SAR TEST REPORT

No. 2011SAR00034

For

Sony Ericsson Mobile Communications(China) Co., Ltd.

GSM/GPRS/EDGE & UMTS/HSPA Phone

SO-02C

With

Hardware Version: AP1.1

Software Version: 3.0.1.F.0.25

SEMC ID: AAD-3880112-BV

Industry Canada ID: 4170B-A3880112

FCCID: PY7A3880112

Issued Date: 2011-4-28

Deutscher Akkreditierungs Rat

No. **DGA-PL-114/01-02**

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of TMC Beijing.

Test Laboratory:

TMC Beijing, Telecommunication Metrology Center of MIIT

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1 Test Laboratory

1.1 Testing Location

Company Name:	TMC Beijing, Telecommunication Metrology Center of MIIT
Address:	No 52, Huayuan beilu, Haidian District, Beijing,P.R.China
Postal Code:	100191
Telephone:	+86-10-62304633
Fax:	+86-10-62304793

1.2 Testing Environment

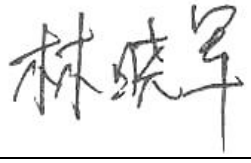
Temperature:	18°C~25 °C,
Relative humidity:	30%~ 70%
Ground system resistance:	< 0.5 Ω

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 Project Data

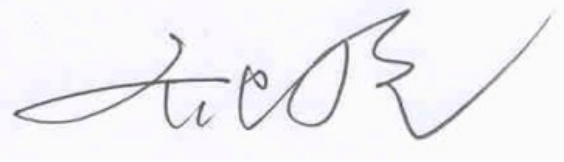
Project Leader:	Qi Dianyuan
Test Engineer:	Lin Xiaojun
Testing Start Date:	April 9, 2011
Testing End Date:	April 28, 2011

1.4 Signature



Lin Xiaojun

(Prepared this test report)



Qi Dianyuan

(Reviewed this test report)

Xiao Li

Deputy Director of the laboratory

(Approved this test report)

2 General Information

2.1 Statement of Compliance

The SAR values found for the AAD-3880112-BV Mobile Phone are below the maximum recommended levels of 1.6 W/Kg as averaged over any 1g tissue according to the FCC rule, the ANSI C95.1-1999.

For body worn operation, this device has been tested and meets FCC RF exposure guidelines when used with any accessory that contains no metal and that positions the handset a minimum of 10mm from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

The measurement together with the test system set-up is described in chapter 5 of this test report.

A detailed description of the equipment under test can be found in chapter 3 of this test report.

2.2 Applicant Information

Company Name:	Sony Ericsson Mobile Communications(China) Co., Ltd.
Address /Post:	1/F, China Digital Kingdom Building, No.1 North Road, Wangjing, Chaoyang District, Beijing, China
City:	Beijing
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Country:	China
Contact:	Ma, Gang
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Telephone:	+86-10-58656312
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2.3 Manufacturer Information

Company Name:	Sony Ericsson Mobile Communications AB
Address /Post:	Nya Vattentornet 22188 Lund Sweden
City:	Lund
Postal Code:	22188
Country:	Sweden
Contact:	Nordlof, Anders
Email:	Anders.Nordlof@sonyericsson.com
Telephone:	+46 46 193919
Fax:	+46 46 193295

3 Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1 About EUT

Description:	GSM/GPRS/EDGE & UMTS/HSPA Phone
Model:	SO-02C
Operating mode(s):	GSM, PCS, WCDMA, Bluetooth, WiFi
GPRS Multislot Class:	12
GPRS capability Class:	B
EGPRS Multislot Class:	12
Test device Production information:	Production unit
Device type:	Portable device
Antenna type:	Integrated antenna
Accessories/Body-worn configurations:	Headset

3.2 Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version
EUT1	CB5A1CH5PF	AP1.1	3.0.1.F.0.25

*EUT ID: is used to identify the test sample in the lab internally.

3.3 Antenna description

There are two antennae in the EUT, Main antenna and BT/WiFi antenna.

Antenna dimension:

Max length: 16mm

Max width: 57mm

4 CHARACTERISTICS OF THE TEST

4.1 Applicable Limit Regulations

ANSI C95.1–1999: IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
It specifies the maximum exposure limit of **1.6 W/kg** as averaged over any 1 gram of tissue for portable devices being used within 20 cm of the user in the uncontrolled environment.

4.2 Applicable Measurement Standards

IEEE 1528–2003: Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques.
OET Bulletin 65 (Edition 97-01) and Supplement C(Edition 01-01): Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits.
KDB648474 D01 SAR Handsets Multi Xmiter and Ant, v01r05: SAR Evaluation Considerations for Handsets with Multiple Transmitters and Antennas.

KDB248227: SAR measurement procedures for 802.112abg transmitters.
KDB941225: SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities

5 OPERATIONAL CONDITIONS DURING TEST

5.1 Schematic Test Configuration

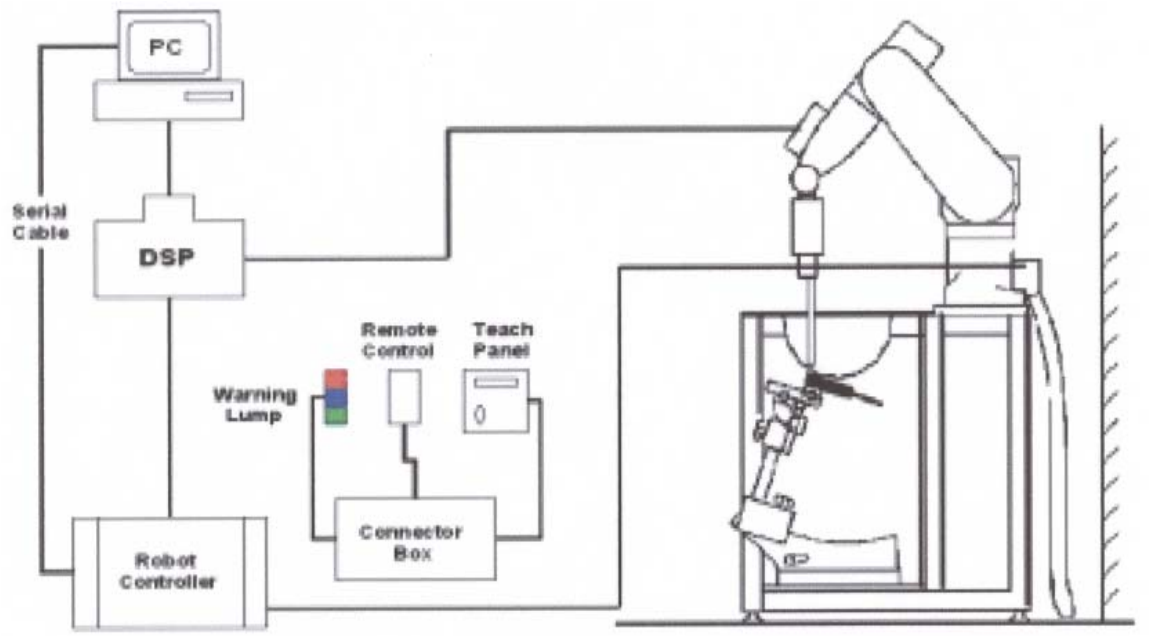
During SAR test, EUT is in Traffic Mode (Channel Allocated) at Normal Voltage Condition. A communication link is set up with a System Simulator (SS) by air link, and a call is established. The Absolute Radio Frequency Channel Number (ARFCN) is allocated to 128, 190 and 251 respectively in the case of GSM 850 MHz; 512, 661 and 810 respectively in the case of PCS 1900 MHz; 4132, 4182 and 4233 respectively in the case of WCDMA 850 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 30 dB.

5.2 SAR Measurement Set-up

These measurements were performed with the automated near-field scanning system DASY4 Professional from Schmid & Partner Engineering AG (SPEAG). The system is based on a high precision robot (working range greater than 0.9m), which positions the probes with a positional repeatability of better than ± 0.02mm. Special E- and H-field probes have been developed for measurements close to material discontinuity, the sensors of which are directly loaded with a Schottky diode and connected via highly resistive lines (length =300mm) to the data acquisition unit.

A cell controller system contains the power supply, robot controller, teaches pendant (Joystick), and remote control, is used to drive the robot motors. The PC consists of the Micron Pentium III 800 MHz computer with Windows 2000 system and SAR Measurement Software DASY4 Professional, A/D interface card, monitor, mouse, and keyboard. The Stäubli Robot is connected to the cell controller to allow software manipulation of the robot. A data acquisition electronic (DAE) circuit performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. is connected to the Electro-optical coupler (EOC). The EOC performs the conversion from the optical into digital electric signal of the DAE and transfers data to the PC plug-in card.



Picture 2: SAR Lab Test Measurement Set-up

The DAE consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit. Transmission to the PC-card is accomplished through an optical downlink for data and status information and an optical uplink for commands and clock lines. The mechanical probe mounting device includes two different sensor systems for frontal and sidewise probe contacts. They are also used for mechanical surface detection and probe collision detection. The robot uses its own controller with a built in VME-bus computer.

5.3 Dasy E-field Probe System

The SAR measurements were conducted with the dosimetric probes ES3DV3 and EX3DV4 (manufactured by SPEAG), designed in the classical triangular configuration and optimized for dosimetric evaluation. The probe has been calibrated according to the standard procedure with an accuracy of better than ± 10%. The spherical isotropy was evaluated and found to be better than ± 0.25dB.

ES3DV3 Probe Specification

Construction	Symmetrical design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	ISO/IEC 17025 calibration service available.
Frequency	10 MHz to 4 GHz; Linearity: ± 0.2 dB (30 MHz to 4 GHz)
Directivity	± 0.2 dB in HSL (rotation around probe axis)

Picture 3: ES3DV3 E-field

± 0.3 dB in tissue material (rotation normal to probe axis)

Dynamic Range 5 μW/g to > 100 mW/g; Linearity: ± 0.2 dB

Dimensions Overall length: 330 mm (Tip: 20 mm)
Tip diameter: 3.9 mm (Body: 12 mm)
Distance from probe tip to dipole centers: 2.0 mm

Application General dosimetry up to 4 GHz
Dosimetry in strong gradient fields
Compliance tests of mobile phones

Picture4:ES3DV3 E-field probe

EX3DV4 Probe Specification

Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)

Calibration ISO/IEC 17025 calibration service available.

Frequency 10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)

Directivity ± 0.3 dB in HSL (rotation around probe axis)
± 0.5 dB in tissue material (rotation normal to probe axis)

Dynamic Range 10 μW/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 μW/g)

Dimensions Overall length: 337 mm (Tip: 20 mm)
Tip diameter: 2.5 mm (Body: 12 mm)
Typical distance from probe tip to dipole centers: 1 mm

Application High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.

5.4 E-field Probe Calibration

Each probe is calibrated according to a dosimetric assessment procedure with accuracy better than ± 10%. The spherical isotropy was evaluated and found to be better than ± 0.25dB. The sensitivity parameters (NormX, NormY, NormZ), the diode compression parameter (DCP) and the conversion factor (ConvF) of the probe are tested.

The free space E-field from amplified probe outputs is determined in a test chamber. This is performed in a TEM cell for frequencies bellow 1 GHz, and in a wave guide above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees.

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

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

Where: Δt = Exposure time (30 seconds),
C = Heat capacity of tissue (brain or muscle),
ΔT = Temperature increase due to RF exposure.

Or

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

Where:
σ = Simulated tissue conductivity,
ρ = Tissue density (kg/m^3).

Picture 5: Device Holder

5.5 Other Test Equipment

5.5.1 Device Holder for Transmitters

In combination with the Generic Twin Phantom V3.0, the Mounting Device (POM) enables the rotation of the mounted transmitter in spherical coordinates whereby the rotation points is the ear opening. The devices can be easily, accurately, and repeatable positioned according to the FCC and CENELEC specifications. The device holder can be locked at different phantom locations (left head, right head, flat phantom).

5.5.2 Phantom

The Generic Twin Phantom is constructed of a fiberglass shell integrated in a wooden table. The shape of the shell is based on data from an anatomical study designed to determine the maximum exposure in at least 90% of all users. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents the evaporation of the liquid. Reference markings on the Phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points in the robot.

Shell Thickness	2±0. I mm
Filling Volume	Approx. 20 liters
Dimensions	810 x l000 x 500 mm (H x L x W)
Available	Special

Picture 6: Generic Twin Phantom

5.6 Equivalent Tissues

The liquid used for the frequency range of 800-2000 MHz consisted of water, sugar, salt, preventol, glycol monobutyl and Cellulose. The liquid has been previously proven to be suited for worst-case. The Table 1 and 2 shows the detail solution. It's satisfying the latest tissue dielectric parameters requirements proposed by the IEEE 1528.

Table 1. Composition of the Head Tissue Equivalent Matter

MIXTURE %	FREQUENCY 850MHz
Water	41.45
Sugar	56.0
Salt	1.45
Preventol	0.1
Cellulose	1.0
Dielectric Parameters Target Value	f=850MHz ε=41.5 σ=0.90
MIXTURE %	FREQUENCY 1900MHz
Water	55.242
Glycol monobutyl	44.452
Salt	0.306
Dielectric Parameters Target Value	f=1900MHz ε=40.0 σ=1.40
MIXTURE %	FREQUENCY 2450MHz
Water	58.79
Glycol monobutyl	41.15
Salt	0.06
Dielectric Parameters Target Value	f=2450MHz ε=39.2 σ=1.80

Table 2. Composition of the Body Tissue Equivalent Matter

MIXTURE %	FREQUENCY 850MHz
Water	52.5
Sugar	45.0
Salt	1.4
Preventol	0.1
Cellulose	1.0
Dielectric Parameters Target Value	f=850MHz ε=55.2 σ=0.97
MIXTURE %	FREQUENCY 1900MHz
Water	69.91
Glycol monobutyl	29.96
Salt	0.13
Dielectric Parameters Target Value	f=1900MHz ε=53.3 σ=1.52
MIXTURE %	FREQUENCY 2450MHz
Water	72.60
Glycol monobutyl	27.22
Salt	0.18
Dielectric Parameters Target Value	f=2450MHz ε=52.7 σ=1.95

5.7 System Specifications

Specifications

Positioner: Stäubli Unimation Corp. Robot Model: RX90L
Repeatability: ±0.02 mm
No. of Axis: 6

Data Acquisition Electronic (DAE) System

Cell Controller

Processor: Pentium III
Clock Speed: 800 MHz
Operating System: Windows 2000

Data Converter

Features: Signal Amplifier, multiplexer, A/D converter, and control logic
Software: DASY4 software
Connecting Lines: Optical downlink for data and status info.
Optical uplink for commands and clock

6 CONDUCTED OUTPUT POWER MEASUREMENT

6.1 Summary

During the process of testing, the EUT was controlled via Rhode & Schwarz Digital Radio Communication tester (CMU-200) to ensure the maximum power transmission and proper modulation. This result contains conducted output power for the EUT. In all cases, the measured output power should be greater and within 5% than EMI measurement.

6.2 Conducted Power

6.2.1 Measurement Methods

The EUT was set up for the maximum output power. The channel power was measured with Agilent Spectrum Analyzer E4440A. These measurements were done at low, middle and high channels.

6.2.2 Measurement result

Table 3: The conducted power for GSM 850/1900

GSM 850MHZ	Conducted Power (dBm)		
	Channel 251(848.8MHz)	**Channel 190(836.6MHz)**	**Channel 128(824.2MHz)**
	33.1	32.9	33.1
GSM 1900MHZ	**Conducted Power (dBm)**		
	Channel 810(1909.8MHz)	**Channel 661(1880MHz)**	**Channel 512(1850.2MHz)**
	30.7	30.6	30.6

Table 4: The conducted power for GPRS 850/1900 and EGPRS 850/1900

GSM 850 GPRS	Measured Power (dBm)			calculation	Averaged Power (dBm)		
	251	**190**	**128**		**251**	**190**	**128**
1 Txslot	33.0	32.9	33.0	-9.03dB	23.97	23.87	23.97
2 Txslots	30.9	31.0	31.0	-6.02dB	24.88	24.98	24.98
3Txslots	29.4	29.6	29.5	-4.26dB	25.14	25.34	25.24
4 Txslots	28.4	28.5	28.6	-3.01dB	**25.39**	**25.49**	**25.59**
GSM 850 EGPRS	Measured Power (dBm)			calculation	Averaged Power (dBm)		
	251	**190**	**128**		**251**	**190**	**128**
1 Txslot	27.3	27.4	27.5	-9.03dB	18.27	18.37	18.47
2 Txslots	25.9	25.9	26.0	-6.02dB	19.88	19.88	19.98
3Txslots	25.0	25.0	25.0	-4.26dB	20.74	20.74	20.74
4 Txslots	23.8	23.9	23.9	-3.01dB	**20.79**	**20.89**	**20.89**
PCS1900 GPRS	Measured Power (dBm)			calculation	Averaged Power (dBm)		
	810	**661**	**512**		**810**	**661**	**512**
1 Txslot	30.7	30.6	30.7	-9.03dB	21.67	21.57	21.67
2 Txslots	28.7	28.6	28.5	-6.02dB	22.68	22.58	22.48
3Txslots	27.7	27.7	27.7	-4.26dB	**23.44**	**23.44**	**23.44**
4 Txslots	25.6	25.5	25.7	-3.01dB	22.59	22.49	22.69
PCS1900 EGPRS	Measured Power (dBm)			calculation	Averaged Power (dBm)		
	810	**661**	**512**		**810**	**661**	**512**
1 Txslot	26.5	26.5	26.4	-9.03dB	17.47	17.47	17.37
2 Txslots	24.9	24.9	24.9	-6.02dB	18.88	18.88	18.88
3Txslots	23.9	23.9	24.0	-4.26dB	19.64	19.64	19.74
4 Txslots	22.9	22.8	22.8	-3.01dB	**19.89**	**19.79**	**19.79**

NOTES:

1) Division Factors

To average the power, the division factor is as follows:

1TX-slot = 1 transmit time slot out of 8 time slots=> conducted power divided by (8/1) => -9.03dB

2TX-slots = 2 transmit time slots out of 8 time slots=> conducted power divided by (8/2) => -6.02dB

3TX-slots = 3 transmit time slots out of 8 time slots=> conducted power divided by (8/3) => -4.26dB

4TX-slots = 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01dB

According to the conducted power as above, the body measurements are performed with 4 Txslots for EGPRS 850/1900, GPRS 850, and 3 Txslots for GPRS 1900.

Table 5: The conducted Power for WCDMA850

Item	**band**	**FDDV result**		
	ARFCN	**4233 (846.6MHz)**	**4182 (836.4MHz)**	**4132 (826.4MHz)**
WCDMA	\	24.1	24.2	24.2
HSUPA	**1**	24.2	23.8	24.0
	2	22.5	22.5	22.6
	3	23.3	23.1	23.5

	4	22.9	22.7	22.6
	5	24.0	23.9	23.9

Note: HSUPA body SAR are not required, because maximum average output power of each RF channel with HSUPA active is not 1/4 dB higher than that measured without HSUPA and the maximum SAR for WCDMA850 are not above 75% of the SAR limit (see table 15 for the SAR measurement results).

6.2.3 Power Drift

To control the output power stability during the SAR test, DASY4 system calculates the power drift by measuring the E-field at the same location at the beginning and at the end of the measurement for each test position. These drift values can be found in Table 10 to Table 17 labeled as: (Power Drift [dB]). This ensures that the power drift during one measurement is within 5%.

7 TEST RESULTS

7.1 Dielectric Performance

Table 6: Dielectric Performance of Head Tissue Simulating Liquid

Measurement is made at temperature 23.0 °C and relative humidity 38%. Liquid temperature during the test: 22.5°C Measurement Date : 850 MHz **Apr 9, 2011** 1900 MHz **Apr 10, 2011** 2450 MHz **Apr 12, 2011**			
/	**Frequency**	**Permittivity ε**	**Conductivity σ (S/m)**
Target value	835 MHz	41.5	0.90
	1900 MHz	40.0	1.40
	2450 MHz	39.2	1.80
Measurement value (Average of 10 tests)	835 MHz	41.7	0.91
	1900 MHz	40.4	1.41
	2450 MHz	39.6	1.82

Table 7: Dielectric Performance of Body Tissue Simulating Liquid

Measurement is made at temperature 23.0 °C and relative humidity 38%. Liquid temperature during the test: 22.5°C Measurement Date : 850 MHz **Apr 27, 2011** 1900 MHz **Apr 27, 2011** 2450 MHz **Apr 12, 2011**			
/	**Frequency**	**Permittivity ε**	**Conductivity σ (S/m)**
Target value	835 MHz	55.2	0.97
	1900 MHz	53.3	1.52
	2450 MHz	52.7	1.95
Measurement value (Average of 10 tests)	835 MHz	54.1	0.98
	1900 MHz	52.6	1.51
	2450 MHz	52.5	1.97

7.2 System Validation

Table 8: System Validation of Head

Measurement is made at temperature 23.0 °C and relative humidity 38%.
Liquid temperature during the test: 22.5°C
Measurement Date : 850 MHz **Apr 9, 2011** 1900 MHz **Apr 10, 2011** 2450 MHz **Apr 12, 2011**

		Frequency	Permittivity ε	Conductivity σ (S/m)
Liquid parameters	Dipole calibration Target value	835 MHz	41.6	0.92
		1900 MHz	39.6	1.40
		2450 MHz	39.0	1.74
	Actural Measurement value	835 MHz	41.7	0.91
		1900 MHz	40.4	1.41
		2450 MHz	39.6	1.82

	Frequency	Target value (W/kg)		Measured value (W/kg)		Deviation	
		10 g Average	**1 g Average**	**10 g Average**	**1 g Average**	**10 g Average**	**1 g Average**
Verification results	835 MHz	6.12	9.41	5.92	9.16	-3.27%	-2.66%
	1900 MHz	20.1	39.4	19.88	38.44	-1.09%	-2.44%
	2450 MHz	24.6	52.4	24.2	51.6	-1.63%	-1.53%

Note：Target values are the data of the dipole validation results, please check Annex F for the Dipole Calibration Certificate.

Table 9: System Validation of Body

Measurement is made at temperature 23.0 °C and relative humidity 38%.
Liquid temperature during the test: 22.5°C
Measurement Date : 850 MHz **Apr 27, 2011** 1900 MHz **Apr 27, 2011** 2450 MHz **Apr 12, 2011**

		Frequency	Permittivity ε	Conductivity σ (S/m)
Liquid parameters	Dipole calibration Target value	835 MHz	54.5	0.97
		1900 MHz	52.5	1.51
		2450 MHz	52.5	1.95
	Actural Measurement value	835 MHz	54.1	0.98
		1900 MHz	52.6	1.51
		2450 MHz	52.5	1.97

	Frequency	Target value (W/kg)		Measured value (W/kg)		Deviation	
		10 g Average	**1 g Average**	**10 g Average**	**1 g Average**	**10 g Average**	**1 g Average**
Verification results	835 MHz	6.24	9.57	6.16	9.53	-1.28%	-0.42%

	1900 MHz	20.9	41.4	20.52	40.92	-1.82%	-0.43%
	2450 MHz	23.9	51.6	23.6	51.6	-1.26%	0.00%

Note：Target values are the data of the dipole validation results, please check Annex F for the Dipole Calibration Certificate.

7.3 Summary of Measurement Results

	Duty Cycle
Speech	**1 : 8.3**
GPRS 1900	**1 : 2.67**
GPRS 850, EGPRS 850/1900	**1 : 2**
WCDMA	**1:1**
WIFI	**1:1**

Table 10: SAR Values (GSM 850MHz-Head)

Limit of SAR (W/kg)	**10 g Average**	**1 g Average**	**Power Drift (dB)**
	2.0	1.6	
Test Case	**Measurement Result (W/kg)**		
	10 g Average	**1 g Average**	
Left hand, Touch cheek, Mid frequency (See Fig.1)	0.429	0.567	-0.057
Left hand, Tilt 15 Degree, Mid frequency (See Fig.2)	0.323	0.421	-0.065
Left hand, Touch cheek, Top frequency (See Fig.3)	0.394	0.526	0.113
Left hand, Touch cheek, Bottom frequency (See Fig.4)	0.425	0.562	-0.144
Right hand, Touch cheek, Mid frequency (See Fig.5)	0.449	0.601	0.122
Right hand, Tilt 15 Degree, Mid frequency (See Fig.6)	0.341	0.446	-0.012
Right hand, Touch cheek, Top frequency (See Fig.7)	0.416	0.563	-0.175
Right hand, Touch cheek, Bottom frequency (See Fig.8)	0.458	0.604	0.159

Table 11: SAR Values (PCS 1900MHz-Head)

Limit of SAR (W/kg)	**10 g Average**	**1 g Average**	**Power Drift (dB)**
	2.0	1.6	
Test Case	**Measurement Result (W/kg)**		
	10 g Average	**1 g Average**	
Left hand, Touch cheek, Mid frequency (See Fig.9)	0.457	0.739	-0.037
Left hand, Tilt 15 Degree, Mid frequency (See Fig.10)	0.261	0.420	-0.043
Left hand, Touch cheek, Top frequency (See Fig.11)	0.368	0.597	-0.142

Left hand, Touch cheek, Bottom frequency (See Fig.12)	0.437	0.701	-0.065
Right hand, Touch cheek, Mid frequency (See Fig.13)	0.343	0.552	-0.030
Right hand, Tilt 15 Degree, Mid frequency (See Fig.14)	0.211	0.343	-0.047
Right hand, Touch cheek, Top frequency (See Fig.15)	0.294	0.488	-0.199
Right hand, Touch cheek, Bottom frequency (See Fig.16)	0.300	0.476	-0.064

Table 12: SAR Values (WCDMA 850MHz-Head)

Limit of SAR (W/kg)	**10 g Average**	**1 g Average**	**Power Drift (dB)**
	2.0	1.6	
Test Case	**Measurement Result (W/kg)**		
	10 g Average	**1 g Average**	
Left hand, Touch cheek, Mid frequency (See Fig.17)	0.396	0.532	0.017
Left hand, Tilt 15 Degree, Mid frequency (See Fig.18)	0.314	0.417	-0.023
Left hand, Touch cheek, Top frequency (See Fig.19)	0.365	0.492	-0.036
Left hand, Touch cheek, Bottom frequency (See Fig.20)	0.328	0.442	-0.120
Right hand, Touch cheek, Mid frequency (See Fig.21)	0.484	0.644	-0.190
Right hand, Tilt 15 Degree, Mid frequency (See Fig.22)	0.366	0.484	-0.050
Right hand, Touch cheek, Top frequency (See Fig.23)	0.490	0.659	-0.124
Right hand, Touch cheek, Bottom frequency (See Fig.24)	0.401	0.532	0.066

Table 13: SAR Values (GSM 850MHz-Body)

Limit of SAR (W/kg)	**10 g Average**	**1g Average**	**Power Drift (dB)**
	2.0	1.6	
Test Case	**Measurement Result (W/kg)**		
	10 g Average	**1 g Average**	
Towards Phantom, Mid frequency with GPRS (See Fig.25)	0.668	0.881	-0.174
Towards Ground, Top frequency with GPRS (See Fig.26)	0.727	0.978	-0.072
Towards Ground, Mid frequency with GPRS (See Fig.27)	0.748	1	-0.101
Towards Ground, Bottom frequency with GPRS (See Fig.28)	0.645	0.858	0.104
Towards Ground, Top frequency with EGPRS (See Fig.29)	0.719	0.959	-0.166
Towards Ground, Top frequency with Bluetooth (See Fig.30)	0.564	0.758	-0.005
Towards Ground, Top frequency with Headset (See Fig.31)	0.487	0.667	0.174
Left Side, Mid frequency with GPRS (See Fig.32)	0.598	0.874	-0.159
Right Side, Mid frequency with GPRS (See Fig.33)	0.573	0.833	0.023
Bottom Side, Mid frequency with GPRS (See Fig.34)	0.040	0.073	0.023

Table 14: SAR Values (PCS 1900MHz-Body)

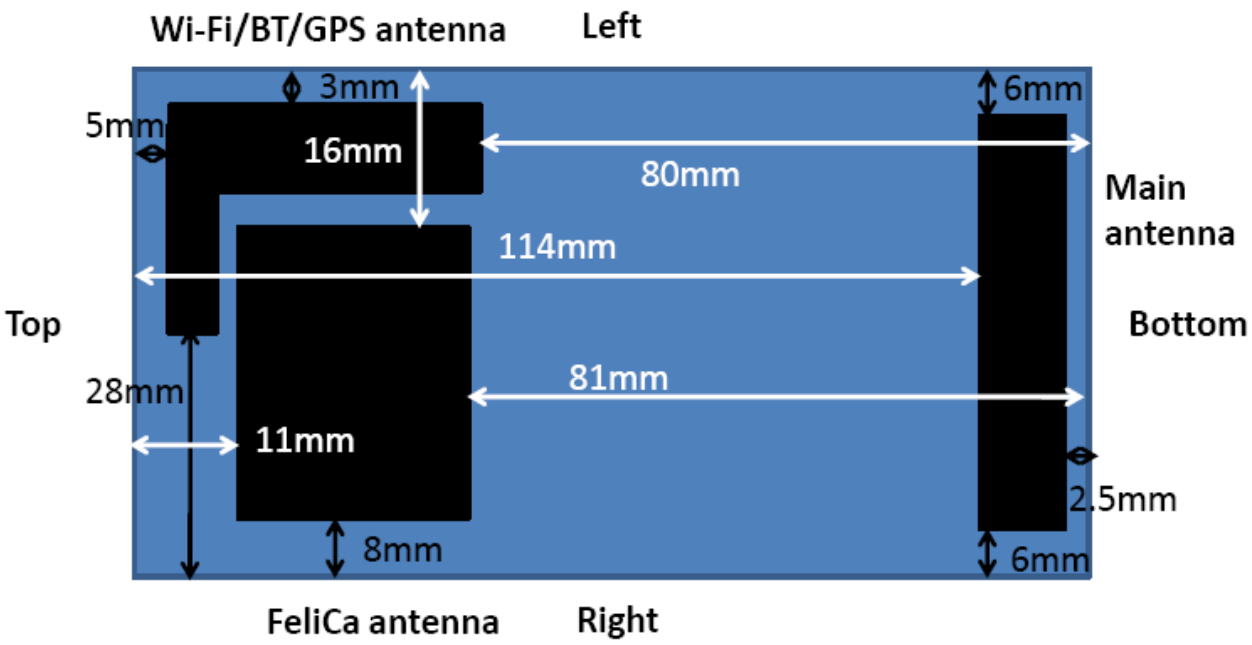
Limit of SAR (W/kg)	10 g Average	1g Average	Power Drift (dB)
	2.0	1.6	
Test Case	**Measurement Result (W/kg)**		
	10 g Average	**1 g Average**	
Towards Phantom, Mid frequency with GPRS (See Fig.35)	0.640	1.01	-0.173
Towards Ground, Top frequency with GPRS (See Fig.36)	0.625	1.07	-0.027
Towards Ground, Mid frequency with GPRS (See Fig.37)	0.677	1.16	0.106
Towards Ground, Bottom frequency with GPRS (See Fig.38)	0.587	1.01	-0.052
Towards Ground, Mid frequency with EGPRS (See Fig.39)	0.629	1.06	-0.002
Towards Ground, Mid frequency with Bluetooth (See Fig.40)	0.512	0.859	-0.186
Towards Ground, Mid frequency with Headset (See Fig.41)	0.597	1.02	0.128
Left Side, Mid frequency with GPRS (See Fig.42)	0.252	0.431	-0.073
Right Side, Mid frequency with GPRS (See Fig.43)	0.127	0.220	-0.155
Bottom Side, Mid frequency with GPRS (See Fig.44)	0.151	0.254	0.117

Table 15: SAR Values (WCDMA 850MHz-Body)

Limit of SAR (W/kg)	10 g Average	1g Average	Power Drift (dB)
	2.0	1.6	
Test Case	**Measurement Result (W/kg)**		
	10 g Average	**1 g Average**	
Towards Phantom, Mid frequency (See Fig.45)	0.713	0.934	-0.004
Towards Ground, Top frequency (See Fig.46)	0.642	0.861	-0.083
Towards Ground, Mid frequency (See Fig.47)	0.747	1	0.026
Towards Ground, Bottom frequency (See Fig.48)	0.650	0.874	-0.095
Towards Ground, Mid frequency with Bluetooth (See Fig.49)	0.622	0.829	-0.057
Towards Ground, Mid frequency with Headset (See Fig.50)	0.520	0.706	-0.035
Left Side, Mid frequency (See Fig.51)	0.644	0.938	-0.105
Right Side, Mid frequency (See Fig.52)	0.633	0.918	-0.038
Bottom Side, Mid frequency (See Fig.53)	0.053	0.102	0.017

7.4 Summary of Measurement Results (Bluetooth and WiFi function)

The distance between BT antenna and GSM antenna is ＞5cm. The location of the antennas inside mobile phone is shown below:



The output power of BT antenna is 6.5mW.

According to the output power measurement result and the distance between the two antennas, we can draw the conclusion that: stand-alone SAR and simultaneous transmission SAR are not required for BT transmitter, because the output power of BT transmitter is ≤$2P_{Ref}$ and its antenna is ＞5cm from other antenna

Note: Power thresholds (P_{Ref}) is derived from multiples of 0.5×60/$f_{(GHz)}$, that is 12mW (10.79dBm) for BT frequency.

The conducted power for WiFi is as following:

802.11b（dBm）

Channel\data rate	1Mbps	2Mbps	5.5Mbps	11Mbps
1	17.5	17.5	17.3	17.2
6	17.8	18.0	17.9	17.9
11	17.4	17.5	17.5	17.5

802.11g（dBm）

Channel\data rate	6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
1	14.3	14.3	14.3	14.4	14.4	14.4	14.4	14.4
6	14.9	15.0	14.9	14.9	14.9	14.9	15.0	15.0
11	14.2	14.3	14.2	14.3	14.3	14.3	14.3	14.2

802.11n（dBm）

Channel\data rate	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7

1	14.3	14.3	14.3	14.3	14.4	14.3	14.4	13.3
6	14.5	14.4	14.5	14.4	14.4	14.4	14.4	13.4
11	14.4	14.3	14.4	14.3	14.4	14.4	14.4	13.4

According to the conducted power measurement result, we can draw the conclusion that: stand-alone SAR for WiFi should be performed. Then, simultaneous transmission SAR for WiFi is considered with measurement results of GSM and WiFi.

SAR is not required for 802.11g/n channels if the output power is less than 0.25dB higher than that measured on the corresponding 802.11b channels, and for each frequency band, testing at higher data rates and higher order modulations is not required when the maximum average output power for each of these configurations is less than 0.25dB higher than those measured at the lowest data rate. According to the above conducted power, the EUT should be tested for “802.11b, 1Mbps, channel 6”.

There is AP function for EUT, so the WiFi should be performed as hot spots. That is, test SAR at 10mm from the top & bottom surfaces and also from side edges with a transmitting antenna ≤ 2.5 cm from an edge.

Table 16: SAR Values (WIFI 802.b -Head)

Limit of SAR (W/kg)	**10 g Average**	**1 g Average**	**Power Drift (dB)**
	2.0	1.6	
Test Case	**Measurement Result (W/kg)**		
	10 g Average	**1 g Average**	
Left hand, Touch cheek, 1Mbps,channel 6 (See Fig.54)	0.165	0.332	0.078
Left hand, Tilt 15 Degree, 1Mbps,channel 6 (See Fig.55)	0.116	0.235	-0.056
Right hand, Touch cheek, 1Mbps,channel 6 (See Fig.56)	0.276	0.599	-0.173
Right hand, Tilt 15 Degree, 1Mbps,channel 6 (See Fig.57)	0.208	0.458	-0.023

Table 17: SAR Values (WIFI 802.b -Body)

Limit of SAR (W/kg)	**10 g Average**	**1 g Average**	**Power Drift (dB)**
	2.0	1.6	
Test Case	**Measurement Result (W/kg)**		
	10 g Average	**1 g Average**	
Toward Phantom, 1Mbps,channel 6 (See Fig.58)	0.069	0.132	-0.030
Toward Ground, 1Mbps,channel 6 (See Fig.59)	0.143	0.324	0.131
Left Side, 1Mbps,channel 6 (See Fig.60)	0.107	0.215	0.096
Top Side, 1Mbps,channel 6 (See Fig.61)	0.048	0.101	-0.088

Table 18: The sum of SAR values for GSM and WiFi

	Maximum SAR value for Head	**Maximum SAR value for Body**
GSM	0.739	1.16
WiFi	0.599	0.324
Sum	**1.338**	**1.484**

According to the above tables, the sum of SAR values for GSM and WiFi ＜1.6W/kg. So simultaneous transmission SAR are not required for WiFi transmitter.

7.5 Conclusion

Localized Specific Absorption Rate (SAR) of this portable wireless device has been measured in all cases requested by the relevant standards cited in Clause 4.2 of this report. Maximum localized SAR is below exposure limits specified in the relevant standards cited in Clause 4.1 of this test report.

The maximum SAR values are obtained at the case of **GSM 1900 MHz Band, Body,** Towards Ground, Mid. frequency with GPRS **(Table 37)**, and the value are: **1.16(1g).**

8 MEASUREMENT UNCERTAINTY

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
Measurement system										
1	Probe calibration	B	5.5	N	1	1	1	5.5	5.5	∞
2	Isotropy	B	4.7	R	$\sqrt{3}$	0.7	0.7	1.9	1.9	∞
3	Boundary effect	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
4	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
5	Detection limit	B	1.0	N	1	1	1	0.6	0.6	∞
6	Readout electronics	B	0.3	R	$\sqrt{3}$	1	1	0.3	0.3	∞
7	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
8	Integration time	B	2.6	R	$\sqrt{3}$	1	1	1.5	1.5	∞
9	RF ambient conditions-noise	B	0	R	$\sqrt{3}$	1	1	0	0	∞
10	RF ambient conditions-reflection	B	0	R	$\sqrt{3}$	1	1	0	0	∞
11	Probe positioned mech. restrictions	B	0.4	R	$\sqrt{3}$	1	1	0.2	0.2	∞
12	Probe positioning with respect to phantom shell	B	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	∞
13	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
Test sample related										
14	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	71

15	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
16	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
17	Phantom uncertainty	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
18	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
19	Liquid conductivity (meas.)	A	2.06	N	1	0.64	0.43	1.32	0.89	43
20	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
21	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	1.0	0.8	521
Combined standard uncertainty		$u_c^{'} = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$						9.25	9.12	257
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$						18.5	18.2	

9 MAIN TEST INSTRUMENTS

Table 19: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	HP 8753E	US38433212	August 4,2010	One year
02	Power meter	NRVD	102083	September 11, 2010	One year
03	Power sensor	NRV-Z5	100542		
04	Signal Generator	E4433C	MY49070393	November 13, 2010	One Year
05	Amplifier	VTL5400	0505	No Calibration Requested	
06	BTS	8960	MY48365192	November 18, 2010	One year
07	E-field Probe	SPEAG ES3DV3	3149	September 25, 2010	One year
08	E-field Probe	SPEAG EX3DV4	3617	July 9, 2010	One year
09	DAE	SPEAG DAE4	771	November 21, 2010	One year
10	Dipole Validation Kit	SPEAG D835V2	443	February 26, 2010	Two years
11	Dipole Validation Kit	SPEAG D1900V2	541	February 26, 2010	Two years
12	Dipole Validation Kit	SPEAG D2450V2	853	September 27, 2010	Two years

END OF REPORT BODY

ANNEX A MEASUREMENT PROCESS

The evaluation was performed with the following procedure:

Step 1: Measurement of the SAR value at a fixed location above the reference point was measured and was used as a reference value for assessing the power drop.

Step 2: The SAR distribution at the exposed side of the phantom was measured at a distance of 3.9 mm from the inner surface of the shell. The area covered the entire dimension of the flat phantom and the horizontal grid spacing was 10 mm x 10 mm. Based on this data, the area of the maximum absorption was determined by spline interpolation.

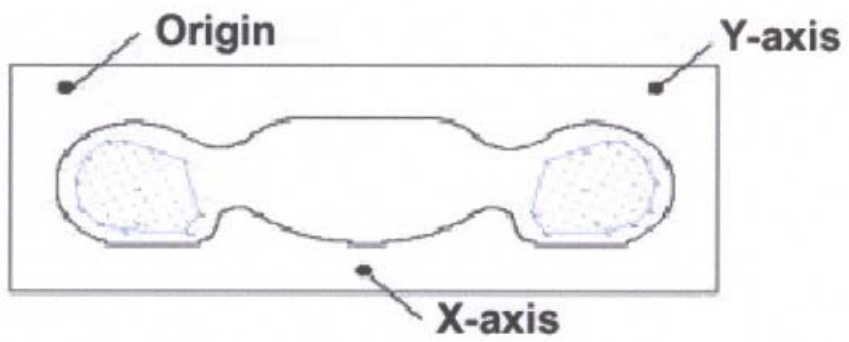
Step 3: Around this point, a volume of 30 mm x 30 mm x 30 mm was assessed by measuring 7 x 7x 7 points. On this basis of this data set, the spatial peak SAR value was evaluated with the following procedure:

a. The data at the surface were extrapolated, since the center of the dipoles is 2.7 mm away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.2 mm. The extrapolation was based on a least square algorithm. A polynomial of the fourth order was calculated through the points in z-axes. This polynomial was then used to evaluate the points between the surface and the probe tip.

b. The maximum interpolated value was searched with a straightforward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1g or 10g) were computed using the 3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the "Not a knot"-condition (in x ~ y and z-directions). The volume was integrated with the trapezoidal algorithm. One thousand points (10 x 10 x 10) were interpolated to calculate the average.

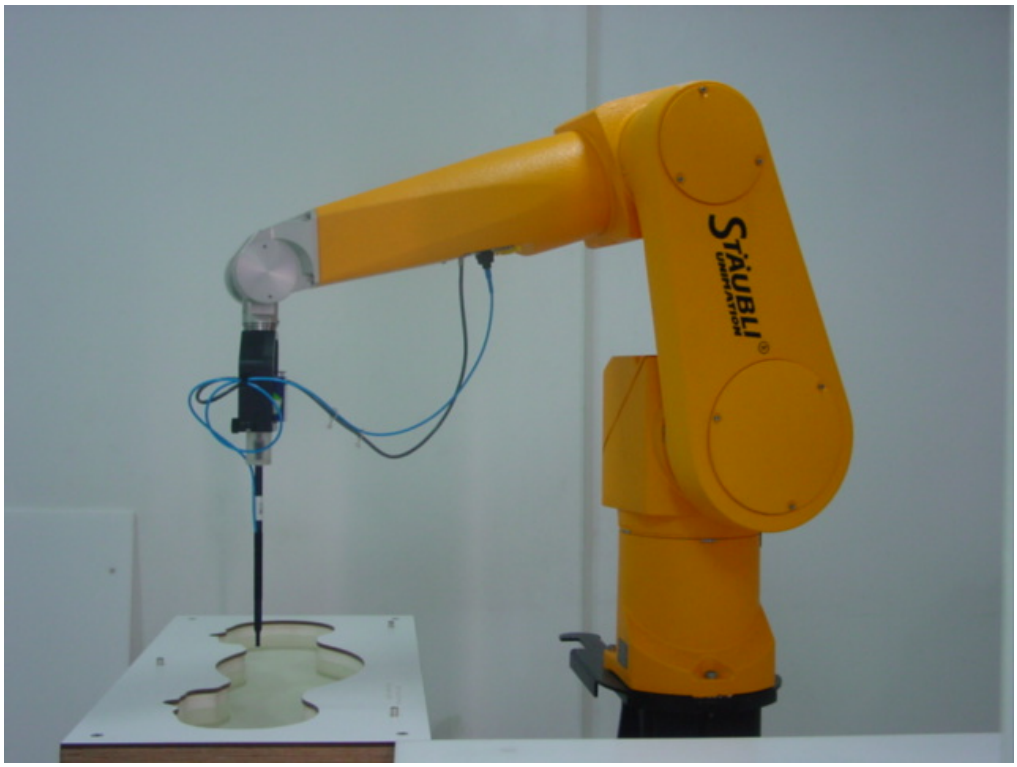
c. All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.

Step 4: Re-measurement the SAR value at the same location as in Step 1. If the value changed by more than 5%, the evaluation is repeated.

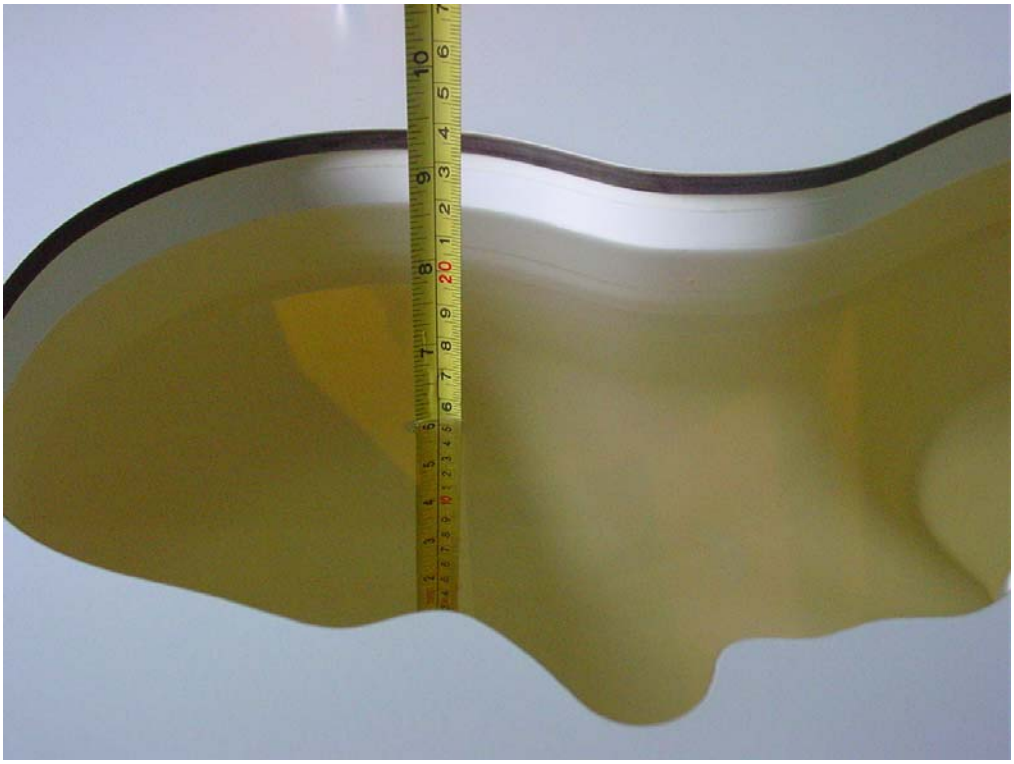


Picture A: SAR Measurement Points in Area Scan

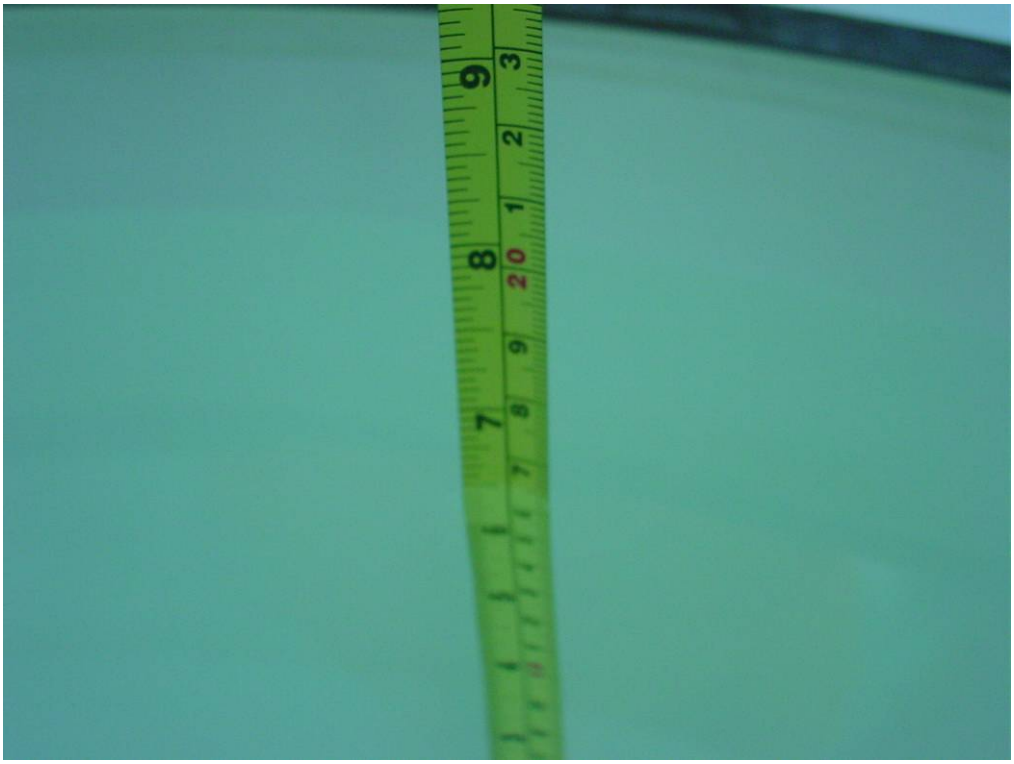
ANNEX B TEST LAYOUT



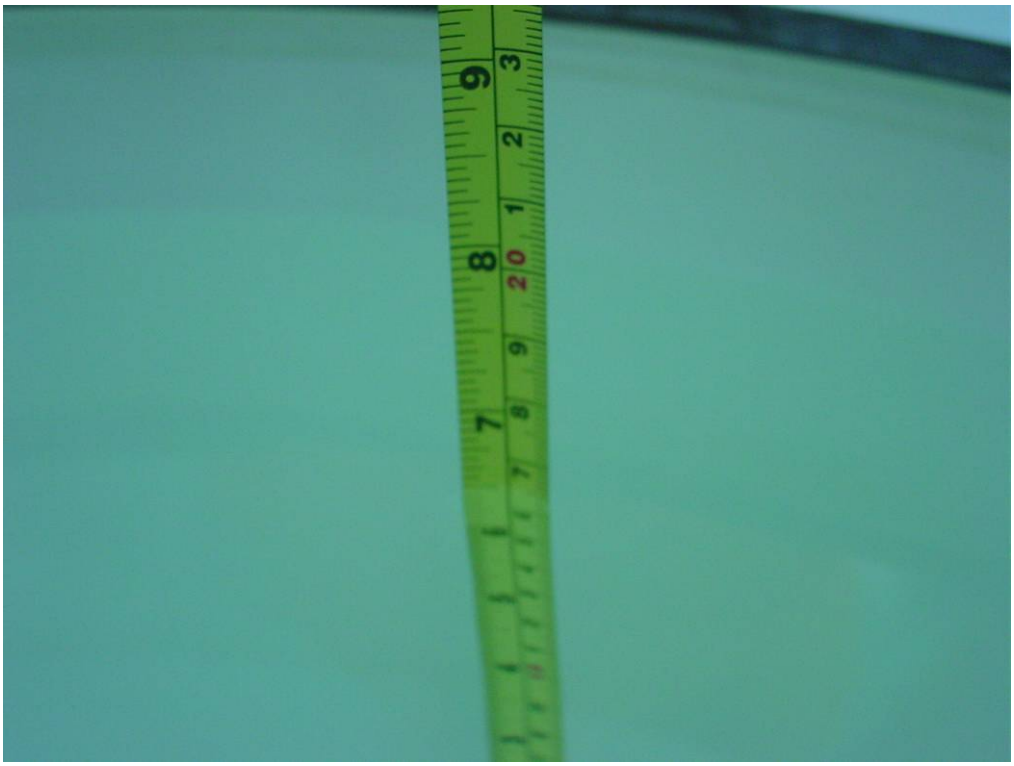
Picture B1: Specific Absorption Rate Test Layout



Picture B2: Liquid depth in the Head Phantom (850 MHz)



Picture B3 Liquid depth in the Flat Phantom (1900MHz)



Picture B4 Liquid depth in the Flat Phantom (2450MHz)

ANNEX C GRAPH RESULTS

850 Left Cheek Middle

Date/Time: 2011-4-9 8:07:32
Electronics: DAE4 Sn771
Medium: Head 850 MHz
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.90 mho/m; εr = 41.9; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 850 Frequency: 836.6 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Cheek Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.593 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.2 V/m; Power Drift = -0.057 dB
Peak SAR (extrapolated) = 0.695 W/kg
SAR(1 g) = 0.567 mW/g; SAR(10 g) = 0.429 mW/g
Maximum value of SAR (measured) = 0.600 mW/g

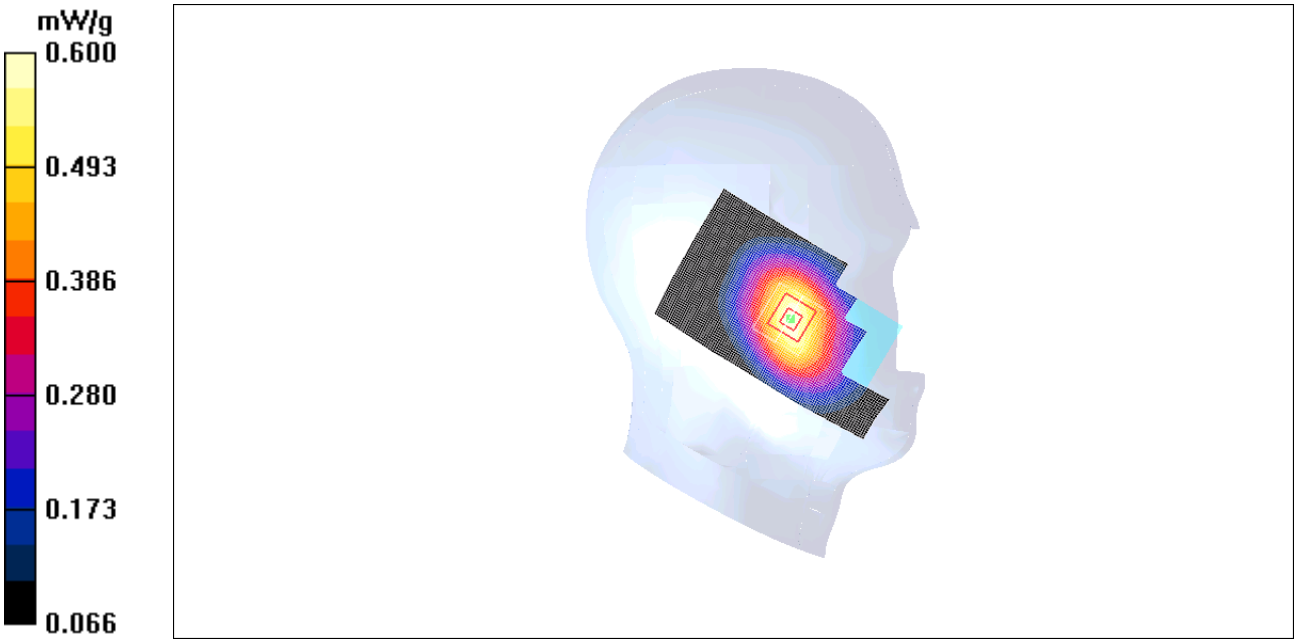


Fig. 1 850 MHz CH190

850 Left Tilt Middle

Date/Time: 2011-4-9 8:24:14
Electronics: DAE4 Sn771
Medium: Head 850 MHz
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.90 mho/m; εr = 41.9; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 850 Frequency: 836.6 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Tilt Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.438 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.1 V/m; Power Drift = -0.065 dB
Peak SAR (extrapolated) = 0.511 W/kg
SAR(1 g) = 0.421 mW/g; SAR(10 g) = 0.323 mW/g
Maximum value of SAR (measured) = 0.440 mW/g

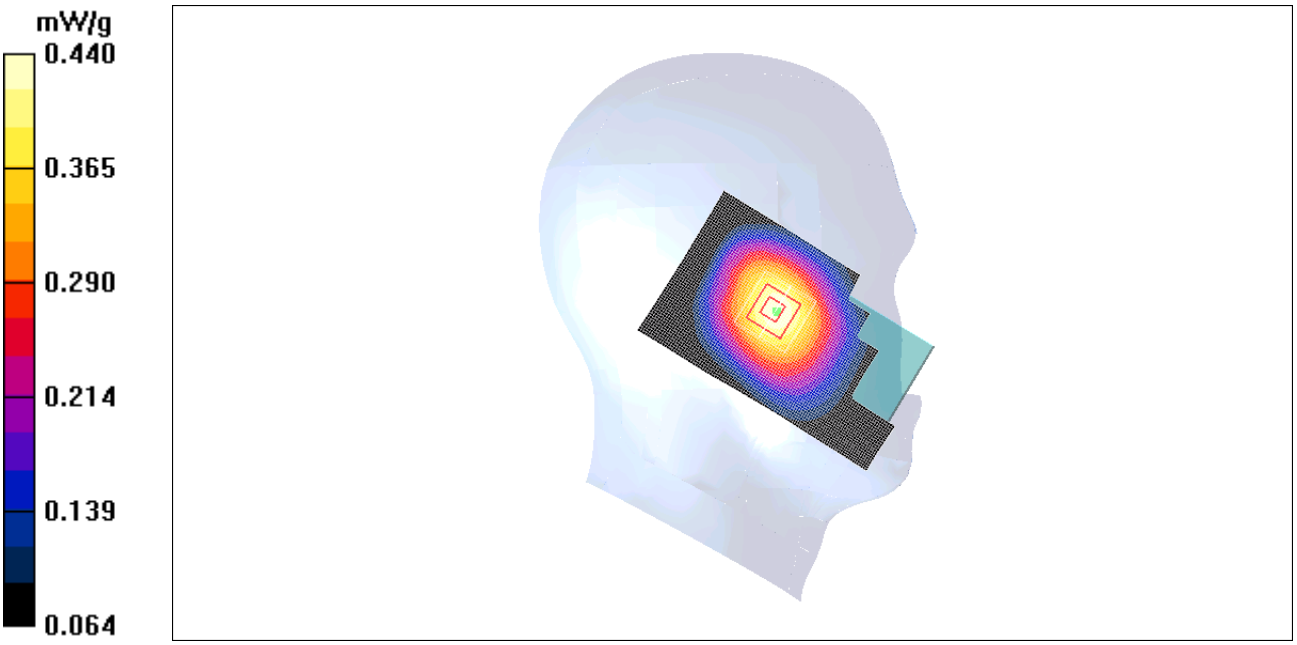


Fig.2 850 MHz CH190

850 Left Cheek High

Date/Time: 2011-4-9 8:41:21
Electronics: DAE4 Sn771
Medium: Head 850 MHz
Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.90 mho/m; εr = 41.8; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 850 Frequency: 848.8 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Cheek High/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.546 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.77 V/m; Power Drift = 0.113 dB
Peak SAR (extrapolated) = 0.668 W/kg
SAR(1 g) = 0.526 mW/g; SAR(10 g) = 0.394 mW/g
Maximum value of SAR (measured) = 0.554 mW/g

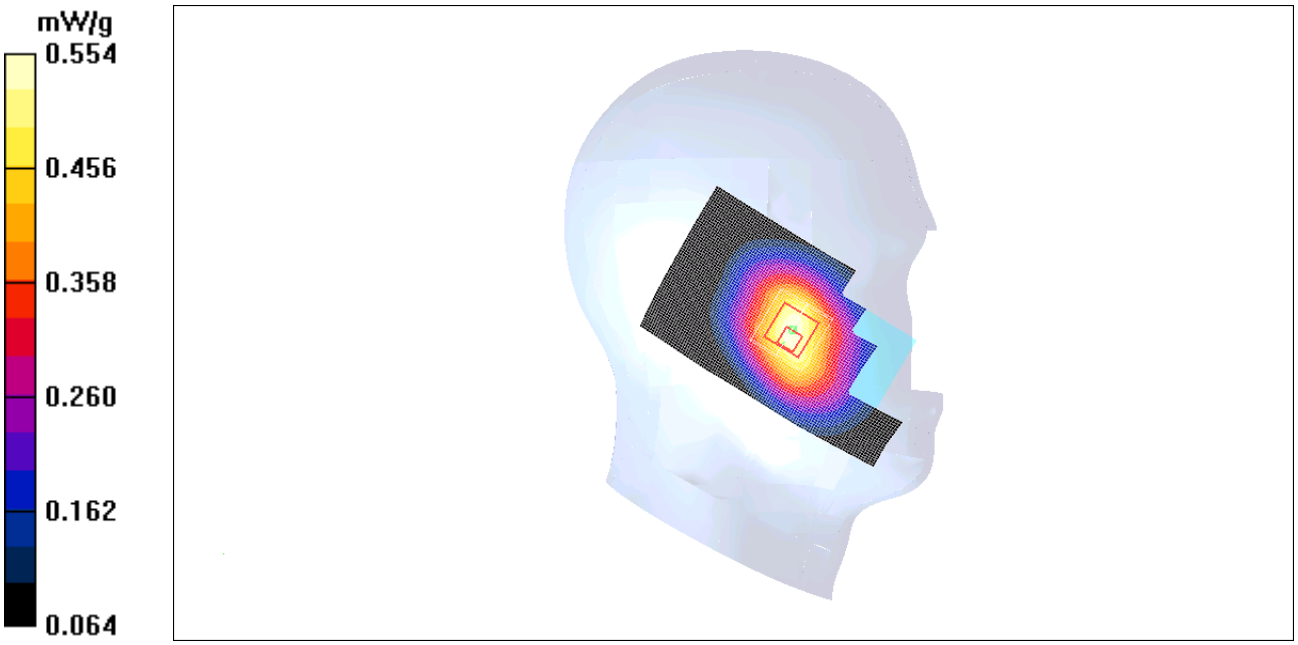


Fig. 3 850MHz CH251

850 Left Cheek Low

Date/Time: 2011-4-9 8:57:57
Electronics: DAE4 Sn771
Medium: Head 850 MHz
Medium parameters used: f = 825 MHz; σ = 0.88 mho/m; εr = 42.1; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 850 Frequency: 824.2 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Cheek Low/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.597 mW/g

Cheek Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.35 V/m; Power Drift = -0.144 dB
Peak SAR (extrapolated) = 0.693 W/kg
SAR(1 g) = 0.562 mW/g; SAR(10 g) = 0.425 mW/g
Maximum value of SAR (measured) = 0.595 mW/g

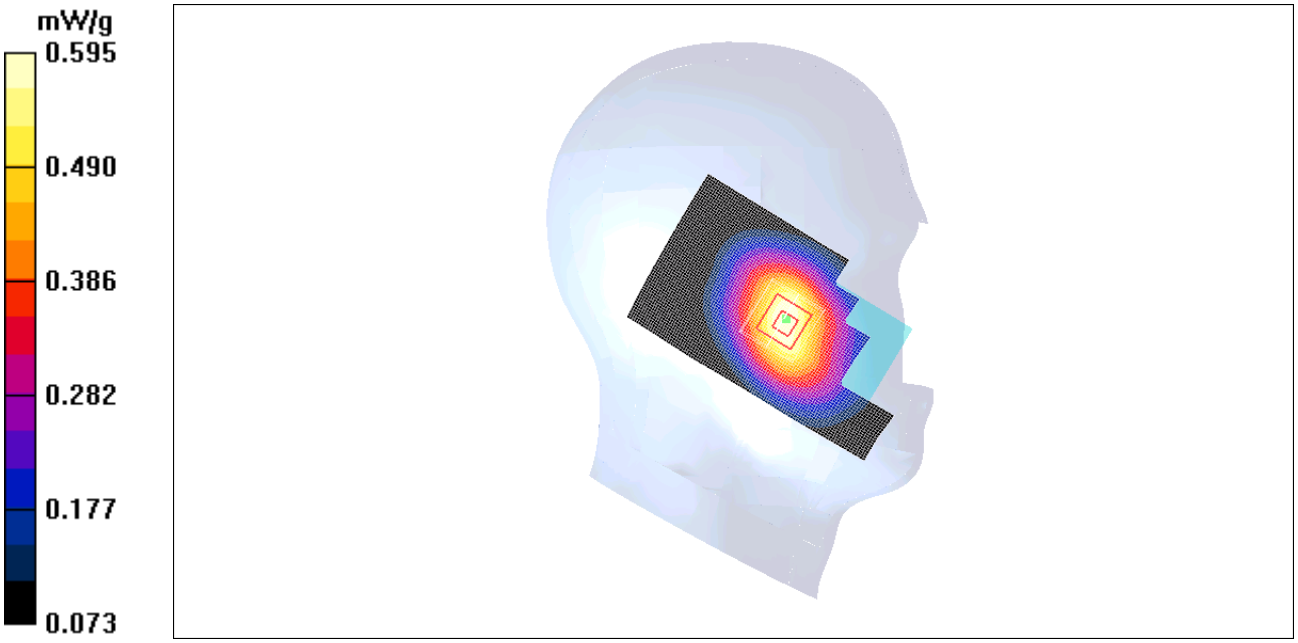


Fig. 4 850 MHz CH128

850 Right Cheek Middle

Date/Time: 2011-4-9 9:15:22
Electronics: DAE4 Sn771
Medium: Head 850 MHz
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.90 mho/m; εr = 41.9; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 850 Frequency: 836.6 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Cheek Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.601 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.38 V/m; Power Drift = 0.122 dB
Peak SAR (extrapolated) = 0.743 W/kg
SAR(1 g) = 0.601 mW/g; SAR(10 g) = 0.449 mW/g
Maximum value of SAR (measured) = 0.636 mW/g

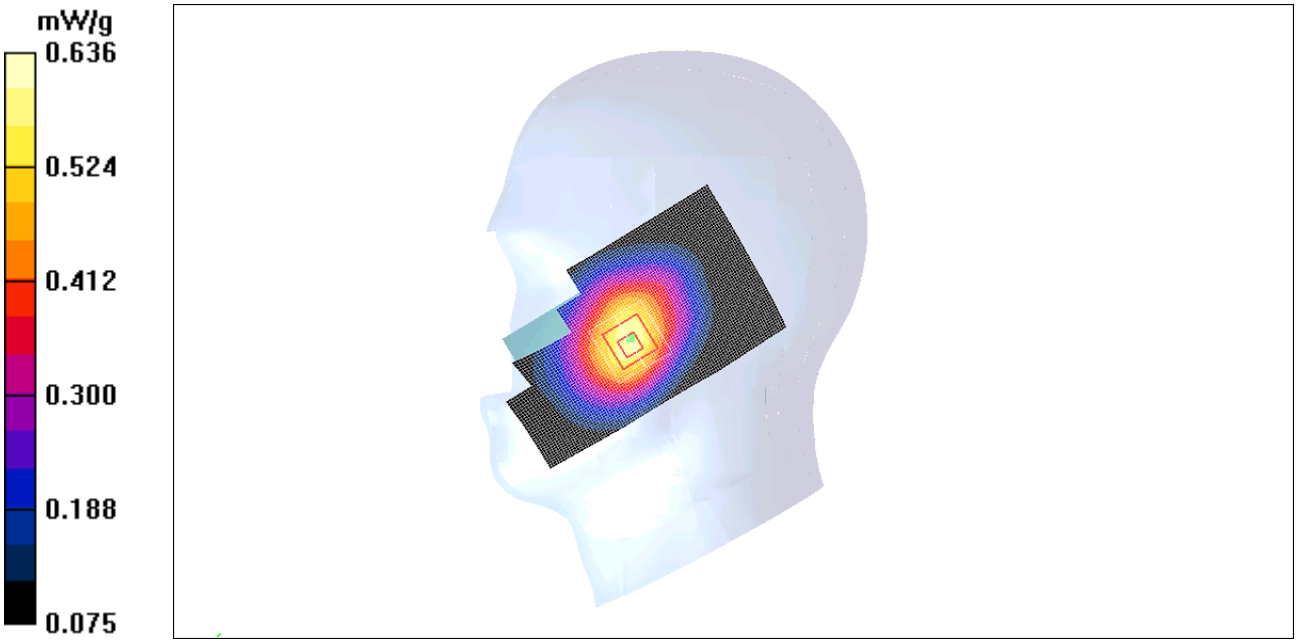


Fig. 5 850 MHz CH190

850 Right Tilt Middle

Date/Time: 2011-4-9 9:32:36
Electronics: DAE4 Sn771
Medium: Head 850 MHz
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.90 mho/m; εr = 41.9; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 850 Frequency: 836.6 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Tilt Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.466 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.7 V/m; Power Drift = -0.012 dB
Peak SAR (extrapolated) = 0.545 W/kg
SAR(1 g) = 0.446 mW/g; SAR(10 g) = 0.341 mW/g
Maximum value of SAR (measured) = 0.467 mW/g

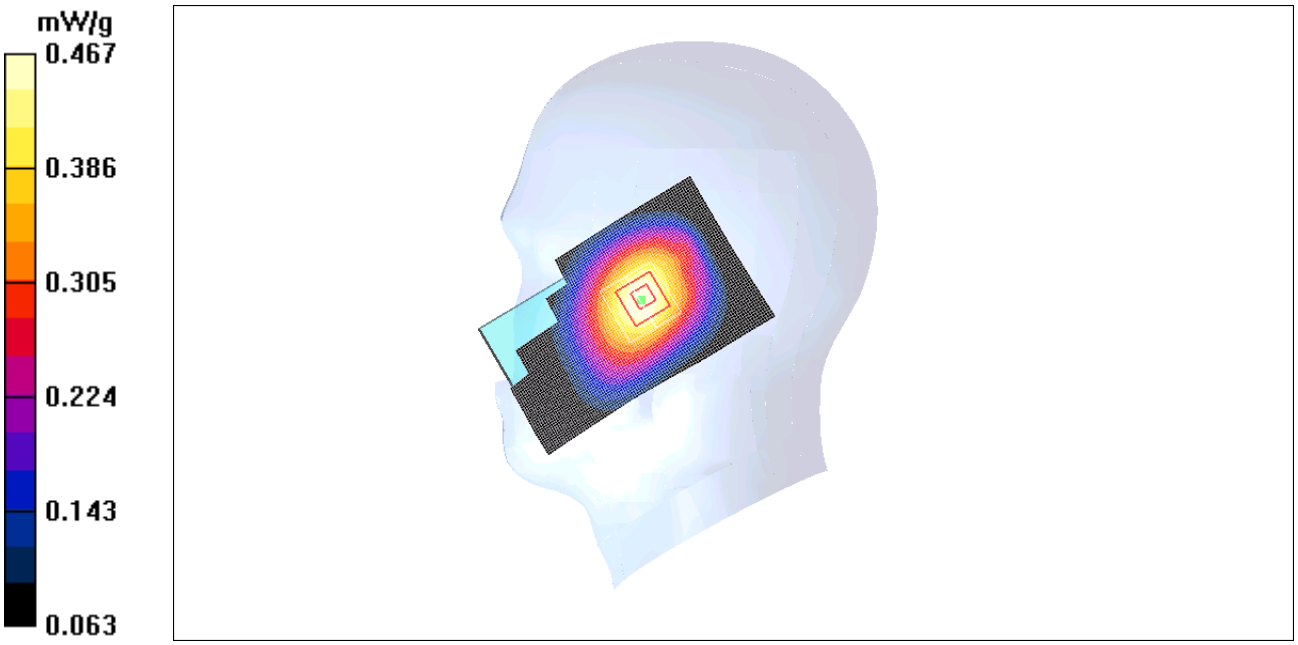


Fig.6 850 MHz CH190

850 Right Cheek High

Date/Time: 2011-4-9 9:49:12
Electronics: DAE4 Sn771
Medium: Head 850 MHz
Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.90 mho/m; εr = 41.8; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 850 Frequency: 848.8 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Cheek High/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.551 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.76 V/m; Power Drift = -0.175 dB
Peak SAR (extrapolated) = 0.700 W/kg
SAR(1 g) = 0.563 mW/g; SAR(10 g) = 0.416 mW/g
Maximum value of SAR (measured) = 0.594 mW/g

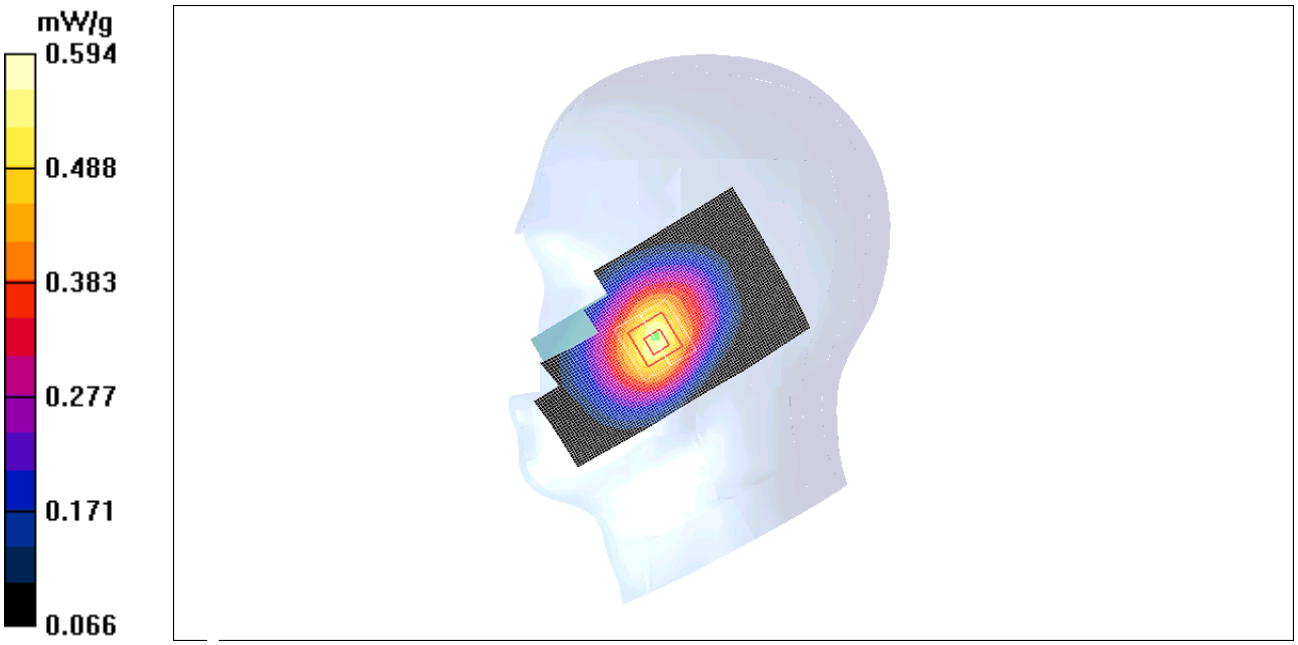


Fig. 7 850 MHz CH251

850 Right Cheek Low

Date/Time: 2011-4-9 10:05:52
Electronics: DAE4 Sn771
Medium: Head 850 MHz
Medium parameters used: f = 825 MHz; σ = 0.88 mho/m; εr = 42.1; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 850 Frequency: 824.2 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Cheek Low/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.577 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.32 V/m; Power Drift = 0.159 dB
Peak SAR (extrapolated) = 0.734 W/kg
SAR(1 g) = 0.604 mW/g; SAR(10 g) = 0.458 mW/g
Maximum value of SAR (measured) = 0.638 mW/g

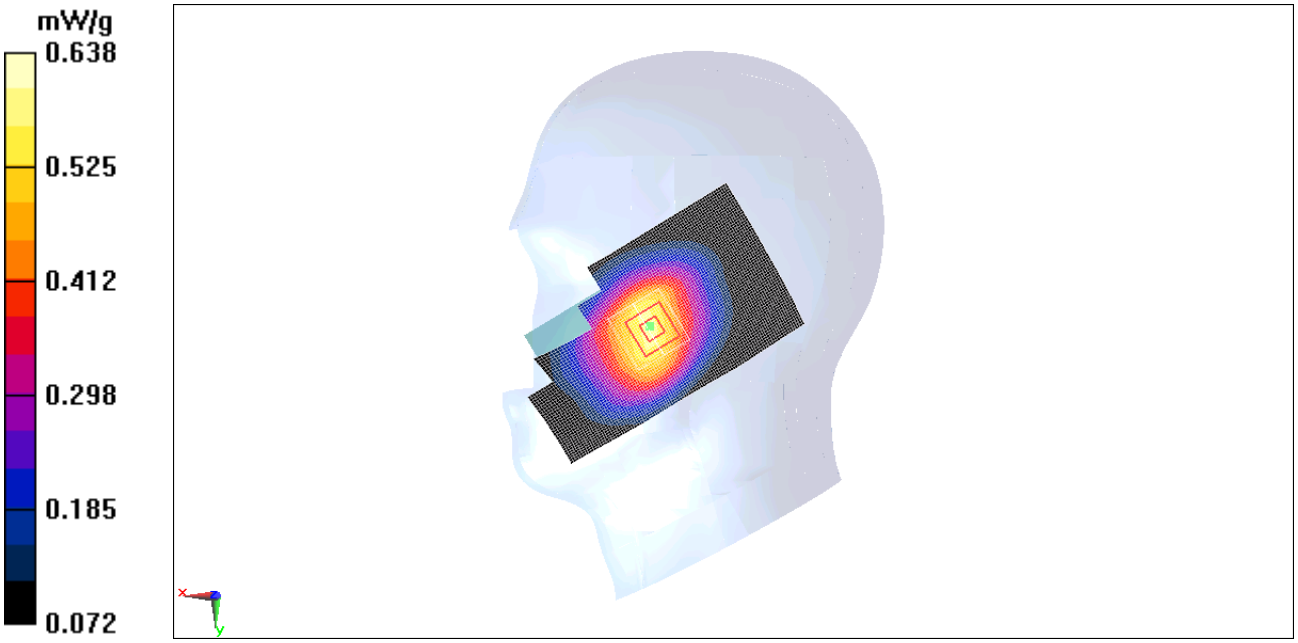


Fig. 8 850 MHz CH128

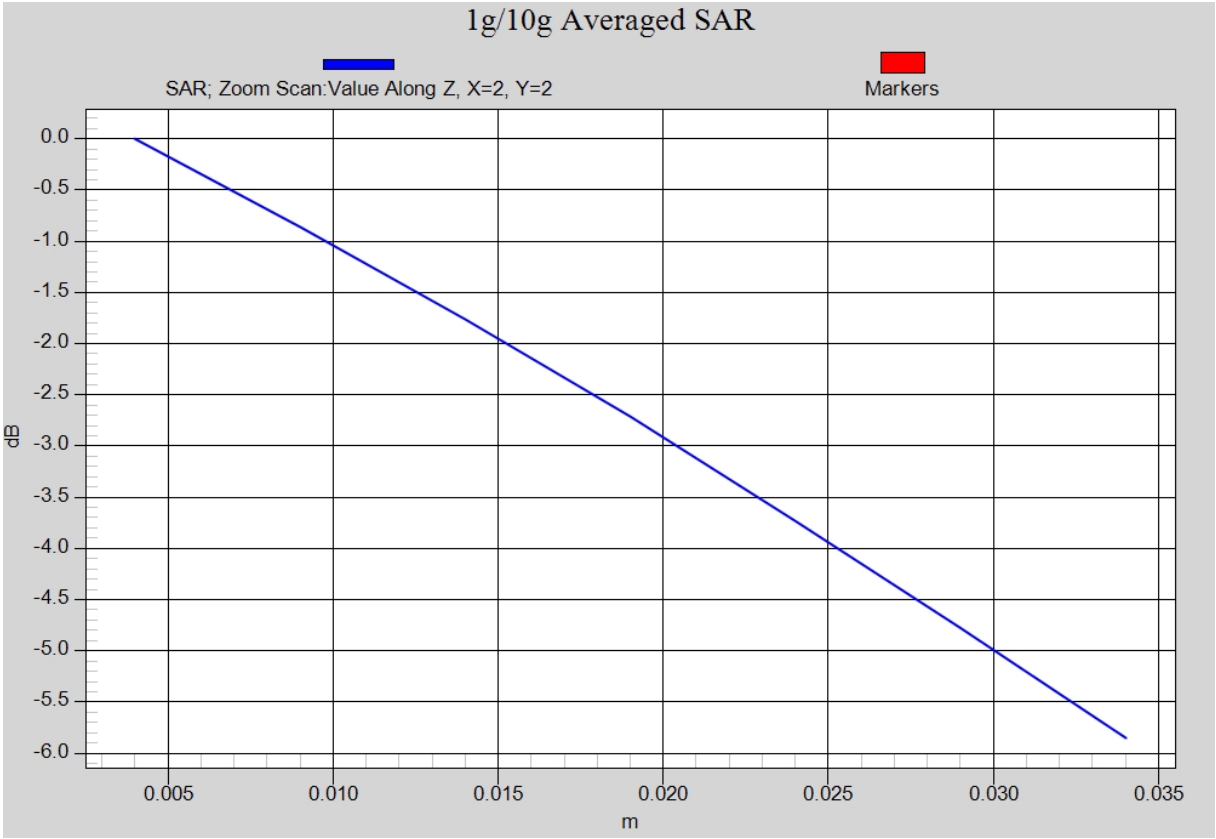


Fig. 8-1 Z-Scan at power reference point (850 MHz CH128)

1900 Left Cheek Middle

Date/Time: 2011-4-10 8:21:31
Electronics: DAE4 Sn771
Medium: Head 1900 MHz
Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; εr = 40.6; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 1900MHz Frequency: 1880 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.798 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.79 V/m; Power Drift = -0.037 dB
Peak SAR (extrapolated) = 1.15 W/kg
SAR(1 g) = 0.739 mW/g; SAR(10 g) = 0.457 mW/g
Maximum value of SAR (measured) = 0.802 mW/g

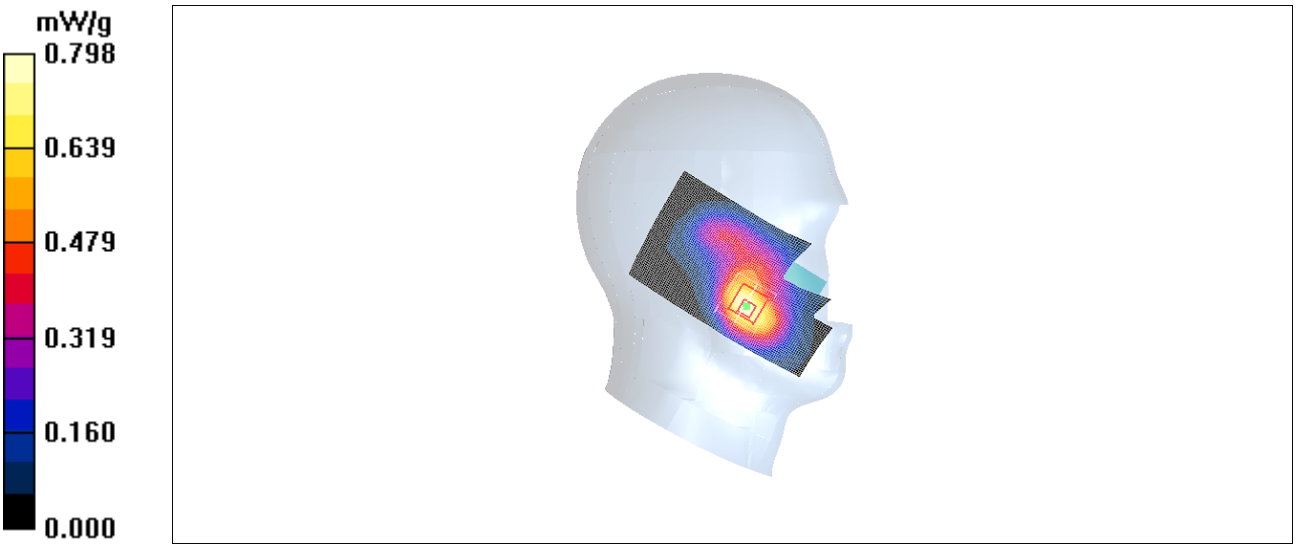


Fig. 9 1900 MHz CH661

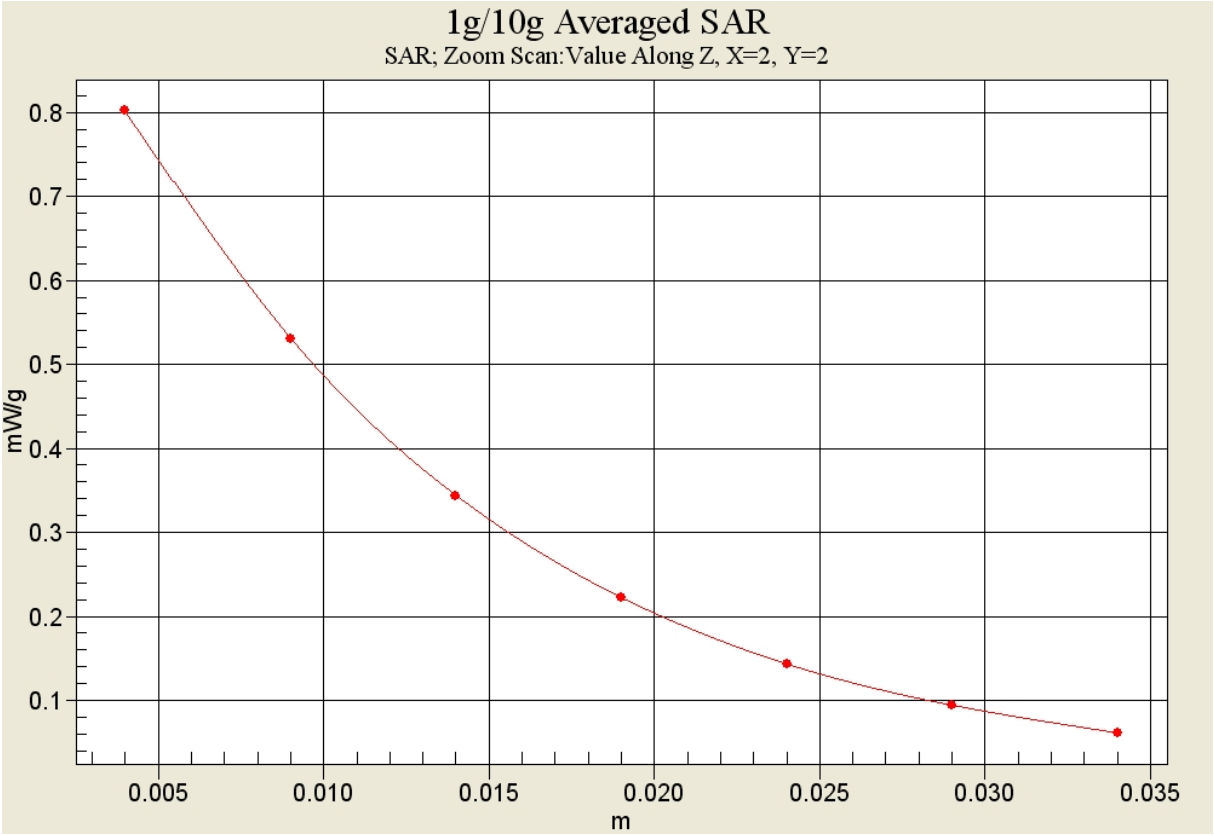


Fig. 9-1 Z-Scan at power reference point (1900 MHz CH661)

1900 Left Tilt Middle

Date/Time: 2011-4-10 8:38:28
Electronics: DAE4 Sn771
Medium: Head 1900 MHz
Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; εr = 40.6; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 1900MHz Frequency: 1880 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.501 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.4 V/m; Power Drift = -0.043 dB
Peak SAR (extrapolated) = 0.601 W/kg
SAR(1 g) = 0.420 mW/g; SAR(10 g) = 0.261 mW/g
Maximum value of SAR (measured) = 0.446 mW/g

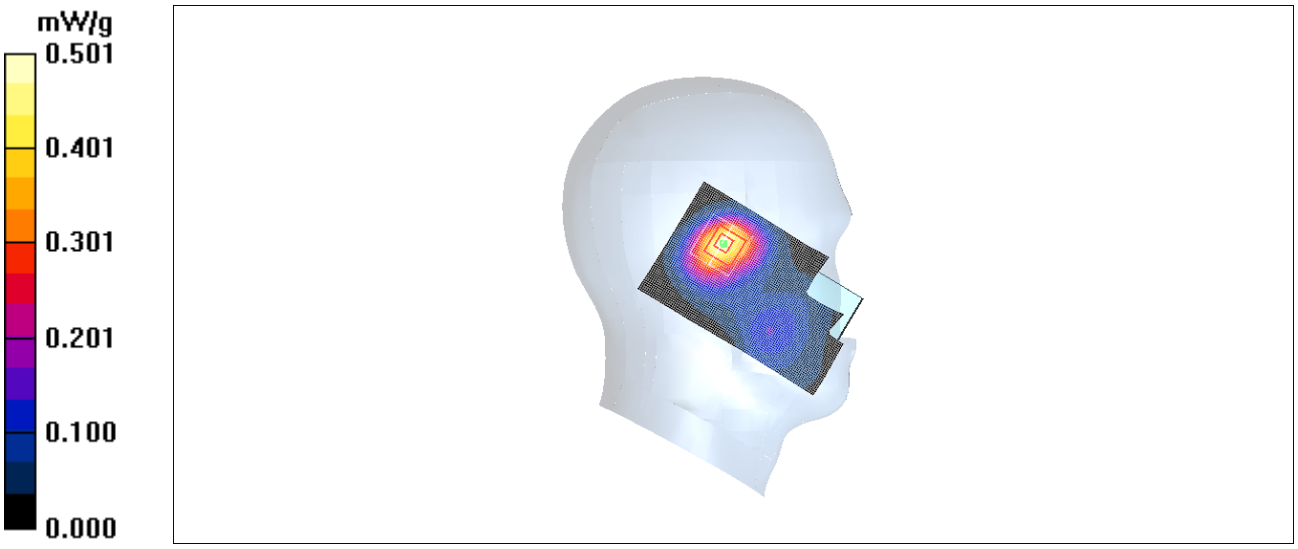


Fig. 10 1900 MHz CH661

1900 Left Cheek High

Date/Time: 2011-4-10 8:58:52
Electronics: DAE4 Sn771
Medium: Head 1900 MHz
Medium parameters used: f = 1910 MHz; σ = 1.43 mho/m; εr = 40.2; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 1900MHz Frequency: 1909.8 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek High/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.647 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.45 V/m; Power Drift = -0.142 dB
Peak SAR (extrapolated) = 0.929 W/kg
SAR(1 g) = 0.597 mW/g; SAR(10 g) = 0.368 mW/g
Maximum value of SAR (measured) = 0.649 mW/g

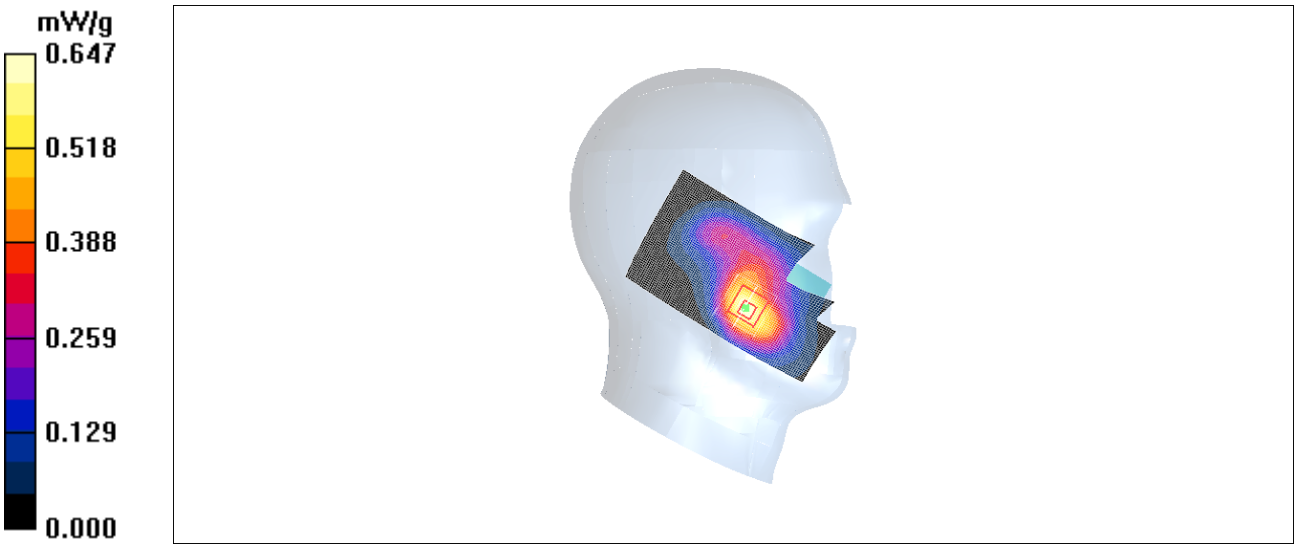


Fig. 11 1900 MHz CH810

1900 Left Cheek Low

Date/Time: 2011-4-10 9:17:45
Electronics: DAE4 Sn771
Medium: Head 1900 MHz
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.36 mho/m; εr = 39.5; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 1900MHz Frequency: 1850.2 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Low/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.761 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.48 V/m; Power Drift = -0.065 dB
Peak SAR (extrapolated) = 1.08 W/kg
SAR(1 g) = 0.701 mW/g; SAR(10 g) = 0.437 mW/g
Maximum value of SAR (measured) = 0.762 mW/g

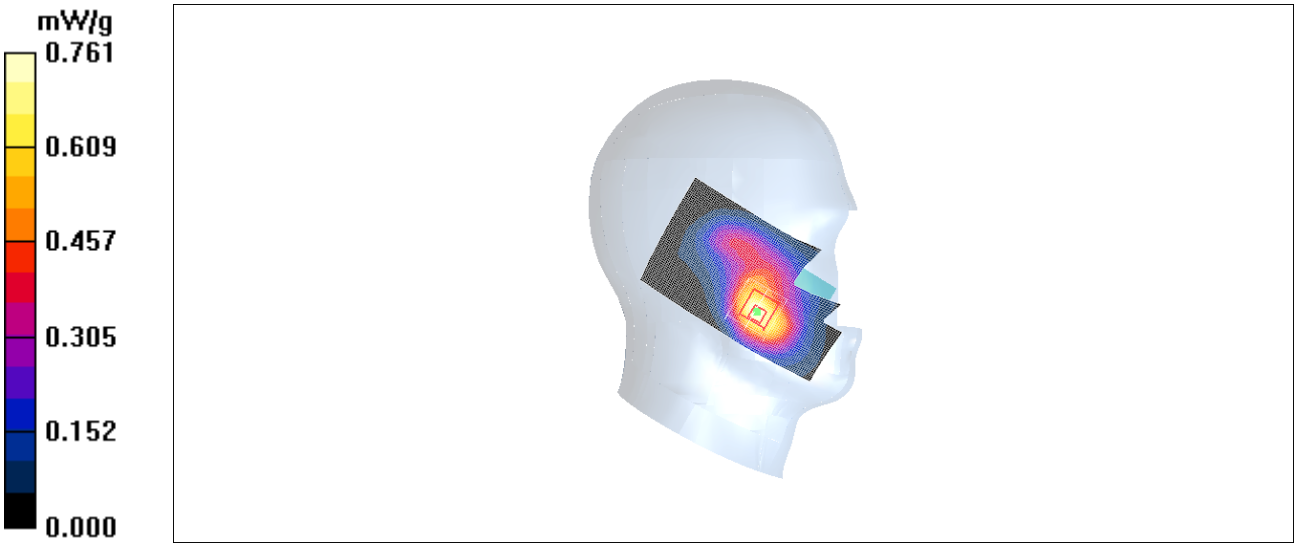


Fig. 12 1900 MHz CH512

1900 Right Cheek Middle

Date/Time: 2011-4-10 9:36:23
Electronics: DAE4 Sn771
Medium: Head 1900 MHz
Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; εr = 40.6; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 1900MHz Frequency: 1880 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.628 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.59 V/m; Power Drift = -0.030 dB
Peak SAR (extrapolated) = 0.836 W/kg
SAR(1 g) = 0.552 mW/g; SAR(10 g) = 0.343 mW/g
Maximum value of SAR (measured) = 0.605 mW/g

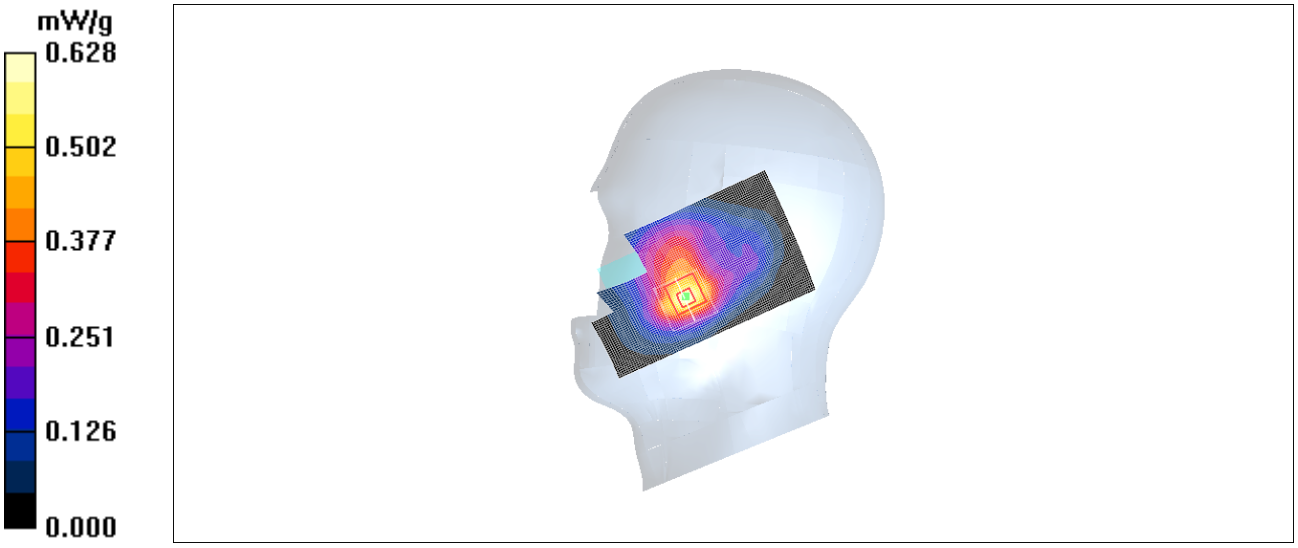


Fig. 13 1900 MHz CH661

1900 Right Tilt Middle

Date/Time: 2011-4-10 9:54:14
Electronics: DAE4 Sn771
Medium: Head 1900 MHz
Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; εr = 40.6; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 1900MHz Frequency: 1880 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.391 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.2 V/m; Power Drift = -0.047 dB
Peak SAR (extrapolated) = 0.541 W/kg
SAR(1 g) = 0.343 mW/g; SAR(10 g) = 0.211 mW/g
Maximum value of SAR (measured) = 0.359 mW/g

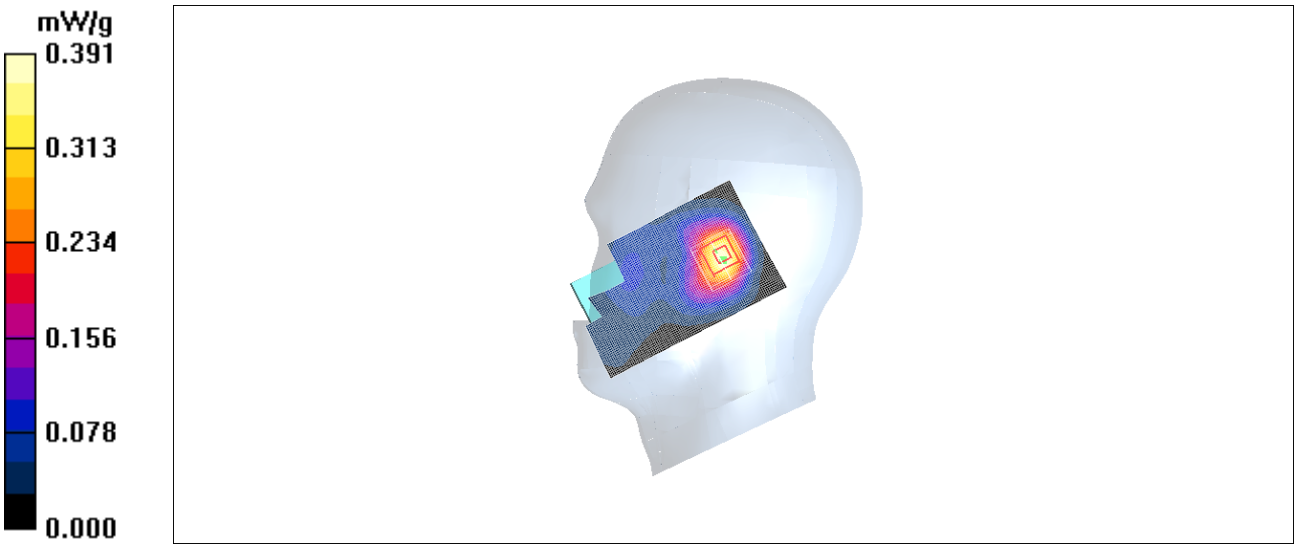


Fig.14 1900 MHz CH661

1900 Right Cheek High

Date/Time: 2011-4-10 10:12:32
Electronics: DAE4 Sn771
Medium: Head 1900 MHz
Medium parameters used: f = 1910 MHz; σ = 1.43 mho/m; εr = 40.2; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 1900MHz Frequency: 1909.8 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek High/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.589 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.57 V/m; Power Drift = -0.199 dB
Peak SAR (extrapolated) = 0.760 W/kg
SAR(1 g) = 0.488 mW/g; SAR(10 g) = 0.294 mW/g
Maximum value of SAR (measured) = 0.542 mW/g

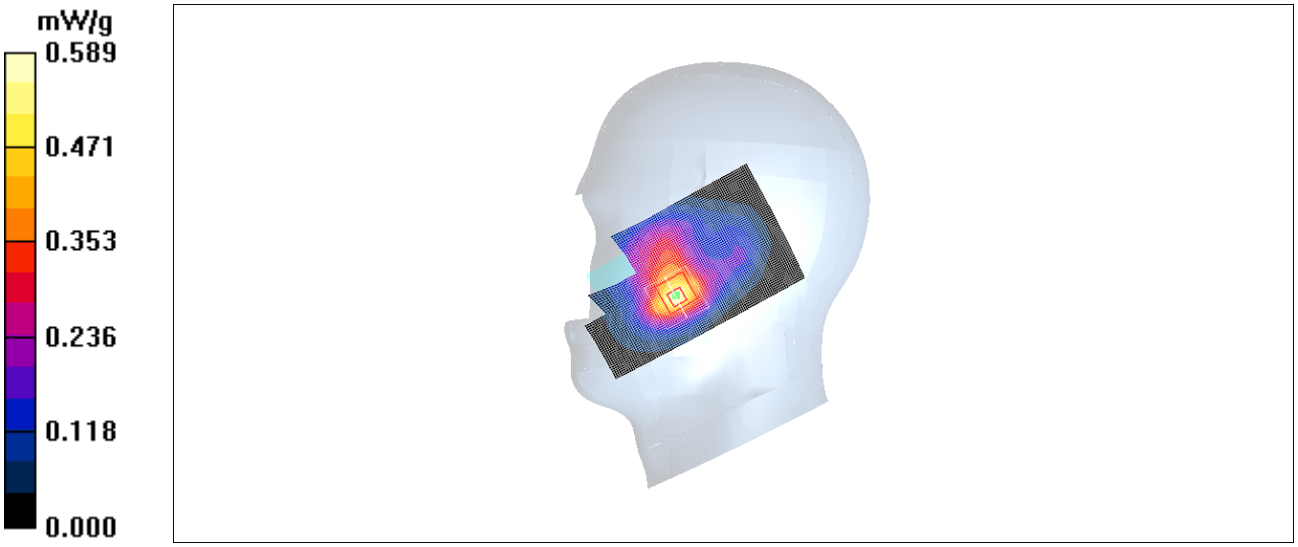


Fig. 15 1900 MHz CH810

1900 Right Cheek Low

Date/Time: 2011-4-10 10:29:23
Electronics: DAE4 Sn771
Medium: Head 1900 MHz
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.36 mho/m; εr = 39.5; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 1900MHz Frequency: 1850.2 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Low/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.540 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.96 V/m; Power Drift = -0.064 dB
Peak SAR (extrapolated) = 0.708 W/kg
SAR(1 g) = 0.476 mW/g; SAR(10 g) = 0.300 mW/g
Maximum value of SAR (measured) = 0.523 mW/g

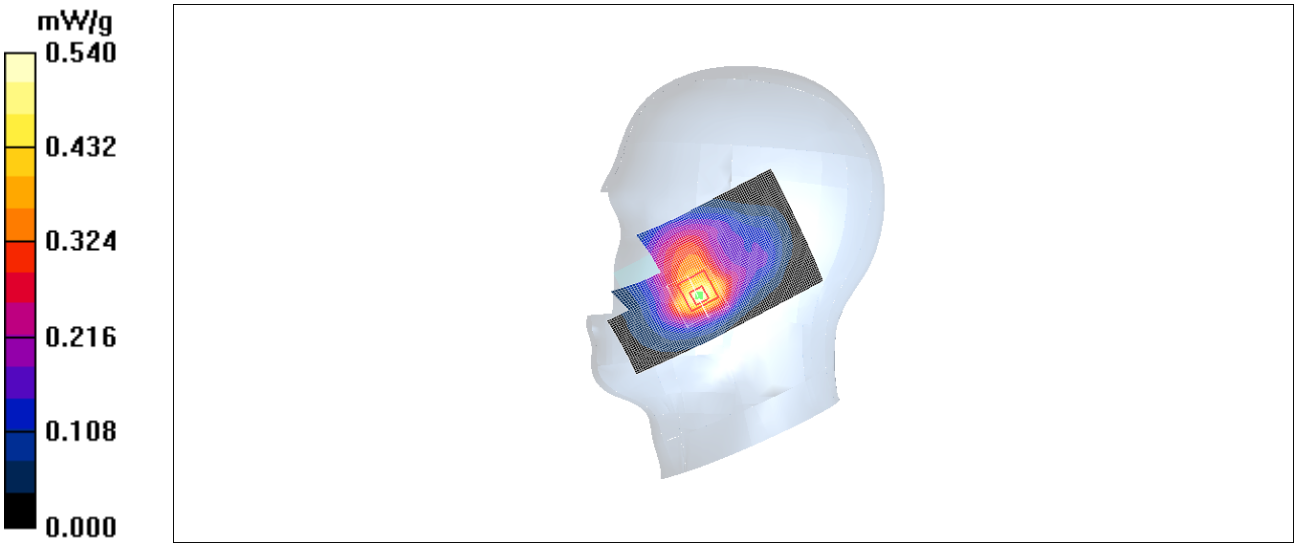


Fig. 16 1900 MHz CH512

WCDMA 850 Left Cheek Middle

Date/Time: 2011-4-9 10:27:21
Electronics: DAE4 Sn771
Medium: Head 850
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.90 mho/m; εr = 41.9; ρ = 1000 kg/m^3
Ambient Temperature:23°C Liquid Temperature: 22.5^{o}C
Communication System: WCDMA 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Cheek Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.554 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.97 V/m; Power Drift = 0.017 dB
Peak SAR (extrapolated) = 0.674 W/kg
SAR(1 g) = 0.532 mW/g; SAR(10 g) = 0.396 mW/g
Maximum value of SAR (measured) = 0.558 mW/g

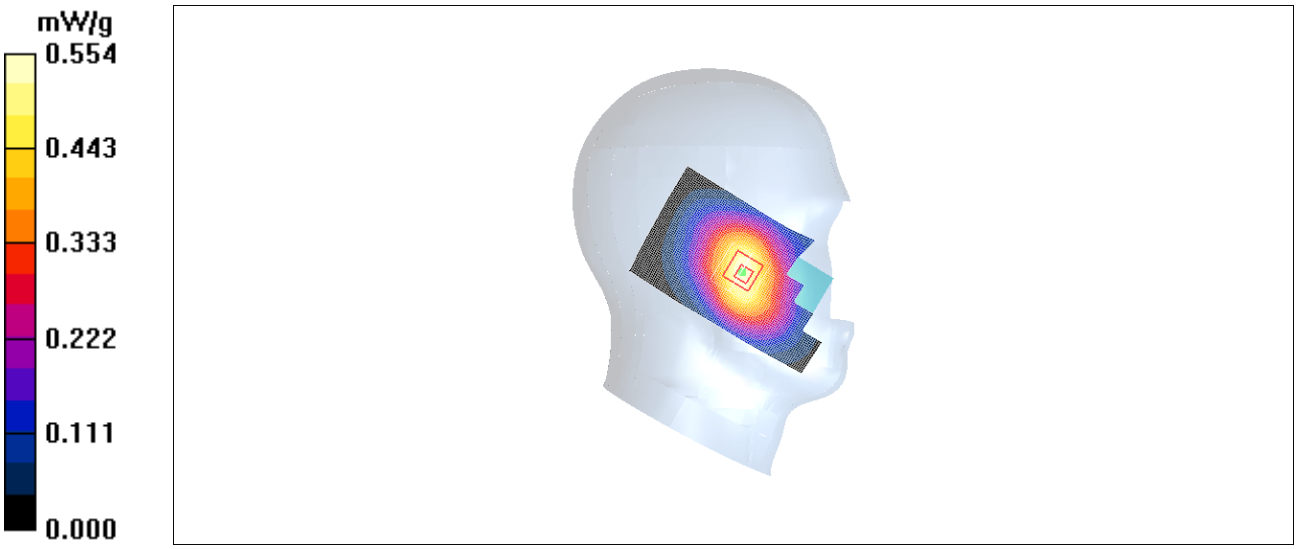


Fig. 17 850 MHz CH4182

WCDMA 850 Left Tilt Middle

Date/Time: 2011-4-9 10:44:18
Electronics: DAE4 Sn771
Medium: Head 850
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.90 mho/m; εr = 41.9; ρ = 1000 kg/m^3
Ambient Temperature:23°C Liquid Temperature: 22.5^{o}C
Communication System: WCDMA 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Tilt Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.431 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.0 V/m; Power Drift = -0.023 dB
Peak SAR (extrapolated) = 0.522 W/kg
SAR(1 g) = 0.417 mW/g; SAR(10 g) = 0.314 mW/g
Maximum value of SAR (measured) = 0.439 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.0 V/m; Power Drift = -0.023 dB
Peak SAR (extrapolated) = 0.418 W/kg
SAR(1 g) = 0.312 mW/g; SAR(10 g) = 0.209 mW/g
Maximum value of SAR (measured) = 0.360 mW/g

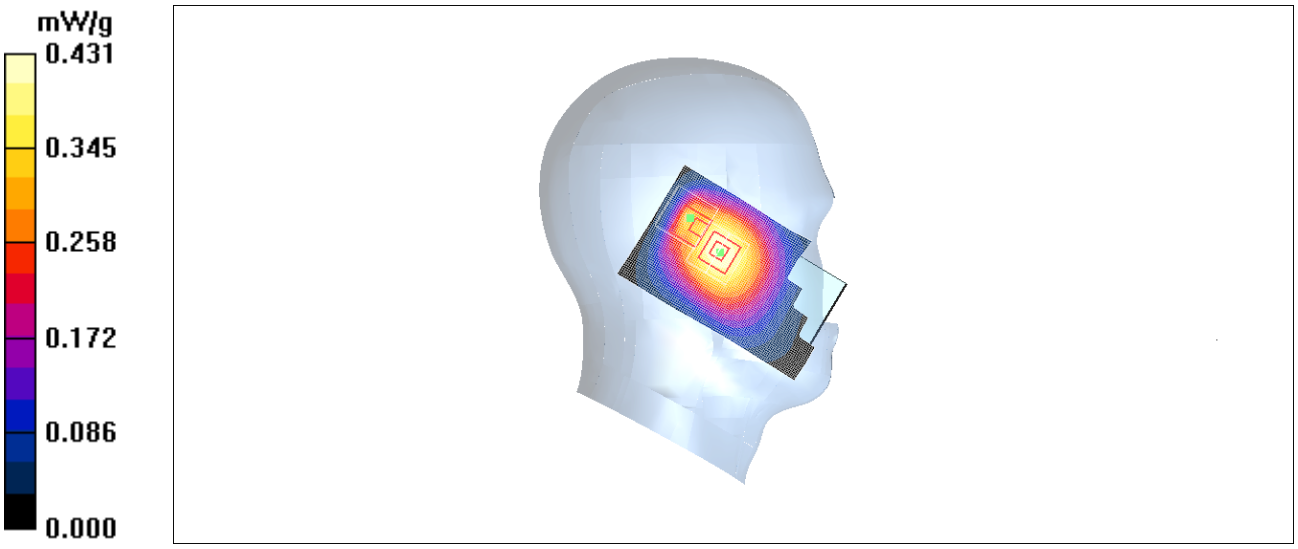


Fig.18 850 MHz CH4182

WCDMA 850 Left Cheek High

Date/Time: 2011-4-9 11:01:34
Electronics: DAE4 Sn771
Medium: Head 850 MHz
Medium parameters used (interpolated): f = 846.6 MHz; σ = 0.901 mho/m; εr = 41.8; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: WCDMA 850 Frequency: 846.6 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Cheek High/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.520 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.57 V/m; Power Drift = -0.036 dB
Peak SAR (extrapolated) = 0.627 W/kg
SAR(1 g) = 0.492 mW/g; SAR(10 g) = 0.365 mW/g
Maximum value of SAR (measured) = 0.522 mW/g

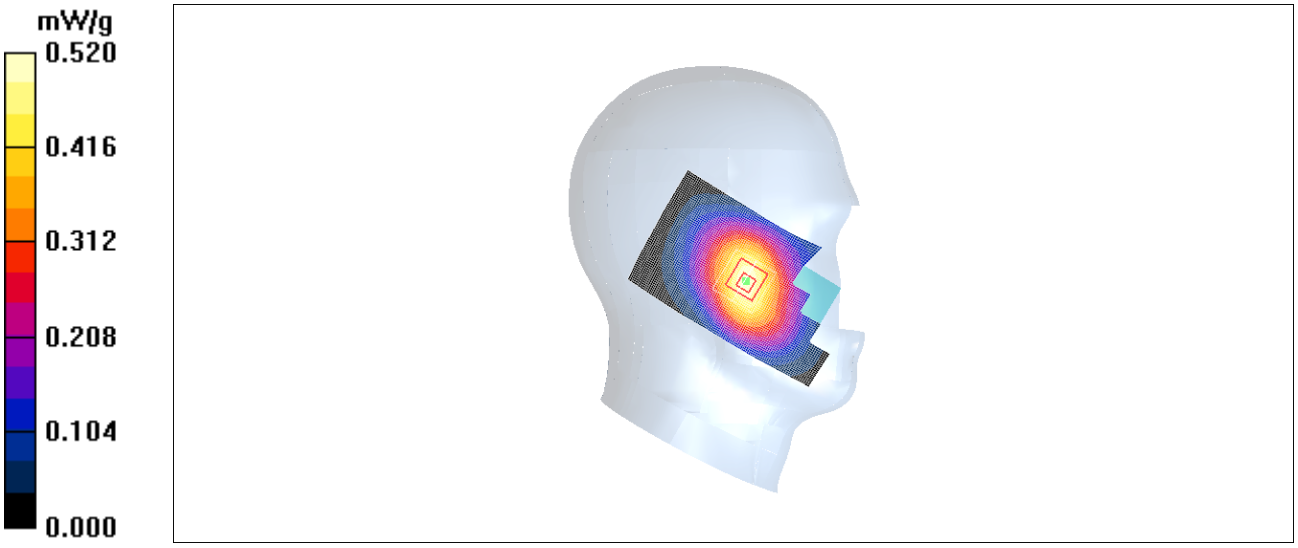


Fig. 19 850MHz CH4233

WCDMA 850 Left Cheek Low

Date/Time: 2011-4-9 11:18:08
Electronics: DAE4 Sn771
Medium: Head 850
Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.88 mho/m; εr = 42.1; ρ = 1000 kg/m^3
Ambient Temperature:23°C Liquid Temperature: 22.5^{o}C
Communication System: WCDMA 850 Frequency: 826.4 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Cheek Low/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.457 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.15 V/m; Power Drift = -0.120 dB
Peak SAR (extrapolated) = 0.564 W/kg
SAR(1 g) = 0.442 mW/g; SAR(10 g) = 0.328 mW/g
Maximum value of SAR (measured) = 0.470 mW/g

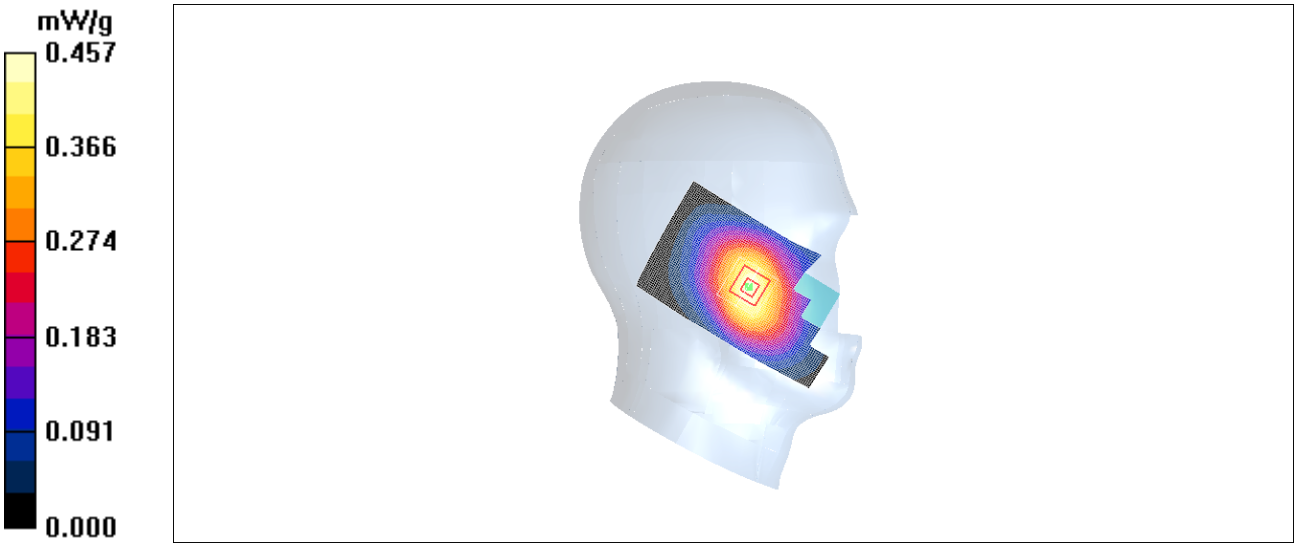


Fig. 20 850 MHz CH4132

WCDMA 850 Right Cheek Middle

Date/Time: 2011-4-9 11:36:21
Electronics: DAE4 Sn771
Medium: Head 900
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.90 mho/m; εr = 41.9; ρ = 1000 kg/m^3
Ambient Temperature:23.0 ^{o}C Liquid Temperature: 22.5^{o}C
Communication System: WCDMA 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Cheek Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.702 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.5 V/m; Power Drift = -0.190 dB
Peak SAR (extrapolated) = 0.820 W/kg
SAR(1 g) = 0.644 mW/g; SAR(10 g) = 0.484 mW/g
Maximum value of SAR (measured) = 0.674 mW/g

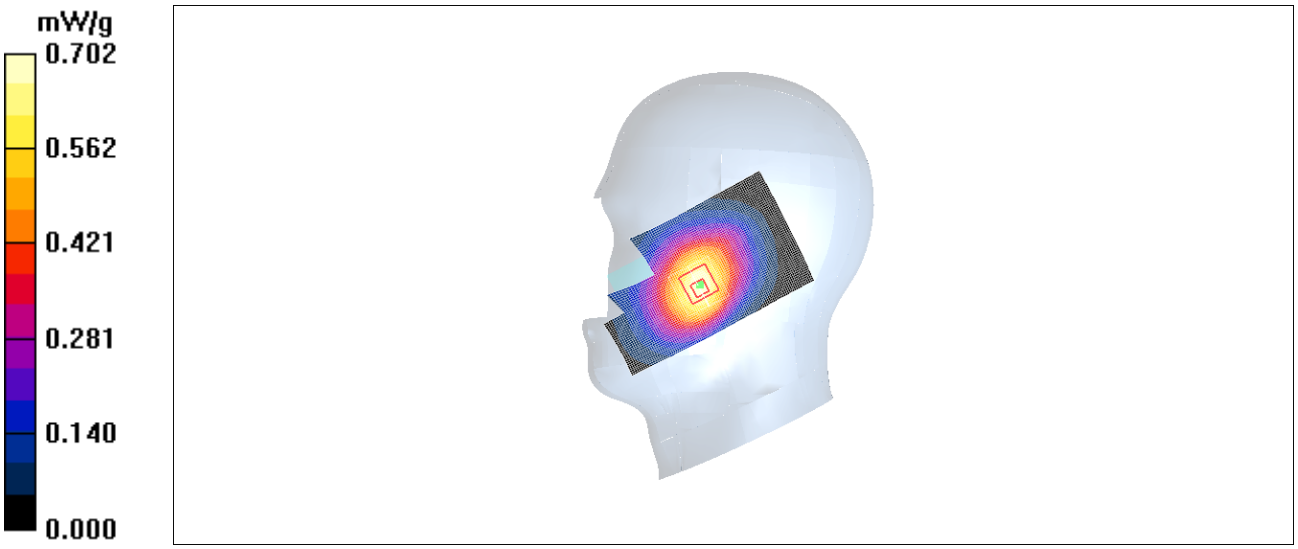


Fig. 21 850 MHz CH4182

WCDMA 850 Right Tilt Middle

Date/Time: 2011-4-9 11:52:35
Electronics: DAE4 Sn771
Medium: Head 900
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.90 mho/m; εr = 41.9; ρ = 1000 kg/m^3
Ambient Temperature:23.0 ^{o}C Liquid Temperature: 22.5^{o}C
Communication System: WCDMA 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Tilt Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.500 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.7 V/m; Power Drift = -0.050 dB
Peak SAR (extrapolated) = 0.598 W/kg
SAR(1 g) = 0.484 mW/g; SAR(10 g) = 0.366 mW/g
Maximum value of SAR (measured) = 0.508 mW/g

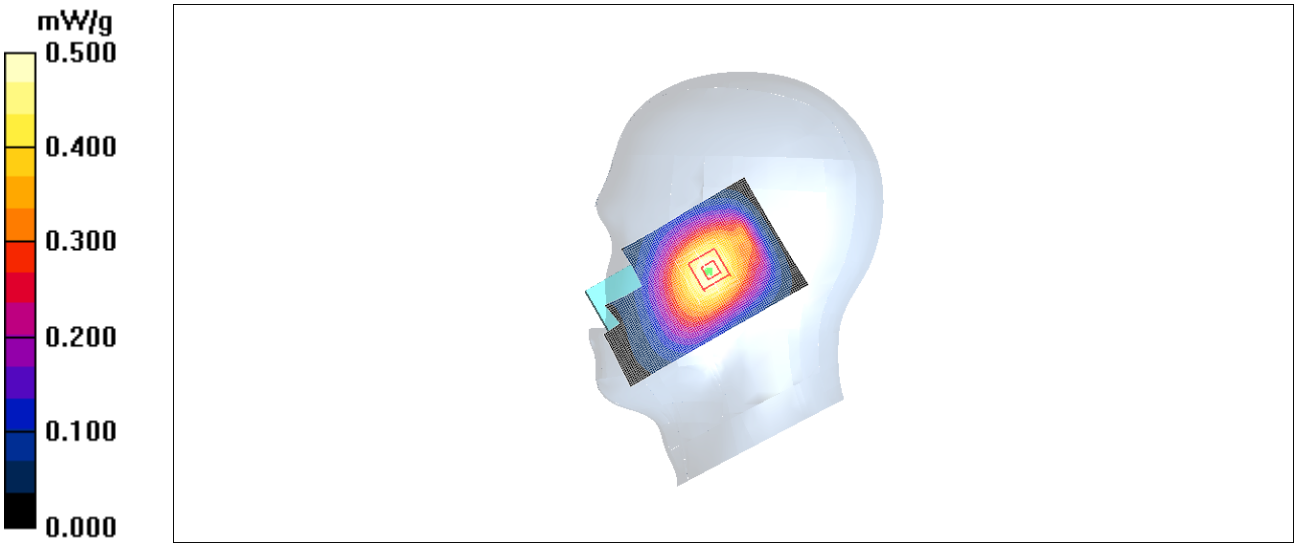


Fig.22 850 MHz CH4182

WCDMA 850 Right Cheek High

Date/Time: 2011-4-9 12:09:41
Electronics: DAE4 Sn771
Medium: Head 900
Medium parameters used (interpolated): f = 846.6 MHz; σ = 0.901 mho/m; εr = 41.8; ρ = 1000 kg/m^3
Ambient Temperature:23.0 ^{o}C Liquid Temperature: 22.5^{o}C
Communication System: WCDMA 850 Frequency: 846.6 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Cheek High/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.705 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.4 V/m; Power Drift = -0.124 dB
Peak SAR (extrapolated) = 0.833 W/kg
SAR(1 g) = 0.659 mW/g; SAR(10 g) = 0.490 mW/g
Maximum value of SAR (measured) = 0.692 mW/g

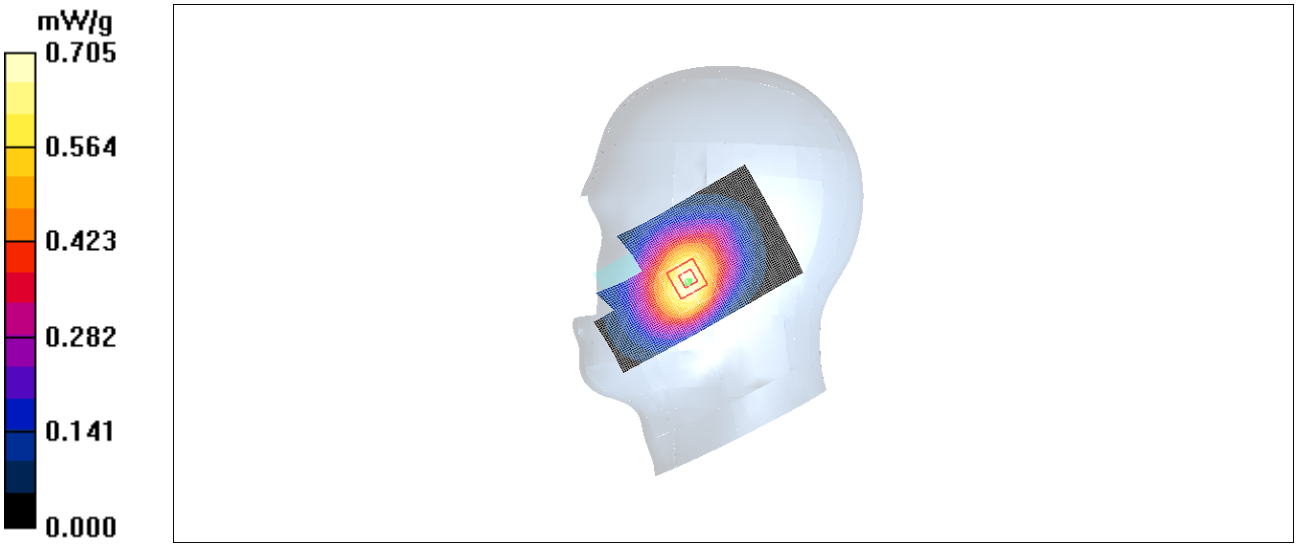


Fig. 23 850 MHz CH4233

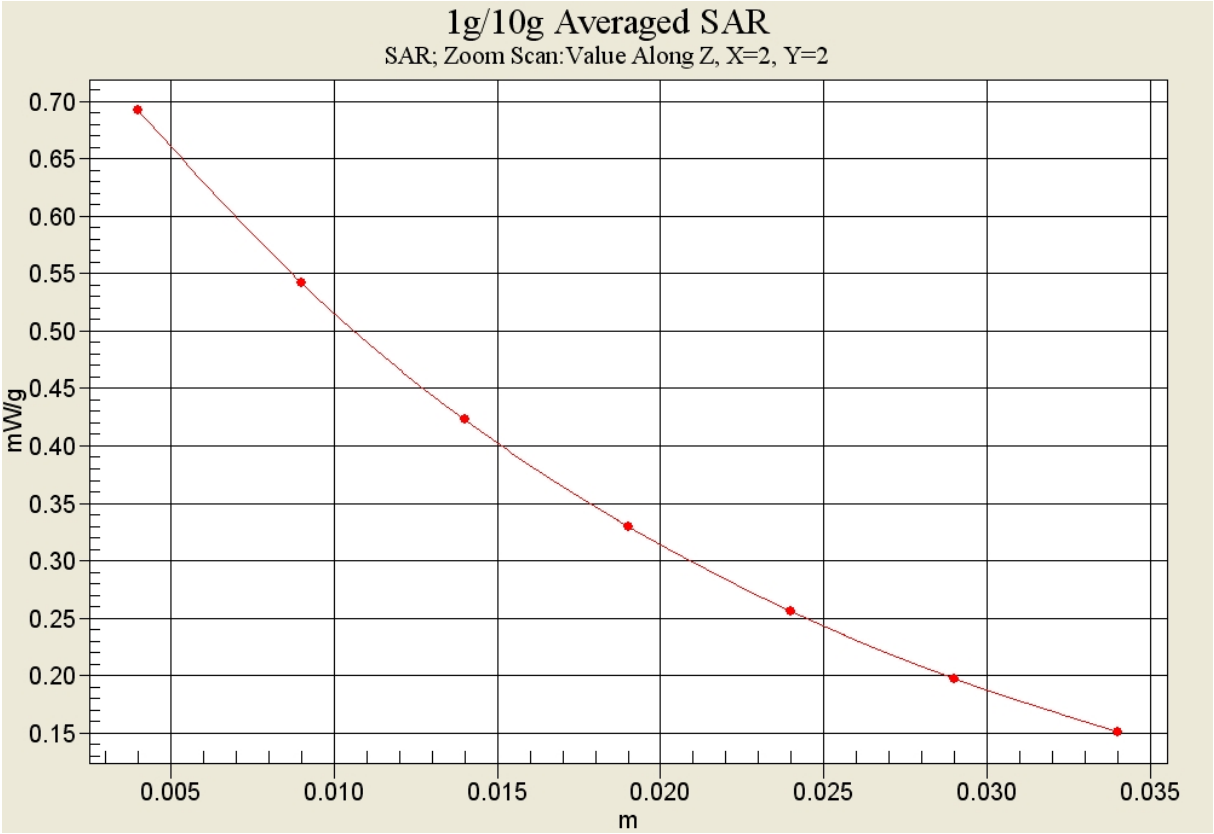


Fig. 23-1 Z-Scan at power reference point (850 MHz CH4233)

WCDMA 850 Right Cheek Low

Date/Time: 2011-4-9 12:26:26
Electronics: DAE4 Sn771
Medium: Head 900
Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.88 mho/m; εr = 42.1; ρ = 1000 kg/m^3
Ambient Temperature:23.0 ^{o}C Liquid Temperature: 22.5^{o}C
Communication System: WCDMA 850 Frequency: 826.4 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Cheek Low/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.561 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.10 V/m; Power Drift = 0.066 dB
Peak SAR (extrapolated) = 0.672 W/kg
SAR(1 g) = 0.532 mW/g; SAR(10 g) = 0.401 mW/g
Maximum value of SAR (measured) = 0.557 mW/g

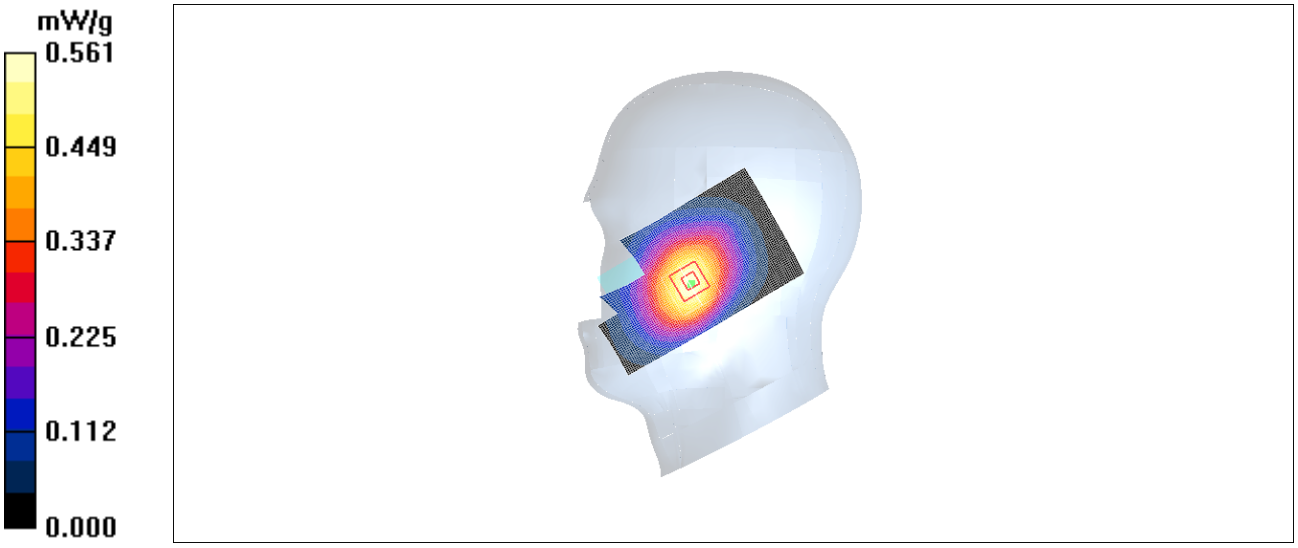


Fig. 24 850 MHz CH4132

850 Body Towards Phantom Middle with GPRS

Date/Time: 2011-4-27 8:12:15
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.95 mho/m; εr = 54.8; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 850 GPRS Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Phantom Middle 10mm/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.985 mW/g

Toward Phantom Middle 10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 32.0 V/m; Power Drift = -0.174 dB
Peak SAR (extrapolated) = 1.10 W/kg
SAR(1 g) = 0.881 mW/g; SAR(10 g) = 0.668 mW/g
Maximum value of SAR (measured) = 0.923 mW/g

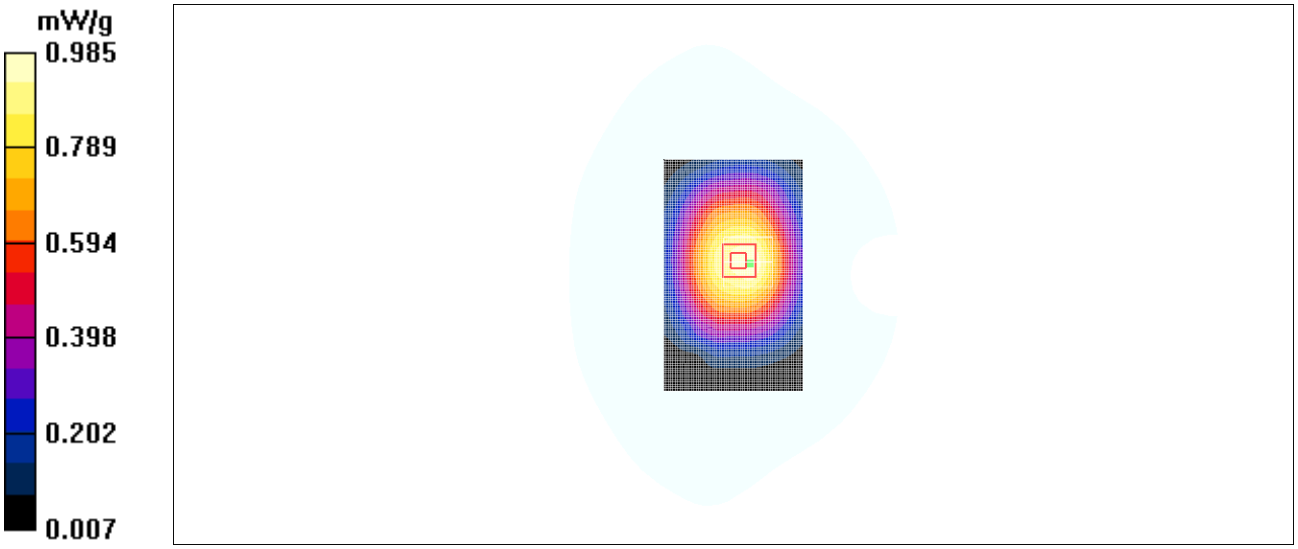


Fig. 25 850 MHz CH190

850 Body Towards Ground High with GPRS

Date/Time: 2011-4-27 8:29:43
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.94 mho/m; εr = 54.5; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 850 GPRS Frequency: 848.8 MHz Duty Cycle: 1:2
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground High 10mm/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.03 mW/g

Toward Ground High 10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 31.0 V/m; Power Drift = -0.072 dB
Peak SAR (extrapolated) = 1.22 W/kg
SAR(1 g) = 0.978 mW/g; SAR(10 g) = 0.727 mW/g
Maximum value of SAR (measured) = 1.01 mW/g

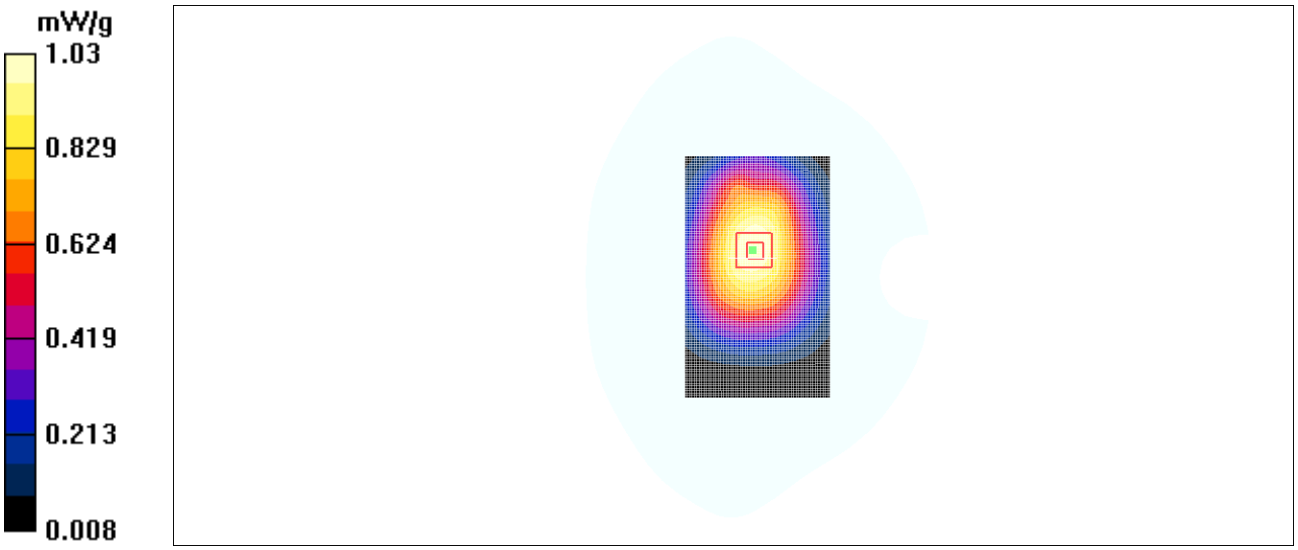


Fig. 26 850 MHz CH251

850 Body Towards Ground Middle with GPRS

Date/Time: 2011-4-27 8:47:03
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.95 mho/m; εr = 54.8; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 850 GPRS Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Middle 10mm/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.03 mW/g

Toward Ground Middle 10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 32.4 V/m; Power Drift = -0.101 dB
Peak SAR (extrapolated) = 1.26 W/kg
SAR(1 g) = 1 mW/g; SAR(10 g) = 0.748 mW/g
Maximum value of SAR (measured) = 1.05 mW/g

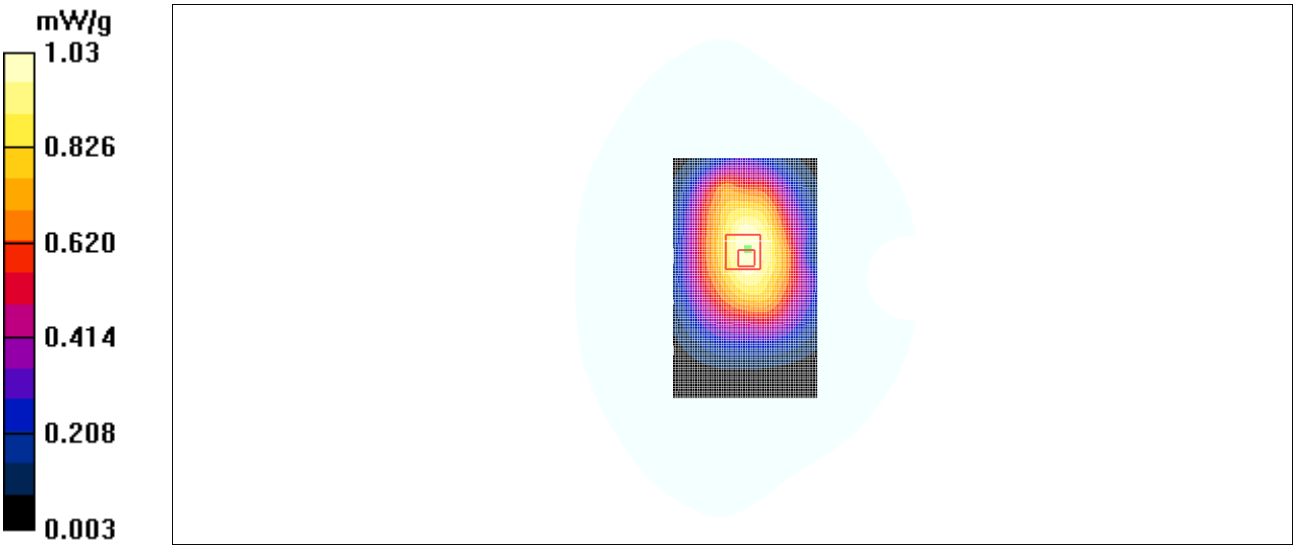


Fig. 27 850 MHz CH190

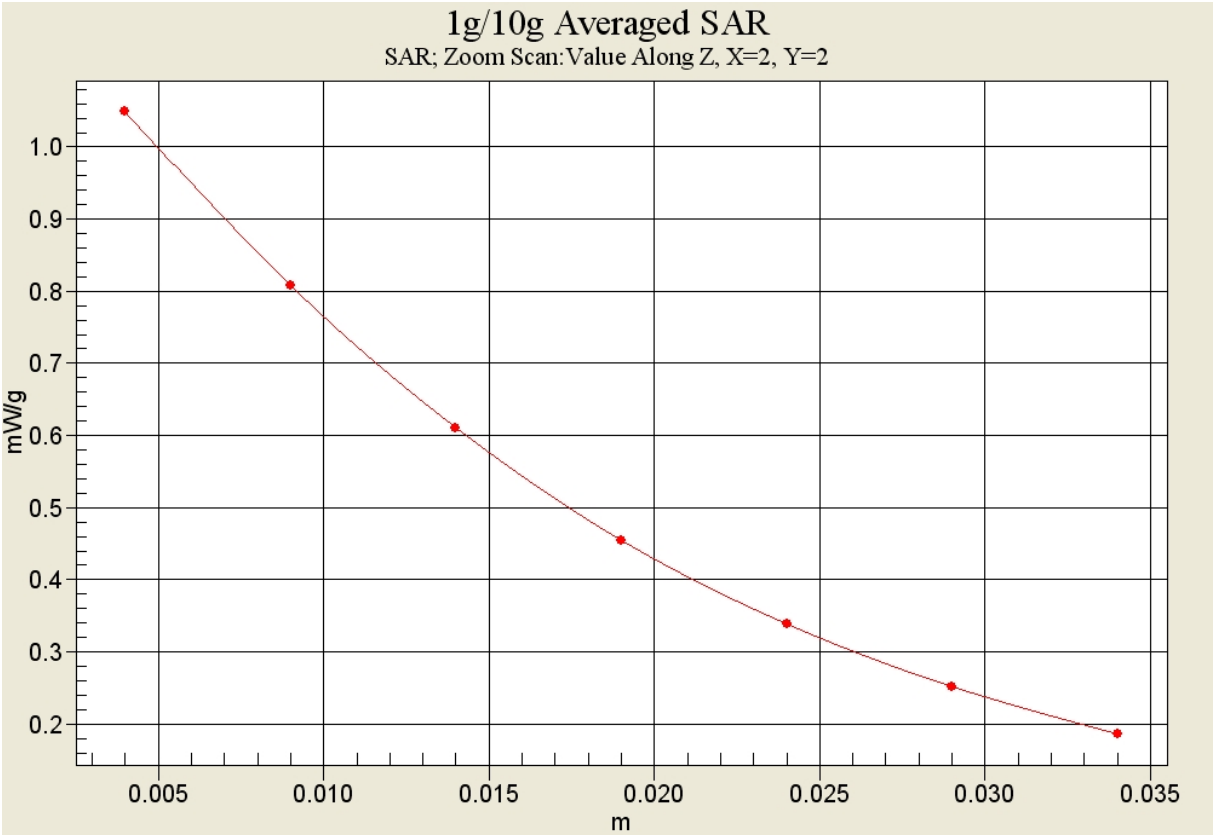


Fig. 27-1 Z-Scan at power reference point (850 MHz CH190)

850 Body Towards Ground Low with GPRS

Date/Time: 2011-4-27 9:05:51
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used: f = 825 MHz; σ = 0.93 mho/m; εr = 55.8; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 850 GPRS Frequency: 824.2 MHz Duty Cycle: 1:2
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Low 10mm/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.929 mW/g

Toward Ground Low 10mm/Zoom Scan (4x4x7)/Cube 0: Measurement grid: dx=10mm, dy=10mm, dz=5mm
Reference Value = 29.1 V/m; Power Drift = 0.104 dB
Peak SAR (extrapolated) = 1.07 W/kg
SAR(1 g) = 0.858 mW/g; SAR(10 g) = 0.645 mW/g
Maximum value of SAR (measured) = 0.887 mW/g

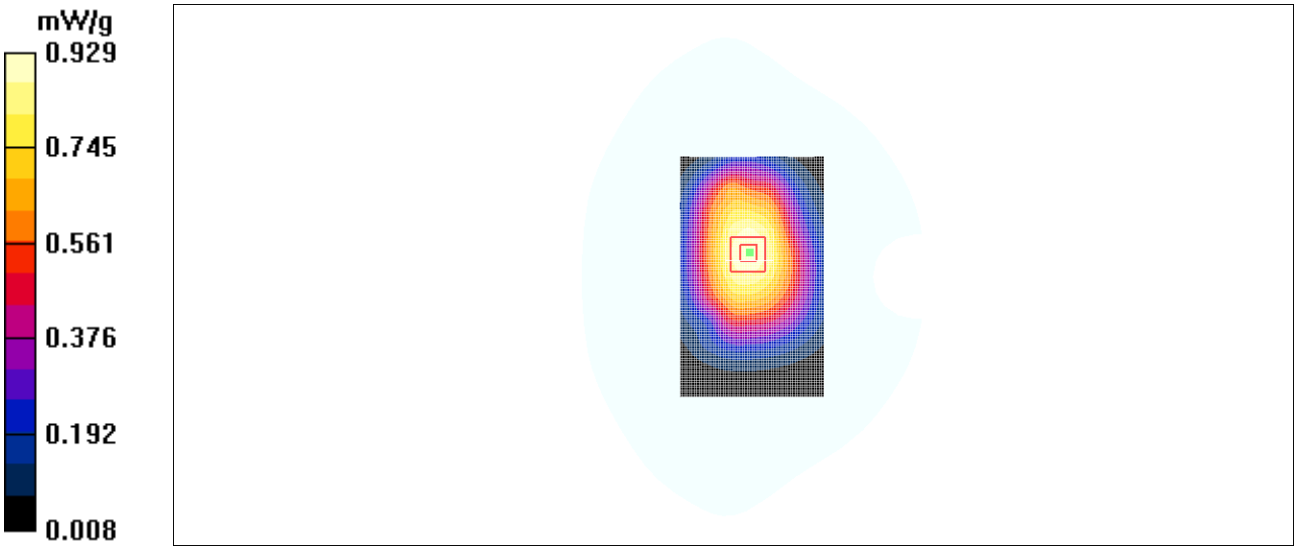


Fig. 28 850 MHz CH128

850 Body Towards Ground Middle with EGPRS

Date/Time: 2011-4-27 9:25:21
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.94 mho/m; εr = 54.5; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 850 GPRS Frequency: 848.8 MHz Duty Cycle: 1:2
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Middle 10mm EGPRS/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.09 mW/g

Toward Ground Middle 10mm EGPRS/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 31.5 V/m; Power Drift = -0.166 dB
Peak SAR (extrapolated) = 1.25 W/kg
SAR(1 g) = 0.959 mW/g; SAR(10 g) = 0.719 mW/g
Maximum value of SAR (measured) = 1.02 mW/g

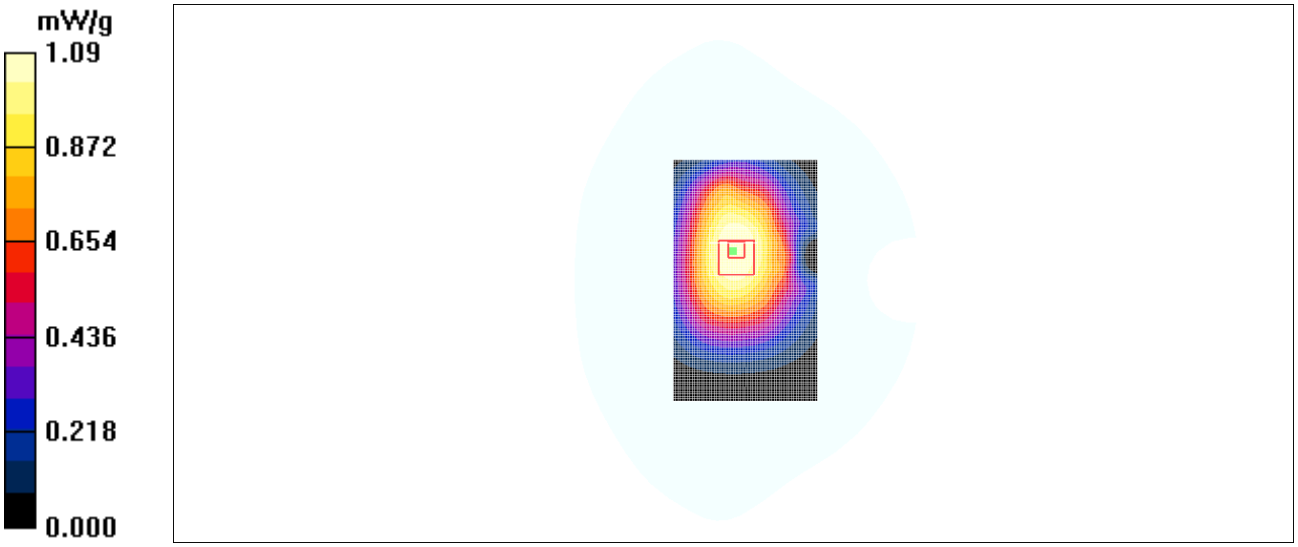


Fig. 29 850 MHz CH190

850 Body Towards Ground Middle with Bluetooth

Date/Time: 2011-4-27 9:44:59
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.94 mho/m; εr = 54.5; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 850 Frequency: 848.8 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Middle 10mm/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.806 mW/g

Toward Ground Middle 10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 27.7 V/m; Power Drift = -0.005 dB
Peak SAR (extrapolated) = 0.965 W/kg
SAR(1 g) = 0.758 mW/g; SAR(10 g) = 0.564 mW/g
Maximum value of SAR (measured) = 0.795 mW/g

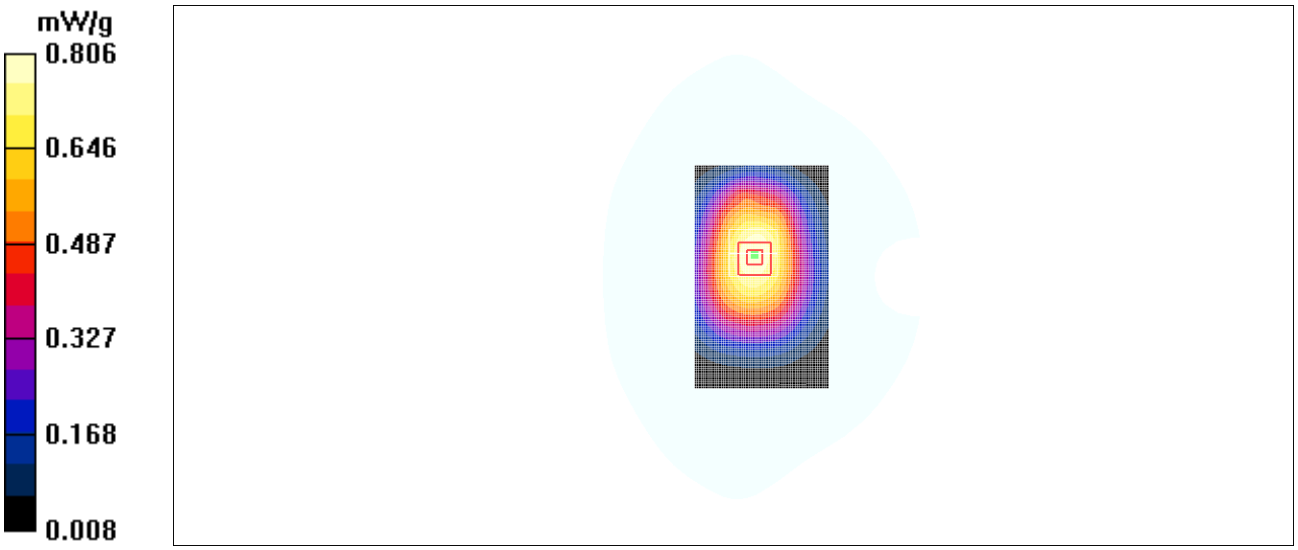


Fig. 30 850 MHz CH190

850 Body Towards Ground Middle with Headset

Date/Time: 2011-4-27 10:05:41
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.94 mho/m; εr = 54.5; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 850 Frequency: 848.8 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Middle 10mm/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.697 mW/g

Toward Ground Middle 10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.1 V/m; Power Drift = 0.174 dB
Peak SAR (extrapolated) = 0.871 W/kg
SAR(1 g) = 0.667 mW/g; SAR(10 g) = 0.487 mW/g
Maximum value of SAR (measured) = 0.707 mW/g

Toward Ground Middle 10mm/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.1 V/m; Power Drift = 0.174 dB
Peak SAR (extrapolated) = 0.894 W/kg
SAR(1 g) = 0.587 mW/g; SAR(10 g) = 0.368 mW/g
Maximum value of SAR (measured) = 0.668 mW/g

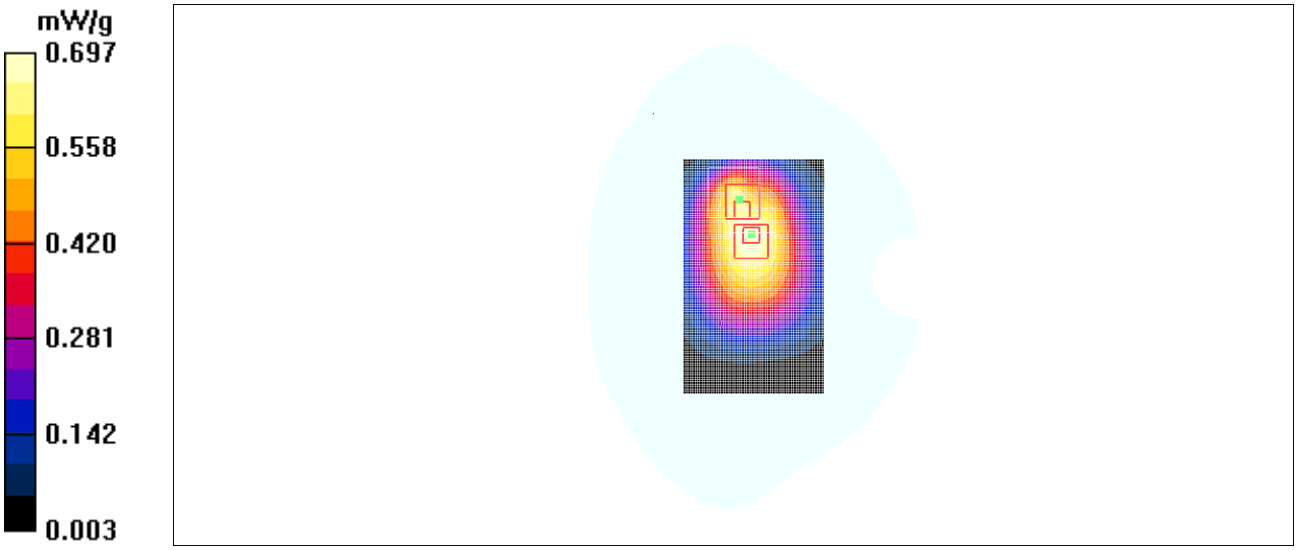


Fig. 31 850 MHz CH190

850 Body Left Side Middle

Date/Time: 2011-4-27 10:24:42
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.94 mho/m; εr = 54.5; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 850 Frequency: 848.8 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Body Left Side/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.04 mW/g

Body Left Side/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 33.4 V/m; Power Drift = -0.159 dB
Peak SAR (extrapolated) = 1.23 W/kg
SAR(1 g) = 0.874 mW/g; SAR(10 g) = 0.598 mW/g
Maximum value of SAR (measured) = 0.935 mW/g

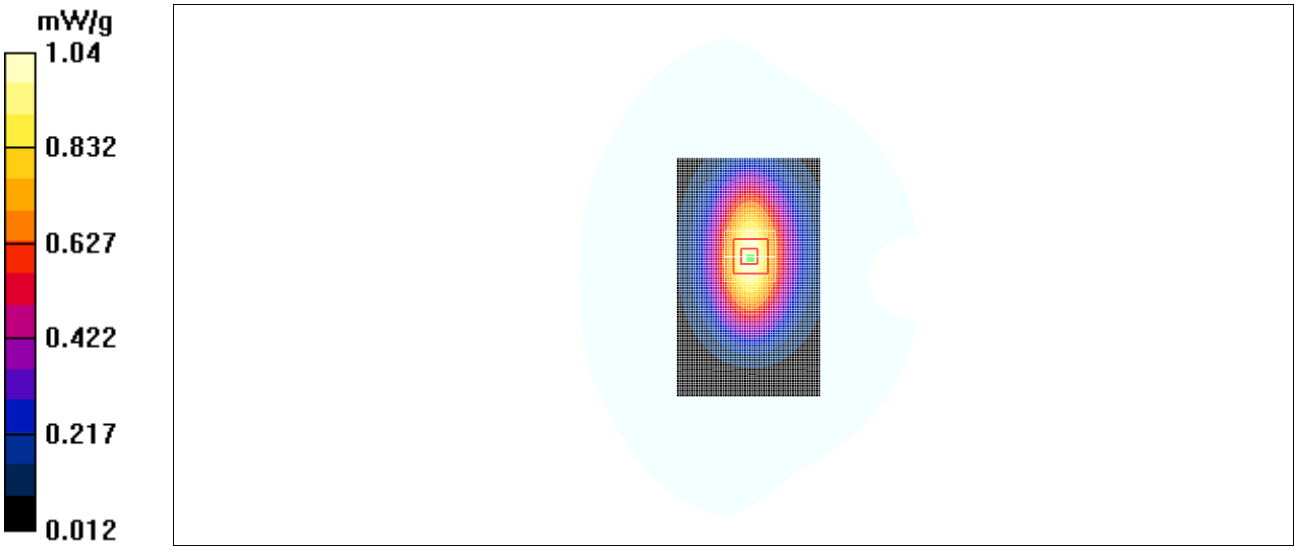


Fig. 32 850 MHz CH190

850 Body Right Side Middle

Date/Time: 2011-4-27 10:45:15
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.94 mho/m; εr = 54.5; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 850 Frequency: 848.8 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Body Right Side/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.970 mW/g

Body Right Side/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 27.9 V/m; Power Drift = 0.023 dB
Peak SAR (extrapolated) = 1.16 W/kg
SAR(1 g) = 0.833 mW/g; SAR(10 g) = 0.573 mW/g
Maximum value of SAR (measured) = 0.896 mW/g

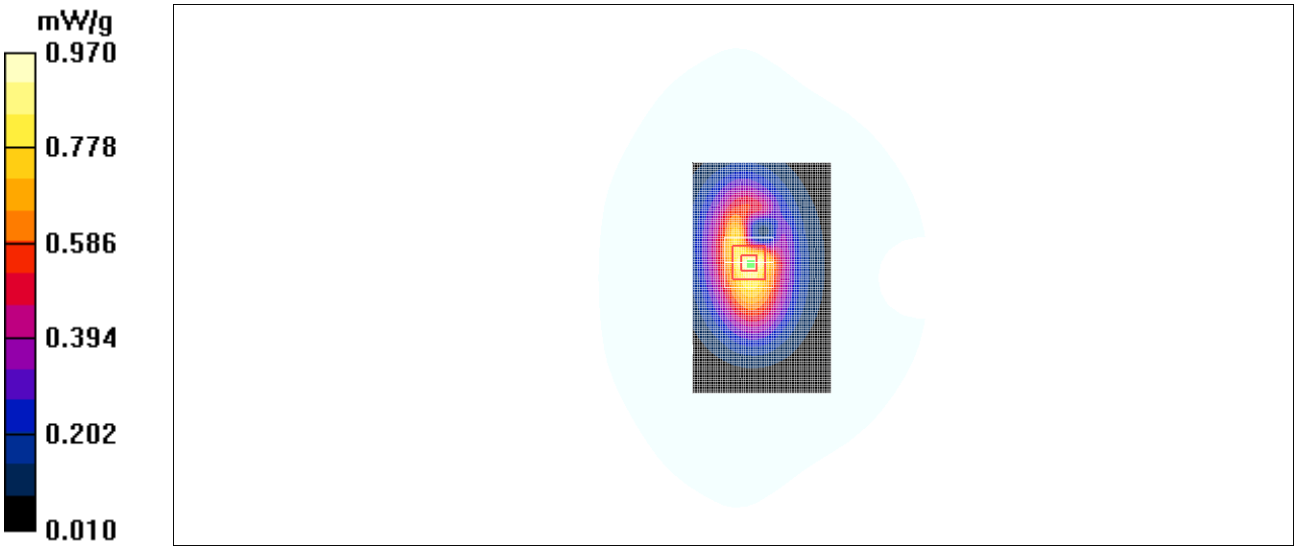


Fig. 33 850 MHz CH190

850 Body Bottom Side Middle

Date/Time: 2011-4-27 11:07:22
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.94 mho/m; εr = 54.5; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 850 Frequency: 848.8 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Body Bottom Side/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.077 mW/g

Body Bottom Side/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.86 V/m; Power Drift = 0.023 dB
Peak SAR (extrapolated) = 0.144 W/kg
SAR(1 g) = 0.073 mW/g; SAR(10 g) = 0.040 mW/g
Maximum value of SAR (measured) = 0.084 mW/g

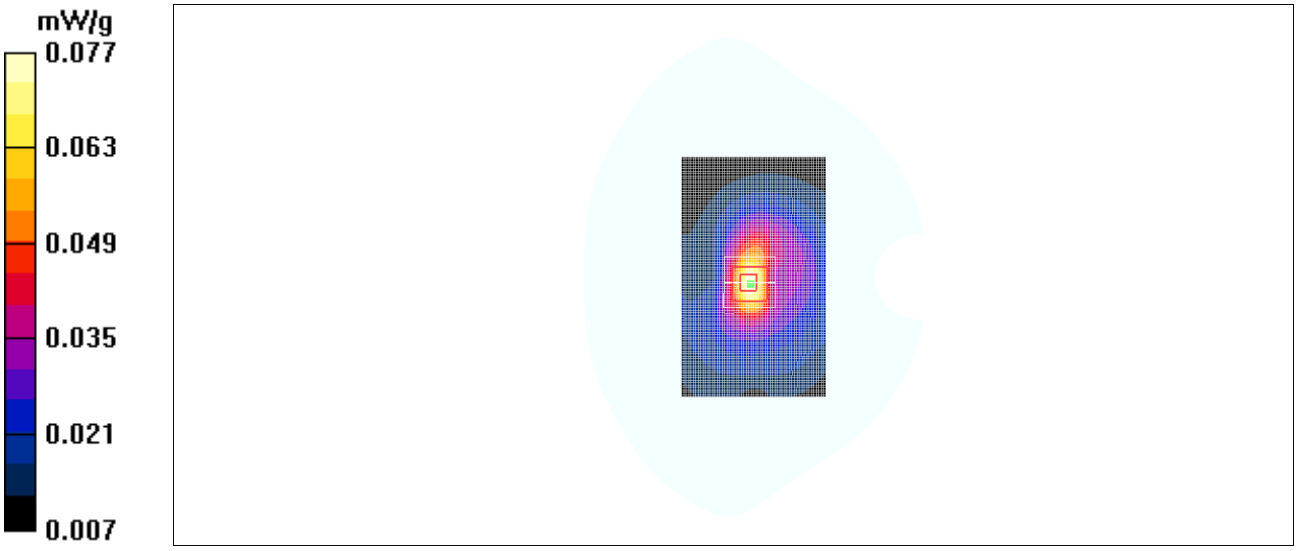


Fig. 34 850 MHz CH190

1900 Body Towards Phantom Middle with GPRS

Date/Time: 2011-4-27 15:53:06
Electronics: DAE4 Sn771
Medium: Body 1900 MHz
Medium parameters used: f = 1880 MHz; σ = 1.50 mho/m; εr = 53.2; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 1900MHz GPRS Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom Middle 10mm/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.11 mW/g

Toward Phantom Middle 10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.0 V/m; Power Drift = -0.173 dB
Peak SAR (extrapolated) = 1.58 W/kg
SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.640 mW/g
Maximum value of SAR (measured) = 1.06 mW/g

Toward Phantom Middle 10mm/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.0 V/m; Power Drift = -0.173 dB
Peak SAR (extrapolated) = 1.08 W/kg
SAR(1 g) = 0.676 mW/g; SAR(10 g) = 0.416 mW/g
Maximum value of SAR (measured) = 0.693 mW/g

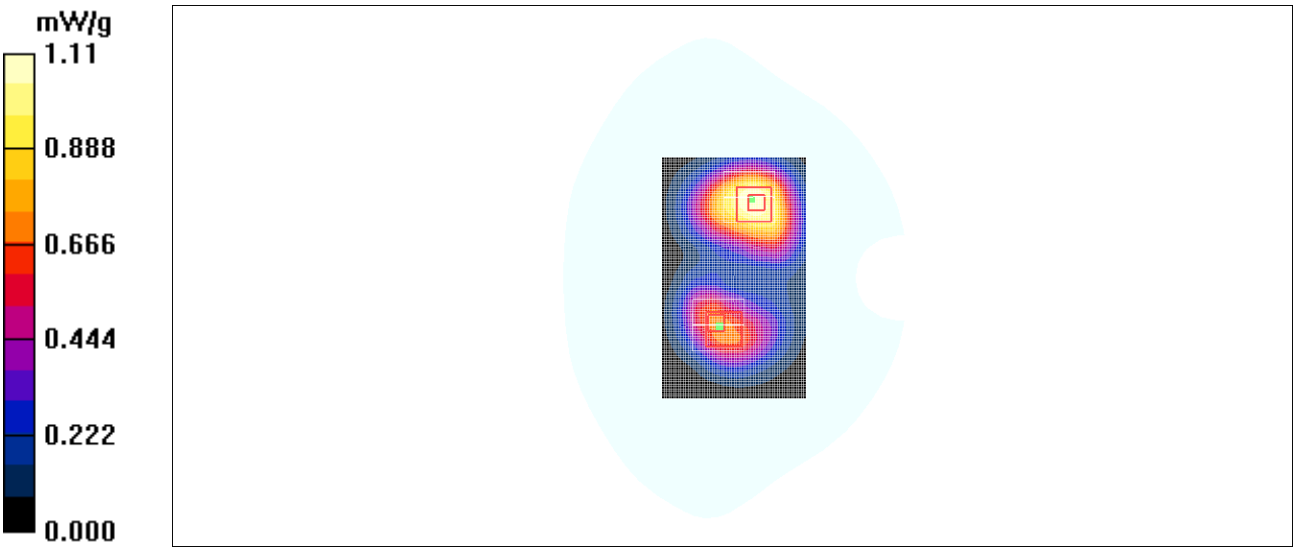


Fig. 35 1900 MHz CH661

1900 Body Towards Ground High with GPRS

Date/Time: 2011-4-27 16:15:34
Electronics: DAE4 Sn771
Medium: Body 1900 MHz
Medium parameters used: f = 1910 MHz; σ = 1.55 mho/m; εr = 52.7; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 1900MHz GPRS Frequency: 1909.8 MHz Duty Cycle: 1:2.67
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground High/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.18 mW/g

Toward Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.90 V/m; Power Drift = -0.027 dB
Peak SAR (extrapolated) = 1.92 W/kg
SAR(1 g) = 1.07 mW/g; SAR(10 g) = 0.625 mW/g
Maximum value of SAR (measured) = 1.18 mW/g

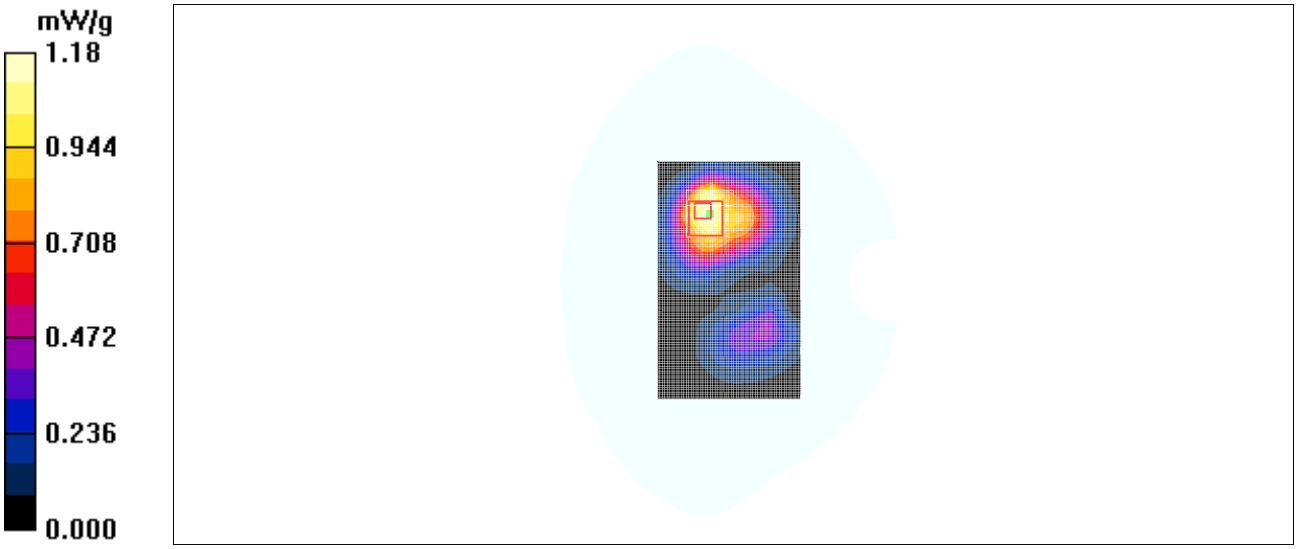


Fig. 36 1900 MHz CH810

1900 Body Towards Ground Middle with GPRS

Date/Time: 2011-4-27 16:33:12
Electronics: DAE4 Sn771
Medium: Body 1900 MHz
Medium parameters used: f = 1880 MHz; σ = 1.50 mho/m; εr = 53.2; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 1900MHz GPRS Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Middle 10mm/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.25 mW/g

Toward Ground Middle 10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.03 V/m; Power Drift = 0.106 dB
Peak SAR (extrapolated) = 2.00 W/kg
SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.677 mW/g
Maximum value of SAR (measured) = 1.24 mW/g

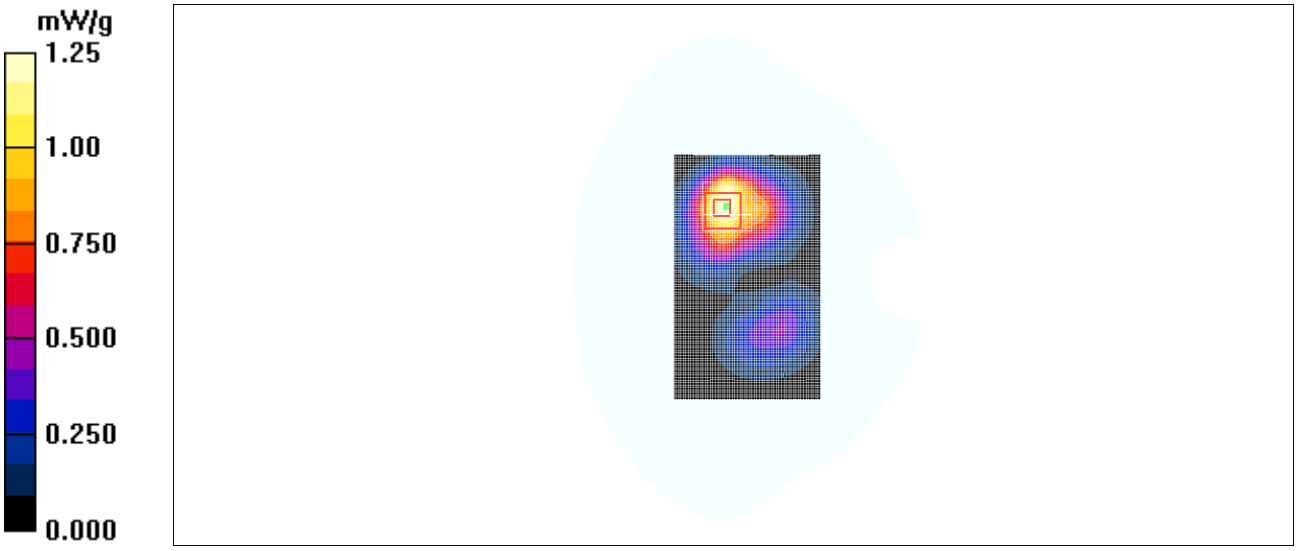


Fig. 37 1900 MHz CH661

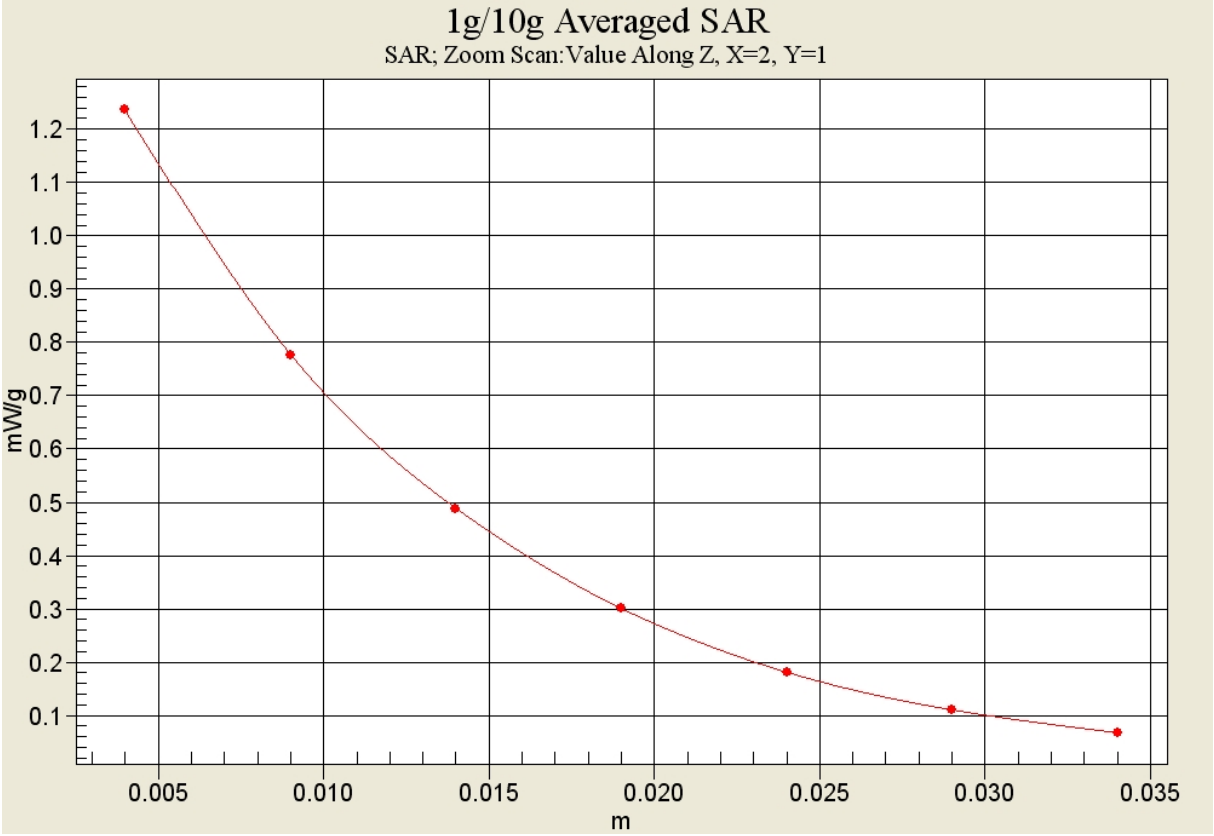


Fig. 37-1 Z-Scan at power reference point (1900 MHz CH661)

1900 Body Towards Ground Low with GPRS

Date/Time: 2011-4-27 16:56:26
Electronics: DAE4 Sn771
Medium: Body 1900 MHz
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.48 mho/m; εr = 53.6; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 1900MHz GPRS Frequency: 1850.2 MHz Duty Cycle: 1:2.67
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Low 10mm/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.15 mW/g

Toward Ground Low 10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.68 V/m; Power Drift = -0.052 dB
Peak SAR (extrapolated) = 1.70 W/kg
SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.587 mW/g
Maximum value of SAR (measured) = 1.10 mW/g

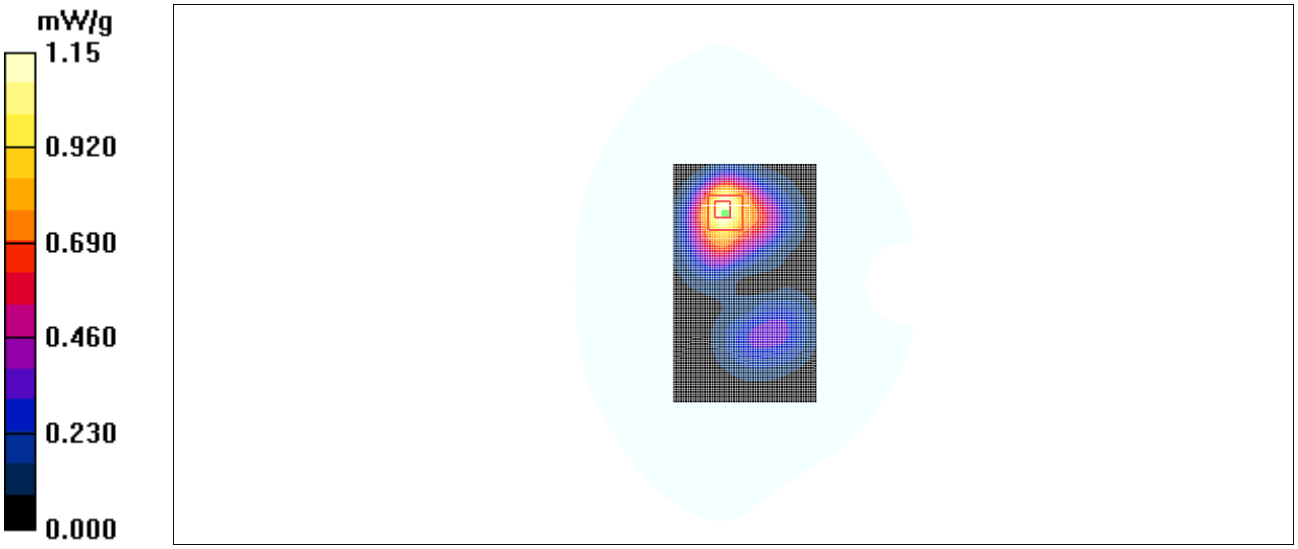


Fig. 38 1900 MHz CH512

1900 Body Towards Ground Middle with EGPRS

Date/Time: 2011-4-27 17:18:51
Electronics: DAE4 Sn771
Medium: Body 1900 MHz
Medium parameters used: f = 1880 MHz; σ = 1.50 mho/m; εr = 53.2; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 1900MHz GPRS Frequency: 1880 MHz Duty Cycle: 1:2
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Middle EGPRS 10mm/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.22 mW/g

Toward Ground Middle EGPRS 10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.99 V/m; Power Drift = -0.002 dB
Peak SAR (extrapolated) = 1.81 W/kg
SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.629 mW/g
Maximum value of SAR (measured) = 1.13 mW/g

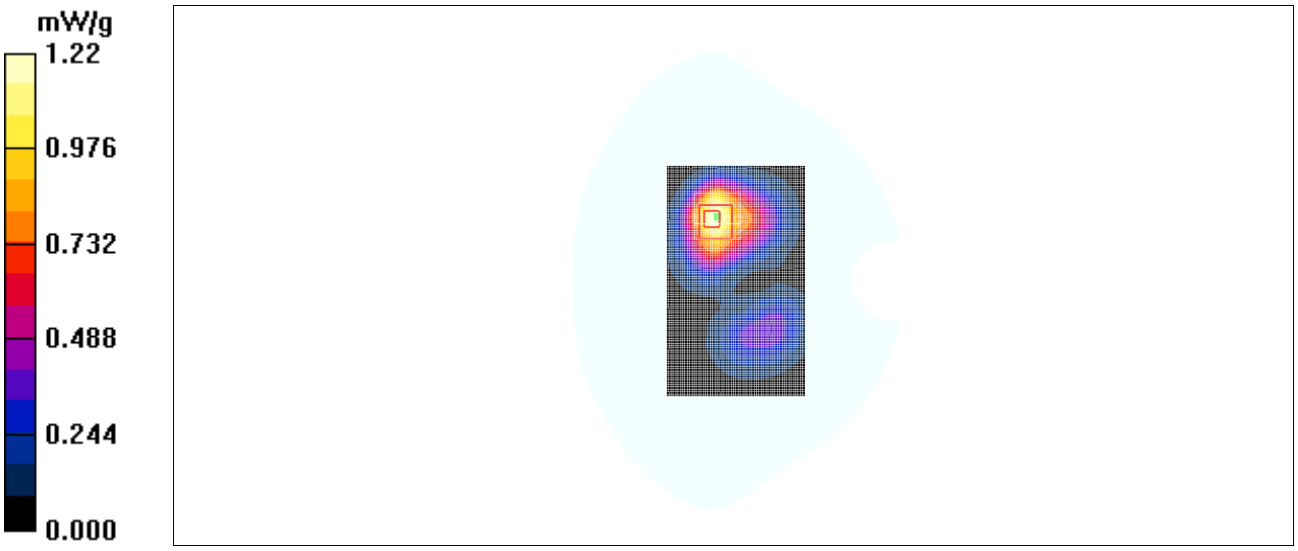


Fig. 39 1900 MHz CH661

1900 Body Towards Ground Middle with Bluetooth

Date/Time: 2011-4-27 17:39:01
Electronics: DAE4 Sn771
Medium: Body 1900 MHz
Medium parameters used: f = 1880 MHz; σ = 1.50 mho/m; εr = 53.2; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 1900MHz Frequency: 1880 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Middle 10mm/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.01 mW/g

Toward Ground Middle 10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.03 V/m; Power Drift = -0.186 dB
Peak SAR (extrapolated) = 1.47 W/kg
SAR(1 g) = 0.859 mW/g; SAR(10 g) = 0.512 mW/g
Maximum value of SAR (measured) = 0.913 mW/g

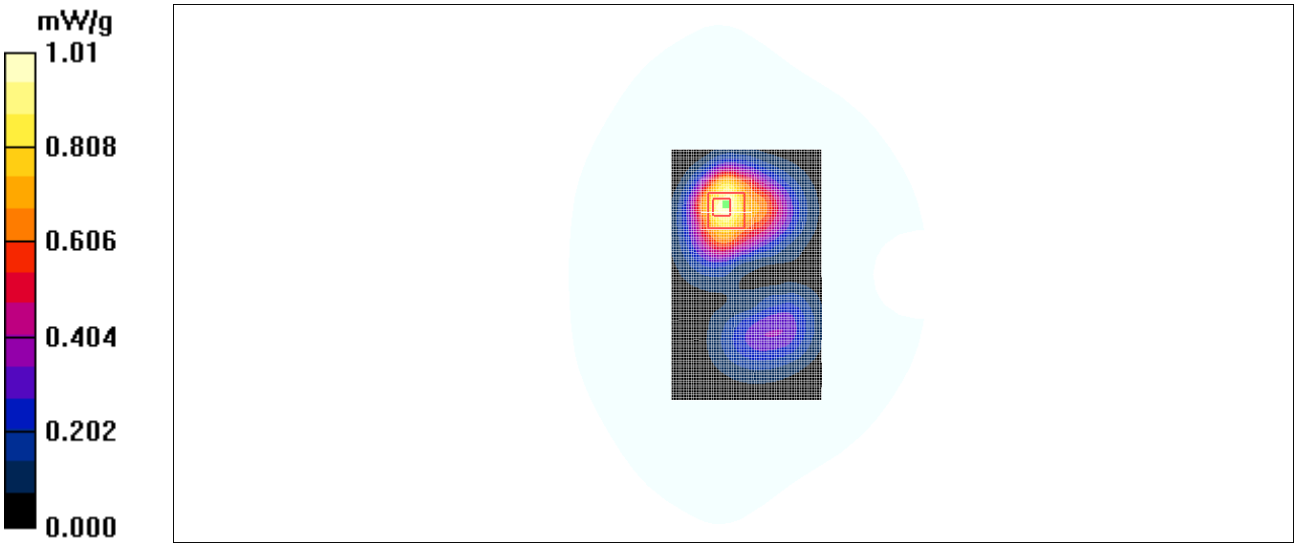


Fig. 40 1900 MHz CH661

1900 Body Towards Ground Middle with Headset

Date/Time: 2011-4-27 17:57:15
Electronics: DAE4 Sn771
Medium: Body 1900 MHz
Medium parameters used: f = 1880 MHz; σ = 1.50 mho/m; εr = 53.2; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 1900MHz Frequency: 1880 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.16 mW/g

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.30 V/m; Power Drift = 0.128 dB
Peak SAR (extrapolated) = 1.81 W/kg
SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.597 mW/g
Maximum value of SAR (measured) = 1.08 mW/g

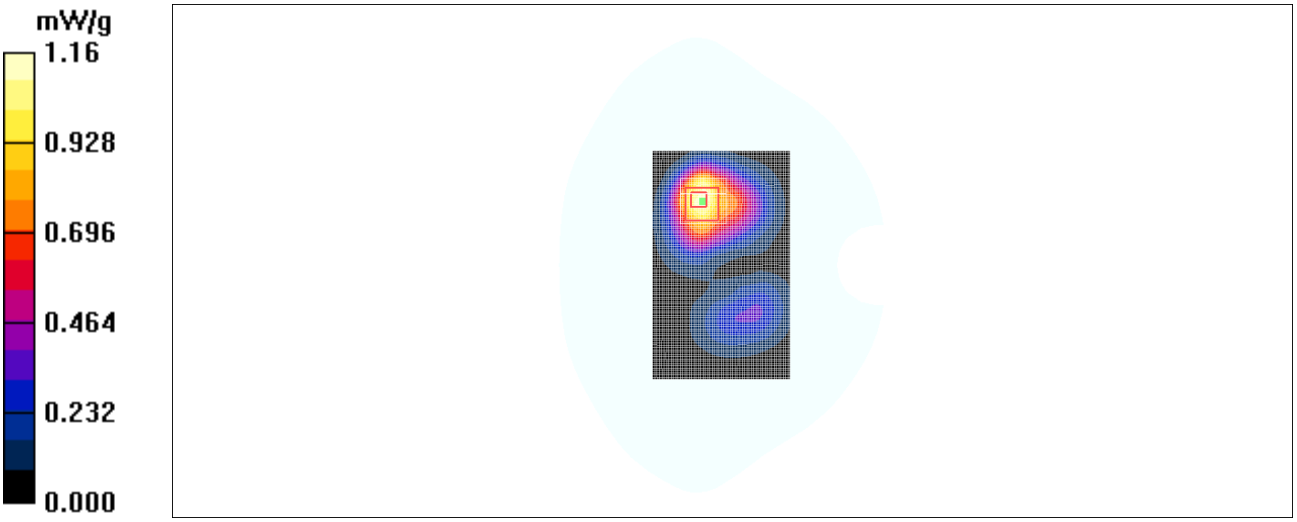


Fig. 41 1900 MHz CH661

1900 Body Left Side Middle

Date/Time: 2011-4-27 18:18:42
Electronics: DAE4 Sn771
Medium: Body 1900 MHz
Medium parameters used: f = 1880 MHz; σ = 1.50 mho/m; εr = 53.2; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 1900MHz Frequency: 1880 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Body Left Side/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.497 mW/g

Body Left Side/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.3 V/m; Power Drift = -0.073 dB
Peak SAR (extrapolated) = 0.711 W/kg
SAR(1 g) = 0.431 mW/g; SAR(10 g) = 0.252 mW/g
Maximum value of SAR (measured) = 0.473 mW/g

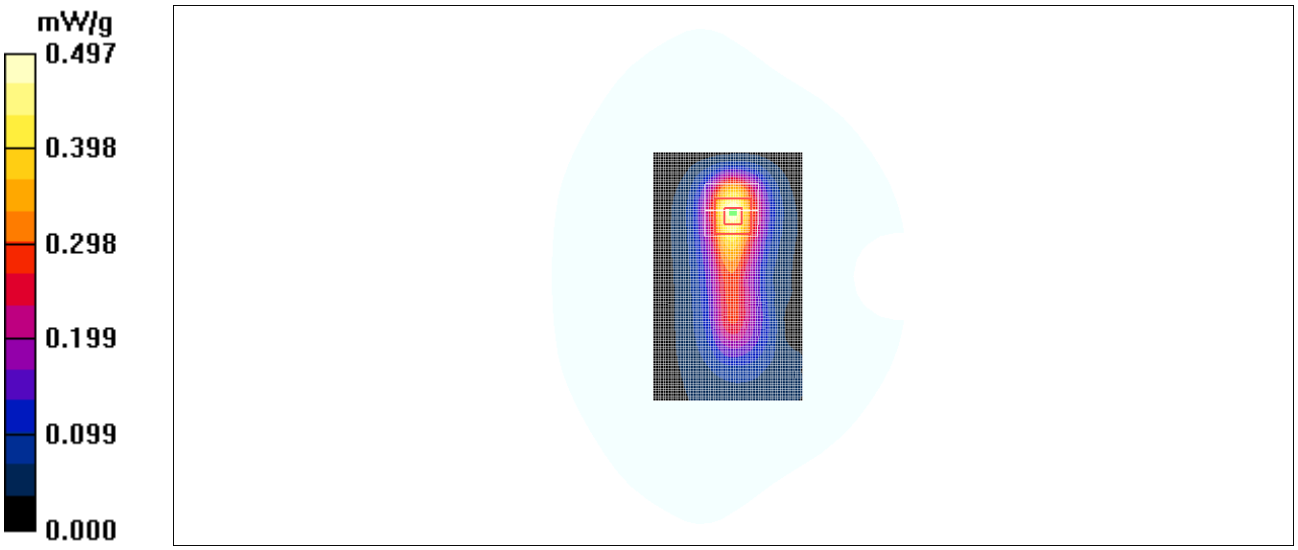


Fig. 42 1900 MHz CH661

1900 Body Right Side Middle
Date/Time: 2011-4-27 18:36:22
Electronics: DAE4 Sn771
Medium: Body 1900 MHz
Medium parameters used: f = 1880 MHz; σ = 1.50 mho/m; εr = 53.2; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 1900MHz Frequency: 1880 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Body Right Side/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.254 mW/g

Body Right Side/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.90 V/m; Power Drift = -0.155 dB
Peak SAR (extrapolated) = 0.348 W/kg
SAR(1 g) = 0.220 mW/g; SAR(10 g) = 0.127 mW/g
Maximum value of SAR (measured) = 0.244 mW/g

Body Right Side/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.90 V/m; Power Drift = -0.155 dB
Peak SAR (extrapolated) = 0.290 W/kg
SAR(1 g) = 0.174 mW/g; SAR(10 g) = 0.103 mW/g
Maximum value of SAR (measured) = 0.188 mW/g

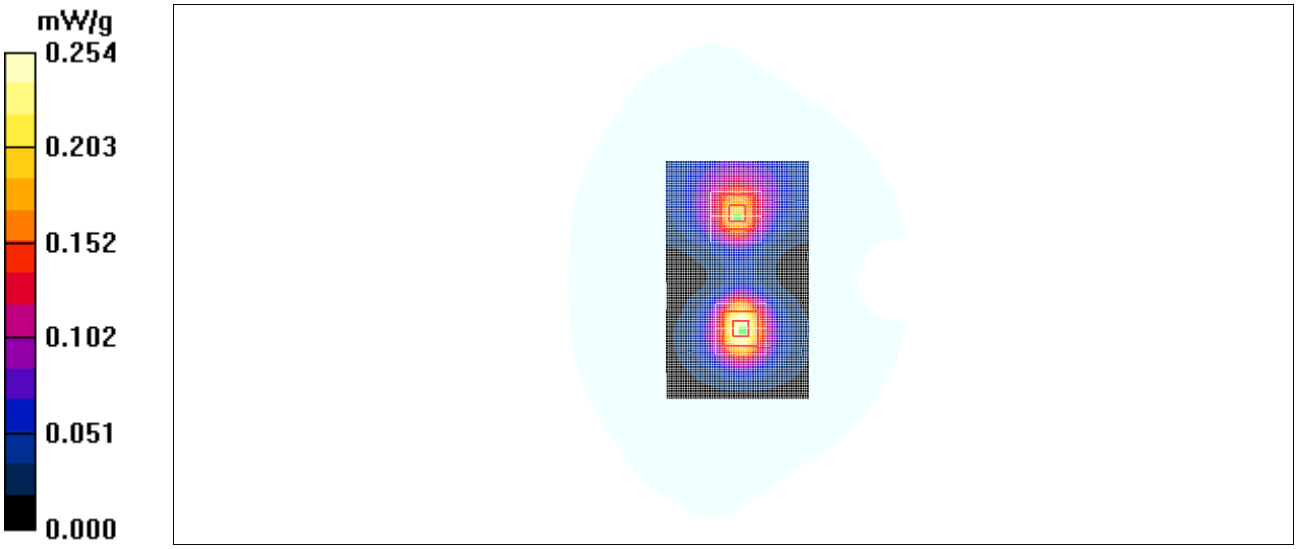


Fig. 43 1900 MHz CH661

1900 Body Bottom Side Middle

Date/Time: 2011-4-27 18:57:32
Electronics: DAE4 Sn771
Medium: Body 1900 MHz
Medium parameters used: f = 1880 MHz; σ = 1.50 mho/m; εr = 53.2; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: GSM 1900MHz Frequency: 1880 MHz Duty Cycle: 1:8.3
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Body Bottom Side/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.277 mW/g

Body Bottom Side/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.0 V/m; Power Drift = 0.117 dB
Peak SAR (extrapolated) = 0.432 W/kg
SAR(1 g) = 0.254 mW/g; SAR(10 g) = 0.151 mW/g
Maximum value of SAR (measured) = 0.274 mW/g

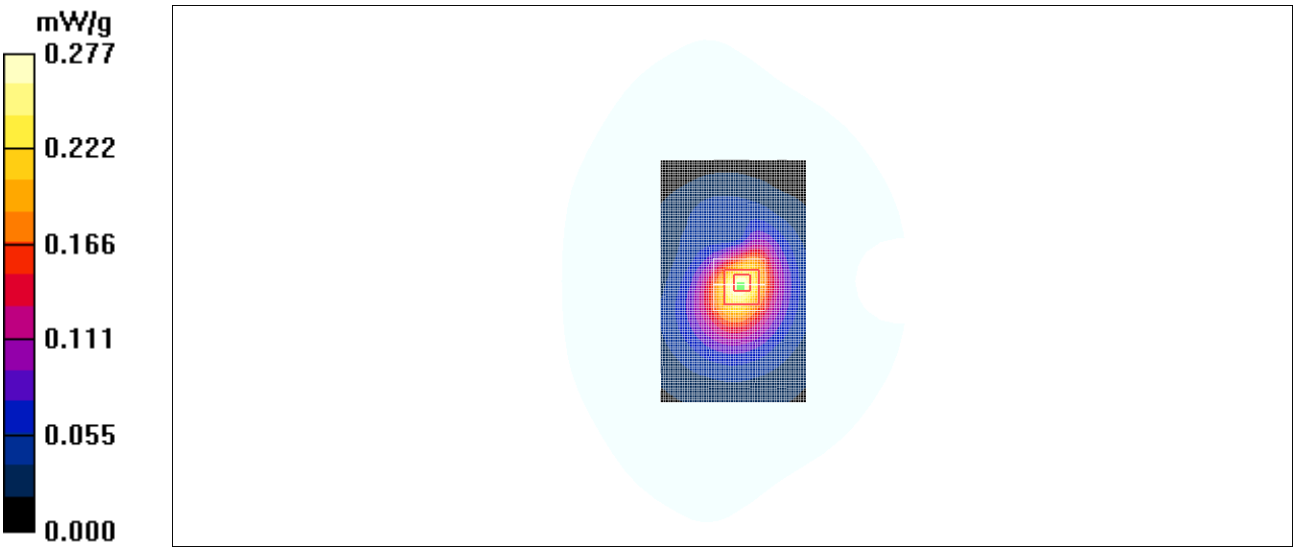


Fig. 44 1900 MHz CH661

WCDMA 850 Body Towards Phantom Middle

Date/Time: 2011-4-27 11:31:41
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.95 mho/m; εr = 54.8; ρ = 1000 kg/m^3
Ambient Temperature:23.0 °C Liquid Temperature: 22.5°C
Communication System: WCDMA 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Phantom Middle 10mm/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.977 mW/g

Toward Phantom Middle 10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 30.4 V/m; Power Drift = -0.004 dB
Peak SAR (extrapolated) = 1.15 W/kg
SAR(1 g) = 0.934 mW/g; SAR(10 g) = 0.713 mW/g
Maximum value of SAR (measured) = 0.979 mW/g

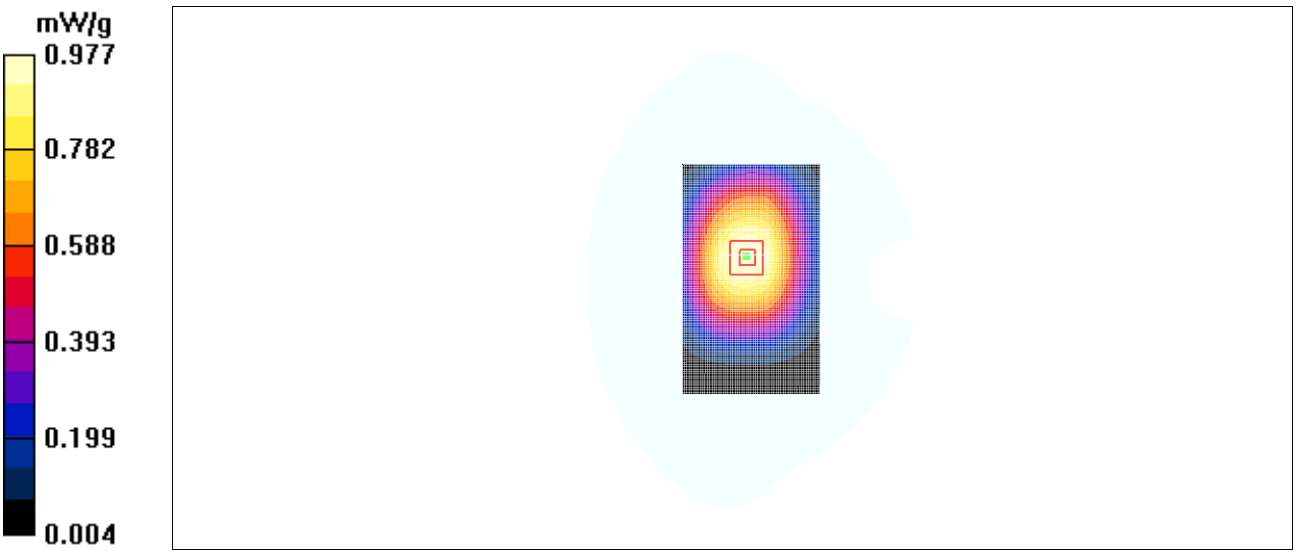


Fig. 45 850 MHz CH4182

WCDMA 850 Body Towards Ground High

Date/Time: 2011-4-27 11:50:25
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used (interpolated): f = 846.6 MHz; σ = 0.94 mho/m; εr = 54.6; ρ = 1000 kg/m^3
Ambient Temperature:23.0 ^{o}C Liquid Temperature: 22.5^{o}C
Communication System: WCDMA 850 Frequency: 846.6 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground High 10mm/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.905 mW/g

Toward Ground High 10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 29.2 V/m; Power Drift = -0.083 dB
Peak SAR (extrapolated) = 1.08 W/kg
SAR(1 g) = 0.861 mW/g; SAR(10 g) = 0.642 mW/g
Maximum value of SAR (measured) = 0.890 mW/g

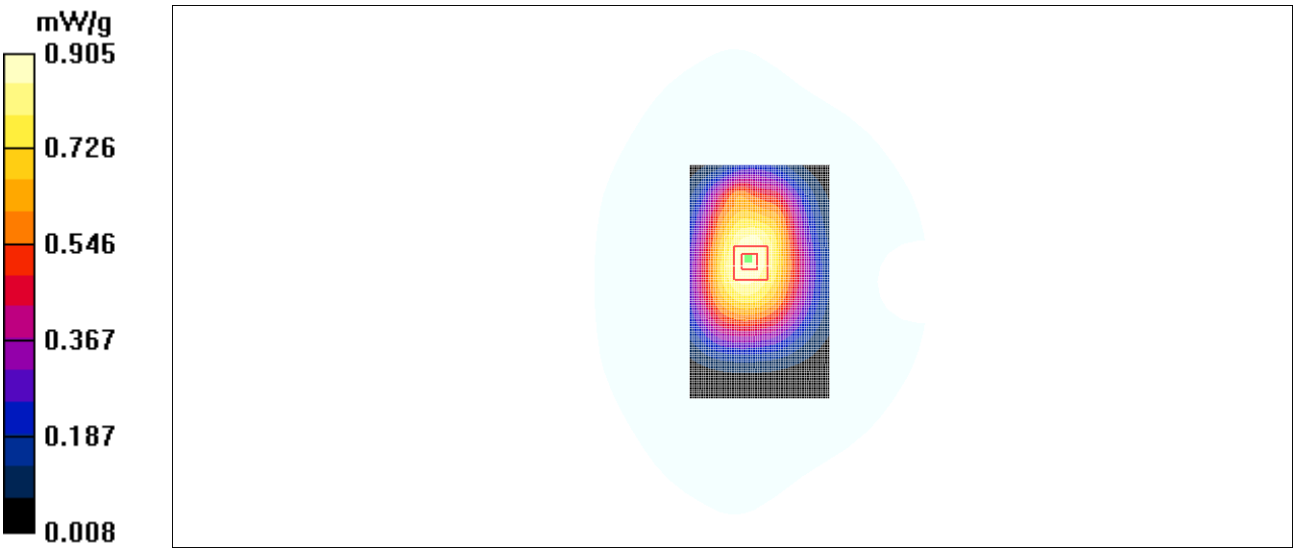


Fig. 46 850 MHz CH4233

WCDMA 850 Body Towards Ground Middle

Date/Time: 2011-4-27 12:11:57
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.95 mho/m; εr = 54.8; ρ = 1000 kg/m^3
Ambient Temperature:23.0 ^{o}C Liquid Temperature: 22.5^{o}C
Communication System: WCDMA 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Middle 10mm/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.06 mW/g

Toward Ground Middle 10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 29.6 V/m; Power Drift = 0.026 dB
Peak SAR (extrapolated) = 1.27 W/kg
SAR(1 g) = 1 mW/g; SAR(10 g) = 0.747 mW/g
Maximum value of SAR (measured) = 1.04 mW/g

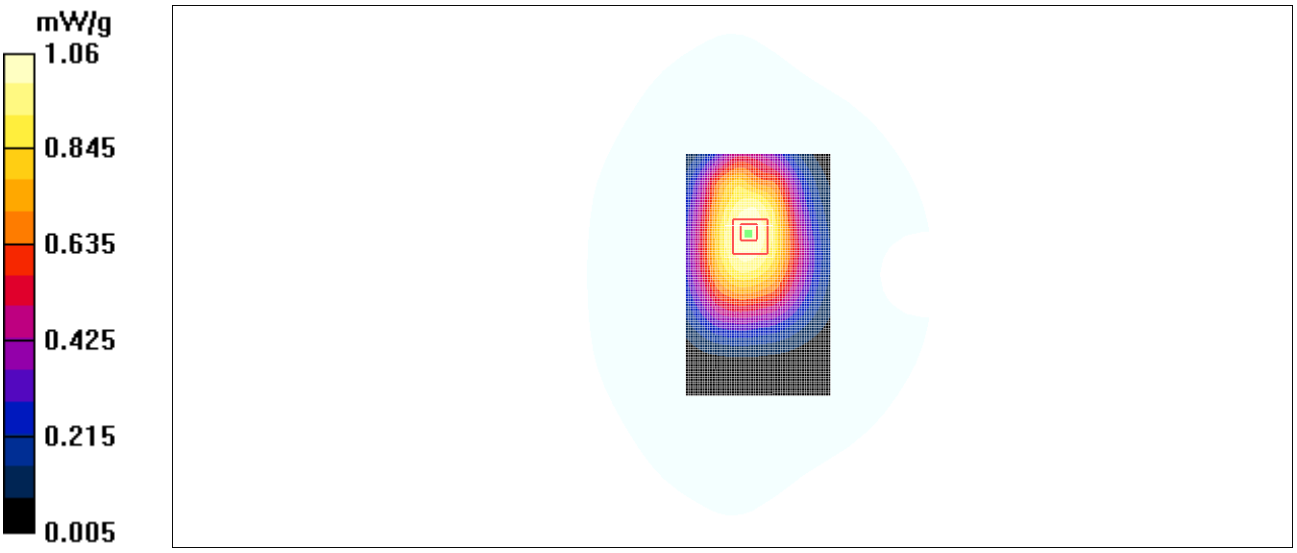


Fig. 47 850 MHz CH4182

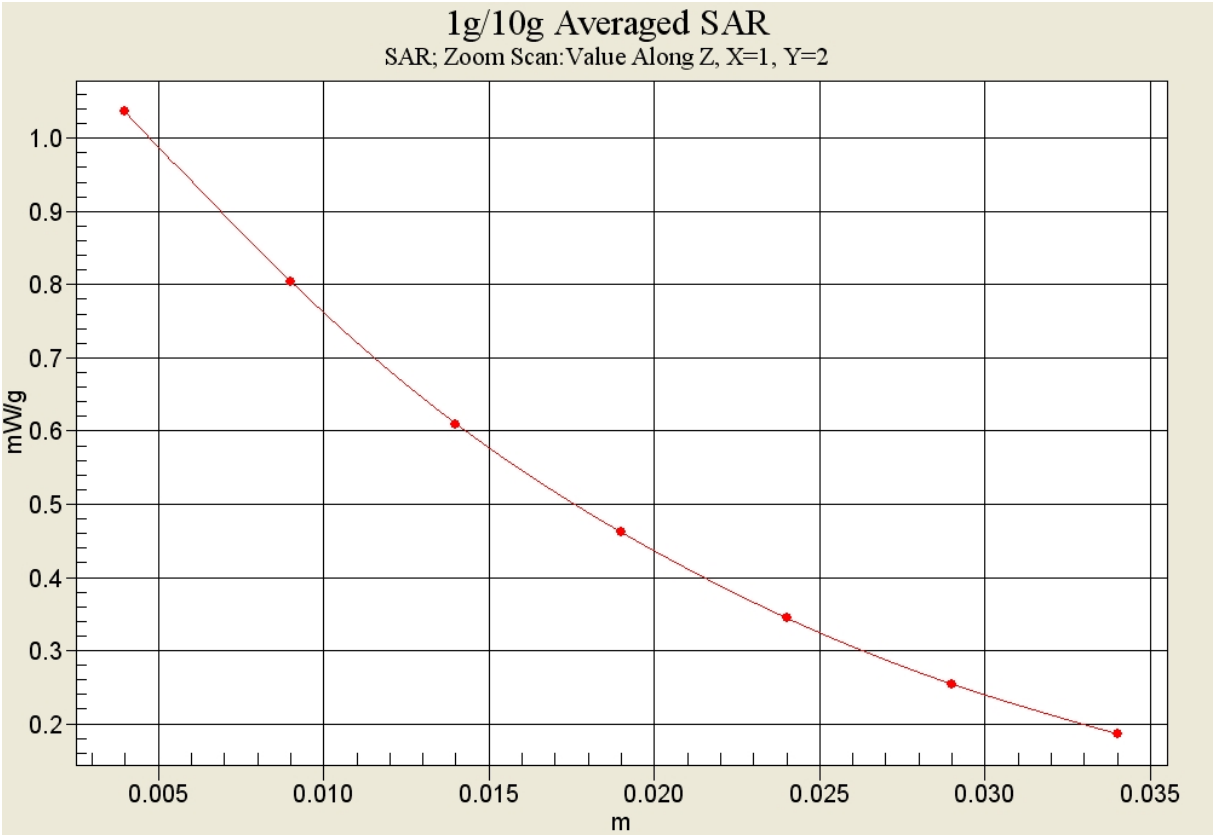


Fig. 47-1 Z-Scan at power reference point (850 MHz CH4182)

WCDMA 850 Body Towards Ground Low

Date/Time: 2011-4-27 12:33:16
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.94 mho/m; εr = 55.5; ρ = 1000 kg/m^3
Ambient Temperature:23.0 ^{o}C Liquid Temperature: 22.5^{o}C
Communication System: WCDMA 850 Frequency: 826.4 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Low 10mm/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.907 mW/g

Toward Ground Low 10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 29.4 V/m; Power Drift = -0.095 dB
Peak SAR (extrapolated) = 1.11 W/kg
SAR(1 g) = 0.874 mW/g; SAR(10 g) = 0.650 mW/g
Maximum value of SAR (measured) = 0.911 mW/g

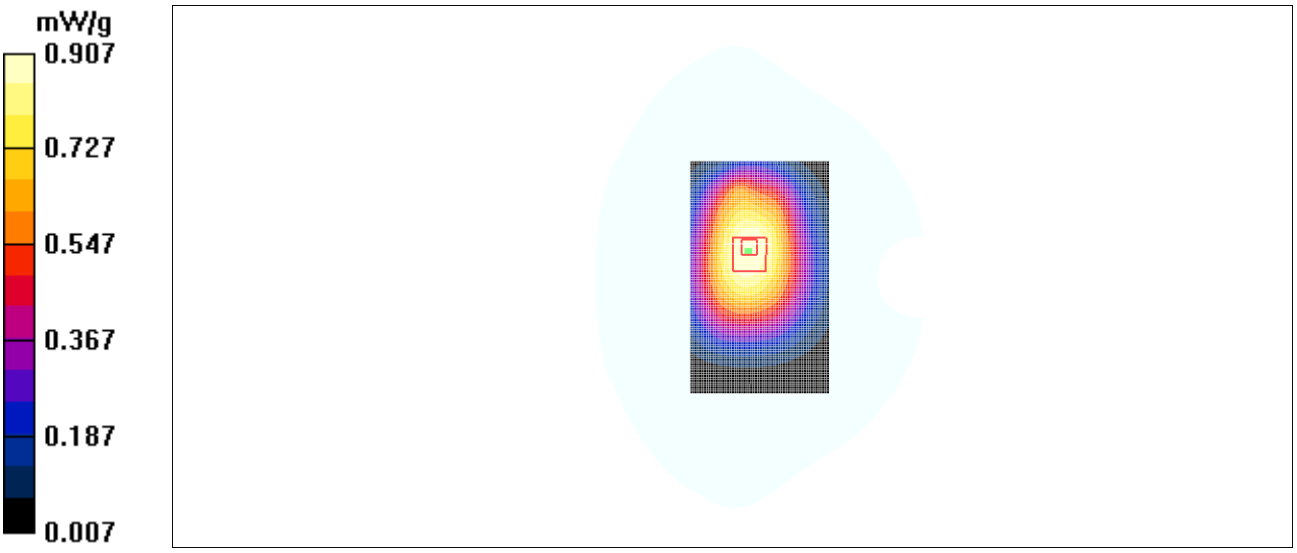


Fig. 48 850 MHz CH4132

WCDMA 850 Body Towards Ground Middle with Bluetooth

Date/Time: 2011-4-27 12:55:24
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.95 mho/m; εr = 54.8; ρ = 1000 kg/m^3
Ambient Temperature:23.0 ^{o}C Liquid Temperature: 22.5^{o}C
Communication System: WCDMA 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Middle 10mm/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.908 mW/g

Toward Ground Middle 10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 29.3 V/m; Power Drift = -0.057 dB
Peak SAR (extrapolated) = 1.04 W/kg
SAR(1 g) = 0.829 mW/g; SAR(10 g) = 0.622 mW/g
Maximum value of SAR (measured) = 0.856 mW/g

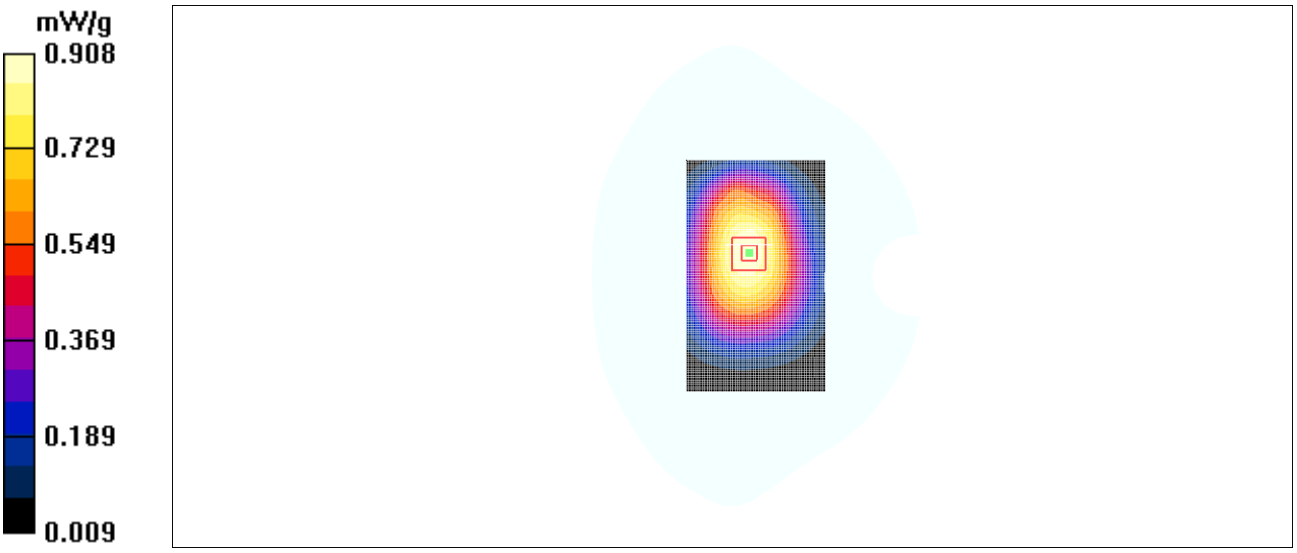


Fig. 49 850 MHz CH4182

WCDMA 850 Body Towards Ground Middle with Headset

Date/Time: 2011-4-27 13:20:33
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.95 mho/m; εr = 54.8; ρ = 1000 kg/m^3
Ambient Temperature:23.0 ^{o}C Liquid Temperature: 22.5^{o}C
Communication System: WCDMA 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Middle 10mm/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.749 mW/g

Toward Ground Middle 10mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.0 V/m; Power Drift = -0.035 dB
Peak SAR (extrapolated) = 0.907 W/kg
SAR(1 g) = 0.706 mW/g; SAR(10 g) = 0.520 mW/g
Maximum value of SAR (measured) = 0.729 mW/g

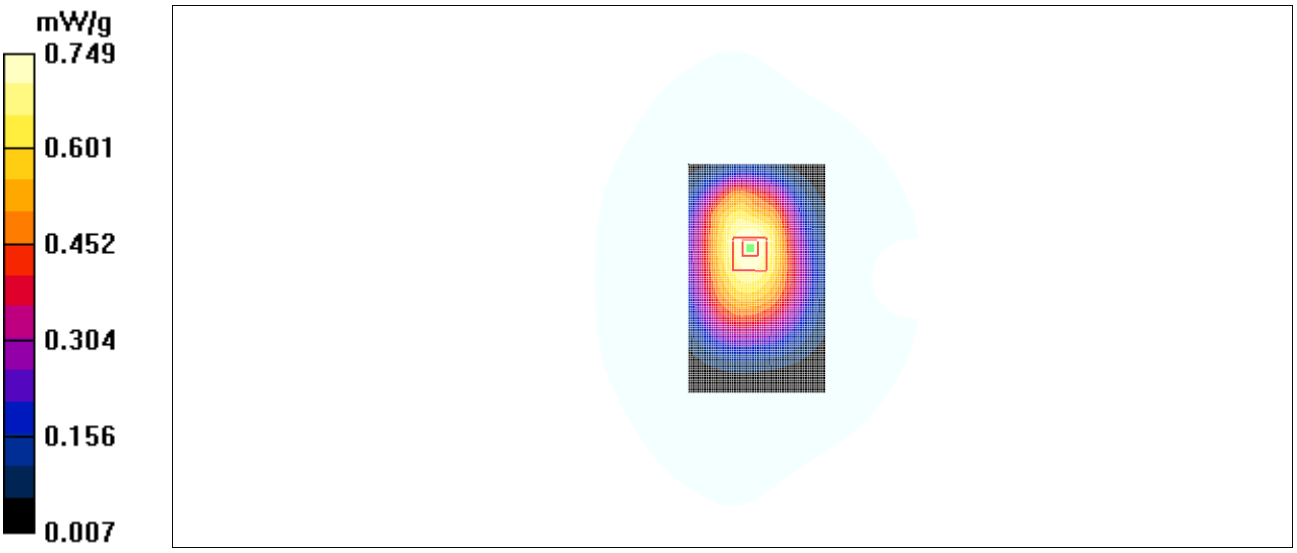


Fig. 50 850 MHz CH4182

WCDMA 850 Body Left Side

Date/Time: 2011-4-27 13:41:23
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.95 mho/m; εr = 54.8; ρ = 1000 kg/m^3
Ambient Temperature:23.0 ^{o}C Liquid Temperature: 22.5^{o}C
Communication System: WCDMA 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Body Left Side/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.01 mW/g

Body Left Side/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 31.5 V/m; Power Drift = -0.105 dB
Peak SAR (extrapolated) = 1.30 W/kg
SAR(1 g) = 0.938 mW/g; SAR(10 g) = 0.644 mW/g
Maximum value of SAR (measured) = 1.00 mW/g

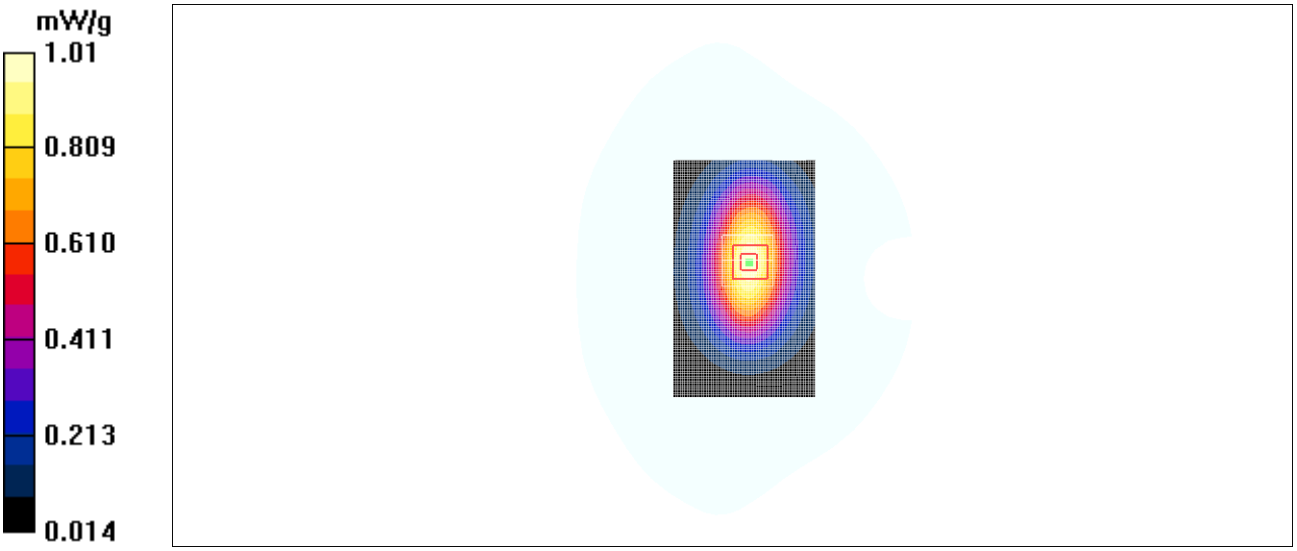


Fig. 51 850 MHz CH4182

WCDMA 850 Body Right Side

Date/Time: 2011-4-27 14:02:30
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.95 mho/m; εr = 54.8; ρ = 1000 kg/m^3
Ambient Temperature:23.0 ^{o}C Liquid Temperature: 22.5^{o}C
Communication System: WCDMA 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Body Right Side/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.984 mW/g

Body Right Side/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 31.4 V/m; Power Drift = -0.038 dB
Peak SAR (extrapolated) = 1.27 W/kg
SAR(1 g) = 0.918 mW/g; SAR(10 g) = 0.633 mW/g
Maximum value of SAR (measured) = 0.978 mW/g

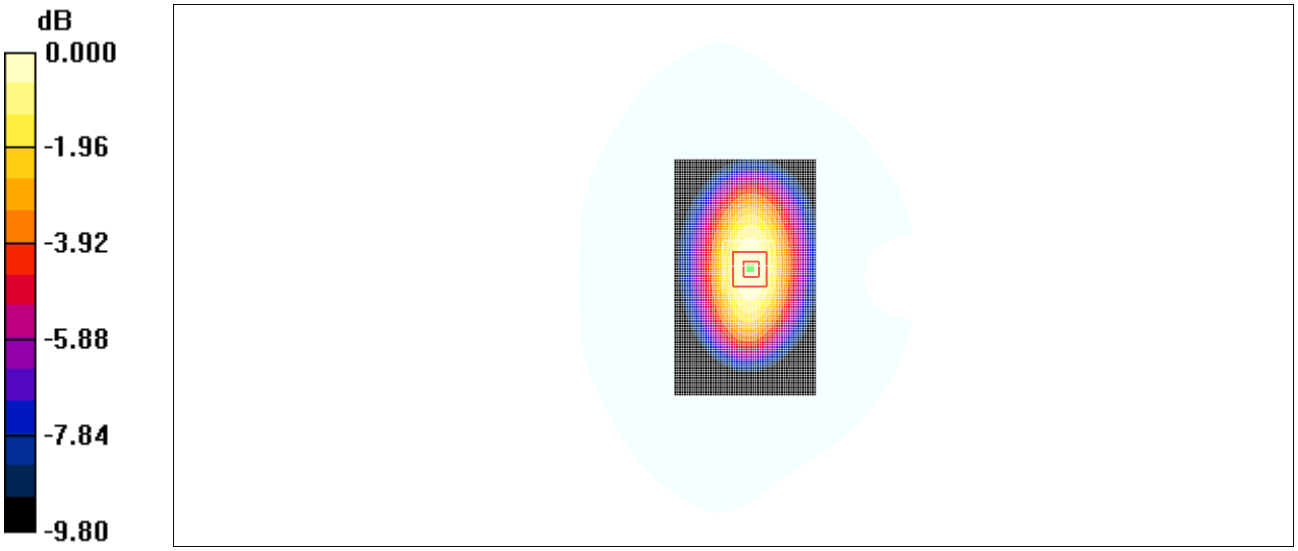


Fig. 52 850 MHz CH4182

WCDMA 850 Body Bottom Side

Date/Time: 2011-4-27 14:25:36
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.95 mho/m; εr = 54.8; ρ = 1000 kg/m^3
Ambient Temperature:23.0 ^{o}C Liquid Temperature: 22.5^{o}C
Communication System: WCDMA 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Body Bottom Side/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.108 mW/g

Body Bottom Side/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.4 V/m; Power Drift = 0.017 dB
Peak SAR (extrapolated) = 0.207 W/kg
SAR(1 g) = 0.102 mW/g; SAR(10 g) = 0.053 mW/g
Maximum value of SAR (measured) = 0.113 mW/g

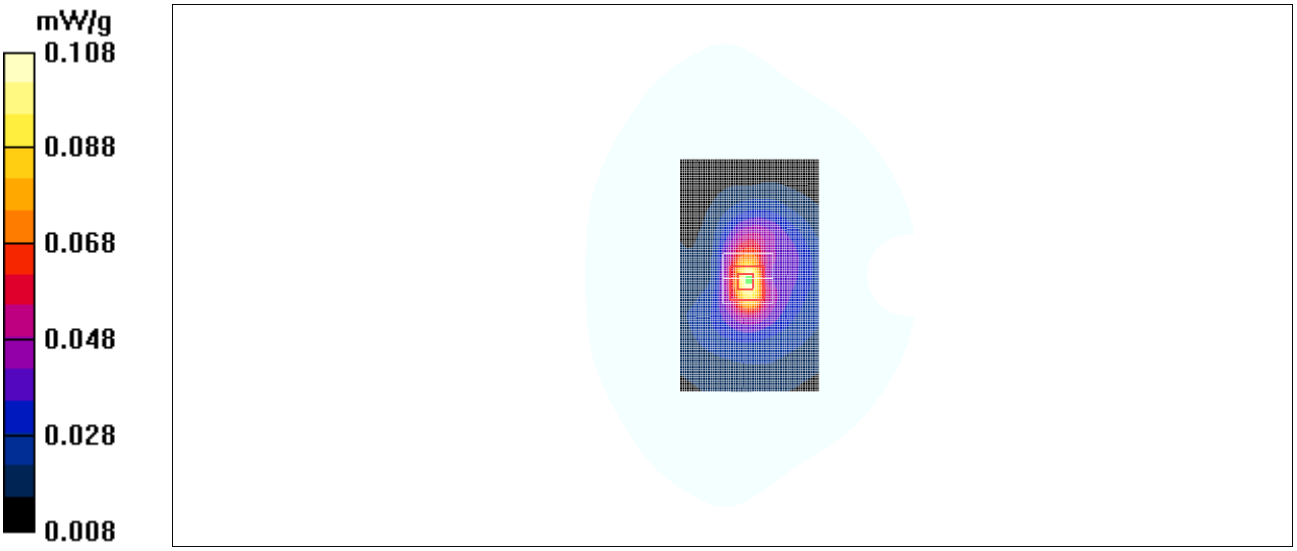


Fig. 53 850 MHz CH4182

WiFi 802.11b 1Mbps Left Cheek Channel 6

Date/Time: 2011-4-12 10:33:17
Electronics: DAE4 Sn771
Medium: Head 2450 MHz
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.81 mho/m; εr = 39.7; ρ = 1000 kg/m^3
Ambient Temperature:23.0 ^{o}C Liquid Temperature: 22.5^{o}C
Communication System: WLan 2450 Frequency: 2437 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3617 ConvF(7.19, 7.19, 7.19)

Cheek Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.342 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.1 V/m; Power Drift = 0.078 dB
Peak SAR (extrapolated) = 0.613 W/kg
SAR(1 g) = 0.332 mW/g; SAR(10 g) = 0.165 mW/g
Maximum value of SAR (measured) = 0.359 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.1 V/m; Power Drift = 0.078 dB
Peak SAR (extrapolated) = 0.459 W/kg
SAR(1 g) = 0.247 mW/g; SAR(10 g) = 0.135 mW/g
Maximum value of SAR (measured) = 0.303 mW/g

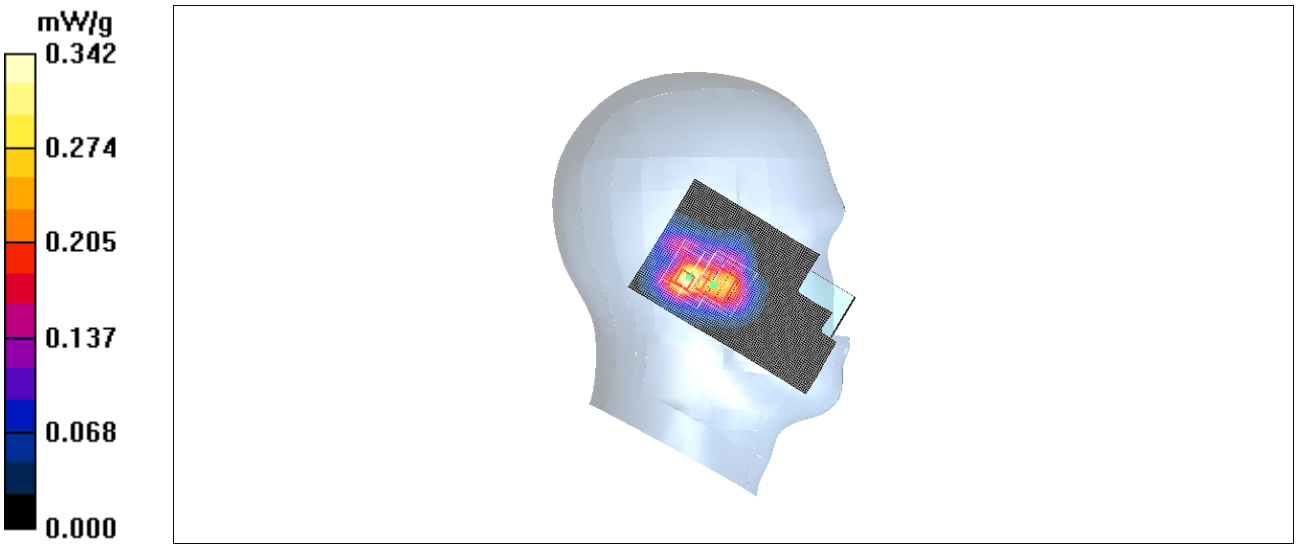


Fig.54 802.11b 1Mbps CH6

WiFi 802.11b 1Mbps Left Tilt Channel 6

Date/Time: 2011-4-12 10:47:35
Electronics: DAE4 Sn771
Medium: Head 2450 MHz
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.81 mho/m; εr = 39.7; ρ = 1000 kg/m^3
Ambient Temperature:23.0 ^{o}C Liquid Temperature: 22.5^{o}C
Communication System: WLan 2450 Frequency: 2437 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3617 ConvF(7.19, 7.19, 7.19)

Tilt Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.239 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.64 V/m; Power Drift = -0.056 dB
Peak SAR (extrapolated) = 0.437 W/kg
SAR(1 g) = 0.235 mW/g; SAR(10 g) = 0.116 mW/g
Maximum value of SAR (measured) = 0.260 mW/g

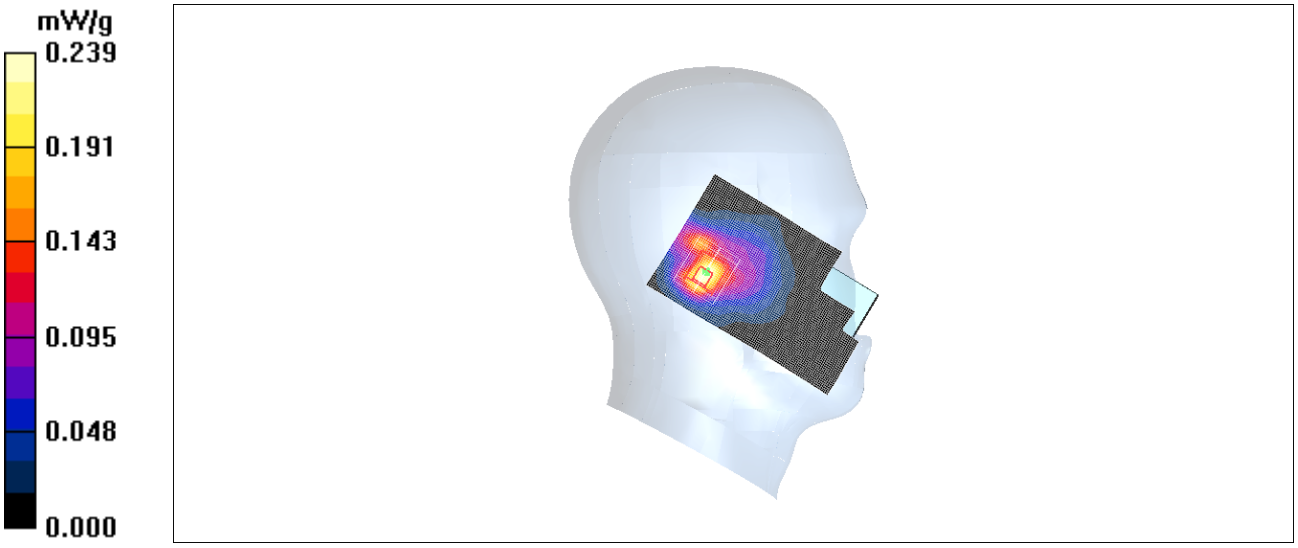


Fig.55 802.11b 1Mbps CH6

WiFi 802.11b 1Mbps Right Cheek Channel 6

Date/Time: 2011-4-12 11:02:31
Electronics: DAE4 Sn771
Medium: Head 2450 MHz
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.81 mho/m; εr = 39.7; ρ = 1000 kg/m^3
Ambient Temperature:23.0 ^{o}C Liquid Temperature: 22.5^{o}C
Communication System: WLan 2450 Frequency: 2437 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3617 ConvF(7.19, 7.19, 7.19)

Cheek Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.580 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.6 V/m; Power Drift = -0.173 dB
Peak SAR (extrapolated) = 1.20 W/kg
SAR(1 g) = 0.599 mW/g; SAR(10 g) = 0.276 mW/g
Maximum value of SAR (measured) = 0.714 mW/g

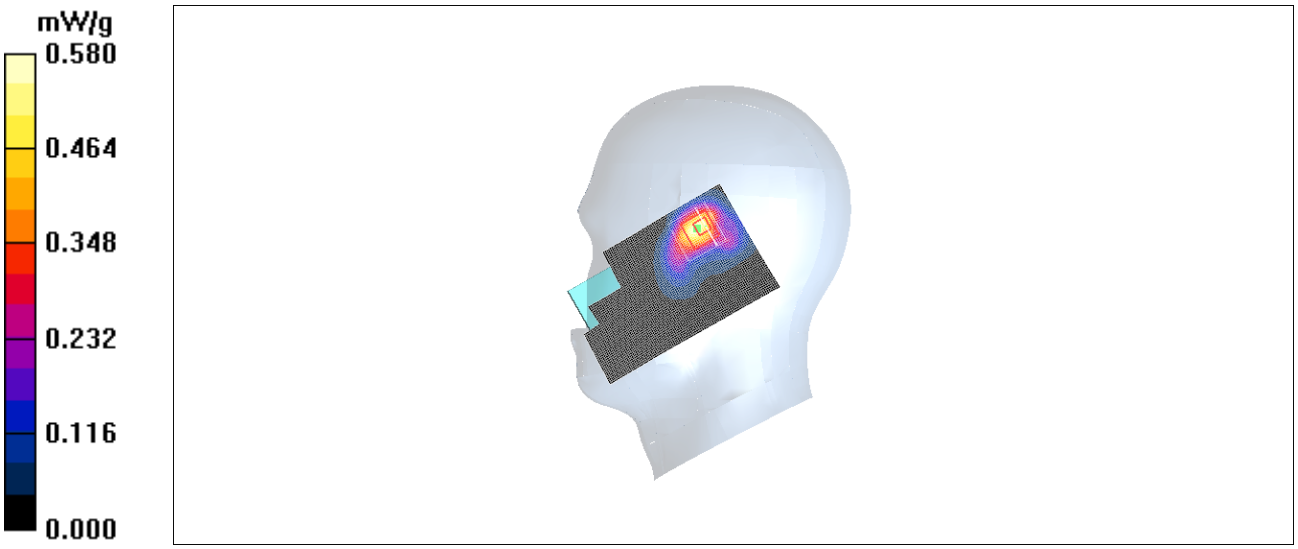


Fig.56 802.11b 1Mbps CH6

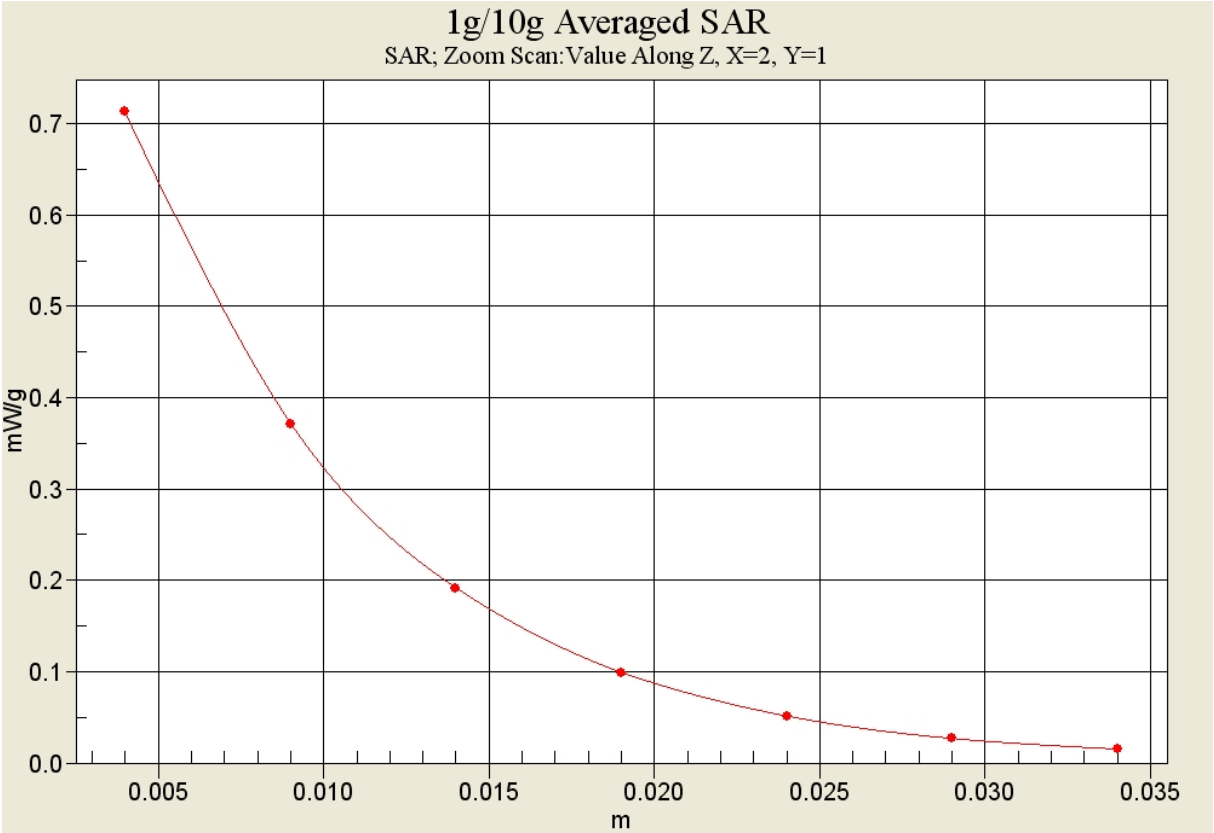


Fig. 56-1 Z-Scan at power reference point (802.11b 1Mbps CH6)

WiFi 802.11b 1Mbps Right Tilt Channel 6

Date/Time: 2011-4-12 11:16:57
Electronics: DAE4 Sn771
Medium: Head 2450 MHz
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.81 mho/m; εr = 39.7; ρ = 1000 kg/m^3
Ambient Temperature:23.0 ^{o}C Liquid Temperature: 22.5^{o}C
Communication System: WLan 2450 Frequency: 2437 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3617 ConvF(7.19, 7.19, 7.19)

Tilt Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.406 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.2 V/m; Power Drift = -0.023 dB
Peak SAR (extrapolated) = 0.955 W/kg
SAR(1 g) = 0.458 mW/g; SAR(10 g) = 0.208 mW/g
Maximum value of SAR (measured) = 0.540 mW/g

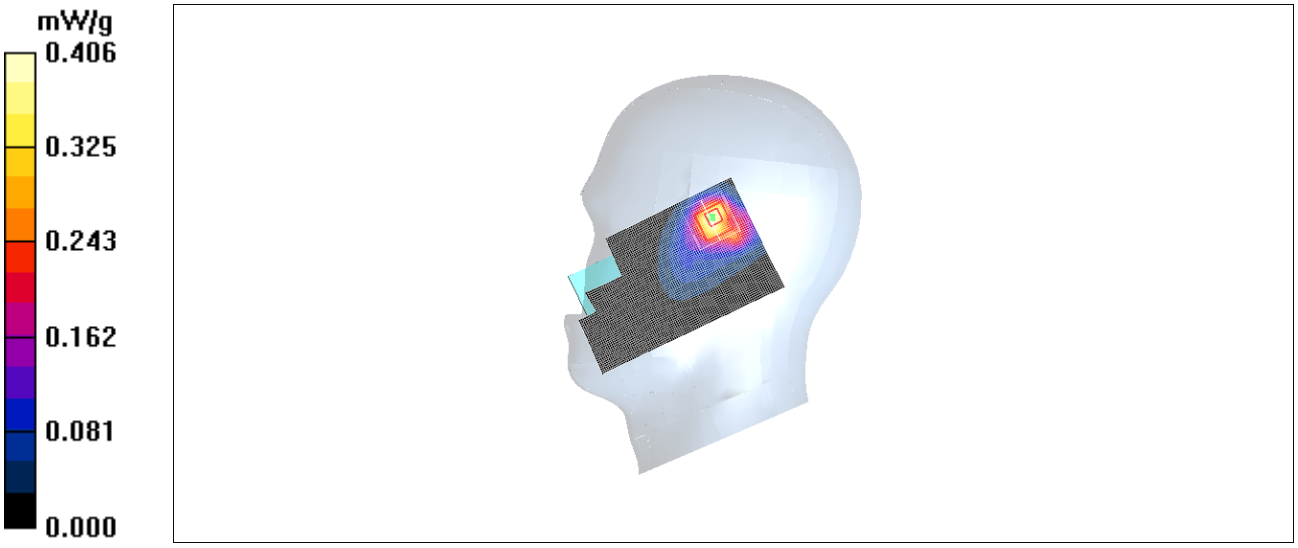


Fig.57 802.11b 1Mbps CH6

WiFi 802.11b 1Mbps Toward Phantom Channel 6

Date/Time: 2011-4-12 13:41:02
Electronics: DAE4 Sn771
Medium: Body 2450 MHz
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.95 mho/m; εr = 52.5; ρ = 1000 kg/m^3
Ambient Temperature:23.0 ^{o}C Liquid Temperature: 22.5^{o}C
Communication System: WLan 2450 Frequency: 2437 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3617 ConvF(6.88, 6.88, 6.88)

Toward Phantom Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.138 mW/g

Toward Phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.43 V/m; Power Drift = -0.030 dB
Peak SAR (extrapolated) = 0.243 W/kg
SAR(1 g) = 0.132 mW/g; SAR(10 g) = 0.069 mW/g
Maximum value of SAR (measured) = 0.151 mW/g

Toward Phantom Middle/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.43 V/m; Power Drift = -0.030 dB
Peak SAR (extrapolated) = 0.170 W/kg
SAR(1 g) = 0.094 mW/g; SAR(10 g) = 0.053 mW/g
Maximum value of SAR (measured) = 0.102 mW/g

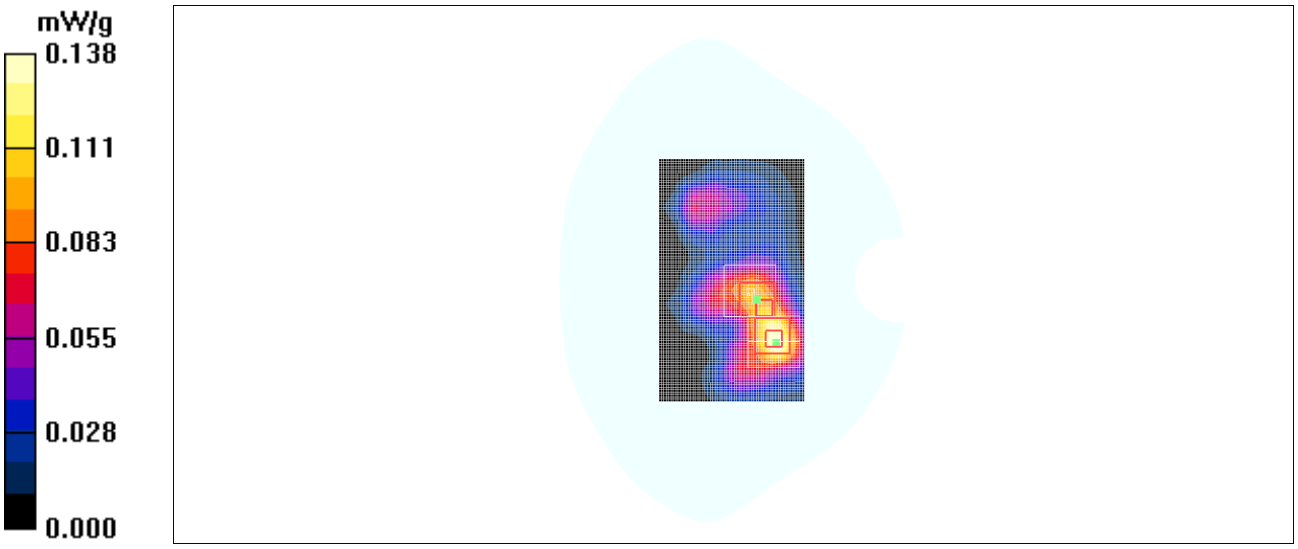


Fig.58 802.11b 1Mbps CH6

WiFi 802.11b 1Mbps Toward Ground Channel 6

Date/Time: 2011-4-12 13:56:44
Electronics: DAE4 Sn771
Medium: Body 2450 MHz
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.95 mho/m; εr = 52.5; ρ = 1000 kg/m^3
Ambient Temperature:23.0 ^{o}C Liquid Temperature: 22.5^{o}C
Communication System: WLan 2450 Frequency: 2437 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3617 ConvF(6.88, 6.88, 6.88)

Toward Ground Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.304 mW/g

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.66 V/m; Power Drift = 0.131 dB
Peak SAR (extrapolated) = 0.691 W/kg
SAR(1 g) = 0.324 mW/g; SAR(10 g) = 0.143 mW/g
Maximum value of SAR (measured) = 0.317 mW/g

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.66 V/m; Power Drift = 0.131 dB
Peak SAR (extrapolated) = 0.476 W/kg
SAR(1 g) = 0.233 mW/g; SAR(10 g) = 0.106 mW/g
Maximum value of SAR (measured) = 0.260 mW/g

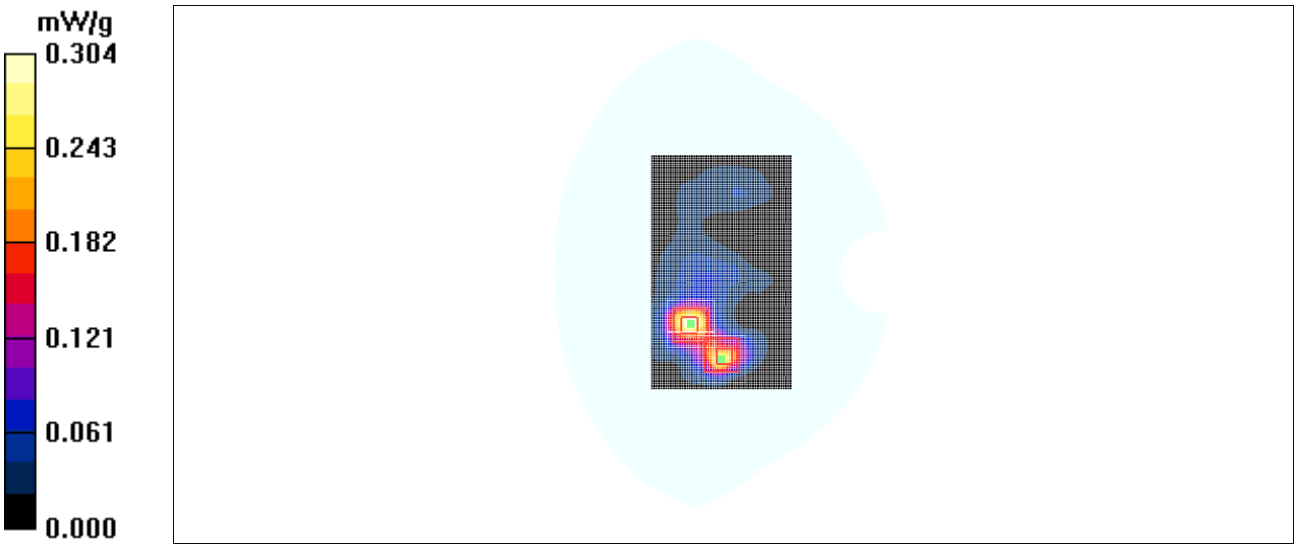


Fig.59 802.11b 1Mbps CH6

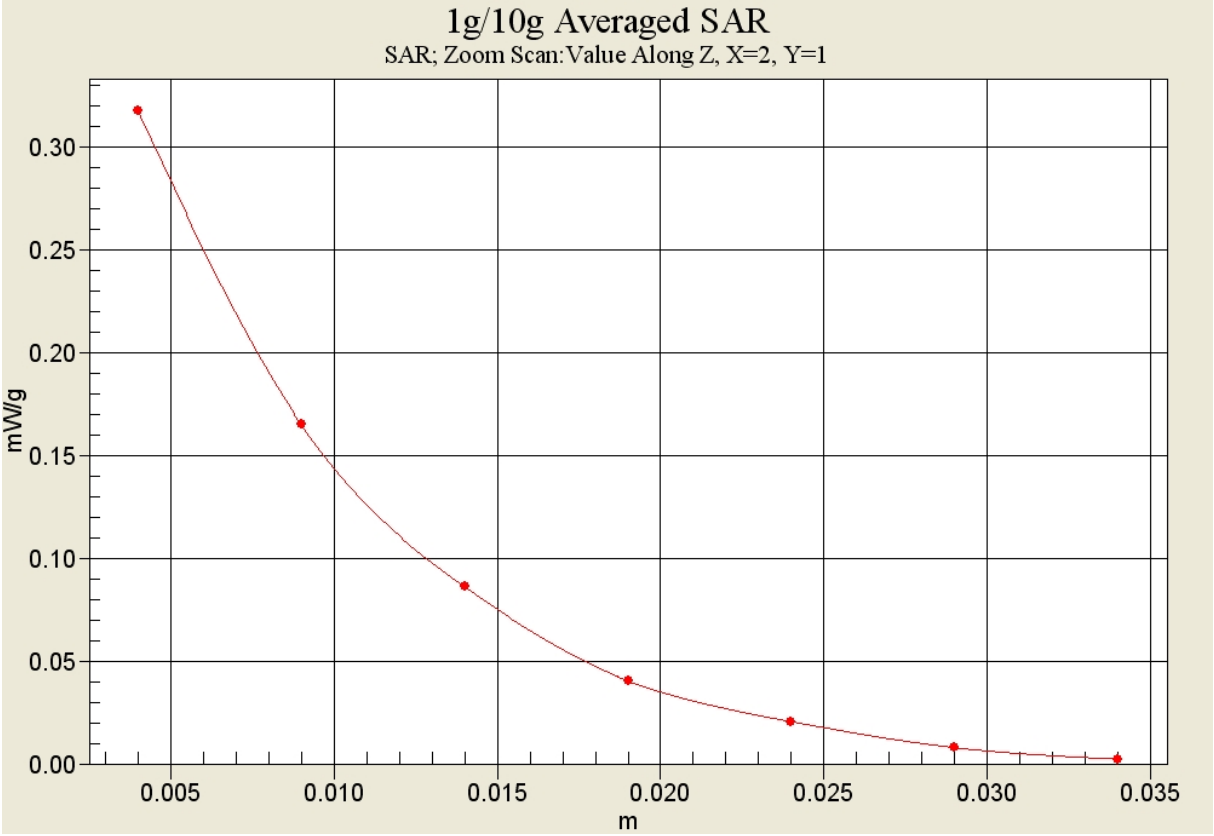


Fig. 59-1 Z-Scan at power reference point (802.11b 1Mbps CH6)

WiFi 802.11b 1Mbps Left Side Channel 6

Date/Time: 2011-4-12 14:12:39
Electronics: DAE4 Sn771
Medium: Body 2450 MHz
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.95 mho/m; εr = 52.5; ρ = 1000 kg/m^3
Ambient Temperature:23.0 ^{o}C Liquid Temperature: 22.5^{o}C
Communication System: WLan 2450 Frequency: 2437 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3617 ConvF(6.88, 6.88, 6.88)

Left Side/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.244 mW/g

Left Side/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.43 V/m; Power Drift = 0.096 dB
Peak SAR (extrapolated) = 0.422 W/kg
SAR(1 g) = 0.215 mW/g; SAR(10 g) = 0.107 mW/g
Maximum value of SAR (measured) = 0.243 mW/g

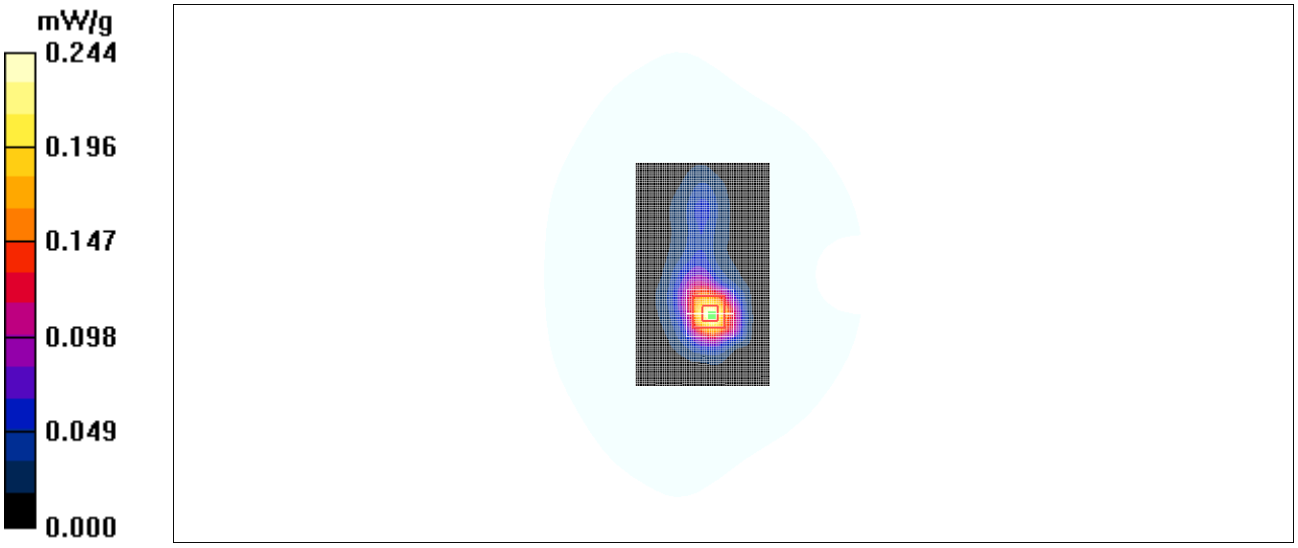


Fig.60 802.11b 1Mbps CH6

WiFi 802.11b 1Mbps Top Side Channel 6

Date/Time: 2011-4-12 14:28:07
Electronics: DAE4 Sn771
Medium: Body 2450 MHz
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.95 mho/m; εr = 52.5; ρ = 1000 kg/m^3
Ambient Temperature:23.0 ^{o}C Liquid Temperature: 22.5^{o}C
Communication System: WLan 2450 Frequency: 2437 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3617 ConvF(6.88, 6.88, 6.88)

Top Side/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.104 mW/g

Top Side/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.46 V/m; Power Drift = -0.088 dB
Peak SAR (extrapolated) = 0.185 W/kg
SAR(1 g) = 0.101 mW/g; SAR(10 g) = 0.048 mW/g
Maximum value of SAR (measured) = 0.119 mW/g

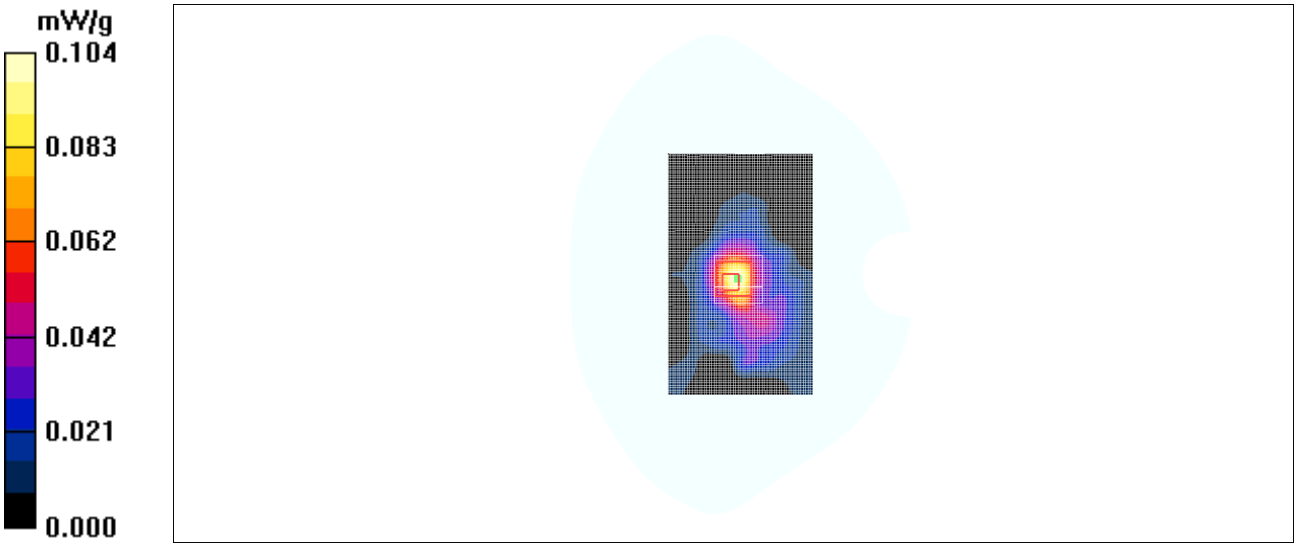


Fig.61 802.11b 1Mbps CH6

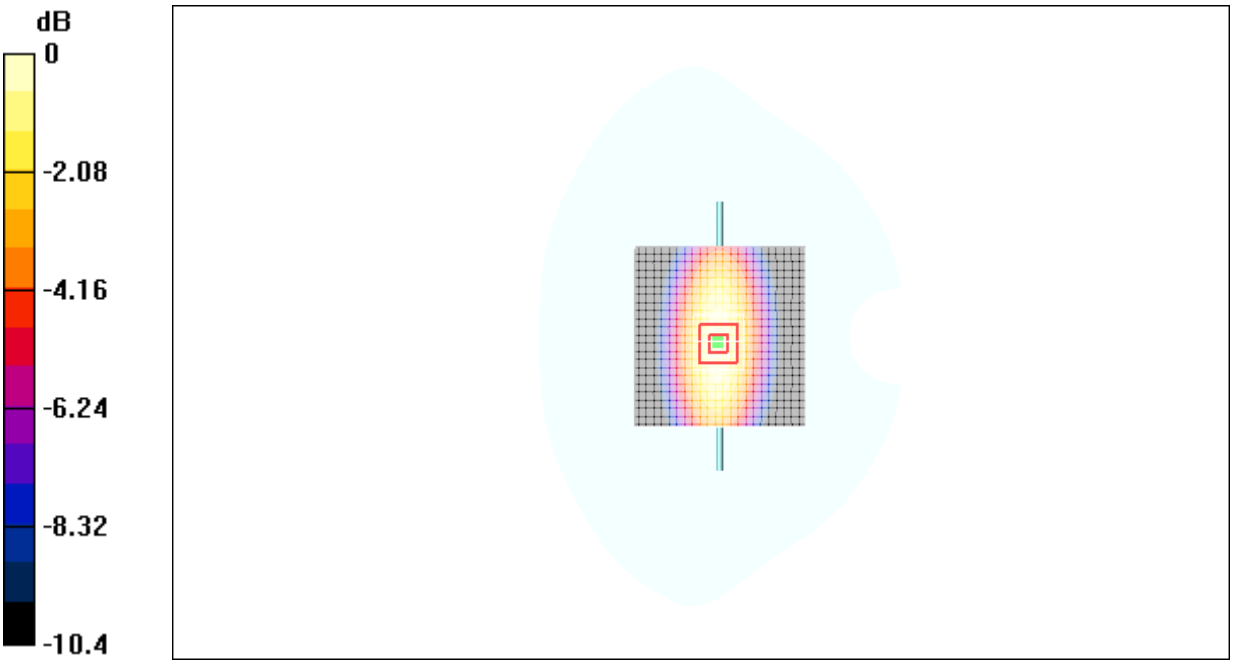
ANNEX D SYSTEM VALIDATION RESULTS

835MHz

Date/Time: 2011-4-9 7:11:16
Electronics: DAE4 Sn771
Medium: Head 850 MHz
Medium parameters used: f = 835 MHz; σ = 0.91 mho/m; ε_r = 41.7; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

System Validation /Area Scan (101x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 2.51 mW/g

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.2 V/m; Power Drift = 0.061 dB
Peak SAR (extrapolated) = 3.32 W/kg
SAR(1 g) = 2.29 mW/g; SAR(10 g) = 1.48 mW/g
Maximum value of SAR (measured) = 2.44 mW/g



0 dB = 2.44mW/g

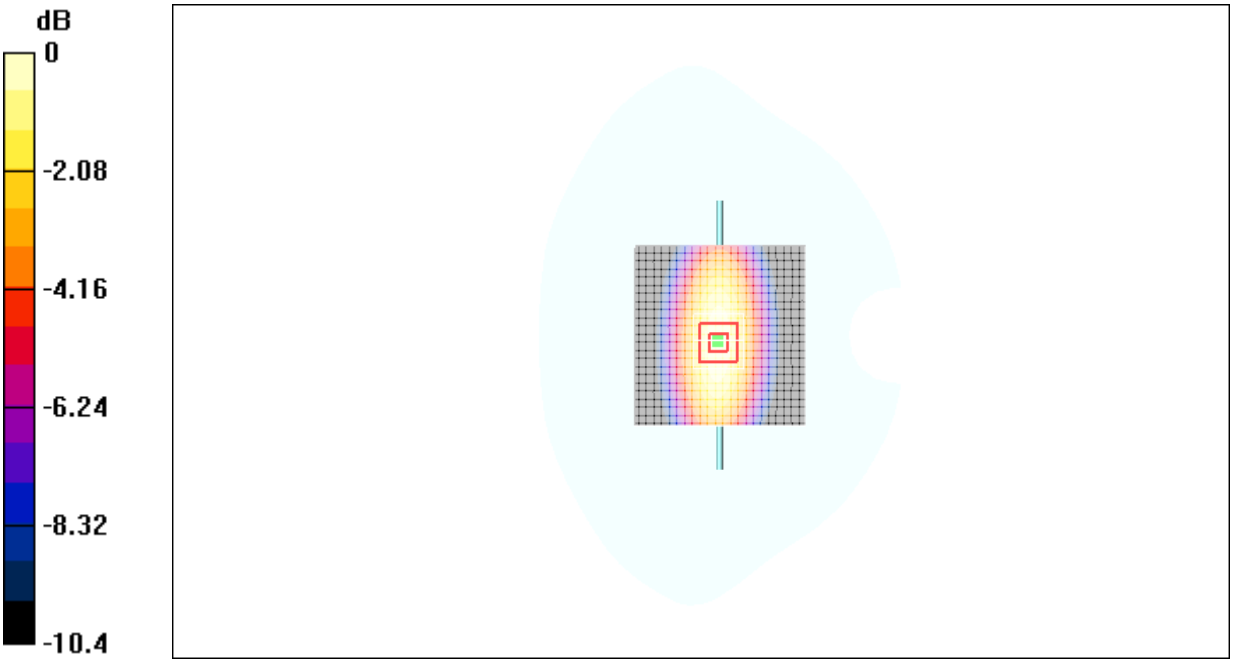
Fig.62 validation 835MHz 250mW

835MHz

Date/Time: 2011-4-27 7:05:22
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used: f = 835 MHz; σ = 0.98 mho/m; ε_r = 54.1; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

System Validation /Area Scan (101x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 2.57 mW/g

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 51.4 V/m; Power Drift = 0.180 dB
Peak SAR (extrapolated) = 3.29 W/kg
SAR(1 g) = 2.38 mW/g; SAR(10 g) = 1.54 mW/g
Maximum value of SAR (measured) = 2.48 mW/g



0 dB = 2.48mW/g

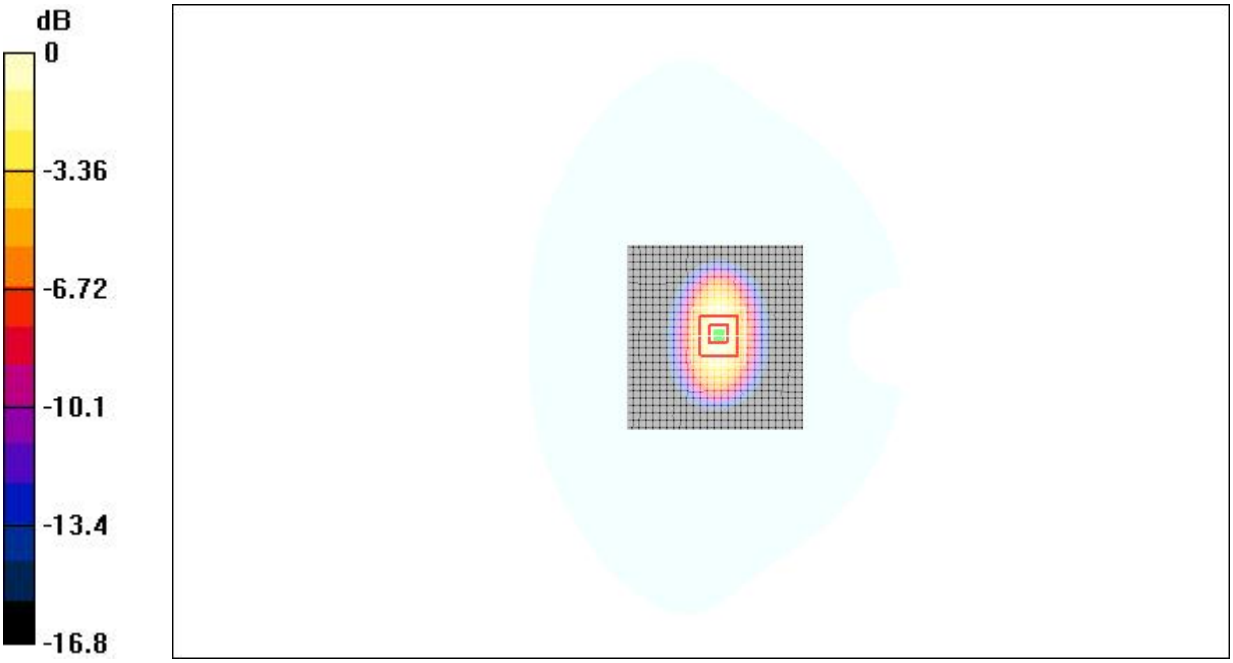
Fig.63 validation 835MHz 250mW

1900MHz

Date/Time: 2011-4-10 7:12:53
Electronics: DAE4 Sn771
Medium: Head 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.41 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

System Validation/Area Scan (101x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 11.2 mW/g

System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 87.8 V/m; Power Drift = -0.055 dB
Peak SAR (extrapolated) = 14.7 W/kg
SAR(1 g) = 9.61 mW/g; SAR(10 g) = 4.97 mW/g
Maximum value of SAR (measured) = 10.5 mW/g



0 dB = 10.5mW/g

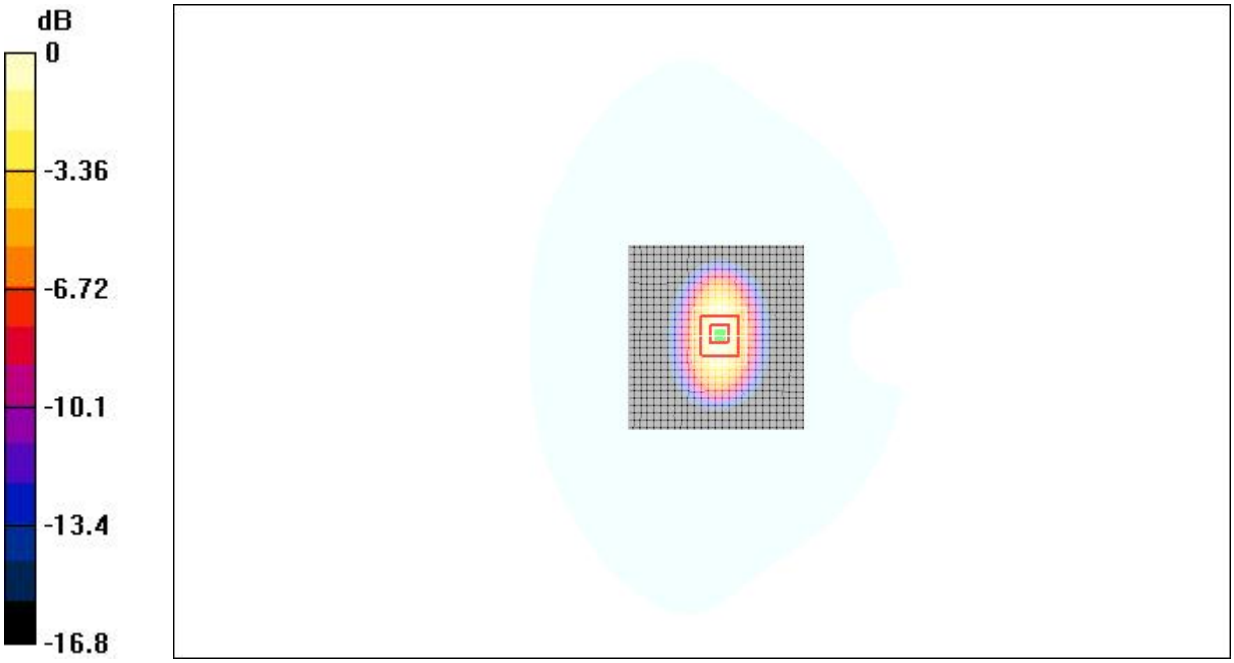
Fig.64 validation 1900MHz 250mW

1900MHz

Date/Time: 2011-4-27 15:03:24
Electronics: DAE4 Sn771
Medium: Body 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.51 mho/m; ε_r = 52.6; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

System Validation/Area Scan (101x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 11.7 mW/g

System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 92.3 V/m; Power Drift = 0.018 dB
Peak SAR (extrapolated) = 16.1 W/kg
SAR(1 g) = 10.23 mW/g; SAR(10 g) = 5.13 mW/g
Maximum value of SAR (measured) = 10.92mW/g



0 dB = 10.92mW/g

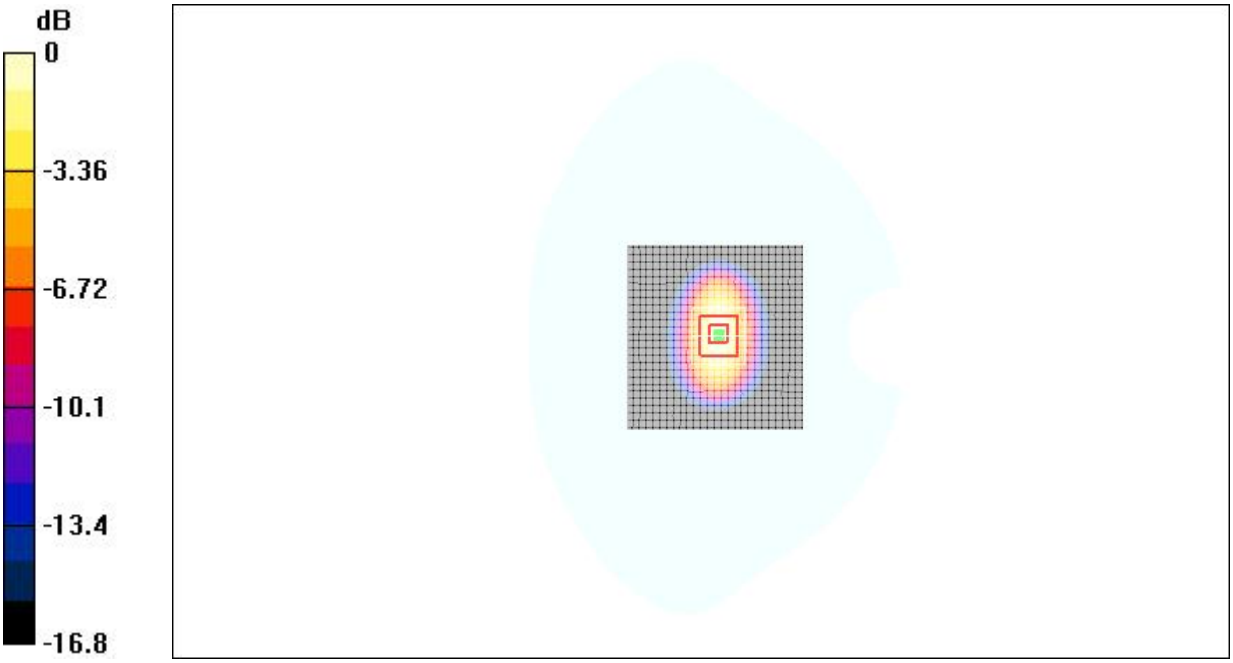
Fig.65 validation 1900MHz 250mW

2450MHz

Date/Time: 2011-4-12 7:22:31
Electronics: DAE4 Sn771
Medium: Head 2450 MHz
Medium parameters used: f = 2450 MHz; σ = 1.82 mho/m; ε_r = 39.6; ρ = 1000 kg/m^3
Ambient Temperature:23.0^{o}C Liquid Temperature: 22.5^{o}C
Communication System: CW Frequency: 2450 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3617 ConvF(7.19, 7.19, 7.19)

System Validation/Area Scan (101x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 14.8 mW/g

System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 87.1 V/m; Power Drift = 0.046 dB
Peak SAR (extrapolated) = 18.2 W/kg
SAR(1 g) = 12.9 mW/g; SAR(10 g) = 6.05 mW/g
Maximum value of SAR (measured) = 13.9 mW/g



0 dB = 13.9mW/g

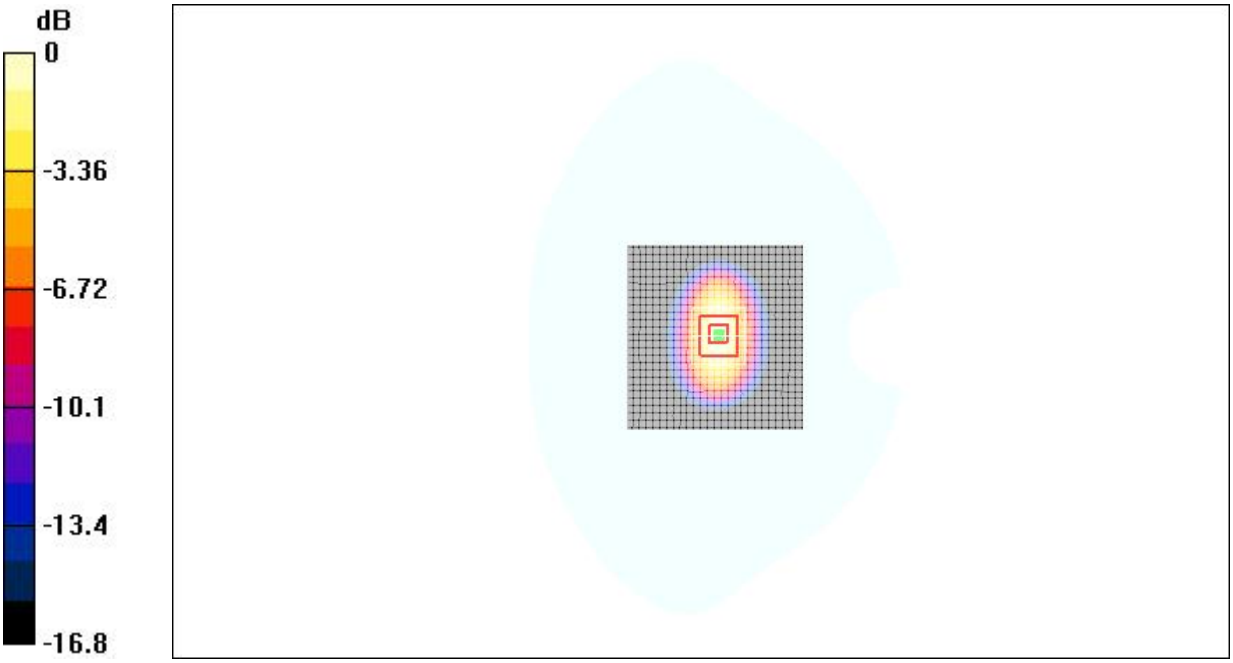
Fig.66 validation 2450MHz 250mW

2450MHz

Date/Time: 2011-4-12 13:15:46
Electronics: DAE4 Sn771
Medium: Body 2450
Medium parameters used: f = 2450 MHz; σ = 1.97 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3
Ambient Temperature:23.0oC Liquid Temperature: 22.5^{o}C
Communication System: CW Frequency: 2450 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3617 ConvF(6.88, 6.88, 6.88)

System Validation/Area Scan (101x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 15.8 mW/g

System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 82.1 V/m; Power Drift = 0.069 dB
Peak SAR (extrapolated) = 24.3 W/kg
SAR(1 g) = 12.9 mW/g; SAR(10 g) = 5.9 mW/g
Maximum value of SAR (measured) = 14.5 mW/g



0 dB = 14.5mW/g

Fig.67 validation 2450MHz 250mW

Calibration certificate and Test positions are described in the additional document:

Appendix to test report no. 2011SAR00034

Calibration certificate and Test positions