



SAR TEST REPORT



Issued to

Qingdao Haier Telecom Co.Ltd

For

Mobile Phone

Model Name : HW-N80W
 Trade Name : Haier /ekt
 Brand Name : Haier/ekt
 FCC ID : SG71110HW-N80W
 Standard : FCC Oet65 Supplement C Jun.2001
 47CFR 2.1093
 ANSI C95.1-1999
 IEEE 1528-2003
 MAX SAR : Head: 0.711W/kg
 Body: 1.116W/kg
 Test date : 2011-11-14 to 2011-11-15
 Issue date : 2011-12-2

Shenzhen MORLAB Communication Technology Co., Ltd.



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 Date 2011.12.2

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 Date 2011.12.2



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Change History		
Issue	Date	Reason for change
1.0	Nov. 25, 2011	First edition
2.0	Dec.2,2011	Second edition

1. Testing Laboratory

1.1. Identification of the Responsible Testing Laboratory

Company Name: Shenzhen Morlab Communications Technology Co., Ltd.
 Department: Morlab Laboratory
 Address: 3/F, Electronic Testing Building, Shahe Road, Nanshan District, Shenzhen, 518055 P. R. China
 Responsible Test Lab Manager: Mr. Shu Luan
 Telephone: +86 755 86130268
 Facsimile: +86 755 86130218

1.2. Identification of the Responsible Testing Location

Name: Shenzhen Morlab Communications Technology Co., Ltd.
 Morlab Laboratory
 Address: 3/F, Electronic Testing Building, Shahe Road, Nanshan District, Shenzhen, 518055 P. R. China

1.3. Accreditation Certificate

Accredited Testing Laboratory: No. CNAS L3572

1.4. List of Test Equipments

No.	Instrument	Type	Cal. Date	Cal. Due
1	PC	Dell (Pentium IV 2.4GHz, SN:X10-23533)	(n.a)	(n.a)
2	Network Emulator	Rohde&Schwarz (CMU200, SN:105894)	2011-9-26	1year
3	Voltmeter	Keithley (2000, SN:1000572)	2011-9-24	1year
4	Synthetizer	Rohde&Schwarz (SML_03, SN:101868)	2011-9-24	1year
5	Amplifier	Nucl udes (ALB216, SN:10800)	2011-9-24	1year
6	Power Meter	Rohde&Schwarz (NRVD, SN:101066)	2011-9-24	1year
7	Probe	Satimo (SN:SN_3708_EP80)	2011-9-24	1year
8	Phantom	Satimo (SN:SN_36_08_SAM62)	2011-9-24	1year
9	Liquid	Satimo (Last Calibration: 2011-11-15)	N/A	N.A
10	Dipole 835MHz	Satimo (SN 36/08 DIPC 99)	2011-9-24	1year
11	Dipole 1900MHz	Satimo (SN 36/08 DIPF 102)	2011-9-24	1year
12	Dipole 2450MHz	Satimo (SN 36/08 DIPF 103)	2011-9-24	1year

2. Technical Information

Note: the following data is based on the information by the applicant.

2.1. Identification of Applicant

Company Name: Qingdao Haier Telecom Co.Ltd
Address: No.1 Haier Road, Hi-tech Zone,Qingdao266101,P.R.China

2.2. Identification of Manufacturer

Company Name: Qingdao Haier Telecom Co.Ltd
Address: No.1 Haier Road, Hi-tech Zone,Qingdao266101,P.R.China

2.3. Equipment Under Test (EUT)

Brand Name: Haier/ekt
Type Name: Haier/ekt
Marking Name: HW-N80W
Hardware Version: S046M001P200
Software Version: HW-N80W-H01-S00-EN
Frequency Bands: GSM 850MHz / PCS 1900MHz; WCDMA 850MHz/1900MHz;
WIFI802.11 B/G/N;
Modulation Mode: GSM/GPRS: GMSK; EDGE: 8PSK
WIFI802.11B: DSSS; WIFI802.11G: OFDM
Multislot Class: GPRS: Multislot Class 12; EDGE: Multislot Class 12
Antenna type: Fixed Internal Antenna
Development Stage: Identical prototype
Battery Model: H15214
Battery specification: 1500mAh3.7V

2.3.1. Photographs of the EUT

Please see for photographs of the EUT.

2.3.2. Identification of all used EUT

The EUT identity consists of numerical and letter characters, the letter character indicates the test sample, and the following two numerical characters indicate the software version of the test sample.

EUT Identity	Hardware Version	Software Version
1#	S046M001P200	HW-N80W-H01-S00-EN

2.4. Applied Reference Documents

Leading reference documents for testing:

No.	Identity	Document Title
1	47 CFR§2.1093	Radiofrequency Radiation Exposure Evaluation: Portable Devices
2	FCC OET Bulletin 65 (Edition 97-01), Supplement C (Edition 01-01)	Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields
3	ANSI C95.1-1999	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3kHz to 300 GHz
4	IEEE 1528-2003	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate(SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques.

2.5. Device Category and SAR Limits

This device belongs to portable device category because its radiating structure is allowed to be used within 20 centimeters of the body of the user. Limit for General Population/Uncontrolled exposure should be applied for this device, it is 1.6 W/kg as averaged over any 1 gram of tissue.

2.6. Test Environment/Conditions

Normal Temperature (NT):	20 ... 25 °C
Relative Humidity:	30 ... 75 %
Air Pressure:	980 ... 1020 hPa
Test frequency:	GSM 850MHz PCS 1900MHz WCDMA 850MHz WCDMA1900MHz WIFI 802.11B
Operation mode:	Call established
Power Level:	GSM 850 MHz Maximum output power(level 5) PCS 1900 MHz Maximum output power(level 0) WCDMA Maximum output power WIFI Maximum output power

During SAR test, EUT is in Traffic Mode (Channel Allocated) at Normal Voltage Condition. A communication link is set up with a System Simulator (SS) by air link, and a call is established.

The Absolute Radio Frequency Channel Number (ARFCN) is allocated to 125, 190 and 251 respectively in the case of GSM 850 MHz, or to 512, 661 and 810 respectively in the case of PCS 1900 MHz ,or to 9262, 9400 and 9538 respectively in the case of WCDMA 19000, or to 4132, 4182 and 4233 respectively in the case of WCDMA 850. The EUT is commanded to operate at maximum transmitting power.

During WIFI SAR test, the EUT was located at channel 1, 6, 11. And EUT was commanded to operate at maximum transmitting power.

The EUT shall use its internal transmitter. The antenna(s), battery and accessories shall be those specified by the manufacturer. The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power output. If a wireless link is used, the antenna connected to the output of the base station simulator shall be placed at least 50 cm away from the handset.

The signal transmitted by the simulator to the antenna feeding point shall be lower than the output power level of the handset by at least 35 dB.

For SAR testing, EUT is in GPRS/EDGE or WCDMA link mode. In GPRS/EDGE link mode, its crest factor is 2, because EUT is set in GPRS/EDGE multi-slot class 12 with 4 uplink slots. In WCDMA and WIFI mode, its crest factor is 1.

3. Specific Absorption Rate (SAR)

3.1. Introduction

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.

3.2. SAR Definition

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

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

SAR is expressed in units of Watts per kilogram (W/kg)

SAR measurement can be either related to the temperature elevation in tissue by

$$\text{SAR} = C \frac{\delta T}{\delta t}$$

, where C is the specific heat capacity, δT is the temperature rise and δt the exposure duration, or related to the electrical field in the tissue by

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

, where σ is the conductivity of the tissue, ρ is the mass density of the tissue and E is the rms electrical field strength.

However for evaluating SAR of low power transmitter, electrical field measurement is typically applied.

4. SAR Measurement Setup

4.1. The Measurement System

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.

4.2. Probe

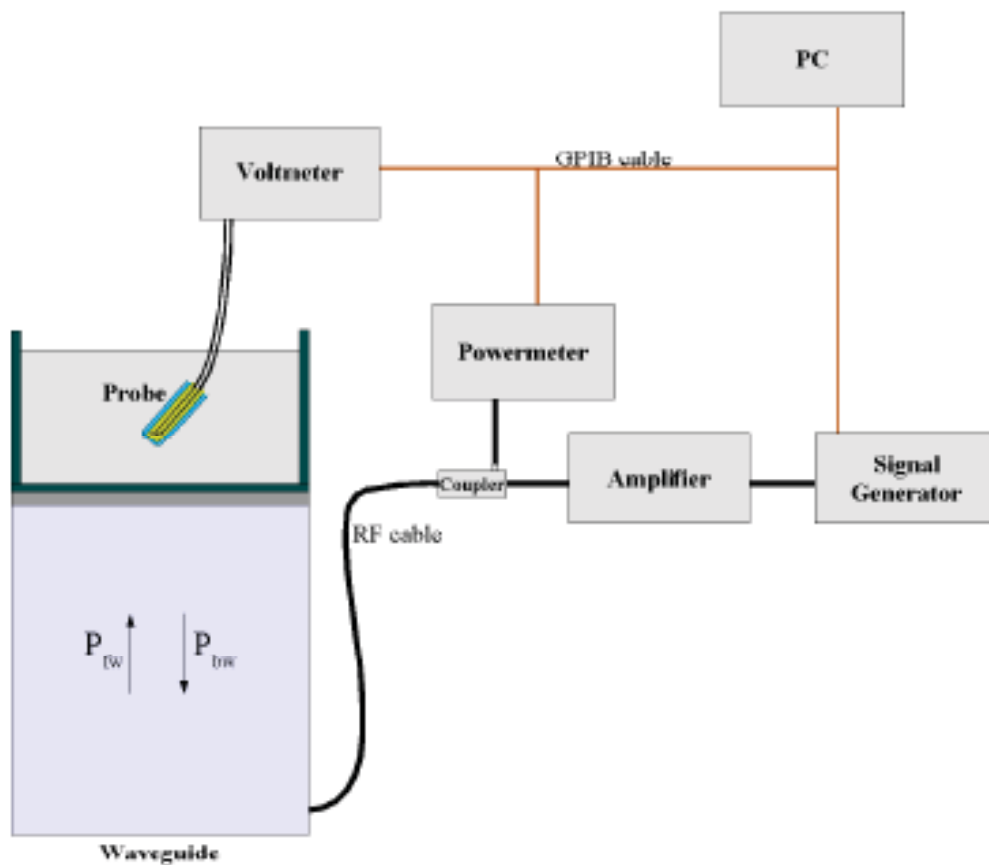
For the measurements the Specific Dosimetric E-Field Probe SN 37/08 EP80 with following specifications is used

- Dynamic range: 0.01-100 W/kg
- Tip Diameter : 6.5 mm
- Distance between probe tip and sensor center: 2.5mm
- 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: 835 to 2500 MHz for head & body simulating liquid.

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

Probe calibration is realized, in compliance with CENELEC EN 62209 and IEEE 1528 std, with CALISAR, Antenna proprietary calibration system. The calibration is performed with the EN 622091 annexe technique using reference guide at the five frequencies.



$$SAR = \frac{4(P_{fw} - P_{bw})}{ab\delta} \cos^2\left(\pi \frac{y}{a}\right) e^{-2z/\delta}$$

Where :

P_{fw} = Forward Power

P_{bw} = Backward Power

a and b = Waveguide dimensions

δ = Skin depth

Keithley configuration:

Rate = Medium; Filter = ON; RDGS=10; FILTER TYPE = MOVING AVERAGE; RANGE AUTO

After each calibration, a SAR measurement is performed on a validation dipole and compared with a NPL calibrated probe, to verify it.

The calibration factors, CF(N), for the 3 sensors corresponding to dipole 1, dipole 2 and dipole 3 are:

$$CF(N) = SAR(N) / V_{lin}(N) \quad (N=1,2,3)$$

The linearised output voltage $V_{lin}(N)$ is obtained from the displayed output voltage $V(N)$ using

$$V_{lin}(N) = V(N) * (1 + V(N) / DCP(N)) \quad (N=1,2,3)$$

where DCP is the diode compression point in mV.

4.3. Probe Calibration Process

4.3.1 Dosimetric Assessment Procedure

Each E-Probe/Probe Amplifier combination has unique calibration parameters. SATIMO Probe calibration procedure is conducted to determine the proper amplifier settings to enter in the probe parameters. The amplifier settings are determined for a given frequency by subjecting the probe to a known E-field density (1 mW/cm²) using an with CALISAR, Antenna proprietary calibration system.

4.3.2 Free Space Assessment Procedure

The free space E-field from amplified probe outputs is determined in a test chamber. This calibration can be performed in a TEM cell if the frequency is below 1 GHz and in a waveguide or other methodologies above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is rotated 360 degrees until the three channels show the maximum reading. The power density readings equates to 1 mW/cm².

4.3.2 Temperature Assessment Procedure

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated head tissue. The E-field in the medium correlates with the temperature rise in the dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

Where:

$$SAR = C \frac{\Delta T}{\Delta t}$$

Δt = exposure time (30 seconds),

C = heat capacity of tissue (brain or muscle),

ΔT = temperature increase due to RF exposure.

SAR is proportional to $\Delta T / \Delta t$, the initial rate of tissue heating, before thermal diffusion takes place. The electric field in the simulated tissue can be used to estimate SAR by equating the thermally derived SAR to that with the E- field component.

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

Where:

σ = simulated tissue conductivity,

ρ = Tissue density (1.25 g/cm³ for brain tissue)

4.4. Phantom

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

4.5. Device Holder

The positioning system allows obtaining cheek and tilting position with a very good accuracy. In compliance with CENELEC, the tilt angle uncertainty is lower than 1°.



Device holder

System Material	Permittivity	Loss Tangent
Delrin	3.7	0.005

5. Tissue Simulating Liquids

Simulant liquids that are used for testing at frequencies of 850, 1900MHz and 2450MHz. which are made mainly of sugar, salt and water solutions may be left in the phantoms. Approximately 20litres are needed for an upright head compared to about 25 litres for a horizontal bath phantom. The liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is (head SAR) or from the flat phantom to the liquid top surface (body SAR) is 15cm.

Following are the recipes for one liter of head and body tissue simulating liquid for frequency band 835 MHz, 1900 MHz and 2450 MHz.

Ingredients (% by weight)	Frequency Band		Frequency Band		Frequency Band
	835MHz		1900MHz		2450MHz
Tissue Type	Head	Body	Head	Body	Body
Water	41.45	52.4	54.9	40.4	73.2
Salt(NaCl)	1.45	1.4	0.18	0.5	0.04
Sugar	56.0	45.0	0.0	58.0	0.0
HEC	1.0	1.0	0.0	1.0	0.0
Bactericide	0.1	0.1	0.0	0.1	0.0
Triton	0.0	0.0	0.0	0.0	0.0
DGBE	0.0	0.0	44.92	0.0	26.7
Acticide SPX	0.0	0.0	0.0	0.0	0.0
Dielectric Constant	42.45	56.1	39.9	54.0	52.5
Conductivity (S/m)	0.91	0.95	1.42	1.45	1.78

Recipes for Tissue Simulating Liquid

The dielectric parameters of the liquids were verified prior to the SAR evaluation using an Agilent 85033E Dielectric Probe Kit and an Agilent Network Analyzer.

Table 1: Dielectric Performance of Head Tissue Simulating Liquid

Temperature: 23.0~23.8°C, humidity: 54~60%.			
/	Frequency	Permittivity ϵ	Conductivity σ (S/m)
Target value	835 MHZ	41.5	0.90
Validation value (Nov. 14)	835 MHZ	41.675999	0.894409
Target value	1900 MHZ	40	1.40
Validation value (Nov. 15)	1900 MHZ	38.509998	1.436111

For body-worn measurements, the device was tested against flat phantom representing the user body. Under measurement phone was put on in the phone holder.

Table 2: Dielectric Performance of Body Tissue Simulating Liquid

Temperature: 23.0~23.8°C, humidity: 54~60%.			
/	Frequency	Permittivity ϵ	Conductivity σ (S/m)
Target value	835 MHz	55.2	0.97
Validation value (Nov. 14)	835 MHz	55.709999	0.9809033
Target value	1900 MHz	53.3	1.52
Validation value (Nov. 15)	1900 MHz	52.548876	1.553978
Target value	2450 MHz	52.7	1.95
Validation value (Nov. 15)	2450 MHz	52.548876	1.974257

6. Uncertainty Assessment

The following table includes the uncertainty table of the IEEE 1528. The values are determined by Antennessa.

6.1. UNCERTAINTY EVALUATION FOR HANDSET SAR TEST

a	b	c	d	e= f(d,k)	f	g	h= c*f/e	i= c*g/e	k
Uncertainty Component	Sec.	Tol (+-%)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	Vi
Measurement System									
Probe calibration	E.2.1	4.76	N	1	1	1	4.76	4.76	∞
Axial Isotropy	E.2.2	2.5	R	$\sqrt{3}$	0.7	0.7	1.01	1.01	∞
Hemispherical Isotropy	E.2.2	4.0	R	$\sqrt{3}$	0.7	0.7	1.62	1.62	∞
Boundary effect	E.2.3	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Linearity	E.2.4	5.0	R	$\sqrt{3}$	1	1	2.89	2.89	∞
System detection limits	E.2.5	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Readout Electronics	E.2.6	0.02	N	1	1	1	0.02	0.02	∞
Reponse Time	E.2.7	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Integration Time	E.2.8	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	∞
RF ambient Conditions	E.6.1	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Probe positioner Mechanical Tolerance	E.6.2	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	∞
Probe positioning with respect to Phantom Shell	E.6.3	0.05	R	$\sqrt{3}$	1	1	0.03	0.03	∞
Extrapolation, interpolation and integration Algorithms for Max. SAR Evaluation	E.5.2	5.0	R	$\sqrt{3}$	1	1	2.89	2.89	∞
Test sample Related									
Test sample positioning	E.4.2.1	0.03	N	1	1	1	0.03	0.03	N-1
Device Holder Uncertainty	E.4.1.1	5.00	N	1	1	1	5.00	5.00	N-1
Output power Power drift - SAR drift measurement	6.6.2	4.04	R	$\sqrt{3}$	1	1	2.33	2.33	∞
Phantom and Tissue Parameters									
Phantom Uncertainty (Shape and thickness tolerances)	E.3.1	0.05	R	$\sqrt{3}$	1	1	0.03	0.03	∞

Liquid conductivity - deviation from target value	E.3.2	4.57	R	$\sqrt{3}$	0.64	0.43	1.69	1.13	∞
Liquid conductivity - measurement uncertainty	E.3.3	5.00	N	1	0.64	0.43	3.20	2.15	M
Liquid permittivity - deviation from target value	E.3.2	3.69	R	$\sqrt{3}$	0.6	0.49	1.28	1.04	∞
Liquid permittivity - measurement uncertainty	E.3.3	10.00	N	1	0.6	0.49	6.00	4.90	M
Combined Standard Uncertainty			RSS				11.55	10.67	
Expanded Uncertainty (95% Confidence interval)			K=2				23.11	21.33	

6.2. UNCERTAINTY FOR SYSTEM PERFORMANCE CHECK

a	b	c	d	e= f(d,k)	f	g	h= c*f/e	i= c*g/e	k
Uncertainty Component	Sec.	Tol (+- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	Vi
Measurement System									
Probe calibration	E.2.1	4.76	N	1	1	1	4.76	4.76	∞
Axial Isotropy	E.2.2	2.5	R	$\sqrt{3}$	0.7	0.7	1.01	1.01	∞
Hemispherical Isotropy	E.2.2	4.0	R	$\sqrt{3}$	0.7	0.7	1.62	1.62	∞
Boundary effect	E.2.3	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Linearity	E.2.4	5.0	R	$\sqrt{3}$	1	1	2.89	2.89	∞
System detection limits	E.2.5	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Readout Electronics	E.2.6	0.02	N	1	1	1	0.02	0.02	∞
Reponse Time	E.2.7	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Integration Time	E.2.8	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	∞
RF ambient Conditions	E.6.1	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Probe positioner Mechanical Tolerance	E.6.2	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	∞
Probe positioning with respect to Phantom Shell	E.6.3	0.05	R	$\sqrt{3}$	1	1	0.03	0.03	∞
Extrapolation, interpolation and integration Algorithms for Max. SAR Evaluation	E.5.2	5.0	R	$\sqrt{3}$	1	1	2.89	2.89	∞
Dipole									
Dipole axis to liquid Distance	8,E.4.2	1.00	N	$\sqrt{3}$	1	1	0.58	0.58	∞

Input power and SAR drift measurement	8,6.6.2	4.04	R	$\sqrt{3}$	1	1	2.33	2.33	∞
Phantom and Tissue Parameters									
Phantom Uncertainty (Shape and thickness tolerances)	E.3.1	0.05	R	$\sqrt{3}$	1	1	0.03	0.03	∞
Liquid conductivity - deviation from target value	E.3.2	4.57	R	$\sqrt{3}$	0.64	0.43	1.69	1.13	∞
Liquid conductivity - measurement uncertainty	E.3.3	5.00	N	$\sqrt{3}$	0.64	0.43	1.85	1.24	M
Liquid permittivity - deviation from target value	E.3.2	3.69	R	$\sqrt{3}$	0.6	0.49	1.28	1.04	∞
Liquid permittivity - measurement uncertainty	E.3.3	10.00	N	$\sqrt{3}$	0.6	0.49	3.46	2.83	M
Combined Standard Uncertainty			RSS				8.83	8.37	
Expanded Uncertainty (95% Confidence interval)			K=2				17.66	16.73	

7. SAR Measurement Evaluation

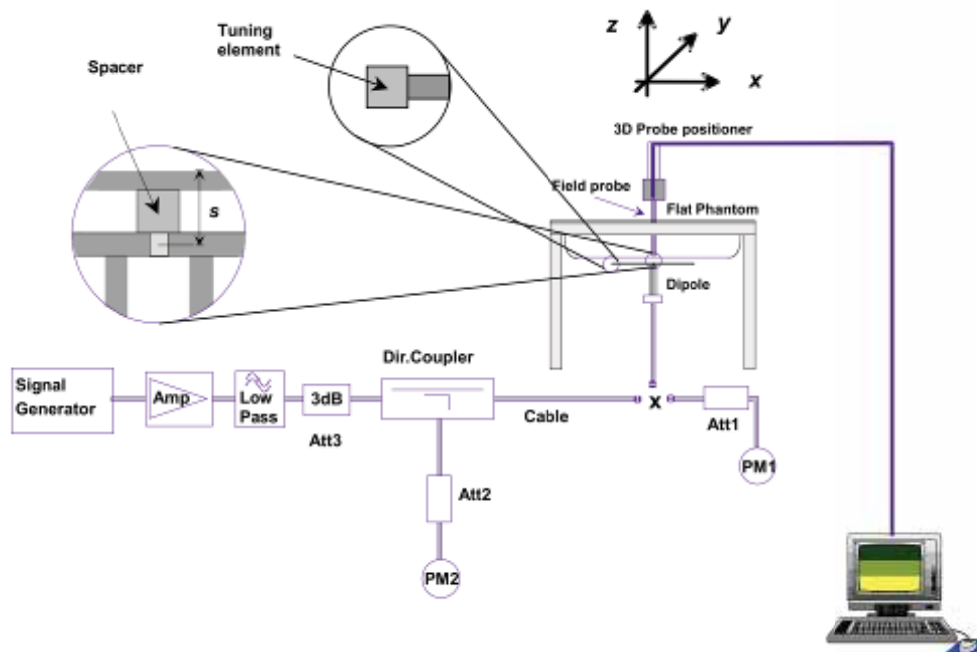
7.1. System Setup

In the simplified setup for system evaluation, the DUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave which comes from a signal generator at frequency 835 MHz, 1900 MHz and 2450MHz. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. The distance holder should touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom.

Equipments:

name	Type and specification
Signal generator	E4433B
Directional coupler	450MHz-3GHz
Amplifier	3W 502(10-2500MHz)
Reference dipole	835MHz:SN 36/08 DIPC 99 1900MHz:SN 36/08 DIPF 102 2450MHz:SN 36/08 DIPF 103

System Verification Setup Block Diagram



7.2. Validation Results

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

Cal. On Nov.14, 2011

Frequency	835MHz
Target value (1g)	9.5 W/Kg
250 mW input power	2.478 W/Kg
Test value (1g)	9.912 W/Kg

Cal. On Nov.15, 2011

Frequency	1900MHz	2450MHz
Target value (1g)	39.7 W/Kg	52.4 W/Kg
250 mW input power	9.455 W/Kg	12.789 W/Kg
Test value (1g)	37.820 W/Kg	51.156 W/Kg

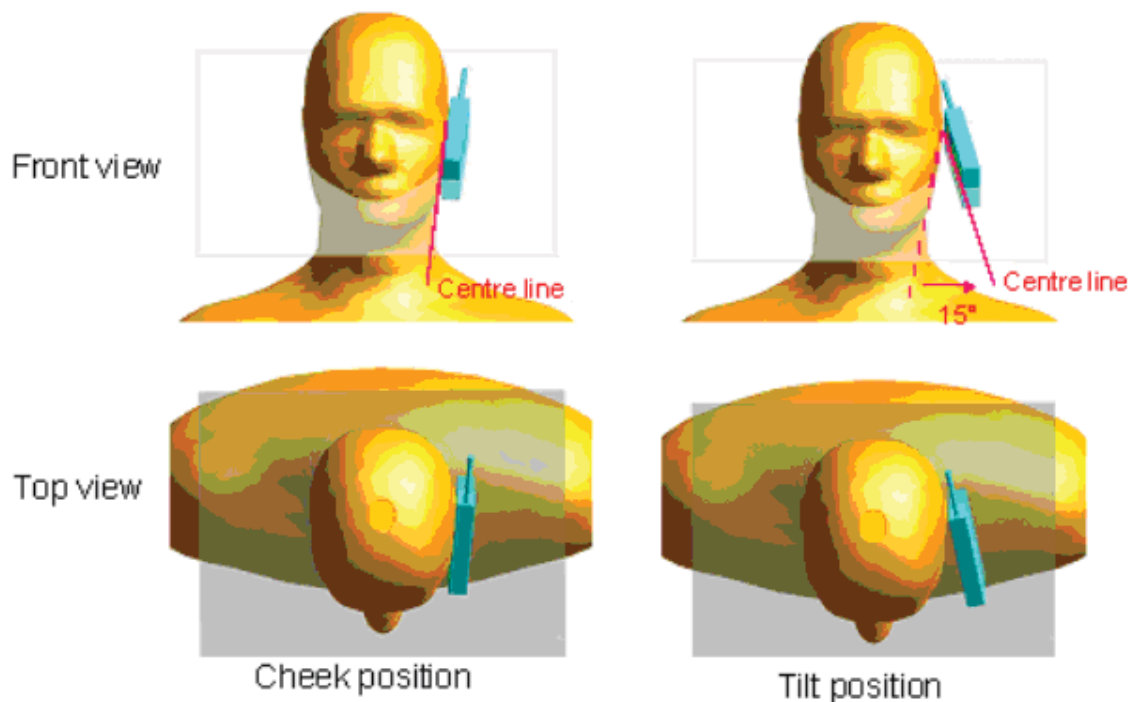
Note: System checks the specific test data please see page 177~182.

8. Operational Conditions During Test

8.1. Informations on the testing

The mobile phone antenna and battery are those specified by the manufacturer. The battery is fully charged before each measurement. The output power and frequency are controlled using a base station simulator. The mobile phone is set to transmit at its highest output peak power level.

The mobile phone is test in the “cheek” and “tilted” positions on the left and right sides of the phantom. The mobile phone is placed with the vertical centre line of the body of the mobile phone and the horizontal line crossing the centre of the earpiece in a plane parallel to the sagittal plane of the phantom.



Description of the “cheek” position:

The mobile phone is well placed in the reference plane and the earpiece is in contact with the ear. Then the mobile phone is moved until any point on the front side get in contact with the cheek of the phantom or until contact with the ear is lost.

Description of the “tilted” position:

The mobile phone is well placed in the “cheek” position as described above. Then the mobile phone is moved outward away from the month by an angle of 15 degrees or until contact with the ear lost.

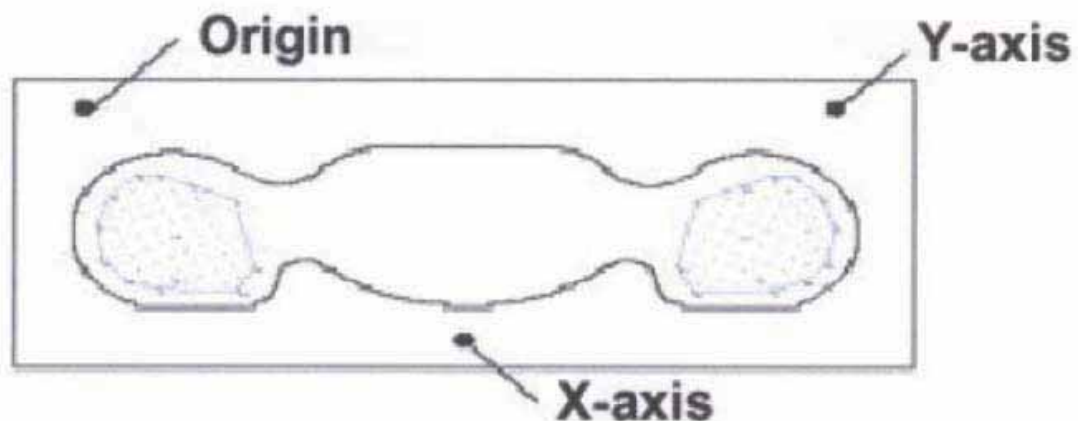
Remark: Please refer to Appendix B for the test setup photos.

8.2. Body-worn Configurations

The body-worn configurations shall be tested with the supplied accessories (belt-clips, holsters, etc.) attached to the device in normal use configuration.

The depth of the body tissue was 15.1cm. The distance between the back of the device and the bottom of the flat phantom is 1.5cm(taking into account of the IEEE 1528 and the place of the antenna)

For body-worn and other configurations a flat phantom shall be used which is comprised of material with electrical properties similar to the corresponding tissues.



SAR Measurement Points in Area Scan

8.3. Measurement procedure

The following steps are used for each test position

- Establish a call with the maximum output power with a base station simulator. The connection between the mobile and the base station simulator is established via air interface
- Measurement of the local E-field value at a fixed location. This value serves as a reference value for calculating a possible power drift.
- Measurement of the SAR distribution with a grid of 8 to 16mm * 8 to 16 mm and a constant distance to the inner surface of the phantom. Since the sensors can not directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolation scheme.
- Around this point, a cube of 30 * 30 * 30 mm or 32 * 32 * 32 mm is assessed by measuring 5 or 8 * 5 or 8*4 or 5 mm. With these data, the peak spatial-average SAR value can be calculated.

8.4. Description of interpolation/extrapolation scheme

The local SAR inside the phantom is measured using small dipole sensing elements inside a probe body. The probe tip must not be in contact with the phantom surface in order to minimize measurements errors, but the highest local SAR will occur at the surface of the phantom.

An extrapolation is using to determinate this highest local SAR values. The extrapolation is based on a fourth-order least-square polynomial fit of measured data. The local SAR value is then extrapolated from the liquid surface with a 1mm step.

The measurements have to be performed over a limited time (due to the duration of the battery) so the step of measurement is high. It could vary between 5 and 8 mm. To obtain an accurate assessment of the maximum SAR averaged over 10 grams and 1 gram requires a very fine resolution in the three dimensional scanned data array.

9. 3G MEASUREMENT PROCEDURES

9.1. Procedures Used To Establish Test Signal

The handset was placed into a simulated call using a base station simulator in a shielded chamber. Such test signals offer a consistent means for testing SAR and are recommended for evaluating SAR. SAR measurements were taken with a fully charged battery. In order to verify that the device was tested and maintained at full power, this was configured with the base station simulator. The SAR measurement software calculates a reference point at the start and end of the test to check for power drifts. If conducted power deviations of more than 5% occurred, the tests were repeated.

9.2. SAR Measurement Conditions for WCDMA

These procedures were followed according to FCC KDB 941225, October, 2007.

9.3. Output Power Verification

Maximum output power is verified on the High, Middle and Low channels according to the general descriptions in section 5.2 of 3GPP TS 34.121, using the appropriate RMC or AMR with TPC(transmit power control) set to all "1s". Results for all applicable physical channel configurations (DPCCH, DPDCH and spreading codes) should be tabulated in the test report. All configurations that are not supported by the EUT or cannot be measured due to technical or equipment limitations should be clearly identified.

9.4. Measurement Of Conducted Peak Output Power.

1. WCDMA Conducted peak output power

Item	band	WCDMA 850			WCDMA 1900		
	ARFCN	4132	4175	4233	9262	9400	9538
	subtest	dBm			dBm		
5.2(WCDMA)	non	23.40	23.14	23.55	21.70	22.79	21.46
HSDPA	1	23.31	23.11	23.41	21.65	22.67	21.33
	2	23.27	23.09	23.47	21.61	22.63	21.32
	3	22.82	22.73	22.97	21.12	22.23	20.85
	4	22.74	22.71	22.93	21.13	22.20	20.89
HSUPA	1	23.33	23.12	23.46	21.63	22.65	21.41
	2	21.38	21.11	21.46	19.68	20.88	19.51
	3	22.34	22.13	22.51	20.56	21.85	20.56
	4	21.37	21.10	21.50	19.61	20.83	19.43
	5	23.31	23.13	23.51	21.57	22.64	21.39

Band	Channel	Power Drift (%)
WCDMA 850	4132	0.09
	4175	1.03
	4233	-1.39
WCDMA 1900	9262	-0.26
	9400	1.03
	9538	0.06

2. GSM Conducted peak output power

Band	Channel	Frequency (MHz)	Output Power (dBm)	Power Drift (%)
GSM 850	128	824.2	31.71	-1.81
	190	836.6	31.37	/
	251	848.8	30.78	/
PCS 1900	512	1850.2	29.92	-2.04
	661	1880.0	28.55	/
	810	1909.8	28.49	/

2. GPRS Mode Conducted peak output power

Band	Channel	Frequency (MHz)	Output Power(dBm)			
			Slot 1	Slot 2	Slot 3	Slot 4
GSM 850	128	824.2	31.69	31.67	31.67	31.68
	190	836.6	31.36	31.37	31.36	31.36
	251	848.8	30.52	30.56	30.55	30.57
PCS 1900	512	1850.2	28.48	28.46	28.46	28.44
	661	1880.0	29.32	29.32	29.33	29.33
	810	1909.8	29.81	29.80	29.83	29.81

GPRS Time-based Average Power

Band	Channel	Frequency (MHz)	Output Power(dBm)				Power Drift (%)
			Slot 1	Slot 2	Slot 3	Slot 4	Slot 4
GSM 850	128	824.2	22.69	25.65	27.41	28.67	-2.63
	190	836.6	22.36	25.35	27.10	28.35	0.12
	251	848.8	29.52	24.54	26.29	27.56	-1.11
PCS 1900	512	1850.2	19.48	22.44	24.20	25.43	1.21
	661	1880.0	20.32	23.28	25.05	26.32	-1.19
	810	1909.8	20.81	23.78	25.57	26.80	-3.24

Timeslot consignations:

No. Of Slots	Slot 1	Slot 2	Slot 3	Slot 4
Slot Consignation	1Up4Down	2Up2Down	3Up2Down	4Up1Down
Duty Cycle	1:8	1:4	1:2.67	1:2
Correct Factor	-9.00dB	-6.02dB	-4.26dB	-3.01dB

Note: 1. Correct Factor=10*log (Duty Cycle)

2. Average Power= Peak Power+ Correct Factor

3. EDGE Mode Conducted peak output power

Band	Channel	Frequency (MHz)	Output Power(dBm)			
			Slot 1	Slot 2	Slot 3	Slot 4
GSM 850	128	824.2	31.65	31.65	31.63	31.65
	190	836.6	31.36	31.35	31.35	31.35
	251	848.8	30.55	30.54	30.55	30.54
PCS 1900	512	1850.2	28.55	28.50	28.50	28.49
	661	1880.0	29.08	29.07	29.07	29.07
	810	1909.8	29.75	29.75	29.72	29.71

EDGE Time-based Average Power

Band	Channel	Frequency (MHz)	Output Power(dBm)				Power Drift (%)
			Slot 1	Slot 2	Slot 3	Slot 4	Slot 4
GSM 850	128	824.2	22.65	25.63	27.39	28.64	-2.39
	190	836.6	22.36	25.33	27.09	28.34	-1.03
	251	848.8	21.55	24.52	26.29	27.53	-0.97
PCS 1900	512	1850.2	19.55	22.48	24.24	25.48	-1.45
	661	1880.0	20.08	23.05	24.81	26.06	-3.01
	810	1909.8	20.75	23.73	25.46	26.70	-2.82

Timeslot consignations:

No. Of Slots	Slot 1	Slot 2	Slot 3	Slot 4
Slot Consignation	1Up4Down	2Up2Down	3Up2Down	4Up1Down
Duty Cycle	1:8	1:4	1:2.67	1:2
Correct Factor	-9.00dB	-6.02dB	-4.26dB	-3.01dB

Note: 1. Correct Factor= $10 \cdot \log$ (Duty Cycle)

2. Average Power= Peak Power+ Correct Factor

4. Wifi peak output power

Band	Channel	Frequency (MHz)	Output Power(dBm)			Power Drift (%)
			802.11B (DSSS)	802.11G (OFDM)	802.11N (OFDM)	802.11B (DSSS)
WiFi	1	2412	11.96	10.14	8.03	/
	6	2437	12.12	10.29	8.14	-1.71
	11	2462	12.04	10.47	8.24	/

5. Bluetooth peak output power

Band	Channel	Frequency (MHz)	Output Power(dBm)		
			GFSK	Π/4-DQPSK	8-DPSK
BT	0	2402	2.382	4.248	1.816
	38	2441	3.273	5.149	2.819
	79	2480	5.544	7.325	5.101

10. Wireless Hot Spot SAR Evaluation Procedures

This Portable Devices with Wireless Router function. And the SAR evaluation procedures accord with KDB 941225 D06 Hot Spot SAR v01.

1. SAR must be tested for all surfaces and edges (side) with a transmitting antenna with in 2.5 cm from that surface or edge, at a test separation distance of 10 mm, in the wireless modes that support wireless routing.
2. Edge configurations:



3. WCDMA&GSM antenna is located at edge C, the distance between WCDMA&GSM antenna and edge D is 10cm larger than 2.5cm. according with KDB941225 D06, the SAR measurement of edge D of WCDMA and GSM are not required.
4. Wifi antenna is located at edge D, the distance between wifi antenna and edge B is 3.6 cm large than 2.5 cm and the distance between wifi antenna and edge C, is larger than 2.5cm. according with KDB941225 D06, the SAR measurement of edge B&C, are not required.

11. Test Results List

Summary of Measurement Results (GSM 850MHz Band)

Temperature: 21.0~23.8°C, humidity: 54~60%.						
Phantom Configurations	Device Test Positions	Antenna Positions	SAR(W/Kg), 1g Peak			
			Device Test channel,			
			Channel 128	Channel 190	Channel 251	
Right Side Of Head	Cheek/Touch	Internal	0.327	/	/	
	Ear/Tilt	Internal	0.439	/	/	
Left Side Of Head	Cheek/Touch	Internal	0.365	/	/	
	Ear/Tilt	Internal	0.396	/	/	
Body (10mm Separation)	GSM	Back upward	Internal	0.617	/	/
		Face Upward	Internal	0.382	/	/
	GPRS	Back upward	Internal	1.018	1.082	1.116
		Face Upward	Internal	0.584	/	/
		EDGE A	Internal	0.726	/	/
		EDGE B	Internal	0.612	/	/
		EDGE C	Internal	0.152	/	/
		EDGE D	Internal	/	/	/
	EDGE	Back upward	Internal	1.099	1.007	1.112
		Face Upward	Internal	0.557	/	/
		EDGE A	Internal	0.534	/	/
		EDGE B	Internal	0.613	/	/
		EDGE C	Internal	0.136	/	/
		EDGE D	Internal	/	/	/

Note:

1. Refer to 9.4 Measurement Of Conducted Peak Output Power of the corresponding lists, the highest power channel is 128 for GSM/GPRS/EDGE mode, when the SAR of highest power channel of each configurations is less than 0.8 W/kg, refer to KDB 447498, testing for the other channels is not required. In the “back upward” of GPRS/EDGE configuration SAR value is larger than 0.8W/Kg, other channels, 190 and 251 should be tested.
2. KDB 447498: “when the SAR procedures require multiple channels to be tested and the 1-g SAR for the highest output channel is less than 0.8 W/kg and peak SAR is less than 1.6W/kg, where the transmission band corresponding to all channels is ≤ 100 MHz, testing for the other channels is not required”.

Summary of Measurement Results (GSM 1900MHz Band)

Temperature: 21.0~23.8°C, humidity: 54~60%.						
Phantom Configurations	Device Test Positions	Antenna Positions	SAR(W/Kg), 1g Peak			
			Device Test channel,			
			Channel 512	Channel 661	Channel 810	
Right Side Of Head	Cheek/Touch	Internal	0.494	/	/	
	Ear/Tilt	Internal	0.147	/	/	
Left Side Of Head	Cheek/Touch	Internal	0.406	/	/	
	Ear/Tilt	Internal	0.126	/	/	
Body (10mm Separation)	GSM	Back upward	Internal	0.481	/	/
		Face Upward	Internal	0.373	/	/
	GPRS	Back upward	Internal	0.758	0.824	0.850
		Face Upward	Internal	/	/	0.587
		EDGE A	Internal	/	/	0.347
		EDGE B	Internal	/	/	0.164
		EDGE C	Internal	/	/	0.637
		EDGE D	Internal	/	/	/
	EDGE	Back upward	Internal	0.700	0.802	0.773
		Face Upward	Internal	/	/	0.417
		EDGE A	Internal	/	/	0.362
		EDGE B	Internal	/	/	0.194
		EDGE C	Internal	/	/	0.561
		EDGE D	Internal	/	/	/

Note:

1. Refer to 9.4 Measurement Of Conducted Peak Output Power of the corresponding lists, the highest power channel is 512 for GSM mode and 810 for the GPRS/EDGE mode, when the SAR of highest power channel of each configurations is less than 0.8 W/kg, refer to KDB 447498, testing for the other channels is not required. In the “back upward” of GPRS/EDGE configuration SAR value is larger than 0.8W/Kg, other channels, 512 and 661 should be tested.
2. KDB 447498: “when the SAR procedures require multiple channels to be tested and the 1-g SAR for the highest output channel is less than 0.8 W/kg and peak SAR is less than 1.6W/kg, where the transmission band corresponding to all channels is ≤ 100 MHz, testing for the other channels is not required”.

Summary of Measurement Results (WCDMA 850MHz Band)

Temperature: 21.0~23.8°C, humidity: 54~60%.					
Phantom Configurations	Device Test Positions	Antenna Positions	SAR(W/Kg), 1g Peak		
			Device Test channel		
			Channel 4132	Channel 4182	Channel 4233
Right Side Of Head	Cheek/Touch	Internal	/	/	0.567
	Ear/Tilt	Internal	/	/	0.402
Left Side Of Head	Cheek/Touch	Internal	/	/	0.711
	Ear/Tilt	Internal	/	/	0.285
Body (10mm Separation)	Back upward	Internal	0.928	1.099	1.089
	Face Upward	Internal	/	/	0.618
	EDGE A	Internal	/	/	0.703
	EDGE B	Internal	/	/	0.514
	EDGE C	Internal	/	/	0.109
	EDGE D	Internal	/	/	/

Note:

1. Refer to 9.4 Measurement Of Conducted Peak Output Power of the corresponding list, the highest power channel is 4233 for WCDMA 850MHz mode, when the SAR of highest power channel of each configurations is less than 0.8 W/kg, refer to KDB 447498, testing for the other channels is not required. In the “back upward” configuration, SAR value is larger than 0.8W/Kg, other channels, 4132 and 4182 should be tested.
2. KDB 447498: “when the SAR procedures require multiple channels to be tested and the 1-g SAR for the highest output channel is less than 0.8 W/kg and peak SAR is less than 1.6W/kg, where the transmission band corresponding to all channels is ≤ 100 MHz, testing for the other channels is not required”.

Summary of Measurement Results (WCDMA 1900MHz Band)

Temperature: 21.0~23.8°C, humidity: 54~60%.					
Phantom Configurations	Device Test Positions	Antenna Positions	SAR(W/Kg), 1g Peak		
			Device Test channel		
			Channel 9262	Channel 9400	Channel 9538
Right Side Of Head	Cheek/Touch	Internal	/	0.649	/
	Ear/Tilt	Internal	/	0.188	/
Left Side Of Head	Cheek/Touch	Internal	/	0.599	/
	Ear/Tilt	Internal	/	0.168	/
Body (10mm Separation)	Back upward	Internal	0.831	0.895	0.775
	Face Upward	Internal	/	0.611	/
	EDGE A	Internal	/	0.210	/
	EDGE B	Internal	/	0.204	/
	EDGE C	Internal	/	0.507	/
	EDGE D	Internal	/	/	/

Note:

1. Refer to 9.4 Measurement Of Conducted Peak Output Power of the corresponding list, the highest power channel is 9400 for WCDMA 1900MHz mode, when the SAR of highest power channel of each configurations is less than 0.8 W/kg, refer to KDB 447498, testing for the other channels is not required. In the “back upward” configuration, SAR value is larger than 0.8W/Kg, other channels, 9262 and 9538 should be tested.
2. KDB 447498: “when the SAR procedures require multiple channels to be tested and the 1-g SAR for the highest output channel is less than 0.8 W/kg and peak SAR is less than 1.6W/kg, where the transmission band corresponding to all channels is ≤ 100 MHz, testing for the other channels is not required”.

Summary of Measurement Results (WLAN 802.11B Band)

Temperature: 21.0~23.8°C, humidity: 54~60%.					
Phantom Configurations	Device Test Positions	Antenna Positions	SAR(W/Kg), 1g Peak		
			Device Test channel		
			Channel 1	Channel 6	Channel 11
Body (10mm separation)	Back upward	Internal		0.106	/
	Face Upward	Internal		0.035	/
	Edge A	Internal		0.103	/
	Edge B	Internal		/	/
	Edge C	Internal		/	/
	Edge D	Internal	/	0.139	/

Note:

1. Refer to 9.4 Measurement Of Conducted Peak Output Power of the corresponding list, the highest power channel is 6 at 802.11B mode, refer to KDB 447498, when the SAR procedures require multiple channels to be tested and the 1-g SAR for the highest output channel is less than 0.8 W/kg and peak SAR is less than 1.6W/kg, where the transmission band corresponding to all channels is ≤ 100 MHz, testing for the other channels is not required.
2. WCDMA&GSM antenna is located at edge C, the distance between WCDMA&GSM antenna and edge D is 10cm larger than 2.5cm. according with KDB941225 D06, the SAR measurement of edge D of WCDMA and GSM are not required.
3. Wifi antenna is located at edge D, the distance between wifi antenna and edge B is 3.6 cm large than 2.5 cm and the distance between wifi antenna and edge C, is larger than 2.5cm. according with KDB941225 D06, the SAR measurement of edge B&C, are not required.

12. Multiple Transmitters Evaluation

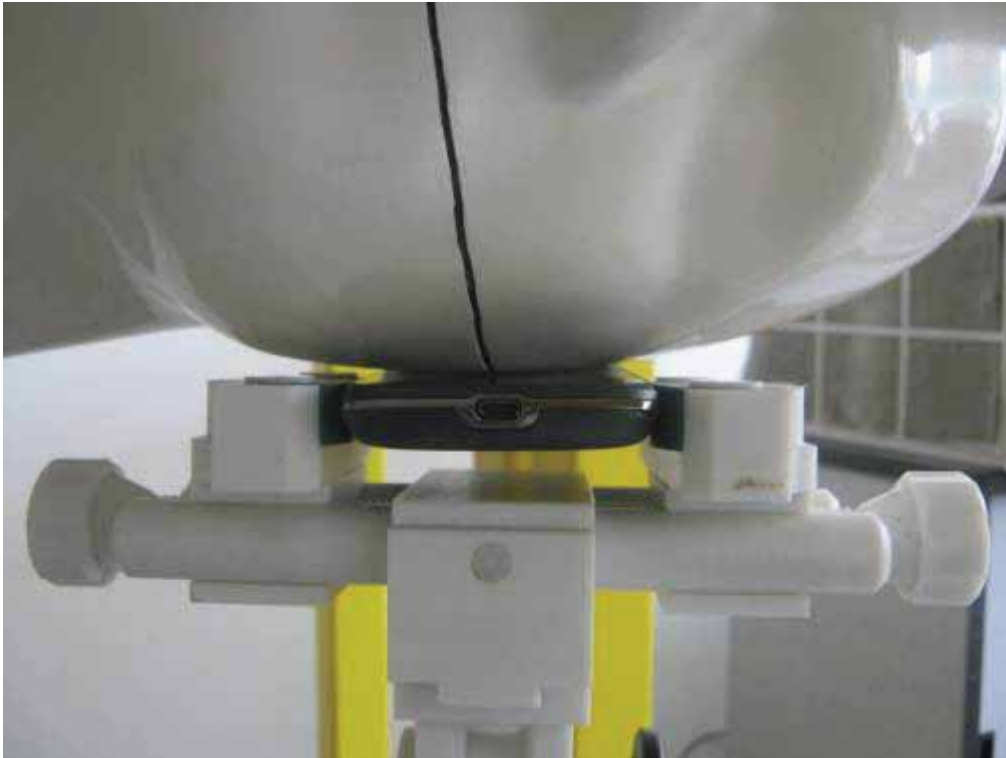
The are three transmitters build in EUT, As following :



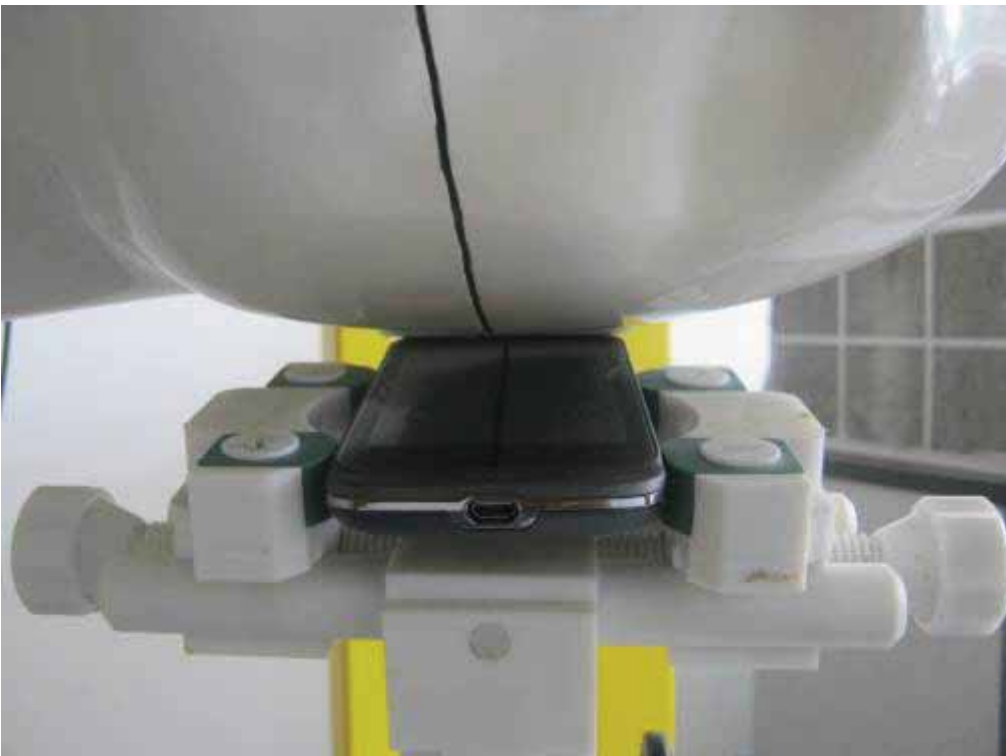
1. The Wifi mode Max. 1-g SAR vauel is 0.139W/Kg, and the Main Antenna Max. 1-g SAR vauel is 1.116W/Kg, the sum of 1-g SAR vauel is 1.255 W/Kg less than 1.6W/Kg, according with KDB 648474 D01, when the sum of the 1-g SAR is <math>< 1.6\text{ W/kg}</math> for all simultaneous transmitting antennas, and the Simultaneous Transmission SAR is not required.
2. The distance between Main Antenna and WIFI antenna is 7.5cm.
2. The GSM and WCDMA can't simultaneous transmitting.
3. The BT Max. Peak output power is 7.325dBm (5.4mW) less than 12mW, and the distance between BT antenna and main antenna is 7.5 cm larger than 2.5 cm. Accord with KDB 648474 D01, Bluetooth Stand-alone SAR is not required.

Annex A EUT Setup Photos

1 EUT Left Head Touch Cheek Position



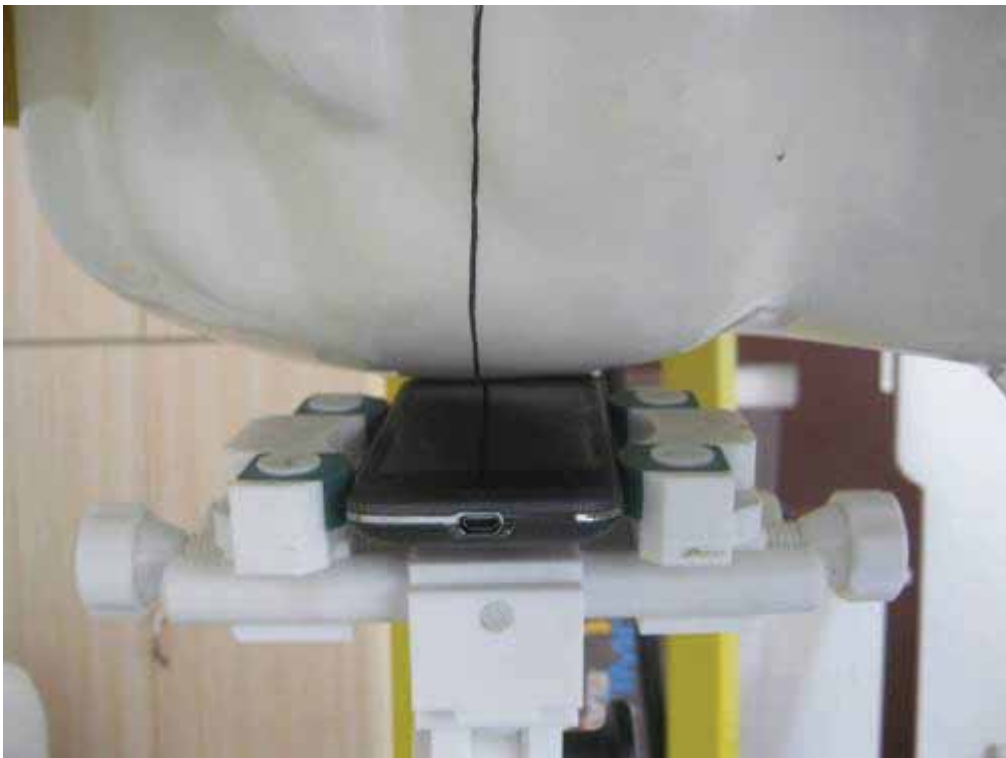
2 EUT Left Head Tilt15 Position



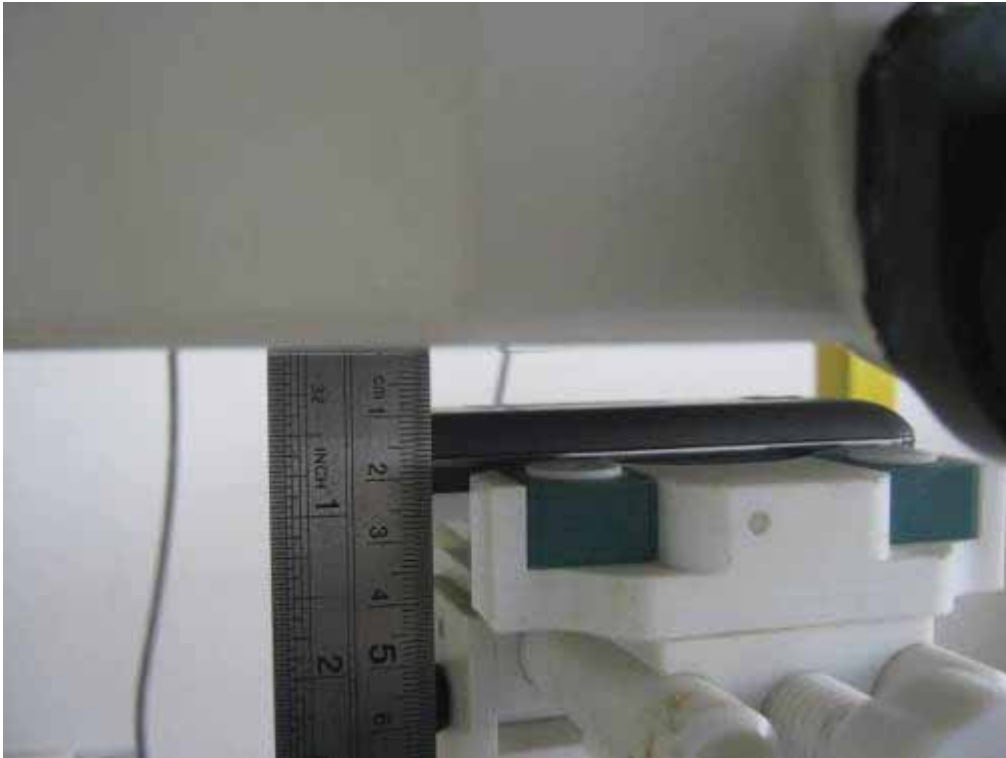
3 EUT Right Head Touch Cheek Position



4 EUT Right Head Tilt15 Position



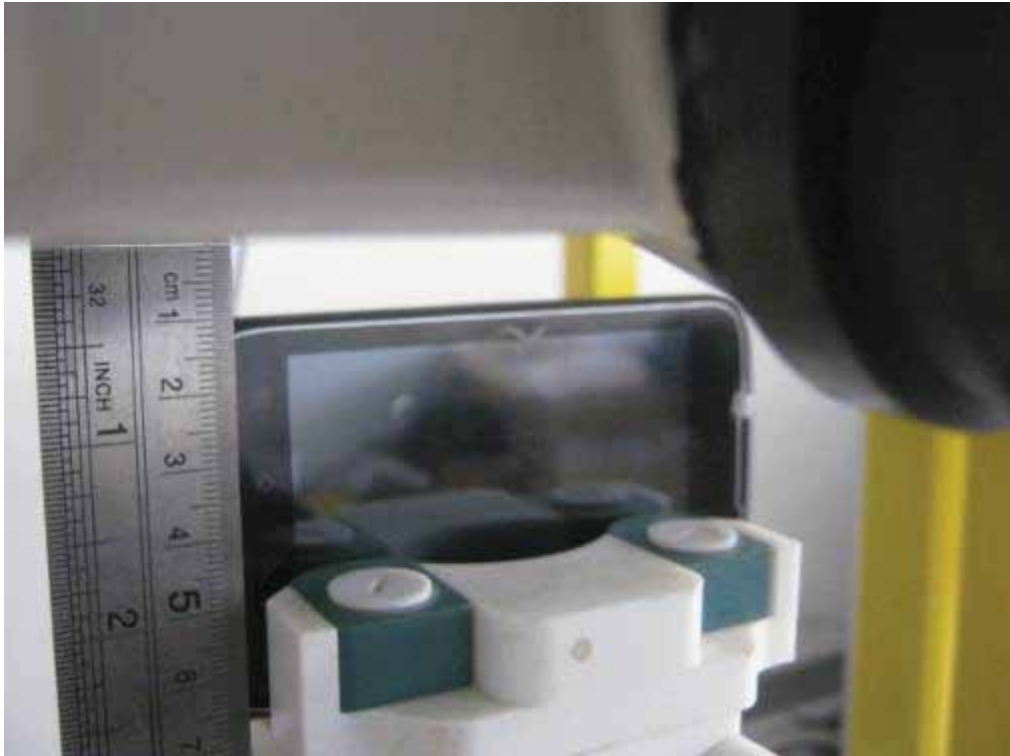
5 Side Position



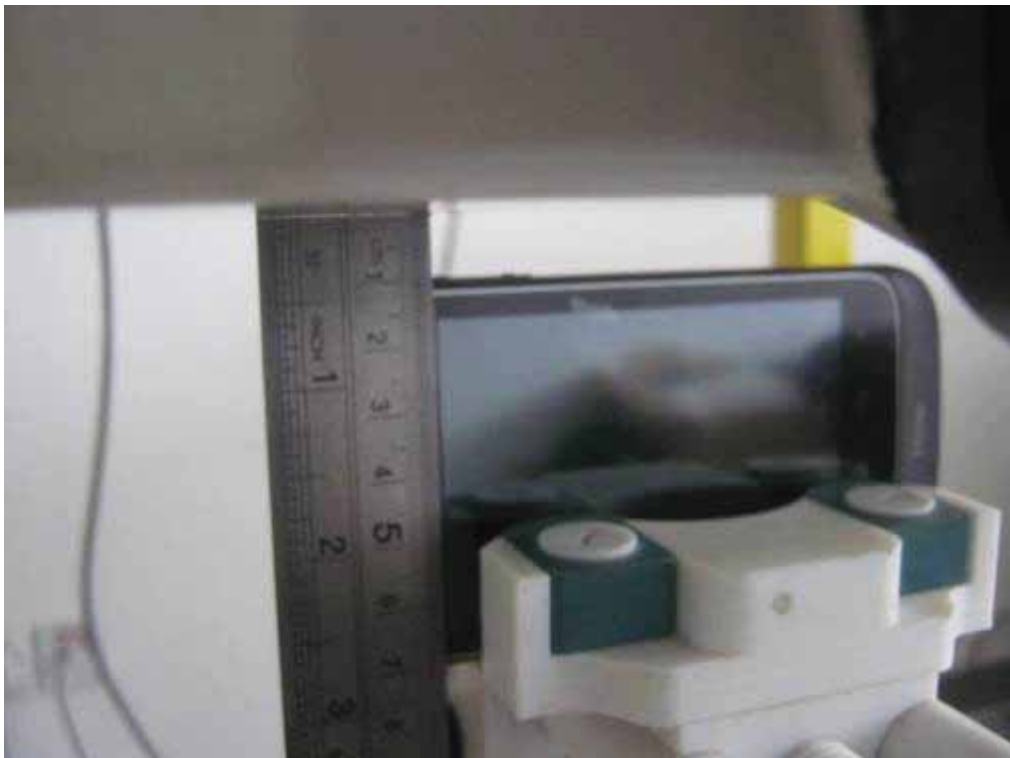
6 Side position with earphone



7 Edge A



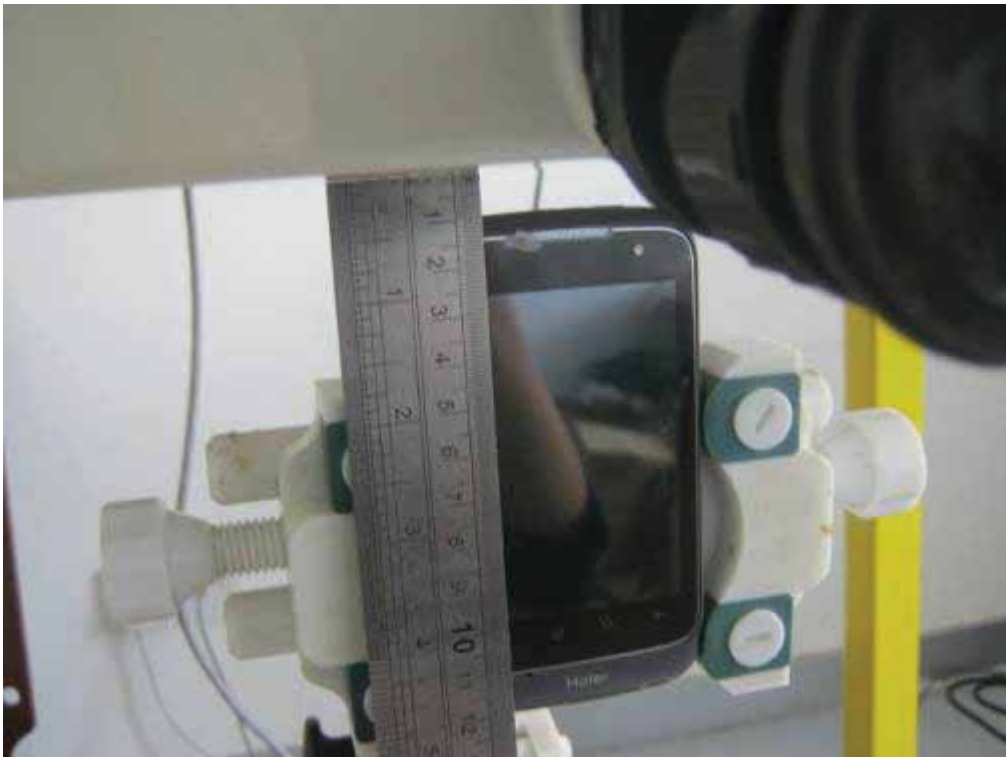
8 Edge B



9 Edge C



10 Edge D



Liquid Level Photo



Annex B Graph Test Results

BAND	<u>PARAMETERS</u>
<u>GSM850</u>	<p><u>Measurement 1:</u> Right Head with Cheek device position on Low Channel in GSM mode</p> <p><u>Measurement 2:</u> Right Head with Tilt device position on Low Channel in GSM mode</p> <p><u>Measurement 3:</u> Left Head with Cheek device position on Low Channel in GSM mode</p> <p><u>Measurement 4:</u> Left Head with Tilt device position on Low Channel in GSM mode</p> <p><u>Measurement 5:</u> Validation Plane with Body device position on Low Channel in GSM mode</p> <p><u>Measurement 6:</u> Validation Plane with Body device position on Low Channel in GSM mode</p> <p><u>Measurement 7:</u> Validation Plane with Body device position on Low Channel in GPRS mode</p> <p><u>Measurement 8:</u> Validation Plane with Body device position on Middle Channel in GPRS mode</p> <p><u>Measurement 9:</u> Validation Plane with Body device position on High Channel in GPRS mode</p> <p><u>Measurement 10:</u> Validation Plane with Body device position on Low Channel in GPRS mode</p> <p><u>Measurement 11:</u> Validation Plane with Body device position on Low Channel in GPRS mode</p> <p><u>Measurement 12:</u> Validation Plane with Body device position on Low Channel in GPRS mode</p> <p><u>Measurement 13:</u> Validation Plane with Body device position on Low Channel in GPRS mode</p> <p><u>Measurement 14:</u> Validation Plane with Body device position on Low Channel in EDGE mode</p> <p><u>Measurement 15:</u> Validation Plane with Body device position on Middle Channel in EDGE mode</p> <p><u>Measurement 16:</u> Validation Plane with Body device position on High Channel in EDGE mode</p> <p><u>Measurement 17:</u> Validation Plane with Body device position on Low Channel in EDGE mode</p> <p><u>Measurement 18:</u> Validation Plane with Body device position on Low Channel in EDGE mode</p> <p><u>Measurement 19:</u> Validation Plane with Body device position on Low Channel in EDGE mode</p> <p><u>Measurement 20:</u> Validation Plane with Body device position on Low Channel in EDGE mode</p>

<u>GSM1900</u>	<p><u>Measurement 21:</u> Right Head with Cheek device position on Low Channel in GSM mode</p> <p><u>Measurement 22:</u> Right Head with Tilt device position on Low Channel in GSM mode</p> <p><u>Measurement 23:</u> Left Head with Cheek device position on Low Channel in GSM mode</p> <p><u>Measurement 24:</u> Left Head with Tilt device position on Low Channel in GSM mode</p> <p><u>Measurement 25:</u> Validation Plane with Body device position on Low Channel in GSM mode</p> <p><u>Measurement 26:</u> Validation Plane with Body device position on Low Channel in GSM mode</p> <p><u>Measurement 27:</u> Validation Plane with Body device position on Low Channel in GPRS mode</p> <p><u>Measurement 28:</u> Validation Plane with Body device position on Middle Channel in GPRS mode</p> <p><u>Measurement 29:</u> Validation Plane with Body device position on High Channel in GPRS mode</p> <p><u>Measurement 30:</u> Validation Plane with Body device position on High Channel in GPRS mode</p> <p><u>Measurement 31:</u> Validation Plane with Body device position on High Channel in GPRS mode</p> <p><u>Measurement 32:</u> Validation Plane with Body device position on High Channel in GPRS mode</p> <p><u>Measurement 33:</u> Validation Plane with Body device position on Low Channel in GPRS mode</p> <p><u>Measurement 34:</u> Validation Plane with Body device position on Middle Channel in EDGE mode</p> <p><u>Measurement 35:</u> Validation Plane with Body device position on High Channel in EDGE mode</p> <p><u>Measurement 36:</u> Validation Plane with Body device position on High Channel in EDGE mode</p> <p><u>Measurement 37:</u> Validation Plane with Body device position on High Channel in EDGE mode</p> <p><u>Measurement 38:</u> Validation Plane with Body device position on High Channel in EDGE mode</p> <p><u>Measurement 39:</u> Validation Plane with Body device position on High Channel in EDGE mode</p> <p><u>Measurement 40:</u> Validation Plane with Body device position on High Channel in EDGE mode</p>
<u>WCDMA</u> <u>850</u>	<p><u>Measurement 41:</u> Right Head with Cheek device position on High Channel in CDMA mode</p> <p><u>Measurement 42:</u> Right Head with Tilt device position on High Channel in CDMA mode</p>

	<p><u>Measurement 43:</u> Left Head with Cheek device position on High Channel in CDMA mode</p> <p><u>Measurement 44:</u> Left Head with Tilt device position on High Channel in CDMA mode</p> <p><u>Measurement 45:</u> Validation Plane with Body device position on Low Channel in CDMA mode</p> <p><u>Measurement 46:</u> Validation Plane with Body device position on Middle Channel in CDMA mode</p> <p><u>Measurement 47:</u> Validation Plane with Body device position on High Channel in CDMA mode_</p> <p><u>Measurement 48:</u> Validation Plane with Body device position on High Channel in CDMA mode</p> <p><u>Measurement 49:</u> Validation Plane with Body device position on High Channel in CDMA mode</p> <p><u>Measurement 50:</u> Validation Plane with Body device position on High Channel in CDMA mode</p> <p><u>Measurement 51:</u> Validation Plane with Body device position on High Channel in CDMA mode</p>
<p><u>WCDMA</u> <u>1900</u></p>	<p><u>Measurement 52:</u> Right Head with Cheek device position on Middle Channel in CDMA mode</p> <p><u>Measurement 53:</u> Right Head with Tilt device position on Middle Channel in CDMA mode</p> <p><u>Measurement 54:</u> Left Head with Cheek device position on Middle Channel in CDMA mode</p> <p><u>Measurement 55:</u> Left Head with Tilt device position on Middle Channel in CDMA mode</p> <p><u>Measurement 56:</u> Validation Plane with Body device position on Low Channel in CDMA mode</p> <p><u>Measurement 57:</u> Validation Plane with Body device position on Middle Channel in CDMA mode</p> <p><u>Measurement 58:</u> Validation Plane with Body device position on High Channel in CDMA mode</p> <p><u>Measurement 59:</u> Validation Plane with Body device position on Middle Channel in CDMA mode</p> <p><u>Measurement 60:</u> Validation Plane with Body device position on Middle Channel in CDMA mode</p> <p><u>Measurement 61:</u> Validation Plane with Body device position on Middle Channel in CDMA mode</p> <p><u>Measurement 62:</u> Validation Plane with Body device position on Middle Channel in CDMA mode</p>
<p><u>WIFI</u> <u>2450</u></p>	<p><u>Measurement 63:</u> Validation Plane with Body device position on Middle Channel in DSSS mode</p> <p><u>Measurement 64:</u> Validation Plane with Body device position on Middle Channel in DSSS mode</p>

Measurement 65: Validation Plane with Body device position on Middle Channel in DSSS mode

Measurement 66: Validation Plane with Body device position on Middle Channel in DSSS mode

MEASUREMENT 1

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 8 minutes 1 seconds

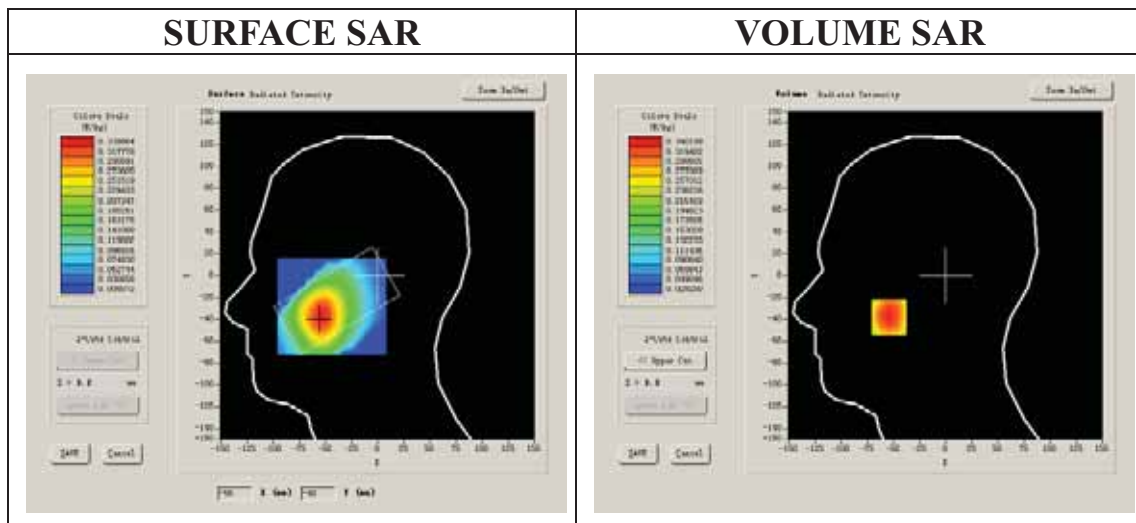
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Cheek
Band	GSM850
Channels	Low
Signal	GSM

B. SAR Measurement Results

Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250
Conductivity (S/m)	0.866612
Power drift (%)	-0.190000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



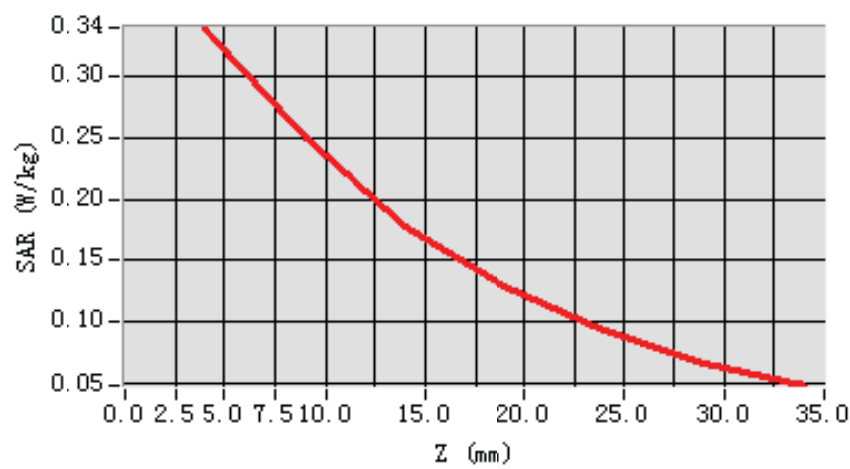
Maximum location: X=-54.00, Y=-38.00

SAR 10g (W/Kg)	0.226937
SAR 1g (W/Kg)	0.326519

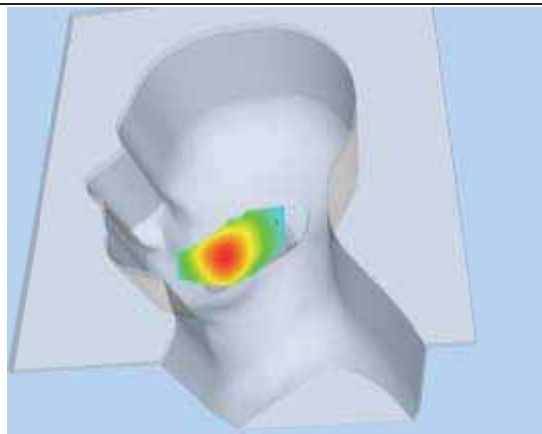
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.3402	0.2493	0.1779	0.1297	0.0926	0.0662

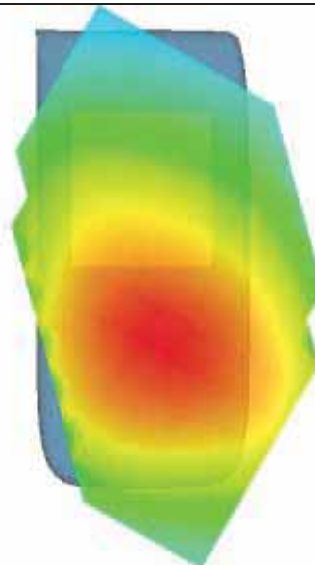
SAR, Z Axis Scan (X = -54, Y = -38)



3D scen shot



Hot spot position



MEASUREMENT 2

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 7 minutes 39 seconds

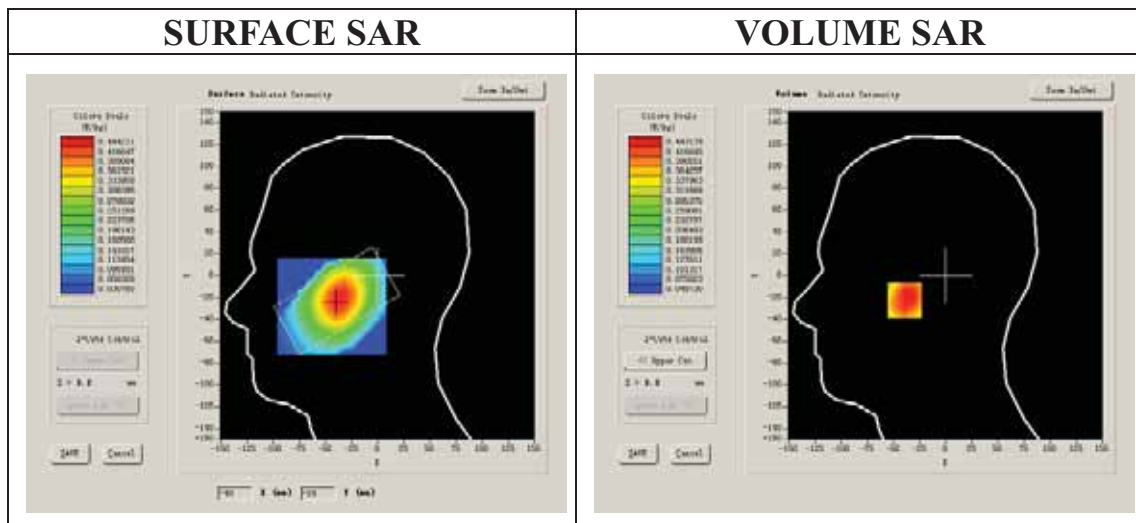
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Tilt
Band	GSM850
Channels	Low
Signal	GSM

B. SAR Measurement Results

Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250
Conductivity (S/m)	0.866612
Power drift (%)	-0.480000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



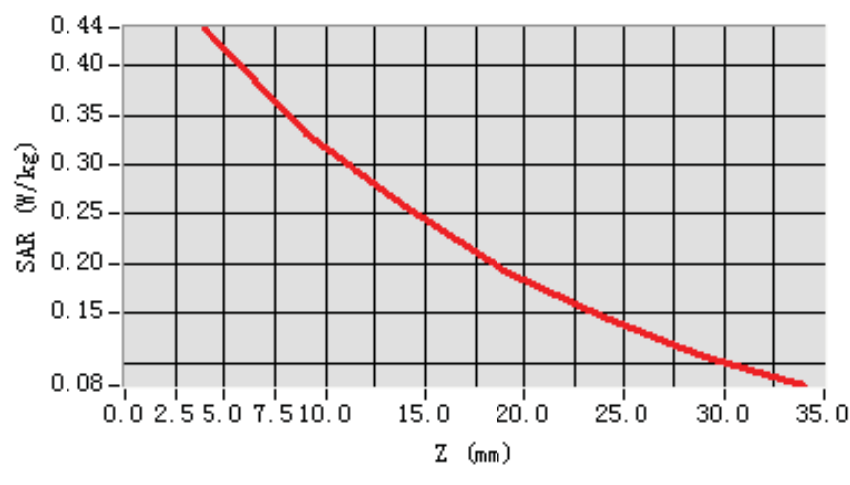
Maximum location: X=-39.00, Y=-23.00

SAR 10g (W/Kg)	0.312315
SAR 1g (W/Kg)	0.438765

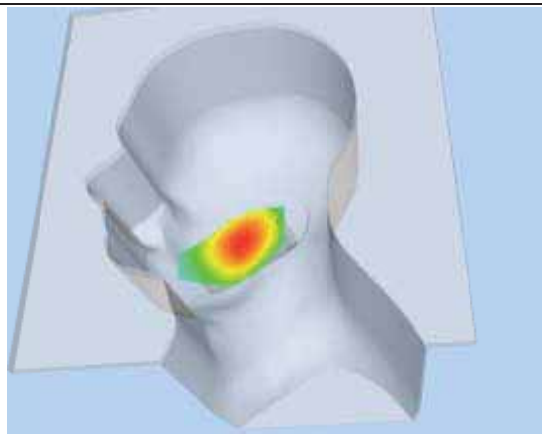
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4382	0.3312	0.2576	0.1933	0.1455	0.1062

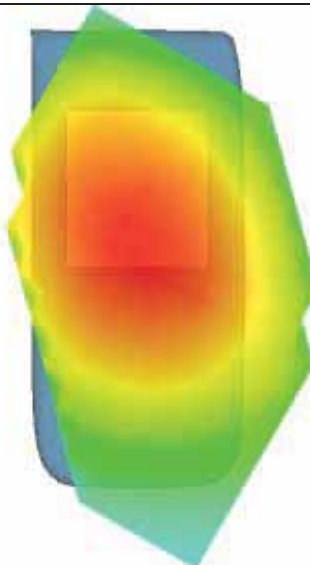
SAR, Z Axis Scan (X = -39, Y = -23)



3D scen shot



Hot spot position



MEASUREMENT 3

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 8 minutes 0 seconds

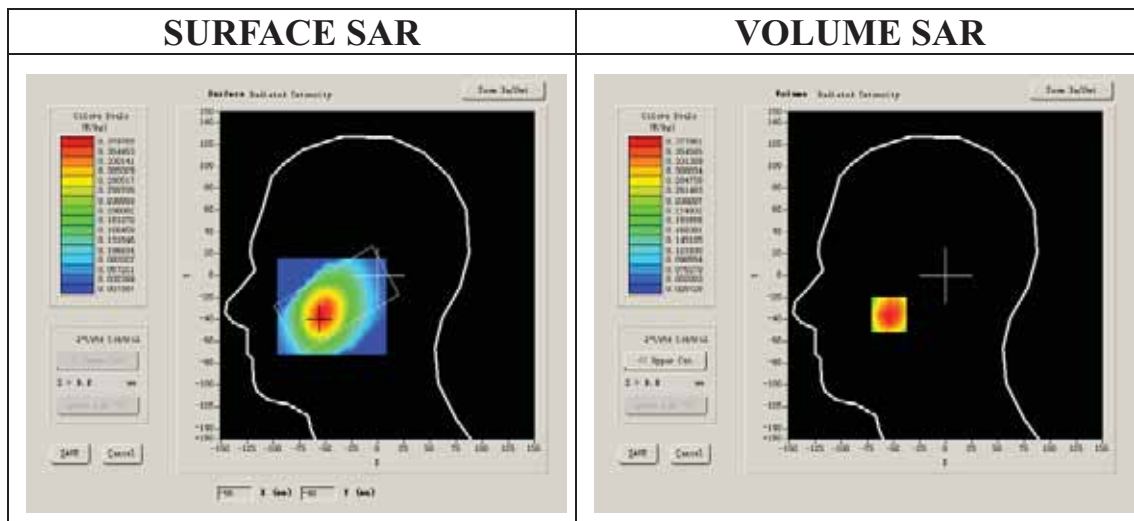
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	GSM850
Channels	Low
Signal	GSM

B. SAR Measurement Results

Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250
Conductivity (S/m)	0.866612
Power drift (%)	-1.810000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



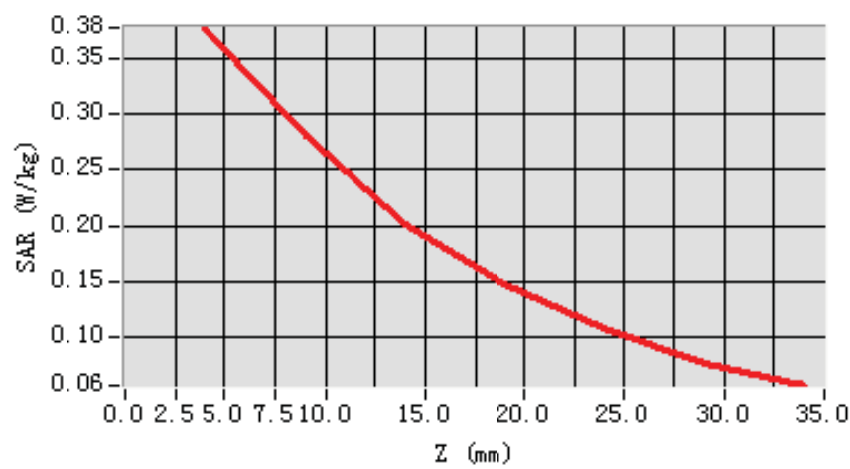
Maximum location: X=-54.00, Y=-36.00

SAR 10g (W/Kg)	0.250122
SAR 1g (W/Kg)	0.365347

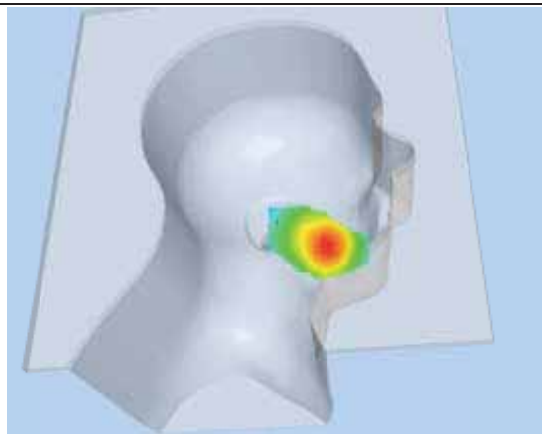
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.3779	0.2809	0.2009	0.1478	0.1082	0.0766

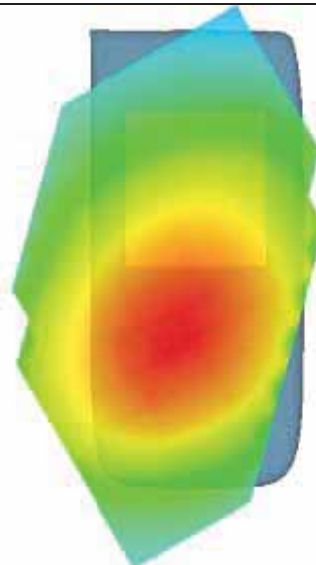
SAR, Z Axis Scan (X = -54, Y = -36)



3D scene shot



Hot spot position



MEASUREMENT 4

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 7 minutes 38 seconds

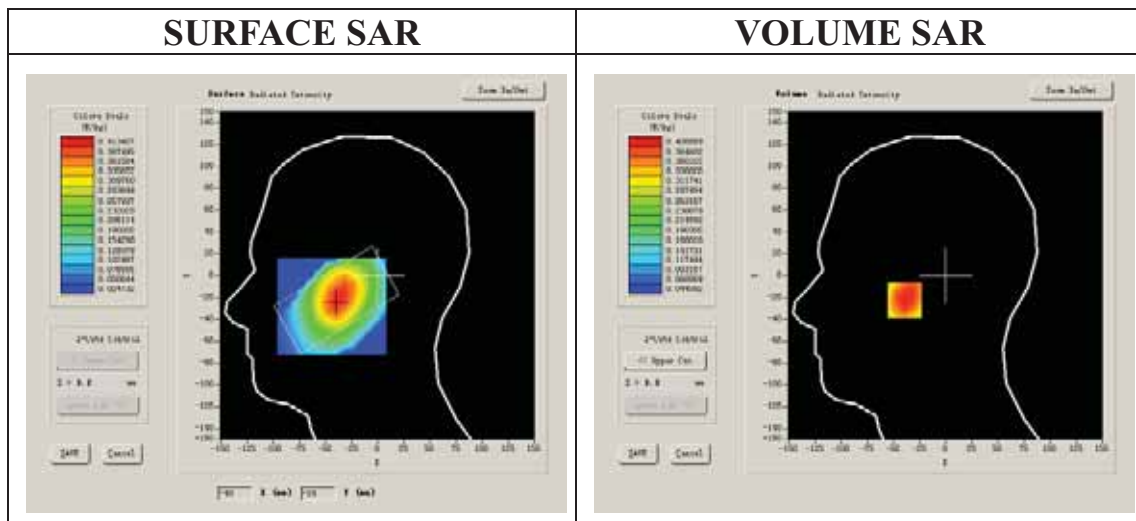
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Tilt
Band	GSM850
Channels	Low
Signal	GSM

B. SAR Measurement Results

Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250
Conductivity (S/m)	0.866612
Power drift (%)	-0.580000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



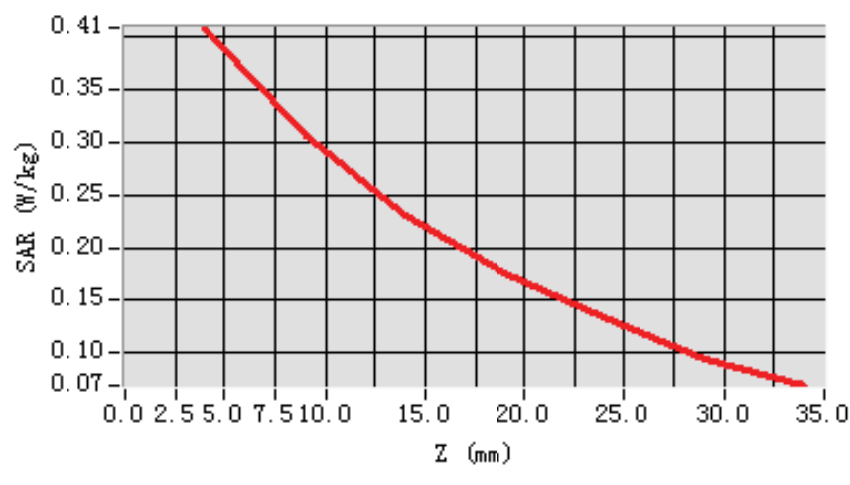
Maximum location: X=-39.00, Y=-23.00

SAR 10g (W/Kg)	0.282903
SAR 1g (W/Kg)	0.395518

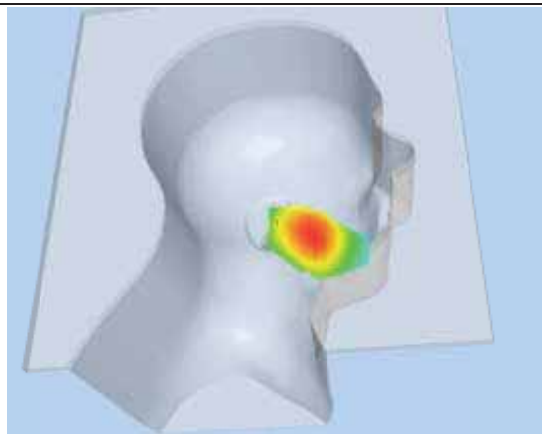
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4089	0.3066	0.2302	0.1754	0.1333	0.0939

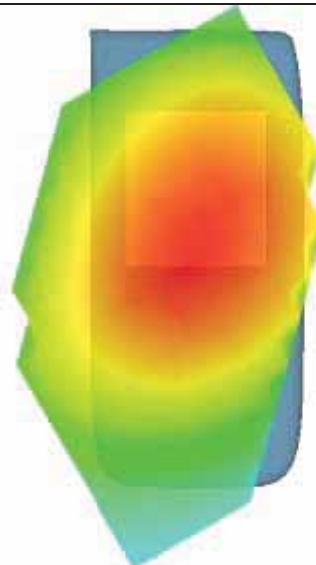
SAR, Z Axis Scan (X = -39, Y = -23)



3D scene shot



Hot spot position



MEASUREMENT 5

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 9 minutes 6 seconds

A. Experimental conditions.

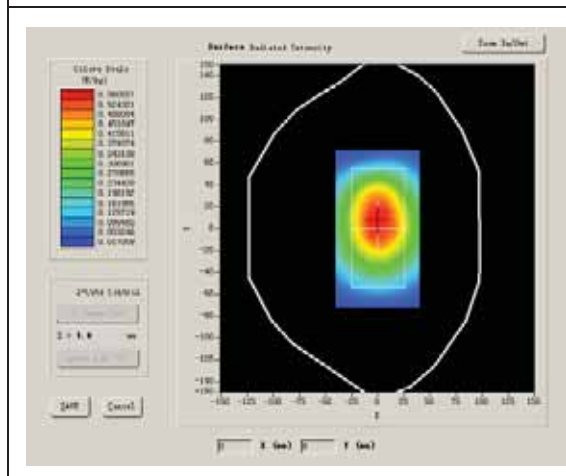
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Low
Signal	GSM

B. SAR Measurement Results

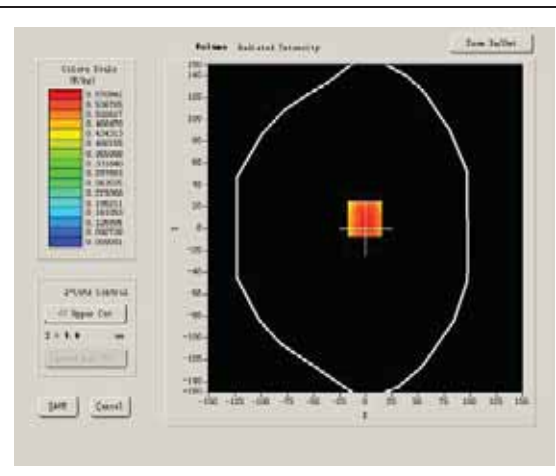
Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550
Conductivity (S/m)	0.974596
Power drift (%)	0.650000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:8

SURFACE SAR



VOLUME SAR



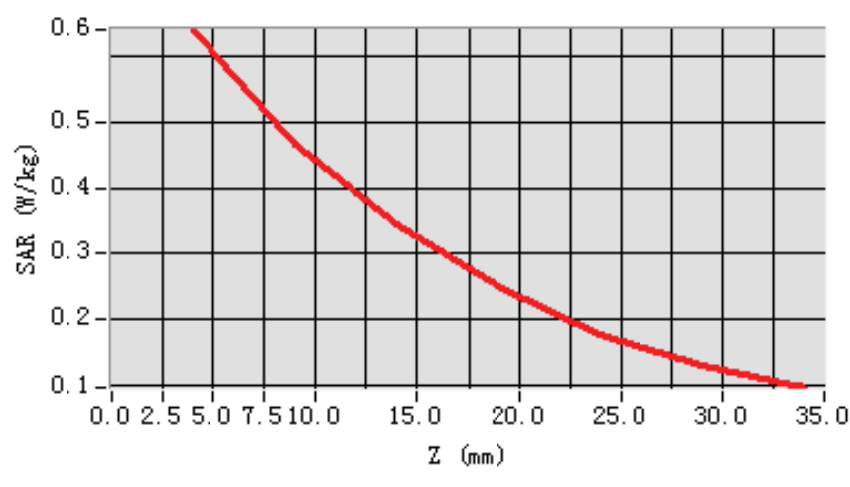
Maximum location: X=-1.00, Y=9.00

SAR 10g (W/Kg)	0.438169
SAR 1g (W/Kg)	0.617333

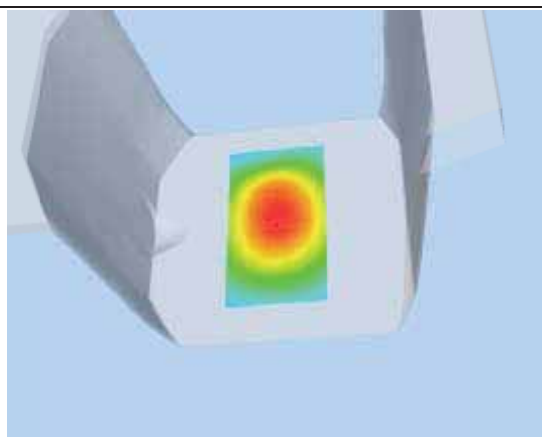
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6421	0.4660	0.3436	0.2518	0.1768	0.1306

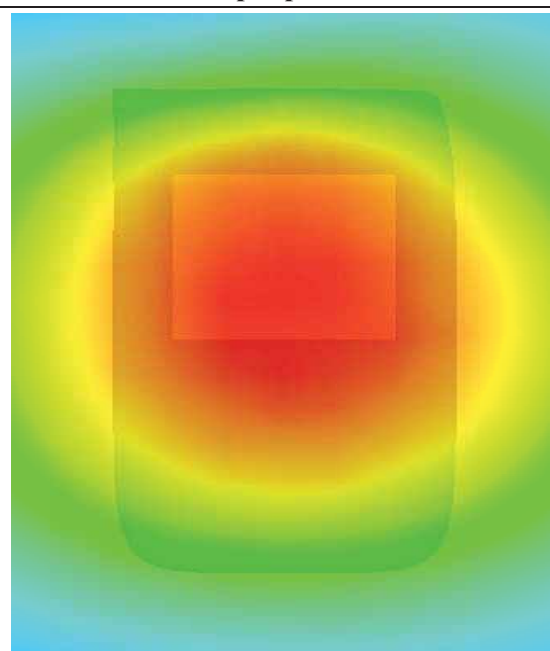
SAR, Z Axis Scan (X = -1, Y = 9)



3D scen shot



Hot spot position



MEASUREMENT 6

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 9 minutes 8 seconds

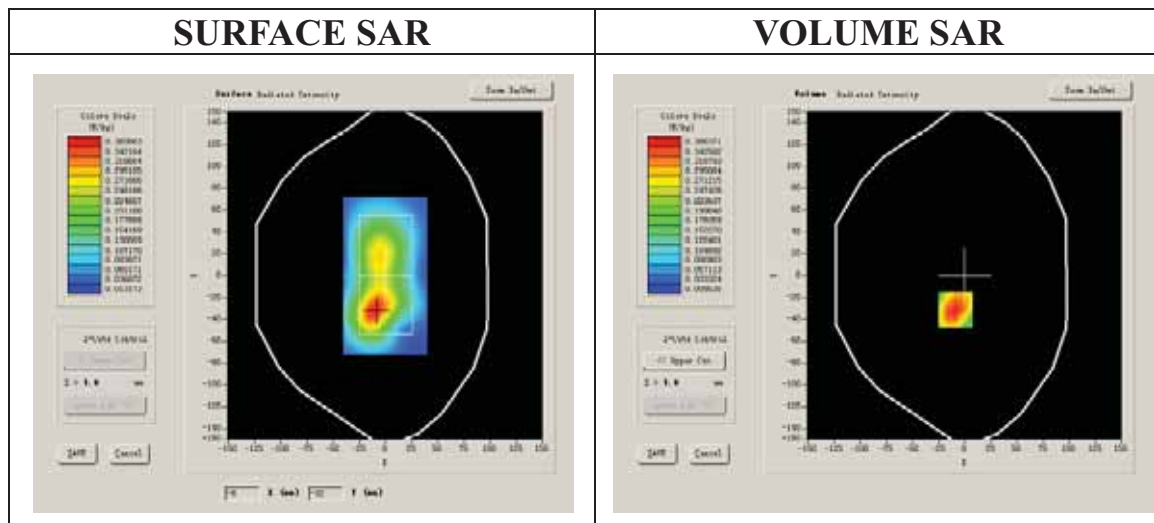
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Low
Signal	GSM

B. SAR Measurement Results

Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550
Conductivity (S/m)	0.974596
Power drift (%)	-0.290000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:8



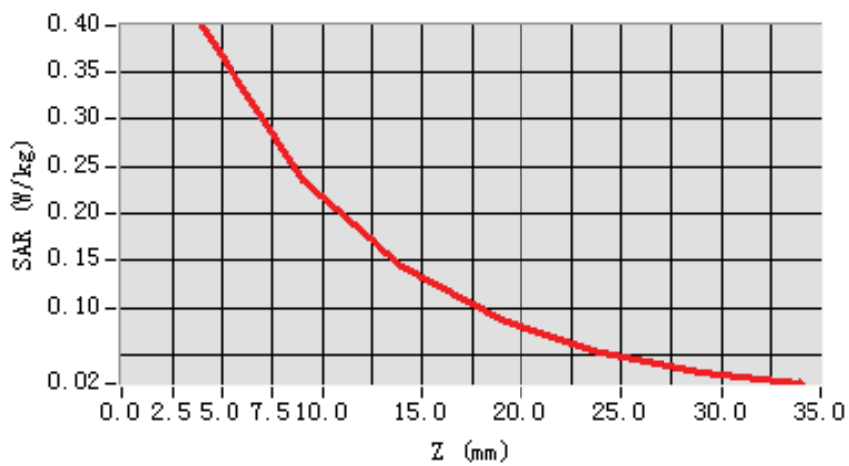
Maximum location: X=-9.00, Y=-31.00

SAR 10g (W/Kg)	0.223408
SAR 1g (W/Kg)	0.381549

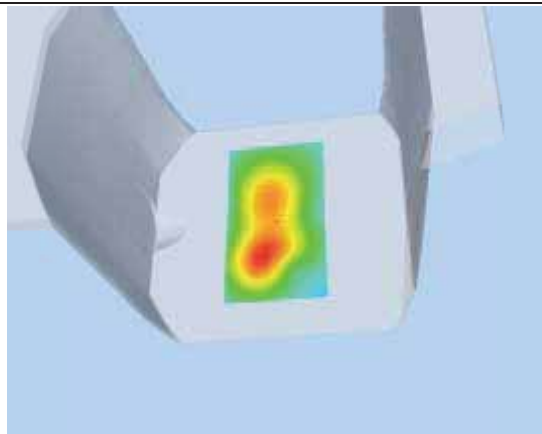
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.3989	0.2353	0.1425	0.0867	0.0522	0.0308

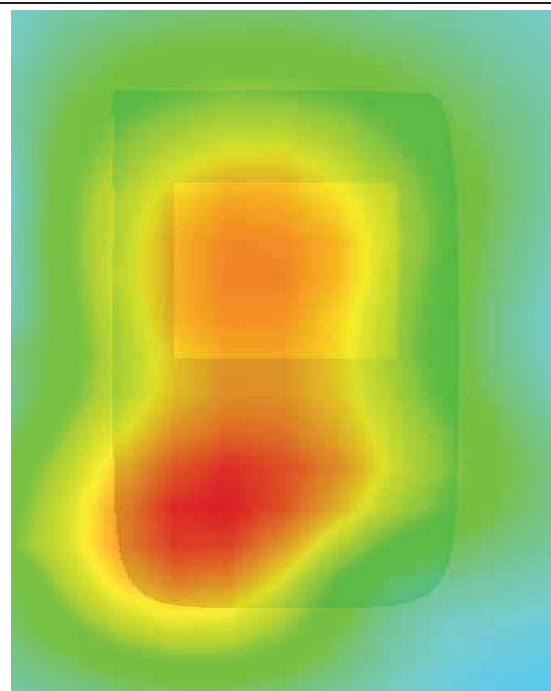
SAR, Z Axis Scan (X = -9, Y = -31)



3D scene shot



Hot spot position



MEASUREMENT 7

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 9 minutes 6 seconds

A. Experimental conditions.

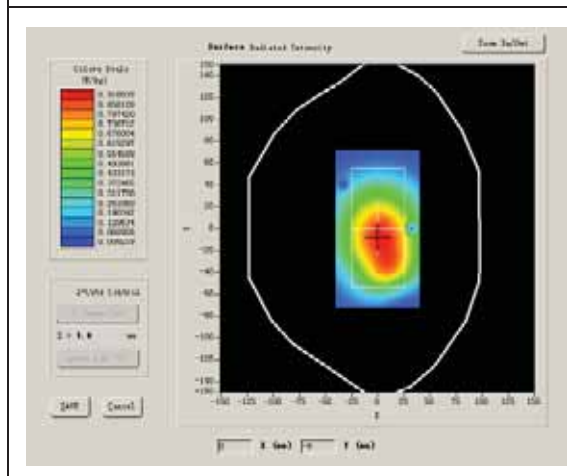
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Low
Signal	GPRS

B. SAR Measurement Results

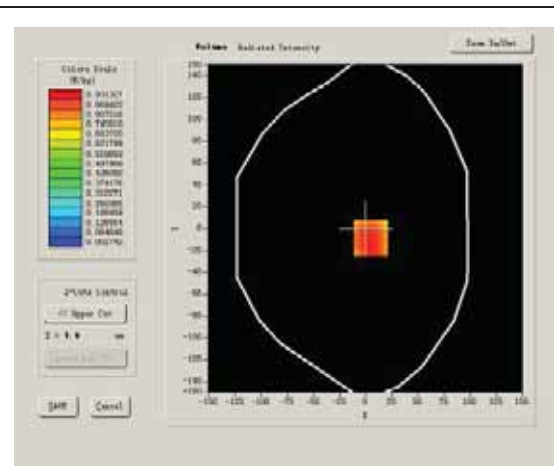
Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550
Conductivity (S/m)	0.974596
Power drift (%)	0.420000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



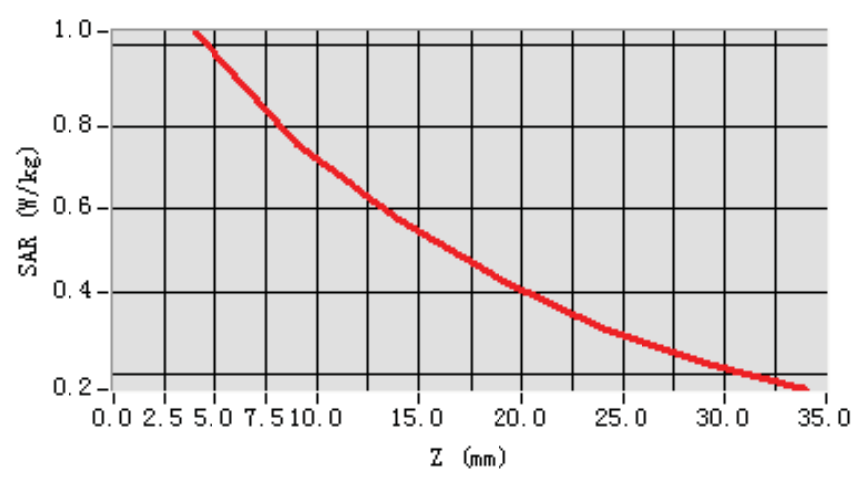
Maximum location: X=5.00, Y=-9.00

SAR 10g (W/Kg)	0.718668
SAR 1g (W/Kg)	1.018025

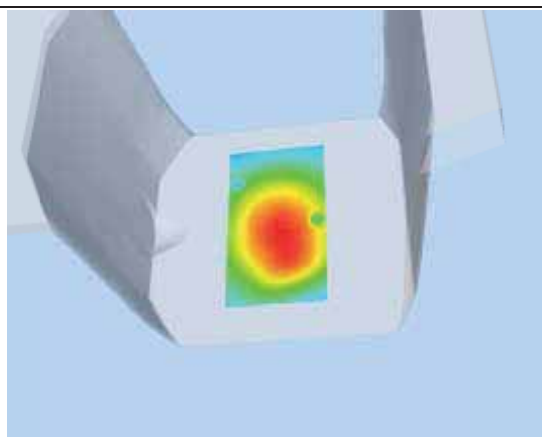
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	1.0307	0.7586	0.5746	0.4307	0.3145	0.2272

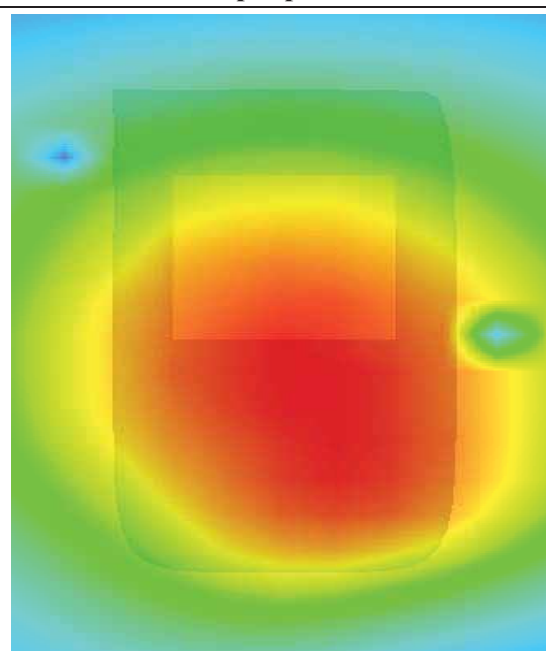
SAR, Z Axis Scan (X = 5, Y = -9)



3D scene shot



Hot spot position



MEASUREMENT 8

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 9 minutes 7 seconds

A. Experimental conditions.

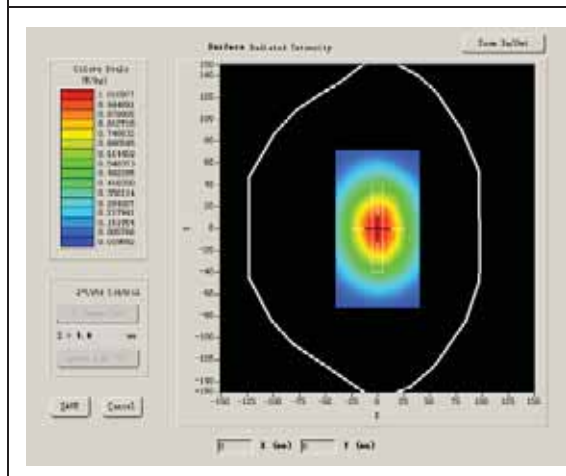
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Middle
Signal	GPRS

B. SAR Measurement Results

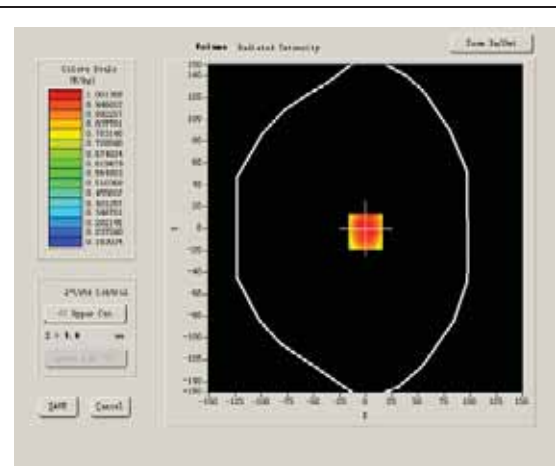
Middle Band SAR (Channel 190):

Frequency (MHz)	836.599976
Relative permittivity (real part)	55.709999
Relative permittivity	21.709999
Conductivity (S/m)	1.009033
Power drift (%)	0.120000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



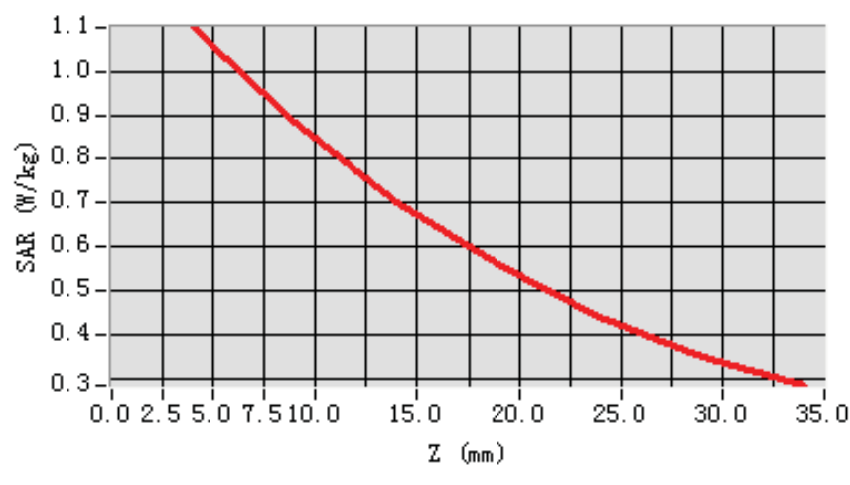
Maximum location: X=0.00, Y=-3.00

SAR 10g (W/Kg)	0.814238
SAR 1g (W/Kg)	1.081668

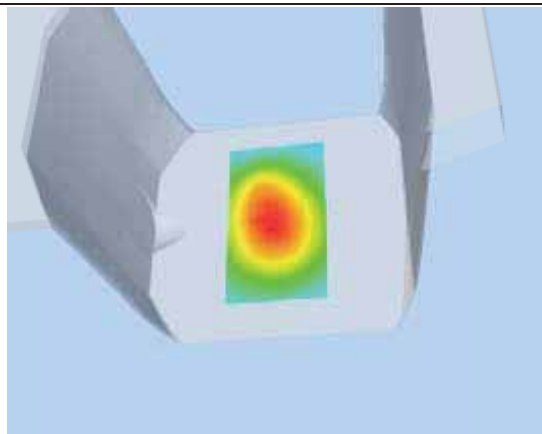
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	1.0979	0.8831	0.7030	0.5637	0.4429	0.3495

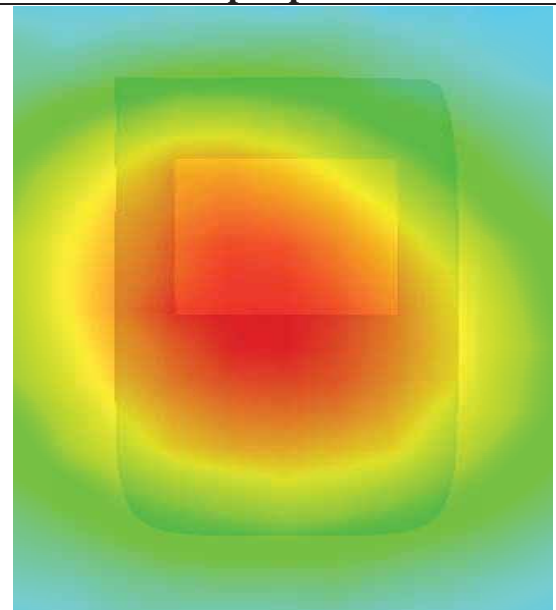
SAR, Z Axis Scan (X = 0, Y = -3)



3D scen shot



Hot spot position



MEASUREMENT 9

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 9 minutes 9 seconds

A. Experimental conditions.

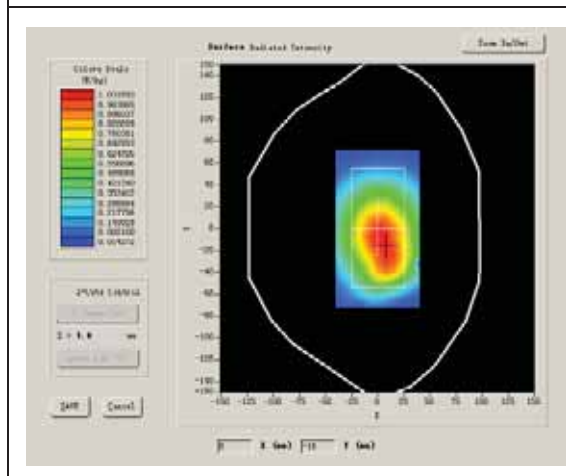
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	High
Signal	GPRS

B. SAR Measurement Results

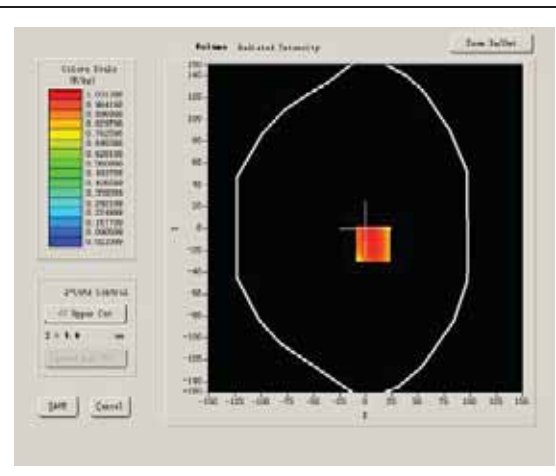
Higher Band SAR (Channel 251):

Frequency (MHz)	848.799988
Relative permittivity (real part)	54.014999
Relative permittivity	21.332850
Conductivity (S/m)	1.005962
Power drift (%)	-1.110000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



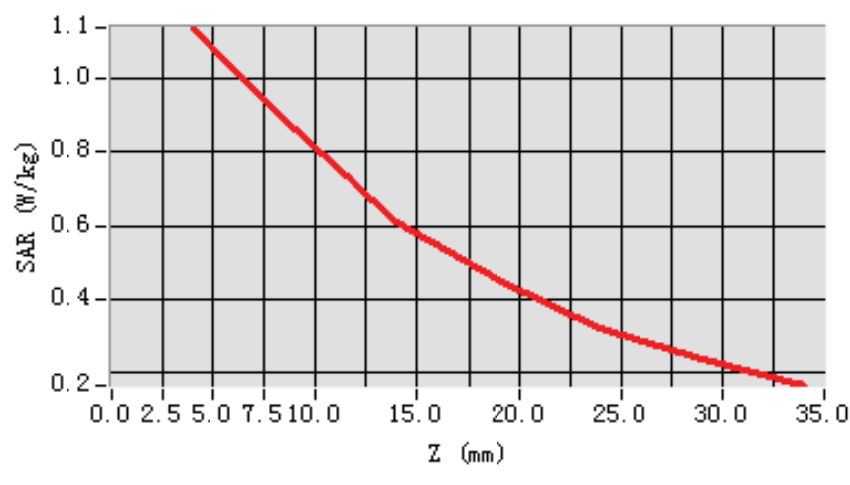
Maximum location: X=7.00, Y=-14.00

SAR 10g (W/Kg)	0.792067
SAR 1g (W/Kg)	1.115670

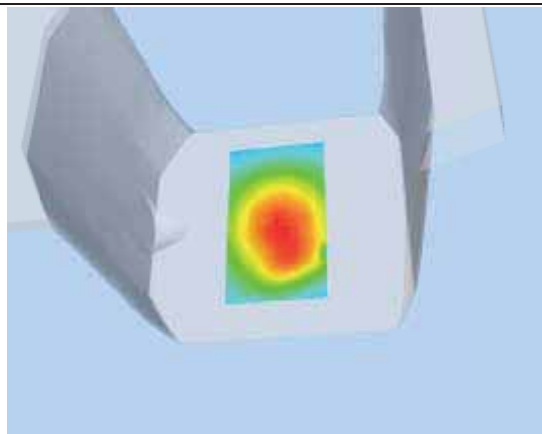
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	1.1359	0.8634	0.6099	0.4522	0.3241	0.2361

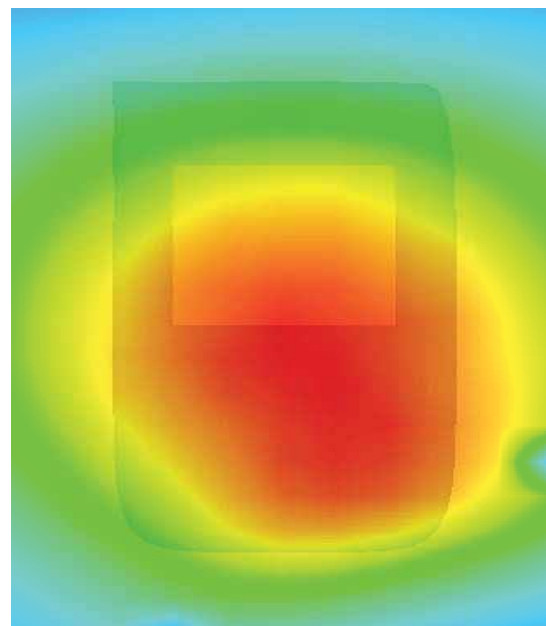
SAR, Z Axis Scan (X = 7, Y = -14)



3D scen shot



Hot spot position



MEASUREMENT 10

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 9 minutes 8 seconds

A. Experimental conditions.

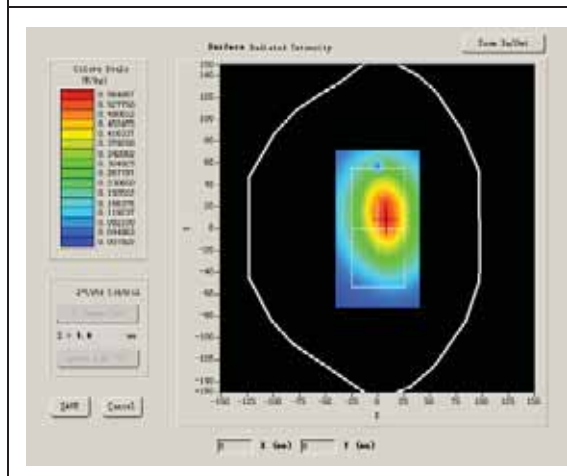
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Low
Signal	GPRS

B. SAR Measurement Results

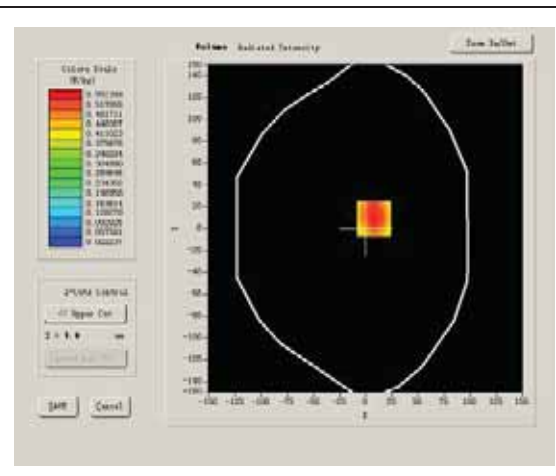
Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	55.709999
Relative permittivity	21.709999
Conductivity (S/m)	1.009033
Power drift (%)	-0.770000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



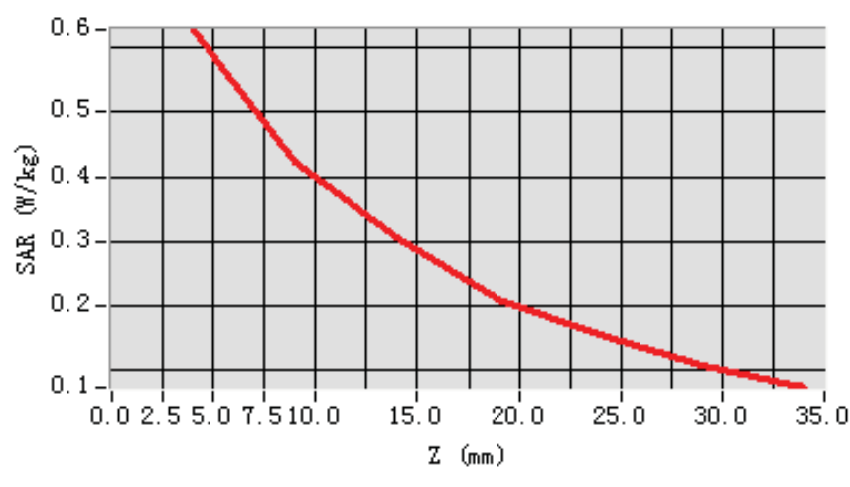
Maximum location: X=8.00, Y=9.00

SAR 10g (W/Kg)	0.396454
SAR 1g (W/Kg)	0.584059

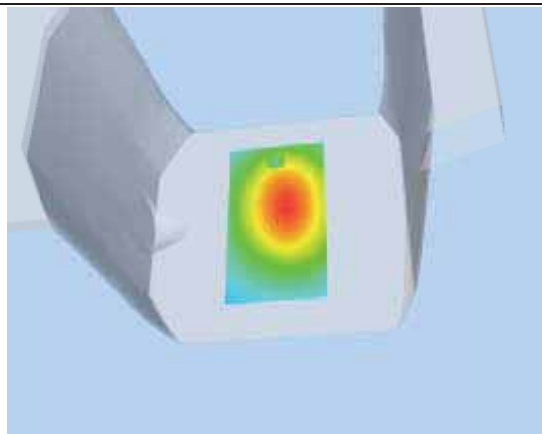
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6272	0.4240	0.3047	0.2111	0.1572	0.1066

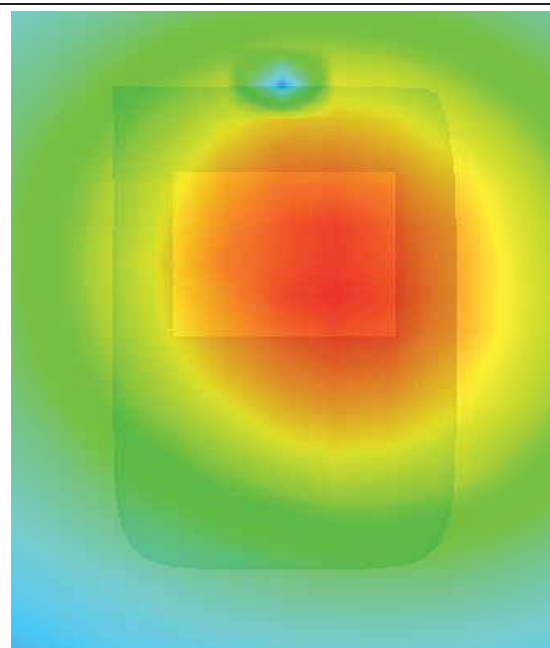
SAR, Z Axis Scan (X = 8, Y = 9)



3D scen shot



Hot spot position



MEASUREMENT 11

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 9 minutes 4 seconds

A. Experimental conditions.

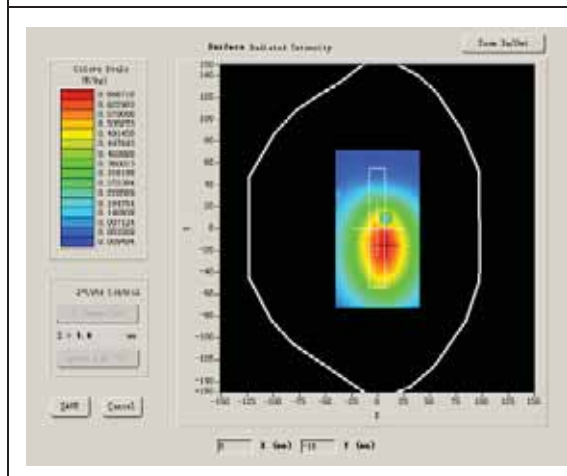
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Low
Signal	GPRS

B. SAR Measurement Results

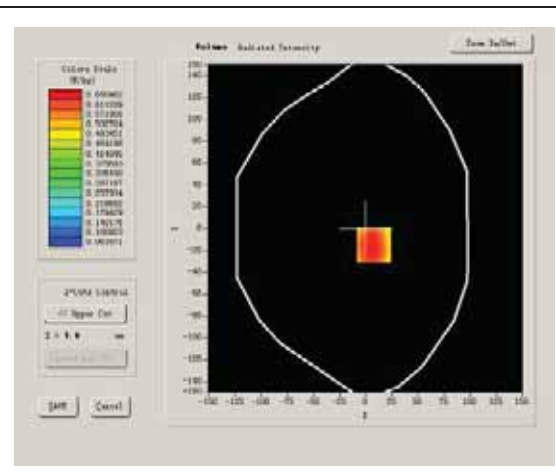
Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	54.014999
Relative permittivity	21.332850
Conductivity (S/m)	1.005962
Power drift (%)	-0.440000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



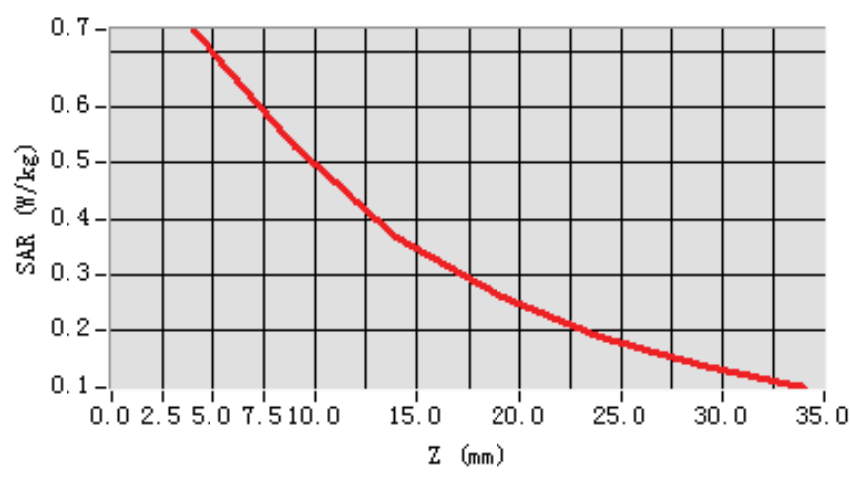
Maximum location: X=8.00, Y=-15.00

SAR 10g (W/Kg)	0.490959
SAR 1g (W/Kg)	0.725892

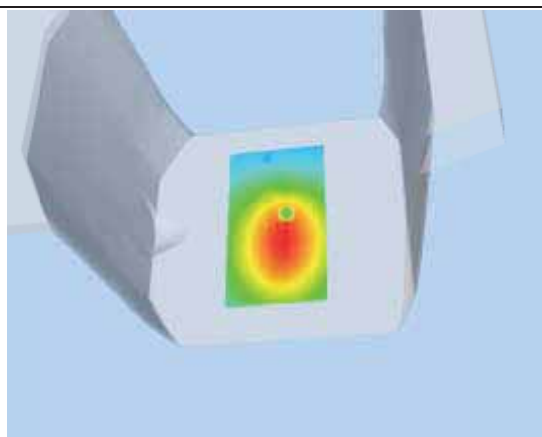
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.7386	0.5297	0.3667	0.2653	0.1883	0.1390

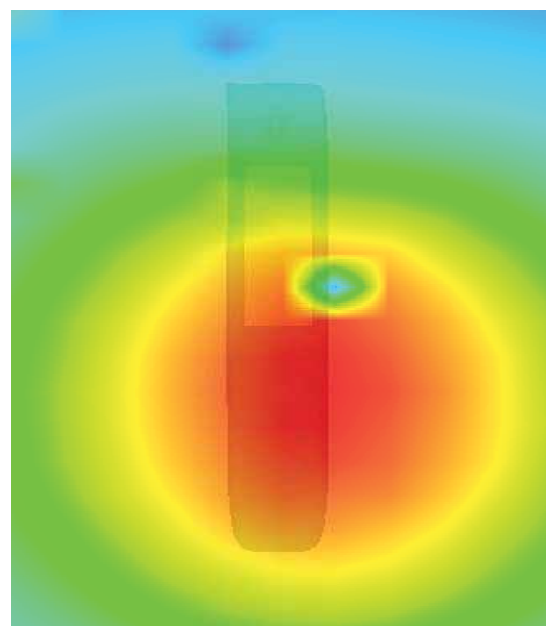
SAR, Z Axis Scan (X = 8, Y = -15)



3D scene shot



Hot spot position



MEASUREMENT 12

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 9 minutes 7 seconds

A. Experimental conditions.

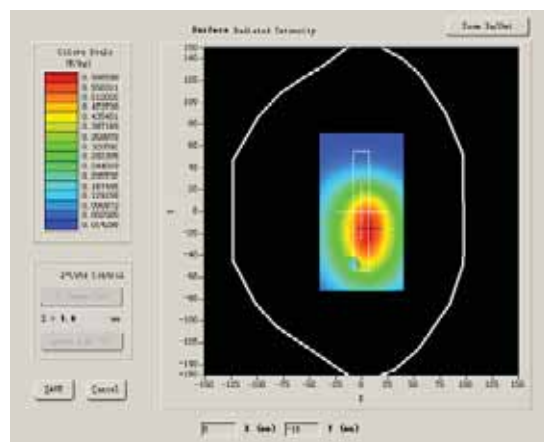
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Low
Signal	GPRS

B. SAR Measurement Results

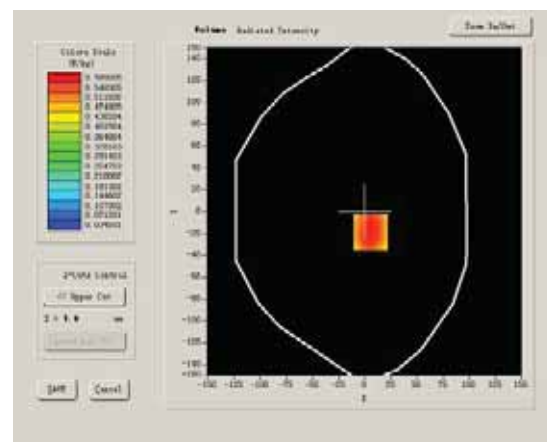
Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	54.014999
Relative permittivity	21.332850
Conductivity (S/m)	1.005962
Power drift (%)	0.440000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



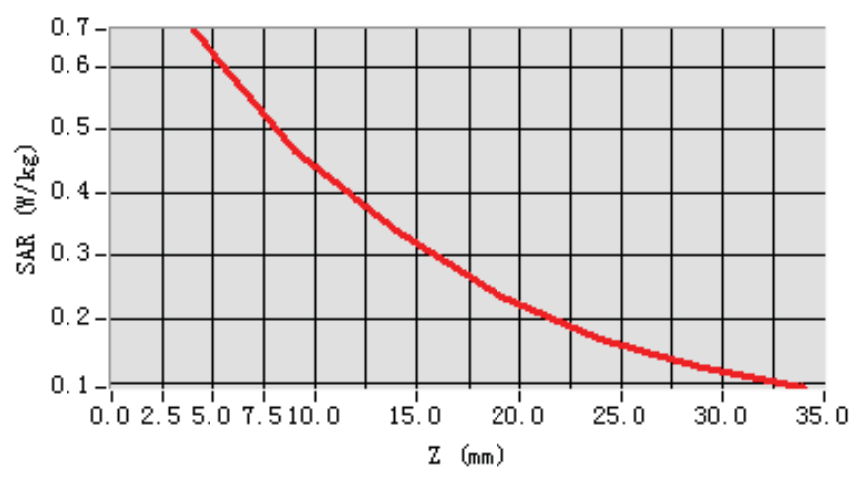
Maximum location: X=6.00, Y=-19.00

SAR 10g (W/Kg)	0.431710
SAR 1g (W/Kg)	0.611968

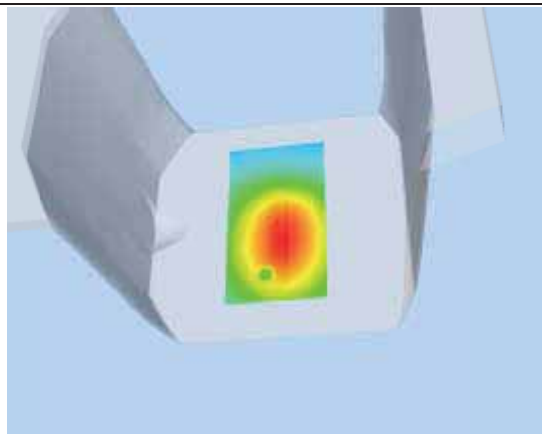
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6596	0.4658	0.3400	0.2376	0.1701	0.1225

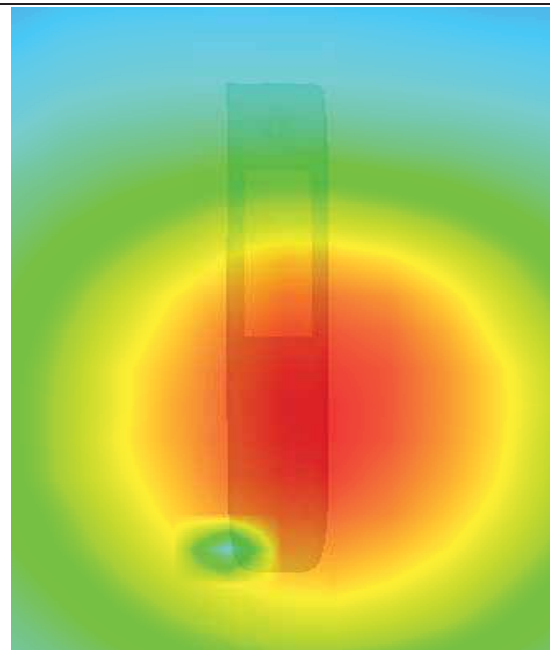
SAR, Z Axis Scan (X = 6, Y = -19)



3D scene shot



Hot spot position



MEASUREMENT 13

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 9 minutes 8 seconds

A. Experimental conditions.

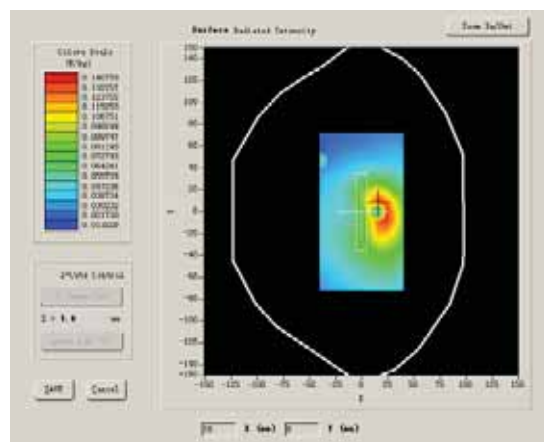
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Low
Signal	GPRS

B. SAR Measurement Results

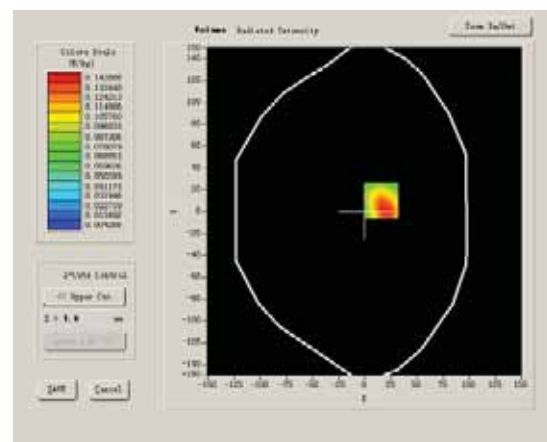
Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	54.014999
Relative permittivity	21.332850
Conductivity (S/m)	1.005962
Power drift (%)	-2.630000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



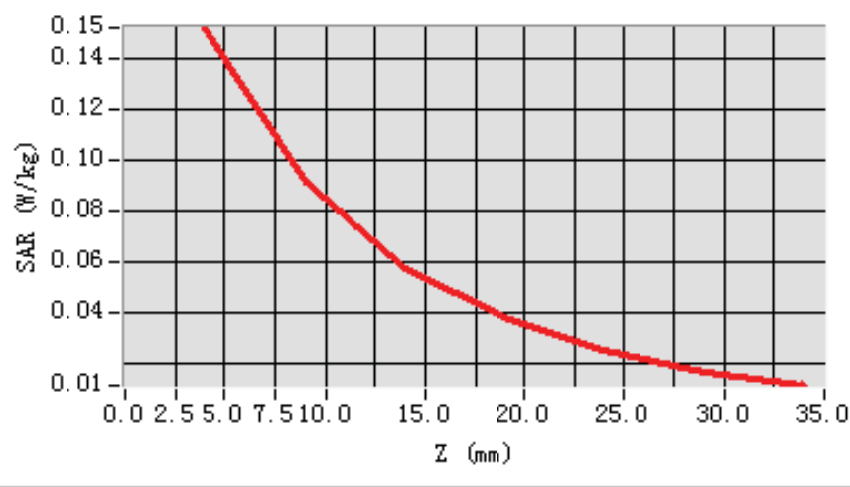
Maximum location: X=16.00, Y=10.00

SAR 10g (W/Kg)	0.090615
SAR 1g (W/Kg)	0.151654

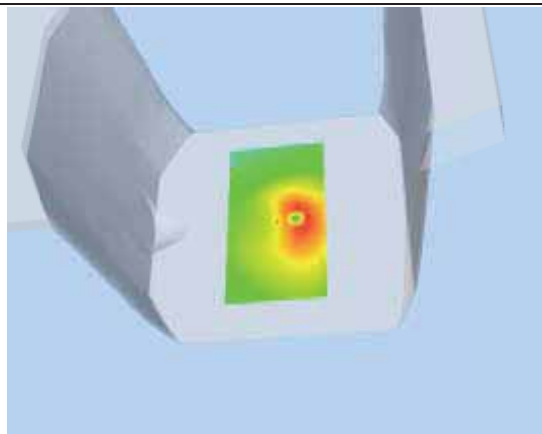
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1526	0.0910	0.0573	0.0383	0.0250	0.0165

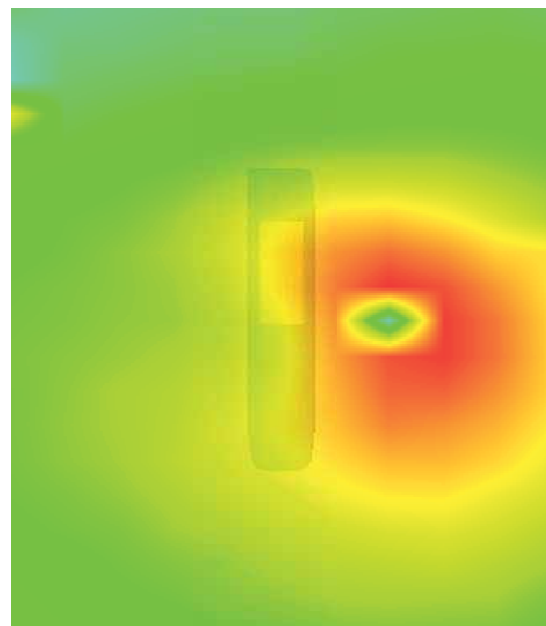
SAR, Z Axis Scan (X = 16, Y = 10)



3D scen shot



Hot spot position



MEASUREMENT 14

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 9 minutes 8 seconds

A. Experimental conditions.

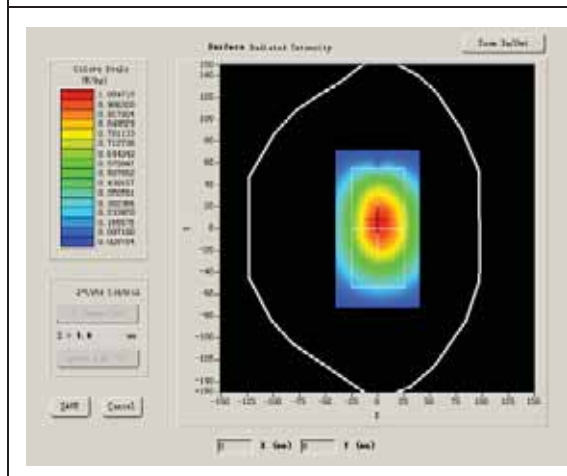
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Low
Signal	EDGE

B. SAR Measurement Results

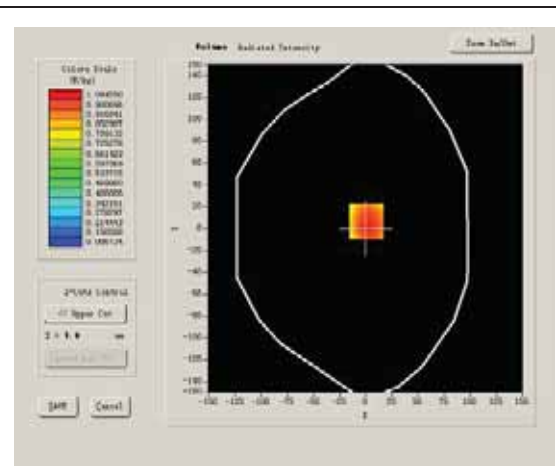
Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	54.014999
Relative permittivity	21.332850
Conductivity (S/m)	1.005962
Power drift (%)	-2.050000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



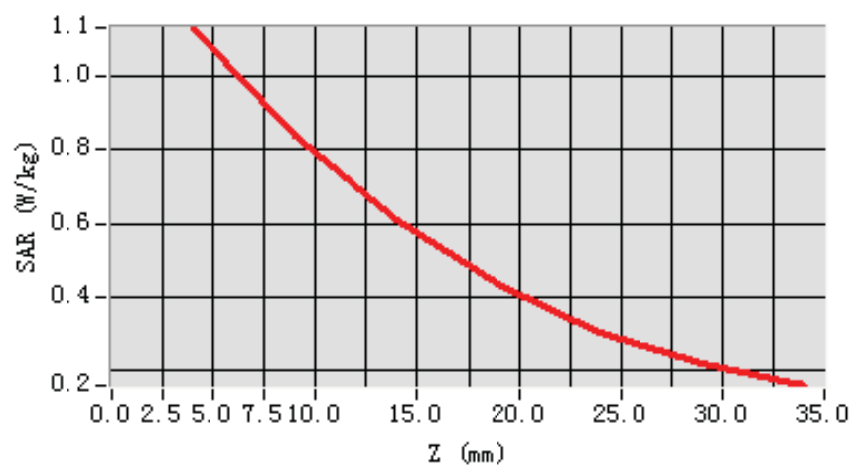
Maximum location: X=1.00, Y=7.00

SAR 10g (W/Kg)	0.771389
SAR 1g (W/Kg)	1.099285

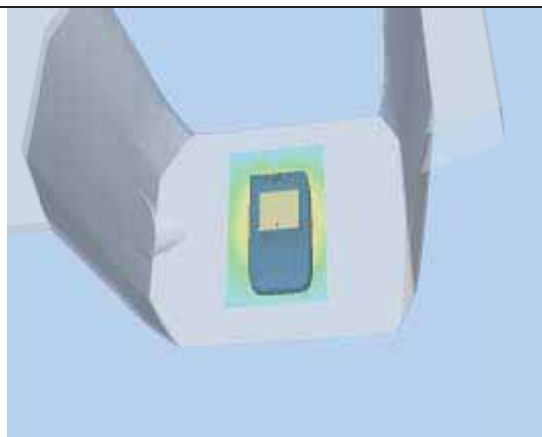
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	1.1349	0.8363	0.6083	0.4360	0.3000	0.2188

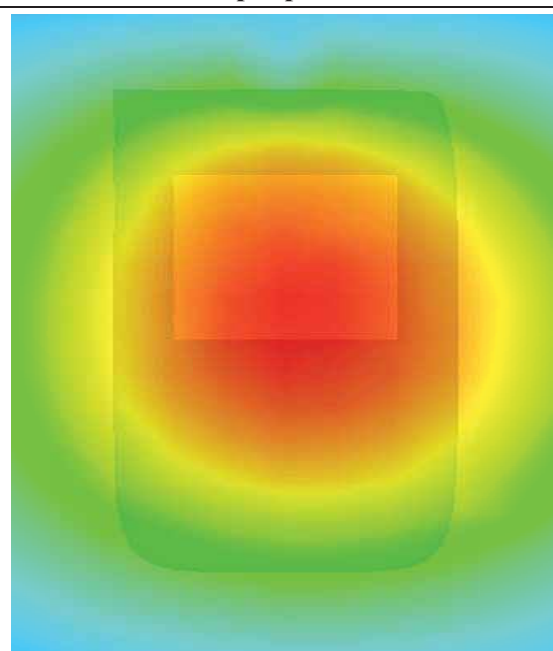
SAR, Z Axis Scan (X = 1, Y = 7)



3D scene shot



Hot spot position



MEASUREMENT 15

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 9 minutes 8 seconds

A. Experimental conditions.

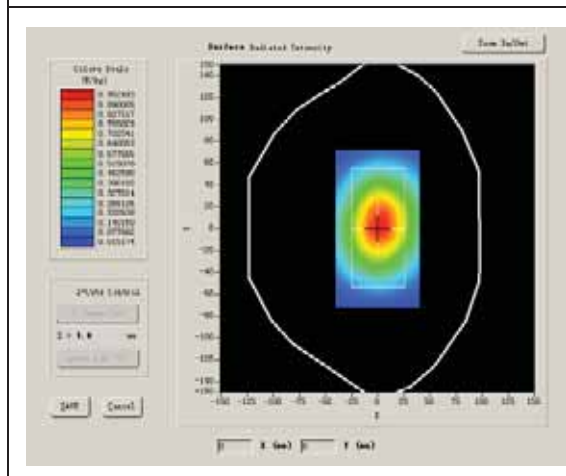
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Middle
Signal	EDGE

B. SAR Measurement Results

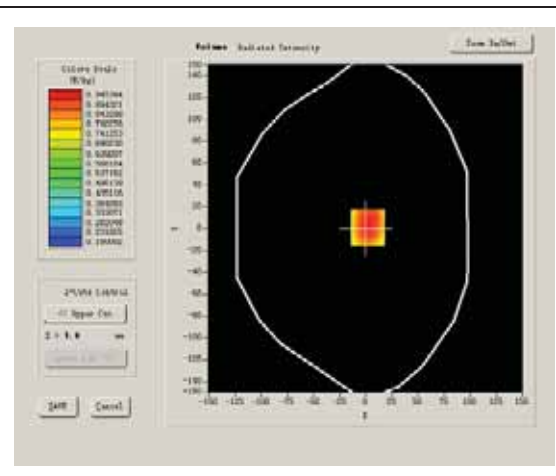
Middle Band SAR (Channel 190):

Frequency (MHz)	836.599976
Relative permittivity (real part)	54.014999
Relative permittivity	21.332850
Conductivity (S/m)	1.005962
Power drift (%)	-1.060000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



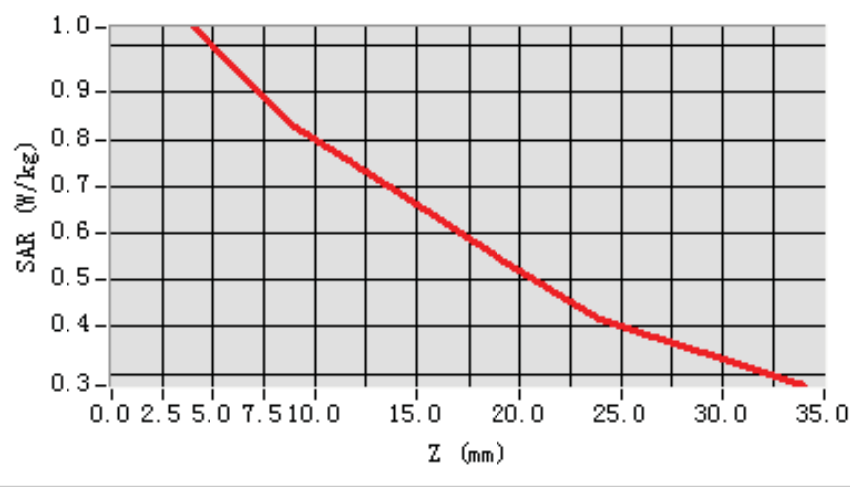
Maximum location: X=2.00, Y=1.00

SAR 10g (W/Kg)	0.766687
SAR 1g (W/Kg)	1.006756

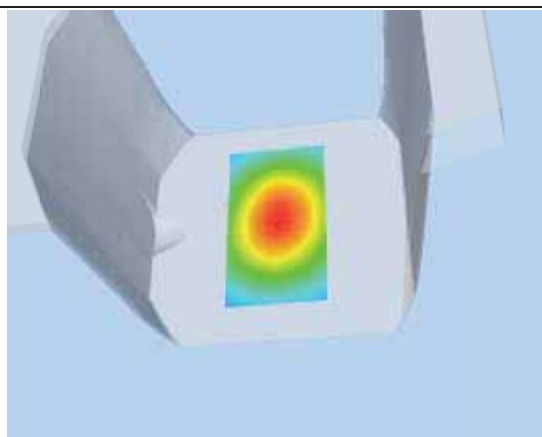
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	1.0378	0.8262	0.6877	0.5473	0.4162	0.3437

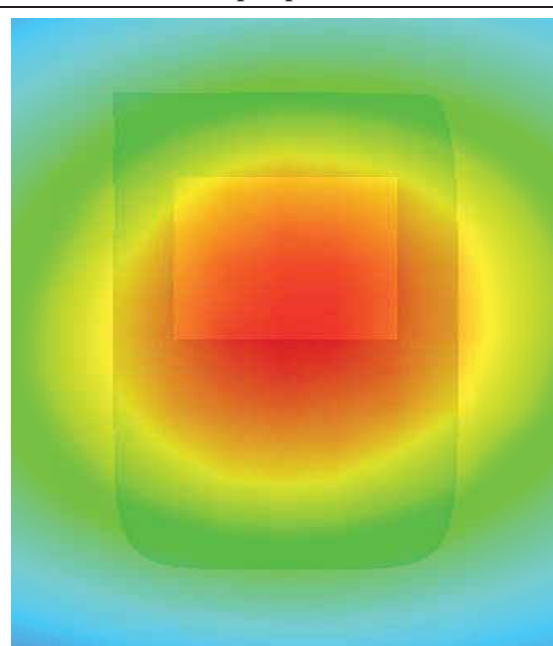
SAR, Z Axis Scan (X = 2, Y = 1)



3D scen shot



Hot spot position



MEASUREMENT 16

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 9 minutes 8 seconds

A. Experimental conditions.

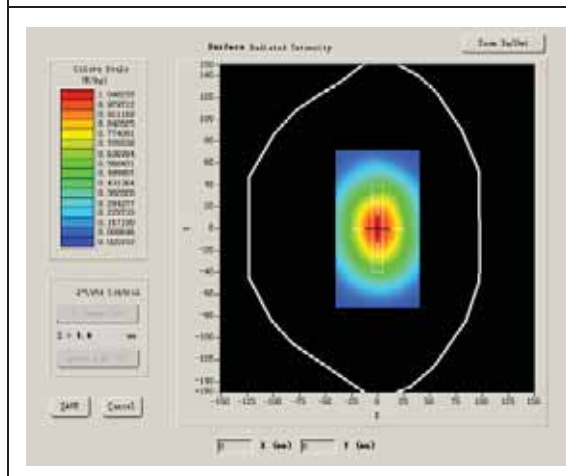
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	High
Signal	EDGE

B. SAR Measurement Results

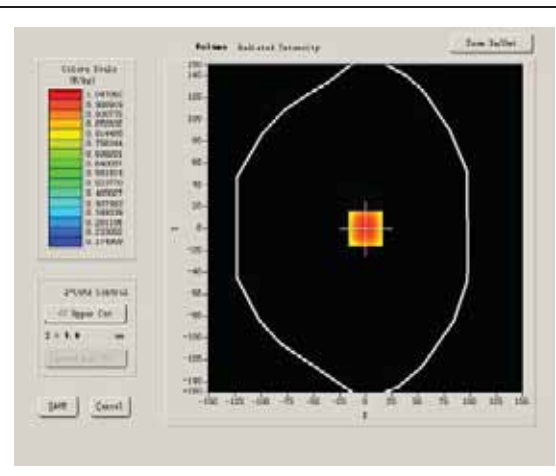
Higher Band SAR (Channel 251):

Frequency (MHz)	848.799988
Relative permittivity (real part)	54.014999
Relative permittivity	21.332850
Conductivity (S/m)	1.005962
Power drift (%)	-0.970000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



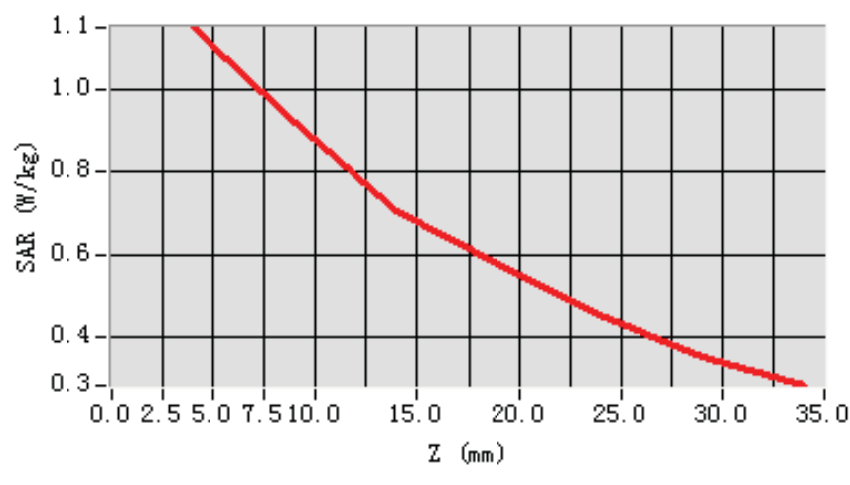
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	0.834344
SAR 1g (W/Kg)	1.111822

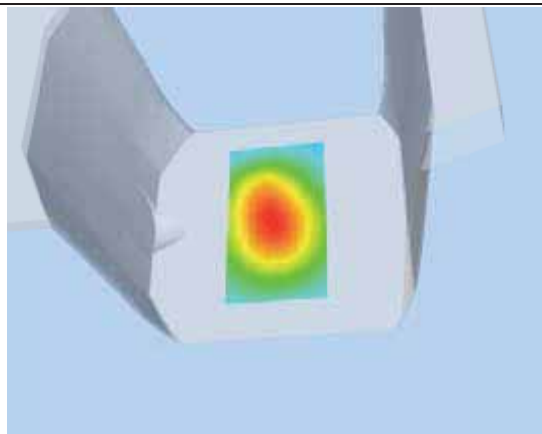
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	1.1495	0.9198	0.7027	0.5770	0.4505	0.3514

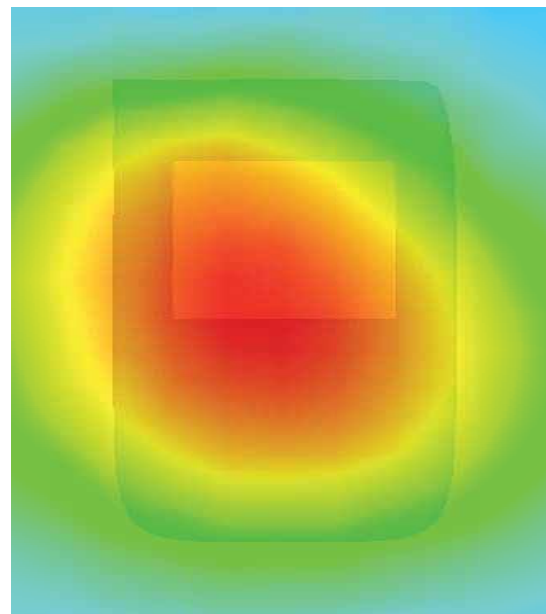
SAR, Z Axis Scan (X = 0, Y = 0)



3D scen shot



Hot spot position



MEASUREMENT 17

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 9 minutes 9 seconds

A. Experimental conditions.

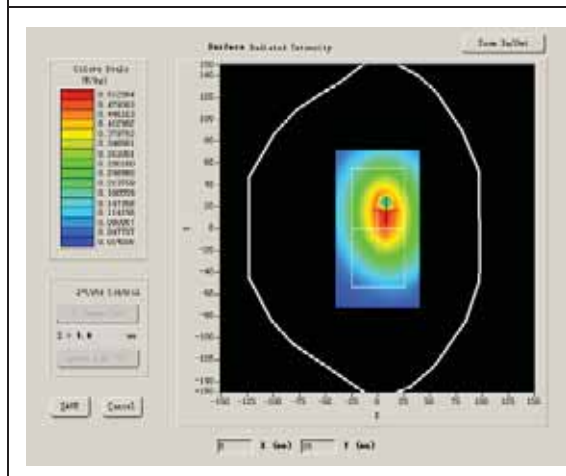
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Low
Signal	EDGE

B. SAR Measurement Results

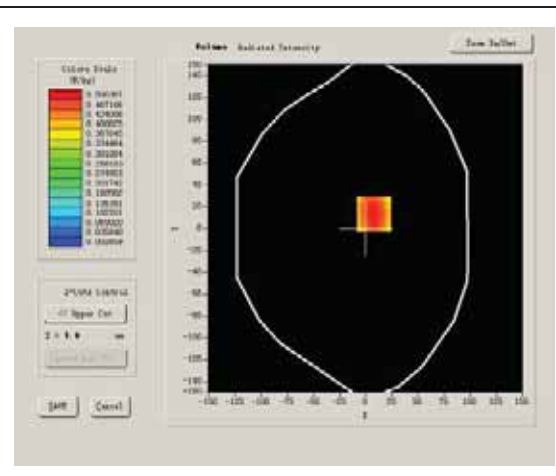
Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	54.014999
Relative permittivity	21.332850
Conductivity (S/m)	1.005962
Power drift (%)	-2.390000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



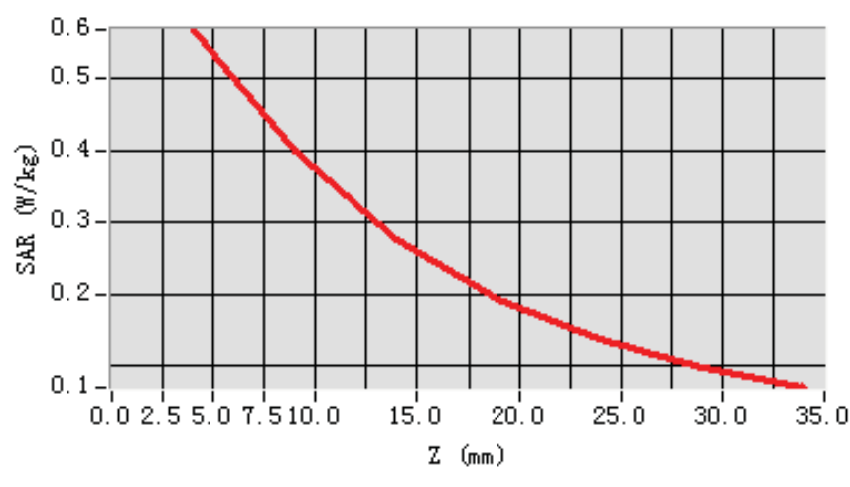
Maximum location: X=8.00, Y=13.00

SAR 10g (W/Kg)	0.362678
SAR 1g (W/Kg)	0.557191

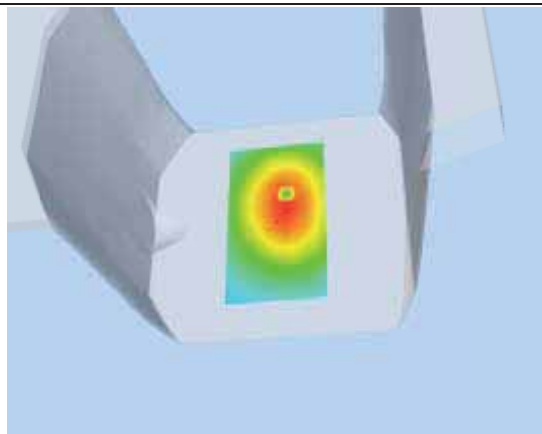
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5681	0.3998	0.2758	0.1922	0.1373	0.0982

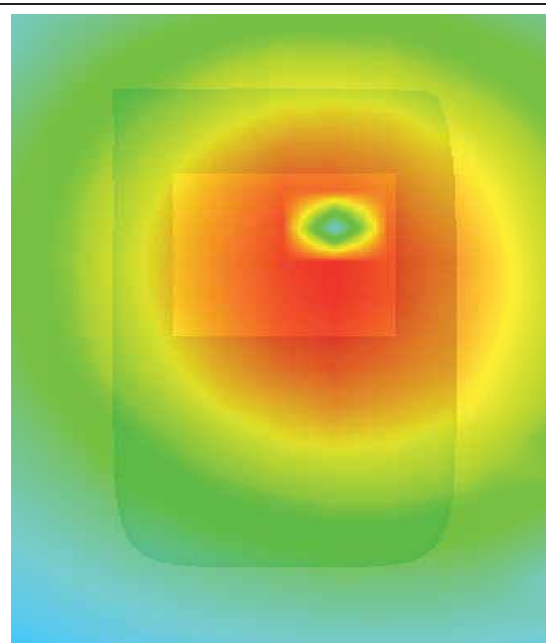
SAR, Z Axis Scan (X = 8, Y = 13)



3D scene shot



Hot spot position



MEASUREMENT 18

Type: Phone measurement (Complete)

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

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

Date of measurement: 8/10/2011

Measurement duration: 9 minutes 10 seconds

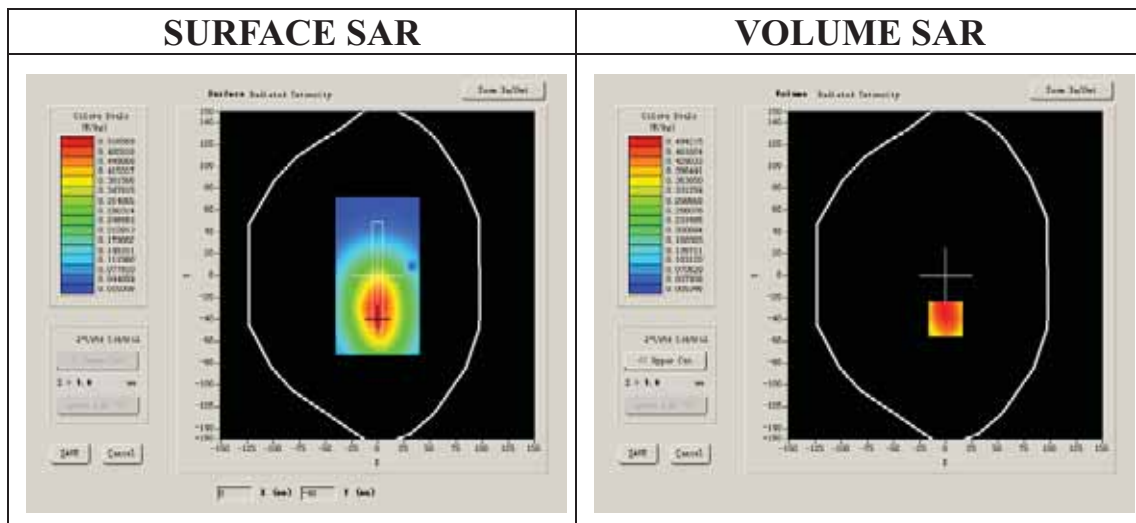
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Low
Signal	EDGE

B. SAR Measurement Results

Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550
Conductivity (S/m)	0.974596
Power drift (%)	-3.540000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:2



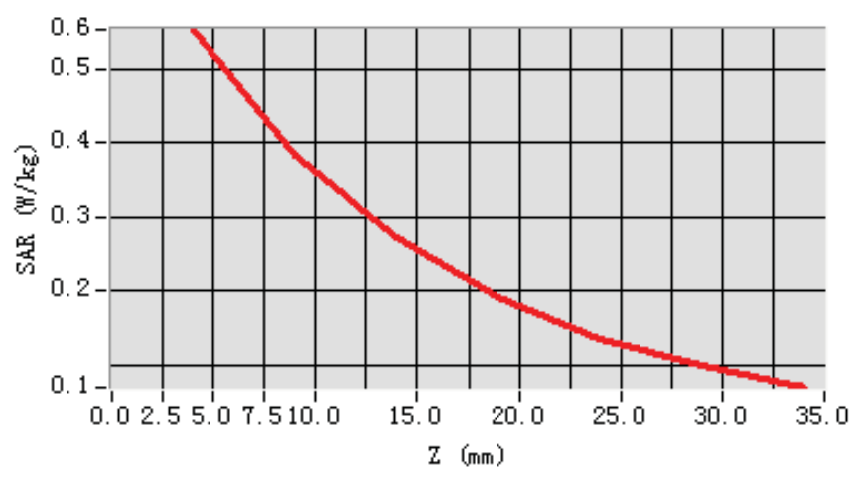
Maximum location: X=0.00, Y=-40.00

SAR 10g (W/Kg)	0.362136
SAR 1g (W/Kg)	0.533572

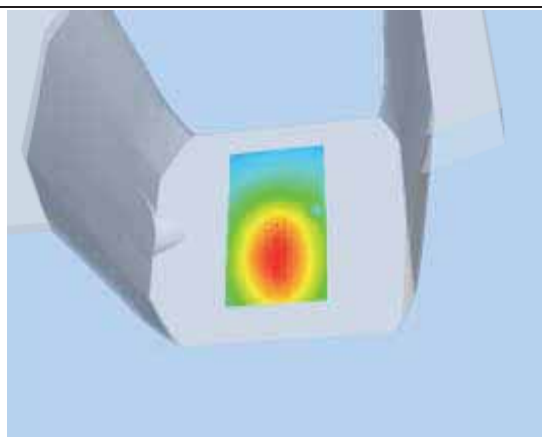
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5532	0.3824	0.2722	0.1910	0.1344	0.0980

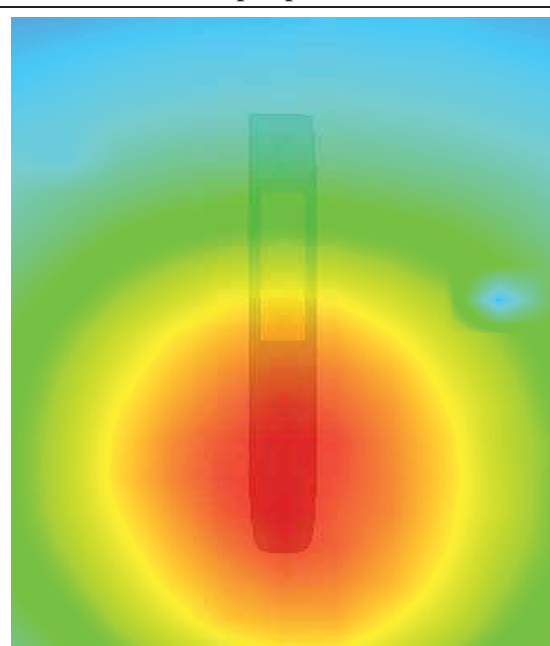
SAR, Z Axis Scan (X = 0, Y = -40)



3D scen shot



Hot spot position



MEASUREMENT 19

Type: Phone measurement (Complete)

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

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

Date of measurement: 8/10/2011

Measurement duration: 9 minutes 24 seconds

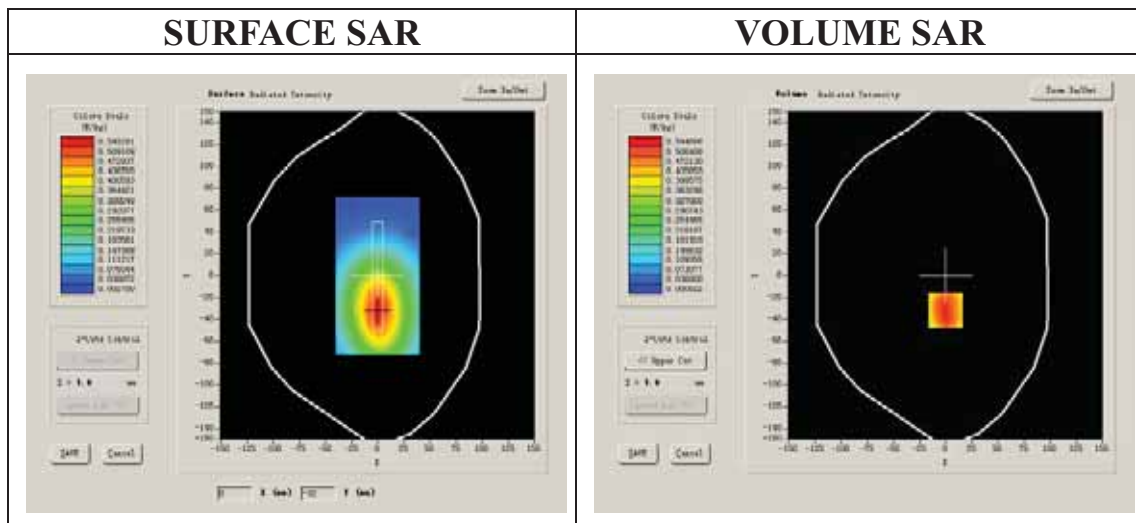
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Low
Signal	EDGE

B. SAR Measurement Results

Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550
Conductivity (S/m)	0.974596
Power drift (%)	-2.450000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:2



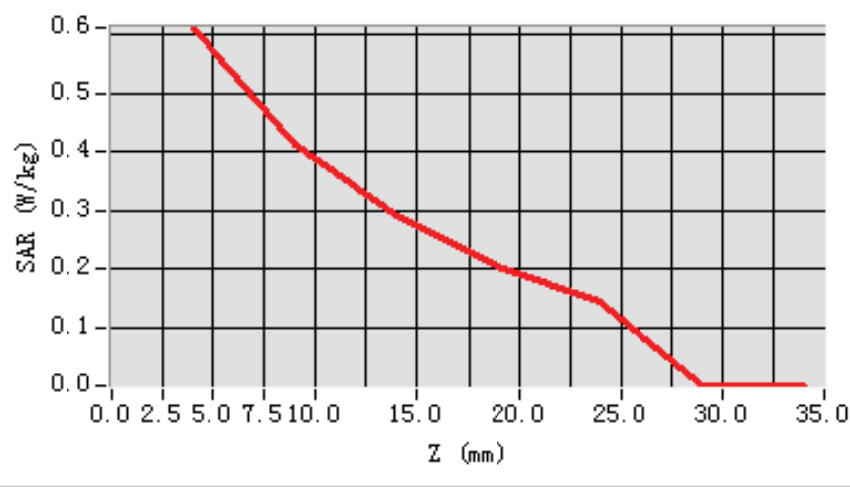
Maximum location: X=0.00, Y=-32.00

SAR 10g (W/Kg)	0.401194
SAR 1g (W/Kg)	0.612937

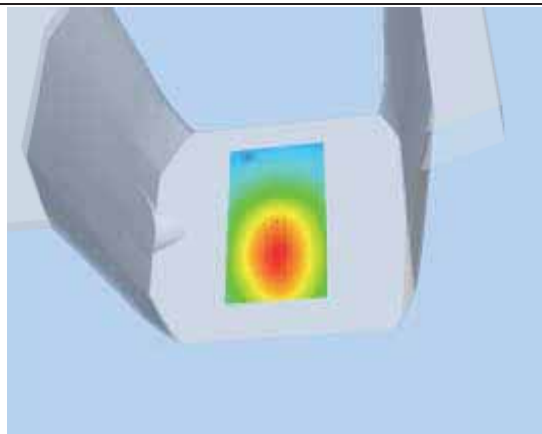
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6126	0.4124	0.2901	0.2038	0.1443	0.0007

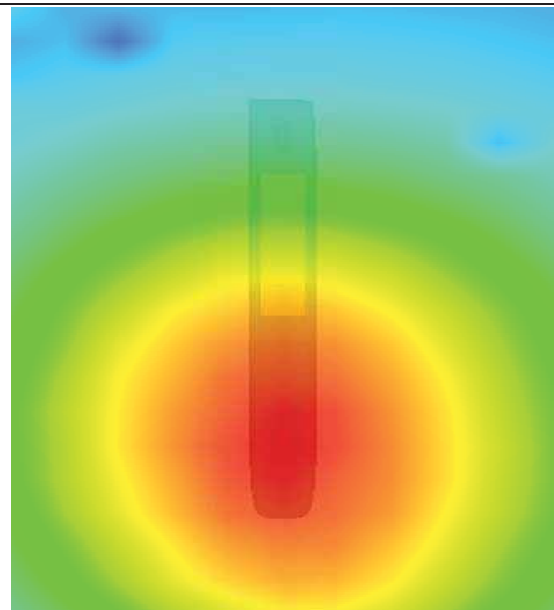
SAR, Z Axis Scan (X = 0, Y = -32)



3D scen shot



Hot spot position



MEASUREMENT 20

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 9 minutes 6 seconds

A. Experimental conditions.

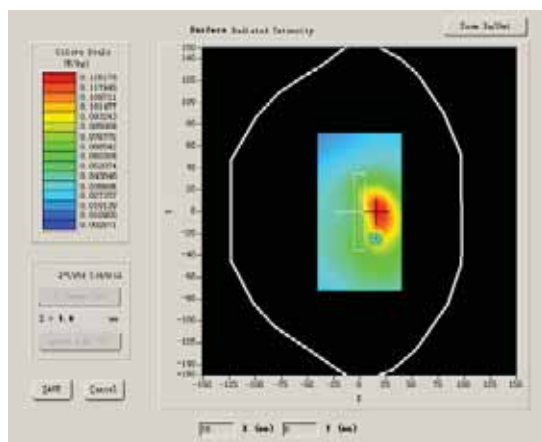
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Low
Signal	EDGE

B. SAR Measurement Results

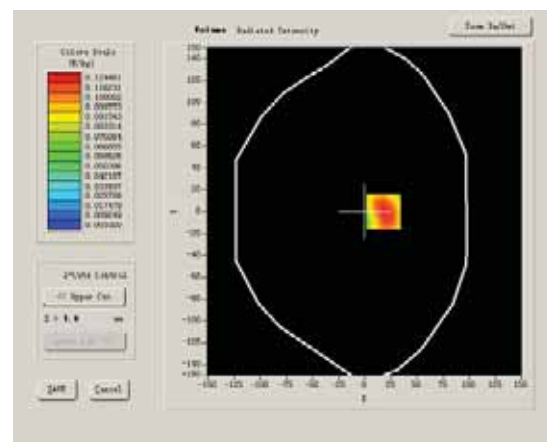
Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	54.014999
Relative permittivity	21.332850
Conductivity (S/m)	1.005962
Power drift (%)	-1.620000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



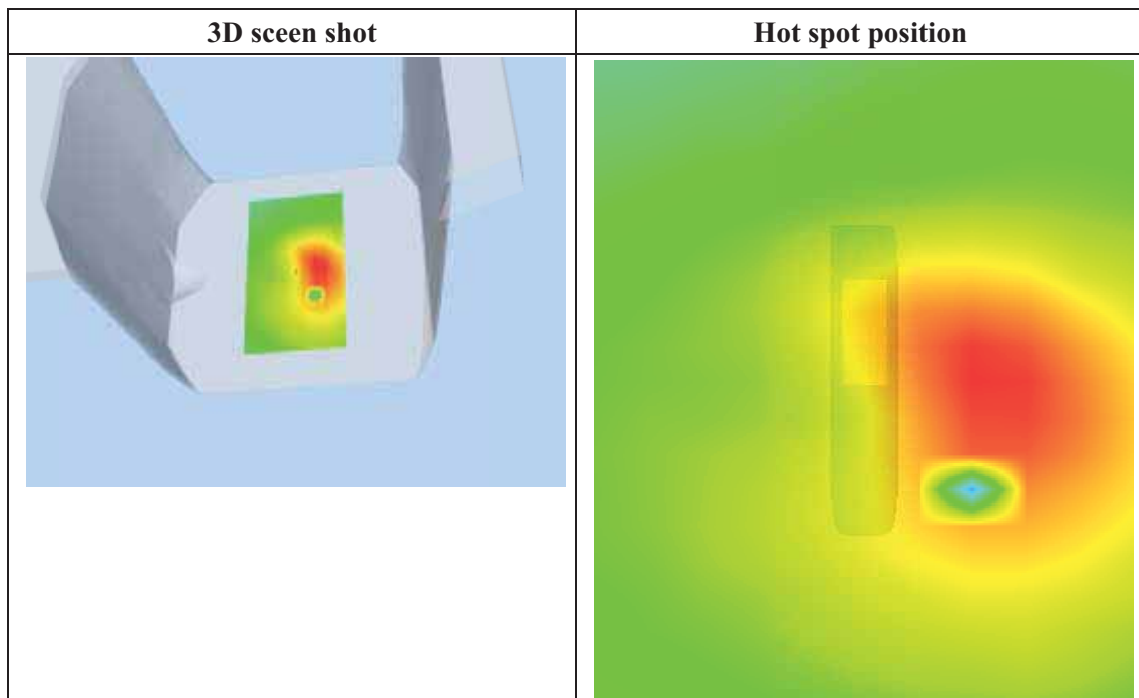
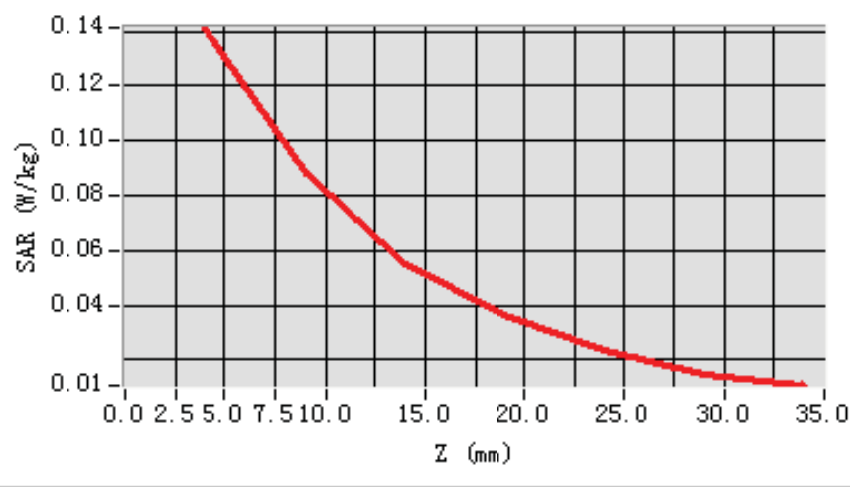
Maximum location: X=18.00, Y=0.00

SAR 10g (W/Kg)	0.084234
SAR 1g (W/Kg)	0.136156

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1413	0.0877	0.0547	0.0367	0.0235	0.0150

SAR, Z Axis Scan (X = 18, Y = 0)



MEASUREMENT 21

Type: Phone measurement (Complete)

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

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

Date of measurement:9/11/2011

Measurement duration: 8 minutes 13 seconds

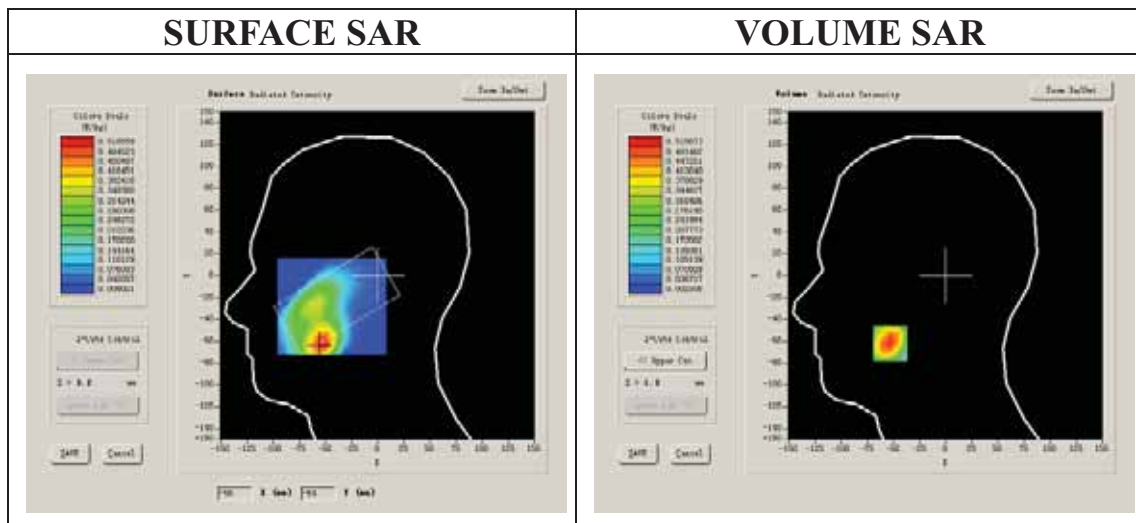
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Cheek
Band	GSM1900
Channels	Low
Signal	GSM

B. SAR Measurement Results

Lower Band SAR (Channel 512):

Frequency (MHz)	1850.199951
Relative permittivity (real part)	39.993999
Relative permittivity	12.991650
Conductivity (S/m)	1.335397
Power drift (%)	2.040000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:8



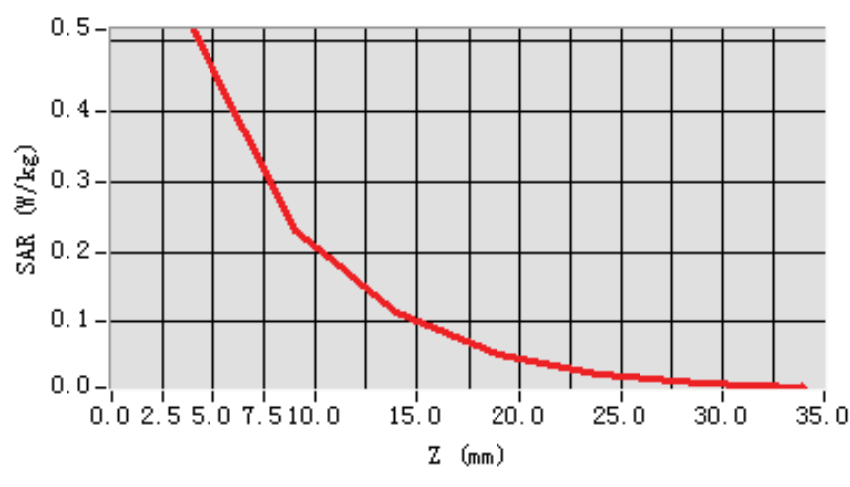
Maximum location: X=-53.00, Y=-62.00

SAR 10g (W/Kg)	0.245802
SAR 1g (W/Kg)	0.493663

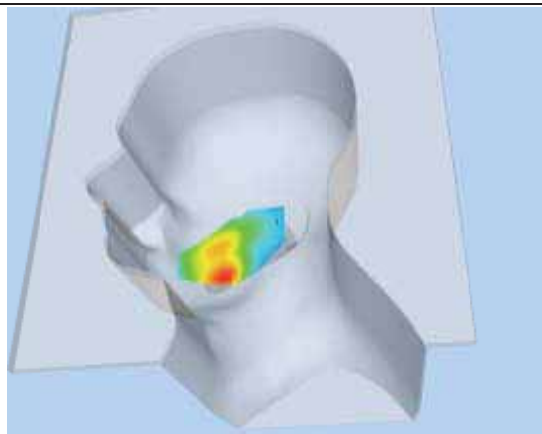
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5157	0.2306	0.1124	0.0530	0.0261	0.0139

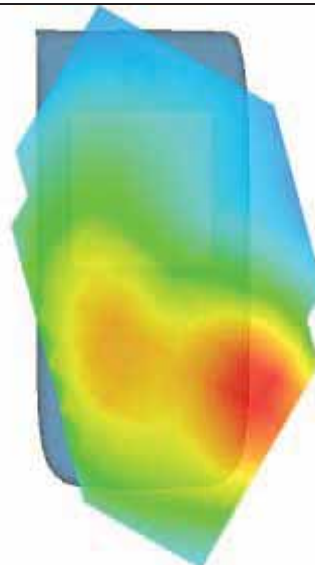
SAR, Z Axis Scan (X = -53, Y = -62)



3D scen shot



Hot spot position



MEASUREMENT 22

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 7 minutes 27 seconds

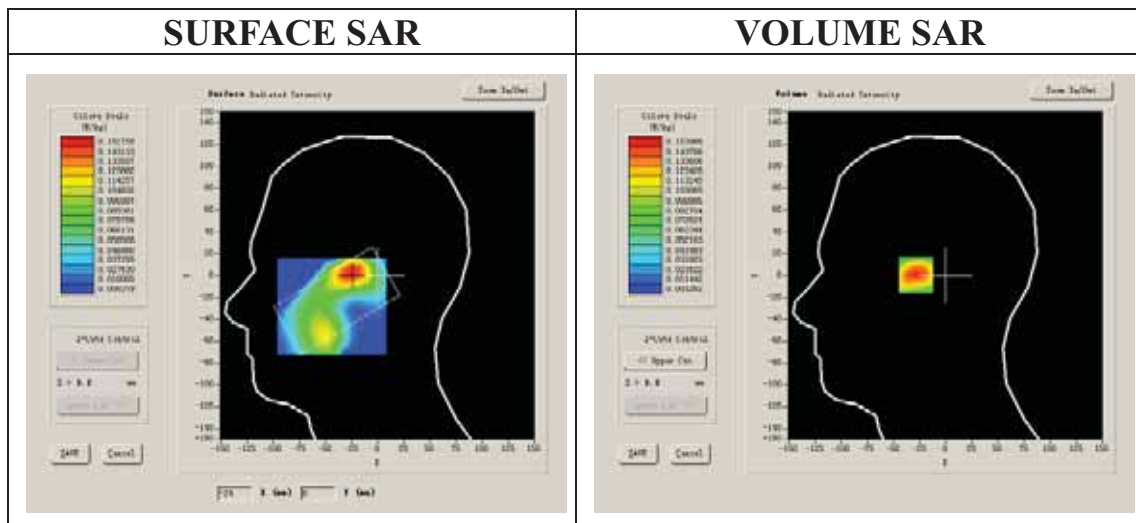
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Tilt
Band	GSM1900
Channels	Low
Signal	GSM

B. SAR Measurement Results

Lower Band SAR (Channel 512):

Frequency (MHz)	1850.199951
Relative permittivity (real part)	39.993999
Relative permittivity	12.991650
Conductivity (S/m)	1.335397
Power drift (%)	-1.190000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:8



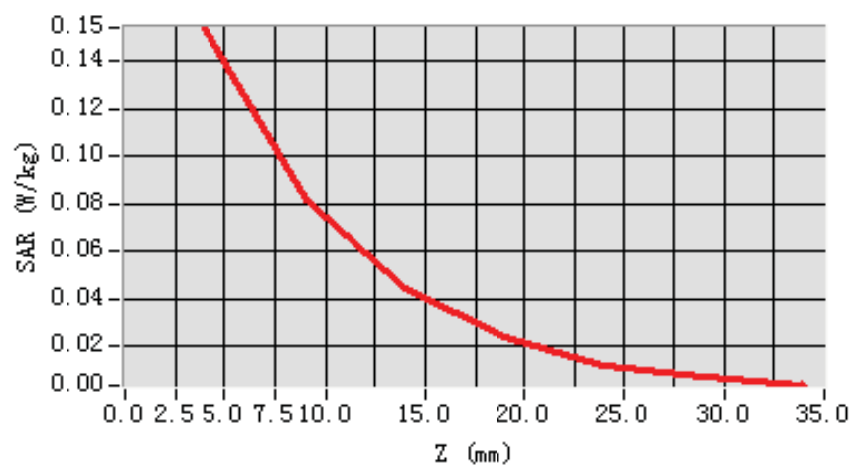
Maximum location: X=-25.00, Y=2.00

SAR 10g (W/Kg)	0.079171
SAR 1g (W/Kg)	0.146635

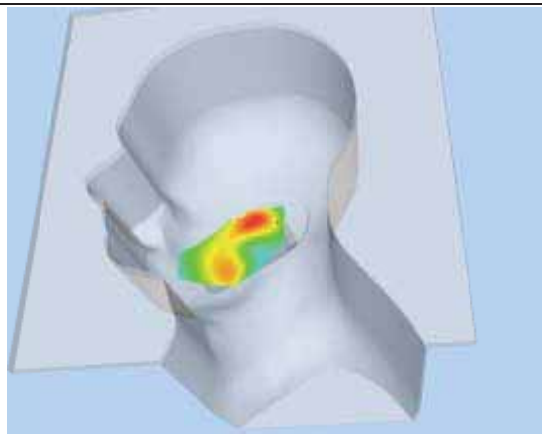
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1540	0.0819	0.0449	0.0244	0.0122	0.0074

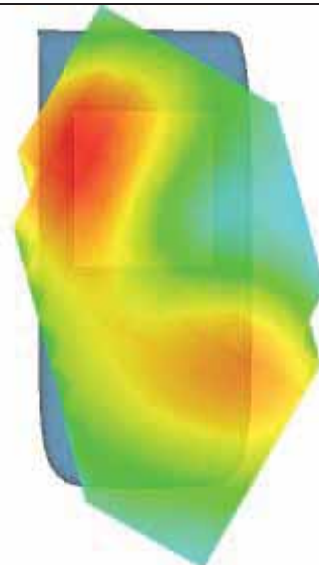
SAR, Z Axis Scan (X = -25, Y = 2)



3D scene shot



Hot spot position



MEASUREMENT 23

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 8 minutes 8 seconds

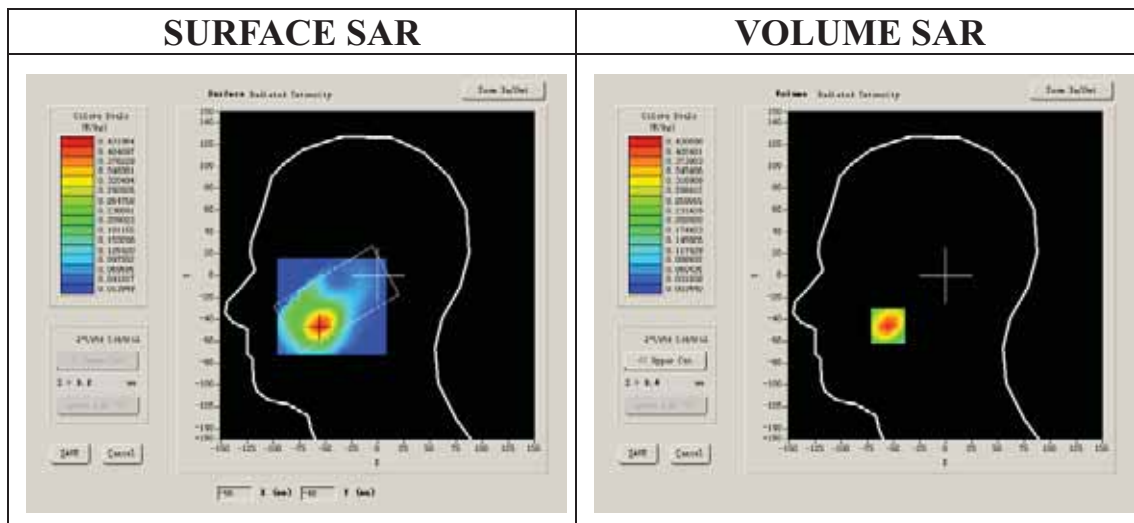
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	GSM1900
Channels	Low
Signal	GSM

B. SAR Measurement Results

Lower Band SAR (Channel 512):

Frequency (MHz)	1850.199951
Relative permittivity (real part)	39.993999
Relative permittivity	12.991650
Conductivity (S/m)	1.335397
Power drift (%)	0.590000
Ambient Temperature	22.6°C
Liquid Temperature	22.7°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:8



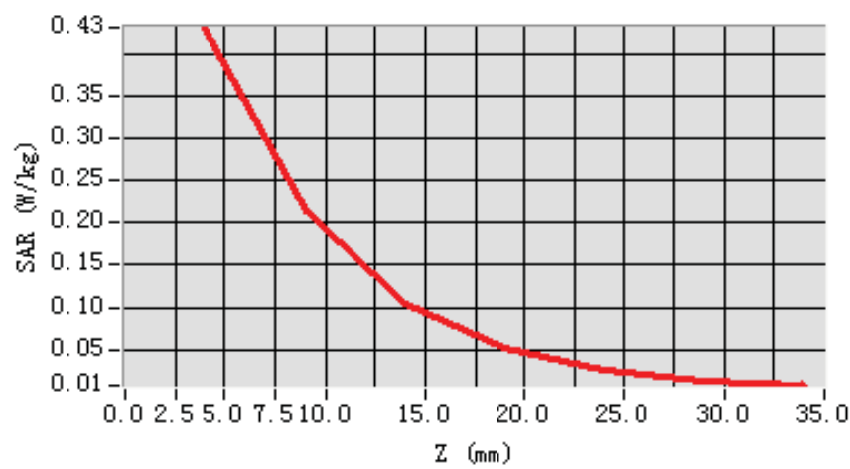
Maximum location: X=-55.00, Y=-46.00

SAR 10g (W/Kg)	0.208311
SAR 1g (W/Kg)	0.406038

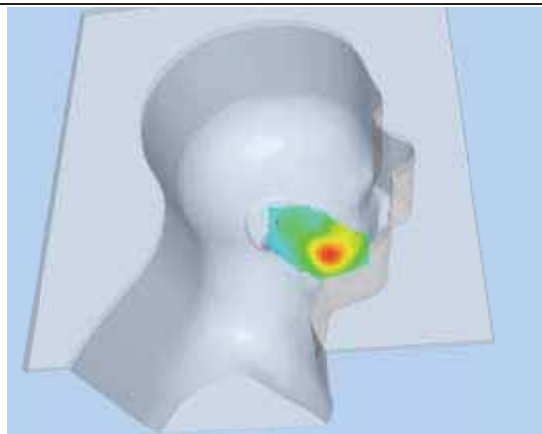
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4309	0.2137	0.1050	0.0513	0.0247	0.0116

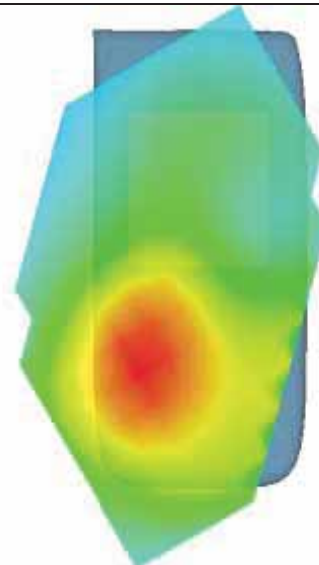
SAR, Z Axis Scan (X = -55, Y = -46)



3D scene shot



Hot spot position



MEASUREMENT 24

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 7 minutes 24 seconds

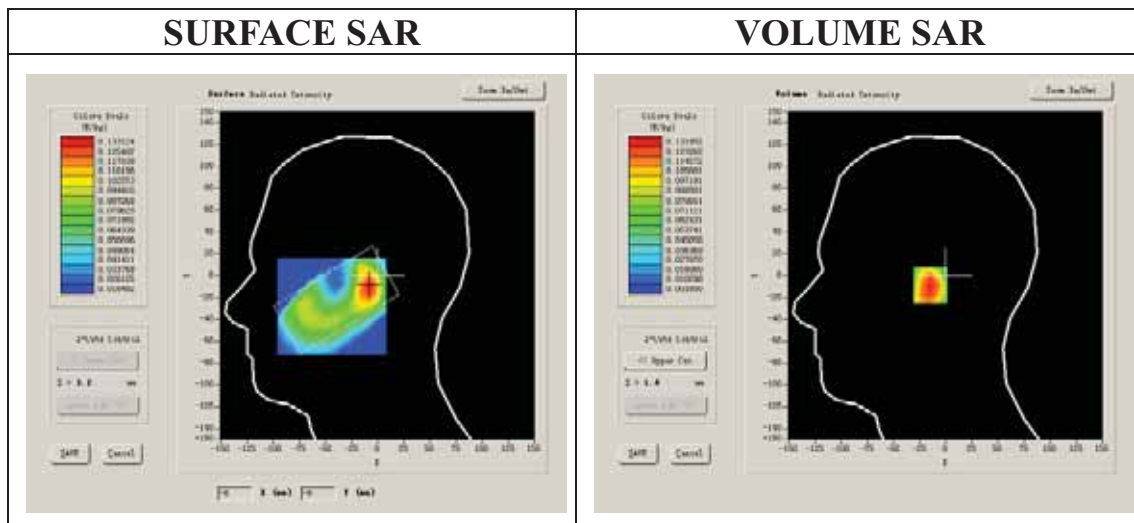
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Tilt
Band	GSM1900
Channels	Low
Signal	GSM

B. SAR Measurement Results

Lower Band SAR (Channel 512):

Frequency (MHz)	1850.199951
Relative permittivity (real part)	39.993999
Relative permittivity	12.991650
Conductivity (S/m)	1.335397
Power drift (%)	-0.150000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:8



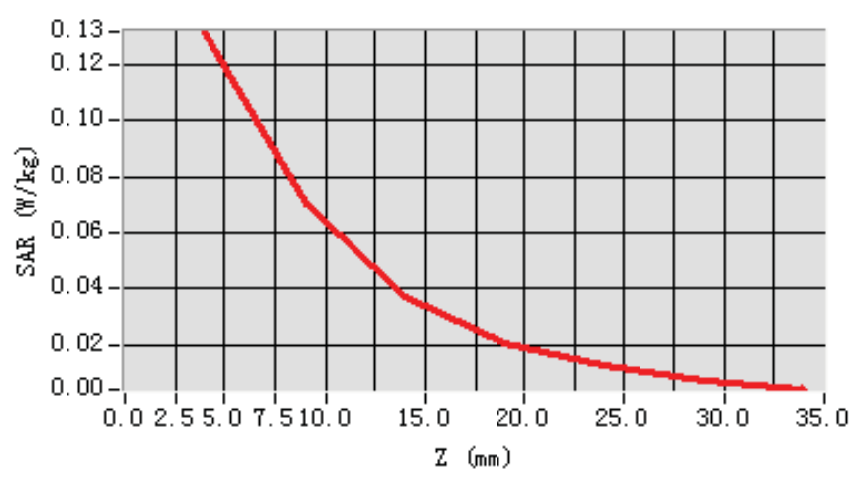
Maximum location: X=-8.00, Y=-9.00

SAR 10g (W/Kg)	0.067995
SAR 1g (W/Kg)	0.125832

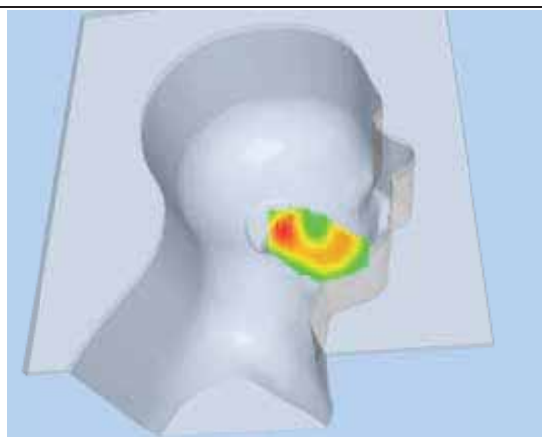
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1320	0.0702	0.0369	0.0202	0.0121	0.0072

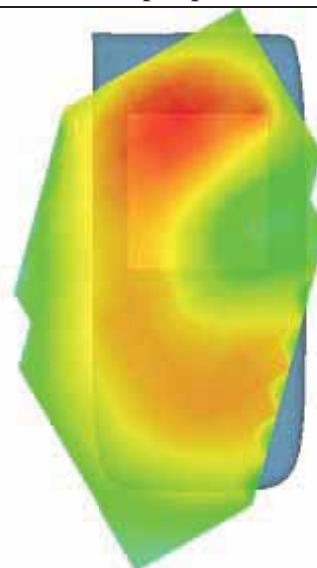
SAR, Z Axis Scan (X = -8, Y = -9)



3D scene shot



Hot spot position



MEASUREMENT 25

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 7 seconds

A. Experimental conditions.

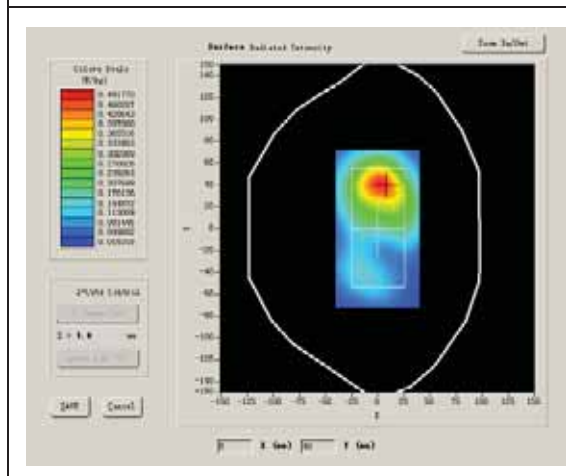
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	Low
Signal	GSM

B. SAR Measurement Results

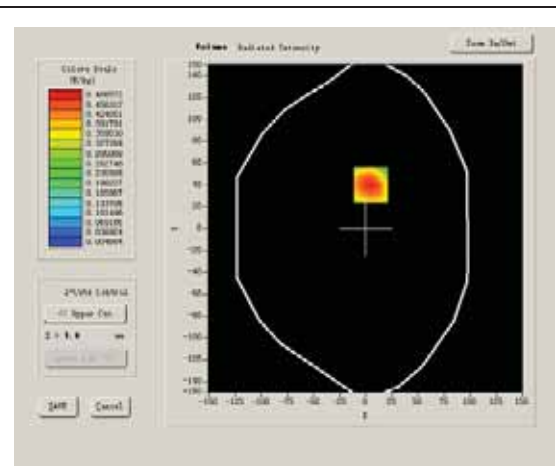
Lower Band SAR (Channel 512):

Frequency (MHz)	1850.000000
Relative permittivity (real part)	52.540001
Relative permittivity	14.070000
Conductivity (S/m)	1.469533
Power drift (%)	-0.560000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:8

SURFACE SAR



VOLUME SAR



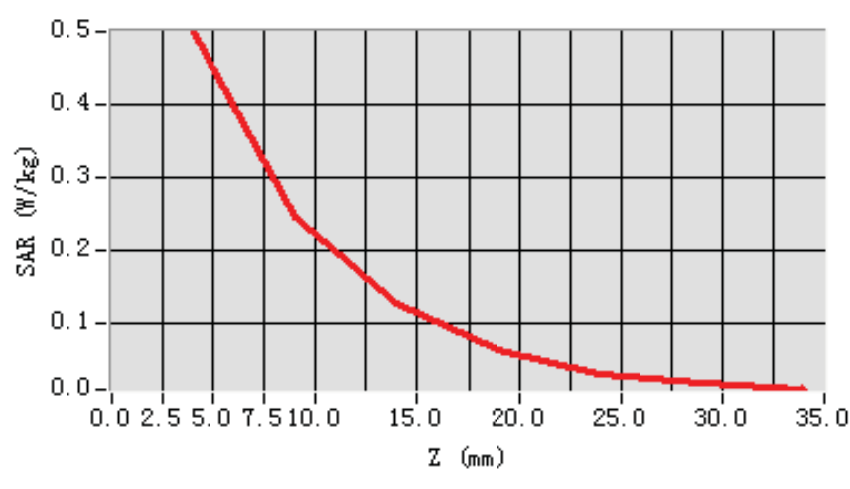
Maximum location: X=5.00, Y=40.00

SAR 10g (W/Kg)	0.260433
SAR 1g (W/Kg)	0.480771

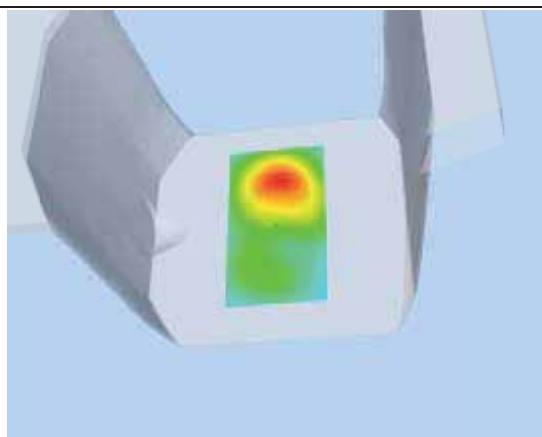
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4999	0.2467	0.1260	0.0631	0.0316	0.0181

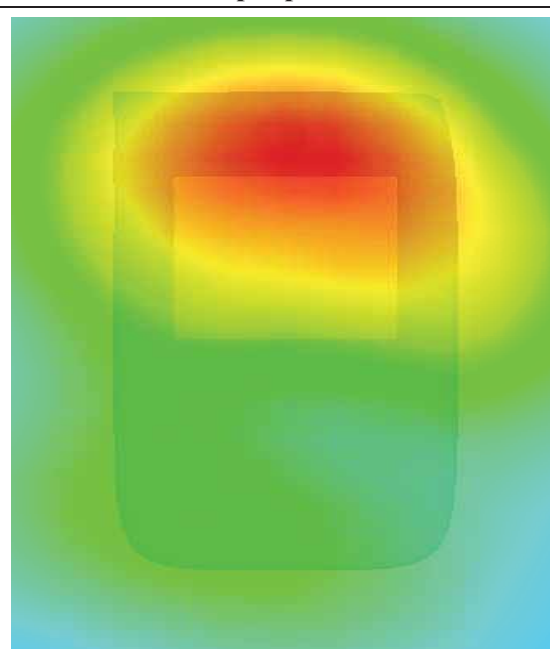
SAR, Z Axis Scan (X = 5, Y = 40)



3D scene shot



Hot spot position



MEASUREMENT 26

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 3 seconds

A. Experimental conditions.

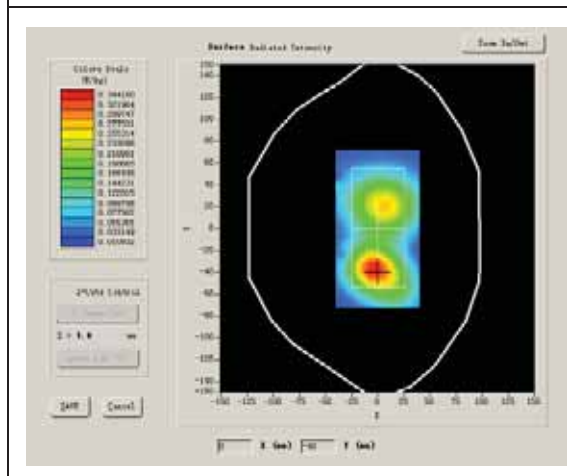
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	Low
Signal	GSM

B. SAR Measurement Results

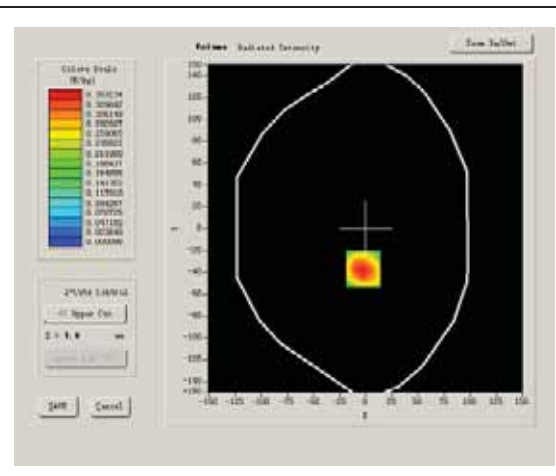
Lower Band SAR (Channel 661):

Frequency (MHz)	1850.000000
Relative permittivity (real part)	52.540001
Relative permittivity	14.070000
Conductivity (S/m)	1.469533
Power drift (%)	0.970000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:8

SURFACE SAR



VOLUME SAR



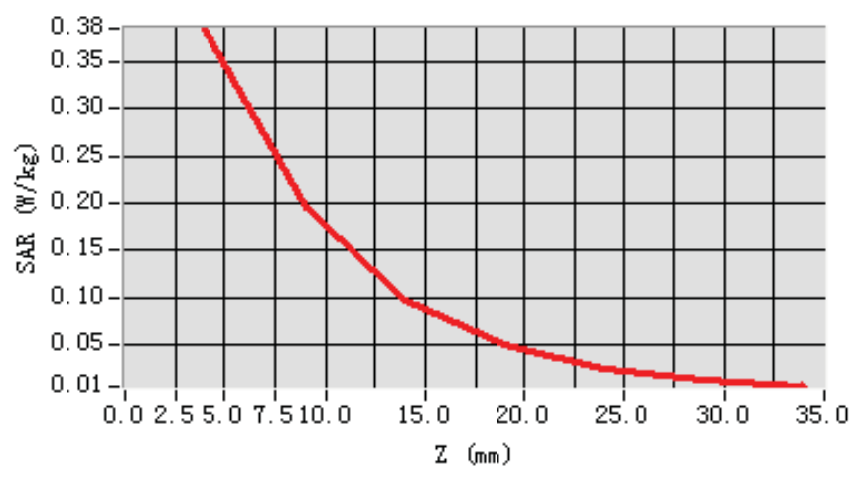
Maximum location: X=-2.00, Y=-37.00

SAR 10g (W/Kg)	0.197220
SAR 1g (W/Kg)	0.372706

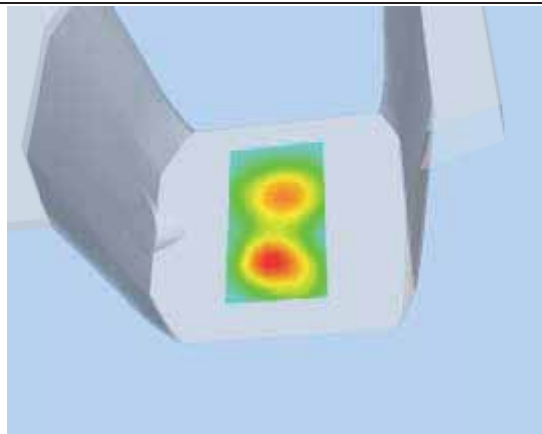
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.3846	0.1964	0.0968	0.0495	0.0256	0.0132

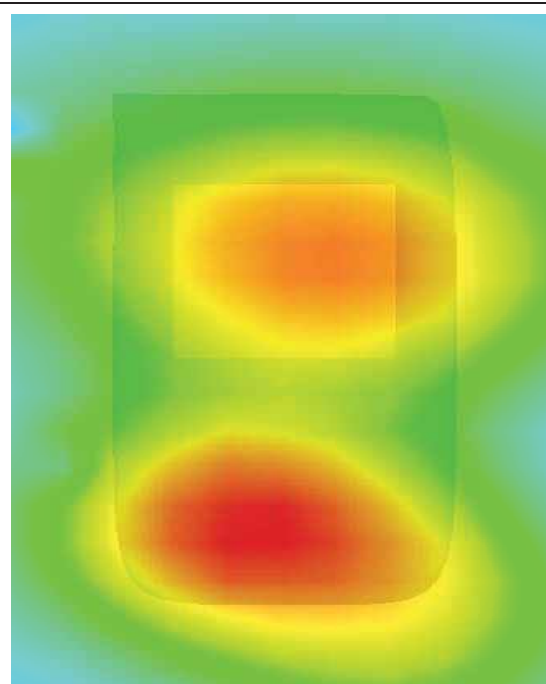
SAR, Z Axis Scan (X = -2, Y = -37)



3D scen shot



Hot spot position



MEASUREMENT 27

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 8 seconds

A. Experimental conditions.

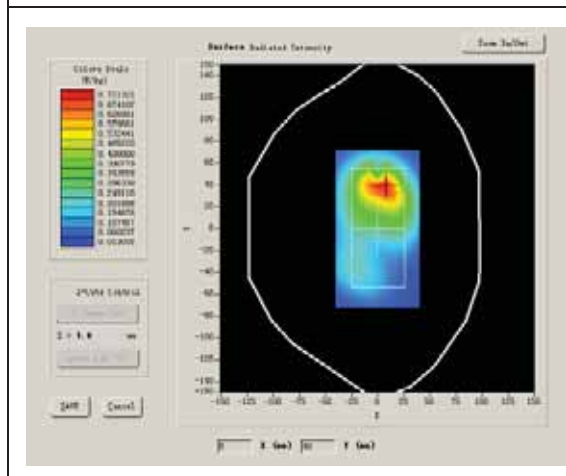
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	Low
Signal	GPRS

B. SAR Measurement Results

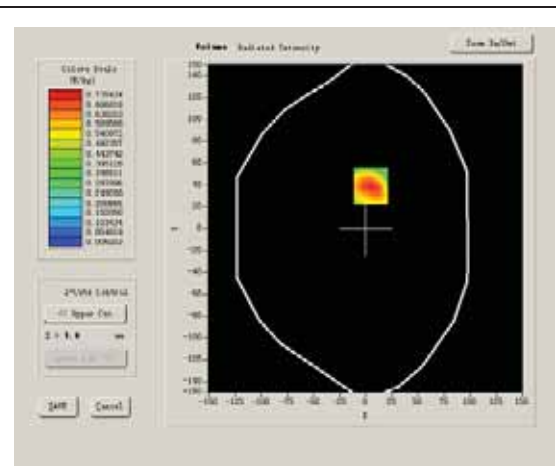
Lower Band SAR (Channel 512):

Frequency (MHz)	1850.199951
Relative permittivity (real part)	52.540001
Relative permittivity	14.070000
Conductivity (S/m)	1.446240
Power drift (%)	1.210000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



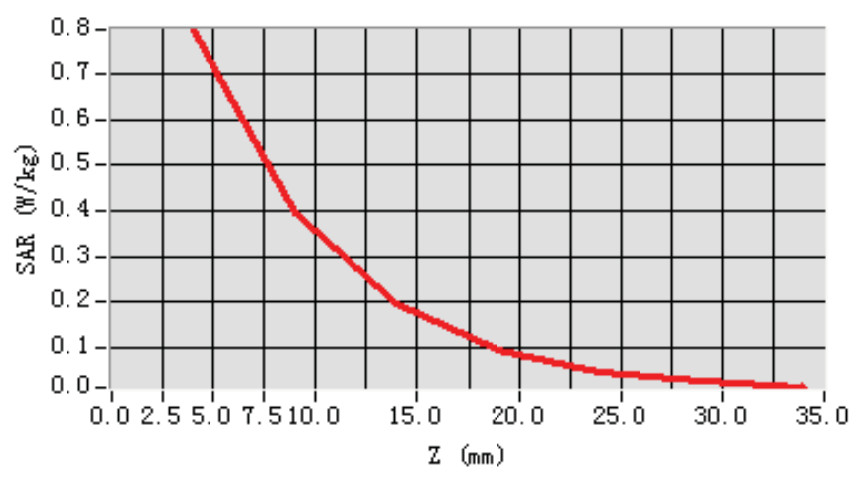
Maximum location: X=5.00, Y=39.00

SAR 10g (W/Kg)	0.401054
SAR 1g (W/Kg)	0.757980

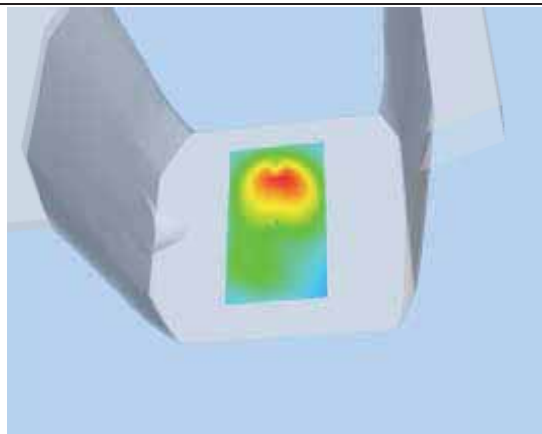
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.7965	0.3932	0.1953	0.0969	0.0488	0.0264

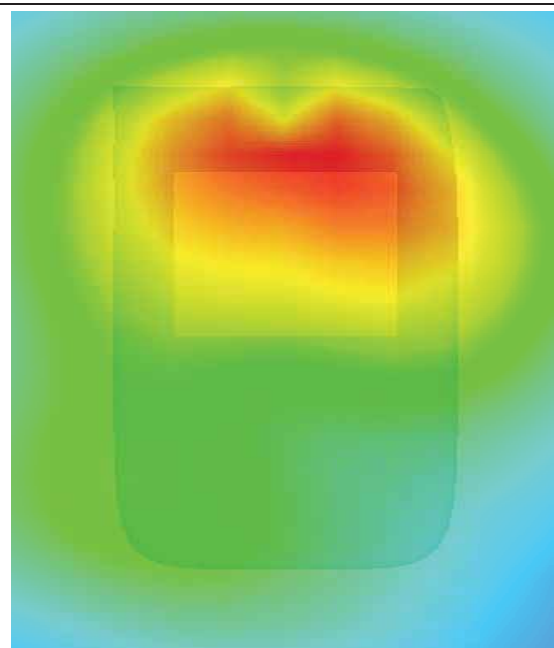
SAR, Z Axis Scan (X = 5, Y = 39)



3D scene shot



Hot spot position



MEASUREMENT 28

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 10 seconds

A. Experimental conditions.

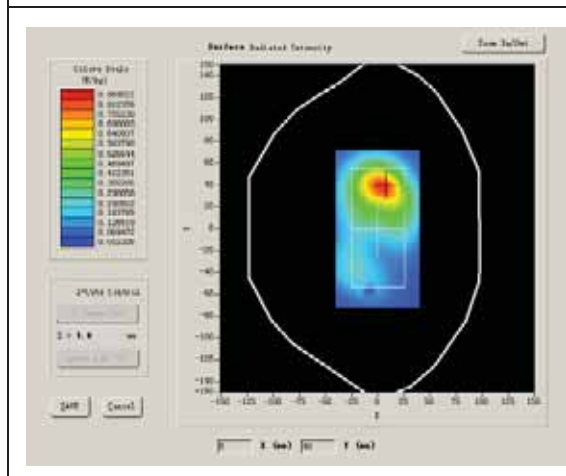
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	Middle
Signal	GPRS

B. SAR Measurement Results

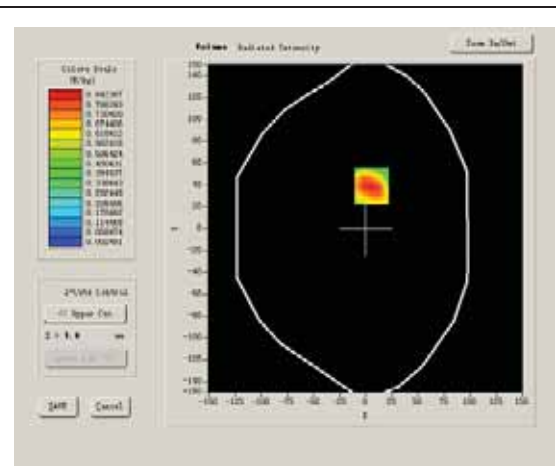
Middle Band SAR (Channel 661):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	52.540001
Relative permittivity	14.070000
Conductivity (S/m)	1.469533
Power drift (%)	-1.170000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



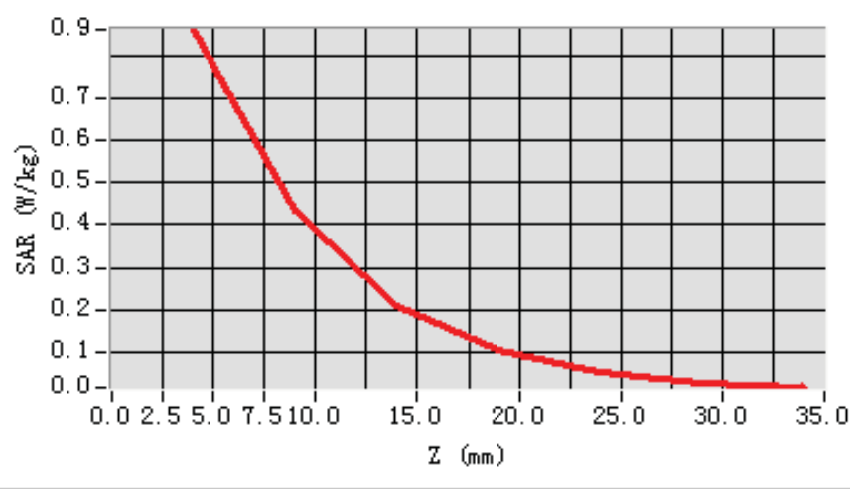
Maximum location: X=6.00, Y=39.00

SAR 10g (W/Kg)	0.432102
SAR 1g (W/Kg)	0.824287

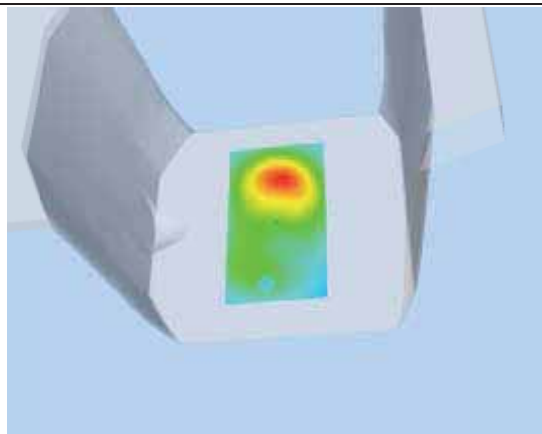
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.8620	0.4317	0.2108	0.1064	0.0527	0.0280

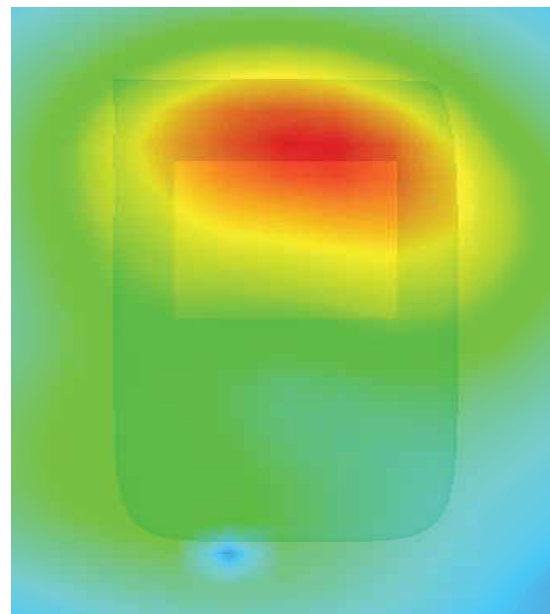
SAR, Z Axis Scan (X = 6, Y = 39)



3D scene shot



Hot spot position



MEASUREMENT 29

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 8 seconds

A. Experimental conditions.

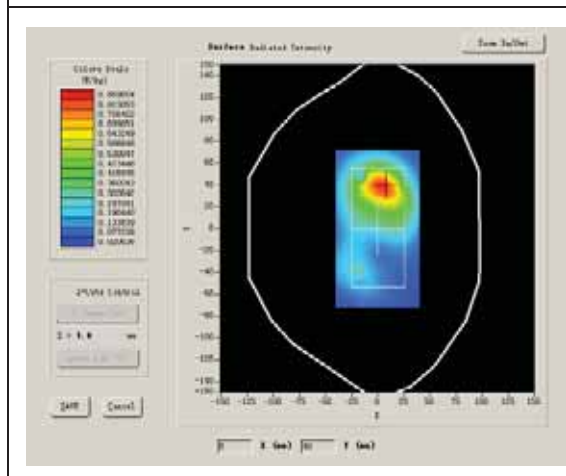
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	High
Signal	GPRS

B. SAR Measurement Results

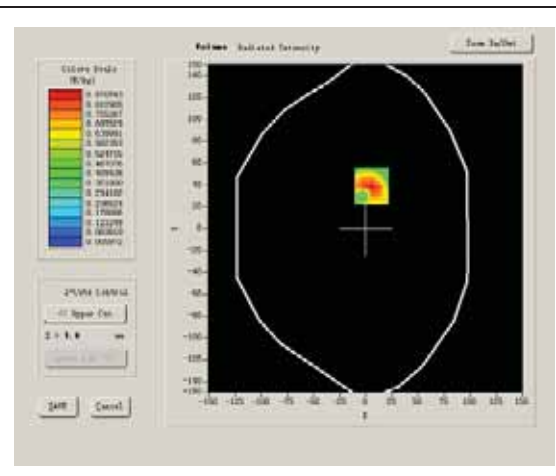
Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049
Relative permittivity (real part)	52.540001
Relative permittivity	14.070000
Conductivity (S/m)	1.492827
Power drift (%)	-1.190000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



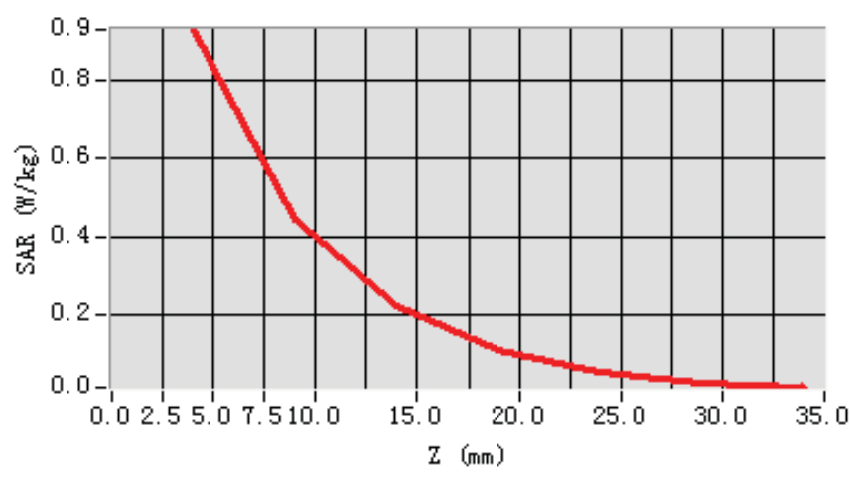
Maximum location: X=6.00, Y=39.00

SAR 10g (W/Kg)	0.430094
SAR 1g (W/Kg)	0.850071

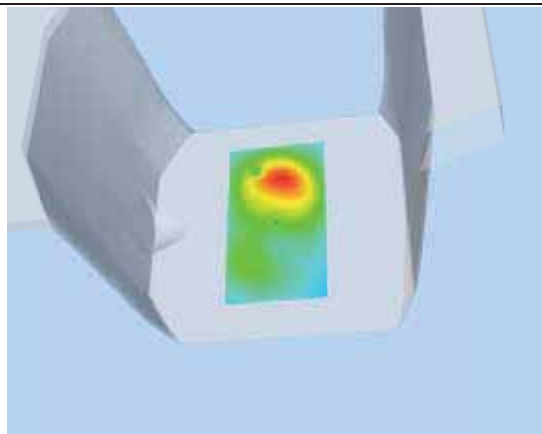
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.9010	0.4156	0.2020	0.0996	0.0412	0.0158

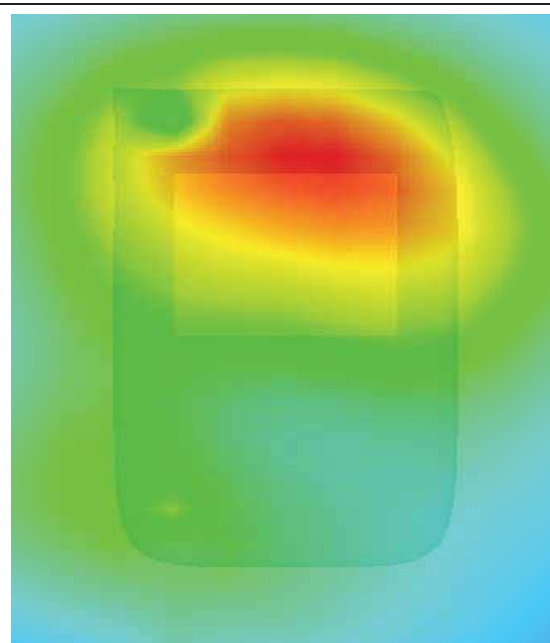
SAR, Z Axis Scan (X = 6, Y = 39)



3D scen shot



Hot spot position



MEASUREMENT 30

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 10 seconds

A. Experimental conditions.

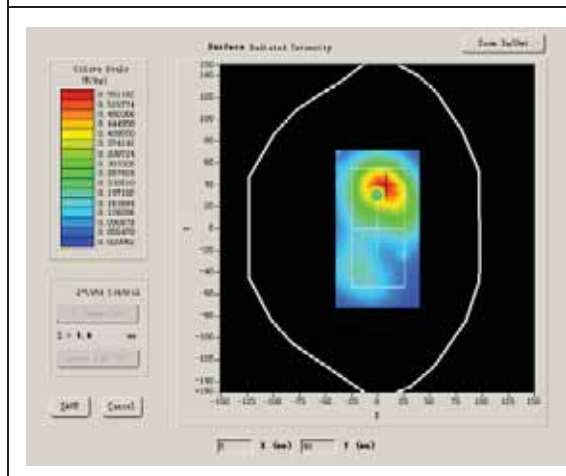
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	High
Signal	GPRS

B. SAR Measurement Results

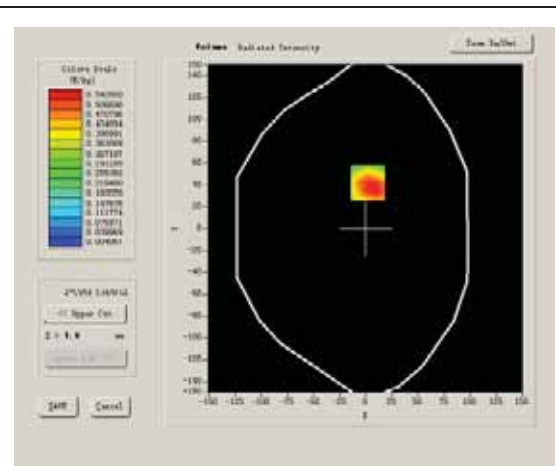
Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049
Relative permittivity (real part)	52.540001
Relative permittivity	14.070000
Conductivity (S/m)	1.492827
Power drift (%)	-0.870000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



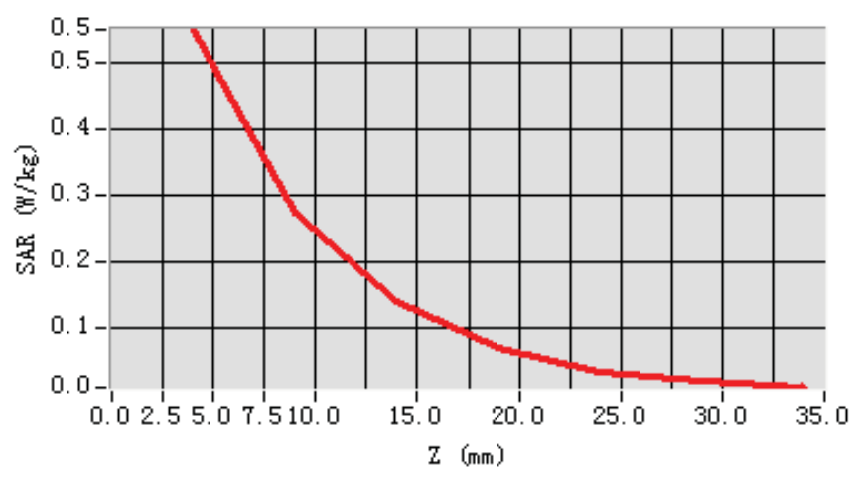
Maximum location: X=2.00, Y=42.00

SAR 10g (W/Kg)	0.297583
SAR 1g (W/Kg)	0.586919

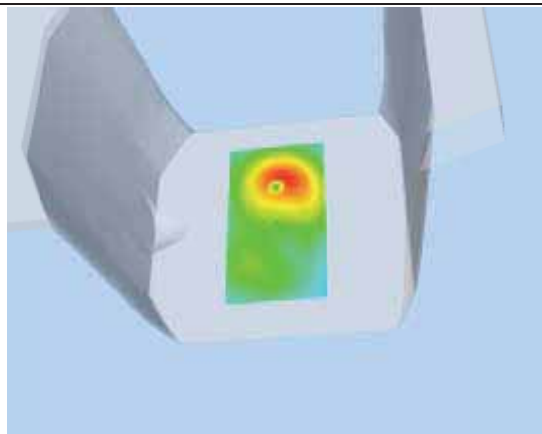
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5486	0.2721	0.1401	0.0712	0.0340	0.0196

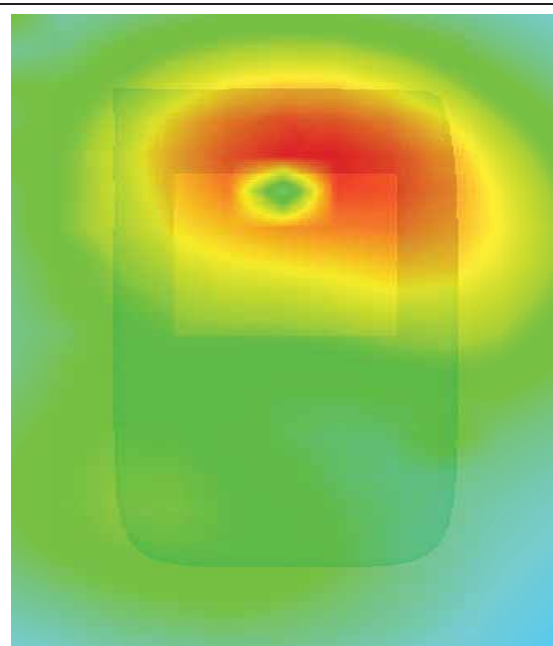
SAR, Z Axis Scan (X = 2, Y = 42)



3D scene shot



Hot spot position



MEASUREMENT 31

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 8 seconds

A. Experimental conditions.

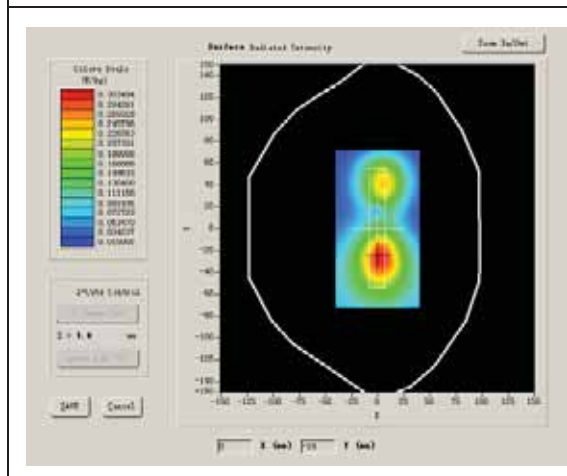
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	High
Signal	GPRS

B. SAR Measurement Results

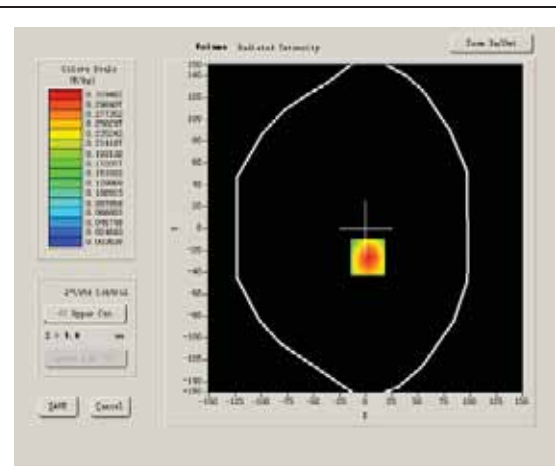
Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049
Relative permittivity (real part)	52.540001
Relative permittivity	14.070000
Conductivity (S/m)	1.492827
Power drift (%)	0.020000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



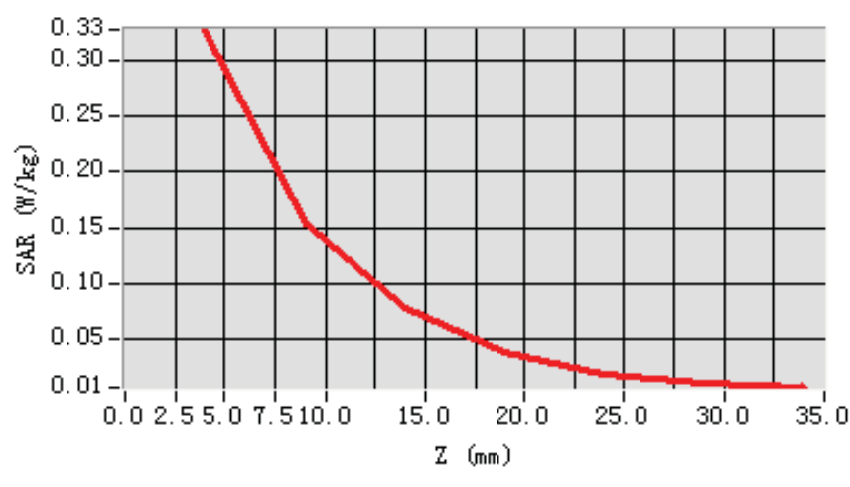
Maximum location: X=2.00, Y=-26.00

SAR 10g (W/Kg)	0.166357
SAR 1g (W/Kg)	0.346938

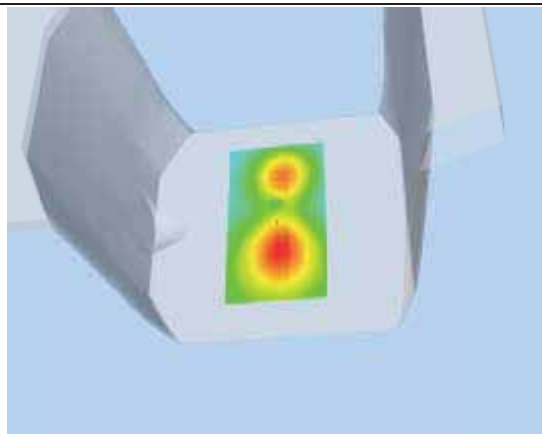
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.3269	0.1539	0.0776	0.0390	0.0195	0.0106

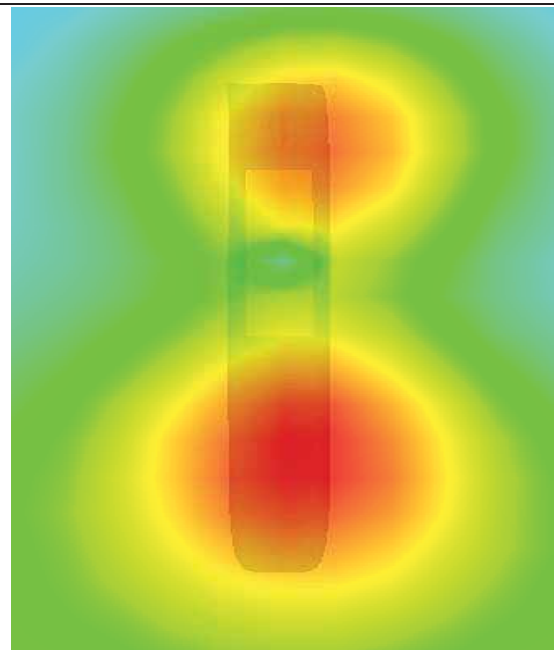
SAR, Z Axis Scan (X = 2, Y = -26)



3D scen shot



Hot spot position



MEASUREMENT 32

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 7 seconds

A. Experimental conditions.

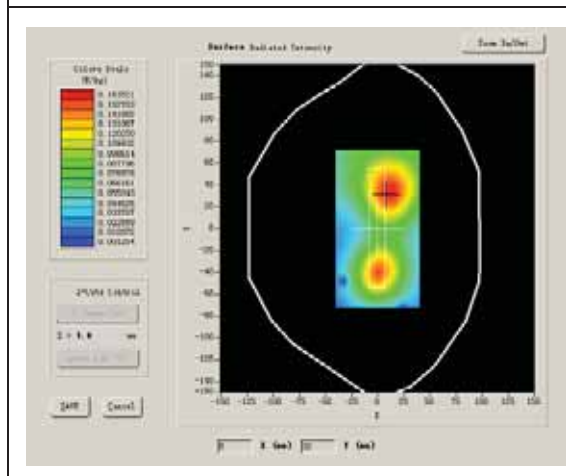
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	High
Signal	GPRS

B. SAR Measurement Results

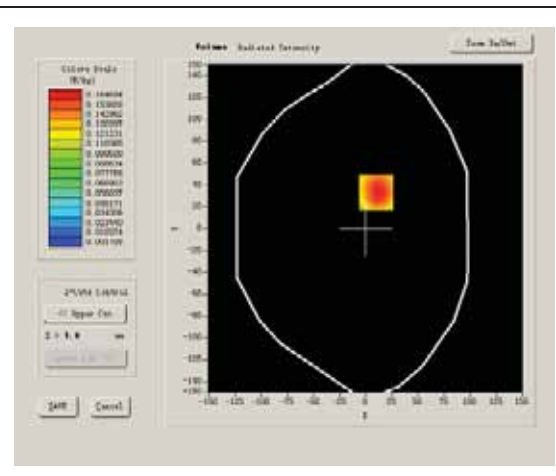
Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049
Relative permittivity (real part)	52.540001
Relative permittivity	14.070000
Conductivity (S/m)	1.492827
Power drift (%)	-0.450000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



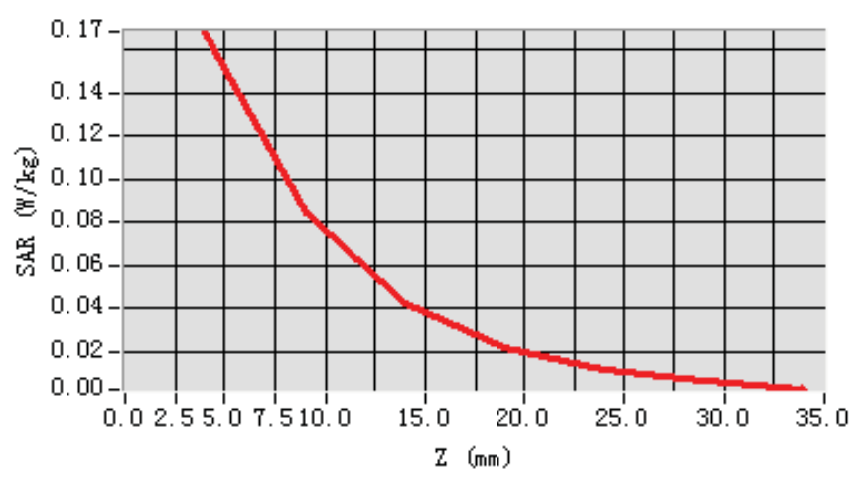
Maximum location: X=10.00, Y=33.00

SAR 10g (W/Kg)	0.090172
SAR 1g (W/Kg)	0.163602

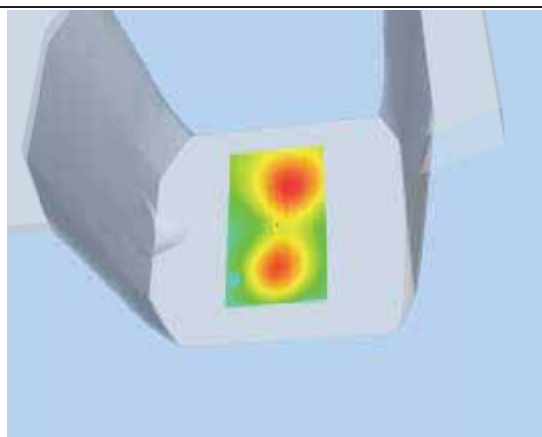
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1685	0.0843	0.0427	0.0225	0.0121	0.0064

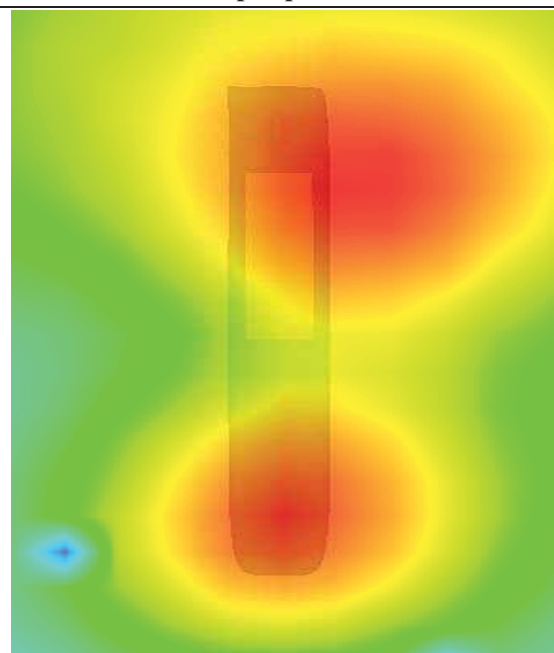
SAR, Z Axis Scan (X = 10, Y = 33)



3D scene shot



Hot spot position



MEASUREMENT 33

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 7 seconds

A. Experimental conditions.

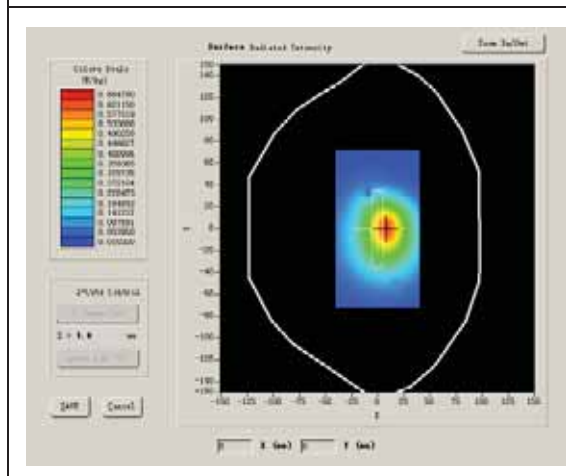
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	High
Signal	GPRS

B. SAR Measurement Results

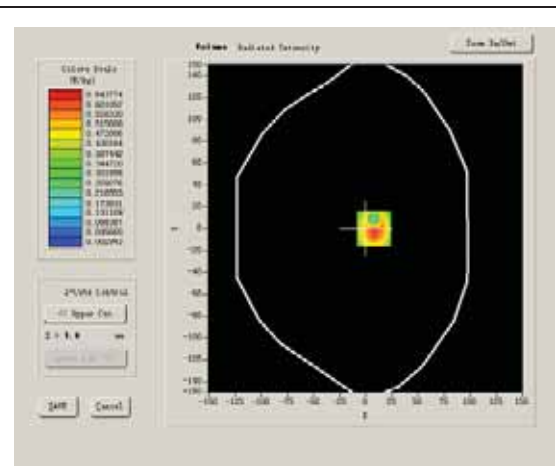
Higher Band SAR (Channel 661):

Frequency (MHz)	1909.800049
Relative permittivity (real part)	52.540001
Relative permittivity	14.070000
Conductivity (S/m)	1.492827
Power drift (%)	-3.240000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



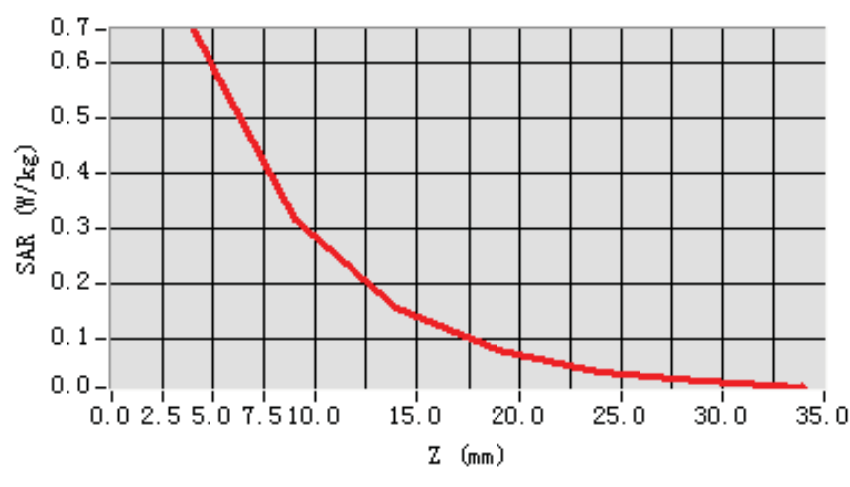
Maximum location: X=8.00, Y=0.00

SAR 10g (W/Kg)	0.303411
SAR 1g (W/Kg)	0.636870

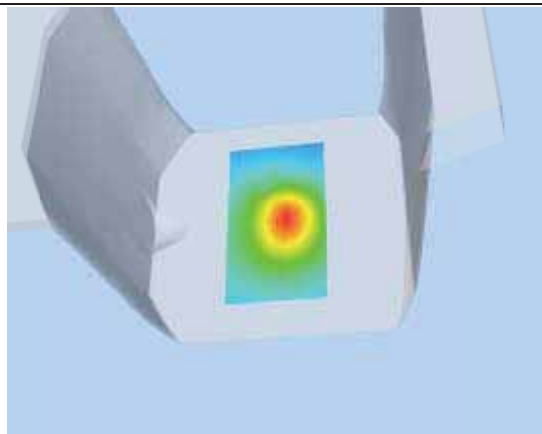
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6588	0.3130	0.1552	0.0783	0.0397	0.0207

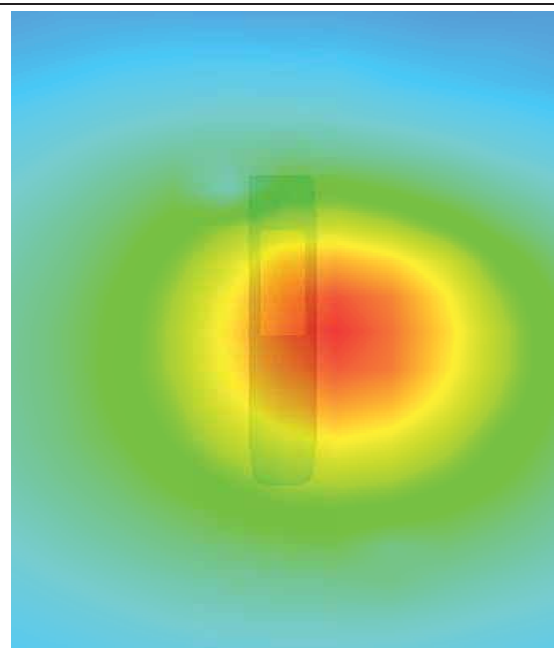
SAR, Z Axis Scan (X = 8, Y = 0)



3D scene shot



Hot spot position



MEASUREMENT 34

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 7 seconds

A. Experimental conditions.

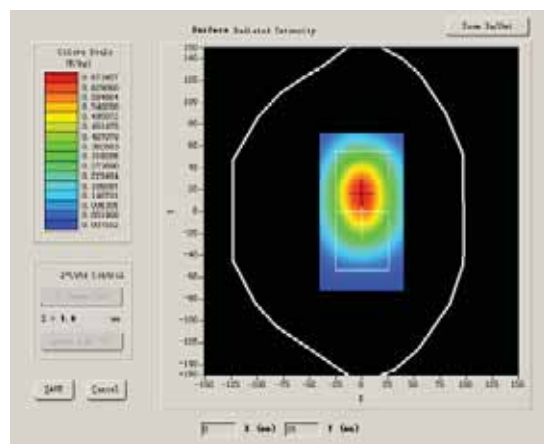
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	Low
Signal	EDGE

B. SAR Measurement Results

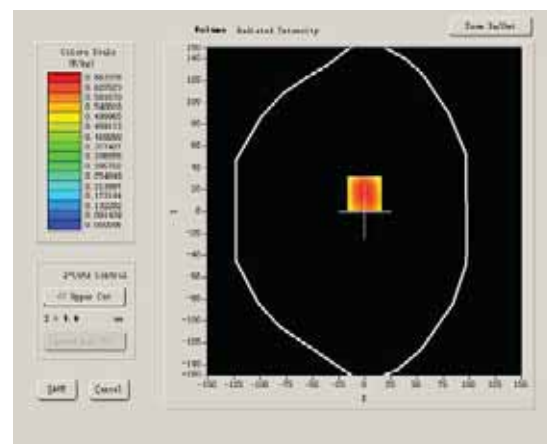
Lower Band SAR (Channel 512):

Frequency (MHz)	1850.000000
Relative permittivity (real part)	52.540001
Relative permittivity	14.070000
Conductivity (S/m)	1.492827
Power drift (%)	-1.450000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



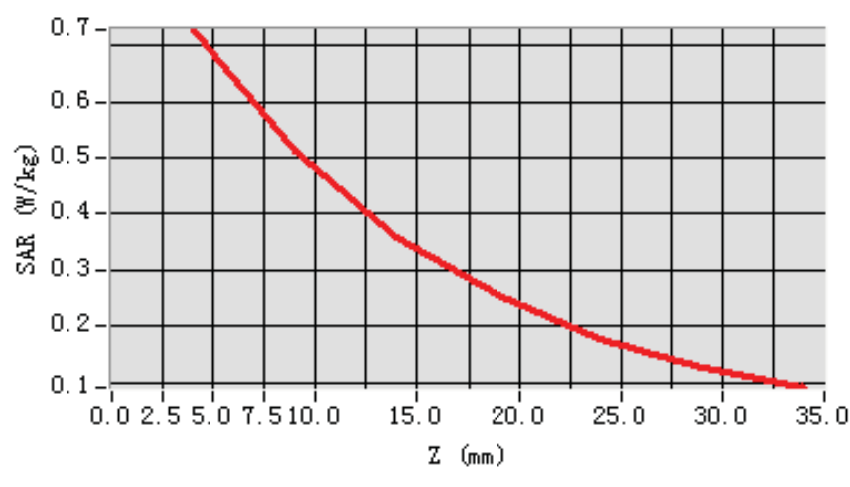
Maximum location: X=0.00, Y=16.00

SAR 10g (W/Kg)	0.474679
SAR 1g (W/Kg)	0.700109

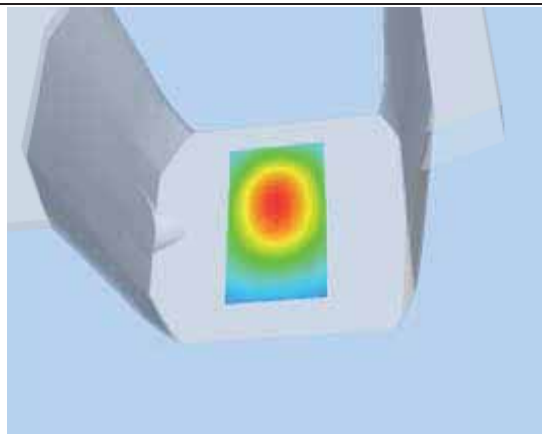
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.7283	0.5100	0.3598	0.2548	0.1781	0.1245

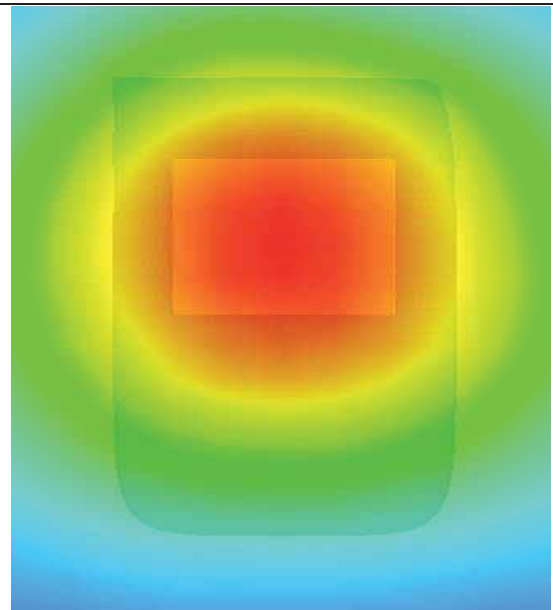
SAR, Z Axis Scan (X = 0, Y = 16)



3D scene shot



Hot spot position



MEASUREMENT 35

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 7 seconds

A. Experimental conditions.

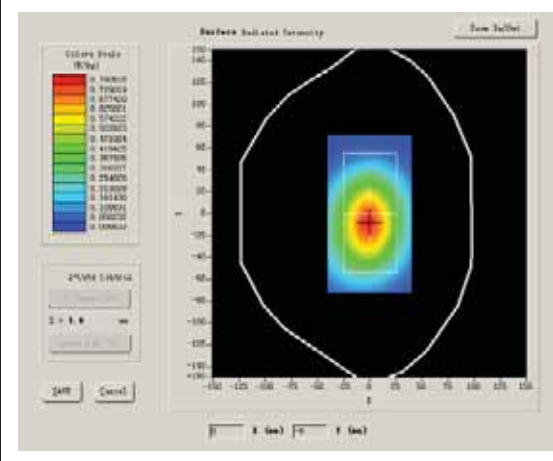
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	Middle
Signal	EDGE

B. SAR Measurement Results

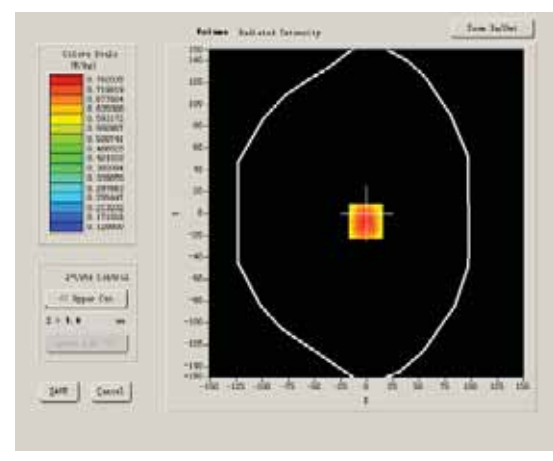
Middle Band SAR (Channel 661):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	52.540001
Relative permittivity	14.070000
Conductivity (S/m)	1.492827
Power drift (%)	-3.010000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:2

SURFACE SAR



VOLUME SAR

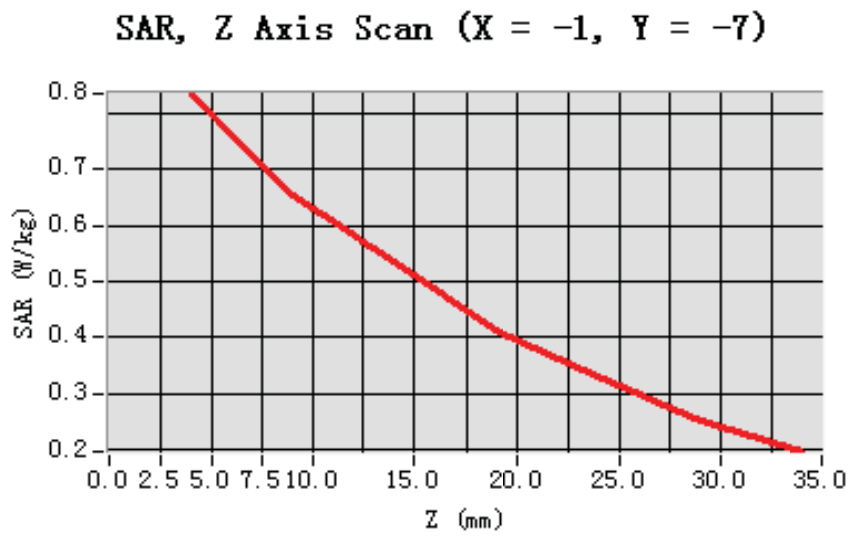


Maximum location: X=-1.00, Y=-7.00

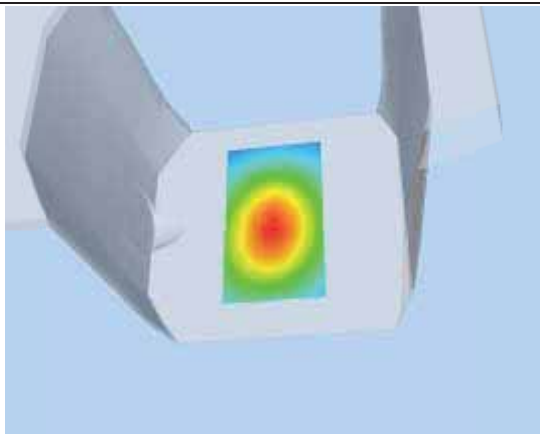
SAR 10g (W/Kg)	0.601524
SAR 1g (W/Kg)	0.802114

Z Axis Scan

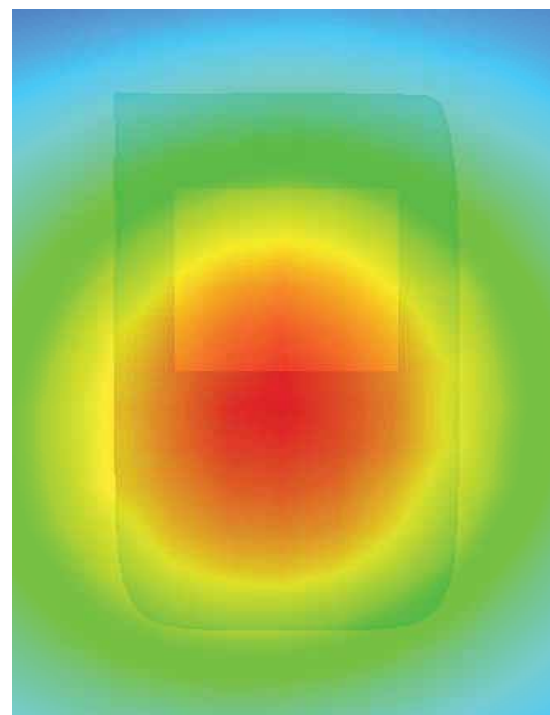
Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.8366	0.6553	0.5366	0.4114	0.3289	0.2524



3D scen shot



Hot spot position



MEASUREMENT 36

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 7 seconds

A. Experimental conditions.

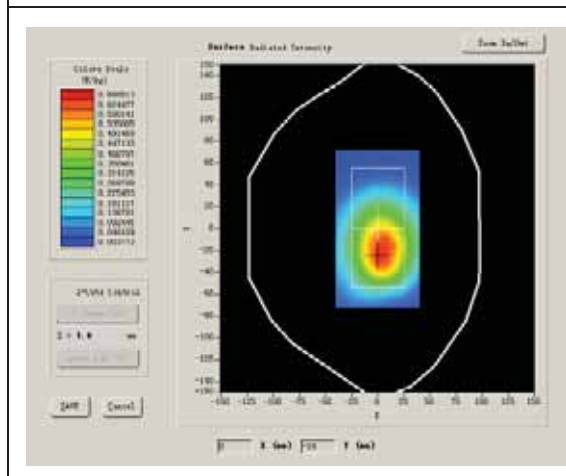
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	High
Signal	EDGE

B. SAR Measurement Results

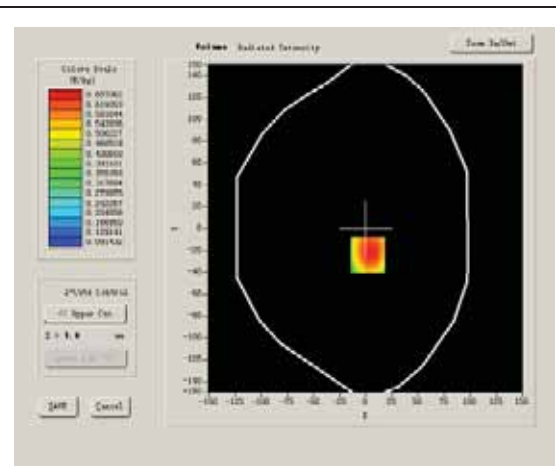
Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049
Relative permittivity (real part)	52.540001
Relative permittivity	14.070000
Conductivity (S/m)	1.492827
Power drift (%)	-1.250000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



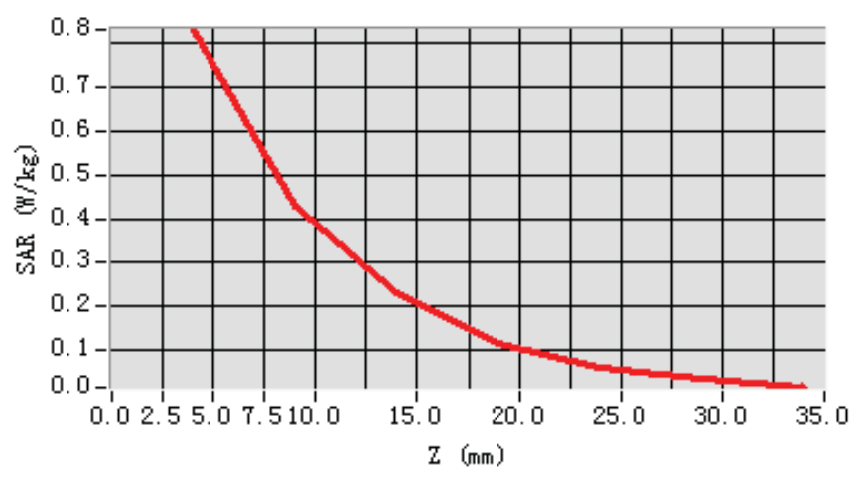
Maximum location: X=1.00, Y=30.00

SAR 10g (W/Kg)	0.534783
SAR 1g (W/Kg)	0.773063

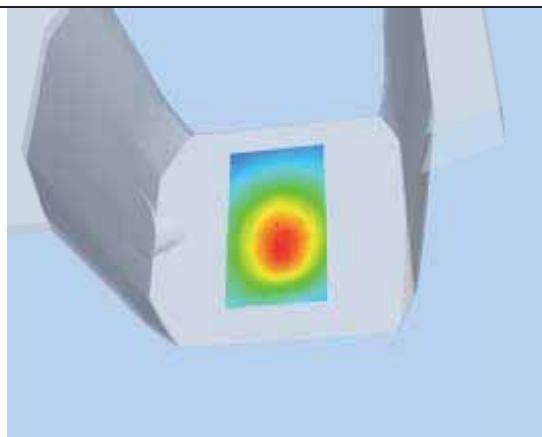
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.8191	0.6049	0.4460	0.3473	0.2750	0.2154

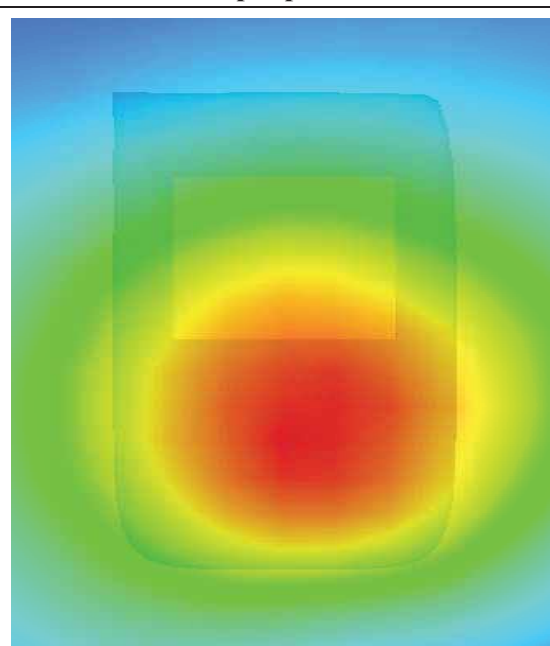
SAR, Z Axis Scan (X = 1, Y = 30)



3D scene shot



Hot spot position



MEASUREMENT 37

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 7 seconds

A. Experimental conditions.

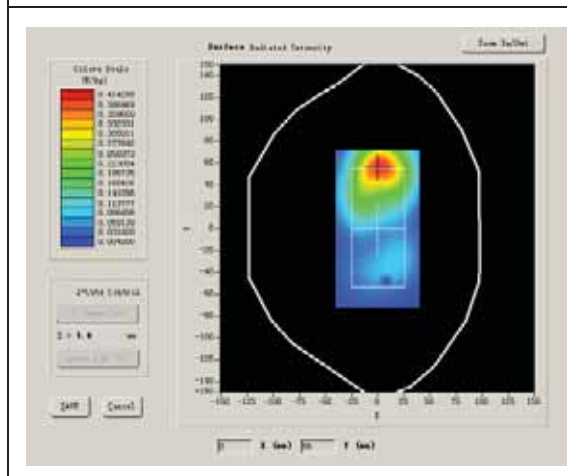
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	High
Signal	EDGE

B. SAR Measurement Results

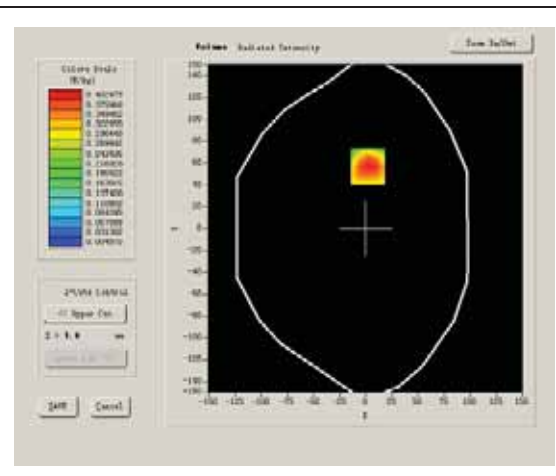
Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049
Relative permittivity (real part)	52.540001
Relative permittivity	14.070000
Conductivity (S/m)	1.492827
Power drift (%)	-2.820000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



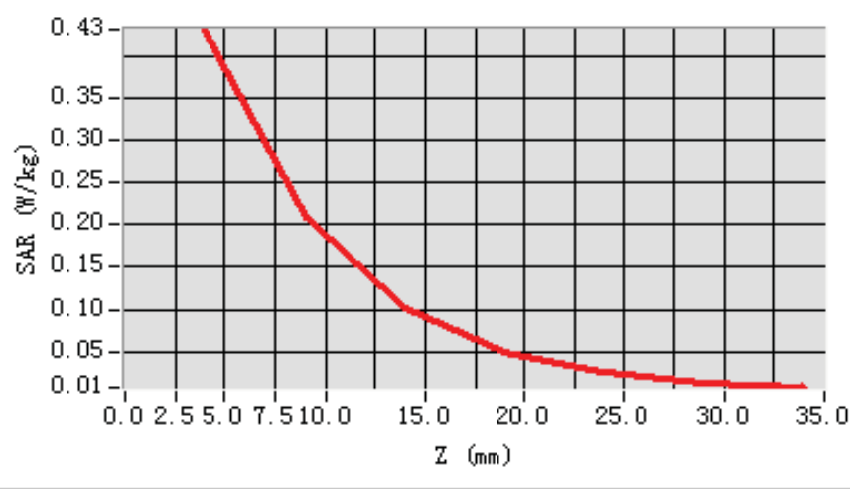
Maximum location: X=2.00, Y=57.00

SAR 10g (W/Kg)	0.219887
SAR 1g (W/Kg)	0.416725

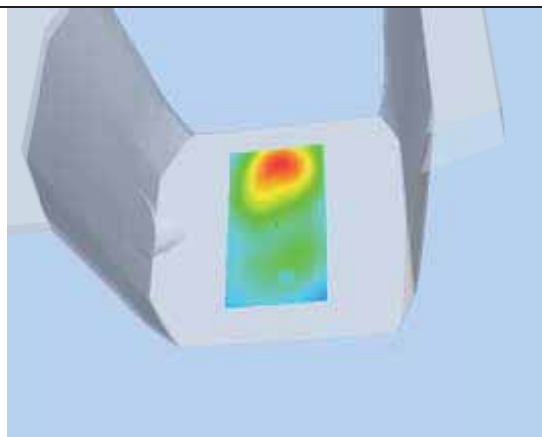
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4304	0.2078	0.1006	0.0501	0.0252	0.0138

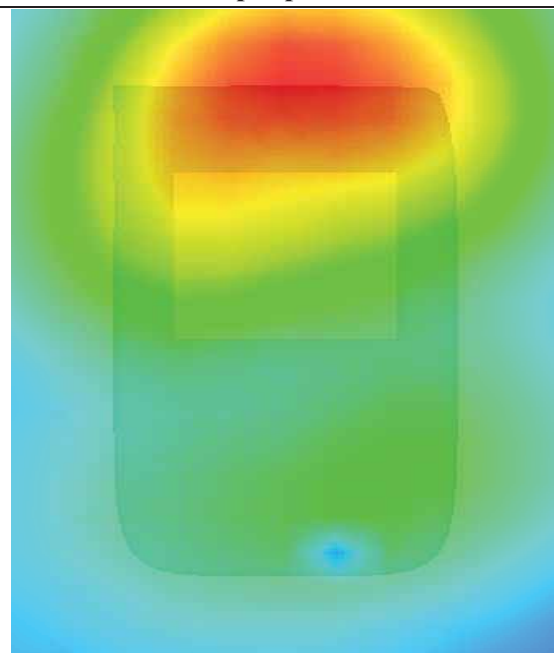
SAR, Z Axis Scan (X = 2, Y = 57)



3D scen shot



Hot spot position



MEASUREMENT 38

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 10 seconds

A. Experimental conditions.

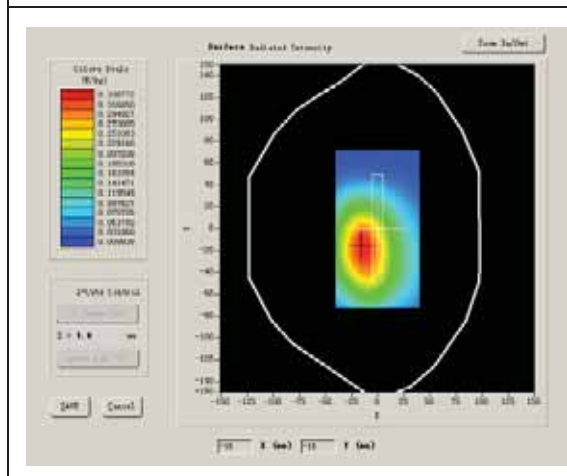
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	High
Signal	EDGE

B. SAR Measurement Results

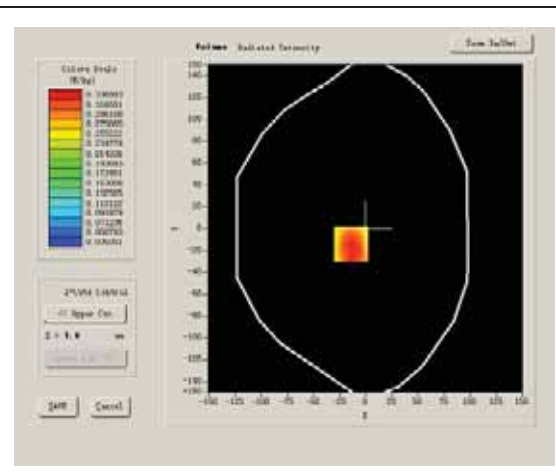
Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049
Relative permittivity (real part)	52.540001
Relative permittivity	14.070000
Conductivity (S/m)	1.469533
Power drift (%)	1.800000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



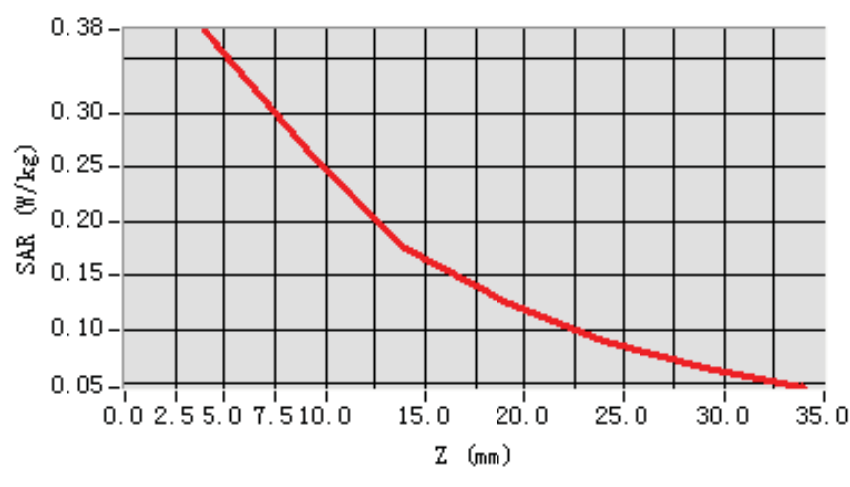
Maximum location: X=-14.00, Y=-14.00

SAR 10g (W/Kg)	0.246327
SAR 1g (W/Kg)	0.362344

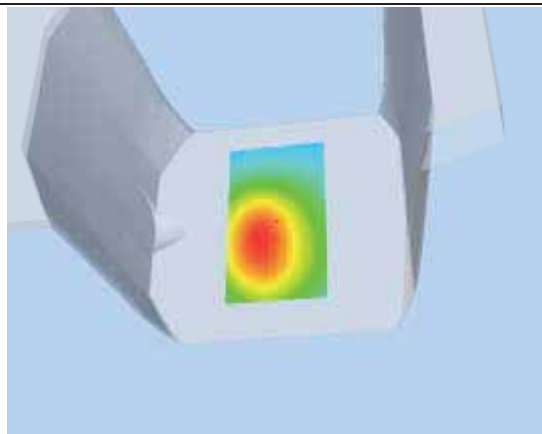
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.3773	0.2667	0.1749	0.1266	0.0880	0.0637

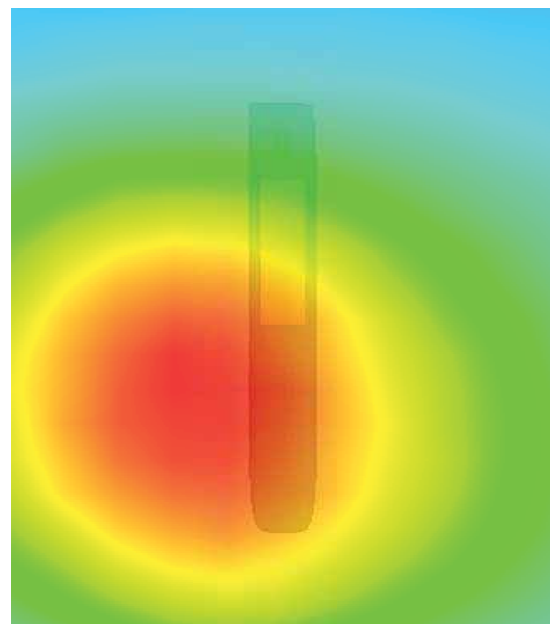
SAR, Z Axis Scan (X = -14, Y = -14)



3D scen shot



Hot spot position



MEASUREMENT 39

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 7 seconds

A. Experimental conditions.

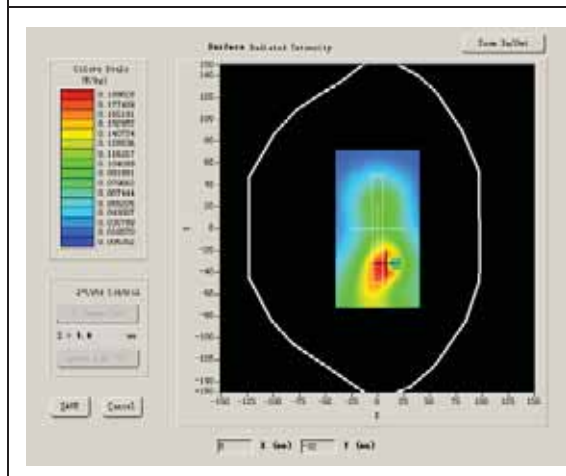
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	High
Signal	EDGE

B. SAR Measurement Results

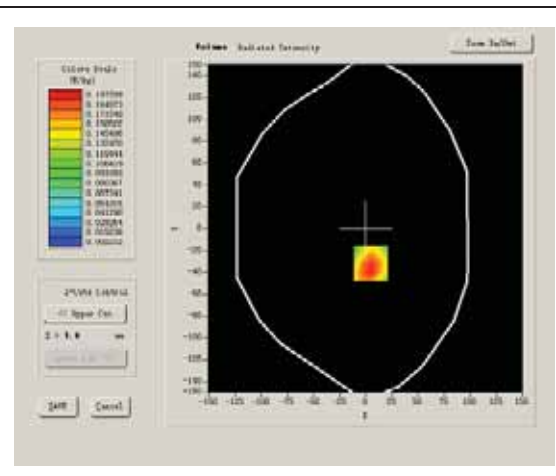
Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049
Relative permittivity (real part)	52.540001
Relative permittivity	14.070000
Conductivity (S/m)	1.469533
Power drift (%)	0.050000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:2

SURFACE SAR



VOLUME SAR



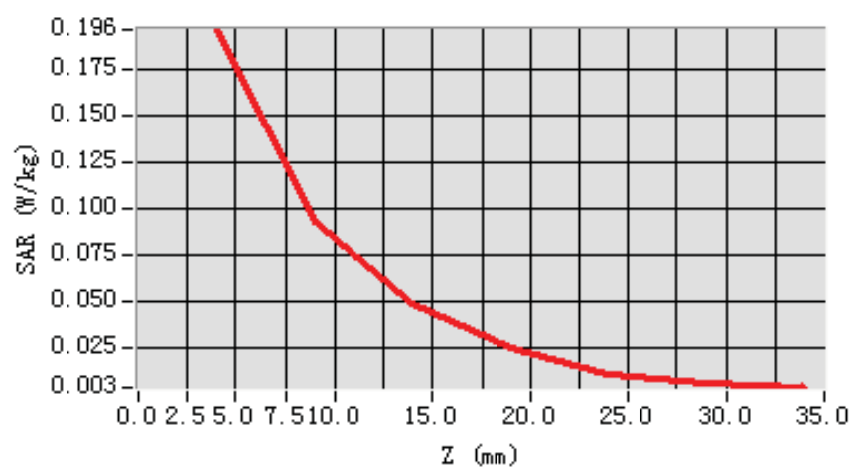
Maximum location: X=5.00, Y=-32.00

SAR 10g (W/Kg)	0.102117
SAR 1g (W/Kg)	0.194436

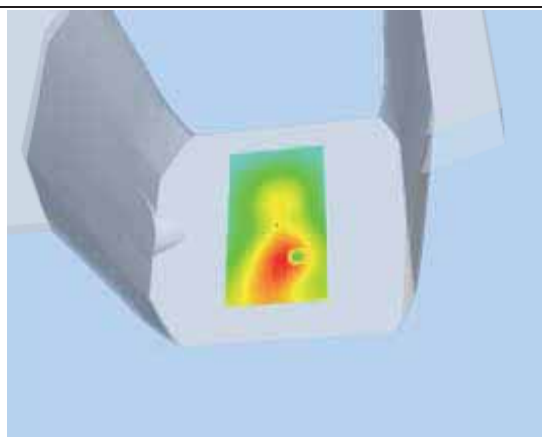
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1958	0.0928	0.0482	0.0243	0.0110	0.0062

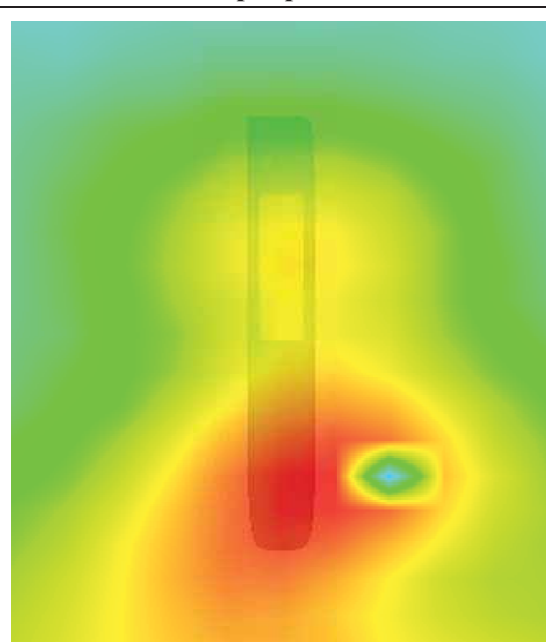
SAR, Z Axis Scan (X = 5, Y = -32)



3D scene shot



Hot spot position



MEASUREMENT 40

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 7 seconds

A. Experimental conditions.

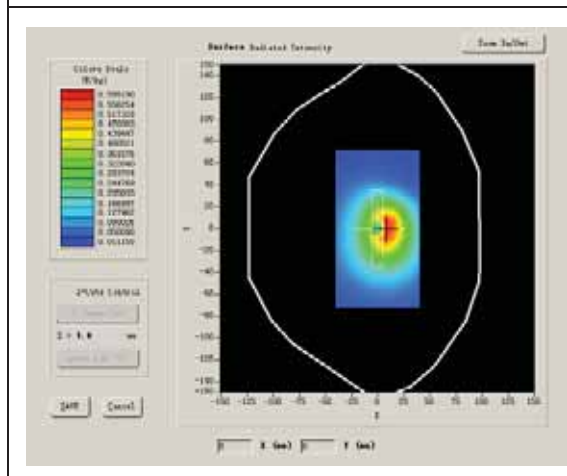
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	High
Signal	EDGE

B. SAR Measurement Results

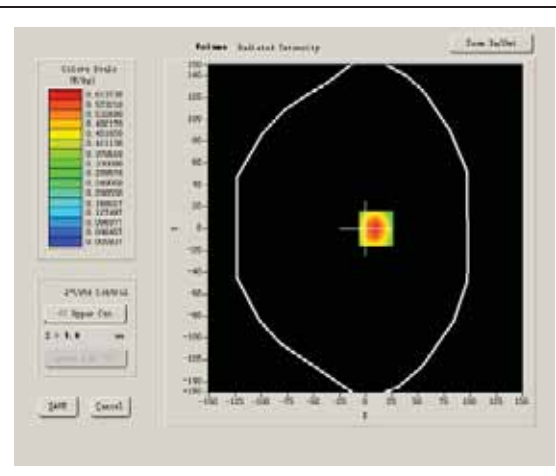
Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049
Relative permittivity (real part)	52.540001
Relative permittivity	14.070000
Conductivity (S/m)	1.469533
Power drift (%)	0.050000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:2

SURFACE SAR



VOLUME SAR

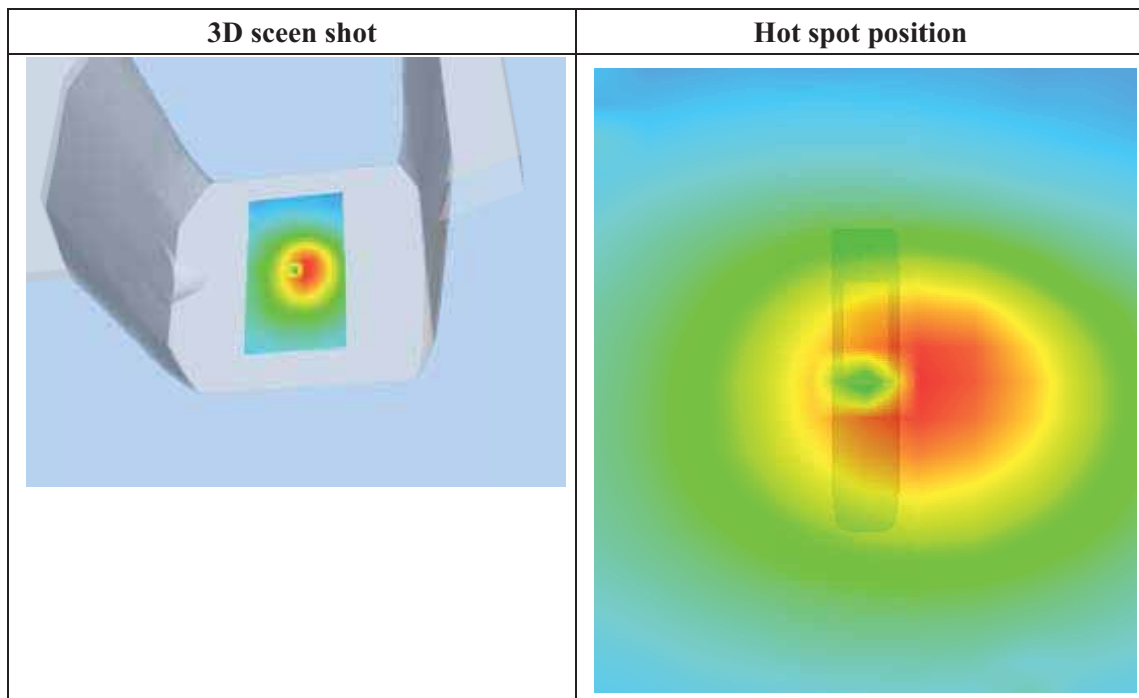
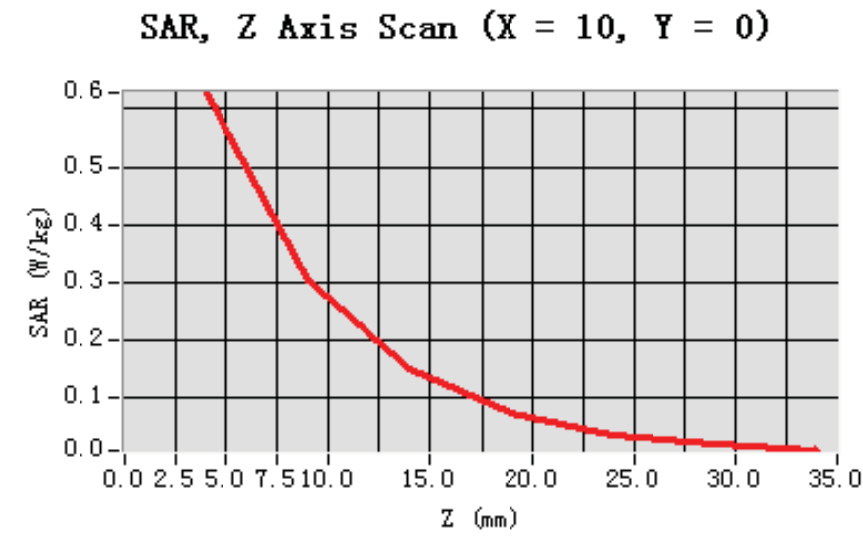


Maximum location: X=10.00, Y=0.00

SAR 10g (W/Kg)	0.311751
SAR 1g (W/Kg)	0.561617

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6280	0.3048	0.1516	0.0729	0.0374	0.0204



MEASUREMENT 41

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 7 minutes 59 seconds

A. Experimental conditions.

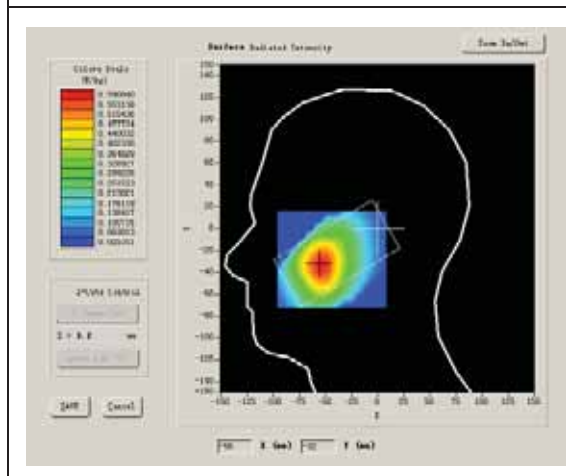
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Cheek
Band	WCDMA850
Channels	High
Signal	CDMA

B. SAR Measurement Results

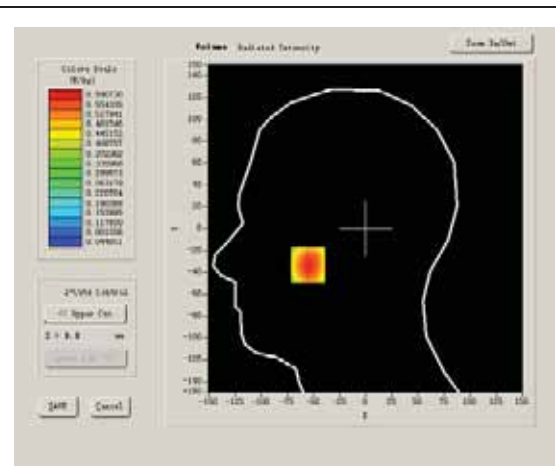
Higher Band SAR (Channel 4233):

Frequency (MHz)	846.000000
Relative permittivity (real part)	39.799999
Relative permittivity	13.380000
Conductivity (S/m)	0.628860
Power drift (%)	0.450000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.479, 25.214, 27.196
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



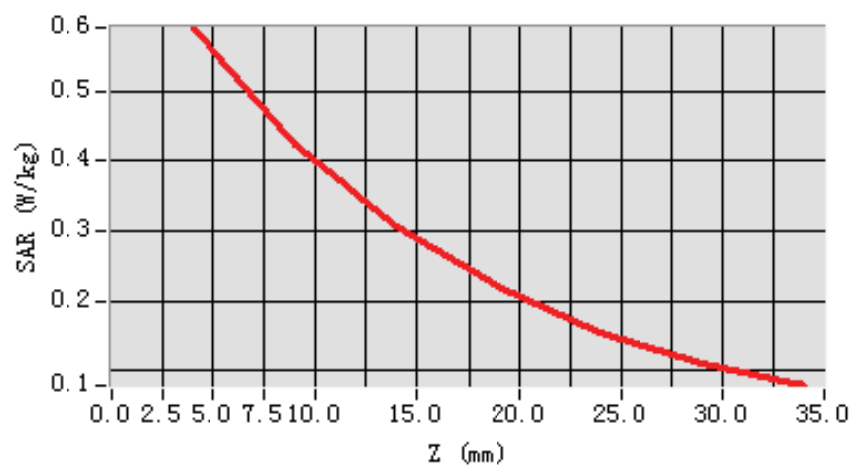
Maximum location: X=-55.00, Y=-33.00

SAR 10g (W/Kg)	0.388599
SAR 1g (W/Kg)	0.566528

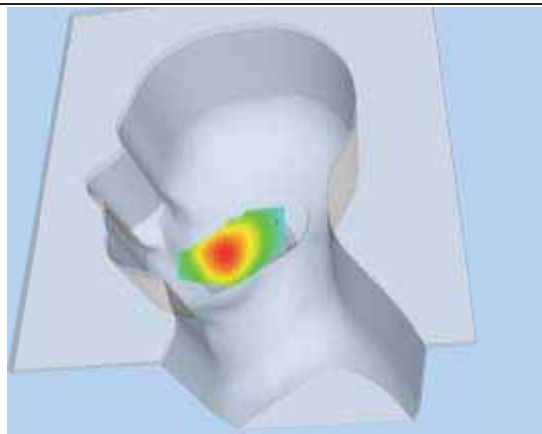
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5907	0.4239	0.3054	0.2202	0.1560	0.1113

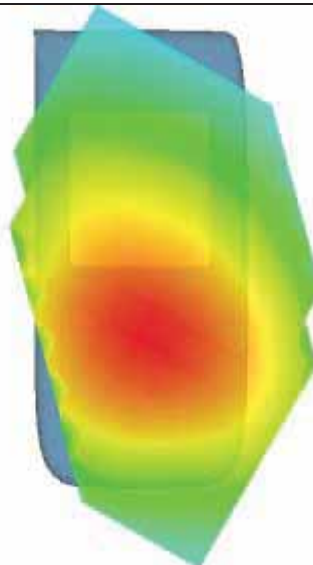
SAR, Z Axis Scan (X = -55, Y = -33)



3D scen shot



Hot spot position



MEASUREMENT 42

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 7 minutes 41 seconds

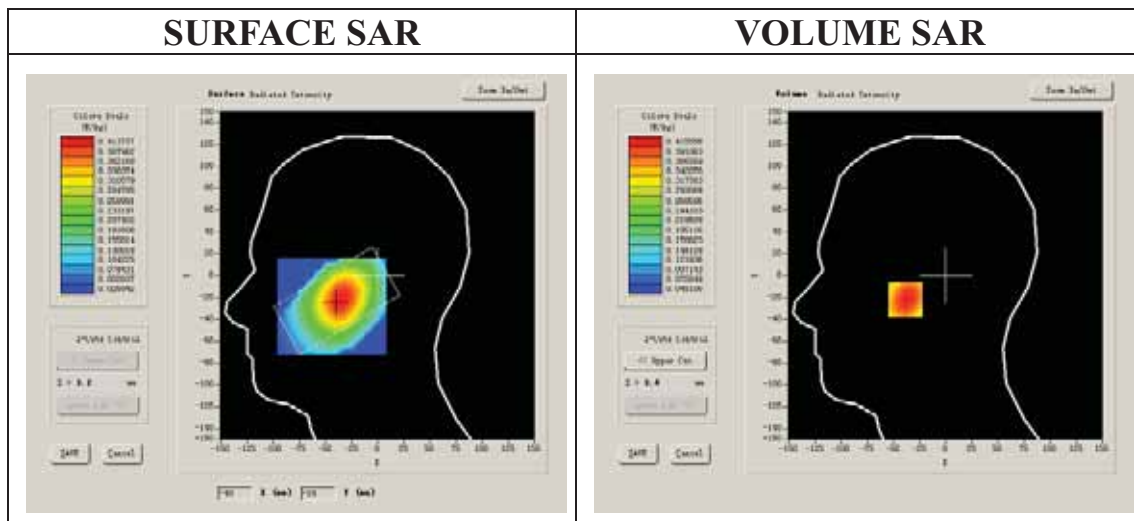
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Tilt
Band	WCDMA850
Channels	High
Signal	CDMA

B. SAR Measurement Results

Higher Band SAR (Channel 4233):

Frequency (MHz)	846.000000
Relative permittivity (real part)	39.910000
Relative permittivity	13.230000
Conductivity (S/m)	0.614460
Power drift (%)	0.020000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.479, 25.214, 27.196
Crest factor:	1:1



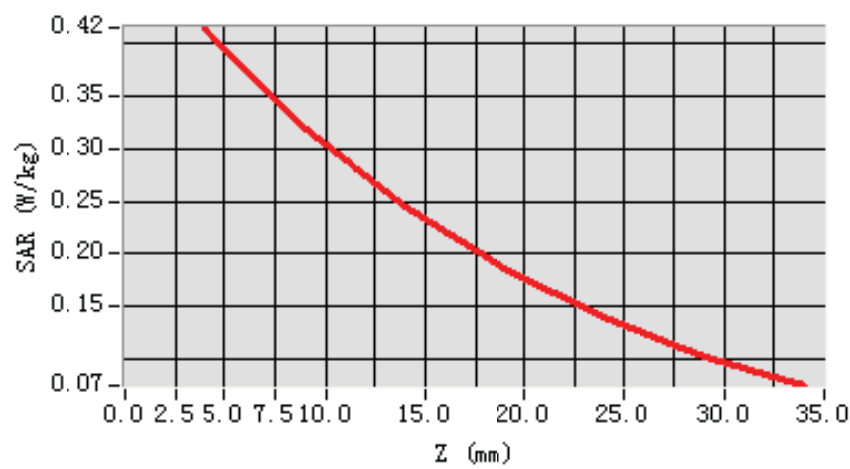
Maximum location: X=-36.00, Y=-22.00

SAR 10g (W/Kg)	0.293117
SAR 1g (W/Kg)	0.401837

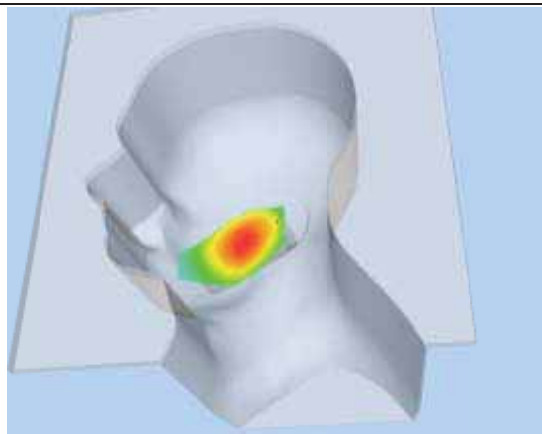
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4156	0.3190	0.2454	0.1860	0.1395	0.1017

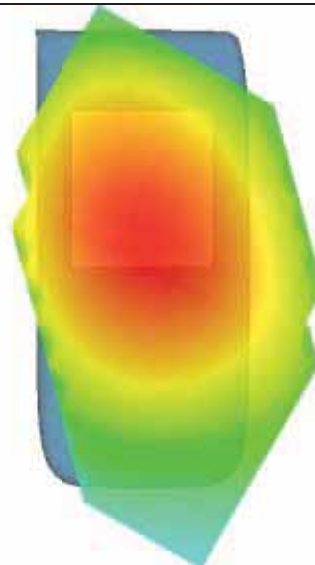
SAR, Z Axis Scan (X = -36, Y = -22)



3D scen shot



Hot spot position



MEASUREMENT 43

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 7 minutes 53 seconds

A. Experimental conditions.

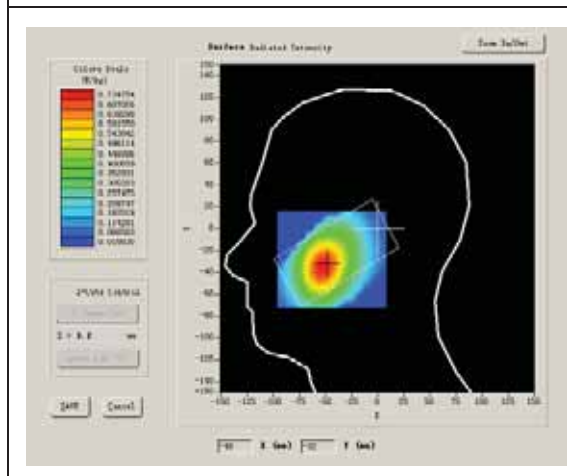
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	WCDMA850
Channels	High
Signal	CDMA

B. SAR Measurement Results

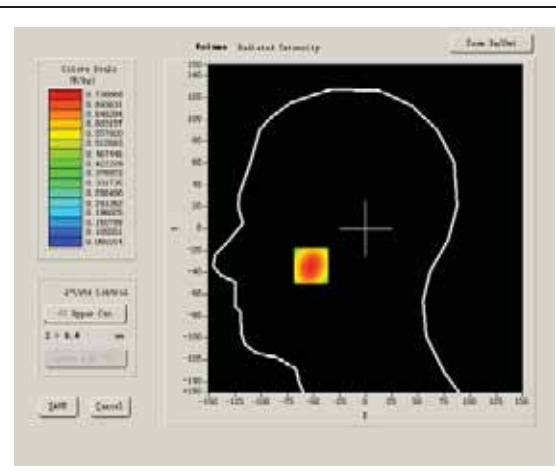
Higher Band SAR (Channel 4233):

Frequency (MHz)	846.000000
Relative permittivity (real part)	39.799999
Relative permittivity	13.380000
Conductivity (S/m)	0.628860
Power drift (%)	-0.500000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.479, 25.214, 27.196
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



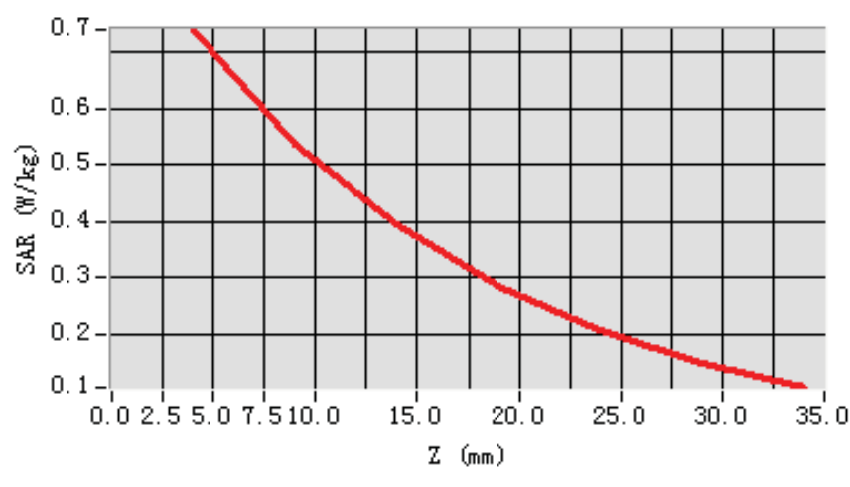
Maximum location: X=-52.00, Y=-34.00

SAR 10g (W/Kg)	0.489694
SAR 1g (W/Kg)	0.710674

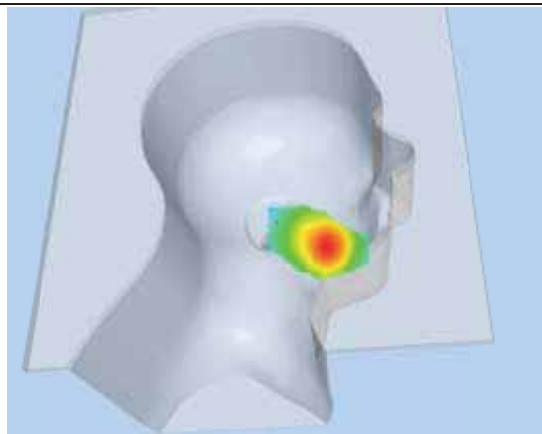
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.7389	0.5360	0.3947	0.2877	0.2065	0.1474

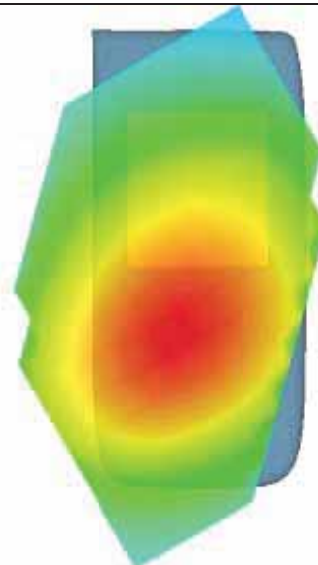
SAR, Z Axis Scan (X = -52, Y = -34)



3D scen shot



Hot spot position



MEASUREMENT 44

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 7 minutes 40 seconds

A. Experimental conditions.

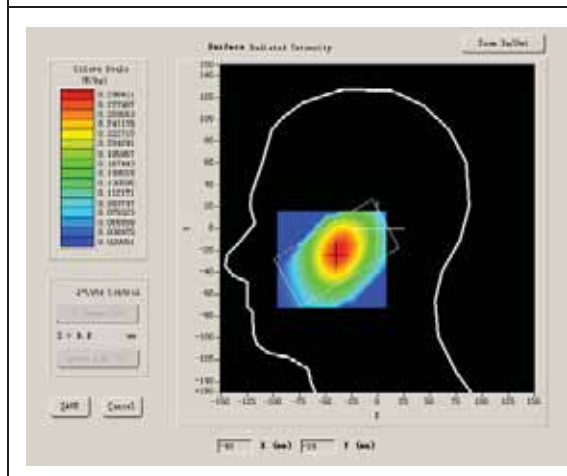
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Tilt
Band	WCDMA850
Channels	High
Signal	CDMA

B. SAR Measurement Results

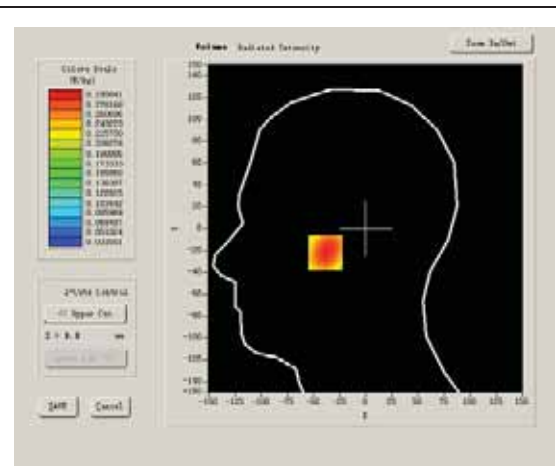
Higher Band SAR (Channel 4233):

Frequency (MHz)	846.000000
Relative permittivity (real part)	39.910000
Relative permittivity	13.230000
Conductivity (S/m)	0.614460
Power drift (%)	-0.380000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.479, 25.214, 27.196
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



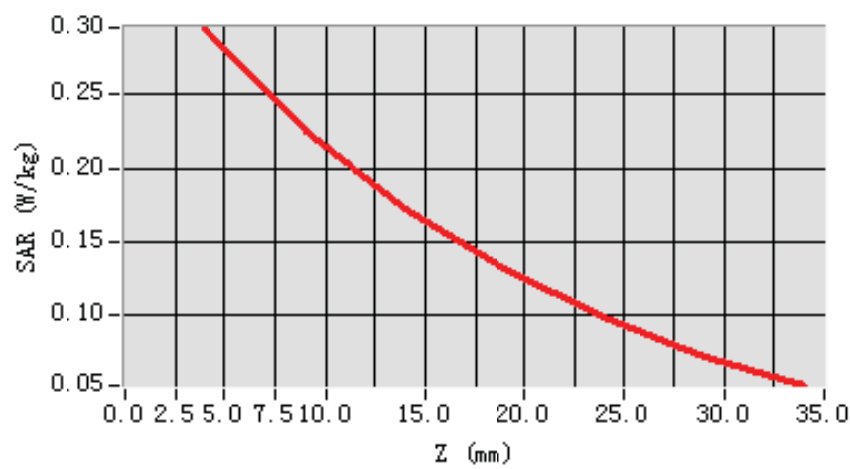
Maximum location: X=-38.00, Y=-22.00

SAR 10g (W/Kg)	0.206885
SAR 1g (W/Kg)	0.285256

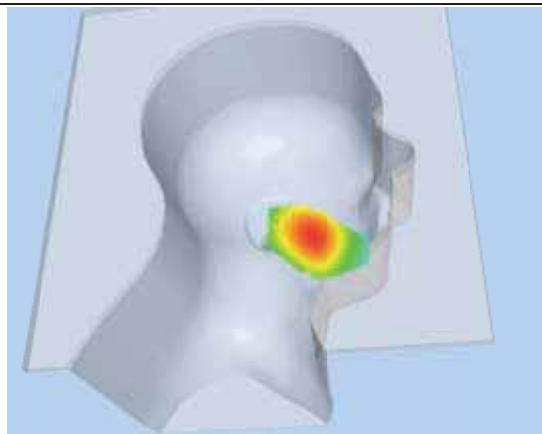
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2956	0.2250	0.1729	0.1311	0.0980	0.0714

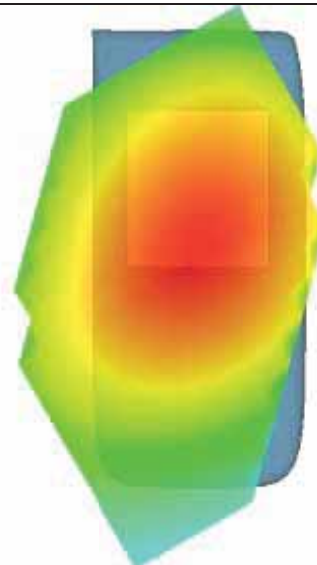
SAR, Z Axis Scan (X = -38, Y = -22)



3D scen shot



Hot spot position



MEASUREMENT 45

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 9 minutes 7 seconds

A. Experimental conditions.

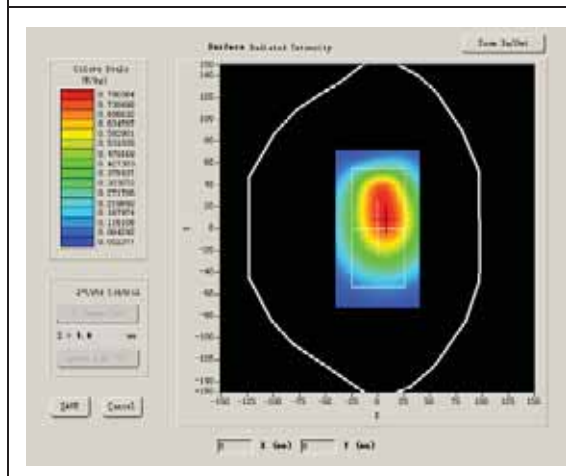
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA850
Channels	Low
Signal	CDMA

B. SAR Measurement Results

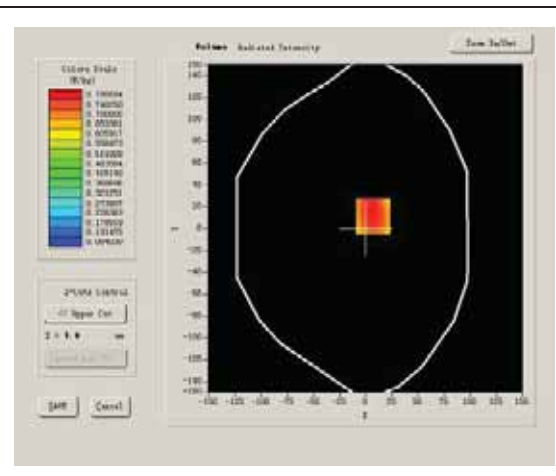
Lower Band SAR (Channel 4132):

Frequency (MHz)	826.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	0.728580
Power drift (%)	0.090000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



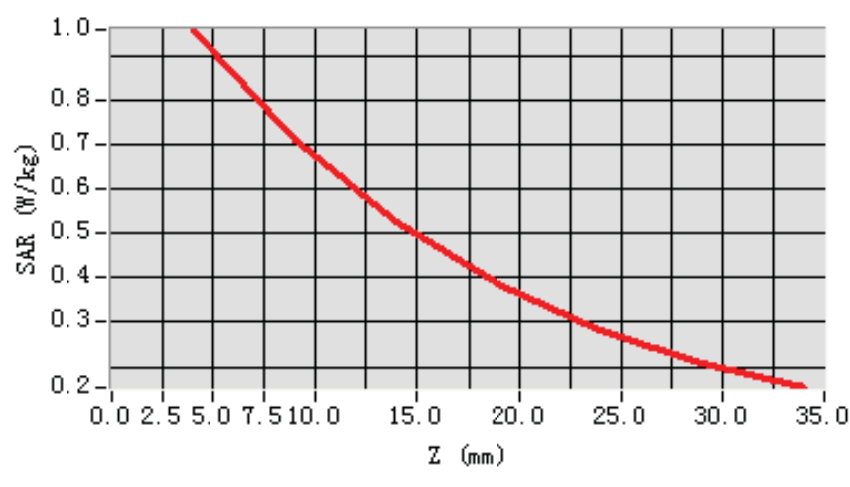
Maximum location: X=7.00, Y=11.00

SAR 10g (W/Kg)	0.665345
SAR 1g (W/Kg)	0.928191

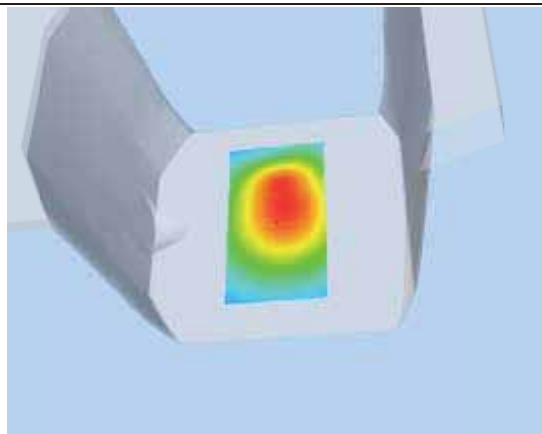
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.9592	0.7106	0.5268	0.3883	0.2850	0.2082

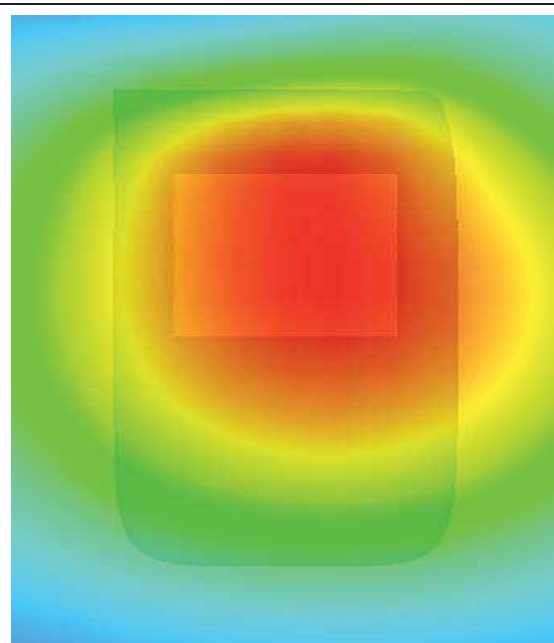
SAR, Z Axis Scan (X = 7, Y = 11)



3D scene shot



Hot spot position



MEASUREMENT 46

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 9 minutes 15 seconds

A. Experimental conditions.

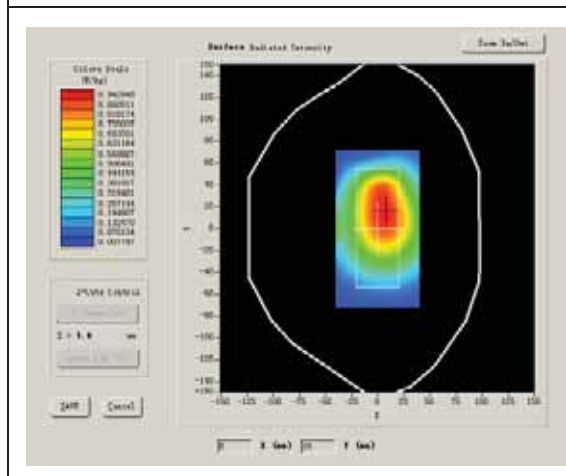
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA850
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

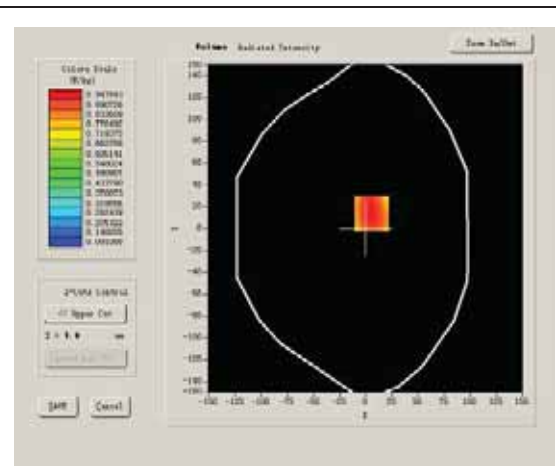
Middle Band SAR (Channel 4182):

Frequency (MHz)	836.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	0.737401
Power drift (%)	-0.030000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



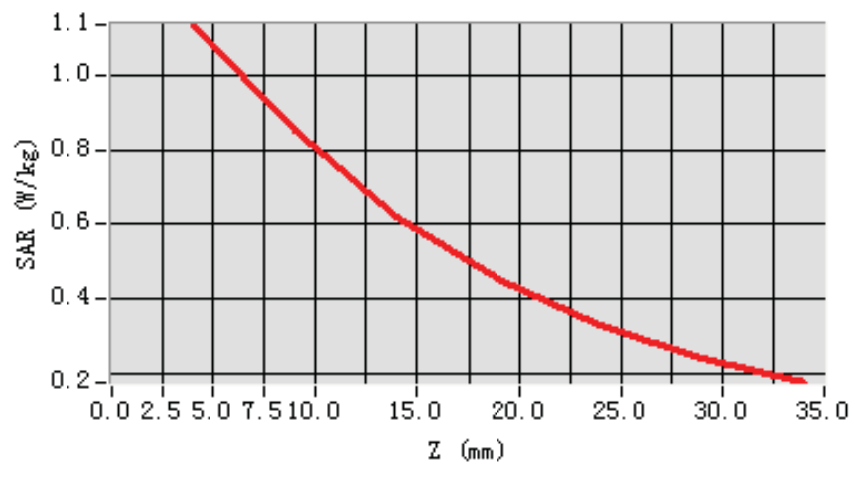
Maximum location: X=6.00, Y=14.00

SAR 10g (W/Kg)	0.787447
SAR 1g (W/Kg)	1.098586

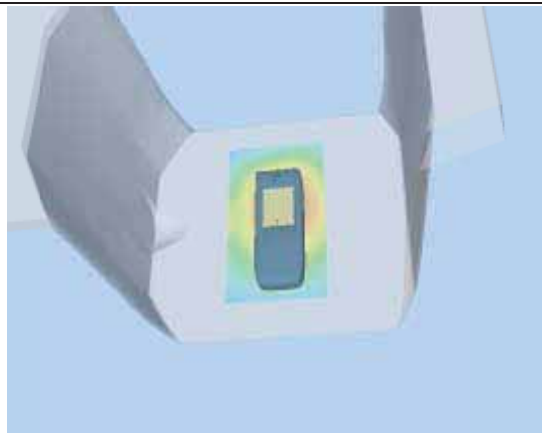
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	1.1375	0.8492	0.6175	0.4562	0.3298	0.2387

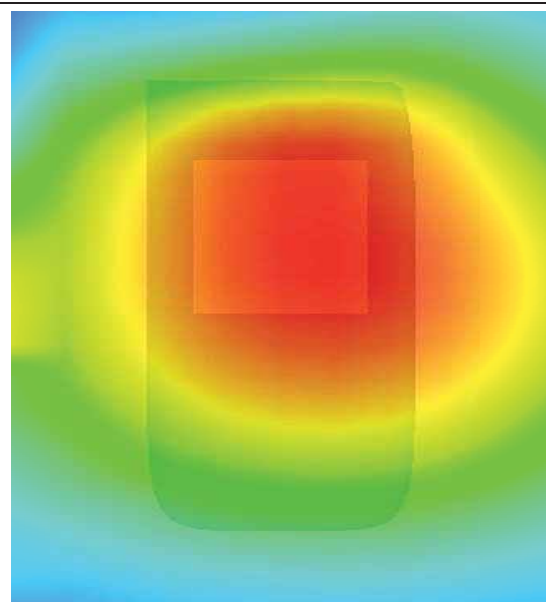
SAR, Z Axis Scan (X = 6, Y = 14)



3D seen shot



Hot spot position



MEASUREMENT 47

Type: Phone measurement (Complete)

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

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

Date of measurement:8/11/2011

Measurement duration: 9 minutes 5 seconds

A. Experimental conditions.

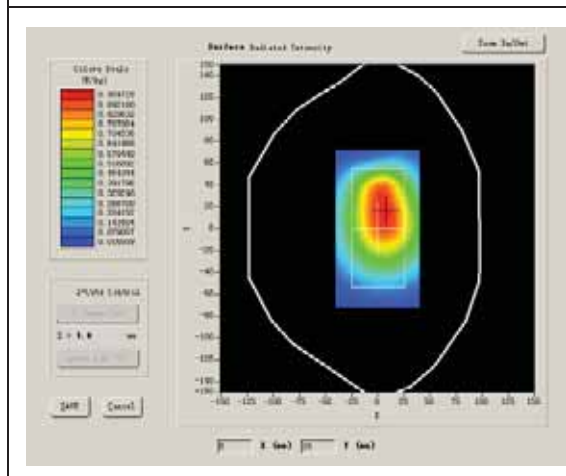
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA850
Channels	High
Signal	CDMA

B. SAR Measurement Results

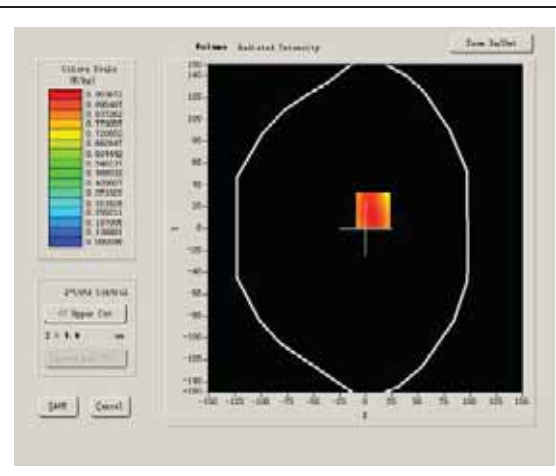
Higher Band SAR (Channel 4233):

Frequency (MHz)	846.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	0.746221
Power drift (%)	-0.390000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



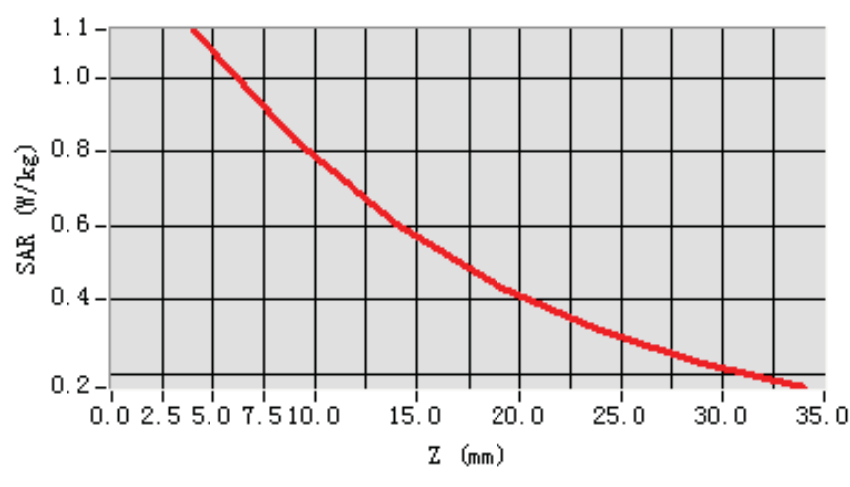
Maximum location: X=7.00, Y=17.00

SAR 10g (W/Kg)	0.777932
SAR 1g (W/Kg)	1.089421

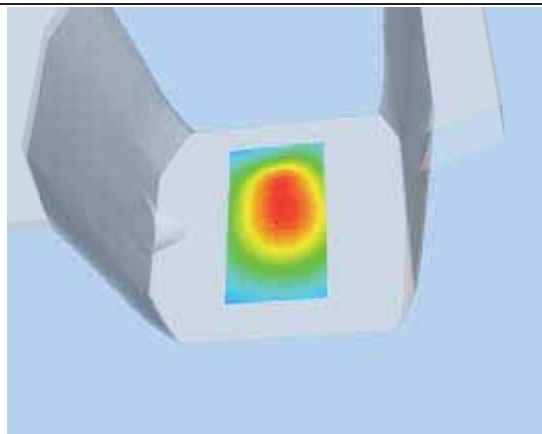
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	1.1285	0.8317	0.6058	0.4391	0.3166	0.2270

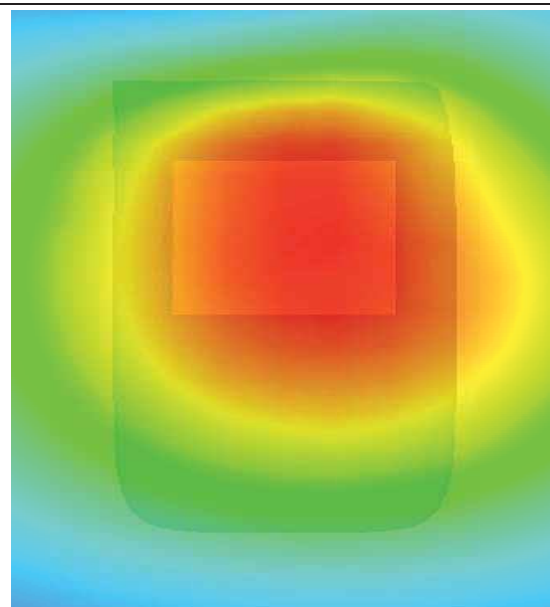
SAR, Z Axis Scan (X = 7, Y = 17)



3D scen shot



Hot spot position



MEASUREMENT 48

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 9 minutes 16 seconds

A. Experimental conditions.

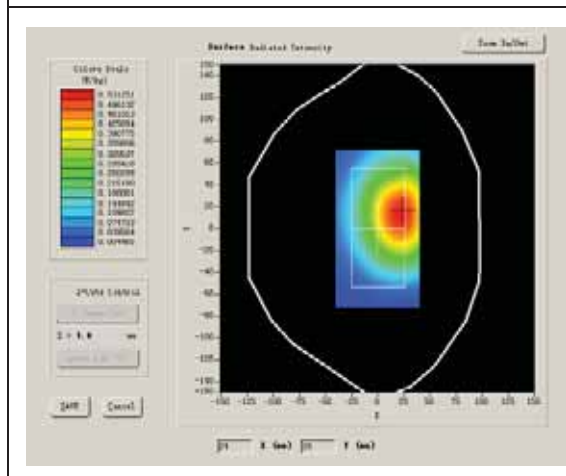
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA850
Channels	High
Signal	CDMA

B. SAR Measurement Results

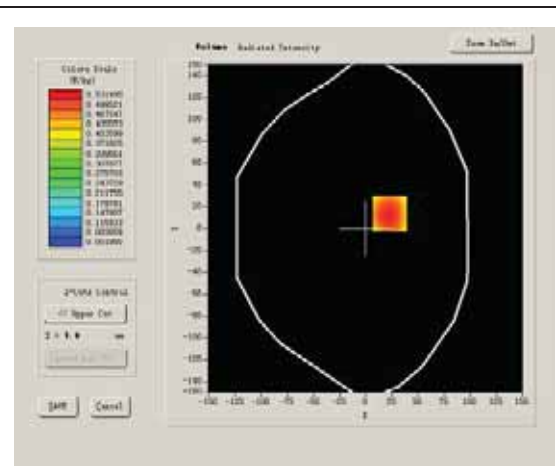
Higher Band SAR (Channel 4233):

Frequency (MHz)	846.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	0.737401
Power drift (%)	-1.390000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



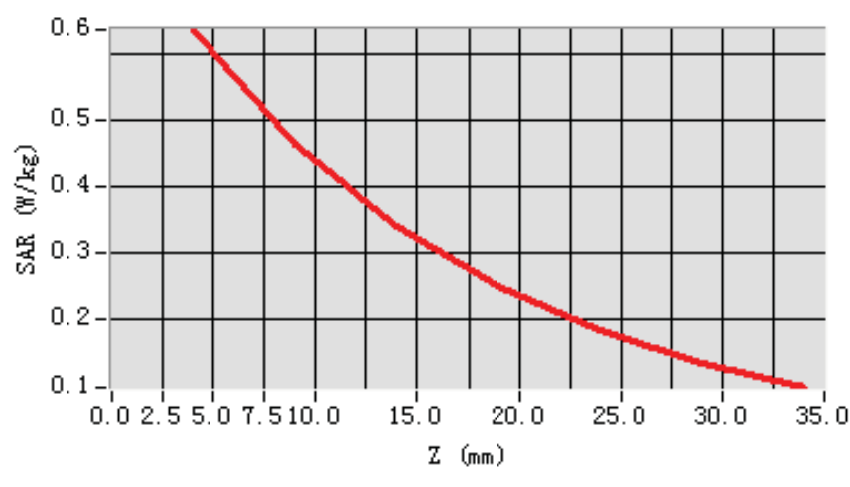
Maximum location: X=23.00, Y=14.00

SAR 10g (W/Kg)	0.435802
SAR 1g (W/Kg)	0.618273

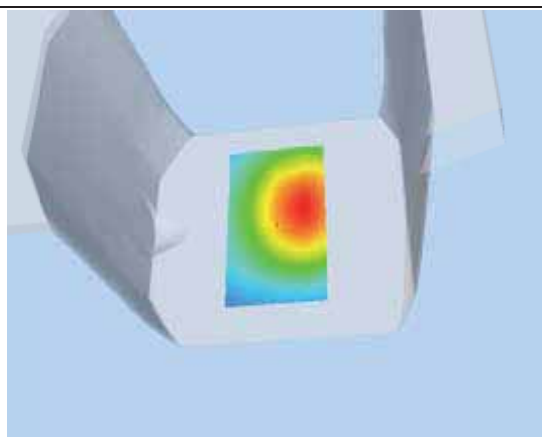
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6378	0.4650	0.3413	0.2506	0.1841	0.1336

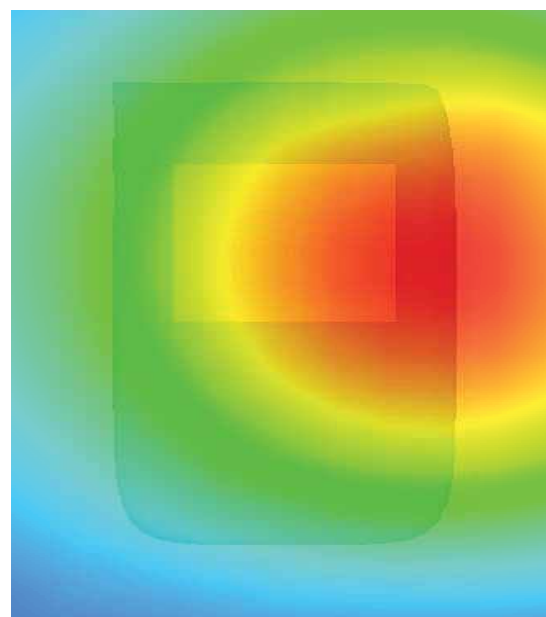
SAR, Z Axis Scan (X = 23, Y = 14)



3D scene shot



Hot spot position



MEASUREMENT 49

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 9 minutes 8 seconds

A. Experimental conditions.

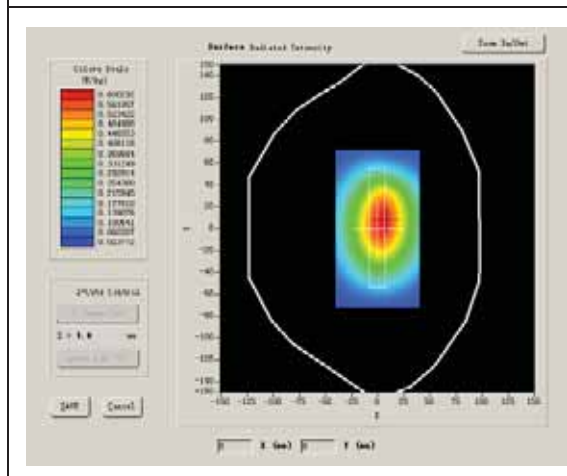
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA850
Channels	High
Signal	CDMA

B. SAR Measurement Results

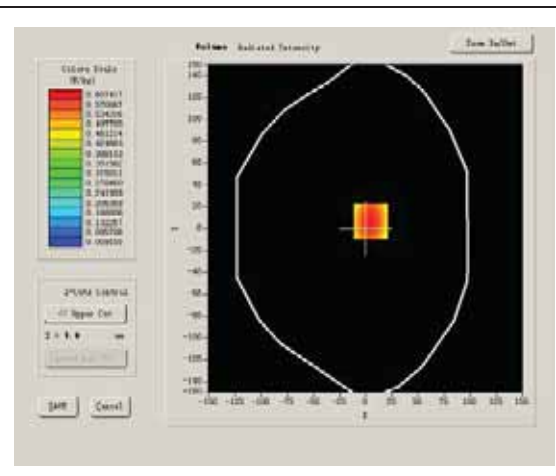
Higher Band SAR (Channel 4233):

Frequency (MHz)	846.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	0.737401
Power drift (%)	-0.090000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



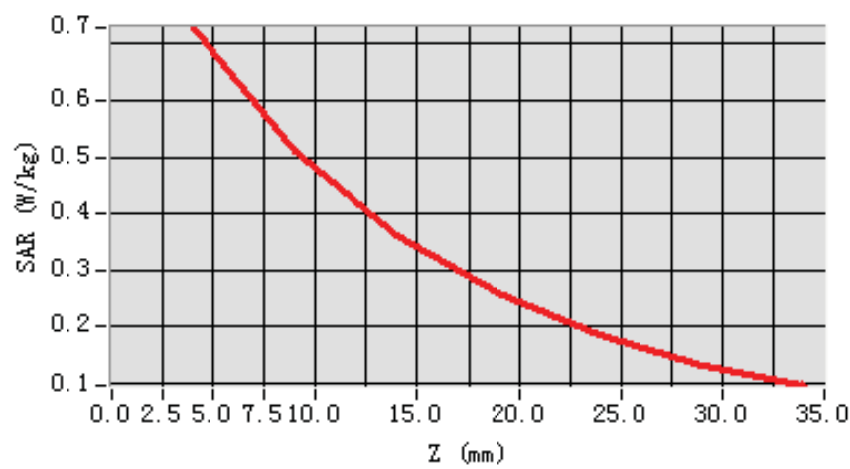
Maximum location: X=5.00, Y=7.00

SAR 10g (W/Kg)	0.482055
SAR 1g (W/Kg)	0.703149

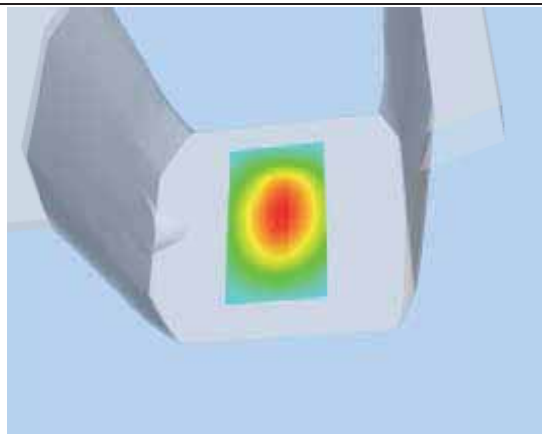
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.7289	0.5112	0.3622	0.2581	0.1841	0.1325

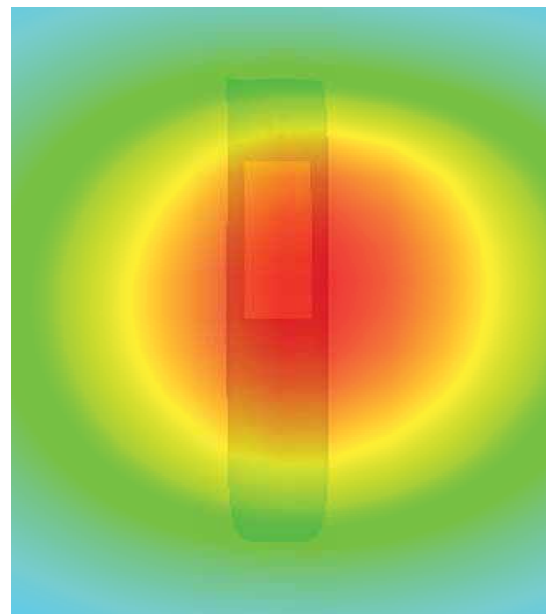
SAR, Z Axis Scan (X = 5, Y = 7)



3D scen shot



Hot spot position



MEASUREMENT 50

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 9 minutes 14 seconds

A. Experimental conditions.

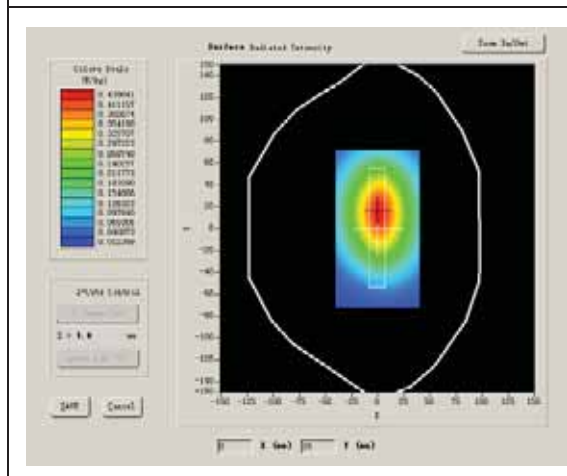
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA850
Channels	High
Signal	CDMA

B. SAR Measurement Results

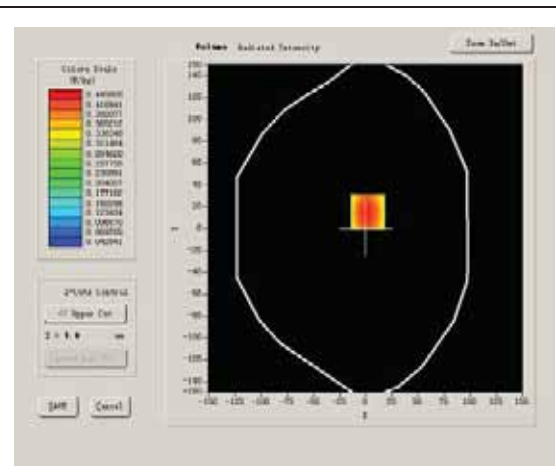
Higher Band SAR (Channel 4233):

Frequency (MHz)	846.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	0.737401
Power drift (%)	0.330000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



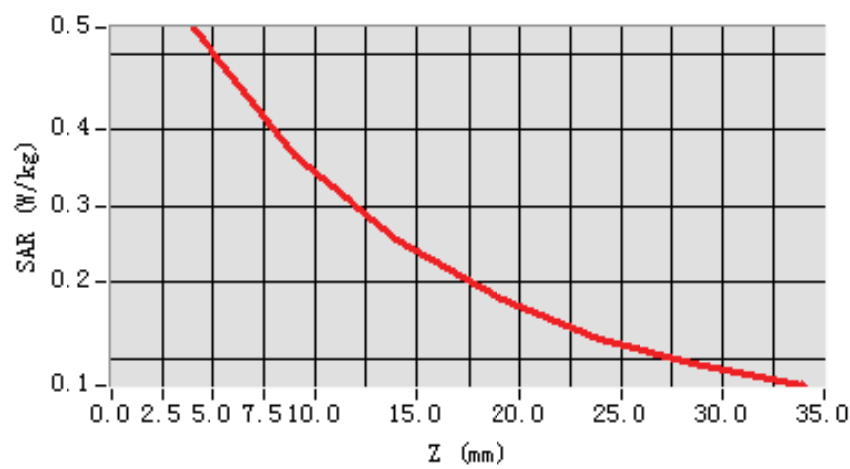
Maximum location: X=2.00, Y=15.00

SAR 10g (W/Kg)	0.346168
SAR 1g (W/Kg)	0.513981

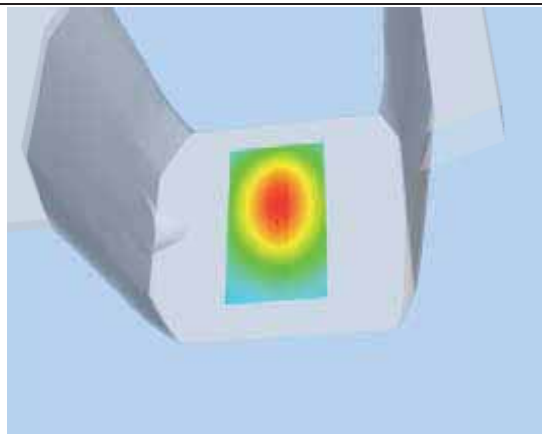
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5350	0.3670	0.2556	0.1802	0.1266	0.0908

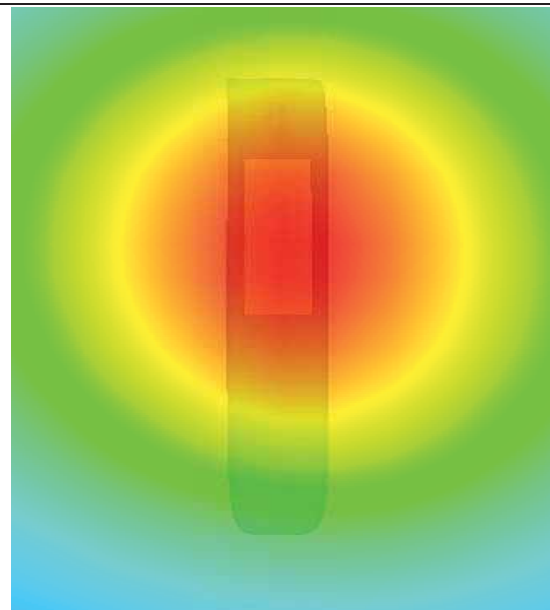
SAR, Z Axis Scan (X = 2, Y = 15)



3D scene shot



Hot spot position



MEASUREMENT 51

Type: Phone measurement (Complete)

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

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

Date of measurement: 14/11/2011

Measurement duration: 9 minutes 10 seconds

A. Experimental conditions.

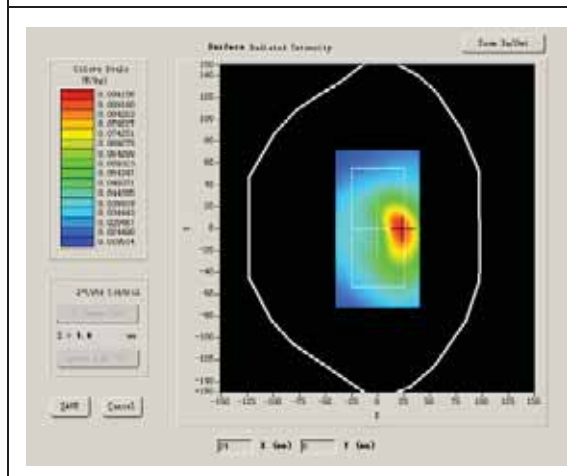
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA850
Channels	High
Signal	CDMA

B. SAR Measurement Results

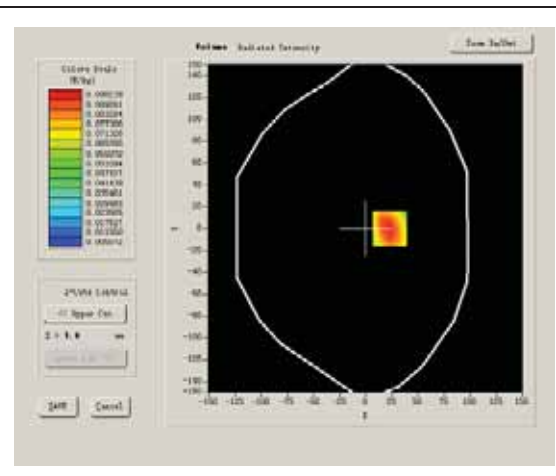
Higher Band SAR (Channel 4233):

Frequency (MHz)	846.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	0.737401
Power drift (%)	0.600000
Ambient Temperature:	22.7°C
Liquid Temperature:	22.8°C
ConvF:	28.559, 25.681, 27.588
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



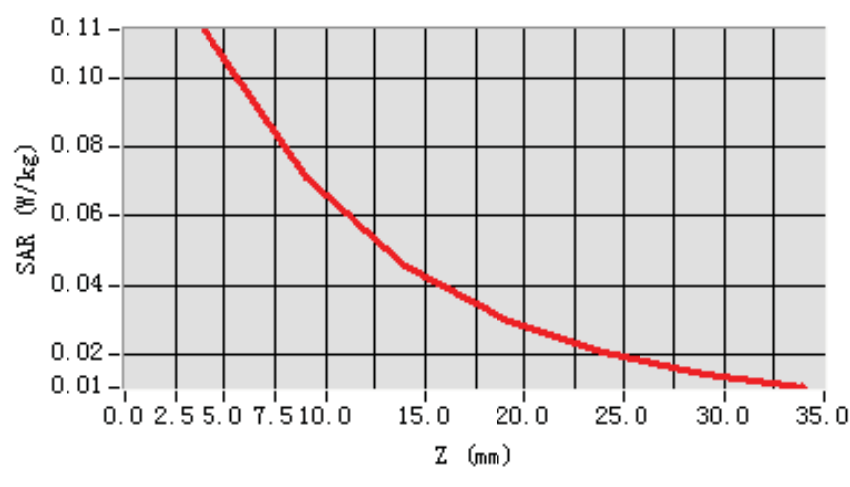
Maximum location: X=23.00, Y=0.00

SAR 10g (W/Kg)	0.068229
SAR 1g (W/Kg)	0.109468

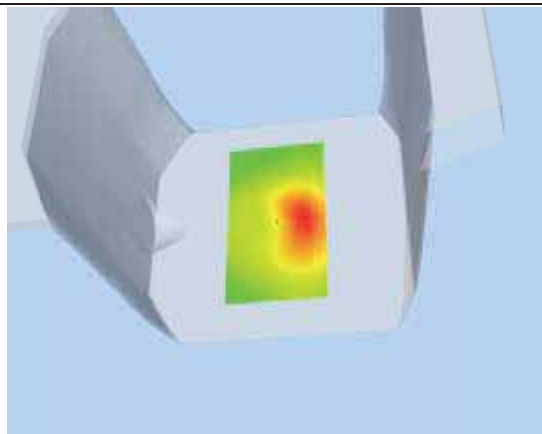
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1143	0.0712	0.0453	0.0299	0.0203	0.0137

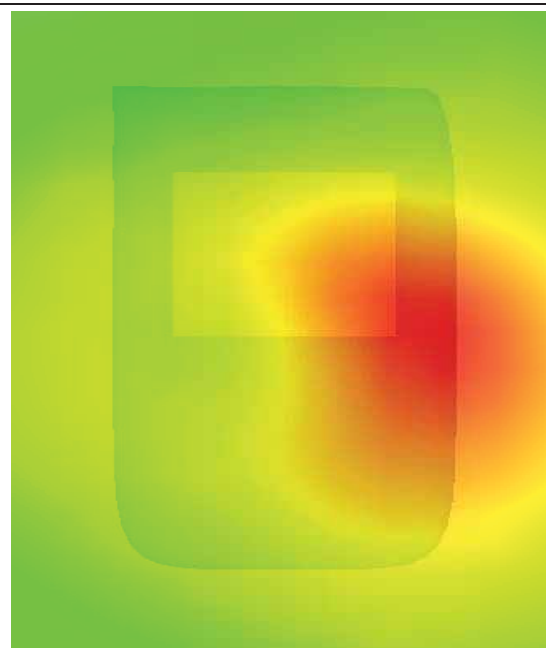
SAR, Z Axis Scan (X = 23, Y = 0)



3D scene shot



Hot spot position



MEASUREMENT 52

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 8 minutes 9 seconds

A. Experimental conditions.

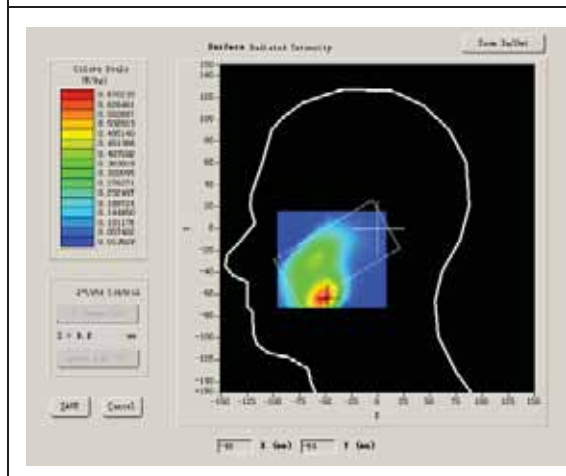
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Cheek
Band	WCDMA1900
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

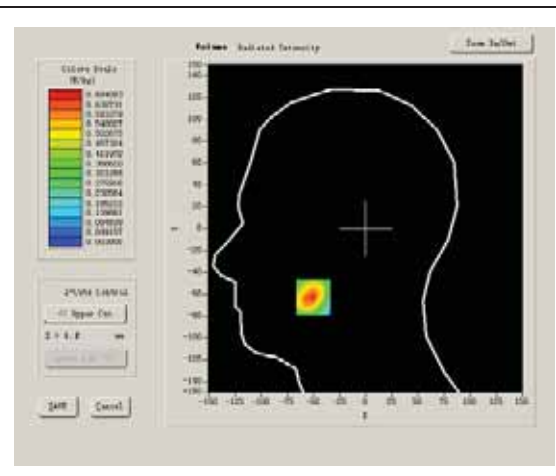
Middle Band SAR (Channel 9400):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	39.910000
Relative permittivity	13.230000
Conductivity (S/m)	1.381800
Power drift (%)	0.280000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



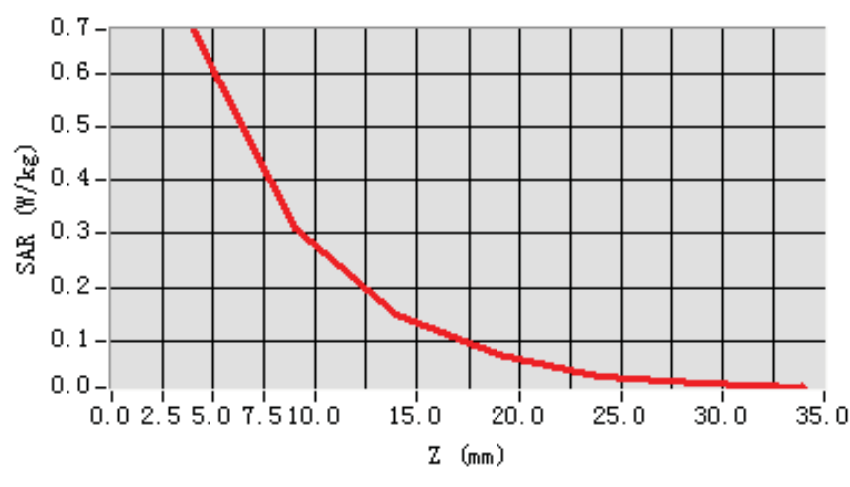
Maximum location: X=-50.00, Y=-63.00

SAR 10g (W/Kg)	0.315161
SAR 1g (W/Kg)	0.648716

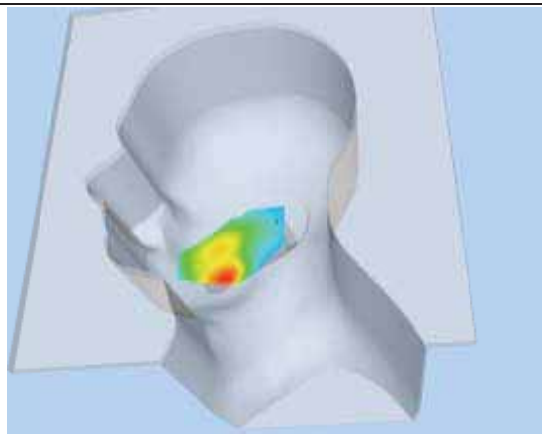
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6841	0.3083	0.1463	0.0714	0.0328	0.0181

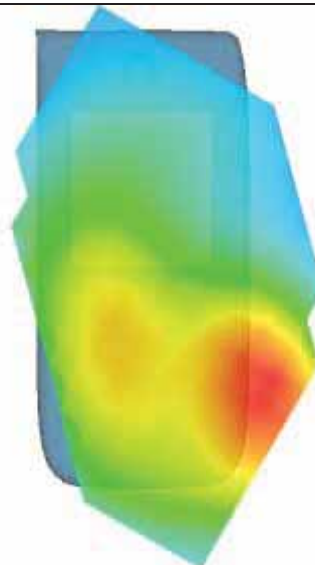
SAR, Z Axis Scan (X = -50, Y = -63)



3D scen shot



Hot spot position



MEASUREMENT 53

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 7 minutes 28 seconds

A. Experimental conditions.

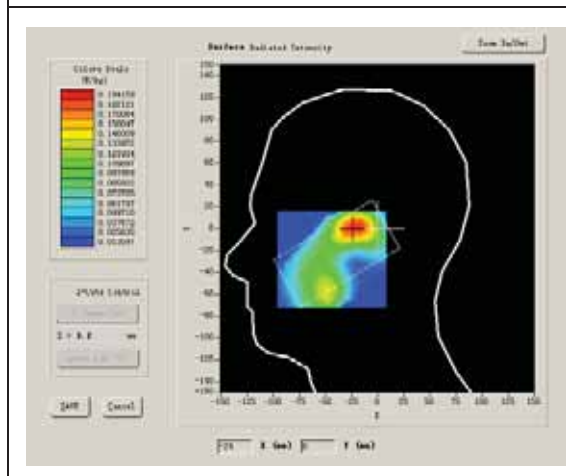
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Tilt
Band	WCDMA1900
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

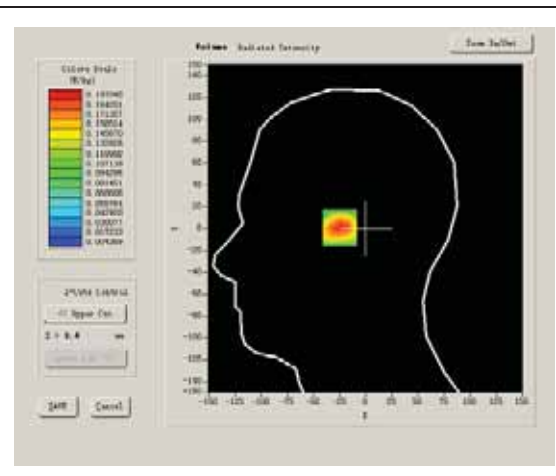
Middle Band SAR (Channel 9400):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	39.910000
Relative permittivity	13.230000
Conductivity (S/m)	1.381800
Power drift (%)	0.160000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



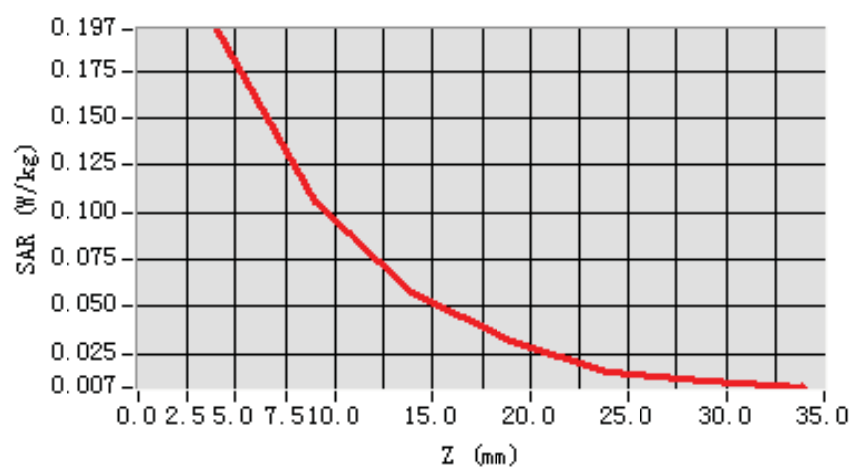
Maximum location: X=-21.00, Y=1.00

SAR 10g (W/Kg)	0.100871
SAR 1g (W/Kg)	0.187656

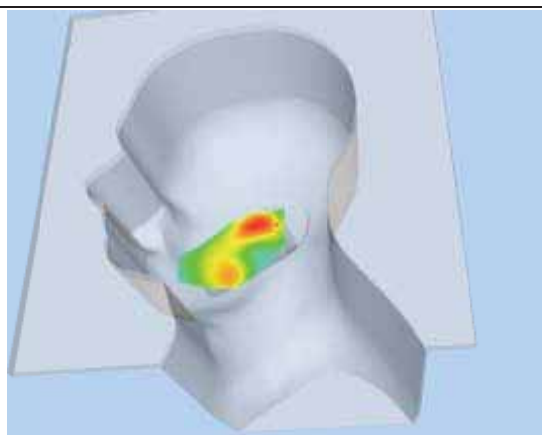
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1970	0.1051	0.0576	0.0316	0.0151	0.0107

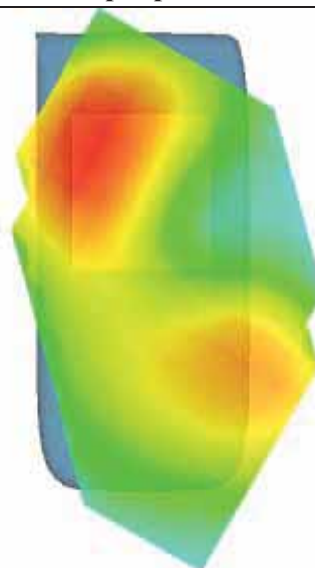
SAR, Z Axis Scan (X = -21, Y = 1)



3D scen shot



Hot spot position



MEASUREMENT 54

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 8 minutes 7 seconds

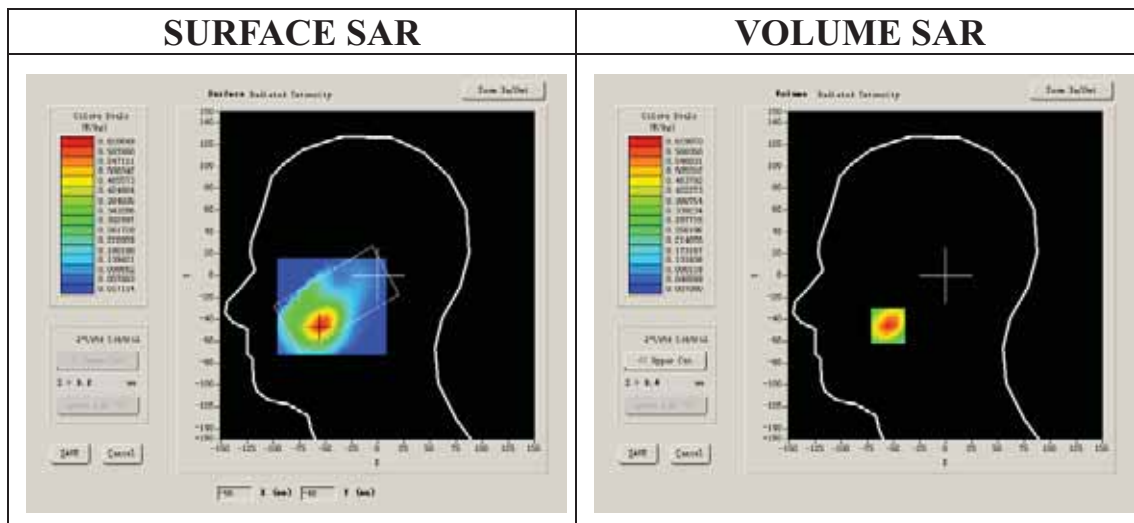
A. Experimental conditions.

Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	WCDMA1900
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

Middle Band SAR (Channel 9400):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	39.910000
Relative permittivity	13.230000
Conductivity (S/m)	1.381800
Power drift (%)	-0.500000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1



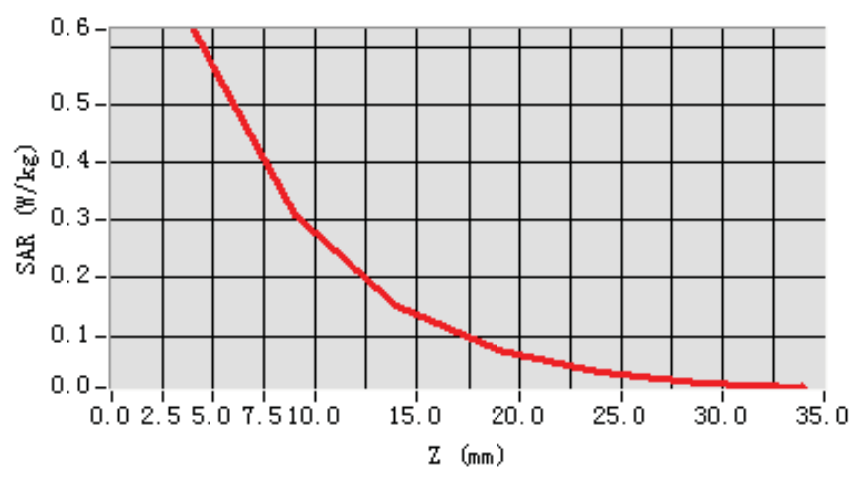
Maximum location: X=-55.00, Y=-46.00

SAR 10g (W/Kg)	0.304702
SAR 1g (W/Kg)	0.598519

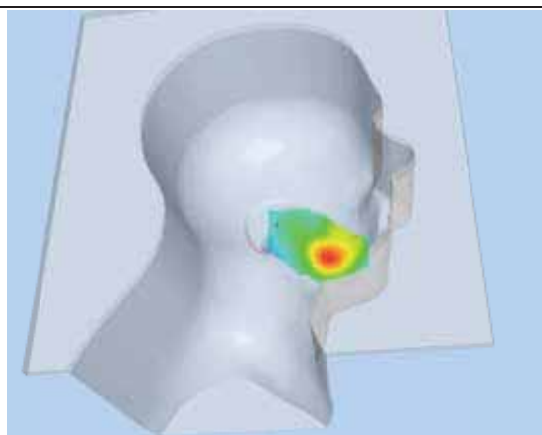
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6299	0.3072	0.1505	0.0744	0.0375	0.0171

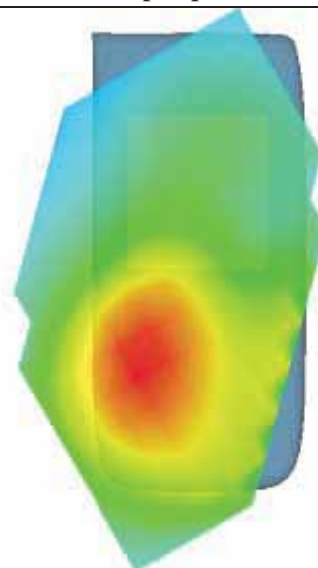
SAR, Z Axis Scan (X = -55, Y = -46)



3D scene shot



Hot spot position



MEASUREMENT 55

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 7 minutes 30 seconds

A. Experimental conditions.

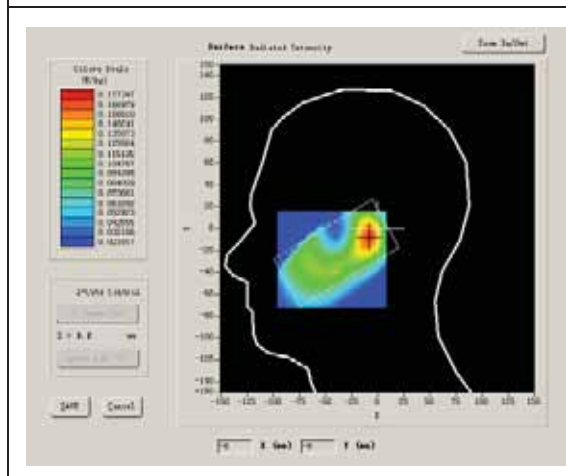
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Tilt
Band	WCDMA1900
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

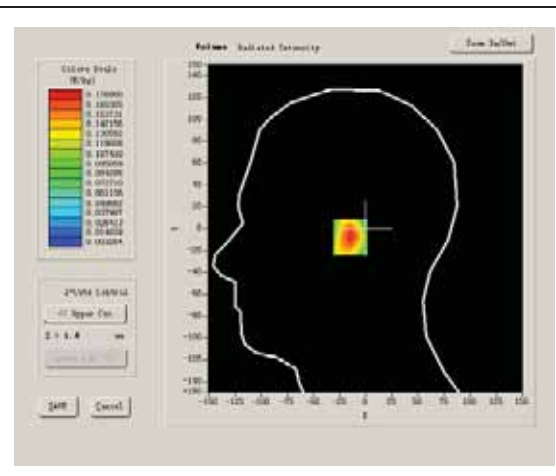
Middle Band SAR (Channel 9400):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	39.910000
Relative permittivity	13.230000
Conductivity (S/m)	1.381800
Power drift (%)	0.190000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



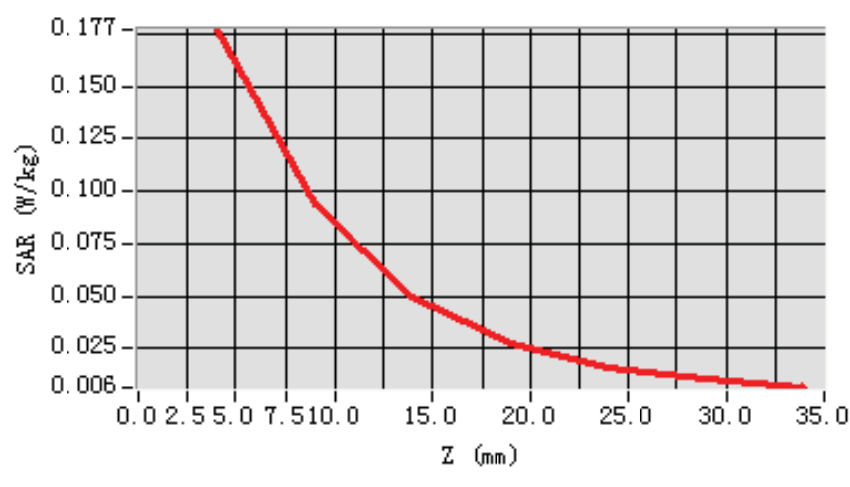
Maximum location: X=-8.00, Y=-8.00

SAR 10g (W/Kg)	0.090839
SAR 1g (W/Kg)	0.167613

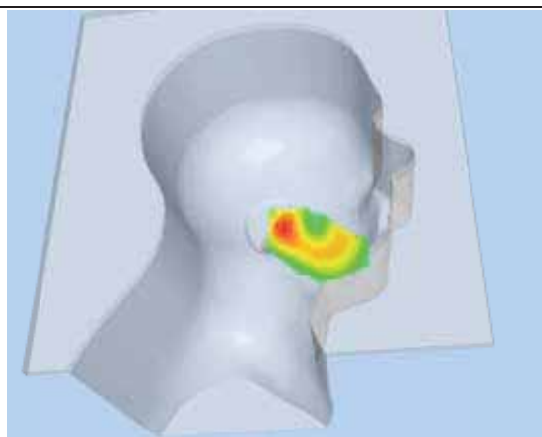
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1769	0.0941	0.0496	0.0273	0.0156	0.0106

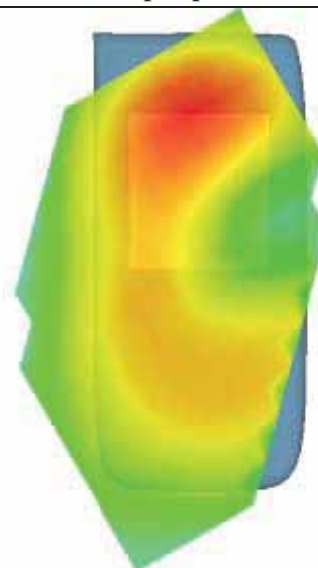
SAR, Z Axis Scan (X = -8, Y = -8)



3D scene shot



Hot spot position



MEASUREMENT 56

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 7 seconds

A. Experimental conditions.

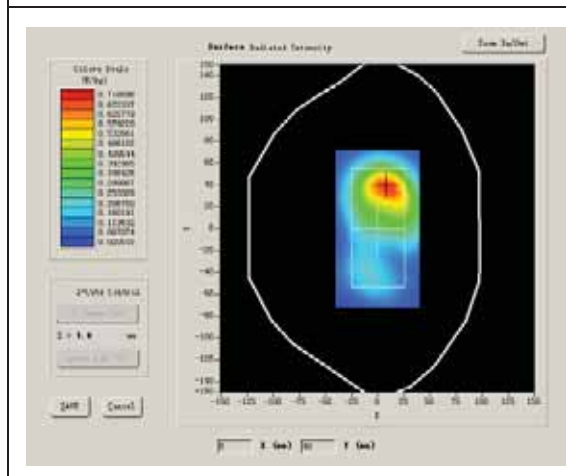
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA1900
Channels	Low
Signal	CDMA

B. SAR Measurement Results

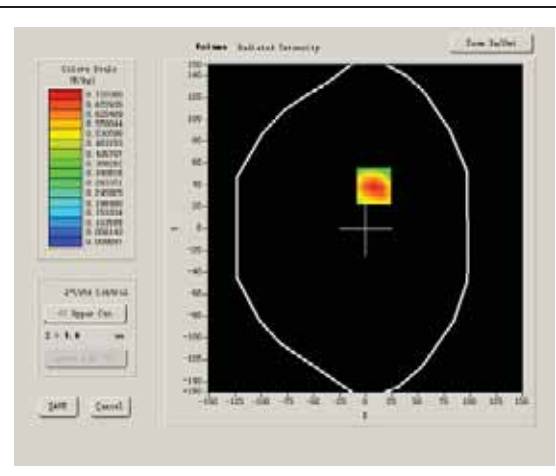
Lower Band SAR (Channel 9262):

Frequency (MHz)	1852.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	1.633572
Power drift (%)	-0.260000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



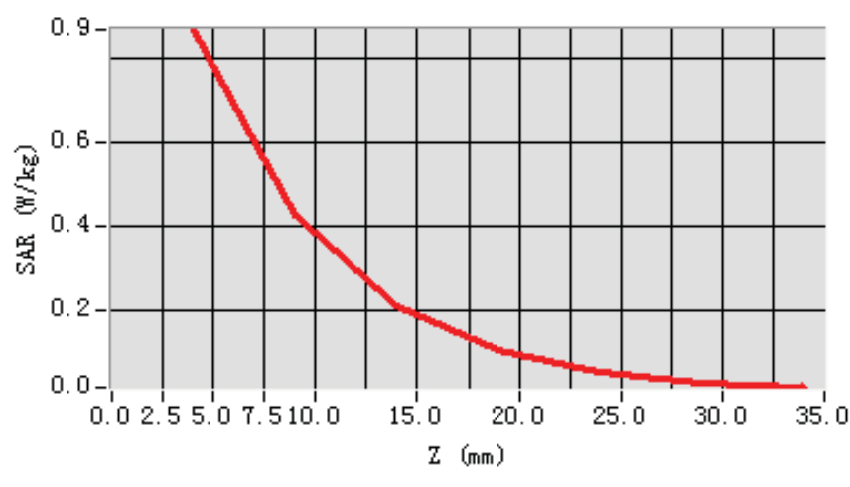
Maximum location: X=8.00, Y=39.00

SAR 10g (W/Kg)	0.440944
SAR 1g (W/Kg)	0.831302

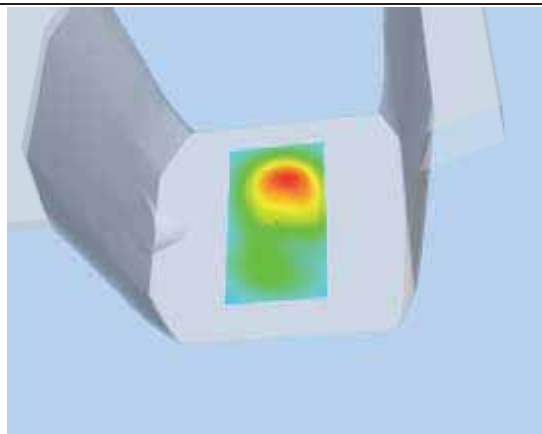
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.8685	0.4263	0.2132	0.1062	0.0556	0.0293

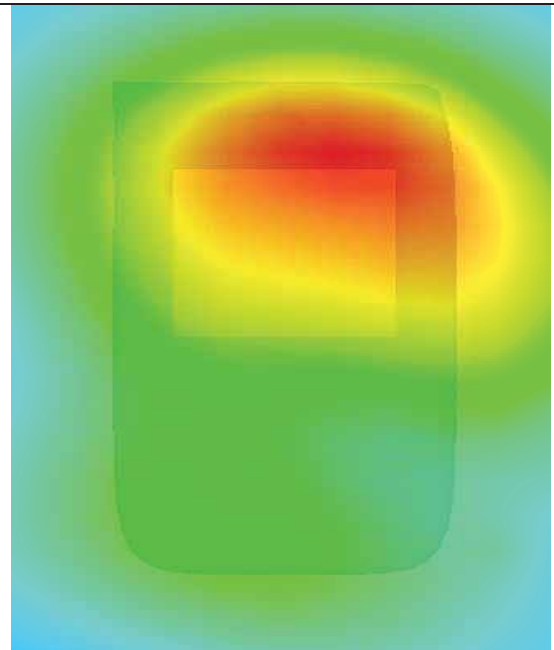
SAR, Z Axis Scan (X = 8, Y = 39)



3D scene shot



Hot spot position



MEASUREMENT 57

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 7 seconds

A. Experimental conditions.

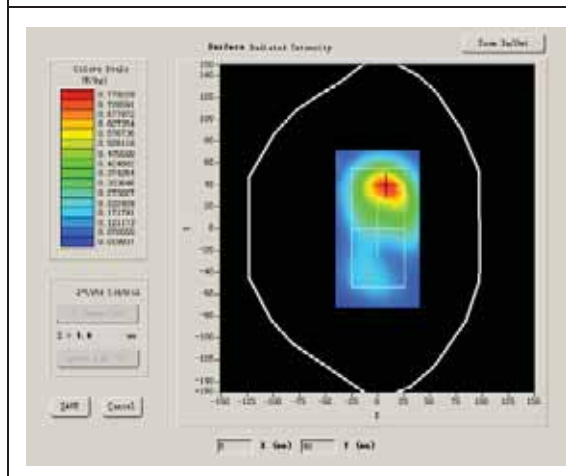
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA1900
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

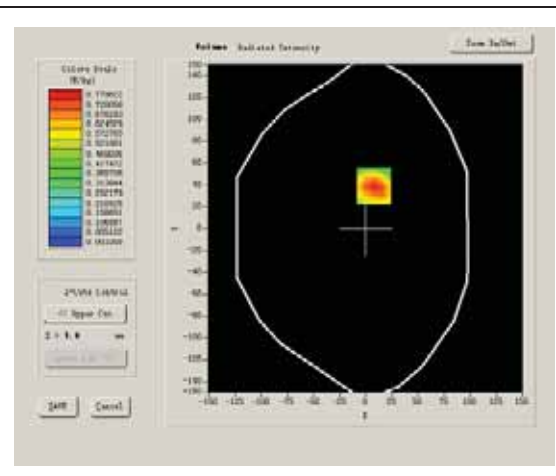
Middle Band SAR (Channel 9400):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	1.658270
Power drift (%)	0.570000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



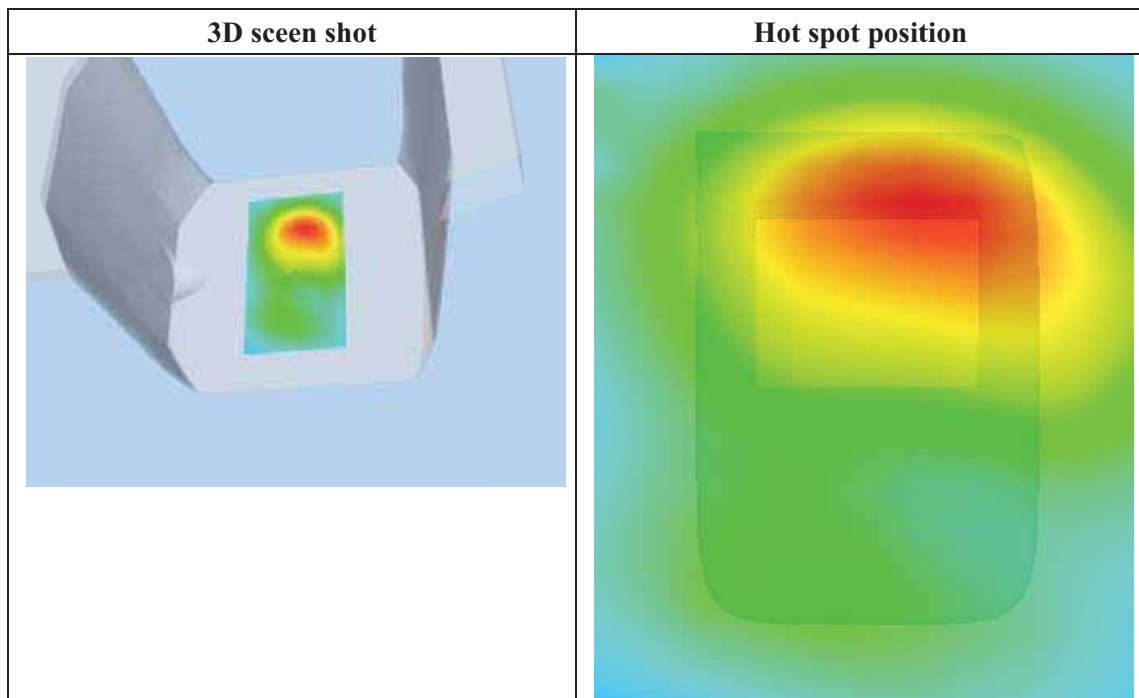
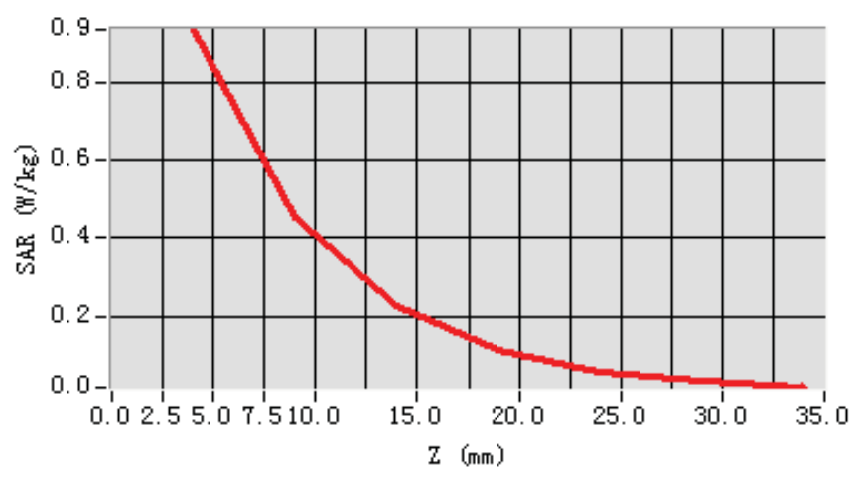
Maximum location: X=8.00, Y=39.00

SAR 10g (W/Kg)	0.470261
SAR 1g (W/Kg)	0.894975

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.9358	0.4539	0.2239	0.1117	0.0566	0.0325

SAR, Z Axis Scan (X = 8, Y = 39)



MEASUREMENT 58

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 7 seconds

A. Experimental conditions.

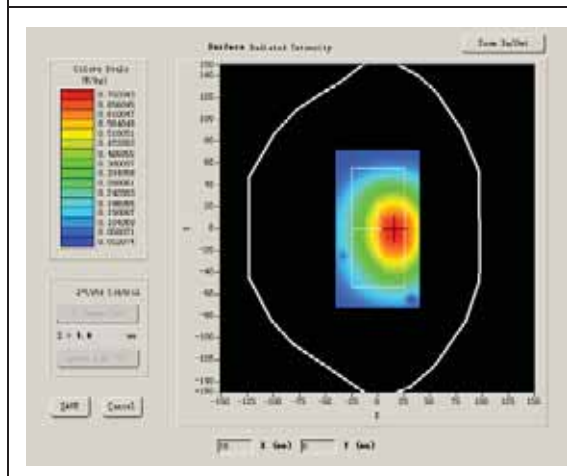
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA1900
Channels	High
Signal	CDMA

B. SAR Measurement Results

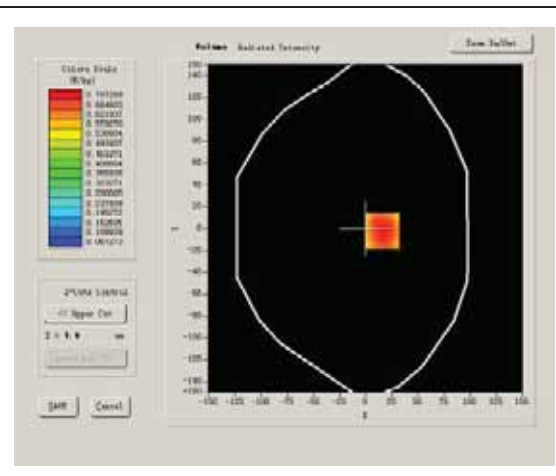
Higher Band SAR (Channel 9538):

Frequency (MHz)	1907.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	1.682085
Power drift (%)	0.060000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



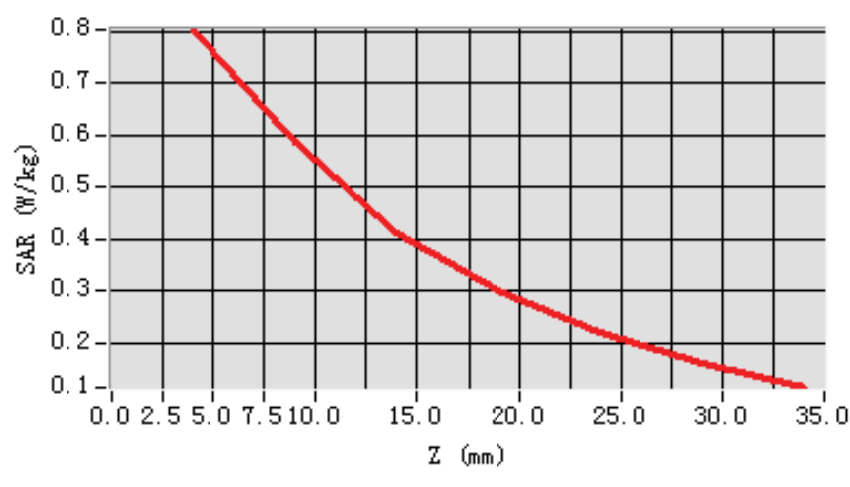
Maximum location: X=16.00, Y=-2.00

SAR 10g (W/Kg)	0.541562
SAR 1g (W/Kg)	0.775194

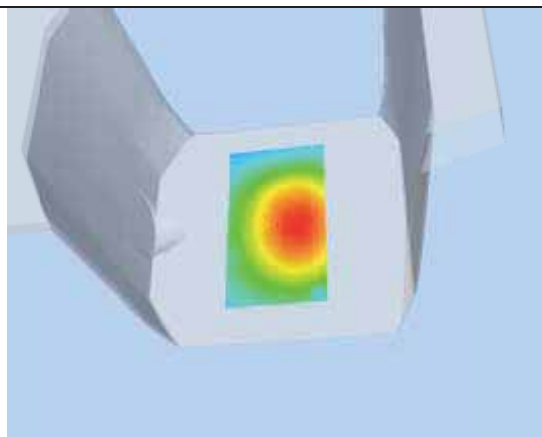
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.8031	0.5868	0.4102	0.3033	0.2227	0.1631

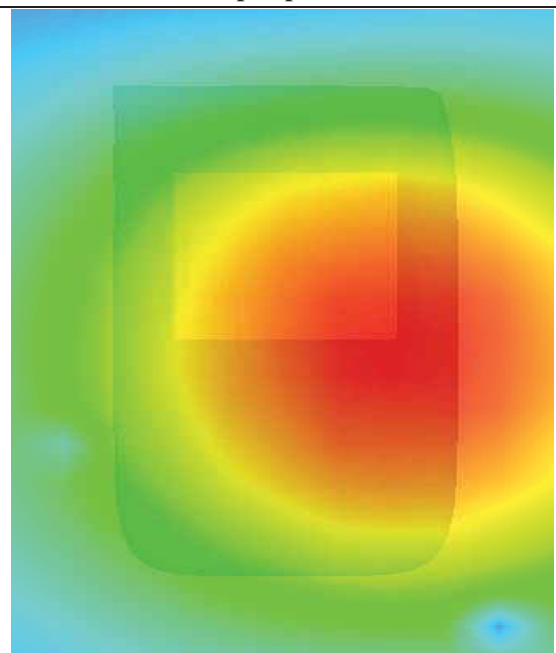
SAR, Z Axis Scan (X = 16, Y = -2)



3D scene shot



Hot spot position



MEASUREMENT 59

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 14 seconds

A. Experimental conditions.

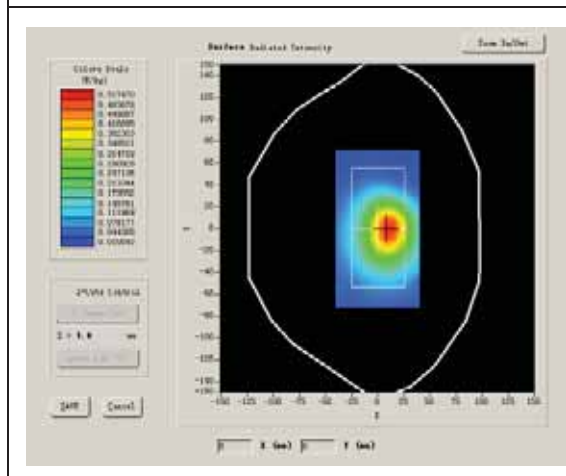
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA1900
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

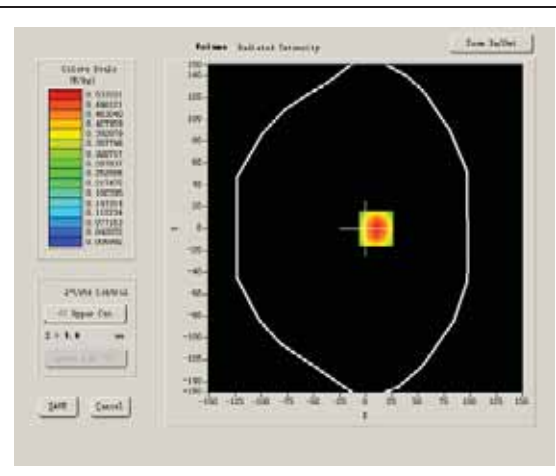
Middle Band SAR (Channel 9400):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	1.658270
Power drift (%)	0.080000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



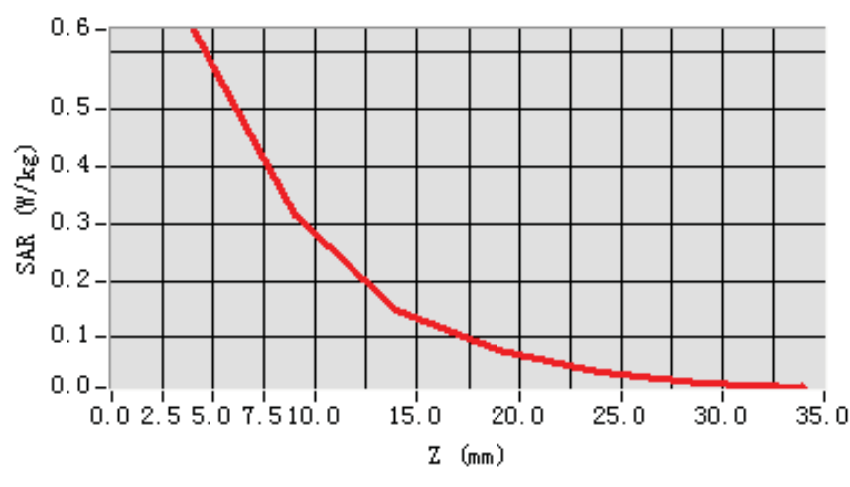
Maximum location: X=10.00, Y=0.00

SAR 10g (W/Kg)	0.324745
SAR 1g (W/Kg)	0.611231

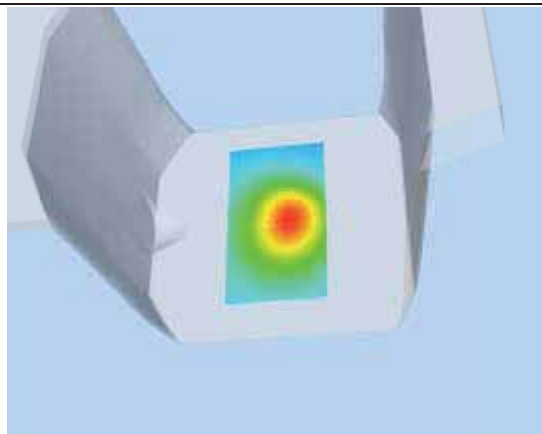
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6399	0.3135	0.1472	0.0767	0.0403	0.0214

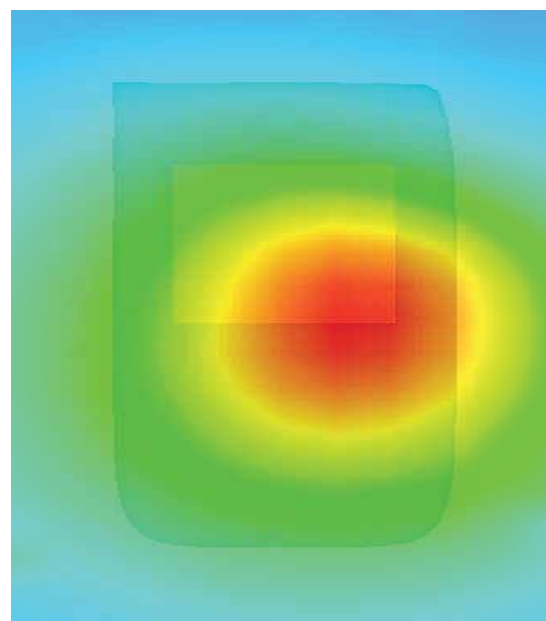
SAR, Z Axis Scan (X = 10, Y = 0)



3D scene shot



Hot spot position



MEASUREMENT 60

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 14 seconds

A. Experimental conditions.

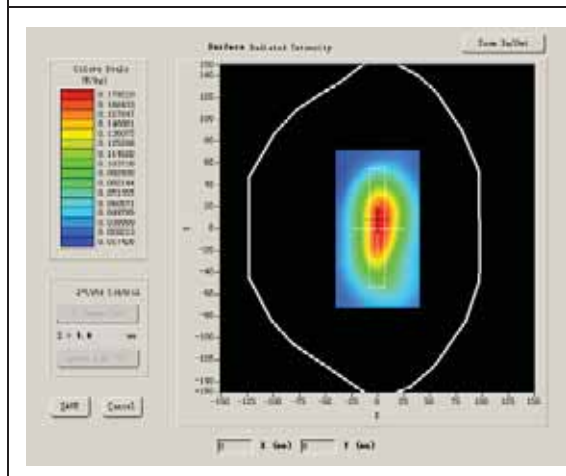
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA1900
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

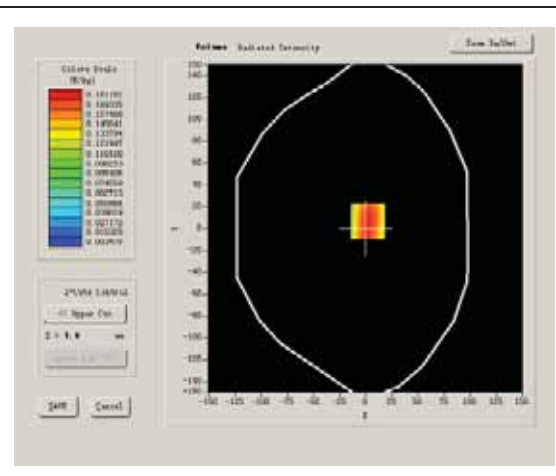
Middle Band SAR (Channel 9400):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	1.658270
Power drift (%)	1.030000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



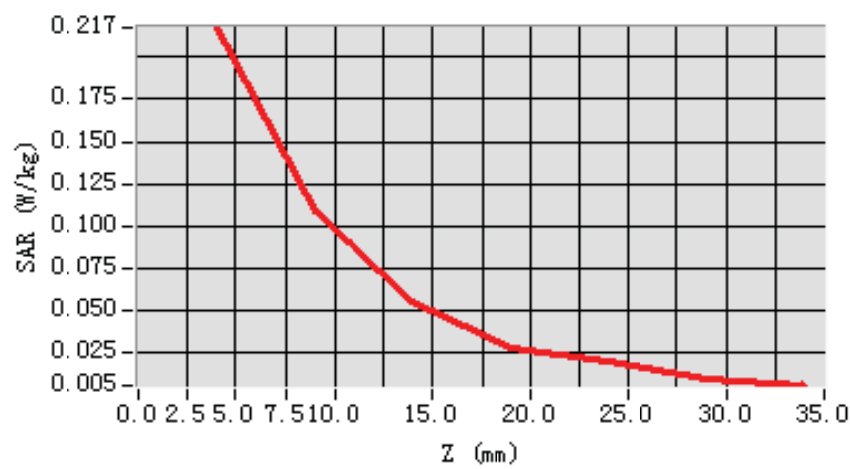
Maximum location: X=2.00, Y=7.00

SAR 10g (W/Kg)	0.115660
SAR 1g (W/Kg)	0.209630

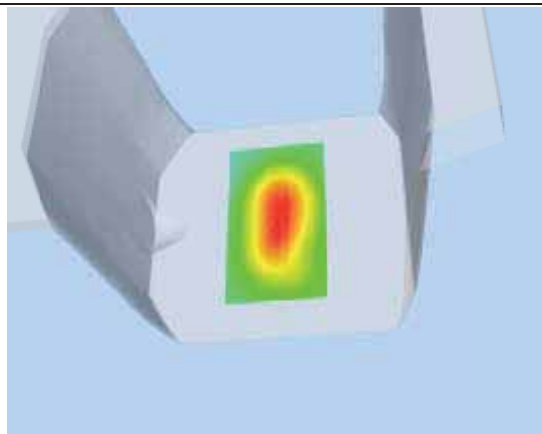
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2174	0.1087	0.0554	0.0271	0.0193	0.0094

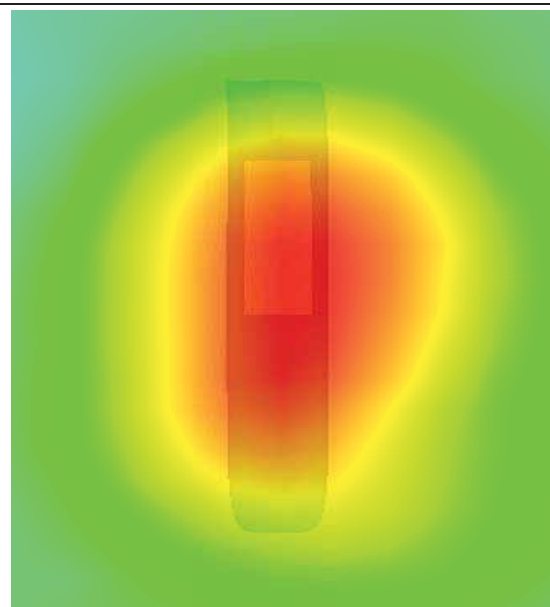
SAR, Z Axis Scan (X = 2, Y = 7)



3D scen shot



Hot spot position



MEASUREMENT 61

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 8 seconds

A. Experimental conditions.

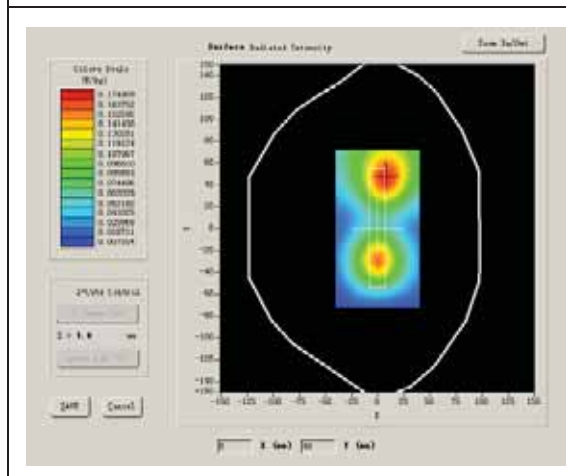
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA1900
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

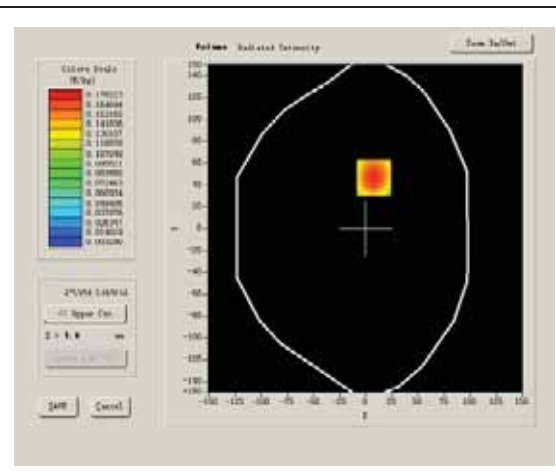
Middle Band SAR (Channel 9400):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	1.658270
Power drift (%)	1.030000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



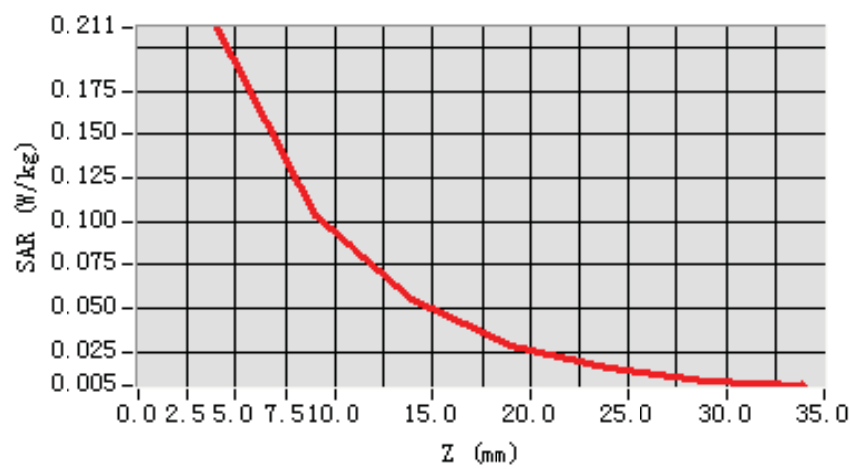
Maximum location: X=8.00, Y=47.00

SAR 10g (W/Kg)	0.111870
SAR 1g (W/Kg)	0.203798

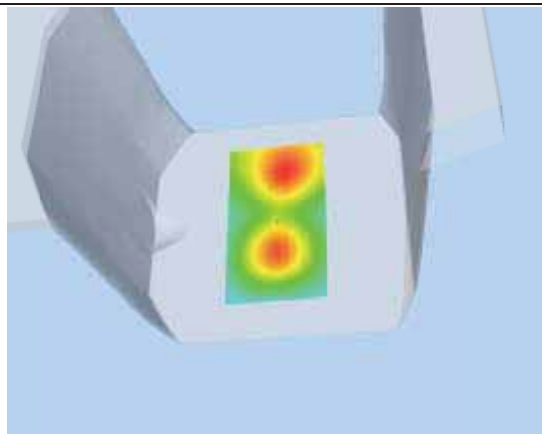
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.2115	0.1029	0.0545	0.0283	0.0152	0.0076

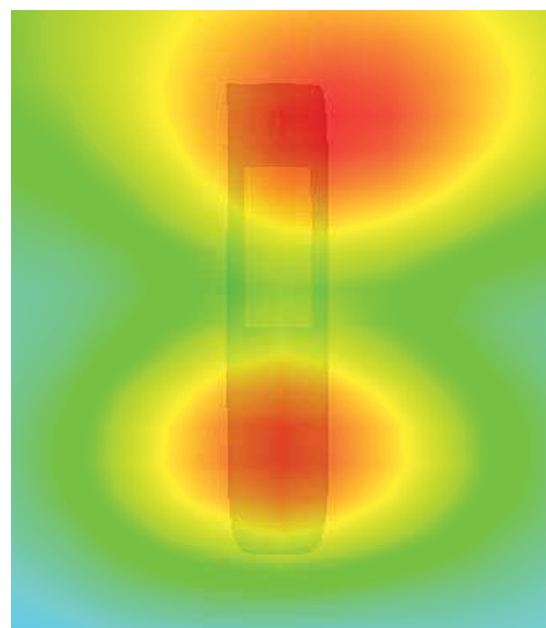
SAR, Z Axis Scan (X = 8, Y = 47)



3D scene shot



Hot spot position



MEASUREMENT 62

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 12 seconds

A. Experimental conditions.

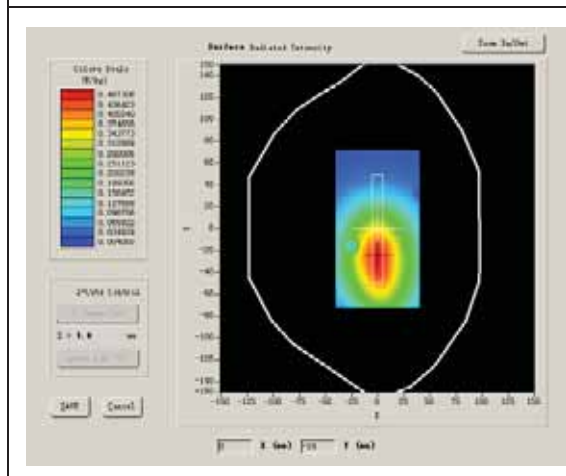
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	WCDMA1900
Channels	Middle
Signal	CDMA

B. SAR Measurement Results

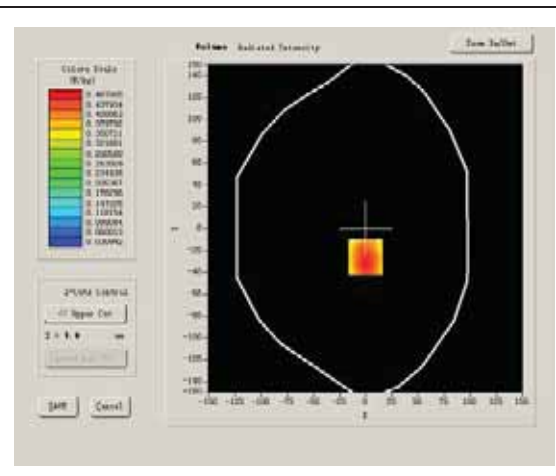
Middle Band SAR (Channel 9400):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050
Conductivity (S/m)	1.658270
Power drift (%)	1.030000
Ambient Temperature:	22.6°C
Liquid Temperature:	22.7°C
ConvF:	40.625,34.773,38.535
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



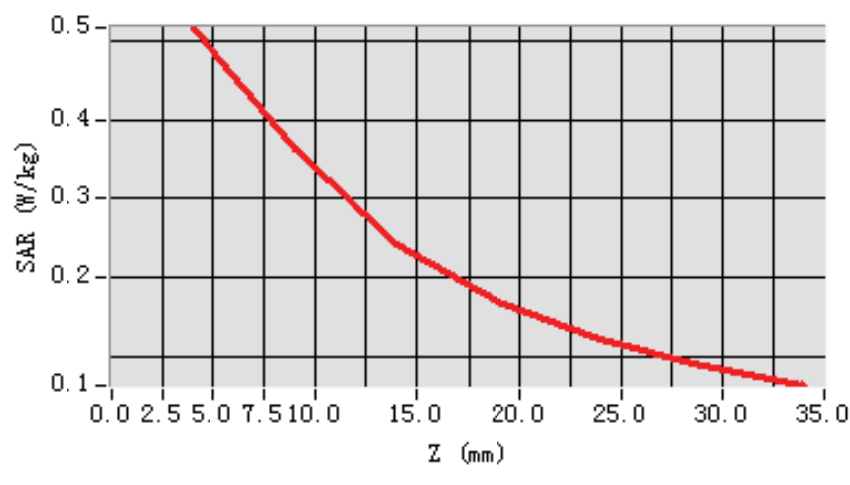
Maximum location: X=0.00, Y=-26.00

SAR 10g (W/Kg)	0.336763
SAR 1g (W/Kg)	0.507310

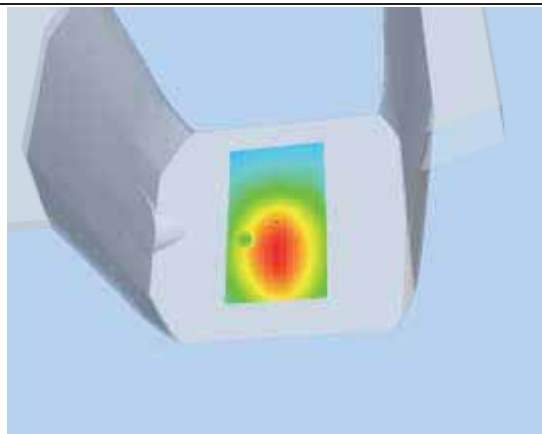
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5176	0.3617	0.2425	0.1690	0.1222	0.0870

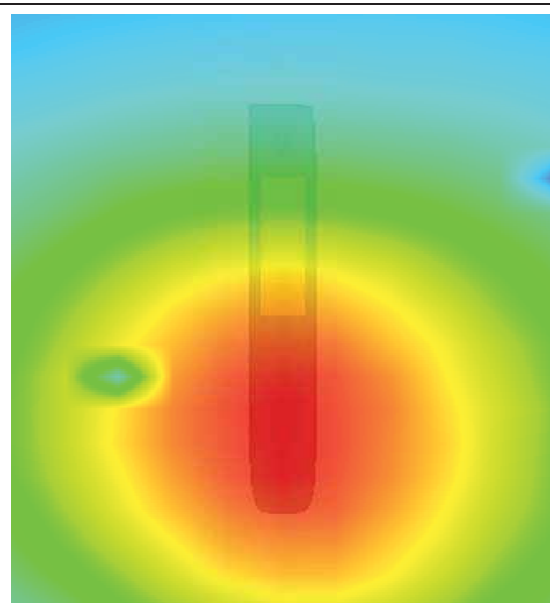
SAR, Z Axis Scan (X = 0, Y = -26)



3D scene shot



Hot spot position



MEASUREMENT 63

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 10 seconds

A. Experimental conditions.

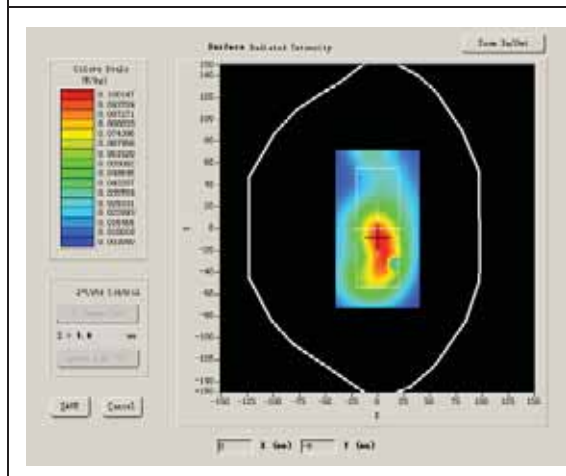
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	802.11B
Channels	Middle
Signal	DSSS

B. SAR Measurement Results

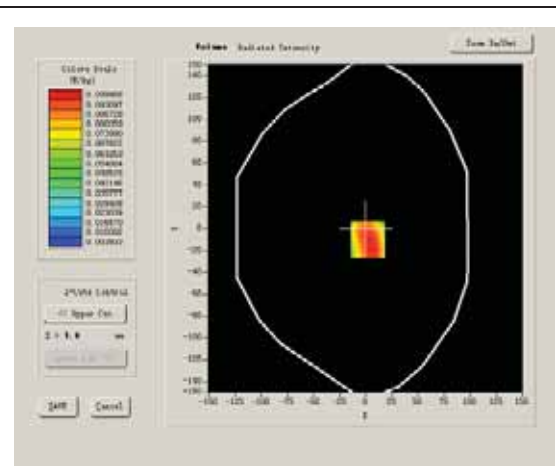
Middle Band SAR (Channel 6)

Frequency (MHz)	2437.000000
Relative permittivity (real part)	52.548876
Relative permittivity	15.500000
Conductivity (S/m)	1.974257
Power drift (%)	-1.710000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.8°C
ConvF:	39.772,33.946,37.835
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



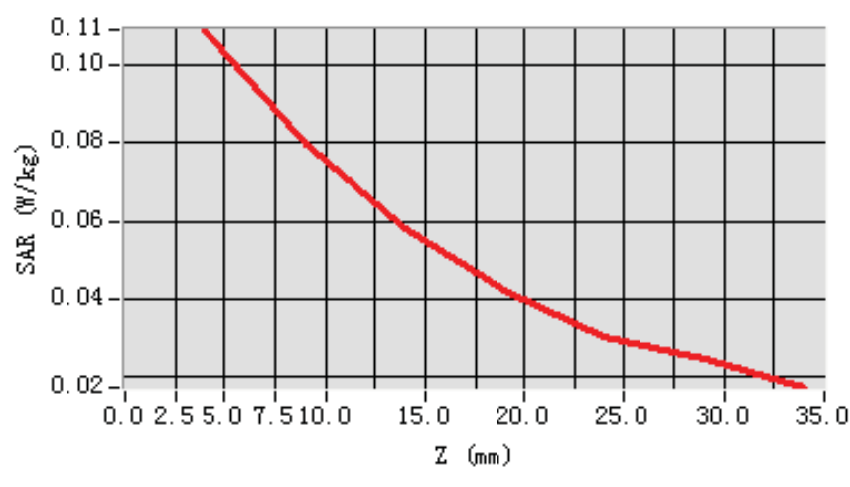
Maximum location: X=2.00, Y=-10.00

SAR 10g (W/Kg)	0.072889
SAR 1g (W/Kg)	0.105965

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1092	0.0795	0.0579	0.0423	0.0303	0.0247

SAR, Z Axis Scan (X = 2, Y = -10)



3D scen shot	Hot spot position

MEASUREMENT 64

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 10 seconds

A. Experimental conditions.

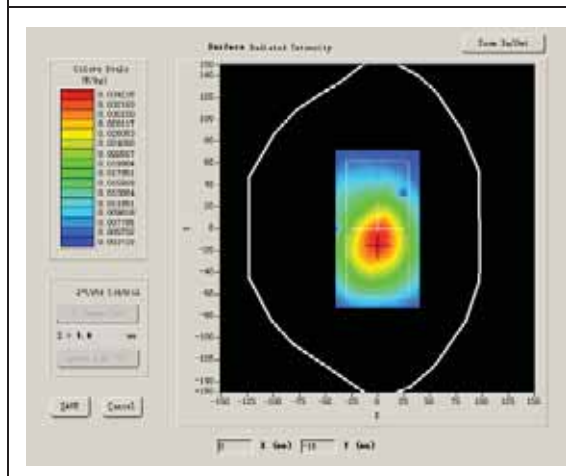
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	802.11B
Channels	Middle
Signal	DSSS

B. SAR Measurement Results

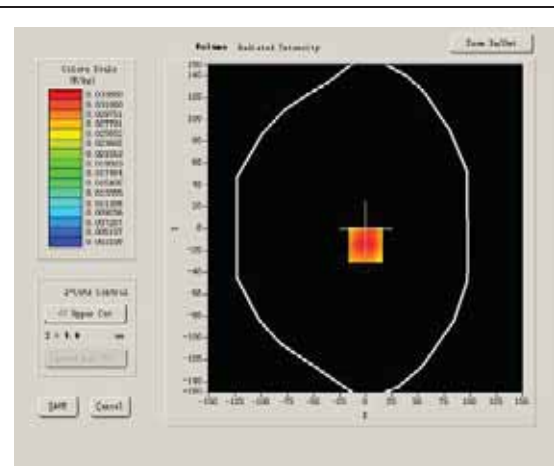
Middle Band SAR (Channel 6)

Frequency (MHz)	2437.000000
Relative permittivity (real part)	52.548876
Relative permittivity	15.500000
Conductivity (S/m)	1.974257
Power drift (%)	-1.520000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.8°C
ConvF:	39.772,33.946,37.835
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



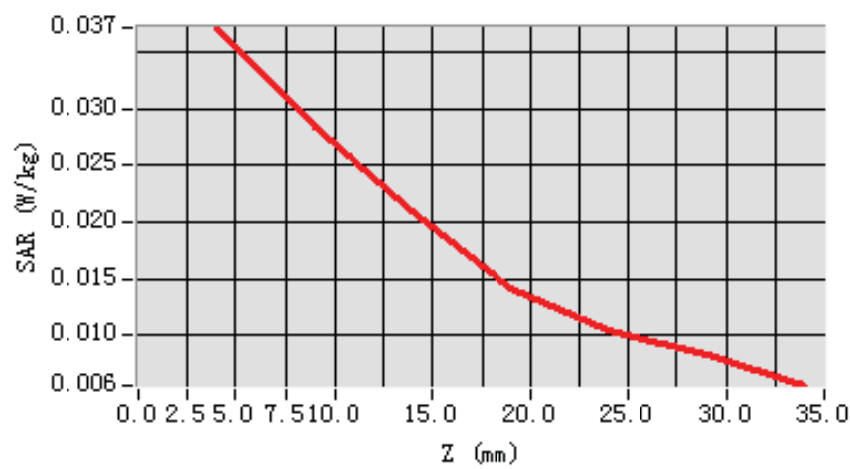
Maximum location: X=0.00, Y=-15.00

SAR 10g (W/Kg)	0.024740
SAR 1g (W/Kg)	0.035394

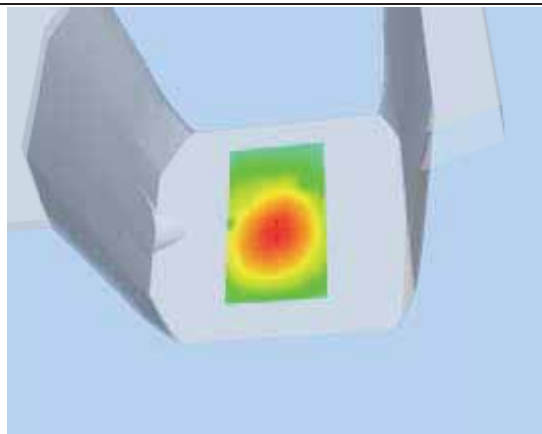
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.0372	0.0283	0.0209	0.0142	0.0105	0.0083

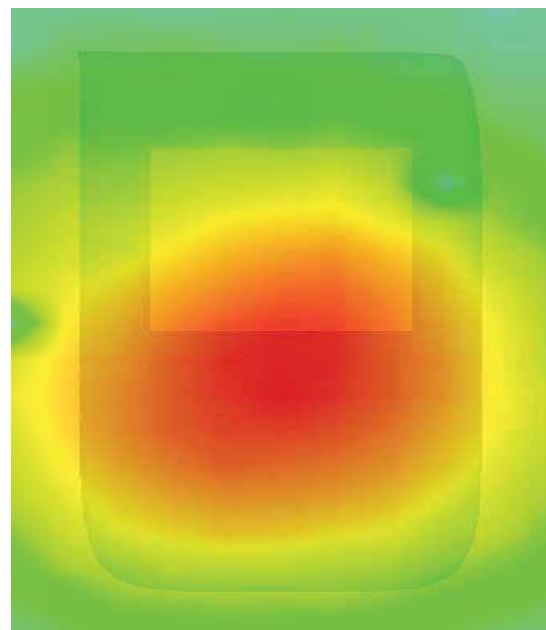
SAR, Z Axis Scan (X = 0, Y = -15)



3D scene shot



Hot spot position



MEASUREMENT 65

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 10 seconds

A. Experimental conditions.

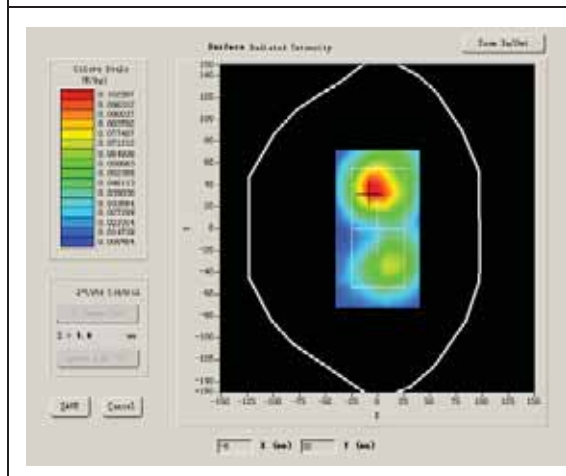
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	802.11B
Channels	Middle
Signal	DSSS

B. SAR Measurement Results

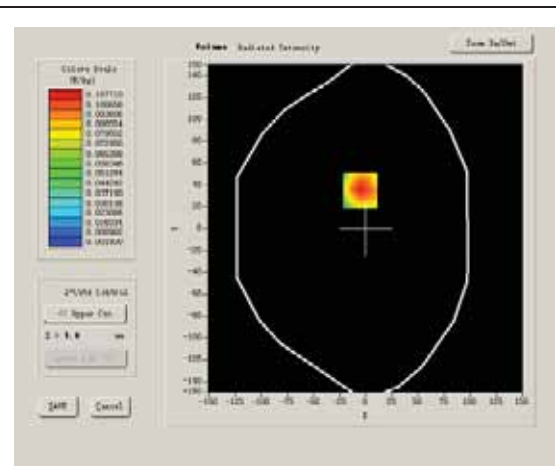
Middle Band SAR (Channel 6)

Frequency (MHz)	2437.000000
Relative permittivity (real part)	52.548876
Relative permittivity	15.500000
Conductivity (S/m)	1.974257
Power drift (%)	-1.360000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.8°C
ConvF:	39.772,33.946,37.835
Crest factor:	1:1

SURFACE SAR



VOLUME SAR



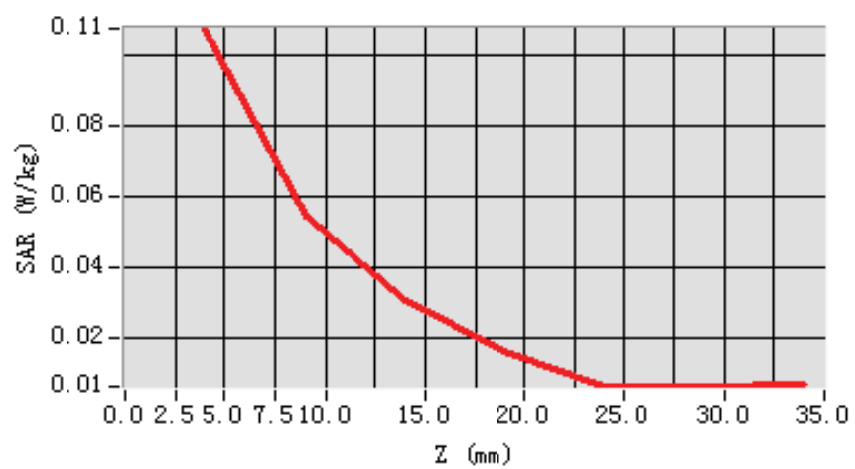
Maximum location: X=-5.00, Y=35.00

SAR 10g (W/Kg)	0.056577
SAR 1g (W/Kg)	0.102899

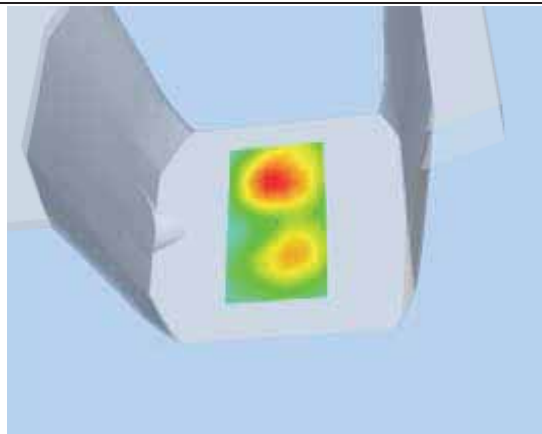
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1077	0.0547	0.0307	0.0164	0.0062	0.0063

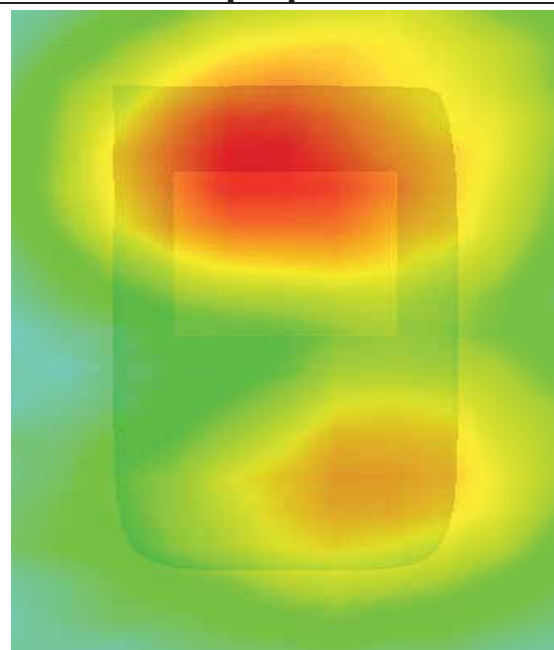
SAR, Z Axis Scan (X = -5, Y = 35)



3D scen shot



Hot spot position



MEASUREMENT 66

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 9 minutes 10 seconds

A. Experimental conditions.

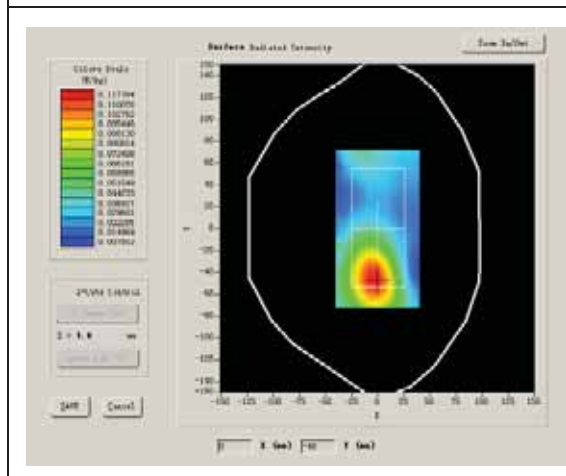
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	802.11B
Channels	Middle
Signal	DSSS

B. SAR Measurement Results

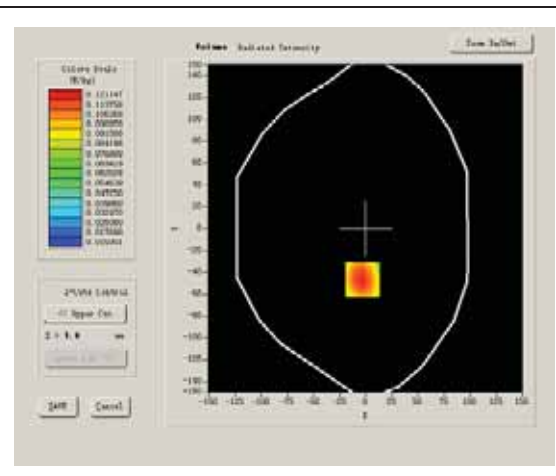
Middle Band SAR (Channel 6)

Frequency (MHz)	2437.000000
Relative permittivity (real part)	52.548876
Relative permittivity	15.500000
Conductivity (S/m)	1.974257
Power drift (%)	-1.090000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.8°C
ConvF:	39.772,33.946,37.835
Crest factor:	1:1

SURFACE SAR



VOLUME SAR

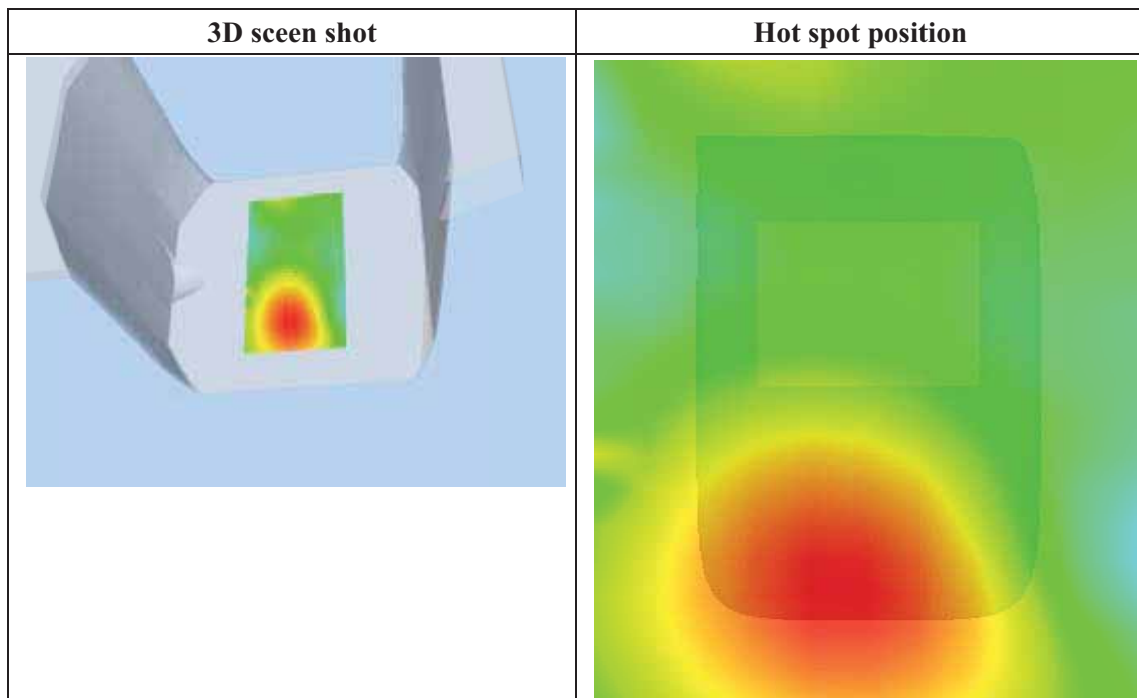
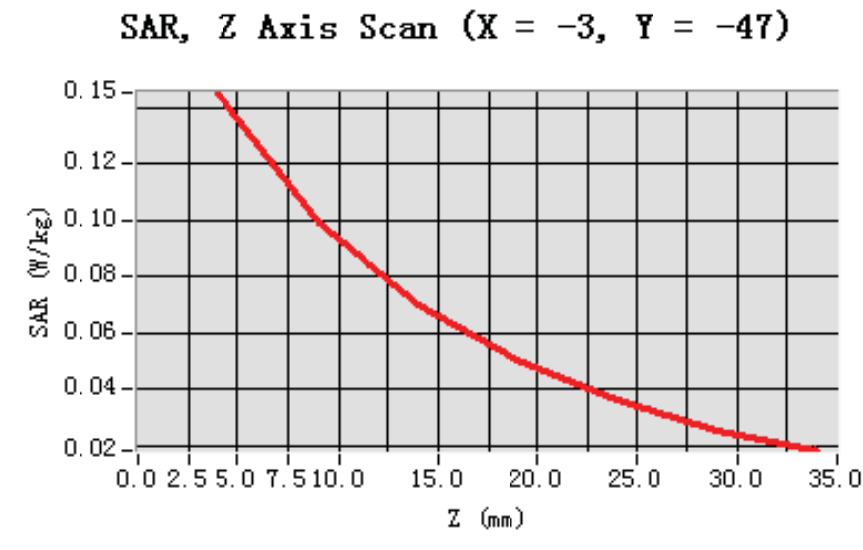


Maximum location: X=-3.00, Y=-47.00

SAR 10g (W/Kg)	0.093076
SAR 1g (W/Kg)	0.139400

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.1454	0.0992	0.0699	0.0504	0.0366	0.0255



System Performance Check Data(835MHz)

Type: Phone measurement (Complete)
 Area scan resolution: dx=8mm,dy=8mm
 Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
 Date of measurement: 14/11/2011
 Measurement duration: 13 minutes 27 seconds

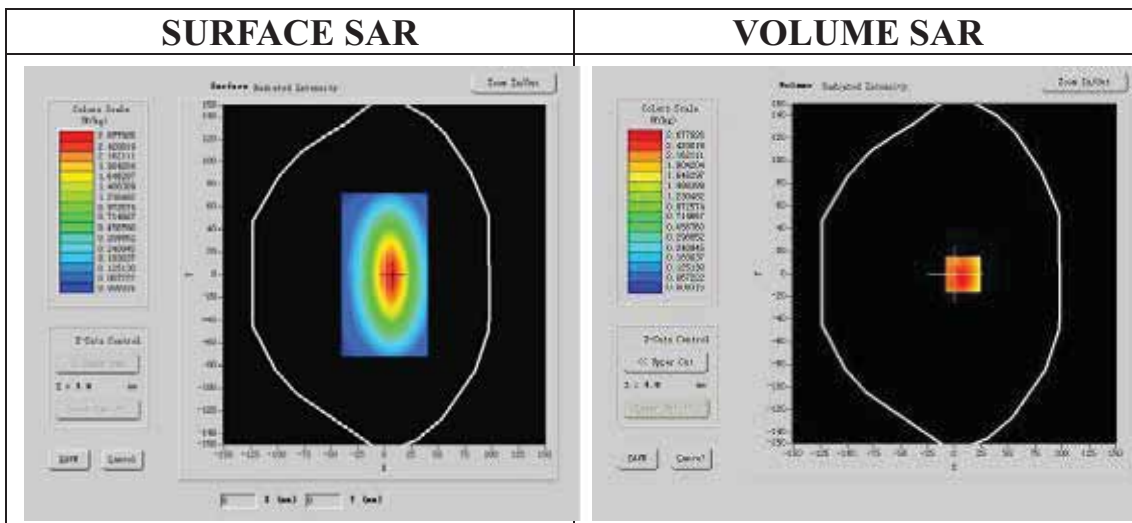
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	
Band	835MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

Frequency (MHz)	835.000000
Relative permittivity (real part)	40.490002
Relative permittivity	15.070000
Conductivity (S/m)	0.983918
Power drift (%)	-0.050000
Ambient Temperature:	22.4°C
Liquid Temperature:	21.5°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1



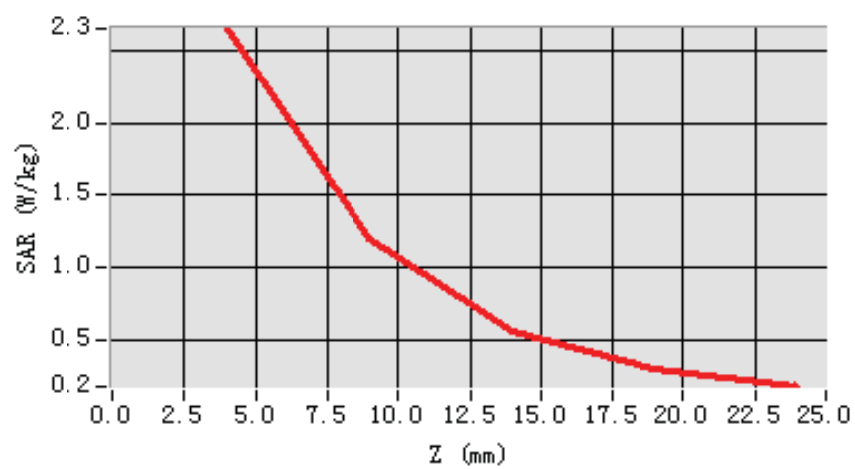
Maximum location: X=5.00, Y=1.00

SAR 10g (W/Kg)	1.685732
SAR 1g (W/Kg)	2.478462

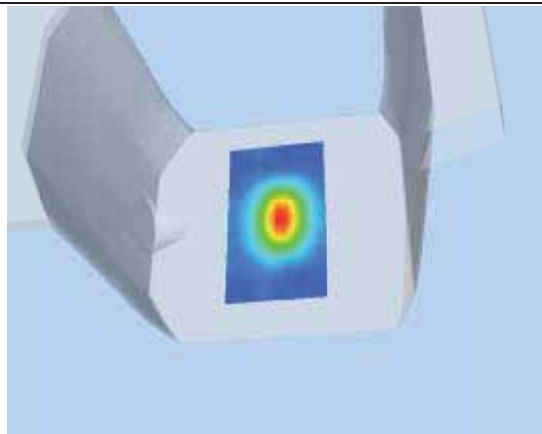
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	2.2754	1.2251	0.5857	0.3114

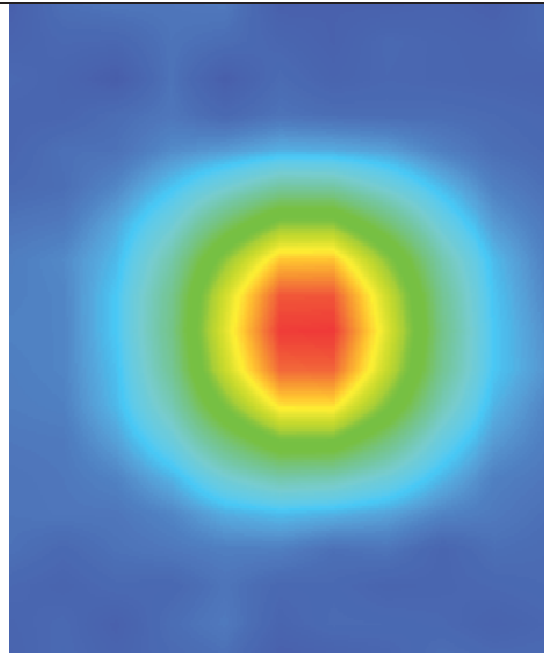
SAR, Z Axis Scan (X = 5, Y = 1)



3D scen shot



Hot spot position



System Performance Check Data(1900MHz)

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 13 minutes 27 seconds

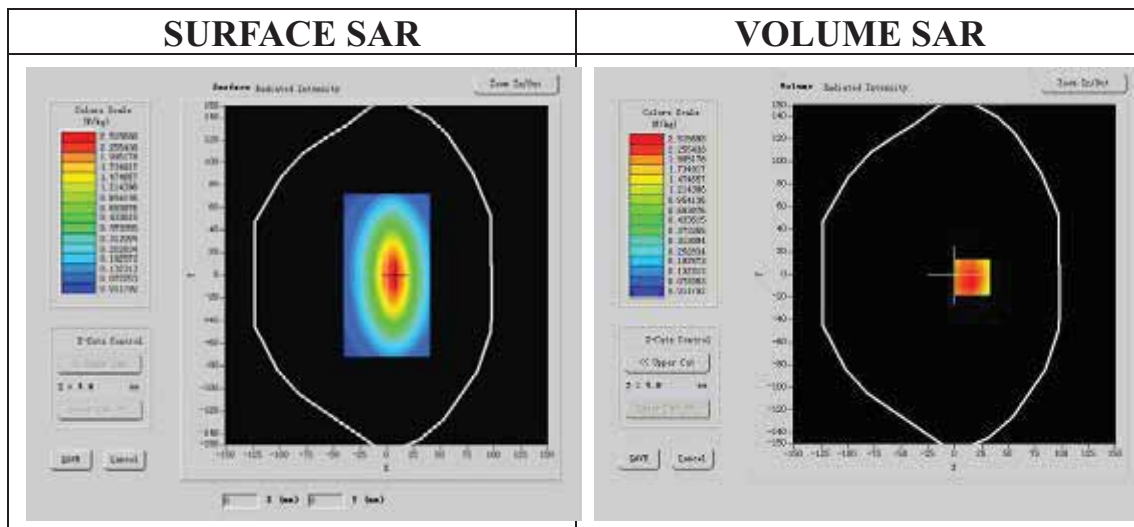
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	
Band	1900MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

Frequency (MHz)	1900.000000
Relative permittivity (real part)	38.930000
Relative permittivity	15.070000
Conductivity (S/m)	1.321229
Power drift (%)	-0.140000
Ambient Temperature:	22.3°C
Liquid Temperature:	22.6°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

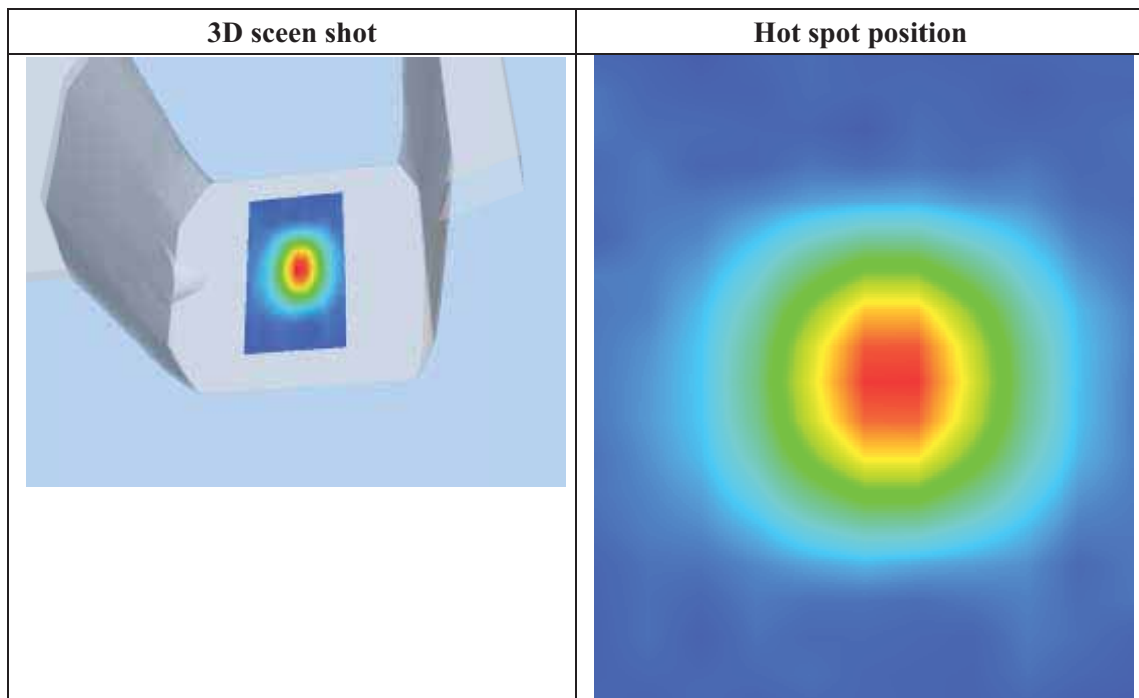
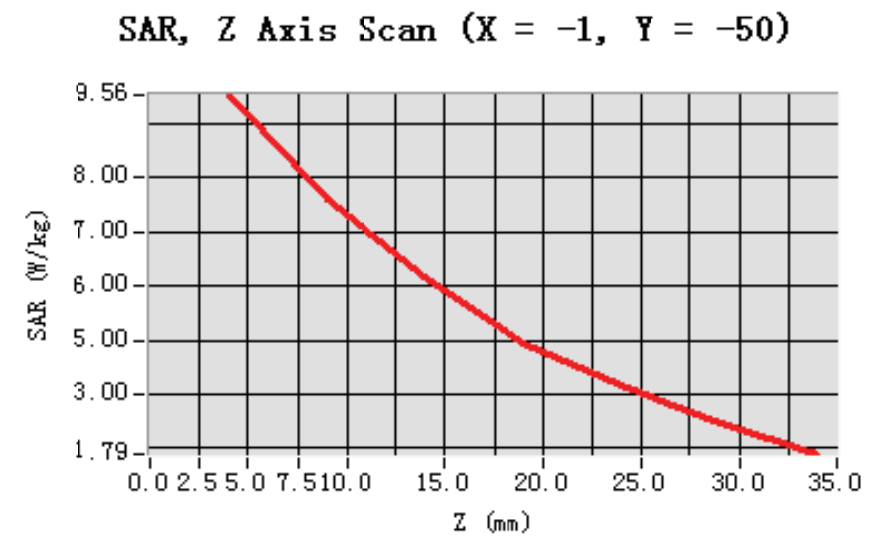


Maximum location: X=-1.00, Y=-50.00

SAR 10g (W/Kg)	4.884149
SAR 1g (W/Kg)	9.454628

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	9.4148	5.3955	2.7646	0.3955



System Performance Check Data(2450MHz)

Type: Phone measurement (Complete)

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

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

Date of measurement: 15/11/2011

Measurement duration: 13 minutes 27 seconds

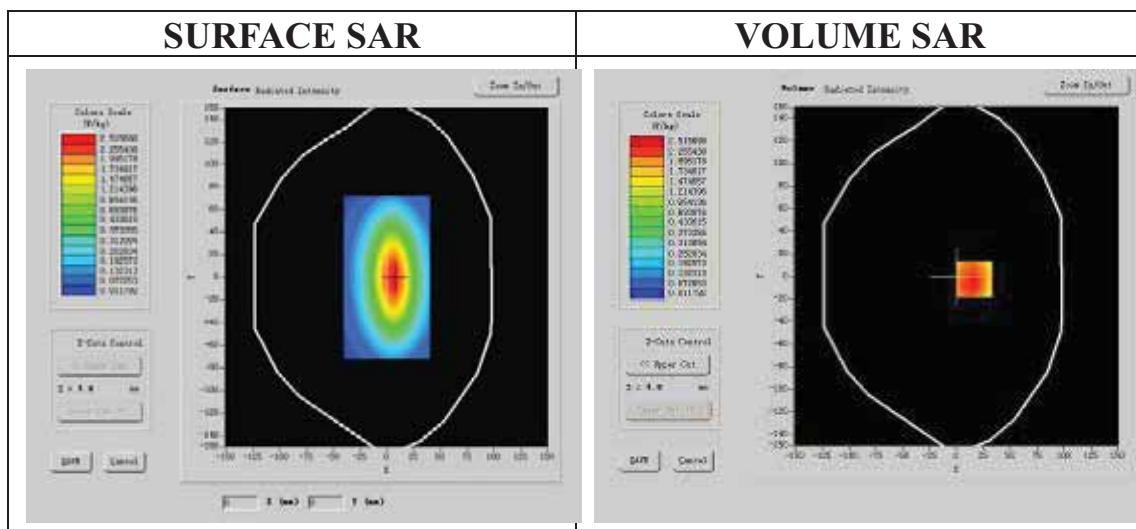
A. Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	
Band	2450MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

Frequency (MHz)	2450.000000
Relative permittivity (real part)	52.548876
Relative permittivity	15.500000
Conductivity (S/m)	1.974257
Power Drift (%)	-2.180000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.8°C
ConvF:	39.772,33.946,37.835
Crest factor:	1:1



Maximum location: X=-1.00, Y=-50.00

SAR 10g (W/Kg)	6.256773
SAR 1g (W/Kg)	12.789110

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	13.1279	6.8312	3.5991	1.3473

