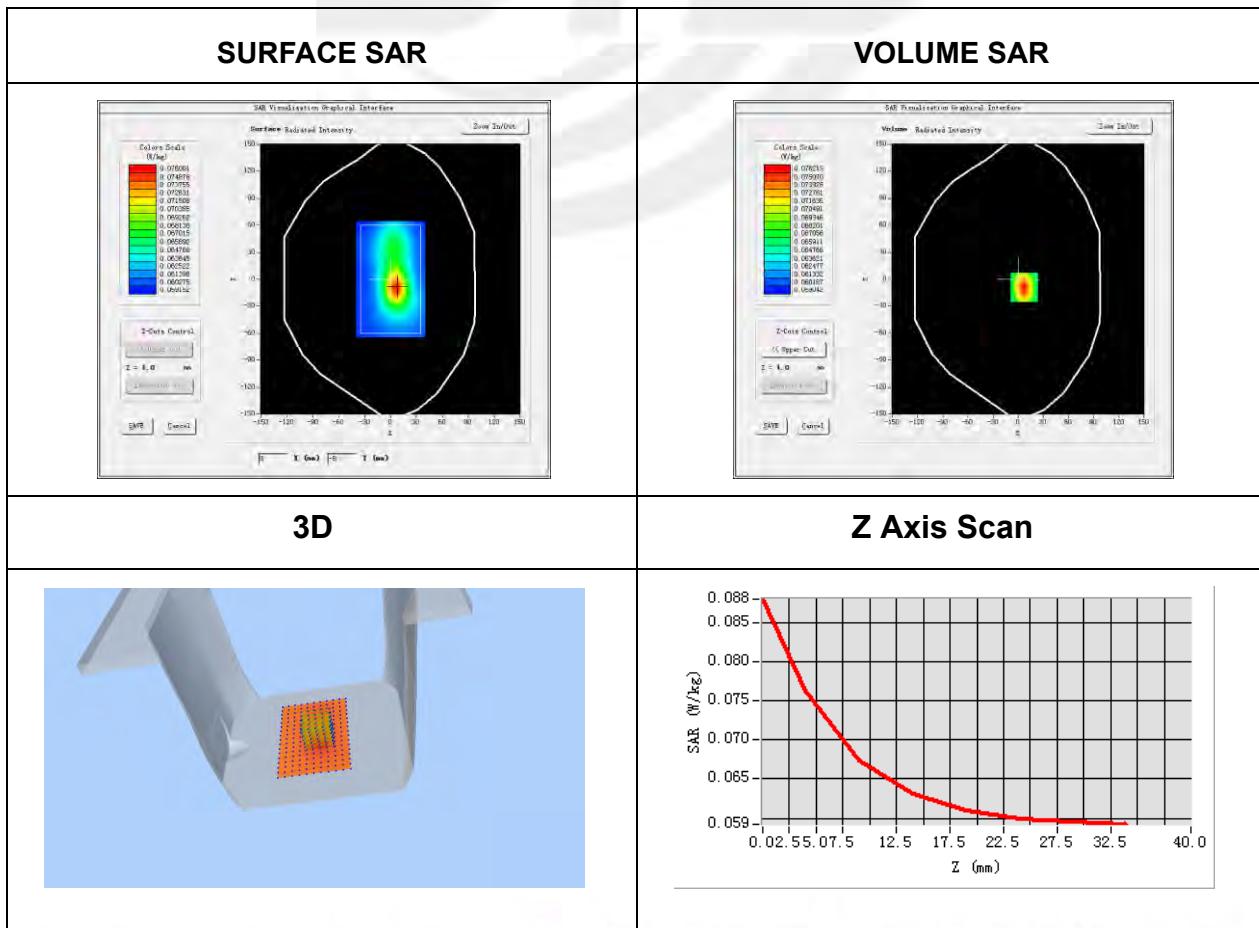


**Plot 103: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
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 lift side
Band	IEEE 802.11b ISM
Channels	Low
Signal	<u>IEEE802.b (Crest factor: 1.0)</u>
Frequency (MHz)	2412
Relative permittivity (real part)	39.23
Conductivity (S/m)	1.79
Variation (%)	1.71

Maximum location: X=7.00, Y=-9.00
SAR Peak: 0.09 W/kg

SAR 10g (W/Kg)	0.066817
SAR 1g (W/Kg)	0.075201

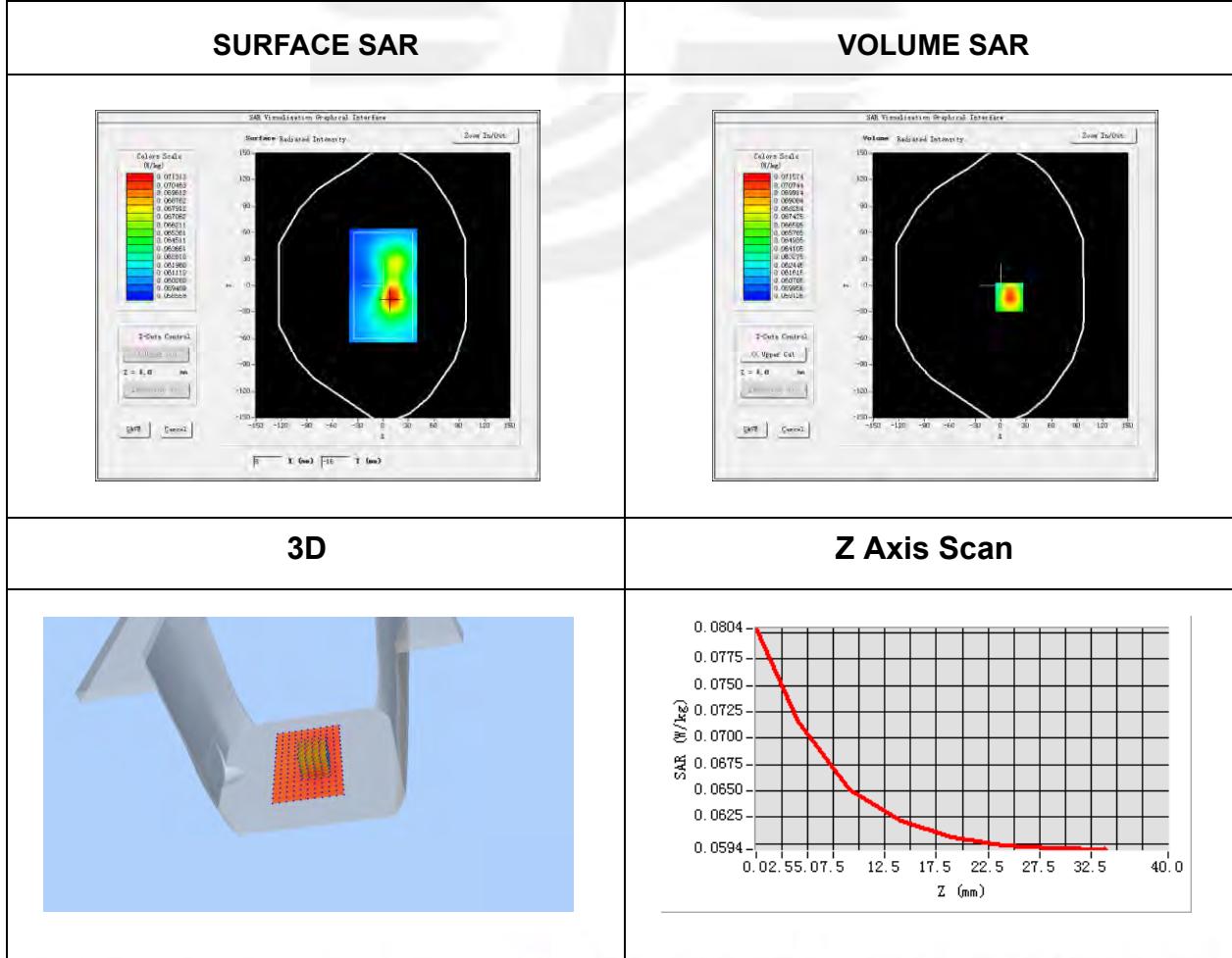


**Plot 104: DUT: 4G MOBILE PHONE; EUT Model: U5051**

Test Data	2015-12-23
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 side
Band	IEEE 802.11b ISM
Channels	Low
Signal	<u>IEEE802.b (Crest factor: 1.0)</u>
Frequency (MHz)	2412
Relative permittivity (real part)	39.23
Conductivity (S/m)	1.79
Variation (%)	0.65

Maximum location: X=10.00, Y=-13.00
SAR Peak: 0.08 W/kg

SAR 10g (W/Kg)	0.064760
SAR 1g (W/Kg)	0.070829





Appendix C. Probe Calibration And Dipole Calibration Report

Refer the appendix Calibration Report.

※※※※END OF THE REPORT※※※※

