



FCC SAR

TEST REPORT

of

H-U50

Model Name: H-U50
Trade Name: Haier
Report No.: SZ10070125S01
FCC ID: SG71007H-U50

prepared for

Qingdao Haier Telecom Co.Ltd
Haier Information Park No.1 Haier Road, Qingdao

prepared by
Shenzhen Morlab Communications Technology Co., Ltd.

Morlab Laboratory

3/F, Electronic Testing Building, Shahe Road, Xili,
Nanshan District, Shenzhen, 518055 P. R. China

Tel: +86 755 86130398

Fax: +86 755 86130218



Bluetooth®

CTIA Authorized Test Lab

LAB CODE 20081223-00

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General Information

1.1. Notes

The test results of this test report relate exclusively to the information specified in section 3.3. Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the identification. The test report may only be reproduced or published in full. Reproduction or publications of extracts from the test report requires the prior written approval of Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory. The test report shall be invalid without all the signatures of testing the Project Manager, the Deputy Project Manager and the Test Lab Manager. Any objections must be raised to Morlab within 30 days since the date when the report is received. It will not be taken into consideration beyond this limit.

1.2. Organization item

Report No.:	SZ10070125S01
Date of Issue:	Aug. 12, 2010
Date of Tests:	Aug. 5, 2010 –Aug. 5, 2010
Responsible for Accreditation:	Shu Luan
Project Manager:	Li Lei
Deputy Project Manager:	Samuel Peng

1.3. Conclusion

Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory has verified that all tests as listed in the section 4.5 of this report haven been performed succ essfully with the tested equipment.

 _____ Samuel Peng Tested by (Responsible for the Test Report)		 _____ Li Lei 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 Morlab Communications Technology Co., Ltd.
 Department: Morlab Laboratory
 Address: 3/F, Electronic Testing Building, Shahe Road, Nanshan District, Shenzhen, 518055 P. R. China
 Responsible Test Lab Manager: Mr. Shu Luan
 Telephone: +86 755 86130268
 Facsimile: +86 755 86130218

2.2. Identification of the Responsible Testing Location

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

2.3. Accreditation Certificate

Accredited Testing Laboratory: No. CNAS L3572 (see 0)

2.4. List of Test Equipments

No.	Instrument	Type	Cal. Date	Cal. Due
1	PC	Dell (Pentium IV 2.4GHz, SN:X10-23533)		
2	Network Emulator	Rohde&Schwarz (CMU200, SN:105894)	2009-9-26	1year
3	Voltmeter	Keithley (2000, SN:1000572)	2009-9-24	1year
4	Synthesizer	Rohde&Schwarz (SML_03, SN:101868)	2009-9-24	1year
5	Amplifier	Nucl udes (ALB216, SN:10800)	2009-9-24	1year
6	Power Meter	Rohde&Schwarz (NRVD, SN:101066)	2009-9-24	1year
7	Probe	Antennessa (SN:SN_3708_EP80)	2009-9-24	1year
8	Phantom	Antennessa (SN:SN_36_08_SAM62)	2009-9-24	1year
9	Liquid	Antennessa (Last Calibration:21 08 08)	2009-8-21	1year

3. Technical Information

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

3.1. Identification of Applicant

Company Name: Qingdao Haier Telecom Co.Ltd
Address: Haier Information Park No.1 Haier Road,Qingdao

3.2. Identification of Manufacturer

Company Name: Qingdao Haier Telecom Co.Ltd
Address: Haier Information Park No.1 Haier Road,Qingdao

3.3. Equipment Under Test (EUT)

Brand Name: Haier
Type Name: Haier
Marking Name: H-U50
Hardware Version: H101
Software Version: U50-H01-S003-LATIN-100709
Frequency Bands: GSM 850MHz: 848.2 MHz to 848.8 MHz
PCS 1900MHz: 1850.2 MHz to 1909.80 MHz
WIFI 802.11b/g
Modulation Mode: GMSK
Antenna type: Build inside
Development Stage: Identical prototype
Battery Model: H15161
Battery specification: 1500mAh 3.7V
Multislot Class: GPRS: Multislot Class 12; EDGE: Multislot Class 12
GPRS Operation Mode: Class B

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	Hardware Version	Software Version
1#	H101	U50-H01-S003-LATIN-100709

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:	100~240V/50~60Hz AC
Extreme Temperature:	Low Temperature (LT) = -10°C
	High Temperature (HT) = 55°C
Extreme Voltage of the EUT:	Normal Voltage (NV) = 3.70V
	Low Voltage (LV) = 3.60V
	High Voltage (HV) = 4.20V
Test frequency:	GSM 850MHz
	PCS 1900MHz
	802.11 b/g
Operation mode:	Call established
Power Level:	GSM 850 MHz Maximum output power(level 5)
	PCS 1900 MHz Maximum output power(level 0)
	Maximum output power

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

The Absolute Radio Frequency Channel Number (ARFCN) is allocated to 125, 190 and 251 respectively in the case of GSM 850 MHz, or to 512, 661 and 810 respectively in the case of PCS 1900 MHz, The EUT, 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

I. INFORMATIONS ON THE TESTING

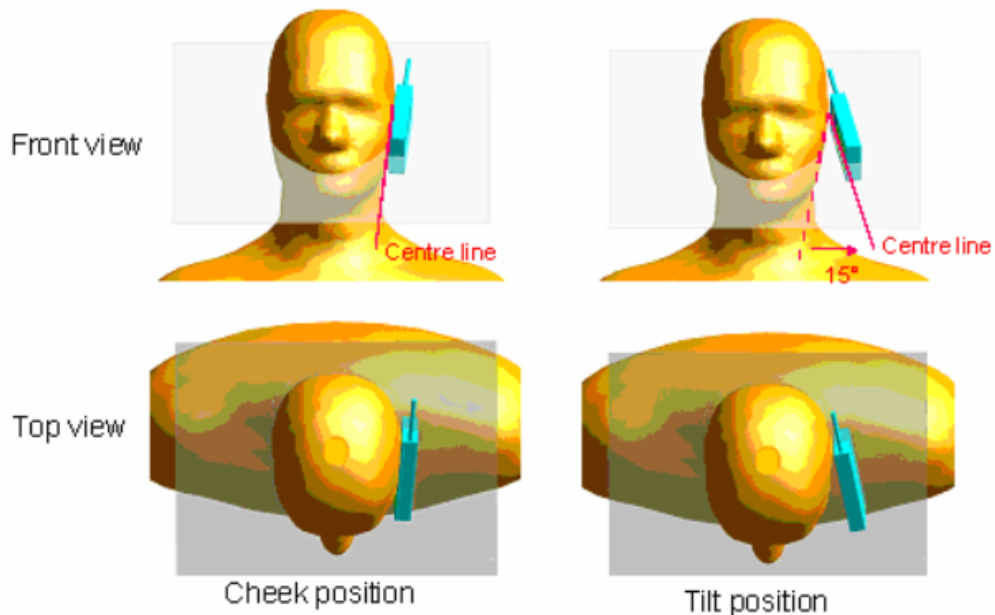
I.1. Normative reference

IEEE 1528: Recommended Practice for determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques. Institute of Electrical and Electronics Engineers, INC., 2003.

I.3. Positions and test conditions of the mobile phone under test

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

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



Description of the « cheek » position:

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

Description of the « tilted » position:

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

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 surface 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 Antenna.

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	$\sqrt{3}$	$(1 C_p)^{1/2}$	$(1 C_p)^{1/2}$	1.02	1.02	∞
Hemispherical Isotropy	E.2.2	4.0	R	$\sqrt{3}$	$\sqrt{C_p}$	$\sqrt{C_p}$	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 Algorithms for Max. SAR Evaluation	E.5.2	5.0	R	$\sqrt{3}$	1	1	2.89	2.89	∞
Test sample Related									
Test sample positioning	E.4.2.1	0.03	N	1	1	1	0.03	0.03	N-1
Device Holder Uncertainty	E.4.1.1	5.00	N	1	1	1	5.00	5.00	
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	835MHz:SN 36/08 DIPC 99 1800MHz:SN 36/08 DIPF 101 2450MHz:SN 36/08 DIPJ 103

Results:

Frequency	835MHz	1900MHz	2450 MHz
Target value (1g)	10.8 W/Kg (body)	39.7 W/Kg	52.4 W/Kg (body)
250 mW input power	2.709 W/Kg (head) 2.701 W/Kg (body)	9.843 W/Kg (head) 10.22 W/Kg (body)	12.988 W/Kg (body)
Test value (1g)	10.836 W/Kg (head) 10.804 W/Kg (body)	39.372 W/Kg (head) 40.880 W/Kg (body)	51.952 W/Kg (body)

Note:Please refer to check the system performance data, the first 168-182 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.

Table 1: Dielectric Performance of Head Tissue Simulating Liquid

Temperature: 23.0~23.8°C, humidity: 54~60%.			
/	Frequency	Permittivity ϵ	Conductivity σ (S/m)
Target value	835 MHZ	41.5	0.90
Validation value (Aug. 5)	835 MHZ	41.675999	0.894409
Target value	1900 MHZ	40	1.40
Validation value (Aug. 5)	1900 MHZ	39.481223	1.395758

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 2: Dielectric Performance of Body Tissue Simulating Liquid

Temperature: 23.0~23.8°C, humidity: 54~60%.			
/	Frequency	Permittivity ϵ	Conductivity σ (S/m)
Target value	835 MHz	55.2	0.97
Validation value (Aug. 5)	835 MHz	55.709999	1.009033
Target value	1900 MHz	53.3	1.52

Validation value (Aug. 5)	1900 MHz	52.548876	1.573978
Target value	2450 MHz	52.70	1.52
Validation value (Aug. 5)	2450 MHz	54.548876	1.541411

4.3.6. Simulant liquids

Simulant liquids that are used for testing at frequencies of GSM 850MHz and 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		Frequency Band		Frequency Band
	835MHz		1900MHz		2450MHz
Tissue Type	Head	Body	Body	Head	Body
Water	41.45	52.4	52.4	55.36	40.4
Salt(NaCl)	1.45	1.4	1.4	0.35	0.5
Sugar	56.0	45.0	45.0	30.45	58.0
HEC	1.0	1.0	1.0	0.0	1.0
Bactericide	0.1	0.1	0.1	0.0	0.1
Triton	0.0	0.0	0.0	0.0	0.0
DGBE	0.0	0.0	0.0	13.84	0.0
Acticide SPX	0.0	0.0	0.0	0.0	0.0
Dielectric Constant	42.45	56.1	52.7	41.00	54.0
Conductivity (S/m)	0.91	0.95	1.95	1.38	1.45

4.4. Items used in the Test Results List

Terms in the column “Verdict” for the test results list of the section 4.5:

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

4.5. Test Results List

Summary of Measurement Results (GSM 850MHz Band)

SAR Values (GSM 850MHz Band), Measured against the head.

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)
Left head, Touch cheek, Channel Low	0.609	31.32
Left head, Touch cheek, Channel Middle	0.507	31.36
Left head, Touch cheek, Channel High	0.463	31.87
Left head, Tilt 15 Degree, Channel Low	0.399	31.32
Left head, Tilt 15 Degree, Channel Middle	0.343	31.36
Left head, Tilt 15 Degree, Channel High	0.326	31.87
Right head, Touch cheek, Channel Low	0.695	31.32
Right head, Touch cheek, Channel Middle	0.554	31.36
Right head, Touch cheek, Channel High	0.516	31.87
Right head, Tilt 15 Degree, Channel Low	0.448	31.32
Right head, Tilt 15 Degree, Channel Middle	0.377	31.36
Right head, Tilt 15 Degree, Channel High	0.352	31.87

Summary of Measurement Results (GSM 1900MHz Band)

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

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)
Left head, Touch cheek, Channel Low	0.542	29.4
Left head, Touch cheek, Channel Middle	0.886	29.52
Left head, Touch cheek, Channel High	0.782	29.73
Left head, Tilt 15 Degree, Channel Low	0.485	29.4
Left head, Tilt 15 Degree, Channel Middle	0.751	29.52
Left head, Tilt 15 Degree, Channel High	0.584	29.73
Right head, Touch cheek, Channel Low	0.627	29.4

Right head, Touch cheek, Channel Middle	0.975	29.52
Right head, Touch cheek, Channel High	0.869	29.73
Right head, Tilt 15 Degree, Channel Low	0.536	29.4
Right head, Tilt 15 Degree, Channel Middle	0.833	29.52
Right head, Tilt 15 Degree, Channel High	0.684	29.73

SAR Values (GSM 850MHz Band), Measured against the body.

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)
Side, Low frequency GPRS mode	0.760	31.41
Side, Middle frequency GPRS mode	0.753	31.43
Side, High frequency GPRS mode	0.720	31.93
Side, Low frequency GPRS mode (back)	0.544	31.41
Side, Low frequency GSM mode	0.560	31.32
Side, Low frequency GSM mode (with earphone)	0.548	31.32

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

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)
Side, Low frequency GPRS mode	0.932	29.32
Side, Middle frequency GPRS mode	0.996	29.91
Side, High frequency GPRS mode	0.910	29.25
Side, Middle frequency GPRS mode (back)	0.531	29.91
Side, Middle frequency GSM mode	0.796	29.52
Side, Middle frequency GSM mode (with earphone)	0.773	29.52

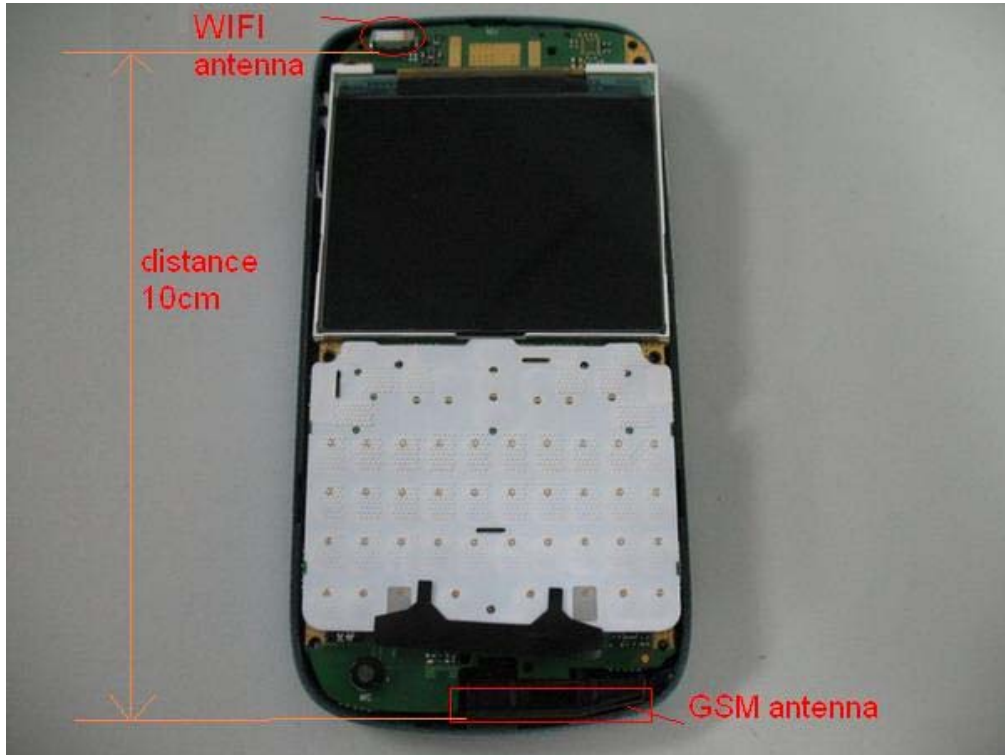
SAR Values (WIFI 2450MHz Band), Measured against the body.

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)
Side, Low frequency	0.135	22.23
Side, Middle frequency	0.147	22.25
Side, High frequency	0.158	22.28
Side, High frequency (back)	0.124	22.28

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 1.5cm(taking into account of the IEEE 1528 and the place of the antenna)

- 2.WIFI some of the test are done under the maximum output power.
- 3. Simultaneous transmitter testing to comply with FCC KDB 648474 File Description
- 4. SUM SAR values $0.996 \text{ W/kg} + 0.158 \text{ W/kg} = 1.154 \text{ W/kg}$ lower than 1.6 W/kg .



Annex A Accreditation Certificate

Annex B Photographs of the EUT

1 EUT Left Head Touch Cheek Position



2 EUT Left Head Tilt15 Position



3 EUT Right Head Touch Cheek Position



4 EUT Right Head Tilt15 Position



5 Side Position



6 With Headphone



Annex C Graph Test Results

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

	<p style="text-align: center;"><u>GSM</u></p> <p style="text-align: center;"><u>1900</u></p>	<p><u>Measurement 19:</u> Right Head with Cheek device position on Low Channel in GSM mode</p> <p><u>Measurement 20:</u> Right Head with Cheek device position on Middle Channel in GSM mode</p> <p><u>Measurement 21:</u> Right Head with Cheek device position on High Channel in GSM mode</p> <p><u>Measurement 22:</u> Right Head with Tilt device position on Low Channel in GSM mode</p> <p><u>Measurement 23:</u> Right Head with Tilt device position on Middle Channel in GSM mode</p> <p><u>Measurement 24:</u> Right Head with Tilt device position on High Channel in GSM mode</p> <p><u>Measurement 25:</u> Left Head with Cheek device position on Low Channel in GSM mode</p> <p><u>Measurement 26:</u> Left Head with Cheek device position on Middle Channel in GSM mode</p> <p><u>Measurement 27:</u> Left Head with Cheek device position on High Channel in GSM mode</p> <p><u>Measurement 28:</u> Left Head with Tilt device position on Low Channel in GSM mode</p> <p><u>Measurement 29:</u> Left Head with Tilt device position on Middle Channel in GSM mode</p> <p><u>Measurement 30:</u> Left Head with Tilt device position on High Channel in GSM mode</p> <p><u>Measurement 31:</u> Validation Plane with Body device position on Low Channel in GSM mode</p> <p><u>Measurement 32:</u> Validation Plane with Body device position on Middle Channel in GSM mode</p> <p><u>Measurement 33:</u> Validation Plane with Body device position on High Channel in GSM mode</p> <p><u>Measurement 34:</u> Validation Plane with Body device position on High Channel in GSM mode (back)</p> <p><u>Measurement 35:</u> Validation Plane with Body device position on High Channel in GSM mode(with GPRS)</p> <p><u>Measurement 36:</u> Validation Plane with Body device position on High Channel in GSM mode(with earphone)</p>
	<p style="text-align: center;"><u>WIFI</u></p> <p style="text-align: center;"><u>2450MHz</u></p>	<p><u>Measurement 37:</u> Validation Plane with Body device position on Low Channel in WIFI mode</p> <p><u>Measurement 38:</u> Validation Plane with Body device position on Middle Channel in WIFI mode</p> <p><u>Measurement 39:</u> Validation Plane with Body device</p>

		position on High Channel in WIFI mode <u>Measurement 40:</u> Validation Plane with Body device position on Low Channel in WIFI mode (back)
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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: 5/8/2010

Measurement duration: 7 minutes 54 seconds

A. Experimental conditions.

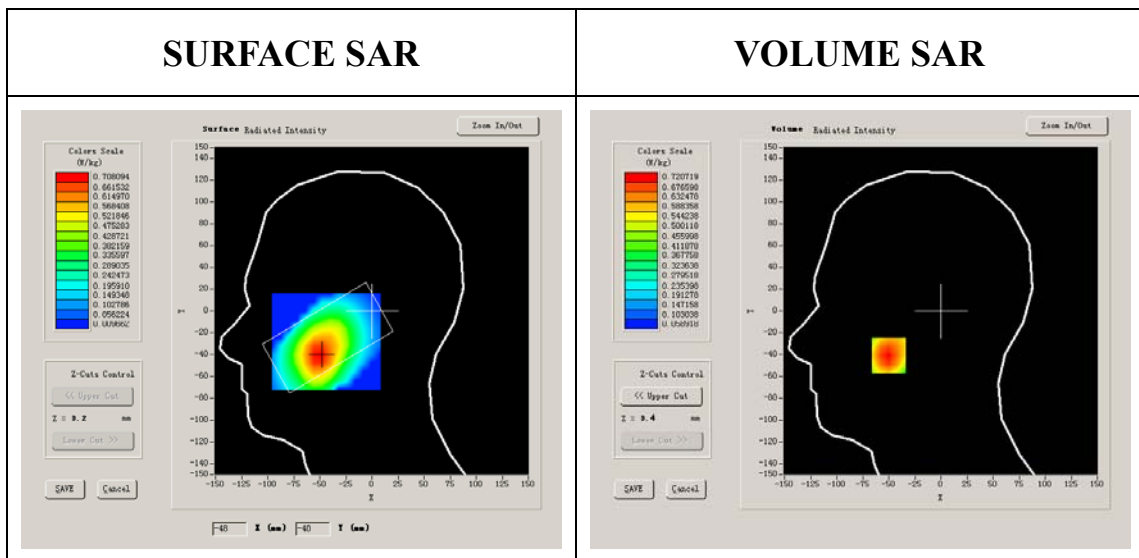
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Cheek
Band	GSM850
Channels	Low
Signal	GSM

B. SAR Measurement Results

Lower Band SAR (Channel 128):

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

Conductivity (S/m)	0.866612
Variation (%)	-0.340000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8

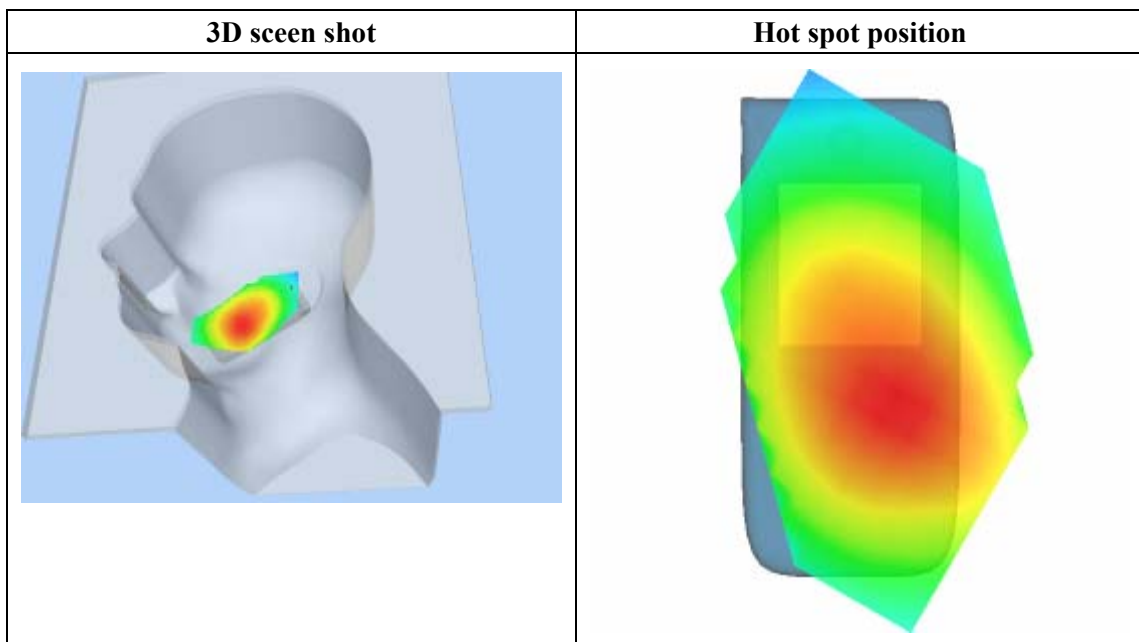
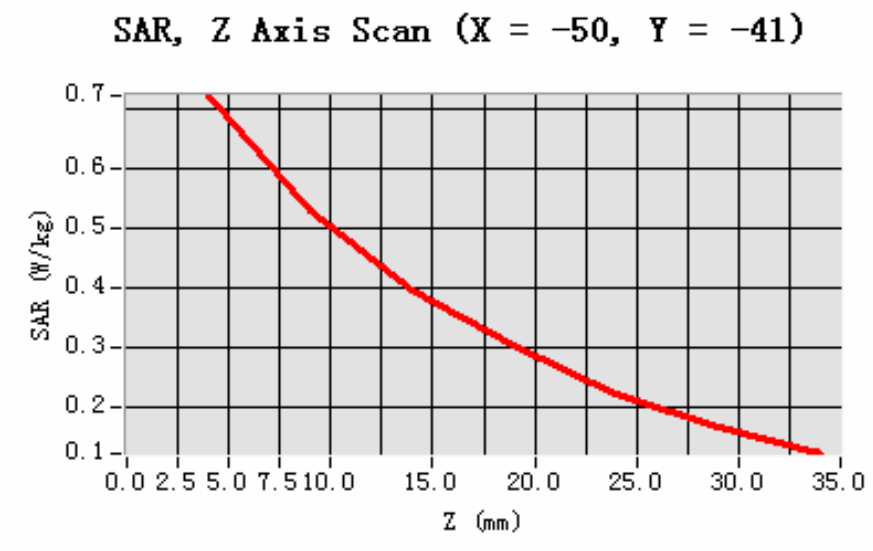


Maximum location: X=-50.00, Y=-41.00

SAR 10g (W/Kg)	0.487662
SAR 1g (W/Kg)	0.695269

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.7207	0.5297	0.3954	0.3045	0.2228	0.1681



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: 5/8/2010

Measurement duration: 7 minutes 58 seconds

A. Experimental conditions.

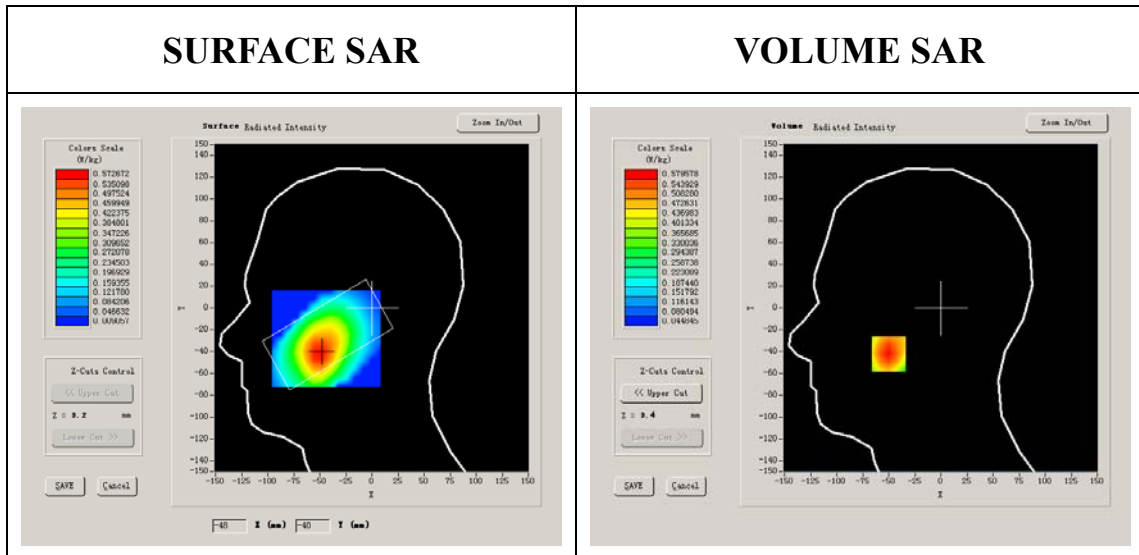
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Cheek
Band	GSM850
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 190):

Frequency (MHz)	836.599976
Relative permittivity (real part)	40.669998
Relative permittivity	19.120001

Conductivity (S/m)	0.888655
Variation (%)	0.340000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8

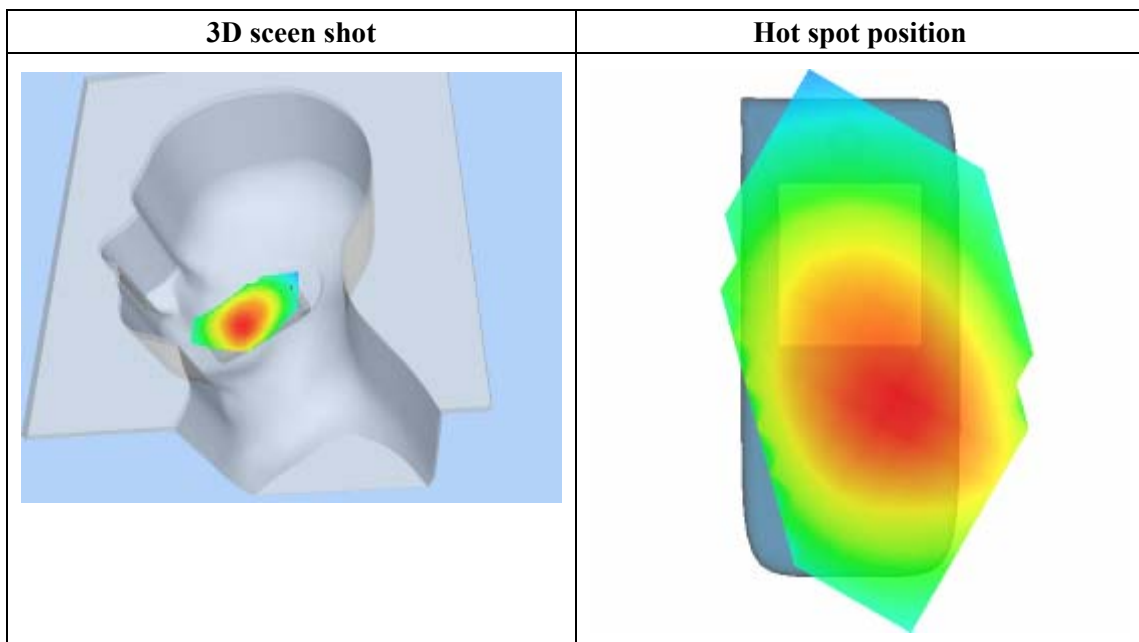
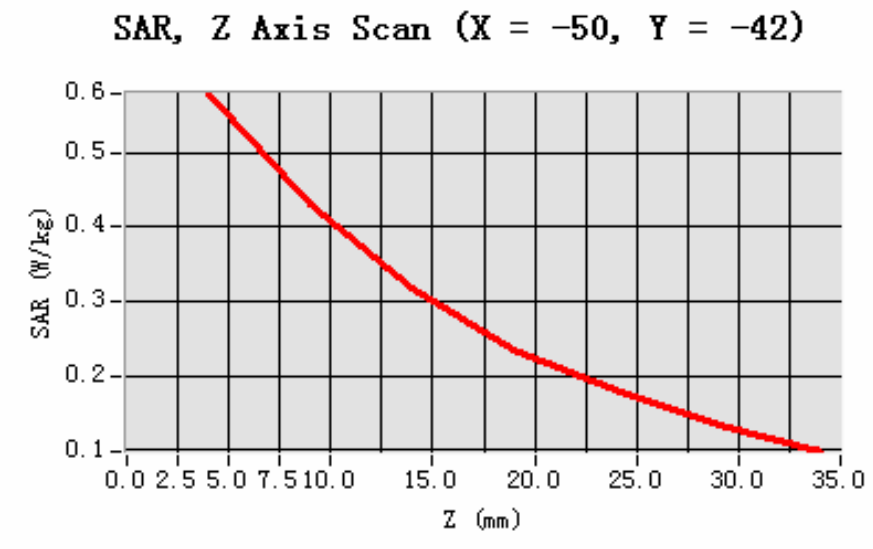


Maximum location: X=-50.00, Y=-42.00

SAR 10g (W/Kg)	0.389829
SAR 1g (W/Kg)	0.554239

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5796	0.4316	0.3169	0.2352	0.1799	0.1324



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: 5/8/2010

Measurement duration: 7 minutes 58 seconds

A. Experimental conditions.

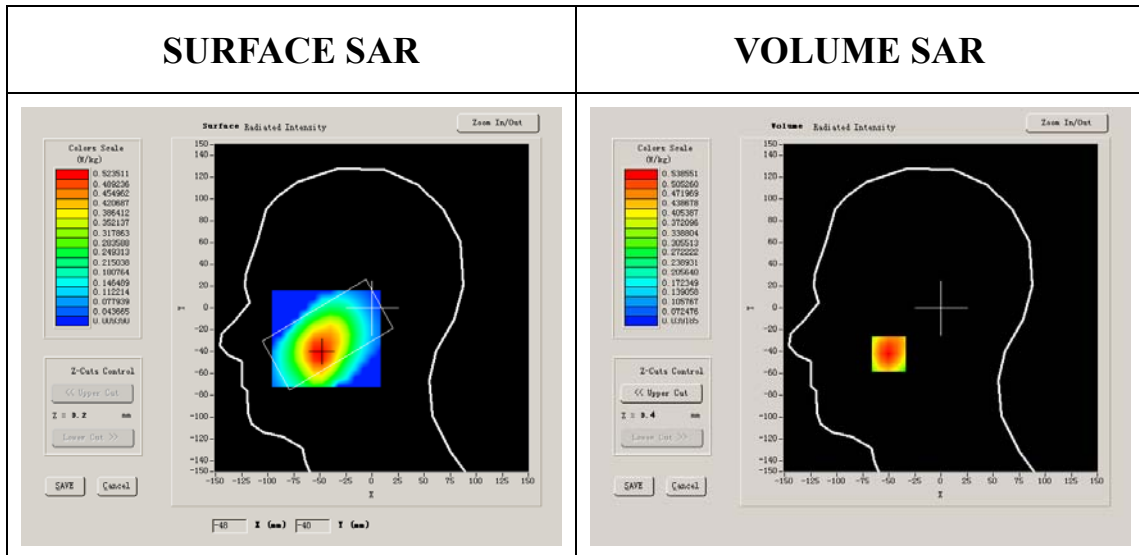
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Cheek
Band	GSM850
Channels	High
Signal	GSM

B. SAR Measurement Results

Higher Band SAR (Channel 251):

Frequency (MHz)	848.799988
Relative permittivity (real part)	41.675999
Relative permittivity	18.967199

Conductivity (S/m)	0.894409
Variation (%)	1.290000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



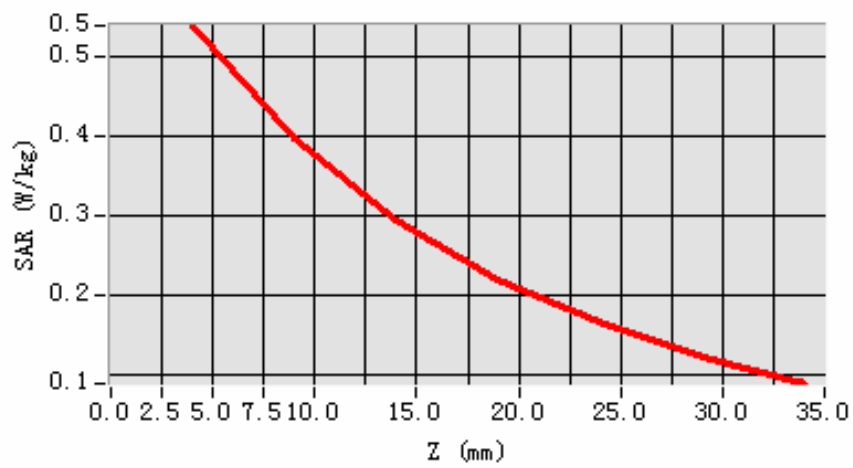
Maximum location: X=-50.00, Y=-42.00

SAR 10g (W/Kg)	0.363745
SAR 1g (W/Kg)	0.515918

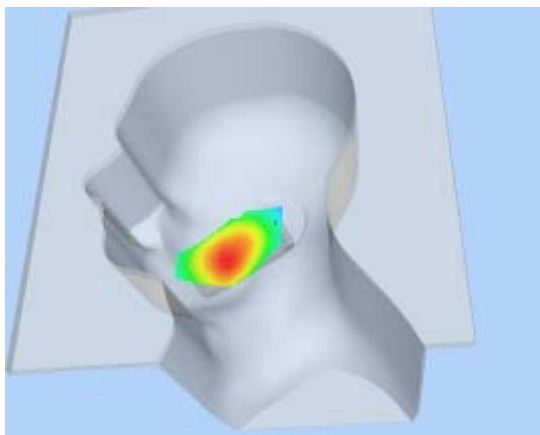
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5386	0.3977	0.2952	0.2204	0.1653	0.1219

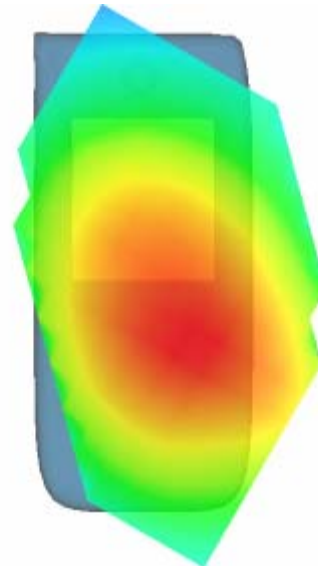
SAR, Z Axis Scan (X = -50, Y = -42)



3D scen shot



Hot spot position



MEASUREMENT 4

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 7 minutes 40 seconds

A. Experimental conditions.

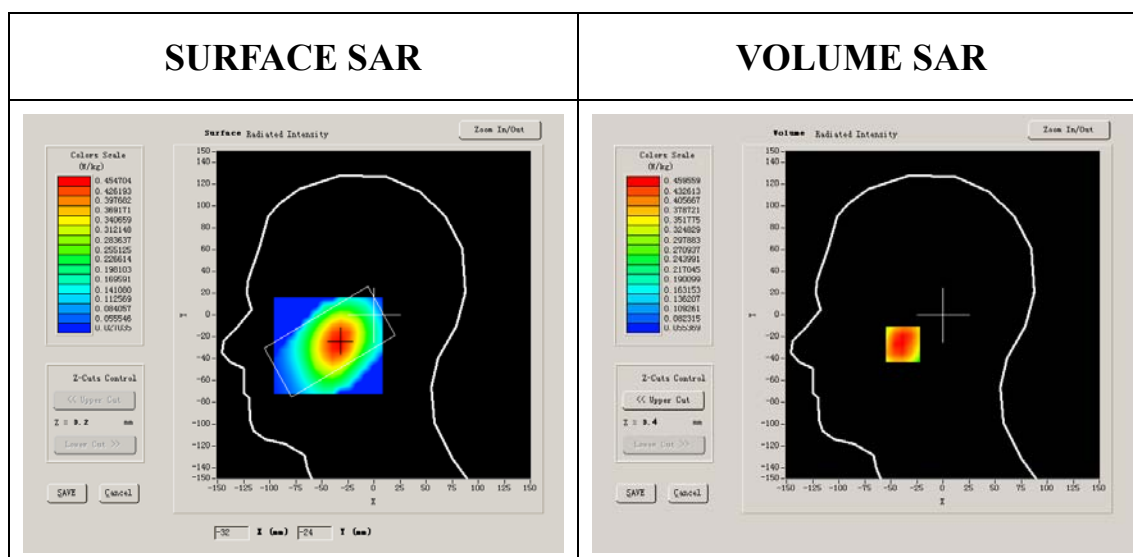
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Tilt
Band	GSM850
Channels	Low
Signal	GSM

B. SAR Measurement Results

Lower Band SAR (Channel 128):

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

Conductivity (S/m)	0.866612
Variation (%)	1.130000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



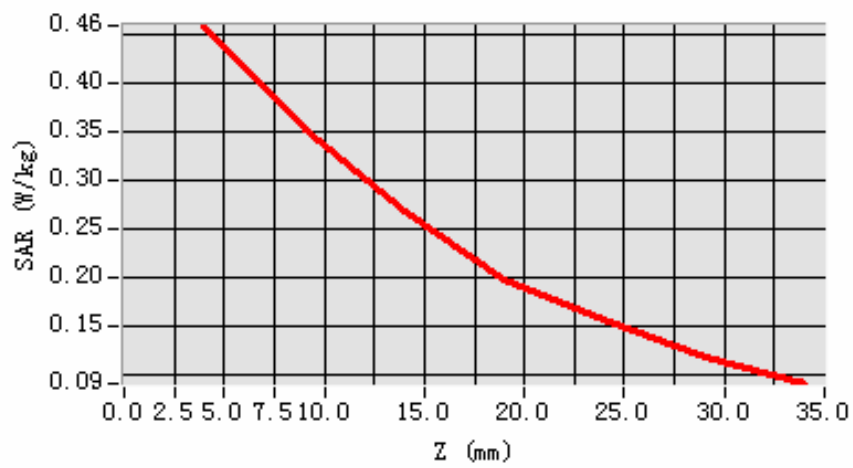
Maximum location: X=-34.00, Y=-27.00

SAR 10g (W/Kg)	0.321009
SAR 1g (W/Kg)	0.448379

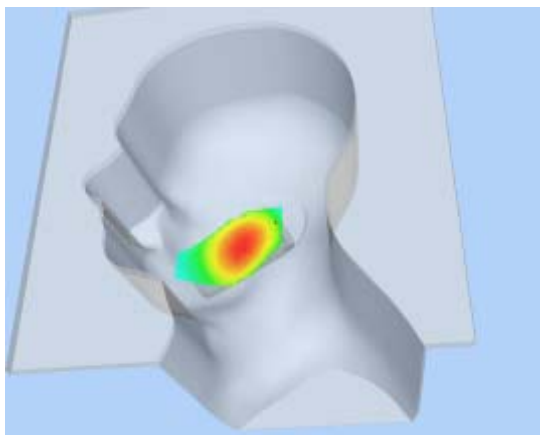
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4596	0.3530	0.2678	0.1987	0.1576	0.1178

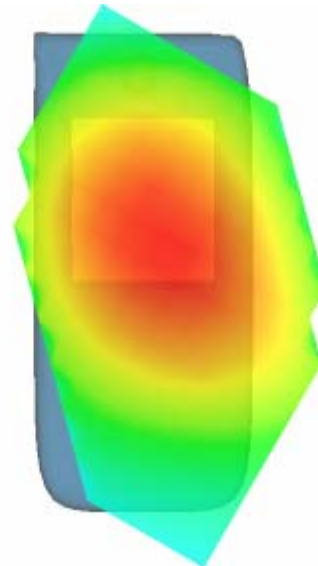
SAR, Z Axis Scan (X = -34, Y = -27)



3D scen shot



Hot spot position



MEASUREMENT 5

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 7 minutes 42 seconds

A. Experimental conditions.

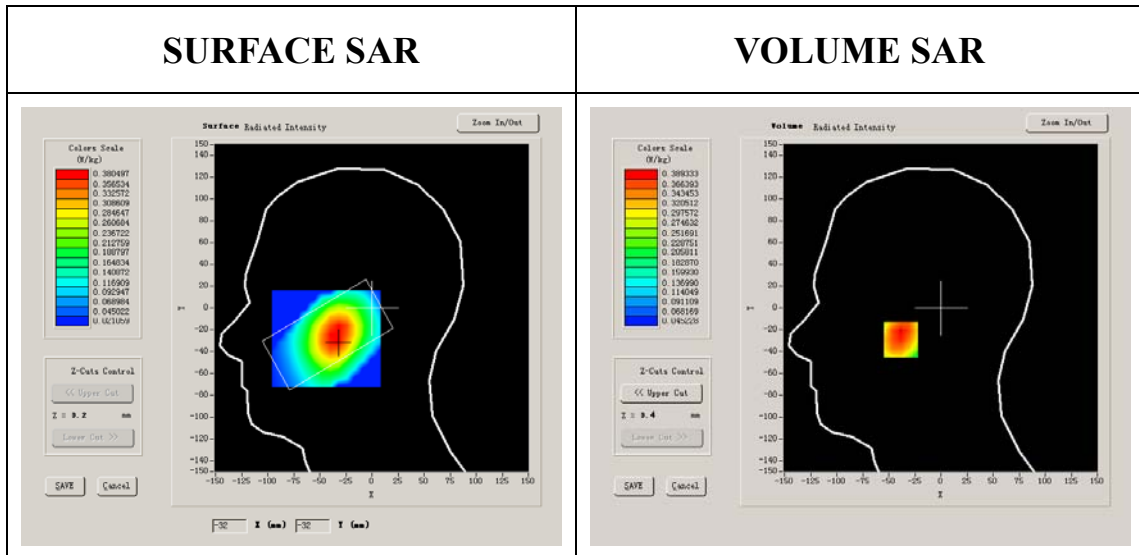
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Tilt
Band	GSM850
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 190):

Frequency (MHz)	836.599976
Relative permittivity (real part)	40.669998
Relative permittivity	19.120001

Conductivity (S/m)	0.888655
Variation (%)	-0.940000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8

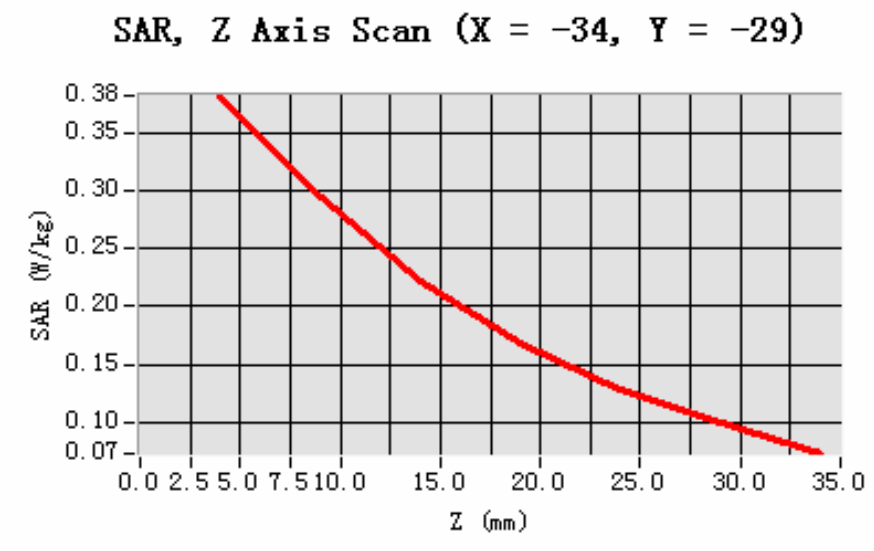


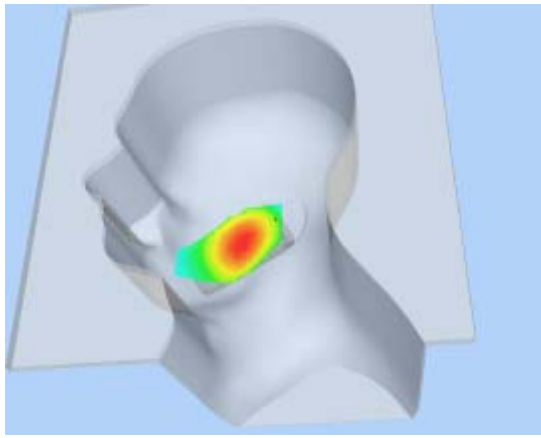
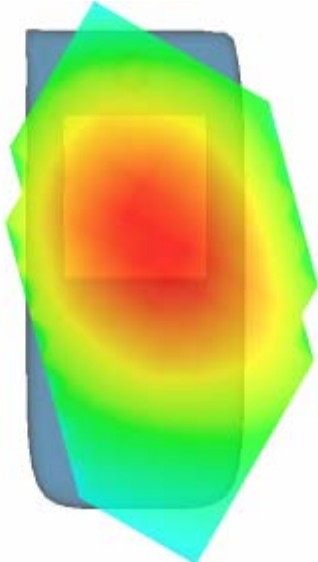
Maximum location: X=-34.00, Y=-29.00

SAR 10g (W/Kg)	0.268144
SAR 1g (W/Kg)	0.377463

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.3817	0.2944	0.2222	0.1680	0.1282	0.0996



3D scen shot	Hot spot position
	

MEASUREMENT 6

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 7 minutes 39 seconds

A. Experimental conditions.

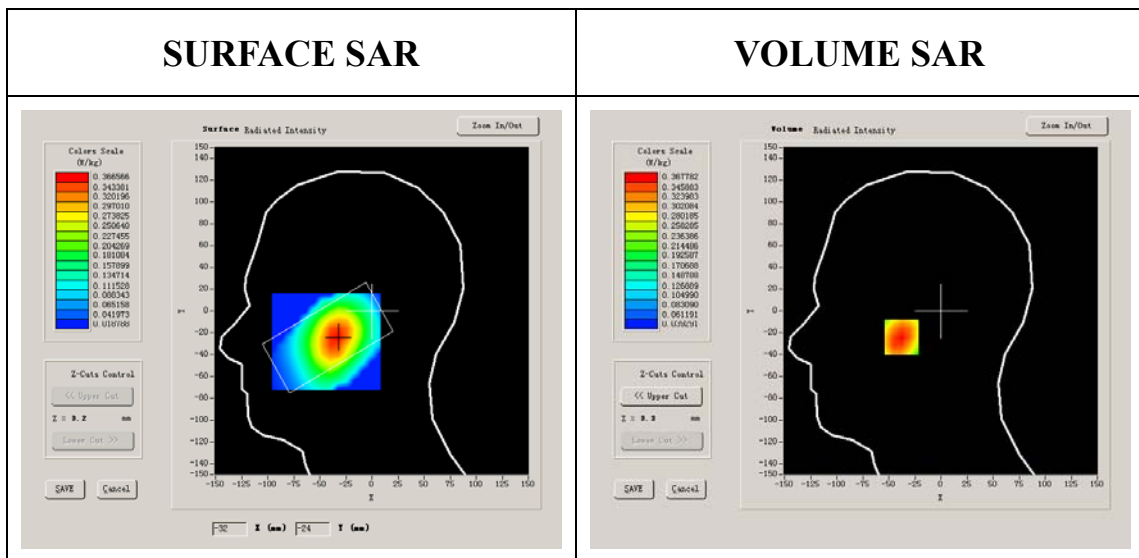
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Tilt
Band	GSM850
Channels	High
Signal	GSM

B. SAR Measurement Results

Higher Band SAR (Channel 251):

Frequency (MHz)	848.799988
Relative permittivity (real part)	41.675999
Relative permittivity	18.967199

Conductivity (S/m)	0.894409
Variation (%)	-1.810000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



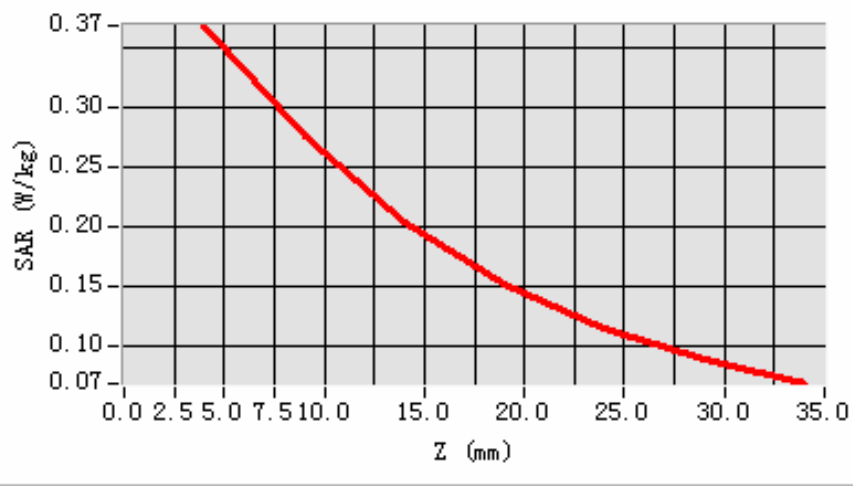
Maximum location: X=-33.00, Y=-24.00

SAR 10g (W/Kg)	0.247164
SAR 1g (W/Kg)	0.352072

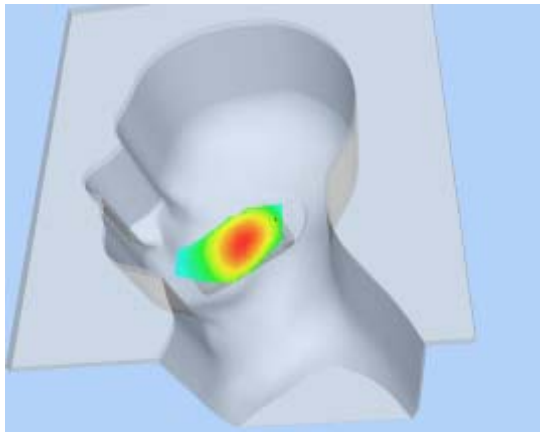
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.3678	0.2758	0.2025	0.1516	0.1141	0.0876

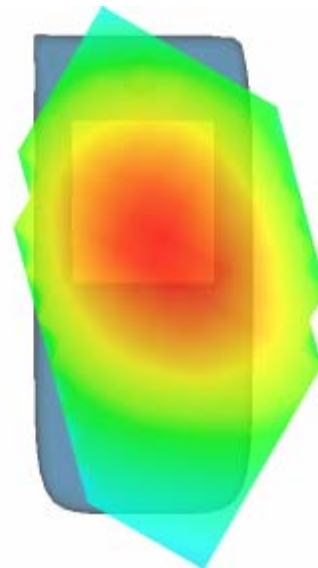
SAR, Z Axis Scan (X = -33, Y = -24)



3D scen shot



Hot spot position



MEASUREMENT 7

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 7 minutes 46 seconds

A. Experimental conditions.

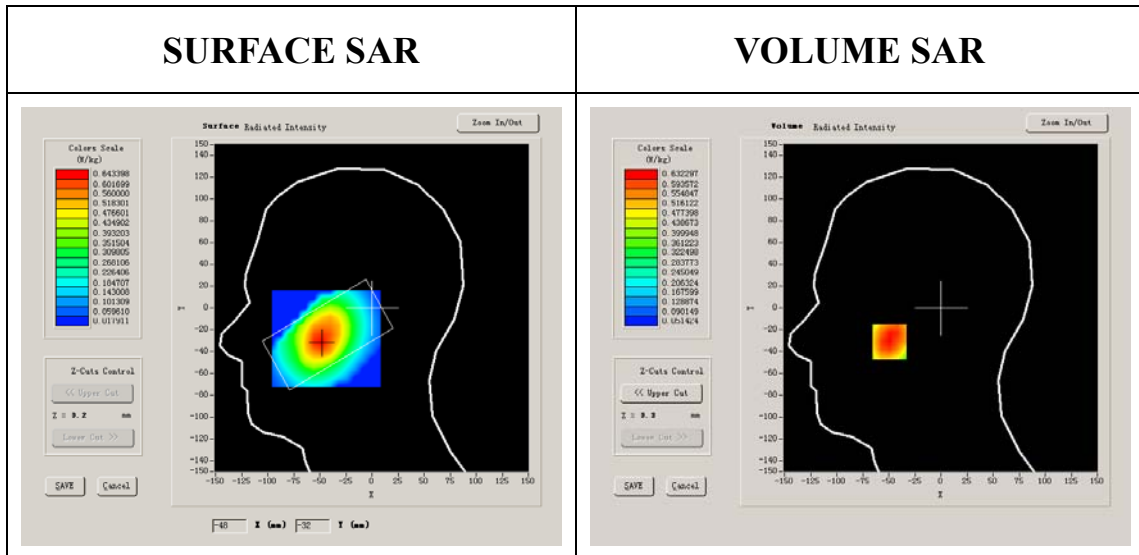
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	GSM850
Channels	Low
Signal	GSM

B. SAR Measurement Results

Lower Band SAR (Channel 128):

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

Conductivity (S/m)	0.866612
Variation (%)	0.480000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



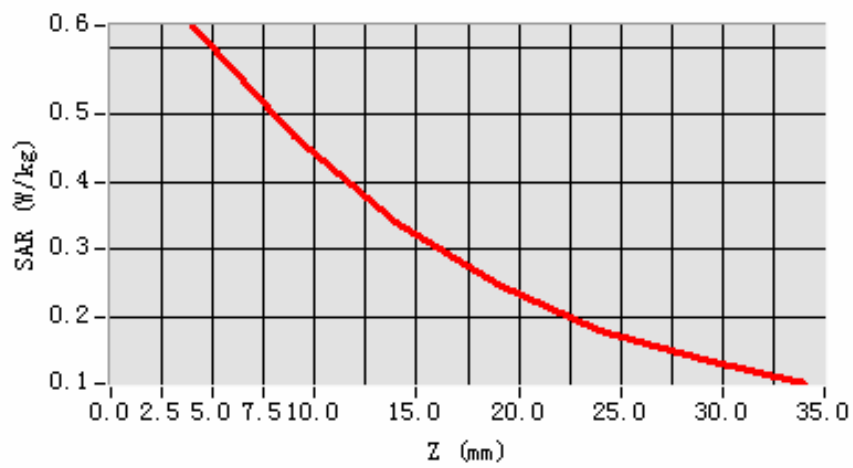
Maximum location: X=-49.00, Y=-31.00

SAR 10g (W/Kg)	0.429830
SAR 1g (W/Kg)	0.609180

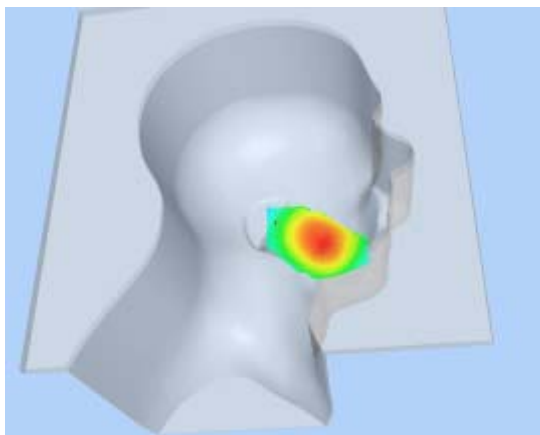
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6323	0.4680	0.3404	0.2480	0.1818	0.1364

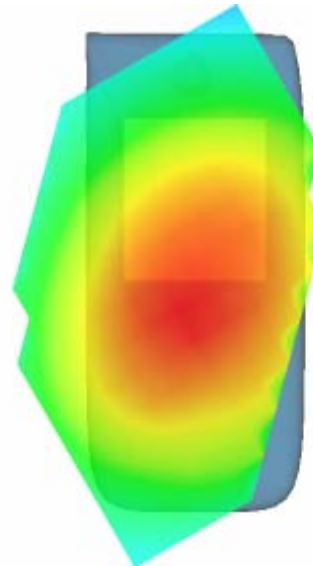
SAR, Z Axis Scan (X = -49, Y = -31)



3D scen shot



Hot spot position



MEASUREMENT 8

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 7 minutes 47 seconds

A. Experimental conditions.

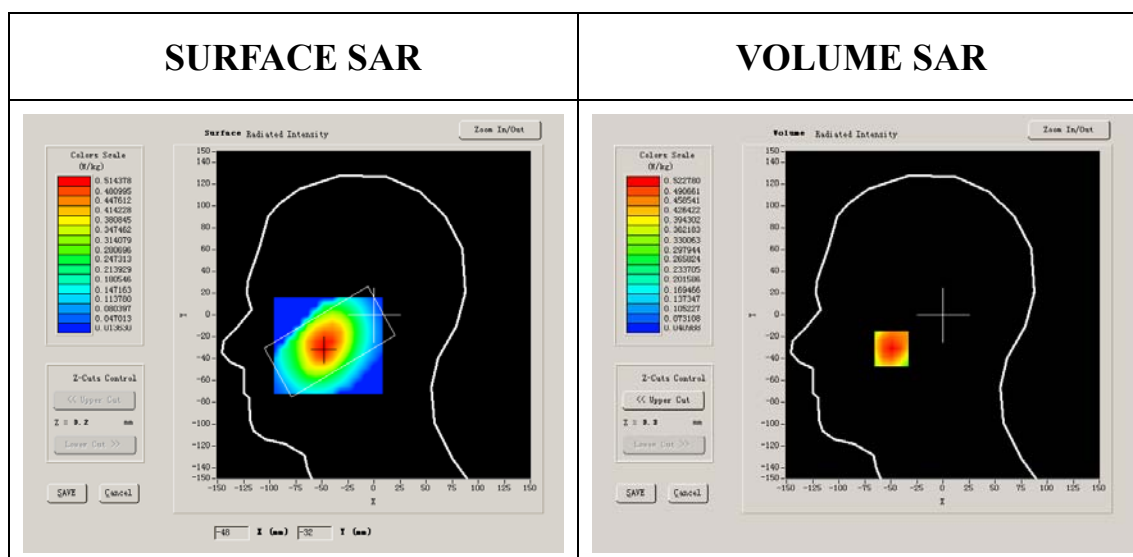
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	GSM850
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 190):

Frequency (MHz)	836.599976
Relative permittivity (real part)	40.669998
Relative permittivity	19.120001

Conductivity (S/m)	0.888655
Variation (%)	-0.090000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



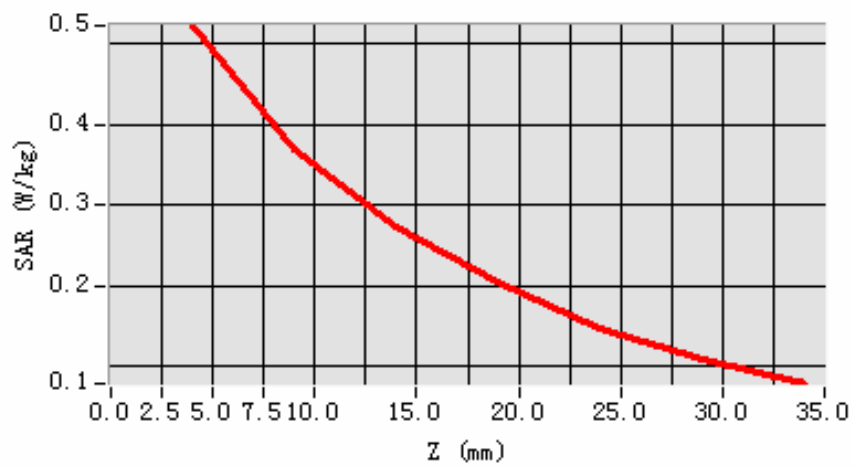
Maximum location: X=-49.00, Y=-31.00

SAR 10g (W/Kg)	0.353867
SAR 1g (W/Kg)	0.506610

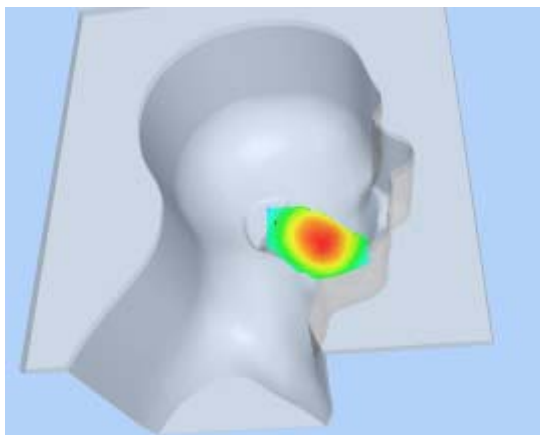
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5228	0.3690	0.2720	0.2037	0.1474	0.1097

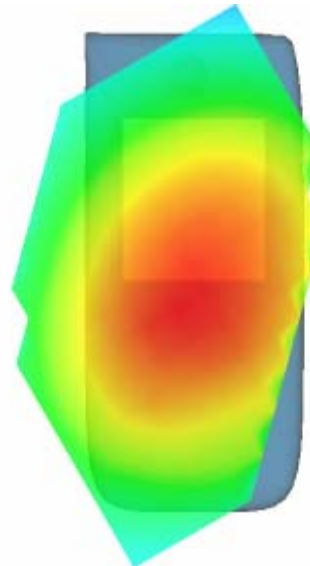
SAR, Z Axis Scan (X = -49, Y = -31)



3D scen shot



Hot spot position



MEASUREMENT 9

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 8 minutes 0 seconds

A. Experimental conditions.

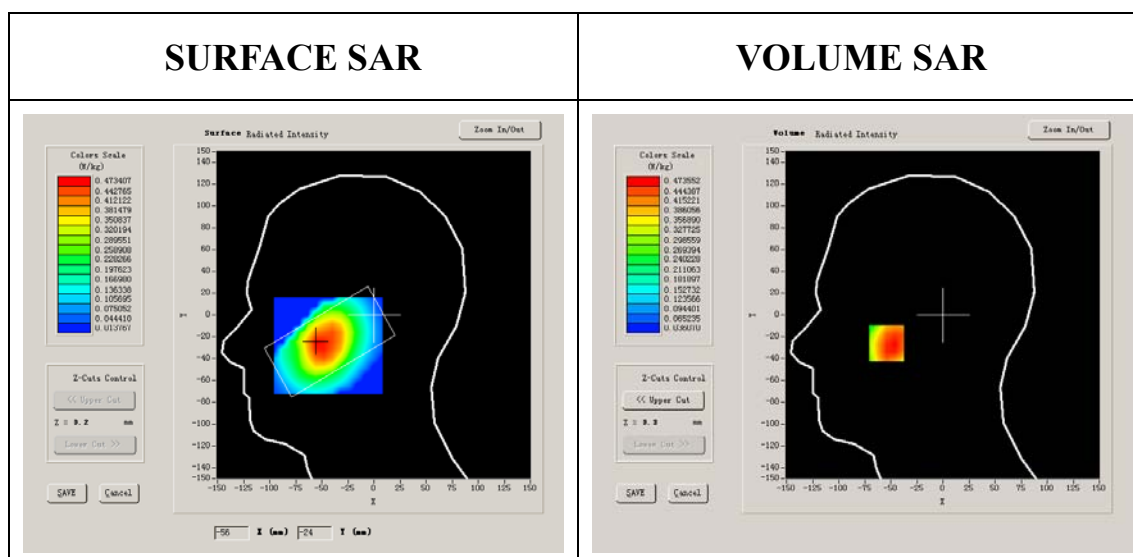
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Cheek
Band	GSM850
Channels	High
Signal	GSM

B. SAR Measurement Results

Higher Band SAR (Channel 251):

Frequency (MHz)	848.799988
Relative permittivity (real part)	41.675999
Relative permittivity	18.967199

Conductivity (S/m)	0.894409
Variation (%)	-3.400000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



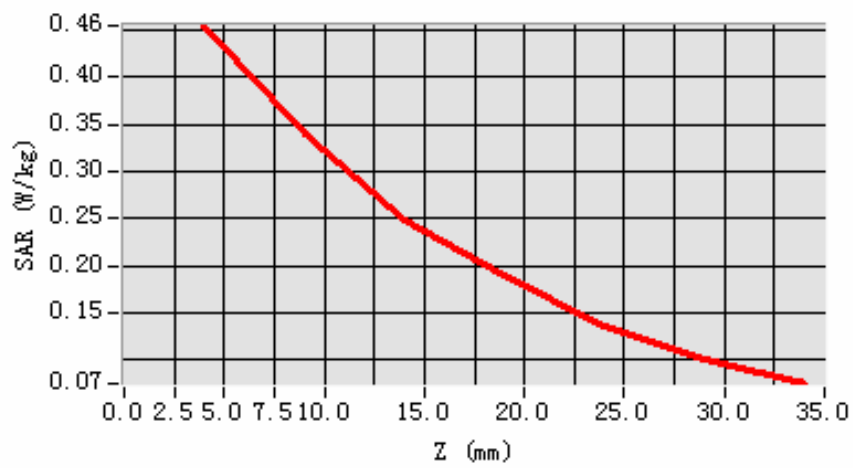
Maximum location: X=-54.00, Y=-26.00

SAR 10g (W/Kg)	0.324970
SAR 1g (W/Kg)	0.462642

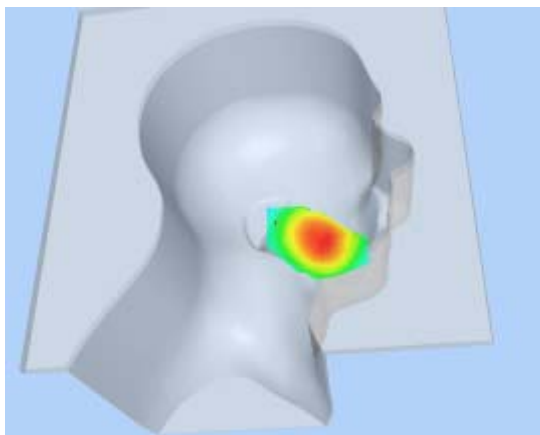
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4550	0.3411	0.2476	0.1885	0.1348	0.0999

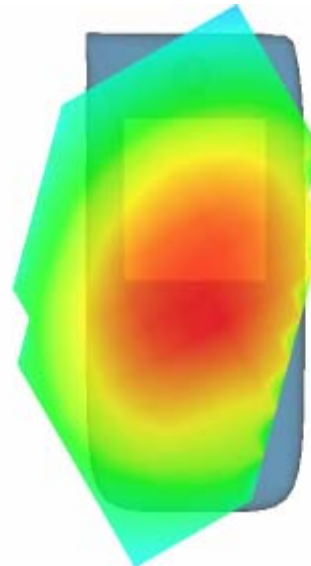
SAR, Z Axis Scan (X = -54, Y = -26)



3D scen shot



Hot spot position



MEASUREMENT 10

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 7 minutes 38 seconds

A. Experimental conditions.

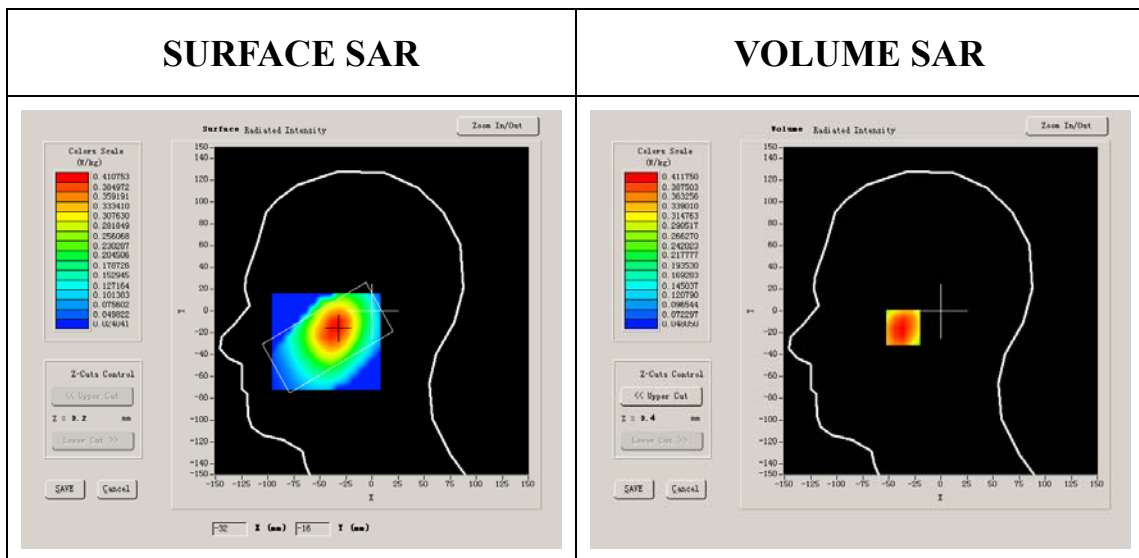
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Tilt
Band	GSM850
Channels	Low
Signal	GSM

B. SAR Measurement Results

Lower Band SAR (Channel 128):

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

Conductivity (S/m)	0.866612
Variation (%)	-0.750000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



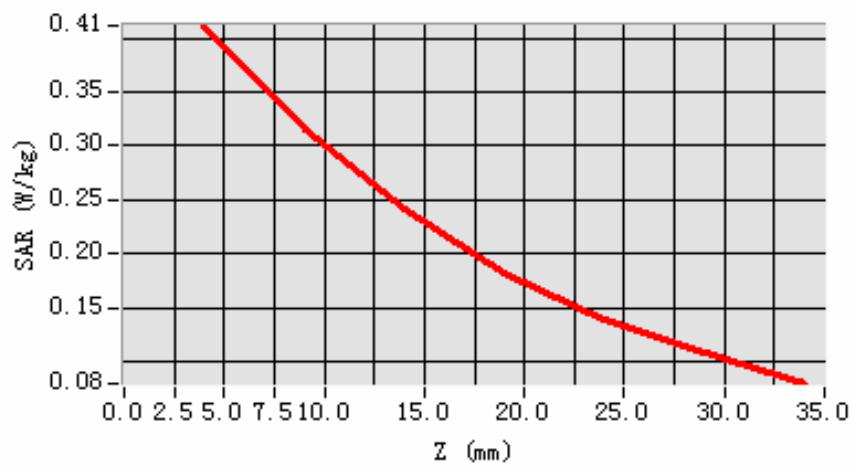
Maximum location: X=-34.00, Y=-15.00

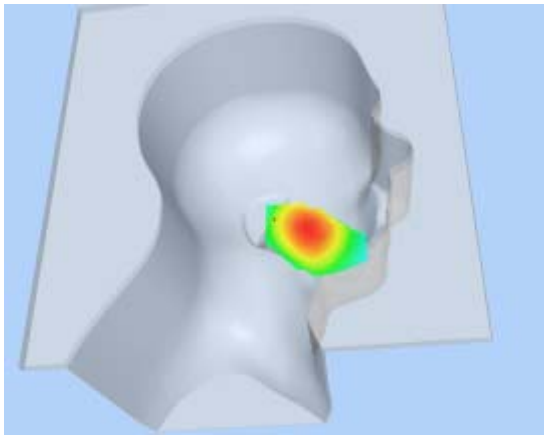
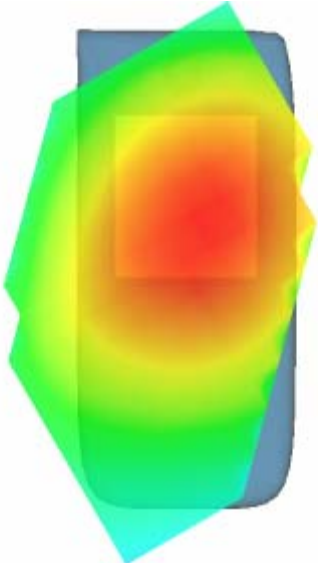
SAR 10g (W/Kg)	0.286888
SAR 1g (W/Kg)	0.398934

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4118	0.3149	0.2416	0.1823	0.1387	0.1082

SAR, Z Axis Scan (X = -34, Y = -15)



3D scen shot	Hot spot position
	

MEASUREMENT 11

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 7 minutes 47 seconds

A. Experimental conditions.

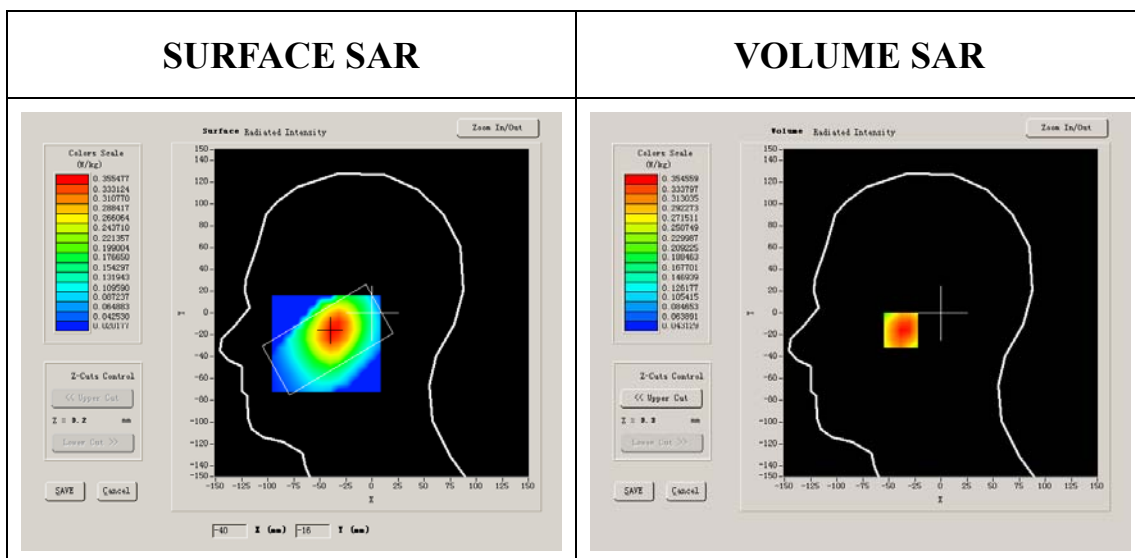
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Tilt
Band	GSM850
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 190):

Frequency (MHz)	836.599976
Relative permittivity (real part)	40.669998
Relative permittivity	19.120001

Conductivity (S/m)	0.888655
Variation (%)	-0.380000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



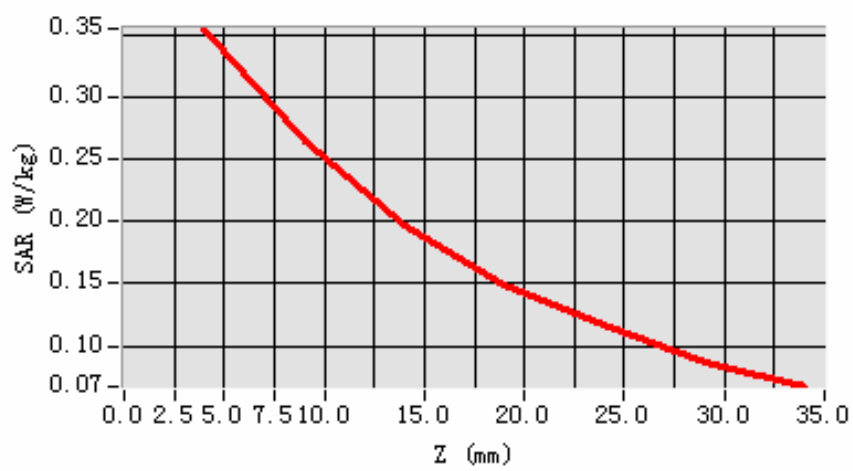
Maximum location: X=-38.00, Y=-16.00

SAR 10g (W/Kg)	0.241571
SAR 1g (W/Kg)	0.342795

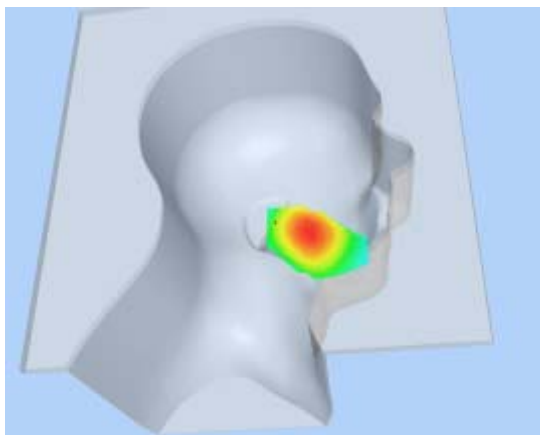
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.3546	0.2646	0.1968	0.1492	0.1162	0.0866

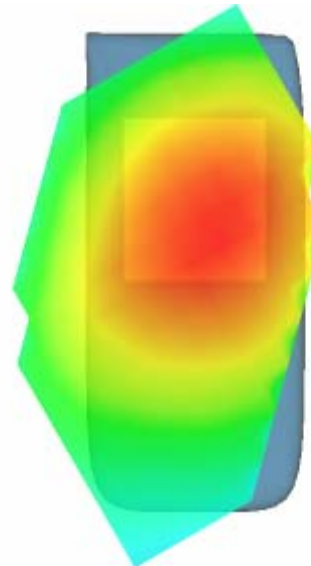
SAR, Z Axis Scan (X = -38, Y = -16)



3D scen shot



Hot spot position



MEASUREMENT 12

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 7 minutes 34 seconds

A. Experimental conditions.

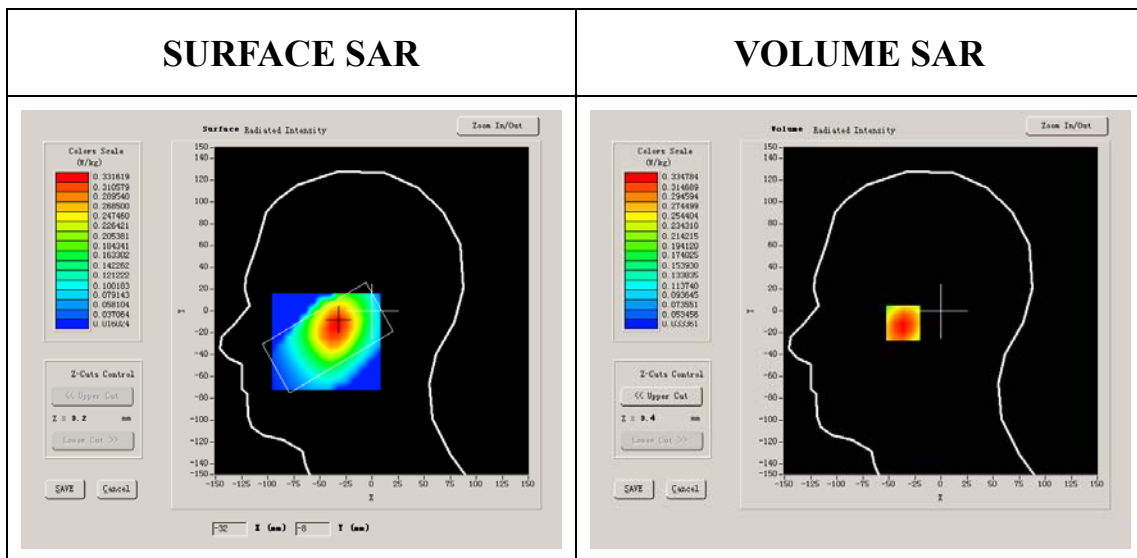
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Tilt
Band	GSM850
Channels	High
Signal	GSM

B. SAR Measurement Results

Higher Band SAR (Channel 251):

Frequency (MHz)	848.799988
Relative permittivity (real part)	41.675999
Relative permittivity	18.967199

Conductivity (S/m)	0.894409
Variation (%)	-0.830000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



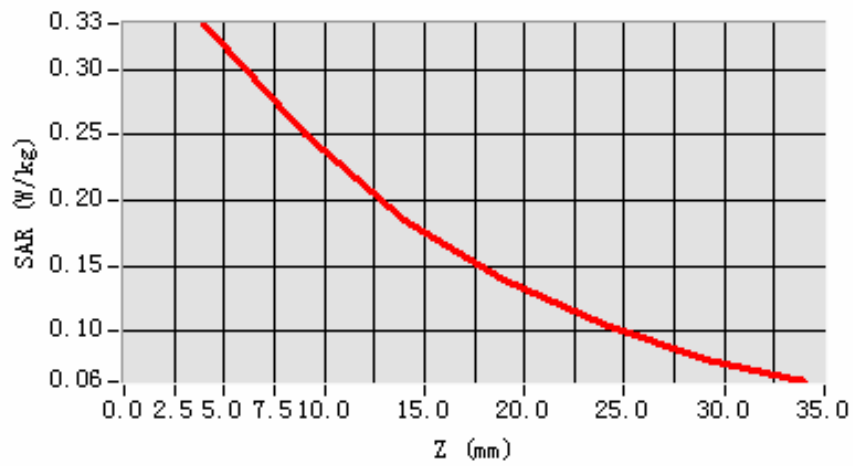
Maximum location: X=-34.00, Y=-11.00

SAR 10g (W/Kg)	0.228796
SAR 1g (W/Kg)	0.326076

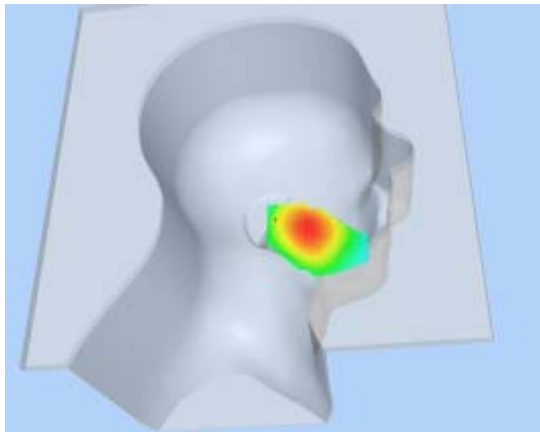
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.3348	0.2497	0.1846	0.1392	0.1058	0.0788

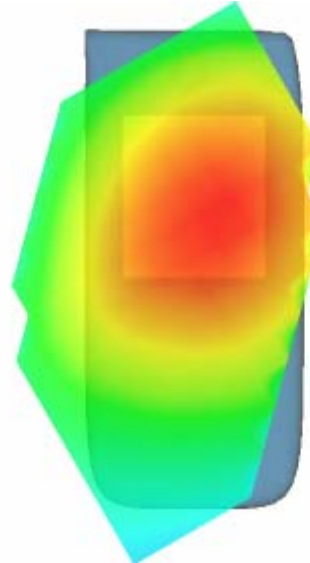
SAR, Z Axis Scan (X = -34, Y = -11)



3D scen shot



Hot spot position



MEASUREMENT 13

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 9 minutes 7 seconds

A. Experimental conditions.

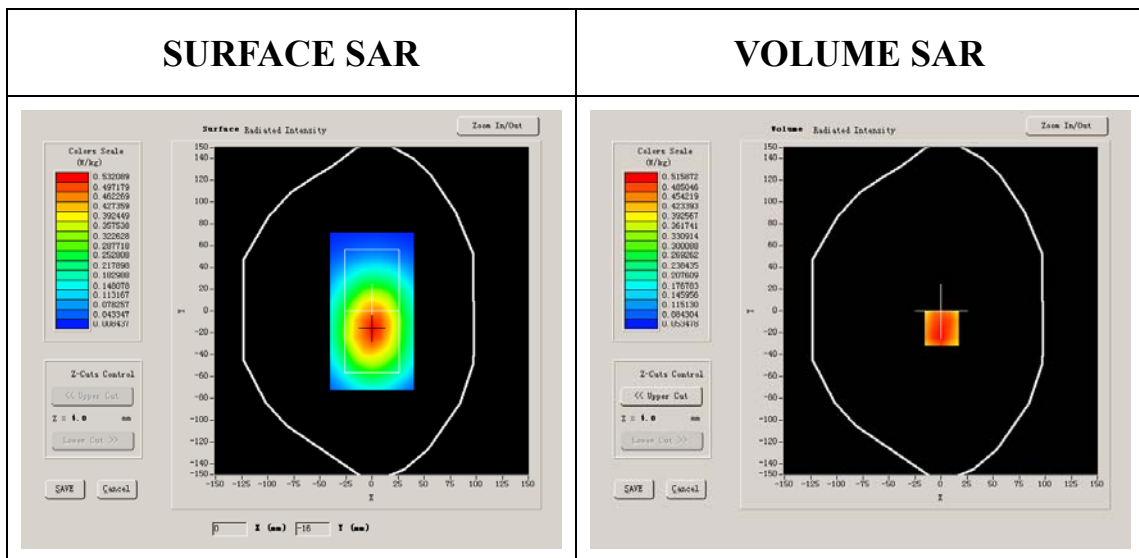
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Low
Signal	GPRS

B. SAR Measurement Results

Lower Band SAR (Channel 128):

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

Conductivity (S/m)	0.974596
Variation (%)	-0.520000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:2

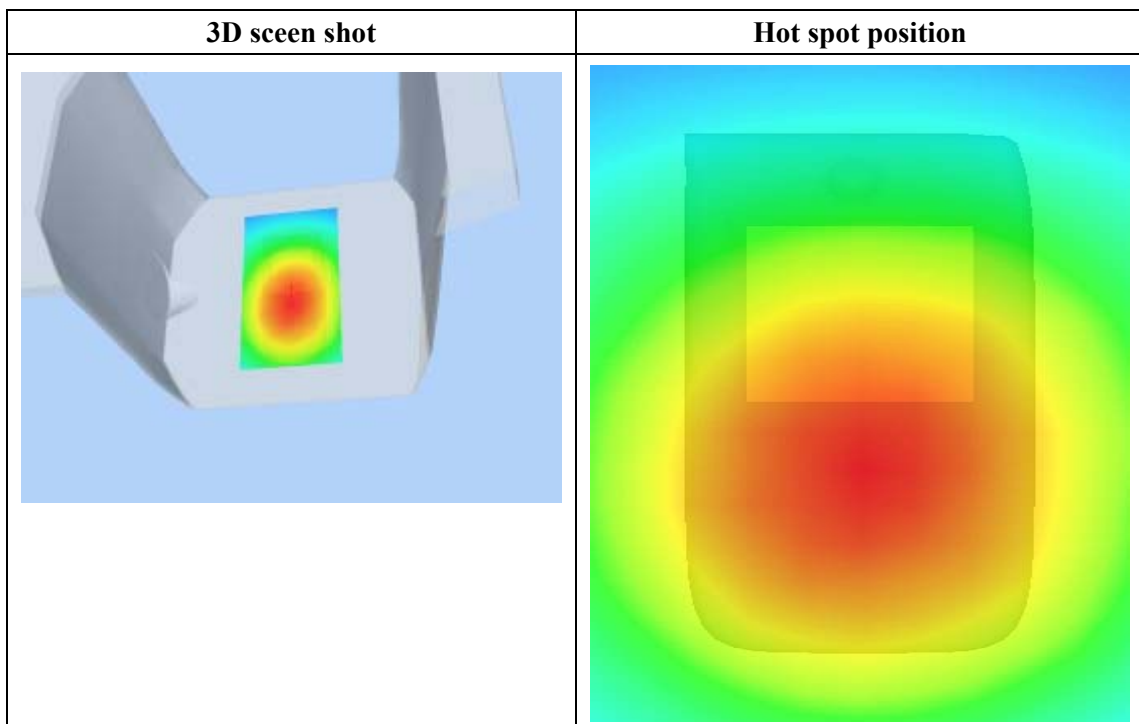
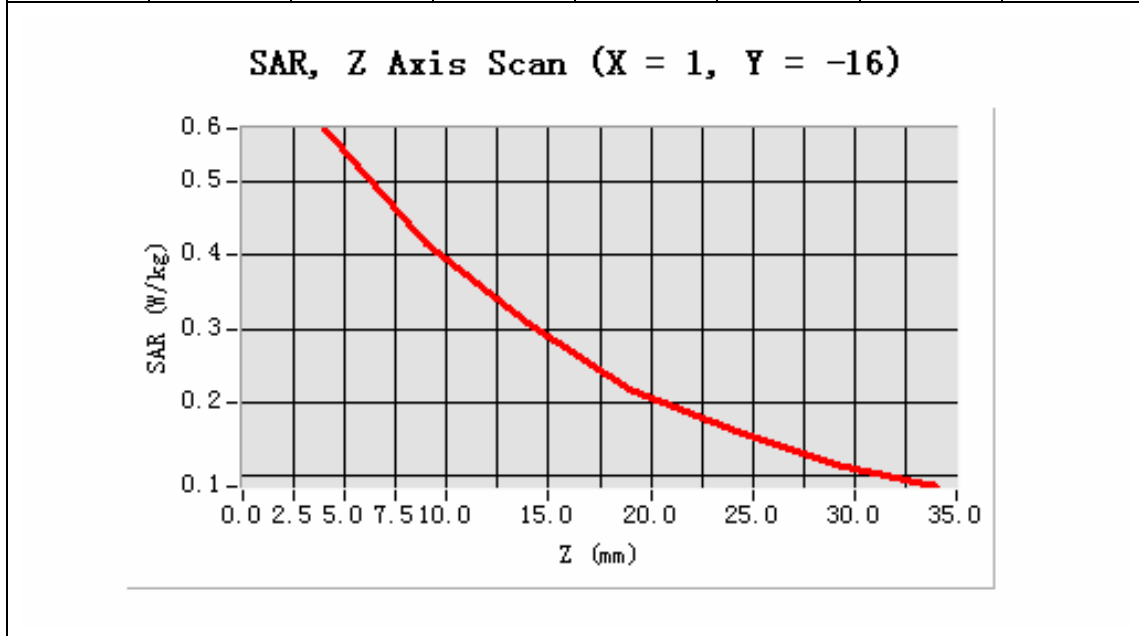


Maximum location: X=1.00, Y=-16.00

SAR 10g (W/Kg)	0.489947
SAR 1g (W/Kg)	0.760411

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5715	0.4146	0.3089	0.2189	0.1641	0.1170



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: 5/8/2010

Measurement duration: 9 minutes 7 seconds

A. Experimental conditions.

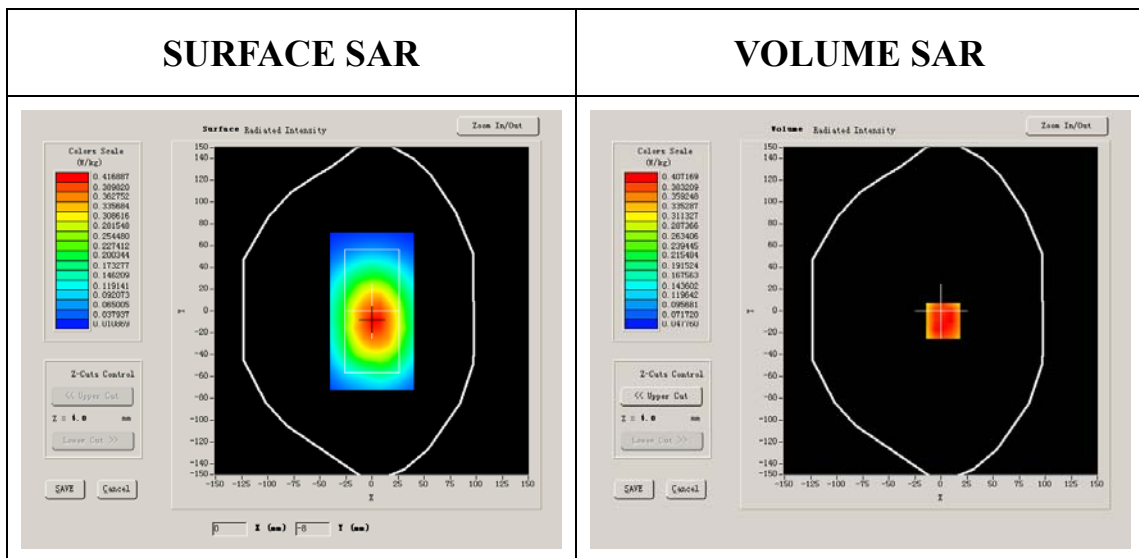
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Middle
Signal	GPRS

B. SAR Measurement Results

Middle Band SAR (Channel 190):

Frequency (MHz)	836.599976
Relative permittivity (real part)	55.709999
Relative permittivity	21.709999

Conductivity (S/m)	1.009033
Variation (%)	-1.000000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:2



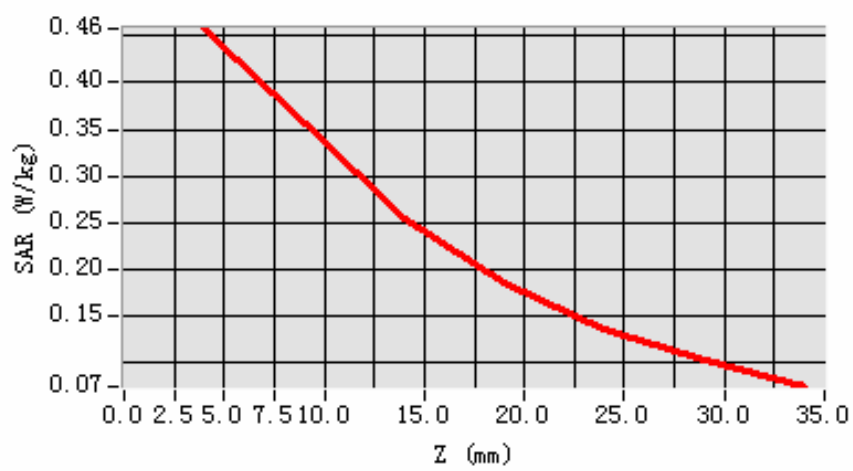
Maximum location: X=2.00, Y=-9.00

SAR 10g (W/Kg)	0.470114
SAR 1g (W/Kg)	0.753438

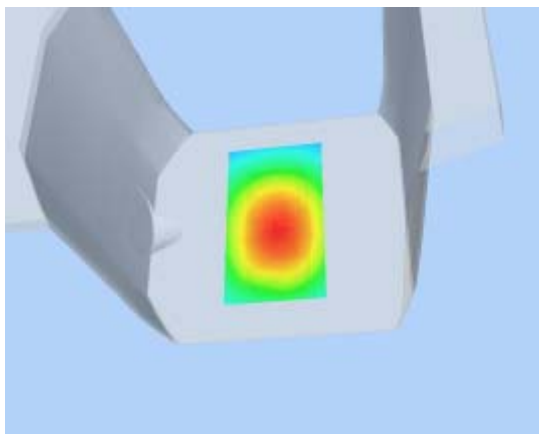
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4576	0.3554	0.2550	0.1867	0.1373	0.1021

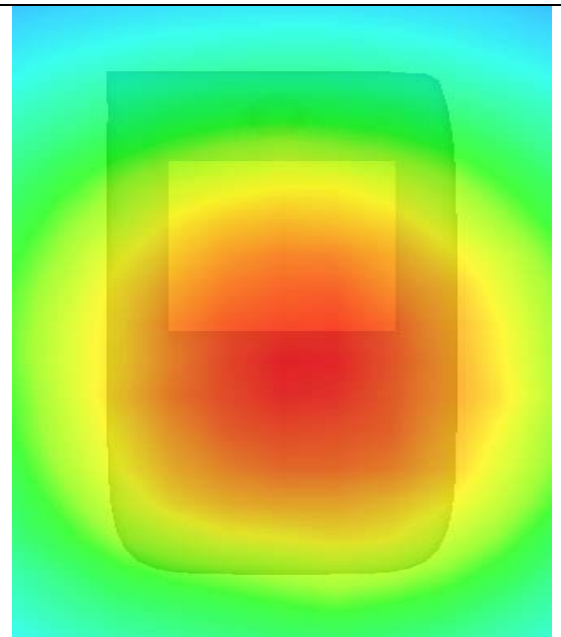
SAR, Z Axis Scan (X = 2, Y = -9)



3D scene shot



Hot spot position



MEASUREMENT 15

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 9 minutes 6 seconds

A. Experimental conditions.

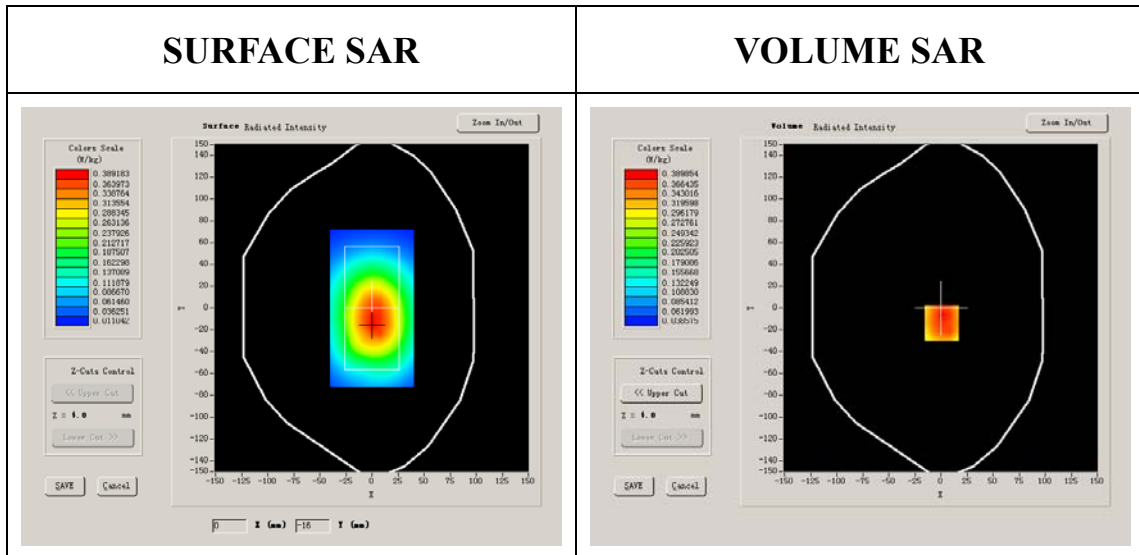
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	High
Signal	GPRS

B. SAR Measurement Results

Higher Band SAR (Channel 251):

Frequency (MHz)	848.799988
Relative permittivity (real part)	54.014999
Relative permittivity	21.332850

Conductivity (S/m)	1.005962
Variation (%)	-1.230000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:2

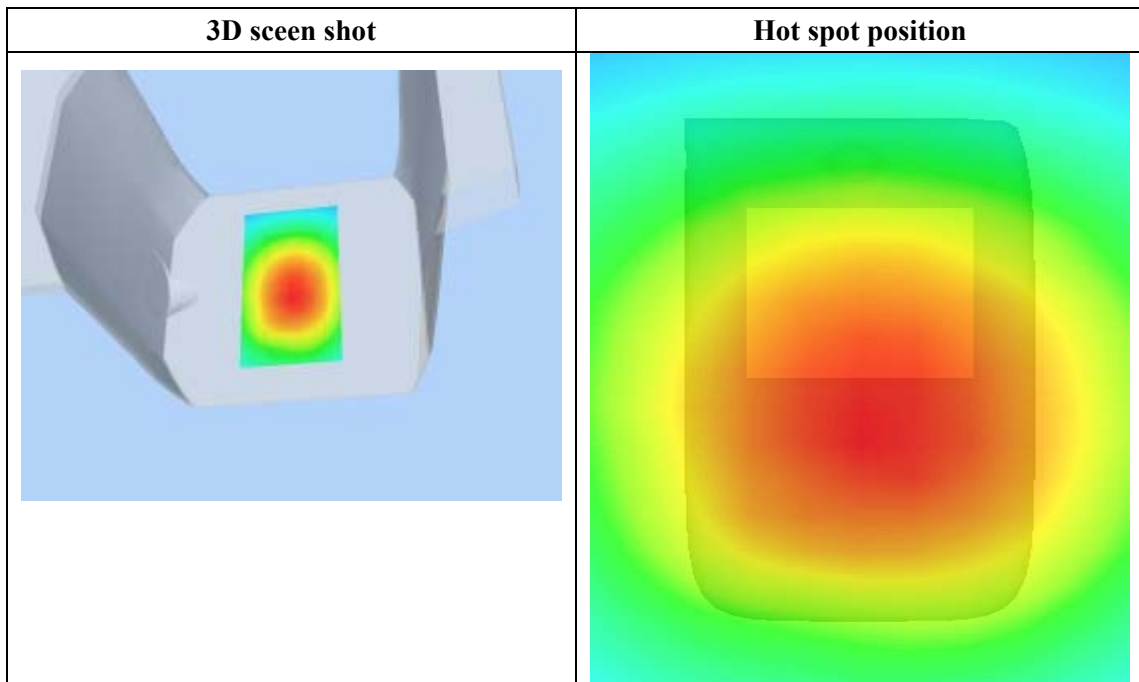
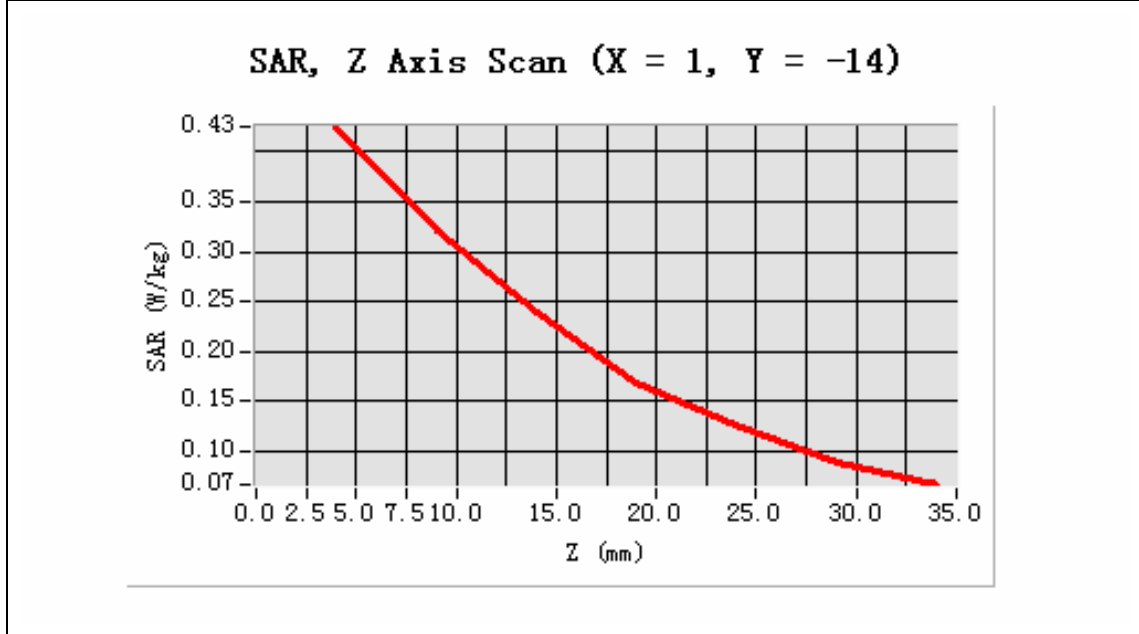


Maximum location: X=1.00, Y=-14.00

SAR 10g (W/Kg)	0.446868
SAR 1g (W/Kg)	0.720487

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.4255	0.3214	0.2400	0.1678	0.1271	0.0882



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: 5/8/2010

Measurement duration: 9 minutes 8 seconds

A. Experimental conditions.

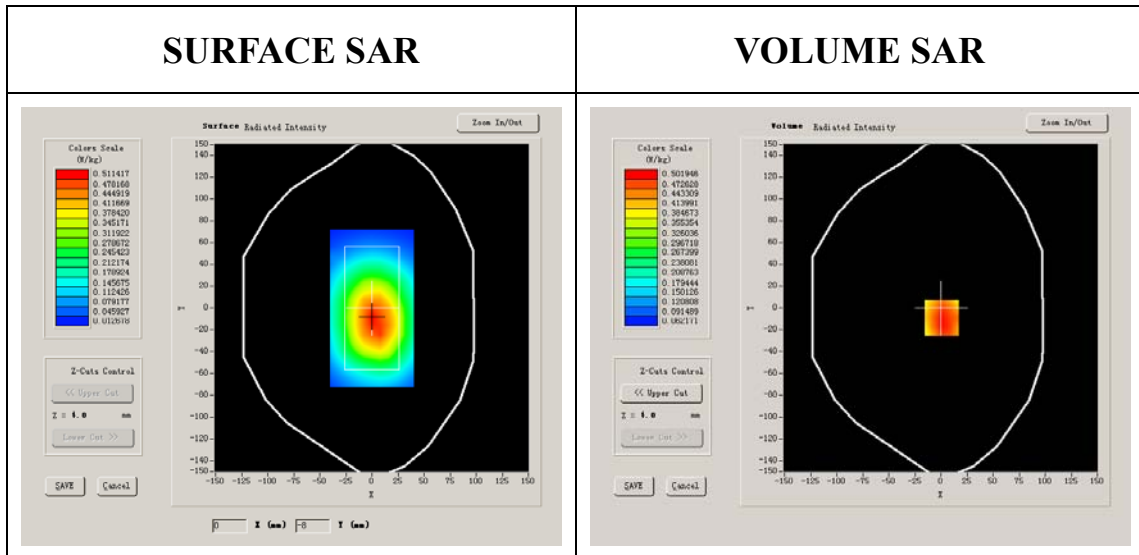
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Low
Signal	GPRS

B. SAR Measurement Results

Lower Band SAR (Channel 128):

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

Conductivity (S/m)	0.974596
Variation (%)	-2.480000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:2



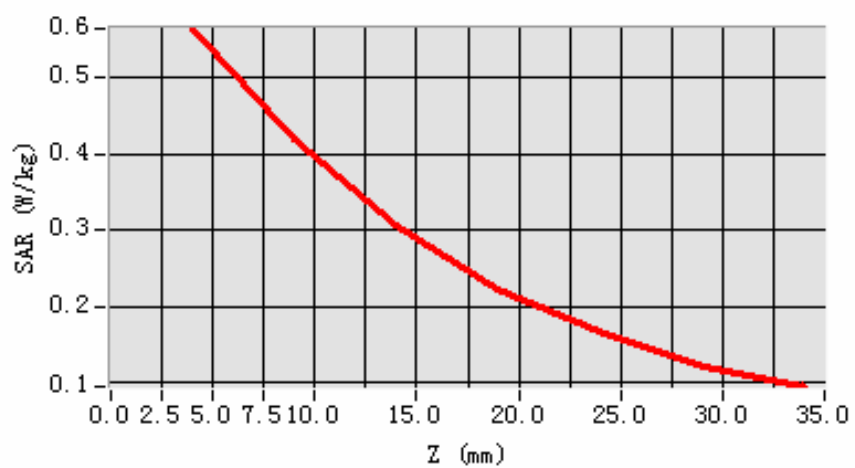
Maximum location: X=1.00, Y=-9.00

SAR 10g (W/Kg)	0.386075
SAR 1g (W/Kg)	0.543538

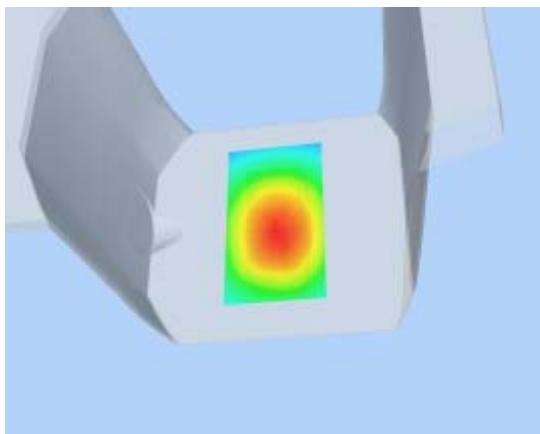
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5645	0.4211	0.3056	0.2232	0.1681	0.1221

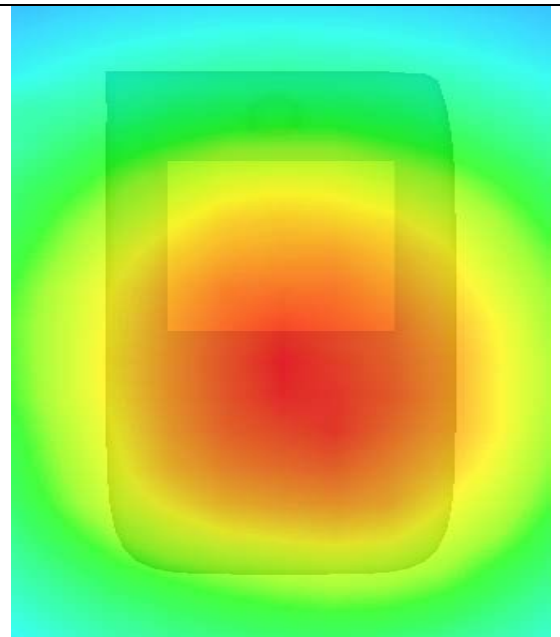
SAR, Z Axis Scan (X = 1, Y = -9)



3D scene shot



Hot spot position



MEASUREMENT 17

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 9 minutes 9 seconds

A. Experimental conditions.

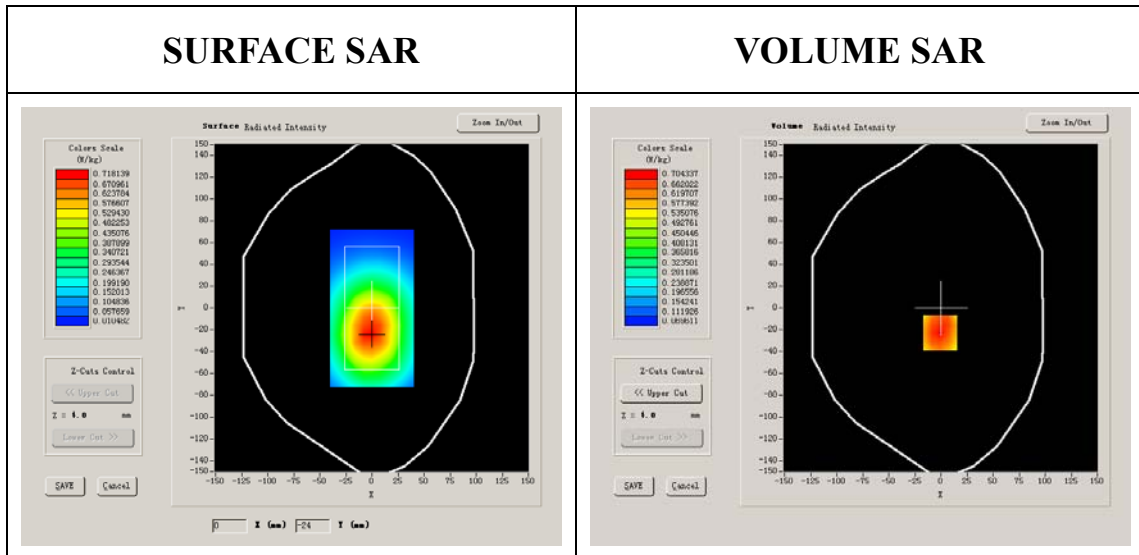
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Low
Signal	GSM

B. SAR Measurement Results

Lower Band SAR (Channel 128):

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

Conductivity (S/m)	0.974596
Variation (%)	-1.750000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



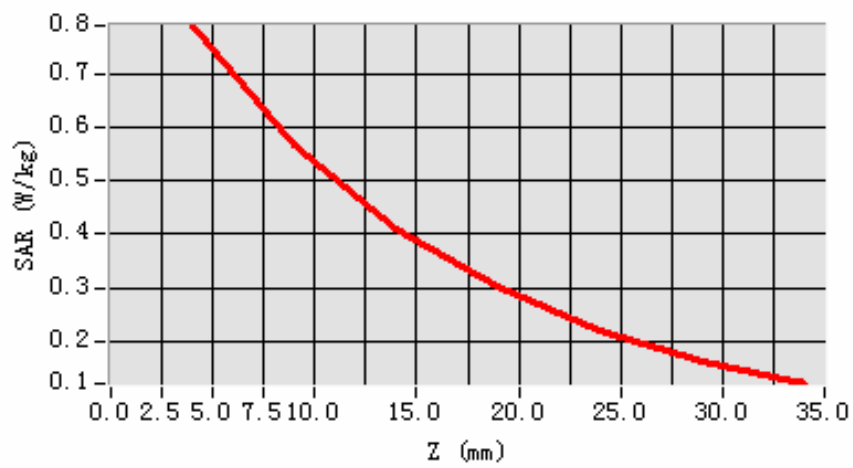
Maximum location: X=-1.00, Y=-23.00

SAR 10g (W/Kg)	0.334895
SAR 1g (W/Kg)	0.559980

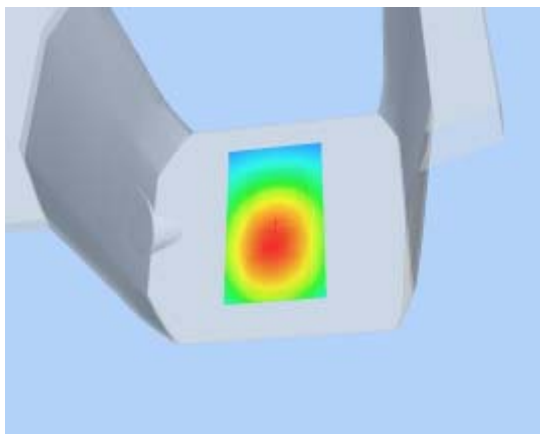
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.7921	0.5690	0.4087	0.3008	0.2204	0.1601

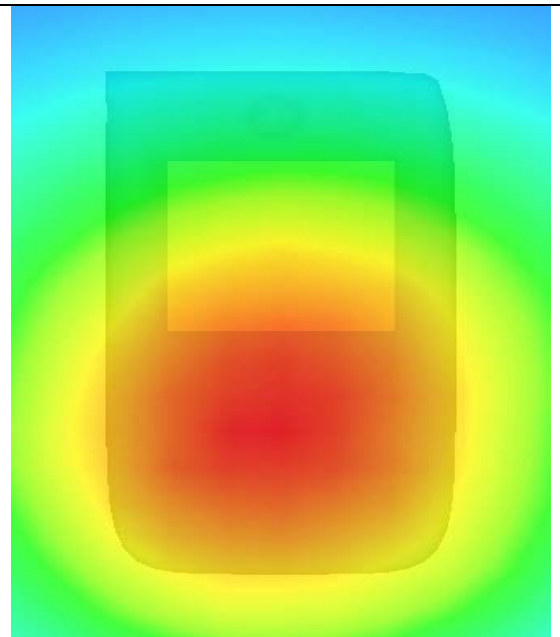
SAR, Z Axis Scan (X = -1, Y = -23)



3D scene shot



Hot spot position



MEASUREMENT 18

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 9 minutes 9 seconds

A. Experimental conditions.

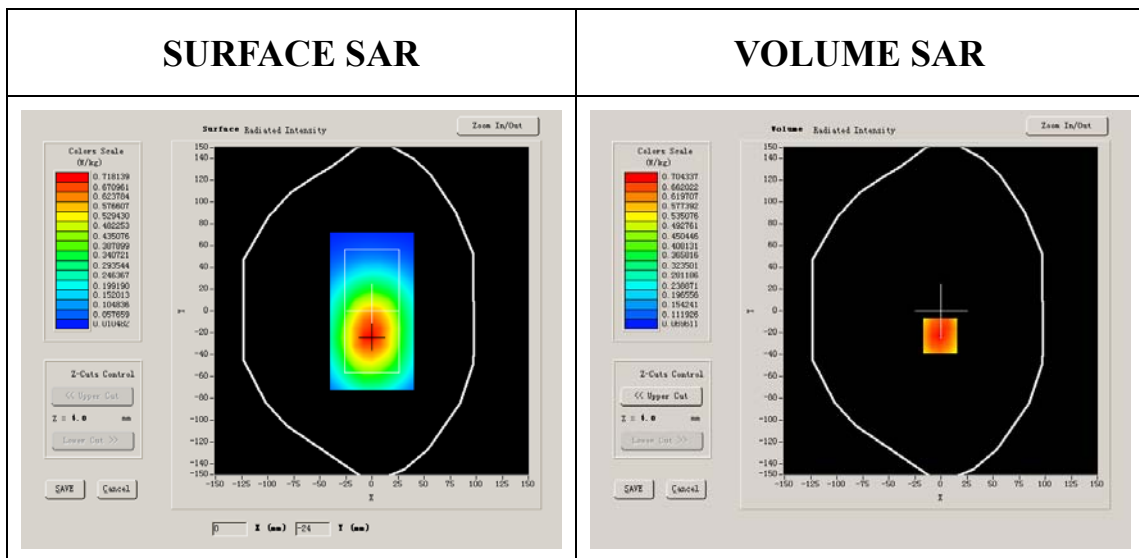
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM850
Channels	Low
Signal	GSM

B. SAR Measurement Results

Lower Band SAR (Channel 128):

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

Conductivity (S/m)	0.974596
Variation (%)	-1.750000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:8



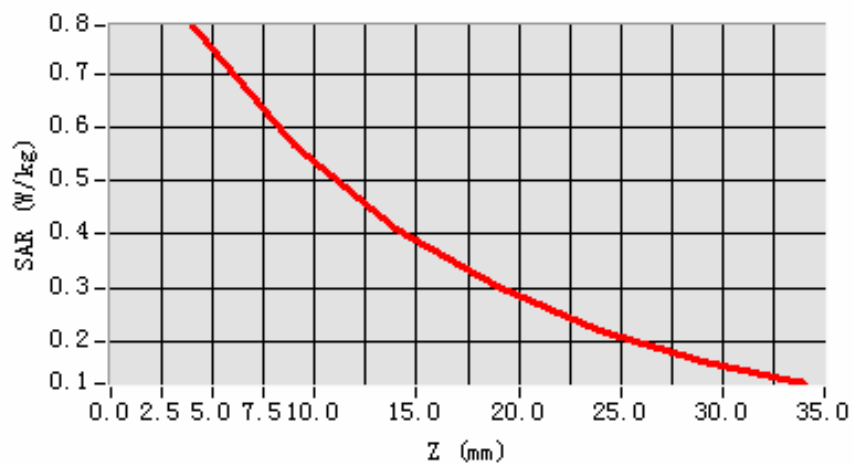
Maximum location: X=-1.00, Y=-23.00

SAR 10g (W/Kg)	0.374666
SAR 1g (W/Kg)	0.548466

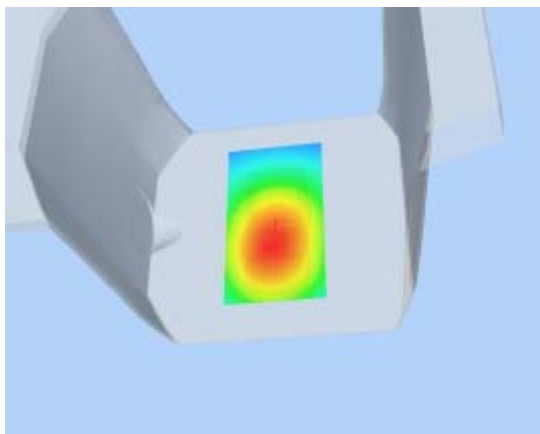
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.7921	0.5690	0.4087	0.3008	0.2204	0.1601

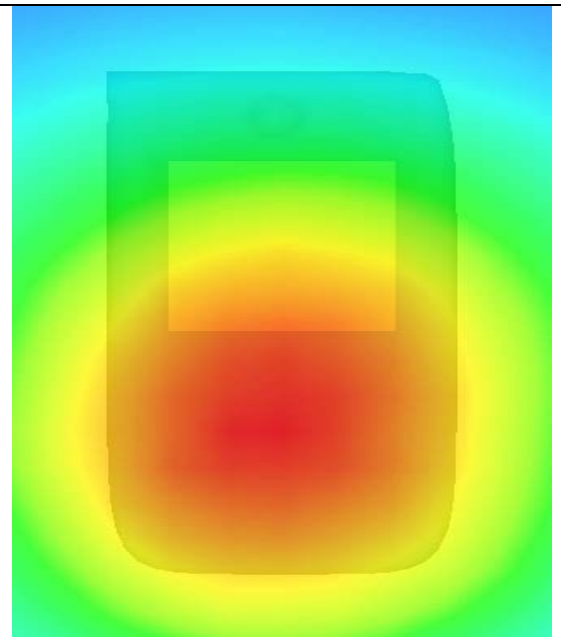
SAR, Z Axis Scan (X = -1, Y = -23)



3D scene shot



Hot spot position



MEASUREMENT 19

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 7 minutes 30 seconds

A. Experimental conditions.

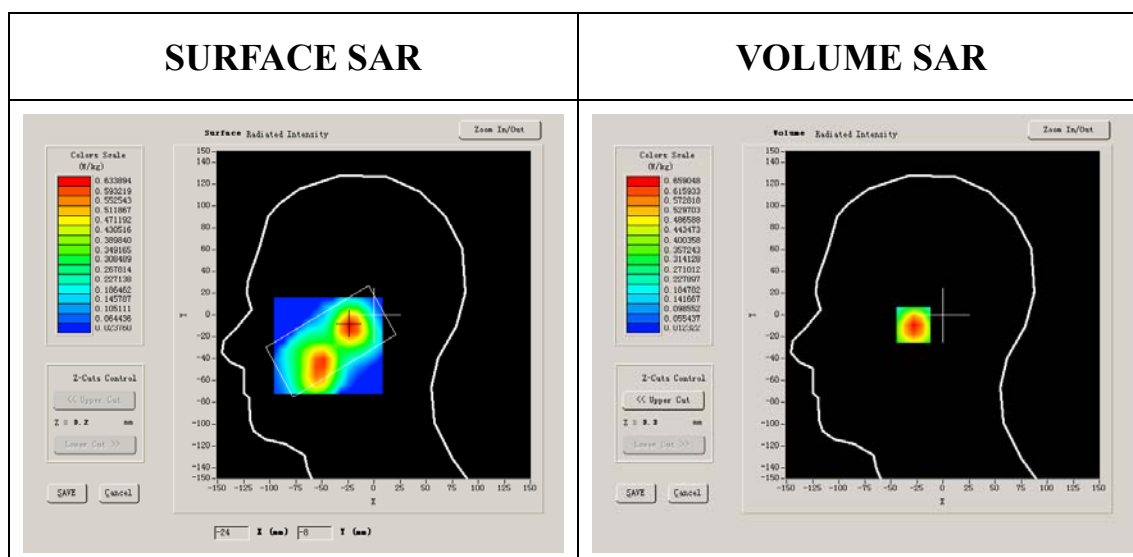
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Cheek
Band	GSM1900
Channels	Low
Signal	GSM

B. SAR Measurement Results

Lower Band SAR (Channel 512):

Frequency (MHz)	1850.199951
Relative permittivity (real part)	39.993999
Relative permittivity	12.991650

Conductivity (S/m)	1.335397
Variation (%)	1.720000
Ambient Temperature:	23.2°C
Liquid Temperature:	22.9°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:8



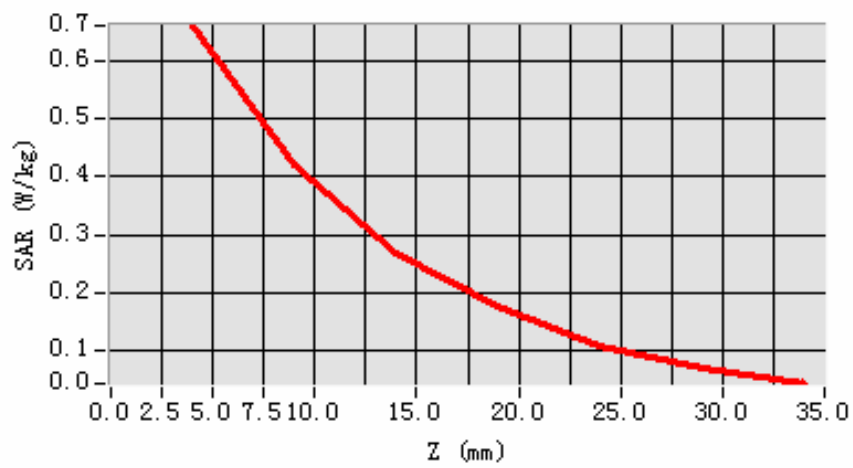
Maximum location: X=-23.00, Y=-9.00

SAR 10g (W/Kg)	0.374966
SAR 1g (W/Kg)	0.627047

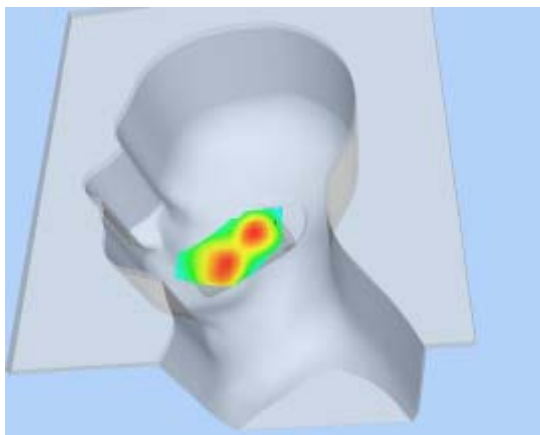
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6590	0.4203	0.2690	0.1771	0.1080	0.0701

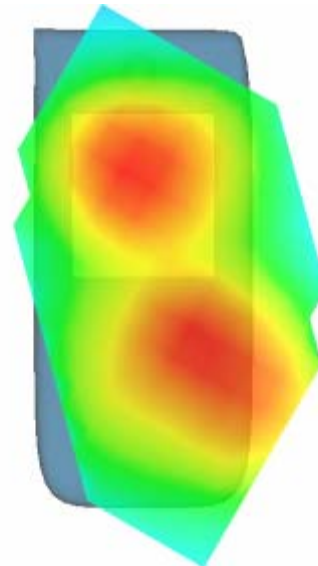
SAR, Z Axis Scan (X = -23, Y = -9)



3D scen shot



Hot spot position



MEASUREMENT 20

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 7 minutes 22 seconds

A. Experimental conditions.

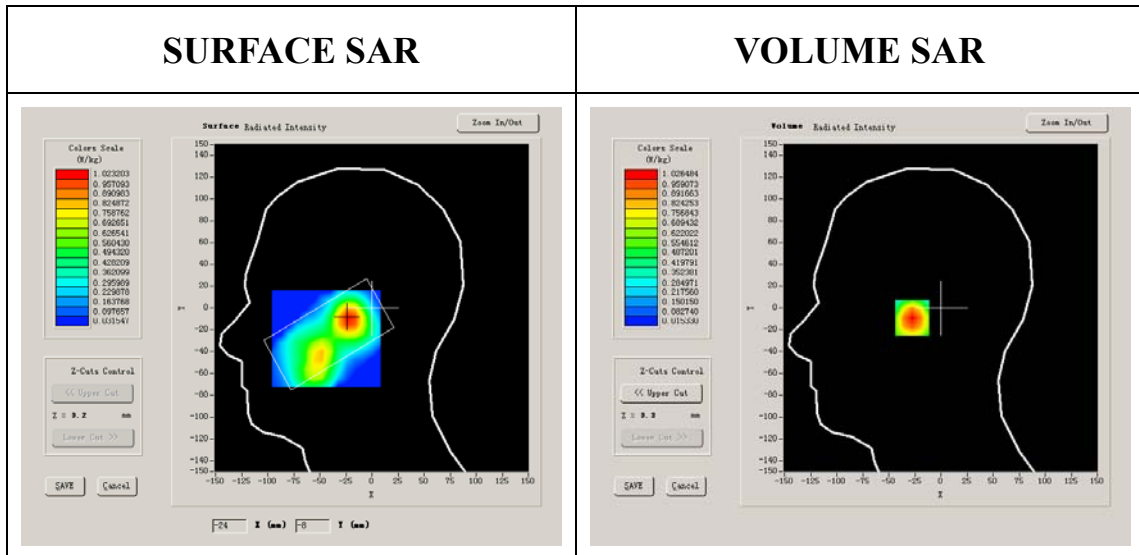
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Cheek
Band	GSM1900
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 661):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	38.509998
Relative permittivity	13.750000

Conductivity (S/m)	1.436111
Variation (%)	1.390000
Ambient Temperature:	23.2°C
Liquid Temperature:	22.9°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:8

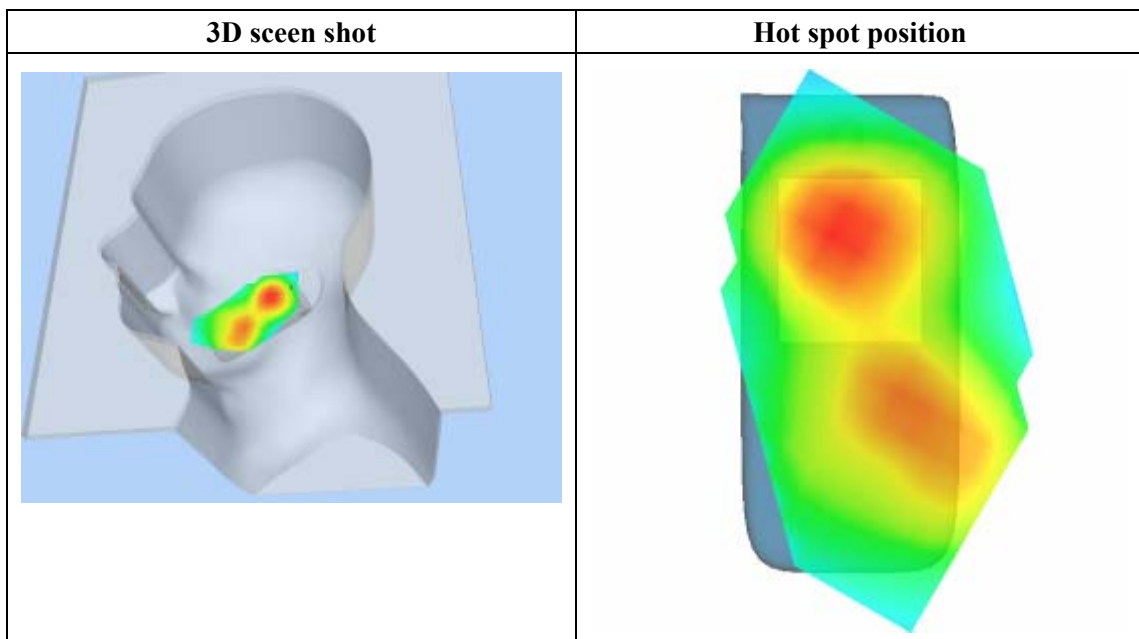
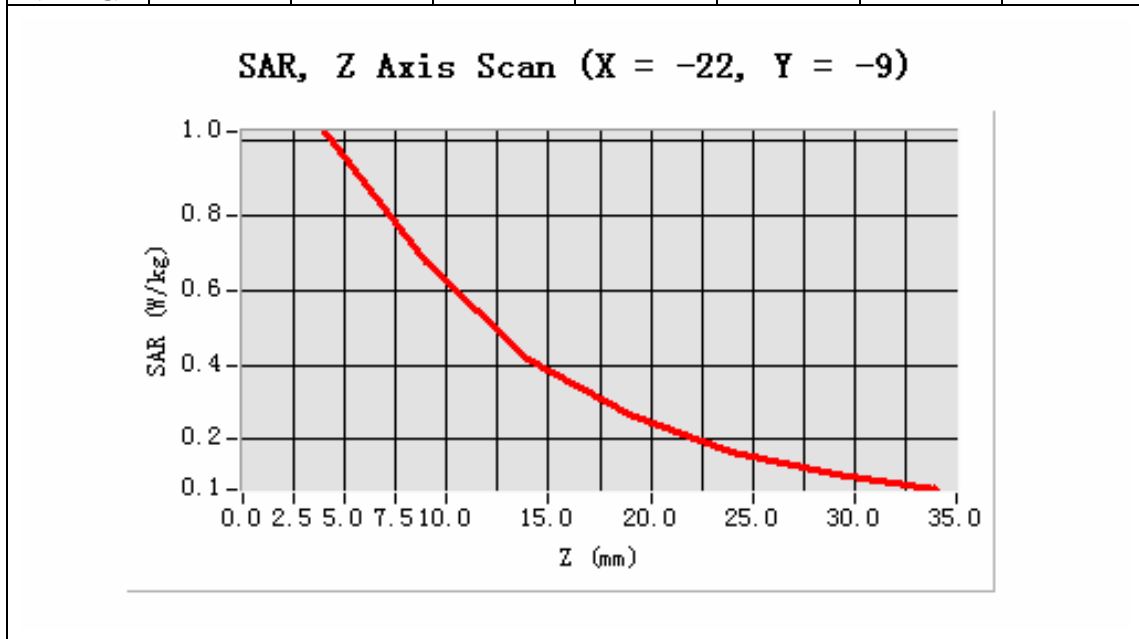


Maximum location: X=-22.00, Y=-9.00

SAR 10g (W/Kg)	0.581251
SAR 1g (W/Kg)	0.975214

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	1.0265	0.6777	0.4171	0.2658	0.1663	0.1040



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: 5/8/2010

Measurement duration: 7 minutes 30 seconds

A. Experimental conditions.

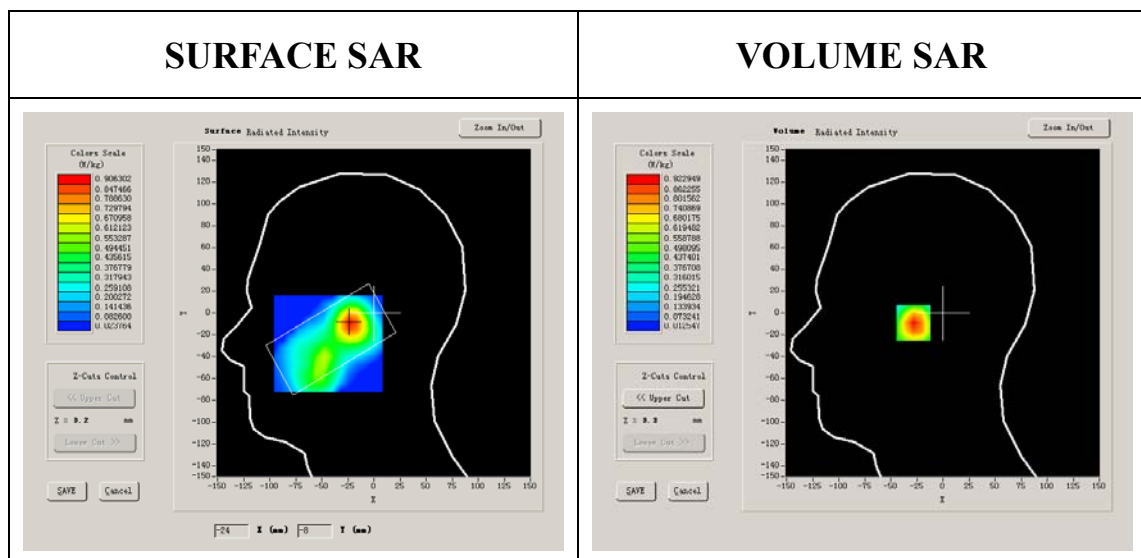
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Cheek
Band	GSM1900
Channels	High
Signal	GSM

B. SAR Measurement Results

Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049
Relative permittivity (real part)	39.929001
Relative permittivity	13.156500

Conductivity (S/m)	1.395905
Variation (%)	0.270000
Ambient Temperature:	23.2°C
Liquid Temperature:	22.9°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:8

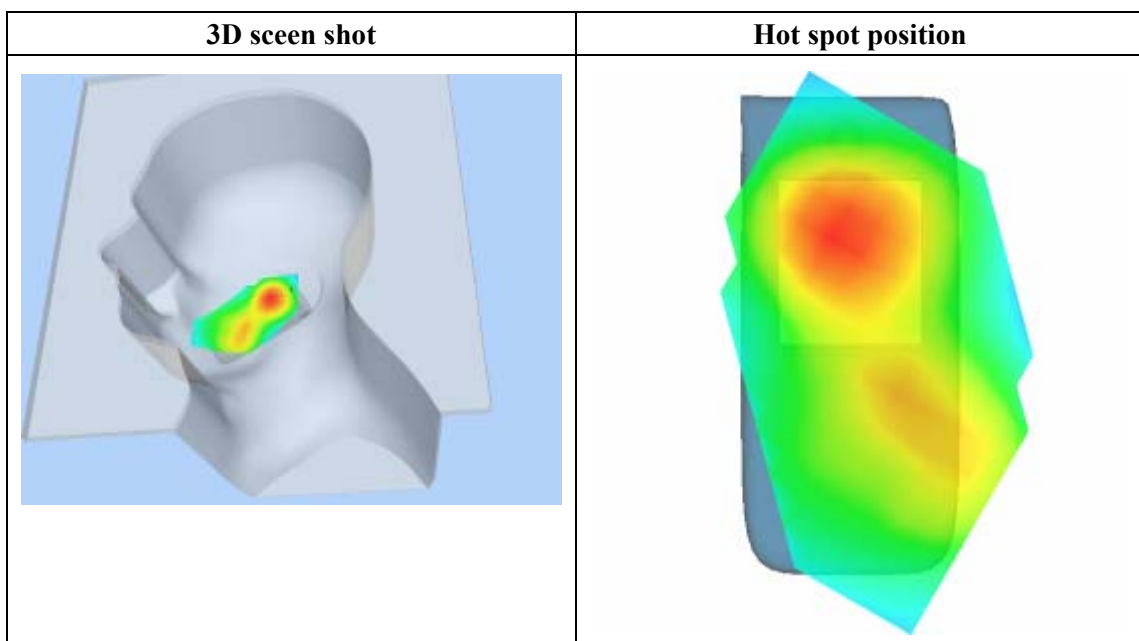
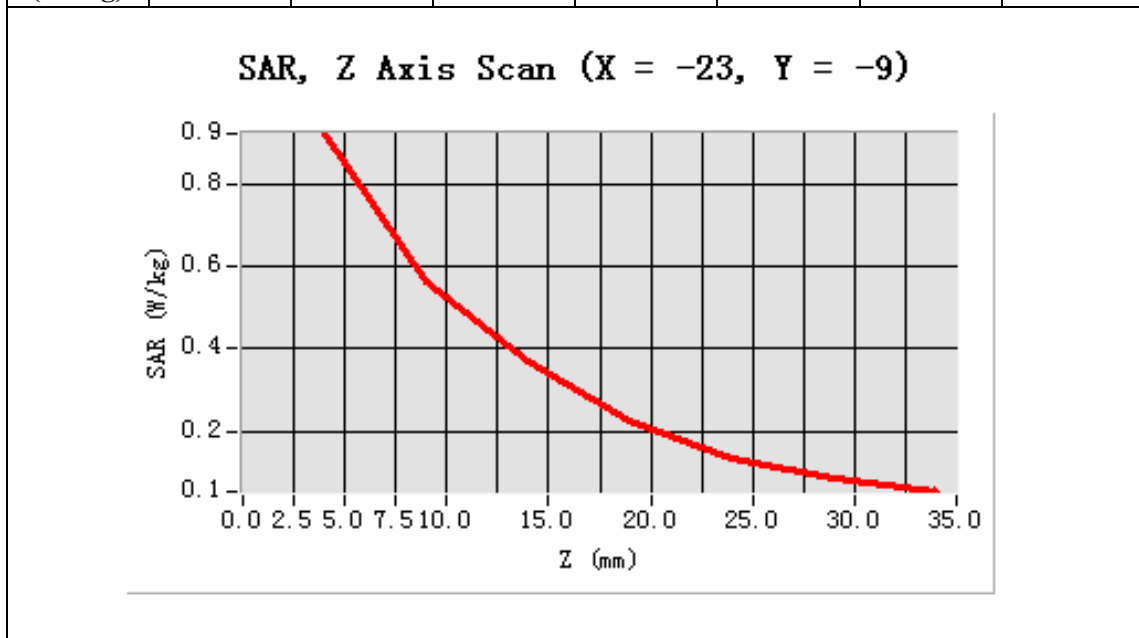


Maximum location: X=-23.00, Y=-9.00

SAR 10g (W/Kg)	0.508840
SAR 1g (W/Kg)	0.868681

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.9229	0.5658	0.3678	0.2225	0.1335	0.0838



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: 5/8/2010

Measurement duration: 7 minutes 26 seconds

A. Experimental conditions.

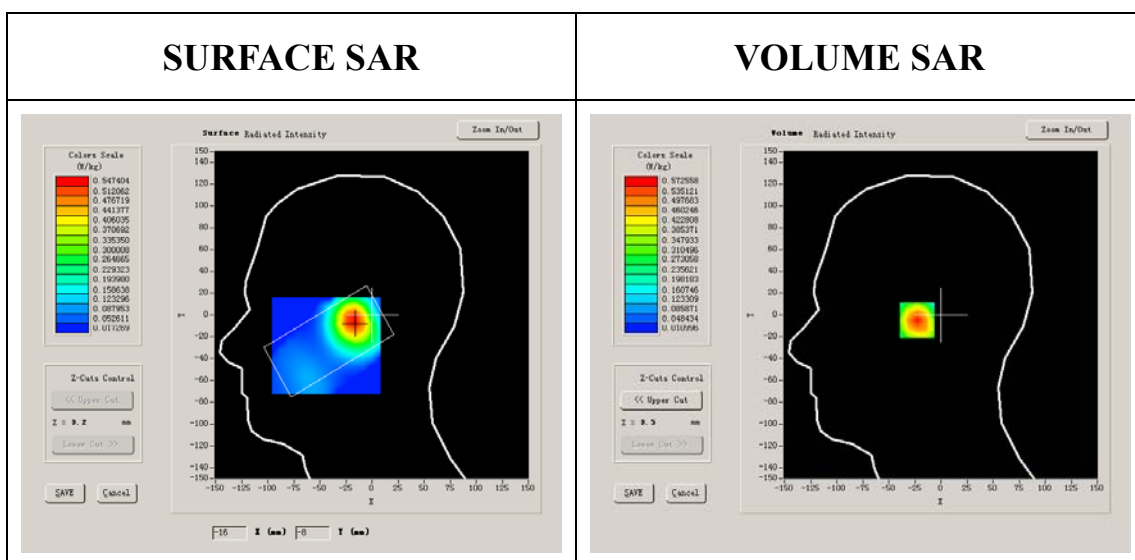
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Tilt
Band	GSM1900
Channels	Low
Signal	GSM

B. SAR Measurement Results

Lower Band SAR (Channel 512):

Frequency (MHz)	1850.199951
Relative permittivity (real part)	39.993999
Relative permittivity	12.991650

Conductivity (S/m)	1.335397
Variation (%)	-0.080000
Ambient Temperature:	23.2°C
Liquid Temperature:	22.9°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:8

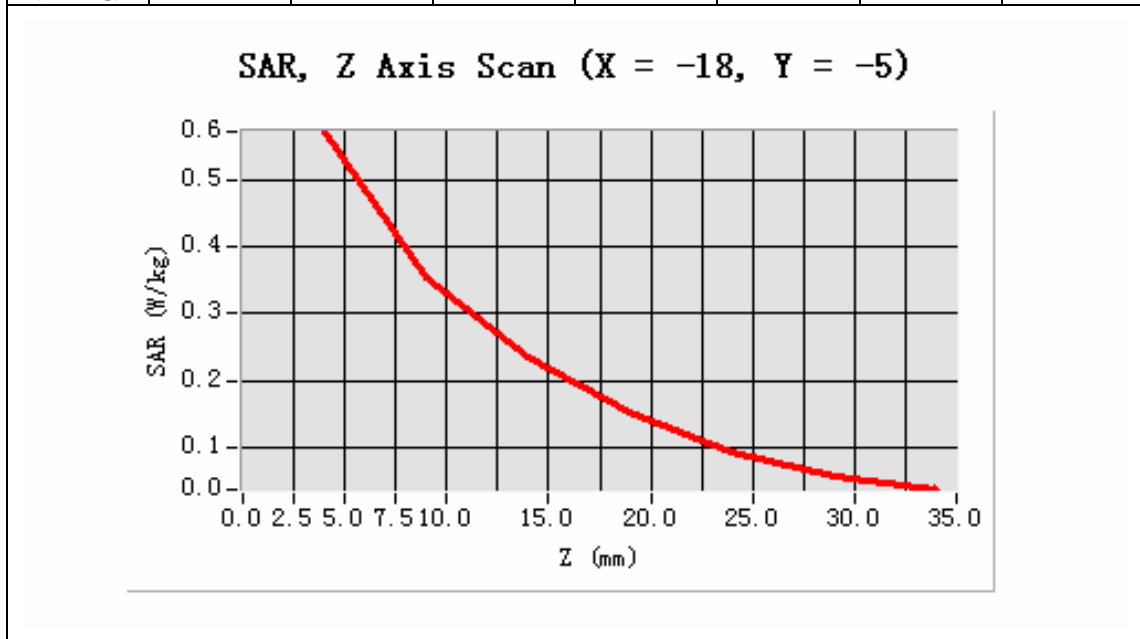


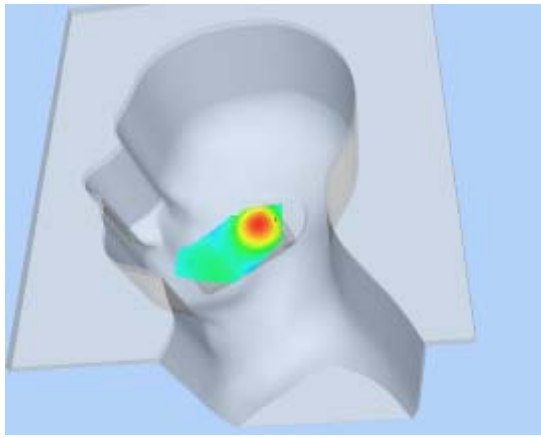
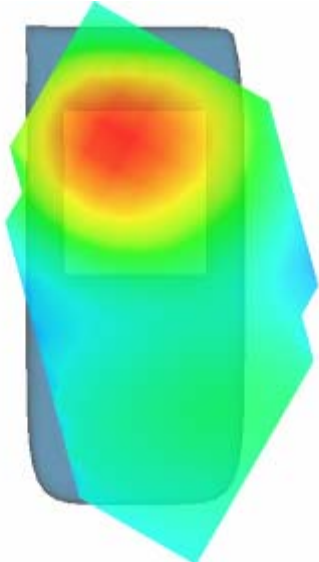
Maximum location: X=-18.00, Y=-5.00

SAR 10g (W/Kg)	0.317806
SAR 1g (W/Kg)	0.536354

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5726	0.3525	0.2337	0.1509	0.0923	0.0570



3D scen shot	Hot spot position
	

MEASUREMENT 23

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 7 minutes 22 seconds

A. Experimental conditions.

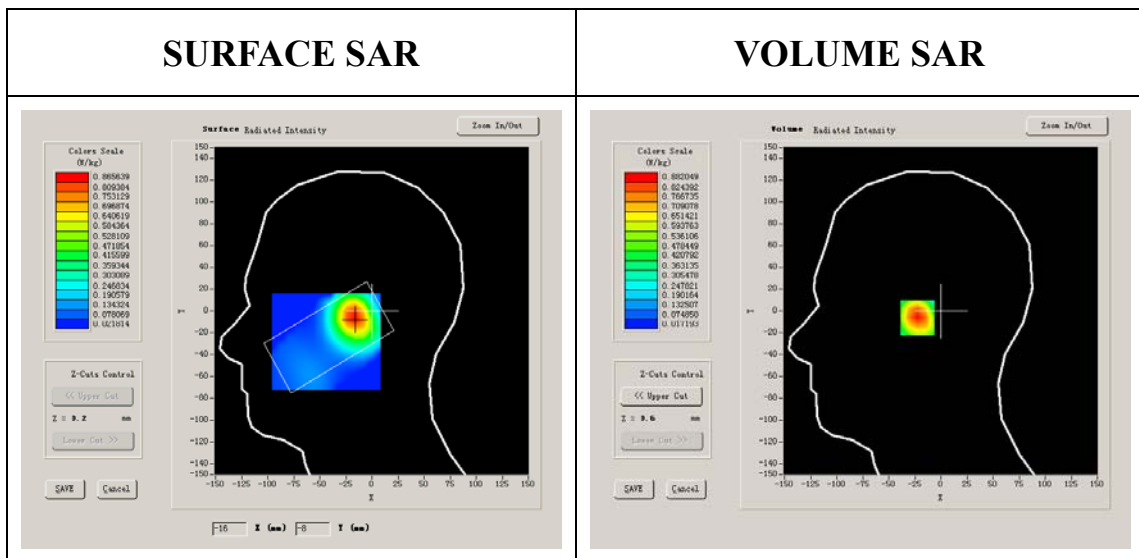
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Tilt
Band	GSM1900
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 661):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	38.509998
Relative permittivity	13.750000

Conductivity (S/m)	1.436111
Variation (%)	0.370000
Ambient Temperature:	23.2°C
Liquid Temperature:	22.9°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:8



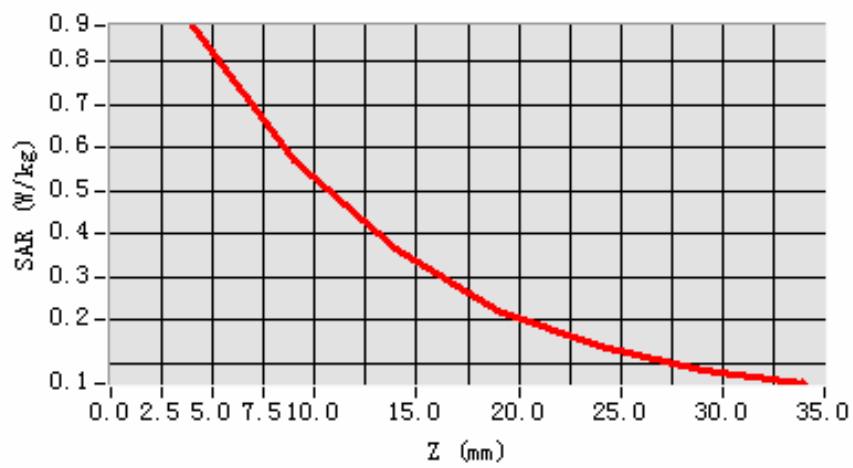
Maximum location: X=-17.00, Y=-6.00

SAR 10g (W/Kg)	0.494843
SAR 1g (W/Kg)	0.833110

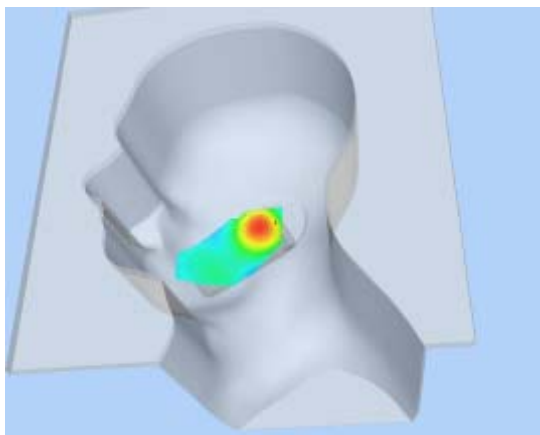
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.8820	0.5705	0.3667	0.2237	0.1417	0.0853

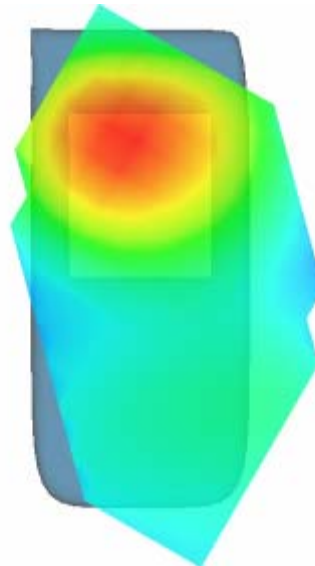
SAR, Z Axis Scan (X = -17, Y = -6)



3D scen shot



Hot spot position



MEASUREMENT 24

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 7 minutes 25 seconds

A. Experimental conditions.

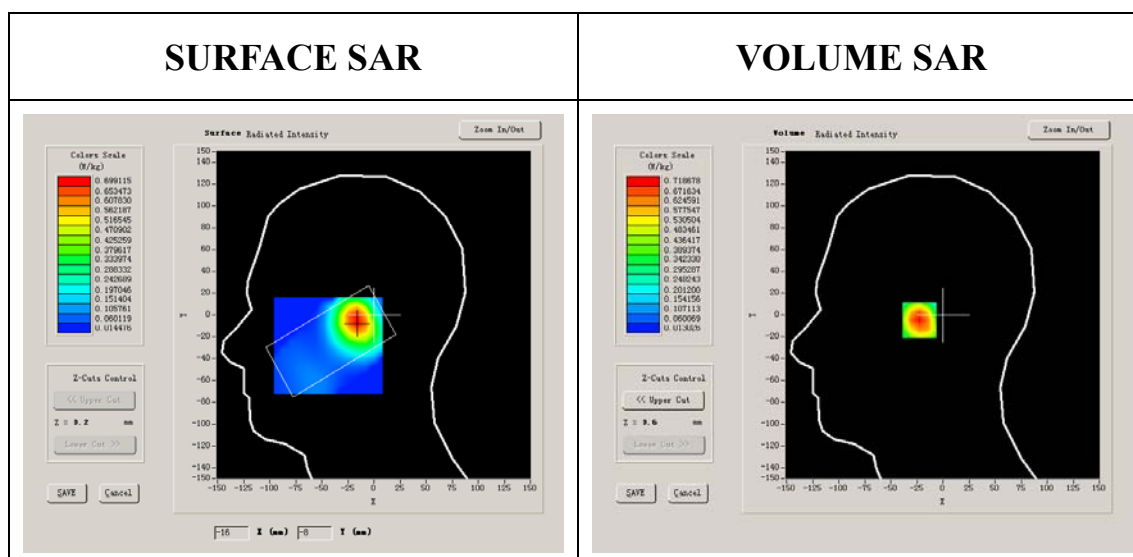
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Right head
Device Position	Tilt
Band	GSM1900
Channels	High
Signal	GSM

B. SAR Measurement Results

Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049
Relative permittivity (real part)	39.929001
Relative permittivity	13.156500

Conductivity (S/m)	1.395905
Variation (%)	0.120000
Ambient Temperature:	23.2°C
Liquid Temperature:	22.9°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:8

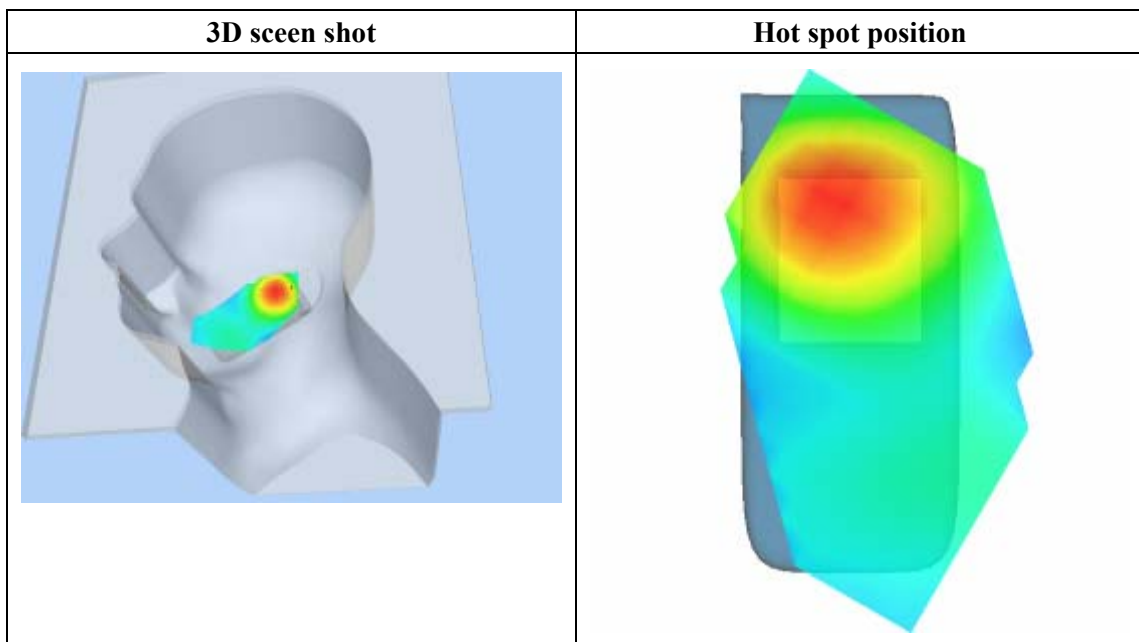
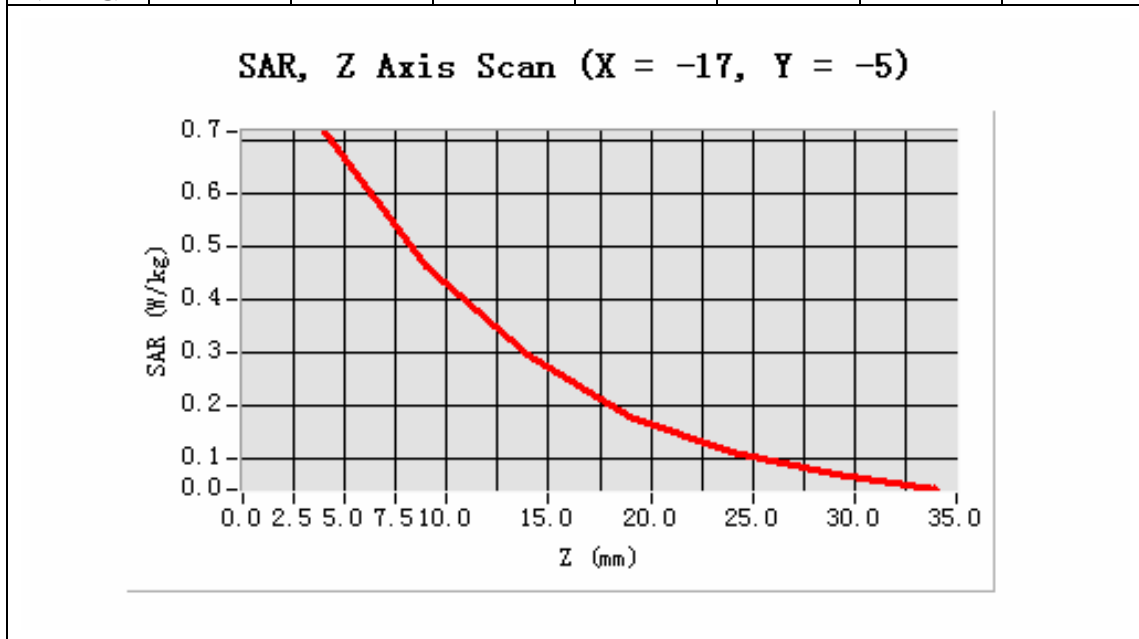


Maximum location: X=-17.00, Y=-5.00

SAR 10g (W/Kg)	0.401355
SAR 1g (W/Kg)	0.683919

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.7187	0.4618	0.2935	0.1783	0.1101	0.0685



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: 5/8/2010

Measurement duration: 7 minutes 26 seconds

A. Experimental conditions.

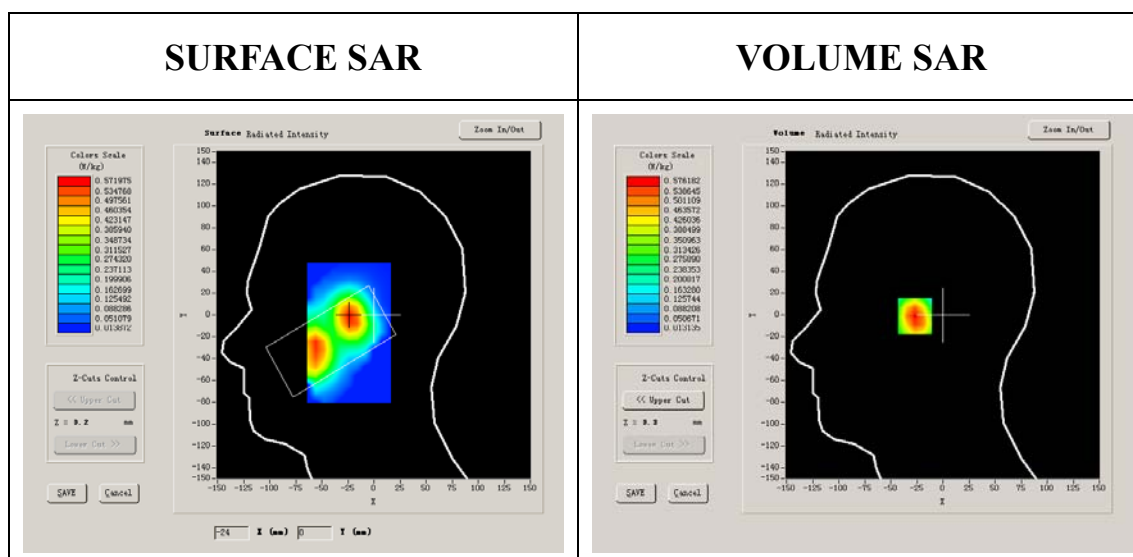
Phantom File	zinf3.txt
Phantom	Left head
Device Position	Cheek
Band	GSM1900
Channels	Low
Signal	GSM

B. SAR Measurement Results

Lower Band SAR (Channel 512):

Frequency (MHz)	1850.199951
Relative permittivity (real part)	39.993999
Relative permittivity	12.991650

Conductivity (S/m)	1.335397
Variation (%)	-0.070000
Ambient Temperature:	23.2°C
Liquid Temperature:	22.9°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:8



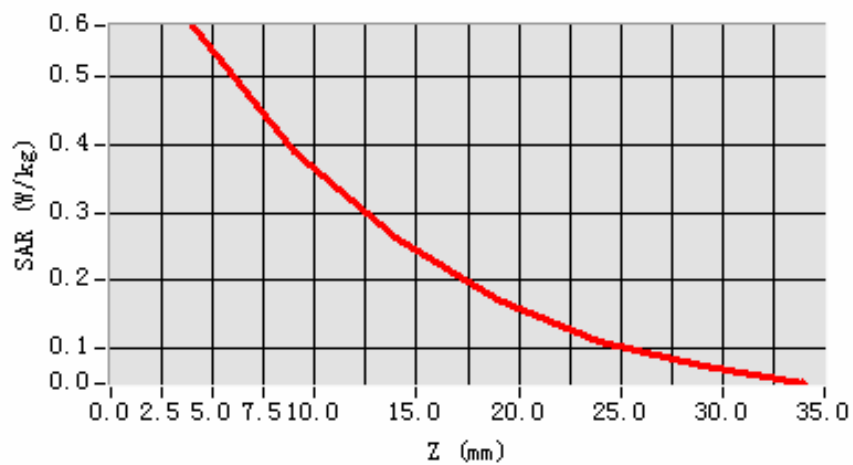
Maximum location: X=-23.00, Y=-1.00

SAR 10g (W/Kg)	0.333068
SAR 1g (W/Kg)	0.542474

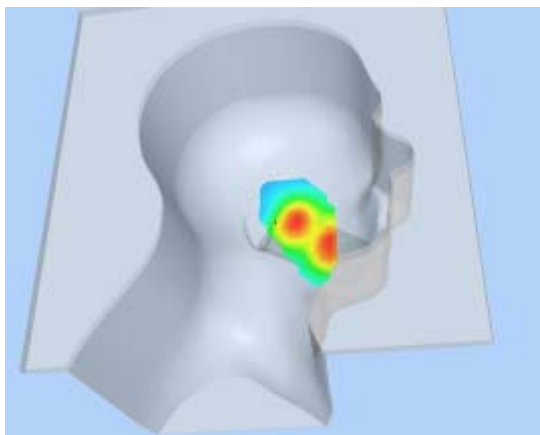
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5762	0.3910	0.2630	0.1724	0.1107	0.0726

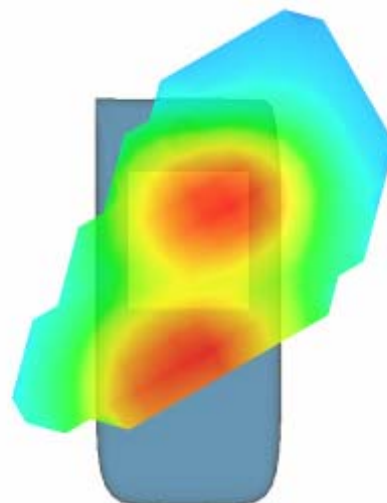
SAR, Z Axis Scan (X = -23, Y = -1)



3D scen shot



Hot spot position



MEASUREMENT 26

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 7 minutes 26 seconds

A. Experimental conditions.

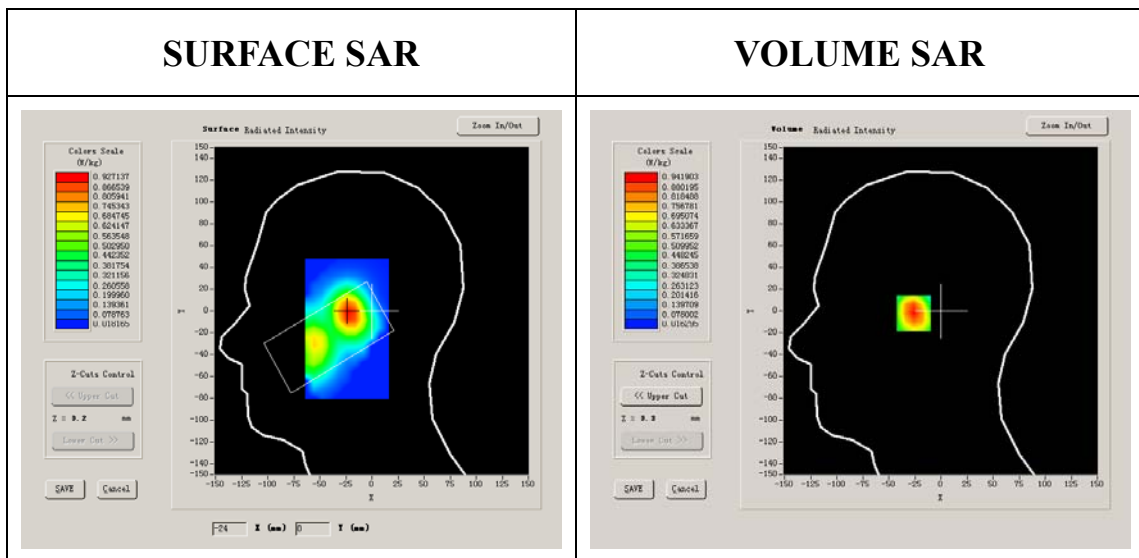
Phantom File	zinf3.txt
Phantom	Left head
Device Position	Cheek
Band	GSM1900
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 661):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	38.509998
Relative permittivity	13.750000

Conductivity (S/m)	1.436111
Variation (%)	1.180000
Ambient Temperature:	23.2°C
Liquid Temperature:	22.9°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:8



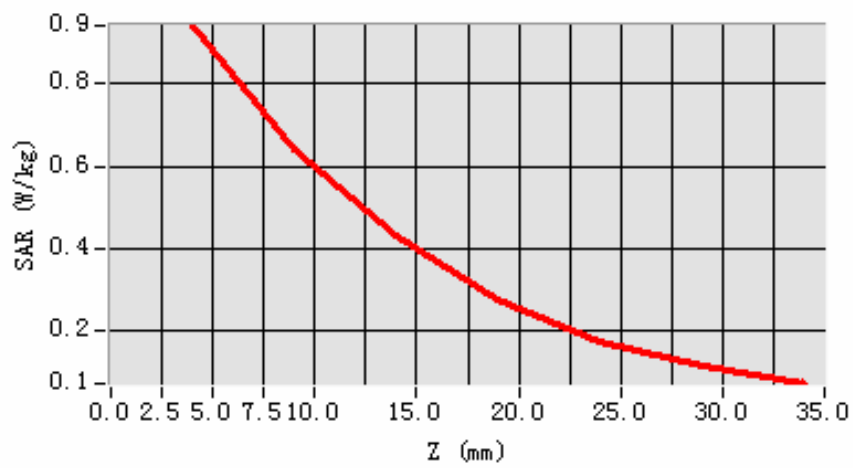
Maximum location: X=-22.00, Y=-2.00

SAR 10g (W/Kg)	0.539647
SAR 1g (W/Kg)	0.886432

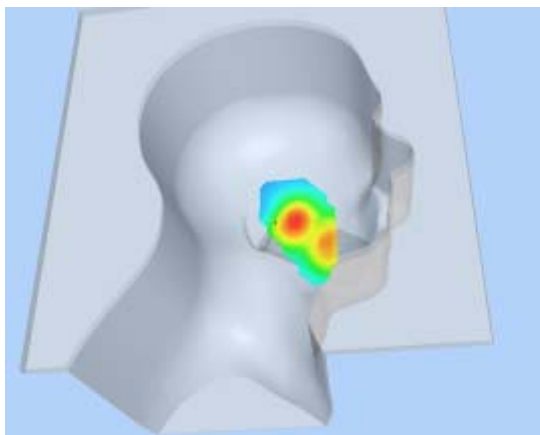
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.9419	0.6386	0.4285	0.2733	0.1744	0.1119

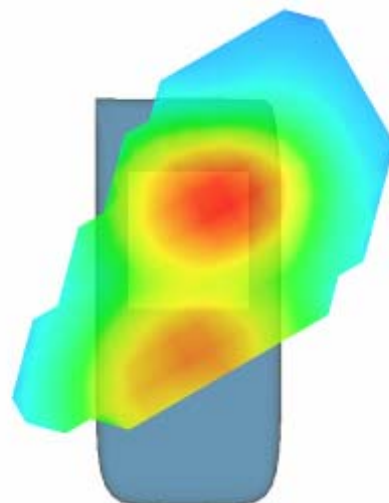
SAR, Z Axis Scan (X = -22, Y = -2)



3D scen shot



Hot spot position



MEASUREMENT 27

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 7 minutes 28 seconds

A. Experimental conditions.

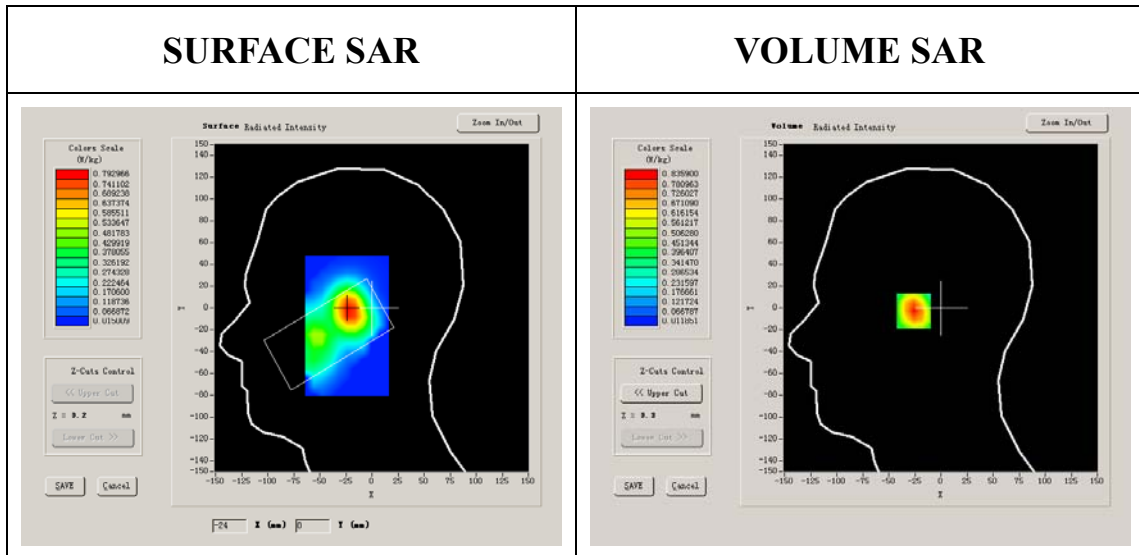
Phantom File	zinf3.txt
Phantom	Left head
Device Position	Cheek
Band	GSM1900
Channels	High
Signal	GSM

B. SAR Measurement Results

Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049
Relative permittivity (real part)	39.929001
Relative permittivity	13.156500

Conductivity (S/m)	1.395905
Variation (%)	1.920000
Ambient Temperature:	23.2°C
Liquid Temperature:	22.9°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:8



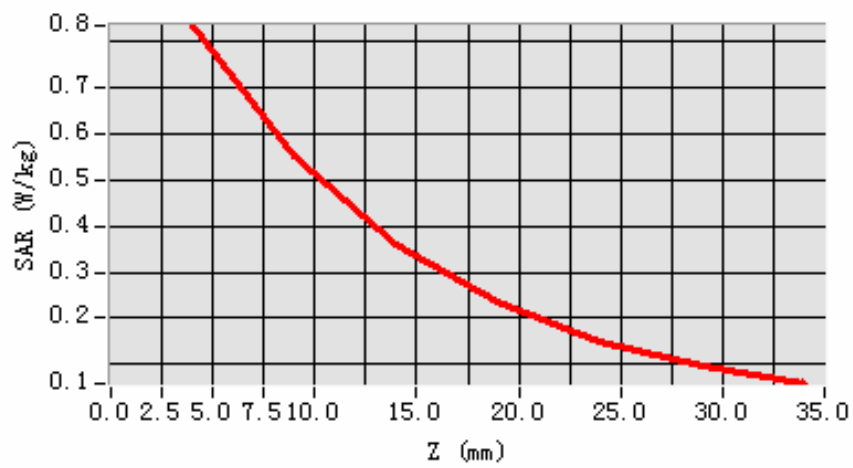
Maximum location: X=-22.00, Y=-3.00

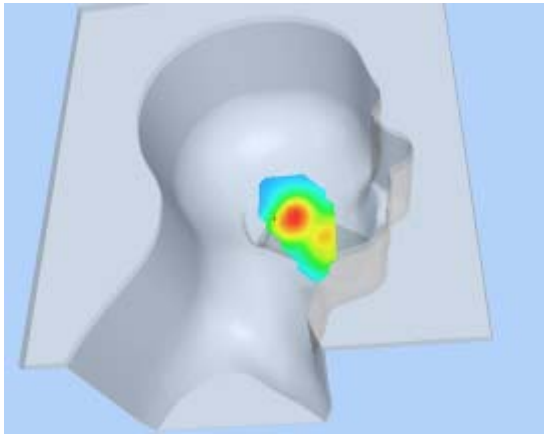
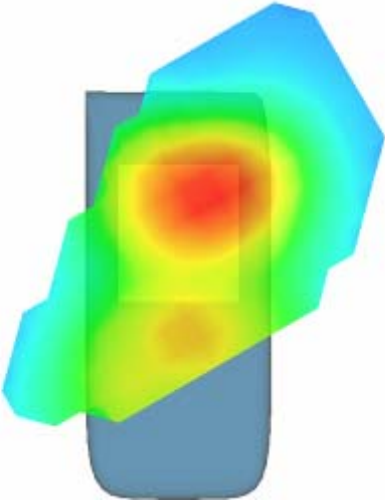
SAR 10g (W/Kg)	0.465832
SAR 1g (W/Kg)	0.781695

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.8359	0.5516	0.3610	0.2377	0.1496	0.0948

SAR, Z Axis Scan (X = -22, Y = -3)



3D scen shot	Hot spot position
	

MEASUREMENT 28

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 7 minutes 27 seconds

A. Experimental conditions.

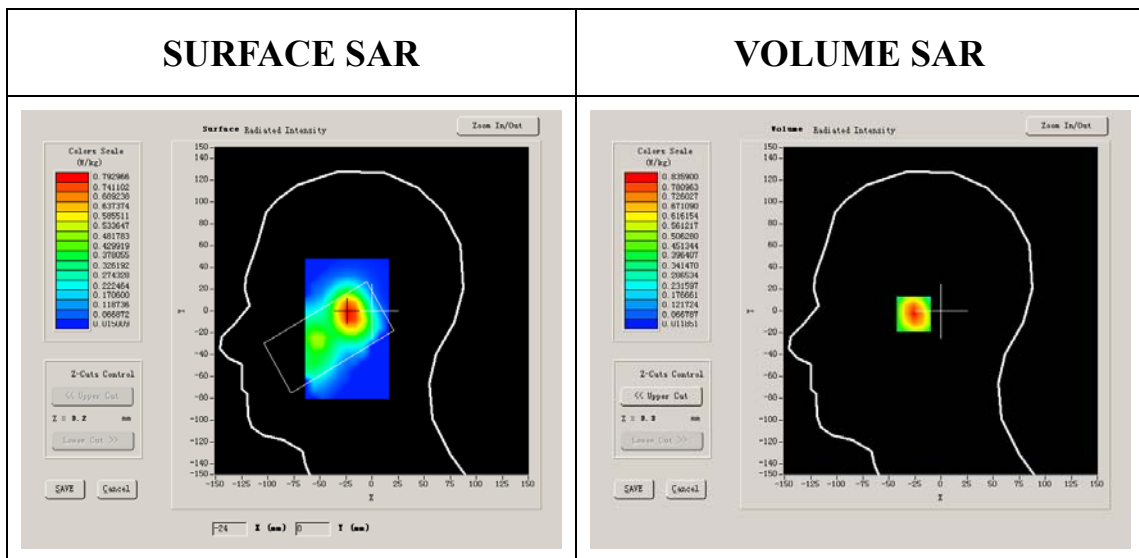
Phantom File	sam_direct_droit2_surf8mm.txt
Phantom	Left head
Device Position	Tilt
Band	GSM1900
Channels	Low
Signal	GSM

B. SAR Measurement Results

Lower Band SAR (Channel 512):

Frequency (MHz)	1850.199951
Relative permittivity (real part)	39.993999
Relative permittivity	12.991650

Conductivity (S/m)	1.335397
Variation (%)	-0.450000
Ambient Temperature:	23.2°C
Liquid Temperature:	22.9°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:8



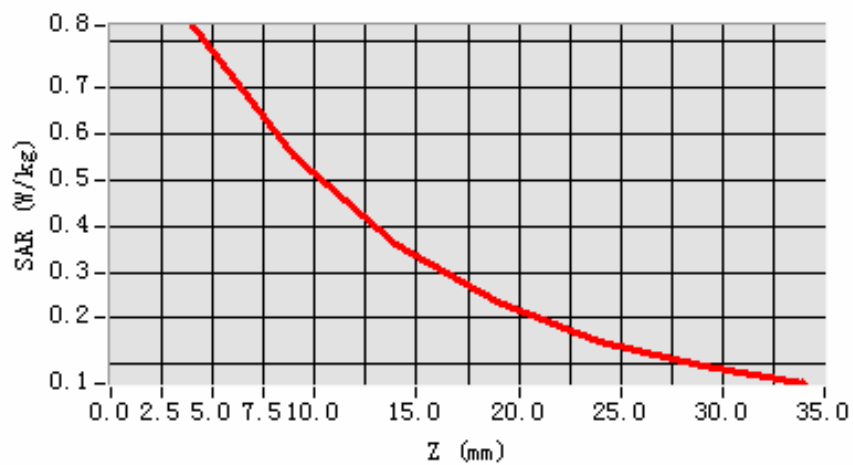
Maximum location: X=-22.00, Y=-3.00

SAR 10g (W/Kg)	0.264553
SAR 1g (W/Kg)	0.485695

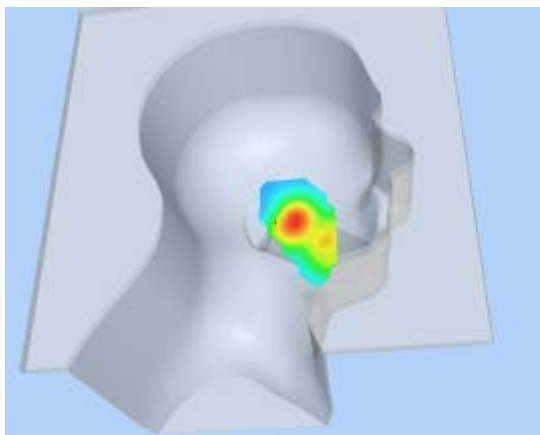
Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.8359	0.5516	0.3610	0.2377	0.1496	0.0948

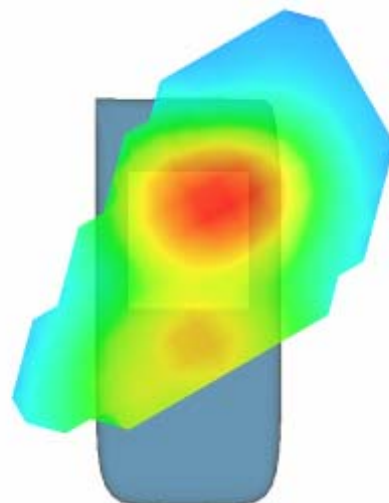
SAR, Z Axis Scan (X = -22, Y = -3)



3D scen shot



Hot spot position



MEASUREMENT 29

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 7 minutes 23 seconds

A. Experimental conditions.

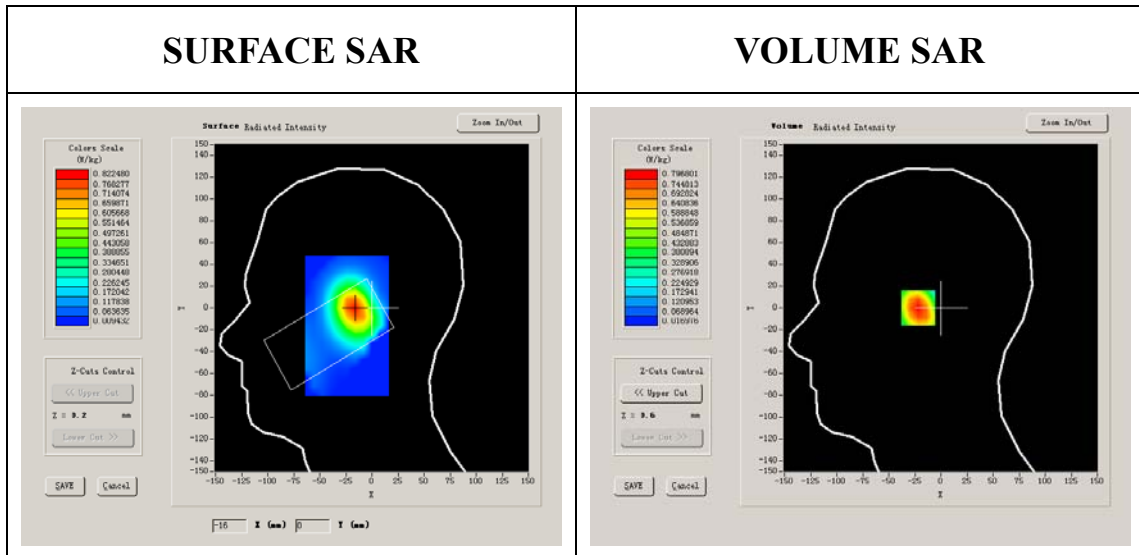
Phantom File	zinf3.txt
Phantom	Left head
Device Position	Tilt
Band	GSM1900
Channels	Middle
Signal	GSM

B. SAR Measurement Results

Middle Band SAR (Channel 661):

Frequency (MHz)	1880.000000
Relative permittivity (real part)	38.509998
Relative permittivity	13.750000

Conductivity (S/m)	1.436111
Variation (%)	-1.640000
Ambient Temperature:	23.2°C
Liquid Temperature:	22.9°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:8

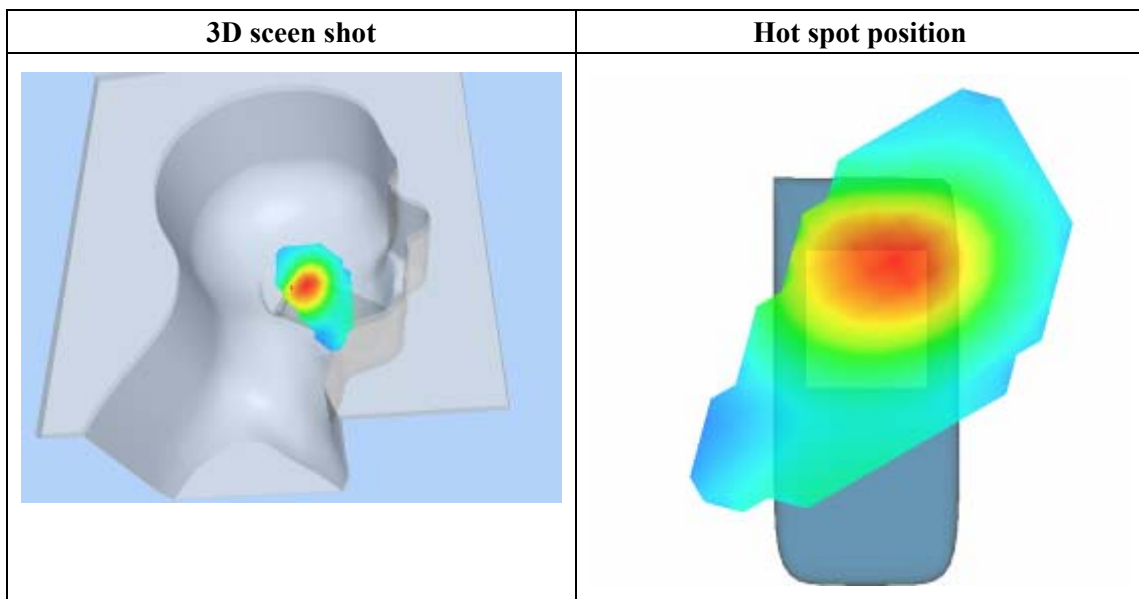
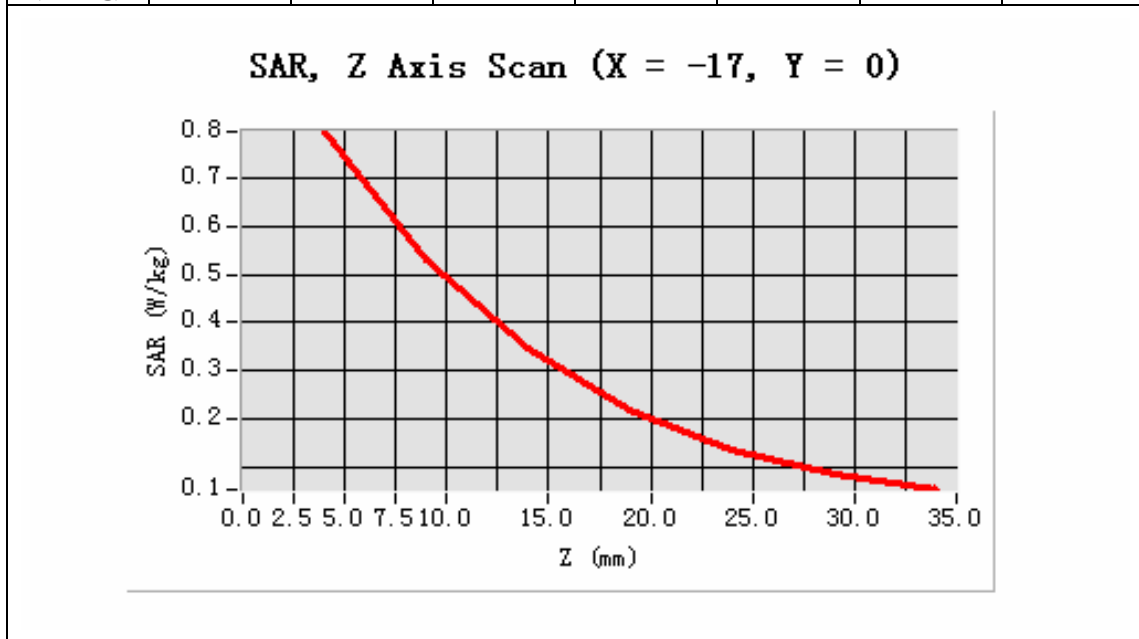


Maximum location: X=-17.00, Y=0.00

SAR 10g (W/Kg)	0.457991
SAR 1g (W/Kg)	0.751441

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.7968	0.5325	0.3492	0.2190	0.1381	0.0857



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: 5/8/2010

Measurement duration: 7 minutes 24 seconds

A. Experimental conditions.

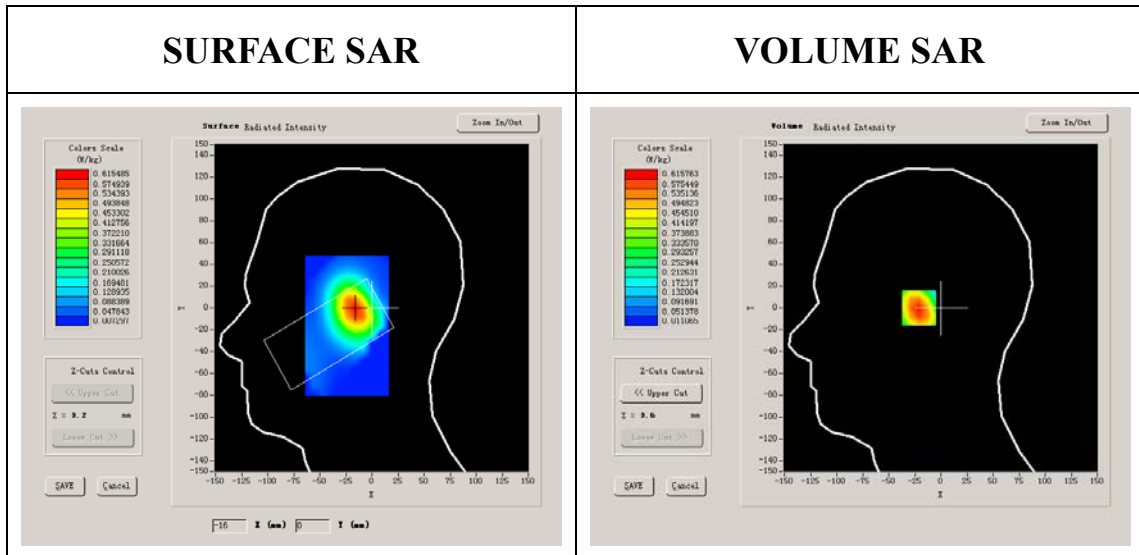
Phantom File	zinf3.txt
Phantom	Left head
Device Position	Tilt
Band	GSM1900
Channels	High
Signal	GSM

B. SAR Measurement Results

Higher Band SAR (Channel 810):

Frequency (MHz)	1909.800049
Relative permittivity (real part)	39.929001
Relative permittivity	13.156500

Conductivity (S/m)	1.395905
Variation (%)	-0.500000
Ambient Temperature:	23.2°C
Liquid Temperature:	22.9°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:8

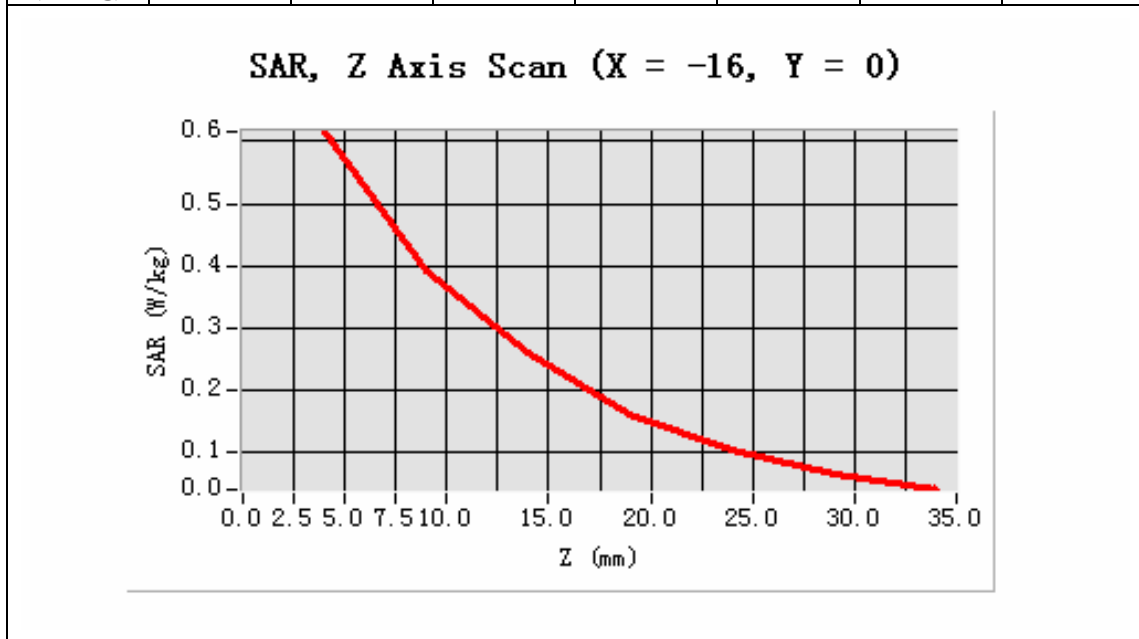


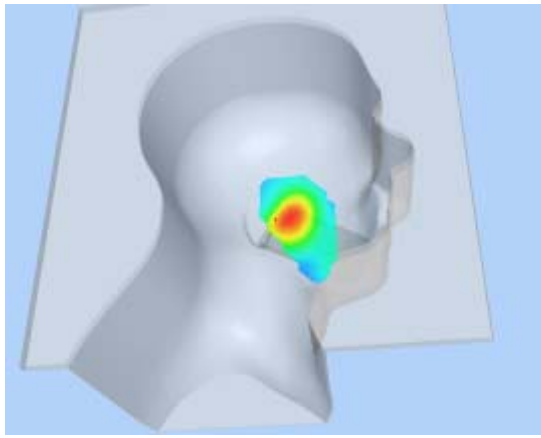
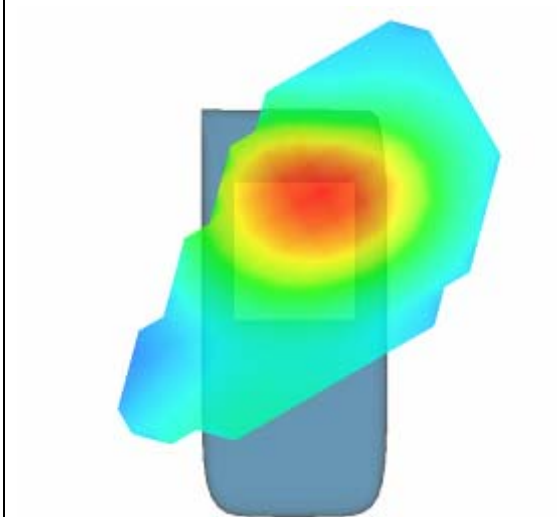
Maximum location: X=-16.00, Y=0.00

SAR 10g (W/Kg)	0.351961
SAR 1g (W/Kg)	0.583973

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6158	0.3910	0.2590	0.1624	0.1050	0.0642



3D scen shot	Hot spot position
	

MEASUREMENT 31

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 9 minutes 9 seconds

A. Experimental conditions.

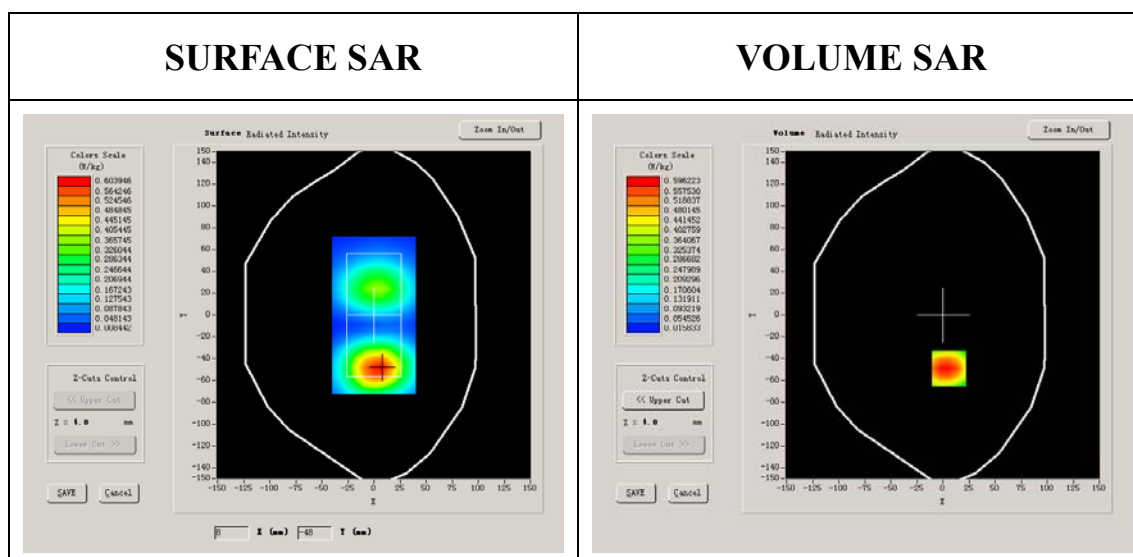
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	Low
Signal	GPRS

B. SAR Measurement Results

Lower Band SAR (Channel 512):

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

Conductivity (S/m)	1.233467
Variation (%)	-2.110000
Ambient Temperature:	23.2°C
Liquid Temperature:	22.9°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:2

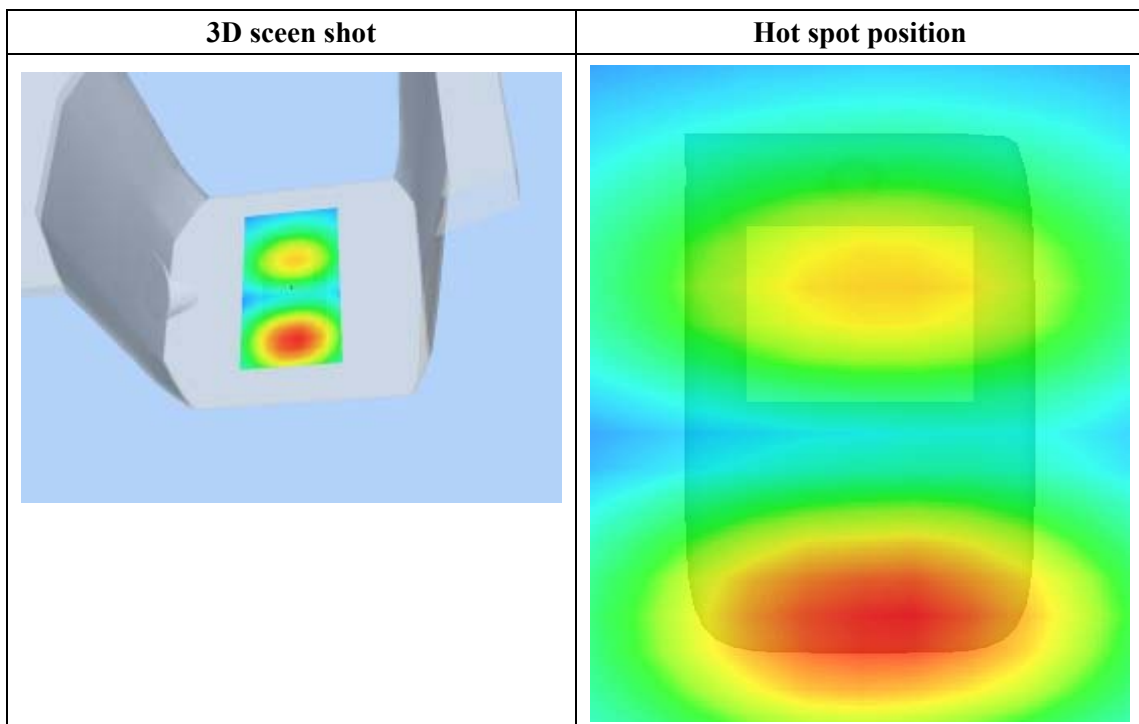
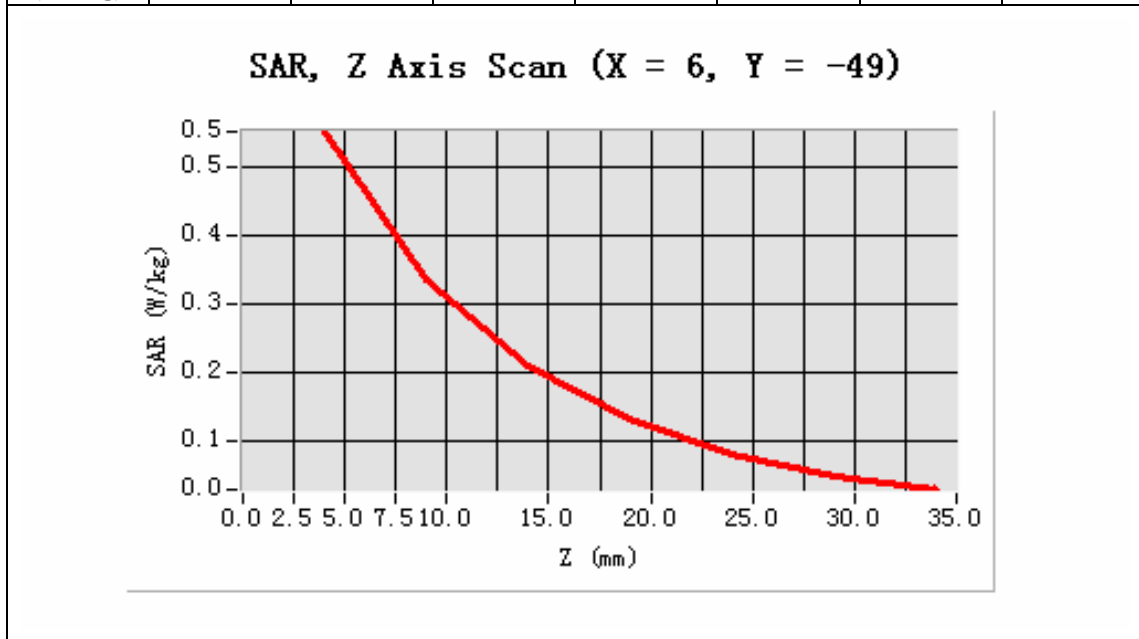


Maximum location: X=6.00, Y=-49.00

SAR 10g (W/Kg)	0.618478
SAR 1g (W/Kg)	0.932496

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5497	0.3336	0.2105	0.1323	0.0800	0.0493



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: 5/8/2010

Measurement duration: 9 minutes 7 seconds

A. Experimental conditions.

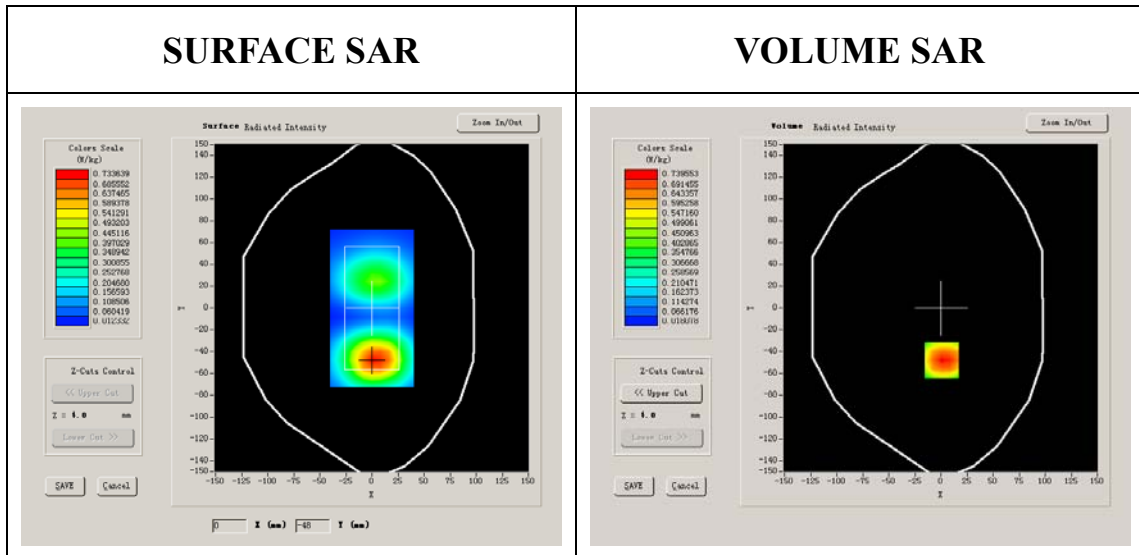
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	Middle
Signal	GPRS

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 (%)	-1.110000
Ambient Temperature:	23.2°C
Liquid Temperature:	22.9°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:2

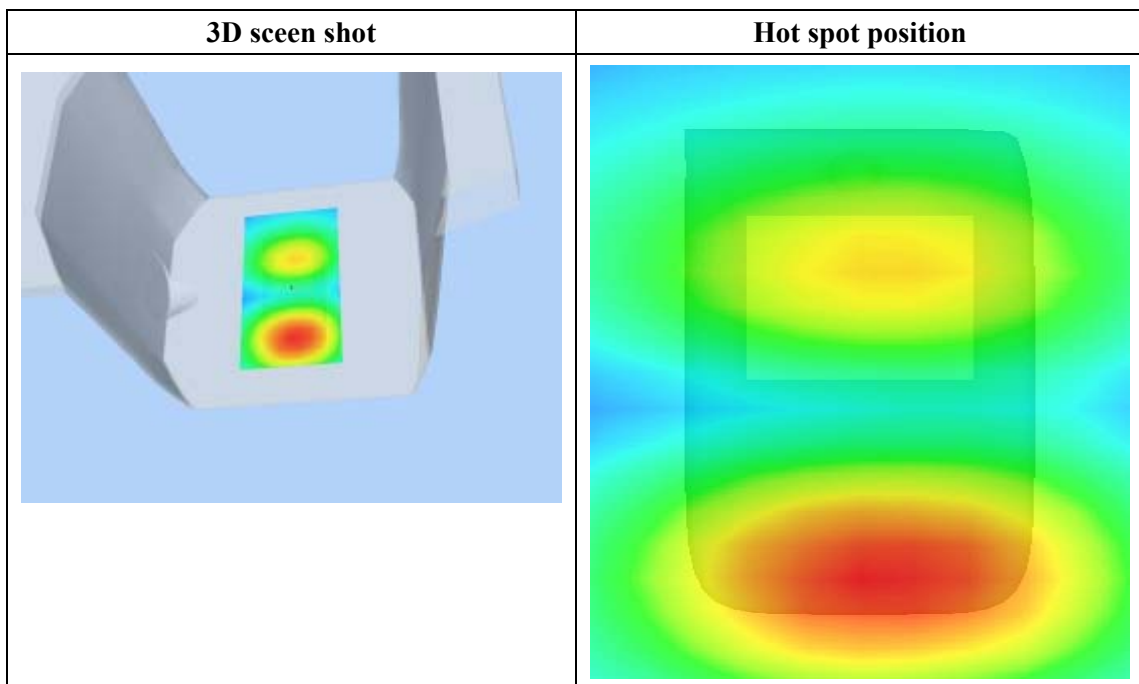
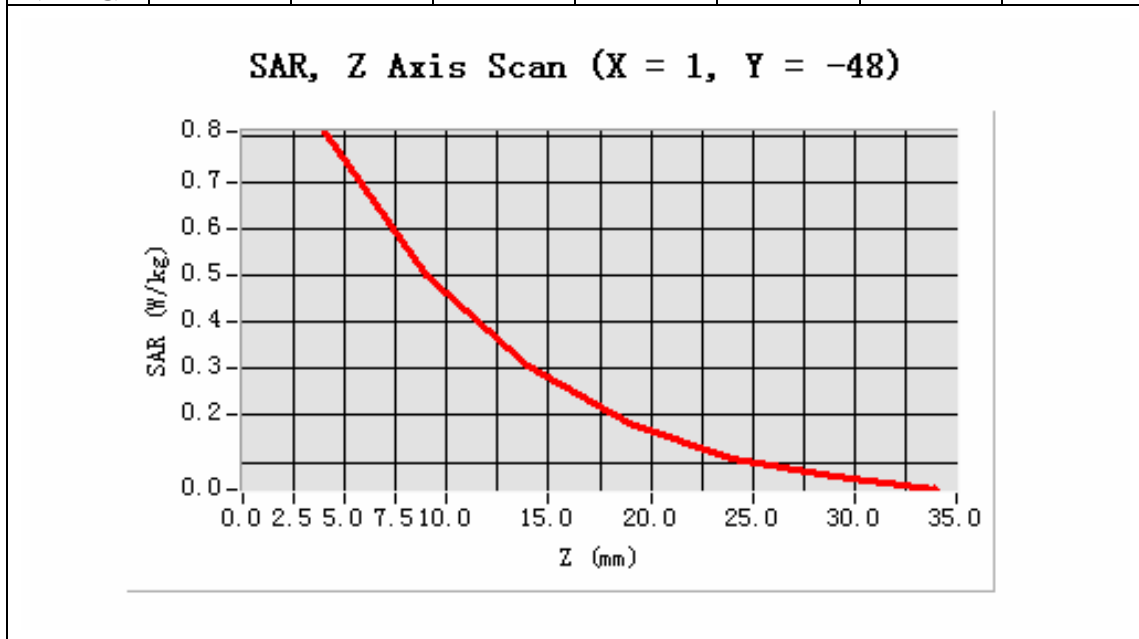


Maximum location: X=1.00, Y=-48.00

SAR 10g (W/Kg)	0.663224
SAR 1g (W/Kg)	0.996127

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.8106	0.4996	0.3074	0.1850	0.1090	0.0691



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: 5/8/2010

Measurement duration: 9 minutes 10 seconds

A. Experimental conditions.

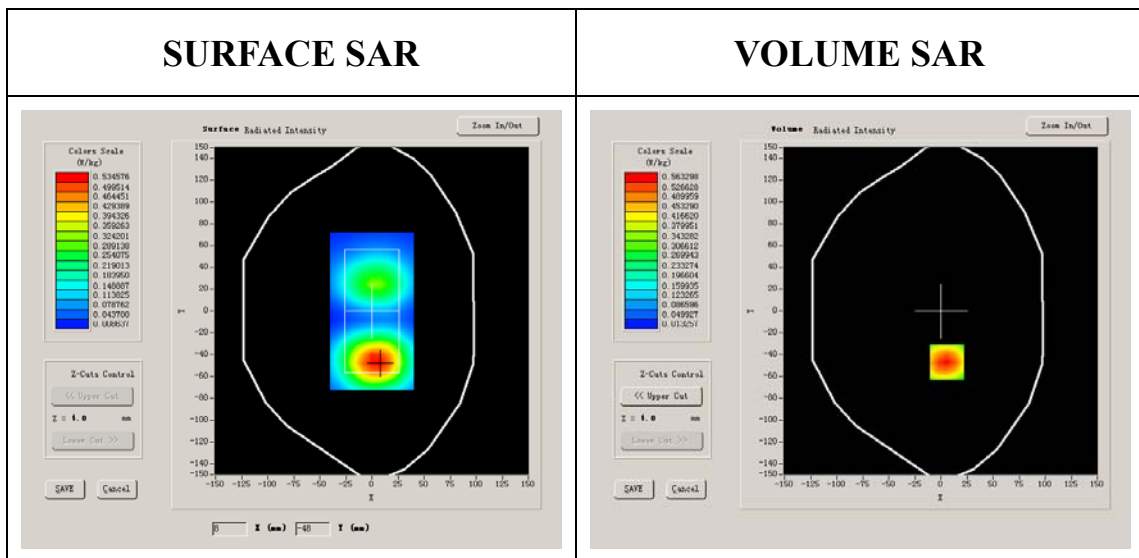
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	High
Signal	GPRS

B. SAR Measurement Results

Higher Band SAR (Channel 810):

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

Conductivity (S/m)	1.273200
Variation (%)	-0.070000
Ambient Temperature:	23.2°C
Liquid Temperature:	22.9°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:2

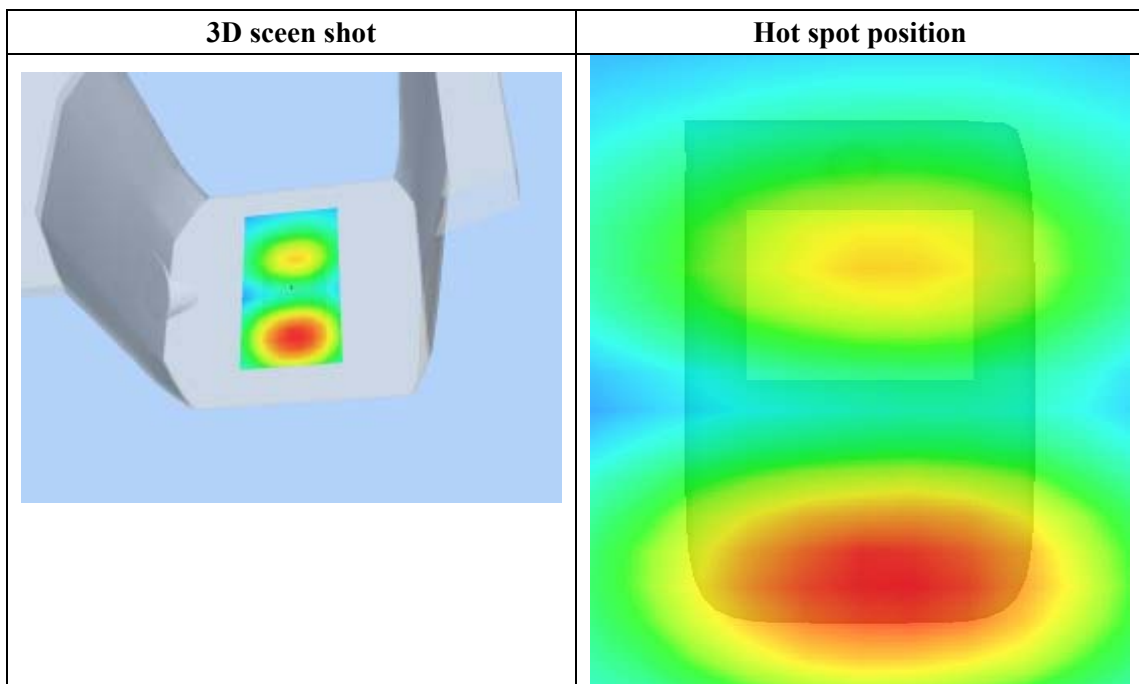
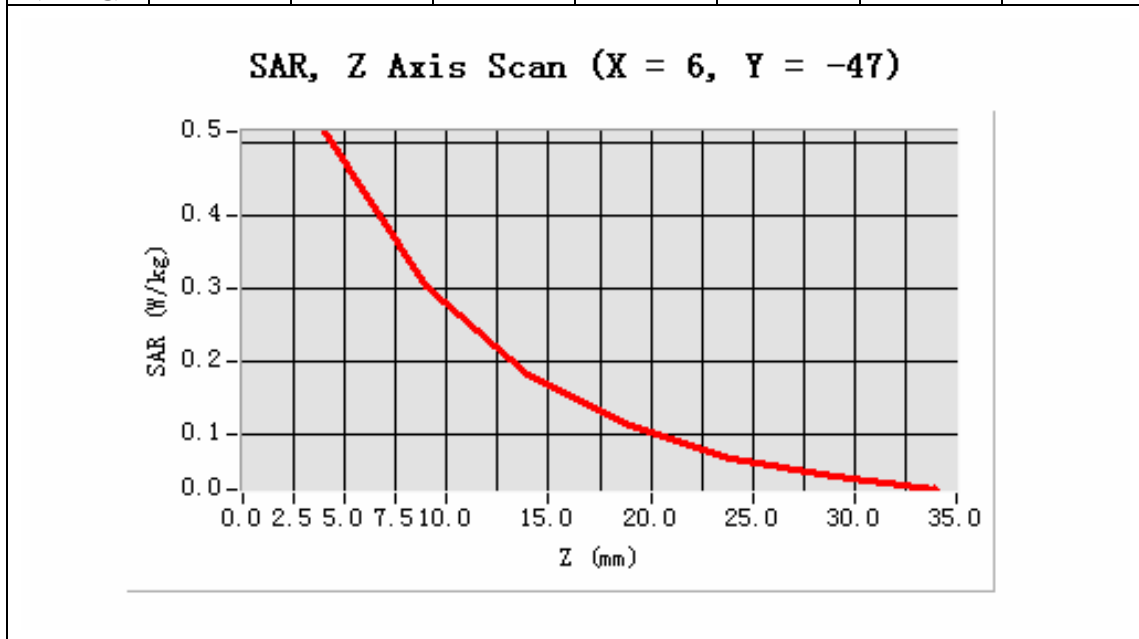


Maximum location: X=6.00, Y=-47.00

SAR 10g (W/Kg)	0.587860
SAR 1g (W/Kg)	0.909643

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5138	0.3039	0.1815	0.1113	0.0679	0.0416



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: 5/8/2010

Measurement duration: 9 minutes 10 seconds

A. Experimental conditions.

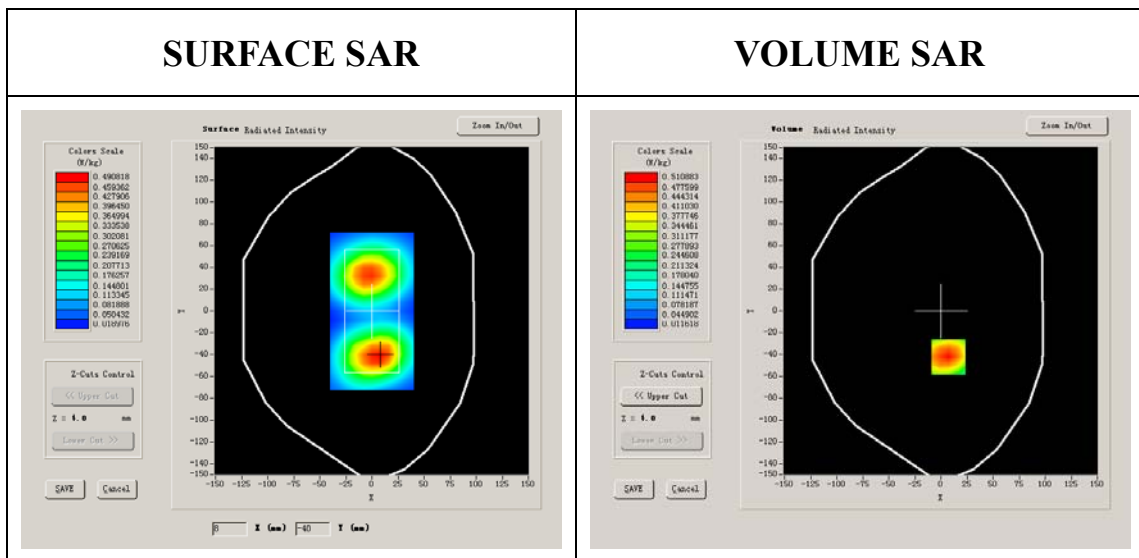
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	Middle
Signal	GPRS

B. SAR Measurement Results

Middle Band SAR (Channel 661):

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

Conductivity (S/m)	1.573978
Variation (%)	2.330000
Ambient Temperature:	23.2°C
Liquid Temperature:	22.9°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:2

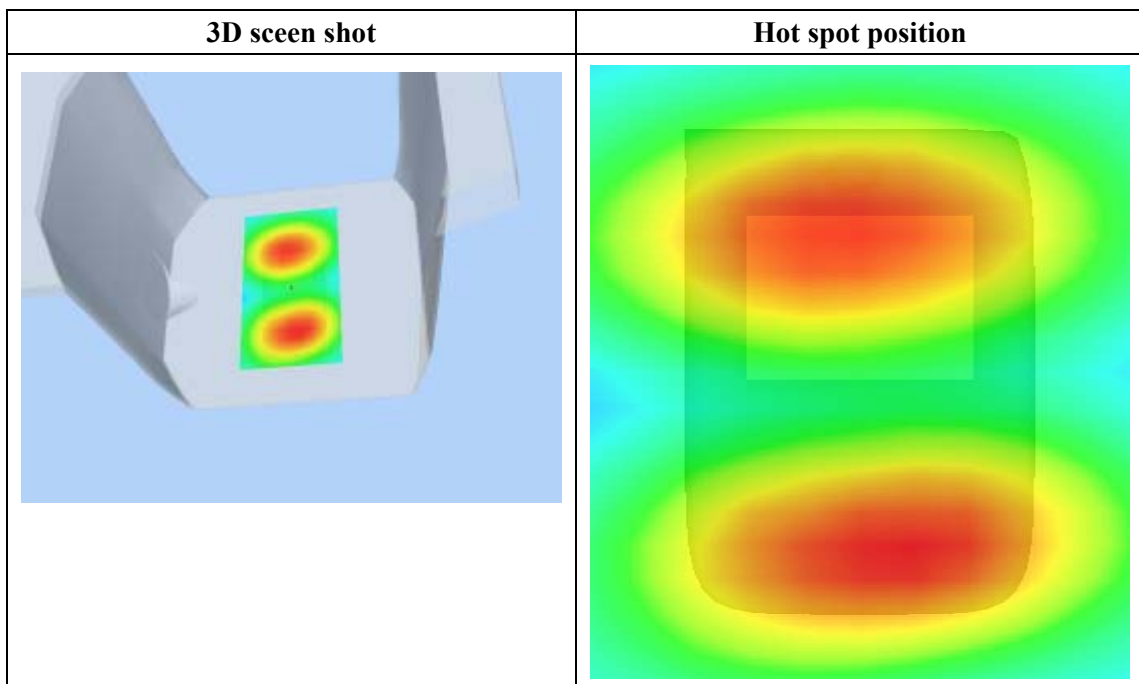
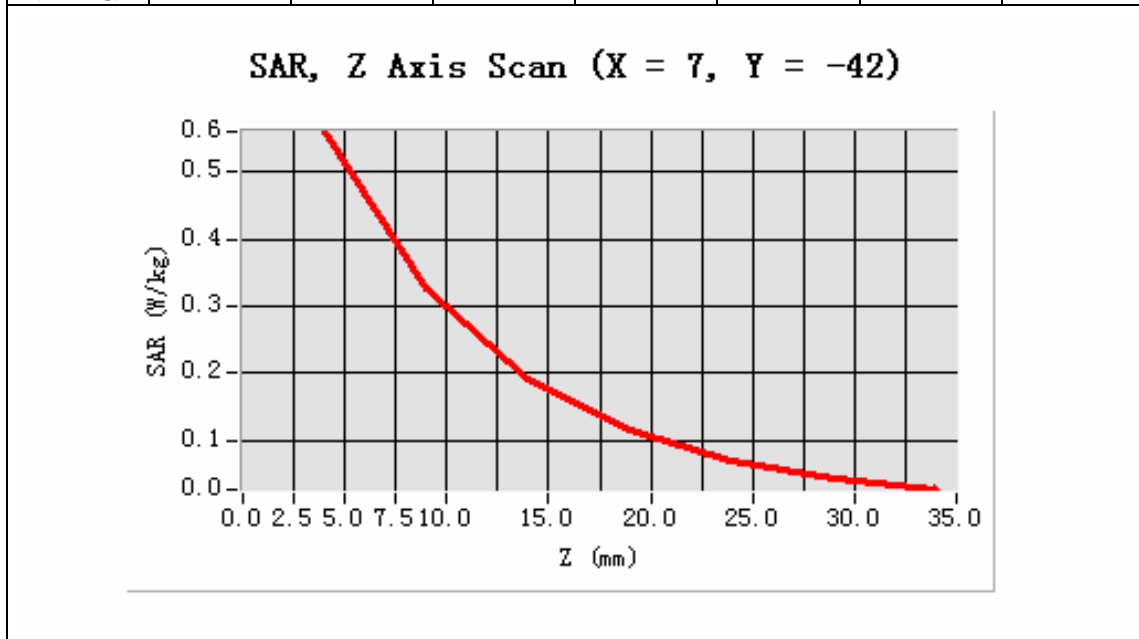


Maximum location: X=7.00, Y=-42.00

SAR 10g (W/Kg)	0.309195
SAR 1g (W/Kg)	0.531044

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5599	0.3257	0.1921	0.1159	0.0708	0.0414



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: 5/8/2010

Measurement duration: 9 minutes 9 seconds

A. Experimental conditions.

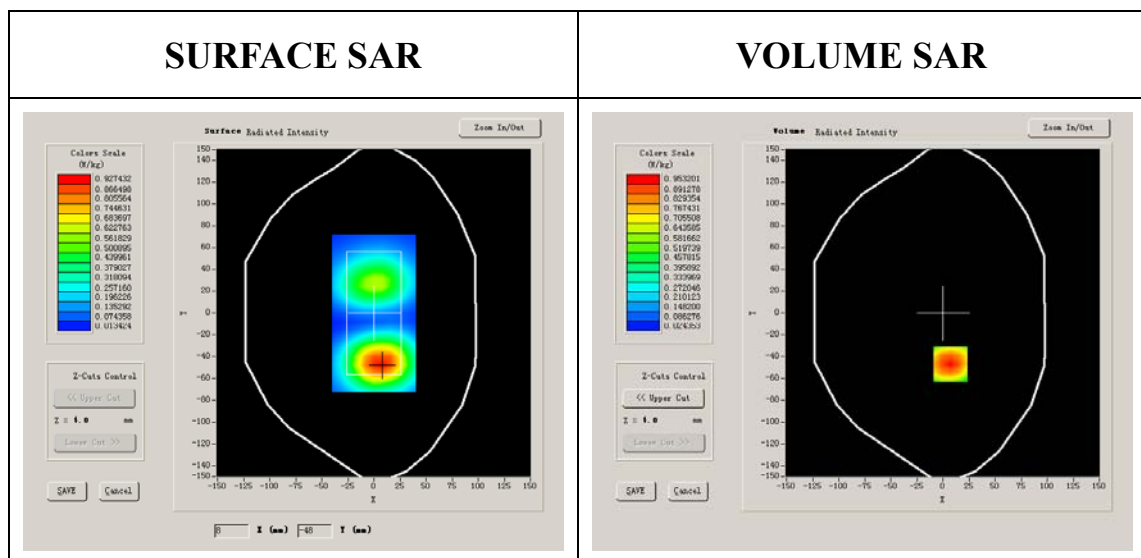
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	Middle
Signal	GSM

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 (%)	-0.240000
Ambient Temperature:	23.2°C
Liquid Temperature:	22.9°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:8

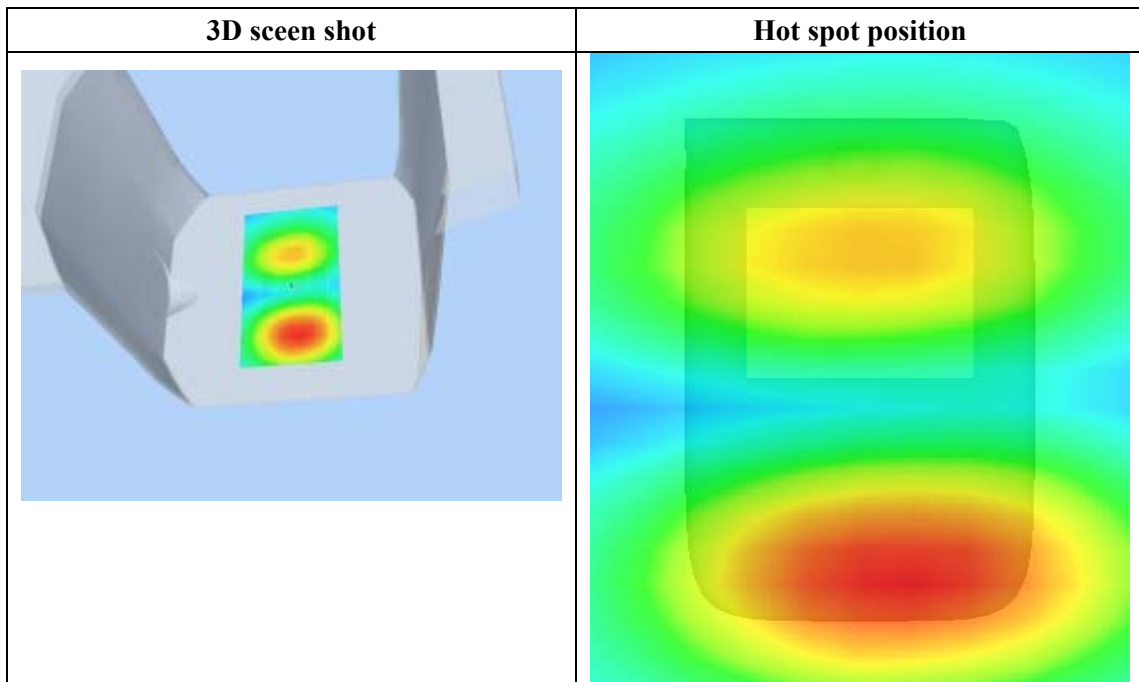
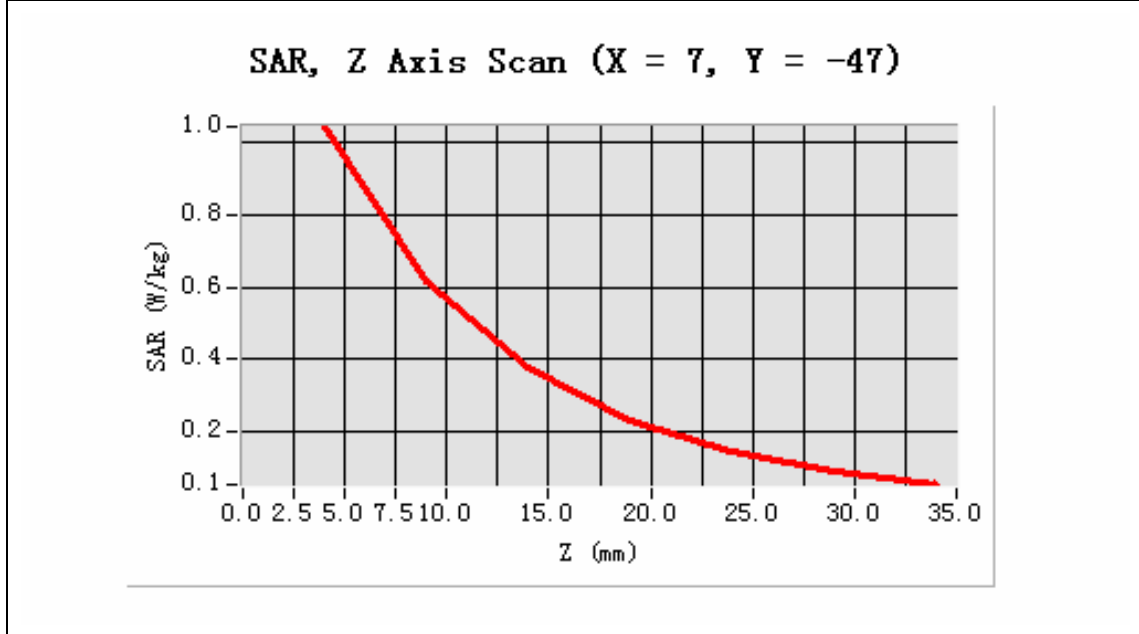


Maximum location: X=7.00, Y=-47.00

SAR 10g (W/Kg)	0.578846
SAR 1g (W/Kg)	0.796464

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	1.0447	0.6151	0.3799	0.2295	0.1414	0.0859



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: 5/8/2010

Measurement duration: 9 minutes 9 seconds

A. Experimental conditions.

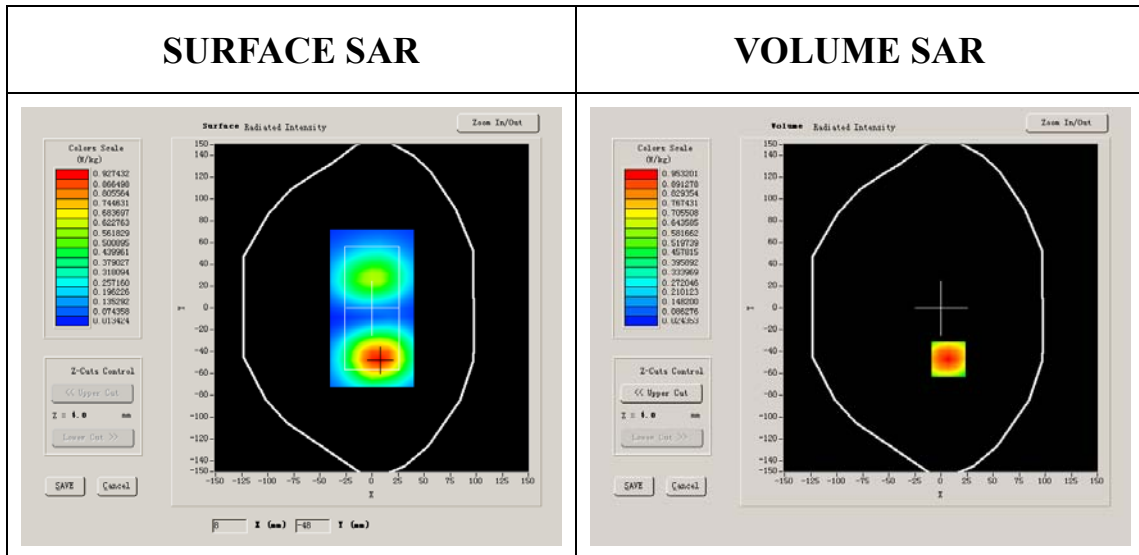
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	Middle
Signal	GSM

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 (%)	-0.240000
Ambient Temperature:	23.2°C
Liquid Temperature:	22.9°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:8

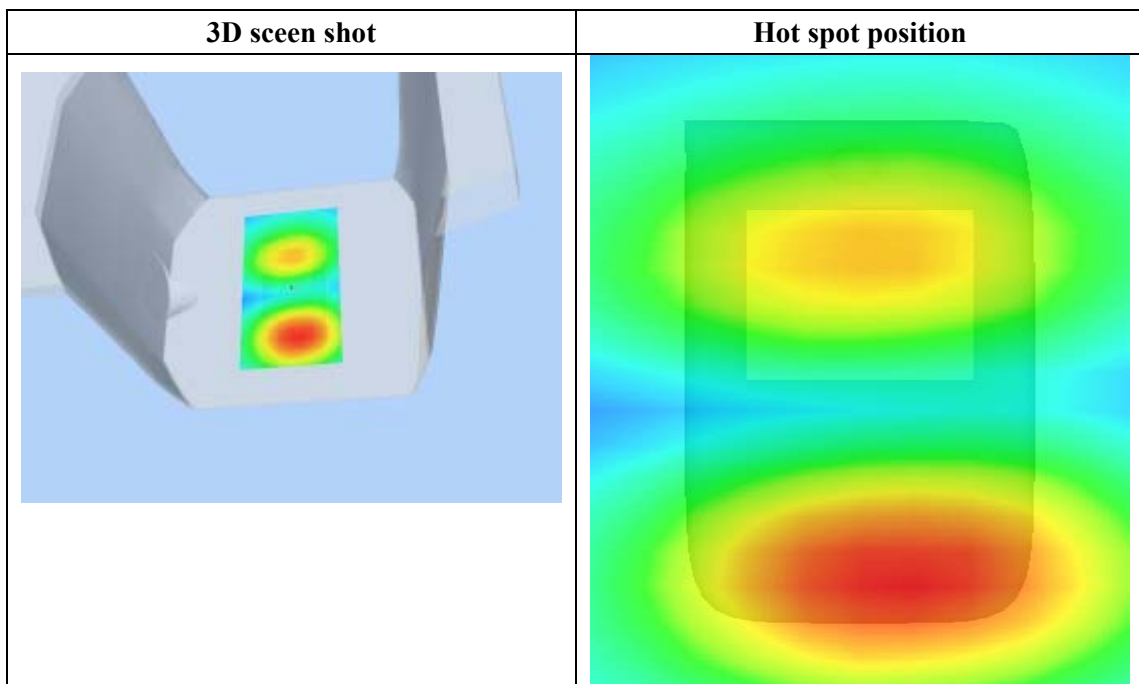
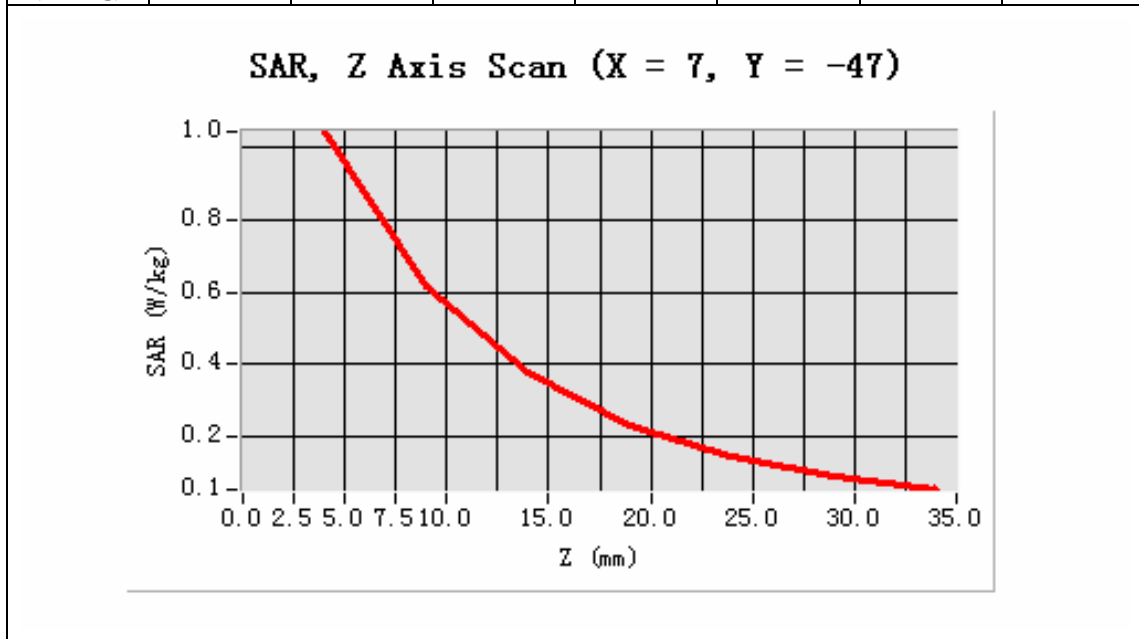


Maximum location: X=7.00, Y=-47.00

SAR 10g (W/Kg)	0.463553
SAR 1g (W/Kg)	0.773298

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	1.0447	0.6151	0.3799	0.2295	0.1414	0.0859



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: 5/8/2010

Measurement duration: 9 minutes 6 seconds

A. Experimental conditions.

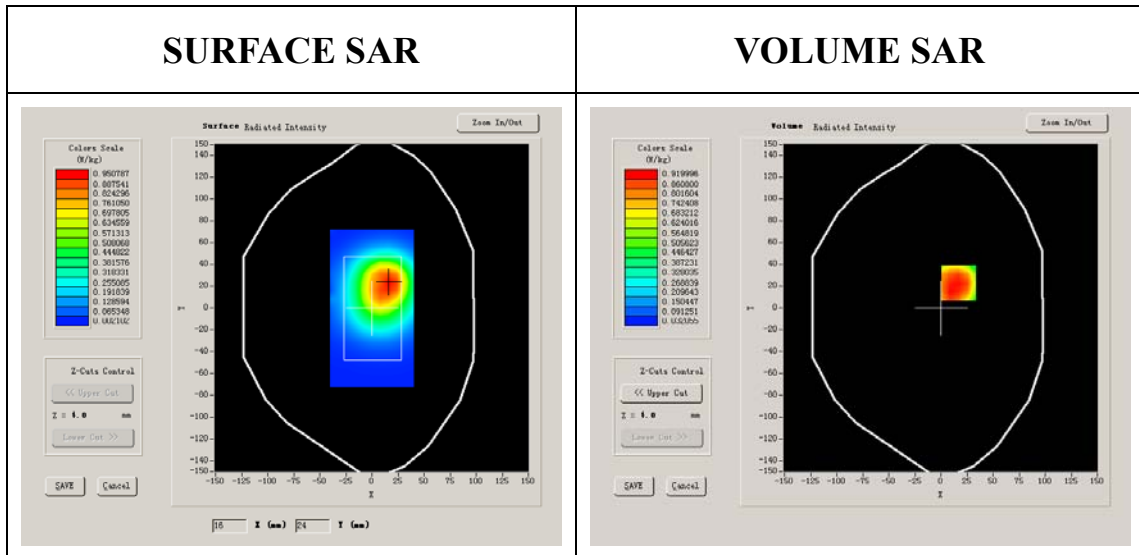
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	802.11 b
Channels	Low
Signal	CW

B. SAR Measurement Results

Lower Band SAR:

Frequency (MHz)	2412.000000
Relative permittivity (real part)	54.341000
Relative permittivity	18.926250

Conductivity (S/m)	1.541411
Variation (%)	-0.560000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	39.772,33.946,37.835
Crest factor:	1:1

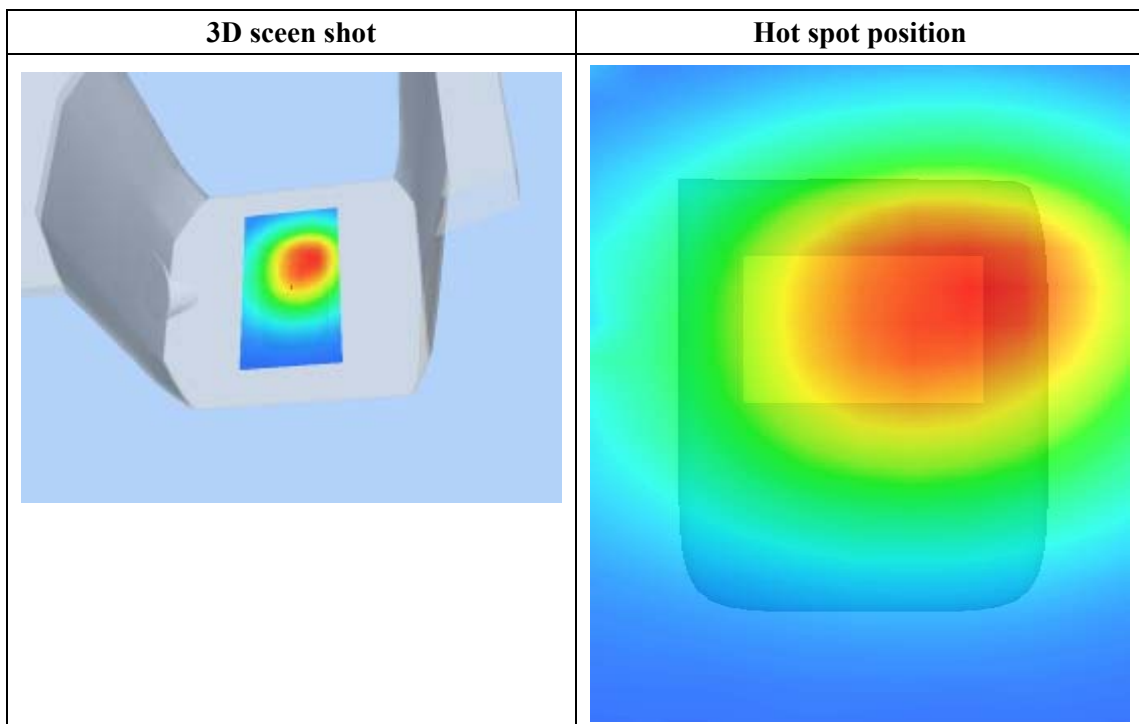
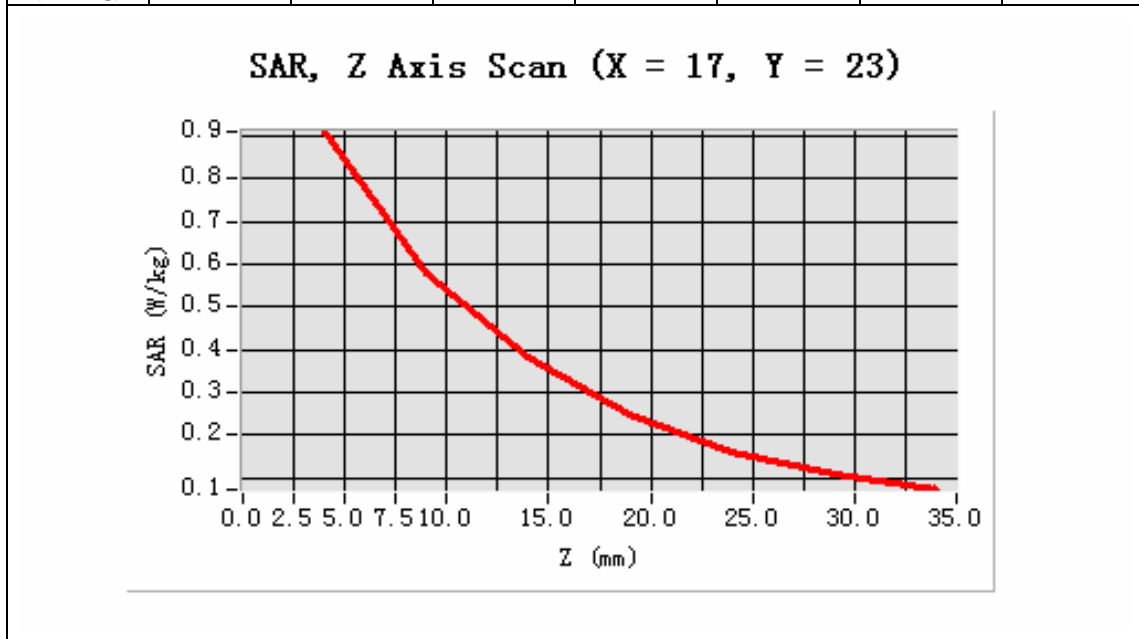


Maximum location: X=17.00, Y=23.00

SAR 10g (W/Kg)	0.076645
SAR 1g (W/Kg)	0.135355

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.9112	0.5812	0.3841	0.2467	0.1619	0.1087



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: 5/8/2010

Measurement duration: 9 minutes 6 seconds

A. Experimental conditions.

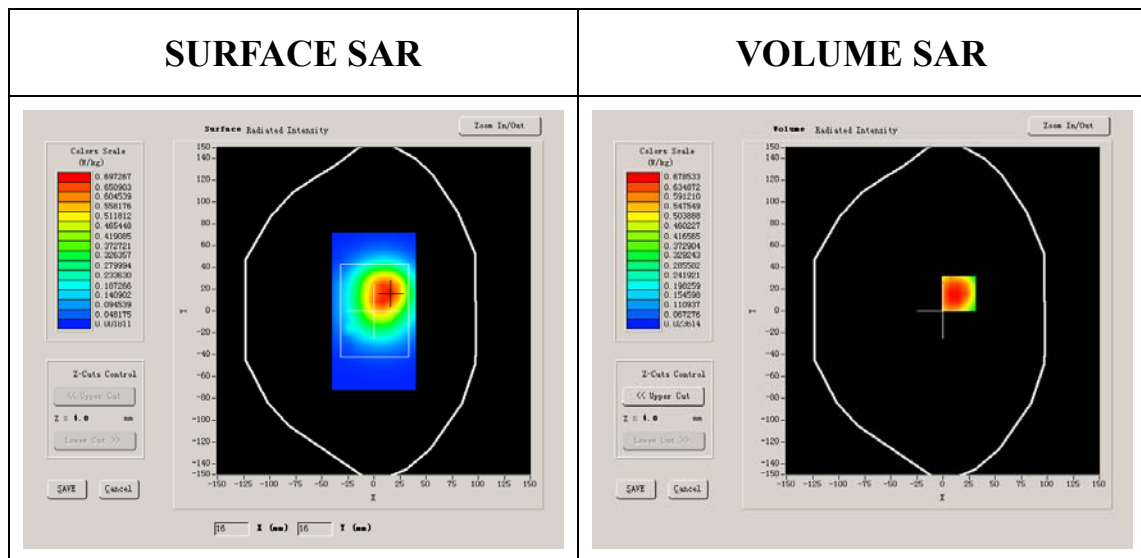
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	802.11 b
Channels	Middle
Signal	CW

B. SAR Measurement Results

Middle Band SAR:

Frequency (MHz)	2437.000000
Relative permittivity (real part)	54.341000
Relative permittivity	19.120001

Conductivity (S/m)	1.541411
Variation (%)	-2.180000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	39.772,33.946,37.835
Crest factor:	1:1

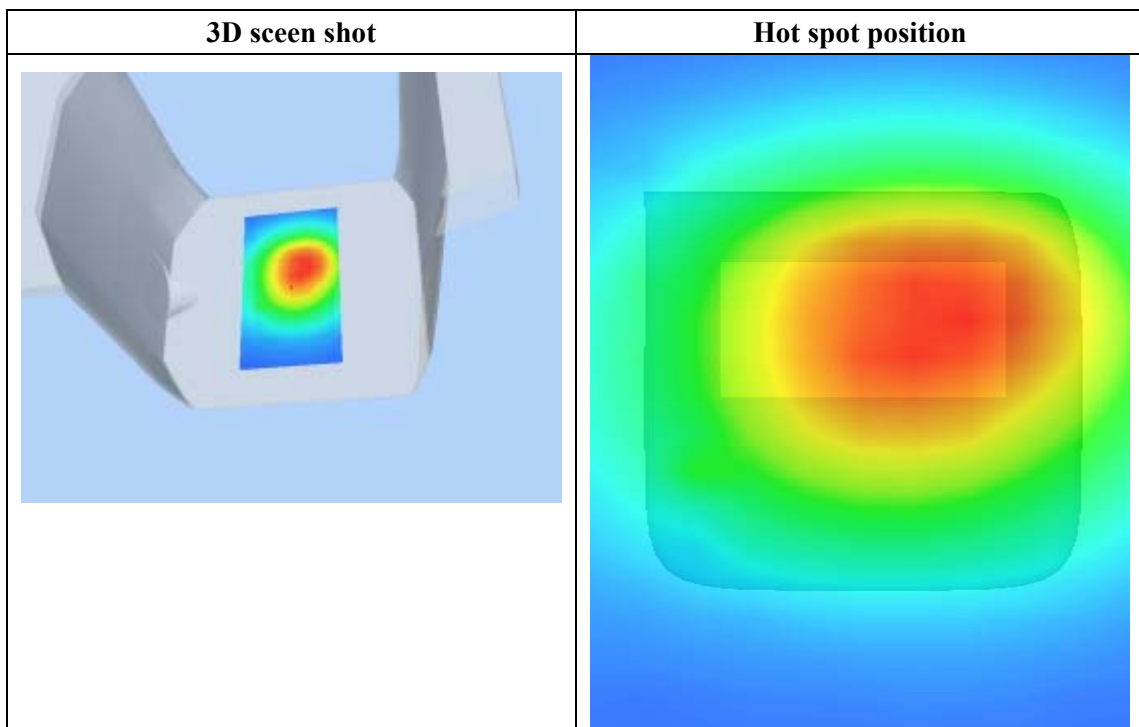
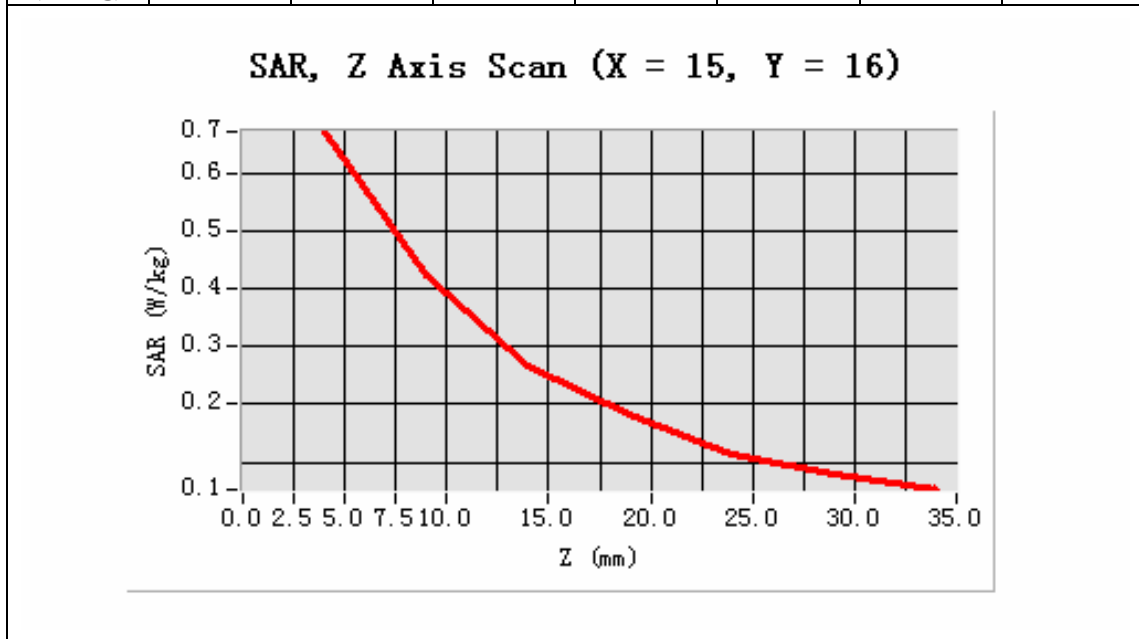


Maximum location: X=15.00, Y=16.00

SAR 10g (W/Kg)	0.076466
SAR 1g (W/Kg)	0.147866

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.6732	0.4257	0.2657	0.1826	0.1143	0.0778



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: 5/8/2010

Measurement duration: 9 minutes 6 seconds

A. Experimental conditions.

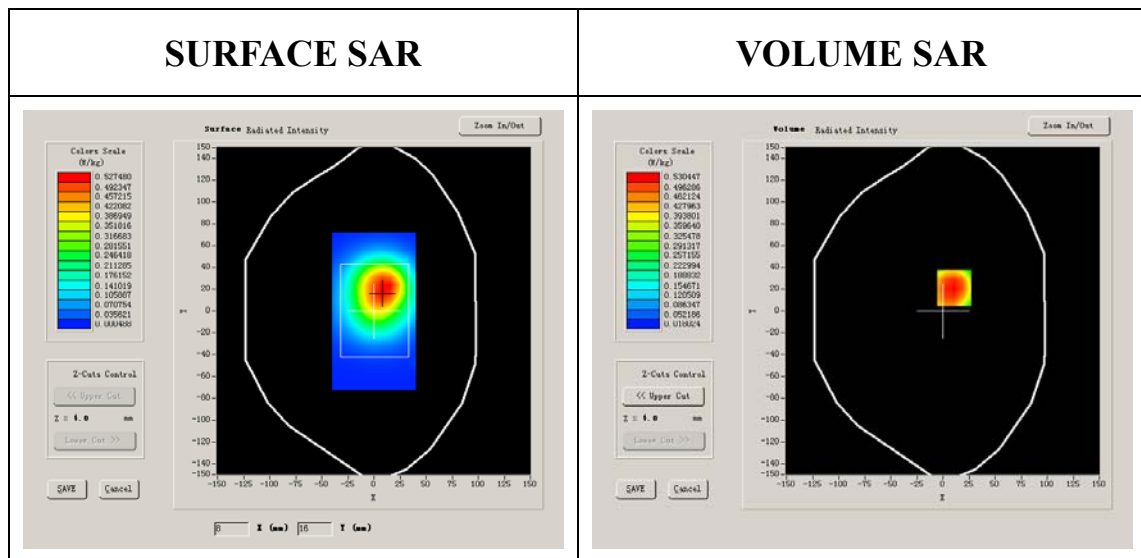
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	802.11 b
Channels	High
Signal	CW

B. SAR Measurement Results

Higher Band SAR:

Frequency (MHz)	2462.000000
Relative permittivity (real part)	54.341000
Relative permittivity	18.967199

Conductivity (S/m)	1.541411
Variation (%)	-1.440000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	39.772,33.946,37.835
Crest factor:	1:1

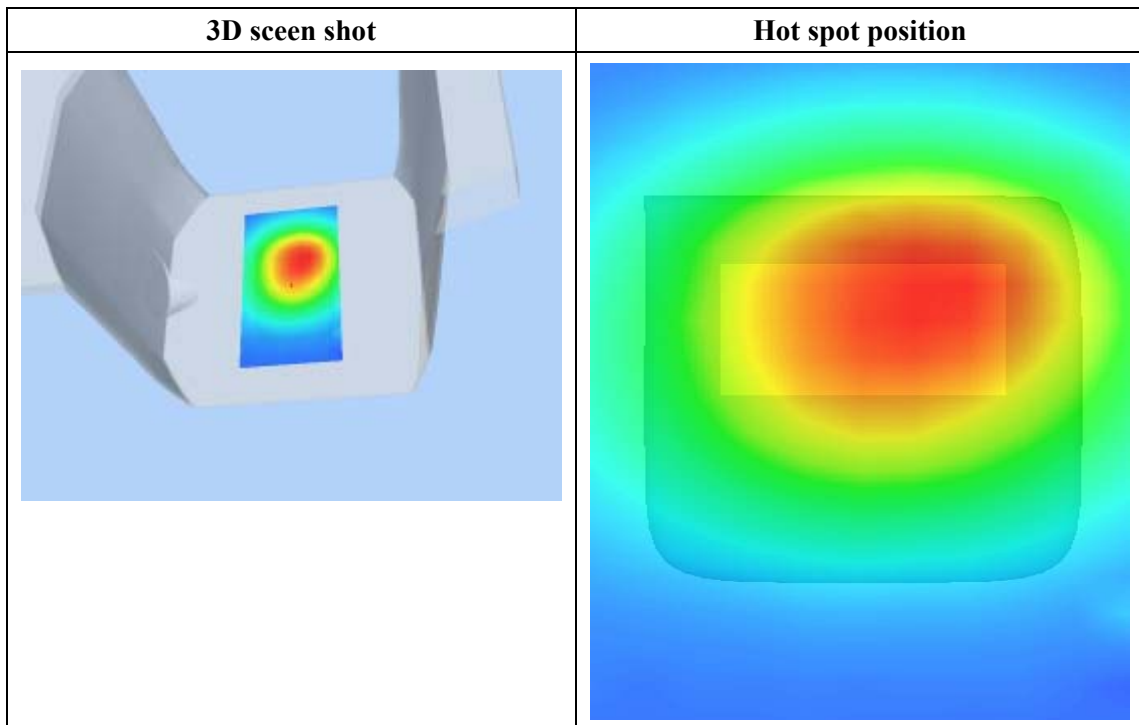
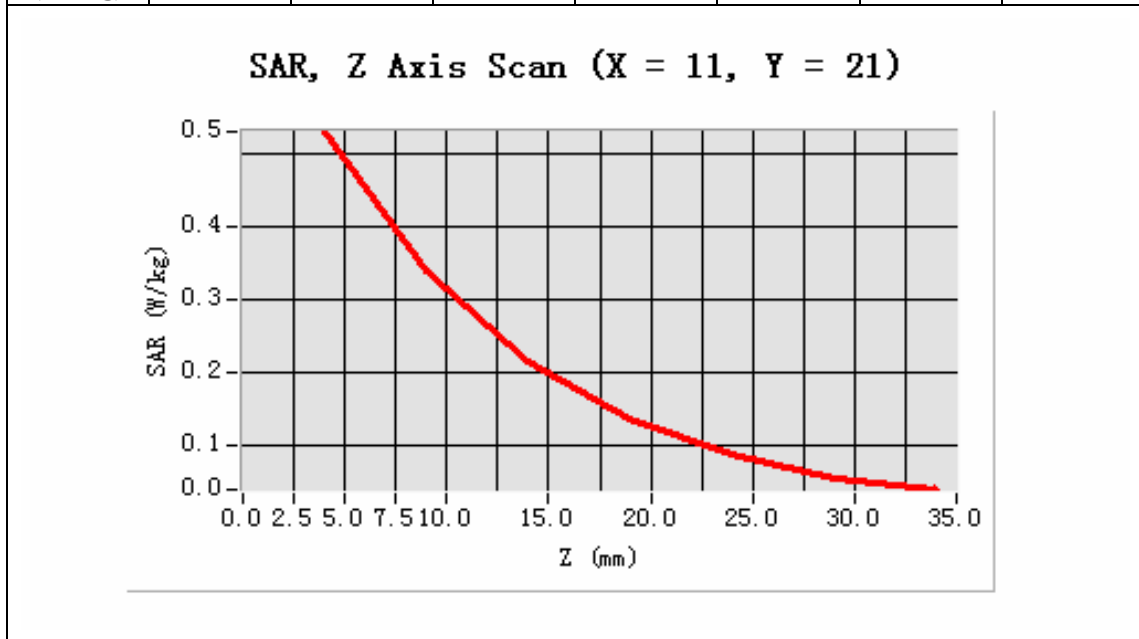


Maximum location: X=11.00, Y=21.00

SAR 10g (W/Kg)	0.088566
SAR 1g (W/Kg)	0.158466

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.5304	0.3381	0.2129	0.1357	0.0870	0.0521



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: 5/8/2010

Measurement duration: 9 minutes 6 seconds

A. Experimental conditions.

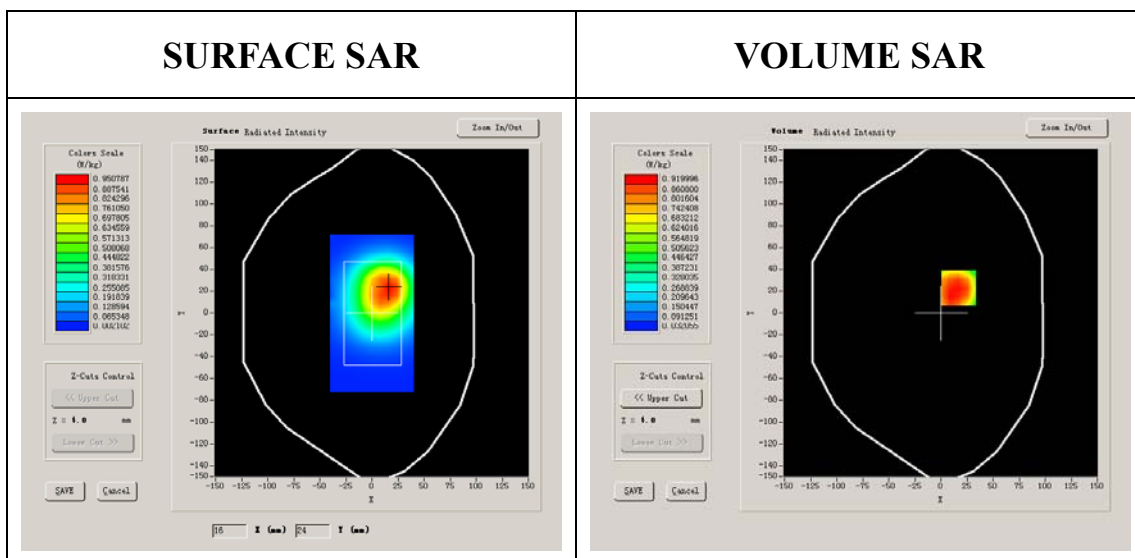
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	802.11 b
Channels	High
Signal	CW

B. SAR Measurement Results

Lower Band SAR:

Frequency (MHz)	2462.000000
Relative permittivity (real part)	54.341000
Relative permittivity	18.926250

Conductivity (S/m)	1.541411
Variation (%)	-0.560000
Ambient Temperature:	22.5°C
Liquid Temperature:	22.3°C
ConvF:	39.772,33.946,37.835
Crest factor:	1:1

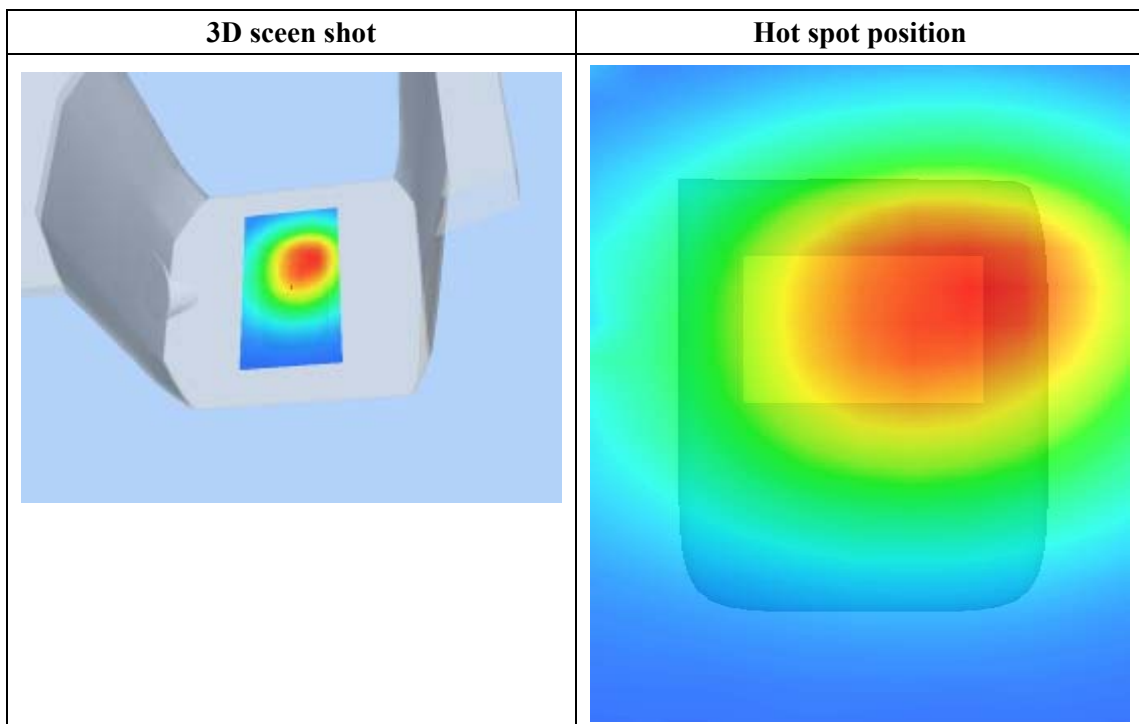
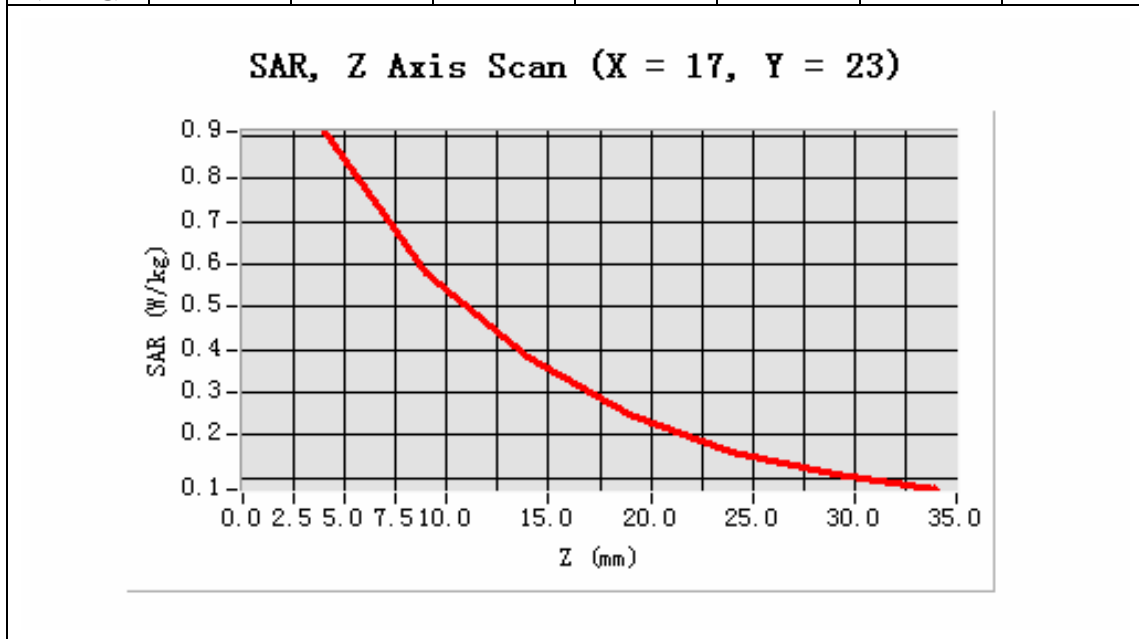


Maximum location: X=17.00, Y=23.00

SAR 10g (W/Kg)	0.068566
SAR 1g (W/Kg)	0.123773

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	0.9112	0.5812	0.3841	0.2467	0.1619	0.1087



System Performance Check Data(835MHz Head)

Type: Phone measurement (Complete)

Date of measurement: 5/8/2010

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

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

A. Experimental conditions.

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

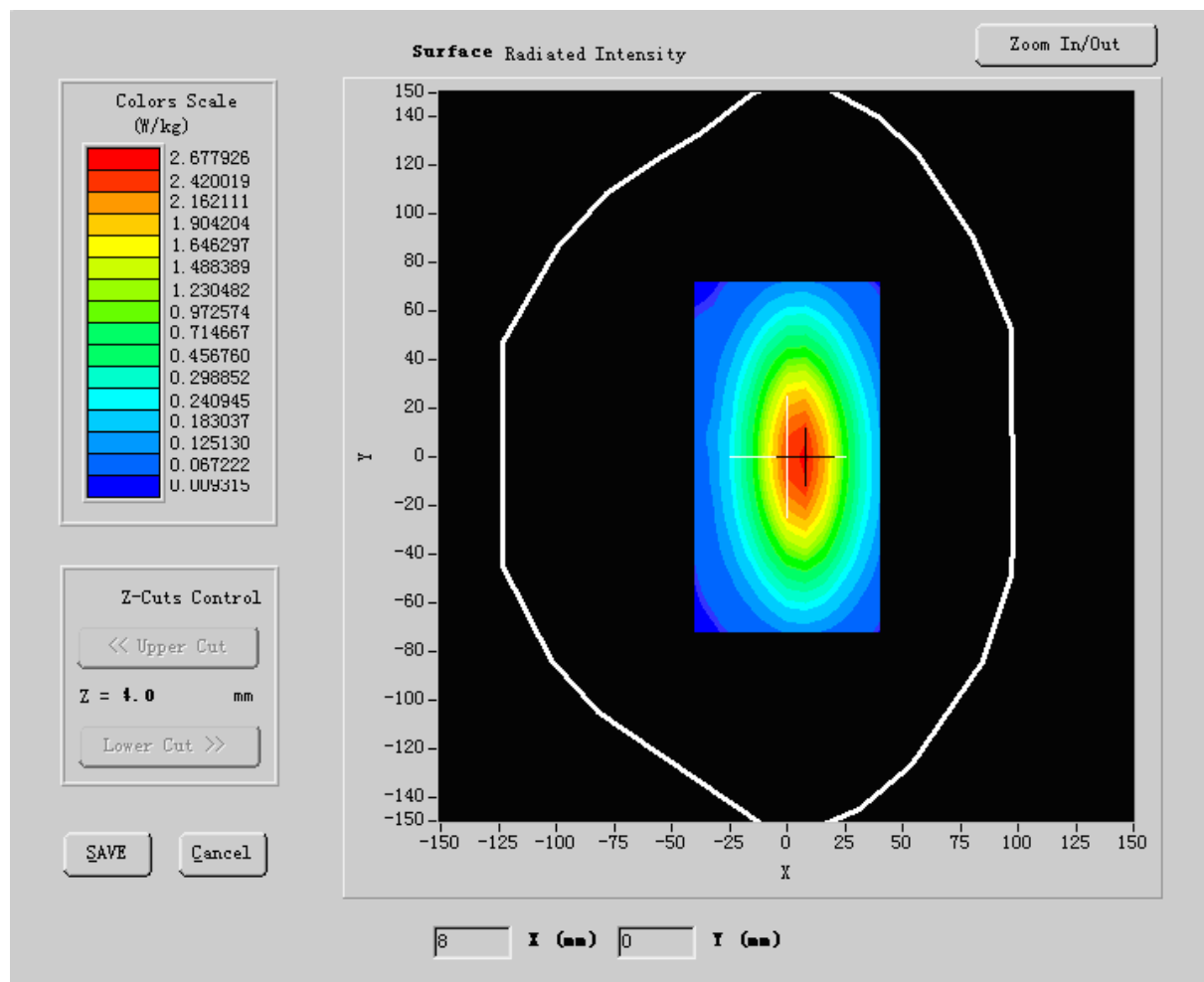
B. SAR Measurement Results

Middle Band SAR:

Frequency (MHz)	835.00000
Relative permittivity (real part)	41.675999
Relative permittivity	18.926250
Conductivity (S/m)	0.894409

Variation (%)	-0.050000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1

SURFACE SAR



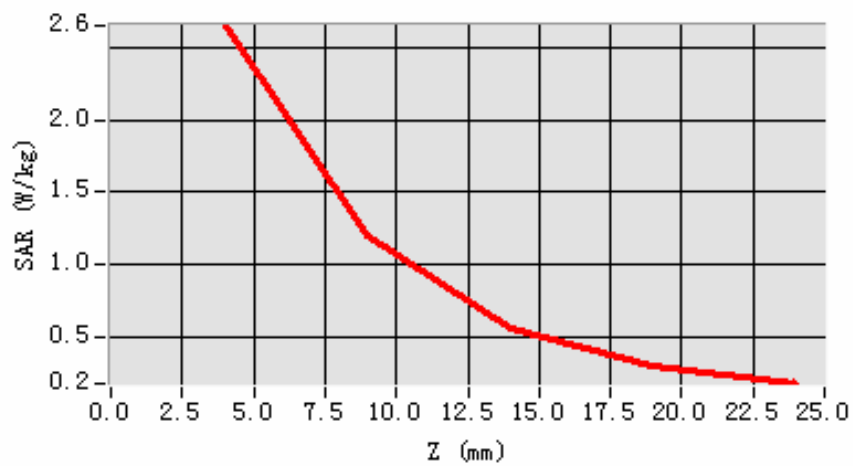
Maximum location: X=5.00, Y=1.00

SAR 10g (W/Kg)	1.875252
SAR 1g (W/Kg)	2.709422

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	2.6486	1.2069	0.5583	0.3002

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



System Performance Check Data(835MHz Body)

Type: Phone measurement (Complete)

Date of measurement: 5/8/2010

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

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

A. Experimental conditions.

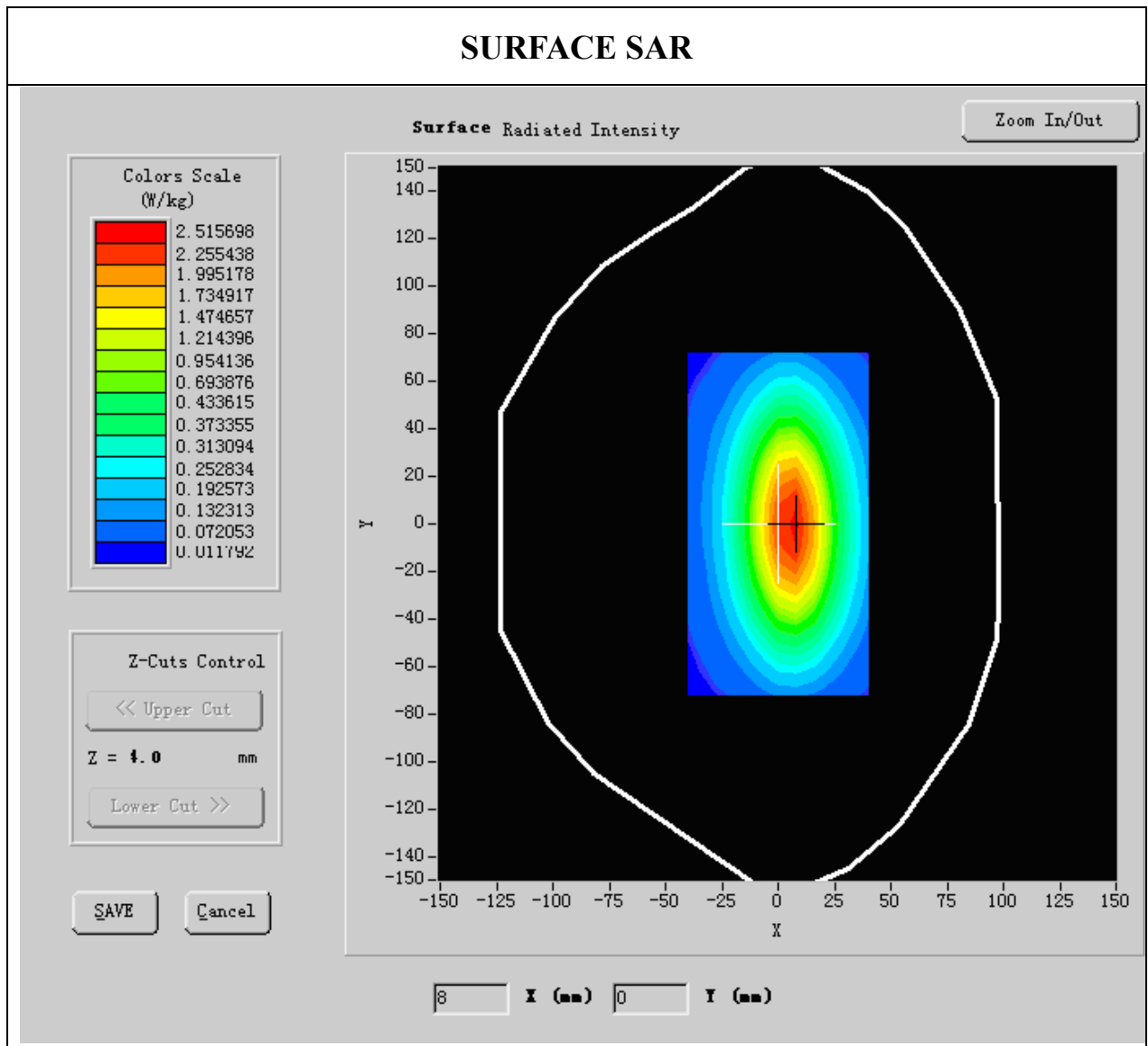
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM 835MHz
Channels	
Signal	CW

B. SAR Measurement Results

Middle Band SAR:

Frequency (MHz)	835.000000
Relative permittivity (real part)	55.709999
Relative permittivity	15.070000
Conductivity (S/m)	1.009033

Variation (%)	-0.140000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	28.479,25.214,27.196
Crest factor:	1:1



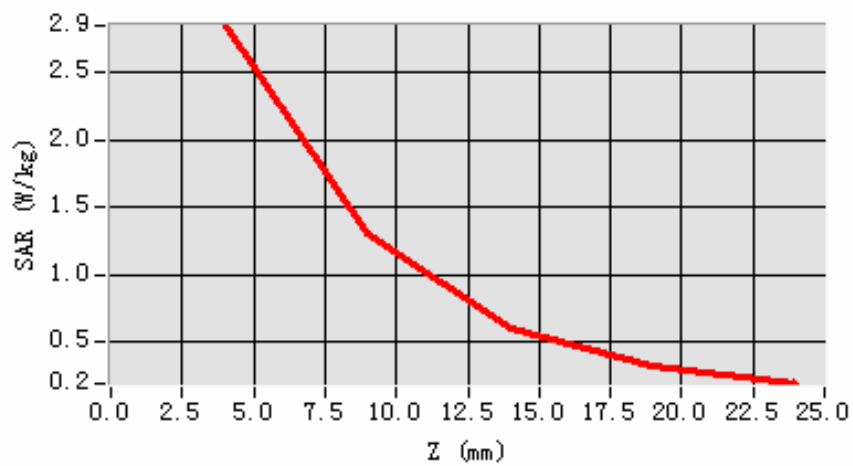
Maximum location: X=5.00, Y=1.00

SAR 10g (W/Kg)	1.652852
SAR 1g (W/Kg)	2.701584

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

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



System Performance Check Data(1900MHz Head)

Type: Phone measurement (Complete)

Date of measurement: 5/8/2010

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

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

A. Experimental conditions.

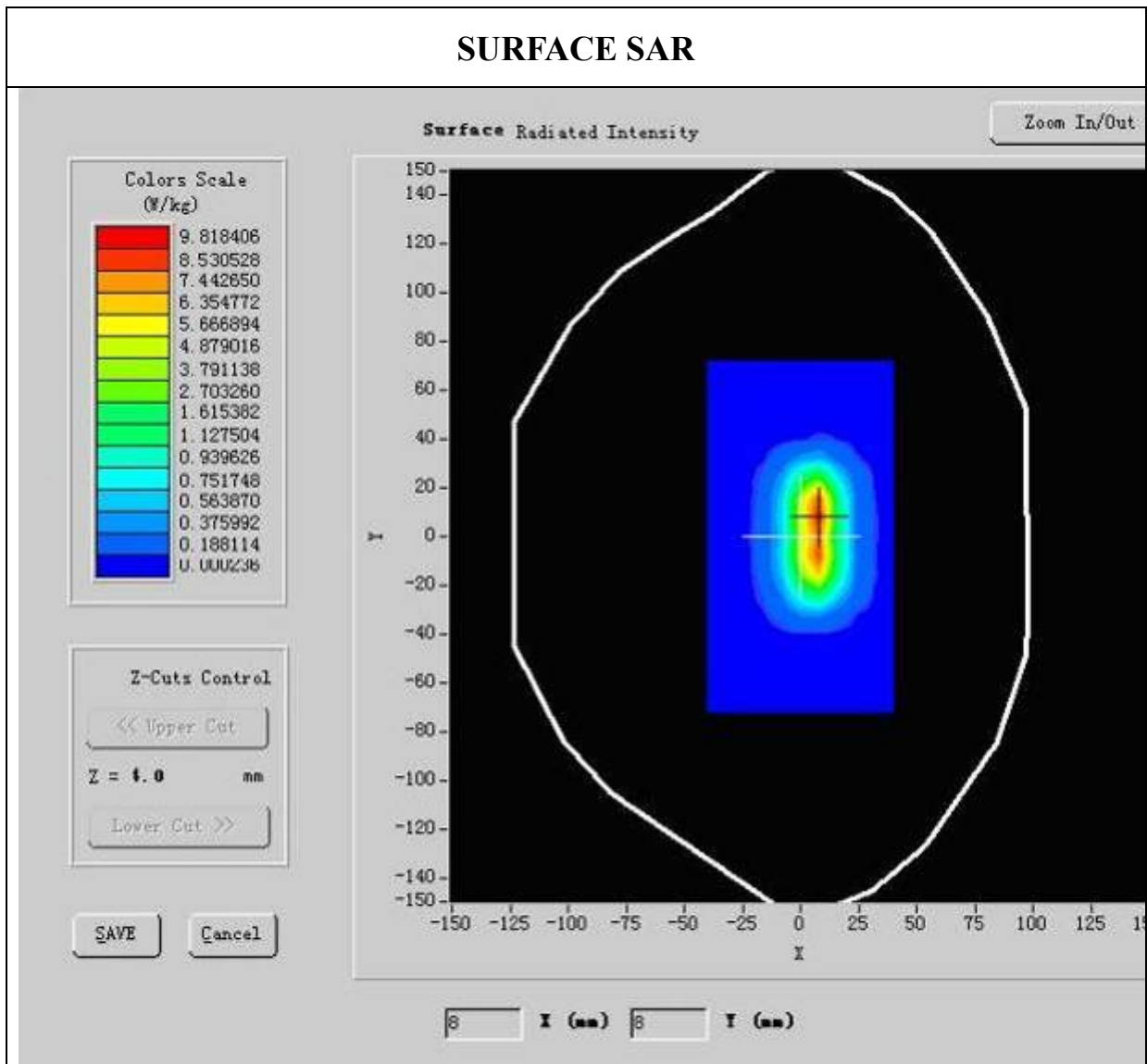
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Device Position	Body
Band	GSM1900
Channels	
Signal	CW

B. SAR Measurement Results

Lower Band SAR:

Frequency (MHz)	1900.000000
Relative permittivity (real part)	39.481223
Relative permittivity	12.991650
Conductivity (S/m)	1.395758

Variation (%)	0.570000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1



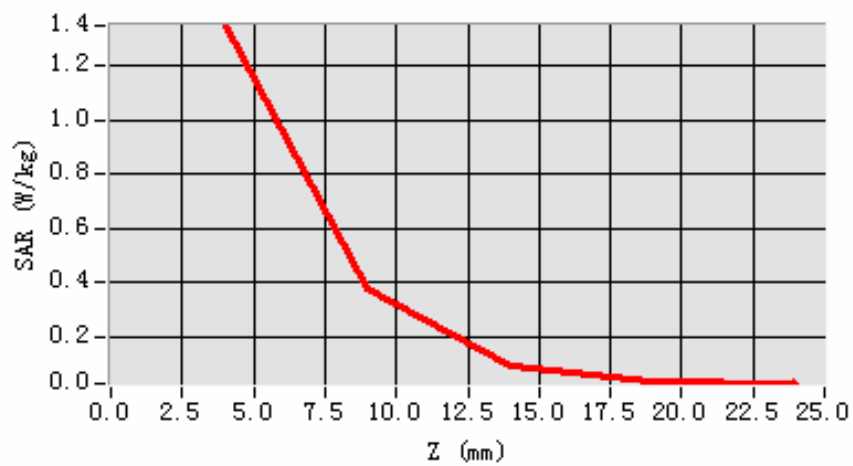
Maximum location: X=7.00, Y=8.00

SAR 10g (W/Kg)	5.873331
SAR 1g (W/Kg)	9.843651

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	1.3503	0.3791	0.0904	0.0338

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



System Performance Check Data(1900MHz Body)

Type: Phone measurement (Complete)

Date of measurement: 5/8/2010

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

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

A. Experimental conditions.

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

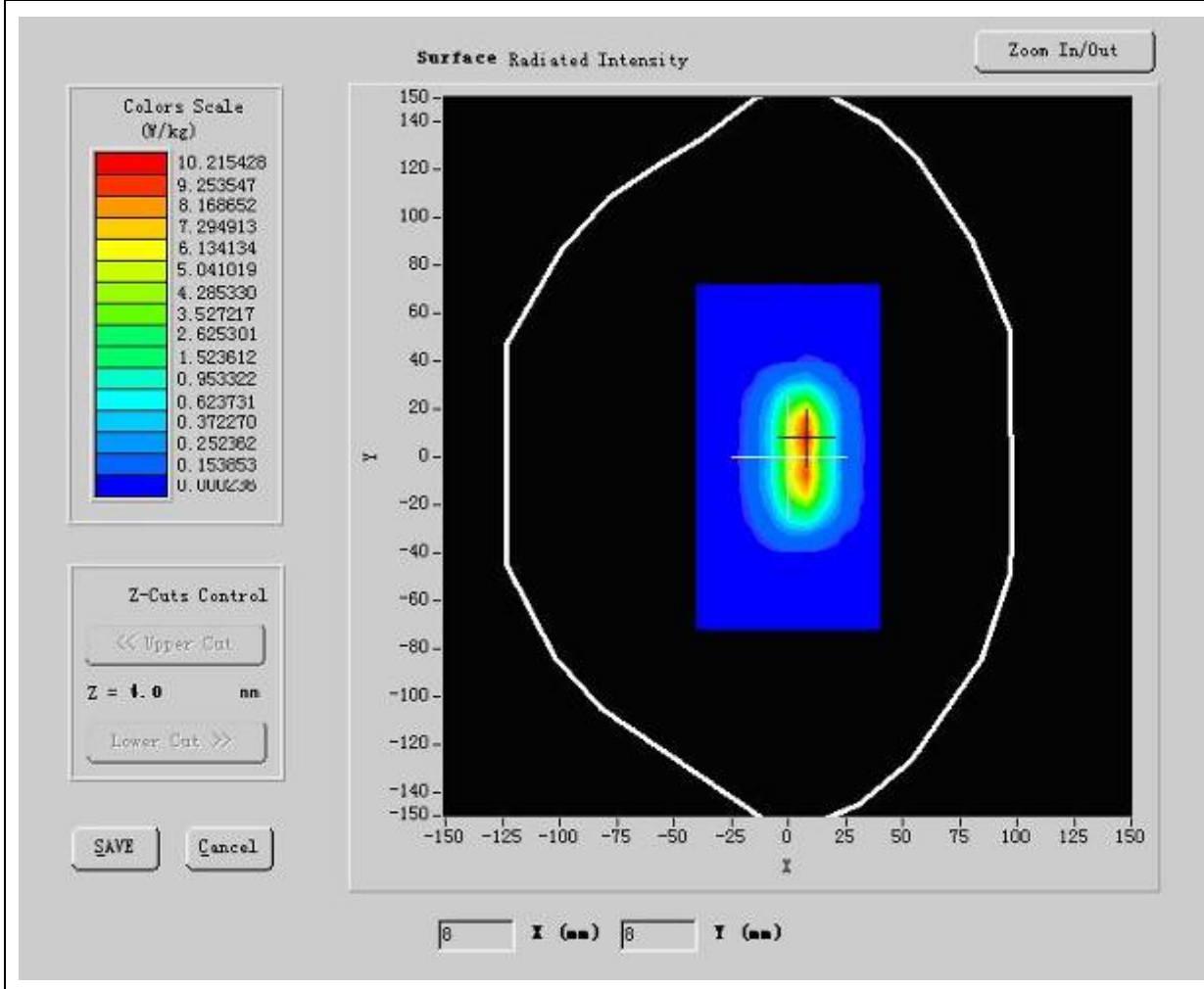
B. SAR Measurement Results

Lower Band SAR:

Frequency (MHz)	1900.000000
Relative permittivity (real part)	52.548876
Relative permittivity (imaginary part)	12.991650

Conductivity (S/m)	1.573978
Variation (%)	0.570000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	40.136,34.843,38.721
Crest factor:	1:1

SURFACE SAR



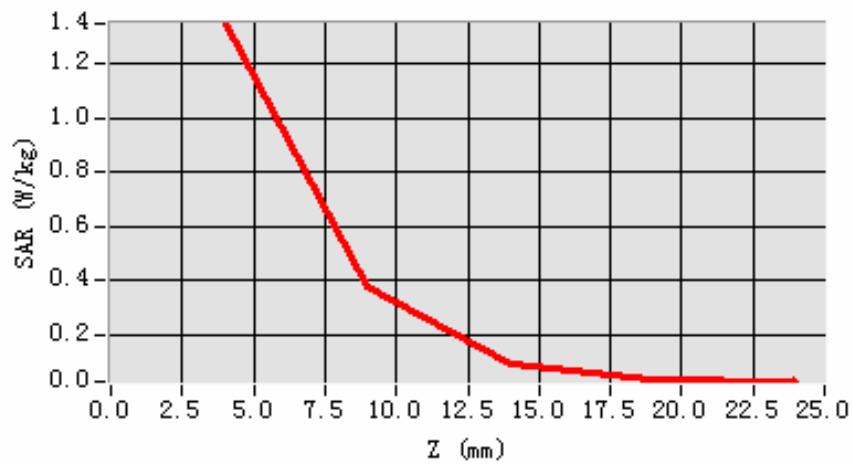
Maximum location: X=7.00, Y=8.00

SAR 10g (W/Kg)	5.487222
SAR 1g (W/Kg)	10.225723

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	1.3503	0.3791	0.0904	0.0338

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





System Performance Check Data(2450MHz Body)

Type: Phone measurement (Complete)

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

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

Date of measurement: 5/8/2010

Measurement duration: 9 minutes 27 seconds

A. Experimental conditions.

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

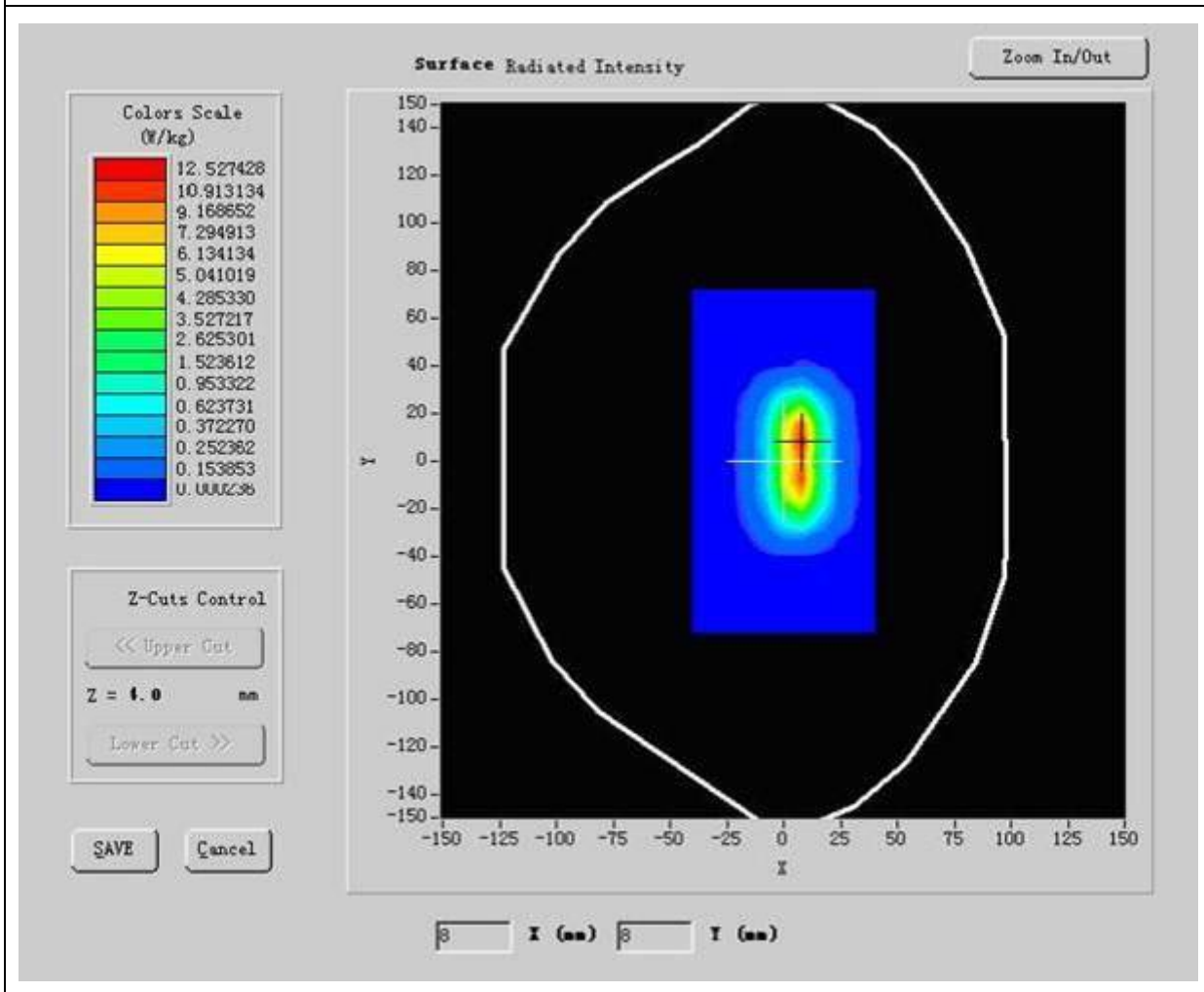
B. SAR Measurement Results

Lower Band SAR:

Frequency (MHz)	2450.000000
Relative permittivity (real part)	54.548876
Relative permittivity	12.991650

Conductivity (S/m)	1.541411
Variation (%)	0.570000
Ambient Temperature:	23.5°C
Liquid Temperature:	22.8°C
ConvF:	39.563,33.614,37.677
Crest factor:	1:1

SURFACE SAR



Maximum location: X=7.00, Y=8.00

SAR 10g (W/Kg)	7.077634
SAR 1g (W/Kg)	12.988772

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	1.3503	0.3791	0.0904	0.0338

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

