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FCC SAR TEST REPORT

Report No: STS1502031H01

Issued for

CELL TECH ELECTRONICS, INC.

2678 & 2680 NW 97TH AVE, DORAL MIAMI 33172, USA

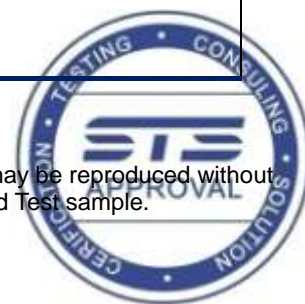
Product Name:	Mobile phone
Brand Name:	Genius Touch
Model No.:	EROS 4.0
Series Model:	N/A
FCC ID:	2ADFBGTEROS40
Test Standard:	ANSI/IEEE Std. C95.1
	FCC 47 CFR Part 2 (2.1093)
	IEEE 1528: 2003
Max. SAR (1g):	Head :0.361 W/kg
	Body:1.068W/kg

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Shenzhen STS Test Services Co., Ltd.

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Test Report Certification

Applicant's name : CELL TECH ELECTRONICS, INC.
Address : 2678 & 2680 NW 97TH AVE, DORAL MIAMI 33172, USA
Manufacture's Name..... : SUPERDIGITAL TECHNOLOGY CO., LIMITED
Address : F19, Block B, Nanxian Building, Longhua New District, Shenzhen
518000, P. R. China

Product description

Product name : Mobile phone
Trademark : Genius Touch
Model and/or type reference : EROS 4.0
Serial Model : N/A
IMEI: 868525000796208
Standards : ANSI/IEEE Std. C95.1-1992
FCC 47 CFR Part 2 (2.1093)
IEEE 1528: 2003

The device was tested by Shenzhen STS Test Services Co., Ltd. in accordance with the measurement methods and procedures specified in KDB 865664 The test results in this report apply only to the tested sample of the stated device/equipment. Other similar device/equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Date of Test :
Date (s) of performance of tests : Feb. 12 , 2015 to Mar. 18, 2015
Date of Issue..... : Mar. 19, 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	Mobile phone		
Brand Name	Genius Touch		
Model No.	EROS 4.0		
Serial Model	N/A		
FCC ID	2ADFBGTEROS40		
Model Difference	N/A		
Adapter	Input: AC100-240V, 0.15A, 50/60 Hz Output: DC 5V, 600mA		
Battery	Rated Voltage: 3.7V Charge Limit: 4.2V Capacity:1150mAh		
Hardware Version	97055-1-208		
Software Version	SW_97055U_M20_KEBAINA_5C_GENIUSTOUCH_V004		
Frequency Range	GSM 850: 824.2 ~ 848.8 MHz PCS1900: 1850.2 ~ 1909.8 MHz WCDMA II: 1852.4~1907.6 MHz WCDMA V: 826.4~846.6 MHz WLAN 802.11 b/g/n(HT20):2412-2462 MHz WLAN 802.11 n(HT40):2422-2452 MHz Bluetooth : 2402~2480MHz		
Transmit Power(MAX):	SIM 1 Card GSM 850: 31.93dBm GSM 1900: 28.78dBm WCDMA II: 22.31dBm WCDMA V: 22.68dBm SIM 2 Card GSM 850: 31.68dBm GSM 1900: 28.34dBm 802.11b: 9.75dBm 802.11g: 8.38dBm 802.11n(HT20/HT40):8.32dBm/6.68dBm Bluetooth: -0.53dBm		
Max. Reported SAR(1g):	Head: GSM 850: 0.068 W/kg GSM 1900: 0.089 W/kg WCDMA II: 0.361 W/kg WCDMA V: 0.201W/kg WIFI: 0.279 W/kg	Body: GSM 850: 0.317W/kg GSM 1900: 0.340 W/kg WCDMA II: 0.815W/kg WCDMA V: 1.068W/kg WIFI: 0.468 W/kg	Hotspot: GSM 850: 0.639W/kg GSM 1900: 0.726W/kg WCDMA II: 0.665W/kg WCDMA V: 0.475W/kg
Operating Mode:	GSM: GSM Voice/GPRS/EGPRS Class 12; WCDMA: RMC/HSDPA/HSUPA Release 6; WLAN: 802.11 b/g/n; Bluetooth: V4.0 + EDR (GFSK + π /4DQPSK+8DPSK)		
Antenna Specification:	GSM/WCDMA: 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		

Product	Type
	<input checked="" type="checkbox"/> Production unit <input type="checkbox"/> Identical Prototype



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 2, Zhuoke Science Park, Chongqing Road, Fuyong,
Baoan District, Shenzhen, China

FCC Registration No.: 842334;IC Registration No.: 12108A-1





2. Test Standards And Limits

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	ANSI/IEEE Std. C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
3	IEEE Std. 1528-2003	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
4	FCC KDB 447498 D01 v05r02	Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies
5	FCC KDB 865664 D01 v01r03	SAR Measurement 100 MHz to 6 GHz
6	FCC KDB 941225 D06 v02	SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities
7	FCC KDB 941225 D01 v03	SAR Measurement Procedures for 3G Devices
8	FCC KDB 248227 D01 v01r02	SAR Measurement Procedures for 802.11 a/b/g Transmitters

SAR assessments have been made in line with the requirements of IEEE-1528, FCC Supplement C, and comply with ANSI/IEEE C95.1-1992 "Uncontrolled Environments" limits. These limits apply to a location which is deemed as "Uncontrolled Environment" which can be described as a situation where the general public may be exposed to an RF source with no prior knowledge or control over their exposure.

(A). Limits for Occupational/Controlled Exposure (W/kg)

Whole-Body Partial-Body Hands, Wrists, Feet and Ankles

0.4 8.0 20.0

(B). Limits for General Population/Uncontrolled Exposure (W/kg)

Whole-Body Partial-Body Hands, Wrists, Feet and Ankles

0.08 1.6 4.0

NOTE: Whole-Body SAR is averaged over the entire body, partial-body SAR is averaged over any 1 gram of tissue defined as a tissue volume in the shape of a cube. SAR for hands, wrists, feet and ankles is averaged over any 1 grams of tissue defined as a tissue volume in the shape of a cube.

Population/Uncontrolled Environments:

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

Occupational/Controlled Environments:

are defined as locations where there is exposure that may be incurred by people who are aware of the potential for exposure, (i.e. as a result of employment or occupation).

NOTE

GENERAL POPULATION/UNCONTROLLED EXPOSURE

PARTIAL BODY LIMIT

1.6 W/kg

3. SAR Measurement System

3.1 Definition Of Specific Absorption Rate (SAR)

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

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

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

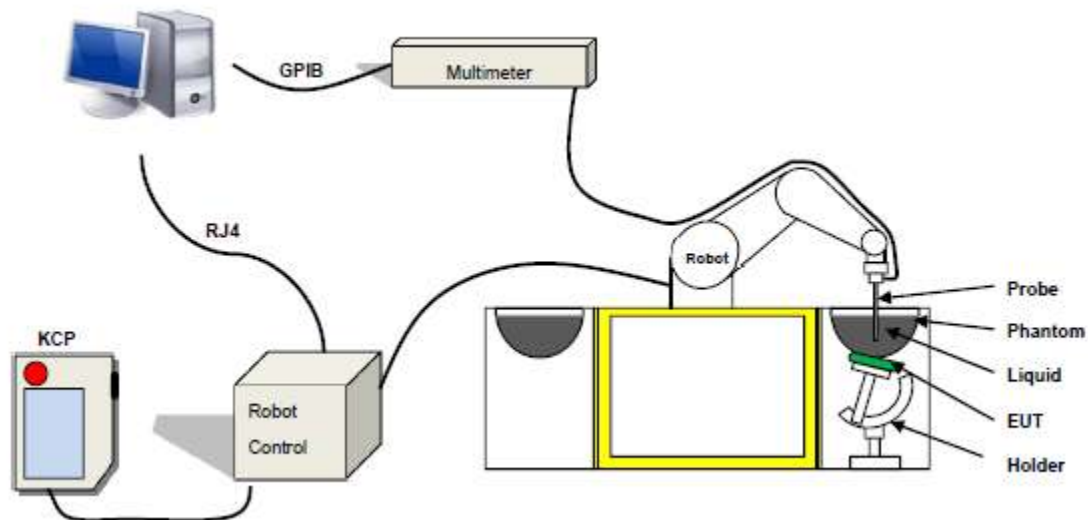
SAR is expressed in units of Watts per kilogram (W/kg) SAR measurement can be related to the electrical field in the tissue by

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

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

3.2 SAR System

SATIMO SAR System Diagram:



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

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

The following figure shows the system.



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

3.2.1 Probe

For the measurements the Specific Dosimetric E-Field Probe SN 17/14 EP221 with following specifications is used

- Dynamic range: 0.01-100 W/kg
 - Tip Diameter :5 mm
 - Distance between probe tip and sensor center: 2.7mm
 - Distance between sensor center and the inner phantom surface: 4 mm (repeatability better than +/- 1mm)
 - Probe linearity: <0.25 dB
 - Axial Isotropy: <0.25 dB
 - Spherical Isotropy: <0.25 dB
 - Calibration range: 450MHz to 2600MHz for head & body simulating liquid.
- Angle between probe axis (evaluation axis) and surface normal line: less than 30°



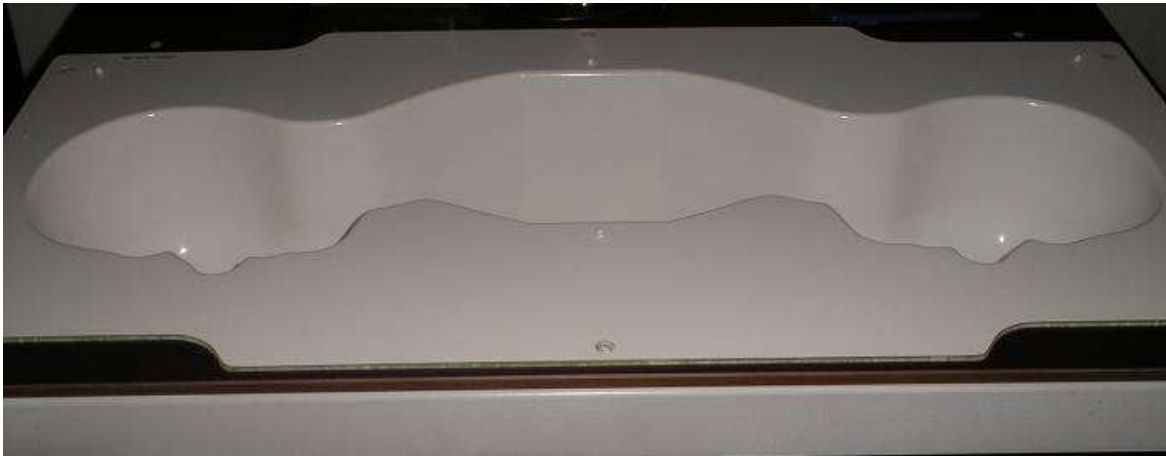
Figure 1 – Satimo COMOSAR Dosimetric E field Dipole

3.2.2 Phantom

For the measurements the SAM twin phantom 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.

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

SN 32/14 SAM115



3.2.3 Device Holder

The COMOSAR device holder is designed to cope with different positions given in the standard. It has two scales for the device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear reference points). The rotation center for both scales is the ear reference point (EPR).

Thus the device needs no repositioning when changing the angles.

The COMOSAR device holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivity $\epsilon_r = 3$ and loss tangent $\delta = 0.02$. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.





4. Tissue Simulating Liquids

4.1 Simulating Liquids Parameter Check

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15cm. For head SAR testing the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15cm For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15cm. The nominal dielectric values of the tissue simulating liquids in the phantom and the tolerance of 5% are listed in 4.2

Frequency (MHz)	Water %	Suger %	Cellulose %	Salt %	Preventol %	Dgbe %	Conductivity σ	Permittivity: ϵ
Head								
835	40.3	57.9	0.2	1.4	0.2	0	0.90	41.5
1900	54.9	0	0	0.18	0	44.92	1.4	40.0
2450	46.7	0	0	0	0	53.3	1.80	0
Body								
835	50.8	48.2	0	0.9	0.1	0	0.97	55.2
1900	40.5	58.0	0	0.5	0.5	0	1.52	53.3
2450	73.2	0	0	0.04	0	26.7	1.95	52.7



**LIQUID MEASUREMENT RESULTS****Date:** Feb.12, 2015 **Ambient condition:** Temperature 21.4°C Relative humidity: 50.9%

Head Simulating Liquid		Parameters	Target	Measured	Deviation[%]	Limited[%]
Frequency	Temp. [°C]					
824.2 MHz	20.0	Permittivity:	41.5	42.81	3.16%	± 5
		Conductivity:	0.90	0.86	-4.44%	± 5
826.4 MHz	20.0	Permittivity:	41.5	42.75	3.01%	± 5
		Conductivity:	0.90	0.87	-3.33%	± 5
835 MHz	20.0	Permittivity:	41.5	42.03	1.28%	± 5
		Conductivity:	0.90	0.88	-2.22%	± 5
836.6 MHz	20.0	Permittivity:	41.5	41.99	1.18%	± 5
		Conductivity:	0.90	0.90	0.00%	± 5
846.6 MHz	20.0	Permittivity:	41.5	41.57	0.17%	± 5
		Conductivity:	0.90	0.91	1.11%	± 5
848.8MHz	20.0	Permittivity:	41.5	41.00	-1.20%	± 5
		Conductivity:	0.90	0.93	3.33%	± 5

Date: Feb.12, 2015 **Ambient condition:** Temperature 21.4°C Relative humidity: 50.9%

Body Simulating Liquid		Parameters	Target	Measured	Deviation[%]	Limited[%]
Frequency	Temp.[°C]					
824.2 MHz	20.0	Permittivity:	55.20	56.45	2.26%	± 5
		Conductivity:	0.97	0.93	-4.12%	± 5
826.4 MHz	20.0	Permittivity:	55.20	56.08	1.59%	± 5
		Conductivity:	0.97	0.95	-2.06%	± 5
835 MHz	20.0	Permittivity:	55.20	55.43	0.42%	± 5
		Conductivity:	0.97	0.95	-2.06%	± 5
836.6 MHz	20.0	Permittivity:	55.20	55.34	0.25%	± 5
		Conductivity:	0.97	0.96	-1.03%	± 5
846.6 MHz	20.0	Permittivity:	55.20	55.16	-0.07%	± 5
		Conductivity:	0.97	0.97	0.00%	± 5
848.8MHz	20.0	Permittivity:	55.20	55.11	-0.16%	± 5
		Conductivity:	0.97	0.98	1.03%	± 5

Date: Feb.13, 2015 **Ambient condition:** Temperature 20.9°C Relative humidity: 51.4%

Head Simulating Liquid		Parameters	Target	Measured	Deviation[%]	Limited[%]
Frequency	Temp. [°C]					
1850.2 MHz	20.2	Permittivity:	40.00	41.83	4.58%	± 5
		Conductivity:	1.40	1.35	-3.57%	± 5
1852.4 MHz	20.2	Permittivity:	40.00	41.29	3.23%	± 5
		Conductivity:	1.40	1.38	-1.43%	± 5
1880 MHz	20.2	Permittivity:	40.00	41.02	2.55%	± 5
		Conductivity:	1.40	1.40	0.00%	± 5
1900 MHz	20.2	Permittivity:	40.00	40.91	2.27%	± 5
		Conductivity:	1.40	1.40	0.00%	± 5
1907.6 MHz	20.2	Permittivity:	40.00	40.43	1.08%	± 5
		Conductivity:	1.40	1.41	0.71%	± 5
1909.8 MHz	20.2	Permittivity:	40.00	40.21	0.53%	± 5
		Conductivity:	1.40	1.43	2.14%	± 5

Date: Feb.13, 2015 **Ambient condition:** Temperature 20.9°C Relative humidity: 51.4%

Body Simulating Liquid		Parameters	Target	Measured	Deviation[%]	Limited[%]
Frequency	Temp. [°C]					
1850.2 MHz	20.2	Permittivity:	53.30	54.16	1.61%	± 5
		Conductivity:	1.52	1.46	-3.95%	± 5
1852.4 MHz	20.2	Permittivity:	53.30	54.09	1.48%	± 5
		Conductivity:	1.52	1.47	-3.29%	± 5
1880 MHz	20.2	Permittivity:	53.30	53.77	0.88%	± 5
		Conductivity:	1.52	1.50	-1.32%	± 5
1900 MHz	20.2	Permittivity:	53.30	53.05	-0.47%	± 5
		Conductivity:	1.52	1.53	0.66%	± 5
1907.6 MHz	20.2	Permittivity:	53.30	52.61	-1.29%	± 5
		Conductivity:	1.52	1.54	1.32%	± 5
1909.8 MHz	20.2	Permittivity:	53.30	52.08	-2.29%	± 5
		Conductivity:	1.52	1.57	3.29%	± 5



Date: Mar.18, 2015 **Ambient condition:** Temperature 21.4°C Relative humidity: 50.9%

Head Simulating Liquid		Parameters	Target	Measured	Deviation[%]	Limited[%]
Frequency	Temp. [°C]					
2412 MHz	20.0	Permittivity:	39.2	39.99	2.02%	± 5
		Conductivity:	1.80	1.78	-1.11%	± 5
2437 MHz	20.0	Permittivity:	39.2	39.90	1.79%	± 5
		Conductivity:	1.80	1.81	0.56%	± 5
2450 MHz	20.0	Permittivity:	39.2	39.48	0.71%	± 5
		Conductivity:	1.80	1.83	1.67%	± 5
2462 MHz	20.0	Permittivity:	39.2	38.77	-1.10%	± 5
		Conductivity:	1.80	1.84	2.22%	± 5

Date: Mar.18, 2015 **Ambient condition:** Temperature 21.4°C Relative humidity: 50.9%

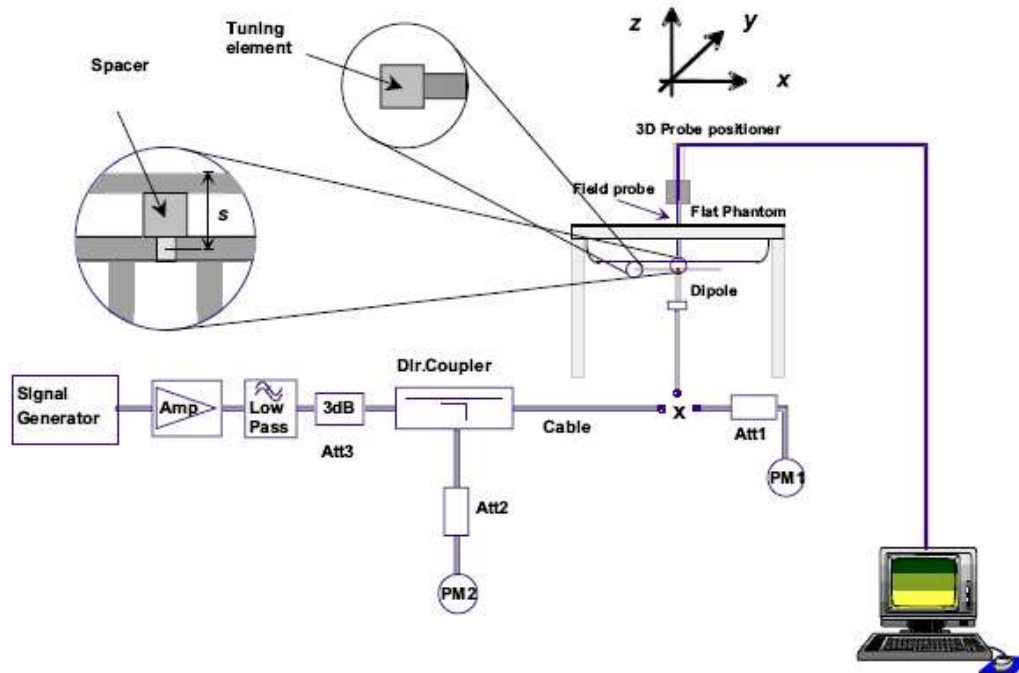
Body Simulating Liquid		Parameters	Target	Measured	Deviation[%]	Limited[%]
Frequency	Temp. [°C]					
2412 MHz	20.0	Permittivity:	52.7	54.00	2.47%	± 5
		Conductivity:	1.95	1.90	-2.56%	± 5
2437 MHz	20.0	Permittivity:	52.7	53.16	0.87%	± 5
		Conductivity:	1.95	1.92	-1.54%	± 5
2450 MHz	20.0	Permittivity:	52.7	53.01	0.59%	± 5
		Conductivity:	1.95	1.93	-1.03%	± 5
2462 MHz	20.0	Permittivity:	52.7	52.73	0.06%	± 5
		Conductivity:	1.95	1.97	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.



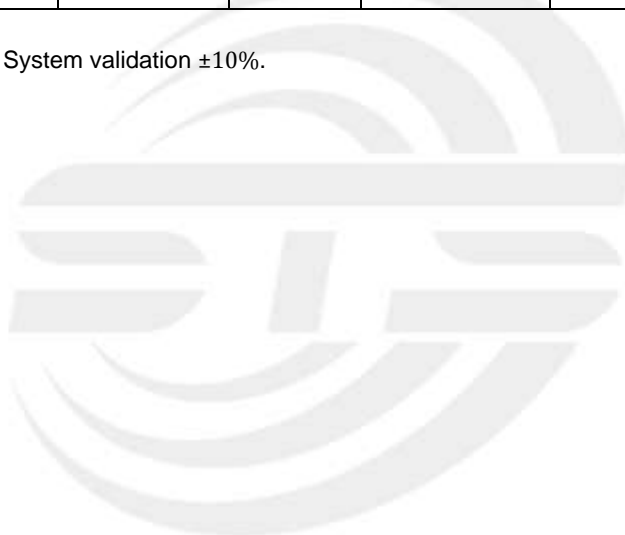


5.2 Validation Result

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

Freq.(M Hz)	Power(m W)	Tested Value (W/Kg)	Normalized SAR (W/kg)	Target(W /Kg)	Limited[%]	Ambient Temperature (°C)	Relative Humidity (%)	Date
835 Head	125.9	1.220	9.763	9.63	8.667-10.593	21.4	50.9	2015-02-12
835 Body	125.9	1.211	9.691	9.93	8.937-10.923	21.4	50.9	2015-02-12
1900 Head	63.1	2.480	39.682	39.84	35.856-43.824	20.9	51.4	2015-02-13
1900 Body	63.1	2.489	39.818	43.33	38.997-47.663	20.9	51.4	2015-02-13
2450 Head	63.1	3.291	52.650	54.70	49.230-60.170	20.9	50.9	2015-03-18
2450 Body	63.1	3.396	54.333	55.65	50.085-61.215	20.9	50.9	2015-03-18

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





6. SAR Evaluation Procedures

The EUT is set to transmit at the required power in line with product specification, at each frequency relating to the LOW, MID, and HIGH channel settings.

Pre-scans are made on the device to establish the location for the transmitting antenna, using a large area scan in either air or tissue simulation fluid.

The EUT is placed against the SAM twin phantom where the maximum area scan dimensions are larger than the physical size of the resonating antenna. When the scan size is not large enough to cover the peak SAR distribution, it is modified by either extending the area scan size in both the X and Y directions, or the device is shifted within the predefined area.

The area scan is then run to establish the peak SAR location (interpolated resolution set at 1mm^2) which is then used to orient the center of the zoom scan. The zoom scan is then executed and the 1g and 10g averages are derived from the zoom scan volume (interpolated resolution set at 1mm^3).

When multiple peak SAR location were found during the same configuration or test mode, Zoom scan shall performed on each peak SAR location, only the peak point with maximum SAR value will be reported for the configuration or test mode.

Area Scan& Zoom Scan

Area scans are defined prior to the measurement process being executed with a user defined variable spacing between each measurement point (integral) allowing low uncertainty measurements to be conducted. Scans defined for FCC applications utilize a 10mm^2 step integral, with 1mm interpolation used to locate the peak SAR area used for zoom scan assessments. In this report, Area Scan: $dx=8\text{mm}$ $dy=8\text{mm}$

When an Area Scan has measured all reachable points, it computes the field maxima found in the scanned area, within a range of the global maximum. The range (in dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE 1528-2003 and relevant KDB files, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan).

Zoom Scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1 g and 10 g of simulated tissue. A density of 1000 kg/m^3 is used to represent the head and body tissue density and not the phantom liquid density, in order to be consistent with the definition of the liquid dielectric properties, i.e. the side length of the 1 g cube is 10mm, with the side length of the 10 g cube 21,5mm.

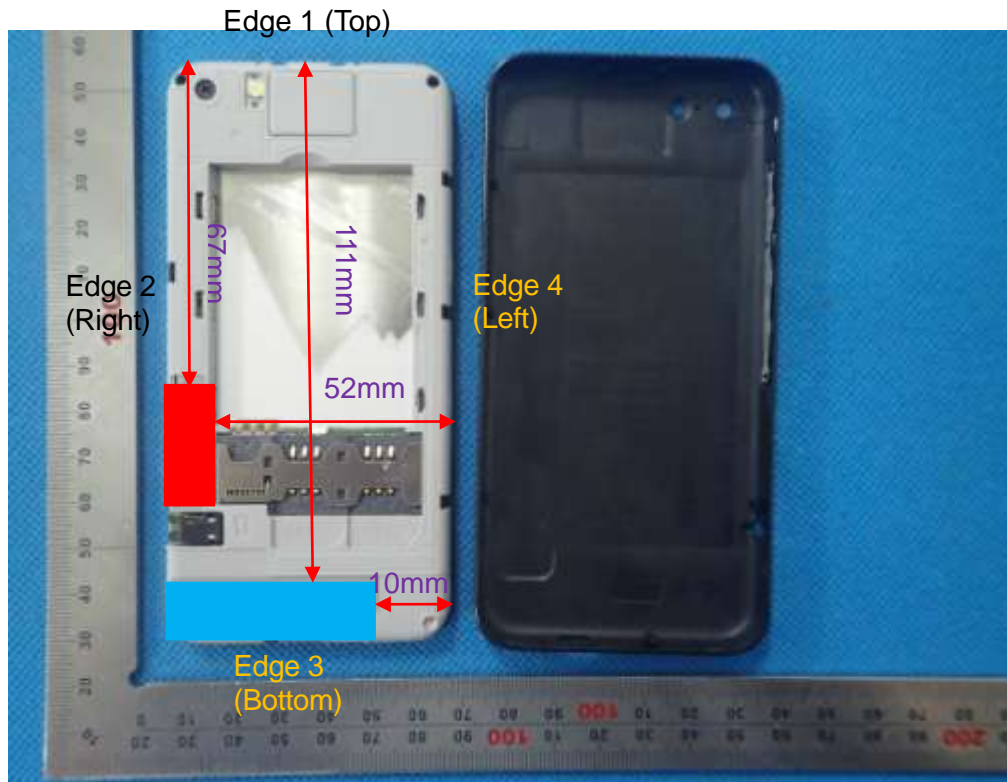
The zoom scan integer steps can be user defined so as to reduce uncertainty, but normal practice for typical test applications utilize a physical step of $8\text{mm} \times 8\text{mm} \times 5\text{mm}$ providing a volume of 30mm in the X & Y axis, and 30mm in the Z axis.



			$\leq 3 \text{ GHz}$	$> 3 \text{ GHz}$
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			$5 \pm 1 \text{ mm}$	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5 \text{ mm}$
Maximum probe angle from probe axis to phantom surface normal at the measurement location			$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
Maximum area scan spatial resolution: $\Delta x_{\text{Area}}, \Delta y_{\text{Area}}$			$\leq 2 \text{ GHz}: \leq 15 \text{ mm}$ $2 - 3 \text{ GHz}: \leq 12 \text{ mm}$	$3 - 4 \text{ GHz}: \leq 12 \text{ mm}$ $4 - 6 \text{ GHz}: \leq 10 \text{ mm}$
			When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be \leq the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: $\Delta x_{\text{Zoom}}, \Delta y_{\text{Zoom}}$			$\leq 2 \text{ GHz}: \leq 8 \text{ mm}$ $2 - 3 \text{ GHz}: \leq 5 \text{ mm}^*$	$3 - 4 \text{ GHz}: \leq 5 \text{ mm}^*$ $4 - 6 \text{ GHz}: \leq 4 \text{ mm}^*$
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{\text{Zoom}}(n)$		$\leq 5 \text{ mm}$	$3 - 4 \text{ GHz}: \leq 4 \text{ mm}$ $4 - 5 \text{ GHz}: \leq 3 \text{ mm}$ $5 - 6 \text{ GHz}: \leq 2 \text{ mm}$
	graded grid	$\Delta z_{\text{Zoom}}(1)$: between 1 st two points closest to phantom surface	$\leq 4 \text{ mm}$	$3 - 4 \text{ GHz}: \leq 3 \text{ mm}$ $4 - 5 \text{ GHz}: \leq 2.5 \text{ mm}$ $5 - 6 \text{ GHz}: \leq 2 \text{ mm}$
		$\Delta z_{\text{Zoom}}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$	
Minimum zoom scan volume	x, y, z		$\geq 30 \text{ mm}$	$3 - 4 \text{ GHz}: \geq 28 \text{ mm}$ $4 - 5 \text{ GHz}: \geq 25 \text{ mm}$ $5 - 6 \text{ GHz}: \geq 22 \text{ mm}$
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.				
* When zoom scan is required and the <u>reported</u> SAR from the <i>area scan based 1-g SAR estimation</i> procedures of KDB 447498 is $\leq 1.4 \text{ W/kg}$, $\leq 8 \text{ mm}$, $\leq 7 \text{ mm}$ and $\leq 5 \text{ mm}$ zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.				

7. EUT Antenna Location Sketch

It is a Mobile phone, support GSM mode and WCDMA mode.



- WWAN Antenna
- WIFI/BT Antenna





7.1 SAR TEST EXCLUSION CONSIDER TABLE

For WWAN mode:

Test Configurations	Antenna to edges/surface	SAR required
Back	<25mm	Yes
Front	<25mm	Yes
Edge 1 (Top)	111mm	No
Edge 2 (Right)	1 mm	Yes
Edge 3 (Bottom)	1 mm	Yes
Edge 4 (Left)	10 mm	Yes

For WLAN mode:

Test Configurations	Antenna to edges/surface	SAR required
Back	<25mm	Yes
Front	<25mm	Yes
Edge 1 (Top)	29mm	No
Edge 2 (Right)	1 mm	Yes
Edge 3 (Bottom)	67mm	No
Edge 4 (Left)	52mm	No

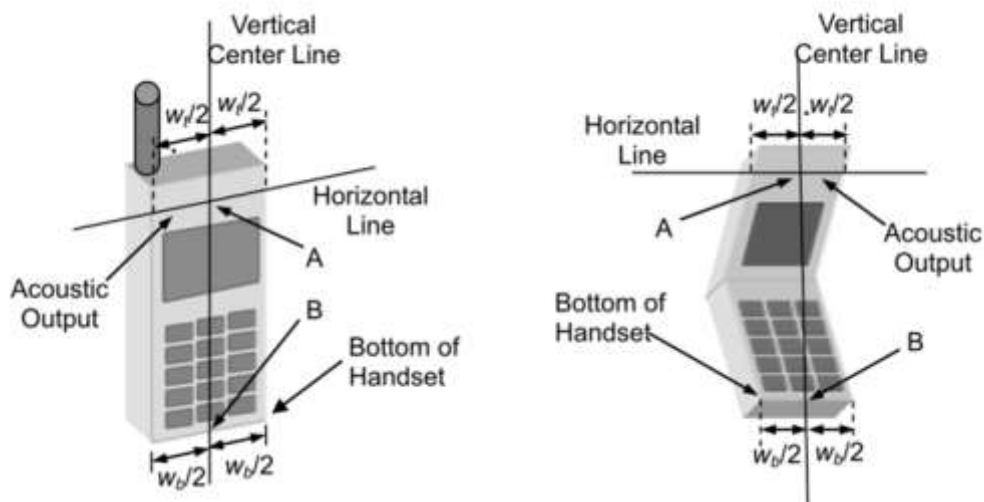
Note: SAR is not required for the distance between the antenna and the edge is <25mm as per KDB 941225D06 Hotspot SAR

8. EUT Test Position

This EUT was tested in Right Cheek, Right Titled, Left Cheek, Left Titled Front Face and Rear Face and 4 edges.

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 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



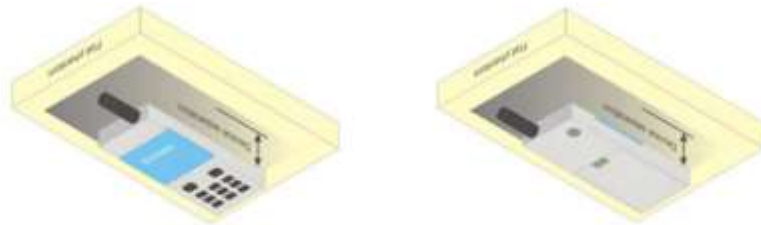
Title Position

- (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.



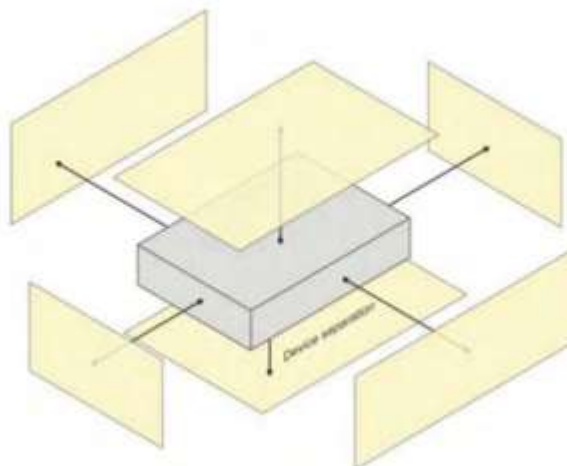
Body-worn Position Conditions

- (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. Measurement 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
Readout related									
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 cheek Uncertainty

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



16	Deviation of experimental source from numerical source	4	N	1	1	1	4.00	4.00	∞
17	Input power and SAR drif measurement	5	R	√3	1	1	2.89	2.89	∞
18	Dipole Axis to liquid Distance	2	R	√3	1	1			∞
Phantom and set-up									
19	Phantom uncertainty	4.0	R	√3	1	1	2.31	2.31	∞
20	Uncertainty in SAR correction for deviation(in permittivity and conductivity)	2.0	N	1	1	0.84	2	1.68	∞
21	Liquid conductivity (target)	2	N	1	1	0.84	2.00	1.68	∞
22	Liquid conductivity (temperature uncertainty)	2.5	N	1	0.78	0.71	1.95	1.78	5
23	Liquid conductivity (meas)	4	N	1	0.23	0.26	0.92	1.04	5
24	Liquid Permittivity (target)	2.5	N	1	0.78	0.71	1.95	1.78	∞
25	Liquid 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

GSM BAND

Mode	Frequency (MHz)	Peak Power	Avg. Burst Power(dBm)	Duty cycle Factor(dB)	Frame Power(dBm)
GSM850	824.2	32.26	31.74	-9	22.74
	836.6	32.28	31.84	-9	22.84
	848.8	32.15	31.93	-9	22.93
GPRS850 (1 Slot)	824.2	31.82	31.27	-9	22.27
	836.6	31.77	31.25	-9	22.25
	848.8	31.73	31.24	-9	22.24
GPRS850 (2 Slot)	824.2	30.54	30.33	-6	24.33
	836.6	30.58	30.27	-6	24.27
	848.8	30.64	30.21	-6	24.21
GPRS850 (3 Slot)	824.2	28.89	28.25	-4.26	23.99
	836.6	28.95	28.21	-4.26	23.95
	848.8	28.85	28.16	-4.26	23.9
GPRS850 (4 Slot)	824.2	27.88	27.23	-3	24.23
	836.6	27.92	27.17	-3	24.17
	848.8	27.83	27.12	-3	24.12
EDGE850 (1 Slot)	824.2	28.67	27.98	-9	18.98
	836.6	28.62	27.94	-9	18.94
	848.8	28.54	27.91	-9	18.91
EDGE850 (2 Slot)	824.2	28.49	27.86	-6	21.86
	836.6	28.45	27.82	-6	21.82
	848.8	28.41	27.81	-6	21.81
EDGE850 (3 Slot)	824.2	26.69	26.05	-4.26	21.79
	836.6	26.64	26.03	-4.26	21.77
	848.8	26.57	26.02	-4.26	21.76
EDGE850 (4 Slot)	824.2	26.48	25.96	-3	22.96
	836.6	26.42	25.92	-3	22.92
	848.8	26.44	25.87	-3	22.87

**GSM BAND CONTINUE**

Mode	Frequency (MHz)	Peak Power	Avg. Burst Power(dBm)	Duty cycle Factor(dB)	Frame Power(dBm)
GSM1900	1850.2	28.99	28.78	-9	19.78
	1880	28.85	28.64	-9	19.64
	1909.8	28.94	28.73	-9	19.73
GPRS1900 (1 Slot)	1850.2	28.92	28.65	-9	19.65
	1880	28.95	28.54	-9	19.54
	1909.8	28.94	28.72	-9	19.72
GPRS1900 (2 Slot)	1850.2	27.93	27.55	-6	21.55
	1880	27.81	27.54	-6	21.54
	1909.8	27.85	27.65	-6	21.65
GPRS1900 (3 Slot)	1850.2	25.90	25.55	-4.26	21.29
	1880	25.74	25.34	-4.26	21.08
	1909.8	25.72	25.45	-4.26	21.19
GPRS1900 (4 Slot)	1850.2	24.94	24.54	-3	21.54
	1880	24.65	24.36	-3	21.36
	1909.8	24.64	24.32	-3	21.32
EDGE1900 (1 Slot)	1850.2	26.83	26.21	-9	17.21
	1880	26.77	26.18	-9	17.18
	1909.8	26.69	26.13	-9	17.13
EDGE1900 (2 Slot)	1850.2	25.87	25.44	-6	19.44
	1880	25.83	25.41	-6	19.41
	1909.8	25.76	25.36	-6	19.36
EDGE1900 (3 Slot)	1850.2	24.64	24.06	-4.26	19.8
	1880	24.61	24.02	-4.26	19.76
	1909.8	24.59	24.11	-4.26	19.85
EDGE1900 (4 Slot)	1850.2	23.83	23.35	-3	20.35
	1880	23.77	23.32	-3	20.32
	1909.8	23.75	23.24	-3	20.24

Note 1:

The Frame Power (Source-based time-averaged Power) is scaled the maximum burst average power based on time slots. The calculated methods are show as following:

Frame Power = Max burst power (1 Up Slot) – 9 dB

Frame Power = Max burst power (2 Up Slot) – 6 dB

Frame Power = Max burst power (3 Up Slot) – 4.26 dB

Frame Power = Max burst power (4 Up Slot) – 3 dB

UMTS BAND

HSDPA Setup Configuration:

- The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
- The RF path losses were compensated into the measurements.
- A call was established between EUT and Based Station with following setting:
 - (1) Set Gain Factors(β_c and β_d) parameters set according to each
 - (2) Set RMC 12.2Kbps+HSDPA mode.
 - (3) Set Cell Power=-86dBm
 - (4) Set HS-DSCH Configuration Type to FRC (H-set 1, QPSK)
 - (5) Select HSDPA Uplink Parameters
 - (6) Set Delta ACK, Delta NACK and Delta CQI=8
 - (7) Set Ack - Nack Repetition Factor to 3
 - (8) Set CQI Feedback Cycle (k) to 4ms
 - (9) Set CQI Repetition Factor to 2
 - (10) Power Ctrl Mode=All Up bits
- The transmitted maximum output power was recorded.

Table C.10.2.4: β values for transmitter characteristics tests with HS-DPCCH

Sub-test	β_c (Note5)	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15(Not e 4)	15/15(Not e 4)	64	12/15(Note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: ΔACK , $\Delta NACK$ and $\Delta CQI = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$.

Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, ΔACK and $\Delta NACK = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$, and $\Delta CQI = 24/15$ with $\beta_{hs} = 24/15 * \beta_c$.

Note 3: CM = 1 for $\beta_c/\beta_d = 12/15$, $hs/c = 24/15$. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 4: For subtest 2 the c/d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $c = 11/15$ and $d = 15/15$.

HSUPA Setup Configuration:

- The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
- The RF path losses were compensated into the measurements.
- A call was established between EUT and Base Station with following setting * :
 - (1) Call Configs = 5.2B, 5.9B, 5.10B, and 5.13.2B with QPSK
 - (2) Set the Gain Factors (β_c and β_d) and parameters (AG Index) were set according to each specific sub-test in the following table, C11.1.3, quoted from the TS 34.121
 - (3) Set Cell Power = -86 dBm
 - (4) Set Channel Type = 12.2k + HSPA
 - (5) Set UE Target Power
 - (6) Power Ctrl Mode= Alternating bits
 - (7) Set and observe the E-TFCI
 - (8) Confirm that E-TFCI is equal to the target E-TFCI of 75 for sub-test 1, and other subtest's E-TFCI
- The transmitted maximum output power was recorded.

Table C.11.1.3: β values for transmitter characteristics tests with HS-DPCCH and E-DCH

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note1)	β_{ec}	β_{ed} (Note 4) (Note 5)	β_{ed} (SF)	β_{ed} (Codes)	CM (dB) (Note 2)	MPR (dB) (Note 2) (Note 6)	AG Index (Note 5)	E-TFCI
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/225	1309/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	$\beta_{ed1}: 47/15$ $\beta_{ed2}: 47/15$	4 4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67

Note 1: For sub-test 1 to 4, ΔACK , $\Delta NACK$ and $\Delta CQI = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$. For sub-test 5, ΔACK , $\Delta NACK$ and $\Delta CQI = 5/15$ with $\beta_{hs} = 5/15 * \beta_c$.

Note 2: CM = 1 for $\beta_c/\beta_d = 12/15$, $hs/c = 24/15$. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.

Note 3: For subtest 1 the c/d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $c = 10/15$ and $d = 15/15$.

Note 4: In case of testing by UE using E-DPDCH Physical Layer category 1, Sub-test 3 is omitted according to TS25.306 Table 5.1g.

Note 5: β_{ed} cannot be set directly; it is set by Absolute Grant Value.

Note 6: For subtests 2, 3 and 4, UE may perform E-DPDCH power scaling at max power which could results in slightly smaller MPR values.



UMTS BAND II

Mode	Frequency (MHz)	Peak Power(dBm)	Avg. Burst Power(dBm)
WCDMA 1900 RMC	1852.4	22.63	22.31
	1880	22.33	22.05
	1907.6	22.25	21.97
HSDPA Subtest 1	1852.4	22.51	22.15
	1880	22.25	22.04
	1907.6	22.24	21.95
HSDPA Subtest 2	1852.4	21.49	21.32
	1880	21.15	20.73
	1907.6	21.23	21.05
HSDPA Subtest 3	1852.4	21.04	20.64
	1880	20.49	20.15
	1907.6	20.65	20.33
HSDPA Subtest 4	1852.4	20.36	20.15
	1880	19.84	19.54
	1907.6	20.05	19.82
HSUPA Subtest 1	1852.4	22.47	22.26
	1880	22.21	21.97
	1907.6	22.15	21.95
HSUPA Subtest 2	1852.4	21.45	21.14
	1880	21.24	20.96
	1907.6	21.07	20.85
HSUPA Subtest 3	1852.4	20.92	20.72
	1880	20.74	20.56
	1907.6	20.36	19.92
HSUPA Subtest 4	1852.4	20.25	20.05
	1880	20.28	19.94
	1907.6	19.85	19.47
HSUPA Subtest 5	1852.4	19.72	19.45
	1880	19.63	19.26
	1907.6	19.24	18.93



UMTS BAND V

Mode	Frequency (MHz)	Peak Power(dBm)	Avg. Burst Power(dBm)
WCDMA 850 RMC	826.4	22.53	22.25
	836.6	22.97	22.68
	846.6	22.64	22.27
HSDPA Subtest 1	826.4	22.55	22.36
	836.6	22.93	22.51
	846.6	22.52	22.25
HSDPA Subtest 2	826.4	21.45	21.21
	836.6	21.94	21.55
	846.6	21.41	21.11
HSDPA Subtest 3	826.4	20.76	20.54
	836.6	20.83	20.48
	846.6	20.85	20.62
HSDPA Subtest 4	826.4	20.23	19.83
	836.6	20.71	20.35
	846.6	20.48	19.96
HSUPA Subtest 1	826.4	22.46	22.34
	836.6	22.43	22.25
	846.6	22.54	22.36
HSUPA Subtest 2	826.4	21.52	21.31
	836.6	21.67	21.25
	846.6	21.45	21.22
HSUPA Subtest 3	826.4	20.96	20.66
	836.6	20.83	20.72
	846.6	20.75	20.44
HSUPA Subtest 4	826.4	20.34	19.93
	836.6	20.62	20.25
	846.6	20.29	19.85
HSUPA Subtest 5	826.4	19.65	19.44
	836.6	19.82	19.53
	846.6	19.67	19.46

**GSM Card 2 Slot:****GSM 850:**

Mode	Frequency (MHz)	Peak Power	Avg. Burst Power(dBm)	Duty cycle Factor(dB)	Frame Power(dBm)
GSM850	824.2	32.14	31.57	-9	22.57
	836.6	32.19	31.61	-9	22.61
	848.8	32.21	31.68	-9	22.68
GPRS850 (1 Slot)	824.2	31.61	31.31	-9	25.31
	836.6	31.58	31.26	-9	25.26
	848.8	31.51	31.21	-9	25.21
GPRS850 (2 Slot)	824.2	30.62	30.23	-6	25.97
	836.6	30.73	30.29	-6	26.03
	848.8	30.64	30.16	-6	25.9
GPRS850 (3 Slot)	824.2	28.88	28.45	-4.26	25.45
	836.6	28.98	28.53	-4.26	25.53
	848.8	28.83	28.41	-4.26	25.41
GPRS850 (4 Slot)	824.2	27.76	27.48	-3	24.48
	836.6	27.71	27.41	-3	24.41
	848.8	27.85	27.55	-3	24.55
EDGE850 (1 Slot)	824.2	28.64	28.12	-9	19.12
	836.6	28.57	28.08	-9	19.08
	848.8	28.61	28.11	-9	19.11
EDGE850 (2 Slot)	824.2	28.59	28.05	-6	22.05
	836.6	28.51	28.03	-6	22.03
	848.8	28.49	28.06	-6	22.06
EDGE850 (3 Slot)	824.2	26.69	26.16	-4.26	21.9
	836.6	26.61	26.12	-4.26	21.86
	848.8	26.57	26.07	-4.26	21.81
EDGE850 (4 Slot)	824.2	26.84	26.38	-3	23.38
	836.6	26.82	26.32	-3	23.32
	848.8	26.78	26.29	-3	23.29

**PCS 1900:**

Mode	Frequency (MHz)	Peak Power	Avg. Burst Power(dBm)	Duty cycle Factor(dB)	Frame Power(dBm)
GSM1900	1850.2	28.68	28.34	-9	19.34
	1880	28.62	28.31	-9	19.31
	1909.8	28.57	28.24	-9	19.24
GPRS1900 (1 Slot)	1850.2	28.48	28.16	-9	22.16
	1880	28.42	28.12	-9	22.12
	1909.8	28.41	28.09	-9	22.09
GPRS1900 (2 Slot)	1850.2	27.87	27.72	-6	23.46
	1880	27.83	27.69	-6	23.43
	1909.8	27.81	27.61	-6	23.35
GPRS1900 (3 Slot)	1850.2	25.89	25.59	-4.26	22.59
	1880	25.81	25.53	-4.26	22.53
	1909.8	25.77	25.44	-4.26	22.44
GPRS1900 (4 Slot)	1850.2	24.84	24.67	-3	21.67
	1880	24.82	24.64	-3	21.64
	1909.8	24.77	24.61	-3	21.61
EDGE1900 (1 Slot)	1850.2	26.63	26.39	-9	17.39
	1880	26.61	26.35	-9	17.35
	1909.8	26.59	26.32	-9	17.32
EDGE1900 (2 Slot)	1850.2	25.73	25.47	-6	19.47
	1880	25.68	25.42	-6	19.42
	1909.8	25.64	25.39	-6	19.39
EDGE1900 (3 Slot)	1850.2	24.61	24.44	-4.26	20.18
	1880	24.58	24.35	-4.26	20.09
	1909.8	24.54	24.32	-4.26	20.06
EDGE1900 (4 Slot)	1850.2	23.53	23.25	-3	20.25
	1880	23.44	23.11	-3	20.11
	1909.8	23.39	23.12	-3	20.12

Note 1:

The Frame Power (Source-based time-averaged Power) is scaled the maximum burst average power based on time slots. The calculated methods are show as following:

Frame Power = Max burst power (1 Up Slot) – 9 dB

Frame Power = Max burst power (2 Up Slot) – 6 dB

Frame Power = Max burst power (3 Up Slot) – 4.26 dB

Frame Power = Max burst power (4 Up Slot) – 3 dB

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

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

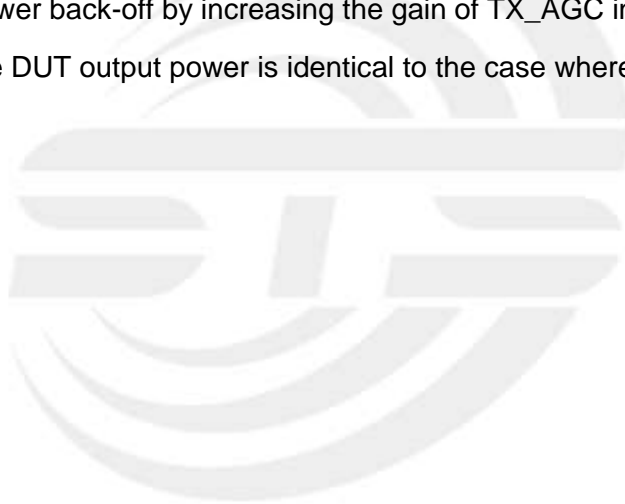
UE Transmit Channel Configuration	CM(db)	MPR(db)
For all combinations of ,DPDCH,DPCCH HS-DPDCH,E-DPDCH and E-DPCCH	$0 \leq CM \leq 3.5$	$MAX(CM-1,0)$
Note: CM=1 for $\beta_d/\beta_{d=12/15}$, $\beta_{hs}/\beta_c=24/15$. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR 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	9.75
	6	2437	9.69
	11	2462	9.51
802.11g	1	2412	8.38
	6	2437	8.27
	11	2462	8.36
802.11n(HT-20)	1	2412	8.32
	6	2437	8.24
	11	2462	8.21
802.11n(HT-40)	3	2422	6.68
	6	2437	6.61
	9	2452	6.53

Bluetooth 3.0

Mode	Channel Number	Frequency (MHz)	Peak Power (dBm)
GFSK(1M)	0	2402	-1.91
	39	2441	-0.66
	78	2480	-0.53
$\pi/4$ -DQPSK(2Mbps)	0	2402	-2.58
	39	2441	-2.16
	78	2480	-2.05
8-DPSK(3Mbps)	0	2402	-2.44
	39	2441	-2.14
	78	2480	-2.10

BT 4.0

Mode	Channel Number	Frequency (MHz)	Peak Power (dBm)
GFSK	1	2402	-7.36
	20	2441	-6.21
	40	2480	-7.70

11. EUT And Test Setup Photo

11.1 EUT Photo



Front side



Back side



Top side



Bottom side



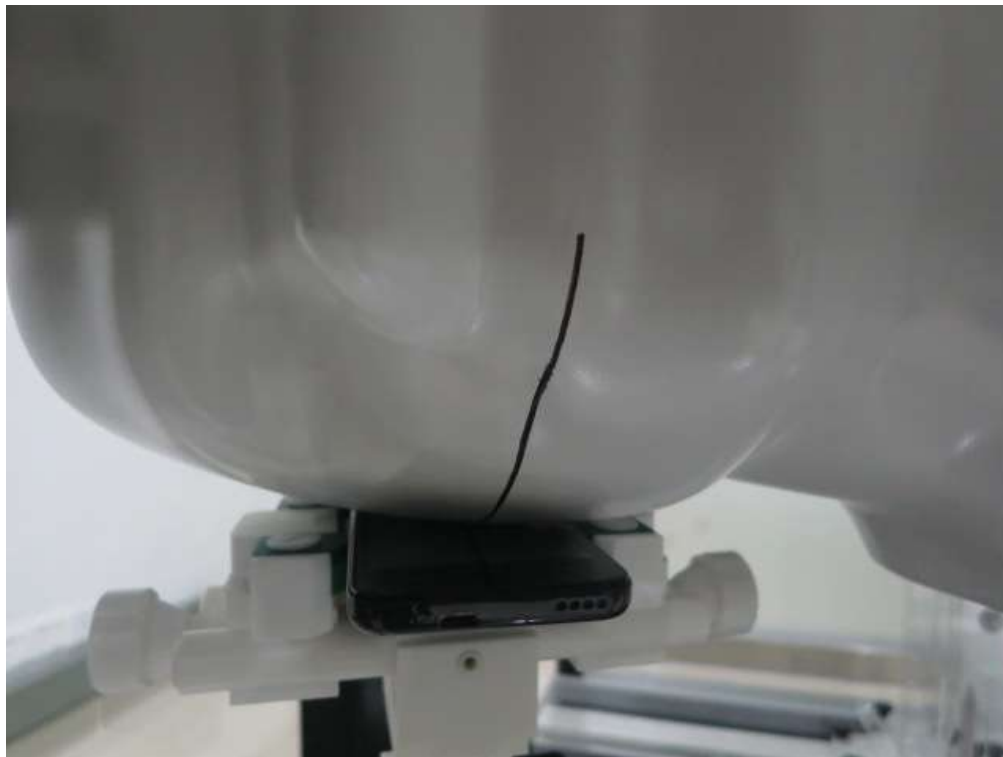
Left side



Right side



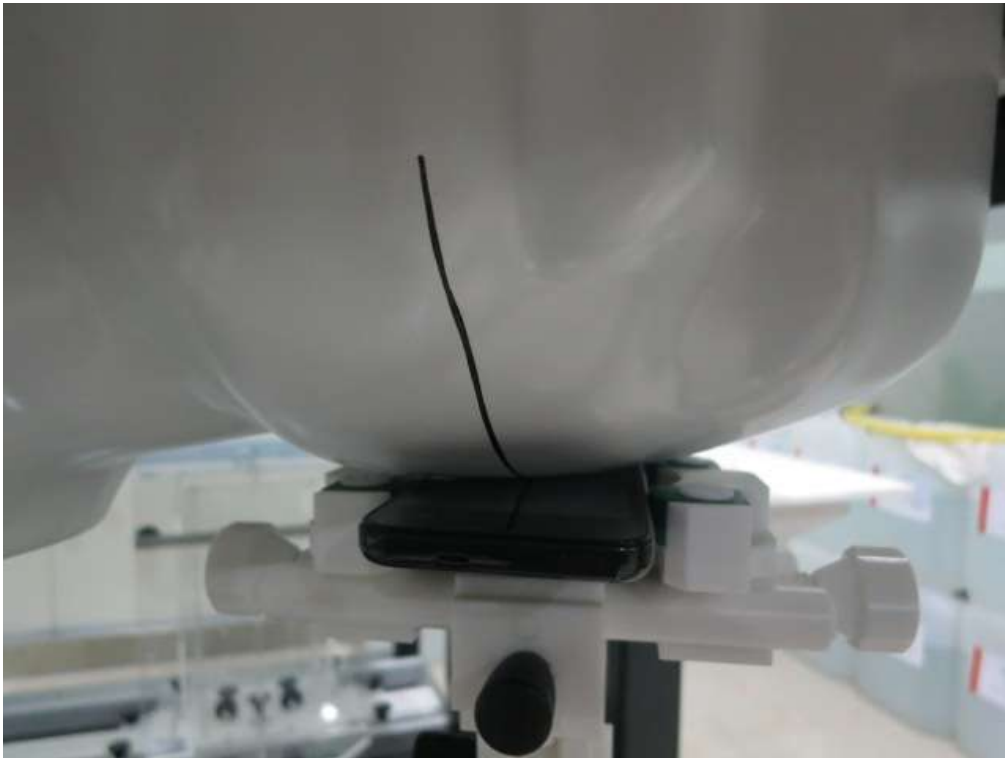
11.2 Setup Photo



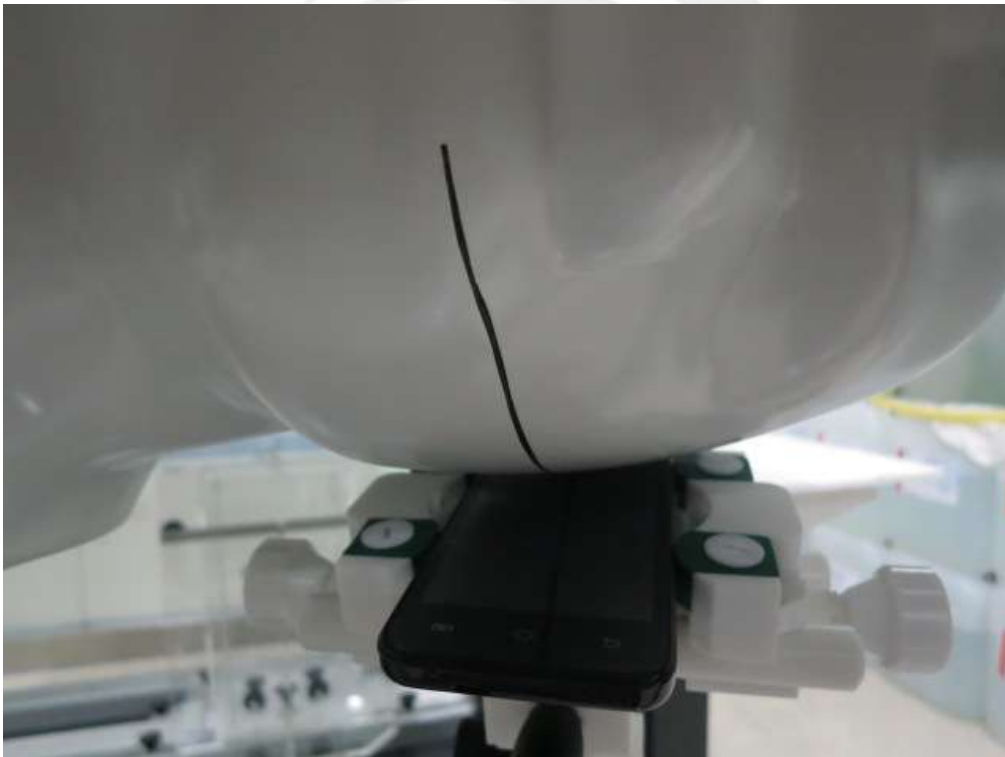
Right Touch



Right Tilt



Left Touch



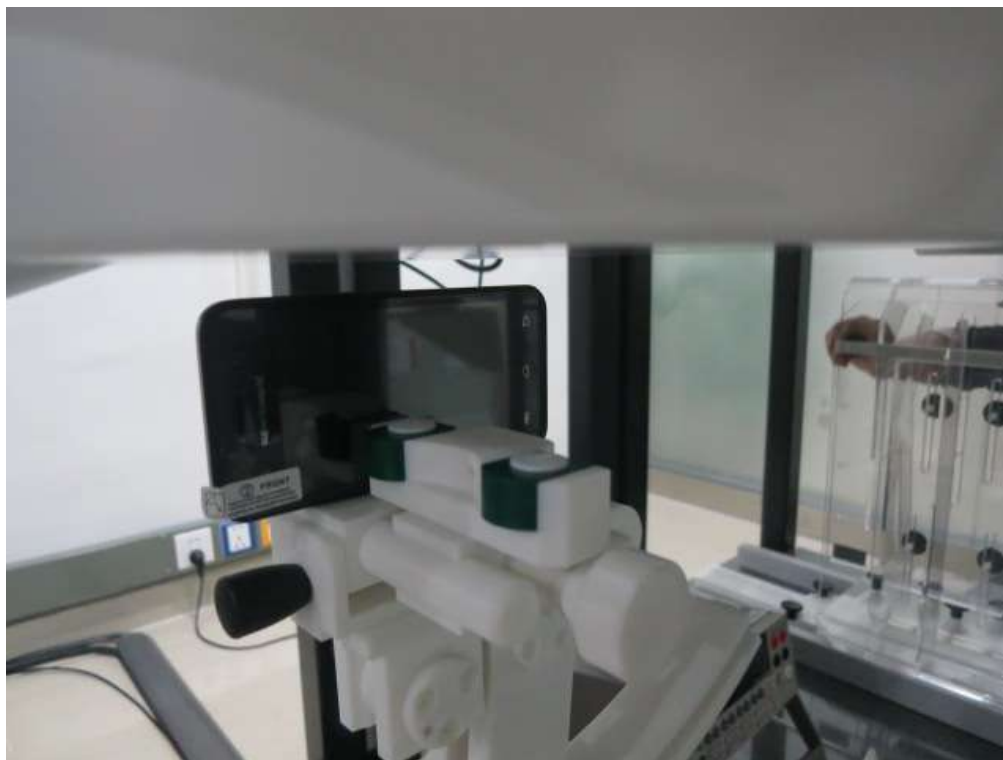
Left Tilt



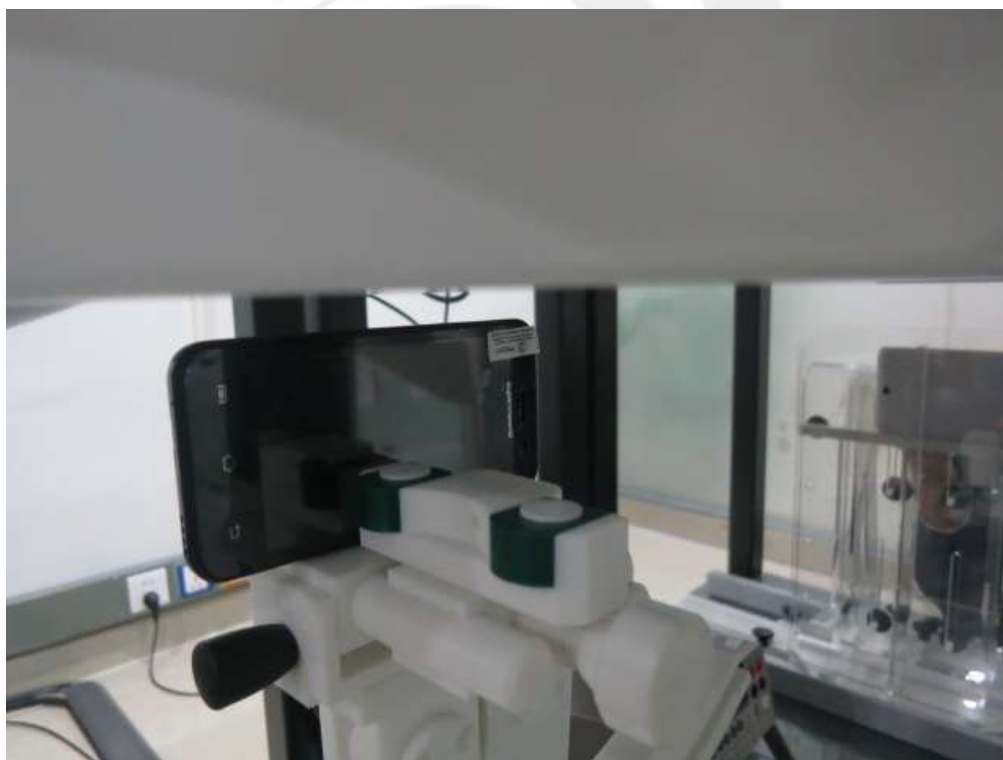
Body Front side 10mm



Body Back side 10mm



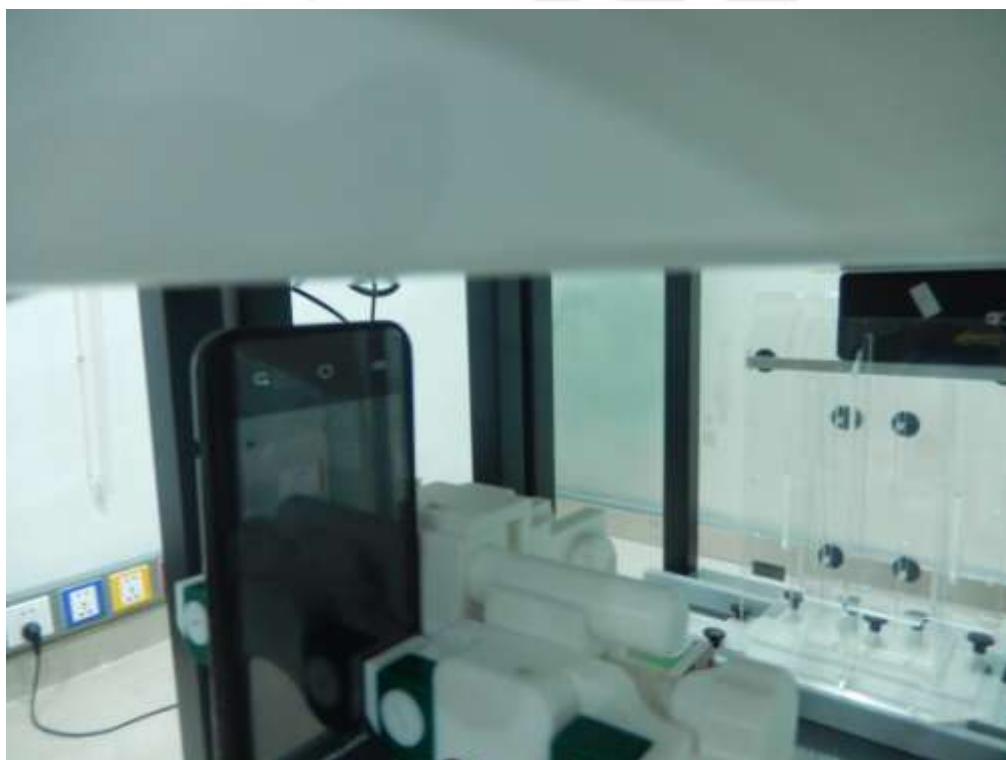
Body left side



Body Right side



Body top side



Body bottom side



Head Liquid depth at 850 MHz (15.2cm)



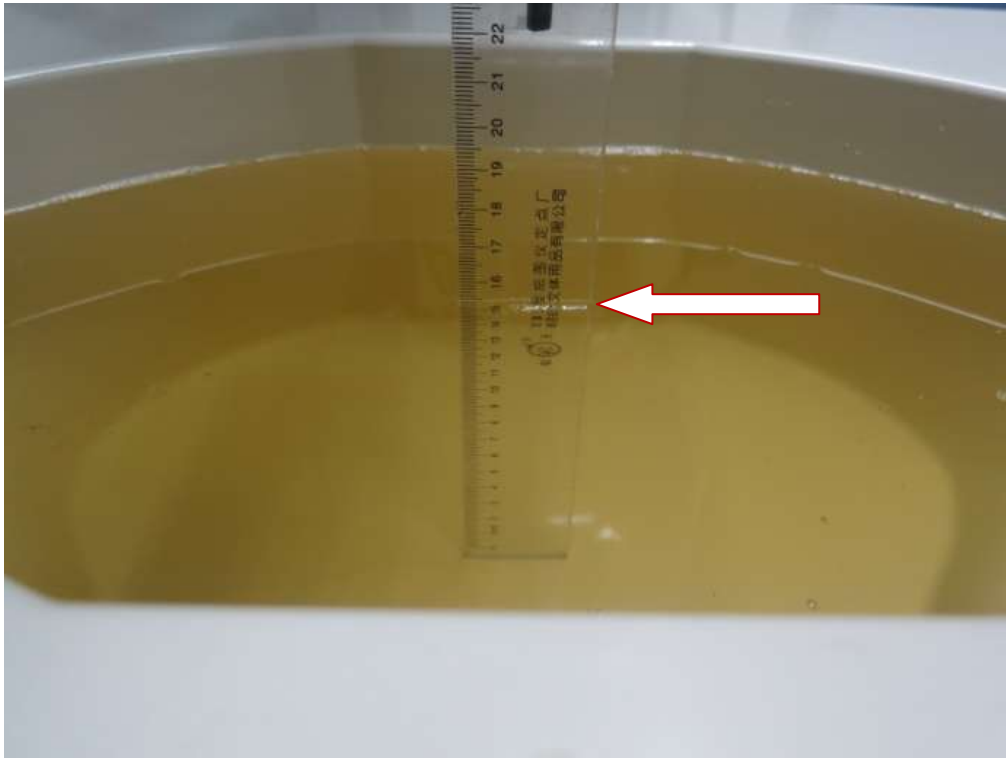
Head Liquid depth at 1900 MHz (15.1cm)



Head Liquid depth at 2450 MHz (15.2cm)



Body Liquid depth at 850 MHz (15.3 cm)



Body Liquid depth at 1900 MHz (15.2 cm)



Body Liquid depth at 2450MHz (15.1 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 190	0.045	0.25	33	31.84	0.059	1
		Right Tilt	CH 190	0.045	-0.96	33	31.84	0.059	2
		Left Cheek	CH 190	0.047	0.31	33	31.84	0.061	3
		Left Tilt	CH 190	0.052	-1.58	33	31.84	0.068	4
	GPRS Data-2 Slot	Right Cheek	CH 190	0.091	0.59	31	30.27	0.108	8
		Right Tilt	CH 190	0.083	0.63	31	30.27	0.098	9
		Left Cheek	CH 190	0.093	-0.13	31	30.27	0.110	10
		Left Tilt	CH 190	0.081	1.02	31	30.27	0.096	11
GSM1900	Voice	Right Cheek	CH 661	0.078	1.74	29	28.64	0.085	18
		Right Tilt	CH 661	0.021	0.24	29	28.64	0.023	19
		Left Cheek	CH 661	0.082	1.36	29	28.64	0.089	20
		Left Tilt	CH 661	0.019	-0.28	29	28.64	0.021	21
	GPRS Data-2 Slot	Right Cheek	CH 661	0.152	0.69	28	27.54	0.169	25
		Right Tilt	CH 661	0.032	-0.25	28	27.54	0.036	26
		Left Cheek	CH 661	0.172	1.04	28	27.54	0.191	27
		Left Tilt	CH 661	0.033	-1.95	28	27.54	0.037	28
WCDMA II	RMC	Right Cheek	CH9400	0.290	0.74	23	22.05	0.361	35
		Right Tilt	CH9400	0.071	-0.84	23	22.05	0.088	36
		Left Cheek	CH9400	0.277	0.13	23	22.05	0.345	37
		Left Tilt	CH9400	0.058	0.26	23	22.05	0.072	38
WCDMA V	RMC	Right Cheek	CH4183	0.183	0.54	23	22.68	0.197	45
		Right Tilt	CH4183	0.179	-0.19	23	22.68	0.193	46
		Left Cheek	CH4183	0.159	-0.46	23	22.68	0.171	47
		Left Tilt	CH4183	0.187	-0.99	23	22.68	0.201	48



12.2Body 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	Voice (body-worn)	Front side	CH 190	0.070	-0.95	33	31.84	0.091	6
		Back side	CH 190	0.243	-0.41	33	31.84	0.317	7
	GPRS Data-2 Slot (hotspot)	Front side	CH 190	0.123	-0.63	31	30.27	0.146	12
		Back side	CH 190	0.540	1.47	31	30.27	0.639	13
		Left side	CH 190	0.037	-0.86	31	30.27	0.044	14
		Right side	CH 190	0.103	-0.91	31	30.27	0.122	15
		Top side	CH 190	0.005	0.52	31	30.27	0.006	16
		Bottom side	CH 190	0.111	0.68	31	30.27	0.131	17
GSM1900	Voice (body-worn)	Front side	CH 661	0.060	-1.47	29	28.64	0.065	23
		Back side	CH 661	0.313	-0.52	29	28.64	0.340	24
	GPRS Data-2 Slot (hotspot)	Front side	CH 661	0.111	0.63	28	27.54	0.123	29
		Back side	CH 661	0.653	0.25	28	27.54	0.726	30
		Left side	CH 661	0.025	0.14	28	27.54	0.028	31
		Right side	CH 661	0.305	-0.74	28	27.54	0.339	32
		Top side	CH 661	0.114	-0.51	28	27.54	0.127	33
		Bottom side	CH 661	0.278	0.32	28	27.54	0.309	34
WCDMA II	RMC (body-worn and hotspot)	Front side	CH9400	0.137	1.22	23	22.05	0.170	39
		Back side	CH9400	0.655	-0.96	23	22.05	0.815	40
		Left side	CH9400	0.080	-1.15	23	22.05	0.100	41
		Right side	CH9400	0.220	0.27	23	22.05	0.274	42
		Top side	CH9400	0.119	-0.08	23	22.05	0.148	43
		Bottom side	CH9400	0.534	0.66	23	22.05	0.665	44
WCDMA V	RMC (body-worn and hotspot)	Front side	CH4183	0.196	0.32	23	22.68	0.211	49
		Back side	CH 4132	0.899	-0.45	23	22.25	1.068	50
		Back side	CH 4183	0.886	-0.61	23	22.68	0.954	51
		Back side	CH 4233	0.704	0.28	23	22.27	0.833	52
		Left side	CH4183	0.007	-0.91	23	22.68	0.008	53
		Right side	CH4183	0.441	0.27	23	22.68	0.475	54
		Top side	CH4183	0.049	-0.23	23	22.68	0.053	55
		Bottom side	CH4183	0.285	0.55	23	22.68	0.307	56



Summary of Measurement Results (SIM 2 Card)

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 (body-worn)	Left Cheek	CH 190	0.086	0.68	33	31.61	0.118	5
GSM1900	Voice (body-worn)	Left Cheek	CH 661	0.161	-0.21	29	28.41	0.184	22

WIFI SAR (802.11b)

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.
802.11b	DTS	Right Cheek	CH 6	0.158	0.29	10	9.69	0.170	57
		Right Tilt	CH 6	0.047	0.65	10	9.69	0.050	58
		Left Cheek	CH 6	0.260	-0.54	10	9.69	0.279	59
		Left Tilt	CH 6	0.038	0.21	10	9.69	0.041	60
		Front side	CH 6	0.082	0.36	10	9.69	0.088	61
		Back side	CH 6	0.436	-0.87	10	9.69	0.468	62
		Left side	CH 6	0.028	0.26	10	9.69	0.030	63
		Right side	CH 6	0.318	-0.42	10	9.69	0.342	64
		Top side	CH 6	0.018	0.12	10	9.69	0.019	65
		Bottom side	CH 6	0.054	0.36	10	9.69	0.058	66

Summary of Measurement Results (Repeated SAR)

Band	Mode	Test Position	Channel	Once SAR (1g) (W/kg)	Twice SAR (1g) (W/kg)	Third SAR (1g) (W/kg)	Limit W/kg	Meas. No.
GSM1900	Voice (body-worn)	Back side	CH 661	0.650	-	-	1.6	67
WCDMA V	RMC	Back side	CH 4183	0.882	-	-	1.6	68



Simultaneous Multi-band Transmission Evaluation:

Application Simultaneous Transmission information:

NO	Simultaneous state	Portable Handset			Note
		Head	Body-worn	Hotspot	
1	GSM(voice)+WLAN 2.4GHz (data)	Yes	Yes	-	-
2	WCDMA(voice)+WLAN 2.4GHz (data)	Yes	Yes	-	-
3	GSM(voice)+Bluetooth(data)	Yes	Yes	-	-
4	WCDMA(voice)+Bluetooth(data)	Yes	Yes	-	-
5	GPRS (Data)+Bluetooth(data)	Yes	Yes	Yes	2.4GHz Hotspot
6	GPRS (Data)+WLAN 2.4GHz (data)	Yes	Yes	Yes	2.4GHz Hotspot
7	WCDMA (Data)+Bluetooth(data)	Yes	Yes	Yes	2.4GHz Hotspot
8	WCDMA (Data)+WLAN 2.4GHz (data)	Yes	Yes	Yes	2.4GHz Hotspot

NOTE:

1. WLAN and BT share the same antenna, and cannot transmit simultaneously.
2. Simultaneous with every transmitter must be the same test position.
3. KDB 447498 D01, BT SAR is excluded as below table.
4. KDB 447498 D01, for handsets the test separation distance is determined by the smallest distance between the outer surface of the device and the user; which is 0mm for head SAR and 10mm for body-worn SAR.
5. If the test separation distance is <5mm, 5mm is used for excluded SAR calculation.
6. According to KDB447497 D01 4.3.2, simultaneous transmission SAR test exclusion is as follow:
 - (1) 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.
 - (2) Any transmitters and antennas should be considered when calculating simultaneous mode.
 - (3) For mobile phone and PC, it's the sum of all transmitters and antennas at the same mode with same position in each applicable exposure condition
 - (4) When the standalone SAR test exclusion of section 4.3.1 is applied to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to the following to determine simultaneous transmission SAR test exclusion:

$$(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm}) \cdot [\sqrt{f(\text{GHz})/x}] \text{ W/kg for test separation distances } \leq 50 \text{ mm};$$
 where $x = 7.5$ for 1-g SAR, and $x = 18.75$ for 10-g SAR.
7. When the sum of SAR is larger than the limit, SAR test exclusion is determined by the SAR to peak location separation ratio. The simultaneous transmitting antennas in each operating mode and exposure condition combination must be considered one pair at a time to determine the SAR to peak location separation ratio to qualify for test exclusion. The ratio is determined by $(\text{SAR}_1 + \text{SAR}_2)1.5/R_i$, rounded to two decimal digits, and must be ≤ 0.04 for all antenna pairs in the configuration to qualify for 1-g SAR test exclusion.



Estimated SAR		Maximum Average Power		Antenna to user(mm)	Frequency(GHz)	Stand alone SAR(1g) [W/kg]
		dBm	mW			
BT	Head	0	1	5	2.480	0.042
	Body			10	2.480	0.021

Maximum test results (WWAN) with BT and WIFI SAR:**BT:** Head (0 cm gap): 0.042 W/kg and Body (0cm gap): 0.021 W/kg



Sum of the SAR for GSM 850 & Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ 1-g SAR (W/Kg)
		GSM 850 Band	Wi-Fi DTS Band	Bluetooth	
Head (voice)	Right Cheek	0.059	0.170		0.229
	Right Tilt	0.059	0.050		0.109
	Left Cheek	0.061	0.279		0.340
	Left Tilt	0.068	0.041		0.109
	Right Cheek	0.059		0.042	0.101
	Right Tilt	0.059		0.042	0.101
	Left Cheek	0.061		0.042	0.103
	Left Tilt	0.068		0.042	0.110
Head (Data)	Right Cheek	0.108	0.170		0.278
	Right Tilt	0.098	0.050		0.148
	Left Cheek	0.110	0.279		0.389
	Left Tilt	0.096	0.041		0.137
	Right Cheek	0.108		0.042	0.150
	Right Tilt	0.098		0.042	0.140
	Left Cheek	0.110		0.042	0.152
	Left Tilt	0.096		0.042	0.138
Body-worn	Front	0.091	0.088		0.179
	Rear	0.317	0.468		0.785
	Front	0.091		0.021	0.112
	Rear	0.317		0.021	0.338
Hotspot	Front	0.146	0.088		0.234
	Rear	0.639	0.468		1.107
	Left side	0.044	0.030		0.074
	Right side	0.122	0.342		0.464
	Top side	0.006	0.019		0.025
	Bottom side	0.131	0.058		0.189
	Front	0.146		0.021	0.167
	Rear	0.639		0.021	0.660
	Left side	0.044		0.021	0.065
	Right side	0.122		0.021	0.143
	Top side	0.006		0.021	0.027
	Bottom side	0.131		0.021	0.152



Sum of the SAR for GSM 1900 & Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ 1-g SAR (W/Kg)
		GSM 1900 Band	Wi-Fi DTS Band	Bluetooth	
Head (voice)	Right Cheek	0.085	0.170		0.255
	Right Tilt	0.023	0.050		0.073
	Left Cheek	0.089	0.279		0.368
	Left Tilt	0.021	0.041		0.062
	Right Cheek	0.085		0.042	0.127
	Right Tilt	0.023		0.042	0.065
	Left Cheek	0.089		0.042	0.131
	Left Tilt	0.021		0.042	0.063
Head (Data)	Right Cheek	0.169	0.170		0.339
	Right Tilt	0.036	0.050		0.086
	Left Cheek	0.191	0.279		0.470
	Left Tilt	0.037	0.041		0.078
	Right Cheek	0.169		0.042	0.211
	Right Tilt	0.036		0.042	0.078
	Left Cheek	0.191		0.042	0.233
	Left Tilt	0.037		0.042	0.079
Body-worn	Front	0.065	0.088		0.153
	Rear	0.340	0.468		0.808
	Front	0.065		0.021	0.086
	Rear	0.340		0.021	0.361
Hotspot	Front	0.123	0.088		0.211
	Rear	0.726	0.468		1.194
	Left side	0.028	0.030		0.058
	Right side	0.339	0.342		0.681
	Top side	0.127	0.019		0.146
	Bottom side	0.309	0.058		0.367
	Front	0.123		0.021	0.144
	Rear	0.726		0.021	0.747
	Left side	0.028		0.021	0.049
	Right side	0.339		0.021	0.360
	Top side	0.127		0.021	0.148
	Bottom side	0.309		0.021	0.330



Sum of the SAR for WCDMA Band II & Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ 1-g SAR (W/Kg)
		WCDMA Band II	Wi-Fi DTS Band	Bluetooth	
Head	Right Cheek	0.361	0.170		0.531
	Right Tilt	0.088	0.050		0.138
	Left Cheek	0.345	0.279		0.624
	Left Tilt	0.072	0.041		0.113
	Right Cheek	0.361		0.042	0.403
	Right Tilt	0.088		0.042	0.130
	Left Cheek	0.345		0.042	0.387
	Left Tilt	0.072		0.042	0.114
Body-worn and Hotspot	Front	0.170	0.088		0.258
	Rear	0.815	0.468		1.283
	Left side	0.100	0.030		0.130
	Right side	0.274	0.342		0.616
	Top side	0.148	0.019		0.167
	Bottom side	0.665	0.058		0.723
	Front	0.170		0.021	0.191
	Rear	0.815		0.021	0.836
	Left side	0.100		0.021	0.121
	Right side	0.274		0.021	0.295
	Top side	0.148		0.021	0.169
	Bottom side	0.665		0.021	0.686

Sum of the SAR for WCDMA Band V & Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ 1-g SAR (W/Kg)
		WCDMA Band V	Wi-Fi DTS Band	Bluetooth	
Head	Right Cheek	0.197	0.170		0.367
	Right Tilt	0.193	0.050		0.243
	Left Cheek	0.171	0.279		0.450
	Left Tilt	0.201	0.041		0.242
	Right Cheek	0.197		0.042	0.239
	Right Tilt	0.193		0.042	0.235
	Left Cheek	0.171		0.042	0.213
	Left Tilt	0.201		0.042	0.243
Body-worn and Hotspot	Front	0.211	0.088		0.299
	Rear	1.068	0.468		1.536
	Left side	0.008	0.030		0.038
	Right side	0.475	0.342		0.817
	Top side	0.053	0.019		0.072
	Bottom side	0.307	0.058		0.365
	Front	0.211		0.021	0.232
	Rear	1.068		0.021	1.089
	Left side	0.008		0.021	0.029
	Right side	0.475		0.021	0.496
	Top side	0.053		0.021	0.074
	Bottom side	0.307		0.021	0.328

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

NO.	Instrument	Manufacturer	Model	S/N	Cal. Date	Cal. Due Date
1	835MHz Dipole	SATIMO	SID835	SN 30/14 DIP0G835-332	2014.09.01	2015.08.31
2	1900MHz Dipole	SATIMO	SID1900	SN 30/14 DIP1G900-333	2014.09.01	2015.08.31
3	2450MHz Dipole	SATIMO	SID2450	SN 30/14 DIP2G450-335	2014.09.01	2015.08.31
4	E-Field Probe	SATIMO	SSE5	SN 17/14 EP221	2014.09.01	2015.08.31
5	Antenna	SATIMO	ANTA3	SN 07/13 ZNTA52	2014.09.01	2015.08.31
6	Waveguide	SATIMO	SWG5500	SN 13/14 WGA32	2014.09.01	2015.08.31
7	Phantom	SATIMO	SAM	SN_4511_SAM9 0	2014.09.01	2015.08.31
8	SAR TEST BENCH	SATIMO	Tablet POSITIONNIN G SYSTEM	SN 32/14 MSH97	2014.09.01	--
9	SAR TEST BENCH	SATIMO	LAPTOP POSITIONNIN G SYSTEM	SN 32/14 LSH29	2014.09.01	2015.08.31
10	Dielectric Probe Kit	SATIMO	SCLMP	SN 32/14 OCPG52	2014.09.01	2015.08.31
11	Multi Meter	Keithley	Multi Meter 2000	4050073	2014.11.20	2015.11.19
12	Signal Generator	R&S	SMF100A	104260	2014.10.27	2015.10.26
13	Power Meter	R&S	NRP	100510	2014.10.25	2015.10.24
14	Power Sensor	R&S	NRP-Z11	101919	2014.10.25	2015.10.24
15	Network Analyzer	R&S	5071C	EMY46103472	2014.12.12	2015.12.11
16	Power Amplifier	SATIMO	ZHL-42W	9638	2014.11.20	2015.11.19
17	Power Meter	R&S	NRP-Z23	US38261498	2014.10.25	2015.10.24
18	Power Sensor	R&S	NRP-Z21	1137.6000.02	2014.10.22	2015.10.21

Appendix A. System Validation Plots

System Performance Check Data (835MHz Head)

Type: Phone measurement (Complete)

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

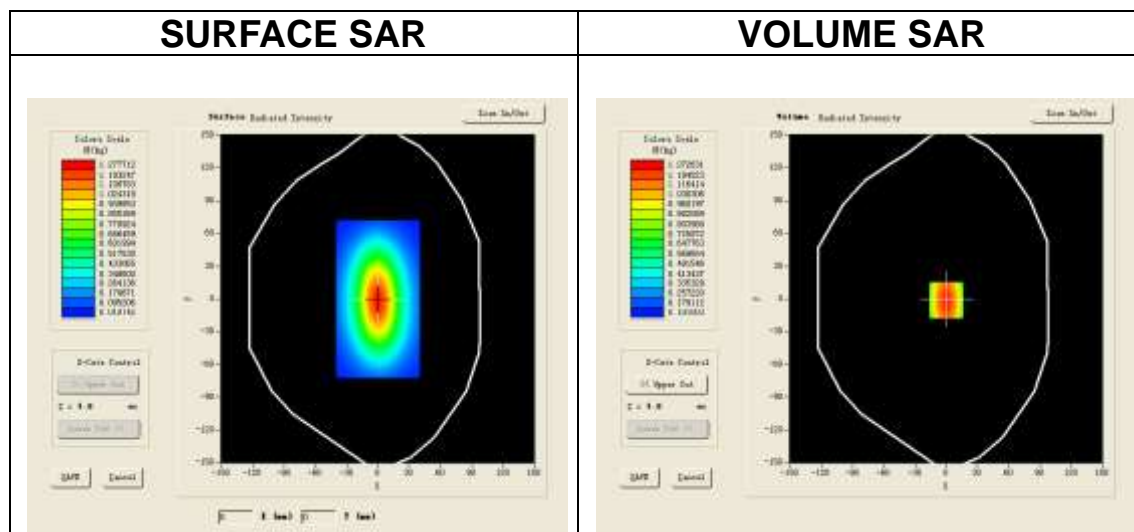
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2015.02.12

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)	41.27
Relative permittivity	18.72
Conductivity (S/m)	0.91
Power drift (%)	0.45
Ambient Temperature:	21.4°C
Liquid Temperature:	20.0°C
ConvF:	4.83
Crest factor:	1:1

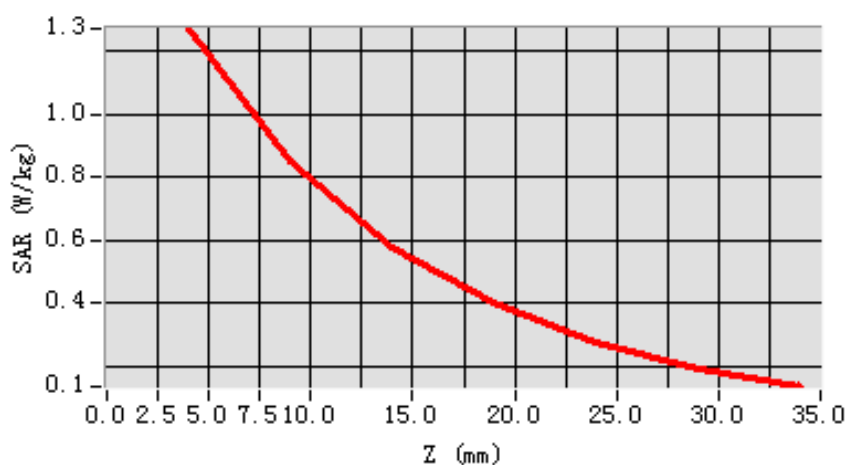


Maximum location: X=0.00, Y=-1.00

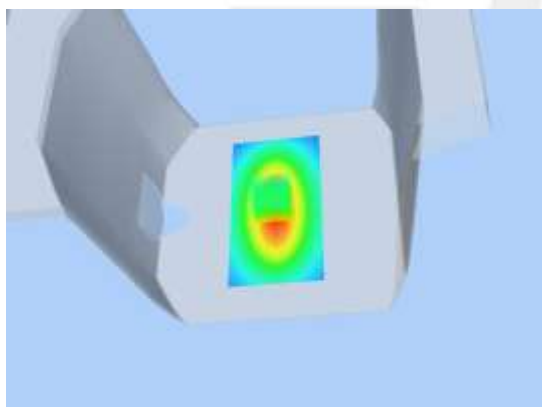
SAR 10g (W/Kg)	0.782910
SAR 1g (W/Kg)	1.220362

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	1.2726	0.8476	0.5778	0.3978	0.2754	0.1925

SAR, Z Axis Scan (X = 0, Y = -1)



3D screen shot



Hot spot position





System Performance Check Data (835MHz Body)

Type: Phone measurement (Complete)

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

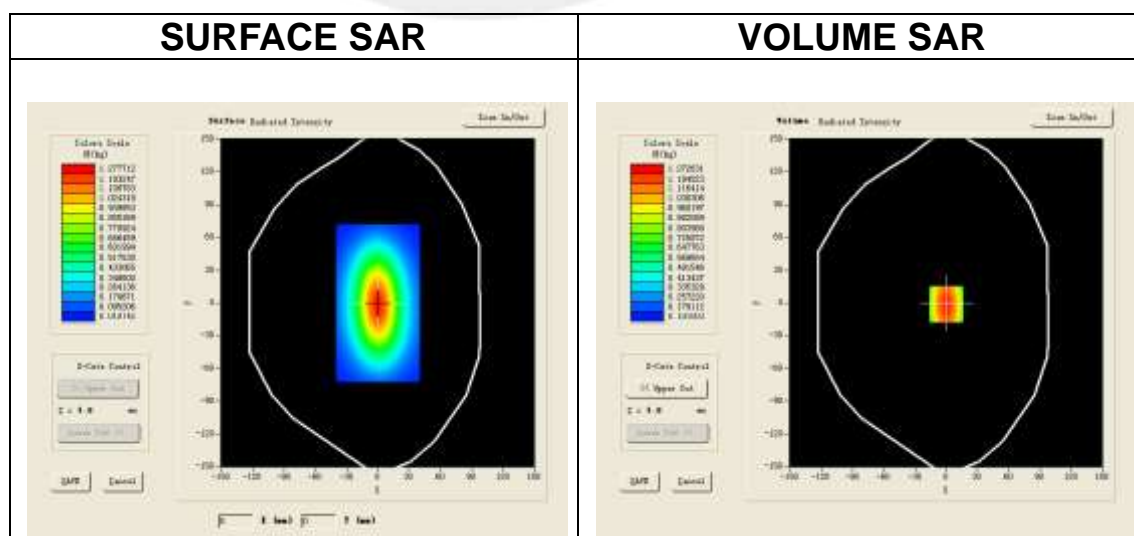
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2015.02.12

Measurement duration: 14 minutes 13 seconds

Experimental conditions.

Probe	SN 17/14 EP221
Phantom	Validation plane
Device Position	-
Band	835MHz
Channels	-
Signal	CW
Frequency (MHz)	835MHz
Relative permittivity (real part)	55.19
Relative permittivity	20.672109
Conductivity (S/m)	0.96
Power drift (%)	0.60000
Ambient Temperature:	21.4°C
Liquid Temperature:	20.0°C
ConvF:	5.02
Crest factor:	1:1

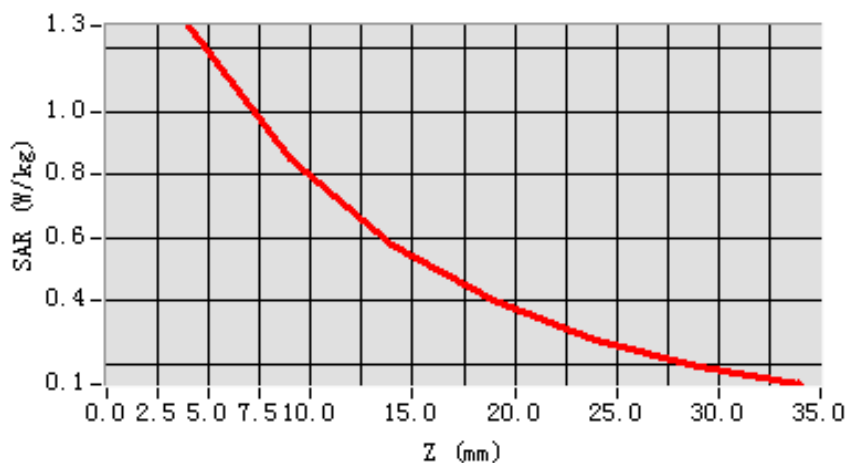


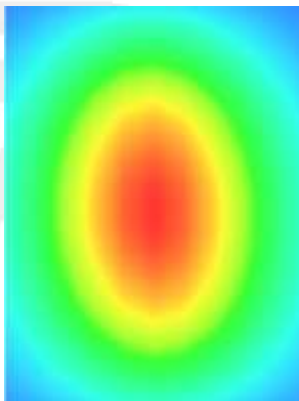
Maximum location: X=0.00, Y=-1.00

SAR 10g (W/Kg)	0.778106
SAR 1g (W/Kg)	1.211357

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	1.2685	0.8409	0.5768	0.3965	0.2743	0.1910

SAR, Z Axis Scan (X = 0, Y = -1)



3D screen shot	Hot spot position
	

System Performance Check Data (1900MHz Head)

Type: Phone measurement (Complete)

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

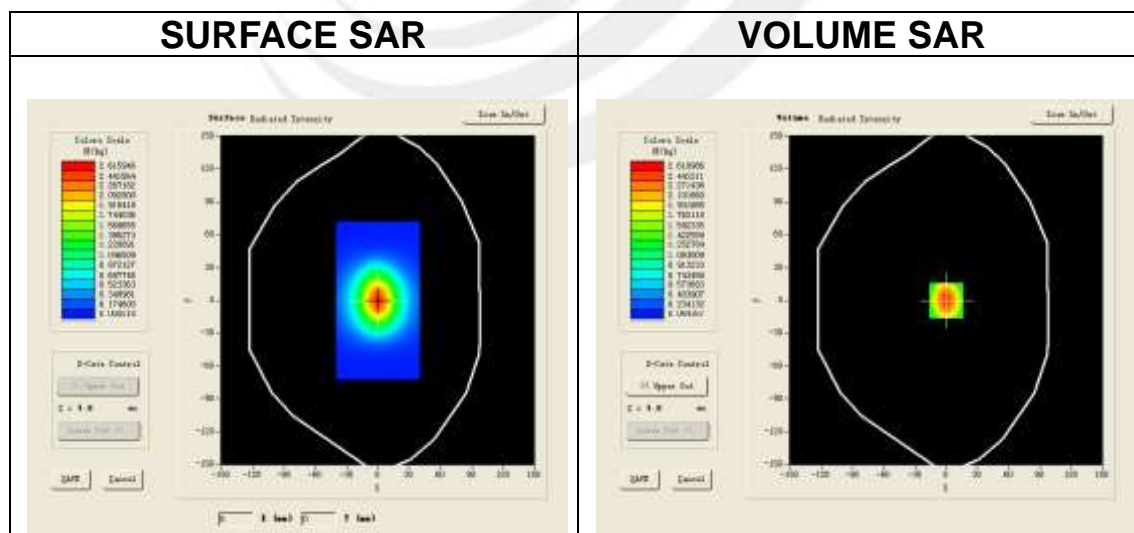
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2015.02.13

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)	39.57
Relative permittivity	13.26
Conductivity (S/m)	1.40
Power drift (%)	0.47
Ambient Temperature:	20.9°C
Liquid Temperature:	20.2°C
Probe	SN 17/14 EP221
ConvF:	4.71
Crest factor:	1:1

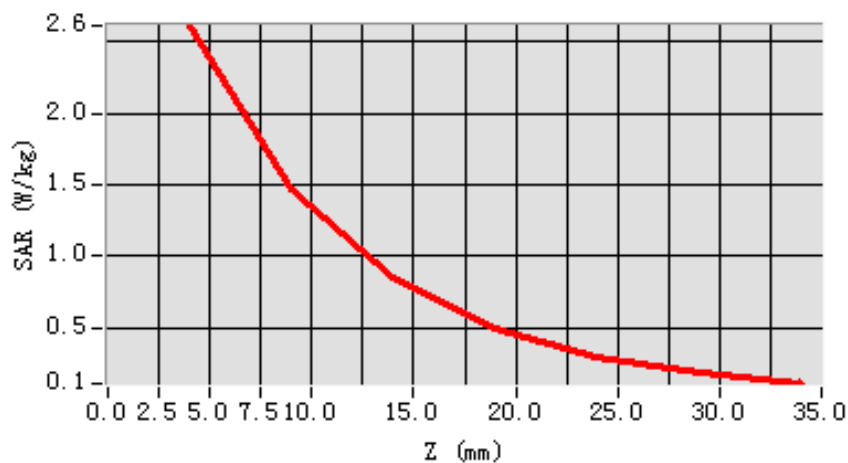


Maximum location: X=0.00, Y=0.00

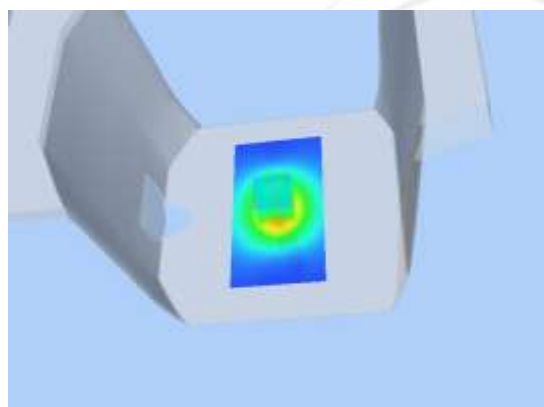
SAR 10g (W/Kg)	1.358936
SAR 1g (W/Kg)	2.480124

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	2.6106	1.4673	0.8500	0.5084	0.2918	0.1732

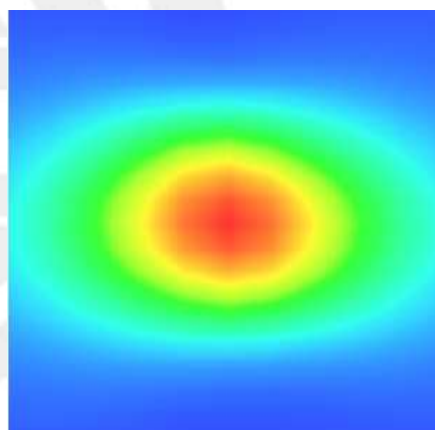
SAR, Z Axis Scan (X = 0, Y = 0)



3D screen shot



Hot spot position



**System Performance Check Data (1900MHz Body)**

Type: Phone measurement (Complete)

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

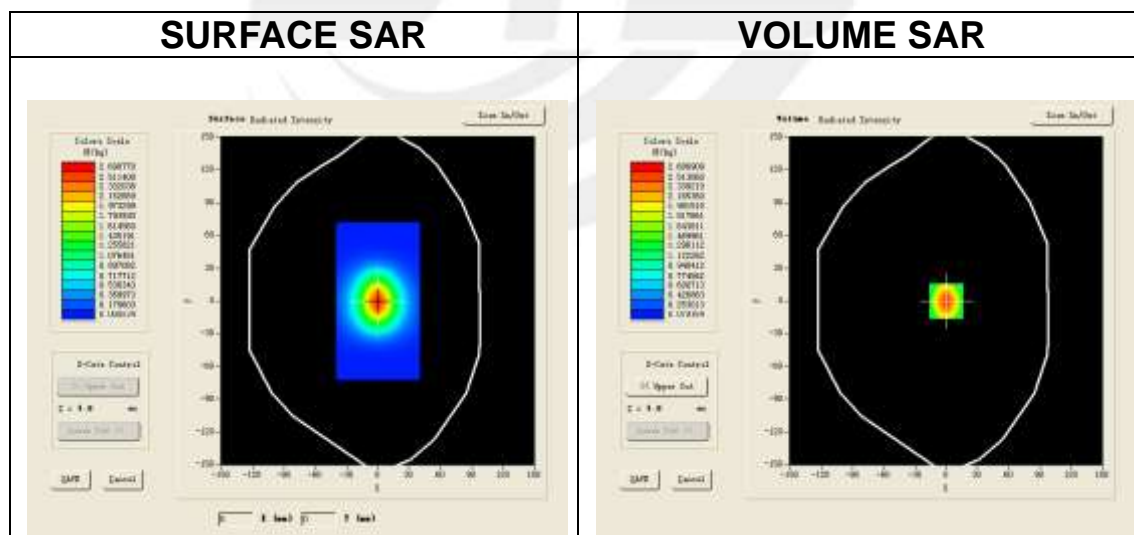
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2015.02.13

Measurement duration: 14 minutes 46 seconds

Experimental conditions.

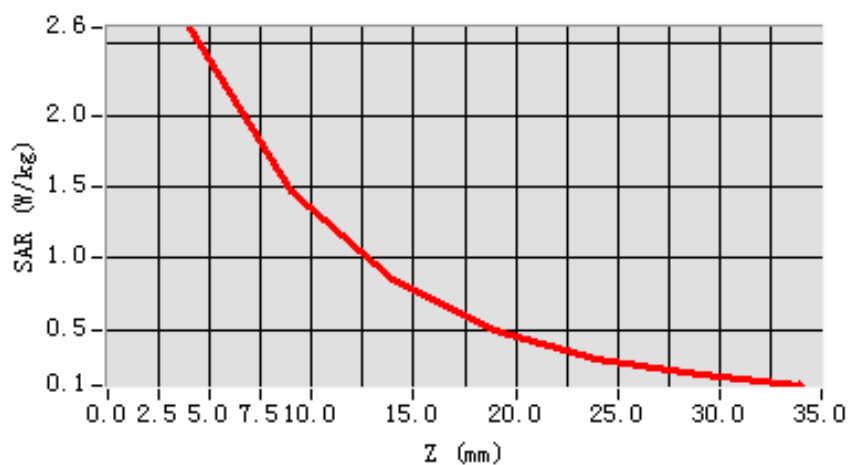
Device Position	-
Band	1900MHz
Channels	-
Signal	CW
Frequency (MHz)	1900
Relative permittivity (real part)	53.00
Relative permittivity	14.47
Conductivity (S/m)	1.53
Power drift (%)	0.51
Ambient Temperature:	20.9°C
Liquid Temperature:	20.2°C
Probe	SN 17/14 EP221
ConvF:	4.85
Crest factor:	1:1

**Maximum location: X=0.00, Y=0.00**

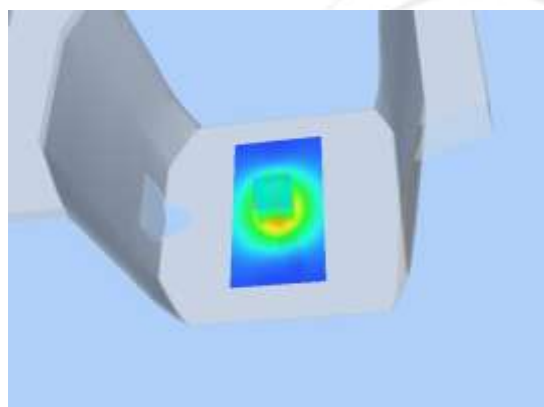
SAR 10g (W/Kg)	1.370012
SAR 1g (W/Kg)	2.488640

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	2.6108	1.4681	0.8573	0.5001	0.2924	0.17903

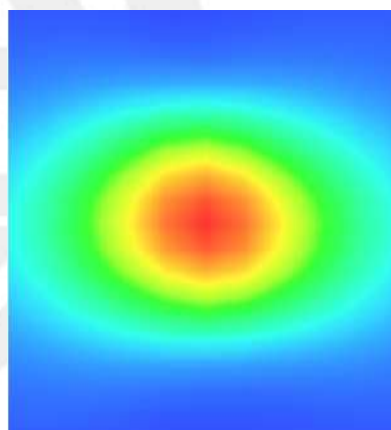
SAR, Z Axis Scan (X = 0, Y = 0)



3D screen shot



Hot spot position



System Performance Check Data (2450MHz Head)

Type: Phone measurement (Complete)

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

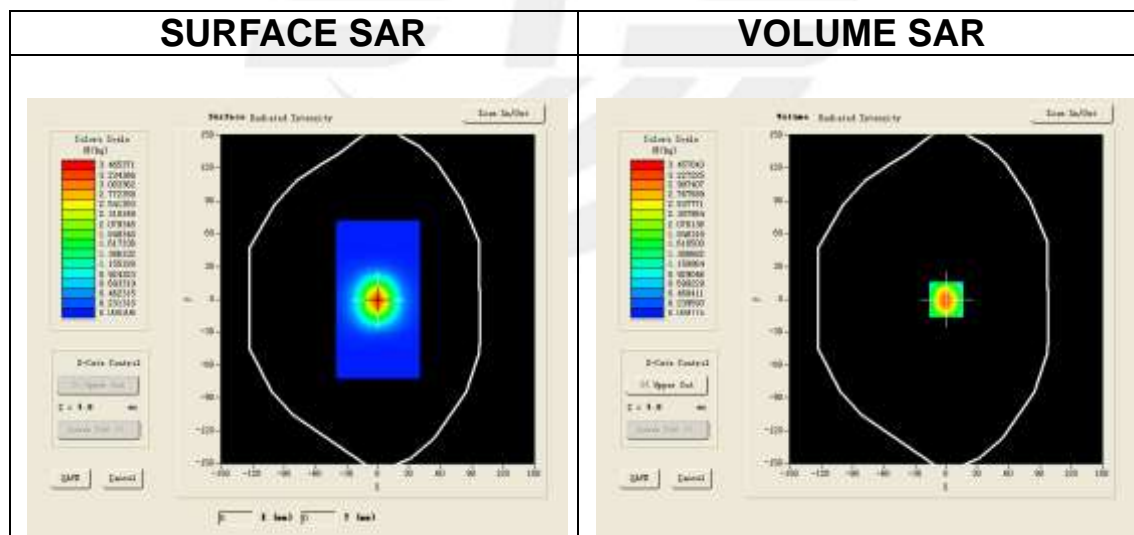
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2015.03.18

Measurement duration: 14 minutes 42 seconds

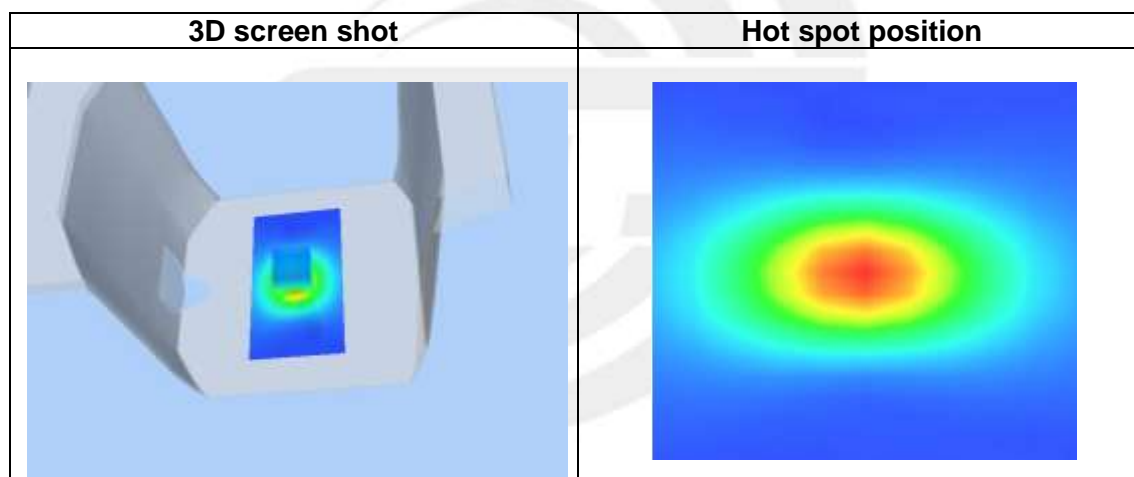
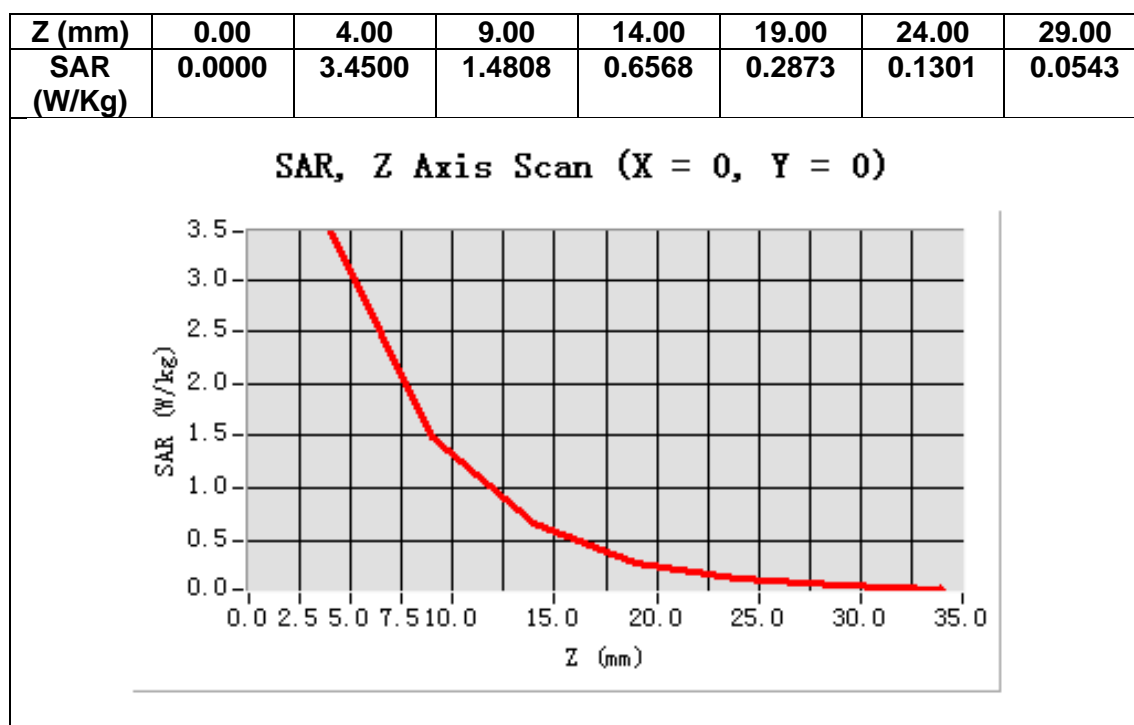
Experimental conditions.

Device Position	-
Band	2450MHz
Channels	-
Signal	CW
Frequency (MHz)	2450
Relative permittivity (real part)	39.48
Relative permittivity	14.59
Conductivity (S/m)	1.83
Power drift (%)	0.31
Ambient Temperature:	21.4
Liquid Temperature:	20
Probe	SN 17/14 EP221
ConvF:	4.11
Crest factor:	1:1



Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	1.467025
SAR 1g (W/Kg)	3.290628



System Performance Check Data (2450MHz Body)

Type: Phone measurement (Complete)

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

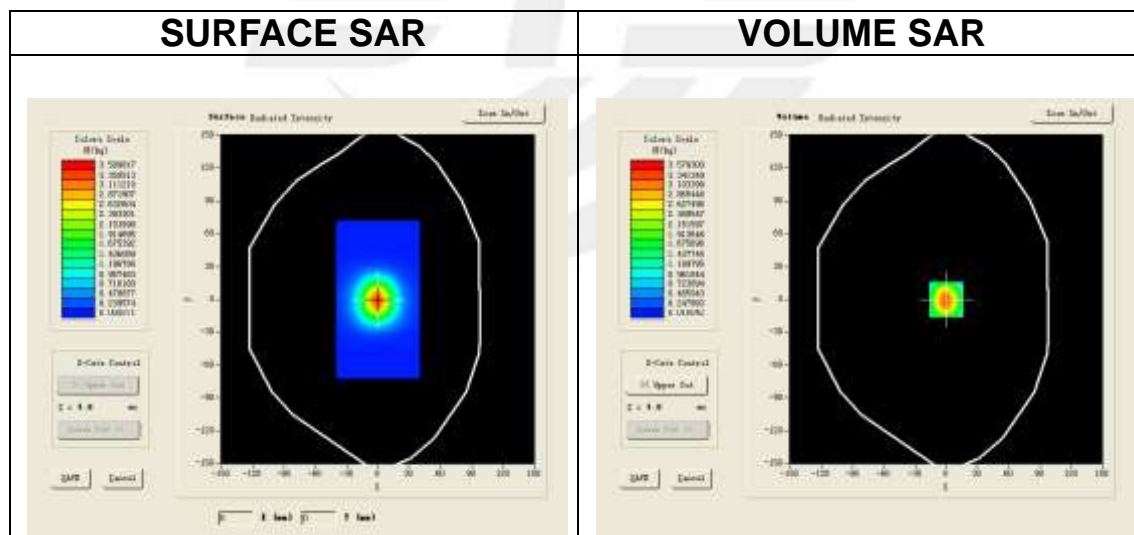
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2015.03.18

Measurement duration: 14 minutes 36 seconds

Experimental conditions.

Device Position	-
Band	2450MHz
Channels	-
Signal	CW
Frequency (MHz)	2450
Relative permittivity (real part)	53.01
Relative permittivity	14.58
Conductivity (S/m)	1.93
Power drift (%)	0.37
Ambient Temperature:	21.4
Liquid Temperature:	20
Probe	SN 17/14 EP221
ConvF:	4.25
Crest factor:	1:1



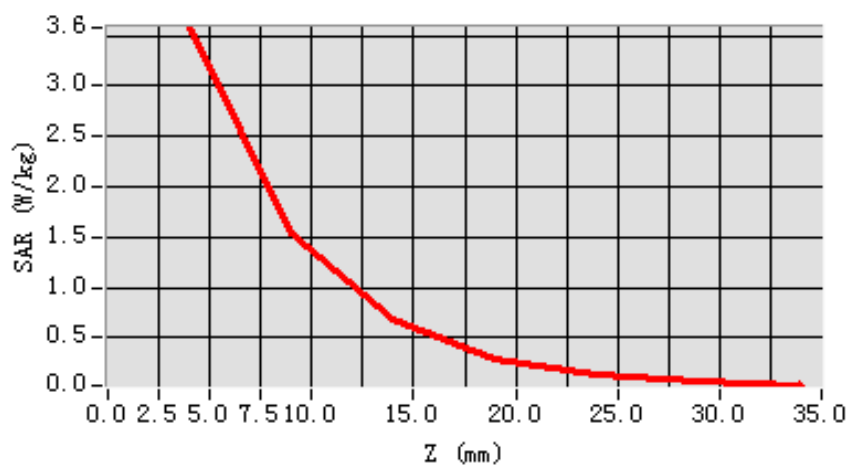
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	1.511501
SAR 1g (W/Kg)	3.395817



Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	3.5788	1.5370	0.6754	0.2971	0.1320	0.0586

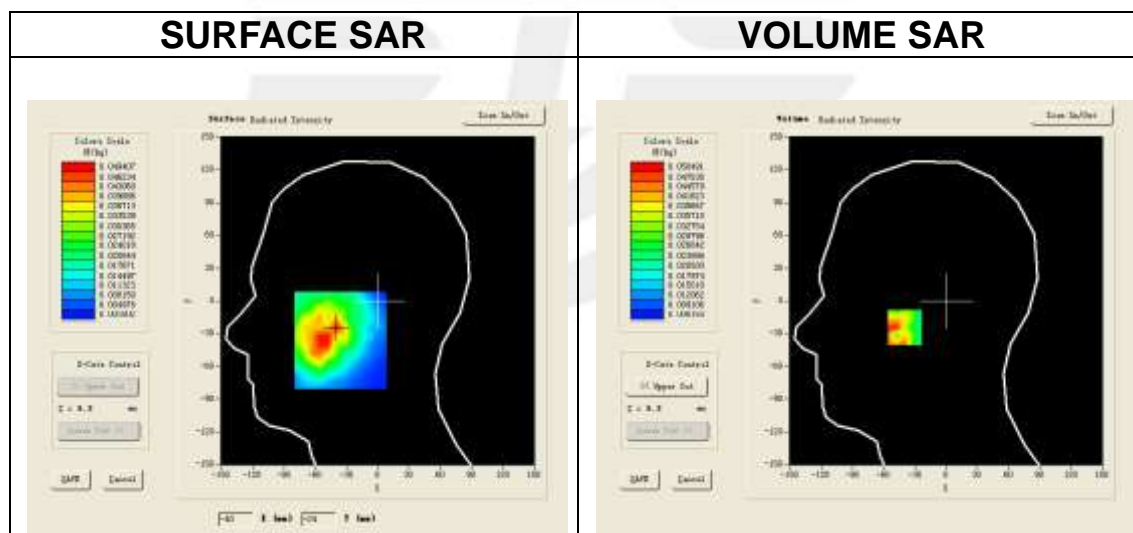
SAR, Z Axis Scan (X = 0, Y = 0)



Appendix B. SAR Test Plots

Plot 1: DUT: Revel Pro; EUT Model: EROS 4.0

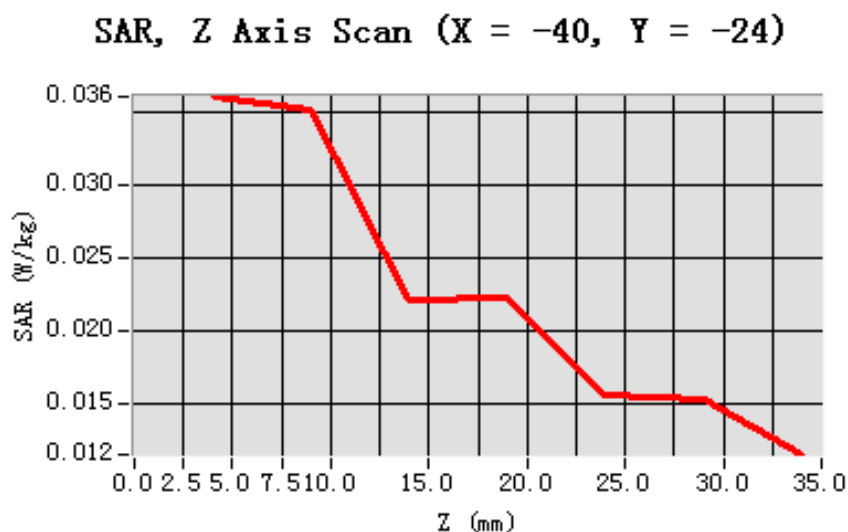
Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
Probe	SN 17/14 EP221
ConvF	4.83
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Right head
Device Position	Cheek
Band	GSM850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	41.99
Conductivity (S/m)	0.90
Variation (%)	-0.25



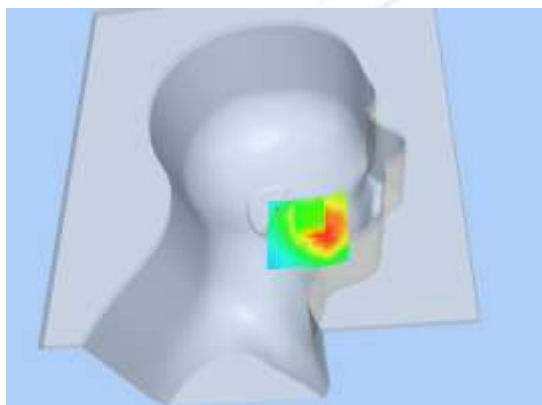
Maximum location: X=-40.00, Y=-24.00

SAR 10g (W/Kg)	0.031384
SAR 1g (W/Kg)	0.045414

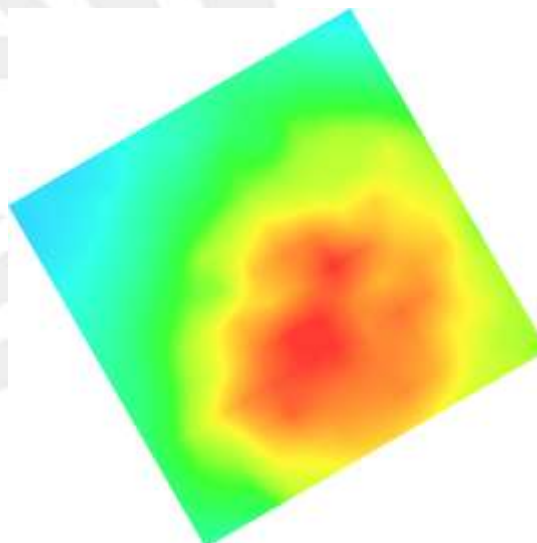
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0361	0.0352	0.0222	0.0224	0.0156	0.0154



3D screen shot

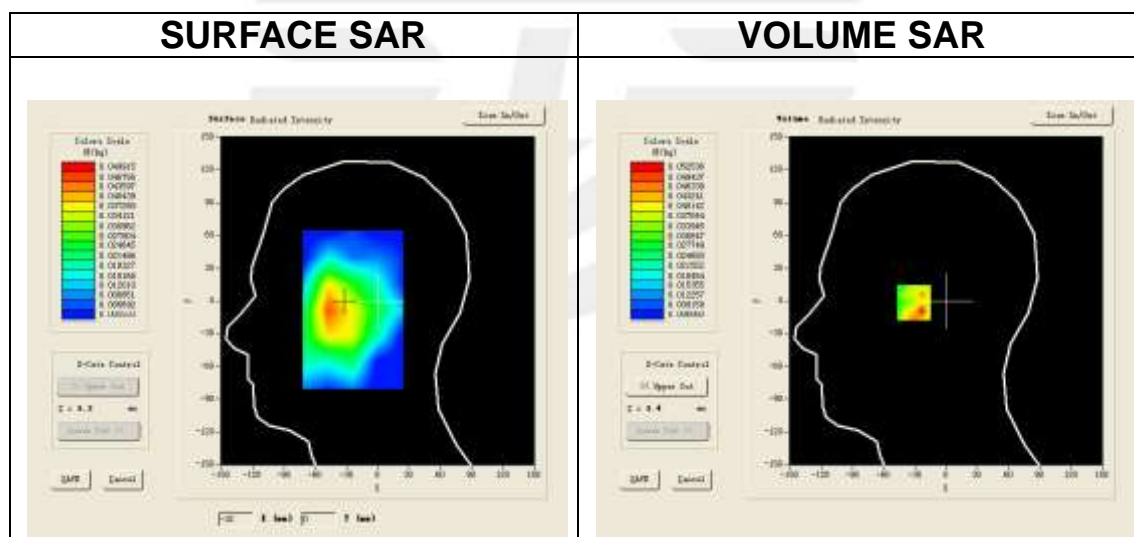


Hot spot position



Plot 2: DUT: Revel Pro; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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	GSM850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	41.99
Conductivity (S/m)	0.90
Variation (%)	-0.96

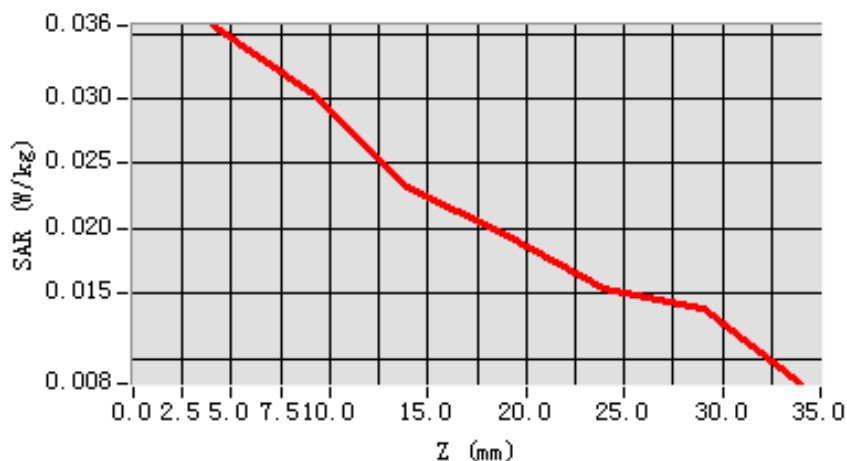


Maximum location: X=-29.00, Y=0.00

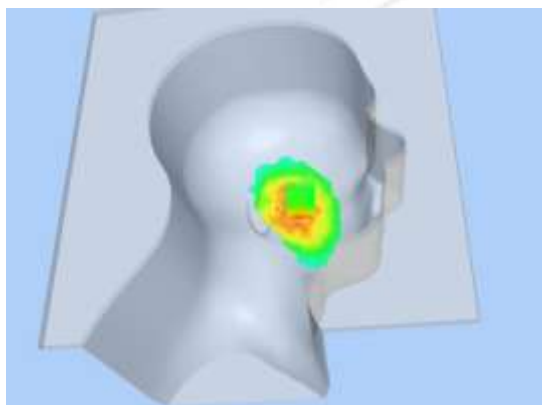
SAR 10g (W/Kg)	0.031386
SAR 1g (W/Kg)	0.044925

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0356	0.0304	0.0231	0.0195	0.0154	0.0139

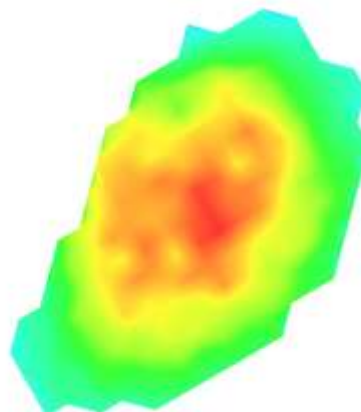
SAR, Z Axis Scan (X = -29, Y = 0)



3D screen shot

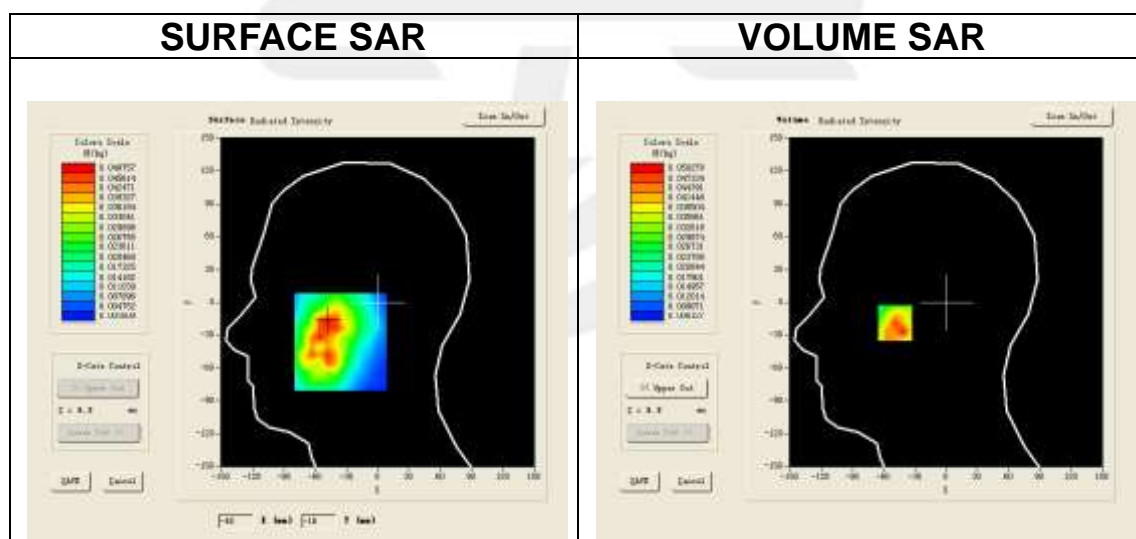


Hot spot position



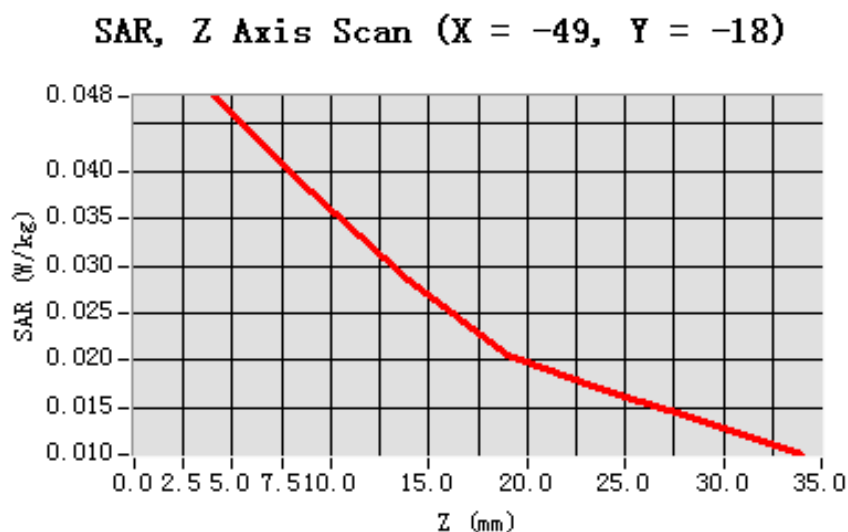
Plot 3: DUT: Revel Pro; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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	Middle
Signal	TDMA (Crest factor: 8.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	41.99
Conductivity (S/m)	0.90
Variation (%)	0.31

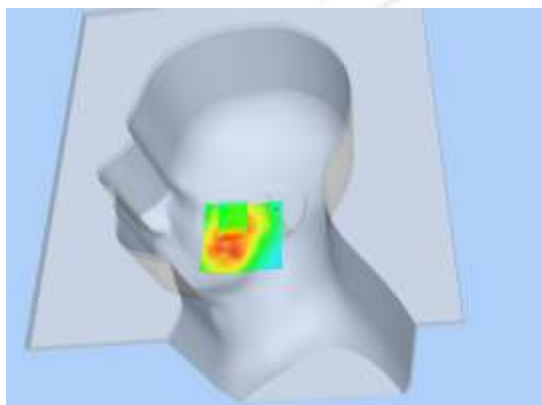

Maximum location: X=-49.00, Y=-18.00

SAR 10g (W/Kg)	0.032640
SAR 1g (W/Kg)	0.047068

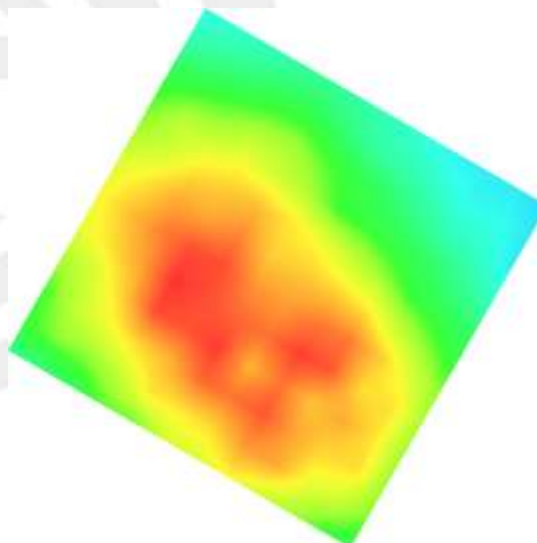
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0479	0.0379	0.0286	0.0206	0.0169	0.0135



3D screen shot

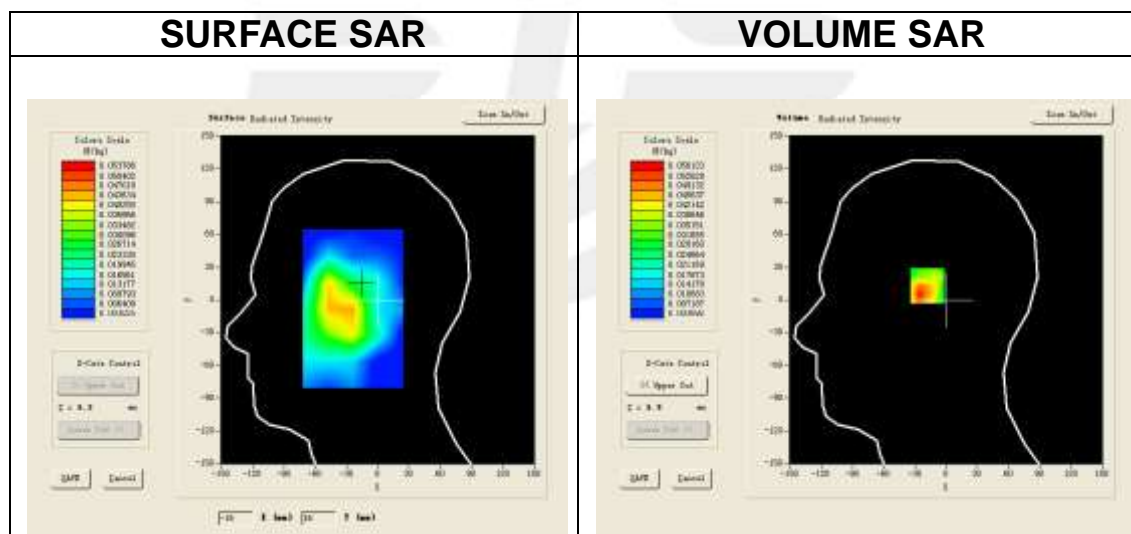


Hot spot position



Plot 4: DUT: Revel Pro; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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	Middle
Signal	TDMA (Crest factor: 8.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	41.99
Conductivity (S/m)	0.90
Variation (%)	-1.58

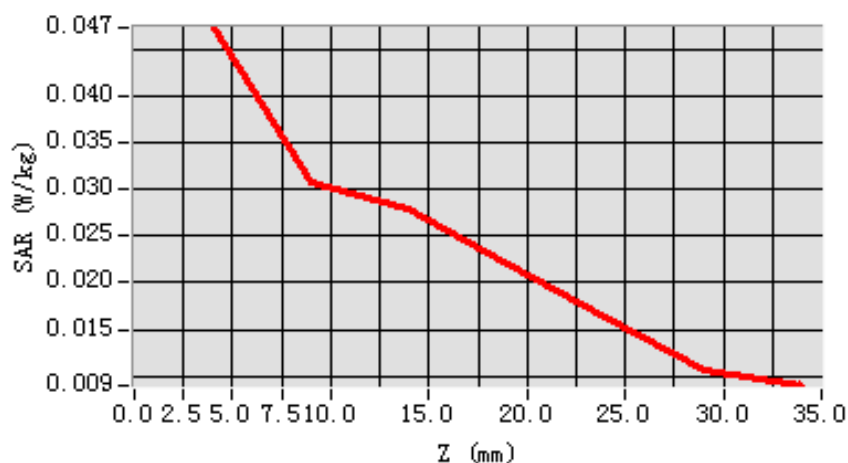


Maximum location: X=-15.00, Y=15.00

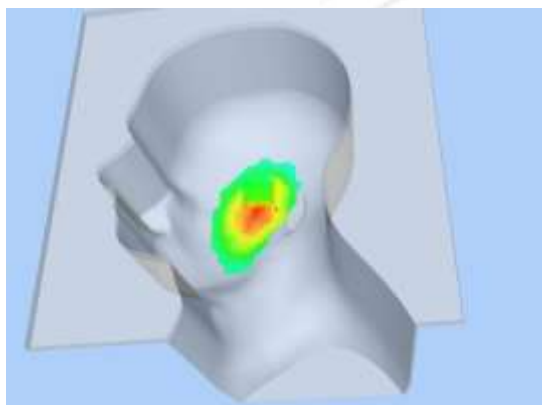
SAR 10g (W/Kg)	0.034316
SAR 1g (W/Kg)	0.051959

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0473	0.0309	0.0279	0.0219	0.0164	0.0107

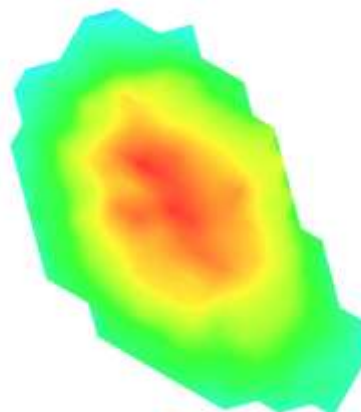
SAR, Z Axis Scan (X = -15, Y = 15)



3D screen shot

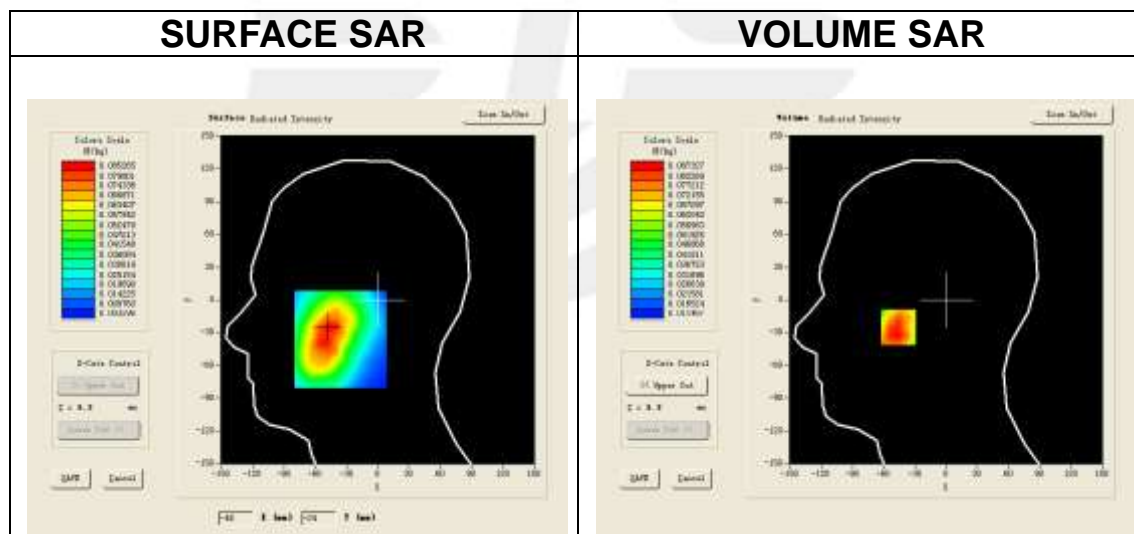


Hot spot position



Plot 5: DUT: Revel Pro; EUT Model: EROS 4.0

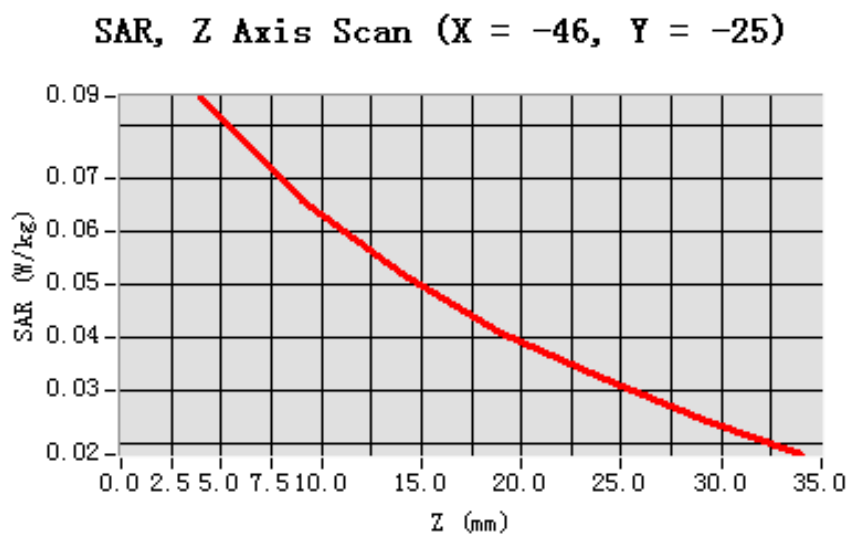
Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
Probe	SN 17/14 EP221
ConvF	4.83
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Right head
Device Position	Cheek
Band	GSM850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	41.99
Conductivity (S/m)	0.90
Variation (%)	0.68



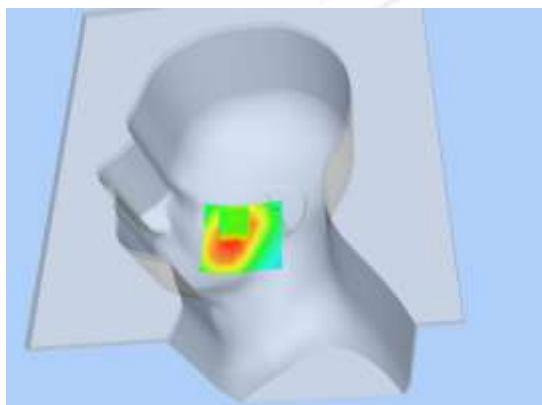
Maximum location: X=-46.00, Y=-25.00

SAR 10g (W/Kg)	0.060341
SAR 1g (W/Kg)	0.085505

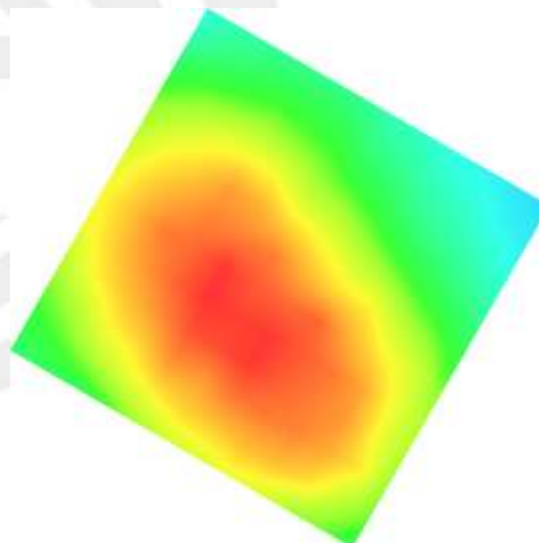
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0853	0.0659	0.0520	0.0408	0.0325	0.0246



3D screen shot

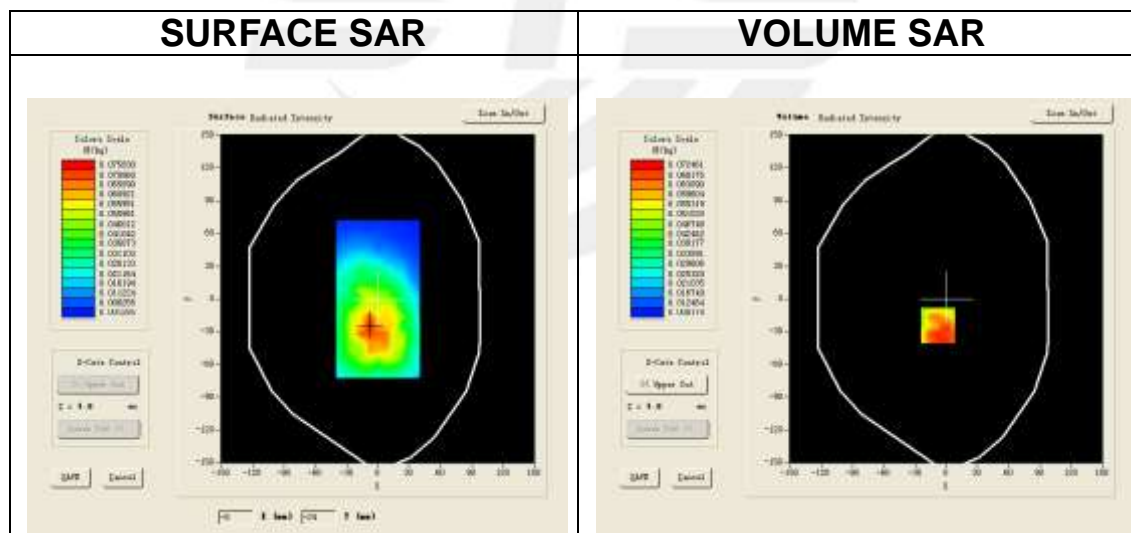


Hot spot position



Plot 6: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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	GSM850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.34
Conductivity (S/m)	0.96
Variation (%)	-0.95

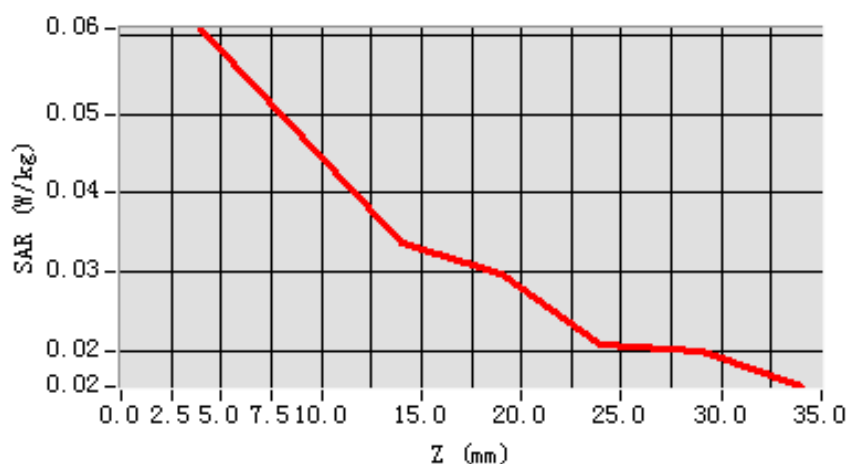


Maximum location: X=-8.00, Y=-24.00

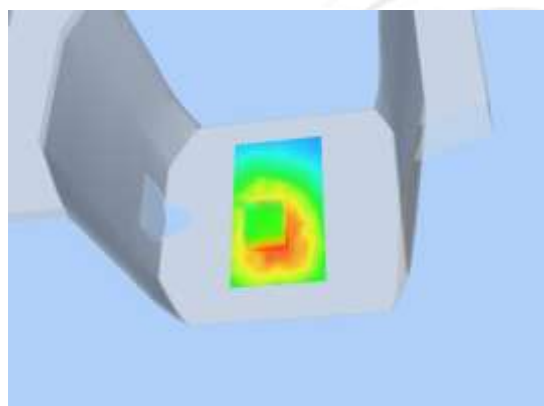
SAR 10g (W/Kg)	0.048312
SAR 1g (W/Kg)	0.069983

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0609	0.0472	0.0336	0.0298	0.0208	0.0199

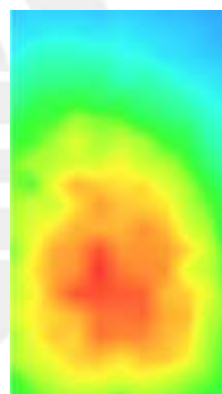
SAR, Z Axis Scan (X = -8, Y = -24)



3D screen shot

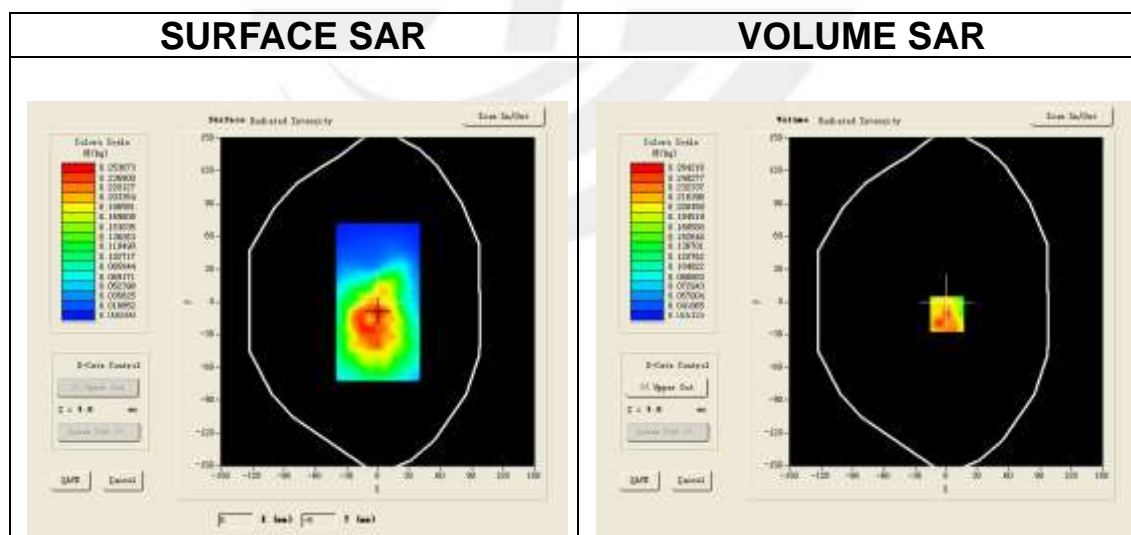


Hot spot position



Plot 7: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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	GSM850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.34
Conductivity (S/m)	0.96
Variation (%)	-0.41

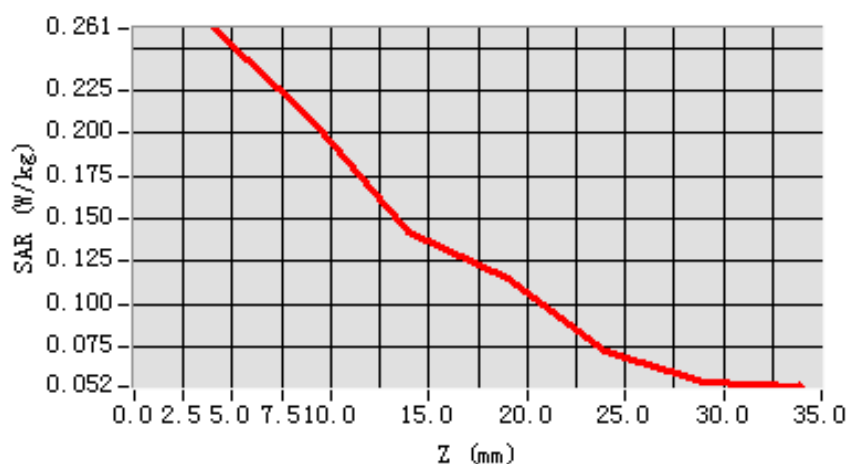


Maximum location: X=1.00, Y=-11.00

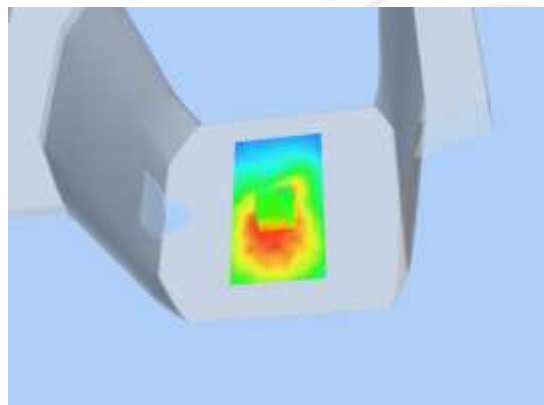
SAR 10g (W/Kg)	0.171341
SAR 1g (W/Kg)	0.242592

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2610	0.2083	0.1423	0.1158	0.0720	0.0543

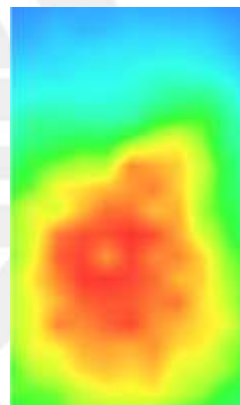
SAR, Z Axis Scan (X = 1, Y = -11)



3D screen shot

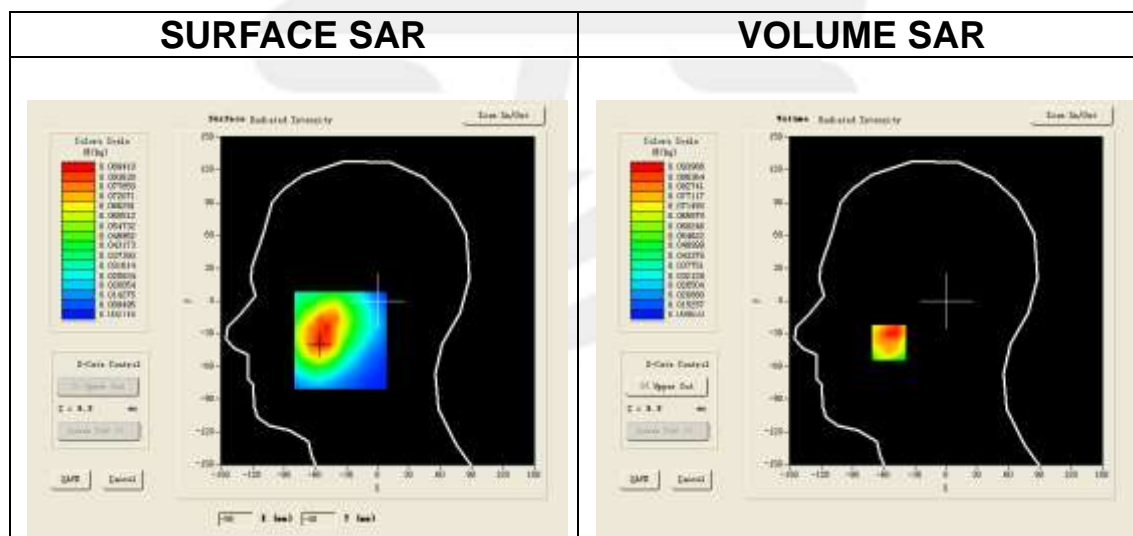


Hot spot position



Plot 8: DUT: Revel Pro; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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	GPRS850
Channels	Middle
Signal	TDMA (Crest factor:4.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	41.99
Conductivity (S/m)	0.90
Variation (%)	0.59

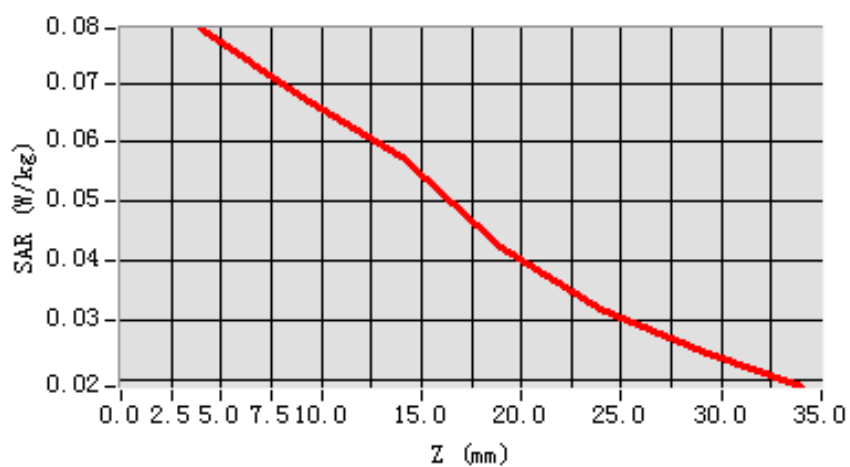


Maximum location: X=-55.00, Y=-38.00

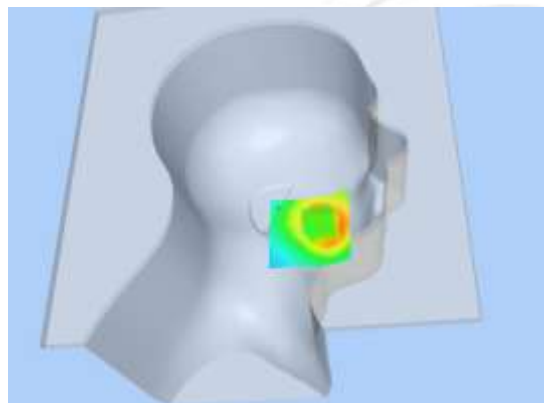
SAR 10g (W/Kg)	0.064204
SAR 1g (W/Kg)	0.090795

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0792	0.0676	0.0575	0.0424	0.0319	0.0245

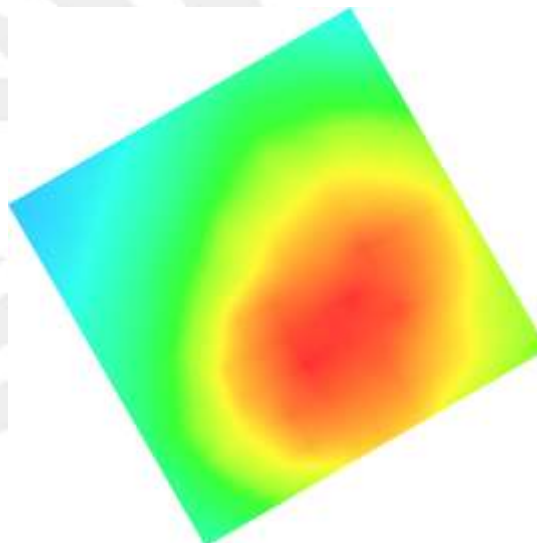
SAR, Z Axis Scan (X = -55, Y = -38)



3D screen shot

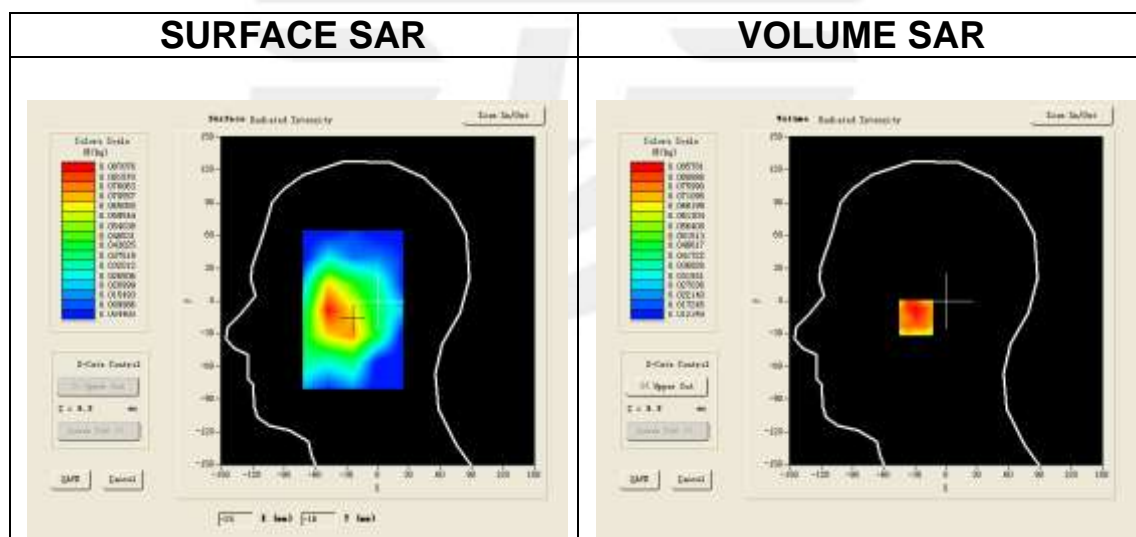


Hot spot position



Plot 9: DUT: Revel Pro; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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	GPRS850
Channels	Middle
Signal	TDMA (Crest factor:4.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	41.99
Conductivity (S/m)	0.90
Variation (%)	0.63

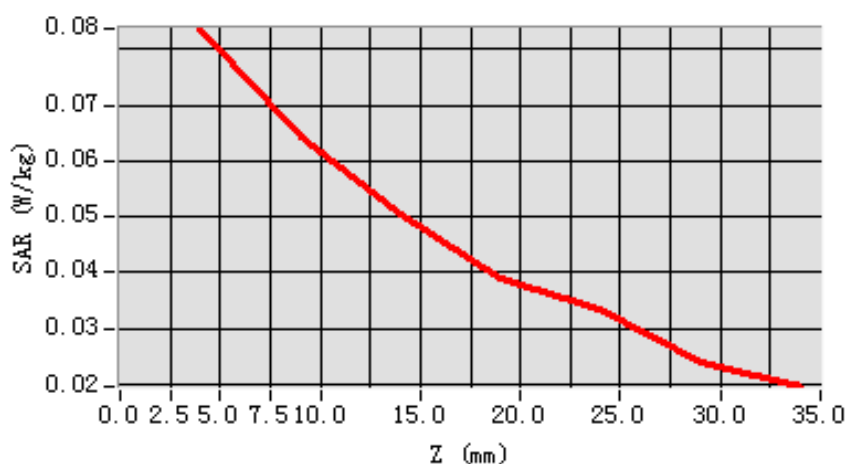


Maximum location: X=-23.00, Y=-15.00

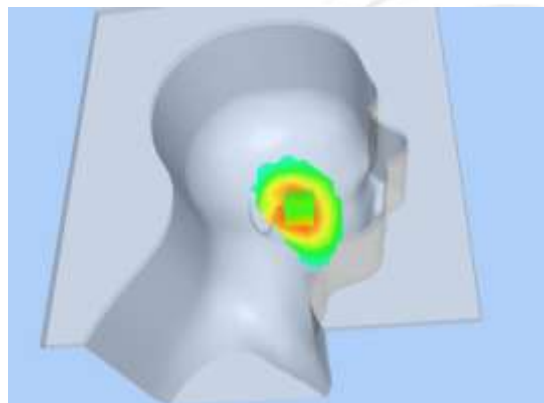
SAR 10g (W/Kg)	0.060915
SAR 1g (W/Kg)	0.082571

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0837	0.0641	0.0503	0.0389	0.0332	0.0238

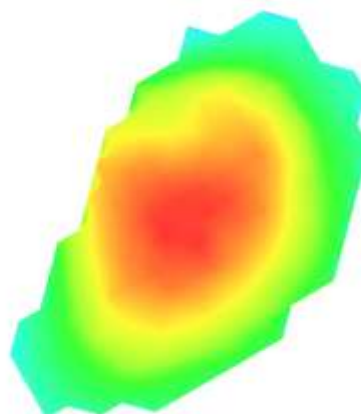
SAR, Z Axis Scan (X = -23, Y = -15)



3D screen shot

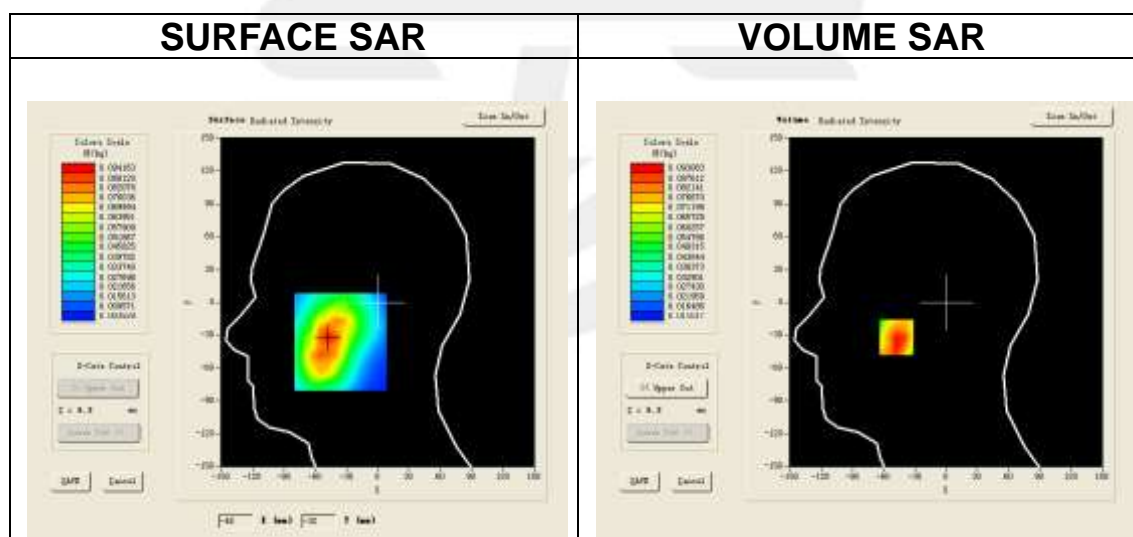


Hot spot position



Plot 10: DUT: Revel Pro; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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	GPRS850
Channels	Middle
Signal	TDMA (Crest factor:4.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	41.99
Conductivity (S/m)	0.90
Variation (%)	-0.13

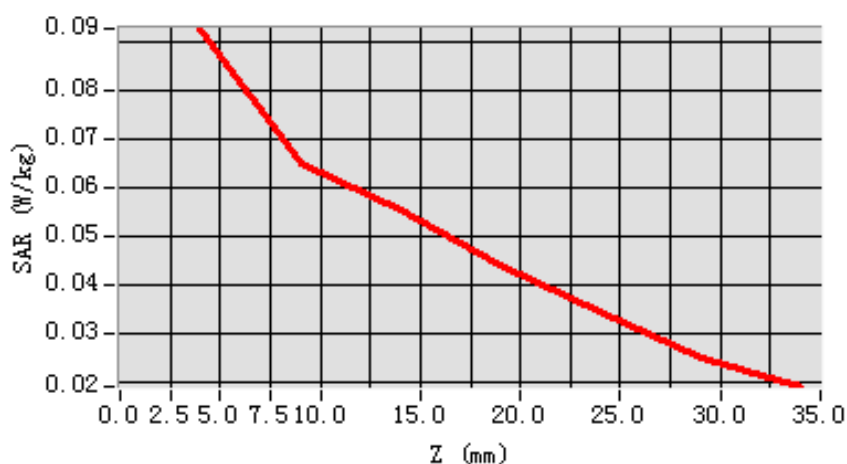


Maximum location: X=-48.00, Y=-32.00

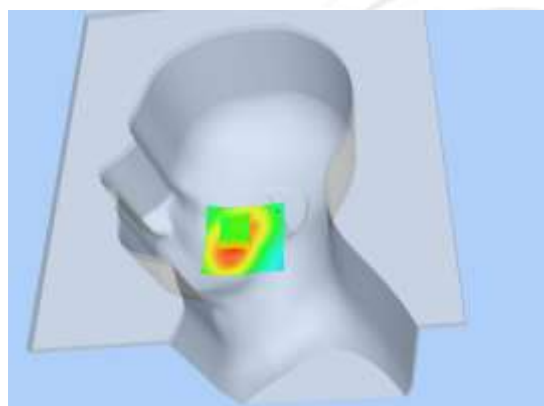
SAR 10g (W/Kg)	0.063990
SAR 1g (W/Kg)	0.092636

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0927	0.0649	0.0552	0.0441	0.0345	0.0250

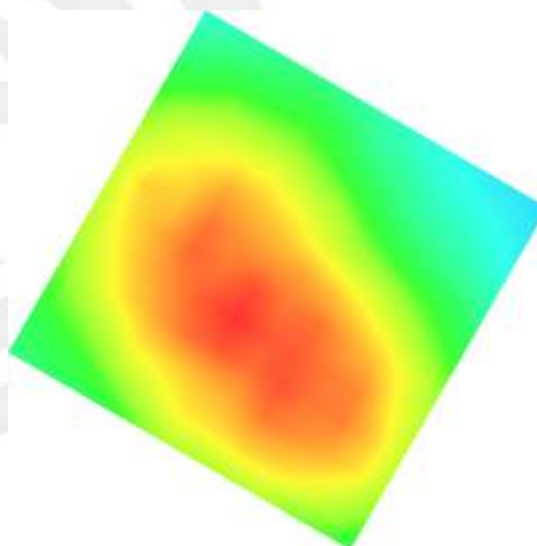
SAR, Z Axis Scan (X = -48, Y = -32)



3D screen shot

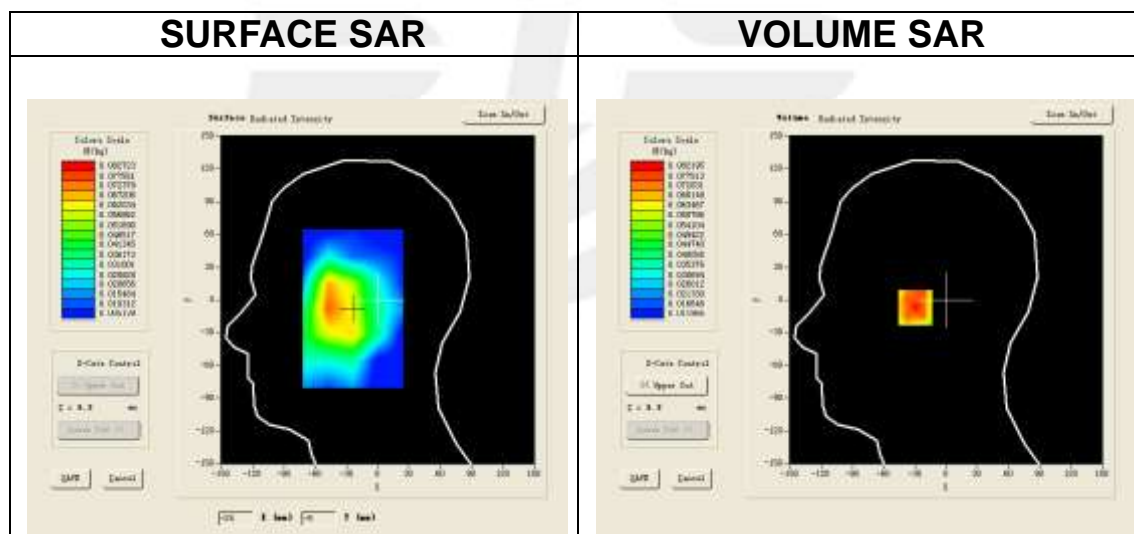


Hot spot position



Plot 11: DUT: Revel Pro; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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	GPRS850
Channels	Middle
Signal	TDMA (Crest factor:4.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	41.99
Conductivity (S/m)	0.90
Variation (%)	1.02

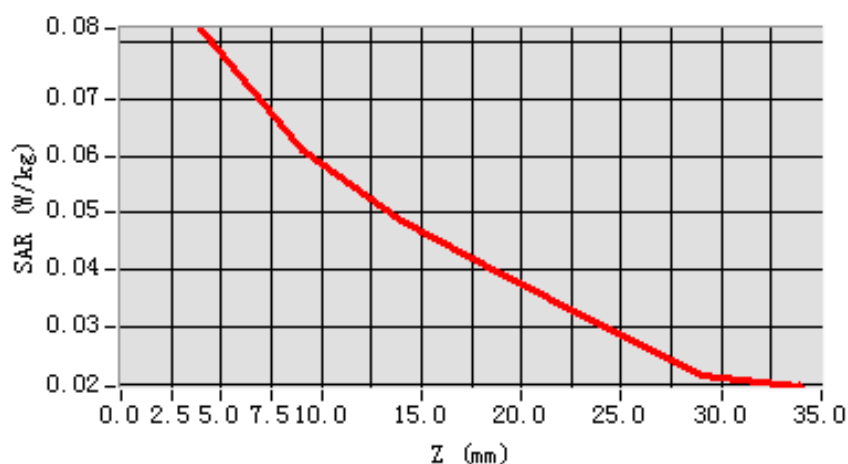


Maximum location: X=-25.00, Y=-7.00

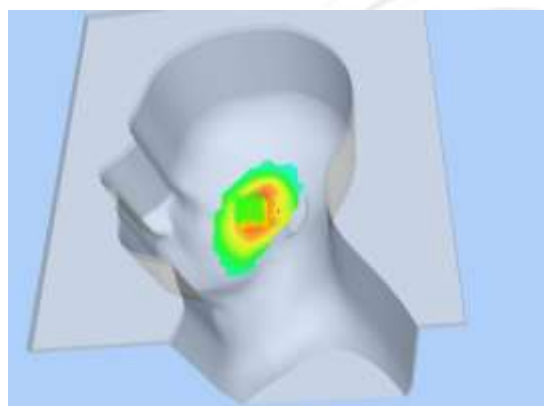
SAR 10g (W/Kg)	0.057114
SAR 1g (W/Kg)	0.080715

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0822	0.0611	0.0486	0.0394	0.0306	0.0217

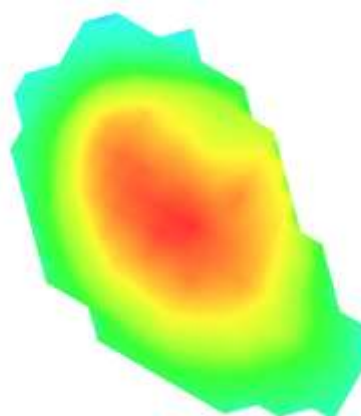
SAR, Z Axis Scan (X = -25, Y = -7)



3D screen shot

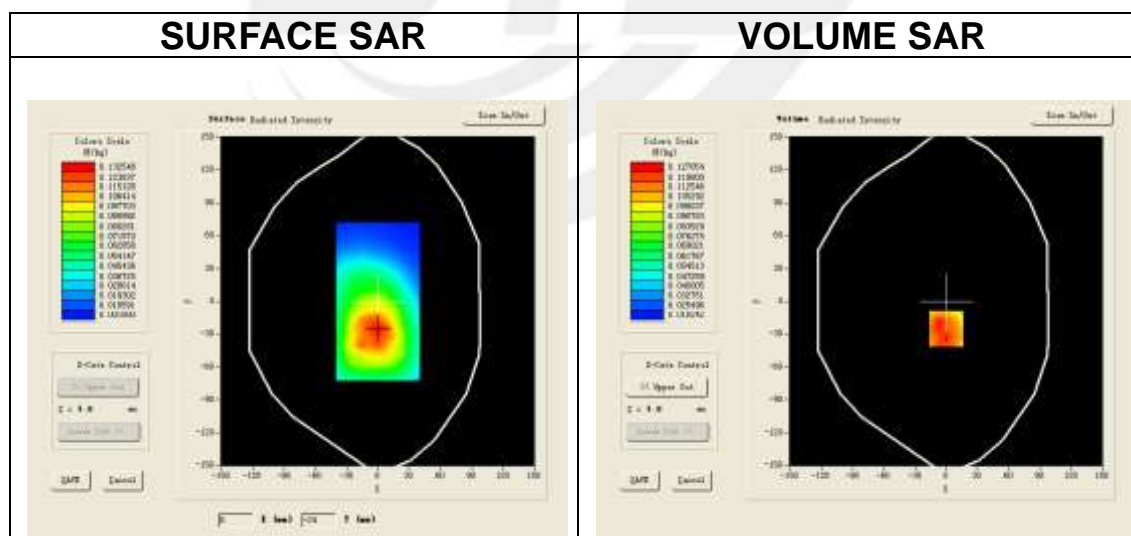


Hot spot position



Plot 12: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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	Middle
Signal	TDMA (Crest factor: 4.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.34
Conductivity (S/m)	0.96
Variation (%)	-0.63

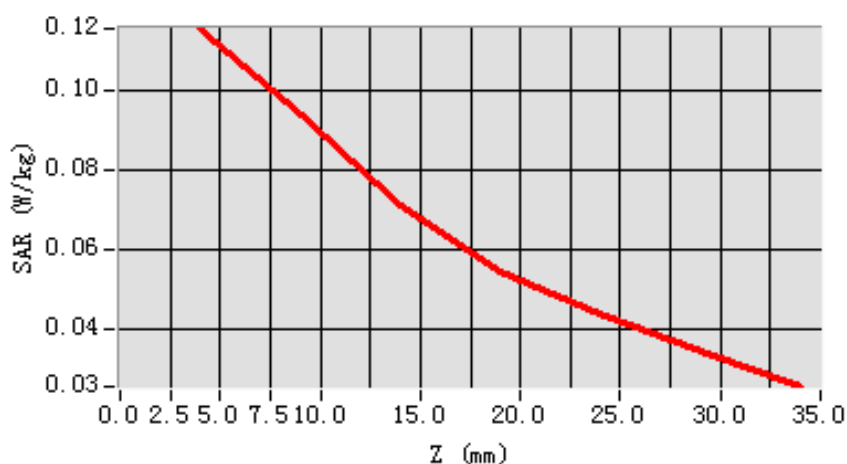


Maximum location: X=0.00, Y=-25.00

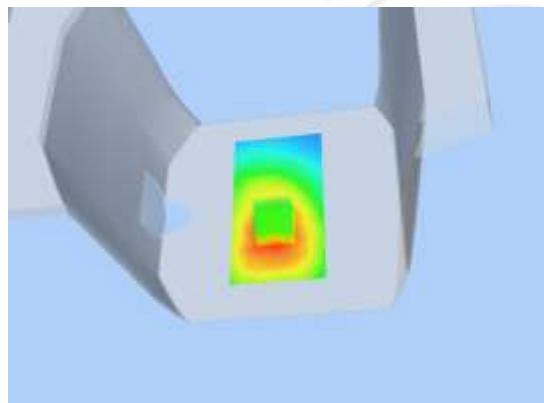
SAR 10g (W/Kg)	0.088030
SAR 1g (W/Kg)	0.123310

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1156	0.0941	0.0711	0.0546	0.0441	0.0347

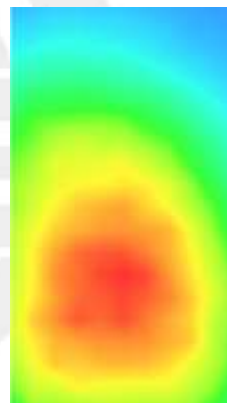
SAR, Z Axis Scan (X = 0, Y = -25)



3D screen shot

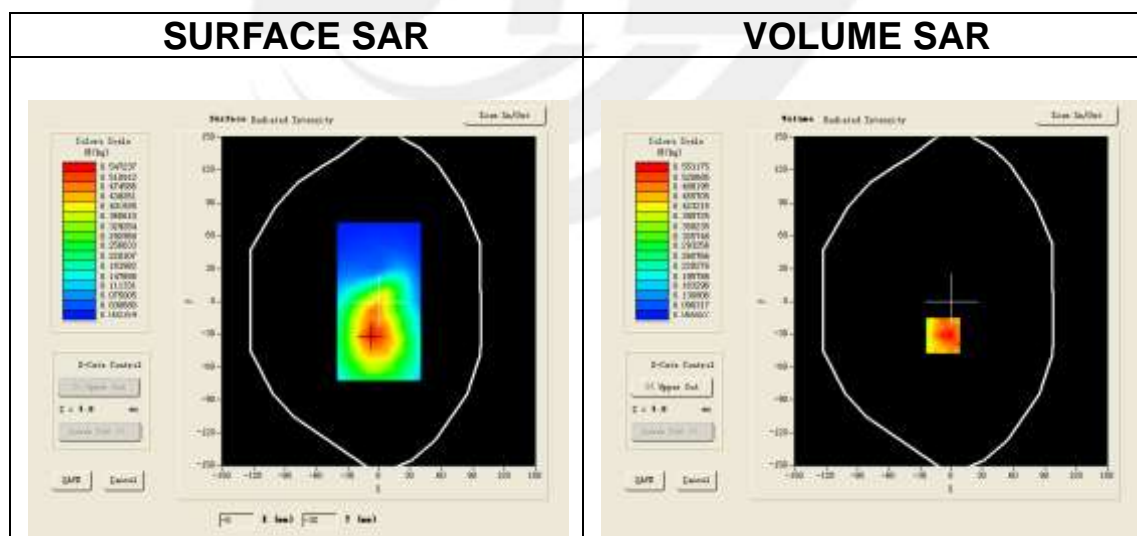


Hot spot position



Plot 13: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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 Behind
Band	GPRS 850
Channels	Middle
Signal	TDMA (Crest factor: 4.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.34
Conductivity (S/m)	0.96
Variation (%)	1.47

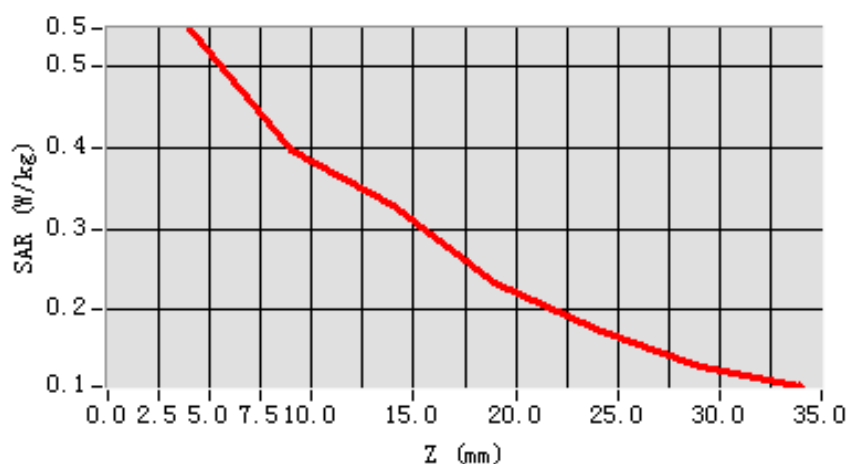


Maximum location: X=-8.00, Y=-31.00

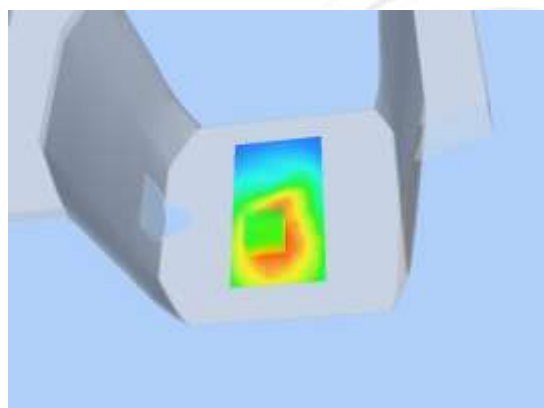
SAR 10g (W/Kg)	0.375381
SAR 1g (W/Kg)	0.540425

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5458	0.3969	0.3274	0.2325	0.1766	0.1314

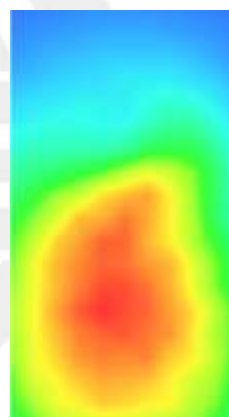
SAR, Z Axis Scan (X = -8, Y = -31)



3D screen shot

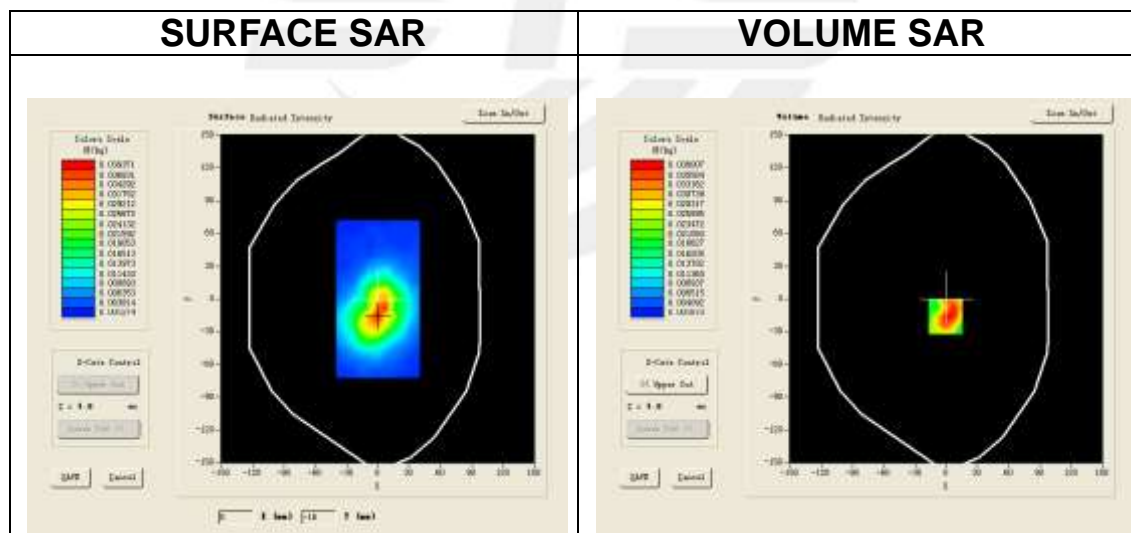


Hot spot position



Plot 14: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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	GPRS 850
Channels	Middle
Signal	TDMA (Crest factor: 4.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.34
Conductivity (S/m)	0.96
Variation (%)	-0.86

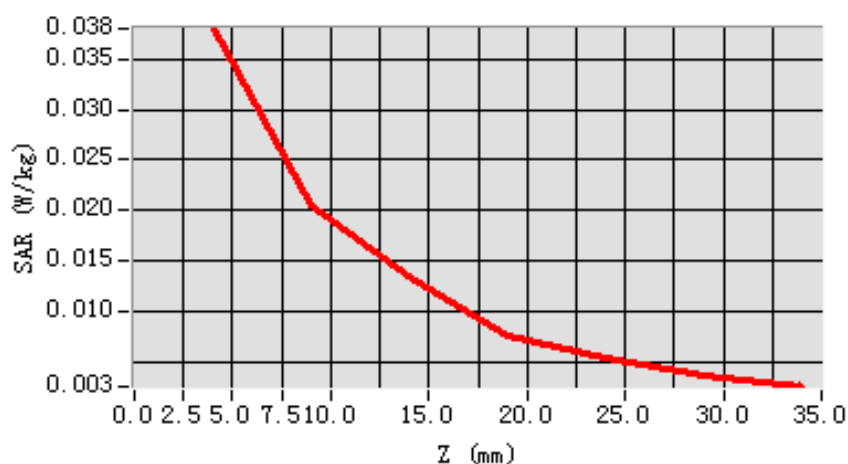


Maximum location: X=-1.00, Y=-16.00

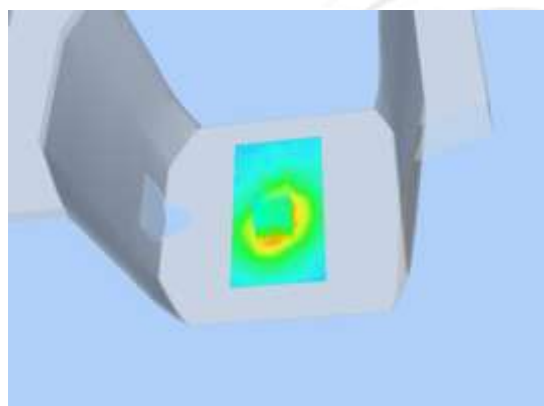
SAR 10g (W/Kg)	0.021064
SAR 1g (W/Kg)	0.037172

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0380	0.0204	0.0134	0.0075	0.0055	0.0036

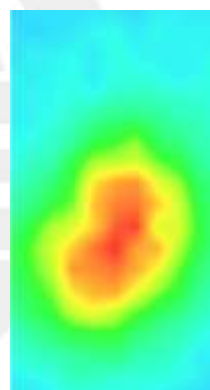
SAR, Z Axis Scan (X = -1, Y = -16)



3D screen shot

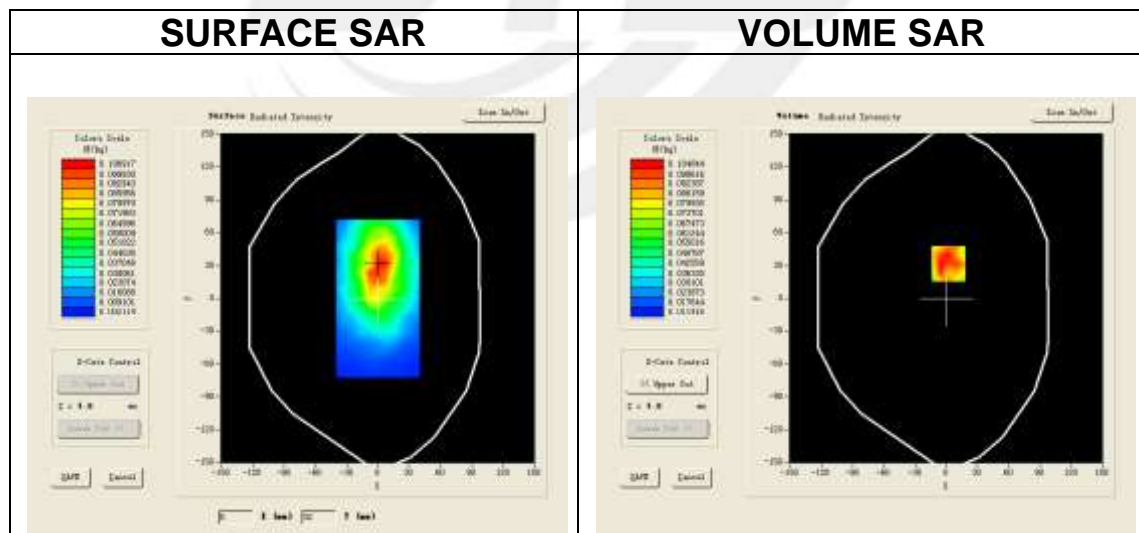


Hot spot position



Plot 15: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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	Middle
Signal	TDMA (Crest factor: 4.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.34
Conductivity (S/m)	0.96
Variation (%)	-0.91

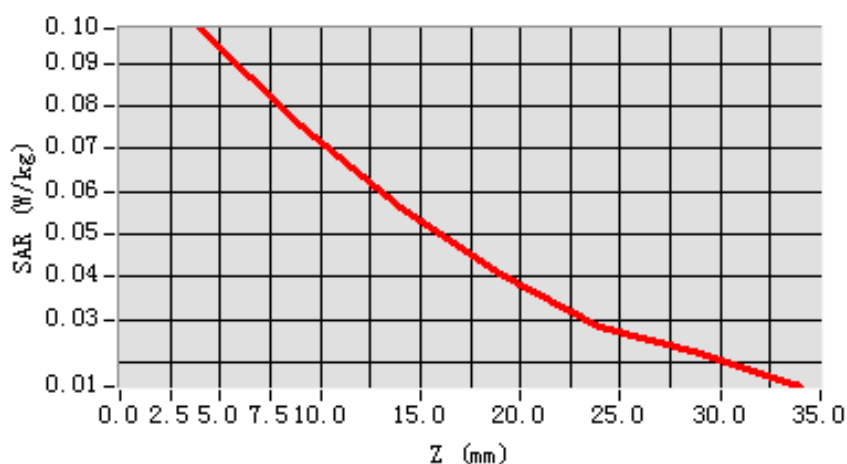


Maximum location: X=2.00, Y=32.00

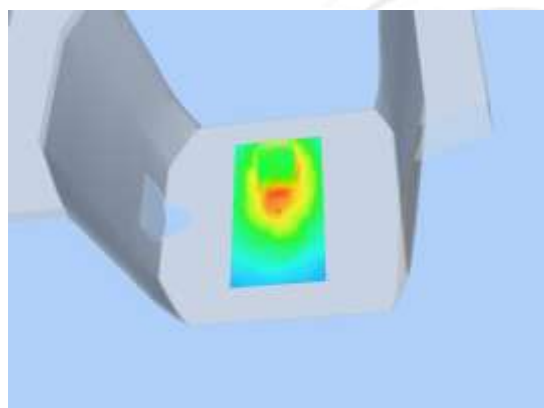
SAR 10g (W/Kg)	0.068195
SAR 1g (W/Kg)	0.103286

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0982	0.0754	0.0560	0.0405	0.0280	0.0222

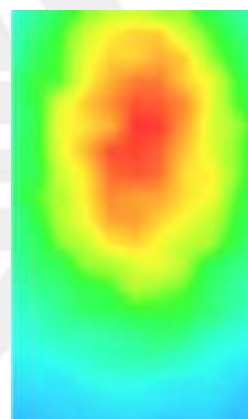
SAR, Z Axis Scan (X = 2, Y = 32)



3D screen shot

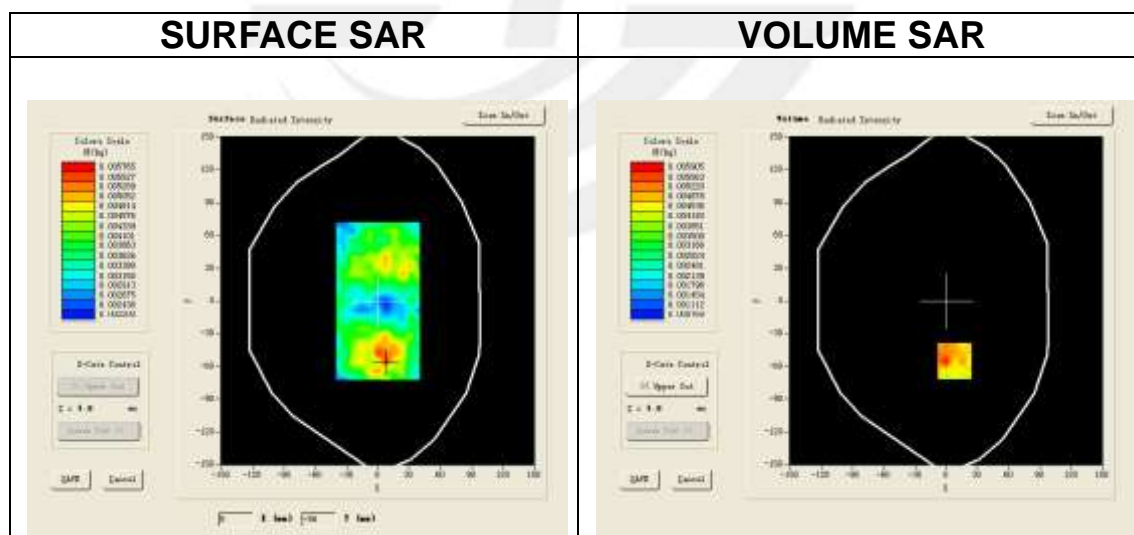


Hot spot position



Plot 16: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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 top side
Band	GPRS 850
Channels	Middle
Signal	TDMA (Crest factor: 4.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.34
Conductivity (S/m)	0.96
Variation (%)	0.52

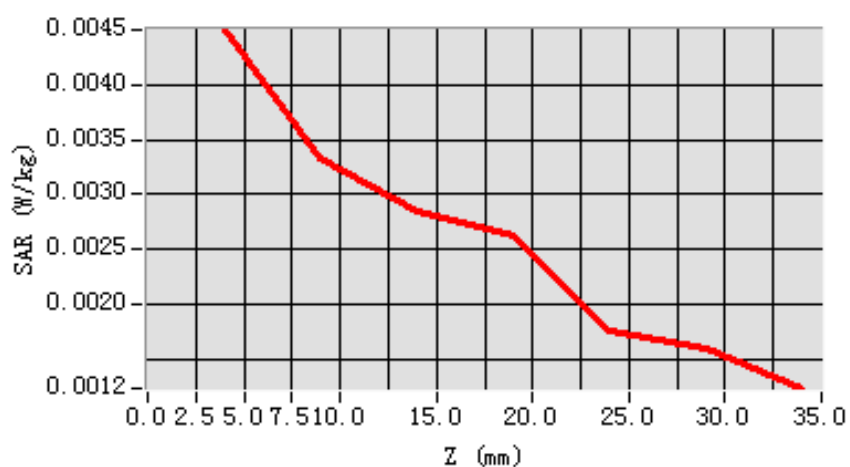


Maximum location: X=8.00, Y=-55.00

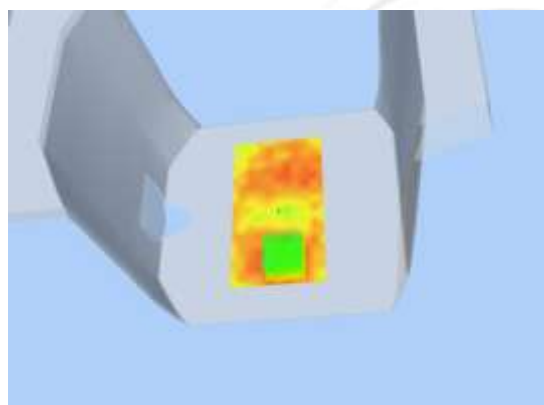
SAR 10g (W/Kg)	0.003736
SAR 1g (W/Kg)	0.005494

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0045	0.0033	0.0029	0.0026	0.0018	0.0016

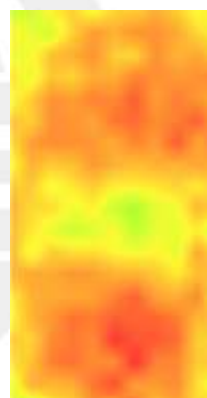
SAR, Z Axis Scan (X = 8, Y = -55)



3D screen shot

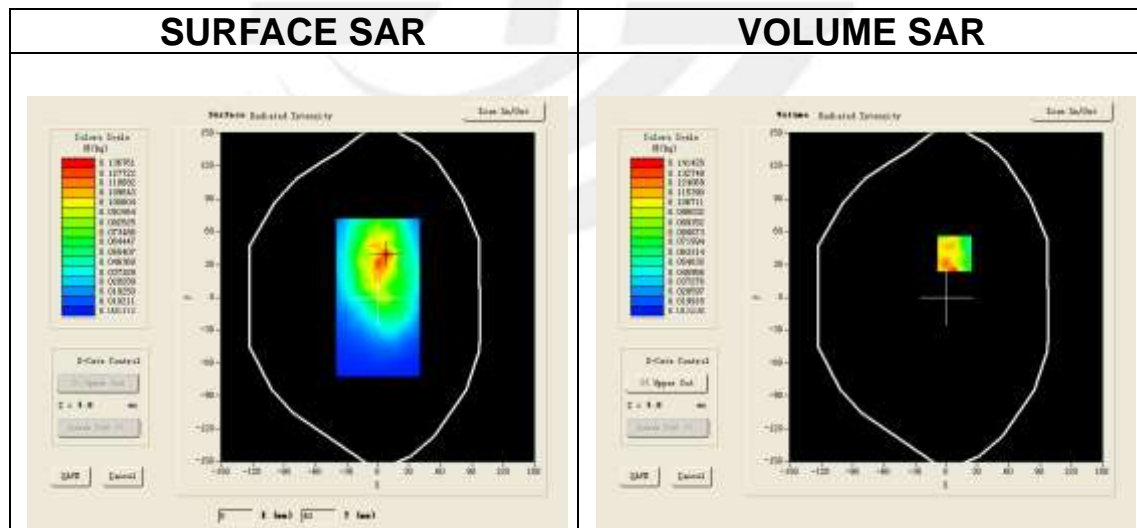


Hot spot position



Plot 17: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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	Middle
Signal	TDMA (Crest factor: 2.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.34
Conductivity (S/m)	0.96
Variation (%)	0.68

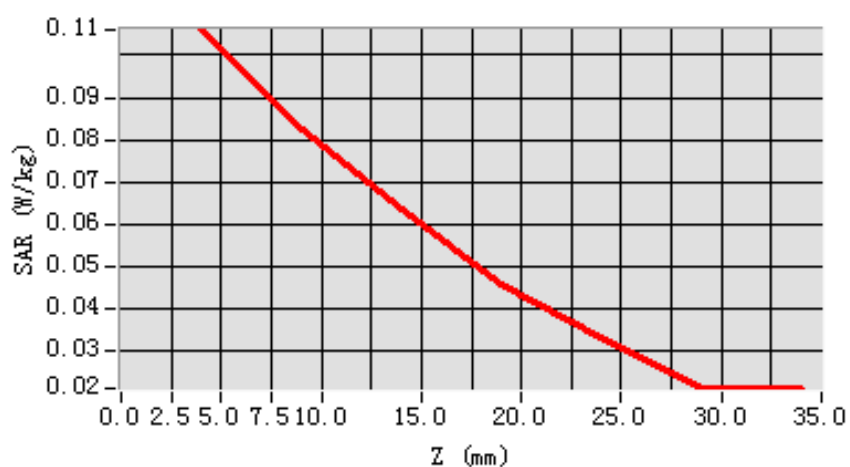


Maximum location: X=8.00, Y=40.00

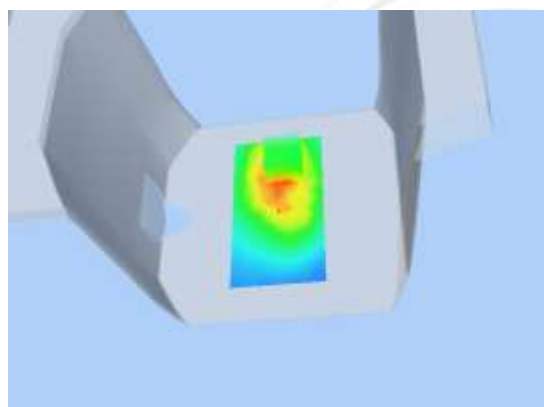
SAR 10g (W/Kg)	0.079405
SAR 1g (W/Kg)	0.111023

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1060	0.0823	0.0634	0.0456	0.0332	0.0211

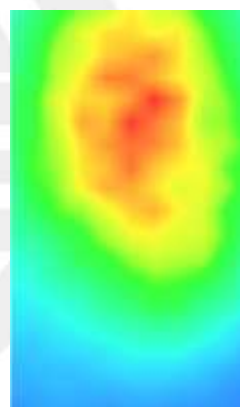
SAR, Z Axis Scan (X = 8, Y = 40)



3D screen shot

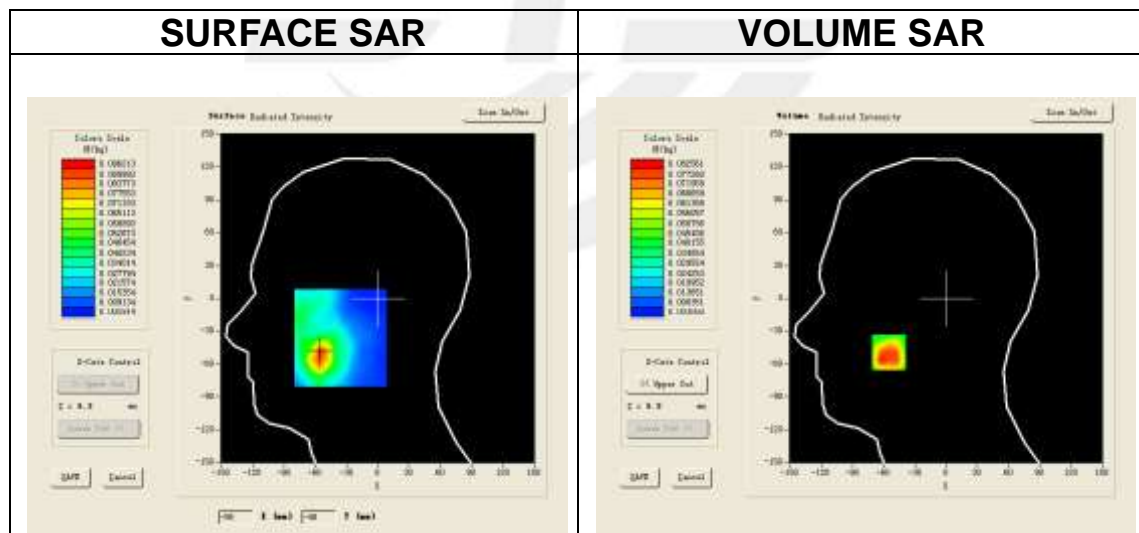


Hot spot position



Plot 18: DUT: Revel Pro; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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	Mid
Signal	TDMA (Crest factor: 8.0)
Frequency (MHz)	1880
Relative permittivity (real part)	41.02
Conductivity (S/m)	1.40
Variation (%)	1.74

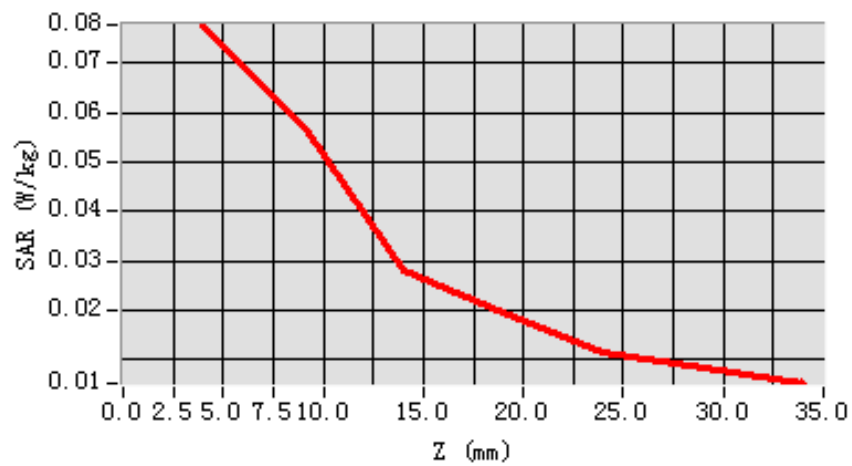


Maximum location: X=-55.00, Y=-49.00

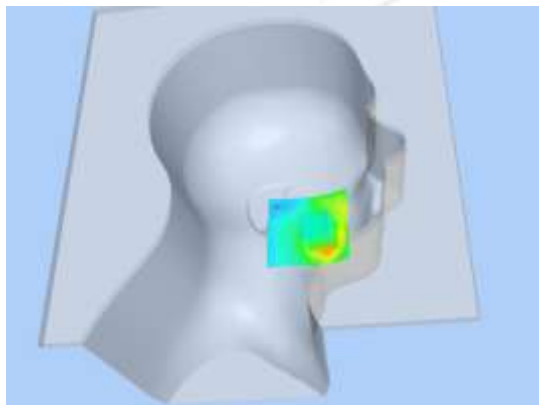
SAR 10g (W/Kg)	0.044114
SAR 1g (W/Kg)	0.078338

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0779	0.0572	0.0279	0.0193	0.0113	0.0083

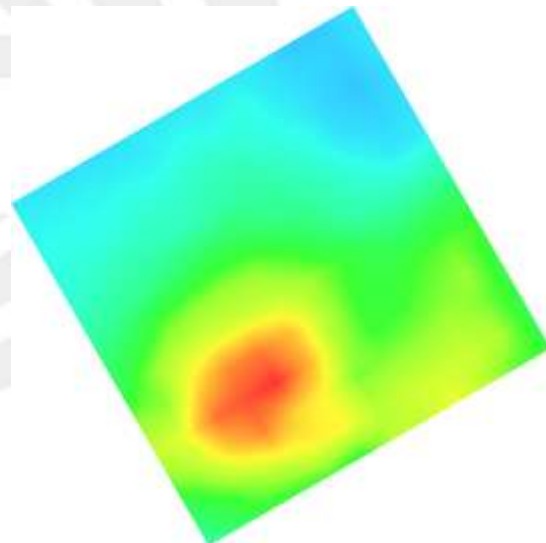
SAR, Z Axis Scan (X = -55, Y = -49)



3D screen shot

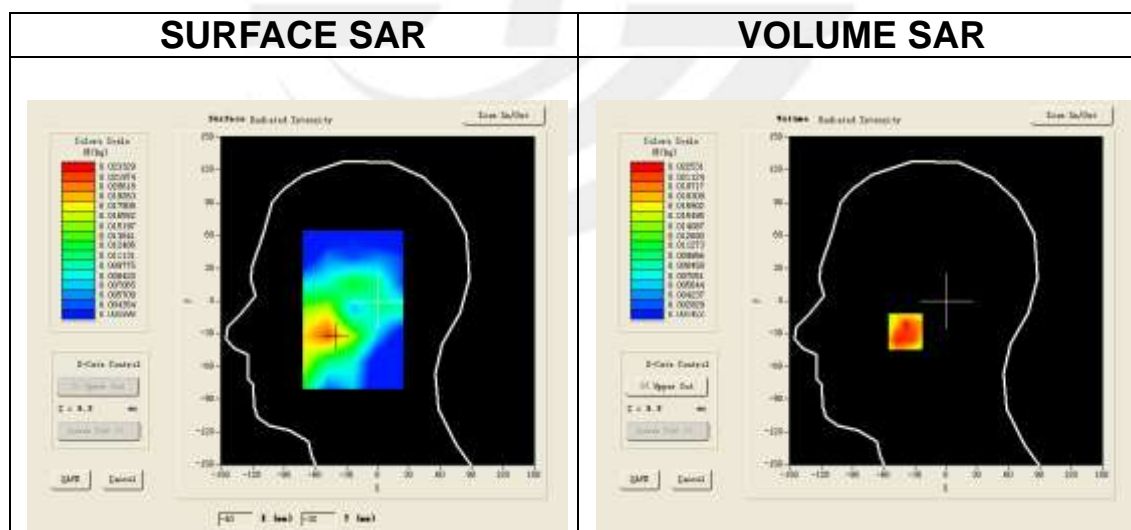


Hot spot position



Plot 19: DUT: Revel Pro; EUT Model: EROS 4.0

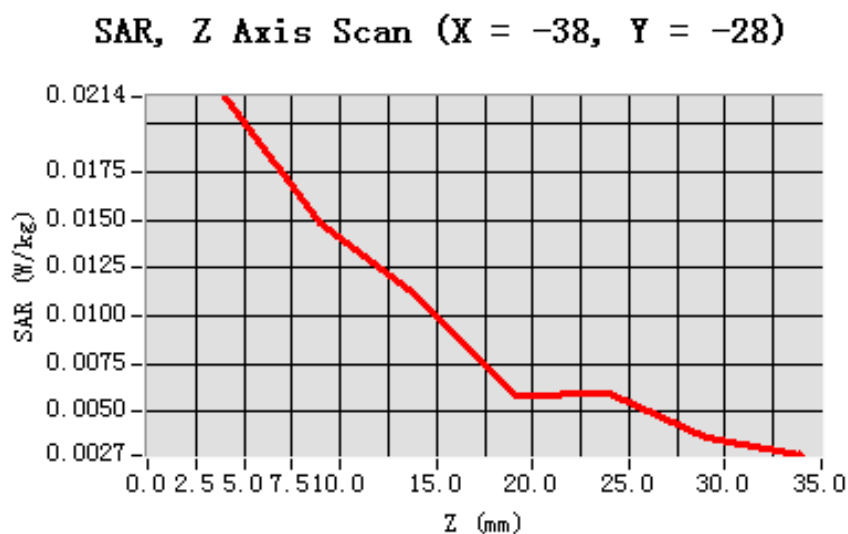
Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
Probe	SN 17/14 EP221
ConvF	4.71
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Right head
Device Position	Tilt
Band	GSM1900
Channels	Mid
Signal	TDMA (Crest factor: 8.0)
Frequency (MHz)	1880
Relative permittivity (real part)	41.02
Conductivity (S/m)	1.40
Variation (%)	0.24



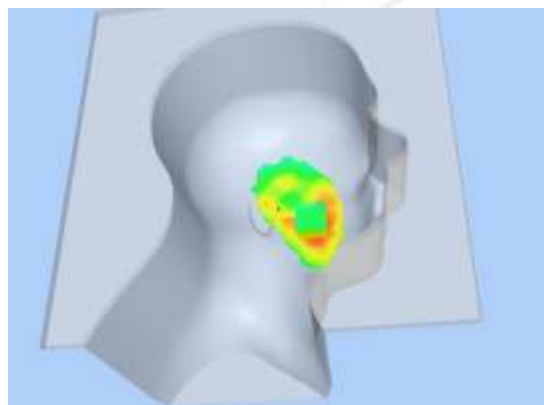
Maximum location: X=-38.00, Y=-28.00

SAR 10g (W/Kg)	0.013572
SAR 1g (W/Kg)	0.021246

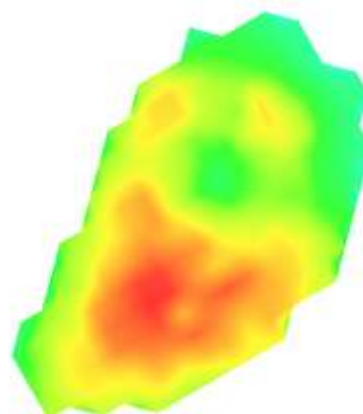
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0214	0.0149	0.0111	0.0058	0.0060	0.0037



3D screen shot

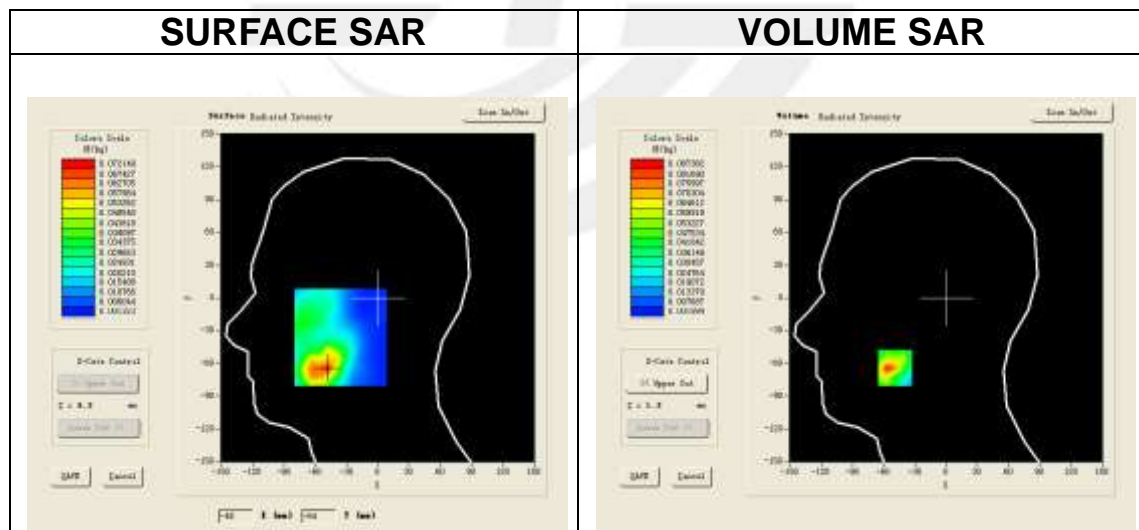


Hot spot position



Plot 20: DUT: Revel Pro; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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	Low
Signal	TDMA (Crest factor: 8.0)
Frequency (MHz)	1850.2
Relative permittivity (real part)	41.02
Conductivity (S/m)	1.40
Variation (%)	1.36

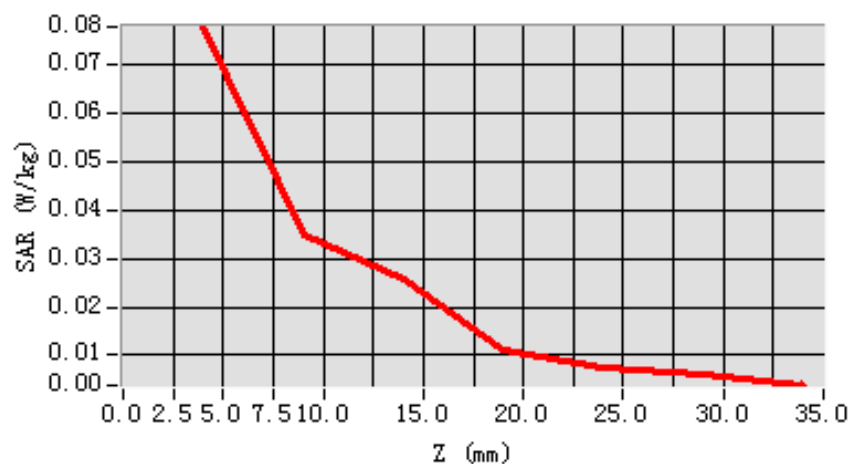


Maximum location: X=-49.00, Y=-64.00

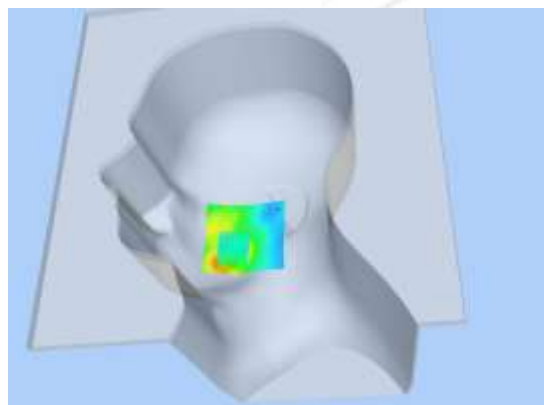
SAR 10g (W/Kg)	0.038586
SAR 1g (W/Kg)	0.082333

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0780	0.0349	0.0258	0.0109	0.0072	0.0061

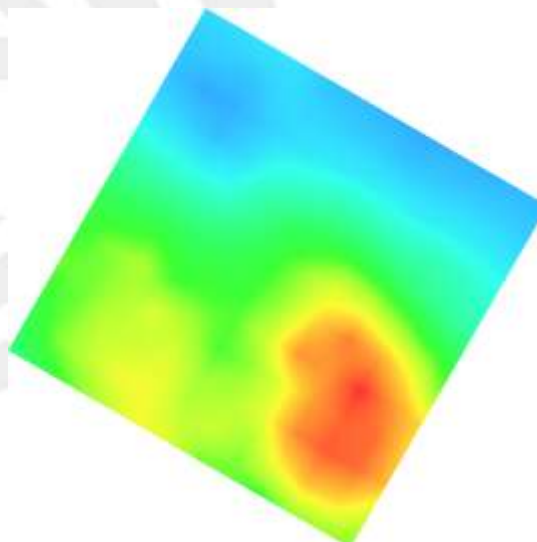
SAR, Z Axis Scan (X = -49, Y = -64)



3D screen shot

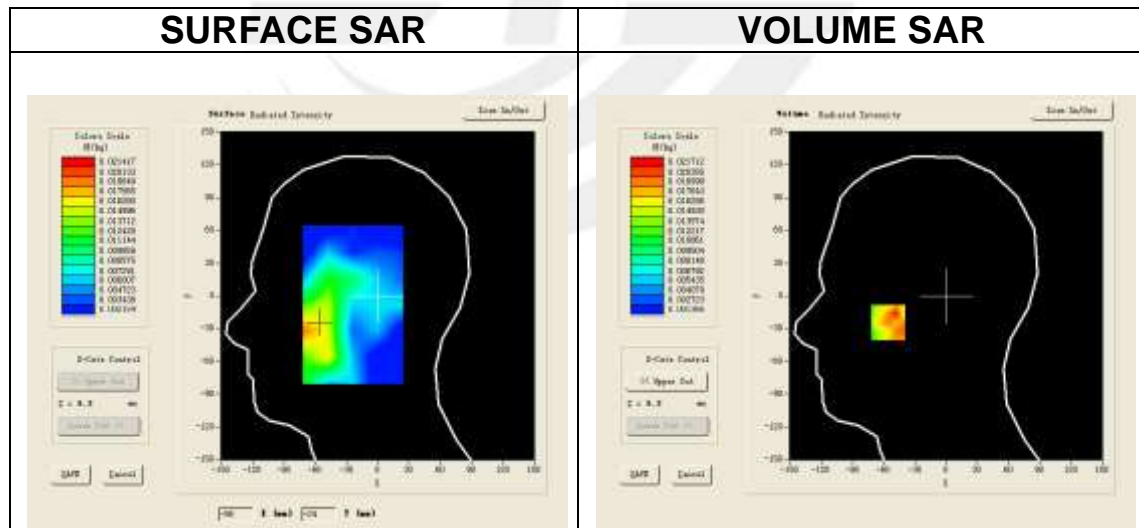


Hot spot position



Plot 21: DUT: Revel Pro; EUT Model: EROS 4.0

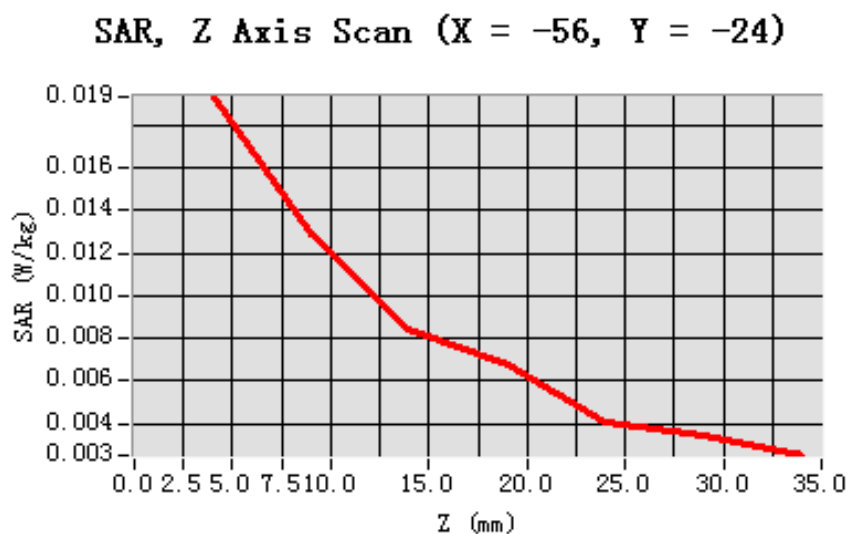
Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
Probe	SN 17/14 EP221
ConvF	4.85
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Left head
Device Position	Tilt
Band	GSM1900
Channels	Mid
Signal	TDMA (Crest factor: 8.0)
Frequency (MHz)	1880
Relative permittivity (real part)	41.02
Conductivity (S/m)	1.40
Variation (%)	-0.28



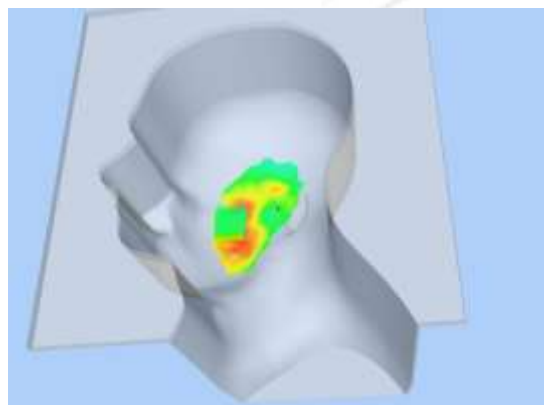
Maximum location: X=-56.00, Y=-24.00

SAR 10g (W/Kg)	0.012325
SAR 1g (W/Kg)	0.019422

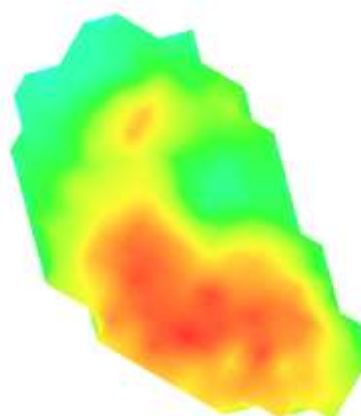
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0193	0.0128	0.0084	0.0068	0.0041	0.0035



3D screen shot

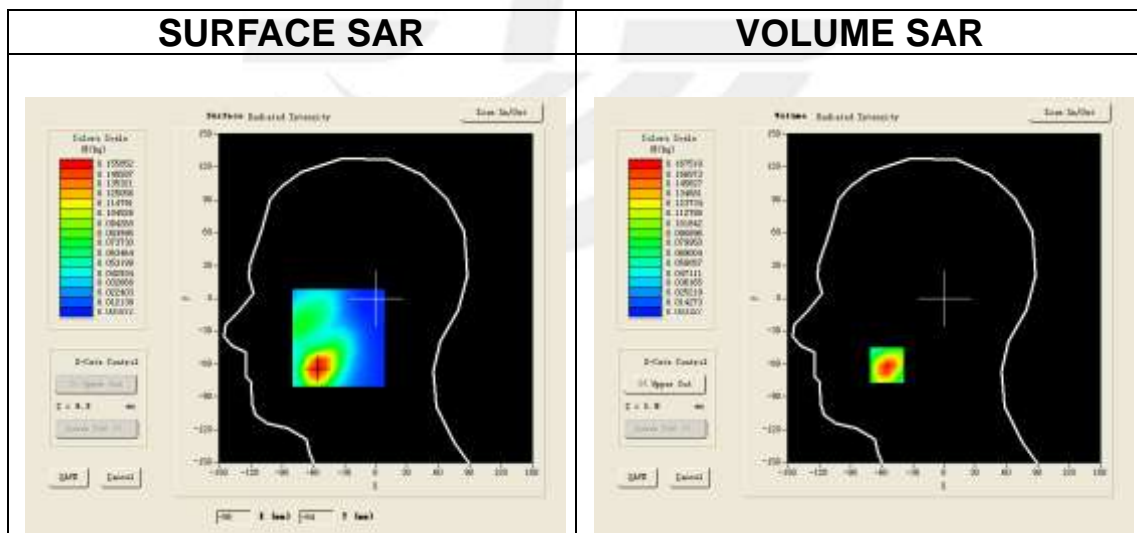


Hot spot position



Plot 22: DUT: Revel Pro; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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	Mid
Signal	TDMA (Crest factor: 8.0)
Frequency (MHz)	1880
Relative permittivity (real part)	41.02
Conductivity (S/m)	1.40
Variation (%)	-0.21

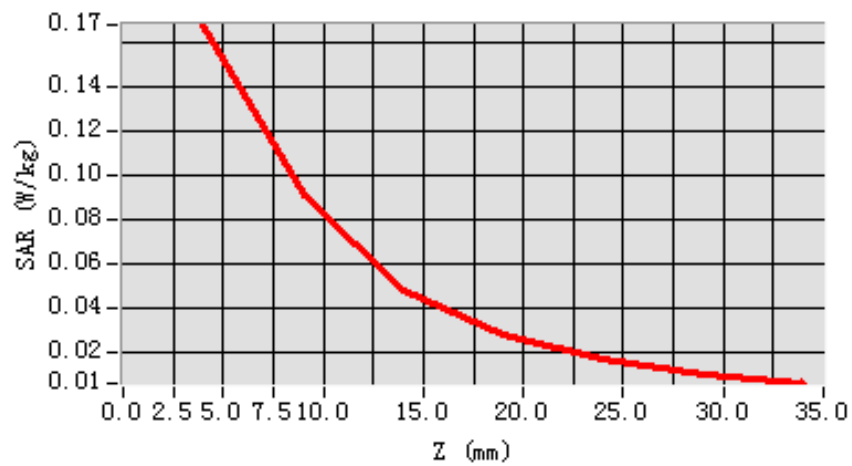


Maximum location: X=-55.00, Y=-61.00

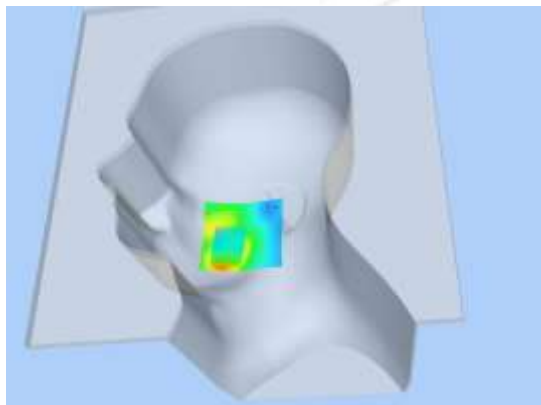
SAR 10g (W/Kg)	0.083700
SAR 1g (W/Kg)	0.160667

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1675	0.0907	0.0479	0.0279	0.0164	0.0097

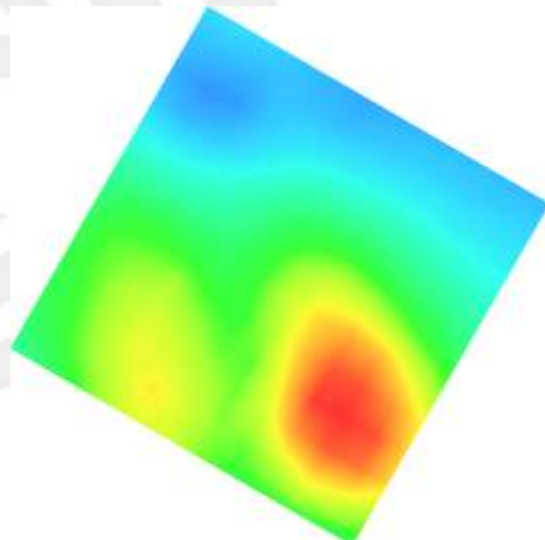
SAR, Z Axis Scan (X = -55, Y = -61)



3D screen shot

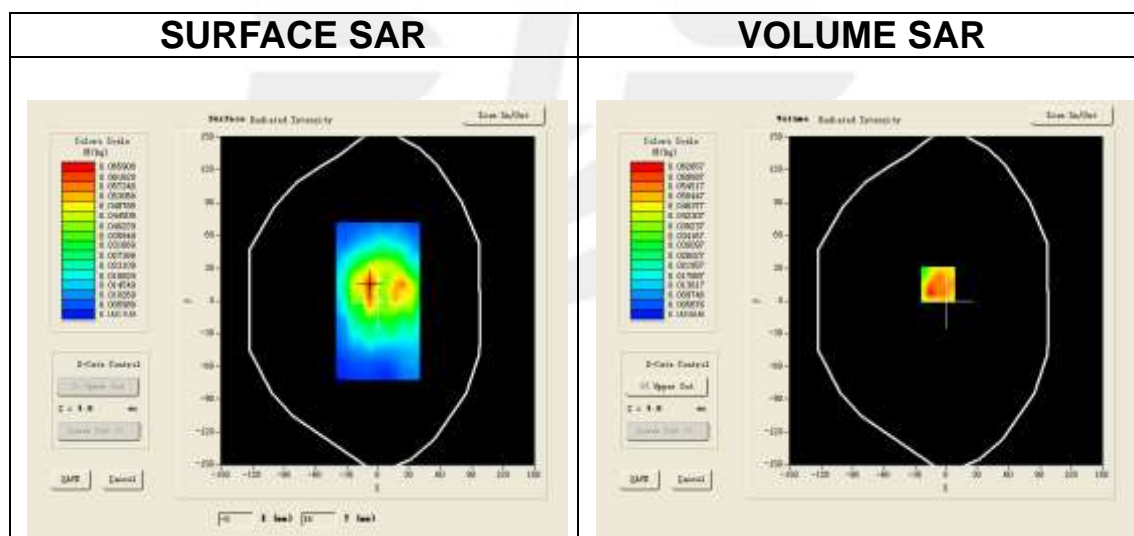


Hot spot position



Plot 23: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)
Frequency (MHz)	1880
Relative permittivity (real part)	53.77
Conductivity (S/m)	1.50
Variation (%)	-1.47

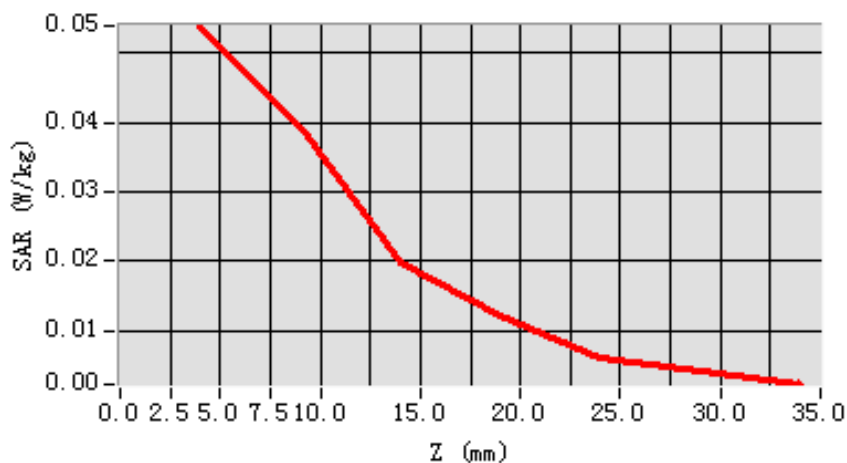


Maximum location: X=-8.00, Y=15.00

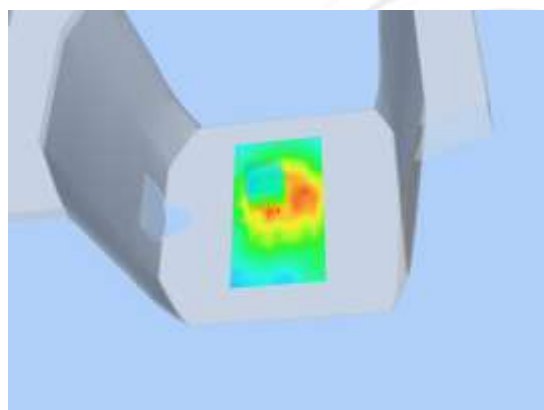
SAR 10g (W/Kg)	0.032695
SAR 1g (W/Kg)	0.059785

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0538	0.0391	0.0199	0.0121	0.0063	0.0043

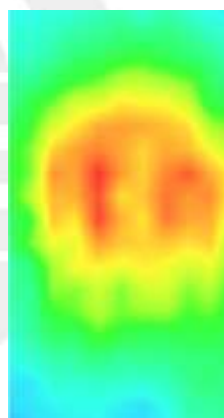
SAR, Z Axis Scan (X = -8, Y = 15)



3D screen shot

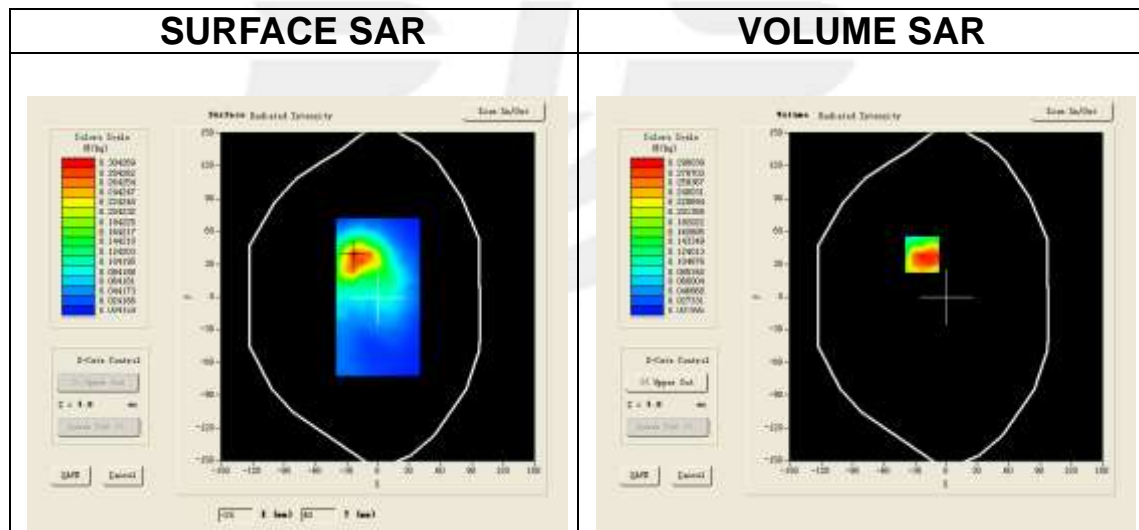


Hot spot position



Plot 24: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)
Frequency (MHz)	1880
Relative permittivity (real part)	53.77
Conductivity (S/m)	1.50
Variation (%)	-0.52

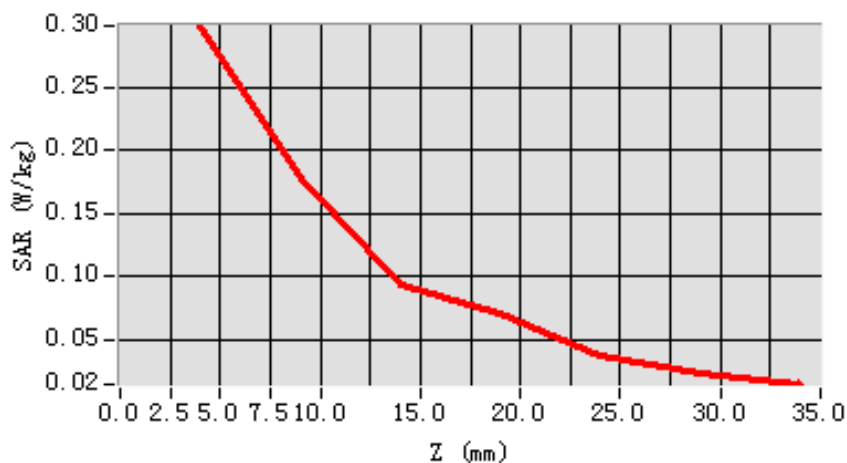


Maximum location: X=-23.00, Y=39.00

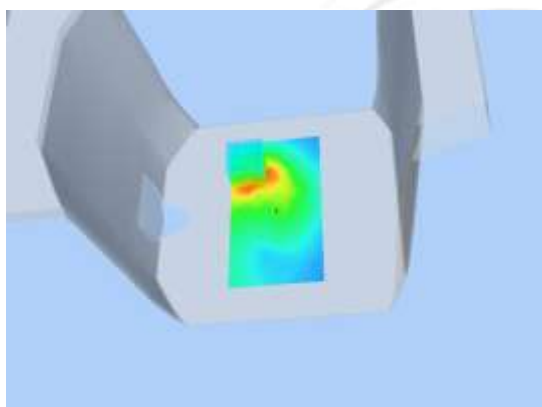
SAR 10g (W/Kg)	0.166529
SAR 1g (W/Kg)	0.313117

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2980	0.1777	0.0941	0.0712	0.0375	0.0241

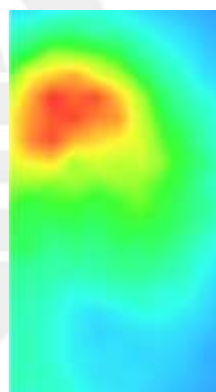
SAR, Z Axis Scan (X = -23, Y = 39)



3D screen shot

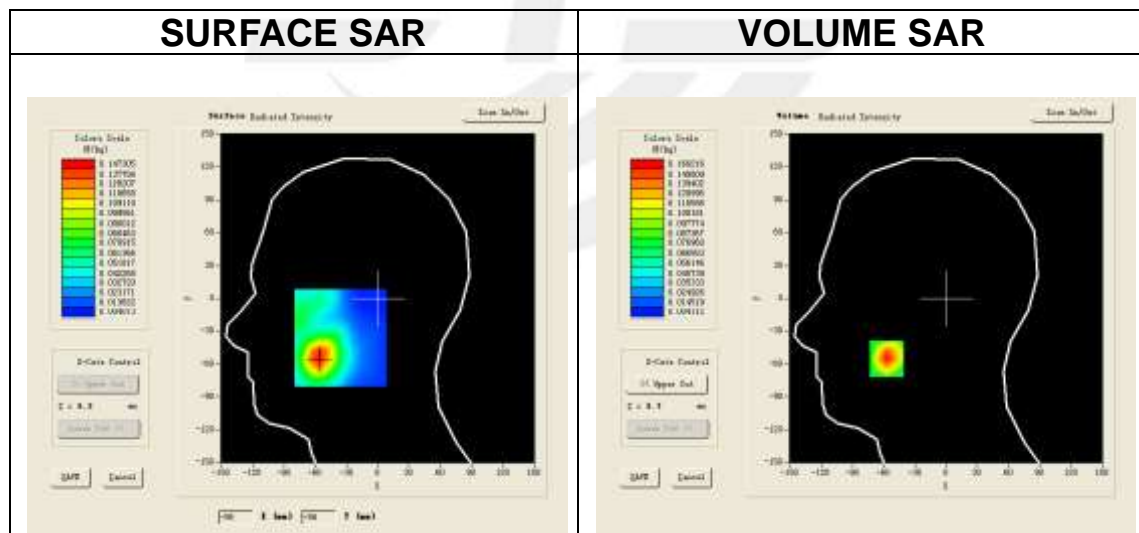


Hot spot position



Plot 25: DUT: Revel Pro; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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	GPRS 1900
Channels	Mid
Signal	TDMA (Crest factor: 4.0)
Frequency (MHz)	1880
Relative permittivity (real part)	41.02
Conductivity (S/m)	1.40
Variation (%)	0.69

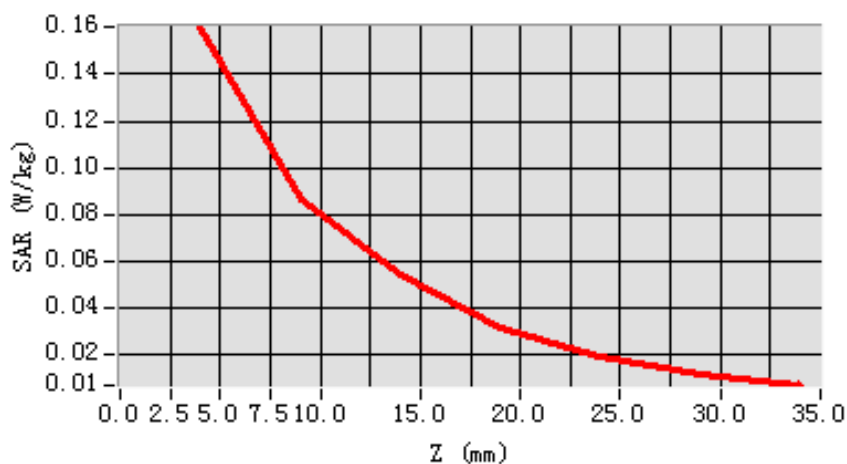


Maximum location: X=-57.00, Y=-55.00

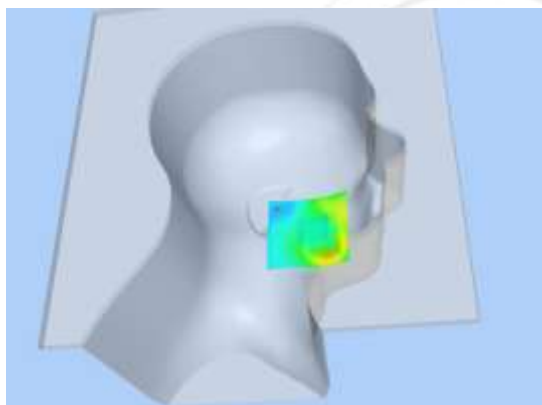
SAR 10g (W/Kg)	0.082430
SAR 1g (W/Kg)	0.152128

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1602	0.0869	0.0543	0.0317	0.0194	0.0116

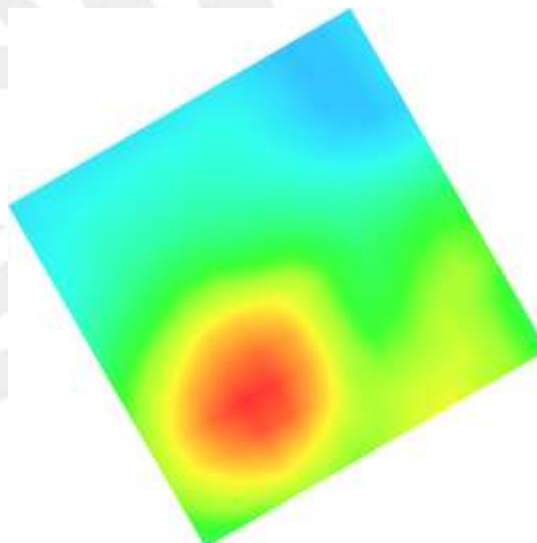
SAR, Z Axis Scan (X = -57, Y = -55)



3D screen shot

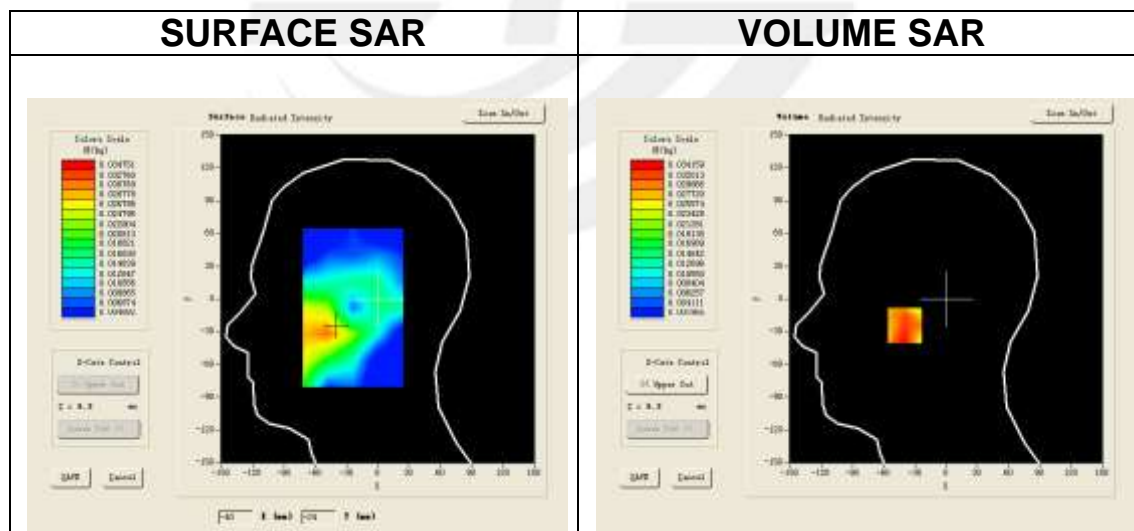


Hot spot position



Plot 26: DUT: Revel Pro; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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	GPRS 1900
Channels	Mid
Signal	TDMA (Crest factor: 4.0)
Frequency (MHz)	1880
Relative permittivity (real part)	41.02
Conductivity (S/m)	1.40
Variation (%)	-0.25

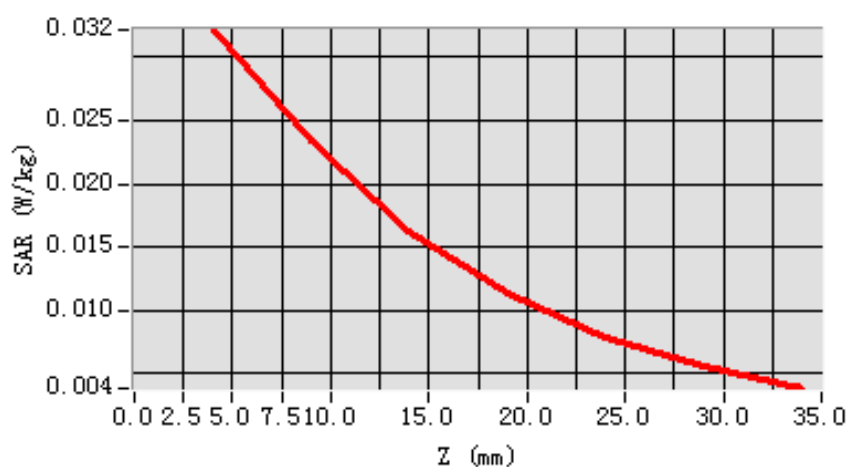


Maximum location: X=-40.00, Y=-24.00

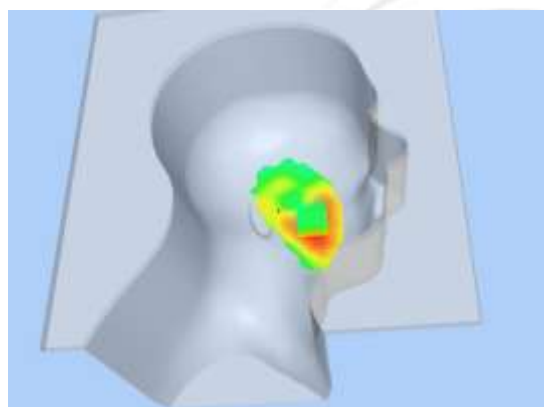
SAR 10g (W/Kg)	0.021517
SAR 1g (W/Kg)	0.032321

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0322	0.0235	0.0163	0.0113	0.0079	0.0056

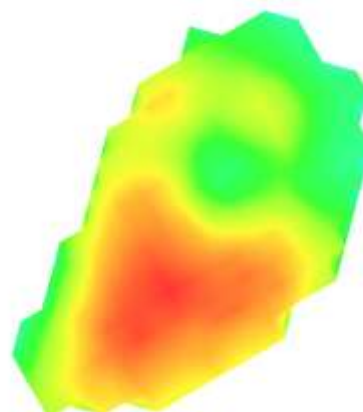
SAR, Z Axis Scan (X = -40, Y = -24)



3D screen shot

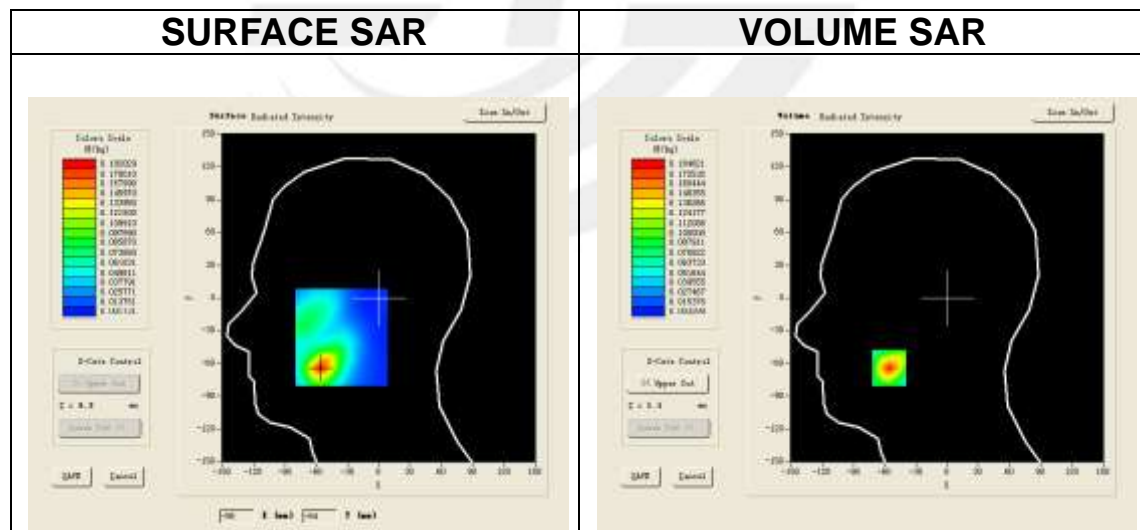


Hot spot position



Plot 27: DUT: Revel Pro; EUT Model: EROS 4.0

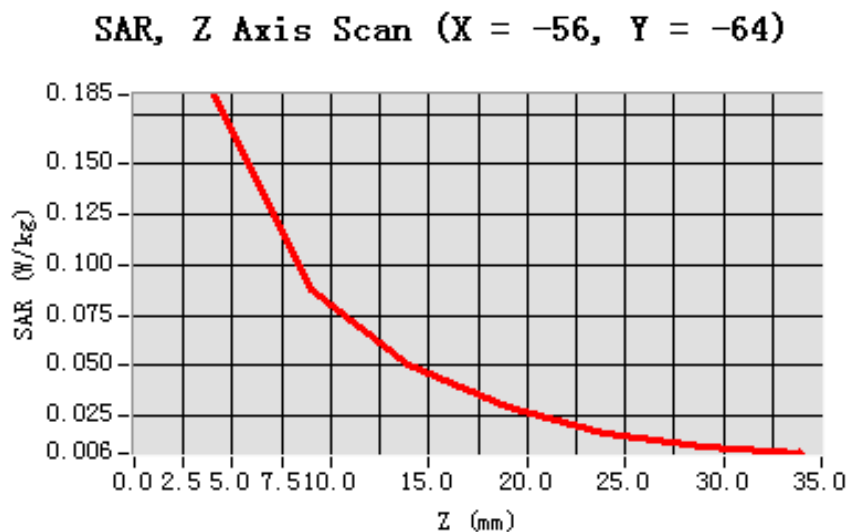
Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
Probe	SN 17/14 EP221
ConvF	4.71
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Left head
Device Position	Cheek
Band	GPRS 1900
Channels	Mid
Signal	TDMA (Crest factor: 4.0)
Frequency (MHz)	1880
Relative permittivity (real part)	41.02
Conductivity (S/m)	1.40
Variation (%)	1.04



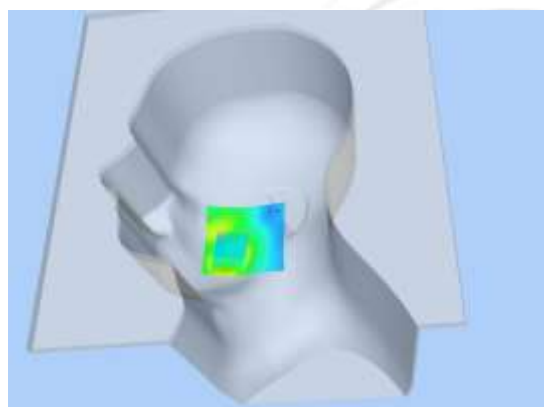
Maximum location: X=-56.00, Y=-64.00

SAR 10g (W/Kg)	0.085289
SAR 1g (W/Kg)	0.172314

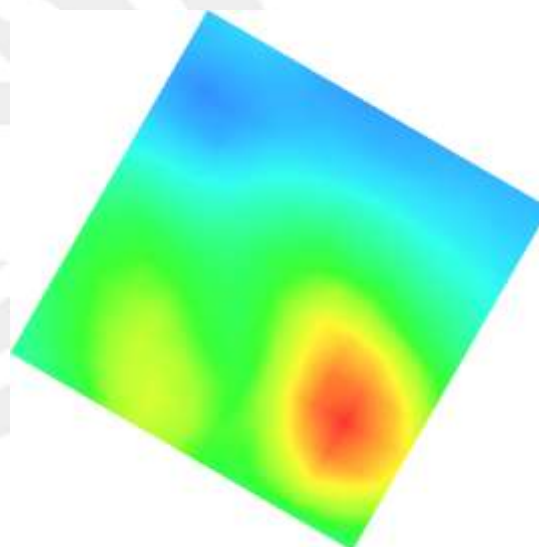
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1846	0.0881	0.0501	0.0288	0.0160	0.0099



3D screen shot

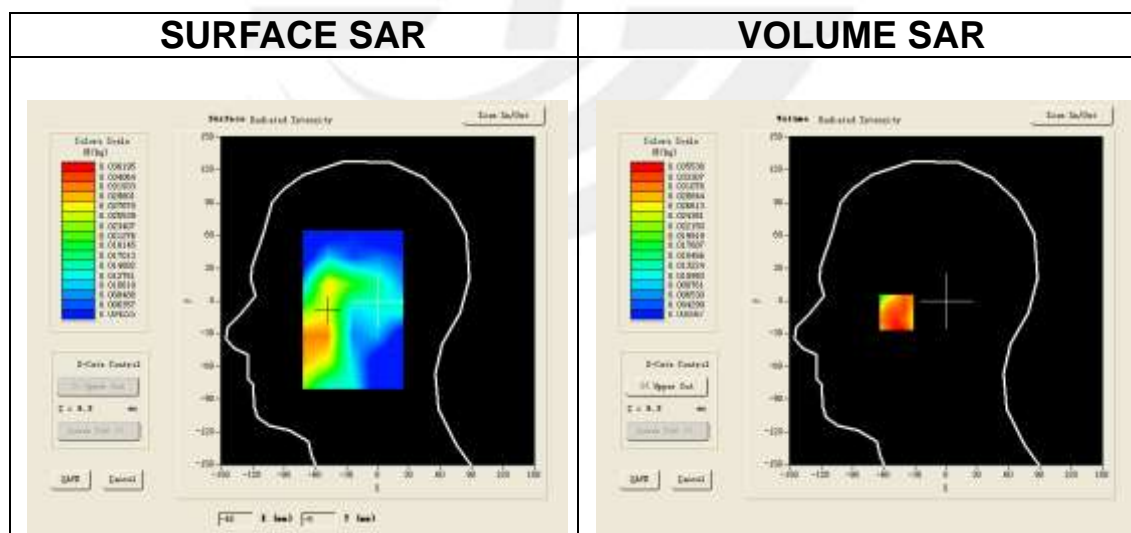


Hot spot position



Plot 28: DUT: Revel Pro; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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	Left head
Device Position	Tilt
Band	GPRS 1900
Channels	Mid
Signal	TDMA (Crest factor: 4.0)
Frequency (MHz)	1880
Relative permittivity (real part)	41.02
Conductivity (S/m)	1.40
Variation (%)	-1.95

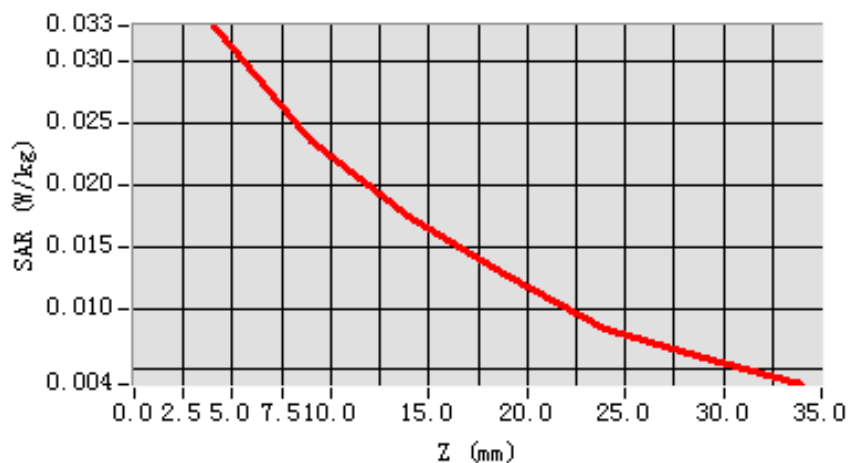


Maximum location: X=-48.00, Y=-8.00

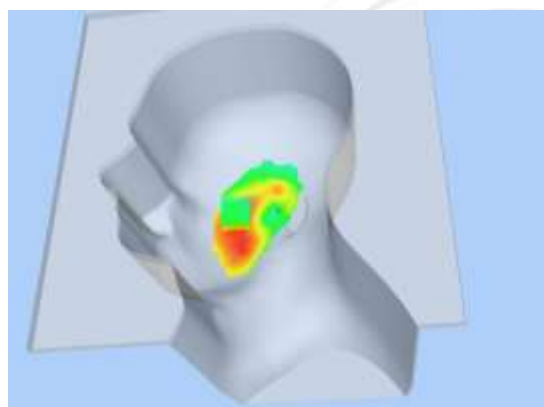
SAR 10g (W/Kg)	0.022616
SAR 1g (W/Kg)	0.032926

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0330	0.0236	0.0176	0.0127	0.0083	0.0059

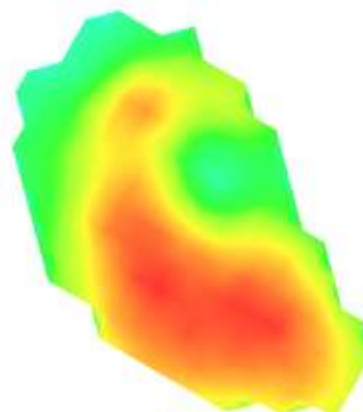
SAR, Z Axis Scan (X = -48, Y = -8)



3D screen shot

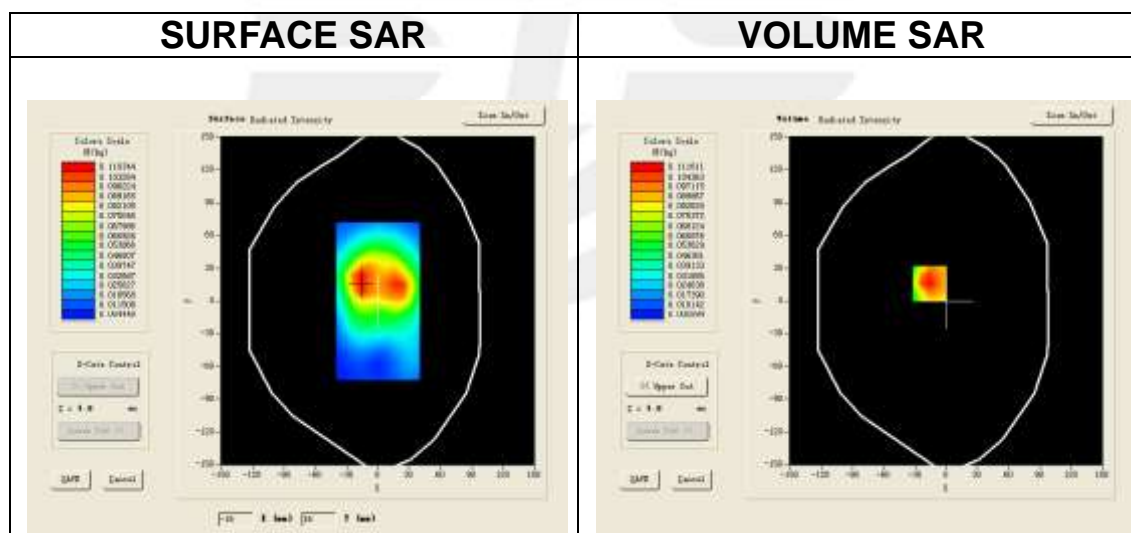


Hot spot position



Plot 29: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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	TDMA (Crest factor: 4.0)
Frequency (MHz)	1880
Relative permittivity (real part)	53.77
Conductivity (S/m)	1.50
Variation (%)	0.63

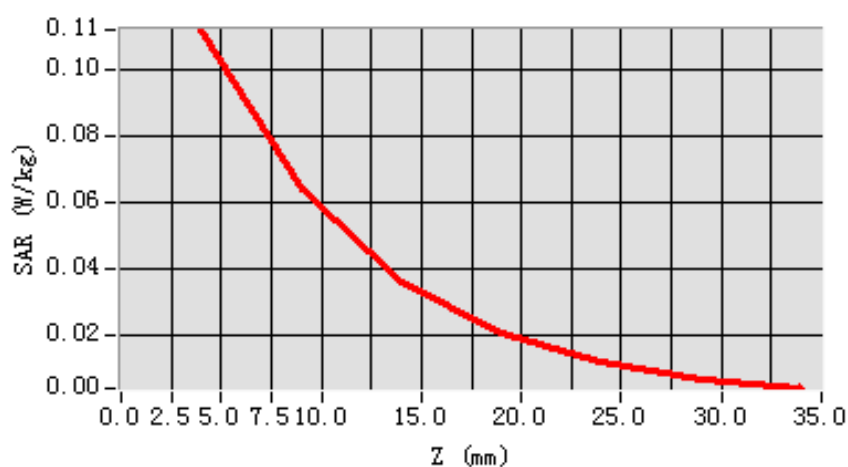


Maximum location: X=-16.00, Y=16.00

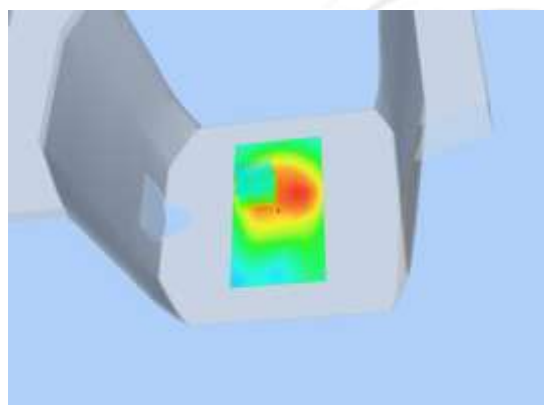
SAR 10g (W/Kg)	0.060945
SAR 1g (W/Kg)	0.110749

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1116	0.0642	0.0358	0.0205	0.0121	0.0069

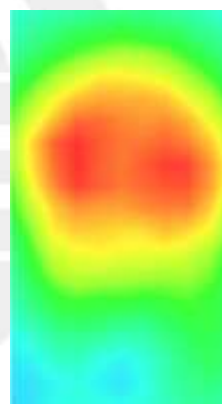
SAR, Z Axis Scan (X = -16, Y = 16)



3D screen shot

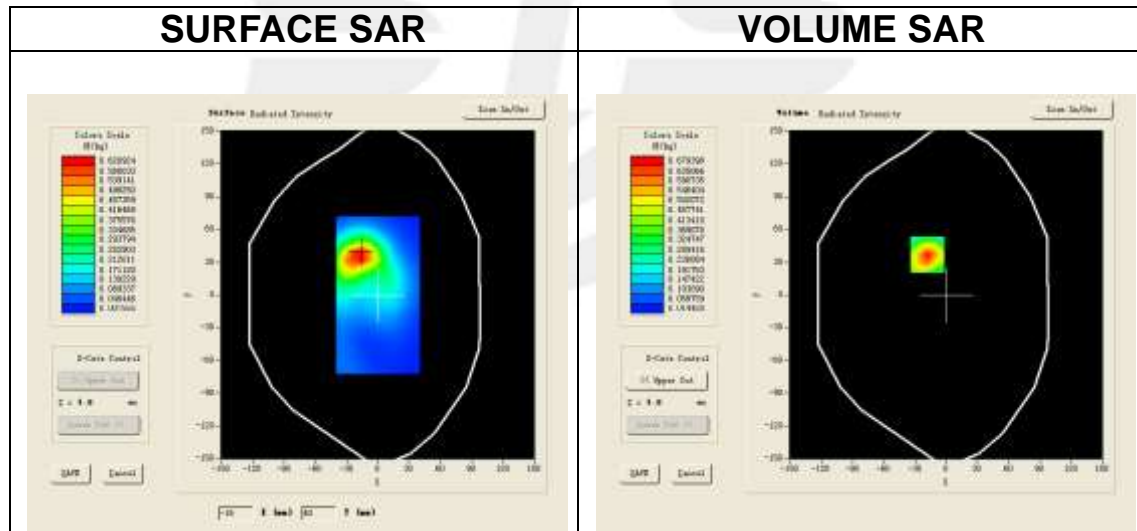


Hot spot position



Plot 30: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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	TDMA (Crest factor: 8.0)
Frequency (MHz)	1880
Relative permittivity (real part)	53.77
Conductivity (S/m)	1.50
Variation (%)	0.25

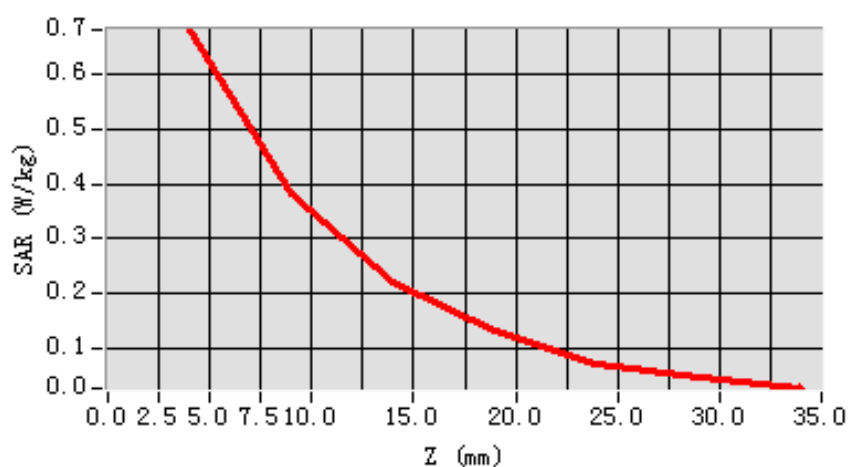


Maximum location: X=-18.00, Y=37.00

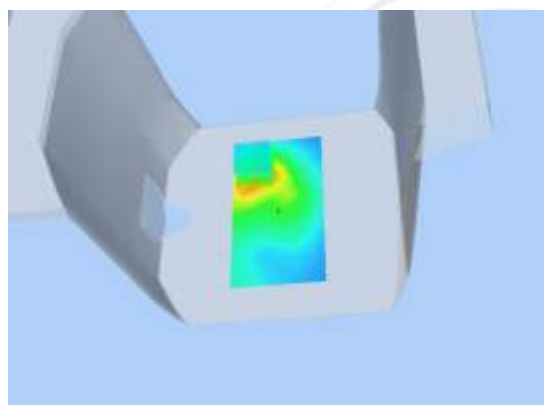
SAR 10g (W/Kg)	0.352447
SAR 1g (W/Kg)	0.653054

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6794	0.3836	0.2222	0.1329	0.0737	0.0469

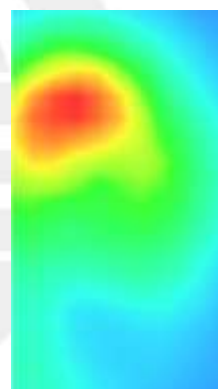
SAR, Z Axis Scan (X = -18, Y = 37)



3D screen shot

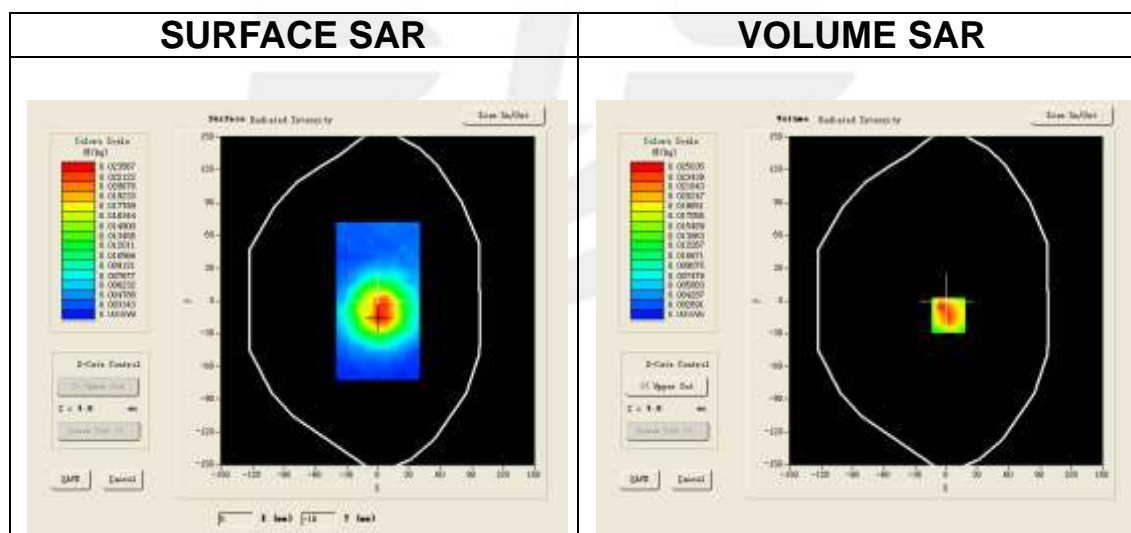


Hot spot position



Plot 31: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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	GPRS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)
Frequency (MHz)	1880
Relative permittivity (real part)	53.77
Conductivity (S/m)	1.50
Variation (%)	0.14

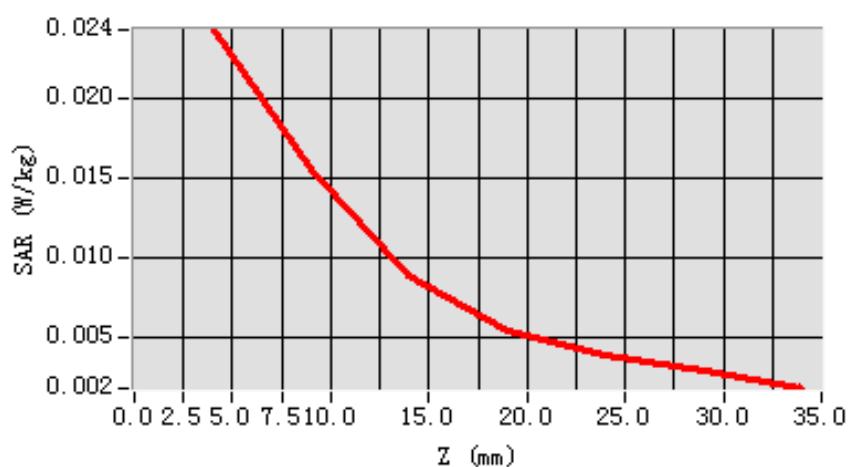


Maximum location: X=2.00, Y=-13.00

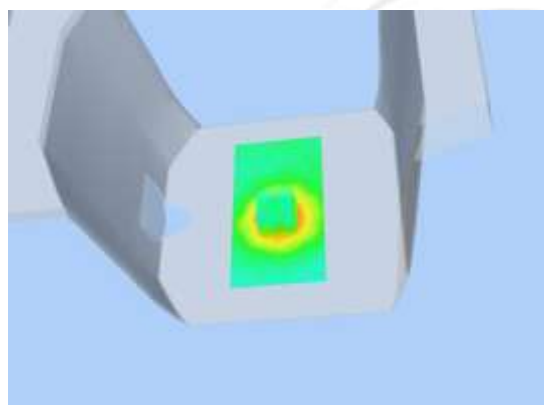
SAR 10g (W/Kg)	0.013744
SAR 1g (W/Kg)	0.025090

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0243	0.0155	0.0090	0.0055	0.0040	0.0029

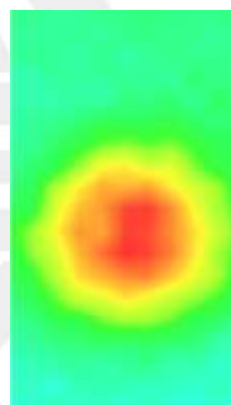
SAR, Z Axis Scan (X = 2, Y = -13)



3D screen shot

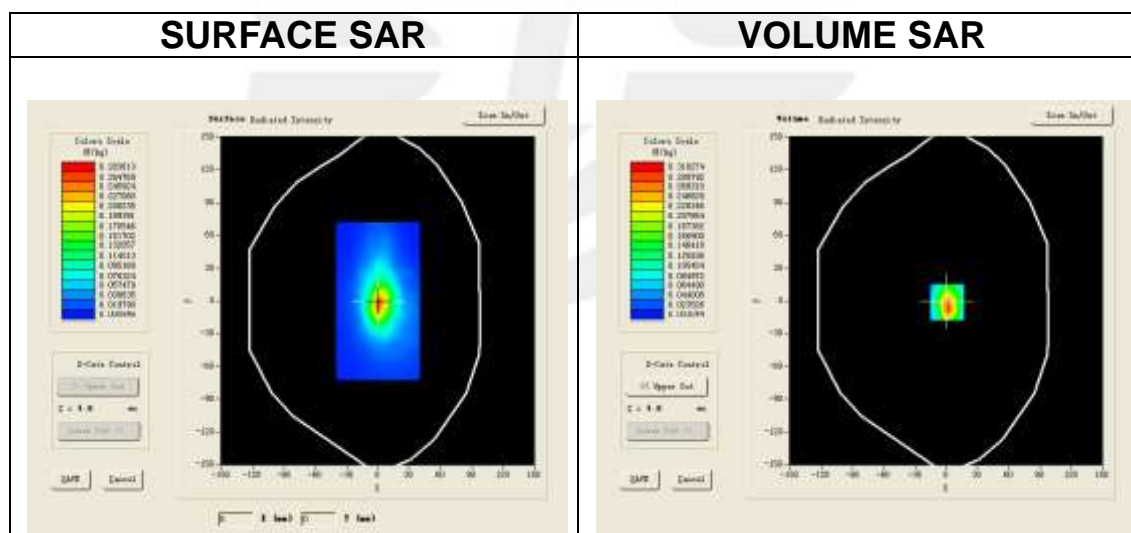


Hot spot position



Plot 32: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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	TDMA (Crest factor: 8.0)
Frequency (MHz)	1880
Relative permittivity (real part)	53.77
Conductivity (S/m)	1.50
Variation (%)	-0.74

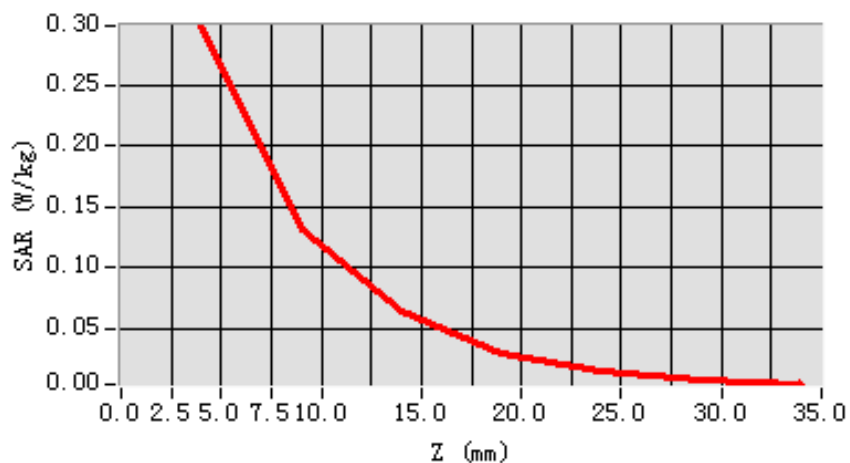


Maximum location: X=1.00, Y=-1.00

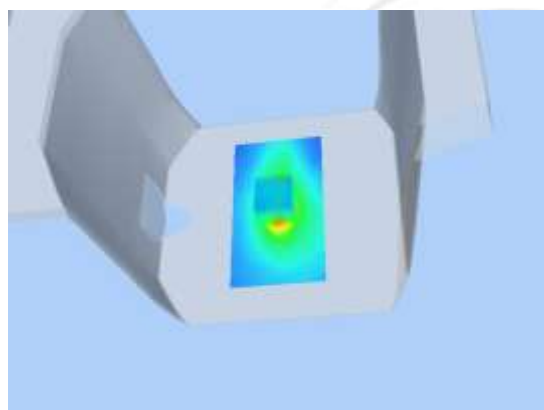
SAR 10g (W/Kg)	0.125091
SAR 1g (W/Kg)	0.304837

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2982	0.1325	0.0642	0.0296	0.0163	0.0093

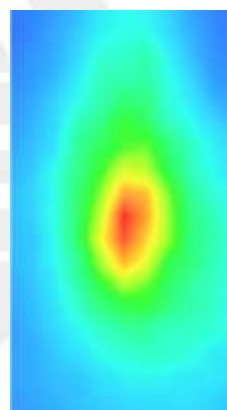
SAR, Z Axis Scan (X = 1, Y = -1)



3D screen shot

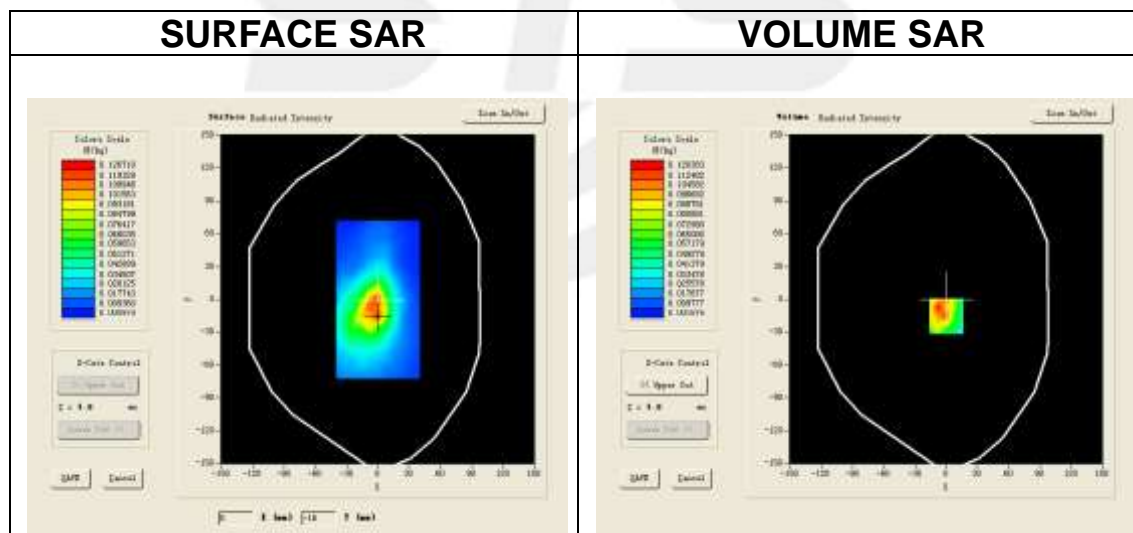


Hot spot position



Plot33: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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 top side
Band	GPRS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)
Frequency (MHz)	1880
Relative permittivity (real part)	53.77
Conductivity (S/m)	1.50
Variation (%)	-0.51

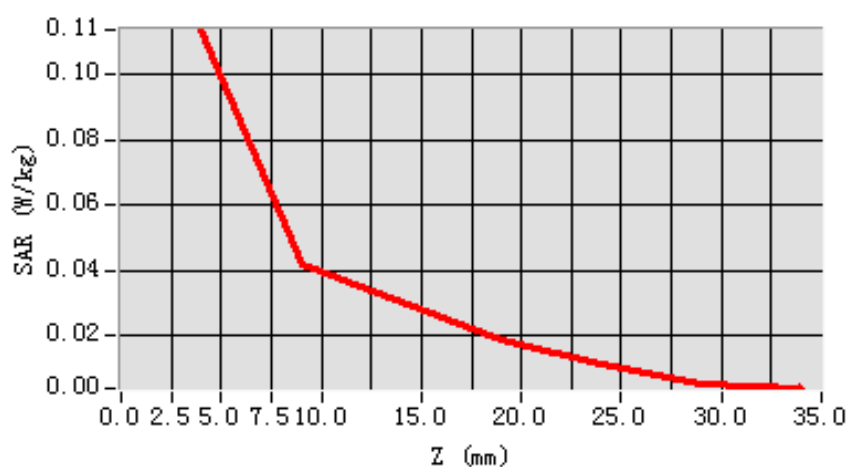


Maximum location: X=0.00, Y=-15.00

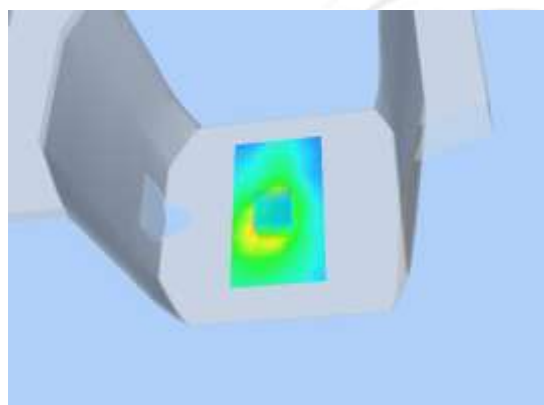
SAR 10g (W/Kg)	0.058232
SAR 1g (W/Kg)	0.114355

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1137	0.0416	0.0302	0.0188	0.0112	0.0050

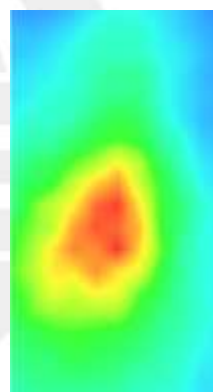
SAR, Z Axis Scan (X = 0, Y = -15)



3D screen shot

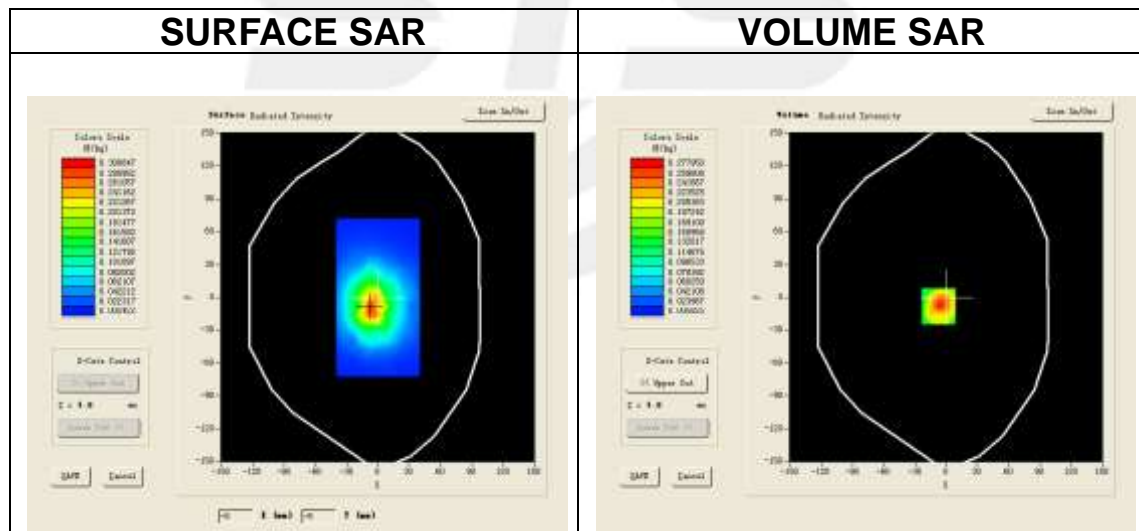


Hot spot position



Plot 34: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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	TDMA (Crest factor: 8.0)
Frequency (MHz)	1880
Relative permittivity (real part)	53.77
Conductivity (S/m)	1.50
Variation (%)	0.32

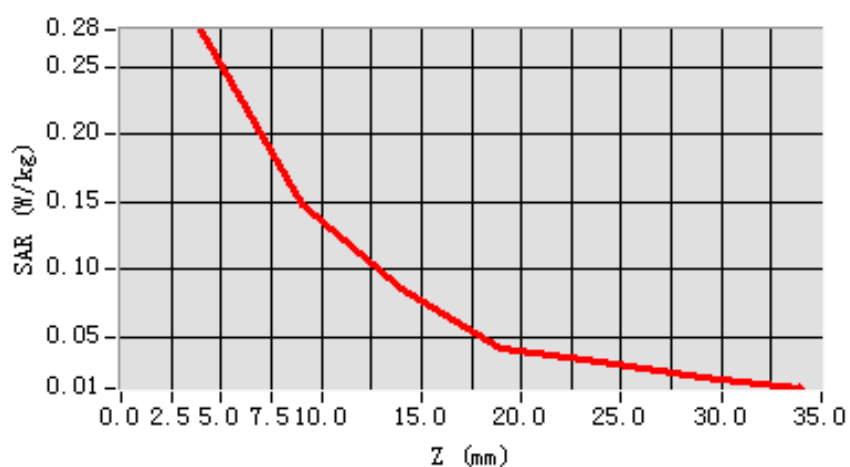


Maximum location: X=-7.00, Y=-8.00

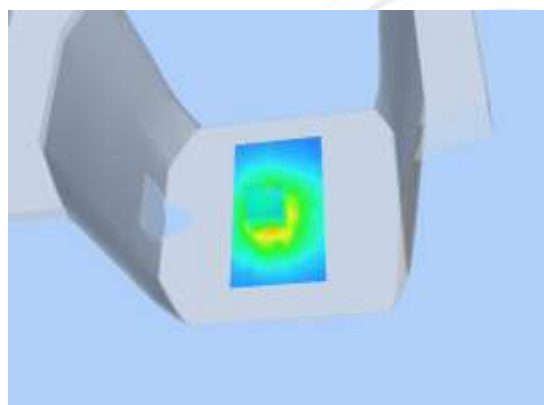
SAR 10g (W/Kg)	0.143833
SAR 1g (W/Kg)	0.277834

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2779	0.1477	0.0853	0.0408	0.0320	0.0191

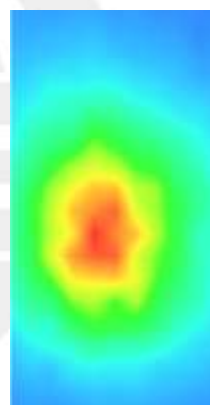
SAR, Z Axis Scan (X = -7, Y = -8)



3D screen shot

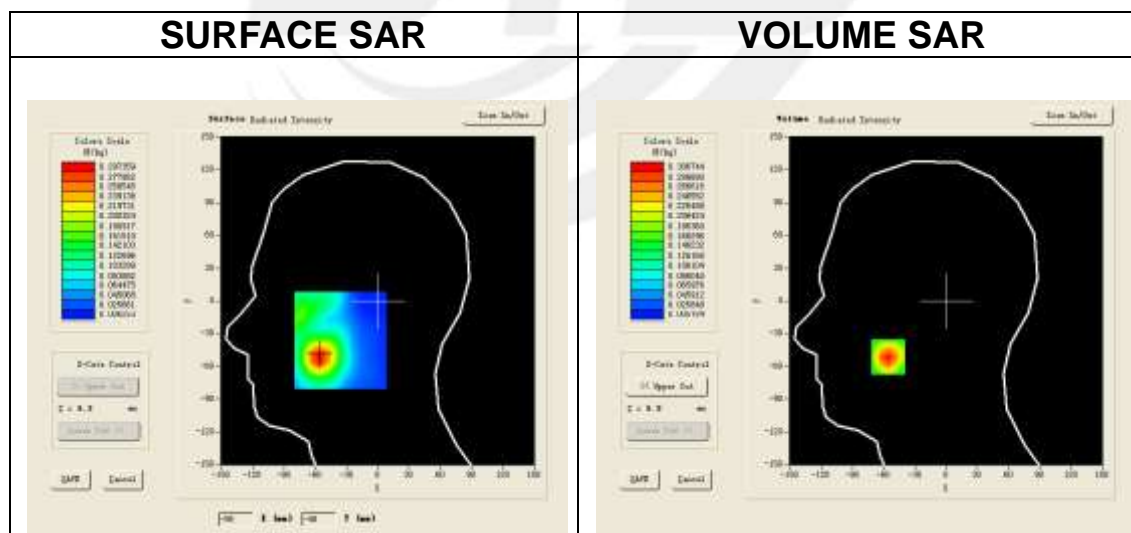


Hot spot position



Plot 35: DUT: Revel Pro; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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	Mid
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1880
Relative permittivity (real part)	41.02
Conductivity (S/m)	1.40
Variation (%)	0.74

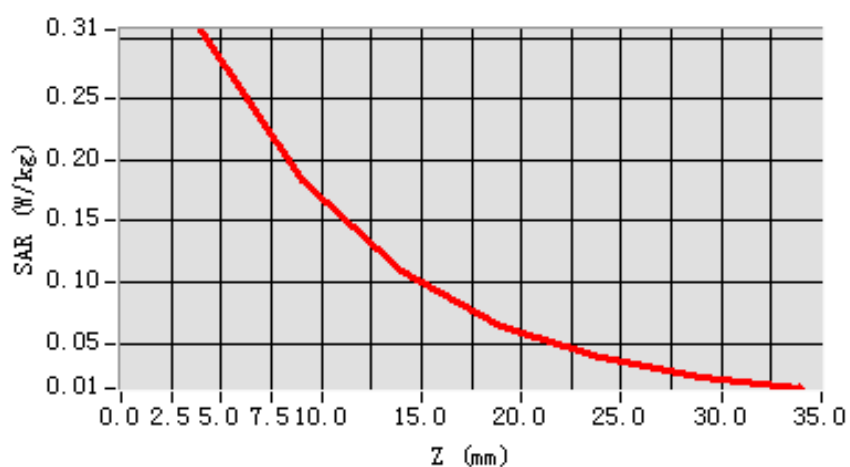


Maximum location: X=-56.00, Y=-51.00

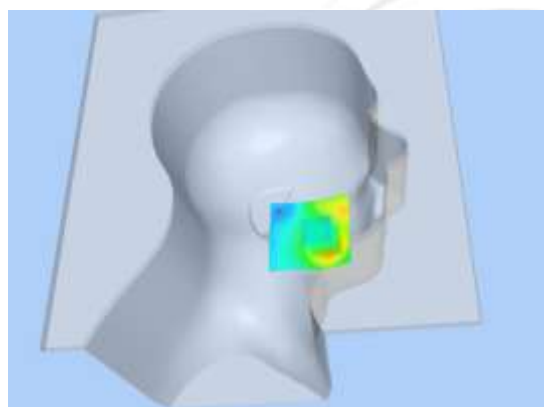
SAR 10g (W/Kg)	0.160831
SAR 1g (W/Kg)	0.290455

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.3067	0.1837	0.1094	0.0646	0.0381	0.0228

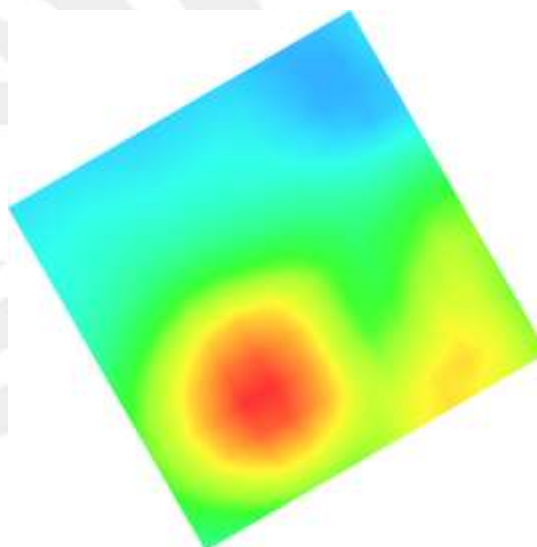
SAR, Z Axis Scan (X = -56, Y = -51)



3D screen shot

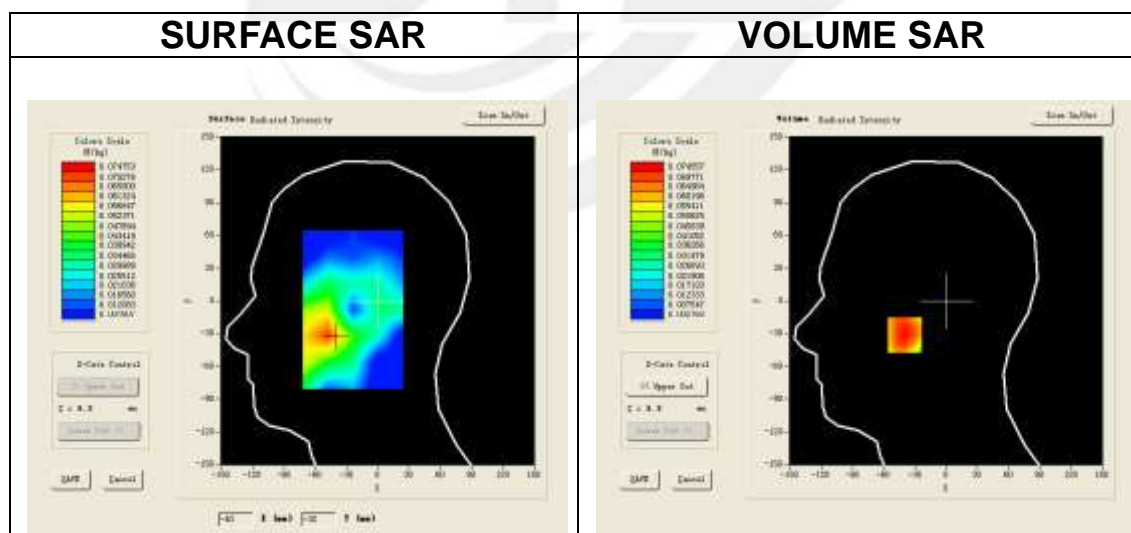


Hot spot position



Plot 36: DUT: Revel Pro; EUT Model: EROS 4.0

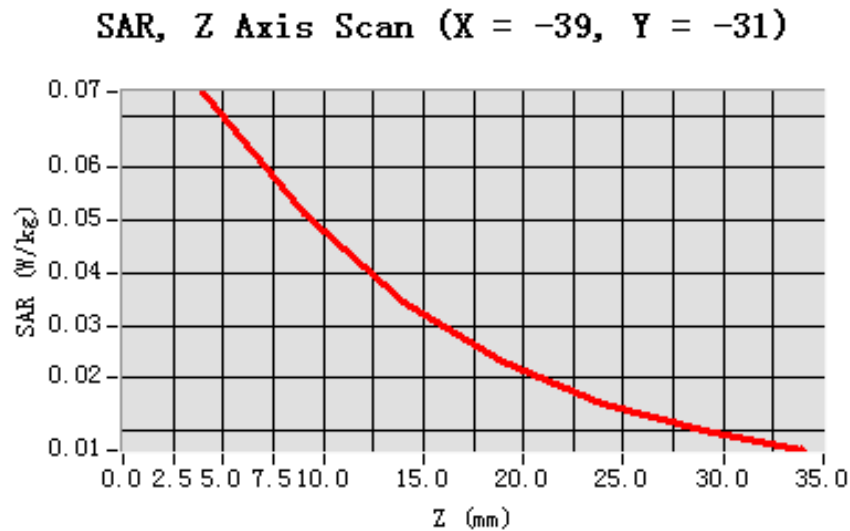
Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
Probe	SN 17/14 EP221
ConvF	4.71
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Right head
Device Position	Tilt
Band	WCDMA II
Channels	Mid
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1880
Relative permittivity (real part)	41.02
Conductivity (S/m)	1.40
Variation (%)	-0.84



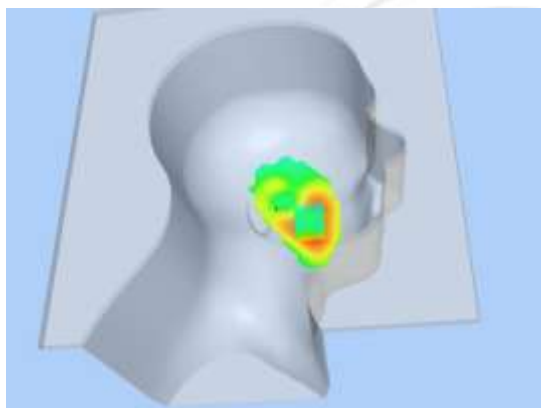
Maximum location: X=-39.00, Y=-31.00

SAR 10g (W/Kg)	0.047033
SAR 1g (W/Kg)	0.071412

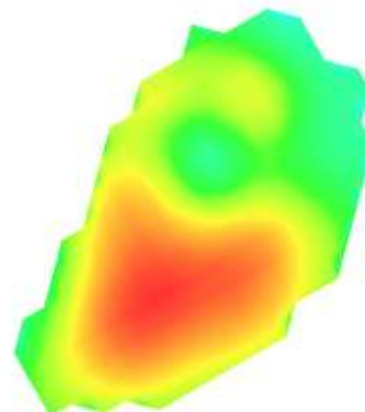
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0746	0.0511	0.0346	0.0230	0.0152	0.0100



3D screen shot

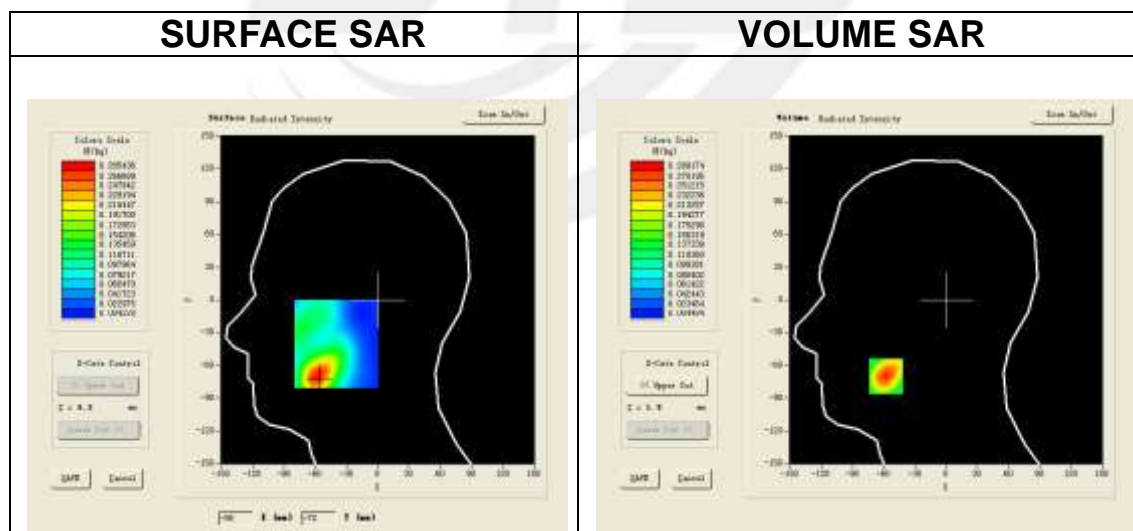


Hot spot position



Plot 37: DUT: Revel Pro; EUT Model: EROS 4.0

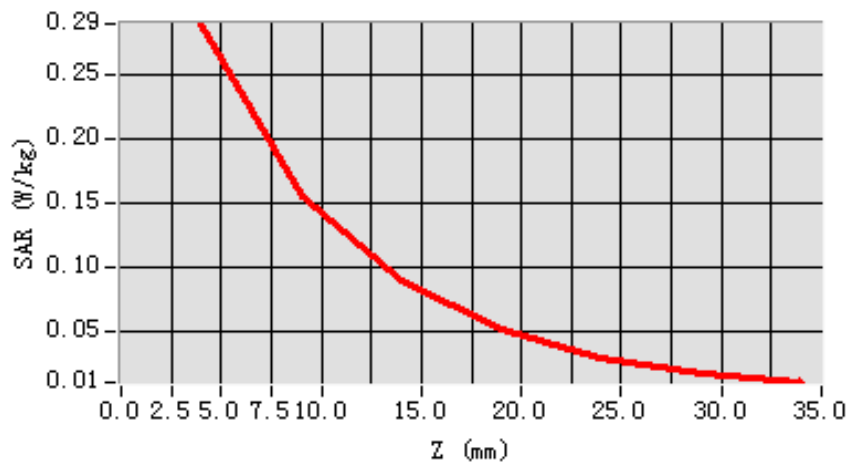
Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
Probe	SN 17/14 EP221
ConvF	4.71
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Left head
Device Position	Cheek
Band	WCDMA II
Channels	Mid
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1880
Relative permittivity (real part)	41.02
Conductivity (S/m)	1.40
Variation (%)	0.13


Maximum location: X=-58.00, Y=-70.00

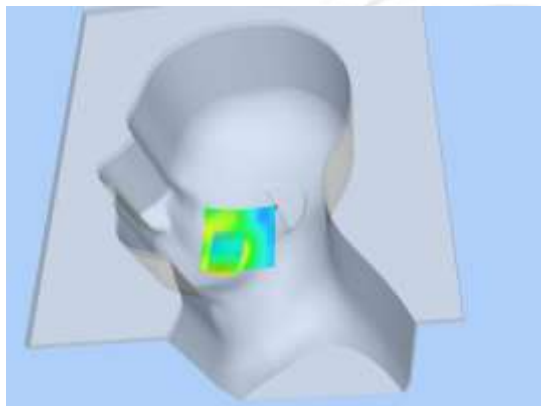
SAR 10g (W/Kg)	0.148616
SAR 1g (W/Kg)	0.277118

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2892	0.1544	0.0889	0.0514	0.0300	0.0175

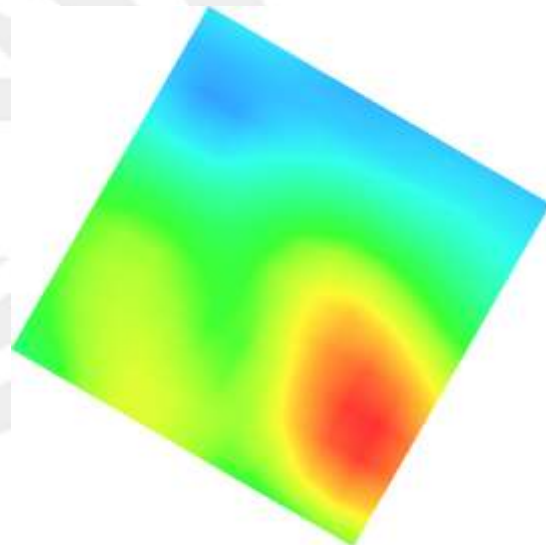
SAR, Z Axis Scan (X = -58, Y = -70)



3D screen shot

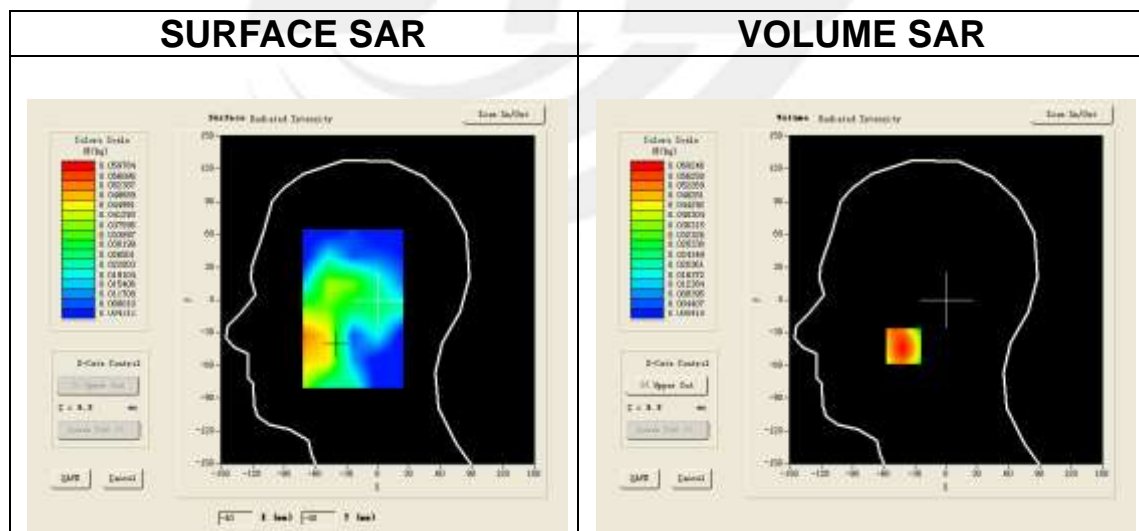


Hot spot position



Plot 38: DUT: Revel Pro; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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	Mid
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1880
Relative permittivity (real part)	41.02
Conductivity (S/m)	1.40
Variation (%)	0.26

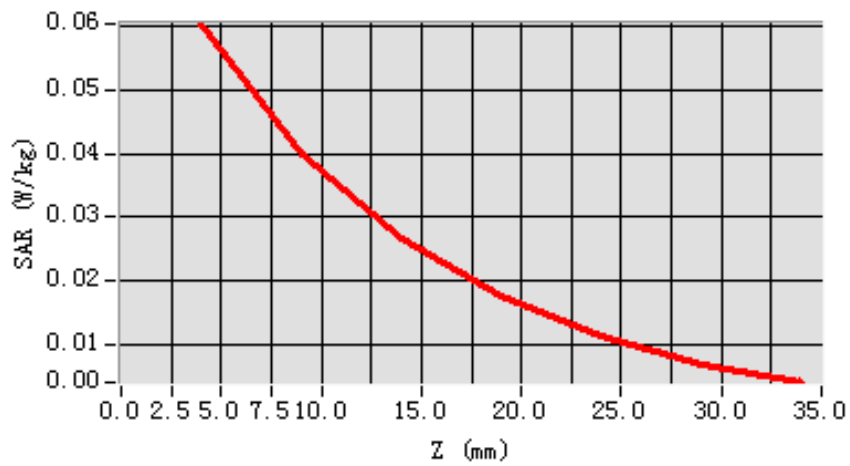


Maximum location: X=-41.00, Y=-42.00

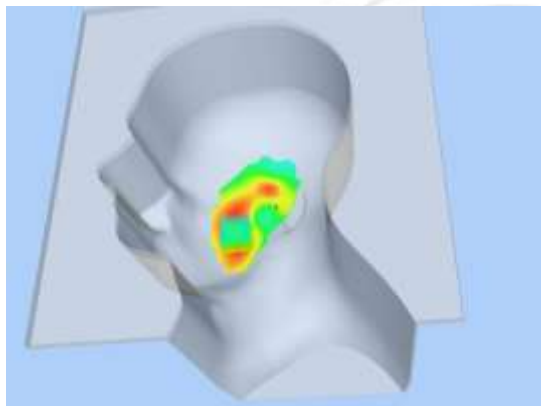
SAR 10g (W/Kg)	0.036422
SAR 1g (W/Kg)	0.057706

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0602	0.0400	0.0268	0.0177	0.0115	0.0070

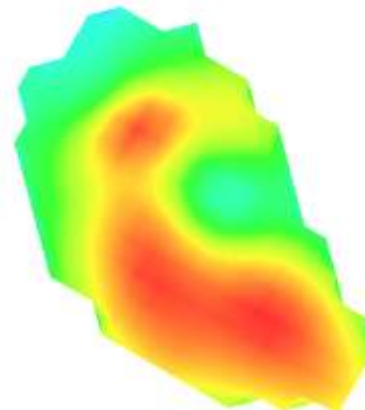
SAR, Z Axis Scan (X = -41, Y = -42)



3D screen shot

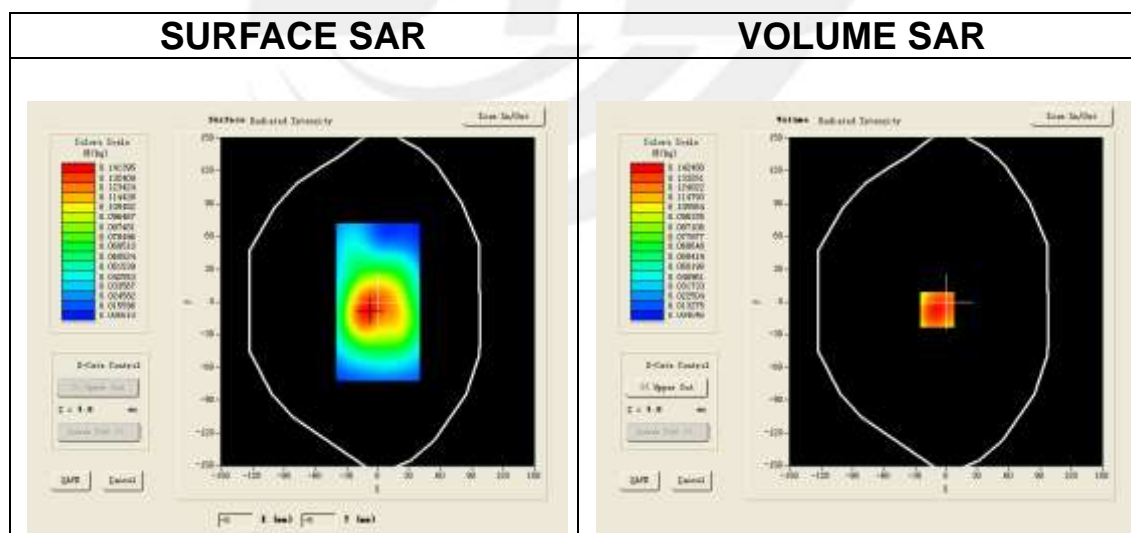


Hot spot position



Plot 39: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1880
Relative permittivity (real part)	53.77
Conductivity (S/m)	1.50
Variation (%)	1.22

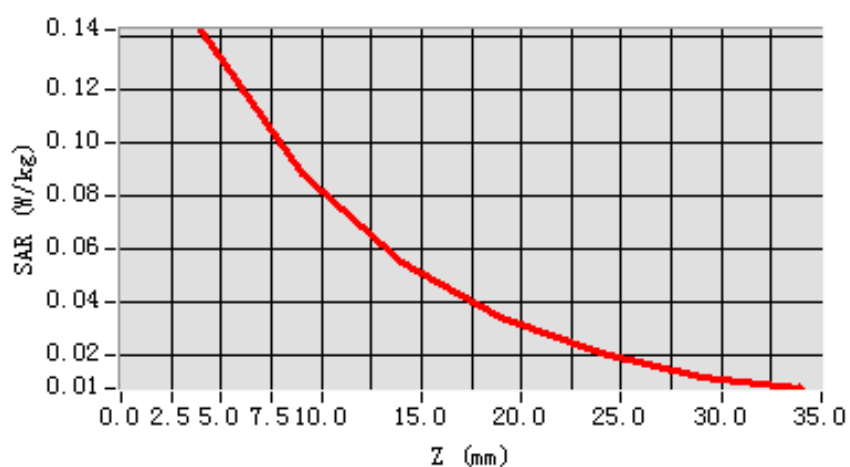


Maximum location: X=-9.00, Y=-7.00

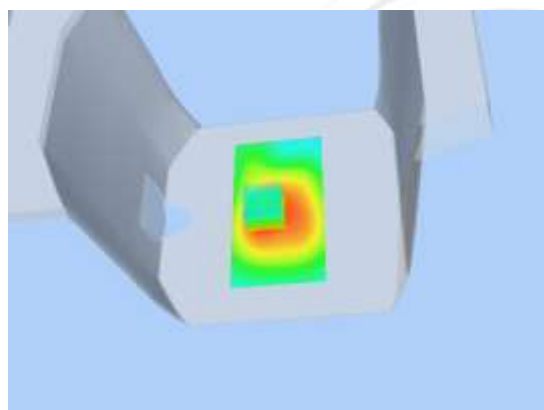
SAR 10g (W/Kg)	0.084534
SAR 1g (W/Kg)	0.137288

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1425	0.0886	0.0551	0.0336	0.0202	0.0116

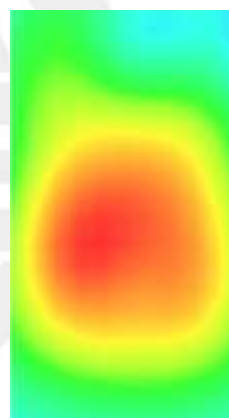
SAR, Z Axis Scan (X = -9, Y = -7)



3D screen shot

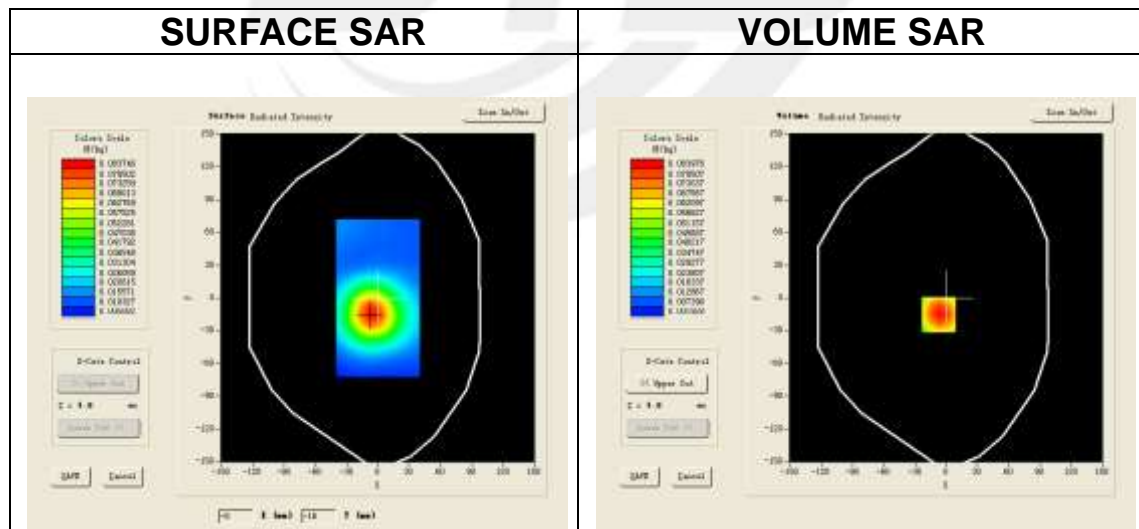


Hot spot position



Plot 40: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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)	1880
Relative permittivity (real part)	53.77
Conductivity (S/m)	1.50
Variation (%)	-0.96

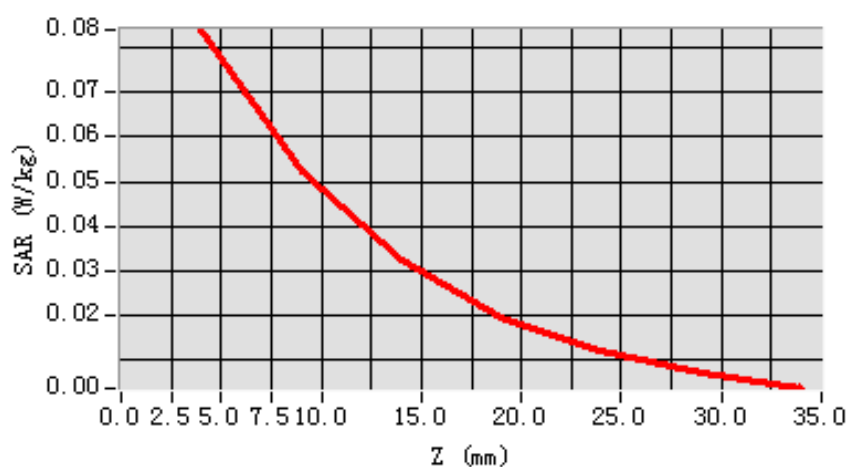


Maximum location: X=-7.00, Y=-15.00

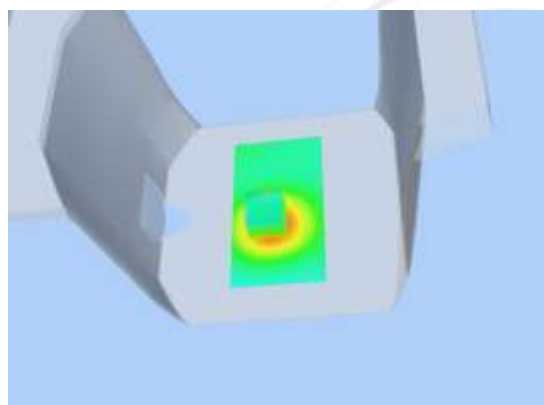
SAR 10g (W/Kg)	0.048433
SAR 1g (W/Kg)	0.080324

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0840	0.0524	0.0323	0.0193	0.0119	0.0070

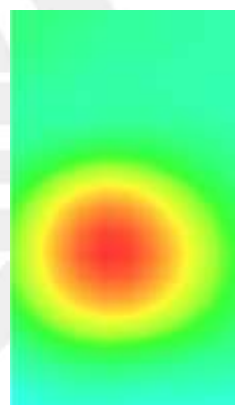
SAR, Z Axis Scan (X = -7, Y = -15)



3D screen shot

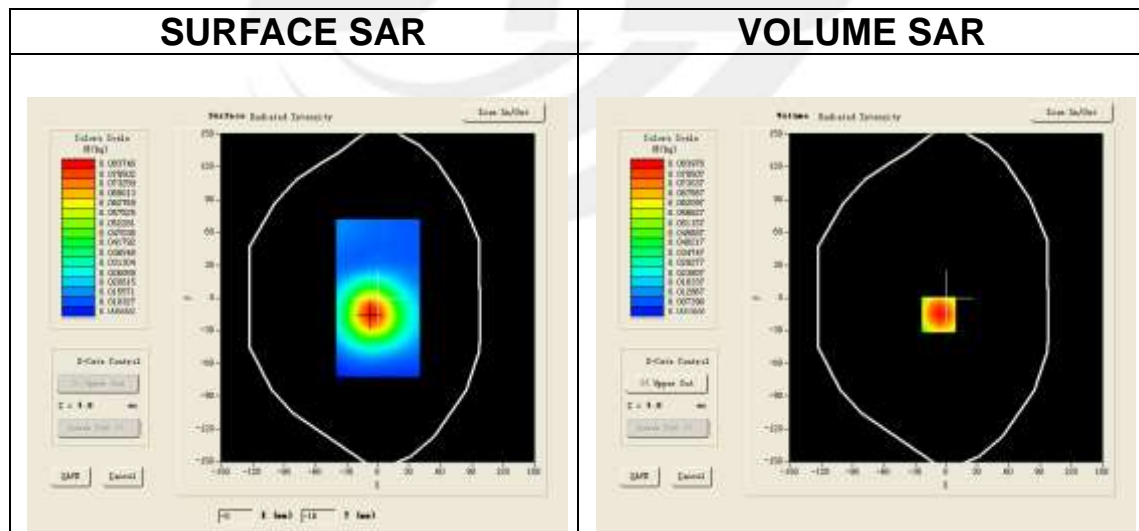


Hot spot position



Plot 41: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1880
Relative permittivity (real part)	53.77
Conductivity (S/m)	1.50
Variation (%)	-1.15

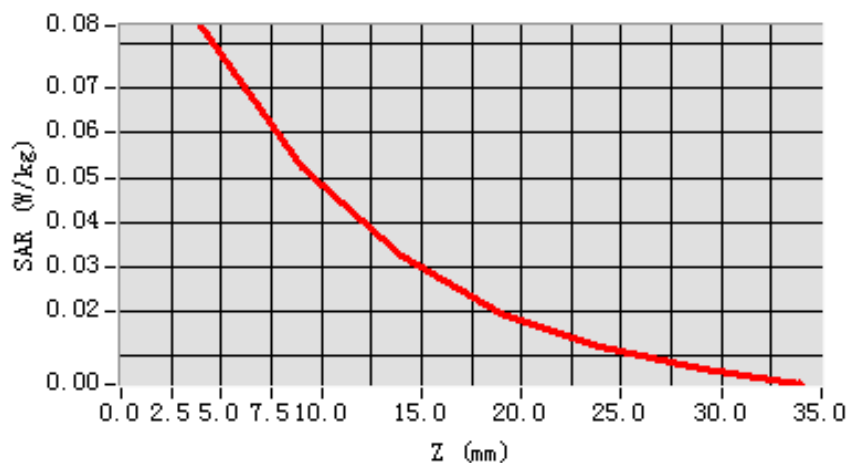


Maximum location: X=-7.00, Y=-15.00

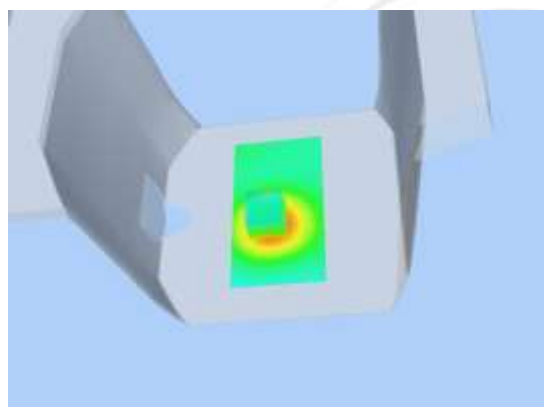
SAR 10g (W/Kg)	0.048433
SAR 1g (W/Kg)	0.080324

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0840	0.0524	0.0323	0.0193	0.0119	0.0070

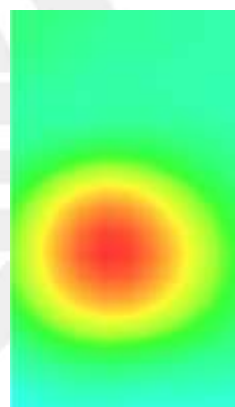
SAR, Z Axis Scan (X = -7, Y = -15)



3D screen shot

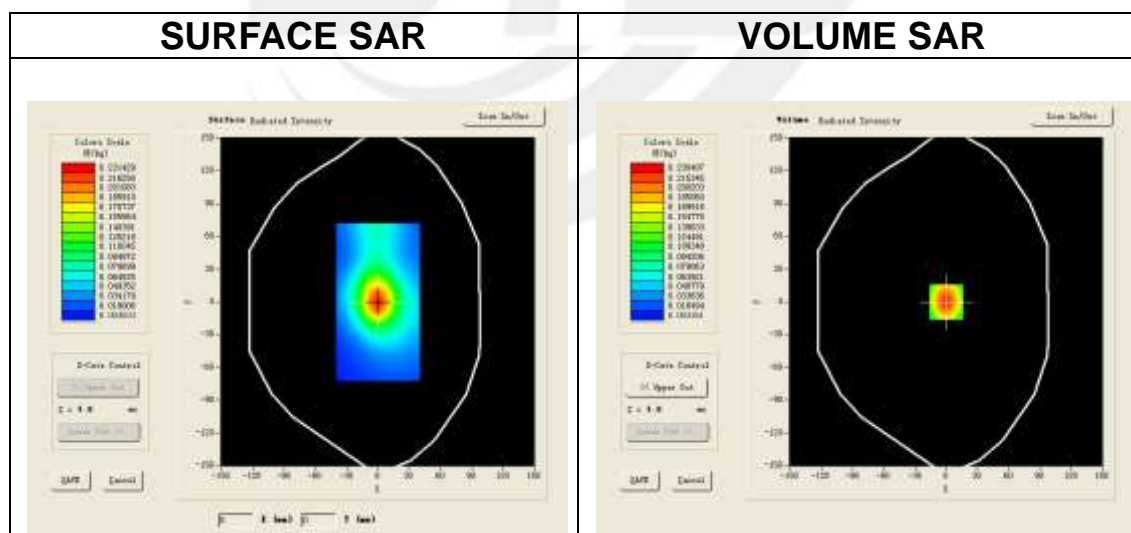


Hot spot position



Plot 42: DUT: Mobile phone; EUT Model: EROS 4.0

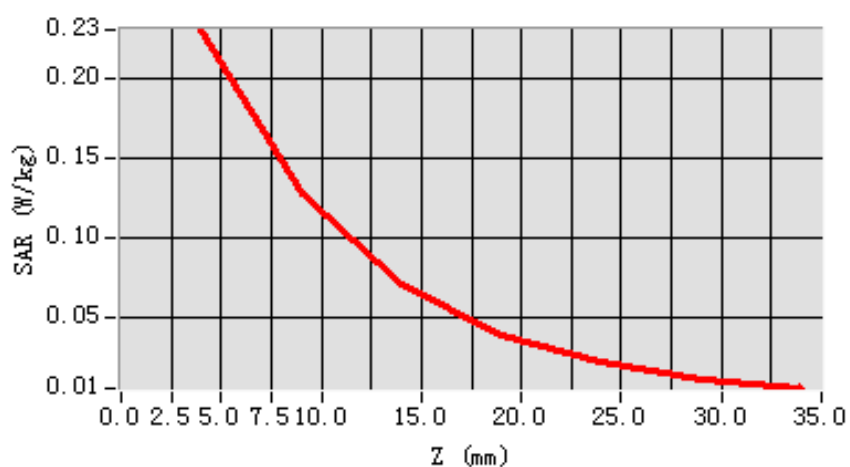
Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
Probe	SN 17/14 EP221
ConvF	4.85
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body right side
Band	WCDMA II
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1880
Relative permittivity (real part)	53.77
Conductivity (S/m)	1.50
Variation (%)	0.27


Maximum location: X=0.00, Y=0.00

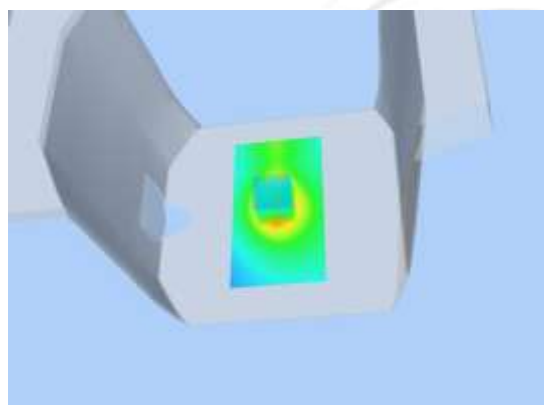
SAR 10g (W/Kg)	0.120095
SAR 1g (W/Kg)	0.219510

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2305	0.1278	0.0715	0.0401	0.0224	0.0122

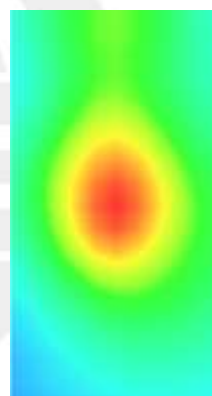
SAR, Z Axis Scan (X = 0, Y = 0)



3D screen shot

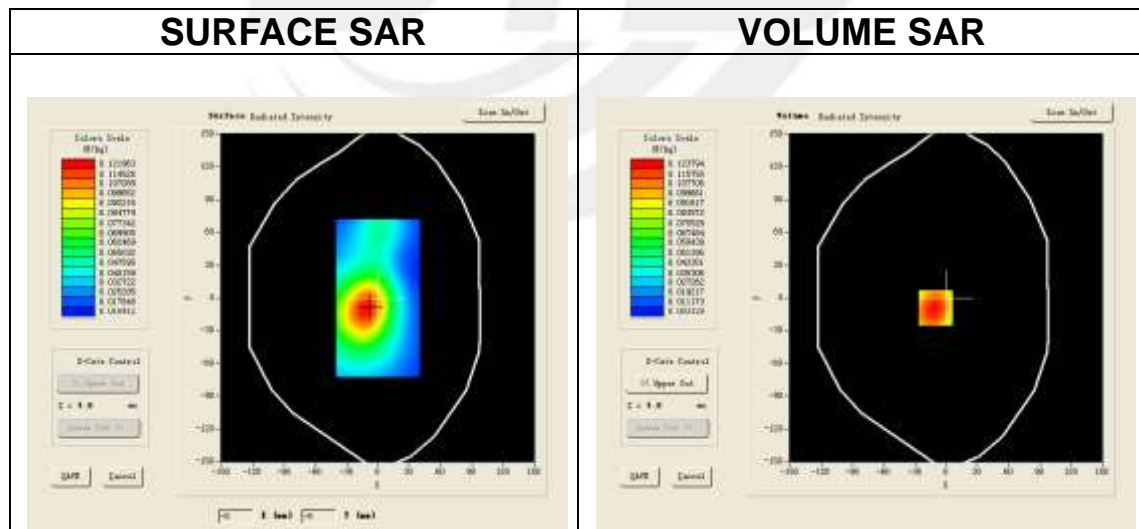


Hot spot position



Plot 43: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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 top side
Band	WCDMA II
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1880
Relative permittivity (real part)	53.77
Conductivity (S/m)	1.50
Variation (%)	-0.08

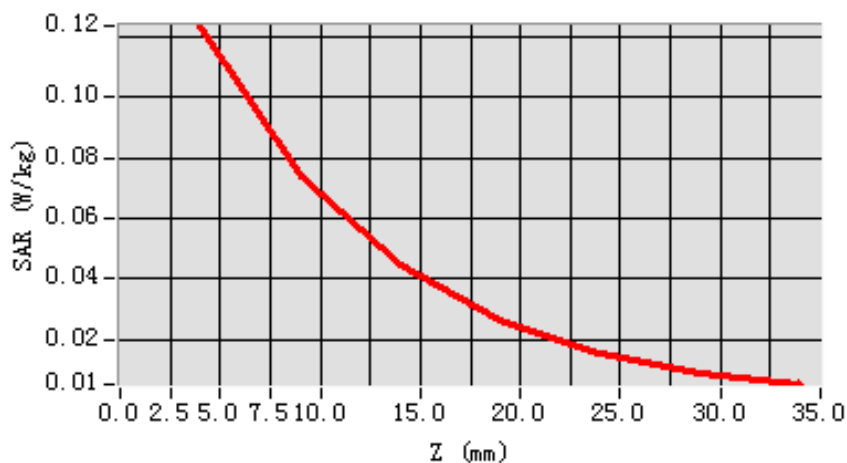


Maximum location: X=-10.00, Y=-9.00

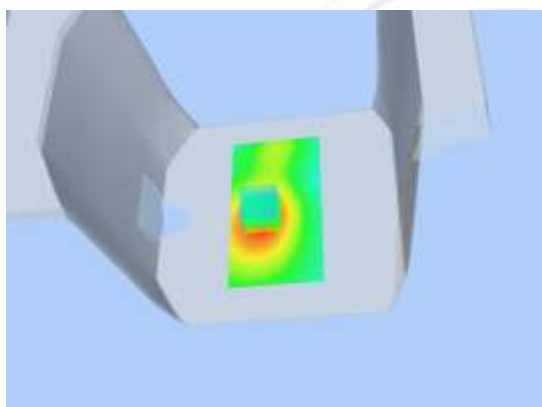
SAR 10g (W/Kg)	0.071949
SAR 1g (W/Kg)	0.119497

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1238	0.0741	0.0444	0.0266	0.0153	0.0088

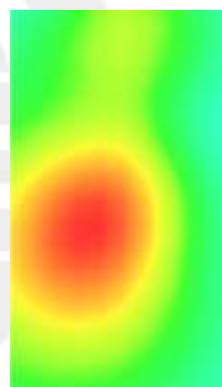
SAR, Z Axis Scan (X = -10, Y = -9)



3D screen shot

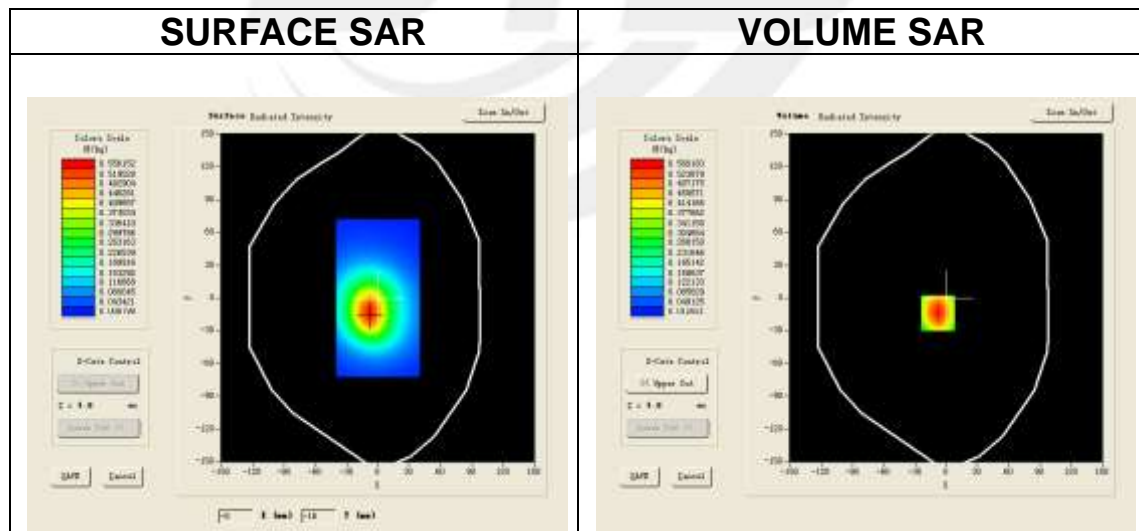


Hot spot position



Plot 44: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	1880
Relative permittivity (real part)	53.77
Conductivity (S/m)	1.50
Variation (%)	0.66

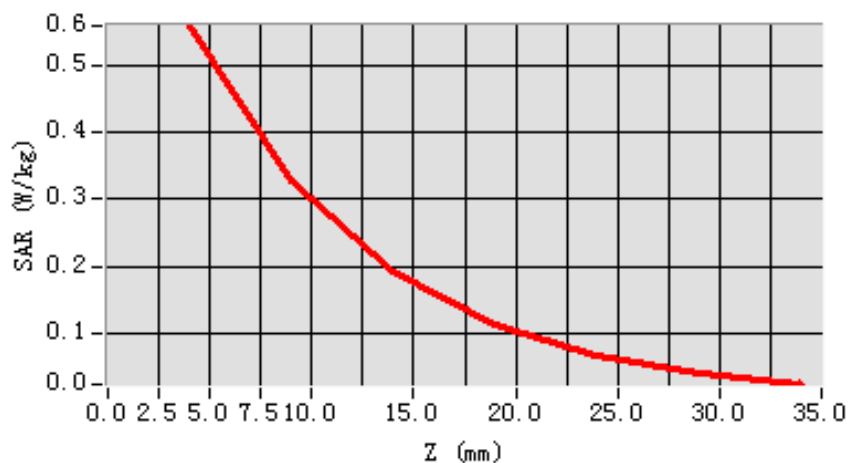


Maximum location: X=-8.00, Y=-14.00

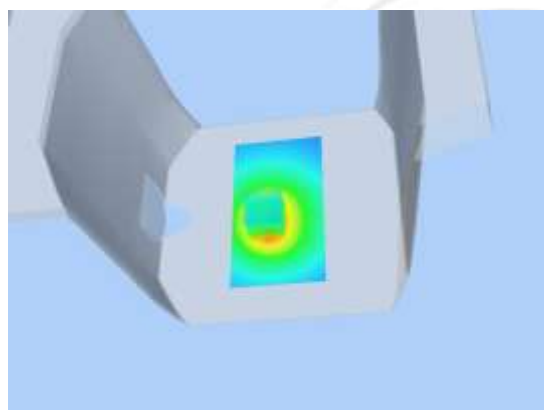
SAR 10g (W/Kg)	0.305971
SAR 1g (W/Kg)	0.534248

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5602	0.3271	0.1919	0.1131	0.0664	0.0395

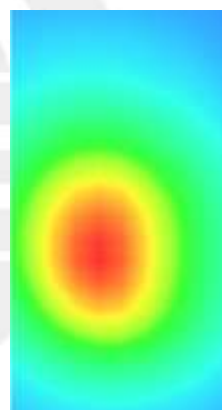
SAR, Z Axis Scan (X = -8, Y = -14)



3D screen shot

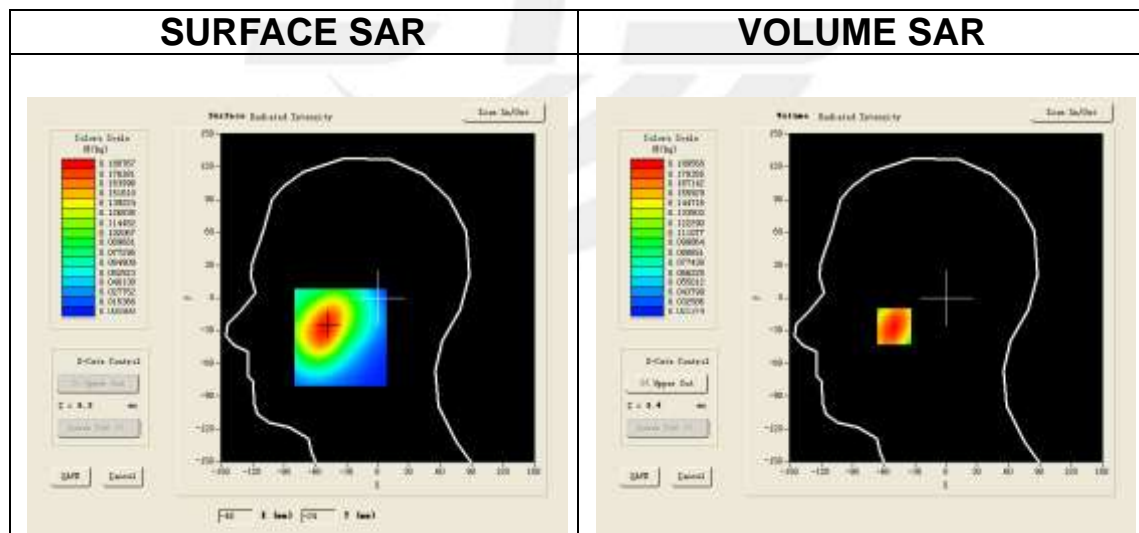


Hot spot position



Plot 45: DUT: Revel Pro; EUT Model: EROS 4.0

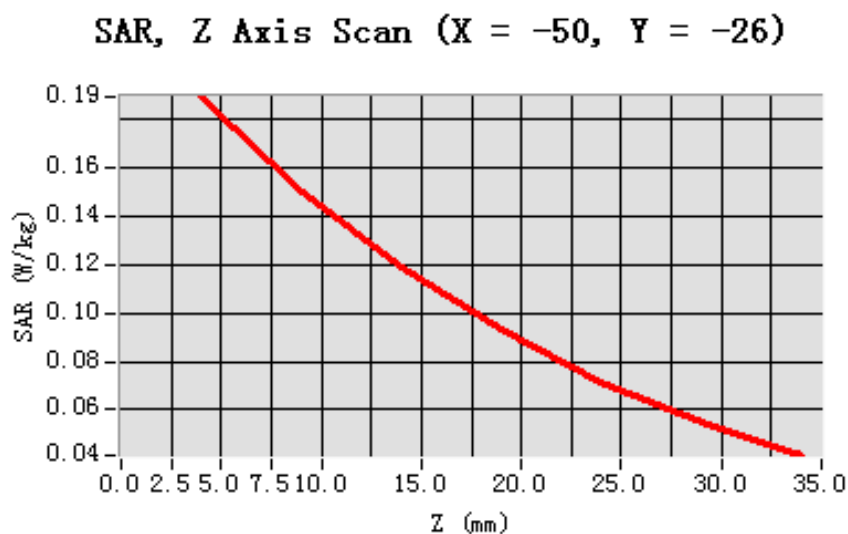
Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
Probe	SN 17/14 EP221
ConvF	4.83
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Right head
Device Position	Cheek
Band	WCDMA V
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	41.99
Conductivity (S/m)	0.90
Variation (%)	0.54



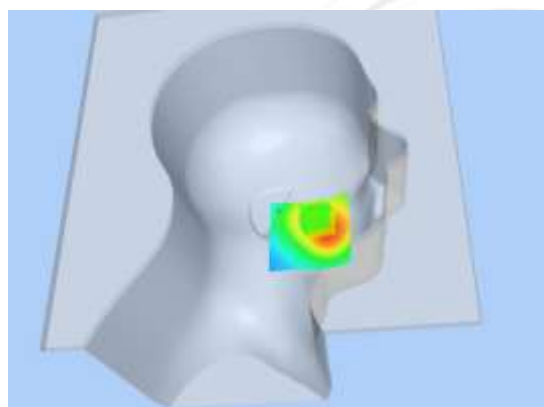
Maximum location: X=-50.00, Y=-26.00

SAR 10g (W/Kg)	0.134874
SAR 1g (W/Kg)	0.182961

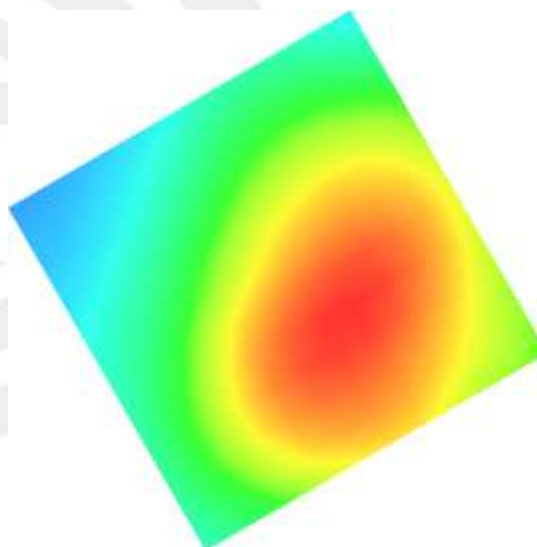
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1896	0.1501	0.1191	0.0931	0.0718	0.0545



3D screen shot

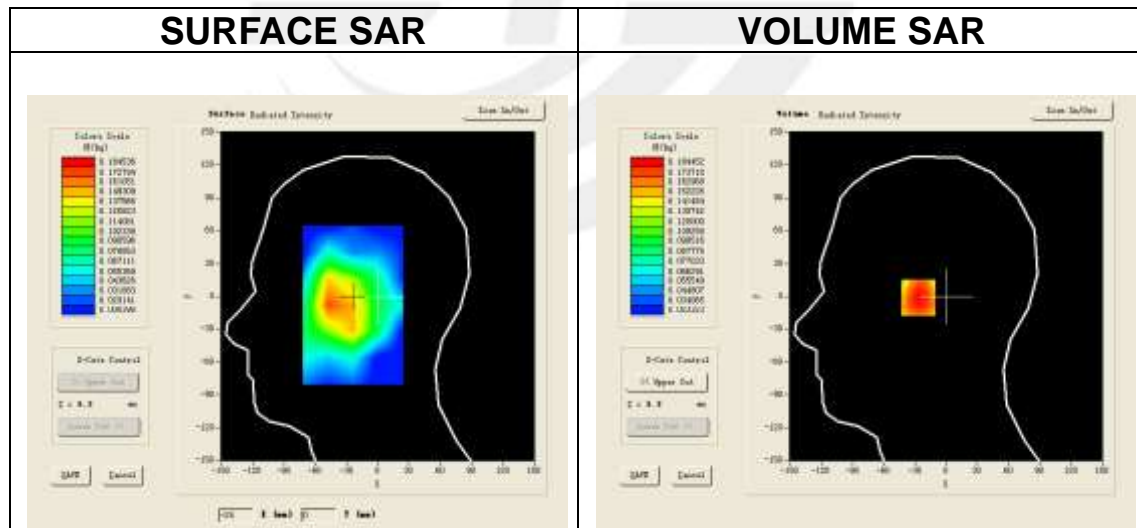


Hot spot position



Plot 46: DUT: Revel Pro; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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)	41.99
Conductivity (S/m)	0.90
Variation (%)	-0.19

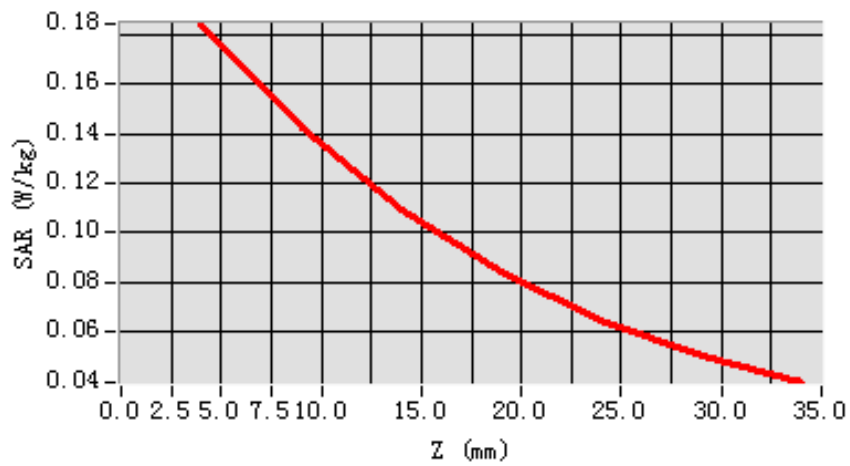


Maximum location: X=-23.00, Y=-1.00

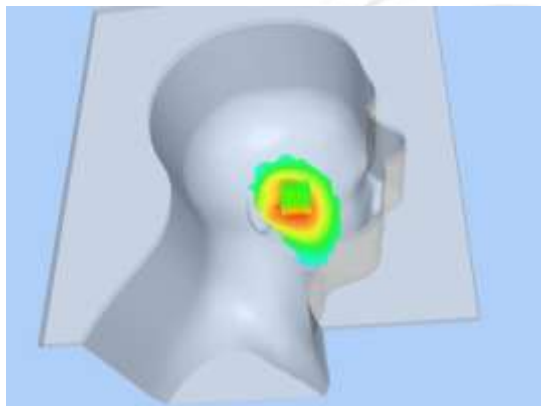
SAR 10g (W/Kg)	0.131645
SAR 1g (W/Kg)	0.179015

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1845	0.1426	0.1093	0.0847	0.0651	0.0502

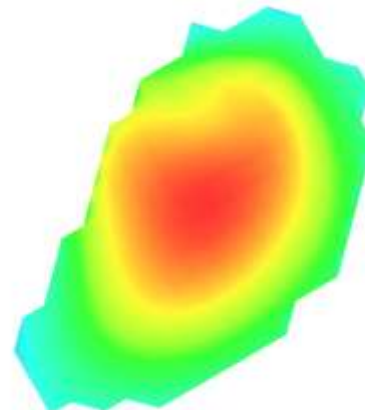
SAR, Z Axis Scan (X = -23, Y = -1)



3D screen shot

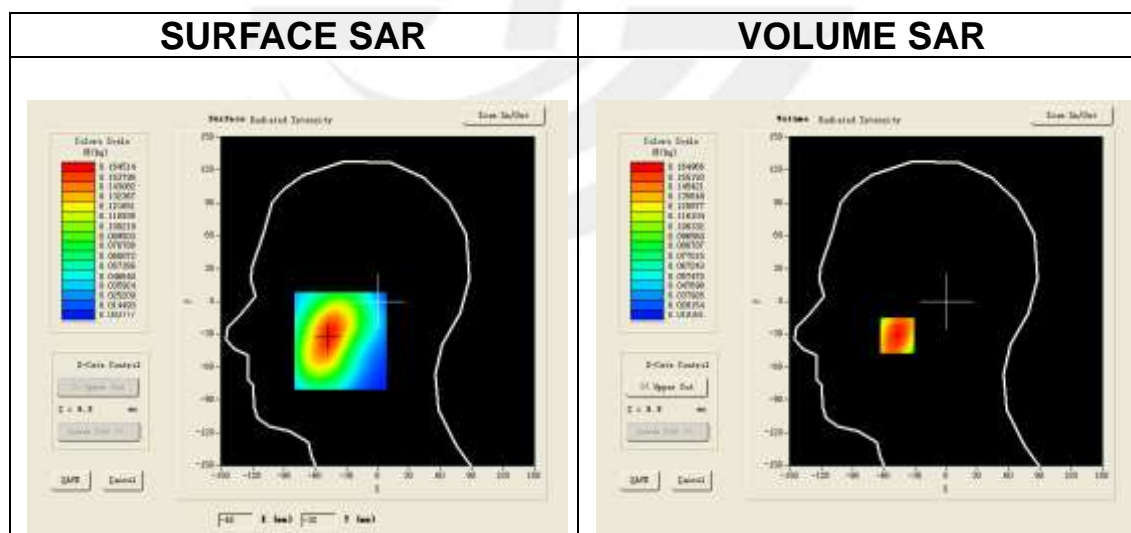


Hot spot position



Plot 47: DUT: Revel Pro; EUT Model: EROS 4.0

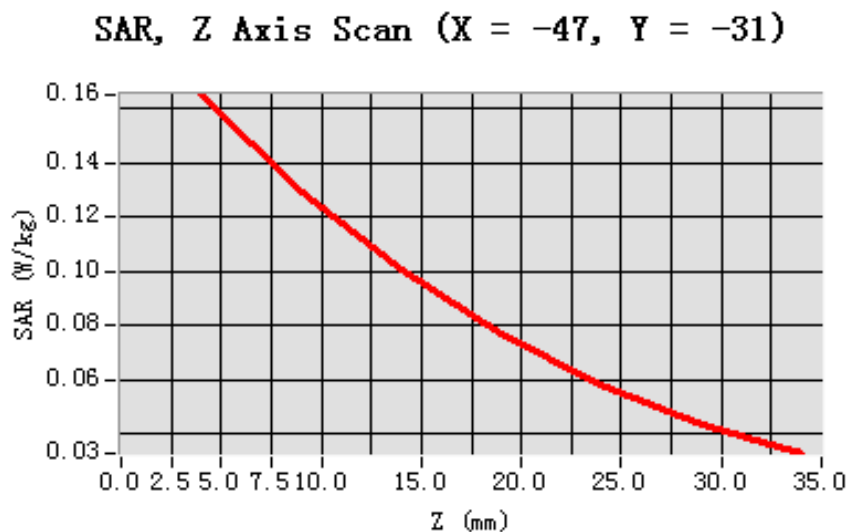
Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
Probe	SN 17/14 EP221
ConvF	4.83
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Left head
Device Position	Cheek
Band	WCDMA V
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	41.99
Conductivity (S/m)	0.90
Variation (%)	-0.46



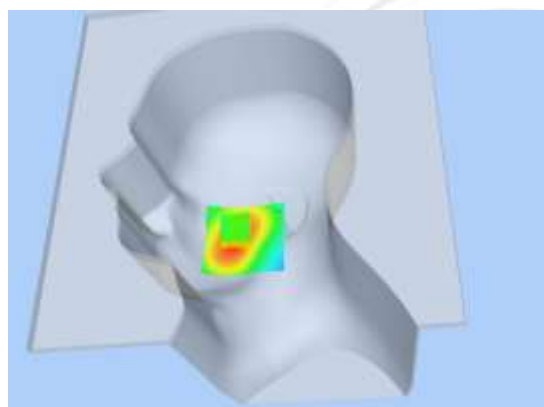
Maximum location: X=-47.00, Y=-31.00

SAR 10g (W/Kg)	0.117125
SAR 1g (W/Kg)	0.159261

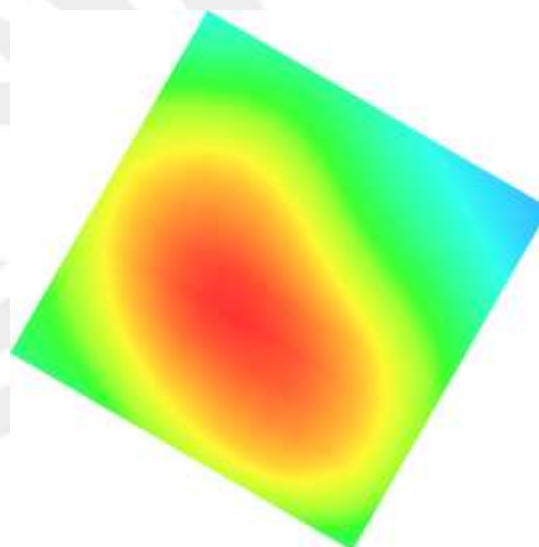
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1650	0.1294	0.1006	0.0768	0.0581	0.0434



3D screen shot

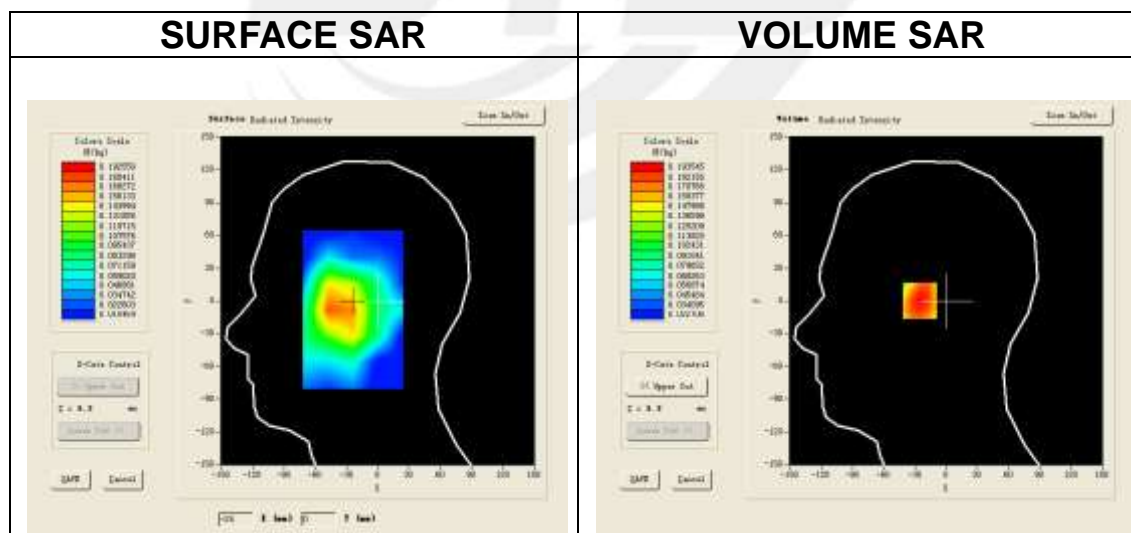


Hot spot position



Plot 48: DUT: Revel Pro; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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)	41.99
Conductivity (S/m)	0.90
Variation (%)	-0.99

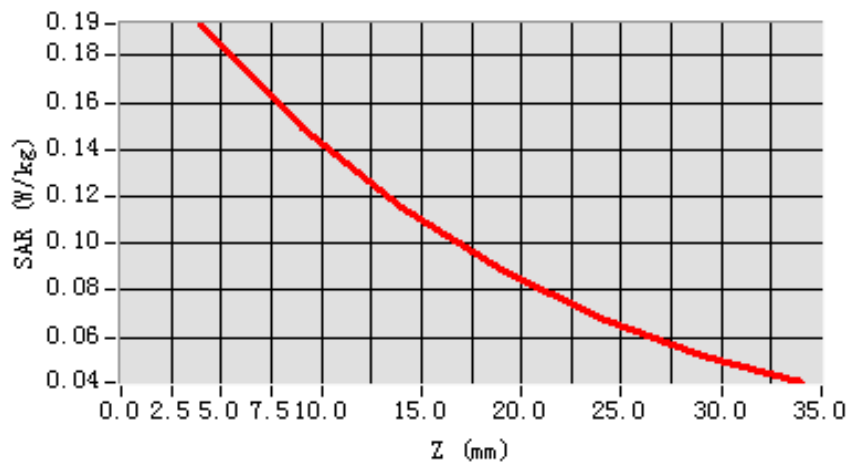


Maximum location: X=-22.00, Y=1.00

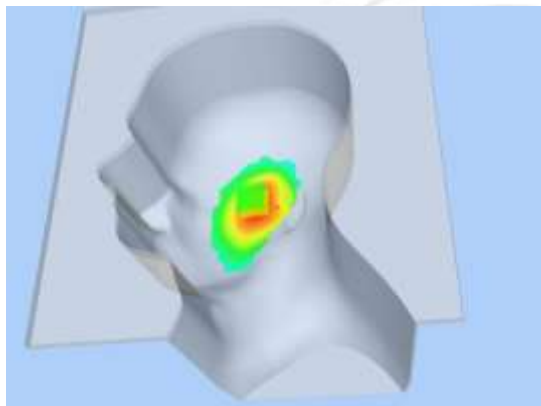
SAR 10g (W/Kg)	0.137417
SAR 1g (W/Kg)	0.187237

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1935	0.1494	0.1149	0.0892	0.0685	0.0521

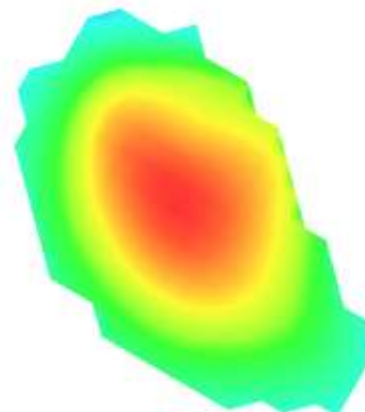
SAR, Z Axis Scan (X = -22, Y = 1)



3D screen shot

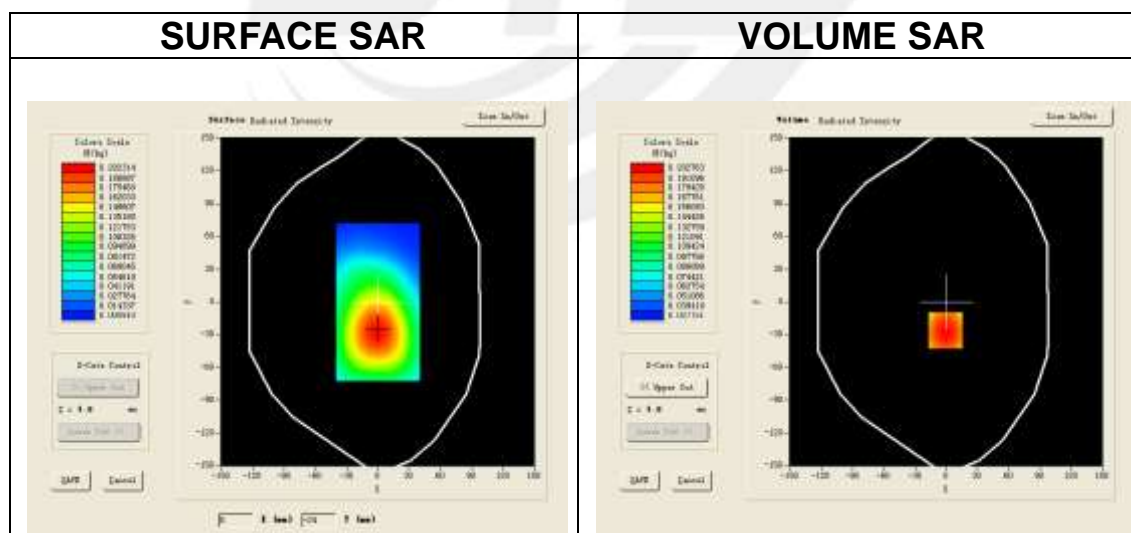


Hot spot position



Plot 49: DUT: Mobile phone; EUT Model: EROS 4.0

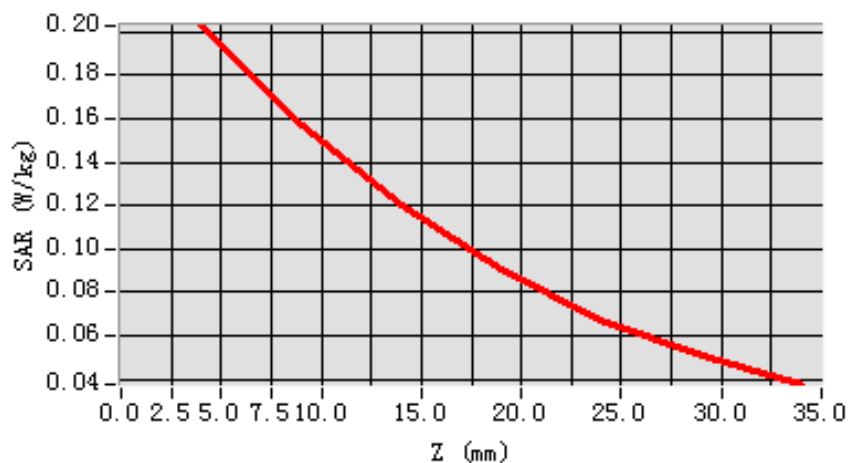
Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
Probe	SN 17/14 EP221
ConvF	5.02
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body front
Band	WCDMA V
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.34
Conductivity (S/m)	0.96
Variation (%)	0.32


Maximum location: X=-1.00, Y=-26.00

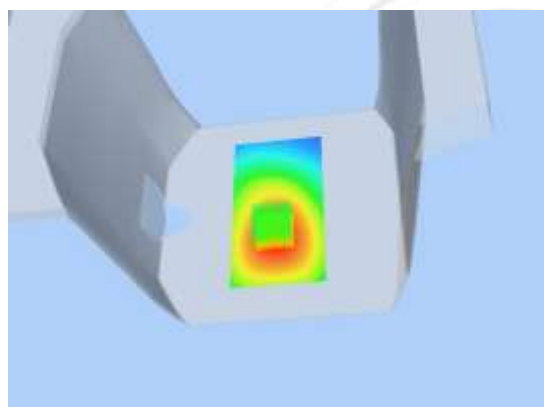
SAR 10g (W/Kg)	0.144037
SAR 1g (W/Kg)	0.196176

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2028	0.1566	0.1198	0.0902	0.0675	0.0507

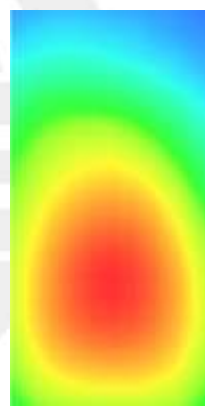
SAR, Z Axis Scan (X = -1, Y = -26)



3D screen shot

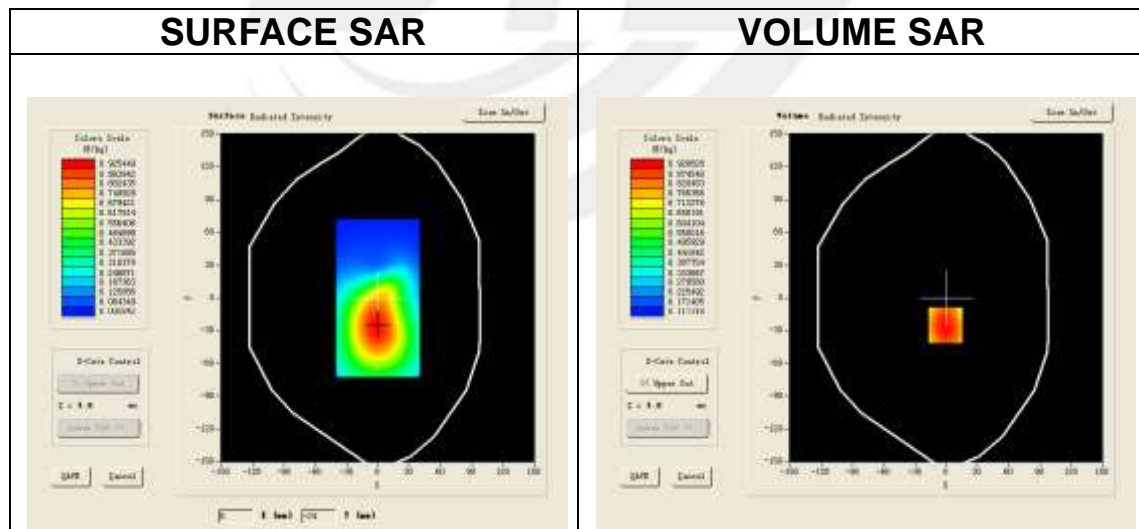


Hot spot position



Plot 50: DUT: Mobile phone; EUT Model: EROS 4.0

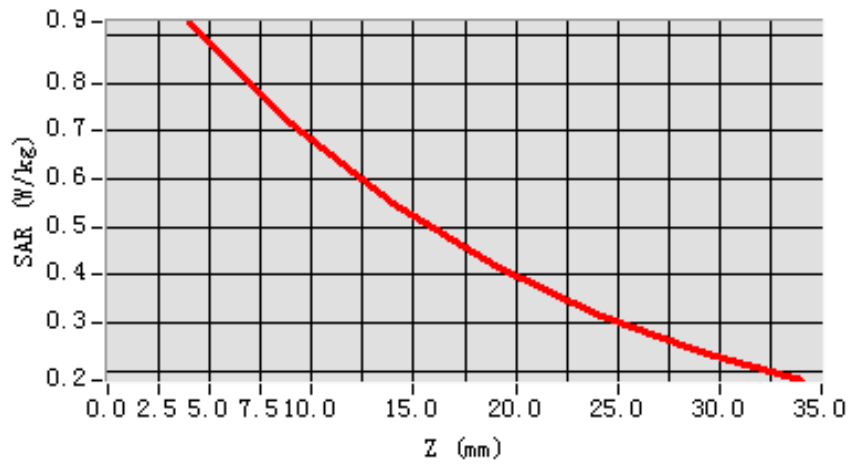
Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
Probe	SN 17/14 EP221
ConvF	5.02
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back
Band	WCDMA V
Channels	Low
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	826.4
Relative permittivity (real part)	56.08
Conductivity (S/m)	0.95
Variation (%)	-0.45


Maximum location: X=-1.00, Y=-25.00

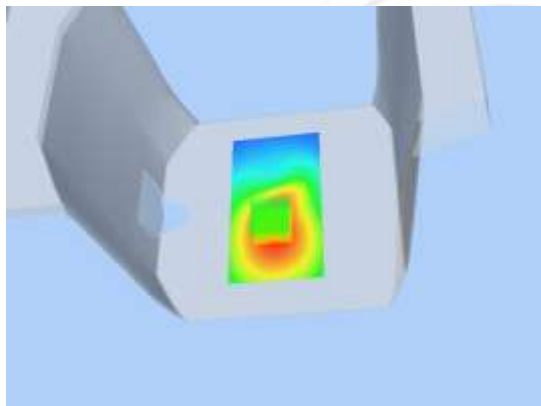
SAR 10g (W/Kg)	0.659718
SAR 1g (W/Kg)	0.899018

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.9286	0.7170	0.5498	0.4194	0.3191	0.2392

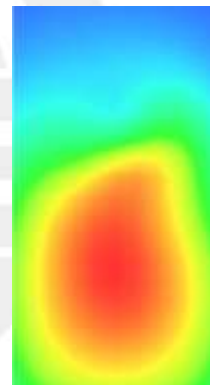
SAR, Z Axis Scan (X = -1, Y = -25)



3D screen shot

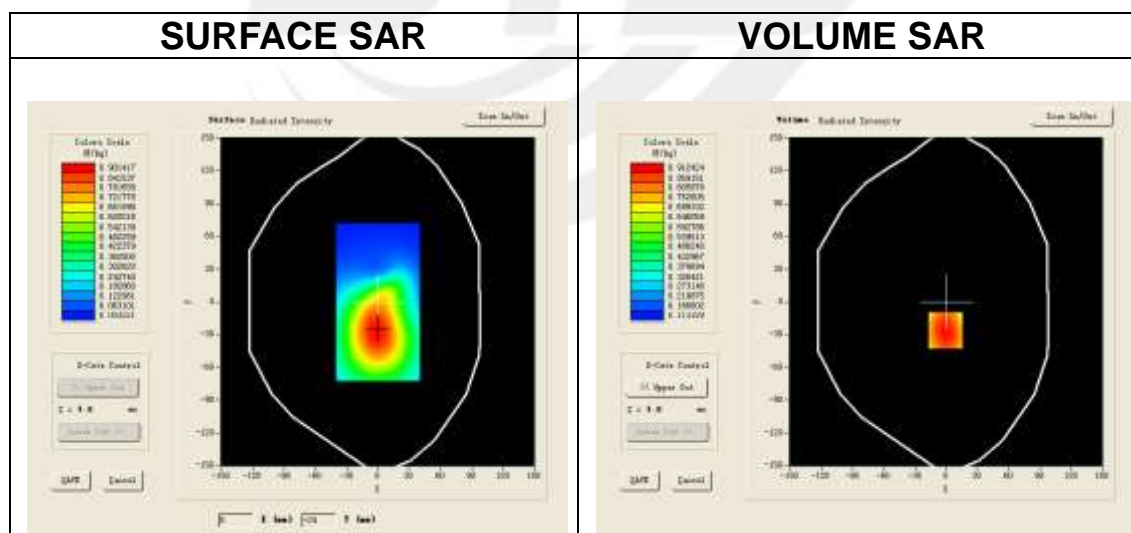


Hot spot position



Plot 51: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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	WCDMA V
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.34
Conductivity (S/m)	0.96
Variation (%)	-0.61

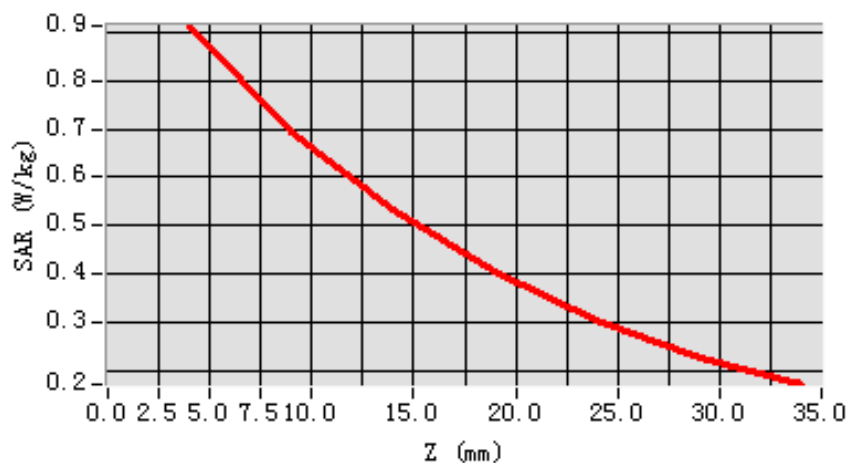


Maximum location: X=-1.00, Y=-26.00

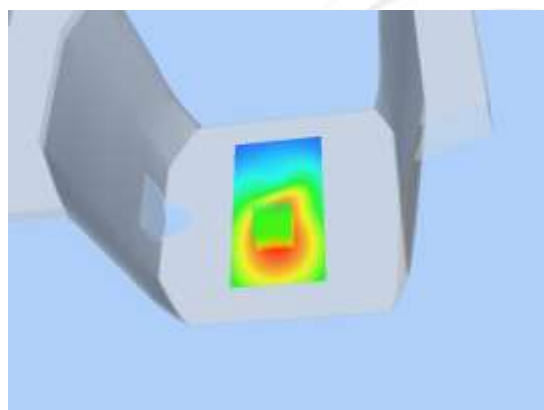
SAR 10g (W/Kg)	0.643606
SAR 1g (W/Kg)	0.885760

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.9124	0.6952	0.5339	0.4067	0.3047	0.2283

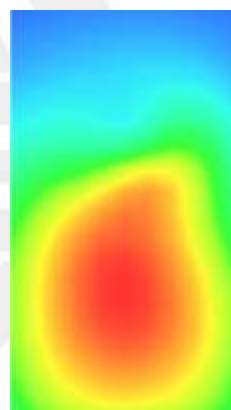
SAR, Z Axis Scan (X = -1, Y = -26)



3D screen shot

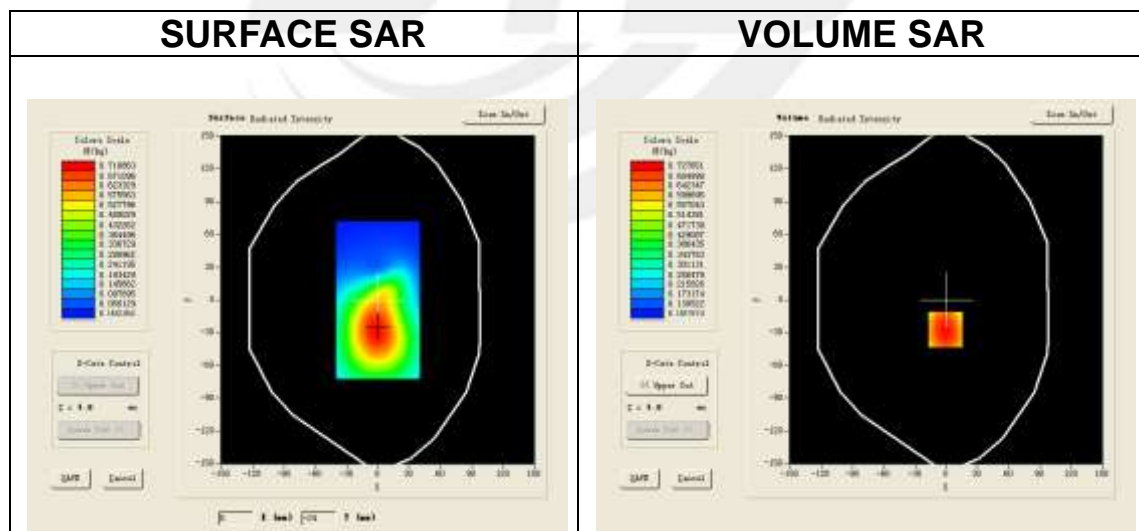


Hot spot position



Plot 52: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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	WCDMA V
Channels	High
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	846.6
Relative permittivity (real part)	55.16
Conductivity (S/m)	0.97
Variation (%)	0.28

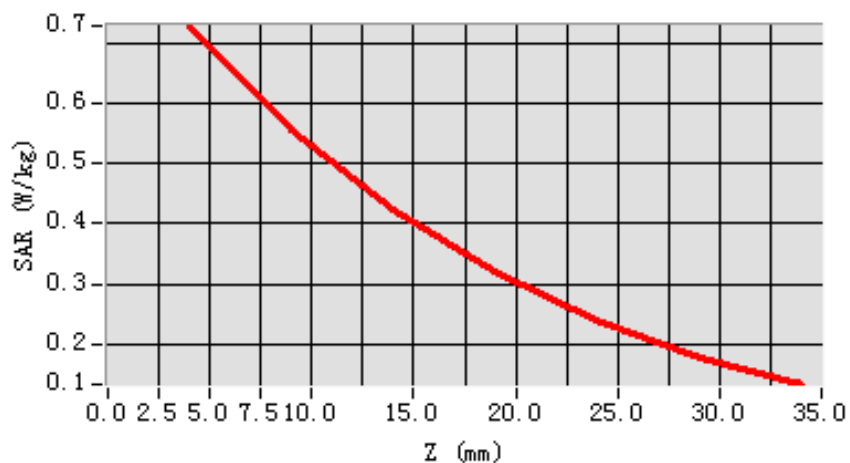


Maximum location: X=-1.00, Y=-27.00

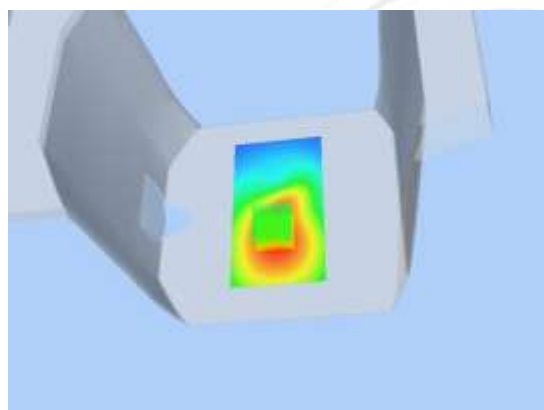
SAR 10g (W/Kg)	0.511712
SAR 1g (W/Kg)	0.704146

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.7277	0.5559	0.4231	0.3206	0.2413	0.1792

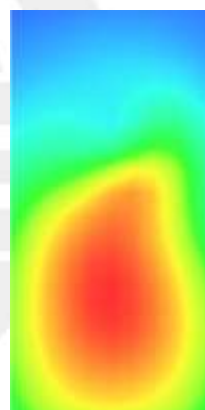
SAR, Z Axis Scan (X = -1, Y = -27)



3D screen shot

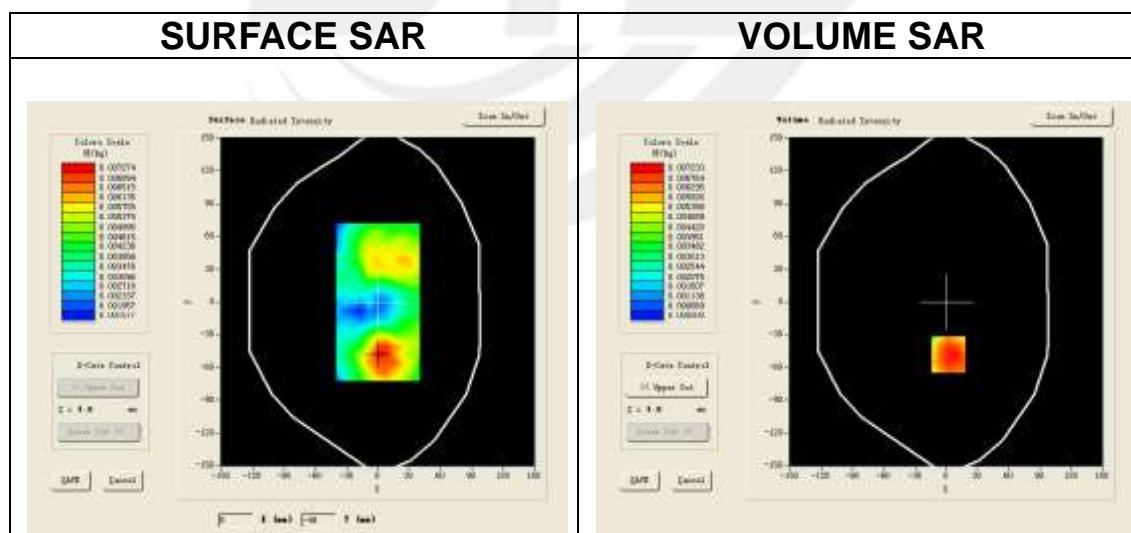


Hot spot position



Plot 53: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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)	55.34
Conductivity (S/m)	0.96
Variation (%)	-0.91

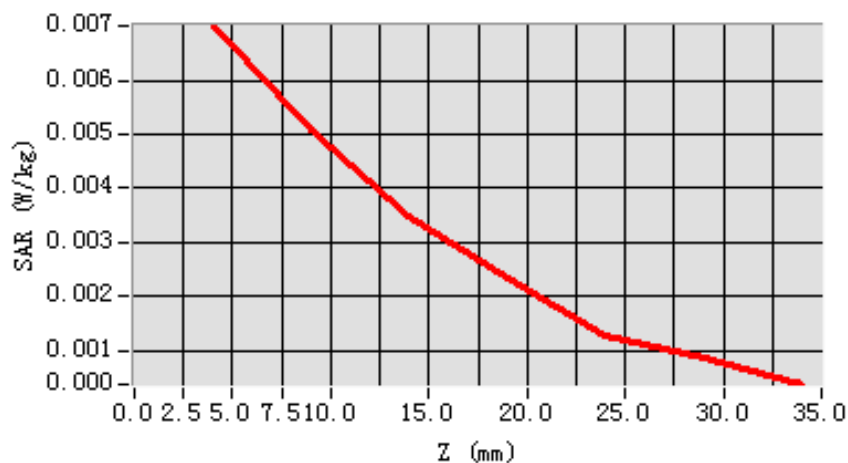


Maximum location: X=2.00, Y=-48.00

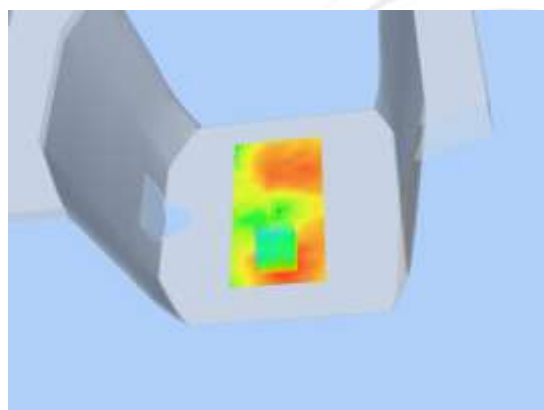
SAR 10g (W/Kg)	0.004657
SAR 1g (W/Kg)	0.007008

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0070	0.0051	0.0035	0.0023	0.0013	0.0008

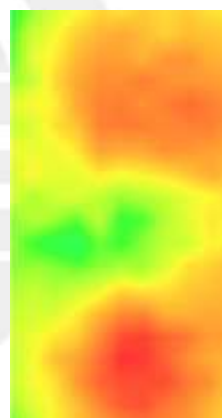
SAR, Z Axis Scan (X = 2, Y = -48)



3D screen shot

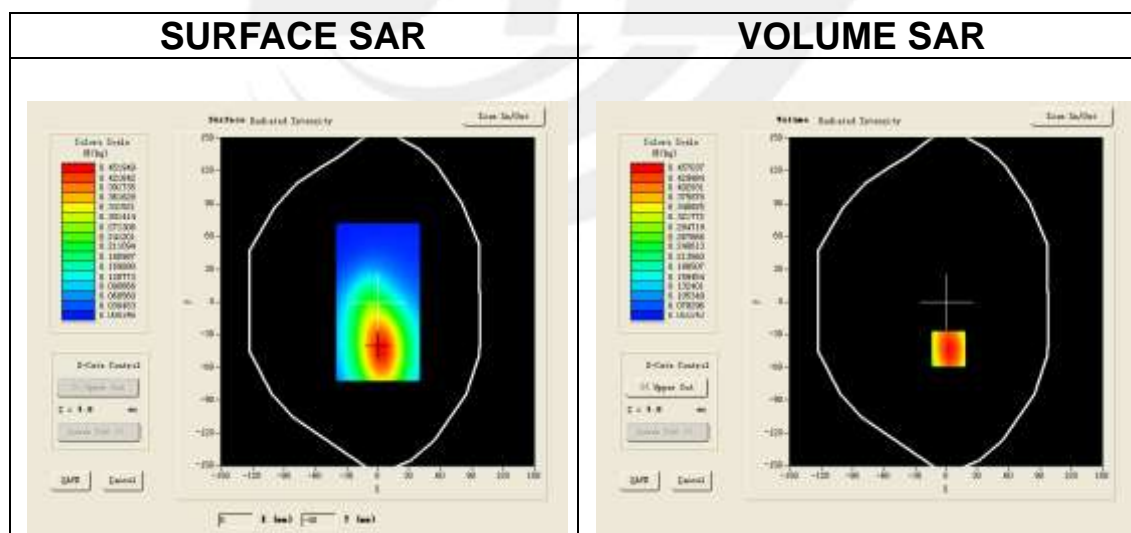


Hot spot position



Plot 54: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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)	55.34
Conductivity (S/m)	0.96
Variation (%)	0.27

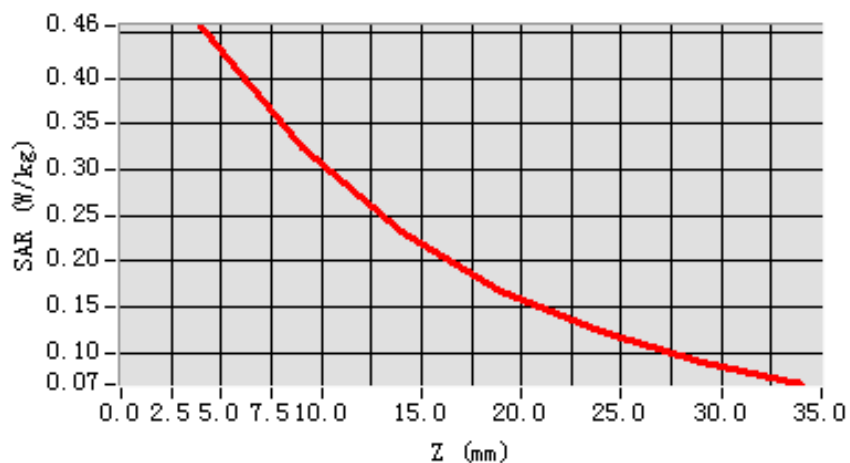


Maximum location: X=2.00, Y=-43.00

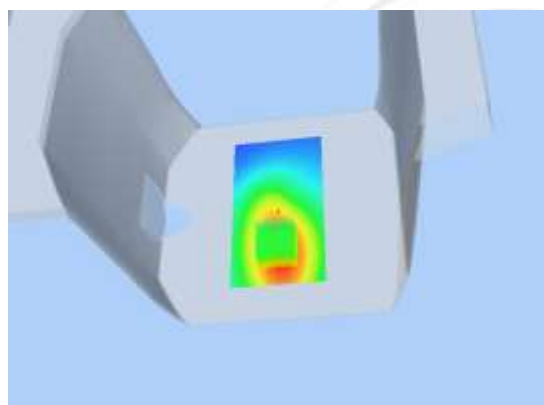
SAR 10g (W/Kg)	0.300072
SAR 1g (W/Kg)	0.440626

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4570	0.3235	0.2324	0.1675	0.1225	0.0894

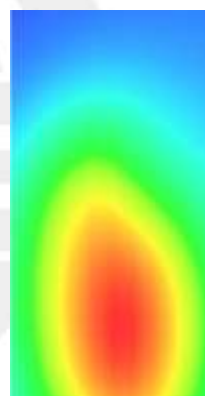
SAR, Z Axis Scan (X = 2, Y = -43)



3D screen shot

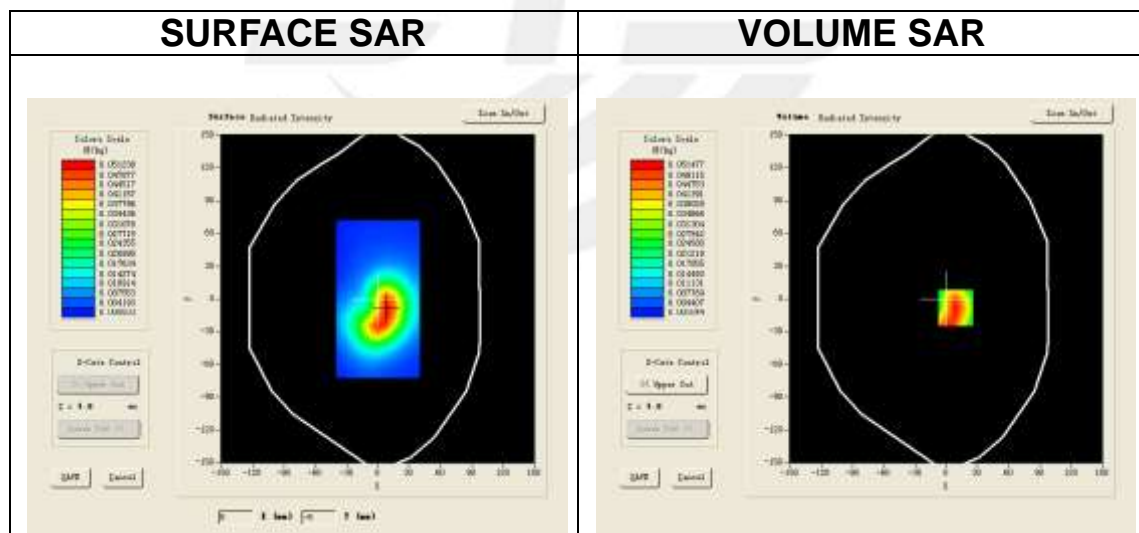


Hot spot position



Plot 55: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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 top side
Band	WCDMA V
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.34
Conductivity (S/m)	0.96
Variation (%)	-0.23

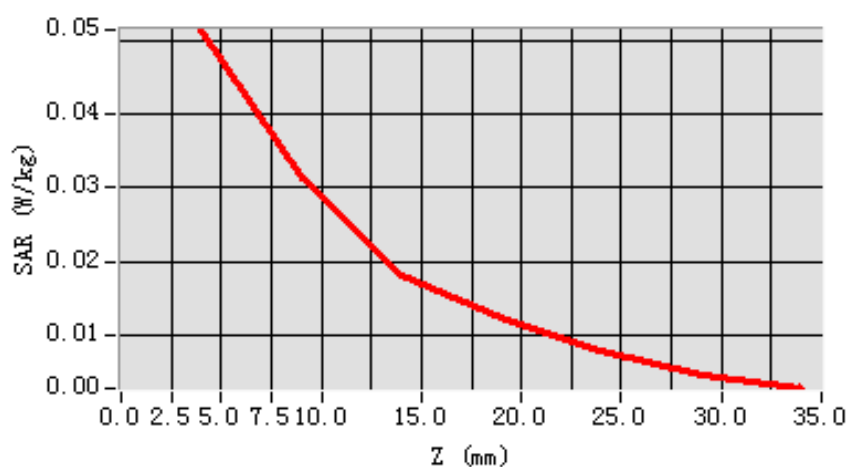


Maximum location: X=9.00, Y=-8.00

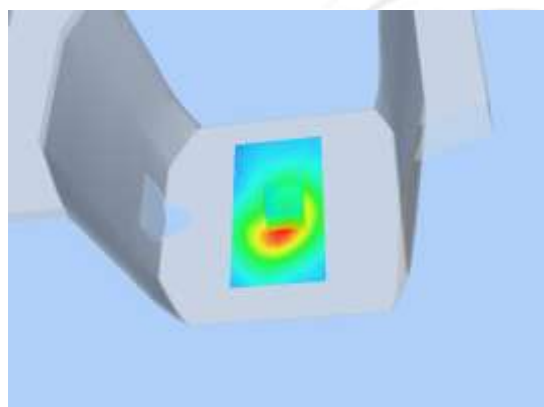
SAR 10g (W/Kg)	0.028557
SAR 1g (W/Kg)	0.048588

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0515	0.0314	0.0182	0.0123	0.0078	0.0047

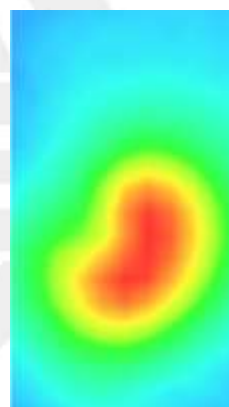
SAR, Z Axis Scan (X = 9, Y = -8)



3D screen shot

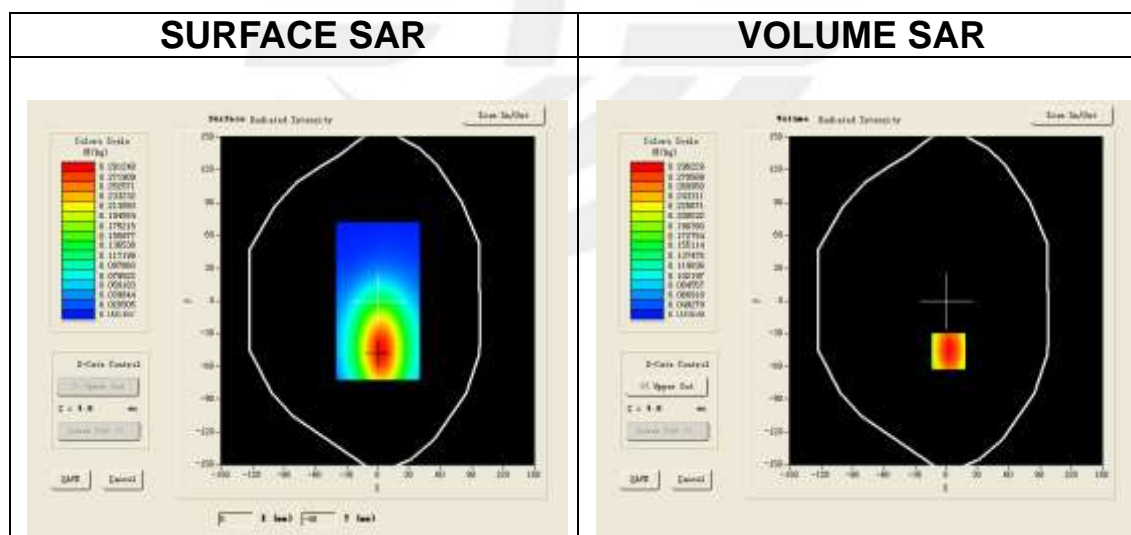


Hot spot position



Plot 56: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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)	55.34
Conductivity (S/m)	0.96
Variation (%)	0.55

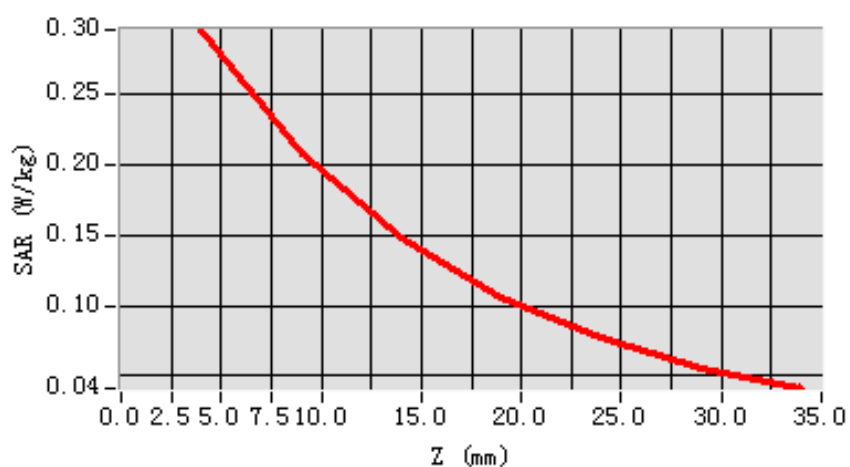


Maximum location: X=2.00, Y=-46.00

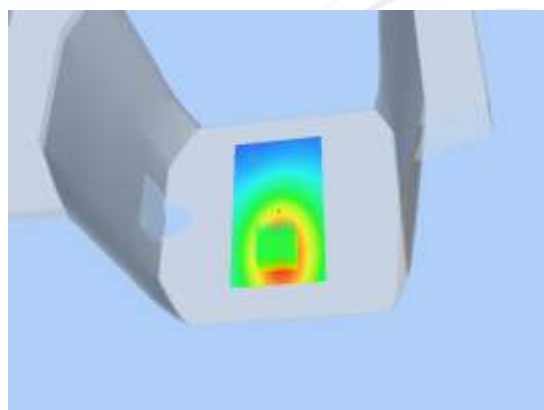
SAR 10g (W/Kg)	0.192878
SAR 1g (W/Kg)	0.285275

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2962	0.2077	0.1481	0.1063	0.0768	0.0556

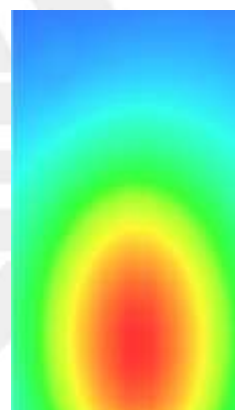
SAR, Z Axis Scan (X = 2, Y = -46)



3D screen shot

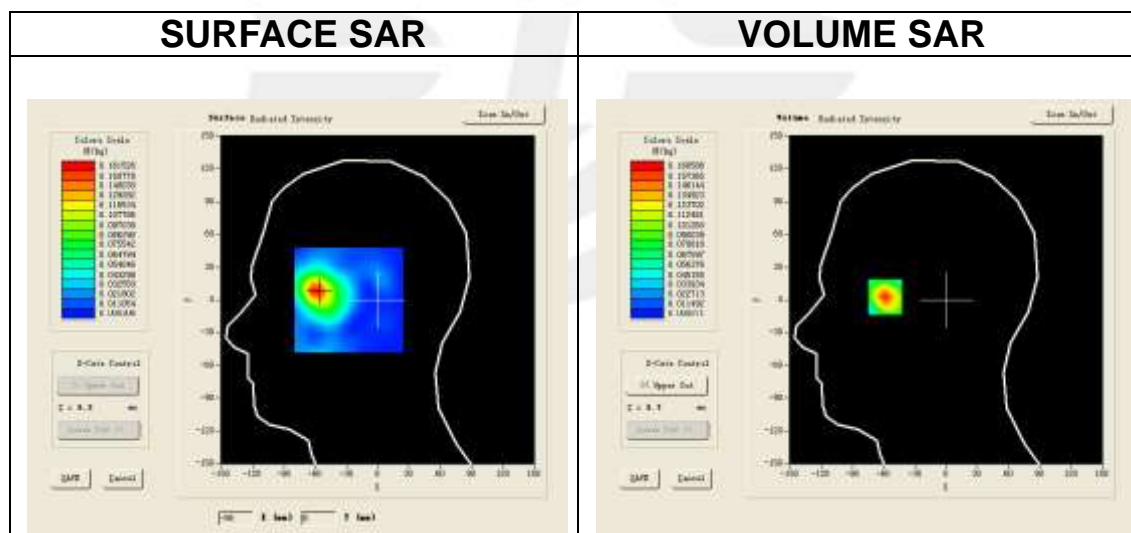


Hot spot position



Plot 57: DUT: Revel Pro; EUT Model: EROS 4.0

Test Data	2015-03-18
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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	2450MHz
Channels	Middle
Signal	Crest factor: 1.0
Frequency (MHz)	2437
Relative permittivity (real part)	39.90
Conductivity (S/m)	1.81
Variation (%)	0.29

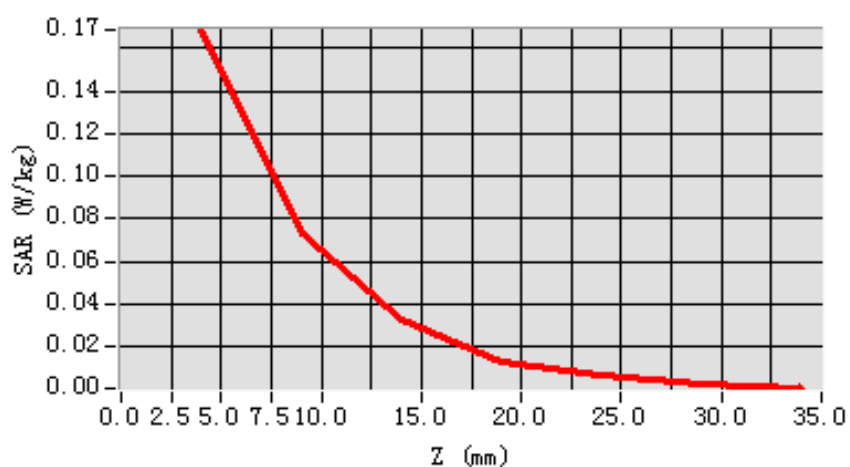


Maximum location: X=-59.00, Y=8.00

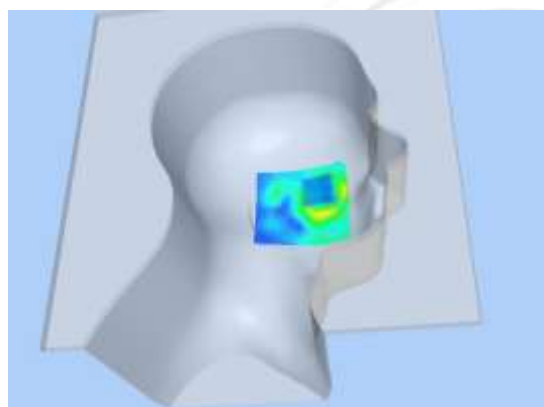
SAR 10g (W/Kg)	0.072626
SAR 1g (W/Kg)	0.158399

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1686	0.0727	0.0322	0.0132	0.0069	0.0027

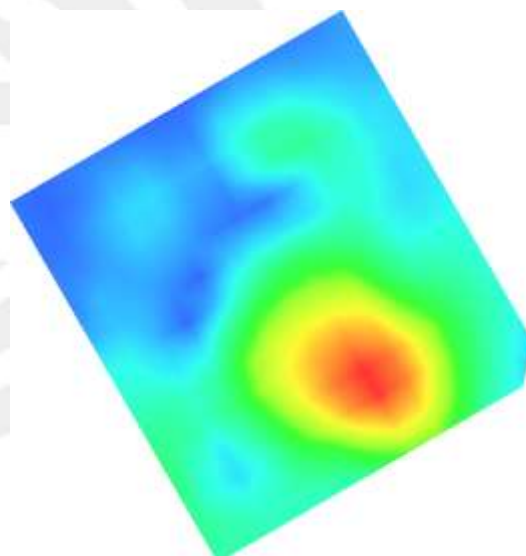
SAR, Z Axis Scan (X = -59, Y = 8)



3D screen shot

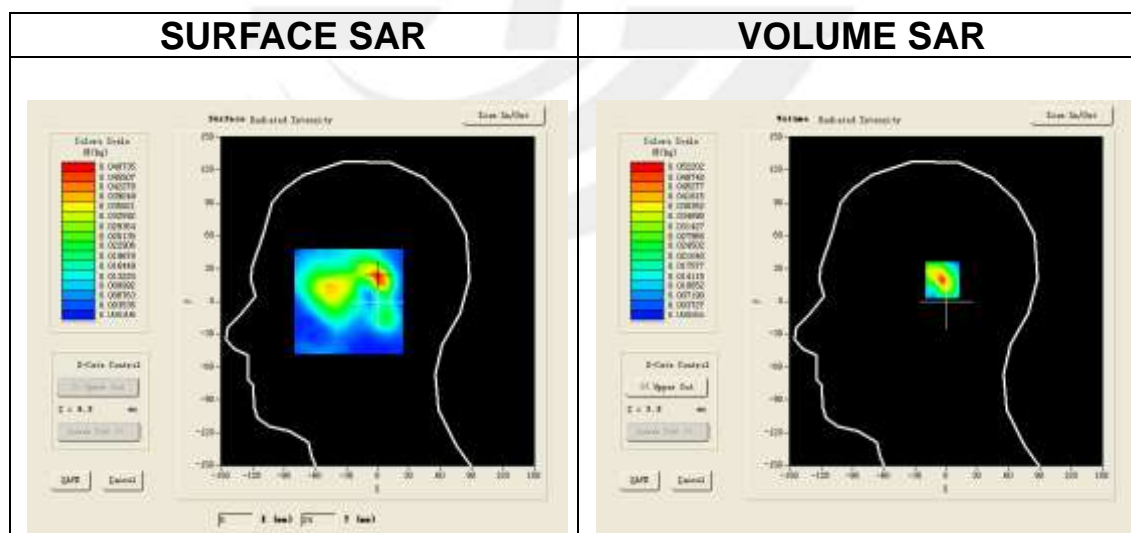


Hot spot position



Plot 58: DUT: Revel Pro; EUT Model: EROS 4.0

Test Data	2015-03-18
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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	2450MHz
Channels	Middle
Signal	Crest factor: 1.0
Frequency (MHz)	2437
Relative permittivity (real part)	39.90
Conductivity (S/m)	1.81
Variation (%)	0.65

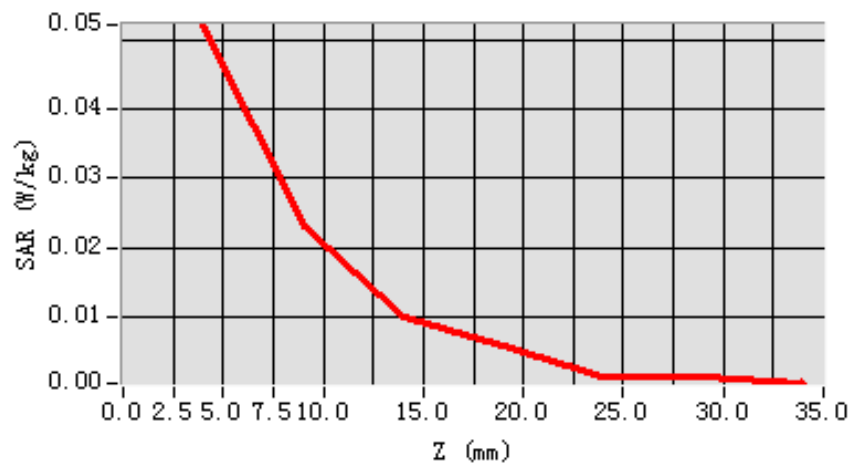


Maximum location: X=1.00, Y=21.00

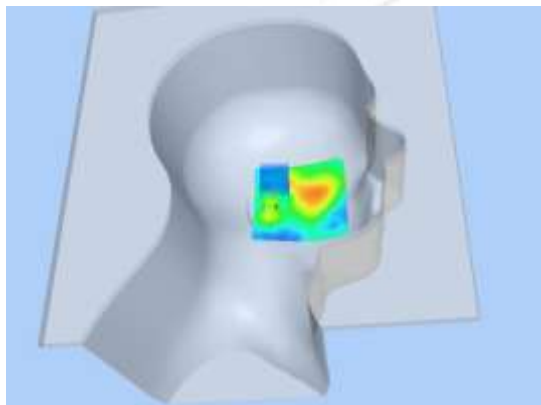
SAR 10g (W/Kg)	0.019480
SAR 1g (W/Kg)	0.046882

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0522	0.0232	0.0100	0.0059	0.0012	0.0013

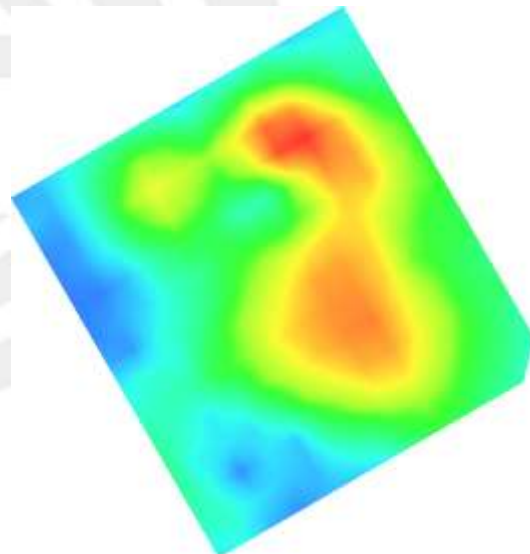
SAR, Z Axis Scan (X = 1, Y = 21)



3D screen shot

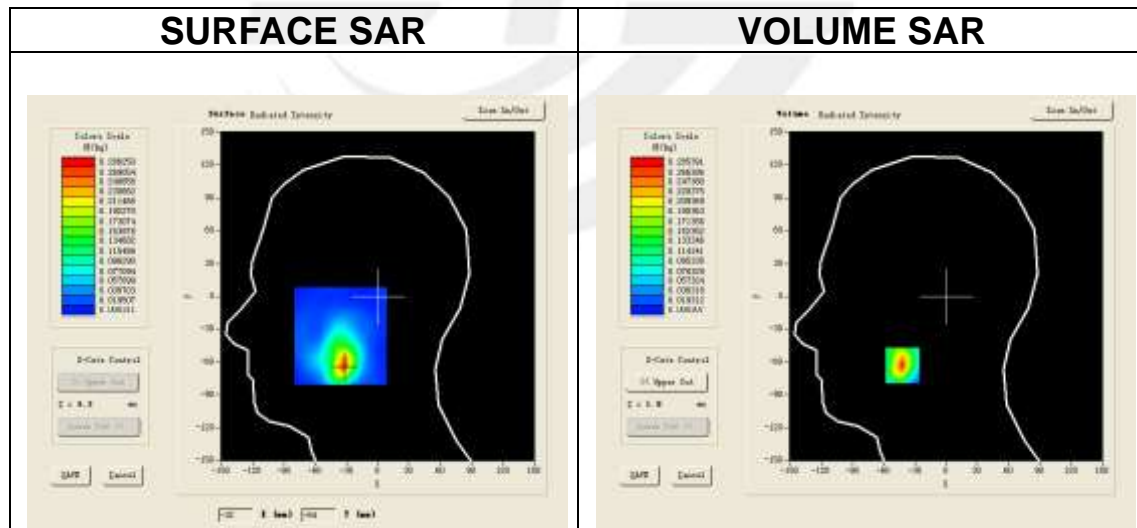


Hot spot position



Plot 59: DUT: Revel Pro; EUT Model: EROS 4.0

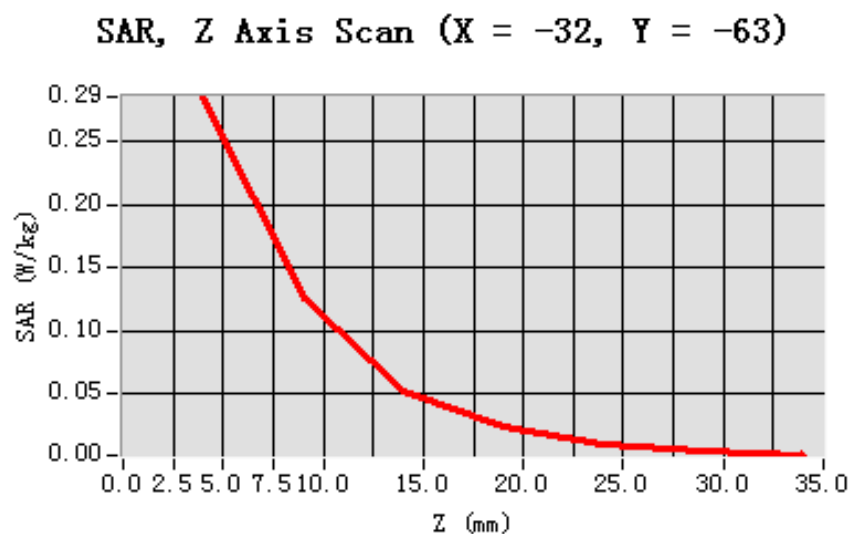
Test Data	2015-03-18
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
Probe	SN 17/14 EP221
ConvF	4.11
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Left head
Device Position	Cheek
Band	2450MHz
Channels	Middle
Signal	Crest factor: 1.0
Frequency (MHz)	2437
Relative permittivity (real part)	39.90
Conductivity (S/m)	1.81
Variation (%)	-0.54



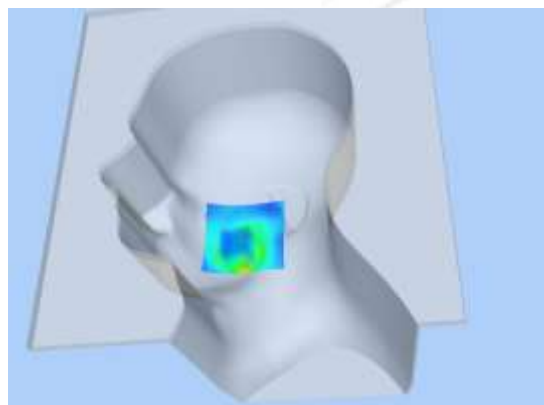
Maximum location: X=-32.00, Y=-63.00

SAR 10g (W/Kg)	0.112470
SAR 1g (W/Kg)	0.259752

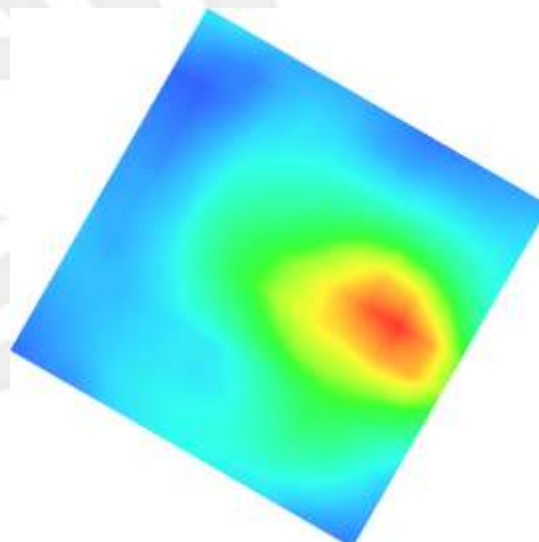
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2854	0.1262	0.0531	0.0236	0.0108	0.0041



3D screen shot

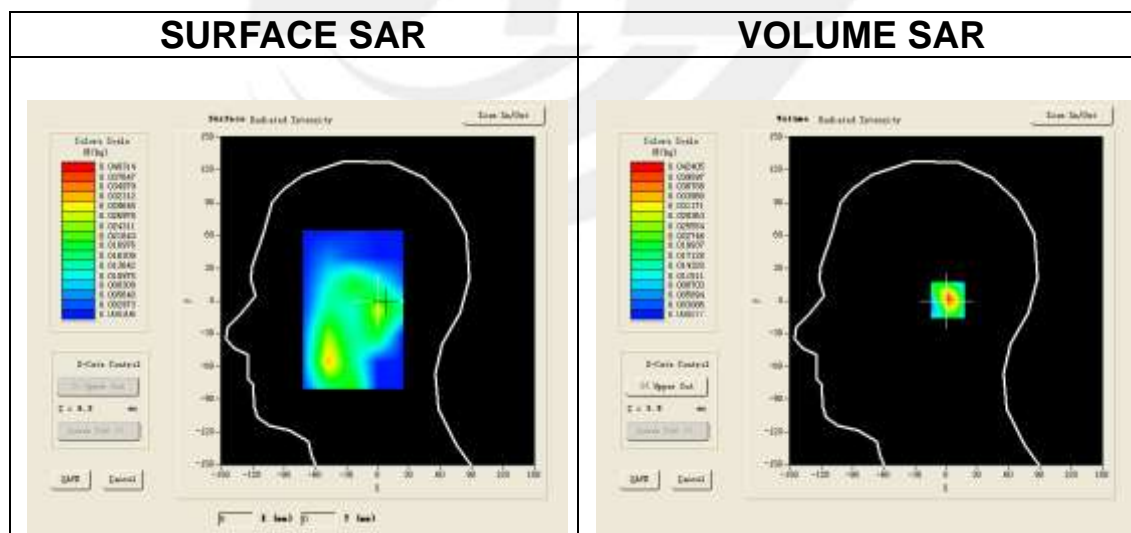


Hot spot position



Plot 60: DUT: Revel Pro; EUT Model: EROS 4.0

Test Data	2015-03-18
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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	2450MHz
Channels	Middle
Signal	Crest factor: 1.0
Frequency (MHz)	2437
Relative permittivity (real part)	39.90
Conductivity (S/m)	1.81
Variation (%)	0.21

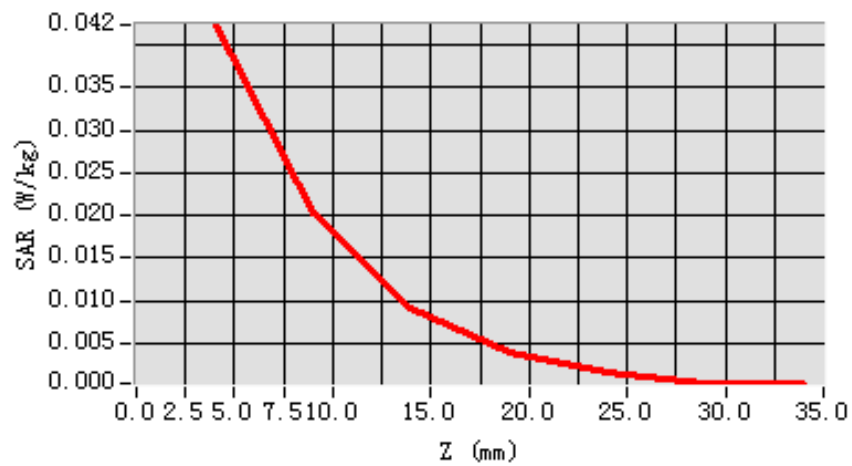


Maximum location: X=9.00, Y=1.00

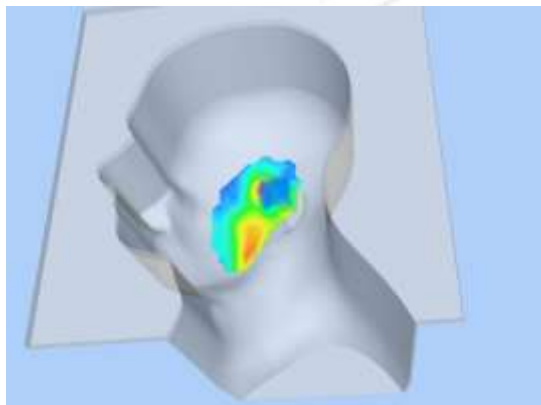
SAR 10g (W/Kg)	0.016011
SAR 1g (W/Kg)	0.038486

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0424	0.0203	0.0090	0.0040	0.0015	0.0004

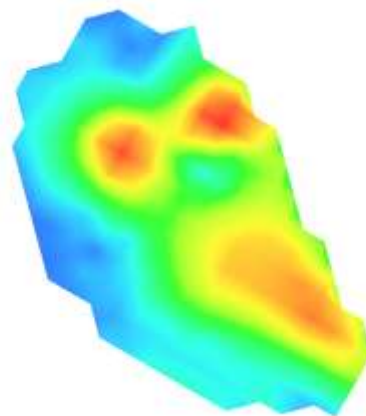
SAR, Z Axis Scan (X = 9, Y = 1)



3D screen shot

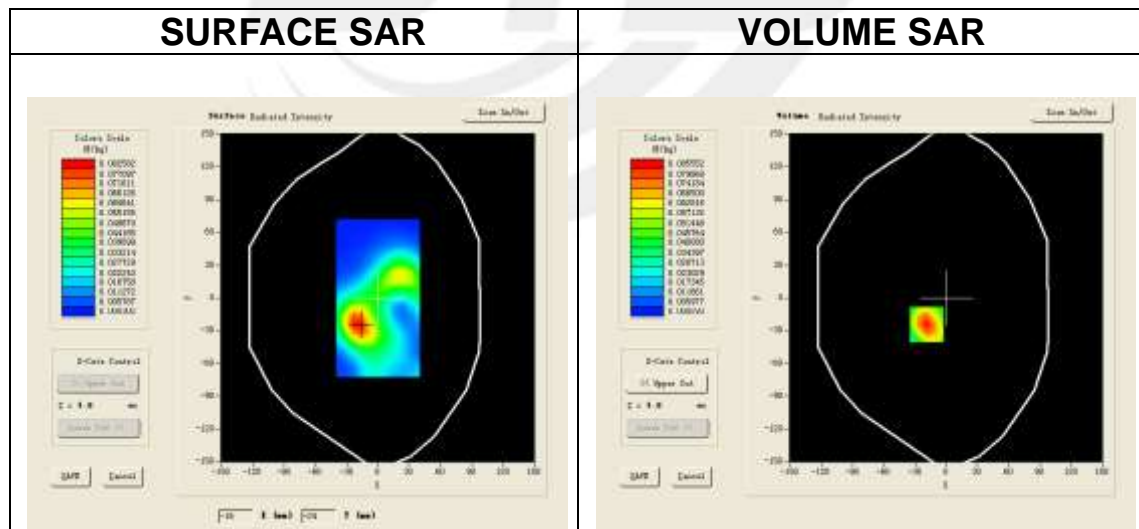


Hot spot position



Plot 61: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-03-18
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
Probe	SN 17/14 EP221
ConvF	4.25
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body front
Band	2450MHz
Channels	Middle
Signal	Crest factor: 1.0
Frequency (MHz)	2437
Relative permittivity (real part)	53.16
Conductivity (S/m)	1.92
Variation (%)	0.36

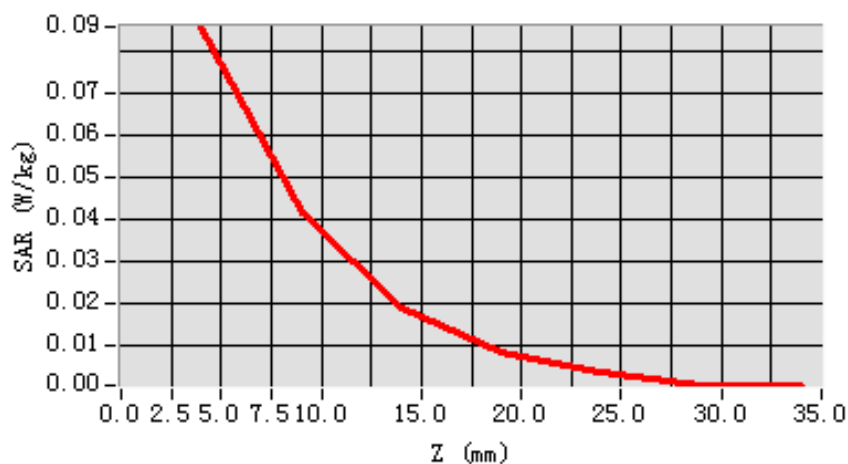


Maximum location: X=-19.00, Y=-24.00

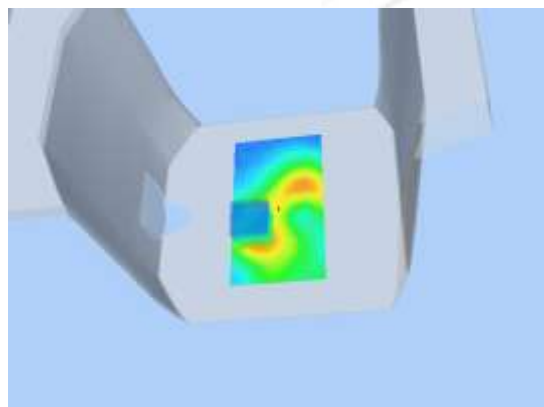
SAR 10g (W/Kg)	0.040142
SAR 1g (W/Kg)	0.081741

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0856	0.0414	0.0193	0.0089	0.0037	0.0008

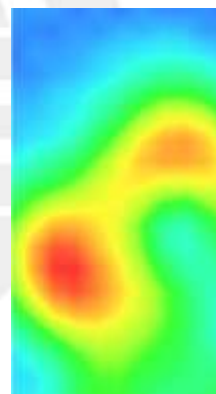
SAR, Z Axis Scan (X = -19, Y = -24)



3D screen shot

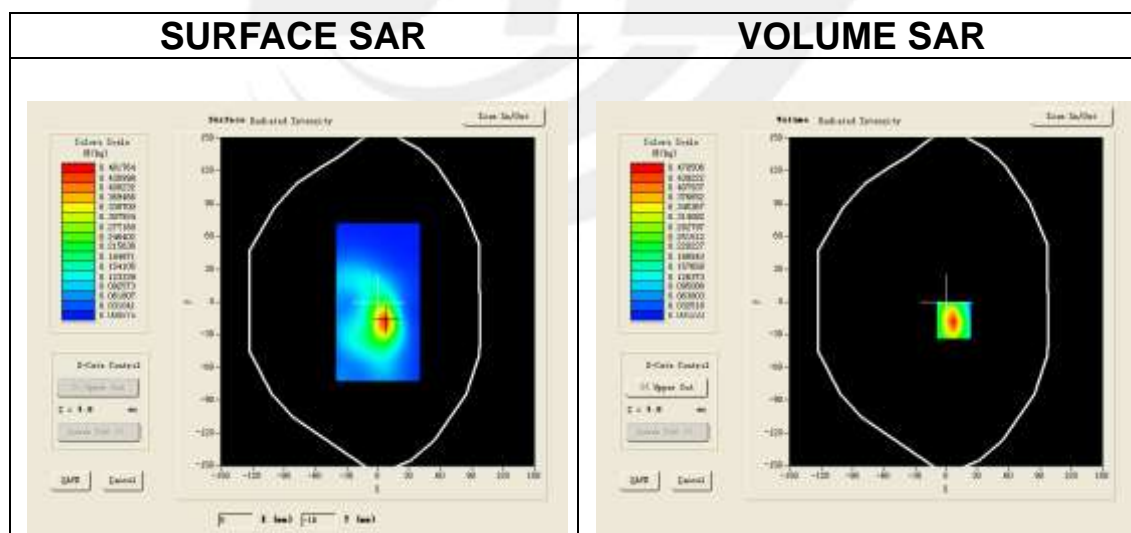


Hot spot position



Plot 62: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-03-18
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
Probe	SN 17/14 EP221
ConvF	4.25
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back
Band	2450MHz
Channels	Middle
Signal	Crest factor: 1.0
Frequency (MHz)	2437
Relative permittivity (real part)	53.16
Conductivity (S/m)	1.92
Variation (%)	-0.87

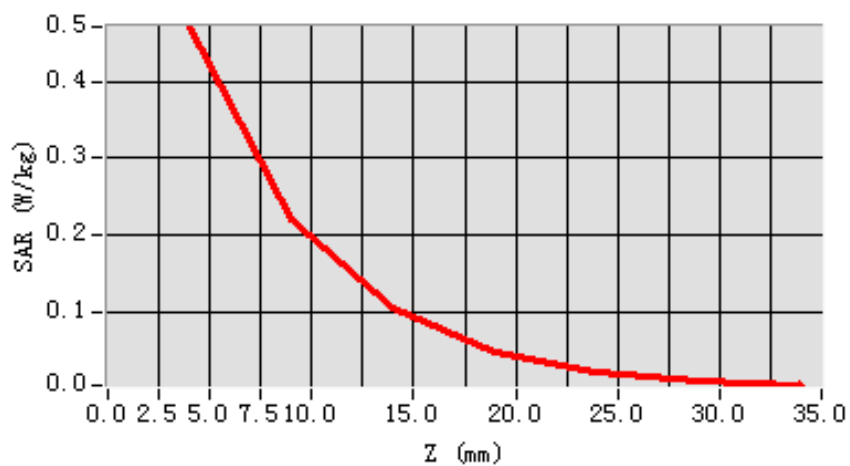


Maximum location: X=7.00, Y=-17.00

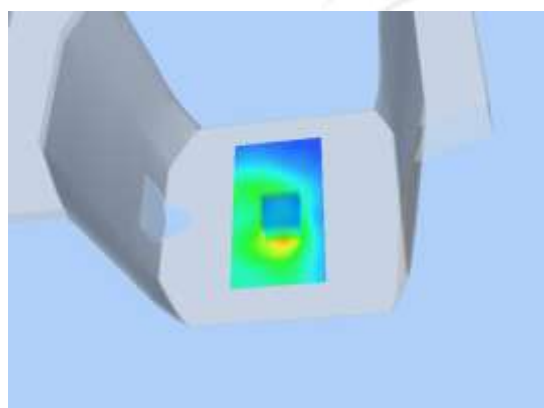
SAR 10g (W/Kg)	0.200379
SAR 1g (W/Kg)	0.436010

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4705	0.2213	0.1043	0.0492	0.0225	0.0105

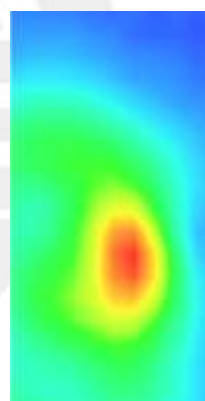
SAR, Z Axis Scan (X = 7, Y = -17)



3D screen shot

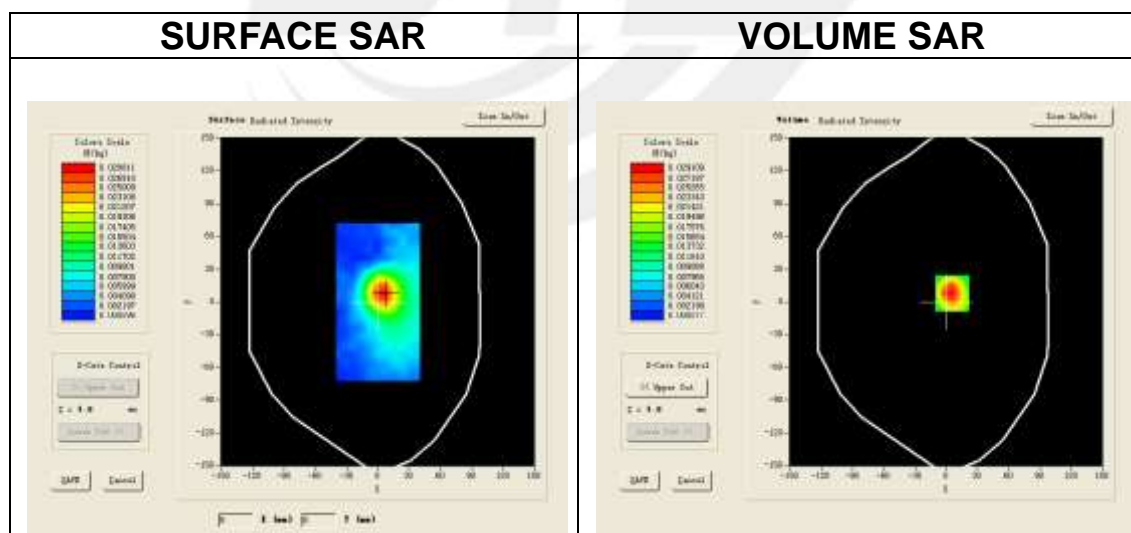


Hot spot position



Plot 63: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-03-18
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
Probe	SN 17/14 EP221
ConvF	4.25
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body left side
Band	2450MHz
Channels	Middle
Signal	Crest factor: 1.0
Frequency (MHz)	2437
Relative permittivity (real part)	53.16
Conductivity (S/m)	1.92
Variation (%)	0.26

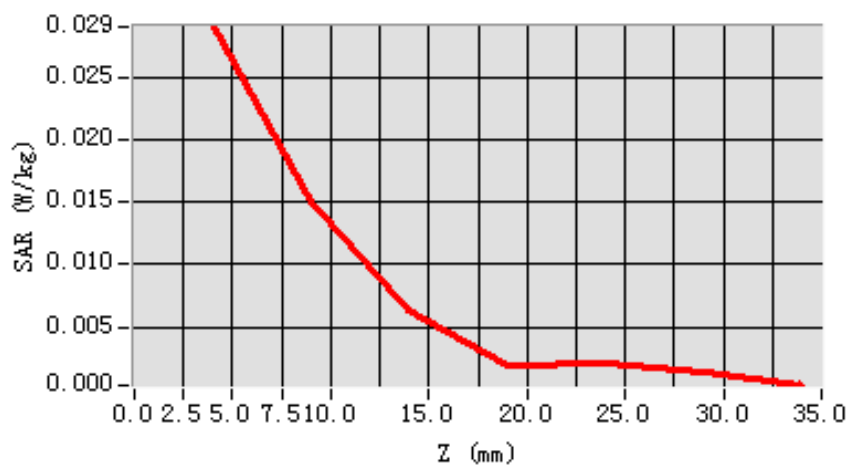


Maximum location: X=6.00, Y=8.00

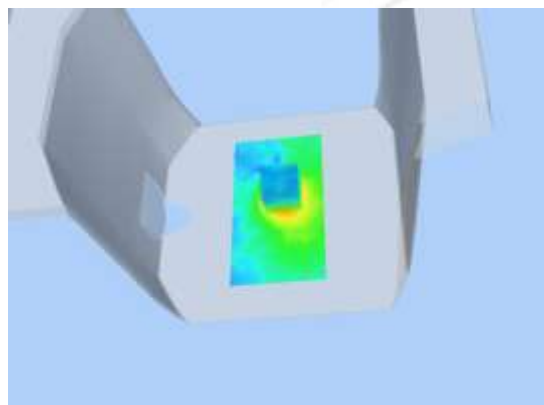
SAR 10g (W/Kg)	0.013468
SAR 1g (W/Kg)	0.027608

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0291	0.0151	0.0063	0.0019	0.0020	0.0013

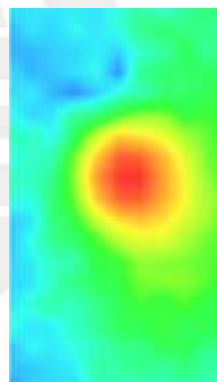
SAR, Z Axis Scan (X = 6, Y = 8)



3D screen shot

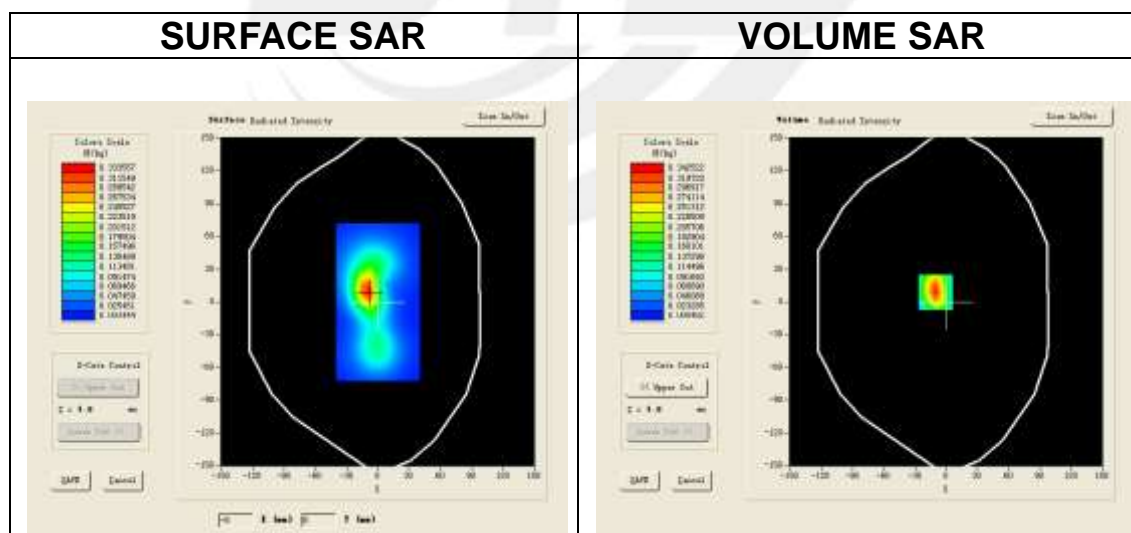


Hot spot position



Plot 64: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-03-18
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
Probe	SN 17/14 EP221
ConvF	4.25
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body right side
Band	2450MHz
Channels	Middle
Signal	Crest factor: 1.0
Frequency (MHz)	2437
Relative permittivity (real part)	53.16
Conductivity (S/m)	1.92
Variation (%)	-0.42

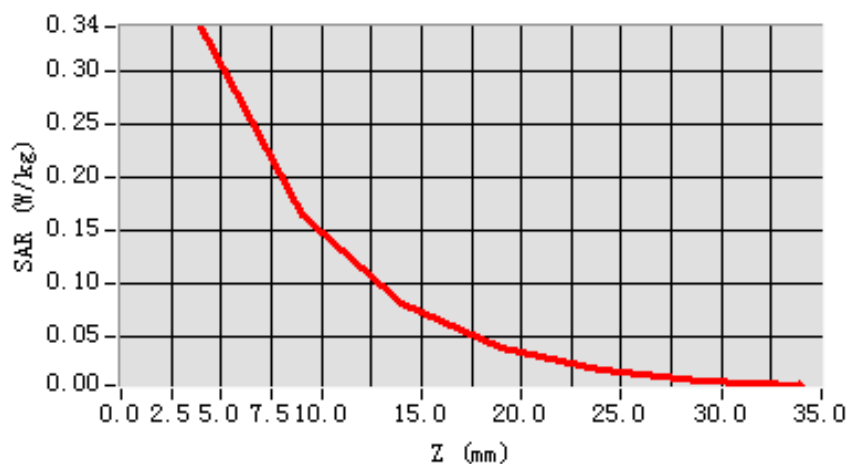


Maximum location: X=-10.00, Y=9.00

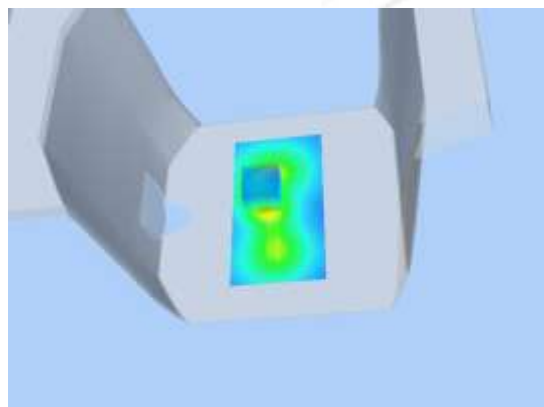
SAR 10g (W/Kg)	0.148980
SAR 1g (W/Kg)	0.318482

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.3425	0.1649	0.0801	0.0380	0.0188	0.0076

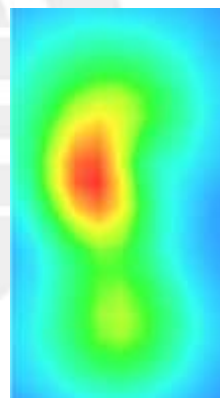
SAR, Z Axis Scan (X = -10, Y = 9)



3D screen shot

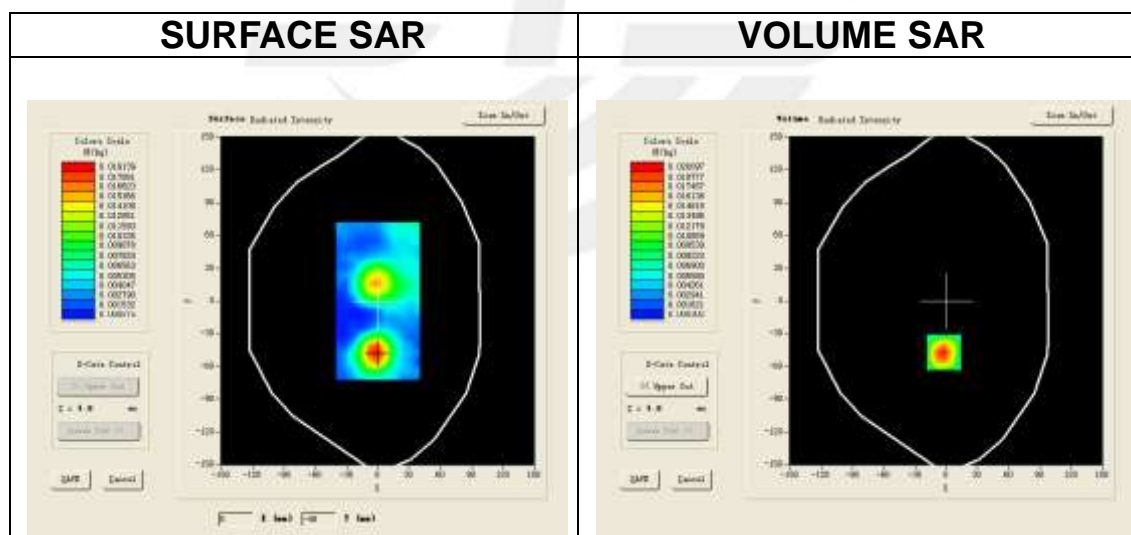


Hot spot position



Plot 65: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-03-18
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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	2450MHz
Channels	Middle
Signal	Crest factor: 1.0
Frequency (MHz)	2437
Relative permittivity (real part)	53.16
Conductivity (S/m)	1.92
Variation (%)	0.12

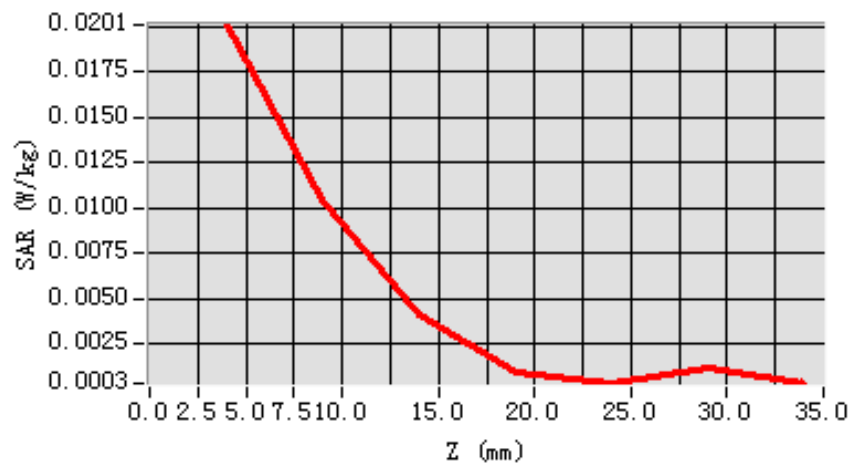


Maximum location: X=-2.00, Y=-47.00

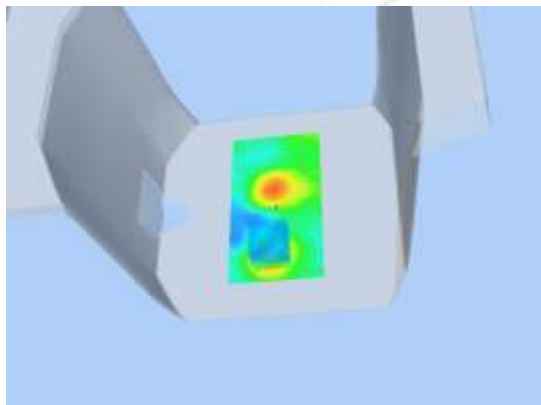
SAR 10g (W/Kg)	0.008688
SAR 1g (W/Kg)	0.018268

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0201	0.0104	0.0041	0.0010	0.0004	0.0011

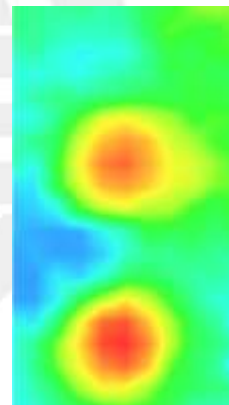
SAR, Z Axis Scan (X = -2, Y = -47)



3D screen shot

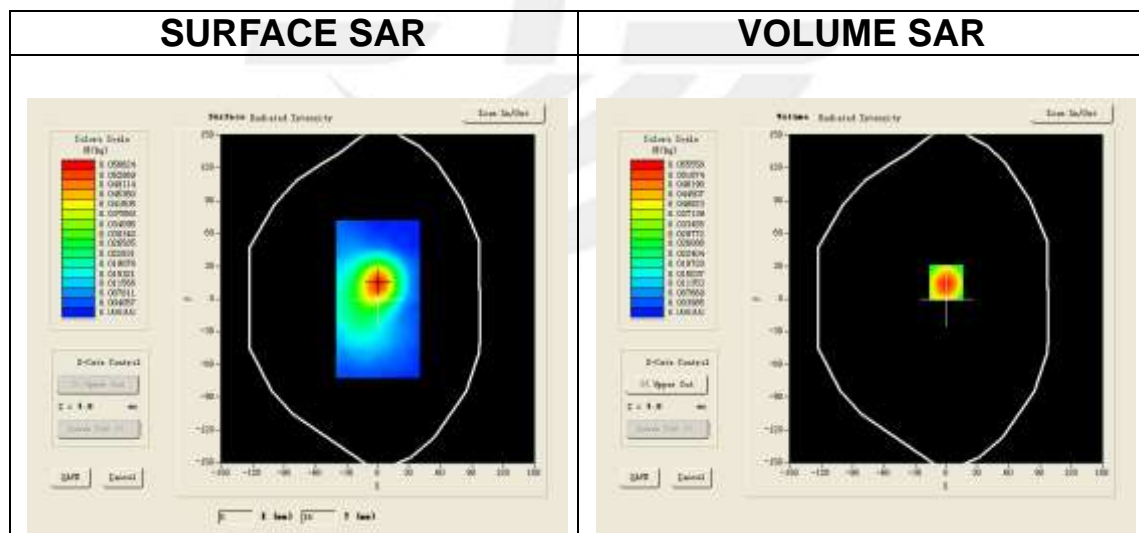


Hot spot position



Plot 66: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-03-18
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
Probe	SN 17/14 EP221
ConvF	4.25
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body bottom side
Band	2450MHz
Channels	Middle
Signal	Crest factor: 1.0
Frequency (MHz)	2437
Relative permittivity (real part)	53.16
Conductivity (S/m)	1.92
Variation (%)	0.36

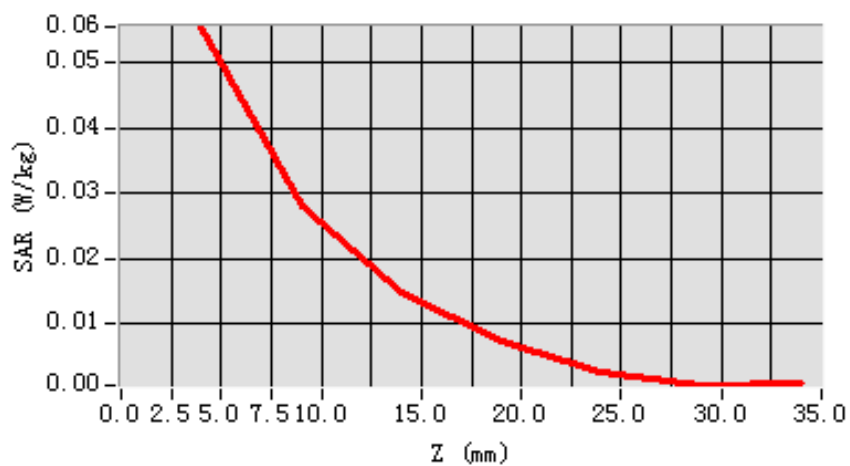


Maximum location: X=0.00, Y=15.00

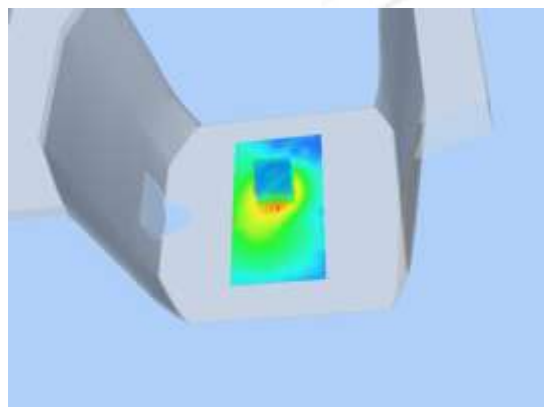
SAR 10g (W/Kg)	0.027470
SAR 1g (W/Kg)	0.053697

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0556	0.0281	0.0148	0.0074	0.0027	0.0007

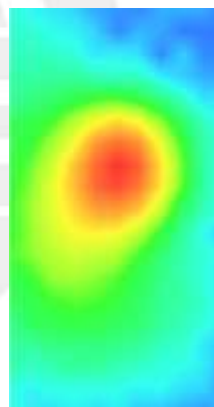
SAR, Z Axis Scan (X = 0, Y = 15)



3D screen shot



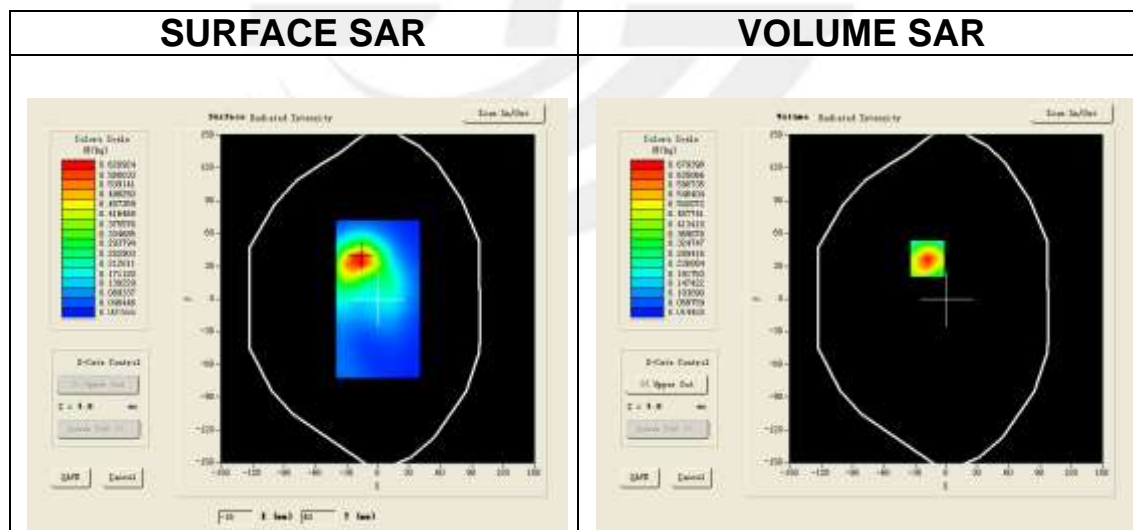
Hot spot position



Repeated SAR

Plot 67: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-13
Ambient Temperature(°C)	20.9
Liquid Temperature(°C)	20.2
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	GSM1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)
Frequency (MHz)	1880
Relative permittivity (real part)	53.77
Conductivity (S/m)	1.50
Variation (%)	-0.32

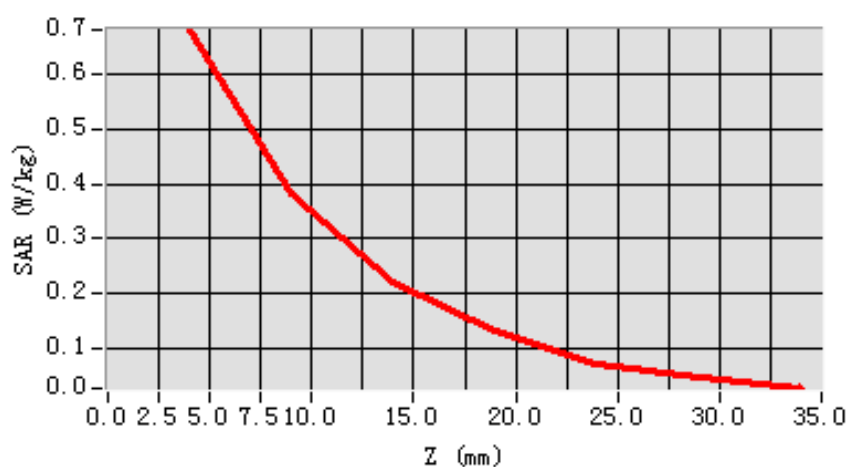


Maximum location: X=-18.00, Y=37.00

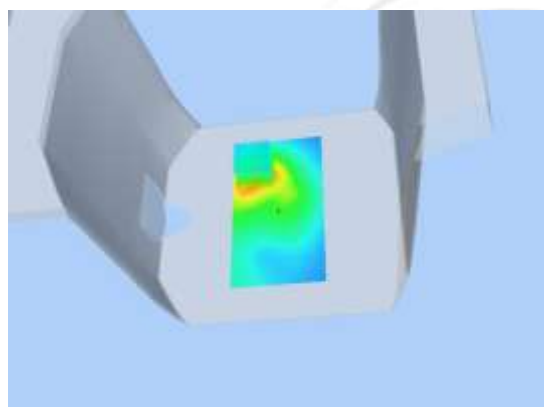
SAR 10g (W/Kg)	0.351863
SAR 1g (W/Kg)	0.650231

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6784	0.3825	0.2220	0.1322	0.0729	0.0458

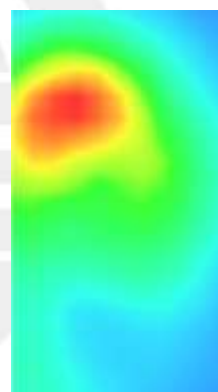
SAR, Z Axis Scan (X = -18, Y = 37)



3D screen shot

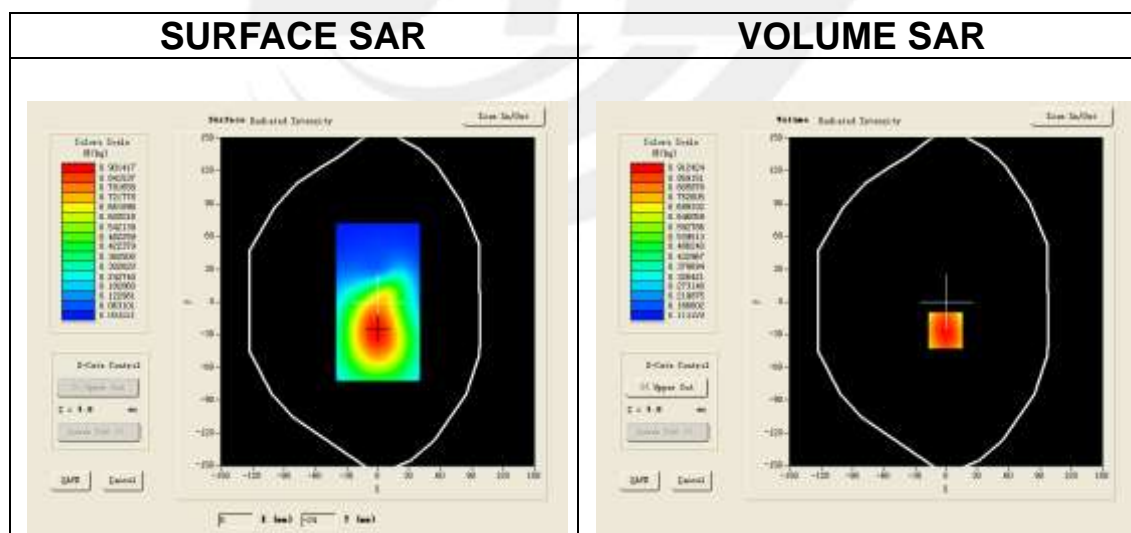


Hot spot position



Plot 68: DUT: Mobile phone; EUT Model: EROS 4.0

Test Data	2015-02-12
Ambient Temperature(°C)	21.4
Liquid Temperature(°C)	20.0
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	WCDMA V
Channels	Middle
Signal	WCDMA (Crest factor: 1.0)
Frequency (MHz)	836.6
Relative permittivity (real part)	55.34
Conductivity (S/m)	0.96
Variation (%)	-0.91

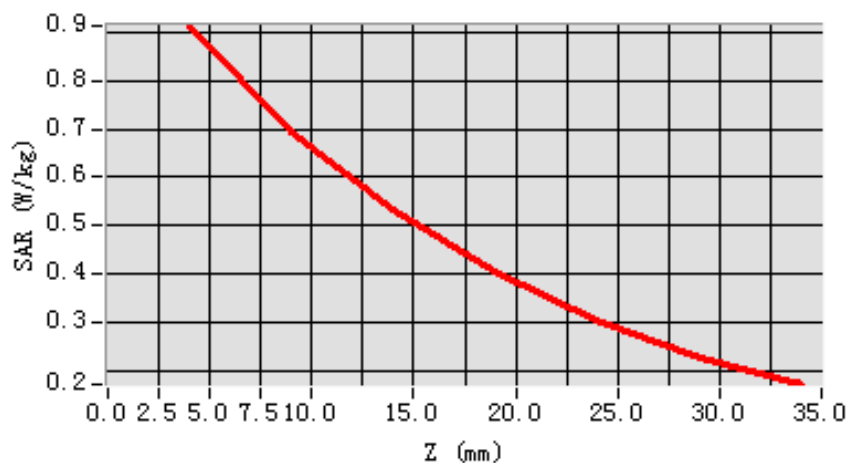


Maximum location: X=-1.00, Y=-26.00

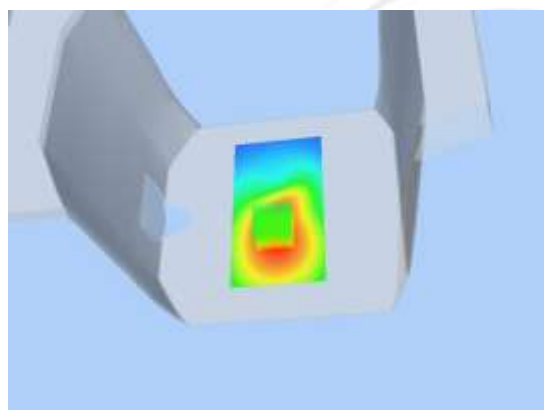
SAR 10g (W/Kg)	0.640569
SAR 1g (W/Kg)	0.882354

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.9114	0.6946	0.5328	0.4061	0.3042	0.2278

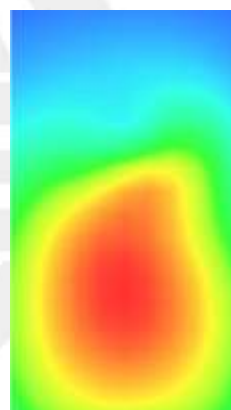
SAR, Z Axis Scan (X = -1, Y = -26)



3D screen shot



Hot spot position





Appendix C. Probe Calibration And Dipole Calibration Report

Refer the appendix Calibration Report.

