FCC SAR

TEST REPORT

of

HSDPA USB Modem

Model Name: One Touch X060
Trade Name: Alcatel
Report No.: SZ08110085S03
FCC ID: RAD108

prepared for

TCT Mobile Limited
4/F, South Building,No.2966, Jinke Road, Zhangjiang High-Tech Park, Pudong, Shanghai, 201203, P.R.China

prepared by

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Contents

General Information

1.1. Notes

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1.2. Organization item

Report No.:	SZ08110085S03
Date of Issue:	Jan 13, 2009
Date of Tests:	Jan 10, 2009 - Jan 10, 2009
Responsible for Accreditation:	Shu luan
Project Manager:	Li Lei
Deputy Project Manager:	Liao Jianming

1.3. Conclusion

Shenzhen Electronic Product Quality Testing Center Morlab Laboratory has verified that all tests as listed in the section 4.6 of this report haven been performed successfully with the tested equipment.

Li Lei
Tested by
(Responsible for the Test Report)

Liao Jianming
Reviewed by
(Verification of the Test Report)

Shu luan
Approved by
(Responsible Test Lab Manager)

2. Testing Laboratory

2.1. Identification of the Responsible Testing Laboratory

Company Name:	Shenzhen Electronic Product Quality Testing Center
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

2.2. Identification of the Responsible Testing Location

Name:	Shenzhen Electronic Product Quality Testing Center Morlab Laboratory
Address:	3/F, Electronic Testing Building, Shahe Road, Nanshan District, Shenzhen, 518055 P. R. China

2.3. Accreditation Certificate

Accredited Testing Laboratory:	No. CNAS L1659 (see Annex A)

2.4. List of Test Equipments

No.	Instrument	Type
1	PC	Dell (Pentium IV 2.4GHz, SN:X10-23533)
2	Network Emulator	Rohde&Schwarz (CMU200, SN:105894)
3	Voltmeter	Keithley (2000, SN:1000572)
4	Synthetizer	Rohde&Schwarz (SML_03, SN:101868)
5	Amplifier	Nucl udes (ALB216, SN:10800)
6	Power Meter	Rohde&Schwarz (NRVD, SN:101066)
7	Probe	Antennessa (SN:SN_3708_EP80)
8	Phantom	Antennessa (SN:SN_36_08_SAM62)
9	Liquid	Antennessa (Last Calibration:21 08 04)

3. Technical Information

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

3.1. Identification of Applicant

Company Name:	TCT Mobile Limited
Address:	4/F, South Building,No.2966, Jinke Road, Zhangjiang High-Tech Park, Pudong, Shanghai, 201203, P.R.China
Contact Person:	Hu Dai
Telephone:	+86-755-3303 5444
Facsimile:	+86-755-3303 5460
E-mail:	dai.hu@jrdcom.com

3.2. Identification of Manufacturer

Company Name:	TCT Mobile Limited
Address:	4/F, South Building,No.2966, Jinke Road, Zhangjiang High-Tech Park, Pudong, Shanghai, 201203, P.R.China
Contact Person:	Hu Dai
Telephone:	+86-755-3303 5444
Facsimile:	+86-755-3303 5460
E-mail:	dai.hu@jrdcom.com

3.3. Equipment Under Test (EUT)

Brand Name:	Alcatel
Type Name:	Alcatel
Marking Name:	One Touch X060
Hardware Version:	Proto
Software Version:	n.a
Frequency Bands:	GSM 850MHz(channel 128:824.20MHz, channel 190:836.59MHz, channel 251:848.29MHz,) GSM 1900MHz(channel 512:1850.19MHz, channel 661:1880.00MHz, channel 810:1909.80MHz,) WCDMA 850MHz(channel 4132: 826.00MHz, channel 4182:836.00MHz, channel 4233: 846.00MHz,) WCDMA 1900MHz(channel 9262: 1852.00MHz, channel 9400: 1880.00MHz, channel 9538: 1907.00MHz,)
Modulation Mode:	GSM 850MHz,GSM 1900MHz,WCDMA 850MHz,WCDMA 1900MHz

Antenna type: Build inside

3.3.1. Photographs of the EUT

Please see for photographs of the EUT.

3.3.2. Identification of all used EUTs

The EUT Identity consists of numerical and letter characters (see the table below), the first five numerical characters indicates the Type of the EUT defined by Morlab, the next letter character indicates the test sample, and the following two numerical characters indicates the software version of the test sample.

EUT Identity	ESN	Hardware Version	Software Version
1#	00000000	Proto	n.a
2#	00000000	Proto	n.a

4. Test Results

4.1. 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 Techuiques.

4.2. Test Environment/Conditions

Normal Temperature (NT):	20 ... 25 °C		
Relative Humidity:	30 ... 75 %		
Air Pressure:	980 ... 1020 hPa		
Details of Power Supply:	220V/50Hz AC		
Extreme Temperature:	Low Temperature (LT)	=	-10°C
	High Temperature (HT)	=	55°C
Extreme Voltage of the EUT:	Normal Voltage (NV)	=	4.75V
	Low Voltage (LV)	=	5.0V
	High Voltage (HV)	=	5.25V
Test frequency:	GSM 850MHz,GSM 1900MHz,WCDMA 850MHz,WCDMA 1900MHz		
Operation mode:	Call established		
Power Level:	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 128, 190 and 251 respectively in the case of GSM 850MHz or is allocated to 512, 661 and810 respectively in the case of GSM 1900MHz or is allocated to 4132, 4182 and 4233 respectively in the case of WCDMA 850MHz and is allocated to 9262, 9400 and 9538 respectively in the case of WCDMA 1900MHz, The EUT is 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.

4.3.Operational Conditions During Test

4.3.1. Informations On The Testing

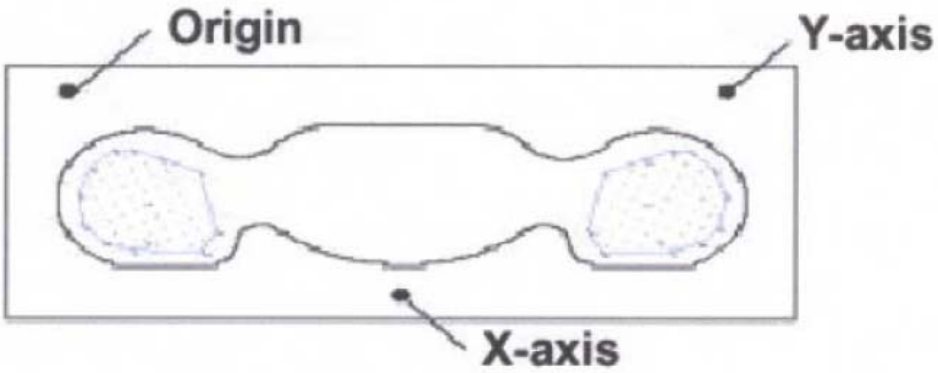
4.3.1.1 Body-worn Configurations

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 0.5cm(taking into account of the IEEE 1528 and the place of the antenna)

4.3.1.2Phantom Requirements

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.



Picture A:SAR Measurement Points in Area Scan

4.3.1.3 Test to be Performed

For devices with retractable antenna the SAR test shall be performed with the antenna fully extended and fully retracted. Other factors that may affect the exposure shall also be tested. For example, optional antennas or optional battery packs which may significantly change the volume, lengths, flip open/closed, etc. Of the device, or any other accessories which might have the potential to considerably increase the peak spatial-average SAR value.

The SAR test shall be performed at the high, middle and low frequency channels of each operating mode. If the SAR measured at the middle channel for each test configuration is at least 3.0dB lower than the SAR limit, testing at the high and low channels is optional.
For handsets with HSDPA body SAR is not required when the maximum average output of each RF channel with HSDPA active is less than 1/4 dB higher than that measured without HSDPA using

12.2kbps RMC Otherwise SAR is measured for HSDPA using FRC, with the body exposure configuration that results the highest in SAR in 12.2 RMC for that RF channel.

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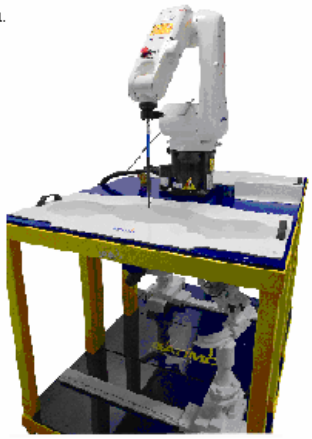
4.3.2. The Measurement System

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.



COMOSAR bench

The mobile phone 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 10 g mass.

II.1. 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 2 mm +/- 0,2 mm. It enables the dosimetric evaluation of left and right hand 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.

II.2. Probe

For the measurements the Specific Dosimetric E-Field Probe SSE5 with following specifications is used.

- Dynamic range: 0.01-100 W/kg
- Tip Diameter : 5 mm

- Distance between probe tip and sensor center : 2.5 mm
- 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 : <0.50 dB
- Calibration range : 835 to 2500 MHz for head & body simulating liquid
- Angle between probe axis (evaluation axis) and suface normal line : less than 30°

II.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 16 mm * 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.

II.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 minimise 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 1 mm 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.

4.3.3. Uncertainty Assessment

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

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	7.0	N	1	1	1	7.00	7.00	∞
Axial Isotropy	E.2.2	2.5	R	$\sqrt{3}$	$(1-Cp)^{1/2}$	$(1-Cp)^{1/2}$	1.02	1.02	∞
Hemispherical Isotropy	E.2.2	4.0	R	$\sqrt{3}$	$\sqrt{Cp}$	$\sqrt{Cp}$	1.63	1.63	∞
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 Algoritms 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	
Output power Variation – SAR drift measurement	6.6.2	4.76	R	$\sqrt{3}$	1	1	2.75	2.75	∞
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	0.57	R	$\sqrt{3}$	0.64	0.43	0.21	0.14	∞

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	3.66	R	$\sqrt{3}$	0.6	0.49	1.27	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				11.28	10.78	
Expanded Uncertainty (95% Confidence interval)			k				21.99	21.03	

4.3.4. Equipments and results of validation testing

Equipments :

name	Type and specification
Signal generator	E4433B
Directional coupler	450MHz-3GHz
Amplifier	3W 502(10-2500MHz)
Reference dipole	SN 36/08 DIPF 101

Results:

Frequency	Target value (1g)	Test value (1g)
835MHz	10.8W/Kg	9.948(body)
1900MHz	39.7W/Kg	39.388(body)

Note:Please refer to check the system performance data, the first 181-186 page. 250 mW input power

4.3.5. Dielectric Performance

The measured 1-gram averaged SAR values of the device against the head and the body are provided in Tables 1 and 2 respectively. The humidity and ambient temperature of test facility were 54% ~60% and 23.0 °C ~23.8°C respectively. The SAM head phantom（SN 0381 SH）were full of the head tissue simulating liquid. 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). A base station simulator was used to control the device during the SAR measurement. The phone was supplied with full-charged battery for each measurement.
For head measurement, the device was tested at the lowest, middle and highest frequencies in the

transmit band.

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

Table 1: 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	56.1	0.95
Validation value (Jan 10)	835 MHZ	54.540001	0.975187
Target value	1900 MHz	54	1.45
Validation value (Jan 10)	1900 MHz	53.345554	1.428747

4.3.6. Simulant liquids

Simulant liquids that are used for testing at frequencies of GSM 1900MHz, 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 20litres for a horizontal bath phantom.

Ingredients (% by weight)	Frequency Band 835MHz		Frequency Band 1900MHz	
Tissue Type	Head	Body	Head	Body
Water	41.45	52.4	55.36	40.4
Salt(NaCl)	1.45	1.4	0.35	0.5
Sugar	56.0	45.0	30.45	58.0
HEC	1.0	1.0	0.0	1.0
Bactericide	0.1	0.1	0.0	0.1
Triton	0.0	0.0	0.0	0.0
DGBE	0.0	0.0	13.84	0.0
Acticide SPX	0.0	0.0	0.0	0.0
Dielectric Constant	42.45	56.1	41.00	54.0
Conductivity (S/m)	0.91	0.95	0.38	1.45

4.4. 3G MEASUREMENT PROCEDURES

4.4.1. 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 then 5% occurred, the tests were repeated.

4.4.2. SAR Measurement Conditions for WCDMA

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

4.4.3. 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, DPDCHn 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.

4.4.4. Body SAR Measurement

SAR for body exposure configurations is measured using the 12.2 kbps RMC with TPC bits configured to all “1s”.

4.4.5. USB Dongle with HSDPA

Body SAR is also measured for HSDPA when the maximum average output of each RF channel with HSDPA active is at least 1/4 dB higher then that measured without HSDPA using 12.2kbps RMC or the maximum SAR for 12.2kbps RMC is above 75% of the SAR limit. Body SAR for HSDPA is measured using an FRC with H-Set 1 in Sub-test 1 and a 12.2kbps RMC configured in Test Loop Mode 1,using the highest body SAR configuration in 12.2kbps RMC without HSDPA.

Band		HSDPA INACTIVE		HSDPA ACTIVE	
	Channel	12.2kbps RMC (dBm)	12.2kbps RMC (dBm)	12.2kbps RMC (dBm)	12.2kbps RMC (dBm)
Cellular 850MHz	4132	22.55	22.51	22.43	22.22
	4175	23.12	23.10	23.04	23.13
	4233	23.91	23.91	23.43	23.61
PCS 1900MHz	9262	21.72	21.43	21.53	21.53
	9400	22.33	22.43	22.62	22.43
	9538	21.62	21.43	21.55	21.53

4.5. Items used in the Test Results List

Terms in the column “Verdict” for the test results list of the section 4.6:

Verdict	Description
PASS	EUT passed this test case
FAIL	EUT failed this test case
INC.	EUT did not pass and did not fail this test case, therefore the verdict is inconclusive
Decl.	“Declaration”: Morlab has received documents from the applicant and/or manufacturer which show conformity to the applied standards for this test case.
N/A	Test case not applicable for the EUT, see the column “Note” for detailed

4.6. Test Results List

Summary of Measurement Results (GSM 850MHz Band)
SAR Values (GSM 850MHz Band), Measured against the body0.

Temperature: 23.0~23.8°C, humidity: 54~60%.		
Limit of SAR (W/kg)	1 g Average	
	1.2	
Test Case	Measurement Result (W/kg)	
	1 g Average (W/kg)	Power level (dBm)
Validation Plane with Body device position on Low Channel in GSM mode with GPRS（Horizontal-Up）	0.657	31.51
Validation Plane with Body device position on Middle Channel in GSM mode with GPRS（Horizontal-Up）	0.559	32.06
Validation Plane with Body device position on High Channel in GSM mode with GPRS（Horizontal-Up）	0.465	32.17
Validation Plane with Body device position on Low Channel in GSM mode with GPRS（Horizontal-Down）	0.537	31.51
Validation Plane with Body device position on Middle Channel in GSM mode with GPRS（Horizontal-Down）	0.461	32.06
Validation Plane with Body device position on High Channel in GSM mode with GPRS（Horizontal-Down）	0.462	32.17
Validation Plane with Body device position on Low Channel in GSM mode with GPRS（Vertical-Front）	0.463	31.51
Validation Plane with Body device position on Middle Channel in GSM mode with GPRS（Vertical-Front）	0.235	32.06
Validation Plane with Body device position on High Channel in GSM mode with GPRS（Vertical-Front）	0.221	32.17
Validation Plane with Body device position on Low Channel in GSM mode with GPRS（Vertical-Back）	0.284	31.51
Validation Plane with Body device position on Middle Channel in GSM mode with GPRS（Vertical-Back）	0.375	32.06
Validation Plane with Body device position on High Channel in GSM mode with GPRS（Vertical-Back）	0.365	32.17

ummary of Measurement Results (GSM 1900MHz Band)

SAR Values (GSM 1900MHz Band), Measured against the body0.

Temperature: 23.0~23.8°C, humidity: 54~60%.		
Limit of SAR (W/kg)	1 g Average	
	1.6	
Test Case	Measurement Result (W/kg)	
	1 g Average (W/kg)	Power level (dBm)
Validation Plane with Body device position on Low Channel in GSM mode with GPRS（Horizontal-Up）	0.836	28.39
Validation Plane with Body device position on Middle Channel in GSM mode with GPRS（Horizontal-Up）	**1.018**	**29.01**
Validation Plane with Body device position on High Channel in GSM mode with GPRS（Horizontal-Up）	0.837	29.57
Validation Plane with Body device position on Low Channel in GSM mode with GPRS（Horizontal-Down）	0.713	28.39
Validation Plane with Body device position on Middle Channel in GSM mode with GPRS（Horizontal-Down）	0.952	29.01
Validation Plane with Body device position on High Channel in GSM mode with GPRS（Horizontal-Down）	0.755	29.57
Validation Plane with Body device position on Low Channel in GSM mode with GPRS（Vertical-Front）	0.655	28.39
Validation Plane with Body device position on Middle Channel in GSM mode with GPRS（Vertical-Front）	0.922	29.01
Validation Plane with Body device position on High Channel in GSM mode with GPRS（Vertical-Front）	0.759	29.57
Validation Plane with Body device position on Low Channel in GSM mode with GPRS（Vertical-Back）	0.219	28.39
Validation Plane with Body device position on Middle Channel in GSM mode with GPRS（Vertical-Back）	0.365	29.01
Validation Plane with Body device position on High Channel in GSM mode with GPRS（Vertical-Back）	0.409	29.57
Validation Plane with Body device position on Middle Channel in GSM mode with EDGE（Horizontal-Up）	**1.094**	**29.01**

ummary of Measurement Results (WCDMA 850MHz Band)
SAR Values (WCDMA 850MHz Band), Measured against the body0.

Temperature: 23.0~23.8°C, humidity: 54~60%.		
Limit of SAR (W/kg)	1 g Average	
	1.6	
Test Case	Measurement Result (W/kg)	
	1 g Average (W/kg)	Power level (dBm)
Validation Plane with Body device position on Low Channel in WCDMA mode（Horizontal-Up）	0.318	22.55
Validation Plane with Body device position on Middle Channel in WCDMA mode（Horizontal-Up）	0.310	23.12
Validation Plane with Body device position on High Channel in WCDMA mode（Horizontal-Up）	0.341	23.91
Validation Plane with Body device position on Low Channel in WCDMA mode（Horizontal-Down）	0.278	22.55
Validation Plane with Body device position on Middle Channel in WCDMA mode（Horizontal-Down）	0.278	23.12
Validation Plane with Body device position on High Channel in WCDMA mode（Horizontal-Down）	0.304	23.91
Validation Plane with Body device position on Low Channel in WCDMA mode（Vertical-Front）	0.159	22.55
Validation Plane with Body device position on Middle Channel in WCDMA mode（Vertical-Front）	0.159	23.12
Validation Plane with Body device position on High Channel in WCDMA mode（Vertical-Front）	0.181	23.91
Validation Plane with Body device position on Low Channel in WCDMA mode（Vertical-Back）	0.154	22.55
Validation Plane with Body device position on Middle Channel in WCDMA mode（Vertical-Back）	0.154	23.12
Validation Plane with Body device position on High Channel in WCDMA mode（Vertical-Back）	0.174	23.91

ummary of Measurement Results (WCDMA 1900MHz Band)
SAR Values (WCDMA 1900MHz Band), Measured against the body0.

Temperature: 23.0~23.8°C, humidity: 54~60%.		
Limit of SAR (W/kg)	1 g Average	
	1.6	
Test Case	Measurement Result (W/kg)	
	1 g Average (W/kg)	Power level (dBm)
Validation Plane with Body device position on Low Channel in WCDMA mode（Horizontal-Up）	**0.733**	**21.72**
Validation Plane with Body device position on Middle Channel in WCDMA mode（Horizontal-Up）	0.490	22.33
Validation Plane with Body device position on High Channel in WCDMA mode（Horizontal-Up）	0.590	21.62
Validation Plane with Body device position on Low Channel in WCDMA mode（Horizontal-Down）	0.601	21.72
Validation Plane with Body device position on Middle Channel in WCDMA mode（Horizontal-Down）	0.383	22.33
Validation Plane with Body device position on High Channel in WCDMA mode（Horizontal-Down）	0.498	21.62
Validation Plane with Body device position on Low Channel in WCDMA mode（Vertical-Front）	0.669	21.72
Validation Plane with Body device position on Middle Channel in WCDMA mode（Vertical-Front）	0.449	22.33
Validation Plane with Body device position on High Channel in WCDMA mode（Vertical-Front）	0.538	21.62
Validation Plane with Body device position on Low Channel in WCDMA mode（Vertical-Back）	0.310	21.72
Validation Plane with Body device position on Middle Channel in WCDMA mode（Vertical-Back）	0.165	22.33
Validation Plane with Body device position on High Channel in WCDMA mode（Vertical-Back）	0.192	21.62
Validation Plane with Body device position on Low Channel in WCDMA mode with HSDPA（Horizontal-Up）	**0.684**	**21.72**

Note：1. 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 0.5cm(taking into account of the IEEE 1528 and the place of the antenna)

2. The separation distance is determined corroding to FCC KDB 447498 D01 Section 2(b)(ii)(1) states, the SAR value of 5mm distance is less than 50% of initial touching position.

Annex A Accreditation Certificate

China National Accreditation Service for Conformity Assessment

LABORATORY ACCREDITATION CERTIFICATE

(No. CNAS L1659)

China National Accreditation Service for Conformity Assessment has accredited

Shenzhen Electronic Product Quality Testing Center

(CQCS Testing Co. Ltd.)

Electronic Testing Building Wenguang Road, Shahe West, Xili Town, Nanshan District, Shenzhen, Guangdong, China

to ISO/IEC 17025:1999 General Requirements for the Competence of Testing and Calibration Laboratories(CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing and calibration.

The scope of accreditation is detailed in the attached schedule bearing the same accreditation number as above. The schedule forms an integral part of this certificate.

Date of Issue: 2007-01-17

Date of Expiry: 2009-10-08

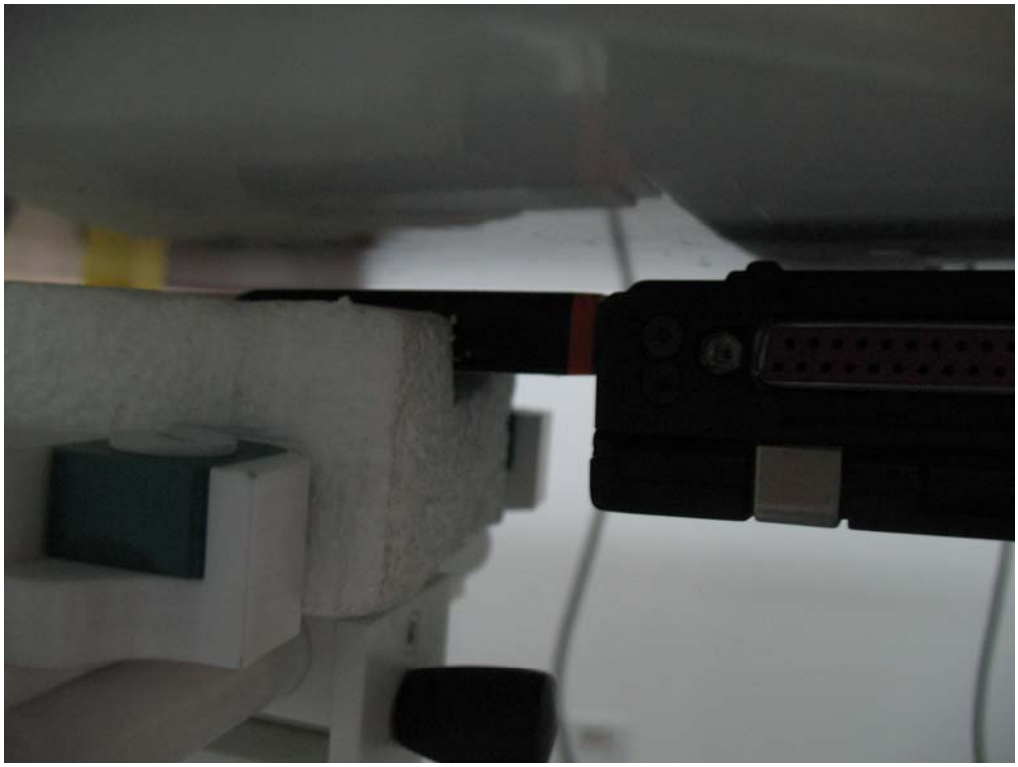
Date of Initial Accreditation: 1999-08-03

Signed on behalf of China National Accreditation Service for Conformity Assessment

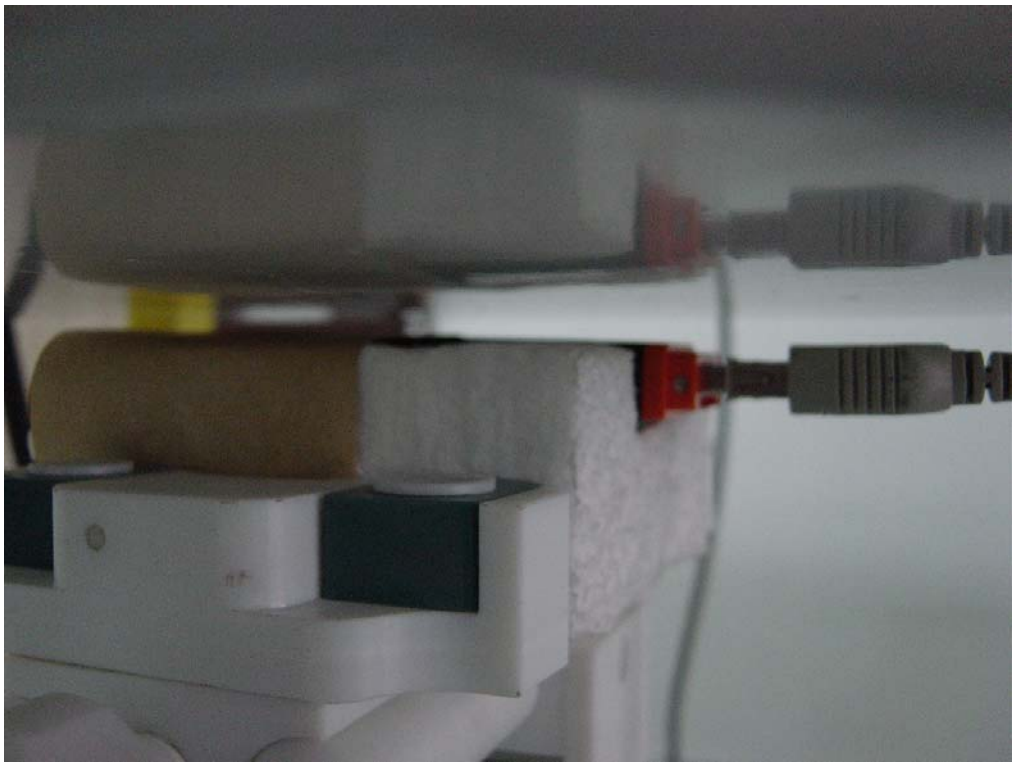
China National Accreditation Service for Conformity Assessment(CNAS) is authorized by Certification and Accreditation Administration of the People's Republic of China (CNCA) to operate the national accreditation systems for conformity assessment. CNAS is the signatory to International Laboratory Accreditation Cooperation Multilateral Recognition Arrangement (ILAC MRA), and the signatory to Asia Pacific Laboratory Accreditation Cooperation Multilateral Recognition Arrangement (APLAC MRA).

Annex B Photographs of the EUT

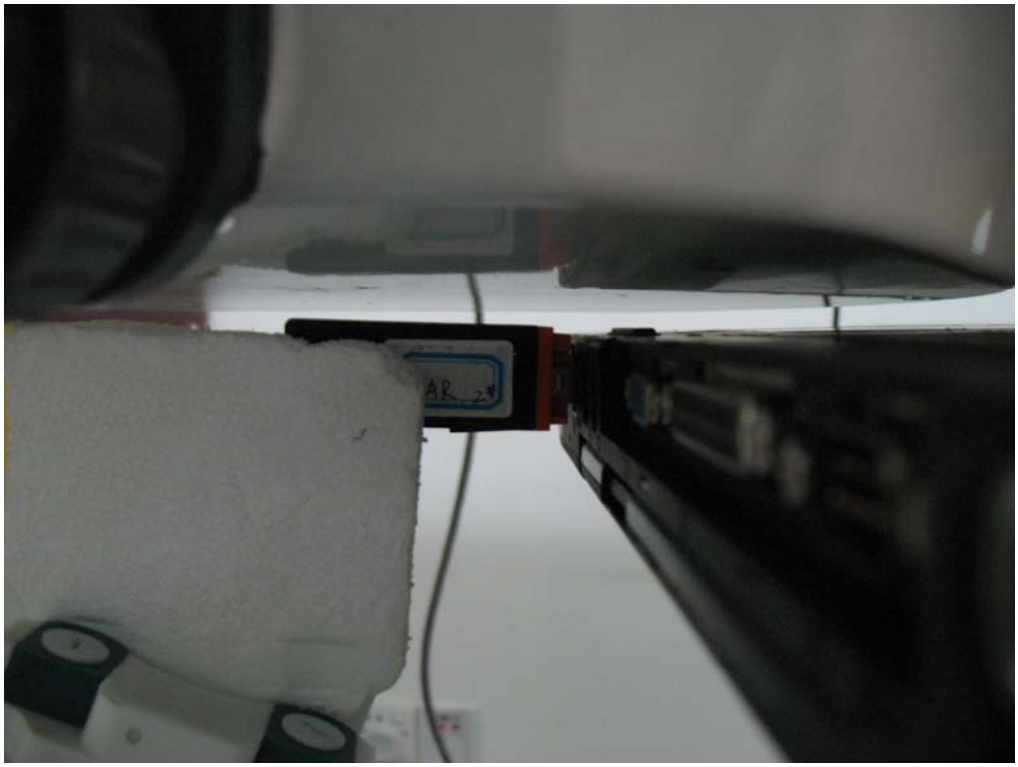
1 EUT Horizontal-Up(PC:IBM T42)



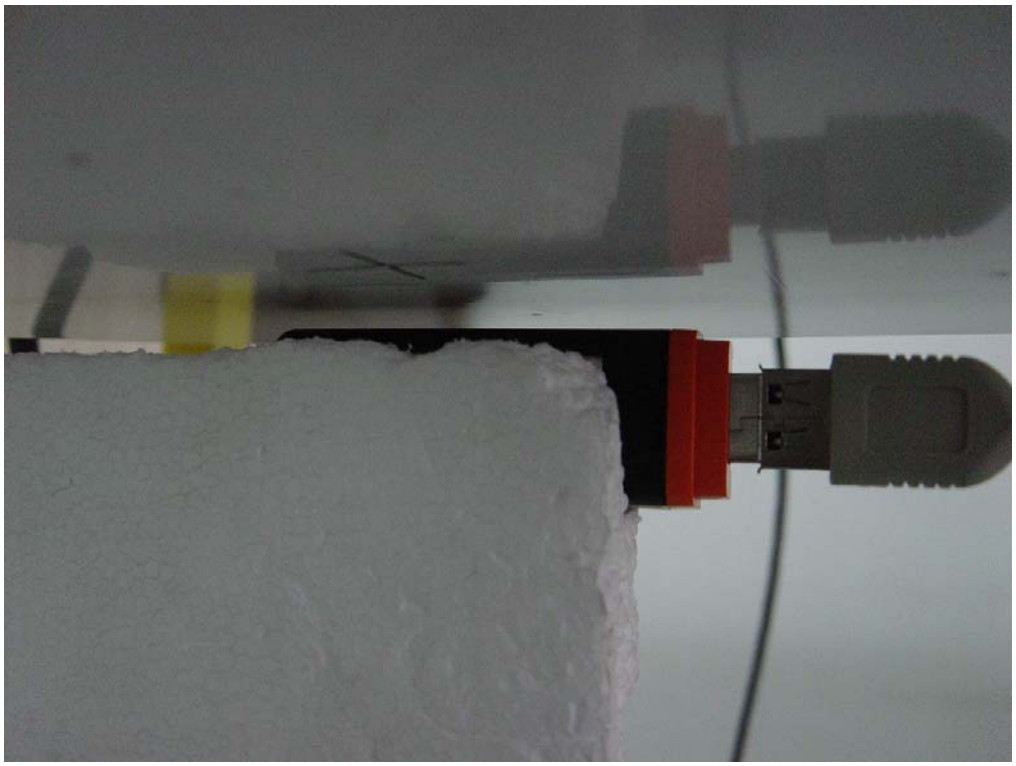
2 EUT Horizontal-Down



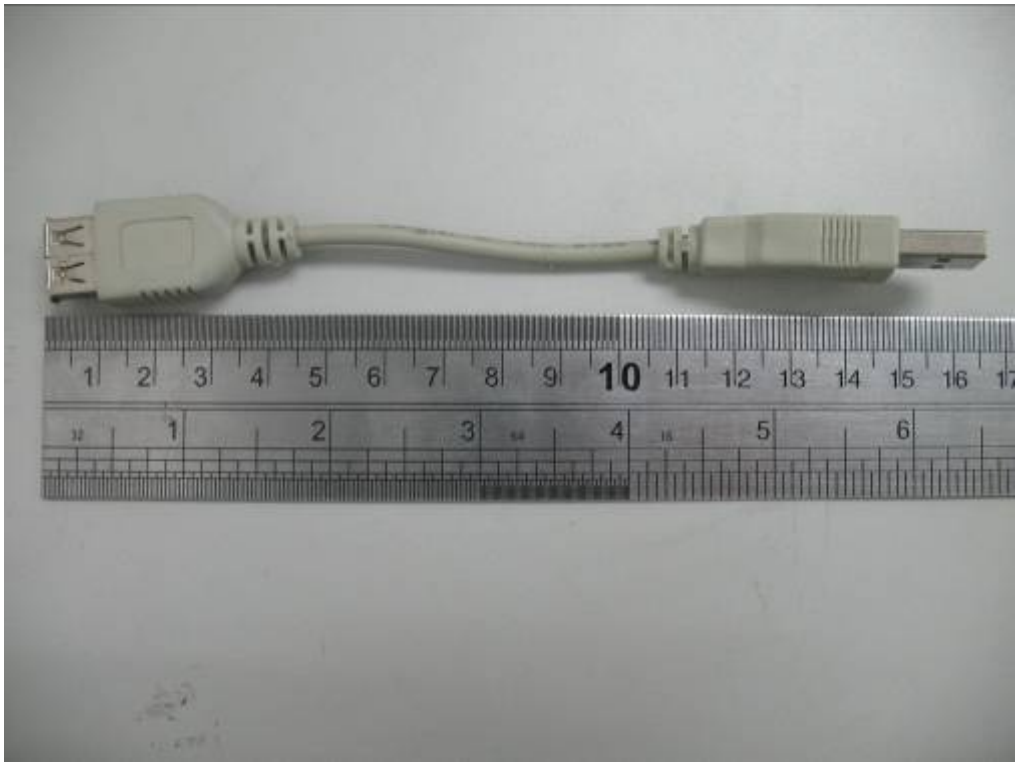
3 EUT Vertical-Front(PC:IBM T20)



4 EUT Vertical-Back



5 Data line



Annex C Graph Test Results

	GSM 850	Measurement 1: Validation Plane with Body device position on Low Channel in GSM mode with GPRS （**Horizontal-Up**） Measurement 2: Validation Plane with Body device position on Middle Channel in GSM mode with GPRS （**Horizontal-Up**） Measurement 3: Validation Plane with Body device position on High Channel in GSM mode with GPRS （**Horizontal-Up**） Measurement 4: Validation Plane with Body device position on Low Channel in GSM mode with GPRS （**Horizontal-Down**） Measurement 5: Validation Plane with Body device position on Middle Channel in GSM mode with GPRS （**Horizontal-Down**） Measurement 6: Validation Plane with Body device position on High Channel in GSM mode with GPRS （**Horizontal-Down**） Measurement 7: Validation Plane with Body device position on Low Channel in GSM mode with GPRS （**Vertical-Front**） Measurement 8: Validation Plane with Body device position on Middle Channel in GSM mode with GPRS （**Vertical-Front**） Measurement 9: Validation Plane with Body device position on High Channel in GSM mode with GPRS （**Vertical-Front**） Measurement 10: Validation Plane with Body device position on Low Channel in GSM mode with GPRS （**Vertical-Back**） Measurement 11: Validation Plane with Body device position on Middle Channel in GSM mode with GPRS （**Vertical-Back**） Measurement 12: Validation Plane with Body device position on High Channel in GSM mode with GPRS （**Vertical-Back**）
		Measurement 1: Validation Plane with Body device position on Low Channel in GSM mode with GPRS （**Horizontal-Up**）

	GSM 1900	Measurement 2: Validation Plane with Body device position on Middle Channel in GSM mode with GPRS（**Horizontal-Up**） Measurement 3: Validation Plane with Body device position on High Channel in GSM mode with GPRS（**Horizontal-Up**） Measurement 4: Validation Plane with Body device position on Low Channel in GSM mode with GPRS（**Horizontal-Down**） Measurement 5: Validation Plane with Body device position on Middle Channel in GSM mode with GPRS（**Horizontal-Down**） Measurement 6: Validation Plane with Body device position on High Channel in GSM mode with GPRS（**Horizontal-Down**） Measurement 7: Validation Plane with Body device position on Low Channel in GSM mode with GPRS（**Vertical-Front**） Measurement 8: Validation Plane with Body device position on Middle Channel in GSM mode with GPRS（**Vertical-Front**） Measurement 9: Validation Plane with Body device position on High Channel in GSM mode with GPRS（**Vertical-Front**） Measurement 10: Validation Plane with Body device position on Low Channel in GSM mode with GPRS（**Vertical-Back**） Measurement 11: Validation Plane with Body device position on Middle Channel in GSM mode with GPRS（**Vertical-Back**） Measurement 12: Validation Plane with Body device position on High Channel in GSM mode with GPRS（**Vertical-Back**）
		Validation Plane with Body device position on Low Channel in WCDMA mode（**Horizontal-Up**） Validation Plane with Body device position on Middle Channel in WCDMA mode（**Horizontal-Up**） Validation Plane with Body device position on High Channel in WCDMA mode（**Horizontal-Up**） Validation Plane with Body device position on Low Channel in WCDMA mode（**Horizontal-Down**）

	WCDMA 850MHz	Validation Plane with Body device position on Middle Channel in WCDMA mode（**Horizontal-Down**） Validation Plane with Body device position on Back Channel in WCDMA mode（**Horizontal-Down**） Validation Plane with Body device position on Low Channel in WCDMA mode（**Vertical-Front**） Validation Plane with Body device position on Middle Channel in WCDMA mode（**Vertical-Front**） Validation Plane with Body device position on High Channel in WCDMA mode（**Vertical-Front**） Validation Plane with Body device position on Low Channel in WCDMA mode（**Vertical-Back**） Validation Plane with Body device position on Middle Channel in WCDMA mode（**Vertical-Back**） Validation Plane with Body device position on High Channel in WCDMA mode（**Vertical-Back**）
	WCDMA 1900MHz	Validation Plane with Body device position on Low Channel in WCDMA mode（**Horizontal-Up**） Validation Plane with Body device position on Middle Channel in WCDMA mode（**Horizontal-Up**） Validation Plane with Body device position on High Channel in WCDMA mode（**Horizontal-Up**） Validation Plane with Body device position on Low Channel in WCDMA mode（**Horizontal-Down**） Validation Plane with Body device position on Middle Channel in WCDMA mode（**Horizontal-Down**） Validation Plane with Body device position on Back Channel in WCDMA mode（**Horizontal-Down**） Validation Plane with Body device position on Low Channel in WCDMA mode（**Vertical-Front**） Validation Plane with Body device position on Middle Channel in WCDMA mode（**Vertical-Front**） Validation Plane with Body device position on High Channel in WCDMA mode（**Vertical-Front**） Validation Plane with Body device position on Low Channel in WCDMA mode（**Vertical-Back**） Validation Plane with Body device position on Middle Channel in WCDMA mode（**Vertical-Back**） Validation Plane with Body device position on High Channel in WCDMA mode（**Vertical-Back**）

Note：1.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 5mm (taking into account of the IEEE 1528 and the place of the antenna)。

2. The separation distance is determined corroding to FCC KDB 447498 D01 Section 2(b)(ii)(1) states, the SAR value of 5mm distance is less than 50% of initial touching position.

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: 10/1/2009

Measurement duration: 9 minutes 32 seconds

A. Experimental conditions.

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

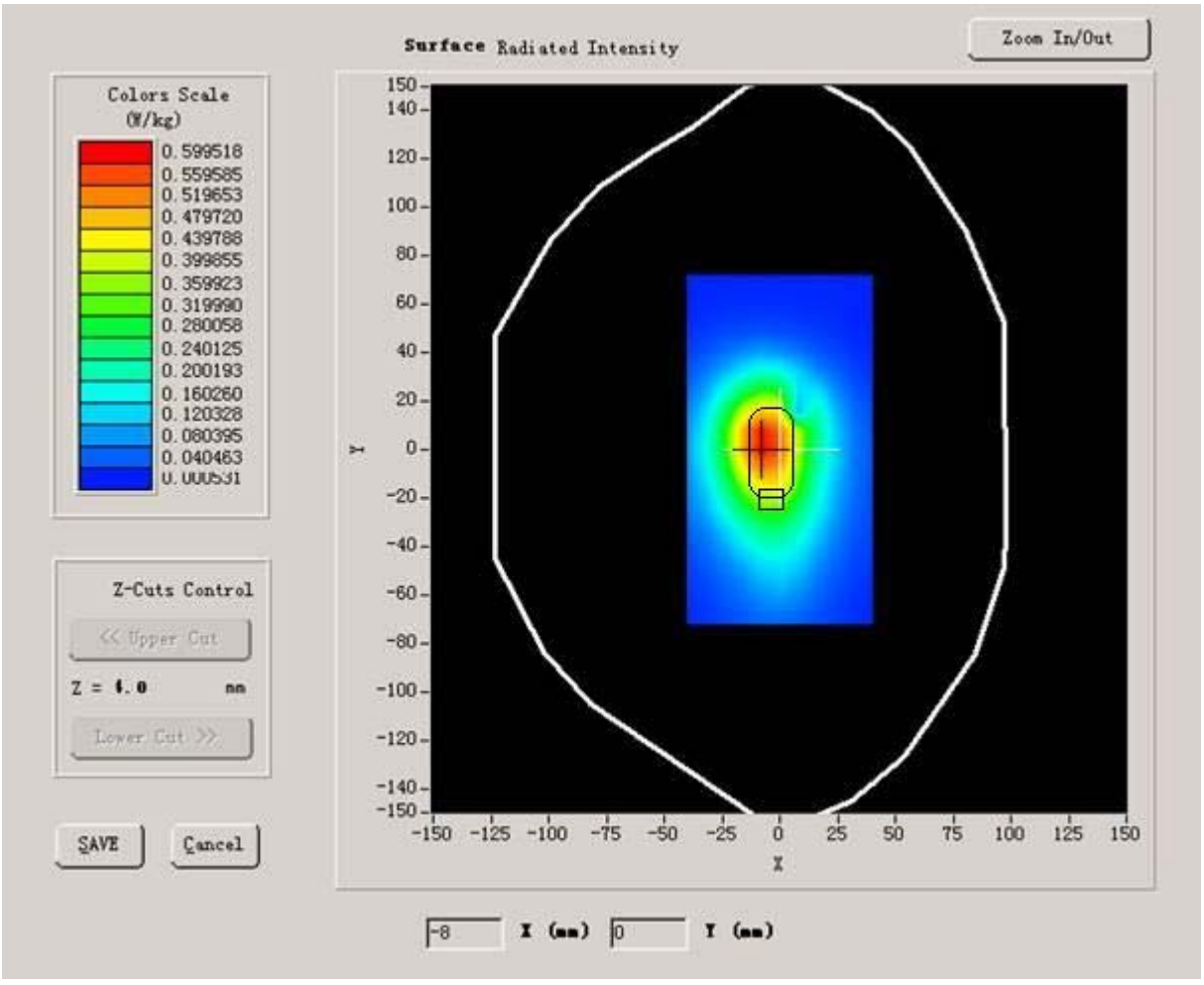
B. SAR Measurement Results

Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550

Conductivity (S/m)	0.975187
Variation (%)	0.130000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

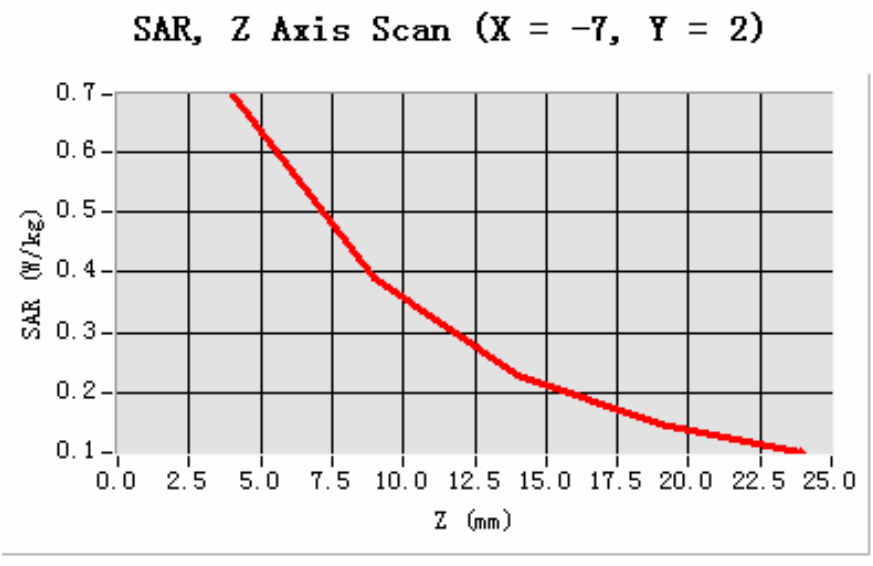


Maximum location: X=-7.00, Y=2.00

SAR 10g (W/Kg)	0.374621
SAR 1g (W/Kg)	0.657924

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.6970	0.3921	0.2292	0.1472



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: 10/1/2009

Measurement duration:9 minutes 31 seconds

A. Experimental conditions.

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

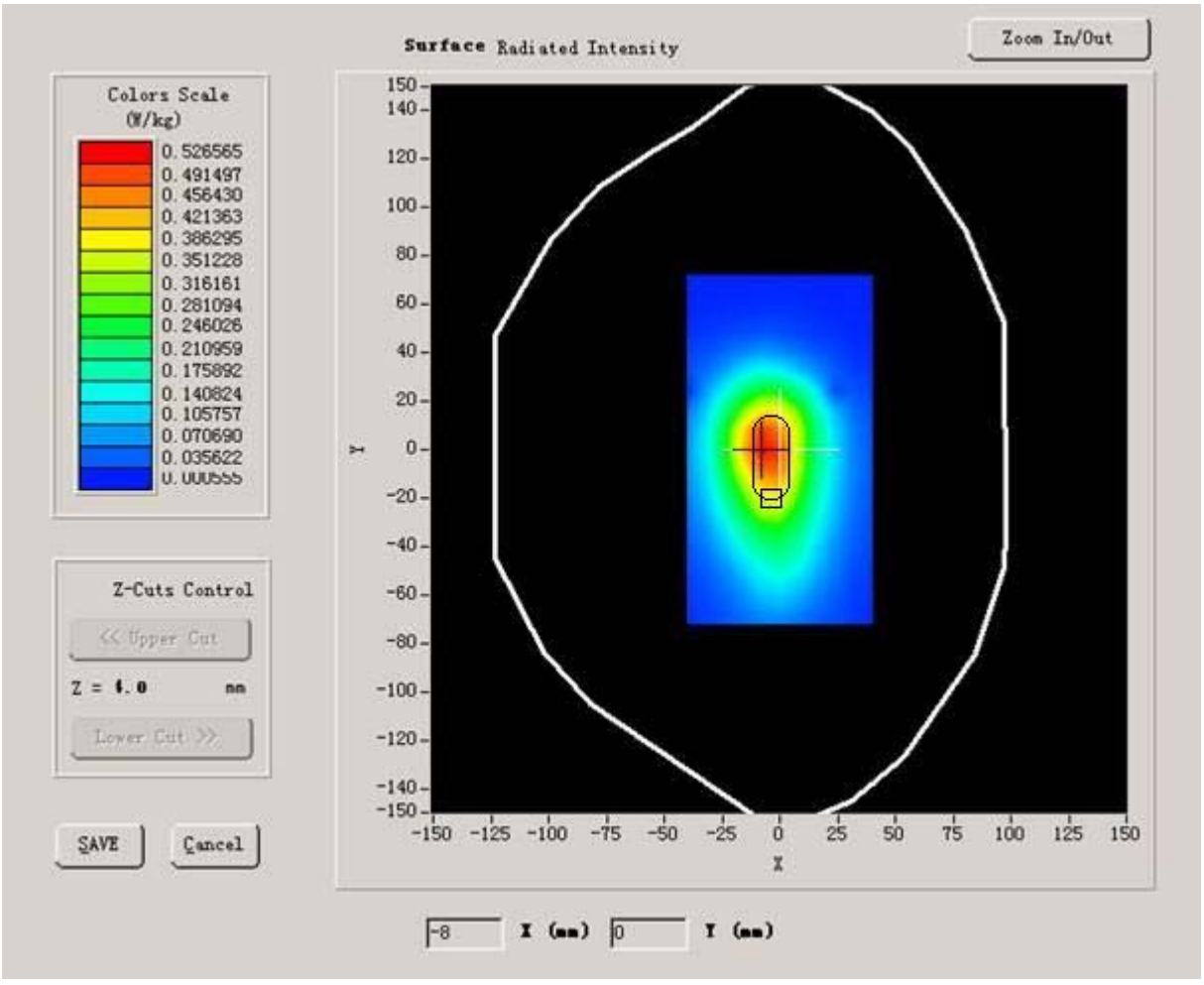
B. SAR Measurement Results

Middle Band SAR (Channel 190):

Frequency (MHz)	836.599976
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550

Conductivity (S/m)	0.989164
Variation (%)	1.010000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

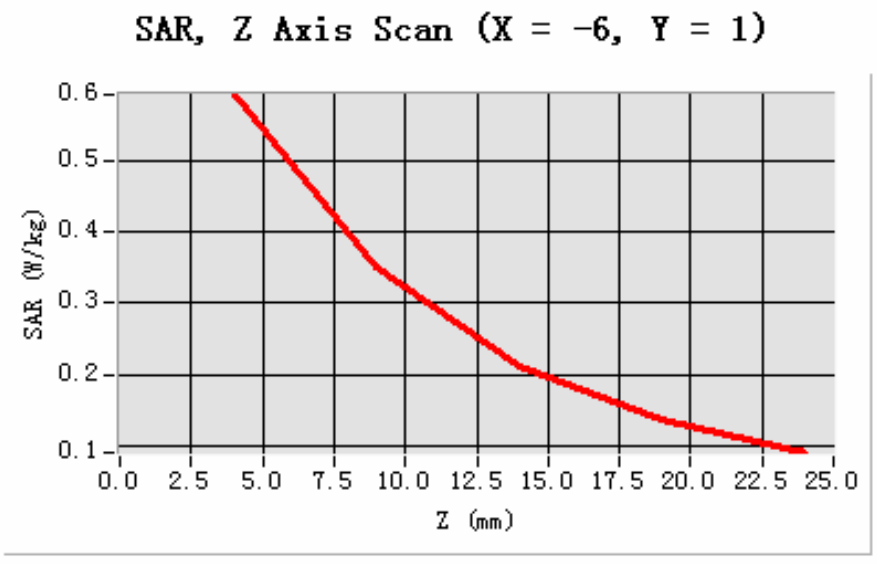


Maximum location: X=-6.00, Y=1.00

SAR 10g (W/Kg)	0.330240
SAR 1g (W/Kg)	0.559501

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.5914	0.3501	0.2130	0.1382



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: 10/1/2009

Measurement duration: 9 minutes 30 seconds

A. Experimental conditions.

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

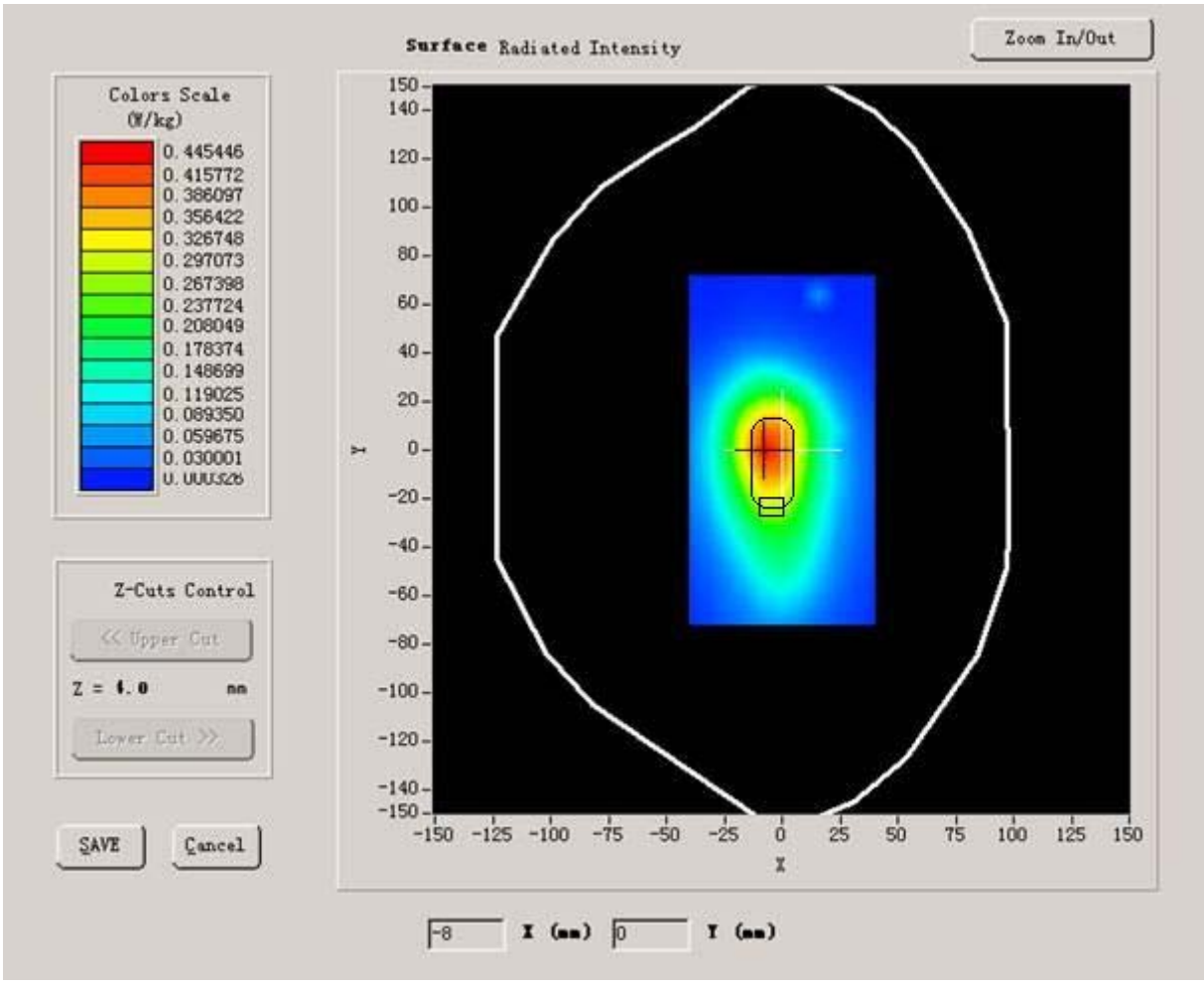
B. SAR Measurement Results

Higher Band SAR (Channel 251):

Frequency (MHz)	848.799988
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550

Conductivity (S/m)	1.003105
Variation (%)	-2.720000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

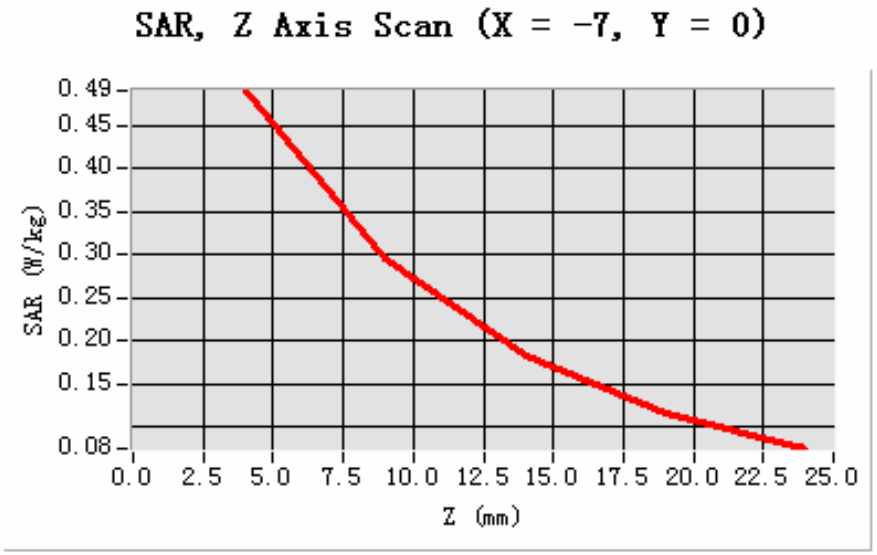


Maximum location: X=-7.00, Y=0.00

SAR 10g (W/Kg)	0.275285
SAR 1g (W/Kg)	0.465038

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.4903	0.2959	0.1819	0.1171



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: 10/1/2009

Measurement duration: 9 minutes 31 seconds

A. Experimental conditions.

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

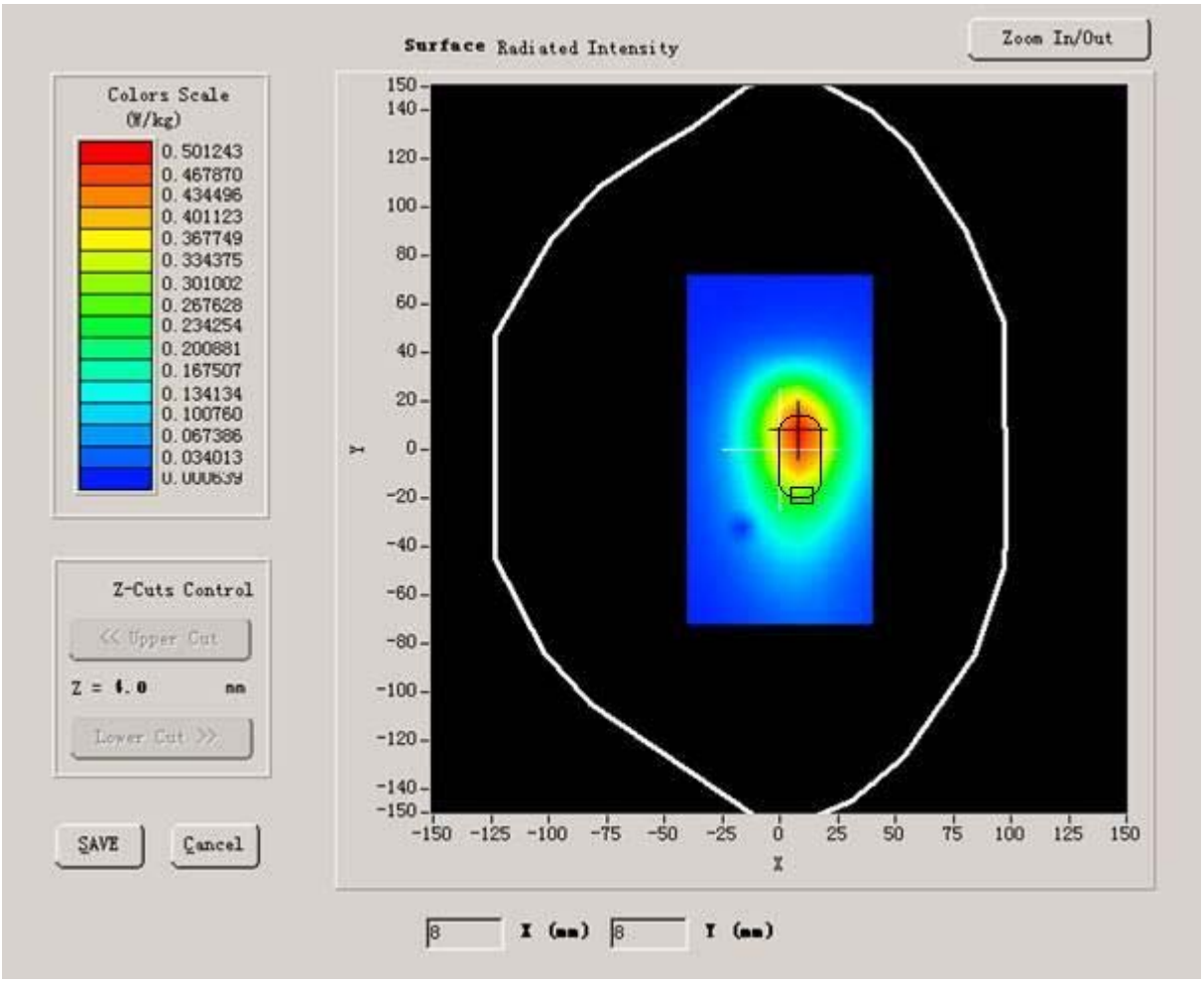
B. SAR Measurement Results

Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550

Conductivity (S/m)	0.975187
Variation (%)	-0.470000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

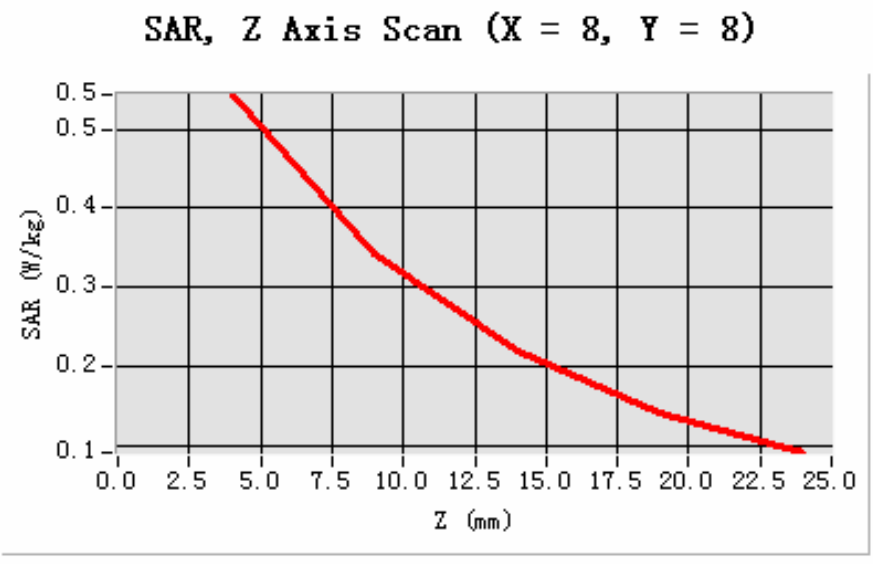


Maximum location: X=8.00, Y=8.00

SAR 10g (W/Kg)	0.320385
SAR 1g (W/Kg)	0.537253

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.5434	0.3429	0.2183	0.1423



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: 10/1/2009

Measurement duration: 9 minutes 29 seconds

A. Experimental conditions.

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

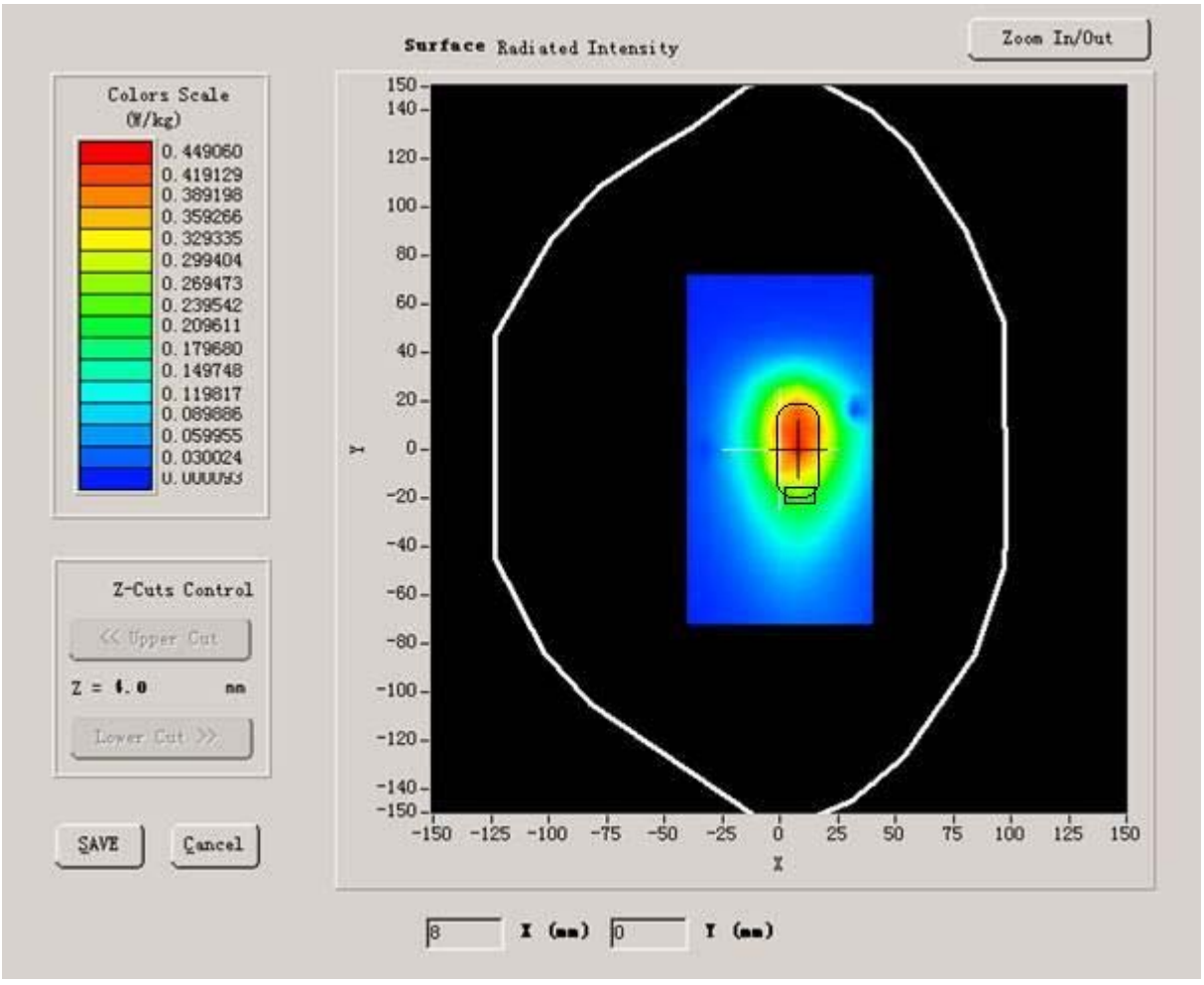
B. SAR Measurement Results

Middle Band SAR (Channel 190):

Frequency (MHz)	836.599976
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550

Conductivity (S/m)	0.989164
Variation (%)	-1.880000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

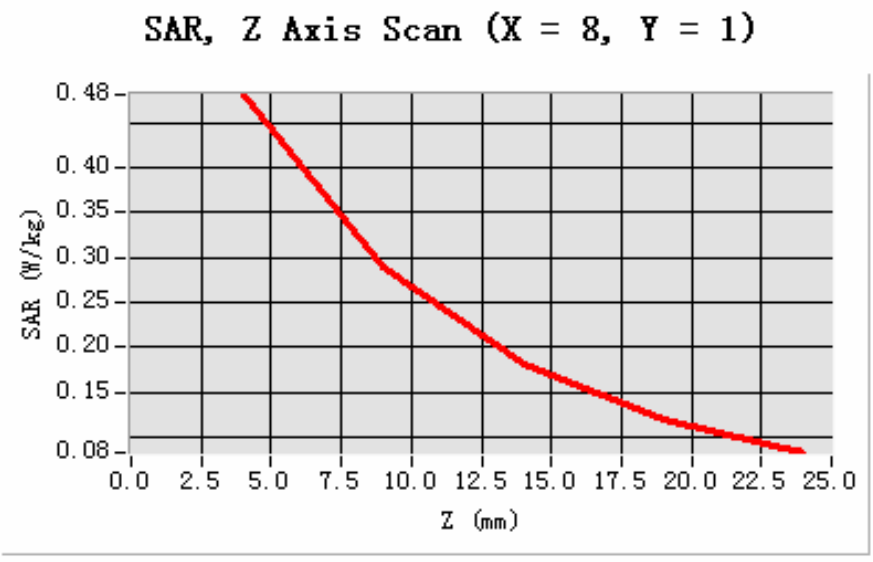


Maximum location: X=8.00, Y=1.00

SAR 10g (W/Kg)	0.274509
SAR 1g (W/Kg)	0.461632

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.4808	0.2896	0.1804	0.1207



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: 10/1/2009

Measurement duration: 9 minutes 32 seconds

A. Experimental conditions.

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

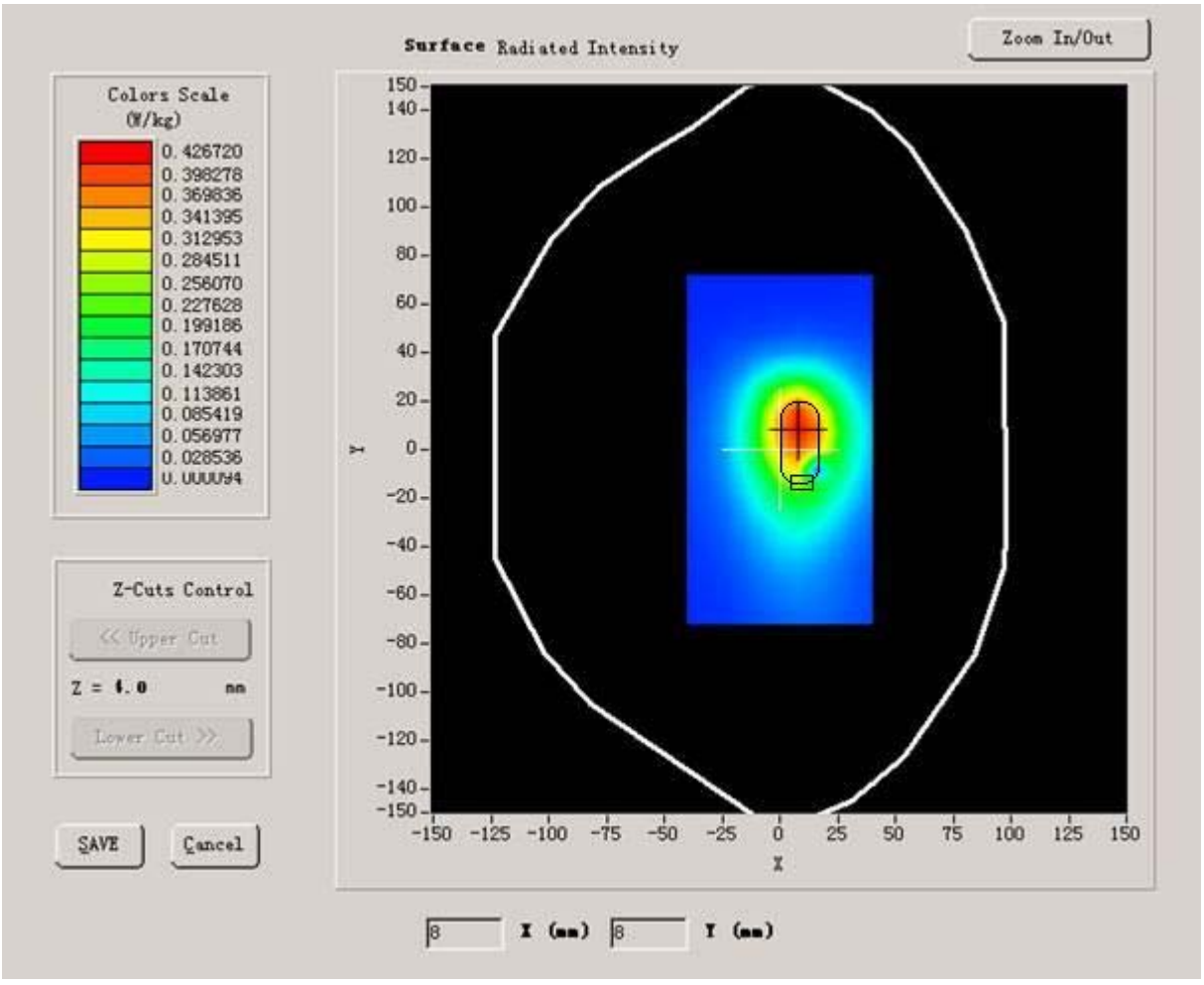
B. SAR Measurement Results

Higher Band SAR (Channel 251):

Frequency (MHz)	848.799988
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550

Conductivity (S/m)	1.003105
Variation (%)	-1.580000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

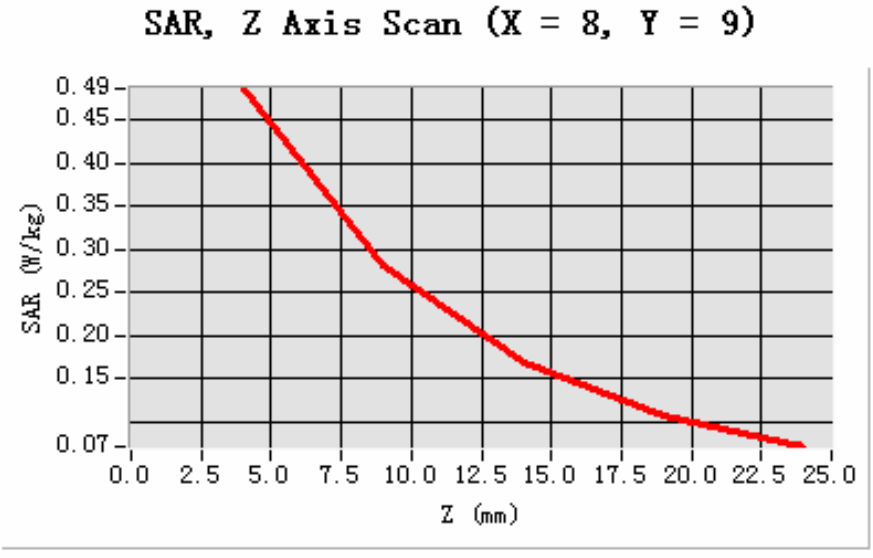


Maximum location: X=8.00, Y=9.00

SAR 10g (W/Kg)	0.266875
SAR 1g (W/Kg)	0.462037

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.4859	0.2811	0.1676	0.1076



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: 10/1/2009

Measurement duration: 9 minutes 34 seconds

A. Experimental conditions.

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

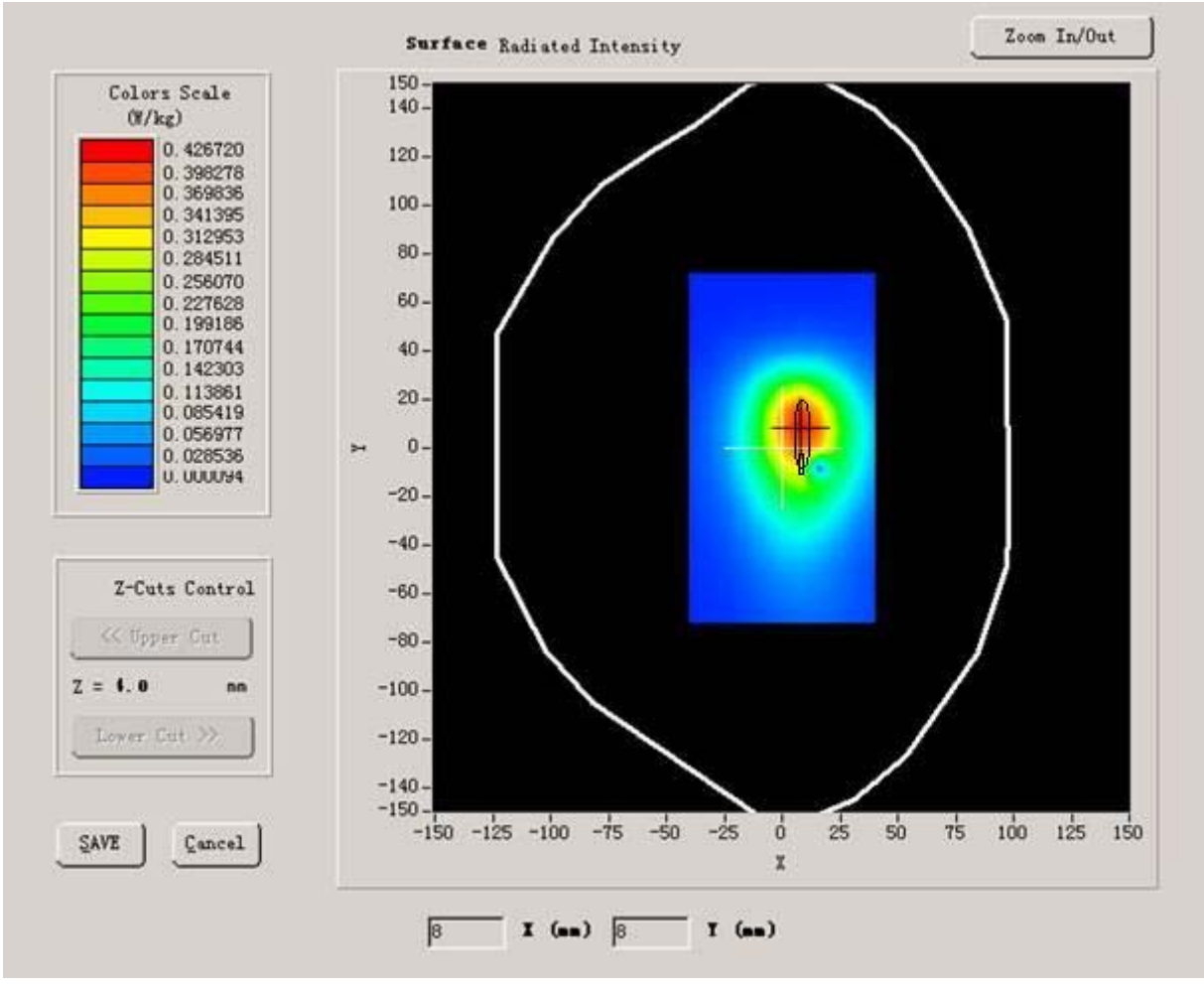
B. SAR Measurement Results

Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250

Conductivity (S/m)	0.867138
Variation (%)	-0.660000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

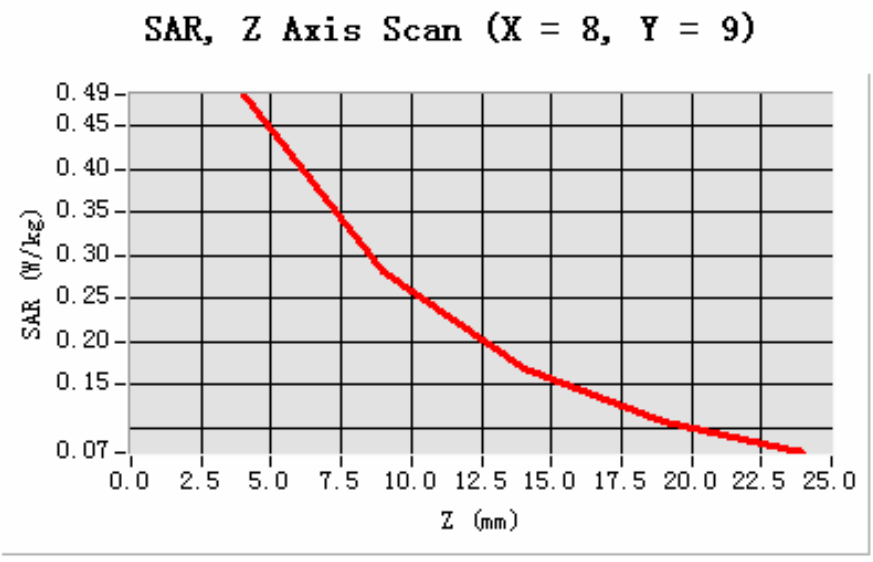


Maximum location: X=8.00, Y=9.00

SAR 10g (W/Kg)	0.275489
SAR 1g (W/Kg)	0.463778

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.4859	0.2811	0.1676	0.1076



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: 10/1/2009

Measurement duration: 9 minutes 32 seconds

A. Experimental conditions.

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

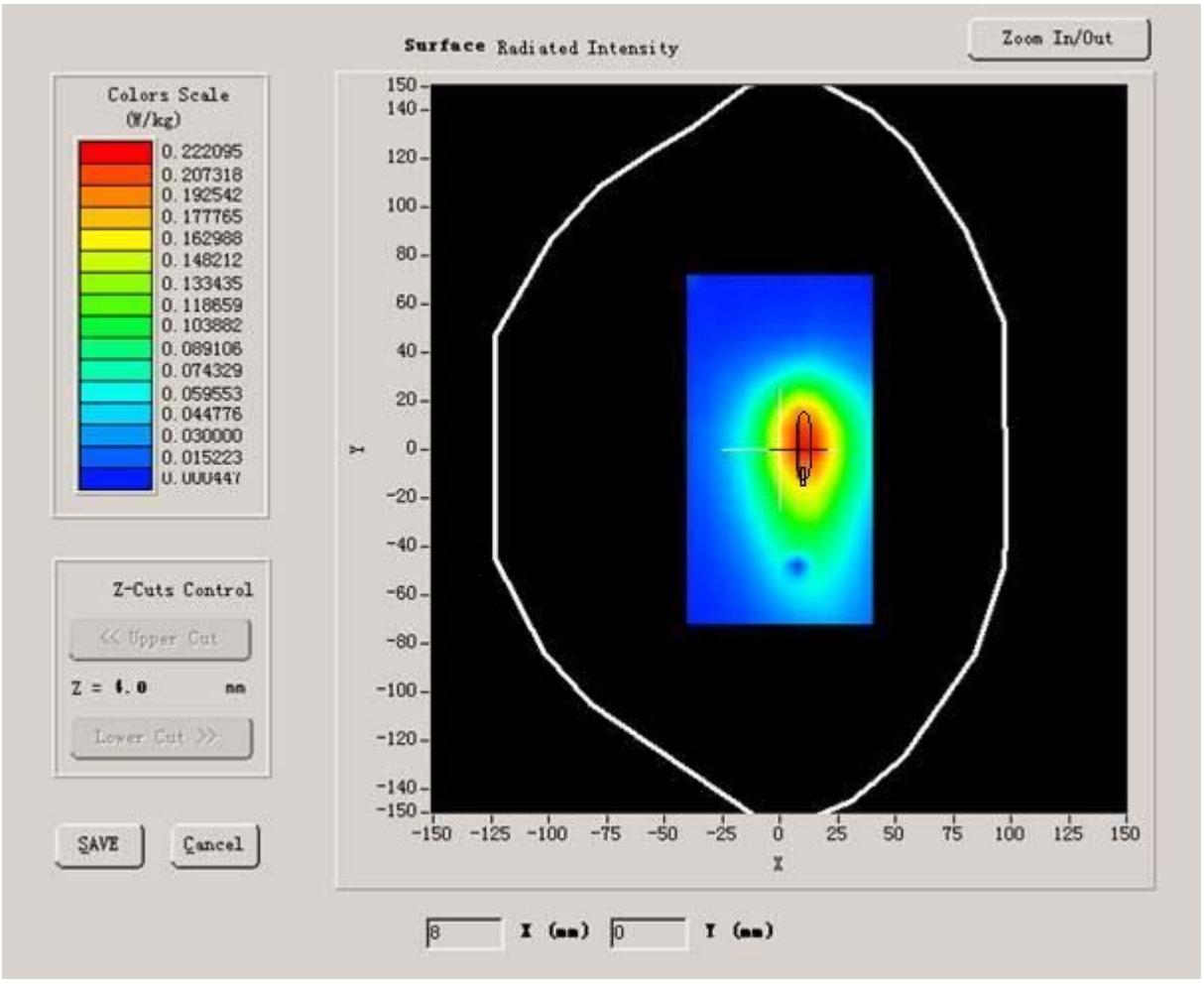
B. SAR Measurement Results

Middle Band SAR (Channel 190):

Frequency (MHz)	836.599976
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550

Conductivity (S/m)	0.989164
Variation (%)	-0.350000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

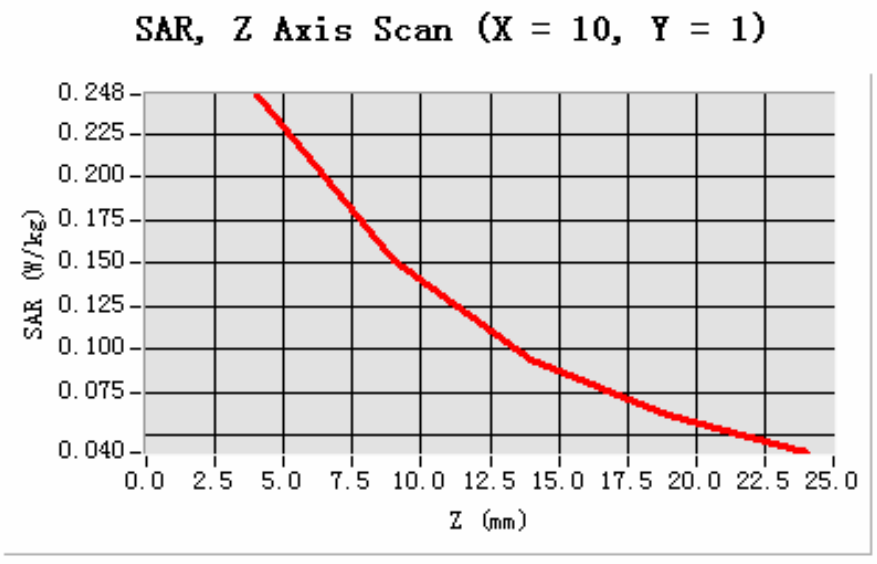


Maximum location: X=10.00, Y=1.00

SAR 10g (W/Kg)	0.140557
SAR 1g (W/Kg)	0.235003

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.2481	0.1511	0.0938	0.0610



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: 10/1/2009

Measurement duration: 9 minutes 32 seconds

A. Experimental conditions.

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

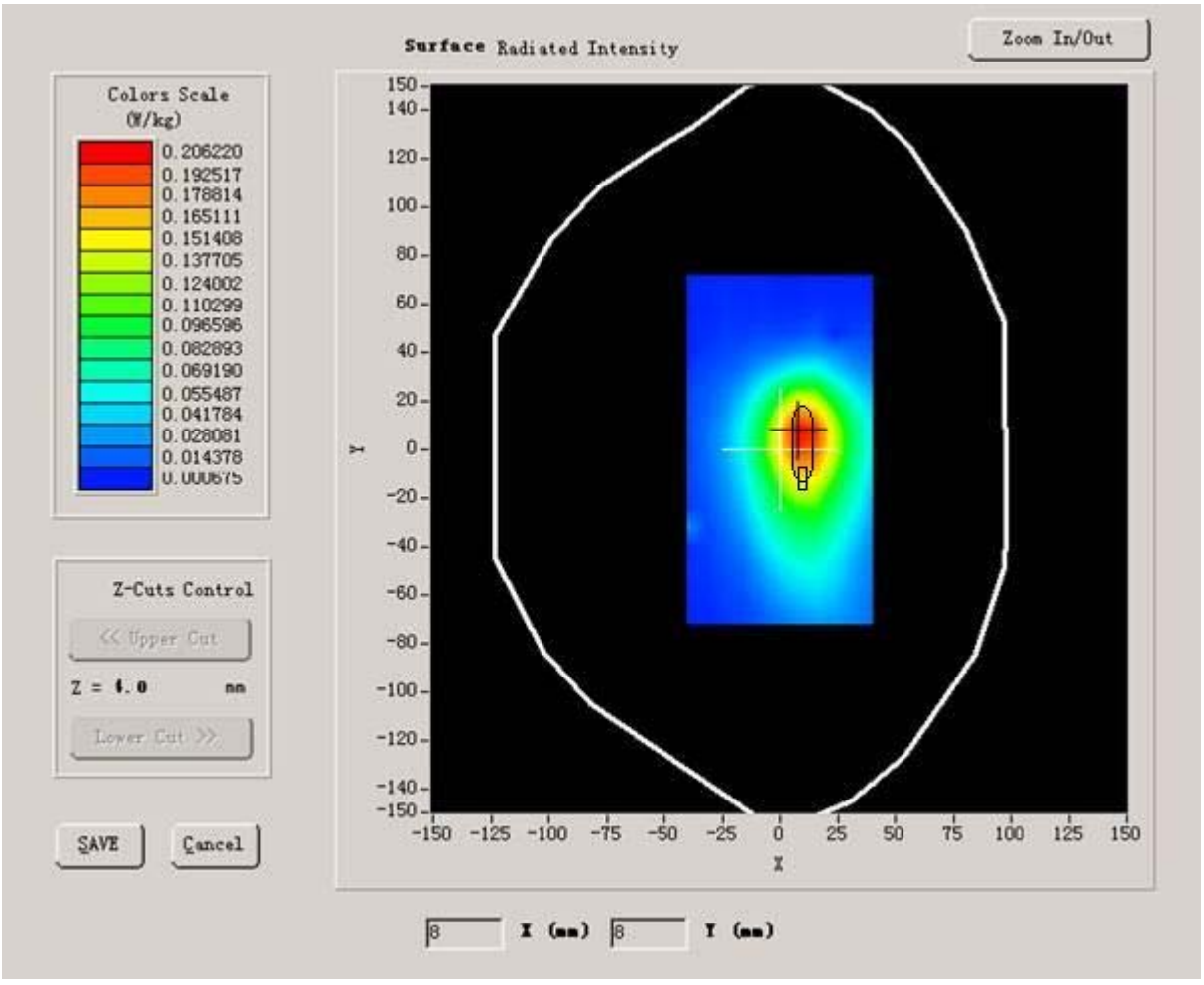
B. SAR Measurement Results

Higher Band SAR (Channel 251):

Frequency (MHz)	848.799988
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550

Conductivity (S/m)	1.003105
Variation (%)	-1.380000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

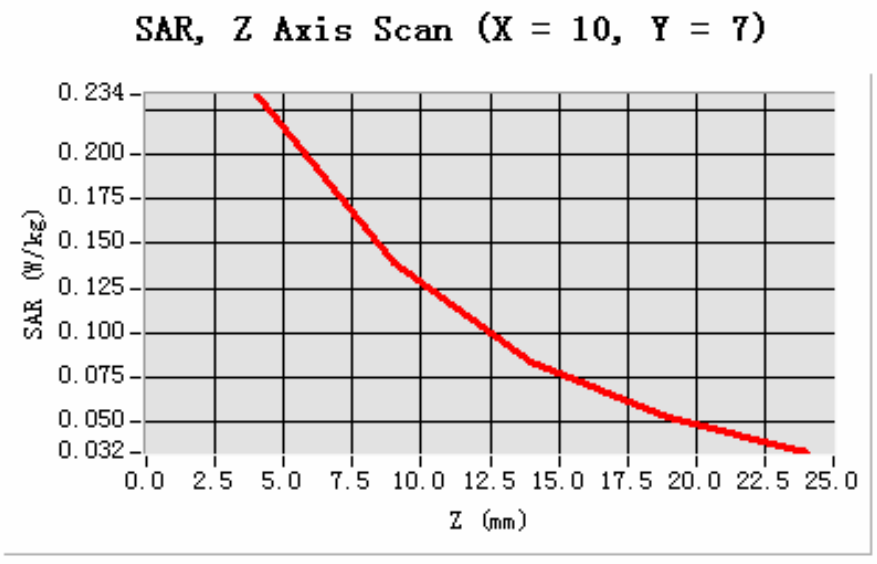


Maximum location: X=10.00, Y=7.00

SAR 10g (W/Kg)	0.129081
SAR 1g (W/Kg)	0.221665

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.2340	0.1389	0.0835	0.0522



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: 10/1/2009

Measurement duration: 9 minutes 32 seconds

A. Experimental conditions.

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

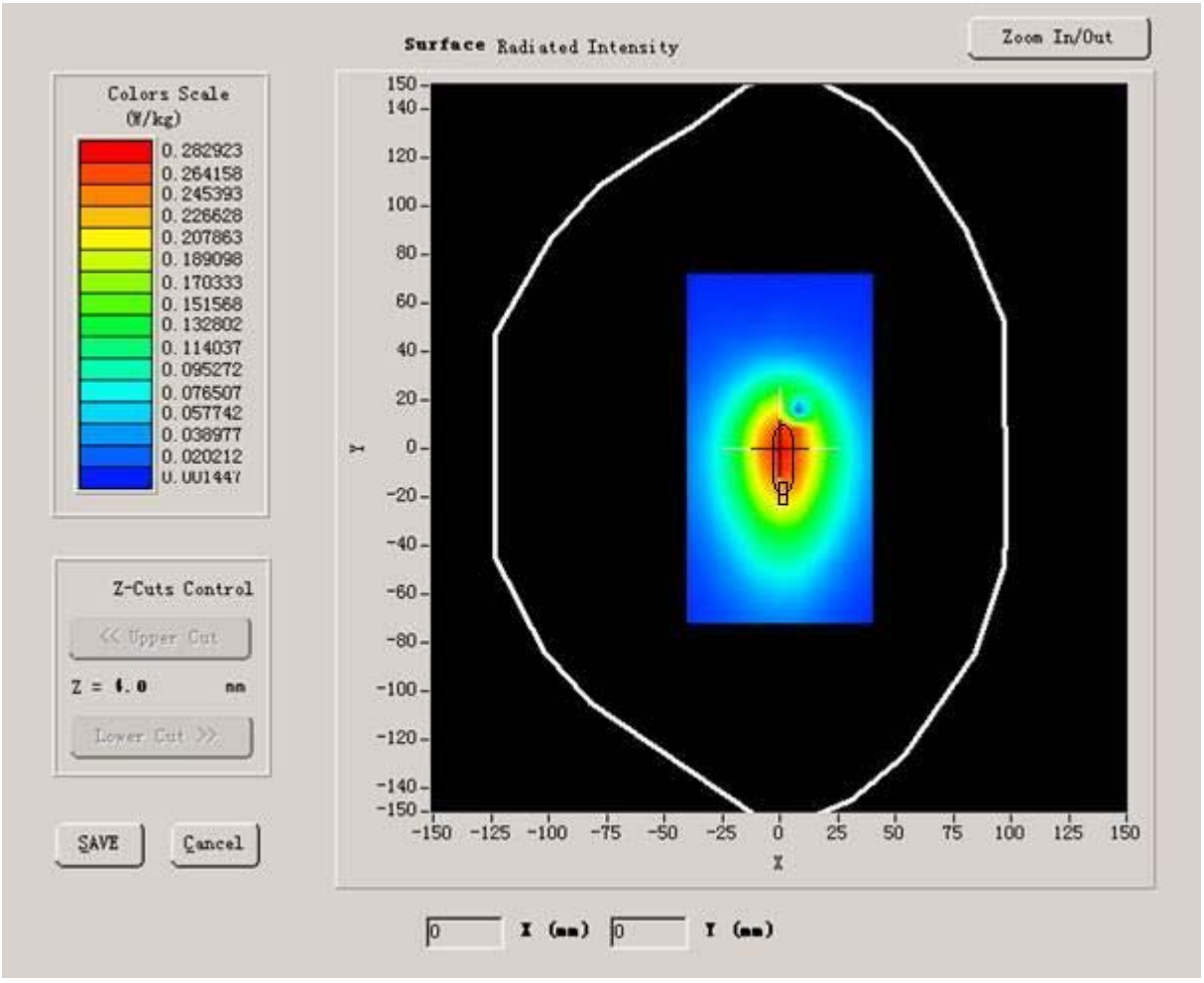
B. SAR Measurement Results

Lower Band SAR (Channel 128):

Frequency (MHz)	824.200012
Relative permittivity (real part)	54.116001
Relative permittivity	21.284550

Conductivity (S/m)	0.974596
Variation (%)	-3.530000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

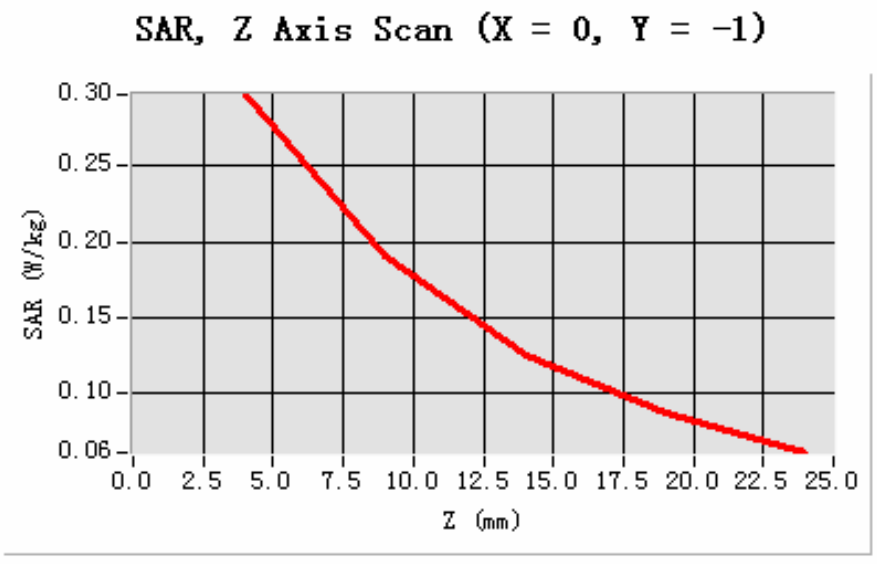


Maximum location: X=0.00, Y=-1.00

SAR 10g (W/Kg)	0.179860
SAR 1g (W/Kg)	0.284507

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.2978	0.1905	0.1250	0.0860



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: 10/1/2009

Measurement duration: 9 minutes 31 seconds

A. Experimental conditions.

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

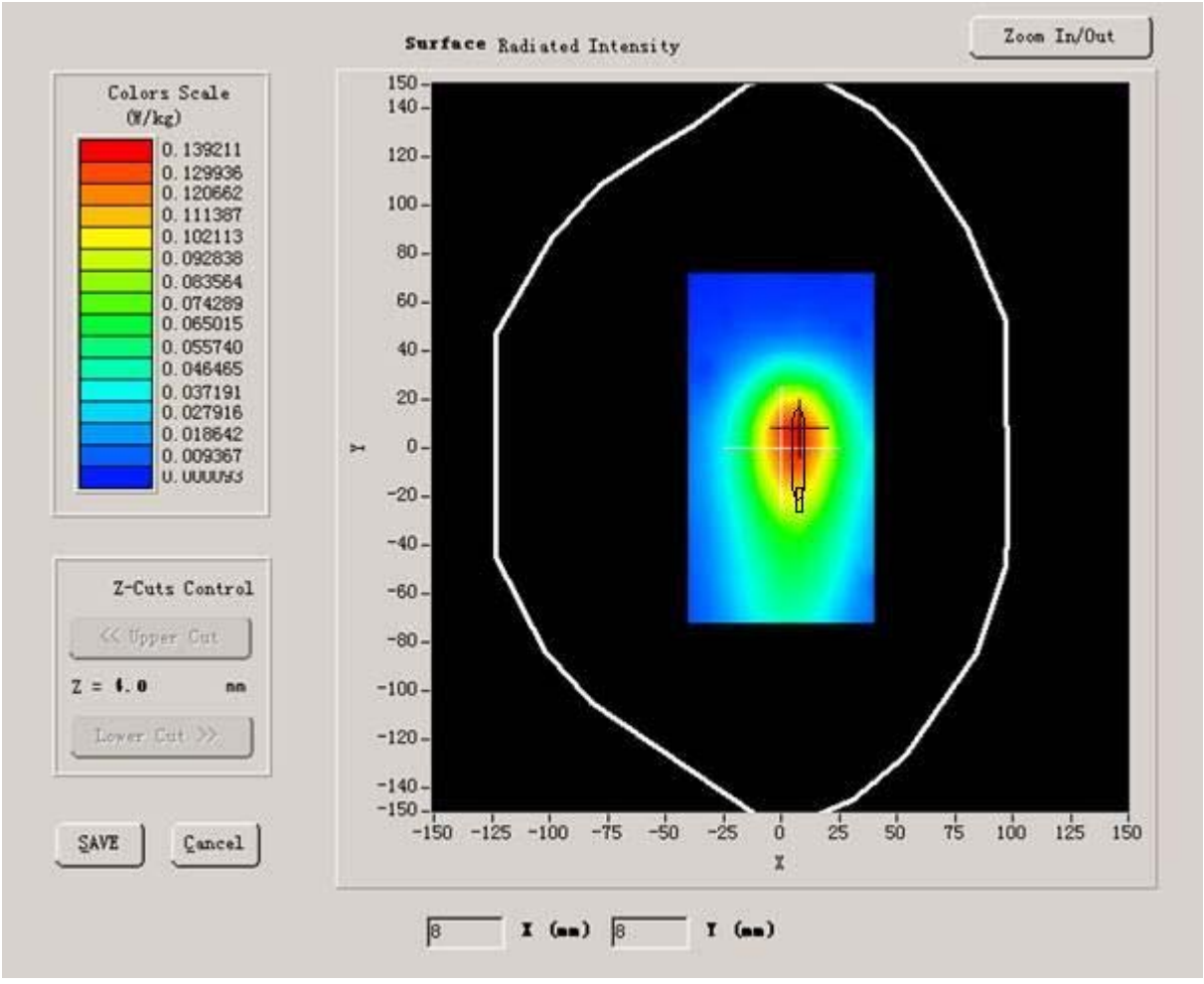
B. SAR Measurement Results

Middle Band SAR (Channel 190):

Frequency (MHz)	836.599976
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250

Conductivity (S/m)	0.879566
Variation (%)	1.590000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

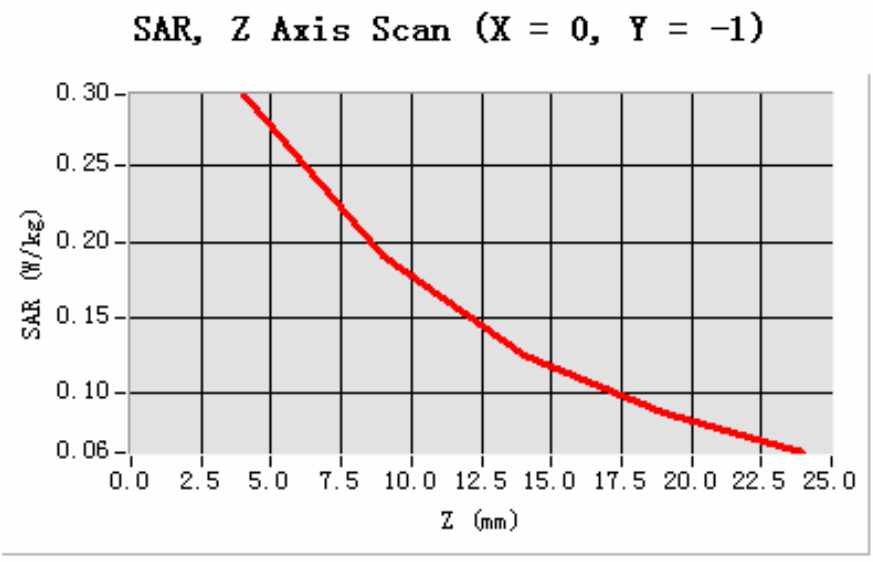


Maximum location: X=6.00, Y=6.00

SAR 10g (W/Kg)	0.204357
SAR 1g (W/Kg)	0.375294

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.2978	0.1905	0.1250	0.0860



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: 10/1/2009

Measurement duration: 9 minutes 31 seconds

A. Experimental conditions.

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

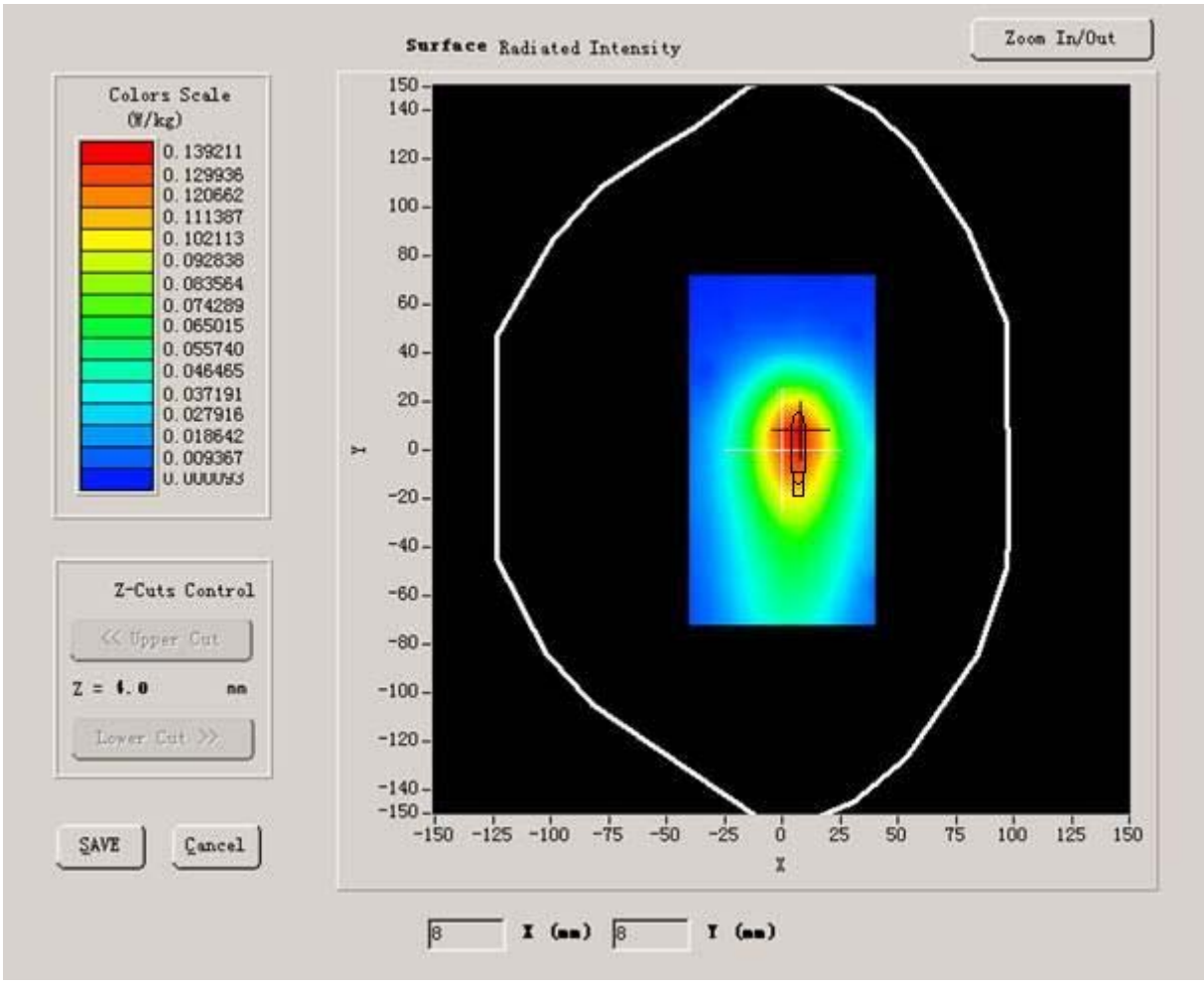
B. SAR Measurement Results

Middle Band SAR (Channel 251):

Frequency (MHz)	848.799988
Relative permittivity (real part)	41.790001
Relative permittivity	18.926250

Conductivity (S/m)	0.879566
Variation (%)	1.590000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

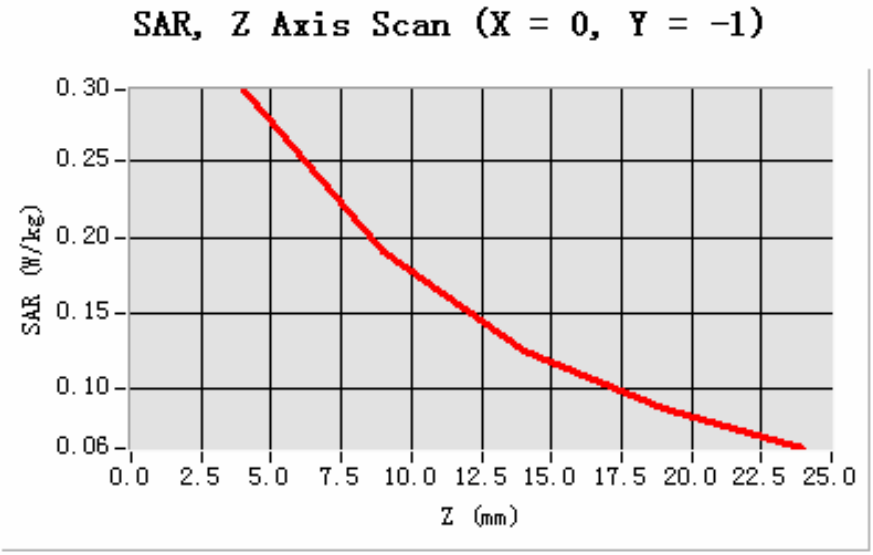


Maximum location: X=6.00, Y=6.00

SAR 10g (W/Kg)	0.198747
SAR 1g (W/Kg)	0.365467

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.2978	0.1905	0.1250	0.0860



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: 10/1/2009

Measurement duration: 9 minutes 24 seconds

A. Experimental conditions.

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

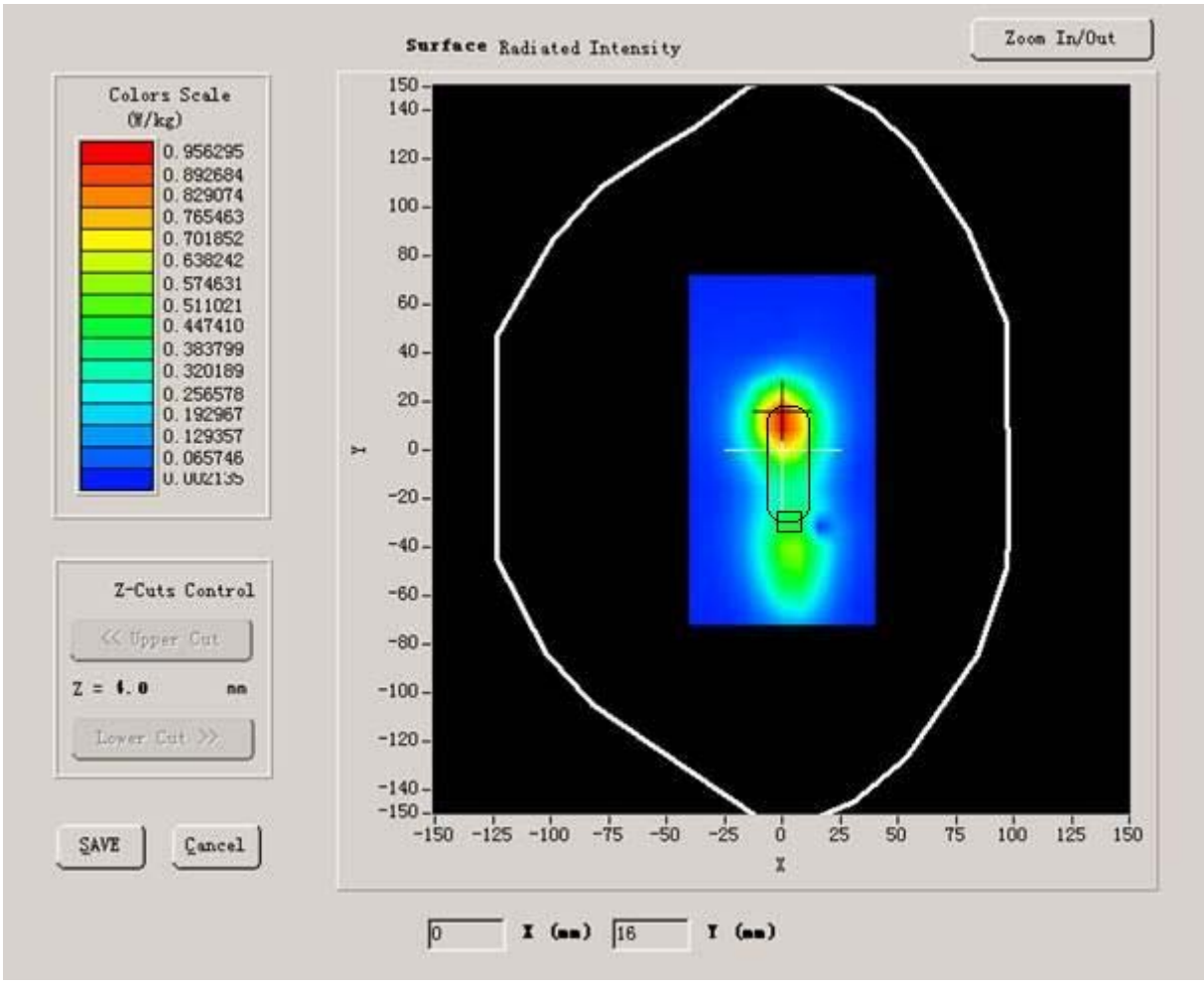
B. SAR Measurement Results

Lower Band SAR (Channel 512):

Frequency (MHz)	1850.199951
Relative permittivity (real part)	10.000000
Relative permittivity	12.000000

Conductivity (S/m)	1.233467
Variation (%)	-0.450000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

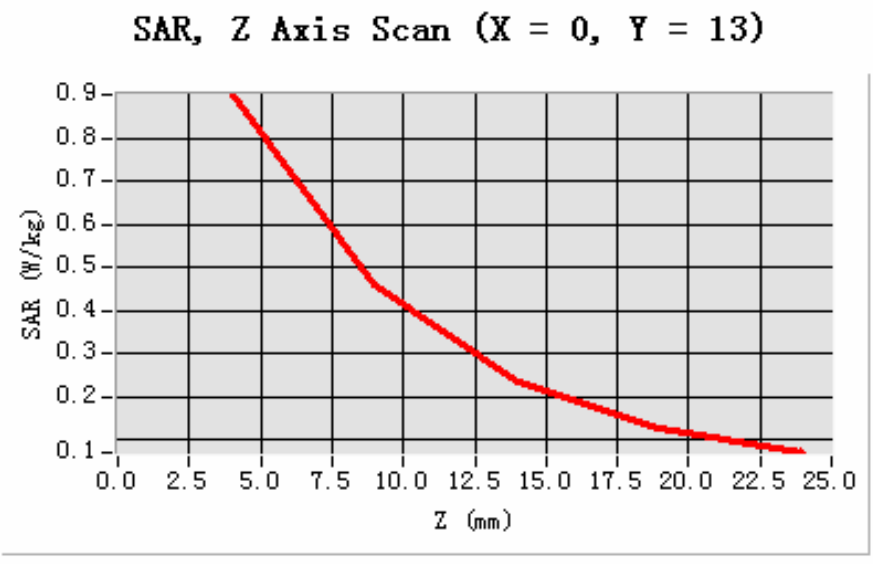


Maximum location: X=0.00, Y=13.00

SAR 10g (W/Kg)	0.407975
SAR 1g (W/Kg)	0.836740

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.9001	0.4590	0.2349	0.1289



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: 10/1/2009

Measurement duration: 9 minutes 24 seconds

A. Experimental conditions.

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

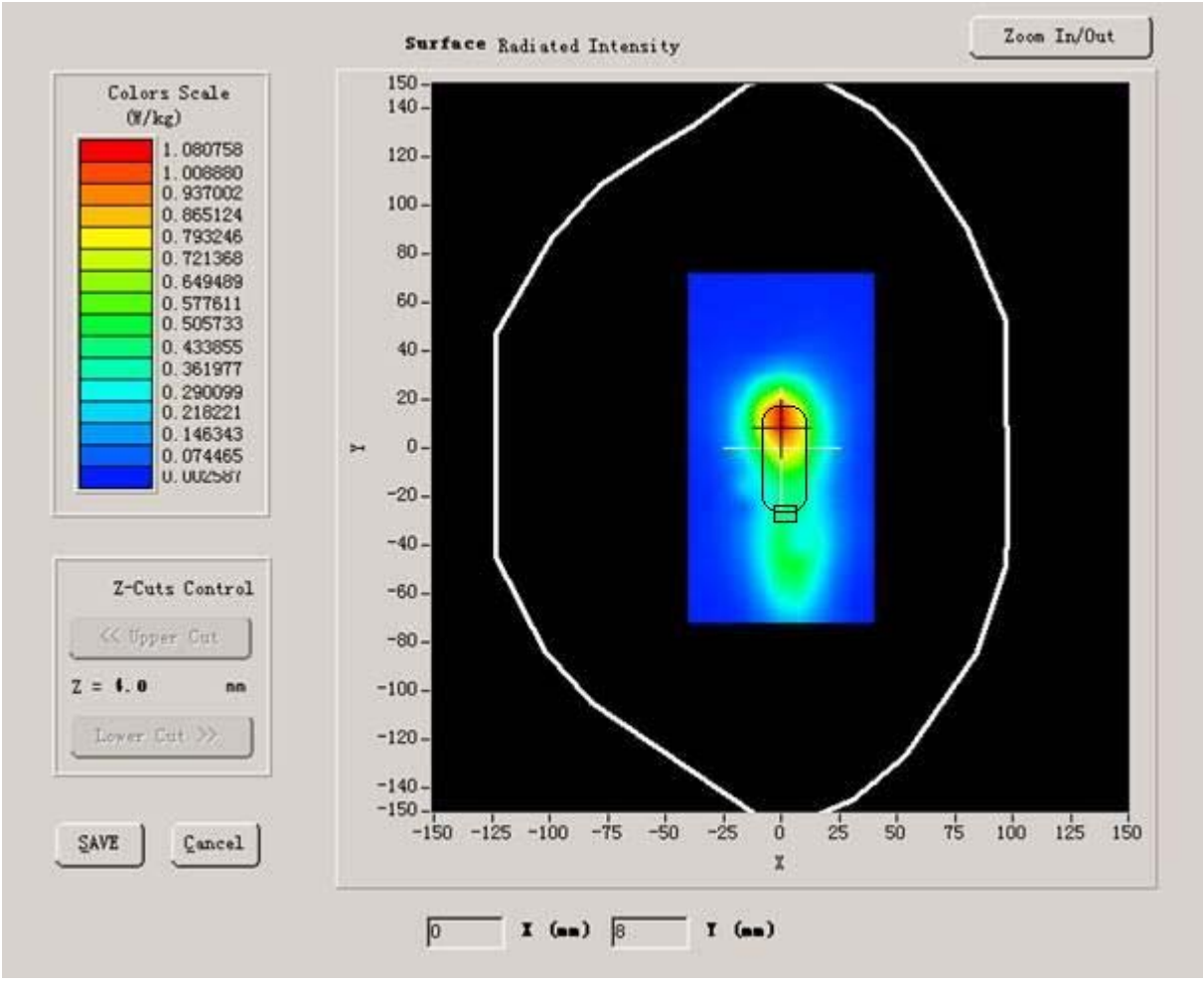
B. SAR Measurement Results

Middle Band SAR (Channel 661):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	51.540001
Relative permittivity	15.070000

Conductivity (S/m)	1.573978
Variation (%)	-0.680000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

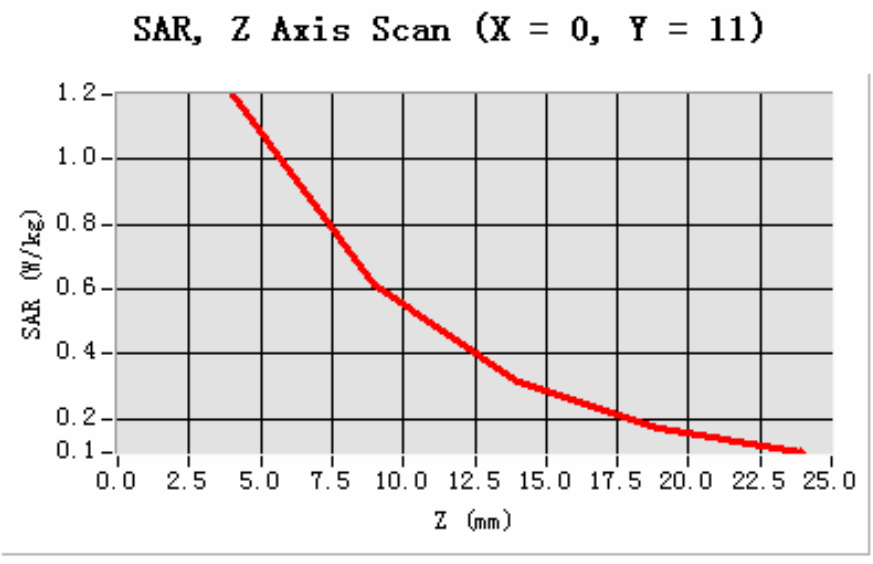


Maximum location: X=0.00, Y=11.00

SAR 10g (W/Kg)	0.549892
SAR 1g (W/Kg)	1.018745

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	1.2014	0.6130	0.3139	0.1723



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: 10/1/2009

Measurement duration: 9 minutes 25 seconds

A. Experimental conditions.

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

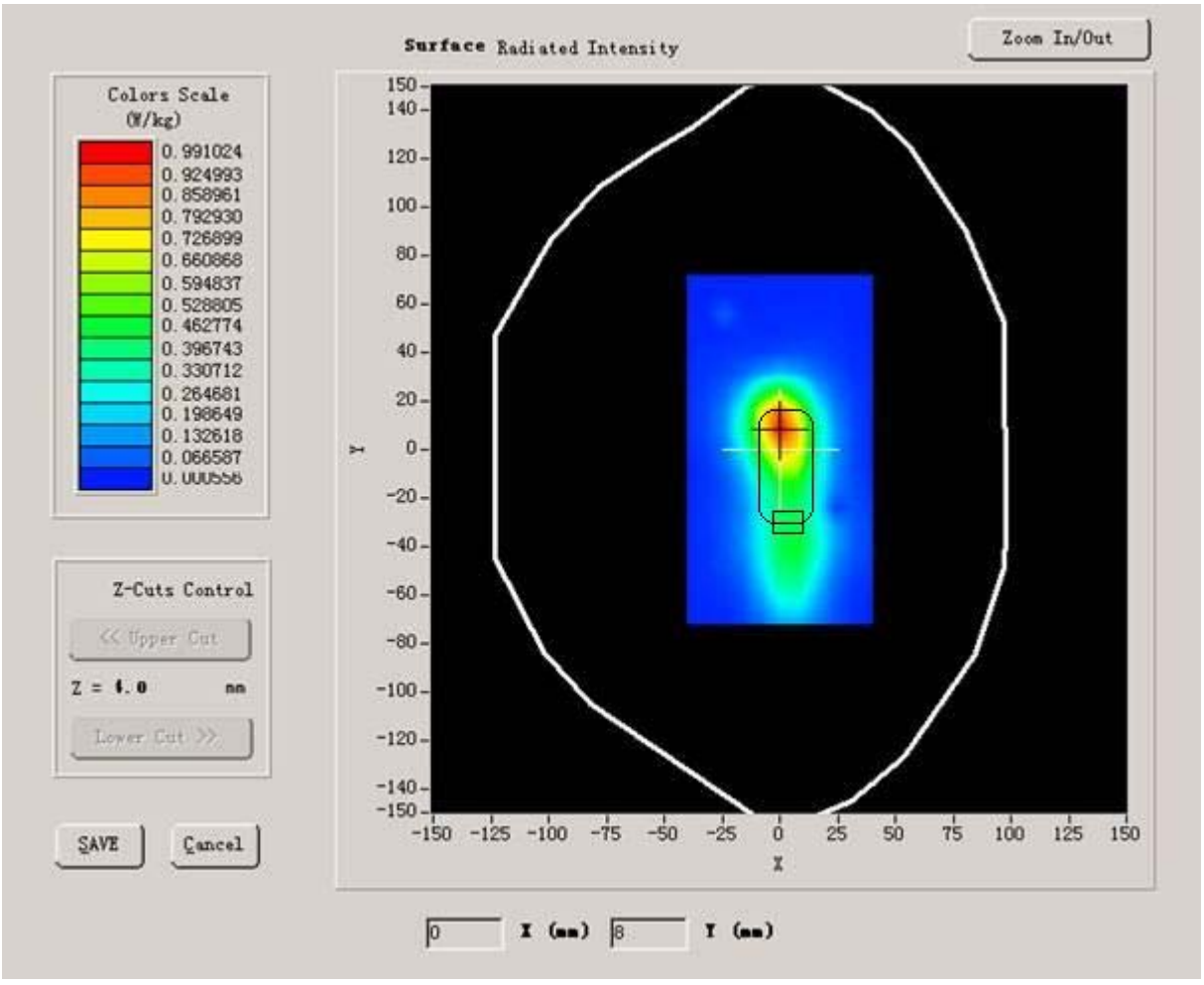
B. SAR Measurement Results

Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049
Relative permittivity (real part)	10.000000
Relative permittivity	12.000000

Conductivity (S/m)	1.273200
Variation (%)	0.290000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

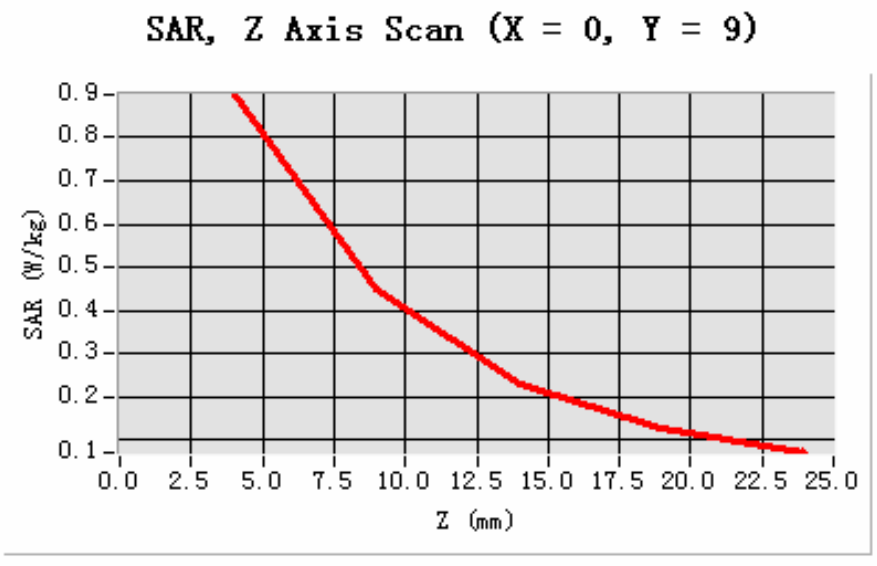


Maximum location: X=0.00, Y=9.00

SAR 10g (W/Kg)	0.412662
SAR 1g (W/Kg)	0.837121

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.8994	0.4513	0.2280	0.1251



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: 10/1/2009

Measurement duration: 9 minutes 34 seconds

A. Experimental conditions.

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

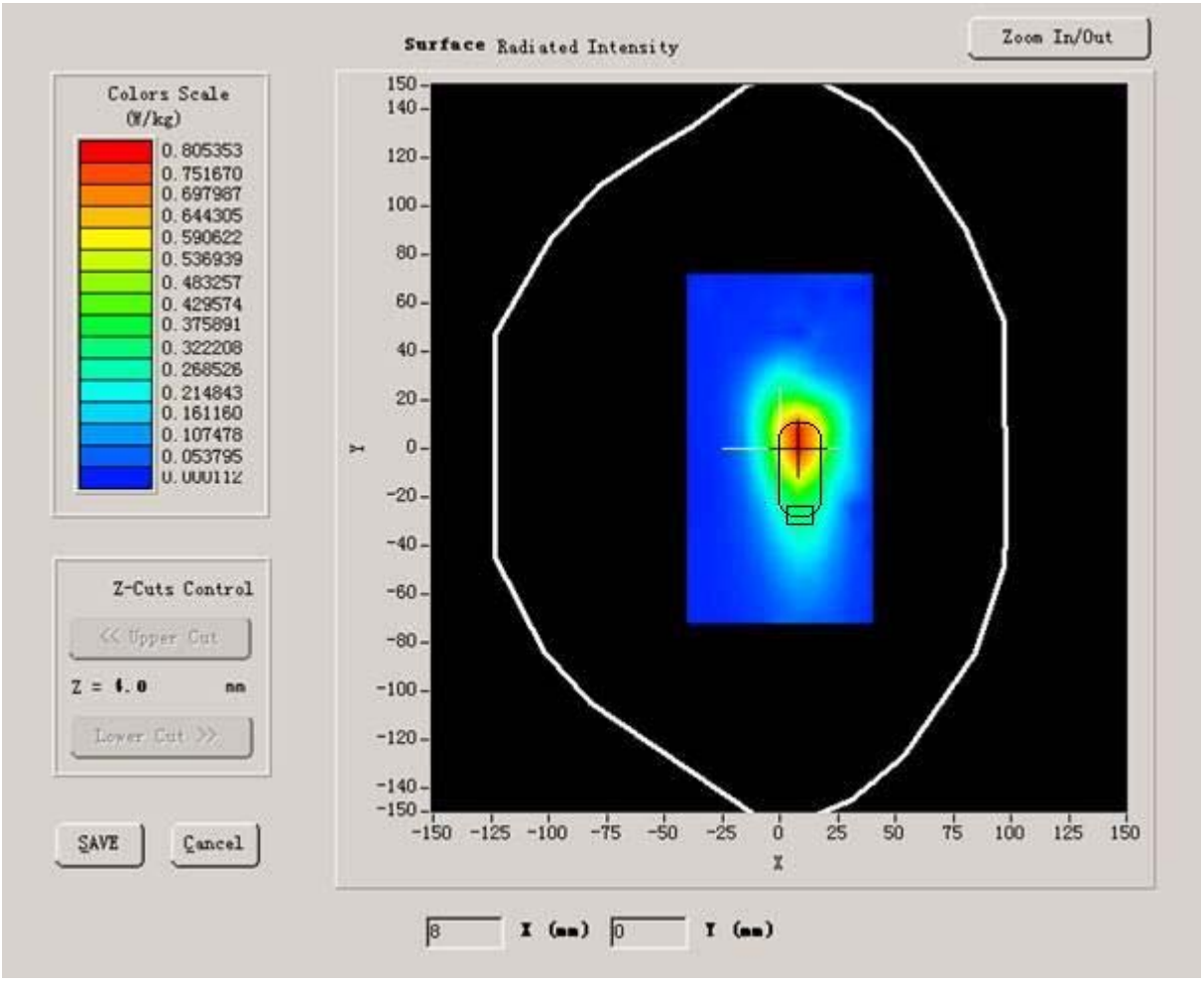
B. SAR Measurement Results

Lower Band SAR (Channel 512):

Frequency (MHz)	1850.199951
Relative permittivity (real part)	10.000000
Relative permittivity	12.000000

Conductivity (S/m)	1.233467
Variation (%)	-3.290000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

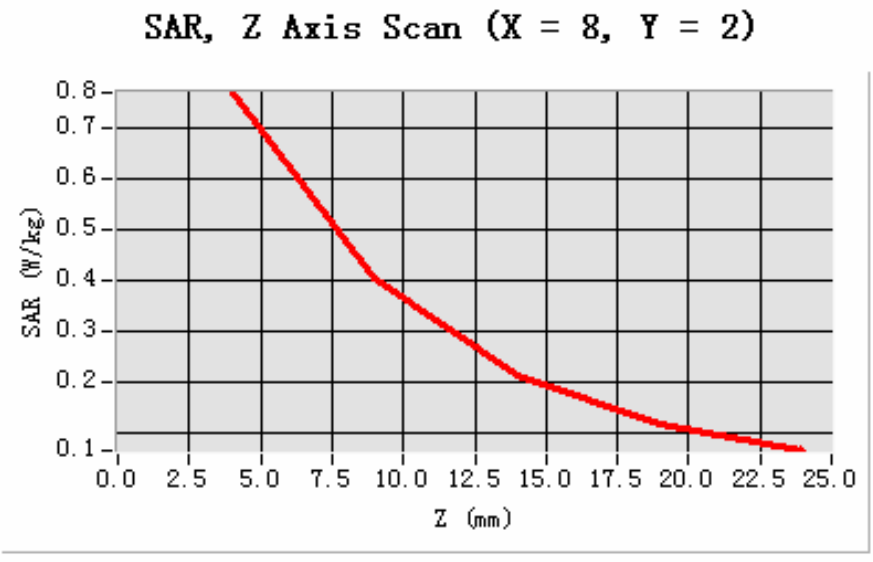


Maximum location: X=8.00, Y=2.00

SAR 10g (W/Kg)	0.364615
SAR 1g (W/Kg)	0.713787

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.7679	0.4038	0.2131	0.1191



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: 10/1/2009

Measurement duration: 9 minutes 24 seconds

A. Experimental conditions.

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

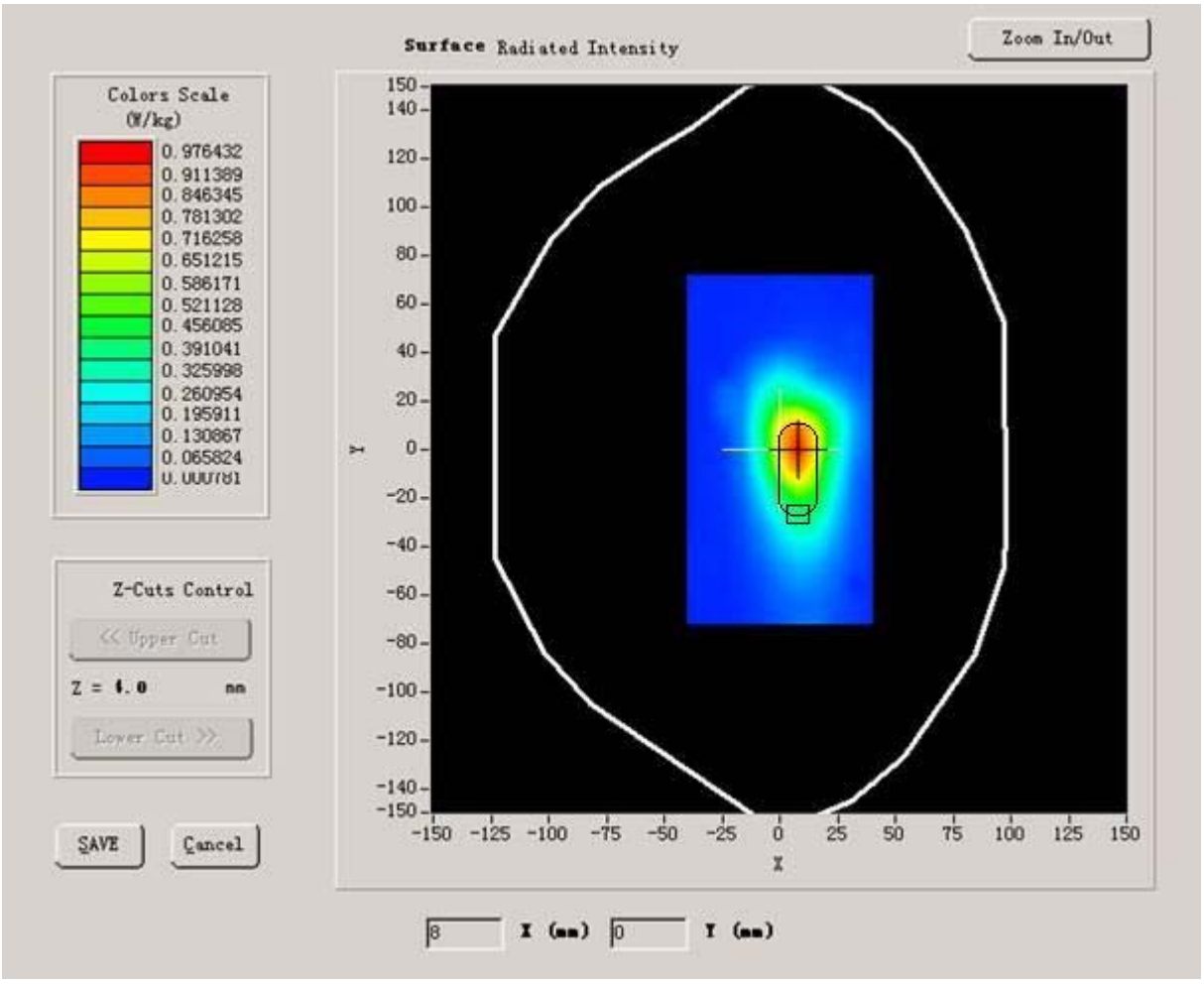
B. SAR Measurement Results

Middle Band SAR (Channel 661):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	51.540001
Relative permittivity	15.070000

Conductivity (S/m)	1.573978
Variation (%)	-3.760000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

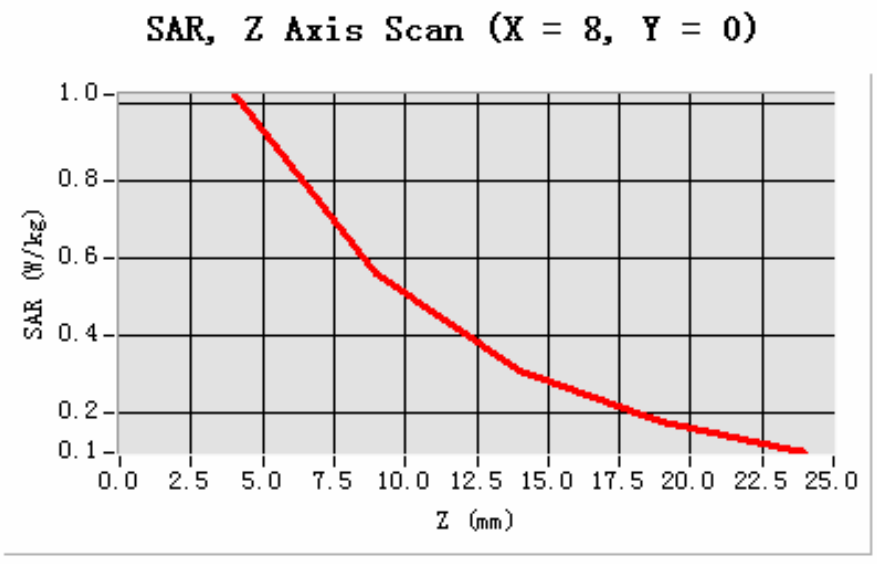


Maximum location: X=8.00, Y=0.00

SAR 10g (W/Kg)	0.497470
SAR 1g (W/Kg)	0.952074

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	1.0252	0.5597	0.3054	0.1732



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: 10/1/2009

Measurement duration: 9 minutes 25 seconds

A. Experimental conditions.

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

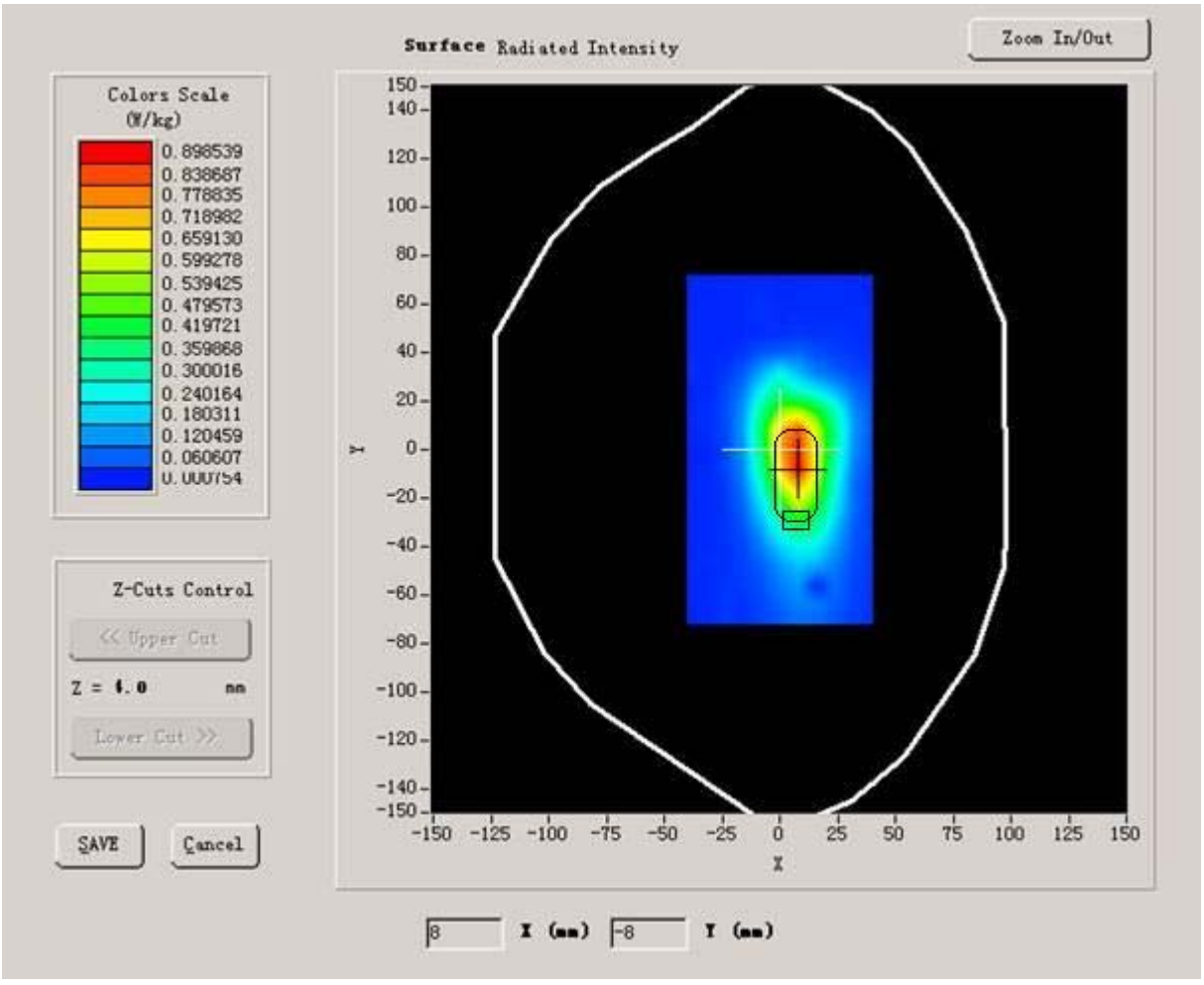
B. SAR Measurement Results

Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049
Relative permittivity (real part)	51.540001
Relative permittivity	12.000000

Conductivity (S/m)	1.273200
Variation (%)	-3.620000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

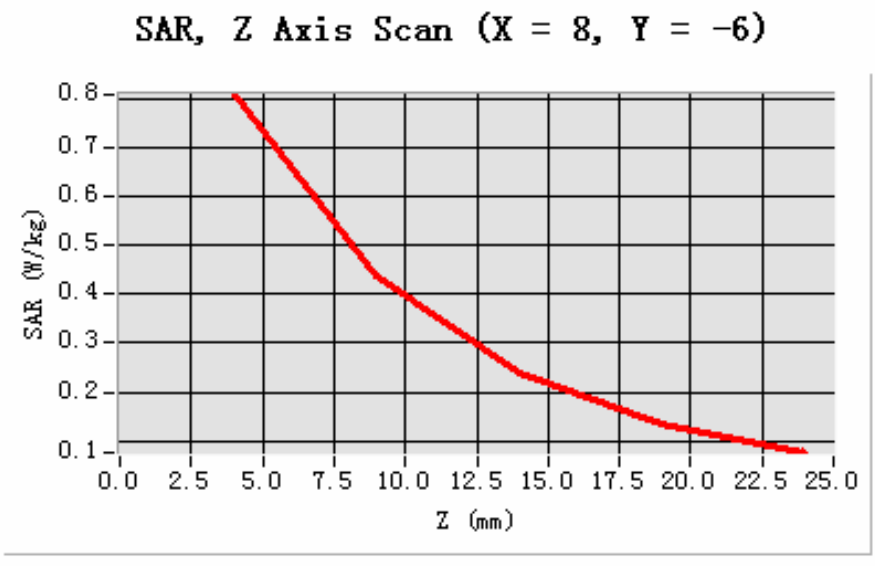


Maximum location: X=8.00, Y=-6.00

SAR 10g (W/Kg)	0.395201
SAR 1g (W/Kg)	0.755434

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.8080	0.4381	0.2381	0.1356



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: 10/1/2009

Measurement duration: 9 minutes 26 seconds

A. Experimental conditions.

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

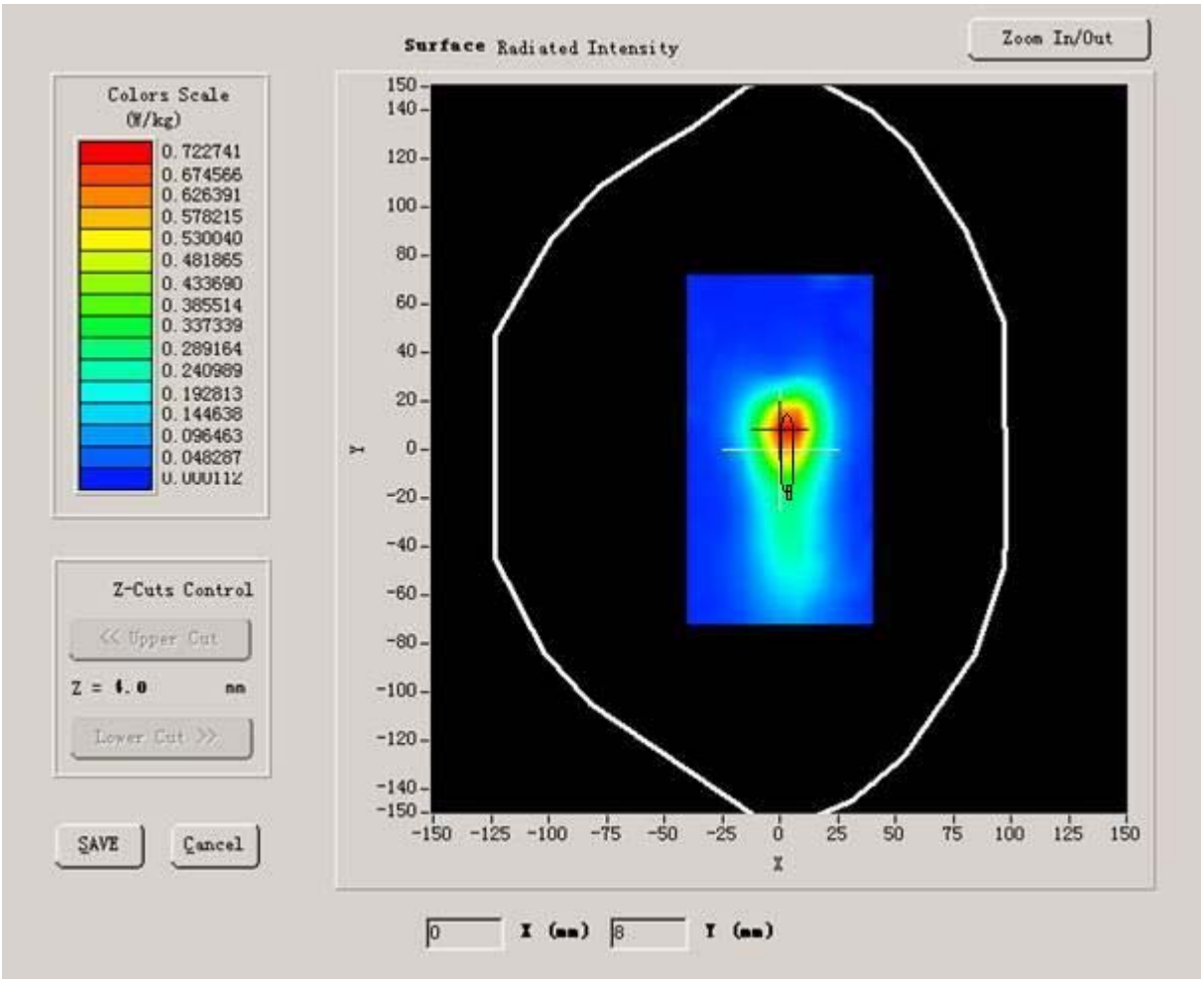
B. SAR Measurement Results

Lower Band SAR (Channel 512):

Frequency (MHz)	1850.199951
Relative permittivity (real part)	51.540001
Relative permittivity	12.000000

Conductivity (S/m)	1.233467
Variation (%)	-0.150000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

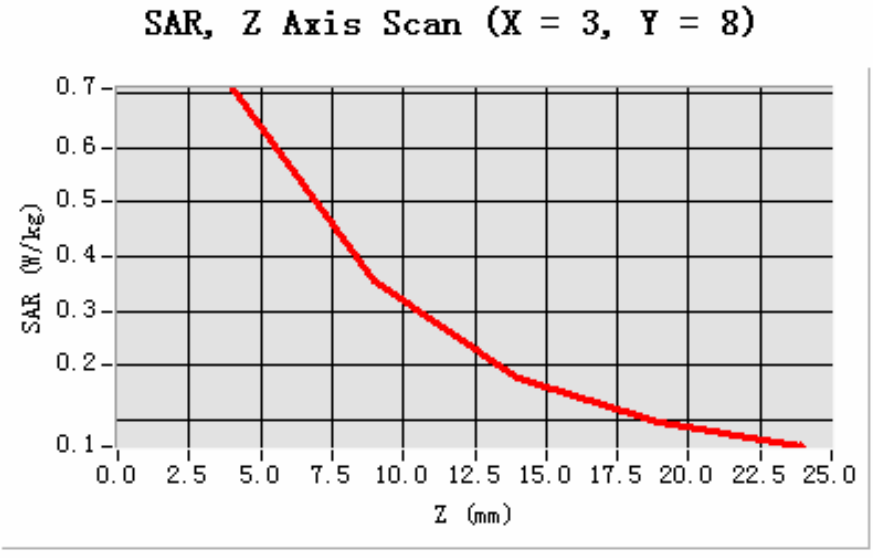


Maximum location: X=3.00, Y=8.00

SAR 10g (W/Kg)	0.317585
SAR 1g (W/Kg)	0.655385

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.7092	0.3546	0.1771	0.0947



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: 10/1/2009

Measurement duration: 9 minutes 32 seconds

A. Experimental conditions.

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

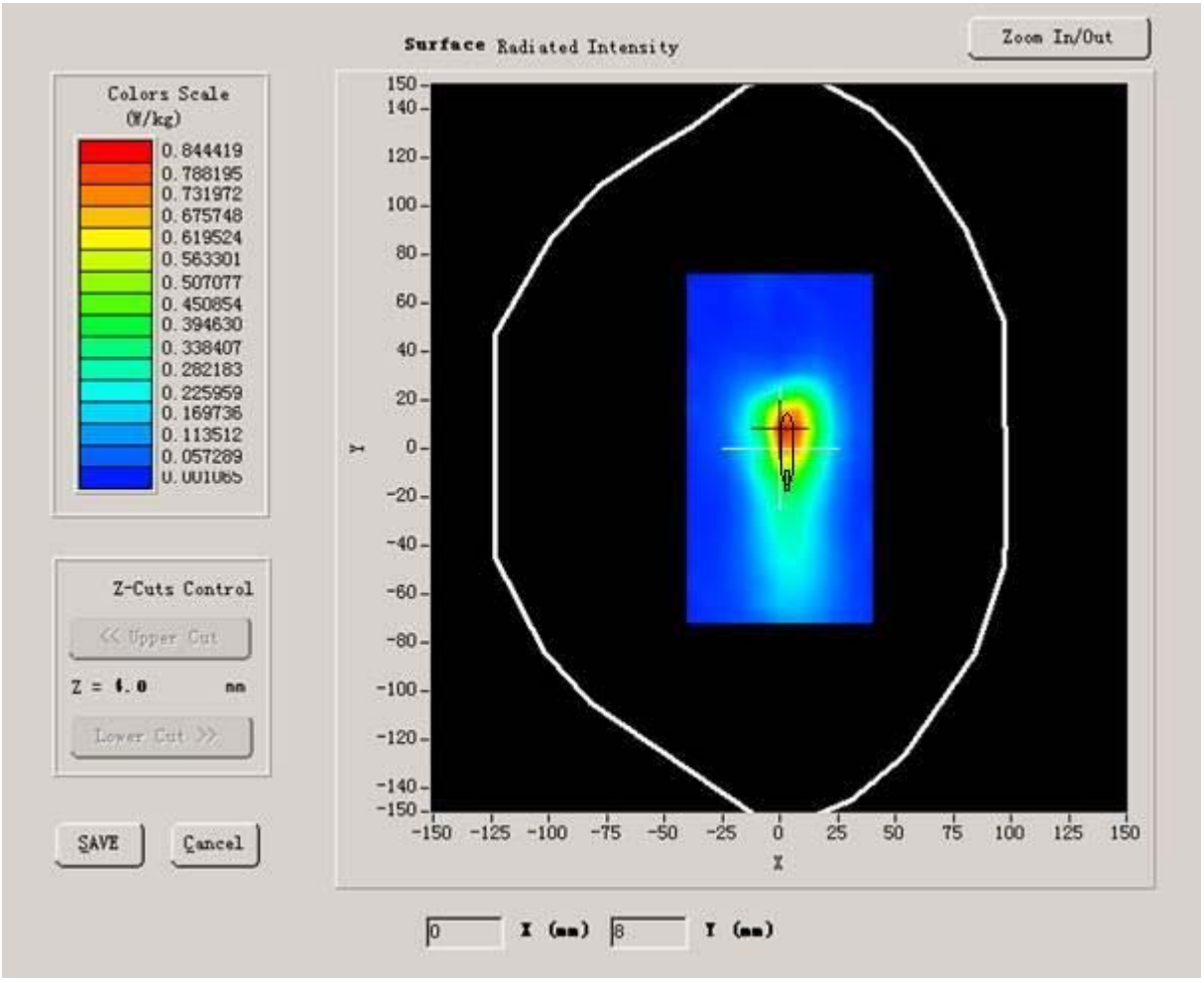
B. SAR Measurement Results

Middle Band SAR (Channel 661):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	51.540001
Relative permittivity	15.070000

Conductivity (S/m)	1.573978
Variation (%)	2.040000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

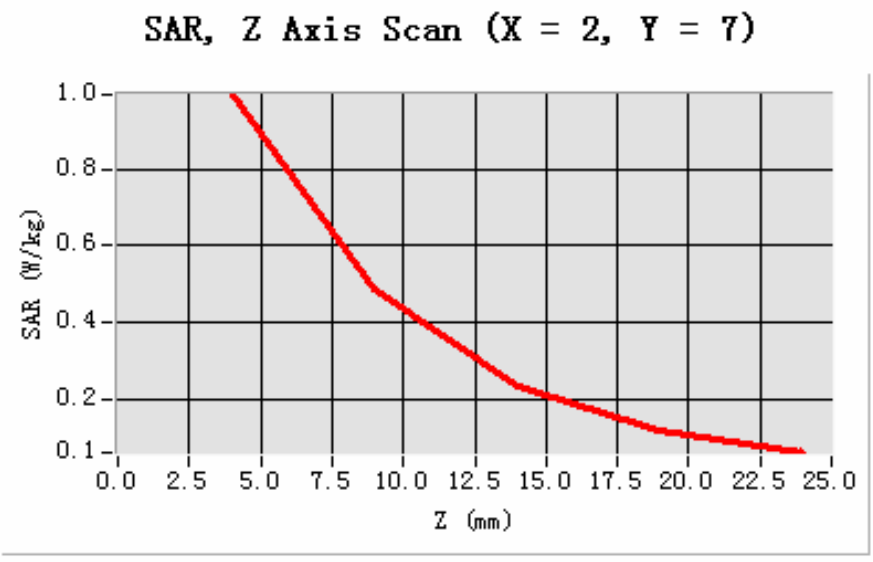


Maximum location: X=2.00, Y=7.00

SAR 10g (W/Kg)	0.442206
SAR 1g (W/Kg)	0.922370

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.9931	0.4850	0.2339	0.1196



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: 10/1/2009

Measurement duration: 9 minutes 28 seconds

A. Experimental conditions.

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

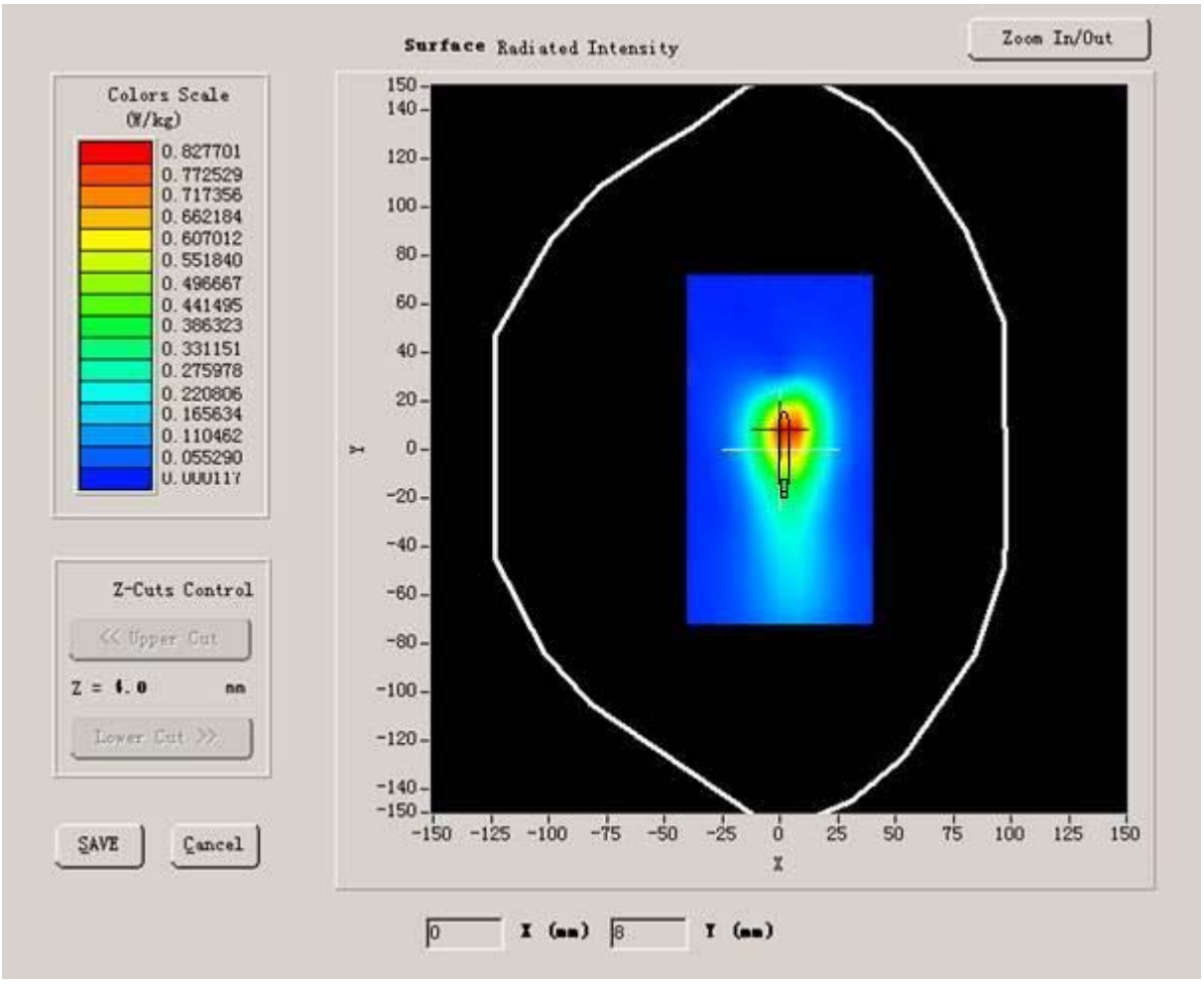
B. SAR Measurement Results

Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049
Relative permittivity (real part)	10.000000
Relative permittivity	12.000000

Conductivity (S/m)	1.273200
Variation (%)	0.500000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

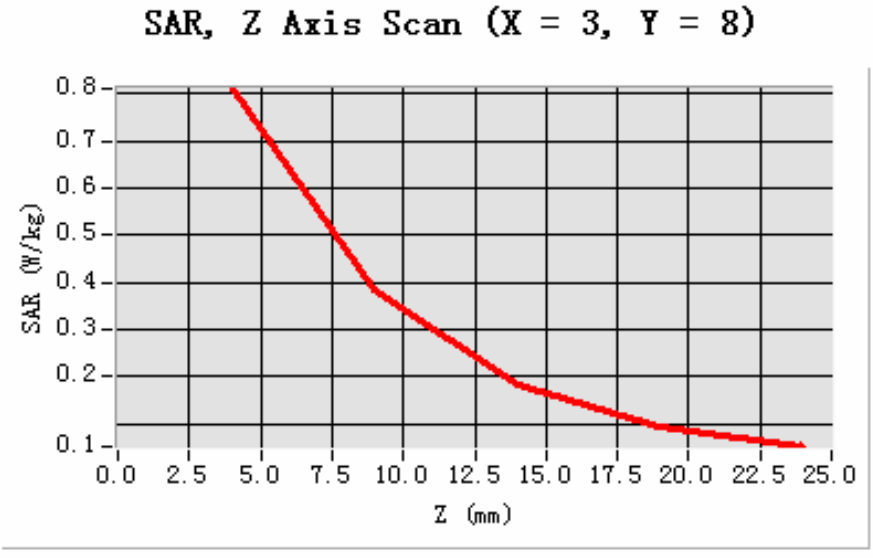


Maximum location: X=3.00, Y=8.00

SAR 10g (W/Kg)	0.361221
SAR 1g (W/Kg)	0.759809

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.8104	0.3831	0.1814	0.0952



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: 10/1/2009

Measurement duration: 9 minutes 33 seconds

A. Experimental conditions.

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

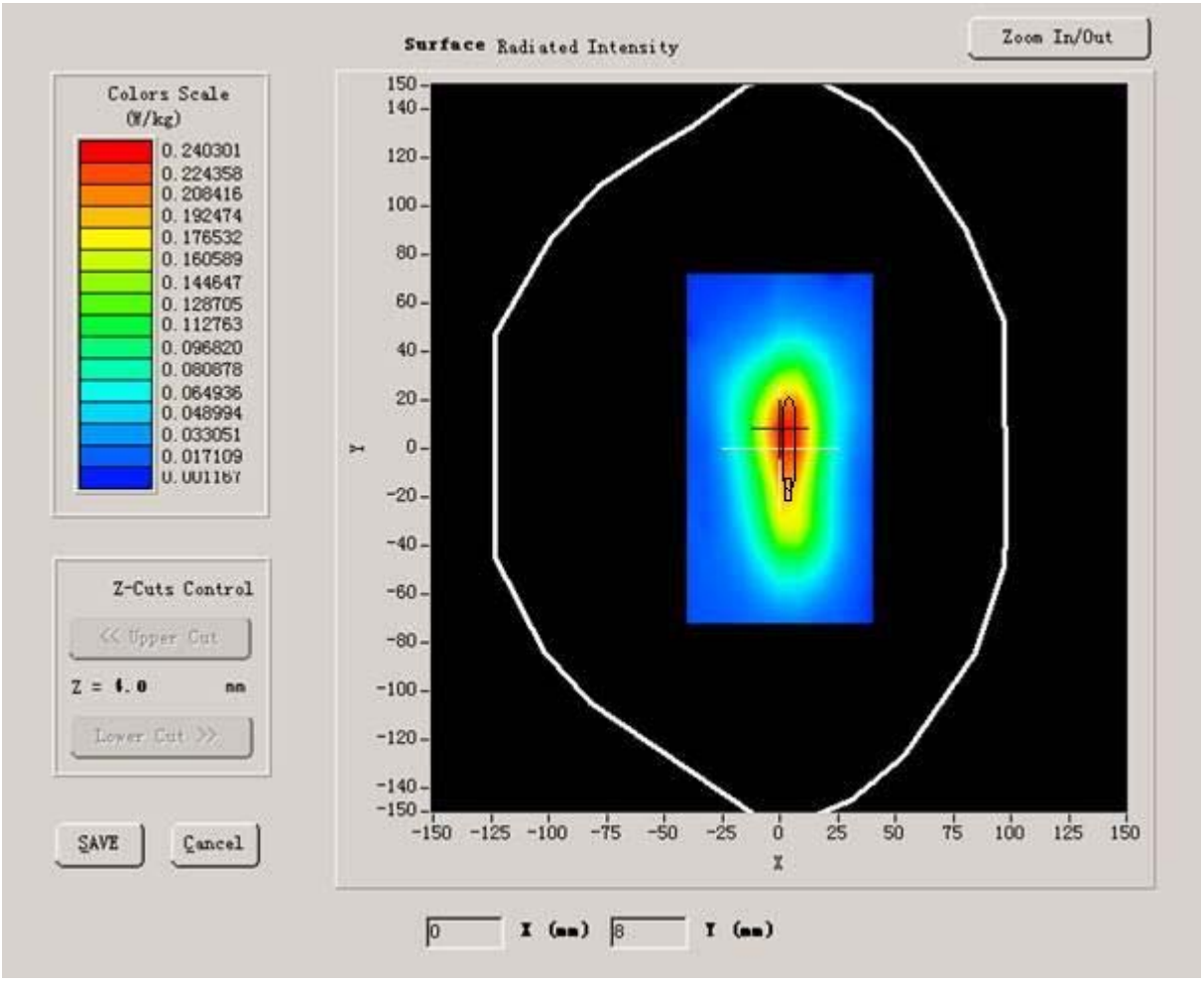
B. SAR Measurement Results

Lower Band SAR (Channel 512):

Frequency (MHz)	1850.199951
Relative permittivity (real part)	10.000000
Relative permittivity	12.000000

Conductivity (S/m)	1.233467
Variation (%)	-0.470000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

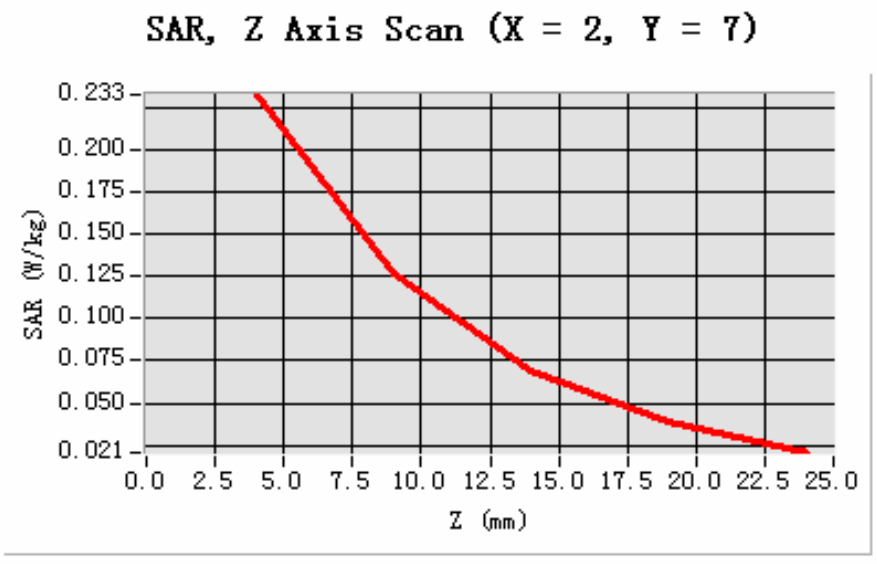


Maximum location: X=2.00, Y=7.00

SAR 10g (W/Kg)	0.119941
SAR 1g (W/Kg)	0.219513

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.2328	0.1269	0.0688	0.0384



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: 10/1/2009

Measurement duration: 9 minutes 32 seconds

A. Experimental conditions.

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

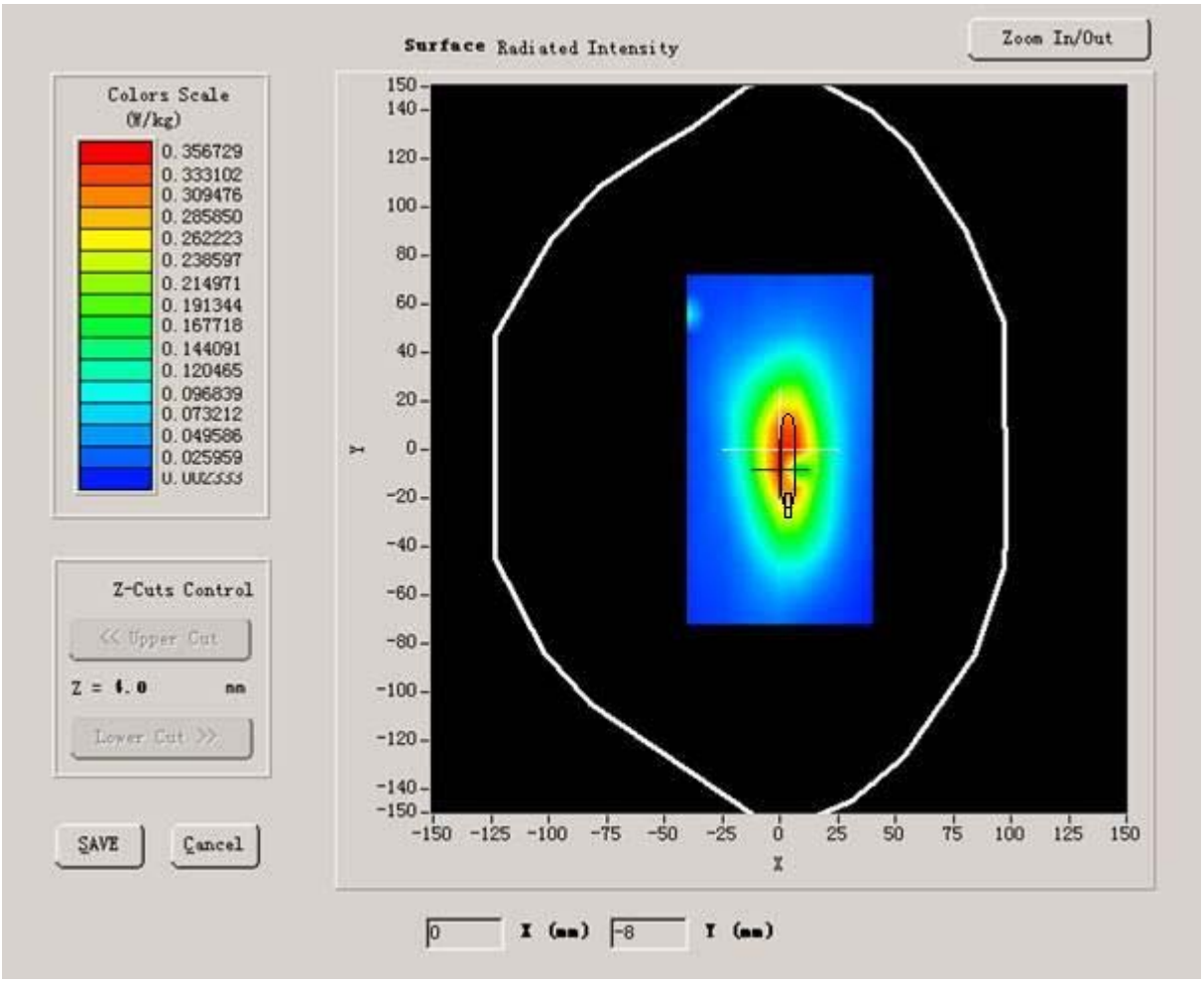
B. SAR Measurement Results

Middle Band SAR (Channel 661):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	51.540001
Relative permittivity	15.070000

Conductivity (S/m)	1.573978
Variation (%)	-2.950000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

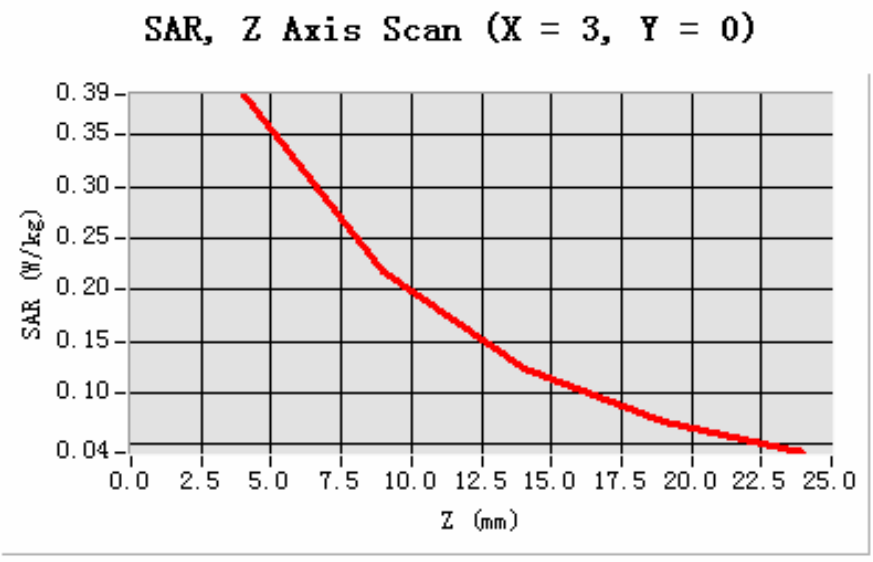


Maximum location: X=3.00, Y=0.00

SAR 10g (W/Kg)	0.202748
SAR 1g (W/Kg)	0.365335

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.3892	0.2184	0.1232	0.0725



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: 10/1/2009

Measurement duration: 9 minutes 25 seconds

A. Experimental conditions.

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

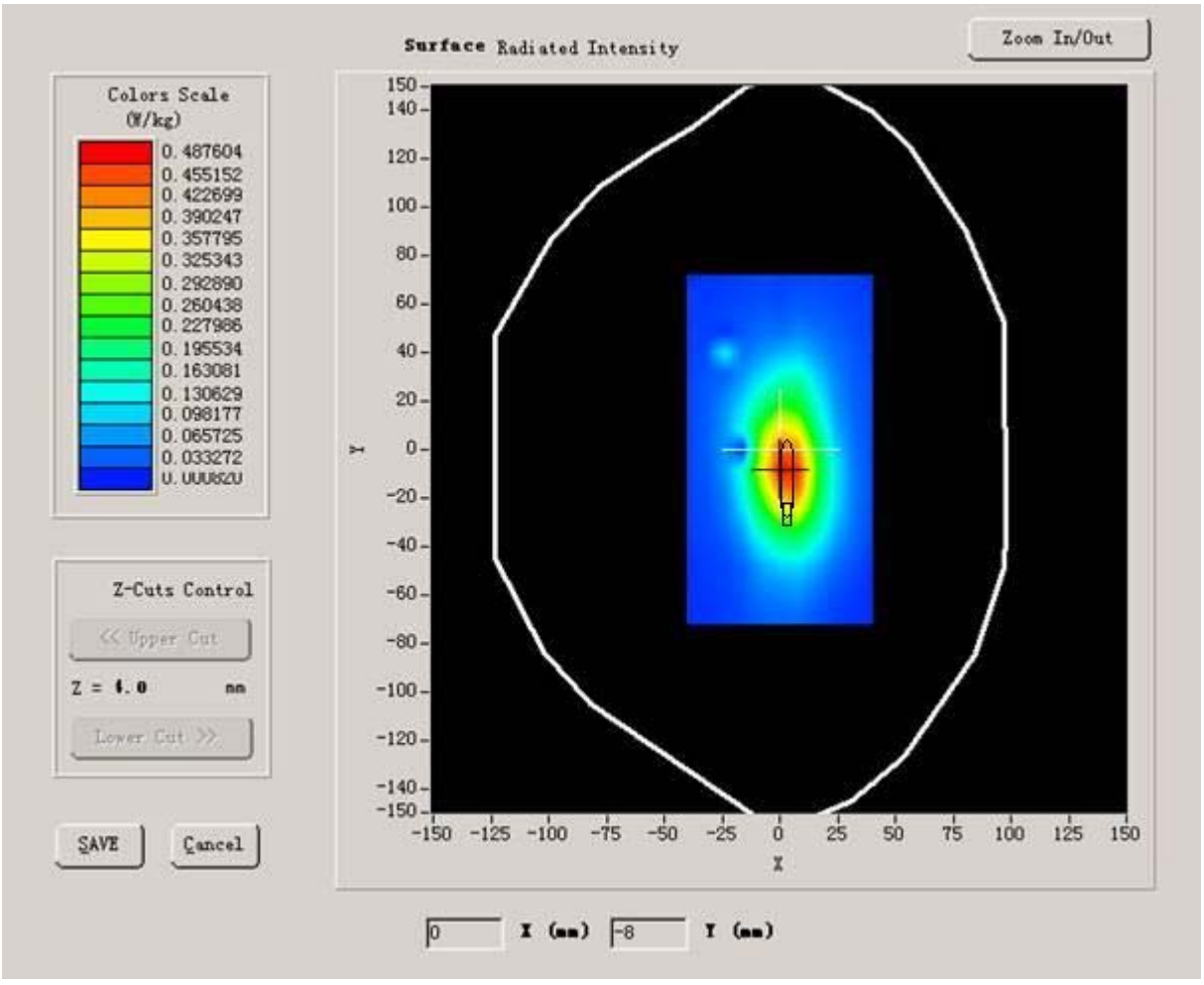
B. SAR Measurement Results

Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049
Relative permittivity (real part)	10.000000
Relative permittivity	12.000000

Conductivity (S/m)	1.273200
Variation (%)	-2.340000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

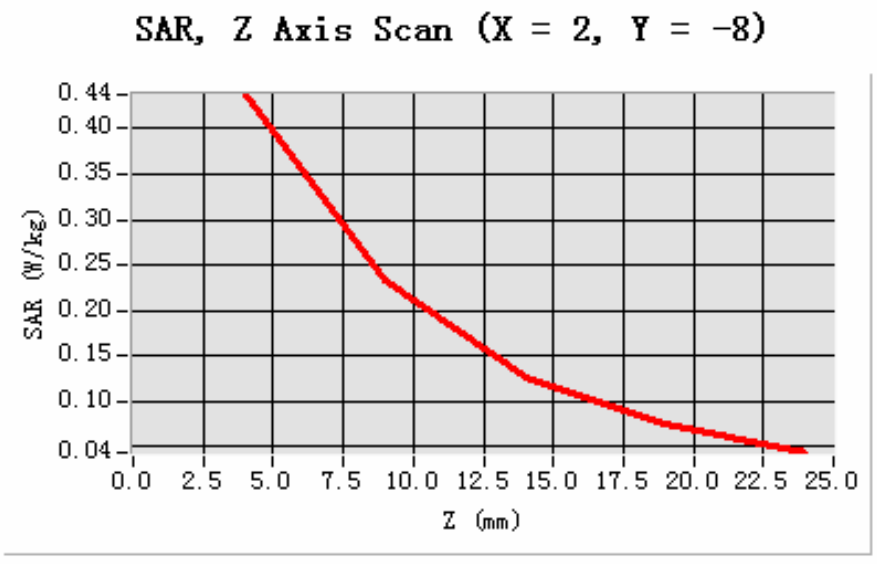


Maximum location: X=2.00, Y=-8.00

SAR 10g (W/Kg)	0.217764
SAR 1g (W/Kg)	0.409432

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.4377	0.2344	0.1271	0.0739



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: 10/1/2009

Measurement duration: 9 minutes 28 seconds

A. Experimental conditions.

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

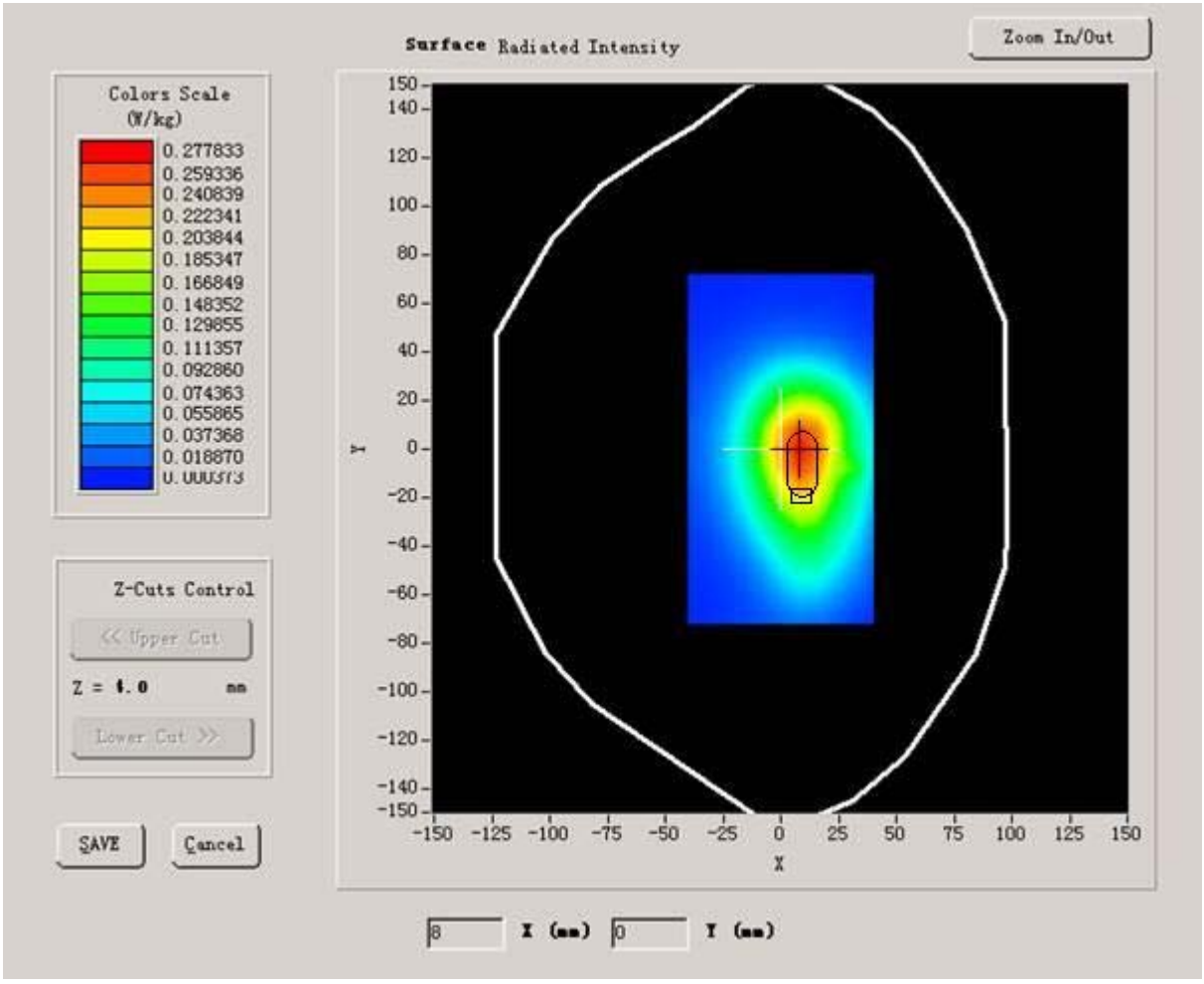
B. SAR Measurement Results

Lower Band SAR (Channel 4132):

Frequency (MHz)	826.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	0.728580
Variation (%)	-0.280000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

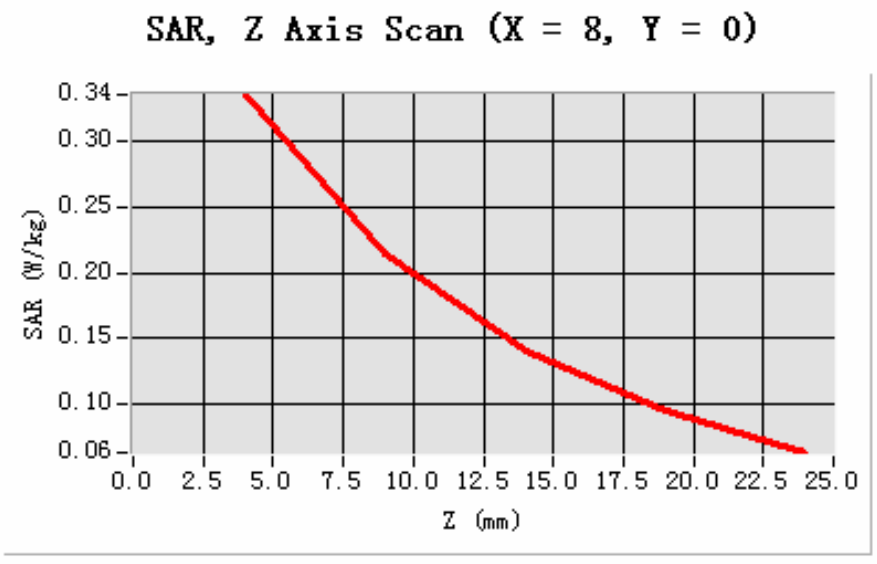


Maximum location: X=8.00, Y=0.00

SAR 10g (W/Kg)	0.197945
SAR 1g (W/Kg)	0.318006

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.3357	0.2154	0.1404	0.0945



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: 10/1/2009

Measurement duration: 9 minutes 26 seconds

A. Experimental conditions.

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

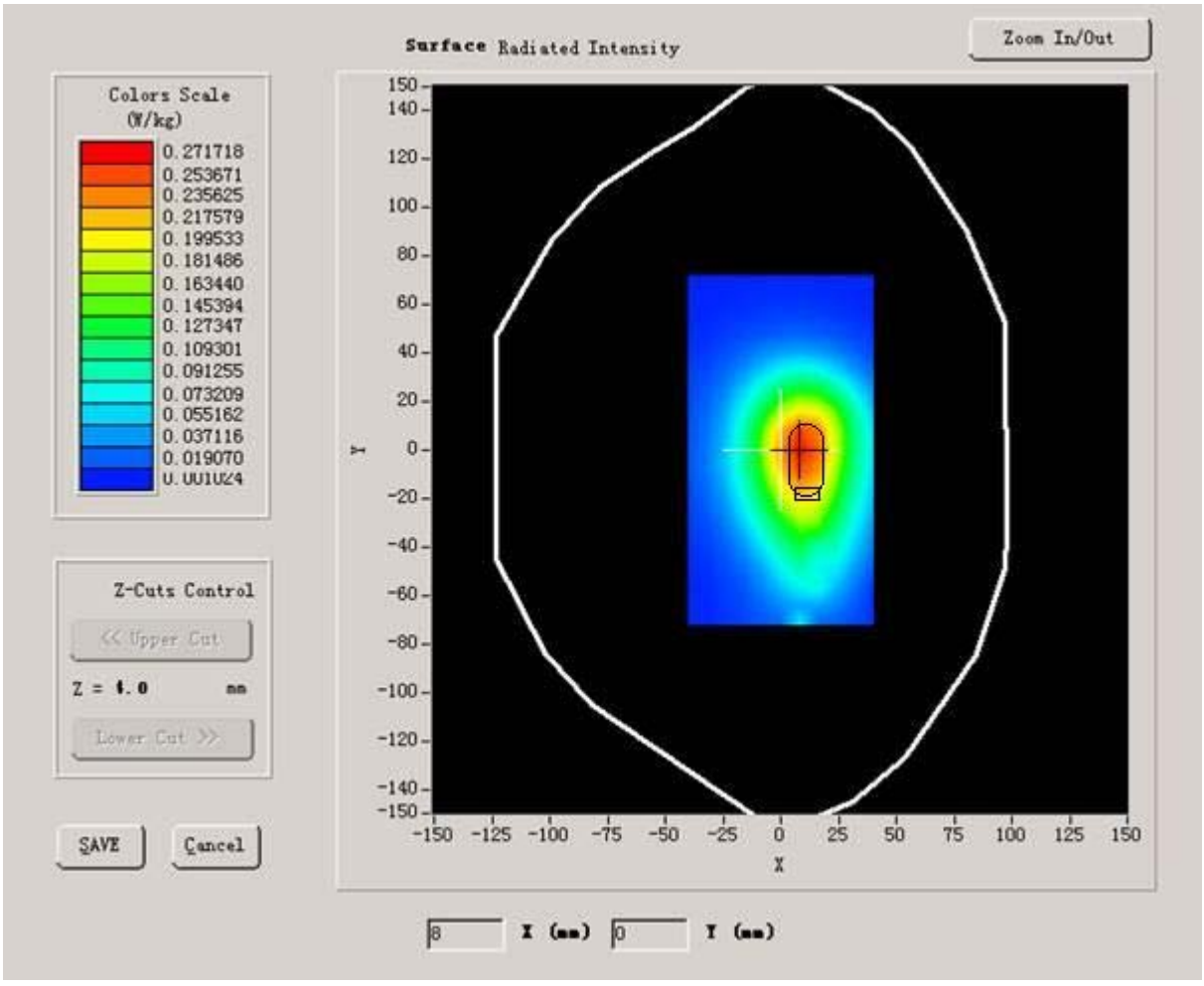
B. SAR Measurement Results

Middle Band SAR (Channel 4182):

Frequency (MHz)	836.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	0.737401
Variation (%)	0.270000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

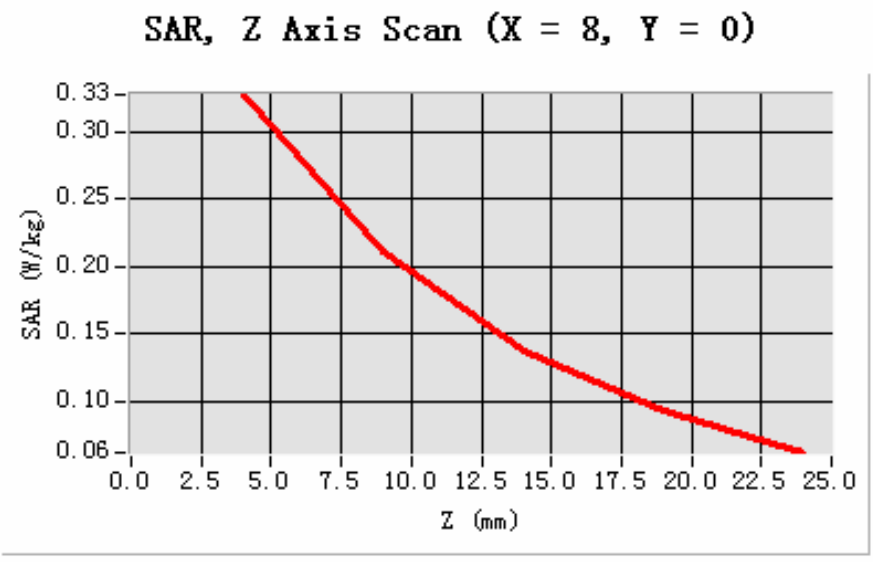


Maximum location: X=8.00, Y=0.00

SAR 10g (W/Kg)	0.193334
SAR 1g (W/Kg)	0.310116

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.3272	0.2104	0.1375	0.0927



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: 10/1/2009

Measurement duration: 9 minutes 28 seconds

A. Experimental conditions.

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

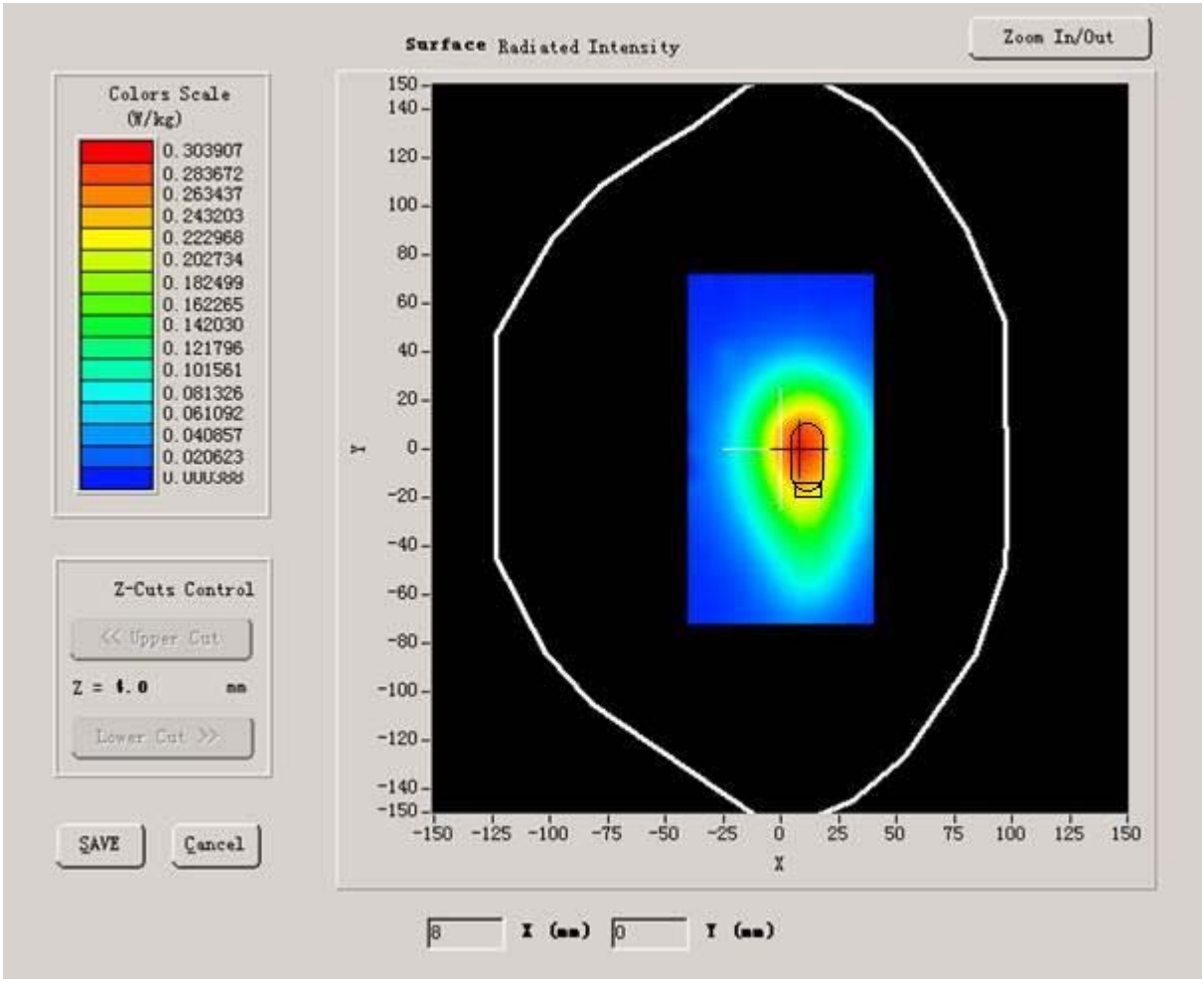
B. SAR Measurement Results

Higher Band SAR (Channel 4233):

Frequency (MHz)	846.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	0.746221
Variation (%)	0.170000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

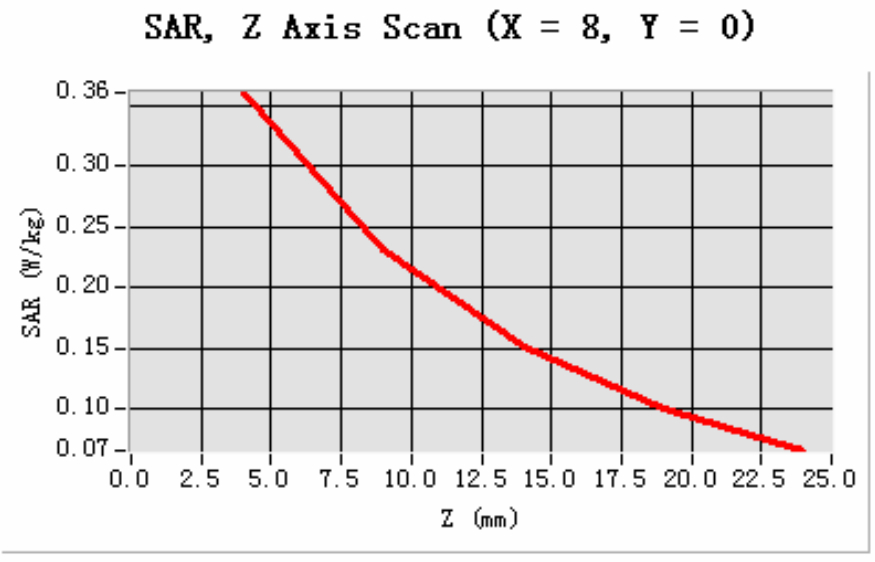


Maximum location: X=8.00, Y=0.00

SAR 10g (W/Kg)	0.212634
SAR 1g (W/Kg)	0.341670

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.3608	0.2323	0.1511	0.1006



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: 10/1/2009

Measurement duration: 9 minutes 29 seconds

A. Experimental conditions.

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

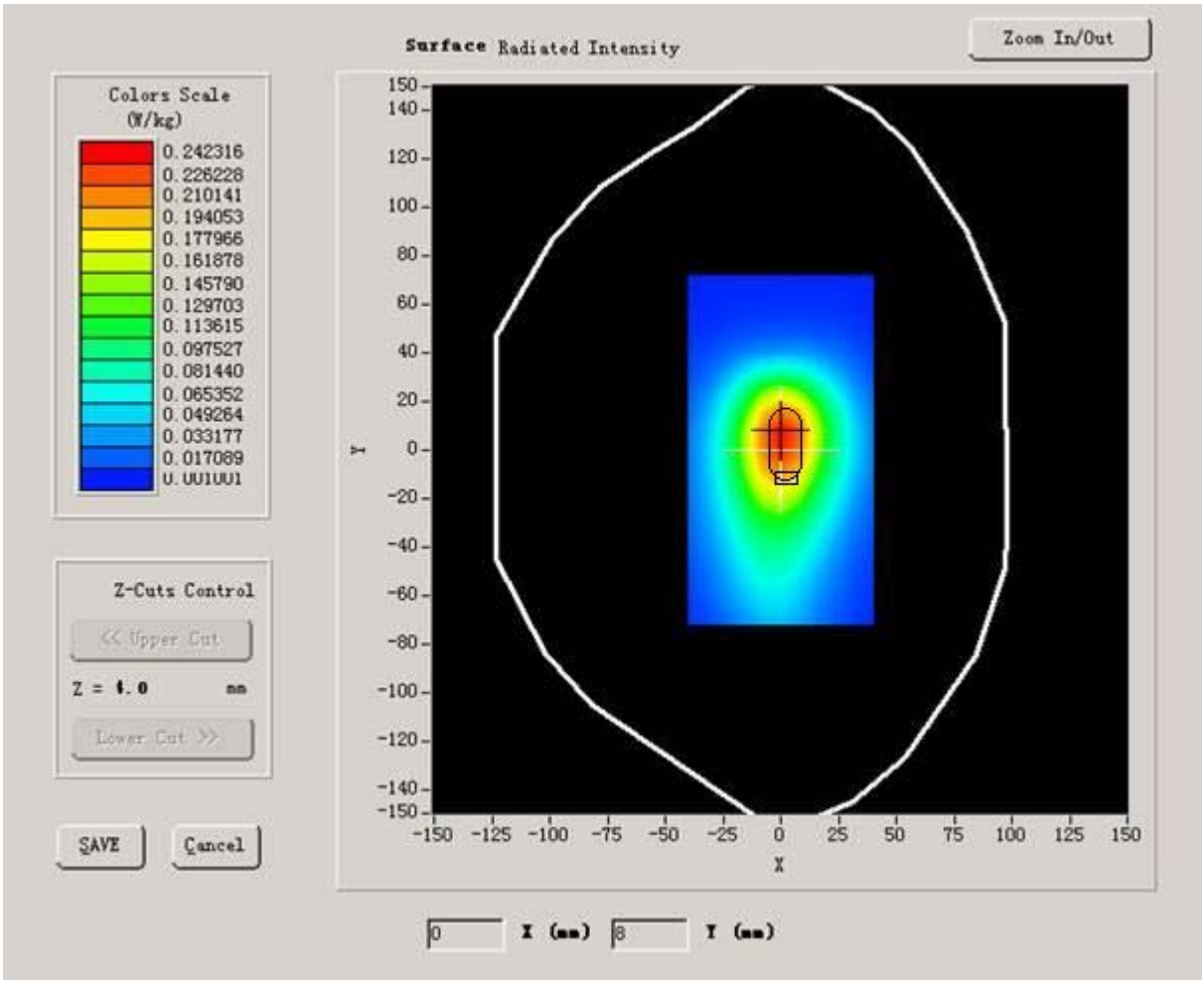
B. SAR Measurement Results

Lower Band SAR (Channel 4132):

Frequency (MHz)	826.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	0.728580
Variation (%)	-0.490000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

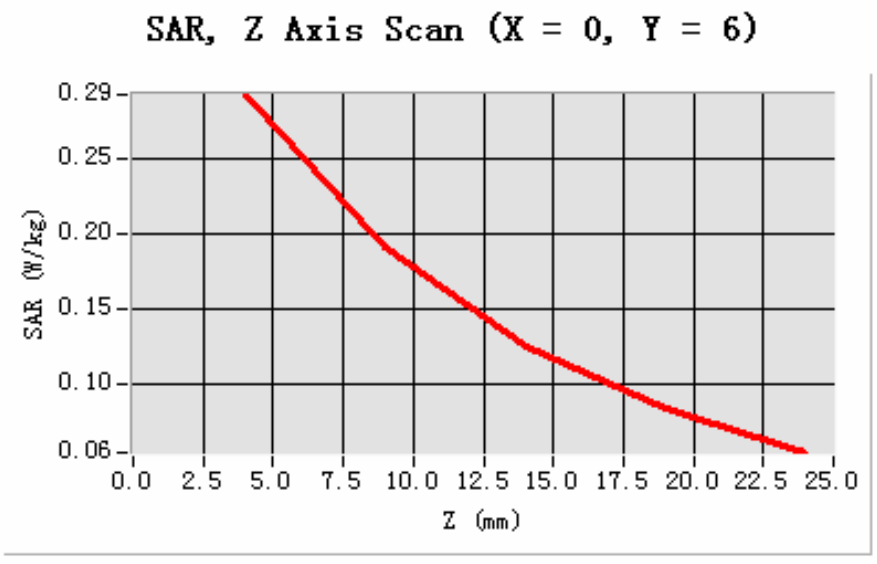


Maximum location: X=0.00, Y=6.00

SAR 10g (W/Kg)	0.173478
SAR 1g (W/Kg)	0.278584

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.2933	0.1912	0.1256	0.0840



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: 10/1/2009

Measurement duration: 9 minutes 30 seconds

A. Experimental conditions.

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

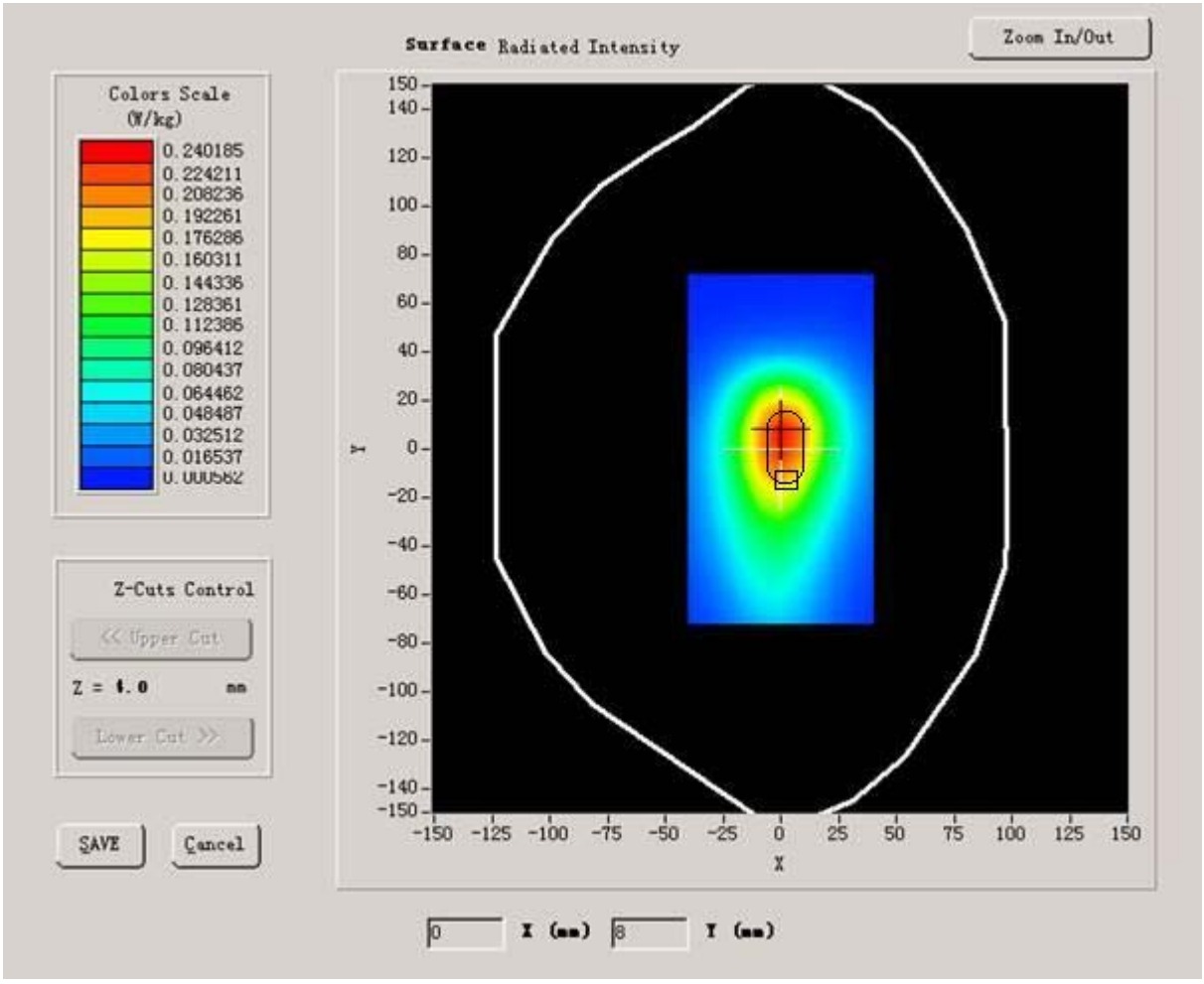
B. SAR Measurement Results

Middle Band SAR (Channel 4182):

Frequency (MHz)	836.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	0.737401
Variation (%)	1.250000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

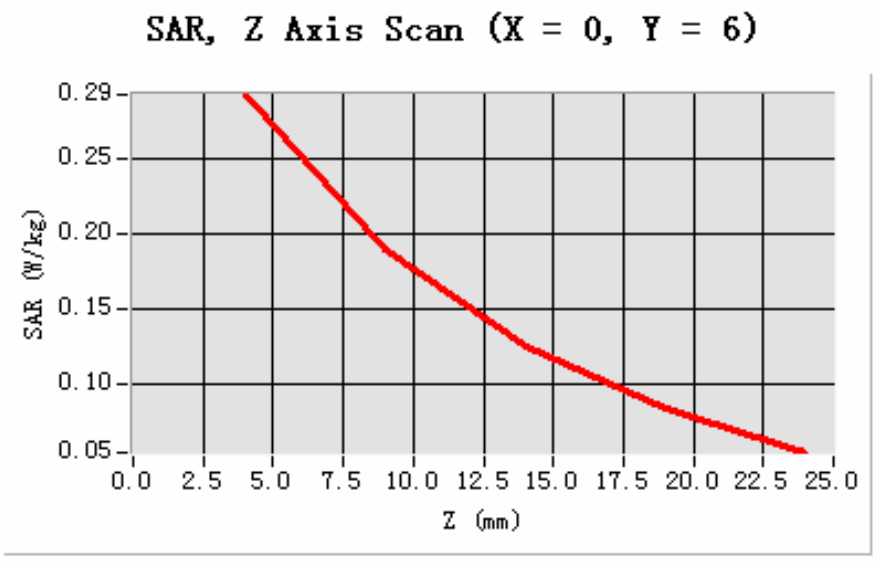


Maximum location: X=0.00, Y=6.00

SAR 10g (W/Kg)	0.173022
SAR 1g (W/Kg)	0.278654

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.2932	0.1901	0.1242	0.0827



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: 10/1/2009

Measurement duration: 9 minutes 29 seconds

A. Experimental conditions.

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

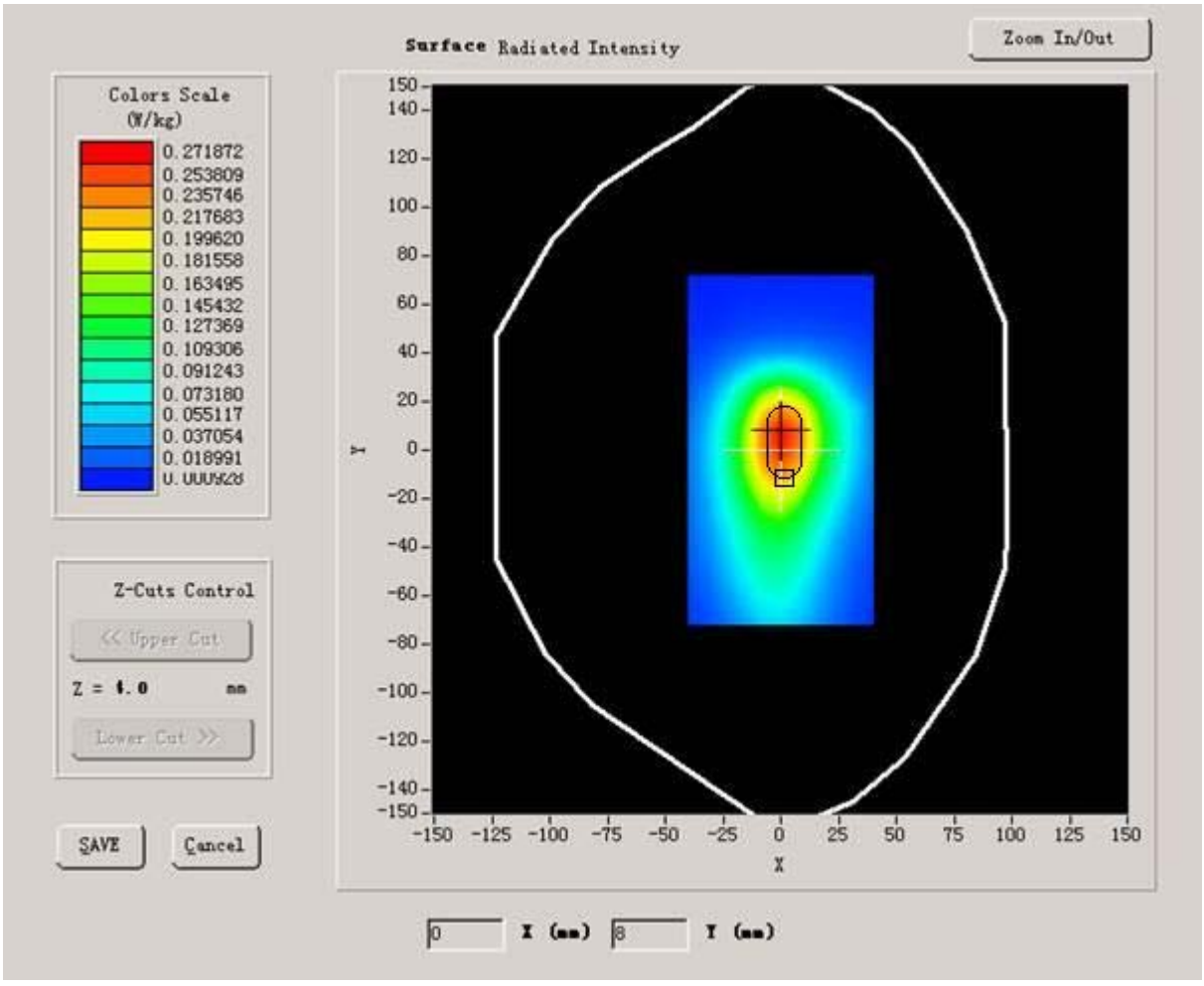
B. SAR Measurement Results

Higher Band SAR (Channel 4233):

Frequency (MHz)	846.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	0.746221
Variation (%)	-0.660000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

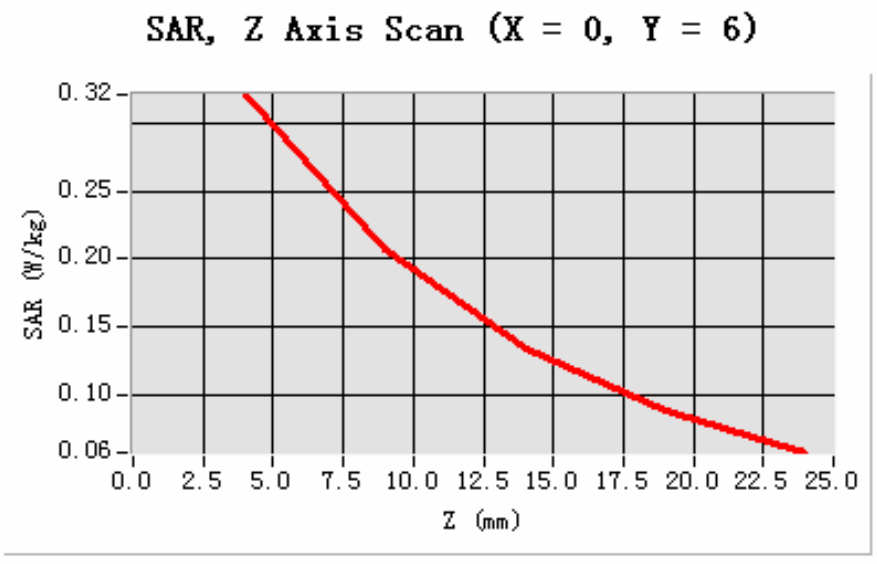


Maximum location: X=0.00, Y=6.00

SAR 10g (W/Kg)	0.188431
SAR 1g (W/Kg)	0.304729

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.3209	0.2070	0.1343	0.0886



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: 10/1/2009

Measurement duration: 9 minutes 33 seconds

A. Experimental conditions.

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

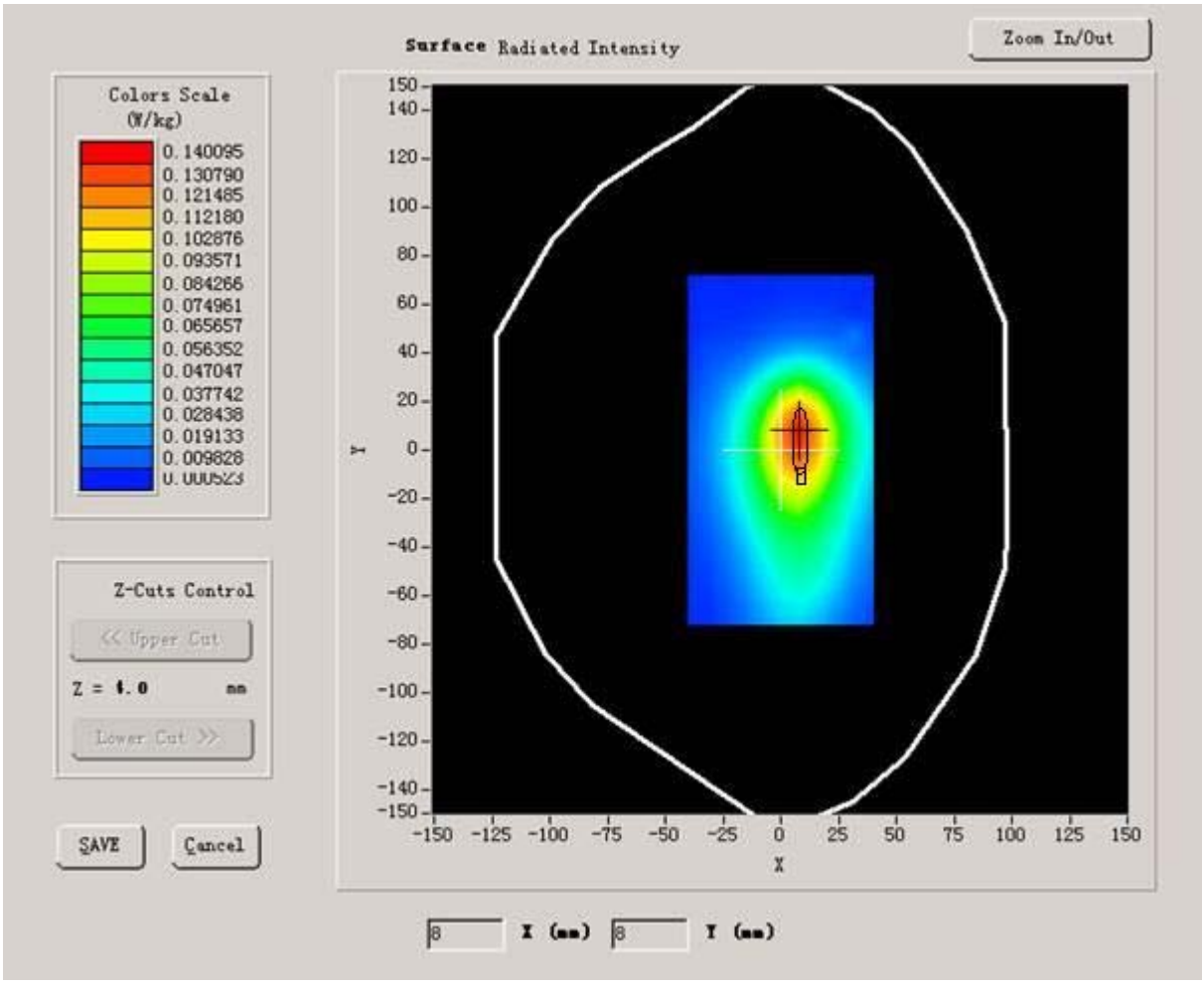
B. SAR Measurement Results

Lower Band SAR (Channel 4132):

Frequency (MHz)	826.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	0.728580
Variation (%)	-0.200000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

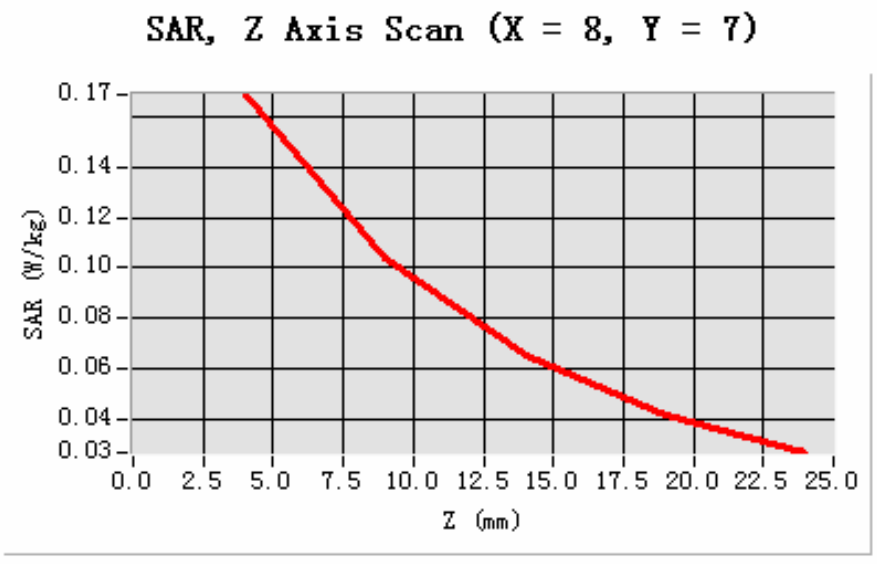


Maximum location: X=8.00, Y=7.00

SAR 10g (W/Kg)	0.096183
SAR 1g (W/Kg)	0.159931

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.1689	0.1041	0.0649	0.0417



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: 10/1/2009

Measurement duration: 9 minutes 33 seconds

A. Experimental conditions.

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

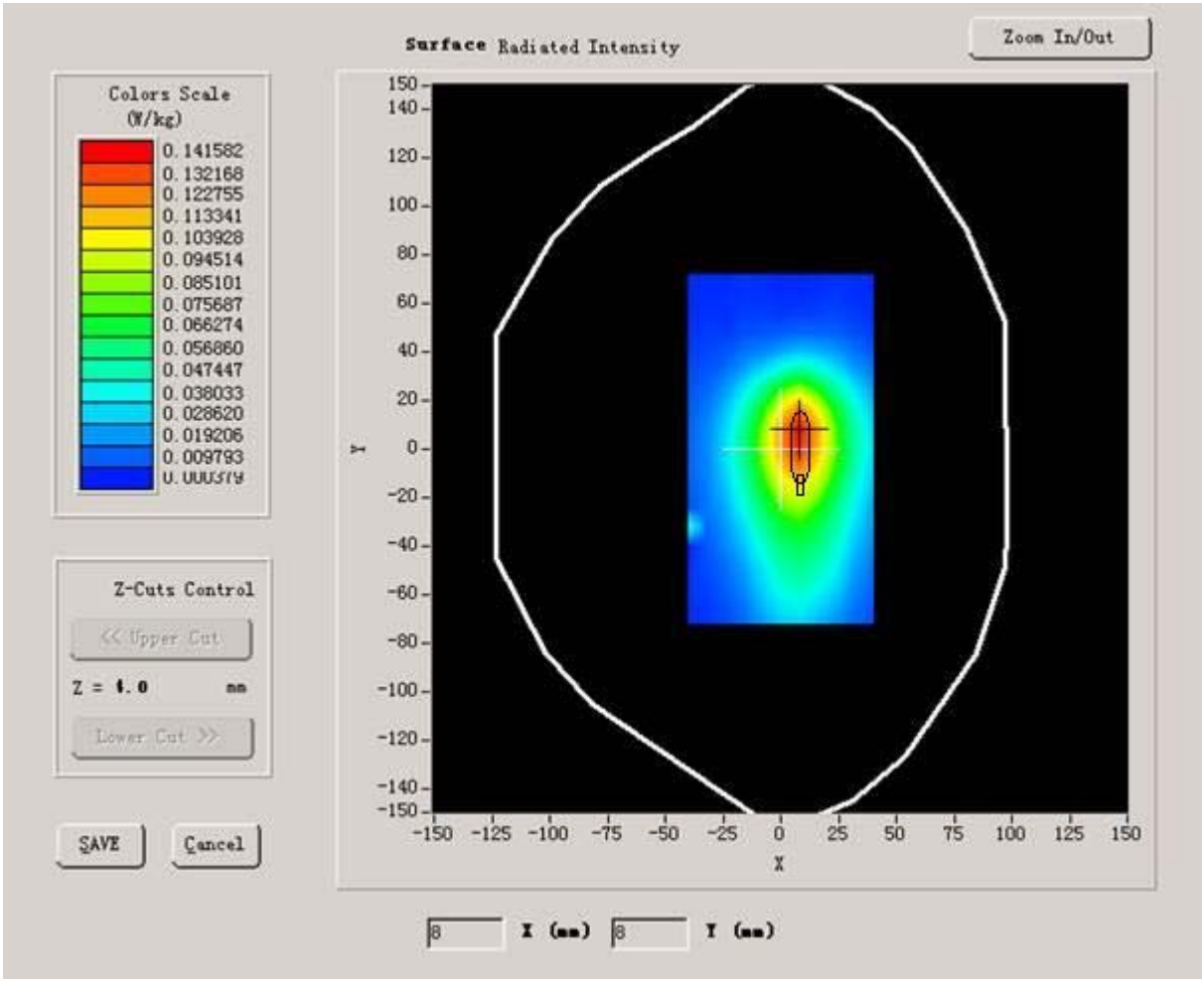
B. SAR Measurement Results

Middle Band SAR (Channel 4182):

Frequency (MHz)	836.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	0.737401
Variation (%)	-1.240000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

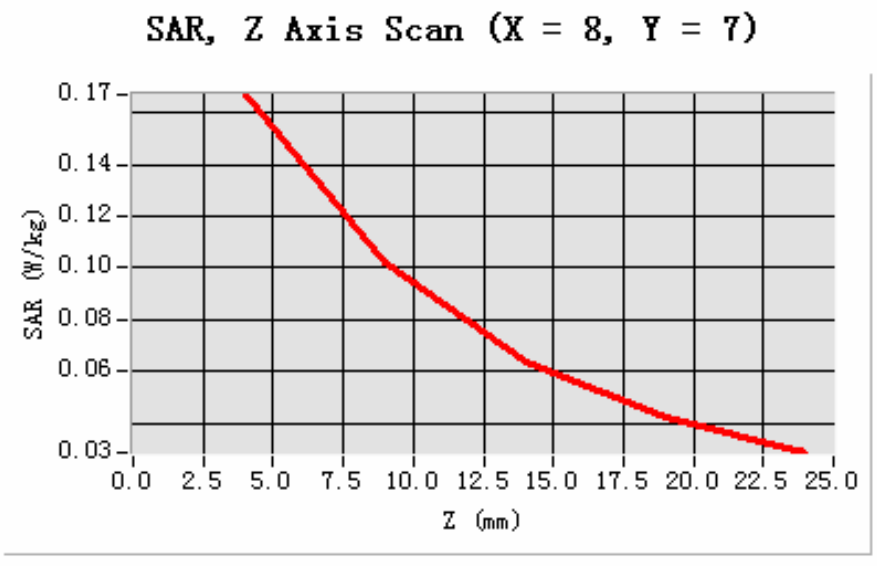


Maximum location: X=8.00, Y=7.00

SAR 10g (W/Kg)	0.096139
SAR 1g (W/Kg)	0.159049

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.1672	0.1020	0.0639	0.0424



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: 10/1/2009

Measurement duration: 9 minutes 27 seconds

A. Experimental conditions.

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

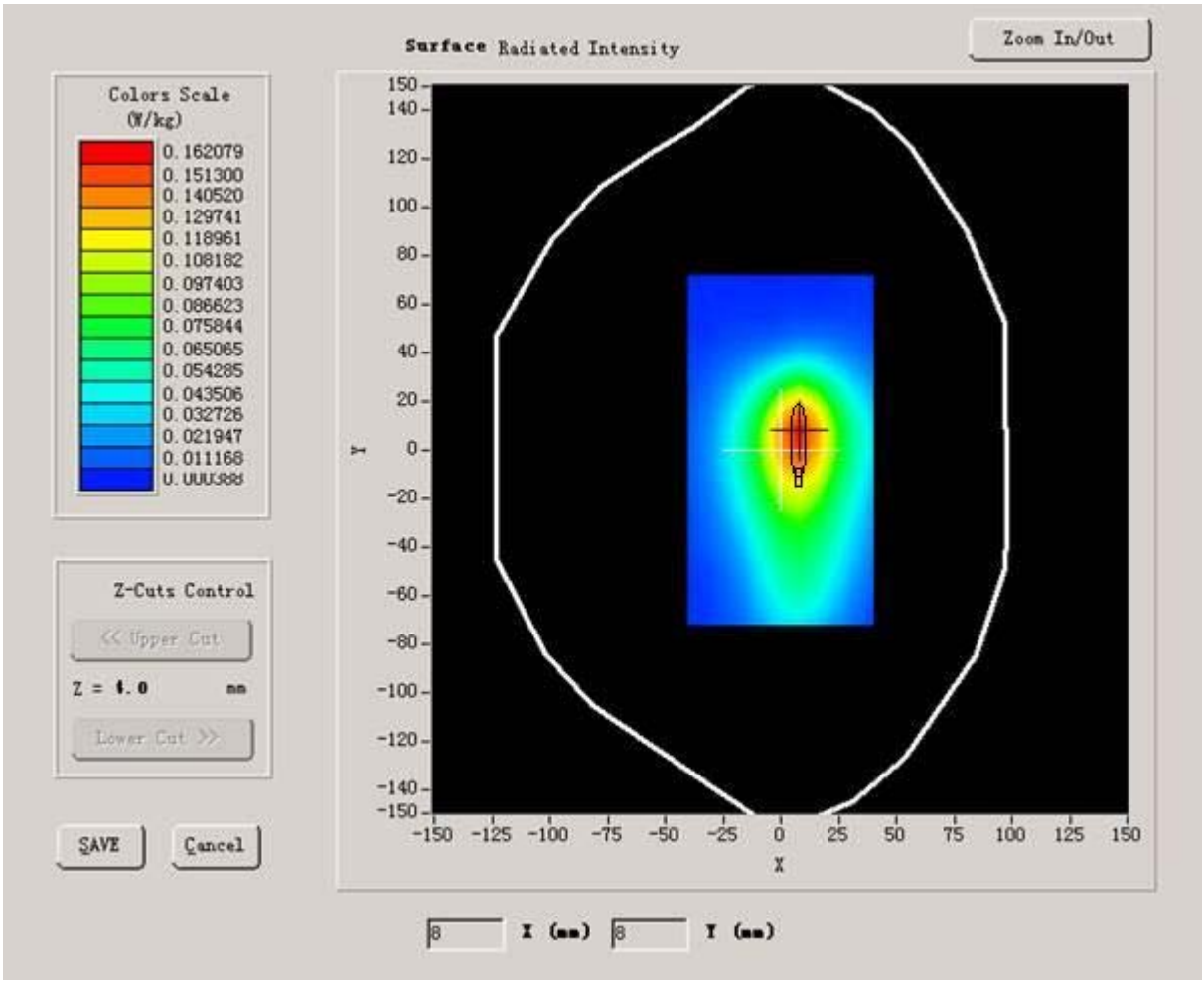
B. SAR Measurement Results

Higher Band SAR (Channel 4233):

Frequency (MHz)	846.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	0.746221
Variation (%)	-0.100000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

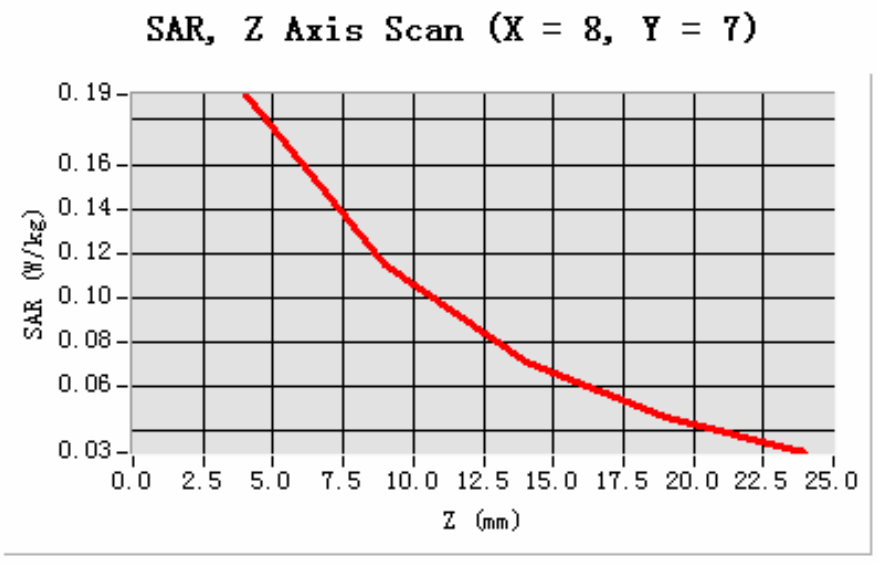


Maximum location: X=8.00, Y=7.00

SAR 10g (W/Kg)	0.108390
SAR 1g (W/Kg)	0.181519

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.1915	0.1150	0.0706	0.0457



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: 10/1/2009

Measurement duration: 9 minutes 30 seconds

A. Experimental conditions.

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

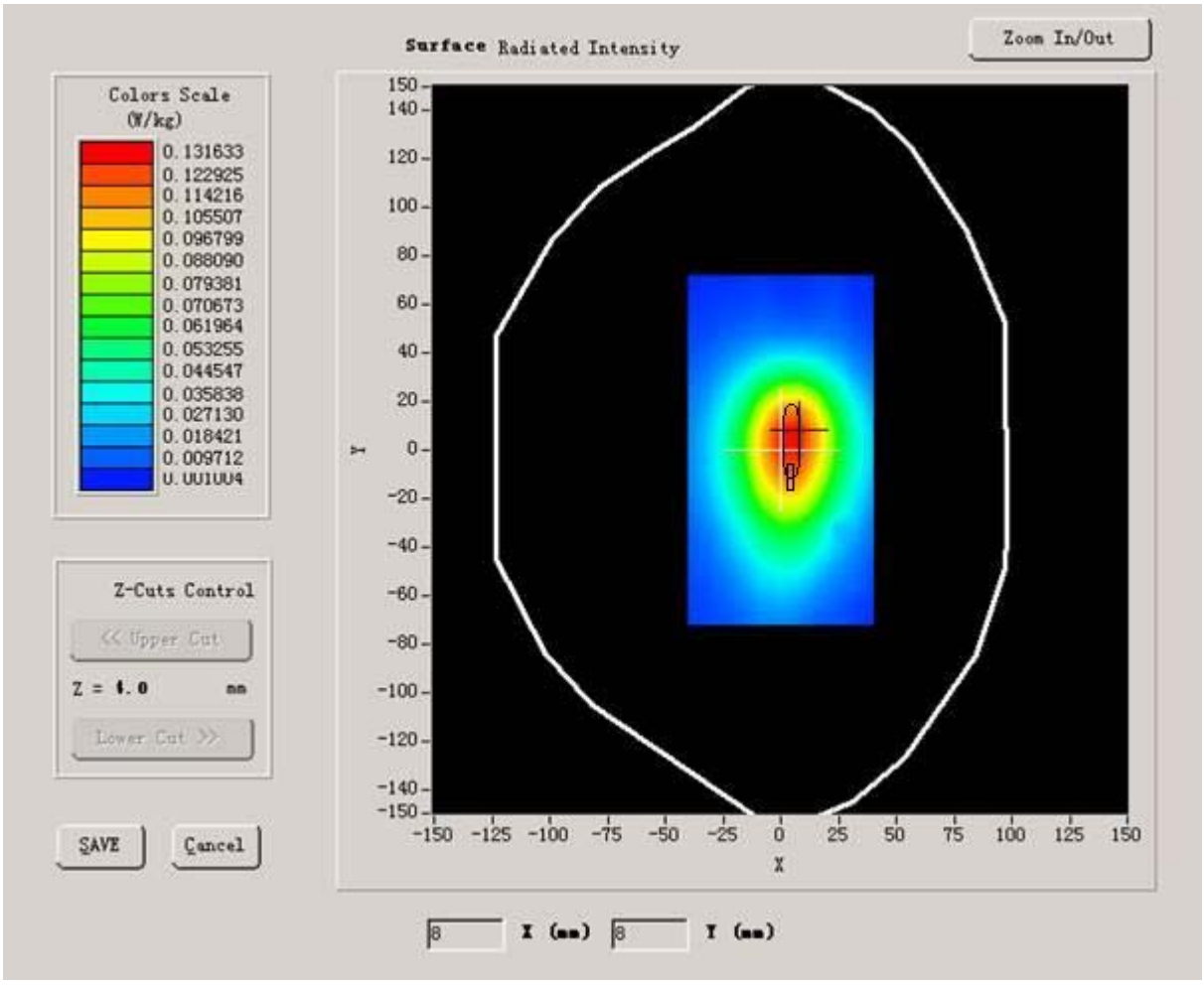
B. SAR Measurement Results

Lower Band SAR (Channel 4132):

Frequency (MHz)	826.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	0.728580
Variation (%)	-1.350000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

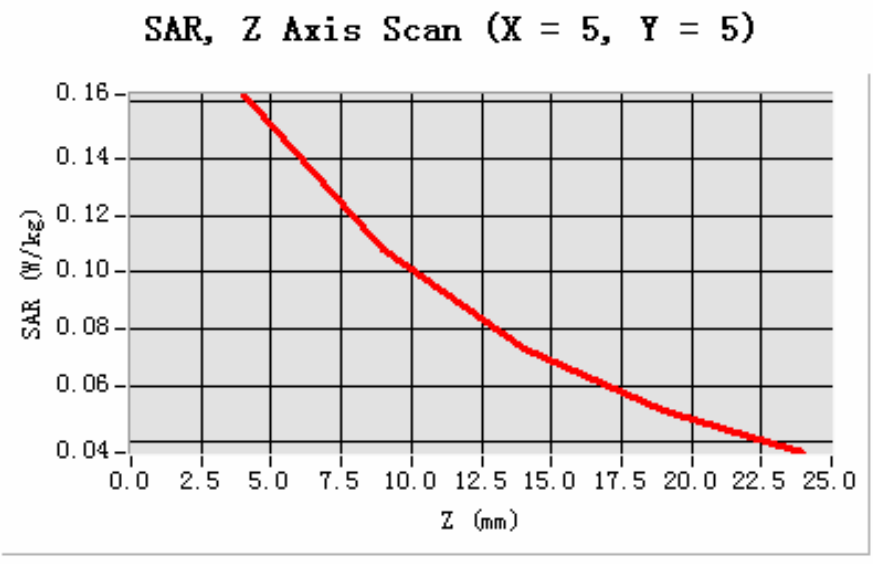


Maximum location: X=5.00, Y=5.00

SAR 10g (W/Kg)	0.099058
SAR 1g (W/Kg)	0.154748

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.1626	0.1077	0.0729	0.0513



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: 10/1/2009

Measurement duration: 9 minutes 24 seconds

A. Experimental conditions.

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

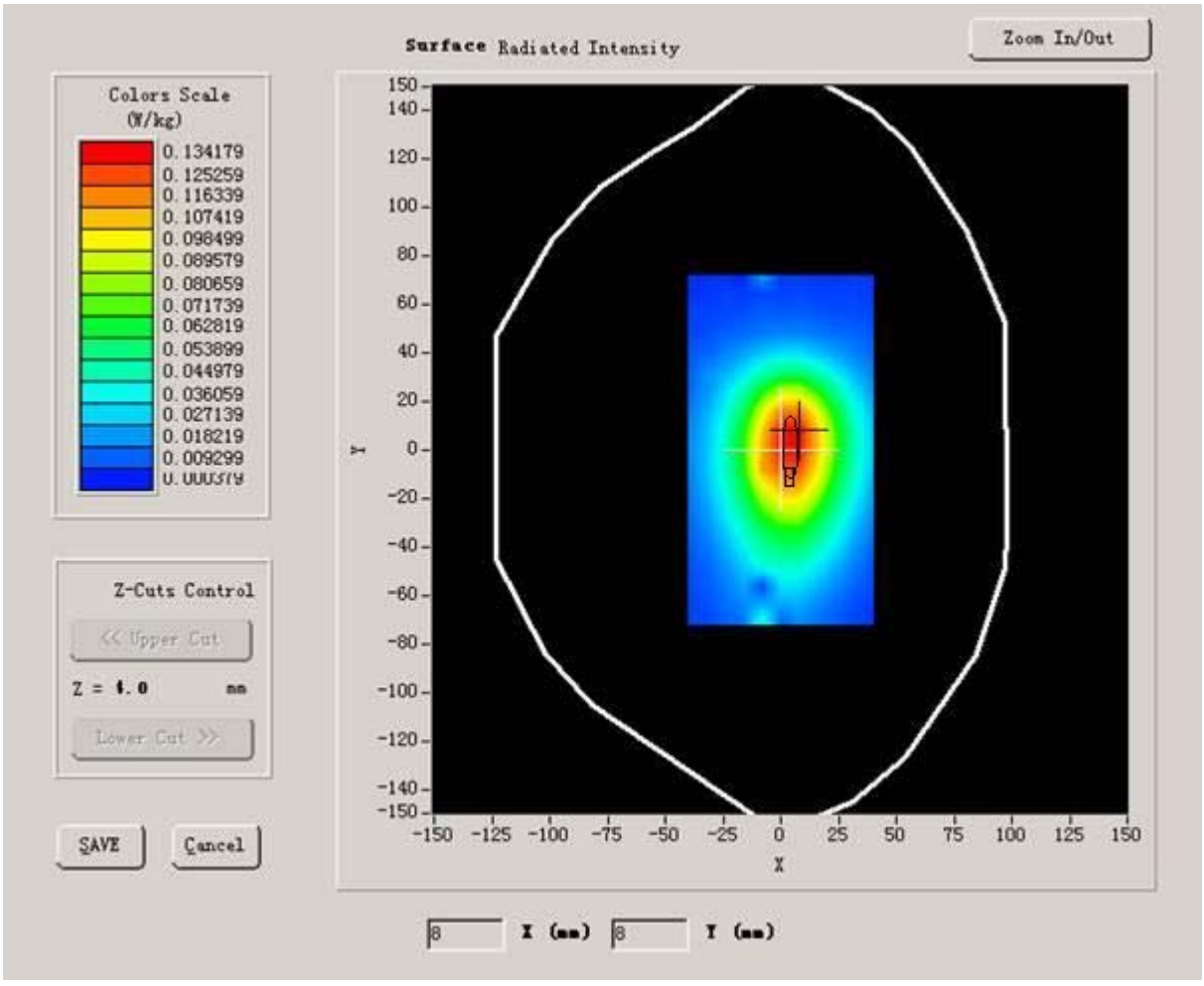
B. SAR Measurement Results

Middle Band SAR (Channel 4182):

Frequency (MHz)	836.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	0.737401
Variation (%)	-1.340000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

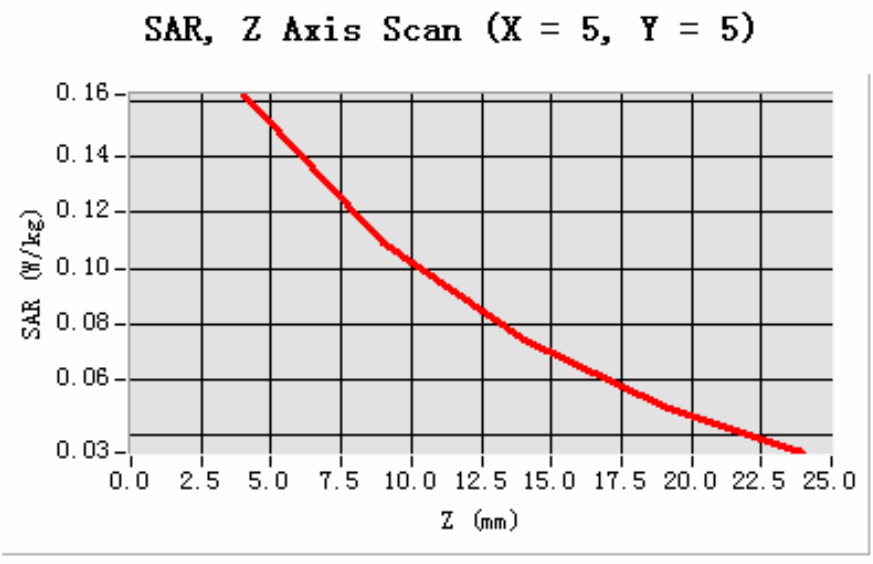


Maximum location: X=5.00, Y=5.00

SAR 10g (W/Kg)	0.099193
SAR 1g (W/Kg)	0.154114

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.1622	0.1096	0.0744	0.0510



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: 10/1/2009

Measurement duration: 9 minutes 26 seconds

A. Experimental conditions.

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

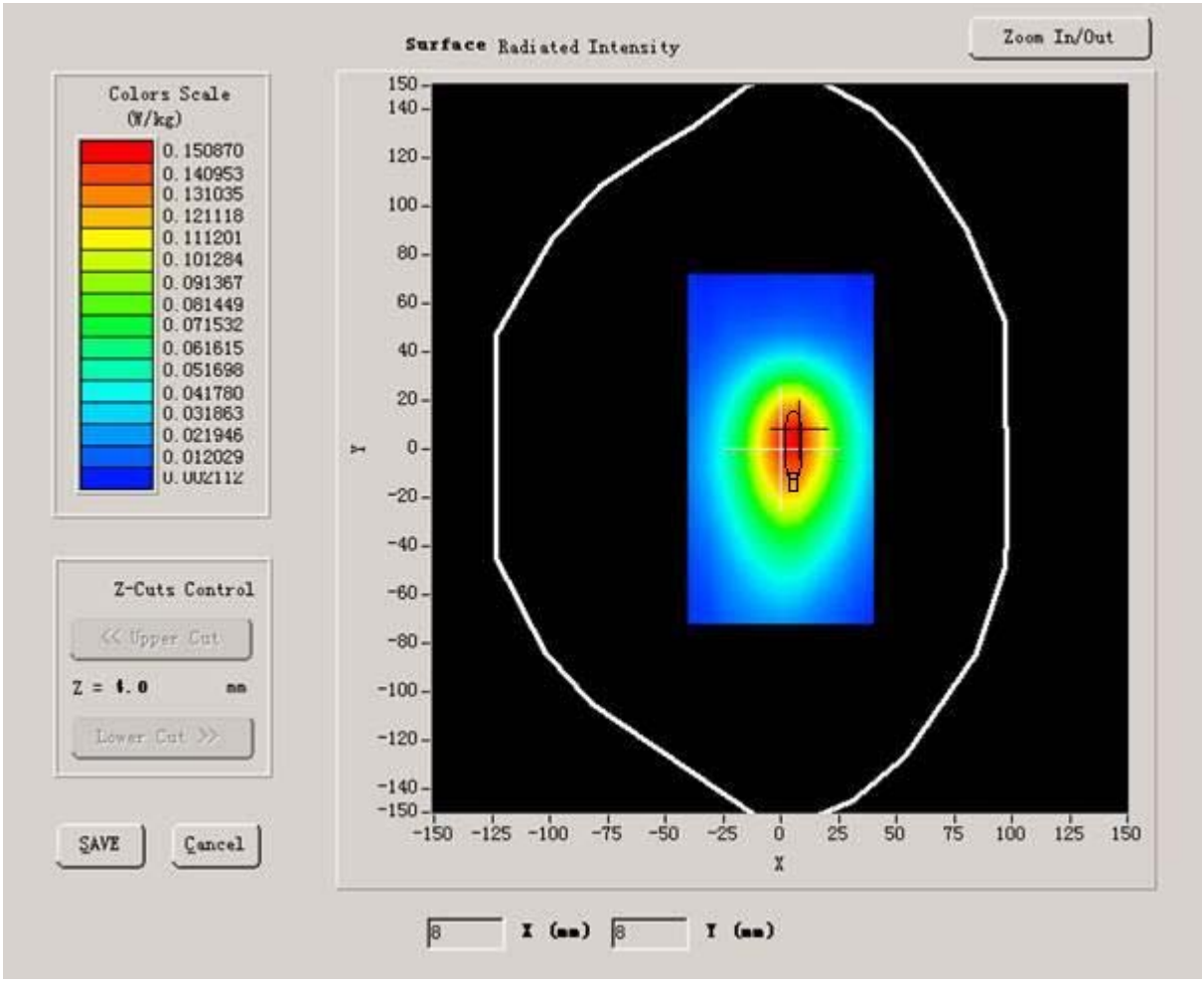
B. SAR Measurement Results

Higher Band SAR (Channel 4233):

Frequency (MHz)	846.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	0.746221
Variation (%)	-0.130000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.9°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

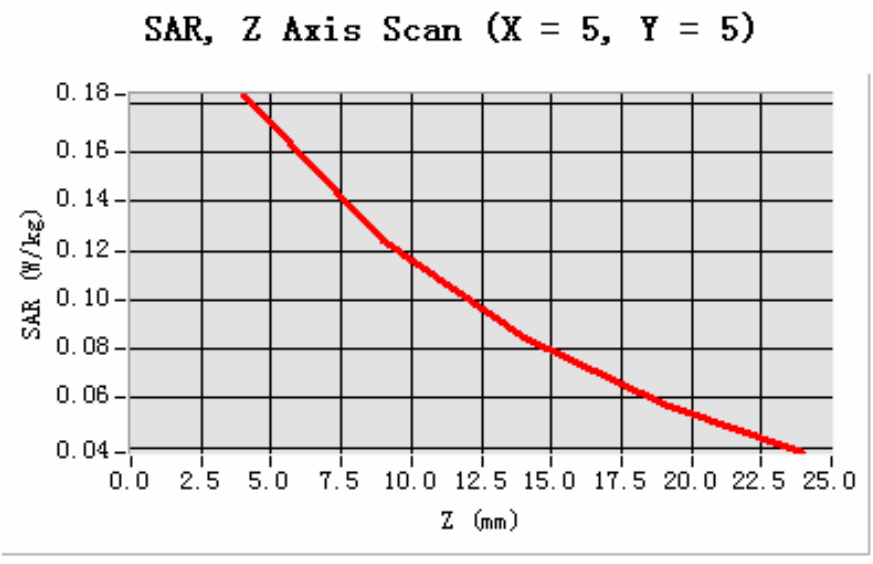


Maximum location: X=5.00, Y=5.00

SAR 10g (W/Kg)	0.111963
SAR 1g (W/Kg)	0.174388

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.1834	0.1243	0.0843	0.0574



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: 10/1/2009

Measurement duration: 9 minutes 32 seconds

A. Experimental conditions.

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

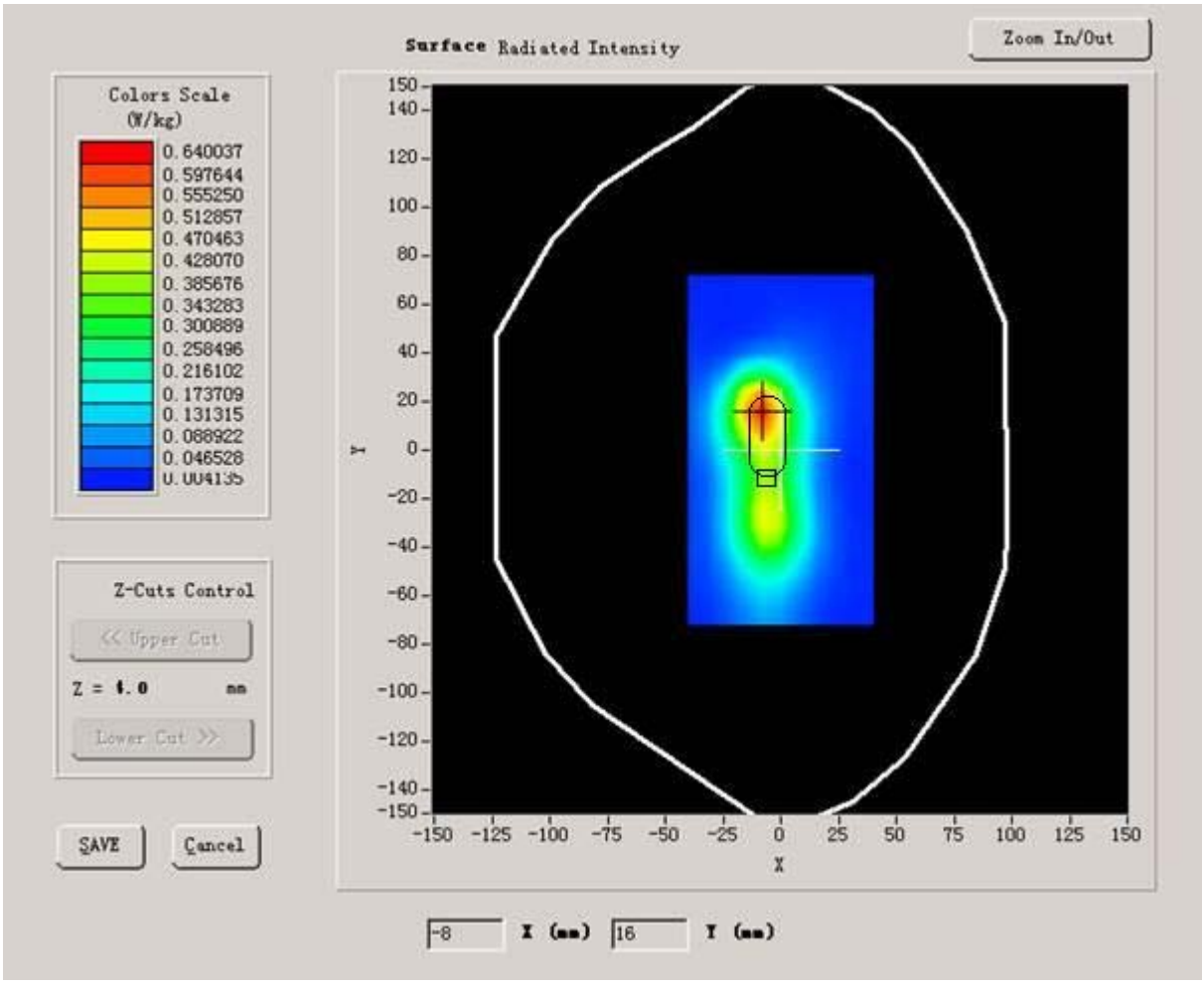
B. SAR Measurement Results

Lower Band SAR (Channel 9262):

Frequency (MHz)	1852.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	1.633572
Variation (%)	0.190000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

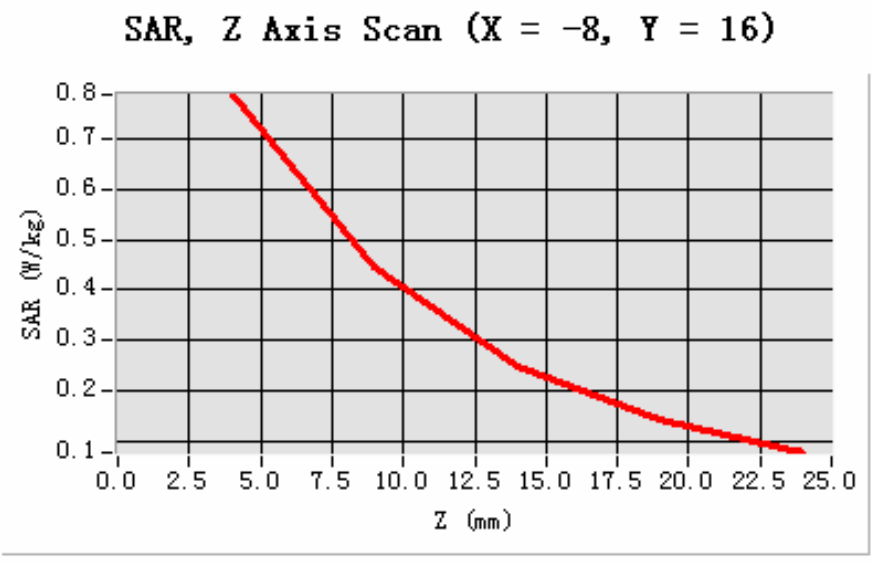


Maximum location: X=-8.00, Y=16.00

SAR 10g (W/Kg)	0.385192
SAR 1g (W/Kg)	0.733010

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.7863	0.4445	0.2499	0.1435



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: 10/1/2009

Measurement duration: 9 minutes 32 seconds

A. Experimental conditions.

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

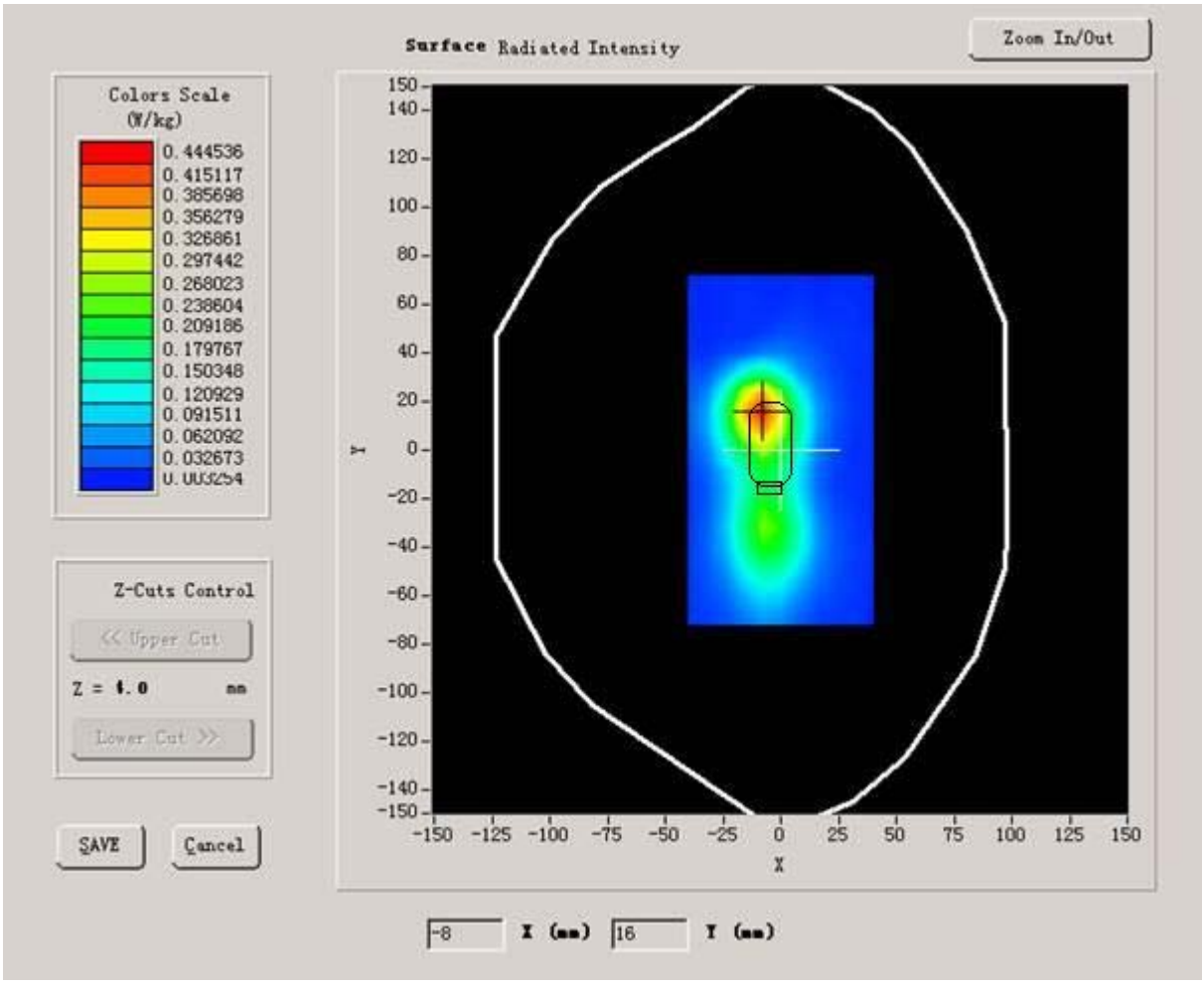
B. SAR Measurement Results

Middle Band SAR (Channel 9400):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	1.658270
Variation (%)	-0.450000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

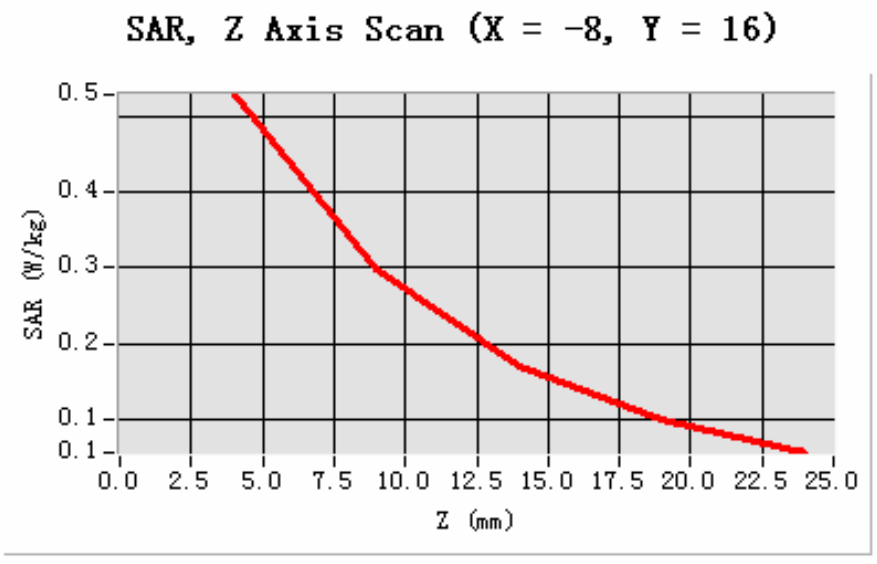


Maximum location: X=-8.00, Y=16.00

SAR 10g (W/Kg)	0.255312
SAR 1g (W/Kg)	0.490708

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.5294	0.2998	0.1697	0.0989



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: 10/1/2009

Measurement duration: 9 minutes 39 seconds

A. Experimental conditions.

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

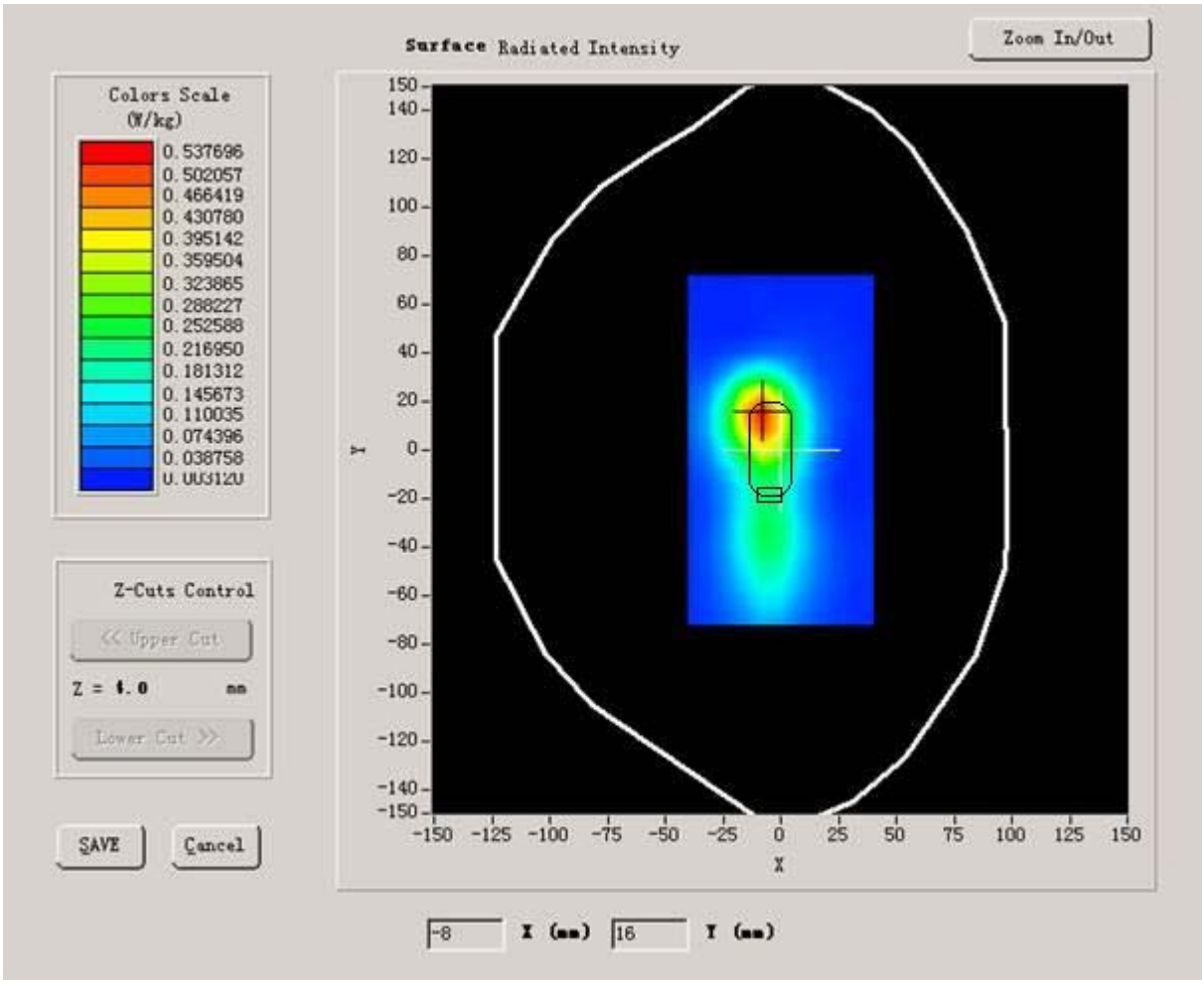
B. SAR Measurement Results

Higher Band SAR (Channel 9538):

Frequency (MHz)	1907.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	1.682085
Variation (%)	-0.360000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

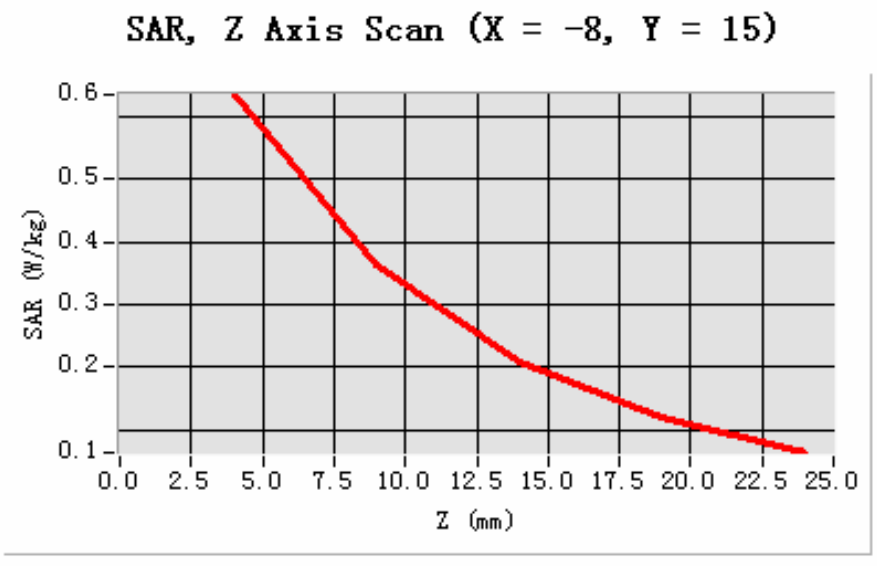


Maximum location: X=-8.00, Y=15.00

SAR 10g (W/Kg)	0.310791
SAR 1g (W/Kg)	0.590872

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.6346	0.3645	0.2073	0.1190



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: 10/1/2009

Measurement duration: 9 minutes 27 seconds

A. Experimental conditions.

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

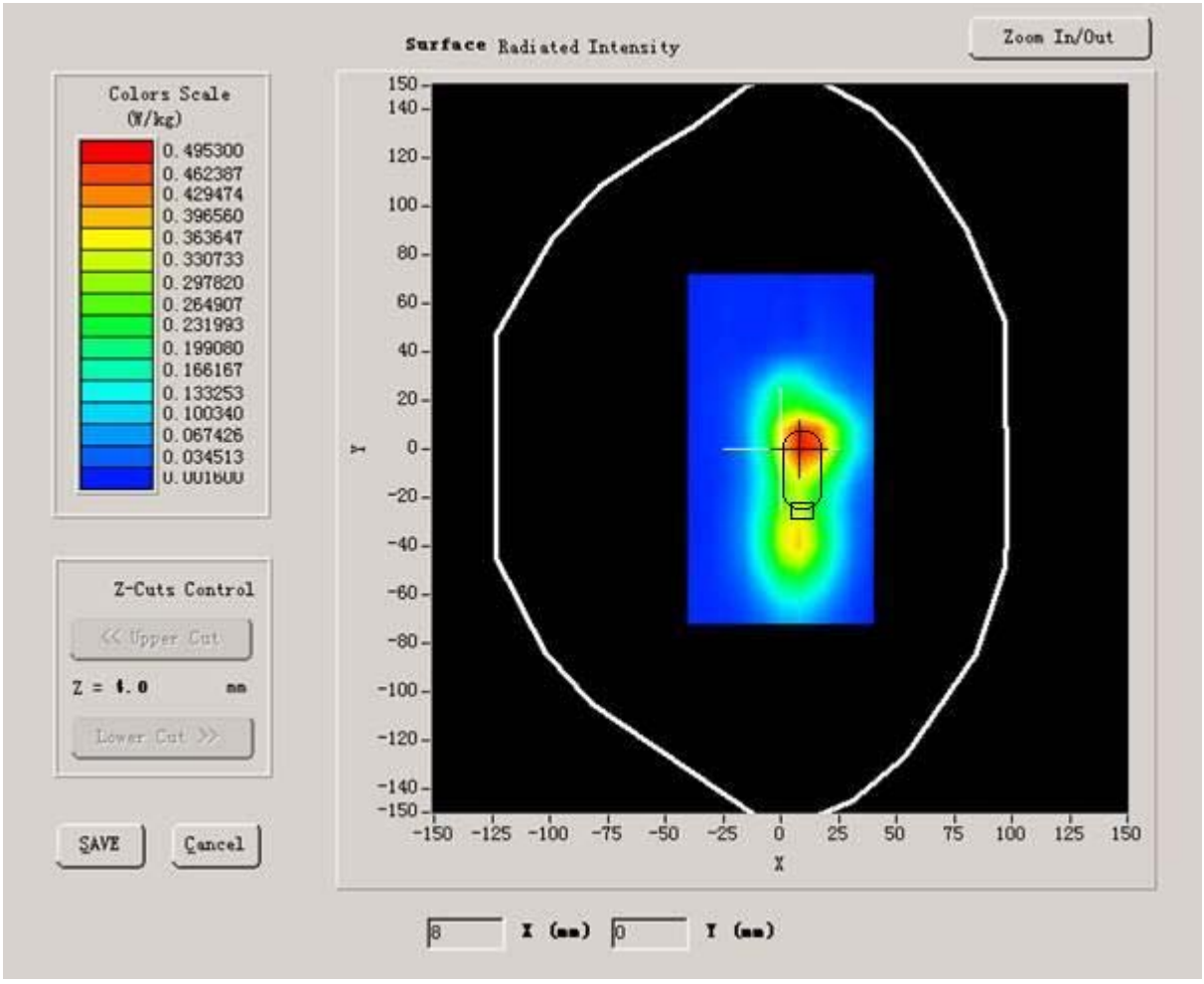
B. SAR Measurement Results

Lower Band SAR (Channel 9262):

Frequency (MHz)	1852.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	1.633572
Variation (%)	1.530000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

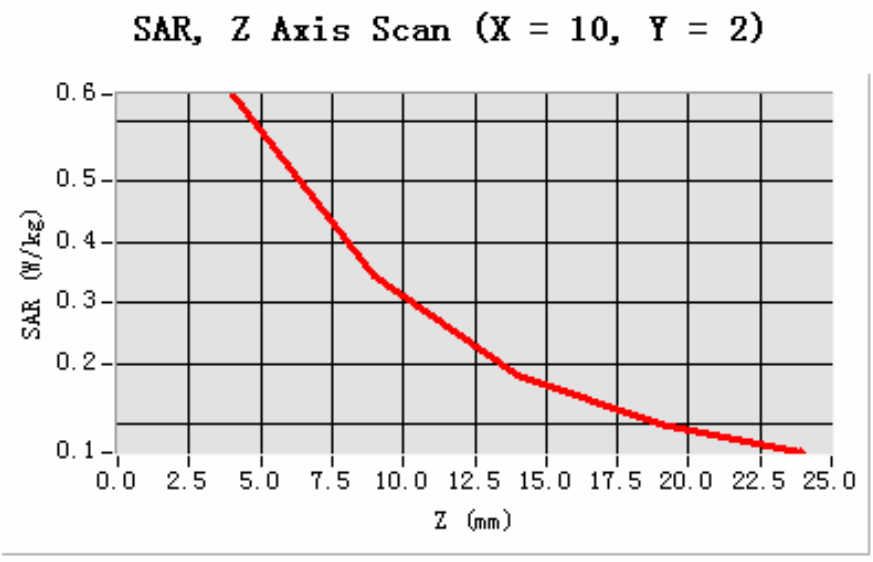


Maximum location: X=10.00, Y=2.00

SAR 10g (W/Kg)	0.313347
SAR 1g (W/Kg)	0.601386

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.6433	0.3432	0.1823	0.1006



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: 10/1/2009

Measurement duration: 9 minutes 25 seconds

A. Experimental conditions.

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

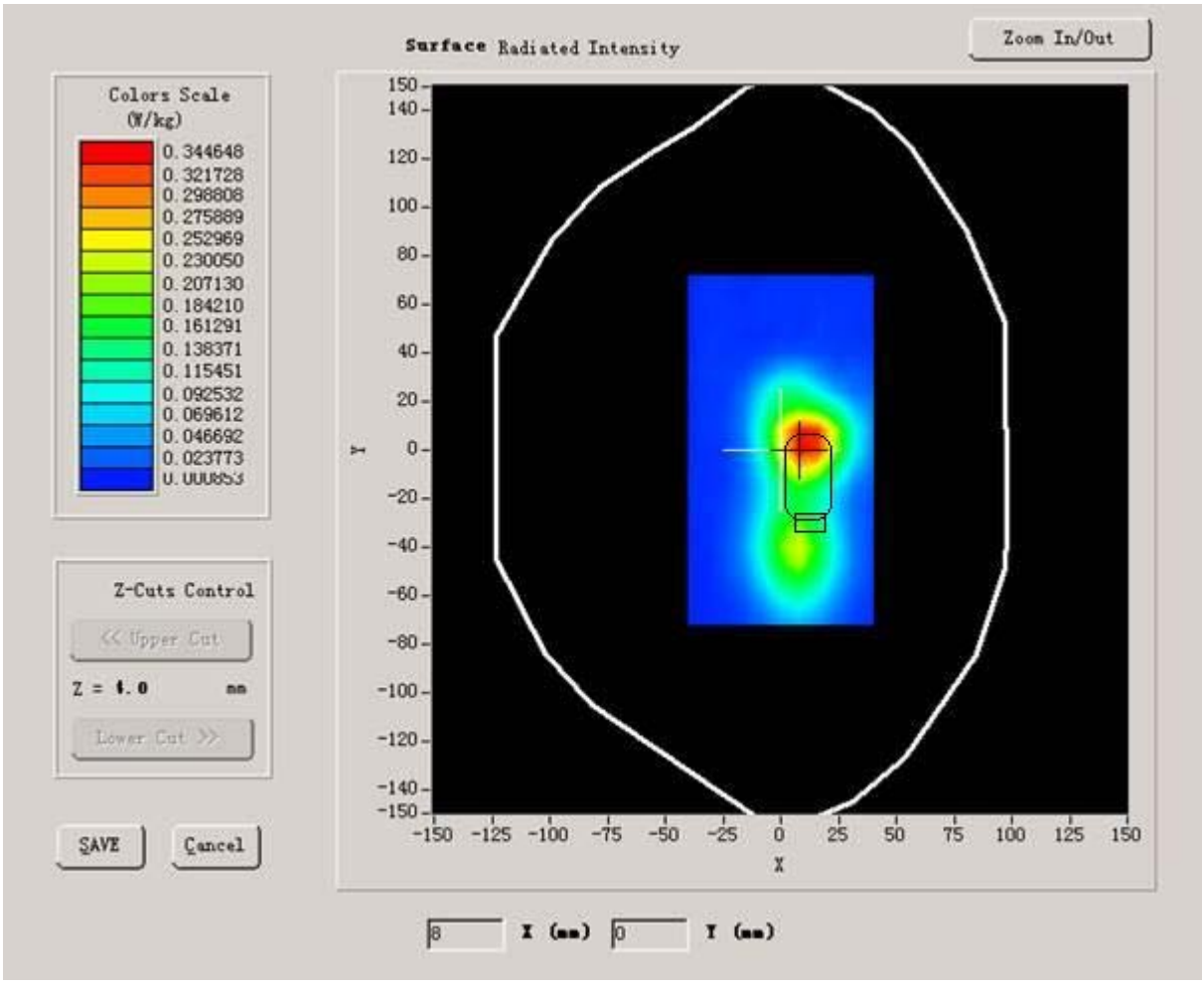
B. SAR Measurement Results

Middle Band SAR (Channel 9400):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	1.658270
Variation (%)	1.180000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

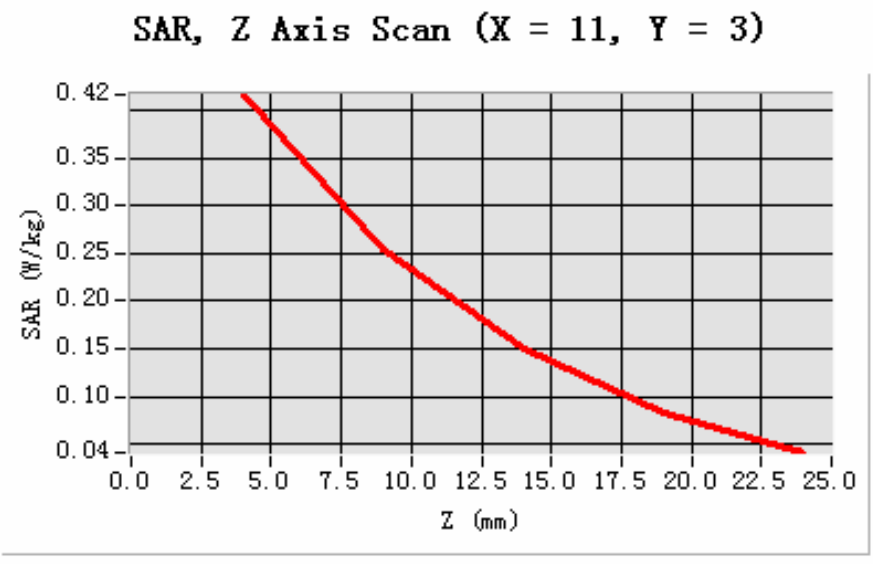


Maximum location: X=11.00, Y=3.00

SAR 10g (W/Kg)	0.207592
SAR 1g (W/Kg)	0.383471

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.4165	0.2543	0.1496	0.0838



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: 10/1/2009

Measurement duration: 9 minutes 32 seconds

A. Experimental conditions.

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

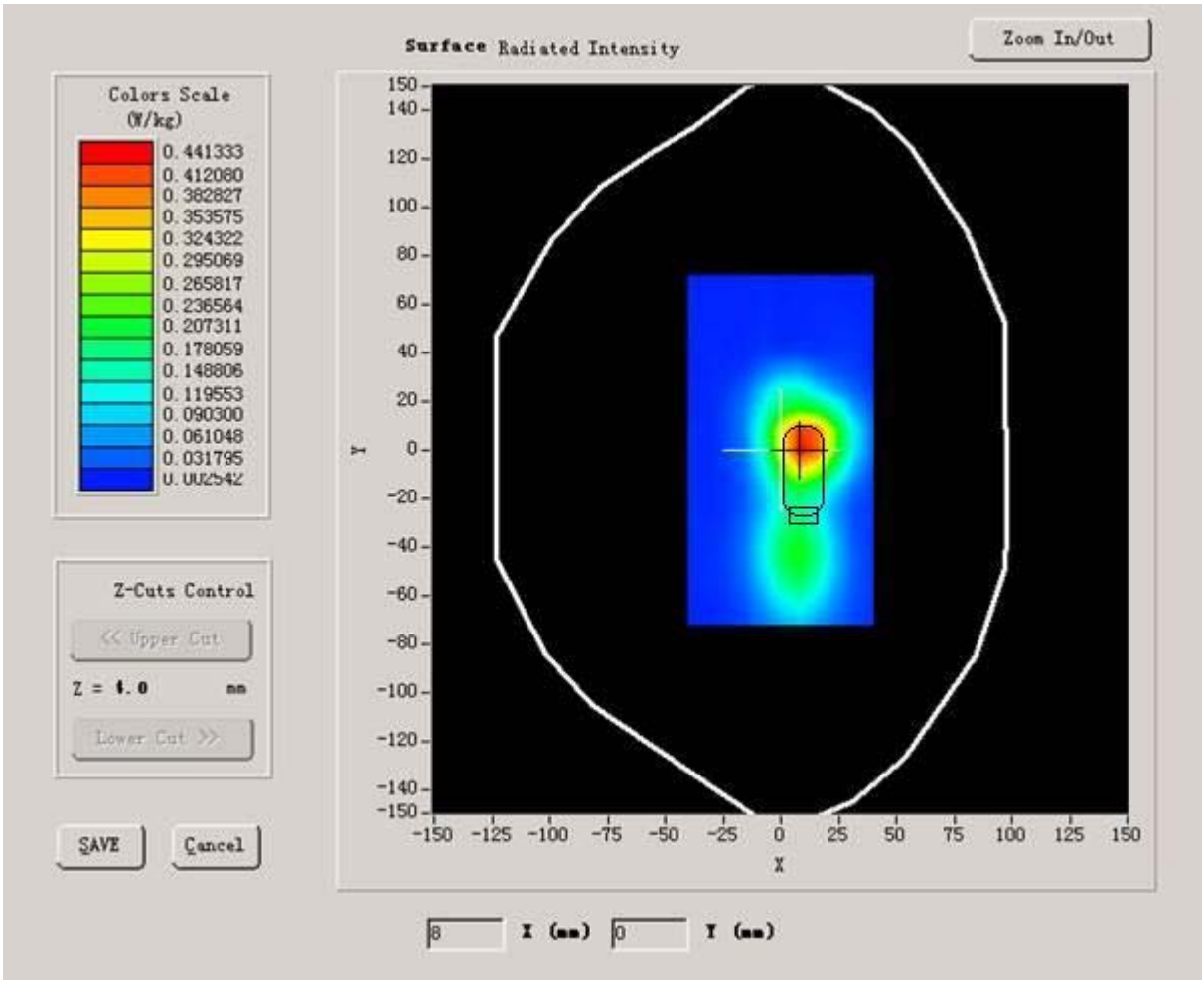
B. SAR Measurement Results

Higher Band SAR (Channel 9538):

Frequency (MHz)	1907.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	1.682085
Variation (%)	-1.980000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

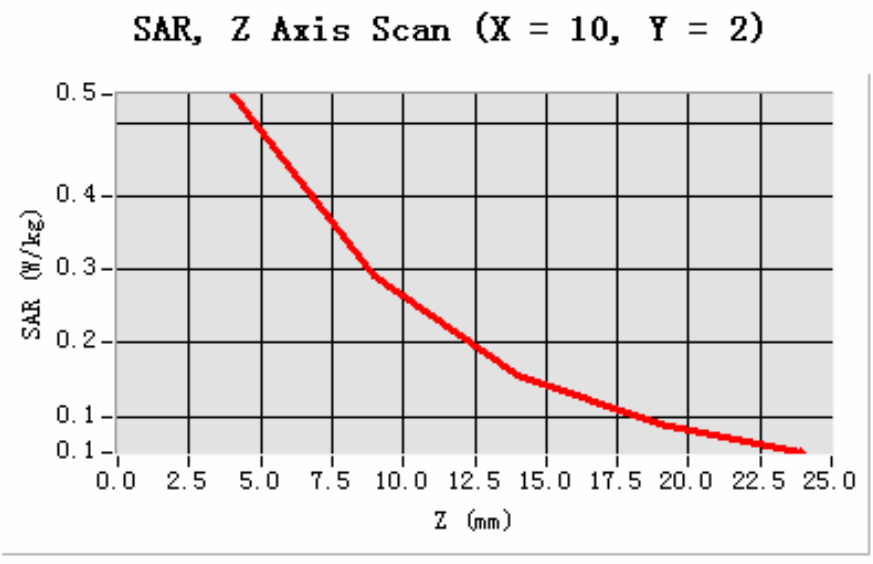


Maximum location: X=10.00, Y=2.00

SAR 10g (W/Kg)	0.253773
SAR 1g (W/Kg)	0.498038

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.5381	0.2903	0.1574	0.0899



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: 10/1/2009

Measurement duration: 9 minutes 27 seconds

A. Experimental conditions.

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

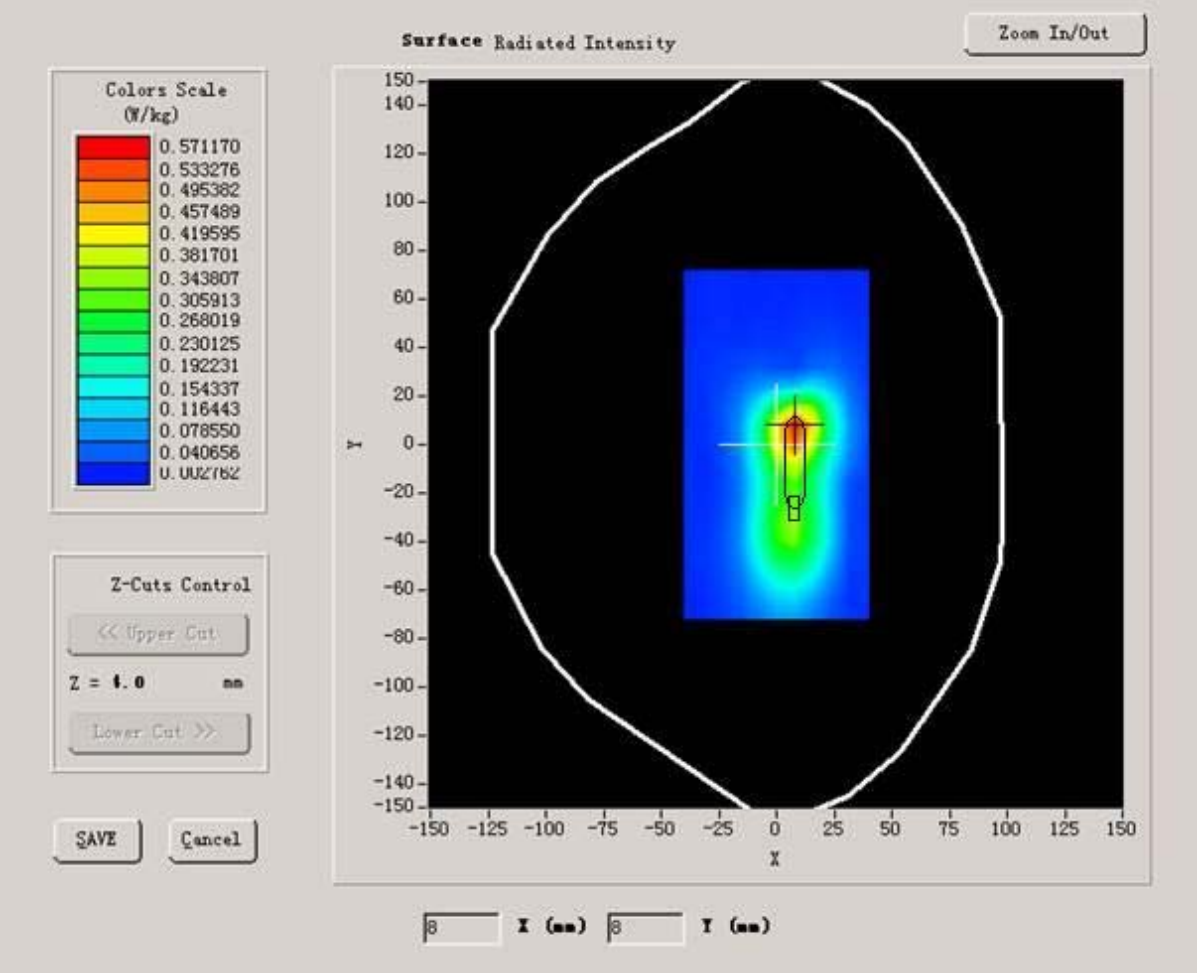
B. SAR Measurement Results

Lower Band SAR (Channel 9262):

Frequency (MHz)	1852.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	1.633572
Variation (%)	0.800000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

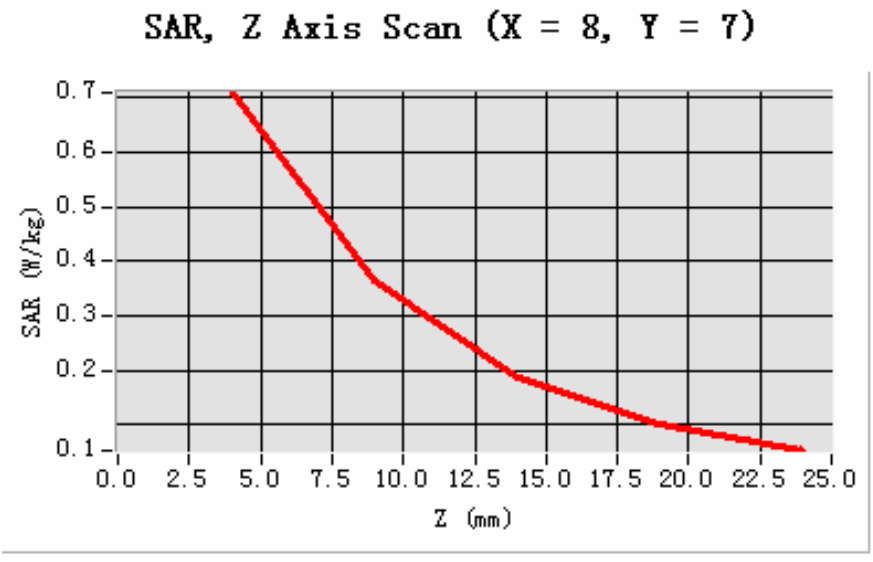


Maximum location: X=8.00, Y=7.00

SAR 10g (W/Kg)	0.328517
SAR 1g (W/Kg)	0.669880

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.7097	0.3634	0.1852	0.0995



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: 10/1/2009

Measurement duration: 9 minutes 30 seconds

A. Experimental conditions.

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

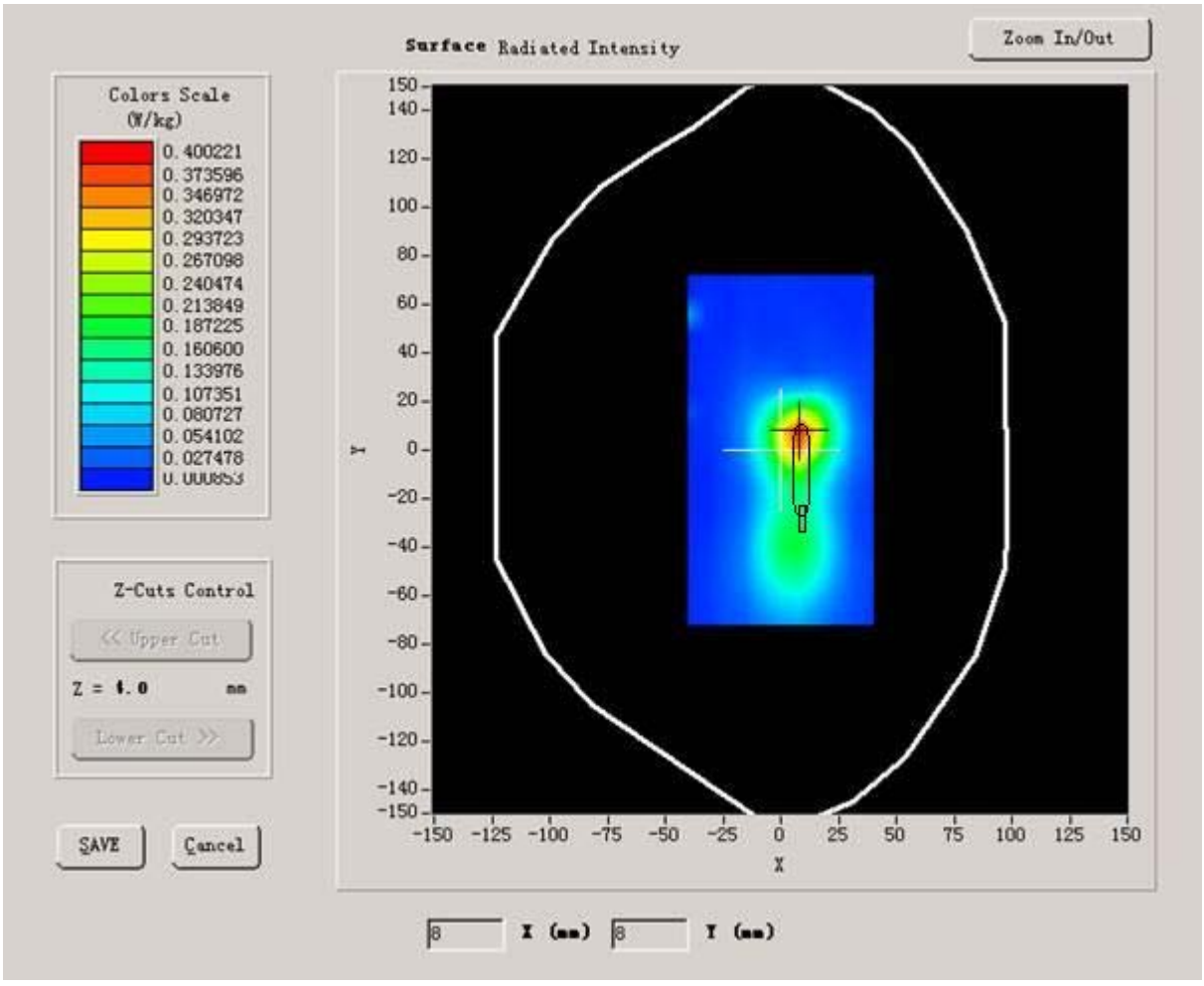
B. SAR Measurement Results

Middle Band SAR (Channel 9400):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	1.658270
Variation (%)	-0.170000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

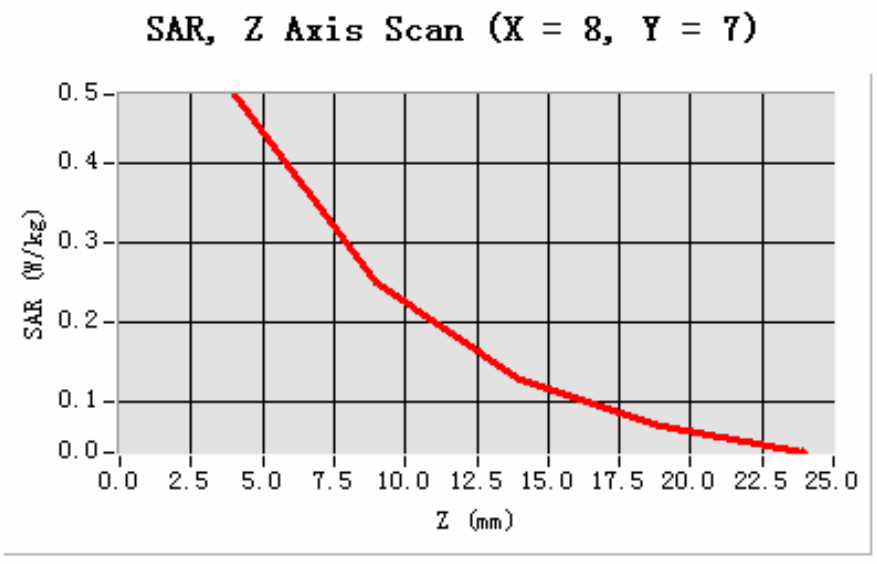


Maximum location: X=8.00, Y=7.00

SAR 10g (W/Kg)	0.217763
SAR 1g (W/Kg)	0.449838

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.4854	0.2514	0.1297	0.0705



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: 10/1/2009

Measurement duration: 9 minutes 27 seconds

A. Experimental conditions.

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

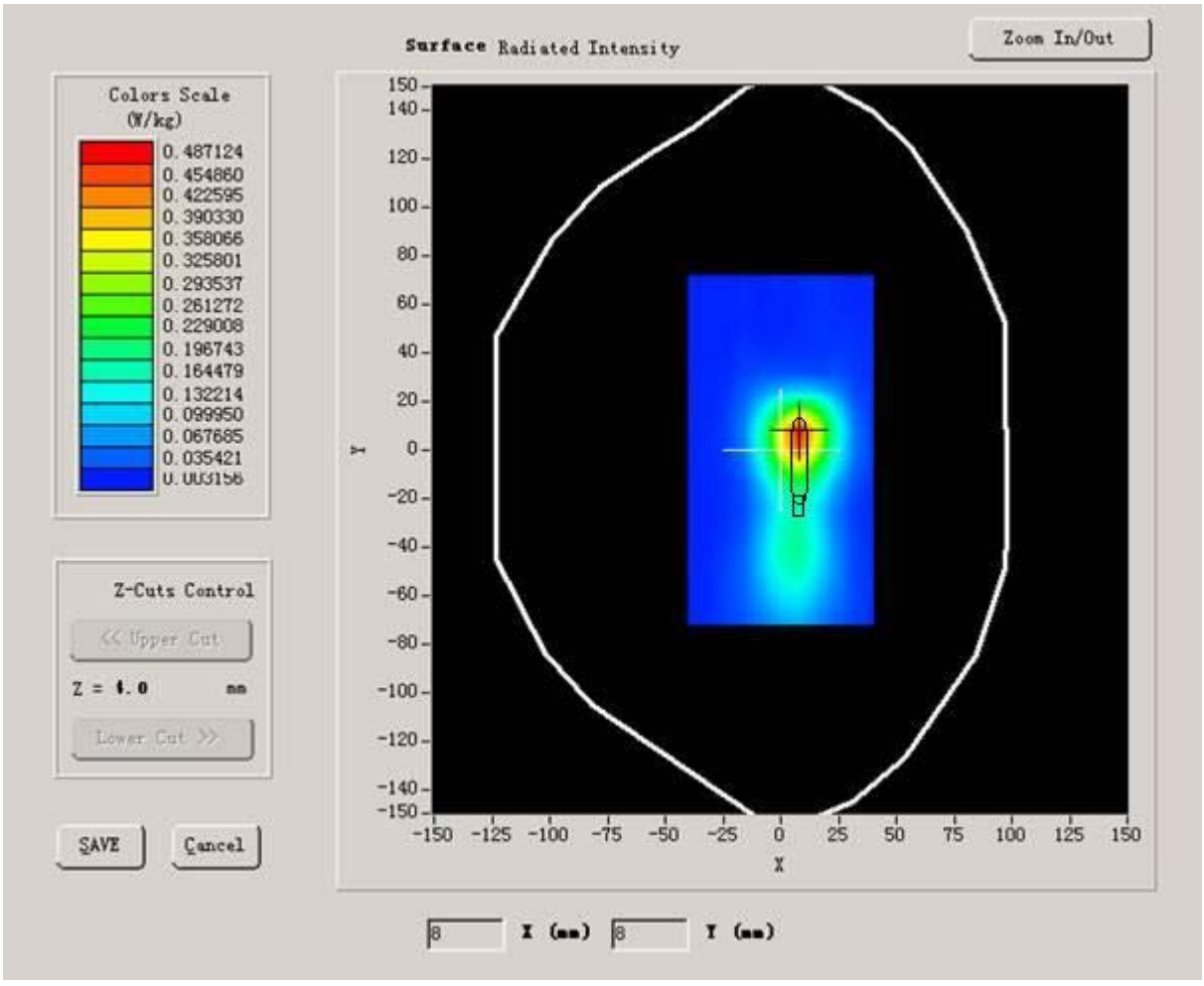
B. SAR Measurement Results

Higher Band SAR (Channel 9538):

Frequency (MHz)	1907.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	1.682085
Variation (%)	-0.170000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

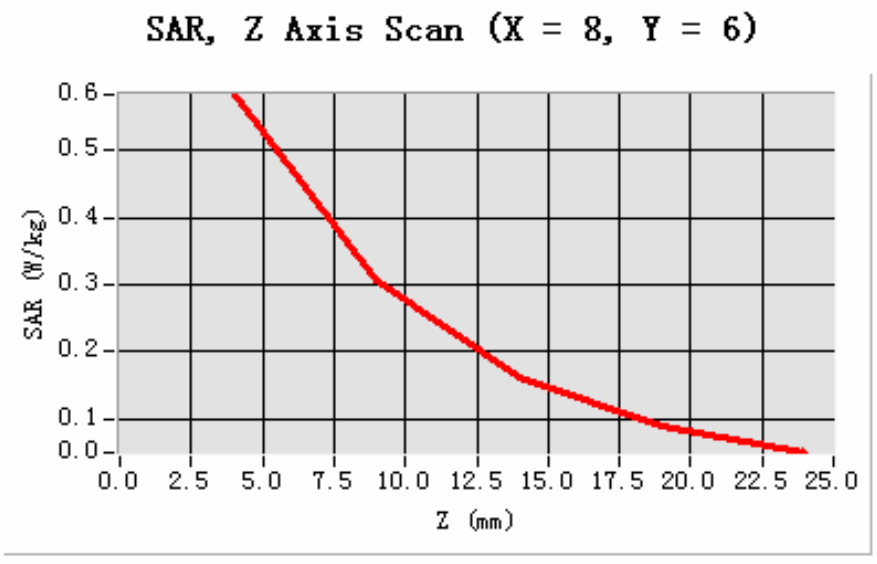


Maximum location: X=8.00, Y=6.00

SAR 10g (W/Kg)	0.263464
SAR 1g (W/Kg)	0.538096

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.5837	0.3064	0.1610	0.0892



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: 10/1/2009

Measurement duration: 9 minutes 23 seconds

A. Experimental conditions.

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

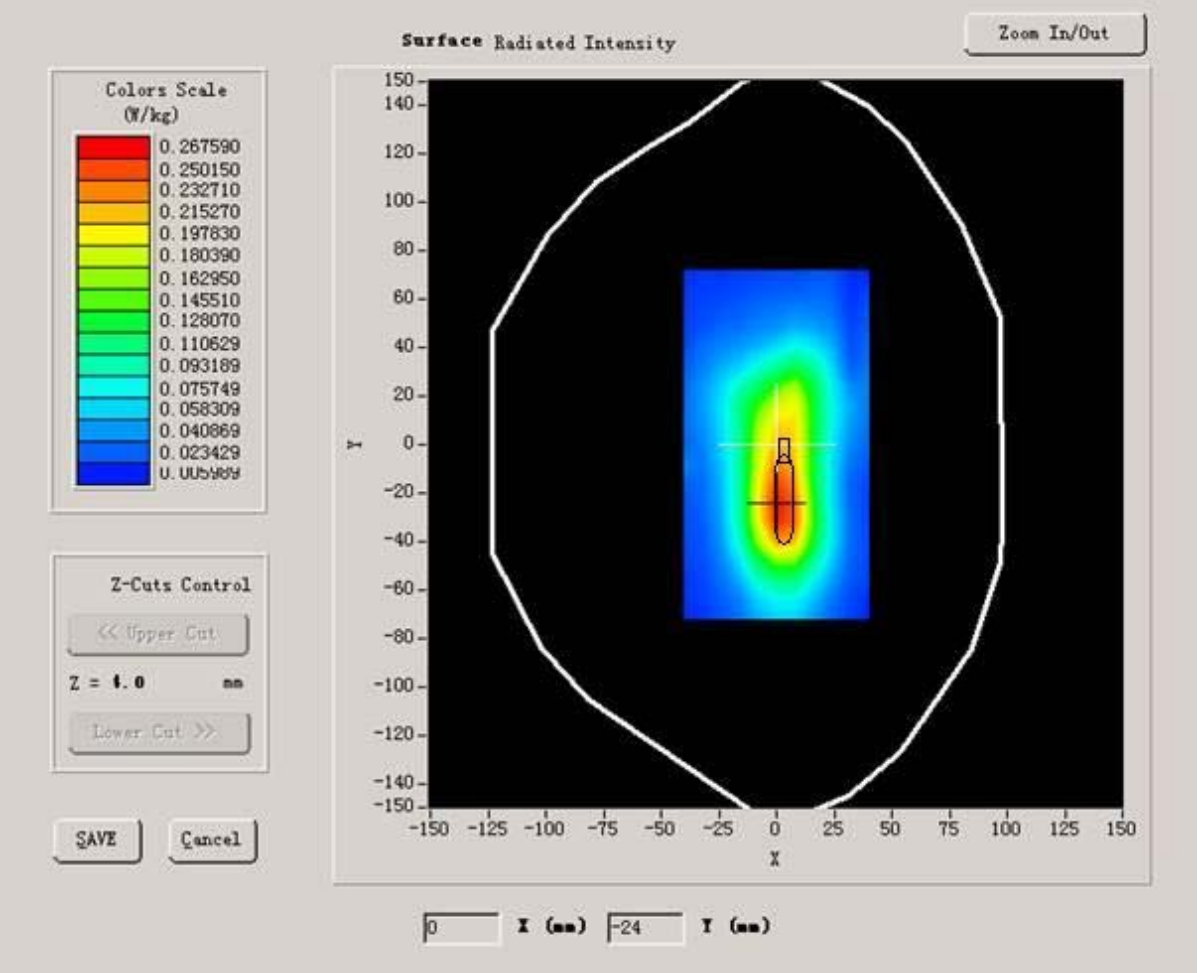
B. SAR Measurement Results

Lower Band SAR (Channel 9262):

Frequency (MHz)	1852.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	1.633572
Variation (%)	0.760000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

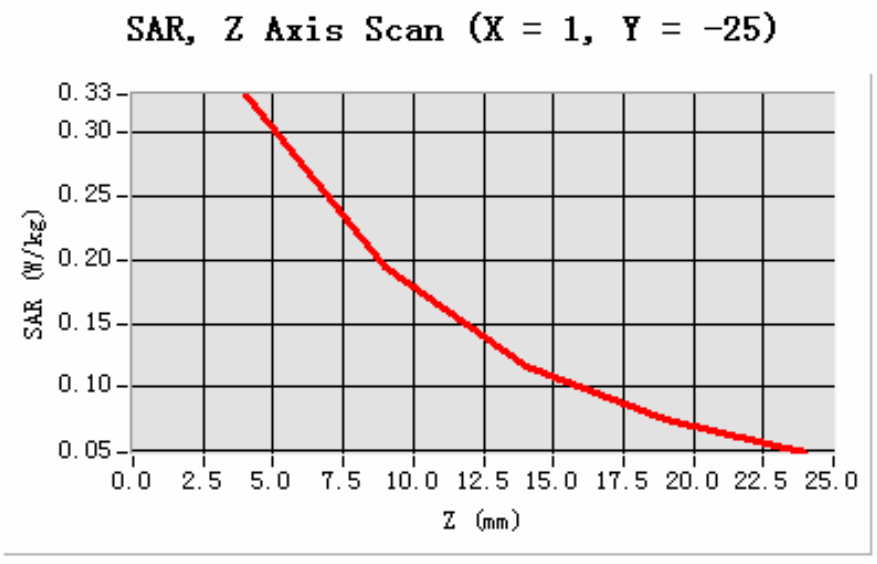


Maximum location: X=1.00, Y=-25.00

SAR 10g (W/Kg)	0.178533
SAR 1g (W/Kg)	0.310114

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.3300	0.1939	0.1168	0.0747



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: 10/1/2009

Measurement duration: 9 minutes 34 seconds

A. Experimental conditions.

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

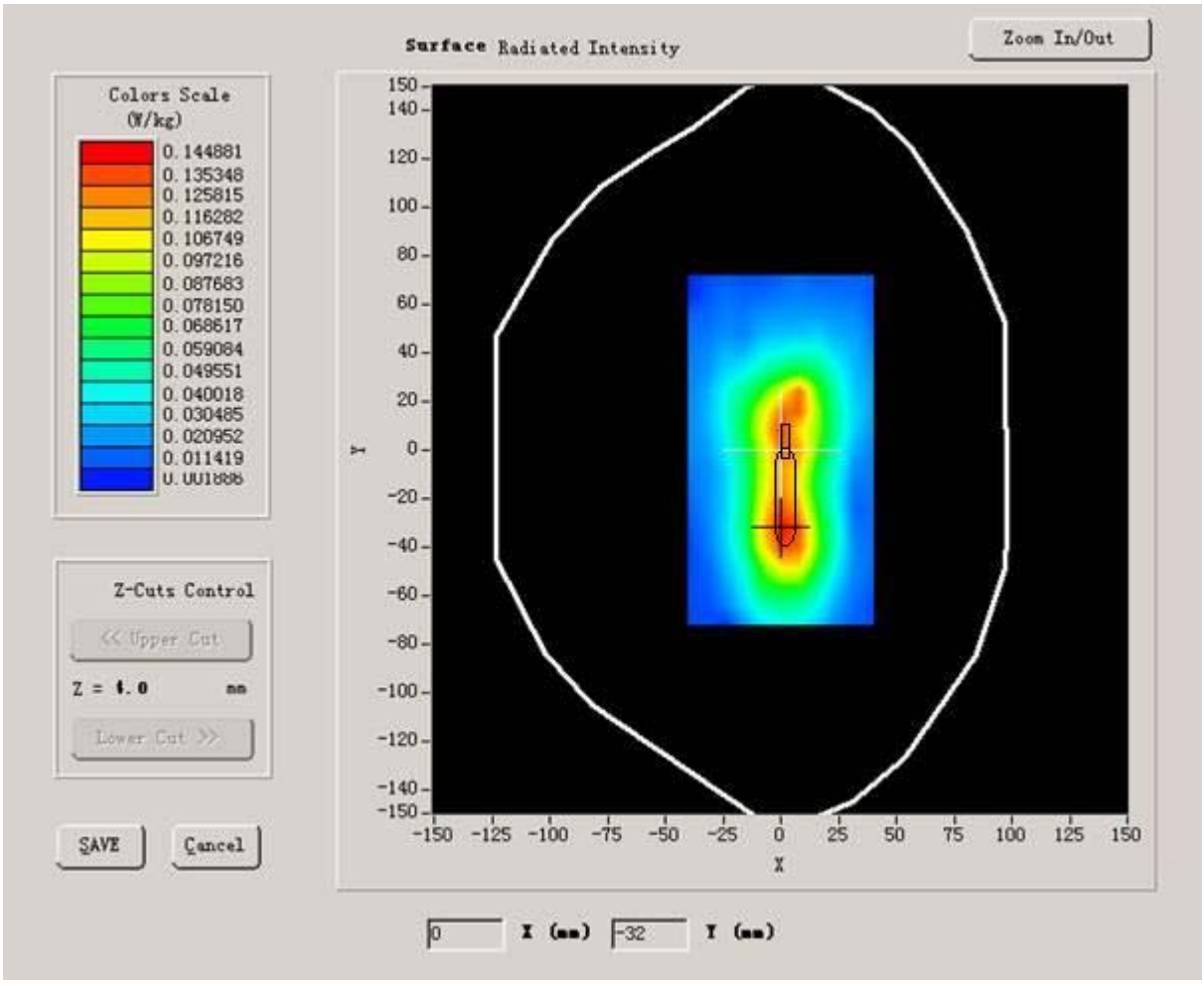
B. SAR Measurement Results

Middle Band SAR (Channel 9400):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	1.658270
Variation (%)	1.160000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

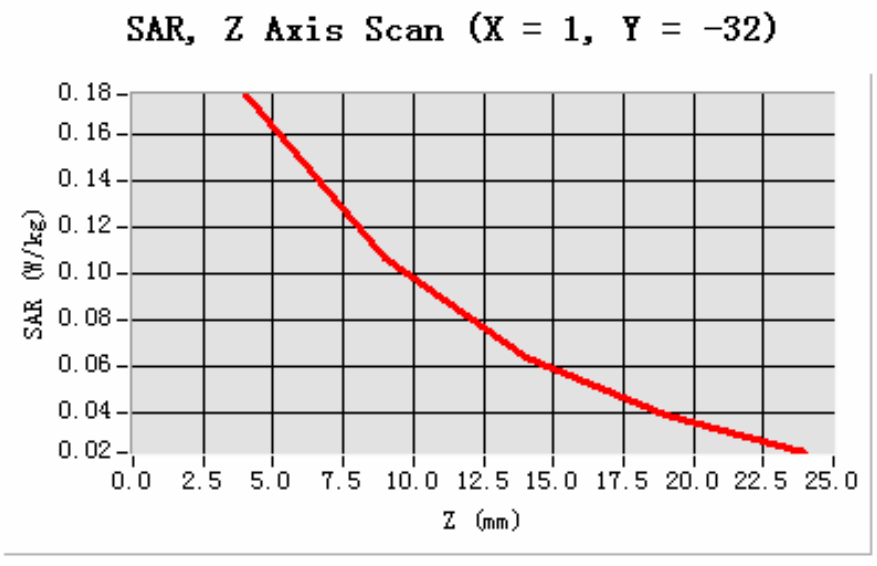


Maximum location: X=1.00, Y=-32.00

SAR 10g (W/Kg)	0.096206
SAR 1g (W/Kg)	0.165855

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.1770	0.1066	0.0642	0.0394



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: 10/1/2009

Measurement duration: 9 minutes 28 seconds

A. Experimental conditions.

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

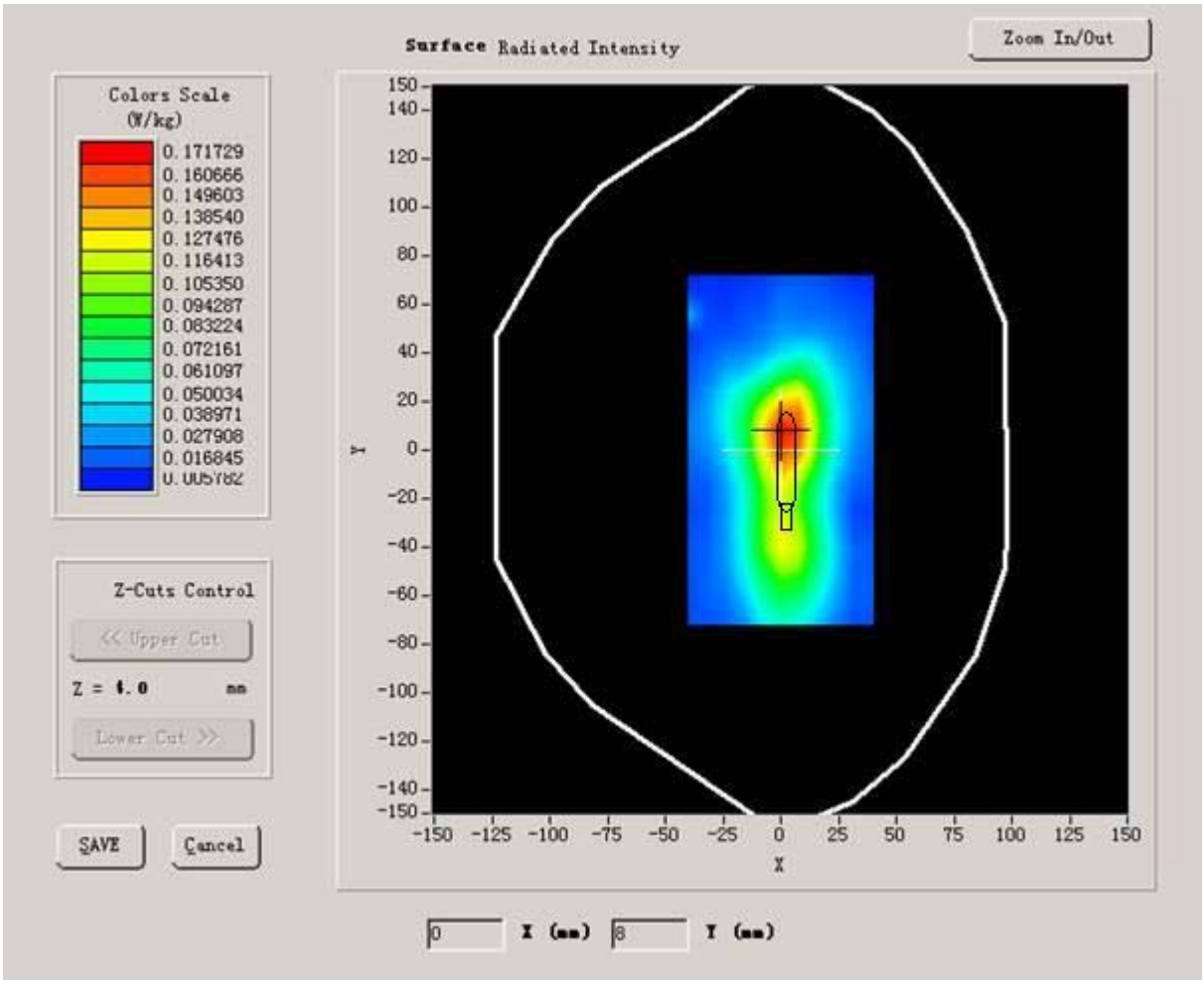
B. SAR Measurement Results

Higher Band SAR (Channel 9538):

Frequency (MHz)	1907.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	1.682085
Variation (%)	-0.640000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

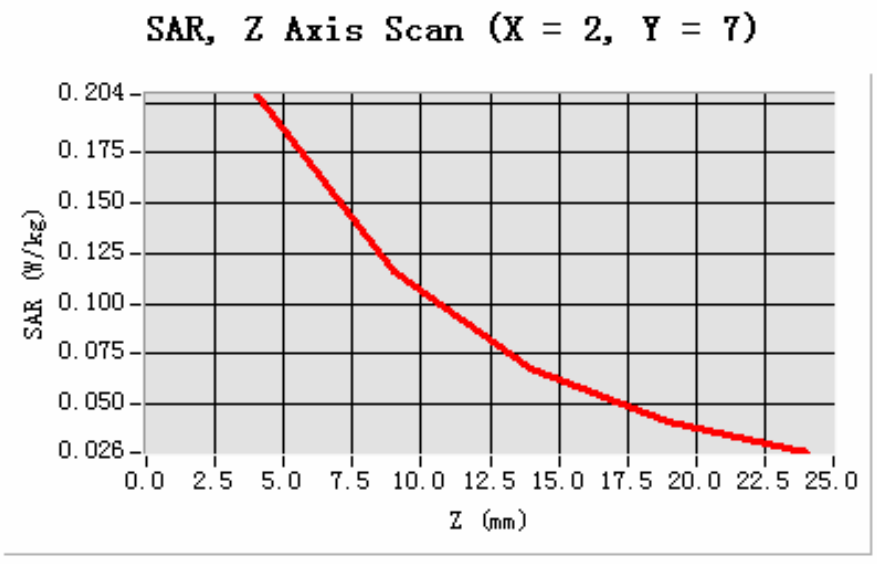


Maximum location: X=2.00, Y=7.00

SAR 10g (W/Kg)	0.108462
SAR 1g (W/Kg)	0.192522

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.2040	0.1162	0.0674	0.0415



MEASUREMENT with HSDPA

Type: Phone measurement (Complete)

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

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

Date of measurement: 10/1/2009

Measurement duration: 9 minutes 32 seconds

A. Experimental conditions.

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

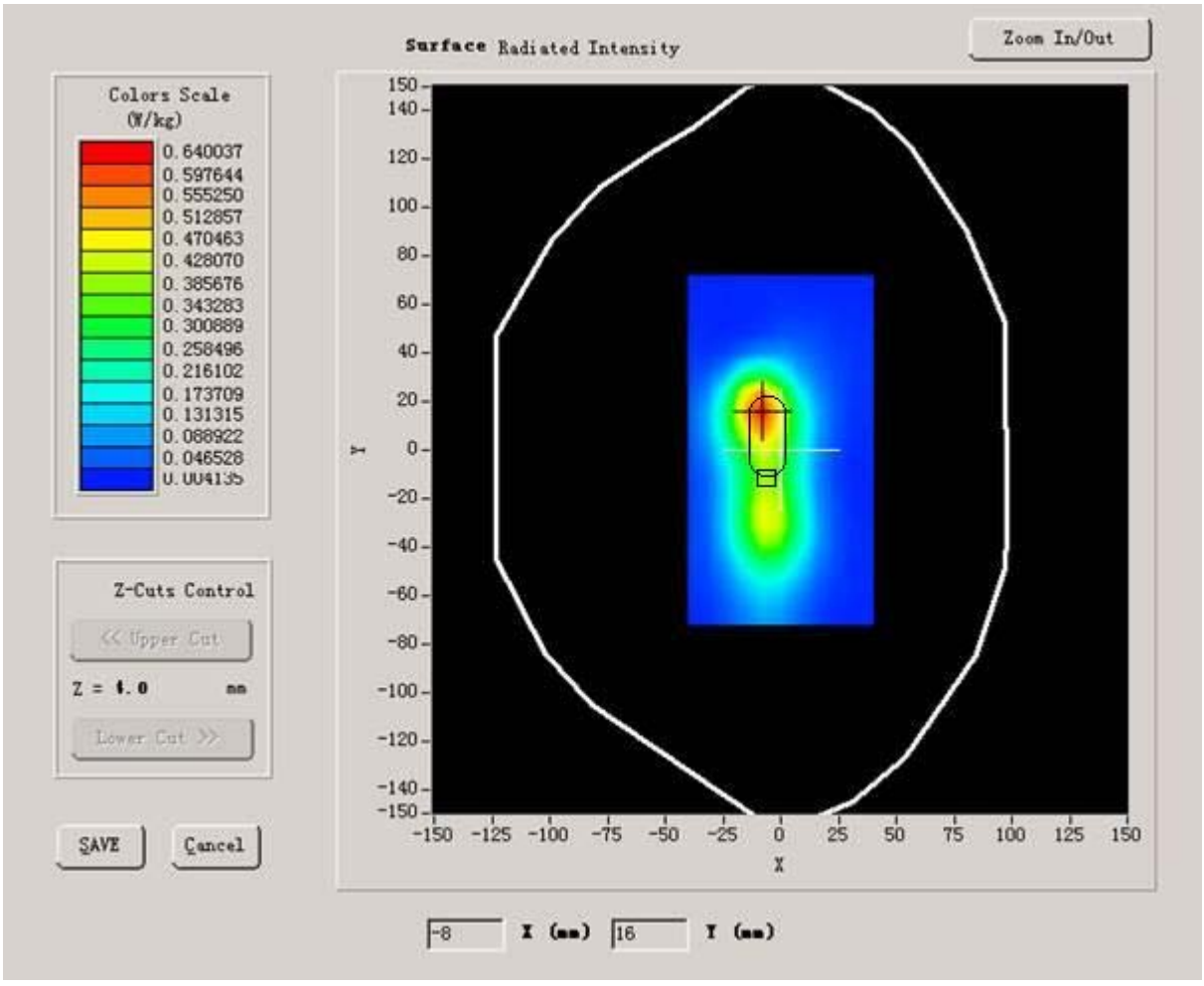
B. SAR Measurement Results

Lower Band SAR (Channel 9262):

Frequency (MHz)	1852.000000
Relative permittivity (real part)	51.341000
Relative permittivity	15.877050

Conductivity (S/m)	1.633572
Variation (%)	0.190000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

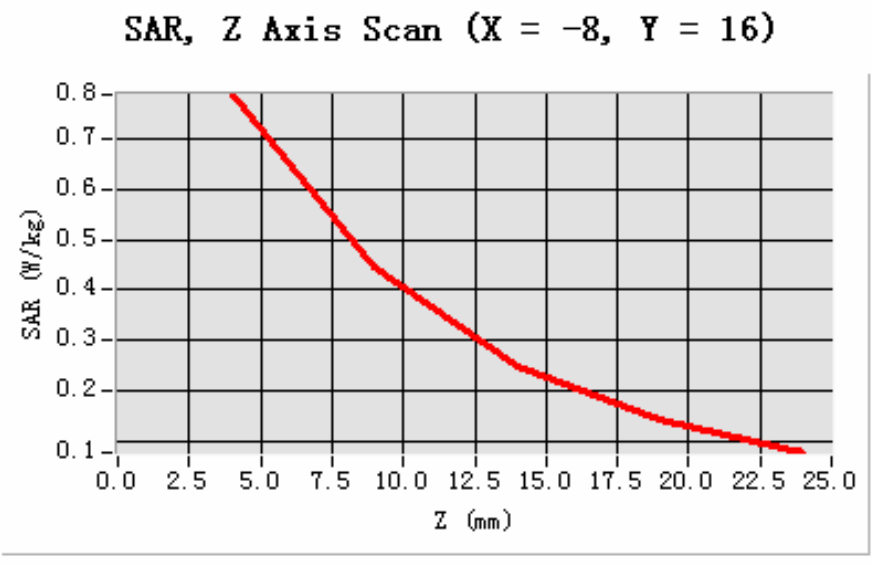


Maximum location: X=-8.00, Y=16.00

SAR 10g (W/Kg)	0.353341
SAR 1g (W/Kg)	0.684455

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.7863	0.4445	0.2499	0.1435



MEASUREMENT with EDGE

Type: Phone measurement (Complete)

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

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

Date of measurement: 10/1/2009

Measurement duration: 9 minutes 24 seconds

A. Experimental conditions.

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

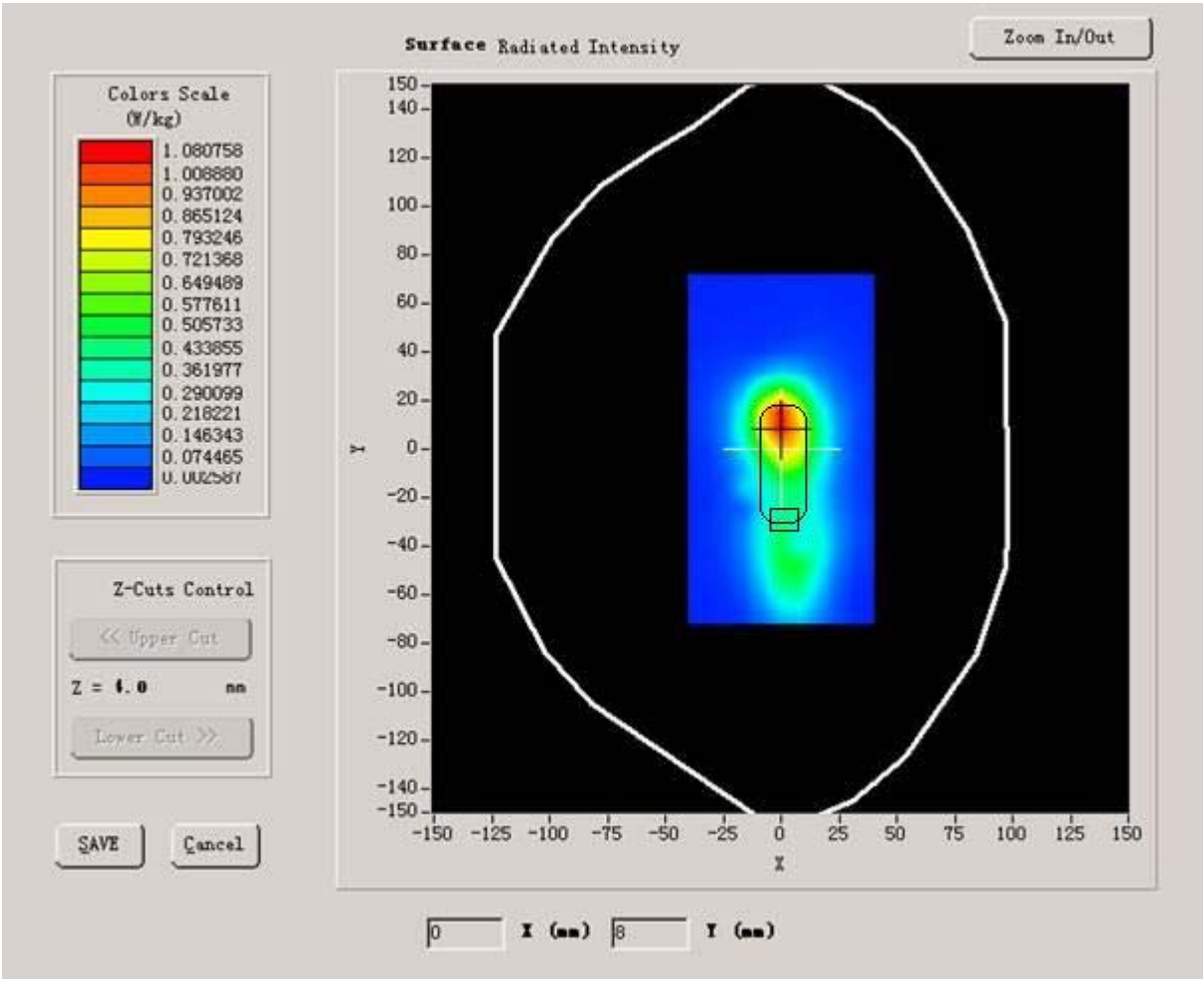
B. SAR Measurement Results

Middle Band SAR (Channel 661):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	51.540001
Relative permittivity	15.070000

Conductivity (S/m)	1.573978
Variation (%)	-0.680000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR

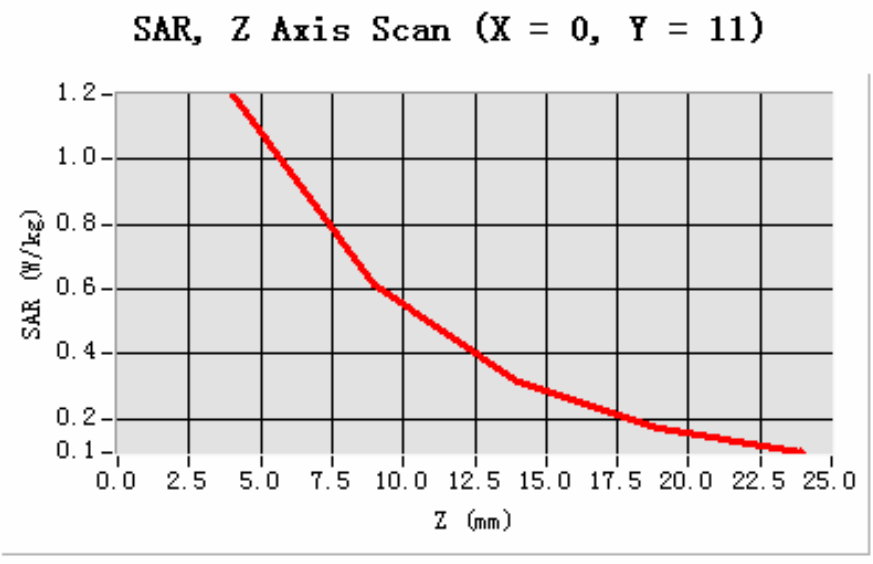


Maximum location: X=0.00, Y=11.00

SAR 10g (W/Kg)	0.563455
SAR 1g (W/Kg)	1.094754

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	1.2014	0.6130	0.3139	0.1723



System Performance Check Data(Body)

Type: Phone measurement (Complete)

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

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

Date of measurement:10/1/2009

Measurement duration: 9 minutes 27 seconds

A. Experimental conditions.

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

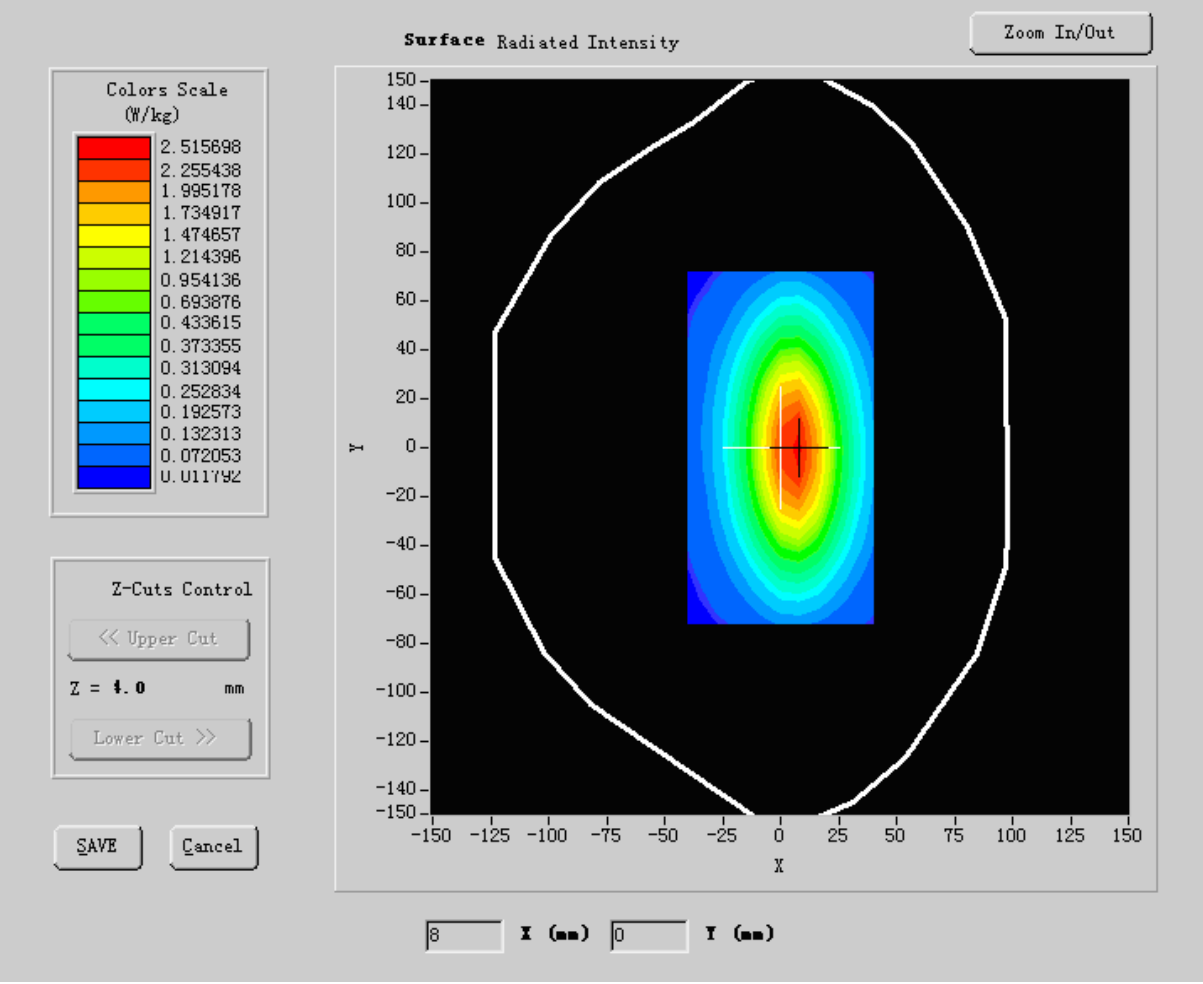
B. SAR Measurement Results

Band SAR:

Frequency (MHz)	835.000000
Relative permittivity (real part)	54.540001
Relative permittivity	15.070000

Conductivity (S/m)	0.975187
Variation (%)	-0.140000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor:	1:1

VOLUME SAR

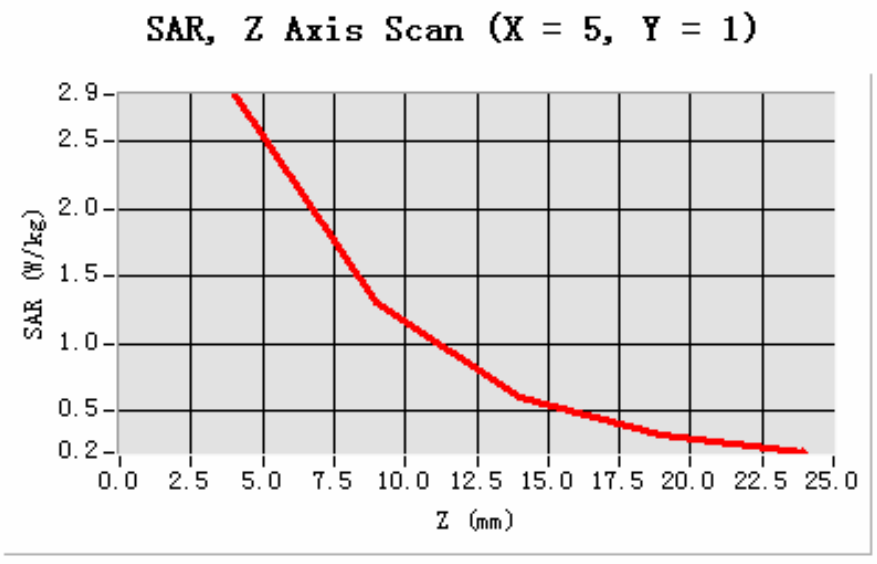


Maximum location: X=5.00, Y=1.00

SAR 10g (W/Kg)	1.398753
SAR 1g (W/Kg)	2.487349

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	2.8536	1.3061	0.6041	0.3211



System Performance Check Data(Body)

Type: Phone measurement (Complete)

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

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

Date of measurement: 10/1/2009

Measurement duration: 9 minutes 27 seconds

A. Experimental conditions.

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

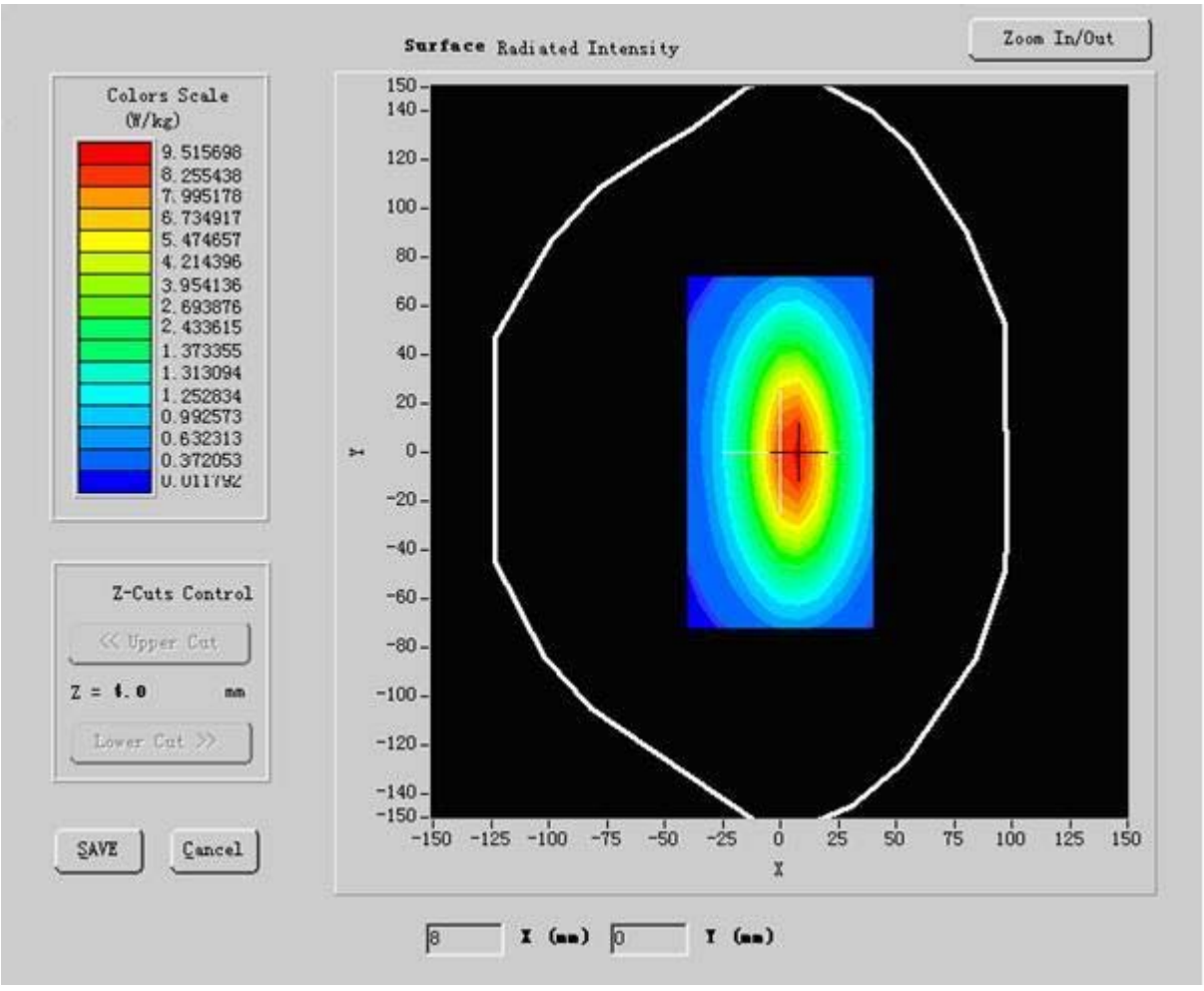
B. SAR Measurement Results

Band SAR

Frequency (MHz)	1900.00MHz
Relative permittivity (real part)	53.345554
Relative permittivity	15.070000

Conductivity (S/m)	1.428747
Variation (%)	-0.140000
Ambient Temperature:	22.4°C
Liquid Temperature:	22.1°C
Probe Serial Number:	SN_3708_EP80
Crest factor：	1:1

VOLUME SAR



Maximum location: X=5.00, Y=1.00

SAR 10g (W/Kg)	5.004387
SAR 1g (W/Kg)	9.847544

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	2.8536	1.3061	0.6041	0.3211