



SAR TEST REPORT

No. 2010SAR00099

For

Motorola (Beijing) Mobility Technologies Ltd.

GSM quad band and UMTS dual band mobile phone

Sesame

XT300

With

Hardware Version: DVT2

Software Version: 01.18

FCCID: IHDP56LQ2

Issued Date: 2010-10-20



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

No. 52, Huayuan Bei Road, Haidian District, Beijing, P. R. China 100191.

Tel:+86(0)10-62304633-2079, Fax:+86(0)10-62304793 Email:welcom@emcite.com. www.emcite.com

©Copyright. All rights reserved by TMC Beijing.

TABLE OF CONTENT

1 TEST LABORATORY	3
1.1 TESTING LOCATION	3
1.2 TESTING ENVIRONMENT.....	3
1.3 PROJECT DATA	3
1.4 SIGNATURE.....	3
2 CLIENT INFORMATION	4
2.1 APPLICANT INFORMATION	4
2.2 MANUFACTURER INFORMATION	4
3 EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT (AE)	5
3.1 ABOUT EUT	5
3.2 INTERNAL IDENTIFICATION OF EUT USED DURING THE TEST	5
3.3 INTERNAL IDENTIFICATION OF AE USED DURING THE TEST.....	5
4 CHARACTERISTICS OF THE TEST	5
4.1 APPLICABLE LIMIT REGULATIONS	5
4.2 APPLICABLE MEASUREMENT STANDARDS.....	5
5 OPERATIONAL CONDITIONS DURING TEST	6
5.1 SCHEMATIC TEST CONFIGURATION.....	6
5.2 SAR MEASUREMENT SET-UP.....	6
5.3 DASY4 E-FIELD PROBE SYSTEM.....	7
5.4 E-FIELD PROBE CALIBRATION	8
5.5 OTHER TEST EQUIPMENT	9
5.6 EQUIVALENT TISSUES	9
5.7 SYSTEM SPECIFICATIONS	10
6 LABORATORY ENVIRONMENT	11
7 CONDUCTED OUTPUT POWER MEASUREMENT.....	11
7.1 SUMMARY	11
7.2 CONDUCTED POWER	11
8 TEST RESULTS	13
8.1 DIELECTRIC PERFORMANCE	13
8.2 SYSTEM VALIDATION.....	14
8.3 SUMMARY OF MEASUREMENT RESULTS	15
8.4 SUMMARY OF MEASUREMENT RESULTS (BLUETOOTH AND WiFi FUNCTION)	21
8.5 CONCLUSION	24
9 MEASUREMENT UNCERTAINTY	24
10 MAIN TEST INSTRUMENTS	25
ANNEX A MEASUREMENT PROCESS.....	26
ANNEX B TEST LAYOUT	27
ANNEX C GRAPH RESULTS.....	36
ANNEX D SYSTEM VALIDATION RESULTS	162
ANNEX E PROBE CALIBRATION CERTIFICATE.....	166
ANNEX F DIPOLE CALIBRATION CERTIFICATE	186

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: September 15, 2010
Testing End Date: September 17, 2010

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 Client Information

2.1 Applicant Information

Company Name: Motorola (Beijing) Mobility Technologies Ltd.
Address /Post: NO. 1 WANG JING EAST Rd. Chao Yang, Beijing
City: Beijing
Postal Code: 100102
Country: P. R. China
Contact: Hailiang Tang
Email: Hailiang.Tang@motorola.com
Telephone: +8613910190872
Fax: /

2.2 Manufacturer Information

Company Name: Motorola (Beijing) Mobility Technologies Ltd."
Address /Post: NO. 1 WANG JING EAST Rd. Chao Yang, Beijing
City: Beijing
Postal Code: 100102
Country: P. R. China
Contact: Hailiang Tang
Email: Hailiang.Tang@motorola.com
Telephone: +8613910190872
Fax: /

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

3.1 About EUT

EUT Description:	GSM quad band and UMTS dual band mobile phone
Model Name:	Sesame
Marketing Name:	XT300
Test Frequency Band:	GSM 850 / PCS 1900 / WCDMA850 / WCDMA1900 / WiFi
GPRS capability Class:	B

3.2 Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version
EUT1	352795040014549 / 352795040011206	DVT2	01.18

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

3.3 Internal Identification of AE used during the test

AE ID*	Description	Model	SN	Manufacturer
AE1	Battery	SPN5334A	/	FLEXPowr
AE2	Headset	SJYN0394A	/	Merry Electronics

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

4 CHARACTERISTICS OF THE TEST

4.1 Applicable Limit Regulations

EN 50360–2001: Product standard for the measurement of Specific Absorption Rate related to human exposure to electromagnetic fields from mobile phones.

It specifies the maximum exposure limit of **2.0 W/kg** as averaged over any 10 gram of tissue for portable devices being used within 20 cm of the user in the uncontrolled environment.

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

EN 62209-1–2006: Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures –Part 1: Procedure to determine the specific absorption rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz).

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.

IEC 62209-1-2005: Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures –Part 1: Procedure to determine the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)

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; 9262, 9400 and 9538 respectively in the case of WCDMA 1900 MHz. The EUT is commanded to operate at maximum transmitting power.

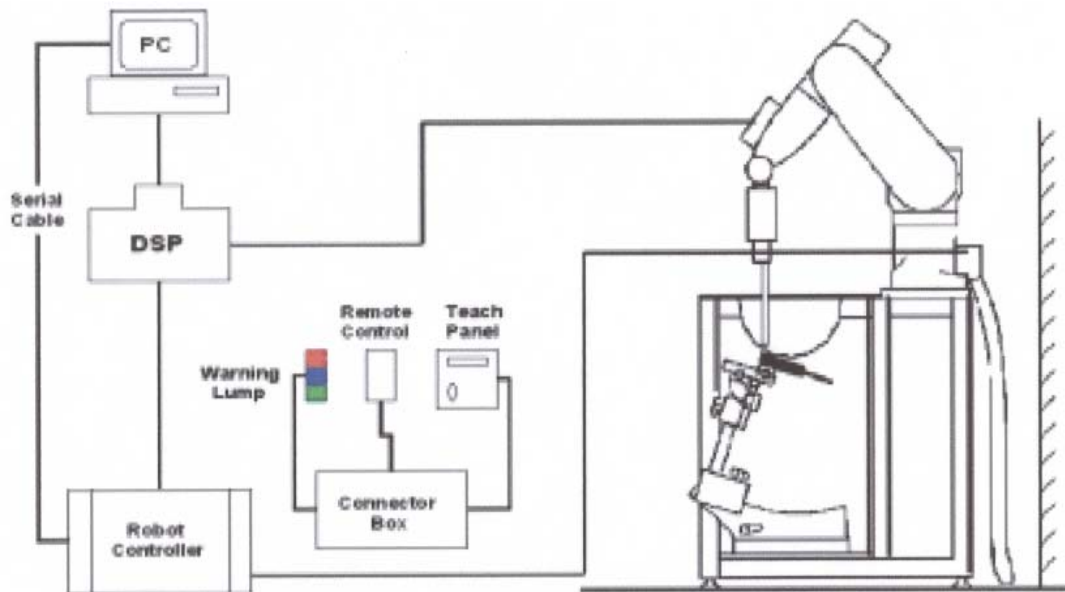
The EUT shall use its internal transmitter. The antenna(s), battery and accessories shall be those specified by the manufacturer. The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power output. If a wireless link is used, the antenna connected to the 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 $\pm 0.02\text{mm}$. 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 Dasy4 E-field Probe System

The SAR measurements were conducted with the dosimetric probe ES3DV3 (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 $\pm 10\%$. The spherical isotropy was evaluated and found to be better than $\pm 0.25\text{dB}$.

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	Basic Broad Band Calibration in air Conversion Factors (CF) for HSL 900 and HSL 1810 Additional CF for other liquids and frequencies upon request
Frequency	10 MHz to 4 GHz; Linearity: $\pm 0.2 \text{ dB}$ (30 MHz to 4 GHz)



Picture 3: ES3DV3 E-field

Directivity	± 0.2 dB in HSL (rotation around probe axis) ± 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

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 below 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/m³).



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 repeatably 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±0.1 mm
Filling Volume	Approx. 20 liters
Dimensions	810 x 1000 x 500 mm (H x L x W)
Available	Special



5.6 Equivalent Tissues

Picture 6: Generic Twin Phantom

The liquid used for the frequency range of 800-3000 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 $\epsilon=40.0$ $\sigma=1.40$
MIXTURE %	FREQUENCY 2450MHz
Water	58.79
Glycol monobutyl	41.15
Salt	0.06
Dielectric Parameters Target Value	f=2450MHz $\epsilon=39.2$ $\sigma=1.80$

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 $\epsilon=55.2$ $\sigma=0.97$
MIXTURE %	FREQUENCY 1900MHz
Water	69.91
Glycol monobutyl	29.96
Salt	0.13
Dielectric Parameters Target Value	f=1900MHz $\epsilon=53.3$ $\sigma=1.52$
MIXTURE %	FREQUENCY 2450MHz
Water	72.60
Glycol monobutyl	27.22
Salt	0.18
Dielectric Parameters Target Value	f=2450MHz $\epsilon=52.7$ $\sigma=1.95$

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 LABORATORY ENVIRONMENT

Table 3: The Ambient Conditions during EMF Test

Temperature	Min. = 15 °C, Max. = 30 °C
Relative humidity	Min. = 30%, Max. = 70%
Ground system resistance	< 0.5 Ω
Ambient noise is checked and found very low and in compliance with requirement of standards. Reflection of surround objects is minimized and in compliance with requirement of standards.	

7 CONDUCTED OUTPUT POWER MEASUREMENT

7.1 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.

7.2 Conducted Power

7.2.1 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.

7.2.2 Measurement result

Table 4: The conducted power for GSM 850/1900

GSM 850MHZ	Conducted Power (dBm)		
	Channel 251(848.8MHz)	Channel 190(836.6MHz)	Channel 128(824.2MHz)
	32.60	32.82	32.91
GSM 1900MHZ	Conducted Power (dBm)		
	Channel 810(1909.8MHz)	Channel 661(1880MHz)	Channel 512(1850.2MHz)
	29.98	30.50	30.75

Table 5: 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	32.25	32.2	32.3	-9.03dB	23.22	23.17	23.27
2 Txslots	30.55	30.5	30.6	-6.02dB	24.53	24.48	24.58
3Txslots	28.53	28.5	28.58	-4.26dB	24.27	24.24	24.32
4 Txslots	26.52	26.5	26.53	-3.01dB	23.51	23.49	23.52
GSM 850 EGPRS	Measured Power (dBm)			calculation	Averaged Power (dBm)		
	251	190	128		251	190	128
1 Txslot	32.25	32.22	32.31	-9.03dB	23.22	23.19	23.28
2 Txslots	30.55	30.5	30.61	-6.02dB	24.53	24.48	24.59
3Txslots	28.53	28.53	28.58	-4.26dB	24.27	24.27	24.32
4 Txslots	26.52	26.52	26.53	-3.01dB	23.51	23.51	23.52

PCS1900 GPRS	Measured Power (dBm)			calculation	Averaged Power (dBm)		
	810	661	512		810	661	512
1 Txslot	29.5	29.52	29.56	-9.03dB	20.47	20.49	20.53
2 Txslots	28.98	29.1	29.15	-6.02dB	22.96	23.08	23.13
3Txslots	26.92	27.13	27.18	-4.26dB	22.66	22.87	22.92
4 Txslots	24.92	25.05	25.21	-3.01dB	21.91	22.04	22.2
PCS1900 EGPRS	Measured Power (dBm)			calculation	Averaged Power (dBm)		
	810	661	512		810	661	512
1 Txslot	29.53	29.52	29.57	-9.03dB	20.5	20.49	20.54
2 Txslots	28.99	29.12	29.16	-6.02dB	22.97	23.1	23.14
3Txslots	26.94	27.14	27.18	-4.26dB	22.68	22.88	22.92
4 Txslots	24.92	25.06	25.22	-3.01dB	21.91	22.05	22.21

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 2 Txslots for GPRS and EGPRS.

Table 6: The conducted Power for WCDMA850

Item	band	FDDV result		
	ARFCN	4233 (846.6MHz)	4182 (836.4MHz)	4132 (826.4MHz)
WCDMA	\	23.93	23.80	24.04
HSDPA	1	23.86	23.76	24.05
	2	23.94	23.82	24.06
	3	23.92	23.84	24.18
	4	24.00	23.84	24.10

Table 7: The conducted Power for WCDMA1900

Item	band	FDDII result		
	ARFCN	9538 (1907.6MHz)	9400 (1880MHz)	9262 (1852.4MHz)
WCDMA	\	23.93	23.76	23.87
HSDPA	1	23.88	23.70	23.84
	2	23.95	23.77	23.89
	3	24.01	23.82	24.02
	4	24.06	23.82	23.98

Note: HSDPA body SAR are not required, because maximum average output power of each RF channel with HSDPA active is not 1/4 dB higher than that measured without HSDPA and the maximum SAR for WCDMA850 and WCDMA1900 are not above 75% of the SAR limit (see table 24, 25, 29 and 30 for the SAR measurement results).

7.2.3 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 9 to Table 12 labeled as: (Power Drift [dB]). This ensures that the power drift during one measurement is within 5%.

8 TEST RESULTS

According to the client request, we use the data of report, No.2010SAR00101, for table 12 to table 26 and perform the measurement of WCDMA1900 for table 27 to table 30.

8.1 Dielectric Performance

Table 8: Dielectric Performance of Head Tissue Simulating Liquid

Measurement is made at temperature 23.0 °C and relative humidity 43%. Liquid temperature during the test: 22.5°C Measurement Date : 850 MHz <u>Sep 15, 2010</u> 1900 MHz <u>Sep 16, 2010</u> 2450 MHz <u>Sep 17, 2010</u>			
/	Frequency	Permittivity ϵ	Conductivity σ (S/m)
Target value	850 MHz	41.5	0.90
	1900 MHz	40.0	1.40
	2450 MHz	39.2	1.80
Measurement value (Average of 10 tests)	850 MHz	41.7	0.91
	1900 MHz	40.4	1.41
	2450 MHz	39.4	1.82

Table 9: Dielectric Performance of Body Tissue Simulating Liquid

Measurement is made at temperature 23.0 °C and relative humidity 43%. Liquid temperature during the test: 22.5°C Measurement Date : 850 MHz <u>Sep 15, 2010</u> 1900 MHz <u>Sep 16, 2010</u> 2450 MHz <u>Sep 17, 2010</u>			
/	Frequency	Permittivity ϵ	Conductivity σ (S/m)
Target value	850 MHz	55.2	0.97
	1900 MHz	53.3	1.52
	2450 MHz	52.7	1.95
Measurement value (Average of 10 tests)	850 MHz	54.8	0.95
	1900 MHz	52.9	1.53
	2450 MHz	51.0	1.94

8.2 System Validation

Table 10: System Validation of Head

Measurement is made at temperature 23.0 °C and relative humidity 43%.							
Liquid temperature during the test: 22.5°C							
Measurement Date : 850 MHz Sep 15, 2010 1900 MHz Sep 16, 2010 2450 MHz Sep 17, 2010							
Liquid parameters	Dipole calibration Target value	Frequency		Permittivity ϵ		Conductivity σ (S/m)	
		835 MHz		41.4		0.91	
		1900 MHz		39.7		1.41	
	Actural Measurement value	835 MHz		41.9		0.90	
		1900 MHz		40.4		1.41	
		2450 MHz		39.4		1.82	
Verification results	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
	835 MHz	6.25	9.65	5.88	9.12	-5.92%	-5.49%
	1900 MHz	20.4	39.6	19.72	38.32	-3.33%	-3.23%
	2450 MHz	25.0	53.5	23.88	51.6	-4.48%	-3.55%

Table 11: System Validation of Body

Measurement is made at temperature 23.0 °C and relative humidity 43%.							
Liquid temperature during the test: 22.5°C							
Measurement Date : 850 MHz Sep 15, 2010 1900 MHz Sep 16, 2010 2450 MHz Sep 17, 2010							
Liquid parameters	Dipole calibration Target value	Frequency		Permittivity ϵ		Conductivity σ (S/m)	
		835 MHz		54.9		0.98	
		1900 MHz		52.3		1.51	
	Actural Measurement value	835 MHz		55.0		0.94	
		1900 MHz		52.9		1.53	
		2450 MHz		51.0		1.94	
Verification results	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
	835 MHz	6.36	9.75	6.00	9.28	-5.66%	-4.82%
	1900 MHz	21.1	41.3	20.24	40.4	-4.08%	-2.18%
	2450 MHz	23.7	51.1	23.96	52.4	1.10%	2.54%

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

8.3 Summary of Measurement Results

Table 12: SAR Values (GSM 850MHz Head) – Slide down

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)	0.265	0.359	0.041
Left hand, Tilt 15 Degree, Mid frequency (See Fig.2)	0.172	0.229	0.111
Right hand, Touch cheek, Top frequency (See Fig.3)	0.321	0.429	0.131
Right hand, Touch cheek, Mid frequency (See Fig.4)	0.318	0.424	-0.027
Right hand, Touch cheek, Bottom frequency (See Fig.5)	0.253	0.336	0.090
Right hand, Tilt 15 Degree, Mid frequency (See Fig.6)	0.176	0.232	0.068

Table 13: SAR Values (GSM 850MHz Head) – Slide up

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.7)	0.278	0.366	-0.168
Left hand, Tilt 15 Degree, Mid frequency (See Fig.8)	0.143	0.190	-0.027
Right hand, Touch cheek, Top frequency (See Fig.9)	0.415	0.561	-0.061
Right hand, Touch cheek, Mid frequency (See Fig.10)	0.332	0.446	-0.191
Right hand, Touch cheek, Bottom frequency (See Fig.11)	0.263	0.355	0.096
Right hand, Tilt 15 Degree, Mid frequency (See Fig.12)	0.167	0.221	0.032

Table 14: SAR Values (PCS 1900MHz Head) – Slide down

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, Top frequency (See Fig.13)	0.172	0.298	0.070
Left hand, Touch cheek, Mid frequency (See Fig.14)	0.238	0.407	0.116
Left hand, Touch cheek, Bottom frequency (See Fig.15)	0.329	0.564	0.025
Left hand, Tilt 15 Degree, Mid frequency (See Fig.16)	0.176	0.300	0.018
Right hand, Touch cheek, Mid frequency (See Fig.17)	0.172	0.285	-0.085
Right hand, Tilt 15 Degree, Mid frequency (See Fig.18)	0.210	0.363	-0.065

Table 15: SAR Values (PCS 1900MHz Head) – Slide up

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.19)	0.134	0.208	-0.109
Left hand, Tilt 15 Degree, Mid frequency (See Fig.20)	0.124	0.189	-0.032
Right hand, Touch cheek, Top frequency (See Fig.21)	0.094	0.152	-0.099
Right hand, Touch cheek, Mid frequency (See Fig.22)	0.147	0.238	0.171
Right hand, Touch cheek, Bottom frequency (See Fig.23)	0.205	0.328	-0.082
Right hand, Tilt 15 Degree, Mid frequency (See Fig.24)	0.129	0.215	0.005

Table 16: SAR Values (WCDMA 850MHz Head) – Slide down

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.25)	0.163	0.225	-0.021
Left hand, Tilt 15 Degree, Mid frequency (See Fig.26)	0.115	0.152	-0.068
Right hand, Touch cheek, Top frequency (See Fig.27)	0.245	0.322	0.119
Right hand, Touch cheek, Mid frequency (See Fig.28)	0.190	0.246	0.101
Right hand, Touch cheek, Bottom frequency (See Fig.29)	0.217	0.280	-0.002
Right hand, Tilt 15 Degree, Mid frequency (See Fig.30)	0.168	0.221	-0.089

Table 17: SAR Values (WCDMA 850MHz Head) – Slide up

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.31)	0.526	0.687	-0.058
Left hand, Tilt 15 Degree, Mid frequency (See Fig.32)	0.319	0.421	0.000
Right hand, Touch cheek, Top frequency (See Fig.33)	0.358	0.478	0.125
Right hand, Touch cheek, Mid frequency (See Fig.34)	0.585	0.777	-0.036
Right hand, Touch cheek, Bottom frequency (See Fig.35)	0.248	0.327	-0.042
Right hand, Tilt 15 Degree, Mid frequency (See Fig.36)	0.326	0.431	0.001

Table 18: SAR Values (GSM 850MHz Body) – Slide down

Limit of SAR (W/kg)	10 g Average	1g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		Power Drift (dB)
	10 g Average	1 g Average	
Towards Phantom, Top frequency with GPRS (See Fig.37)	0.267	0.362	-0.116
Towards Phantom, Mid frequency with GPRS (See Fig.38)	0.263	0.355	-0.011
Towards Phantom, Bottom frequency with GPRS (See Fig.39)	0.200	0.277	-0.102
Towards Ground, Top frequency with GPRS (See Fig.40)	0.625	0.914	-0.076
Towards Ground, Mid frequency with GPRS (See Fig.41)	0.597	0.870	-0.019
Towards Ground, Bottom frequency with GPRS (See Fig.42)	0.461	0.673	0.033

Table 19: SAR Values (GSM 850MHz Body) – Slide up

Limit of SAR (W/kg)	10 g Average	1g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		Power Drift (dB)
	10 g Average	1 g Average	
Towards Phantom, Top frequency with GPRS (See Fig.43)	0.442	0.591	-0.067
Towards Phantom, Mid frequency with GPRS (See Fig.44)	0.391	0.543	-0.051
Towards Phantom, Bottom frequency with GPRS (See Fig.45)	0.400	0.532	0.000
Towards Ground, Top frequency with GPRS (See Fig.46)	0.535	0.749	-0.135
Towards Ground, Mid frequency with GPRS (See Fig.47)	0.522	0.711	-0.106
Towards Ground, Bottom frequency with GPRS (See Fig.48)	0.480	0.678	0.026

Table 20: SAR Values (GSM 850MHz Body with EGPRS and Headset) – Slide down

Limit of SAR (W/kg)	10 g Average	1g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		Power Drift (dB)
	10 g Average	1 g Average	
Towards Ground, Top frequency with EGPRS (See Fig.49)	0.603	0.873	-0.101
Towards Ground, Mid frequency with EGPRS (See Fig.50)	0.573	0.836	-0.119

Towards Ground, Bottom frequency with EGPRS (See Fig.51)	0.441	0.644	0.103
Towards Ground, Top frequency with Headset (See Fig.52)	0.396	0.574	0.039

Table 21: SAR Values (PCS 1900MHz Body) – Slide down

Limit of SAR (W/kg)	10 g Average	1g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		Power Drift (dB)
	10 g Average	1 g Average	
Towards Phantom, Top frequency with GPRS (See Fig.53)	0.050	0.082	0.051
Towards Phantom, Mid frequency with GPRS (See Fig.54)	0.081	0.125	0.073
Towards Phantom, Bottom frequency with GPRS (See Fig.55)	0.128	0.198	0.045
Towards Ground, Top frequency with GPRS (See Fig.56)	0.166	0.284	-0.130
Towards Ground, Mid frequency with GPRS (See Fig.57)	0.236	0.405	0.021
Towards Ground, Bottom frequency with GPRS (See Fig.58)	0.301	0.526	-0.051

Table 22: SAR Values (PCS 1900MHz Body) – Slide up

Limit of SAR (W/kg)	10 g Average	1g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		Power Drift (dB)
	10 g Average	1 g Average	
Towards Phantom, Top frequency with GPRS (See Fig.59)	0.102	0.158	0.124
Towards Phantom, Mid frequency with GPRS (See Fig.60)	0.154	0.237	0.002
Towards Phantom, Bottom frequency with GPRS (See Fig.61)	0.215	0.332	-0.047
Towards Ground, Top frequency with GPRS (See Fig.62)	0.237	0.364	0.114
Towards Ground, Mid frequency with GPRS (See Fig.63)	0.319	0.494	0.005
Towards Ground, Bottom frequency with GPRS (See Fig.64)	0.410	0.638	0.000

Table 23: SAR Values (PCS 1900MHz Body with EGPRS and Headset) – Slide up

Limit of SAR (W/kg)	10 g Average	1g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		Power Drift (dB)
	10 g Average	1 g Average	

Towards Ground, Bottom frequency with EGPRS (See Fig.65)	0.404	0.627	0.003
Towards Ground, Bottom frequency with Headset (See Fig.66)	0.270	0.423	0.026

Table 24: SAR Values (WCDMA 850MHz Body) – Slide down

Limit of SAR (W/kg)	10 g Average	1g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		Power Drift (dB)
	10 g Average	1 g Average	
Towards Phantom, Top frequency (See Fig.67)	0.272	0.367	-0.004
Towards Phantom, Mid frequency (See Fig.68)	0.192	0.258	-0.003
Towards Phantom, Bottom frequency (See Fig.69)	0.209	0.280	0.021
Towards Ground, Top frequency (See Fig.70)	0.572	0.829	0.011
Towards Ground, Mid frequency (See Fig.71)	0.397	0.575	0.031
Towards Ground, Bottom frequency (See Fig.72)	0.398	0.576	0.056

Table 25: SAR Values (WCDMA 850MHz-Body) – Slide up

Limit of SAR (W/kg)	10 g Average	1g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		Power Drift (dB)
	10 g Average	1 g Average	
Towards Phantom, Top frequency (See Fig.73)	0.308	0.414	0.021
Towards Phantom, Mid frequency (See Fig.74)	0.616	0.824	0.045
Towards Phantom, Bottom frequency (See Fig.75)	0.306	0.408	-0.089
Towards Ground, Top frequency (See Fig.76)	0.423	0.577	0.110
Towards Ground, Mid frequency (See Fig.77)	0.813	1.11	-0.049
Towards Ground, Bottom frequency (See Fig.78)	0.421	0.576	0.031

Table 26: SAR Values (WCDMA 850MHz Body with Headset) – Slide up

Limit of SAR (W/kg)	10 g Average	1g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		Power Drift (dB)
	10 g Average	1 g Average	
Towards Ground, Mid frequency with Headset (See Fig.79)	0.784	1.09	-0.118

Table 27: SAR Values (WCDMA 1900MHz Head) – Slide down

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, Top frequency (See Fig.80)	0.494	0.863	-0.157
Left hand, Touch cheek, Mid frequency (See Fig.81)	0.451	0.793	-0.064
Left hand, Touch cheek, Bottom frequency (See Fig.82)	0.540	0.934	-0.037
Left hand, Tilt 15 Degree, Mid frequency (See Fig.83)	0.327	0.536	-0.040
Right hand, Touch cheek, Mid frequency (See Fig.84)	0.332	0.559	0.024
Right hand, Tilt 15 Degree, Mid frequency (See Fig.85)	0.399	0.690	0.015

Table 28: SAR Values (WCDMA 1900MHz Head) – Slide up

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, Top frequency (See Fig.86)	0.297	0.490	0.129
Left hand, Touch cheek, Mid frequency (See Fig.87)	0.258	0.419	-0.147
Left hand, Touch cheek, Bottom frequency (See Fig.88)	0.357	0.576	-0.031
Left hand, Tilt 15 Degree, Mid frequency (See Fig.89)	0.211	0.342	0.099
Right hand, Touch cheek, Mid frequency (See Fig.90)	0.179	0.283	-0.157
Right hand, Tilt 15 Degree, Mid frequency (See Fig.91)	0.223	0.367	-0.026

Table 29: SAR Values (WCDMA 1900MHz Body) – Slide down

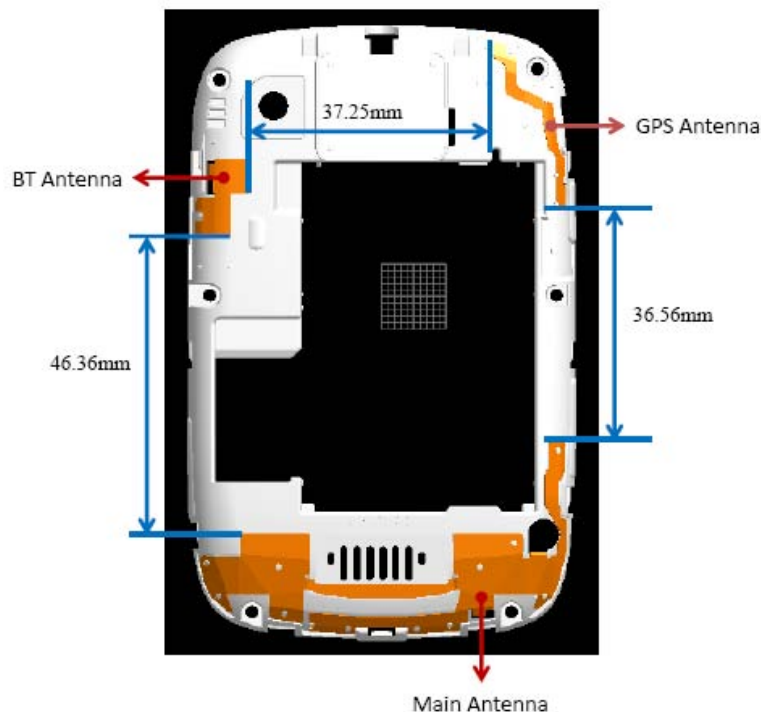
Limit of SAR (W/kg)	10 g Average	1g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		
	10 g Average	1 g Average	
Towards Phantom, Top frequency (See Fig.92)	0.155	0.243	-0.053
Towards Phantom, Mid frequency (See Fig.93)	0.139	0.216	-0.047
Towards Phantom, Bottom frequency (See Fig.94)	0.213	0.330	0.064
Towards Ground, Top frequency (See Fig.95)	0.312	0.529	0.007
Towards Ground, Mid frequency (See Fig.96)	0.231	0.394	0.024
Towards Ground, Bottom frequency (See Fig.97)	0.310	0.531	0.022

Table 30: SAR Values (WCDMA 1900MHz Body) – Slide up

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, Top frequency (See Fig.98)	0.195	0.301	-0.111
Towards Phantom, Mid frequency (See Fig.99)	0.171	0.263	-0.105
Towards Phantom, Bottom frequency (See Fig.100)	0.239	0.365	-0.178
Towards Ground, Top frequency (See Fig.101)	0.377	0.571	-0.137
Towards Ground, Mid frequency (See Fig.102)	0.330	0.499	0.073
Towards Ground, Bottom frequency (See Fig.103)	0.397	0.598	0.107
Towards Ground, Bottom frequency with Headset (See Fig.104)	0.359	0.564	0.002

8.4 Summary of Measurement Results (Bluetooth and WiFi function)

The distance between BT/WiFi antenna and GSM antenna is $>2.5\text{cm}$ and $<5\text{cm}$. The location of the antennas inside mobile phone is shown below:



The output power of BT antenna is as following:

Channel	Ch 0 (2402 MHz)	Ch 39 (2441 MHz)	Ch 78 (2480 MHz)
Peak Conducted Output Power(dBm)	6.2	6.9	7.8

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 $\leq P_{Ref}$ and its antenna is $>2.5\text{cm}$ and $<5\text{cm}$ from other antenna

The conducted power for WiFi is as following:

802.11b (dBm)

Channel\data rate	1Mbps	2Mbps	5.5Mbps	11Mbps
1	17.47	16.98	17.41	17.39
6	17.38	17.28	17.3	17.08
11	17.37	17.34	17.28	17.51

802.11g (dBm)

Channel\data rate	6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
1	9.76	9.79	9.62	9.5	9.43	8.63	8.43	8.4
6	9.75	9.77	9.77	9.81	9.5	8.6	8.7	8.67
11	10.2	10.02	10.17	10.15	10.05	9.1	9	8.95

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 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 1".

Table 31: SAR Values (WIFI 802.11b Head) – Slide down

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 1 (See Fig.105)	0.236	0.477	0.137
Left hand, Tilt 15 Degree, 1Mbps,channel 1 (See Fig.106)	0.198	0.372	0.130
Right hand, Touch cheek, 1Mbps,channel 1 (See Fig.107)	0.176	0.325	-0.142
Right hand, Tilt 15 Degree, 1Mbps,channel 1 (See Fig.108)	0.129	0.233	-0.167

Table 32: SAR Values (WIFI 802.11b Head) – Slide up

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 1 (See Fig.109)	0.219	0.421	-0.148
Left hand, Tilt 15 Degree, 1Mbps,channel 1 (See Fig.110)	0.126	0.245	-0.047
Right hand, Touch cheek, 1Mbps,channel 1 (See Fig.111)	0.290	0.599	0.125
Right hand, Tilt 15 Degree, 1Mbps,channel 1 (See Fig.112)	0.137	0.272	0.092

Table 33: SAR Values (WIFI 802.11b Body) – Slide down

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 1 (See Fig.113)	0.090	0.158	0.090
Toward Ground, 1Mbps,channel 1 (See Fig.114)	0.197	0.339	0.197

Table 34: SAR Values (WIFI 802.11b Body) – Slide up

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 1 (See Fig.115)	0.064	0.113	-0.137
Toward Ground, 1Mbps,channel 1 (See Fig.116)	0.181	0.317	0.105

The device was tested with the front and back of the device facing the phantom. Both sides of the device were tested for Body SAR for the purpose of including the SAR evaluation for body-worn accessories that support the device with the front side facing the user.

Table 35: The sum of SAR values for GSM and WiFi

	Maximum SAR value for Head	Maximum SAR value for Body
GSM	0.777	1.11
WiFi	0.599	0.339
Sum	1.376	1.449

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

8.5 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 value is obtained at the case of **WCDMA 850 MHz Band, Body, Slide up, Towards Ground, Mid frequency (Table 25)**, and the value are: **1.11 (1g)**.

9 Measurement Uncertainty

No.	Error Description	Type	Tolerance (±%)	Probability Distribution	Divisor	c_i	Standard Uncertainty (%) u_i (%)	Degree of freedom V_{eff} or ν_i
1	System repeatability	A	0.5	N	1	1	0.5	9
Measurement system								
2	– probe calibration	B	3.5	N	1	1	3.5	∞
3	– axial isotropy of the probe	B	4.7	R	$\sqrt{3}$	0.5	4.3	∞
4	– hemisphere isotropy of the probe	B	9.4	R	$\sqrt{3}$			
5	– space resolution	B	0	R	$\sqrt{3}$	1	0	∞
6	– boundary effect	B	11.0	R	$\sqrt{3}$	1	6.4	∞
7	– probe linearity	B	4.7	R	$\sqrt{3}$	1	2.7	∞
8	– detection limit	B	1.0	R	$\sqrt{3}$	1	0.6	∞
9	– readout electronics	B	1.0	N	1	1	1.0	∞
10	– RF Ambient Conditions	B	3.0	R	$\sqrt{3}$	1	1.73	∞
11	– Probe Positioner Mechanical Tolerance	B	0.4	R	$\sqrt{3}$	1	0.2	∞
12	– Probe Positioning with respect to Phantom Shell	B	2.9	R	$\sqrt{3}$	1	1.7	∞
13	– Extrapolation, interpolation and Integration Algorithms for Max. SAR Evaluation	B	3.9	R	$\sqrt{3}$	1	2.3	∞
Test sample Related								

14	– Test Sample Positioning	A	4.9	N	1	1	4.9	5
15	– Device Holder	A	6.1	N	1	1	6.1	5
16	– Output Power Variation - SAR drift measurement	B	5.0	R	$\sqrt{3}$	1	2.9	∞
Phantom and Tissue Parameters								
17	– Phantom Uncertainty (shape and thickness tolerances)	B	1.0	R	$\sqrt{3}$	1	0.6	∞
18	– liquid conductivity (deviation from target)	B	5.0	R	$\sqrt{3}$	0.6	1.7	∞
19	– liquid conductivity (measurement error)	A	0.23	N	1	1	0.23	9
20	-liquid permittivity (deviation from target)	B	5.0	R	$\sqrt{3}$	0.6	1.7	∞
21	– liquid permittivity (measurement error)	A	0.46	N	1	1	0.46	9
Combined standard uncertainty		$u_c = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$		/		12.2		88.7
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$		N	k=2	24.4		/

10 MAIN TEST INSTRUMENTS

Table 36: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	HP 8753E	US38433212	August 29,2010	One year
02	Power meter	NRVD	101253	September 4, 2010	One year
03	Power sensor	NRV-Z5	100333		
04	Signal Generator	E4433B	US37230472	September 3, 2010	One Year
05	Amplifier	VTL5400	0505	No Calibration Requested	
06	BTS	CMU 200	113312	August 10, 2010	One year
07	E-field Probe	SPEAG ES3DV3	3149	September 25, 2009	One year
08	E-field Probe	SPEAG EX3DV4	3617	July 9, 2010	One year
09	DAE	SPEAG DAE4	771	November 19, 2009	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	712	February 19, 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.

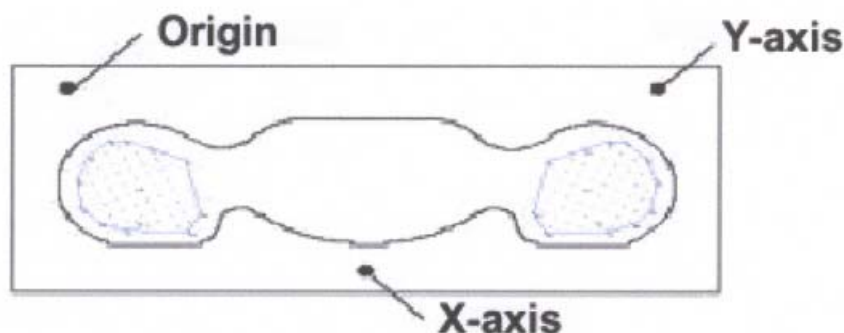
Step 3: Around this point, a volume of 30 mm x 30 mm x 30 mm was assessed by measuring 7 x 7 x 7 points. On this basis of this data set, the spatial peak SAR value was evaluated with the following procedure:

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 C GRAPH RESULTS

850 Left Cheek Middle-Slide down

Date/Time: 2010-9-15 8:08:21

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.385 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.04 V/m; Power Drift = 0.041 dB

Peak SAR (extrapolated) = 0.480 W/kg

SAR(1 g) = 0.359 mW/g; SAR(10 g) = 0.265 mW/g

Maximum value of SAR (measured) = 0.379 mW/g

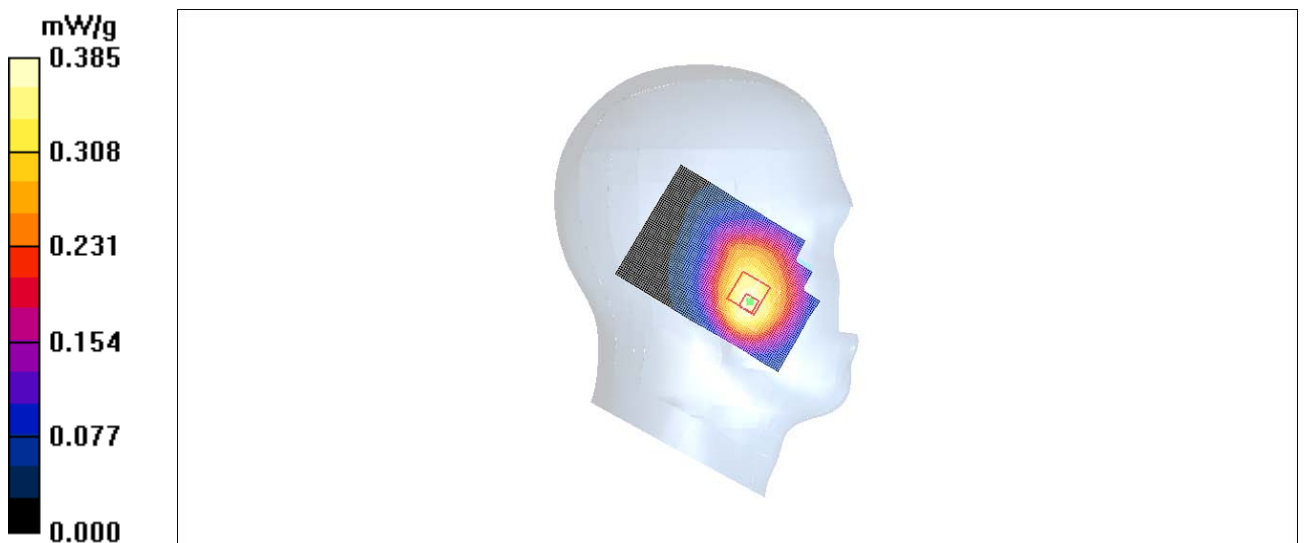


Fig. 1 850 MHz CH190

850 Left Tilt Middle-Slide down

Date/Time: 2010-9-15 8:22:41

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.238 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.4 V/m; Power Drift = 0.111 dB

Peak SAR (extrapolated) = 0.291 W/kg

SAR(1 g) = 0.229 mW/g; SAR(10 g) = 0.172 mW/g

Maximum value of SAR (measured) = 0.243 mW/g

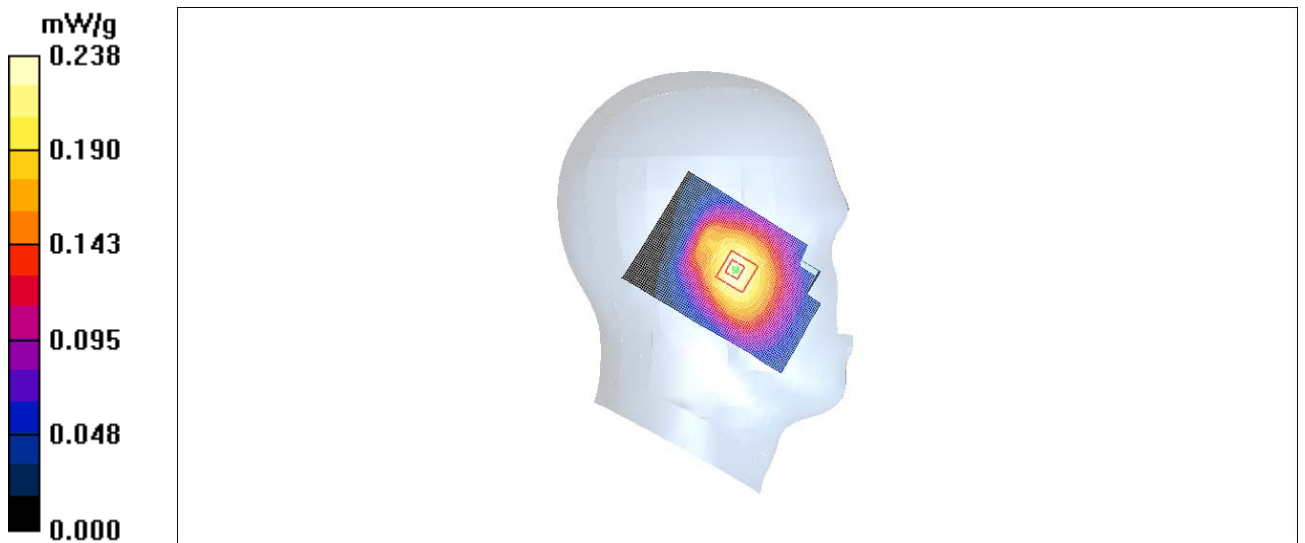


Fig.2 850 MHz CH190

850 Right Cheek High-Slide down

Date/Time: 2010-9-15 8:51:25

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 848.8$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.8$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.460 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.26 V/m; Power Drift = 0.131 dB

Peak SAR (extrapolated) = 0.586 W/kg

SAR(1 g) = 0.429 mW/g; SAR(10 g) = 0.321 mW/g

Maximum value of SAR (measured) = 0.452 mW/g

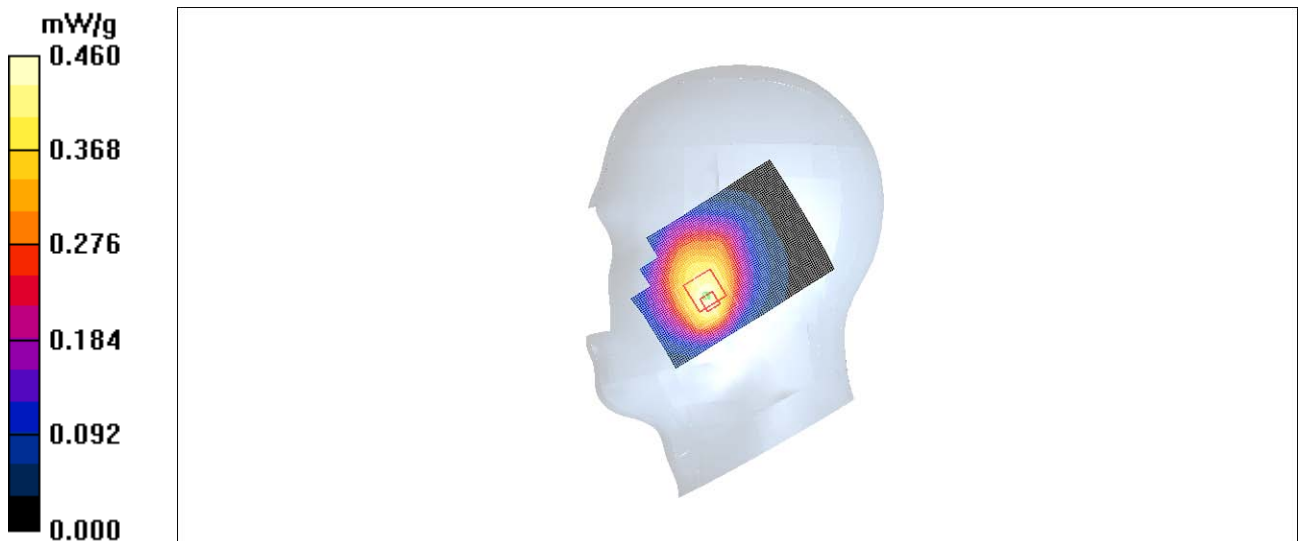


Fig. 3 850 MHz CH251

850 Right Cheek Middle-Slide down

Date/Time: 2010-9-15 8:37:05

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.457 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.04 V/m; Power Drift = -0.027 dB

Peak SAR (extrapolated) = 0.573 W/kg

SAR(1 g) = 0.424 mW/g; SAR(10 g) = 0.318 mW/g

Maximum value of SAR (measured) = 0.443 mW/g

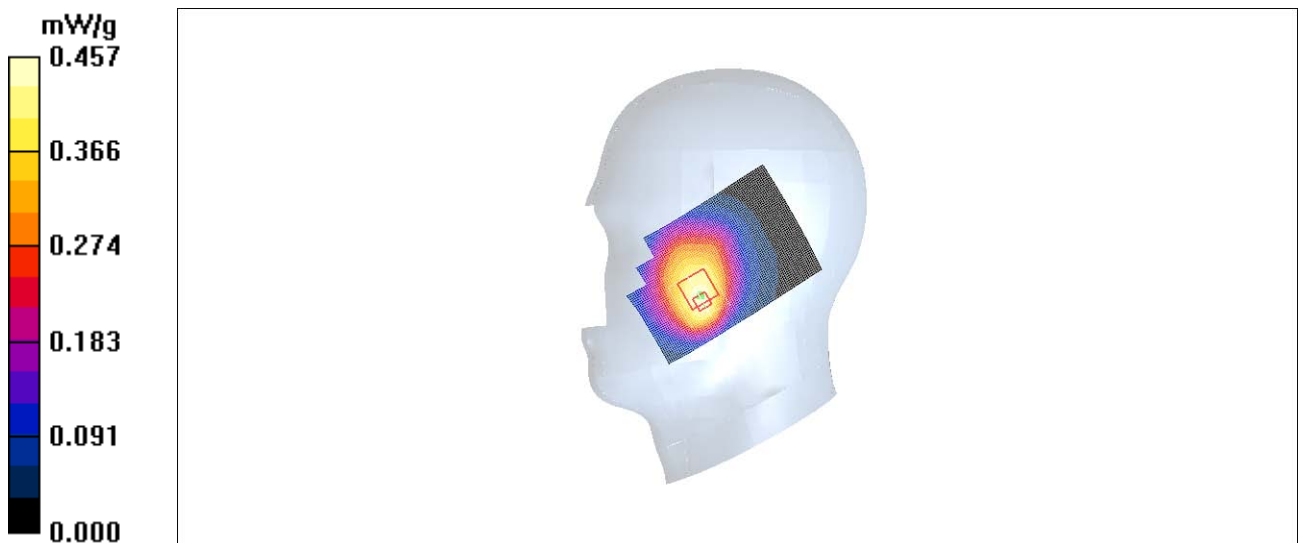


Fig. 4 850 MHz CH190

850 Right Cheek Low-Slide down

Date/Time: 2010-9-15 9:05:52

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used: $f = 825 \text{ MHz}$; $\sigma = 0.88 \text{ mho/m}$; $\epsilon_r = 42.1$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x91x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.364 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 6.20 V/m ; Power Drift = 0.090 dB

Peak SAR (extrapolated) = 0.454 W/kg

SAR(1 g) = 0.336 mW/g ; SAR(10 g) = 0.253 mW/g

Maximum value of SAR (measured) = 0.352 mW/g

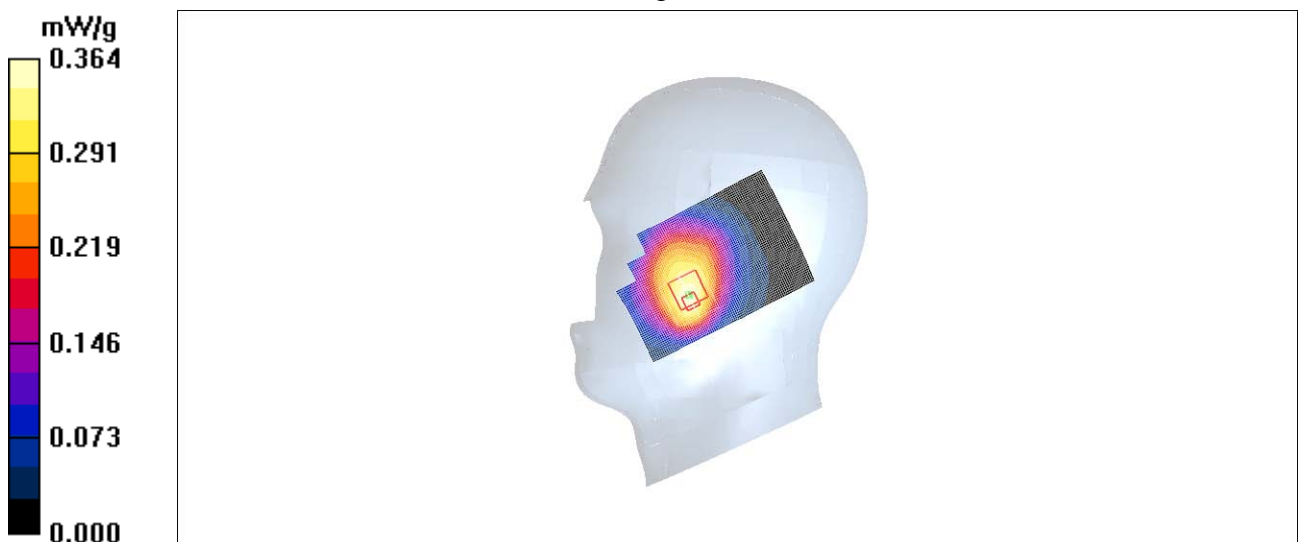


Fig. 5 850 MHz CH128

850 Right Tilt Middle-Slide down

Date/Time: 2010-9-15 9:20:19

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.244 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.1 V/m; Power Drift = 0.068 dB

Peak SAR (extrapolated) = 0.288 W/kg

SAR(1 g) = 0.232 mW/g; SAR(10 g) = 0.176 mW/g

Maximum value of SAR (measured) = 0.245 mW/g

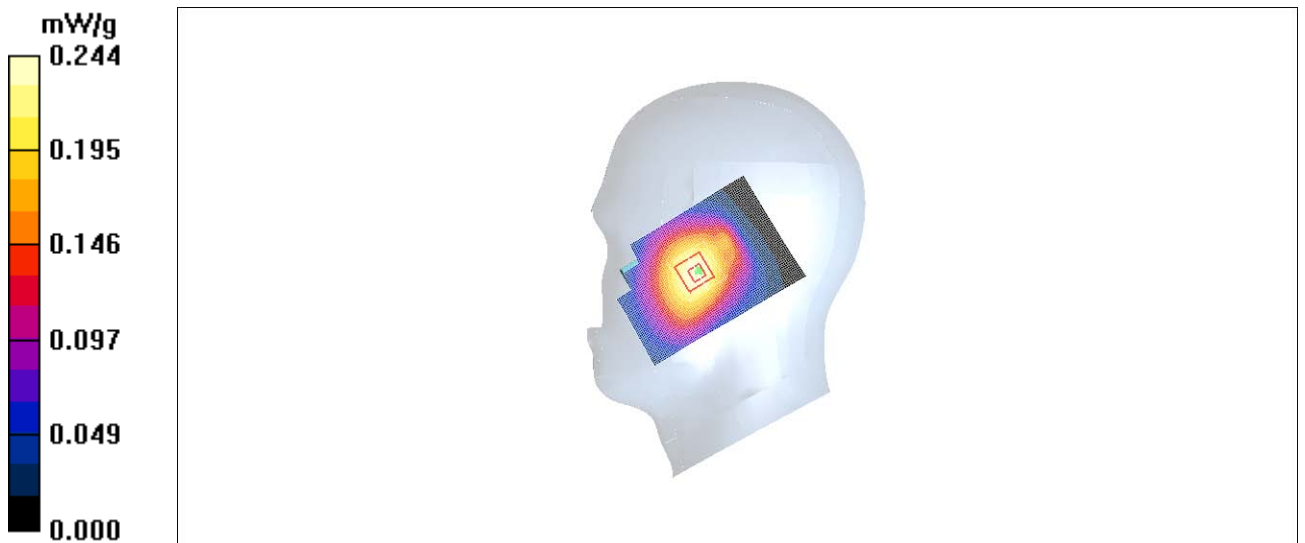


Fig.6 850 MHz CH190

850 Left Cheek Middle-Slide up

Date/Time: 2010-9-15 9:38:21

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.387 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.22 V/m; Power Drift = -0.168 dB

Peak SAR (extrapolated) = 0.444 W/kg

SAR(1 g) = 0.366 mW/g; SAR(10 g) = 0.278 mW/g

Maximum value of SAR (measured) = 0.387 mW/g

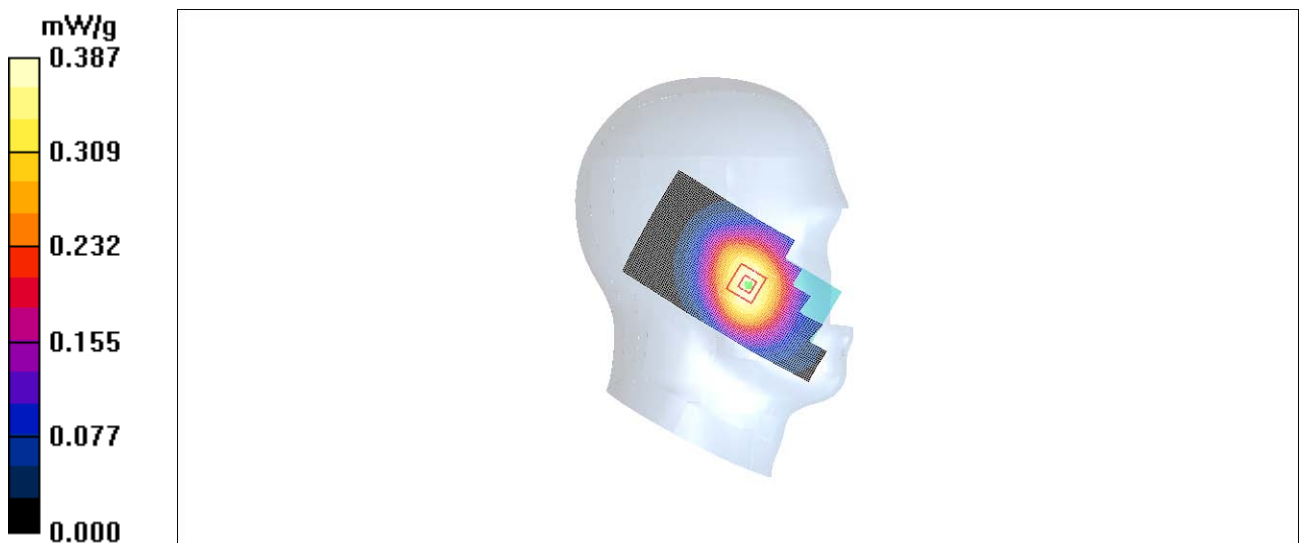


Fig. 7 850 MHz CH190

850 Left Tilt Middle-Slide up

Date/Time: 2010-9-15 9:52:49

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.199 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.48 V/m; Power Drift = -0.027 dB

Peak SAR (extrapolated) = 0.235 W/kg

SAR(1 g) = 0.190 mW/g; SAR(10 g) = 0.143 mW/g

Maximum value of SAR (measured) = 0.200 mW/g

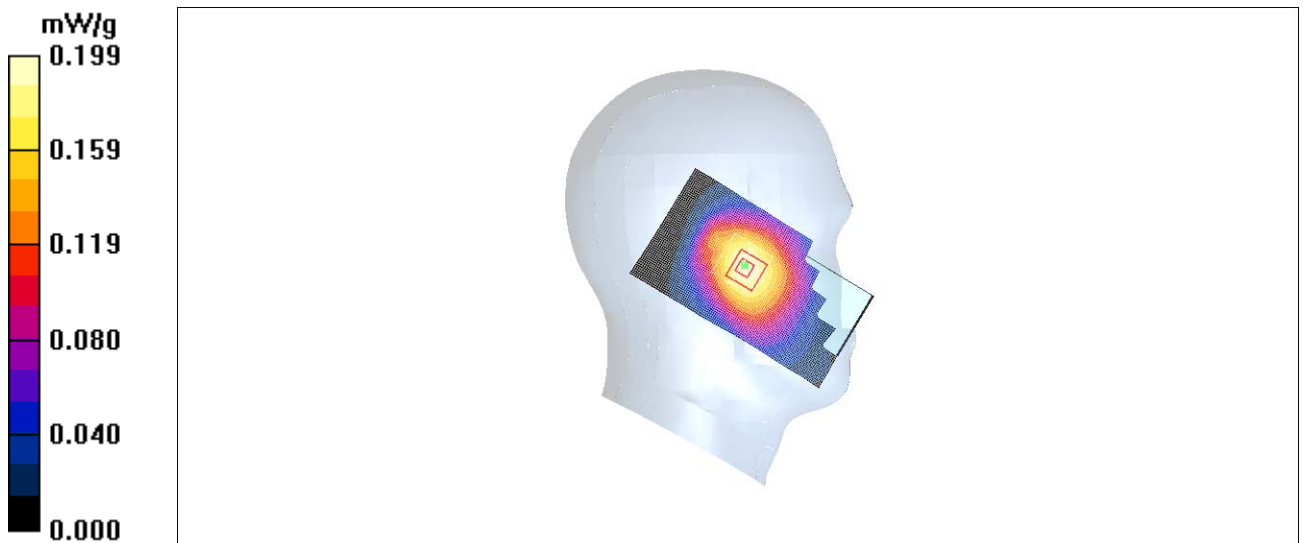


Fig.8 850 MHz CH190

850 Right Cheek High-Slide up

Date/Time: 2010-9-15 10:21:45

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 848.8$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.8$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.610 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.11 V/m; Power Drift = -0.061 dB

Peak SAR (extrapolated) = 0.747 W/kg

SAR(1 g) = 0.561 mW/g; SAR(10 g) = 0.415 mW/g

Maximum value of SAR (measured) = 0.591 mW/g

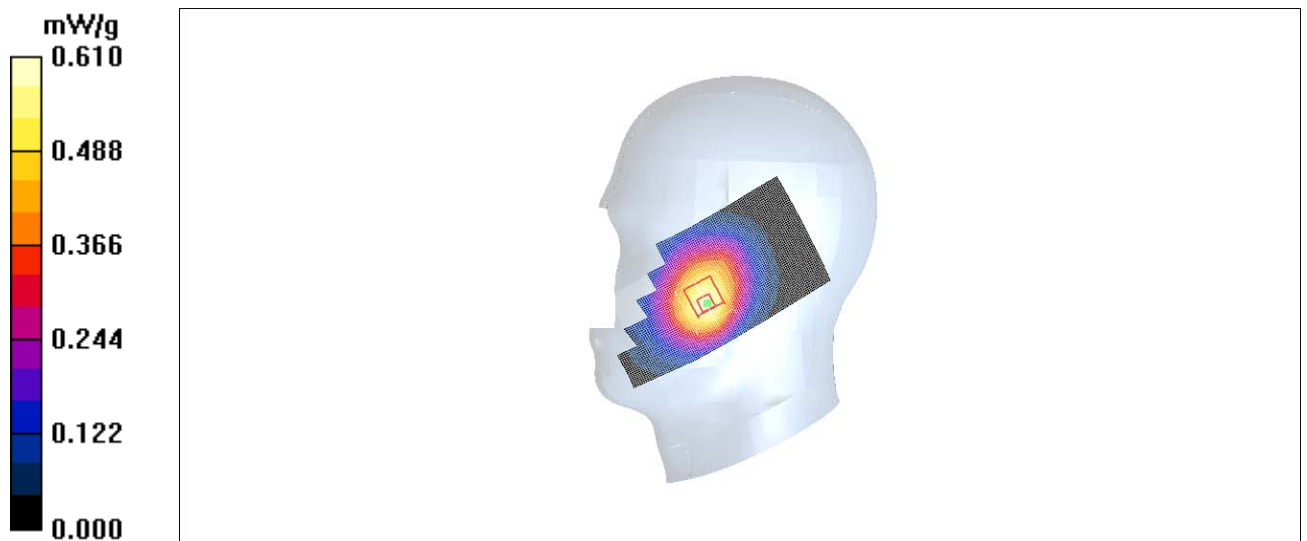


Fig. 9 850 MHz CH251

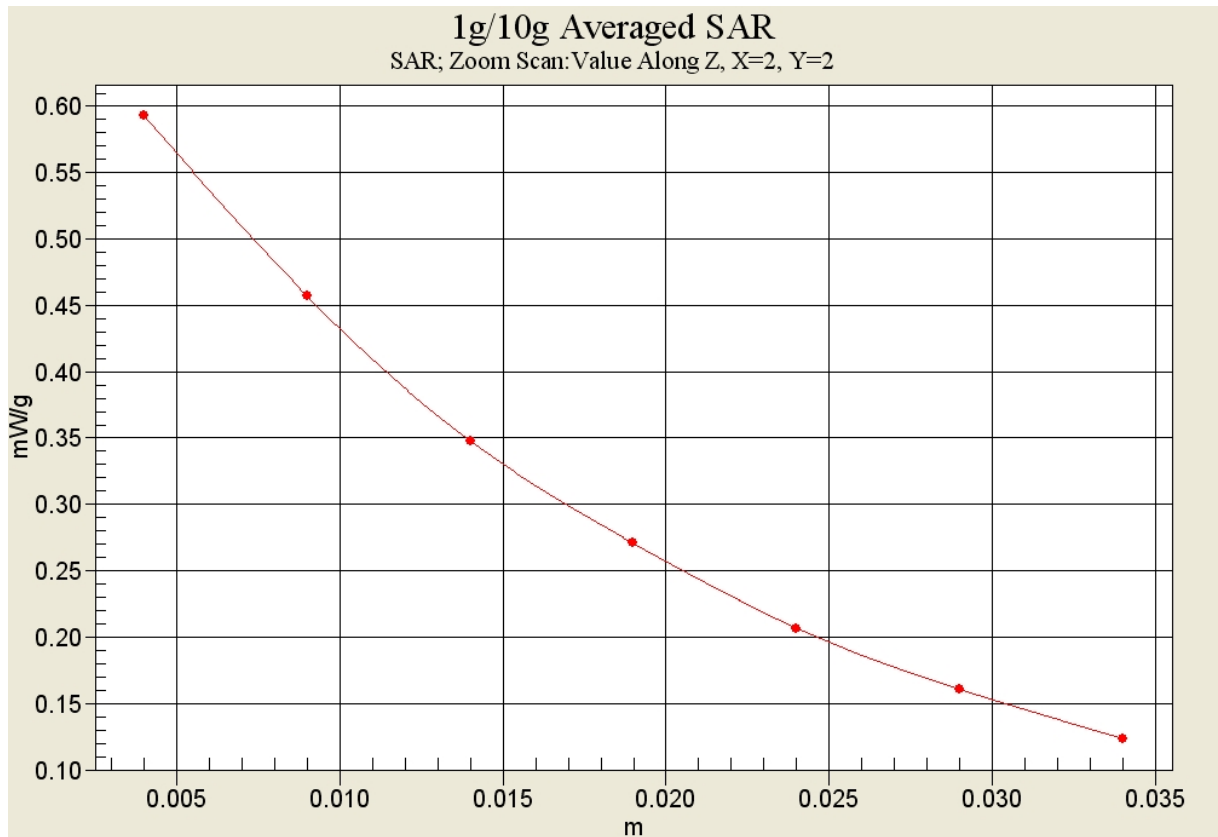


Fig. 9-1 Z-Scan at power reference point (850 MHz CH251)

850 Right Cheek Middle-Slide up

Date/Time: 2010-9-15 10:07:20

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.492 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.51 V/m; Power Drift = -0.191 dB

Peak SAR (extrapolated) = 0.598 W/kg

SAR(1 g) = 0.446 mW/g; SAR(10 g) = 0.332 mW/g

Maximum value of SAR (measured) = 0.467 mW/g

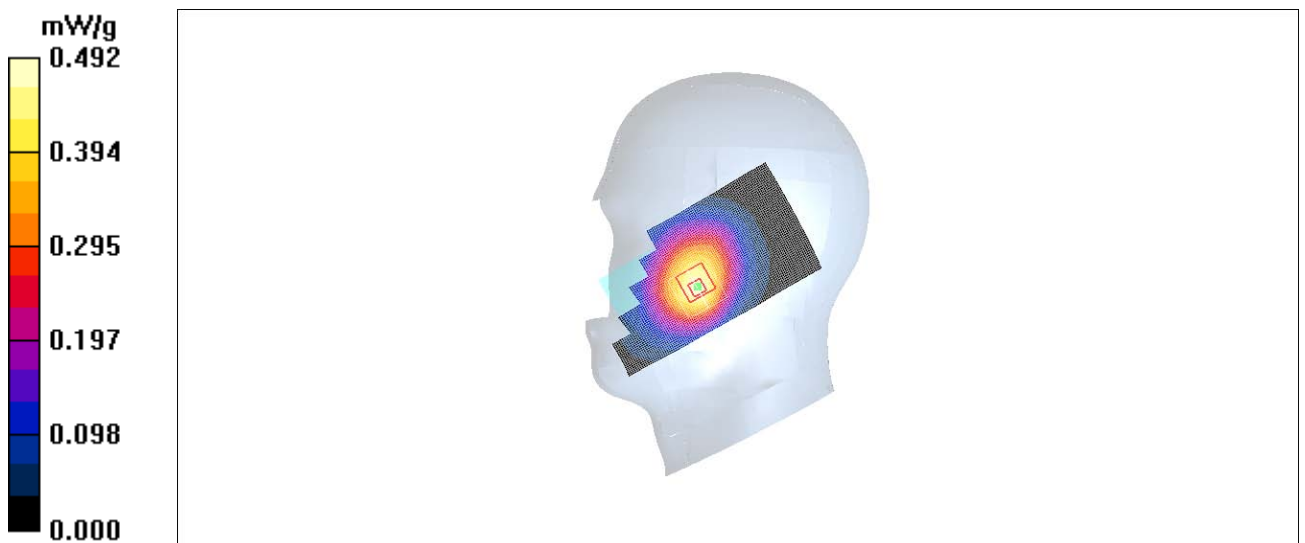


Fig. 10 850 MHz CH190

850 Right Cheek Low-Slide up

Date/Time: 2010-9-15 10:36:04

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used: $f = 825 \text{ MHz}$; $\sigma = 0.88 \text{ mho/m}$; $\epsilon_r = 42.1$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x111x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.387 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.84 V/m ; Power Drift = 0.096 dB

Peak SAR (extrapolated) = 0.467 W/kg

SAR(1 g) = 0.355 mW/g ; SAR(10 g) = 0.263 mW/g

Maximum value of SAR (measured) = 0.373 mW/g

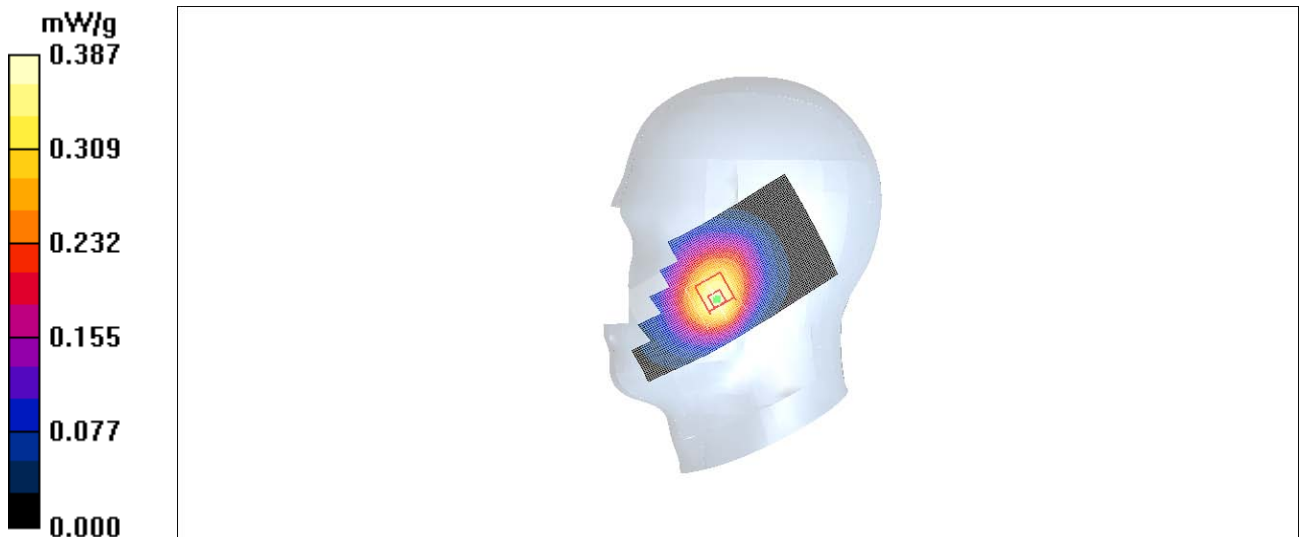


Fig. 11 850 MHz CH128

850 Right Tilt Middle-Slide up

Date/Time: 2010-9-15 10:50:29

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.230 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.88 V/m; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 0.276 W/kg

SAR(1 g) = 0.221 mW/g; SAR(10 g) = 0.167 mW/g

Maximum value of SAR (measured) = 0.233 mW/g

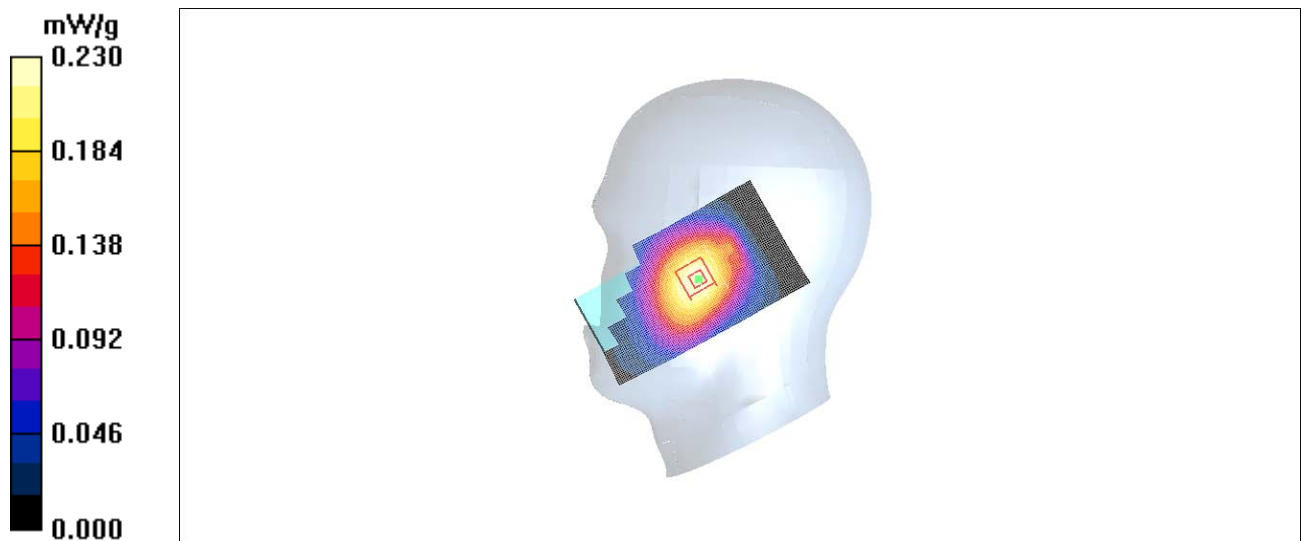


Fig.12 850 MHz CH190

1900 Left Cheek High-Slide down

Date/Time: 2010-9-16 14:43:59

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.335 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.93 V/m; Power Drift = 0.070 dB

Peak SAR (extrapolated) = 0.469 W/kg

SAR(1 g) = 0.298 mW/g; SAR(10 g) = 0.172 mW/g

Maximum value of SAR (measured) = 0.325 mW/g

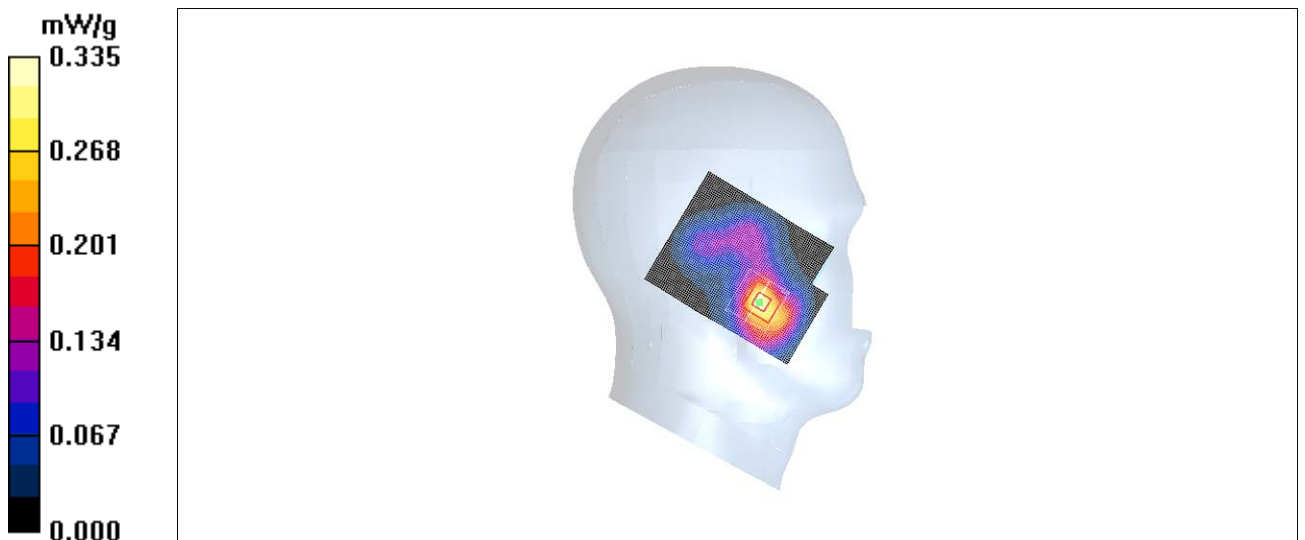


Fig. 13 1900 MHz CH810

1900 Left Cheek Middle-Slide down

Date/Time: 2010-9-16 13:46:02

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.450 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.6 V/m; Power Drift = 0.116 dB

Peak SAR (extrapolated) = 0.631 W/kg

SAR(1 g) = 0.407 mW/g; SAR(10 g) = 0.238 mW/g

Maximum value of SAR (measured) = 0.453 mW/g

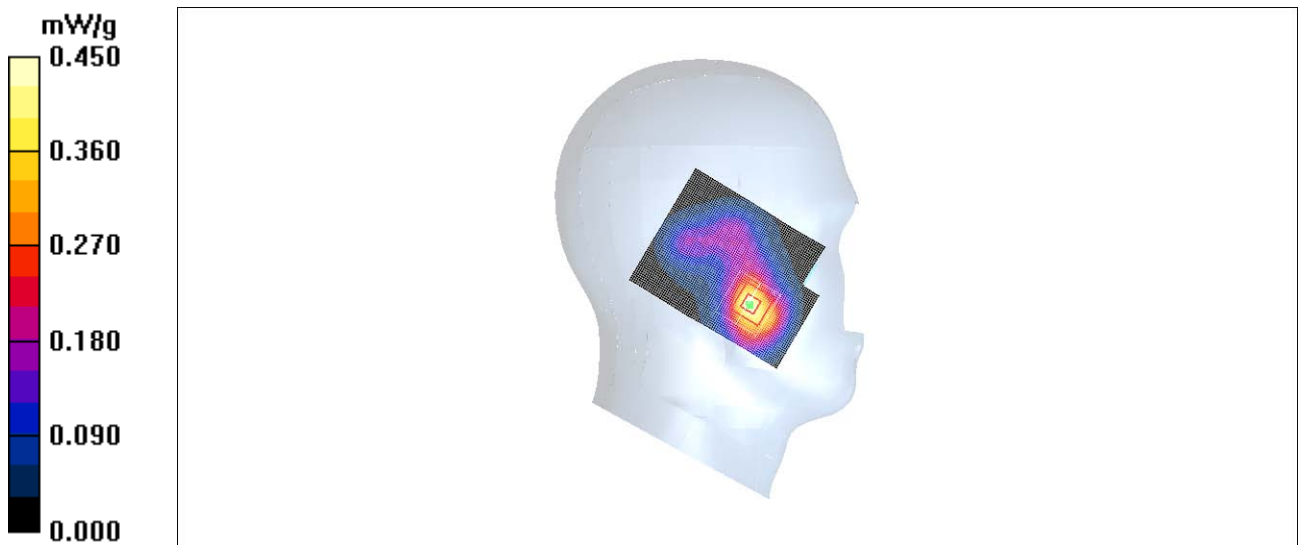


Fig. 14 1900 MHz CH661

1900 Left Cheek Low-Slide down

Date/Time: 2010-9-16 14:58:22

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.36$ mho/m; $\epsilon_r = 39.5$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.623 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.0 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 0.882 W/kg

SAR(1 g) = 0.564 mW/g; SAR(10 g) = 0.329 mW/g

Maximum value of SAR (measured) = 0.623 mW/g

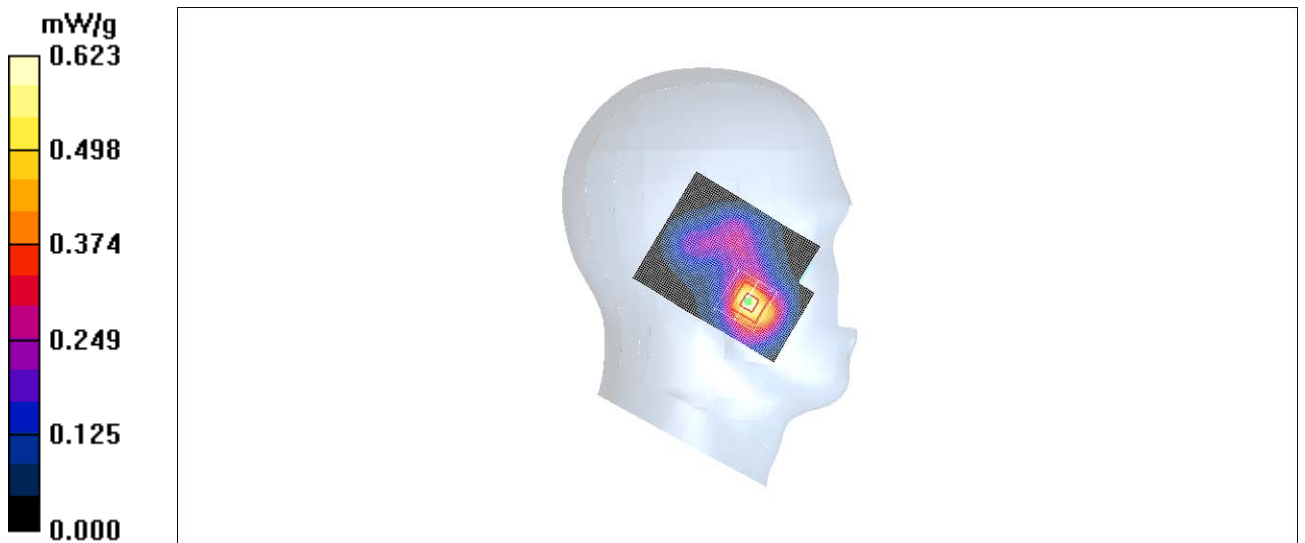


Fig. 15 1900 MHz CH512

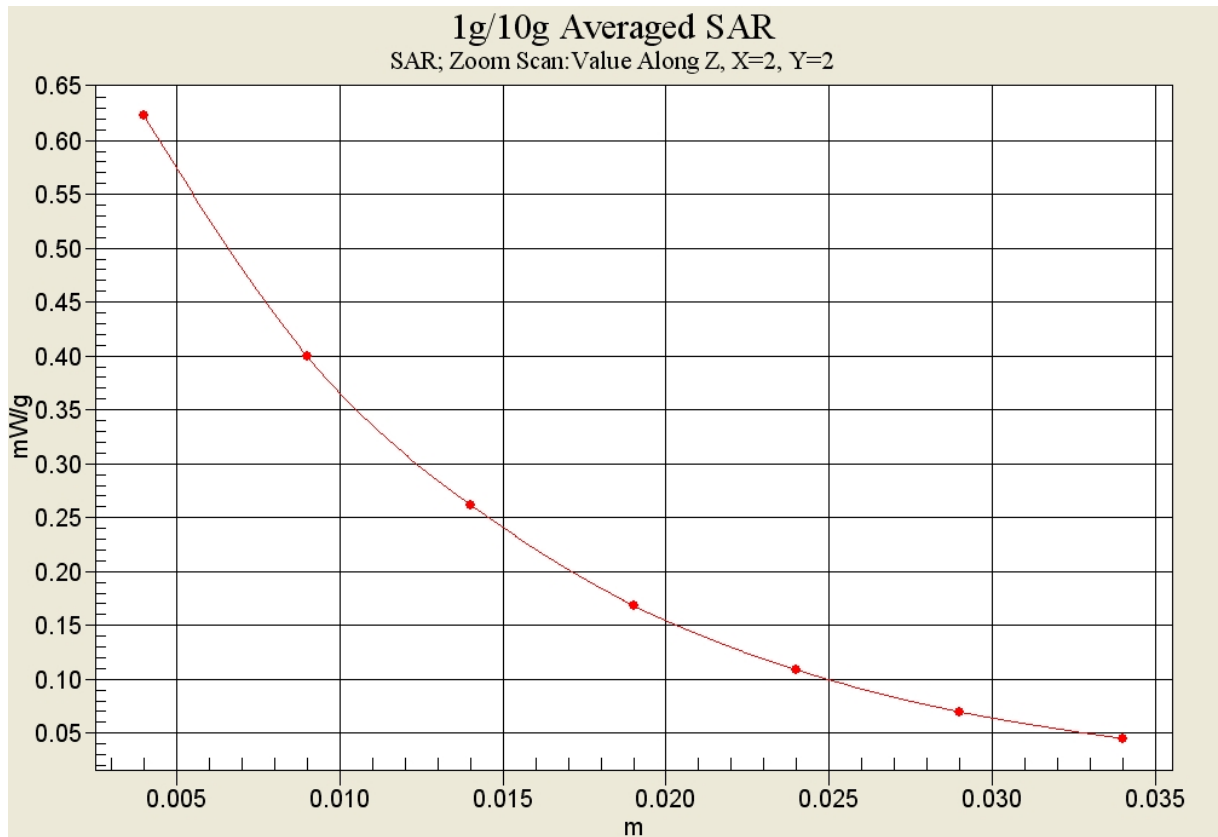


Fig. 15-1 Z-Scan at power reference point (1900 MHz CH512)

1900 Left Tilt Middle-Slide down

Date/Time: 2010-9-16 14:00:23

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.348 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.6 V/m; Power Drift = 0.018 dB

Peak SAR (extrapolated) = 0.467 W/kg

SAR(1 g) = 0.300 mW/g; SAR(10 g) = 0.176 mW/g

Maximum value of SAR (measured) = 0.334 mW/g

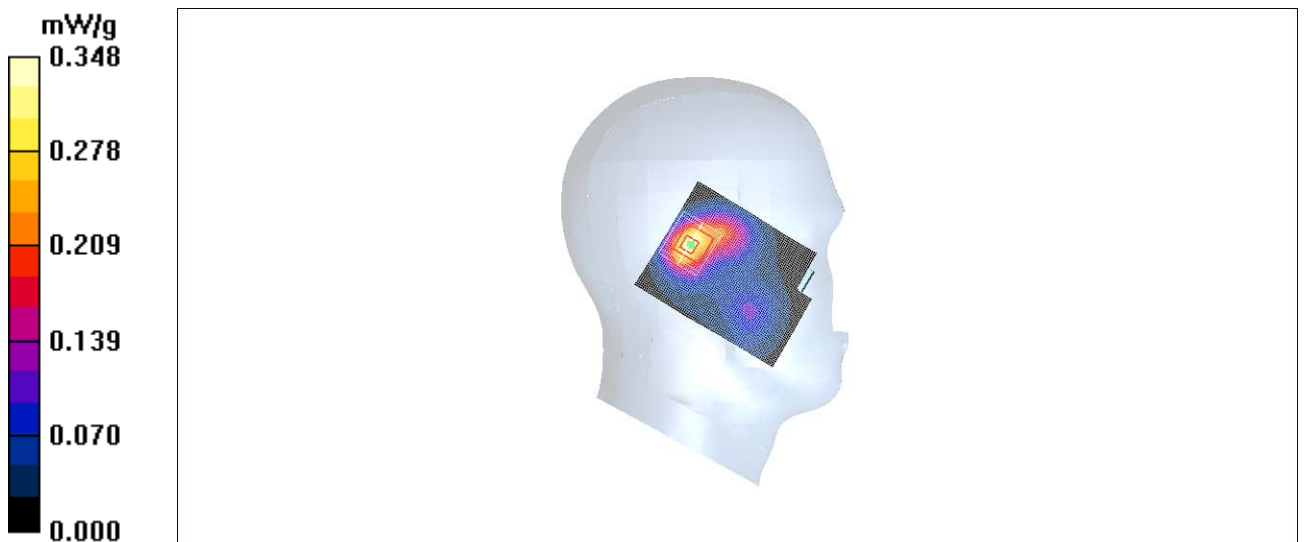


Fig. 16 1900 MHz CH661

1900 Right Cheek Middle-Slide down

Date/Time: 2010-9-16 14:14:57

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.285 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.69 V/m; Power Drift = -0.085 dB

Peak SAR (extrapolated) = 0.445 W/kg

SAR(1 g) = 0.285 mW/g; SAR(10 g) = 0.172 mW/g

Maximum value of SAR (measured) = 0.303 mW/g

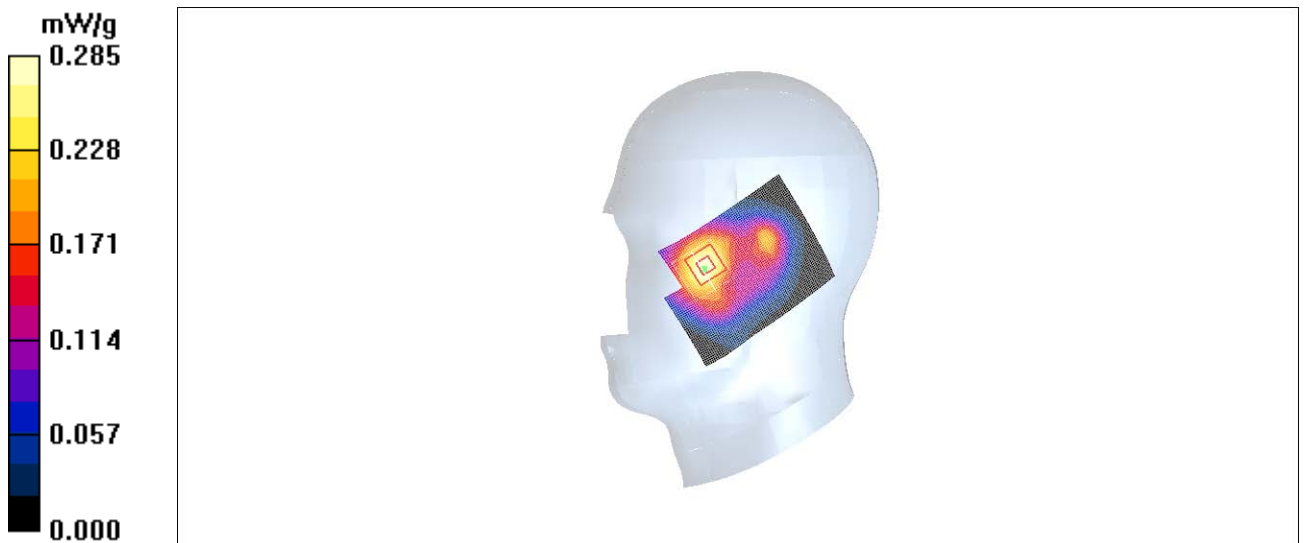


Fig. 17 1900 MHz CH661

1900 Right Tilt Middle-Slide down

Date/Time: 2010-9-16 14:29:18

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.429 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.5 V/m; Power Drift = -0.065 dB

Peak SAR (extrapolated) = 0.567 W/kg

SAR(1 g) = 0.363 mW/g; SAR(10 g) = 0.210 mW/g

Maximum value of SAR (measured) = 0.397 mW/g

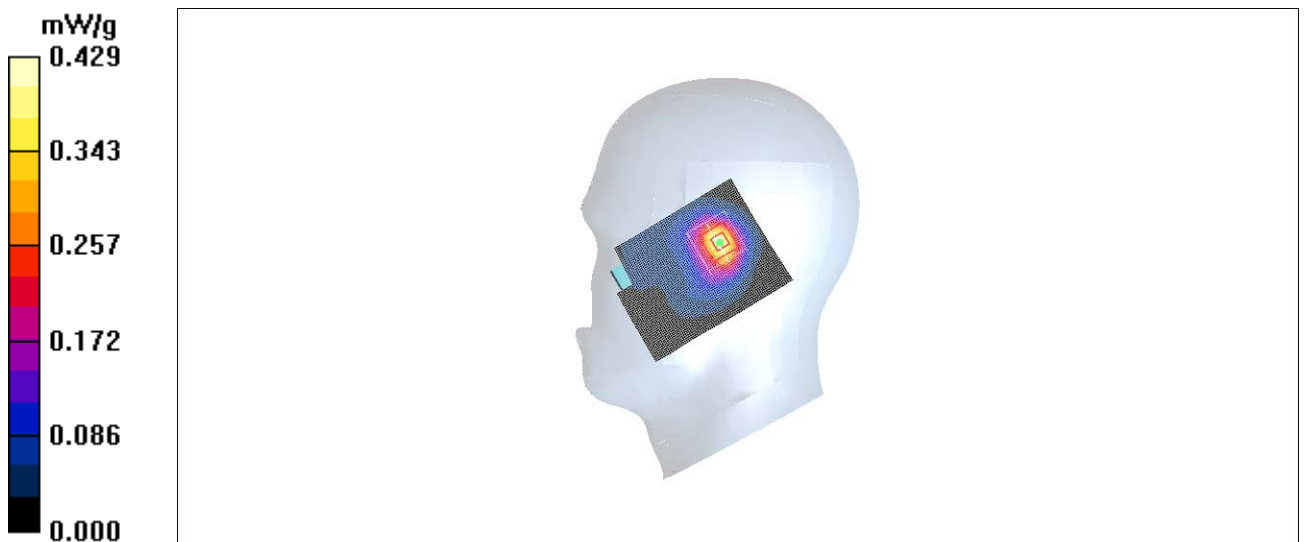


Fig.18 1900 MHz CH661

1900 Left Cheek Middle- Slide up

Date/Time: 2010-9-16 15:13:54

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.220 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.70 V/m; Power Drift = -0.109 dB

Peak SAR (extrapolated) = 0.317 W/kg

SAR(1 g) = 0.208 mW/g; SAR(10 g) = 0.134 mW/g

Maximum value of SAR (measured) = 0.223 mW/g

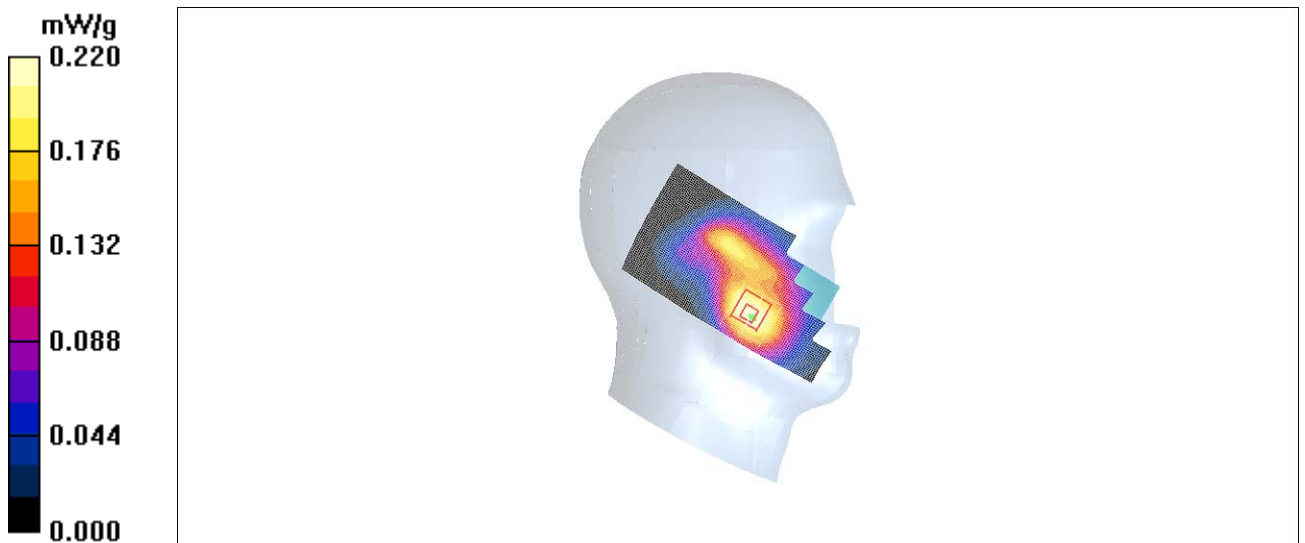


Fig. 19 1900 MHz CH661

1900 Left Tilt Middle- Slide up

Date/Time: 2010-9-16 15:28:20

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.232 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.6 V/m; Power Drift = -0.032 dB

Peak SAR (extrapolated) = 0.275 W/kg

SAR(1 g) = 0.189 mW/g; SAR(10 g) = 0.124 mW/g

Maximum value of SAR (measured) = 0.198 mW/g

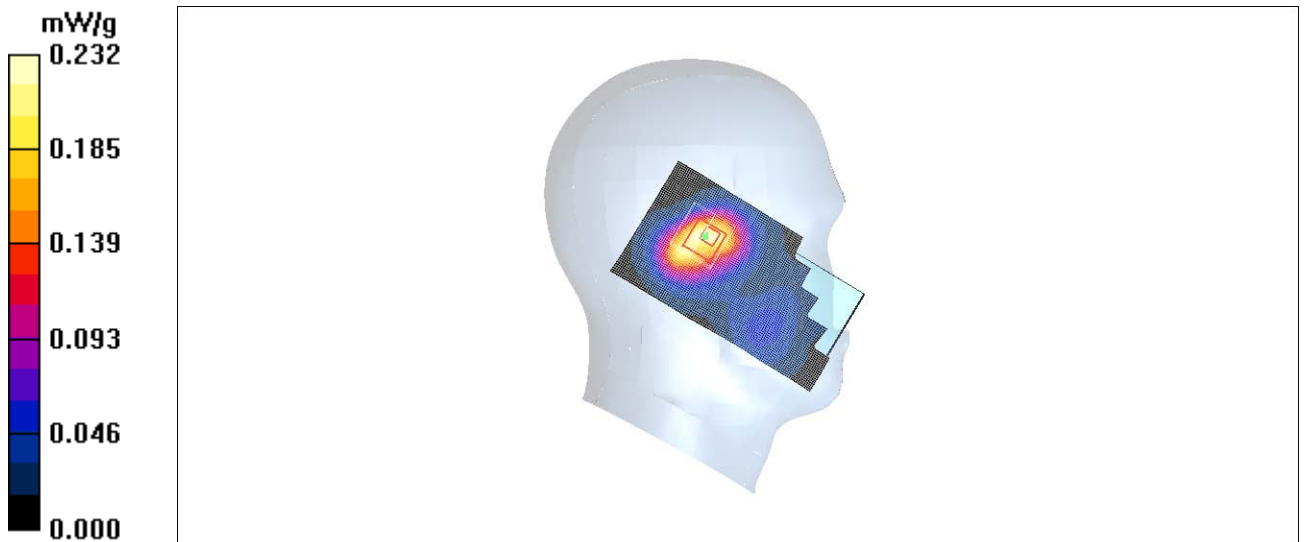


Fig. 20 1900 MHz CH661

1900 Right Cheek High- Slide up

Date/Time: 2010-9-16 15:57:26

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.165 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.50 V/m; Power Drift = -0.099 dB

Peak SAR (extrapolated) = 0.229 W/kg

SAR(1 g) = 0.152 mW/g; SAR(10 g) = 0.094 mW/g

Maximum value of SAR (measured) = 0.168 mW/g

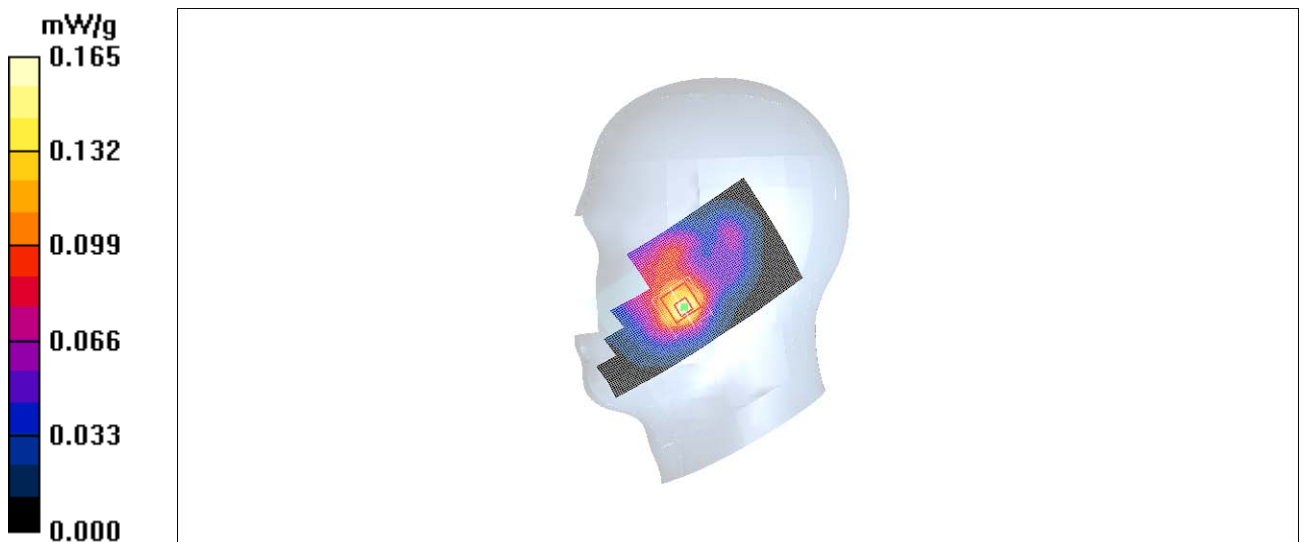


Fig. 21 1900 MHz CH810

1900 Right Cheek Middle- Slide up

Date/Time: 2010-9-16 15:42:58

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.263 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.27 V/m; Power Drift = 0.171 dB

Peak SAR (extrapolated) = 0.350 W/kg

SAR(1 g) = 0.238 mW/g; SAR(10 g) = 0.147 mW/g

Maximum value of SAR (measured) = 0.261 mW/g

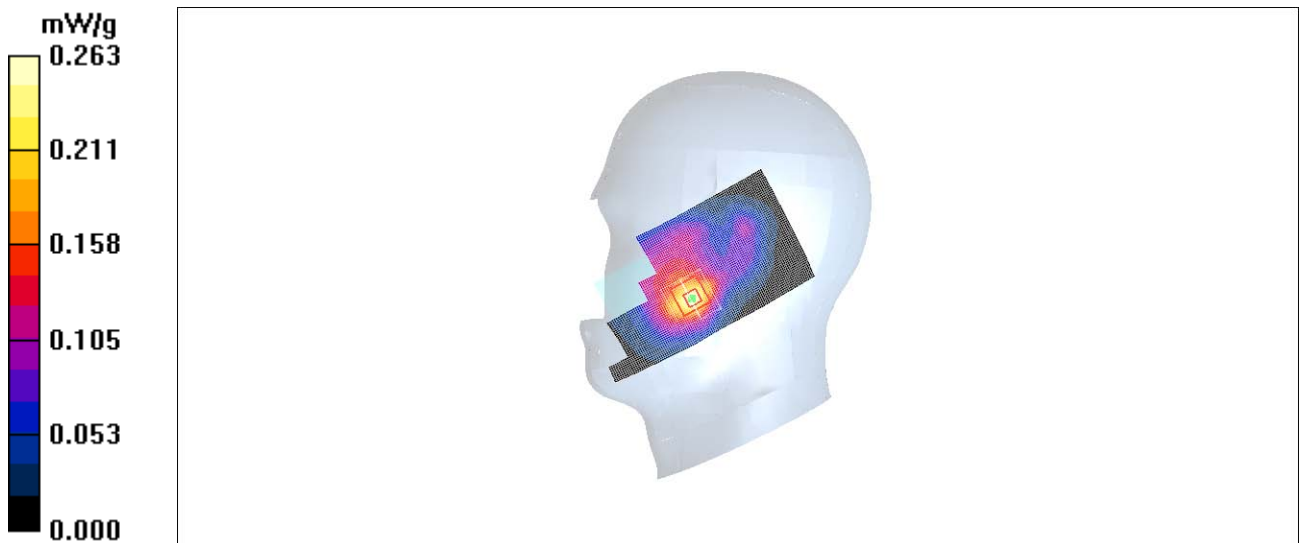


Fig. 22 1900 MHz CH661

1900 Right Cheek Low- Slide up

Date/Time: 2010-9-16 16:11:45

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.36$ mho/m; $\epsilon_r = 39.5$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.360 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.67 V/m; Power Drift = -0.082 dB

Peak SAR (extrapolated) = 0.481 W/kg

SAR(1 g) = 0.328 mW/g; SAR(10 g) = 0.205 mW/g

Maximum value of SAR (measured) = 0.358 mW/g

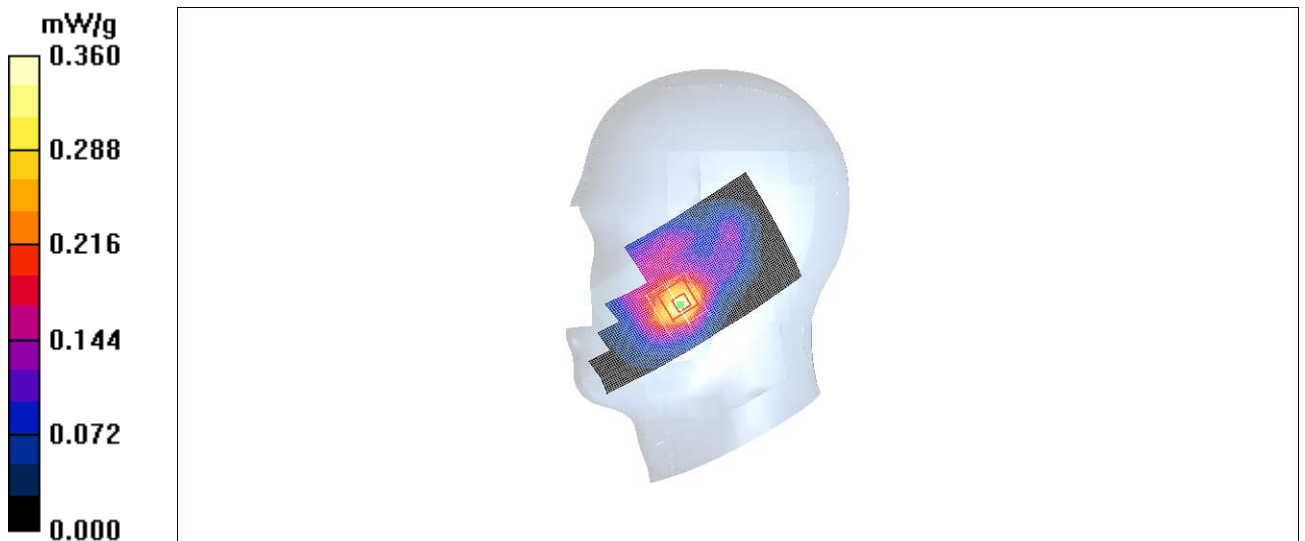


Fig. 23 1900 MHz CH512

1900 Right Tilt Middle- Slide up

Date/Time: 2010-9-16 16:26:19

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.253 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.3 V/m; Power Drift = 0.005 dB

Peak SAR (extrapolated) = 0.329 W/kg

SAR(1 g) = 0.215 mW/g; SAR(10 g) = 0.129 mW/g

Maximum value of SAR (measured) = 0.233 mW/g

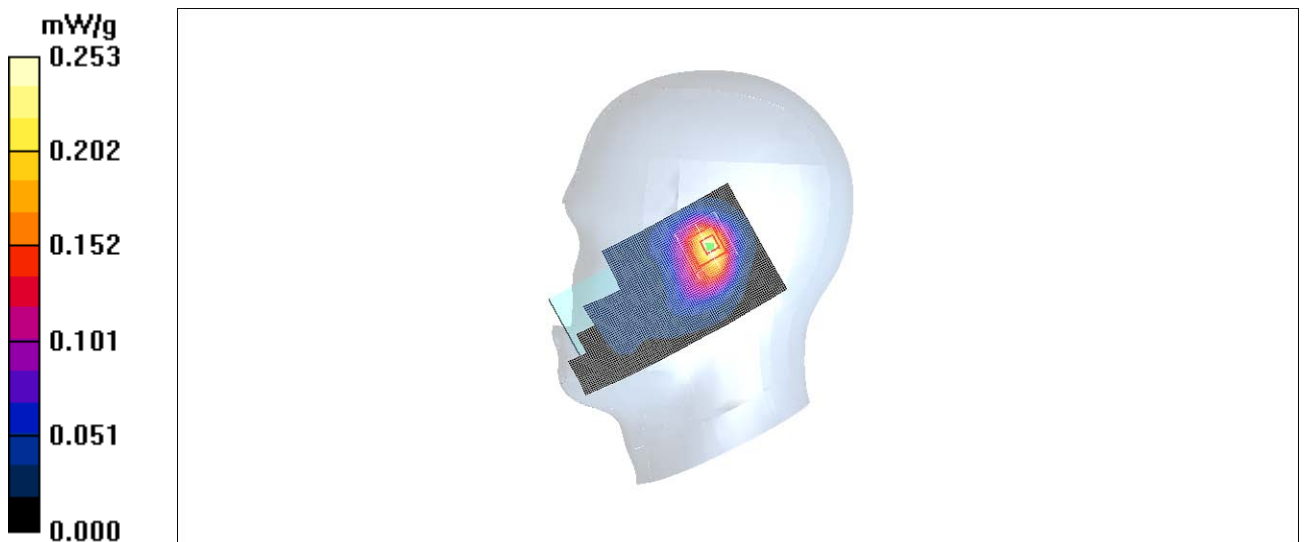


Fig.24 1900 MHz CH661

WCDMA 850 Left Cheek Middle-Slide down

Date/Time: 2010-9-15 11:07:13

Electronics: DAE4 Sn771

Medium: Head 850

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 23°C Liquid Temperature: 22.5°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 (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.246 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.90 V/m; Power Drift = -0.021 dB

Peak SAR (extrapolated) = 0.298 W/kg

SAR(1 g) = 0.225 mW/g; SAR(10 g) = 0.163 mW/g

Maximum value of SAR (measured) = 0.236 mW/g

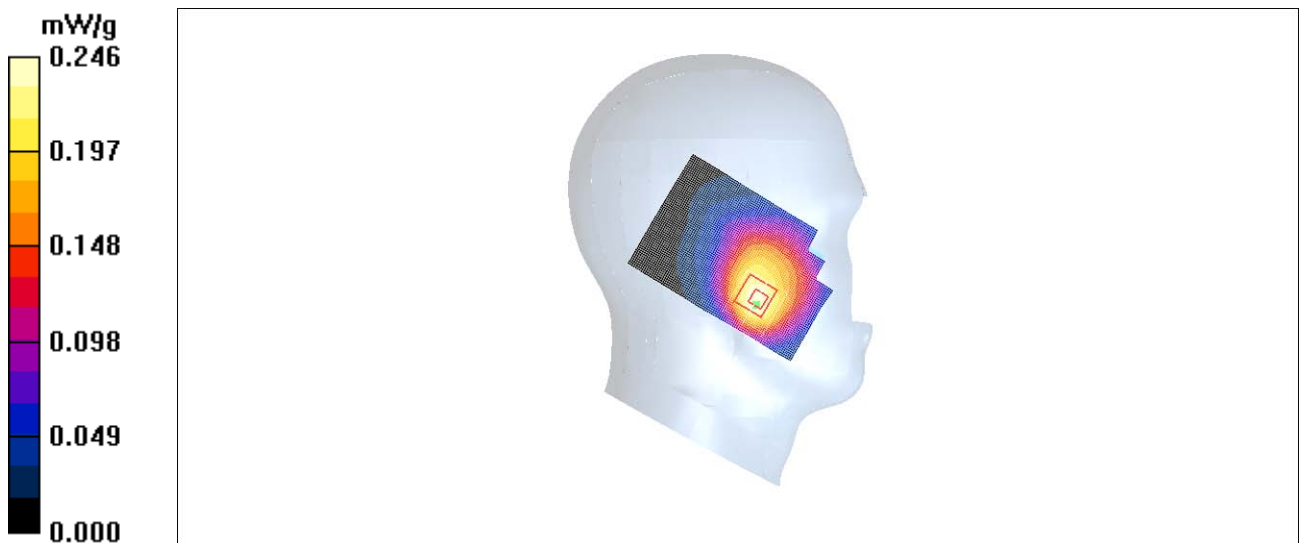


Fig. 25 850 MHz CH4182

WCDMA 850 Left Tilt Middle-Slide down

Date/Time: 2010-9-15 11:21:31

Electronics: DAE4 Sn771

Medium: Head 850

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 23°C Liquid Temperature: 22.5°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 (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.160 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.20 V/m; Power Drift = -0.068 dB

Peak SAR (extrapolated) = 0.192 W/kg

SAR(1 g) = 0.152 mW/g; SAR(10 g) = 0.115 mW/g

Maximum value of SAR (measured) = 0.160 mW/g

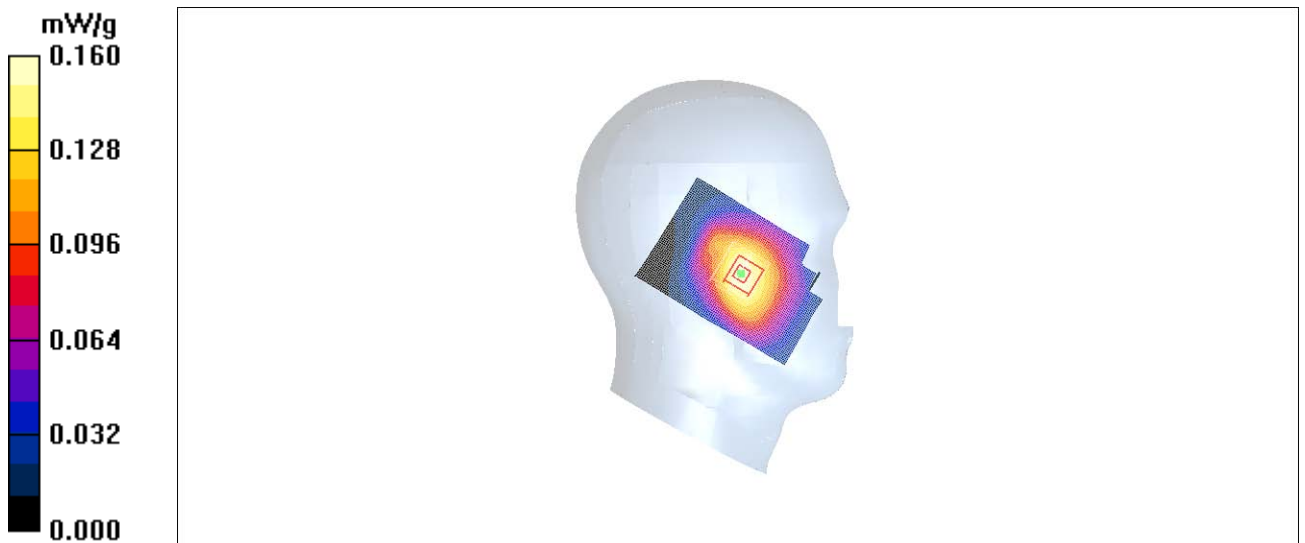


Fig.26 850 MHz CH4182

WCDMA 850 Right Cheek High-Slide down

Date/Time: 2010-9-15 11:50:20

Electronics: DAE4 Sn771

Medium: Head 900

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.901$ mho/m; $\epsilon_r = 41.8$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.353 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.23 V/m; Power Drift = 0.119 dB

Peak SAR (extrapolated) = 0.416 W/kg

SAR(1 g) = 0.322 mW/g; SAR(10 g) = 0.245 mW/g

Maximum value of SAR (measured) = 0.334 mW/g

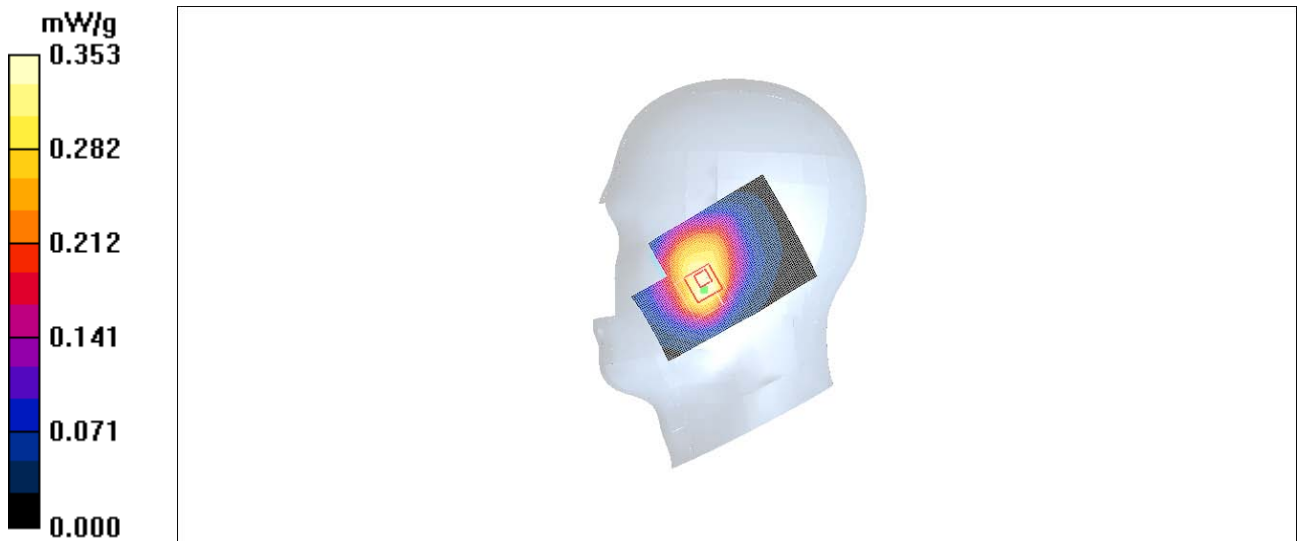


Fig. 27 850 MHz CH4233

WCDMA 850 Right Cheek Middle-Slide down

Date/Time: 2010-9-15 11:35:55

Electronics: DAE4 Sn771

Medium: Head 900

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0oC Liquid Temperature: 22.5°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 (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.261 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.13 V/m; Power Drift = 0.101 dB

Peak SAR (extrapolated) = 0.316 W/kg

SAR(1 g) = 0.246 mW/g; SAR(10 g) = 0.190 mW/g

Maximum value of SAR (measured) = 0.255 mW/g

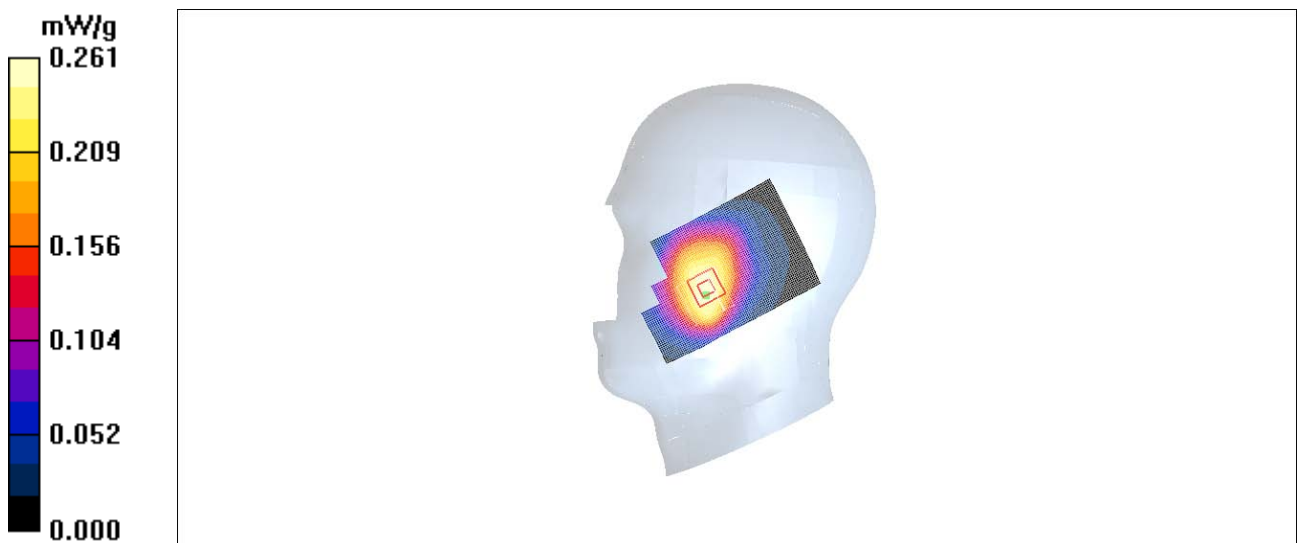


Fig. 28 850 MHz CH4182

WCDMA 850 Right Cheek Low-Slide down

Date/Time: 2010-9-15 12:04:39

Electronics: DAE4 Sn771

Medium: Head 900

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.88$ mho/m; $\epsilon_r = 42.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.296 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.56 V/m; Power Drift = -0.002 dB

Peak SAR (extrapolated) = 0.358 W/kg

SAR(1 g) = 0.280 mW/g; SAR(10 g) = 0.217 mW/g

Maximum value of SAR (measured) = 0.291 mW/g

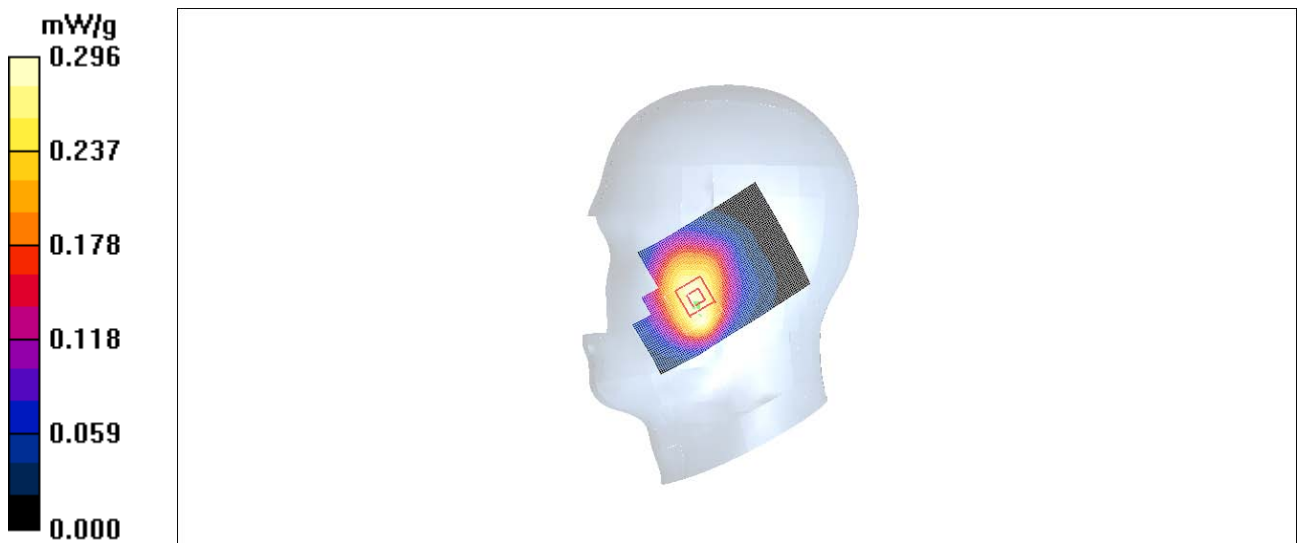


Fig. 29 850 MHz CH4132

WCDMA 850 Right Tilt Middle-Slide down

Date/Time: 2010-9-15 12:18:58

Electronics: DAE4 Sn771

Medium: Head 900

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0oC Liquid Temperature: 22.5°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 (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.236 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.6 V/m; Power Drift = -0.089 dB

Peak SAR (extrapolated) = 0.272 W/kg

SAR(1 g) = 0.221 mW/g; SAR(10 g) = 0.168 mW/g

Maximum value of SAR (measured) = 0.233 mW/g

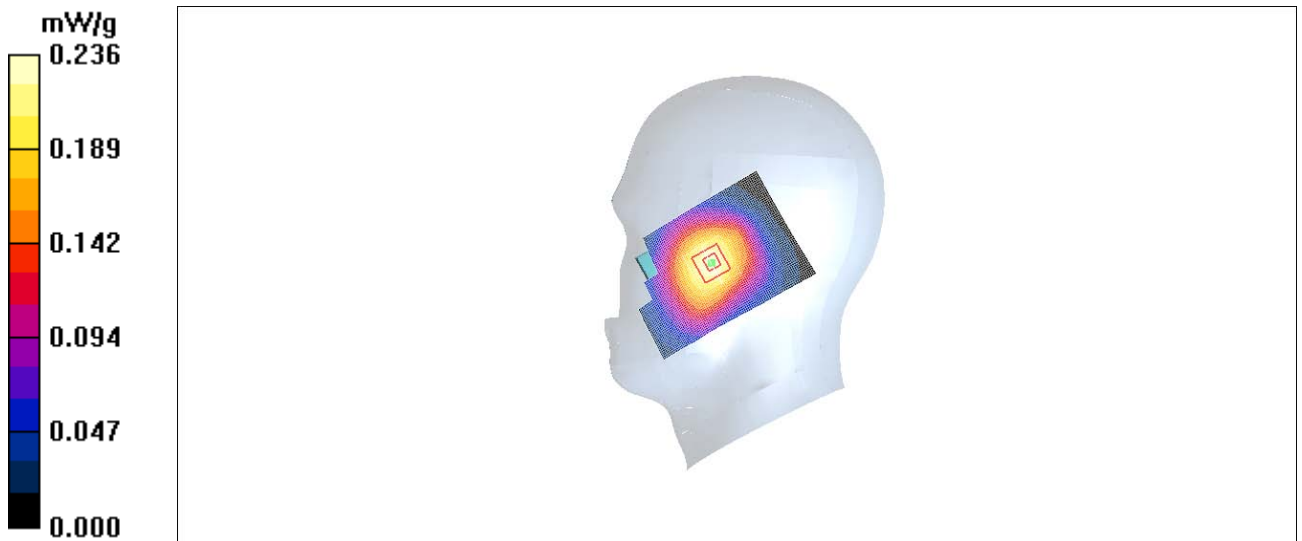


Fig.30 850 MHz CH4182

WCDMA 850 Left Cheek Middle-Slide up

Date/Time: 2010-9-15 12:34:25

Electronics: DAE4 Sn771

Medium: Head 900

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0oC Liquid Temperature: 22.5°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 (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.724 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.43 V/m; Power Drift = -0.058 dB

Peak SAR (extrapolated) = 0.831 W/kg

SAR(1 g) = 0.687 mW/g; SAR(10 g) = 0.526 mW/g

Maximum value of SAR (measured) = 0.725 mW/g

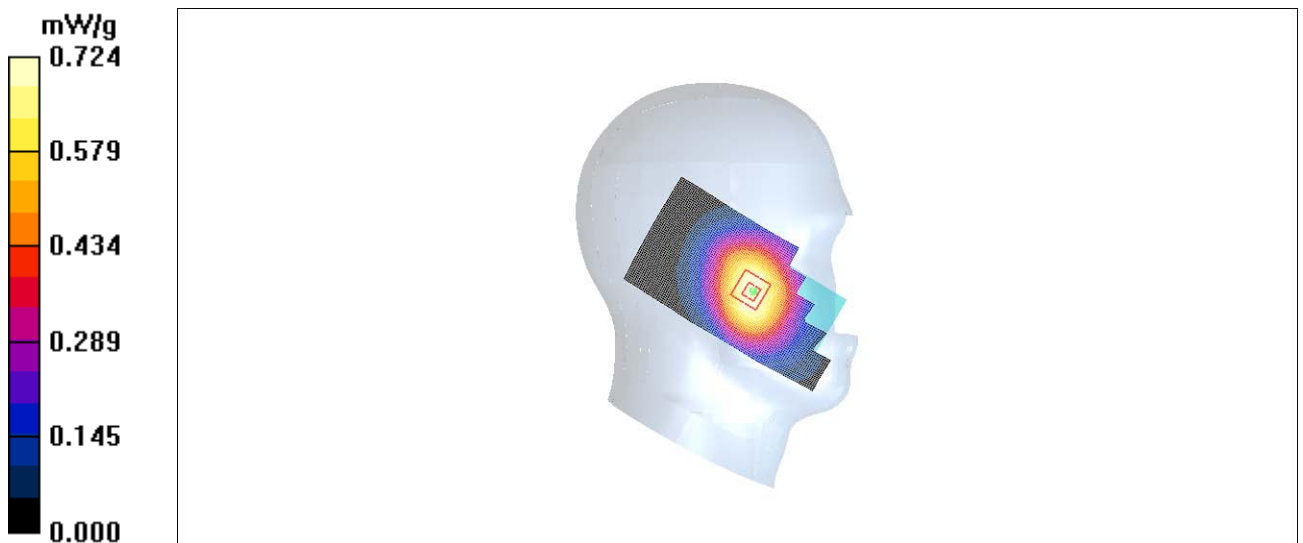


Fig. 31 850 MHz CH4182

WCDMA 850 Left Tilt Middle-Slide up

Date/Time: 2010-9-15 12:48:43

Electronics: DAE4 Sn771

Medium: Head 900

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0oC Liquid Temperature: 22.5°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 (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.445 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.3 V/m; Power Drift = 0.000 dB

Peak SAR (extrapolated) = 0.523 W/kg

SAR(1 g) = 0.421 mW/g; SAR(10 g) = 0.319 mW/g

Maximum value of SAR (measured) = 0.444 mW/g

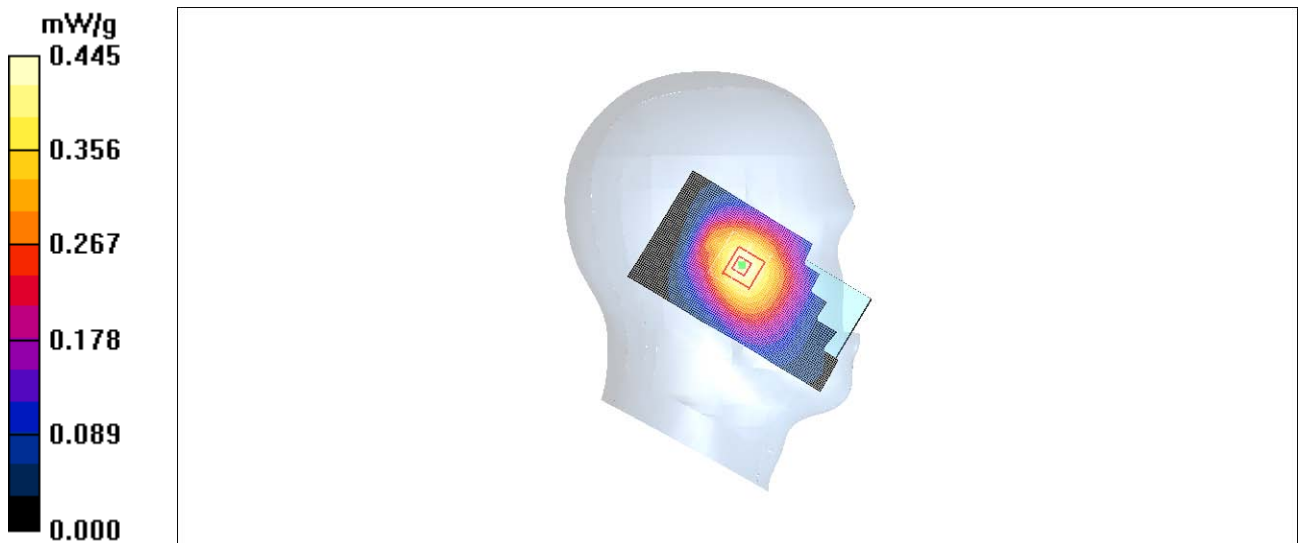


Fig.32 850 MHz CH4182

WCDMA 850 Right Cheek High-Slide up

Date/Time: 2010-9-15 13:17:38

Electronics: DAE4 Sn771

Medium: Head 900

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.901$ mho/m; $\epsilon_r = 41.8$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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 (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.518 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.64 V/m; Power Drift = 0.125 dB

Peak SAR (extrapolated) = 0.623 W/kg

SAR(1 g) = 0.478 mW/g; SAR(10 g) = 0.358 mW/g

Maximum value of SAR (measured) = 0.500 mW/g

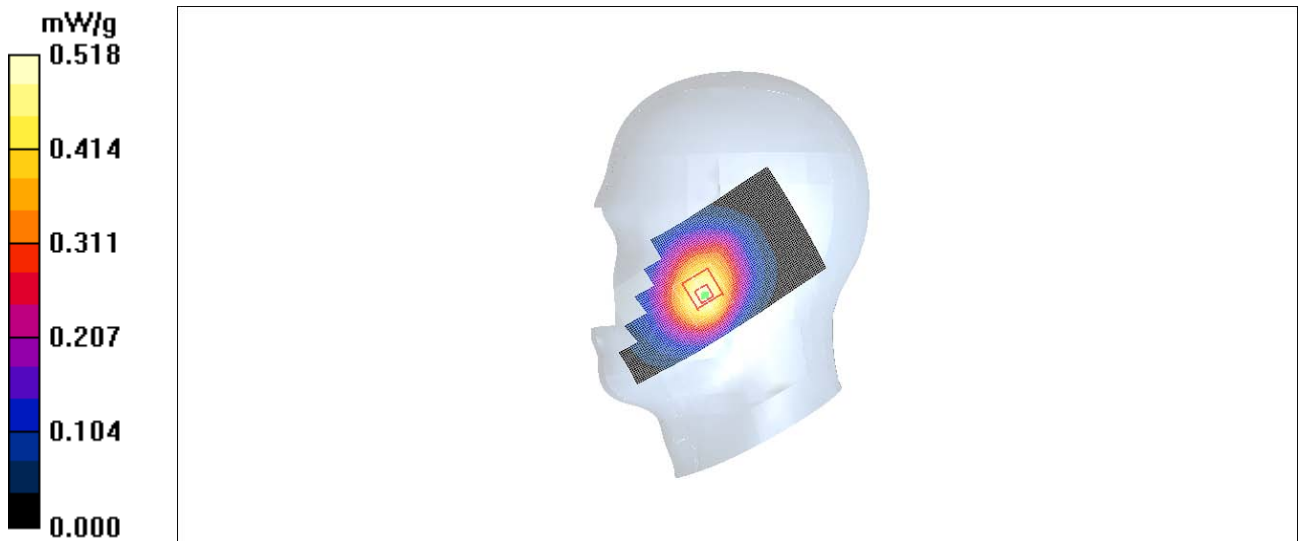


Fig. 33 850 MHz CH4233

WCDMA 850 Right Cheek Middle-Slide up

Date/Time: 2010-9-15 13:03:19

Electronics: DAE4 Sn771

Medium: Head 900

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0oC Liquid Temperature: 22.5°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 (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.847 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.90 V/m; Power Drift = -0.036 dB

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.777 mW/g; SAR(10 g) = 0.585 mW/g

Maximum value of SAR (measured) = 0.816 mW/g

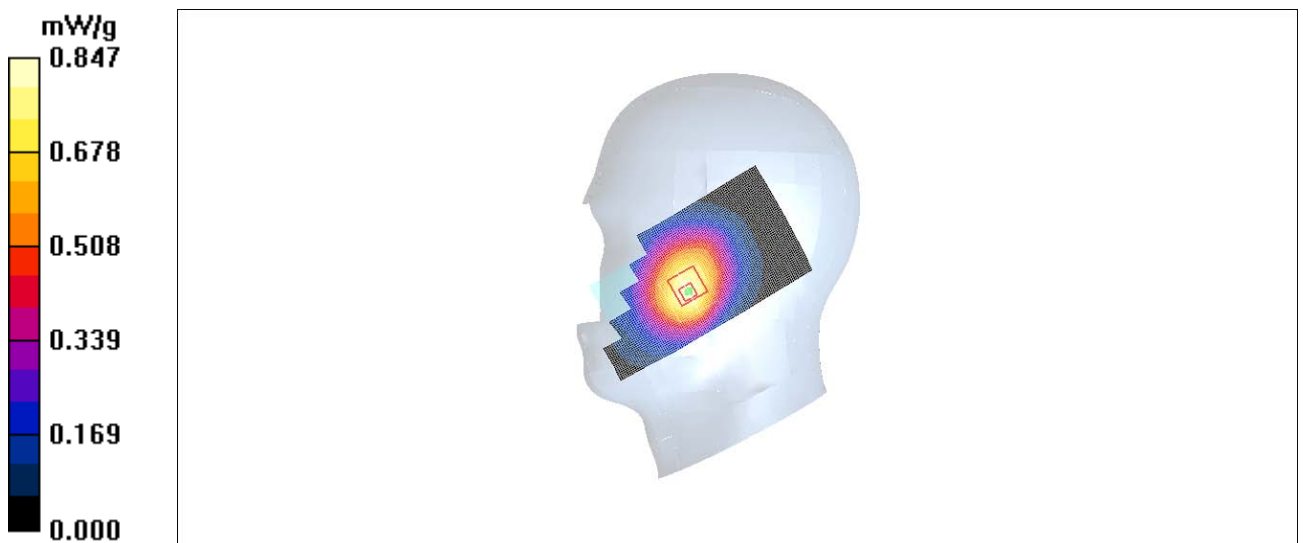


Fig. 34 850 MHz CH4182

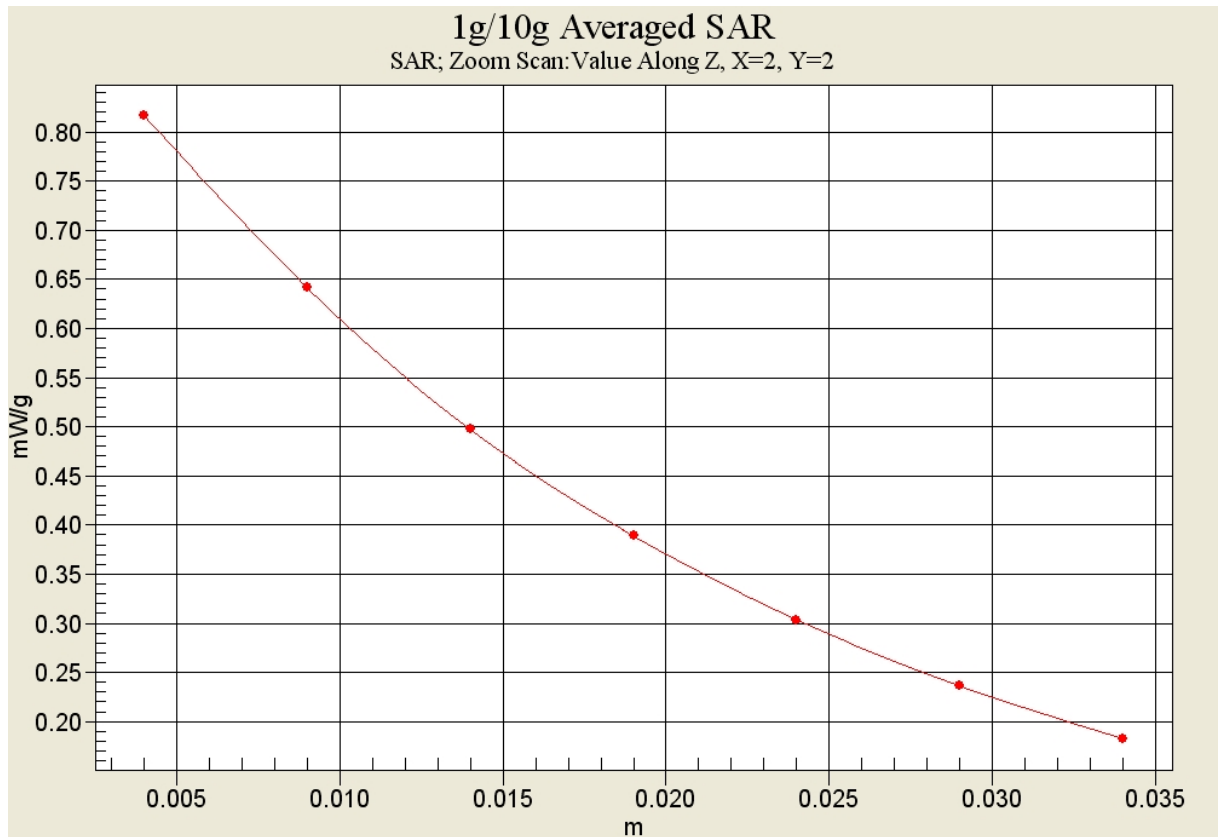


Fig. 34-1 Z-Scan at power reference point (850 MHz CH4182)

WCDMA 850 Right Cheek Low-Slide up

Date/Time: 2010-9-15 13:32:01

Electronics: DAE4 Sn771

Medium: Head 900

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.88$ mho/m; $\epsilon_r = 42.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0oC Liquid Temperature: 22.5°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 (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.355 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.02 V/m; Power Drift = -0.042 dB

Peak SAR (extrapolated) = 0.421 W/kg

SAR(1 g) = 0.327 mW/g; SAR(10 g) = 0.248 mW/g

Maximum value of SAR (measured) = 0.342 mW/g

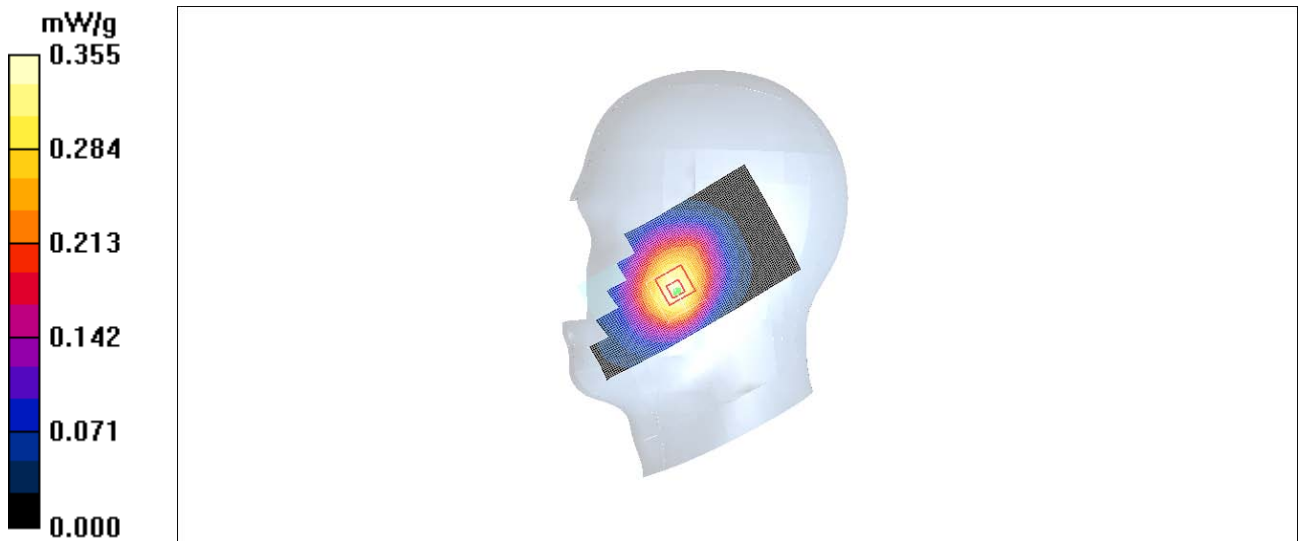


Fig. 35 850 MHz CH4132

WCDMA 850 Right Tilt Middle-Slide up

Date/Time: 2010-9-15 13:46:23

Electronics: DAE4 Sn771

Medium: Head 900

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0oC Liquid Temperature: 22.5°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 (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.452 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.3 V/m; Power Drift = 0.001 dB

Peak SAR (extrapolated) = 0.533 W/kg

SAR(1 g) = 0.431 mW/g; SAR(10 g) = 0.326 mW/g

Maximum value of SAR (measured) = 0.455 mW/g

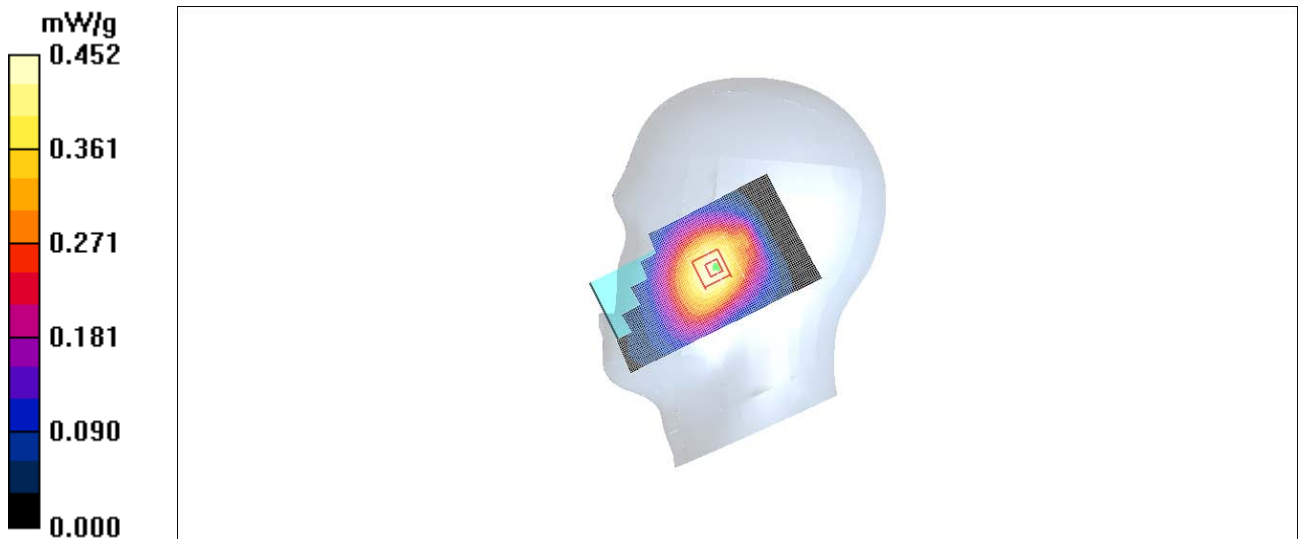


Fig.36 850 MHz CH4182

850 Body Towards Phantom High with GPRS- Slide down

Date/Time: 2010-9-15 14:37:22

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 848.8$ MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 54.5$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 848.8 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Phantom High/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.389 mW/g

Toward Phantom High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.2 V/m; Power Drift = -0.116 dB

Peak SAR (extrapolated) = 0.471 W/kg

SAR(1 g) = 0.362 mW/g; SAR(10 g) = 0.267 mW/g

Maximum value of SAR (measured) = 0.378 mW/g

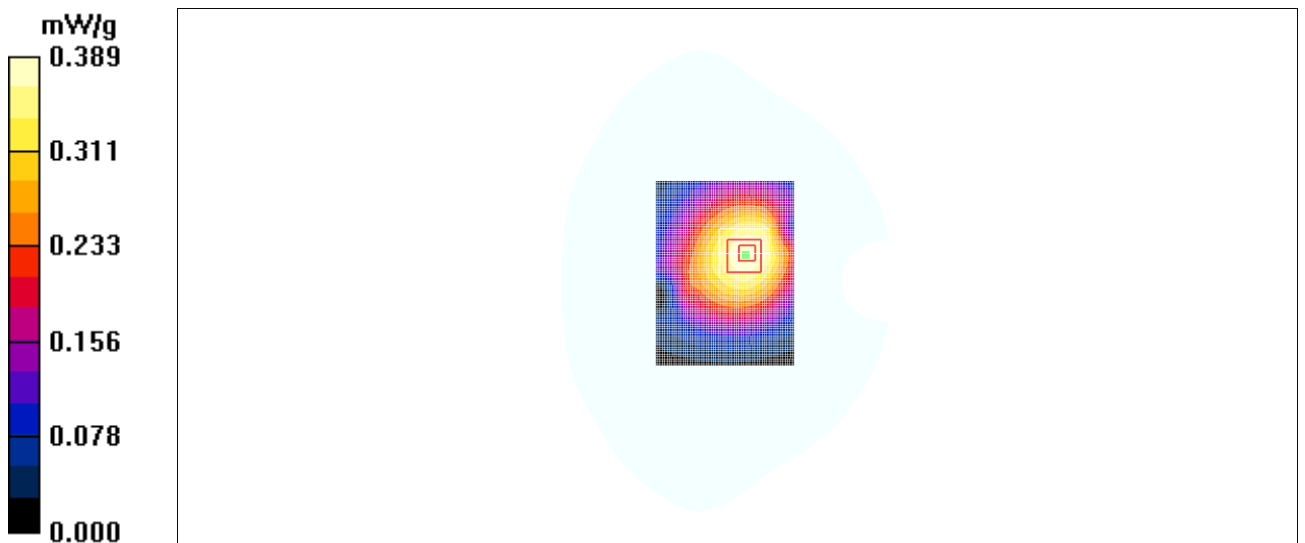


Fig. 37 850 MHz CH251

850 Body Towards Phantom Middle with GPRS- Slide down

Date/Time: 2010-9-15 14:52:43

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 54.8$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 836.6 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Phantom Middle/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.380 mW/g

Toward Phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.8 V/m; Power Drift = -0.011 dB

Peak SAR (extrapolated) = 0.460 W/kg

SAR(1 g) = 0.355 mW/g; SAR(10 g) = 0.263 mW/g

Maximum value of SAR (measured) = 0.375 mW/g

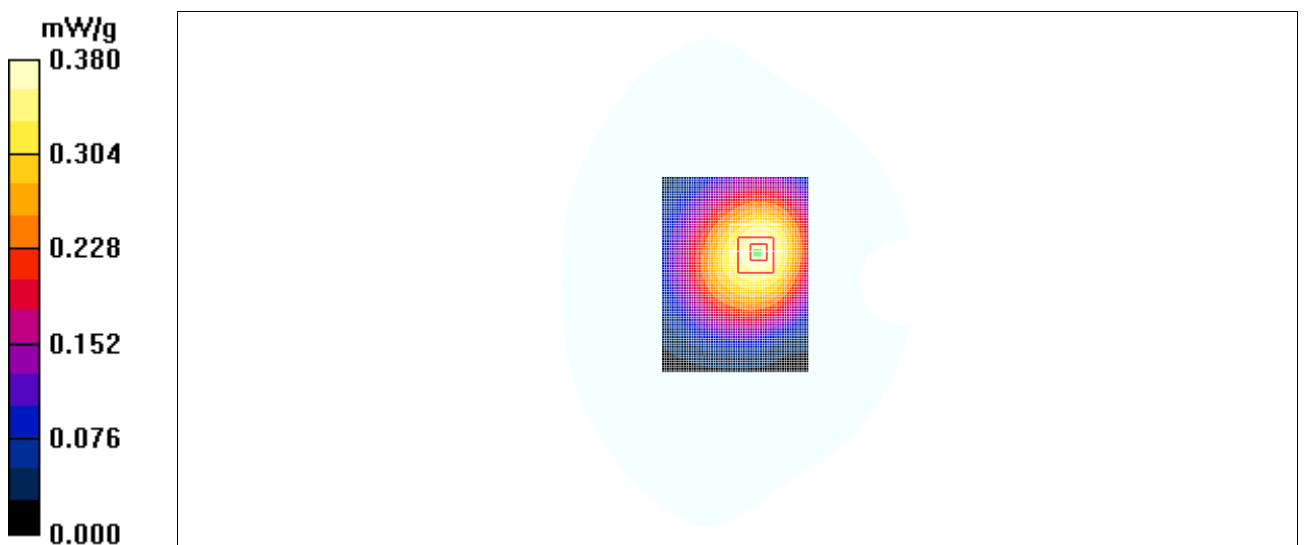


Fig. 38 850 MHz CH190

850 Body Towards Phantom Low with GPRS- Slide down

Date/Time: 2010-9-15 15:08:11

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used: $f = 825$ MHz; $\sigma = 0.93$ mho/m; $\epsilon_r = 55.8$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 824.2 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Phantom Low/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.290 mW/g

Toward Phantom Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.7 V/m; Power Drift = -0.102 dB

Peak SAR (extrapolated) = 0.640 W/kg

SAR(1 g) = 0.277 mW/g; SAR(10 g) = 0.200 mW/g

Maximum value of SAR (measured) = 0.288 mW/g

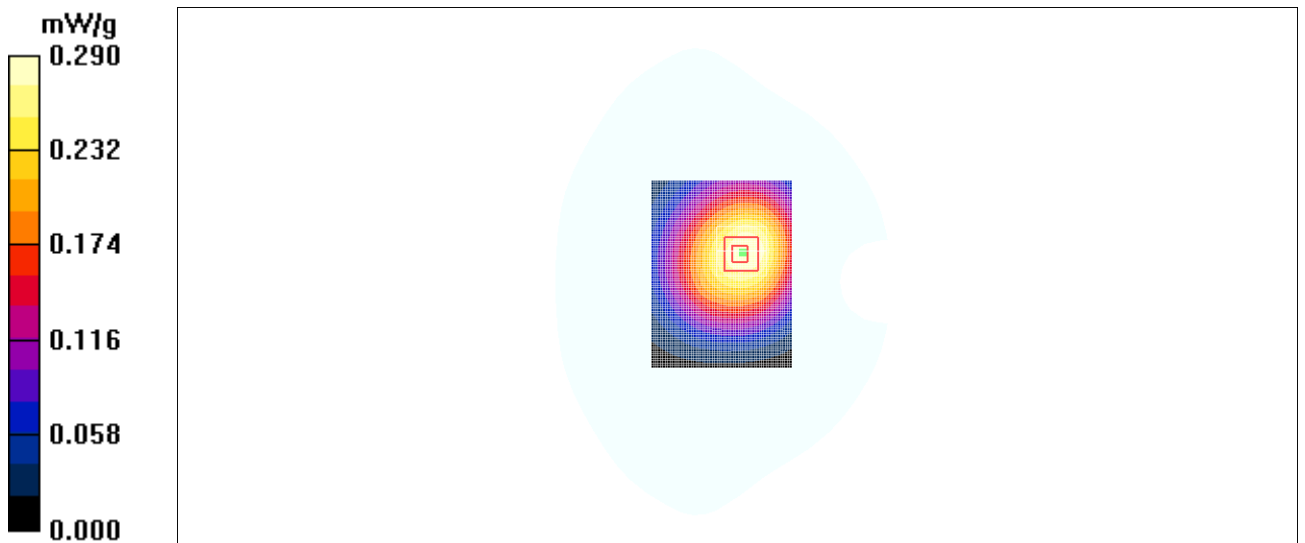


Fig. 39 850 MHz CH128

850 Body Towards Ground High with GPRS- Slide down

Date/Time: 2010-9-15 15:23:35

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 848.8$ MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 54.5$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 848.8 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground High/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.977 mW/g

Toward Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.0 V/m; Power Drift = -0.076 dB

Peak SAR (extrapolated) = 1.27 W/kg

SAR(1 g) = 0.914 mW/g; SAR(10 g) = 0.625 mW/g

Maximum value of SAR (measured) = 0.955 mW/g

Toward Ground High/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.0 V/m; Power Drift = -0.076 dB

Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.721 mW/g; SAR(10 g) = 0.433 mW/g

Maximum value of SAR (measured) = 0.818 mW/g

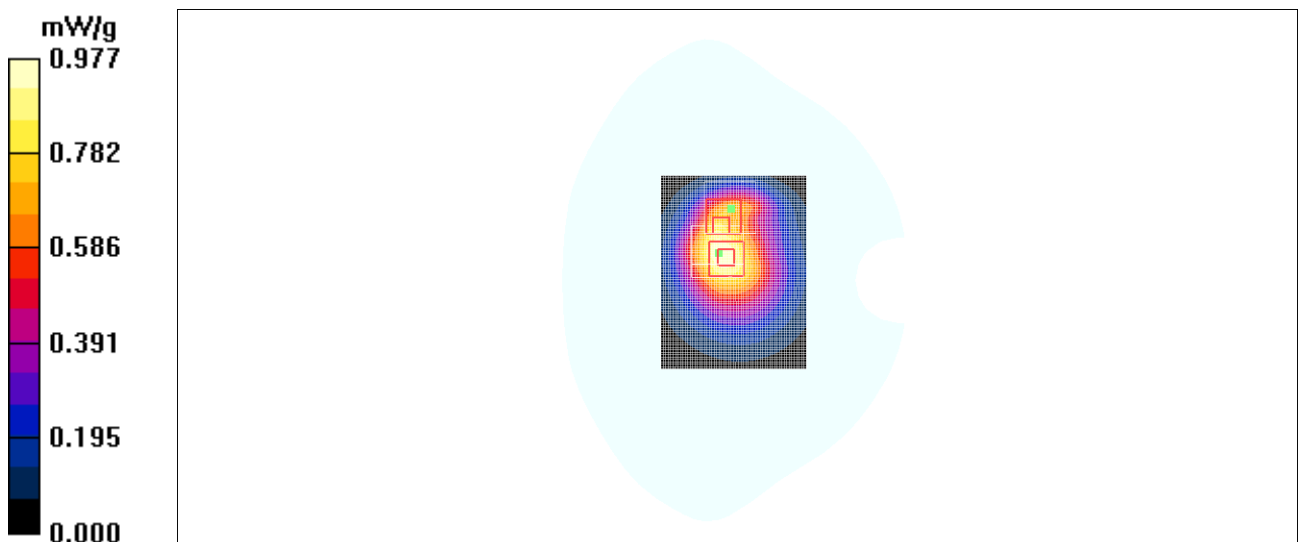


Fig. 40 850 MHz CH251

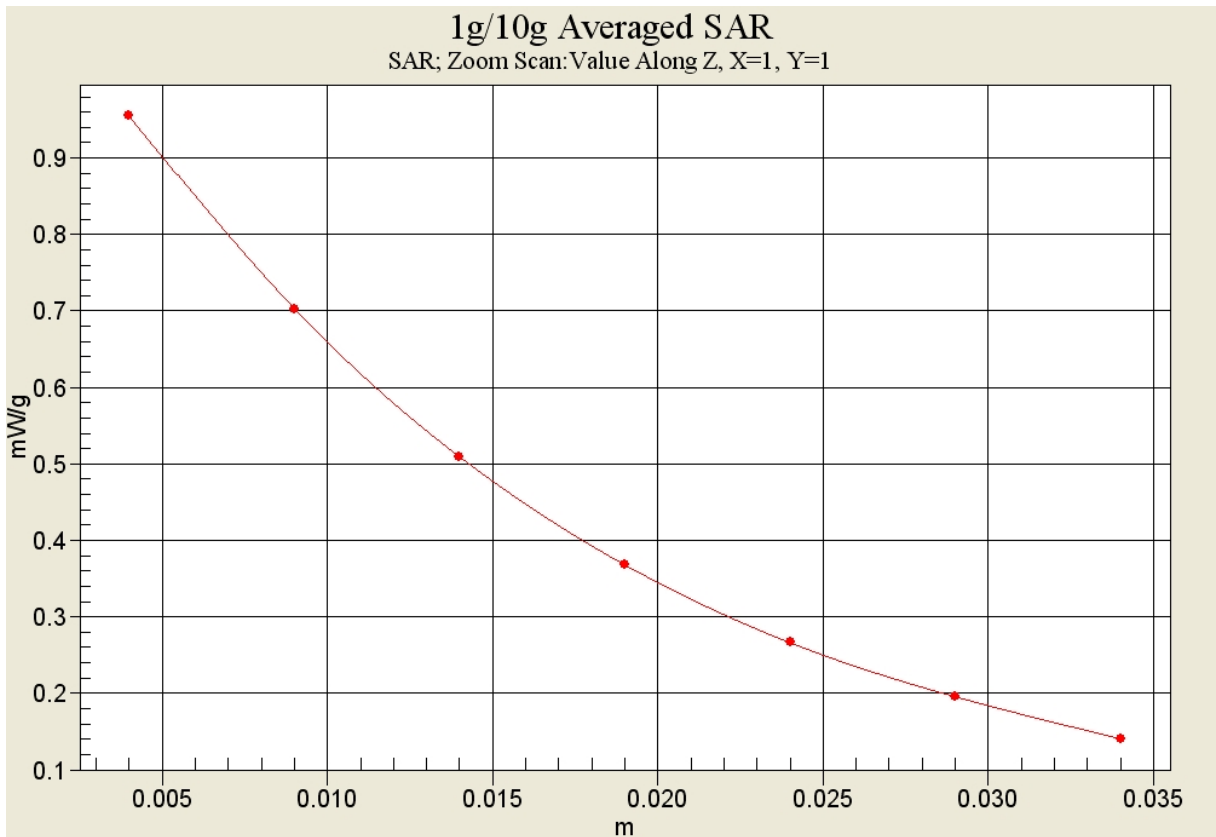


Fig. 40-1 Z-Scan at power reference point (850 MHz CH251)

850 Body Towards Ground Middle with GPRS- Slide down

Date/Time: 2010-9-15 15:38:52

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 54.8$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 836.6 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Middle/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.950 mW/g

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.4 V/m; Power Drift = -0.019 dB

Peak SAR (extrapolated) = 1.22 W/kg

SAR(1 g) = 0.870 mW/g; SAR(10 g) = 0.597 mW/g

Maximum value of SAR (measured) = 0.912 mW/g

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.4 V/m; Power Drift = -0.019 dB

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.711 mW/g; SAR(10 g) = 0.444 mW/g

Maximum value of SAR (measured) = 0.802 mW/g

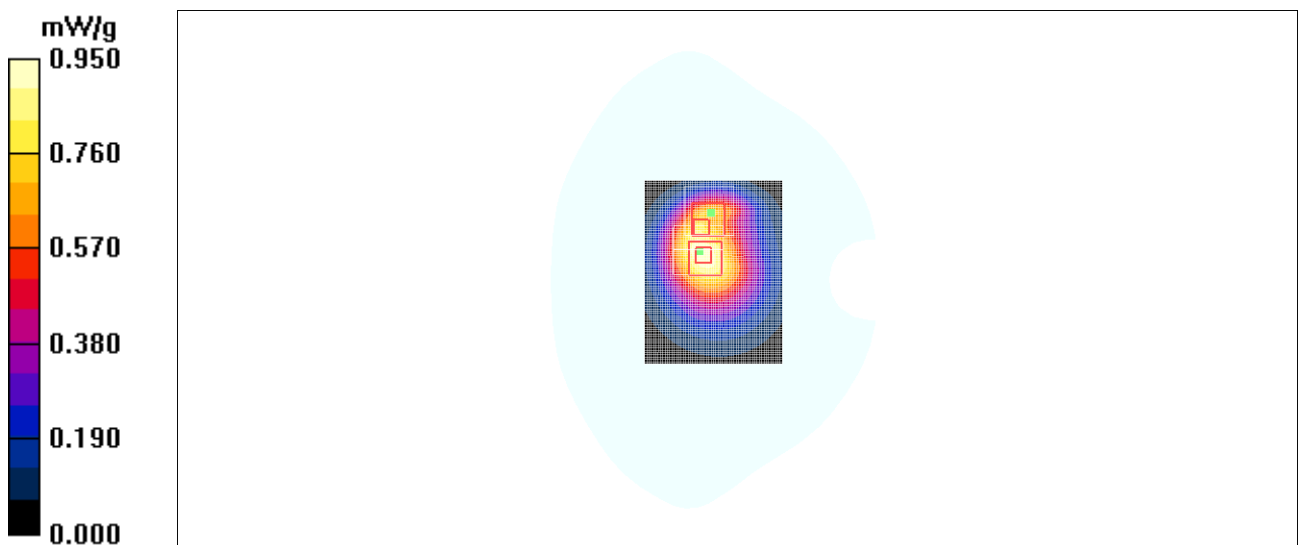


Fig. 41 850 MHz CH190

850 Body Towards Ground Low with GPRS- Slide down

Date/Time: 2010-9-15 15:54:23

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used: $f = 825 \text{ MHz}$; $\sigma = 0.93 \text{ mho/m}$; $\epsilon_r = 55.8$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 824.2 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Low/Area Scan (61x81x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.709 mW/g

Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 24.0 V/m ; Power Drift = 0.033 dB

Peak SAR (extrapolated) = 0.947 W/kg

SAR(1 g) = 0.673 mW/g ; SAR(10 g) = 0.461 mW/g

Maximum value of SAR (measured) = 0.713 mW/g

Toward Ground Low/Zoom Scan (7x7x7)/Cube 1: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 24.0 V/m ; Power Drift = 0.033 dB

Peak SAR (extrapolated) = 0.850 W/kg

SAR(1 g) = 0.566 mW/g ; SAR(10 g) = 0.353 mW/g

Maximum value of SAR (measured) = 0.624 mW/g

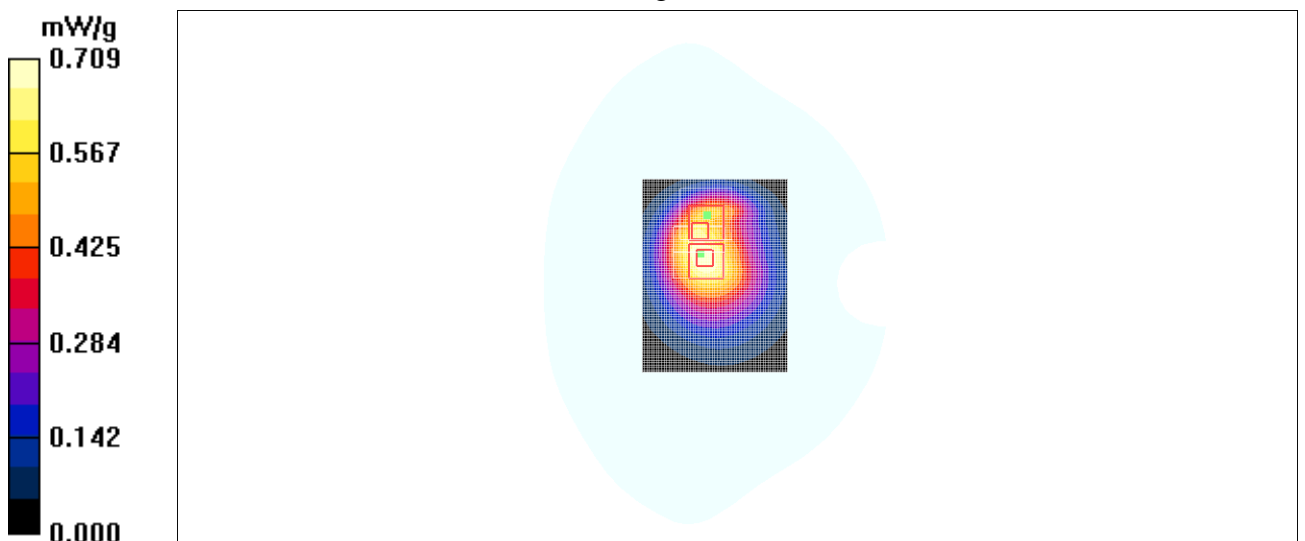


Fig. 42 850 MHz CH128

850 Body Towards Phantom High with GPRS- Slide up

Date/Time: 2010-9-15 16:10:36

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 848.8$ MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 54.5$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 848.8 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Phantom High/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.625 mW/g

Toward Phantom High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.1 V/m; Power Drift = -0.067 dB

Peak SAR (extrapolated) = 0.743 W/kg

SAR(1 g) = 0.591 mW/g; SAR(10 g) = 0.442 mW/g

Maximum value of SAR (measured) = 0.613 mW/g

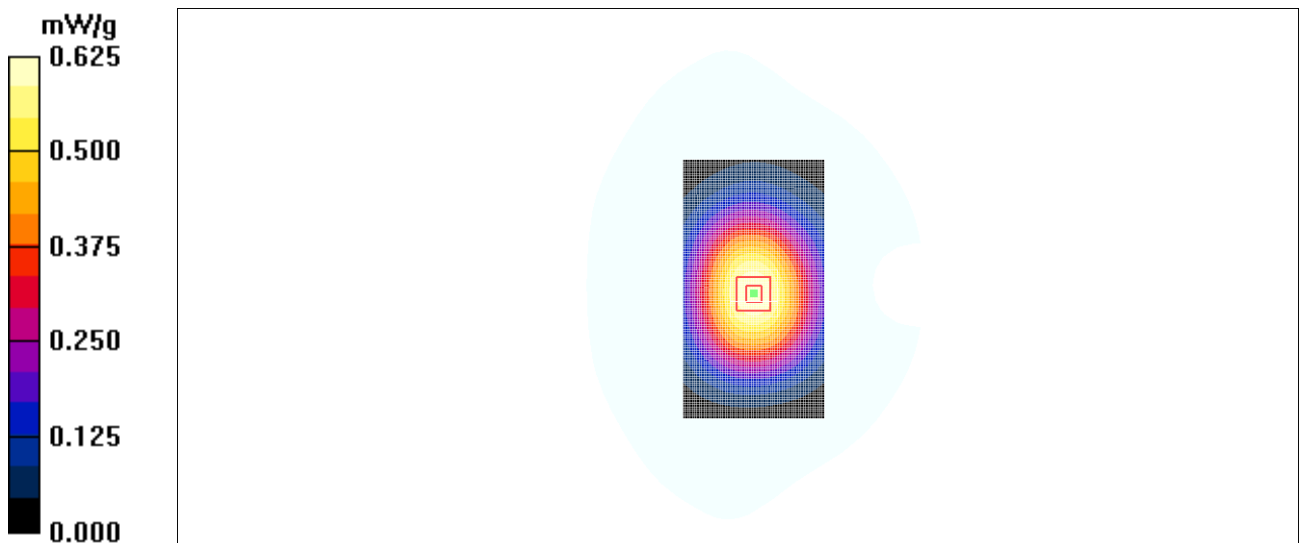


Fig. 43 850 MHz CH251

850 Body Towards Phantom Middle with GPRS- - Slide up

Date/Time: 2010-9-15 16:25:54

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 54.8$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 836.6 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Phantom Middle/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.586 mW/g

Toward Phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.5 V/m; Power Drift = -0.051 dB

Peak SAR (extrapolated) = 0.620 W/kg

SAR(1 g) = 0.543 mW/g; SAR(10 g) = 0.391 mW/g

Maximum value of SAR (measured) = 0.579 mW/g

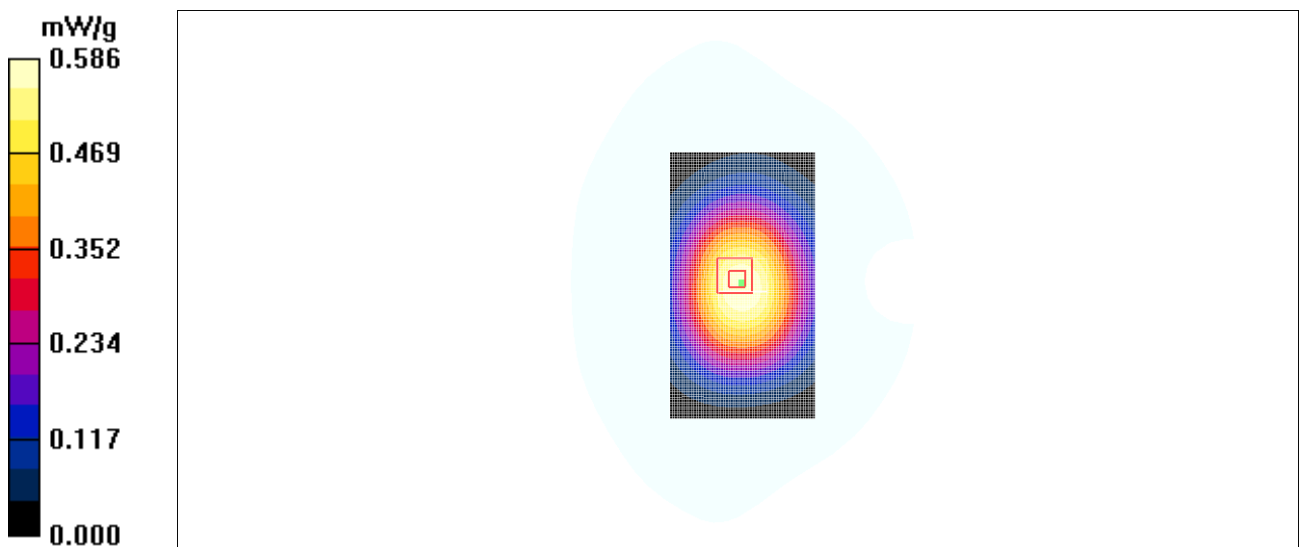


Fig. 44 850 MHz CH190

850 Body Towards Phantom Low with GPRS- - Slide up

Date/Time: 2010-9-15 16:41:17

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used: $f = 825 \text{ MHz}$; $\sigma = 0.93 \text{ mho/m}$; $\epsilon_r = 55.8$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 824.2 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Phantom Low/Area Scan (61x111x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.559 mW/g

Toward Phantom Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 24.1 V/m ; Power Drift = 0.000 dB

Peak SAR (extrapolated) = 0.660 W/kg

SAR(1 g) = 0.532 mW/g ; SAR(10 g) = 0.400 mW/g

Maximum value of SAR (measured) = 0.552 mW/g

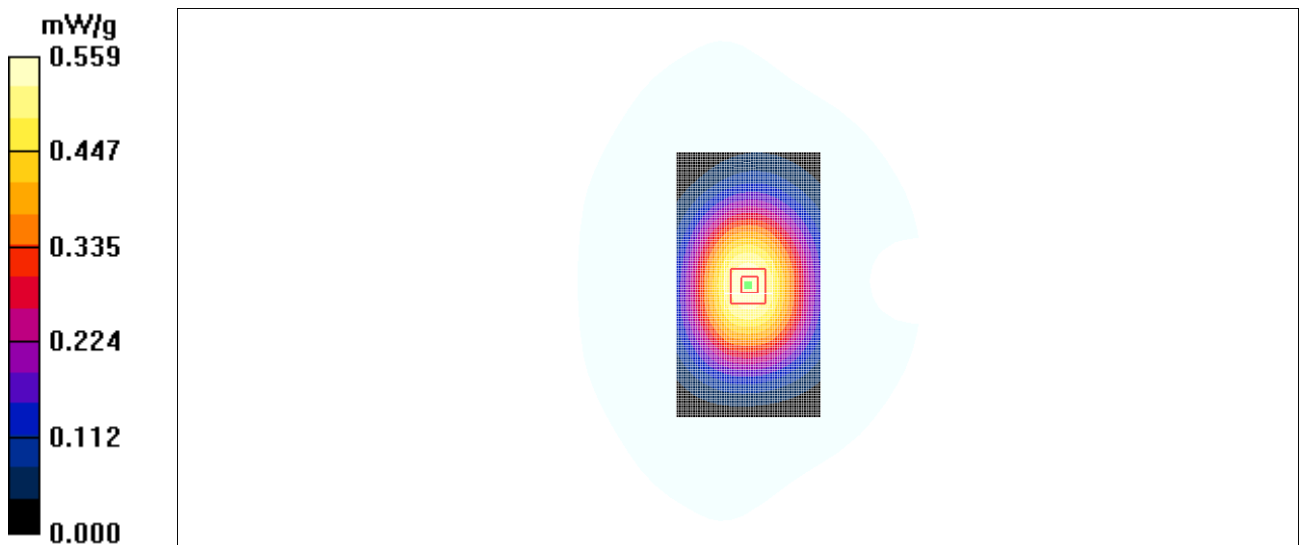


Fig. 45 850 MHz CH128

850 Body Towards Ground High with GPRS- - Slide up

Date/Time: 2010-9-15 16:56:38

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 848.8$ MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 54.5$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 848.8 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground High/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.782 mW/g

Toward Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.7 V/m; Power Drift = -0.135 dB

Peak SAR (extrapolated) = 1.83 W/kg

SAR(1 g) = 0.749 mW/g; SAR(10 g) = 0.535 mW/g

Maximum value of SAR (measured) = 0.760 mW/g

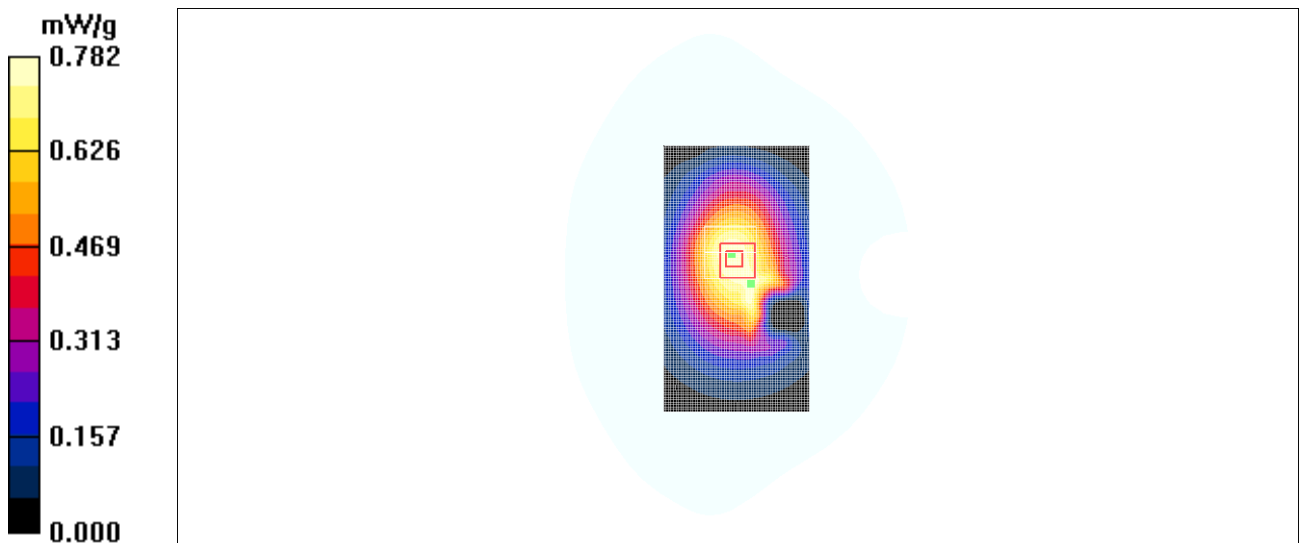


Fig. 46 850 MHz CH251

850 Body Towards Ground Middle with GPRS- - Slide up

Date/Time: 2010-9-15 17:12:03

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 54.8$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 836.6 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Middle/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.755 mW/g

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.3 V/m; Power Drift = -0.106 dB

Peak SAR (extrapolated) = 0.912 W/kg

SAR(1 g) = 0.711 mW/g; SAR(10 g) = 0.522 mW/g

Maximum value of SAR (measured) = 0.745 mW/g

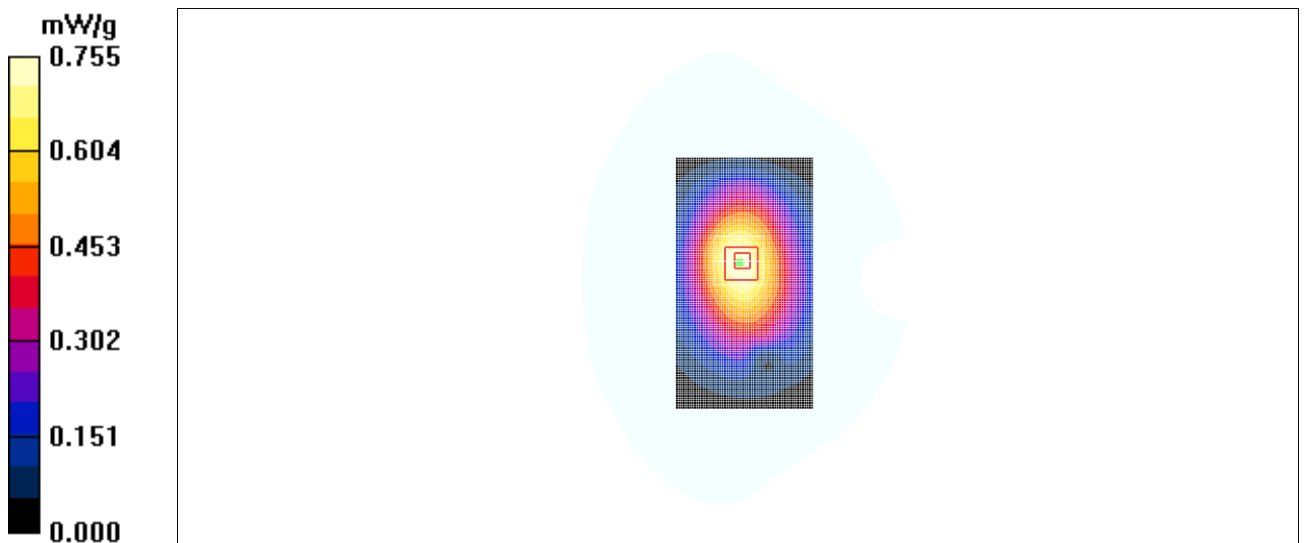


Fig. 47 850 MHz CH190

850 Body Towards Ground Low with GPRS- Slide up

Date/Time: 2010-9-15 17:27:23

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used: $f = 825$ MHz; $\sigma = 0.93$ mho/m; $\epsilon_r = 55.8$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 824.2 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Low/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.825 mW/g

Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.4 V/m; Power Drift = 0.026 dB

Peak SAR (extrapolated) = 0.874 W/kg

SAR(1 g) = 0.678 mW/g; SAR(10 g) = 0.480 mW/g

Maximum value of SAR (measured) = 0.707 mW/g

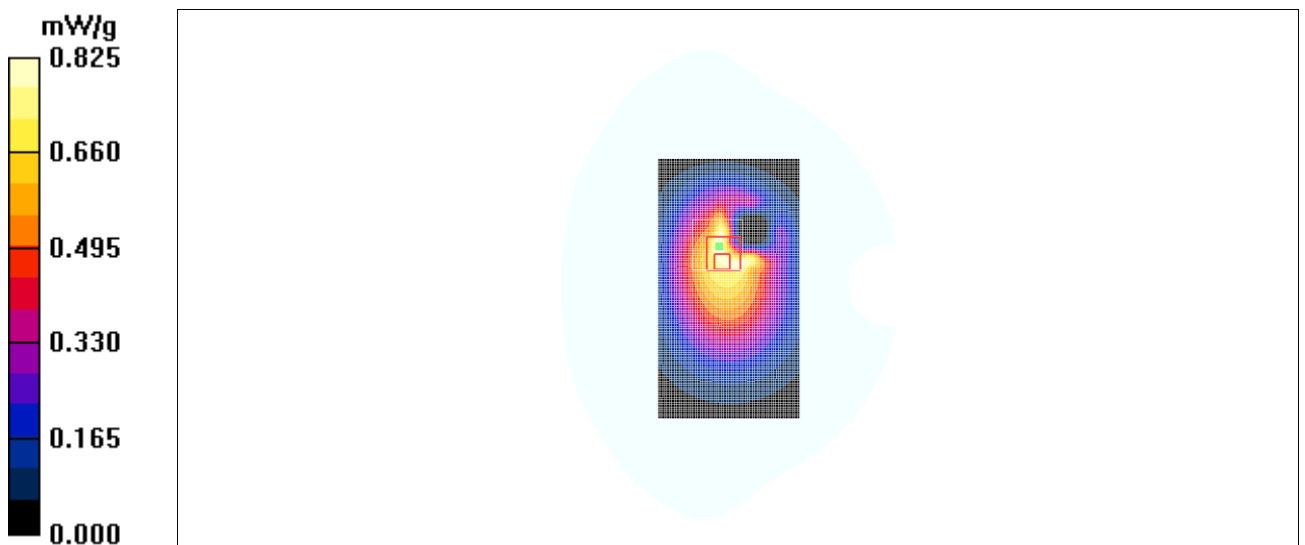


Fig. 48 850 MHz CH128

850 Body Towards Ground High with EGPRS

Date/Time: 2010-9-15 17:43:51

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used: $f = 848.8$ MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 54.5$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 824.2 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground High/Area Scan (61x81x1): 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 = 29.8 V/m; Power Drift = -0.101 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.873 mW/g; SAR(10 g) = 0.603 mW/g

Maximum value of SAR (measured) = 0.926 mW/g

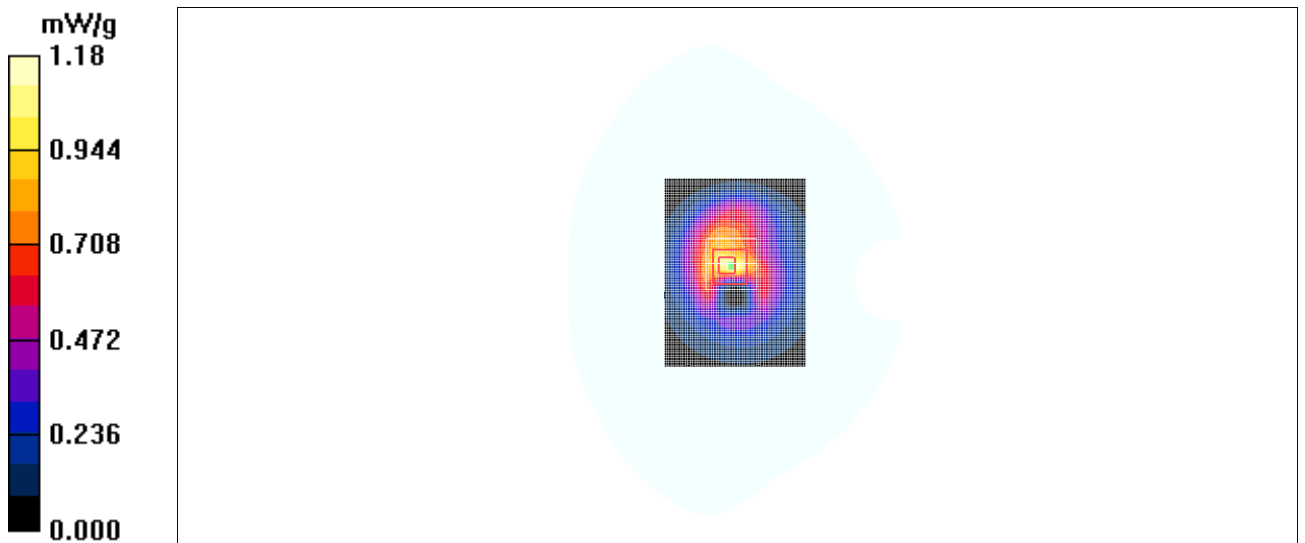


Fig. 49 850 MHz CH251

850 Body Towards Ground Middle with EGPRS

Date/Time: 2010-9-15 18:31:10

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 54.8$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 836.6 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Middle/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.916 mW/g

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.9 V/m; Power Drift = -0.119 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.836 mW/g; SAR(10 g) = 0.573 mW/g

Maximum value of SAR (measured) = 0.878 mW/g

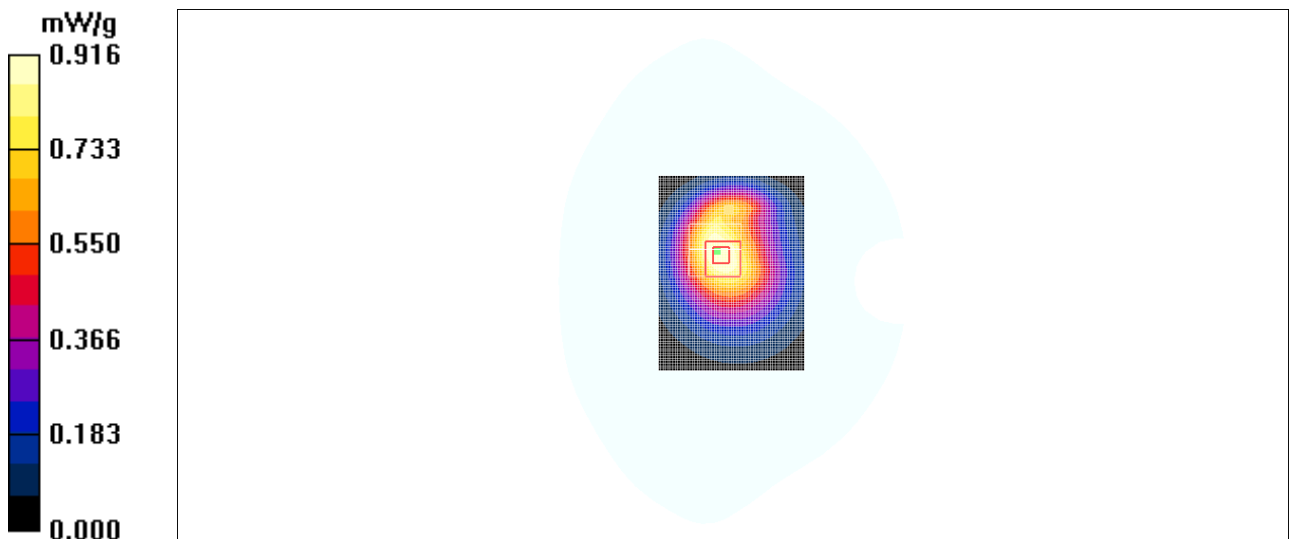


Fig. 50 850 MHz CH190

850 Body Towards Ground Low with EGPRS

Date/Time: 2010-9-15 18:47:22

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used: $f = 825$ MHz; $\sigma = 0.93$ mho/m; $\epsilon_r = 55.8$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 824.2 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Low/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.681 mW/g

Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.3 V/m; Power Drift = 0.103 dB

Peak SAR (extrapolated) = 0.918 W/kg

SAR(1 g) = 0.644 mW/g; SAR(10 g) = 0.441 mW/g

Maximum value of SAR (measured) = 0.684 mW/g

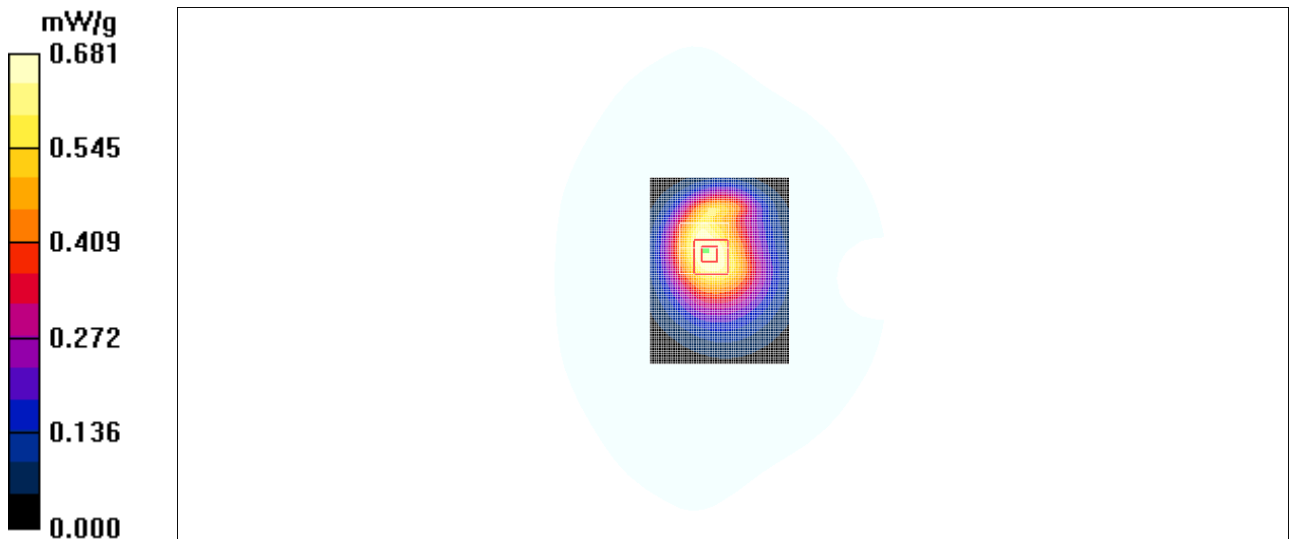


Fig. 51 850 MHz CH128

850 Body Towards Ground High with Headset

Date/Time: 2010-9-15 18:00:33

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used: $f = 848.8$ MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 54.5$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 850 Frequency: 824.2 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground High/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.607 mW/g

Toward Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.7 V/m; Power Drift = 0.039 dB

Peak SAR (extrapolated) = 0.791 W/kg

SAR(1 g) = 0.574 mW/g; SAR(10 g) = 0.396 mW/g

Maximum value of SAR (measured) = 0.615 mW/g

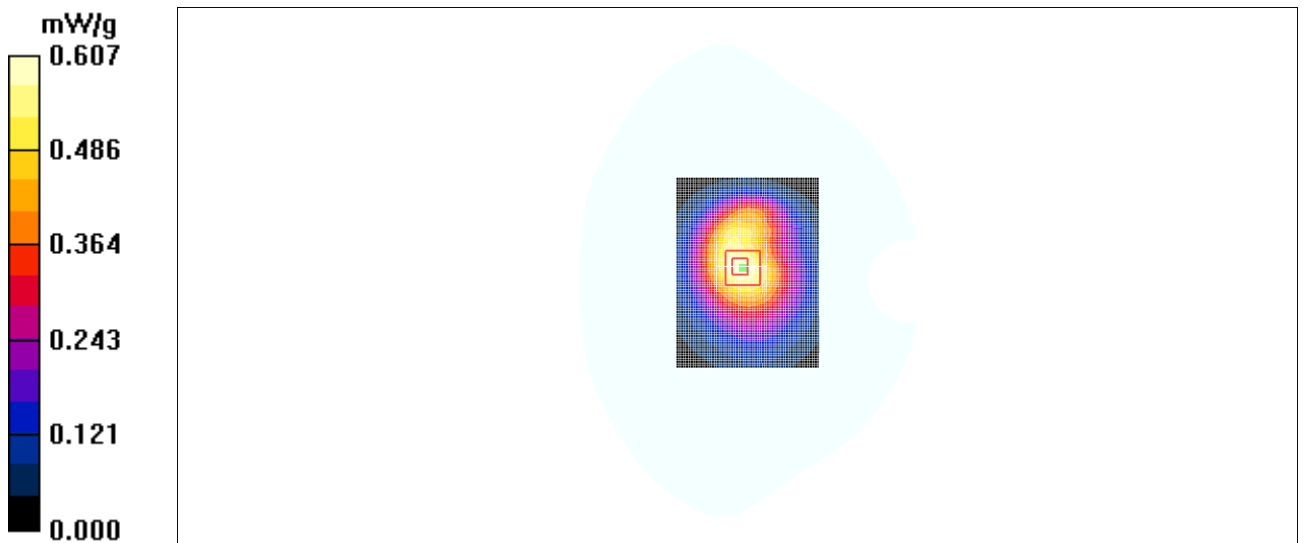


Fig. 52 850 MHz CH251

1900 Body Towards Phantom High with GPRS- Slide down

Date/Time: 2010-9-16 20:05:16

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.55$ mho/m; $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz GPRS Frequency: 1909.8 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom High/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.090 mW/g

Toward Phantom High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.13 V/m; Power Drift = 0.051 dB

Peak SAR (extrapolated) = 0.133 W/kg

SAR(1 g) = 0.082 mW/g; SAR(10 g) = 0.050 mW/g

Maximum value of SAR (measured) = 0.089 mW/g

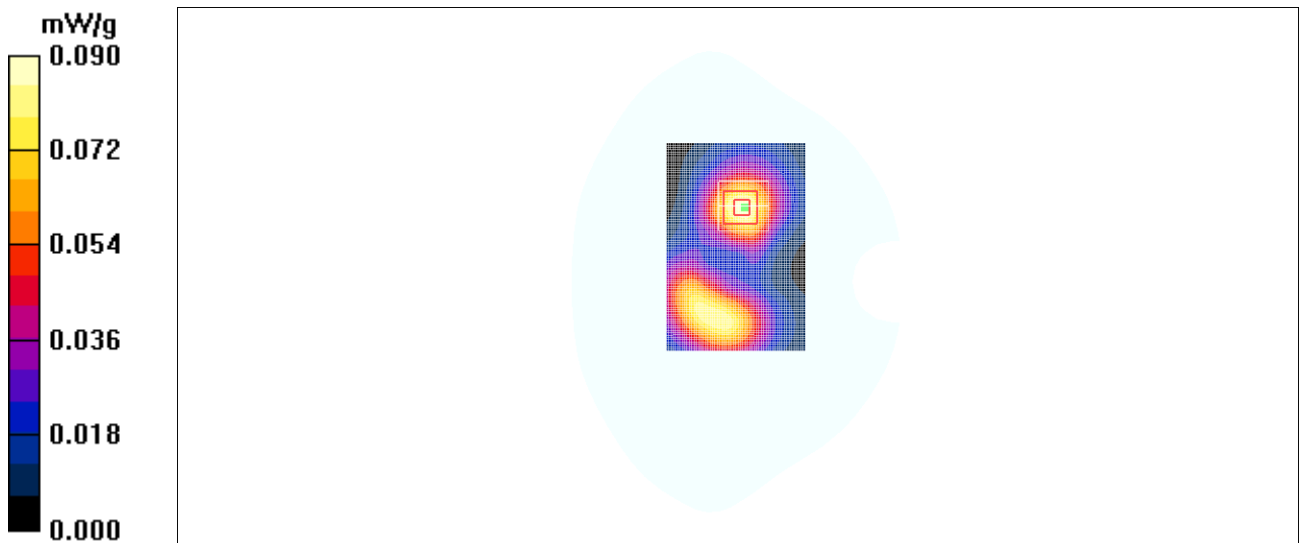


Fig. 53 1900 MHz CH810

1900 Body Towards Phantom Middle with GPRS- Slide down

Date/Time: 2010-9-16 20:20:32

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.50$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz GPRS Frequency: 1880 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom Middle/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.135 mW/g

Toward Phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.66 V/m; Power Drift = 0.073 dB

Peak SAR (extrapolated) = 0.190 W/kg

SAR(1 g) = 0.125 mW/g; SAR(10 g) = 0.081 mW/g

Maximum value of SAR (measured) = 0.133 mW/g

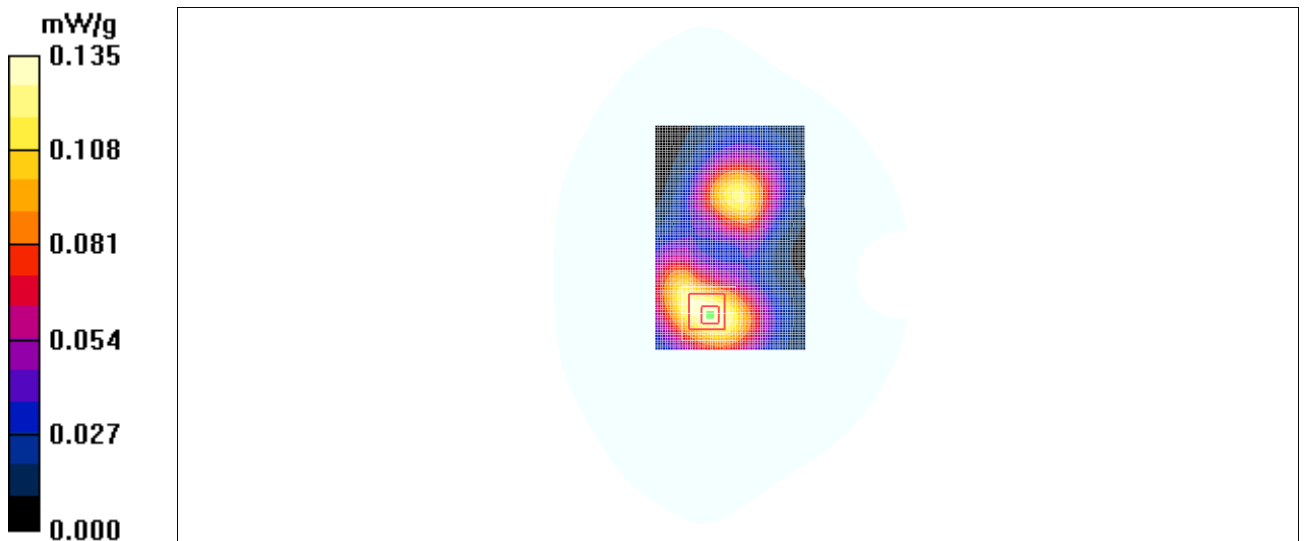


Fig. 54 1900 MHz CH661

1900 Body Towards Phantom Low with GPRS- Slide down

Date/Time: 2010-9-16 20:35:54

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 53.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz GPRS Frequency: 1850.2 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom Low/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.216 mW/g

Toward Phantom Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.82 V/m; Power Drift = 0.045 dB

Peak SAR (extrapolated) = 0.299 W/kg

SAR(1 g) = 0.198 mW/g; SAR(10 g) = 0.128 mW/g

Maximum value of SAR (measured) = 0.210 mW/g

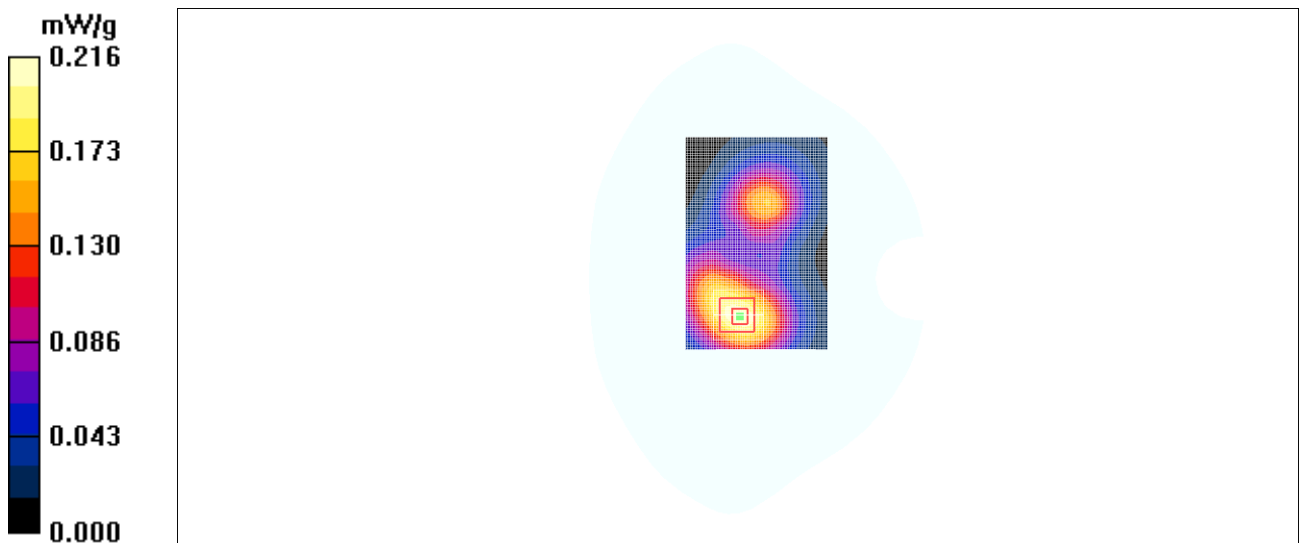


Fig. 55 1900 MHz CH512

1900 Body Towards Ground High with GPRS- Slide down

Date/Time: 2010-9-16 20:51:15

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.55$ mho/m; $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz GPRS Frequency: 1909.8 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground High/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.325 mW/g

Toward Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.39 V/m; Power Drift = -0.130 dB

Peak SAR (extrapolated) = 0.467 W/kg

SAR(1 g) = 0.284 mW/g; SAR(10 g) = 0.166 mW/g

Maximum value of SAR (measured) = 0.310 mW/g

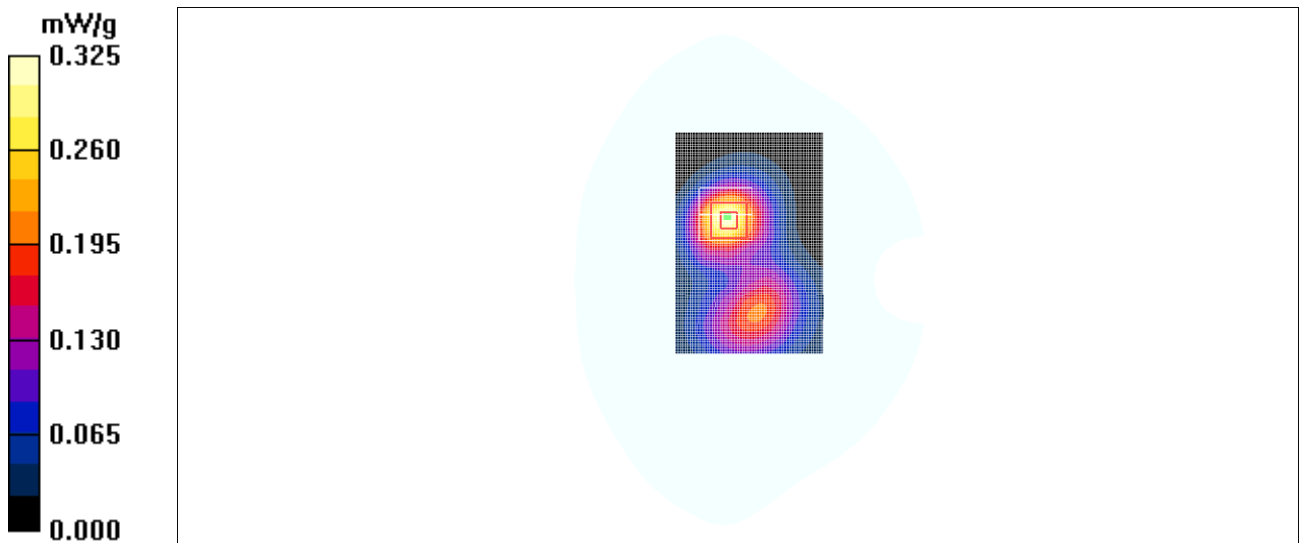


Fig. 56 1900 MHz CH810

1900 Body Towards Ground Middle with GPRS- Slide down

Date/Time: 2010-9-16 21:06:33

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.50$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz GPRS Frequency: 1880 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Middle/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.466 mW/g

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.6 V/m; Power Drift = 0.021 dB

Peak SAR (extrapolated) = 0.681 W/kg

SAR(1 g) = 0.405 mW/g; SAR(10 g) = 0.236 mW/g

Maximum value of SAR (measured) = 0.440 mW/g

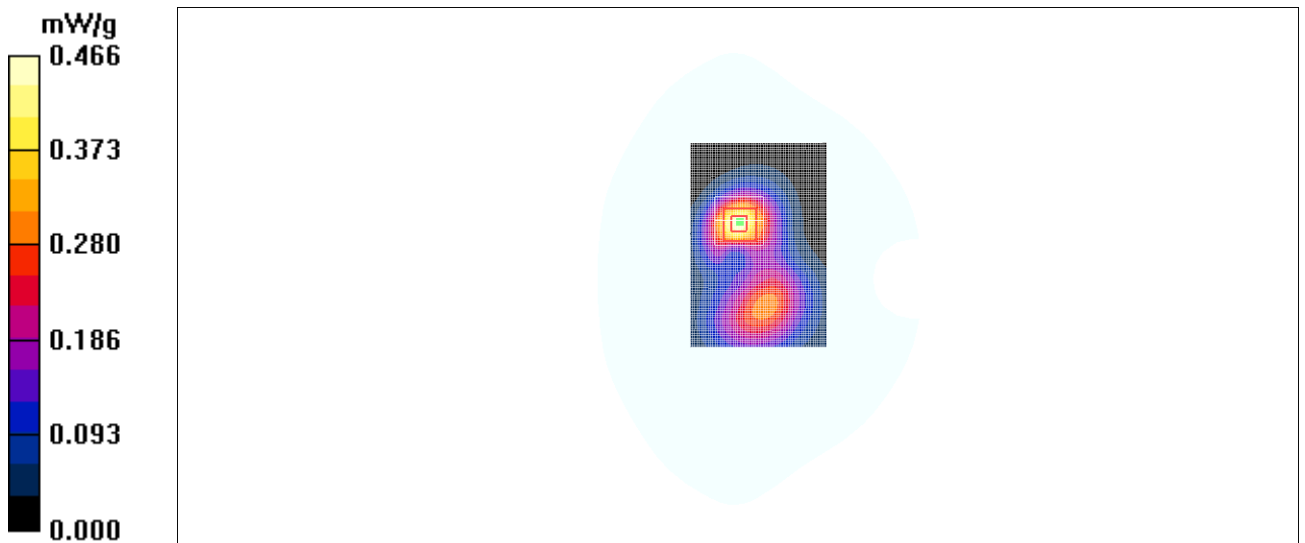


Fig. 57 1900 MHz CH661

1900 Body Towards Ground Low with GPRS- Slide down

Date/Time: 2010-9-16 21:21:52

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 53.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz GPRS Frequency: 1850.2 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Low/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.616 mW/g

Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.4 V/m; Power Drift = -0.051 dB

Peak SAR (extrapolated) = 0.866 W/kg

SAR(1 g) = 0.526 mW/g; SAR(10 g) = 0.301 mW/g

Maximum value of SAR (measured) = 0.591 mW/g

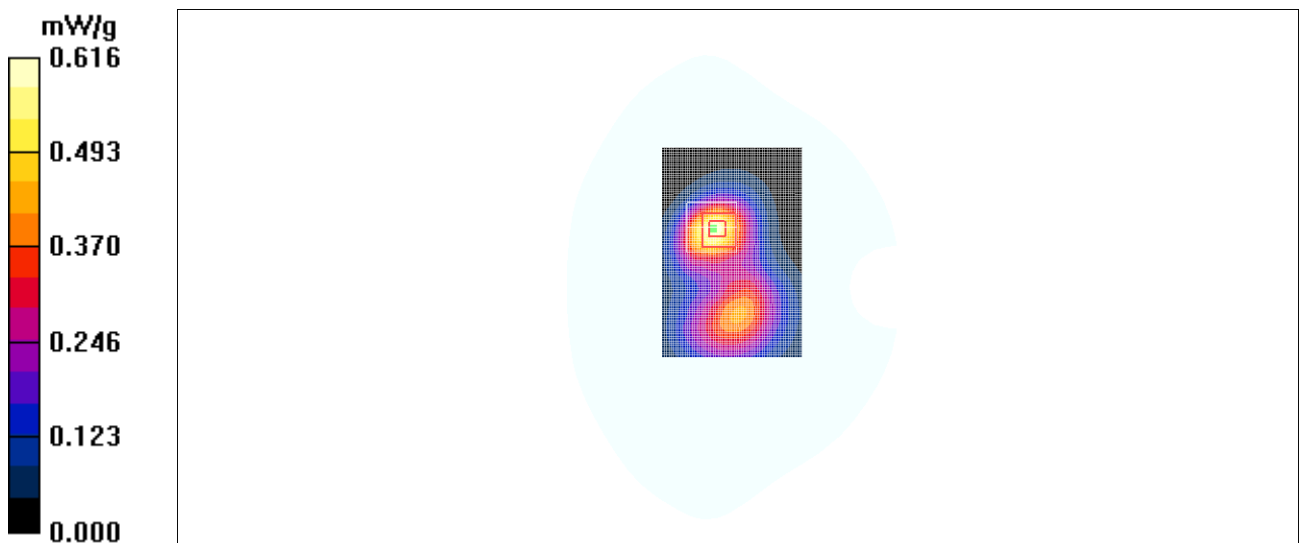


Fig. 58 1900 MHz CH512

1900 Body Towards Phantom High with GPRS- Slide up

Date/Time: 2010-9-16 21:37:20

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.55$ mho/m; $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz GPRS Frequency: 1909.8 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom High/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.170 mW/g

Toward Phantom High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.85 V/m; Power Drift = 0.124 dB

Peak SAR (extrapolated) = 0.241 W/kg

SAR(1 g) = 0.158 mW/g; SAR(10 g) = 0.102 mW/g

Maximum value of SAR (measured) = 0.166 mW/g

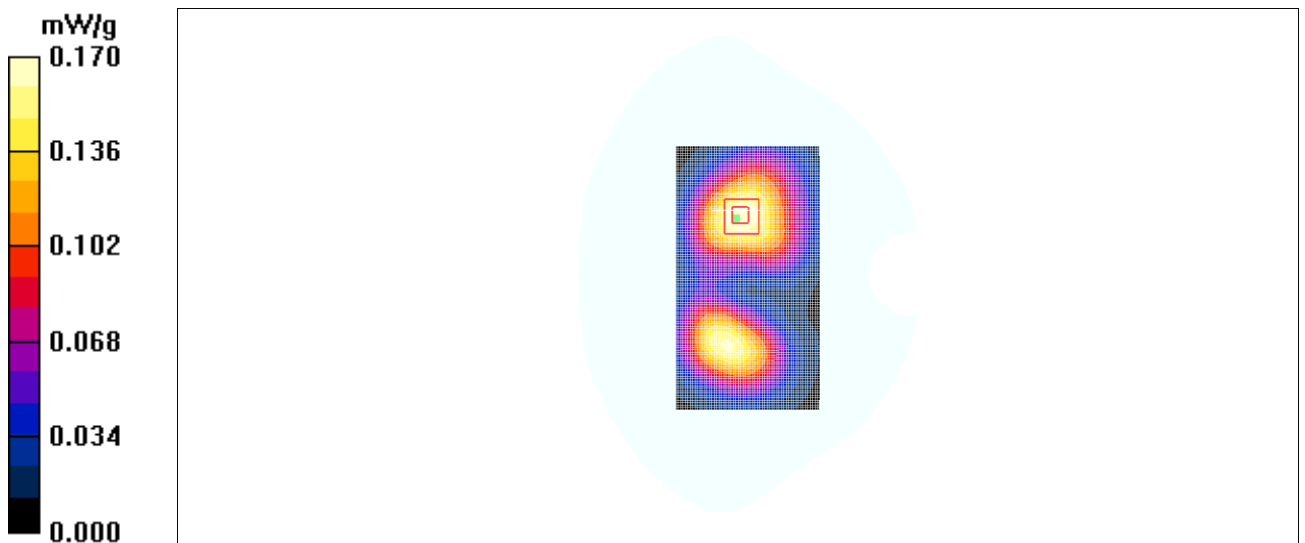


Fig. 59 1900 MHz CH810

1900 Body Towards Phantom Middle with GPRS- Slide up

Date/Time: 2010-9-16 21:52:43

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.50$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz GPRS Frequency: 1880 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom Middle/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.254 mW/g

Toward Phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.29 V/m; Power Drift = 0.002 dB

Peak SAR (extrapolated) = 0.361 W/kg

SAR(1 g) = 0.237 mW/g; SAR(10 g) = 0.154 mW/g

Maximum value of SAR (measured) = 0.249 mW/g

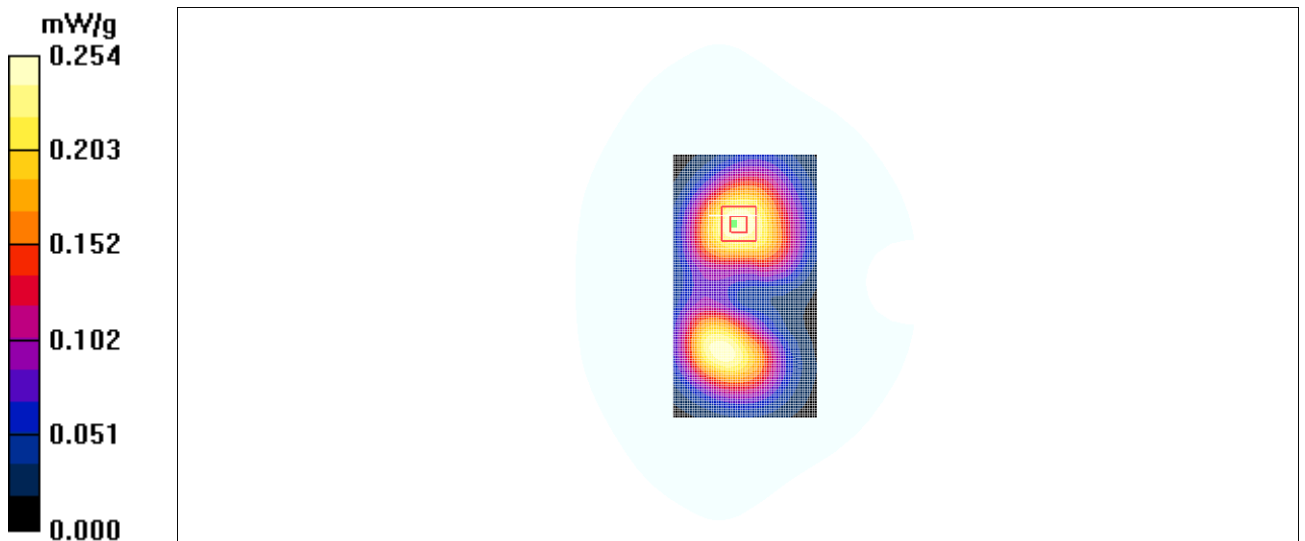


Fig. 60 1900 MHz CH661

1900 Body Towards Phantom Low with GPRS- Slide up

Date/Time: 2010-9-16 22:08:01

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 53.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz GPRS Frequency: 1850.2 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom Low/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.352 mW/g

Toward Phantom Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.69 V/m; Power Drift = -0.047 dB

Peak SAR (extrapolated) = 0.505 W/kg

SAR(1 g) = 0.332 mW/g; SAR(10 g) = 0.215 mW/g

Maximum value of SAR (measured) = 0.347 mW/g

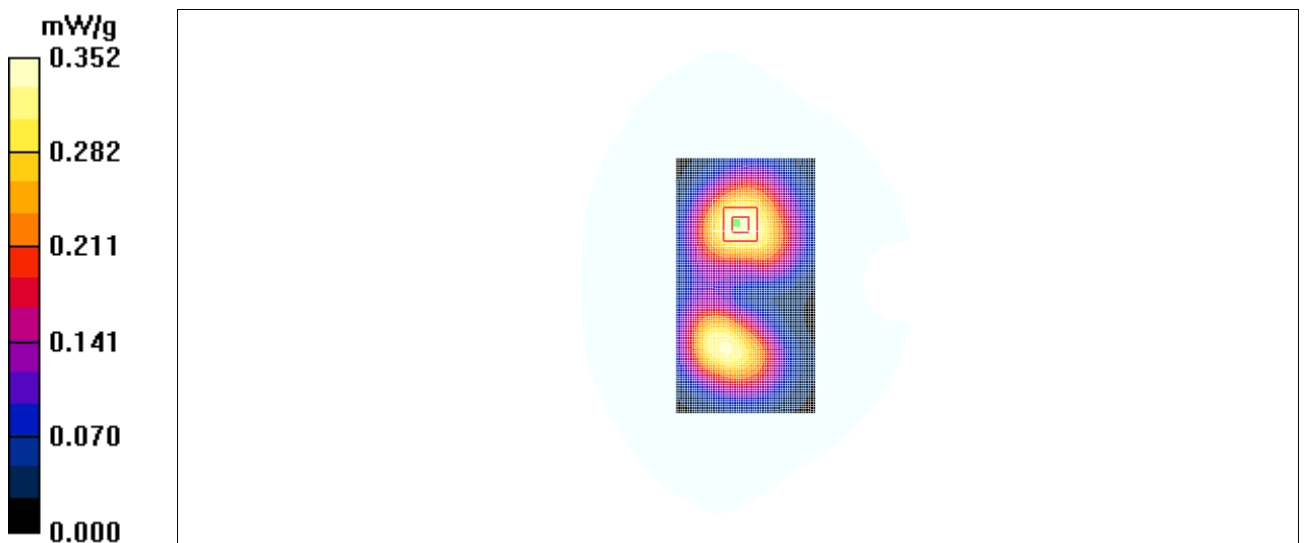


Fig. 61 1900 MHz CH512

1900 Body Towards Ground High with GPRS- Slide up

Date/Time: 2010-9-16 22:23:24

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.55$ mho/m; $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz GPRS Frequency: 1909.8 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground High/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.385 mW/g

Toward Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.3 V/m; Power Drift = 0.114 dB

Peak SAR (extrapolated) = 0.567 W/kg

SAR(1 g) = 0.364 mW/g; SAR(10 g) = 0.237 mW/g

Maximum value of SAR (measured) = 0.387 mW/g

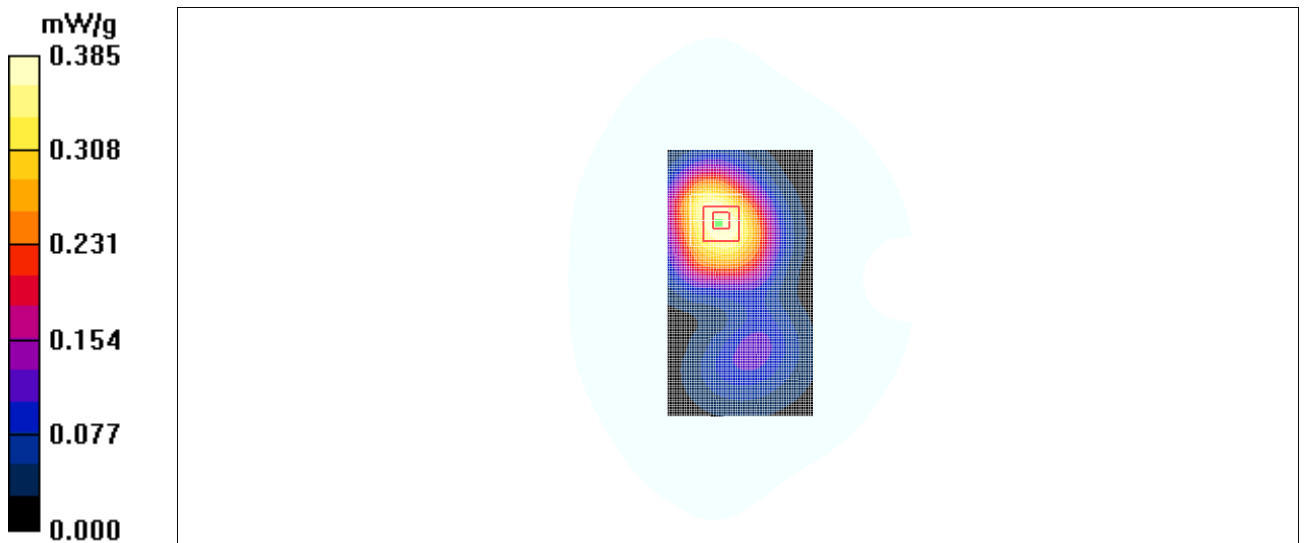


Fig. 62 1900 MHz CH810

1900 Body Towards Ground Middle with GPRS- Slide up

Date/Time: 2010-9-16 22:38:45

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.50$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz GPRS Frequency: 1880 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Middle/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.520 mW/g

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.8 V/m; Power Drift = 0.005 dB

Peak SAR (extrapolated) = 0.768 W/kg

SAR(1 g) = 0.494 mW/g; SAR(10 g) = 0.319 mW/g

Maximum value of SAR (measured) = 0.521 mW/g

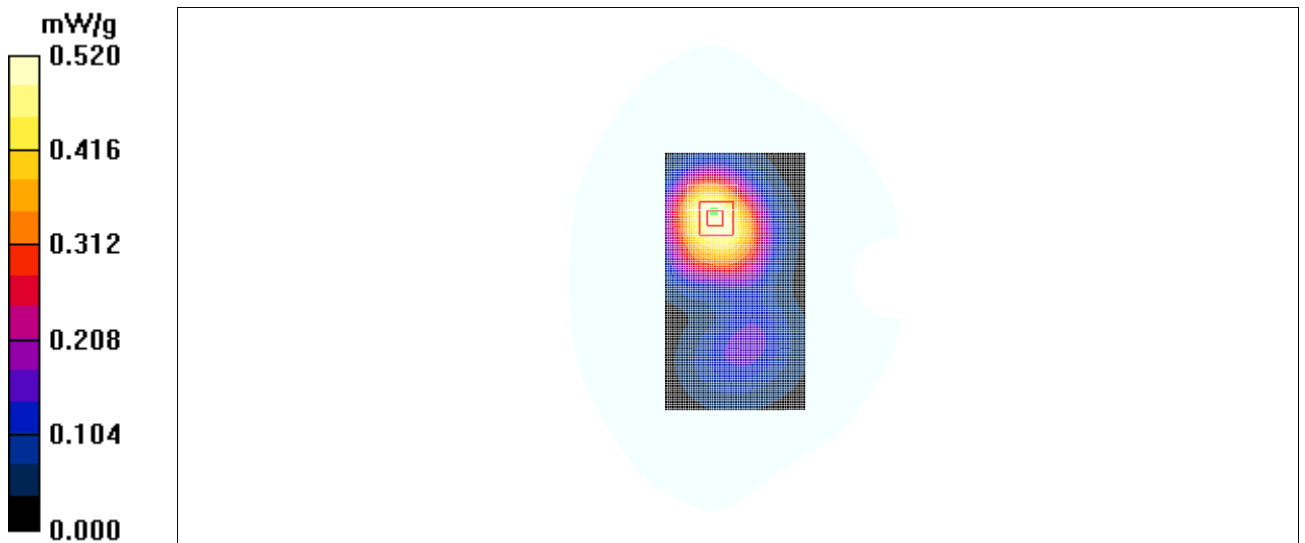


Fig. 63 1900 MHz CH661

1900 Body Towards Ground Low with GPRS- Slide up

Date/Time: 2010-9-16 22:54:07

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 53.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz GPRS Frequency: 1850.2 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Low/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.671 mW/g

Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.4 V/m; Power Drift = 0.000 dB

Peak SAR (extrapolated) = 1.24 W/kg

SAR(1 g) = 0.638 mW/g; SAR(10 g) = 0.410 mW/g

Maximum value of SAR (measured) = 0.662 mW/g

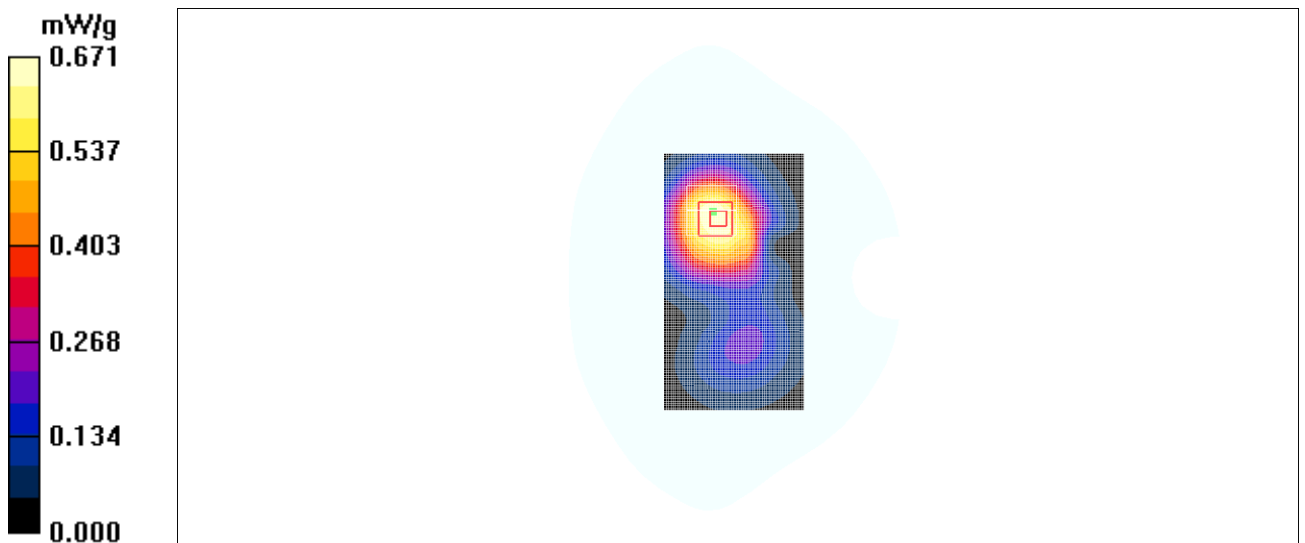


Fig. 64 1900 MHz CH512

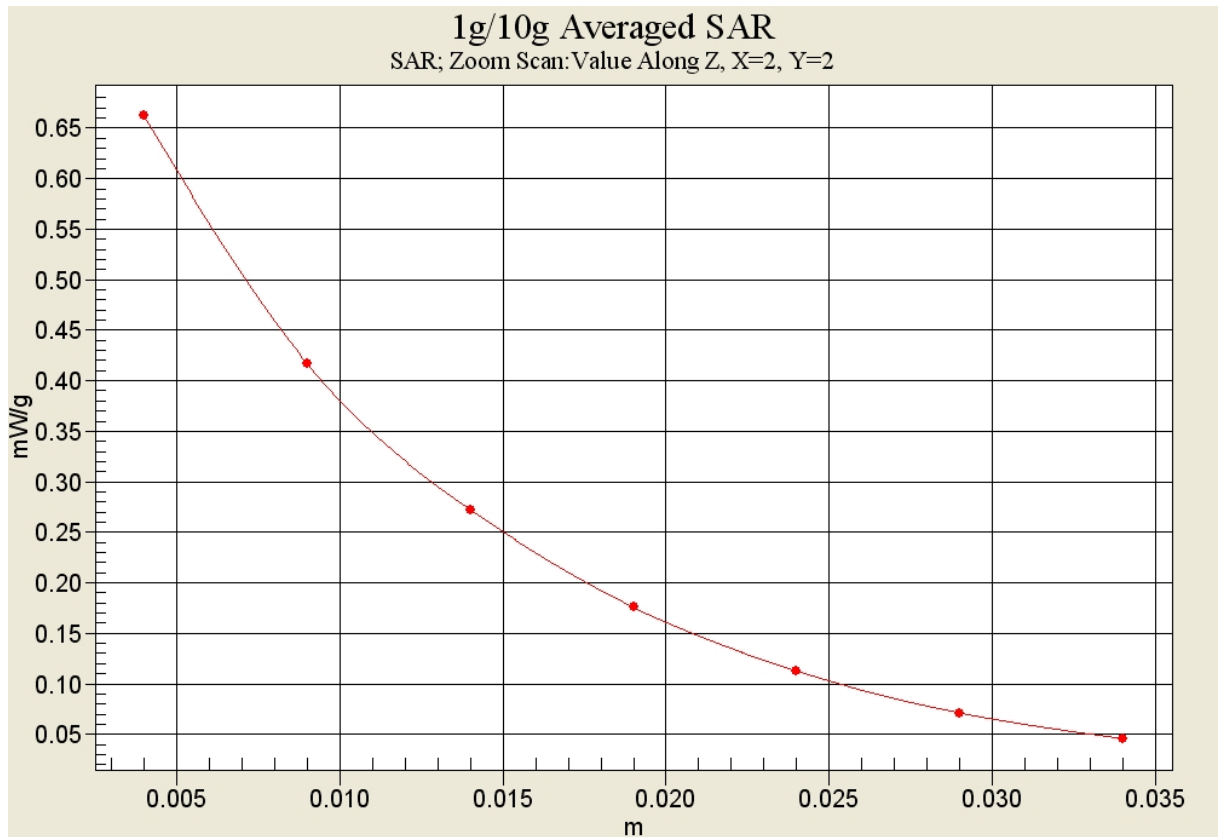


Fig. 64-1 Z-Scan at power reference point (1900 MHz CH512)

1900 Body Towards Ground Low with EGPRS

Date/Time: 2010-9-16 23:10:39

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 53.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz GPRS Frequency: 1850.2 MHz Duty Cycle: 1:4

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Low/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.668 mW/g

Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.7 V/m; Power Drift = 0.003 dB

Peak SAR (extrapolated) = 0.973 W/kg

SAR(1 g) = 0.627 mW/g; SAR(10 g) = 0.404 mW/g

Maximum value of SAR (measured) = 0.663 mW/g

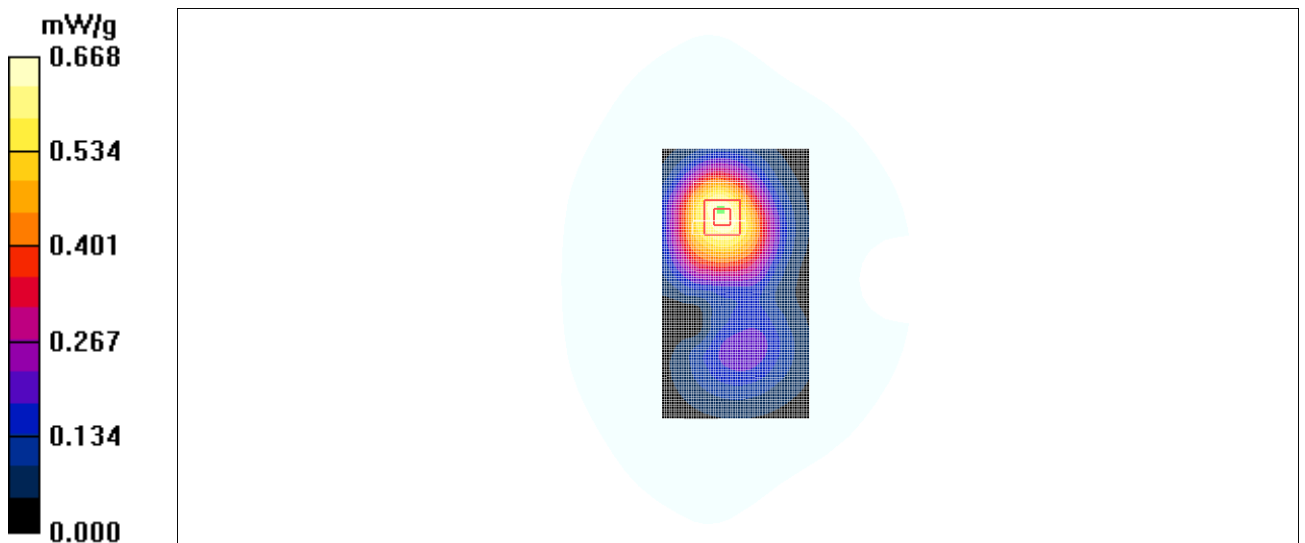


Fig. 65 1900 MHz CH512

1900 Body Towards Ground Low with Headset

Date/Time: 2010-9-16 23:27:03

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 53.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1850.2 MHz Duty Cycle: 1:8.3

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Low/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.452 mW/g

Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.89 V/m; Power Drift = 0.026 dB

Peak SAR (extrapolated) = 0.661 W/kg

SAR(1 g) = 0.423 mW/g; SAR(10 g) = 0.270 mW/g

Maximum value of SAR (measured) = 0.445 mW/g

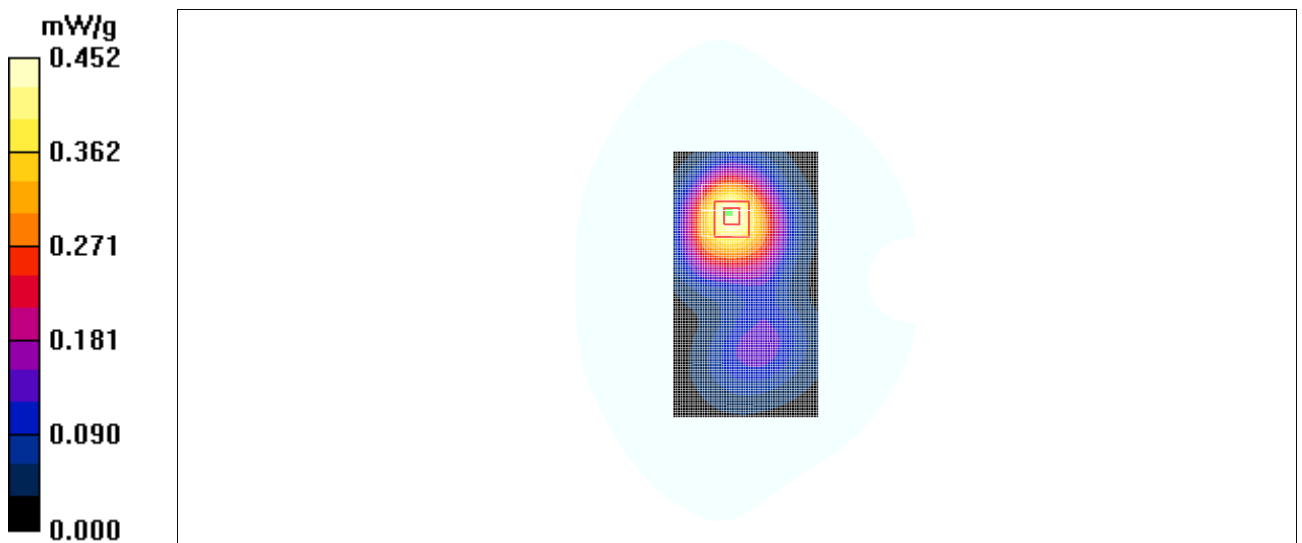


Fig. 66 1900 MHz CH512

WCDMA850 Body Towards Phantom High - Slide down

Date/Time: 2010-9-15 18:18:21

Electronics: DAE4 Sn771

Medium: 900 Body

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 54.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0oC Liquid Temperature: 22.5°C

Communication System: WCDMA 850 Frequency: 846.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Phantom High/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.391 mW/g

Toward Phantom High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.4 V/m; Power Drift = -0.004 dB

Peak SAR (extrapolated) = 0.473 W/kg

SAR(1 g) = 0.367 mW/g; SAR(10 g) = 0.272 mW/g

Maximum value of SAR (measured) = 0.388 mW/g

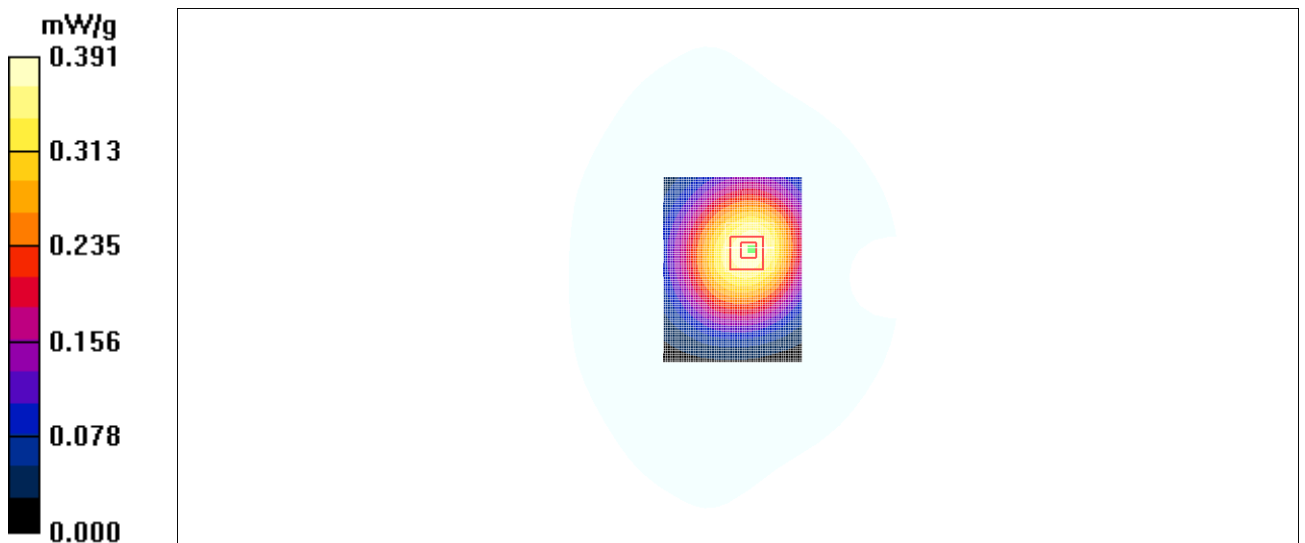


Fig. 67 850 MHz CH4233

WCDMA 850 Body Towards Phantom Middle - Slide down

Date/Time: 2010-9-15 18:33:42

Electronics: DAE4 Sn771

Medium: 900 Body

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 54.8$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0oC 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/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.273 mW/g

Toward Phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.4 V/m; Power Drift = -0.003 dB

Peak SAR (extrapolated) = 0.337 W/kg

SAR(1 g) = 0.258 mW/g; SAR(10 g) = 0.192 mW/g

Maximum value of SAR (measured) = 0.272 mW/g

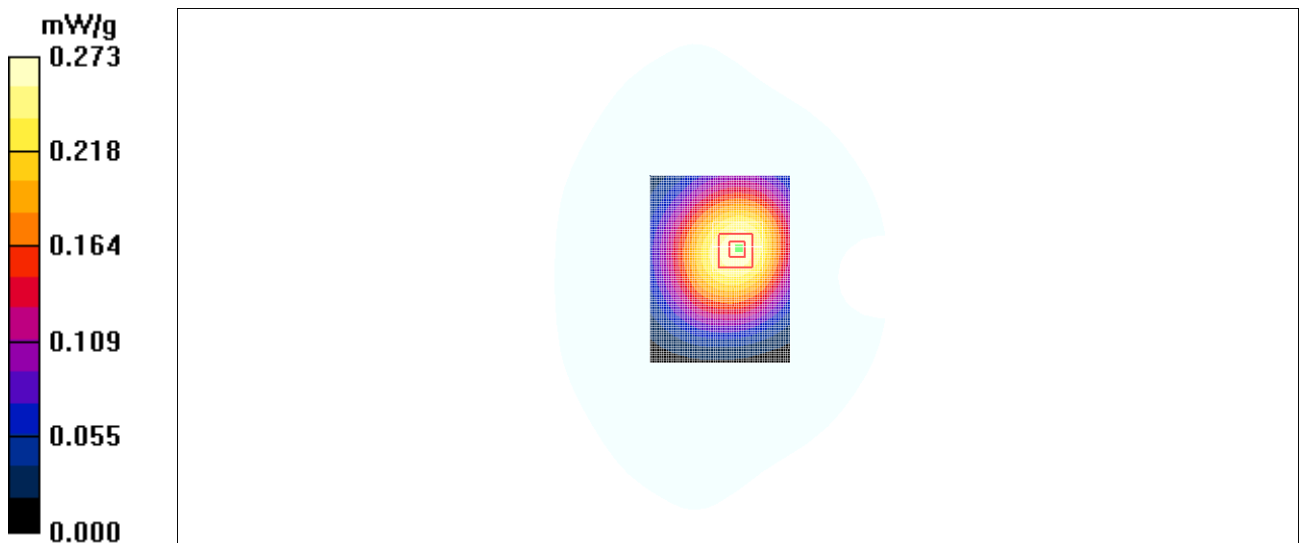


Fig. 68 850 MHz CH4182

WCDMA 850 Body Towards Phantom Low - Slide down

Date/Time: 2010-9-15 18:49:05

Electronics: DAE4 Sn771

Medium: 900 Body

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 55.5$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: WCDMA 850 Frequency: 826.4 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Phantom Low/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.297 mW/g

Toward Phantom Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.1 V/m; Power Drift = 0.021 dB

Peak SAR (extrapolated) = 0.362 W/kg

SAR(1 g) = 0.280 mW/g; SAR(10 g) = 0.209 mW/g

Maximum value of SAR (measured) = 0.294 mW/g

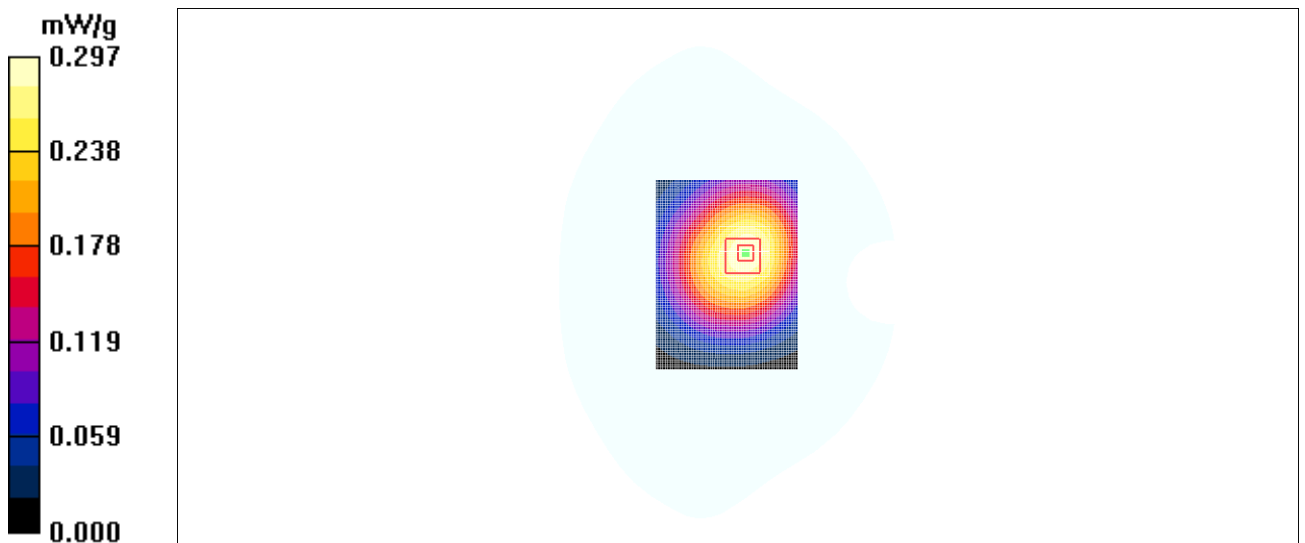


Fig. 69 850 MHz CH4132

WCDMA 850 Body Towards Ground High - Slide down

Date/Time: 2010-9-15 19:04:26

Electronics: DAE4 Sn771

Medium: 900 Body

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 54.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0oC Liquid Temperature: 22.5°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/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.889 mW/g

Toward Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 29.0 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 1.14 W/kg

SAR(1 g) = 0.829 mW/g; SAR(10 g) = 0.572 mW/g

Maximum value of SAR (measured) = 0.877 mW/g

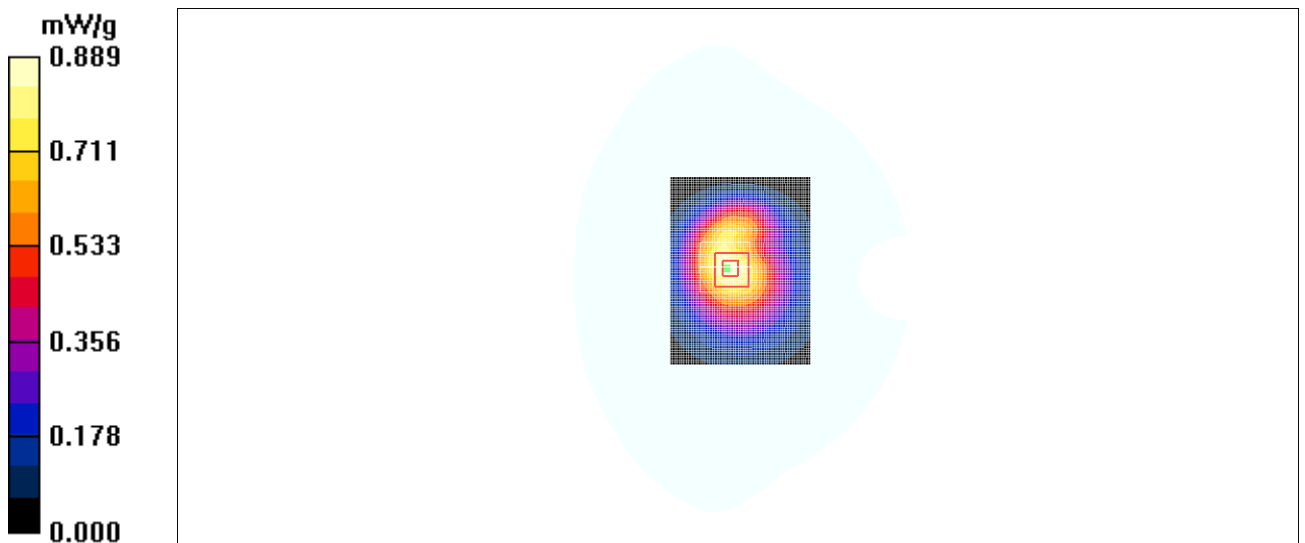


Fig. 70 850 MHz CH4233

WCDMA 850 Body Towards Ground Middle -Slide down

Date/Time: 2010-9-15 19:19:47

Electronics: DAE4 Sn771

Medium: 900 Body

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 54.8$; $\rho = 1000$ kg/m³

Ambient Temperature:23.0oC 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 Ground Middle/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.613 mW/g

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.1 V/m; Power Drift = 0.031 dB

Peak SAR (extrapolated) = 0.791 W/kg

SAR(1 g) = 0.575 mW/g; SAR(10 g) = 0.397 mW/g

Maximum value of SAR (measured) = 0.618 mW/g

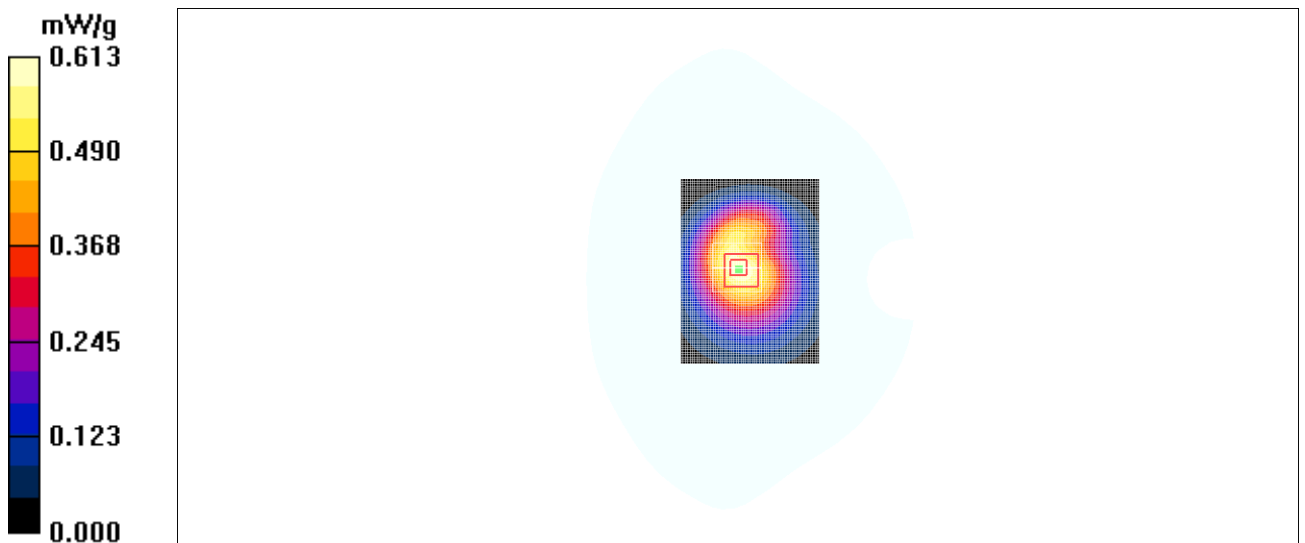


Fig. 71 850 MHz CH4182

WCDMA 850 Body Towards Ground Low - Slide down

Date/Time: 2010-9-15 19:35:14

Electronics: DAE4 Sn771

Medium: 900 Body

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 55.5$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0oC Liquid Temperature: 22.5°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/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.611 mW/g

Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.1 V/m; Power Drift = 0.056 dB

Peak SAR (extrapolated) = 0.792 W/kg

SAR(1 g) = 0.576 mW/g; SAR(10 g) = 0.398 mW/g

Maximum value of SAR (measured) = 0.611 mW/g

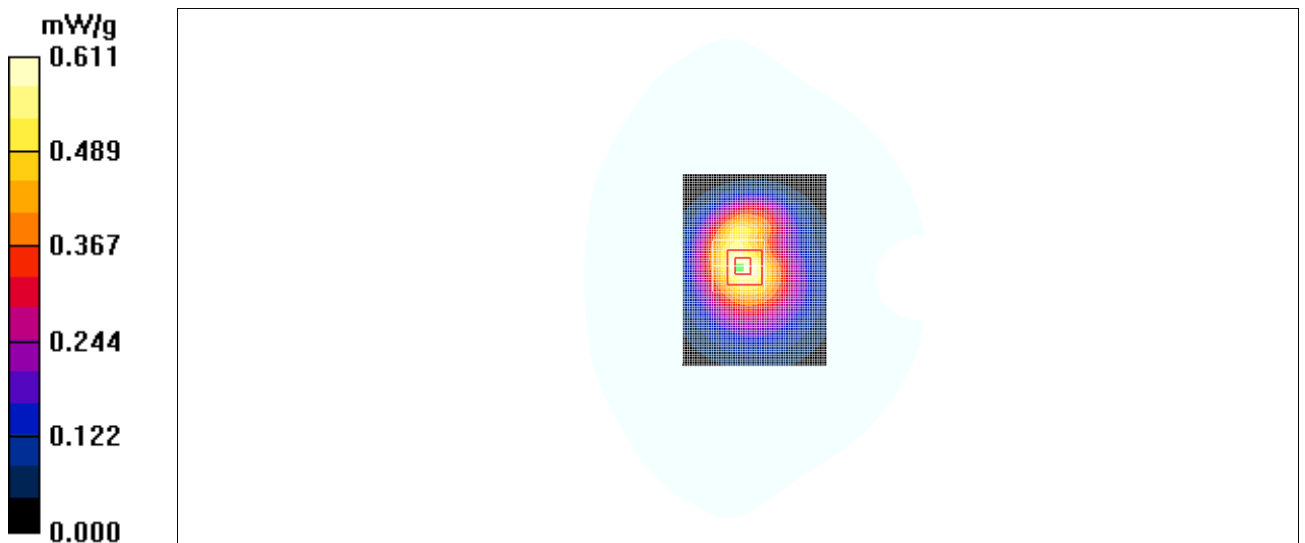


Fig. 72 850 MHz CH4132

WCDMA 850 Body Towards Phantom High - Slide up

Date/Time: 2010-9-15 19:50:40

Electronics: DAE4 Sn771

Medium: 900 Body

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 54.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: WCDMA 850 Frequency: 846.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Phantom High/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.437 mW/g

Toward Phantom High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.7 V/m; Power Drift = 0.021 dB

Peak SAR (extrapolated) = 0.526 W/kg

SAR(1 g) = 0.414 mW/g; SAR(10 g) = 0.308 mW/g

Maximum value of SAR (measured) = 0.429 mW/g

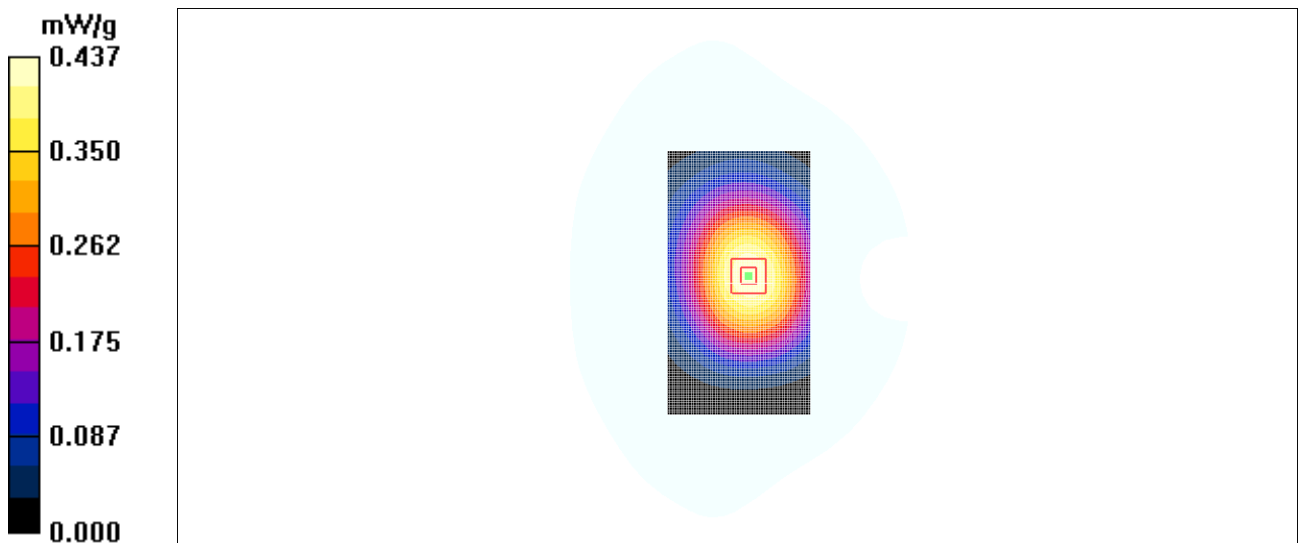


Fig. 73 850 MHz CH4233

WCDMA 850 Body Towards Phantom Middle - Slide up

Date/Time: 2010-9-15 20:06:04

Electronics: DAE4 Sn771

Medium: 900 Body

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 54.8$; $\rho = 1000$ kg/m³

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/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.868 mW/g

Toward Phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 29.2 V/m; Power Drift = 0.045 dB

Peak SAR (extrapolated) = 1.04 W/kg

SAR(1 g) = 0.824 mW/g; SAR(10 g) = 0.616 mW/g

Maximum value of SAR (measured) = 0.856 mW/g

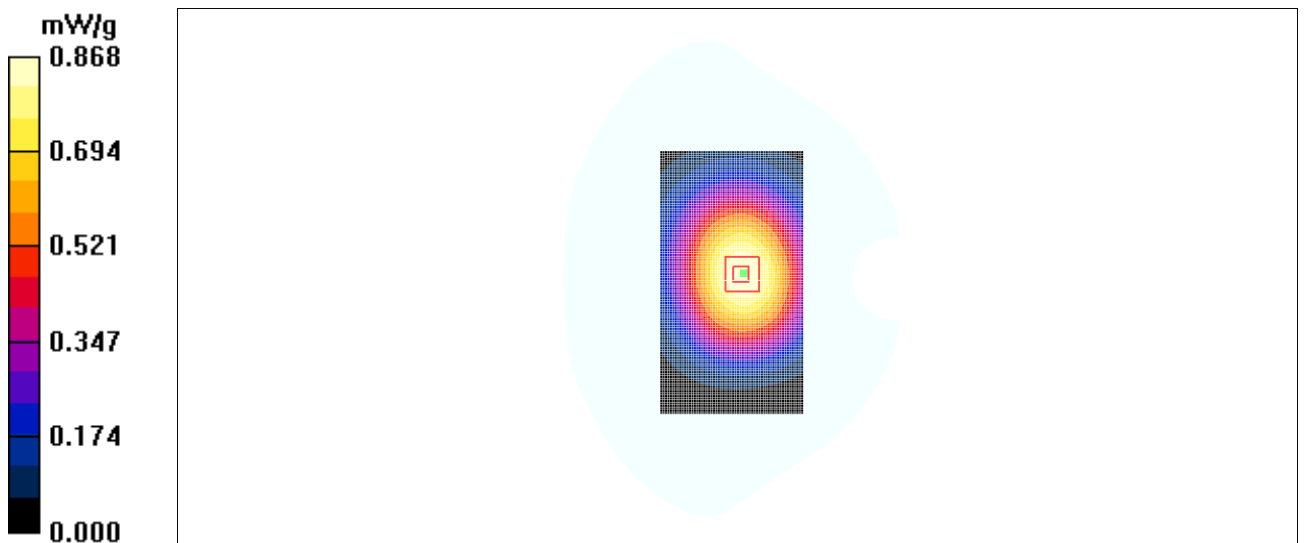


Fig. 74 850 MHz CH4182

WCDMA 850 Body Towards Phantom Low - Slide up

Date/Time: 2010-9-15 20:21:28

Electronics: DAE4 Sn771

Medium: 900 Body

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 55.5$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0oC Liquid Temperature: 22.5°C

Communication System: WCDMA 850 Frequency: 826.4 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Phantom Low/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.436 mW/g

Toward Phantom Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.0 V/m; Power Drift = -0.089 dB

Peak SAR (extrapolated) = 0.510 W/kg

SAR(1 g) = 0.408 mW/g; SAR(10 g) = 0.306 mW/g

Maximum value of SAR (measured) = 0.422 mW/g

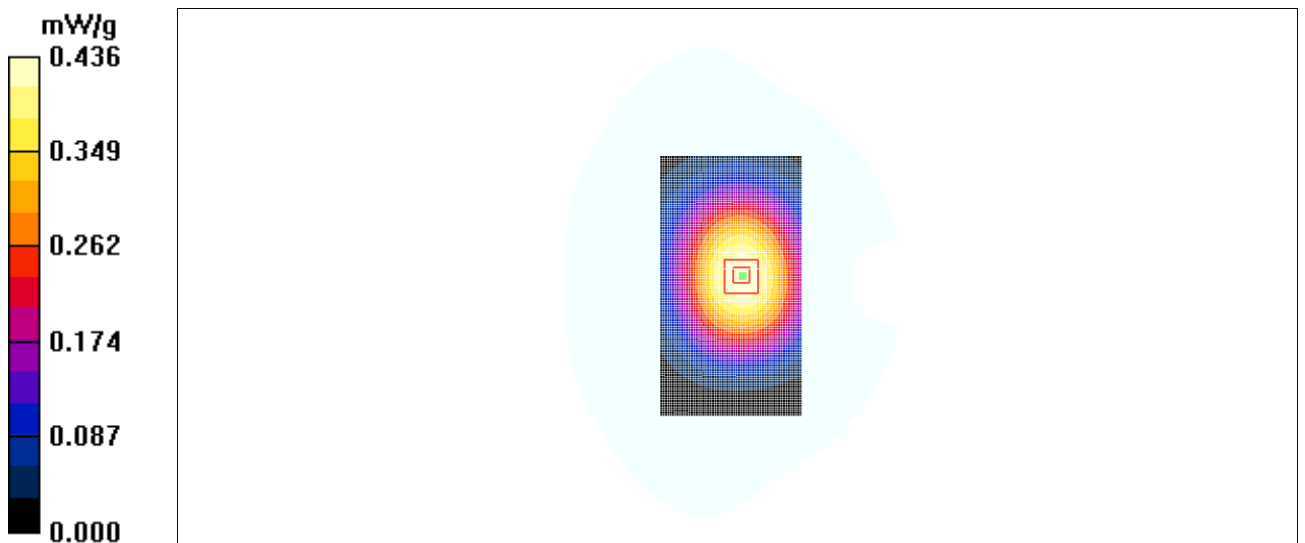


Fig. 75 850 MHz CH4132

WCDMA 850 Body Towards Ground High - Slide up

Date/Time: 2010-9-15 20:36:49

Electronics: DAE4 Sn771

Medium: 900 Body

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 54.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0oC Liquid Temperature: 22.5°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/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.611 mW/g

Toward Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.1 V/m; Power Drift = 0.110 dB

Peak SAR (extrapolated) = 0.745 W/kg

SAR(1 g) = 0.577 mW/g; SAR(10 g) = 0.423 mW/g

Maximum value of SAR (measured) = 0.608 mW/g

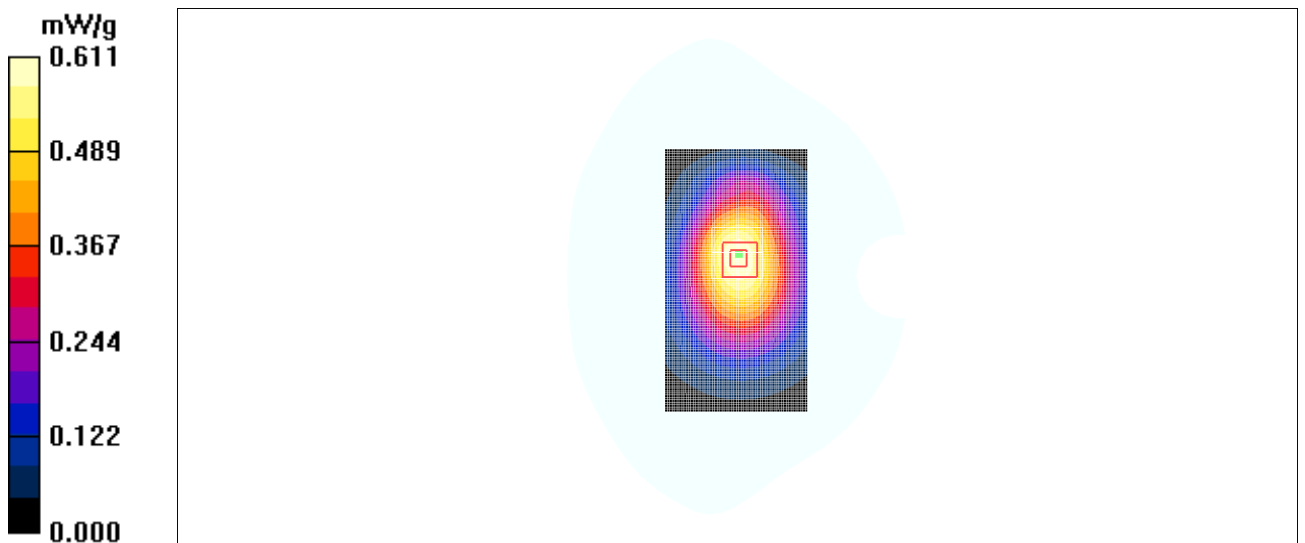


Fig. 76 850 MHz CH4132

WCDMA 850 Body Towards Ground Middle - Slide up

Date/Time: 2010-9-15 20:52:22

Electronics: DAE4 Sn771

Medium: 900 Body

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 54.8$; $\rho = 1000$ kg/m³

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 Ground Middle/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.18 mW/g

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 33.8 V/m; Power Drift = -0.049 dB

Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.813 mW/g

Maximum value of SAR (measured) = 1.18 mW/g

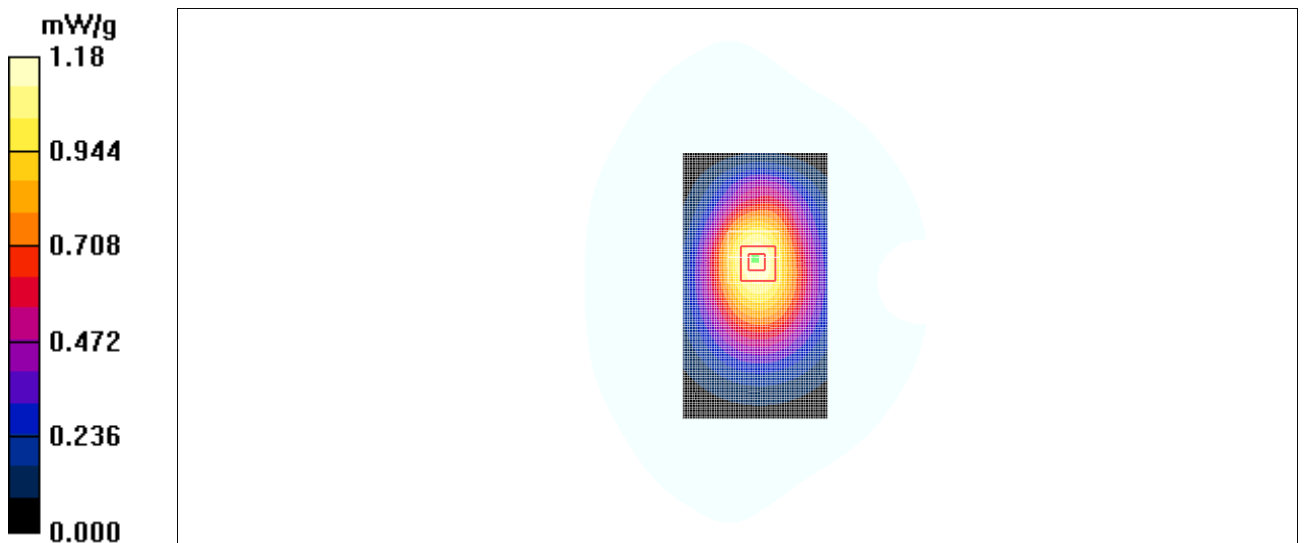


Fig. 77 850 MHz CH4182

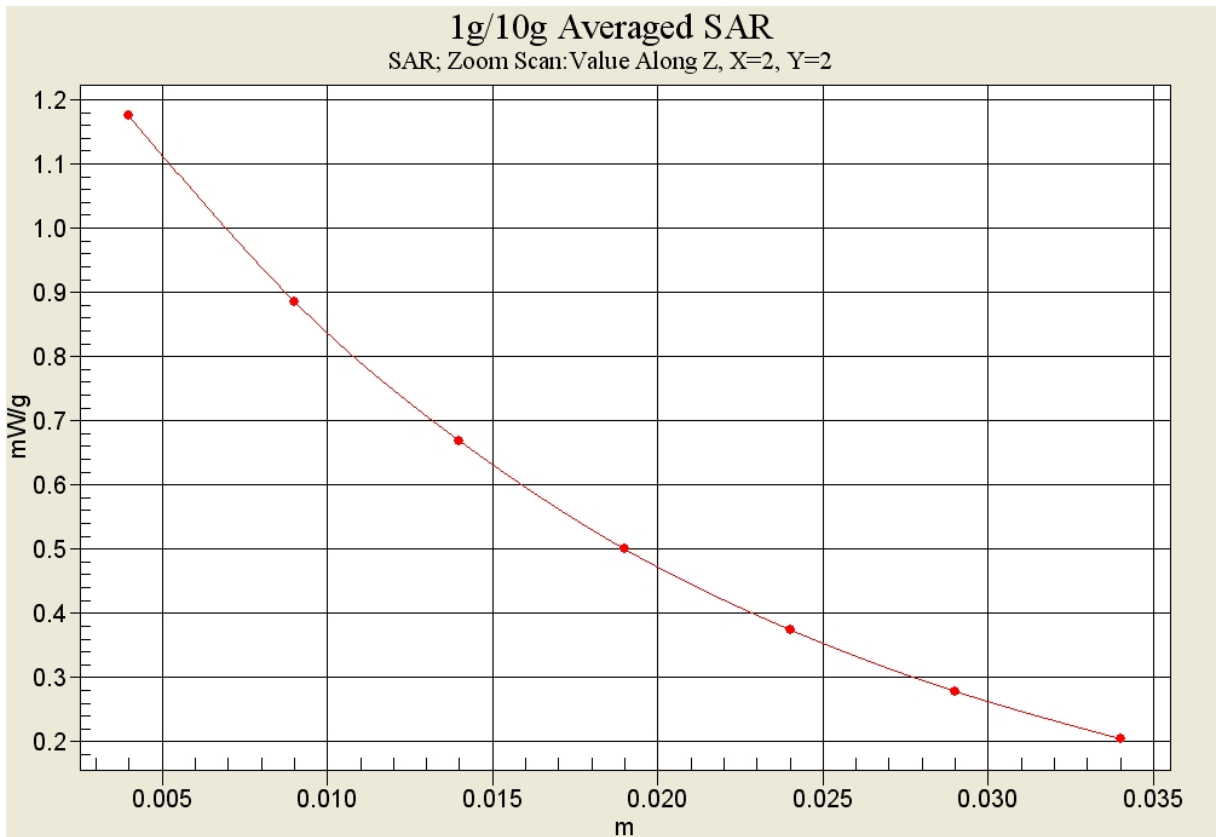


Fig. 77-1 Z-Scan at power reference point (850 MHz CH4182)

WCDMA 850 Body Towards Ground Low - Slide up

Date/Time: 2010-9-15 21:07:50

Electronics: DAE4 Sn771

Medium: 900 Body

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 55.5$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0oC Liquid Temperature: 22.5°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/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.609 mW/g

Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.2 V/m; Power Drift = 0.031 dB

Peak SAR (extrapolated) = 0.742 W/kg

SAR(1 g) = 0.576 mW/g; SAR(10 g) = 0.421 mW/g

Maximum value of SAR (measured) = 0.605 mW/g

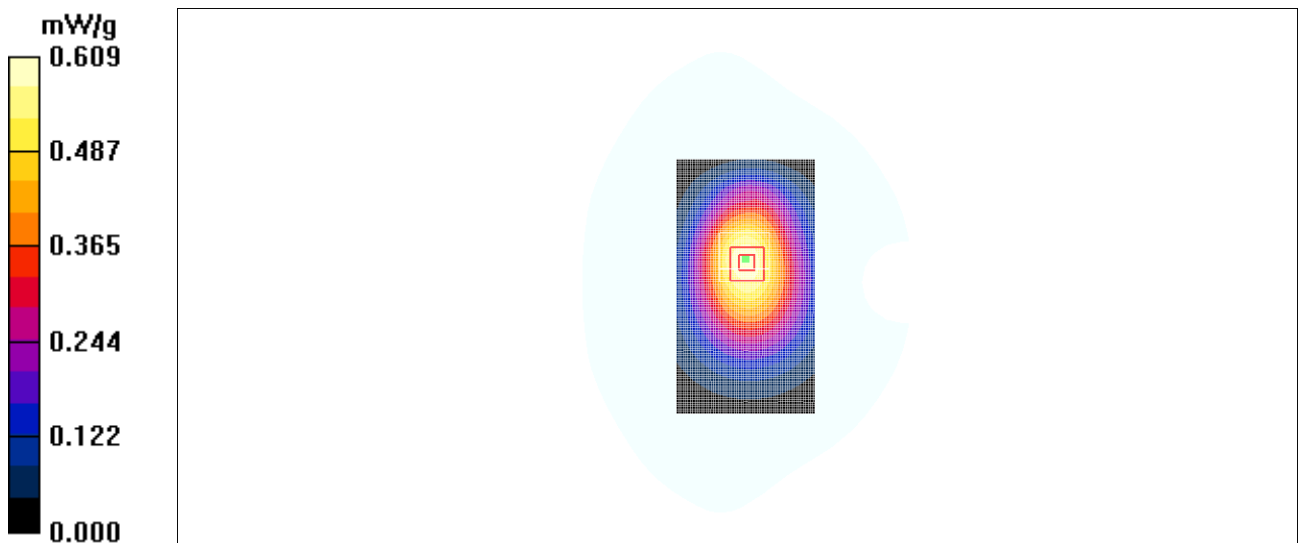


Fig. 78 850 MHz CH4132

WCDMA 850 Body Towards Ground Middle with Headset

Date/Time: 2010-9-15 21:24:19

Electronics: DAE4 Sn771

Medium: 900 Body

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 54.8$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0oC 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 Ground Middle/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.14 mW/g

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 32.3 V/m; Power Drift = -0.118 dB

Peak SAR (extrapolated) = 1.41 W/kg

SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.784 mW/g

Maximum value of SAR (measured) = 1.16 mW/g

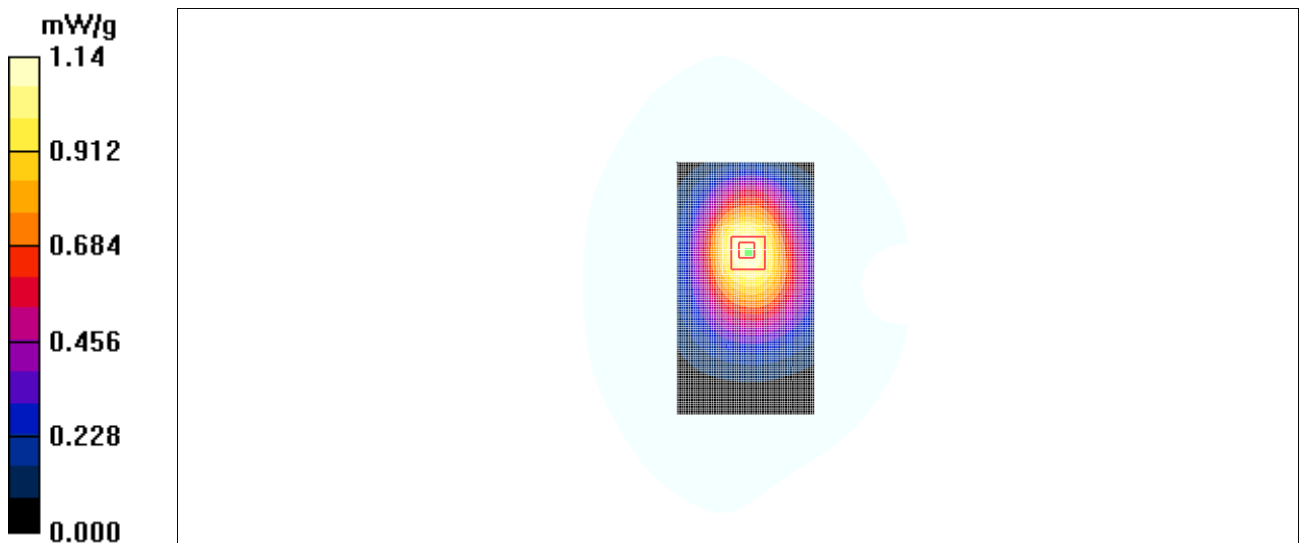


Fig. 79 850 MHz CH4182

WCDMA 1900 Left Cheek High - Slide down

Date/Time: 2010-9-16 16:45:11

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used (interpolated): $f = 1907.6$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek High/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.973 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.9 V/m; Power Drift = -0.157 dB

Peak SAR (extrapolated) = 1.37 W/kg

SAR(1 g) = 0.863 mW/g; SAR(10 g) = 0.494 mW/g

Maximum value of SAR (measured) = 0.977 mW/g

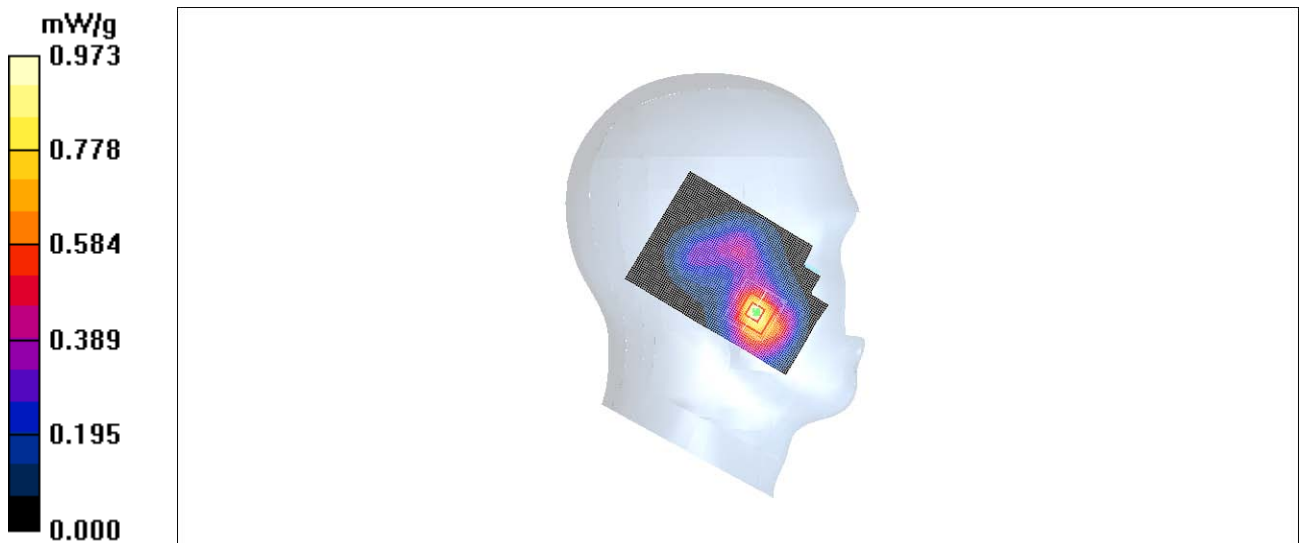


Fig. 80 1900 MHz CH9538

WCDMA 1900 Left Cheek Middle - Slide down

Date/Time: 2010-9-16 16:59:30

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Middle/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.910 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.5 V/m; Power Drift = -0.064 dB

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.793 mW/g; SAR(10 g) = 0.451 mW/g

Maximum value of SAR (measured) = 0.893 mW/g

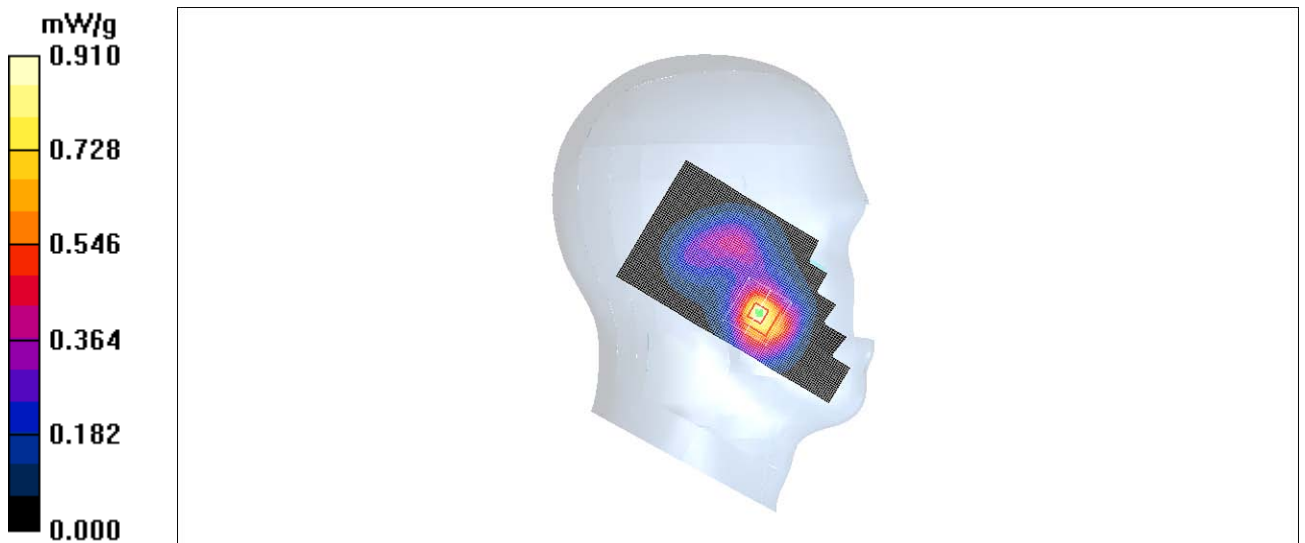


Fig. 81 1900 MHz CH9400

WCDMA 1900 Left Cheek Low - Slide down

Date/Time: 2010-9-16 17:13:53

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.36$ mho/m; $\epsilon_r = 41.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Low/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.06 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.0 V/m; Power Drift = -0.037 dB

Peak SAR (extrapolated) = 1.45 W/kg

SAR(1 g) = 0.934 mW/g; SAR(10 g) = 0.540 mW/g

Maximum value of SAR (measured) = 1.05 mW/g

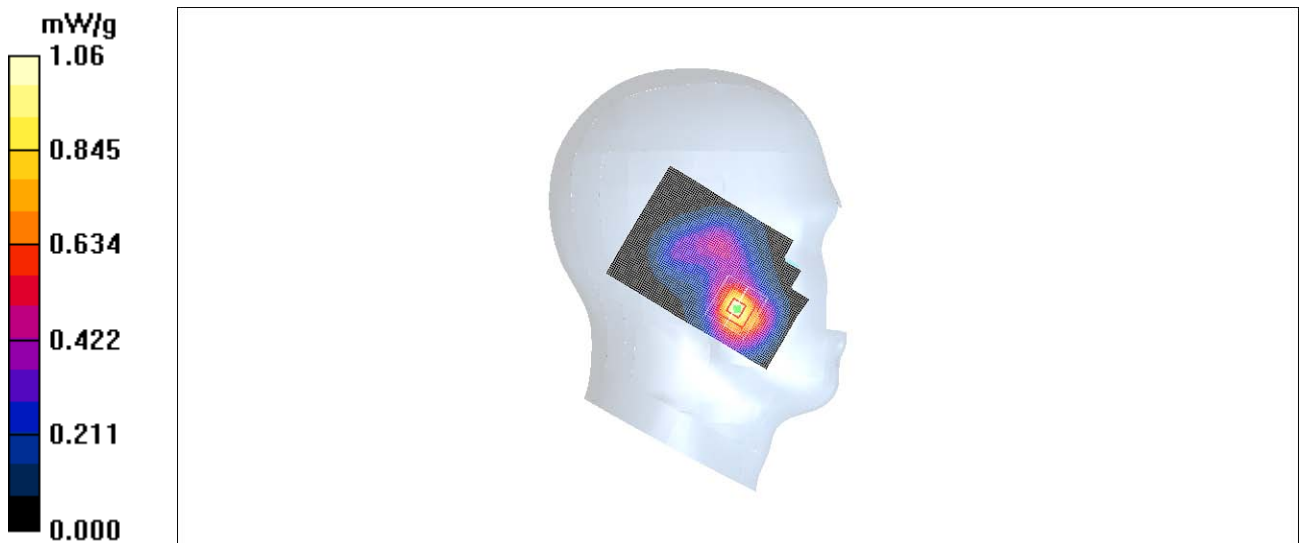


Fig. 82 1900 MHz CH9262

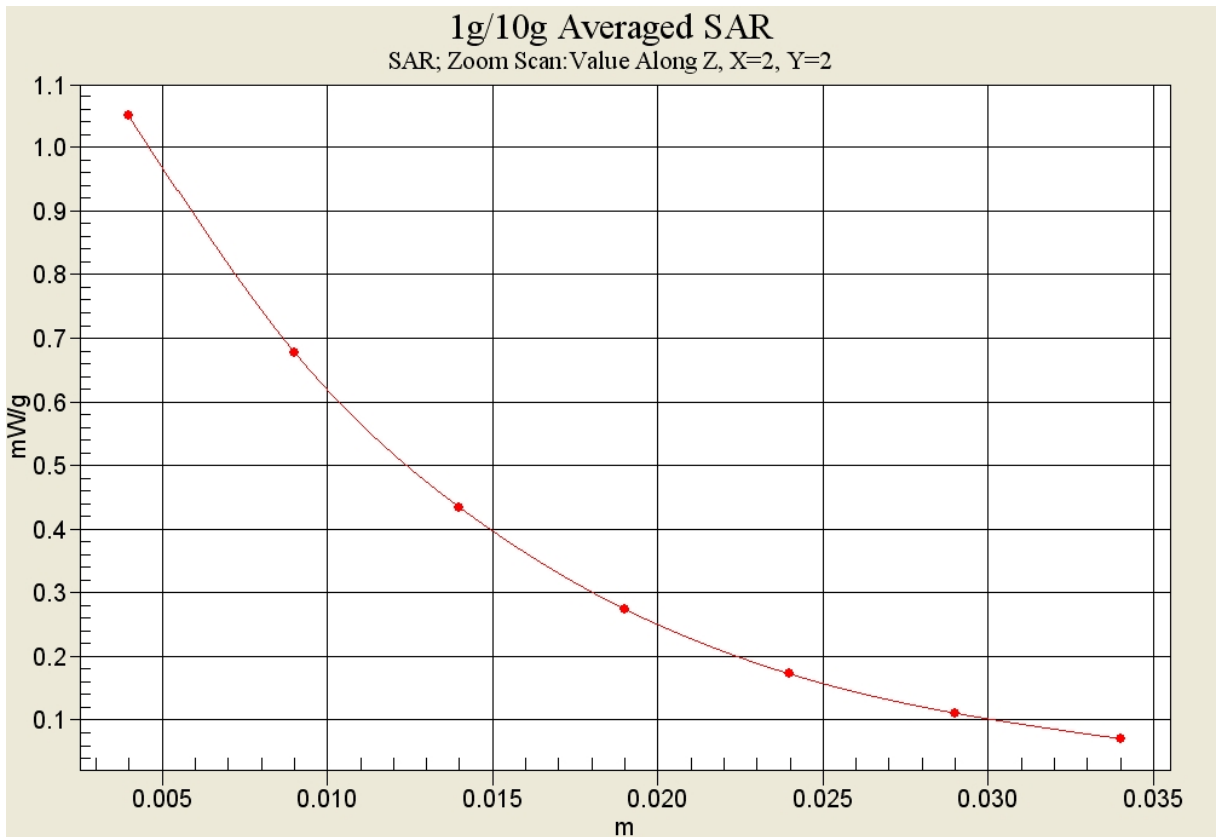


Fig. 82-1 Z-Scan at power reference point (1900 MHz CH9262)

WCDMA 1900 Left Tilt Middle - Slide down

Date/Time: 2010-9-16 17:28:14

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt Middle/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.632 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.3 V/m; Power Drift = -0.040 dB

Peak SAR (extrapolated) = 0.825 W/kg

SAR(1 g) = 0.536 mW/g; SAR(10 g) = 0.327 mW/g

Maximum value of SAR (measured) = 0.579 mW/g

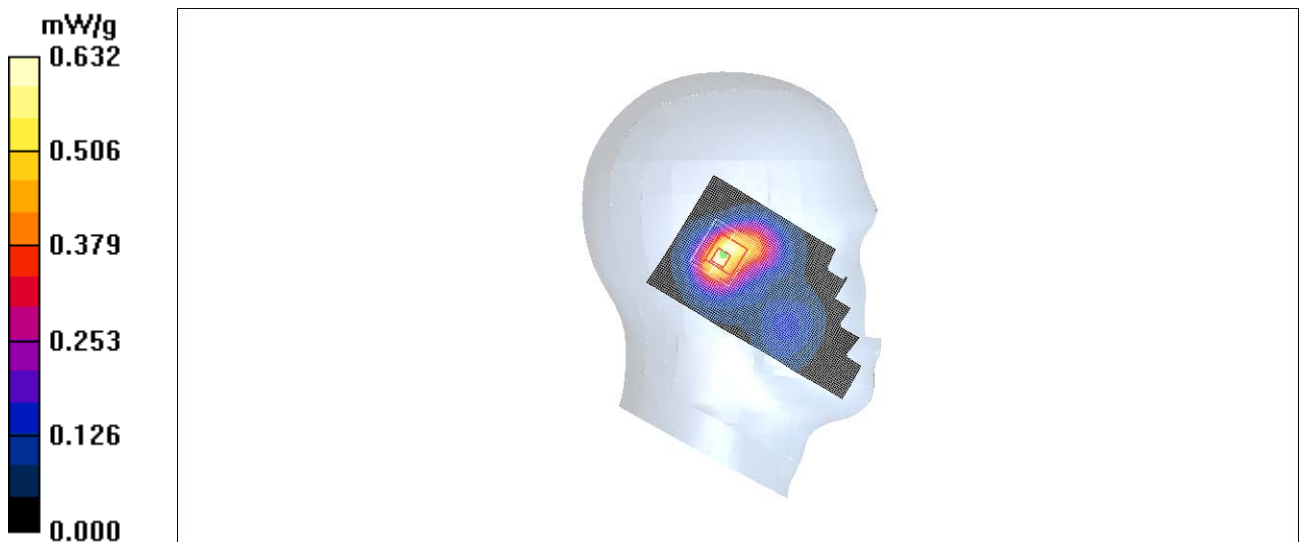


Fig. 83 1900 MHz CH9400

WCDMA 1900 Right Cheek Middle - Slide down

Date/Time: 2010-9-16 17:42:37

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Middle/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.595 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.1 V/m; Power Drift = 0.024 dB

Peak SAR (extrapolated) = 0.865 W/kg

SAR(1 g) = 0.559 mW/g; SAR(10 g) = 0.332 mW/g

Maximum value of SAR (measured) = 0.595 mW/g

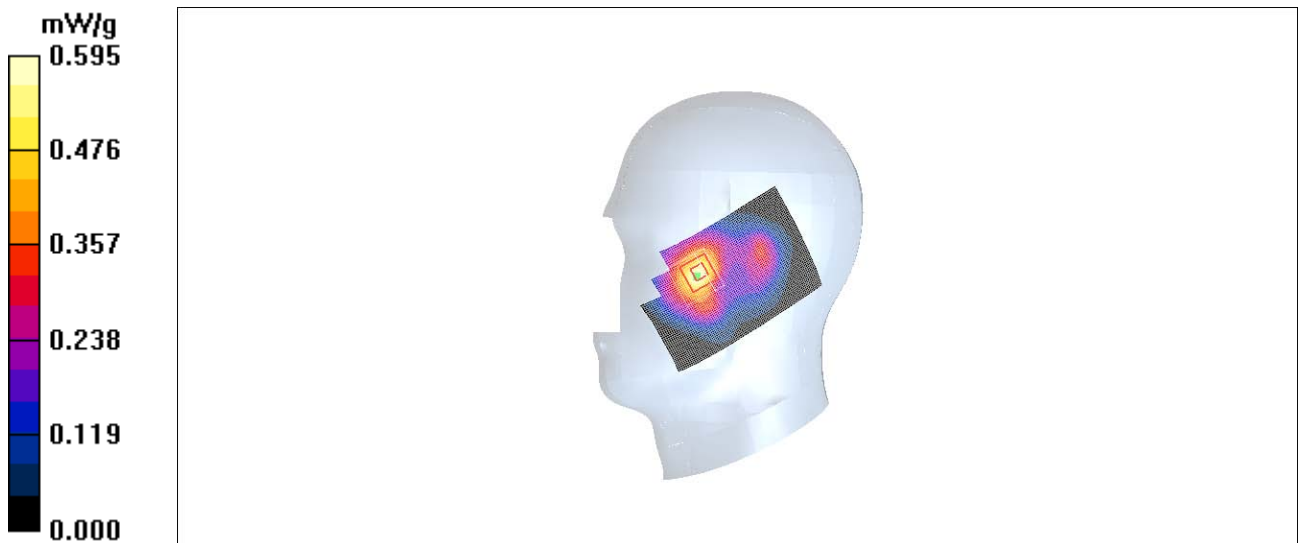


Fig. 84 1900 MHz CH9400

WCDMA 1900 Right Tilt Middle - Slide down

Date/Time: 2010-9-16 17:57:01

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt Middle/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.810 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.0 V/m; Power Drift = 0.015 dB

Peak SAR (extrapolated) = 1.08 W/kg

SAR(1 g) = 0.690 mW/g; SAR(10 g) = 0.399 mW/g

Maximum value of SAR (measured) = 0.768 mW/g

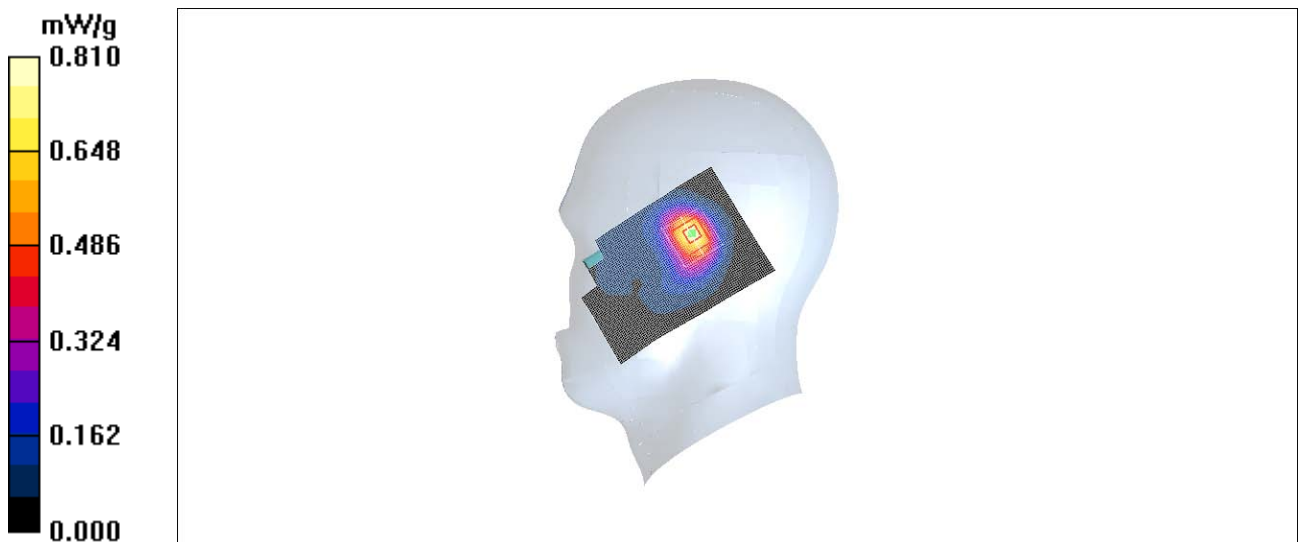


Fig.85 1900 MHz CH9400

WCDMA 1900 Left Cheek High - Slide up

Date/Time: 2010-9-16 18:13:15

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used (interpolated): $f = 1907.6$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek High/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.529 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.96 V/m; Power Drift = 0.129 dB

Peak SAR (extrapolated) = 0.781 W/kg

SAR(1 g) = 0.490 mW/g; SAR(10 g) = 0.297 mW/g

Maximum value of SAR (measured) = 0.536 mW/g

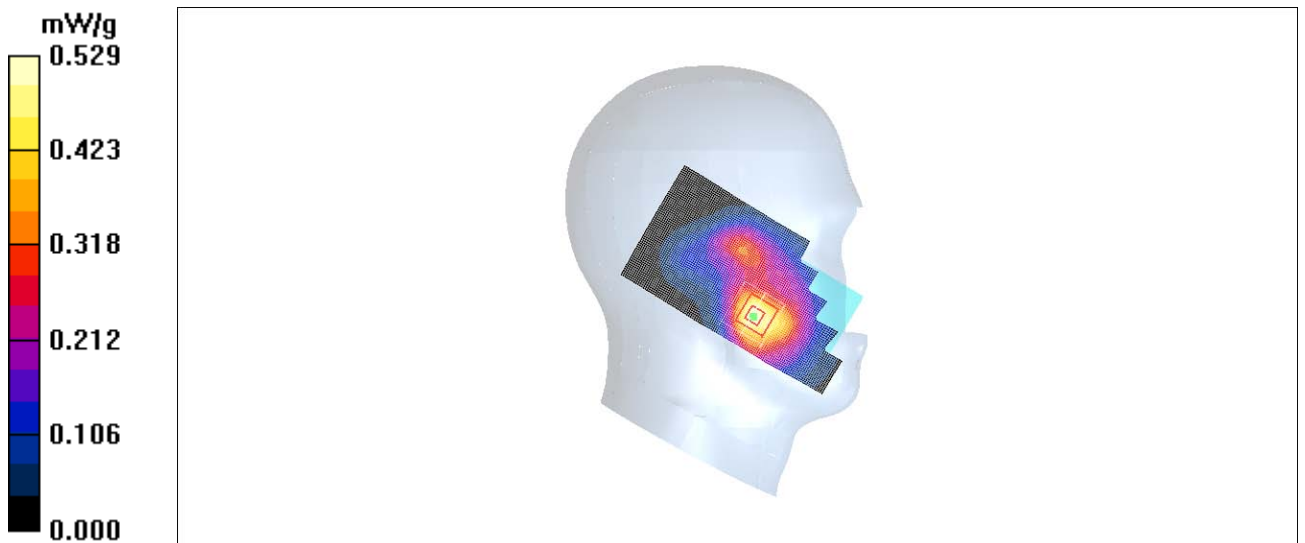


Fig. 86 1900 MHz CH9538

WCDMA 1900 Left Cheek Middle - Slide up

Date/Time: 2010-9-16 18:27:34

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Middle/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.450 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.42 V/m; Power Drift = -0.147 dB

Peak SAR (extrapolated) = 0.665 W/kg

SAR(1 g) = 0.419 mW/g; SAR(10 g) = 0.258 mW/g

Maximum value of SAR (measured) = 0.452 mW/g

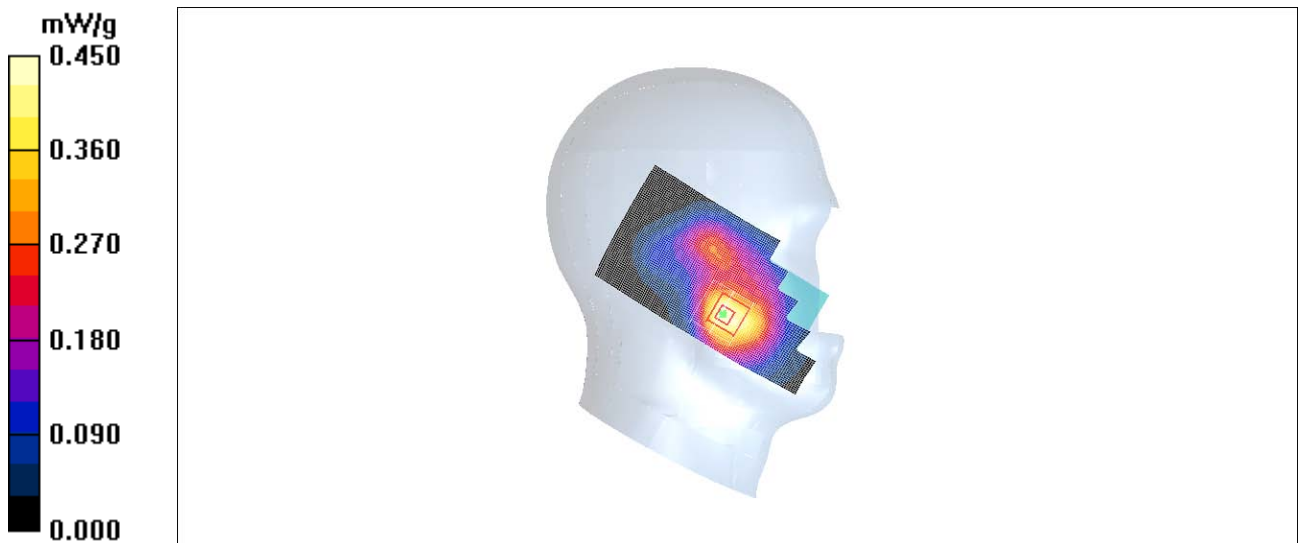


Fig. 87 1900 MHz CH9400

WCDMA 1900 Left Cheek Low - Slide up

Date/Time: 2010-9-16 18:41:55

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.36$ mho/m; $\epsilon_r = 41.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0oC Liquid Temperature: 22.5°C

Communication System: WCDMA 1900 Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Low/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.604 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.67 V/m; Power Drift = -0.031 dB

Peak SAR (extrapolated) = 0.909 W/kg

SAR(1 g) = 0.576 mW/g; SAR(10 g) = 0.357 mW/g

Maximum value of SAR (measured) = 0.622 mW/g

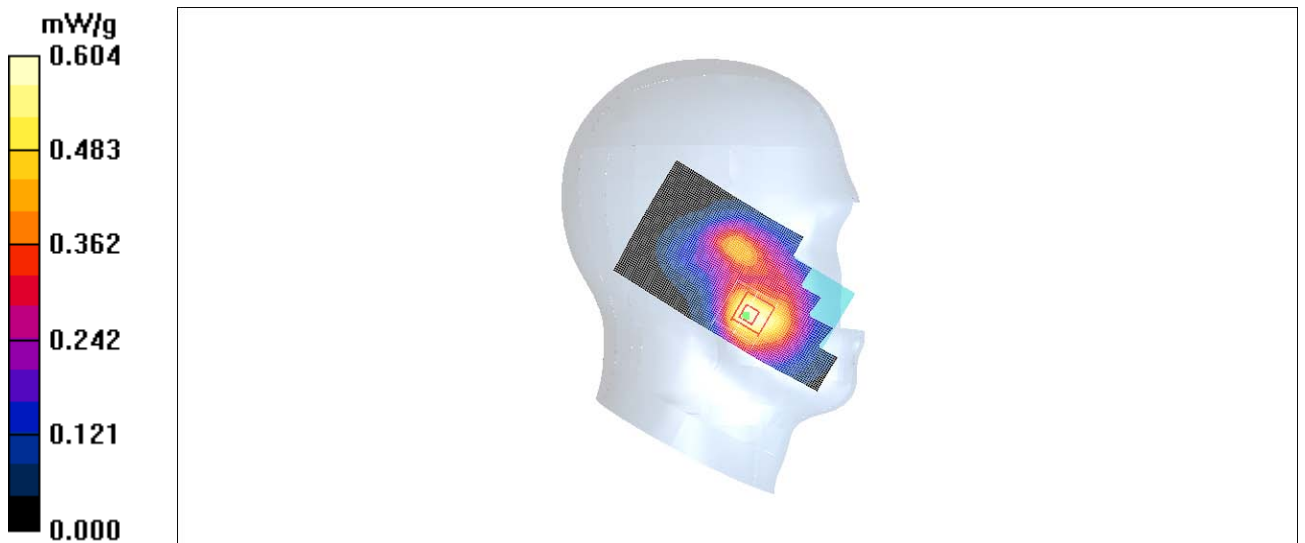


Fig. 88 1900 MHz CH9262

WCDMA 1900 Left Tilt Middle - Slide up

Date/Time: 2010-9-16 18:56:20

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt Middle/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.414 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.8 V/m; Power Drift = 0.099 dB

Peak SAR (extrapolated) = 0.543 W/kg

SAR(1 g) = 0.342 mW/g; SAR(10 g) = 0.211 mW/g

Maximum value of SAR (measured) = 0.369 mW/g

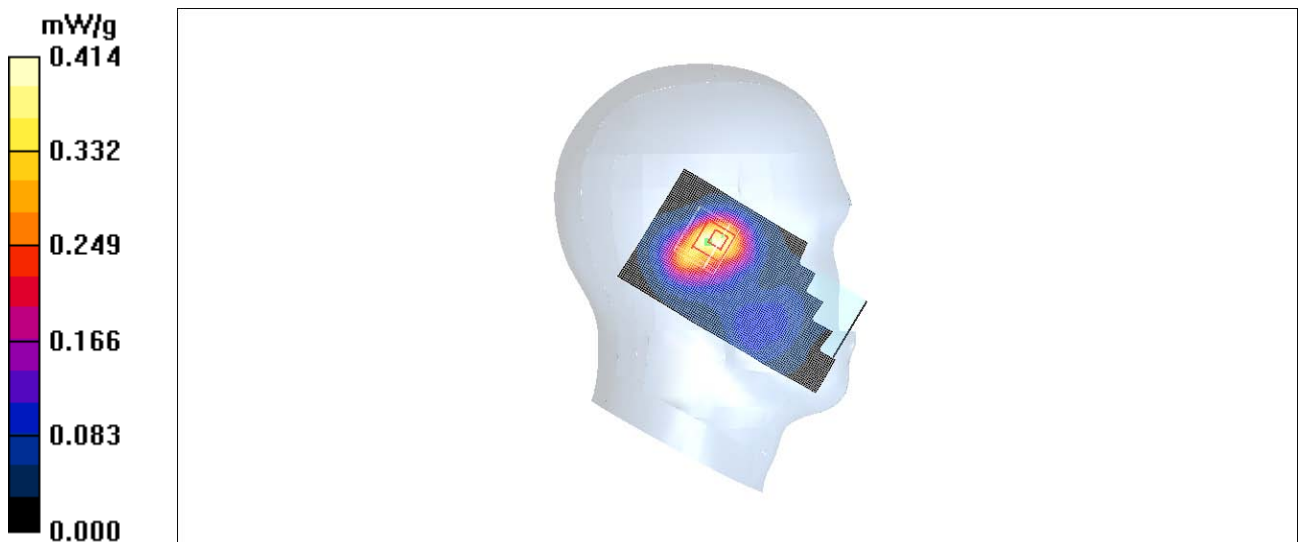


Fig. 89 1900 MHz CH9400

WCDMA 1900 Right Cheek Middle - Slide up

Date/Time: 2010-9-16 19:10:56

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Middle/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.325 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 = -0.157 dB

Peak SAR (extrapolated) = 0.441 W/kg

SAR(1 g) = 0.283 mW/g; SAR(10 g) = 0.179 mW/g

Maximum value of SAR (measured) = 0.305 mW/g

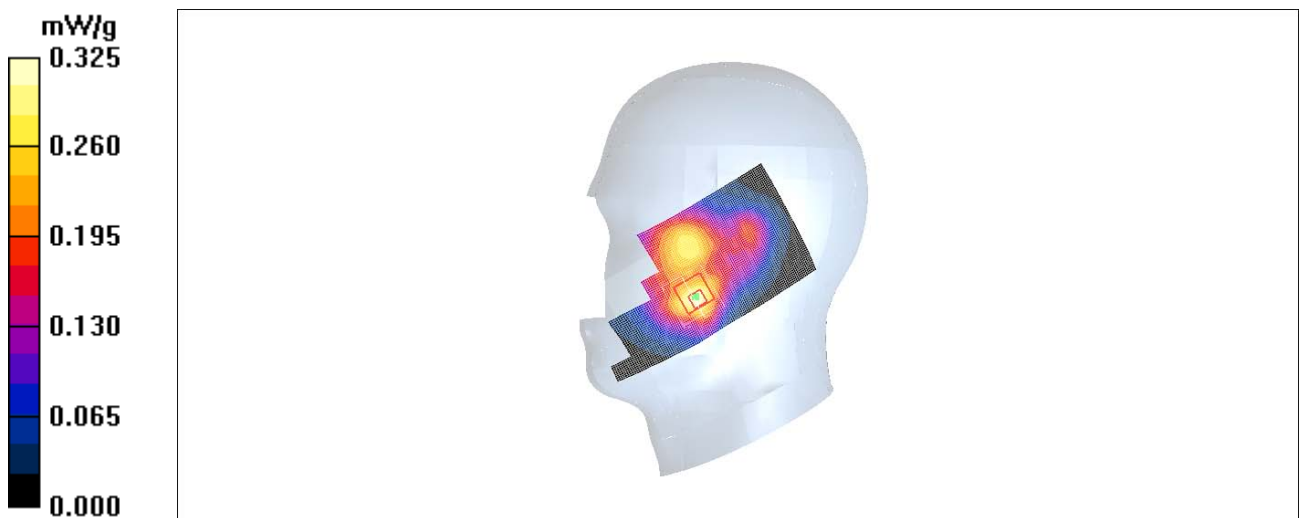


Fig. 90 1900 MHz CH9400

WCDMA 1900 Right Tilt Middle - Slide up

Date/Time: 2010-9-16 19:25:19

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt Middle/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.436 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 = -0.026 dB

Peak SAR (extrapolated) = 0.567 W/kg

SAR(1 g) = 0.367 mW/g; SAR(10 g) = 0.223 mW/g

Maximum value of SAR (measured) = 0.399 mW/g

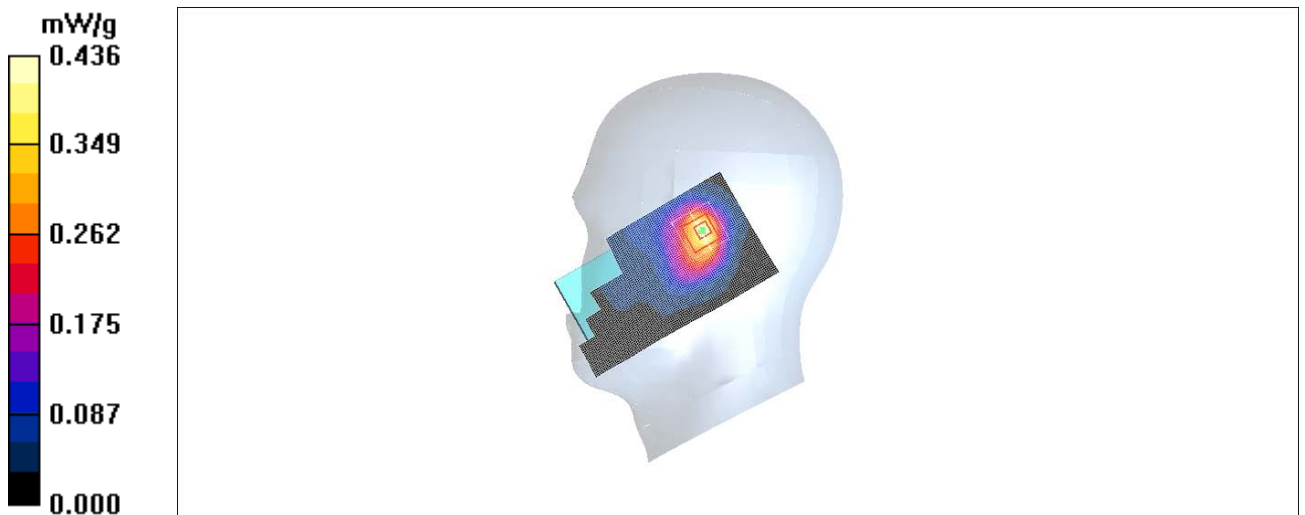


Fig.91 1900 MHz CH9400

WCDMA 1900 Body Towards Phantom High - Slide down

Date/Time: 2010-9-16 23:44:20

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1907.6$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52.8$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom High/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.263 mW/g

Toward Phantom High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.17 V/m; Power Drift = -0.053 dB

Peak SAR (extrapolated) = 0.377 W/kg

SAR(1 g) = 0.243 mW/g; SAR(10 g) = 0.155 mW/g

Maximum value of SAR (measured) = 0.260 mW/g

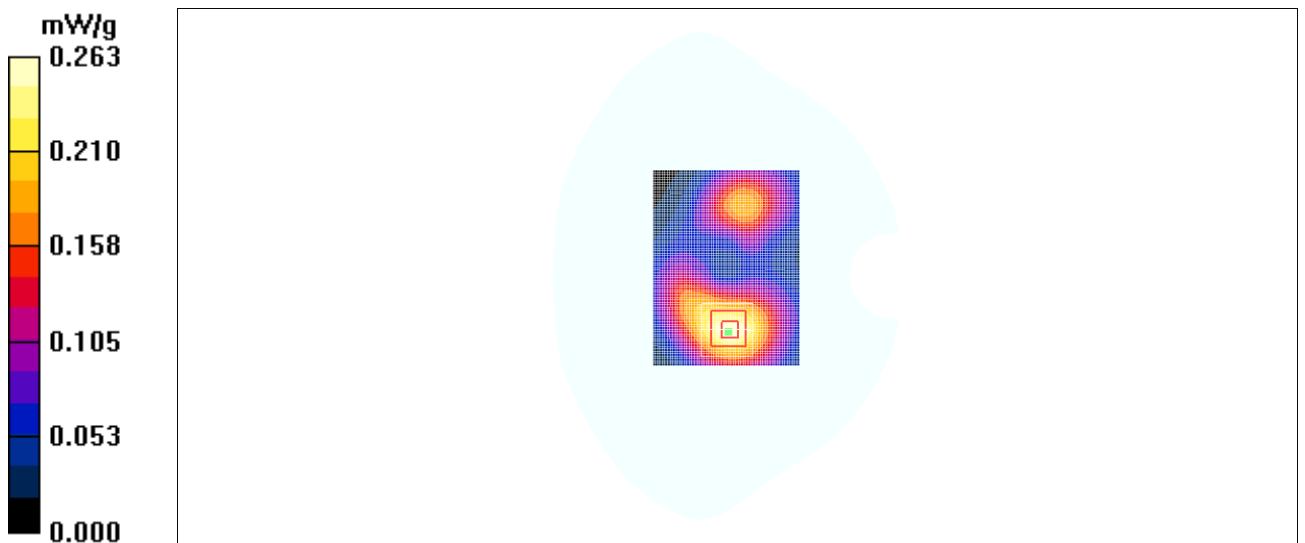


Fig. 92 1900 MHz CH9538

WCDMA 1900 Body Towards Phantom Middle - Slide down

Date/Time: 2010-9-16 23:59:41

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.50$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom Middle/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.232 mW/g

Toward Phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.45 V/m; Power Drift = -0.047 dB

Peak SAR (extrapolated) = 0.330 W/kg

SAR(1 g) = 0.216 mW/g; SAR(10 g) = 0.139 mW/g

Maximum value of SAR (measured) = 0.231 mW/g

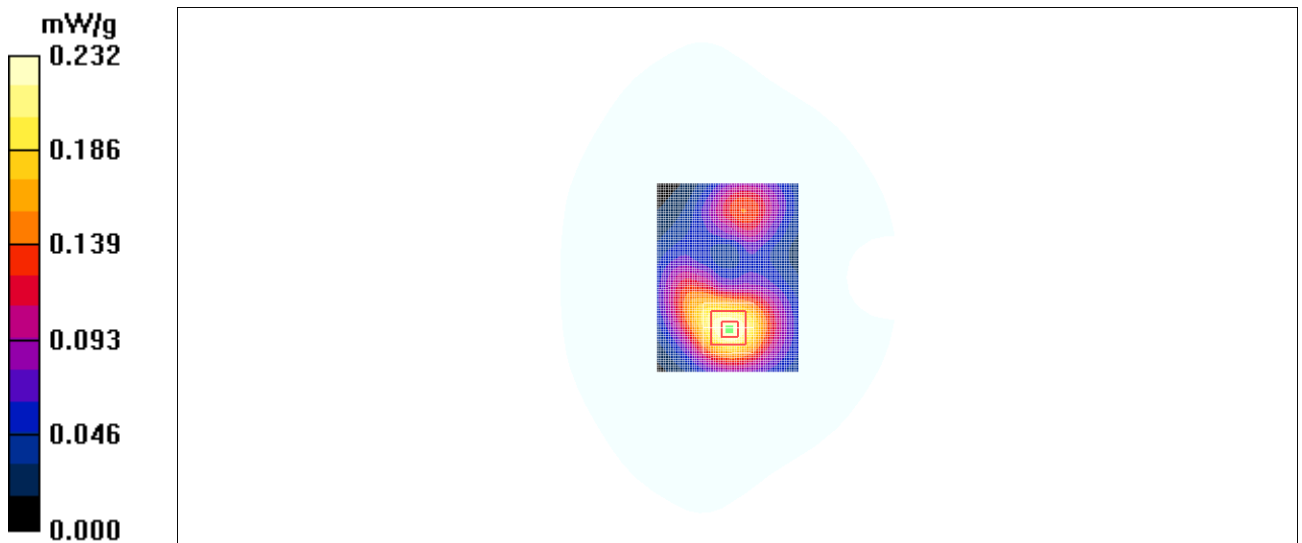


Fig. 93 1900 MHz CH9400

WCDMA 1900 Body Towards Phantom Low - Slide down

Date/Time: 2010-9-17 00:15:11

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 53.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom Low/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.345 mW/g

Toward Phantom Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.84 V/m; Power Drift = 0.064 dB

Peak SAR (extrapolated) = 0.507 W/kg

SAR(1 g) = 0.330 mW/g; SAR(10 g) = 0.213 mW/g

Maximum value of SAR (measured) = 0.352 mW/g

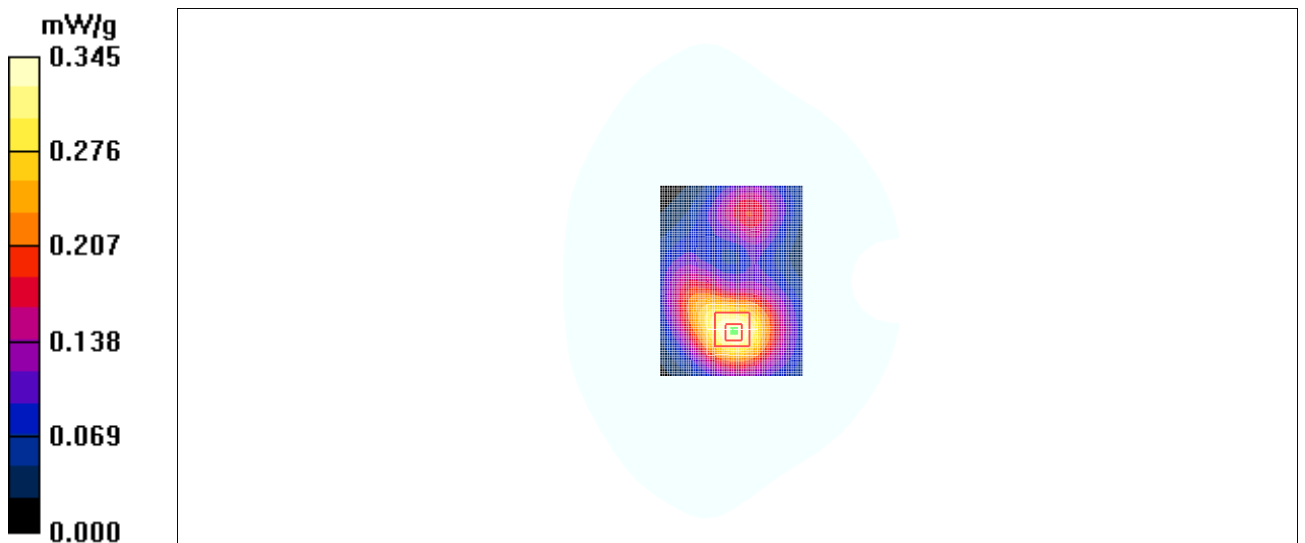


Fig. 94 1900 MHz CH9262

WCDMA 1900 Body Towards Ground High - Slide down

Date/Time: 2010-9-17 00:30:42

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1907.6$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52.8$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground High/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.579 mW/g

Toward Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.00 V/m; Power Drift = 0.007 dB

Peak SAR (extrapolated) = 0.894 W/kg

SAR(1 g) = 0.529 mW/g; SAR(10 g) = 0.312 mW/g

Maximum value of SAR (measured) = 0.564 mW/g

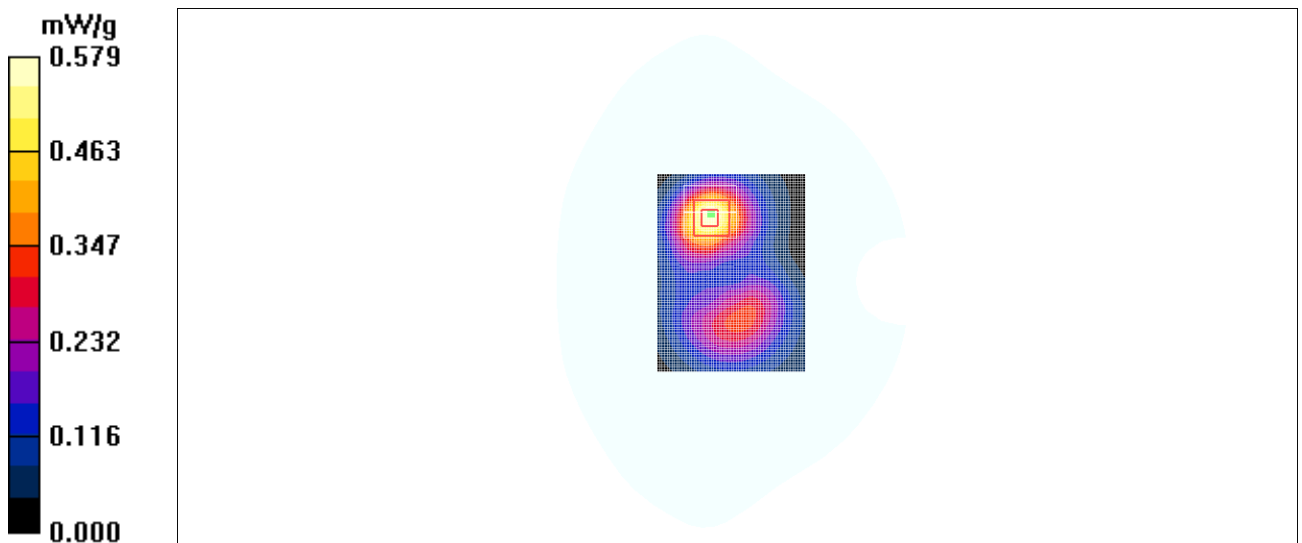


Fig. 95 1900 MHz CH9538

WCDMA 1900 Body Towards Ground Middle - Slide down

Date/Time: 2010-9-17 00:46:09

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.50$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Middle/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.432 mW/g

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.33 V/m; Power Drift = 0.024 dB

Peak SAR (extrapolated) = 0.653 W/kg

SAR(1 g) = 0.394 mW/g; SAR(10 g) = 0.231 mW/g

Maximum value of SAR (measured) = 0.429 mW/g

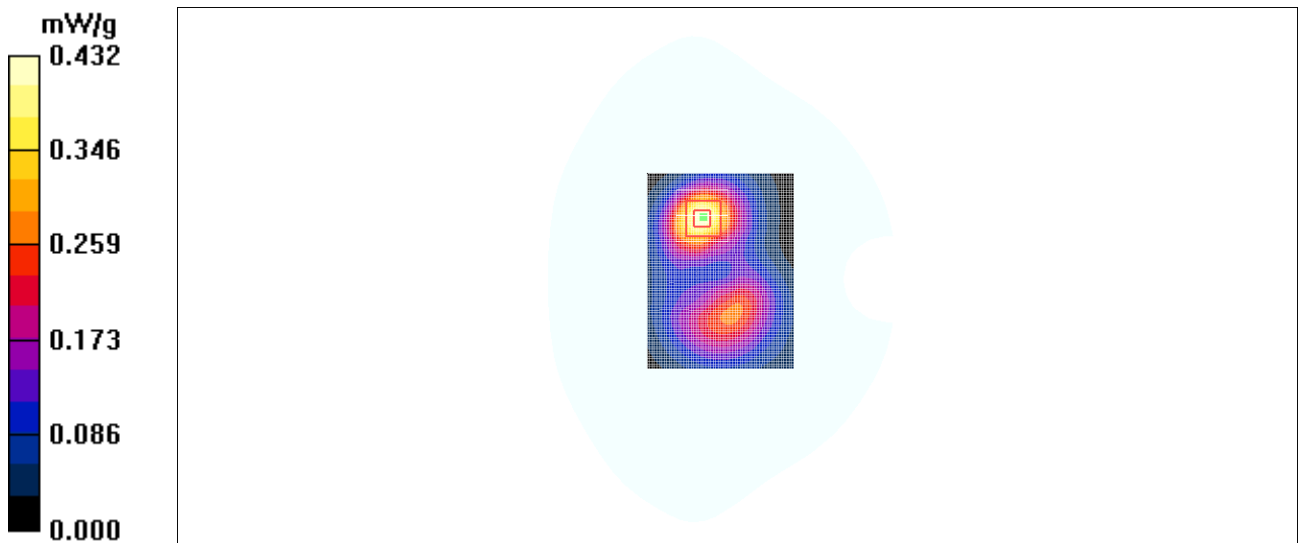


Fig. 96 1900 MHz CH9400

WCDMA 1900 Body Towards Ground Low - Slide down

Date/Time: 2010-9-17 01:01:22

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 53.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Low/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.589 mW/g

Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.7 V/m; Power Drift = 0.022 dB

Peak SAR (extrapolated) = 0.886 W/kg

SAR(1 g) = 0.531 mW/g; SAR(10 g) = 0.310 mW/g

Maximum value of SAR (measured) = 0.582 mW/g

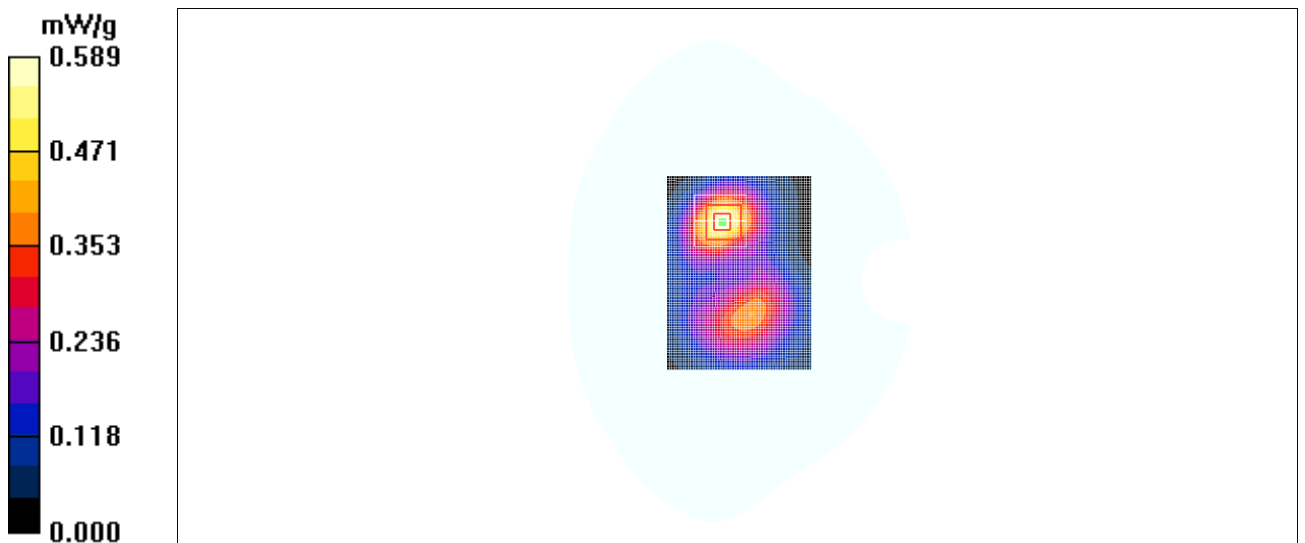


Fig. 97 1900 MHz CH9262

WCDMA 1900 Body Towards Phantom High - Slide up

Date/Time: 2010-9-17 01:16:53

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1907.6$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52.8$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom High/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.332 mW/g

Toward Phantom High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.30 V/m; Power Drift = -0.111 dB

Peak SAR (extrapolated) = 0.457 W/kg

SAR(1 g) = 0.301 mW/g; SAR(10 g) = 0.195 mW/g

Maximum value of SAR (measured) = 0.312 mW/g

Toward Phantom High/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.30 V/m; Power Drift = -0.111 dB

Peak SAR (extrapolated) = 0.319 W/kg

SAR(1 g) = 0.207 mW/g; SAR(10 g) = 0.133 mW/g

Maximum value of SAR (measured) = 0.218 mW/g

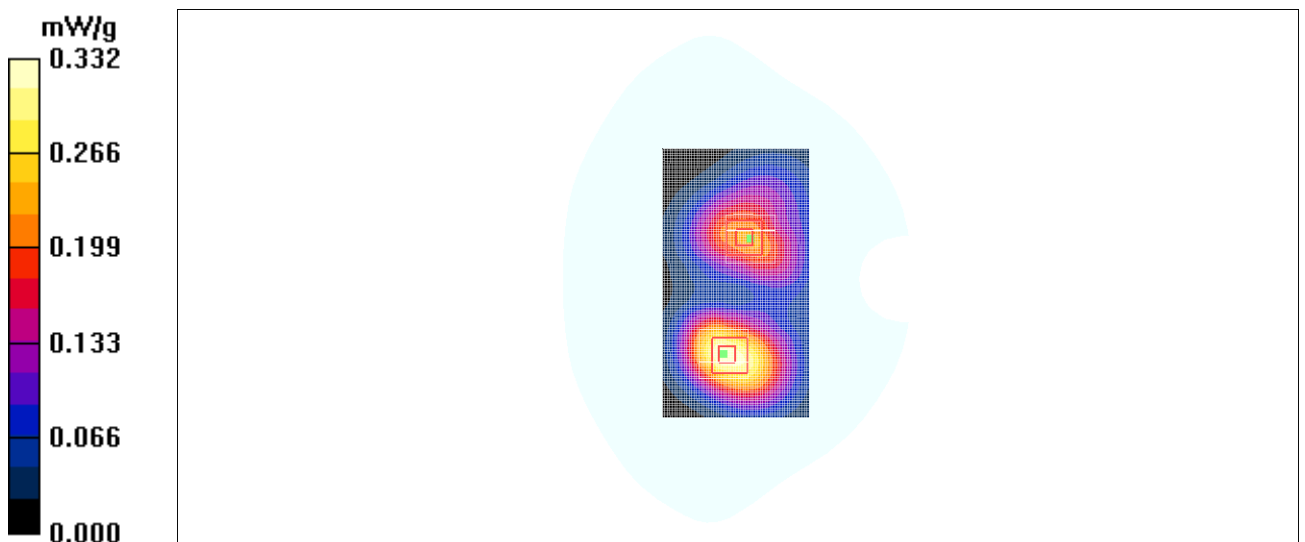


Fig. 98 1900 MHz CH9538

WCDMA 1900 Body Towards Phantom Middle - Slide up

Date/Time: 2010-9-17 01:32:19

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.50$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom Middle/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.285 mW/g

Toward Phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.10 V/m; Power Drift = -0.105 dB

Peak SAR (extrapolated) = 0.395 W/kg

SAR(1 g) = 0.263 mW/g; SAR(10 g) = 0.171 mW/g

Maximum value of SAR (measured) = 0.272 mW/g

Toward Phantom Middle/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.10 V/m; Power Drift = -0.105 dB

Peak SAR (extrapolated) = 0.292 W/kg

SAR(1 g) = 0.188 mW/g; SAR(10 g) = 0.120 mW/g

Maximum value of SAR (measured) = 0.196 mW/g

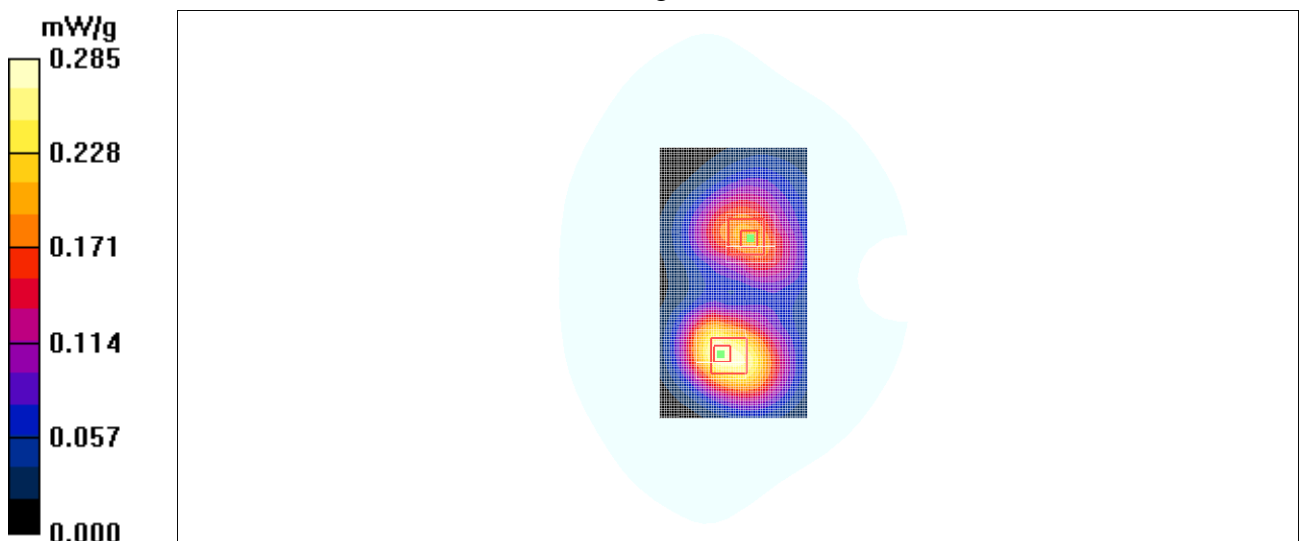


Fig. 99 1900 MHz CH9400

WCDMA 1900 Body Towards Phantom Low - Slide up

Date/Time: 2010-9-17 01:47:35

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 53.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom Low/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.392 mW/g

Toward Phantom Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.21 V/m; Power Drift = -0.178 dB

Peak SAR (extrapolated) = 0.545 W/kg

SAR(1 g) = 0.365 mW/g; SAR(10 g) = 0.239 mW/g

Maximum value of SAR (measured) = 0.379 mW/g

Toward Phantom Low/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.21 V/m; Power Drift = -0.178 dB

Peak SAR (extrapolated) = 0.416 W/kg

SAR(1 g) = 0.272 mW/g; SAR(10 g) = 0.176 mW/g

Maximum value of SAR (measured) = 0.287 mW/g

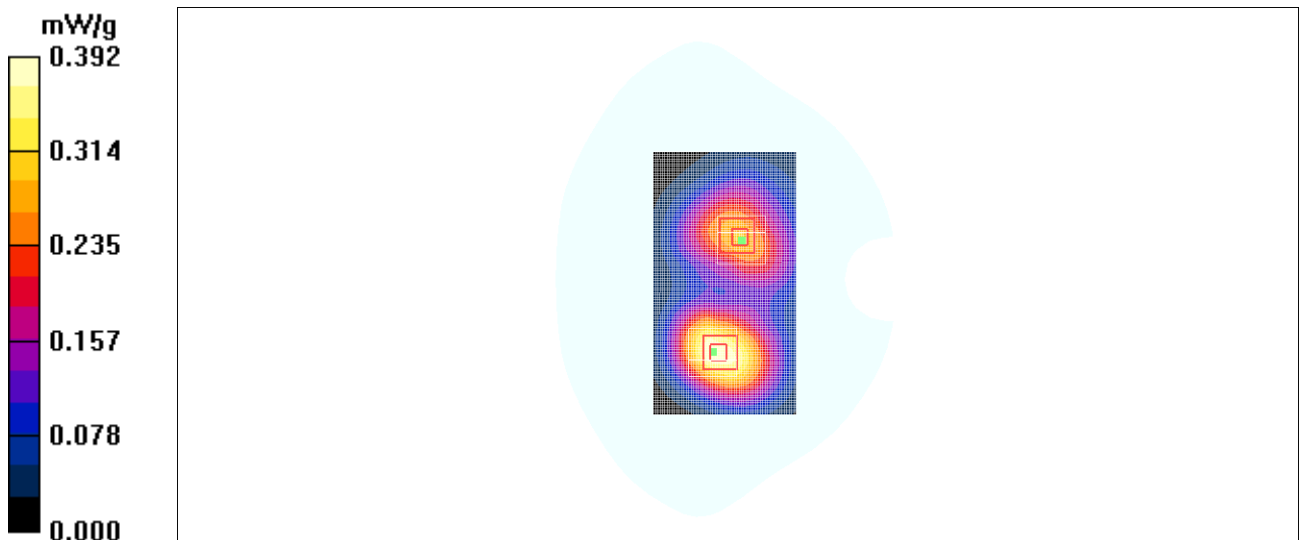


Fig. 100 1900 MHz CH9262

WCDMA 1900 Body Towards Ground High - Slide up

Date/Time: 2010-9-17 02:03:02

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1907.6$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52.8$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground High/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.647 mW/g

Toward Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.4 V/m; Power Drift = -0.137 dB

Peak SAR (extrapolated) = 0.942 W/kg

SAR(1 g) = 0.553 mW/g; SAR(10 g) = 0.351 mW/g

Maximum value of SAR (measured) = 0.599 mW/g

Toward Ground High/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.4 V/m; Power Drift = -0.137 dB

Peak SAR (extrapolated) = 0.870 W/kg

SAR(1 g) = 0.571 mW/g; SAR(10 g) = 0.377 mW/g

Maximum value of SAR (measured) = 0.603 mW/g

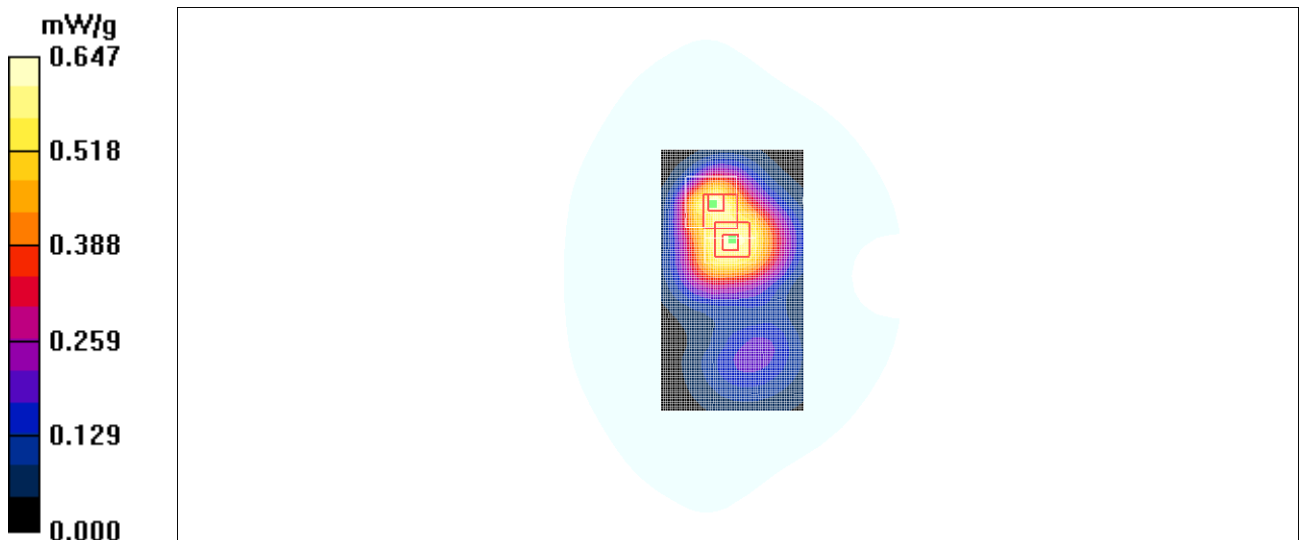


Fig. 101 1900 MHz CH9538

WCDMA 1900 Body Towards Ground Middle - Slide up

Date/Time: 2010-9-17 02:18:24

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.50$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Middle/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.535 mW/g

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.6 V/m; Power Drift = 0.073 dB

Peak SAR (extrapolated) = 0.757 W/kg

SAR(1 g) = 0.499 mW/g; SAR(10 g) = 0.330 mW/g

Maximum value of SAR (measured) = 0.528 mW/g

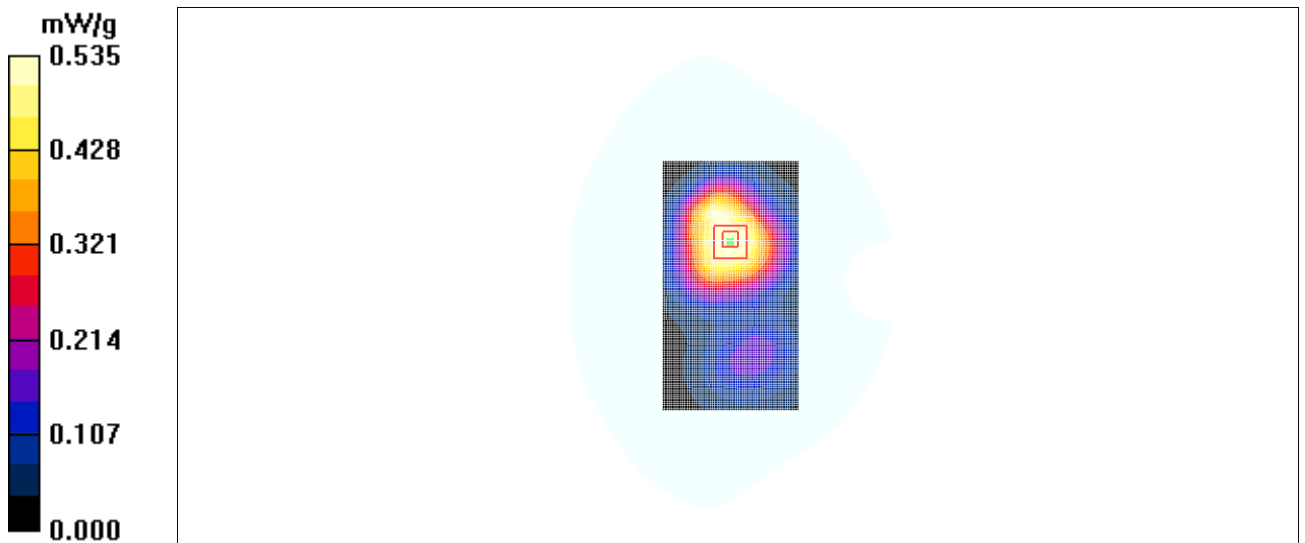


Fig. 102 1900 MHz CH9400

WCDMA 1900 Body Towards Ground Low - Slide up

Date/Time: 2010-9-17 02:33:46

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 53.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WCDMA 1900 Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Low/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.613 mW/g

Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.6 V/m; Power Drift = 0.107 dB

Peak SAR (extrapolated) = 0.893 W/kg

SAR(1 g) = 0.598 mW/g; SAR(10 g) = 0.397 mW/g

Maximum value of SAR (measured) = 0.631 mW/g

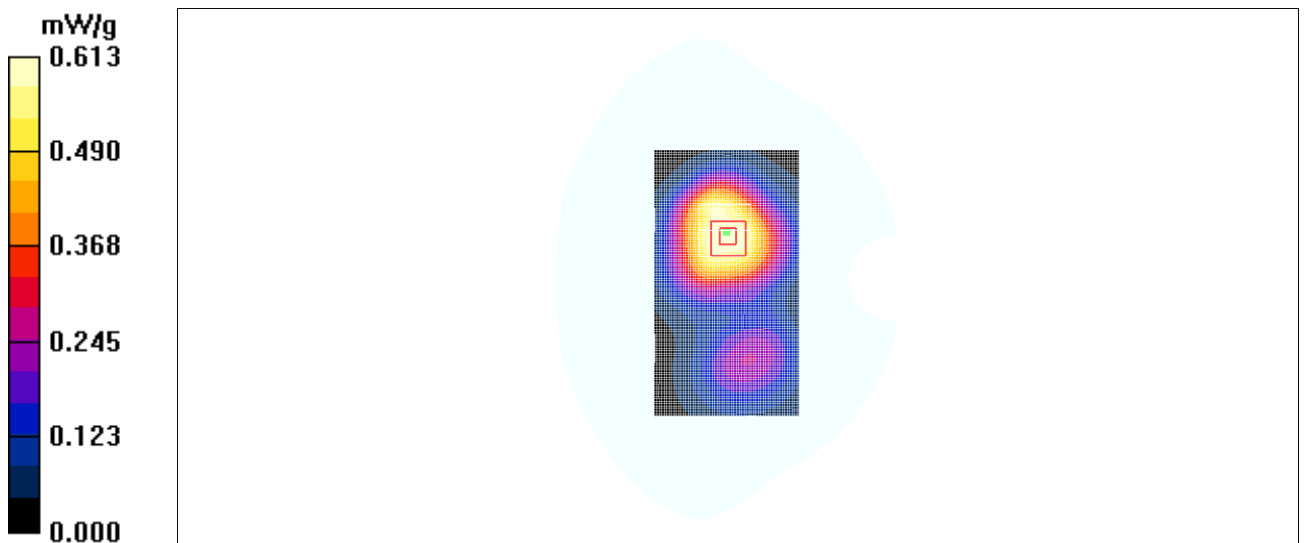


Fig. 103 1900 MHz CH9262

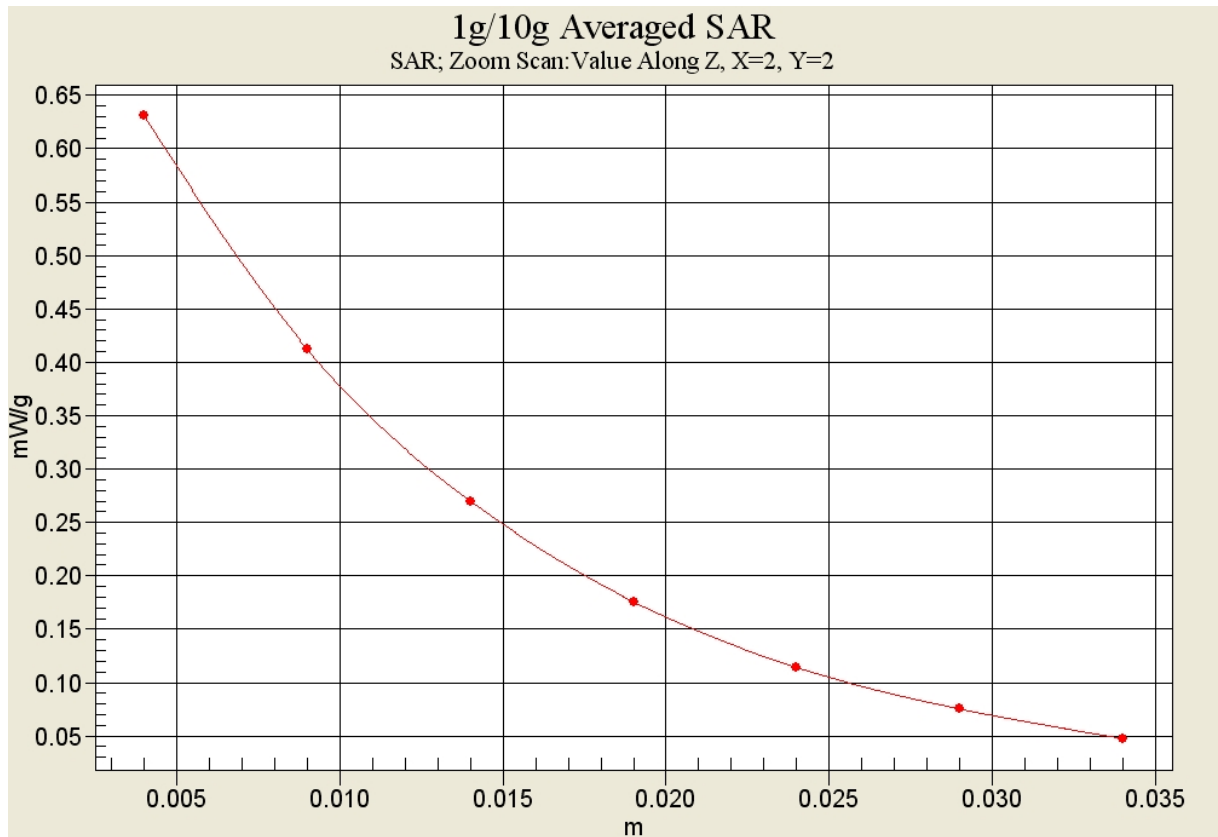


Fig. 103-1 Z-Scan at power reference point (1900 MHz CH9262)

WCDMA 1900 Body Towards Ground Low with Headset - Slide up

Date/Time: 2010-9-17 02:51:37

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 53.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: WCDMA 1900 Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Low/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.619 mW/g

Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.5 V/m; Power Drift = 0.002 dB

Peak SAR (extrapolated) = 0.907 W/kg

SAR(1 g) = 0.564 mW/g; SAR(10 g) = 0.359 mW/g

Maximum value of SAR (measured) = 0.593 mW/g

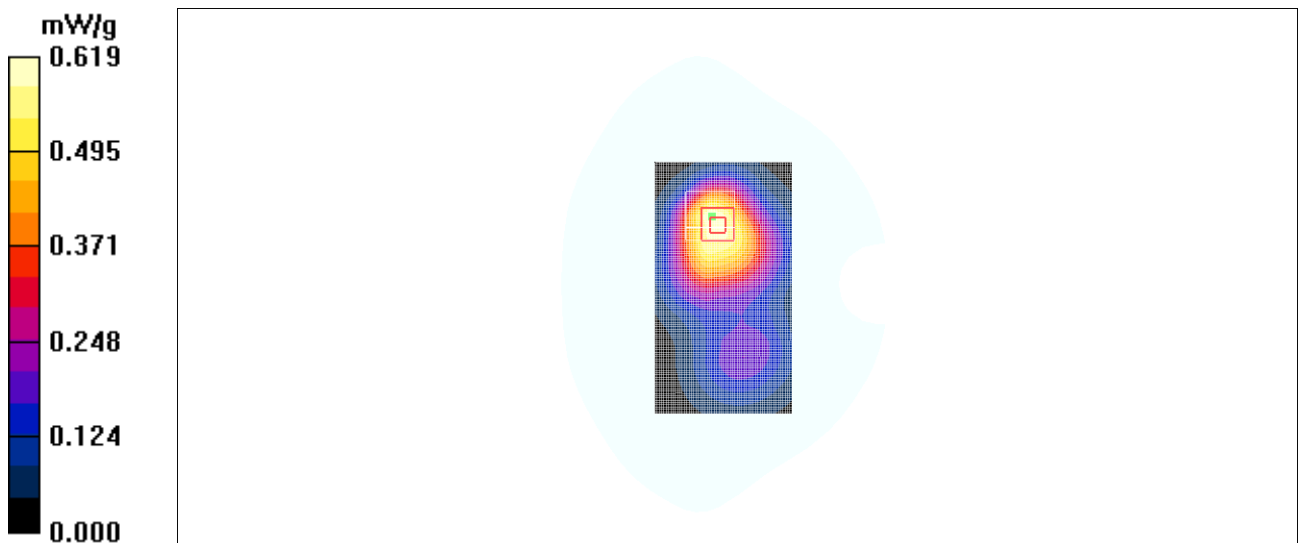


Fig. 104 1900 MHz CH9262

WiFi 802.11b 1Mbps Left Cheek Channel 1 – Slide down

Date/Time: 2010-9-17 11:29:17

Electronics: DAE4 Sn771

Medium: Head 2450 MHz

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.79$ mho/m; $\epsilon_r = 39.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WLAN 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(7.19, 7.19, 7.19)

Cheek Low/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.510 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.7 V/m; Power Drift = 0.137 dB

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.477 mW/g; SAR(10 g) = 0.236 mW/g

Maximum value of SAR (measured) = 0.521 mW/g



Fig.105 802.11b 1Mbps CH1

WiFi 802.11b 1Mbps Left Tilt Channel 1 – Slide down

Date/Time: 2010-9-17 11:43:40

Electronics: DAE4 Sn771

Medium: Head 2450 MHz

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.79$ mho/m; $\epsilon_r = 39.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WLAN 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(7.19, 7.19, 7.19)

Tilt Low/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.391 mW/g

Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.2 V/m; Power Drift = 0.130 dB

Peak SAR (extrapolated) = 0.670 W/kg

SAR(1 g) = 0.372 mW/g; SAR(10 g) = 0.198 mW/g

Maximum value of SAR (measured) = 0.396 mW/g

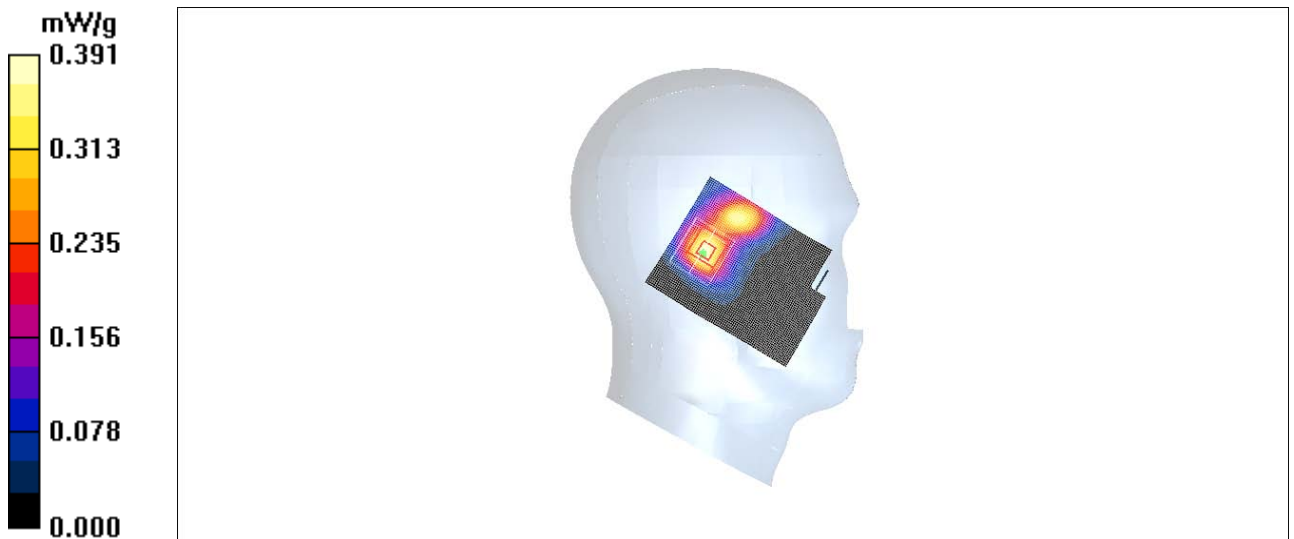


Fig.106 802.11b 1Mbps CH1

WiFi 802.11b 1Mbps Right Cheek Channel 1 – Slide down

Date/Time: 2010-9-17 11:58:13

Electronics: DAE4 Sn771

Medium: Head 2450 MHz

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.79$ mho/m; $\epsilon_r = 39.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: Wlan 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(7.19, 7.19, 7.19)

Cheek Low/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.347 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.4 V/m; Power Drift = -0.142 dB

Peak SAR (extrapolated) = 0.596 W/kg

SAR(1 g) = 0.325 mW/g; SAR(10 g) = 0.176 mW/g

Maximum value of SAR (measured) = 0.335 mW/g

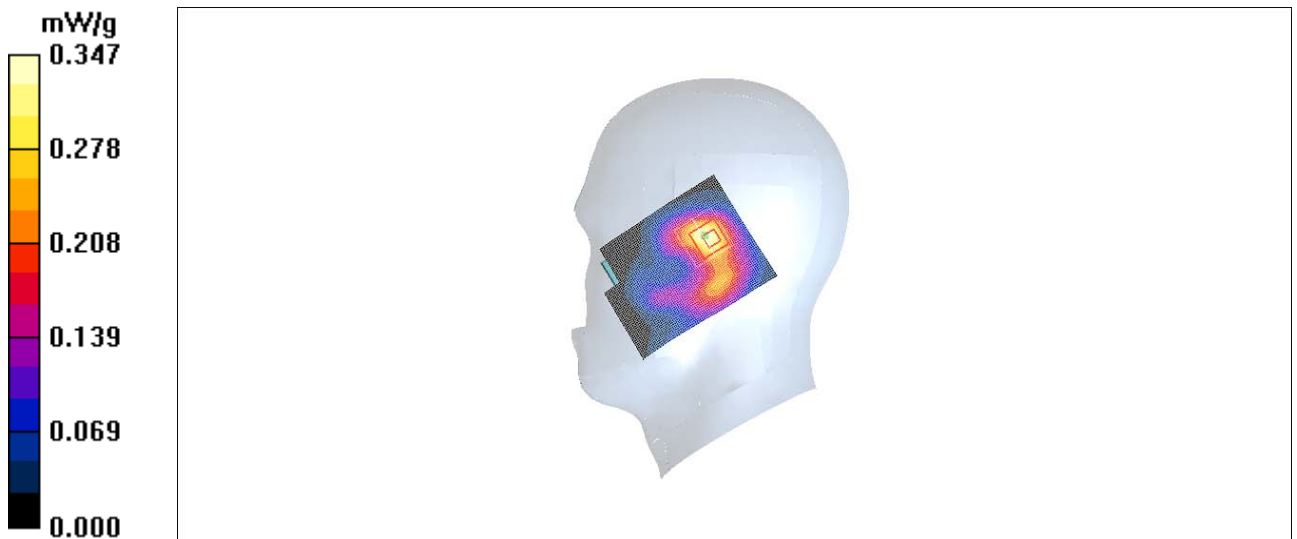


Fig.107 802.11b 1Mbps CH1

WiFi 802.11b 1Mbps Right Tilt Channel 1 – Slide down

Date/Time: 2010-9-17 12:13:28

Electronics: DAE4 Sn771

Medium: Head 2450 MHz

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.79$ mho/m; $\epsilon_r = 39.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WLAN 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(7.19, 7.19, 7.19)

Tilt Low/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.257 mW/g

Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.6 V/m; Power Drift = -0.167 dB

Peak SAR (extrapolated) = 0.426 W/kg

SAR(1 g) = 0.233 mW/g; SAR(10 g) = 0.129 mW/g

Maximum value of SAR (measured) = 0.246 mW/g

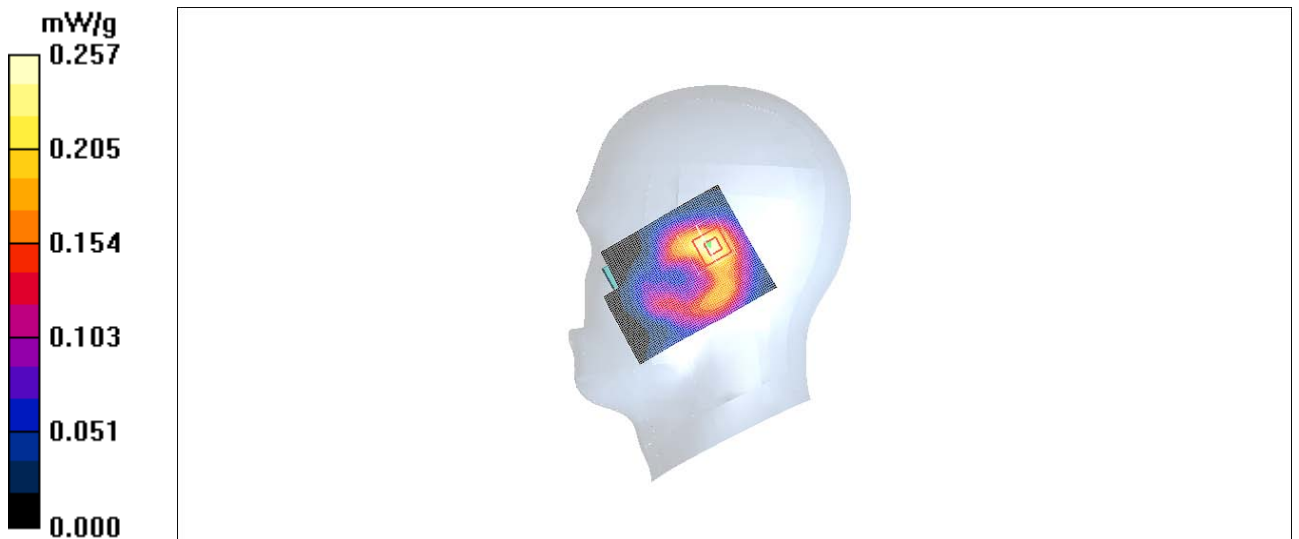


Fig.108 802.11b 1Mbps CH1

WiFi 802.11b 1Mbps Left Cheek Channel 1 – Slide up

Date/Time: 2010-9-17 12:28:02

Electronics: DAE4 Sn771

Medium: Head 2450 MHz

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.79$ mho/m; $\epsilon_r = 39.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WLAN 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(7.19, 7.19, 7.19)

Cheek Low/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.465 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.43 V/m; Power Drift = -0.148 dB

Peak SAR (extrapolated) = 0.828 W/kg

SAR(1 g) = 0.421 mW/g; SAR(10 g) = 0.219 mW/g

Maximum value of SAR (measured) = 0.452 mW/g

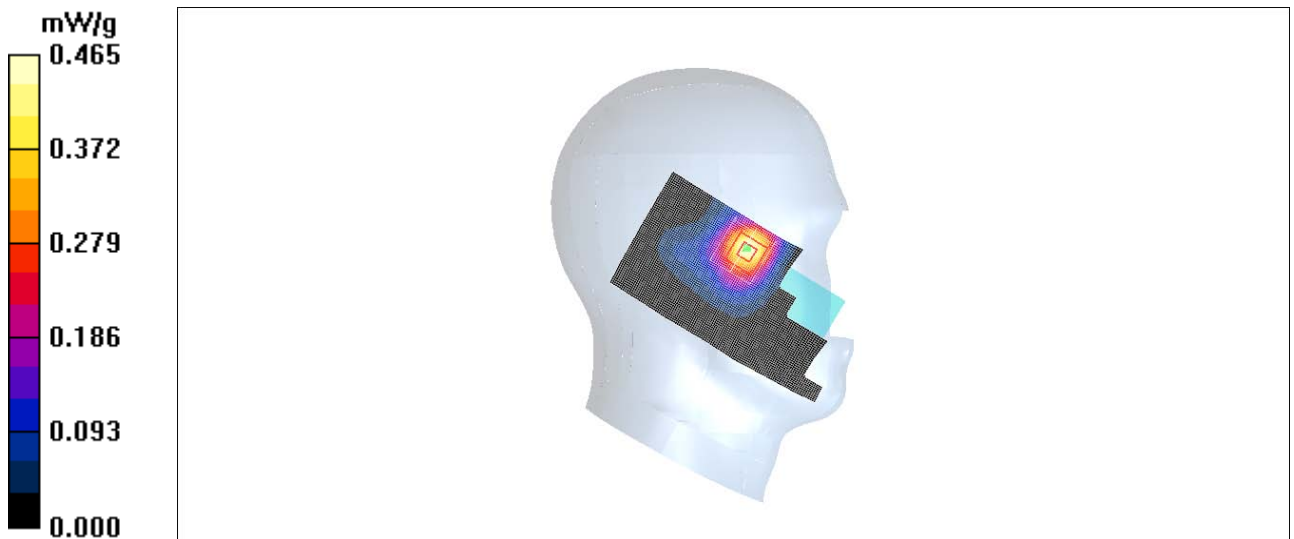


Fig.109 802.11b 1Mbps CH1

WiFi 802.11b 1Mbps Left Tilt Channel 1 – Slide up

Date/Time: 2010-9-17 12:42:29

Electronics: DAE4 Sn771

Medium: Head 2450 MHz

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.79$ mho/m; $\epsilon_r = 39.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WLAN 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(7.19, 7.19, 7.19)

Tilt Low/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.272 mW/g

Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.3 V/m; Power Drift = -0.047 dB

Peak SAR (extrapolated) = 0.452 W/kg

SAR(1 g) = 0.245 mW/g; SAR(10 g) = 0.126 mW/g

Maximum value of SAR (measured) = 0.270 mW/g

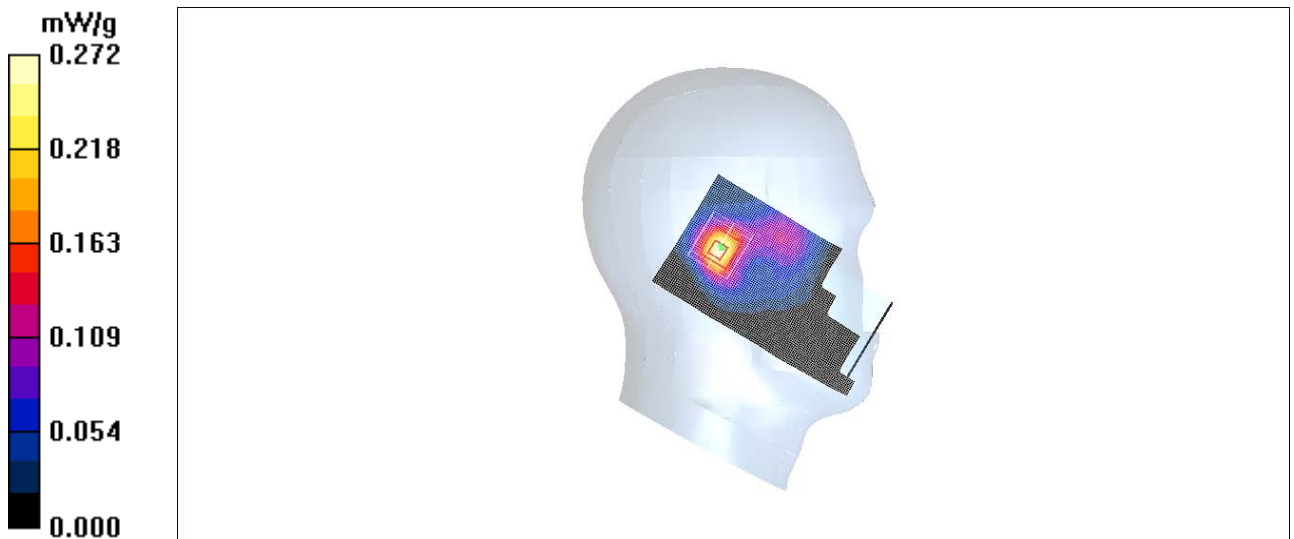


Fig.110 802.11b 1Mbps CH1

WiFi 802.11b 1Mbps Right Cheek Channel 1 – Slide up

Date/Time: 2010-9-17 12:56:57

Electronics: DAE4 Sn771

Medium: Head 2450 MHz

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.79$ mho/m; $\epsilon_r = 39.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: Wlan 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(7.19, 7.19, 7.19)

Cheek Low/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.649 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.06 V/m; Power Drift = 0.125 dB

Peak SAR (extrapolated) = 1.23 W/kg

SAR(1 g) = 0.599 mW/g; SAR(10 g) = 0.290 mW/g

Maximum value of SAR (measured) = 0.675 mW/g

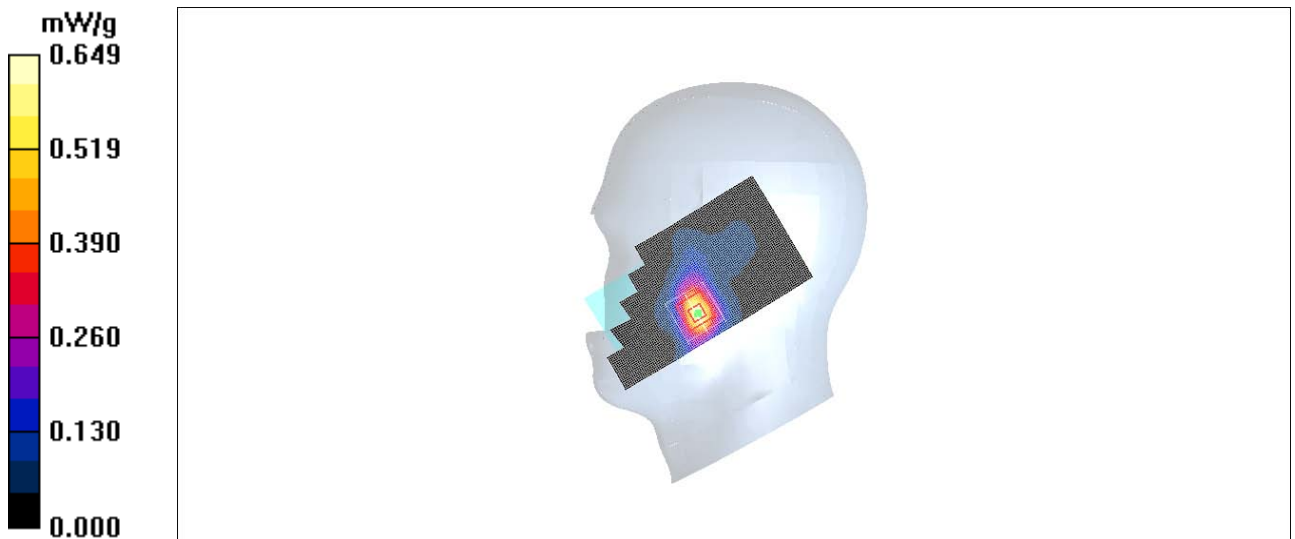


Fig.111 802.11b 1Mbps CH1

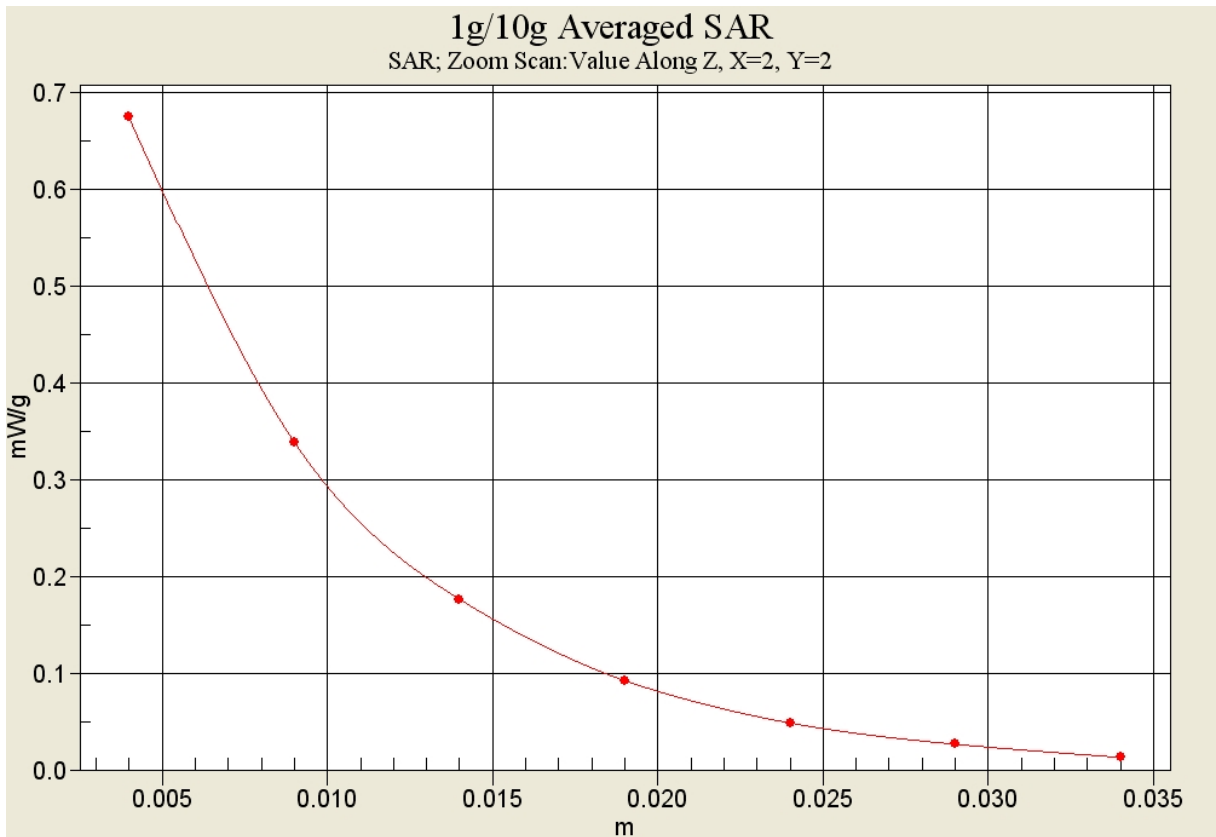


Fig. 111-1 Z-Scan at power reference point (802.11b 1Mbps CH1)

WiFi 802.11b 1Mbps Right Tilt Channel 1 – Slide up

Date/Time: 2010-9-17 13:11:30

Electronics: DAE4 Sn771

Medium: Head 2450 MHz

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.79$ mho/m; $\epsilon_r = 39.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WLAN 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(7.19, 7.19, 7.19)

Tilt Low/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.315 mW/g

Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.0 V/m; Power Drift = 0.092 dB

Peak SAR (extrapolated) = 0.516 W/kg

SAR(1 g) = 0.272 mW/g; SAR(10 g) = 0.137 mW/g

Maximum value of SAR (measured) = 0.306 mW/g

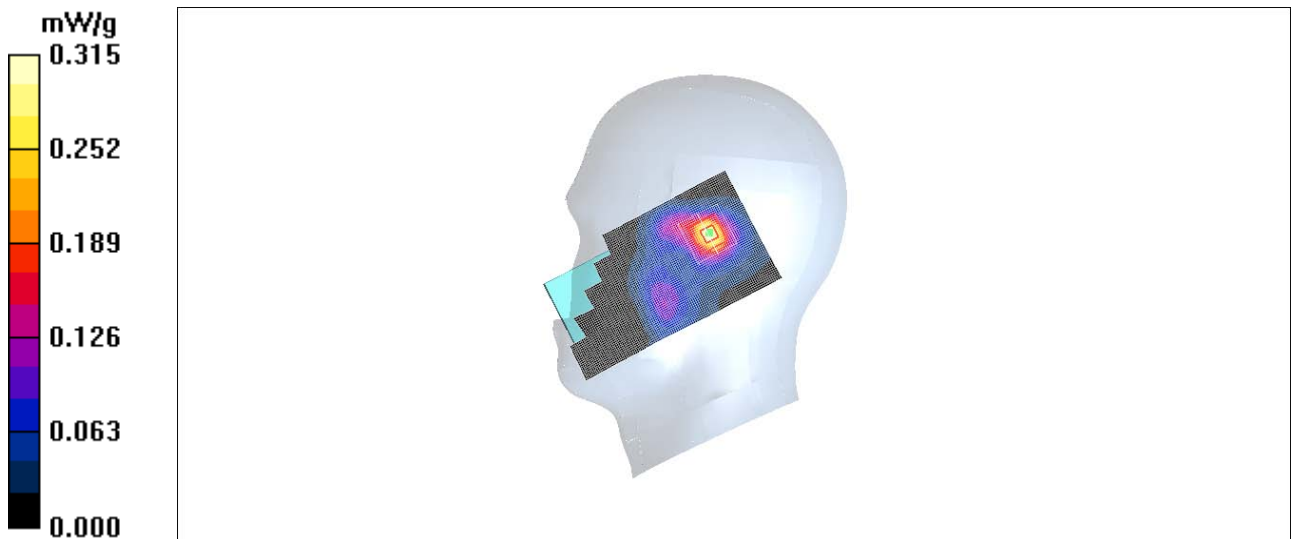


Fig.112 802.11b 1Mbps CH1

WiFi 802.11b 1Mbps Toward Phantom Channel 1 – Slide down

Date/Time: 2010-9-17 15:03:21

Electronics: DAE4 Sn771

Medium: Body 2450 MHz

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.9$ mho/m; $\epsilon_r = 51.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WLAN 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(6.88, 6.88, 6.88)

Toward Phantom Low/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.174 mW/g

Toward Phantom Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.06 V/m; Power Drift = 0.131 dB

Peak SAR (extrapolated) = 0.272 W/kg

SAR(1 g) = 0.158 mW/g; SAR(10 g) = 0.090 mW/g

Maximum value of SAR (measured) = 0.172 mW/g

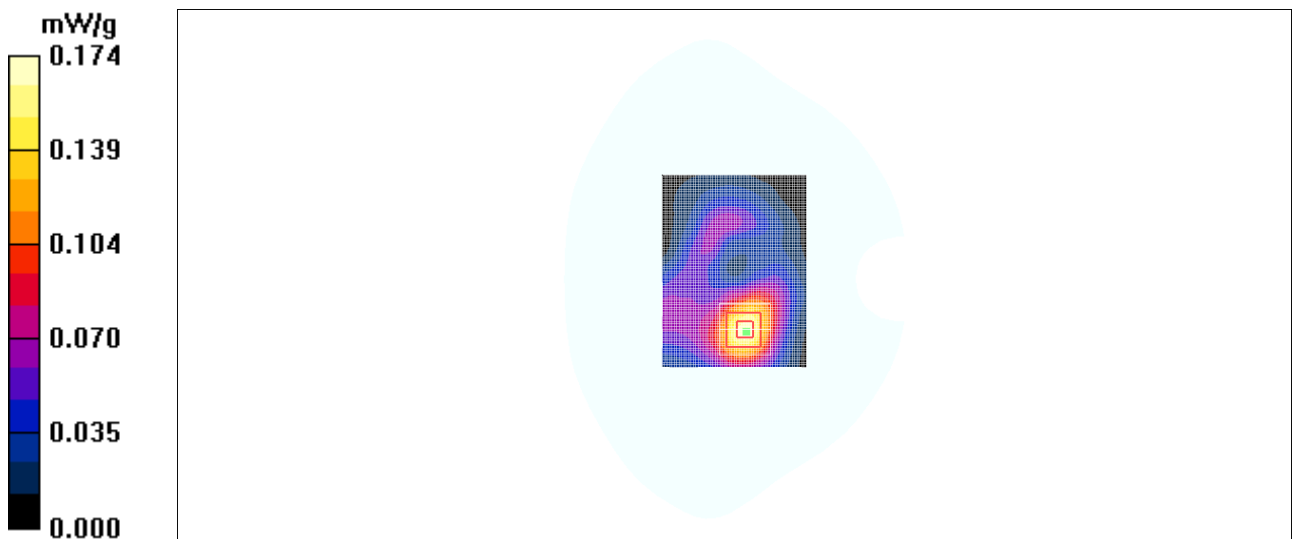


Fig.113 802.11b 1Mbps CH1

WiFi 802.11b 1Mbps Toward Ground Channel 1 – Slide down

Date/Time: 2010-9-17 15:18:50

Electronics: DAE4 Sn771

Medium: Body 2450 MHz

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.9$ mho/m; $\epsilon_r = 51.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WLAN 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(6.88, 6.88, 6.88)

Toward Ground Low/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.368 mW/g

Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.48 V/m; Power Drift = 0.014 dB

Peak SAR (extrapolated) = 0.577 W/kg

SAR(1 g) = 0.339 mW/g; SAR(10 g) = 0.197 mW/g

Maximum value of SAR (measured) = 0.367 mW/g

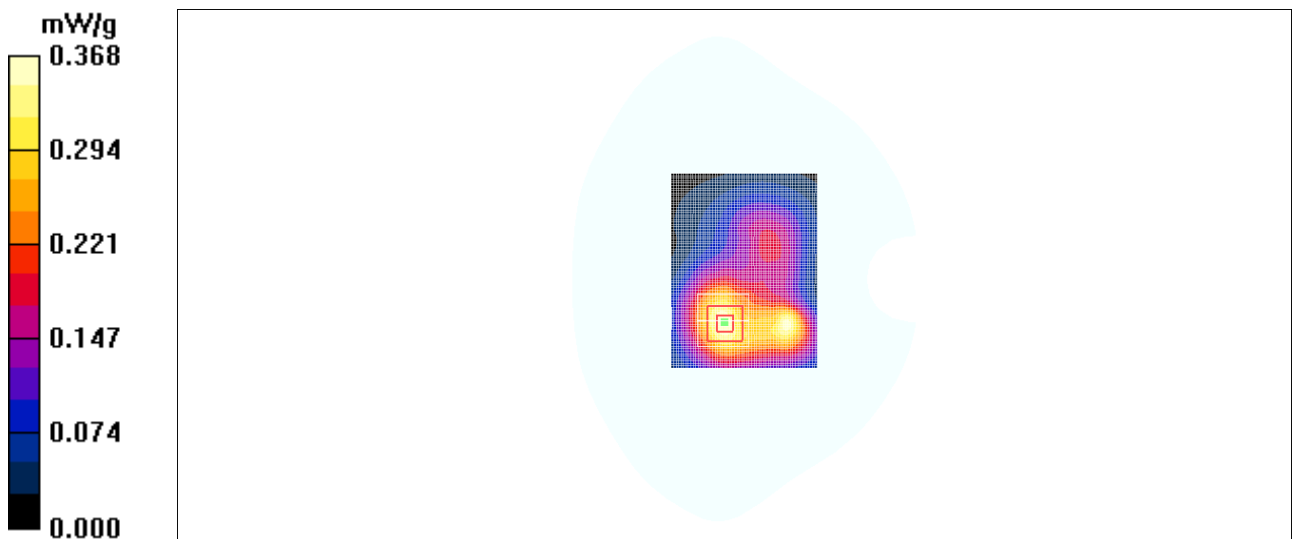


Fig.114 802.11b 1Mbps CH1

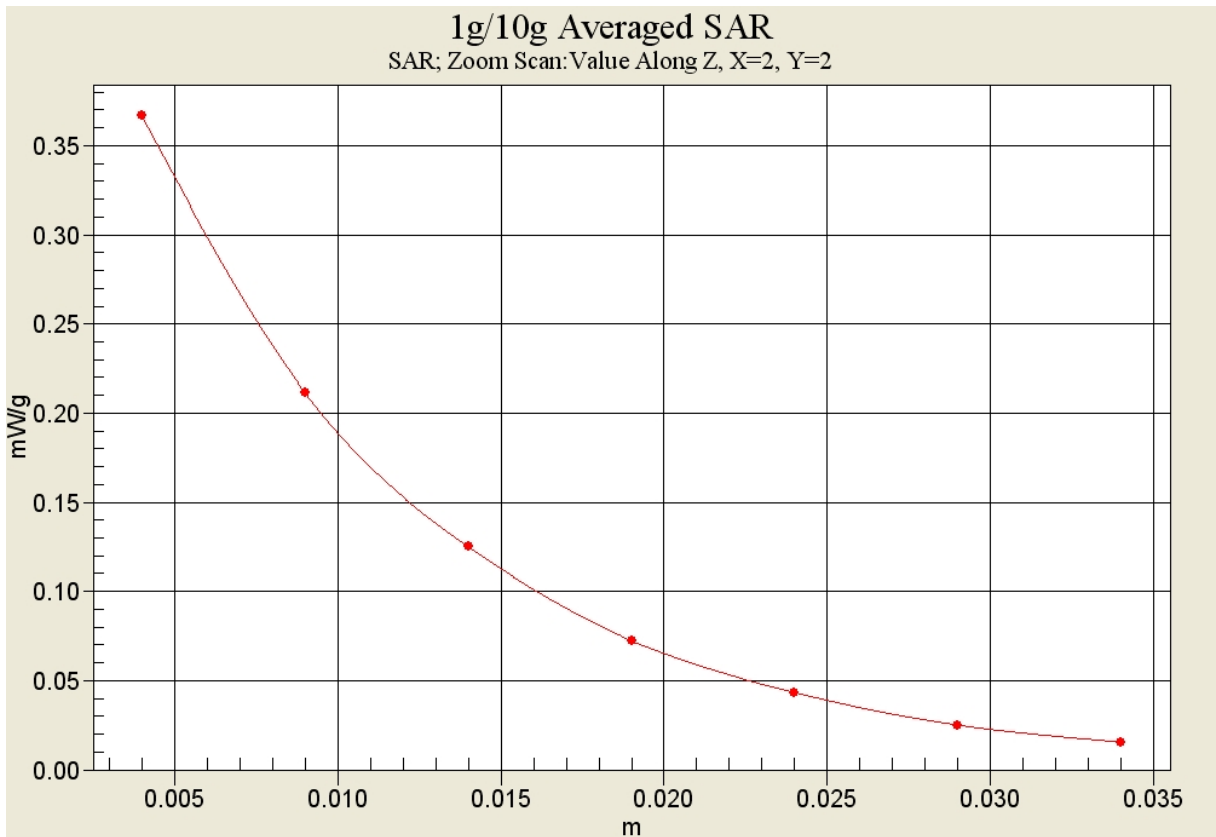


Fig. 114-1 Z-Scan at power reference point (802.11b 1Mbps CH1)

WiFi 802.11b 1Mbps Toward Phantom Channel 1 – Slide up

Date/Time: 2010-9-17 15:34:49

Electronics: DAE4 Sn771

Medium: Body 2450 MHz

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.9$ mho/m; $\epsilon_r = 51.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WLAN 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(6.88, 6.88, 6.88)

Toward Phantom Low/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.125 mW/g

Toward Phantom Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.18 V/m; Power Drift = -0.137 dB

Peak SAR (extrapolated) = 0.192 W/kg

SAR(1 g) = 0.113 mW/g; SAR(10 g) = 0.064 mW/g

Maximum value of SAR (measured) = 0.116 mW/g

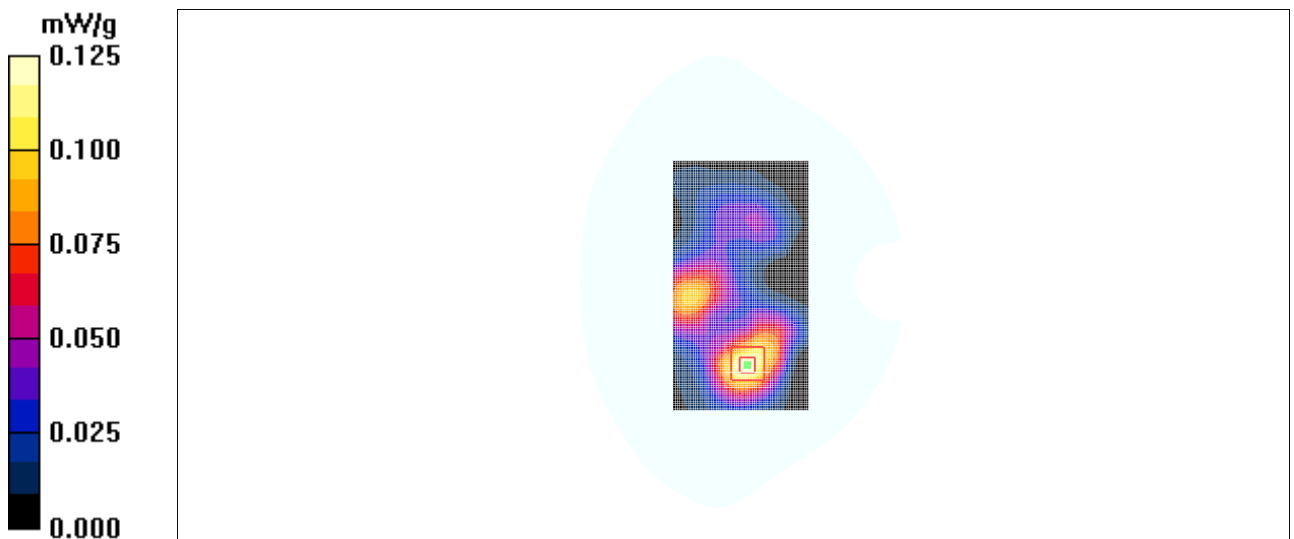


Fig.115 802.11b 1Mbps CH1

WiFi 802.11b 1Mbps Toward Ground Channel 1 – Slide up

Date/Time: 2010-9-17 15:50:31

Electronics: DAE4 Sn771

Medium: Body 2450 MHz

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.9$ mho/m; $\epsilon_r = 51.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C

Communication System: WLAN 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(6.88, 6.88, 6.88)

Toward Ground Low/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.352 mW/g

Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.7 V/m; Power Drift = 0.105 dB

Peak SAR (extrapolated) = 0.564 W/kg

SAR(1 g) = 0.317 mW/g; SAR(10 g) = 0.181 mW/g

Maximum value of SAR (measured) = 0.330 mW/g

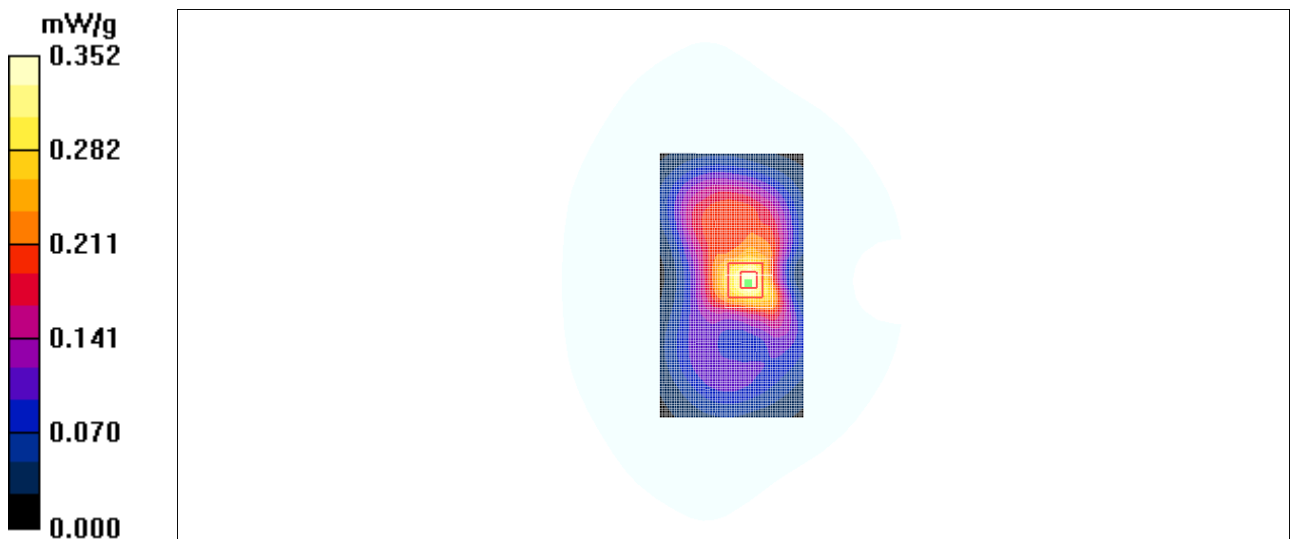


Fig.116 802.11b 1Mbps CH1

ANNEX D SYSTEM VALIDATION RESULTS

835MHz

Date/Time: 2010-9-15 7:24:36

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used: $f = 835$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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) = 2.50 mW/g

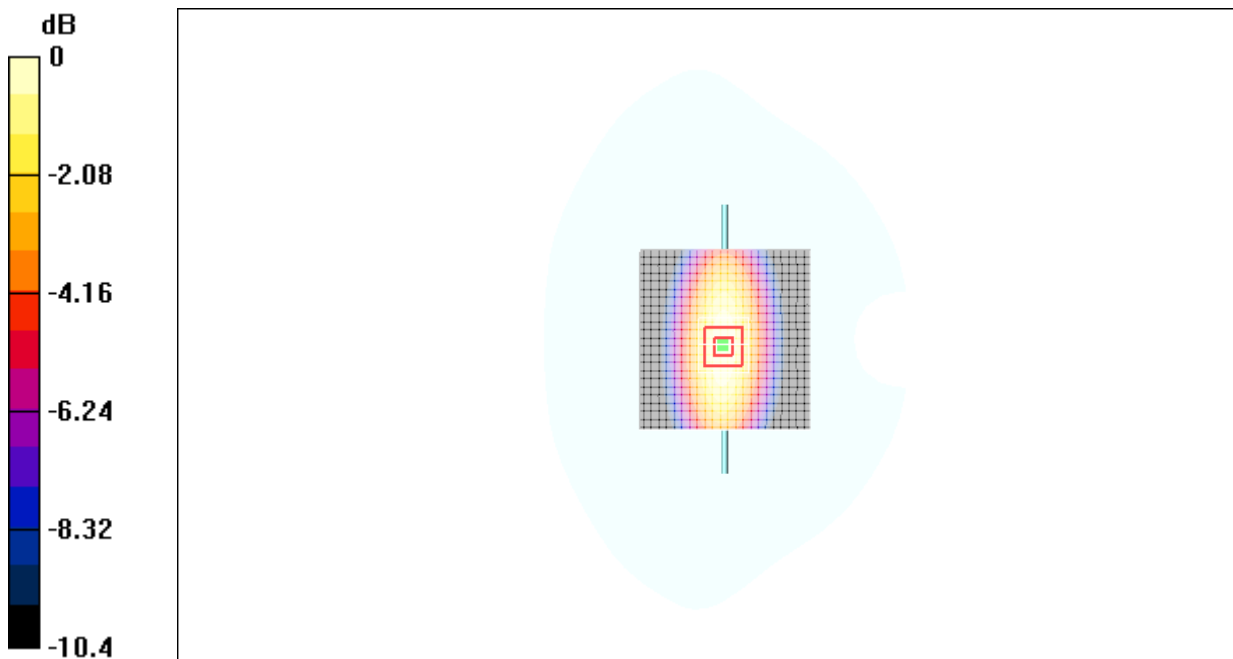
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 53.5 V/m; Power Drift = -0.058 dB

Peak SAR (extrapolated) = 3.29 W/kg

SAR(1 g) = 2.28 mW/g; SAR(10 g) = 1.47 mW/g

Maximum value of SAR (measured) = 2.42 mW/g



0 dB = 2.42mW/g

Fig.117 validation 835MHz 250mW

835MHz

Date/Time: 2010-9-15 14:13:05

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.95 \text{ mho/m}$; $\epsilon_r = 54.8$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 2.49 mW/g

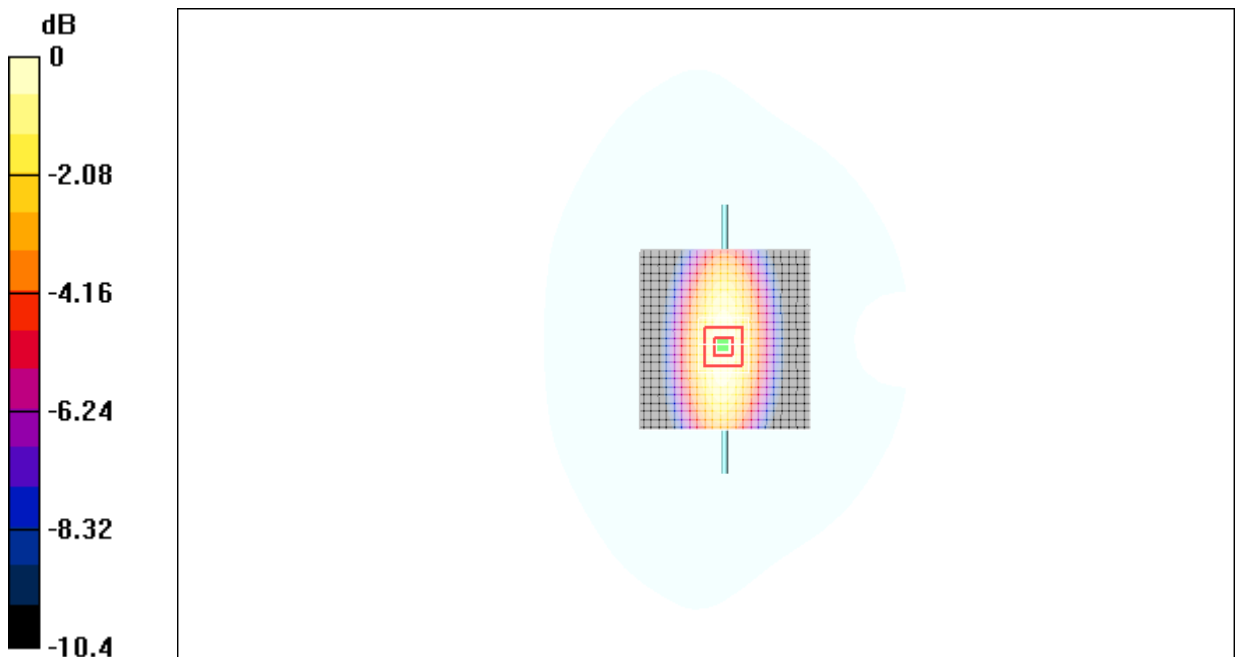
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$,
 $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 49.7 V/m; Power Drift = 0.104 dB

Peak SAR (extrapolated) = 3.24 W/kg

SAR(1 g) = 2.32 mW/g; SAR(10 g) = 1.50 mW/g

Maximum value of SAR (measured) = 2.41 mW/g



0 dB = 2.41mW/g

Fig.118 validation 835MHz 250mW

1900MHz

Date/Time: 2010-9-16 7:21:42

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.41 \text{ mho/m}$; $\epsilon_r = 40.4$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 11.2 mW/g

System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$,
 $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 87.2 V/m ; Power Drift = 0.090 dB

Peak SAR (extrapolated) = 14.7 W/kg

SAR(1 g) = 9.58 mW/g ; SAR(10 g) = 4.93 mW/g

Maximum value of SAR (measured) = 10.5 mW/g

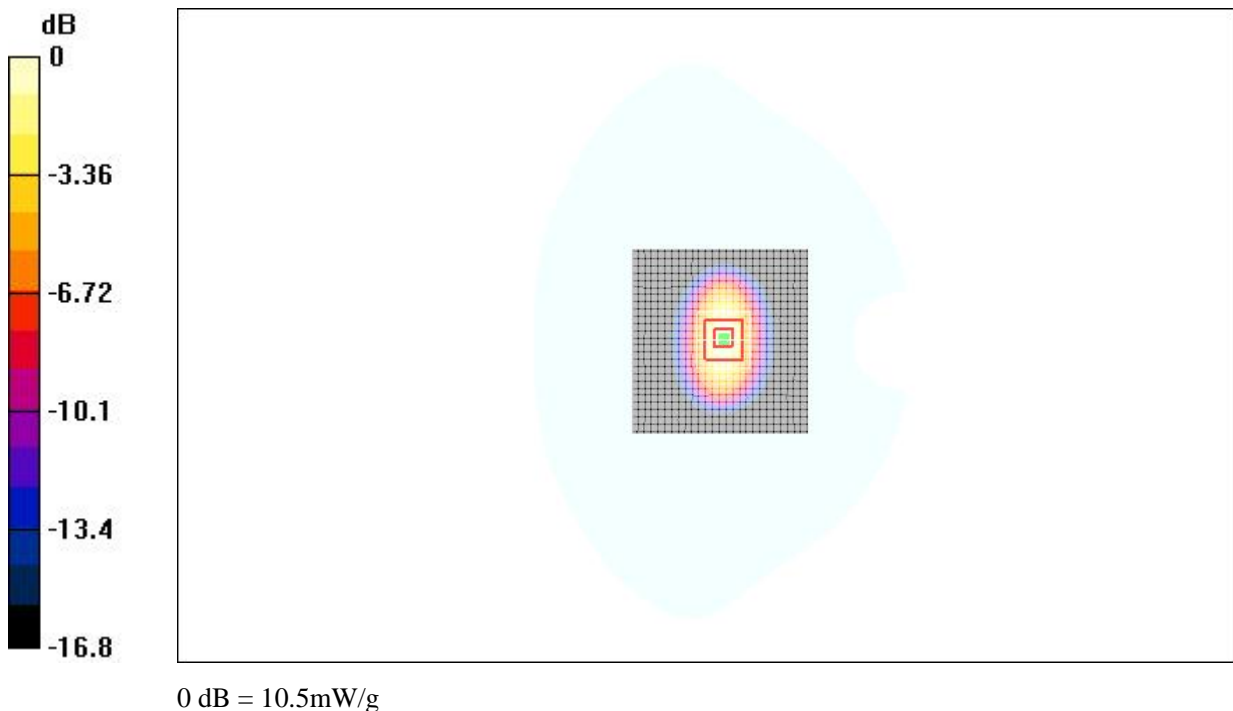


Fig.119 validation 1900MHz 250mW

1900MHz

Date/Time: 2010-9-16 19:47:08

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.53 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 11.2 mW/g

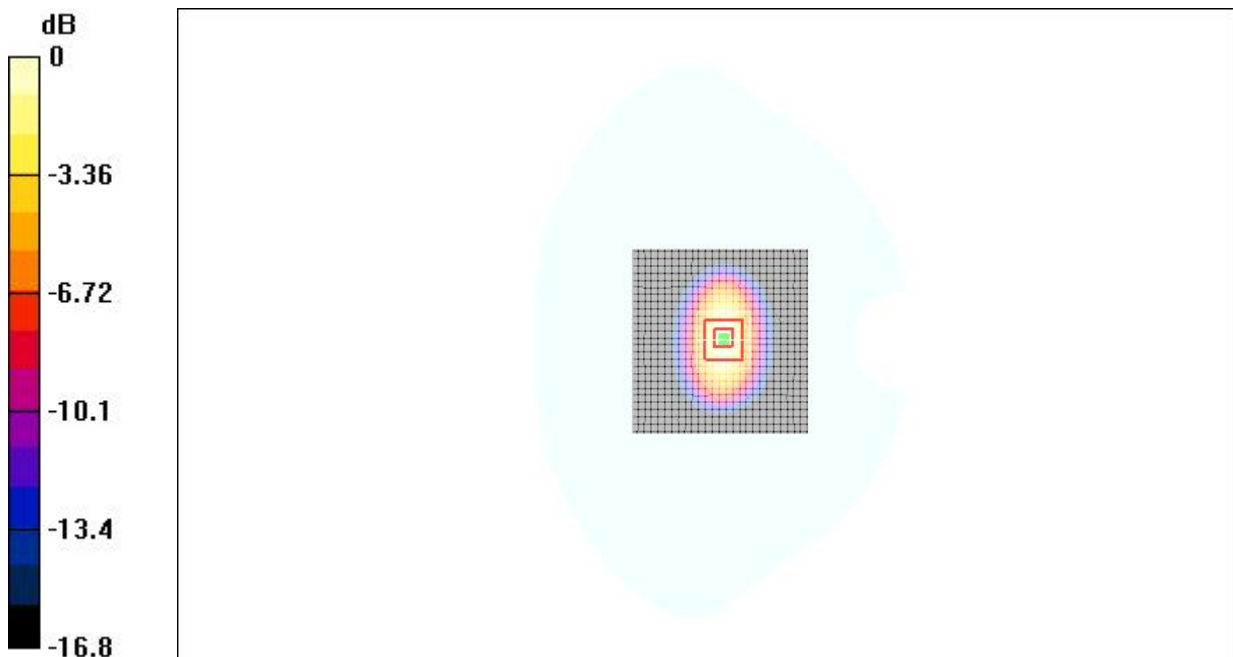
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$,
 $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 90.4 V/m ; Power Drift = 0.068 dB

Peak SAR (extrapolated) = 15.7 W/kg

SAR(1 g) = 10.1 mW/g ; SAR(10 g) = 5.06 mW/g

Maximum value of SAR (measured) = 10.7 mW/g



0 dB = 10.7 mW/g

Fig.120 validation 1900MHz 250mW

2450MHz

Date/Time: 2010-9-17 8:14:25

Electronics: DAE4 Sn771

Medium: Head 2450 MHz

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.82$ mho/m; $\epsilon_r = 39.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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) = 14.6 mW/g

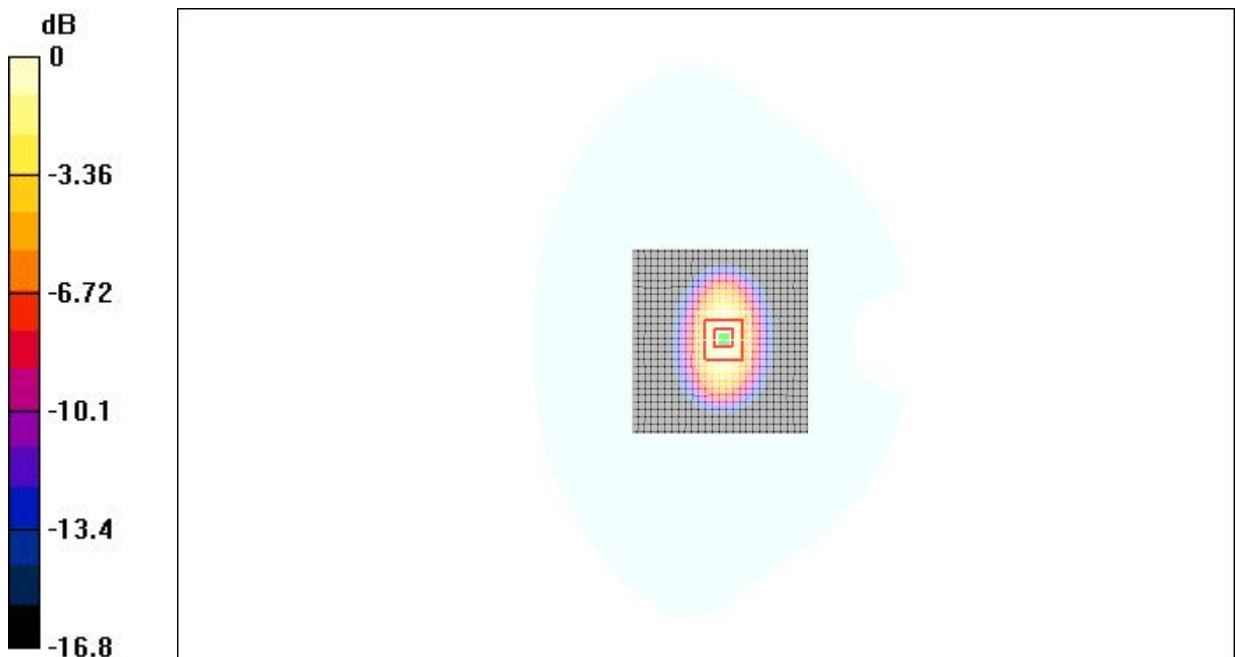
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.7 V/m; Power Drift = 0.048 dB

Peak SAR (extrapolated) = 18.6 W/kg

SAR(1 g) = 12.9 mW/g; SAR(10 g) = 5.97 mW/g

Maximum value of SAR (measured) = 14.2 mW/g



0 dB = 14.2mW/g

Fig.121 validation 2450MHz 250mW

2450MHz

Date/Time: 2010-9-17 14:01:36

Electronics: DAE4 Sn771

Medium: Body 2450 MHz

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.94$ mho/m; $\epsilon_r = 51.0$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°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) = 16.0 mW/g

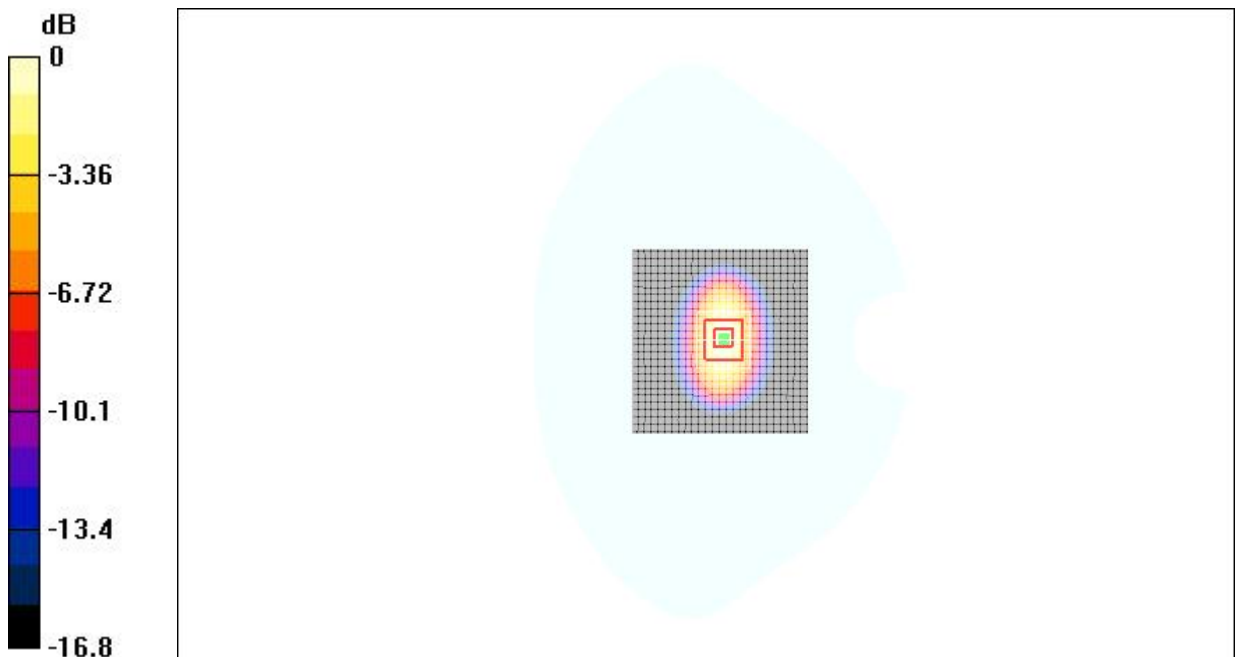
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 84.5 V/m; Power Drift = 0.073 dB

Peak SAR (extrapolated) = 24.2 W/kg

SAR(1 g) = 13.1 mW/g; SAR(10 g) = 5.99 mW/g

Maximum value of SAR (measured) = 14.7 mW/g



0 dB = 14.7mW/g

Fig.122 validation 2450MHz 250mW