

TEST REPORT

上海市计量测试技术研究院
华东国家计量测试中心
中国上海测试中心

检 测 报 告

委 托 者 _____ Ezze Mobile Tech, Inc.
Customer

委托者地址 3F, Bubmusa Bldg., 151-31, Nonhyun-dong, Kangnam-ku,
Address of customer Seoul , Korea

样 品 名 称 _____ GSM/GPRS Mobile phone
Name of sample

制 造 厂 _____ Ezze Mobile Tech, Inc.
Manufacturer

型 号 / 规 格 _____ MASS2
Model/Specification

样 品 编 号 _____ /
No. of sample



报告批准人

Approved by

核 验 员

Checked by

检 测 员

Tested by

检测日期 2008 年 01 月 25 日
Date for test Year Month Day

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Tel. for complaint

未经本院批准, 部分采用本报告内容无效。

Partly using this report will not be admitted unless allowed by SIMT.

Continued page of test report

Test report series No.

国家法定计量检定机构计量授权证书号(中心/院): (国)法计(2002)01039号/(2002)01019号
The number of the Certificate of Metrological Authorization to The Legal Metrological Verification Institution is No. (2002) 01039 / No. (2002) 01019

中国合格评定国家认可委员会实验室认可证书号: No. CNAS L0134
The number of the certificate accredited by CNAS is No. L0134

中国国家认证认可监督管理委员会资质认定计量认证证书(CMA)号: 2006000597E
The number of the metrology accreditation certificate by CNCA is No. 2006000597E

本次检测所依据的技术规范(代号、名称):
Reference documents for the test (code, name)

IEEE 1528-2003 IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques

FCC OET65 C Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields
Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radiofrequency Emissions

本次检测所使用的主要测量仪器:
Main measuring instruments used in this test

Refer to attachment 1

检测地点及环境条件:
Location and environmental condition for the test

地点: No. 716 Yishan Road, Shanghai
Location

温度: 21 °C; 湿度: 50 %RH; 其它:
Ambient temperature Relative humidity Others

检测结果/说明:
Results of test and additional explanation

Pass

(Date of test: 1008.01.25-2008.02.02)

本报告提供的结果仅对本次被测的样品有效。
The data are valid only for the sample(s).

Standard Applicable:

According to 1.1307 (b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline. This product is a portable device.

Measurement Result:

This is a portable device and the max peak output power is 25.9 dBm (389.05m W). Higher than the low threshold $60/f \text{ GHz} = (71.73 \text{ mW})$, $d < 2.5 \text{ cm}$ general population category. The SAR measurement is necessary.

1. Specific Absorption Rate Test**1.1 Basic information****EUT Description**

Product Name	GSM/GPRS Mobile phone
Model No.	MASS2
FCC ID	RV2MASS2
Antenna Type	Integral
GPRS class	8
GPRS Timeslots of test	Uplink :1 Downlink :4
Modulation Mode	GMSK
Tx Frequency range	850MHz: 824~849MHz MHz 1900MHz: 1850~1910MHz
Rx Frequency range	850MHz: 869~894MHz 1900MHz: 1930~1990MHz
Maximum RF Conducted Power	GSM 850: 25.90dBm GSM 850+GPRS:23.26 dBm DCS1900: 22.14 dBm DCS1900+GPRS:19.38 dBm

1.2 Test Environment during SAR test

Temperature	Min. =19°C, Max. =23°C
Relative humidity	Min. =30%, Max. =70%
Ground system resistance	<0.5 Ω
Ambient noise is checked and found very low and in compliance with requirement of standards. Reflection of surrounding objects is minimized and in compliance with requirement of standards.	

1.3 Tissue Simulating Liquid**1.3.1 The composition of the tissue simulating liquid**

The parameters of the simulating solution strongly influence the SAR values. The different normalization organizations have defined adapted solutions for the each mobile system.

GSM liquid: is made of 1-2 Propylene Glycol, de-ionized water and NaCl, reconstituting the electric properties of human tissues at 850MHz/900 MHz;

DCS/PCS Liquid: is made of de-ionized water, DGBE, Triton X 100 and NaCl, reconstituting the electric properties of human tissues at 1800MHz/1900MHz;

UMTS Liquid: is made of de-ionized water, DGBE, Triton X 100 and NaCl, reconstituting the electric properties of human tissues at 2000MHz;

Bluetooth Liquid: is made of de-ionized water, DGBE, Triton X 100 and NaCl, reconstituting the electric properties of human tissues at 2450MHz;

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检测结果/说明（续页）：

Results of test and additional explanation (continued page)

1.3.2 Tissue Calibration Result

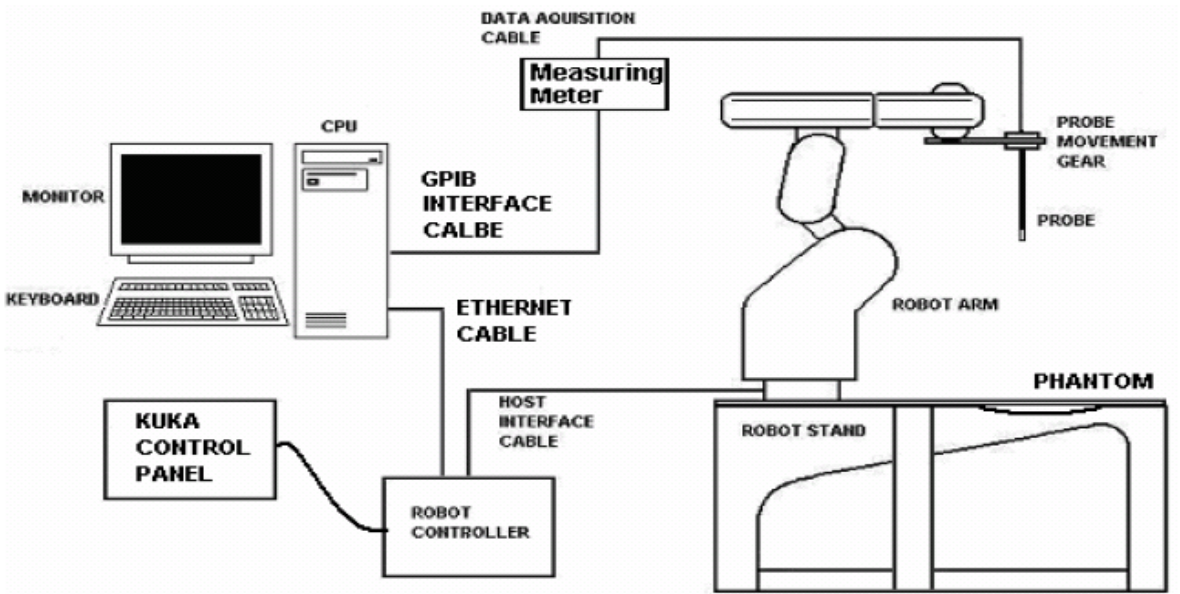
The dielectric parameters of the liquids were verified prior to the SAR evaluation using the Calibration Kits and R&S® ZVB4 Vector Network Analyzers.

Head Tissue simulating Measurement				
Frequency [MHz]	Description	Dielectric Parameters		Tissue Temp.(°C)
		ϵ_r	$\sigma(\text{S/m})$	
850MHz	Reference result +/-5%	41.50	0.90	N/A
	2008-01-31	40.03	0.91	21
1900MHz	Reference result +/-5%	40.00	1.40	N/A
	2008-01-31	38.70	1.38	21

Body Tissue simulating Measurement				
Frequency [MHz]	Description	Dielectric Parameters		Tissue Temp.(°C)
		ϵ_r	$\sigma(\text{S/m})$	
850MHz	Reference result +/-5%	55.20	0.97	N/A
	2008-01-31	54.62	0.99	21
1900MHz	Reference result +/-5%	53.30	1.52	N/A
	2008-01-31	53.81	1.53	21

1.4 SAR Measurement System

This SAR Measurement System uses a Computer-controlled 3-D stepper motor system(SAR Handset Assessment Systems from Antennessa). A E-field probe is used to determine the internal electric fields. The SAR can be obtained from the equation $\text{SAR}=\sigma(|E|^2)/\rho$ where σ and ρ are the conductivity and mass density of the tissue simulating liquid.



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检测结果/说明 (续页):

Results of test and additional explanation (continued page)

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 TCH is allocated to 0, 62 and 124 respectively in the case of GSM 900 MHz, or to 512,698 and 885 respectively in the case of PCS 1800 MHz. 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.

1.4.1 SAM phantom



Figure 1: SAM phantom

The SAM phantom(Antennessa SN:SN_36_05_SAM25) is used to measure the SAR relative to persons exposure to electro-magnetic field radiated by mobile phones. For thickness control purpose, the phantom has several integrated thickness control points(see crosses on the picture below)

Shell thickness	2 mm +/-0.2 mm
Filling volume	27 liters
Dimensions	1000mm(length);500mm (width);200 mm (height)
5 molded plastic points for high precision reference Delivered with 4 nylon screws	
CENELEC 50361 or IEEE 1528-200X versions	

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检测结果/说明（续页）：
Results of test and additional explanation（continued page）

1.4.2 Probe Specification

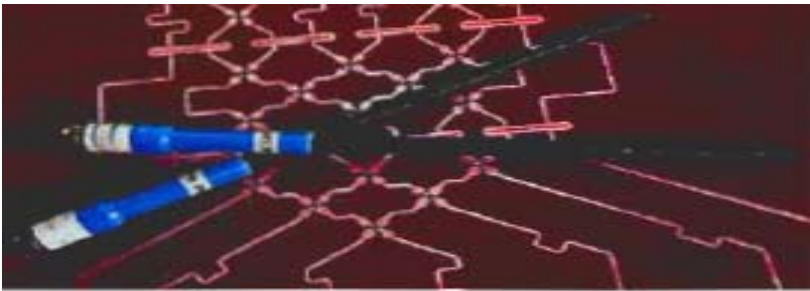


Figure 2: Antennassa probe

E-field probes are constructed with a triangular section bar in alumina. On each face, a dipole and a resistive line are printed. A Schottky diode is placed in the center of each dipole. This probe is designed to fulfill CENELEC and IEEE recommendations for the measurement of electromagnetic fields radiated by mobile phones and base stations. The E-field detection probe is composed of three orthogonal dipoles linked to special Schottky diodes with low detection thresholds. The probe allows the measurement of electric fields in liquids such as the one defined in the IEEE and CENELEC standard. These uncoupled dipoles perform the isotropic and wide-band measurements necessary to assess mobile phones SAR. Figure 3 shows E-field probe relevant features.

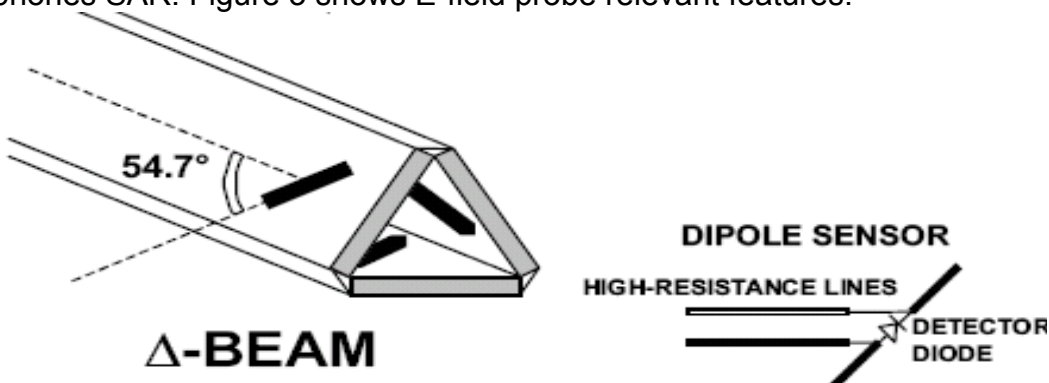


Figure 3:Typical E-field probe construction

The characteristics of the probes	
Frequency range	100 MHz-30 GHz
Maximum external diameter	8 mm
Probe tip external diameter	5 mm
Distance between dipoles and the probe tip	<2.7 mm
Dipole resistance(in the connector plane)	1M to 2M
Axial isotropy in human-equivalent liquids	+/-0.25 dB
Hemispherical Isotropy in human-equivalent liquids	+/-0.5 dB
Linearity	+/-0.5 dB
Maximum operating SAR	100 Watts/Kg
Low SAR detection threshold	0.0015 Watts/Kg
Connectors	6 male wires (Hirose SR30)

检测结果/说明（续页）：
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1.4.3 6 Axis Articulated Robot



This KR3 robot is used in the SAR testing which provides a powerful combination of high-speed flexible automation, high reliability and ease of use. This is due to its brushless DC servomotors, absolute encoders and high-stiffness harmonic drives, which make it one of the fastest and most durable robots in its class.

Figure 4:KR3 robot

Robot/Controller Manufacture	KUKA
Number of axis	6
Position Repeatability	+/- 0.05 mm
Controller	KR C3
Work envelope volume	0.679 m ³
Communication	LAN

1.4.4 Device and Dipole Holder

The SAR value is approximatively inversely proportional to the square of the distance between the source and the internal phantom surface. For a source at 5 mm distance, a positioning uncertainty of +/-0.5 mm would produce a SAR uncertainty of +/-20%. An accurate device positioning is therefore essential for accurate and repeatable measurements

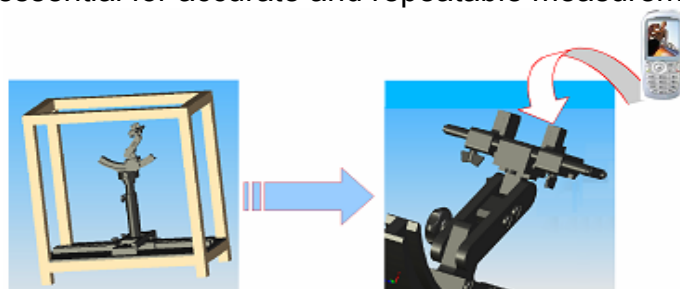
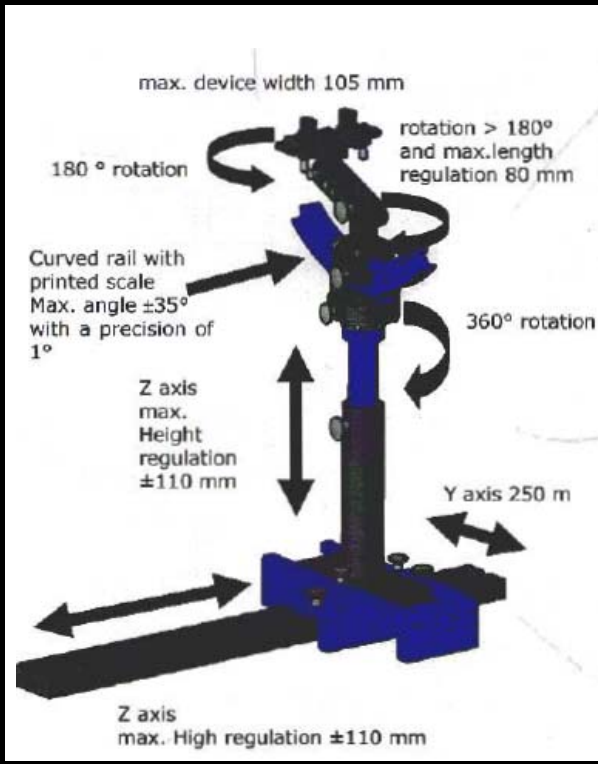


Figure 5:device holder

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

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	Totally metal-free design
	Rotation point on ear opening
	Translation to lock the device under test under the flat part or under the left or right ear
	High repeatability with rotation point external adjustment
	Easy and accurate position according to all standards
	Compliance with mobile phone, PMR or PDA dimensions

This positioning system allows the translation of the mobile phone along the X,Y and Z axis, as well as the required rotation around the phantom ear, for the 2 positions defined by standards(0° “cheek” position and 15° “tilt” position).

1.4.5 Dipoles

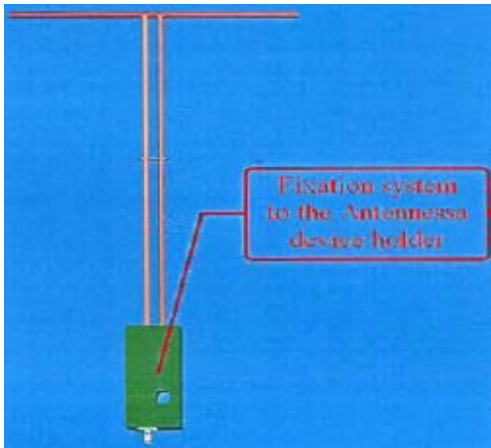


Figure 6:valibration dipole

The antennas are developed with a $\lambda/4$ balun, so that all calibration dipoles are totally symmetrical.

Each validation dipole is used to check the whole SAR measurement chain in its frequency band. They are especially developed to make SAR measurements near a flat SAM phantom filled with human-equivalent liquid, according to CENELEC and IEEE standards.

检测结果/说明（续页）：
Results of test and additional explanation（continued page）

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Frequencies	Antennessa has a full range of dipoles corresponding to the frequencies defines by standards: 835,900,1800,1900,2450,3000MHz,etc.	
Adaptation	S11<-20dB in specified validation position	
Maximum input Power	100W	
Connectors	SMA	
Dimensions	Height: between 200 mm and 300 mm Length: between 25 mm and 83 mm	}depends on the dipole frequency

1.5 SAR Measurement Procedure

1.5.1 General Requirements

The test shall be performed in a laboratory with an environment which avoids influence on SAR measurements by ambient EM sources and reflection from the environment itself. The ambient temperature shall be in the range of 18°C to 25°C during the test

1.5.2 Test Positions

As it cannot be expected that the user will hold the mobile phone exactly in one well defined position, different operational conditions shall be tested. The IEEE standard requires two test positions. For an exact description helpful geometrical definitions are introduced and shown in Fig. 7-8.

There are two imaginary lines on the mobile, the vertical centerline and the horizontal line. The vertical centerline passes through two points on the fronts side of the handset: the midpoint of the width w_t of the handset at the level of the acoustic output(point A on Fig.7),and the midpoint of the width w_b of the bottom of the handset (point B).The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output (see Fig.7).The two lines intersect at point A

检测结果/说明 (续页) :

Results of test and additional explanation (continued page)

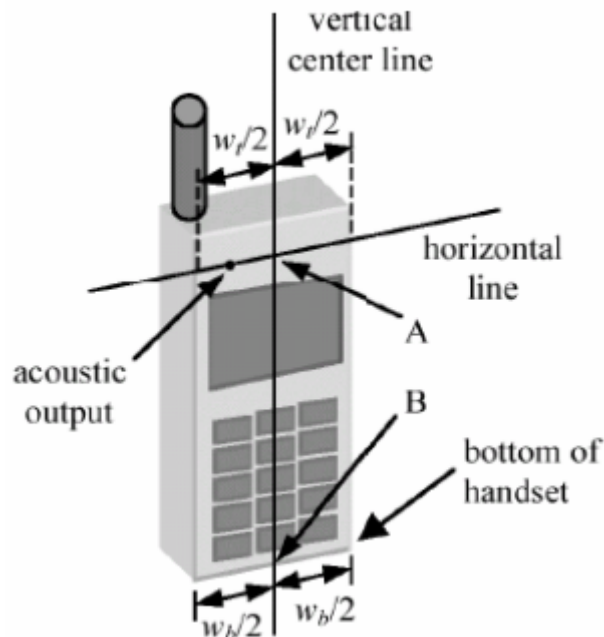


Figure 7: Handset vertical and horizontal reference lines

According to Fig.8 the human head position is given by means of the following three reference points: auditory canal opening of both ears (RE and LE) and the center of the closed mouth (M). The ear reference points are 15-17mm above the entrance to the ear canal along the BM line (back-mouth), as shown in Fig.8. The plane passing through the two ear canals and M is defined as the reference plane. The line NF (Neck-Front) perpendicular to the reference plane and passing through the RE (or LE) is called the reference pivoting line. Line BM is perpendicular to the NF line. With this definitions the test positions are given by

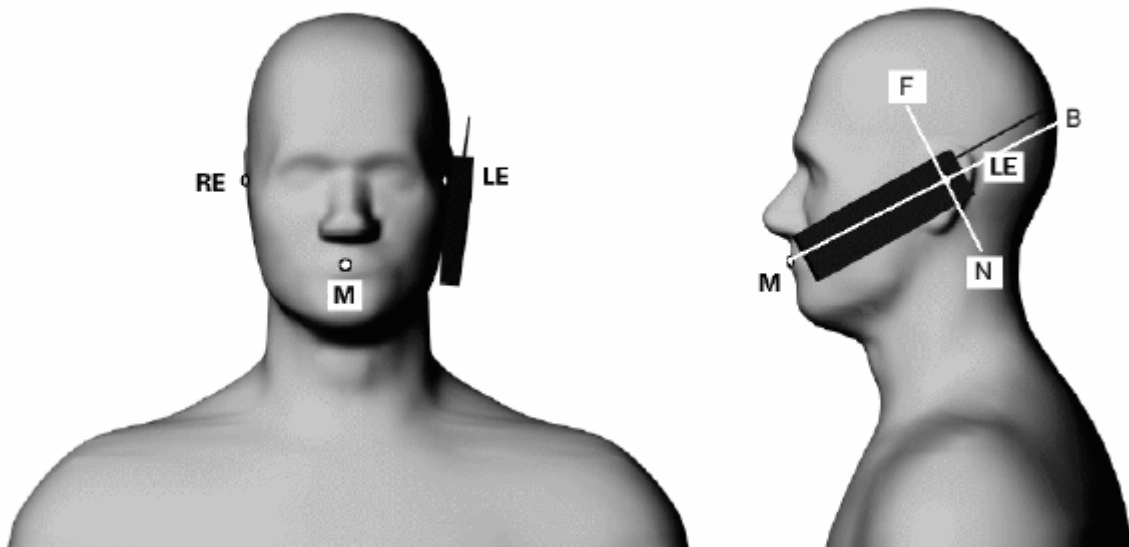


Figure 8: Phantom reference points

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

1.5.2.1 Cheek position (see Fig.9)

Position the handset close to the surface of the phantom such that point A is on the (virtual) extension of the line passing through points RE and LE on the phantom (see Fig.8). such that the plane defined by the vertical center line and the horizontal line of the phone is approximately parallel to the sagittal plane of the phantom. Translate the handset towards the phantom along the line passing through RE and LE until the handset touches the ear. While maintaining the handset in this plane, rotate it around the LE-RE line until the vertical centerline is in the plane normal to MB-NF including the line MB (called the reference plane). Rotate the phone around the vertical centerline until the phone (horizontal line) is symmetrical with respect to the line NF. While maintaining the vertical centerline in the reference plane, keeping point A on the line passing through RE and LE, and maintaining the phone contact with the ear, rotate the handset about the line NF until any point on the handset is in contact with a phantom point below the ear.

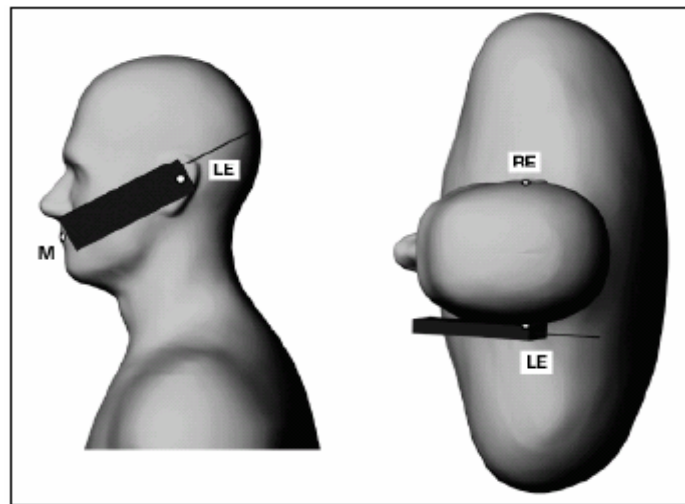


Figure 9: The cheek position

1.5.2.2 Tilted position (see Fig.10)

While maintaining the orientation of the phone retract the phone parallel to the reference plane far enough to enable a rotation of the phone by 15° . Rotate the phone around the horizontal line by 15° . While maintaining the orientation of the phone, move the phone parallel to the reference plane until any part of the phone touches the head. In the position, point A will be located on the line RE-LE.

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检测结果/说明 (续页):

Results of test and additional explanation (continued page)

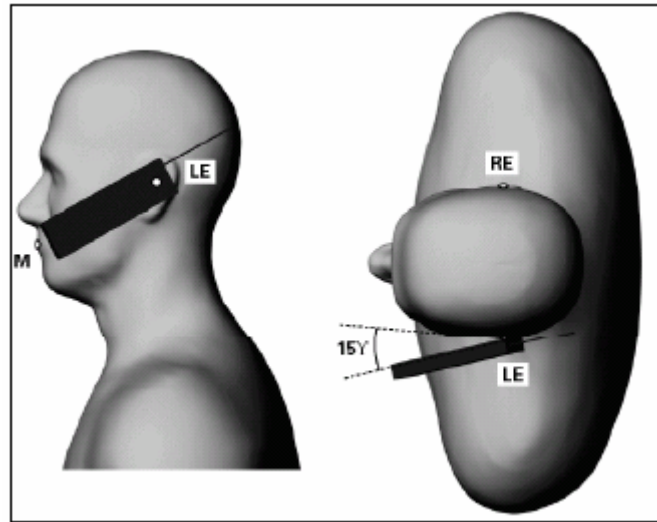


Figure10: The tilted position

1.5.2.3 Body-worn and Other Configurations

Body-worn operating configurations should be tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in normal use configurations. A separation distance of 1.5 cm between the back of the device and a flat phantom is recommended for testing body-worn SAR compliance under such circumstances. Other separation distance may be use, but not exceed 2.5 cm.

1.5.3 Test to be performed

1.5.3.1 The SAR test shall be performed with both phone positions described above, on the left and right side of the phantom. The device shall be measured for all modes operating when the device is next to the ear, even if the different modes operate in the same frequency band. First the SAR test shall be performed using the center frequency of each available operating band and mode with the maximum peak power level. At the device position with highest SAR (cheek or tilted, left or right), the test is repeated at the lowest and highest frequency. In addition, for all other device positions respectively configurations where the spatial peak SAR value is within 3dB of the 1.6 W/kg limit, the lowest and highest frequencies should be tested.

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

1.5.3.3 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 phone and the base station simulator is established via air interface.

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Measurement of the local E-field distribution is done with a grid of 8 mm*8mm and a constant distance 4mm to the inner surface of the phantom. Since the sensors cannot directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolating scheme.

Around this point, a cube of 30*30*30mm or 32*32*30mm is assessed by measuring 5*5*5mm or 8*8*5 mm. With these data, the peak spatial-average SAR value can be calculated.

1.5.4 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 base on a fourth-order least square polynomial fit of measured data. The local SAR value is then extrapolated from the liquid surface with a 1mm step.

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

1.5.5 SAR Exposure Limits

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

Type Exposure	Uncontrolled Environment Limit
Spatial Peak SAR (1g cube tissue for brain or body)	1.60W/Kg(U.S.A)
Spatial Peak SAR (10g cube tissue for brain or body)	2.0 W/Kg(EURO)
Spatial Average SAR (whole body)	0.08W/Kg
Spatial Peak SAR (10g for hands, feet, ankles and wrist)	4.00W/Kg

1.5.6 Summary of Measurement Results

Peak Spatial-Average Specific Absorption Rate (SAR) of this portable wireless device has been measured in all configurations. this portable wireless device was also measured against the head/body with Bluetooth on, The difference of two measurements can be neglected.

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Table 1: SAR Values(GSM 850),Measured against the head/body(Duty Cycle:8).

Temperature: 21.0~21.5°C, Relative Humidity: 60~65%.				
Limit of SAR (W/kg)	1 g Average			
	1.6			
Test Configuration	retracted		extended	
	SAR (W/kg)	before/after Power (dBm)	SAR (W/kg)	before/after Power (dBm)
Left head, Touch cheek, Low Channel	0.213	25.83/25.81	0.211	25.83/25.75
Left head, Touch cheek, Middle Channel	0.275	25.86/25.82	0.230	25.85/25.77
Left head, Touch cheek, High Channel	0.406	25.82/25.80	0.266	25.84/25.74
Left head, Touch cheek, High Channel (Bluetooth on)	0.361	25.80/25.75	0.229	25.80/25.70
Left head, Tilt 15, Low Channel	0.085	25.84/25.82	0.128	25.86/25.82
Left head, Tilt 15, Middle Channel	0.114	25.83/25.80	0.144	25.88/25.85
Left head, Tilt 15, High Channel	0.179	25.82/25.78	0.157	25.90/25.88
Right head, Touch cheek, Low Channel	0.166	25.80/25.78	0.195	25.82/25.80
Right head, Touch cheek, Middle Channel	0.212	25.82/25.80	0.214	25.80/25.78
Right head, Touch cheek, High Channel	0.295	25.81/25.79	0.252	25.82/25.80
Right head, Tilt 15, Low Channel	0.062	25.80/25.78	0.122	25.84/25.75
Right head, Tilt 15, Middle Channel	0.076	25.82/25.80	0.141	25.80/25.70
Right head, Tilt 15, High Channel	0.128	25.81/25.78	0.155	25.83/25.78
Body, Low Channel	0.231	25.90/25.85	0.211	25.84/25.73
Body, Mid Channel	0.195	25.78/25.76	0.194	25.85/25.78
Body, Mid Channel(face to bottom)	0.068	25.80/25.75	0.145	25.82/25.76
Body, High Channel	0.304	25.90/25.85	0.259	25.84/25.78
Body, High Channel(Bluetooth on)	0.339	25.80/25.78	0.235	25.85/25.76

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检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Table 2: SAR Values(GSM 850+GPRS(class 8, 1Tx/4Rx,UL:1 time slot,DL:4 time slots)),Measured against the body(Duty Cycle:8).

Temperature: 21.0~21.5°C, Relative Humidity: 60~65%.				
Limit of SAR (W/kg)	1 g Average			
	1.6			
Test Configuration	retracted		extended	
	SAR (W/kg)	before/after Power (dBm)	SAR (W/kg)	before/after Power (dBm)
Body, Low Channel	0.156	23.26/23.24	0.171	23.22/22.19
Body, Mid Channel	0.201	23.20/23.20	0.190	23.15/23.12
Body, Mid Channel(face to bottom)	0.074	23.18/23.14	0.158	23.12/23.13
Body, High Channel	0.307	23.16/23.14	0.223	23.24/23.12
Body, High Channel(Bluetooth on)	0.286	23.18/23.12	0.223	23.26/23.15

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Table 3: SAR Values(PCS 1900),Measured against the head/body(Duty Cycle:8).

Temperature: 21.0~21.5°C, Relative Humidity: 60~65%.				
Limit of SAR (W/kg)	1 g Average			
	1.6			
Test Configuration	retracted		extended	
	SAR (W/kg)	before/after Power (dBm)	SAR (W/kg)	before/after Power (dBm)
Left head, Touch cheek, Low Channel	0.536	22.12/22.08	0.199	22.14/22.08
Left head, Touch cheek, Middle Channel	0.596	22.10/22.05	0.191	22.12/22.05
Left head, Touch cheek, High Channel	0.592	22.14/22.10	0.217	22.10/22.04
Left head, Touch cheek, High Channel (Bluetooth on)	/	/	0.227	22.11/22.09
Left head, Tilt 15, Low Channel	0.157	22.13/22.10	0.042	22.00/21.95
Left head, Tilt 15, Middle Channel	0.191	22.11/22.08	0.044	22.08/21.96
Left head, Tilt 15, High Channel	0.191	22.14/22.10	0.058	22.06/21.95
Right head, Touch cheek, Low Channel	0.627	22.13/22.12	0.127	22.10/21.98
Right head, Touch cheek, Middle Channel	0.717	22.14/22.11	0.147	22.12/21.94
Right head, Touch cheek, High Channel	0.907	22.13/22.10	0.214	22.13/21.92
Right head, Touch cheek, High Channel (Bluetooth on)	0.830	22.05/22.00	/	/
Right head, Tilt 15, Low Channel	0.186	22.14/22.12	0.057	22.10/21.90
Right head, Tilt 15, Middle Channel	0.209	22.10/22.12	0.057	22.11/22.09
Right head, Tilt 15, High Channel	0.275	22.11/22.08	0.080	22.10/21.90
Body, Low Channel	0.148	22.05/22.02	0.168	22.12/22.10
Body, Mid Channel	0.187	22.06/22.03	0.217	22.14/21.98
Body, Mid Channel(face to bottom)	0.083	22.08/22.04	0.101	22.12/22.10
Body, High Channel	0.259	22.04/22.01	0.287	22.14/21.95
Body, High Channel(Bluetooth on)	0.306	22.06/22.02	0.282	22.00/21.90

检测结果/说明 (续页) :

Results of test and additional explanation (continued page)

Test report series No.

Table 4: SAR Values(PCS 1900+GPRS(class 8, 1Tx/4Rx,UL:1 time slot,DL:4 time slots)),Measured against the body(Duty Cycle:8).

Temperature: 21.0~21.5°C, Relative Humidity: 60~65%.				
Limit of SAR (W/kg)	1 g Average			
	1.6			
Test Configuration	retracted		extended	
	SAR (W/kg)	before/after Power (dBm)	SAR (W/kg)	before/after Power (dBm)
Body, Low Channel	0.182	19.38/19.30	0.166	19.34/19.30
Body, Mid Channel	0.234	19.32/19.30	0.203	19.35/19.30
Body, Mid Channel(face to bottom)	0.093	19.36/19.33	0.108	19.37/19.35
Body, High Channel	0.320	19.37/19.32	0.283	19.38/19.34
Body, High Channel(Bluetooth on)	0.259	19.35/19.31	0.268	19.37/19.30

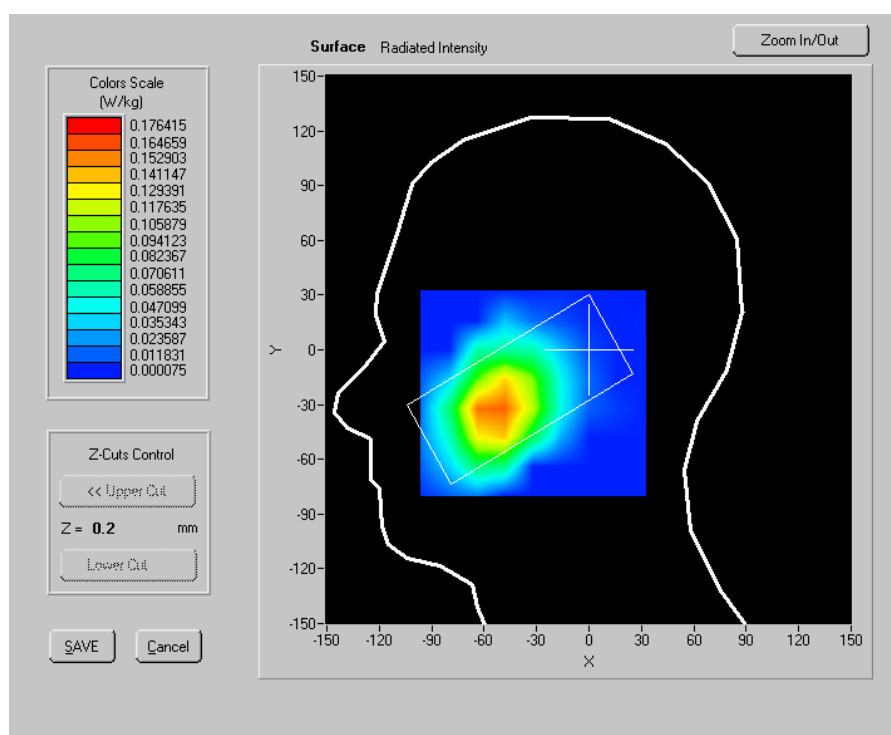
检测结果/说明 (续页) :

Results of test and additional explanation (continued page)

1.5.6 Test Results**1.5.6.1GSM 850MHz****Right head, Cheek (retracted)****Lower Band SAR (Channel 128):**

Experimental conditions	
Phantom	Right head
Device Position	Cheek (retracted)
Band	GSM850
Channels	Low
Signal	TDMA
before/after Power Level:	25.80 dBm/25.78 dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date:	2008.1.20

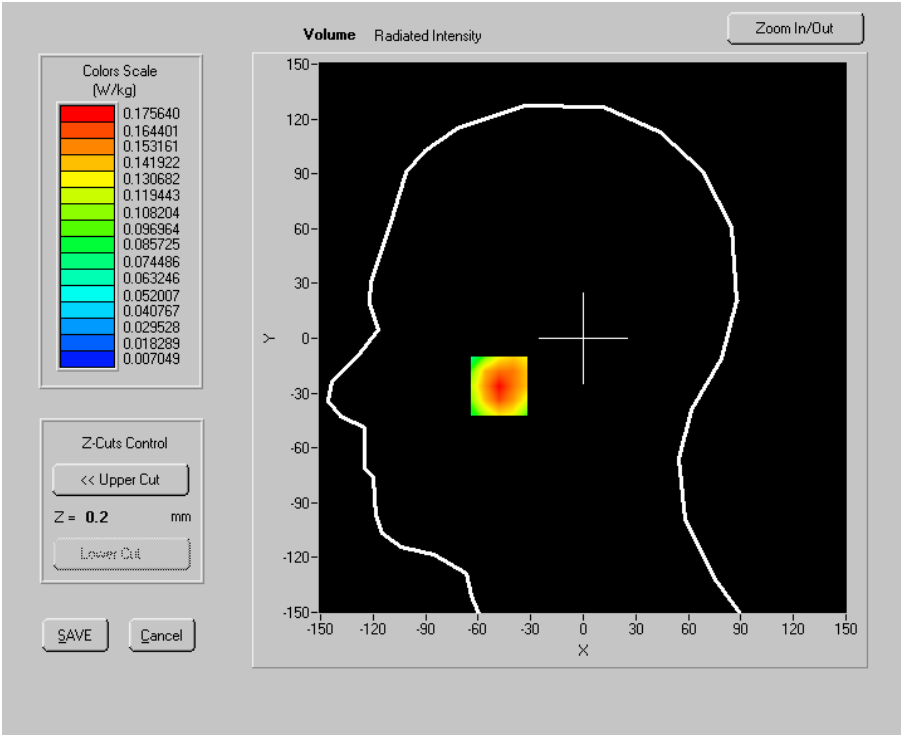
Frequency (MHz)	824.200012
Relative permittivity (real part)	40.160999
Relative permittivity (imaginary part)	19.506901
Conductivity (S/m)	0.893199
Variation (%)	-1.290000

**SURFACE SAR**

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

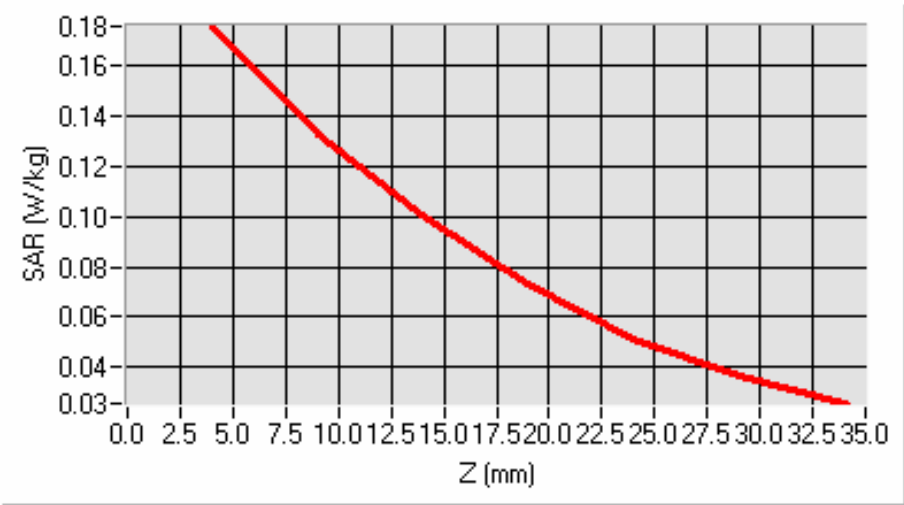


VOLUME SAR

Maximum location: X=-48.00, Y=-26.00

SAR 10g (W/Kg)	0.115414
SAR 1g (W/Kg)	0.166407

SAR, Z Axis Scan (X = -48, Y = -26)

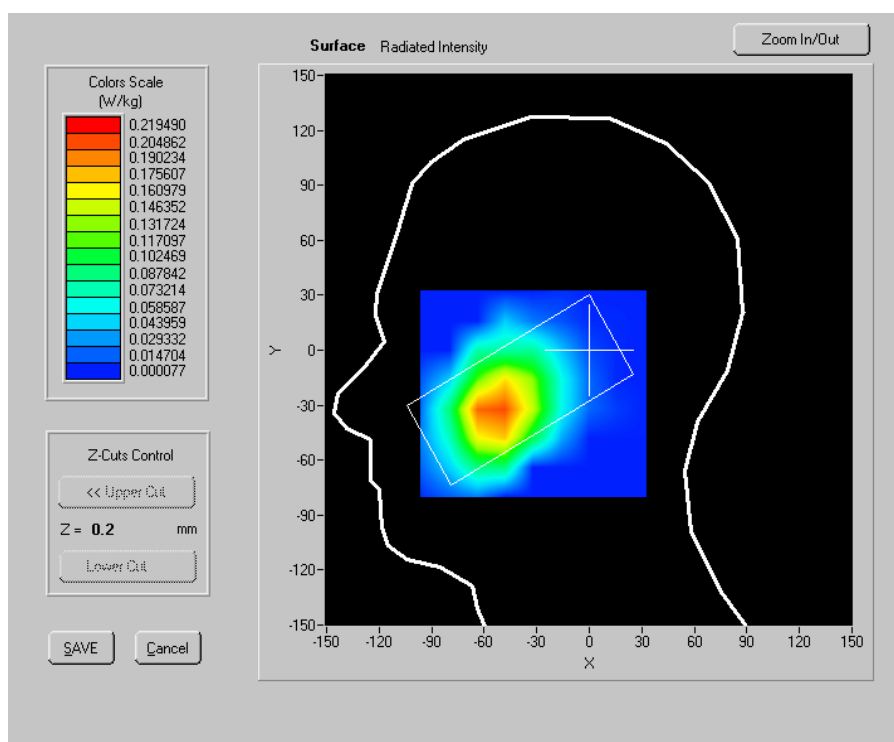


检测结
Results of te

Middle Band SAR (Channel 189):

Experimental conditions	
Phantom	Right head
Device Position	Cheek (retracted)
Band	GSM850
Channels	Middle
Signal	TDMA
before/after Power Level:	25.82 dBm/25.80 dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date:	2008.1.20

Frequency (MHz)	836.400024
Relative permittivity (real part)	40.029999
Relative permittivity (imaginary part)	19.565701
Conductivity (S/m)	0.909153
Variation (%)	0.790000

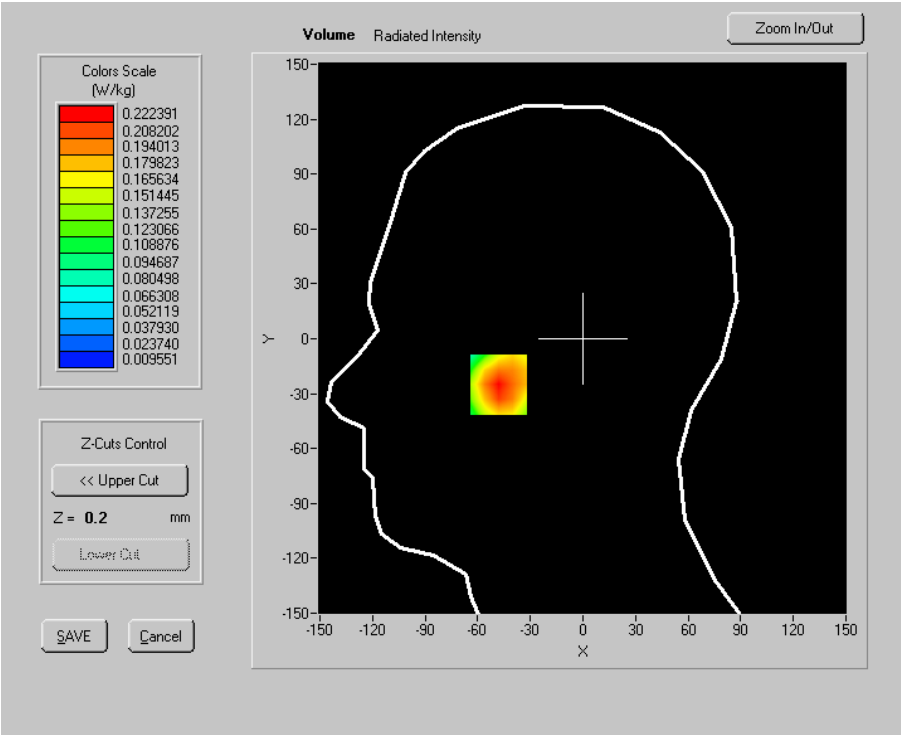


SURFACE SAR

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

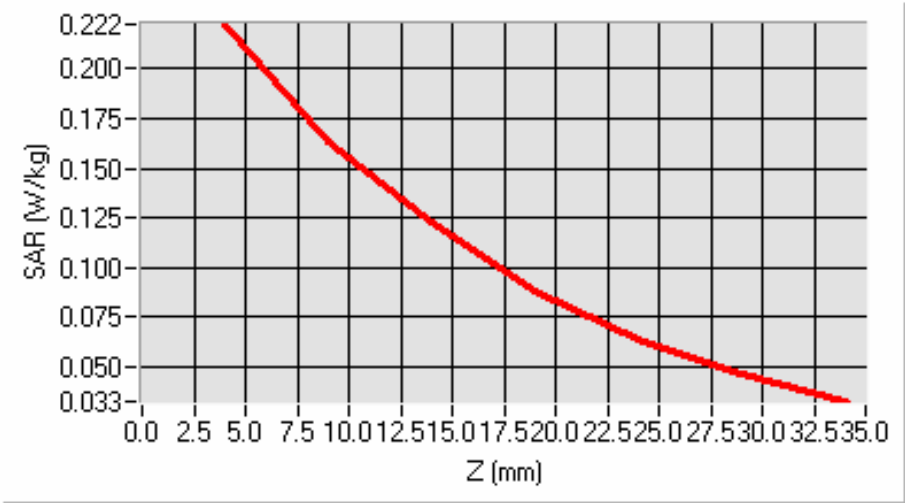


VOLUME SAR

Maximum location: X=-48.00, Y=-25.00

SAR 10g (W/Kg)	0.145491
SAR 1g (W/Kg)	0.211813

SAR, Z Axis Scan (X = -48, Y = -25)



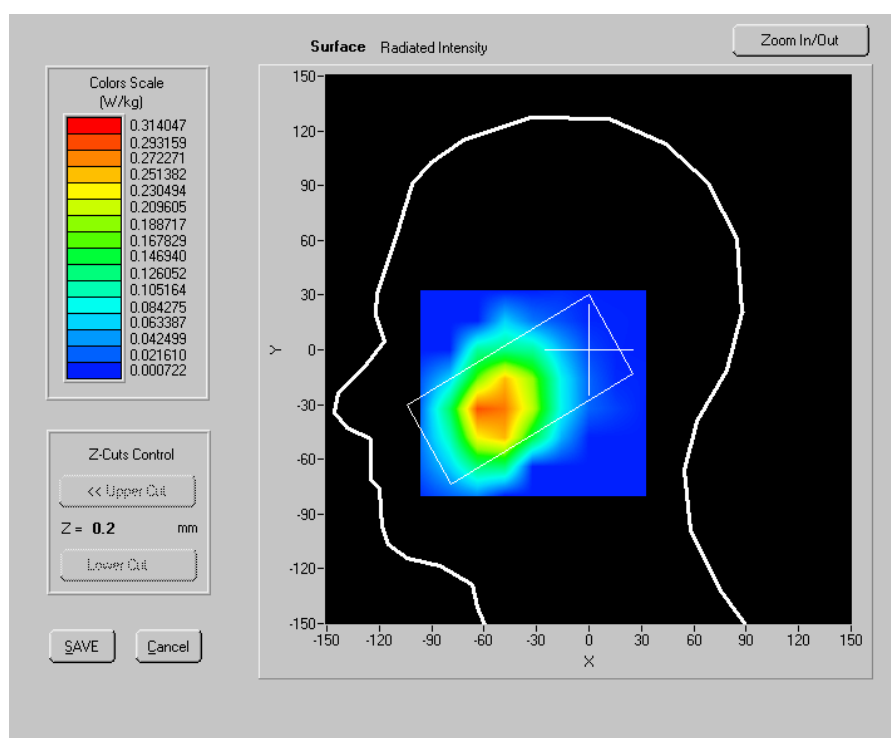
检测结
Results of t

Test report series No.

Higher Band SAR (Channel 251):

Experimental conditions	
Phantom	Right head
Device Position	Cheek (retracted)
Band	GSM850
Channels	High
Signal	TDMA
before/after Power Level:	25.81 dBm/25.79 dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date:	2008.1.20

Frequency (MHz)	848.799988
Relative permittivity (real part)	39.894001
Relative permittivity (imaginary part)	19.601400
Conductivity (S/m)	0.924315
Variation (%)	-1.670000

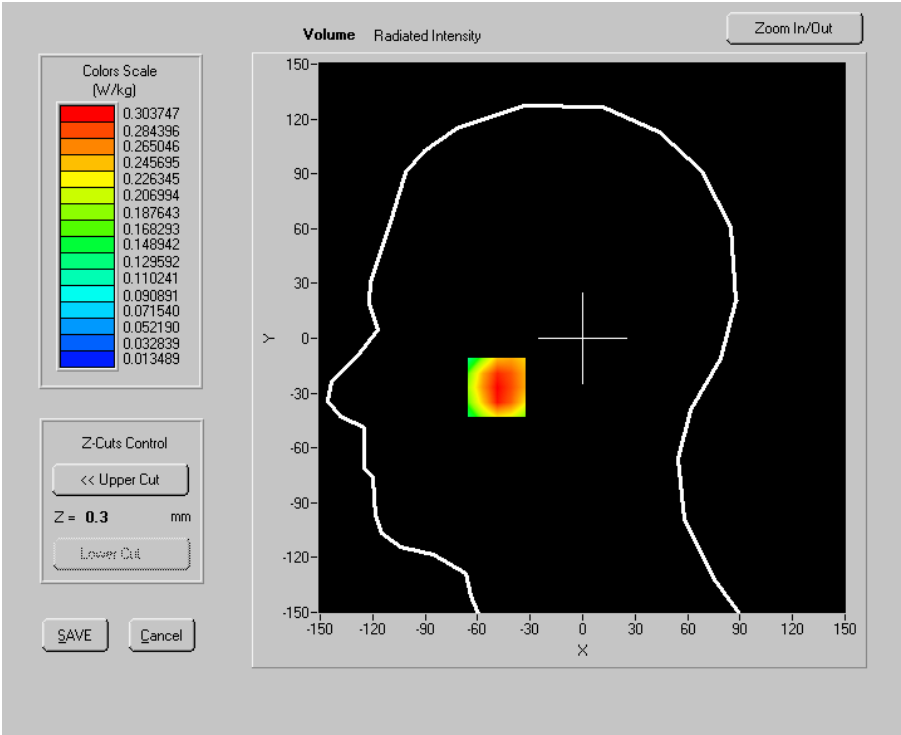


SURFACE SAR

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

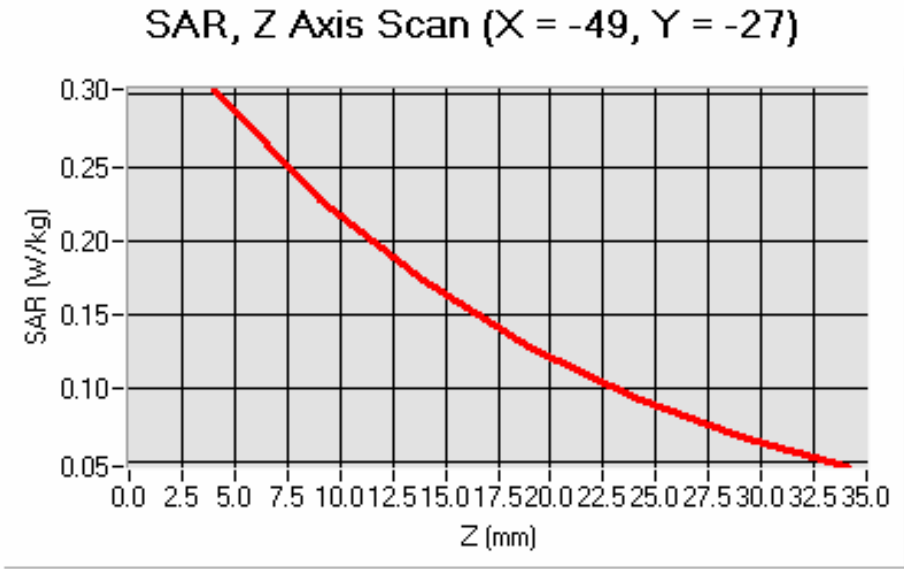
Test report series No.



VOLUME SAR

Maximum location: X=-49.00, Y=-27.00

SAR 10g (W/Kg)	0.205411
SAR 1g (W/Kg)	0.295131



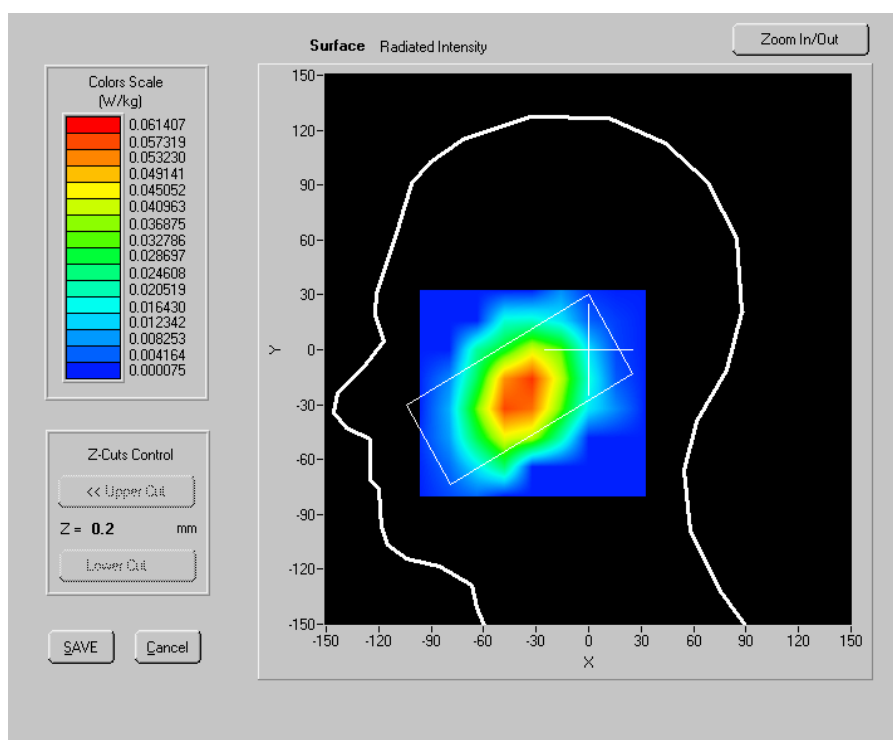
检测结果/说明（续页）：
Results of test and additional explanation（continued page）
1.5.6.2Right head, Tilt（retracted）

Test report series No.

Lower Band SAR (Channel 128):

Experimental conditions	
Phantom	Right head
Device Position	Tilt (retracted)
Band	GSM850
Channels	Low
Signal	TDMA
before/after Power Level:	25.80 dBm/25.78 dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date:	2008.1.20

Frequency (MHz)	824.200012
Relative permittivity (real part)	40.160999
Relative permittivity (imaginary part)	19.506901
Conductivity (S/m)	0.893199
Variation (%)	0.470000

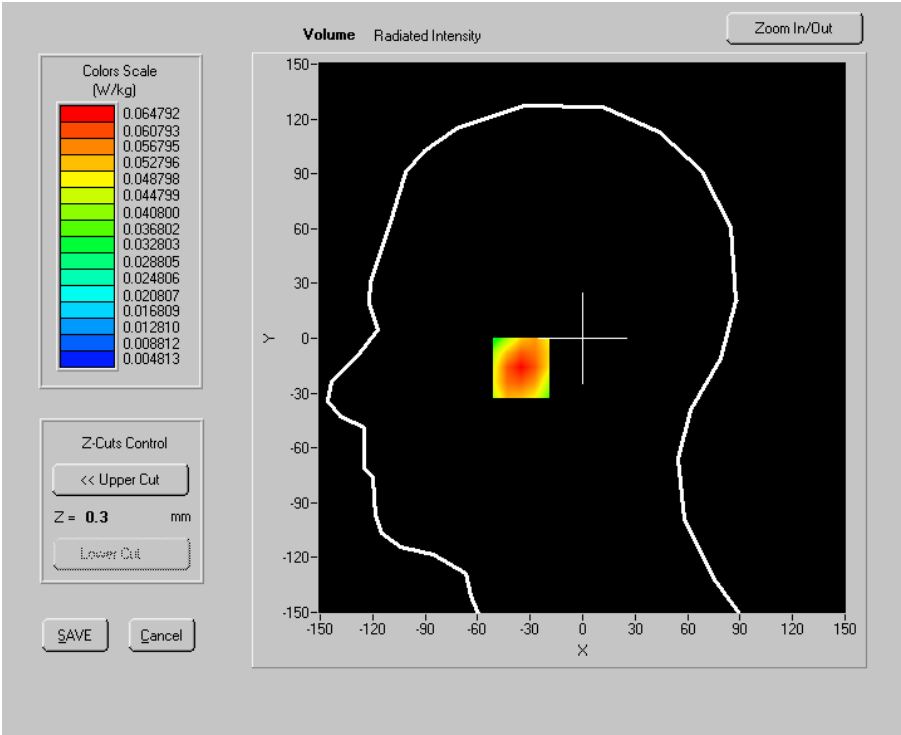


SURFACE SAR

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

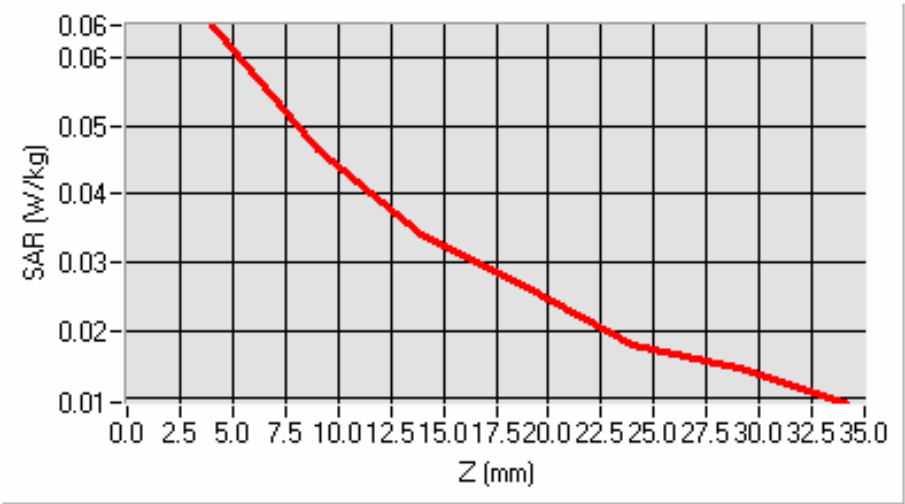


VOLUME SAR

Maximum location: X=-31.00, Y=-16.00

SAR 10g (W/Kg)	0.042452
SAR 1g (W/Kg)	0.061872

SAR, Z Axis Scan (X = -31, Y = -16)



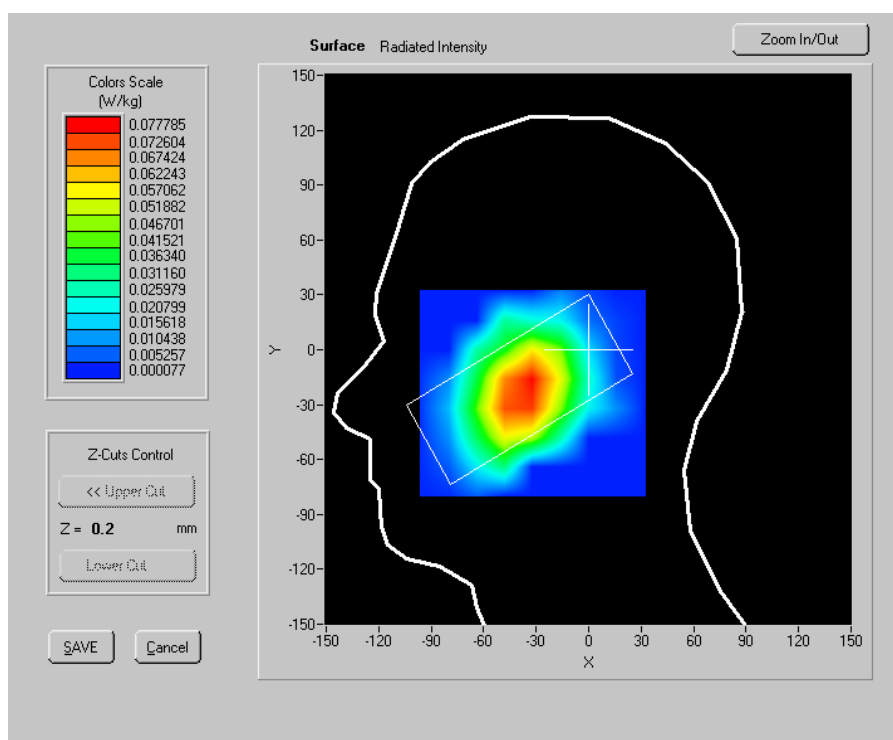
检测
Result

Middle Band SAR (Channel 100):

Test report series No.

Experimental conditions	
Phantom	Right head
Device Position	Tilt (retracted)
Band	GSM850
Channels	Middle
Signal	TDMA
before/after Power Level:	25.82 dBm/25.80 dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date:	2008.1.20

Frequency (MHz)	836.400024
Relative permittivity (real part)	40.029999
Relative permittivity (imaginary part)	19.565701
Conductivity (S/m)	0.909153
Variation (%)	0.190000

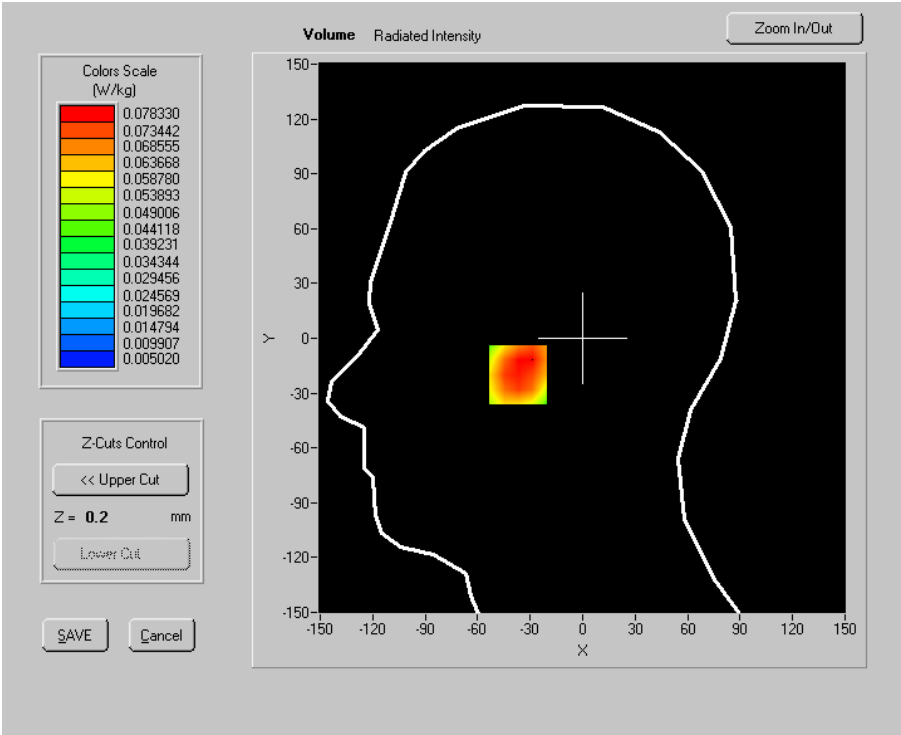


SURFACE SAR

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

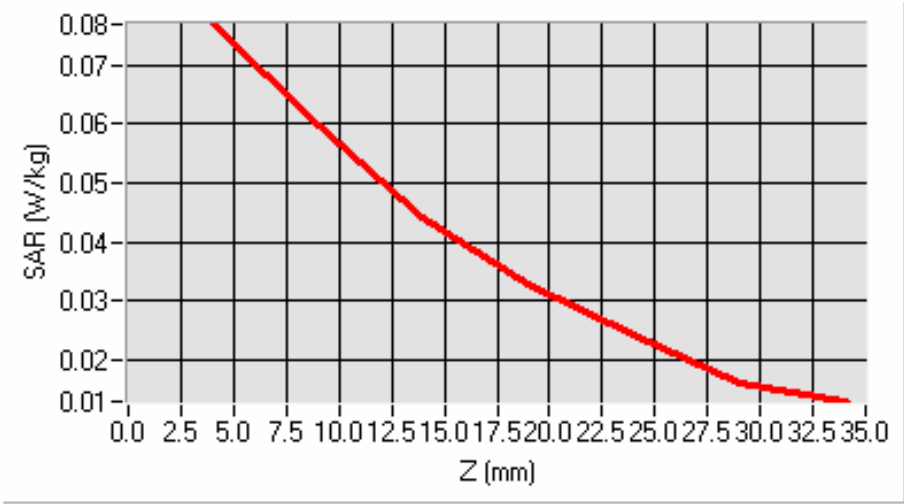


VOLUME SAR

Maximum location: X=-32.00, Y=-20.00

SAR 10g (W/Kg)	0.053596
SAR 1g (W/Kg)	0.075695

SAR, Z Axis Scan (X = -32, Y = -20)



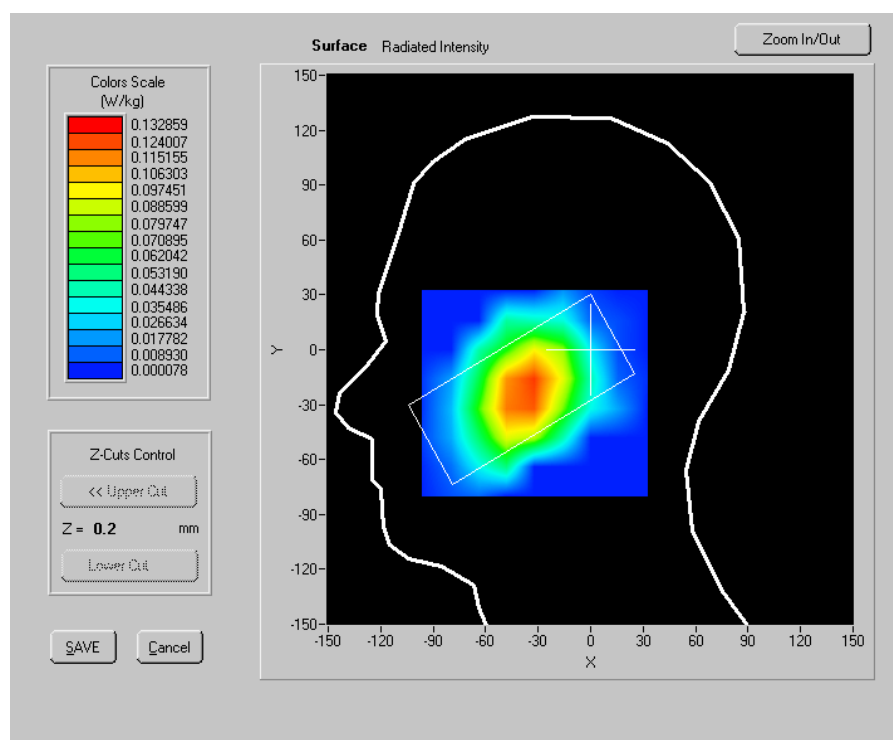
检测结果
Results of t

Higher

Test report series No.

Experimental conditions	
Phantom	Right head
Device Position	Tilt (retracted)
Band	GSM850
Channels	High
Signal	TDMA
before/after Power Level:	25.81dBm/25.78 dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date:	2008.1.20

Frequency (MHz)	848.799988
Relative permittivity (real part)	39.894001
Relative permittivity (imaginary part)	19.601400
Conductivity (S/m)	0.924315
Variation (%)	-0.960000

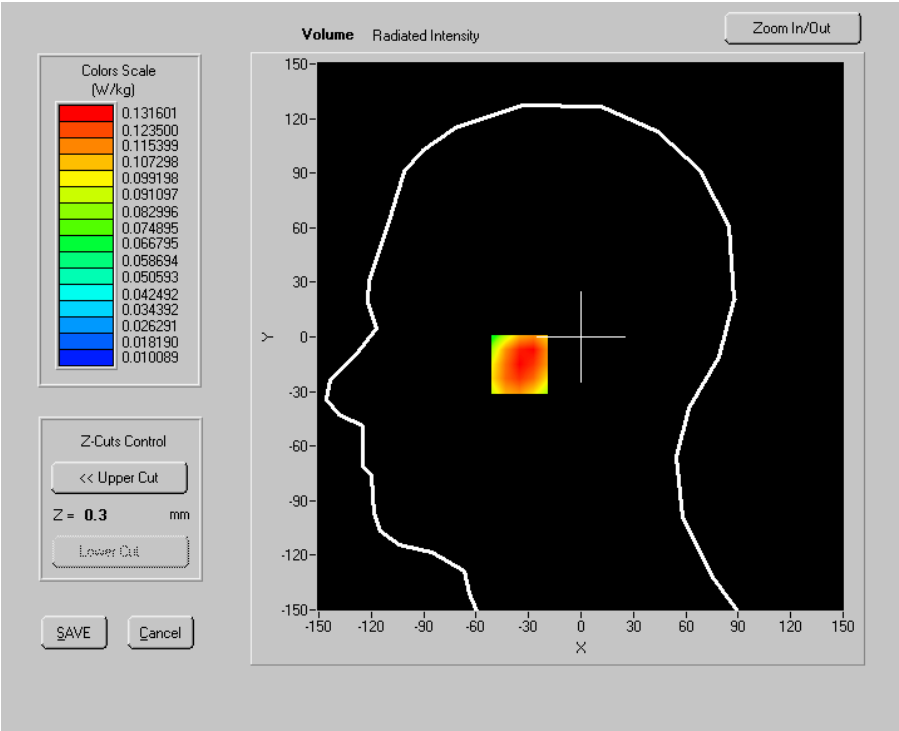


SURFACE SAR

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

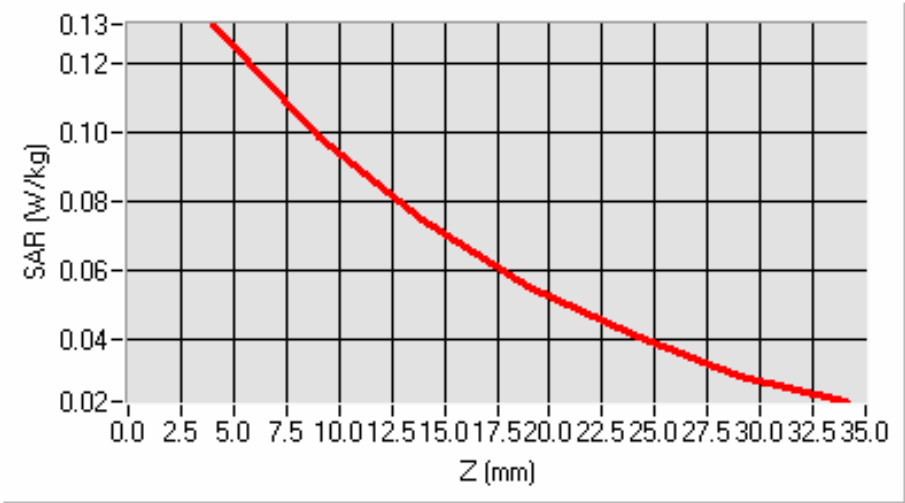


VOLUME SAR

Maximum location: X=-31.00, Y=-15.00

SAR 10g (W/Kg)	0.089810
SAR 1g (W/Kg)	0.127959

SAR, Z Axis Scan (X = -31, Y = -15)



检测结
Results of t

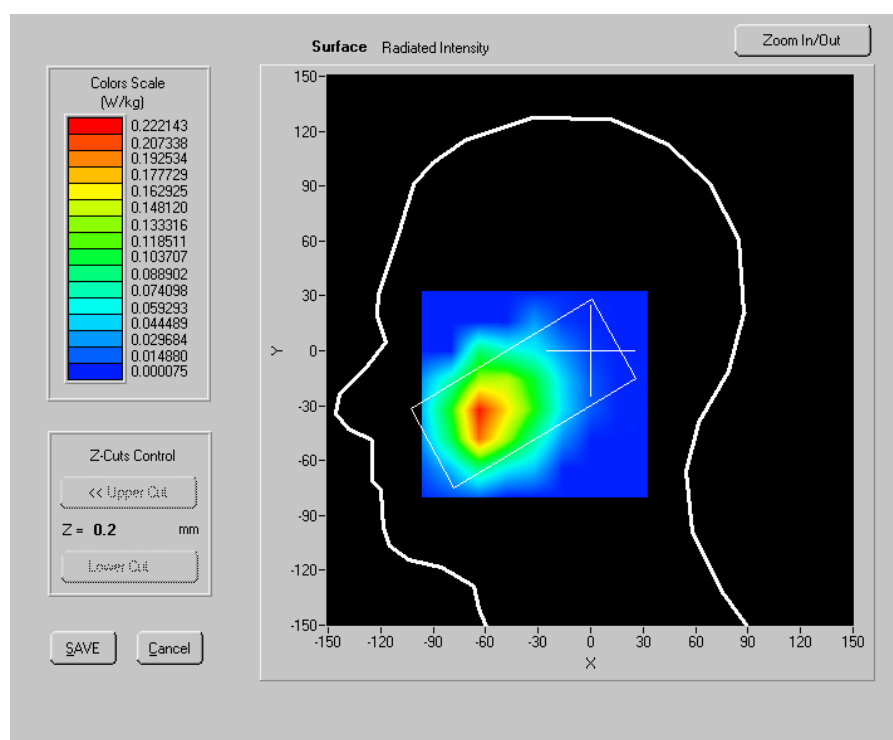
1.5.6.3

Lower Band SAR (Channel 128):

Test report series No.

Experimental conditions	
Phantom	Left head
Device Position	Cheek (retracted)
Band	GSM850
Channels	Low
Signal	TDMA
before/after Power Level:	25.83 dBm/25.81dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date:	2008.1.20

Frequency (MHz)	824.200012
Relative permittivity (real part)	40.160999
Relative permittivity (imaginary part)	19.506901
Conductivity (S/m)	0.893199
Variation (%)	-0.570000

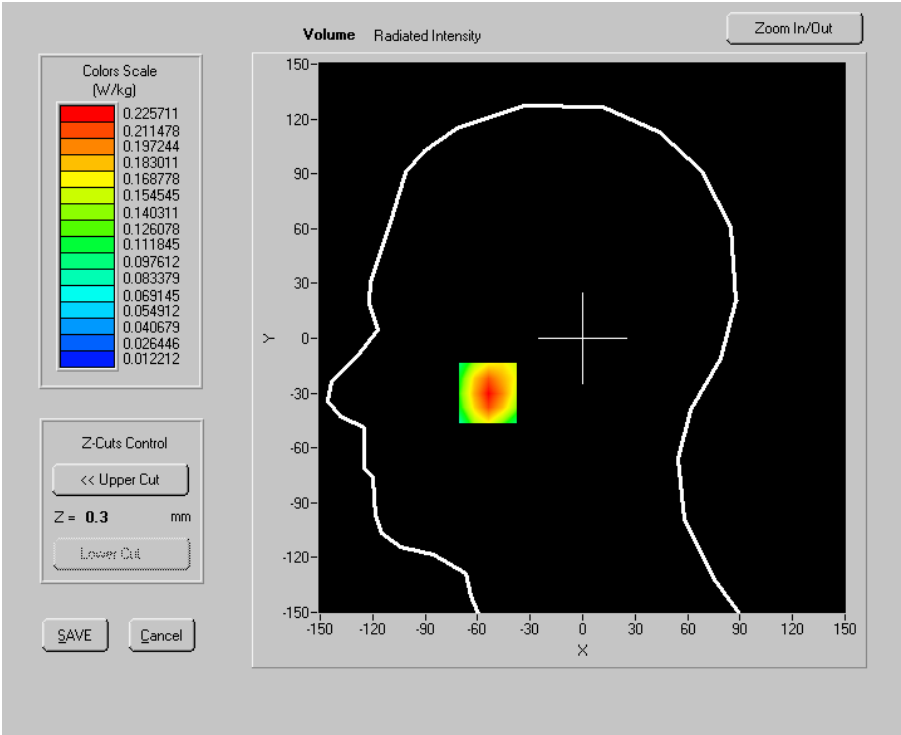


SURFACE SAR

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

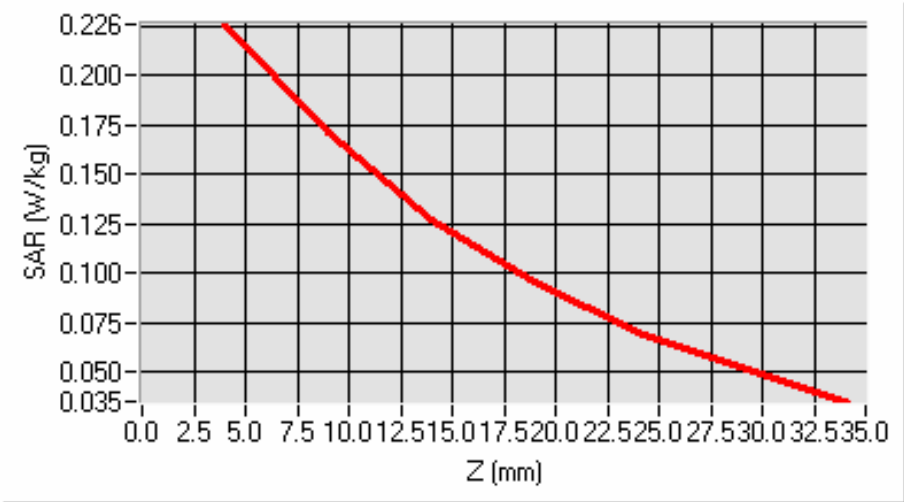


VOLUME SAR

Maximum location: X=-54.00, Y=-30.00

SAR 10g (W/Kg)	0.146565
SAR 1g (W/Kg)	0.212678

SAR, Z Axis Scan (X = -54, Y = -30)



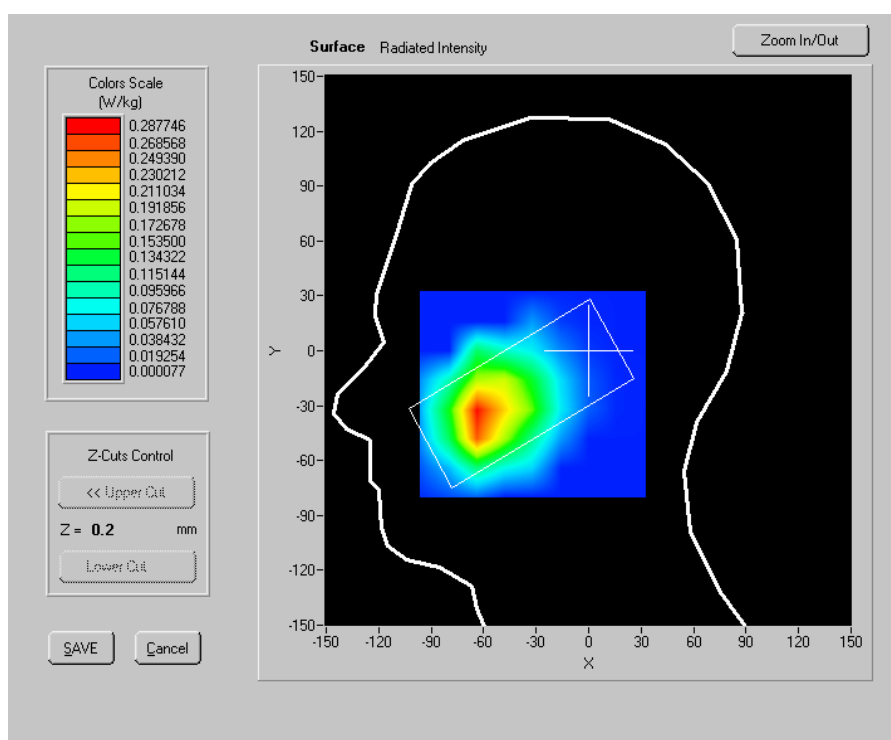
检测结
Results of t

Middle SAR (W/kg) (Channel 100%)

Test report series No.

Experimental conditions	
Phantom	Left head
Device Position	Cheek (retracted)
Band	GSM850
Channels	Middle
Signal	TDMA
before/after Power Level:	25.86 dBm/25.82dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date:	2008.1.20

Frequency (MHz)	836.400024
Relative permittivity (real part)	40.029999
Relative permittivity (imaginary part)	19.565701
Conductivity (S/m)	0.909153
Variation (%)	0.080000

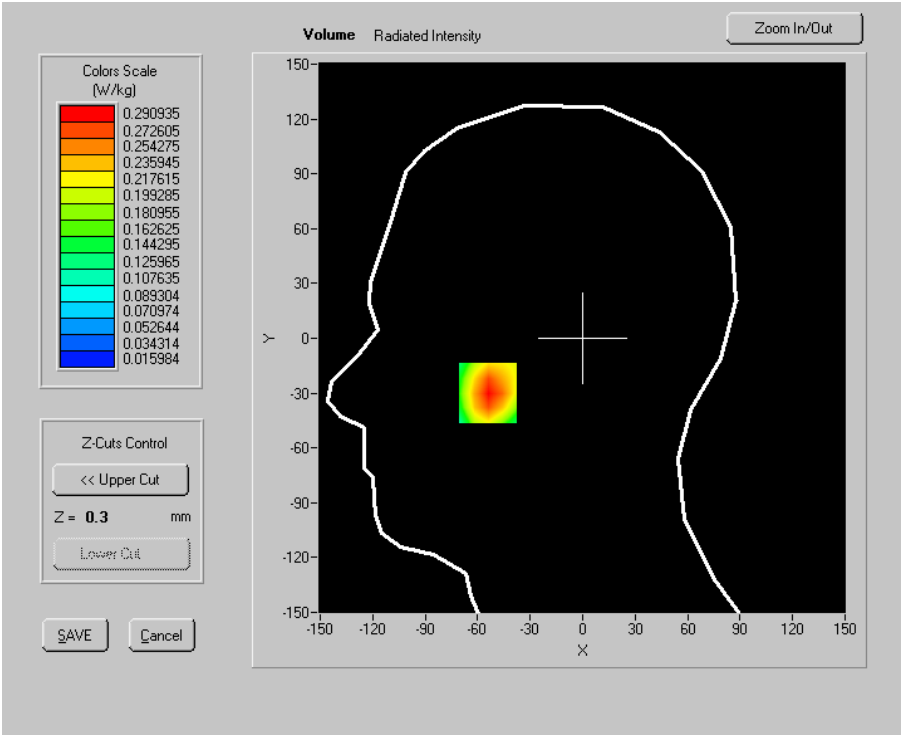


SURFACE SAR

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

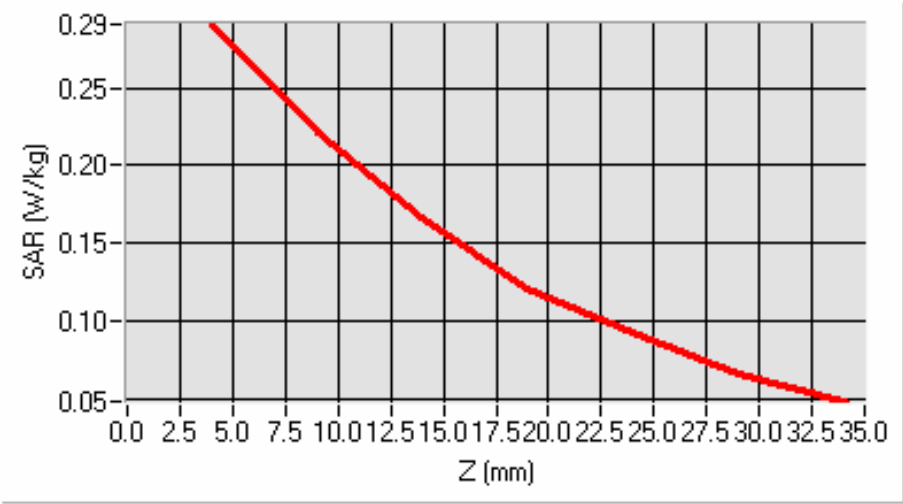


VOLUME SAR

Maximum location: X=-54.00, Y=-30.00

SAR 10g (W/Kg)	0.191064
SAR 1g (W/Kg)	0.274973

SAR, Z Axis Scan (X = -54, Y = -30)



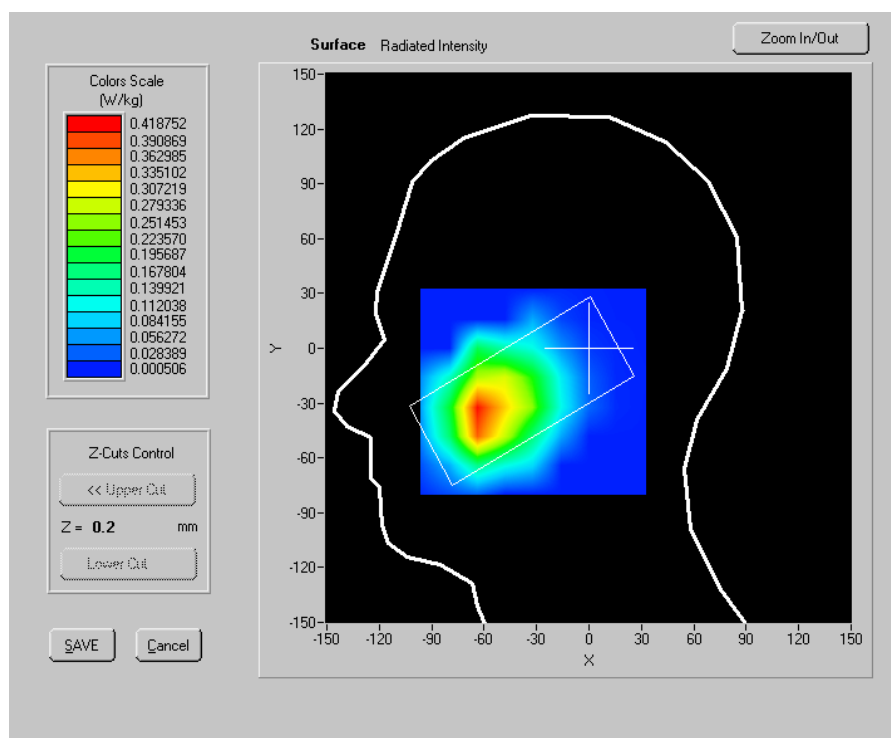
检测结
Results of te

Higher Band SAR (Channel 251):

Test report series No.

Experimental conditions	
Phantom	Left head
Device Position	Cheek (retracted)
Band	GSM850
Channels	High
Signal	TDMA
before/after Power Level:	25.82 dBm/25.80 dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date:	2008.1.20

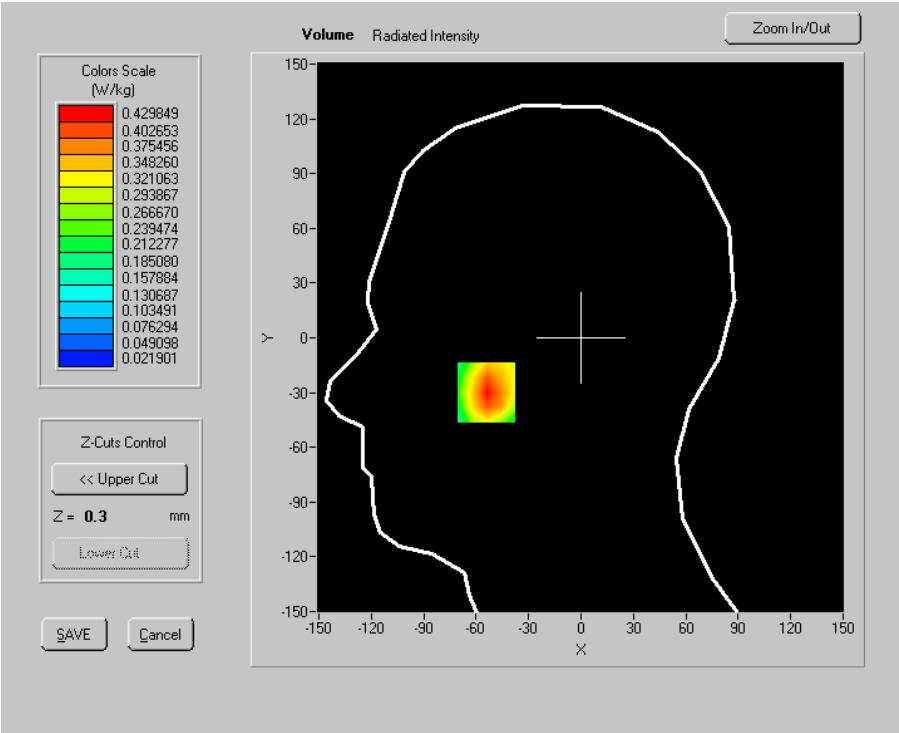
Frequency (MHz)	848.799988
Relative permittivity (real part)	39.894001
Relative permittivity (imaginary part)	19.601400
Conductivity (S/m)	0.924315
Variation (%)	-0.860000



检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

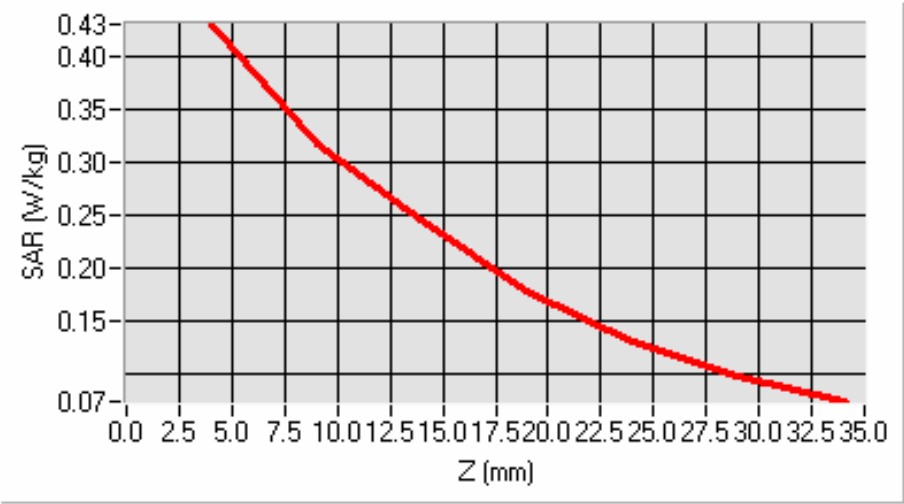


VOLUME SAR

Maximum location: X=-54.00, Y=-30.00

SAR 10g (W/Kg)	0.279330
SAR 1g (W/Kg)	0.405629

SAR, Z Axis Scan (X = -54, Y = -30)



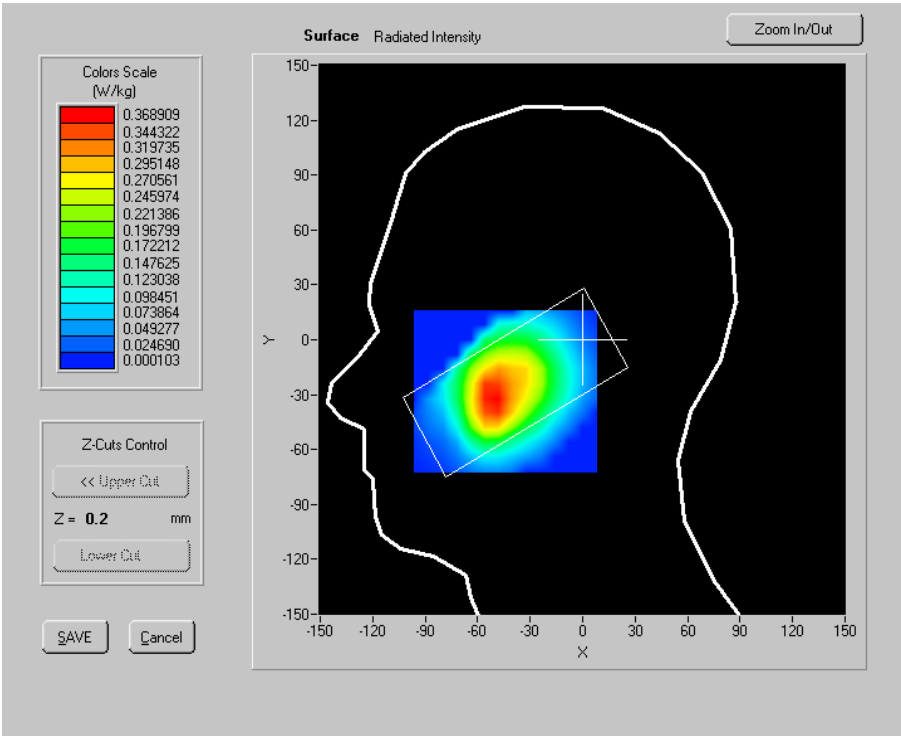
检测结
Results of te

Higher Level of Compliance

Test report series No.

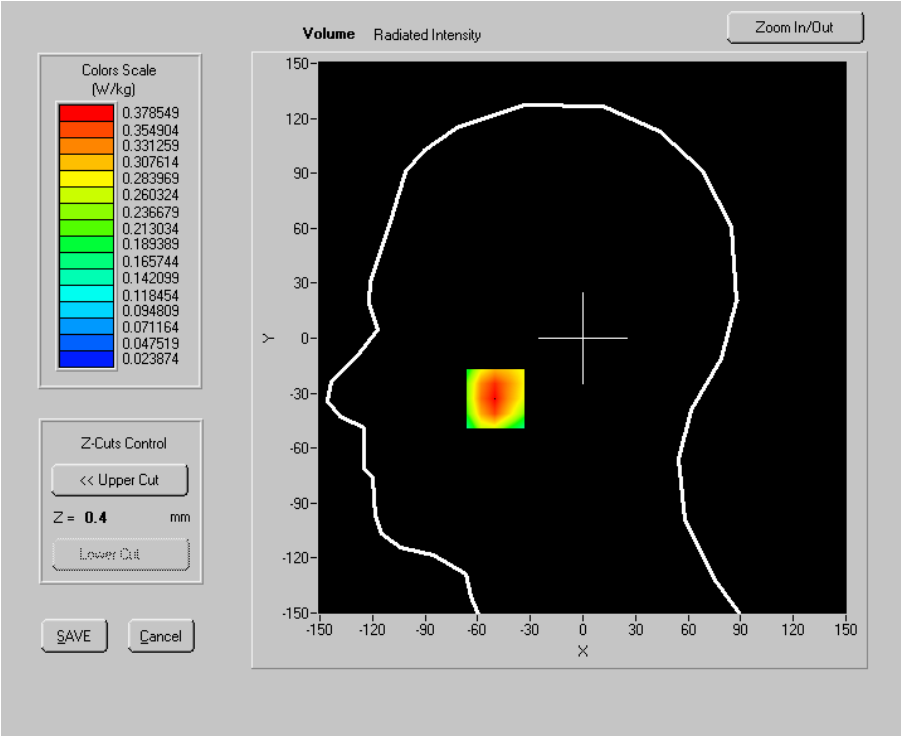
Experimental conditions	
Phantom	Left head
Device Position	Cheek (retracted)
Band	GSM850(Bluetooth on)
Channels	High
Signal	TDMA
before/after Power Level:	25.80dBm/25.75 dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date:	2008.1.20

Frequency (MHz)	848.799988
Relative permittivity (real part)	39.894001
Relative permittivity (imaginary part)	19.601400
Conductivity (S/m)	0.924315
Variation (%)	-0.560000



SURFACE SAR

检测结果/说明（续页）：
Results of test and additional explanation (continued page)

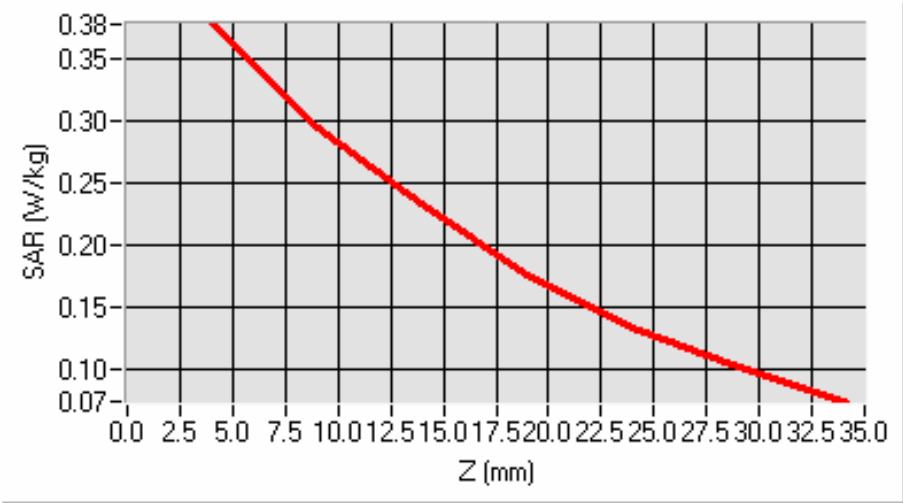


VOLUME SAR

Maximum location: X=-50.00, Y=-33.00

SAR 10g (W/Kg)	0.257326
SAR 1g (W/Kg)	0.360716

SAR, Z Axis Scan (X = -50, Y = -33)



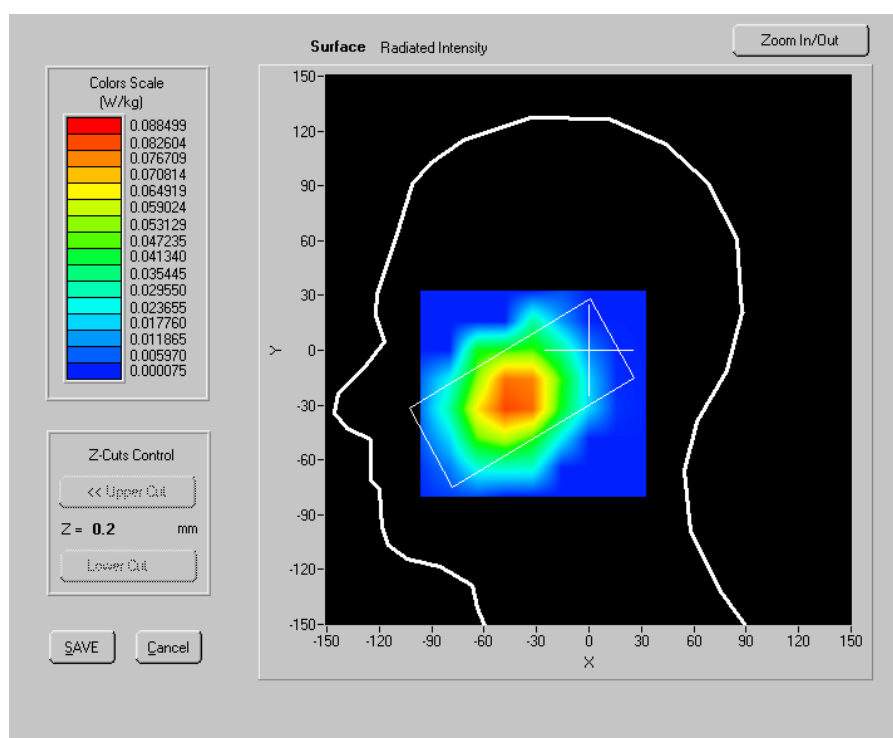
检测结
Results of te

1.5.6.4 Left head, Tilt (retracted)

Lower Band SAR (Channel 128):

Experimental conditions	
Phantom	Left head
Device Position	Tilt (retracted)
Band	GSM850
Channels	Low
Signal	TDMA
before/after Power Level:	25.84 dBm/25.82 dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date:	2008.1.20

Frequency (MHz)	824.200012
Relative permittivity (real part)	40.160999
Relative permittivity (imaginary part)	19.506901
Conductivity (S/m)	0.893199
Variation (%)	0.050000

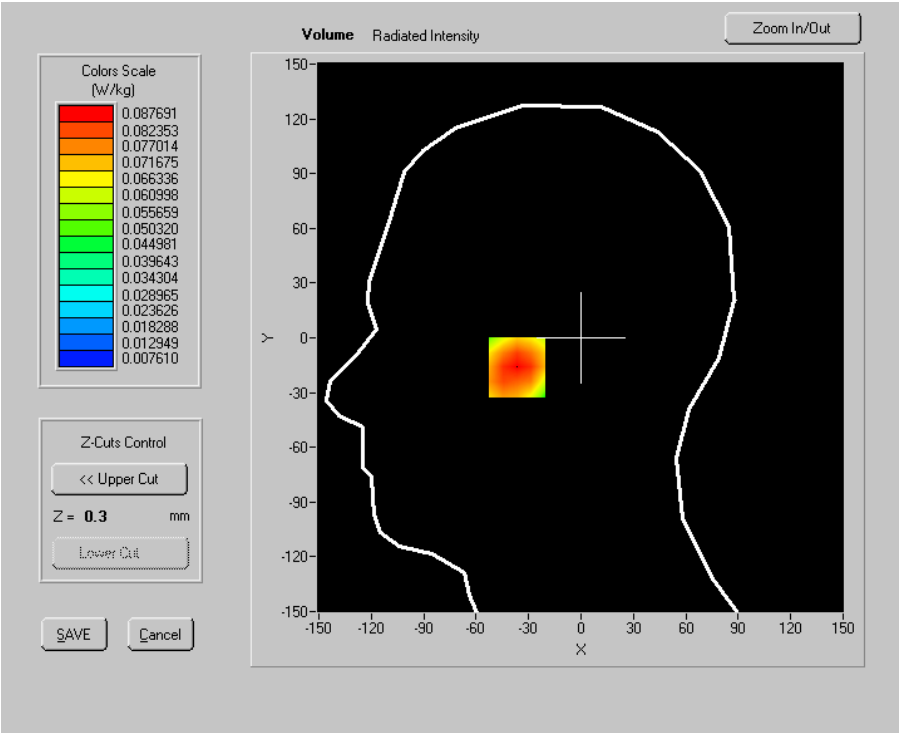


SURFACE SAR

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

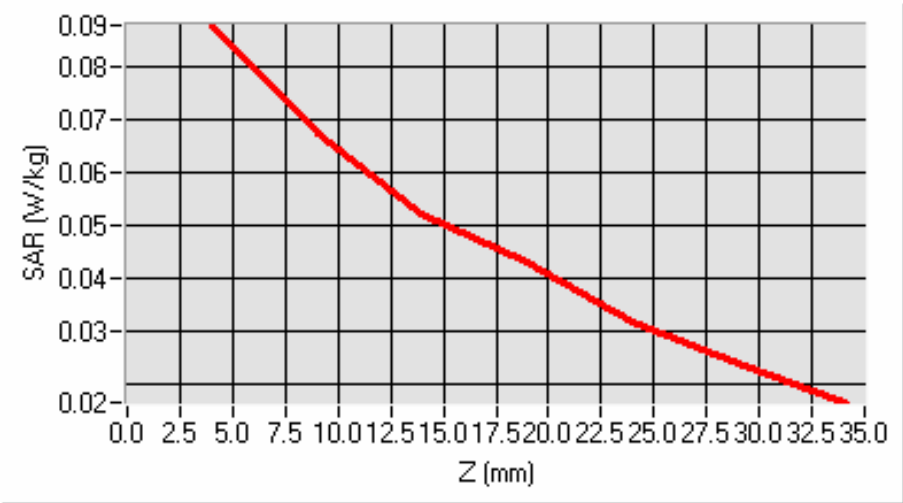


VOLUME SAR

Maximum location: X=-33.00, Y=-16.00

SAR 10g (W/Kg)	0.061680
SAR 1g (W/Kg)	0.085400

SAR, Z Axis Scan (X = -33, Y = -16)



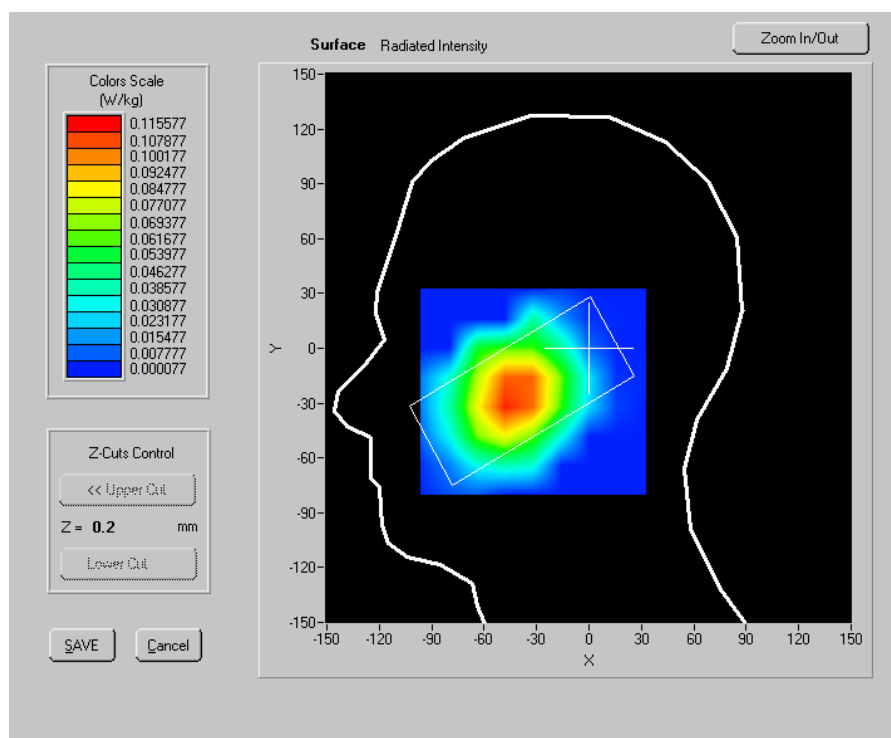
检测结
Results of t

Middle Band SAR (Channel 189):

Test report series No.

Experimental conditions	
Phantom	Left head
Device Position	Tilt (retracted)
Band	GSM850
Channels	Middle
Signal	TDMA
before/after Power Level:	25.83 dBm/25.80 dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date:	2008.1.20

Frequency (MHz)	836.400024
Relative permittivity (real part)	40.029999
Relative permittivity (imaginary part)	19.565701
Conductivity (S/m)	0.909153
Variation (%)	1.720000

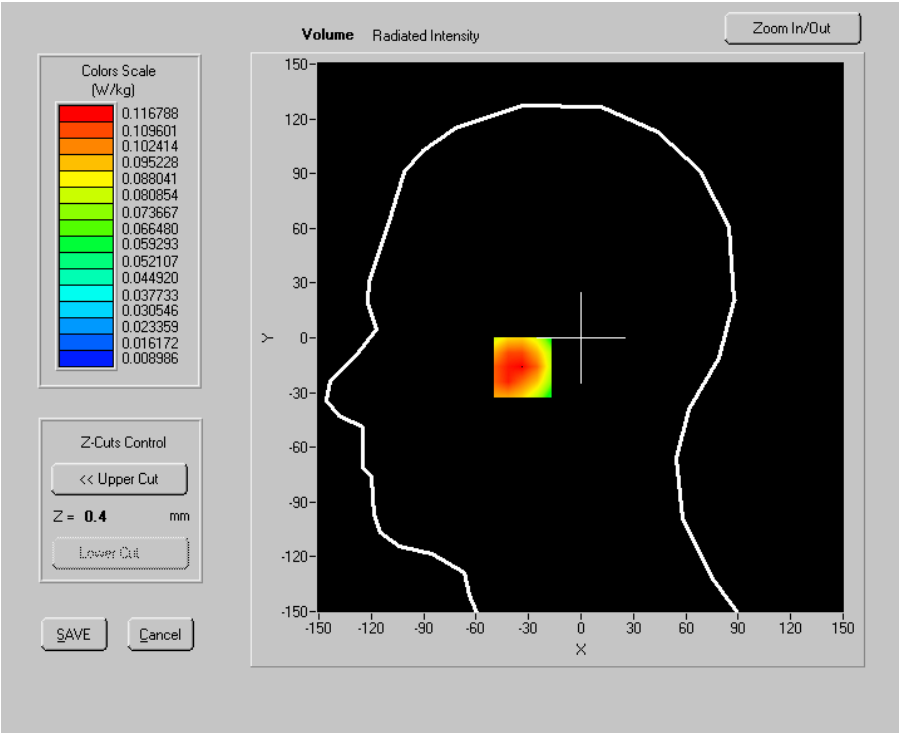


SURFACE SAR

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

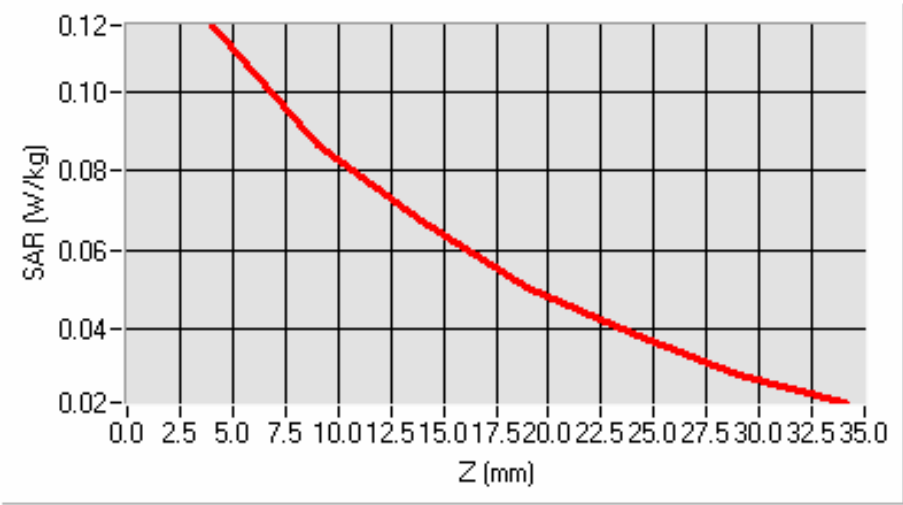


VOLUME SAR

Maximum location: X=-28.00, Y=-16.00

SAR 10g (W/Kg)	0.081817
SAR 1g (W/Kg)	0.113587

SAR, Z Axis Scan (X = -28, Y = -16)



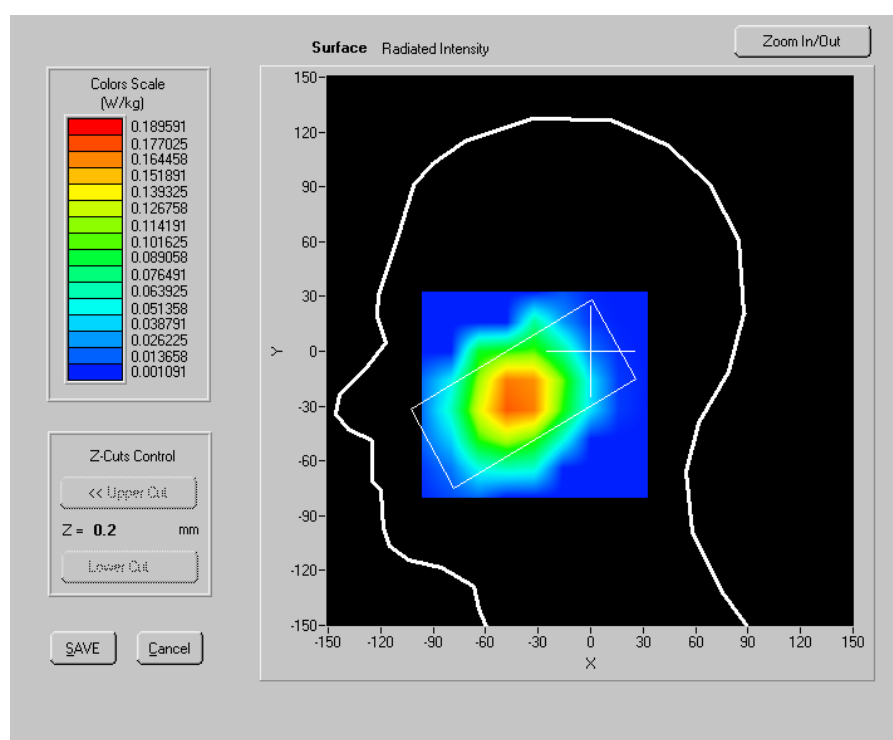
检测结
Results of 1

Higher Band SAR (Channel 251):

Test report series No.

Experimental conditions	
Phantom	Left head
Device Position	Tilt (retracted)
Band	GSM850
Channels	High
Signal	TDMA
before/after Power Level:	25.82 dBm/25.78dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date:	2008.1.20

Frequency (MHz)	848.799988
Relative permittivity (real part)	39.894001
Relative permittivity (imaginary part)	19.601400
Conductivity (S/m)	0.924315
Variation (%)	-1.500000

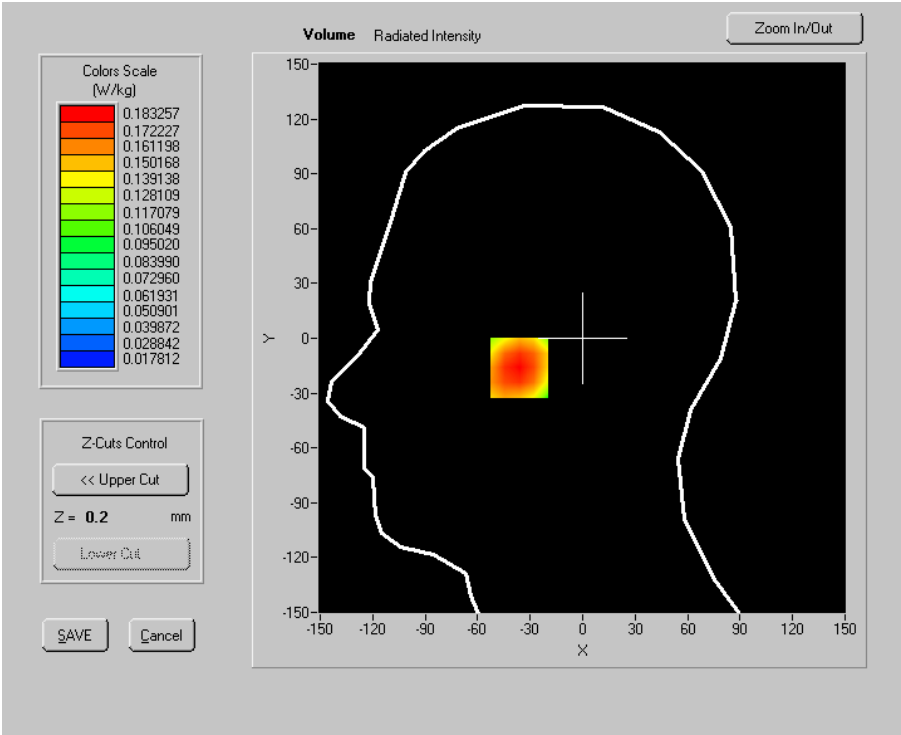


SURFACE SAR

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

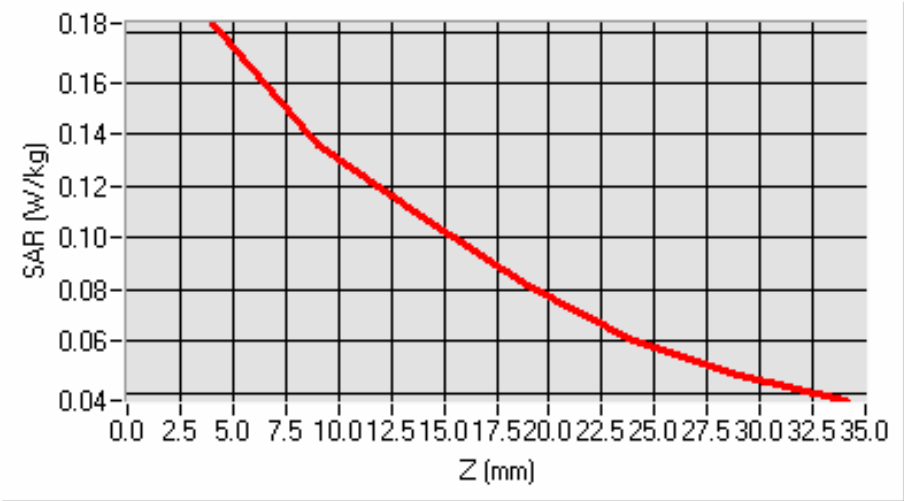


VOLUME SAR

Maximum location: X=-32.00, Y=-16.00

SAR 10g (W/Kg)	0.127324
SAR 1g (W/Kg)	0.178897

SAR, Z Axis Scan (X = -32, Y = -16)



检测结
Results of t

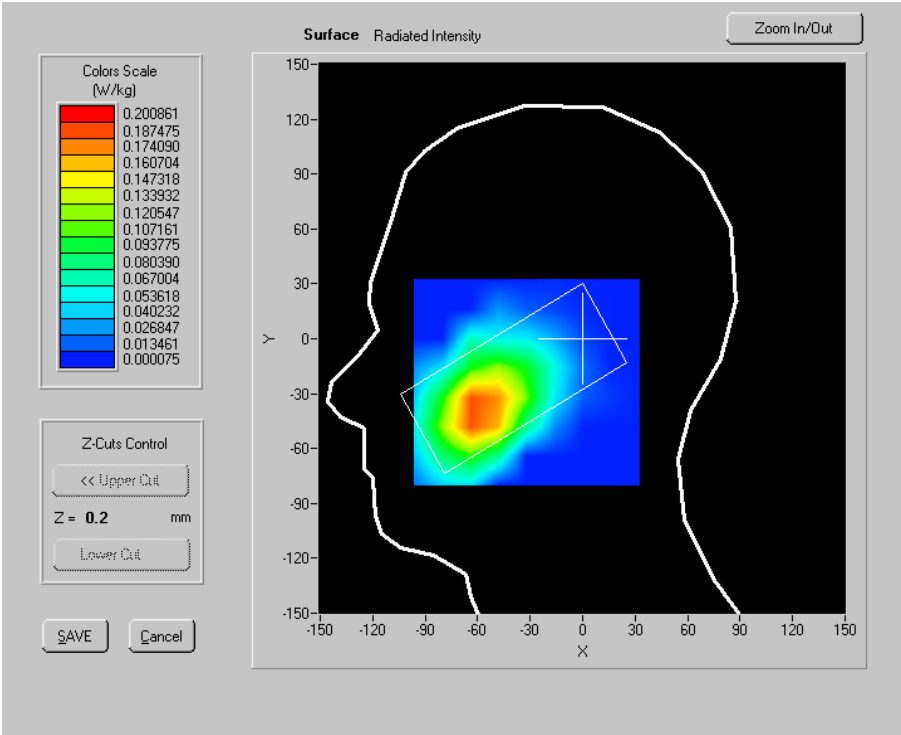
Test report series No.

1.5.6.7 Right head, Cheek (extended)

Lower Band SAR (Channel 128):

Experimental conditions	
Phantom	Right head
Device Position	Cheek (extended)
Band	GSM850
Channels	Low
Signal	TDMA
before/after Power Level:	25.82 dBm/25.80dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date:	2008.1.20

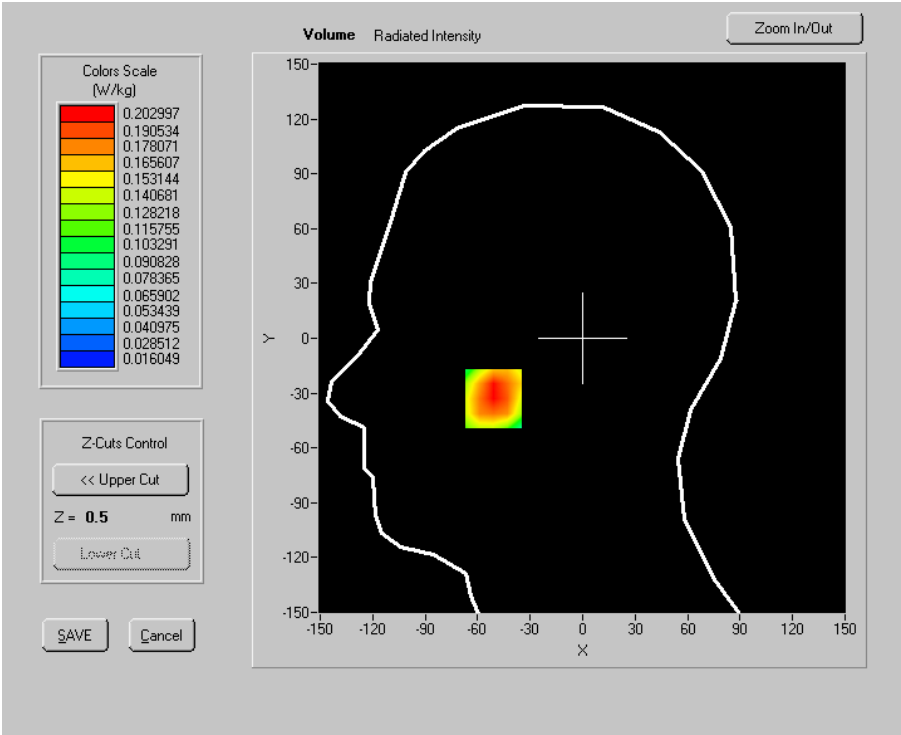
Frequency (MHz)	824.200012
Relative permittivity (real part)	40.160999
Relative permittivity (imaginary part)	19.506901
Conductivity (S/m)	0.893199
Variation (%)	-0.100000



SURFACE SAR

检测结果/说明（续页）：
Results of test and additional explanation (continued page)

Test report series No.

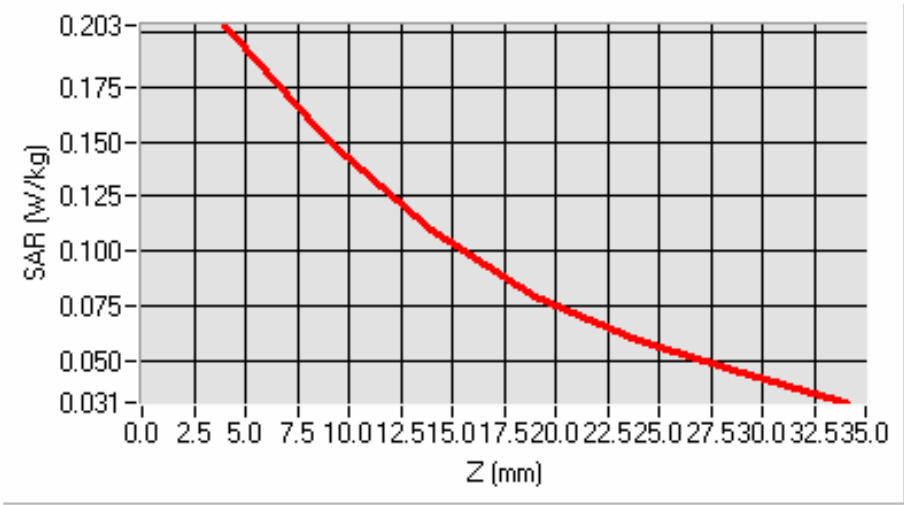


VOLUME SAR

Maximum location: X=-51.00, Y=-33.00

SAR 10g (W/Kg)	0.133263
SAR 1g (W/Kg)	0.195175

SAR, Z Axis Scan (X = -51, Y = -33)



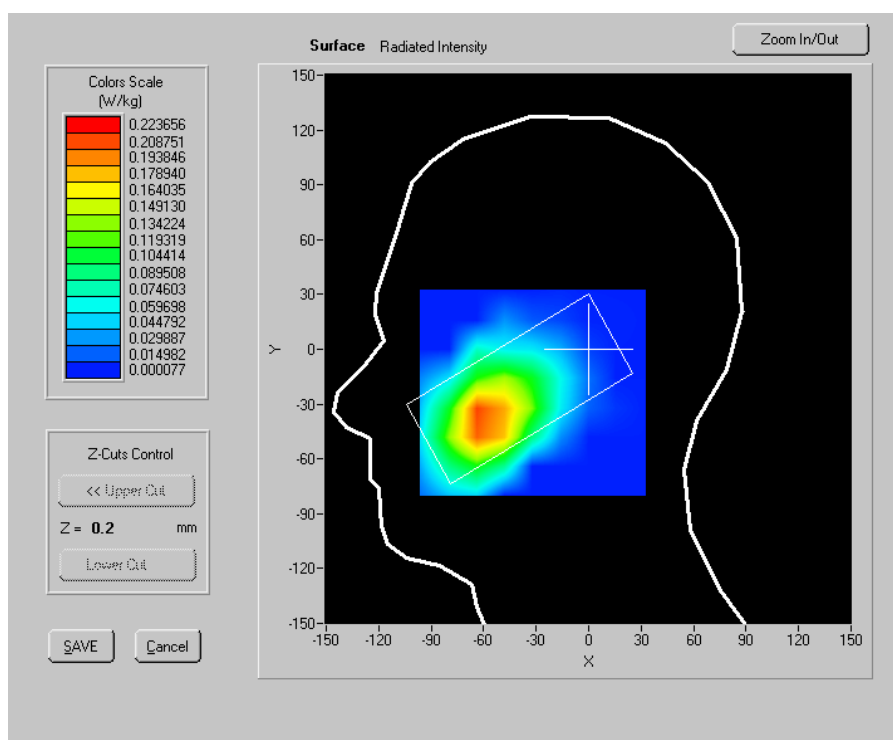
检测结果
Results of t

Middle Band SAR (Channel 189):

Test report series No.

Experimental conditions	
Phantom	Right head
Device Position	Cheek (extended)
Band	GSM850
Channels	Middle
Signal	TDMA
before/after Power Level:	25.80dBm/25.78 dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date	2008.1.20

Frequency (MHz)	836.400024
Relative permittivity (real part)	40.029999
Relative permittivity (imaginary part)	19.565701
Conductivity (S/m)	0.909153
Variation (%)	1.880000

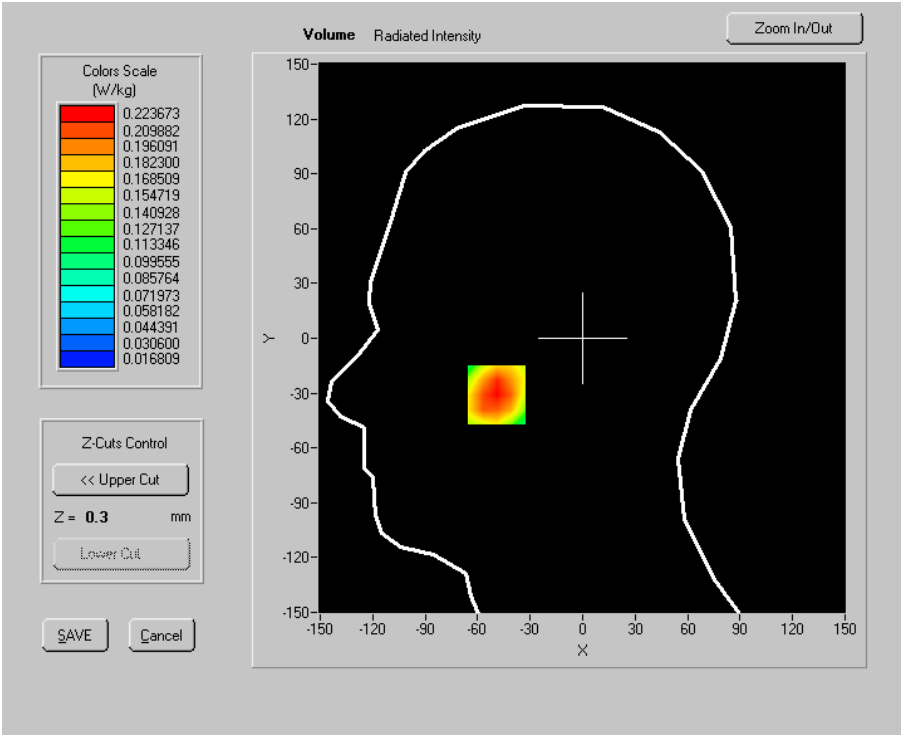


SURFACE SAR

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

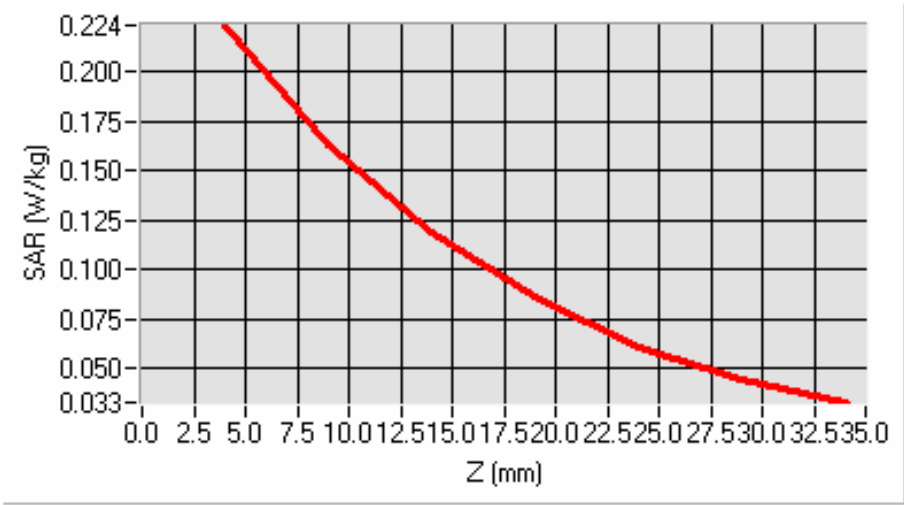


VOLUME SAR

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

SAR 10g (W/Kg)	0.146033
SAR 1g (W/Kg)	0.213671

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



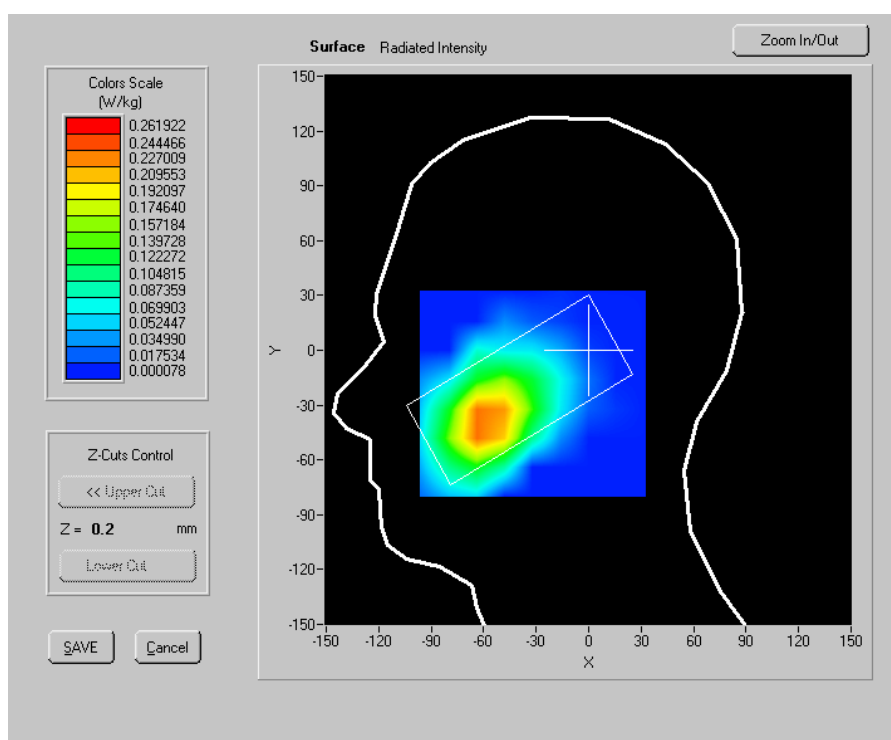
检测结果
Results of t

Higher

Test report series No.

Experimental conditions	
Phantom	Right head
Device Position	Cheek (extended)
Band	GSM850
Channels	High
Signal	TDMA
before/after Power Level:	25.82 dBm/25.80 dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date	2008.1.20

Frequency (MHz)	848.799988
Relative permittivity (real part)	39.894001
Relative permittivity (imaginary part)	19.601400
Conductivity (S/m)	0.924315
Variation (%)	0.400000

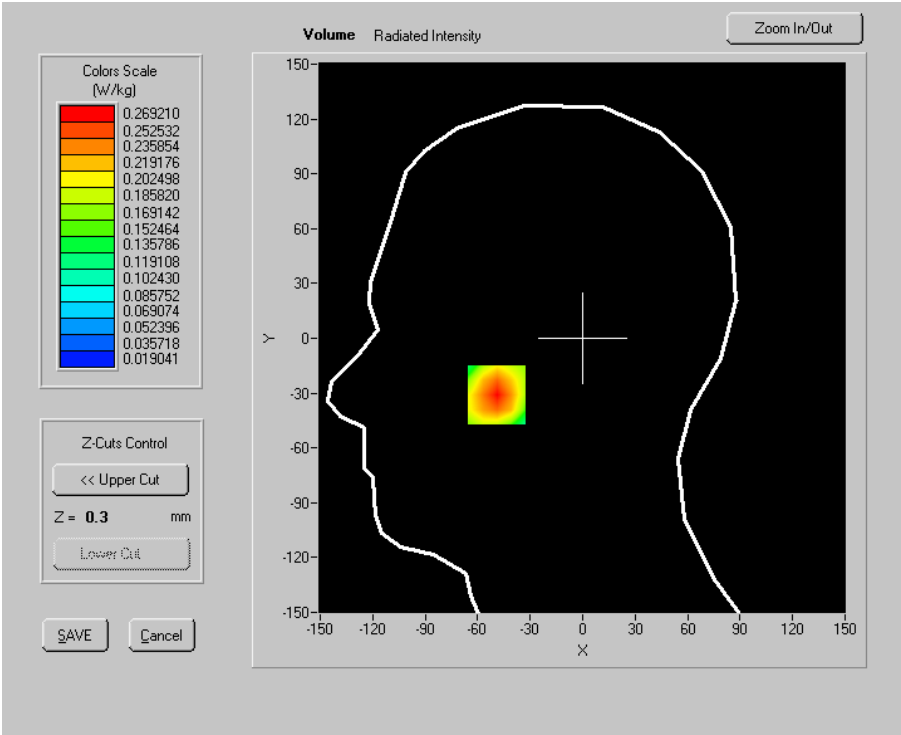


SURFACE SAR

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

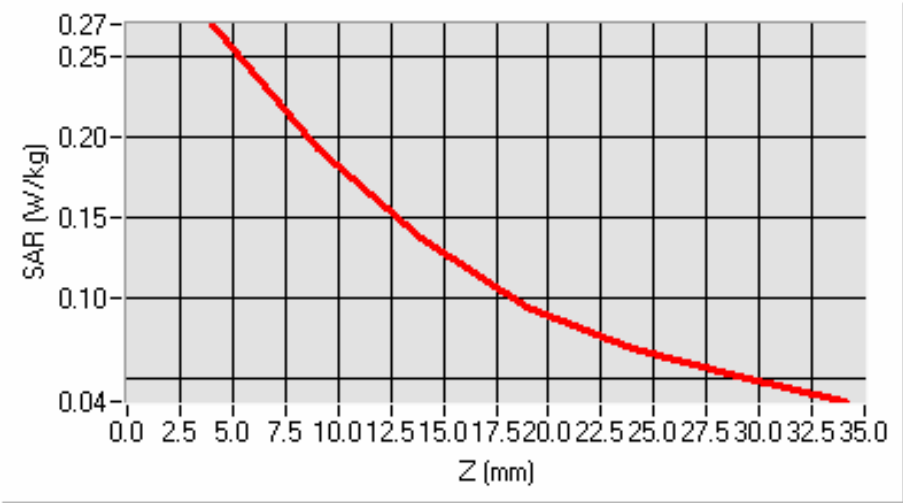


VOLUME SAR

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

SAR 10g (W/Kg)	0.168094
SAR 1g (W/Kg)	0.252010

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



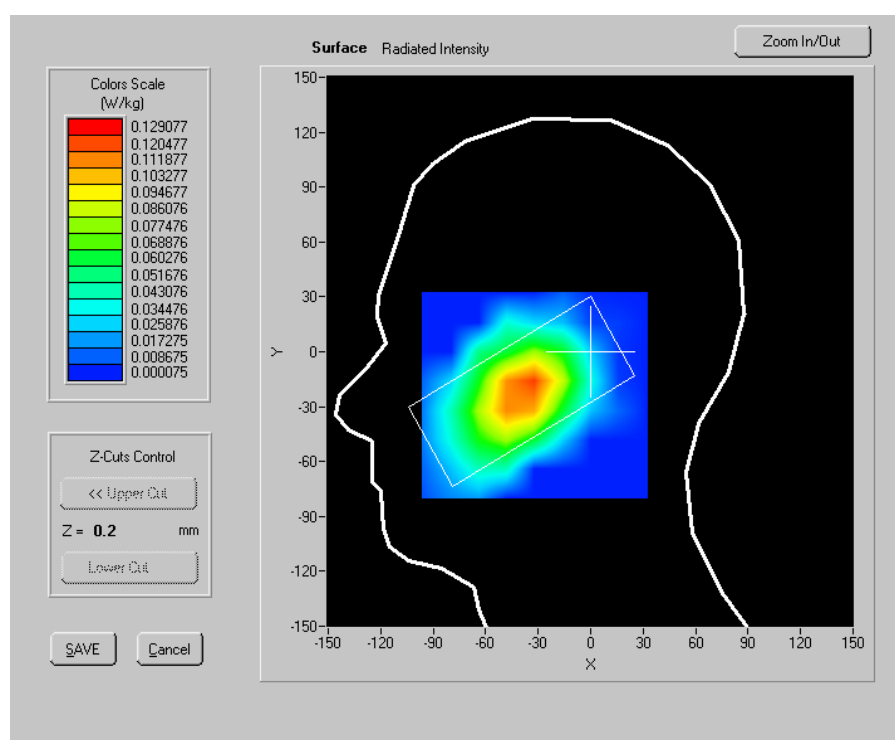
检测结
Results of tr

1.5.6.8 Right head, Tilt (extended)

Lower Band SAR (Channel 128):

Experimental conditions	
Phantom	Right head
Device Position	Tilt (extended)
Band	GSM850
Channels	Low
Signal	TDMA
before/after Power Level:	25.84 dBm/25.75 dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date	2008.1.20

Frequency (MHz)	824.200012
Relative permittivity (real part)	40.160999
Relative permittivity (imaginary part)	19.506901
Conductivity (S/m)	0.893199
Variation (%)	-0.510000

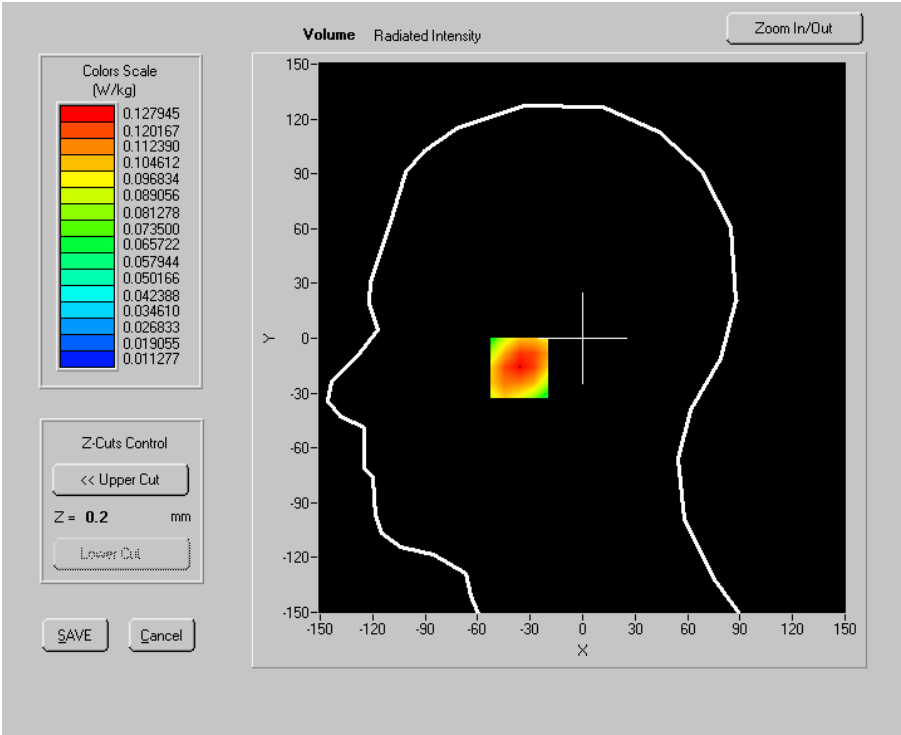


SURFACE SAR

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

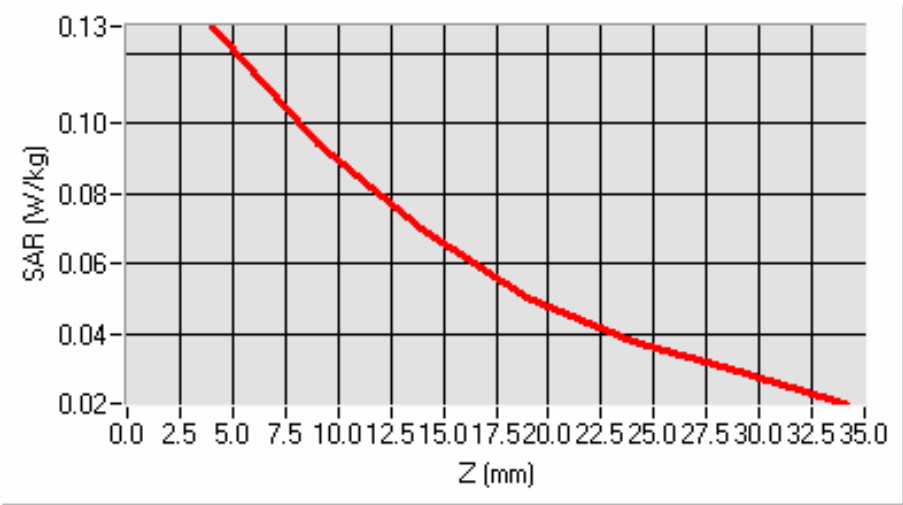


VOLUME SAR

Maximum location: X=-32.00, Y=-16.00

SAR 10g (W/Kg)	0.084651
SAR 1g (W/Kg)	0.122111

SAR, Z Axis Scan (X = -32, Y = -16)



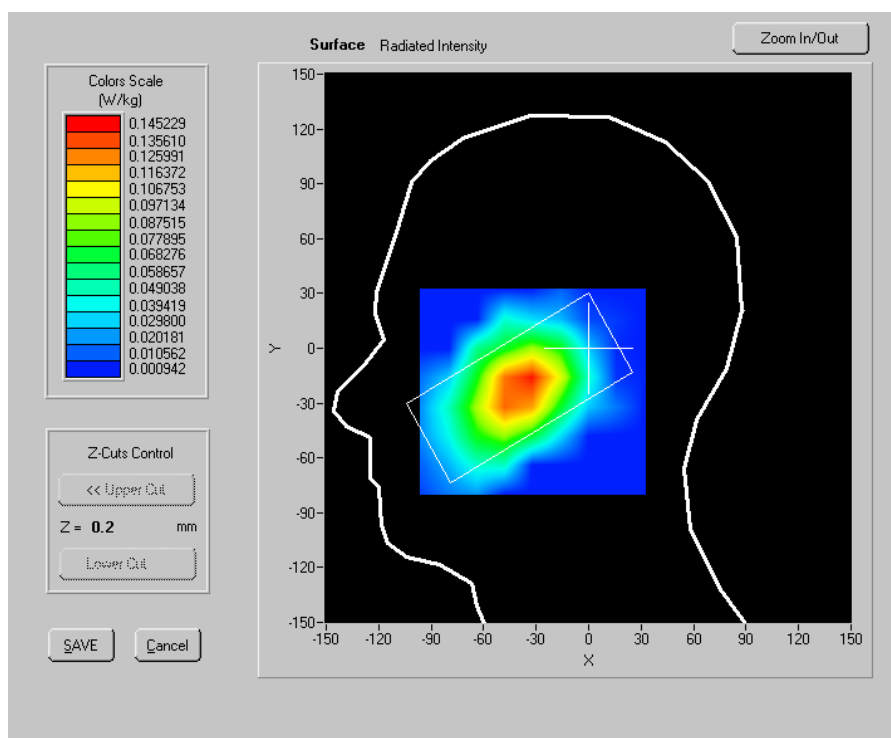
检测结
Results of te

Middle Band SAR (Channel 189):

Test report series No.

Experimental conditions	
Phantom	Right head
Device Position	Tilt (extended)
Band	GSM850
Channels	Middle
Signal	TDMA
before/after Power Level:	25.80dBm/25.70 dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date	2008.1.20

Frequency (MHz)	836.400024
Relative permittivity (real part)	40.029999
Relative permittivity (imaginary part)	19.565701
Conductivity (S/m)	0.909153
Variation (%)	-1.390000

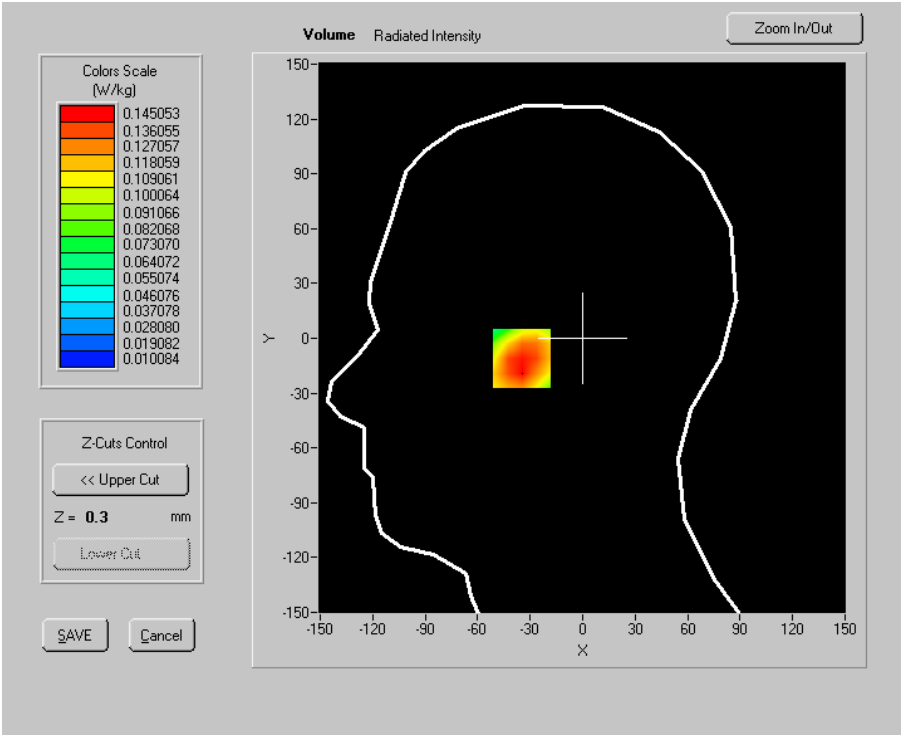


SURFACE SAR

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

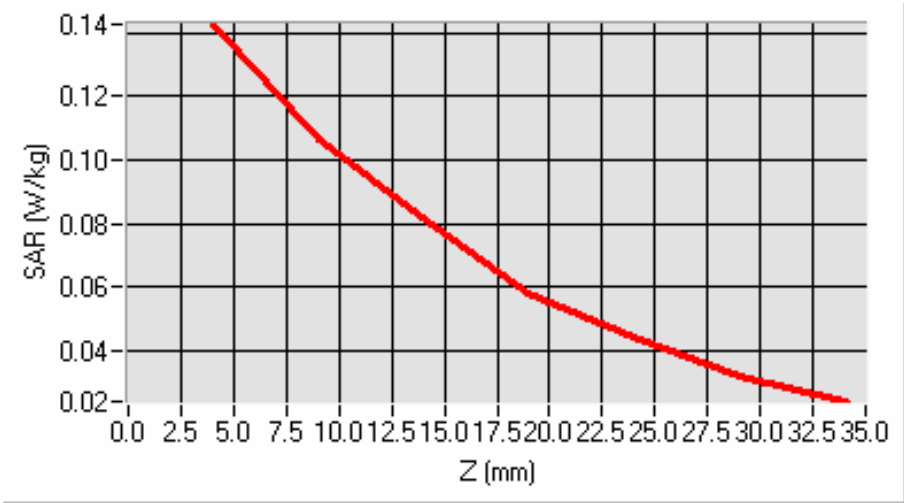


VOLUME SAR

Maximum location: X=-31.00, Y=-11.00

SAR 10g (W/Kg)	0.097044
SAR 1g (W/Kg)	0.141098

SAR, Z Axis Scan (X = -31, Y = -11)



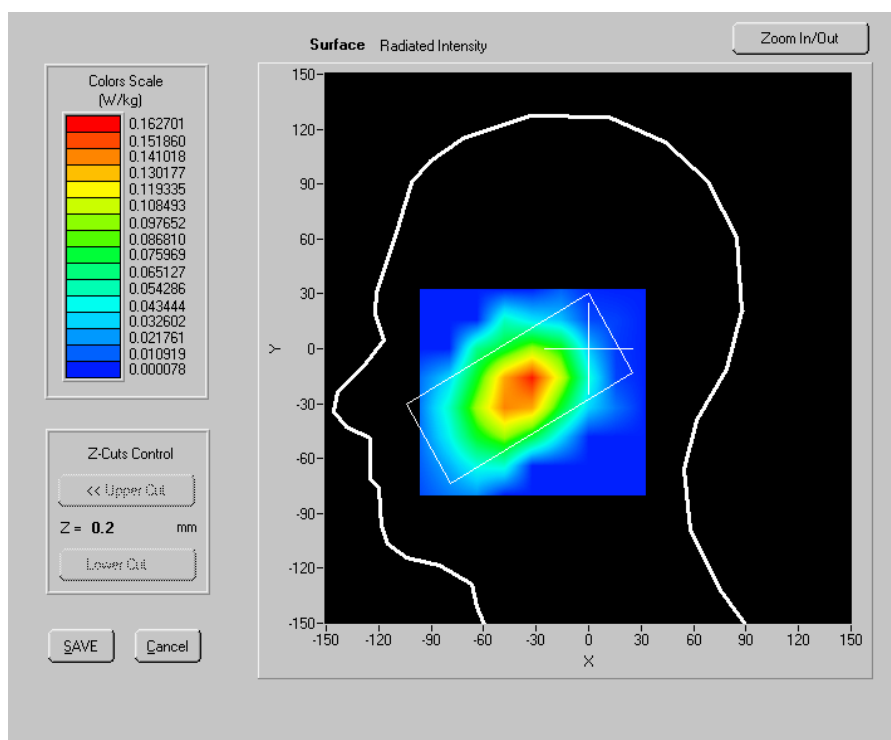
检测结
Results of t

Higher Band SAR (Channel 251):

Test report series No.

Experimental conditions	
Phantom	Right head
Device Position	Tilt (extended)
Band	GSM850
Channels	High
Signal	TDMA
before/after Power Level:	25.83 dBm/25.78 dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date	2008.1.20

Frequency (MHz)	848.799988
Relative permittivity (real part)	39.894001
Relative permittivity (imaginary part)	19.601400
Conductivity (S/m)	0.924315
Variation (%)	0.800000

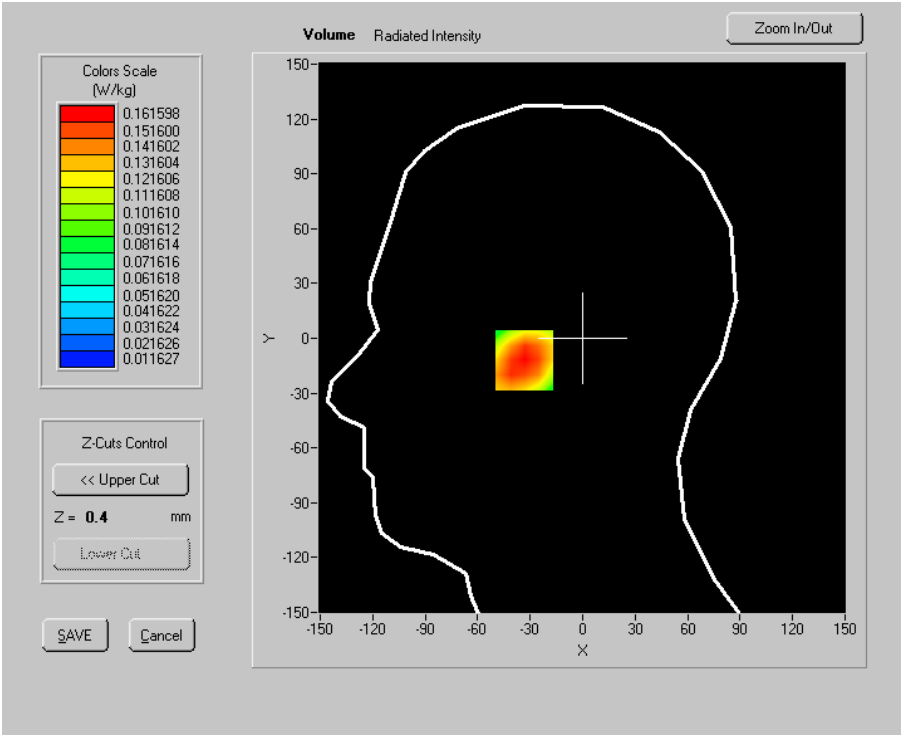


SURFACE SAR

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

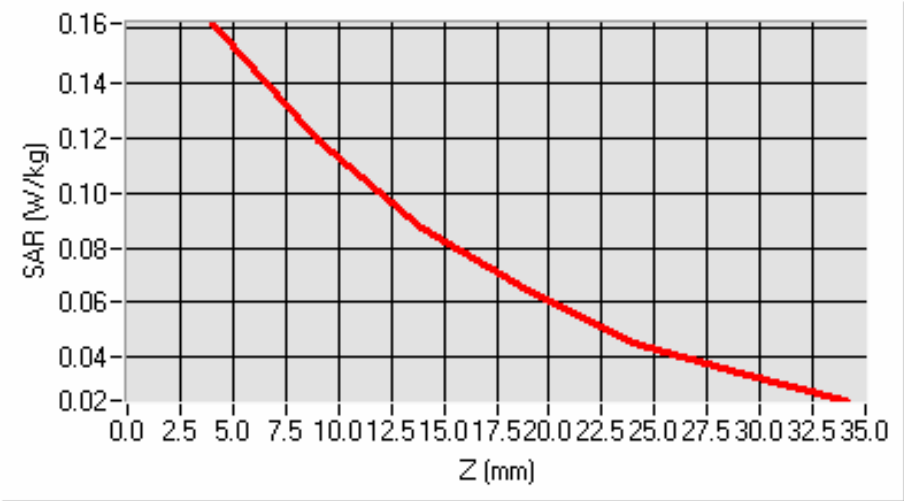


VOLUME SAR

Maximum location: X=-29.00, Y=-12.00

SAR 10g (W/Kg)	0.107299
SAR 1g (W/Kg)	0.155215

SAR, Z Axis Scan (X = -29, Y = -12)

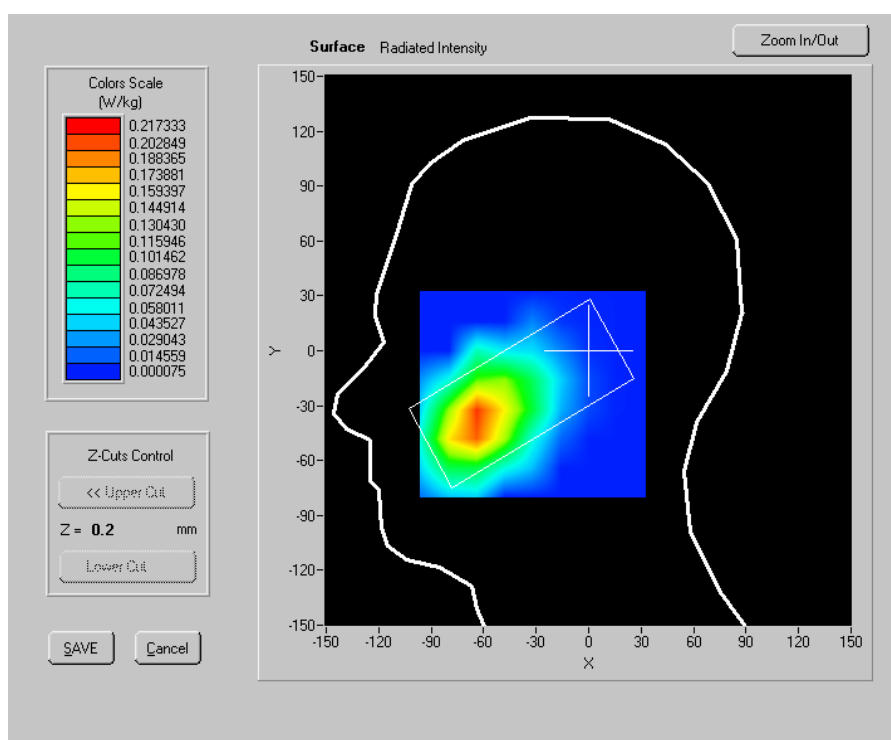


检测经
Results of t
1.5.6.9

Lower Band SAR (Channel 128):

Experimental conditions	
Phantom	Left head
Device Position	Cheek (extended)
Band	GSM850
Channels	Low
Signal	TDMA
before/after Power Level:	25.83 dBm/25.75 dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date	2008.1.20

Frequency (MHz)	824.200012
Relative permittivity (real part)	40.160999
Relative permittivity (imaginary part)	19.506901
Conductivity (S/m)	0.893199
Variation (%)	0.720000

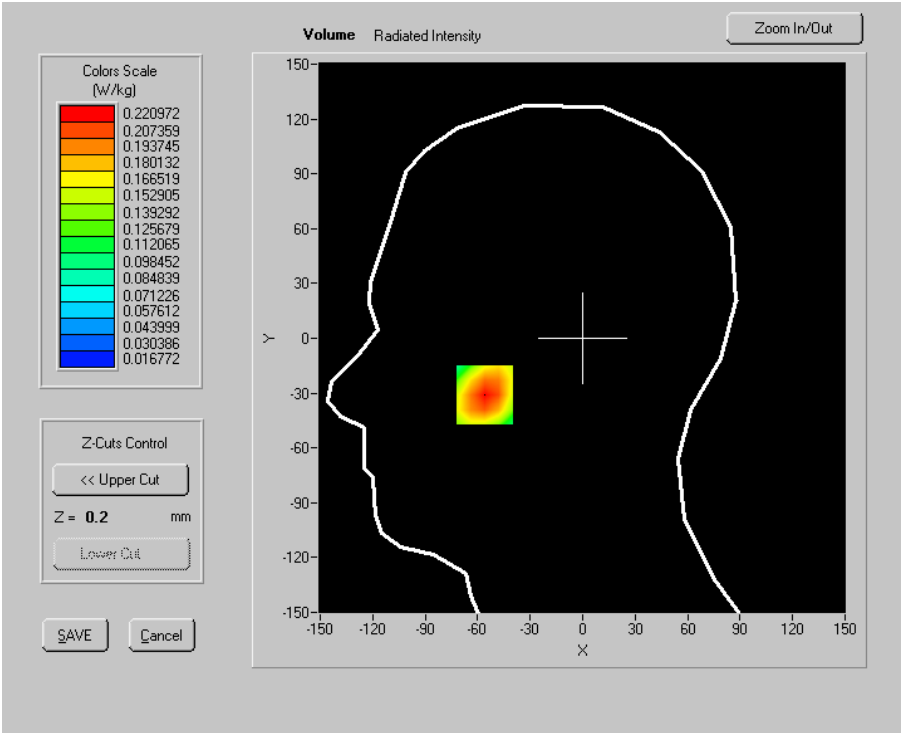


SURFACE SAR

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

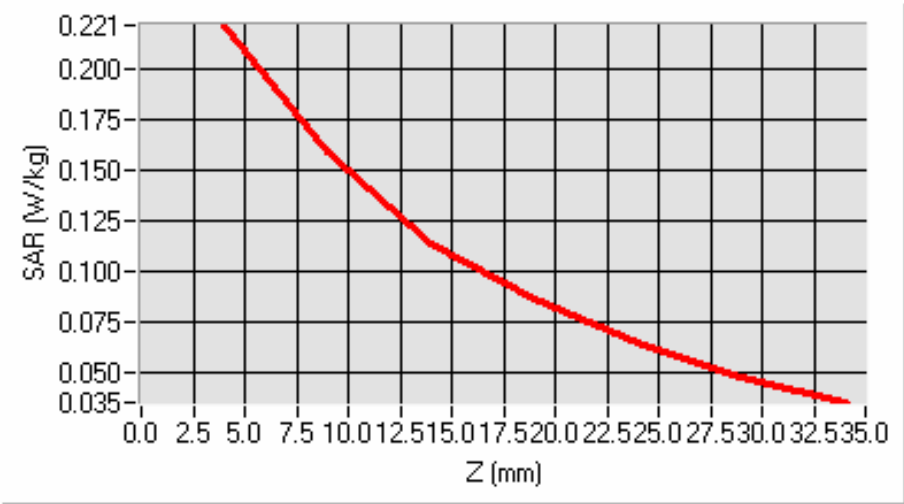


VOLUME SAR

Maximum location: X=-56.00, Y=-31.00

SAR 10g (W/Kg)	0.141952
SAR 1g (W/Kg)	0.211287

SAR, Z Axis Scan (X = -56, Y = -31)



检测结果/说明（续页）：

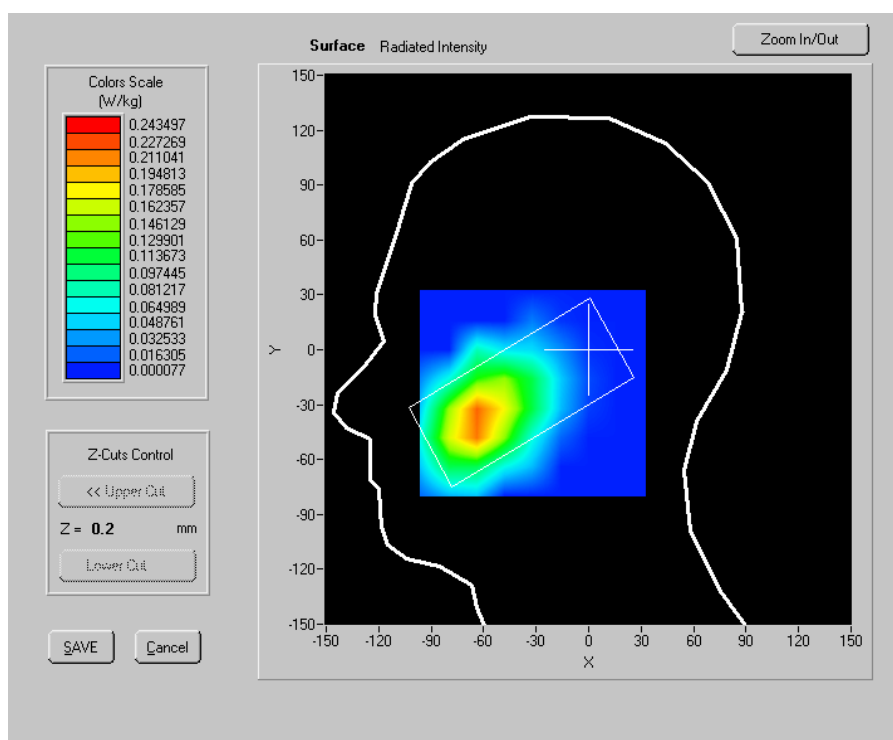
Results of test and additional explanation（continued page）

Test report series No.

Middle Band SAR (Channel 189):

Experimental conditions	
Phantom	Left head
Device Position	Cheek (extended)
Band	GSM850
Channels	Middle
Signal	TDMA
before/after Power Level:	25.85 dBm/25.77dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date	2008.1.20

Frequency (MHz)	836.400024
Relative permittivity (real part)	40.029999
Relative permittivity (imaginary part)	19.565701
Conductivity (S/m)	0.909153
Variation (%)	-1.240000

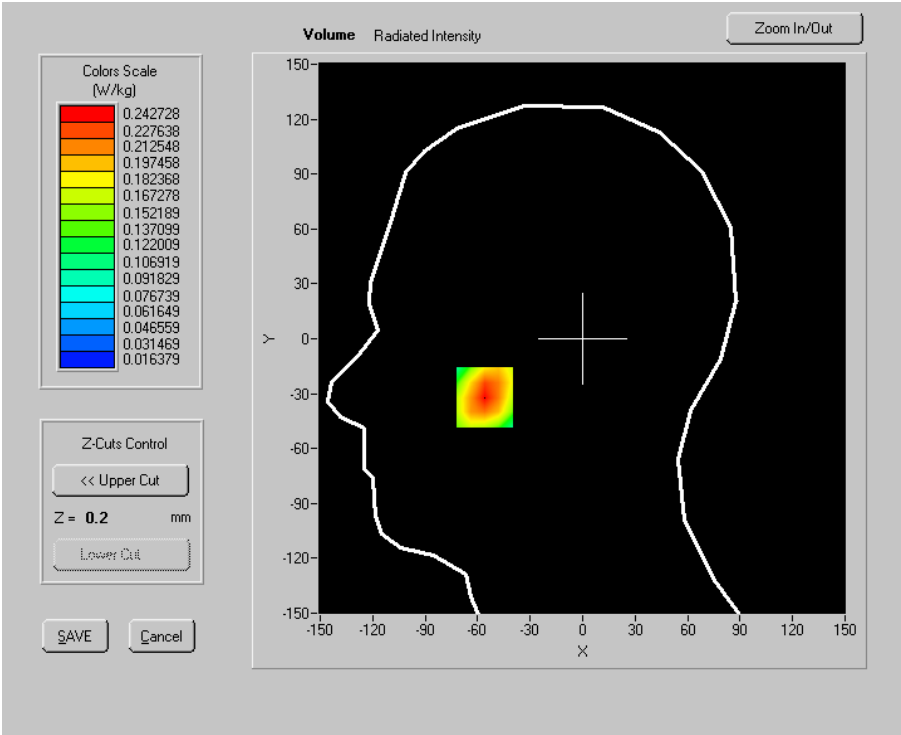


SURFACE SAR

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

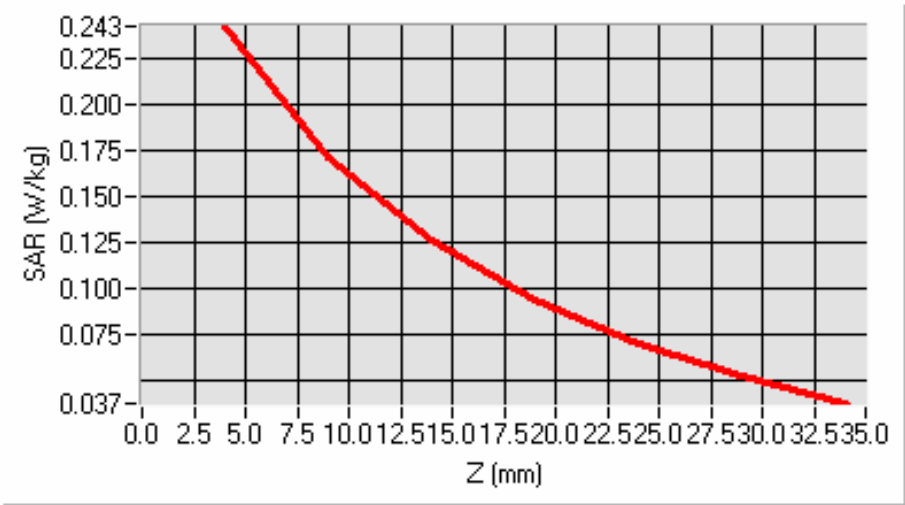


VOLUME SAR

Maximum location: X=-56.00, Y=-32.00

SAR 10g (W/Kg)	0.154669
SAR 1g (W/Kg)	0.230018

SAR, Z Axis Scan (X = -56, Y = -32)



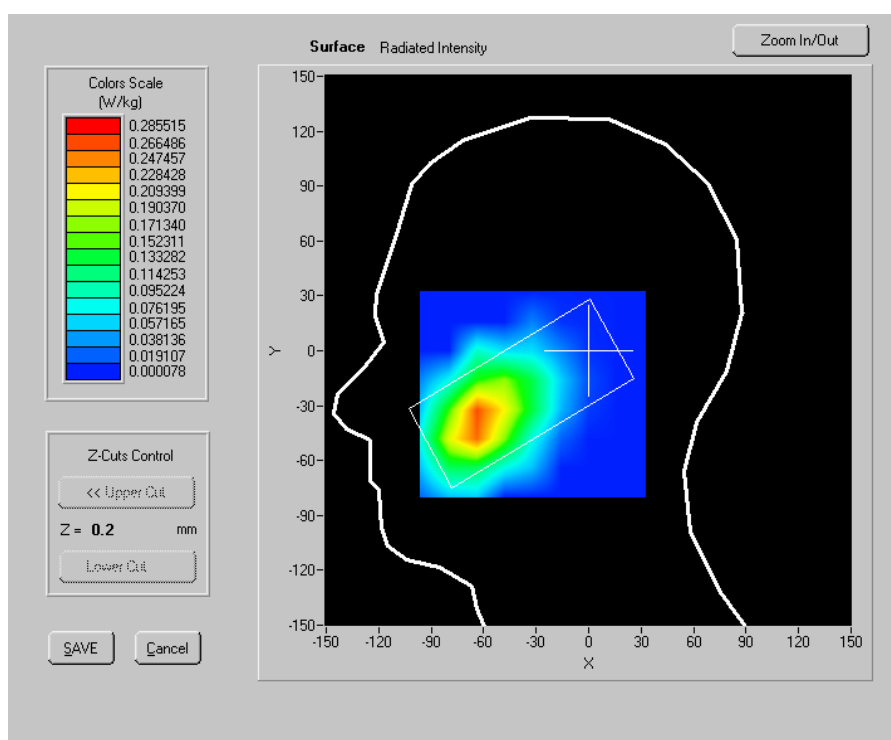
检测结
Results of t

Higher Band SAR (Channel 251):

Test report series No.

Experimental conditions	
Phantom	Left head
Device Position	Cheek (extended)
Band	GSM850
Channels	High
Signal	TDMA
before/after Power Level:	25.84 dBm/25.74 dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date	2008.1.20

Frequency (MHz)	848.799988
Relative permittivity (real part)	39.894001
Relative permittivity (imaginary part)	19.601400
Conductivity (S/m)	0.924315
Variation (%)	-1.940000

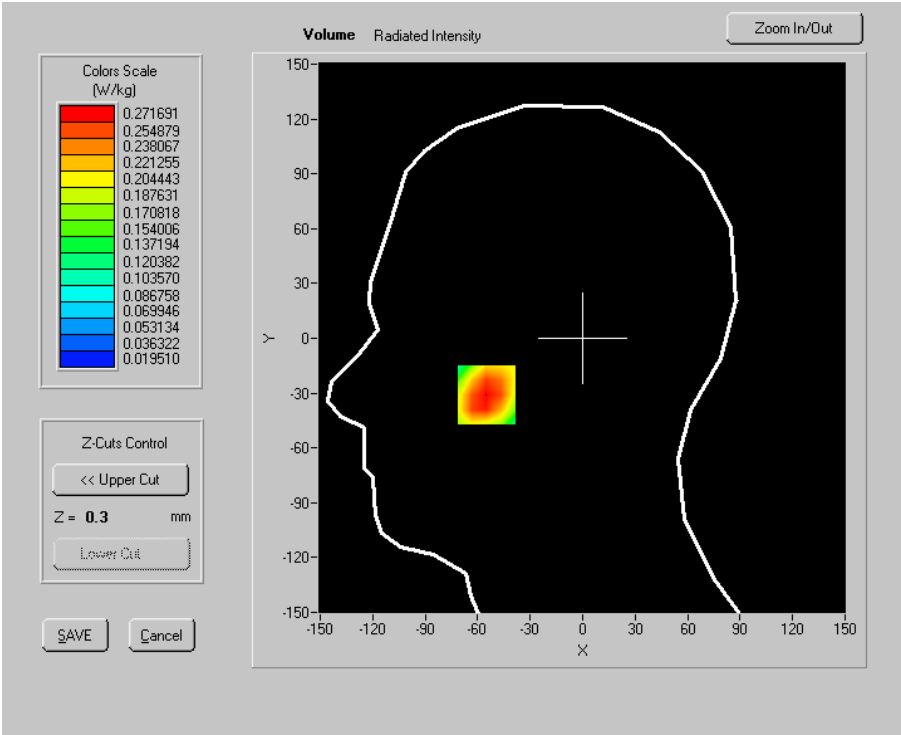


SURFACE SAR

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

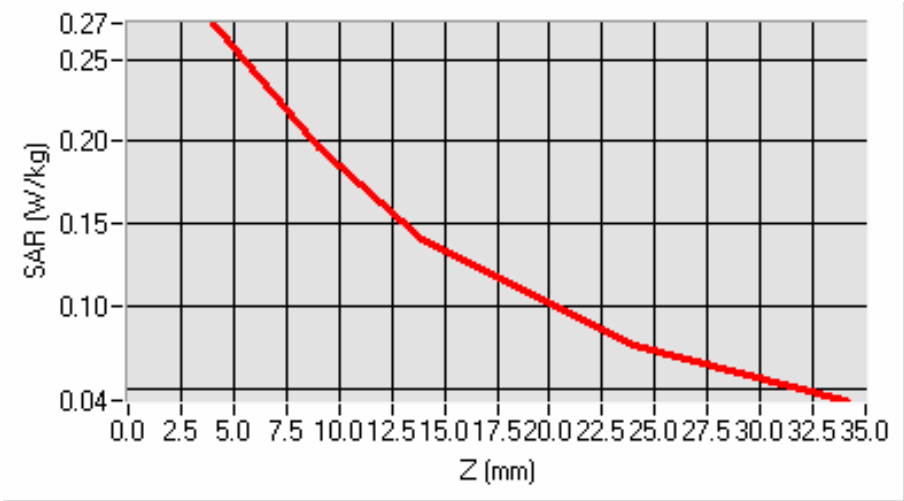


VOLUME SAR

Maximum location: X=-55.00, Y=-31.00

SAR 10g (W/Kg)	0.176796
SAR 1g (W/Kg)	0.265551

SAR, Z Axis Scan (X = -55, Y = -31)



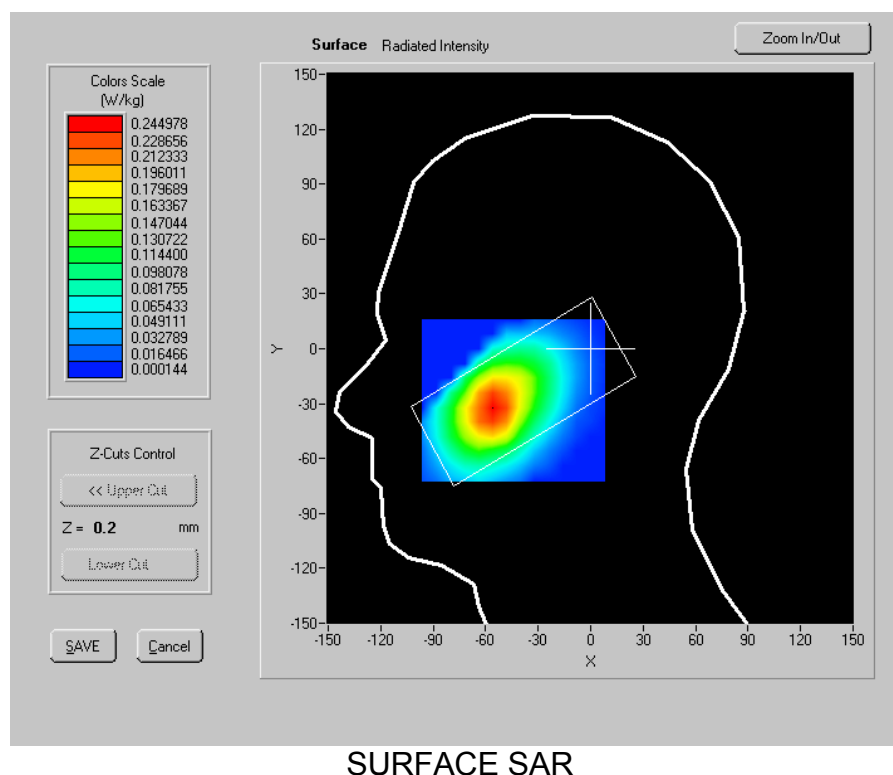
检测结
Results of t

Higher Band SAR (Channel 251):

Test report series No.

Experimental conditions	
Phantom	Left head
Device Position	Cheek (extended)
Band	GSM850(Bluetooth on)
Channels	High
Signal	TDMA
before/after Power Level:	25.80 dBm/25.70 dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date	2008.1.20

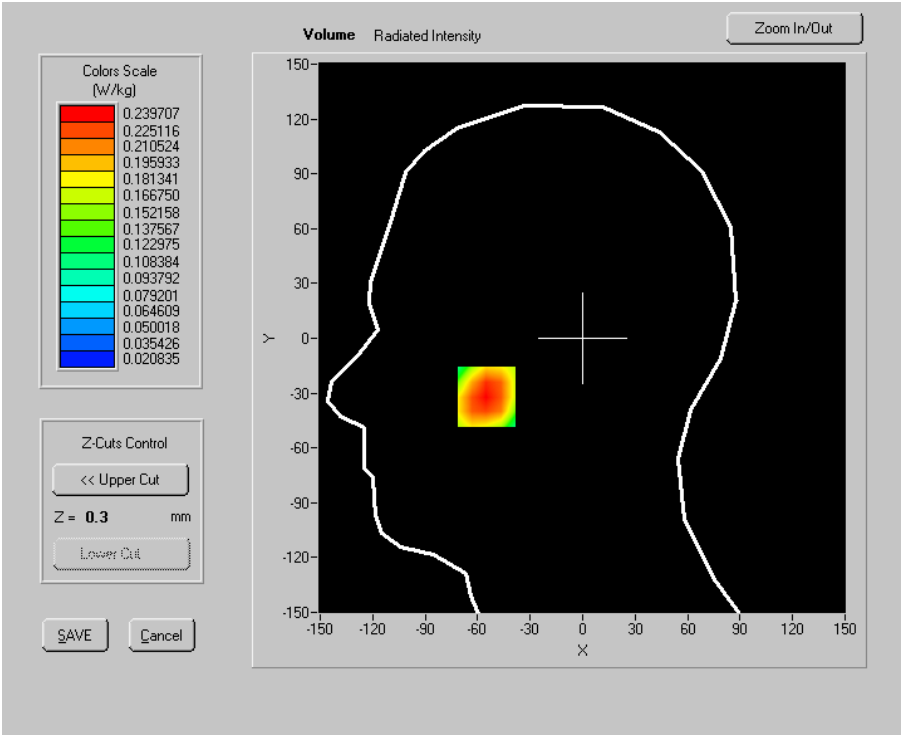
Frequency (MHz)	848.799988
Relative permittivity (real part)	39.894001
Relative permittivity (imaginary part)	19.601400
Conductivity (S/m)	0.924315
Variation (%)	-0.340000



检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

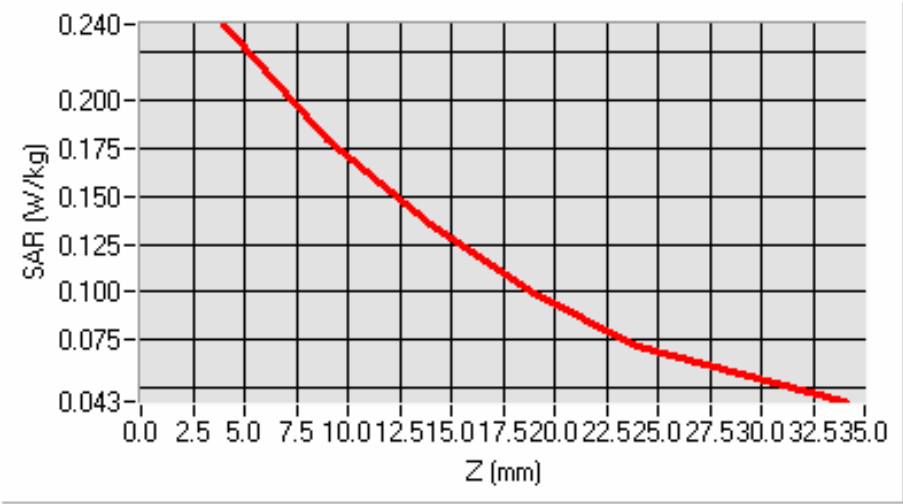


VOLUME SAR

Maximum location: X=-55.00, Y=-32.00

SAR 10g (W/Kg)	0.159703
SAR 1g (W/Kg)	0.228886

SAR, Z Axis Scan (X = -55, Y = -32)



检测结

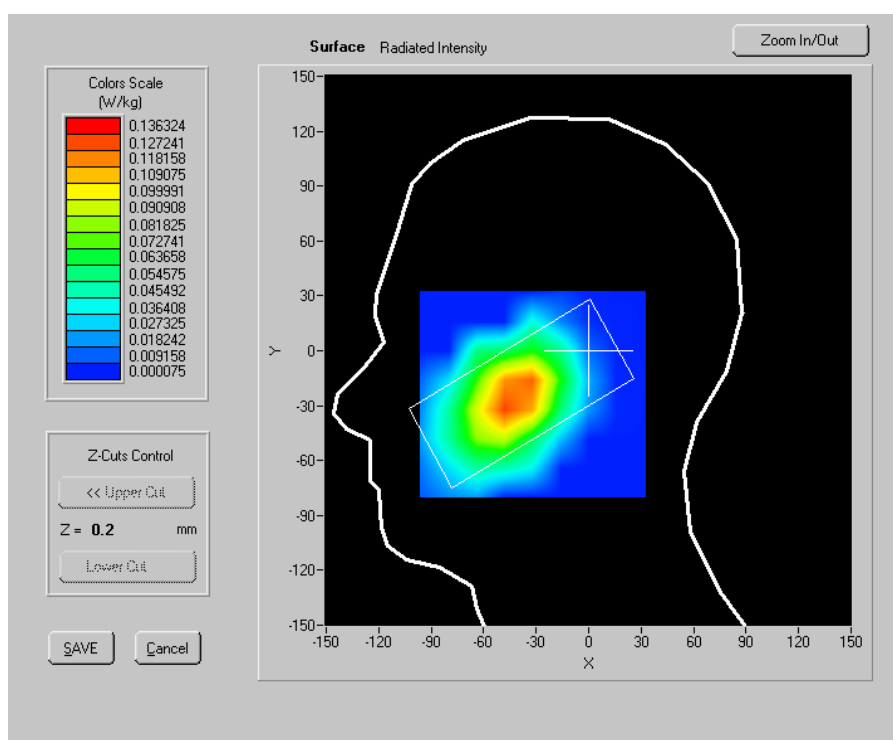
Results of t

1.5.6.10 Left head, tilt (extended)

Lower Band SAR (Channel 128):

Experimental conditions	
Phantom	Left head
Device Position	Tilt (extended)
Band	GSM850
Channels	Low
Signal	TDMA
before/after Power Level:	25.86dBm/25.82 dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date	2008.1.20

Frequency (MHz)	824.200012
Relative permittivity (real part)	40.160999
Relative permittivity (imaginary part)	19.506901
Conductivity (S/m)	0.893199
Variation (%)	-0.960000

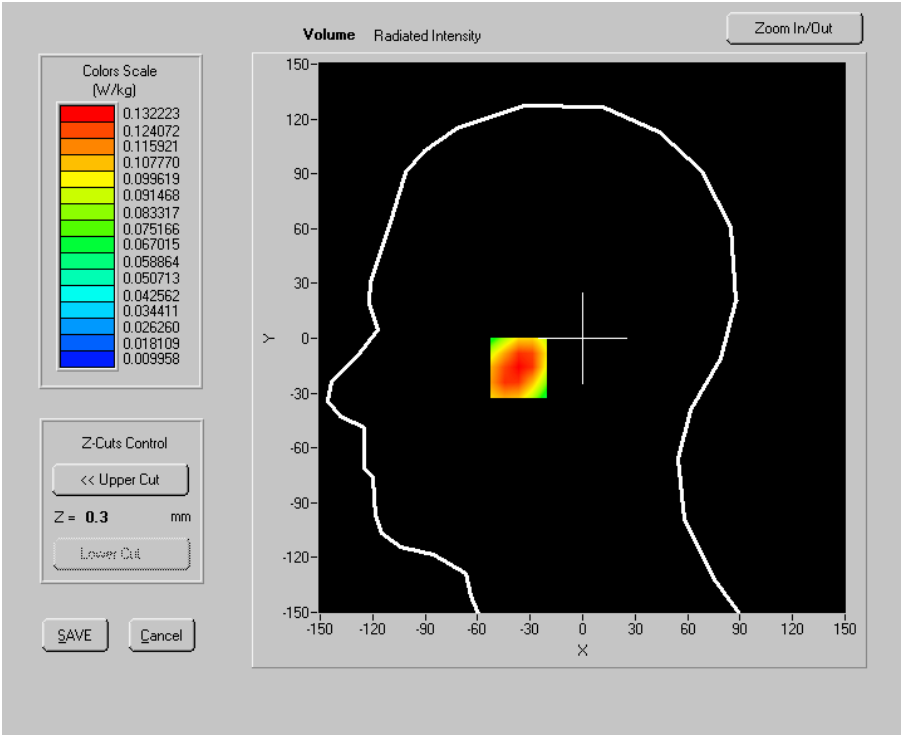


SURFACE SAR

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

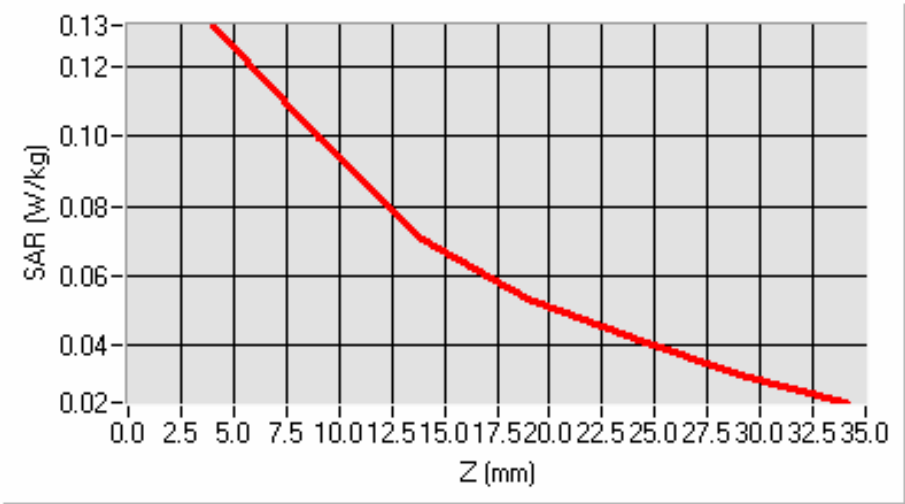


VOLUME SAR

Maximum location: X=-33.00, Y=-16.00

SAR 10g (W/Kg)	0.088704
SAR 1g (W/Kg)	0.127659

SAR, Z Axis Scan (X = -33, Y = -16)



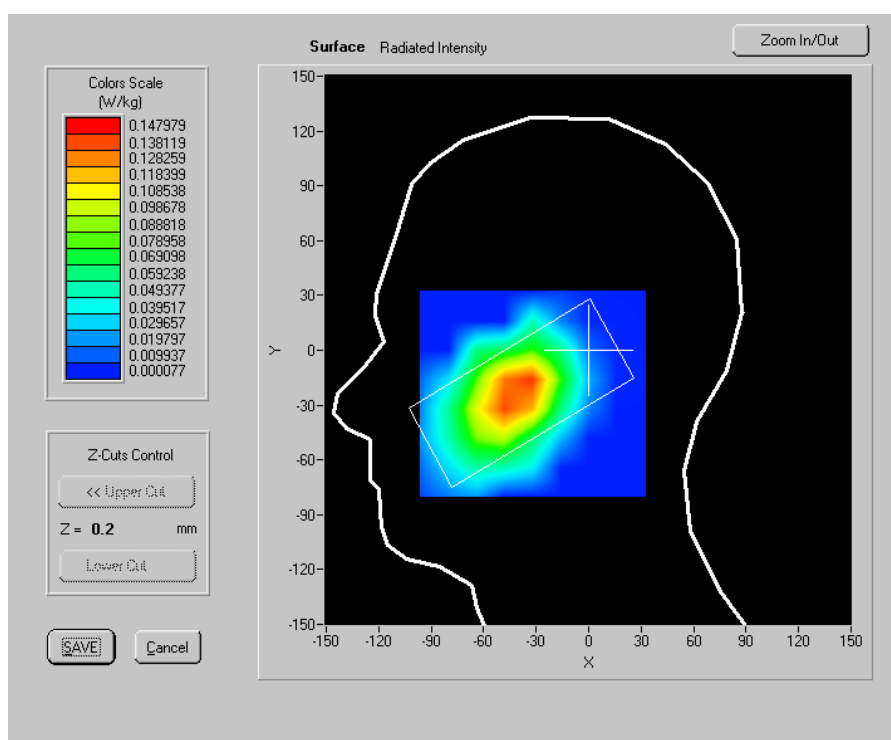
检测结
Results of te

Middle

Test report series No.

Experimental conditions	
Phantom	Left head
Device Position	Tilt (extended)
Band	GSM850
Channels	Middle
Signal	TDMA
before/after Power Level:	25.88 dBm/25.85 dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test data	2008.1.20

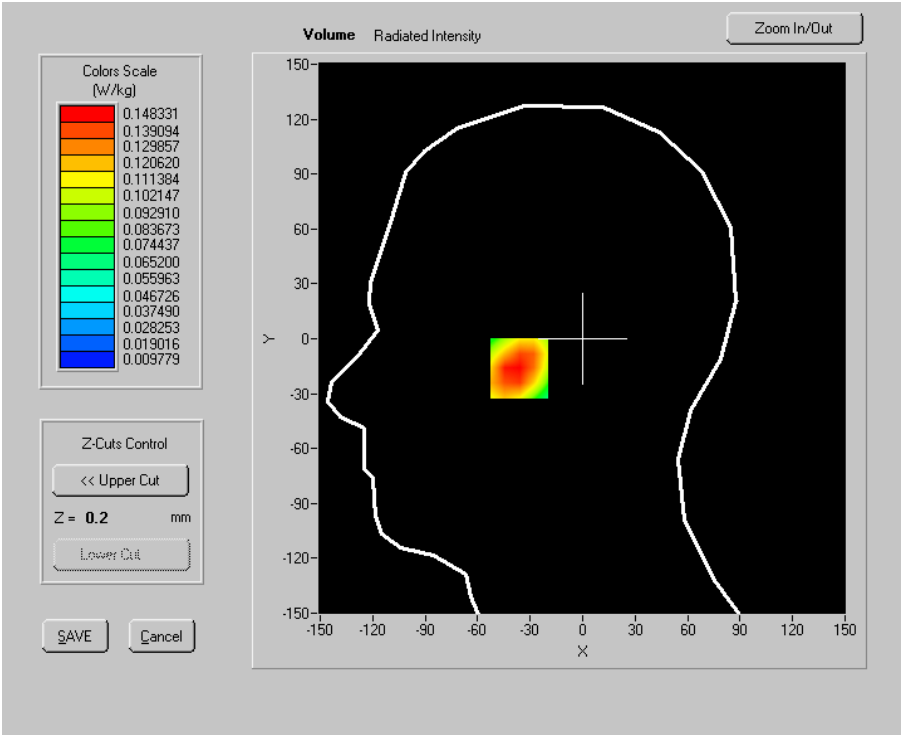
Frequency (MHz)	836.400024
Relative permittivity (real part)	40.029999
Relative permittivity (imaginary part)	19.565701
Conductivity (S/m)	0.909153
Variation (%)	-0.260000



检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Test report series No.

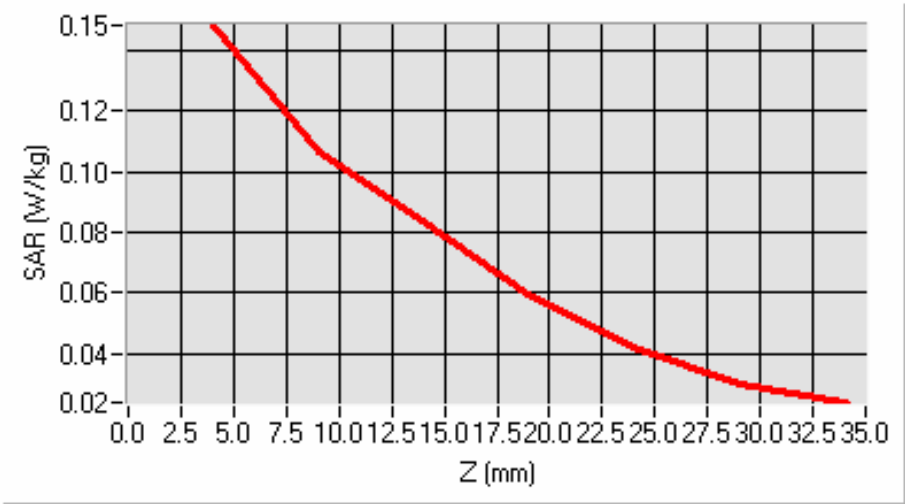


VOLUME SAR

Maximum location: X=-32.00, Y=-16.00

SAR 10g (W/Kg)	0.097790
SAR 1g (W/Kg)	0.144457

SAR, Z Axis Scan (X = -32, Y = -16)



Test report series No.

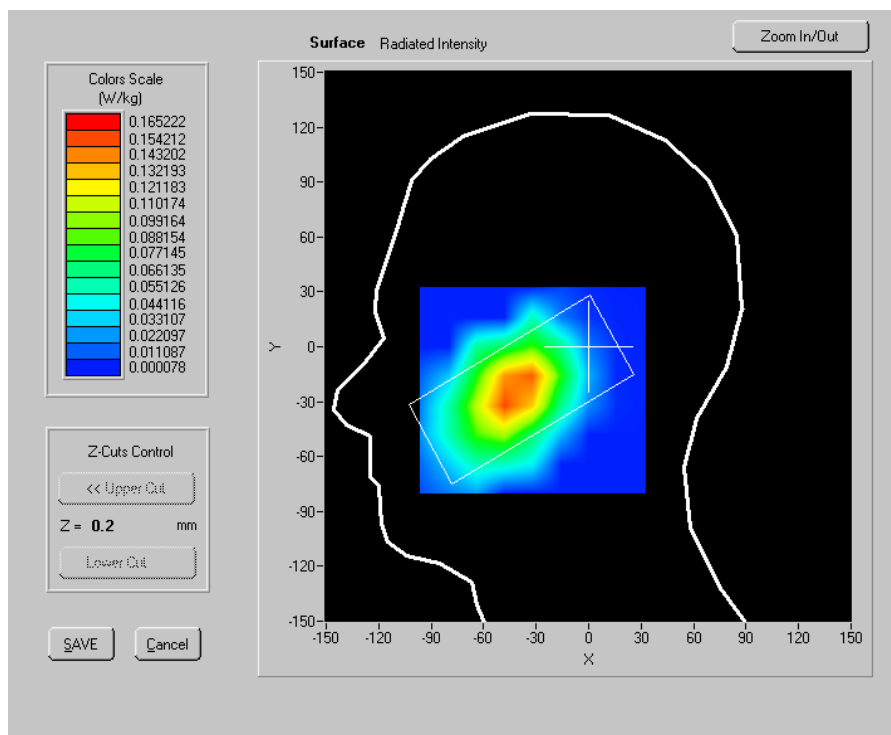
检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Higher Band SAR (Channel 251):

Experimental conditions	
Phantom	Left head
Device Position	Tilt (extended)
Band	GSM850
Channels	High
Signal	TDMA
before/after Power Level:	25.90 dBm/25.88 dBm
Liquid Temperature:	21.2°C
Duty Cycle:	8
Test date	2008.1.20

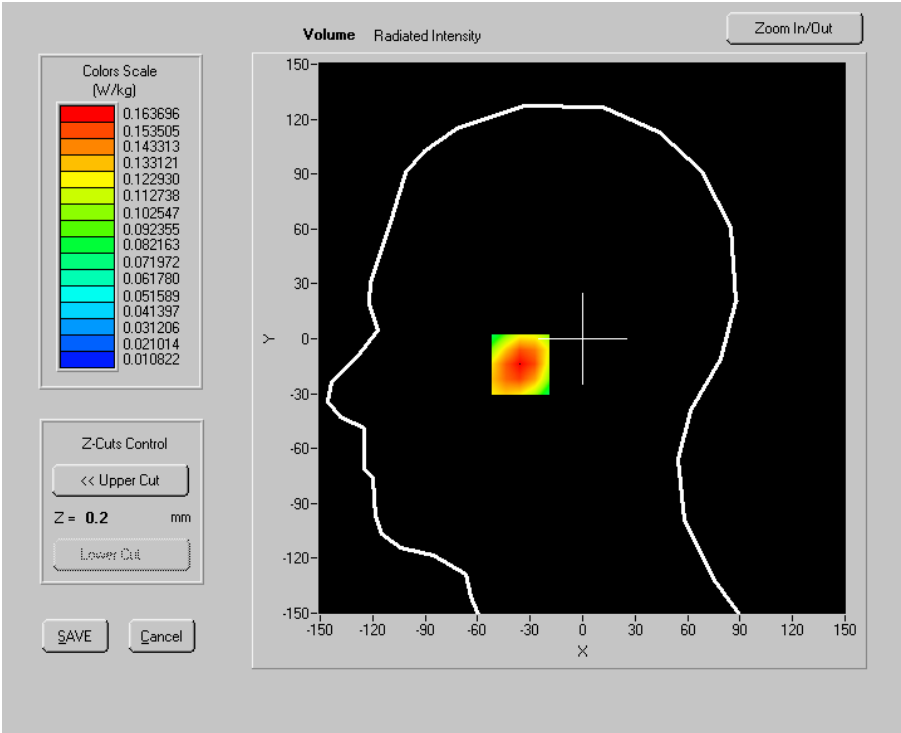
Frequency (MHz)	848.799988
Relative permittivity (real part)	39.894001
Relative permittivity (imaginary part)	19.601400
Conductivity (S/m)	0.924315
Variation (%)	-0.900000



SURFACE SAR

Test report series No.

检测结果/说明 (续页):
Results of test and additional explanation (continued page)

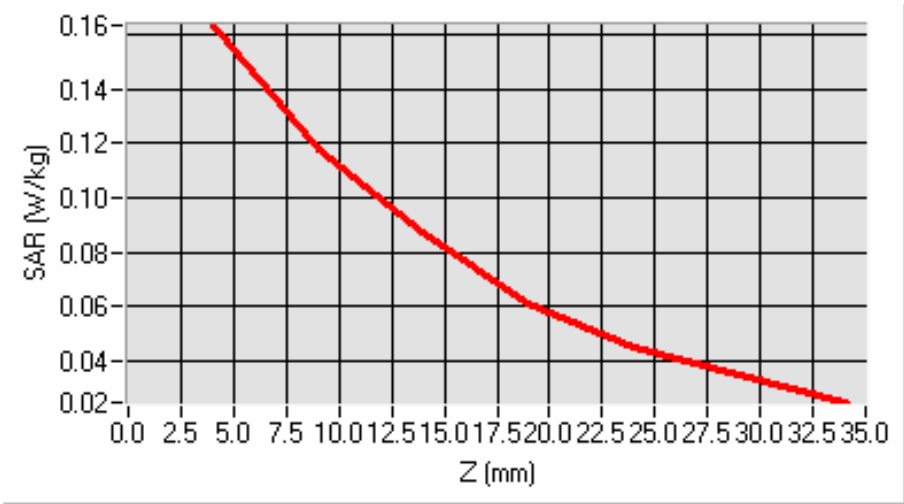


VOLUME SAR

Maximum location: X=-32.00, Y=-14.00

SAR 10g (W/Kg)	0.107400
SAR 1g (W/Kg)	0.156841

SAR, Z Axis Scan (X = -32, Y = -14)



Test report series No.

检测结果/说明 (续页):

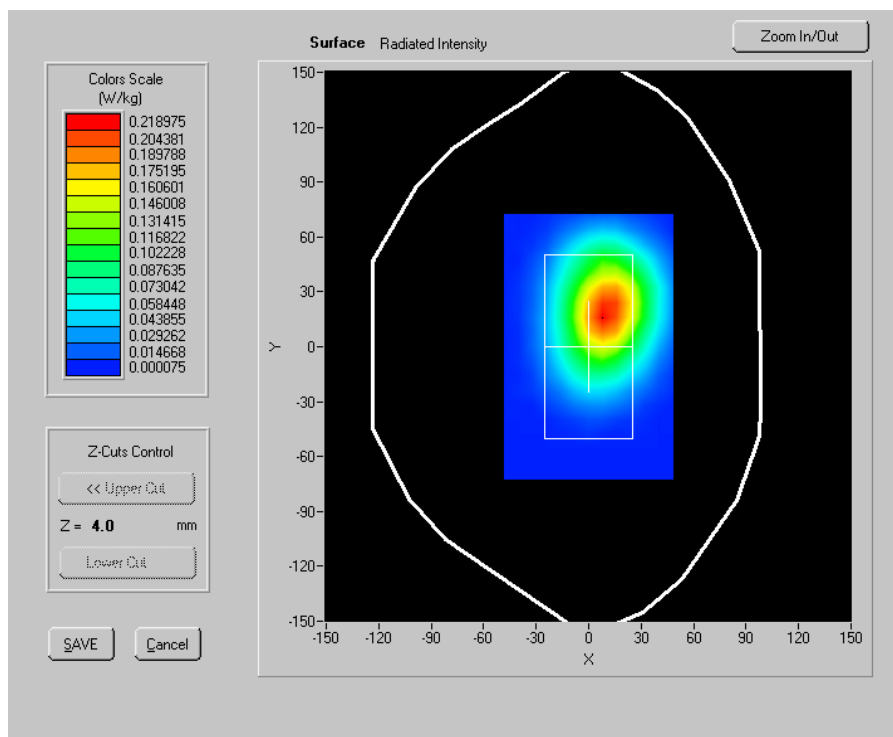
Results of test and additional explanation (continued page)

1.5.6.11 body-worn (retracted)

Lower Band SAR (Channel 128):

Experimental conditions	
Phantom	Validation plane
Device Position	Body (retracted)
Band	GSM850
Channels	Low
Signal	TDMA
before/after Power Level:	25.90 dBm/25.85 dBm
Liquid Temperature:	21.1°C
Duty Cycle:	8
Test data	2008.1.20

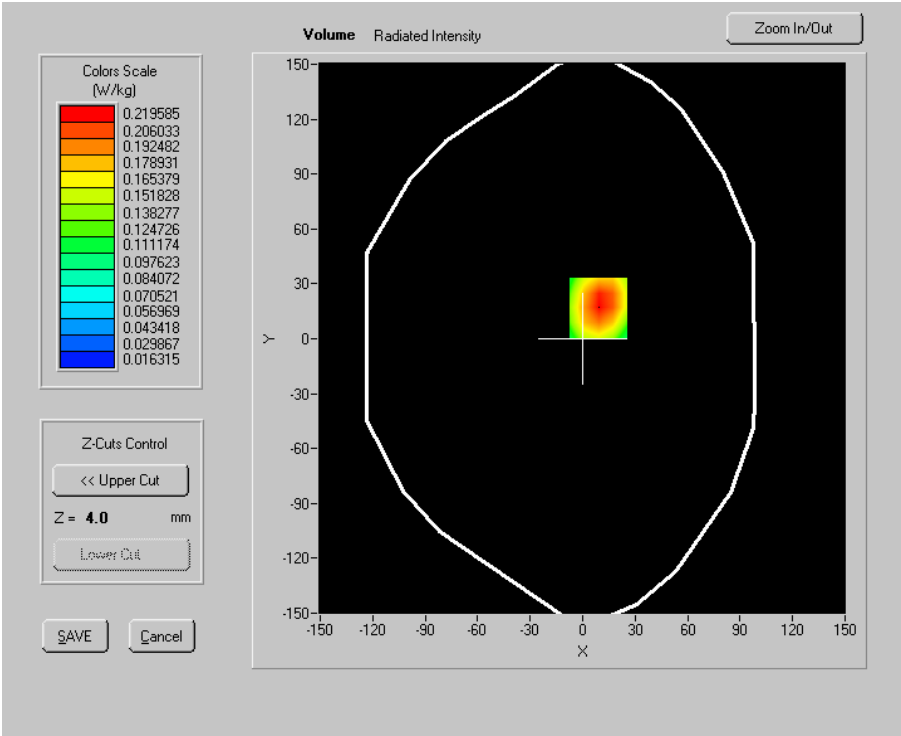
Frequency (MHz)	824.200012
Relative permittivity (real part)	54.678001
Relative permittivity (imaginary part)	21.279301
Conductivity (S/m)	0.974356
Variation (%)	-0.950000



SURFACE SAR

Test report series No.

检测结果/说明 (续页):
Results of test and additional explanation (continued page)

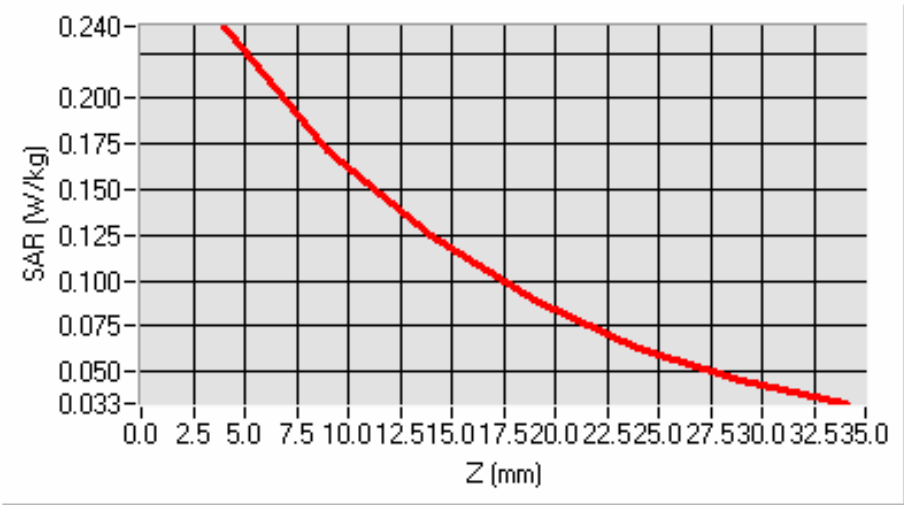


VOLUME SAR

Maximum location: X=9.00, Y=17.00

SAR 10g (W/Kg)	0.153081
SAR 1g (W/Kg)	0.231069

SAR, Z Axis Scan (X = 9, Y = 17)



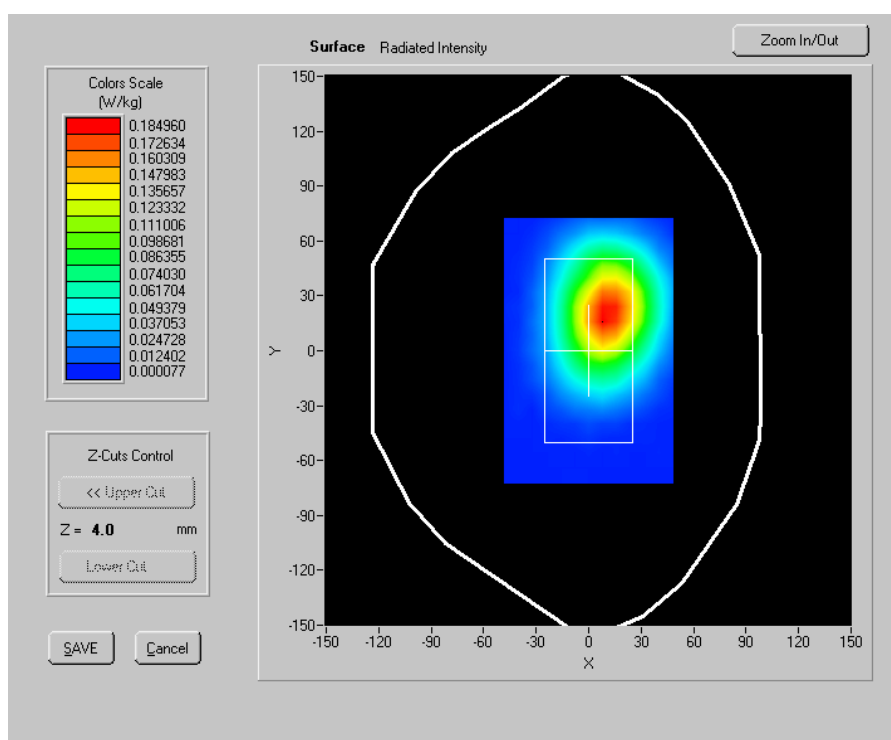
检测结果/说明 (续页):
Results of test and additional explanation (continued page)

Test report series No.

Middle Band SAR (Channel 189):

Experimental conditions	
Phantom	Validation plane
Device Position	Body (retracted)
Band	GSM850
Channels	Middle
Signal	TDMA
before/after Power Level:	25.78 dBm/25.76 dBm
Liquid Temperature:	21.1°C
Duty Cycle:	8
Test date	2008.1.20

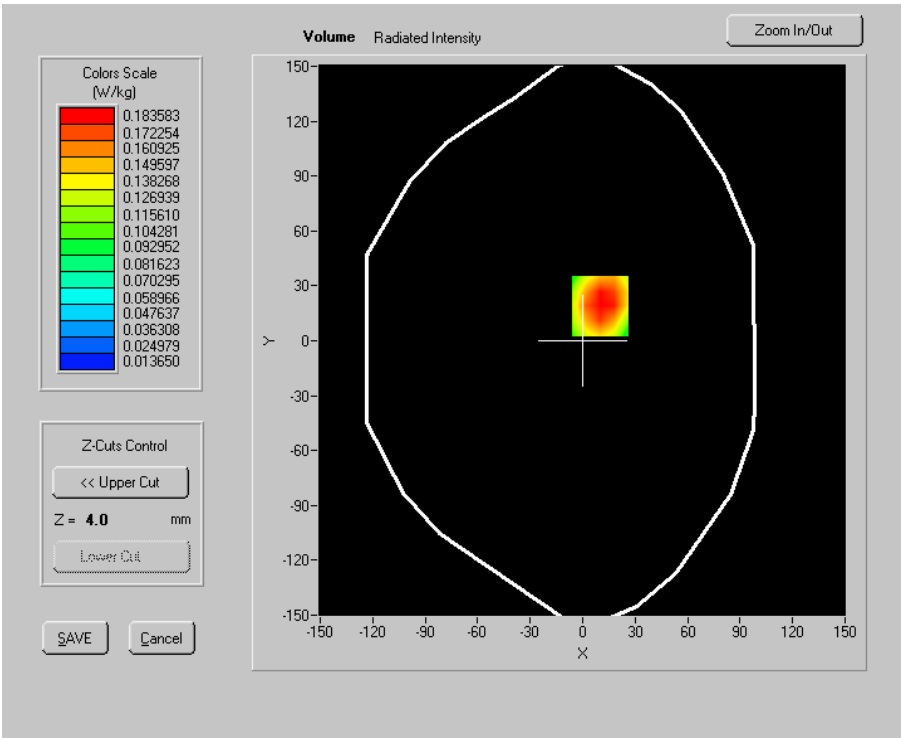
Frequency (MHz)	836.400024
Relative permittivity (real part)	54.622002
Relative permittivity (imaginary part)	21.279301
Conductivity (S/m)	0.988778
Variation (%)	-1.550000



SURFACE SAR

Test report series No.

检测结果/说明 (续页):
Results of test and additional explanation (continued page)

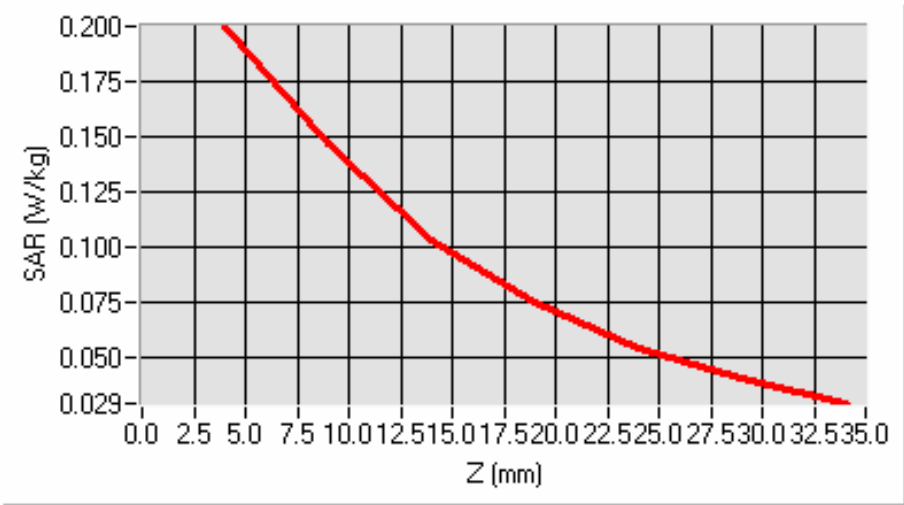


VOLUME SAR

Maximum location: X=10.00, Y=19.00

SAR 10g (W/Kg)	0.130916
SAR 1g (W/Kg)	0.194778

SAR, Z Axis Scan (X = 10, Y = 19)



Test report series No.

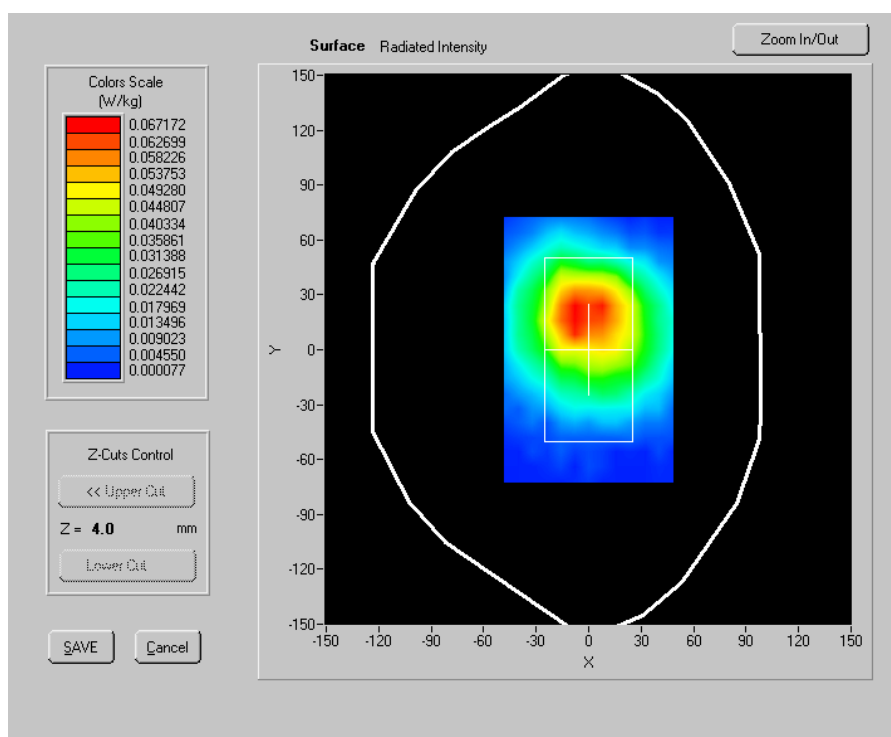
检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Middle Band SAR (Channel 189):

Experimental conditions	
Phantom	Validation plane
Device Position	Body (retracted/face to bottom)
Band	GSM850
Channels	Middle
Signal	TDMA
before/after Power Level:	25.80 dBm/25.75 dBm
Liquid Temperature:	21.1°C
Duty Cycle:	8
Test data	2008.1.20

Frequency (MHz)	836.400024
Relative permittivity (real part)	54.622002
Relative permittivity (imaginary part)	21.279301
Conductivity (S/m)	0.988778
Variation (%)	-2.610000

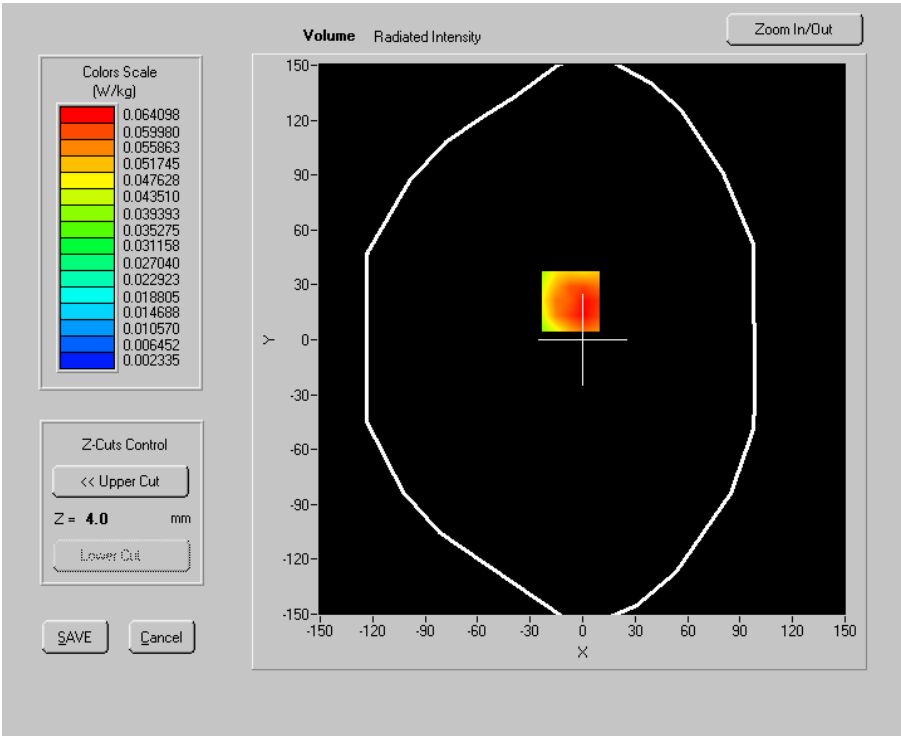


SURFACE SAR

Test report series No.

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

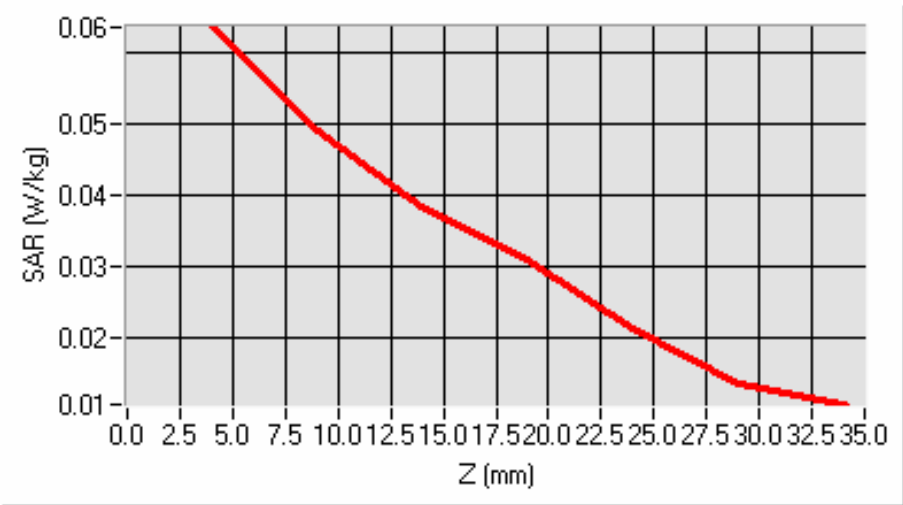


VOLUME SAR

Maximum location: X=-7.00, Y=21.00

SAR 10g (W/Kg)	0.048688
SAR 1g (W/Kg)	0.067863

SAR, Z Axis Scan (X = -7, Y = 21)



Test report series No.

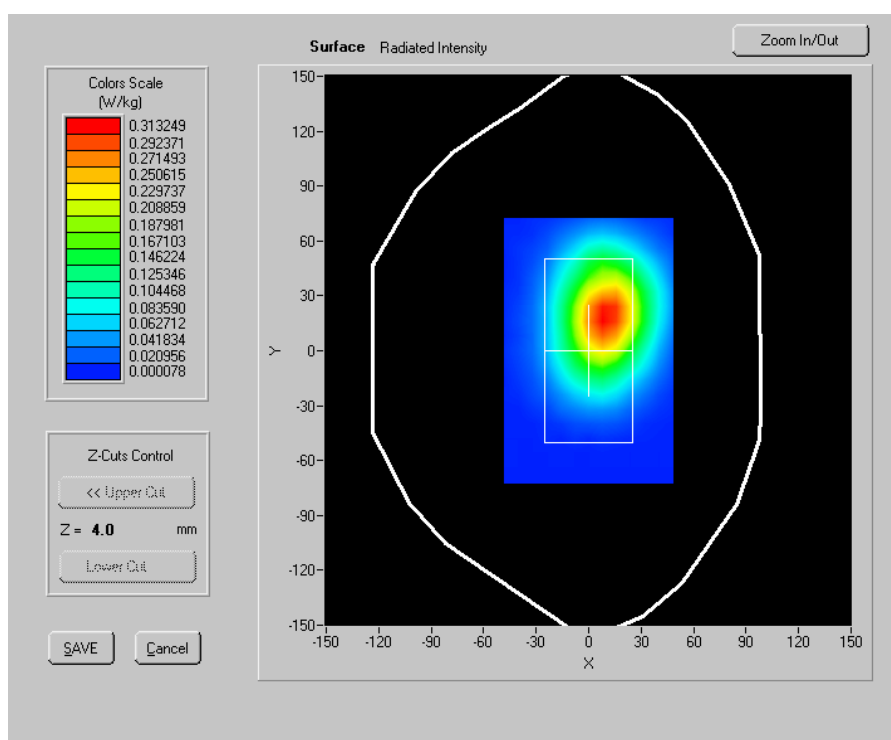
检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Higher Band SAR (Channel 251):

Experimental conditions	
Phantom	Validation plane
Device Position	Body (retracted)
Band	GSM850
Channels	High
Signal	TDMA
before/after Power Level:	25.90 dBm/25.85 dBm
Liquid Temperature:	21.1°C
Duty Cycle:	8
Test date	2008.1.20

Frequency (MHz)	848.799988
Relative permittivity (real part)	54.540001
Relative permittivity (imaginary part)	21.297150
Conductivity (S/m)	1.004279
Variation (%)	1.070000

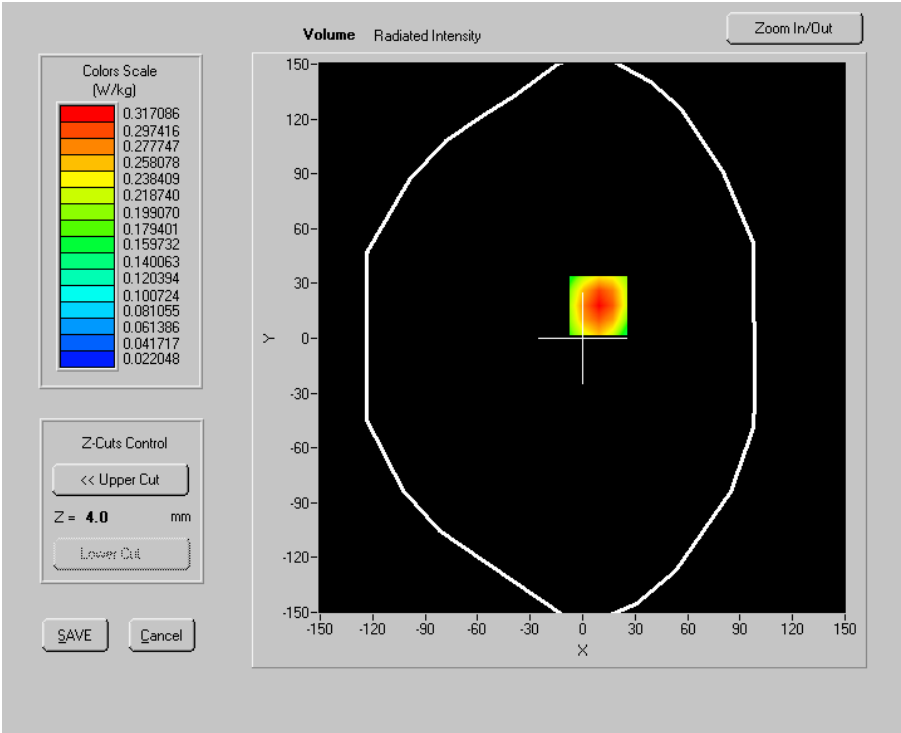


SURFACE SAR

Test report series No.

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

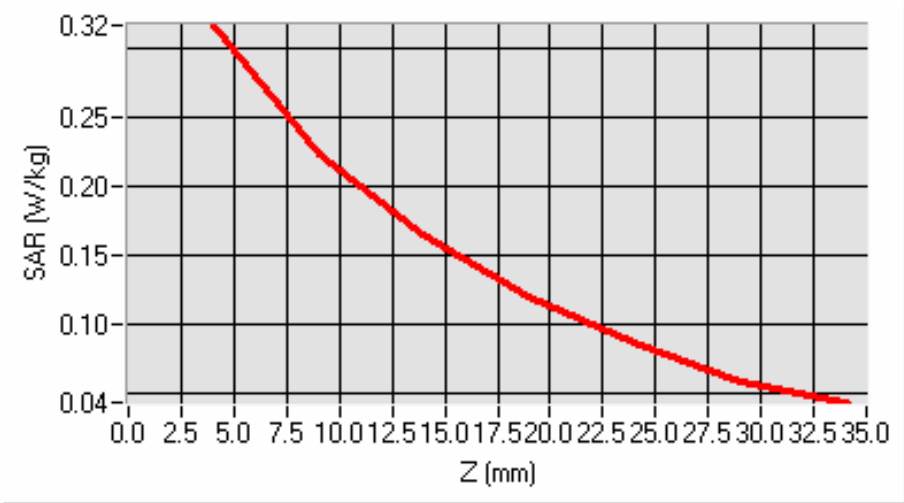


VOLUME SAR

Maximum location: X=9.00, Y=18.00

SAR 10g (W/Kg)	0.203839
SAR 1g (W/Kg)	0.303746

SAR, Z Axis Scan (X = 9, Y = 18)



Test report series No.

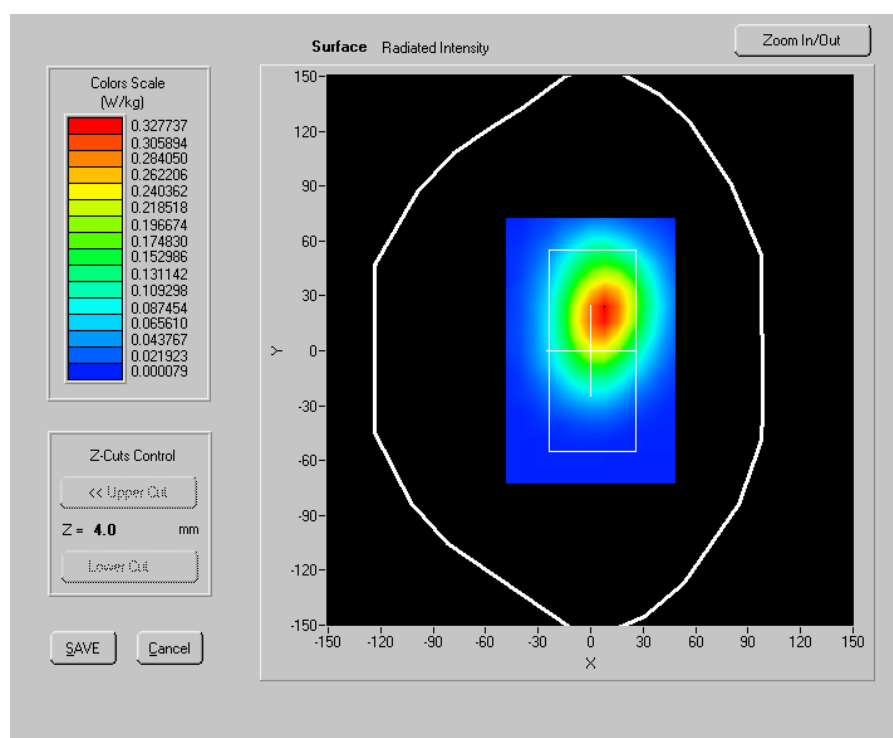
检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Higher Band SAR (Channel 251):

Experimental conditions	
Phantom	Validation plane
Device Position	Body (retracted)
Band	GSM850(Bluetooth on)
Channels	High
Signal	TDMA
before/after Power Level:	25.80 dBm/25.78 dBm
Liquid Temperature:	21.1°C
Duty Cycle:	8
Test data	2008.1.20

Frequency (MHz)	848.799988
Relative permittivity (real part)	54.540001
Relative permittivity (imaginary part)	21.297150
Conductivity (S/m)	1.004279
Variation (%)	1.280000

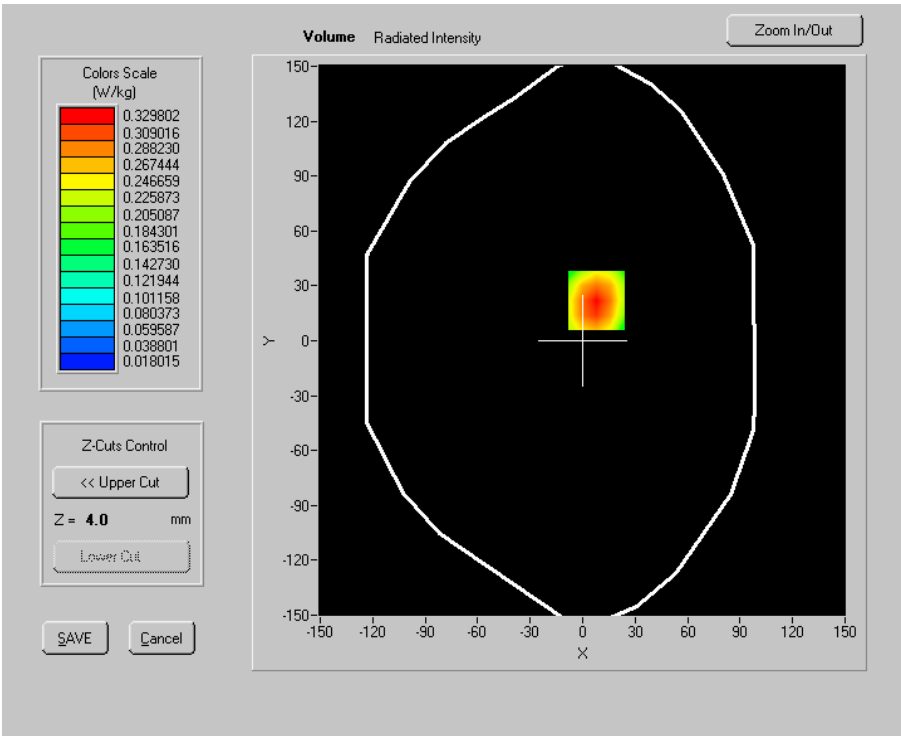


SURFACE SAR

Test report series No.

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

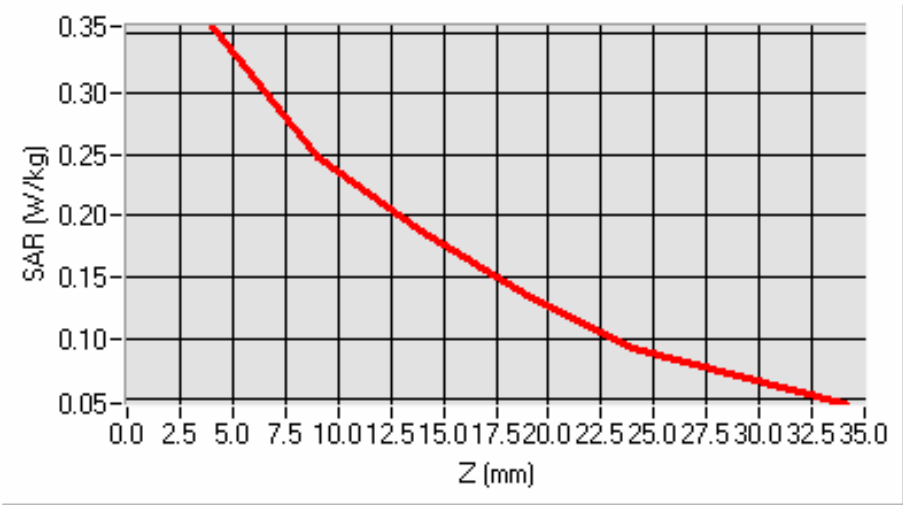


VOLUME SAR

Maximum location: X=8.00, Y=22.00

SAR 10g (W/Kg)	0.229087
SAR 1g (W/Kg)	0.338777

SAR, Z Axis Scan (X = 8, Y = 22)



Test report series No.

检测结果/说明 (续页):

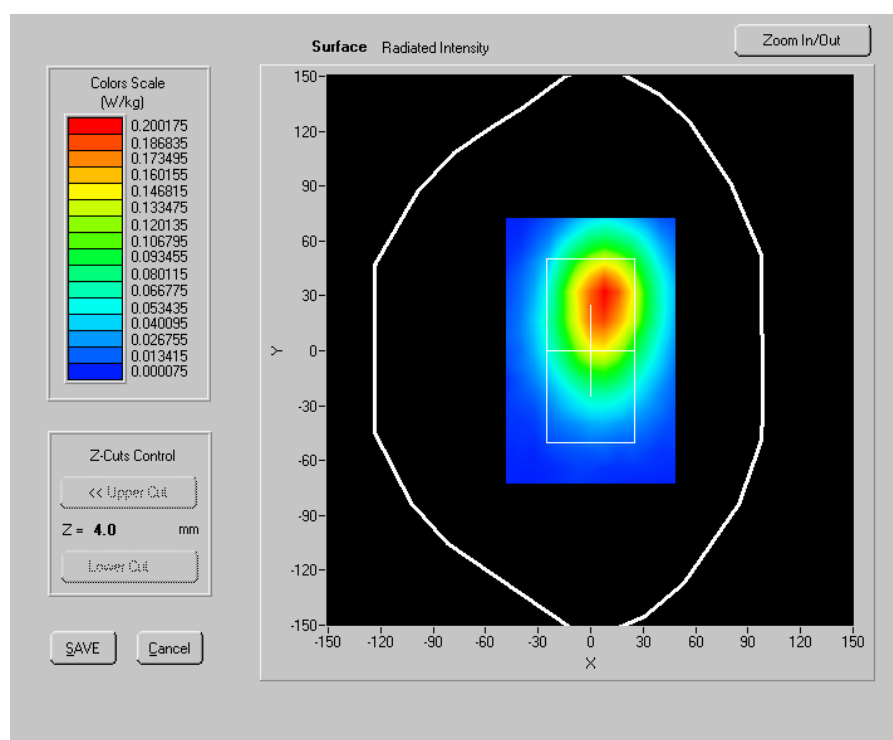
Results of test and additional explanation (continued page)

1.5.6.12 body-worn (extended)

Lower Band SAR (Channel 128):

Experimental conditions	
Phantom	Validation plane
Device Position	Body (extended)
Band	GSM850
Channels	Low
Signal	TDMA
before/after Power Level:	25.84 dBm/25.73 dBm
Liquid Temperature:	21.1°C
Duty Cycle:	8
Test date	2008.1.20

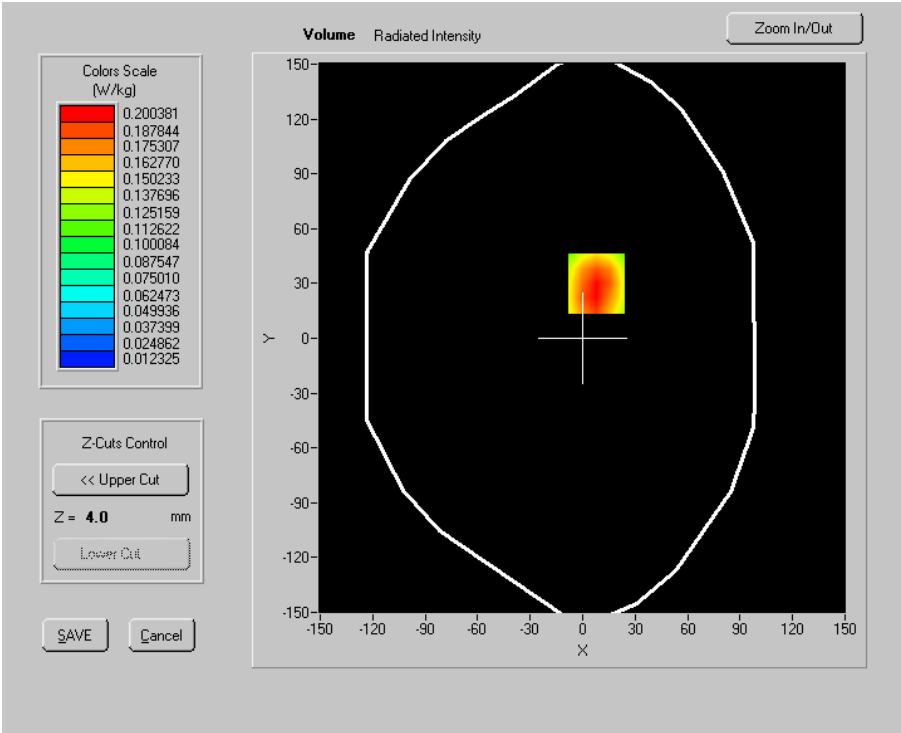
Frequency (MHz)	824.200012
Relative permittivity (real part)	54.678001
Relative permittivity (imaginary part)	21.279301
Conductivity (S/m)	0.974356
Variation (%)	-1.990000



Test report series No.

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

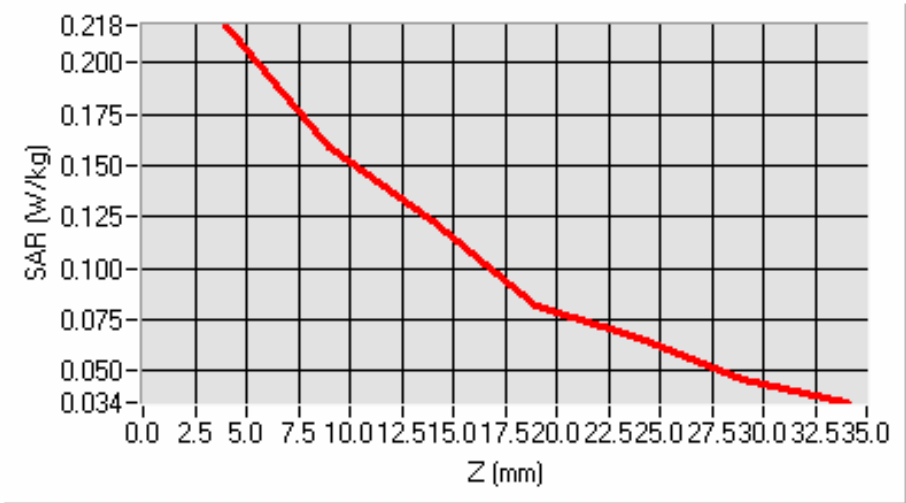


VOLUME SAR

Maximum location: X=8.00, Y=30.00

SAR 10g (W/Kg)	0.147194
SAR 1g (W/Kg)	0.211135

SAR, Z Axis Scan (X = 8, Y = 30)



Test report series No.

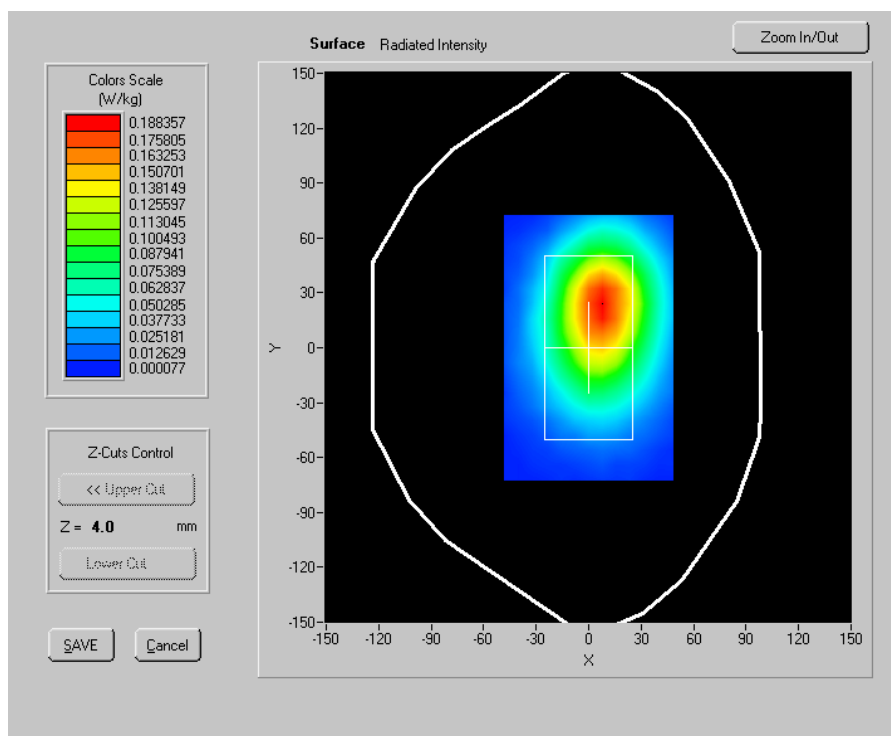
检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Middle Band SAR (Channel 189):

Experimental conditions	
Phantom	Validation plane
Device Position	Body (extended)
Band	GSM850
Channels	Middle
Signal	TDMA
before/after Power Level:	25.85 dBm/25.78dBm
Liquid Temperature:	21.1°C
Duty Cycle:	8
Test data	2008.1.20

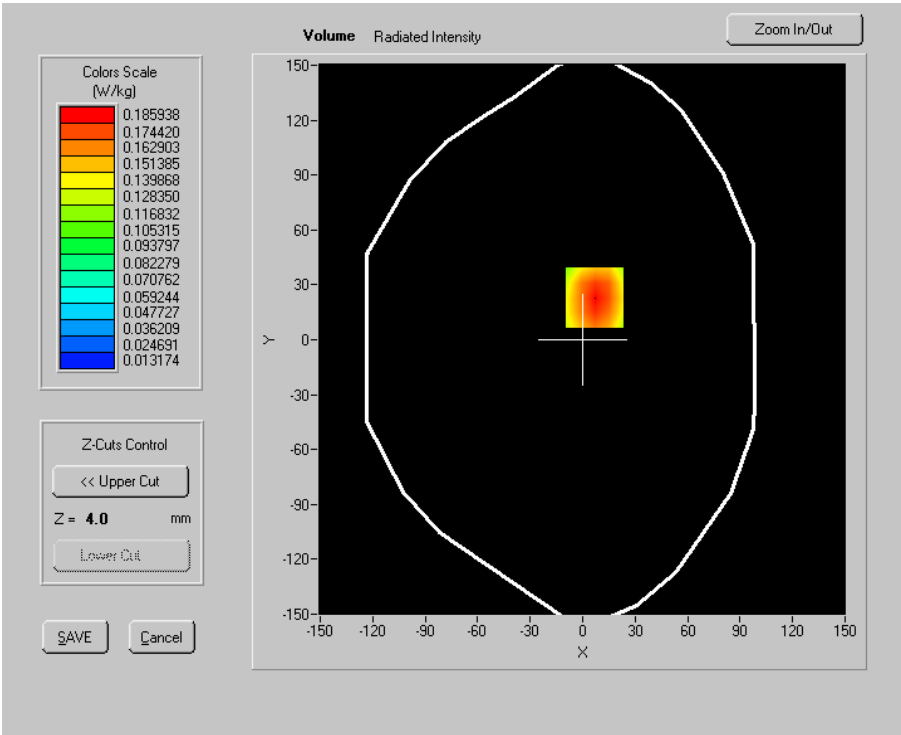
Frequency (MHz)	836.400024
Relative permittivity (real part)	54.622002
Relative permittivity (imaginary part)	21.279301
Conductivity (S/m)	0.988778
Variation (%)	0.590000



SURFACE SAR

Test report series No.

检测结果/说明 (续页):
Results of test and additional explanation (continued page)

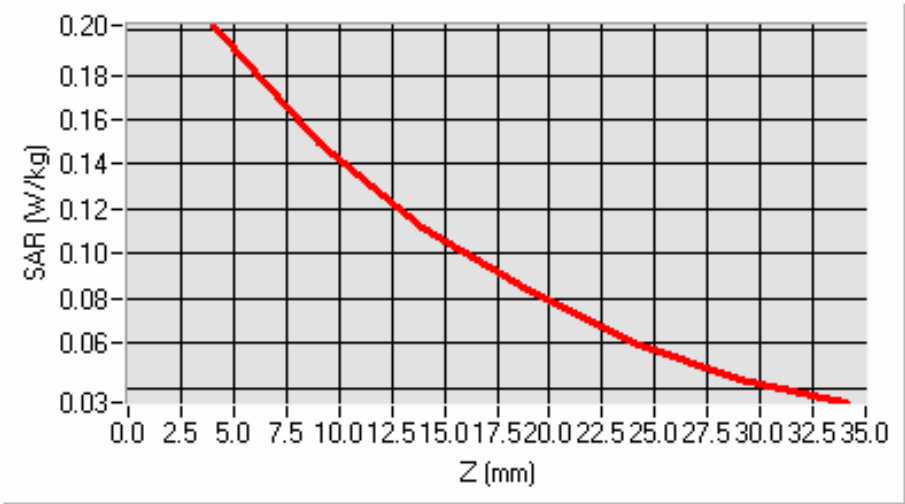


VOLUME SAR

Maximum location: X=7.00, Y=23.00

SAR 10g (W/Kg)	0.136831
SAR 1g (W/Kg)	0.194038

SAR, Z Axis Scan (X = 7, Y = 23)



Test report series No.

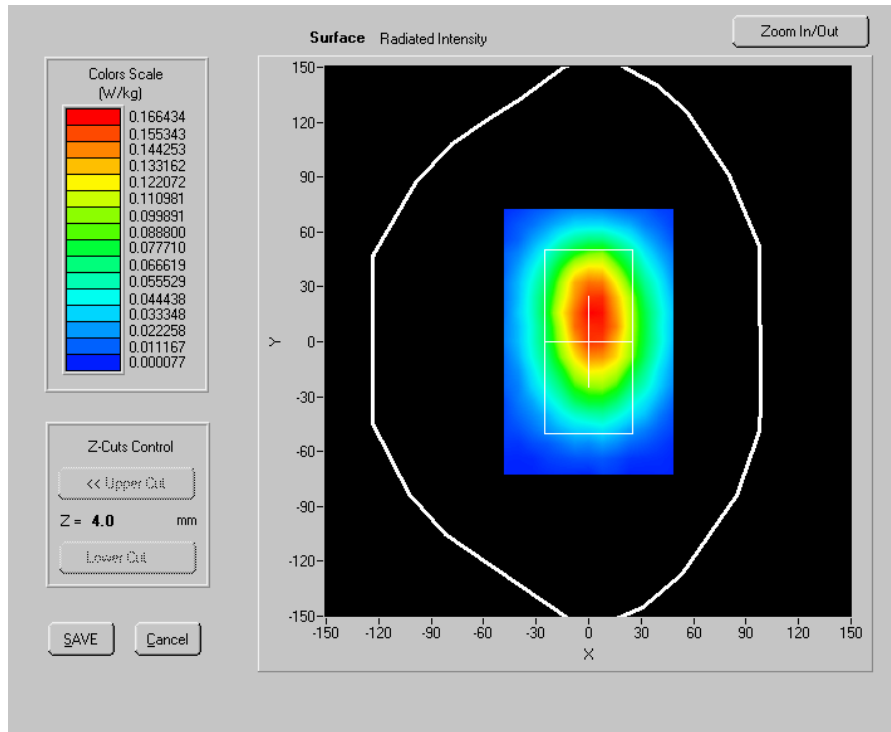
检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Middle Band SAR (Channel 189):

Experimental conditions	
Phantom	Validation plane
Device Position	Body (extended /face to bottom)
Band	GSM850
Channels	Middle
Signal	TDMA
before/after Power Level:	25.82 dBm/25.76 dBm
Liquid Temperature:	21.1°C
Duty Cycle:	8
Test date	2008.1.20

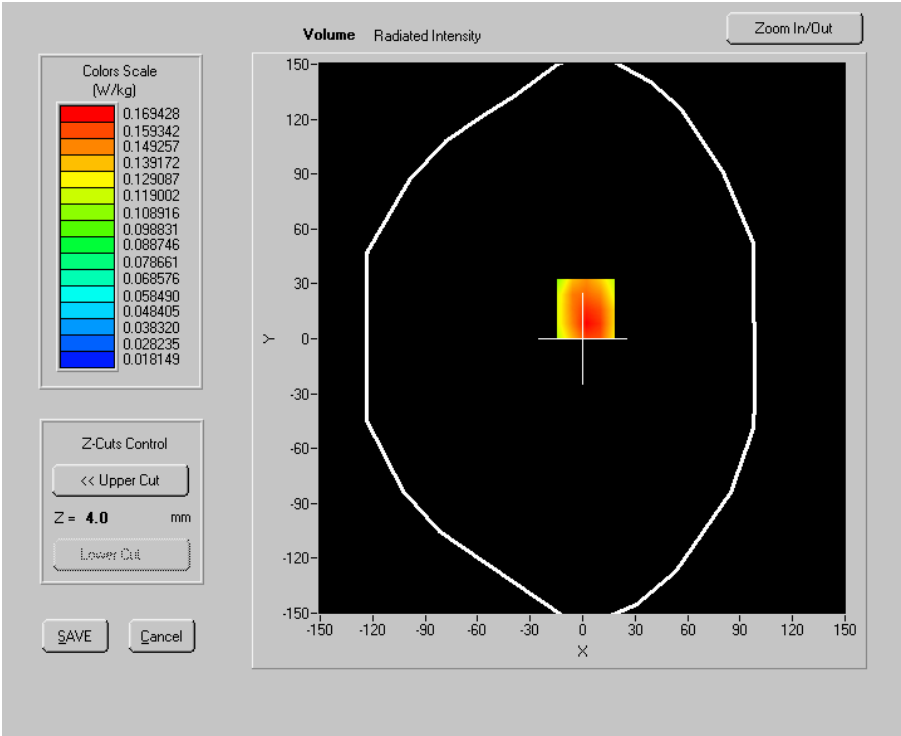
Frequency (MHz)	836.400024
Relative permittivity (real part)	54.622002
Relative permittivity (imaginary part)	21.279301
Conductivity (S/m)	0.988778
Variation (%)	-1.460000



SURFACE SAR

Test report series No.

检测结果/说明 (续页):
Results of test and additional explanation (continued page)

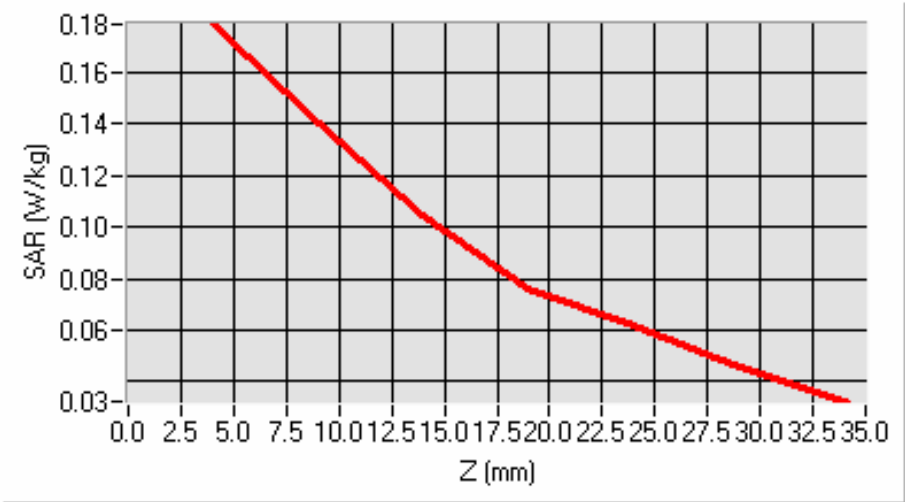


VOLUME SAR

Maximum location: X=2.00, Y=16.00

SAR 10g (W/Kg)	0.096338
SAR 1g (W/Kg)	0.145664

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



Test report series No.

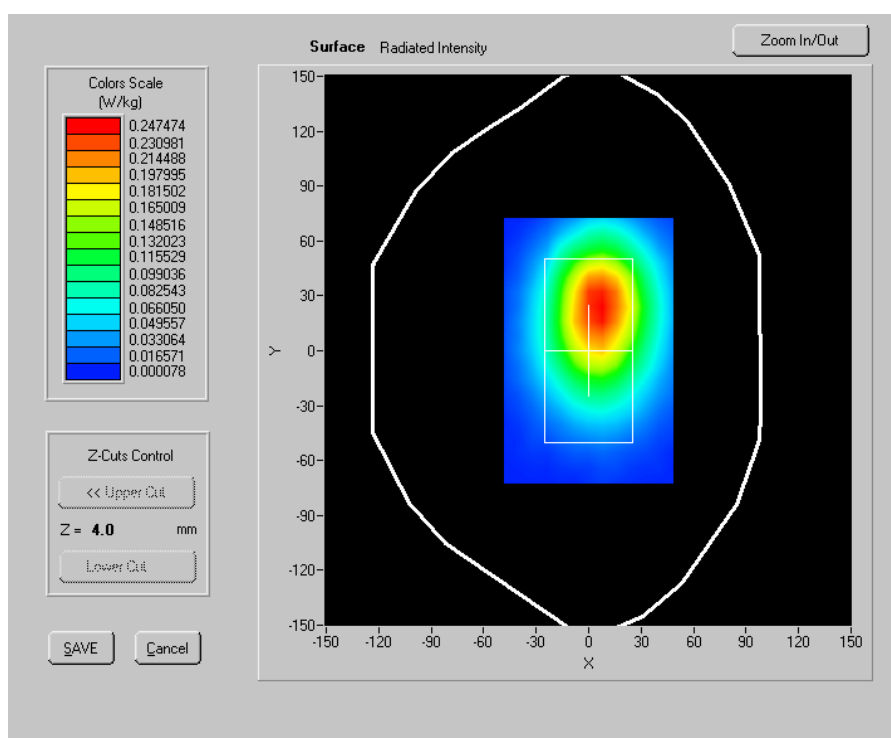
检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Higher Band SAR (Channel 251):

Experimental conditions	
Phantom	Validation plane
Device Position	Body (extended)
Band	GSM850
Channels	High
Signal	TDMA
before/after Power Level:	25.84 dBm/25.78dBm
Liquid Temperature:	21.1°C
Duty Cycle:	8
Test data	2008.1.20

Frequency (MHz)	848.799988
Relative permittivity (real part)	54.540001
Relative permittivity (imaginary part)	21.297150
Conductivity (S/m)	1.004279
Variation (%)	-0.020000

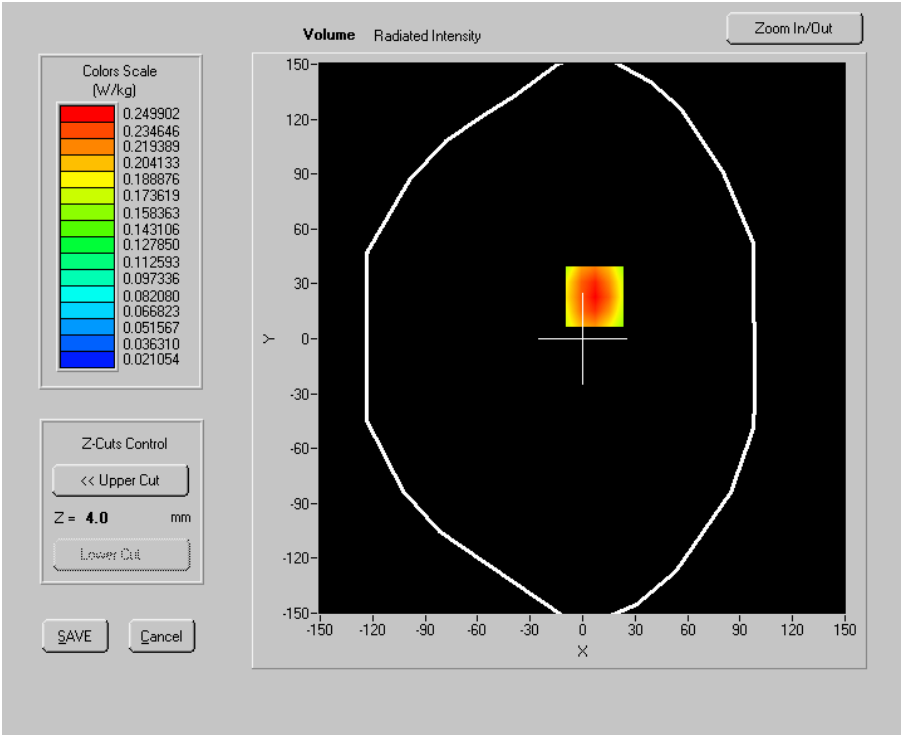


SURFACE SAR

Test report series No.

检测结果/说明 (续页):

Results of test and additional explanation (continued page)

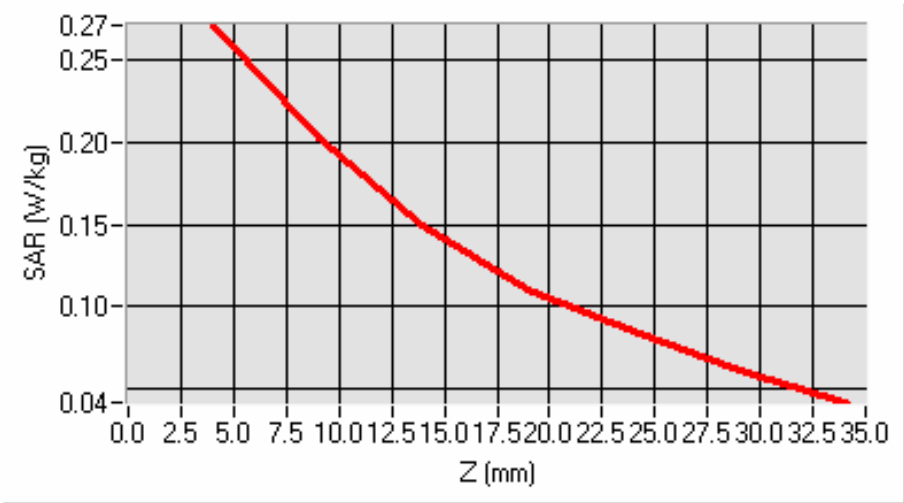


VOLUME SAR

Maximum location: X=7.00, Y=23.00

SAR 10g (W/Kg)	0.182784
SAR 1g (W/Kg)	0.259278

SAR, Z Axis Scan (X = 7, Y = 23)



Test report series No.

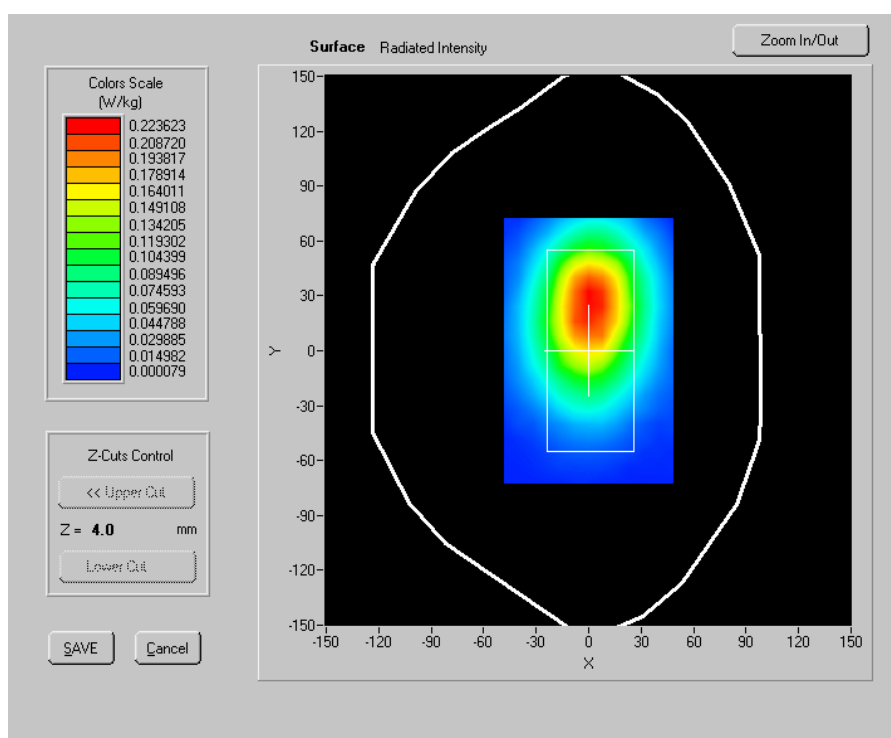
检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Higher Band SAR (Channel 251):

Experimental conditions	
Phantom	Validation plane
Device Position	Body (extended)
Band	GSM850(Bluetooth on)
Channels	High
Signal	TDMA
before/after Power Level:	25.85 dBm/25.76 dBm
Liquid Temperature:	21.1°C
Duty Cycle:	8
Test date	2008.1.20

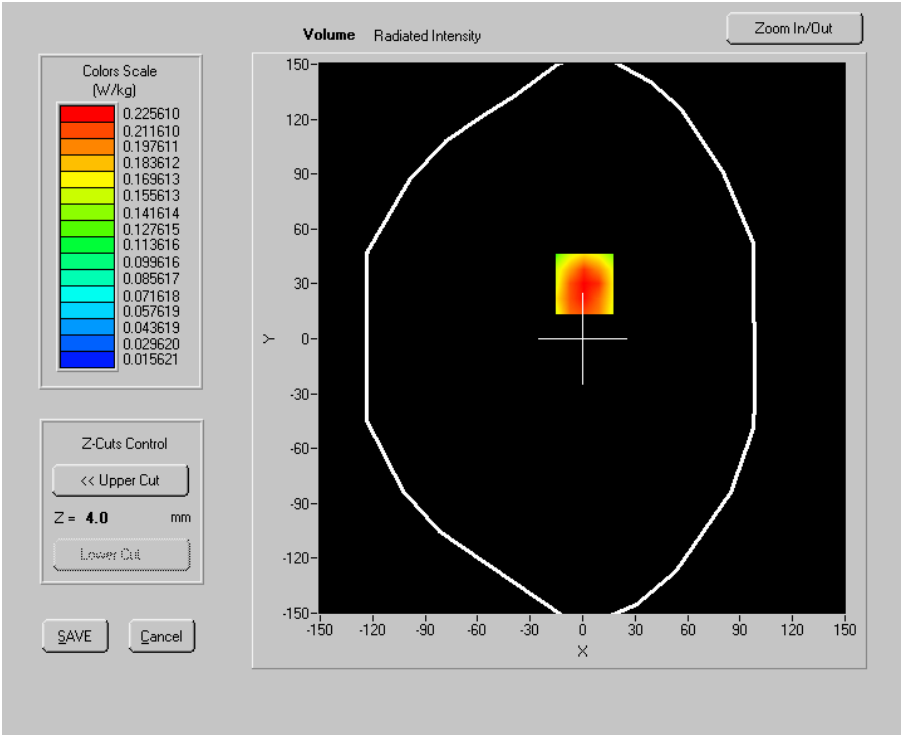
Frequency (MHz)	848.799988
Relative permittivity (real part)	54.540001
Relative permittivity (imaginary part)	21.297150
Conductivity (S/m)	1.004279
Variation (%)	-0.110000



SURFACE SAR

Test report series No.

检测结果/说明 (续页):
Results of test and additional explanation (continued page)

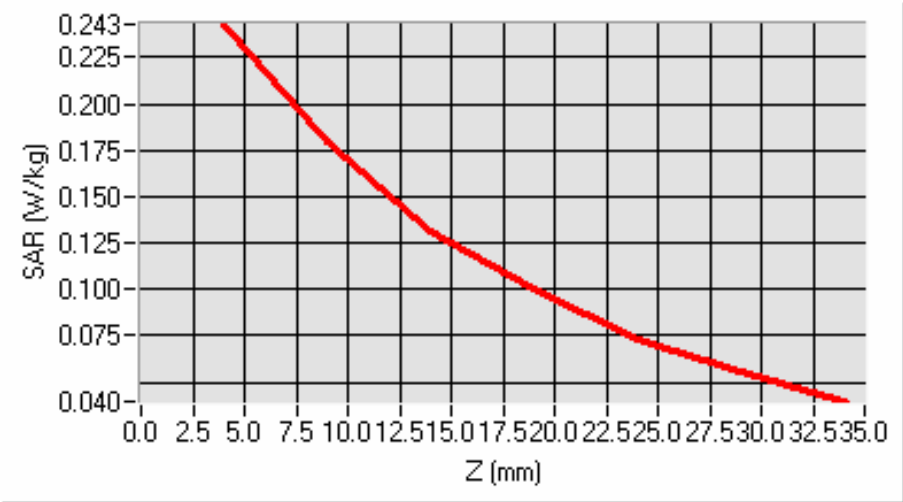


VOLUME SAR

Maximum location: X=1.00, Y=30.00

SAR 10g (W/Kg)	0.165989
SAR 1g (W/Kg)	0.235339

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



Test report series No.

检测结果/说明 (续页):

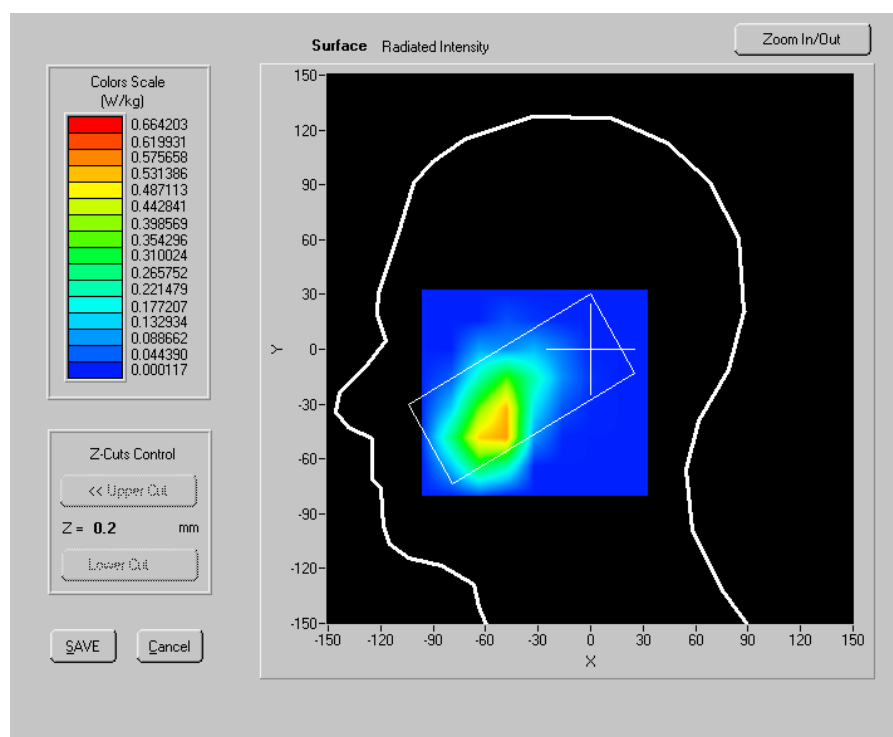
Results of test and additional explanation (continued page)

1.5.7 PCS 1900MHz**1.5.7.1 Right head, Cheek (retracted)**

Lower Band SAR (Channel 512):

Experimental conditions	
Phantom	Right head
Device Position	Cheek (retracted)
Band	PCS1900
Channels	Low
Signal	TDMA
before/after Power Level:	22.13 dBm/22.12 dBm
Liquid Temperature:	21.3°C
Duty Cycle:	8
Test data	2008.1.20

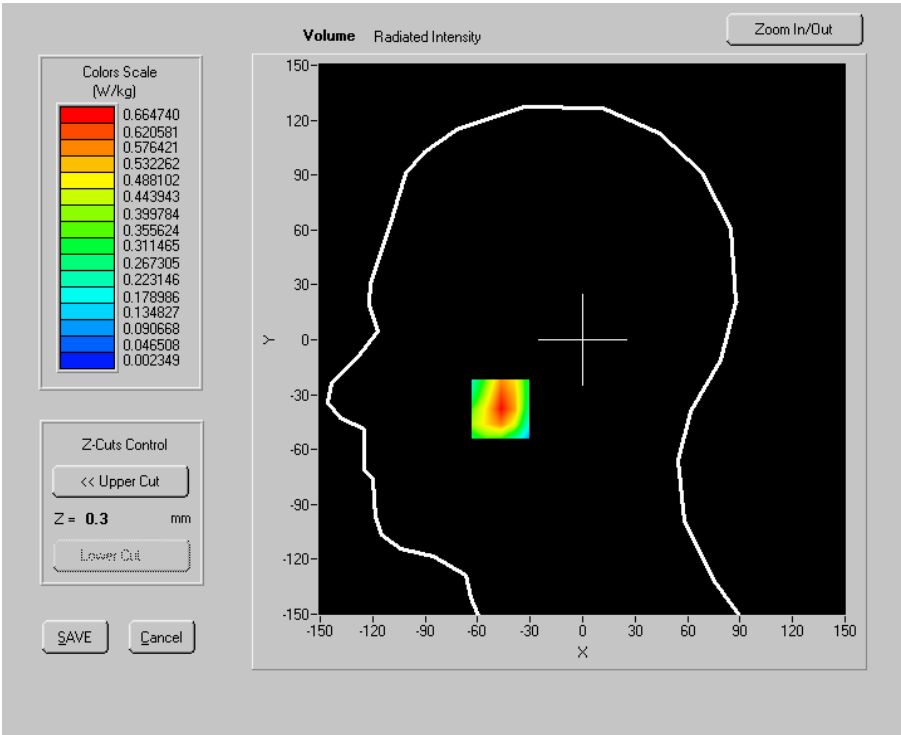
Frequency (MHz)	1850.199951
Relative permittivity (real part)	38.681000
Relative permittivity (imaginary part)	13.410600
Conductivity (S/m)	1.378461
Variation (%)	-1.750000



SURFACE SAR

Test report series No.

检测结果/说明 (续页):
Results of test and additional explanation (continued page)

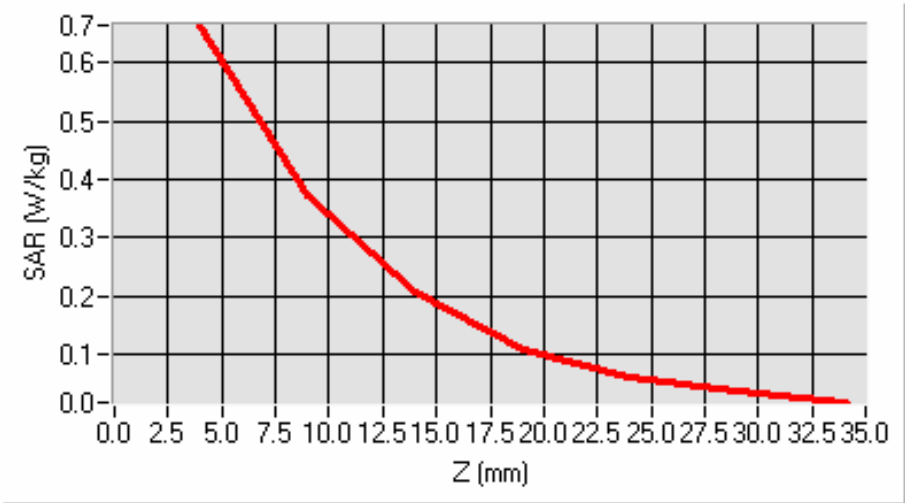


VOLUME SAR

Maximum location: X=-47.00, Y=-38.00

SAR 10g (W/Kg)	0.341269
SAR 1g (W/Kg)	0.626626

SAR, Z Axis Scan (X = -47, Y = -38)



Test report series No.

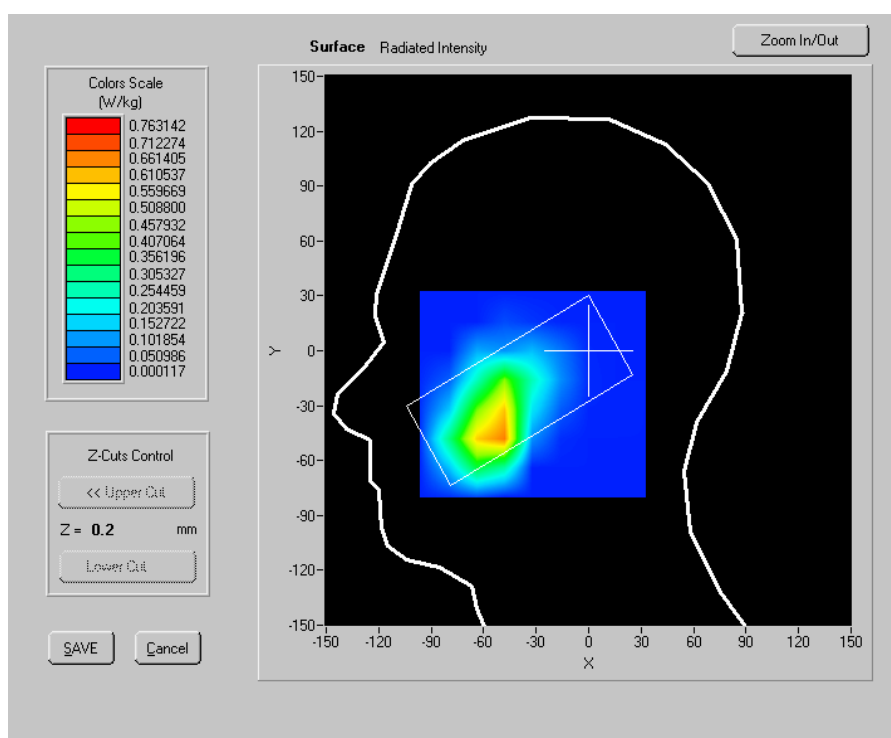
检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Middle Band SAR (Channel 661):

Experimental conditions	
Phantom	Right head
Device Position	Cheek (retracted)
Band	PCS1900
Channels	Middle
Signal	TDMA
before/after Power Level:	22.14 dBm/22.11 dBm
Liquid Temperature:	21.3°C
Duty Cycle:	8
Test date	2008.1.20

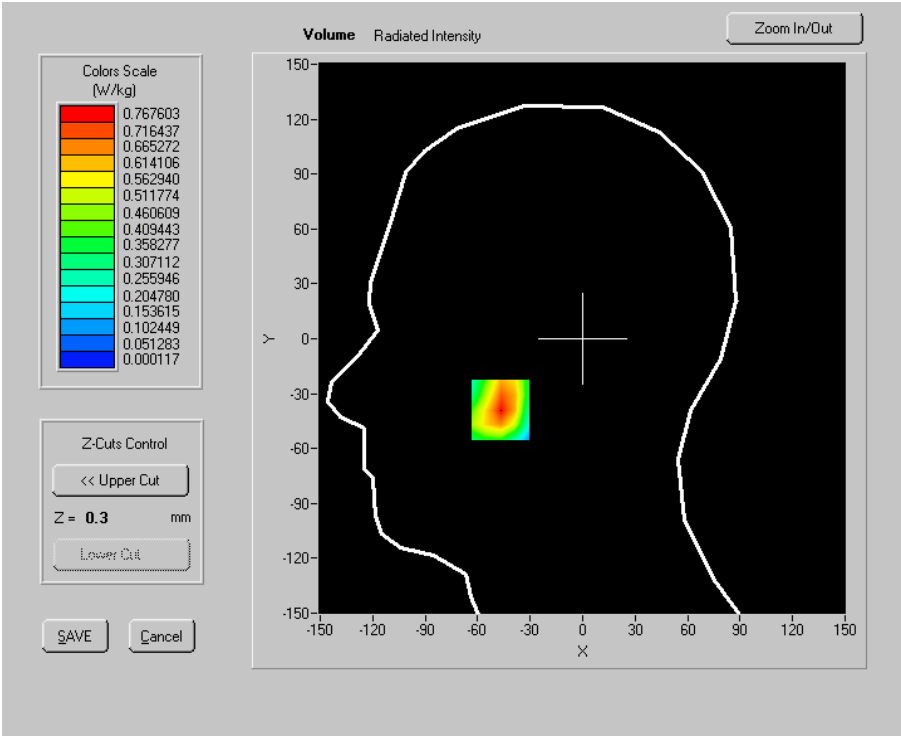
Frequency (MHz)	1880.000000
Relative permittivity (real part)	38.703999
Relative permittivity (imaginary part)	13.207950
Conductivity (S/m)	1.379497
Variation (%)	-0.490000



SURFACE SAR

Test report series No.

检测结果/说明 (续页):
Results of test and additional explanation (continued page)

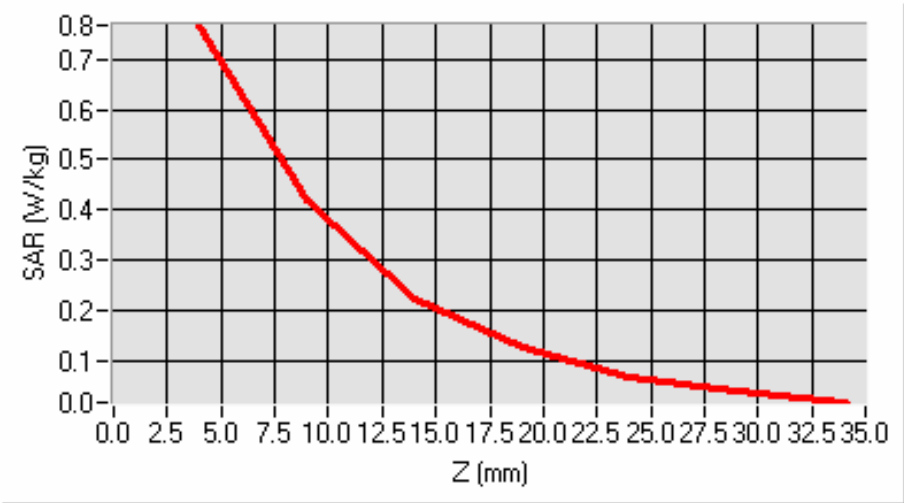


VOLUME SAR

Maximum location: X=-47.00, Y=-39.00

SAR 10g (W/Kg)	0.388492
SAR 1g (W/Kg)	0.716704

SAR, Z Axis Scan (X = -47, Y = -39)



Test report series No.

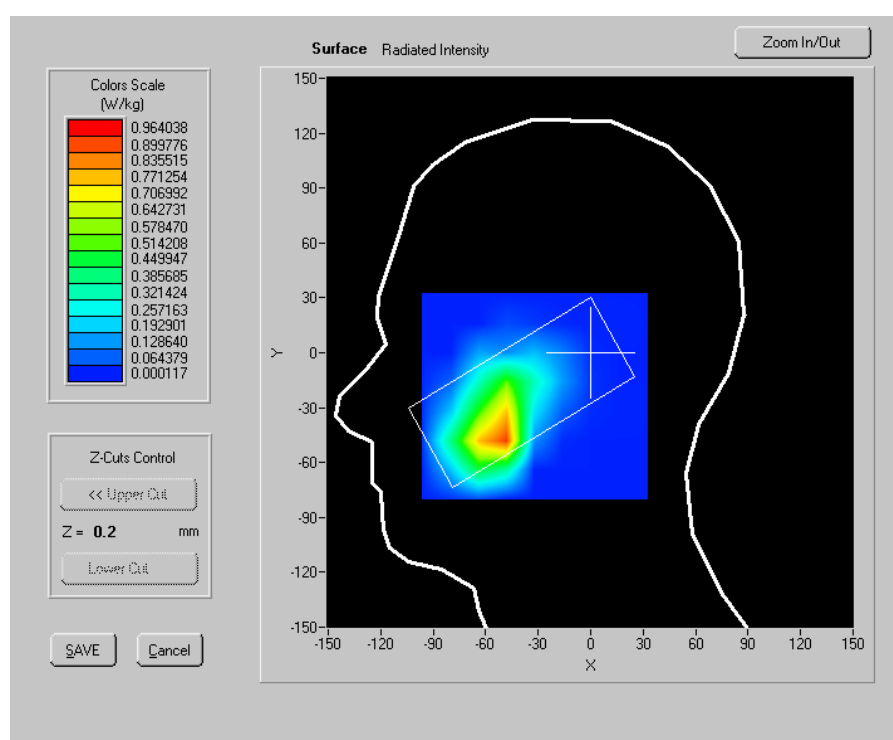
检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Higher Band SAR (Channel 810):

Experimental conditions	
Phantom	Right head
Device Position	Cheek (retracted)
Band	PCS1900
Channels	High
Signal	TDMA
before/after Power Level:	22.13dBm/22.10 dBm
Liquid Temperature:	21.3°C
Duty Cycle:	8
Test data	2008.1.20

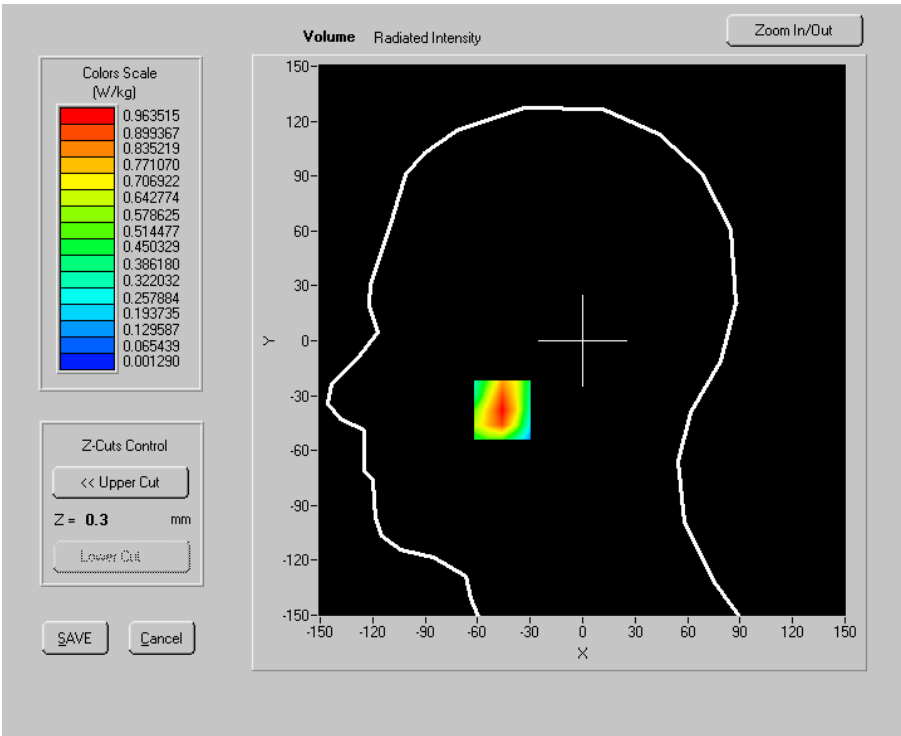
Frequency (MHz)	1909.800049
Relative permittivity (real part)	38.699001
Relative permittivity (imaginary part)	12.982200
Conductivity (S/m)	1.377411
Variation (%)	1.560000



SURFACE SAR

Test report series No.

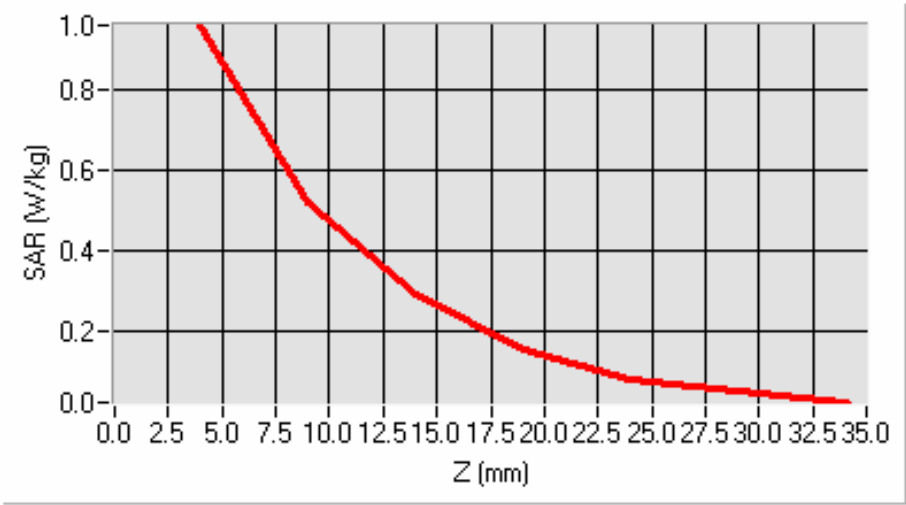
检测结果/说明 (续页):
Results of test and additional explanation (continued page)



Maximum location: X=-46.00, Y=-38.00

SAR 10g (W/Kg)	0.481968
SAR 1g (W/Kg)	0.906914

SAR, Z Axis Scan (X = -46, Y = -38)



Test report series No.

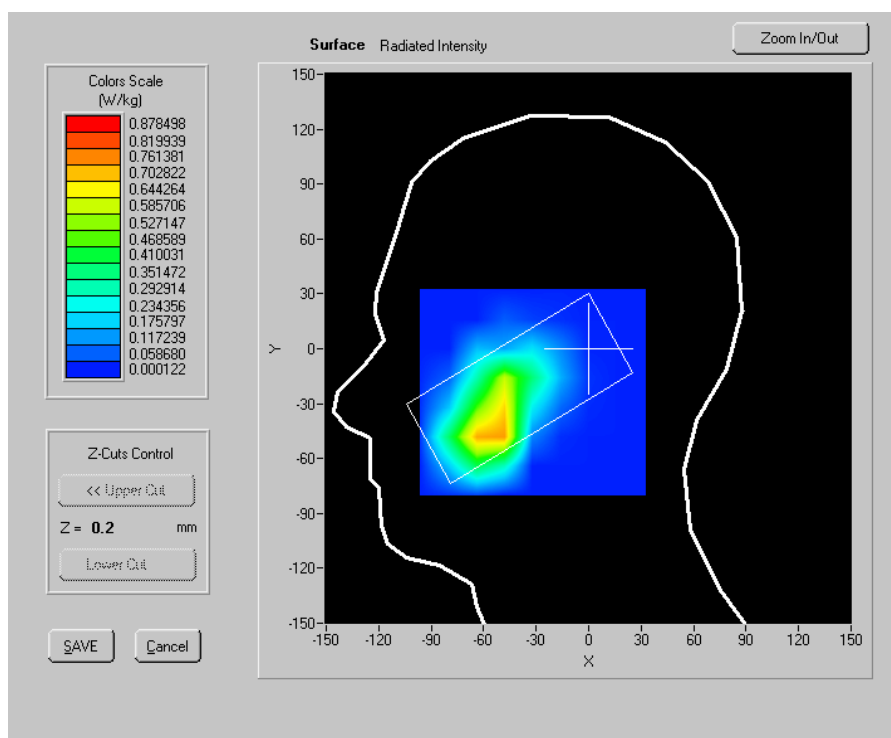
检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Higher Band SAR (Channel 810):

Experimental conditions	
Phantom	Right head
Device Position	Cheek (retracted)
Band	PCS1900(Bluetooth on)
Channels	High
Signal	TDMA
before/after Power Level:	22.05 dBm/22.00 dBm
Liquid Temperature:	21.3°C
Duty Cycle:	8
Test date	2008.1.20

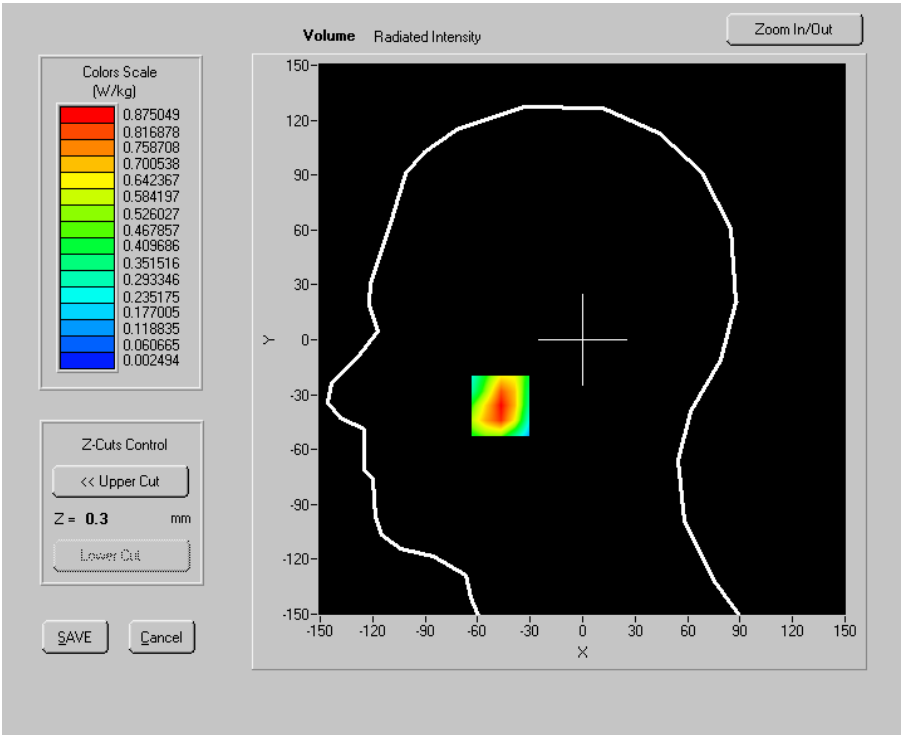
Frequency (MHz)	1909.800049
Relative permittivity (real part)	38.699001
Relative permittivity (imaginary part)	12.982200
Conductivity (S/m)	1.377411
Variation (%)	1.160000



SURFACE SAR

Test report series No.

检测结果/说明 (续页):
Results of test and additional explanation (continued page)

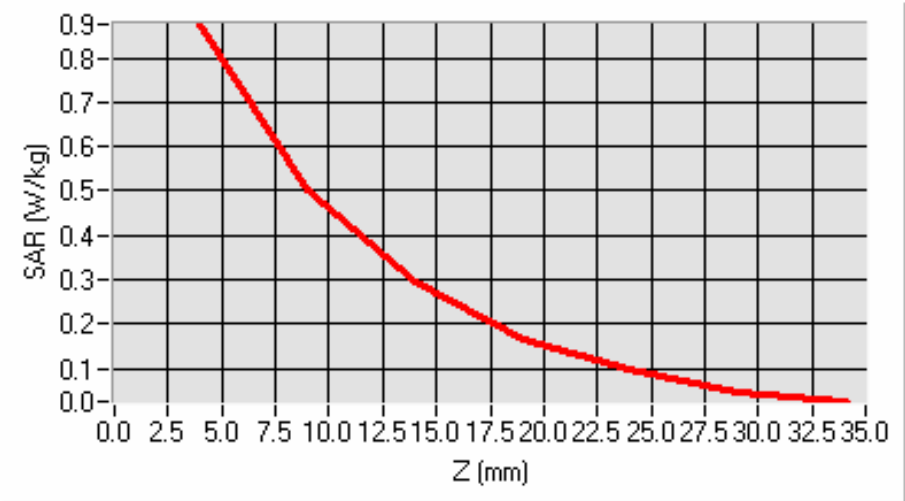


VOLUME SAR

Maximum location: X=-47.00, Y=-36.00

SAR 10g (W/Kg)	0.447813
SAR 1g (W/Kg)	0.829695

SAR, Z Axis Scan (X = -47, Y = -36)



检测结果/说明 (续页):

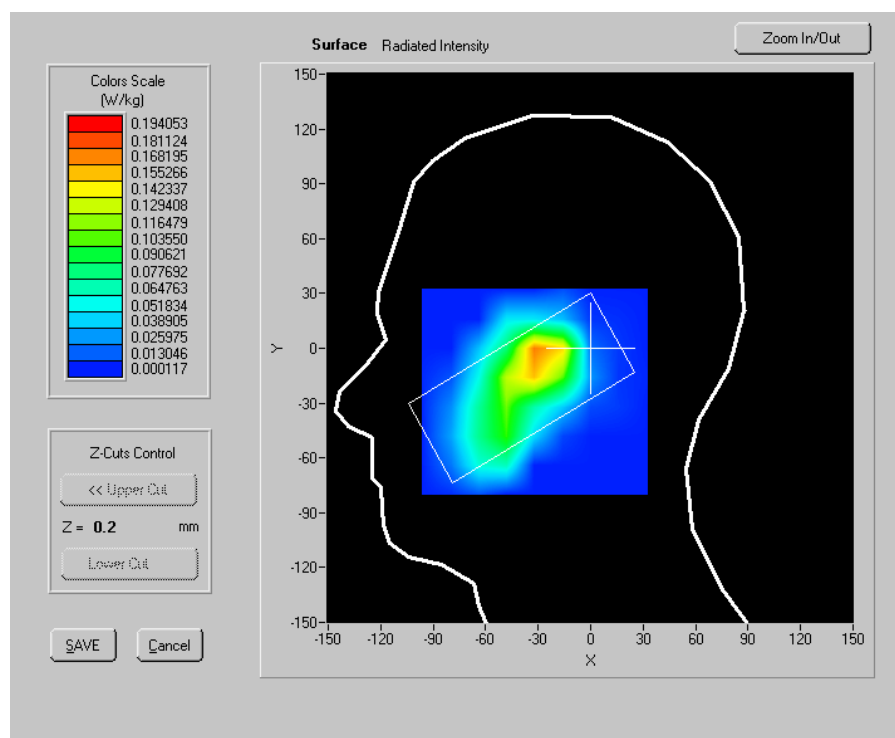
Results of test and additional explanation (continued page)

1.5.7.2 Right head, Tilt (retracted)

Lower Band SAR (Channel 512):

Experimental conditions	
Phantom	Right head
Device Position	Tilt (retracted)
Band	PCS1900
Channels	Low
Signal	TDMA
before/after Power Level:	22.14 dBm/22.12 dBm
Liquid Temperature:	21.3°C
Duty Cycle:	8
Test data	2008.1.20

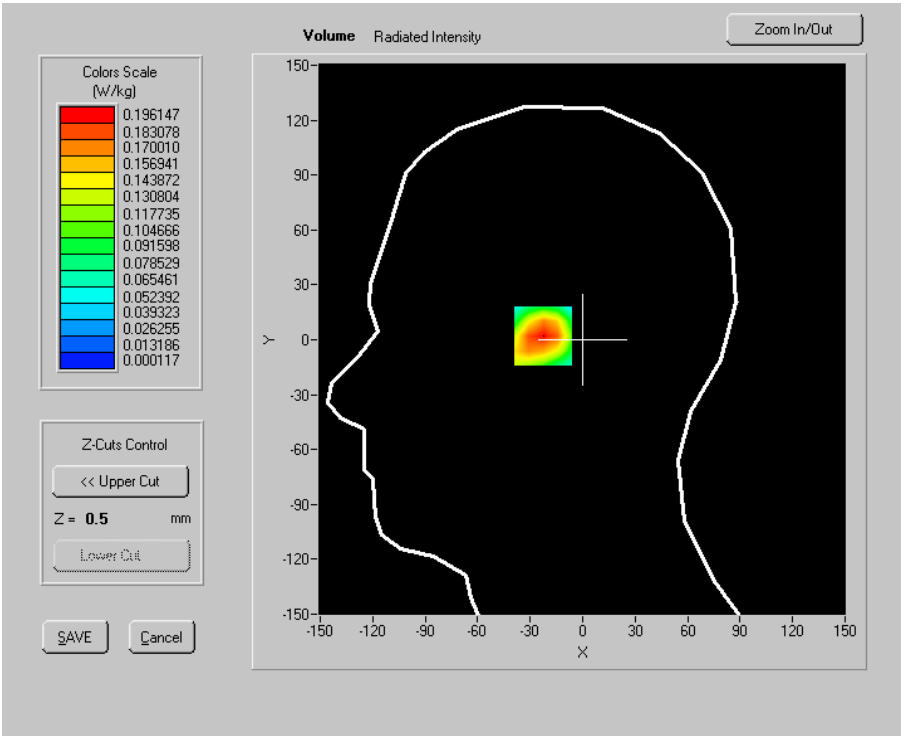
Frequency (MHz)	1850.199951
Relative permittivity (real part)	38.681000
Relative permittivity (imaginary part)	13.410600
Conductivity (S/m)	1.378461
Variation (%)	-1.220000



SURFACE SAR

Test report series No.

检测结果/说明 (续页):
Results of test and additional explanation (continued page)

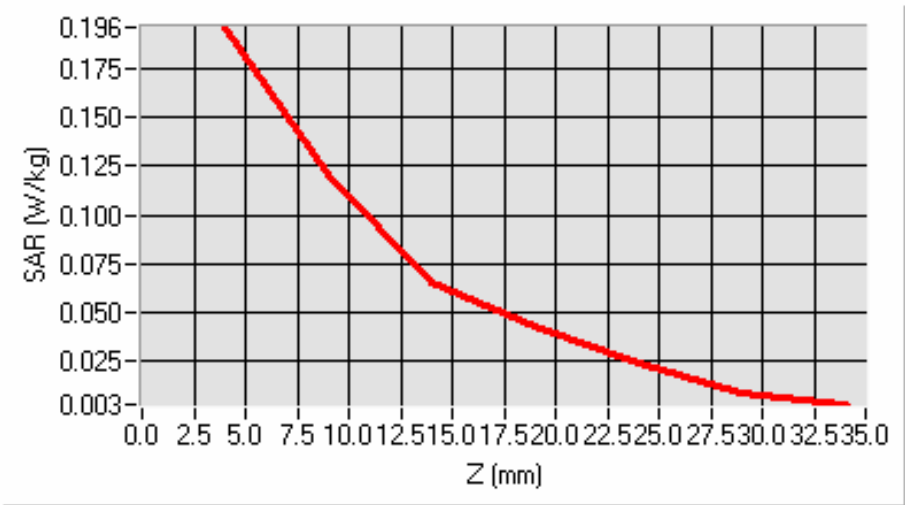


VOLUME SAR

Maximum location: X=-19.00, Y=2.00

SAR 10g (W/Kg)	0.102448
SAR 1g (W/Kg)	0.186119

SAR, Z Axis Scan (X = -19, Y = 2)



Test report series No.

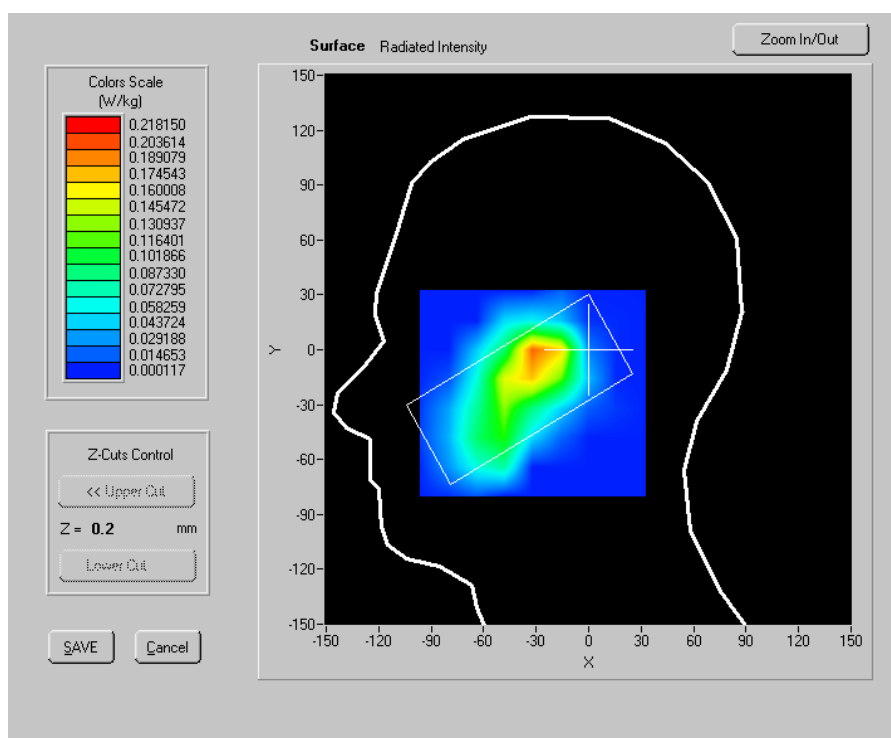
检测结果/说明 (续页):

Results of test and additional explanation (continued page)

Middle Band SAR (Channel 661):

Experimental conditions	
Phantom	Right head
Device Position	Tilt (retracted)
Band	PCS1900
Channels	Middle
Signal	TDMA
before/after Power Level:	22.10 dBm/22.12 dBm
Liquid Temperature:	21.3°C
Duty Cycle:	8
Test date	2008.1.20

Frequency (MHz)	1880.000000
Relative permittivity (real part)	38.703999
Relative permittivity (imaginary part)	13.207950
Conductivity (S/m)	1.379497
Variation (%)	0.000000



SURFACE SAR