OET 65

TEST   REPORT

Test name	Electromagnetic Field (Specific Absorption Rate)
Product	HSDPA/UMTS/GPRS/GSM/EDGE mobile phone with Bluetooth
FCC ID	QISU7315
Model	U7315
Client	Huawei Technologies Co., Ltd.

TA Technology (Shanghai) Co., Ltd.

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GENERAL SUMMARY

Product	HSDPA/UMTS/GPRS/GSM/EDGE mobile phone with Bluetooth	**Model**	U7315
Client	Huawei Technologies Co., Ltd.	**Type of test**	Entrusted
Manufacturer	Huawei Technologies Co., Ltd.	**Arrival Date of sample**	December 18th, 2008
Place of sampling	(Blank)	**Carrier of the samples**	Bin Gao
Quantity of the samples	One	**Date of product**	(Blank)
Base of the samples	(Blank)	**Items of test**	SAR
Series number	JN2AD108B2600038		

Standard(s)	**ANSI C95.1–2005:** IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz. **IEEE 1528–2003:** Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head Due to Wireless Communications Devices: Experimental Techniques. **OET Bulletin 65 supplement C, published June 2001 including DA 02-1438, published June 2002:** Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits. Transition Period for the Phantom Requirements of Supplement C to OET Bulletin 65. **IEC 62209-1:** 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). **IEC 62209-2(draft)-2008:** Human exposure to radio frequency fields from handheld and body-mounted wireless communication devices – Human models, instrumentation, and procedures –Part 2: Procedure to determine the Specific Absorption Rate (SAR)for wireless communication devices used in close proximity to the human body .(frequency rang of 30MHz to 6GHz)
Conclusion	Localized Specific Absorption Rate (SAR) of this portable wireless equipment has been measured in all cases requested by the relevant standards cited in Clause 7.2 of this test report. Maximum localized SAR is below exposure limits specified in the relevant standards cited in Clause 7.1 of this test report. General Judgment: **Pass** (Stamp) **Date of issue: January 7th, 2009**
Comment	The test result only responds to the measured sample.

Approved by _Weizhong Yang_   Revised by _Minbao Ling_   Performed by _Lu Wang_

TABLE OF CONTENT

1. COMPETENCE AND WARRANTIES

TA Technology (Shanghai) Co., Ltd. is a test laboratory competent to carry out the tests described in this test report.

TA Technology (Shanghai) Co., Ltd. guarantees the reliability of the data presented in this test report, which is the results of measurements and tests performed for the items under test on the date and under the conditions stated in this test report and is based on the knowledge and teCHnical facilities available at TA Technology (Shanghai) Co., Ltd. at the time of execution of the test.

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3. DESCRIPTION OF EUT

3.1. Addressing Information Related to EUT

Table 1: Applicant (The Client)

Name or Company	Huawei Technologies Co., Ltd.
Address/Post	Bantian, Longgang District
City	Shenzhen
Postal Code	518129
Country	P.R. China
Telephone	0755-28780808
Fax	0755-28780808

Table 2: Manufacturer

Name or Company	Huawei Technologies Co., Ltd.
Address/Post	Bantian, Longgang District
City	Shenzhen
Postal Code	518129
Country	P.R. China
Telephone	0755-28780808
Fax	0755-28780808

3.2. Constituents of EUT

Table 3: Constituents of Samples

Description	Model	Serial Number	Manufacturer
Handset	U7315	JN2AD108B2600038	HUAWEI Techonologies CO.,Ltd
Lithium Battery	HB5B2H	YAC8621H12101343	FMT Electronics Co.,Ltd.
AC/DC Adapter	TPCA-050065UY	TPI8C3100001	Huawei Technologies Co., Ltd

The EUT appearances see ANNEX H.

3.3. General Description

Equipment Under Test (EUT) is a model of HSDPA/UMTS/GPRS/GSM/EDGE mobile phone with Bluetooth with internal antenna. The detail about Mobile phone, Lithium Battery and AC/DC Adapter is in Table 3. SAR is tested for GSM 850, GSM 1900, WCDMA Band II and WCDMA Band V. The EUT have GPRS (class 10), EGPRS (class 10) and WCDMA/HSDPA (category 6) functions.

The sample under test was selected by the Client.

Components list please refer to documents of the manufacturer.

3.4. Test item

Table 4: Test item of EUT

device type :	portable device	
exposure category:	uncontrolled environment / general population	
device operating configurations :		
operating mode(s):	GSM850; tested GSM1900; tested WCDMA Band II; tested WCDMA Band V; tested	
Modulation:	GMSK, 8-PSK; QPSK	
GPRS mobile station class :	A	
GPRS multislot class :	10	
EGPRS multislot class:	10	
Maximum no. of timeslots in uplink:	2	
HSDPA UE category	6	
standard output power	(33dBm,2W)GSM850; (tested); (30dBm,1W)GSM1900; (tested); (24dBm,0.25W)WCDMA Band II; (tested); (24dBm,0.25W)WCDMA Band V; (tested);	
operating frequency range(s)	transmitter frequency range	receiver frequency range
GSM850: (tested)	824.2 MHz ~ 848.8 MHz	869.2 MHz ~ 893.8 MHz
GSM1900: (tested)	1850.2 MHz ~ 1909.8 MHz	1930.2 MHz ~ 1989.8 MHz
WCDMA Band II: (tested);	1852.4 MHz ~ 1907.6MHz	1932.4 MHz ~ 1987.6 MHz
WCDMA Band V: (tested)	826.4 MHz ~ 846.6 MHz	871.4 MHz ~ 891.6 MHz
Power class	GSM 850: 4, tested with power level 5	
	GSM 1900: 1, tested with power level 0	
	WCDMA Band II: 3, tested with maximum output power	
	WCDMA Band V: 3, tested with maximum output power	
Test channel (Low –Middle –High)	128-190-251 (GSM850) (tested) 512 - 661-810 (GSM1900) (tested) 9262- 9400 -9538 (WCDMA Band II) (tested) 4132 -4182 -4233 (WCDMA Band V) (tested)	
hardware version:	HD2U730M VER.D	
software version:	V100R001	
antenna type:	integrated antenna	

4. OPERATIONAL CONDITIONS DURING TEST

4.1. Test to be performed

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) are allocated to 128, 190 and 251 in the case of GSM 850, allocated to 512, 661 and 810 in the case of GSM 1800, allocated to 9262, 9400 and 9538 in the case of WCDMA Band II, allocated to 4132, 4182 and 4233 in the case of WCDMA Band V. The EUT is commanded to operate at maximum transmitting power.

Connection to the EUT is established via air interface with E5515C, and the EUT is set to maximum output power by E5515C. The antenna connected to the output of the base station simulator shall be placed at least 50 cm away from the EUT. The signal transmitted by the simulator to the antenna feeding point shall be lower than the output power level of the EUT by at least 30 dB.

4.2. GSM Test Configuration

SAR tests for GSM 850 and GSM 1900, a communication link is set up with a System Simulator (SS) by air link. Using E5515C the power lever is set to"5" in head SAR and body SAR of GSM850, is set to"0" in head SAR and body SAR of GSM1900. The test in the band of GSM 850 and GSM1900 are performed in the mode of speech transfer function, GPRS function and EGPRS function. Since the GPRS class and EGPRS class are 10 for this EUT, it has at most 2 timeslots in uplink.

4.3. WCDMA Test Configuration

4.3.1. Output power Verification

Maximum output power is verified on the High, Middle and Low channel according to the procedures described in section 5.2 of 3GPP TS 34. 121, using the appropriate RMC or AMR with TPC(transmit power control) set to all "1's" for WCDMA/HSDPA or applying the required inner loop power control procedures to the maximum output power while HSUPA is active. Results for all applicable physical channel configuration (DPCCH, DPDCH$_n$ and spreading codes, HSDPA, HSPA) should be tabulated in the SAR report. All configuration that are not supported by the DUT or can not be measured due to technical or equipment limitations should be clearly identified.

4.3.2. Head SAR Measurements

SAR for head exposure configurations in voice mode is measured using a 12.2kbps RMC with TPC bits configured to all "1's". SAR in AMR configurations is not required when the maximum average output of each RF channel for 12.2kbps AMR is less than 1/4 dB higher than that measured in 12.2 kbps RMC. Otherwise, SAR is measured on the maximum output channel in 12.2kbps AMR with a

3.4 kbps SRB(Signaling radio bearer) using the exposure configuration that results in the highest SAR in 12.2kbps RMC for that RF channel.

4.3.3. Body SAR Measurements

SAR for body exposure configurations in voice and data modes is measured using 12.2kbps RMC with TPC bits configured to all "1's". SAR for other spreading codes and multiple $DPDCH_n$, when supported by the DUT, are not required when the maximum average output of each RF channel, for each spreading code and $DPDCH_n$ configuration, are less than 1/4 dB higher than those measured in 12.2kbps RMC. Otherwise, SAR is measured on the maximum output channel with an applicable RMC configuration for the corresponding spreading code or $DPDCH_n$ using the exposure configuration that results in the highest SAR with 12.2 kbps RMC. When more than 2 $DPDCH_n$ are supported by the DUT, it may be necessary to configure additional $DPDCH_n$ for a DUT using FTM (Factory Test Mode) or other chipset based test approaches with parameters similar to those used in 384 kbps and 768 kbps RMC.

4.4. HSDPA Test Configuration

Body SAR is not required for handset with HSDPA capabilities when the maximum average output of each RF channel with HSDPA active is less than 1/4 dB higher than that measured without HSDPA using 12.2 kbps RMC and the maximum SAR for 12.2 kbps RMC is ≤75% of the SAR limit. On the maximum output channel with the body exposure configuration that results in the highest SAR in 12.2 kbps RMC for that RF channel.

Table 5: Subtests for UMTS Release 5 HSDPA

Sub-set	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs} (note 1, note 2)	CM(dB) (note 3)	MPR(dB)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (note 4)	15/15 (note 4)	64	12/15 (note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note1: A_{ACK}, A_{NACK} and A_{CQI}= 8 ⟺ A_{hs} = β_{hs}/β_c=30/15 ⟺ β_{hs}=30/15*β_c

Note2: For the HS-DPCCH power mask requirement test in clause 5.2C,5.7A,and the Error Vector Magnitude(EVM) with HS-DPCCH test in clause 5.13.1.A,and HSDPA EVM with phase discontinuity in clause 5.13.1AA, A_{ACK} and A_{NACK}= 8 (A_{hs}=30/15) with β_{hs}=30/15*β_c,and A_{CQI}= 7 (A_{hs}=24/15) with β_{hs}=24/15*β_c.

Note3: CM=1 for β_c/β_d =12/15, β_{hs}/β_c=24/15. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 4: For subtest 2 the $\beta_c\beta_d$ ratio of 12/15 for the TFC during the measurement period(TF1,TF0) is achieved by setting the signaled gain factors for the reference TFC (TFC1,TF1) to β_c=11/15 and β_d=15/15.

5. SAR MEASUREMENTS SYSTEM CONFIGURATION

5.1. SAR Measurement Set-up

The DASY4 system for performing compliance tests consists of the following items:

- A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
- A dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
- A data acquisition electronic (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- A unit to operate the optical surface detector which is connected to the EOC.
- The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DASY4 measurement server.
- The DASY4 measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation. A computer operating Windows 2003
- DASY4 software and SEMCAD data evaluation software.
- Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
- The generic twin phantom enabling the testing of left-hand and right-hand usage.
- The device holder for handheld mobile phones.
- Tissue simulating liquid mixed according to the given recipes.
- System validation dipoles allowing to validate the proper functioning of the system.
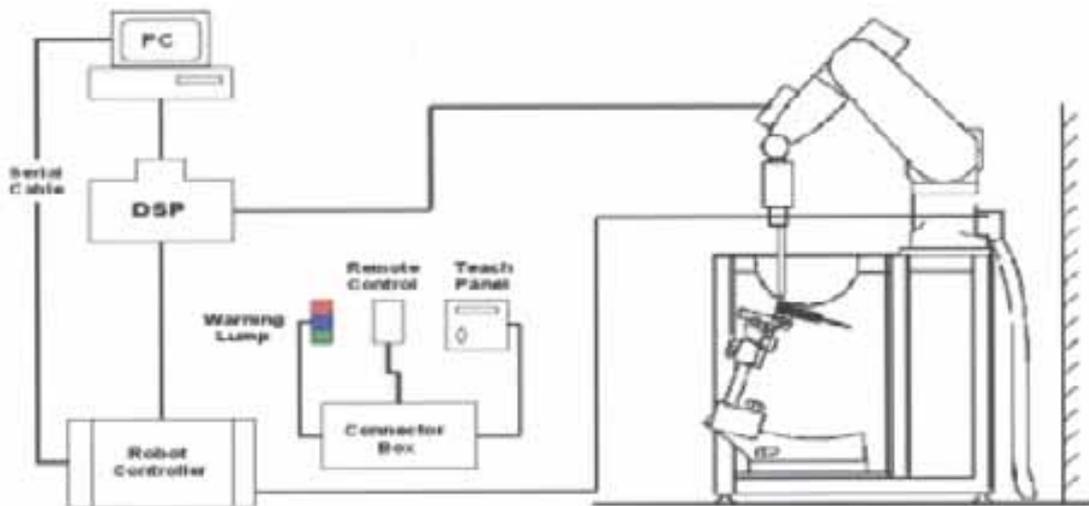
Figure 1. SAR Lab Test Measurement Set-up

5.2. Dasy4 E-field Probe System

The SAR measurements were conducted with the dosimetric probe EX3DV4 (manufactured by SPEAG), designed in the classical triangular configuration and optimized for dosimetric evaluation.

5.2.1. EX3DV4 Probe Specification

Construction   Symmetrical design with triangular core
                      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 1750
                      Additional CF for other liquids and frequencies upon request

Figure 2.EX3DV4 E-field Probe

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

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

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

Dimensions   Overall length: 330 mm (Tip: 20 mm)
                      Tip diameter: 2.5 mm (Body: 12 mm)
                      Typical distance from probe tip to dipole centers: 1 mm

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

Figure 3. EX3DV4 E-field probe

5.2.2. E-field Probe Calibration

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

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

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

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

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

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

Where:
σ = Simulated tissue conductivity,
ρ = Tissue density (kg/m3).

5.3. Other Test Equipment

5.3.1. Device Holder for Transmitters

The DASY device holder is designed to cope with the die rent positions given in the standard.
It has two scales for device rotation (with respect to the body axis) and device inclination (with respect to the line between the ear reference points). The rotation centers for both scales is the ear reference point (ERP). Thus the device needs no repositioning when changing the angles.
The DASY device holder is constructed of low-loss POM material having the following dielectric

Figure 4.Device Holder

parameters: relative permittivity "=3 and loss tangent _=0.02. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the

inference of the clamp on the test results could thus be lowered.

5.3.2. Phantom

The Generic Twin Phantom is constructed of a fiberglass shell integrated in a wooden Figure. 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 l000 x 500 mm (H x L x W)
Aailable   Special

Figure 5.Generic Twin Phantom

5.4. Scanning procedure

The DASY4 installation includes predefined files with recommended procedures for measurements and validation. They are read-only document files and destined as fully defined but unmeasured masks. All test positions (head or body-worn) are tested with the same configuration of test steps differing only in the grid definition for the different test positions.

- The "reference" and "drift" measurements are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure. The indicated drift is mainly the variation of the DUT's output power and should vary max. ± 5 %.

- The "surface check" measurement tests the optical surface detection system of the DASY4 system by repeatedly detecting the surface with the optical and mechanical surface detector and comparing the results. The output gives the detecting heights of both systems, the difference between the two systems and the standard deviation of the detection repeatability. Air bubbles or refraction in the liquid due to separation of the sugar-water mixture gives poor repeatability (above ± 0.1mm). To prevent wrong results tests are only executed when the liquid is free of air bubbles. The difference between the optical surface detection and the actual surface depends on the probe and is specified with each probe. (It does not depend on the surface reflectivity or the probe angle to the surface within ± 30°.)

- Area Scan

The Area Scan is used as a fast scan in two dimensions to find the area of high field values before running a detailed measurement around the hot spot.Before starting the area scan a grid spacing of 15 mm x 15 mm is set. During the scan the distance of the probe to the phantom remains unchanged.

After finishing area scan, the field maxima within a range of 2 dB will be ascertained.

- Zoom Scan

  Zoom Scans are used to estimate the peak spatial SAR values within a cubic averaging volume containing 1 g and 10 g of simulated tissue. The default Zoom Scan is done by 7x7x7 points within a cube whose base is centered around the maxima found in the preceding area scan.

- Spatial Peak Detection

  The procedure for spatial peak SAR evaluation has been implemented and can determine values of masses of 1g and 10g, as well as for user-specific masses.The DASY4 system allows evaluations that combine measured data and robot positions, such as:

  • maximum search

  • extrapolation

  • boundary correction

  • peak search for averaged SAR

  During a maximum search, global and local maxima searches are automatically performed in 2-D after each Area Scan measurement with at least 6 measurement points. It is based on the evaluation of the local SAR gradient calculated by the Quadratic Shepard's method. The algorithm will find the global maximum and all local maxima within -2 dB of the global maxima for all SAR distributions.

  Extrapolation routines are used to obtain SAR values between the lowest measurement points and the inner phantom surface. The extrapolation distance is determined by the surface detection distance and the probe sensor offset. Several measurements at different distances are necessary for the extrapolation. Extrapolation routines require at least 10 measurement points in 3-D space. They are used in the Zoom Scan to obtain SAR values between the lowest measurement points and the inner phantom surface. The routine uses the modified Quadratic Shepard's method for extrapolation. For a grid using 7x7x7 measurement points with 5mm resolution amounting to 343 measurement points, the uncertainty of the extrapolation routines is less than 1% for 1g and 10g cubes.

- A Z-axis scan measures the total SAR value at the x-and y-position of the maximum SAR value found during the cube 7x7x7 scan. The probe is moved away in z-direction from the bottom of the SAM phantom in 5mm steps.

5.5. Data Storage and Evaluation

5.5.1. Data Storage

The DASY4 software stores the acquired data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension ".DA4". The software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of incorrect parameter settings. For example, if a measurement has been performed with a wrong crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be re-evaluated.

The measured data can be visualized or exported in different units or formats, depending on the selected probe type ([V/m], [A/m], [°C], [mW/g], [mW/cm²], [dBrel], etc.). Some of these units are not available in certain situations or show meaningless results, e.g., a SAR output in a lossless media will always be zero. Raw data can also be exported to perform the evaluation with other software packages.

5.5.2. Data Evaluation by SEMCAD

The SEMCAD software automatically executes the following procedures to calculate the field units from the microvolt readings at the probe connector. The parameters used in the evaluation are stored in the configuration modules of the software:

Probe parameters:	- Sensitivity	Normi, ai_0, a_{i1}, a_{i2}
	- Conversion factor	$ConvF_i$
	- Diode compression point	Dcp_i
Device parameters:	- Frequency	f
	- Crest factor	cf
Media parameters:	- Conductivity	
	- Density	

These parameters must be set correctly in the software. They can be found in the component documents or they can be imported into the software from the configuration files issued for the DASY4 components. In the direct measuring mode of the multimeter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal,

the diode type and the DC-transmission factor from the diode to the evaluation electronics.

If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as:

$$V_i = U_i + U_i^2 \cdot cf / dcp_i$$

With V_i = compensated signal of channel i   (i = x, y, z)

        U_i = input signal of channel i   (i = x, y, z)

        cf = crest factor of exciting field   (DASY parameter)

        dcp_i = diode compression point   (DASY parameter)

From the compensated input signals the primary field data for each channel can be evaluated:

E-field probes: $$E_i = (V_i / Norm_i \cdot ConvF)^{1/2}$$

H-field probes: $$H_i = (V_i)^{1/2} \cdot (a_{i0} + a_{i1} f + a_{i2} f^2) / f$$

With V_i = compensated signal of channel i   (i = x, y, z)

        $Norm_i$ = sensor sensitivity of channel i   (i = x, y, z)

            $[mV/(V/m)^2]$ for E-field Probes

        $ConvF$ = sensitivity enhancement in solution

        a_{ij} = sensor sensitivity factors for H-field probes

        f = carrier frequency [GHz]

        E_i = electric field strength of channel i in V/m

        H_i = magnetic field strength of channel i in A/m

The RSS value of the field components gives the total field strength (Hermitian magnitude):

$$E_{tot} = (E_x^2 + E_Y^2 + E_z^2)^{1/2}$$

The primary field data are used to calculate the derived field units.

$$SAR = (E_{tot}^2 \cdot \sigma) / (\rho \cdot 1000)$$

with SAR = local specific absorption rate in mW/g

E_{tot} = total field strength in V/m

$\blacksquare$ = conductivity in [mho/m] or [Siemens/m]

$\blacksquare$ = equivalent tissue density in g/cm^3

Note that the density is normally set to 1 (or 1.06), to account for actual brain density rather than the density of the simulation liquid. The power flow density is calculated assuming the excitation field to be a free space field.

$$P_{pwe} = E_{tot}^{2} / 3770 \quad \text{or} \quad P_{pwe} = H_{tot}^{2} \cdot 37.7$$

with P_{pwe} = equivalent power density of a plane wave in mW/cm^2

E_{tot} = total electric field strength in V/m

H_{tot} = total magnetic field strength in A/m

5.6. System Checking

The manufacturer calibrates the probes annually. Dielectric parameters of the tissue simulants were measured every day using the dielectric probe kit and the network analyser. A system check measurement was made following the determination of the dielectric parameters of the simulant, using the dipole validation kit. A power level of 250 mW was supplied to the dipole antenna, which was placed under the flat section of the twin SAM phantom. The system checking results (dielectric parameters and SAR values) are given in the table 12.

Check results have to be equal or near the values determined during dipole calibration with the relevant liquids and test system (±10 %).

System Check is performed regularly on all frequency bands where tests are performed with the DASY 4 system.

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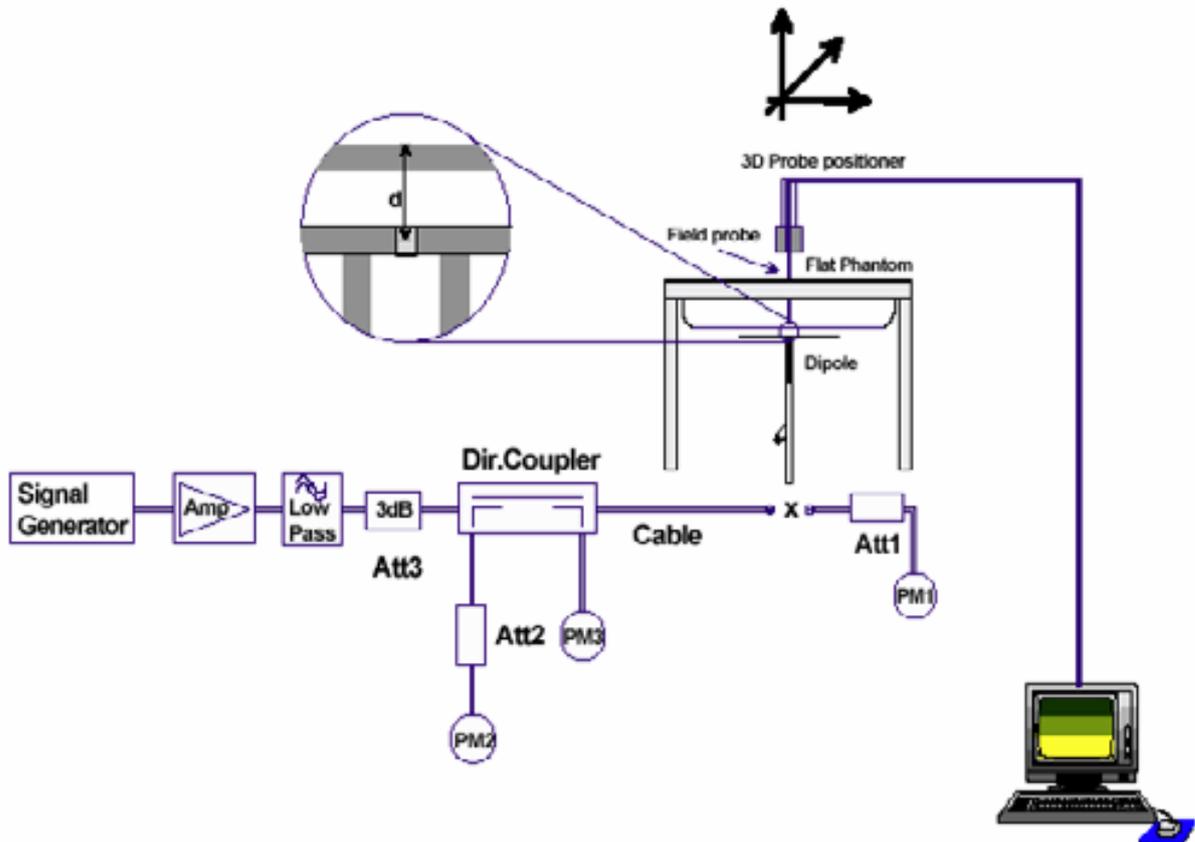
Figure 6. **System Check Set-up**

5.7. Equivalent Tissues

The liquid is consisted of water, sugar, salt, Preventol and Cellulose. The liquid has previously been proven to be suited for worst-case. The Table 5 and Table 6 show the detail solution. It's satisfying the latest tissue dielectric parameters requirements proposed by the OET 65.

Table 6: Composition of the Head Tissue Equivalent Matter

MIXTURE%	FREQUENCY(Brain) 835MHz
Water	41.45
Sugar	56
Salt	1.45
Preventol	0.1
Cellulose	1.0
Dielectric Parameters Target Value	f=835MHz ε=41.5 σ=0.9

MIXTURE%	FREQUENCY(Brain) 1900MHz
Water	55.242
Glycol	44.452
Salt	0.306
Dielectric Parameters Target Value	f=1900MHz ε=40.0 σ=1.40

Table 7: Composition of the Body Tissue Equivalent Matter

MIXTURE%	FREQUENCY(Body)835MHz
Water	52.5
Sugar	45
Salt	1.4
Preventol	0.1
Cellulose	1.0
Dielectric Parameters Target Value	f=835MHz ε=55.2 σ=0.97

MIXTURE%	FREQUENCY(Body)1900MHz
Water	69.91
Glycol	29.96
Salt	0.13
Dielectric Parameters Target Value	f=1900MHz ε=53.3 σ=1.52

6. LABORATORY ENVIRONMENT

Table 8: The Ambient Conditions during Test

Temperature	Min. = 20℃, Max. = 25 ℃
Relative humidity	Min. = 30%, Max. = 70%
Ground system resistance	< 0.5 Ω
Ambient noise is checked and found very low and in compliance with requirement of standards. Reflection of surrounding objects is minimized and in compliance with requirement of standards.	

7. CHARACTERISTICS OF THE TEST

7.1. Applicable Limit Regulations

ANSI C95.1–2005: 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.

7.2. Applicable Measurement Standards

IEEE 1528–2003: Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human head Due to Wireless Communications Devices: Experimental Techniques.

OET Bulletin 65 supplement C, published June 2001 including DA 02-1438, published June 2002: Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits. Transition Period for the Phantom Requirements of Supplement C to OET Bulletin 65.

IEC 62209-1: 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).

IEC 62209-2(draft)-2008: Human exposure to radio frequency fields from handheld and body-mounted wireless communication devices – Human models, instrumentation, and procedures –Part 2: Procedure to determine the Specific Absorption Rate (SAR)for wireless communication devices used in close proximity to the human body .(frequency rang of 30MHz to 6GHz)

8. CONDUCTED OUTPUT POWER MEASUREMENT

8.1. Summary

The DUT is tested using an E5515C communications tester as controller unit to set test channels and maximum output power to the DUT, as well as for measuring the conducted peak power. Conducted output power was measured using an integrated RF connector and attached RF cable. This result contains conducted output power for the EUT.

8.1.1. Measurement result

Table 9: Conducted Power Measurement Results

GSM 850	Conducted Power		
	Channel 128	**Channel 190**	**Channel 251**
	824.2MHz	**836.6MHz**	**848.8MHz**
Before Test (dBm)	32.48	32.67	32.50
After Test (dBm)	32.47	32.68	32.51
GSM 850+GPRS	Conducted Power		
	Channel 128	**Channel 190**	**Channel 251**
	824.2MHz	**836.6MHz**	**848.8MHz**
Before Test (dBm)	32.49	32.69	32.51
After Test (dBm)	32.48	32.68	32.51
GSM 850+EGPRS	Conducted Power		
	Channel 128	**Channel 190**	**Channel 251**
	824.2MHz	**836.6MHz**	**848.8MHz**
Before Test (dBm)	27.30	26.22	27.97
After Test (dBm)	27.30	26.22	27.96
GSM 1900	Conducted Power		
	Channel 512	**Channel 661**	**Channel 810**
	1850.2MHz	**1880MHz**	**1909.8MHz**
Before Test (dBm)	29.01	28.94	28.87
After Test (dBm)	29.00	28.94	28.87
GSM 1900+GPRS	Conducted Power		
	Channel 512	**Channel 661**	**Channel 810**
	1850.2MHz	**1880MHz**	**1909.8MHz**
Before Test (dBm)	29.02	28.93	28.87
After Test (dBm)	29.01	28.92	28.86
GSM 1900+EGPRS	Conducted Power		
	Channel 512	**Channel 661**	**Channel 810**
	1850.2MHz	**1880MHz**	**1909.8MHz**
Before Test (dBm)	27.57	26.34	25.68
After Test (dBm)	27.57	26.33	25.67

WCDMA BAND II (12.2kbps RMC)	Conducted Power		
	Channel 9262	**Channel 9400**	**Channel 9538**
	1852.4MHz	**1880MHz**	**1907.6MHz**
Before Test (dBm)	22.55	22.41	22.90
After Test (dBm)	22.54	22.40	22.91
WCDMA BAND II (64kbps RMC)	Conducted Power		
	Channel 9262	**Channel 9400**	**Channel 9538**
	1852.4MHz	**1880MHz**	**1907.6MHz**
Before Test (dBm)	22.56	22.42	22.91
After Test (dBm)	22.55	22.41	22.92
WCDMA BAND II (144kbps RMC)	Conducted Power		
	Channel 9262	**Channel 9400**	**Channel 9538**
	1852.4MHz	**1880MHz**	**1907.6MHz**
Before Test (dBm)	22.55	22.41	22.91
After Test (dBm)	22.55	22.41	22.91
WCDMA BAND II (384kbps RMC)	Conducted Power		
	Channel 9262	**Channel 9400**	**Channel 9538**
	1852.4MHz	**1880MHz**	**1907.6MHz**
Before Test (dBm)	22.56	22.42	22.89
After Test (dBm)	22.56	22.42	22.90
WCDMA BAND II+ HSDPA (Sub-Test 1)	Conducted Power		
	Channel 9262	**Channel 9400**	**Channel 9538**
	1852.4MHz	**1880MHz**	**1907.6MHz**
Before Test (dBm)	22.54	22.40	22.91
After Test (dBm)	22.54	22.40	22.91
WCDMA BAND II+ HSDPA (Sub-Test 2)	Conducted Power		
	Channel 9262	**Channel 9400**	**Channel 9538**
	1852.4MHz	**1880MHz**	**1907.6MHz**
Before Test (dBm)	22.54	22.40	22.89
After Test (dBm)	22.54	22.40	22.90
WCDMA BAND II+ HSDPA (Sub-Test 3)	Conducted Power		
	Channel 9262	**Channel 9400**	**Channel 9538**
	1852.4MHz	**1880MHz**	**1907.6MHz**
Before Test (dBm)	22.53	22.40	22.89
After Test (dBm)	22.54	22.39	22.88
WCDMA BAND II+ HSDPA (Sub-Test 4)	Conducted Power		
	Channel 9262	**Channel 9400**	**Channel 9538**
	1852.4MHz	**1880MHz**	**1907.6MHz**
Before Test (dBm)	22.53	22.39	22.89
After Test (dBm)	22.53	22.40	22.89

WCDMA BAND V (12.2kbps RMC)	Conducted Power		
	Channel 4132	Channel 4182	Channel 4233
	826.4MHz	836.4MHz	846.6MHz
Before Test (dBm)	22.51	22.63	22.40
After Test (dBm)	22.51	22.63	22.41
WCDMA BAND V (64kbps RMC)	Conducted Power		
	Channel 4132	Channel 4182	Channel 4233
	826.4MHz	836.4MHz	846.6MHz
Before Test (dBm)	22.50	22.62	22.39
After Test (dBm)	22.51	22.61	22.39
WCDMA BAND V (144kbps RMC)	Conducted Power		
	Channel 4132	Channel 4182	Channel 4233
	826.4MHz	836.4MHz	846.6MHz
Before Test (dBm)	22.50	22.62	22.40
After Test (dBm)	22.49	22.62	22.40
WCDMA BAND V (384kbps RMC)	Conducted Power		
	Channel 4132	Channel 4182	Channel 4233
	826.4MHz	836.4MHz	846.6MHz
Before Test (dBm)	22.51	22.62	22.41
After Test (dBm)	22.50	22.62	22.41
WCDMA BAND V + HSDPA (Sub-Test 1)	Conducted Power		
	Channel 4132	Channel 4182	Channel 4233
	826.4MHz	836.4MHz	846.6MHz
Before Test (dBm)	22.51	22.65	22.42
After Test (dBm)	22.50	22.64	22.41
WCDMA BAND V + HSDPA (Sub-Test 2)	Conducted Power		
	Channel 4132	Channel 4182	Channel 4233
	826.4MHz	836.4MHz	846.6MHz
Before Test (dBm)	22.50	22.64	22.41
After Test (dBm)	22.50	22.64	22.41
WCDMA BAND V + HSDPA (Sub-Test 3)	Conducted Power		
	Channel 4132	Channel 4182	Channel 4233
	826.4MHz	836.4MHz	846.6MHz
Before Test (dBm)	22.52	22.62	22.39
After Test (dBm)	22.50	22.63	22.40
WCDMA BAND V + HSDPA (Sub-Test 4)	Conducted Power		
	Channel 4132	Channel 4182	Channel 4233
	826.4MHz	836.4MHz	846.6MHz
Before Test (dBm)	22.50	22.62	22.40
After Test (dBm)	22.50	22.63	22.41

9. TEST RESULTS

9.1. Dielectric Performance

Table 10: Dielectric Performance of Head Tissue Simulating Liquid

Measurement is made at temperature 22.5 °C and relative humidity 51%. Liquid temperature during the test: 22.3°C					
Frequency (MHz)		**Target value**	**Measurement value**	**Difference percentage**	
835 (Brain)	Permittivity ε_r	41.50	41.21	-0.70	%
	Conductivity σ	0.90	0.89	-1.11	%
1900 (Brain)	Permittivity ε_r	40.0	39.98	-0.05	%
	Conductivity σ	1.40	1.41	0.71	%

Table 11: Dielectric Performance of Body Tissue Simulating Liquid

Measurement is made at temperature 22.5 °C and relative humidity 51%. Liquid temperature during the test: 22.3°C					
Frequency (MHz)		**Target value**	**Measurement value**	**Difference percentage**	
835 (Body)	Permittivity ε_r	55.20	54.33	-1.58	%
	Conductivity σ	0.97	0.98	1.03	%
1900 (Body)	Permittivity ε_r	53.30	53.23	-0.13	%
	Conductivity σ	1.52	1.56	2.63	%

9.2. System Validation Results

Table 12: System Validation

Measurement is made at temperature 23.2 °C, relative humidity 50%, and input power 250 mW. Liquid temperature during the test: 22.3°C						
Liquid parameters	**Frequency**	**Permittivity ε**		**Conductivity σ (S/m)**		
	835MHz	41.21		0.89		
	1900MHz	39.98		1.41		
Verification results	**Frequency**	**Target value (W/kg)**		**Measurement value (W/kg)**		**Difference percentage**
		10 g Average	**1 g Average**	**10 g Average**	**1 g Average**	**10 g Average** / **1g Average**

Verification results	**Frequency**	**10 g Average**	**1 g Average**	**10 g Average**	**1 g Average**	**10 g Average**	**1g Average**
	835MHz	1.52	2.30	1.50	2.30	-1.32%	0.00%
	1900MHz	5.06	9.84	5.09	9.74	0.59%	-1.02%

Note   1. Target Values used derive from the SPEAG calibration certificate and 250 mW is used as feeding power to the validation dipole (SPEAG using).

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

3. The graph results see ANNEX C.

9.3. Summary of Measurement Results

Table 13: SAR Values (GSM 850,open)

Liquid Temperature: 22.5					
Limit of SAR (W/kg)		**10 g Average**	**1 g Average**	**Power Drift (dB)**	**Graph Results**
		2.0	**1.6**	**± 0.21**	
Different Test Position	**Channel**	**Measurement Result(W/kg)**		**Power Drift(dB)**	
		10 g Average	**1 g Average**		
Test position of Head					
Left hand, Touch cheek	High	0.437	0.588	0.080	Figure 7
	Middle	0.434	0.583	-0.049	Figure 9
	Low	0.467	0.625	-0.070	Figure 11
Left hand, Tilt 15 Degree	High	0.269	0.371	-0.033	Figure 13
	Middle	0.276	0.379	0.015	Figure 15
	Low	0.257	0.351	-0.045	Figure 17
Right hand, Touch cheek	High	0.448	0.604	-0.022	Figure 19
	Middle	0.456	0.614	-0.062	Figure 21
	Low	0.472	0.635	-0.051	Figure 23
Right hand, Tilt 15 Degree	High	0.279	0.384	0.024	Figure 25
	Middle	0.296	0.404	-0.030	Figure 27
	Low	0.256	0.348	-0.097	Figure 29
Test position of Body (Distance 15mm)					
Towards Ground	High	0.546	0.746	-0.084	Figure 31
	Middle	0.565	0.770	-0.004	Figure 33
	Low	**0.596**	**0.808**	-0.003	Figure 35
Towards Phantom	High	0.503	0.686	0.021	Figure 37
	Middle	0.519	0.705	-0.013	Figure 39
	Low	0.534	0.722	-0.017	Figure 41
Worst case of Body with earphone (Distance 15mm)					
Towards Ground	Low	0.352	0.477	-0.164	Figure 43
Worst case of Body with Bluetooth earphone (Distance 15mm)					
Towards Ground	Low	0.533	0.724	-0.080	Figure 45
Test position of Body with GPRS(Distance 15mm)					
Towards Ground	High	0.941	1.280	-0.157	Figure 47
	Middle	0.951	1.310	-0.039	Figure 49
	Low	0.960	1.300	-0.189	Figure 51
Towards Phantom	High	0.933	1.290	-0.045	Figure 53
	Middle	0.955	1.310	-0.105	Figure 55
	Low	0.960	1.300	-0.061	Figure 57
Worst case of GPRS with EGPRS (Distance 15mm)					
Towards Phantom	Middle	0.219	0.301	-0.130	Figure 59

Note: 1.The value with blue color is the maximum SAR Value of each test band in head and body.

2. Tests in body position were performed with 15 mm air gap between DUT and Phantom to simulate the use of a non-metallic belt-clip or holster.

Table 14: SAR Values (GSM 850,close)

Liquid Temperature: 22.5					
Limit of SAR (W/kg)		**10 g Average**	**1 g Average**	**Power Drift (dB)**	**Graph Results**
		2.0	**1.6**	$\pm$ **0.21**	
Different Test Position	**Channel**	**Measurement Result(W/kg)**		**Power Drift(dB)**	
		10 g Average	**1 g Average**		
Test position of Head					
Left hand, Touch cheek	High	0.151	0.223	-0.139	Figure 61
	Middle	0.137	0.203	-0.133	Figure 63
	Low	0.133	0.196	0.169	Figure 65
Left hand, Tilt 15 Degree	High	0.102	0.140	-0.164	Figure 67
	Middle	0.093	0.127	0.034	Figure 69
	Low	0.093	0.126	0.028	Figure 71
Right hand, Touch cheek	High	0.124	0.183	0.067	Figure 73
	Middle	0.115	0.169	0.145	Figure 75
	Low	0.113	0.165	0.152	Figure 77
Right hand, Tilt 15 Degree	High	0.082	0.113	-0.077	Figure 79
	Middle	0.081	0.110	-0.052	Figure 81
	Low	0.080	0.108	-0.009	Figure 83
Test position of Body (Distance 15mm)					
Towards Ground	High	**0.239**	**0.356**	0.019	Figure 85
	Middle	0.220	0.328	0.055	Figure 87
	Low	0.210	0.312	0.076	Figure 89
Towards Phantom	High	0.102	0.142	-0.122	Figure 91
	Middle	0.093	0.129	-0.138	Figure 93
	Low	0.087	0.120	0.127	Figure 95
Worst case of Body with earphone (Distance 15mm)					
Towards Ground	High	0.236	0.351	-0.147	Figure 97
Worst case of Body with Bluetooth earphone (Distance 15mm)					
Towards Ground	High	0.217	0.332	-0.088	Figure 99
Test position of Body with GPRS(Distance 15mm)					
Towards Ground	High	0.386	0.571	0.088	Figure 101
	Middle	**0.399**	**0.591**	-0.078	Figure 103
	Low	0.380	0.564	-0.077	Figure 105
Towards Phantom	High	0.146	0.207	-0.118	Figure 107
	Middle	0.137	0.192	-0.192	Figure 109
	Low	0.132	0.182	-0.177	Figure 111
Worst case of GPRS with EGPRS (Distance 15mm)					
Towards Ground	Middle	0.088	0.130	0.150	Figure 113

Note: 1. Tests in body position were performed with 15 mm air gap between DUT and Phantom to simulate the use of a non-metallic belt-clip or holster.

Table 15: SAR Values (GSM 1900,open)

Liquid Temperature: 22.5					
Limit of SAR (W/kg)		**10 g Average**	**1 g Average**	**Power**	**Graph Results**
		2.0	**1.6**	**± 0.21**	
Different Test Position	**Channel**	**Measurement Result(W/kg)**		**Power**	
		10 g Average	**1 g Average**	**Drift(dB)**	
Test position of Head					
Left hand, Touch cheek	High	0.169(max.cube)	0.262(max.cube)	-0.199	Figure 115
	Middle	0.160(max.cube)	0.244(max.cube)	-0.001	Figure 117
	Low	0.152(max.cube)	0.232(max.cube)	0.053	Figure 119
Left hand, Tilt 15 Degree	High	0.148	0.253	-0.146	Figure 121
	Middle	0.133	0.223	-0.146	Figure 123
	Low	0.126	0.208	0.016	Figure 125
Right hand, Touch cheek	High	0.209	0.341	-0.098	Figure 127
	Middle	0.197	0.321	-0.042	Figure 129
	Low	0.197	0.321	-0.038	Figure 131
Right hand, Tilt 15 Degree	High	0.135	0.232	-0.016	Figure 133
	Middle	0.117	0.196	-0.004	Figure 135
	Low	0.120	0.198	0.027	Figure 137
Test position of Body (Distance 15mm)					
Towards Ground	High	**0.206(max.cube)**	**0.370(max.cube)**	-0.019	Figure 139
	Middle	0.180(max.cube)	0.324(max.cube)	0.075	Figure 141
	Low	0.175(max.cube)	0.315(max.cube)	0.057	Figure 143
Towards Phantom	High	0.098(max.cube)	0.155(max.cube)	0.020	Figure 145
	Middle	0.092(max.cube)	0.145(max.cube)	0.029	Figure 147
	Low	0.099(max.cube)	0.156(max.cube)	0.056	Figure 149
Worst case of Body with earphone (Distance 15mm)					
Towards Ground	High	0.154(max.cube)	0.270(max.cube)	0.170	Figure 151
Worst case of Body with Bluetooth earphone (Distance 15mm)					
Towards Ground	High	0.201(max.cube)	0.312(max.cube)	0.034	Figure 153
Test position of Body with GPRS(Distance 15mm)					
Towards Ground	High	**0.344(max.cube)**	**0.545(max.cube)**	0.004	Figure 155
	Middle	0.321(max.cube)	0.509(max.cube)	0.123	Figure 157
	Low	0.334(max.cube)	0.519(max.cube)	0.068	Figure 159
Towards Phantom	High	0.196(max.cube)	0.308(max.cube)	-0.147	Figure 161
	Middle	0.182(max.cube)	0.285(max.cube)	0.076	Figure 163
	Low	0.190(max.cube)	0.295(max.cube)	0.036	Figure 165
Worst case of GPRS with EGPRS (Distance 15mm)					
Towards Ground	High	0.149(max.cube)	0.260(max.cube)	0.085	Figure 167

Note: 1. Tests in body position were performed with 15 mm air gap between DUT and Phantom to simulate the use of a non-metallic belt-clip or holster.

2. The (max.cube) labeling indicates that during the grid scanning an additional peak was found which was within 2.0dB of the highest peak. The value of the highest cube is given in the table above; the value from the second assessed cube is given in the SAR distribution plots (See ANNEX B).

Table 16: SAR Values (GSM 1900, close)

Liquid Temperature: 22.5					
Limit of SAR (W/kg)		**10 g Average**	**1 g Average**	**Power**	**Graph Results**
		2.0	**1.6**	**± 0.21**	
Different Test Position	**Channel**	**Measurement Result(W/kg)**		**Power**	
		10 g Average	**1 g Average**	**Drift(dB)**	
Test position of Head					
Left hand, Touch cheek	High	0.335	0.560	0.138	Figure 169
	Middle	0.270(max.cube)	0.451(max.cube)	0.041	Figure 171
	Low	0.185(max.cube)	0.308(max.cube)	0.125	Figure 173
Left hand, Tilt 15 Degree	High	0.145	0.259	0.134	Figure 175
	Middle	0.119	0.210	0.084	Figure 177
	Low	0.100	0.174	0.106	Figure 179
Right hand, Touch cheek	High	0.279	0.436	0.103	Figure 181
	Middle	0.236 (max.cube)	0.367(max.cube)	0.135	Figure 183
	Low	0.178 (max.cube)	0.277 (max.cube)	-0.017	Figure 185
Right hand, Tilt 15 Degree	High	0.121	0.215	0.011	Figure 187
	Middle	0.104	0.183	0.074	Figure 189
	Low	0.087	0.152	0.093	Figure 191
Test position of Body (Distance 15mm)					
Towards Ground	High	**0.395**	**0.658**	0.070	Figure 193
	Middle	0.327	0.553	-0.022	Figure 195
	Low	0.225	0.384	0.037	Figure 197
Towards Phantom	High	0.098	0.153	-0.087	Figure 199
	Middle	0.083	0.130	0.019	Figure 201
	Low	0.061	0.095	0.063	Figure 203
Worst case of Body with earphone (Distance 15mm)					
Towards Ground	High	0.283	0.492	-0.081	Figure 205
Worst case of Body with Bluetooth earphone (Distance 15mm)					
Towards Ground	High	0.308	0.503	-0.086	Figure 207
Test position of Body with GPRS(Distance 15mm)					
Towards Ground	High	0.717	1.240	-0.166	Figure 209
	Middle	0.594	1.010	-0.006	Figure 211
	Low	0.415	0.715	0.071	Figure 213
Towards Phantom	High	0.178(max.cube)	0.277(max.cube)	-0.026	Figure 215
	Middle	0.141(max.cube)	0.219(max.cube)	-0.020	Figure 217
	Low	0.107(max.cube)	0.172(max.cube)	0.054	Figure 219
Worst case of GPRS with EGPRS (Distance 15mm)					
Towards Ground	High	0.317	0.531	0.006	Figure 221

Note: 1.The value with blue color is the maximum SAR Value of each test band in head and body.

2. Tests in body position were performed with 15 mm air gap between DUT and Phantom to simulate the use of a non-metallic belt-clip or holster.

3. The (max.cube) labeling indicates that during the grid scanning an additional peak was found which was within 2.0dB of the highest peak. The value of the highest cube is given in the table above; the value from the second assessed cube is given in the SAR distribution plots (See ANNEX B).

Table 17: SAR Values (WCDMA Band II,open)

Liquid Temperature: 22.5					
Limit of SAR (W/kg)		**10 g Average**	**1 g Average**	**Power Drift(dB)**	**Graph Results**
		2.0	**1.6**	**± 0.21**	
Different Test Position	**Channel**	**Measurement Result(W/kg)**		**Power Drift(dB)**	
		10 g Average	**1 g Average**		
Test position of Head					
Left hand, Touch cheek	High	0.310(max.cube)	0.494(max.cube)	0.093	Figure 223
	Middle	0.342(max.cube)	0.545(max.cube)	0.064	Figure 225
	Low	0.329(max.cube)	0.524(max.cube)	-0.138	Figure 227
Left hand, Tilt 15 Degree	High	0.273	0.455	0.194	Figure 229
	Middle	0.277	0.463	-0.127	Figure 231
	Low	0.280	0.462	-0.147	Figure 233
Right hand, Touch cheek	High	0.333	0.552	0.180	Figure 235
	Middle	0.339	0.559	-0.025	Figure 237
	Low	0.352	0.578	0.004	Figure 239
Right hand, Tilt 15 Degree	High	0.246	0.427	0.121	Figure 241
	Middle	0.241	0.410	0.015	Figure 243
	Low	0.254	0.424	-0.111	Figure 245
Test position of Body (Distance 15mm)					
Towards Ground	High	0.382	0.595	-0.098	Figure 247
	Middle	0.405	0.633	0.050	Figure 249
	Low	**0.442**	**0.688**	-0.114	Figure 251
Towards Phantom	High	0.214(max.cube)	0.338(max.cube)	0.036	Figure 253
	Middle	0.233(max.cube)	0.366(max.cube)	-0.053	Figure 255
	Low	0.257(max.cube)	0.402(max.cube)	-0.095	Figure 257
Worst case of Body with earphone (Distance 15mm)					
Towards Ground	Low	0.441(max.cube)	0.687(max.cube)	0.045	Figure 259
Worst case of Body with Bluetooth earphone (Distance 15mm)					
Towards Ground	Low	0.481	0.741	-0.022	Figure 261
Test position of Body with HSDPA(Distance 15mm)					
Towards Ground	Low	0.345(max.cube)	0.538(max.cube)	-0.124	Figure 263

Note: 1. Tests in body position were performed with 15 mm air gap between DUT and Phantom to simulate the use of a non-metallic belt-clip or holster.

2. The (max.cube) labeling indicates that during the grid scanning an additional peak was found which was within 2.0dB of the highest peak. The value of the highest cube is given in the table above; the value from the second assessed cube is given in the SAR distribution plots (See ANNEX B).

Table 18: SAR Values (WCDMA Band II,close)

Liquid Temperature: 22.5					
Limit of SAR (W/kg)		**10 g Average**	**1 g Average**	**Power Drift (dB)**	**Graph Results**
		2.0	**1.6**	**$\pm$ 0.21**	
Different Test Position	**Channel**	**Measurement Result(W/kg)**		**Power Drift(dB)**	
		10 g Average	**1 g Average**		
Test position of Head					
Left hand, Touch cheek	High	0.527	0.888	0.192	Figure 265
	Middle	0.491	0.820	-0.197	Figure 267
	Low	0.400(max.cube)	0.664(max.cube)	-0.151	Figure 269
Left hand, Tilt 15 Degree	High	0.209	0.369	0.183	Figure 271
	Middle	0.209	0.364	-0.015	Figure 273
	Low	0.192	0.333	0.074	Figure 275
Right hand, Touch cheek	High	0.428	0.664	0.011	Figure 277
	Middle	0.396	0.616	0.016	Figure 279
	Low	0.323(max.cube)	0.498(max.cube)	-0.012	Figure 281
Right hand, Tilt 15 Degree	High	0.178	0.309	-0.050	Figure 283
	Middle	0.174	0.303	0.164	Figure 285
	Low	0.152	0.264	0.126	Figure 287
Test position of Body (Distance 15mm)					
Towards Ground	High	**0.520**	**0.867**	0.102	Figure 289
	Middle	0.486	0.820	-0.025	Figure 291
	Low	0.378	0.643	-0.143	Figure 293
Towards Phantom	High	0.140(max.cube)	0.219(max.cube)	0.024	Figure 295
	Middle	0.133(max.cube)	0.208(max.cube)	0.048	Figure 297
	Low	0.123(max.cube)	0.192(max.cube)	0.021	Figure 299
Worst case of Body with earphone (Distance 15mm)					
Towards Ground	High	0.408	0.704	0.041	Figure 301
Worst case of Body with Bluetooth earphone (Distance 15mm)					
Towards Ground	High	0.539	0.893	-0.136	Figure 303
Test position of Body with EGPRS(Distance 15mm)					
Towards Ground	High	0.432	0.717	-0.150	Figure 305

Note: 1.The value with blue color is the maximum SAR Value of each test band in head and body.

2. Tests in body position were performed with 15 mm air gap between DUT and Phantom to simulate the use of a non-metallic belt-clip or holster.

3. The (max.cube) labeling indicates that during the grid scanning an additional peak was found which was within 2.0dB of the highest peak. The value of the highest cube is given in the table above; the value from the second assessed cube is given in the SAR distribution plots (See ANNEX B).

Table 19: SAR Values (WCDMA Band V,open)

Liquid Temperature: 22.5					
Limit of SAR (W/kg)		**10 g Average**	**1 g Average**	**Power Drift (dB)**	**Graph Results**
		2.0	**1.6**	**± 0.21**	
Different Test Position	**Channel**	**Measurement Result(W/kg)**		**Power Drift(dB)**	
		10 g Average	**1 g Average**		
Test position of Head					
Left hand, Touch cheek	High	0.415	0.556	-0.026	Figure 307
	Middle	0.369	0.496	0.019	Figure 309
	Low	0.407	0.544	-0.117	Figure 311
Left hand, Tilt 15 Degree	High	0.248	0.342	-0.080	Figure 313
	Middle	0.203	0.279	-0.171	Figure 315
	Low	0.253	0.347	-0.023	Figure 317
Right hand, Touch cheek	High	0.408	0.551	-0.049	Figure 319
	Middle	0.361	0.484	-0.129	Figure 321
	Low	0.401	0.537	-0.101	Figure 323
Right hand, Tilt 15 Degree	High	0.242	0.331	-0.020	Figure 325
	Middle	0.192	0.263	-0.004	Figure 327
	Low	0.234	0.317	-0.110	Figure 329
Test position of Body (Distance 15mm)					
Towards Ground	High	0.499	0.682	0.005	Figure 331
	Middle	0.483	0.659	0.081	Figure 333
	Low	0.485	0.656	0.022	Figure 335
Towards Phantom	High	0.459	0.628	-0.024	Figure 337
	Middle	0.432	0.588	-0.079	Figure 339
	Low	0.474	0.646	-0.082	Figure 341
Worst case of Body with earphone (Distance 15mm)					
Towards Ground	High	0.332	0.453	0.002	Figure 343
Worst case of Body with Bluetooth earphone (Distance 15mm)					
Towards Ground	High	0.448	0.612	-0.098	Figure 345
Test position of Body with HSDPA(Distance 15mm)					
Towards Ground	High	0.492	0.669	-0.131	Figure 347

Note: 1.The value with blue color is the maximum SAR Value of each test band in head and body.

2. Tests in body position were performed with 15 mm air gap between DUT and Phantom to simulate the use of a non-metallic belt-clip or holster.

Table 20: SAR Values (WCDMA Band V,close)

Liquid Temperature: 22.5					
Limit of SAR (W/kg)		**10 g Average**	**1 g Average**	**Power Drift (dB)**	**Graph Results**
		2.0	**1.6**	**± 0.21**	
Different Test Position	**Channel**	**Measurement Result(W/kg)**		**Power Drift(dB)**	
		10 g Average	**1 g Average**		
Test position of Head					
Left hand, Touch cheek	High	0.119	0.187	0.024	Figure 349
	Middle	0.194	0.301	-0.163	Figure 351
	Low	0.117	0.179	0.152	Figure 353
Left hand, Tilt 15 Degree	High	0.069	0.095	0.187	Figure 355
	Middle	0.122	0.167	-0.093	Figure 357
	Low	0.075	0.101	0.113	Figure 359
Right hand, Touch cheek	High	0.105	0.155	-0.104	Figure 361
	Middle	0.186	0.277	-0.021	Figure 363
	Low	0.113	0.170	0.000	Figure 365
Right hand, Tilt 15 Degree	High	0.083	0.114	-0.063	Figure 367
	Middle	0.126(max.cube)	0.171(max.cube)	-0.019	Figure 369
	Low	0.078	0.105	0.146	Figure 371
Test position of Body (Distance 15mm)					
Towards Ground	High	0.194	0.293	-0.038	Figure 373
	Middle	**0.309**	**0.462**	0.052	Figure 375
	Low	0.178	0.266	-0.133	Figure 377
Towards Phantom	High	0.065	0.091	0.072	Figure 379
	Middle	0.116	0.161	0.041	Figure 381
	Low	0.067	0.093	-0.153	Figure 383
Worst case of Body with earphone (Distance 15mm)					
Towards Ground	Middle	0.237	0.355	-0.016	Figure 385
Worst case of Body with Bluetooth earphone (Distance 15mm)					
Towards Ground	Middle	0.330	0.488	0.159	Figure 387
Test position of Body with HSDPA(Distance 15mm)					
Towards Ground	Middle	0.309	0.458	-0.056	Figure 389

Note: 1. Tests in body position were performed with 15 mm air gap between DUT and Phantom to simulate the use of a non-metallic belt-clip or holster.

2. The (max.cube) labeling indicates that during the grid scanning an additional peak was found which was within 2.0dB of the highest peak. The value of the highest cube is given in the table above; the value from the second assessed cube is given in the SAR distribution plots (See ANNEX B).

9.3.1. Bluetooth function

The distance between BT antenna and GSM antenna is <2.5cm. The location of the antennas inside mobile phone is shown below:
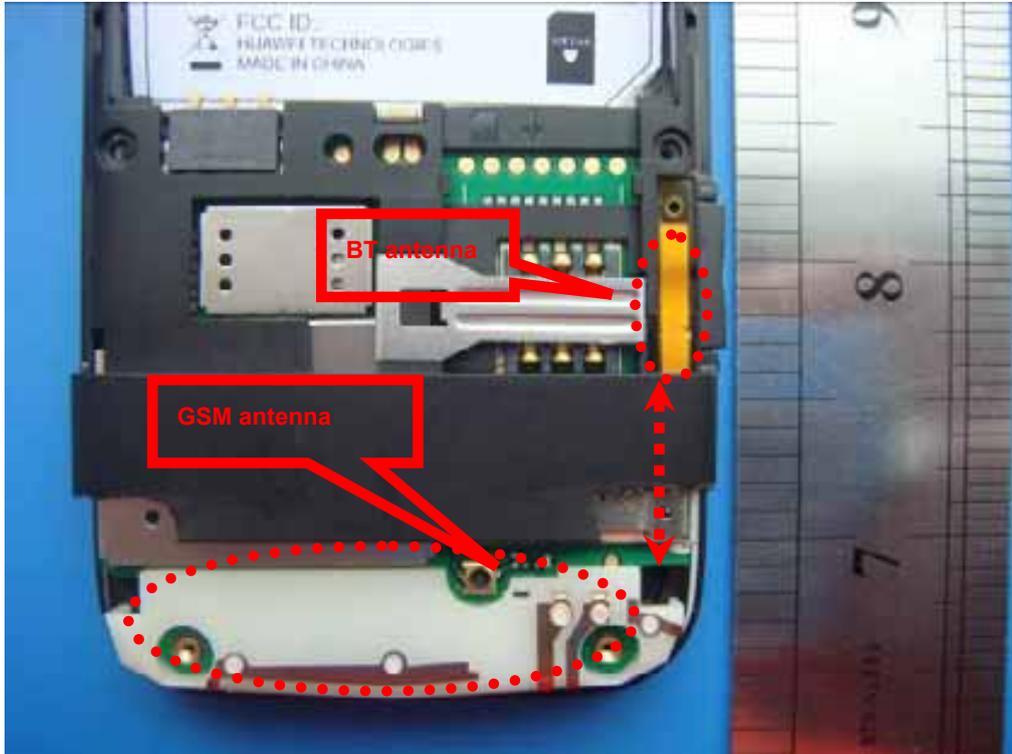
The output power of BT antenna is as following:

Channel	Ch 0 2402 MHz	Ch 39 2441 Mhz	Ch 78 2480 MHz
Peak Conducted Output Power(dBm)	-0.9	-1.2	-0.8

According to the output power measurement result and the distance between the two antennas, we can draw the conclusion that: stand-alone SAR is not required for BT transmitter, because the output power of BT transmitter is ≤P_{Ref} and the distance between the two antennas is within 2.5cm.

According to the output power measurement result and the distance between the two antennas, We didn't perform the standalone BT SAR tests, and just did the BT and license simultaneously SAR test with the request of the client.

Table 21: SAR Values (Open, GSM 850 with Bluetooth)

Liquid Temperature: 22.5					
Limit of SAR (W/kg)		**10 g Average**	**1 g Average**	**Power Drift (dB)**	**Graph Results**
		2.0	**1.6**	**± 0.2**	
Test Case Of Body		**Measurement Result (W/kg)**		**Power Drift (dB)**	
		10 g Average	**1 g Average**		
Different Test Position	**Channel**				
Towards Ground	Low	0.533	0.724	-0.080	Figure 45

Table 22: SAR Values (Close, GSM 850 with Bluetooth)

Liquid Temperature: 22.5					
Limit of SAR (W/kg)		**10 g Average**	**1 g Average**	**Power Drift (dB)**	**Graph Results**
		2.0	**1.6**	**± 0.2**	
Test Case Of Body		**Measurement Result (W/kg)**		**Power Drift (dB)**	
		10 g Average	**1 g Average**		
Different Test Position	**Channel**				
Towards Ground	High	0.217	0.332	-0.088	Figure 99

Table 23: SAR Values (Open, GSM 1900 with Bluetooth)

Liquid Temperature: 22.5					
Limit of SAR (W/kg)		**10 g Average**	**1 g Average**	**Power Drift (dB)**	**Graph Results**
		2.0	**1.6**	**± 0.2**	
Test Case Of Body		**Measurement Result (W/kg)**		**Power Drift (dB)**	
		10 g Average	**1 g Average**		
Different Test Position	**Channel**				
Towards Ground	High	0.201	0.312	0.034	Figure 153

Table 24: SAR Values (Close, GSM 1900 with Bluetooth)

Liquid Temperature: 22.5					
Limit of SAR (W/kg)		**10 g Average**	**1 g Average**	**Power Drift (dB)**	**Graph Results**
		2.0	**1.6**	**± 0.2**	
Test Case Of Body		**Measurement Result (W/kg)**		**Power Drift (dB)**	
		10 g Average	**1 g Average**		
Different Test Position	**Channel**				
Towards Ground	High	0.308	0.503	-0.086	Figure 207

Table 25: SAR Values (Open, WCDMA Band II with Bluetooth)

Liquid Temperature: 22.5					
Limit of SAR (W/kg)		**10 g Average**	**1 g Average**	**Power Drift (dB)**	**Graph Results**
		2.0	**1.6**	**± 0.2**	
Test Case Of Body		**Measurement Result (W/kg)**		**Power Drift (dB)**	
		10 g Average	**1 g Average**		
Different Test Position	**Channel**				
Towards Ground	Low	0.481	0.741	-0.022	Figure 261

Table 26: SAR Values (Close, WCDMA Band II with Bluetooth)

Liquid Temperature: 22.5					
Limit of SAR (W/kg)		**10 g Average**	**1 g Average**	**Power Drift (dB)**	**Graph Results**
		2.0	**1.6**	**± 0.2**	
Test Case Of Body		**Measurement Result (W/kg)**		**Power Drift (dB)**	
		10 g Average	**1 g Average**		
Different Test Position	**Channel**				
Towards Ground	High	0.539	0.893	-0.136	Figure 303

Table 27: SAR Values (Open, WCDMA Band V with Bluetooth)

Liquid Temperature: 22.5					
Limit of SAR (W/kg)		**10 g Average**	**1 g Average**	**Power Drift (dB)**	**Graph Results**
		2.0	**1.6**	**± 0.2**	
Test Case Of Body		**Measurement Result (W/kg)**		**Power Drift (dB)**	
		10 g Average	**1 g Average**		
Different Test Position	**Channel**				
Towards Ground	High	0.448	0.612	-0.098	Figure 345

Table 28: SAR Values (Close, WCDMA Band V with Bluetooth)

Liquid Temperature: 22.5					
Limit of SAR (W/kg)		**10 g Average**	**1 g Average**	**Power Drift (dB)**	**Graph Results**
		2.0	**1.6**	**± 0.2**	
Test Case Of Body		**Measurement Result (W/kg)**		**Power Drift (dB)**	
		10 g Average	**1 g Average**		
Different Test Position	**Channel**				
Towards Ground	Middle	0.330	0.488	0.159	Figure 387

10. 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 7.2 of this report. Maximum localized SAR is 0.88W/kg (head) and 1.31 W/kg (body) that are below exposure limits specified in the relevant standards cited in Clause 7.1 of this test report.

11. MEASUREMENT UNCERTAINTY

No.	a	Type	c	d	e=f(d k)	f	h=c×f e	k
	Uncertainty Component		Tol. (±%)	Prob. Dist	Div.	c_1(1g)	1g u (± %)	v_1
1	System repetivity	A	0.5	N	1	1	0.5	9
	Measurement system							
2	Probe Calibration	B	5	N	2	1	2.5	∞
3	Axial isotropy	B	4.7	R	$\sqrt{3}$	$(1-cp)_{1/2}$	4.3	∞
4	Hemisphere Isotropy	B	9.4	R	$\sqrt{3}$	$\sqrt{C_P}$		∞
5	Boundary Effect	B	0.4	R	$\sqrt{3}$	1	0.23	∞
6	Linearity	B	4.7	R	$\sqrt{3}$	1	2.7	∞
7	System Detection Limits	B	1.0	R	$\sqrt{3}$	1	0.6	∞
8	Readout Electronics	B	1.0	N	1	1	1.0	∞
9	RF Ambient Conditions	B	3.0	R	$\sqrt{3}$	1	1.73	∞
10	Probe Positioner Mechanical Tolerance	B	0.4	R	$\sqrt{3}$	1	0.2	∞
11	Probe Positioning with respect to Phantom Shell	B	2.9	R	$\sqrt{3}$	1	1.7	∞
12	Extrapolation, interpolation and Integration Algorithms for Max. SAR Evaluation	B	3.9	R	$\sqrt{3}$	1	2.3	∞
	Test Sample Related							
13	Test Sample Positioning	A	4.9	N	1	1	4.9	N-1
14	Device Holder Uncertainty	A	6.1	N	1	1	6.1	N-1
15	Output Power Variation-SAR drift measurement	B	5.0	R	$\sqrt{3}$	1	2.9	∞
	Phantom and Tissue Parameters							
16	Phantom Uncertainty(shape and thickness tolerances)	B	1.0	R	$\sqrt{3}$	1	0.6	∞
17	Liquid Conductivity-deviation from target values	B	5.0	R	$\sqrt{3}$	0.64	1.7	∞
18	Liquid Conductivity-measurement uncertainty	B	5.0	N	1	0.64	1.7	M
19	Liquid Permittivity-deviation from target values	B	5.0	R	$\sqrt{3}$	0.6	1.7	∞
20	Liquid Permittivity- measurement uncertainty	B	5.0	N	1	0.6	1.7	M
	Combined Standard Uncertainty			RSS			11.25	
	Expanded Uncertainty (95 % CONFIDENCE INTERVAL)			K=2			22.5	

12. MAIN TEST INSTRUMENTS

Table 29: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	Agilent 8753E	US37390326	September 14, 2008	One year
02	Dielectric Probe Kit	Agilent 85070E	US44020115	No Calibration Requested	
03	Power meter	Agilent E4417A	GB41291714	March 14, 2008	One year
04	Power sensor	Agilent 8481H	MY41091316	March 14, 2008	One year
05	Signal Generator	HP 8341B	2730A00804	September 14, 2008	One year
06	Amplifier	IXA-020	0401	No Calibration Requested	
07	BTS	E5515C	GB46490218	September 14, 2008	One year
08	E-field Probe	EX3DV4	3660	September 3, 2008	One year
09	DAE	DAE3	536	August 28, 2008	One year
10	Validation Kit 835MHz	D835V2	4d020	July 21, 2008	One year
11	Validation Kit 1900MHz	D1900V2	5d060	July 22, 2008	One year

13. TEST PERIOD

The test is performed from December 25, 2008 to January 5, 2009.

14. TEST LOCATION

The test is performed at TA Technology (Shanghai) Co., Ltd.

*****END OF REPORT BODY*****

ANNEX A   TEST LAYOUT

Picture 1: Specific Absorption Rate Test Layout
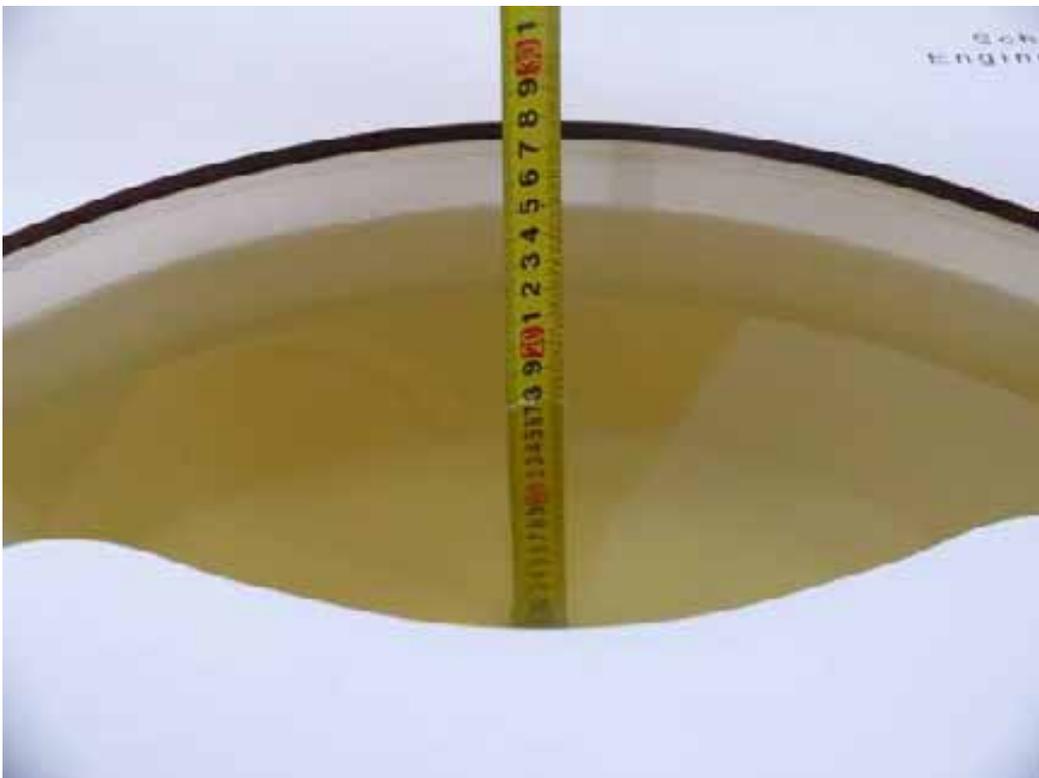
Picture 2: Liquid depth in the Flat Phantom (835 MHz)

ANNEX A   TEST LAYOUT
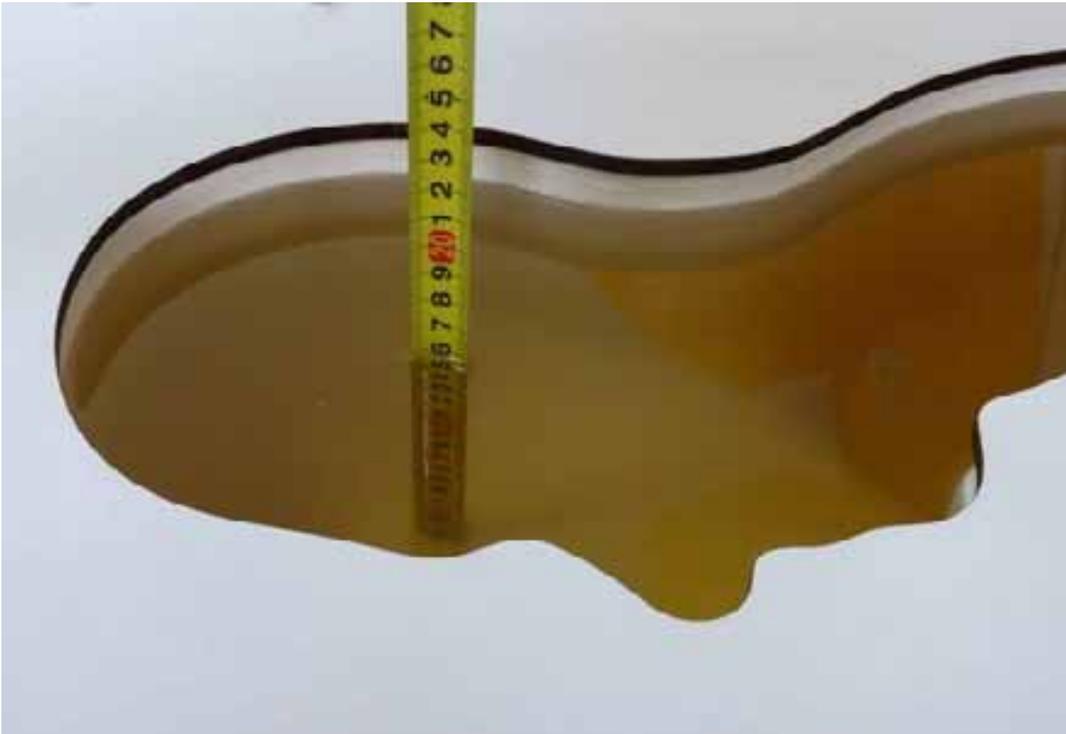
Picture 3: Liquid depth in the head Phantom (835 MHz)
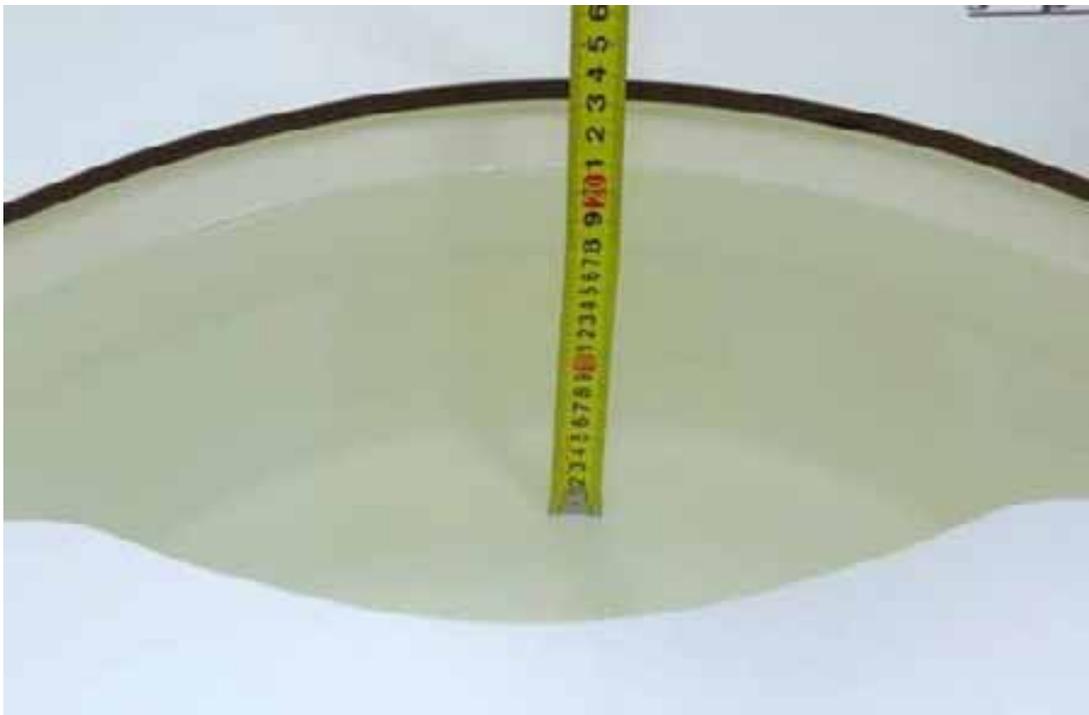
Picture 4:   Liquid depth in the flat Phantom (1900 MHz)

Picture 5: liquid depth in the head Phantom (1900 MHz)

ANNEX B   GRAPH RESULTS

Date/Time: 12/25/2008 6:51:07 AM

GSM 850 Left Cheek High

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 849 MHz; σ = 0.9 mho/m; ε_r = 41; ρ = 1000 kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek High/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.654 mW/g

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

Reference Value = 11.1 V/m; Power Drift = 0.080 dB

Peak SAR (extrapolated) = 0.752 W/kg

SAR(1 g) = 0.588 mW/g; SAR(10 g) = 0.437 mW/g

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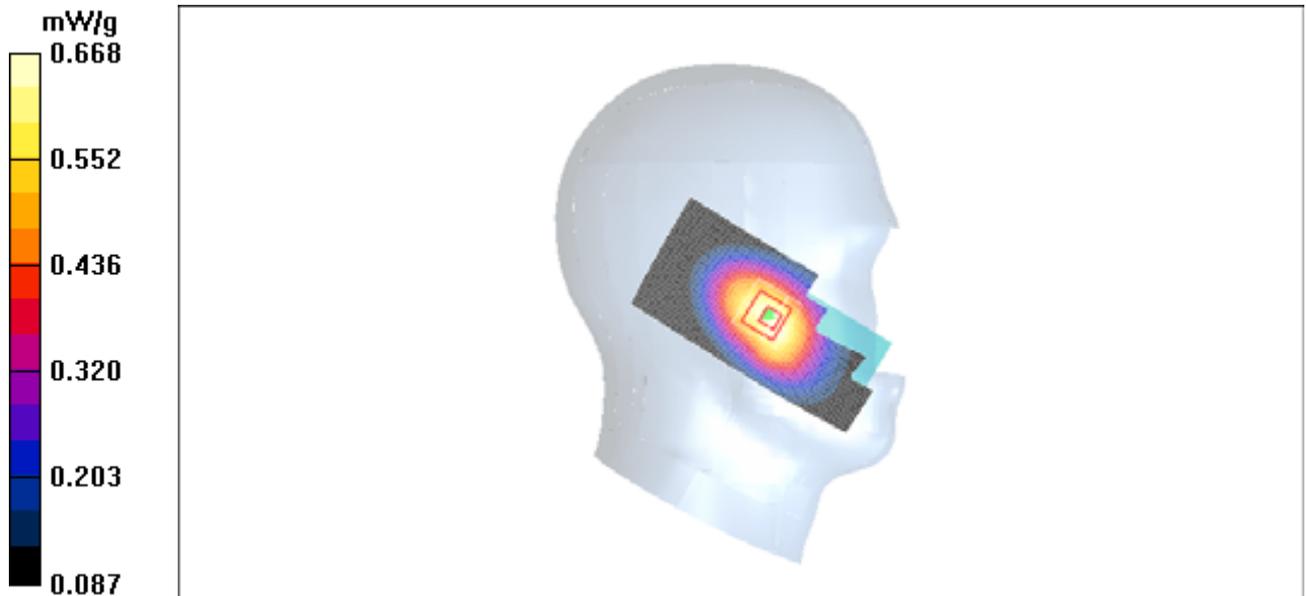

Figure 7 Left Hand Touch Cheek Open GSM 850 Channel 251
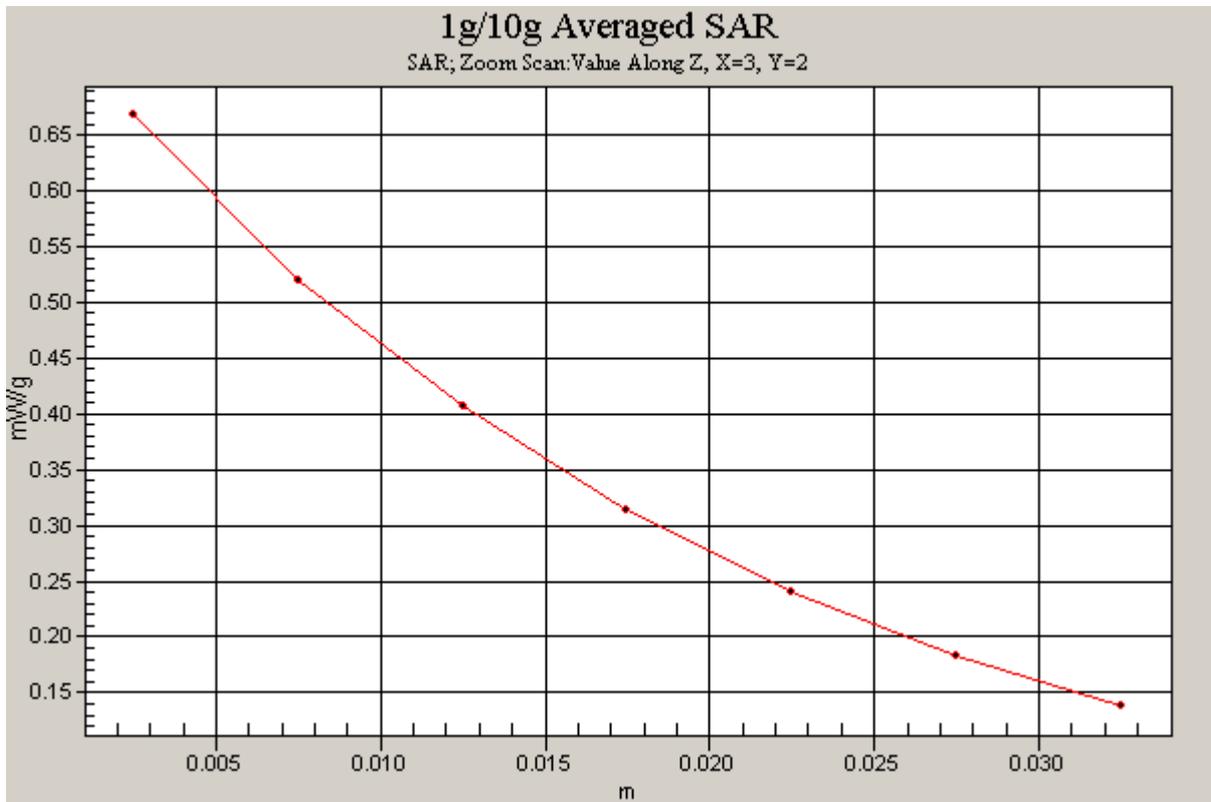
Figure 8 Z-Scan at power reference point (Left Hand Touch Cheek Open GSM 850 Channel 251)

Date/Time: 12/25/2008 7:10:54 AM

GSM 850 Left Cheek Middle Open

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz; σ = 0.889 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.666 mW/g

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

Reference Value = 11.3 V/m; Power Drift = -0.049 dB

Peak SAR (extrapolated) = 0.738 W/kg

SAR(1 g) = 0.583 mW/g; SAR(10 g) = 0.434 mW/g

Maximum value of SAR (measured) = 0.662 mW/g
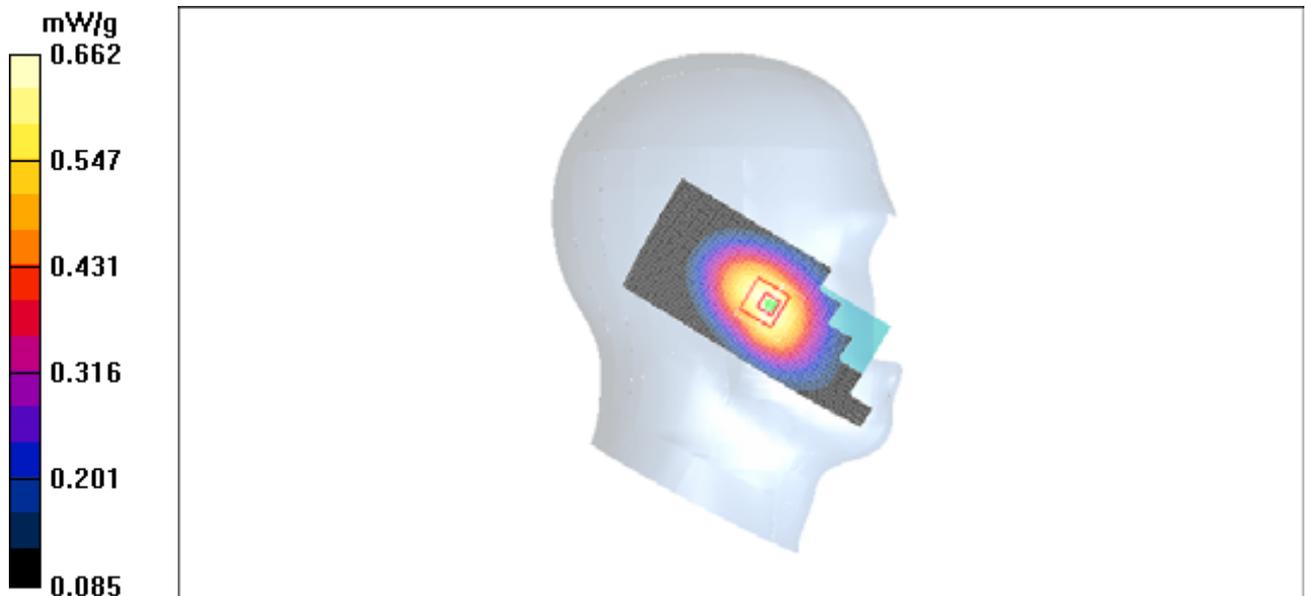
Figure 9 Left Hand Touch Cheek Open GSM 850 Channel 190
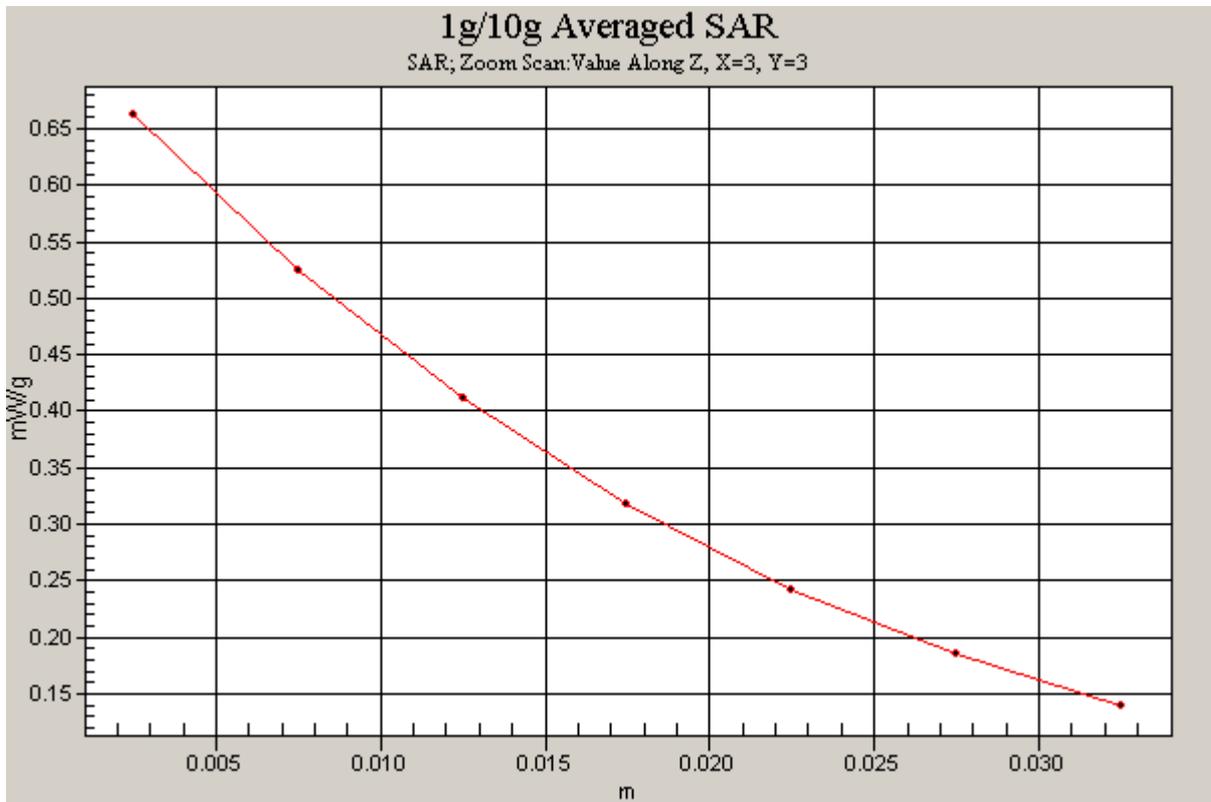
Figure 10 Z-Scan at power reference point (Left Hand Touch Cheek Open GSM 850 Channel 190)

Date/Time: 12/25/2008 7:33:54 AM

GSM 850 Left Cheek Low Open

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

Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.878 mho/m; $ε_r$ = 41.3; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Low/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.711 mW/g

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

Reference Value = 11.5 V/m; Power Drift = -0.070 dB

Peak SAR (extrapolated) = 0.787 W/kg

SAR(1 g) = 0.625 mW/g; SAR(10 g) = 0.467 mW/g

Maximum value of SAR (measured) = 0.706 mW/g
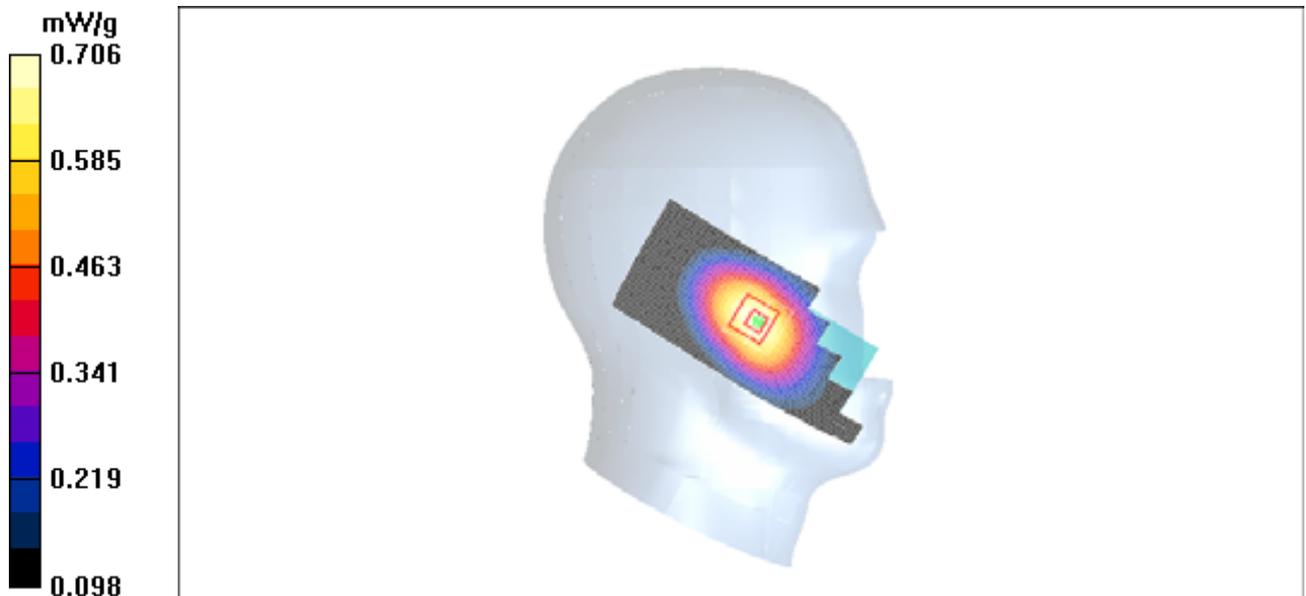

Figure 11 Left Hand Touch Cheek Open GSM 850 Channel 128
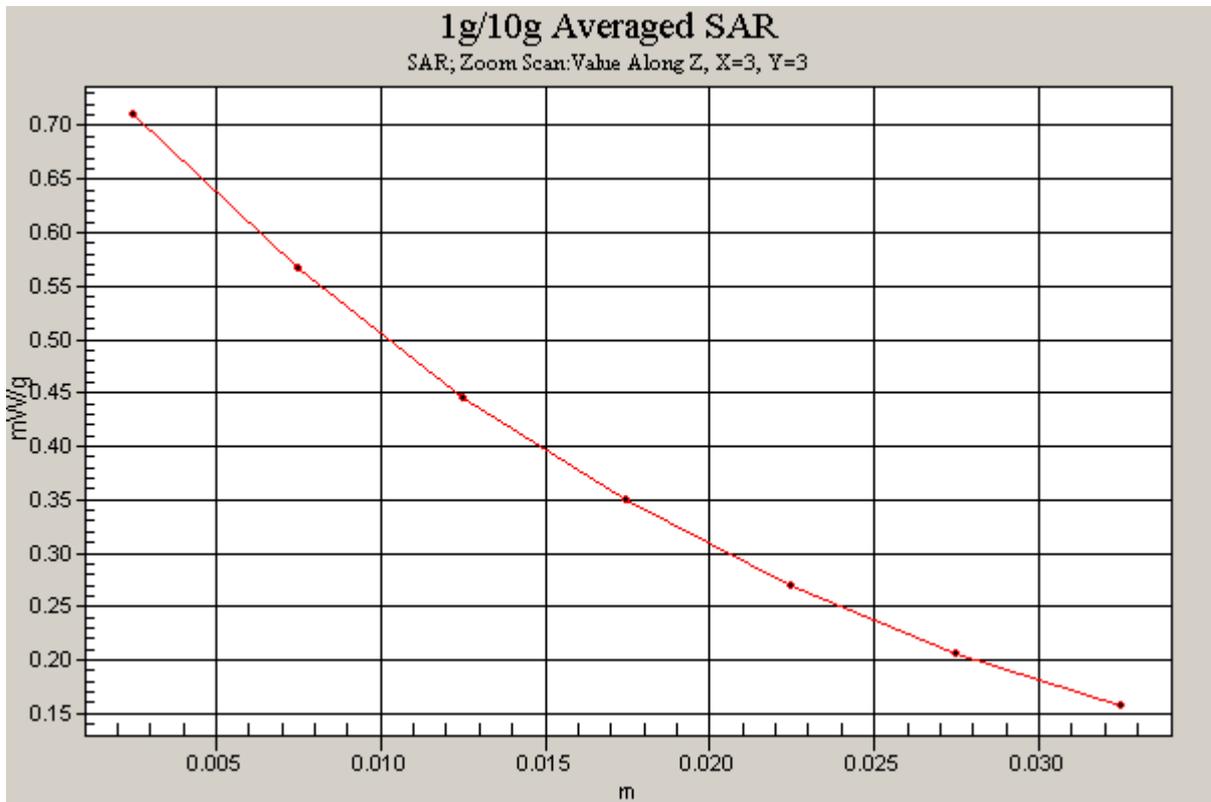
Figure 12 Z-Scan at power reference point (Left Hand Touch Cheek Open GSM 850 Channel 128)

Date/Time: 12/25/2008 7:53:59 AM

GSM 850 Left Tilt High Open

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 849 MHz; σ = 0.9 mho/m; $ε_r$ = 41; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt High/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.417 mW/g

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

Reference Value = 14.8 V/m; Power Drift = -0.033dB

Peak SAR (extrapolated) = 0.489 W/kg

SAR(1 g) = 0.371 mW/g; SAR(10 g) = 0.269 mW/g

Maximum value of SAR (measured) = 0.425 mW/g
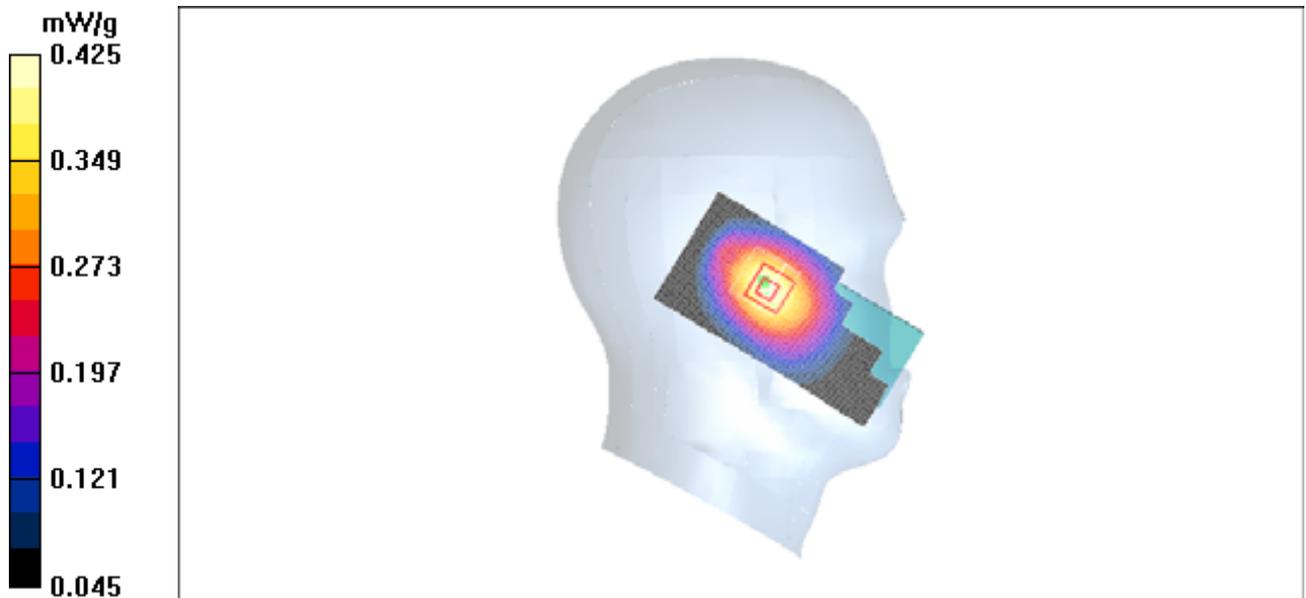
Figure 13 Left Hand Tilt 15°Open GSM 850 Channel 251
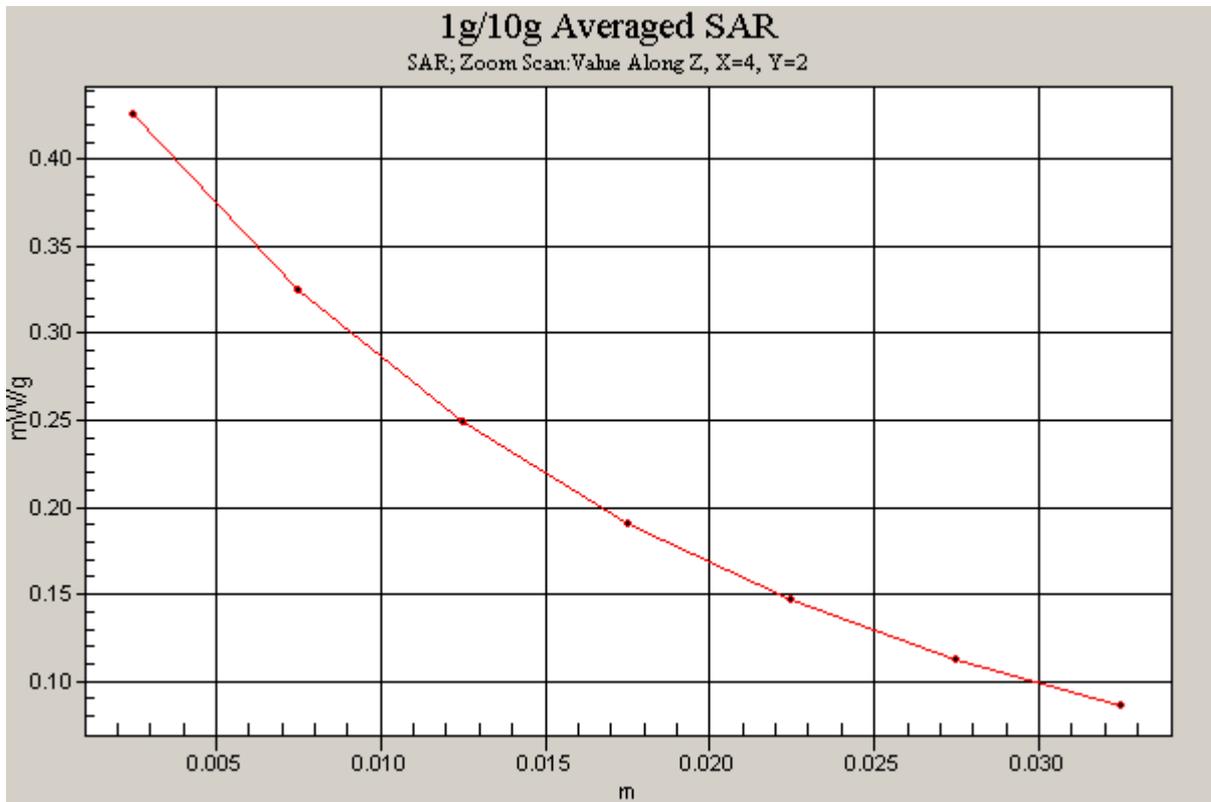
Figure 14 Z-Scan at power reference point (Left Hand Tilt 15°Open GSM 850 Channel 251)

Date/Time: 12/25/2008 8:12:31 AM

GSM 850 Left Tilt Middle Open

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz; σ = 0.889 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.425 mW/g

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

Reference Value = 15.0 V/m; Power Drift = 0.015 dB

Peak SAR (extrapolated) = 0.500 W/kg

SAR(1 g) = 0.379 mW/g; SAR(10 g) = 0.276 mW/g

Maximum value of SAR (measured) = 0.437 mW/g
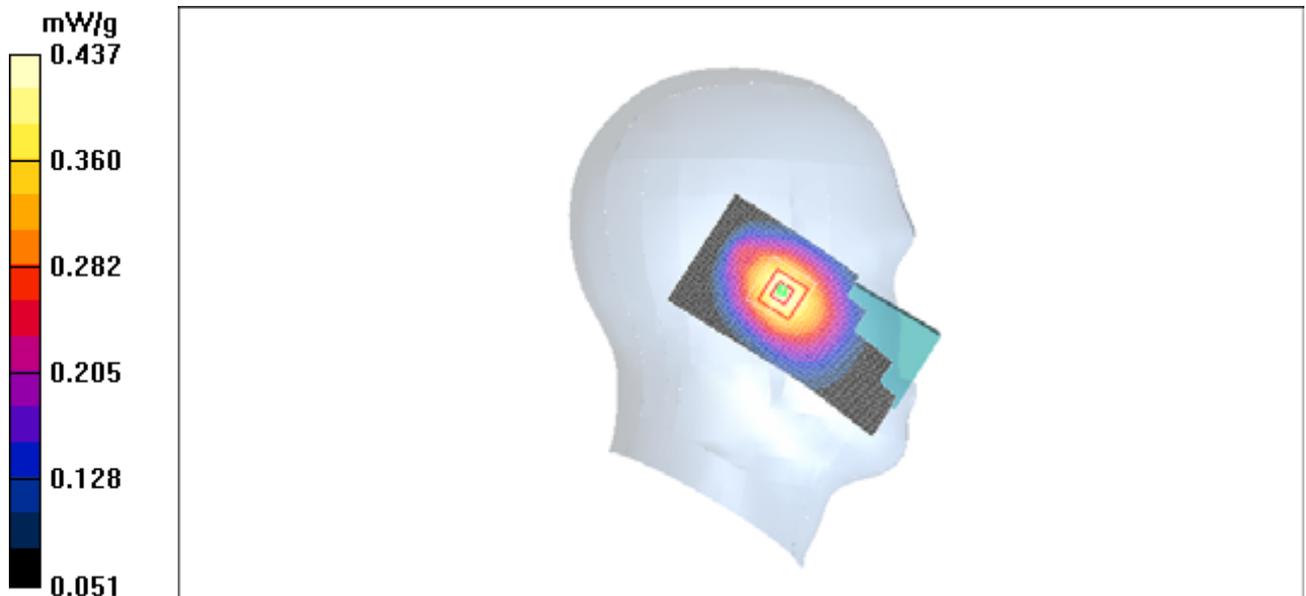
Figure 15 Left Hand Tilt 15°Open GSM 850 Channel 190
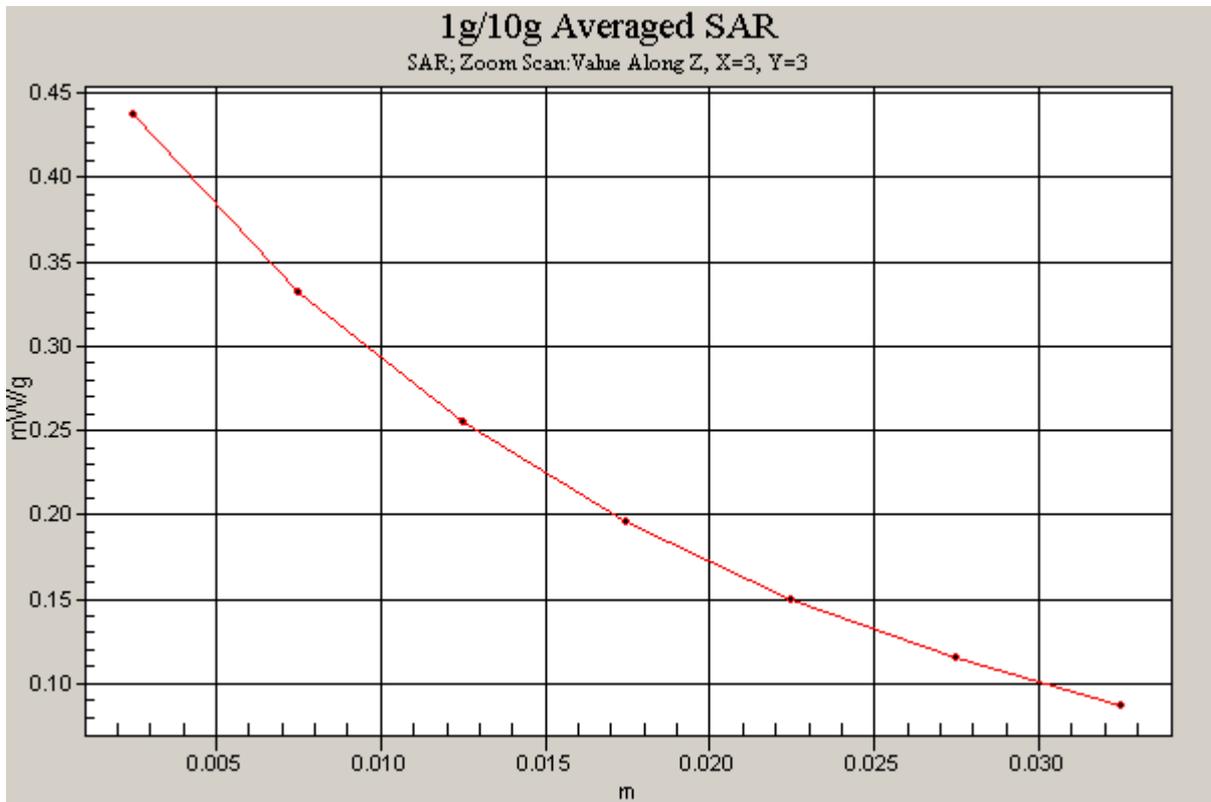
Figure 16 Z-Scan at power reference point (Left Hand Tilt 15°Open GSM 850 Channel 190)

Date/Time: 12/25/2008 8:31:09 AM

GSM 850 Left Tilt Low Open

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

Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.878 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Low/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.394 mW/g

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

Reference Value = 14.6 V/m; Power Drift = -0.045 dB

Peak SAR (extrapolated) = 0.460 W/kg

SAR(1 g) = 0.351 mW/g; SAR(10 g) = 0.257 mW/g

Maximum value of SAR (measured) = 0.401 mW/g
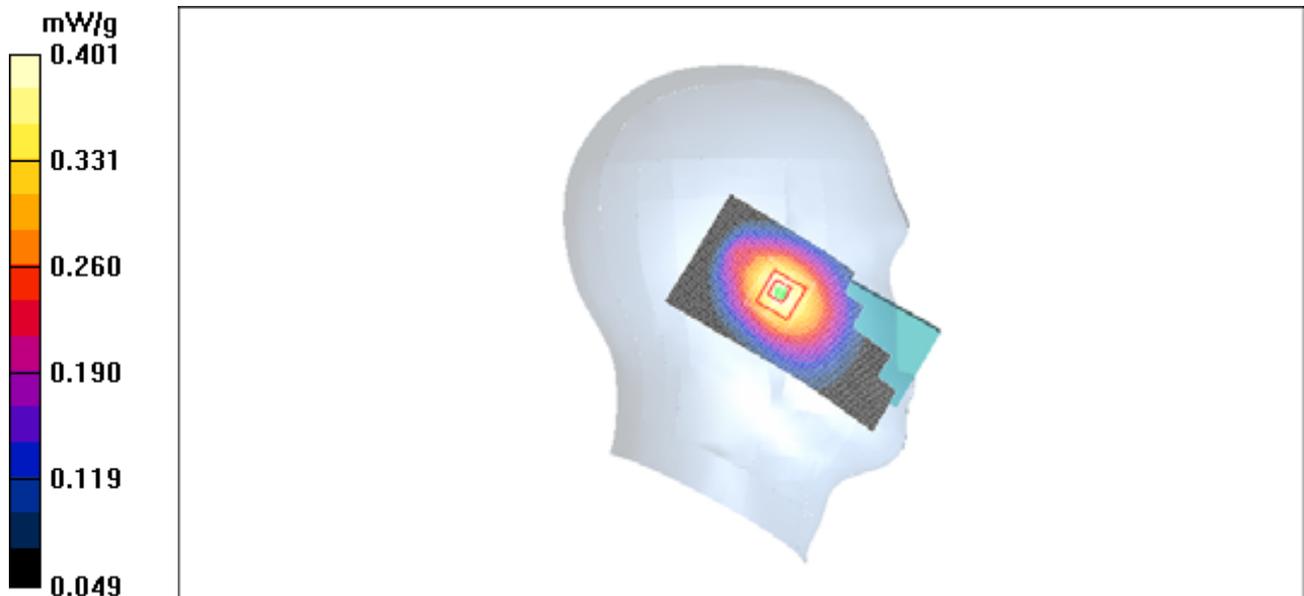
Figure 17 Left Hand Tilt 15°Open GSM 850 Channel 128
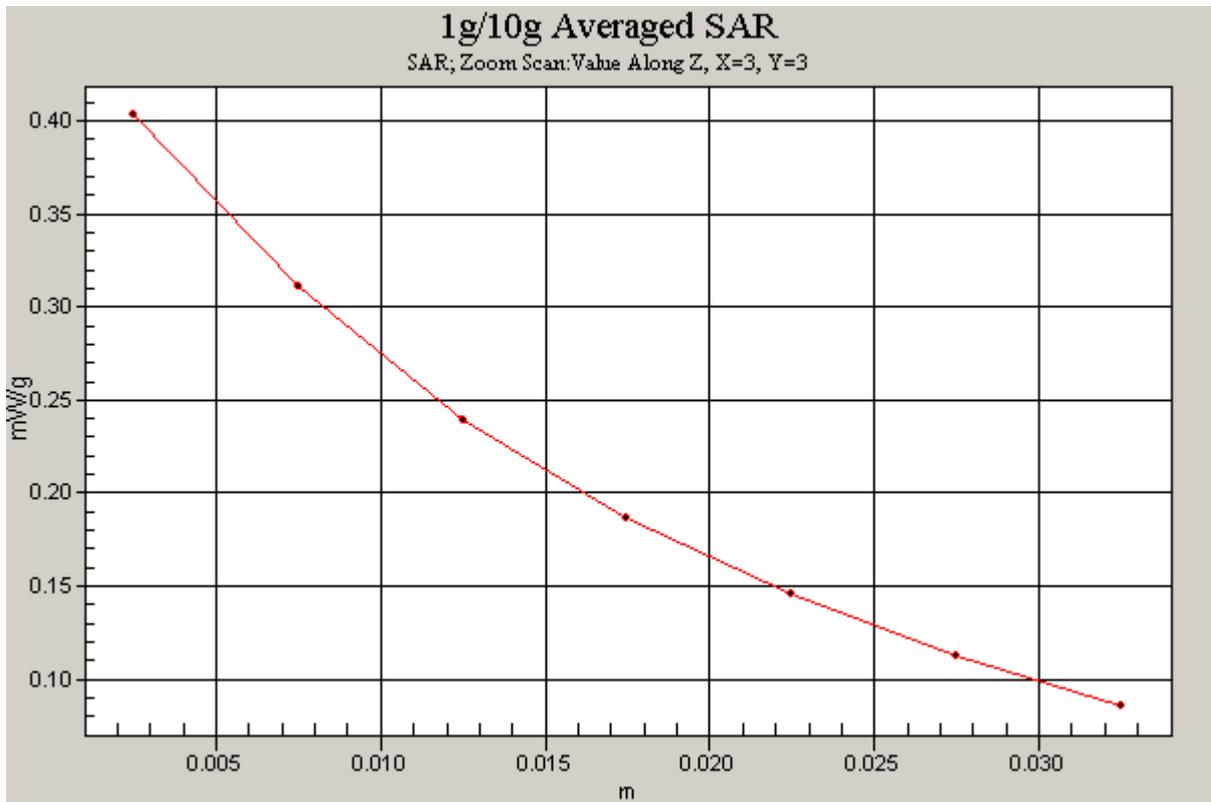
Figure 18 Z-Scan at power reference point (Left Hand Tilt 15°Open GSM 850 Channel 128)

Date/Time: 12/27/2008 8:13:25 PM

GSM 850 Right Cheek High Open

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 849 MHz; σ = 0.9 mho/m; ε_r = 41; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek High/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.701 mW/g

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

Reference Value = 10.8 V/m; Power Drift = -0.022 dB

Peak SAR (extrapolated) = 0.774 W/kg

SAR(1 g) = 0.604 mW/g; SAR(10 g) = 0.448 mW/g

Maximum value of SAR (measured) = 0.683 mW/g
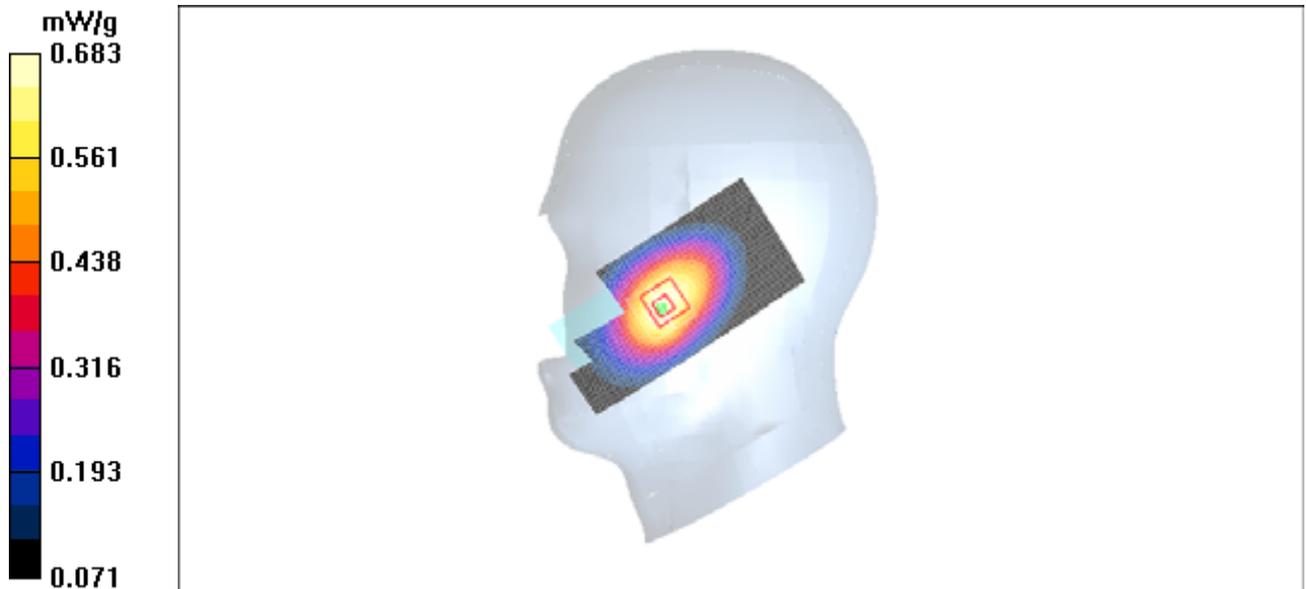
Figure 19 Right Hand Touch Cheek Open GSM 850 Channel 251
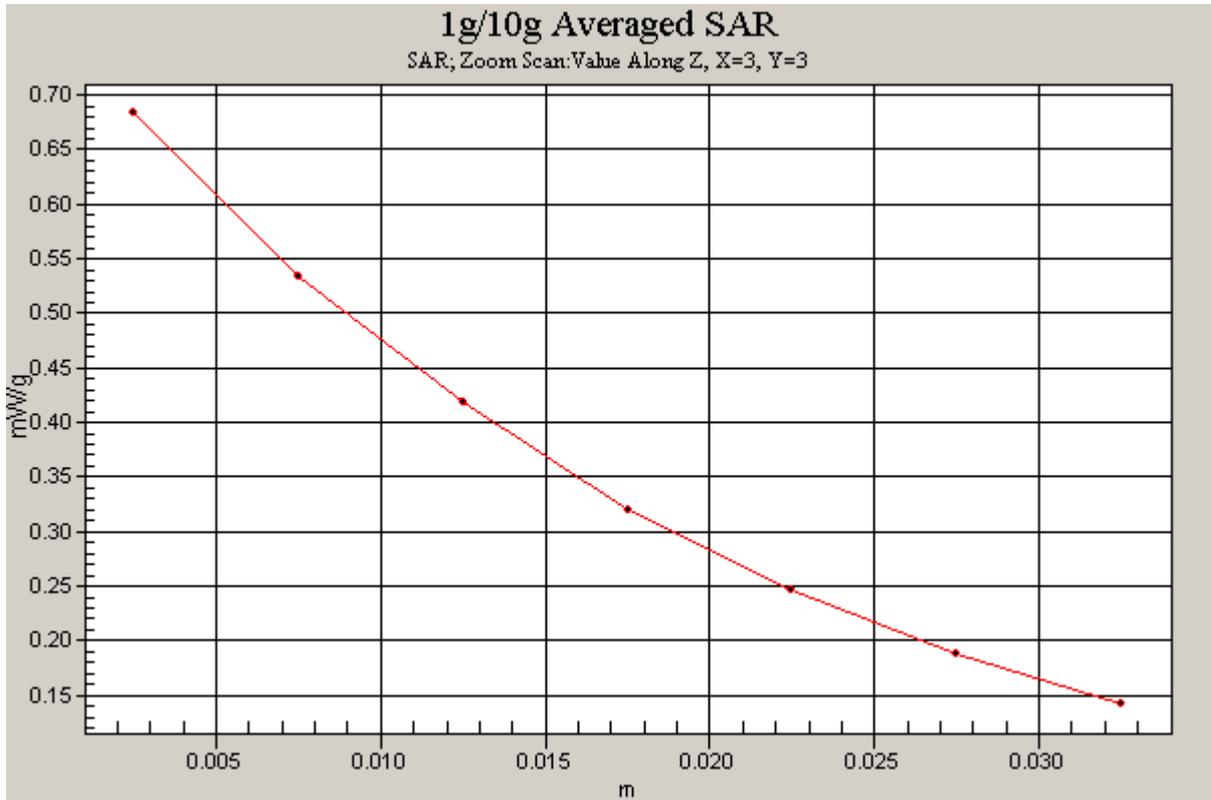
Figure 20 Z-Scan at power reference point (Right Hand Touch Cheek Open GSM 850 Channel 251)

Date/Time: 12/27/2008 8:32:34 PM

GSM 850 Right Cheek Middle Open

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz; σ = 0.889 mho/m; $ε_r$ = 41.2; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 11.0 V/m; Power Drift = -0.062 dB

Peak SAR (extrapolated) = 0.788 W/kg

SAR(1 g) = 0.614 mW/g; SAR(10 g) = 0.456 mW/g

Maximum value of SAR (measured) = 0.692 mW/g
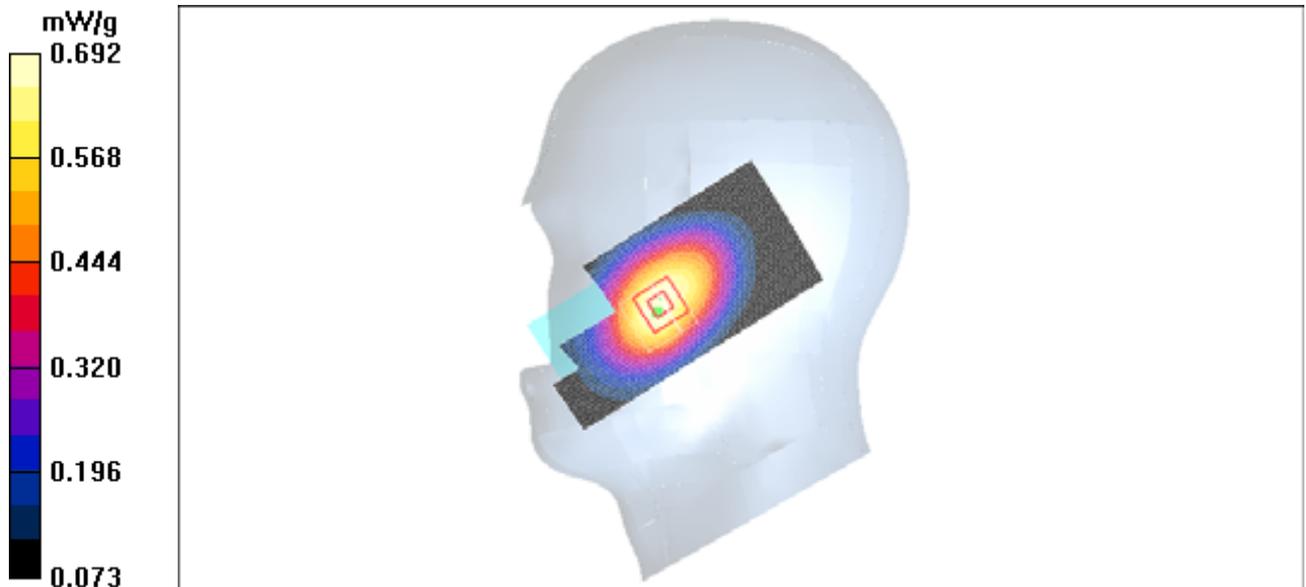
Figure 21 Right Hand Touch Cheek Open GSM 850 Channel 190
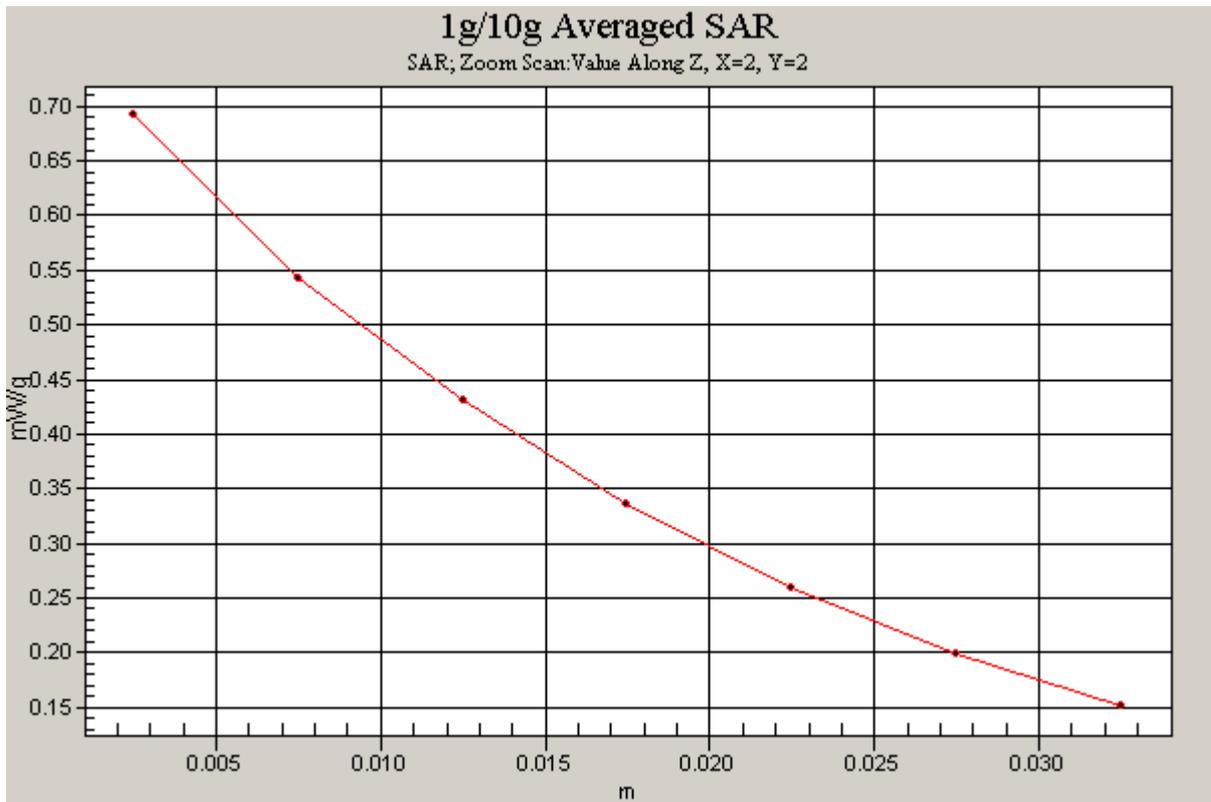
Figure 22 Z-Scan at power reference point (Right Hand Touch Cheek Open GSM 850 Channel 190)

Date/Time: 12/27/2008 8:51:45 PM

GSM 850 Right Cheek Low Open

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

Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.878 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Low/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.732 mW/g

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

Reference Value = 11.3 V/m; Power Drift = -0.051 dB

Peak SAR (extrapolated) = 0.805 W/kg

SAR(1 g) = 0.635 mW/g; SAR(10 g) = 0.472 mW/g

Maximum value of SAR (measured) = 0.717 mW/g
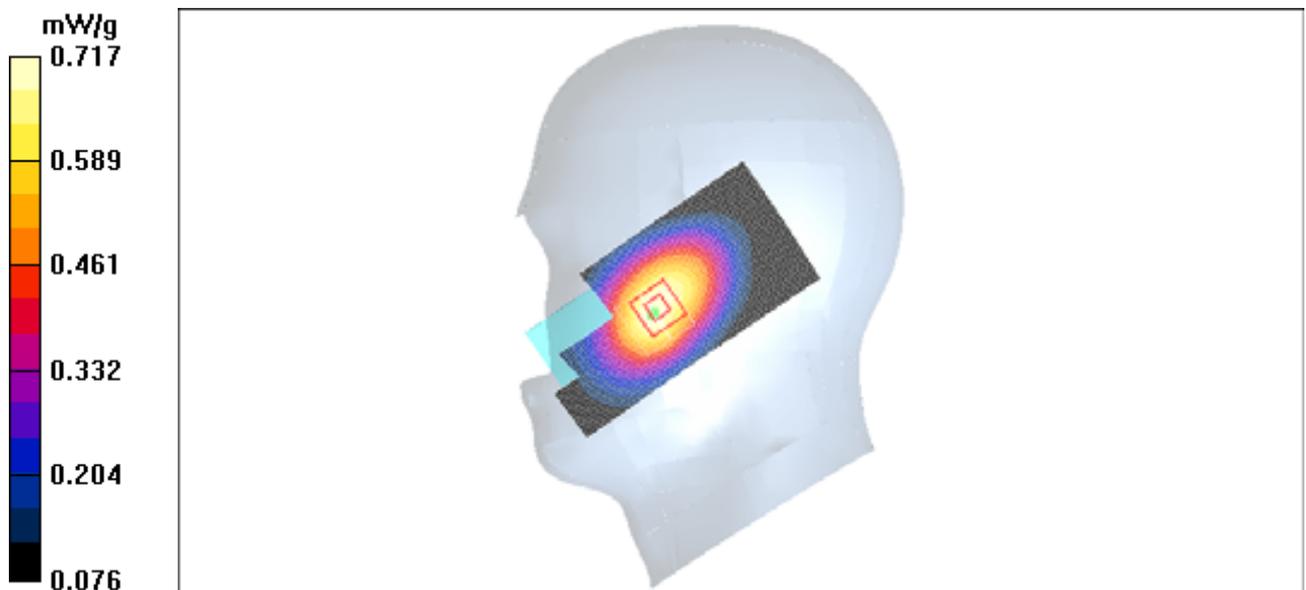
Figure 23 Right Hand Touch Cheek Open GSM 850 Channel 128
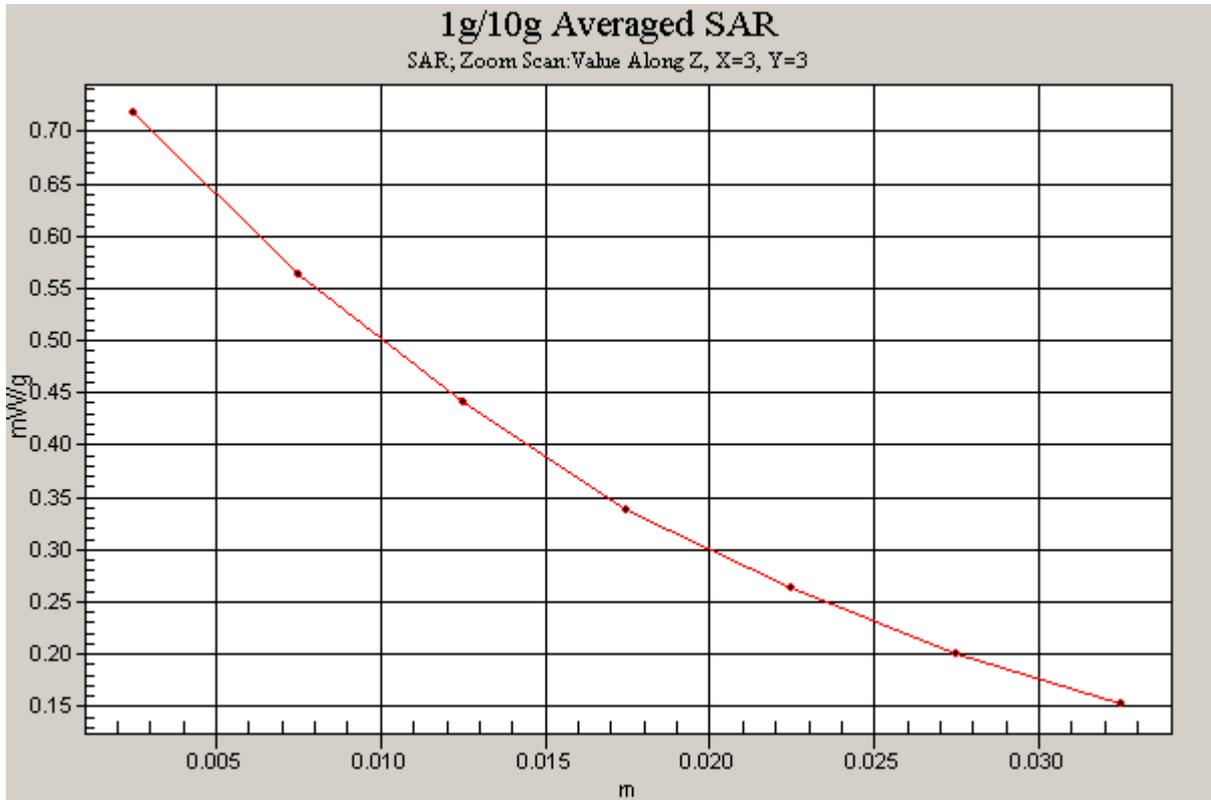
Figure 24 Z-Scan at power reference point (Right Hand Touch Cheek Open GSM 850 Channel 128)

Date/Time: 12/27/2008 9:48:31 PM

GSM 850 Right Tilt High Open

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 849 MHz; σ = 0.9 mho/m; $ε_r$ = 41; ρ = 1000 kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt High/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.434 mW/g

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

Reference Value = 14.9 V/m; Power Drift = 0.024 dB

Peak SAR (extrapolated) = 0.504 W/kg

SAR(1 g) = 0.384 mW/g; SAR(10 g) = 0.279 mW/g

Maximum value of SAR (measured) = 0.440 mW/g
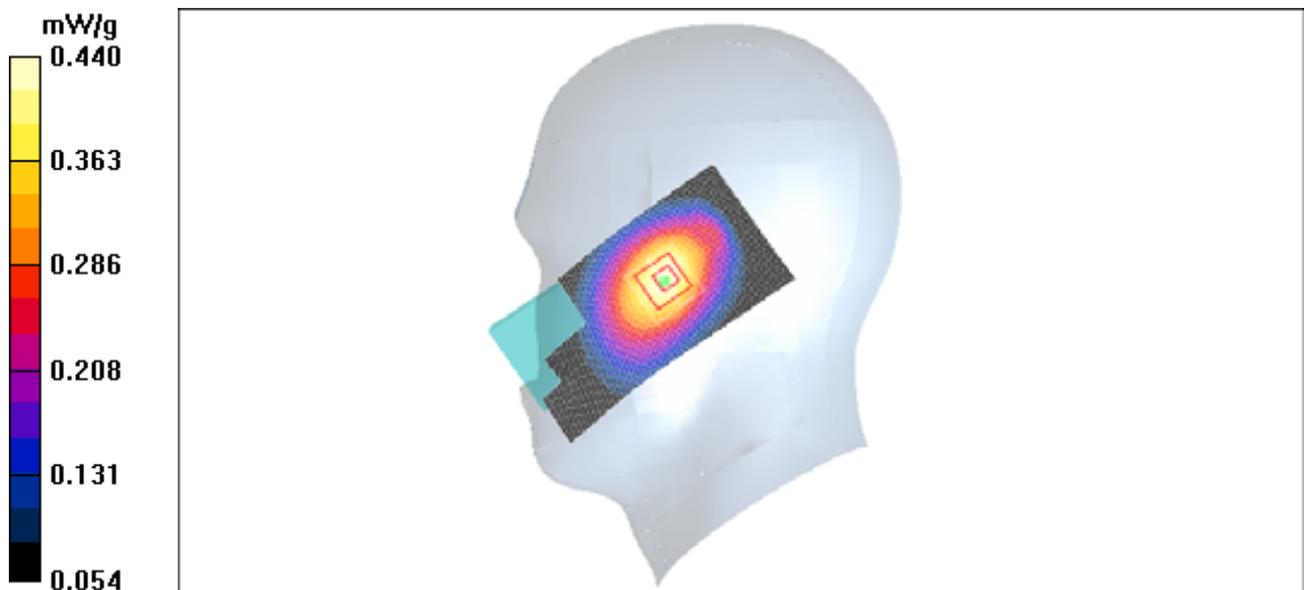
Figure 25 Right Hand Tilt 15°Open GSM 850 Channel 251
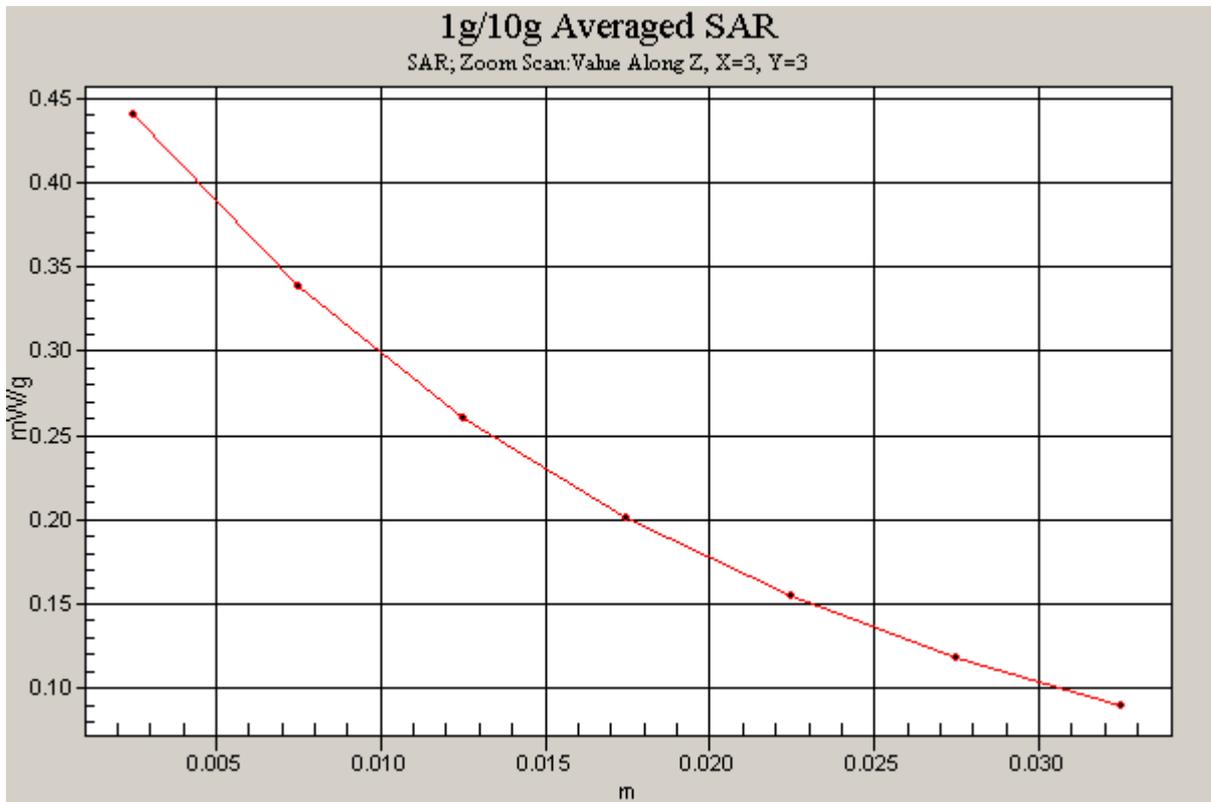
Figure 26 Z-Scan at power reference point (Right Hand Tilt 15°Open GSM 850 Channel 251)

Date/Time: 12/27/2008 9:29:56 PM

GSM 850 Right Tilt Middle Open

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz; σ = 0.889 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.460 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 = -0.030 dB

Peak SAR (extrapolated) = 0.532 W/kg

SAR(1 g) = 0.404 mW/g; SAR(10 g) = 0.296 mW/g

Maximum value of SAR (measured) = 0.463 mW/g
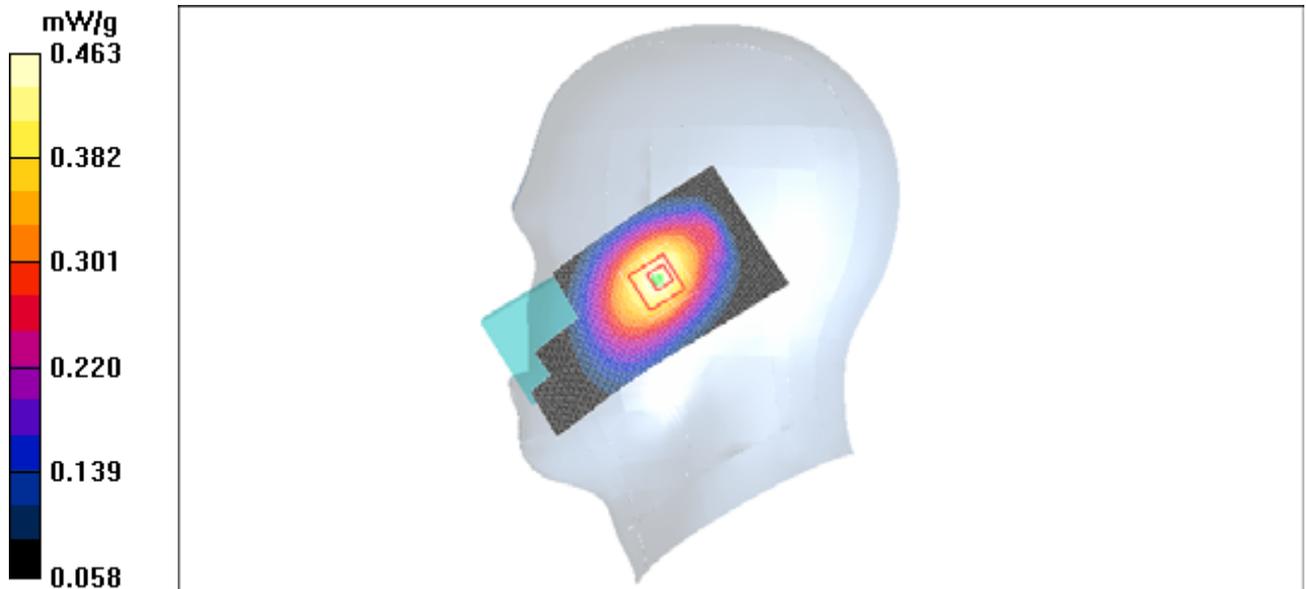
Figure 27 Right Hand Tilt 15°Open GSM 850 Channel 190
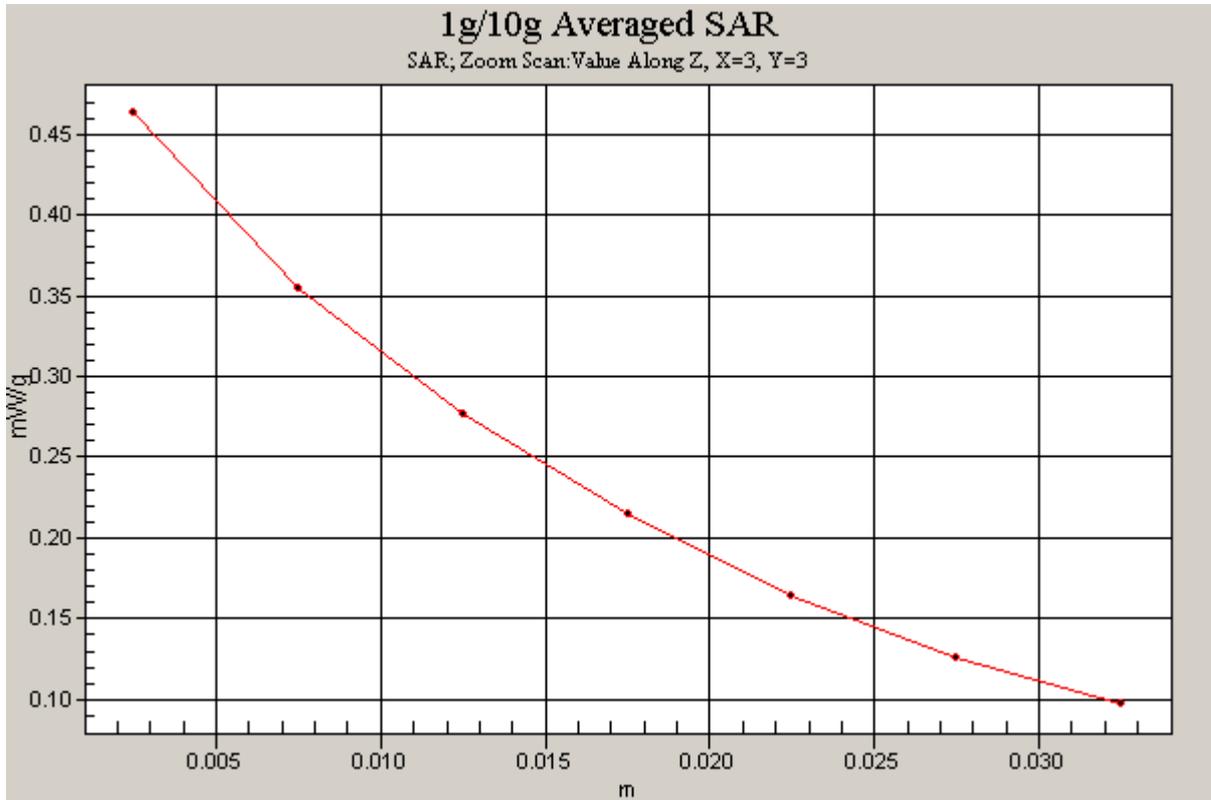
Figure 28 Z-Scan at power reference point (Right Hand Tilt 15°Open GSM 850 Channel 190)

Date/Time: 12/27/2008 9:11:24 PM

GSM 850 Right Tilt Low Open

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

Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.878 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Low/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.394 mW/g

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

Reference Value = 14.6 V/m; Power Drift = -0.097 dB

Peak SAR (extrapolated) = 0.455 W/kg

SAR(1 g) = 0.348 mW/g; SAR(10 g) = 0.256 mW/g

Maximum value of SAR (measured) = 0.398 mW/g
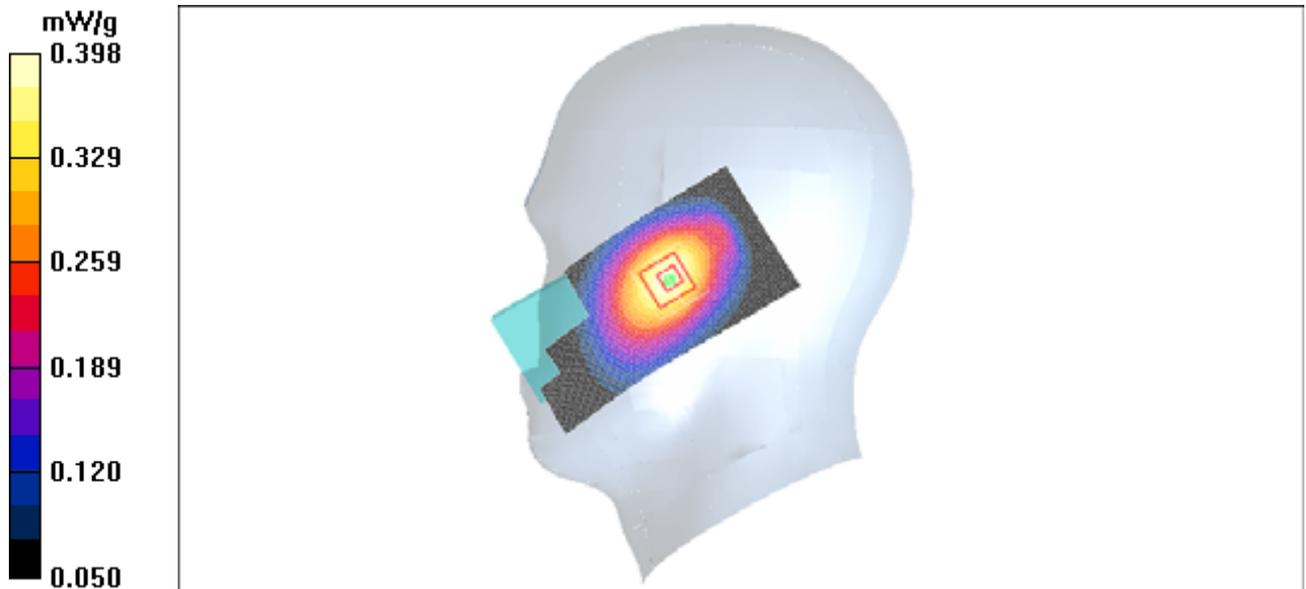
Figure 29 Right Hand Tilt 15°Open GSM 850 Channel 128
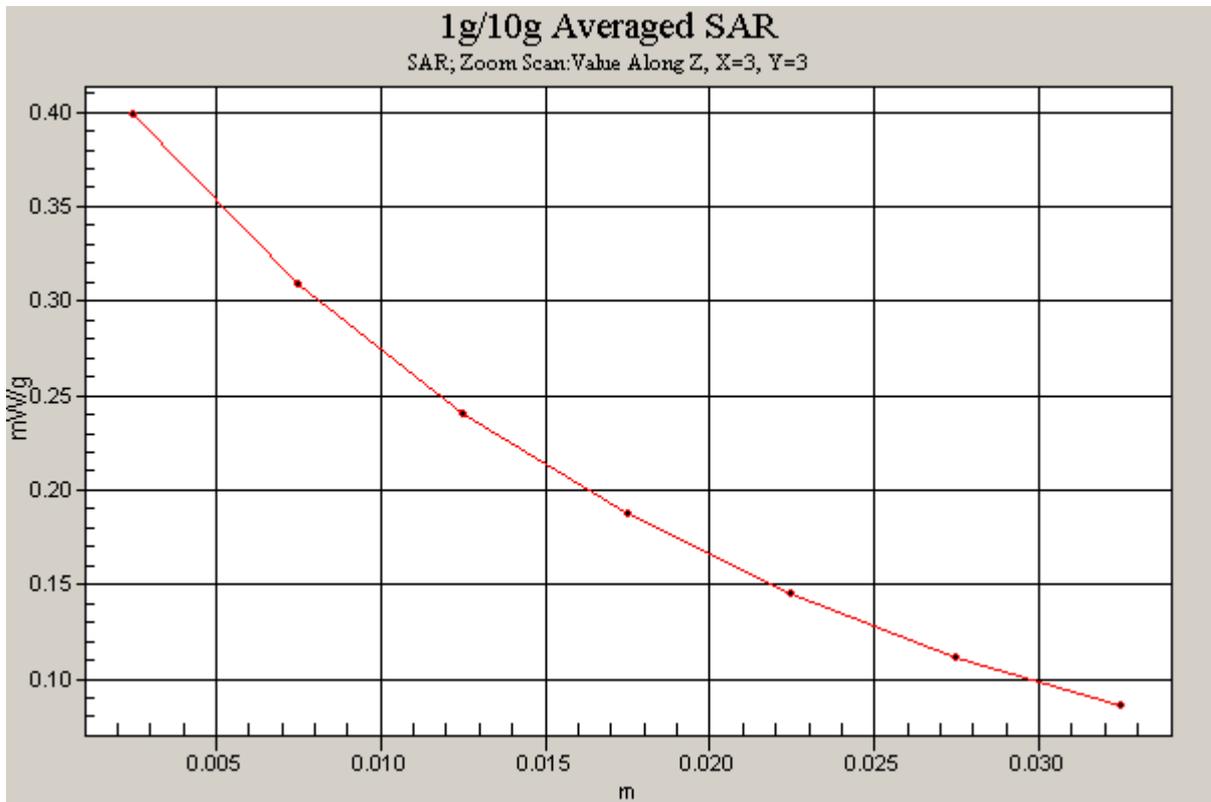
Figure 30 Z-Scan at power reference point (Right Hand Tilt 15°Open GSM 850 Channel 128)

Date/Time: 12/30/2008 3:08:02 AM

GSM 850 Towards Ground High Open

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 849 MHz; σ = 0.997 mho/m; ε_r = 54.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground High/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.858 mW/g

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

Reference Value = 23.4 V/m; Power Drift = -0.084 dB

Peak SAR (extrapolated) = 0.974 W/kg

SAR(1 g) = 0.746 mW/g; SAR(10 g) = 0.546 mW/g

Maximum value of SAR (measured) = 0.855 mW/g
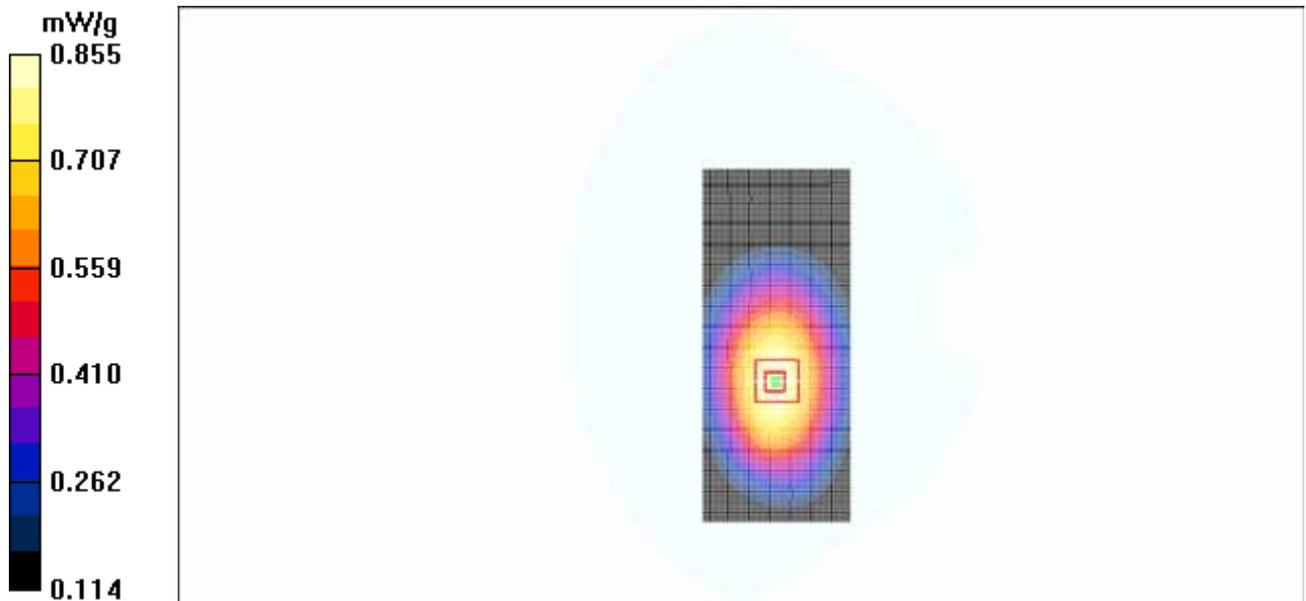
Figure 31 Body, Towards Ground, Open GSM 850 Channel 251
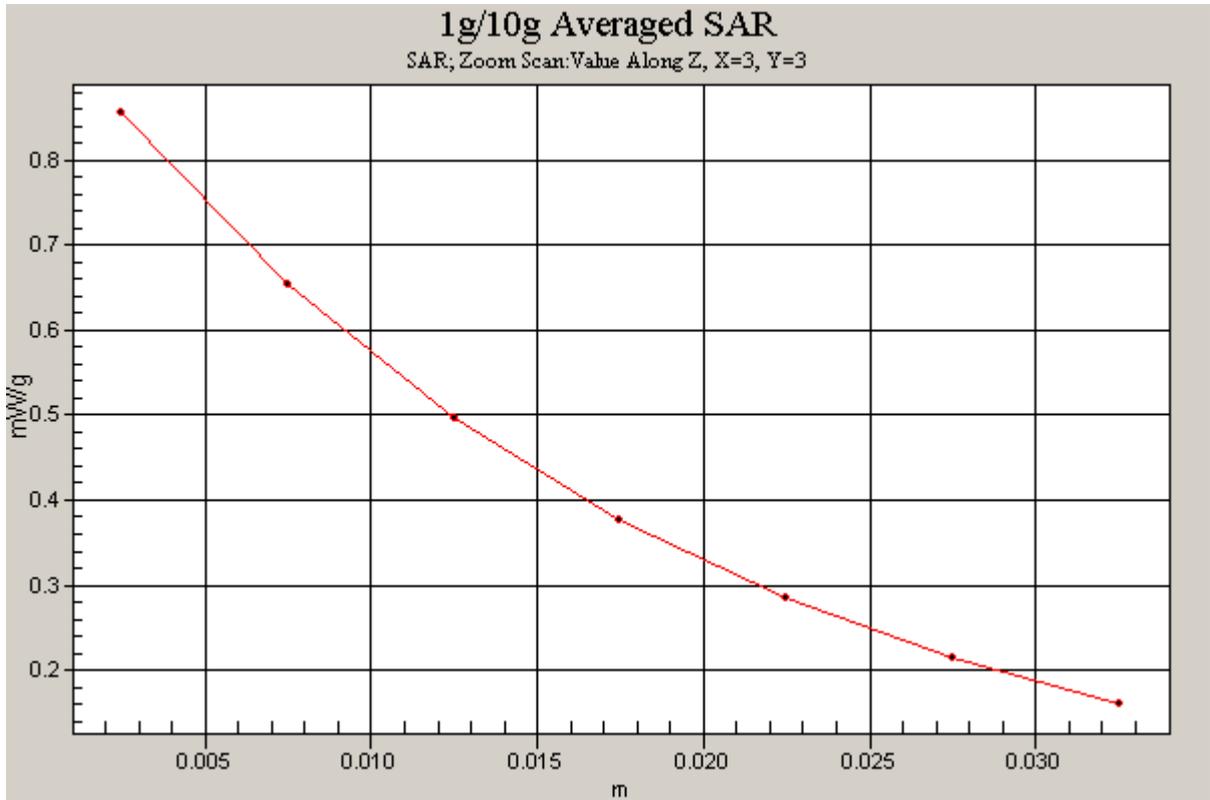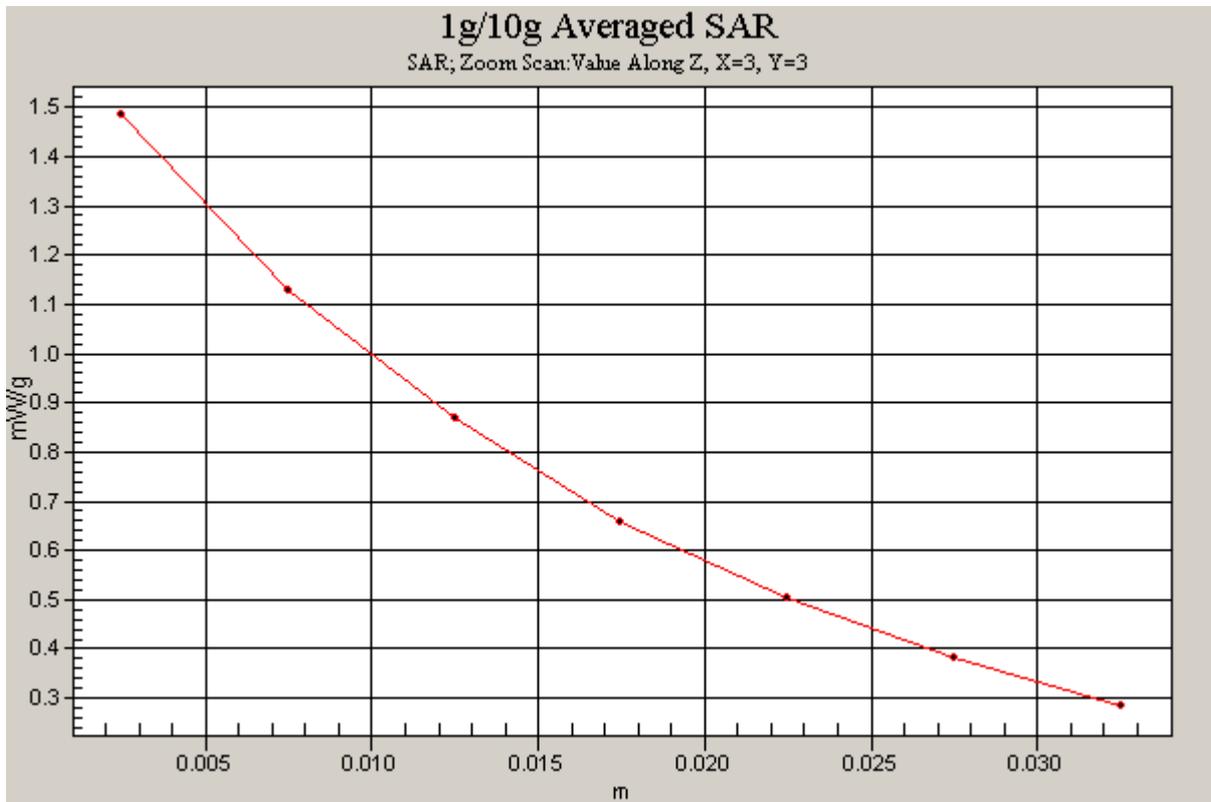
Figure 32 Z-Scan at power reference point (Body, Towards Ground, Open GSM 850 Channel 251)

Date/Time: 12/30/2008 3:27:41 AM

GSM 850 Towards Ground Middle Open

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz; σ = 0.986 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Middle/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.881 mW/g

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

Reference Value = 23.3 V/m; Power Drift = -0.004 dB

Peak SAR (extrapolated) = 0.999 W/kg

SAR(1 g) = 0.770 mW/g; SAR(10 g) = 0.565 mW/g

Maximum value of SAR (measured) = 0.880 mW/g
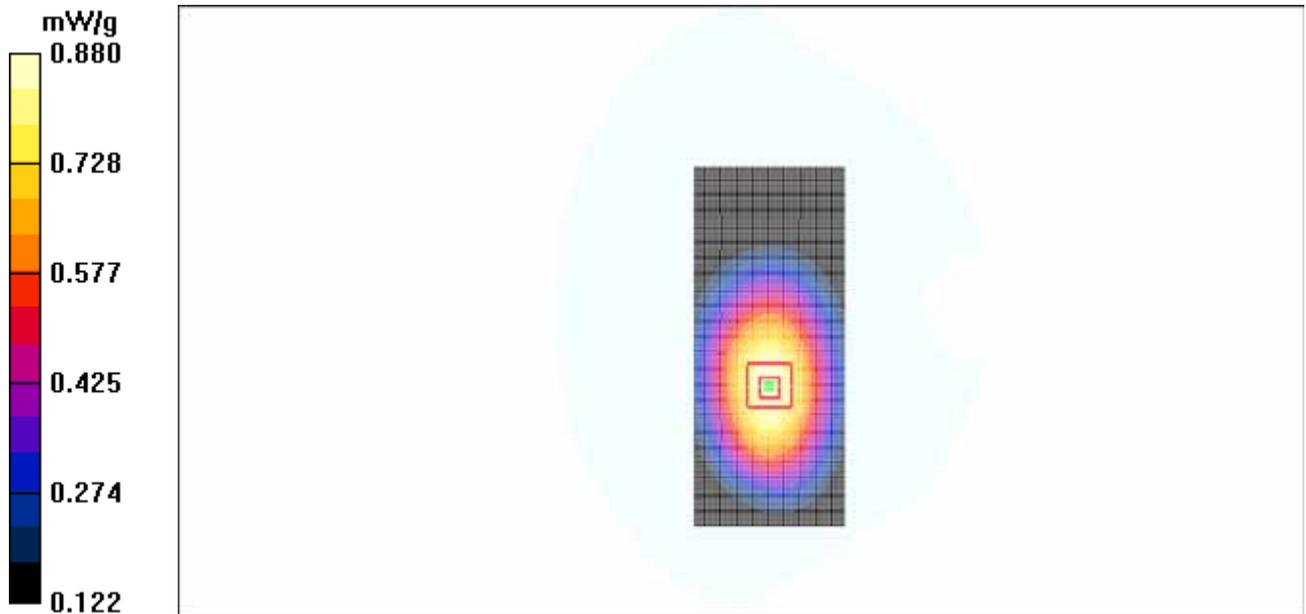

Figure 33 Body, Towards Ground, Open GSM 850 Channel 190
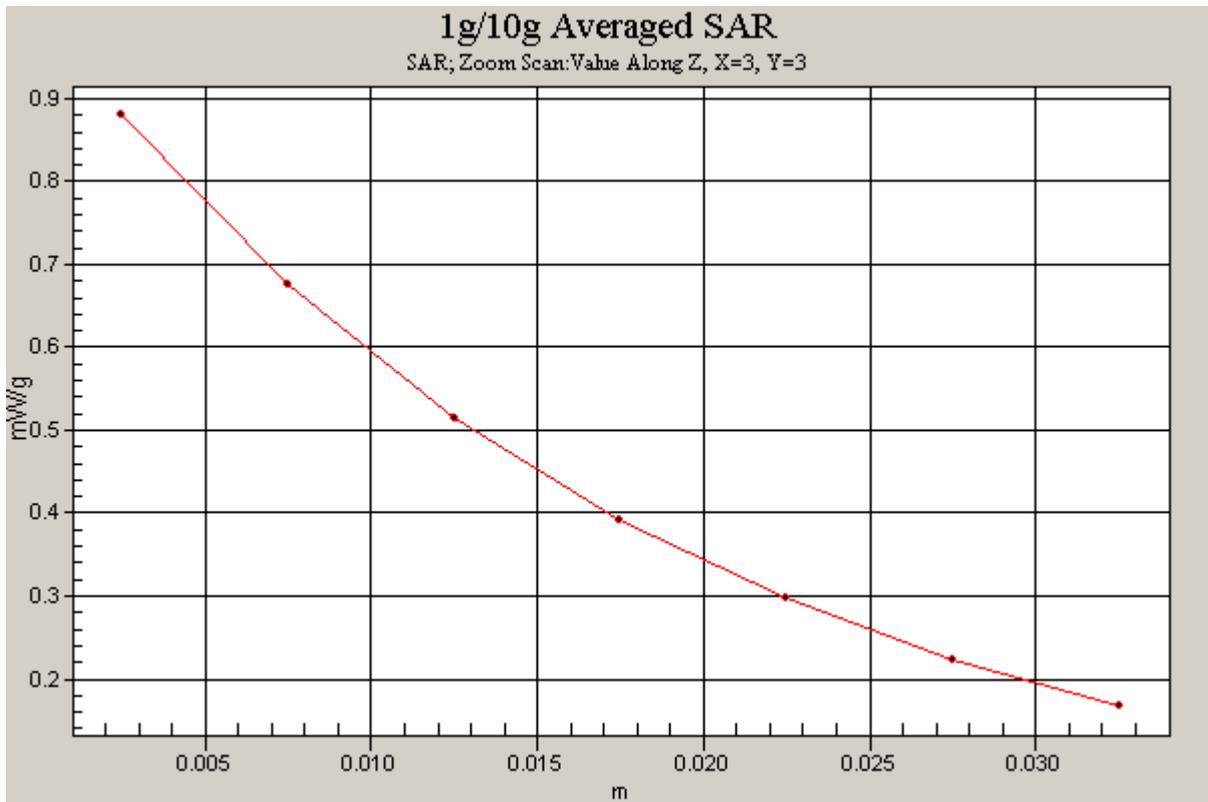
Figure 34 Z-Scan at power reference point (Body, Towards Ground, Open GSM 850 Channel 190)

Date/Time: 12/30/2008 4:13:25 AM

GSM 850 Towards Ground Low Open

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

Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.972 mho/m; ε_r = 54.4; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Low/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.929 mW/g

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

Reference Value = 23.6 V/m; Power Drift = -0.003 dB

Peak SAR (extrapolated) = 1.04 W/kg

SAR(1 g) = 0.808 mW/g; SAR(10 g) = 0.596 mW/g

Maximum value of SAR (measured) = 0.918 mW/g
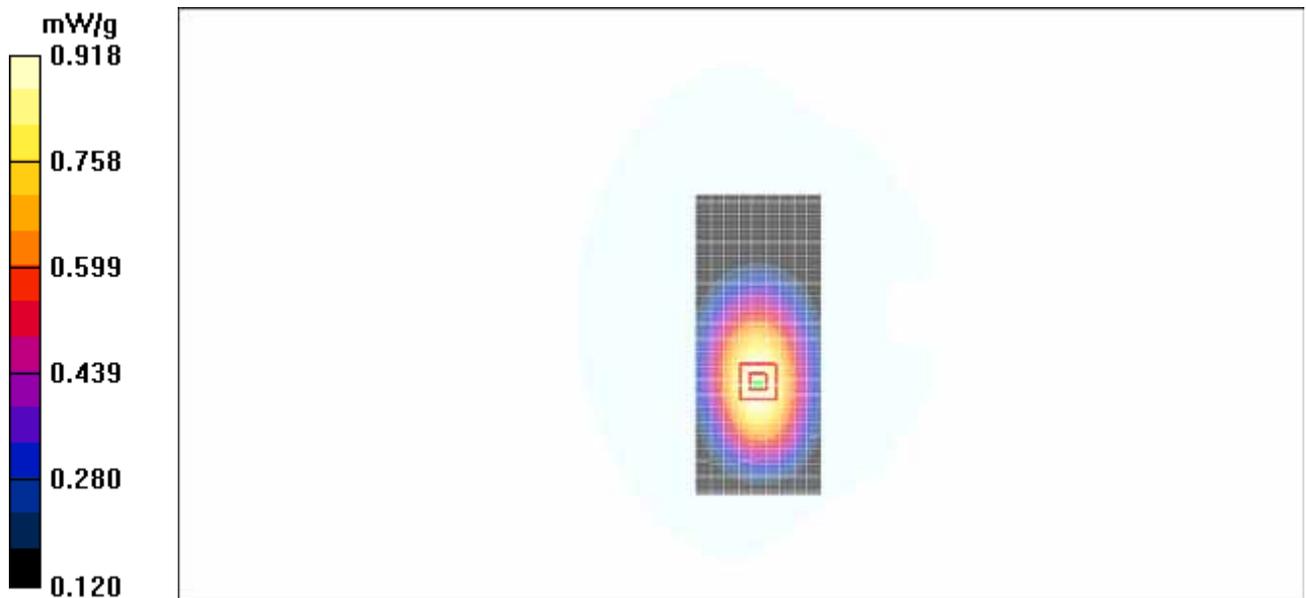

Figure 35 Body, Towards Ground, Open GSM 850 Channel 128
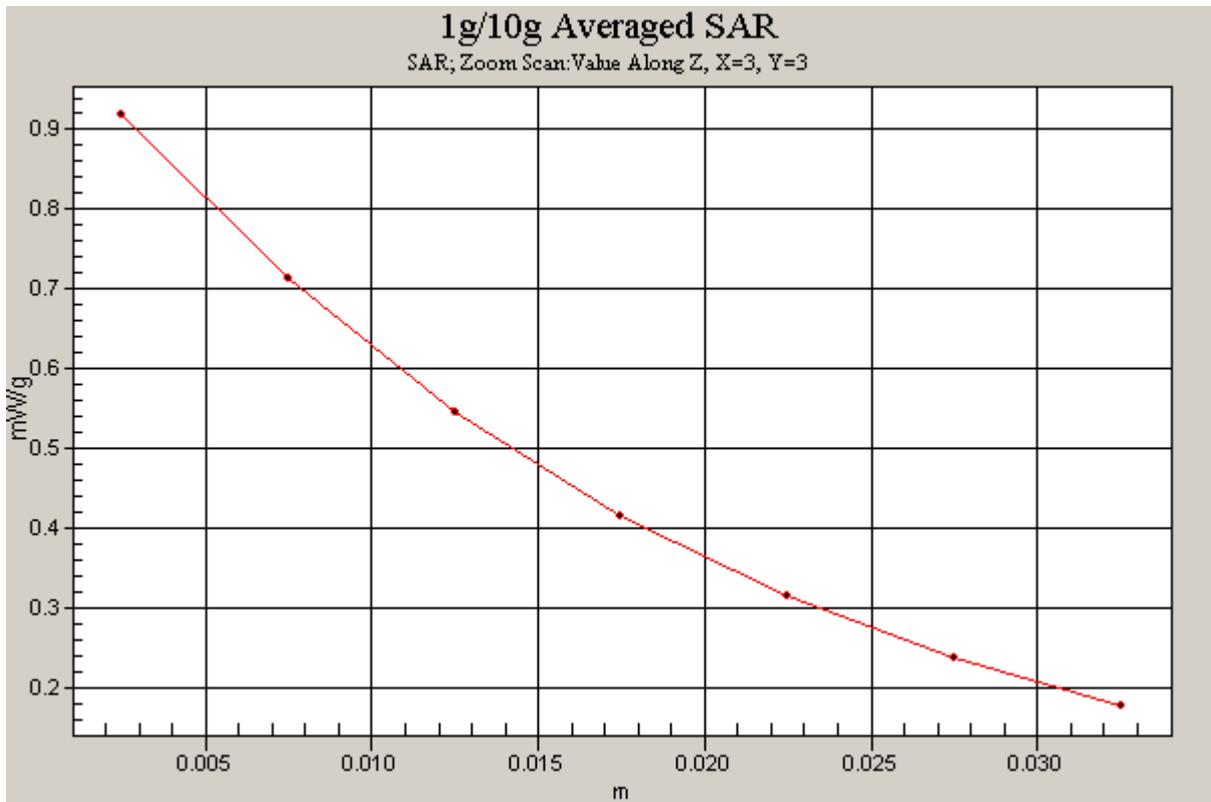
Figure 36 Z-Scan at power reference point (Body, Towards Ground, Open GSM 850 Channel 128)

Date/Time: 12/30/2008 2:46:06 AM

GSM 850 Towards Phantom High Open

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 849 MHz; σ = 0.997 mho/m; ε_r = 54.2; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom High/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.788 mW/g

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

Reference Value = 25.1 V/m; Power Drift = 0.021 dB

Peak SAR (extrapolated) = 0.900 W/kg

SAR(1 g) = 0.686 mW/g; SAR(10 g) = 0.503 mW/g

Maximum value of SAR (measured) = 0.786 mW/g
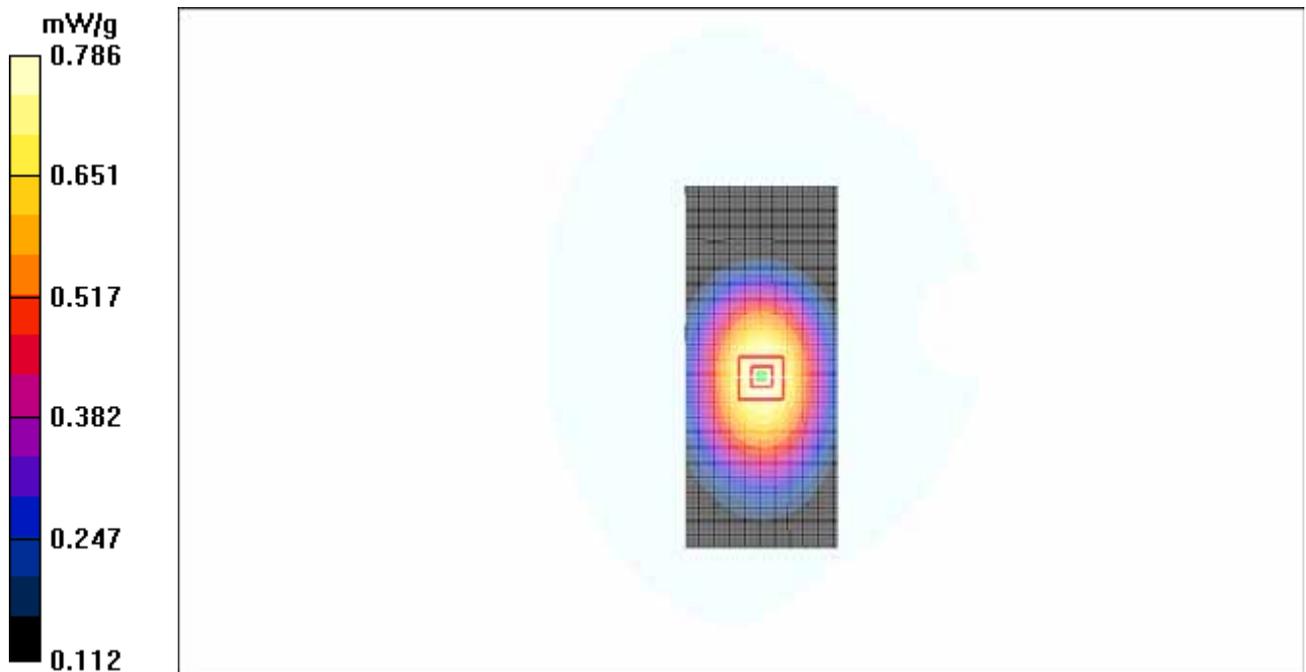
Figure 37 Body, Towards Phantom, Open GSM 850 Channel 251
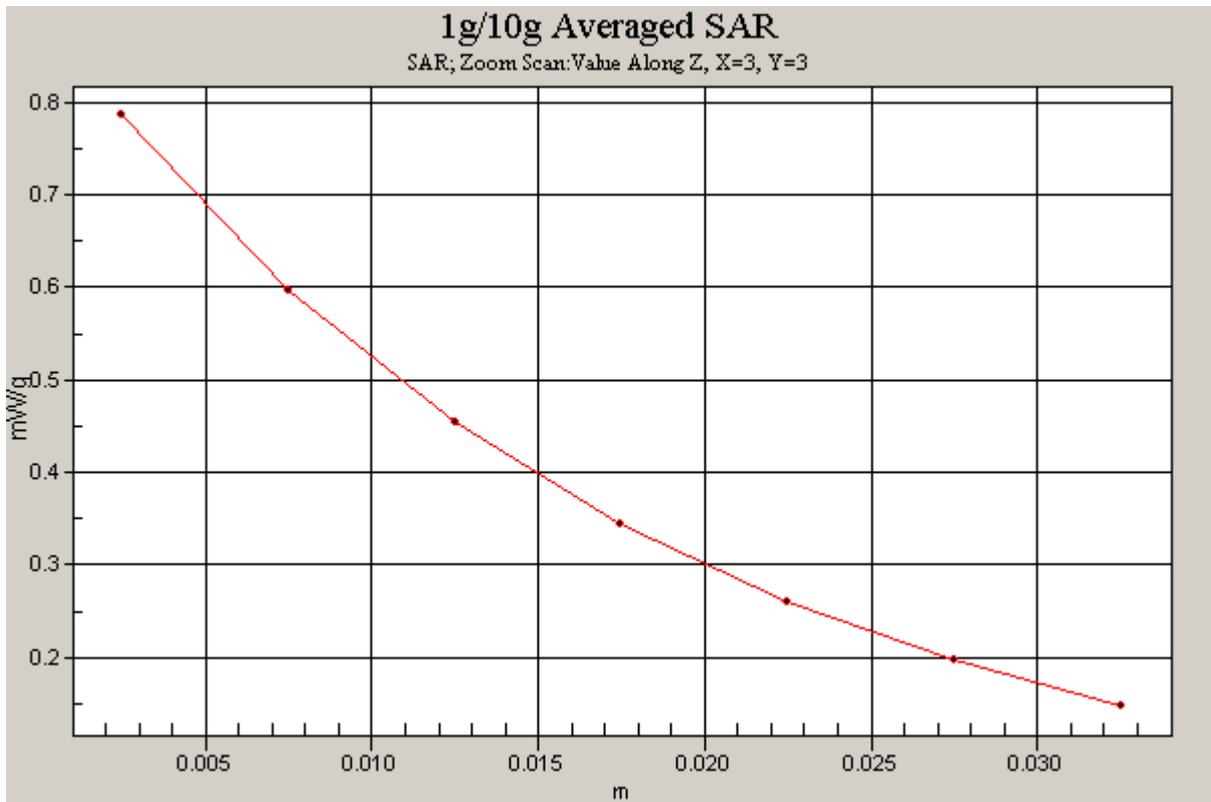
Figure 38 Z-Scan at power reference point (Body, Towards Phantom, Open GSM 850 Channel 251)

Date/Time: 12/30/2008 2:26:33 AM

GSM 850 Towards Phantom Middle Open

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz; σ = 0.986 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom Middle/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.809 mW/g

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

Reference Value = 25.4 V/m; Power Drift = -0.013 dB

Peak SAR (extrapolated) = 0.917 W/kg

SAR(1 g) = 0.705 mW/g; SAR(10 g) = 0.519 mW/g

Maximum value of SAR (measured) = 0.806 mW/g
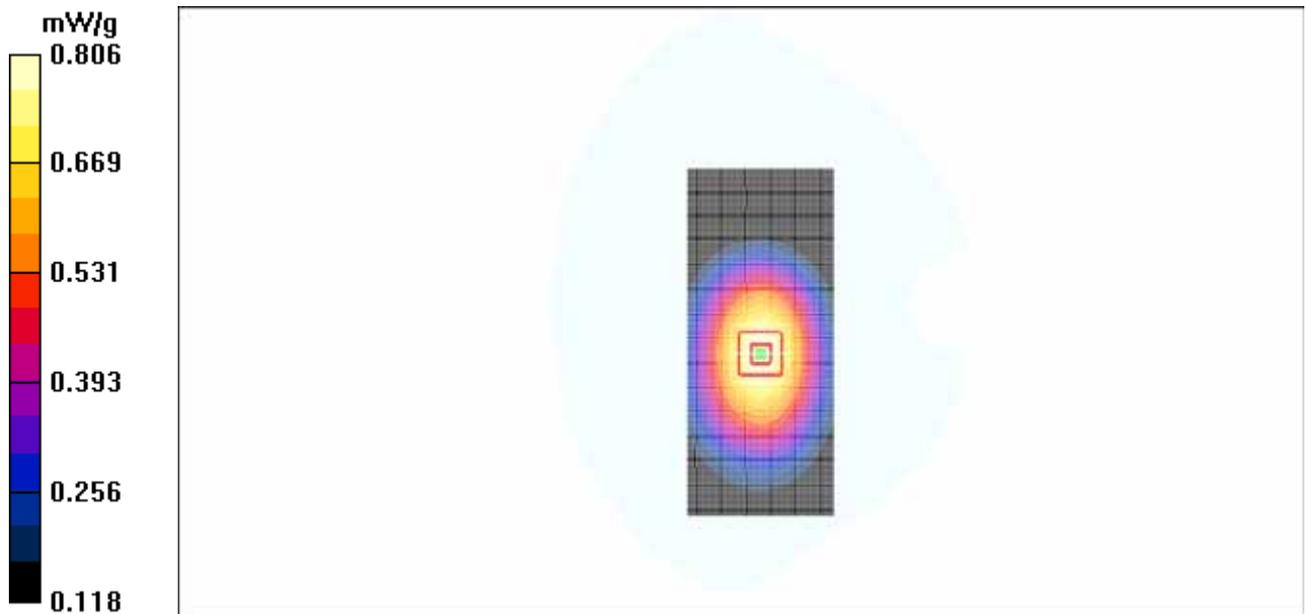
Figure 39 Body, Towards Phantom, Open GSM 850 Channel 190
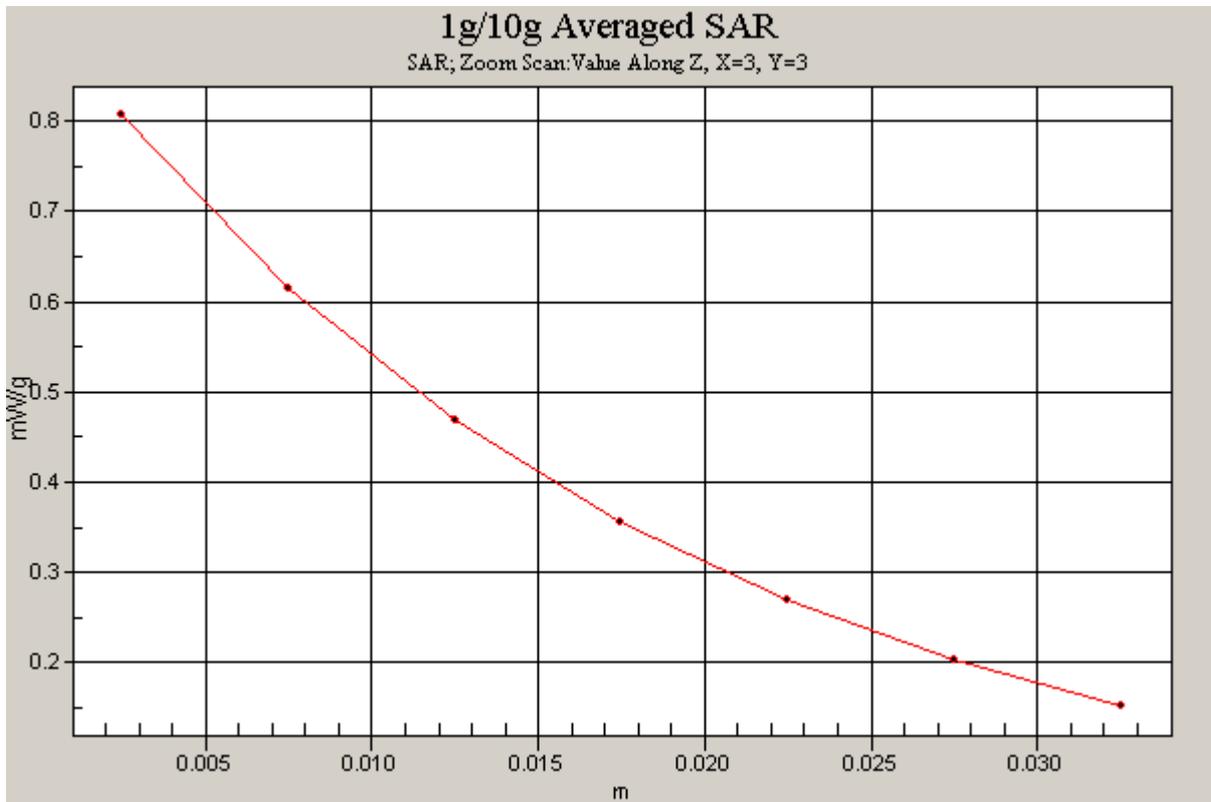
Figure 40 Z-Scan at power reference point (Body, Towards Phantom, Open GSM 850 Channel 190)

Date/Time: 12/30/2008 2:07:06 AM

GSM 850 Towards Phantom Low Open

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

Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.972 mho/m; ε_r = 54.4; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom Low/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.830 mW/g

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

Reference Value = 25.7 V/m; Power Drift = -0.017 dB

Peak SAR (extrapolated) = 0.946 W/kg

SAR(1 g) = 0.722 mW/g; SAR(10 g) = 0.534 mW/g

Maximum value of SAR (measured) = 0.828 mW/g
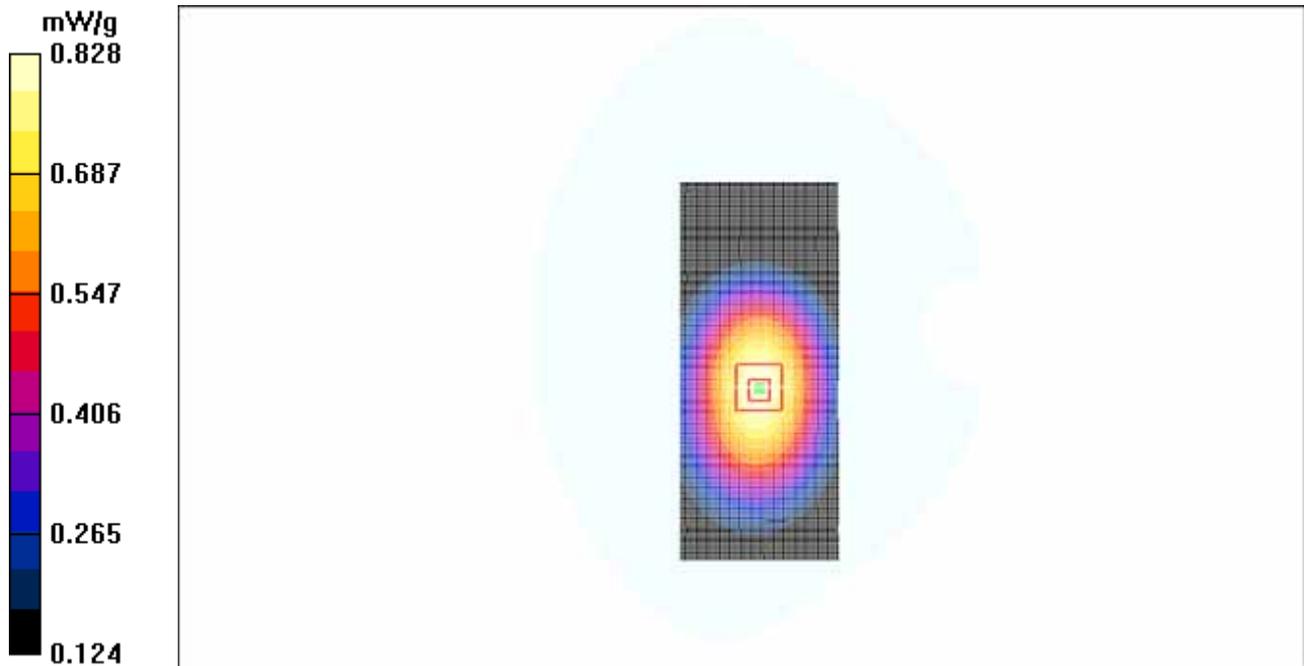

Figure 41 Body, Towards Phantom, Open GSM 850 Channel 128
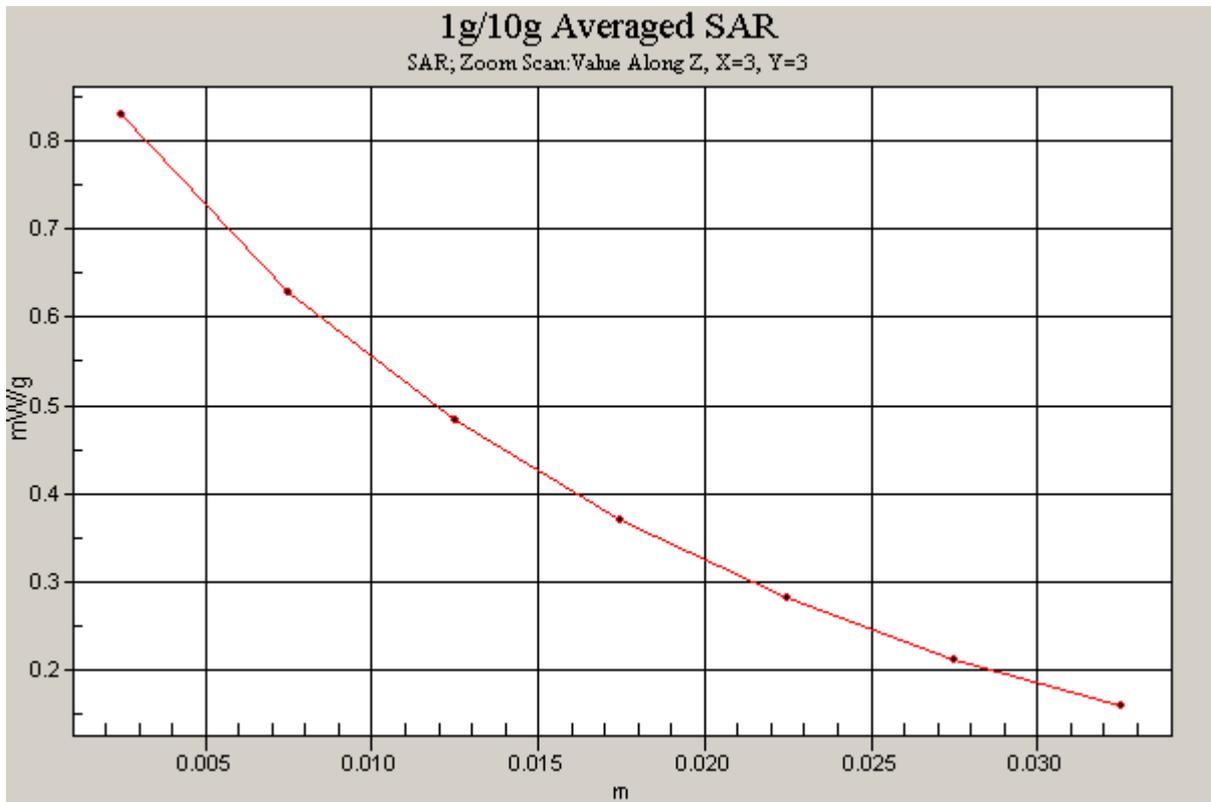
Figure 42 Z-Scan at power reference point (Body, Towards Ground, Open GSM 850, Channel 128)

Date/Time: 12/31/2008 12:13:15 PM

GSM 850 Earphone Towards Ground Low Open

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

Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.972 mho/m; ε_r = 54.4; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Low/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.556 mW/g

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

Reference Value = 14.7 V/m; Power Drift = -0.164 dB

Peak SAR (extrapolated) = 0.624 W/kg

SAR(1 g) = 0.477 mW/g; SAR(10 g) = 0.352 mW/g

Maximum value of SAR (measured) = 0.545 mW/g
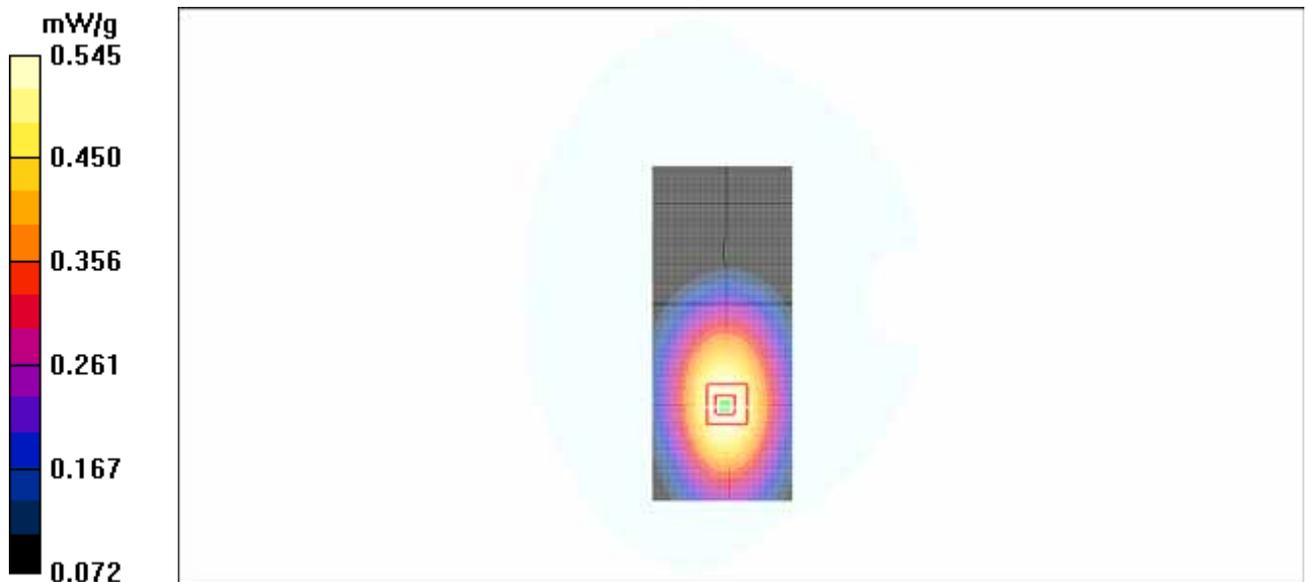
Figure 43 Body with Earphone, Towards Ground, Open GSM 850, Channel 128
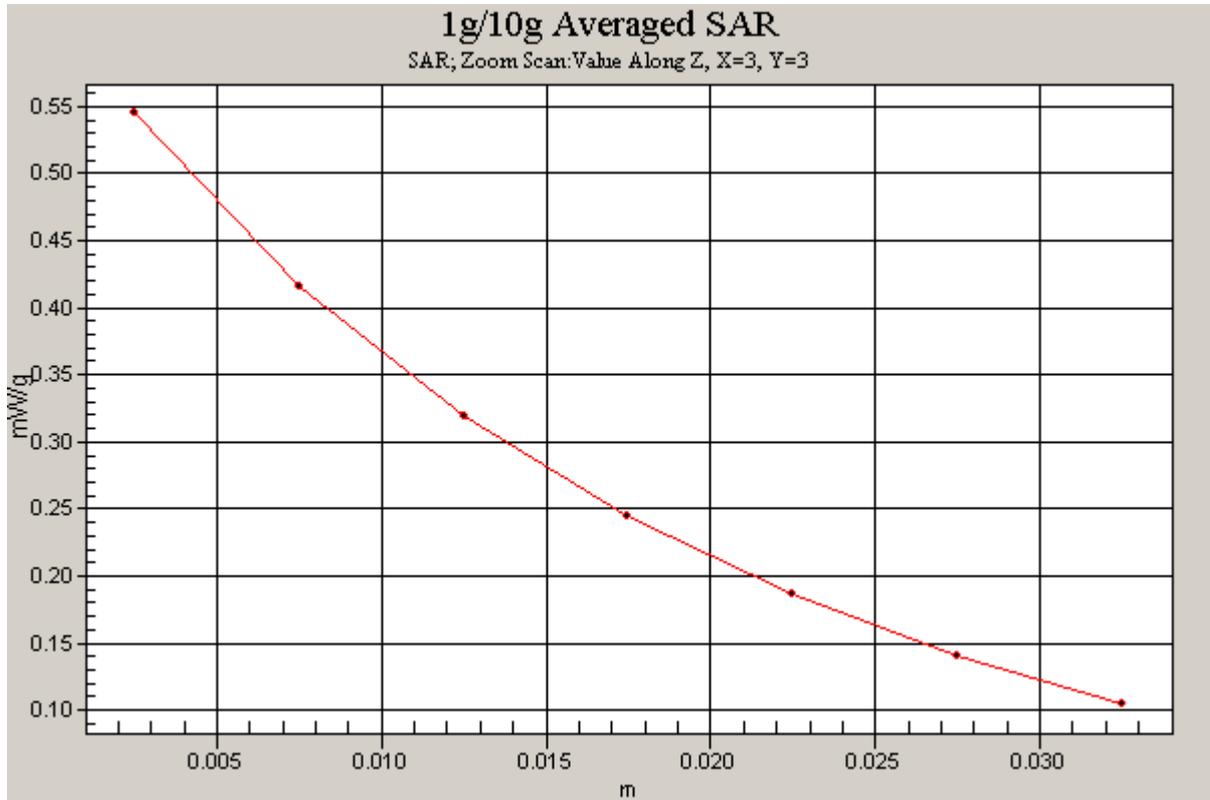
Figure 44 Z-Scan at power reference point (Body with Earphone, Towards Ground, Open GSM 850, Channel 128)

Date/Time: 1/5/2009 9:49:54 AM

GSM 850 Bluetooth Earphone Towards Ground Low Open

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

Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.972 mho/m; ε_r = 54.4; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Low/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.837 mW/g

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

Reference Value = 21.5 V/m; Power Drift = -0.080 dB

Peak SAR (extrapolated) = 0.951 W/kg

SAR(1 g) = 0.724 mW/g; SAR(10 g) = 0.533 mW/g

Maximum value of SAR (measured) = 0.826 mW/g
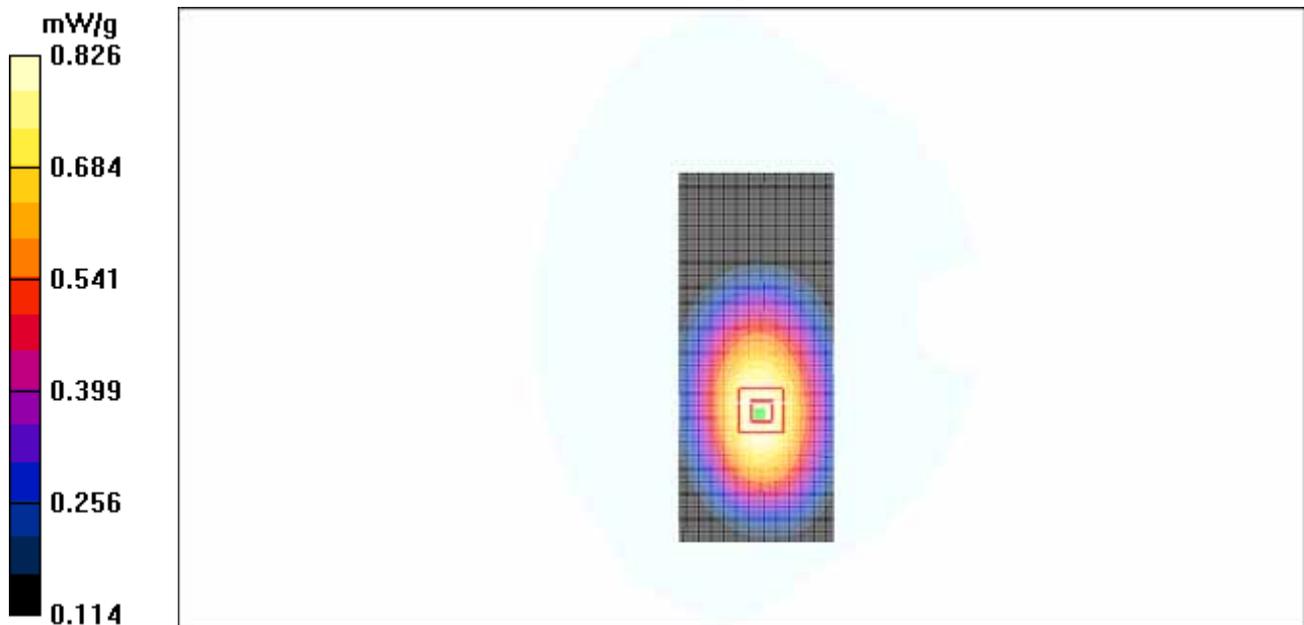
Figure 45 Body with Bluetooth Earphone, Towards Ground, Open GSM 850, Channel 128
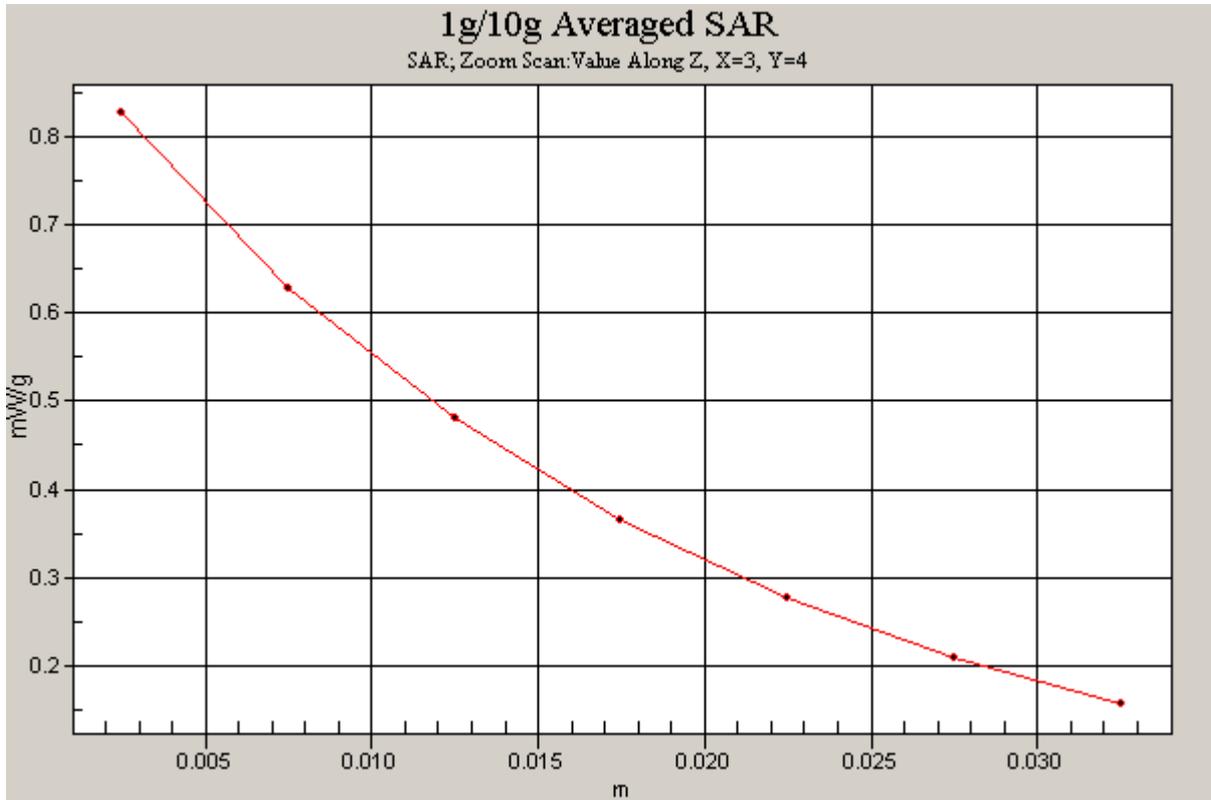
Figure 46 Z-Scan at power reference point (Body with Bluetooth Earphone, Towards Ground, Open GSM 850, Channel 128)

Date/Time: 12/30/2008 10:56:37 AM

GSM 850 GPRS Towards Ground High Open

Communication System: GSM850 + GPRS(2Up); Frequency: 848.8 MHz;Duty Cycle: 1:4

Medium parameters used: f = 849 MHz; σ = 0.997 mho/m; $ε_r$ = 54.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground High/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.50 mW/g

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

Reference Value = 30.0 V/m; Power Drift = -0.157 dB

Peak SAR (extrapolated) = 1.68 W/kg

SAR(1 g) = 1.28 mW/g; SAR(10 g) = 0.941 mW/g

Maximum value of SAR (measured) = 1.47 mW/g
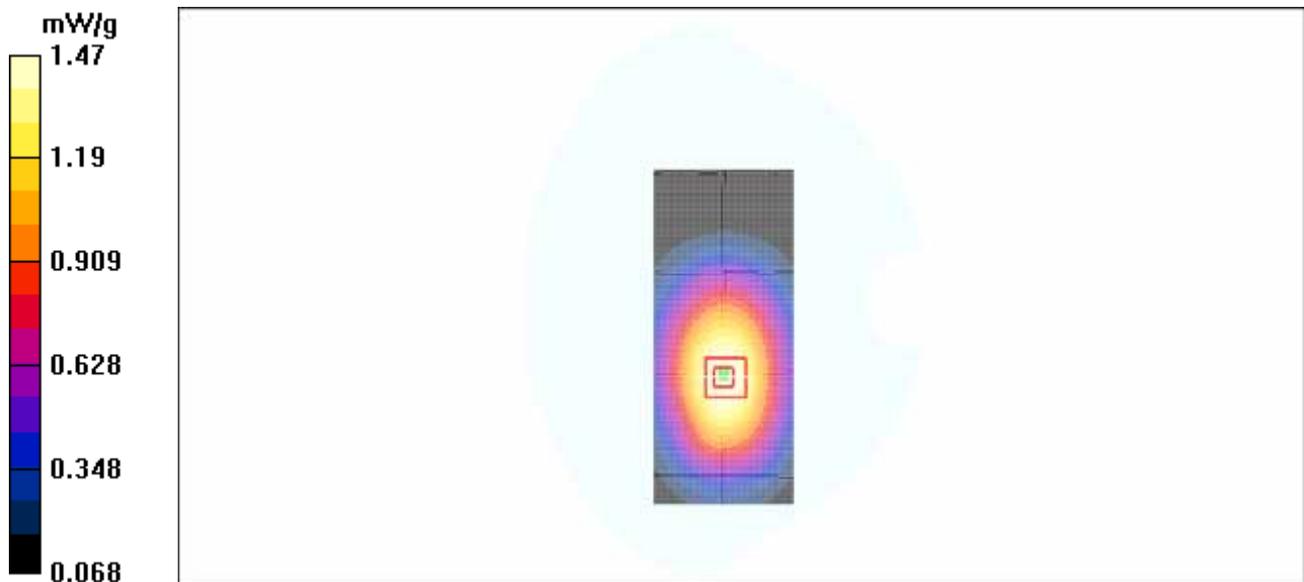
Figure 47 Body, Towards Ground, Open GSM 850 GPRS, Channel 251
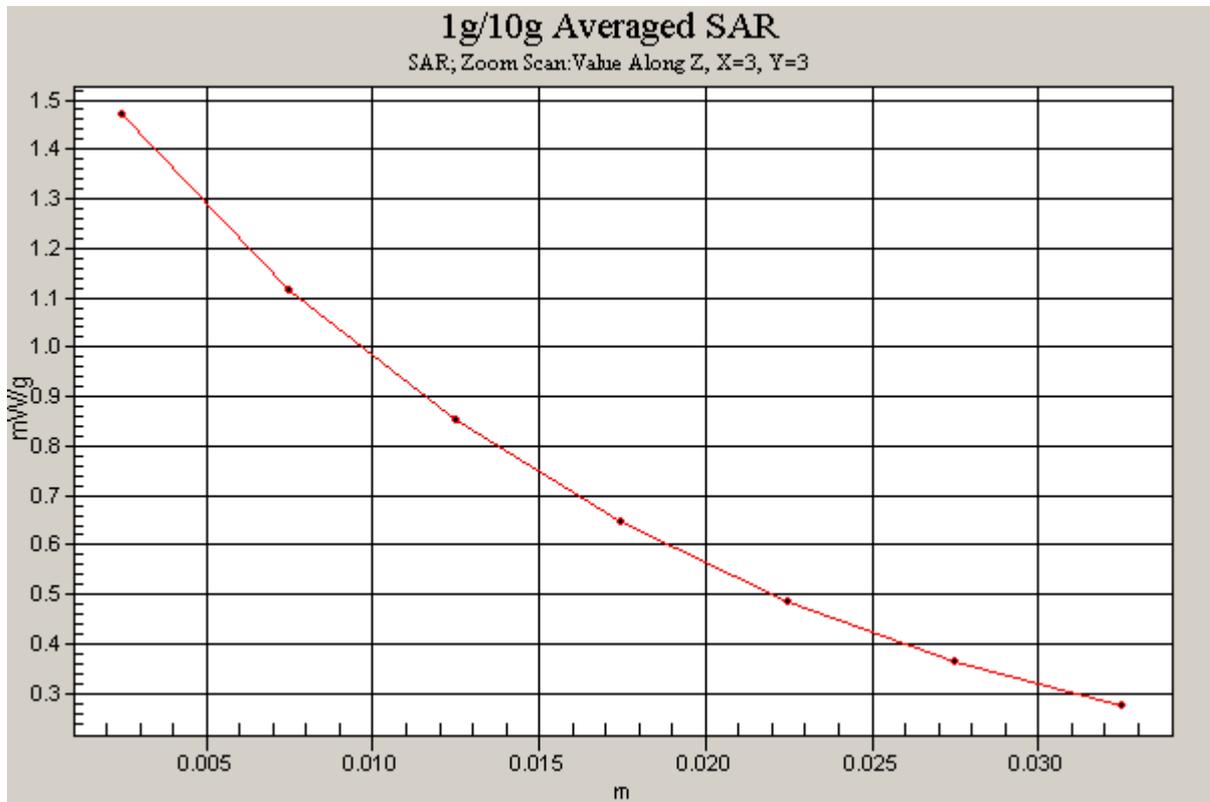
Figure 48 Z-Scan at power reference point (Body, Towards Ground, Open GSM 850 GPRS, Channel 251)

Date/Time: 12/30/2008 11:16:19 AM

GSM 850 GPRS Towards Ground Middle Open

Communication System: GSM850 + GPRS(2Up); Frequency: 836.6 MHz;Duty Cycle: 1:4

Medium parameters used: f = 837 MHz; σ = 0.986 mho/m; $ε_r$ = 54.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Middle/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.54 mW/g

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

Reference Value = 29.5 V/m; Power Drift = -0.039 dB

Peak SAR (extrapolated) = 1.70 W/kg

SAR(1 g) = 1.31 mW/g; SAR(10 g) = 0.951 mW/g

Maximum value of SAR (measured) = 1.50 mW/g
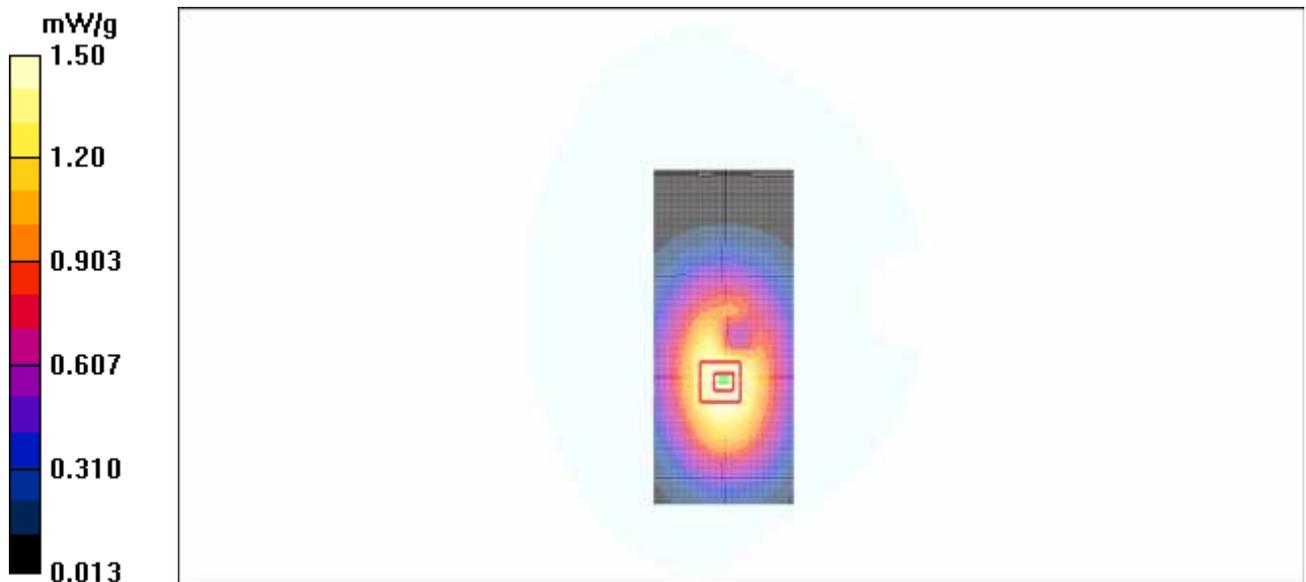
Figure 49 Body, Towards Ground, Open GSM 850 GPRS Channel 190
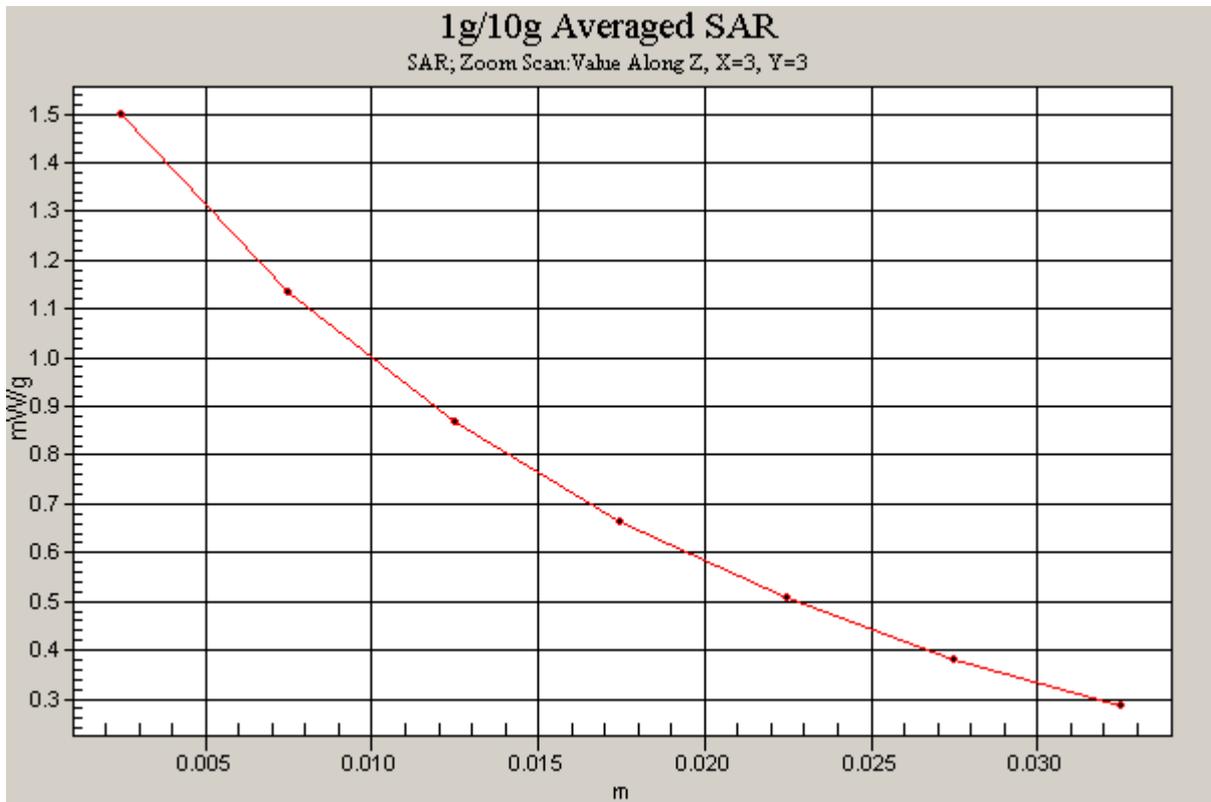
Figure 50 Z-Scan at power reference point (Body, Towards Ground, Open GSM 850 GPRS Channel 190)

Date/Time: 12/30/2008 11:57:49 AM

GSM 850 GPRS Towards Ground Low Open

Communication System: GSM850 + GPRS(2Up); Frequency: 824.2 MHz;Duty Cycle: 1:4

Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.972 mho/m; ε_r = 54.4; ρ = 1000 kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Low/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.53 mW/g

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

Reference Value = 30.2 V/m; Power Drift = -0.189 dB

Peak SAR (extrapolated) = 1.68 W/kg

SAR(1 g) = 1.3 mW/g; SAR(10 g) = 0.960 mW/g

Maximum value of SAR (measured) = 1.48 mW/g
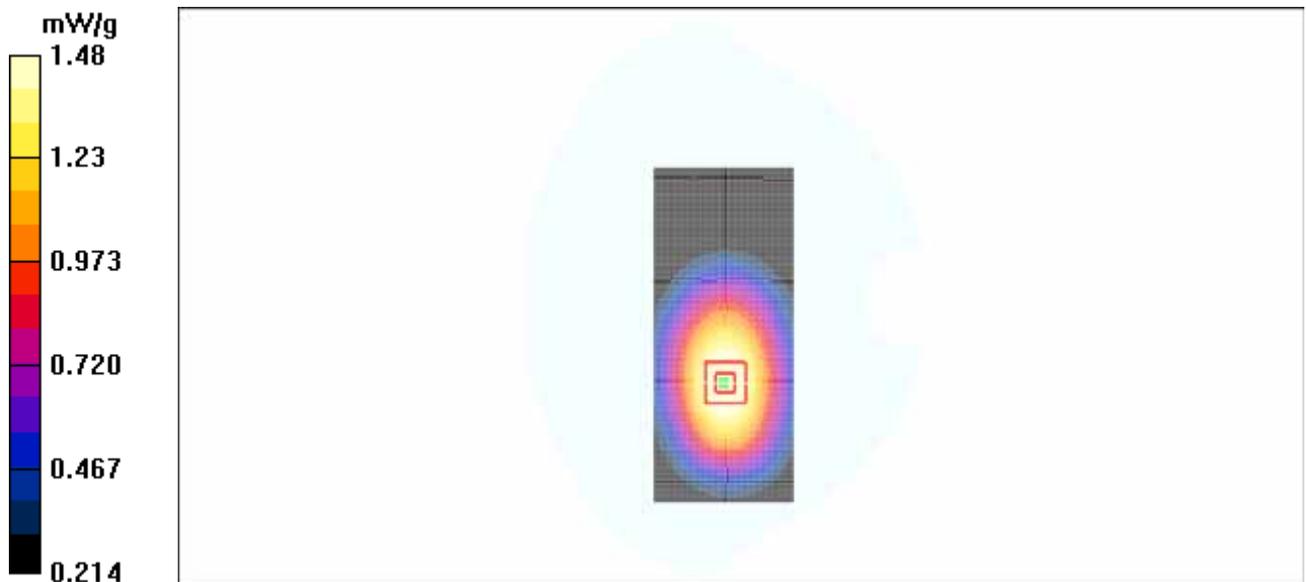
Figure 51 Body, Towards Ground, Open GSM 850 GPRS Channel 128
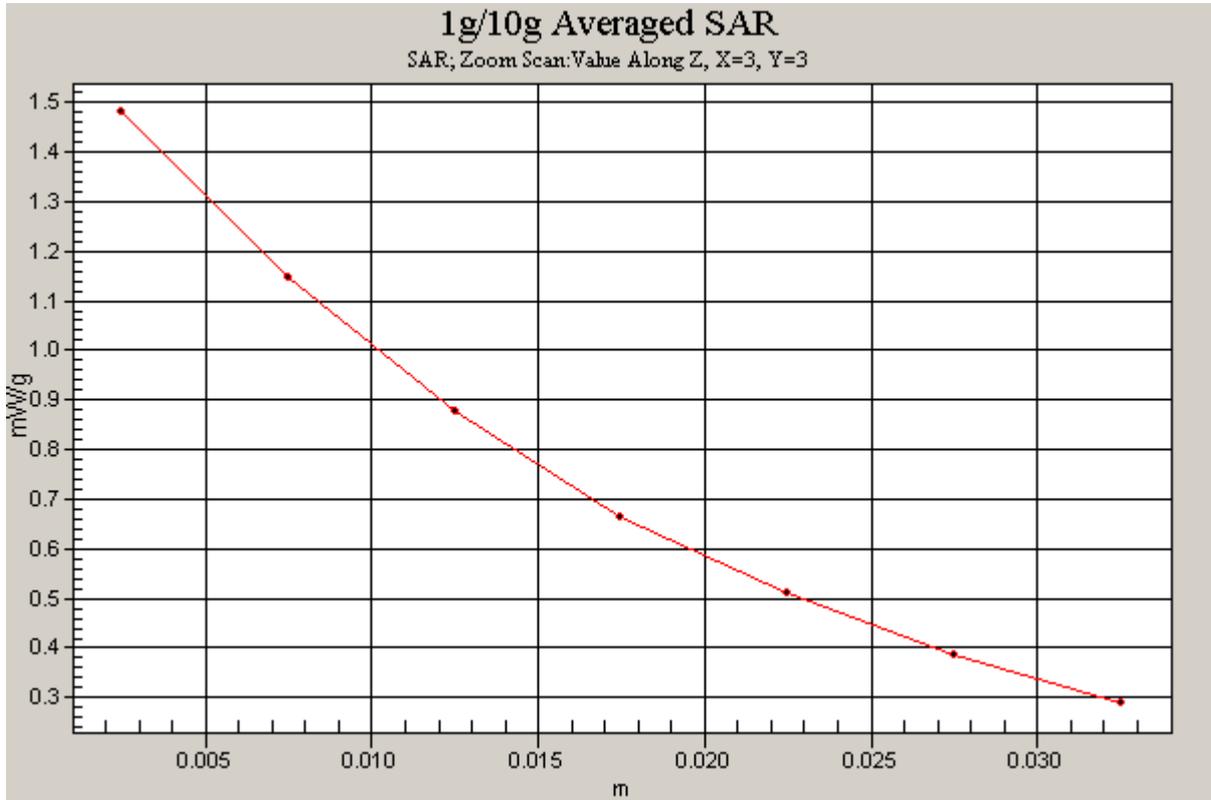
Figure 52 Z-Scan at power reference point (Body, Towards Ground, Open GSM 850 GPRS Channel 128)

Date/Time: 12/31/2008 10:22:38 AM

GSM 850 GPRS Towards Phantom High Open

Communication System: GSM850 + GPRS(2Up); Frequency: 848.8 MHz;Duty Cycle: 1:4

Medium parameters used: f = 849 MHz; σ = 0.997 mho/m; ε_r = 54.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom High/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.65 mW/g

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

Reference Value = 34.6 V/m; Power Drift = -0.045 dB

Peak SAR (extrapolated) = 1.69 W/kg

SAR(1 g) = 1.29 mW/g; SAR(10 g) = 0.933 mW/g

Maximum value of SAR (measured) = 1.48 mW/g
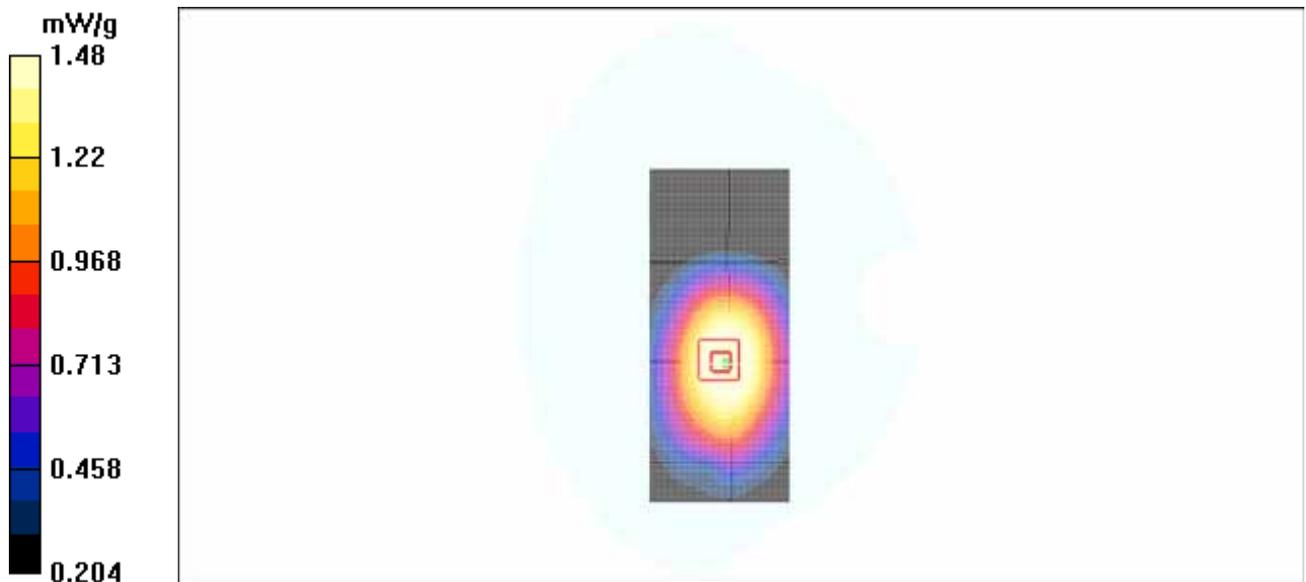
Figure 53 Body, Towards Phantom, Open GSM 850 GPRS, Channel 251
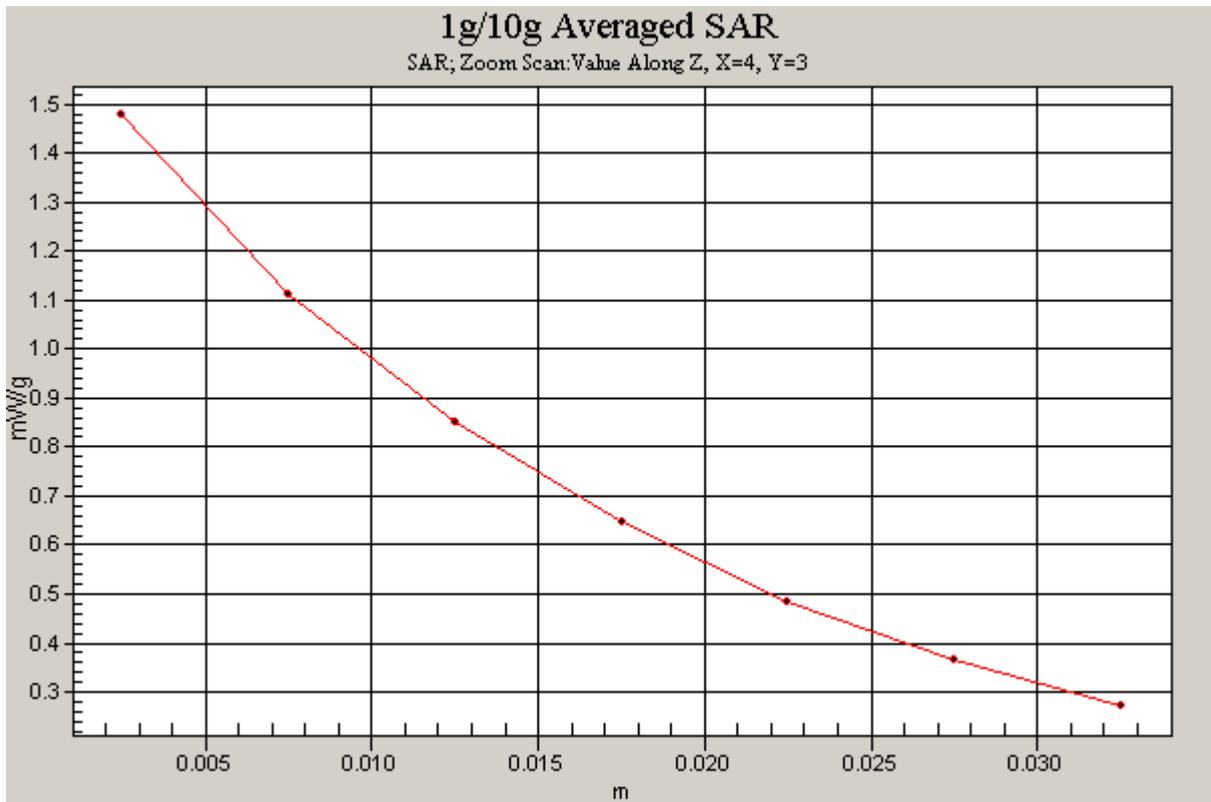
Figure 54 Z-Scan at power reference point (Body, Towards Phantom, Open GSM 850 GPRS, Channel 251)

Date/Time: 12/31/2008 10:43:05 AM

GSM 850 GPRS Towards Phantom Middle Open

Communication System: GSM850 + GPRS(2Up); Frequency: 836.6 MHz;Duty Cycle: 1:4

Medium parameters used: f = 837 MHz; σ = 0.986 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom Middle/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.50 mW/g

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

Reference Value = 30.9 V/m; Power Drift = -0.105 dB

Peak SAR (extrapolated) = 1.71 W/kg

SAR(1 g) = 1.31 mW/g; SAR(10 g) = 0.955 mW/g

Maximum value of SAR (measured) = 1.49 mW/g
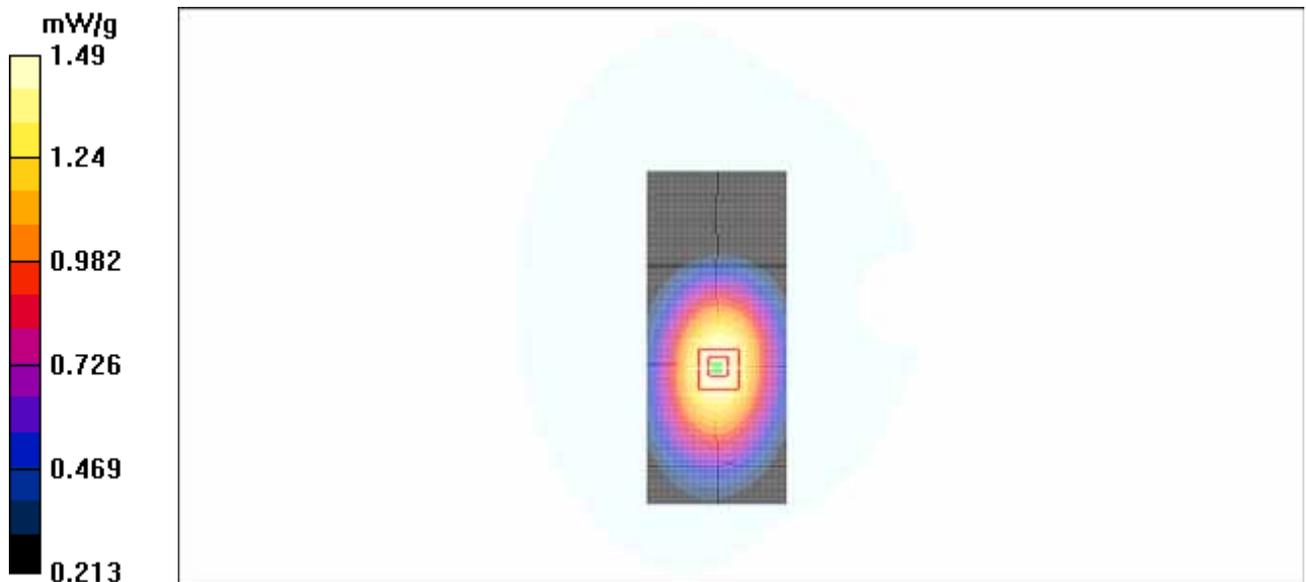
Figure 55 Body, Towards Phantom, Open GSM 850 GPRS Channel 190
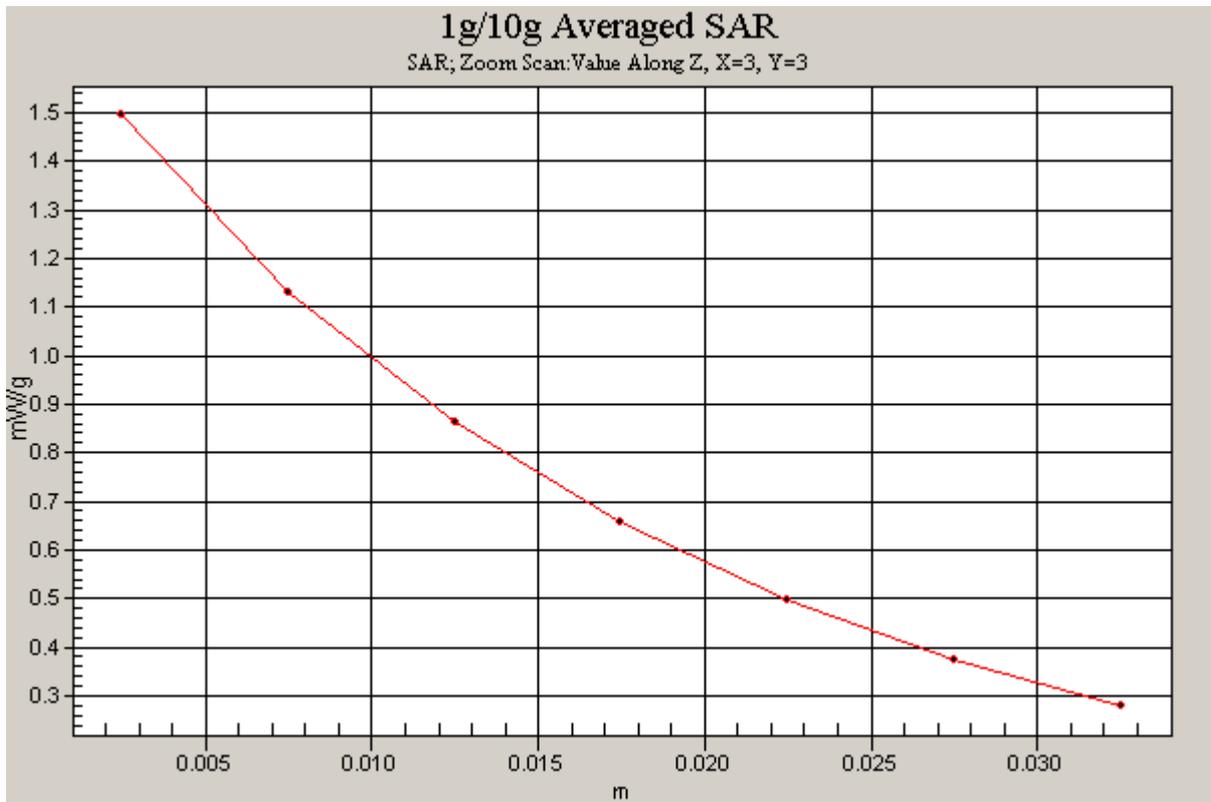
Figure 56 Z-Scan at power reference point (Body, Towards Phantom, Open GSM 850 GPRS Channel 190)

Date/Time: 12/31/2008 11:02:56 AM

GSM 850 GPRS Towards Phantom Low Open

Communication System: GSM850 + GPRS(2Up); Frequency: 824.2 MHz;Duty Cycle: 1:4

Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.972 mho/m; ε_r = 54.4; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom Low/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.51 mW/g

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

Reference Value = 30.6 V/m; Power Drift = -0.061 dB

Peak SAR (extrapolated) = 1.70 W/kg

SAR(1 g) = 1.3 mW/g; SAR(10 g) = 0.960 mW/g

Maximum value of SAR (measured) = 1.48 mW/g
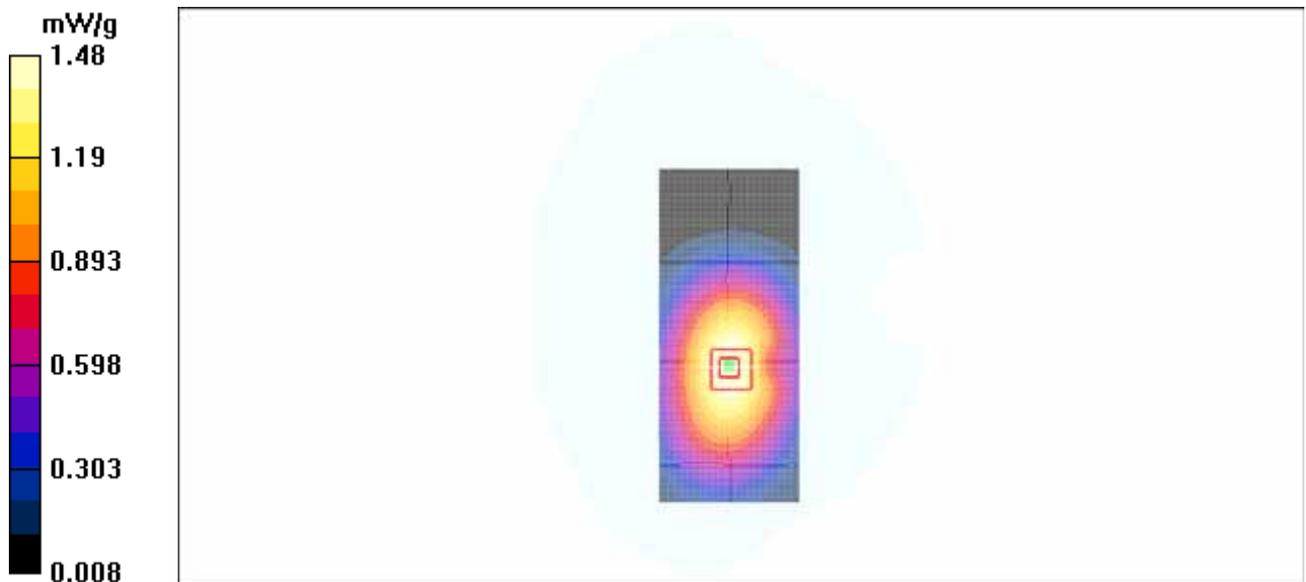
Figure 57 Body, Towards Phantom, Open GSM 850 GPRS Channel 128

Figure 58 Z-Scan at power reference point (Body, Towards Phantom, Open GSM 850 GPRS Channel 128)

Date/Time: 12/31/2008 11:32:32 AM

GSM 850 EGPRS Towards Phantom Middle Open

Communication System: GSM850 +EGPRS(2Up); Frequency: 836.6 MHz;Duty Cycle: 1:4

Medium parameters used: f = 837 MHz; σ = 0.986 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom Middle/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.344 mW/g

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

Reference Value = 14.9 V/m; Power Drift = -0.130 dB

Peak SAR (extrapolated) = 0.398 W/kg

SAR(1 g) = 0.301 mW/g; SAR(10 g) = 0.219 mW/g

Maximum value of SAR (measured) = 0.348 mW/g
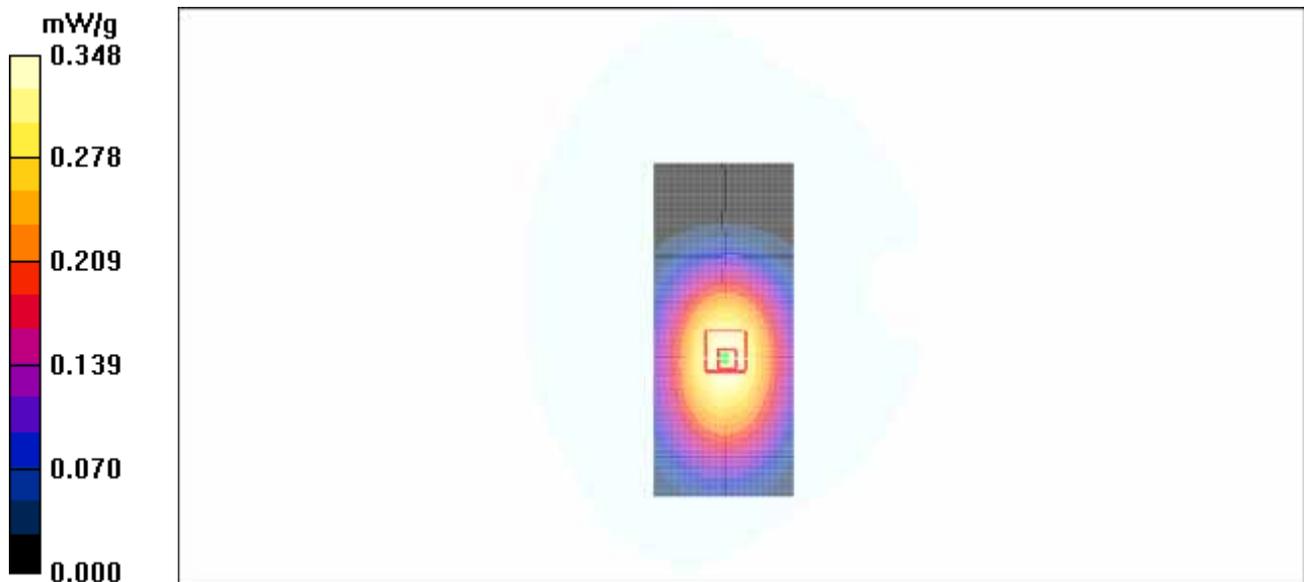
Figure 59 Body, Towards Phantom, Open GSM 850 EGPRS Channel 190
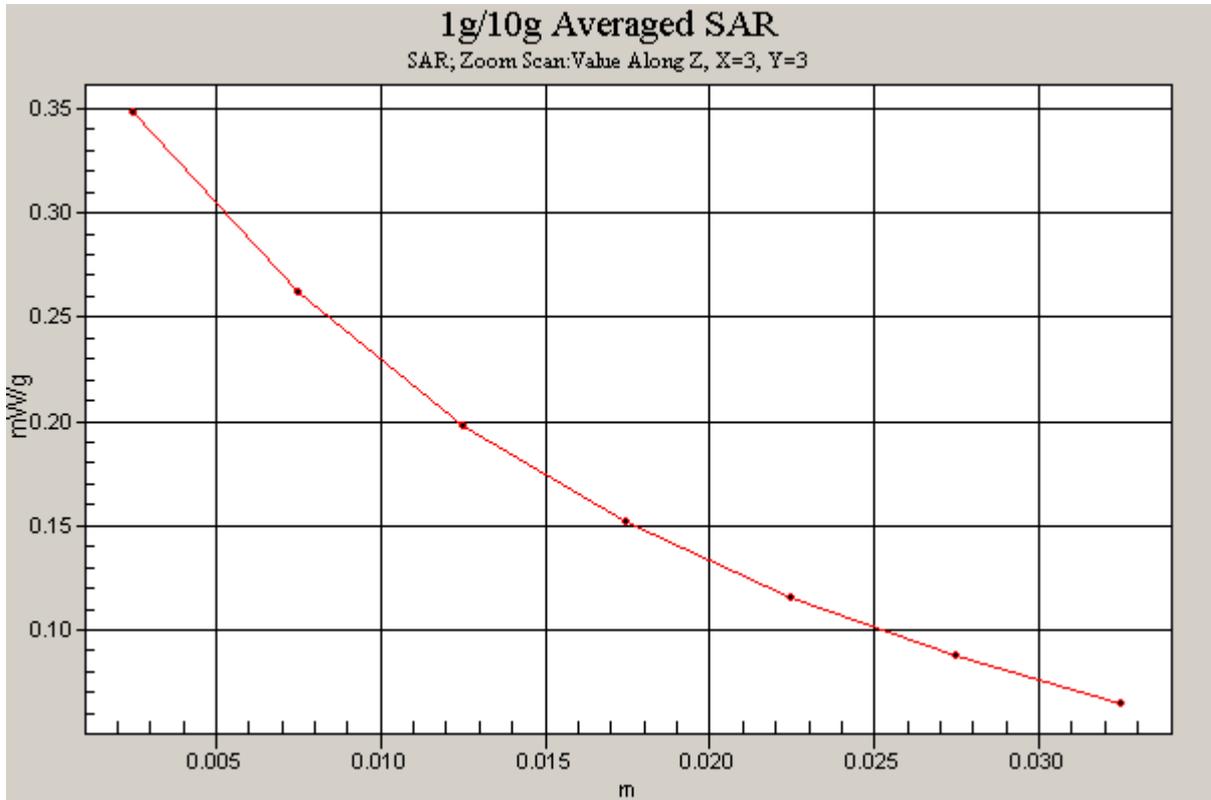
Figure 60 Z-Scan at power reference point (Body, Towards Phantom, Open GSM 850 EGPRS Channel 190)

Date/Time: 12/25/2008 5:15:10 AM

GSM 850 Left Cheek High Close

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 849 MHz; σ = 0.9 mho/m; ε_r = 41; ρ = 1000 kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.258 mW/g

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

Reference Value = 5.42 V/m; Power Drift = -0.139 dB

Peak SAR (extrapolated) = 0.329 W/kg

SAR(1 g) = 0.223 mW/g; SAR(10 g) = 0.151 mW/g

Maximum value of SAR (measured) = 0.267 mW/g
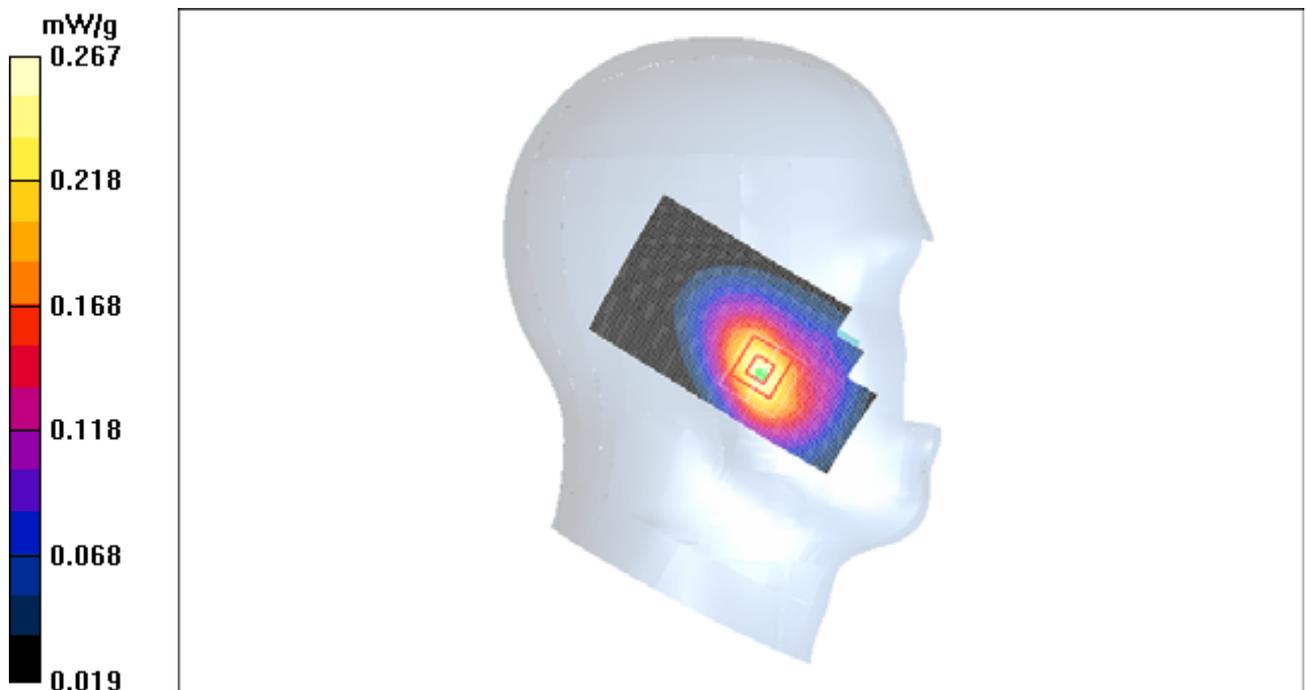

Figure 61 Left Hand Touch Cheek Close GSM 850 Channel 251
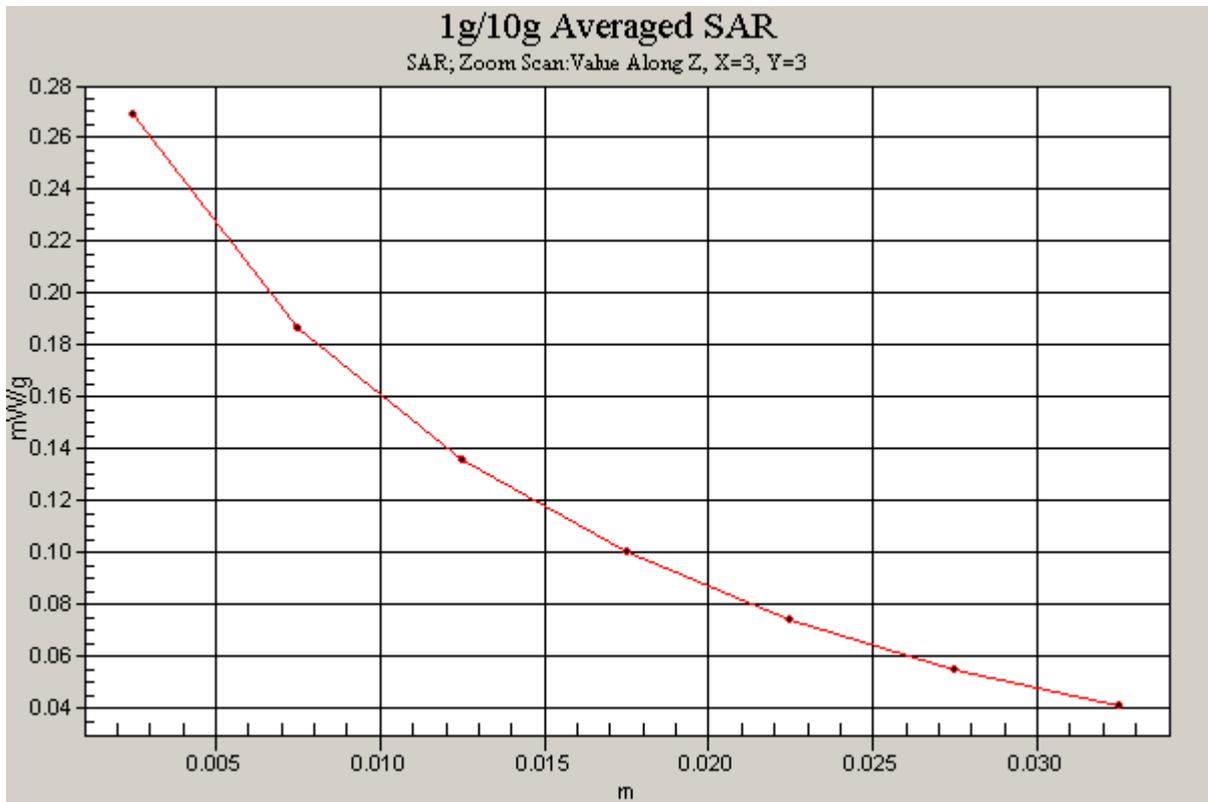
Figure 62 Z-Scan at power reference point (Left Hand Touch Cheek Close GSM 850 Channel 251)

Date/Time: 12/25/2008 4:55:52 AM

GSM 850 Left Cheek Middle Close

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz; σ = 0.889 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 5.41 V/m; Power Drift = -0.133 dB

Peak SAR (extrapolated) = 0.299 W/kg

SAR(1 g) = 0.203 mW/g; SAR(10 g) = 0.137 mW/g

Maximum value of SAR (measured) = 0.245 mW/g
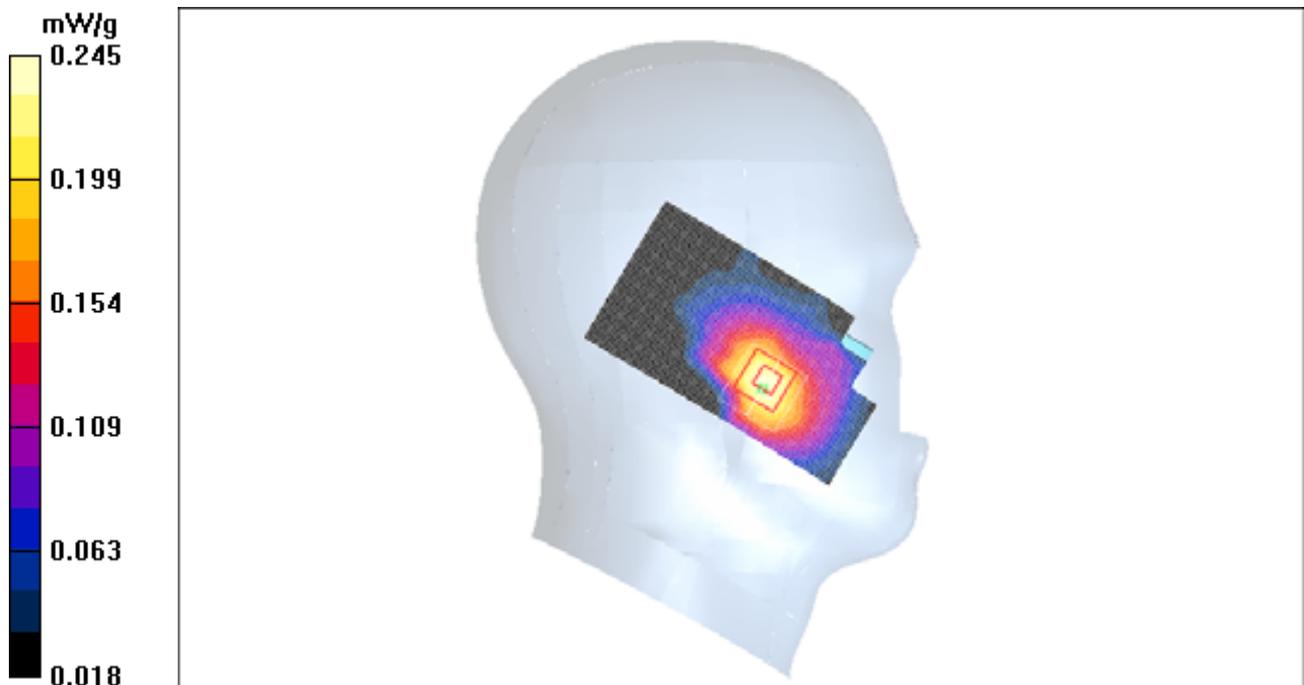
Figure 63 Left Hand Touch Cheek Close GSM 850 Channel 190
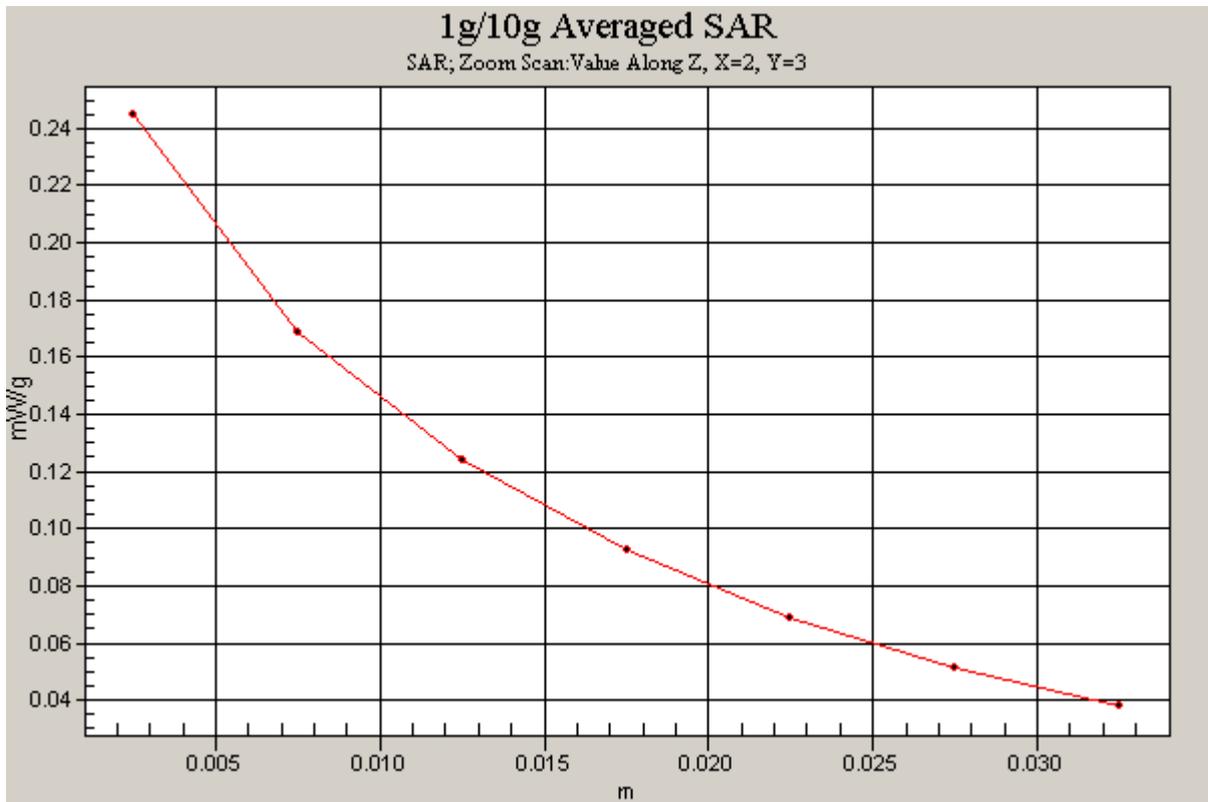
Figure 64 Z-Scan at power reference point (Left Hand Touch Cheek Close GSM 850 Channel 190)

Date/Time: 12/25/2008 5:34:21 AM

GSM 850 Left Cheek Low Close

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

Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.878 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.224 mW/g

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

Reference Value = 5.10 V/m; Power Drift = 0.169 dB

Peak SAR (extrapolated) = 0.290 W/kg

SAR(1 g) = 0.196 mW/g; SAR(10 g) = 0.133 mW/g

Maximum value of SAR (measured) = 0.236 mW/g
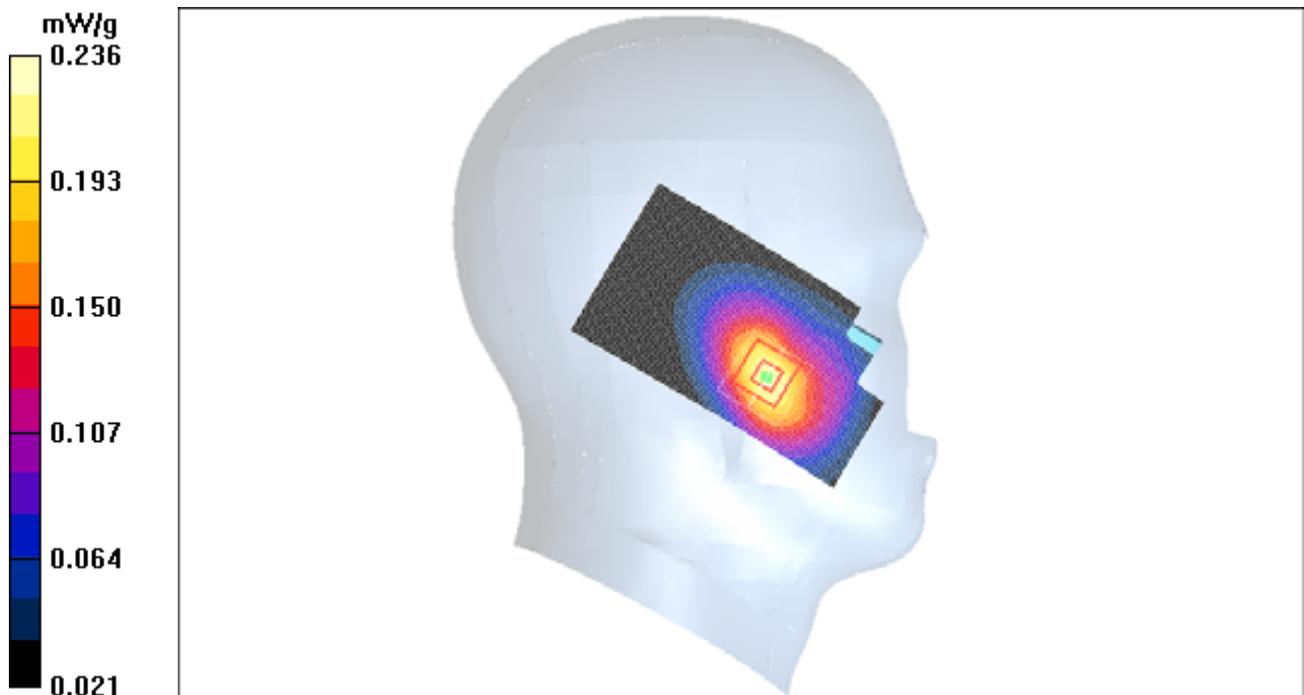
Figure 65 Left Hand Touch Cheek Close GSM 850 Channel 128
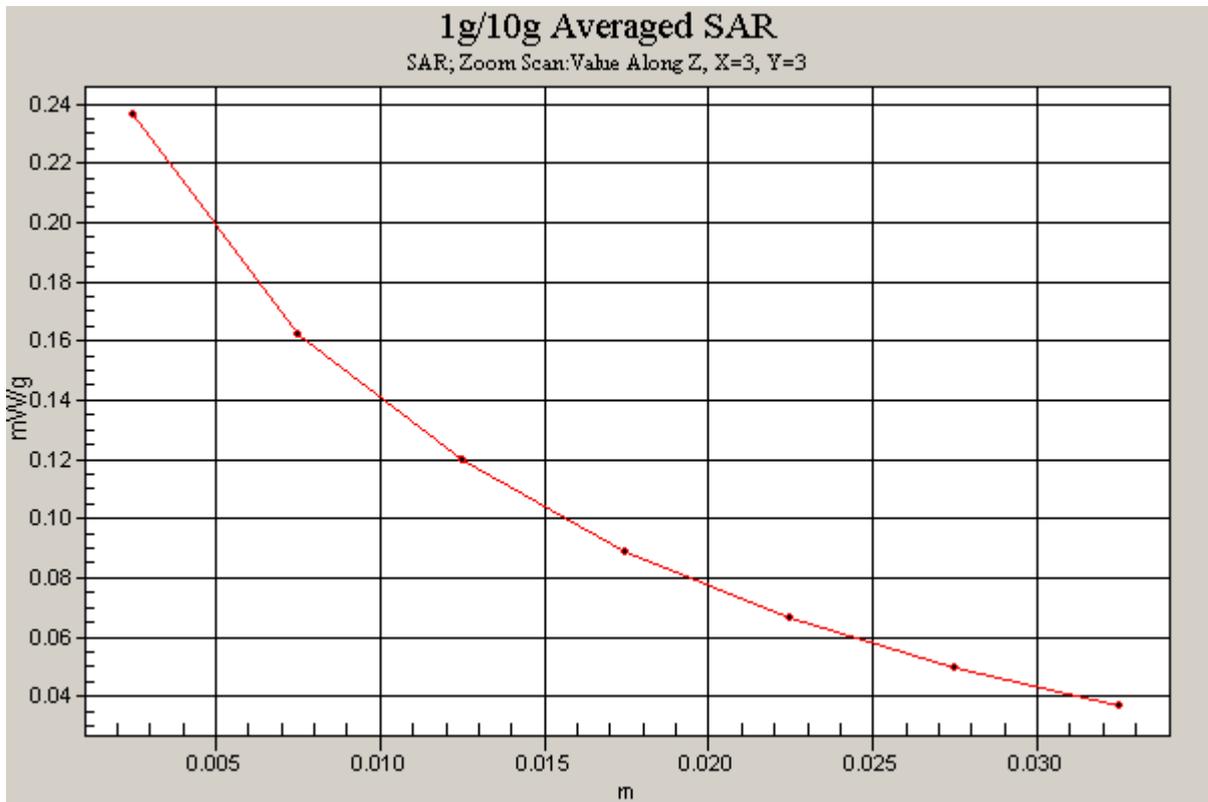
Figure 66 Z-Scan at power reference point (Left Hand Touch Cheek Close GSM 850 Channel 128)

Date/Time: 12/25/2008 6:31:38 AM

GSM 850 Left Tilt High Close

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 849 MHz; σ = 0.9 mho/m; $ε_r$ = 41; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.163 mW/g

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

Reference Value = 9.27 V/m; Power Drift = -0.164 dB

Peak SAR (extrapolated) = 0.184 W/kg

SAR(1 g) = 0.140 mW/g; SAR(10 g) = 0.102 mW/g

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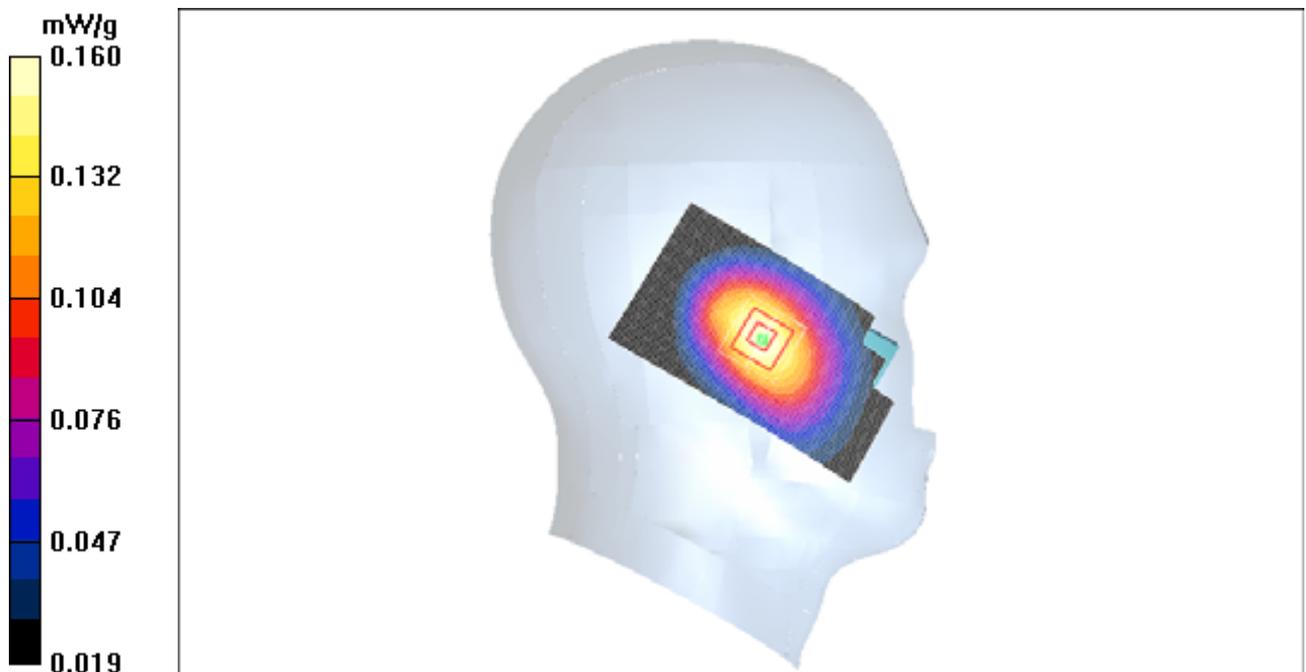

Figure 67 Left Hand Tilt 15°Close GSM 850 Channel 251
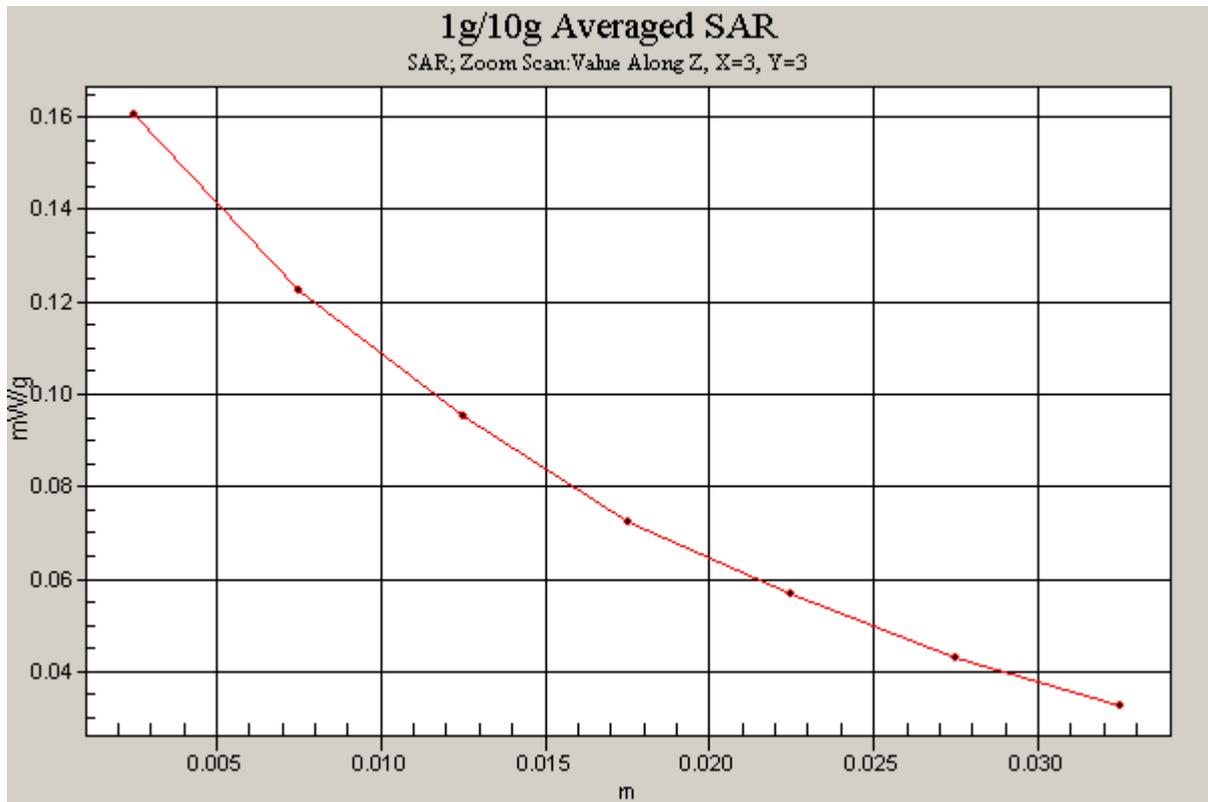
Figure 68 Z-Scan at power reference point (Left Hand Tilt 15°Close GSM 850 Channel 251)

Date/Time: 12/25/2008 6:13:10 AM

GSM 850 Left Tilt Middle Close

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz; σ = 0.889 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.147 mW/g

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

Reference Value = 8.77 V/m; Power Drift = 0.034 dB

Peak SAR (extrapolated) = 0.166 W/kg

SAR(1 g) = 0.127 mW/g; SAR(10 g) = 0.093 mW/g

Maximum value of SAR (measured) = 0.146 mW/g
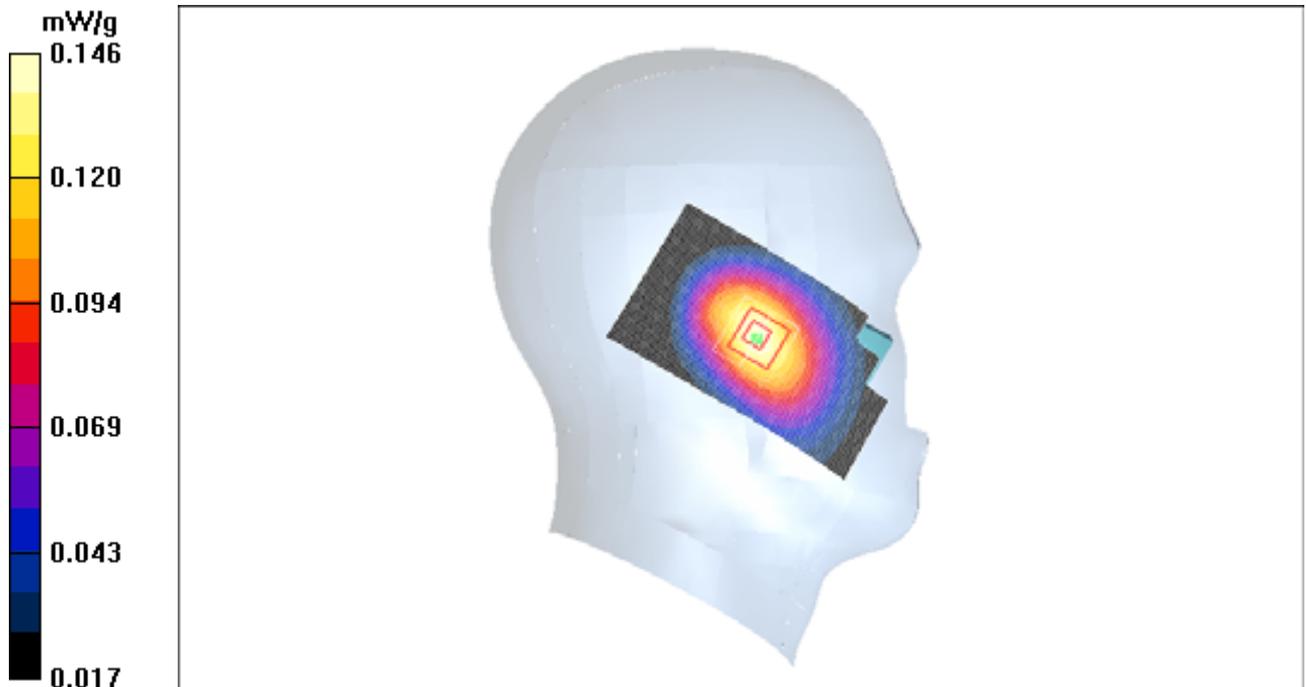

Figure 69 Left Hand Tilt 15°Close GSM 850 Channel 190
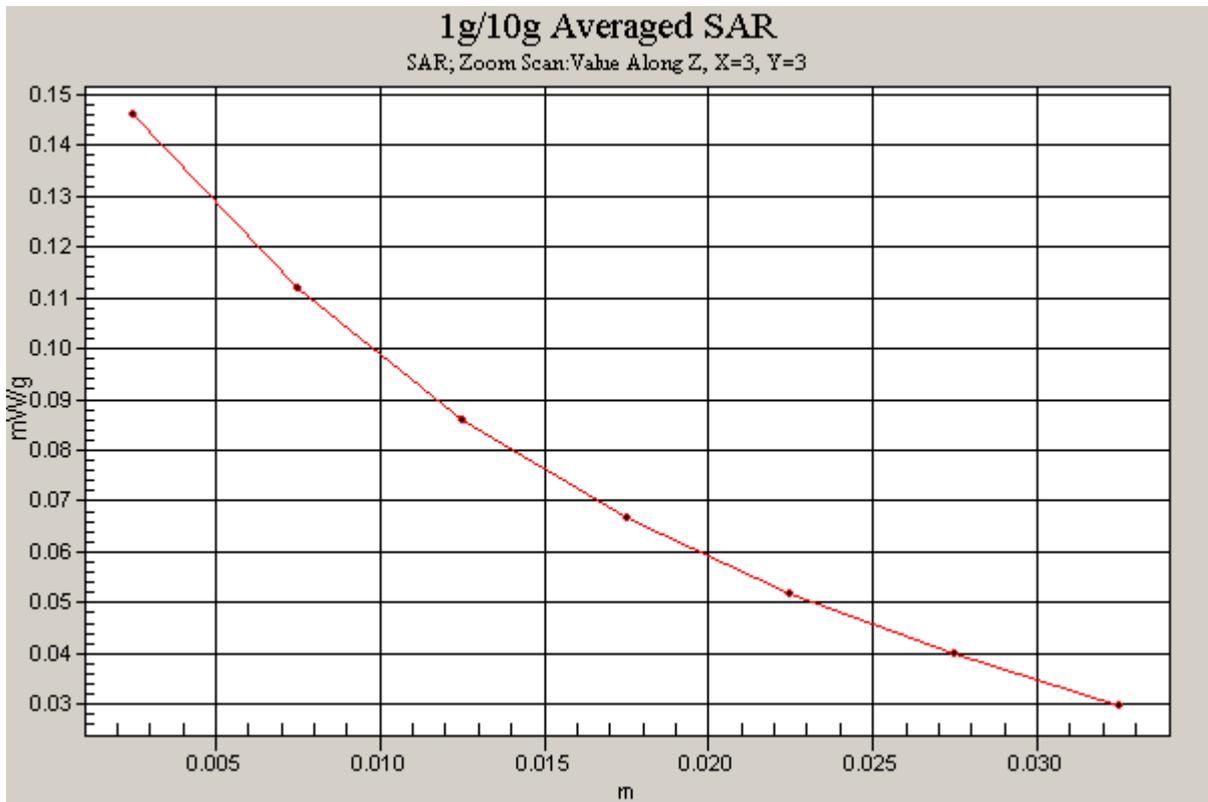
Figure 70 Z-Scan at power reference point (Left Hand Tilt 15°Close GSM 850 Channel 190)

Date/Time: 12/25/2008 5:54:42 AM

GSM 850 Left Tilt Low Close

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

Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.878 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.145 mW/g

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

Reference Value = 8.77 V/m; Power Drift = 0.028 dB

Peak SAR (extrapolated) = 0.164 W/kg

SAR(1 g) = 0.126 mW/g; SAR(10 g) = 0.093 mW/g

Maximum value of SAR (measured) = 0.143 mW/g
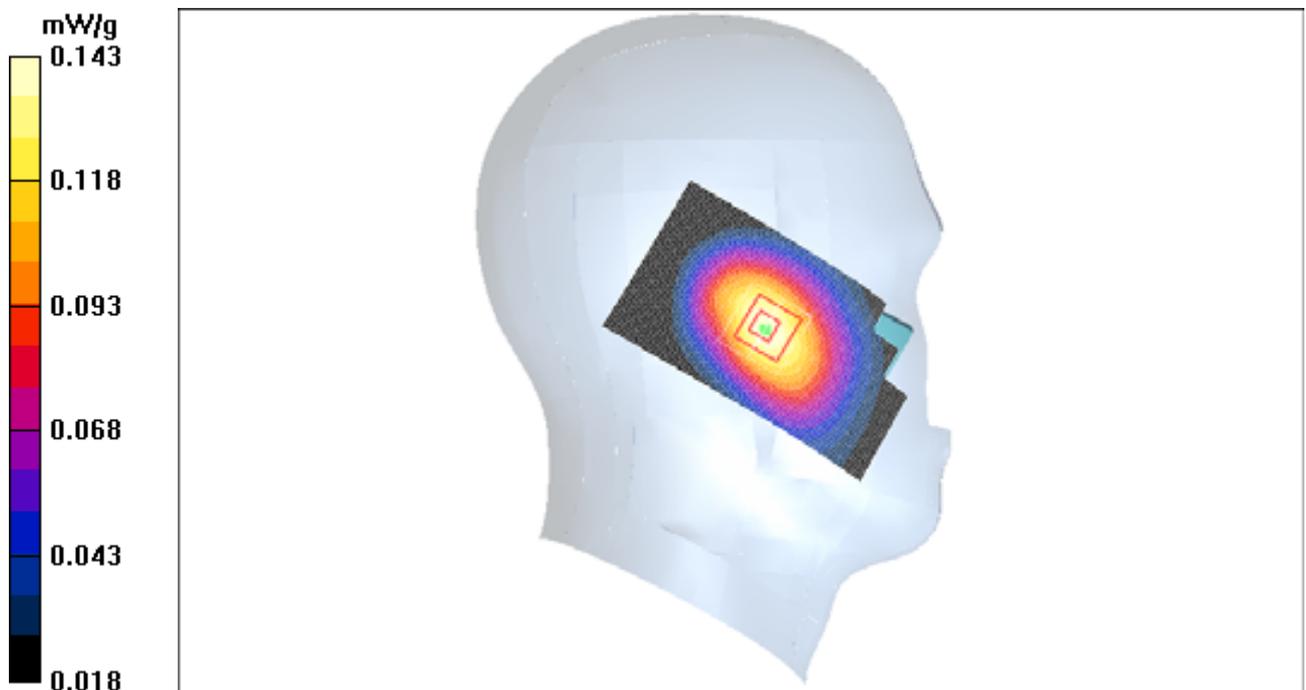
Figure 71 Left Hand Tilt 15°Close GSM 850 Channel 128
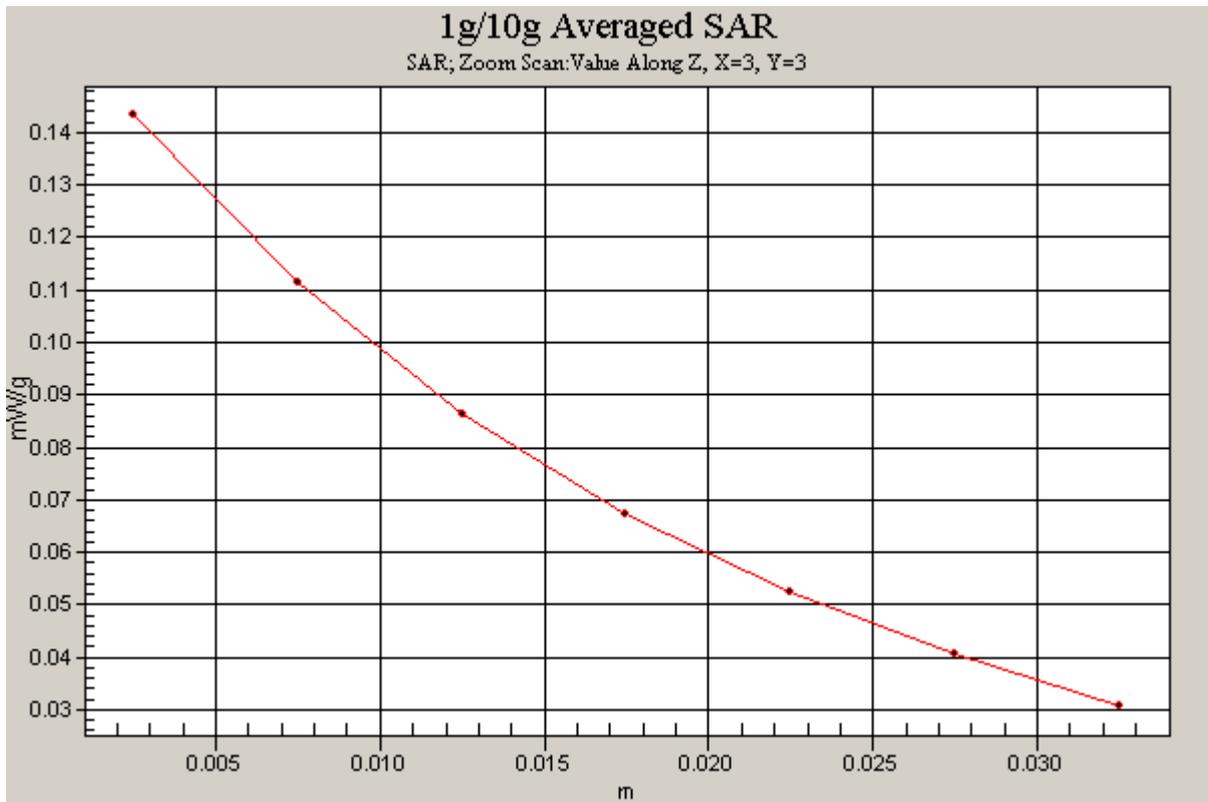
Figure 72 Z-Scan at power reference point (Left Hand Tilt 15°Close GSM 850 Channel 128)

GSM 850 Right Cheek High Close

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 849 MHz; σ = 0.9 mho/m; ε_r = 41; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.221 mW/g

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

Reference Value = 5.10 V/m; Power Drift = 0.067 dB

Peak SAR (extrapolated) = 0.269 W/kg

SAR(1 g) = 0.183 mW/g; SAR(10 g) = 0.124 mW/g

Maximum value of SAR (measured) = 0.221 mW/g
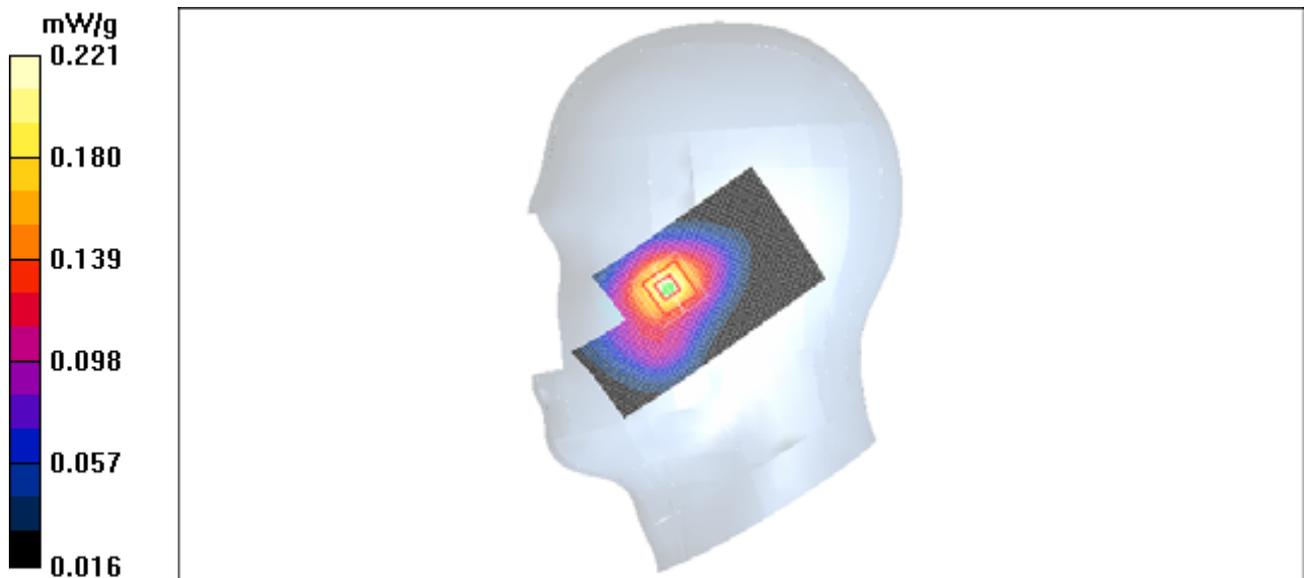
Figure 73 Right Hand Touch Cheek Close GSM 850 Channel 251
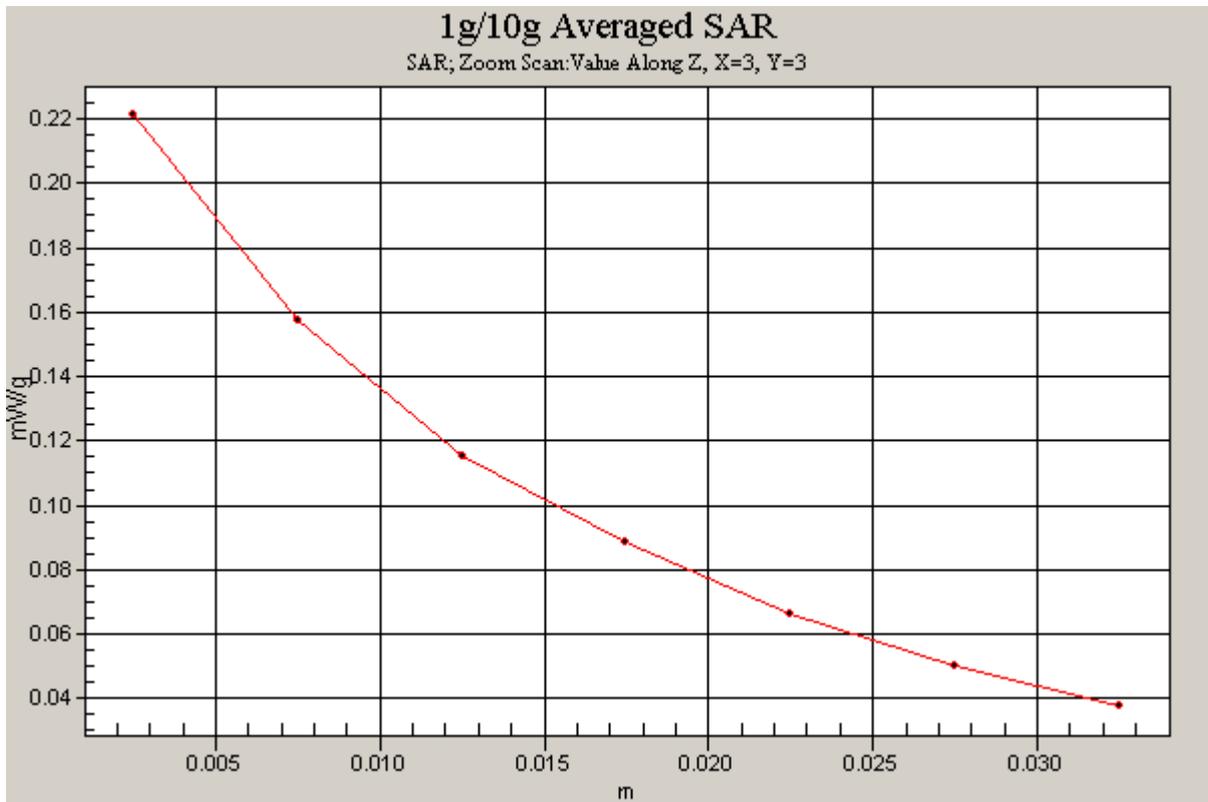
Figure 74 Z-Scan at power reference point (Right Hand Touch Cheek Close GSM 850 Channel 251)

GSM 850 Right Cheek Middle Close

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz; σ = 0.889 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 4.66 V/m; Power Drift = 0.145 dB

Peak SAR (extrapolated) = 0.250 W/kg

SAR(1 g) = 0.169 mW/g; SAR(10 g) = 0.115 mW/g

Maximum value of SAR (measured) = 0.204 mW/g
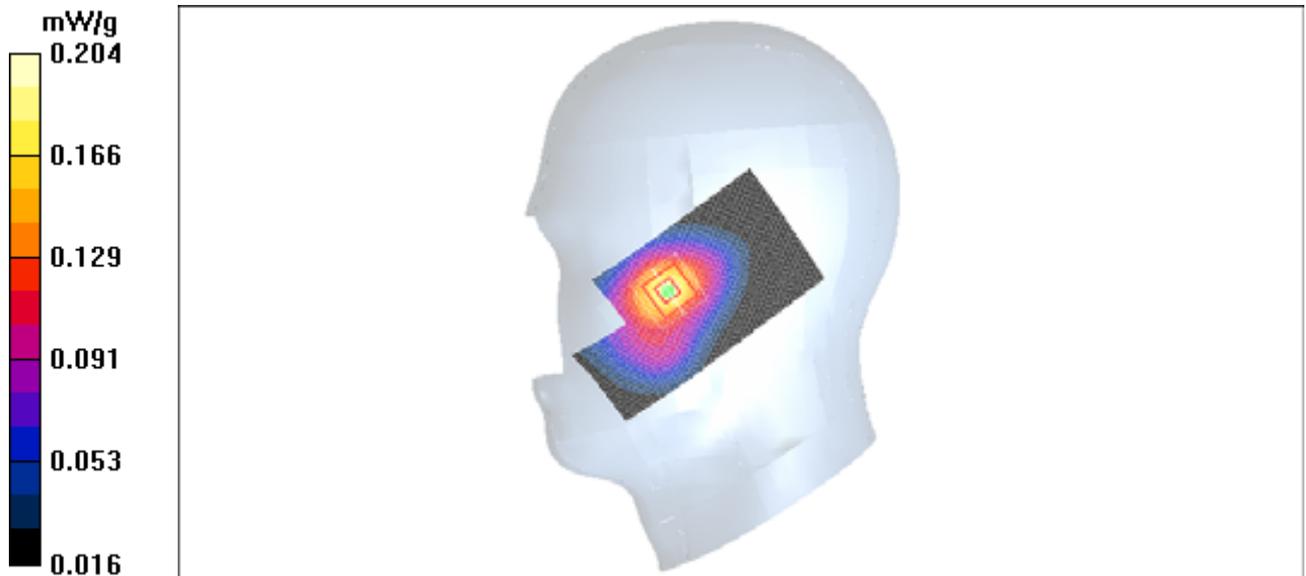
Figure 75 Right Hand Touch Cheek Close GSM 850 Channel 190
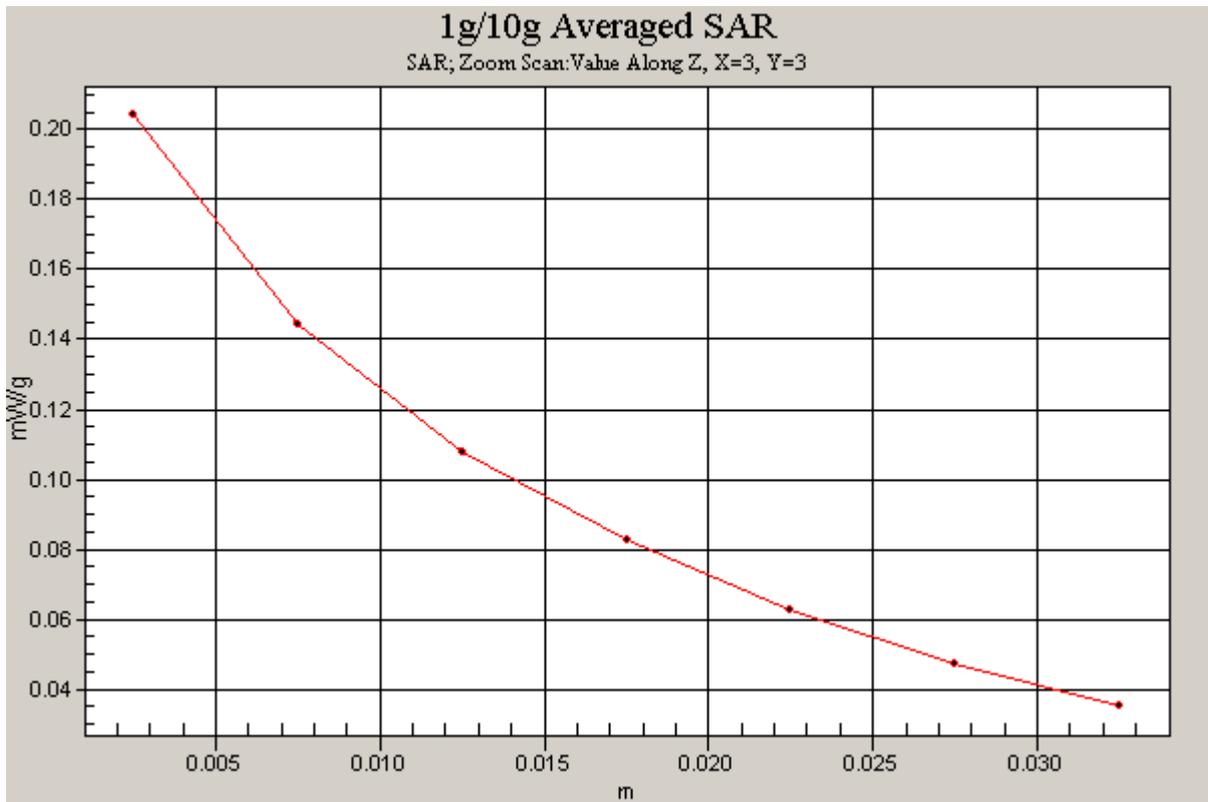
Figure 76 Z-Scan at power reference point (Right Hand Touch Cheek Close GSM 850 Channel 190)

Date/Time: 12/27/2008 6:41:43 PM

GSM 850 Right Cheek Low Close

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

Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.878 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.190 mW/g

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

Reference Value = 4.64 V/m; Power Drift = 0.152 dB

Peak SAR (extrapolated) = 0.243 W/kg

SAR(1 g) = 0.165 mW/g; SAR(10 g) = 0.113 mW/g

Maximum value of SAR (measured) = 0.198 mW/g
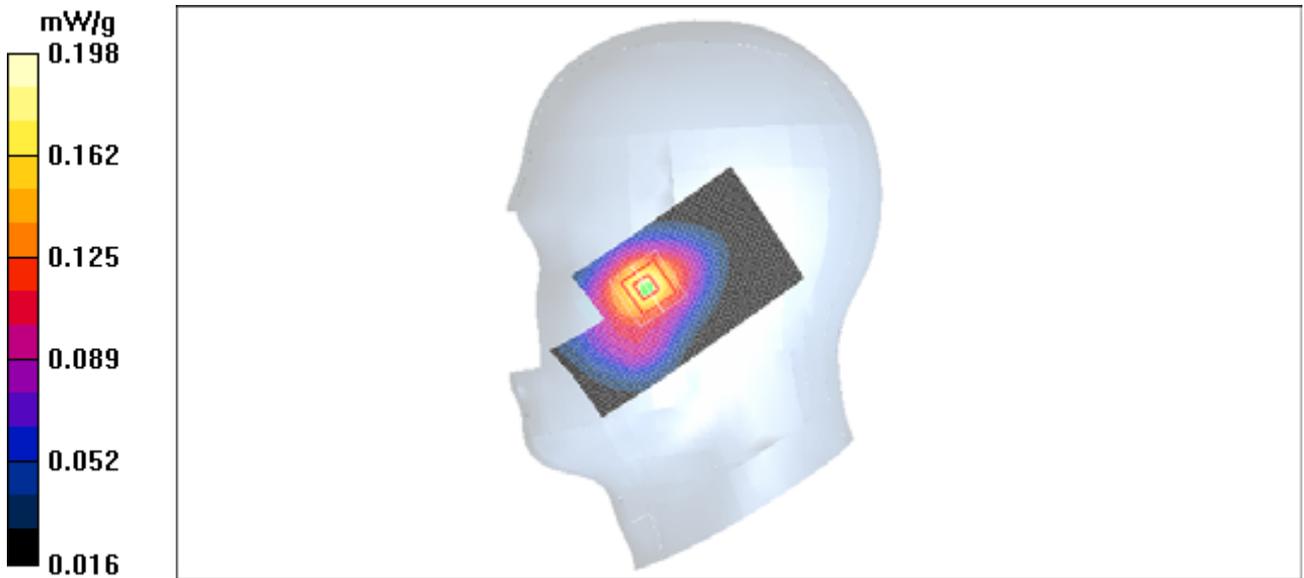
Figure 77 Right Hand Touch Cheek Close GSM 850 Channel 128
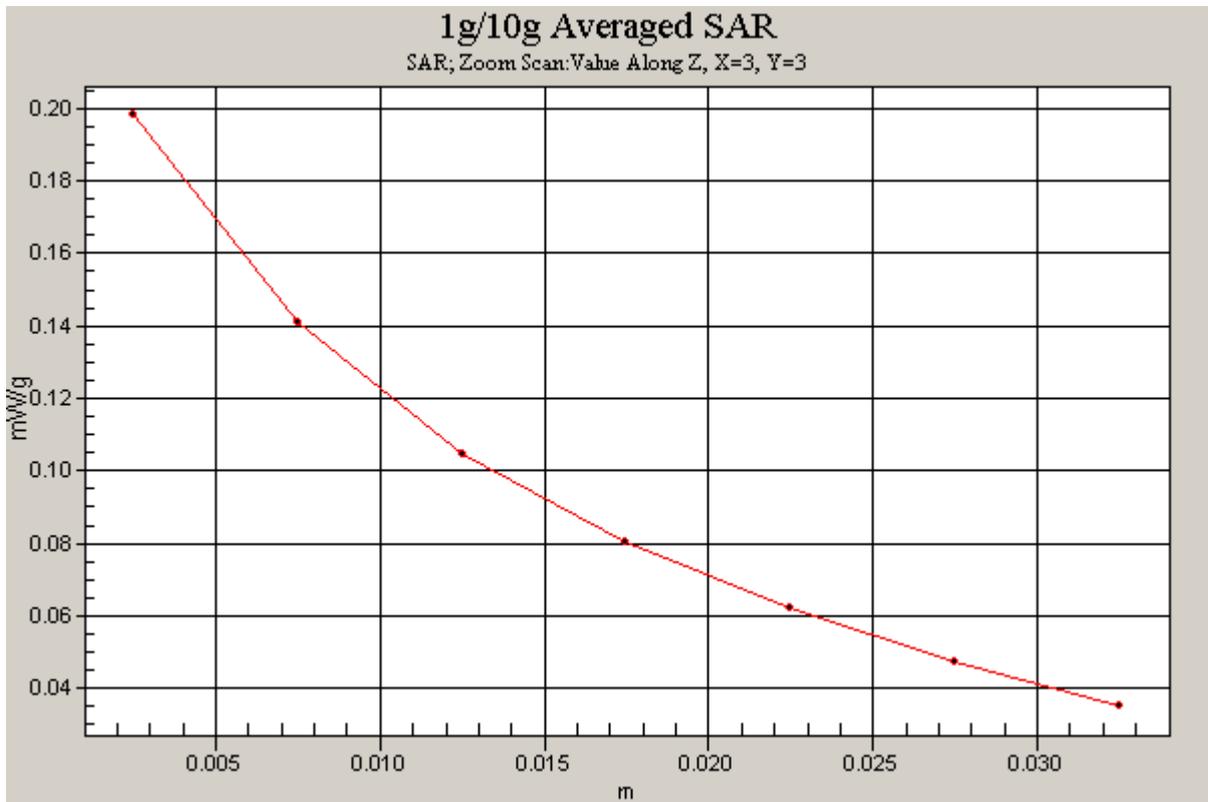
Figure 78 Z-Scan at power reference point (Right Hand Touch Cheek Close GSM 850 Channel 128)

Date/Time: 12/27/2008 7:39:57 PM

GSM 850 Right Tilt High Close

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 849 MHz; σ = 0.9 mho/m; ε_r = 41; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.130 mW/g

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

Reference Value = 8.20 V/m; Power Drift = -0.077 dB

Peak SAR (extrapolated) = 0.148 W/kg

SAR(1 g) = 0.113 mW/g; SAR(10 g) = 0.082 mW/g

Maximum value of SAR (measured) = 0.130 mW/g
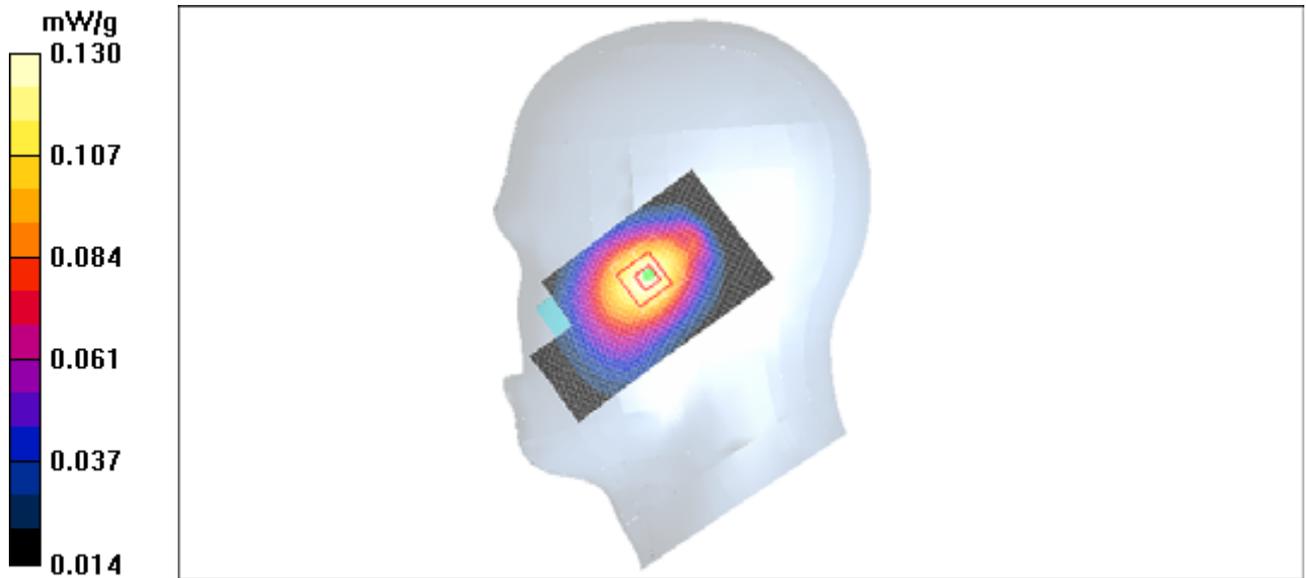
Figure 79 Right Hand Tilt 15°Close GSM 850 Channel 251
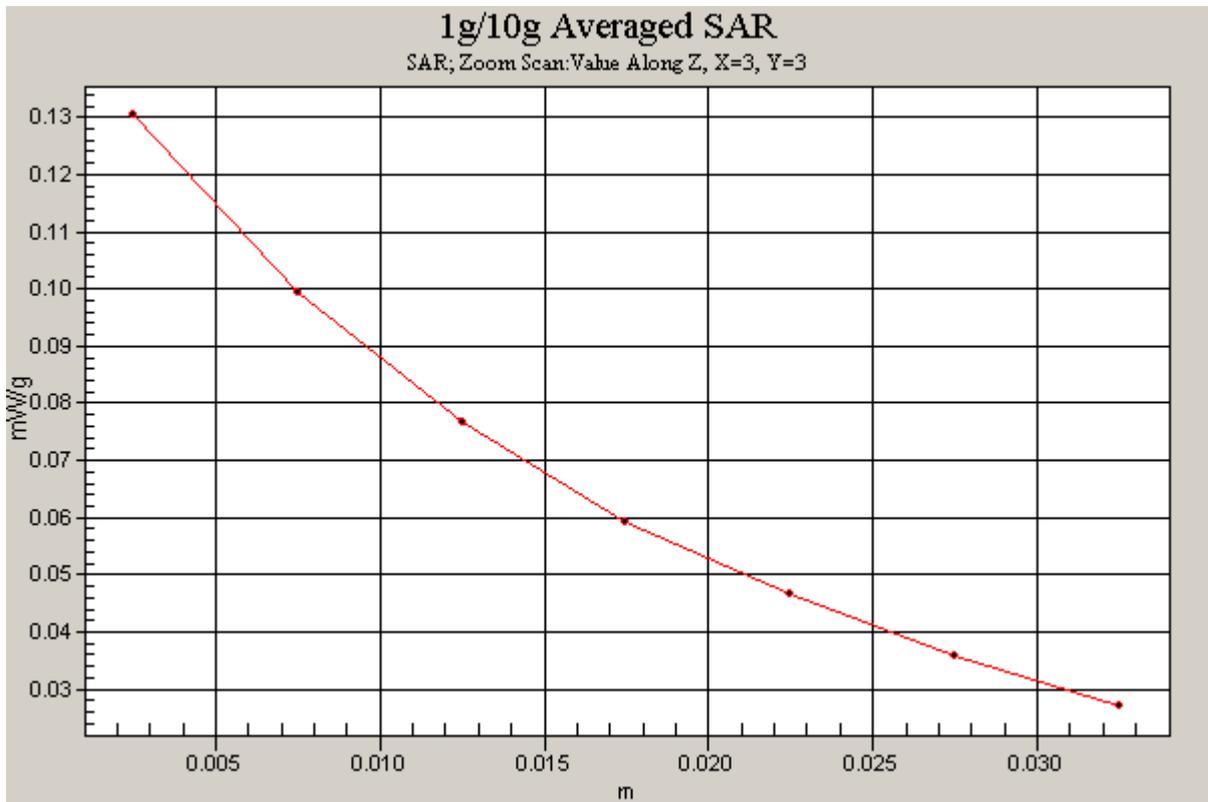
Figure 80 Z-Scan at power reference point (Right Hand Tilt 15°Close GSM 850 Channel 251)

Date/Time: 12/27/2008 7:20:19 PM

GSM 850 Right Tilt Middle Close

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz; σ = 0.889 mho/m; $ε_r$ = 41.2; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.126 mW/g

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

Reference Value = 8.09 V/m; Power Drift = -0.052 dB

Peak SAR (extrapolated) = 0.144 W/kg

SAR(1 g) = 0.110 mW/g; SAR(10 g) = 0.081 mW/g

Maximum value of SAR (measured) = 0.126 mW/g
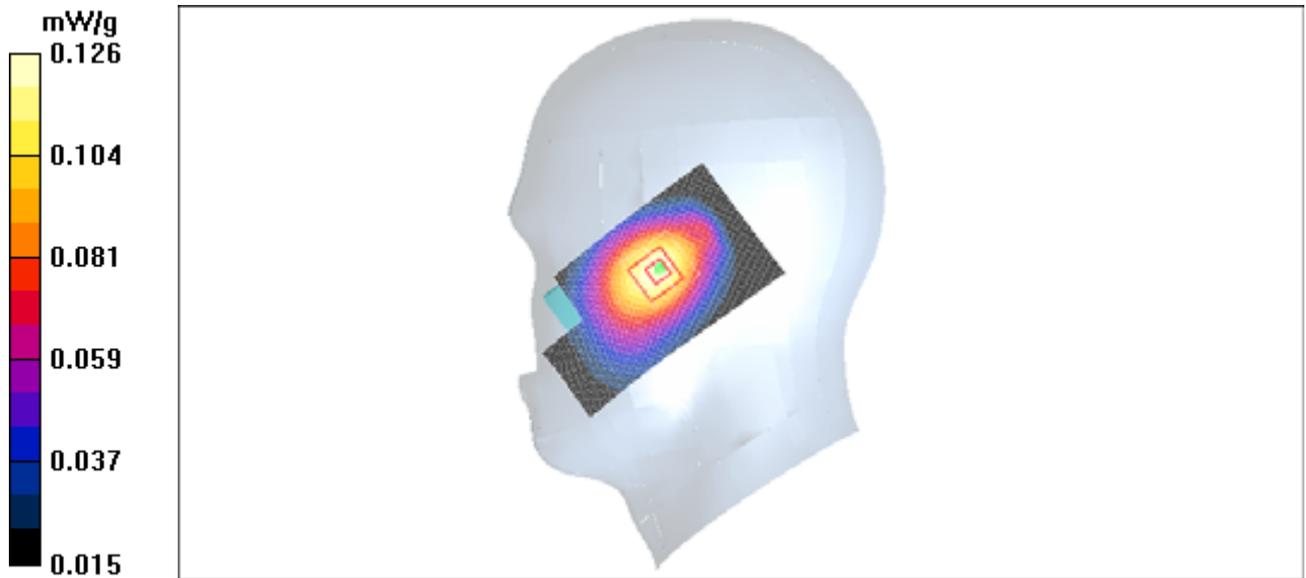
Figure 81 Right Hand Tilt 15°Close GSM 850 Channel 190
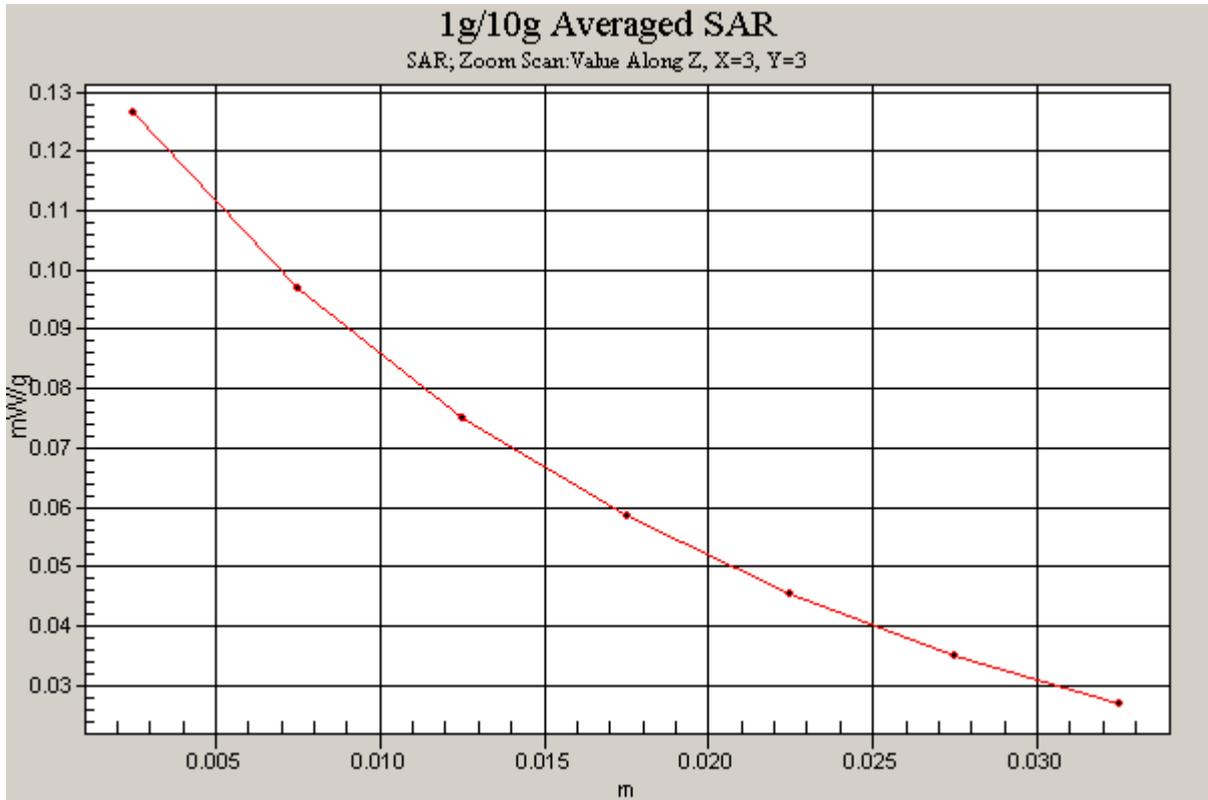
Figure 82 Z-Scan at power reference point (Right Hand Tilt 15°Close GSM 850 Channel 190)

Date/Time: 12/27/2008 7:01:56 PM

GSM 850 Right Tilt Low Close

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

Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.878 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.19, 9.19, 9.19); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.123 mW/g

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

Reference Value = 8.12 V/m; Power Drift = -0.009 dB

Peak SAR (extrapolated) = 0.142 W/kg

SAR(1 g) = 0.108 mW/g; SAR(10 g) = 0.080 mW/g

Maximum value of SAR (measured) = 0.124 mW/g
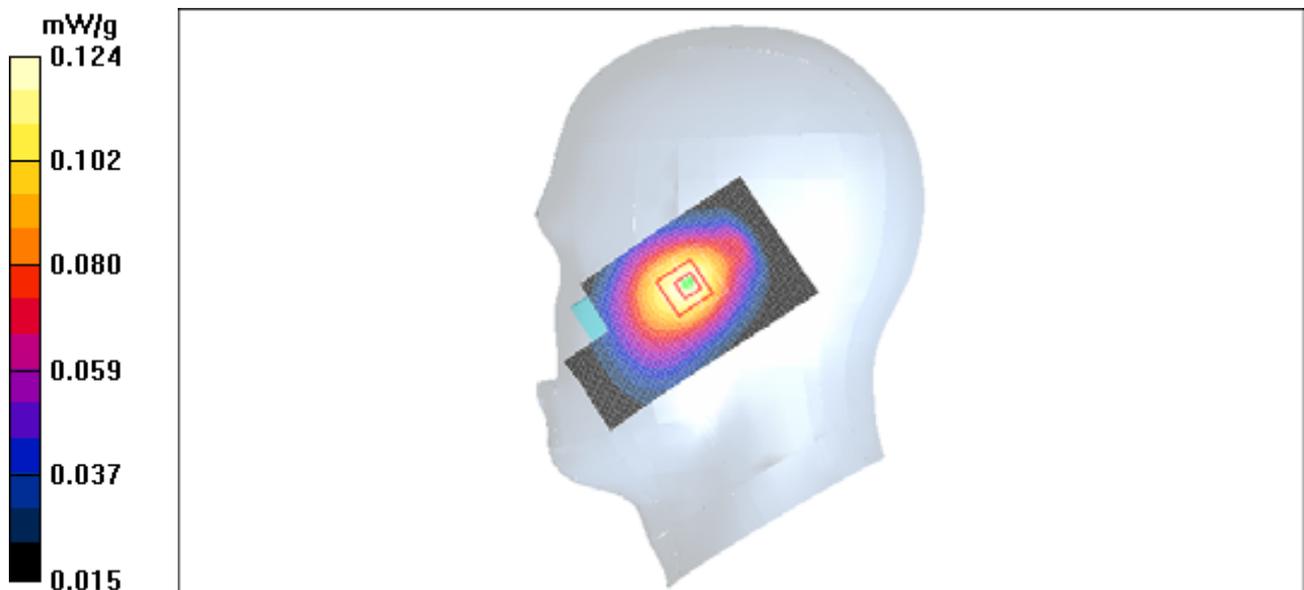
Figure 83 Right Hand Tilt 15°Close GSM 850 Channel 128
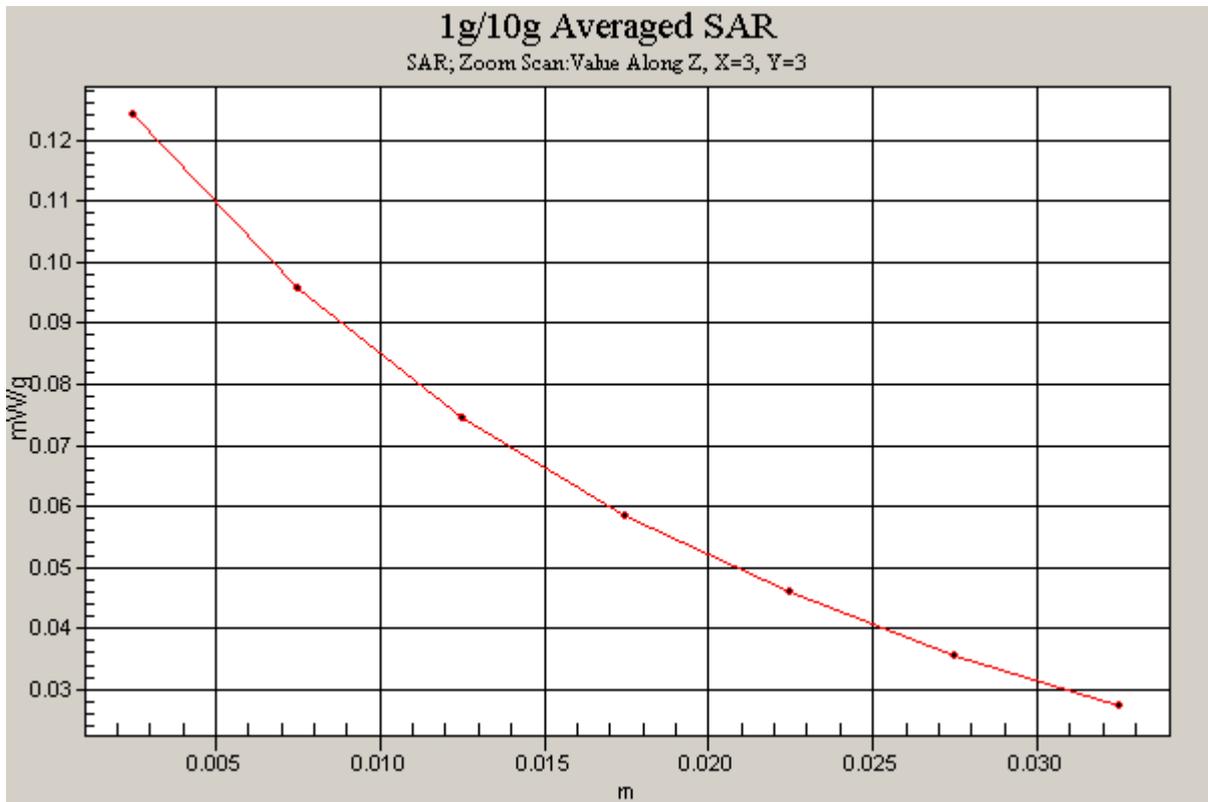
Figure 84 Z-Scan at power reference point (Right Hand Tilt 15°Close GSM 850 Channel 128)

Date/Time: 12/26/2008 9:24:11 AM

GSM 850 Towards Ground High Close

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 849 MHz; σ = 0.997 mho/m; ε_r = 54.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.431 mW/g

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

Reference Value = 6.65 V/m; Power Drift = 0.019 dB

Peak SAR (extrapolated) = 0.517 W/kg

SAR(1 g) = 0.356 mW/g; SAR(10 g) = 0.239 mW/g
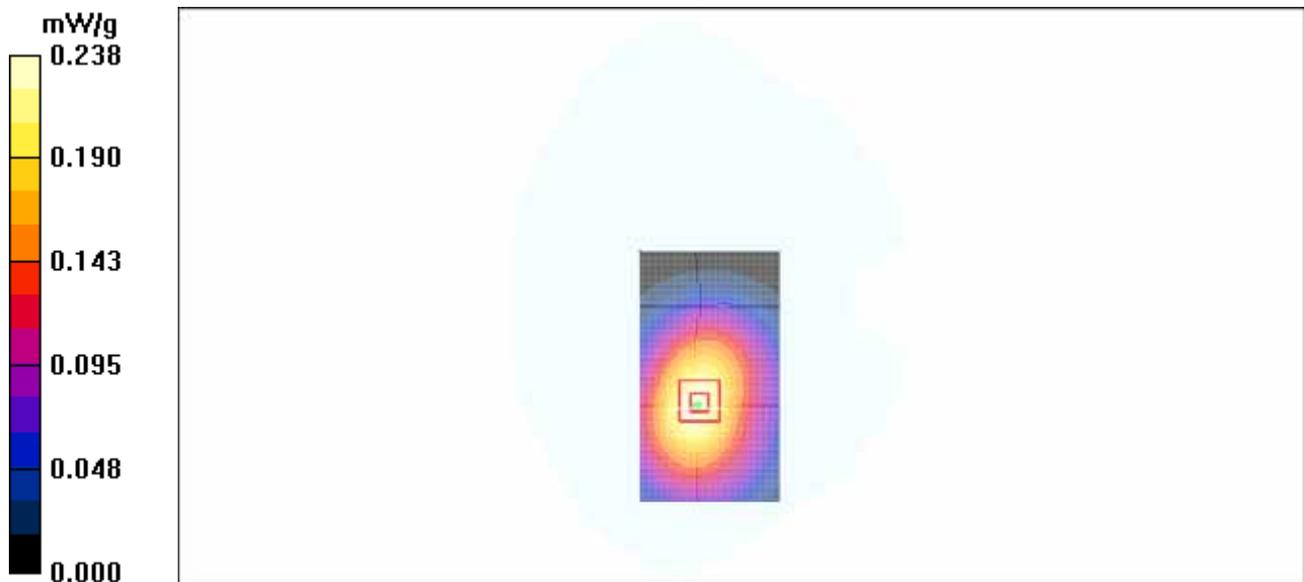
Maximum value of SAR (measured) = 0.425 mW/g
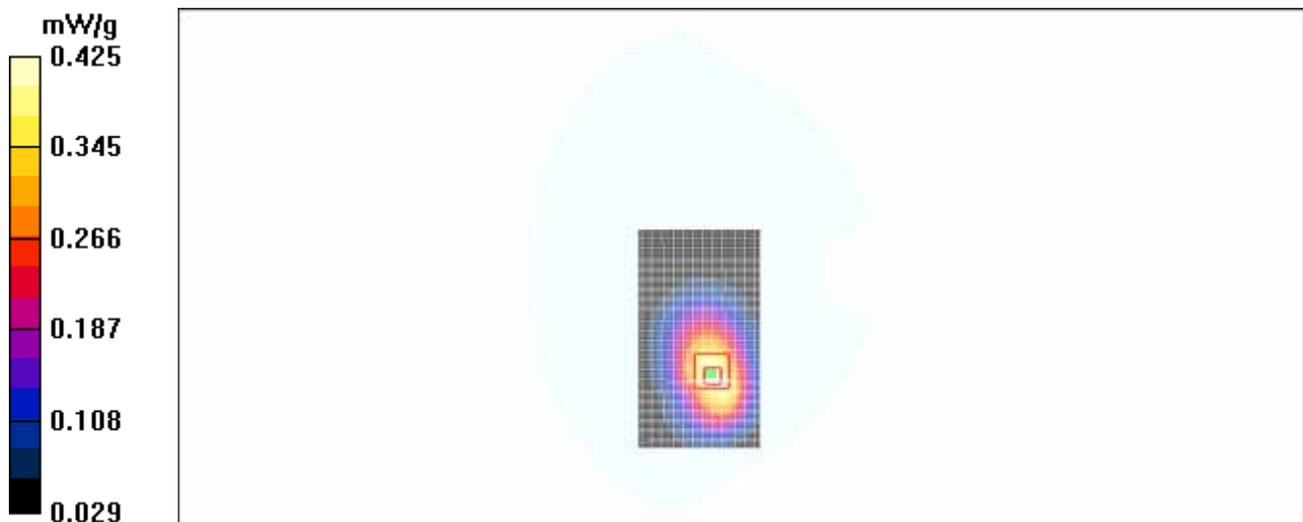


Figure 85 Body, Towards Ground, Close GSM 850 Channel 251
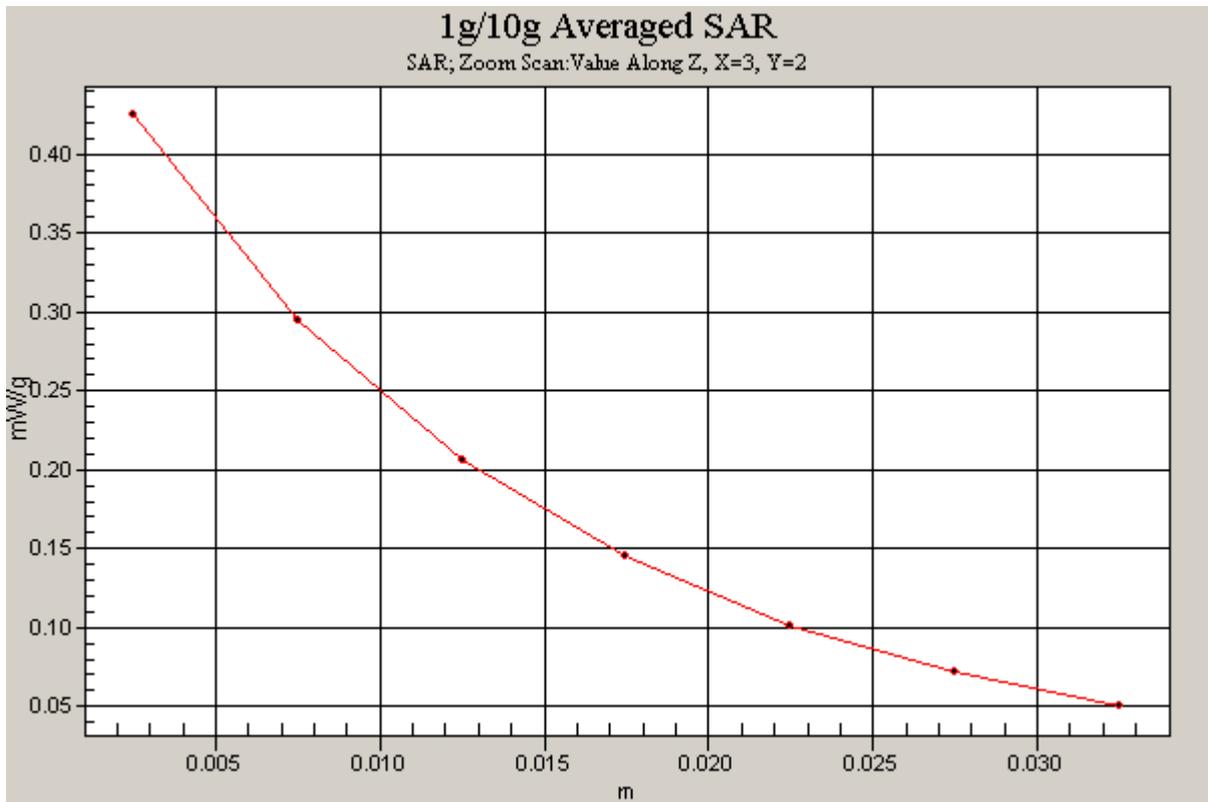
Figure 86 Z-Scan at power reference point (Body, Towards Ground, Close GSM 850 Channel 251)

Date/Time: 12/26/2008 9:06:06 AM

GSM 850 Towards Ground Middle Close

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz; σ = 0.986 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.399 mW/g

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

Reference Value = 6.36 V/m; Power Drift = 0.055 dB

Peak SAR (extrapolated) = 0.472 W/kg

SAR(1 g) = 0.328 mW/g; SAR(10 g) = 0.220 mW/g

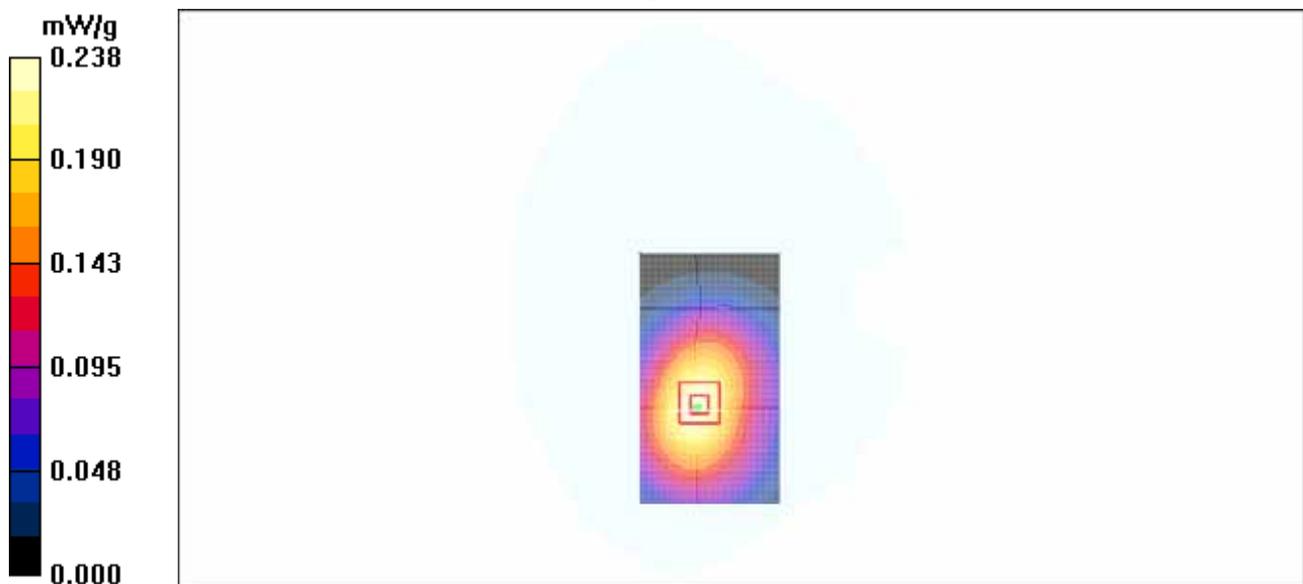Maximum value of SAR (measured) = 0.392 mW/g
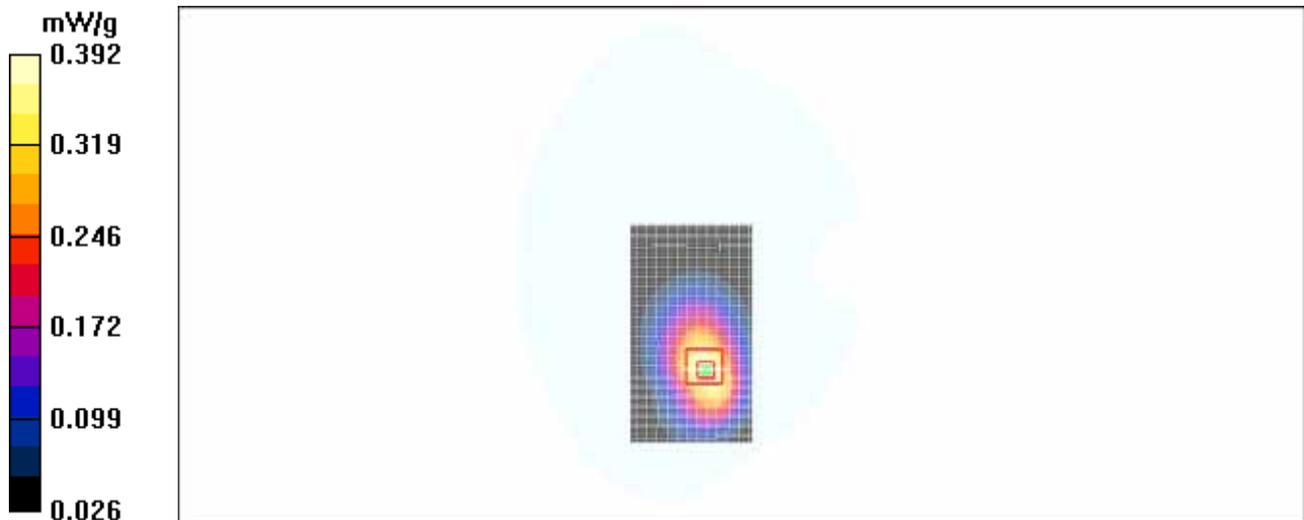


Figure 87 Body, Towards Ground, Close GSM 850 Channel 190
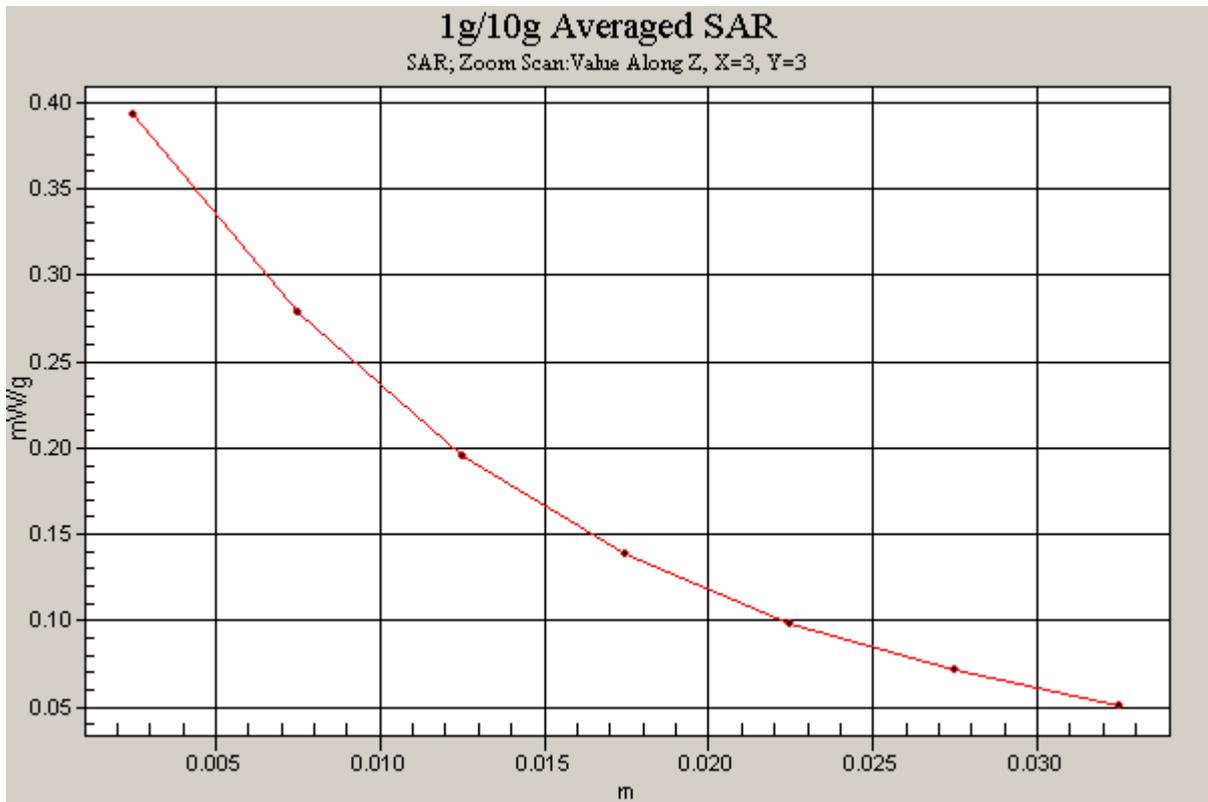
Figure 88 Z-Scan at power reference point (Body, Towards Ground, Close GSM 850 Channel 190)

Date/Time: 12/26/2008 9:44:57 AM

GSM 850 Towards Ground Low Close

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

Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.972 mho/m; ε_r = 54.4; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.372 mW/g

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

Reference Value = 6.17 V/m; Power Drift = 0.076 dB

Peak SAR (extrapolated) = 0.453 W/kg

SAR(1 g) = 0.312 mW/g; SAR(10 g) = 0.210 mW/g

Maximum value of SAR (measured) = 0.375 mW/g
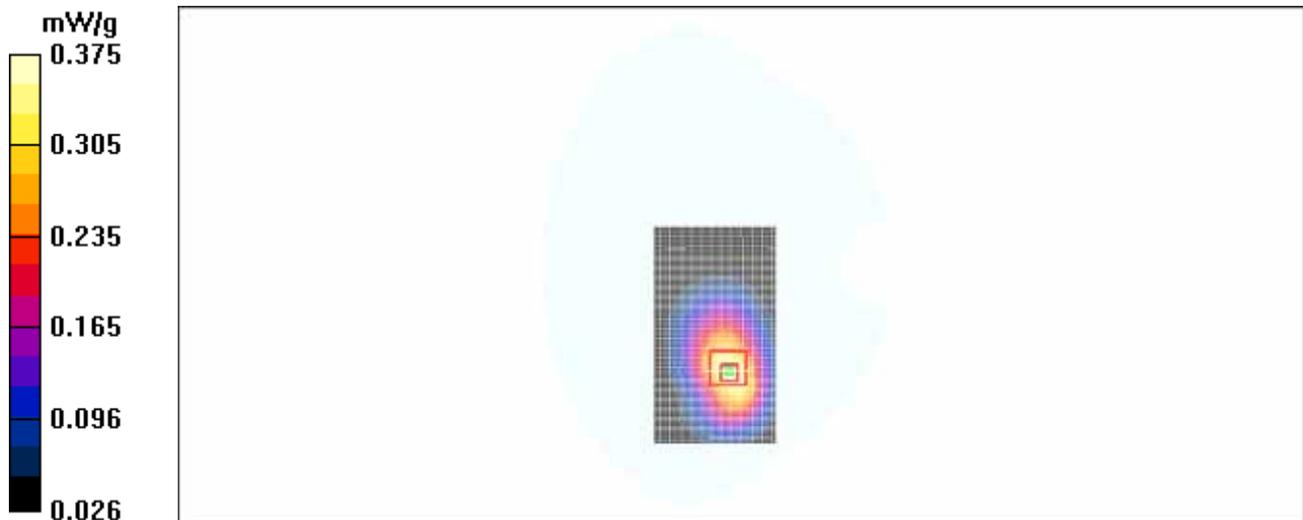
Figure 89 Body, Towards Ground, Close GSM 850 Channel 128
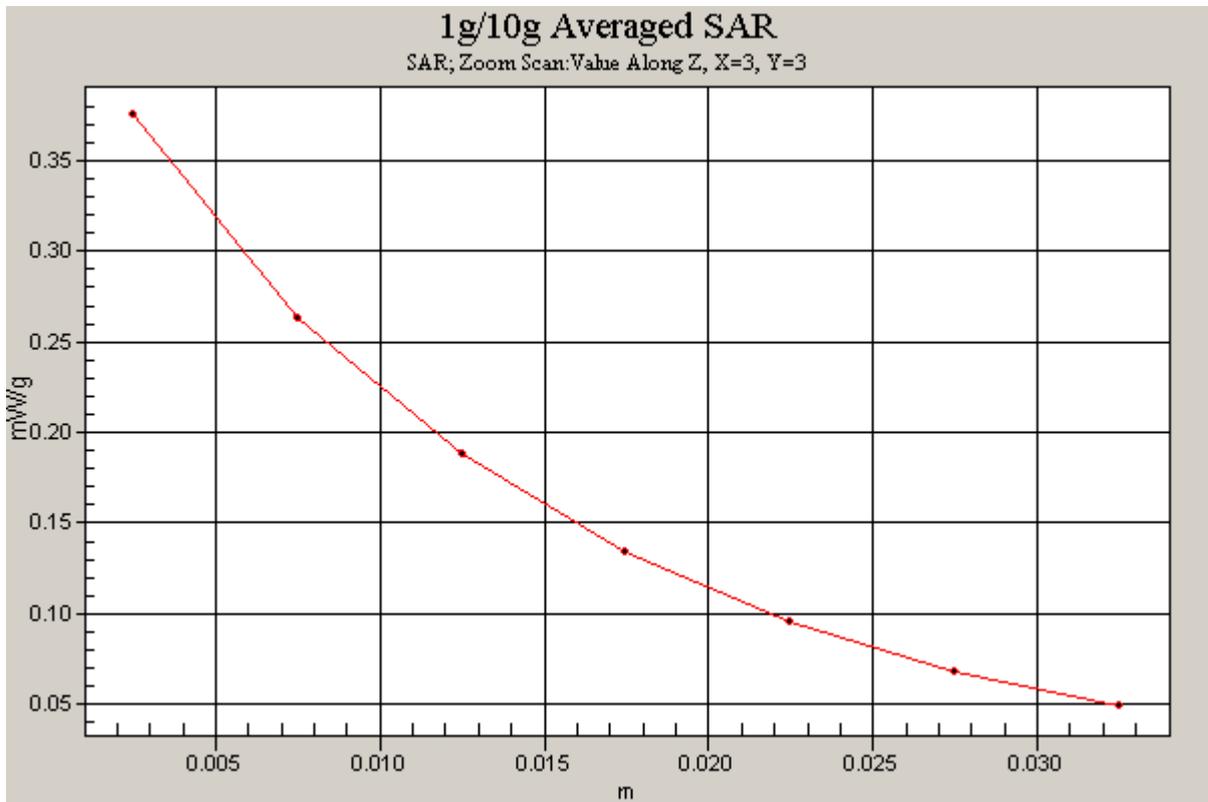
Figure 90 Z-Scan at power reference point (Body, Towards Ground, Close GSM 850 Channel 128)

Date/Time: 12/30/2008 1:26:22 AM

GSM 850 Towards Phantom High Close

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 849 MHz; σ = 0.997 mho/m; ε_r = 54.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.163 mW/g

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

Reference Value = 5.88 V/m; Power Drift = -0.122 dB

Peak SAR (extrapolated) = 0.191 W/kg

SAR(1 g) = 0.142 mW/g; SAR(10 g) = 0.102 mW/g

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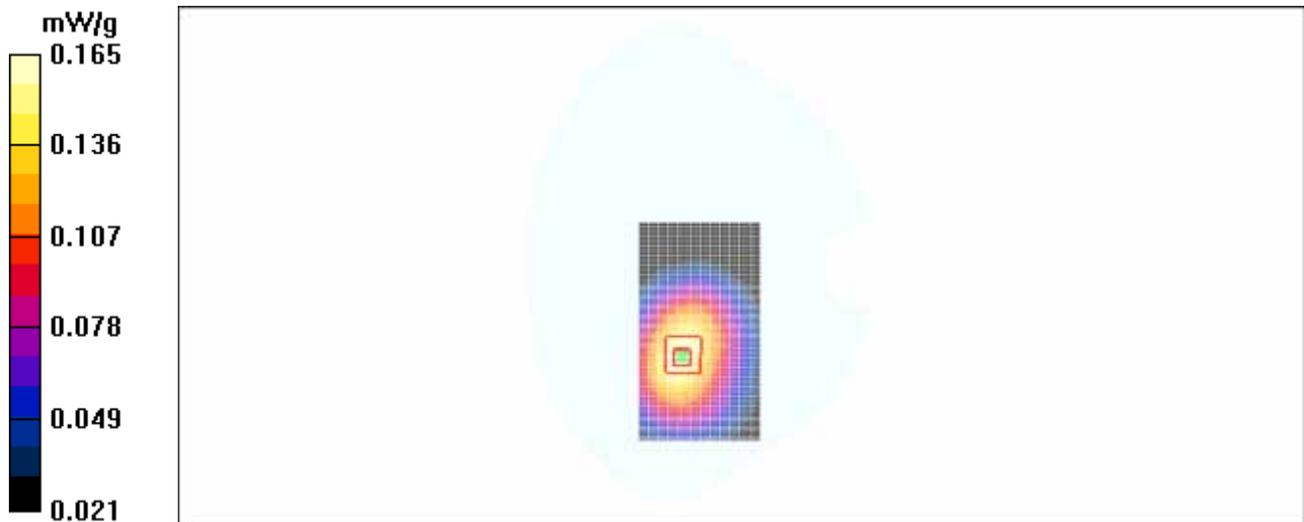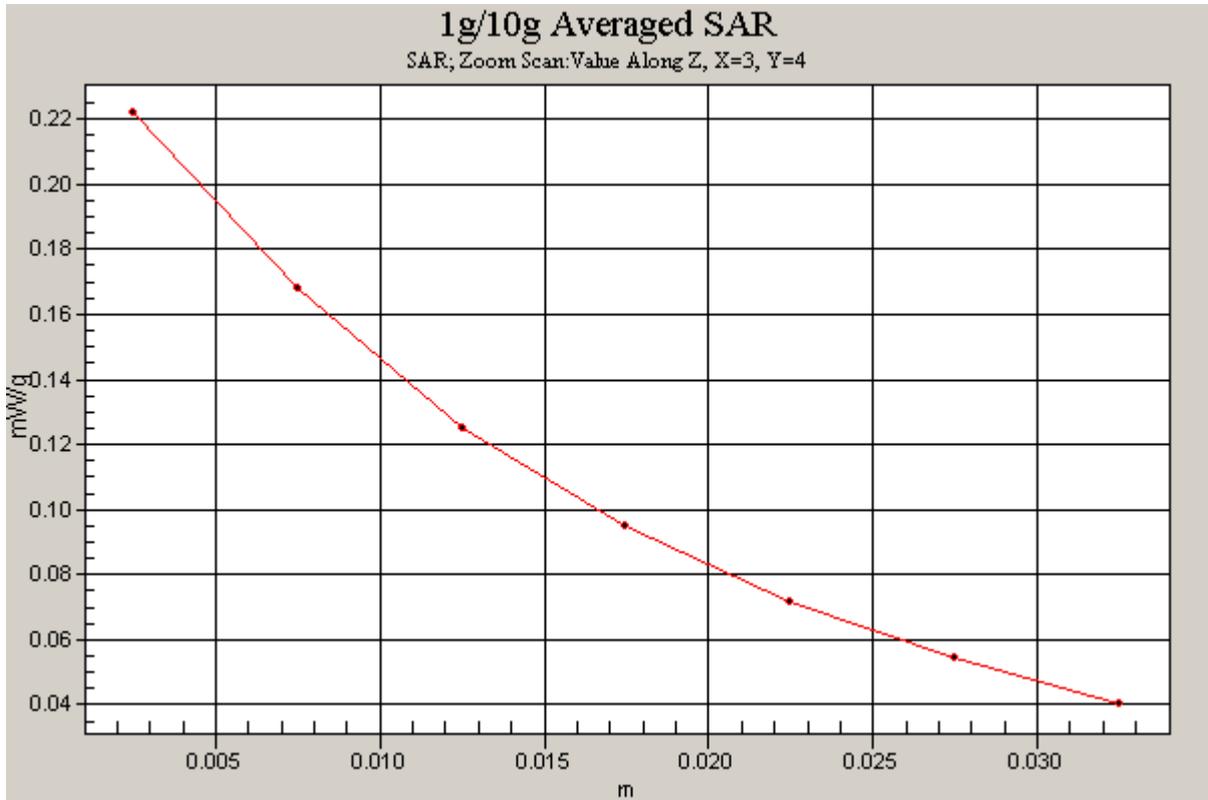

Figure 91 Body, Towards Phantom, Close GSM 850 Channel 251
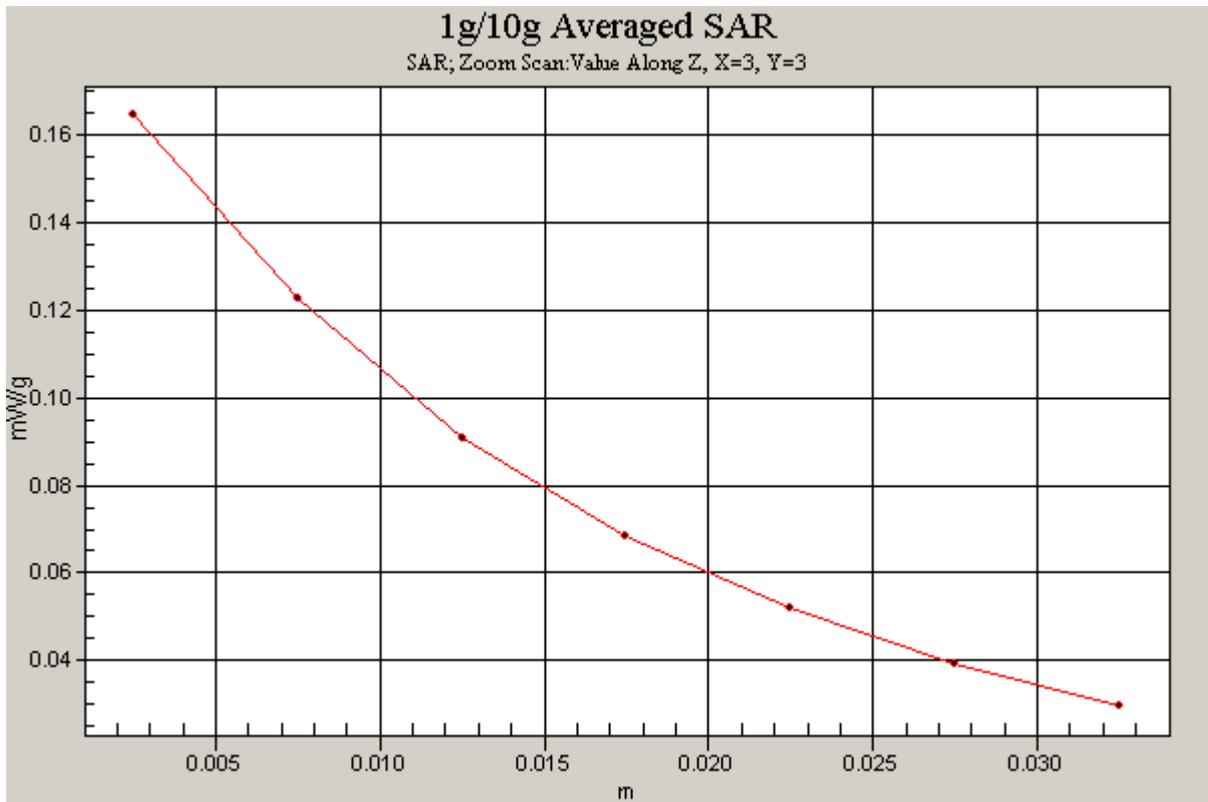
Figure 92 Z-Scan at power reference point (Body, Towards Phantom, Close GSM 850 Channel 251)

Date/Time: 12/30/2008 1:07:13 AM

GSM 850 Towards Phantom Middle Close

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz; σ = 0.986 mho/m; $ε_r$ = 54.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.149 mW/g

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

Reference Value = 5.63 V/m; Power Drift = -0.138 dB

Peak SAR (extrapolated) = 0.173 W/kg

SAR(1 g) = 0.129 mW/g; SAR(10 g) = 0.093 mW/g

Maximum value of SAR (measured) = 0.148 mW/g
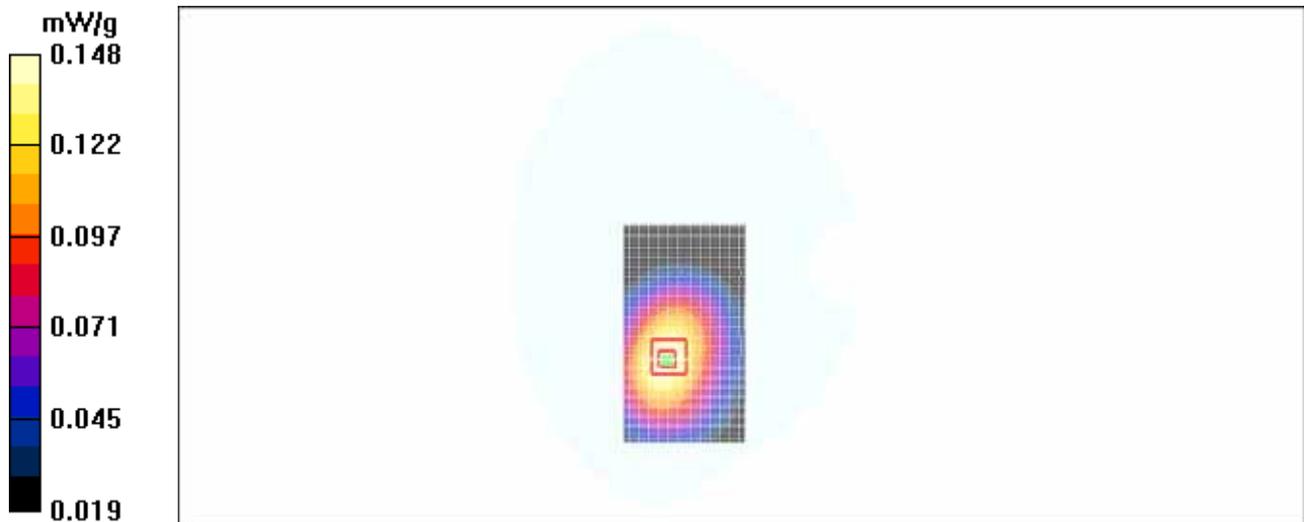

Figure 93 Body, Towards Phantom, Close GSM 850 Channel 190
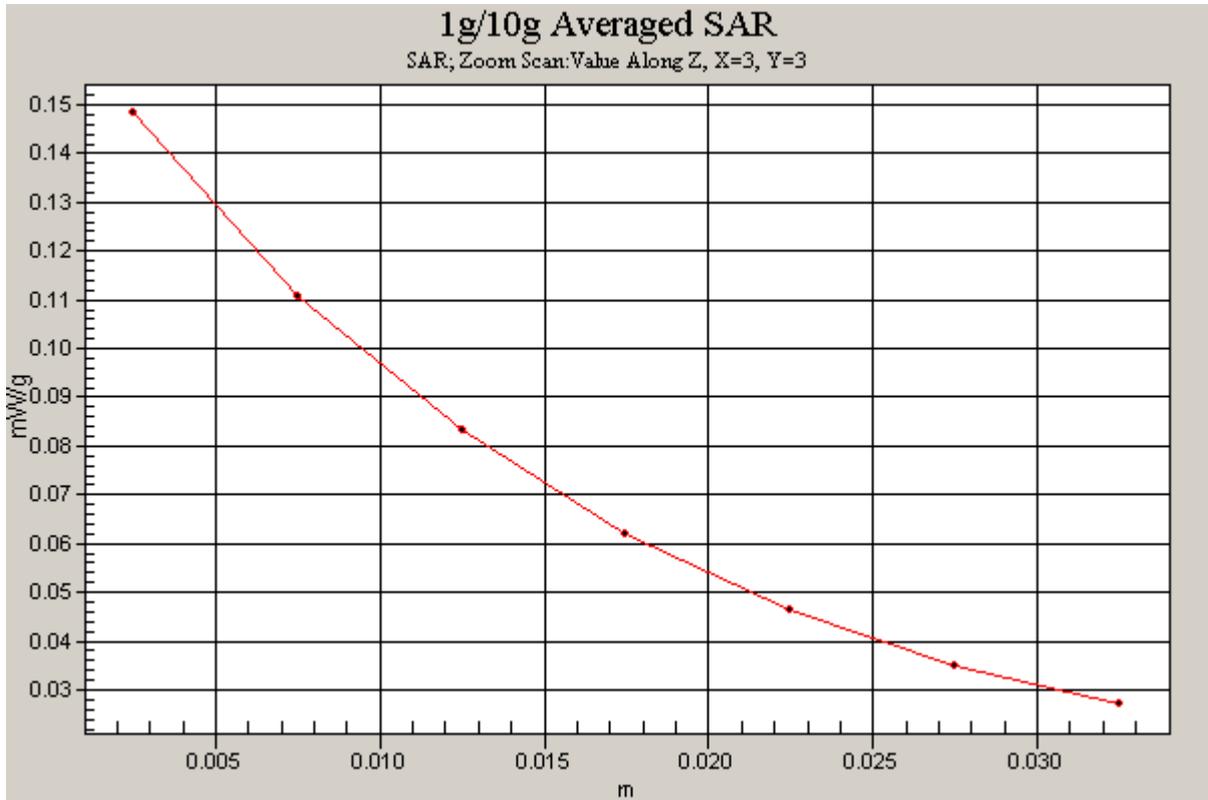
Figure 94 Z-Scan at power reference point (Body, Towards Phantom, Close GSM 850 Channel 190)

Date/Time: 12/30/2008 1:44:36 AM

GSM 850 Towards Phantom Low Close

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

Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.972 mho/m; ε_r = 54.4; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

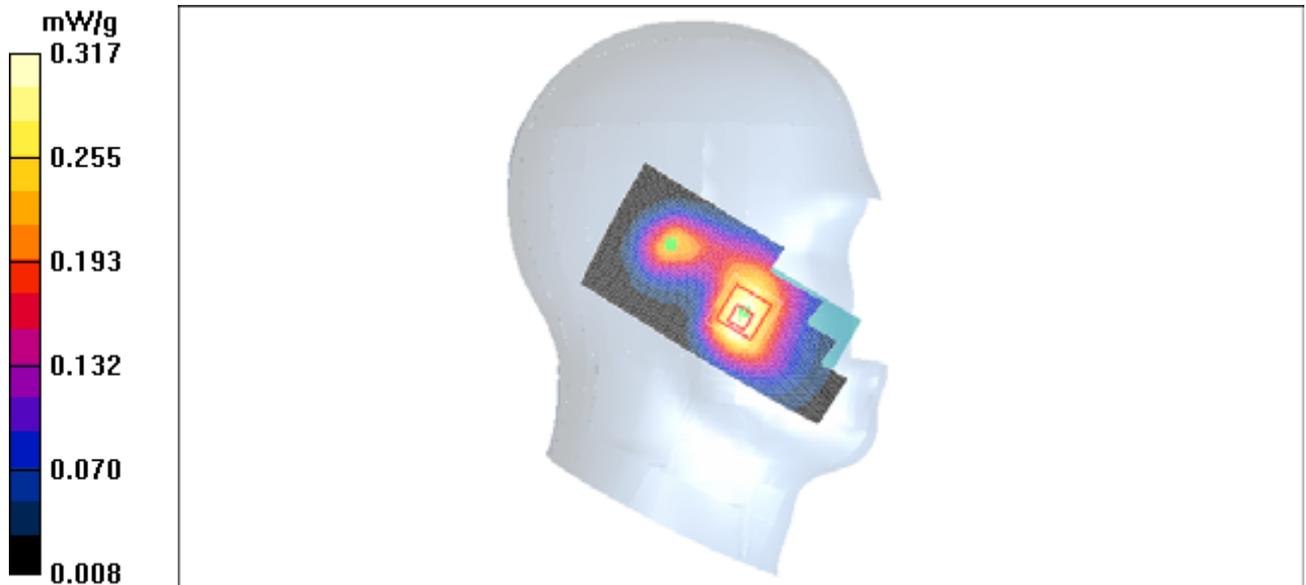Maximum value of SAR (interpolated) = 0.137 mW/g

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

Reference Value = 5.23 V/m; Power Drift = 0.127 dB

Peak SAR (extrapolated) = 0.159 W/kg

SAR(1 g) = 0.120 mW/g; SAR(10 g) = 0.087 mW/g

Maximum value of SAR (measured) = 0.138 mW/g
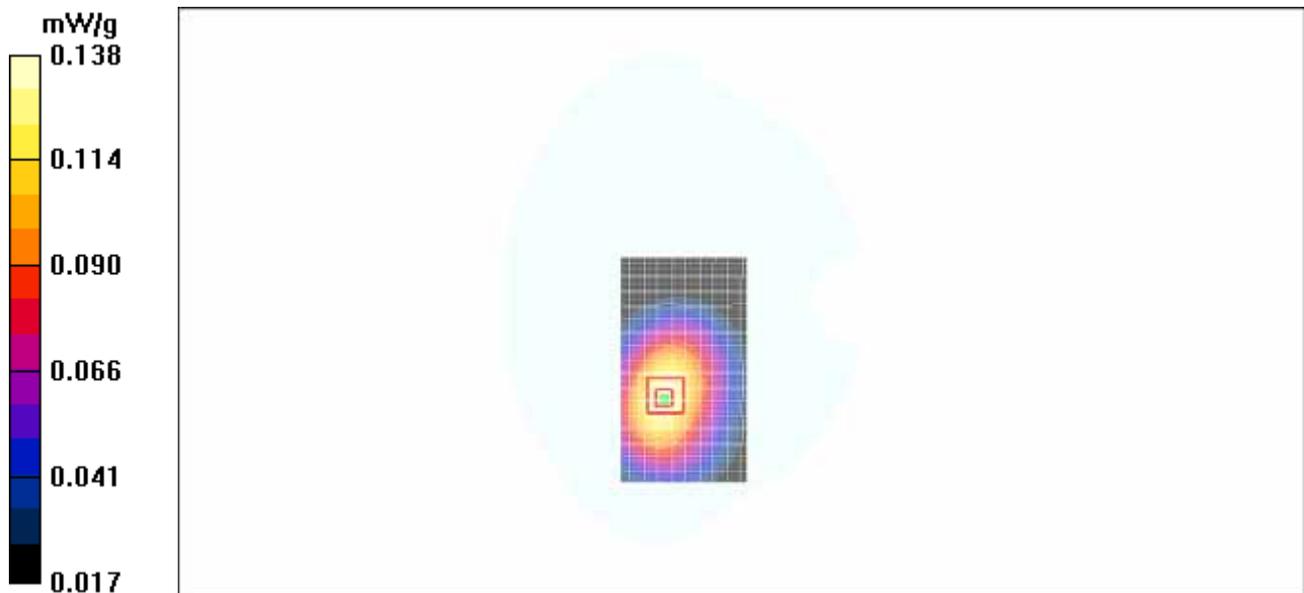
Figure 95 Body, Towards Phantom, Close GSM 850 Channel 128
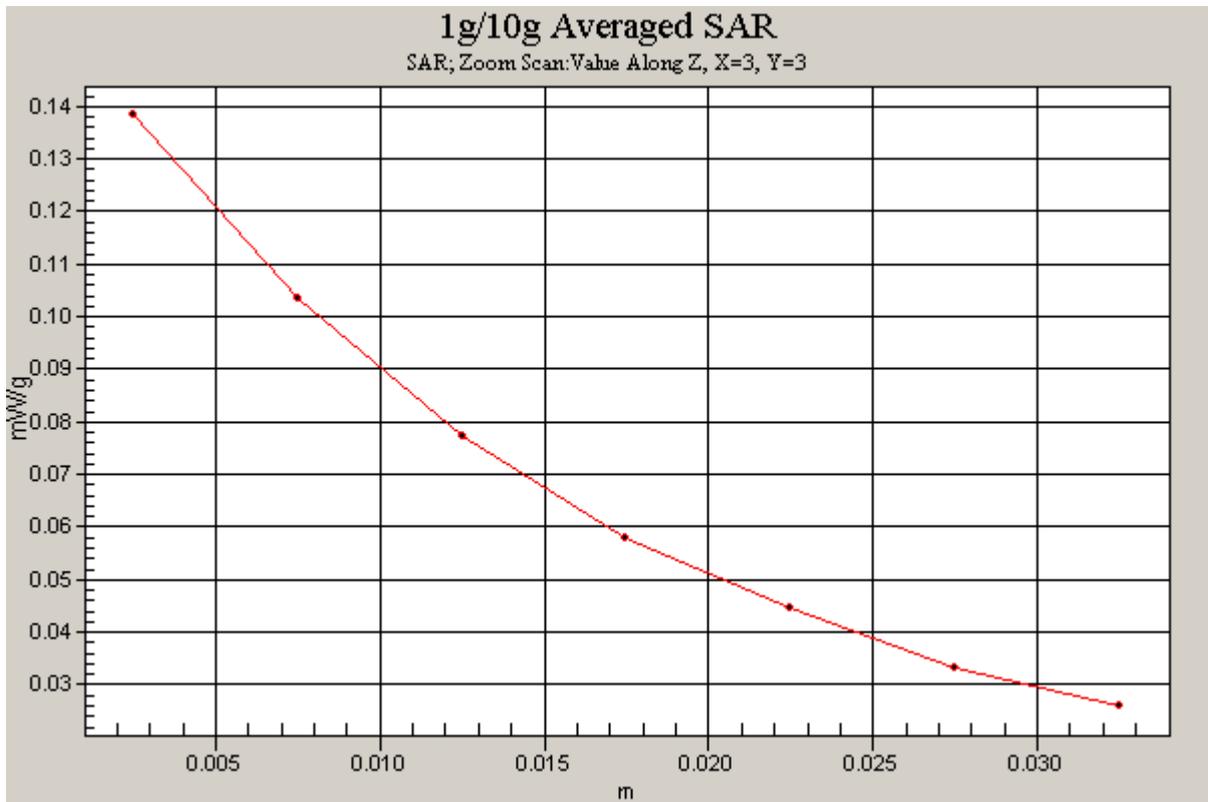
Figure 96 Z-Scan at power reference point (Body, Towards Phantom, Close GSM 850 Channel 128)

Date/Time: 12/30/2008 7:50:11 AM

GSM 850 Earphone Towards Ground High Close

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 849 MHz; σ = 0.997 mho/m; ε_r = 54.2; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.428 mW/g

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

Reference Value = 6.17 V/m; Power Drift = -0.147 dB

Peak SAR (extrapolated) = 0.512 W/kg

SAR(1 g) = 0.351 mW/g; SAR(10 g) = 0.236 mW/g

Maximum value of SAR (measured) = 0.419 mW/g
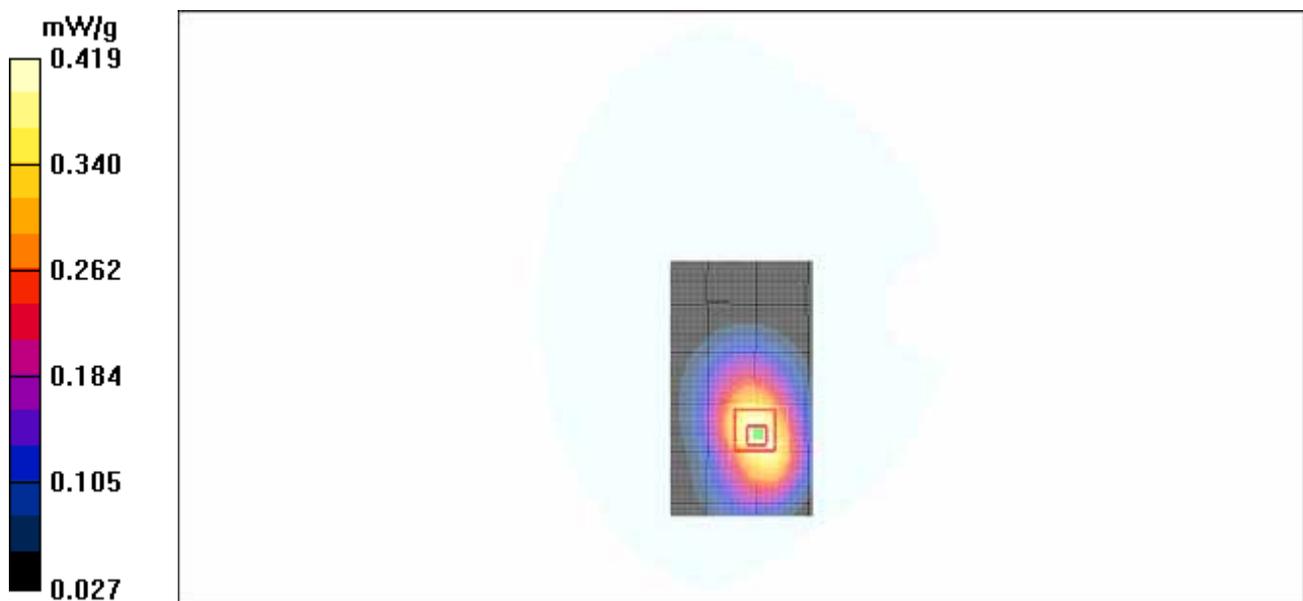
Figure 97 Body with earphone, Towards Ground, Close GSM 850, Channel 251
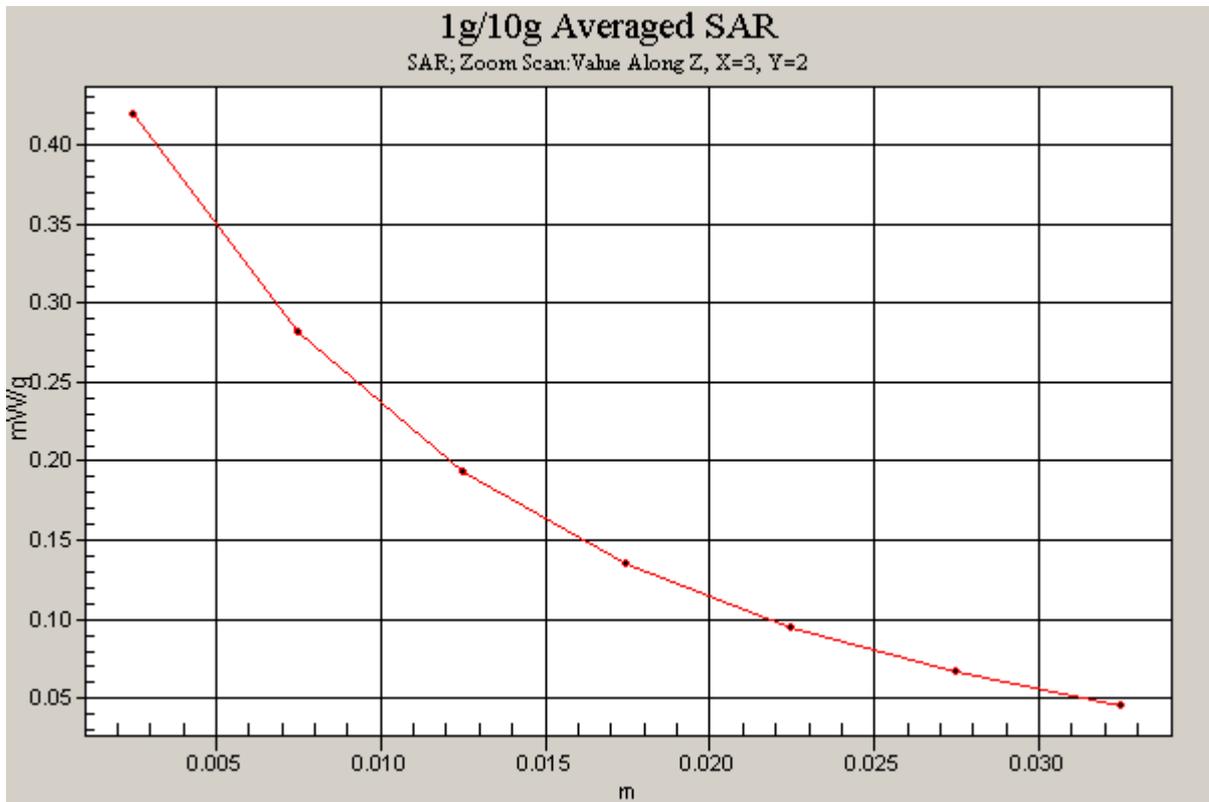
Figure 98 Z-Scan at power reference point (Body with earphone, Towards Phantom, Close GSM 850 Channel 251)

Date/Time: 1/5/2009 9:23:13 AM

GSM 850 Earphone Towards Ground High Close

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 849 MHz; σ = 0.997 mho/m; $ε_r$ = 54.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

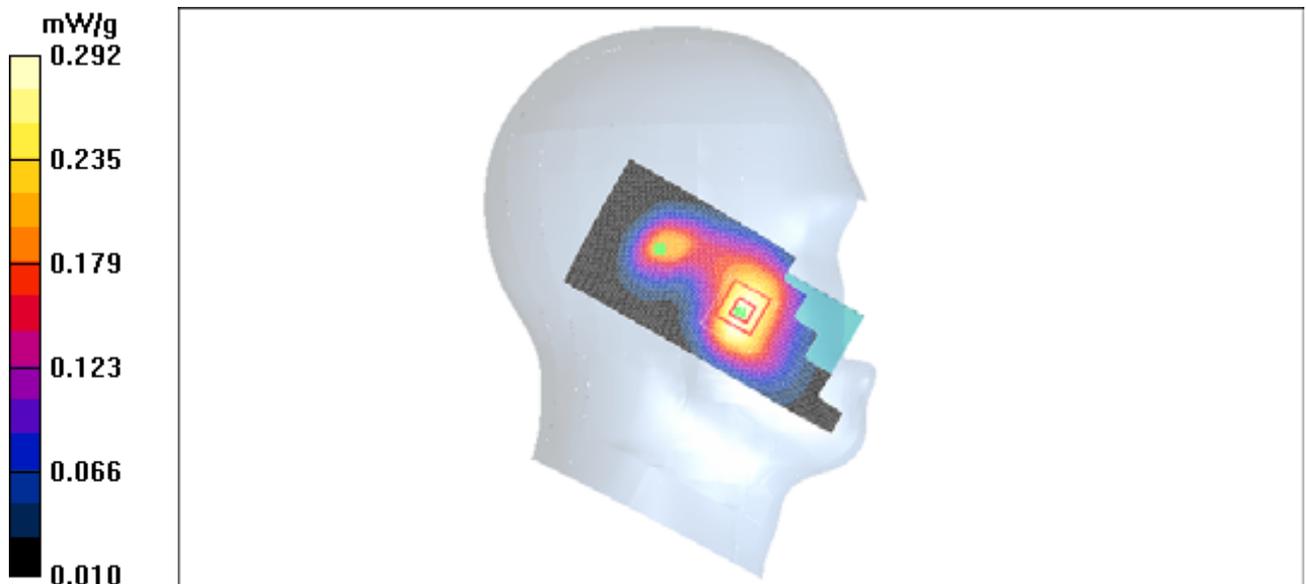Maximum value of SAR (interpolated) = 0.393 mW/g

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

Reference Value = 6.33 V/m; Power Drift = -0.088 dB

Peak SAR (extrapolated) = 0.467 W/kg

SAR(1 g) = 0.322 mW/g; SAR(10 g) = 0.217 mW/g

Maximum value of SAR (measured) = 0.386 mW/g
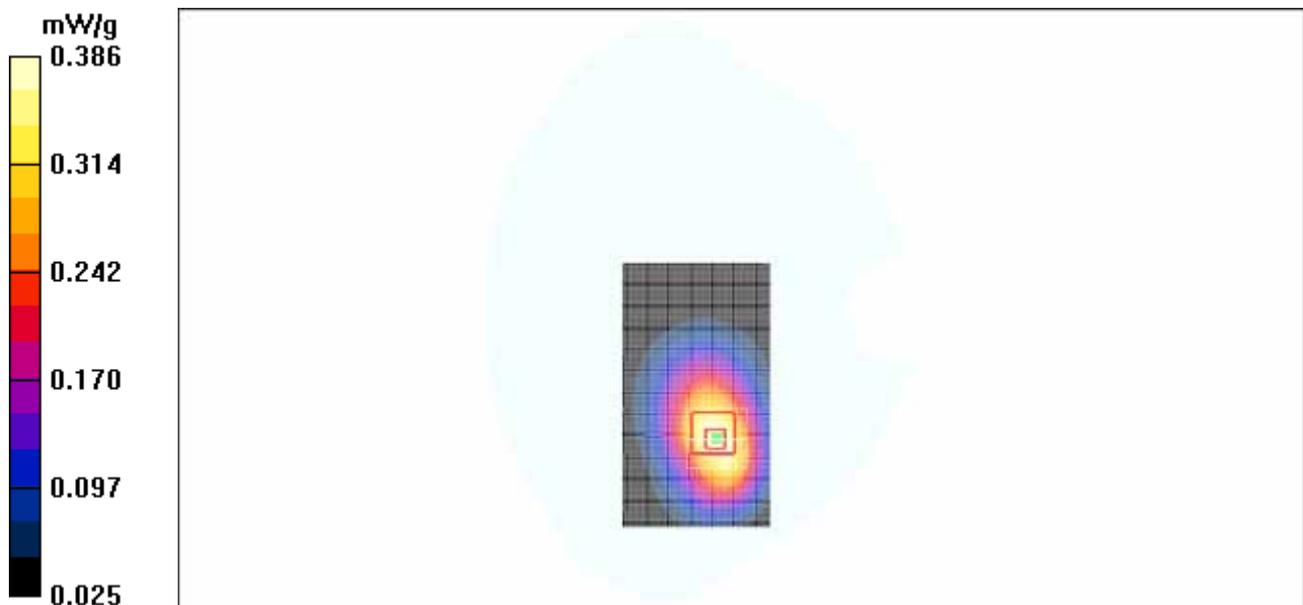
Figure 99 Body with earphone, Towards Ground, Close GSM 850, Channel 251
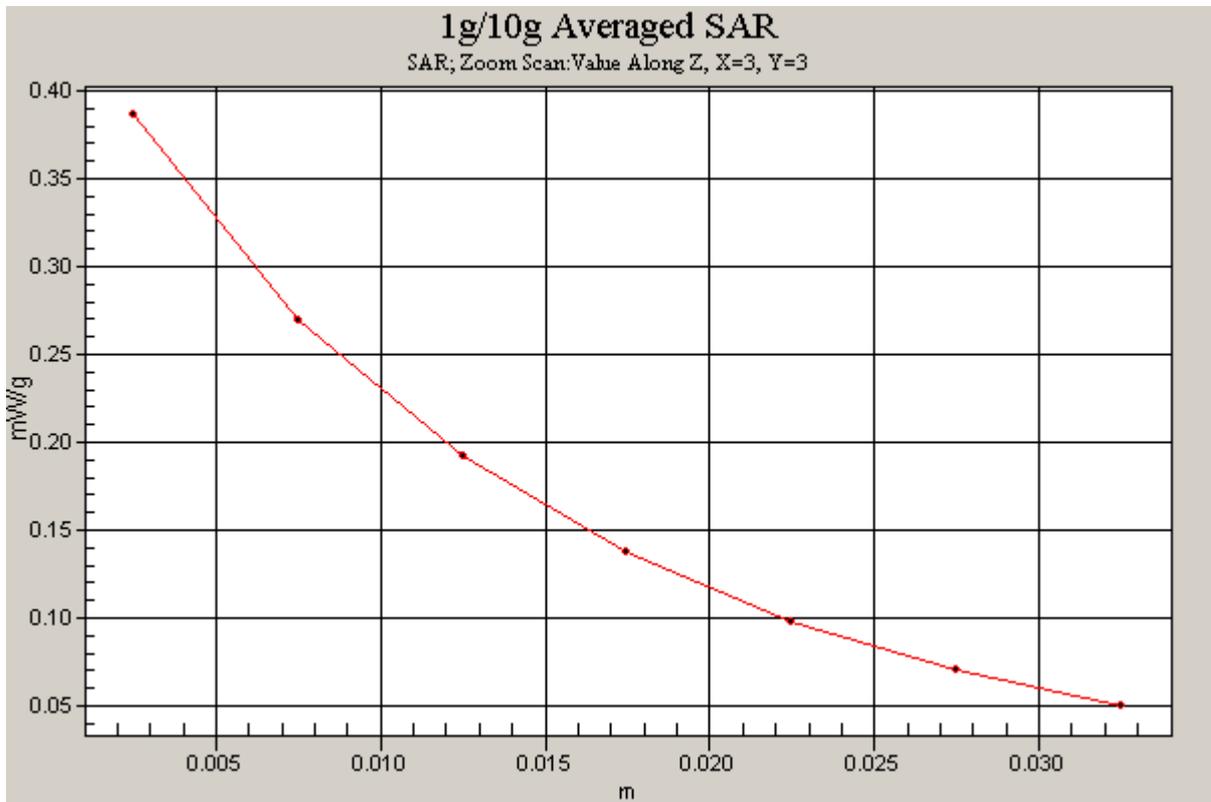
Figure 100 Z-Scan at power reference point (Body with earphone, Towards Phantom, Close GSM 850 Channel 251)

Date/Time: 12/31/2008 12:53:41 PM

GSM 850 GPRS Towards Ground High Close

Communication System: GSM850 + GPRS(2Up); Frequency: 848.8 MHz;Duty Cycle: 1:4

Medium parameters used: f = 849 MHz; σ = 0.997 mho/m; ε_r = 54.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.689 mW/g

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

Reference Value = 8.42 V/m; Power Drift = 0.088 dB

Peak SAR (extrapolated) = 0.839 W/kg

SAR(1 g) = 0.571 mW/g; SAR(10 g) = 0.386 mW/g

Maximum value of SAR (measured) = 0.684 mW/g
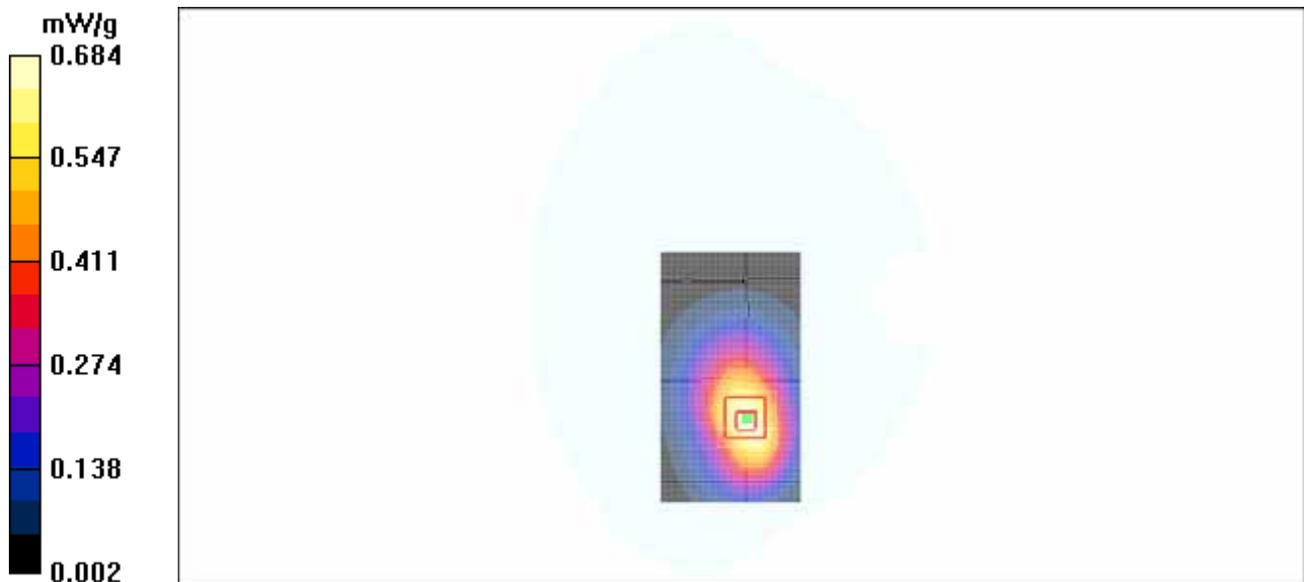
Figure 101 Body, Towards Ground, Close GSM 850 GPRS, Channel 251
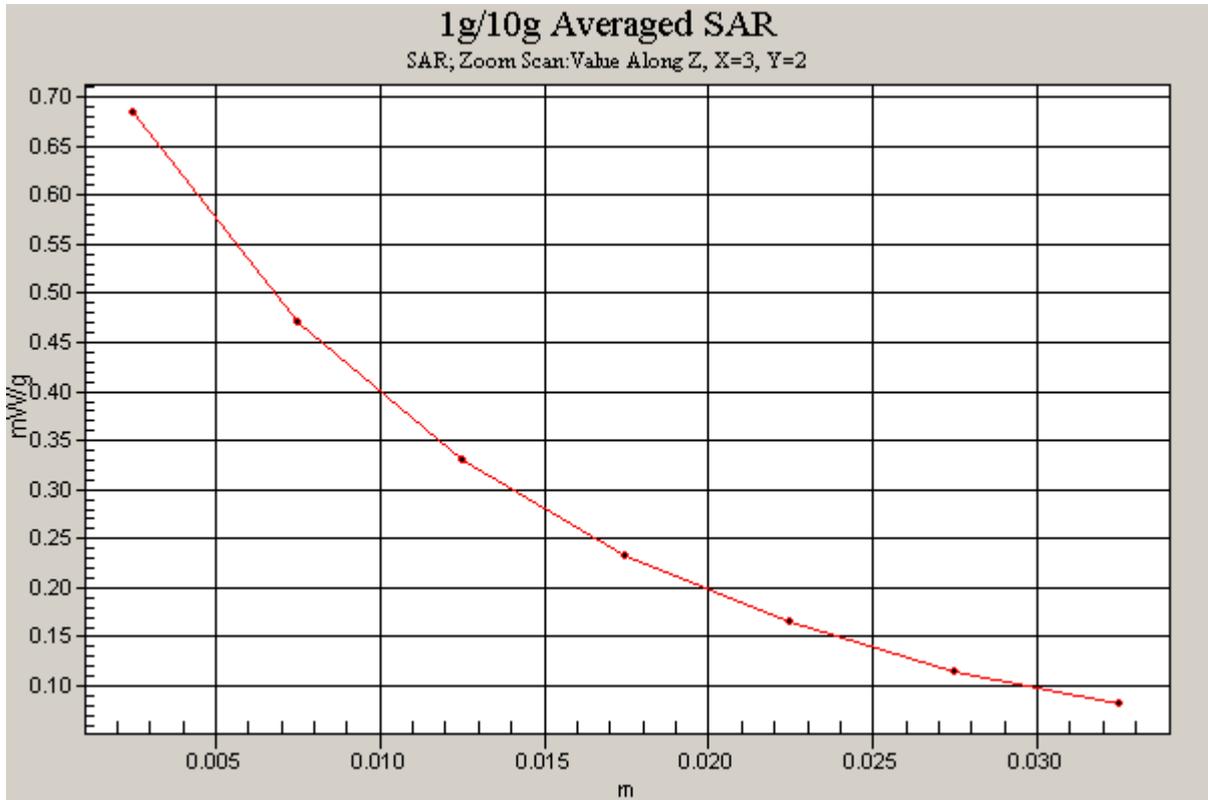
Figure 102 Z-Scan at power reference point (Body, Towards Ground, Close GSM 850 GPRS, Channel 251)

Date/Time: 12/31/2008 2:31:29 PM

GSM 850 GPRS Towards Ground Middle Close

Communication System: GSM850 + GPRS(2Up); Frequency: 836.6 MHz;Duty Cycle: 1:4

Medium parameters used: f = 837 MHz; σ = 0.986 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

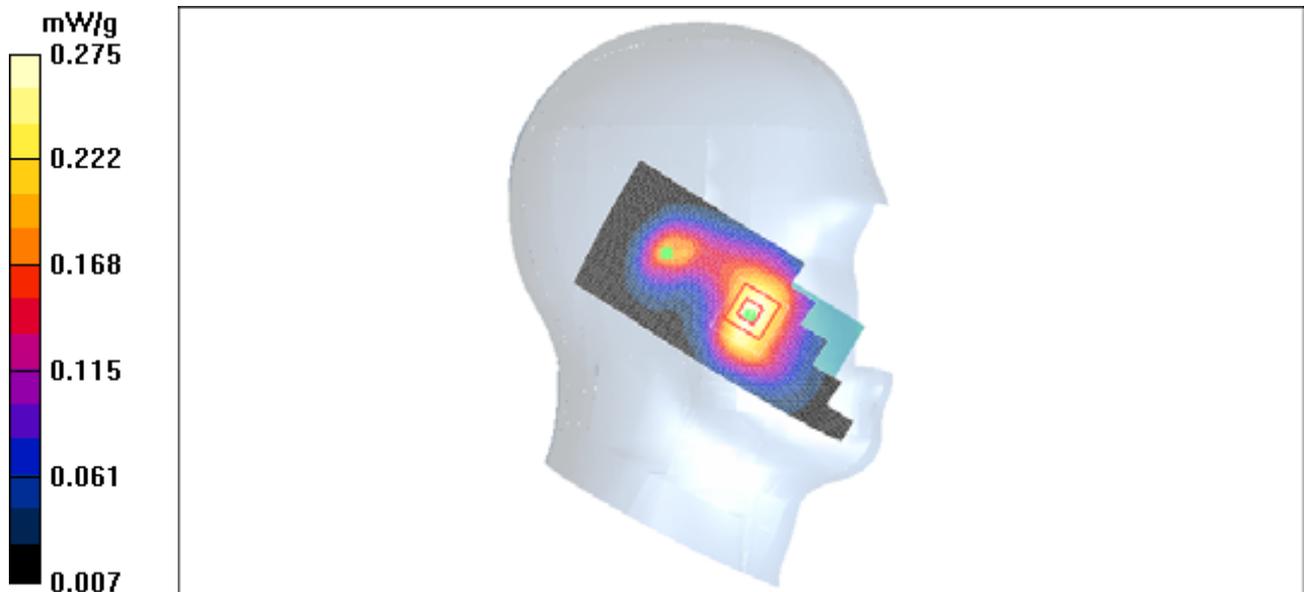Maximum value of SAR (interpolated) = 0.739 mW/g

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

Reference Value = 8.75 V/m; Power Drift = -0.078 dB

Peak SAR (extrapolated) = 0.847 W/kg

SAR(1 g) = 0.591 mW/g; SAR(10 g) = 0.399 mW/g

Maximum value of SAR (measured) = 0.704 mW/g
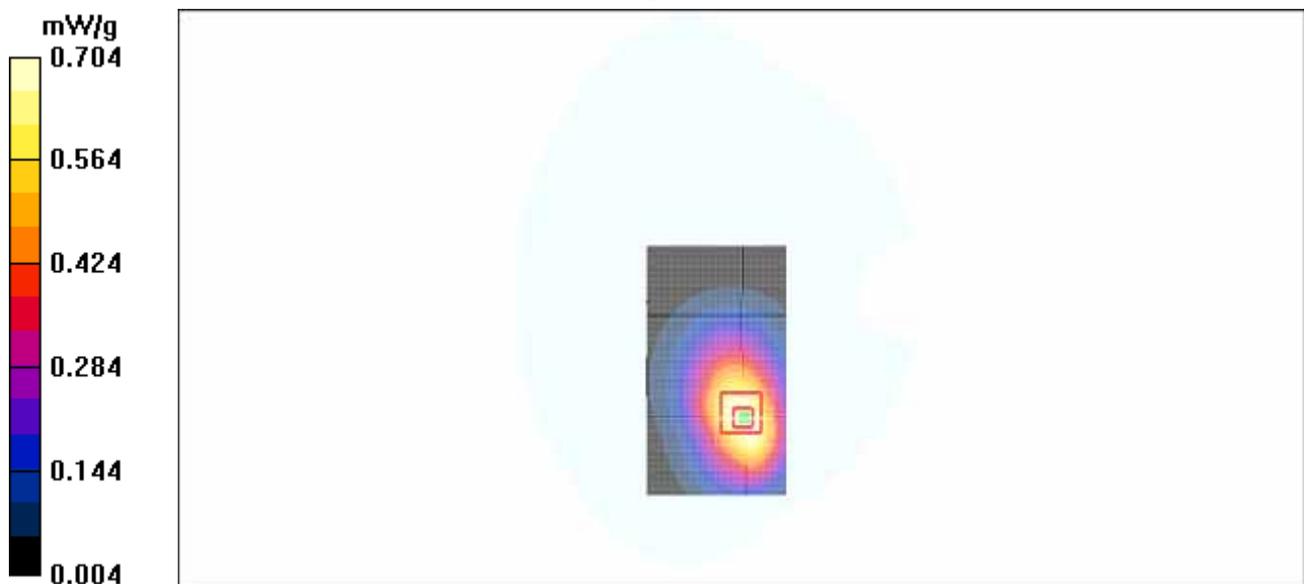
Figure 103 Body, Towards Ground, Close GSM 850 GPRS Channel 190
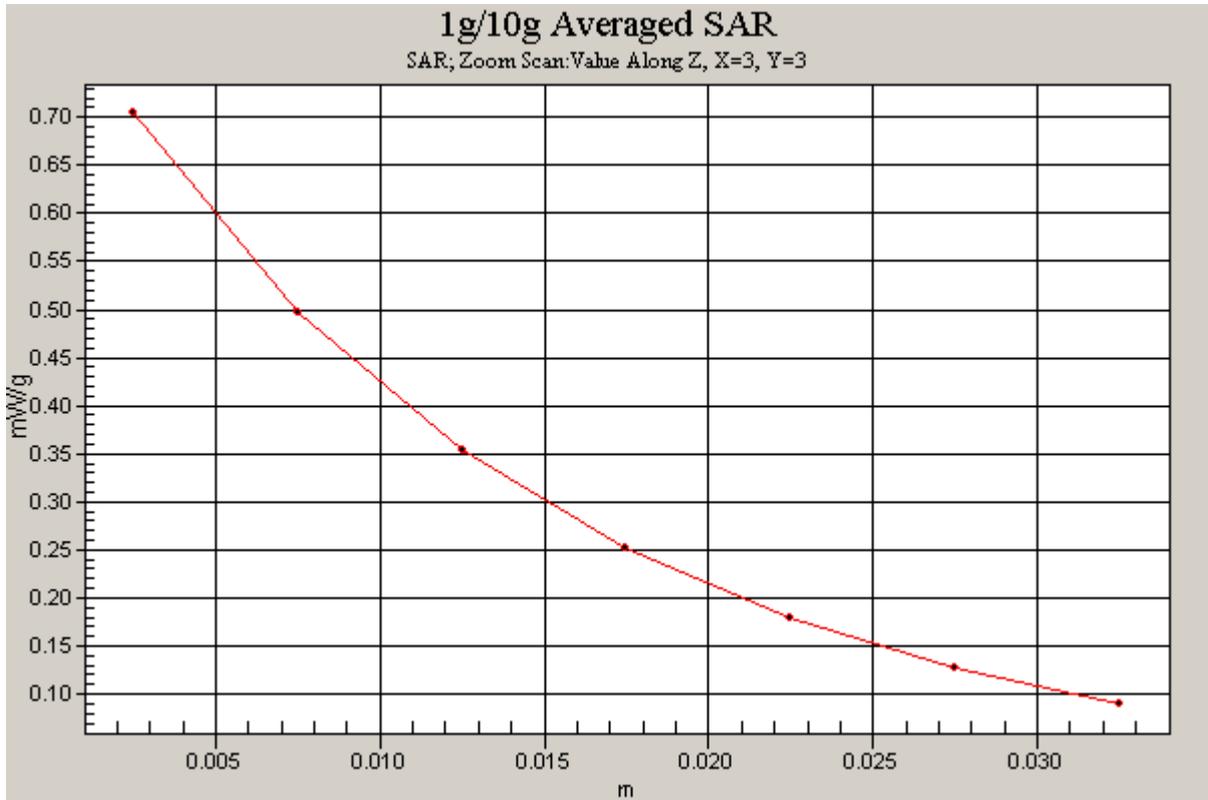
Figure 104 Z-Scan at power reference point (Body, Towards Ground, Close GSM 850 GPRS Channel 190)

Date/Time: 12/31/2008 2:49:14 PM

GSM 850 GPRS Towards Ground Low Close

Communication System: GSM850 + GPRS(2Up); Frequency: 824.2 MHz;Duty Cycle: 1:4

Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.972 mho/m; $ε_r$ = 54.4; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.673 mW/g

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

Reference Value = 7.32 V/m; Power Drift = -0.077 dB

Peak SAR (extrapolated) = 1.13 W/kg

SAR(1 g) = 0.564 mW/g; SAR(10 g) = 0.380 mW/g

Maximum value of SAR (measured) = 0.674 mW/g
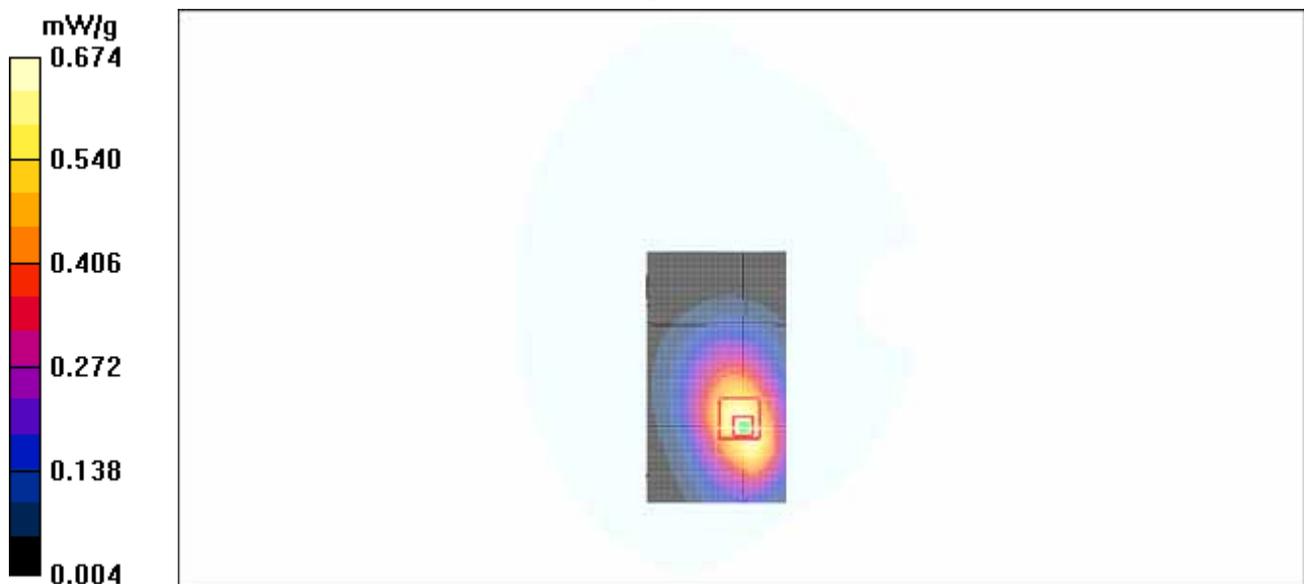
Figure 105 Body, Towards Ground, Close GSM 850 GPRS Channel 128
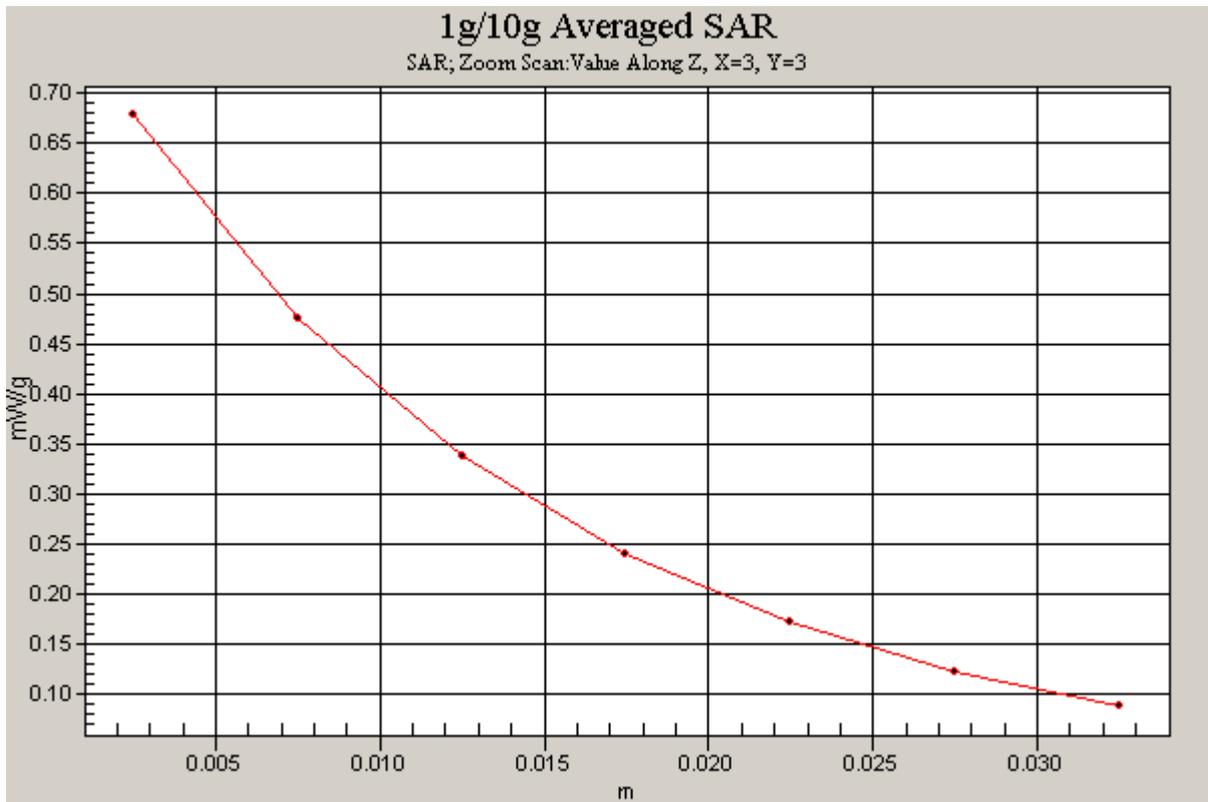
Figure 106 Z-Scan at power reference point (Body, Towards Ground, Close GSM 850 GPRS Channel 128)

Date/Time: 12/31/2008 3:45:59 PM

GSM 850 GPRS Towards Phantom High Close

Communication System: GSM850 + GPRS(2Up); Frequency: 848.8 MHz;Duty Cycle: 1:4

Medium parameters used: f = 849 MHz; σ = 0.997 mho/m; ε_r = 54.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.239 mW/g

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

Reference Value = 7.41 V/m; Power Drift = -0.118 dB

Peak SAR (extrapolated) = 0.296 W/kg

SAR(1 g) = 0.207 mW/g; SAR(10 g) = 0.146 mW/g

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

Figure 107 Body, Towards Phantom, Close GSM 850 GPRS, Channel 251
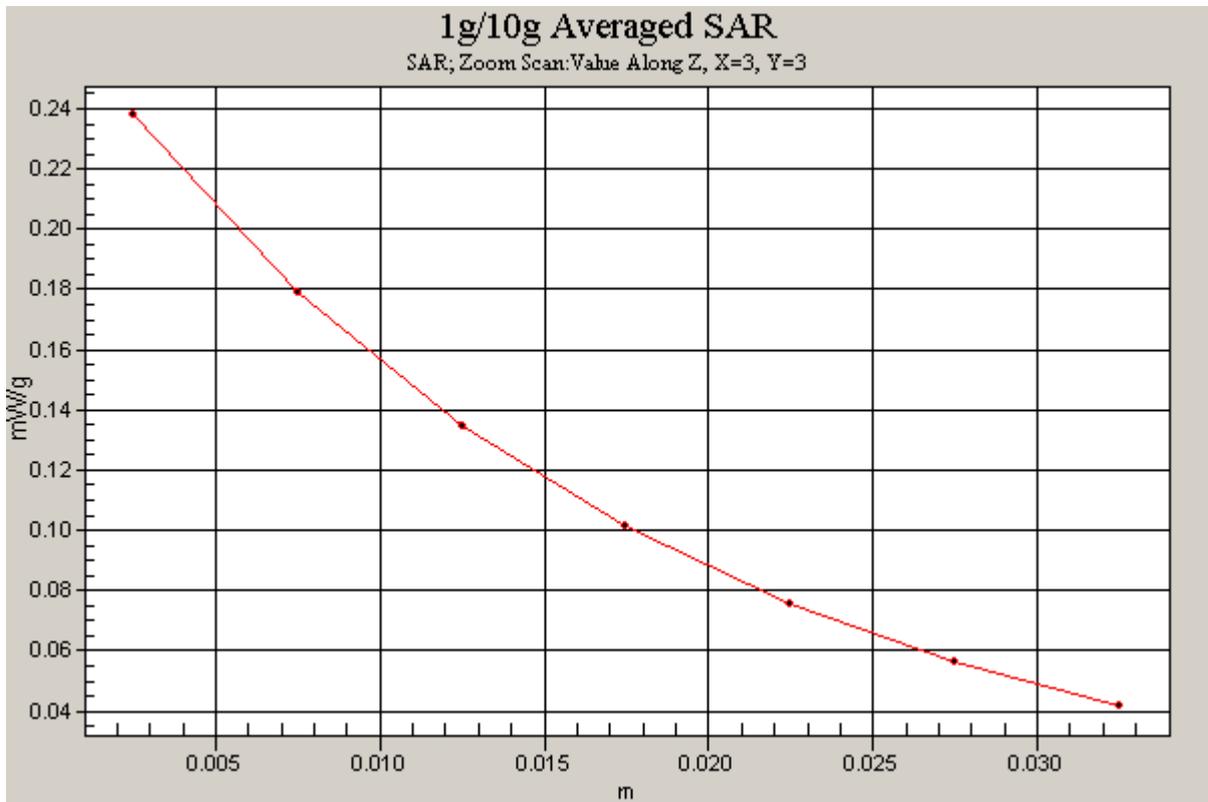
Figure 108 Z-Scan at power reference point (Body, Towards Phantom, Close GSM 850 GPRS, Channel 251)

Date/Time: 12/31/2008 3:45:59 PM

GSM 850 GPRS Towards Phantom Middle Close

Communication System: GSM850 + GPRS(2Up); Frequency: 848.8 MHz;Duty Cycle: 1:4

Medium parameters used: f = 849 MHz; σ = 0.997 mho/m; $ε_r$ = 54.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.239 mW/g

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

Reference Value = 7.41 V/m; Power Drift = -0.118 dB

Peak SAR (extrapolated) = 0.296 W/kg

SAR(1 g) = 0.207 mW/g; SAR(10 g) = 0.146 mW/g

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

Figure 109 Body, Towards Phantom, Close GSM 850 GPRS Channel 190
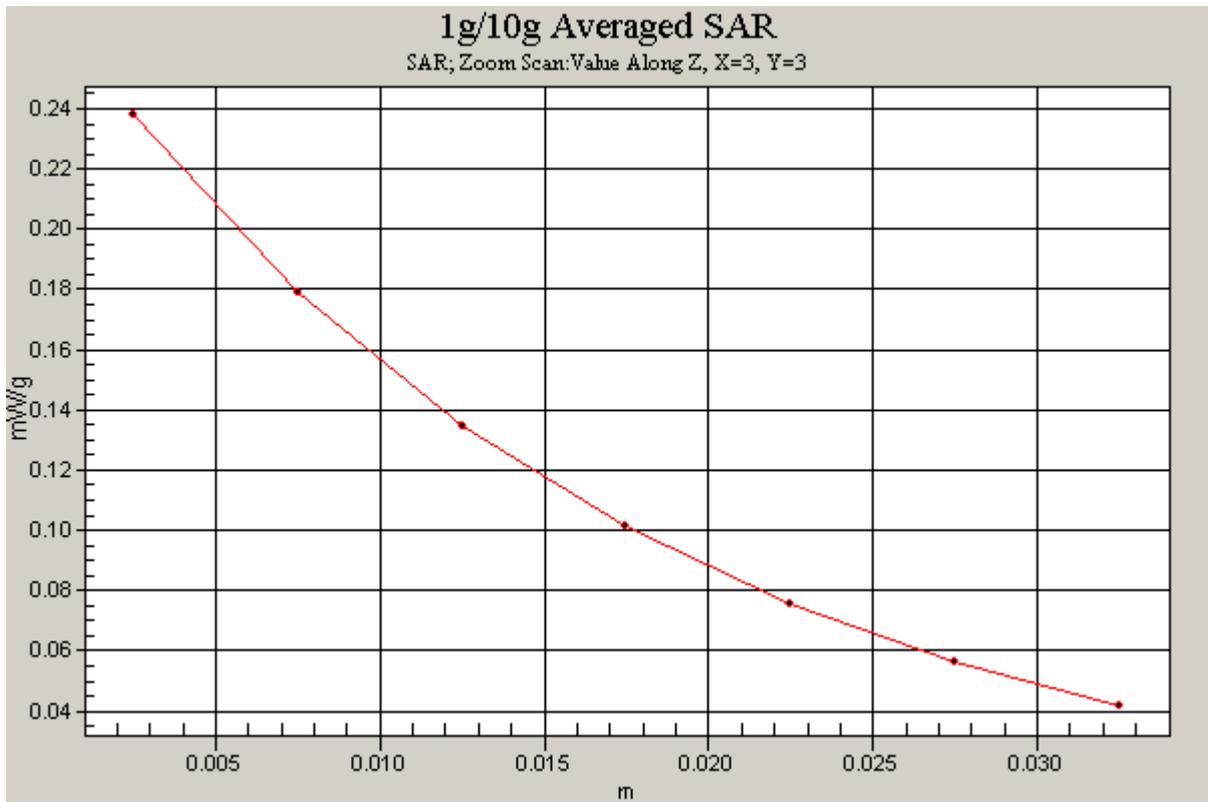
Figure 110 Z-Scan at power reference point (Body, Towards Phantom, Close GSM 850 GPRS Channel 190)

Date/Time: 12/31/2008 3:28:21 PM

GSM 850 GPRS Towards Phantom Low Close

Communication System: GSM850 + GPRS(2Up); Frequency: 836.6 MHz;Duty Cycle: 1:4

Medium parameters used: f = 837 MHz; σ = 0.986 mho/m; $ε_r$ = 54.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.224 mW/g

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

Reference Value = 7.12 V/m; Power Drift = -0.192 dB

Peak SAR (extrapolated) = 0.252 W/kg

SAR(1 g) = 0.192 mW/g; SAR(10 g) = 0.137 mW/g

Maximum value of SAR (measured) = 0.222 mW/g
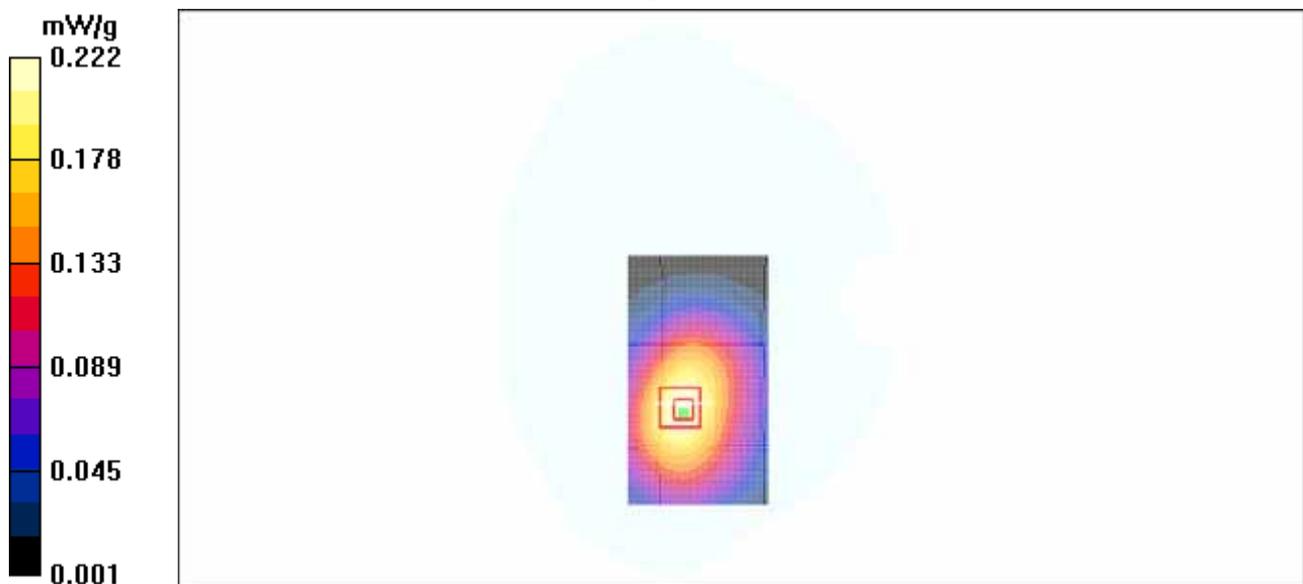
Figure 111 Body, Towards Phantom, Close GSM 850 GPRS Channel 128

Figure 112 Z-Scan at power reference point (Body, Towards Phantom, Close GSM 850 GPRS Channel 128)

Date/Time: 12/31/2008 4:11:08 PM

GSM 850 EGPRS Towards Ground Middle Close

Communication System: GSM850 +EGPRS(2Up); Frequency: 836.6 MHz;Duty Cycle: 1:4

Medium parameters used: f = 837 MHz; σ = 0.986 mho/m; $ε_r$ = 54.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(9.1, 9.1, 9.1); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.154 mW/g

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

Reference Value = 3.64 V/m; Power Drift = 0.150 dB

Peak SAR (extrapolated) = 0.187 W/kg

SAR(1 g) = 0.130 mW/g; SAR(10 g) = 0.088 mW/g

Maximum value of SAR (measured) = 0.156 mW/g
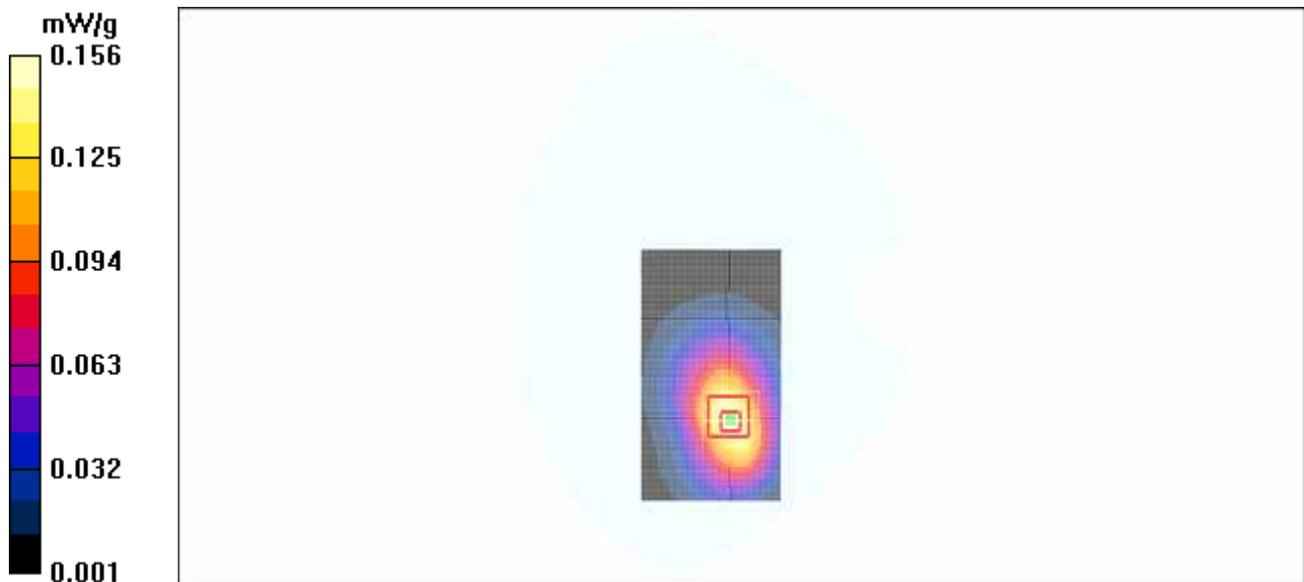
Figure 113 Body, Towards Ground, Close GSM 850 EGPRS Channel 190
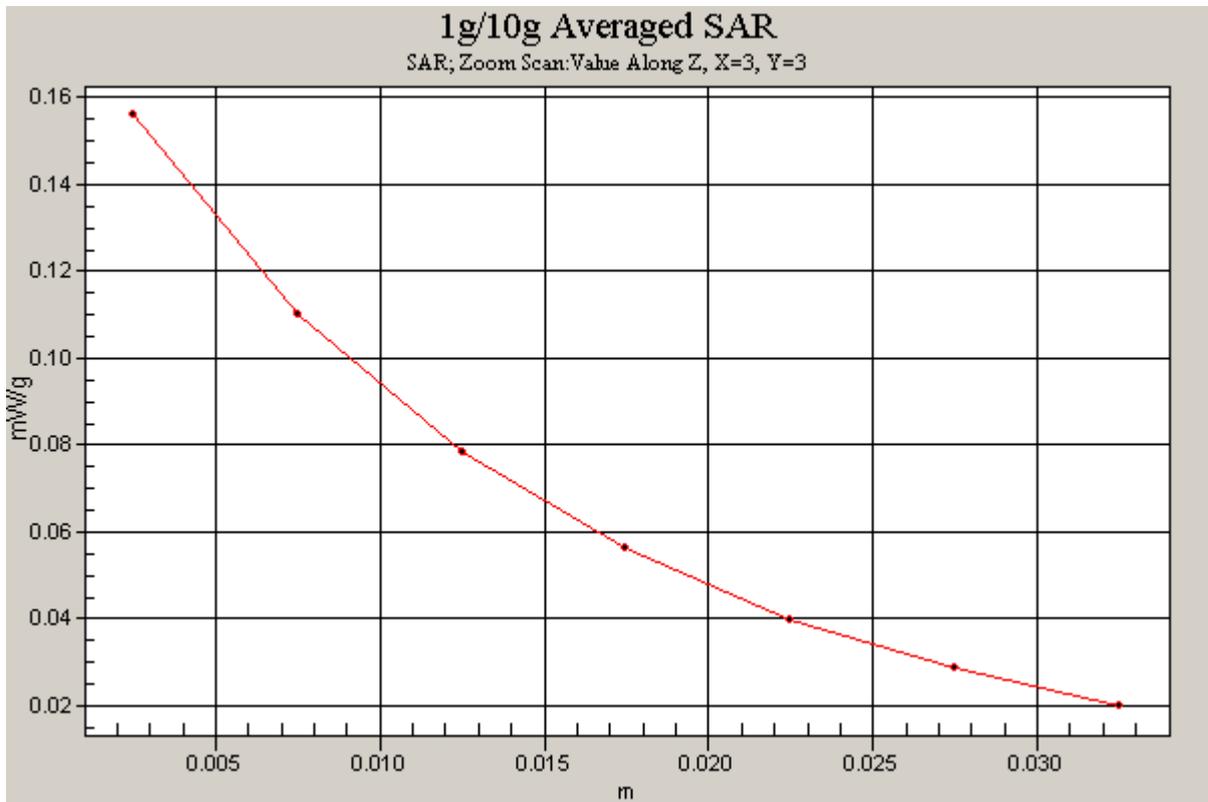
Figure 114 Z-Scan at power reference point (Body, Towards Ground, Close GSM 850
EGPRS Channel 190)

Date/Time: 12/26/2008 7:03:35 PM

GSM 1900 Left Cheek High Open

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1910 MHz; σ = 1.42 mho/m; ε_r = 40; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek High/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.322 mW/g

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

Reference Value = 9.31 V/m; Power Drift = -0.199 dB

Peak SAR (extrapolated) = 0.401 W/kg

SAR(1 g) = 0.262 mW/g; SAR(10 g) = 0.169 mW/g

Maximum value of SAR (measured) = 0.317 mW/g
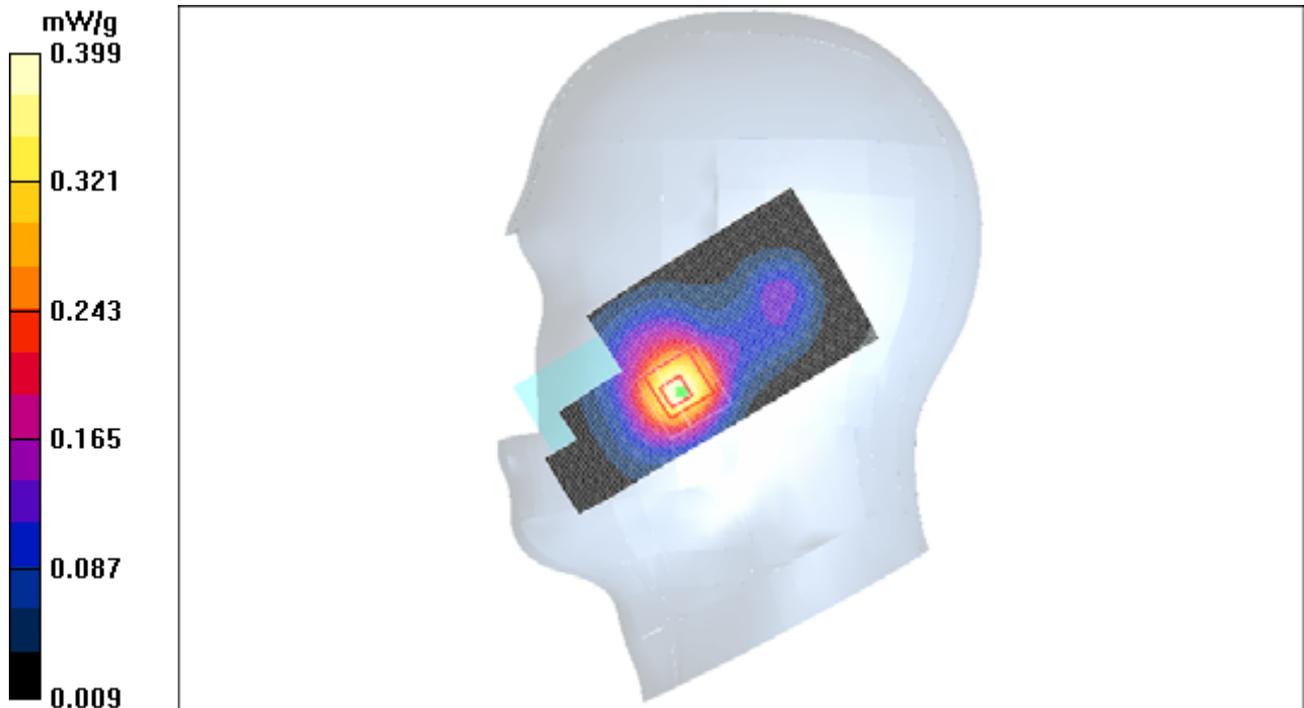
Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1910 MHz; σ = 1.42 mho/m; $ε_r$ = 40; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek High/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.322 mW/g

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

Reference Value = 9.31 V/m; Power Drift = -0.199 dB

Peak SAR (extrapolated) = 0.300 W/kg

SAR(1 g) = 0.190 mW/g; SAR(10 g) = 0.113 mW/g

Maximum value of SAR (measured) = 0.236 mW/g
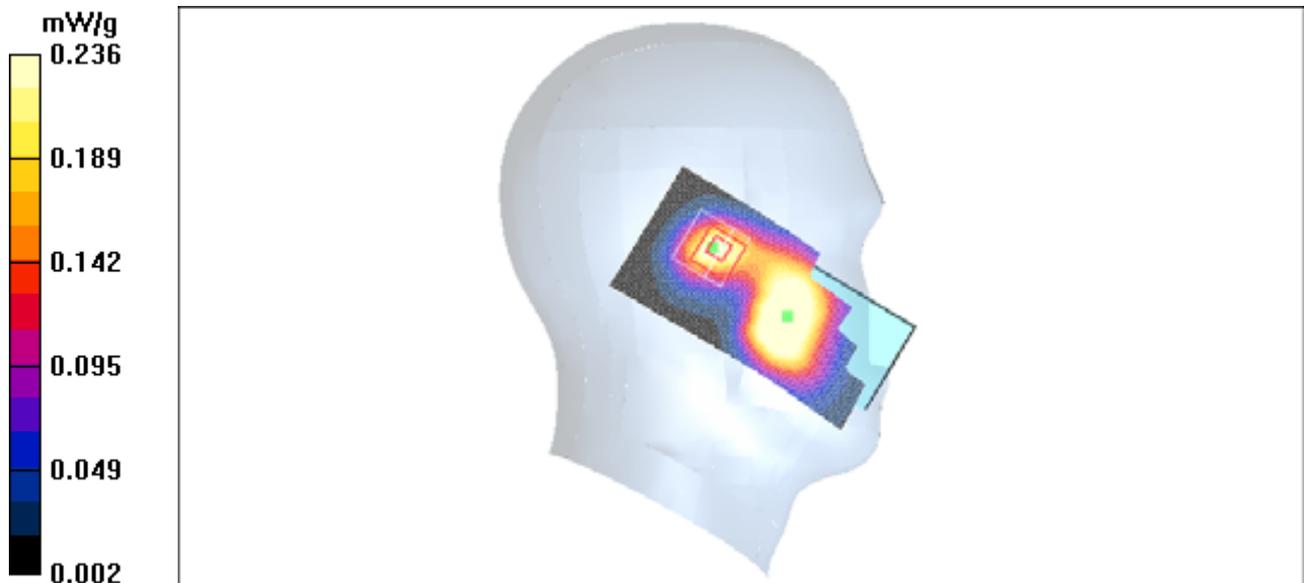
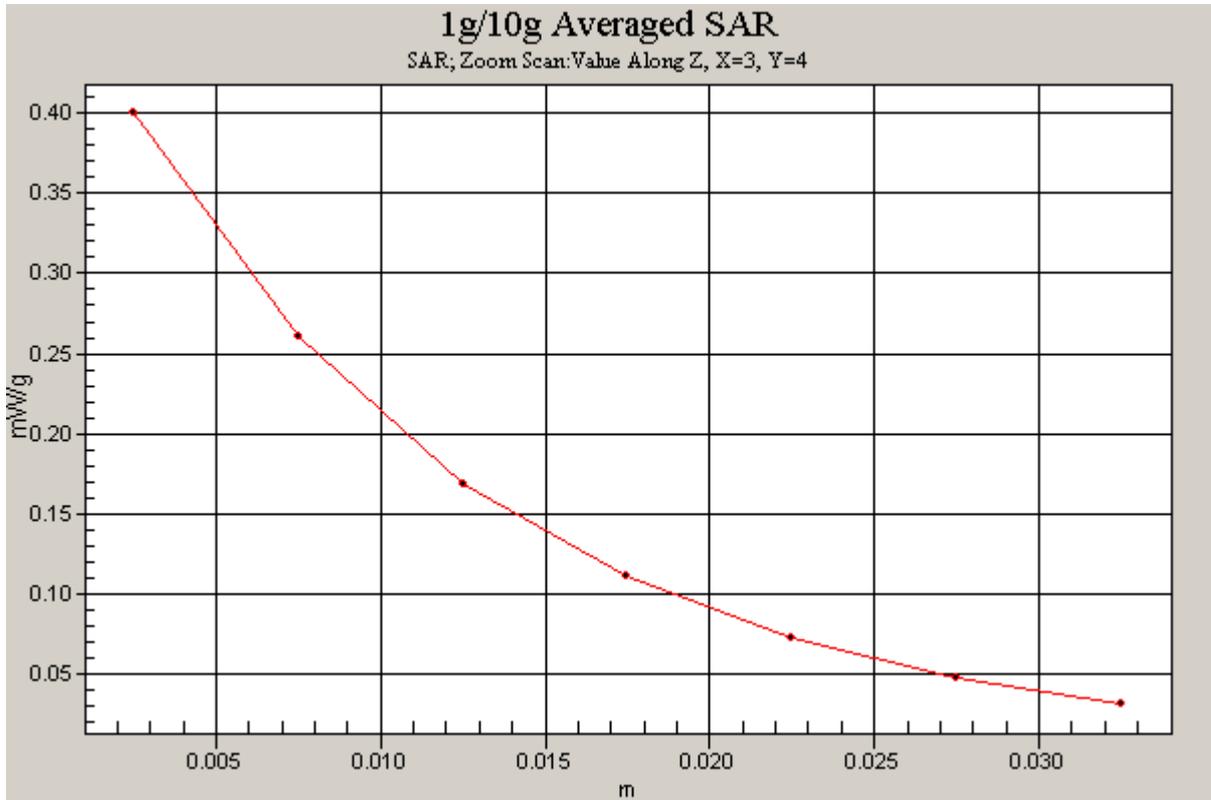Figure 115 Left Hand Touch Cheek Open GSM 1900 Channel 810
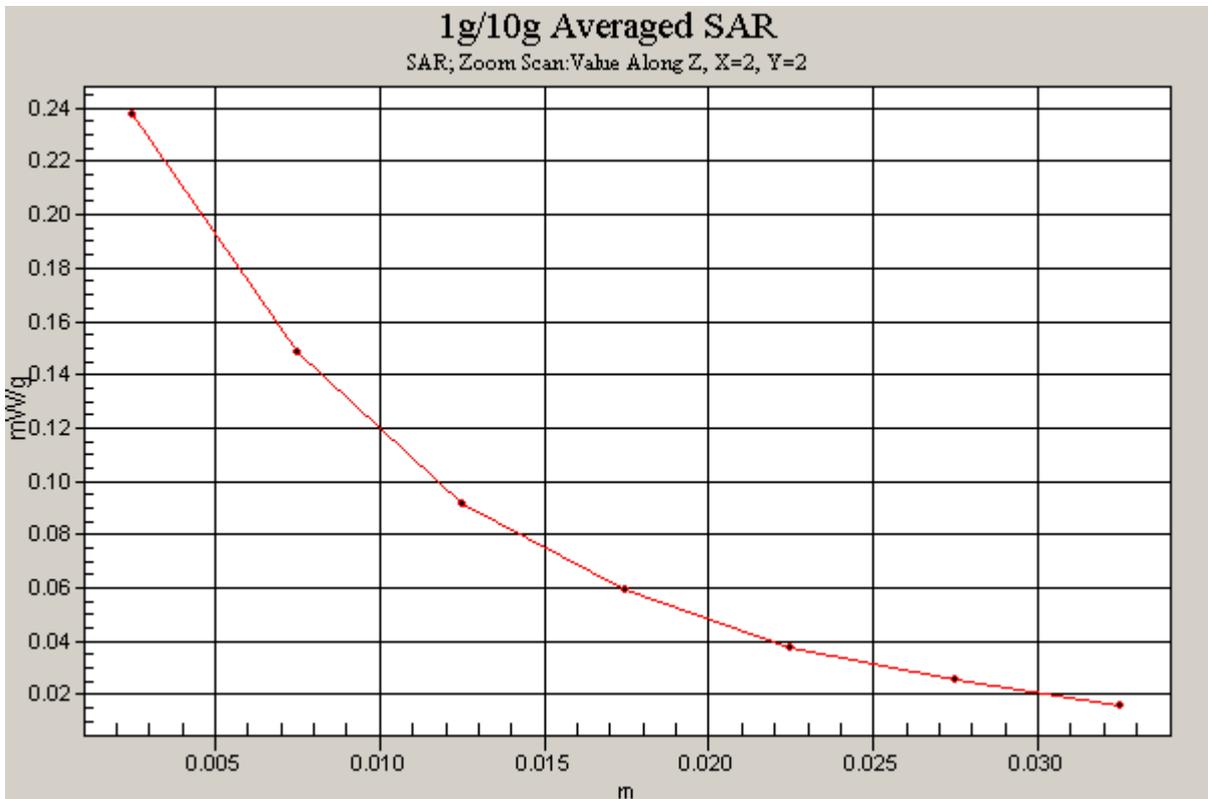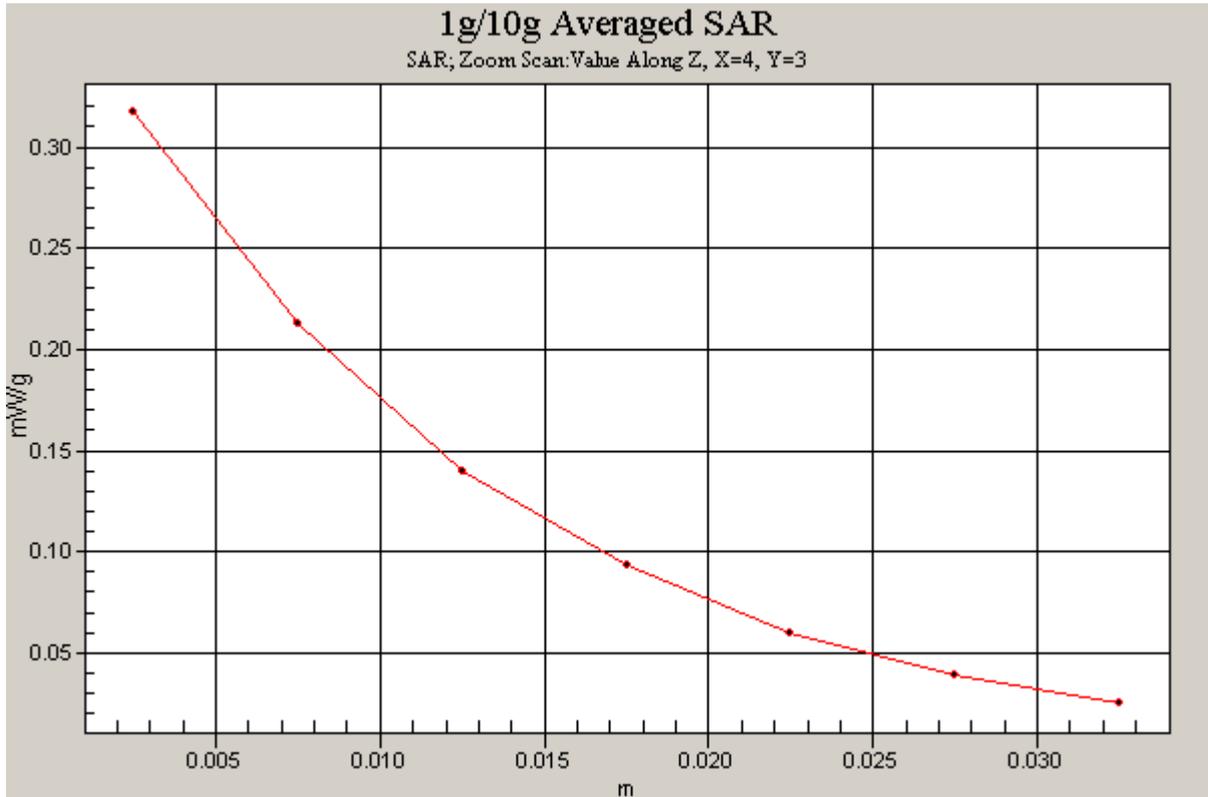
Figure 116 Z-Scan at power reference point (Left Hand Touch Cheek Open GSM 1900 Channel 810)

Date/Time: 12/26/2008 7:35:07 PM

GSM 1900 Left Cheek Middle Open

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 8.60 V/m; Power Drift = -0.001 dB

Peak SAR (extrapolated) = 0.363 W/kg

SAR(1 g) = 0.244 mW/g; SAR(10 g) = 0.160 mW/g

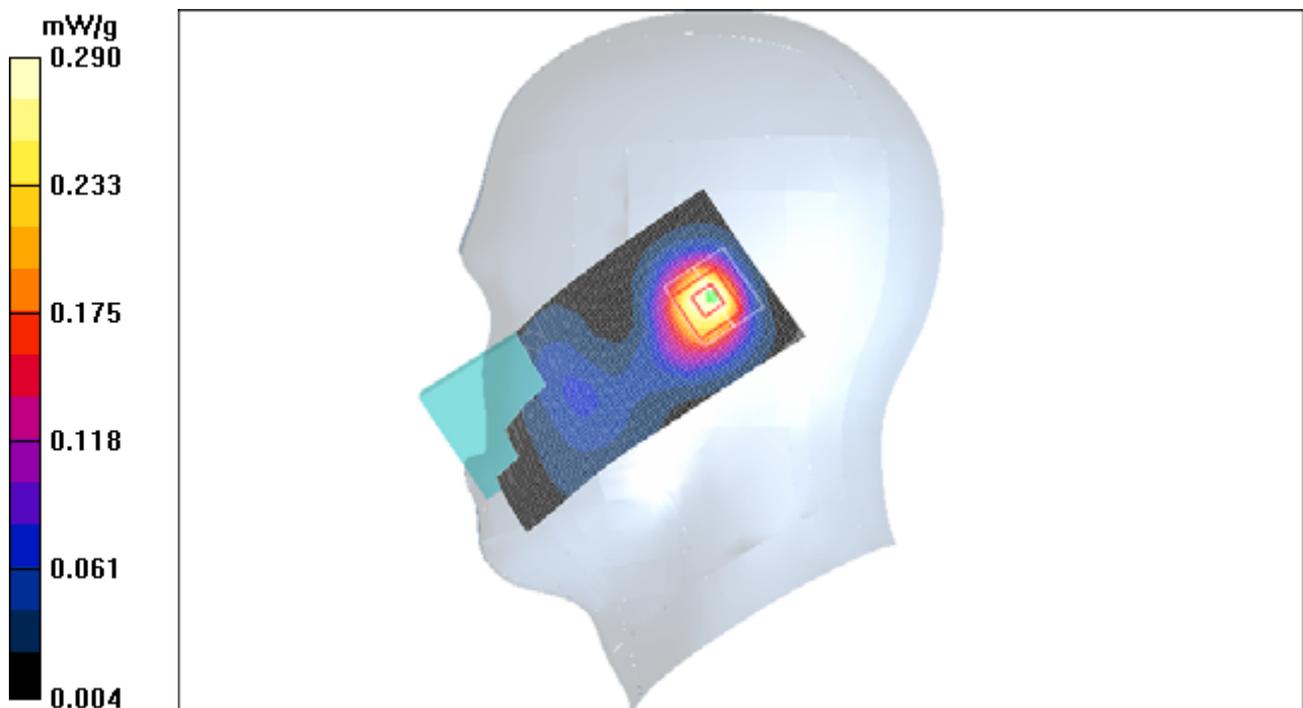Maximum value of SAR (measured) = 0.292 mW/g

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 8.60 V/m; Power Drift = -0.001 dB

Peak SAR (extrapolated) = 0.263 W/kg

SAR(1 g) = 0.170 mW/g; SAR(10 g) = 0.102 mW/g

Maximum value of SAR (measured) = 0.210 mW/g
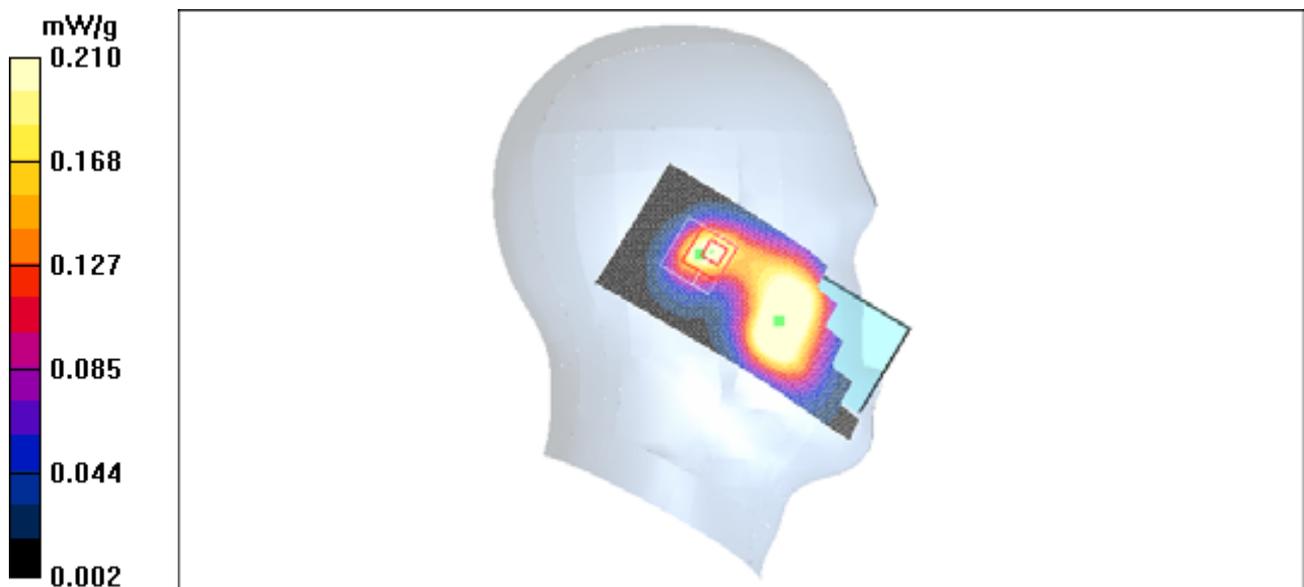
Figure 117 Left Hand Touch Cheek Open GSM 1900 Channel 661
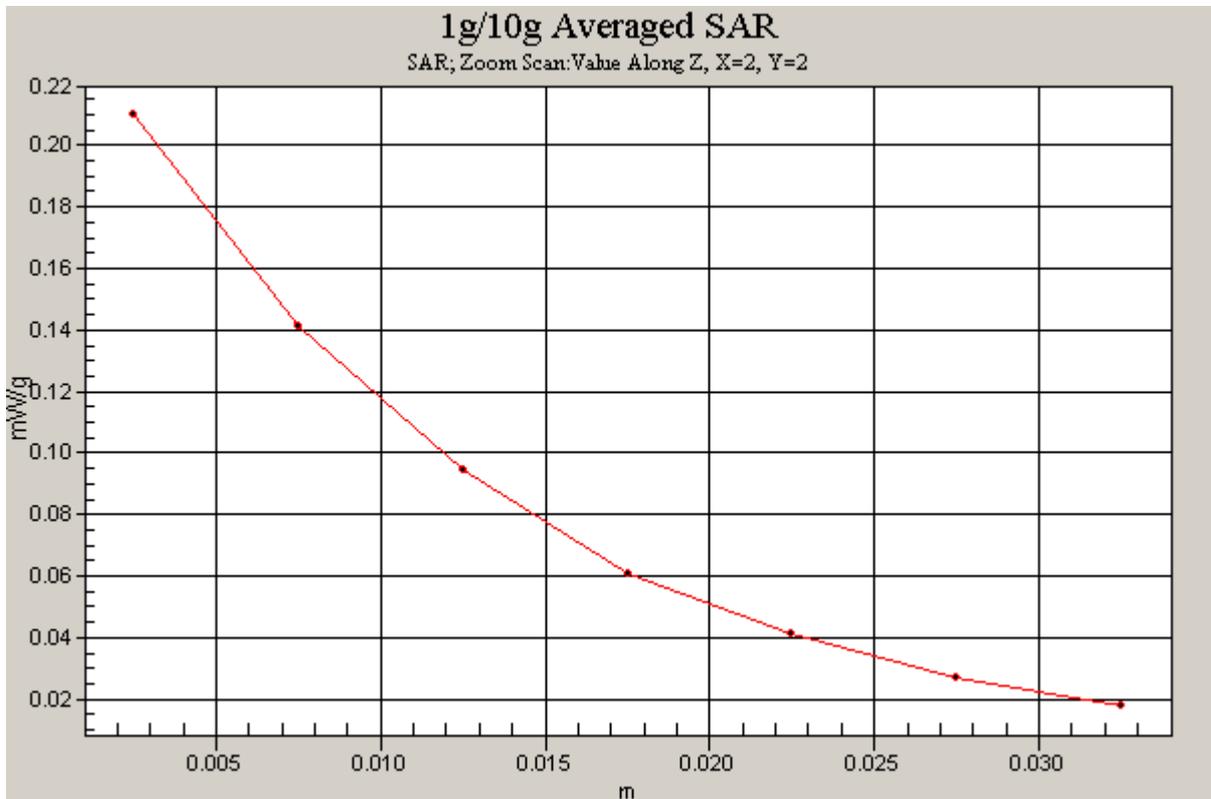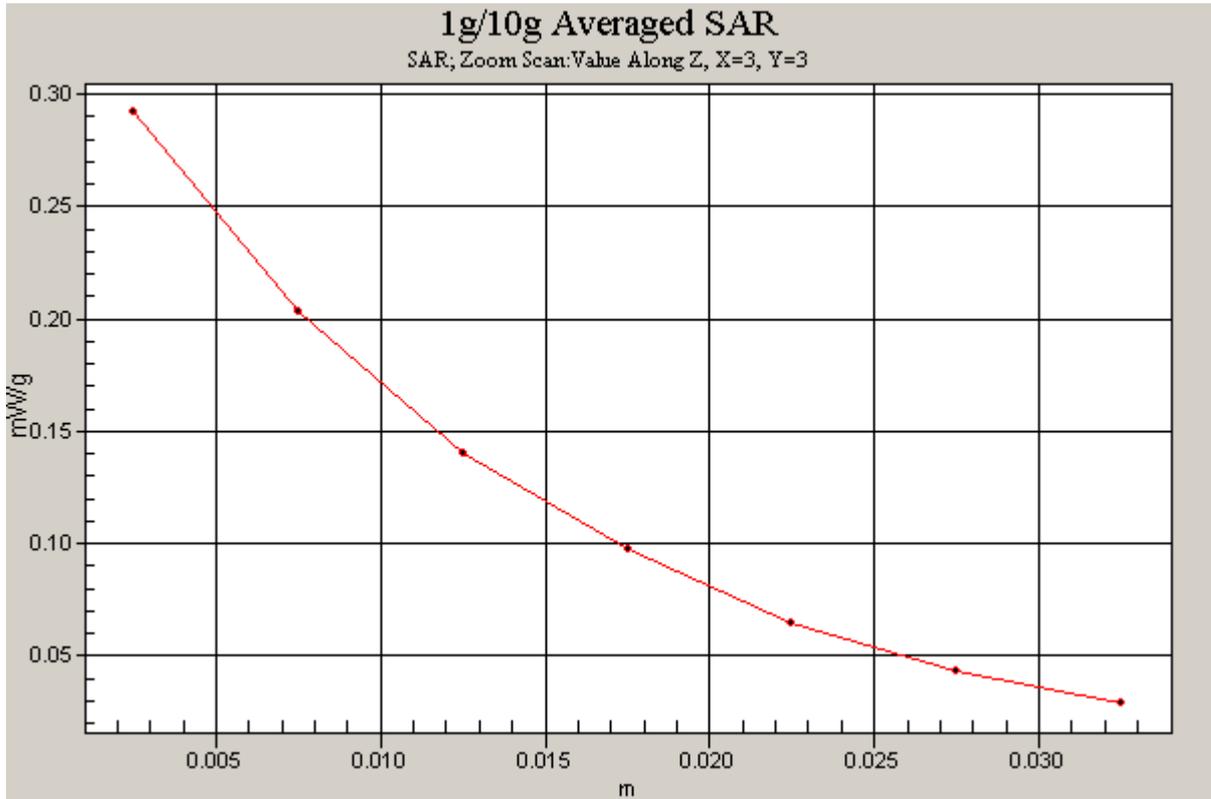
Figure 118 Z-Scan at power reference point (Left Hand Touch Cheek Open GSM 1900 Channel 661)

Date/Time: 12/26/2008 8:05:57 PM

GSM 1900 Left Cheek Low Open

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

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.37 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Low/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.282 mW/g

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

Reference Value = 8.13 V/m; Power Drift = 0.053 dB

Peak SAR (extrapolated) = 0.323 W/kg

SAR(1 g) = 0.232 mW/g; SAR(10 g) = 0.152 mW/g

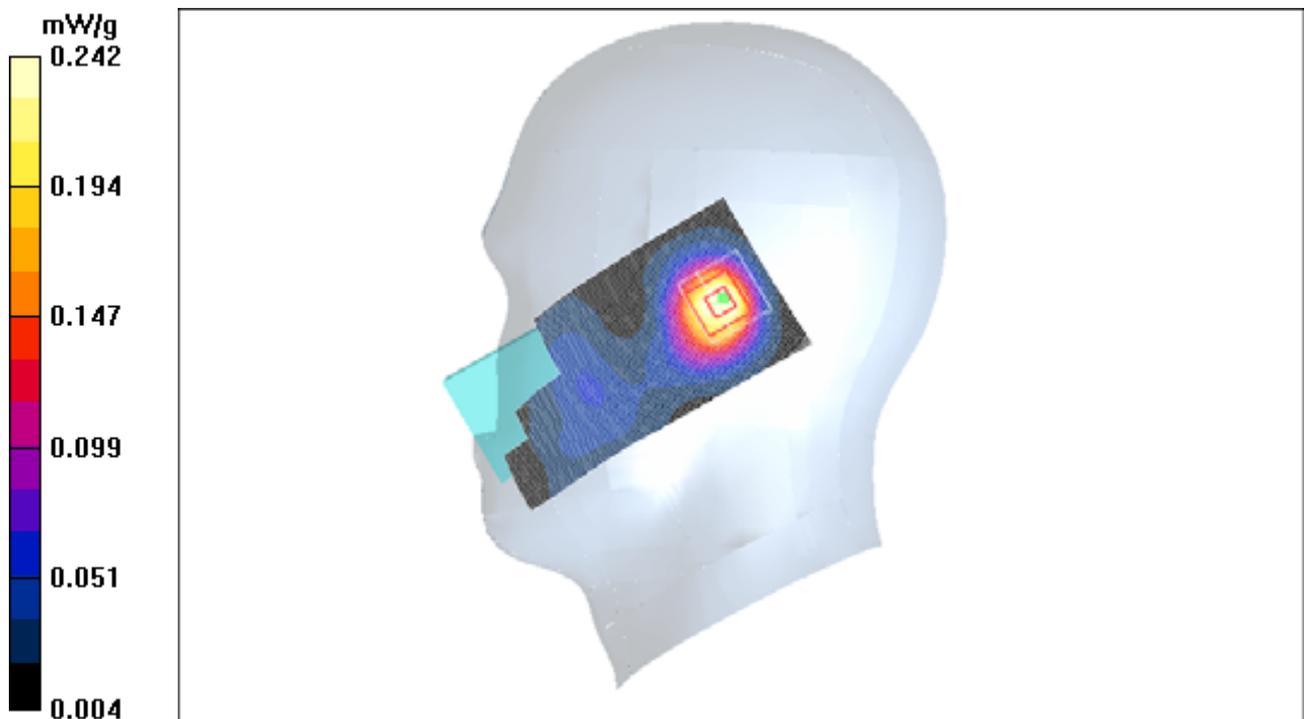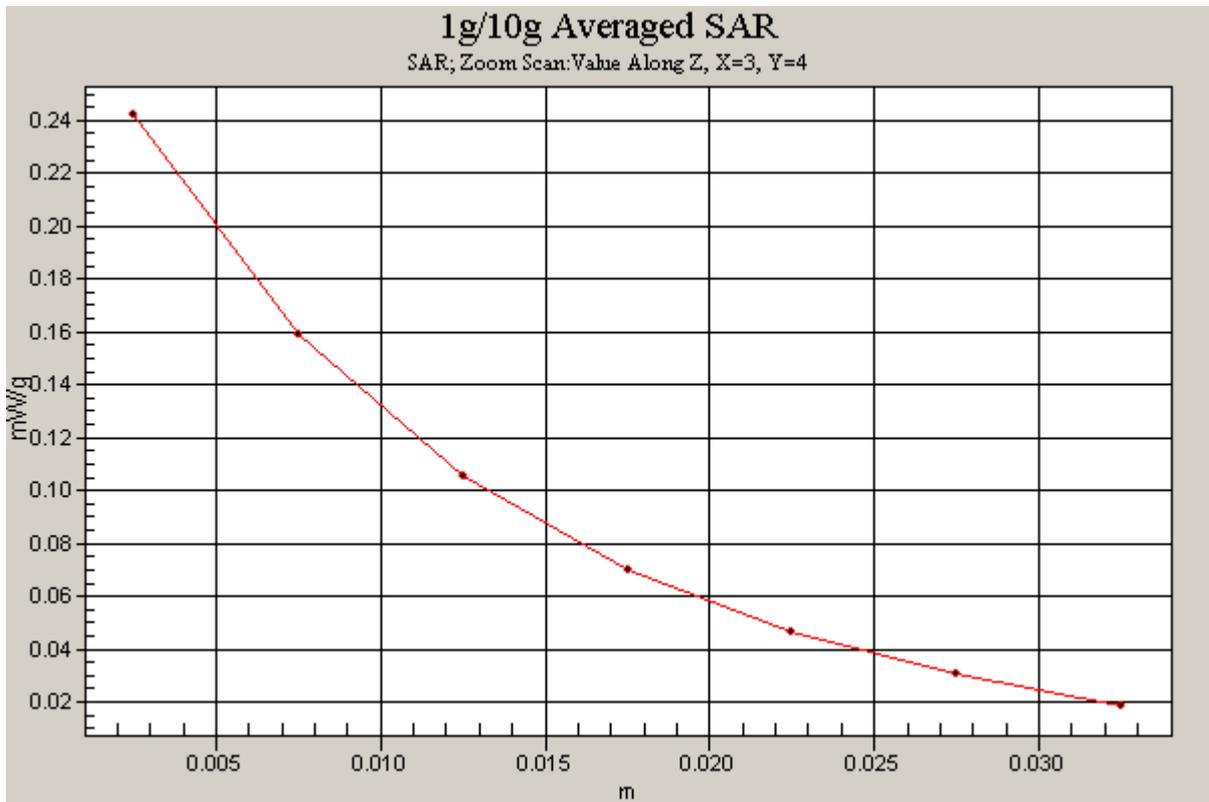Maximum value of SAR (measured) = 0.275 mW/g

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.37 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3
Phantom section: Left Section
DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Low/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.282 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.13 V/m; Power Drift = 0.053 dB
Peak SAR (extrapolated) = 0.232 W/kg
SAR(1 g) = 0.152 mW/g; SAR(10 g) = 0.093 mW/g
Maximum value of SAR (measured) = 0.186 mW/g
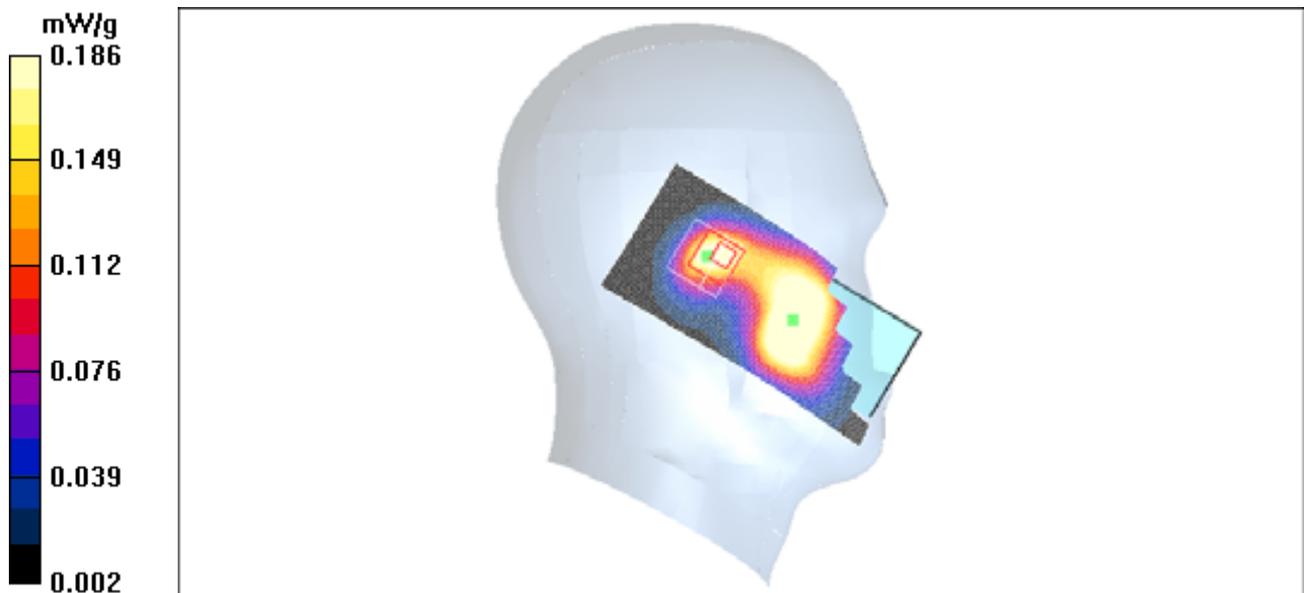
Figure 119 Left Hand Touch Cheek Open GSM 1900 Channel 512
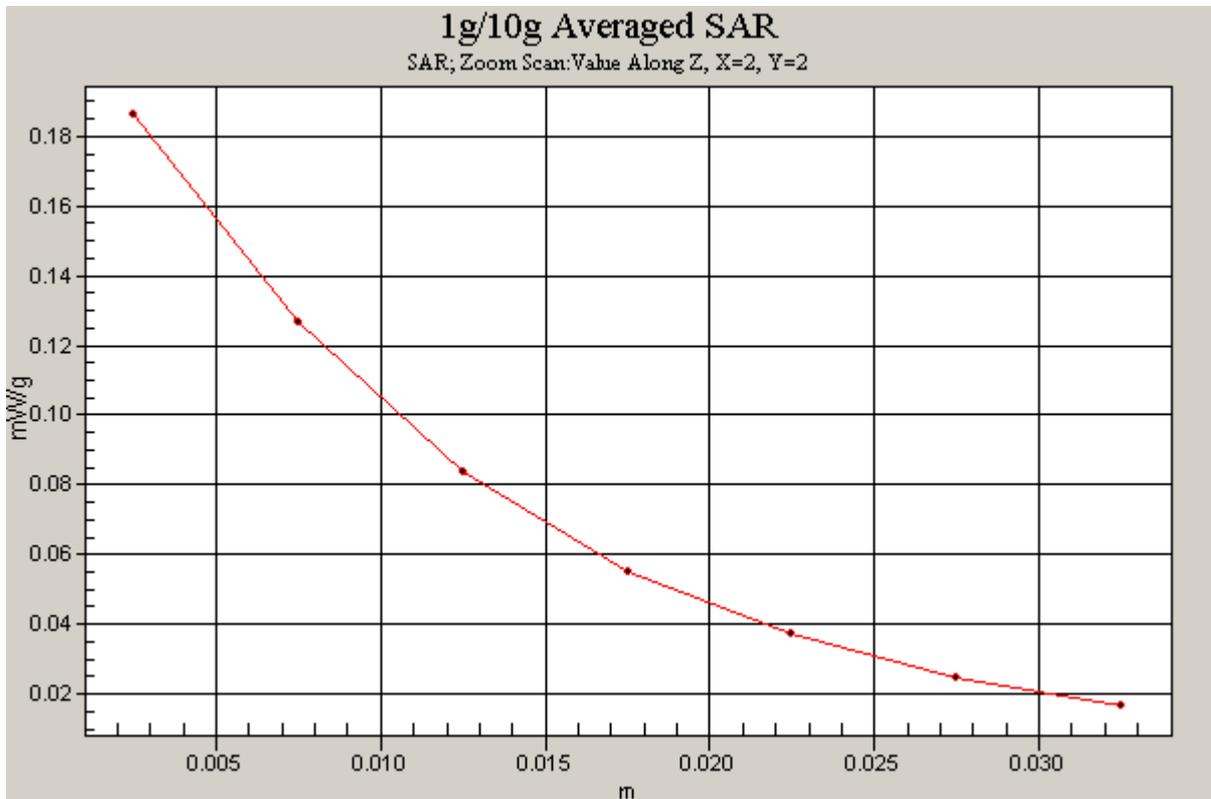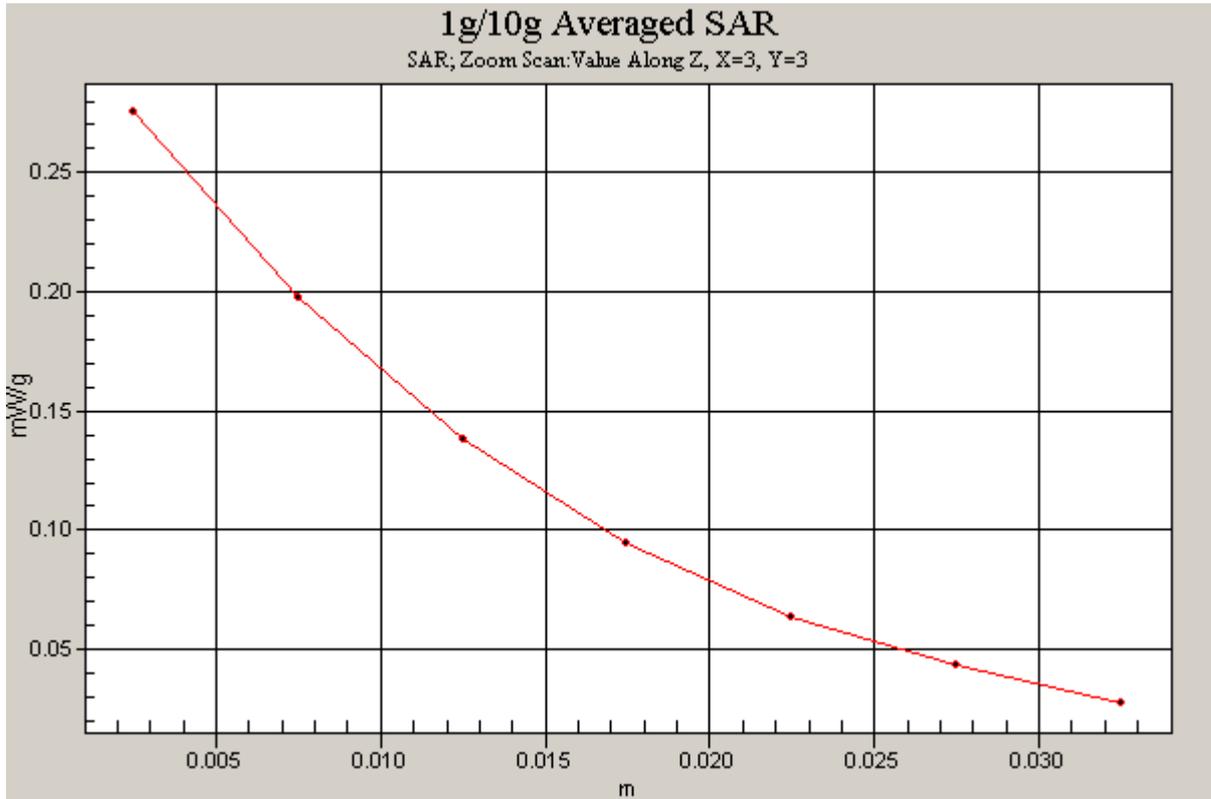
Figure 120 Z-Scan at power reference point (Left Hand Touch Cheek Open GSM 1900 Channel 512)

Date/Time: 12/26/2008 8:41:33 PM

GSM 1900 Left Tilt High Open

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1910 MHz; σ = 1.42 mho/m; ε_r = 40; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt High/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 13.2 V/m; Power Drift = -0.146 dB

Peak SAR (extrapolated) = 0.394 W/kg

SAR(1 g) = 0.253 mW/g; SAR(10 g) = 0.148 mW/g

Maximum value of SAR (measured) = 0.314 mW/g
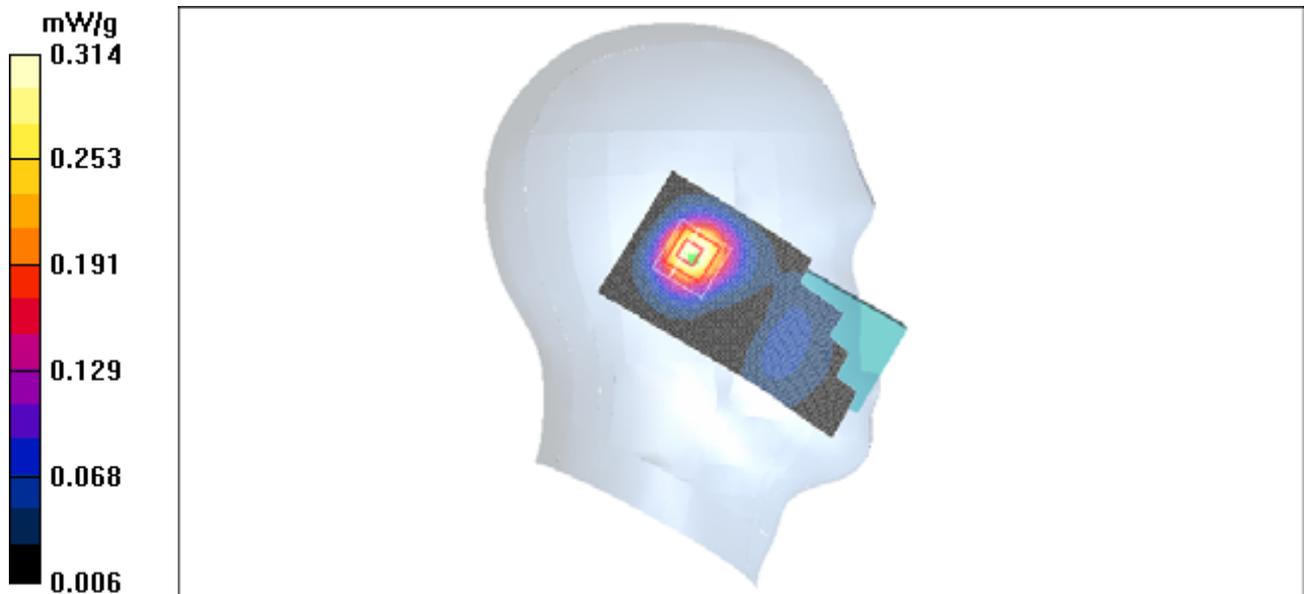
Figure 121 Left Hand Tilt 15°Open GSM 1900 Channel 810
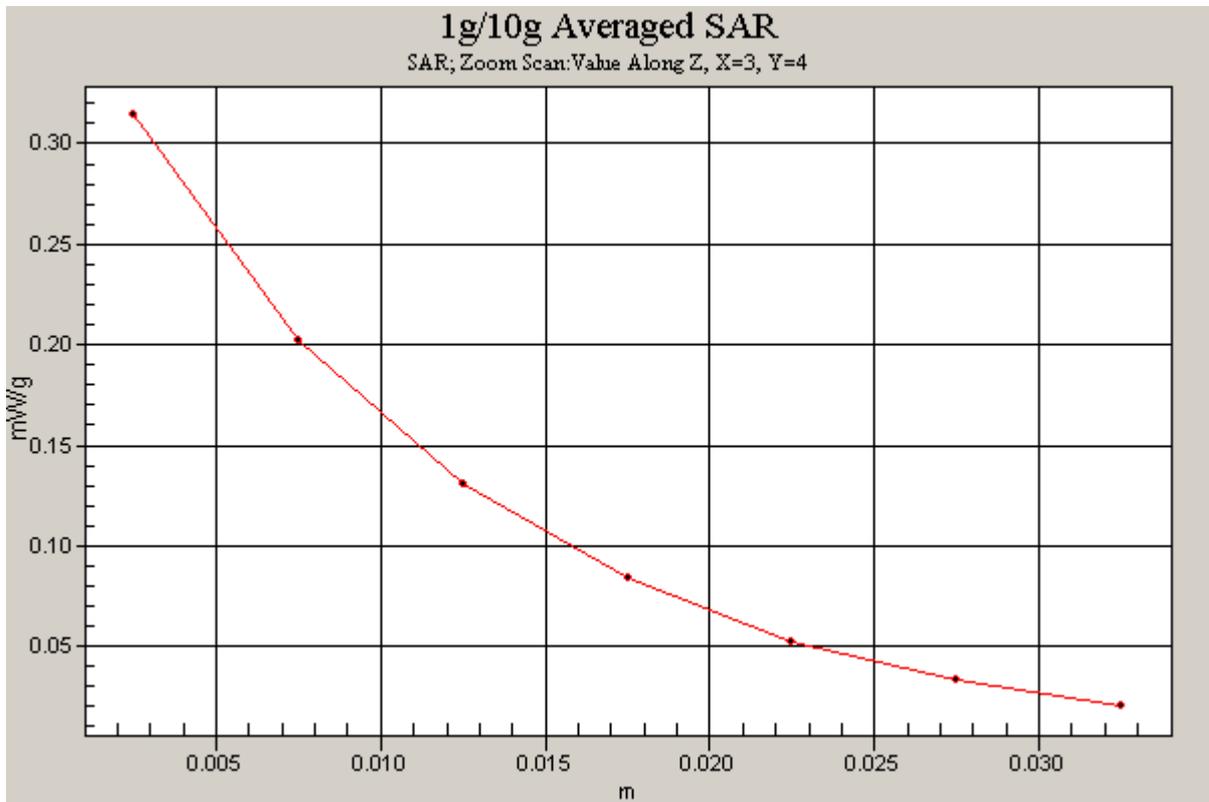
Figure 122 Z-Scan at power reference point (Left Hand Tilt 15°Open GSM 1900 Channel 810)

Date/Time: 12/26/2008 9:00:21 PM

GSM 1900 Left Tilt Middle Open

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 12.2 V/m; Power Drift = -0.146 dB

Peak SAR (extrapolated) = 0.341 W/kg

SAR(1 g) = 0.223 mW/g; SAR(10 g) = 0.133 mW/g

Maximum value of SAR (measured) = 0.277 mW/g
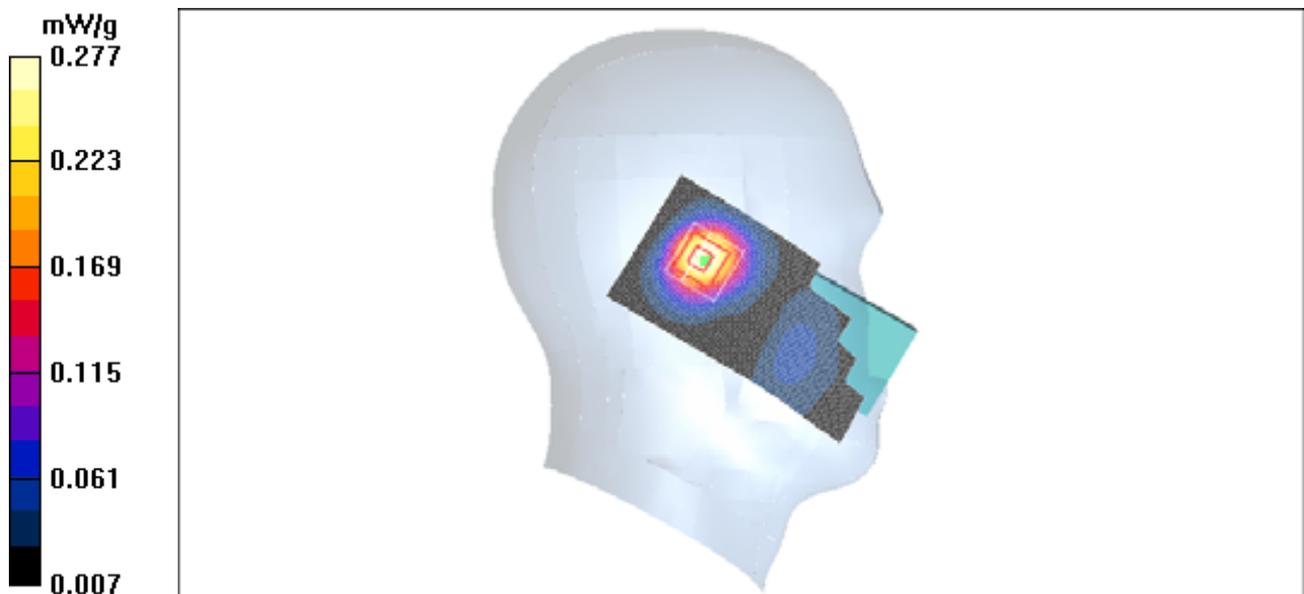
Figure 123 Left Hand Tilt 15°Open GSM 1900 Channel 661
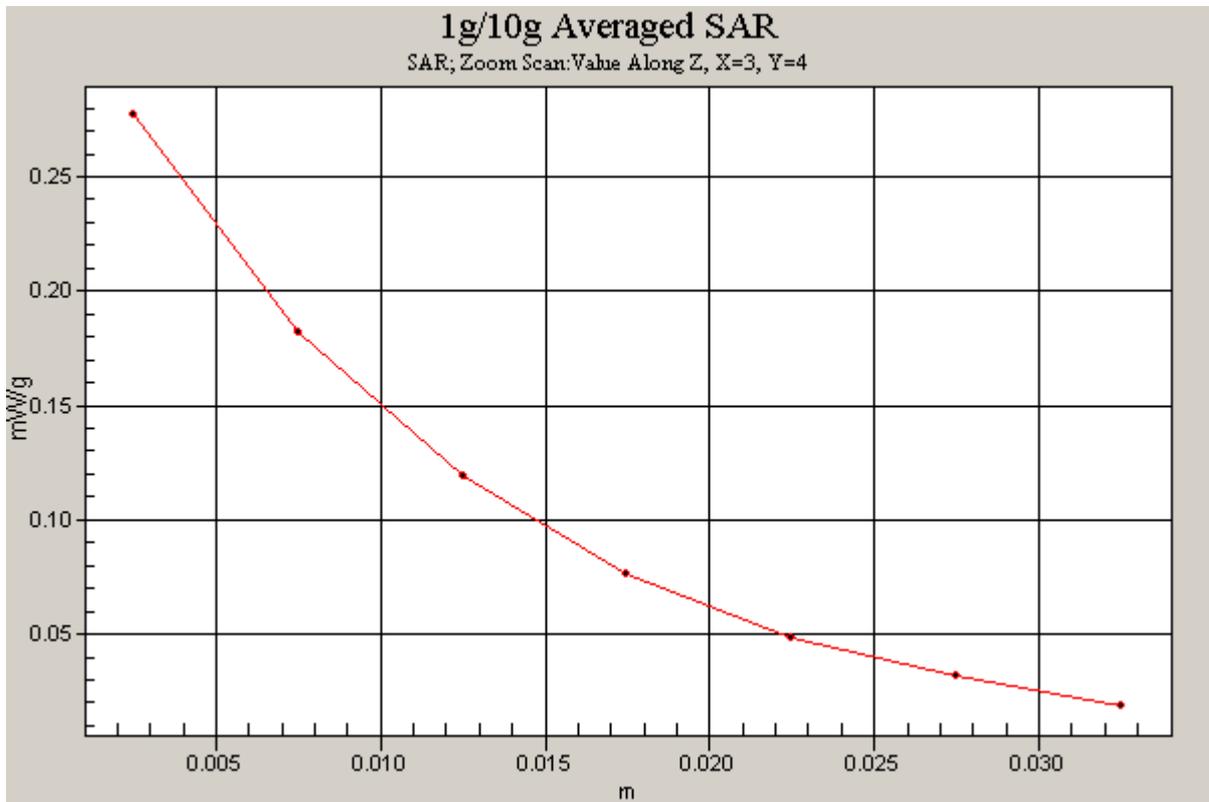
Figure 124 Z-Scan at power reference point (Left Hand Tilt 15°Open GSM 1900 Channel 661)

Date/Time: 12/26/2008 9:19:13 PM

GSM 1900 Left Tilt Low Open

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

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.37 mho/m; $ε_r$ = 40.2; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Low/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.282 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 = 0.016 dB

Peak SAR (extrapolated) = 0.315 W/kg

SAR(1 g) = 0.208 mW/g; SAR(10 g) = 0.126 mW/g

Maximum value of SAR (measured) = 0.253 mW/g
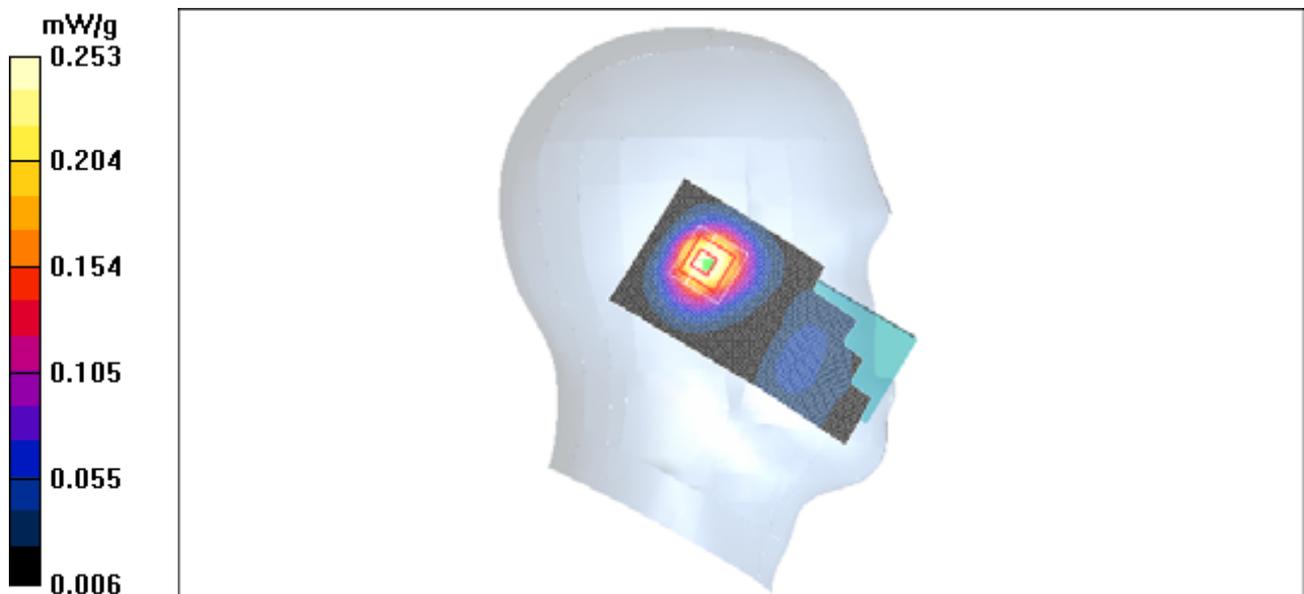
Figure 125 Left Hand Tilt 15°Open GSM 1900 Channel 512
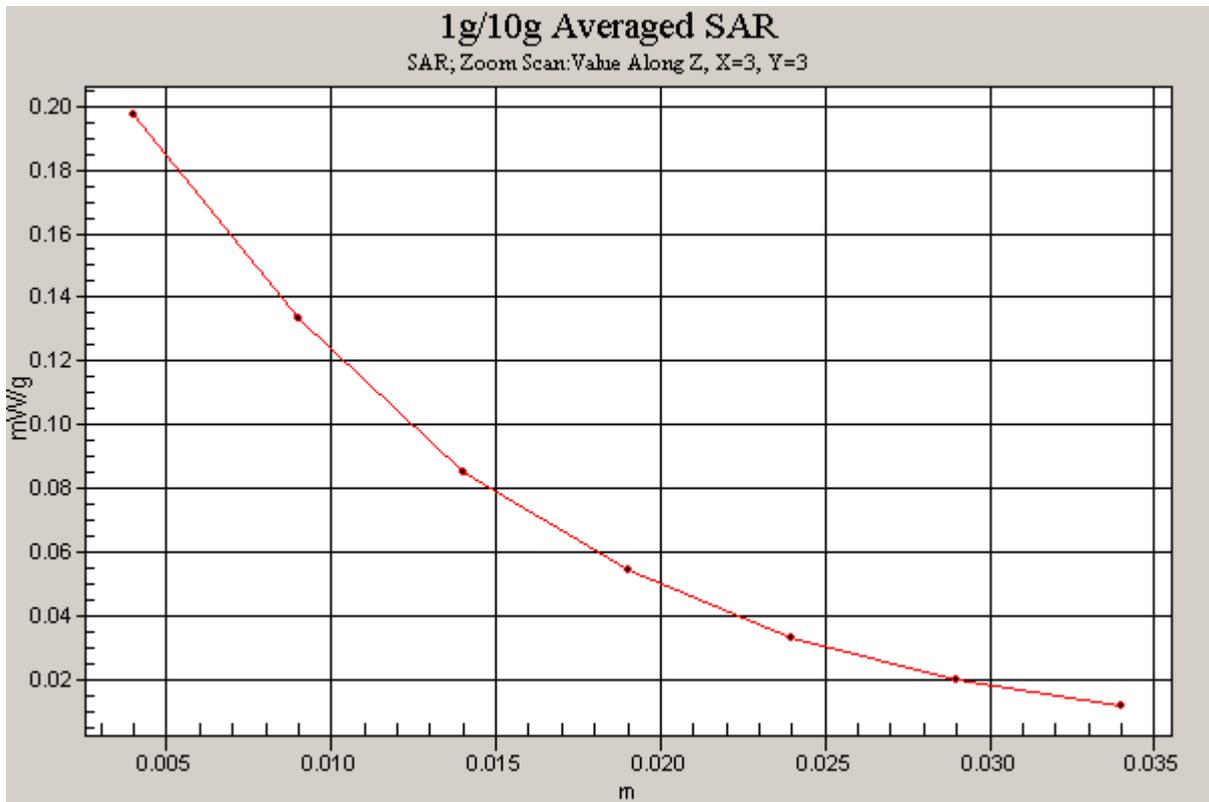
Figure 126 Z-Scan at power reference point (Left Hand Tilt 15°Open GSM 1900 Channel 512)

Date/Time: 12/27/2008 2:49:22 AM

GSM 1900 Right Cheek High Open

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1910 MHz; σ = 1.42 mho/m; ε_r = 40; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek High/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.427 mW/g

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

Reference Value = 10.2 V/m; Power Drift = -0.098 dB

Peak SAR (extrapolated) = 0.539 W/kg

SAR(1 g) = 0.341 mW/g; SAR(10 g) = 0.209 mW/g

Maximum value of SAR (measured) = 0.421 mW/g
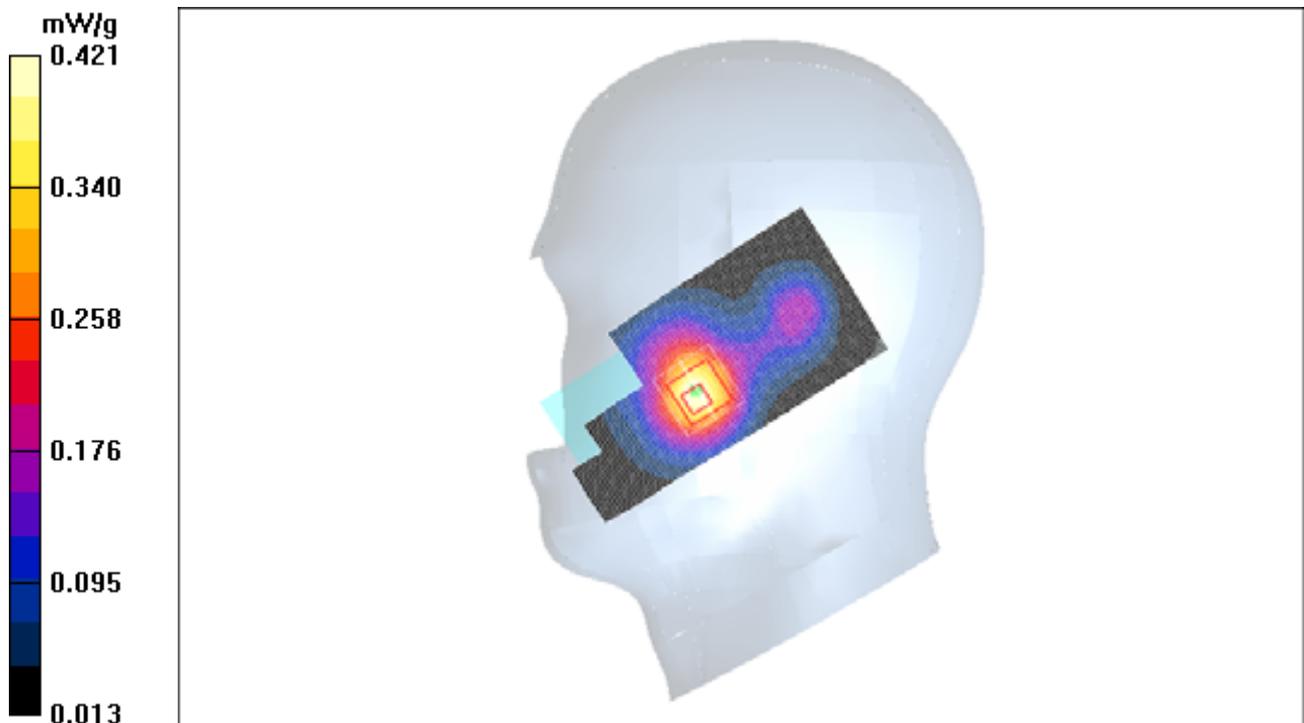
Figure 127 Right Hand Touch Cheek Open GSM 1900 Channel 810
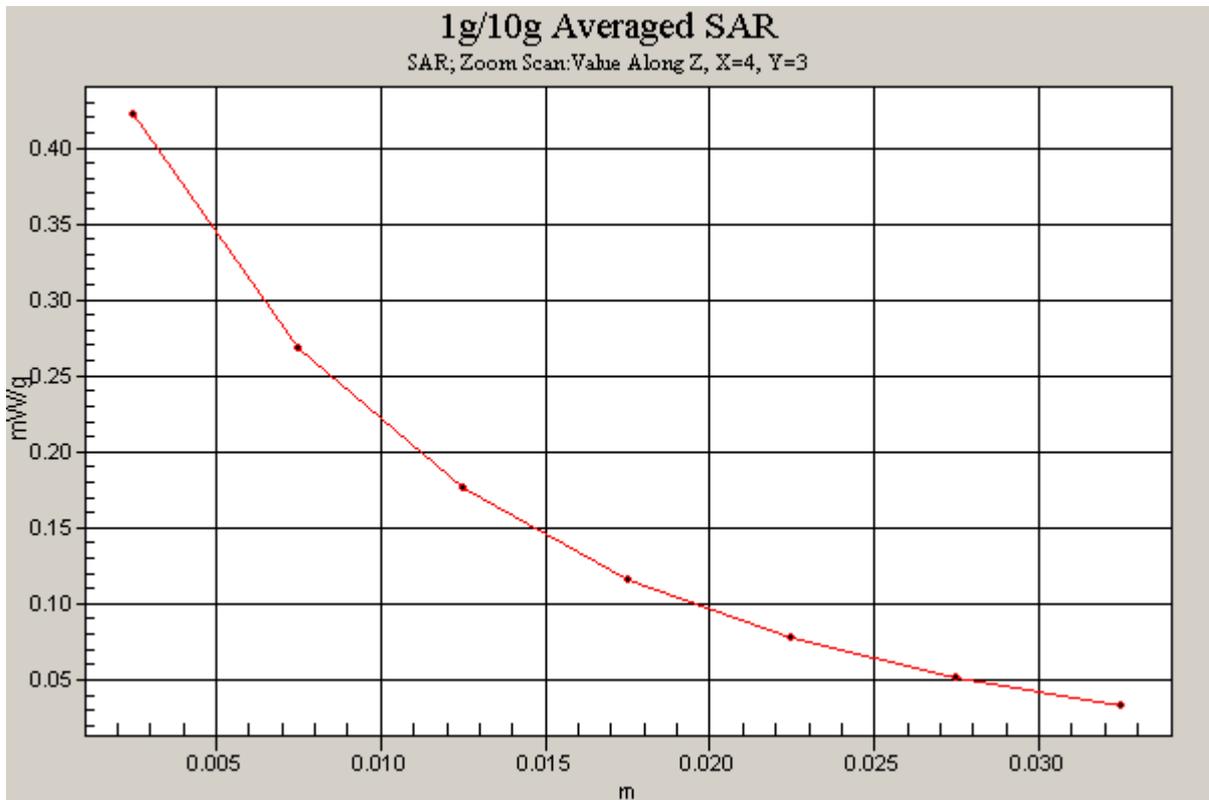
Figure 128 Z-Scan at power reference point (Right Hand Touch Cheek Open GSM 1900 Channel 810)

Date/Time: 12/27/2008 2:20:58 AM

GSM 1900 Right Cheek Middle Open

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.396 mW/g

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

Reference Value = 8.55 V/m; Power Drift = -0.042 dB

Peak SAR (extrapolated) = 0.505 W/kg

SAR(1 g) = 0.321 mW/g; SAR(10 g) = 0.197 mW/g

Maximum value of SAR (measured) = 0.399 mW/g

Figure 129 Right Hand Touch Cheek Open GSM 1900 Channel 661
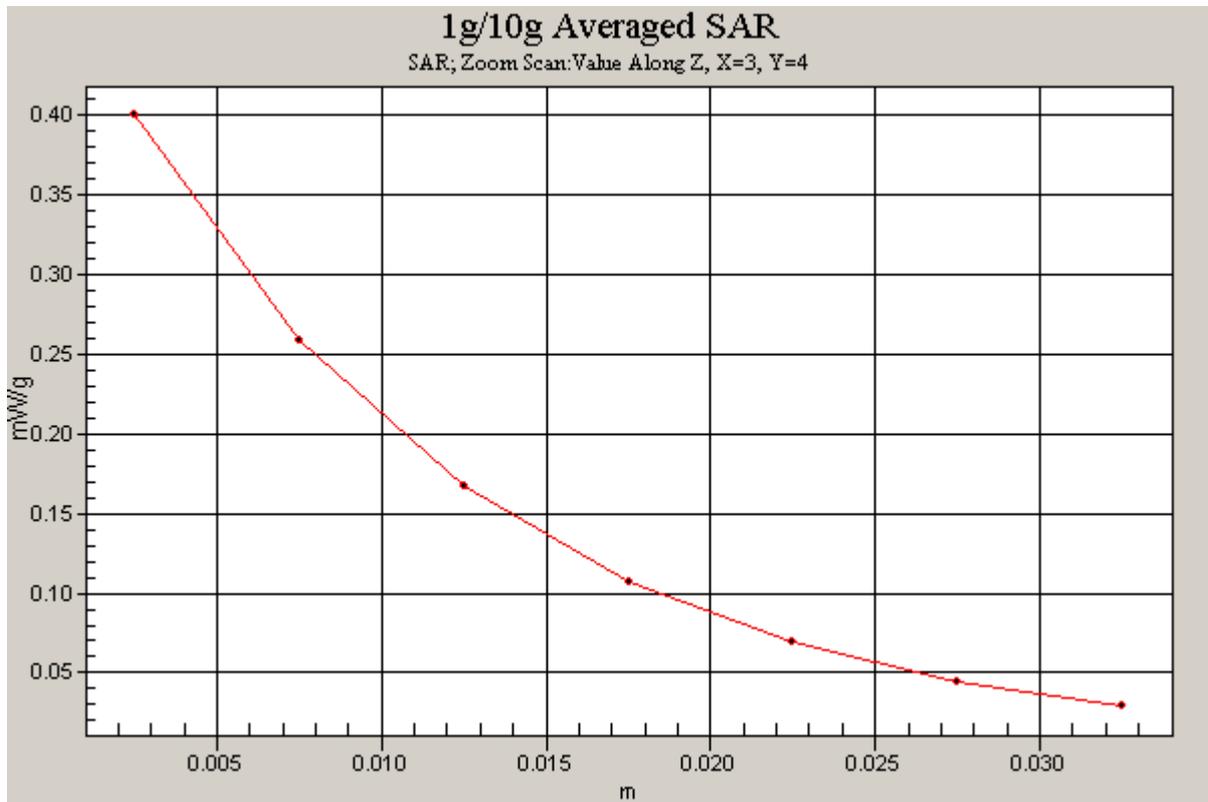
Figure 130 Z-Scan at power reference point (Right Hand Touch Cheek Open GSM 1900 Channel 661)

Date/Time: 12/27/2008 2:01:33 AM

GSM 1900 Right Cheek Low Open

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

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.37 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Low/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 8.53 V/m; Power Drift = -0.038 dB

Peak SAR (extrapolated) = 0.506 W/kg

SAR(1 g) = 0.321 mW/g; SAR(10 g) = 0.197 mW/g

Maximum value of SAR (measured) = 0.400 mW/g
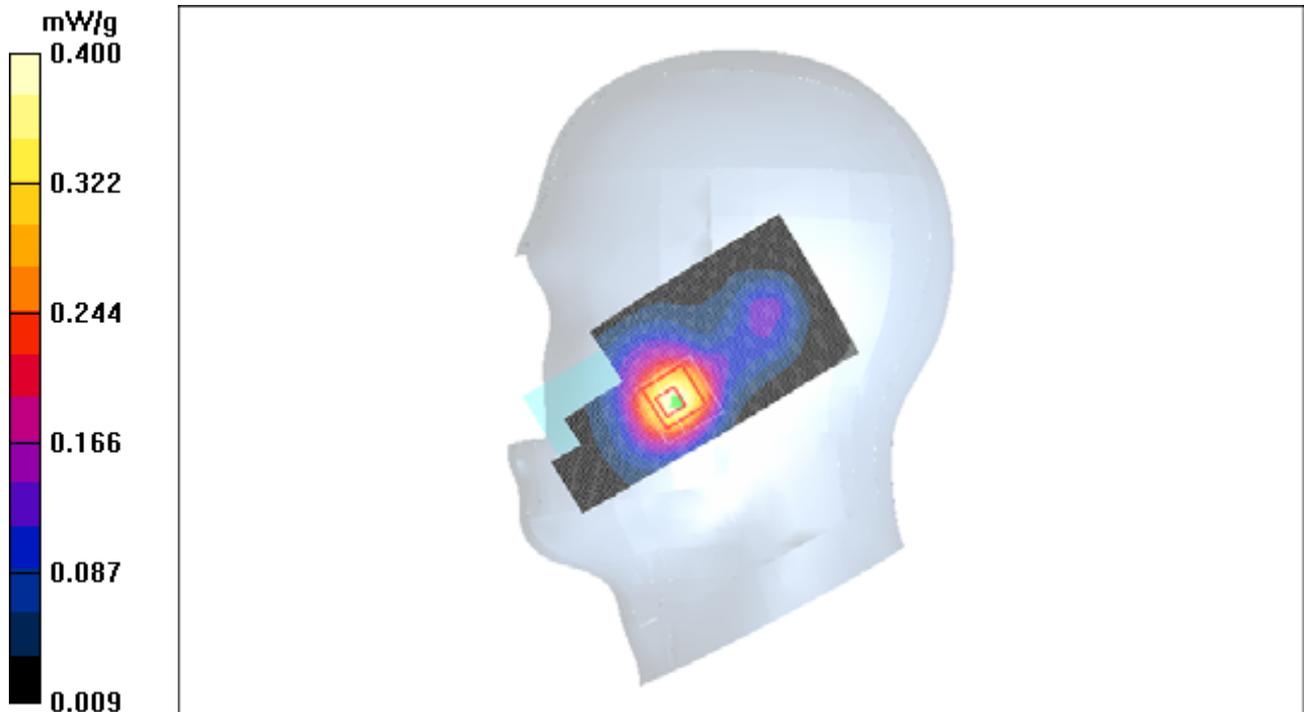

Figure 131 Right Hand Touch Cheek Open GSM 1900 Channel 512

Figure 132 Z-Scan at power reference point (Right Hand Touch Cheek Open GSM 1900 Channel 512)

Date/Time: 12/27/2008 1:05:14 AM

GSM 1900 Right Tilt High Open

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1910 MHz; σ = 1.42 mho/m; ε_r = 40; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt High/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 13.9 V/m; Power Drift = -0.016 dB

Peak SAR (extrapolated) = 0.366 W/kg

SAR(1 g) = 0.232 mW/g; SAR(10 g) = 0.135 mW/g

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

Figure 133 Right Hand Tilt 15°Open GSM 1900 Channel 810
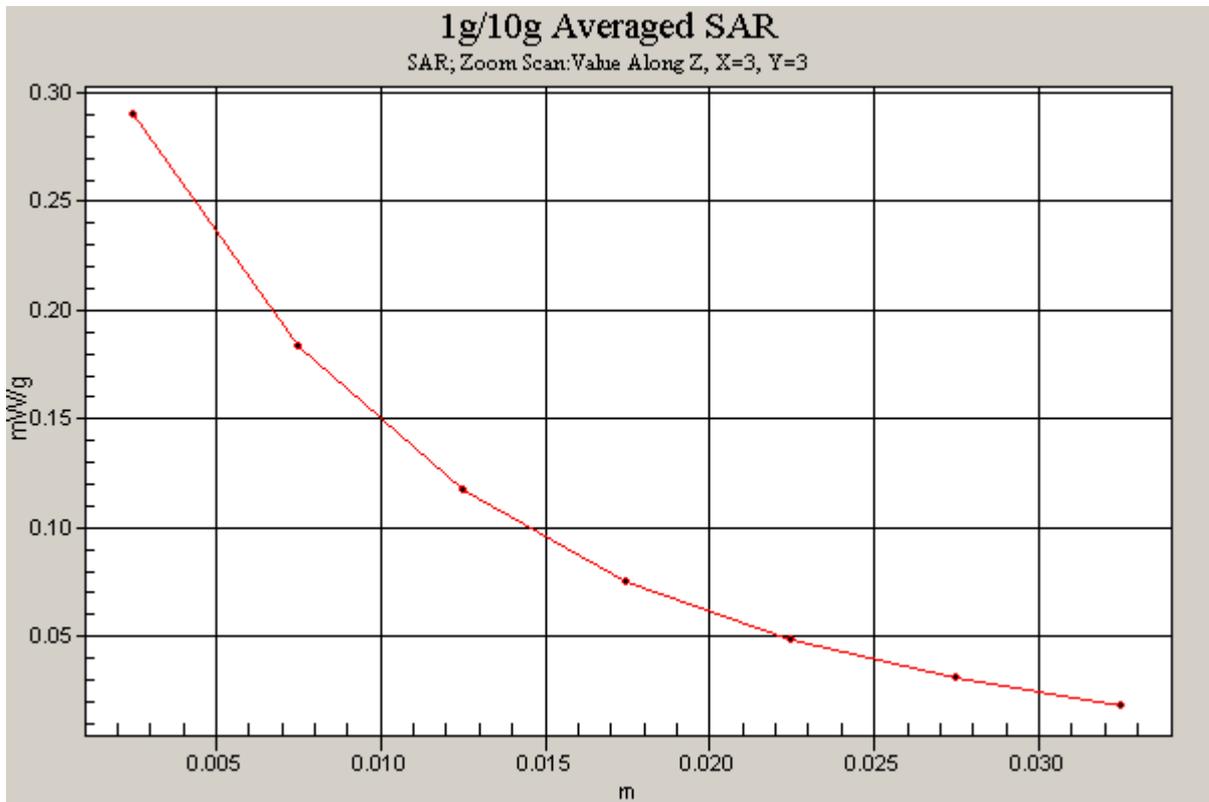
Figure 134 Z-Scan at power reference point (Right Hand Tilt 15°Open GSM 1900 Channel 810)

Date/Time: 12/27/2008 1:23:55 AM

GSM 1900 Right Tilt Middle Open

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.276 mW/g

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

Reference Value = 12.8 V/m; Power Drift = -0.004 dB

Peak SAR (extrapolated) = 0.306 W/kg

SAR(1 g) = 0.196 mW/g; SAR(10 g) = 0.117 mW/g

Maximum value of SAR (measured) = 0.242 mW/g

Figure 135 Right Hand Tilt 15°Open GSM 1900 Channel 661

Figure 136 Z-Scan at power reference point (Right Hand Tilt 15°Open GSM 1900 Channel 661)

Date/Time: 12/27/2008 1:42:25 AM

GSM 1900 Right Tilt Low Open

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

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.37 mho/m; $ε_r$ = 40.2; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Low/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 12.9 V/m; Power Drift = 0.027 dB

Peak SAR (extrapolated) = 0.305 W/kg

SAR(1 g) = 0.198 mW/g; SAR(10 g) = 0.120 mW/g

Maximum value of SAR (measured) = 0.245 mW/g
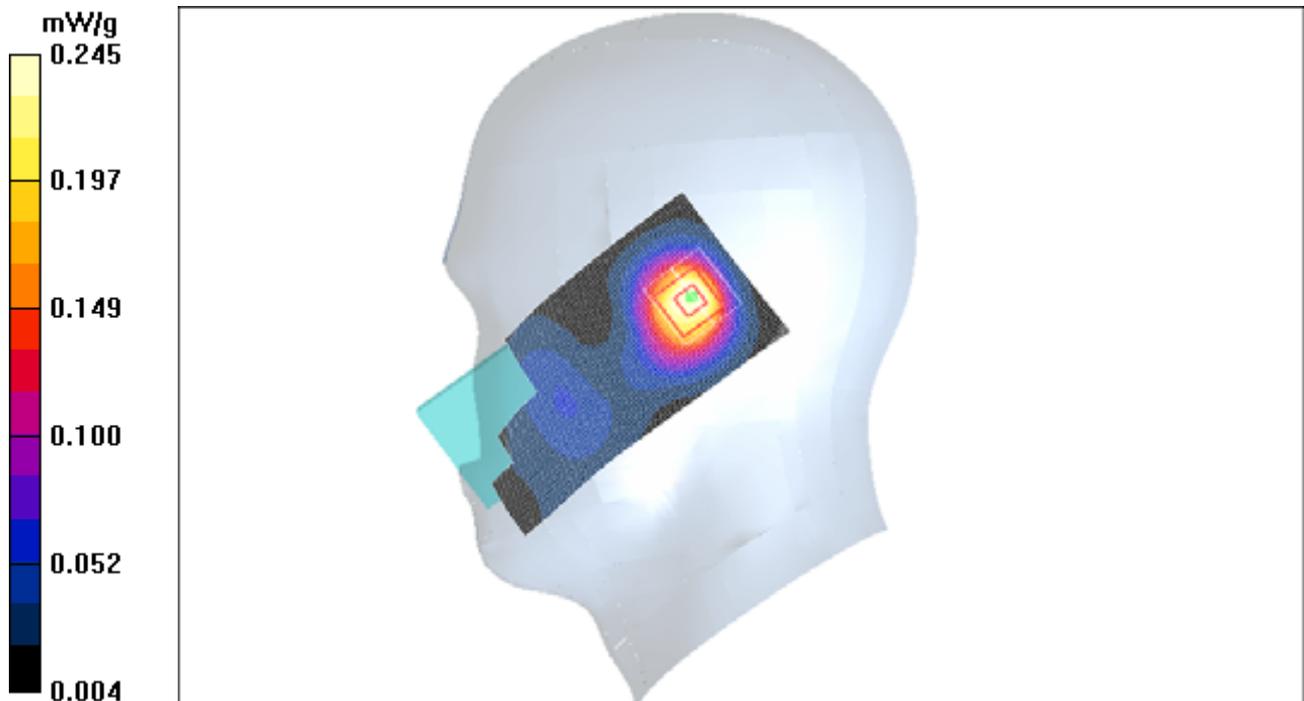
Figure 137 Right Hand Tilt 15°Open GSM 1900 Channel 512
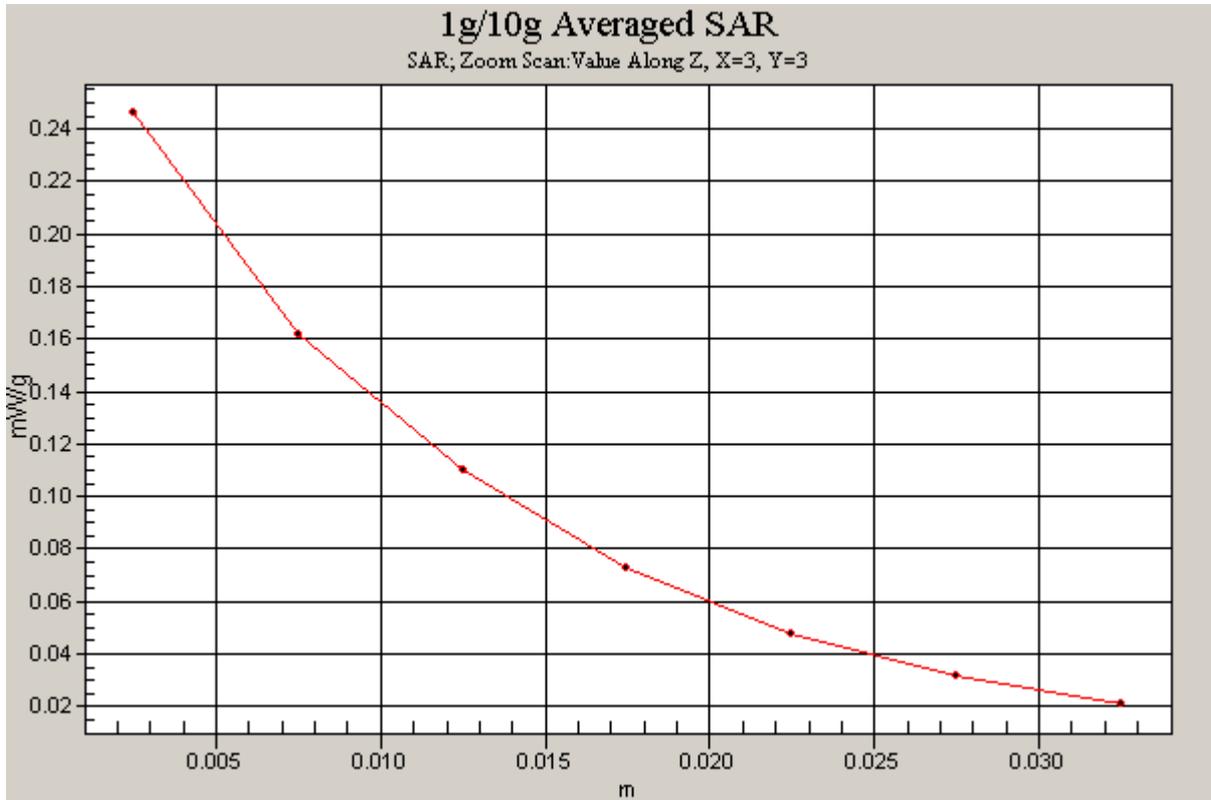
Figure 138 Z-Scan at power reference point (Right Hand Tilt 15°Open GSM 1900 Channel 512)

Date/Time: 12/28/2008 3:16:13 AM

GSM 1900 Towards Ground High Open

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1910 MHz; σ = 1.57 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground High/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.473 mW/g

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

Reference Value = 5.31 V/m; Power Drift = -0.019 dB

Peak SAR (extrapolated) = 0.612 W/kg

SAR(1 g) = 0.370 mW/g; SAR(10 g) = 0.206 mW/g

Maximum value of SAR (measured) = 0.478 mW/g

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

Reference Value = 5.31 V/m; Power Drift = -0.019 dB

Peak SAR (extrapolated) = 0.510 W/kg

SAR(1 g) = 0.333 mW/g; SAR(10 g) = 0.211 mW/g

Maximum value of SAR (measured) = 0.405 mW/g
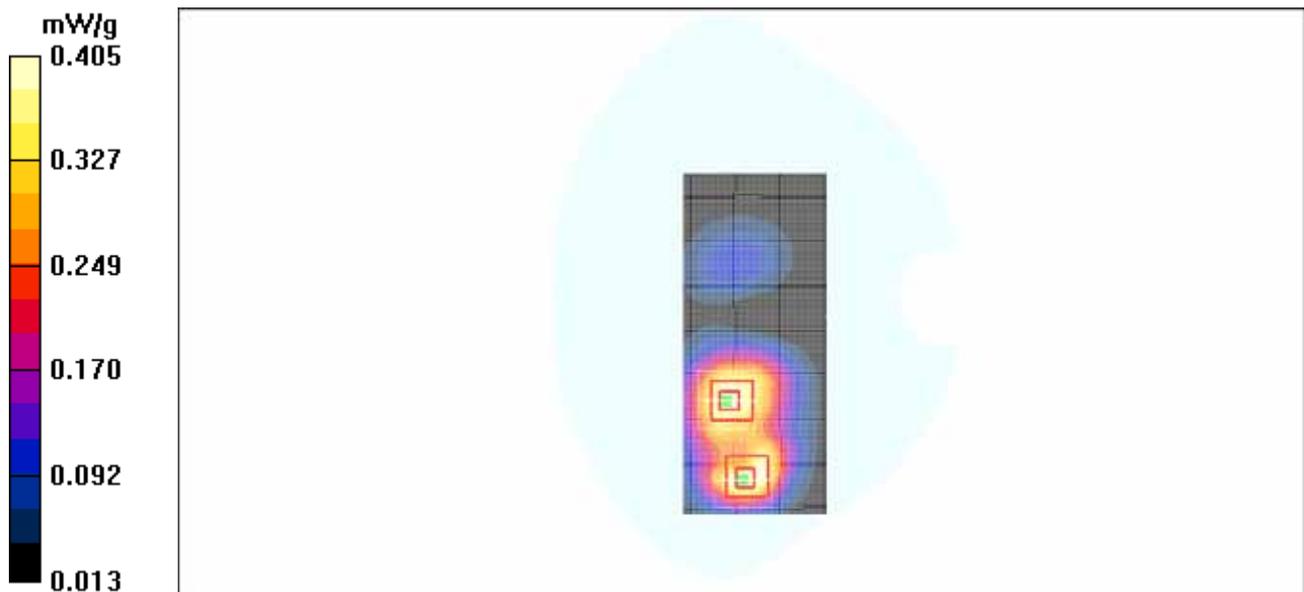
Figure 139 Body, Towards Ground, Open GSM 1900 Channel 810
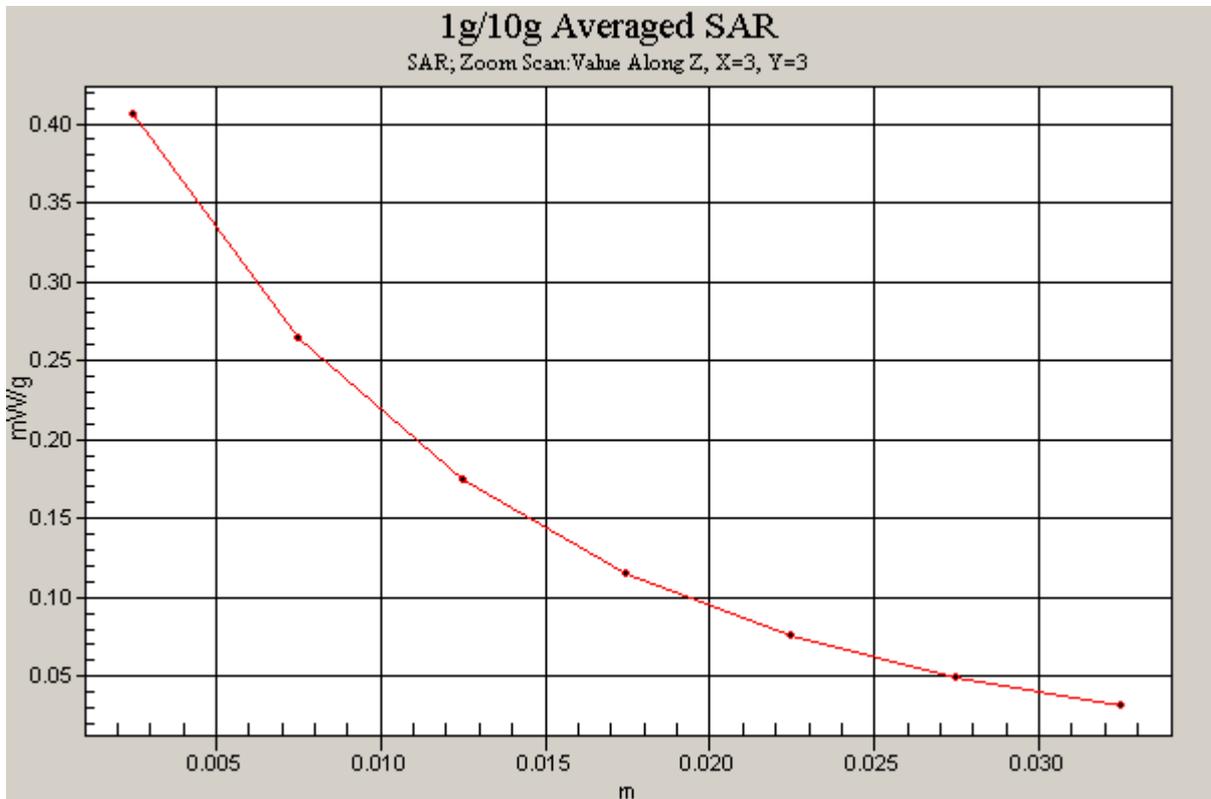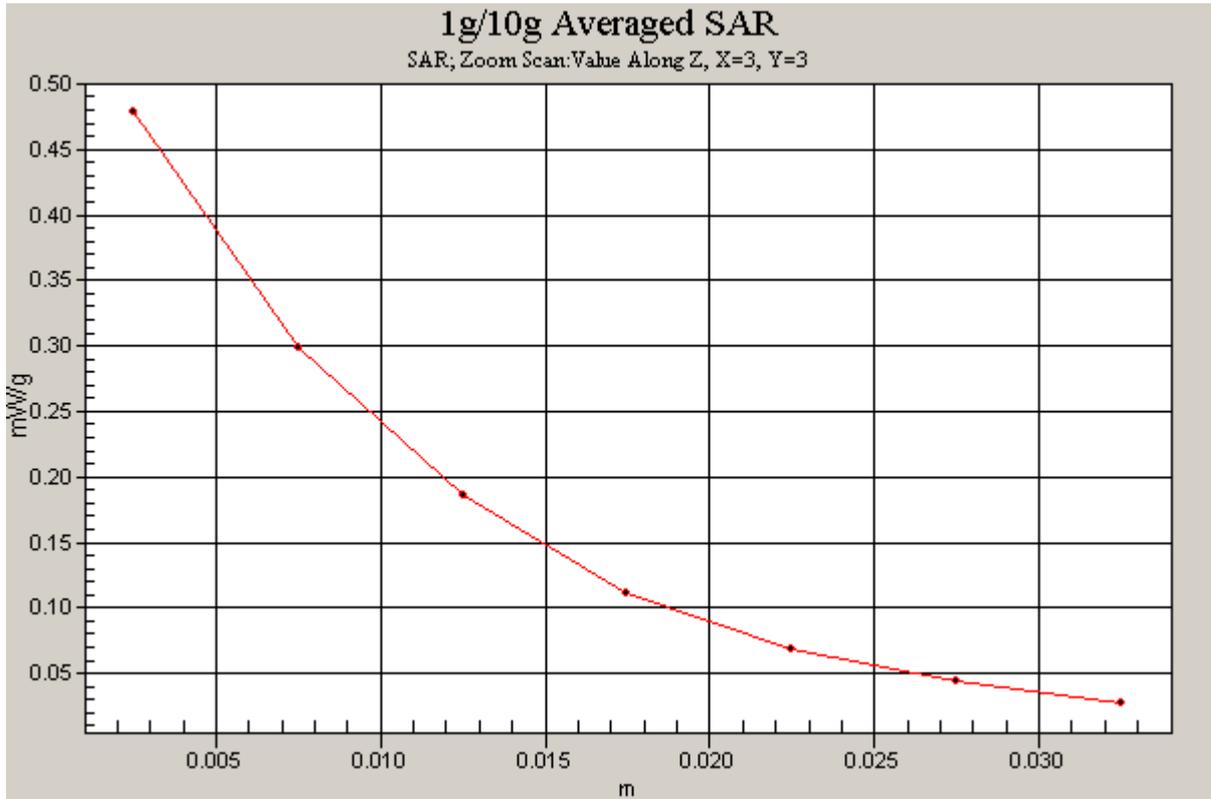
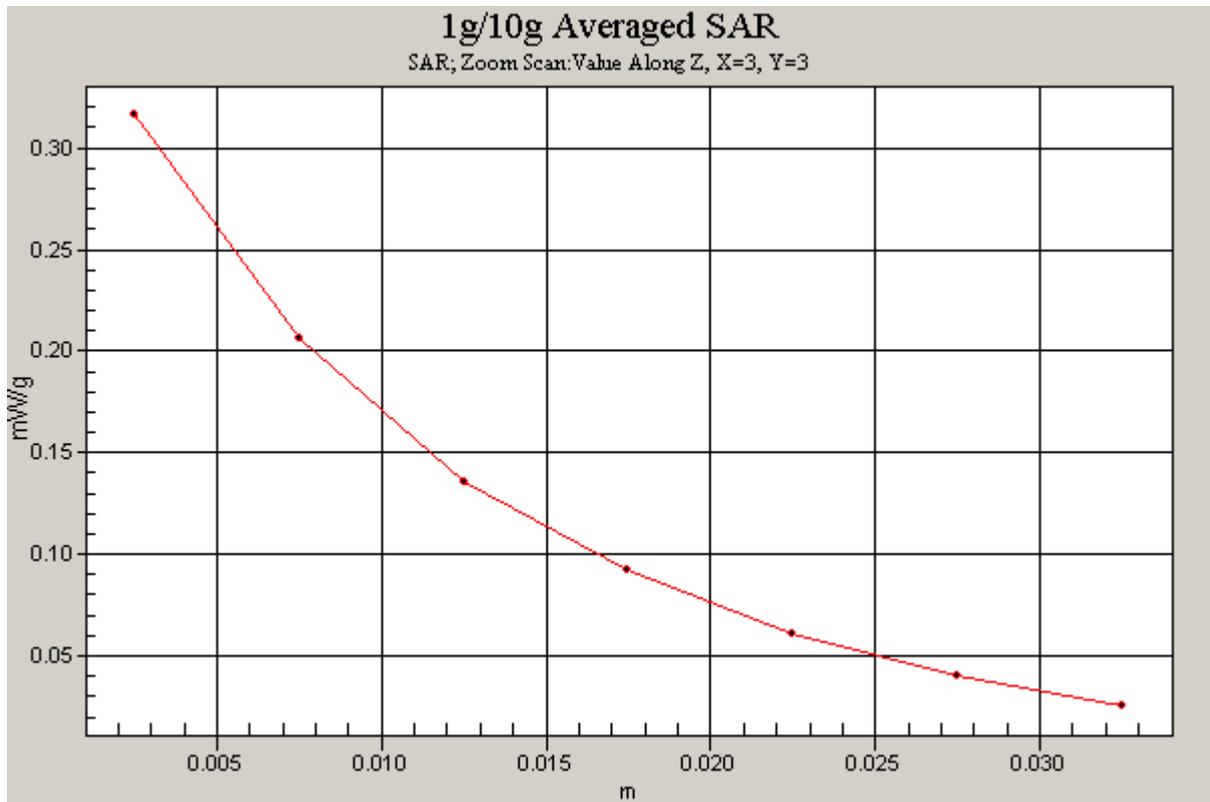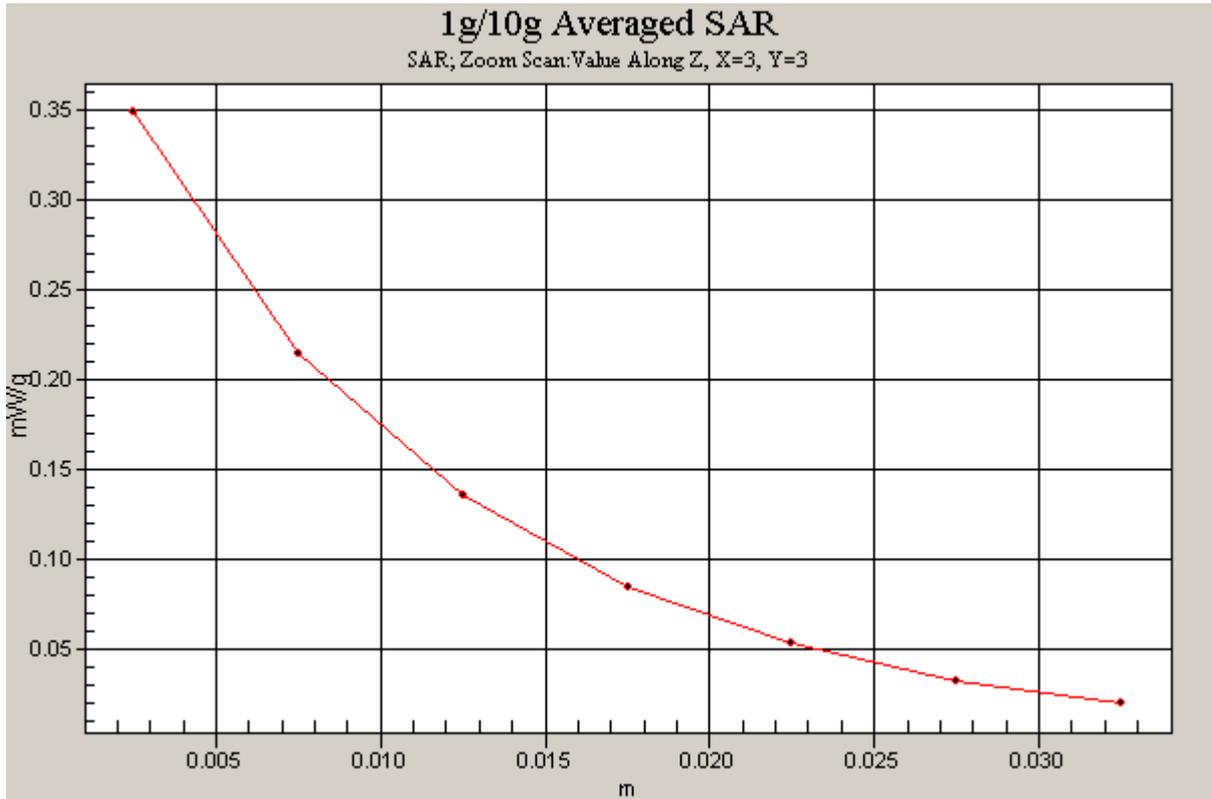Figure 140 Z-Scan at power reference point (Body, Towards Ground, Open GSM 1900 Channel 810)

Date/Time: 12/28/2008 2:43:55 AM

GSM 1900 Towards Ground Middle Open

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; $ε_r$ = 53.3; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Middle/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.415 mW/g

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

Reference Value = 5.69 V/m; Power Drift = 0.075 dB

Peak SAR (extrapolated) = 0.533 W/kg

SAR(1 g) = 0.324 mW/g; SAR(10 g) = 0.180 mW/g

Maximum value of SAR (measured) = 0.422 mW/g

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

Reference Value = 5.69 V/m; Power Drift = 0.075 dB

Peak SAR (extrapolated) = 0.474 W/kg

SAR(1 g) = 0.313 mW/g; SAR(10 g) = 0.200 mW/g

Maximum value of SAR (measured) = 0.379 mW/g
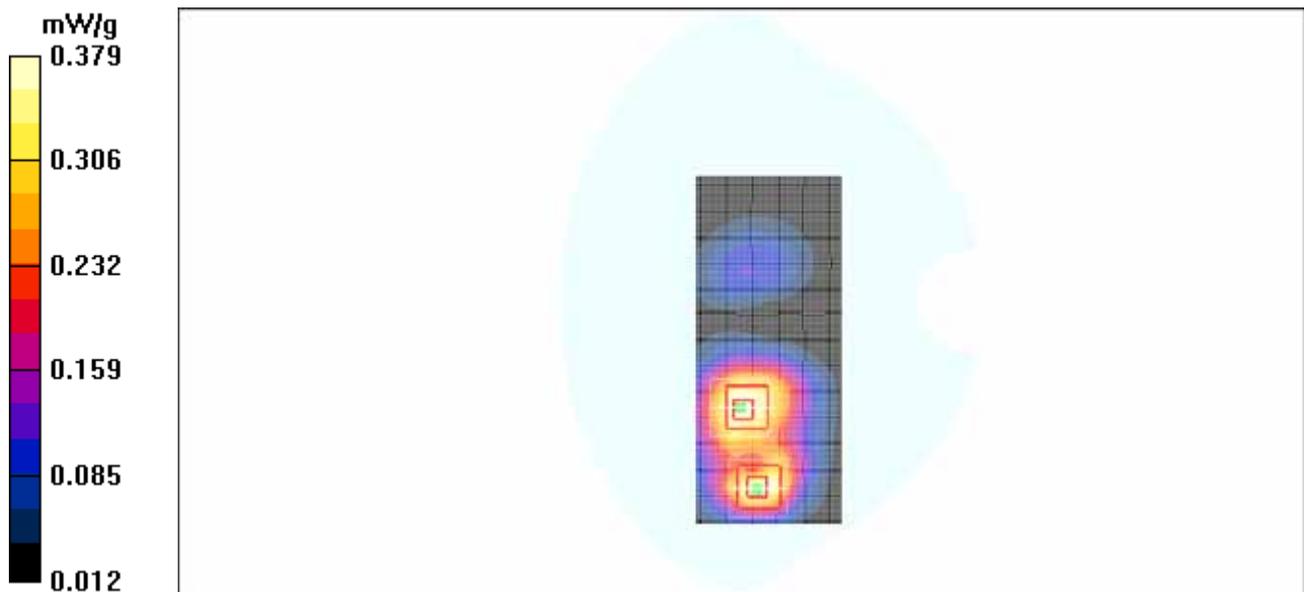
Figure 141 Body, Towards Ground, Open GSM 1900 Channel 661
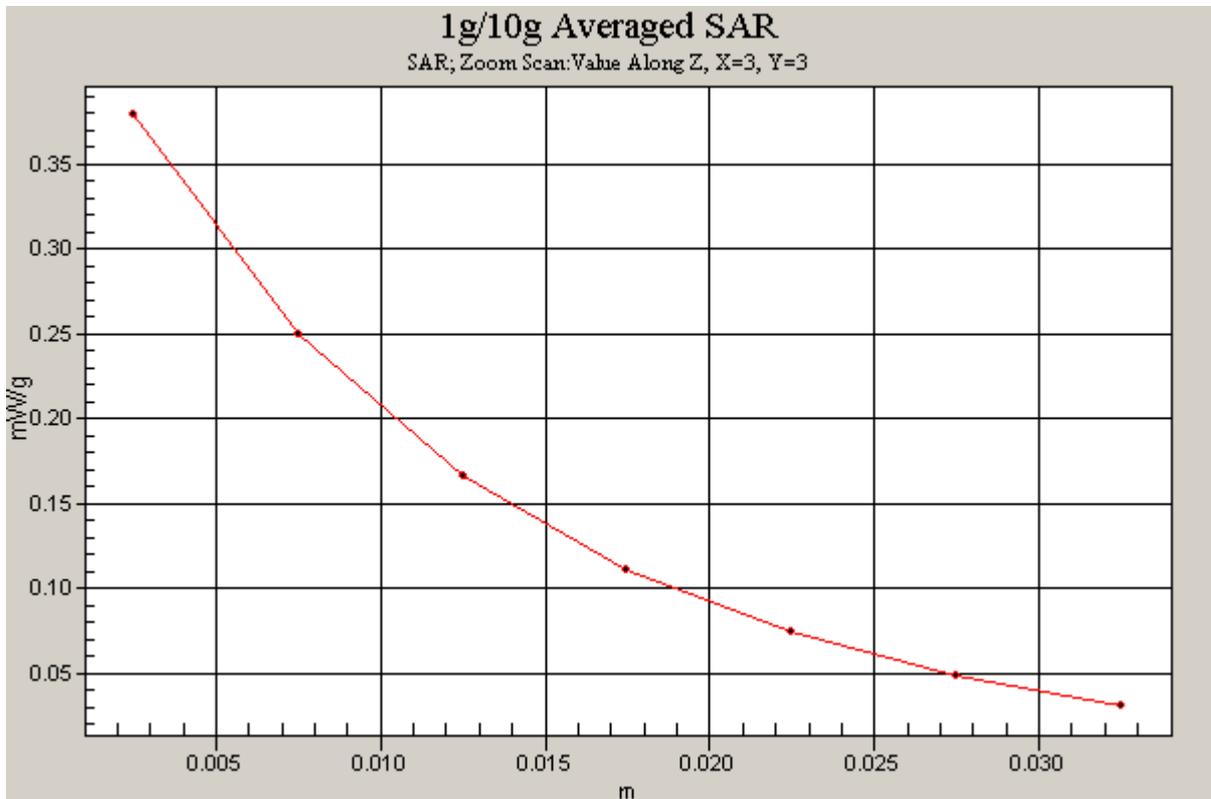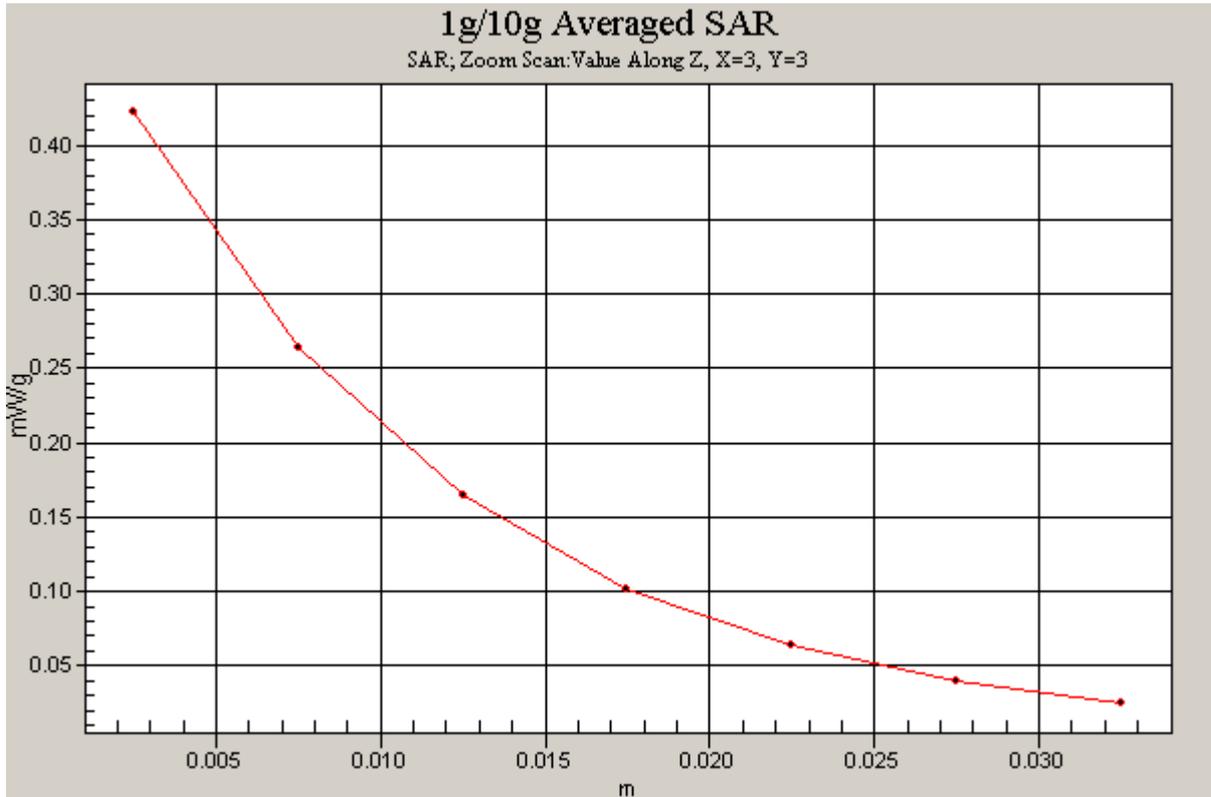
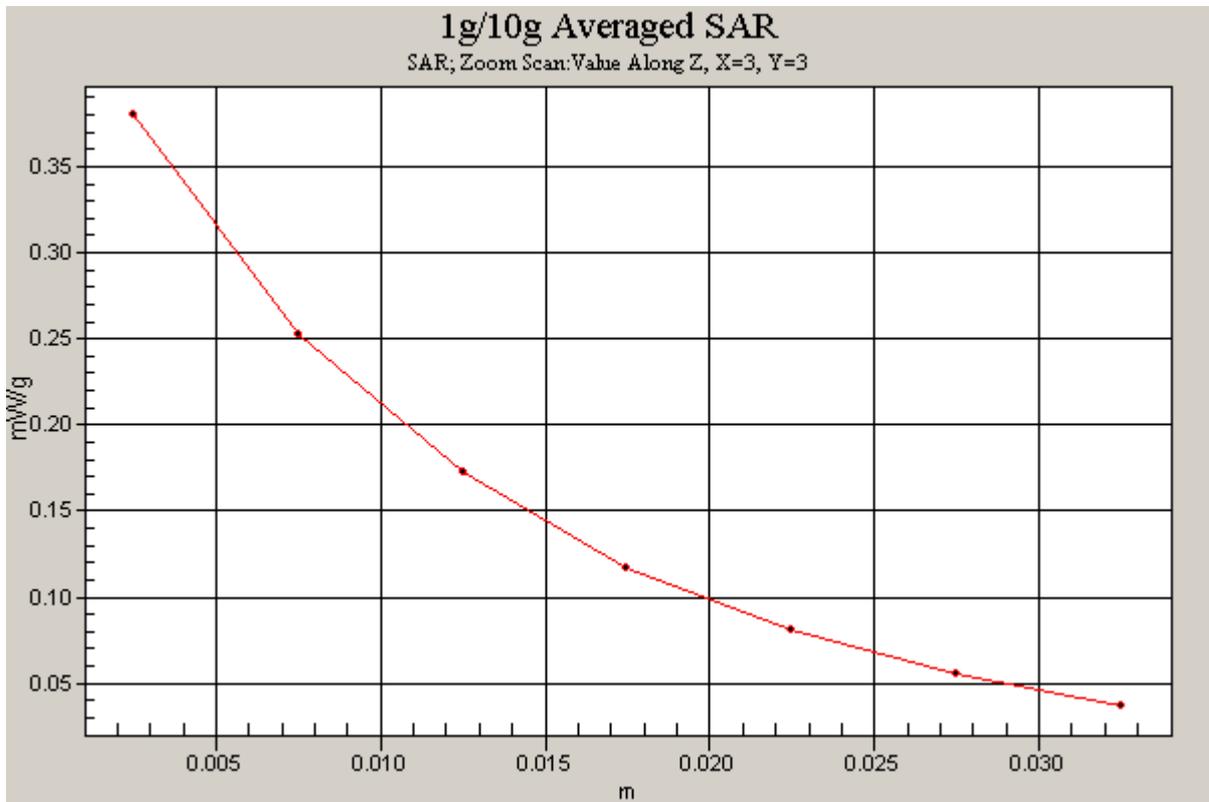Figure 142 Z-Scan at power reference point (Body, Towards Ground, Open GSM 1900 Channel 661)

Date/Time: 12/28/2008 2:10:32 AM

GSM 1900 Towards Ground Low Open

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

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.51 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Low/Area Scan (61x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.406 mW/g

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

Reference Value = 6.44 V/m; Power Drift = 0.057 dB

Peak SAR (extrapolated) = 0.523 W/kg

SAR(1 g) = 0.315 mW/g; SAR(10 g) = 0.175 mW/g

Maximum value of SAR (measured) = 0.410 mW/g

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

Reference Value = 6.44 V/m; Power Drift = 0.057 dB

Peak SAR (extrapolated) = 0.495 W/kg

SAR(1 g) = 0.330 mW/g; SAR(10 g) = 0.212 mW/g

Maximum value of SAR (measured) = 0.399 mW/g
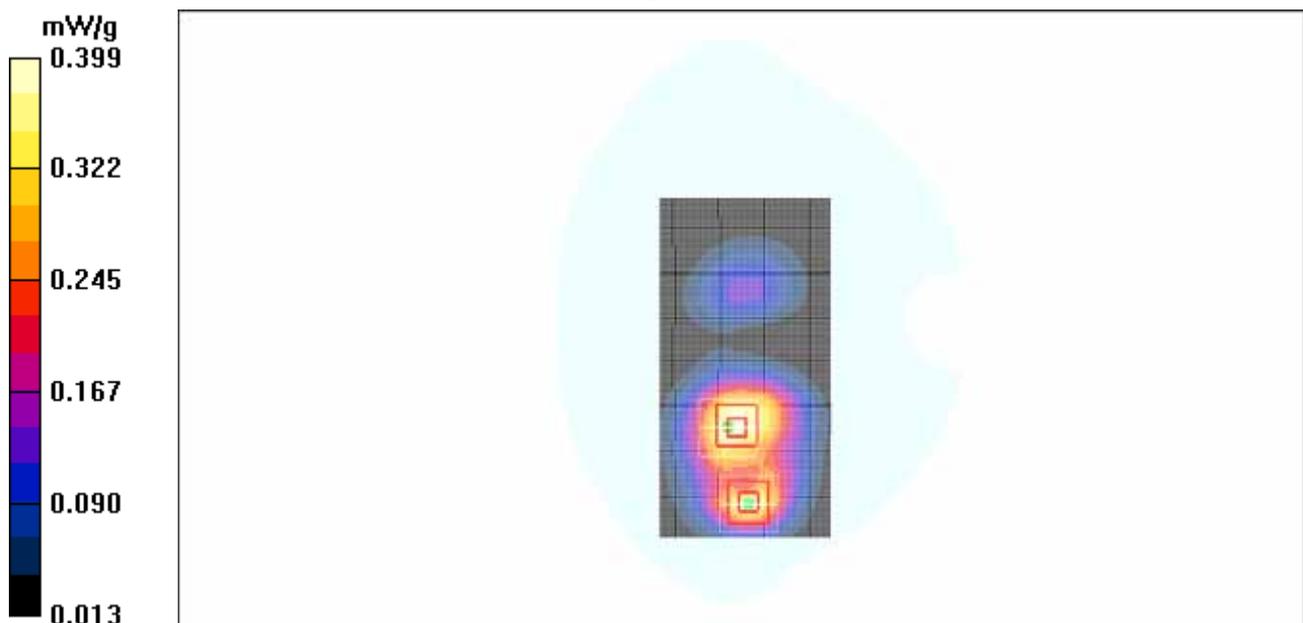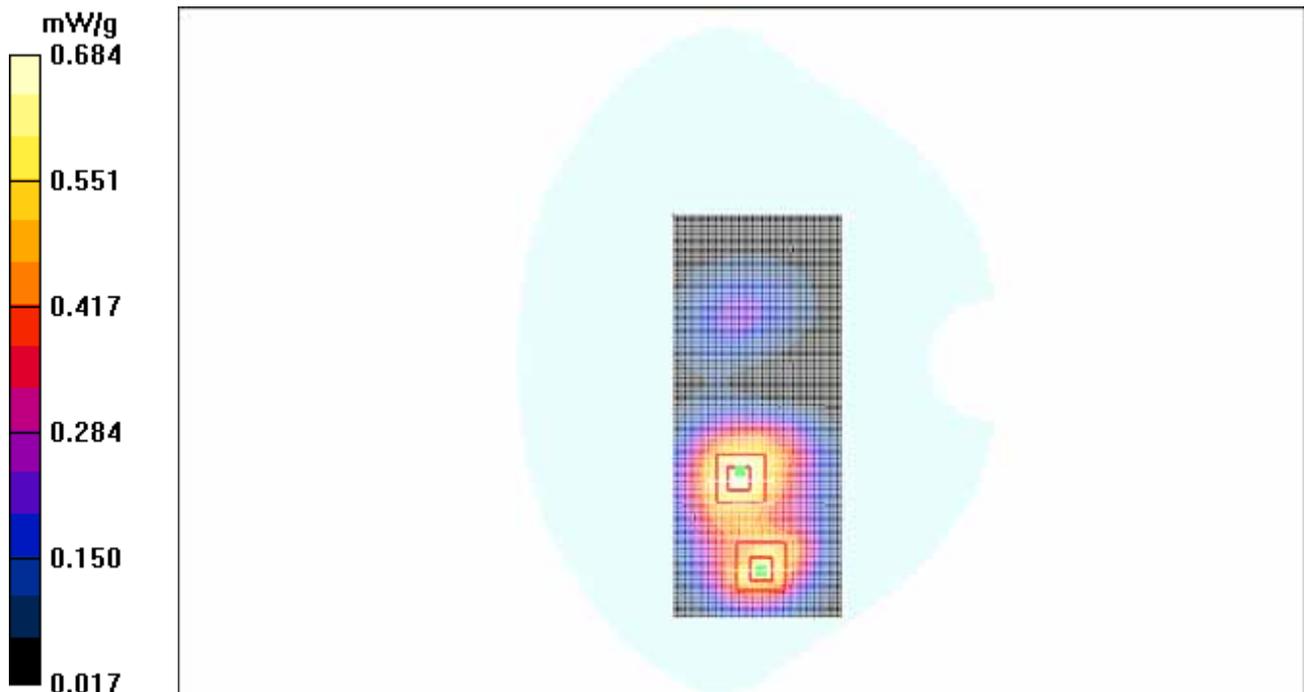
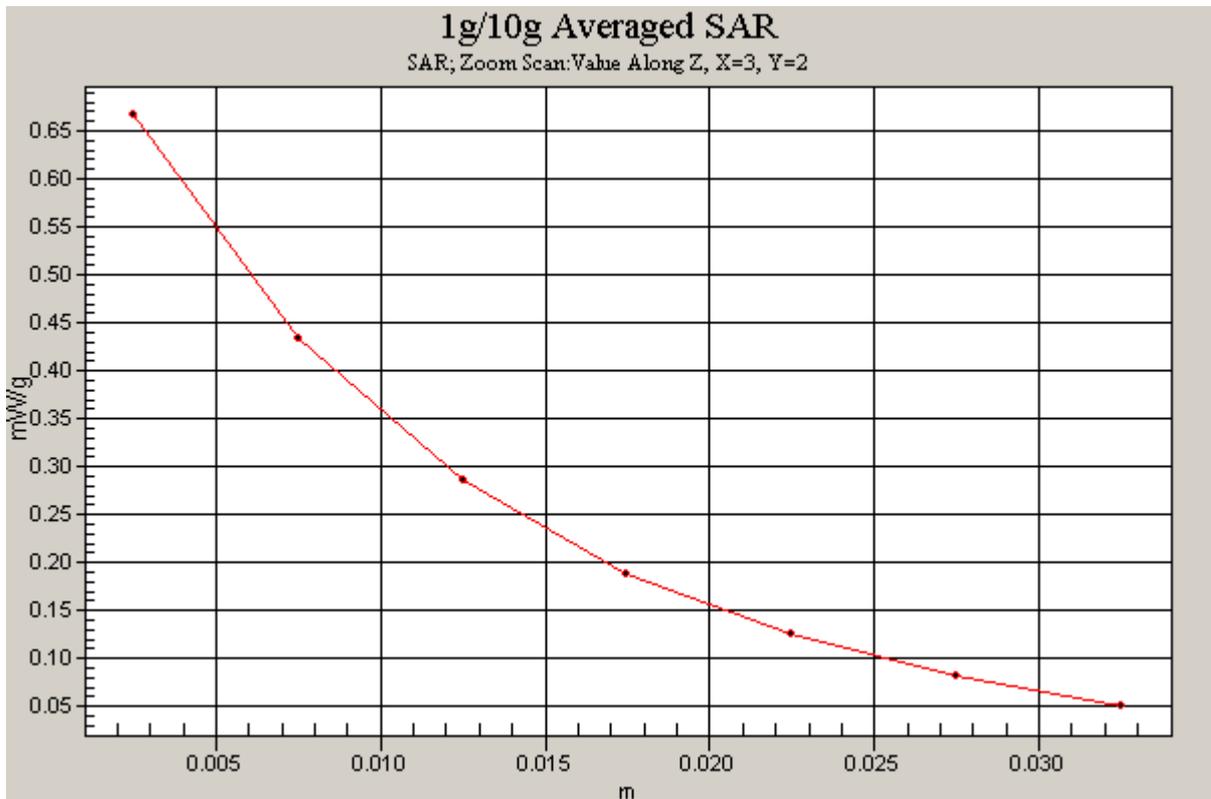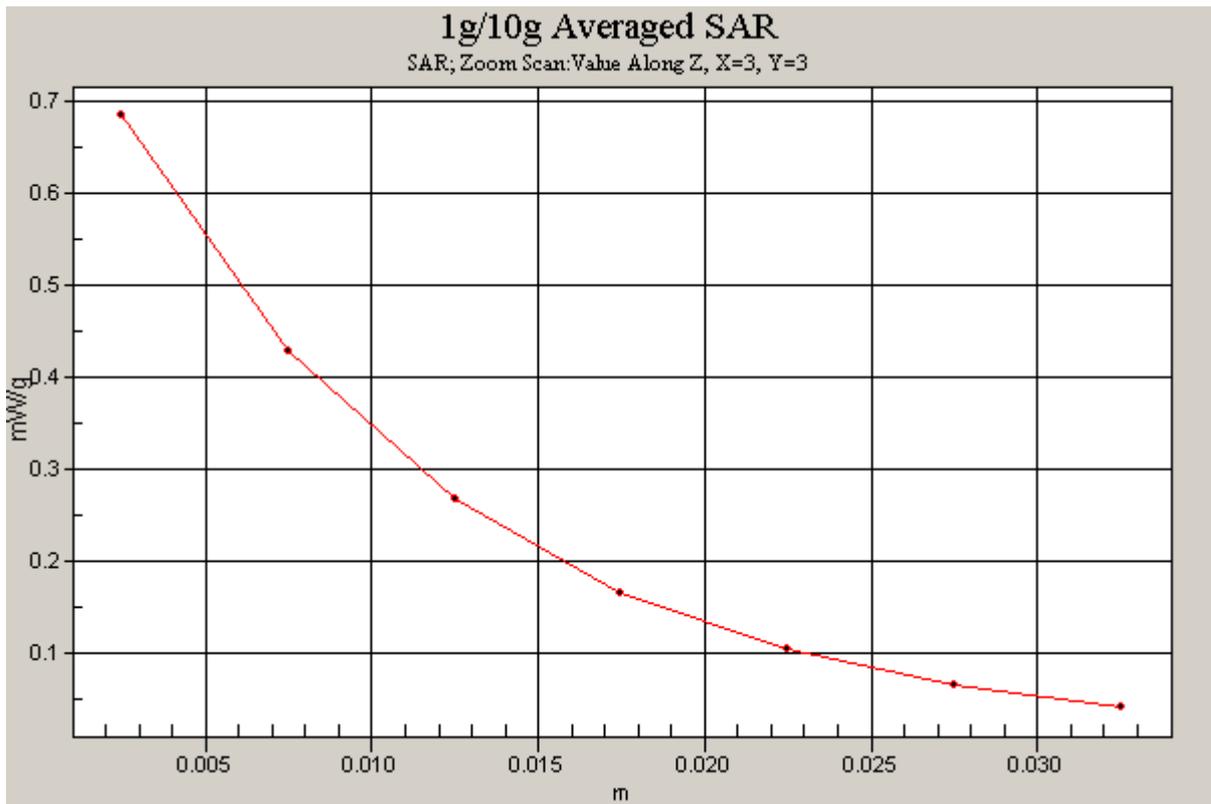

Figure 143 Body, Towards Ground, Open GSM 1900 Channel 512
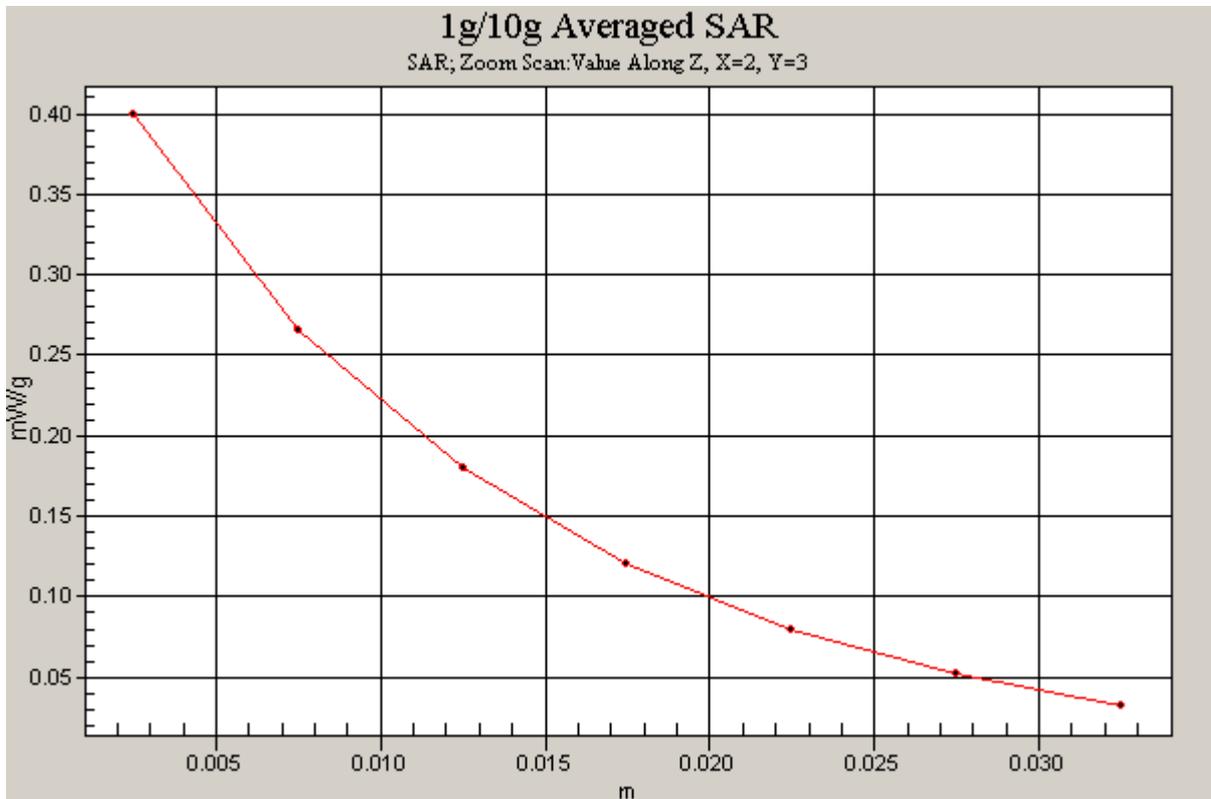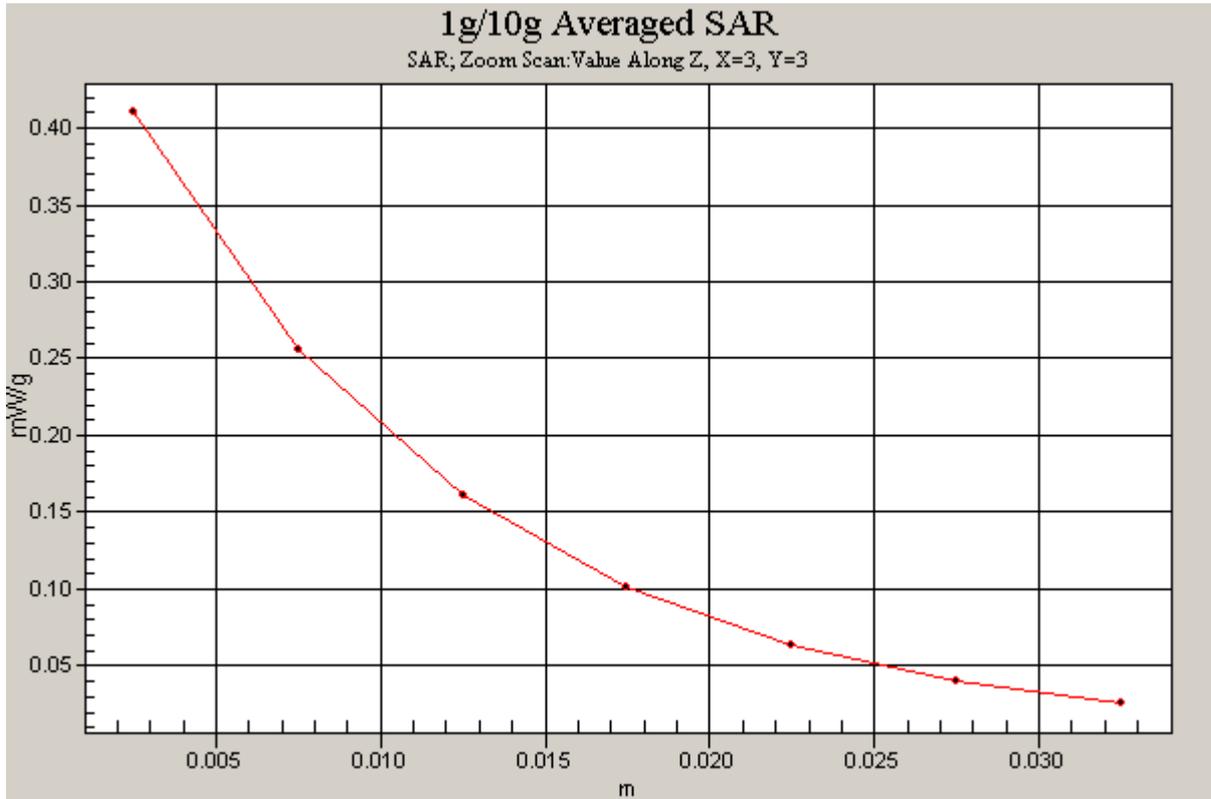
Figure 144 Z-Scan at power reference point (Body, Towards Ground, Open GSM 1900 Channel 512)

Date/Time: 12/28/2008 1:04:11 AM

GSM 1900 Towards Phantom High Open

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1910 MHz; σ = 1.57 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom High/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.195 mW/g

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

Reference Value = 8.78 V/m; Power Drift = 0.020 dB

Peak SAR (extrapolated) = 0.241 W/kg

SAR(1 g) = 0.155 mW/g; SAR(10 g) = 0.098 mW/g

Maximum value of SAR (measured) = 0.192 mW/g

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

Reference Value = 8.78 V/m; Power Drift = 0.020 dB

Peak SAR (extrapolated) = 0.222 W/kg

SAR(1 g) = 0.142 mW/g; SAR(10 g) = 0.088 mW/g

Maximum value of SAR (measured) = 0.176 mW/g
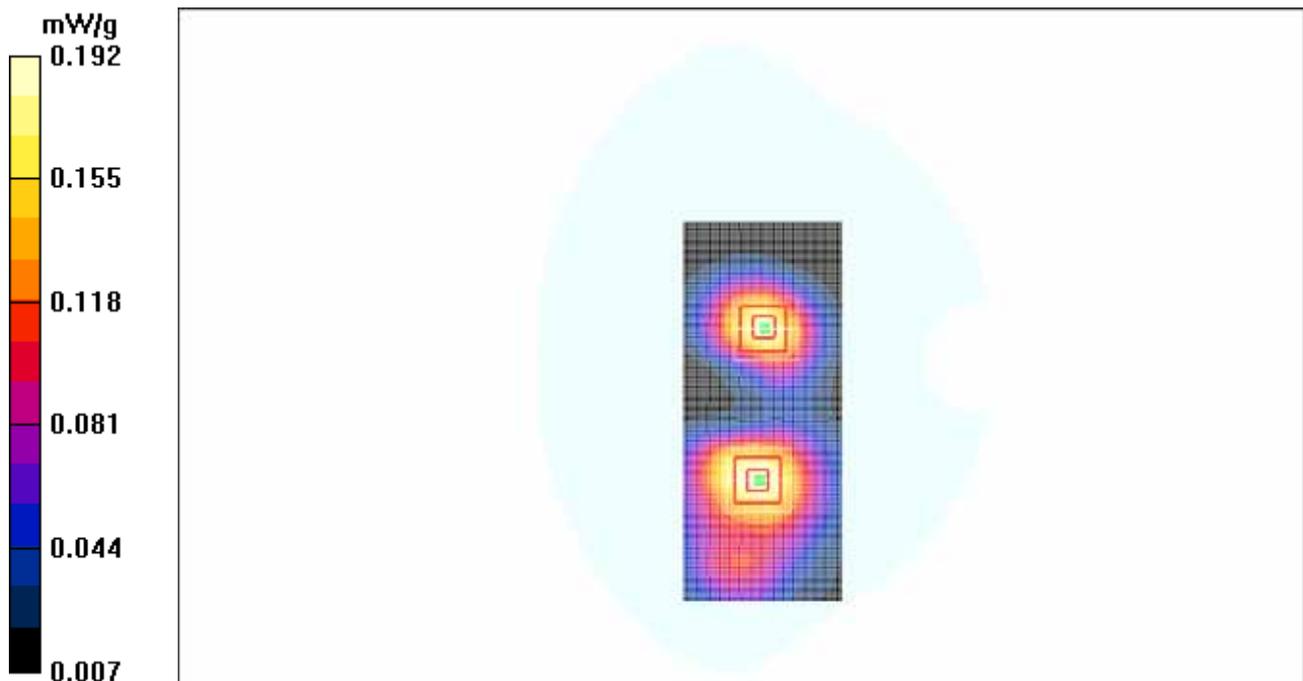

Figure 145 Body, Towards Phantom, Open GSM 1900 Channel 810
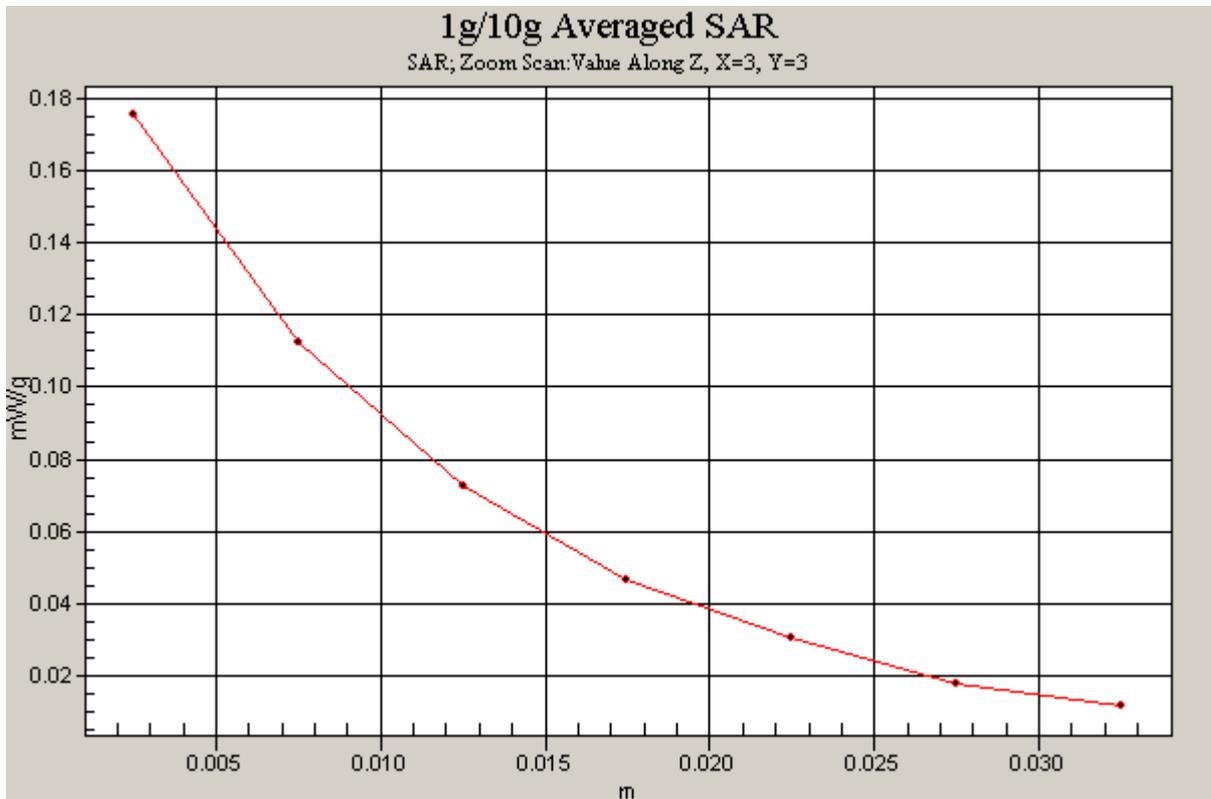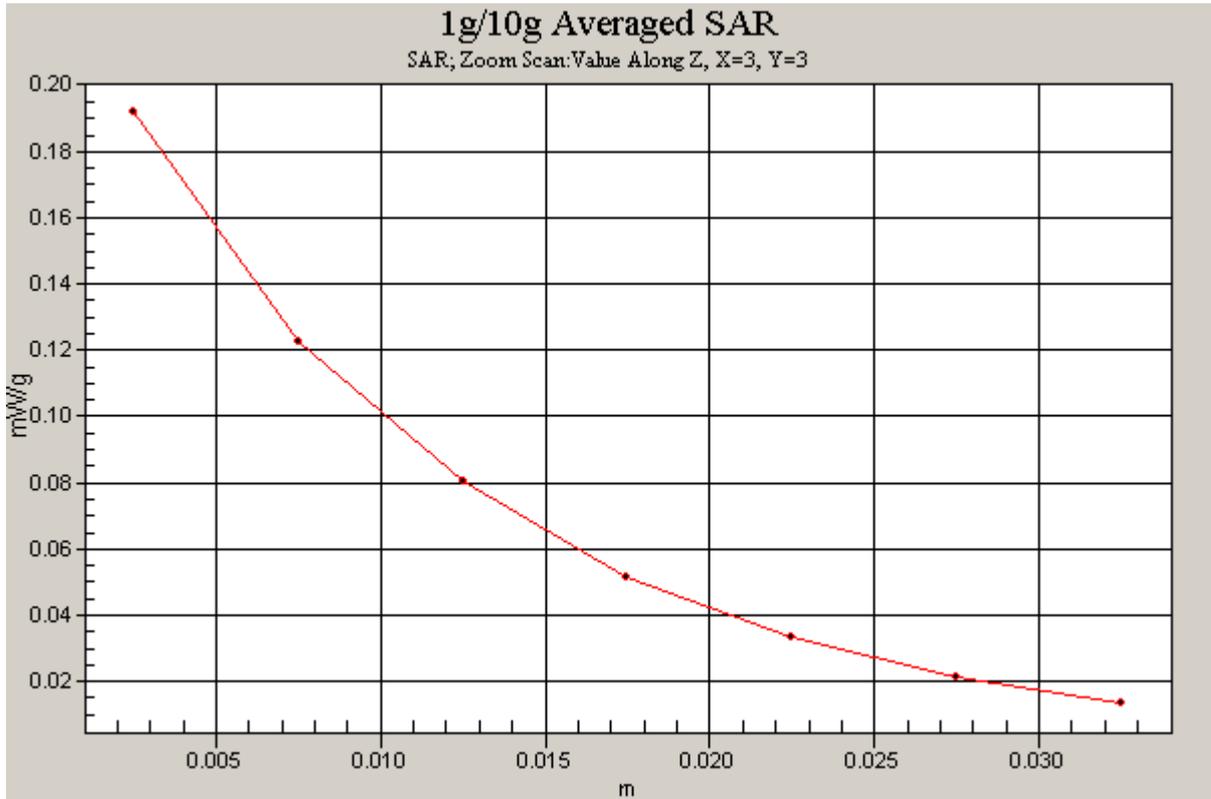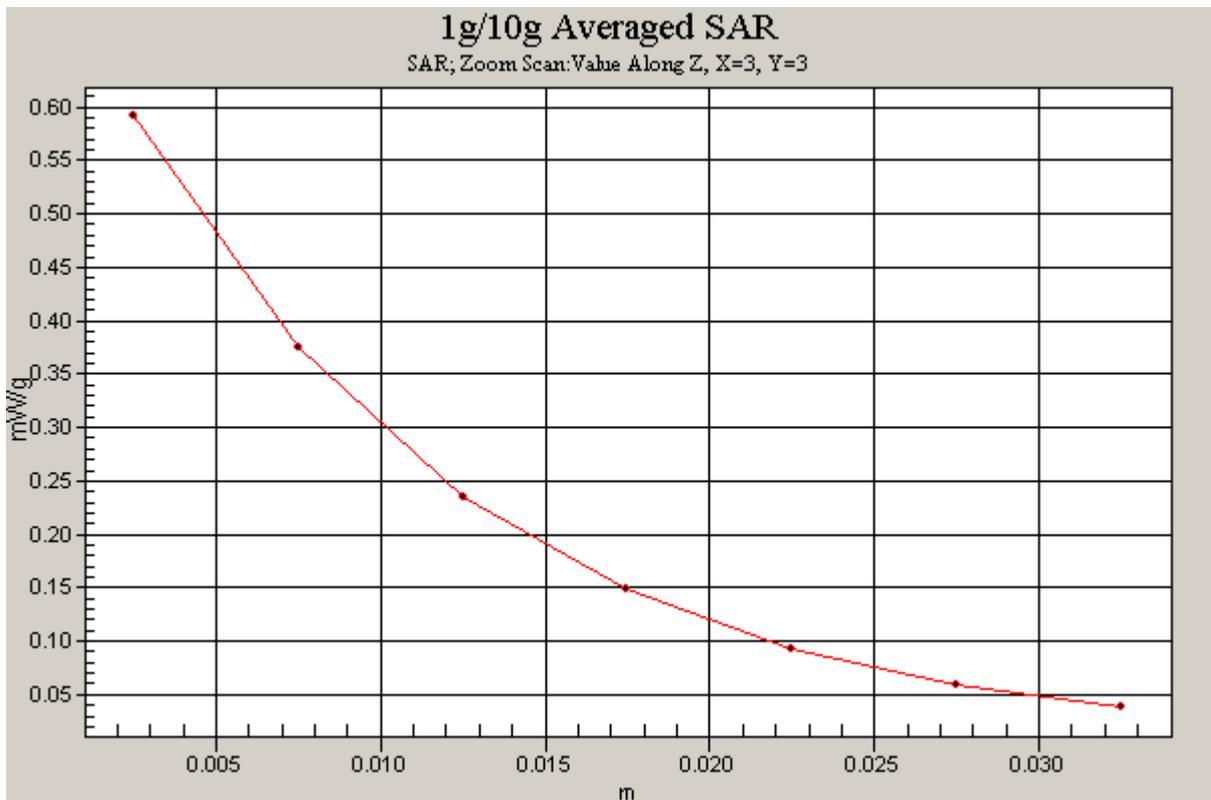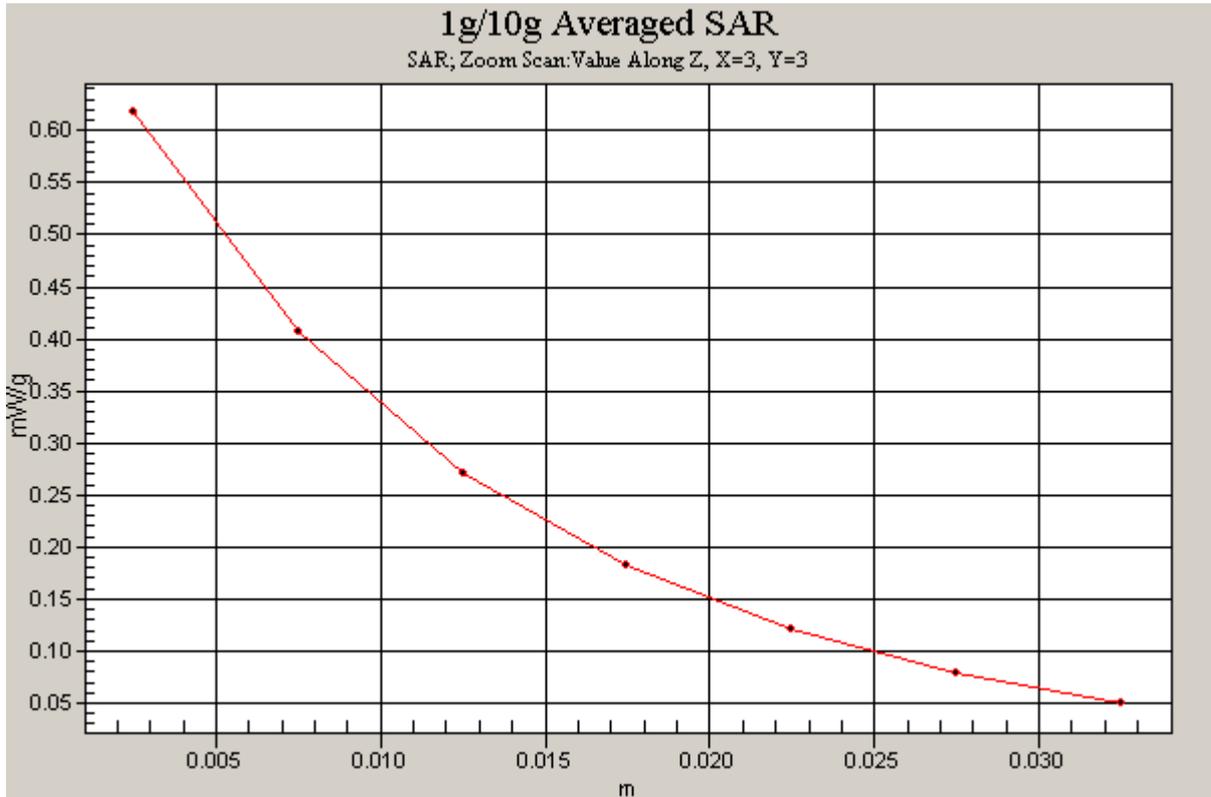
Figure 146 Z-Scan at power reference point (Body, Towards Phantom, Open GSM 1900 Channel 810)

Date/Time: 12/28/2008 12:29:06 AM

GSM 1900 Towards Phantom Middle Open

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom Middle/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.183 mW/g

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

Reference Value = 8.95 V/m; Power Drift = 0.029 dB

Peak SAR (extrapolated) = 0.220 W/kg

SAR(1 g) = 0.142 mW/g; SAR(10 g) = 0.089 mW/g

Maximum value of SAR (measured) = 0.153 mW/g

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

Reference Value = 8.95 V/m; Power Drift = 0.029 dB

Peak SAR (extrapolated) = 0.223 W/kg

SAR(1 g) = 0.145 mW/g; SAR(10 g) = 0.092 mW/g

Maximum value of SAR (measured) = 0.155 mW/g
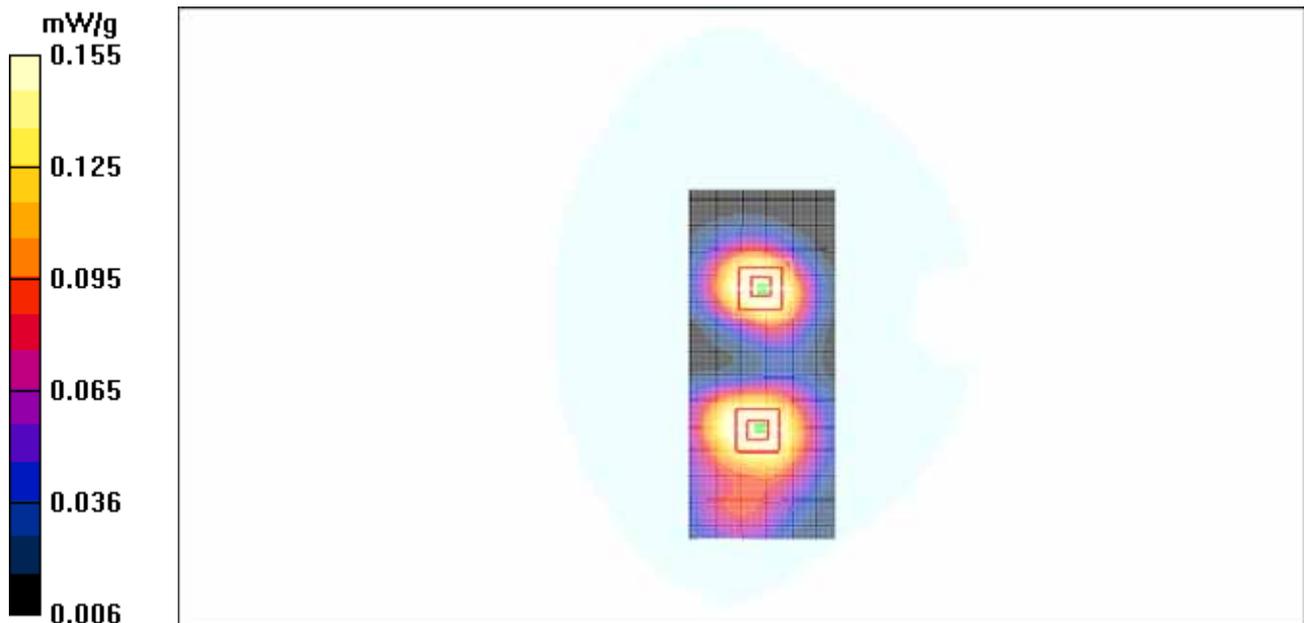
Figure 147 Body, Towards Phantom, Open GSM 1900 Channel 661
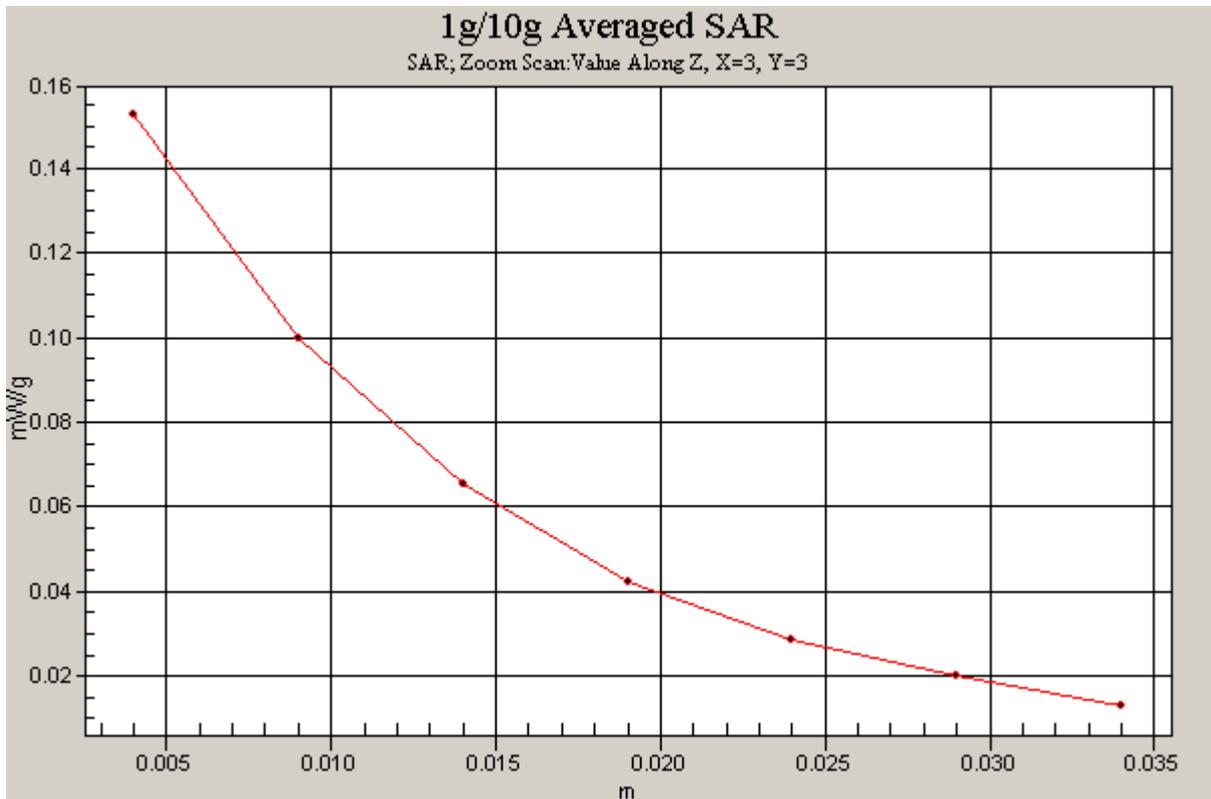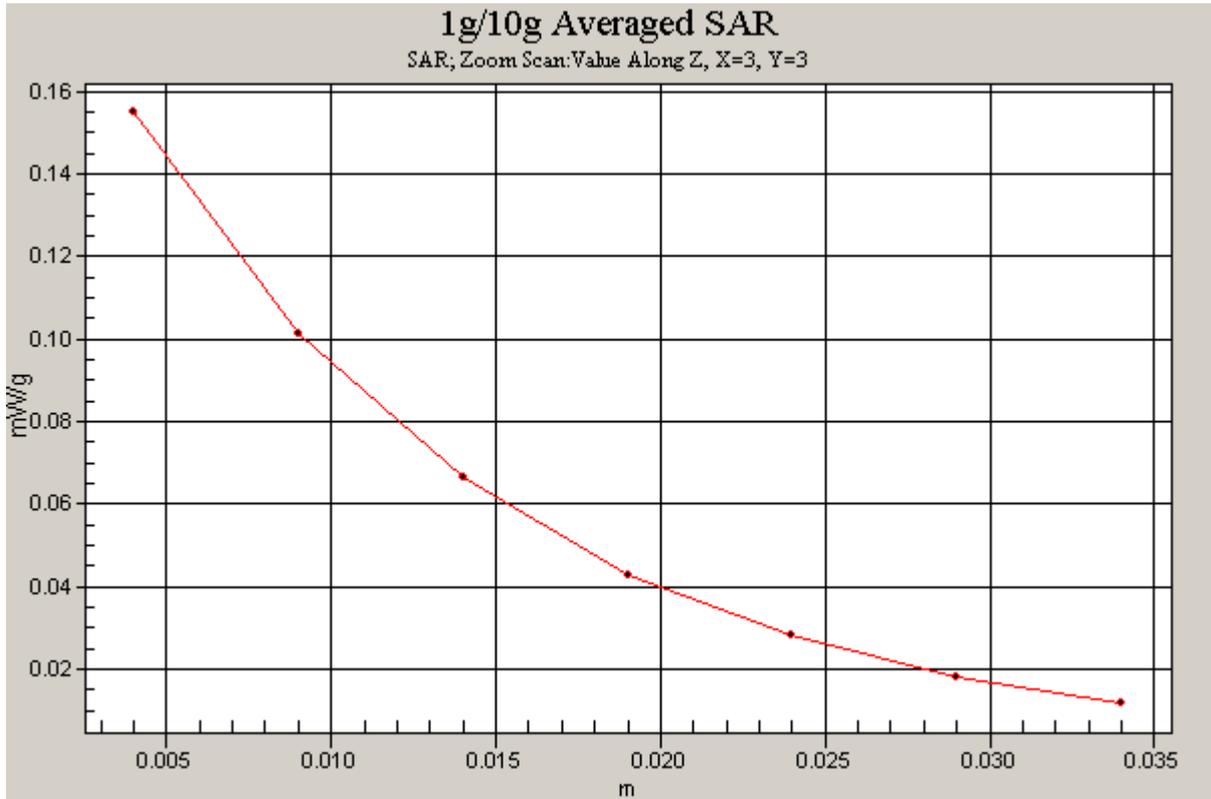
Figure 148 Z-Scan at power reference point (Body, Towards Phantom, Open GSM 1900 Channel 661)

Date/Time: 12/28/2008 1:36:06 AM

GSM 1900 Towards Phantom Low Open

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

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.51 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom Low/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.202 mW/g

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

Reference Value = 9.78 V/m; Power Drift = 0.056 dB

Peak SAR (extrapolated) = 0.240 W/kg

SAR(1 g) = 0.156 mW/g; SAR(10 g) = 0.099 mW/g

Maximum value of SAR (measured) = 0.192 mW/g

Towards Phantom Low/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.78 V/m; Power Drift = 0.056 dB

Peak SAR (extrapolated) = 0.235 W/kg

SAR(1 g) = 0.155 mW/g; SAR(10 g) = 0.099 mW/g

Maximum value of SAR (measured) = 0.189 mW/g
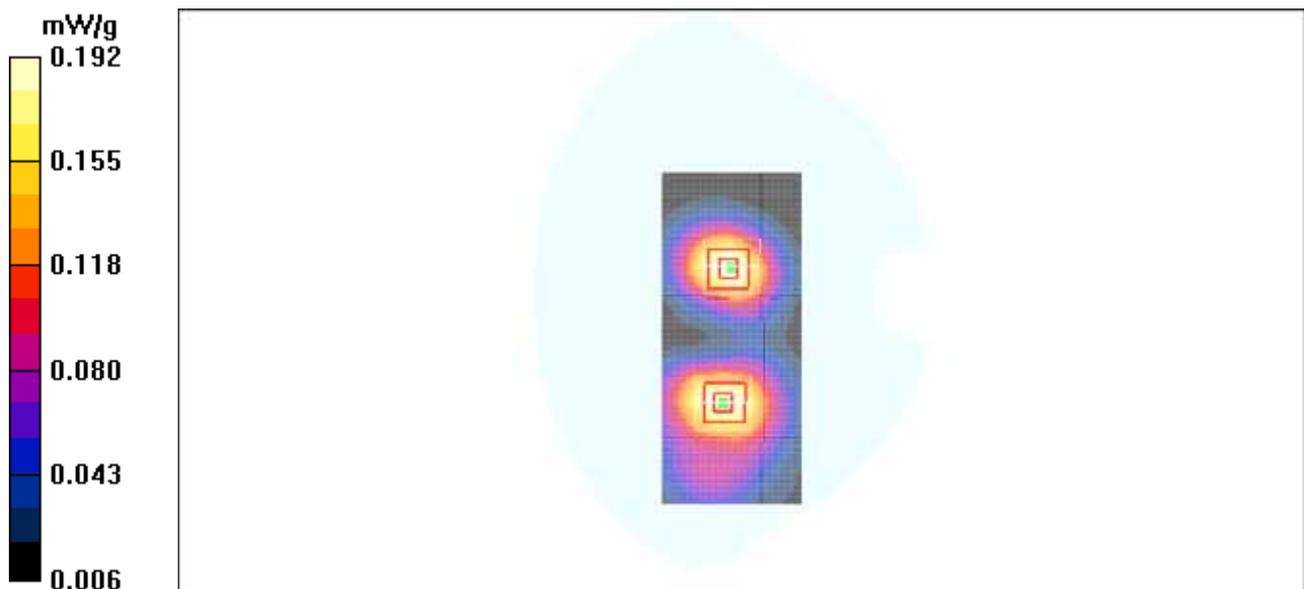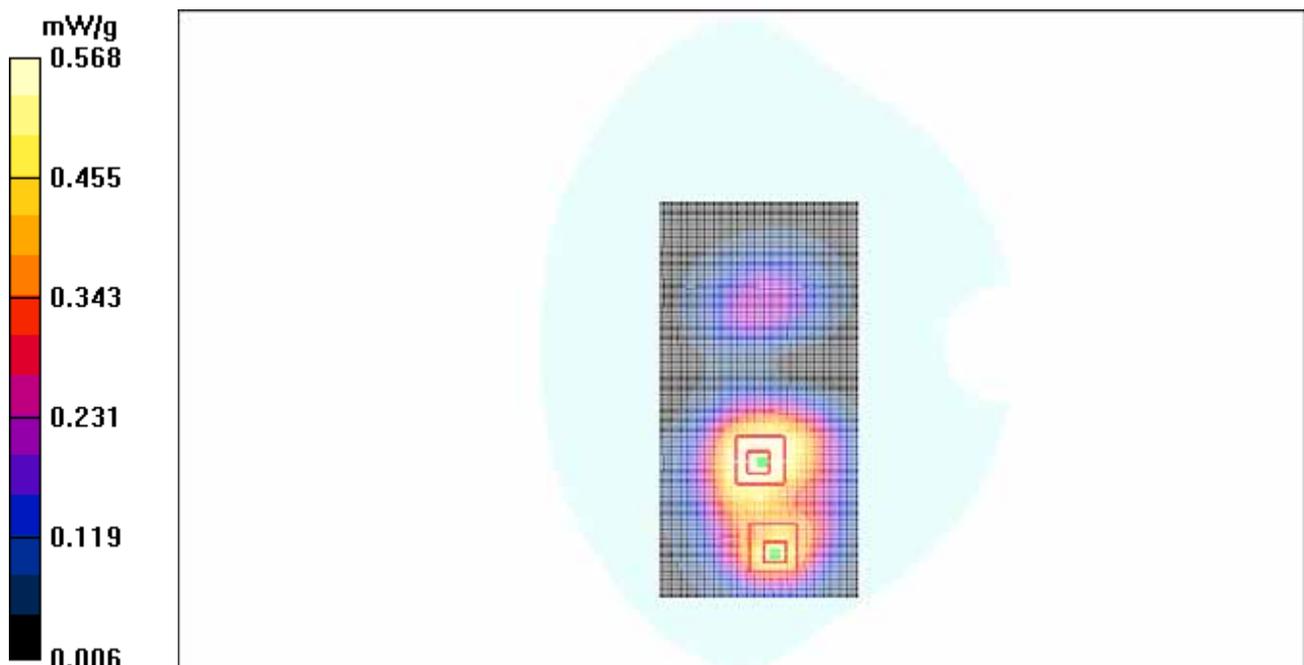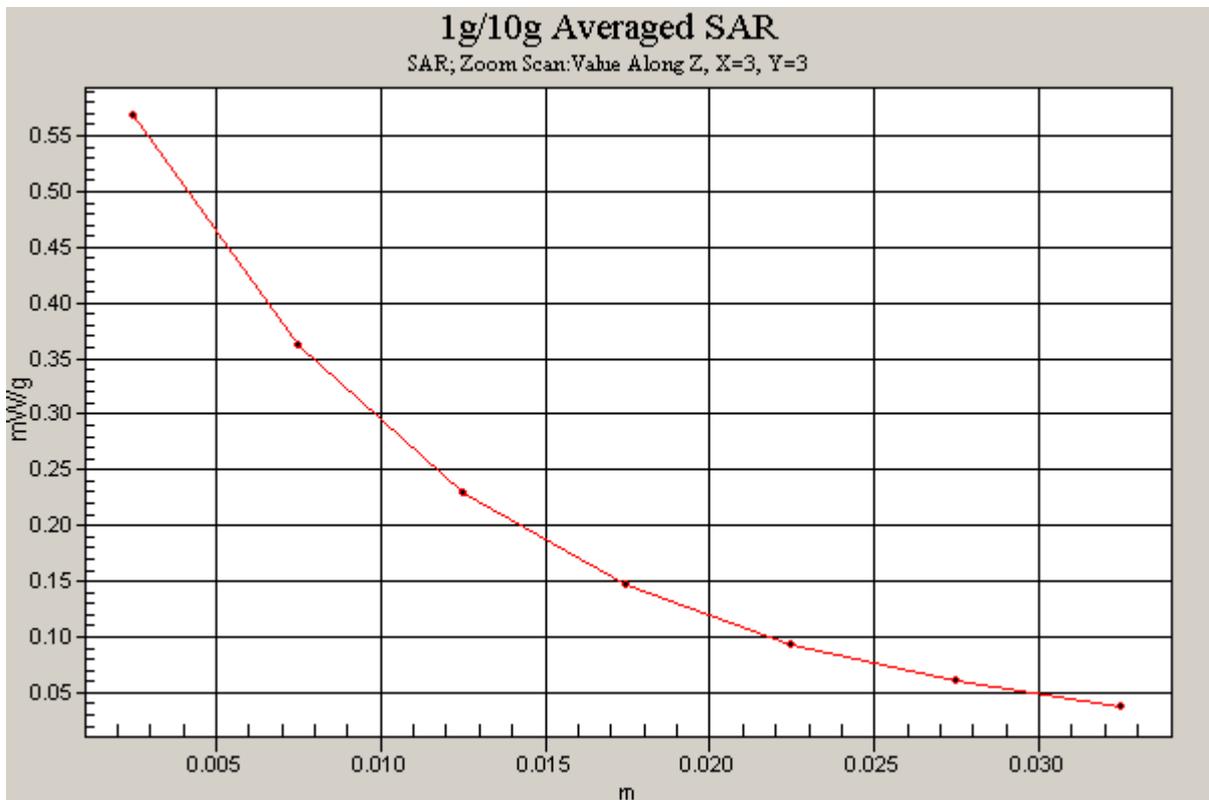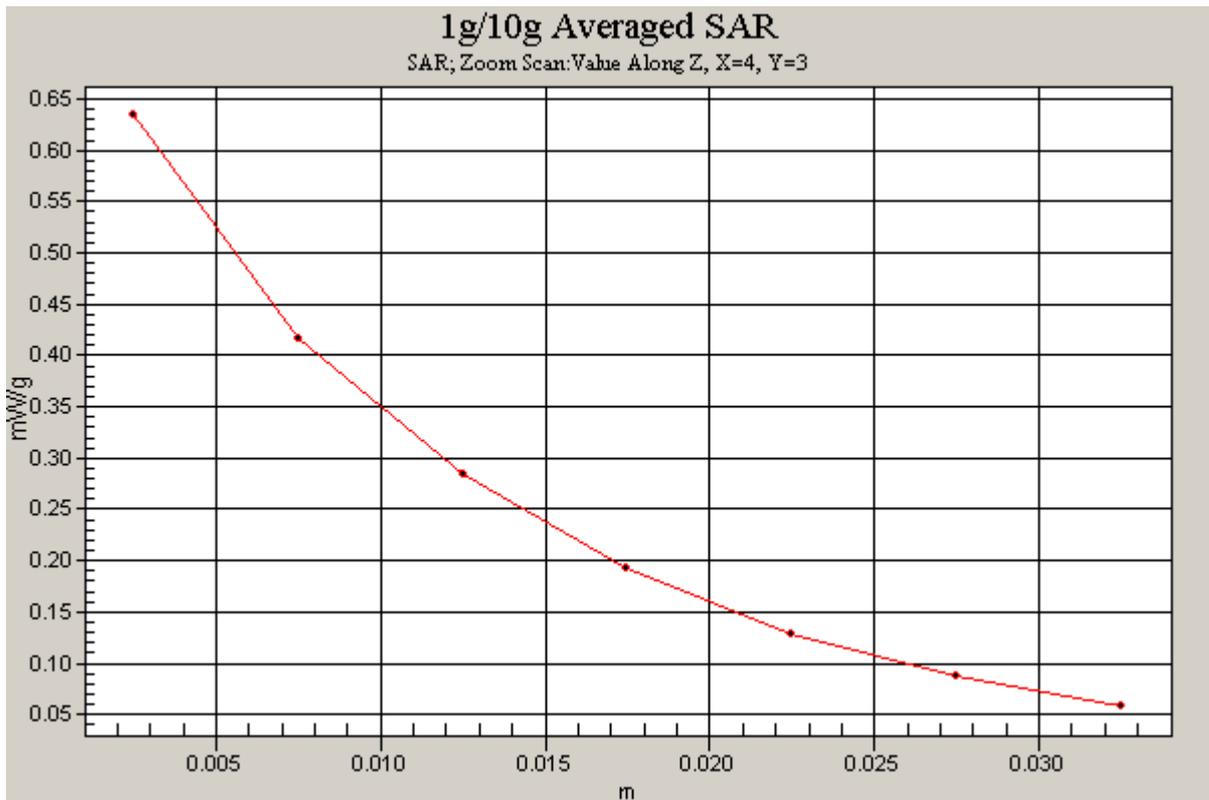

Figure 149 Body, Towards Phantom, Open GSM 1900 Channel 512
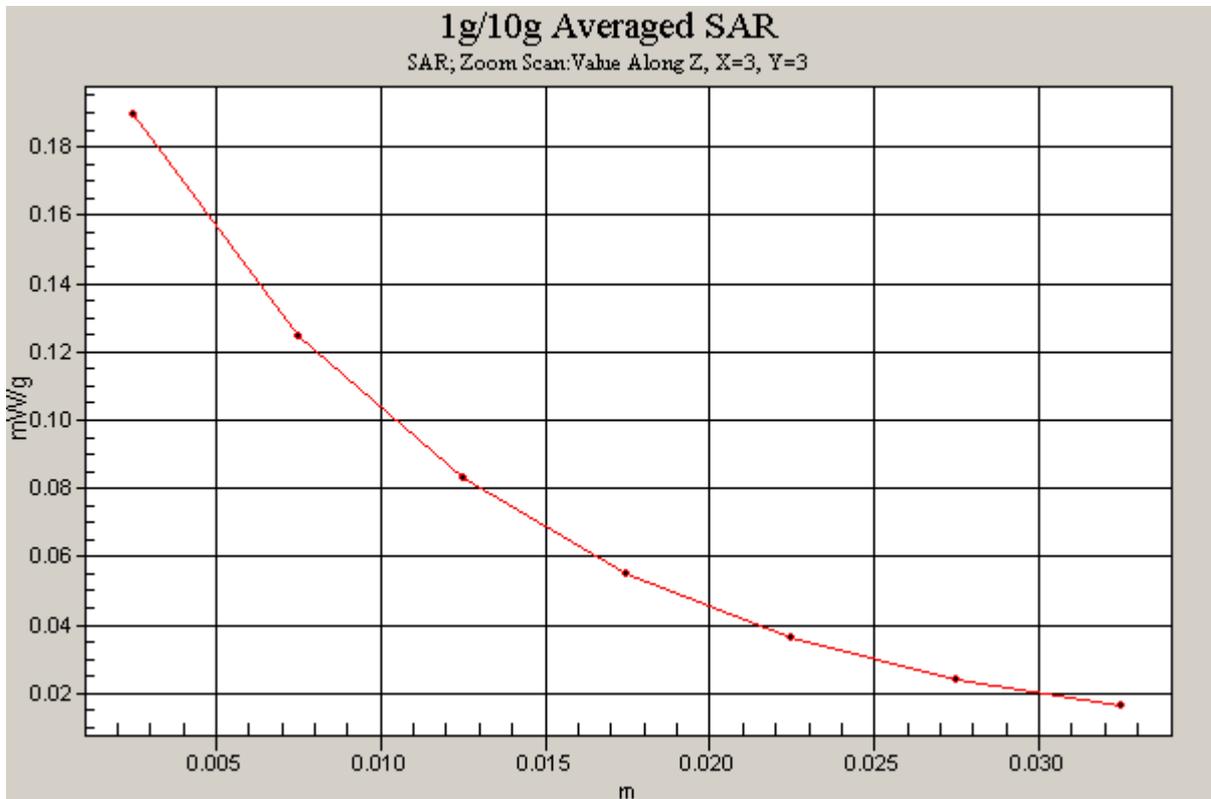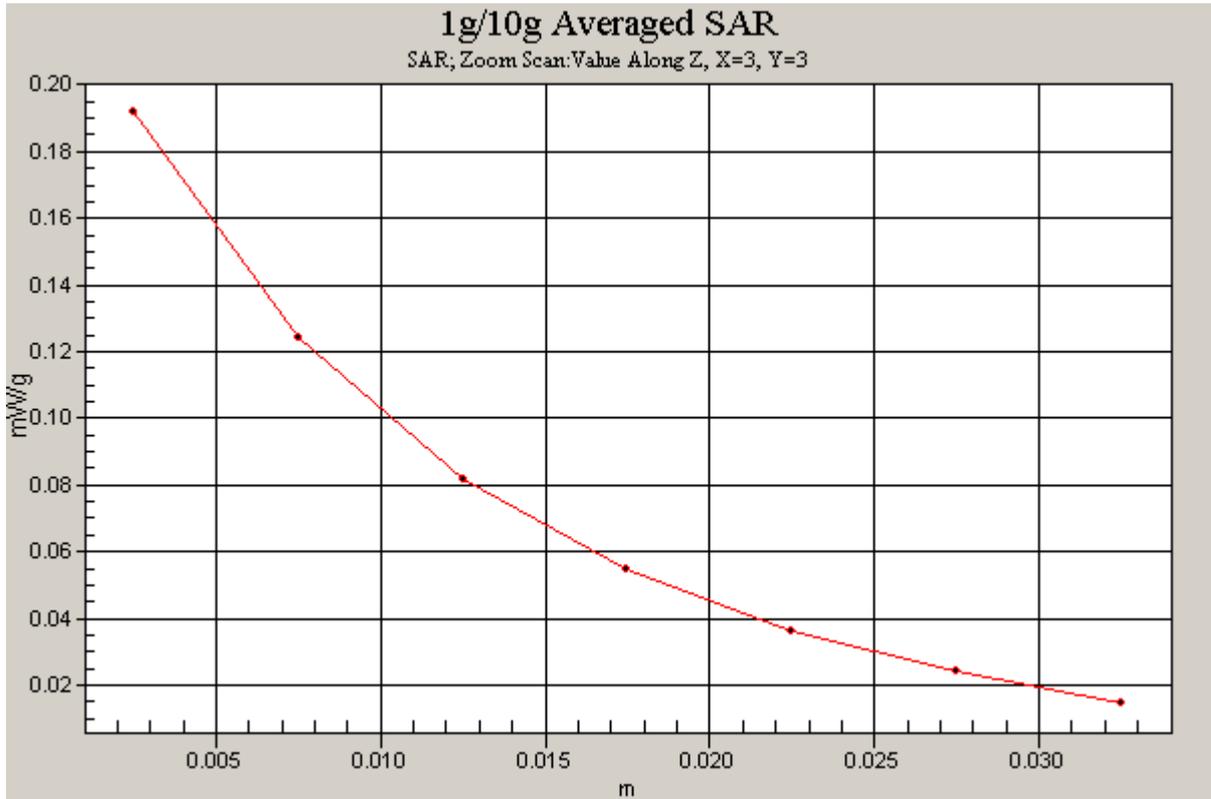
Figure 150 Z-Scan at power reference point (Body, Towards Ground, Open GSM 1900, Channel 512)

Date/Time: 12/28/2008 5:44:43 PM

GSM 1900 Earphone Towards Ground High Open

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1910 MHz; σ = 1.57 mho/m; $ε_r$ = 53.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground High/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 5.71 V/m; Power Drift = 0.170 dB

Peak SAR (extrapolated) = 0.447 W/kg

SAR(1 g) = 0.270 mW/g; SAR(10 g) = 0.154 mW/g

Maximum value of SAR (measured) = 0.349 mW/g

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

Reference Value = 5.71 V/m; Power Drift = 0.170 dB

Peak SAR (extrapolated) = 0.397 W/kg

SAR(1 g) = 0.259 mW/g; SAR(10 g) = 0.165 mW/g

Maximum value of SAR (measured) = 0.316 mW/g
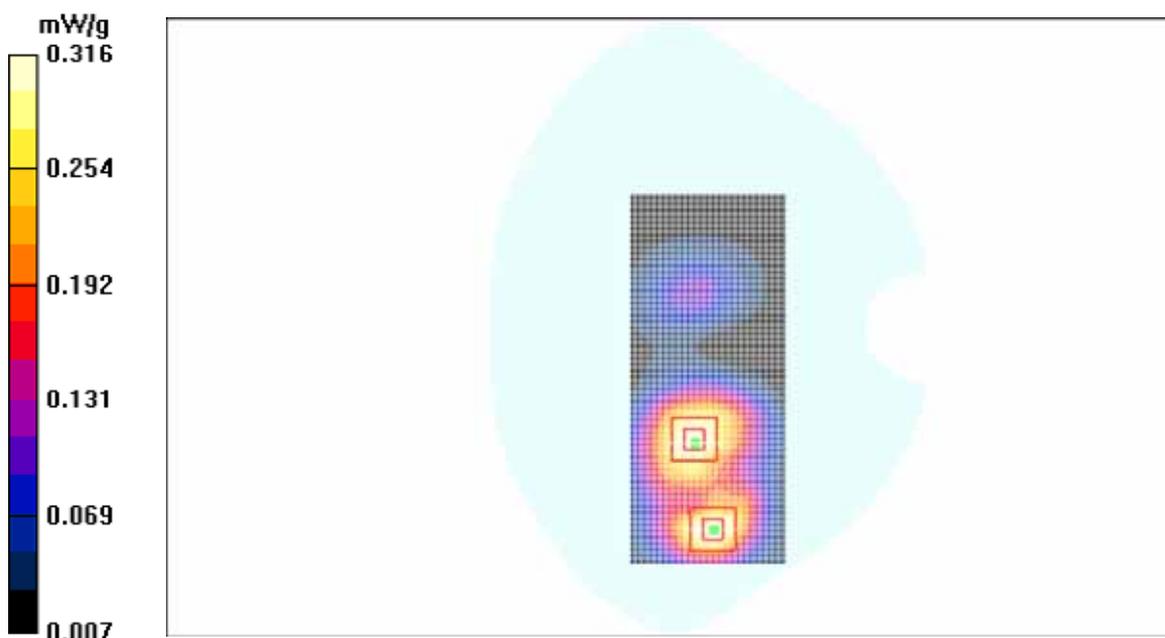
Figure 151 Body with Earphone, Towards Ground, Open GSM 1900, Channel 810

Figure 152 Z-Scan at power reference point (Body with Earphone, Towards Ground, Open GSM 1900, Channel 810)

Date/Time: 1/5/2009 12:10:33 PM

GSM 1900 Bluetooth Earphone Towards Ground High Open

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1910 MHz; σ = 1.57 mho/m; $ε_r$ = 53.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground High/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.381 mW/g

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

Reference Value = 7.16 V/m; Power Drift = 0.034 dB

Peak SAR (extrapolated) = 0.469 W/kg

SAR(1 g) = 0.312 mW/g; SAR(10 g) = 0.201 mW/g

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

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

Reference Value = 7.16 V/m; Power Drift = 0.034 dB

Peak SAR (extrapolated) = 0.462 W/kg

SAR(1 g) = 0.290 mW/g; SAR(10 g) = 0.170 mW/g

Maximum value of SAR (measured) = 0.365 mW/g
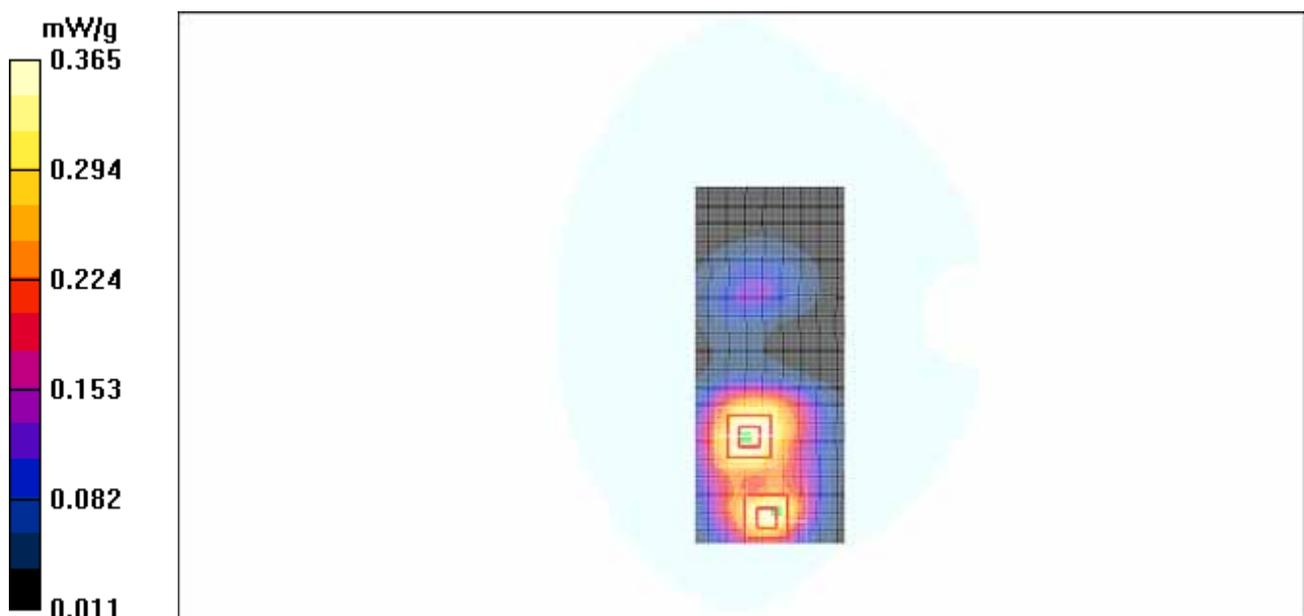
Figure 153 Body with Bluetooth Earphone, Towards Ground, Open GSM 1900, Channel 810

Figure 154 Z-Scan at power reference point (Body with Bluetooth Earphone, Towards Ground, Open GSM 1900, Channel 810)

Date/Time: 12/28/2008 6:20:32 PM

GSM 1900 GPRS Towards Ground High Open

Communication System: GSM 1900+GPRS(2Up); Frequency: 1909.8 MHz;Duty Cycle: 1:4

Medium parameters used: f = 1910 MHz; σ = 1.57 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground High/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.667 mW/g

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

Reference Value = 6.93 V/m; Power Drift = 0.004 dB

Peak SAR (extrapolated) = 0.826 W/kg

SAR(1 g) = 0.545 mW/g; SAR(10 g) = 0.344 mW/g

Maximum value of SAR (measured) = 0.666 mW/g

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

Reference Value = 6.93 V/m; Power Drift = 0.004 dB

Peak SAR (extrapolated) = 0.864 W/kg

SAR(1 g) = 0.535 mW/g; SAR(10 g) = 0.307 mW/g
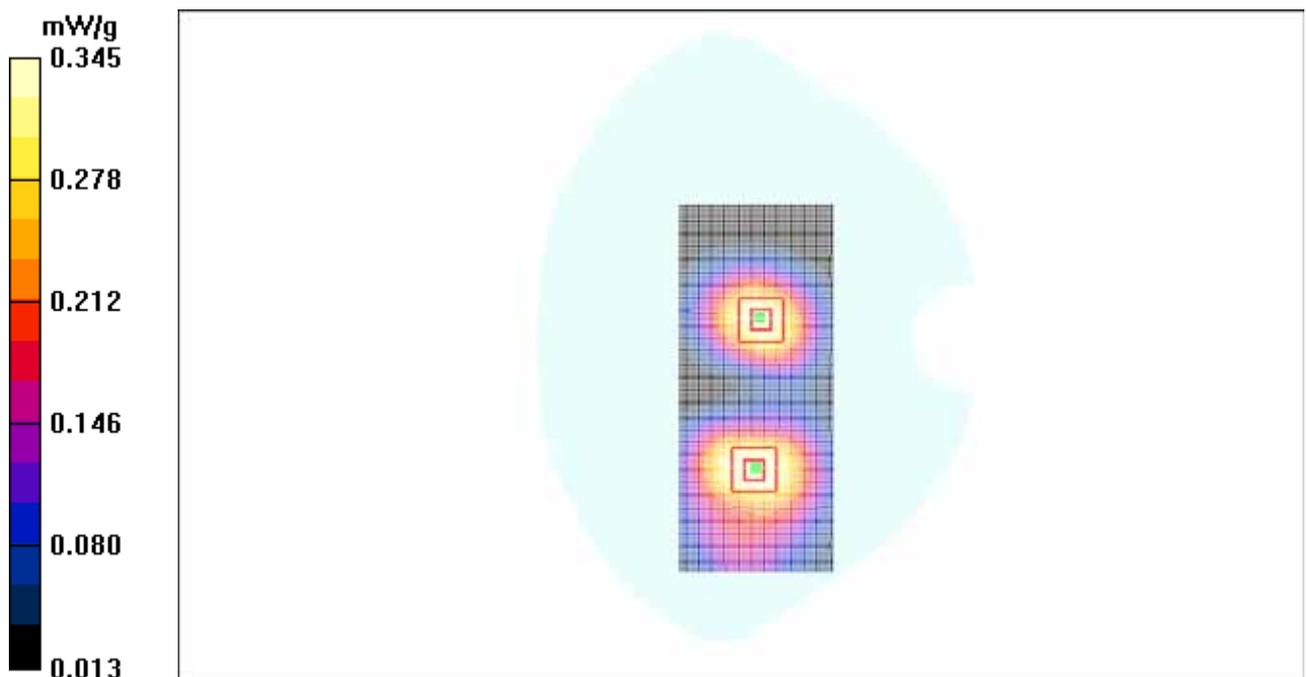
Maximum value of SAR (measured) = 0.684 mW/g

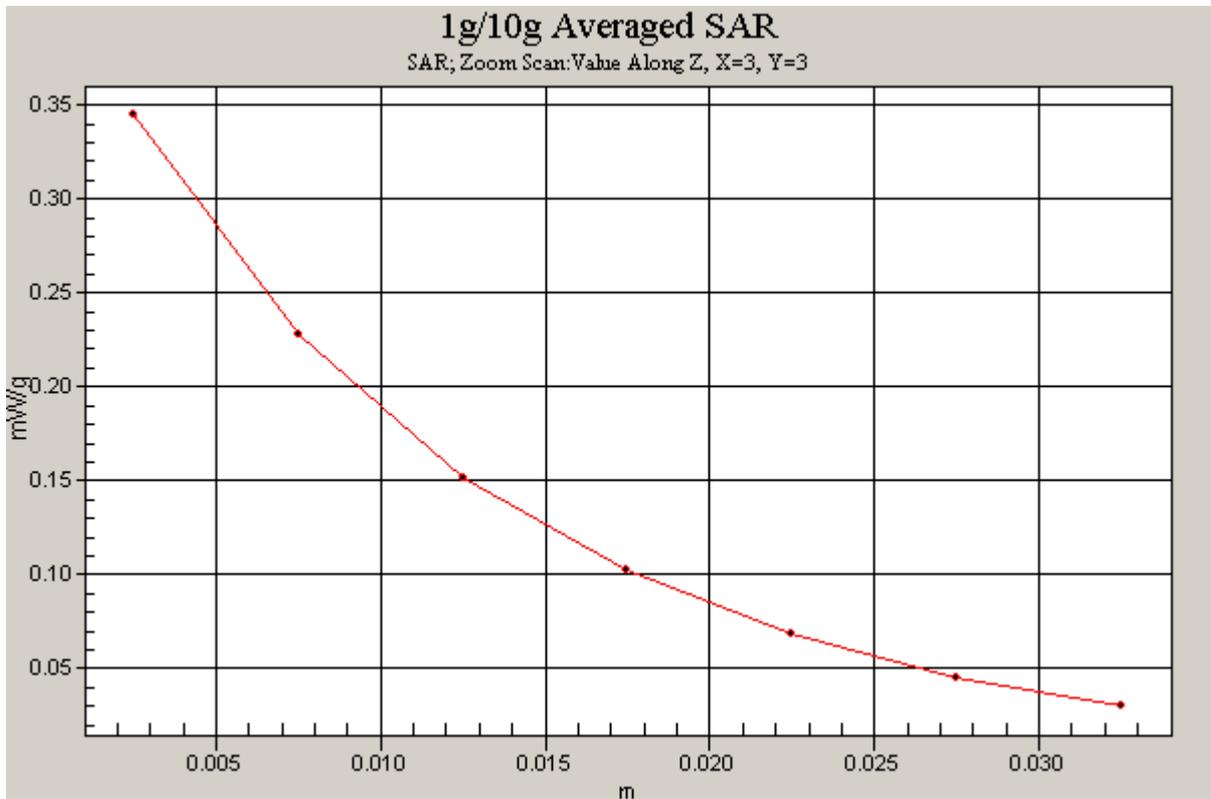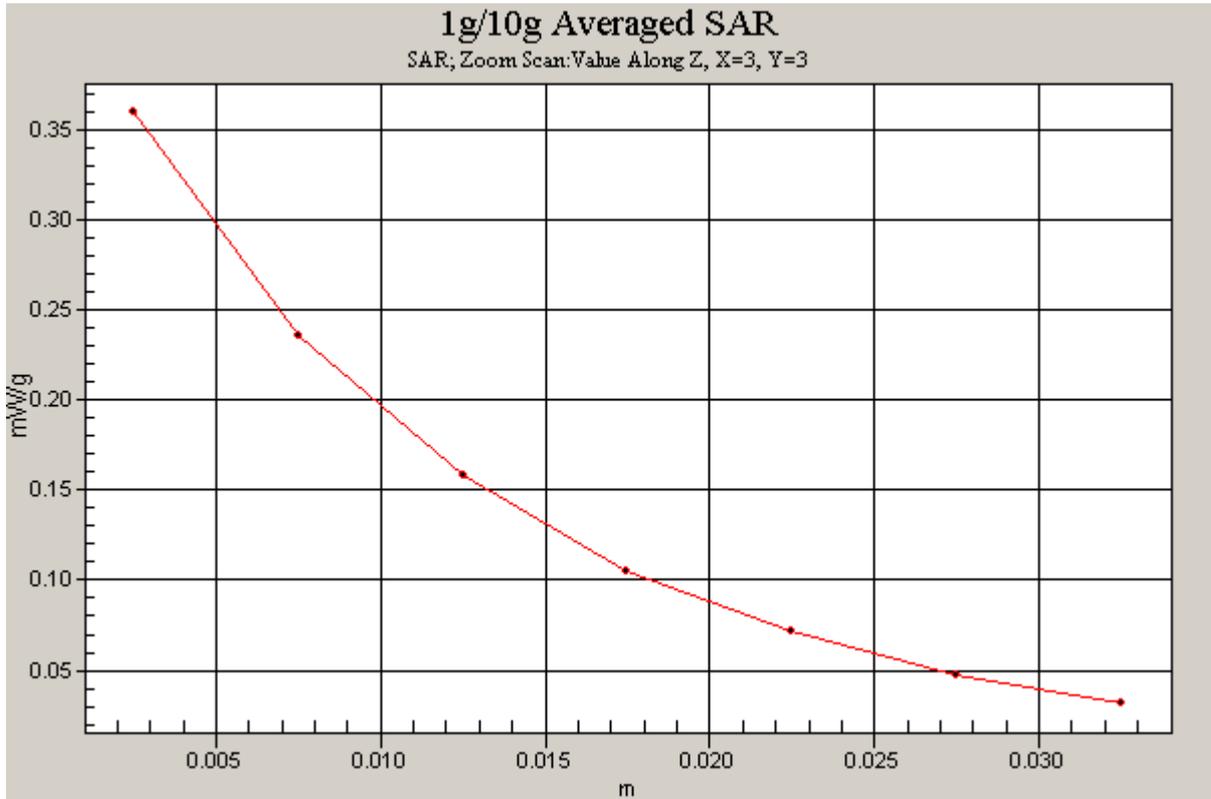Figure 155 Body, Towards Ground, Open GSM 1900 GPRS, Channel 810

Figure 156 Z-Scan at power reference point (Body, Towards Ground, Open GSM 1900 GPRS, Channel 810)

Date/Time: 12/28/2008 6:52:04 PM

GSM 1900 GPRS Towards Ground Middle Open

Communication System: GSM 1900+GPRS(2Up); Frequency: 1880 MHz;Duty Cycle: 1:4

Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Middle/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.614 mW/g

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

Reference Value = 7.38 V/m; Power Drift = 0.123 dB

Peak SAR (extrapolated) = 0.780 W/kg

SAR(1 g) = 0.509 mW/g; SAR(10 g) = 0.321 mW/g

Maximum value of SAR (measured) = 0.617 mW/g

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

Reference Value = 7.38 V/m; Power Drift = 0.123 dB

Peak SAR (extrapolated) = 0.745 W/kg

SAR(1 g) = 0.465 mW/g; SAR(10 g) = 0.264 mW/g
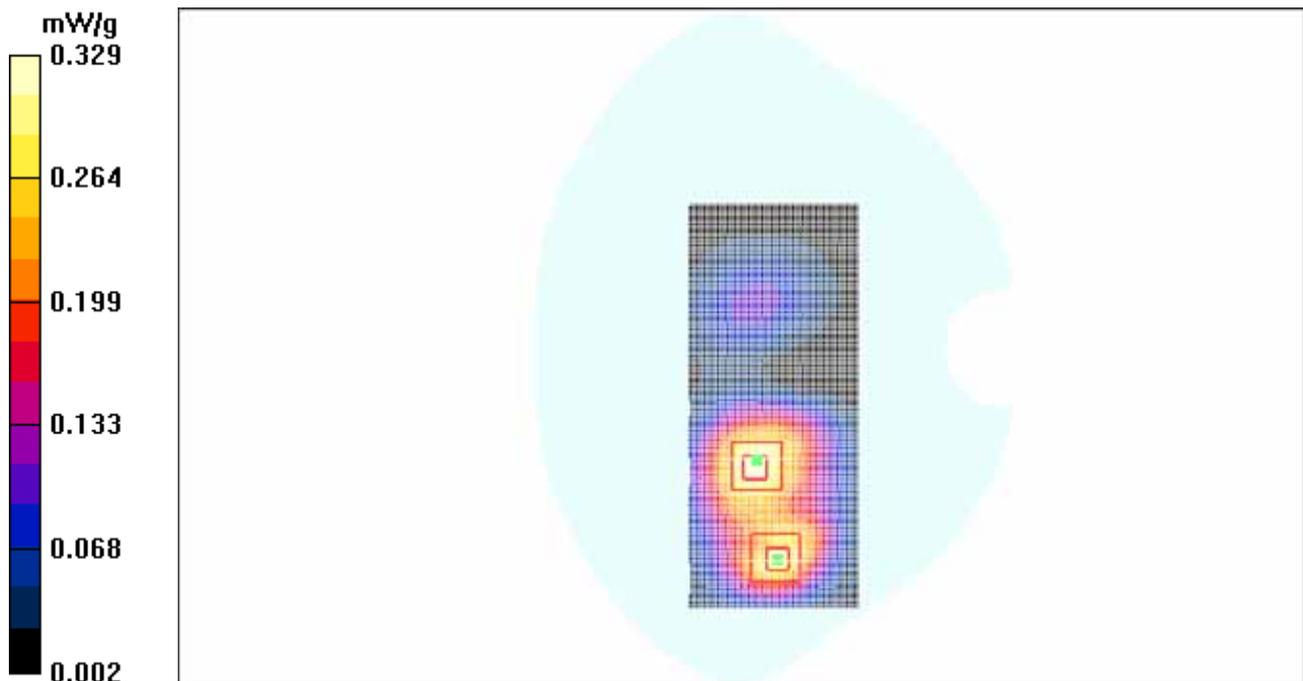
Maximum value of SAR (measured) = 0.591 mW/g
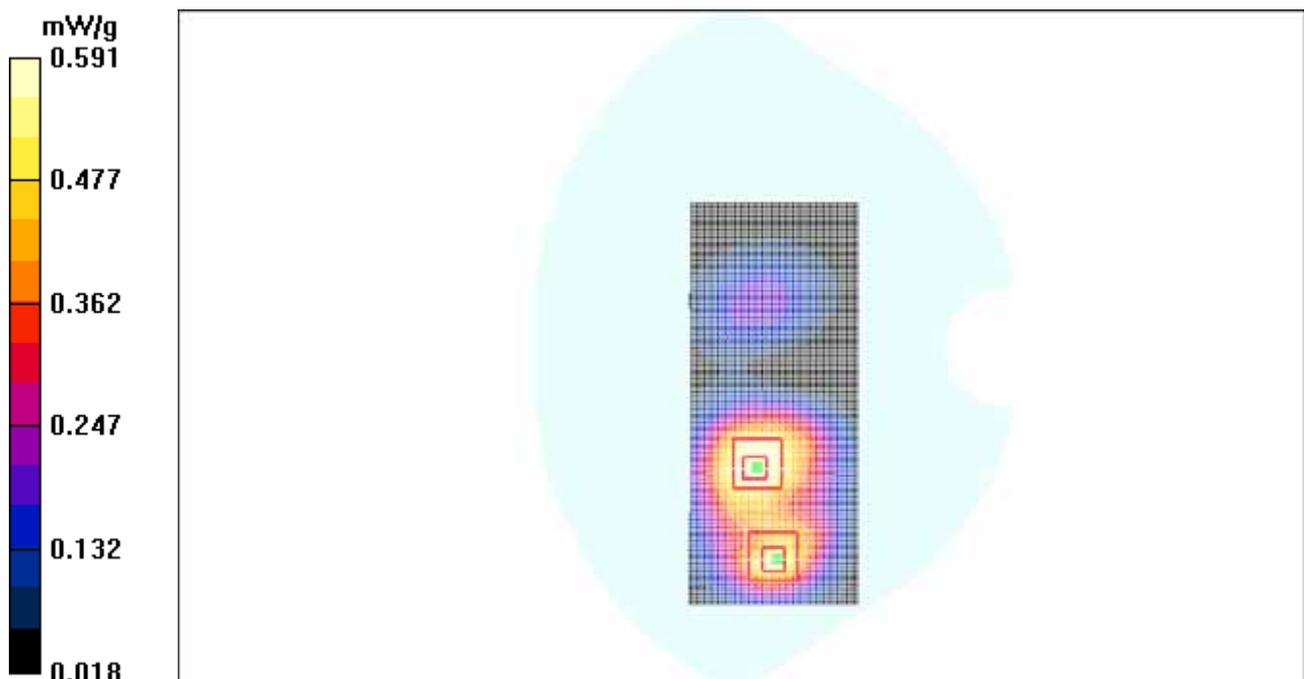
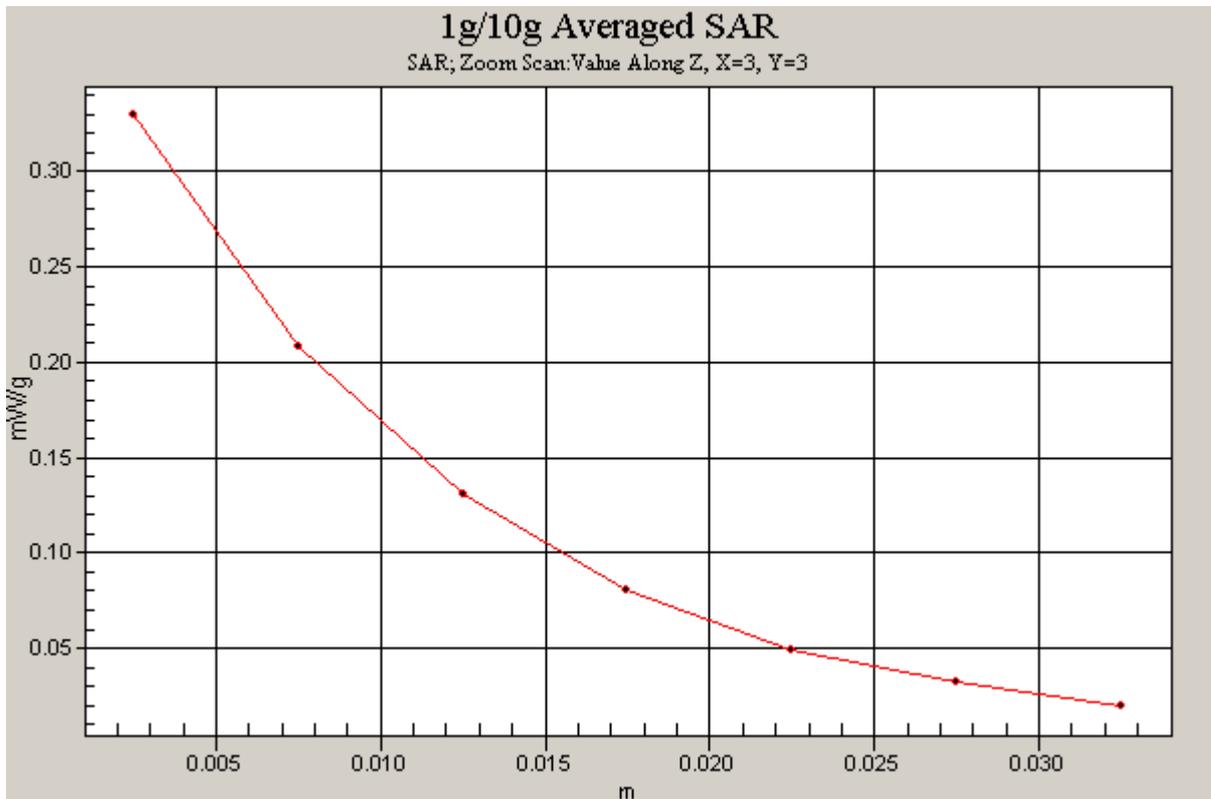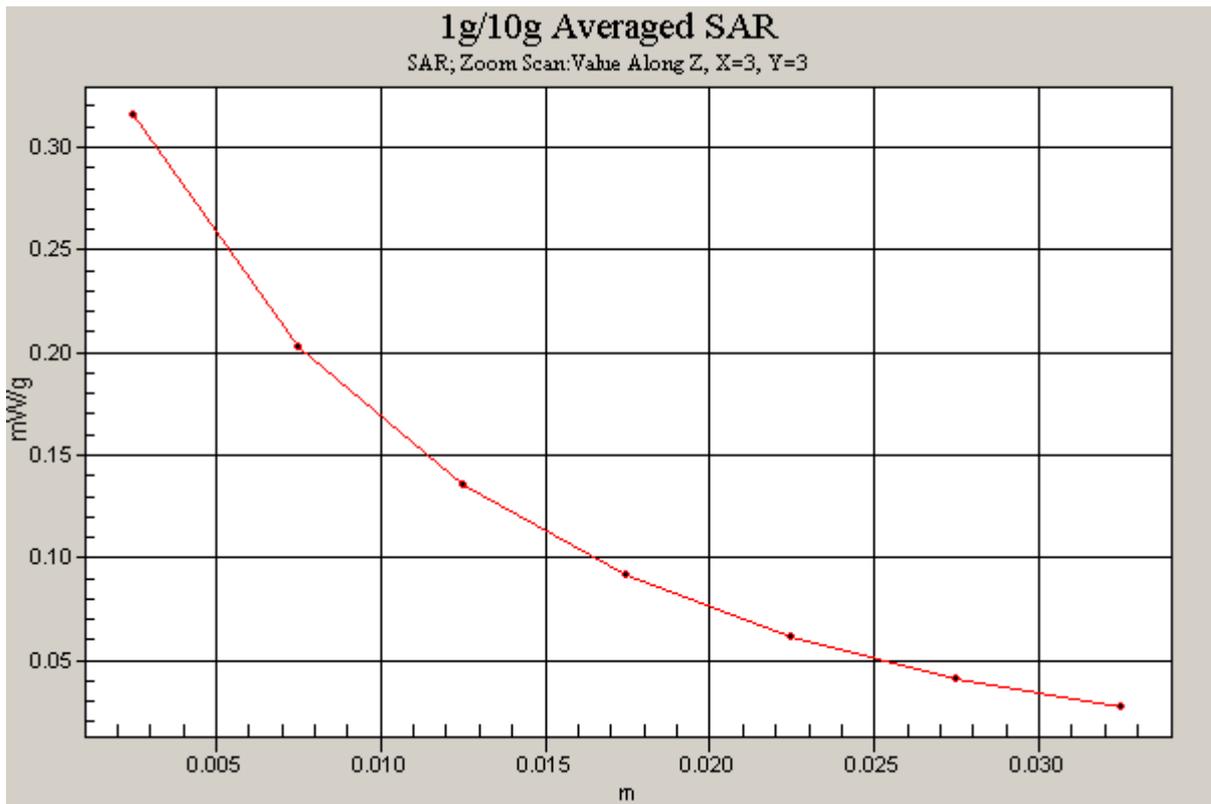Figure 157 Body, Towards Ground, Open GSM 1900 GPRS Channel 661

Figure 158 Z-Scan at power reference point (Body, Towards Ground, Open GSM 1900 GPRS Channel 661)

Date/Time: 12/28/2008 7:24:09 PM

GSM 1900 GPRS Towards Ground Low Open

Communication System: GSM 1900+GPRS(2Up); Frequency: 1850.2 MHz;Duty Cycle: 1:4

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.51 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Low/Area Scan (61x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.627 mW/g

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

Reference Value = 8.33 V/m; Power Drift = 0.068 dB

Peak SAR (extrapolated) = 0.788 W/kg

SAR(1 g) = 0.519 mW/g; SAR(10 g) = 0.334 mW/g

Maximum value of SAR (measured) = 0.630 mW/g

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

Reference Value = 8.33 V/m; Power Drift = 0.068 dB

Peak SAR (extrapolated) = 0.753 W/kg

SAR(1 g) = 0.457 mW/g; SAR(10 g) = 0.256 mW/g

Maximum value of SAR (measured) = 0.568 mW/g

Figure 159 Body, Towards Ground, Open GSM 1900 GPRS Channel 512

Figure 160 Z-Scan at power reference point (Body, Towards Ground, Open GSM 1900 GPRS Channel 512)

Date/Time: 12/28/2008 8:36:02 PM

GSM 1900 GPRS Towards Phantom High Open

Communication System: GSM 1900+GPRS(2Up); Frequency: 1909.8 MHz;Duty Cycle: 1:4

Medium parameters used: f = 1910 MHz; σ = 1.57 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom High/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

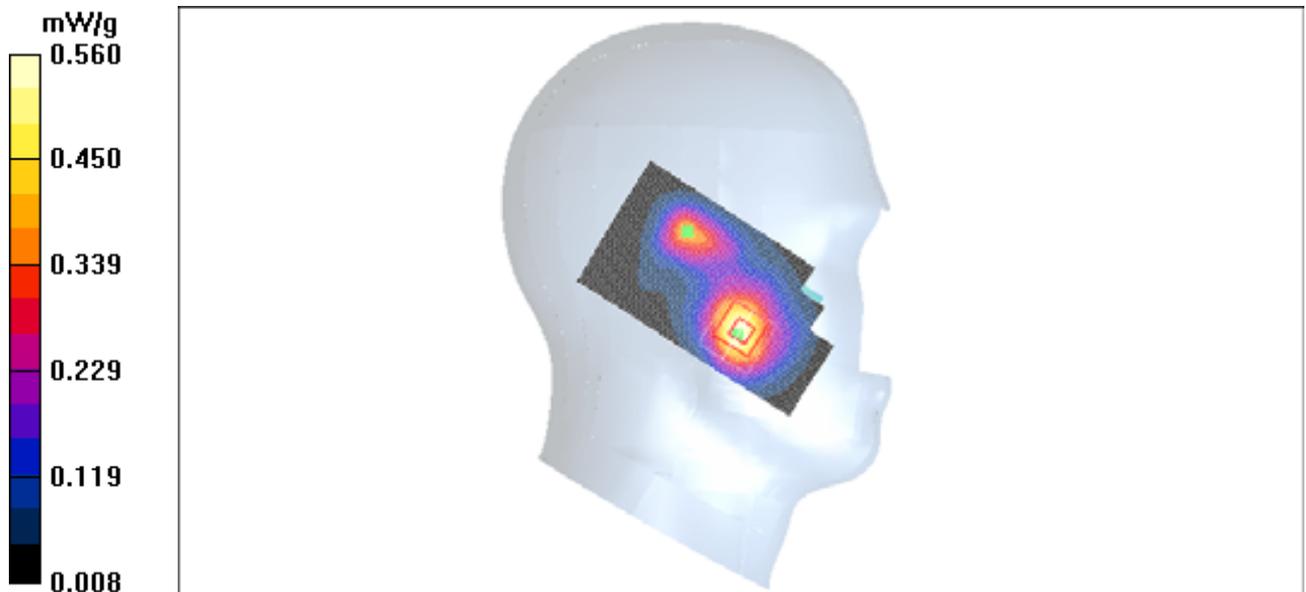Maximum value of SAR (interpolated) = 0.391 mW/g

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

Reference Value = 13.2 V/m; Power Drift = -0.147 dB

Peak SAR (extrapolated) = 0.469 W/kg

SAR(1 g) = 0.308 mW/g; SAR(10 g) = 0.196 mW/g

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

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

Reference Value = 13.2 V/m; Power Drift = -0.147 dB

Peak SAR (extrapolated) = 0.412 W/kg

SAR(1 g) = 0.267 mW/g; SAR(10 g) = 0.165 mW/g

Maximum value of SAR (measured) = 0.328 mW/g
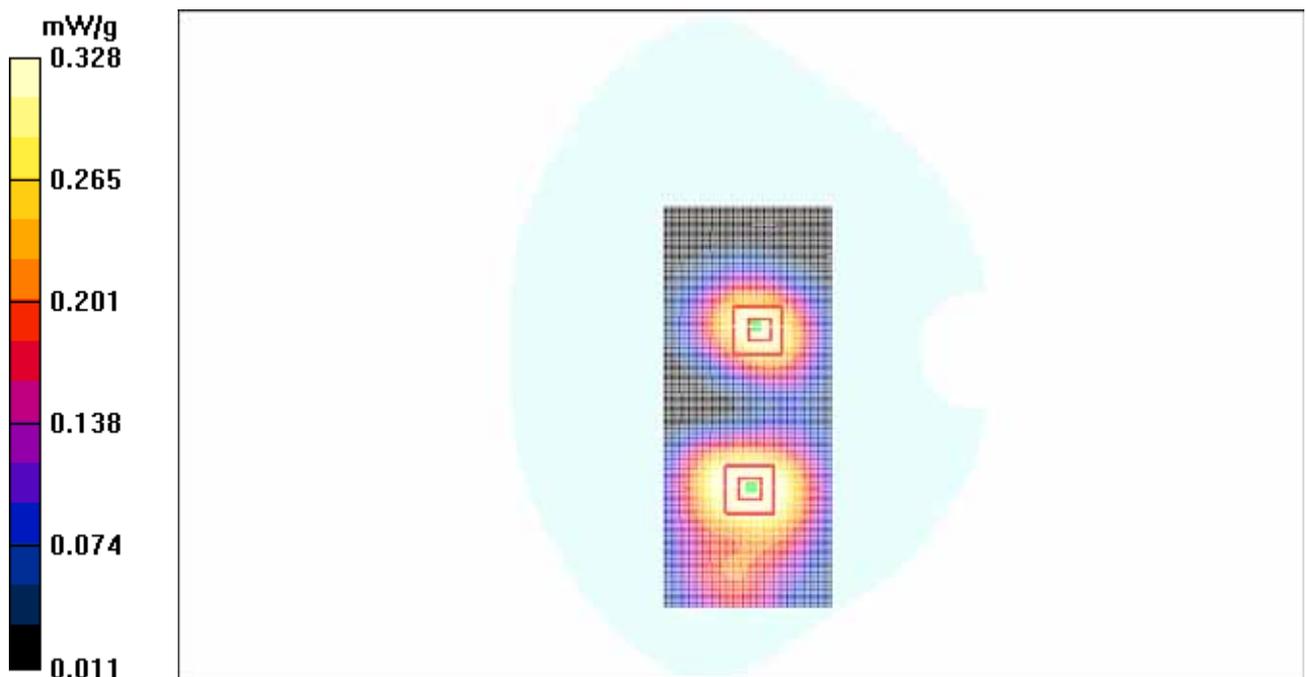
Figure 161 Body, Towards Phantom, Open GSM 1900 GPRS, Channel 810
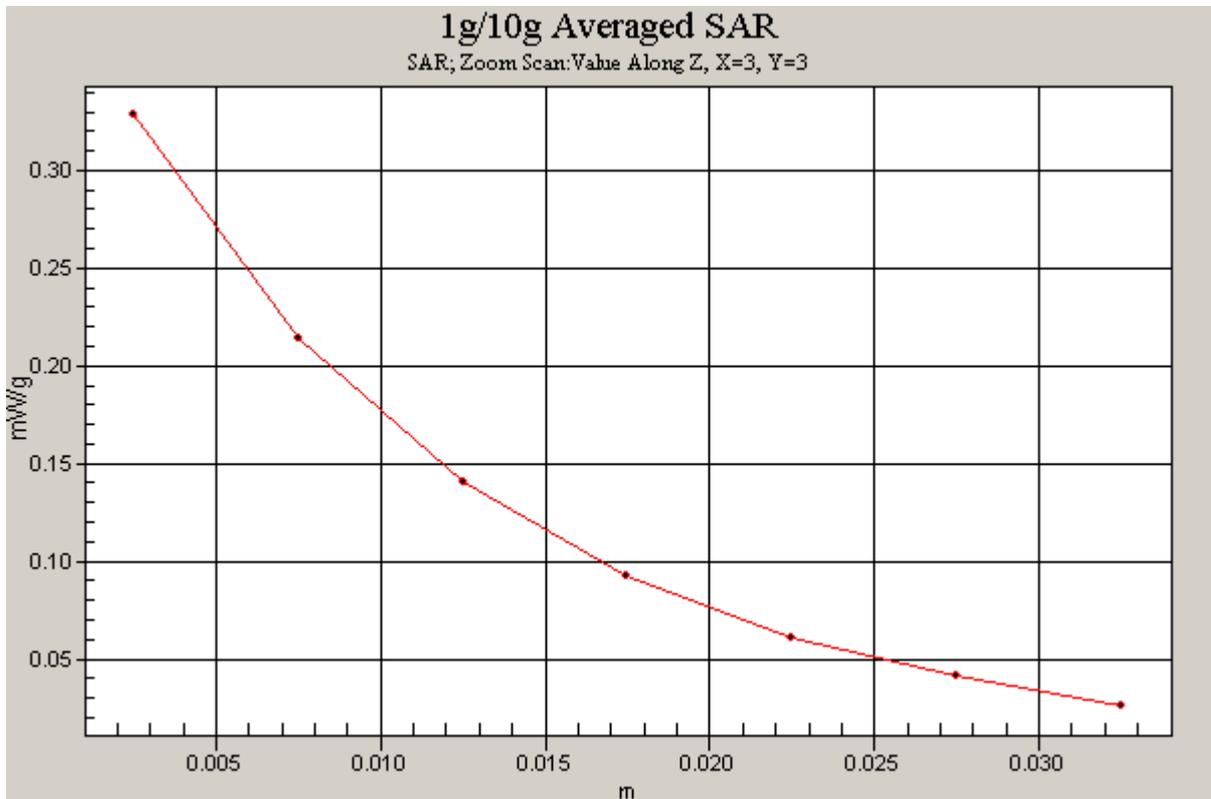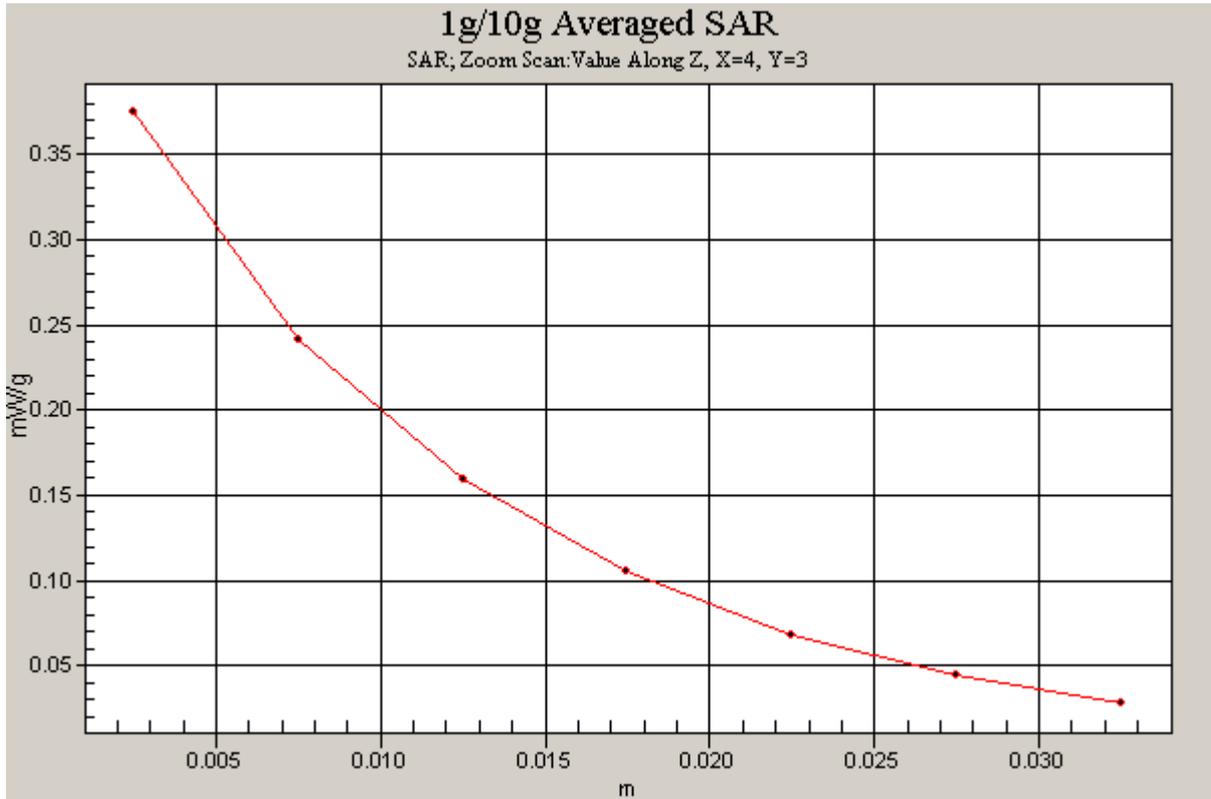
Figure 162 Z-Scan at power reference point (Body, Towards Phantom, Open GSM 1900 GPRS, Channel 810)

Date/Time: 12/28/2008 9:07:58 PM

GSM 1900 GPRS Towards Phantom Middle Open

Communication System: GSM 1900+GPRS(2Up); Frequency: 1880 MHz;Duty Cycle: 1:4

Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; $ε_r$ = 53.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom Middle/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 13.2 V/m; Power Drift = 0.076 dB

Peak SAR (extrapolated) = 0.436 W/kg

SAR(1 g) = 0.285 mW/g; SAR(10 g) = 0.182 mW/g

Maximum value of SAR (measured) = 0.305 mW/g

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

Reference Value = 13.2 V/m; Power Drift = 0.076 dB

Peak SAR (extrapolated) = 0.403 W/kg

SAR(1 g) = 0.263 mW/g; SAR(10 g) = 0.165 mW/g

Maximum value of SAR (measured) = 0.282 mW/g
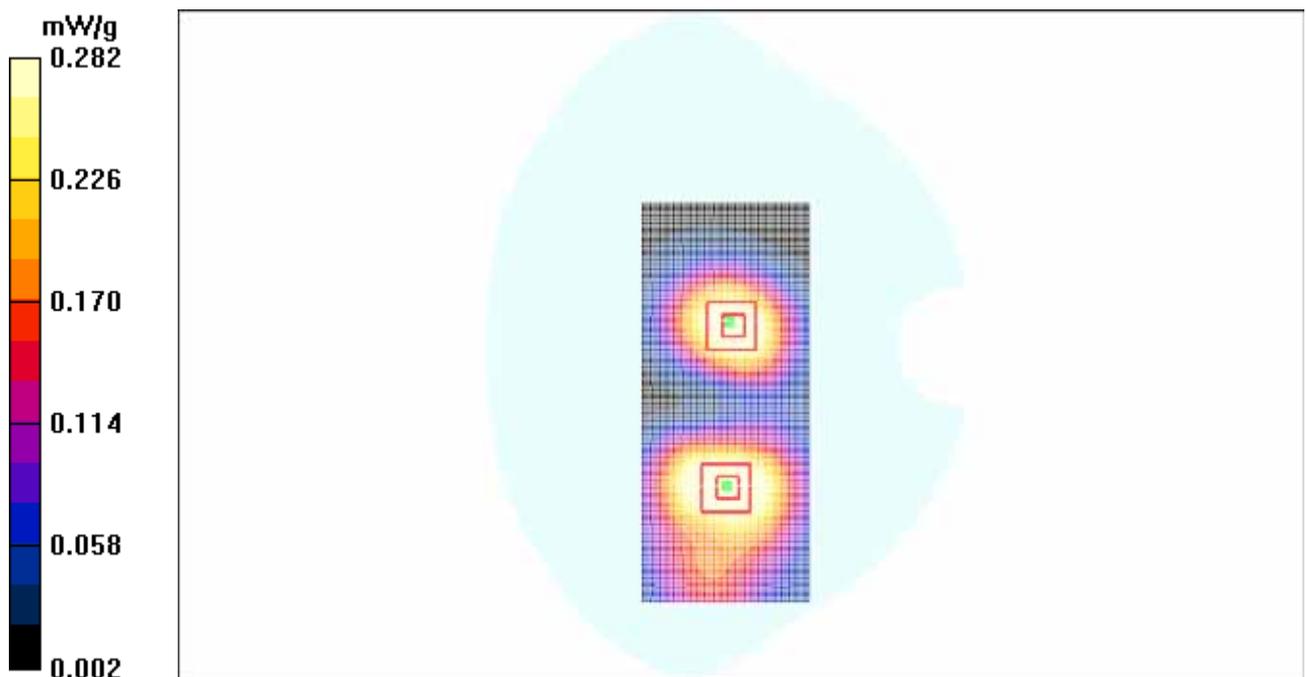
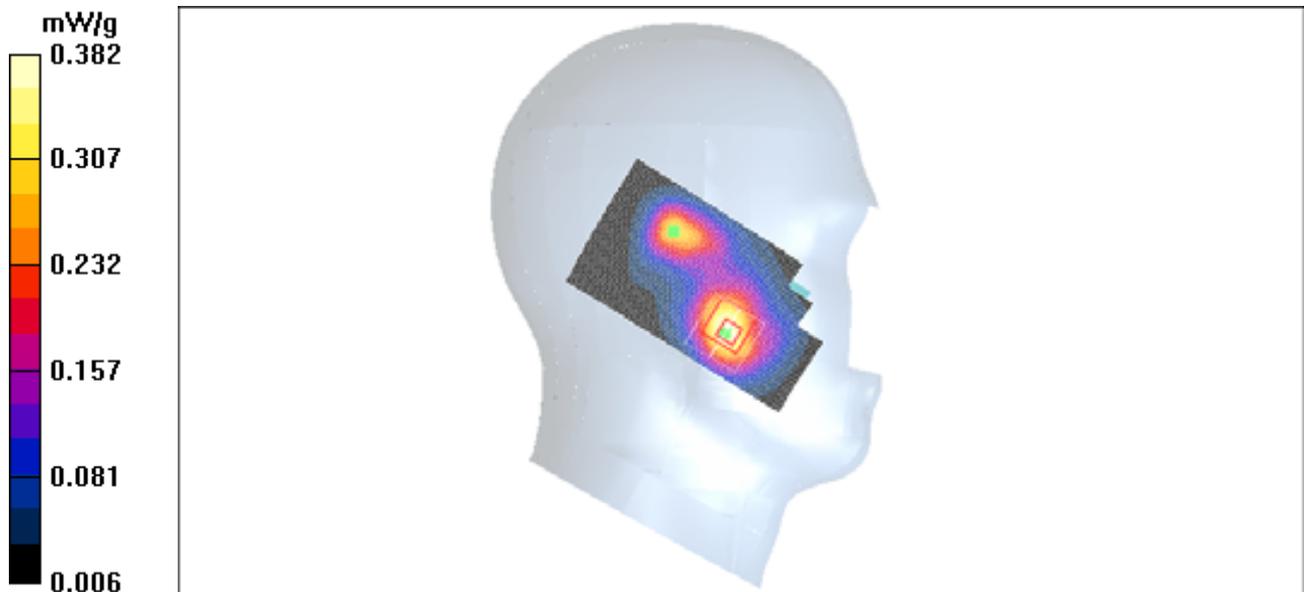Figure 163 Body, Towards Phantom, Open GSM 1900 GPRS Channel 661
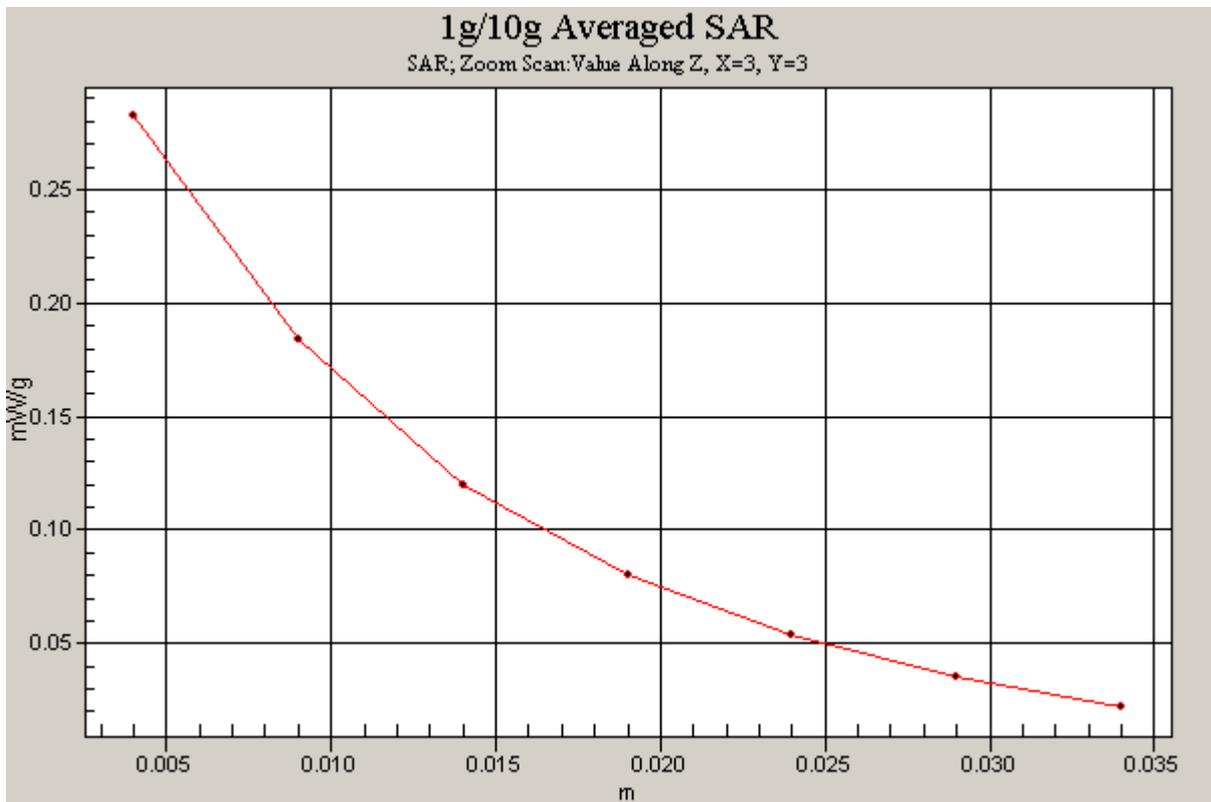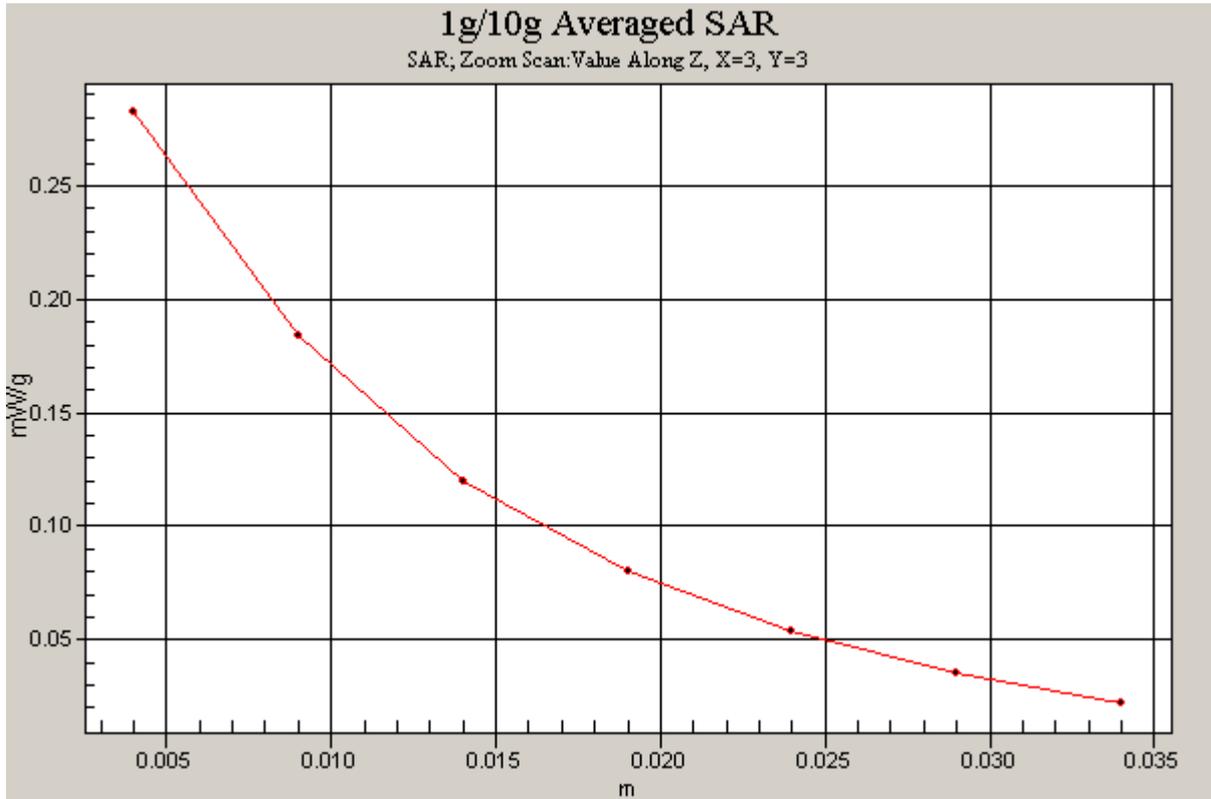
Figure 164 Z-Scan at power reference point (Body, Towards Phantom, Open GSM 1900 GPRS Channel 661)

Date/Time: 12/28/2008 9:39:56 PM

GSM 1900 GPRS Towards Phantom Low Open

Communication System: GSM 1900+GPRS(2Up); Frequency: 1850.2 MHz;Duty Cycle: 1:4

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.51 mho/m; ε_r = 53.3; ρ = 1000 kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom Low/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.369 mW/g

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

Reference Value = 14.1 V/m; Power Drift = 0.036 dB

Peak SAR (extrapolated) = 0.446 W/kg

SAR(1 g) = 0.295 mW/g; SAR(10 g) = 0.190 mW/g

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

Towards Phantom Low/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.1 V/m; Power Drift = 0.036 dB

Peak SAR (extrapolated) = 0.424 W/kg

SAR(1 g) = 0.281 mW/g; SAR(10 g) = 0.178 mW/g

Maximum value of SAR (measured) = 0.345 mW/g

Figure 165 Body, Towards Phantom, Open GSM 1900 GPRS Channel 512

Figure 166 Z-Scan at power reference point (Body, Towards Phantom, Open GSM 1900 GPRS Channel 512)

Date/Time: 12/28/2008 7:58:19 PM

GSM 1900 EGPRS Towards Ground High Open

Communication System: GSM 1900+EGPRS(2Up); Frequency: 1909.8 MHz;Duty Cycle: 1:4

Medium parameters used: f = 1910 MHz; σ = 1.57 mho/m; $ε_r$ = 53.2; ρ = 1000 kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground High/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.316 mW/g

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

Reference Value = 4.82 V/m; Power Drift = 0.085 dB

Peak SAR (extrapolated) = 0.395 W/kg

SAR(1 g) = 0.259 mW/g; SAR(10 g) = 0.164 mW/g

Maximum value of SAR (measured) = 0.315 mW/g

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

Reference Value = 4.82 V/m; Power Drift = 0.085 dB

Peak SAR (extrapolated) = 0.420 W/kg

SAR(1 g) = 0.260 mW/g; SAR(10 g) = 0.149 mW/g

Maximum value of SAR (measured) = 0.329 mW/g

Figure 167 Body, Towards Ground, Open GSM 1900 EGPRS Channel 810

Figure 168 Z-Scan at power reference point (Body, Towards Ground, Open GSM 1900 EGPRS Channel 810)

Date/Time: 12/26/2008 5:00:23 PM

GSM 1900 Left Cheek High Close

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1910 MHz; σ = 1.42 mho/m; ε_r = 40; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.698 mW/g

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

Reference Value = 8.05 V/m; Power Drift = 0.138 dB

Peak SAR (extrapolated) = 0.861 W/kg

SAR(1 g) = 0.560 mW/g; SAR(10 g) = 0.335 mW/g

Maximum value of SAR (measured) = 0.686 mW/g
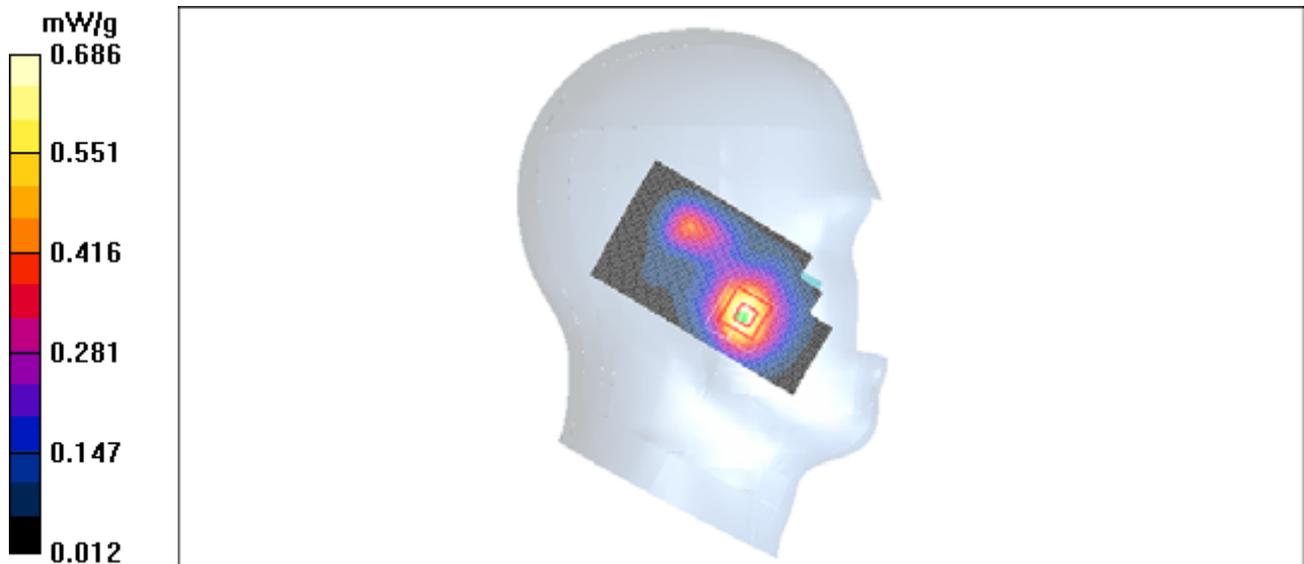
Figure 169 Left Hand Touch Cheek Close GSM 1900 Channel 810
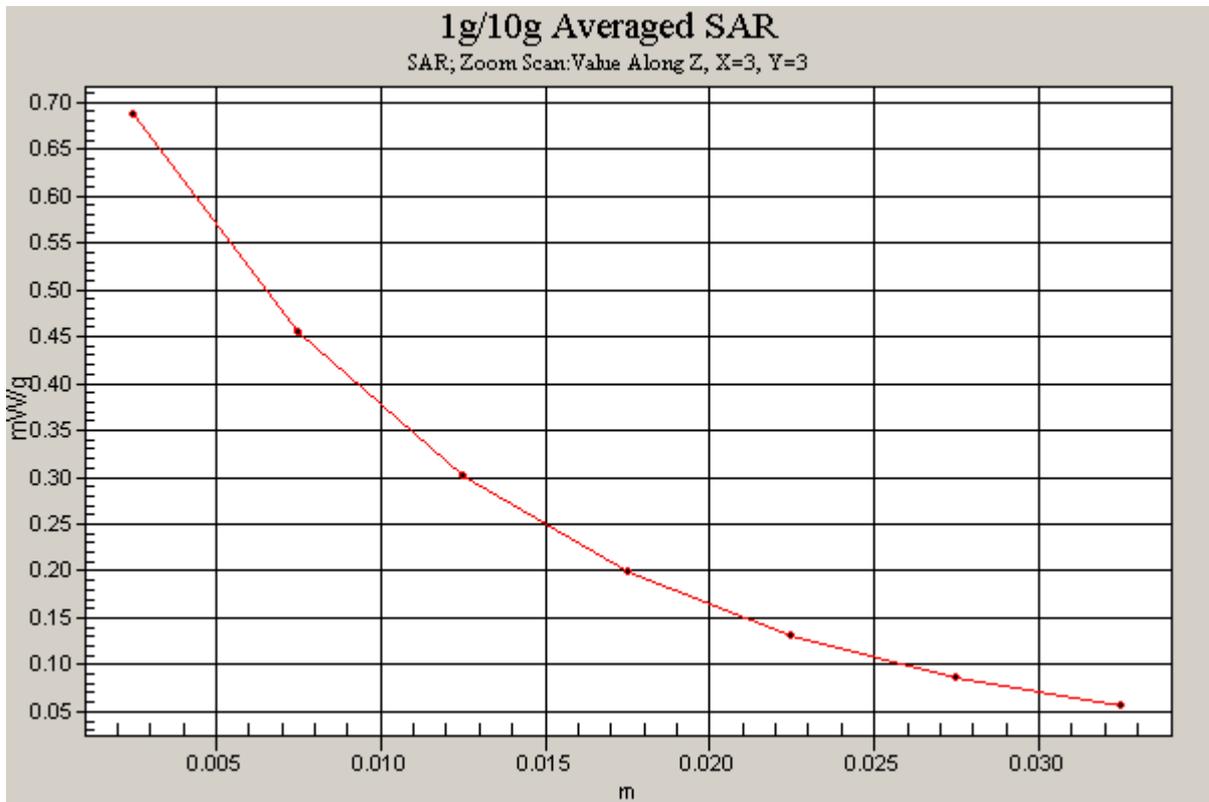
Figure 170 Z-Scan at power reference point (Left Hand Touch Cheek Close GSM 1900 Channel 810)

Date/Time: 12/26/2008 10:12:09 PM

GSM 1900 Left Cheek Middle Close

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.567 mW/g

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

Reference Value = 7.29 V/m; Power Drift = 0.041 dB

Peak SAR (extrapolated) = 0.703 W/kg

SAR(1 g) = 0.451 mW/g; SAR(10 g) = 0.270 mW/g

Maximum value of SAR (measured) = 0.560 mW/g

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.567 mW/g

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

Reference Value = 7.29 V/m; Power Drift = 0.041 dB

Peak SAR (extrapolated) = 0.500 W/kg

SAR(1 g) = 0.312 mW/g; SAR(10 g) = 0.174 mW/g

Maximum value of SAR (measured) = 0.393 mW/g
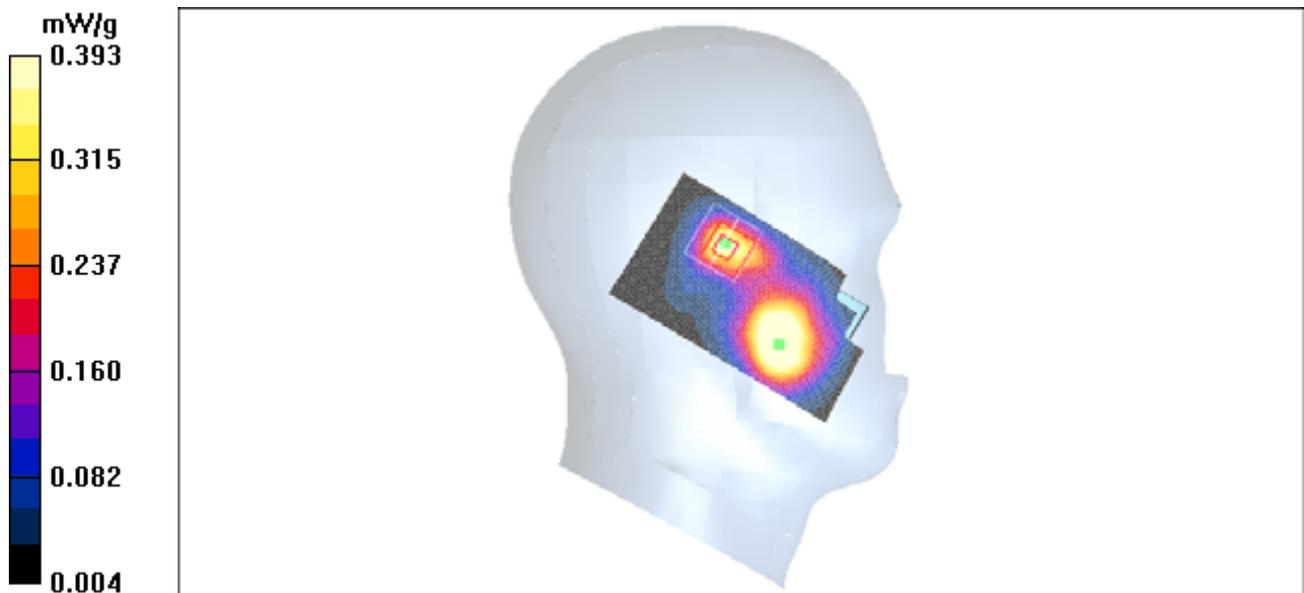
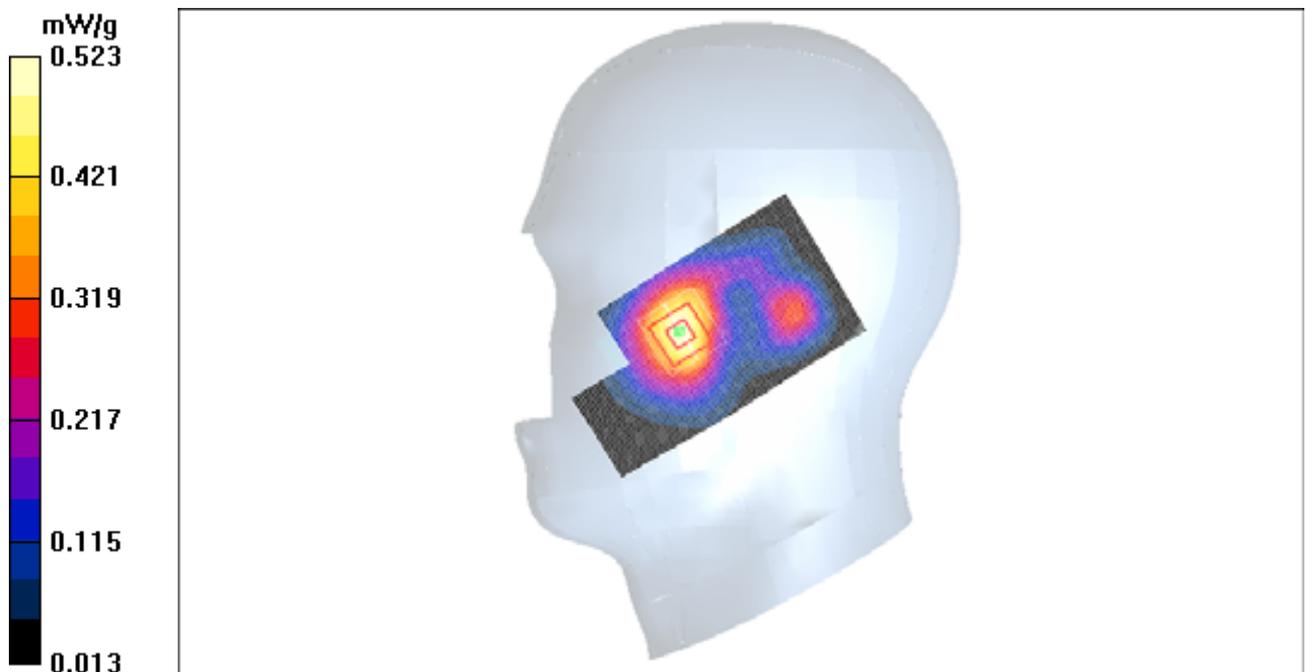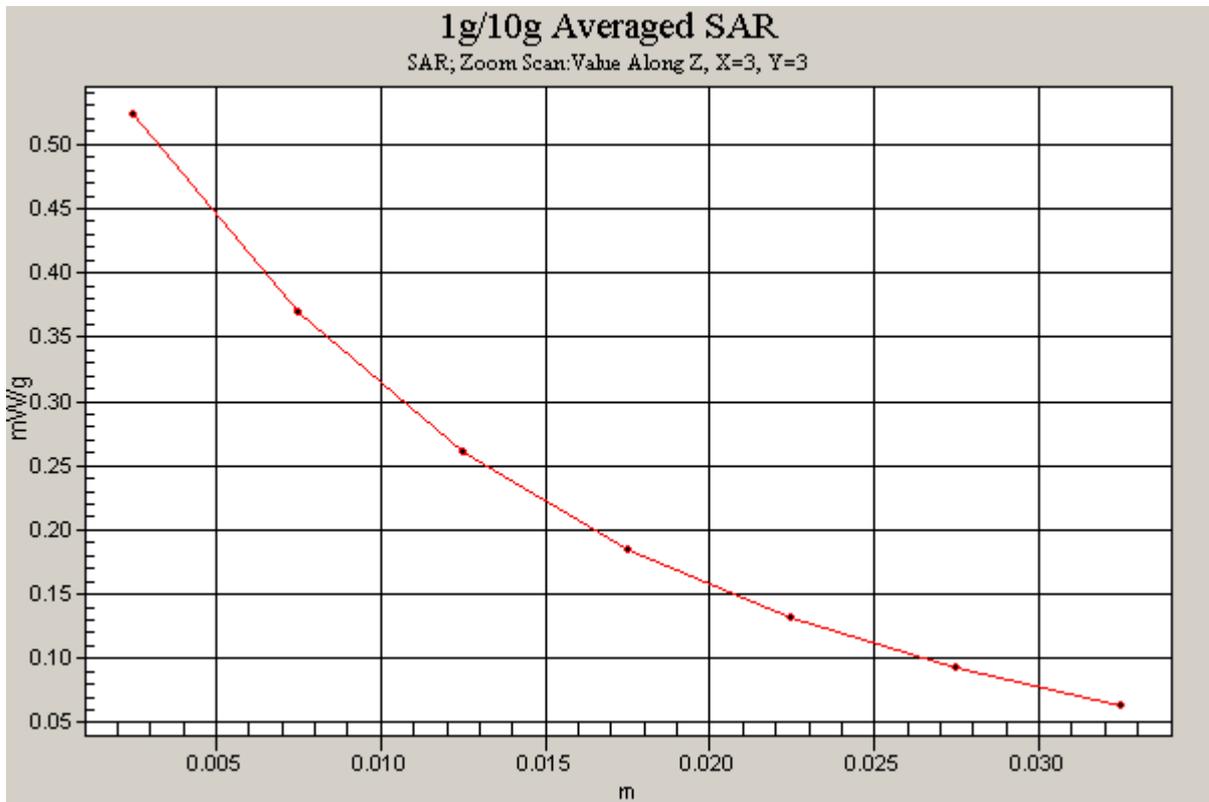Figure 171 Left Hand Touch Cheek Close GSM 1900 Channel 661
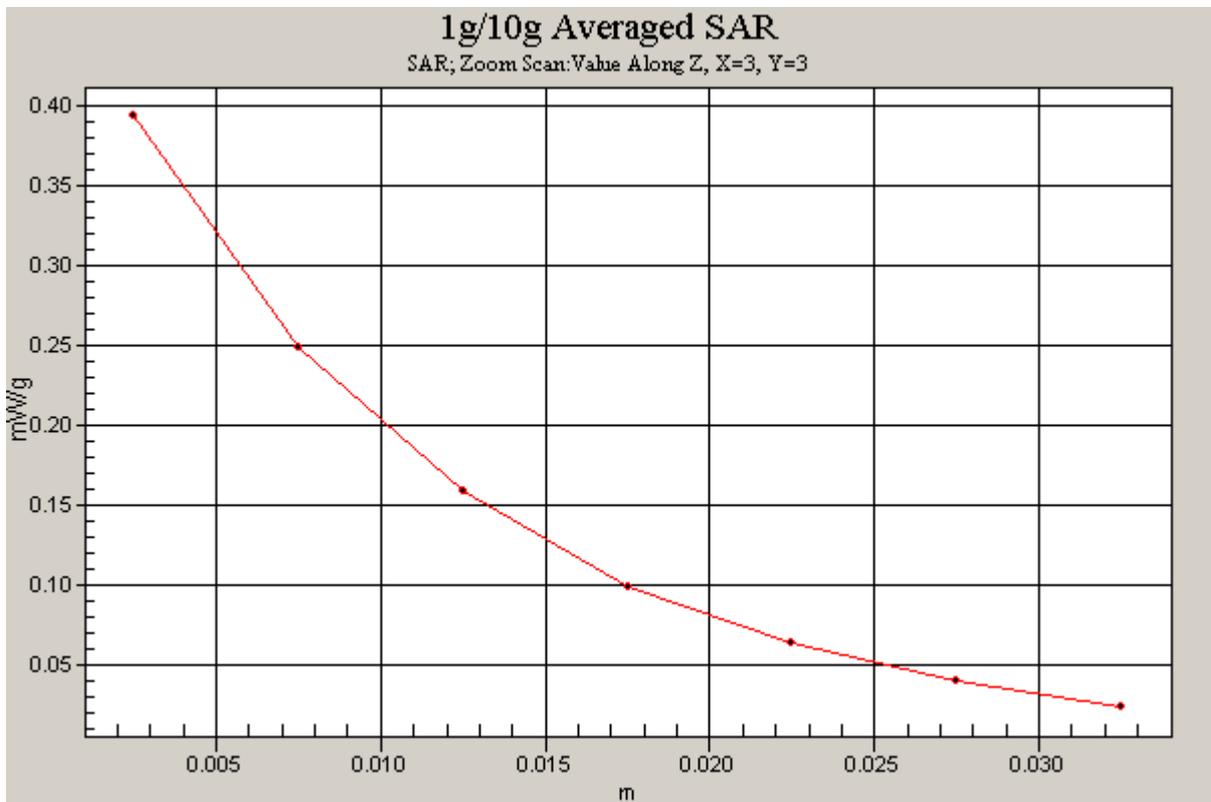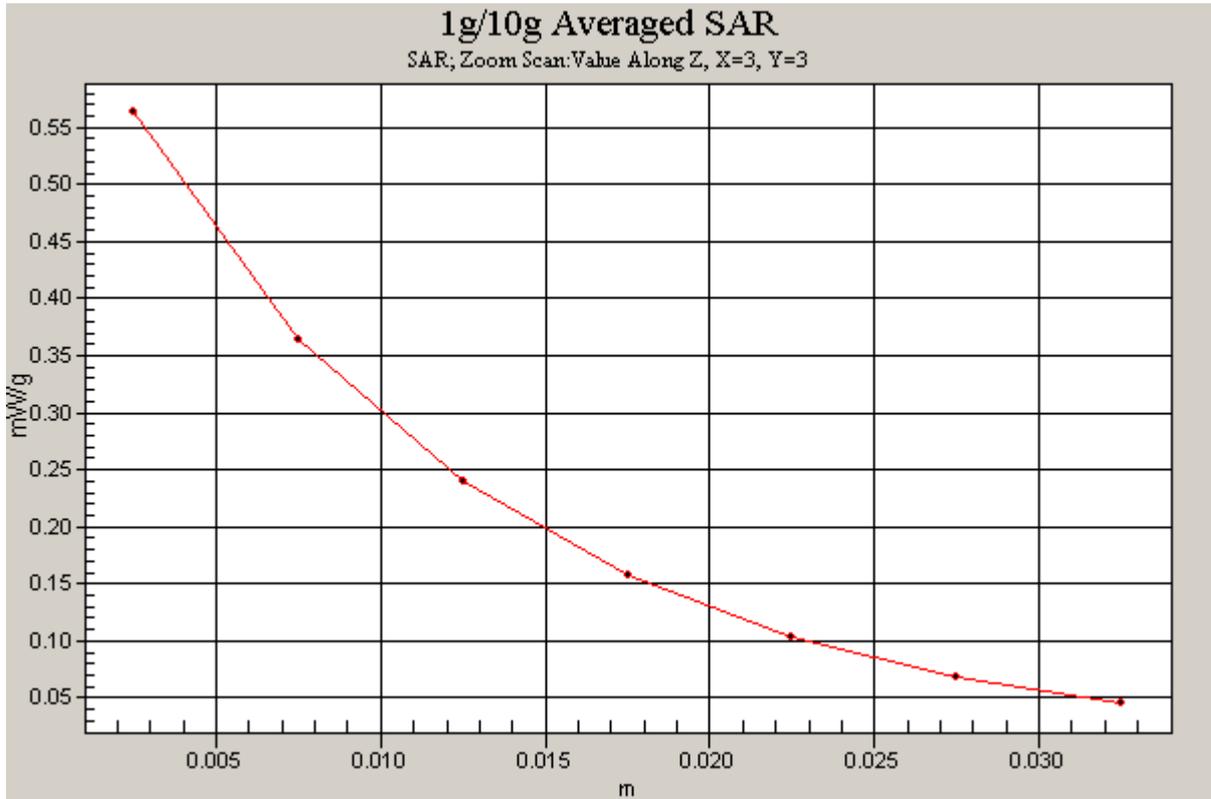
Figure 172 Z-Scan at power reference point (Left Hand Touch Cheek Close GSM 1900 Channel 661)

Date/Time: 12/26/2008 9:39:48 PM

GSM 1900 Left Cheek Low Close

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

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.37 mho/m; $ε_r$ = 40.2; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.393 mW/g

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

Reference Value = 6.53 V/m; Power Drift = 0.125 dB

Peak SAR (extrapolated) = 0.483 W/kg

SAR(1 g) = 0.308 mW/g; SAR(10 g) = 0.185 mW/g

Maximum value of SAR (measured) = 0.382 mW/g

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

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.37 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
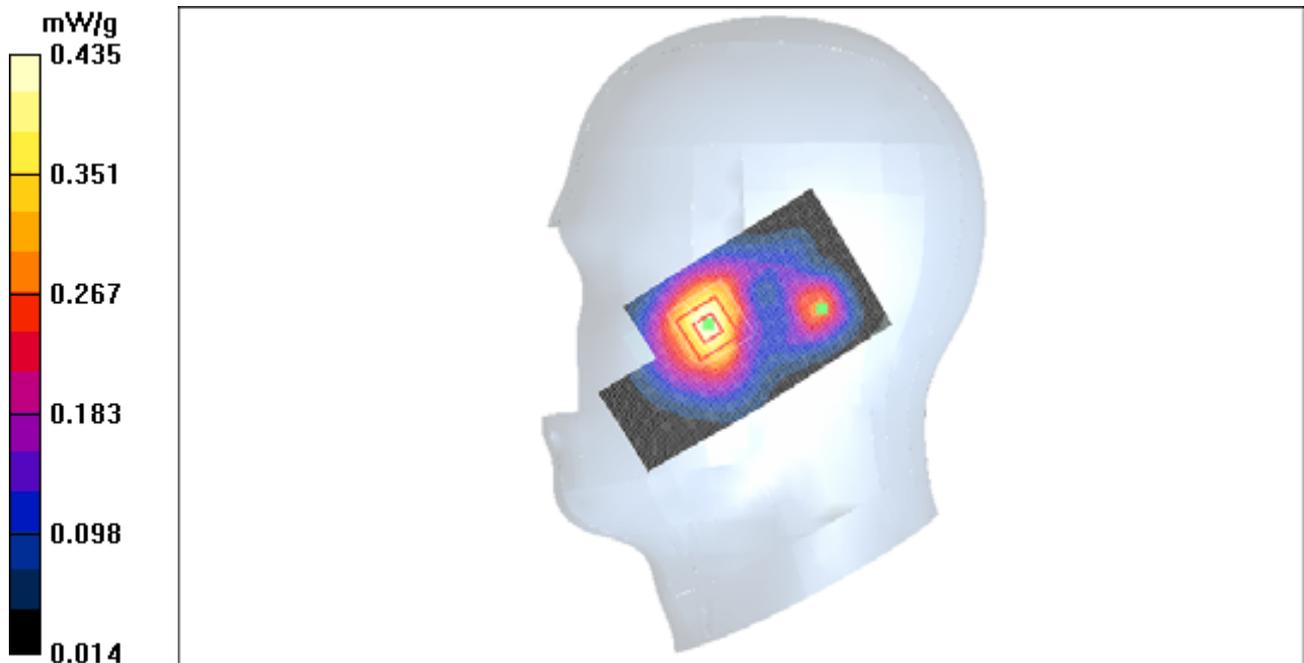
Maximum value of SAR (interpolated) = 0.393 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.53 V/m; Power Drift = 0.125 dB

Peak SAR (extrapolated) = 0.379 W/kg

SAR(1 g) = 0.239 mW/g; SAR(10 g) = 0.137 mW/g

Maximum value of SAR (measured) = 0.301 mW/g
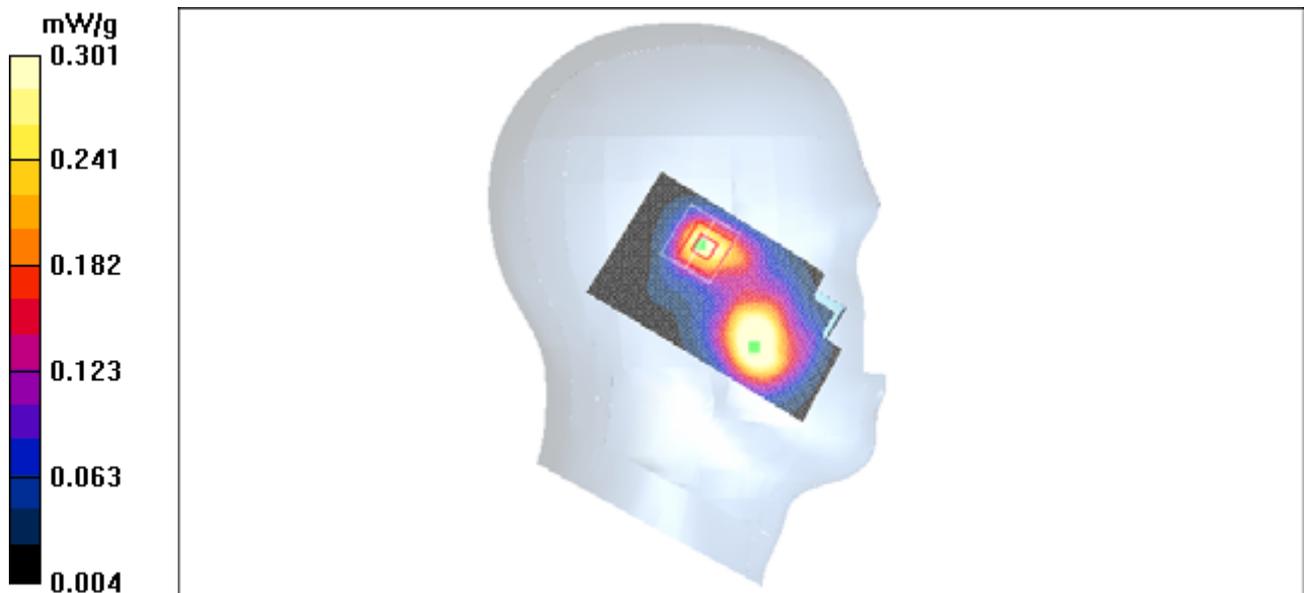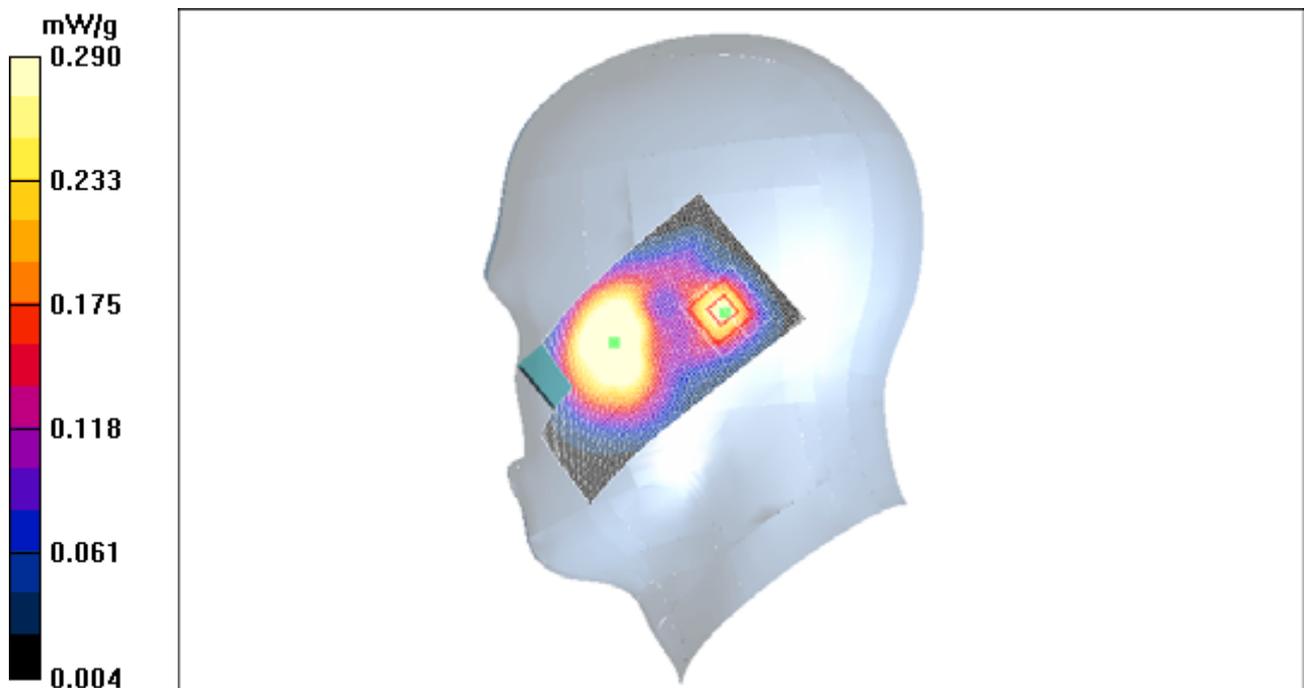

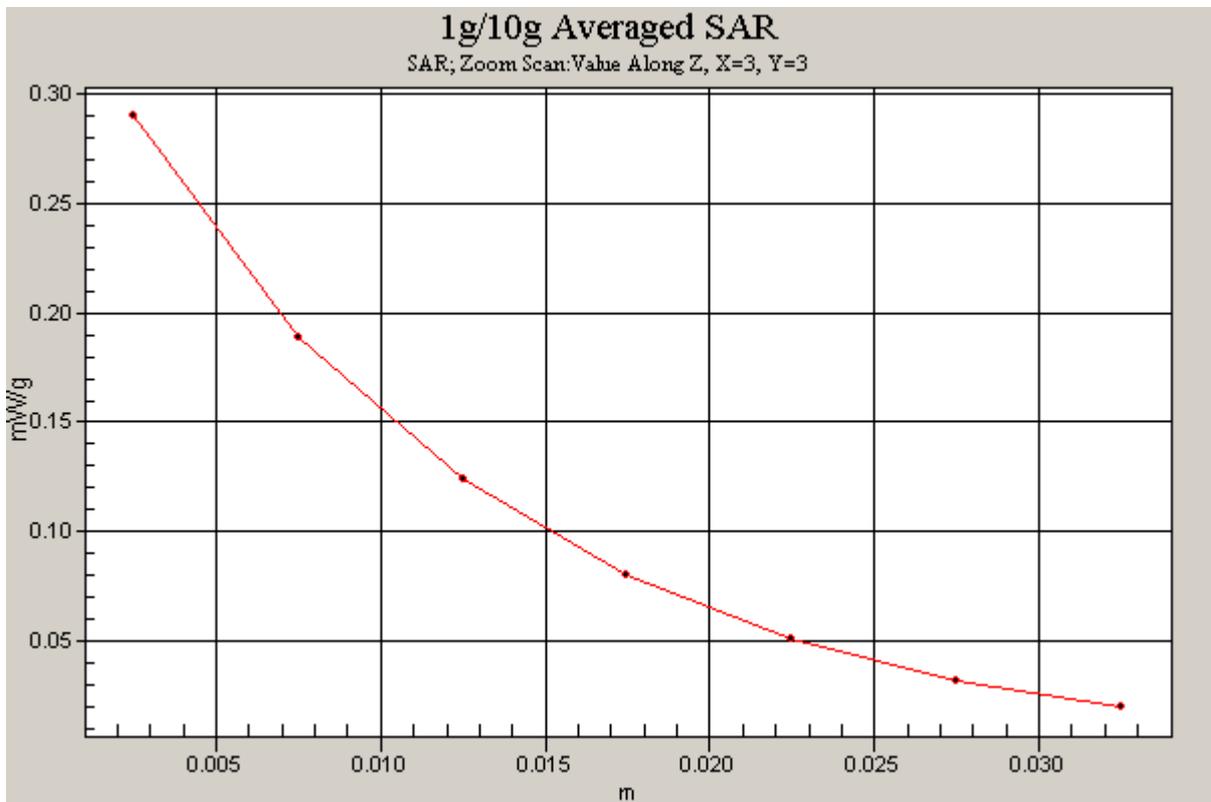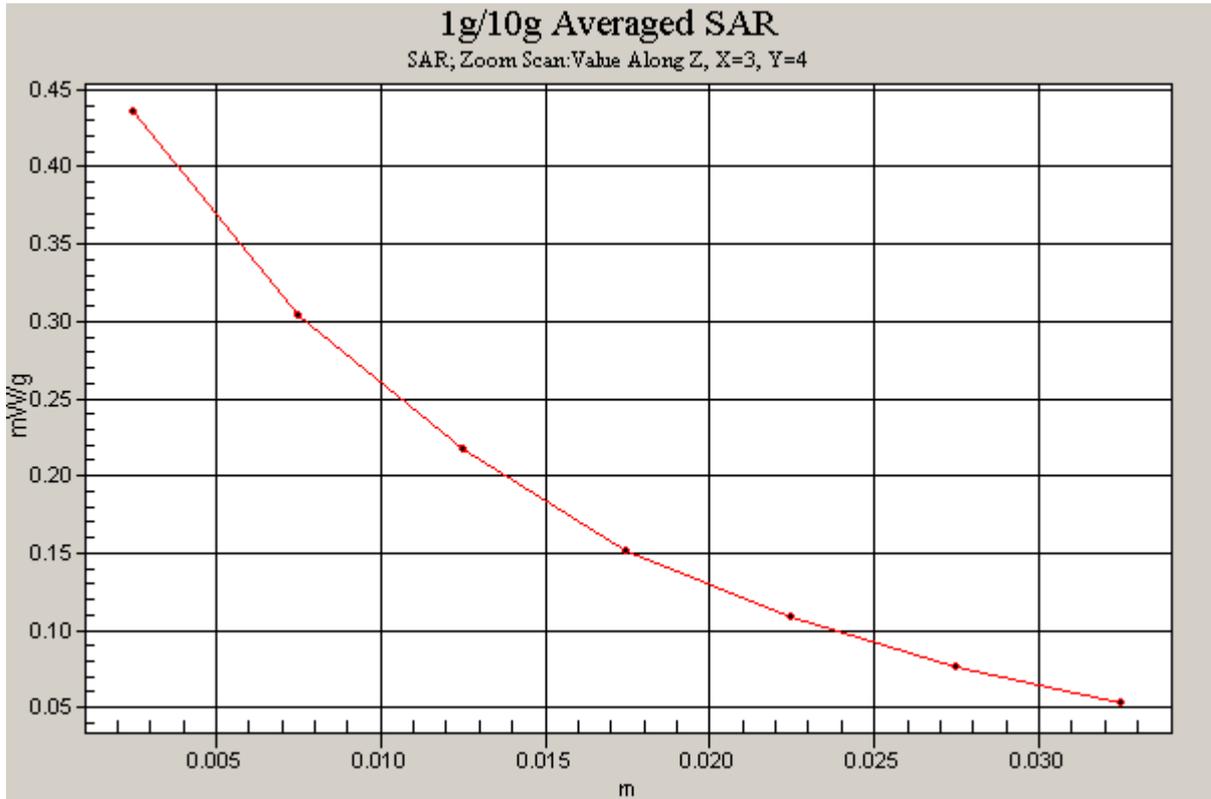Figure 173 Left Hand Touch Cheek Close GSM 1900 Channel 512
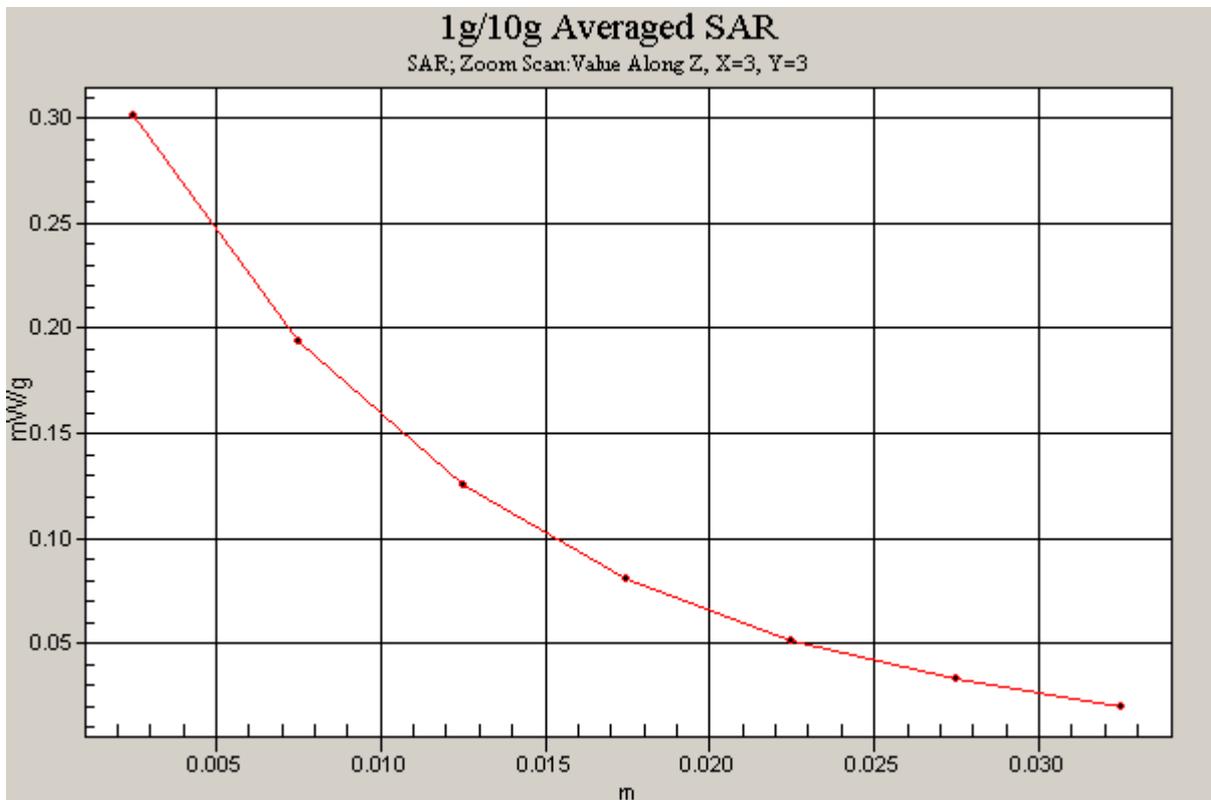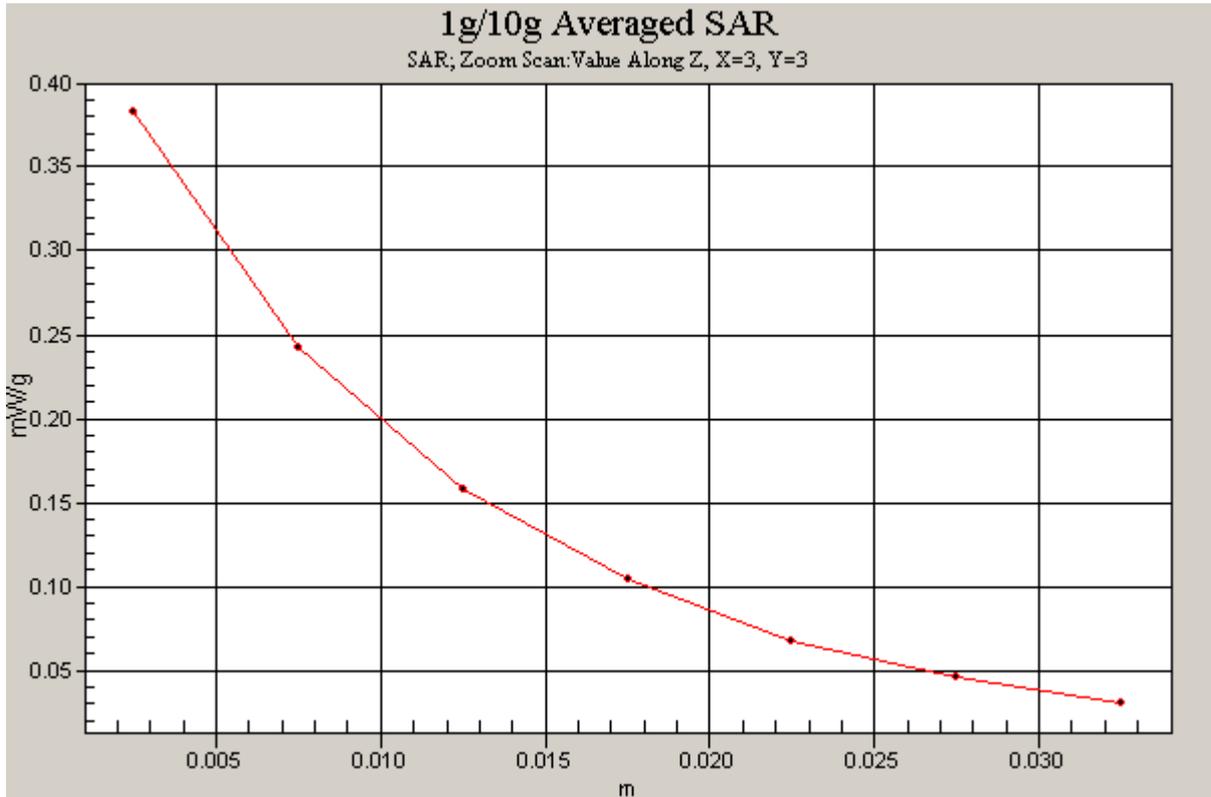
Figure 174 Z-Scan at power reference point (Left Hand Touch Cheek Close GSM 1900 Channel 512)

Date/Time: 12/26/2008 6:39:33 PM

GSM 1900 Left Tilt High Close

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1910 MHz; σ = 1.42 mho/m; ε_r = 40; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.336 mW/g

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

Reference Value = 10.8 V/m; Power Drift = 0.134 dB

Peak SAR (extrapolated) = 0.413 W/kg

SAR(1 g) = 0.259 mW/g; SAR(10 g) = 0.145 mW/g

Maximum value of SAR (measured) = 0.328 mW/g
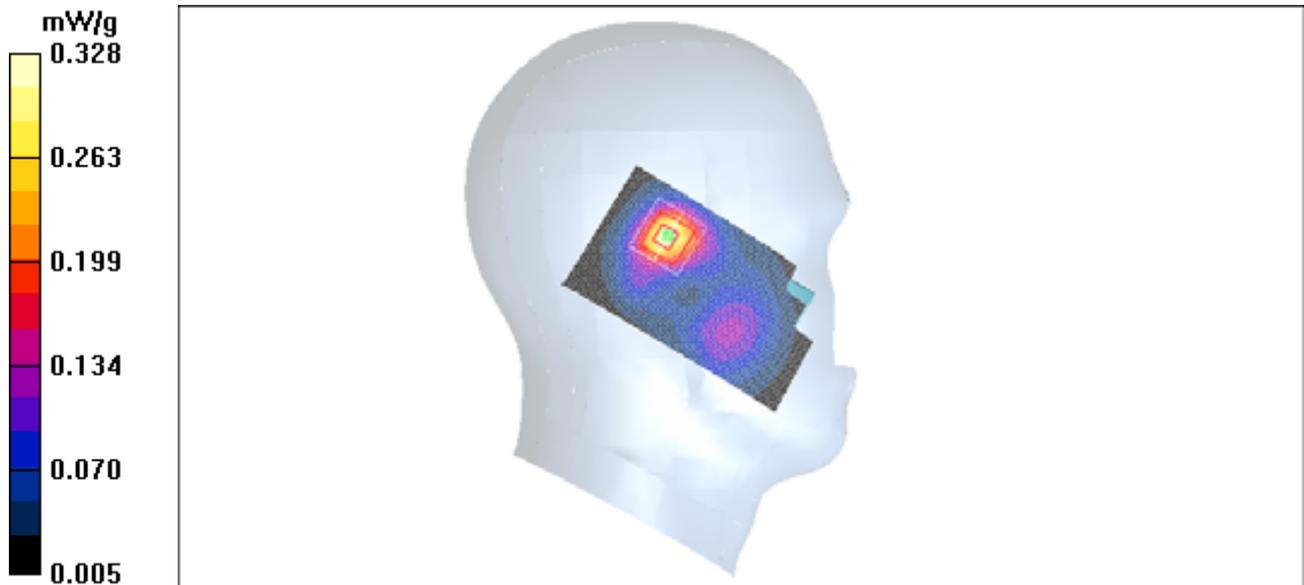
Figure 175 Left Hand Tilt 15°Close GSM 1900 Channel 810
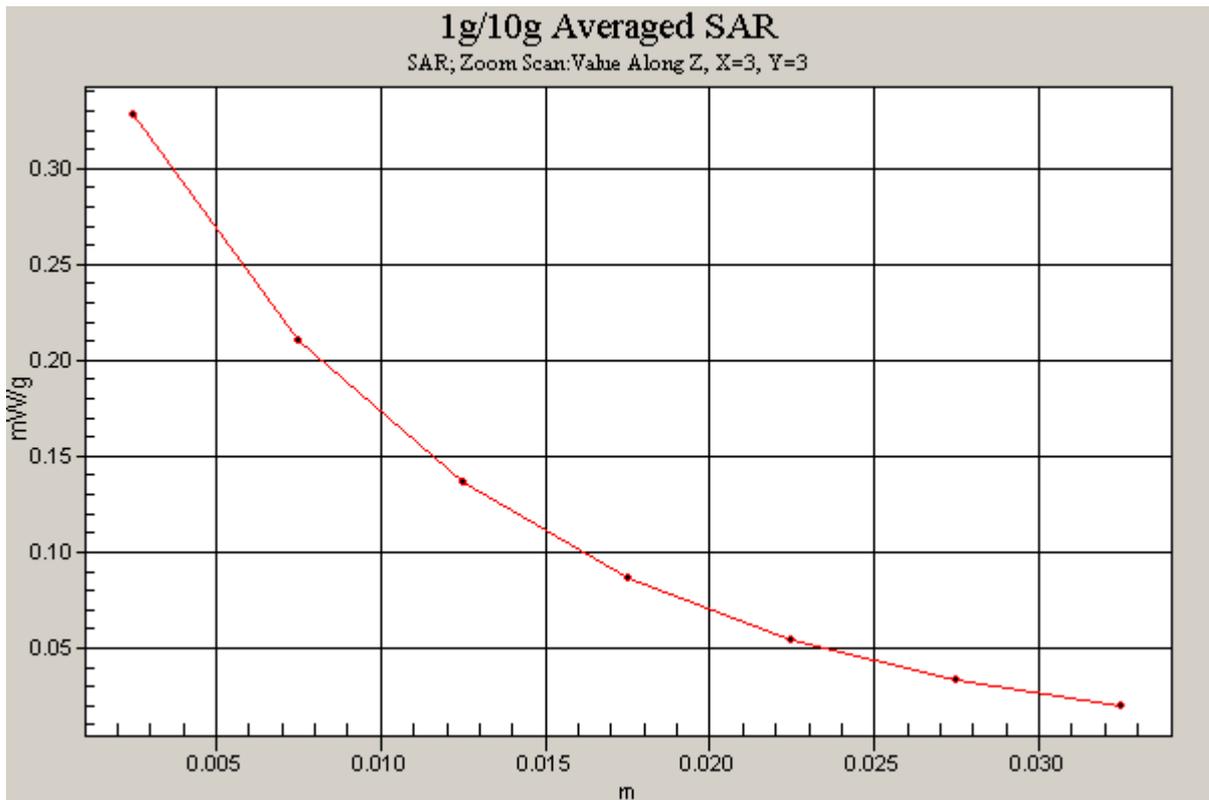
Figure 176 Z-Scan at power reference point (Left Hand Tilt 15°Close GSM 1900 Channel 810)

Date/Time: 12/26/2008 6:21:14 PM

GSM 1900 Left Tilt Middle Close

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
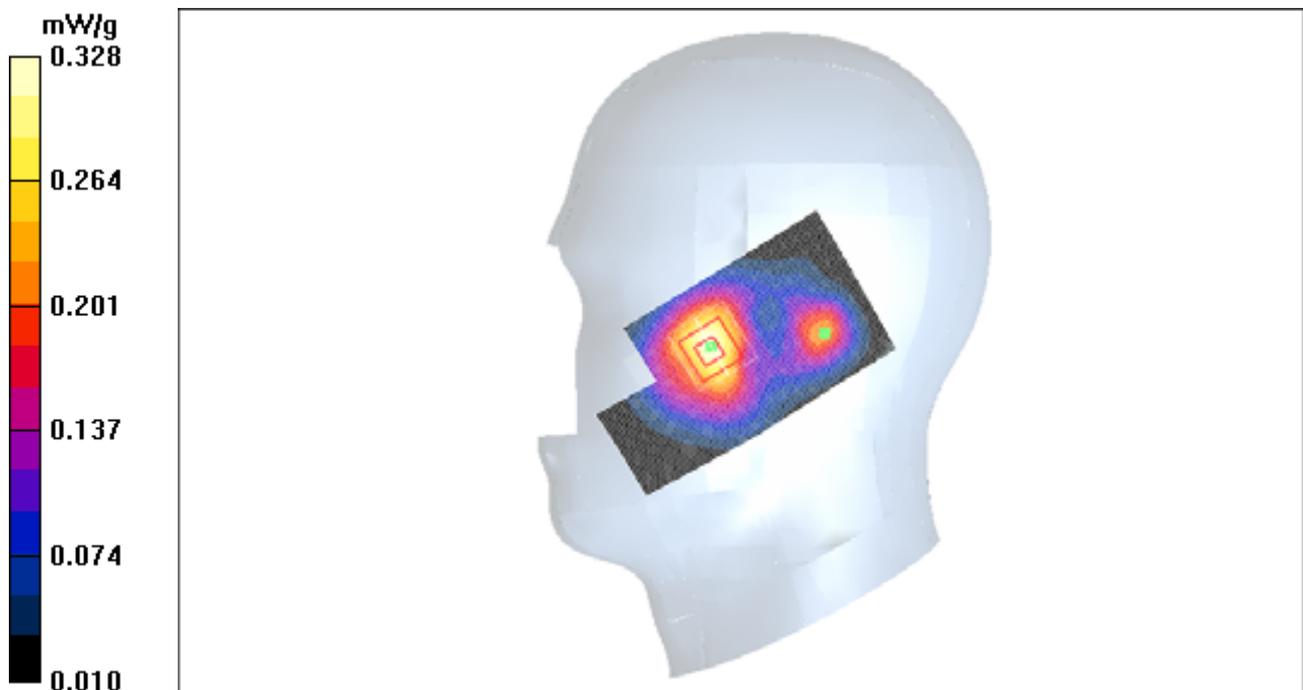
Maximum value of SAR (interpolated) = 0.272 mW/g

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

Reference Value = 9.92 V/m; Power Drift = 0.084 dB

Peak SAR (extrapolated) = 0.333 W/kg

SAR(1 g) = 0.210 mW/g; SAR(10 g) = 0.119 mW/g

Maximum value of SAR (measured) = 0.266 mW/g
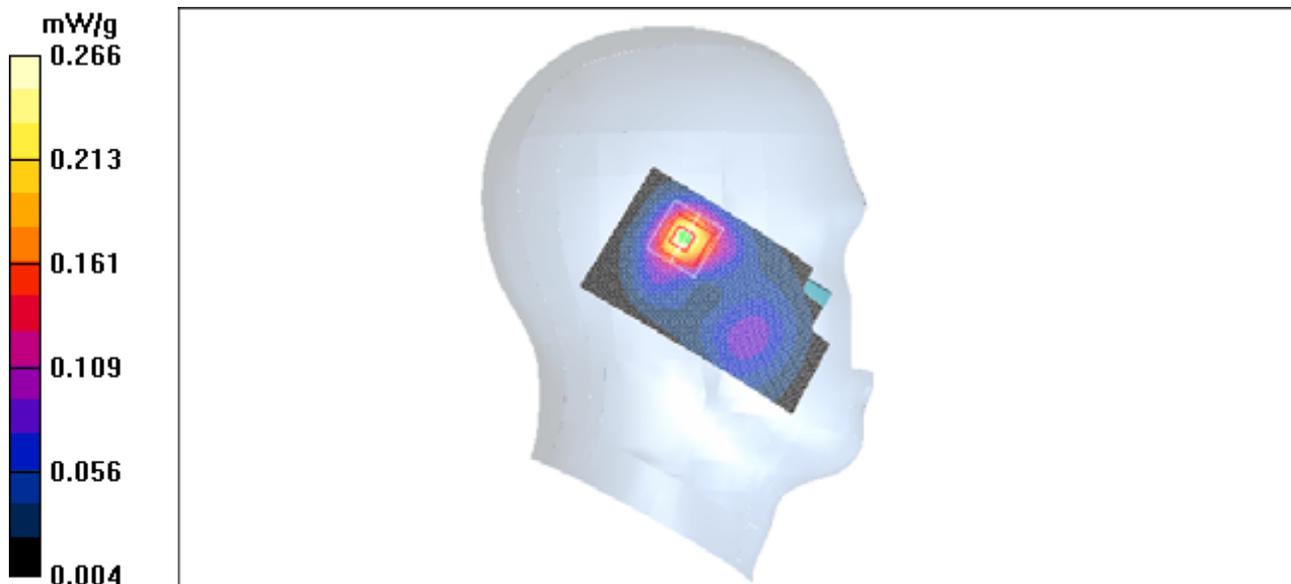
Figure 177 Left Hand Tilt 15°Close GSM 1900 Channel 661
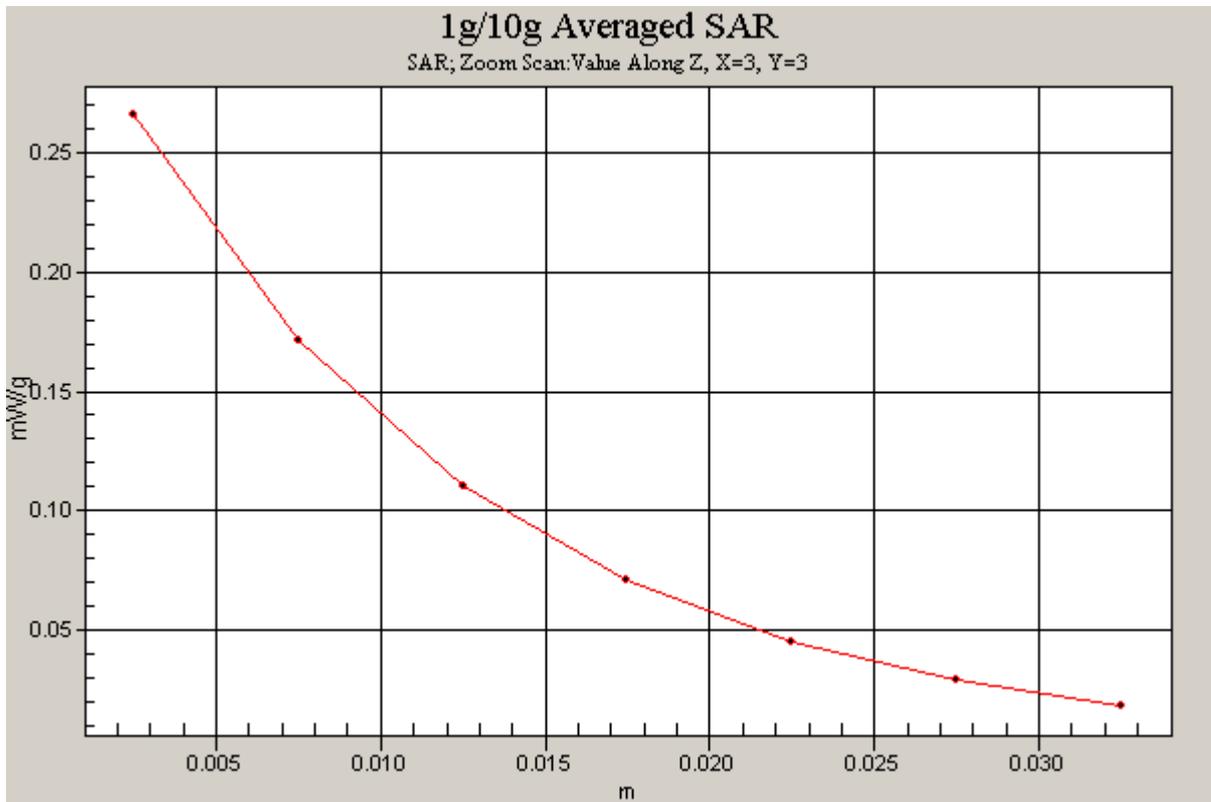
Figure 178 Z-Scan at power reference point (Left Hand Tilt 15°Close GSM 1900 Channel 661)

Date/Time: 12/26/2008 6:02:36 PM

GSM 1900 Left Tilt Low Close

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

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.37 mho/m; $ε_r$ = 40.2; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 8.98 V/m; Power Drift = 0.106 dB

Peak SAR (extrapolated) = 0.279 W/kg

SAR(1 g) = 0.174 mW/g; SAR(10 g) = 0.100 mW/g

Maximum value of SAR (measured) = 0.222 mW/g
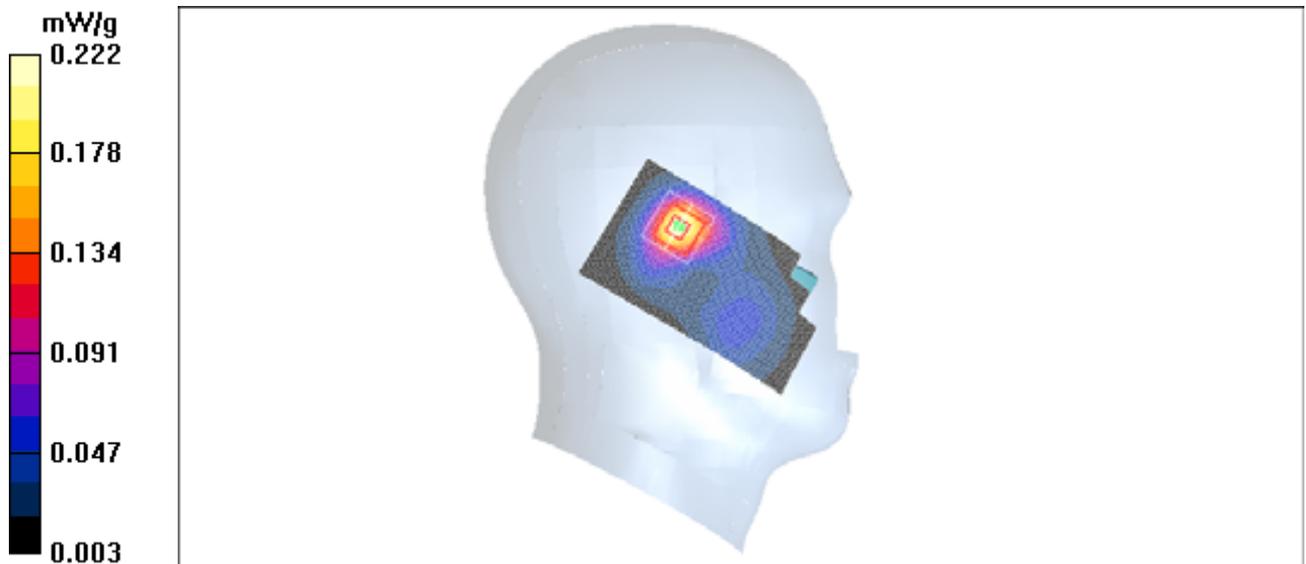

Figure 179 Left Hand Tilt 15°Close GSM 1900 Channel 512
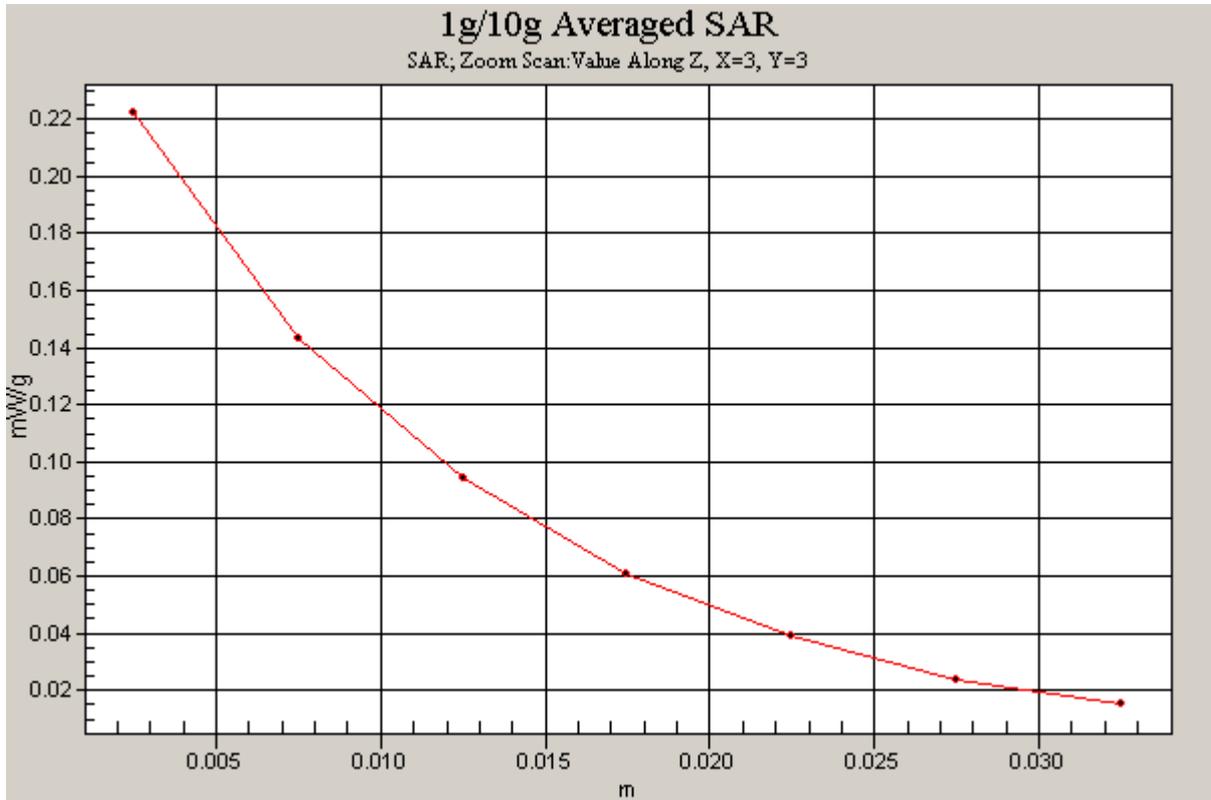
Figure 180 Z-Scan at power reference point (Left Hand Tilt 15°Close GSM 1900 Channel 512)

Date/Time: 12/26/2008 10:48:14 PM

GSM 1900 Right Cheek High Close

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1910 MHz; σ = 1.42 mho/m; ε_r = 40; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.519 mW/g

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

Reference Value = 10.7 V/m; Power Drift = 0.103 dB

Peak SAR (extrapolated) = 0.638 W/kg

SAR(1 g) = 0.436 mW/g; SAR(10 g) = 0.279 mW/g

Maximum value of SAR (measured) = 0.523 mW/g

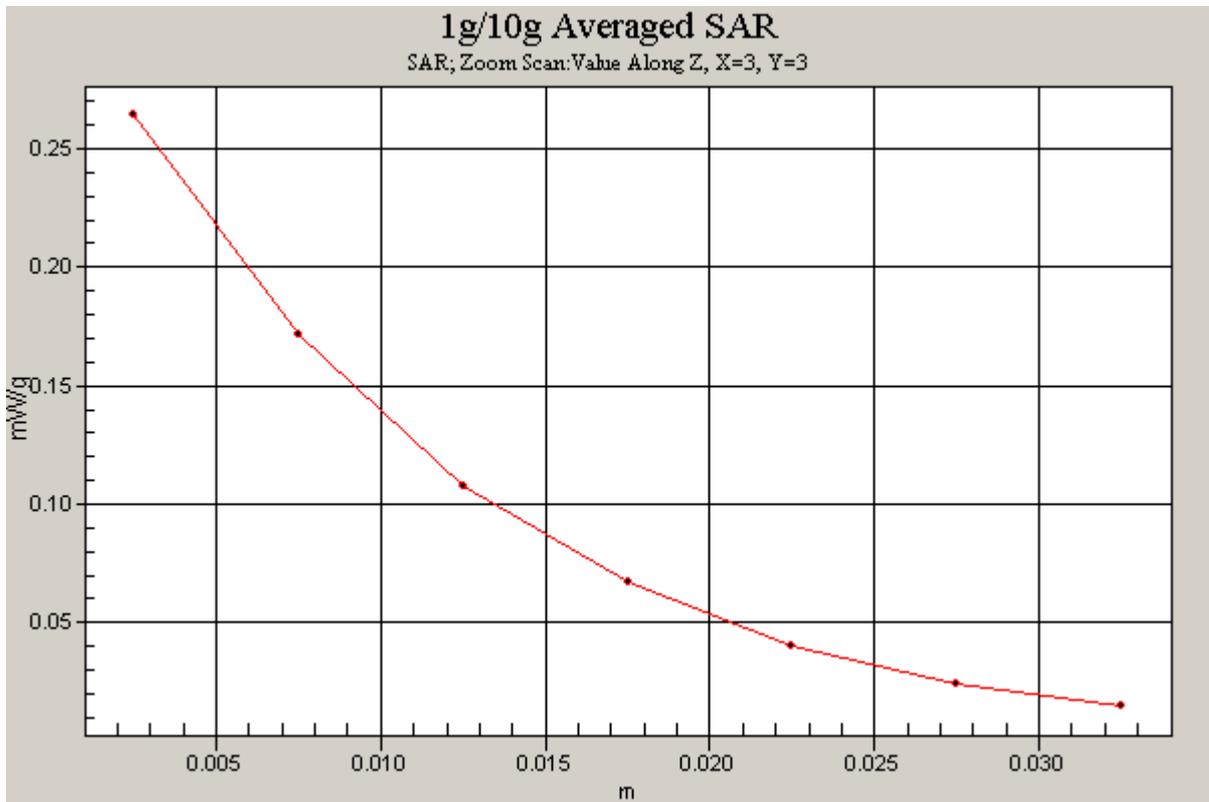Figure 181 Right Hand Touch Cheek Close GSM 1900 Channel 810

Figure 182 Z-Scan at power reference point (Right Hand Touch Cheek Close GSM 1900 Channel 810)

Date/Time: 12/26/2008 11:07:47 PM

GSM 1900 Right Cheek Middle Close

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.438 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 = 0.135 dB

Peak SAR (extrapolated) = 0.529 W/kg

SAR(1 g) = 0.367 mW/g; SAR(10 g) = 0.236 mW/g

Maximum value of SAR (measured) = 0.435 mW/g

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.438 mW/g

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

Reference Value = 10.5 V/m; Power Drift = 0.135 dB

Peak SAR (extrapolated) = 0.366 W/kg

SAR(1 g) = 0.231 mW/g; SAR(10 g) = 0.129 mW/g

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


Figure 183 Right Hand Touch Cheek Close GSM 1900 Channel 661

Figure 184 Z-Scan at power reference point (Right Hand Touch Cheek Close GSM 1900 Channel 661)

Date/Time: 12/26/2008 11:38:52 PM

GSM 1900 Right Cheek Low Close

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

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.37 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.328 mW/g

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

Reference Value = 9.68 V/m; Power Drift = -0.017 dB

Peak SAR (extrapolated) = 0.392 W/kg

SAR(1 g) = 0.277 mW/g; SAR(10 g) = 0.178 mW/g

Maximum value of SAR (measured) = 0.328 mW/g

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

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.37 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.328 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.68 V/m; Power Drift = -0.017 dB

Peak SAR (extrapolated) = 0.280 W/kg

SAR(1 g) = 0.179 mW/g; SAR(10 g) = 0.102 mW/g

Maximum value of SAR (measured) = 0.222 mW/g
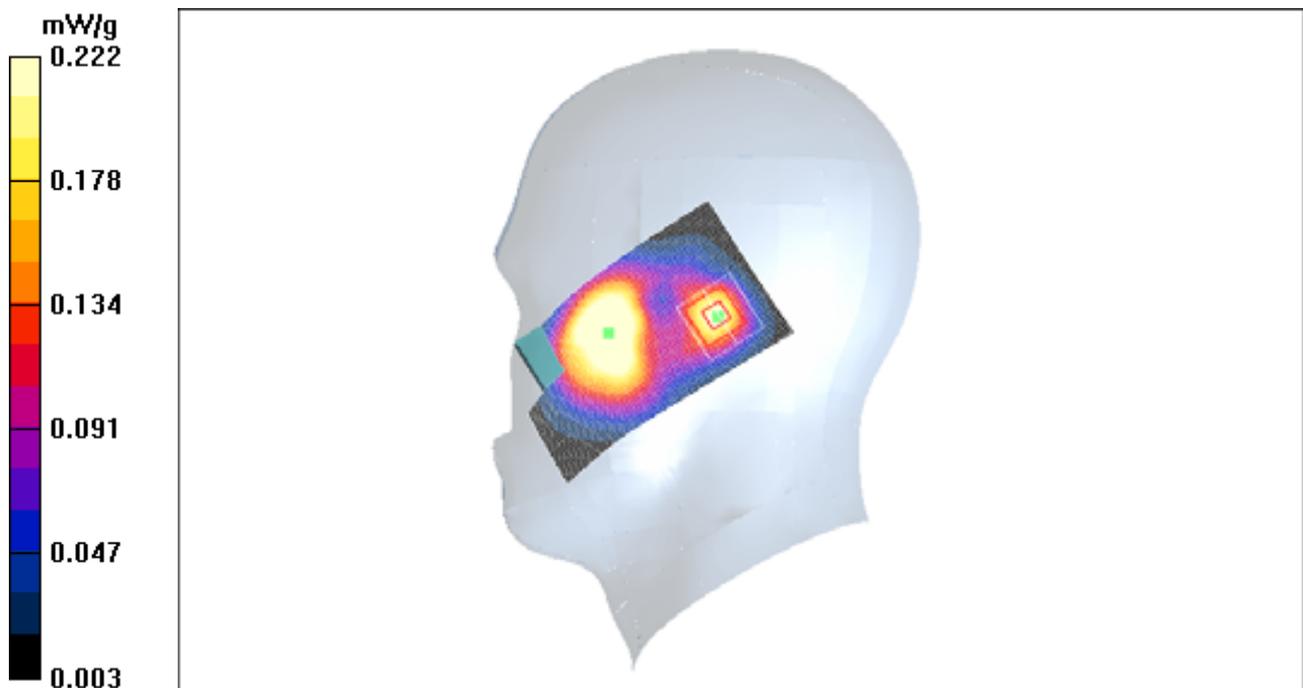
Figure 185 Right Hand Touch Cheek Close GSM 1900 Channel 512
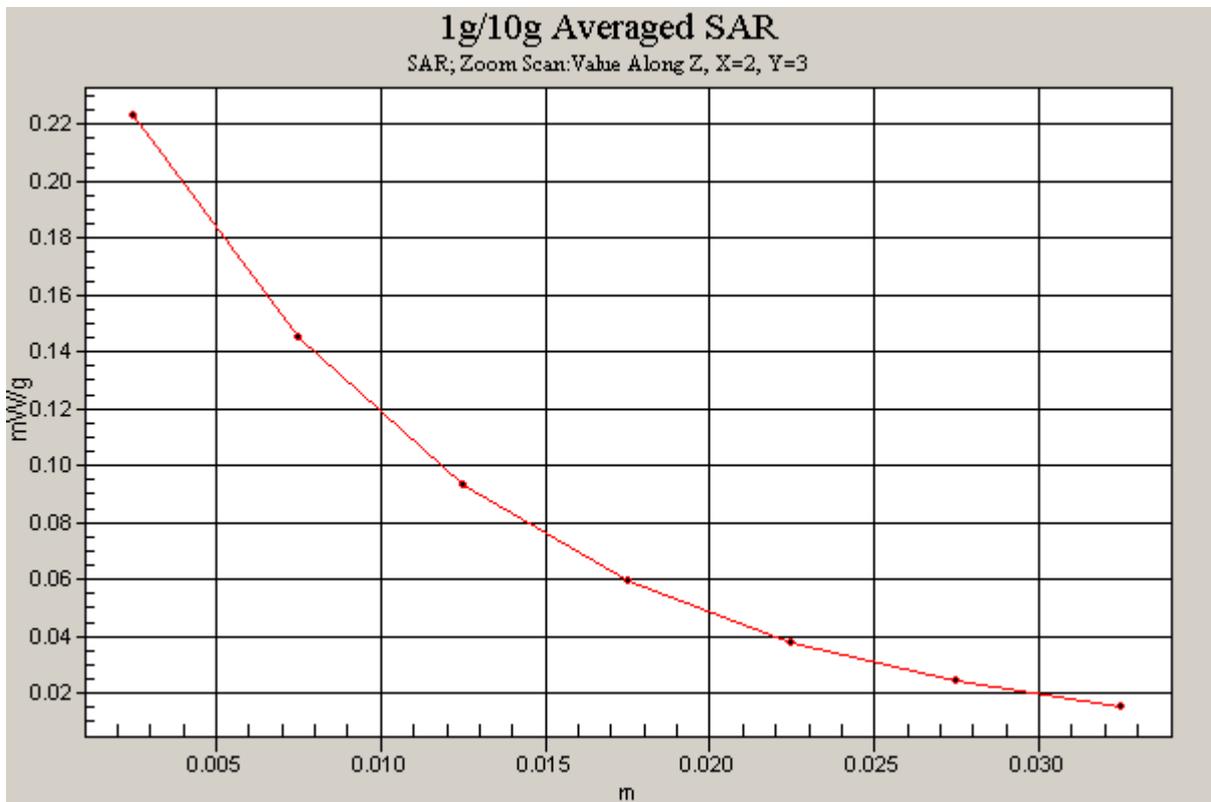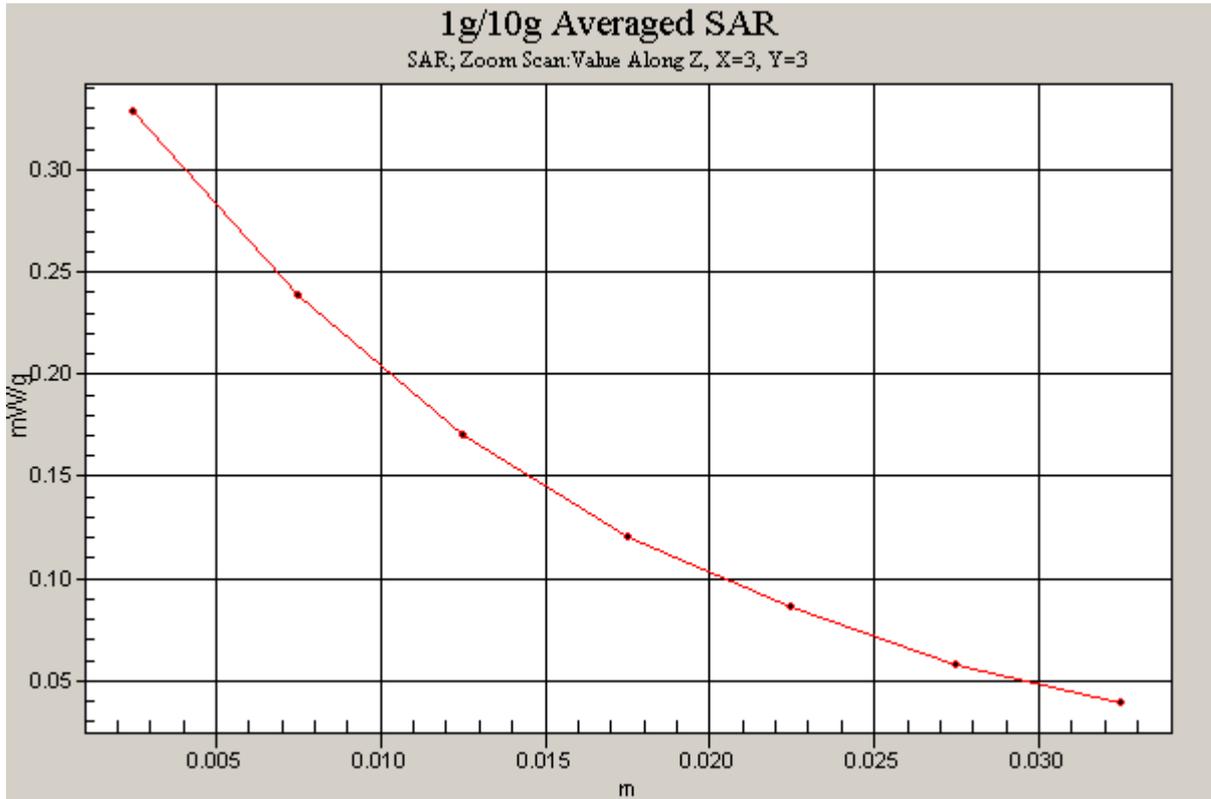
Figure 186 Z-Scan at power reference point (Right Hand Touch Cheek Close GSM 1900 Channel 512)

Date/Time: 12/27/2008 12:45:35 AM

GSM 1900 Right Tilt High Close

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1910 MHz; σ = 1.42 mho/m; ε_r = 40; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 11.9 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 0.335 W/kg

SAR(1 g) = 0.215 mW/g; SAR(10 g) = 0.121 mW/g

Maximum value of SAR (measured) = 0.264 mW/g
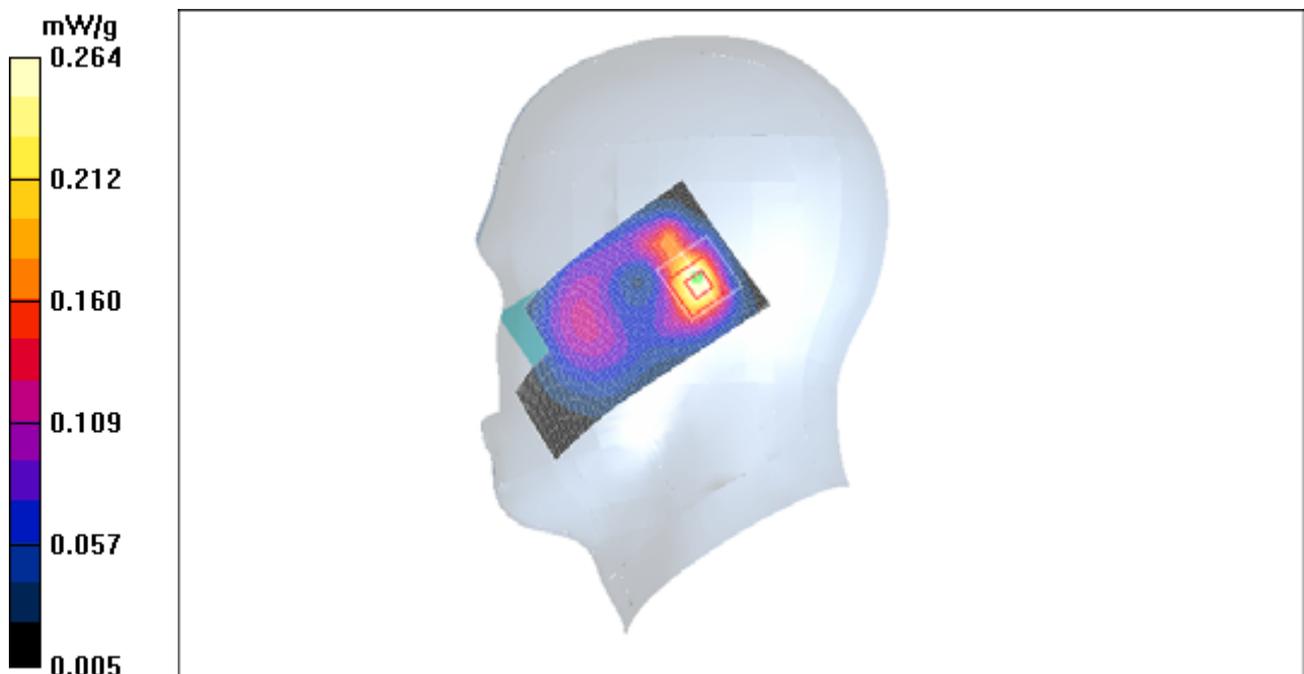
Figure 187 Right Hand Tilt 15°Close GSM 1900 Channel 810

Figure 188 Z-Scan at power reference point (Right Hand Tilt 15°Close GSM 1900 Channel 810)

Date/Time: 12/27/2008 12:27:30 AM

GSM 1900 Right Tilt Middle Close

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.245 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 = 0.074 dB

Peak SAR (extrapolated) = 0.286 W/kg

SAR(1 g) = 0.183 mW/g; SAR(10 g) = 0.104 mW/g

Maximum value of SAR (measured) = 0.225 mW/g
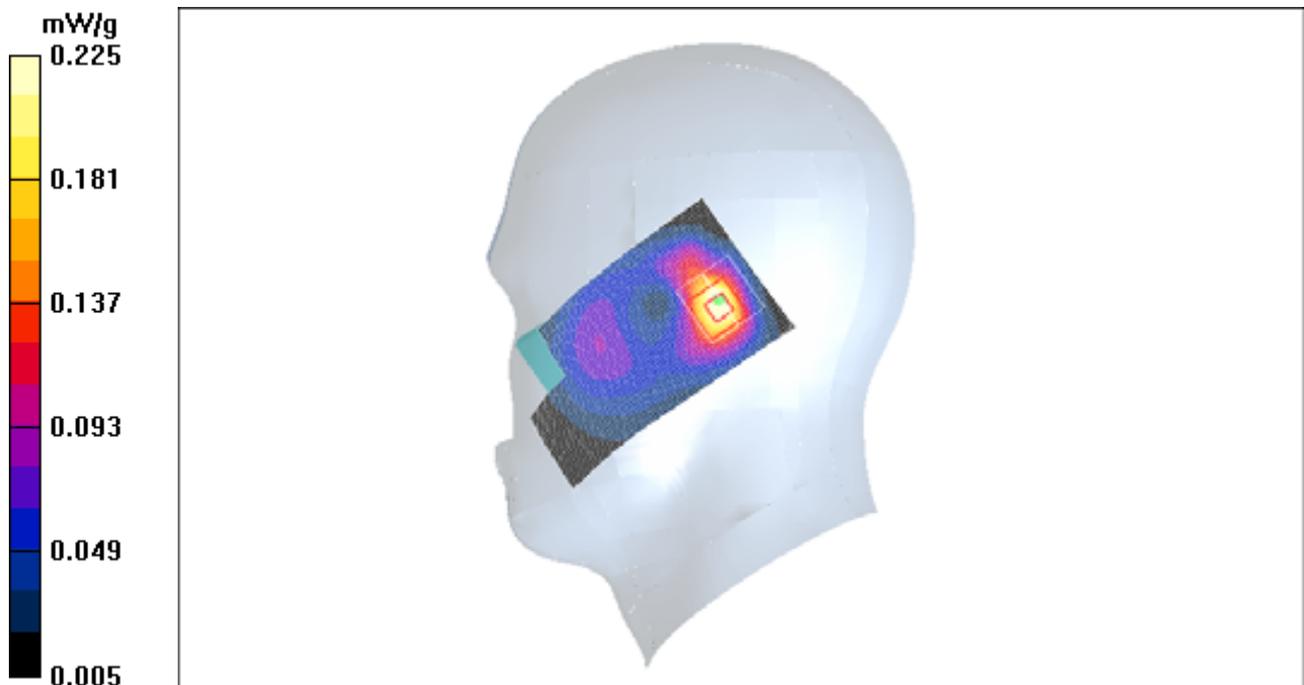
Figure 189 Right Hand Tilt 15°Close GSM 1900 Channel 661
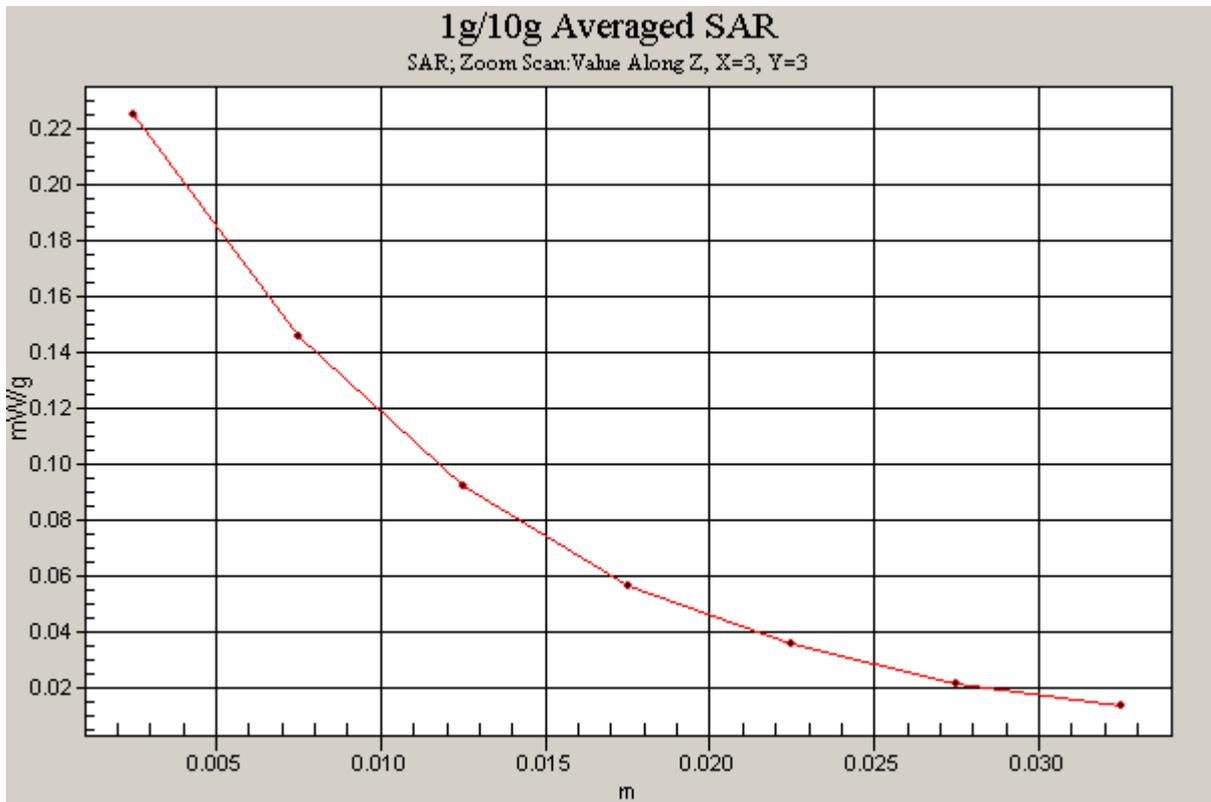
Figure 190 Z-Scan at power reference point (Right Hand Tilt 15°Close GSM 1900 Channel 661)

Date/Time: 12/27/2008 12:09:24 AM

GSM 1900 Right Tilt Low Close

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

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.37 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.208 mW/g

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

Reference Value = 10.3 V/m; Power Drift = 0.093 dB

Peak SAR (extrapolated) = 0.235 W/kg

SAR(1 g) = 0.152 mW/g; SAR(10 g) = 0.087 mW/g

Maximum value of SAR (measured) = 0.191 mW/g
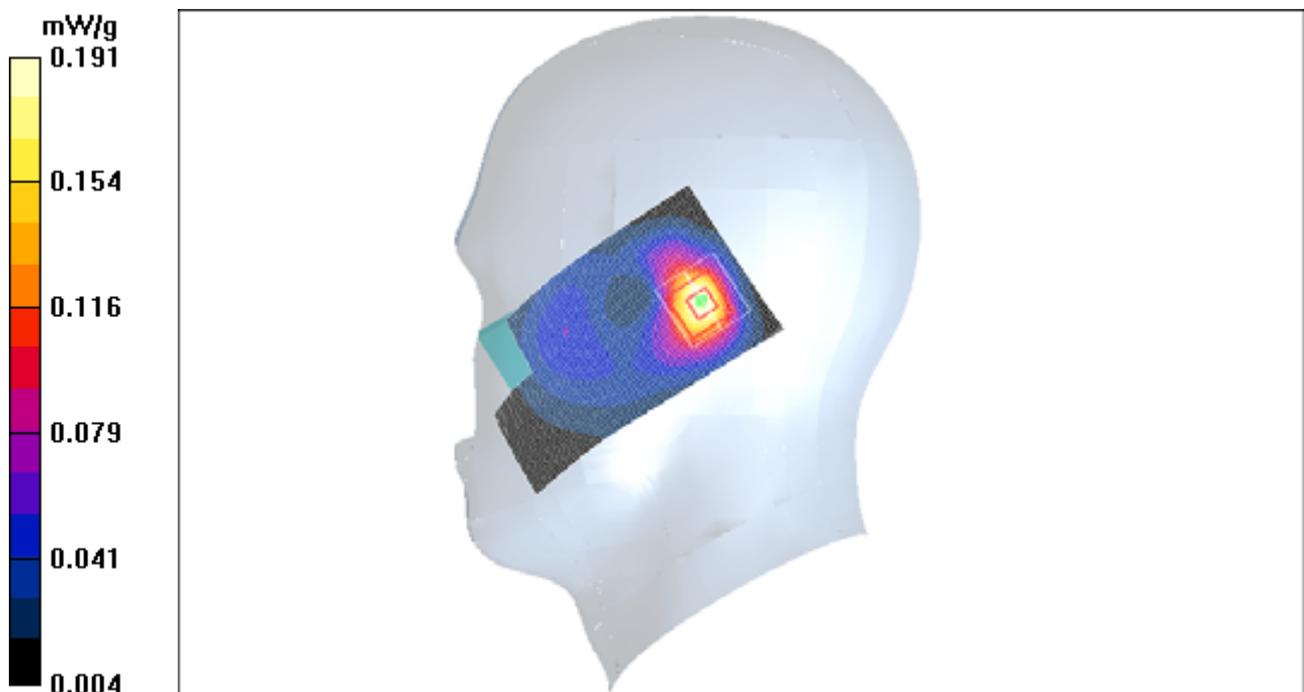
Figure 191 Right Hand Tilt 15°Close GSM 1900 Channel 512
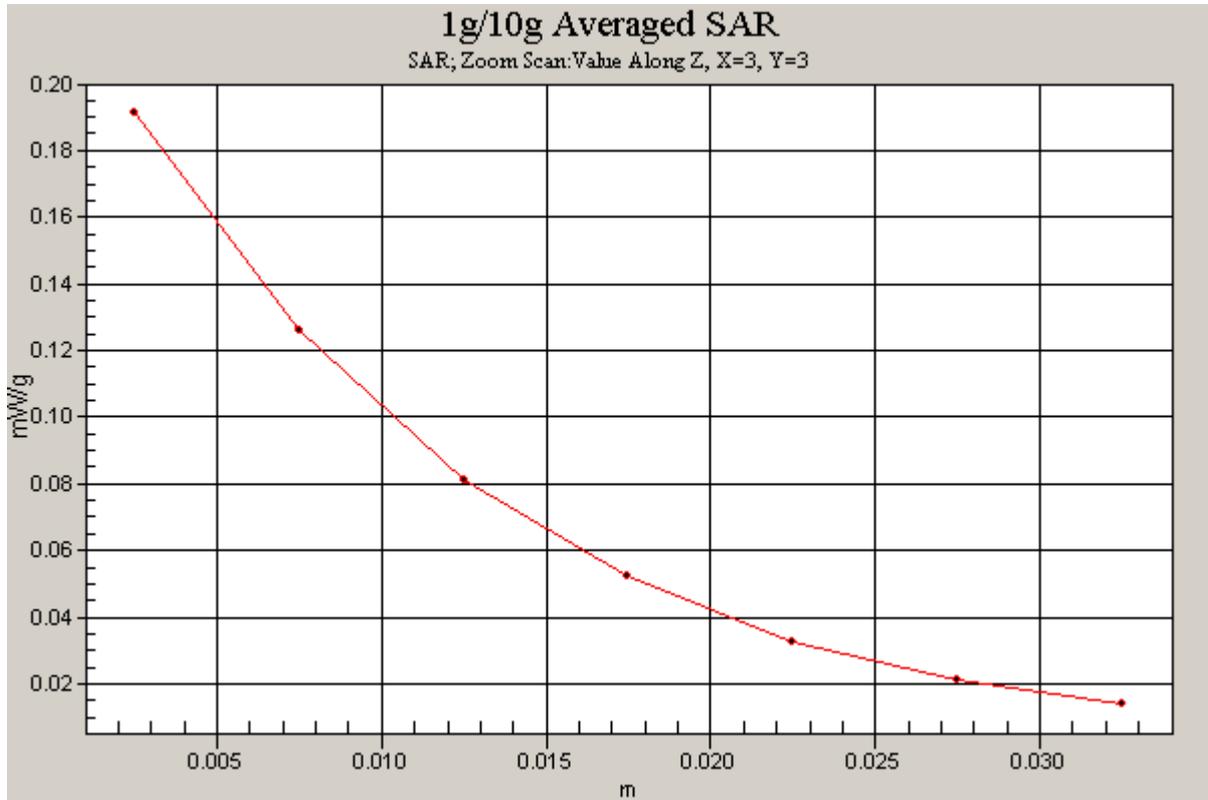
Figure 192 Z-Scan at power reference point (Right Hand Tilt 15°Close GSM 1900 Channel 512)

Date/Time: 12/28/2008 6:07:15 AM

GSM 1900 Towards Ground High Close

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1910 MHz; σ = 1.57 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground High/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.938 mW/g

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

Reference Value = 6.89 V/m; Power Drift = 0.070 dB

Peak SAR (extrapolated) = 1.07 W/kg

SAR(1 g) = 0.658 mW/g; SAR(10 g) = 0.395 mW/g

Maximum value of SAR (measured) = 0.826 mW/g
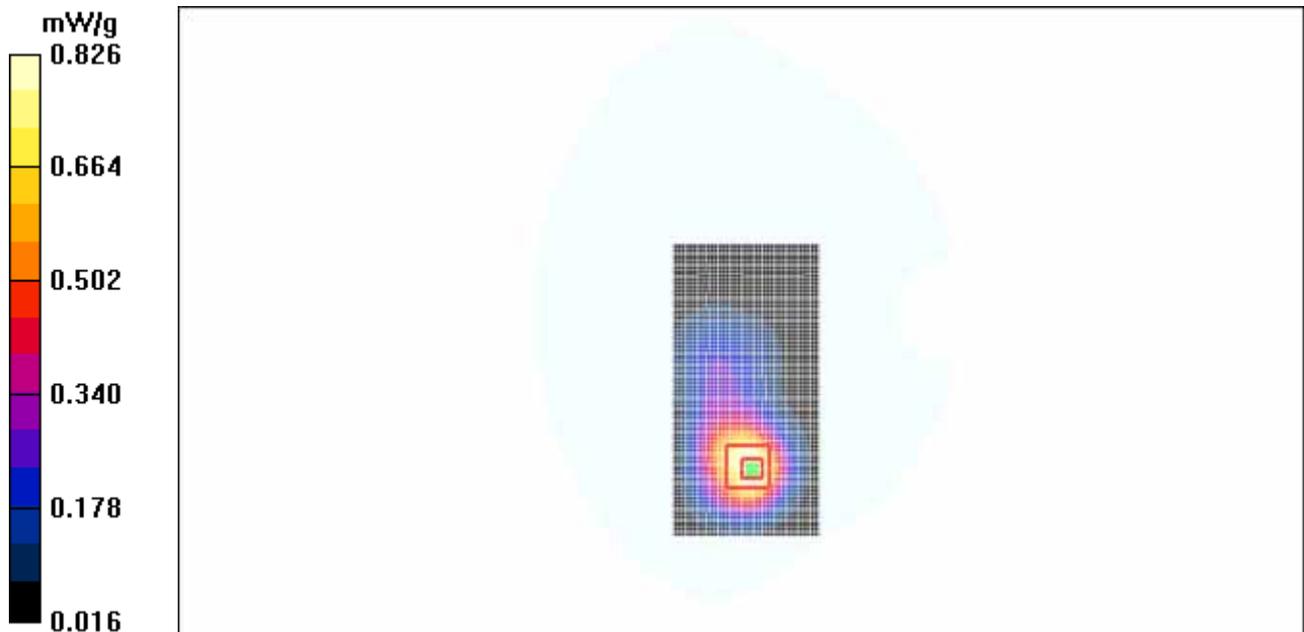
Figure 193 Body, Towards Ground, Close GSM 1900 Channel 810
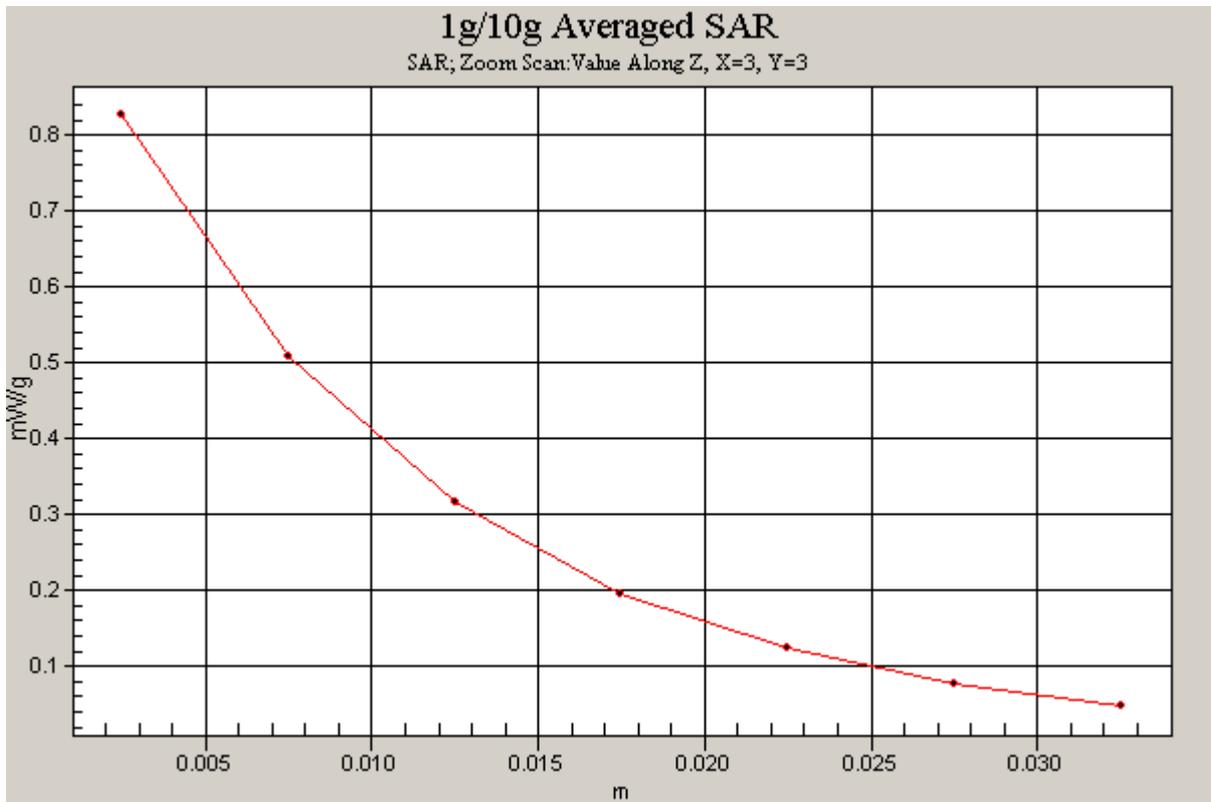
Figure 194 Z-Scan at power reference point (Body, Towards Ground, Close GSM 1900 Channel 810)

Date/Time: 12/28/2008 5:48:04 AM

GSM 1900 Towards Ground Middle Close

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Middle/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.765 mW/g

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

Reference Value = 6.64 V/m; Power Drift = -0.022 dB

Peak SAR (extrapolated) = 0.909 W/kg

SAR(1 g) = 0.553 mW/g; SAR(10 g) = 0.327 mW/g

Maximum value of SAR (measured) = 0.693 mW/g
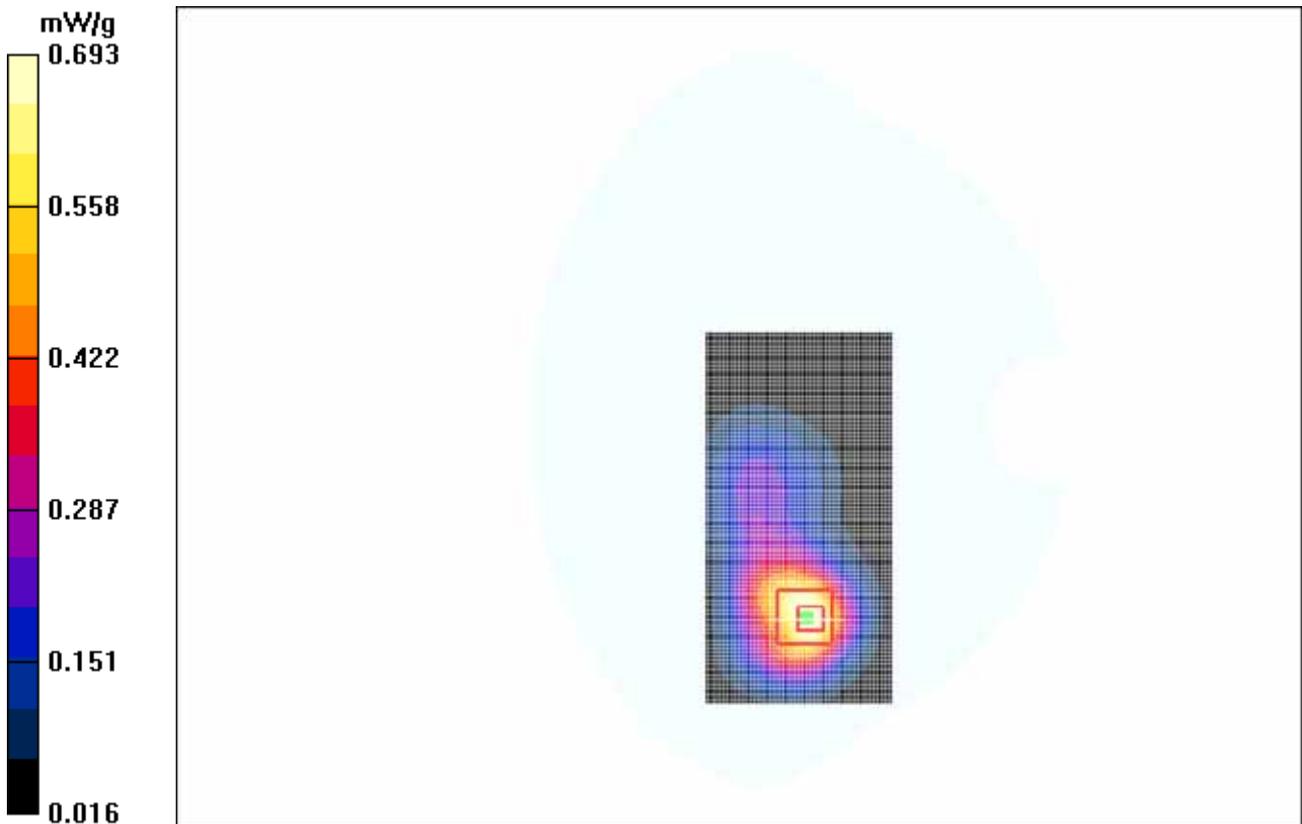
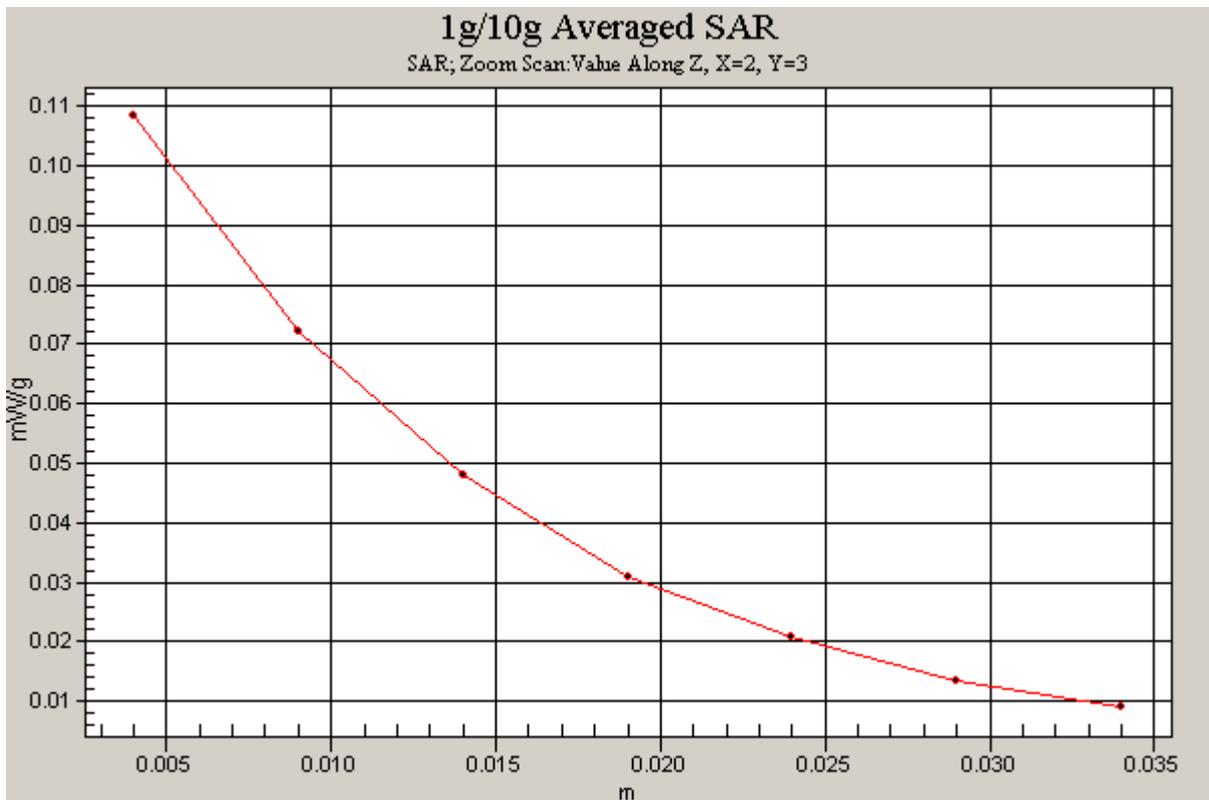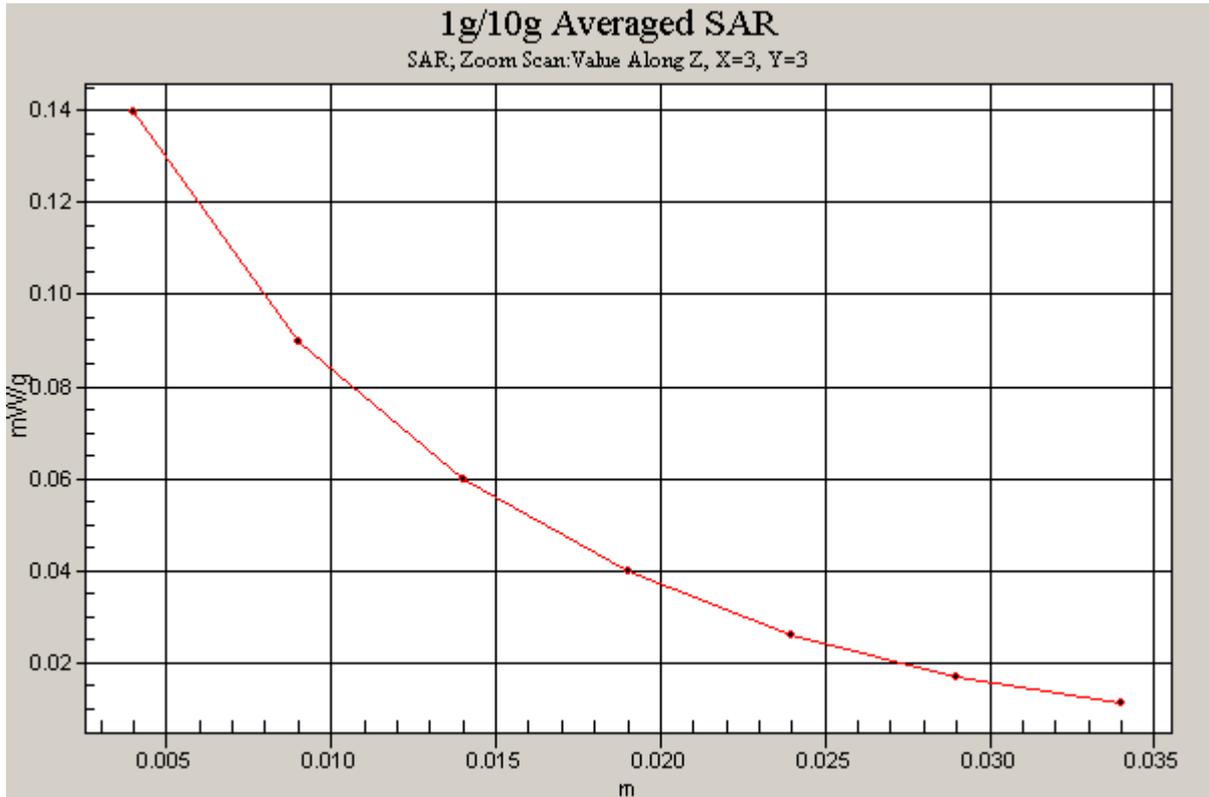
Figure 195 Body, Towards Ground, Close GSM 1900 Channel 661
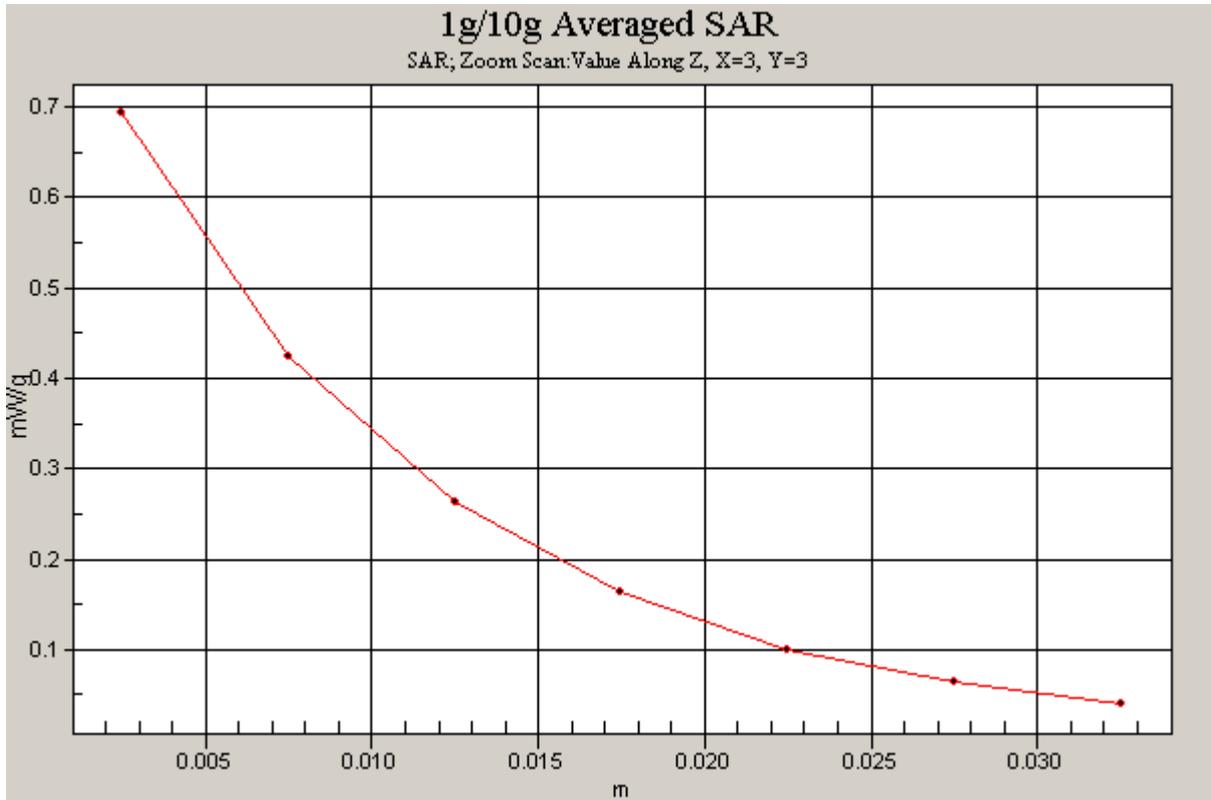
Figure 196 Z-Scan at power reference point (Body, Towards Ground, Close GSM 1900 Channel 661)

Date/Time: 12/28/2008 5:27:58 AM

GSM 1900 Towards Ground Low Close

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

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.51 mho/m; ε_r = 53.3; ρ = 1000 kg/m³

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Low/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.529 mW/g

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

Reference Value = 5.88 V/m; Power Drift = 0.037 dB

Peak SAR (extrapolated) = 0.637 W/kg

SAR(1 g) = 0.384 mW/g; SAR(10 g) = 0.225 mW/g

Maximum value of SAR (measured) = 0.486 mW/g
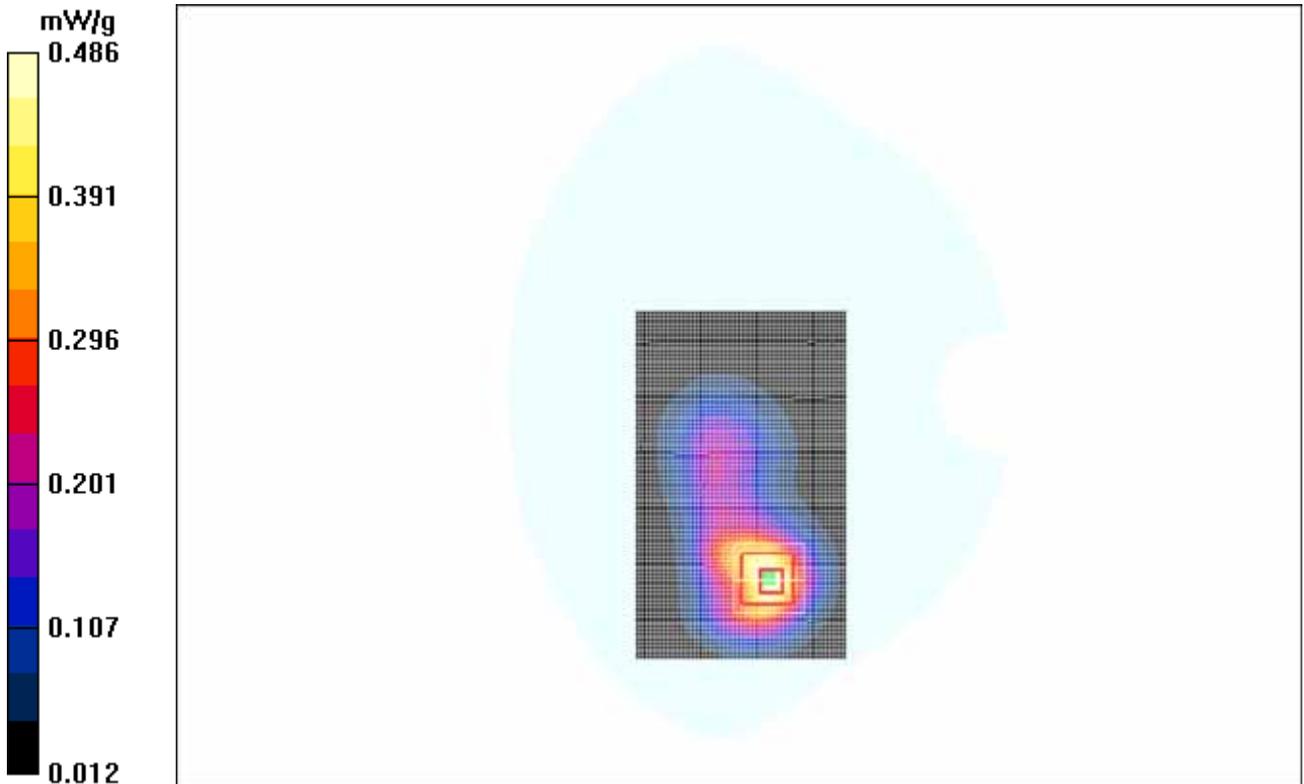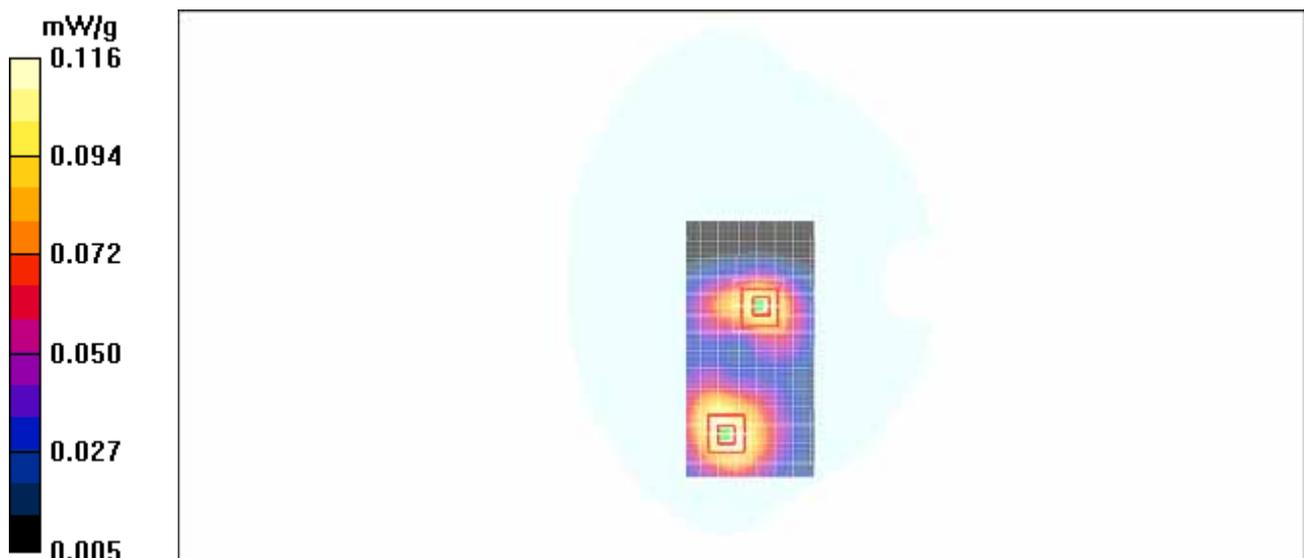

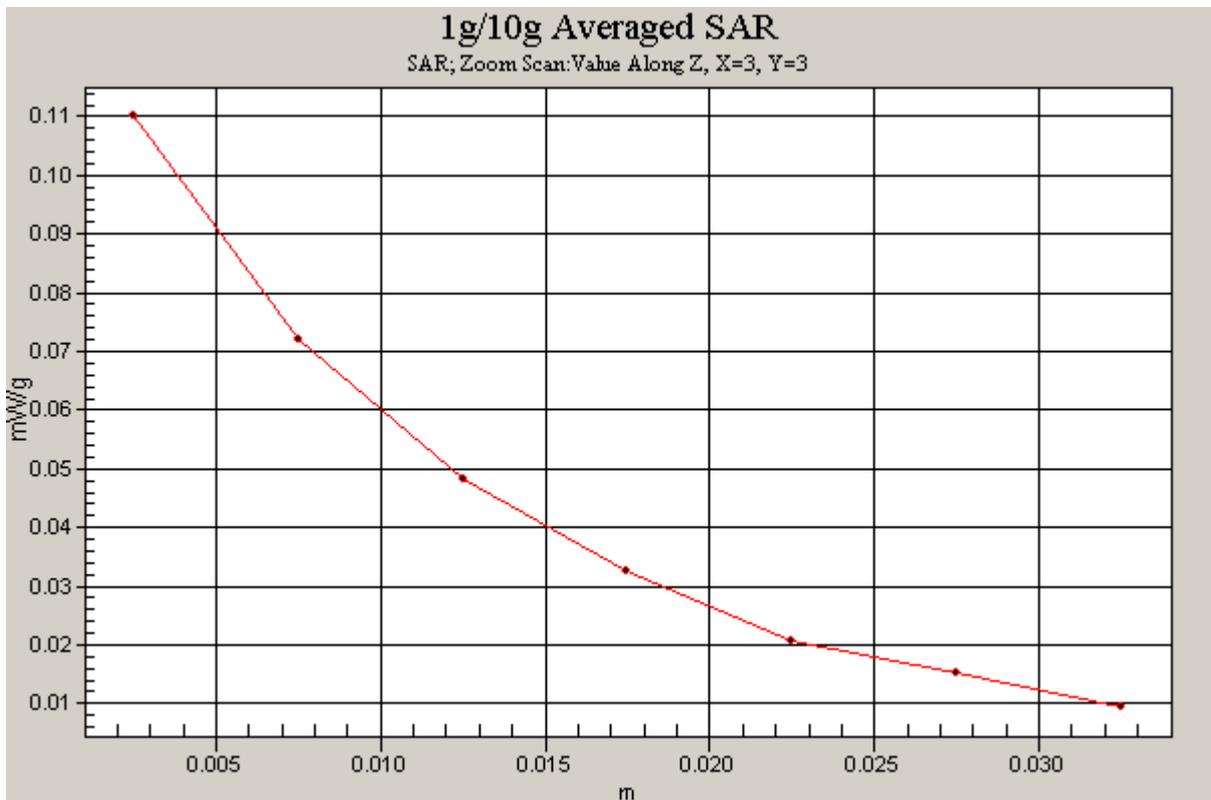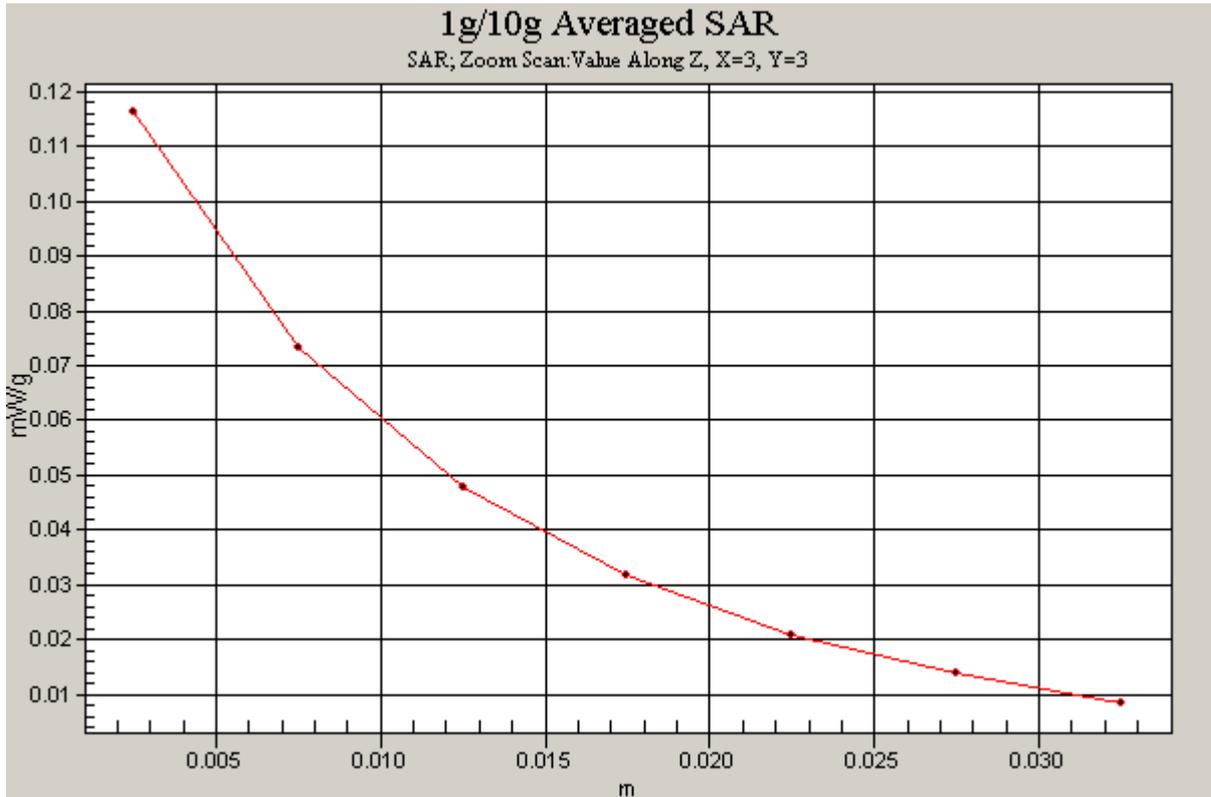Figure 197 Body, Towards Ground, Close GSM 1900 Channel 512
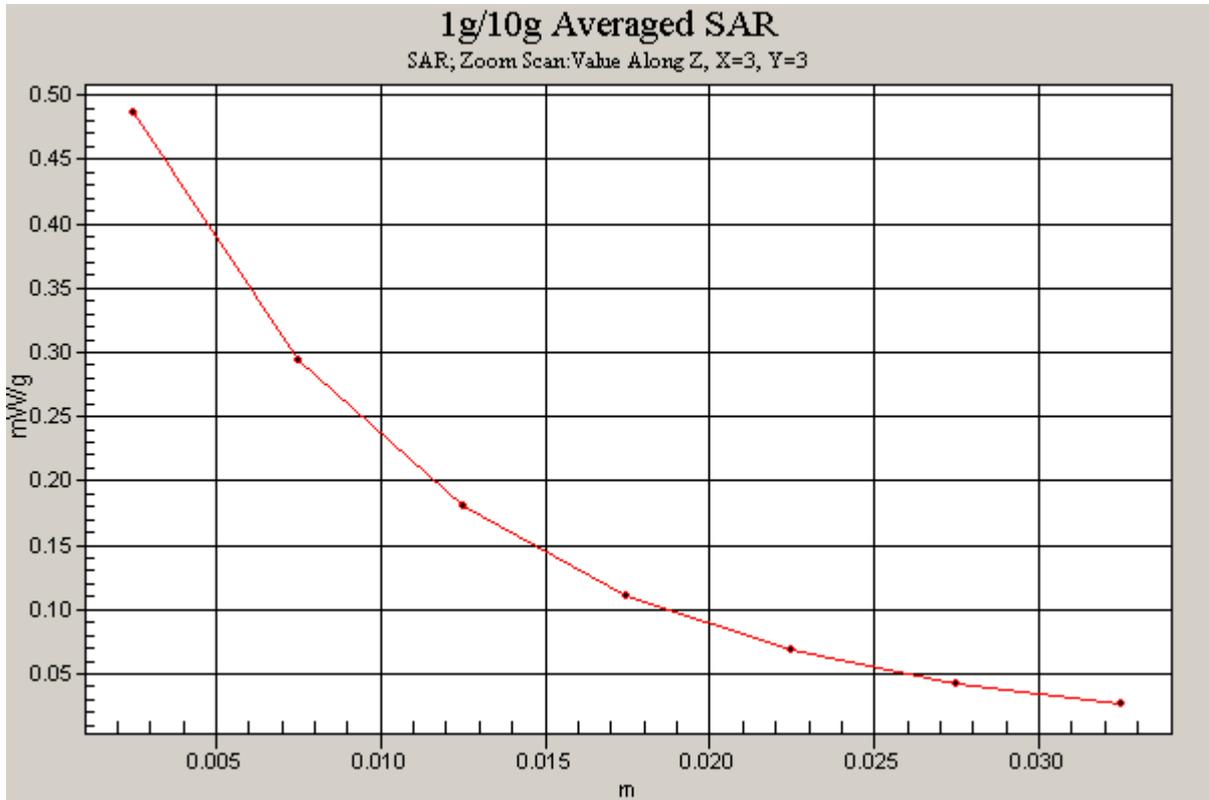
Figure 198 Z-Scan at power reference point (Body, Towards Ground, Close GSM 1900 Channel 512)

Date/Time: 12/28/2008 3:52:00 AM

GSM 1900 Towards Phantom High Close

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1910 MHz; σ = 1.57 mho/m; $ε_r$ = 53.2; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom High/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.187 mW/g

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

Reference Value = 6.85 V/m; Power Drift = -0.087 dB

Peak SAR (extrapolated) = 0.236 W/kg

SAR(1 g) = 0.153 mW/g; SAR(10 g) = 0.098 mW/g

Maximum value of SAR (measured) = 0.186 mW/g

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

Reference Value = 6.85 V/m; Power Drift = -0.087 dB

Peak SAR (extrapolated) = 0.152 W/kg

SAR(1 g) = 0.098 mW/g; SAR(10 g) = 0.060 mW/g
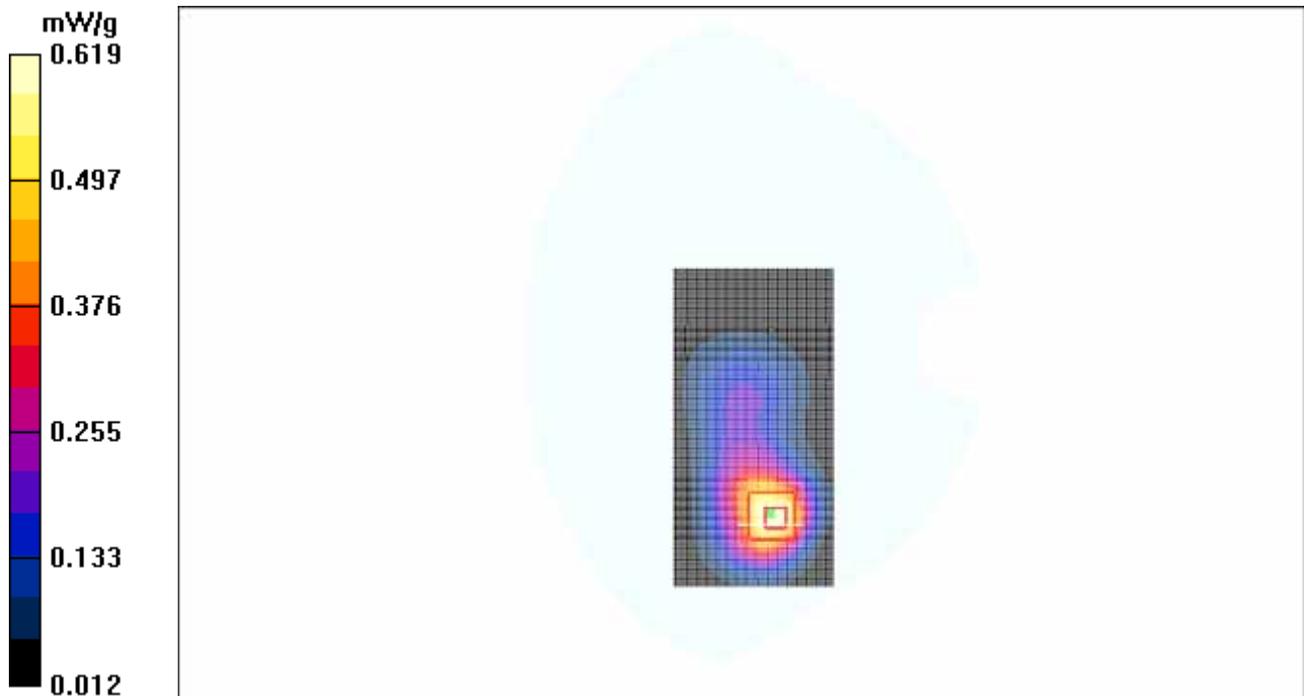
Maximum value of SAR (measured) = 0.120 mW/g
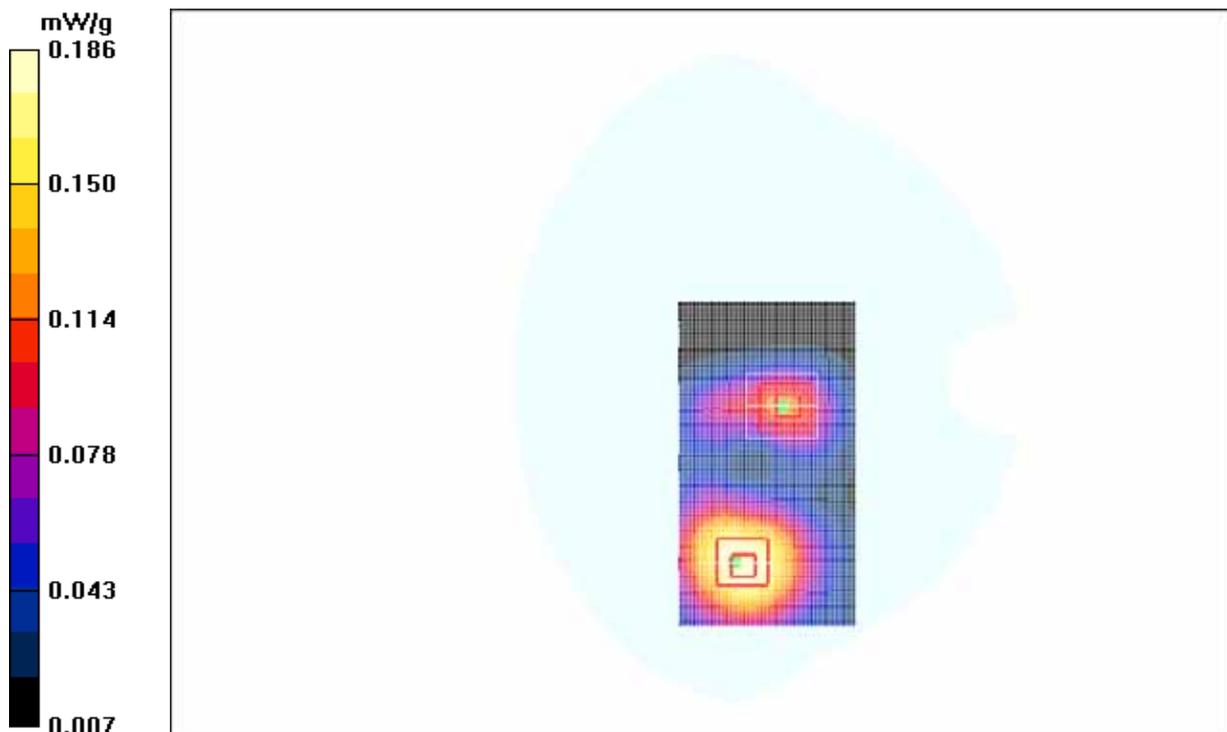
Figure 199 Body, Towards Phantom, Close GSM 1900 Channel 810
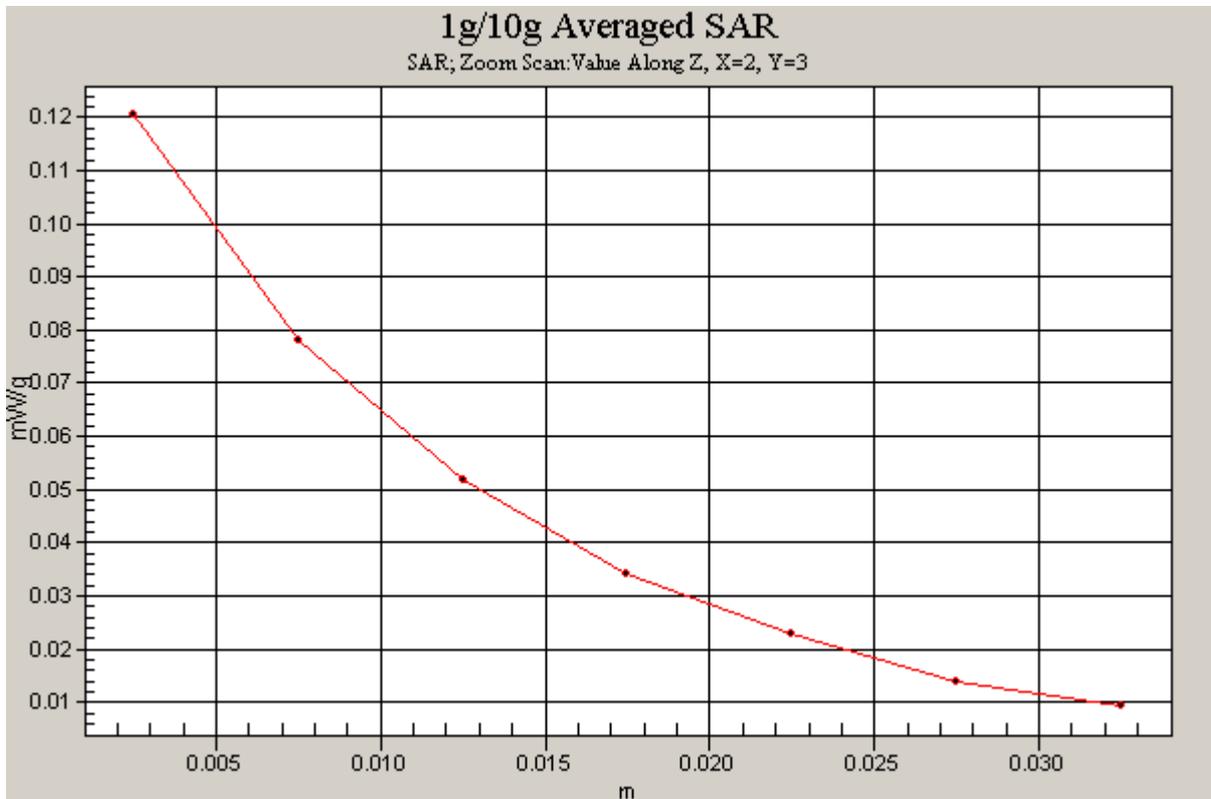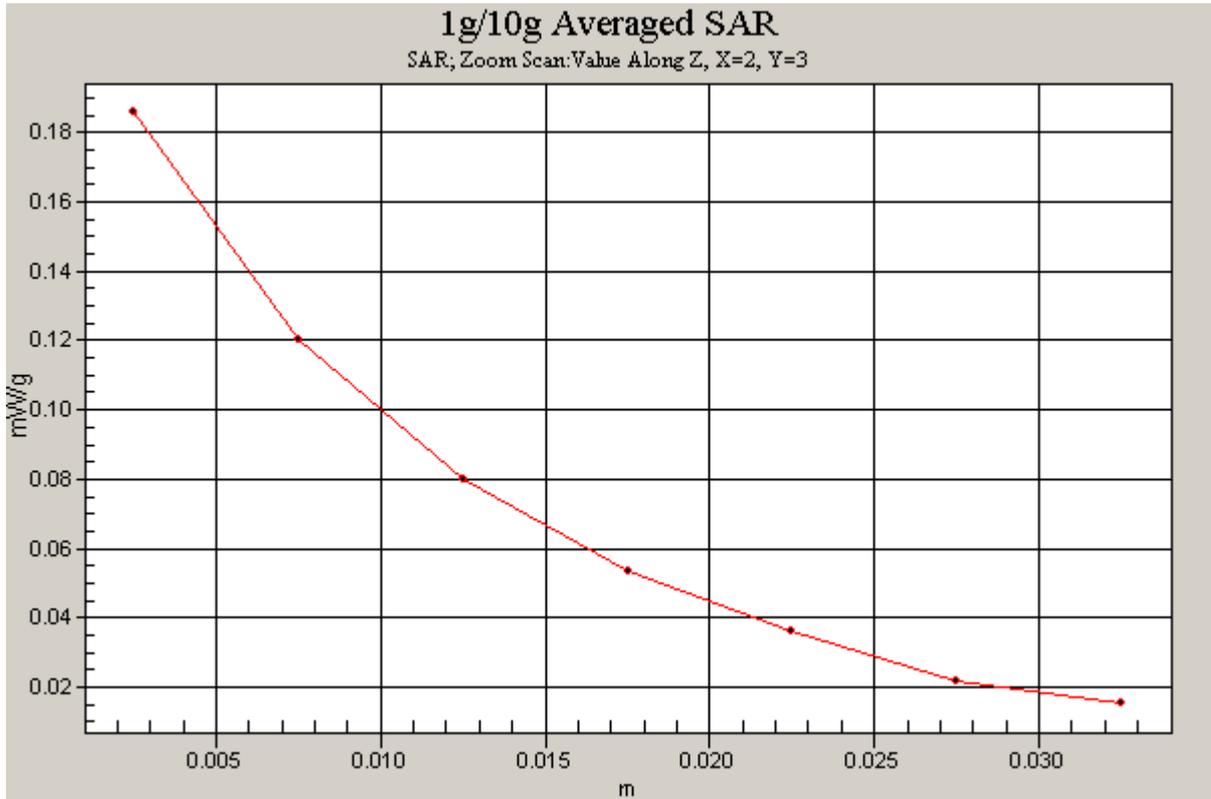
Figure 200 Z-Scan at power reference point (Body, Towards Phantom, Close GSM 1900 Channel 810)

Date/Time: 12/28/2008 4:22:29 AM

GSM 1900 Towards Phantom Middle Close

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; $ε_r$ = 53.3; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom Middle/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.162 mW/g

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

Reference Value = 6.89 V/m; Power Drift = 0.019 dB

Peak SAR (extrapolated) = 0.202 W/kg

SAR(1 g) = 0.130 mW/g; SAR(10 g) = 0.083 mW/g

Maximum value of SAR (measured) = 0.139 mW/g

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

Reference Value = 6.89 V/m; Power Drift = 0.019 dB

Peak SAR (extrapolated) = 0.153 W/kg

SAR(1 g) = 0.101 mW/g; SAR(10 g) = 0.062 mW/g

Maximum value of SAR (measured) = 0.108 mW/g
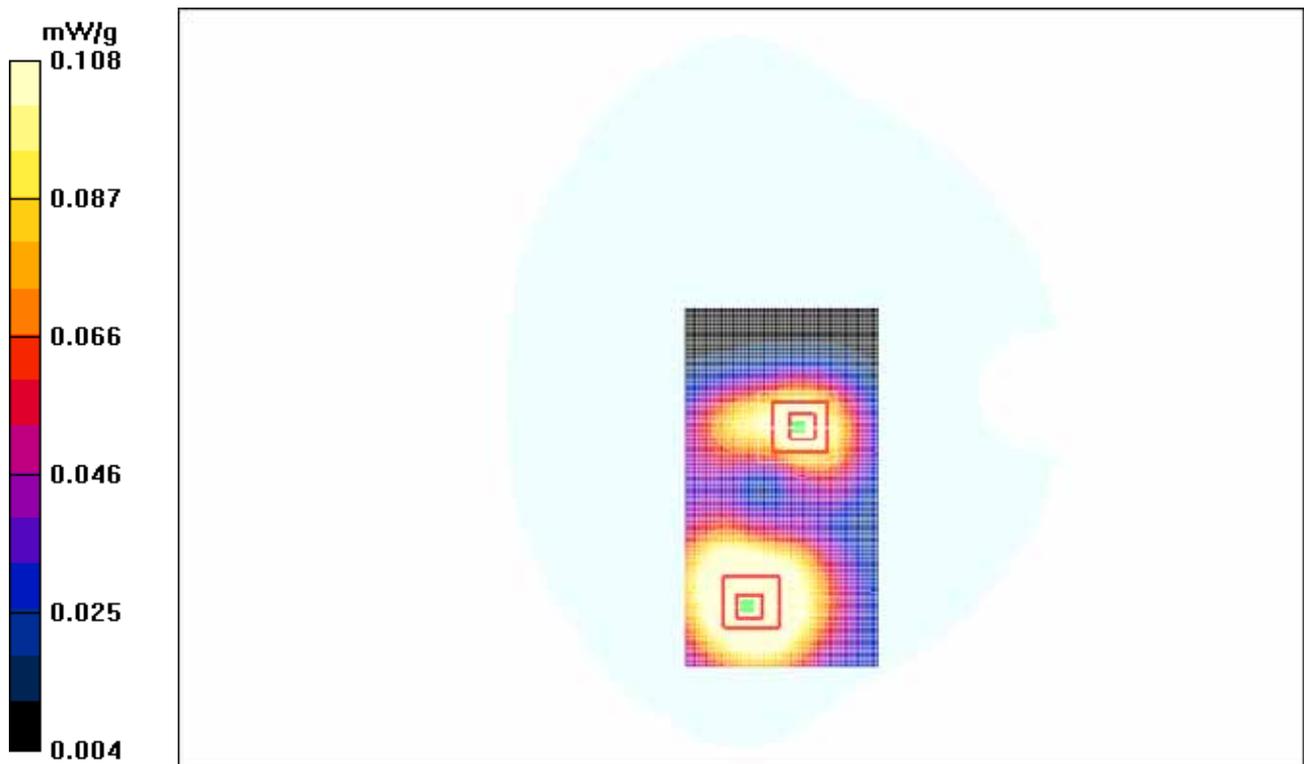
Figure 201 Body, Towards Phantom, Close GSM 1900 Channel 661

Figure 202 Z-Scan at power reference point (Body, Towards Phantom, Close GSM 1900 Channel 661)

Date/Time: 12/28/2008 4:53:03 AM

GSM 1900 Towards Phantom Low Close

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

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.51 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom Low/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.118 mW/g

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

Reference Value = 6.52 V/m; Power Drift = 0.063 dB

Peak SAR (extrapolated) = 0.148 W/kg

SAR(1 g) = 0.095 mW/g; SAR(10 g) = 0.061 mW/g
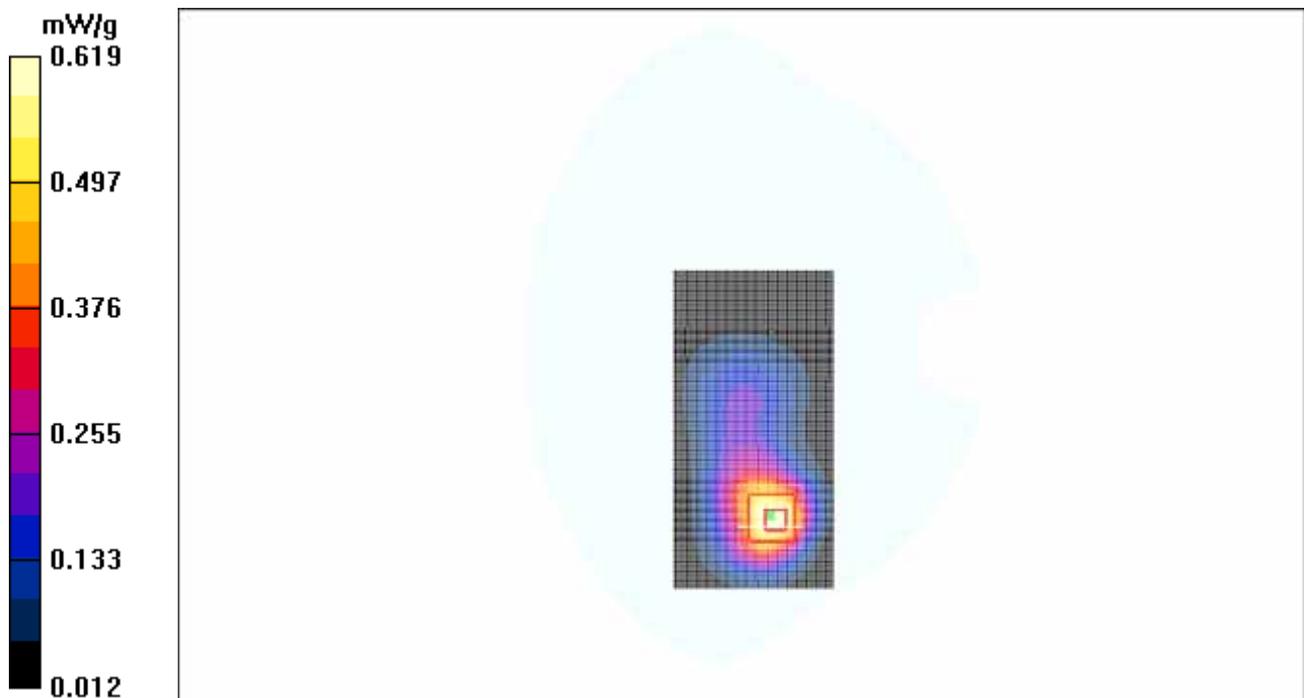
Maximum value of SAR (measured) = 0.116 mW/g

Towards Phantom Low/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.52 V/m; Power Drift = 0.063 dB

Peak SAR (extrapolated) = 0.138 W/kg

SAR(1 g) = 0.089 mW/g; SAR(10 g) = 0.056 mW/g

Maximum value of SAR (measured) = 0.110 mW/g

Figure 203 Body, Towards Phantom, Close GSM 1900 Channel 512

Figure 204 Z-Scan at power reference point (Body, Towards Phantom, Close GSM 1900 Channel 512)

Date/Time: 12/28/2008 5:22:59 PM

GSM 1900 Earphone Towards Ground High Close

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1910 MHz; σ = 1.57 mho/m; ε_r = 53.2; ρ = 1000 kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground High/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.648 mW/g

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

Reference Value = 7.09 V/m; Power Drift = -0.081 dB

Peak SAR (extrapolated) = 0.822 W/kg

SAR(1 g) = 0.492 mW/g; SAR(10 g) = 0.283 mW/g

Maximum value of SAR (measured) = 0.619 mW/g

Figure 205 Body with earphone, Towards Ground, Close GSM 1900, Channel 810
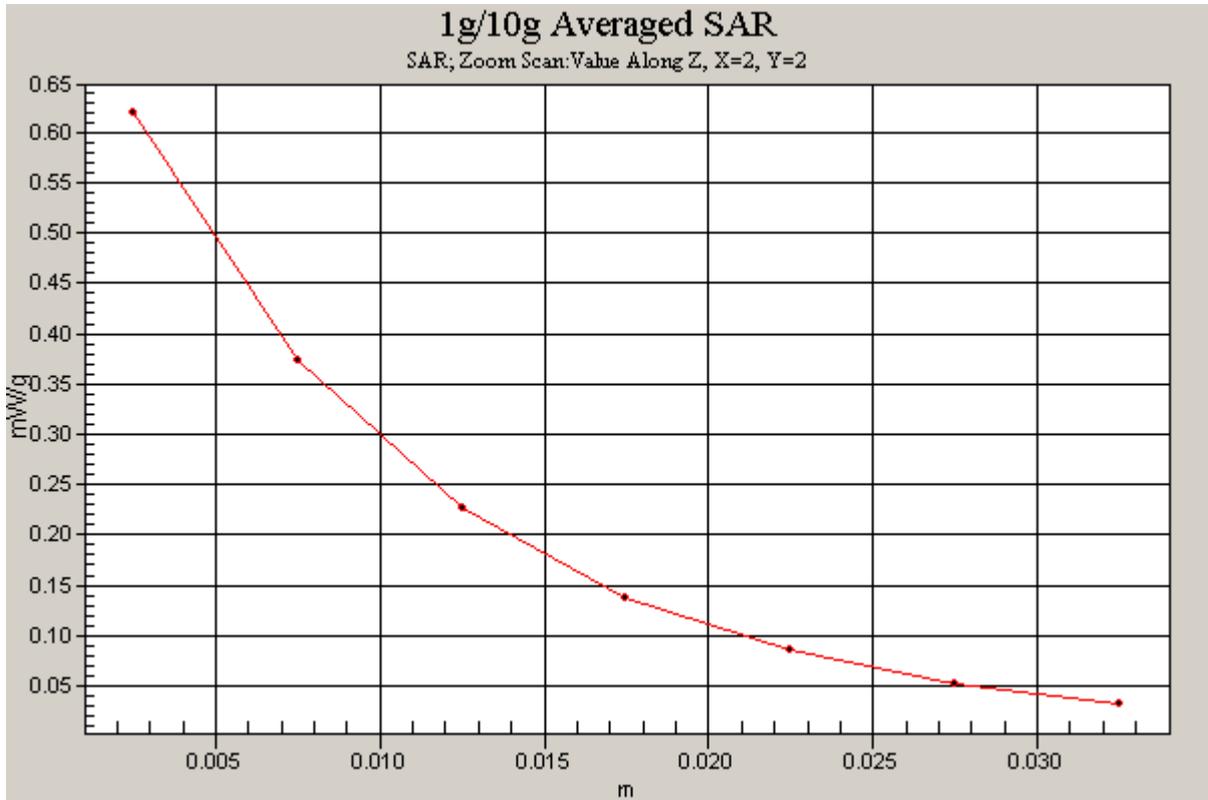
Figure 206 Z-Scan at power reference point (Body with earphone, Towards Ground, Close GSM 1900, Channel 810)

Date/Time: 1/5/2009 12:49:37 PM

GSM 1900 Bluetooth Earphone Towards Ground High Close

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1910 MHz; σ = 1.57 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground High/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 7.08 V/m; Power Drift = -0.086 dB

Peak SAR (extrapolated) = 0.791 W/kg

SAR(1 g) = 0.503 mW/g; SAR(10 g) = 0.308 mW/g

Maximum value of SAR (measured) = 0.618 mW/g
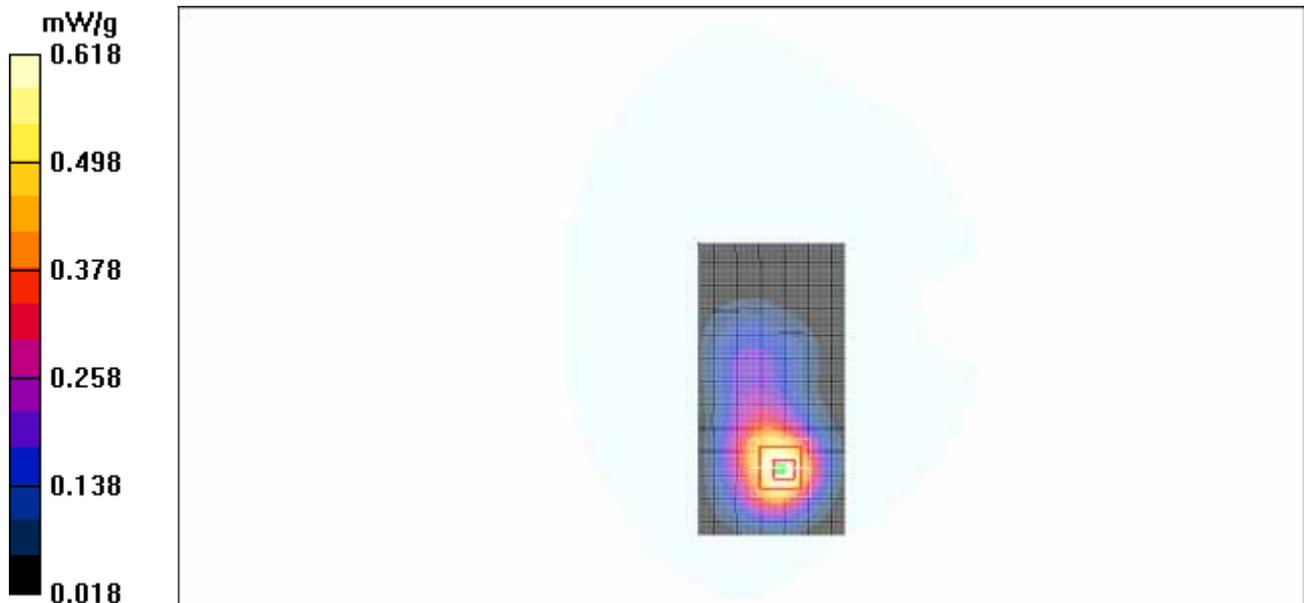
Figure 207 Body with Bluetooth earphone, Towards Ground, Close GSM 1900, Channel 810
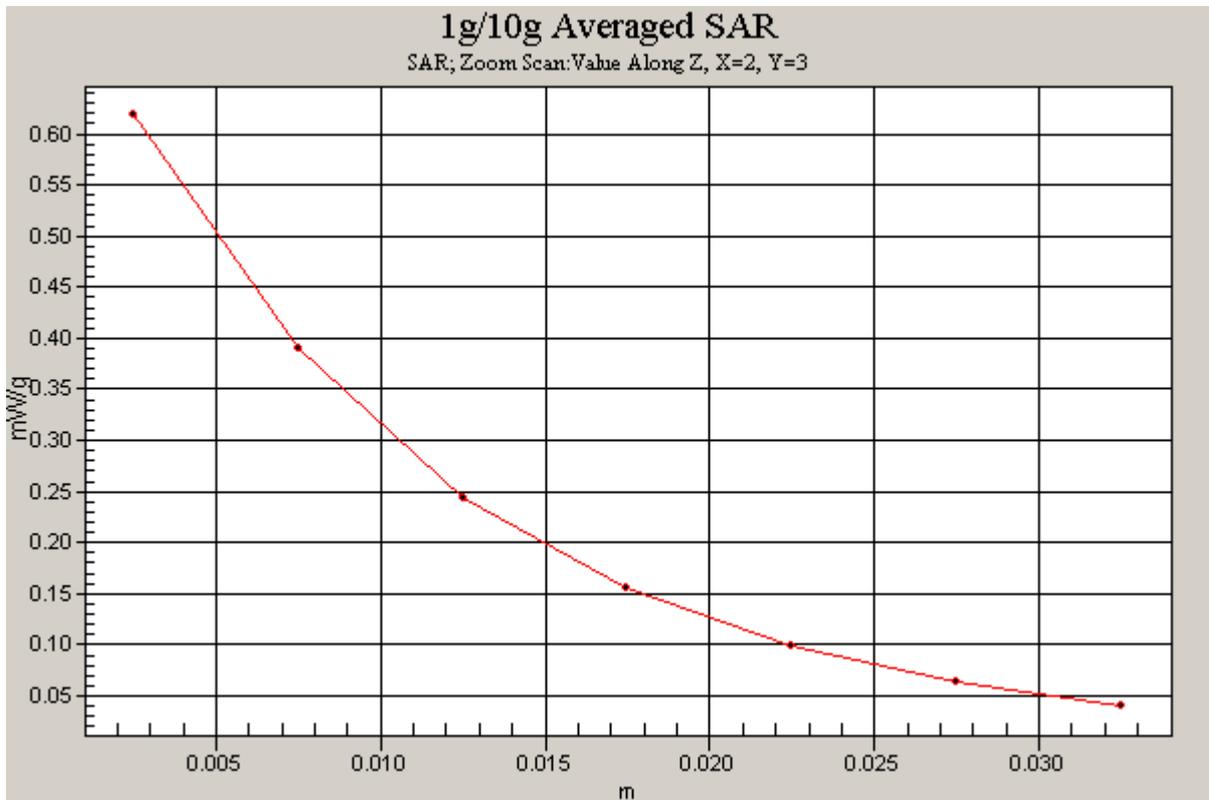
Figure 208 Z-Scan at power reference point (Body with Bluetooth earphone, Towards Ground, Close GSM 1900, Channel 810)

Date/Time: 12/28/2008 5:22:59 PM

GSM 1900 GPRS Towards Ground High Close

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1910 MHz; σ = 1.57 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground High/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.648 mW/g

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

Reference Value = 7.09 V/m; Power Drift = -0.081 dB

Peak SAR (extrapolated) = 0.822 W/kg

SAR(1 g) = 0.492 mW/g; SAR(10 g) = 0.283 mW/g

Maximum value of SAR (measured) = 0.619 mW/g

Figure 209 Body, Towards Ground, Close GSM 1900 GPRS, Channel 810
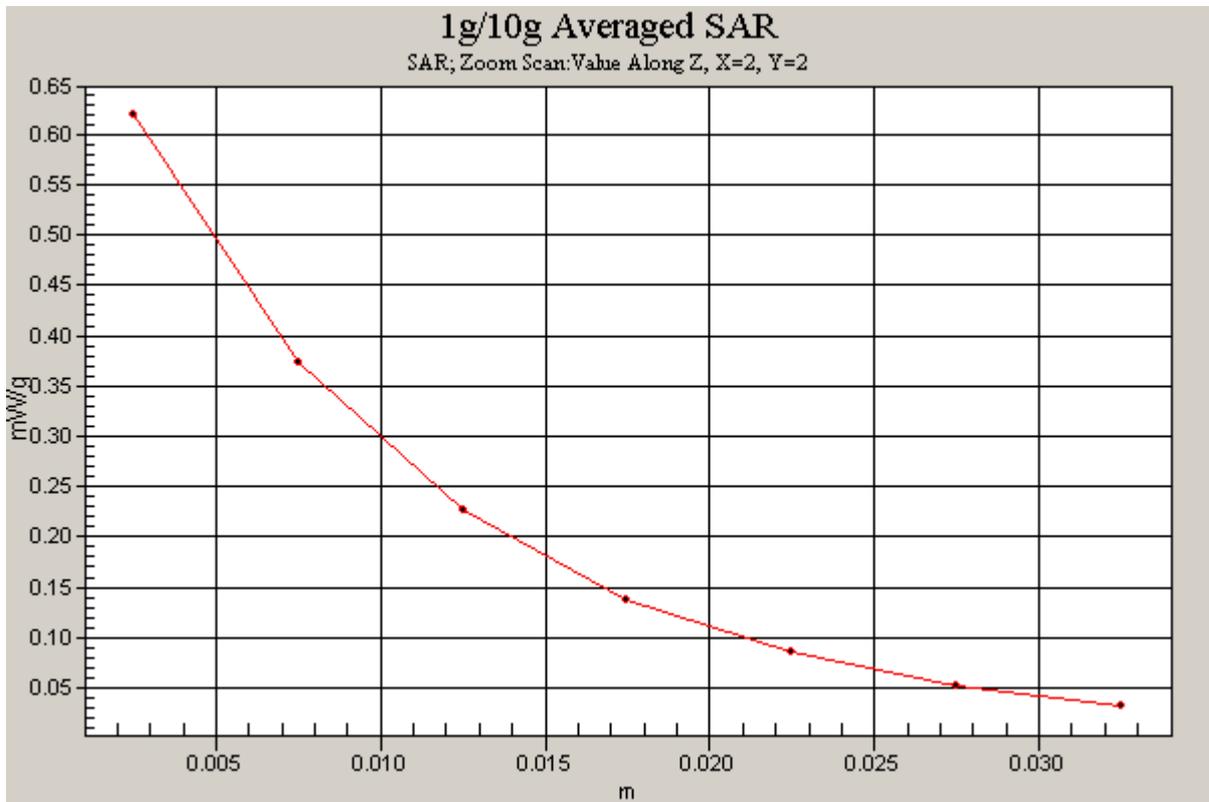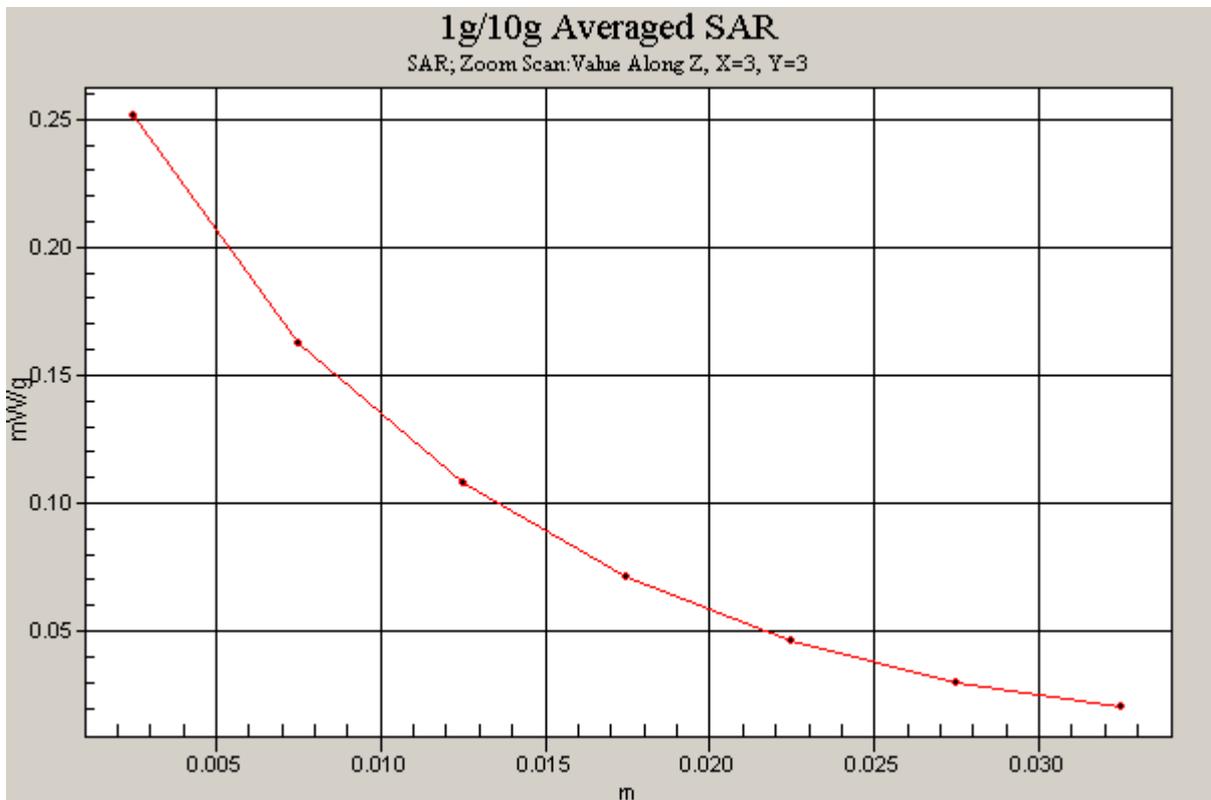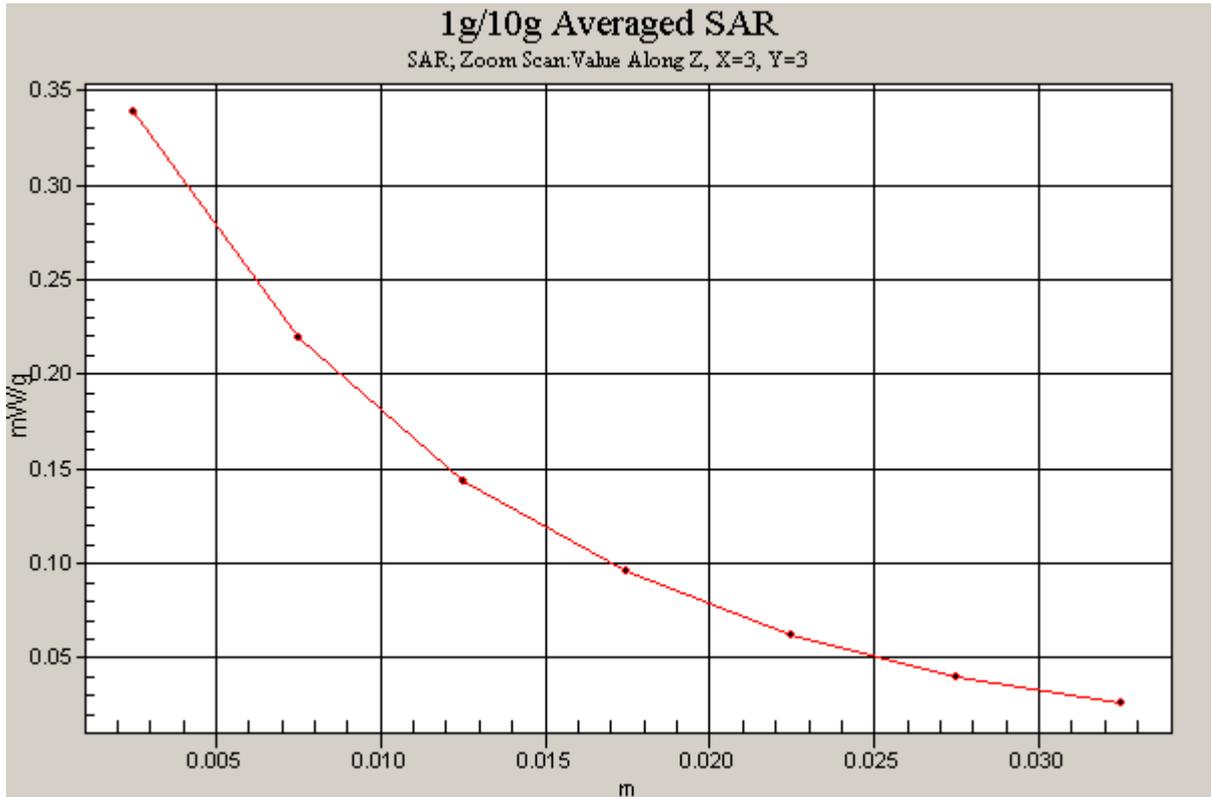
Figure 210 Z-Scan at power reference point (Body, Towards Ground, Close GSM 1900 GPRS, Channel 810)

Date/Time: 12/28/2008 2:39:42 PM

GSM 1900 GPRS Towards Ground Middle Close

Communication System: GSM 1900+GPRS(2Up); Frequency: 1880 MHz;Duty Cycle: 1:4

Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Middle/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.35 mW/g

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

Reference Value = 9.53 V/m; Power Drift = -0.006 dB

Peak SAR (extrapolated) = 1.66 W/kg

SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.594 mW/g
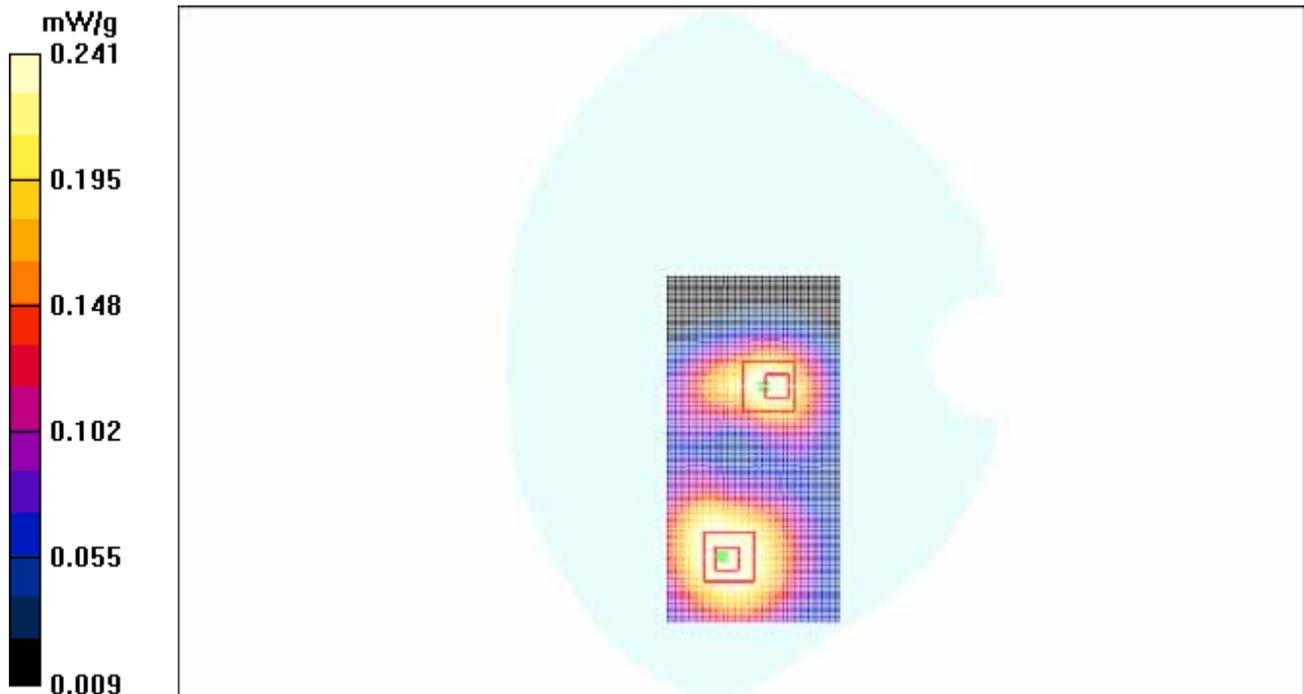
Maximum value of SAR (measured) = 1.27 mW/g
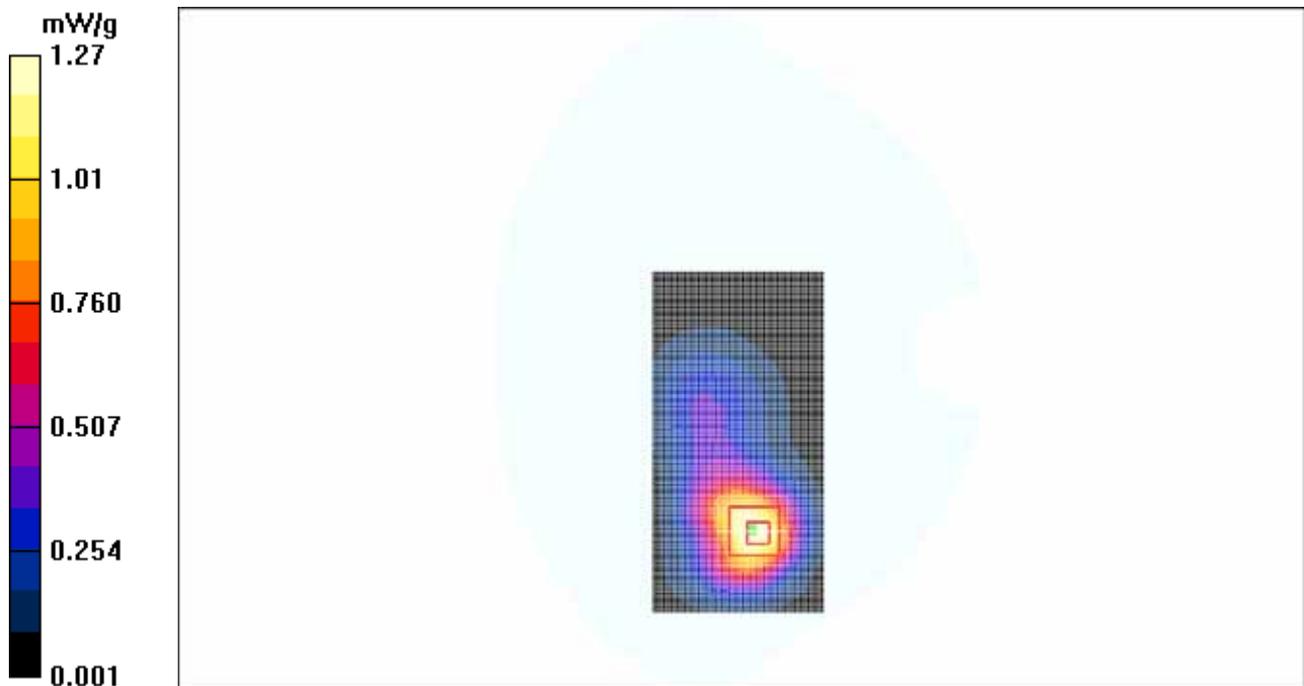
Figure 211 Body, Towards Ground, Close GSM 1900 GPRS Channel 661
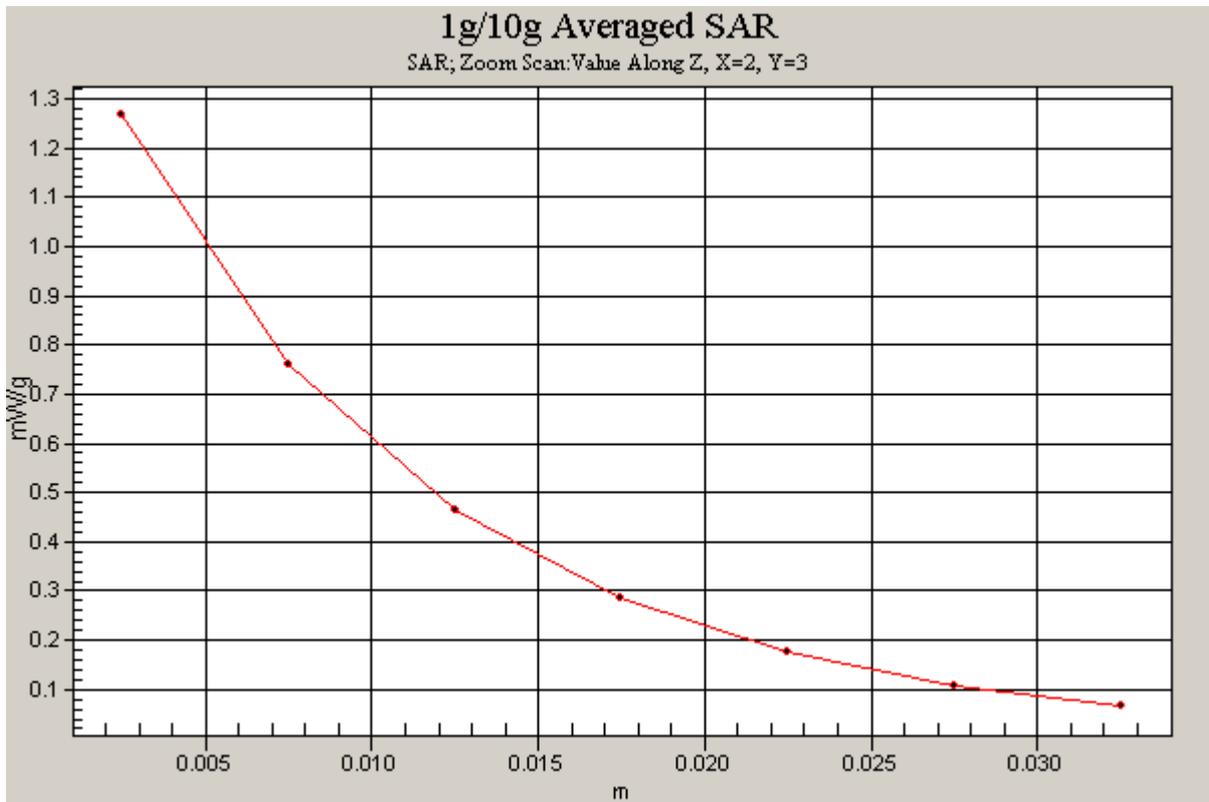
Figure 212 Z-Scan at power reference point (Body, Towards Ground, Close GSM 1900 GPRS Channel 661)

Date/Time: 12/28/2008 2:58:24 PM

GSM 1900 GPRS Towards Ground Low Close

Communication System: GSM 1900+GPRS(2Up); Frequency: 1850.2 MHz;Duty Cycle: 1:4

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.51 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Low/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.943 mW/g

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

Reference Value = 8.64 V/m; Power Drift = 0.071 dB

Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.715 mW/g; SAR(10 g) = 0.415 mW/g

Maximum value of SAR (measured) = 0.901 mW/g
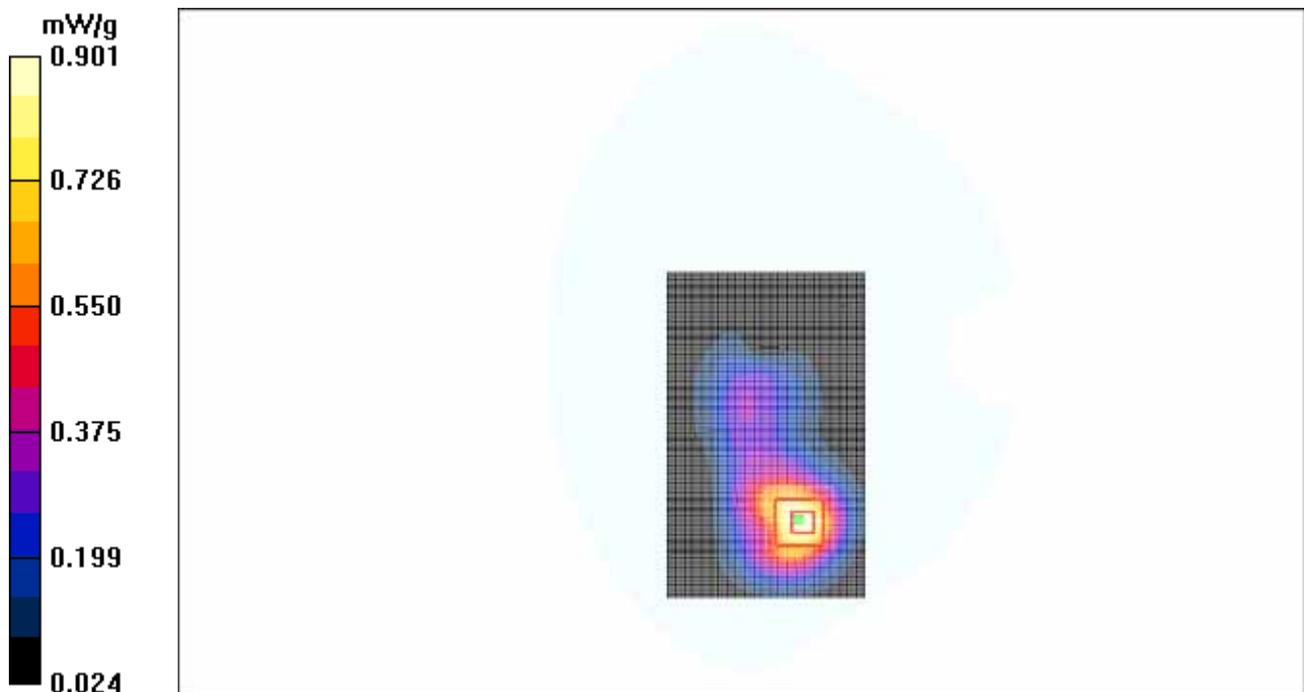
Figure 213 Body, Towards Ground, Close GSM 1900 GPRS Channel 512
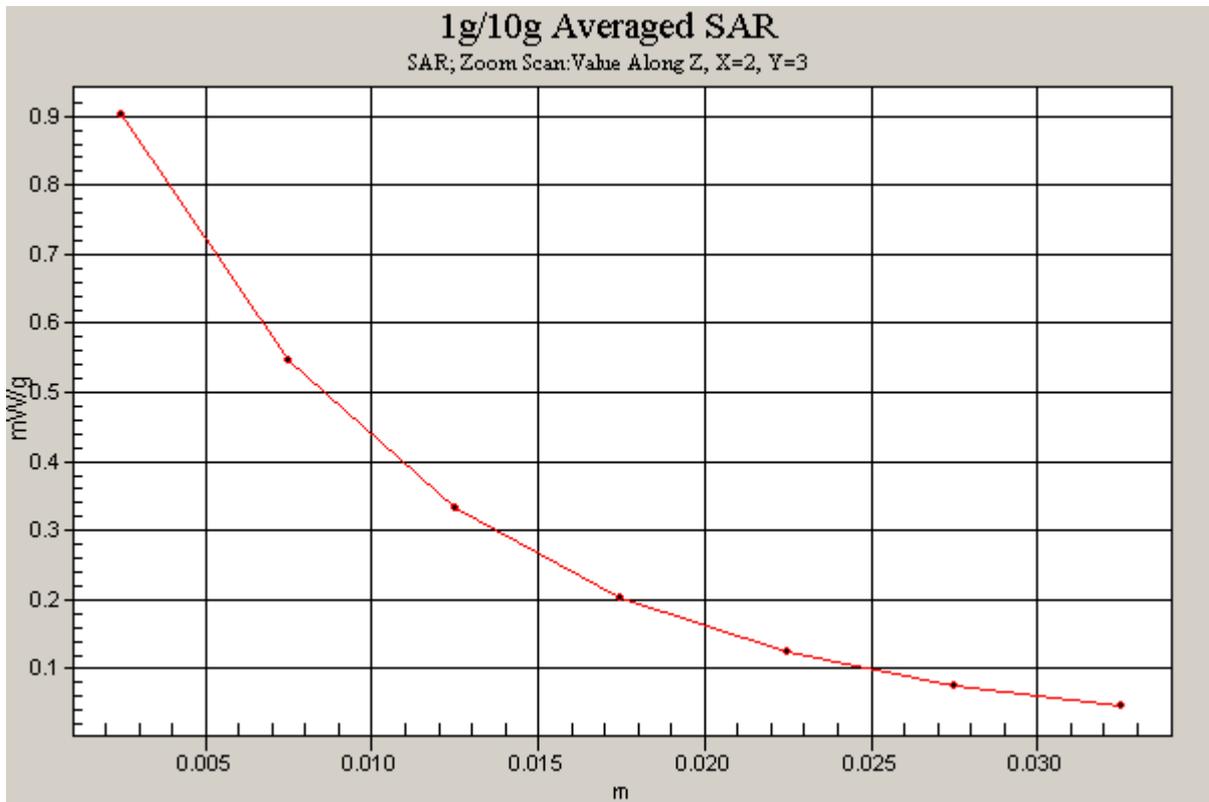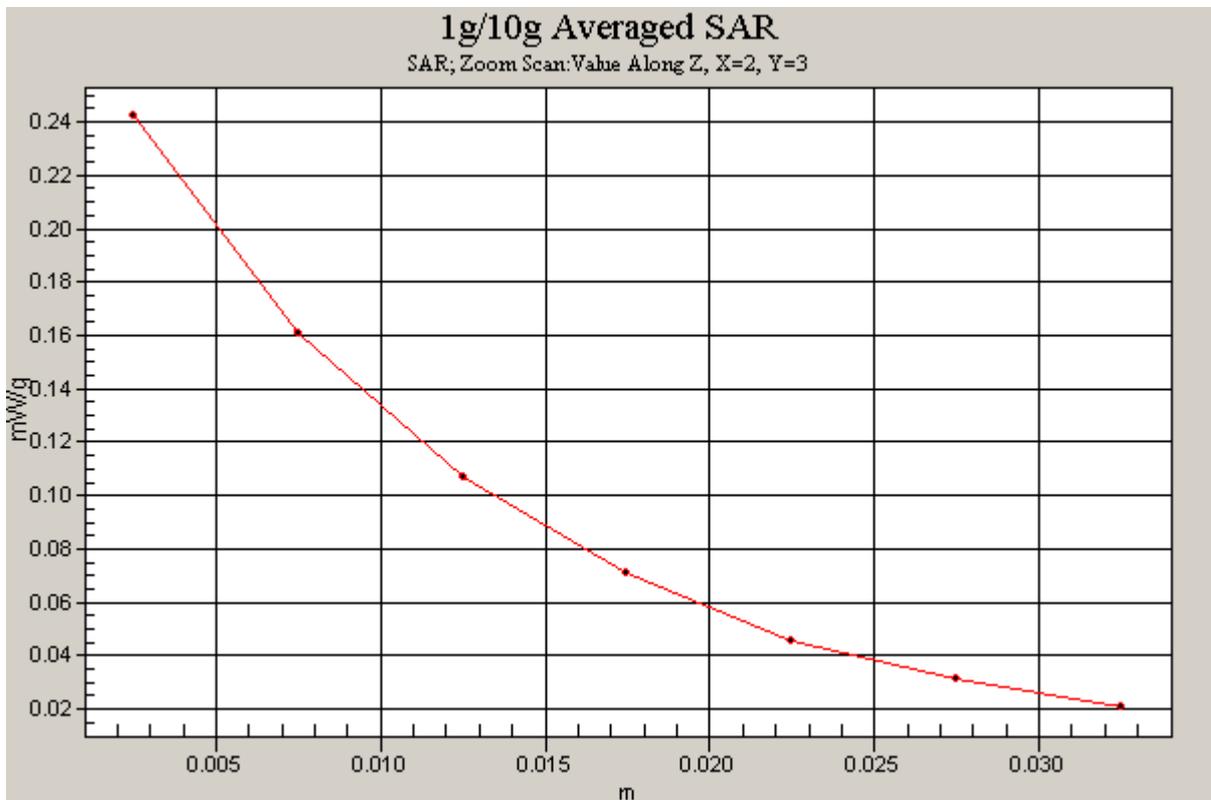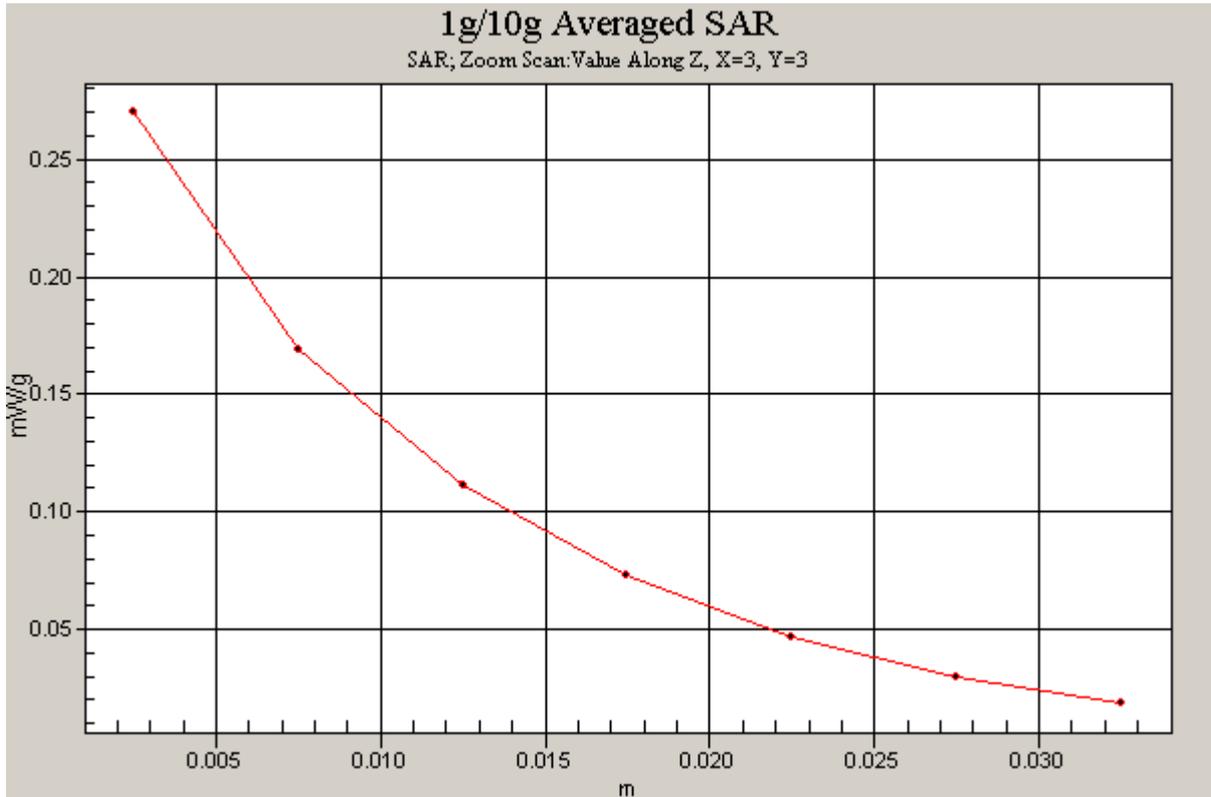
Figure 214 Z-Scan at power reference point (Body, Towards Ground, Close GSM 1900 GPRS Channel 512)

Date/Time: 12/28/2008 4:22:29 PM

GSM 1900 GPRS Towards Phantom High Close

Communication System: GSM 1900+GPRS(2Up); Frequency: 1909.8 MHz;Duty Cycle: 1:4

Medium parameters used: f = 1910 MHz; σ = 1.57 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom High/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.341 mW/g

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

Reference Value = 10.2 V/m; Power Drift = -0.026 dB

Peak SAR (extrapolated) = 0.422 W/kg

SAR(1 g) = 0.277 mW/g; SAR(10 g) = 0.178 mW/g

Maximum value of SAR (measured) = 0.338 mW/g

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

Reference Value = 10.2 V/m; Power Drift = -0.026 dB

Peak SAR (extrapolated) = 0.319 W/kg

SAR(1 g) = 0.204 mW/g; SAR(10 g) = 0.125 mW/g

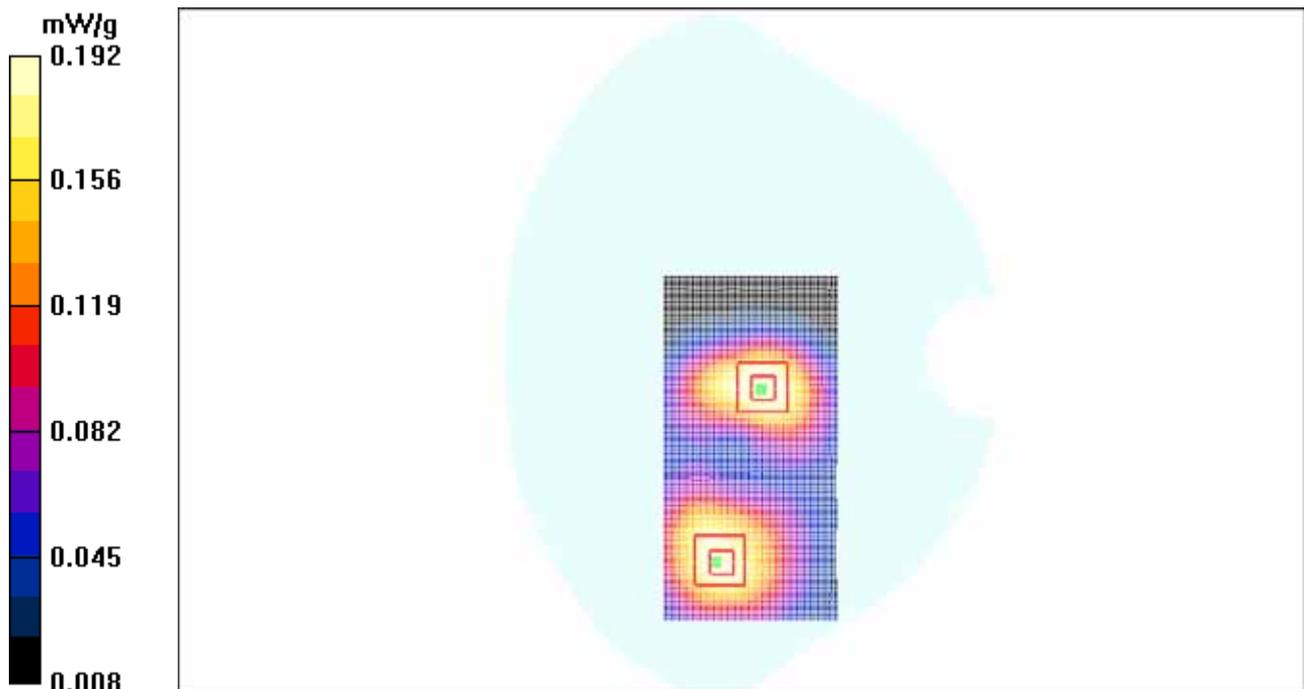Maximum value of SAR (measured) = 0.251 mW/g
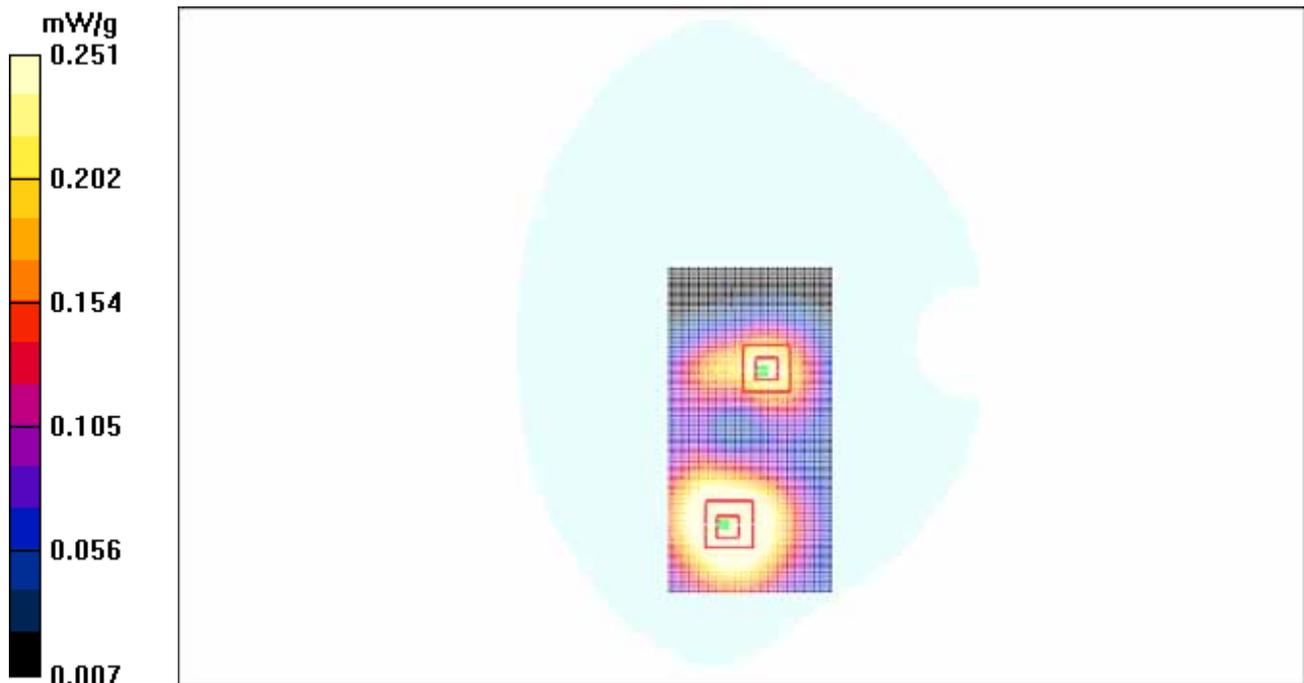
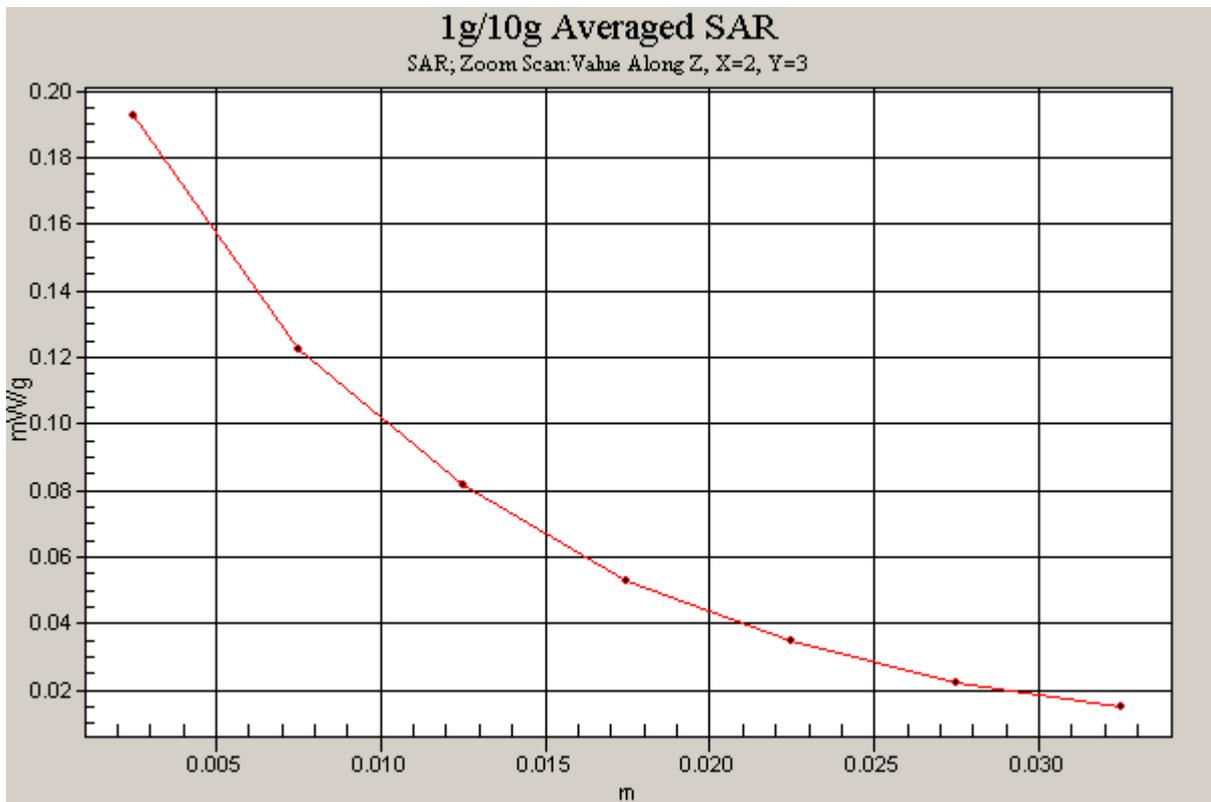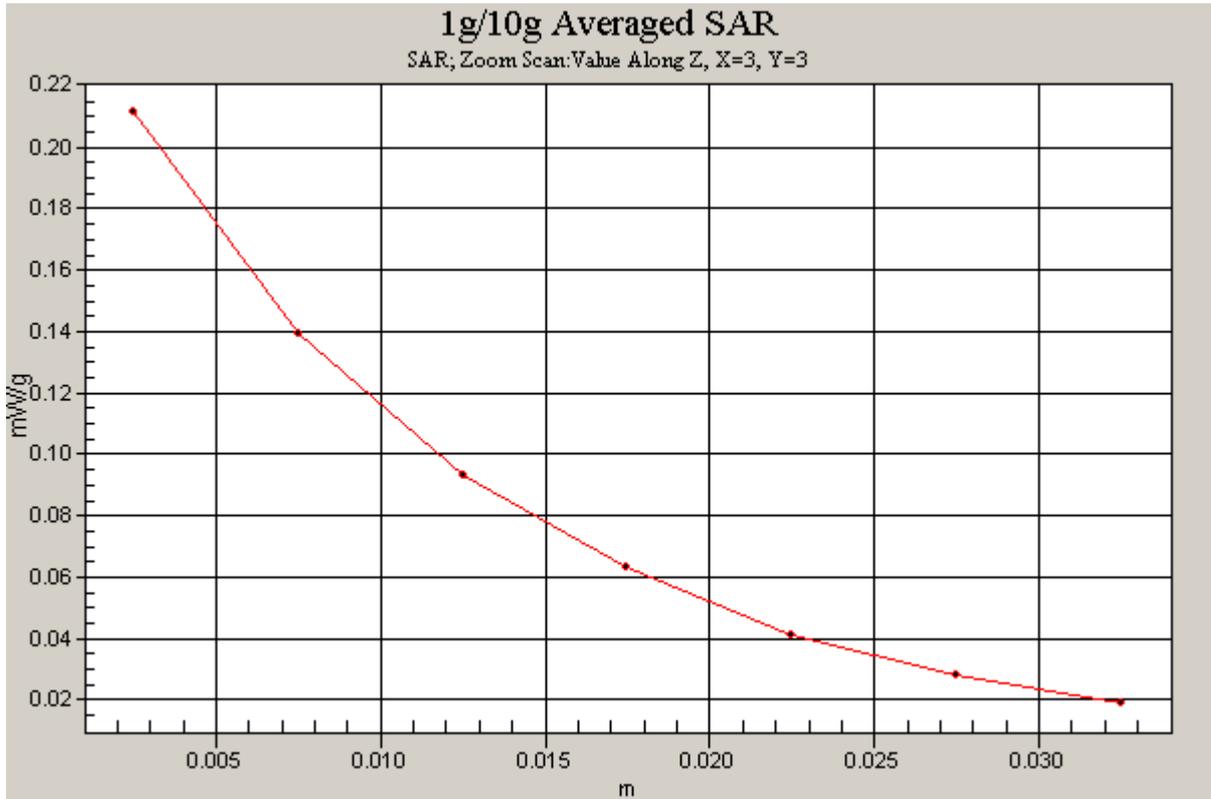Figure 215 Body, Towards Phantom, Close GSM 1900 GPRS, Channel 810

Figure 216 Z-Scan at power reference point (Body, Towards Phantom, Close GSM 1900 GPRS, Channel 810)

Date/Time: 12/28/2008 3:51:01 PM

GSM 1900 GPRS Towards Phantom Middle Close

Communication System: GSM 1900+GPRS(2Up); Frequency: 1880 MHz;Duty Cycle: 1:4

Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; $ε_r$ = 53.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom Middle/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.270 mW/g

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

Reference Value = 10.2 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 0.345 W/kg

SAR(1 g) = 0.219 mW/g; SAR(10 g) = 0.141 mW/g

Maximum value of SAR (measured) = 0.270 mW/g

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

Reference Value = 10.2 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 0.954 W/kg

SAR(1 g) = 0.192 mW/g; SAR(10 g) = 0.122 mW/g

Maximum value of SAR (measured) = 0.241 mW/g

Figure 217 Body, Towards Phantom, Close GSM 1900 GPRS Channel 661

Figure 218 Z-Scan at power reference point (Body, Towards Phantom, Close GSM 1900 GPRS Channel 661)

Date/Time: 12/28/2008 3:20:18 PM

GSM 1900 GPRS Towards Phantom Low Close

Communication System: GSM 1900+GPRS(2Up); Frequency: 1850.2 MHz;Duty Cycle: 1:4

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.51 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom Low/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

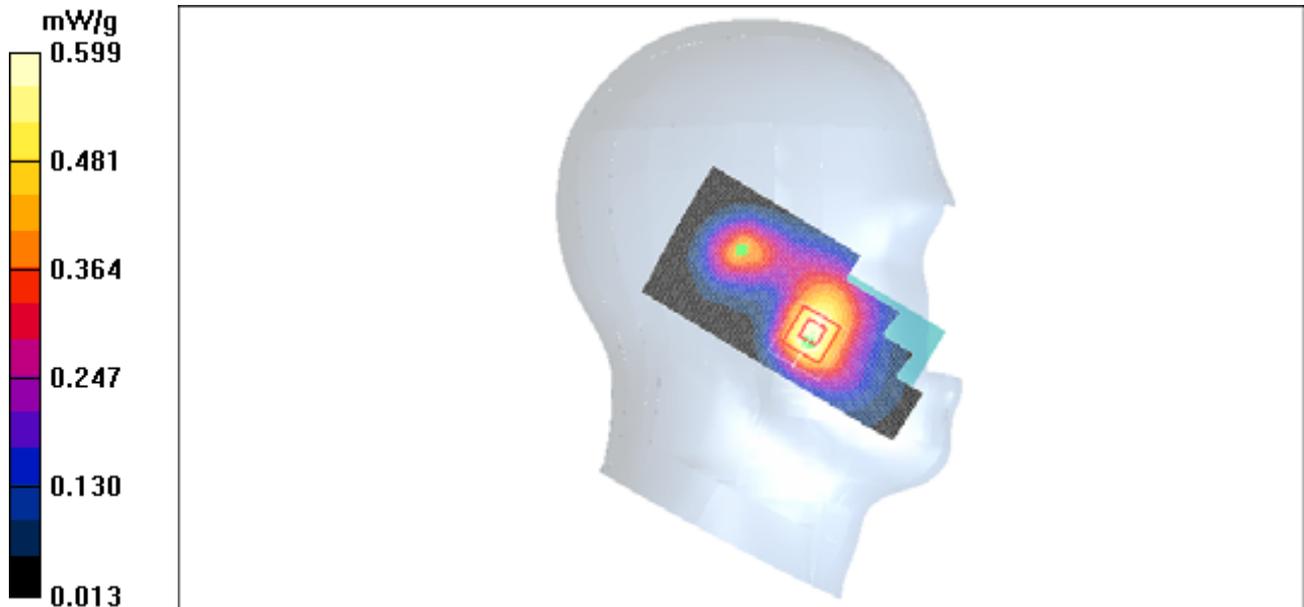Maximum value of SAR (interpolated) = 0.220 mW/g

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

Reference Value = 9.48 V/m; Power Drift = 0.054 dB

Peak SAR (extrapolated) = 0.263 W/kg

SAR(1 g) = 0.172 mW/g; SAR(10 g) = 0.107 mW/g

Maximum value of SAR (measured) = 0.211 mW/g

Towards Phantom Low/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.48 V/m; Power Drift = 0.054 dB

Peak SAR (extrapolated) = 0.359 W/kg

SAR(1 g) = 0.159 mW/g; SAR(10 g) = 0.101 mW/g

Maximum value of SAR (measured) = 0.192 mW/g

Figure 219 Body, Towards Phantom, Close GSM 1900 GPRS Channel 512

Figure 220 Z-Scan at power reference point (Body, Towards Phantom, Close GSM 1900 GPRS Channel 512)

Date/Time: 12/28/2008 5:00:05 PM

GSM 1900 EGPRS Towards Ground High Close

Communication System: GSM 1900+EGPRS(2Up); Frequency: 1909.8 MHz;Duty Cycle: 1:4

Medium parameters used: f = 1910 MHz; σ = 1.57 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground High/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.693 mW/g

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

Reference Value = 6.11 V/m; Power Drift = 0.006 dB

Peak SAR (extrapolated) = 0.931 W/kg

SAR(1 g) = 0.531 mW/g; SAR(10 g) = 0.317 mW/g

Maximum value of SAR (measured) = 0.664 mW/g
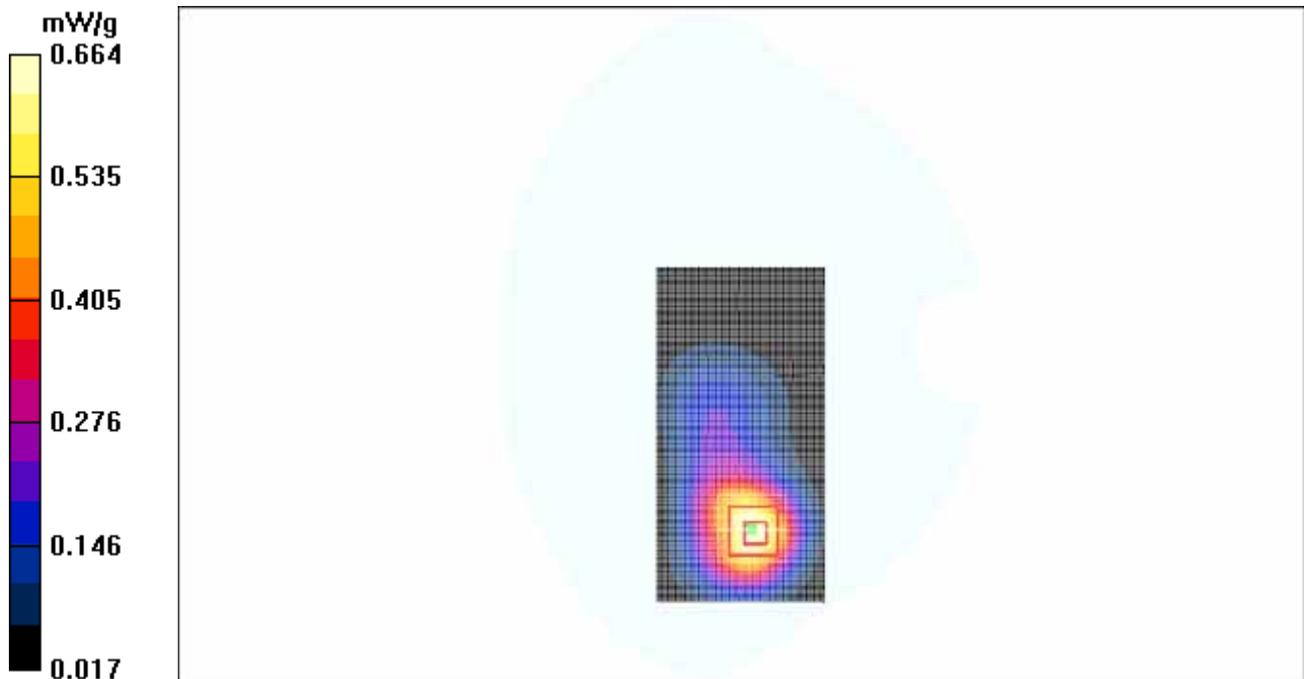
Figure 221 Body, Towards Ground, Close GSM 1900 EGPRS Channel 810
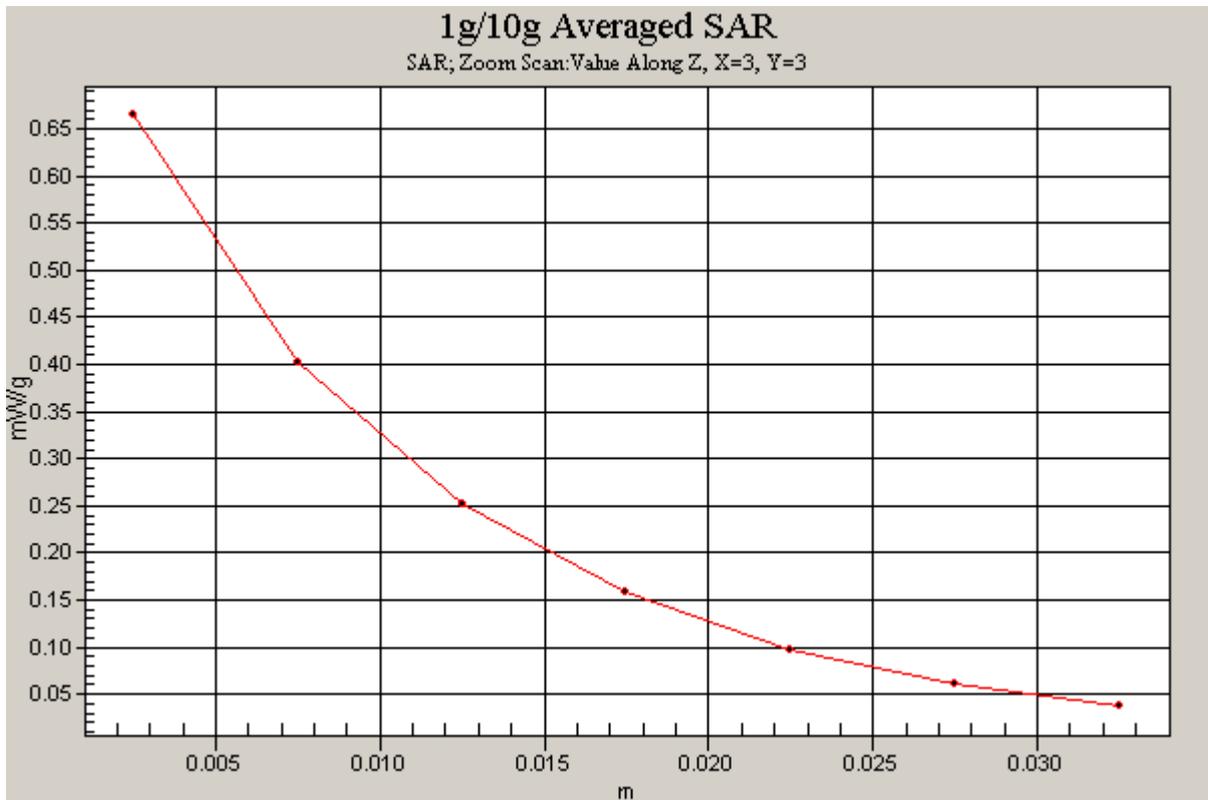
Figure 222 Z-Scan at power reference point (Body, Towards Ground, Close GSM 1900 EGPRS Channel 810)

Date/Time: 12/27/2008 10:07:53 AM

WCDMA Band II Left Cheek High

Communication System: WCDMA Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1908 MHz; σ = 1.42 mho/m; $ε_r$ = 39.9; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek High/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

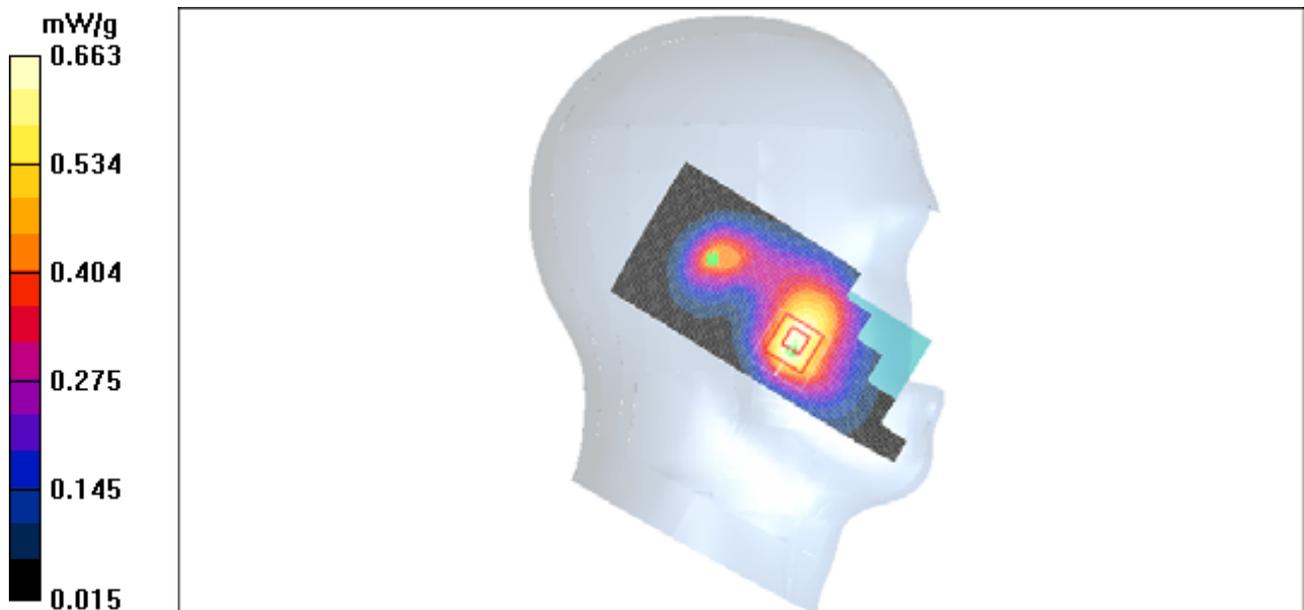Maximum value of SAR (interpolated) = 0.607 mW/g

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

Reference Value = 12.3 V/m; Power Drift = 0.093 dB

Peak SAR (extrapolated) = 0.754 W/kg

SAR(1 g) = 0.494 mW/g; SAR(10 g) = 0.310 mW/g

Maximum value of SAR (measured) = 0.599 mW/g

Communication System: WCDMA Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1908 MHz; σ = 1.42 mho/m; ε_r = 39.9; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek High/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 12.3 V/m; Power Drift = 0.093 dB

Peak SAR (extrapolated) = 0.526 W/kg

SAR(1 g) = 0.341 mW/g; SAR(10 g) = 0.205 mW/g
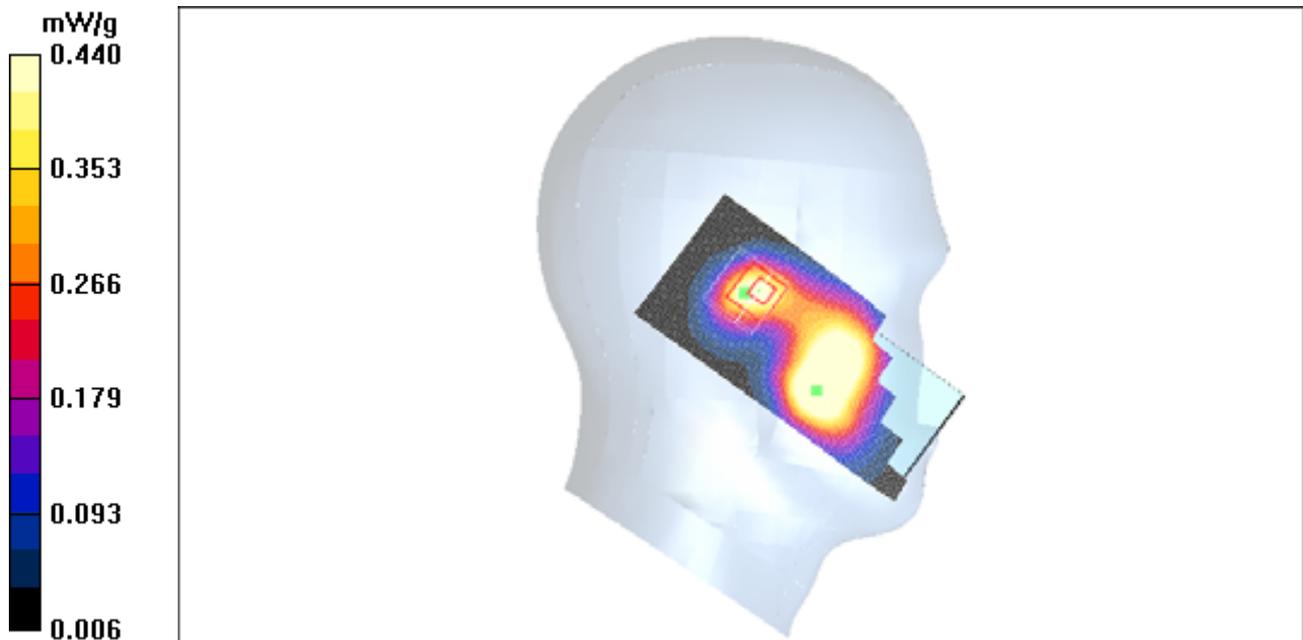
Maximum value of SAR (measured) = 0.418 mW/g
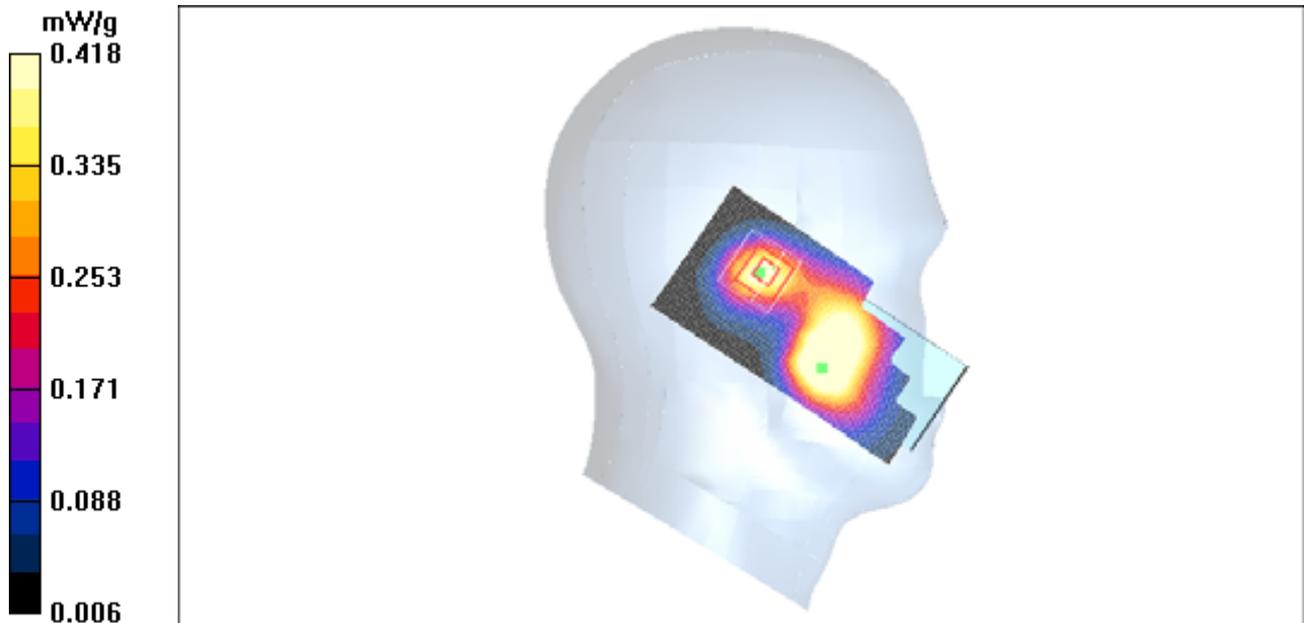
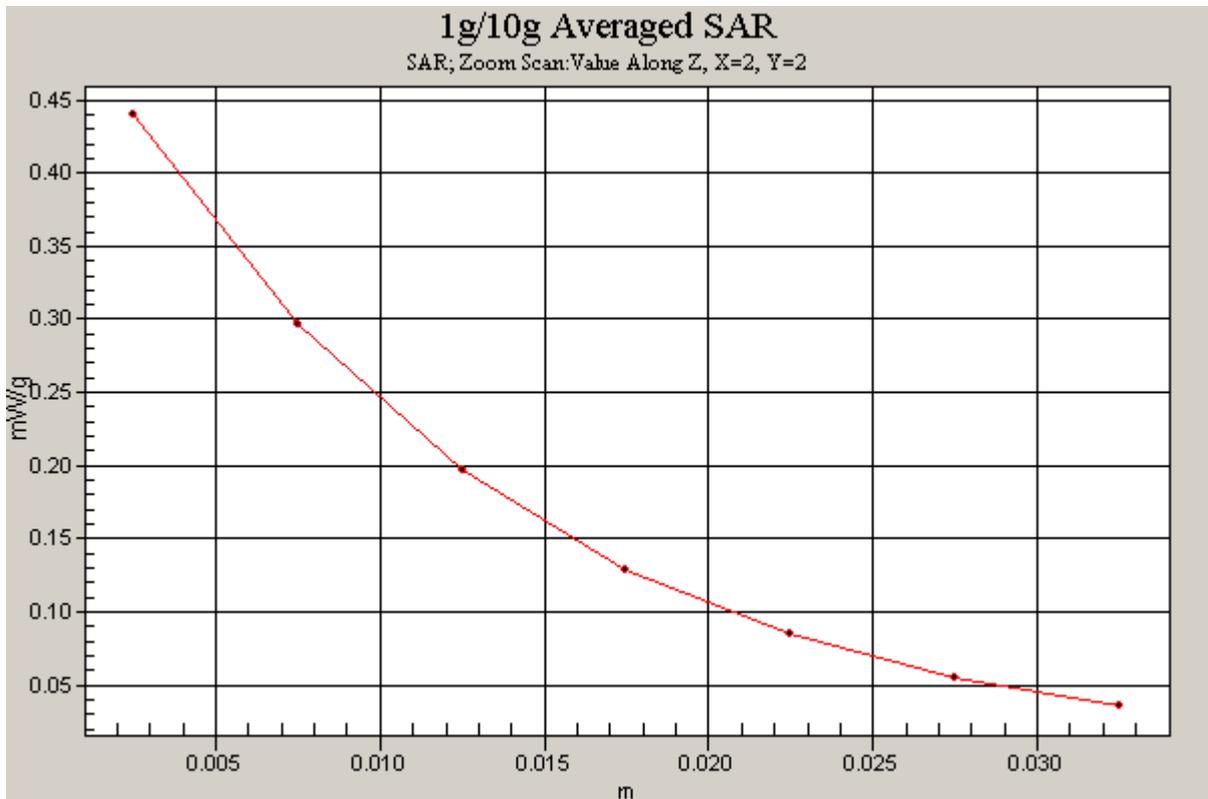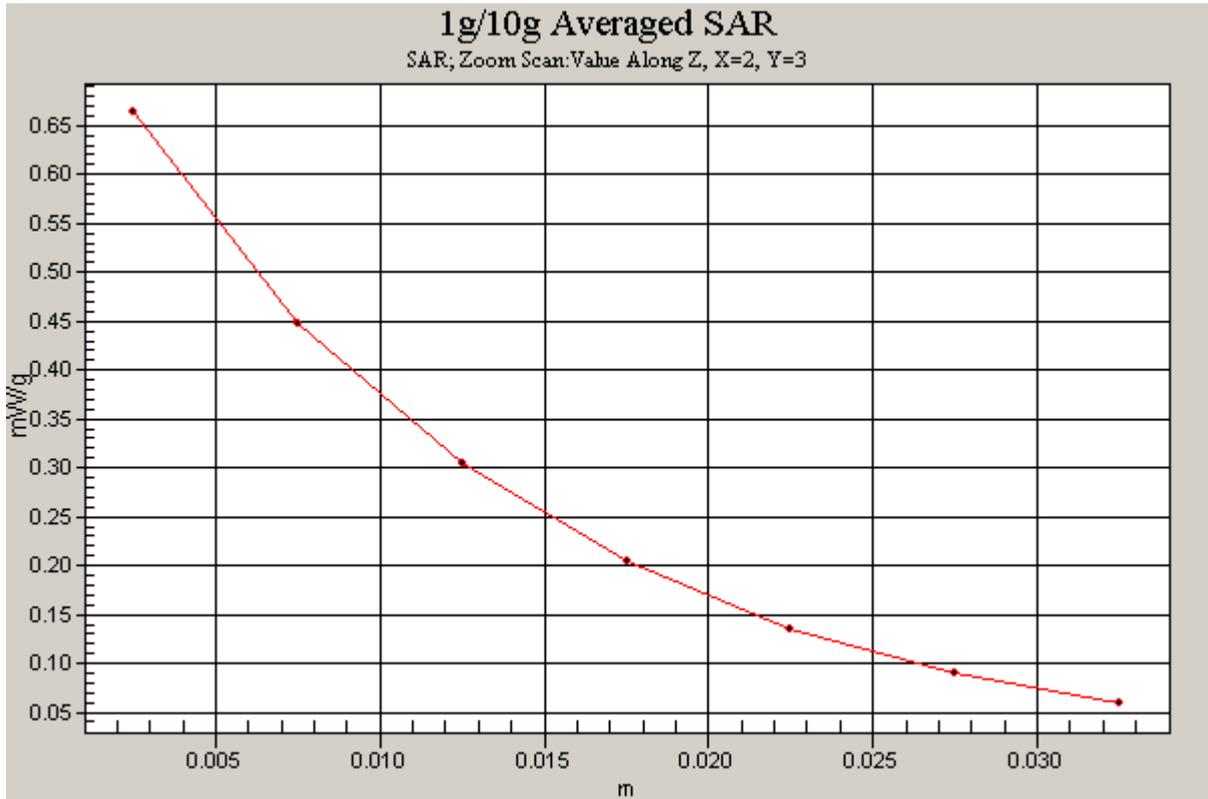Figure 223 Left Hand Touch Cheek Open WCDMA Band II Channel 9538
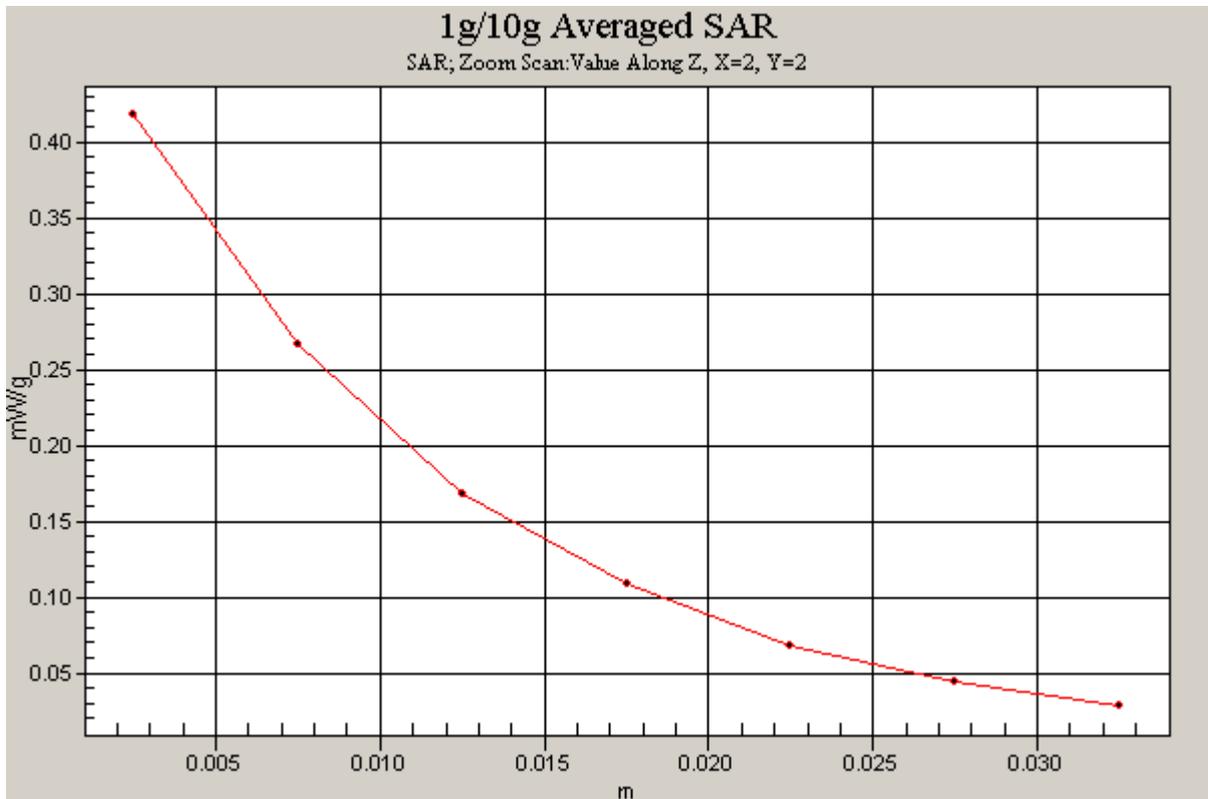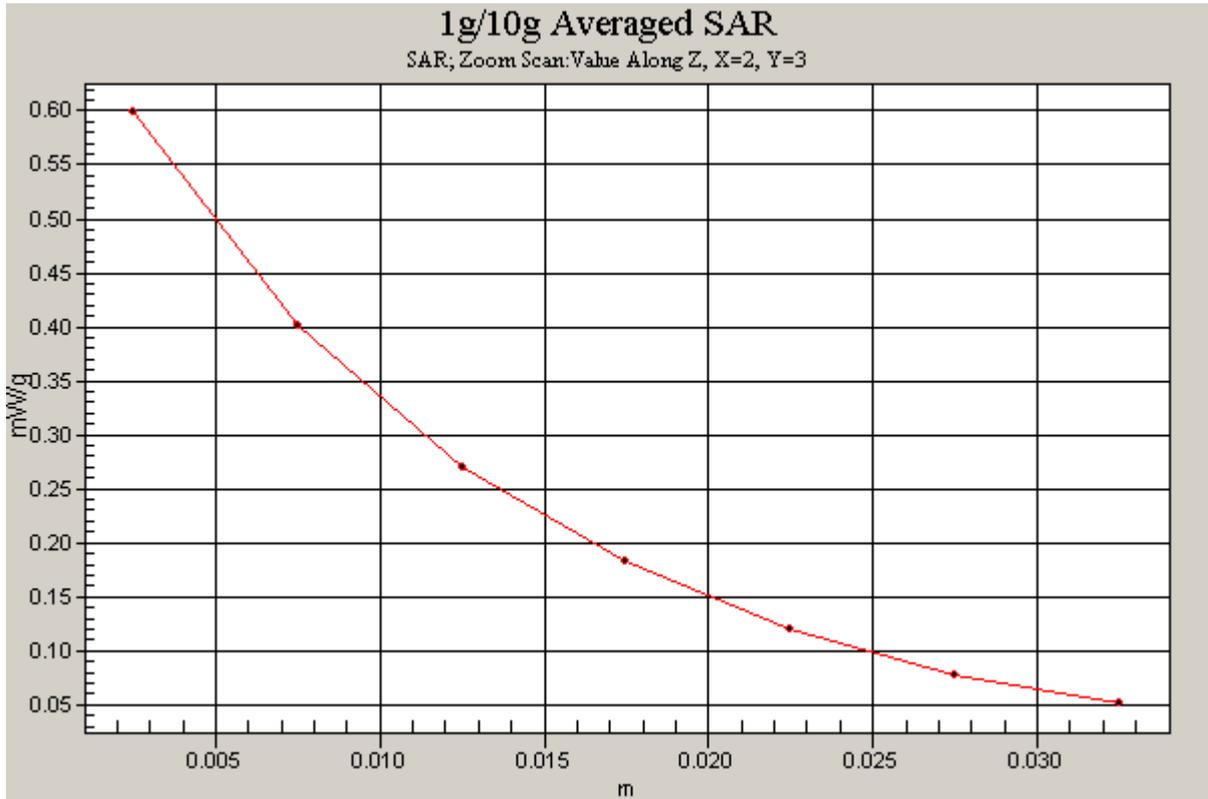
Figure 224 Z-Scan at power reference point (Left Hand Touch Cheek Open WCDMA Band II Channel 9538)

Date/Time: 12/27/2008 11:08:26 AM

WCDMA Band II Left Cheek Middle Open

Communication System: WCDMA Band II; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

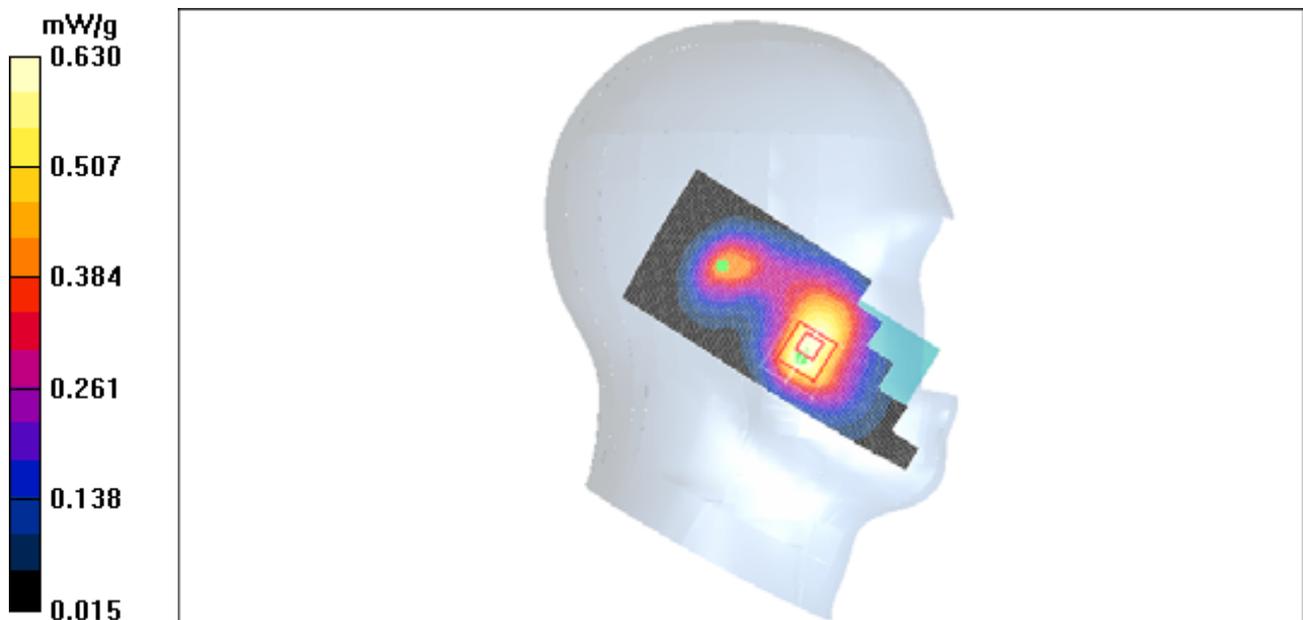Maximum value of SAR (interpolated) = 0.677 mW/g

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

Reference Value = 12.8 V/m; Power Drift = 0.064 dB

Peak SAR (extrapolated) = 0.824 W/kg

SAR(1 g) = 0.545 mW/g; SAR(10 g) = 0.342 mW/g

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

Communication System: WCDMA Band II; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.677 mW/g

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

Reference Value = 12.8 V/m; Power Drift = 0.064 dB

Peak SAR (extrapolated) = 0.547 W/kg

SAR(1 g) = 0.356 mW/g; SAR(10 g) = 0.215 mW/g
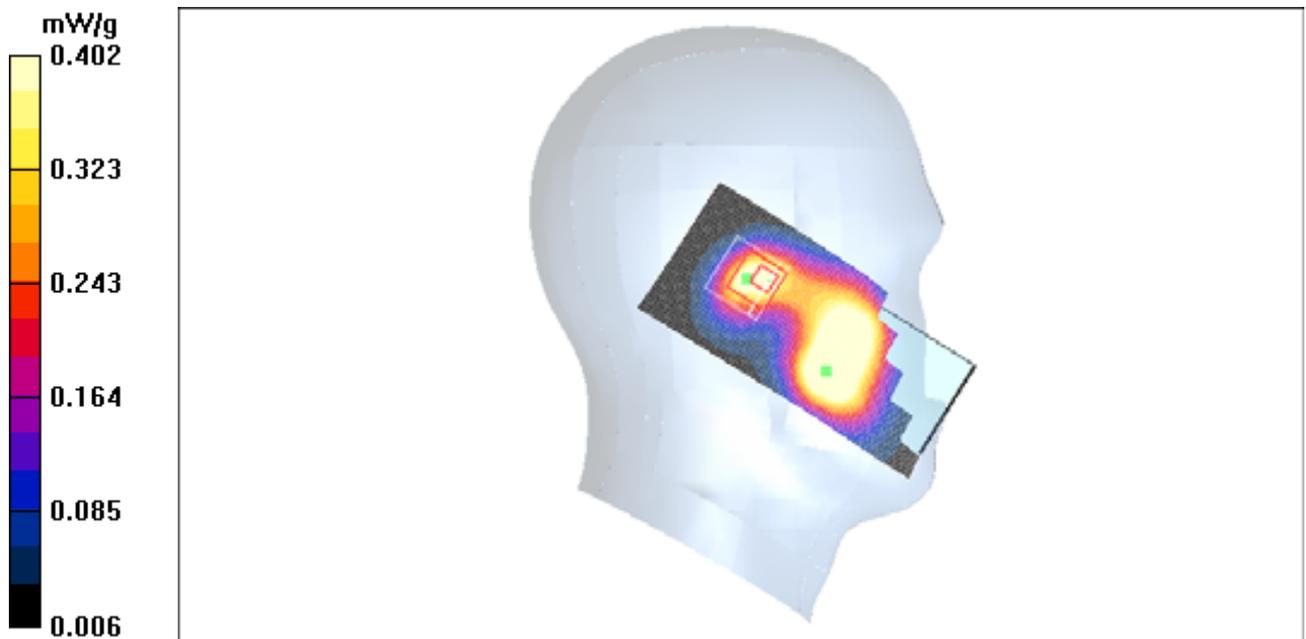
Maximum value of SAR (measured) = 0.440 mW/g

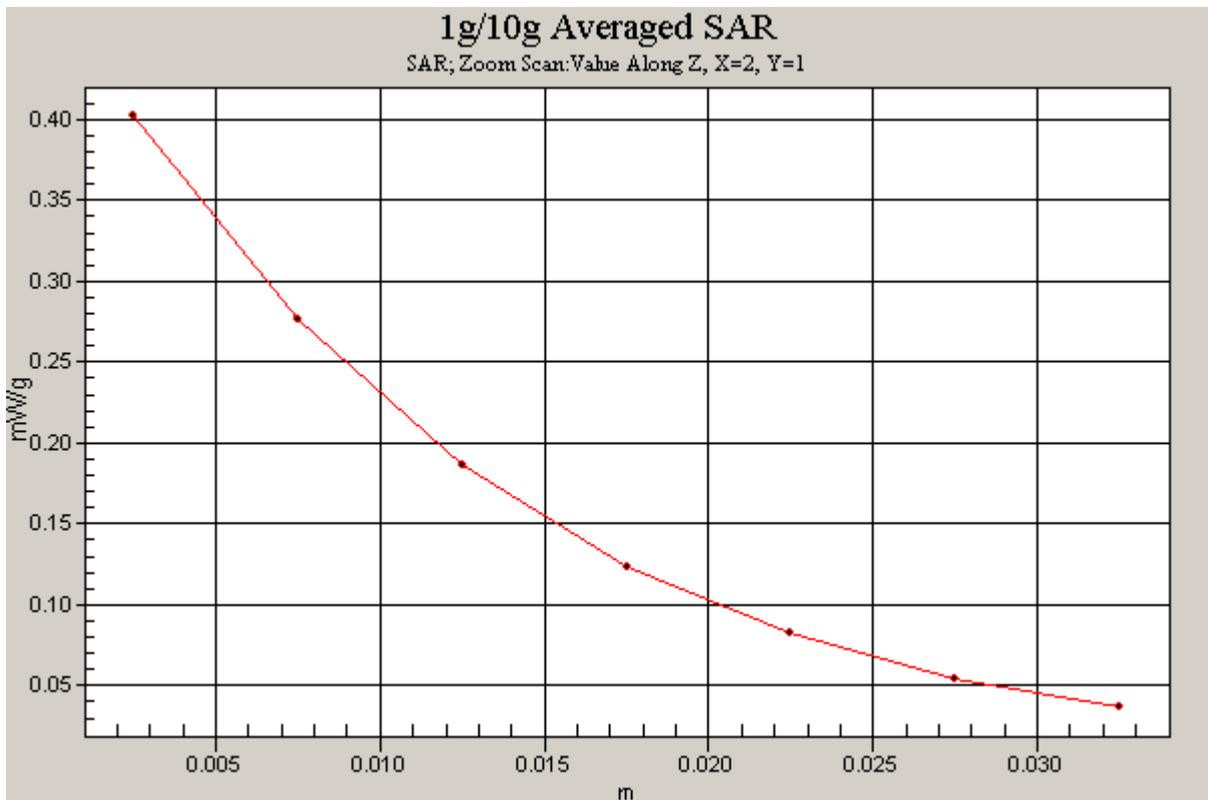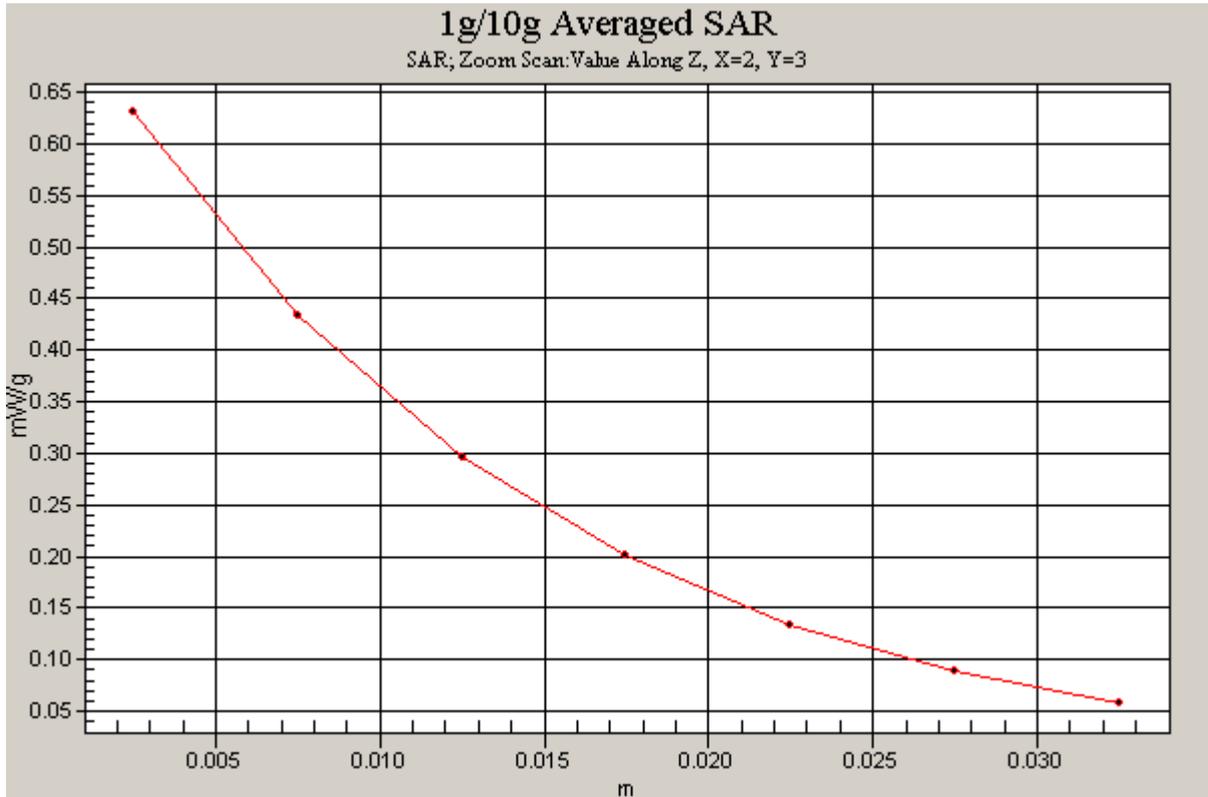Figure 225 Left Hand Touch Cheek Open WCDMA Band II Channel 9400

Figure 226 Z-Scan at power reference point (Left Hand Touch Cheek Open WCDMA Band II Channel 9400)

Date/Time: 12/27/2008 11:39:14 AM

WCDMA Band II Left Cheek Low Open

Communication System: WCDMA Band II; Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.37 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Low/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.648 mW/g

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

Reference Value = 12.7 V/m; Power Drift = -0.138 dB

Peak SAR (extrapolated) = 0.780 W/kg

SAR(1 g) = 0.524 mW/g; SAR(10 g) = 0.329 mW/g

Maximum value of SAR (measured) = 0.630 mW/g

Communication System: WCDMA Band II; Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.37 mho/m; $ε_r$ = 40.2; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Low/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.648 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.7 V/m; Power Drift = -0.138 dB

Peak SAR (extrapolated) = 0.506 W/kg

SAR(1 g) = 0.331 mW/g; SAR(10 g) = 0.203 mW/g

Maximum value of SAR (measured) = 0.402 mW/g

Figure 227 Left Hand Touch Cheek Open WCDMA Band II Channel 9262
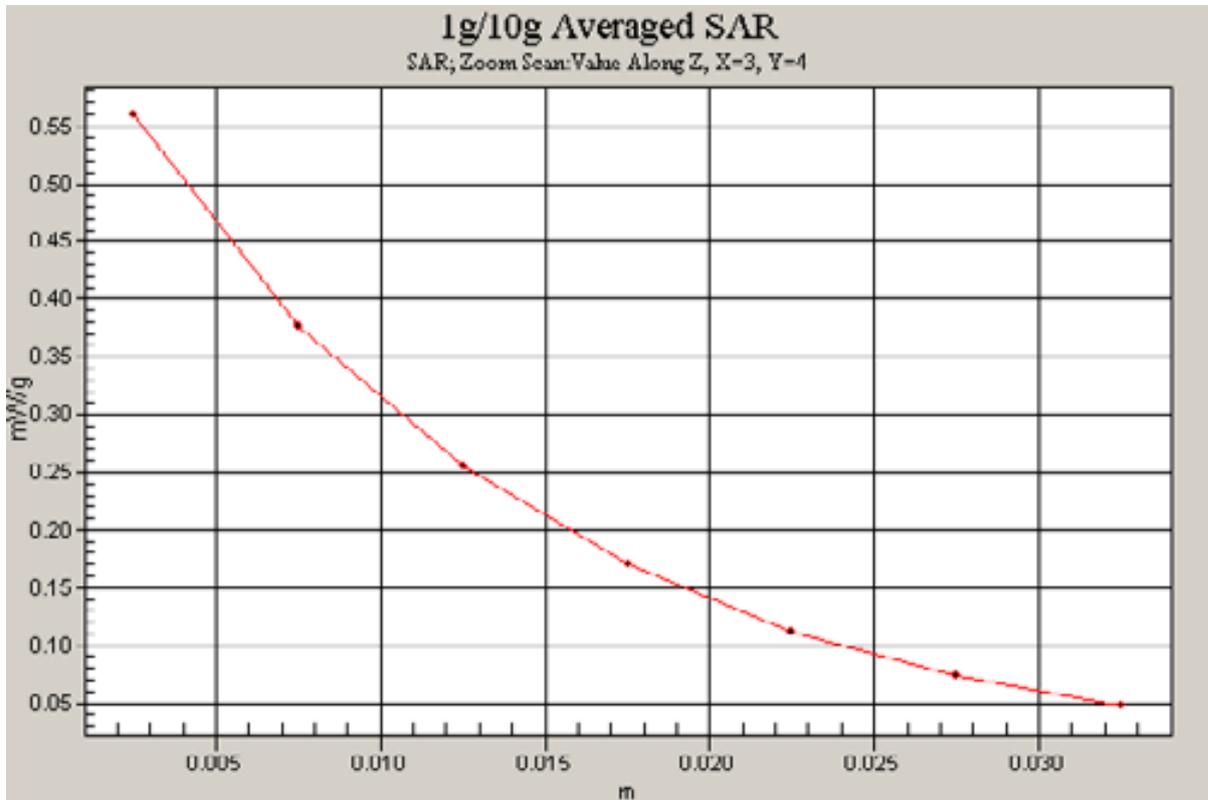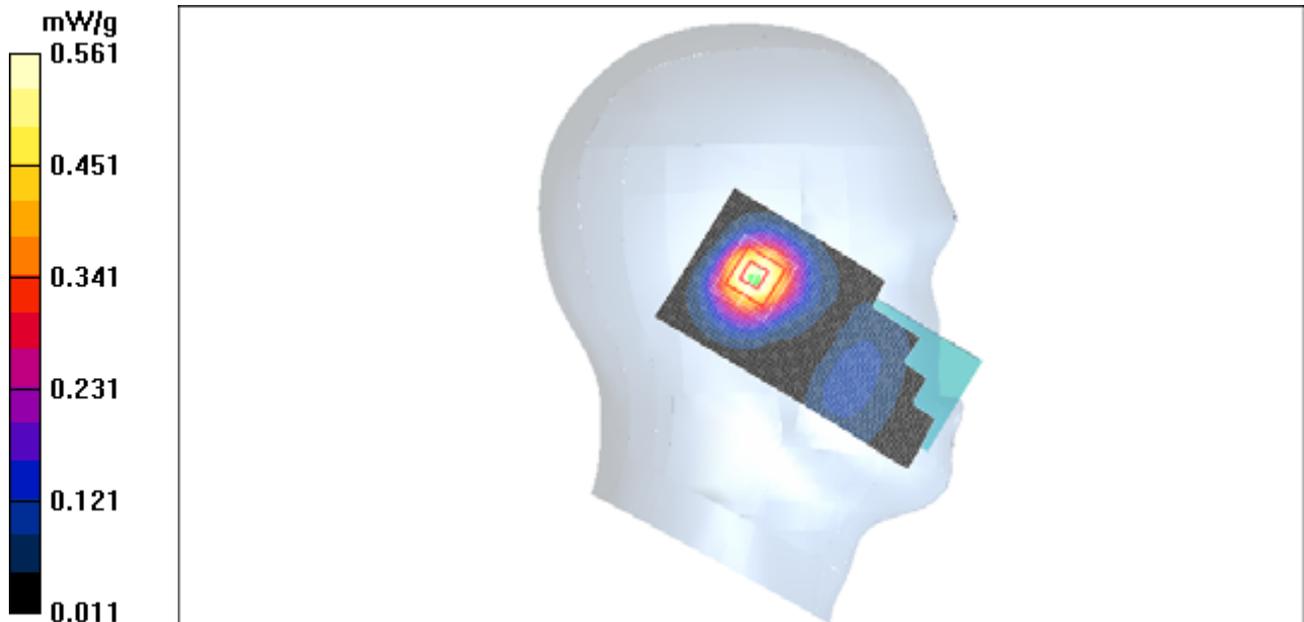
Figure 228 Z-Scan at power reference point (Left Hand Touch Cheek Open WCDMA Band II Channel 9262)

Date/Time: 12/27/2008 1:13:20 PM

WCDMA Band II Left Tilt High Open

Communication System: WCDMA Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1908 MHz; σ = 1.42 mho/m; ε_r = 39.9; ρ = 1000 kg/m3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt High/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 18.6 V/m; Power Drift = 0.194 dB

Peak SAR (extrapolated) = 0.691 W/kg

SAR(1 g) = 0.455 mW/g; SAR(10 g) = 0.273 mW/g

Maximum value of SAR (measured) = 0.559 mW/g
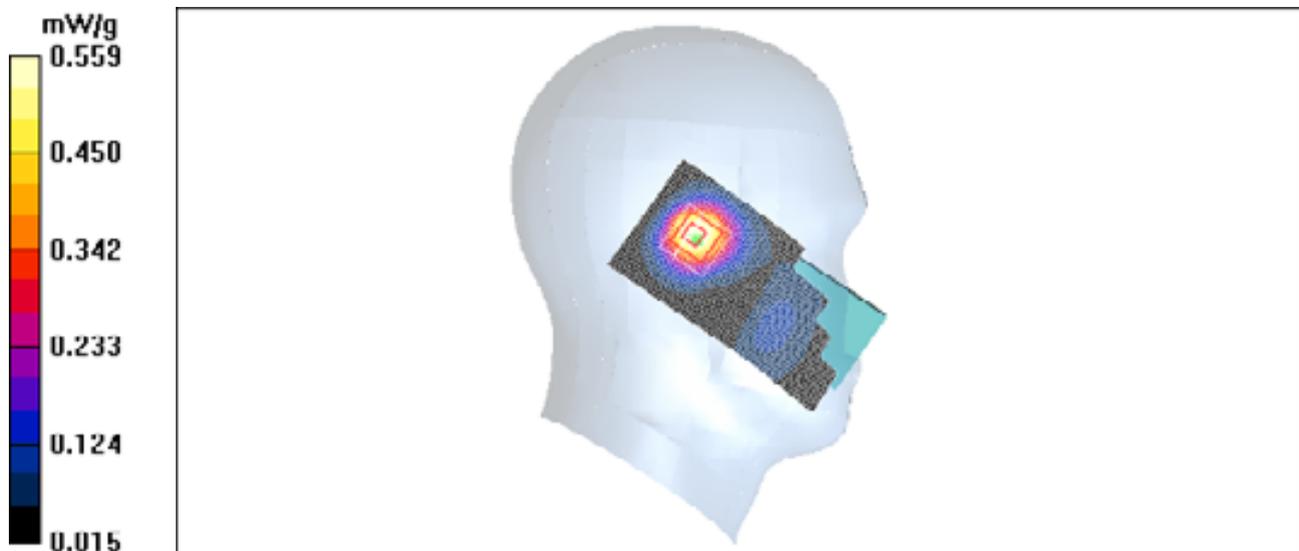
Figure 229 Left Hand Tilt 15°Open WCDMA Band II Channel 9538
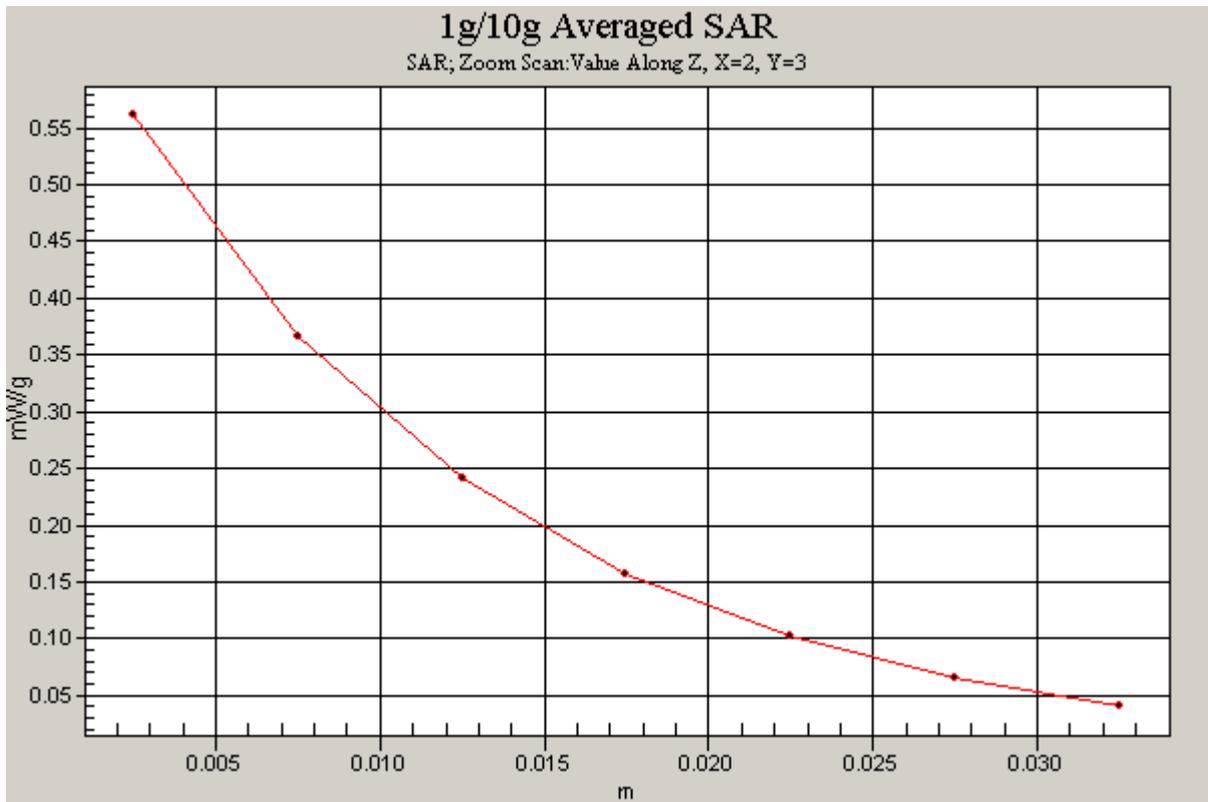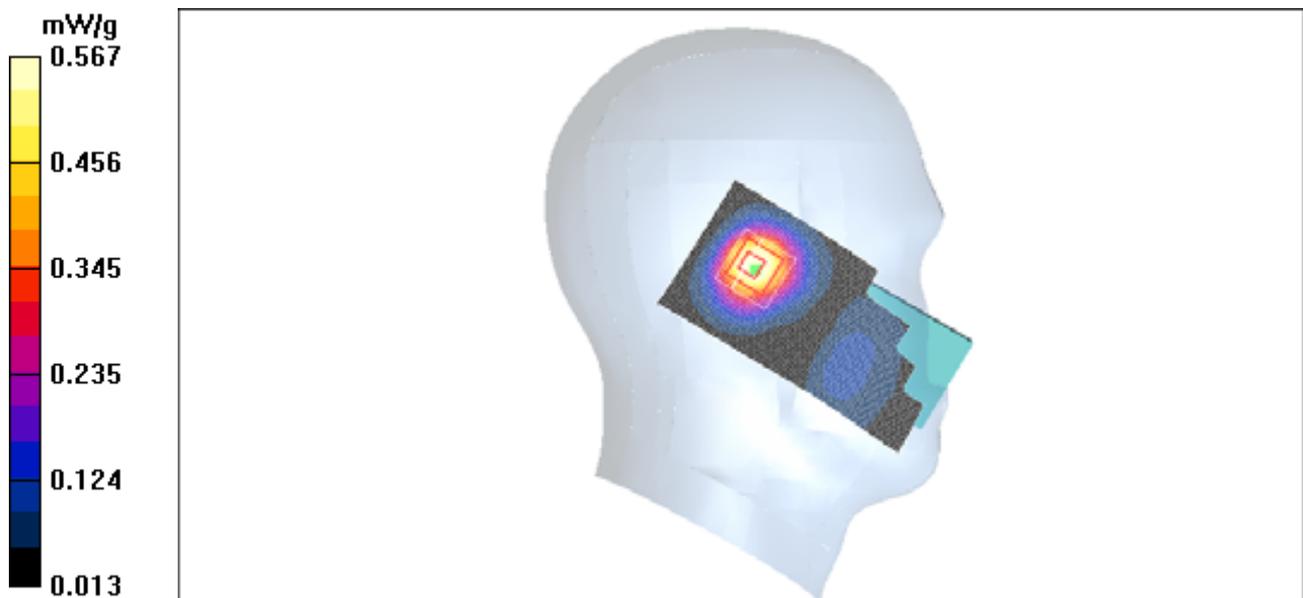
Figure 230 Z-Scan at power reference point (Left Hand Tilt 15°Open WCDMA Band II Channel 9538)

Date/Time: 12/27/2008 12:30:31 PM

WCDMA Band II Left Tilt Middle Open

Communication System: WCDMA Band II; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.628 mW/g

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

Reference Value = 18.1 V/m; Power Drift = -0.127 dB

Peak SAR (extrapolated) = 0.708 W/kg

SAR(1 g) = 0.463 mW/g; SAR(10 g) = 0.277 mW/g

Maximum value of SAR (measured) = 0.561 mW/g

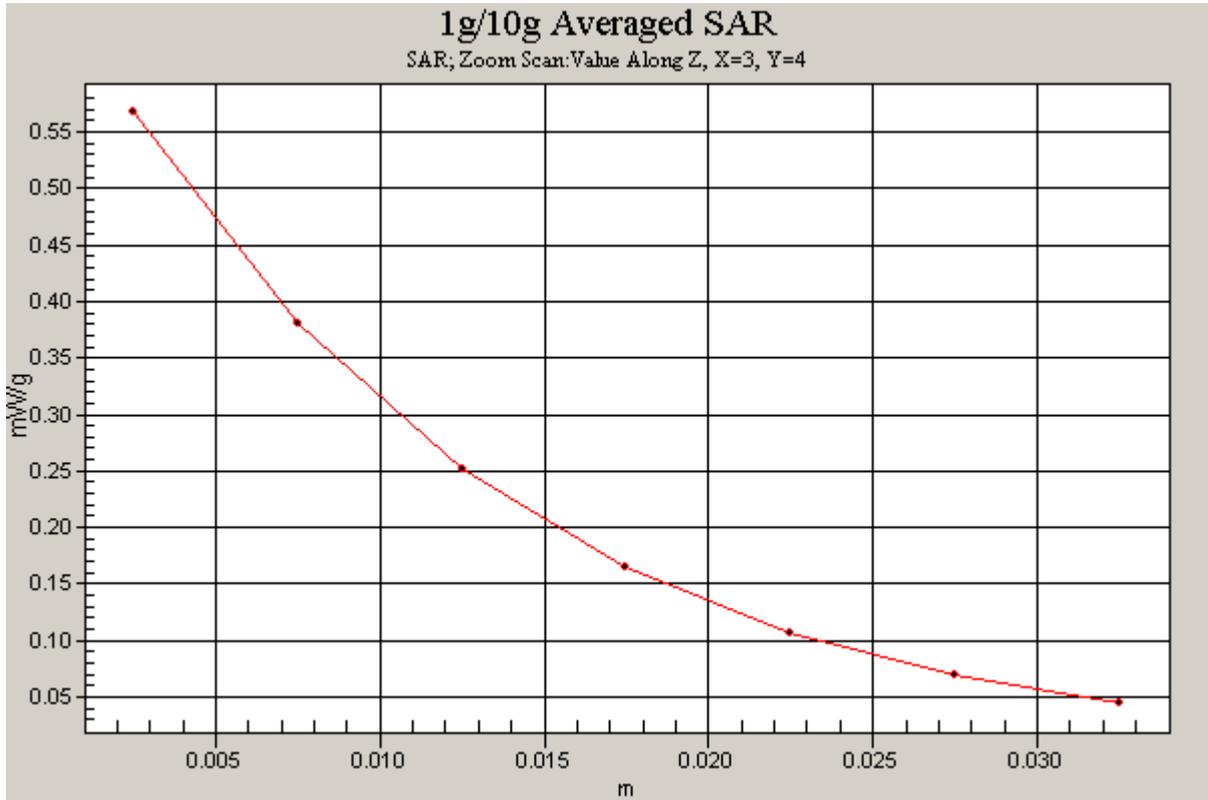

Figure 231 Left Hand Tilt 15°Open WCDMA Band II Channel 9400

Figure 232 Z-Scan at power reference point (Left Hand Tilt 15°Open WCDMA Band II Channel 9400)

Date/Time: 12/27/2008 12:10:47 PM

WCDMA Band II Left Tilt Low Open

Communication System: WCDMA Band II; Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.37 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Low/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.627 mW/g

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

Reference Value = 18.2 V/m; Power Drift = -0.147 dB

Peak SAR (extrapolated) = 0.695 W/kg

SAR(1 g) = 0.462 mW/g; SAR(10 g) = 0.280 mW/g

Maximum value of SAR (measured) = 0.567 mW/g

Figure 233 Left Hand Tilt 15°Open WCDMA Band II Channel 9262

Figure 234 Z-Scan at power reference point (Left Hand Tilt 15°Open WCDMA Band II Channel 9262)

Date/Time: 12/27/2008 3:14:11 AM

WCDMA Band II Right Cheek High Open

Communication System: WCDMA Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1908 MHz; σ = 1.42 mho/m; ε_r = 39.9; ρ = 1000 kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek High/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.699 mW/g

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

Reference Value = 13.3 V/m; Power Drift = 0.180 dB

Peak SAR (extrapolated) = 0.863 W/kg

SAR(1 g) = 0.552 mW/g; SAR(10 g) = 0.333 mW/g

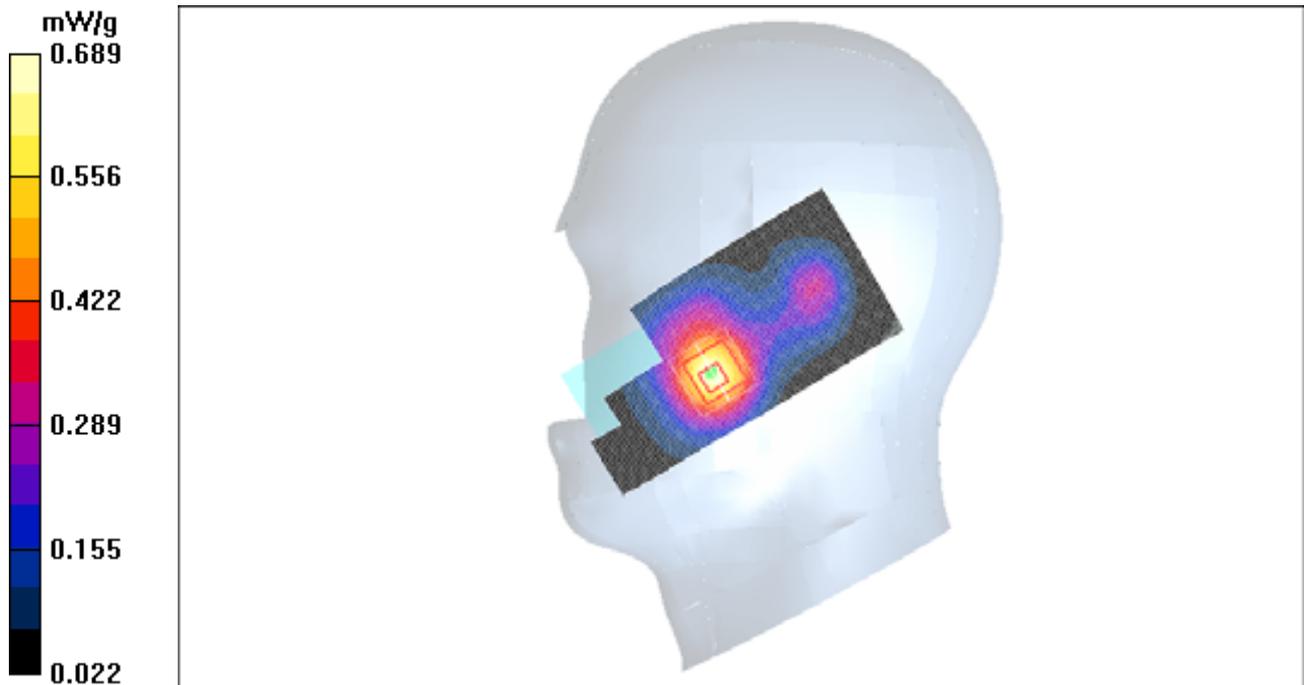Maximum value of SAR (measured) = 0.686 mW/g
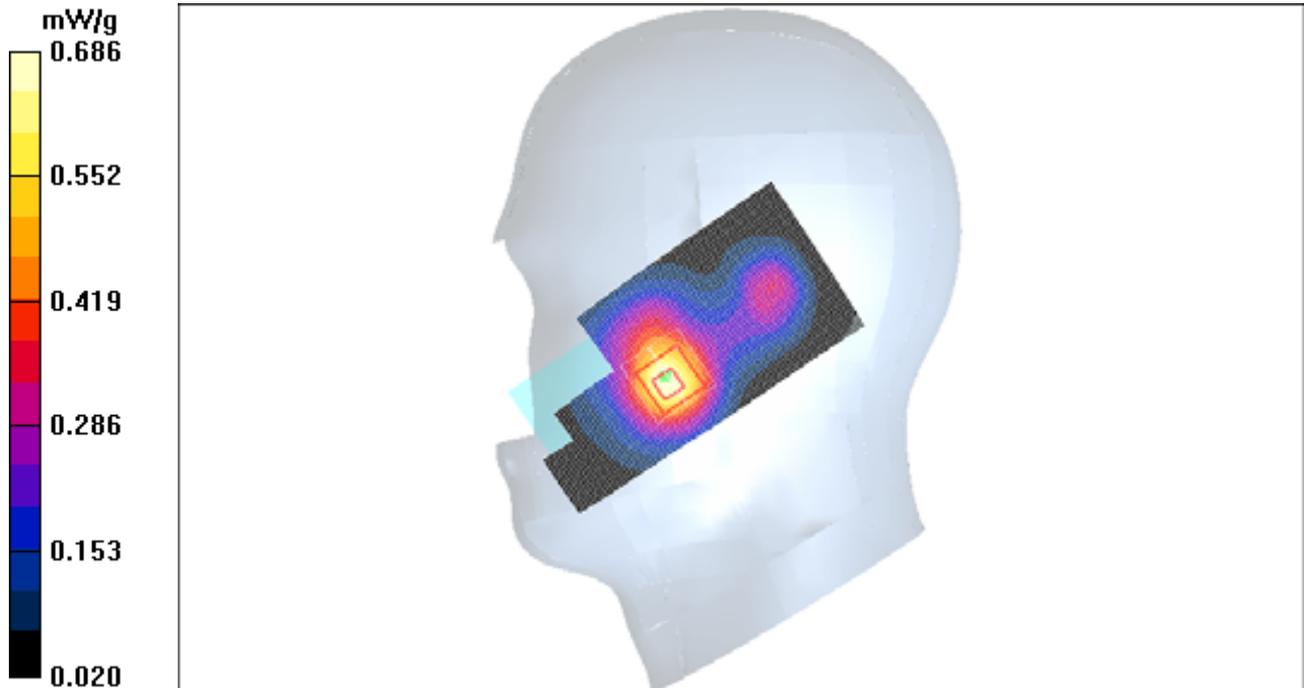
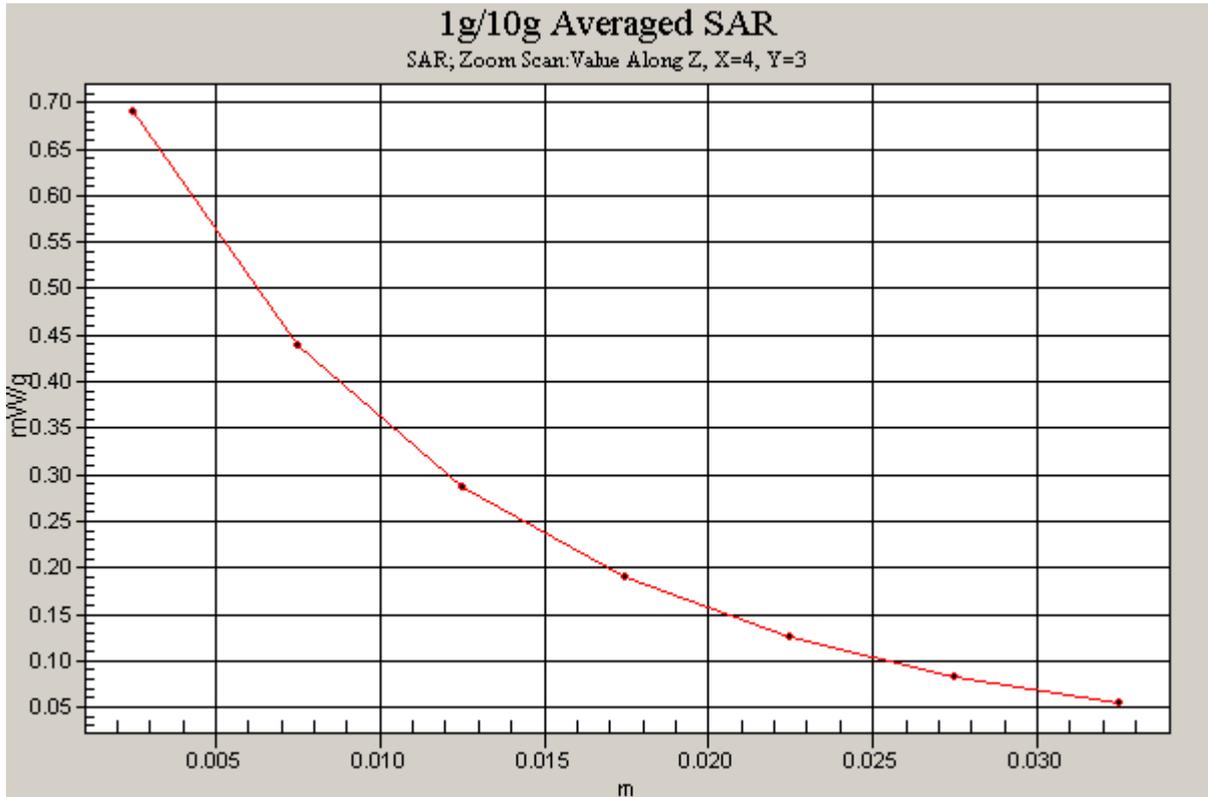Figure 235 Right Hand Touch Cheek Open WCDMA Band II Channel 9538
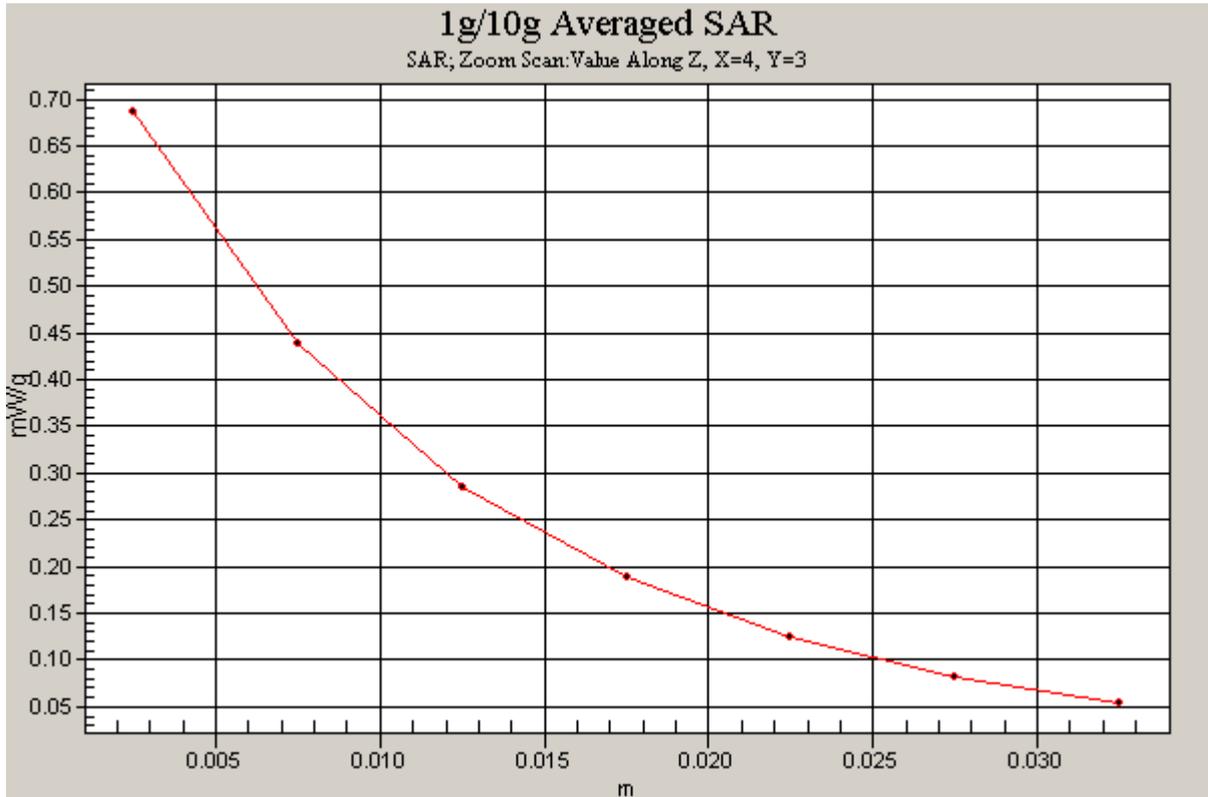
Figure 236 Z-Scan at power reference point (Right Hand Touch Cheek Open WCDMA Band II Channel 9538)

Date/Time: 12/27/2008 3:33:11 AM

WCDMA Band II Right Cheek Middle Open

Communication System: WCDMA Band II; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.683 mW/g

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

Reference Value = 13.3 V/m; Power Drift = -0.025 dB

Peak SAR (extrapolated) = 0.875 W/kg

SAR(1 g) = 0.559 mW/g; SAR(10 g) = 0.339 mW/g

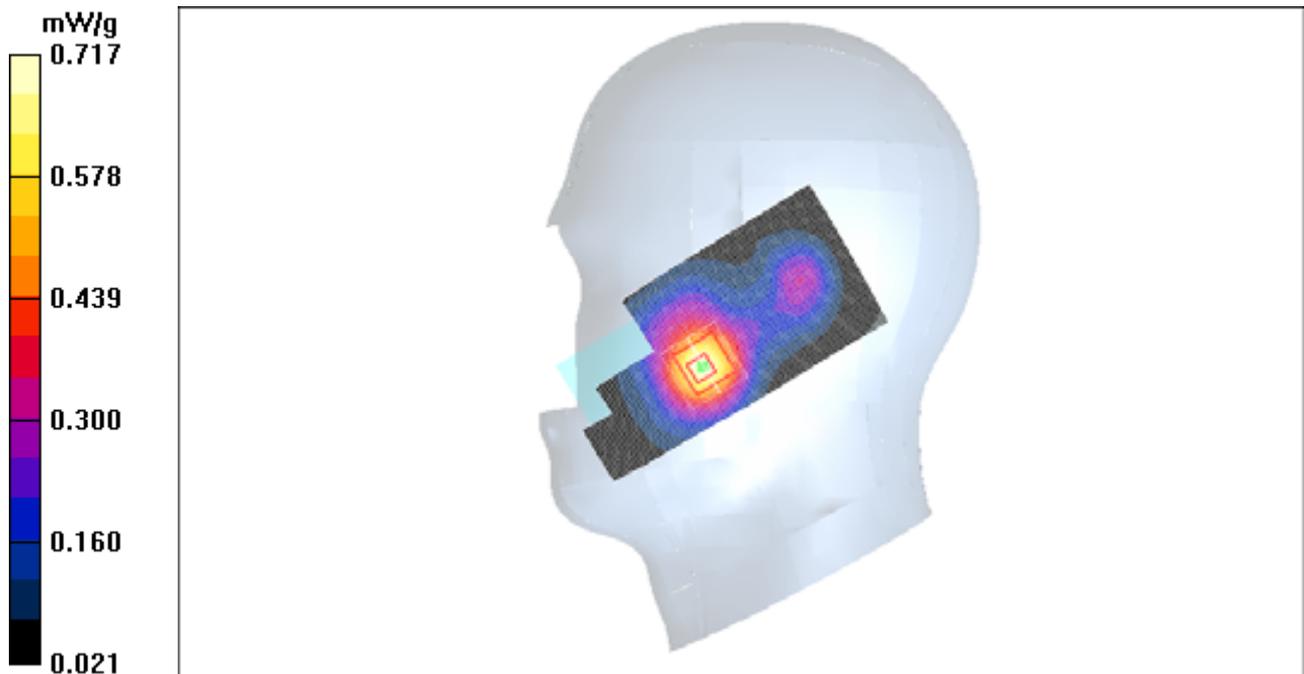Maximum value of SAR (measured) = 0.689 mW/g

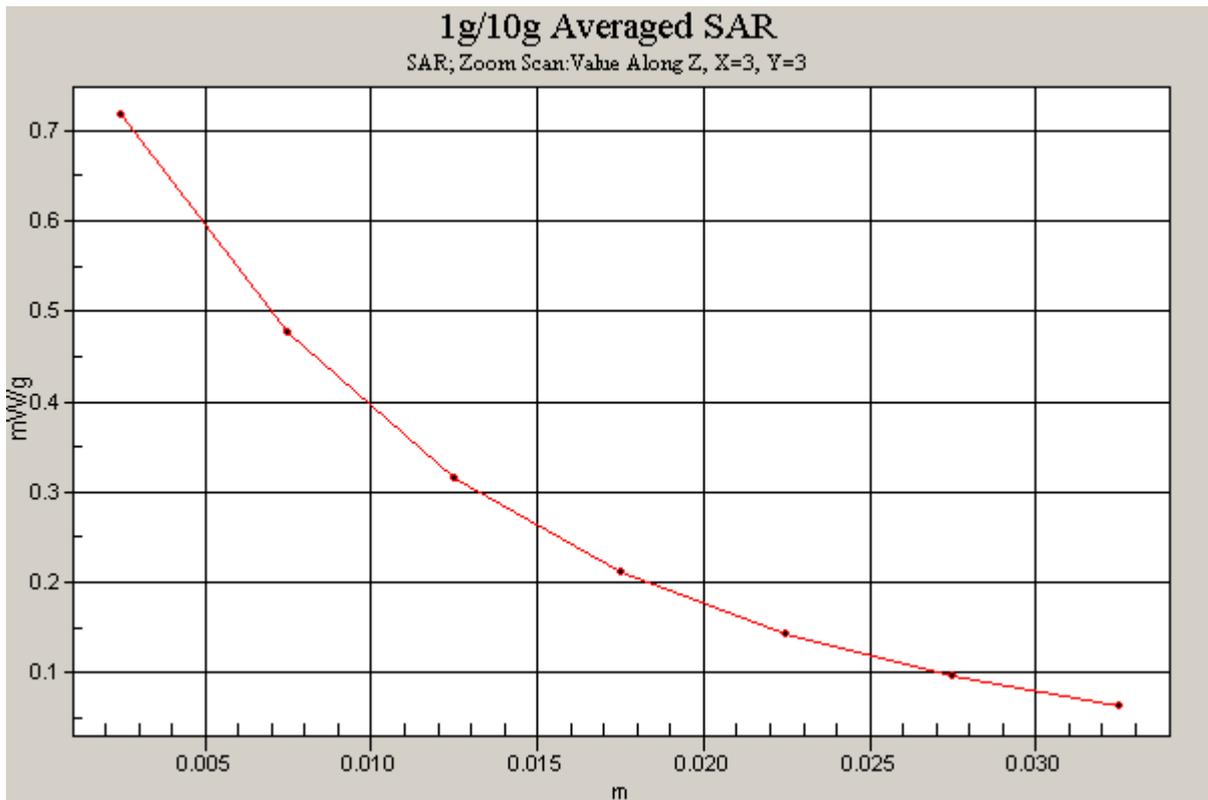Figure 237 Right Hand Touch Cheek Open WCDMA Band II Channel 9400

Figure 238 Z-Scan at power reference point (Right Hand Touch Cheek Open WCDMA Band II Channel 9400)

Date/Time: 12/27/2008 3:52:12 AM

WCDMA Band II Right Cheek Low Open

Communication System: WCDMA Band II; Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.37 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek Low/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.710 mW/g

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

Reference Value = 13.3 V/m; Power Drift = 0.004 dB

Peak SAR (extrapolated) = 0.900 W/kg

SAR(1 g) = 0.578 mW/g; SAR(10 g) = 0.352 mW/g

Maximum value of SAR (measured) = 0.717 mW/g

Figure 239 Right Hand Touch Cheek Open WCDMA Band II Channel 9262

Figure 240 Z-Scan at power reference point (Right Hand Touch Cheek Open WCDMA Band II Channel 9262)

Date/Time: 12/27/2008 5:04:50 AM

WCDMA Band II Right Tilt High Open

Communication System: WCDMA Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1908 MHz; σ = 1.42 mho/m; ε_r = 39.9; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt High/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.631 mW/g

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

Reference Value = 19.8 V/m; Power Drift = 0.121 dB

Peak SAR (extrapolated) = 0.681 W/kg

SAR(1 g) = 0.427 mW/g; SAR(10 g) = 0.246 mW/g

Maximum value of SAR (measured) = 0.538 mW/g
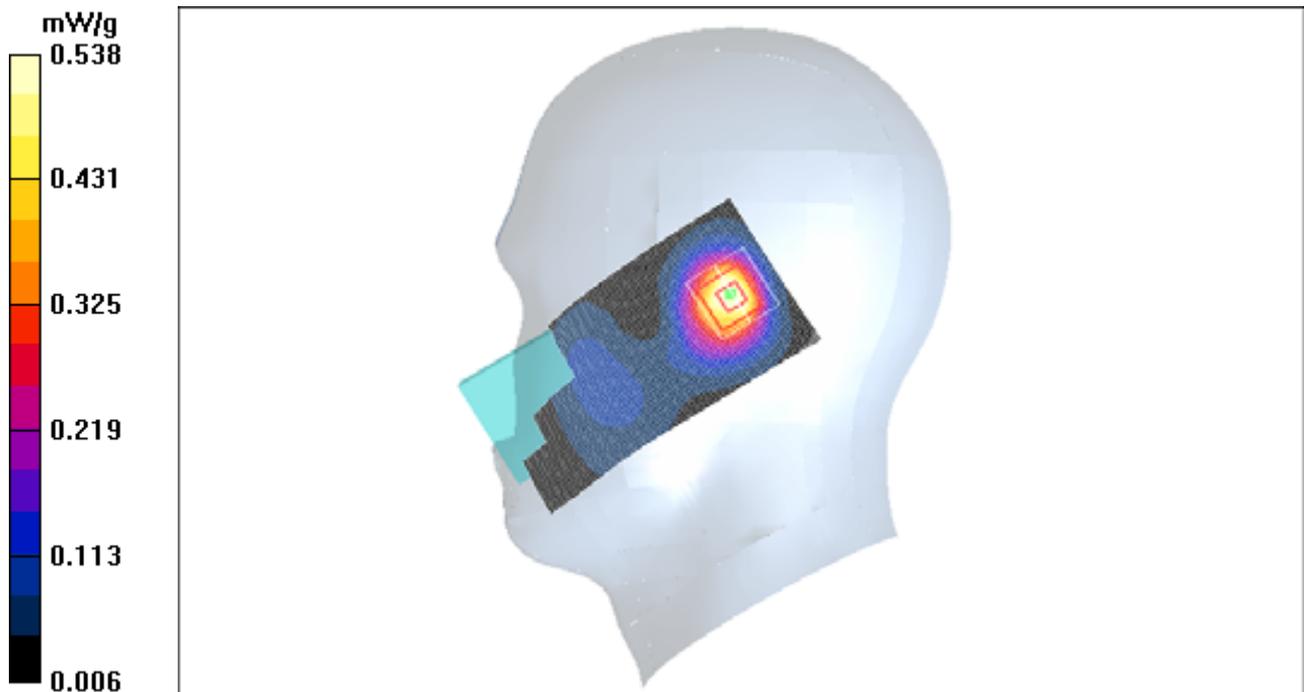
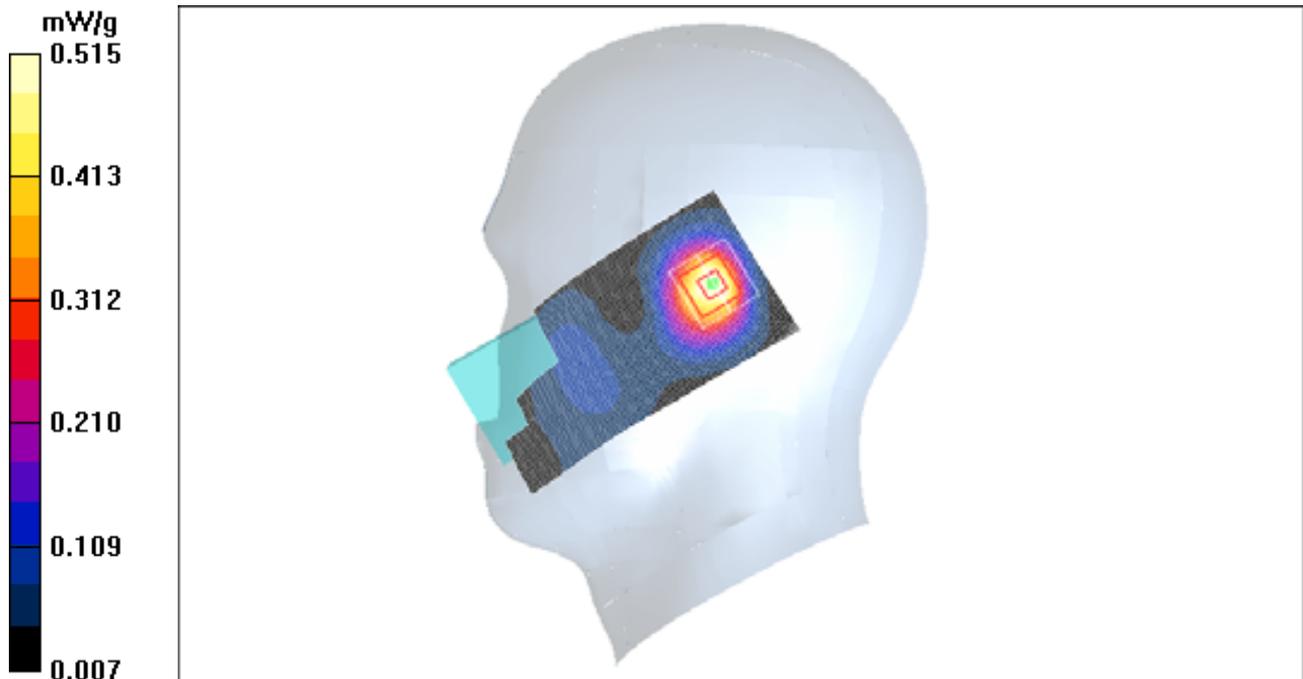

Figure 241 Right Hand Tilt 15°Open WCDMA Band II Channel 9538
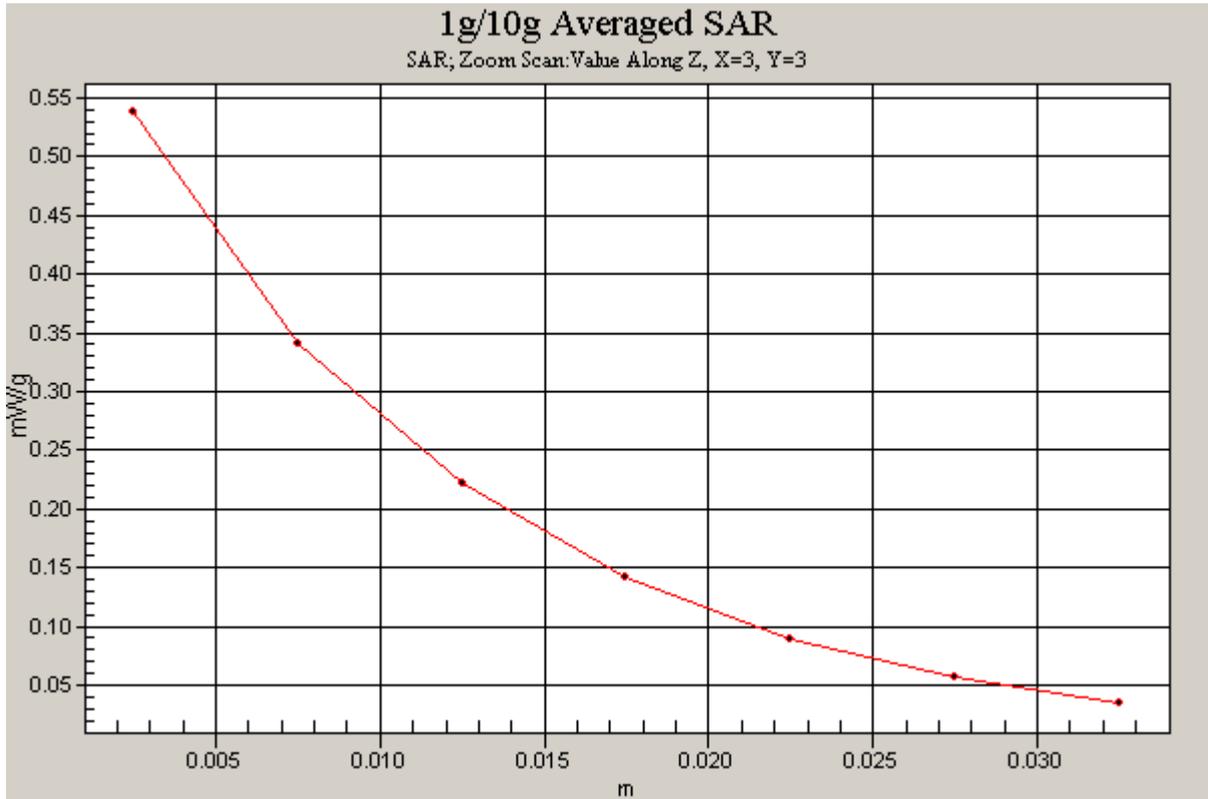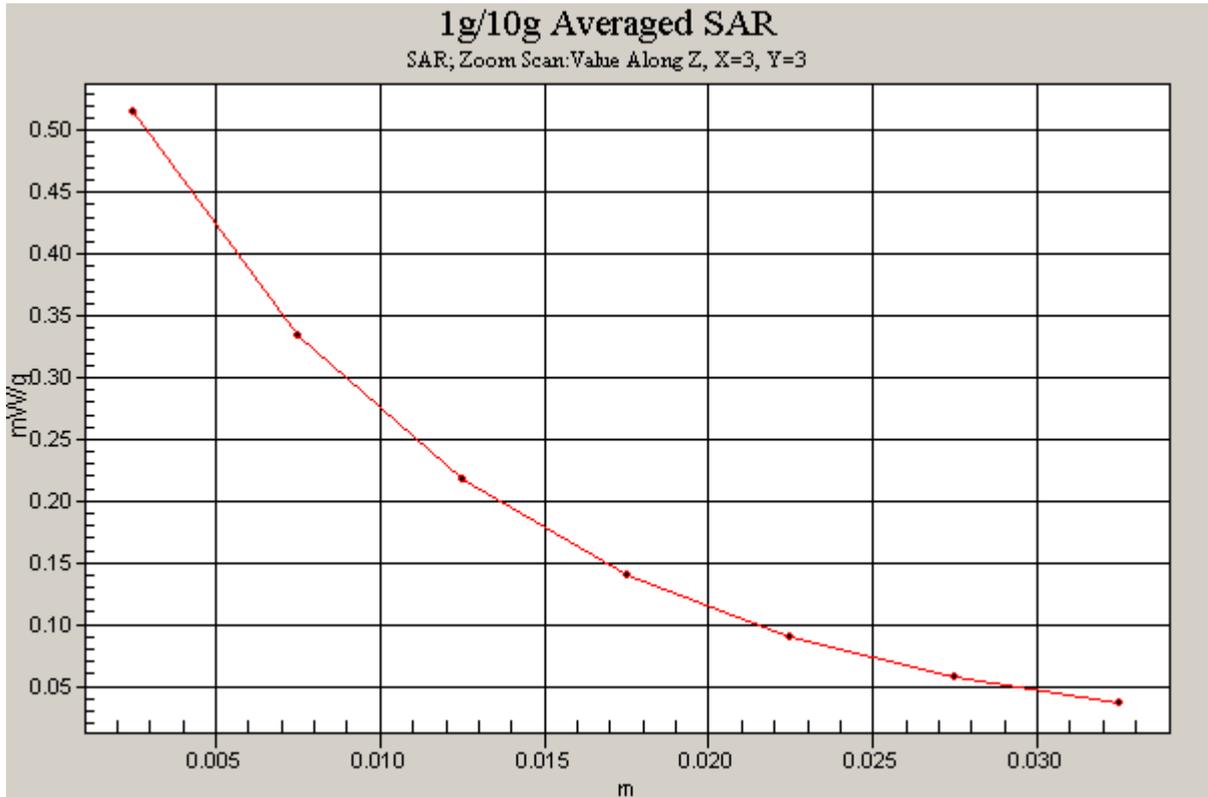
Figure 242 Z-Scan at power reference point (Right Hand Tilt 15°Open WCDMA Band II Channel 9538)

Date/Time: 12/27/2008 4:30:04 AM

WCDMA Band II Right Tilt Middle Open

Communication System: WCDMA Band II; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; $ε_r$ = 40.1; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.594 mW/g

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

Reference Value = 19.0 V/m; Power Drift = 0.015 dB

Peak SAR (extrapolated) = 0.640 W/kg

SAR(1 g) = 0.410 mW/g; SAR(10 g) = 0.241 mW/g
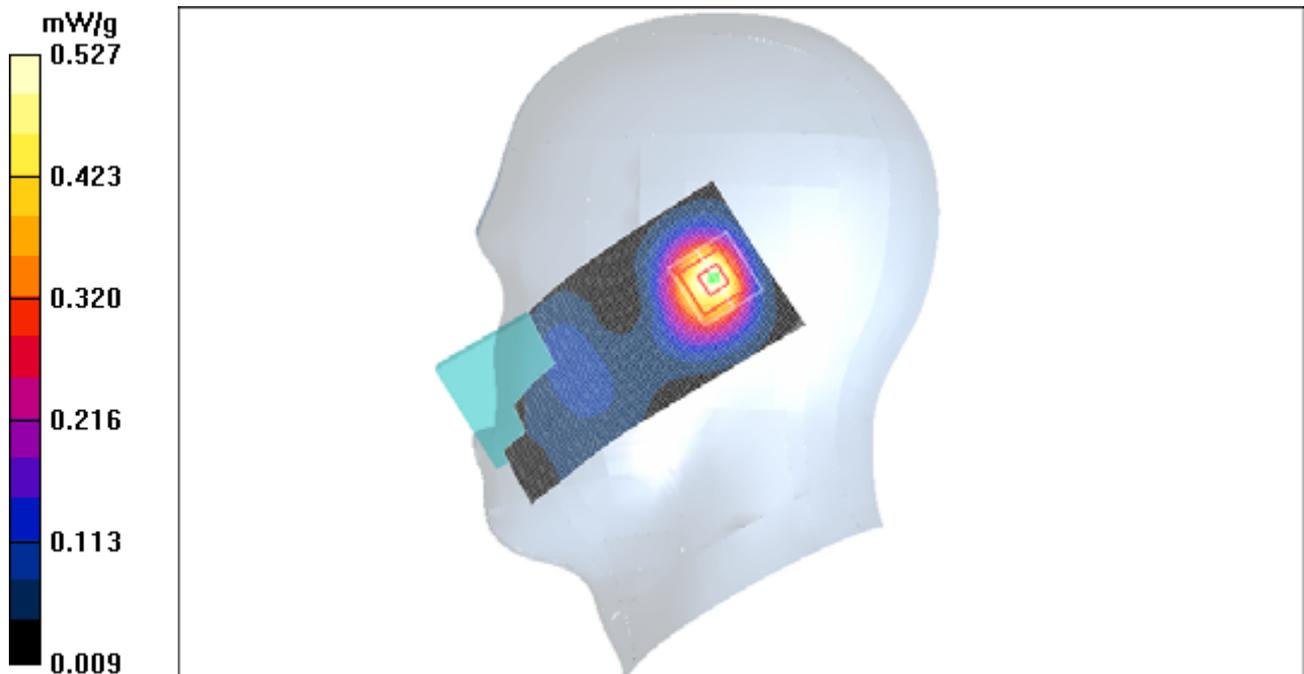
Maximum value of SAR (measured) = 0.515 mW/g

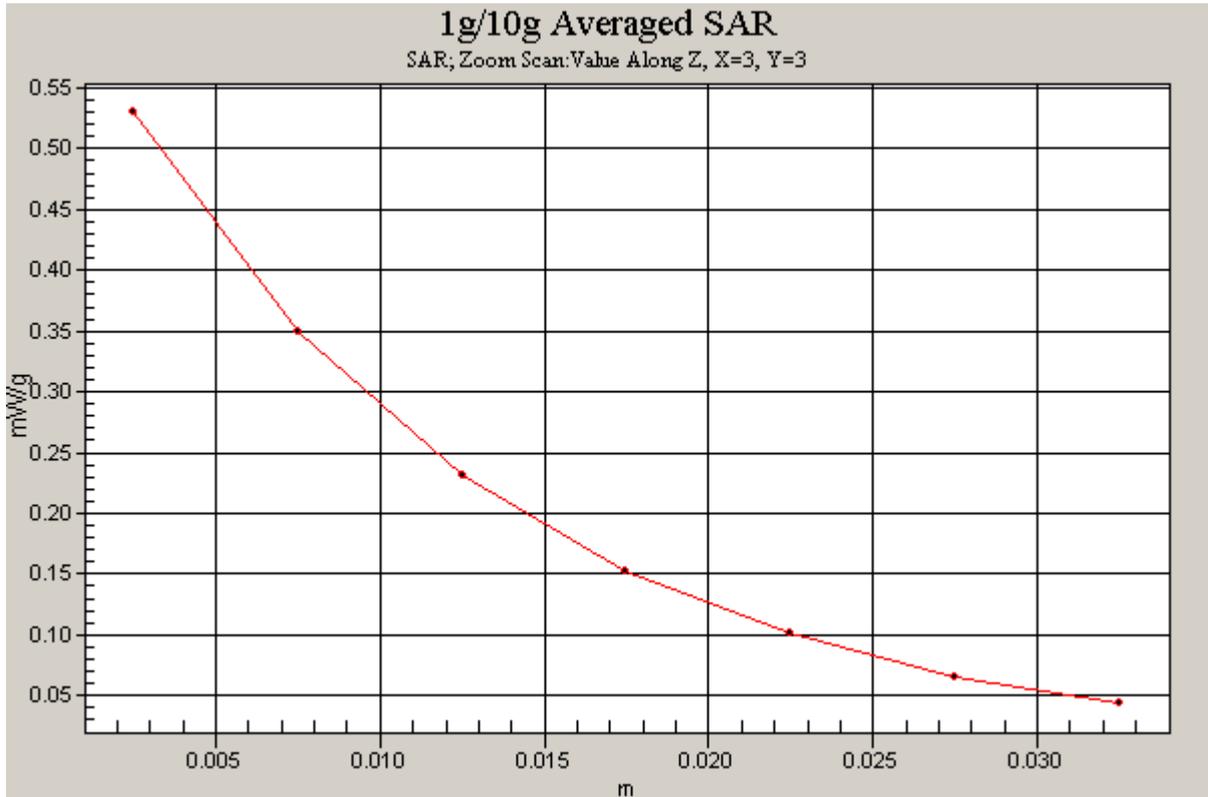
Figure 243 Right Hand Tilt 15°Open WCDMA Band II Channel 9400

Figure 244 Z-Scan at power reference point (Right Hand Tilt 15°Open WCDMA Band II Channel 9400)

Date/Time: 12/27/2008 4:11:37 AM

WCDMA Band II Right Tilt Low Open

Communication System: WCDMA Band II; Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.37 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.35, 7.35, 7.35); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt Low/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.594 mW/g

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

Reference Value = 19.6 V/m; Power Drift = -0.111 dB

Peak SAR (extrapolated) = 0.650 W/kg

SAR(1 g) = 0.424 mW/g; SAR(10 g) = 0.254 mW/g

Maximum value of SAR (measured) = 0.527 mW/g

Figure 245 Right Hand Tilt 15°Open WCDMA Band II Channel 9262

Figure 246 Z-Scan at power reference point (Right Hand Tilt 15°Open WCDMA Band II Channel 9262)

Date/Time: 12/28/2008 12:48:40 PM

WCDMA Band II Towards Ground High Open

Communication System: WCDMA Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1908 MHz; σ = 1.57 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground High/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.729 mW/g

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

Reference Value = 8.76 V/m; Power Drift = -0.098 dB

Peak SAR (extrapolated) = 0.899 W/kg

SAR(1 g) = 0.595 mW/g; SAR(10 g) = 0.382 mW/g
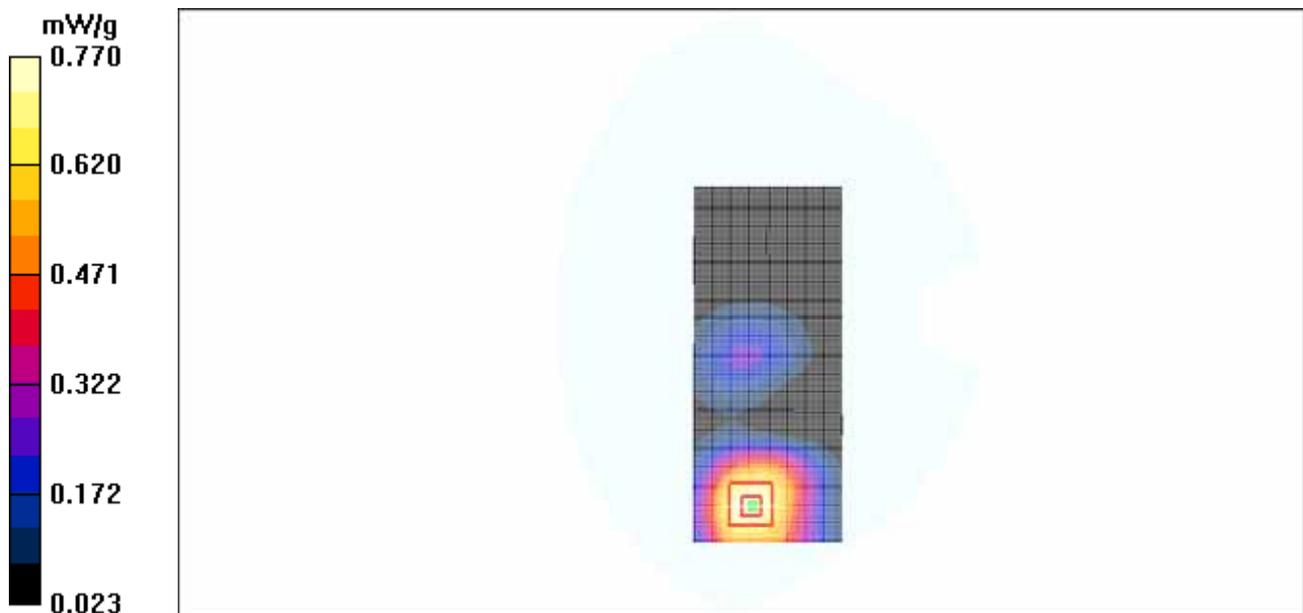
Maximum value of SAR (measured) = 0.723 mW/g
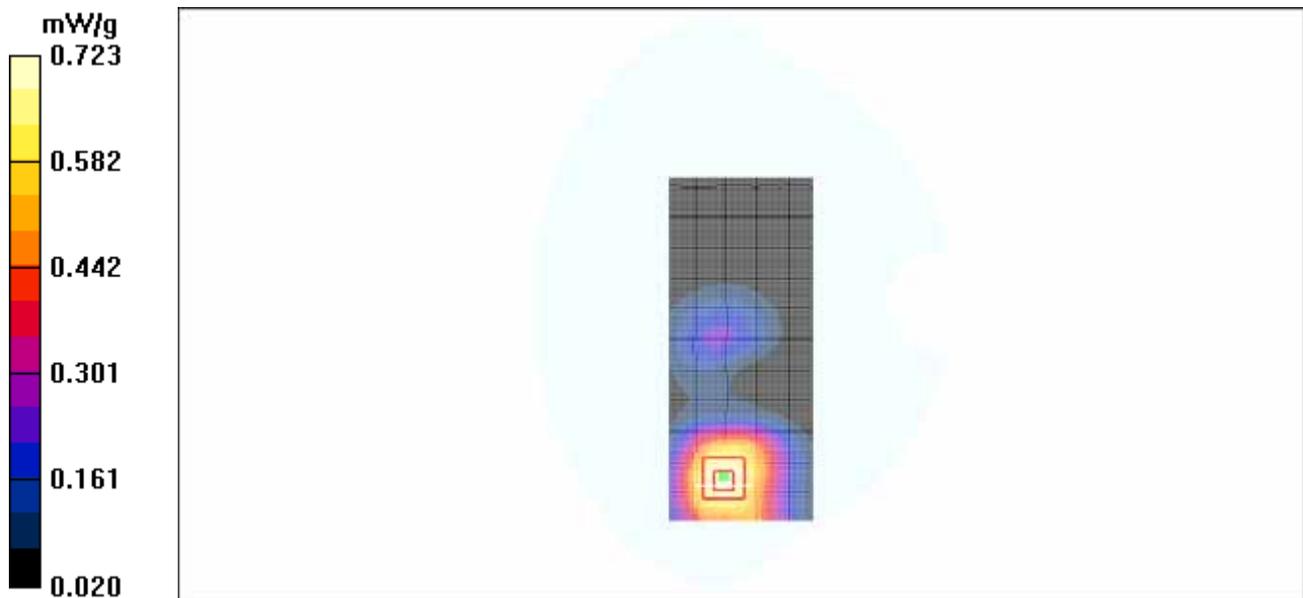
Figure 247 Body, Towards Ground, Open WCDMA Band II Channel 9538
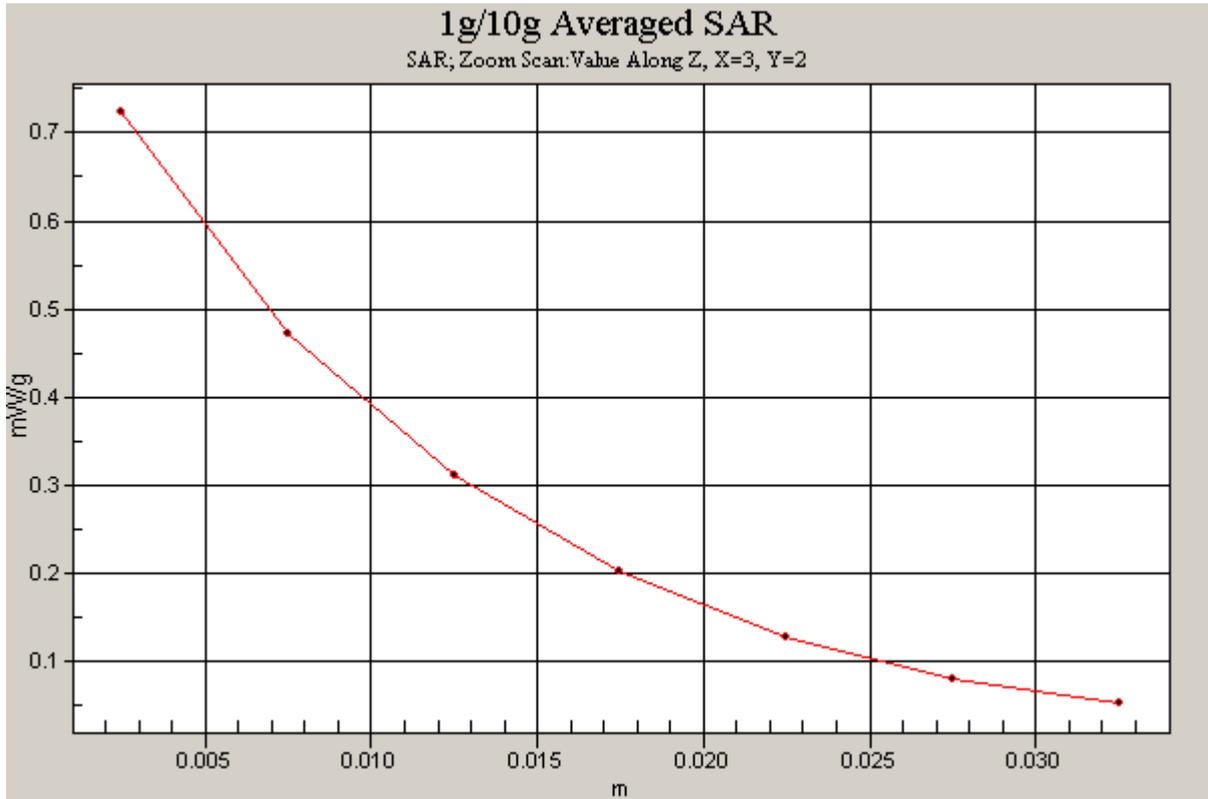
Figure 248 Z-Scan at power reference point (Body, Towards Ground, Open WCDMA Band II Channel 9538)

Date/Time: 12/28/2008 1:22:05 PM

WCDMA Band II Towards Ground Middle Open

Communication System: WCDMA Band II; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; $ε_r$ = 53.3; ρ = 1000 kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Middle/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.777 mW/g

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

Reference Value = 8.46 V/m; Power Drift = 0.050 dB

Peak SAR (extrapolated) = 0.954 W/kg

SAR(1 g) = 0.633 mW/g; SAR(10 g) = 0.405 mW/g

Maximum value of SAR (measured) = 0.770 mW/g

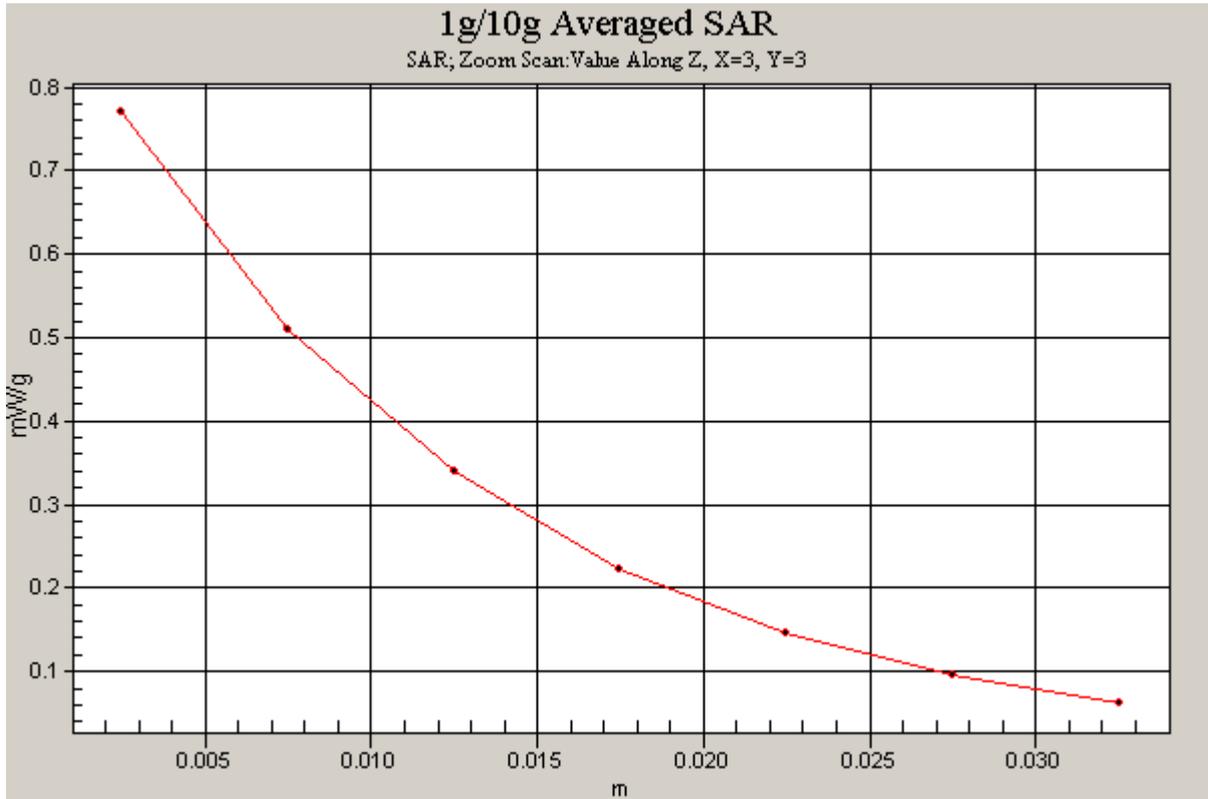Figure 249 Body, Towards Ground, Open WCDMA Band II Channel 9400

Figure 250 Z-Scan at power reference point (Body, Towards Ground, Open WCDMA Band II Channel 9400)

Date/Time: 12/28/2008 1:42:30 PM

WCDMA Band II Towards Ground Low Open

Communication System: WCDMA Band II; Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.51 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Low/Area Scan (61x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.833 mW/g

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

Reference Value = 9.21 V/m; Power Drift = -0.114 dB

Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.688 mW/g; SAR(10 g) = 0.442 mW/g

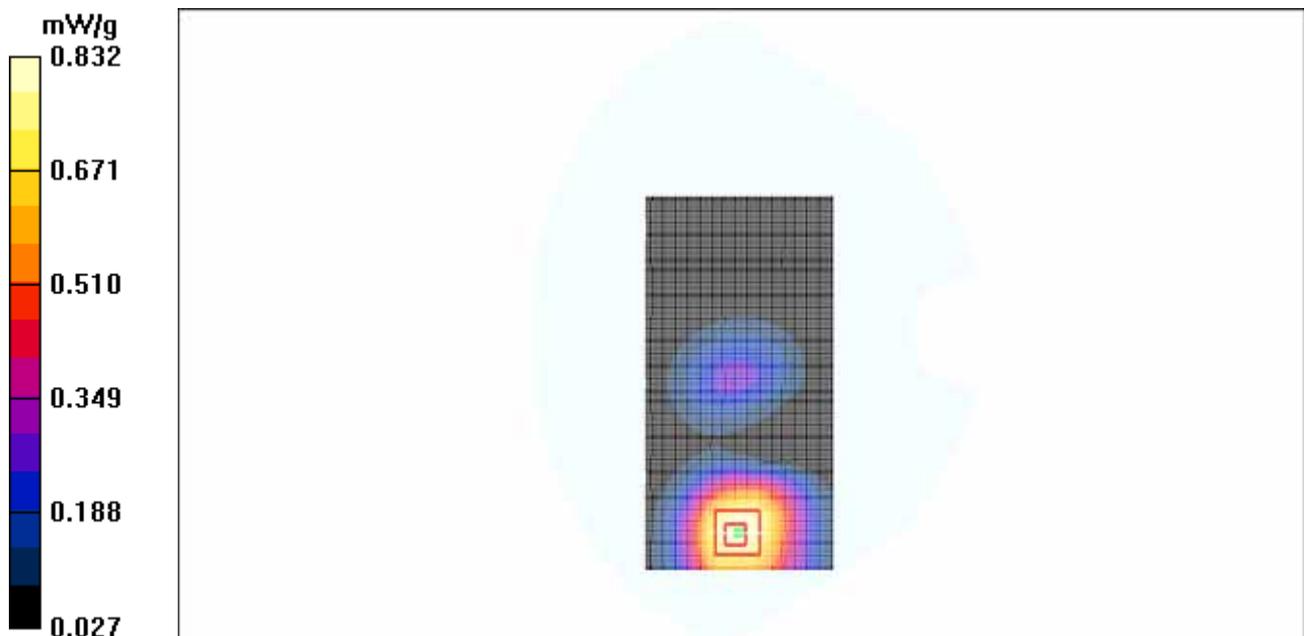Maximum value of SAR (measured) = 0.832 mW/g

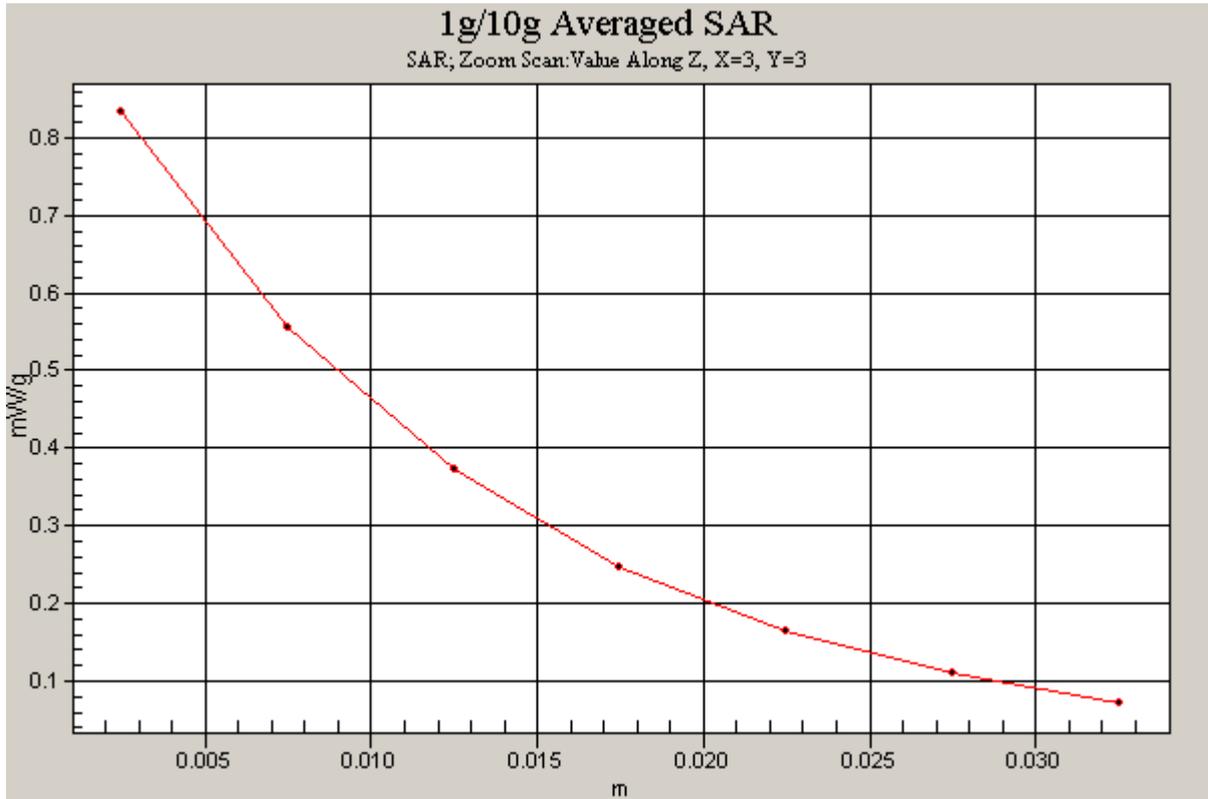Figure 251 Body, Towards Ground, Open WCDMA Band II Channel 9262

Figure 252 Z-Scan at power reference point (Body, Towards Ground, Open WCDMA Band II Channel 9262)

WCDMA Band II Towards Phantom High Open

Communication System: WCDMA Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1908 MHz; σ = 1.57 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom High/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.419 mW/g

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

Reference Value = 12.0 V/m; Power Drift = 0.036 dB

Peak SAR (extrapolated) = 0.512 W/kg

SAR(1 g) = 0.338 mW/g; SAR(10 g) = 0.214 mW/g

Maximum value of SAR (measured) = 0.412 mW/g

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

Reference Value = 12.0 V/m; Power Drift = 0.036 dB

Peak SAR (extrapolated) = 0.420 W/kg

SAR(1 g) = 0.273 mW/g; SAR(10 g) = 0.170 mW/g

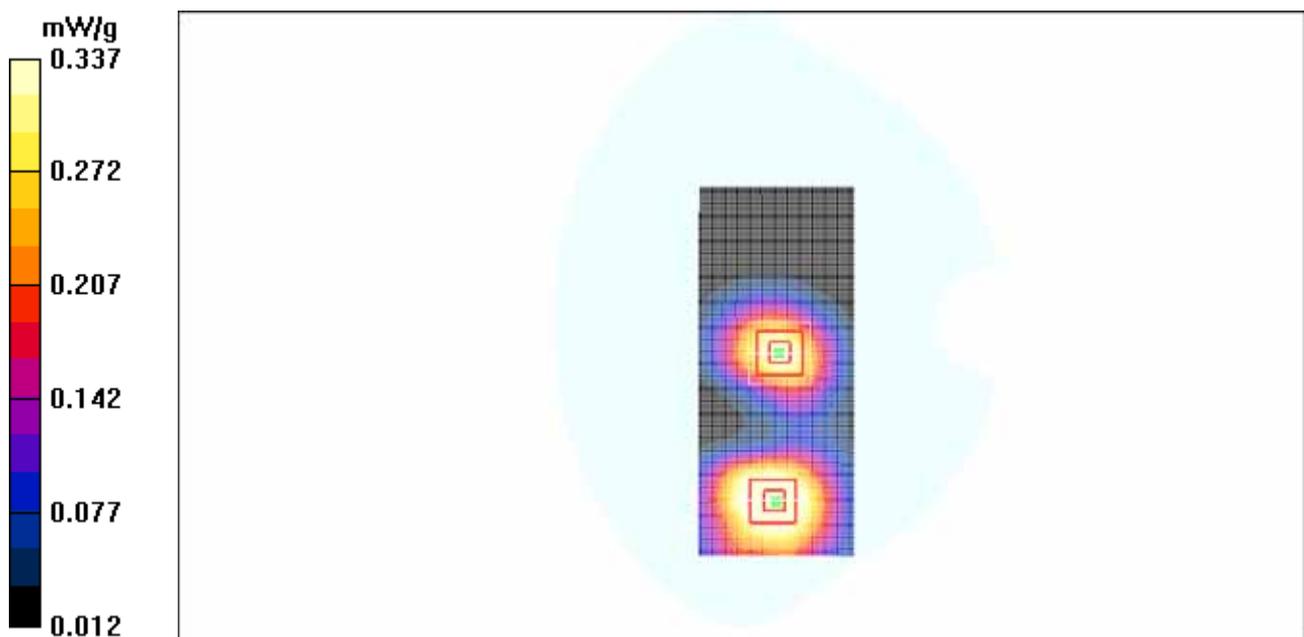Maximum value of SAR (measured) = 0.337 mW/g

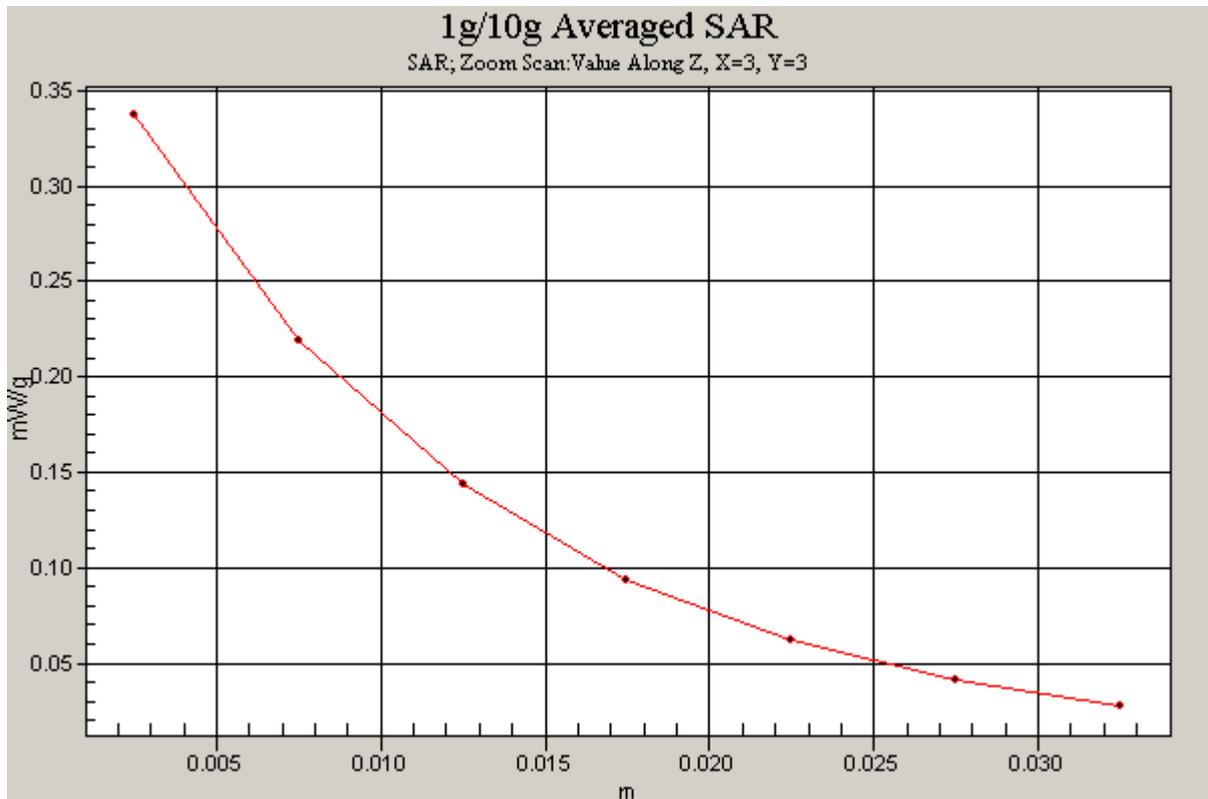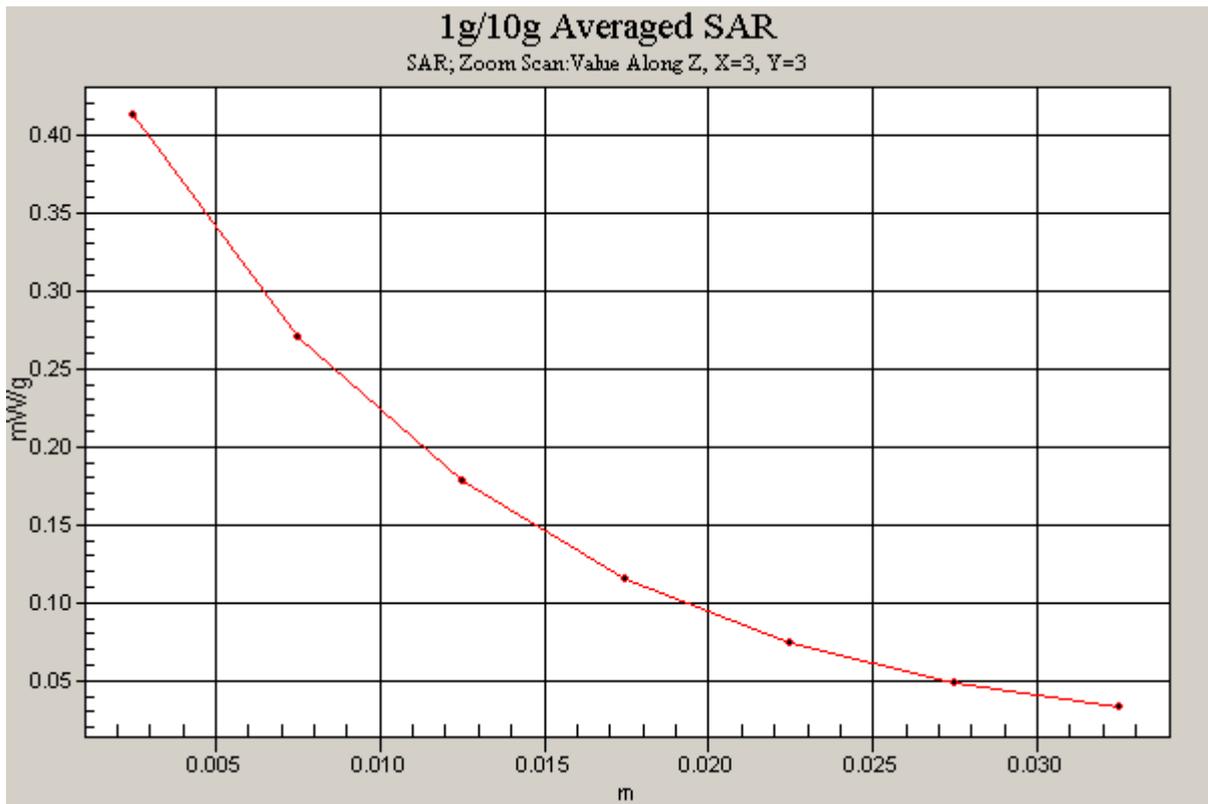Figure 253 Body, Towards Phantom, Open WCDMA Band II Channel 9538

Figure 254 Z-Scan at power reference point (Body, Towards Phantom, Open WCDMA Band II Channel 9538)

Date/Time: 12/28/2008 10:45:05 AM

WCDMA Band II Towards Phantom Middle Open

Communication System: WCDMA Band II; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom Middle/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 12.8 V/m; Power Drift = -0.053 dB

Peak SAR (extrapolated) = 0.552 W/kg

SAR(1 g) = 0.366 mW/g; SAR(10 g) = 0.233 mW/g

Maximum value of SAR (measured) = 0.395 mW/g

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

Reference Value = 12.8 V/m; Power Drift = -0.053 dB

Peak SAR (extrapolated) = 0.484 W/kg

SAR(1 g) = 0.316 mW/g; SAR(10 g) = 0.200 mW/g

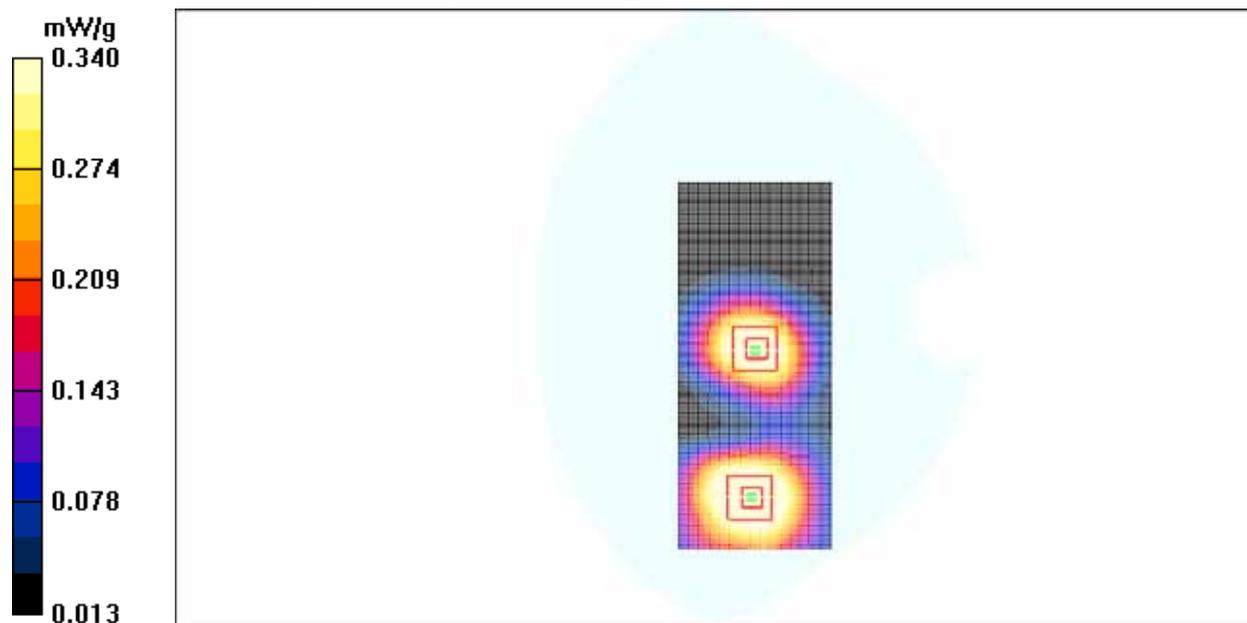Maximum value of SAR (measured) = 0.340 mW/g

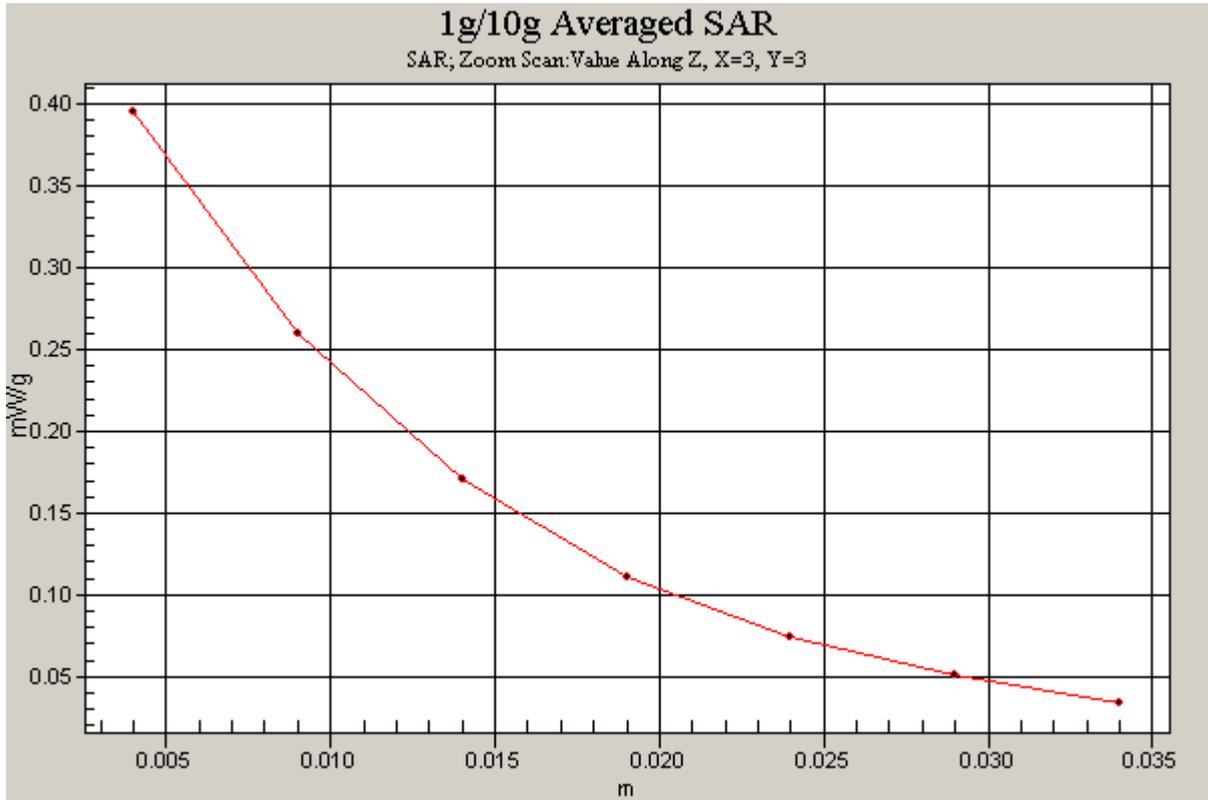Figure 255 Body, Towards Phantom, Open WCDMA Band II Channel 9400

Figure 256 Z-Scan at power reference point (Body, Towards Phantom, Open WCDMA Band II Channel 9400)

Date/Time: 12/28/2008 10:05:23 AM

WCDMA Band II Towards Phantom Low Open

Communication System: WCDMA Band II; Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.51 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Phantom Low/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.498 mW/g

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

Reference Value = 13.7 V/m; Power Drift = -0.095 dB

Peak SAR (extrapolated) = 0.607 W/kg

SAR(1 g) = 0.402 mW/g; SAR(10 g) = 0.257 mW/g

Maximum value of SAR (measured) = 0.490 mW/g

Towards Phantom Low/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.7 V/m; Power Drift = -0.095 dB

Peak SAR (extrapolated) = 0.555 W/kg

SAR(1 g) = 0.367 mW/g; SAR(10 g) = 0.234 mW/g

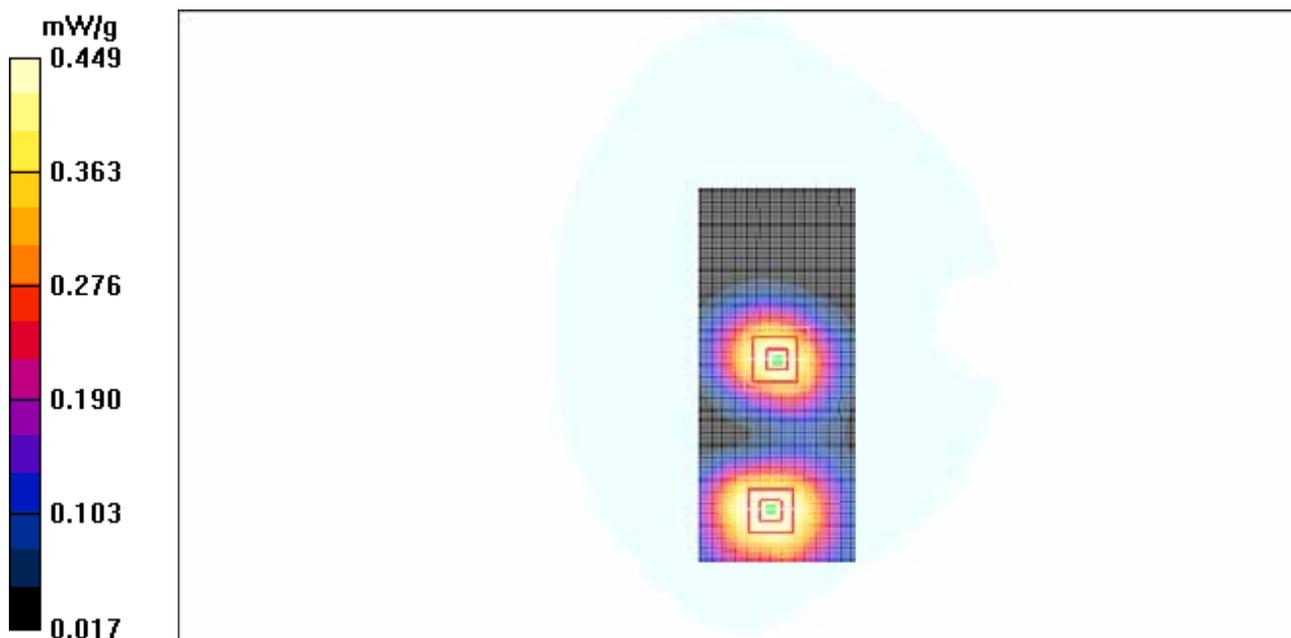Maximum value of SAR (measured) = 0.449 mW/g

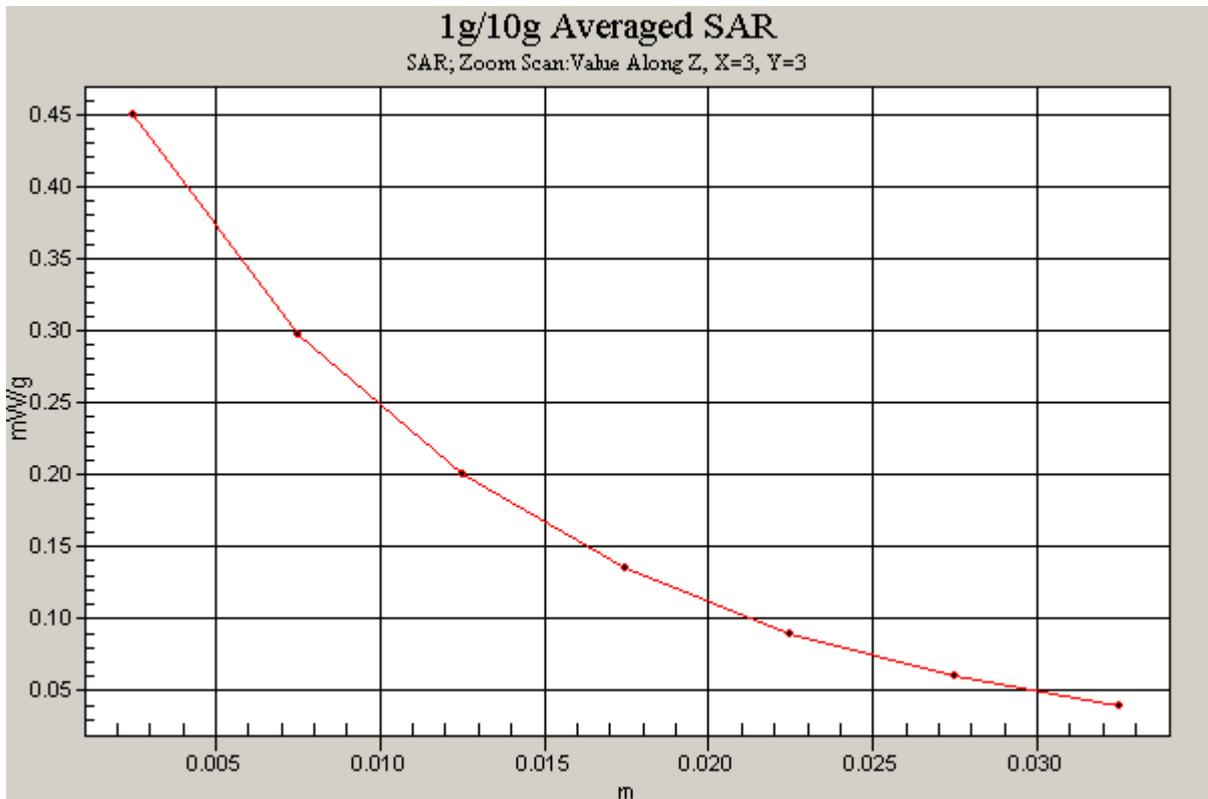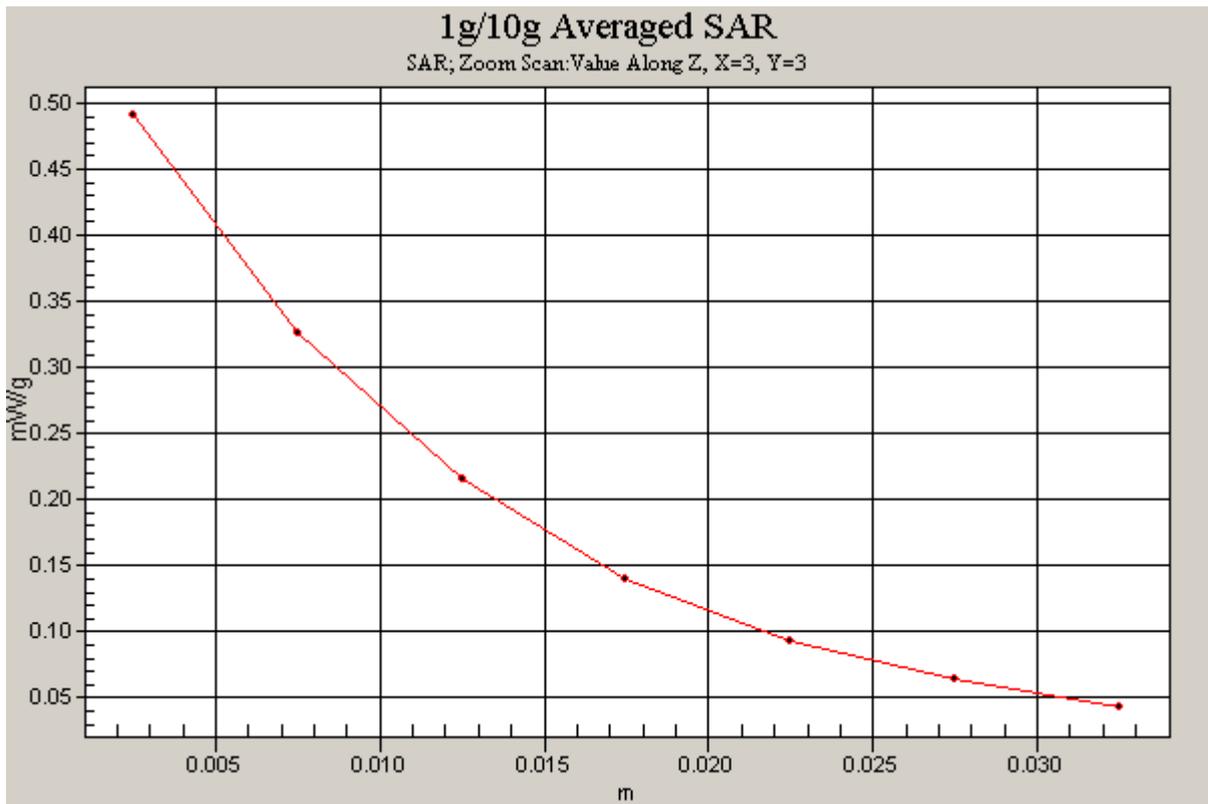Figure 257 Body, Towards Phantom, Open WCDMA Band II Channel 9262

Figure 258 Z-Scan at power reference point (Body, Towards Ground, Open WCDMA Band II, Channel 9262)

Date/Time: 12/28/2008 10:35:47 PM

WCDMA Band II Earphone Towards Ground Low Open

Communication System: WCDMA Band II; Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.51 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Low/Area Scan (61x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.841 mW/g

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

Reference Value = 9.92 V/m; Power Drift = 0.045 dB

Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.687 mW/g; SAR(10 g) = 0.441 mW/g

Maximum value of SAR (measured) = 0.835 mW/g

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

Reference Value = 9.92 V/m; Power Drift = 0.045 dB

Peak SAR (extrapolated) = 0.923 W/kg

SAR(1 g) = 0.572 mW/g; SAR(10 g) = 0.327 mW/g
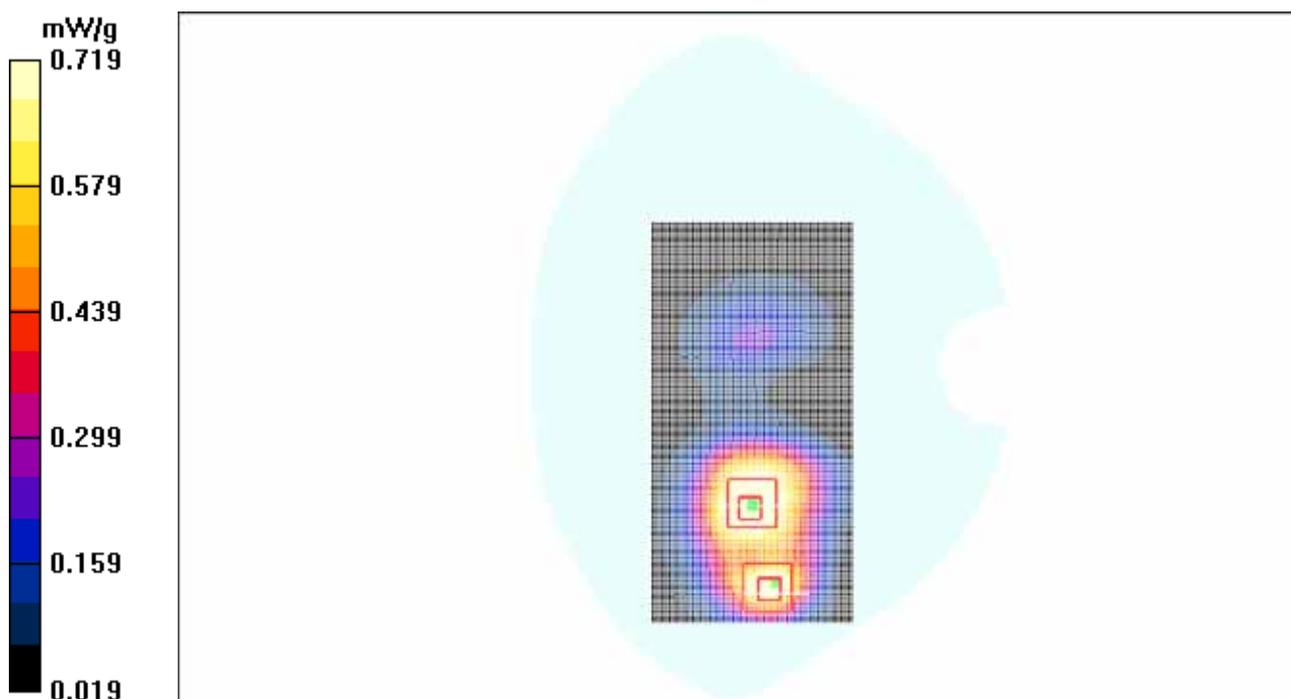
Maximum value of SAR (measured) = 0.719 mW/g

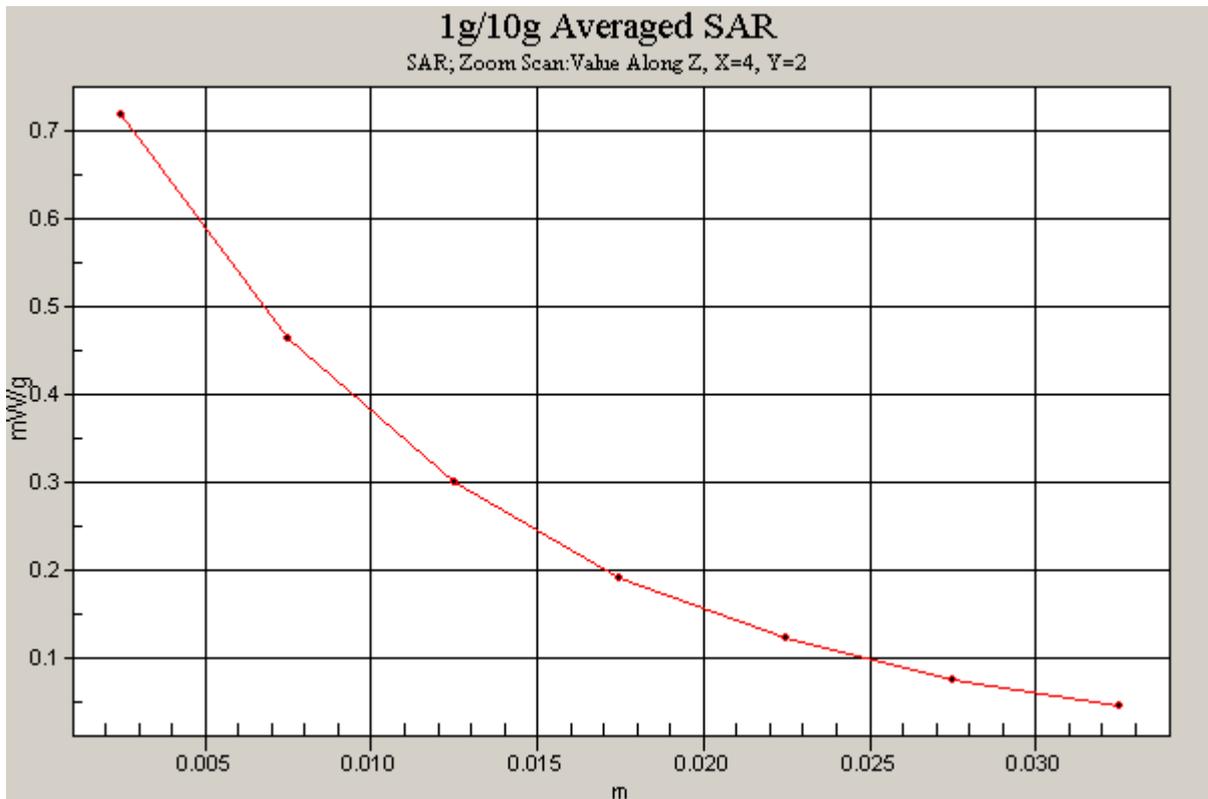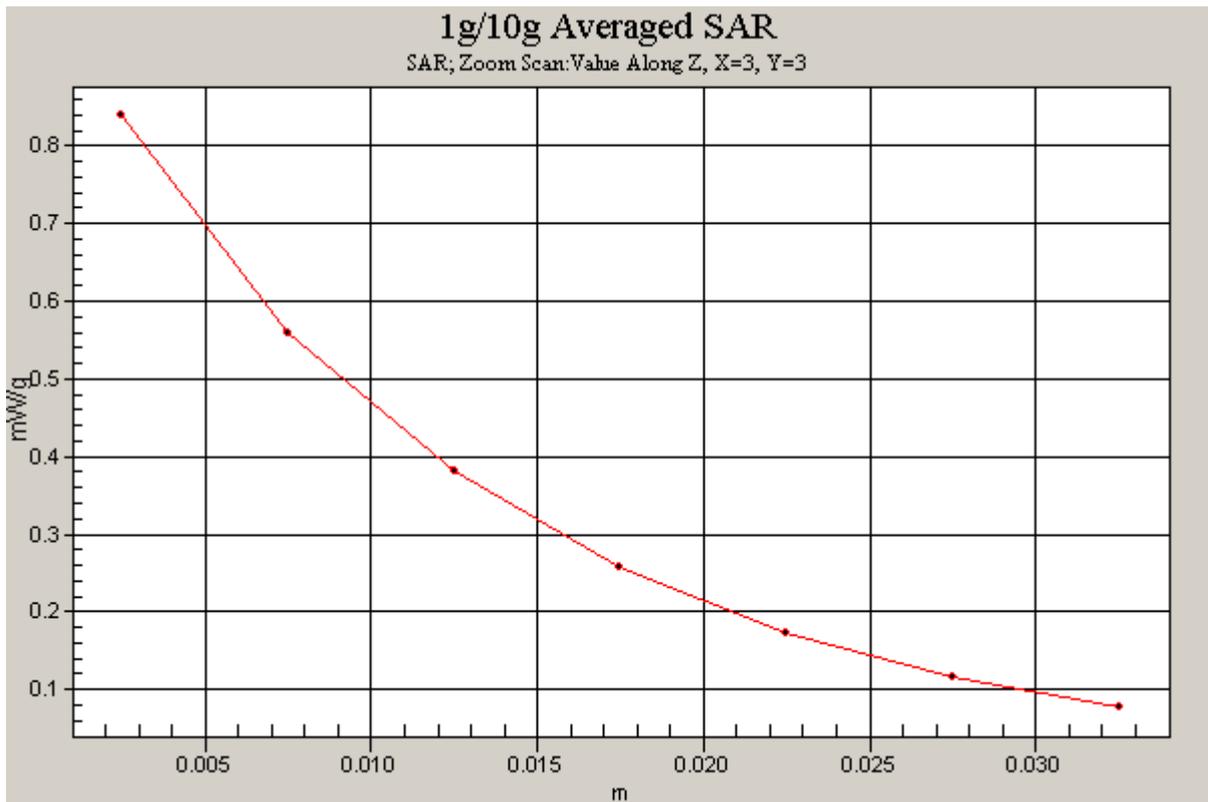Figure 259 Body with Earphone, Towards Ground, Open WCDMA Band II, Channel 9400

Figure 260 Z-Scan at power reference point (Body with Earphone, Towards Ground, Open WCDMA Band II, Channel 9400)

Date/Time: 1/5/2009 11:30:47 AM

WCDMA Band II Earphone Towards Ground Low Open

Communication System: WCDMA Band II; Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.51 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Low/Area Scan (61x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.885 mW/g

Towards 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) = 1.09 W/kg

SAR(1 g) = 0.741 mW/g; SAR(10 g) = 0.481 mW/g

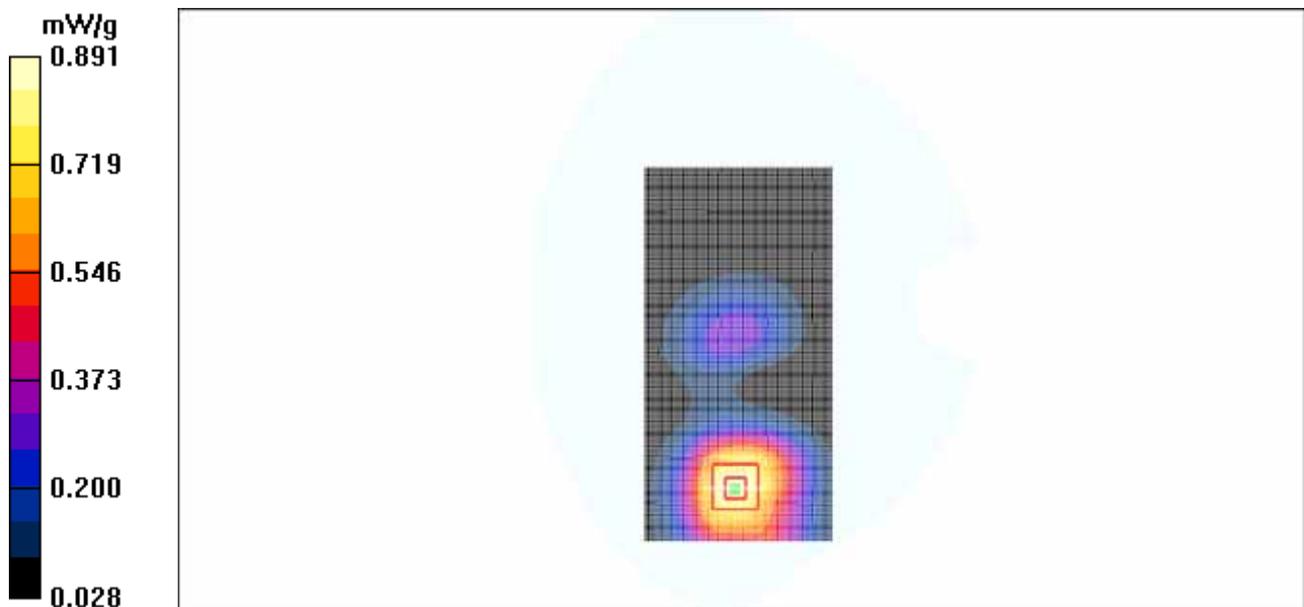Maximum value of SAR (measured) = 0.891 mW/g

Figure 261 Body with Earphone, Towards Ground, Open WCDMA Band II, Channel 9400
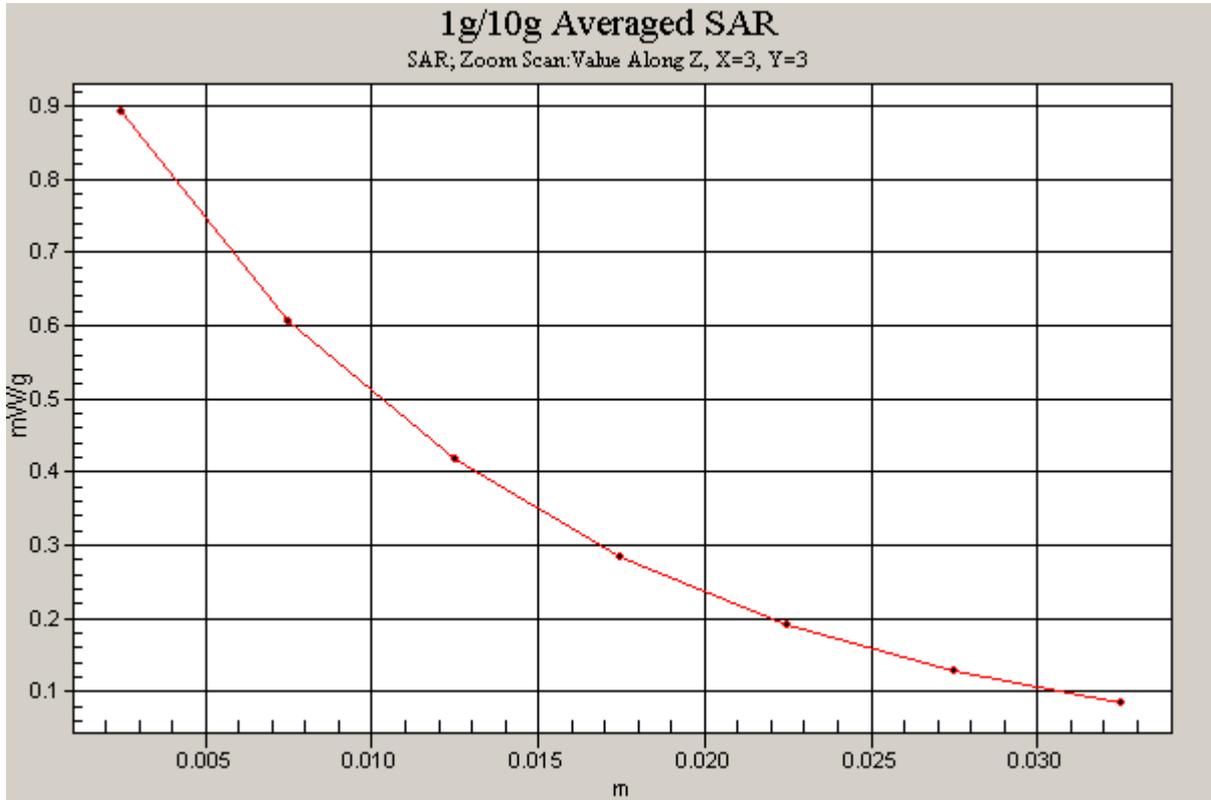
Figure 262 Z-Scan at power reference point (Body with Earphone, Towards Ground, Open WCDMA Band II, Channel 9400)

Date/Time: 12/28/2008 11:17:04 PM

WCDMA Band II HSDPA Towards Ground Low Open

Communication System: WCDMA Band II+HSDPA; Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.51 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3660; ConvF(7.45, 7.45, 7.45); Calibrated: 9/3/2008
- Electronics: DAE3 Sn536; Calibrated: 8/28/2008
- Phantom: SAM000 T01 ; Type: SAM V4.0; Serial: TP-1246
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Towards Ground Low/Area Scan (61x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.654 mW/g

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

Reference Value = 8.15 V/m; Power Drift = -0.124 dB

Peak SAR (extrapolated) = 0.816 W/kg

SAR(1 g) = 0.538 mW/g; SAR(10 g) = 0.345 mW/g

Maximum value of SAR (measured) = 0.654 mW/g

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

Reference Value = 8.15 V/m; Power Drift = -0.124 dB

Peak SAR (extrapolated) = 0.769 W/kg

SAR(1 g) = 0.477 mW/g; SAR(10 g) = 0.273 mW/g
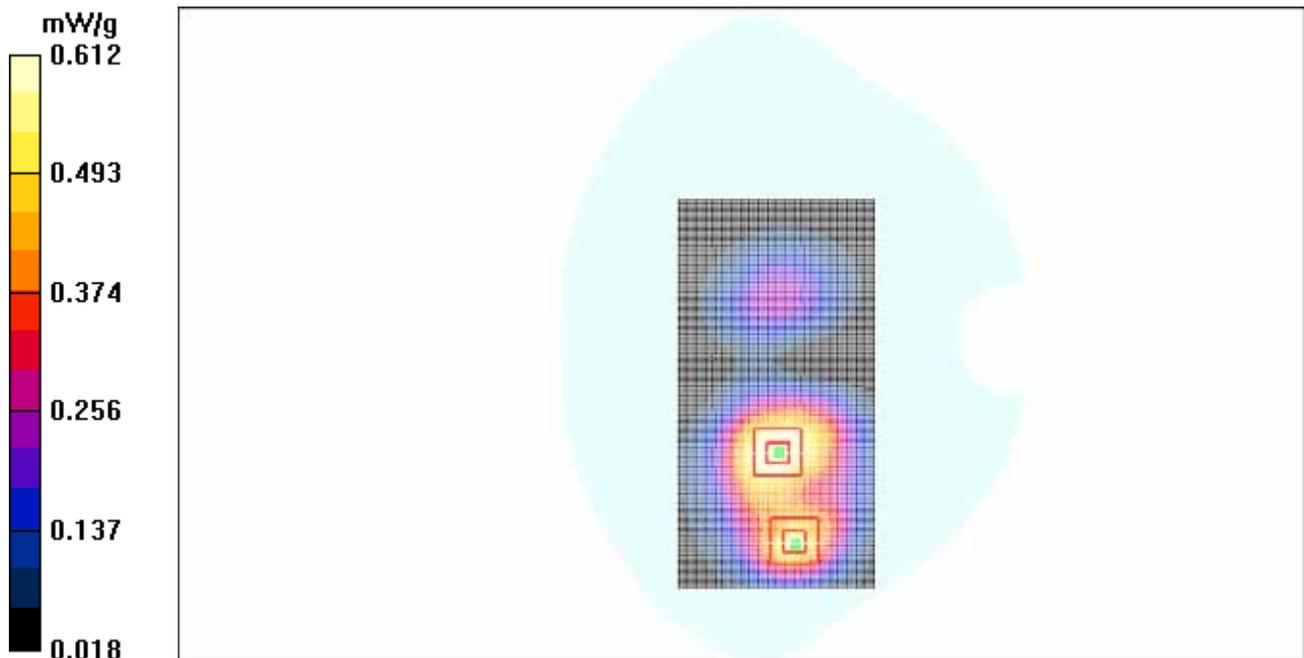
Maximum value of SAR (measured) = 0.612 mW/g

Figure 263 Body, Towards Ground, Open WCDMA Band II HSDPA Channel 9262