NO.: RZA2008-0693FCC

OET 65

TEST REPORT

Test name	Electromagnetic Field (Specific Absorption Rate)
Product	WCDMA/GPRS/GSM/EDGE Mobile Phone
Model	U1307
FCC ID	QISU1307
Client	Huawei Technologies Co., Ltd.

TA Technology (Shanghai) Co., Ltd.

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GENERAL SUMMARY

Product	WCDMA/GPRS/GSM/EDGE Mobile Phone	**Model**	U1307
Client	Huawei Technologies Co., Ltd.	**Type of test**	Entrusted
Manufacturer	Huawei Technologies Co., Ltd.	**Arrival Date of sample**	May.27th, 2008
Place of sampling	(Blank)	**Carrier of the samples**	Yan Xie
Quantity of the samples	One	**Date of product**	(Blank)
Base of the samples	(Blank)	**Items of test**	SAR
Series number	VF2AA10851400093		
Standard(s)	**EN 50360–2001:** Product standard for the measurement of Specific Absorption Rate related to human exposure to electromagnetic fields from mobile phones. **EN 50361–2001:** Basic standard for the measurement of Specific Absorption Rate related to human exposure to electromagnetic fields from mobile phones. **ANSI C95.1–1999:** 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 Body 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).		
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 6.2 of this test report. Maximum localized SAR is below exposure limits specified in the relevant standards cited in Clause 6.1 of this test report. General Judgment: **Pass** (Stamp) **Date of issue: July. 3rd, 2008**		
Comment	The test result only responds to the measured sample.		

Approved by Chenguang Zheng **Revised by** Dabao Wang **Performed by** Minbao Ling

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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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2 GENERAL CONDITIONS

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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	U1307	VF2AA10851400093	Huawei Technologies Co.,Ltd.
Lithium Battery	HBV570	FMT7B0101396Y	FMT Electronics Co.,Ltd.
AC/DC Adapter	HS-050040E2	HKY7C2200005	Huawei Technologies Co.,Ltd.

Note:

The EUT appearances see ANNEX I.

3.3 Operating conditions

Mode	GSM850	GSM1900	WCDMA Band V
TX frequency range	824.2~848.8MHz	1850.2 ~1909.8 MHz	826.4~846.6MHz
RX frequency range	869.2 ~893.8 MHz	1930.2 ~1989.8 MHz	871.4~891.6MHz
Standard output power	33dBm (2W)	30dBm (1W)	24dBm (0.25W)
Power level	Tested with power level 5	Tested with power level 0	All up bit
Modulation	GMSK		QPSK

3.4 General Description

Equipment Under Test (EUT) is a model of WCDMA/GPRS/GSM/EDGE Mobile Phone with internal antenna. It consists of Handset, Lithium Battery and AC/DC Adapter The detail about Mobile phone, Lithium Battery and AC/DC Adapter is in Table 3. SAR is tested for GSM 850, GSM 1900, and WCDMA Band V. It has the GPRS and EGPRS functions, the GPRS and EGPRS class is 10.

The sample undergoing test was selected by the Client.

Components list please refer to documents of the manufacturer.

SAR tests for GSM850, GSM 1900 and WCDMA Band V, a communication link is set up with a System Simulator (SS) by air link, and a call is established, the output power of E5515C would be adjusted to minimum power with the sensitivity of the mobile station to build steady connection with mobile station. The power level control parameter “0”, “5”, “All 1”and it means that requires mobile station to emit with maximum power.

The EUT shall use its internal transmitter. The antenna(s), battery and accessories shall be those specified by the manufacturer. The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power output. If a wireless link is used, the antenna connected to the output of the base station simulator shall be placed at least 50 cm away from the handset. The signal transmitted by the simulator to the antenna feeding point shall be lower than the output power level of the handset by at least 30 dB.

4 OPERATIONAL CONDITIONS DURING TEST

4.1 WCDMA Test Configuration

4.1.1Output 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.

4.1.2 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.

4.1.3 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.

4.2 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.

Since the EUT not only has the data transfer function, but also have the speech transfer function.

The tests in the band of GSM 850 and GSM 1900 are performed in the mode of speech transfer function and GPRS. And since the GPRS class is 10 for this EUT, it has at most 2 timeslots in uplink.

5 SAR MEASUREMENTS SYSTEM CONFIGURATION

5.1 SAR Measurement Set-up

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

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

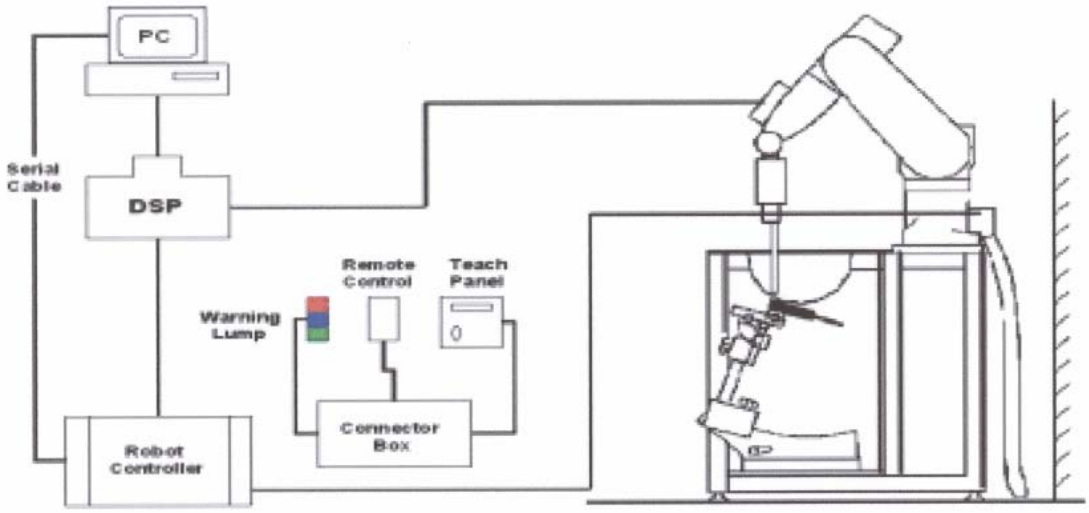


Figure 1. SAR Lab Test Measurement Set-up

The DAE4 consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit. Transmission to the PC-card is accomplished through an optical downlink for data and status information and an optical uplink for commands and clock lines. The mechanical probe mounting device includes two different sensor systems for frontal and sidewise probe contacts. They are also used for mechanical surface detection and probe collision detection. The robot uses its own controller with a built in VME-bus computer.

5.2 Dasy4 E-field Probe System

The SAR measurements were conducted with the dosimetric probe ET3DV6 (manufactured by SPEAG), designed in the classical triangular configuration and optimized for dosimetric evaluation. The probe has been calibrated according to the standard procedure with an accuracy of better than ± 10%. The spherical isotropy was evaluated and found to be better than ± 0.25dB.

ET3DV6 Probe Specification

Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection System (ET3DV6 only) Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.q., glycol)
Calibration	In air from 10 MHz to 2.5 GHz In brain and muscle simulating tissue at frequencies of 900MHz, 1750MHz, 1950MHz and 2450MHz (accuracy±8%) Calibration for other liquids and frequencies upon request
Frequency	I 0 MHz to 3 GHz; Linearity: ±0.2 dB (30 MHz to 3 GHz)
Directivity	±0.2 dB in brain tissue (rotation around probe axis) ±0.4 dB in brain tissue (rotation around probe axis)
Dynamic Range	5u W/g to > 100mW/g; Linearity: ±0.2dB
Surface Detection	±0.2 mm repeatability in air and clear liquids over diffuse reflecting surface (ET3DV6 only)
Dimensions	Overall length: 330mm Tip length: 16mm Body diameter: 12mm Tip diarneter: 6.8mm Distance from probe tip to dipole centers: 2.7mm
Application	General dosimetry up to 3GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms

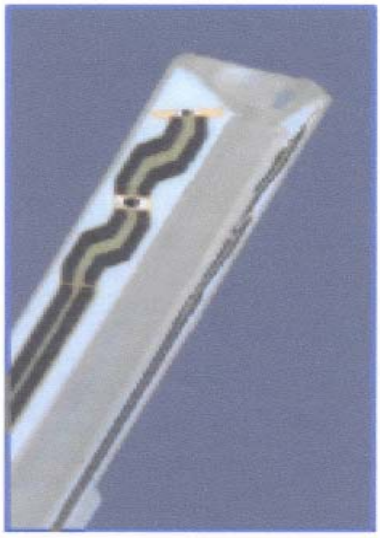


Figure 2.ET3DV6 E-field Probe

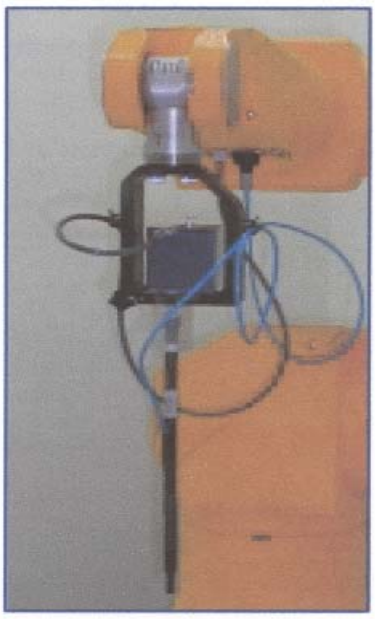


Figure 3. ET3DV6 E-field probe

5.3 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.

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

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

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

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

5.4 Other Test Equipment

5.4.1 Device Holder for Transmitters

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

Figure 4. Device Holder

5.4.2 Phantom

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

Shell Thickness	2±0.1 mm
Filling Volume	Approx. 20 liters
Dimensions	810 x l000 x 500 mm (H x L x W)
Available	Special

Figure 5. Generic Twin Phantom

5.5 Equivalent Tissues

The liquid used for the frequency range of 800-2000 MHz consisted of water, sugar, salt, and Glycol monobutyl, Cellulose, Preventol. The liquid has previously been proven to be suited for worst-case. The Table 4 and Table 5 show the detail solution. It's satisfying the latest tissue dielectric parameters requirements proposed by the IEEE 1528.

Table 4: 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	55.24
Glycol monobutyl	44.45
Salt	0.31
Dielectric Parameters Target Value	f=1900MHz ε=40.0 σ=1.40

Table 5: 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 monobutyl	29.96
Salt	0.13
Dielectric Parameters Target Value	f=1900MHz ε=53.3 σ=1.52

5.6 System Specifications

5.6.1 Robotic System Specifications

Specifications

Positioner: Stäubli Unimation Corp. Robot Model: RX90L

Repeatability: ±0.02 mm

No. of Axis: 6

Data Acquisition Electronic (DAE) System

Cell Controller

Processor: Pentium III

Clock Speed: 800 MHz

Operating System: Windows 2000

Data Converter

Features: Signal Amplifier, multiplexer, A/D converter, and control logic

Software: DASY4 software

Connecting Lines: Optical downlink for data and status info. Optical uplink for commands and clock.

6 CHARACTERISTICS OF THE TEST

6.1 Applicable Limit Regulations

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

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

ANSI C95.1–1999: IEEE Standard for Safety Levels with Respect to Human Exposure to RadioFrequency 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.

6.2 Applicable Measurement Standards

EN 50361–2001: Basic standard for the measurement of Specific Absorption Rate related to human exposure to electromagnetic fields from mobile phones.It specifies the measurement method for demonstration of compliance with the SAR limits for such equipments.

IEEE 1528–2003: Recommended Practice for Determining the Peak Spatial-Average SpecificAbsorption Rate (SAR) in the Human Body 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)

7 LABORATORY ENVIRONMENT

Table 6: The Ambient Conditions during Test

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

8 CONDUCTED OUTPUT POWER MEASUREMENT

8.1 Summary

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

8.2 Power Drift

To control the output power stability during the SAR test, DASY4 system calculates the power drift by measuring the E-field at the same location at the beginning and at the end of the measurement for each test position. These drift values can be found in Table 11 to Table 16 labeled as: (Power Drift [dB]). This ensures that the power drift during one measurement is within 0.21dB.

8.3 Conducted Power

8.3.1 Measurement Methods

The EUT was set up for the maximum output power. The channel power was measured. These measurements were done at 3 channels before SAR test and after SAR test.

8.3.2 Measurement result

Table 7: Conducted Power Measurement Results

GSM 850	Conducted Power		
	Channel 128	Channel 190	Channel 251
Before Test (dBm)	32.76	32.97	32.67
After Test (dBm)	32.75	32.97	32.66
GSM 850+GPRS	**Conducted Power**		
	Channel 128	**Channel 190**	**Channel 251**
Before Test (dBm)	32.76	32.97	32.67
After Test (dBm)	32.77	32.97	32.67
GSM 1900	**Conducted Power**		
	Channel 512	**Channel 661**	**Channel 810**
Before Test (dBm)	28.93	29.05	28.80
After Test (dBm)	28.93	29.04	28.80
GSM 1900+GPRS	**Conducted Power**		
	Channel 512	**Channel 661**	**Channel 810**
Before Test (dBm)	28.94	29.05	28.81
After Test (dBm)	28.94	29.05	28.81
WCDMA Band V (12.2kbps RMC)	**Conducted Power**		
	Channel 4132	**Channel 4183**	**Channel 4233**
Before Test (dBm)	22.60	22.74	22.55
After Test (dBm)	22.60	22.74	22.56
WCDMA Band V (64kbps RMC)	**Conducted Power**		
	Channel 4132	**Channel 4183**	**Channel 4233**
Before Test (dBm)	22.61	22.75	22.56
After Test (dBm)	22.60	22.74	22.56
WCDMA Band V (144kbps RMC)	**Conducted Power**		
	Channel 4132	**Channel 4183**	**Channel 4233**
Before Test (dBm)	22.62	22.75	22.56
After Test (dBm)	22.60	22.74	22.57
WCDMA Band V (384kbps RMC)	**Conducted Power**		
	Channel 4132	**Channel 4183**	**Channel 4233**
Before Test (dBm)	22.62	22.76	22.57
After Test (dBm)	22.62	22.74	22.57

9 TEST RESULTS

9.1 Dielectric Performance

Table 8: 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 (Head)	Permittivity ε_r	41.50	42.36	2.07	%
	Conductivity σ	0.90	0.92	2.22	%
1900 (Head)	Permittivity ε_r	40.00	39.68	-0.80	%
	Conductivity σ	1.40	1.43	2.14	%

Table 9: 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	54.68	-0.94	%
	Conductivity σ	0.97	0.99	2.06	%
1900 (Body)	Permittivity ε_r	53.30	52.06	-2.32	%
	Conductivity σ	1.52	1.52	0.00	%

9.2 System Validation

Table 10: 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	42.36			0.92		
	1900MHz	39.68			1.43		
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**
	835MHz	1.56	2.43	1.53	2.34	-1.92%	-3.70%
	1900MHz	4.98	9.45	4.93	9.36	-1.00%	-0.95%

Note:

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

b. The graph results see ANNEX D.

9.3 Summary of Measurement Results

9.3.1 GSM850/GPRS/EGPRS

Table 11: SAR Values (GSM850, Head)

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 Head		**Measurement Result (W/kg)**		**Power Drift (dB)**	
Different Test Position	**Channel**	**10 g Average**	**1 g Average**		
Left hand, Touch cheek	High	0.785	1.110	-0.069	Figure 7
	Middle	0.791	1.120	-0.058	Figure 9
	Low	0.604	0.859	-0.027	Figure 11
Left hand, Tilt 15 Degree	High	0.478	0.683	0.005	Figure 13
	Middle	0.483	0.685	0.018	Figure 15
	Low	0.366	0.517	0.013	Figure 17
Right hand, Touch cheek	High	0.731	1.020	-0.108	Figure 19
	Middle	0.813	1.130	-0.009	Figure 21
	Low	0.654	0.904	-0.122	Figure 23
Right hand, Tilt 15 Degree	High	0.476	0.660	-0.062	Figure 25
	Middle	0.488	0.675	0.066	Figure 27
	Low	0.391	0.540	-0.044	Figure 29

Table 12: SAR Values (GSM850, Body, Distance 15mm)

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)**	
Different Test Position	**Channel**	**10 g Average**	**1 g Average**		
Towards Ground	High	0.469	0.653	0.042	Figure 31
	Middle	0.560	0.776	-0.112	Figure 33
	Low	**0.587**	**0.814**	0.029	Figure 35
Towards Phantom	High	0.393	0.539	-0.010	Figure 37
	Middle	0.396	0.542	0.006	Figure 39
	Low	0.391	0.535	-0.105	Figure 41
Worst case position of Body with Earphone					
Towards Ground	Low	0.464	0.645	-0.076	Figure 43
Worst case position of Body with Bluetooth Earphone					
Towards Ground	Low	0.580	0.802	-0.051	Figure 45
Test Case of Body with GPRS(2 timeslots in uplink)					
Towards Ground	High	0.872	1.210	-0.145	Figure 47
	Middle	0.948	1.320	-0.030	Figure 49
	Low	**0.949**	**1.320**	-0.115	Figure 51
Towards Phantom	High	0.630	0.867	-0.045	Figure 53
	Middle	0.630	0.871	0.024	Figure 55
	Low	0.588	0.819	-0.130	Figure 57
Worst case position of GPRS with EGPRS(2 timeslots in uplink)					
Towards Ground	Low	0.312	0.435	-0.162	Figure 59

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

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.

9.3.2 GSM1900/GPRS/EGPRS

Table 13: SAR Values (GSM1900, Head)

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 Head		**Measurement Result (W/kg)**		**Power Drift (dB)**	
		10 g Average	**1 g Average**		
Different Test Position	**Channel**				
Left hand, Touch cheek	High	0.393	0.777	-0.155	Figure 61
	Middle	0.555	1.090	0.017	Figure 63
	Low	0.574	1.130	-0.024	Figure 65
Left hand, Tilt 15 Degree	High	0.361	0.670	0.074	Figure 67
	Middle	0.523	0.973	0.007	Figure 69
	Low	0.573	1.070	0.012	Figure 71
Right hand, Touch cheek	High	0.348	0.590	0.075	Figure 73
	Middle	0.482	0.819	0.018	Figure 75
	Low	0.512	0.866	-0.060	Figure 77
Right hand, Tilt 15 Degree	High	0.359	0.638	0.025	Figure 79
	Middle	0.512	0.905	0.009	Figure 81
	Low	0.588	1.040	0.142	Figure 83

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

Table 14: SAR Values (GSM1900, Body, Distance 15mm)

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	0.257	0.420	-0.025	Figure 85
	Middle	0.297	0.473	-0.051	Figure 87
	Low	**0.305**	**0.476**	-0.010	Figure 89
Towards Phantom	High	0.127	0.212	-0.015	Figure 91
	Middle	0.185	0.308	-0.051	Figure 93
	Low	0.201	0.336	-0.009	Figure 95
Worst case position of Body with Earphone					
Towards Ground	Low	0.279	0.441	-0.009	Figure 97
Worst case position of Body with Bluetooth Earphone					
Towards Ground	Low	0.325	0.511	-0.128	Figure 99
Test Case of Body with GPRS(2 timeslots in uplink)					
Towards Ground	High	0.473	0.751	-0.016	Figure 101
	Middle	0.548	0.884	0.021	Figure 103
	Low	**0.568**	**0.884**	-0.072	Figure 105
Towards Phantom	High	0.236	0.391	0.029	Figure 107
	Middle	0.329	0.557	0.016	Figure 109
	Low	0.360	0.606	-0.029	Figure 111
Worst case position of GPRS with EGPRS(2 timeslots in uplink)					
Towards Ground	Low	0.254	0.400	-0.054	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.

9.3.3 WCDMA Band V

Table 15: SAR Values (WCDMA Band V, Head)

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 Head		**Measurement Result (W/kg)**		**Power Drift (dB)**	
Different Test Position	**Channel**	**10 g Average**	**1 g Average**		
Left hand, Touch cheek	High	0.685	0.973	0.008	Figure 115
	Middle	0.612	0.870	-0.041	Figure 117
	Low	0.681	0.973	-0.020	Figure 119
Left hand, Tilt 15 Degree	High	0.429	0.608	-0.103	Figure 121
	Middle	0.366	0.522	0.003	Figure 123
	Low	0.425	0.603	-0.125	Figure 125
Right hand, Touch cheek	High	0.729	1.010	-0.053	Figure 127
	Middle	0.656	0.907	-0.024	Figure 129
	Low	0.746	1.030	-0.147	Figure 131
Right hand, Tilt 15 Degree	High	0.451	0.630	-0.196	Figure 133
	Middle	0.439	0.610	-0.066	Figure 135
	Low	0.437	0.608	-0.100	Figure 137

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

Table 16: SAR Values (WCDMA Band V, Body, Distance 15mm)

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	0.514	0.718	0.001	Figure 139
	Middle	**0.606**	**0.846**	-0.194	Figure 141
	Low	0.571	0.792	-0.082	Figure 143
Towards Phantom	High	0.319	0.436	-0.012	Figure 145
	Middle	0.317	0.433	-0.111	Figure 147
	Low	0.333	0.452	-0.087	Figure 149
Worst case position of Body with Earphone					
Towards Ground	Middle	0.411	0.568	-0.115	Figure 151
Worst case position of Body with Bluetooth Earphone					
Towards Ground	Middle	0.577	0.804	0.018	Figure 153

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

9.4 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 6.2 of this report. Maximum localized SAR is below exposure limits specified in the relevant standards cited in Clause 6.1 of this test report.

10 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	$\sqrt{3}$	$(1\text{-cp})^{1/2}$	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	

11 MAIN TEST INSTRUMENTS

Table 17: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	Agilent 8753E	US37390326	September 15, 2007	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 15, 2007	One year
06	Amplifier	IXA-020	0401	No Calibration Requested	
07	BTS	E5515C	GB46490218	September 15, 2007	One year
08	E-field Probe	ET3DV6	1531	January 29, 2008	One year
09	DAE	DAE4	679	May 21, 2008	One year
10	Validation Kit 1900MHz	D1900V2	5d018	March 21, 2008	One year
11	Validation Kit 835MHz	D835V2	443	December 9, 2007	One year

12 TEST PERIOD

The test is performed from June 11, 2008 to June 14, 2008.

13 TEST LOCATION

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

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

ANNEX A： MEASUREMENT PROCESS

The evaluation was performed with the following procedure:

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

Step 2: The SAR distribution at the exposed side of the head was measured at a distance of 3.9 mm from the inner surface of the shell. The area covered the entire dimension of the head and the horizontal grid spacing was 20 mm x 20 mm. Based on this data, the area of the maximum absorption was determined by spline interpolation.

Step 3: Around this point, a volume of 32 mm x 32 mm x 34 mm was assessed by measuring 7 x 7x 7 points. On this basis of this data set, the spatial peak SAR value was evaluated with the following procedure:

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

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

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

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

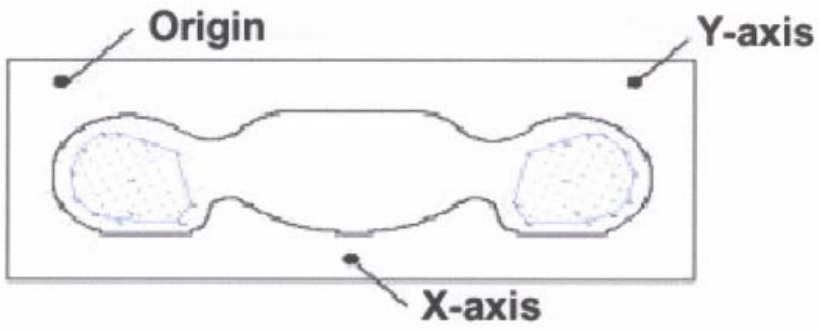
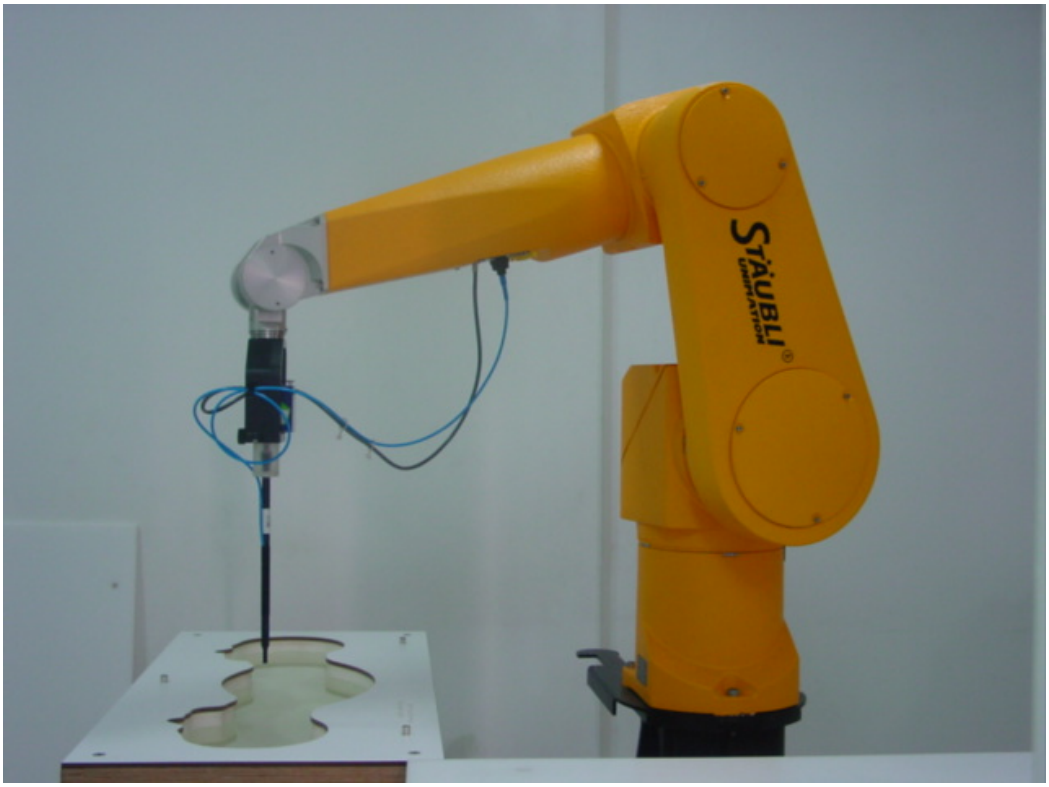
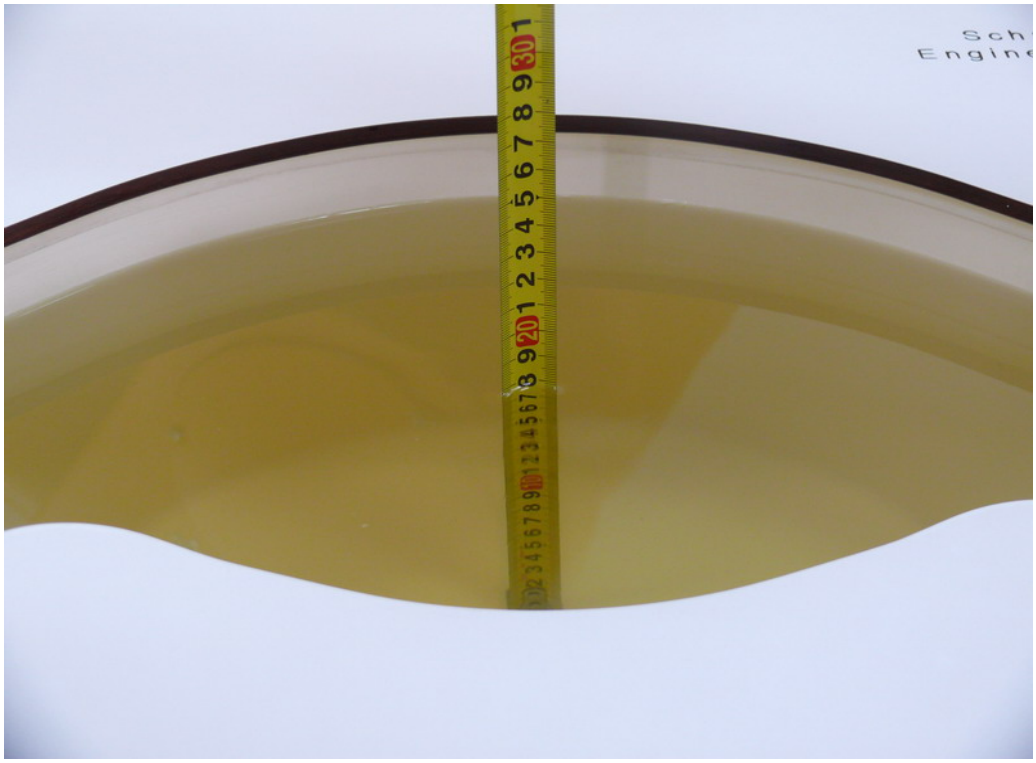


Figure 6 SAR Measurement Points in Area Scan

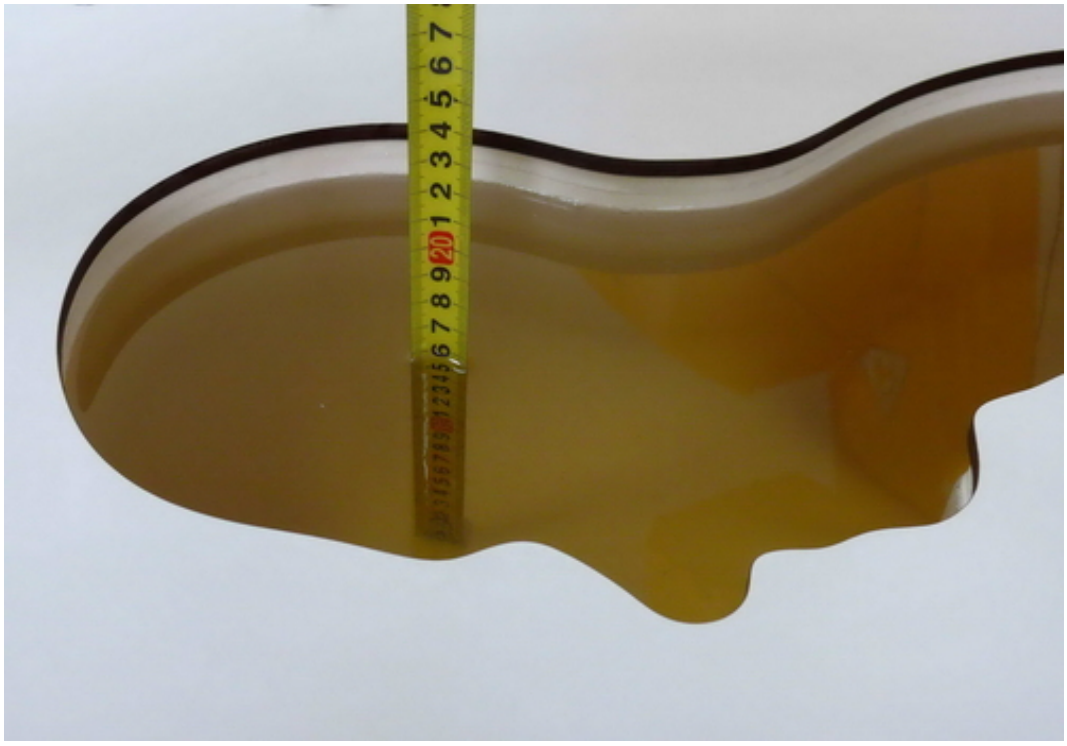
ANNEX B： TEST LAYOUT



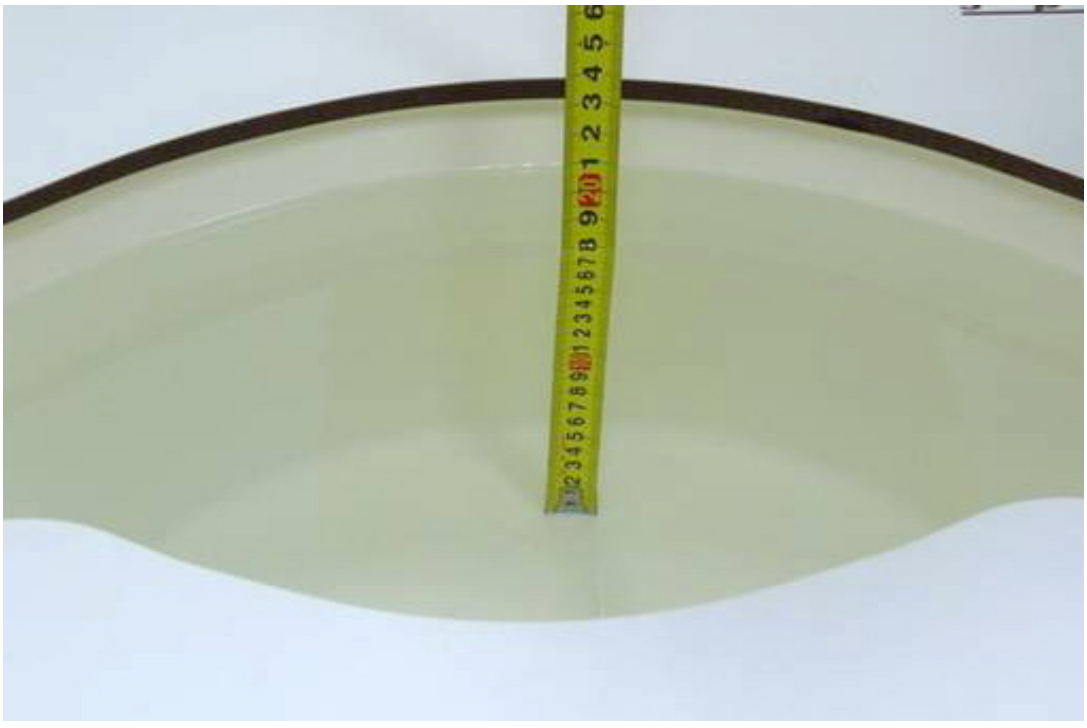
Picture 1 Specific Absorption Rate Test Layout



Picture 1: Liquid depth in the Phantom (835 MHz)



Picture 2: Liquid depth in the head Phantom (835 MHz)



Picture 4: Liquid depth in the Phantom (1900 MHz)

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

ANNEX C： GRAPH RESULTS

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 = 0.927 mho/m; ε_r = 42.2; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Cheek High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.19 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 27.8 V/m; Power Drift = -0.069 dB
Peak SAR (extrapolated) = 1.47 W/kg
SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.785 mW/g
Maximum value of SAR (measured) = 1.19 mW/g

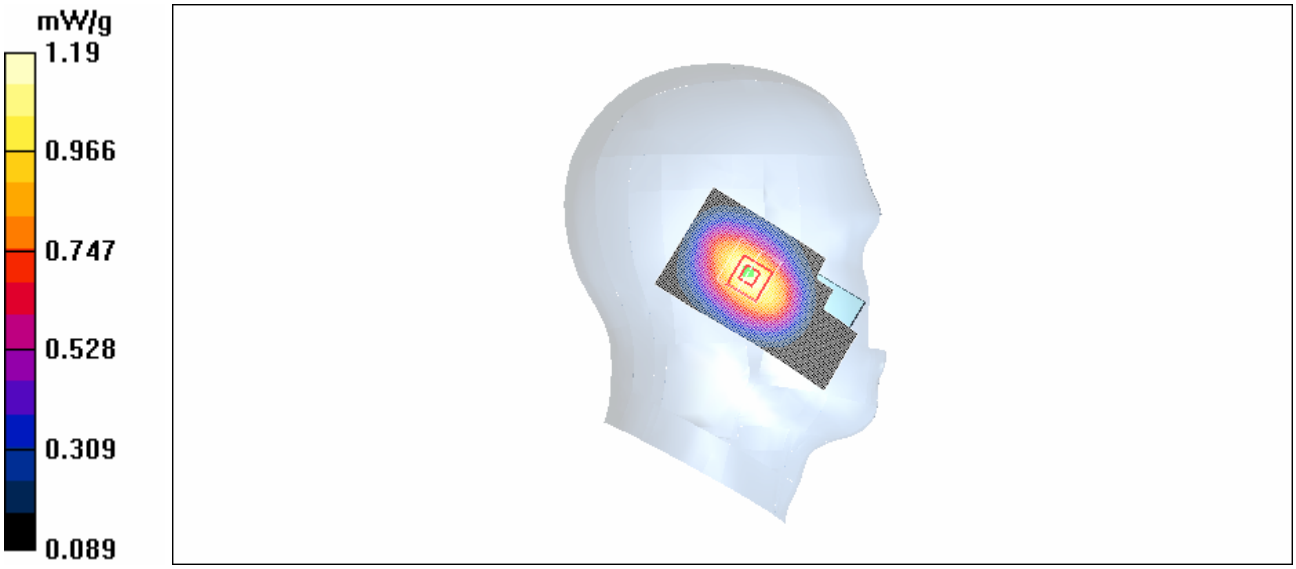


Figure 7 Left Hand Touch Cheek GSM 850 Channel 251

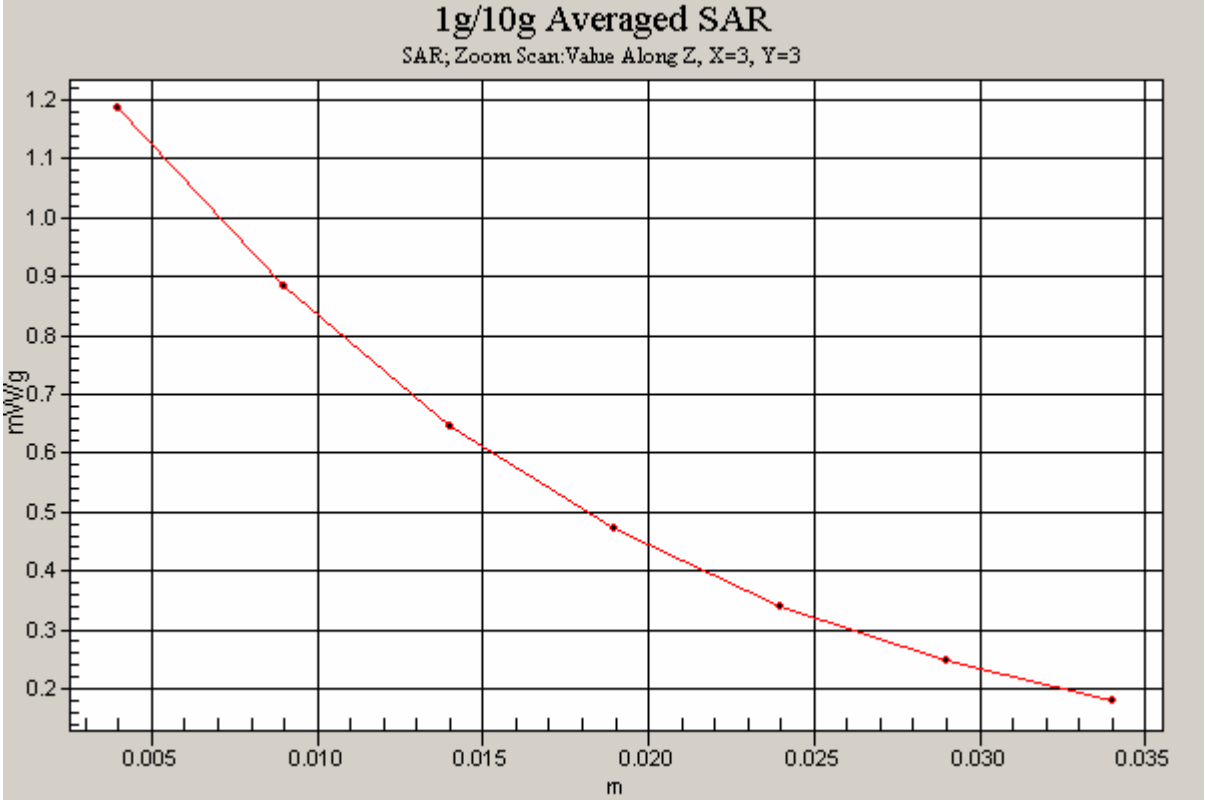


Figure 8 Z-Scan at power reference point (Left Hand Touch Cheek GSM 850 Channel 251)

GSM 850 Left Cheek Middle

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 837 MHz; σ = 0.919 mho/m; ε_r = 42.4; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Cheek Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.22 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 28.3 V/m; Power Drift = -0.058 dB
Peak SAR (extrapolated) = 1.49 W/kg
SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.791 mW/g
Maximum value of SAR (measured) = 1.20 mW/g

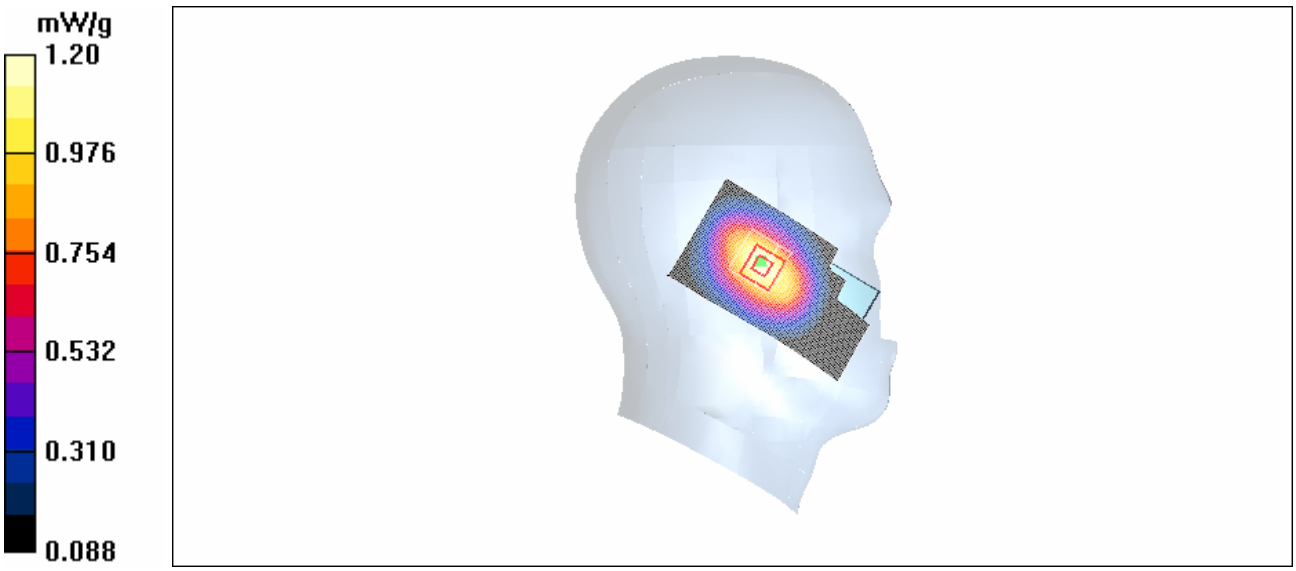


Figure 9 Left Hand Touch Cheek GSM 850 Channel 190

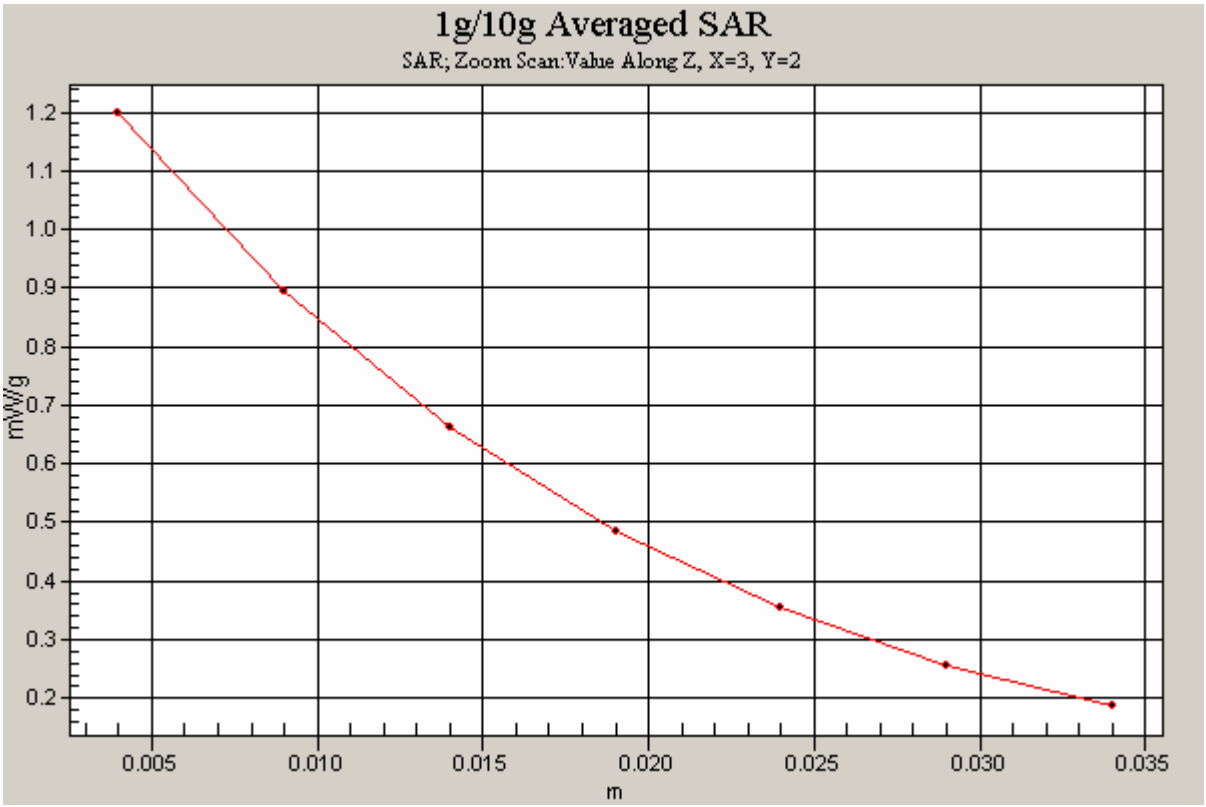


Figure 10 Z-Scan at power reference point (Left Hand Touch Cheek GSM 850 Channel 190)

GSM 850 Left Cheek Low

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.908 mho/m; ε_r = 42.4; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Cheek Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.927 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 25.8 V/m; Power Drift = -0.027 dB
Peak SAR (extrapolated) = 1.12 W/kg
SAR(1 g) = 0.859 mW/g; SAR(10 g) = 0.604 mW/g
Maximum value of SAR (measured) = 0.912 mW/g

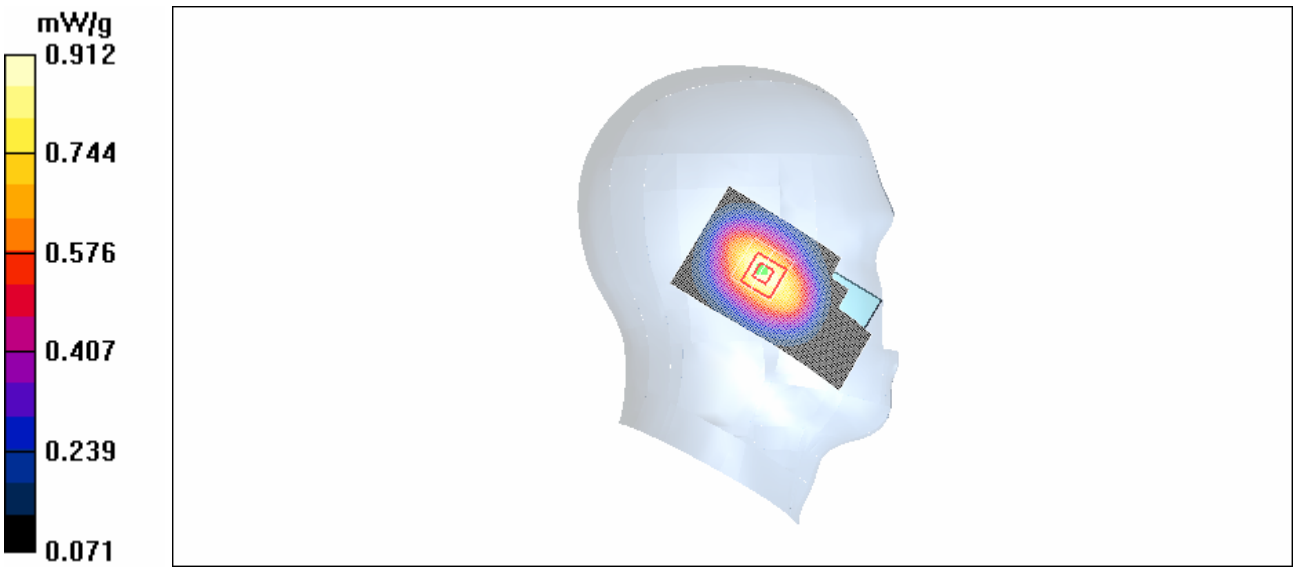


Figure 11 Left Hand Touch Cheek GSM 850 Channel 128

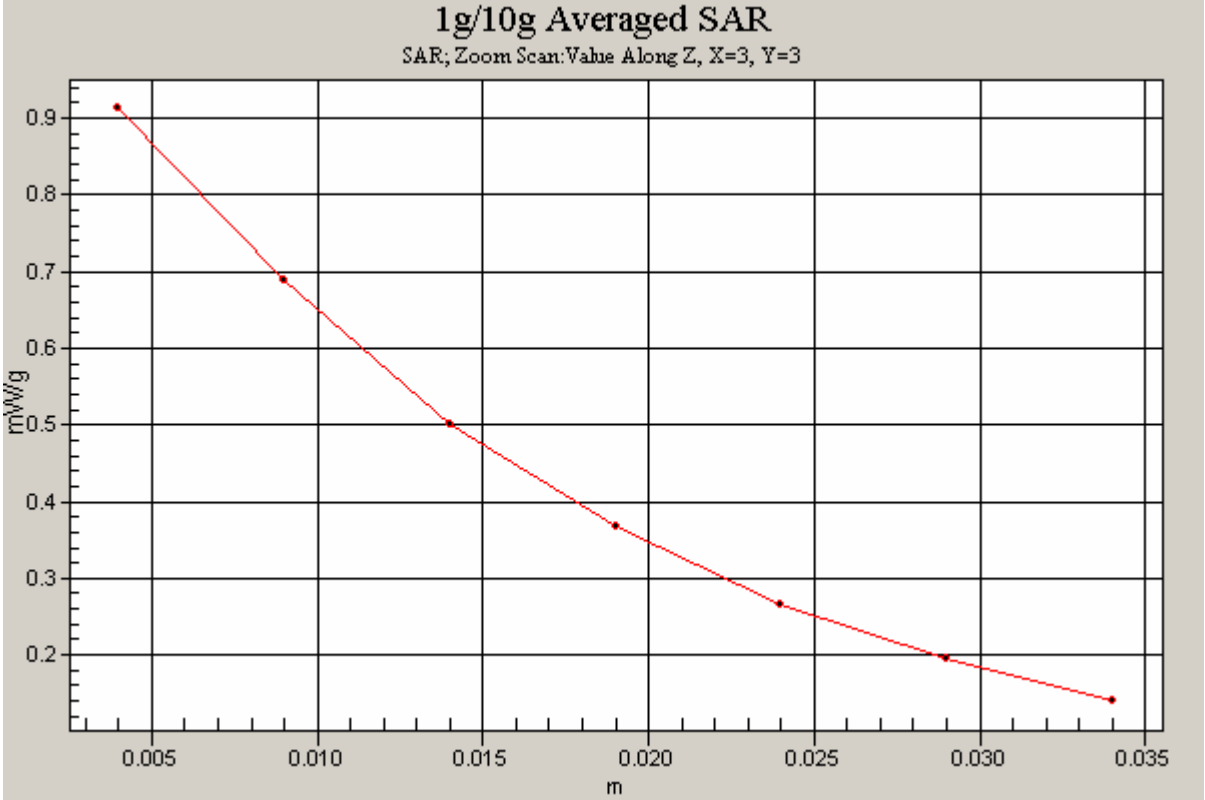


Figure 12 Z-Scan at power reference point (Left Hand Touch Cheek GSM 850 Channel 128)

GSM 850 Left Tilt High

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 849 MHz; σ = 0.927 mho/m; ε_r = 42.2; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Tilt High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.731 mW/g

Tilt High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.1 V/m; Power Drift = 0.005 dB
Peak SAR (extrapolated) = 1.02 W/kg
SAR(1 g) = 0.683 mW/g; SAR(10 g) = 0.478 mW/g
Maximum value of SAR (measured) = 0.730 mW/g

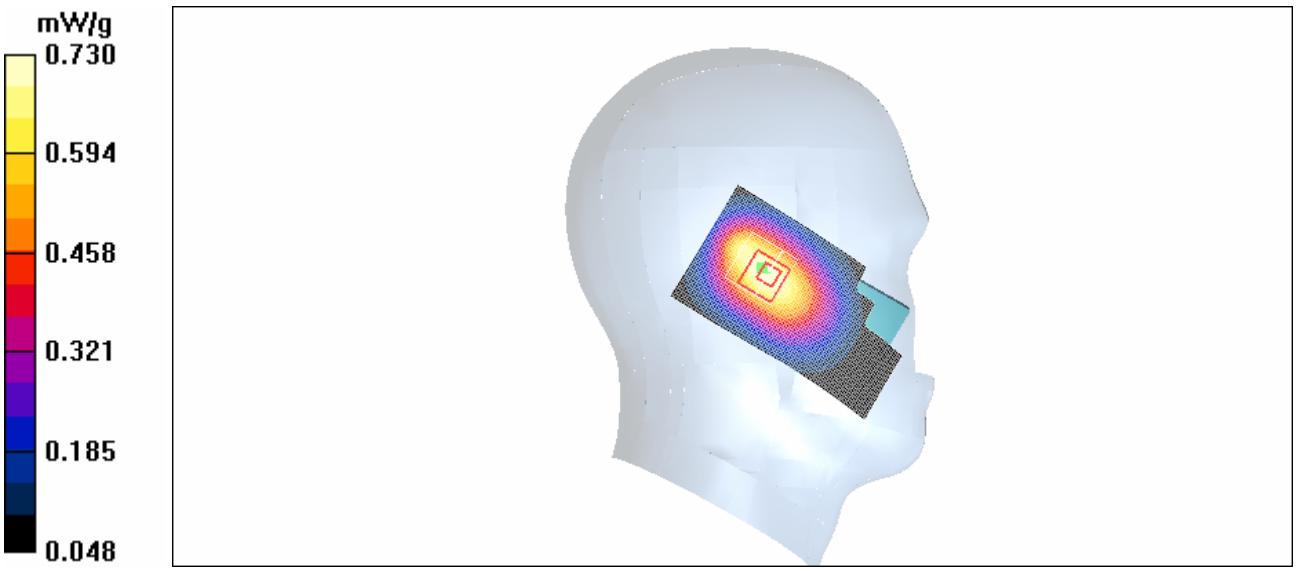


Figure 13 Left Hand Tilt 15°GSM 850 Channel 251

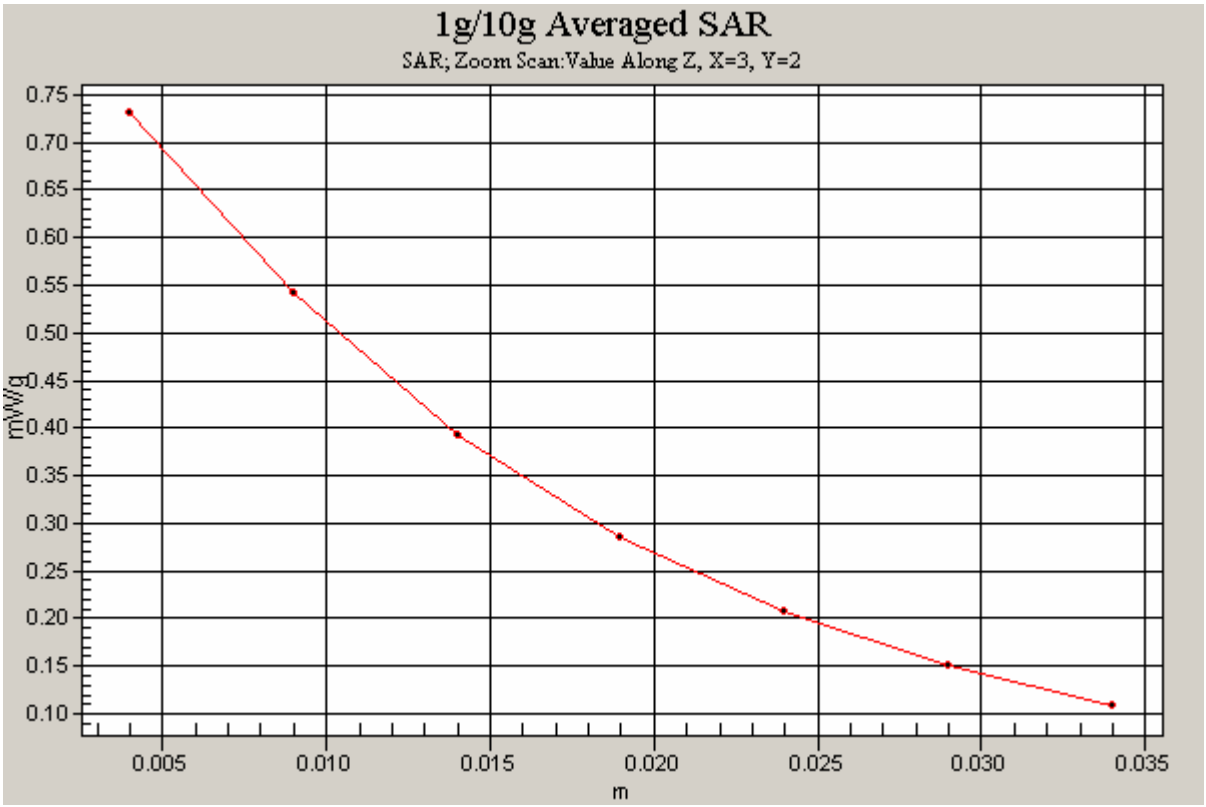


Figure 14 Z-Scan at power reference point (Left Hand Tilt 15°GSM 850 Channel 251)

GSM 850 Left Tilt Middle

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 837 MHz; σ = 0.919 mho/m; ε_r = 42.4; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Tilt Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.746 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.5 V/m; Power Drift = 0.018 dB
Peak SAR (extrapolated) = 0.953 W/kg
SAR(1 g) = 0.685 mW/g; SAR(10 g) = 0.483 mW/g
Maximum value of SAR (measured) = 0.731 mW/g

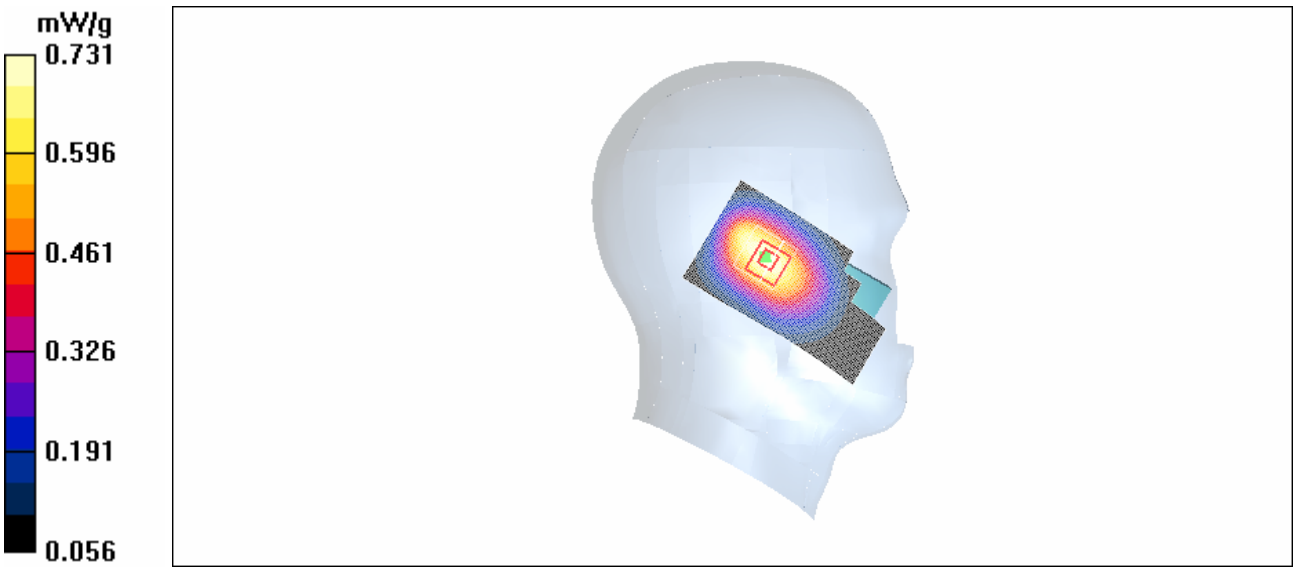


Figure 15 Left Hand Tilt 15° GSM 850 Channel 190

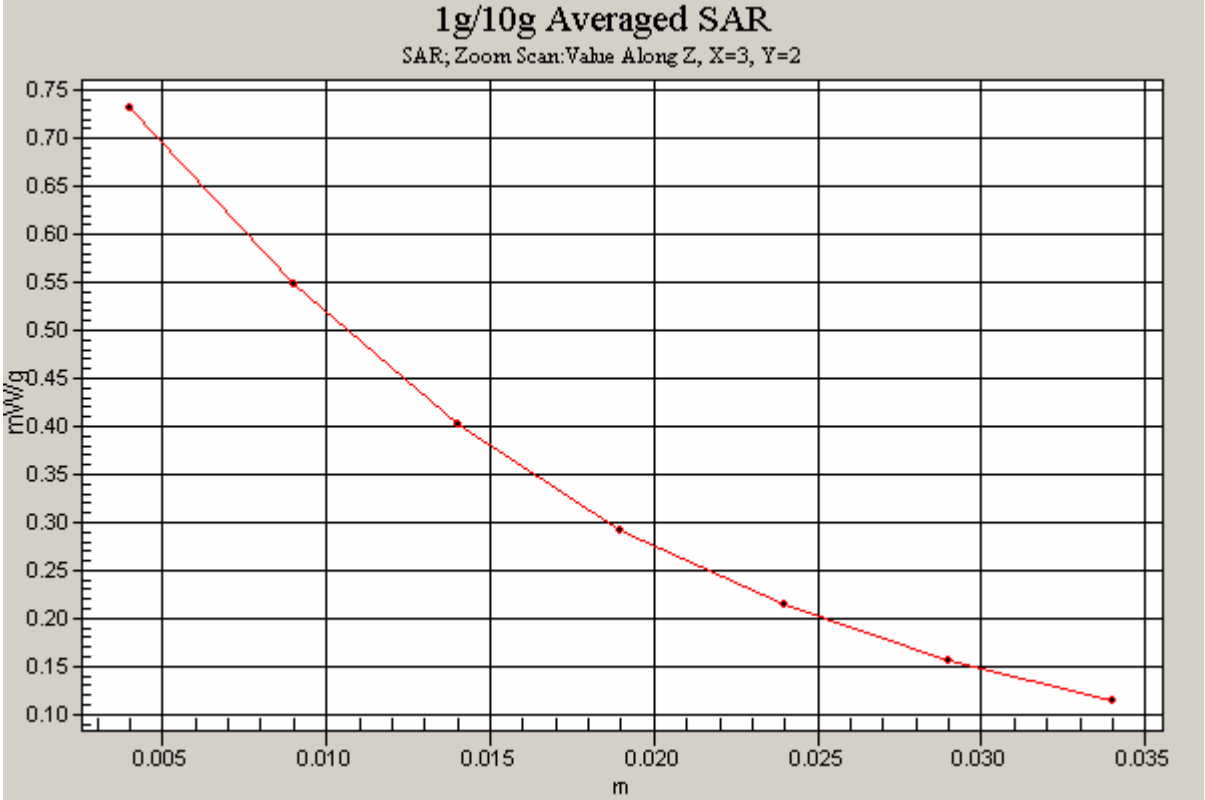


Figure 16 Z-Scan at power reference point (Left Hand Tilt 15° GSM 850 Channel 190)

GSM 850 Left Tilt Low

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.908 mho/m; ε_r = 42.4; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Tilt Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.566 mW/g

Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.5 V/m; Power Drift = 0.013 dB
Peak SAR (extrapolated) = 0.734 W/kg
SAR(1 g) = 0.517 mW/g; SAR(10 g) = 0.366 mW/g
Maximum value of SAR (measured) = 0.551 mW/g

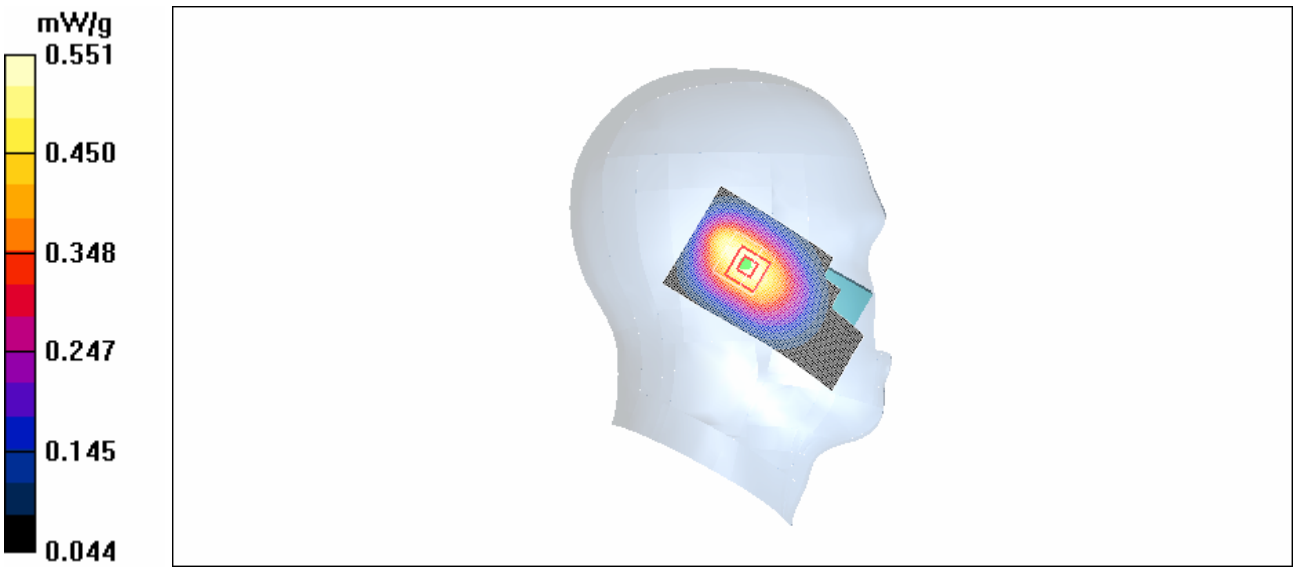


Figure 17 Left Hand Tilt 15° GSM 850 Channel 128

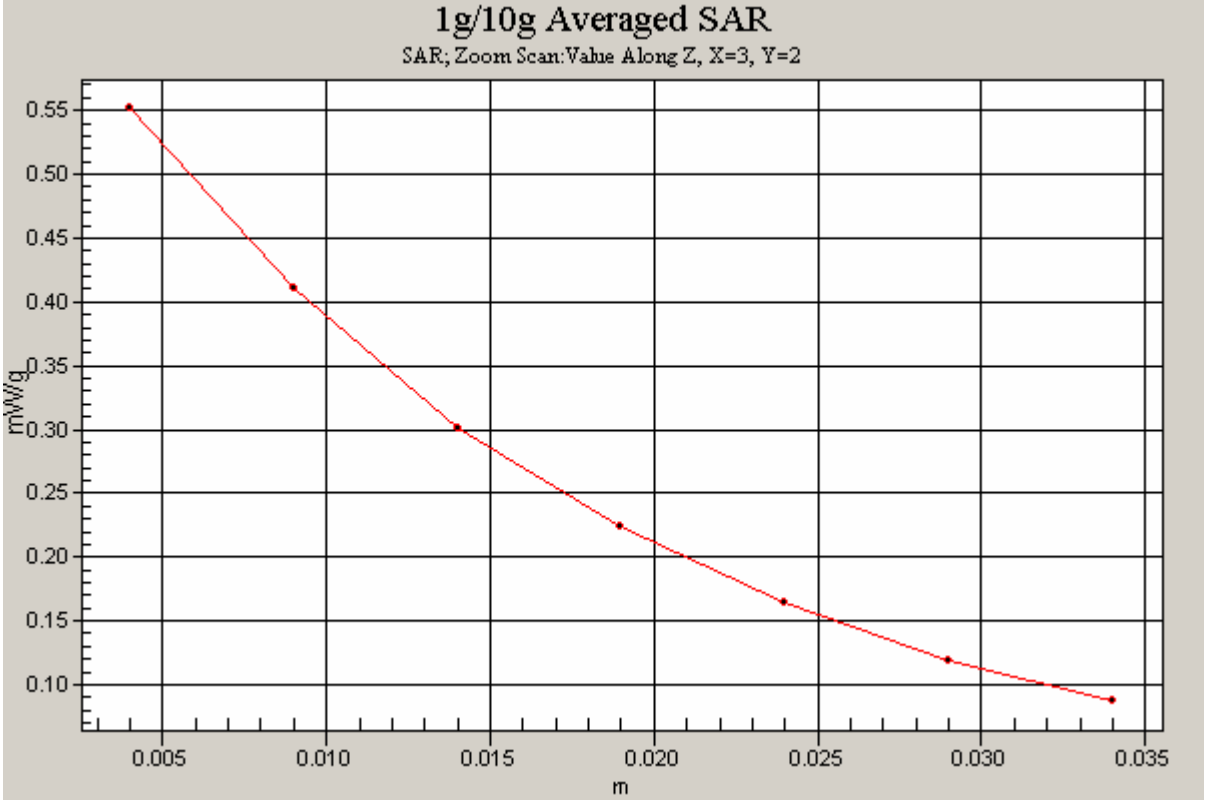


Figure 18 Z-Scan at power reference point (Left Hand Tilt 15° GSM 850 Channel 128)

GSM 850 Right Cheek High

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 849 MHz; σ = 0.927 mho/m; ε_r = 42.2; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Cheek High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.09 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 27.7 V/m; Power Drift = -0.108 dB
Peak SAR (extrapolated) = 1.28 W/kg
SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.731 mW/g
Maximum value of SAR (measured) = 1.08 mW/g

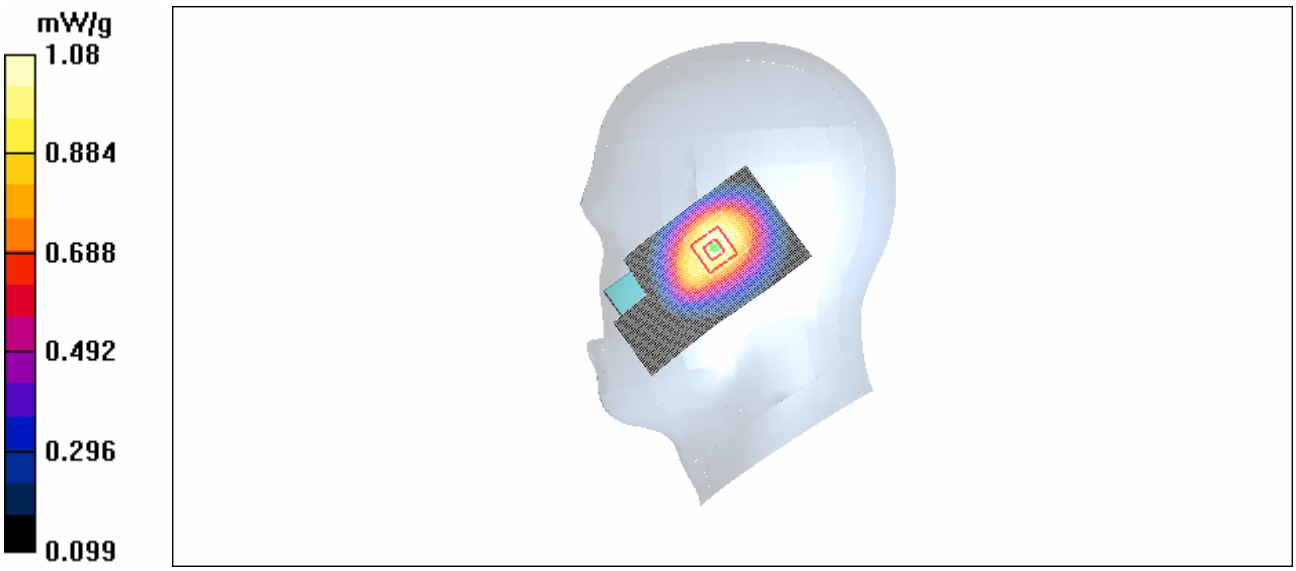


Figure 19 Right Hand Touch Cheek GSM 850 Channel 251

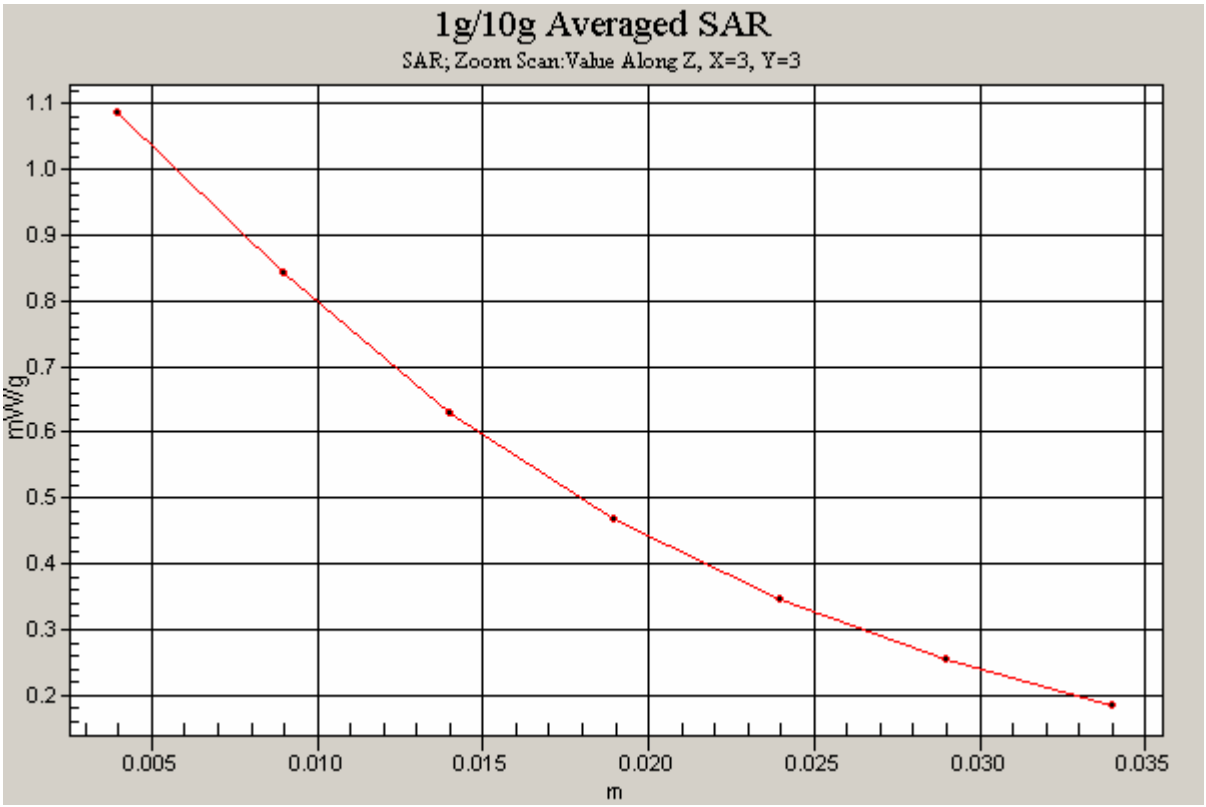


Figure 20 Z-Scan at power reference point (Right Hand Touch Cheek GSM 850 Channel 251)

GSM 850 Right Cheek Middle

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 837 MHz; σ = 0.919 mho/m; ε_r = 42.4; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Cheek Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.20 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 27.9 V/m; Power Drift = -0.009 dB
Peak SAR (extrapolated) = 1.43 W/kg
SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.813 mW/g
Maximum value of SAR (measured) = 1.20 mW/g

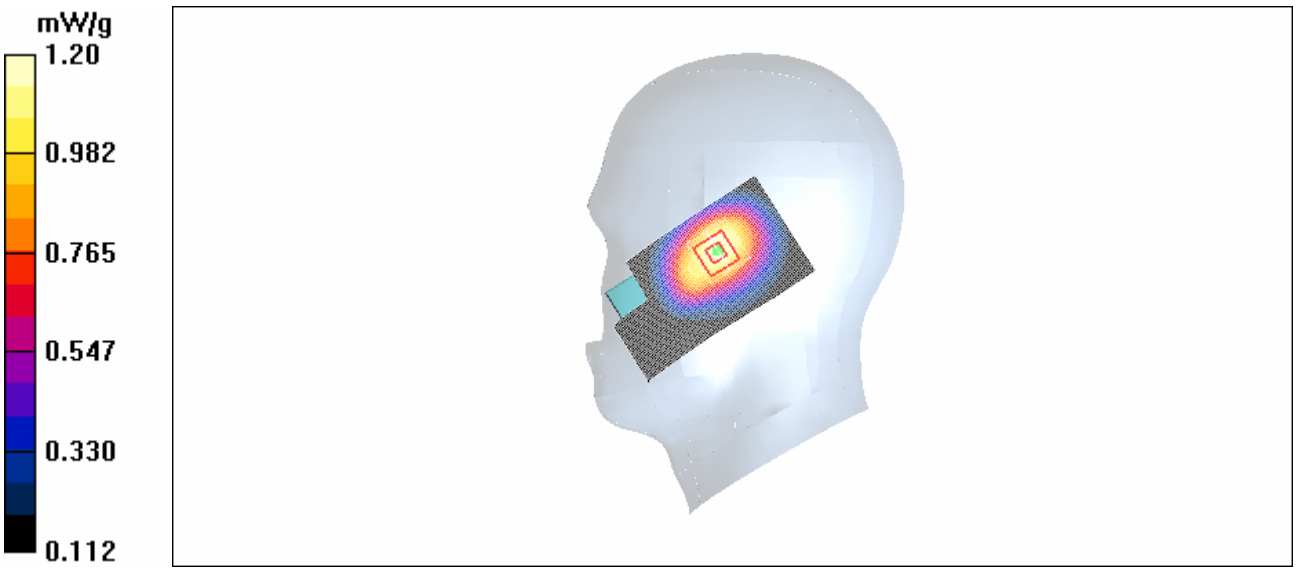


Figure 21 Right Hand Touch Cheek GSM 850 Channel 190

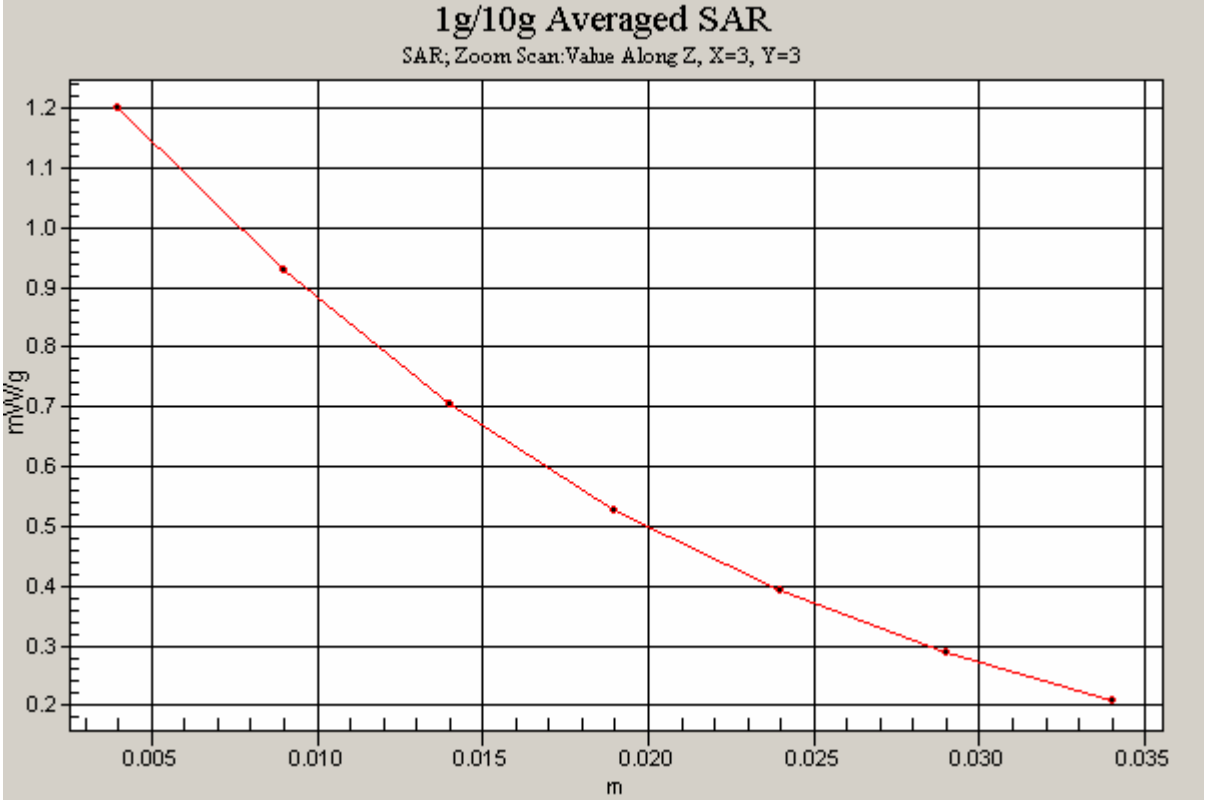


Figure 22 Z-Scan at power reference point (Right Hand Touch Cheek GSM 850 Channel 190)

GSM 850 Right Cheek Low

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.908 mho/m; ε_r = 42.4; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Cheek Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.966 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 25.7 V/m; Power Drift = -0.122 dB
Peak SAR (extrapolated) = 1.13 W/kg
SAR(1 g) = 0.904 mW/g; SAR(10 g) = 0.654 mW/g
Maximum value of SAR (measured) = 0.955 mW/g

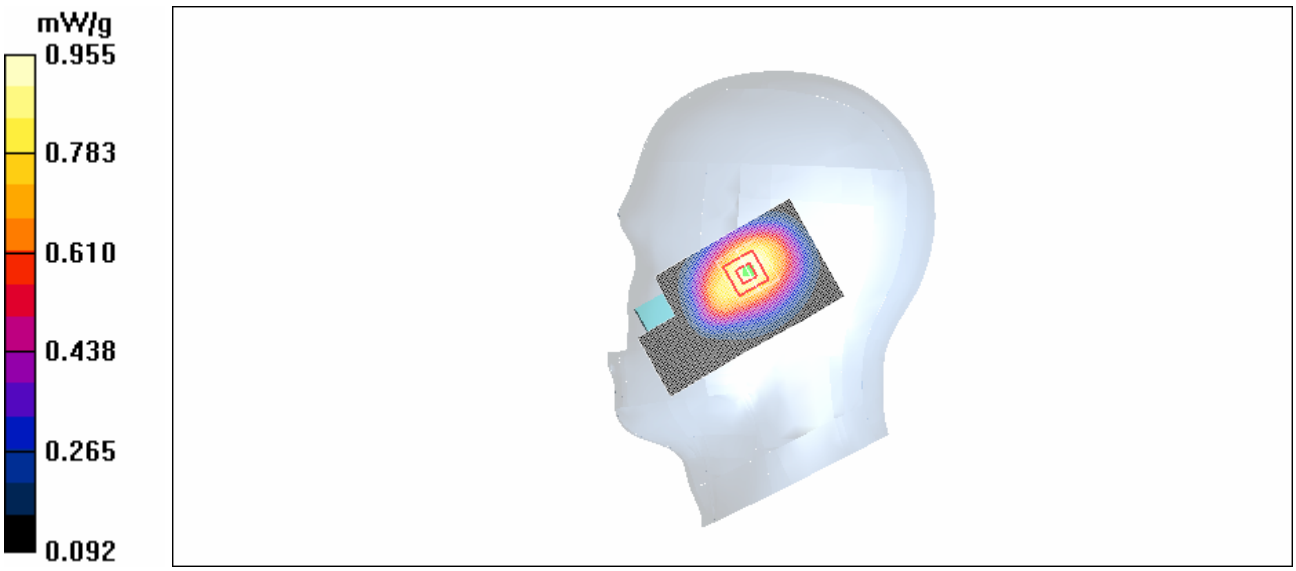


Figure 23 Right Hand Touch Cheek GSM 850 Channel 128

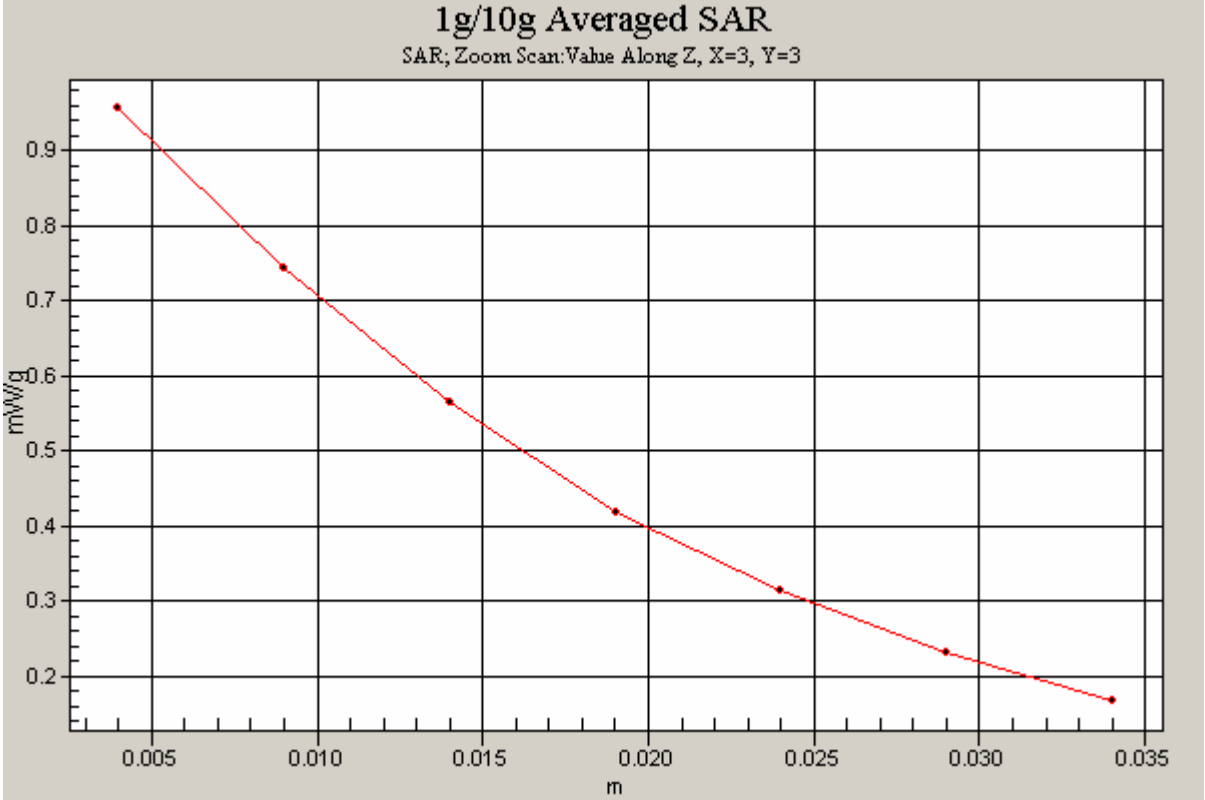


Figure 24 Z-Scan at power reference point (Right Hand Touch Cheek GSM 850 Channel 128)

GSM 850 Right Tilt High

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 849 MHz; σ = 0.927 mho/m; ε_r = 42.2; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Tilt High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.714 mW/g

Tilt High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 25.6 V/m; Power Drift = -0.062 dB
Peak SAR (extrapolated) = 0.828 W/kg
SAR(1 g) = 0.660 mW/g; SAR(10 g) = 0.476 mW/g
Maximum value of SAR (measured) = 0.701 mW/g

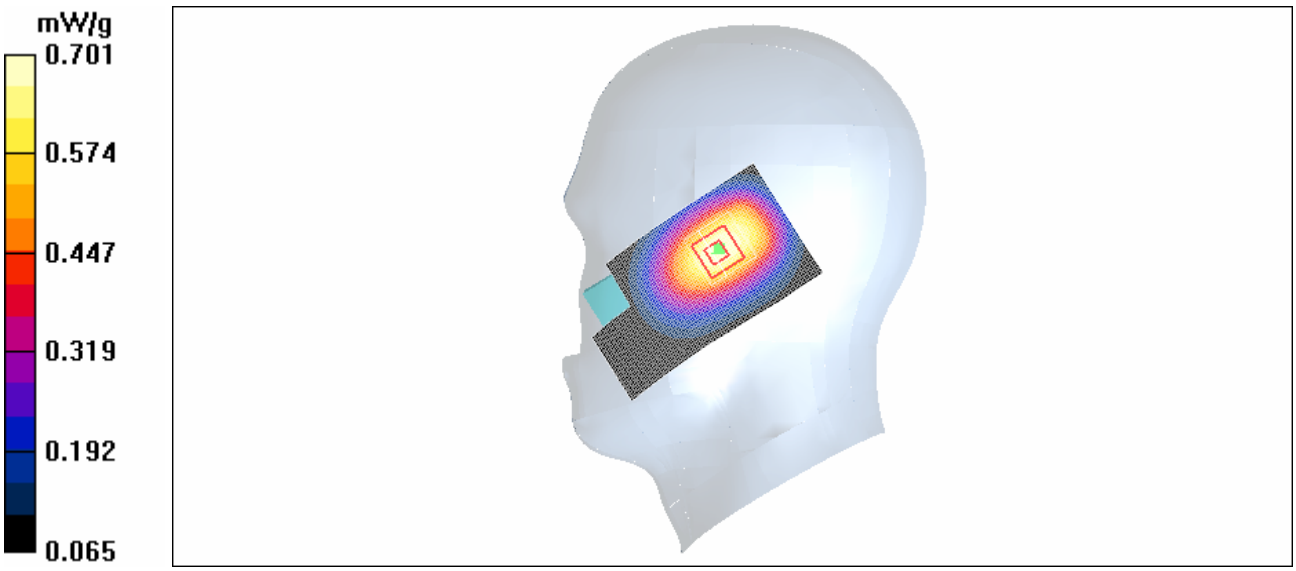


Figure 25 Right Hand Tilt 15° GSM 850 Channel 251

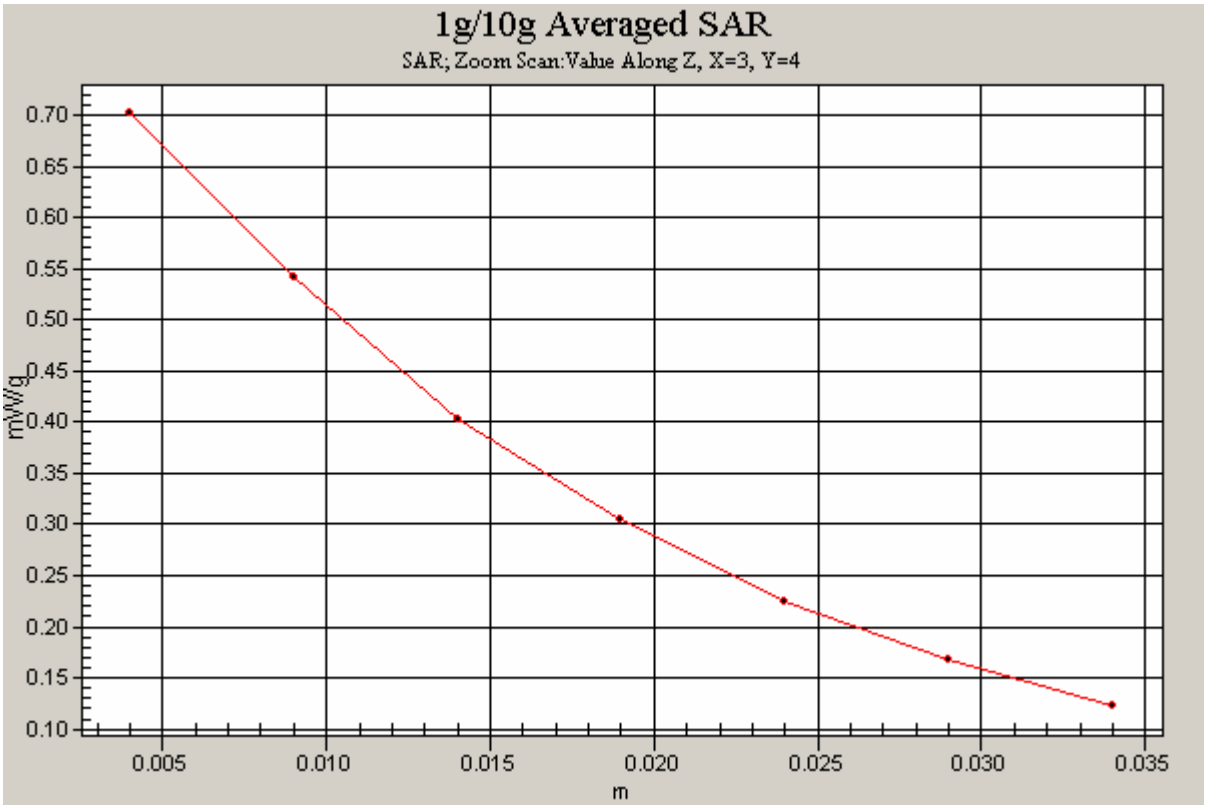


Figure 26 Z-Scan at power reference point (Right Hand Tilt 15° GSM 850 Channel 251)

GSM 850 Right Tilt Middle

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 837 MHz; σ = 0.919 mho/m; ε_r = 42.4; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Tilt Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.725 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 25.8 V/m; Power Drift = 0.066 dB
Peak SAR (extrapolated) = 0.842 W/kg
SAR(1 g) = 0.675 mW/g; SAR(10 g) = 0.488 mW/g
Maximum value of SAR (measured) = 0.719 mW/g

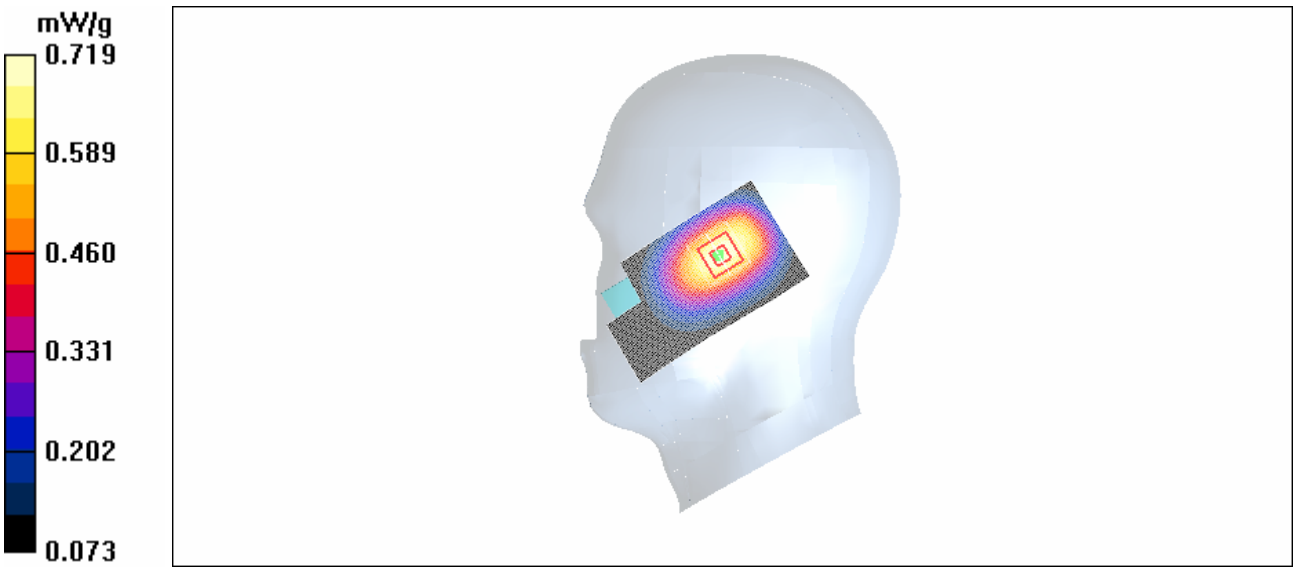


Figure 27 Right Hand Tilt 15° GSM 850 Channel 190

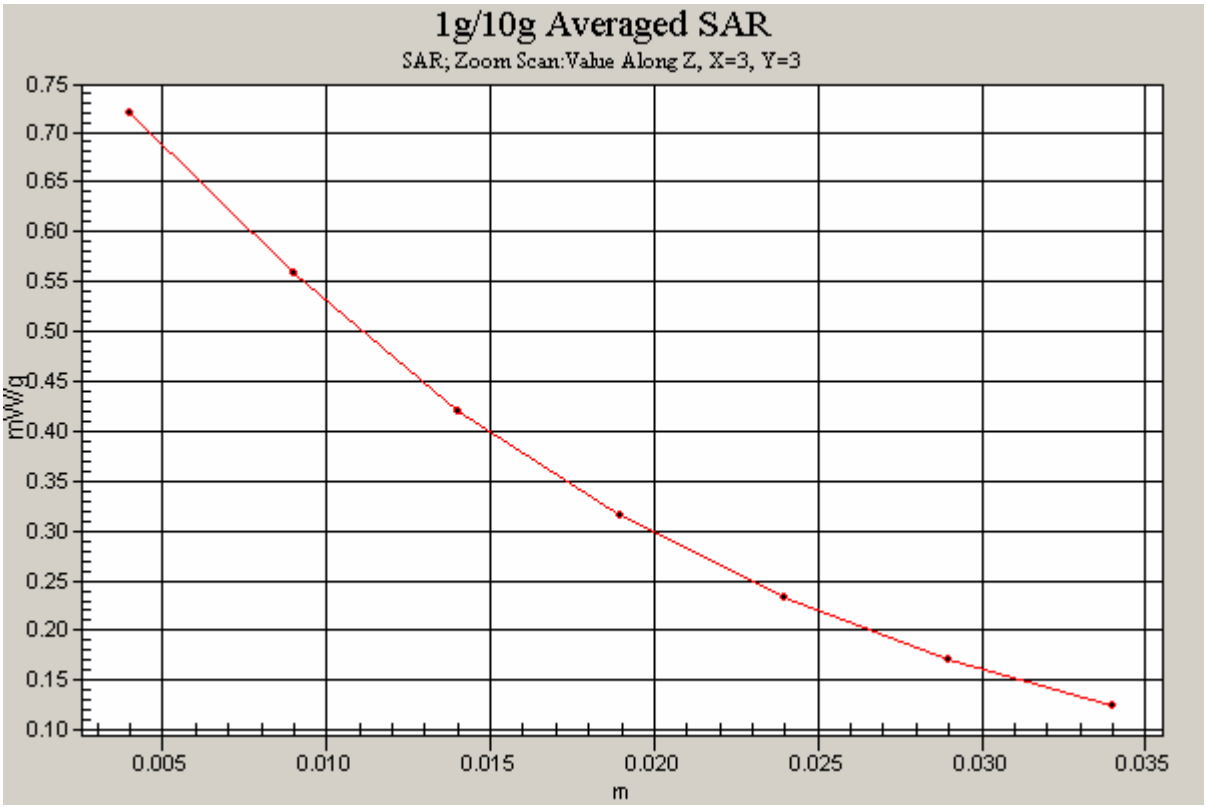


Figure 28 Z-Scan at power reference point (Right Hand Tilt 15° GSM 850 Channel 190)

GSM 850 Right Tilt Low

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.908 mho/m; ε_r = 42.4; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Tilt Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.585 mW/g

Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.5 V/m; Power Drift = -0.044 dB
Peak SAR (extrapolated) = 0.680 W/kg
SAR(1 g) = 0.540 mW/g; SAR(10 g) = 0.391 mW/g
Maximum value of SAR (measured) = 0.571 mW/g

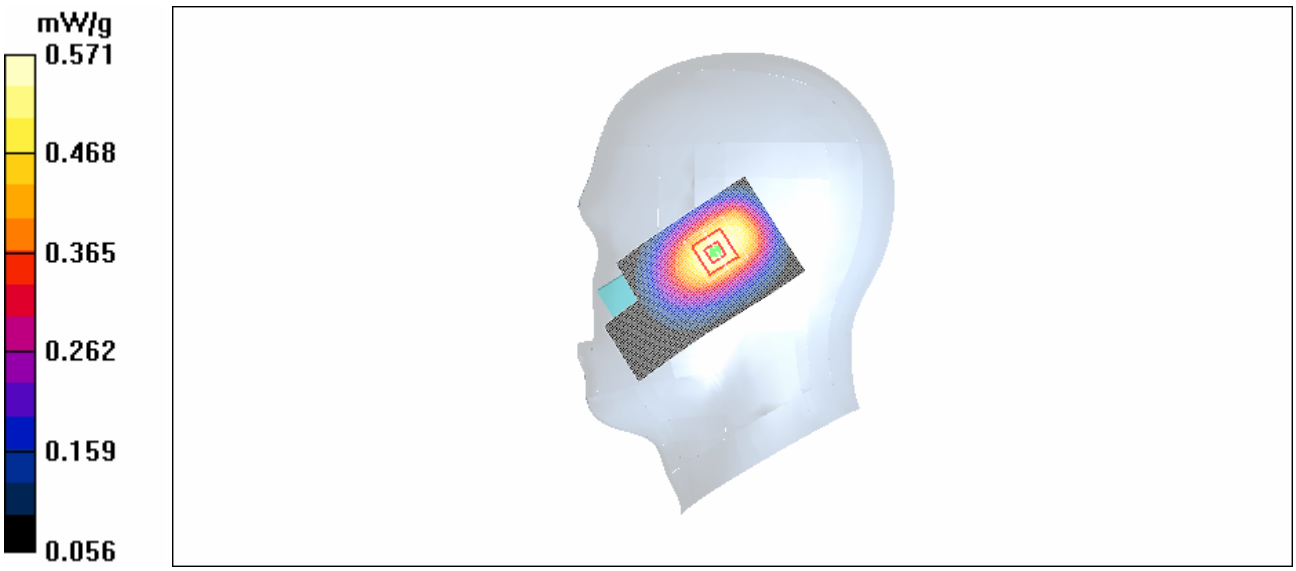


Figure 29 Right Hand Tilt 15° GSM 850 Channel 128

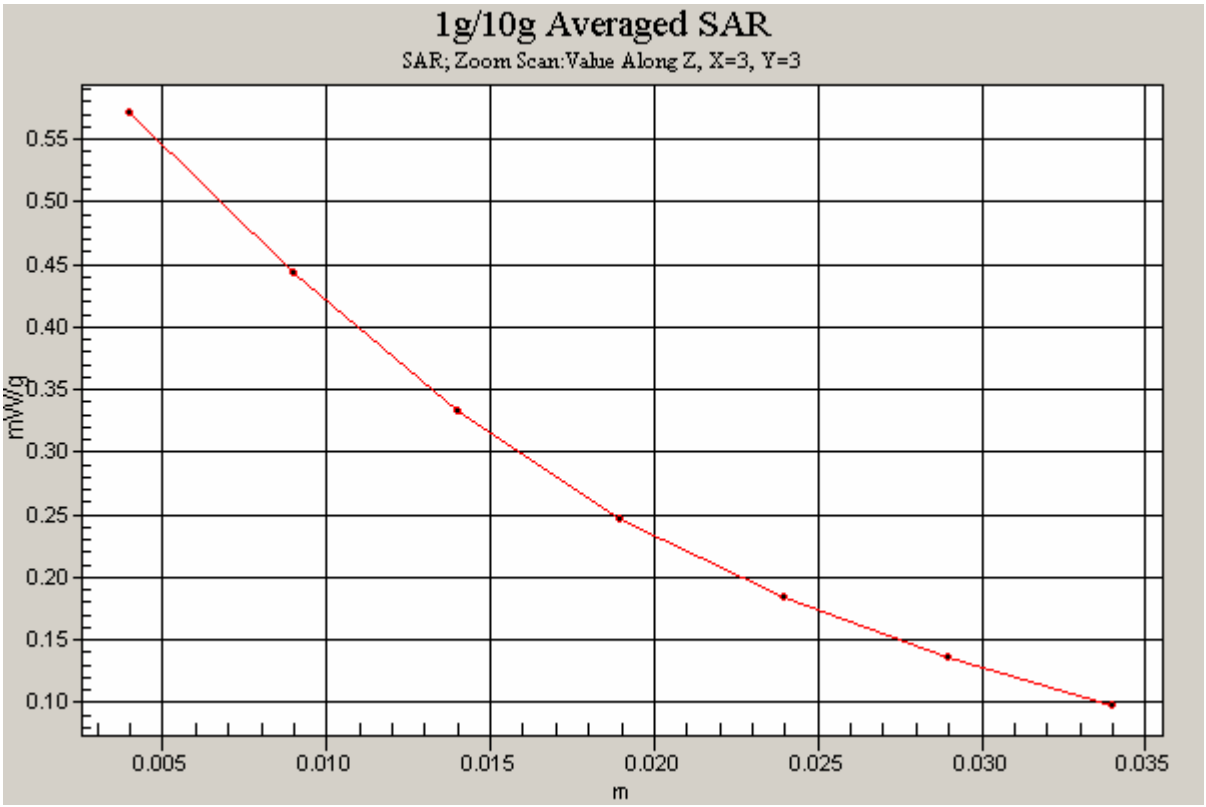


Figure 30 Z-Scan at power reference point (Right Hand Tilt 15° GSM 850 Channel 128)

GSM 850 Towards Ground High

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 849 MHz; σ = 1.01 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards Ground High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.691 mW/g

Towards Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.9 V/m; Power Drift = 0.042 dB
Peak SAR (extrapolated) = 0.811 W/kg
SAR(1 g) = 0.653 mW/g; SAR(10 g) = 0.469 mW/g
Maximum value of SAR (measured) = 0.690 mW/g

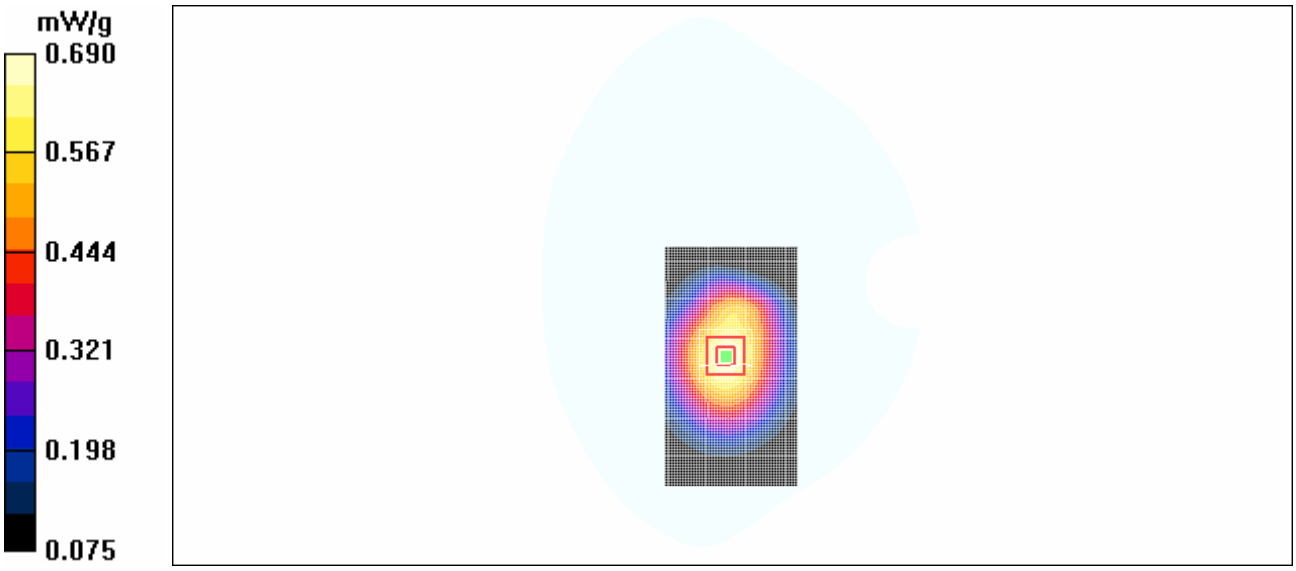


Figure 31 Body, Towards Ground, GSM 850 Channel 251

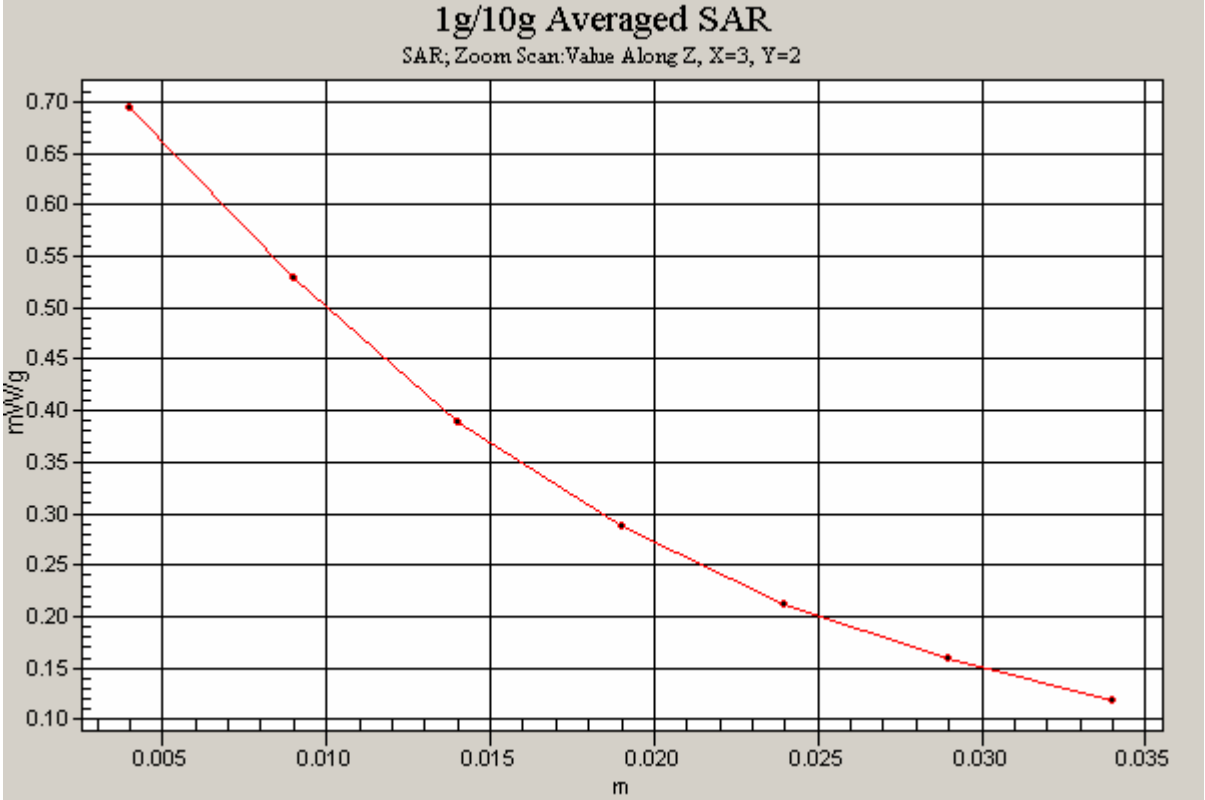


Figure 32 Z-Scan at power reference point (Body, Towards Ground, GSM 850 Channel 251)

GSM 850 Towards Ground Middle

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 837 MHz; σ = 0.995 mho/m; ε_r = 54.7; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards Ground Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.835 mW/g

Towards Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.8 V/m; Power Drift = -0.112 dB
Peak SAR (extrapolated) = 0.980 W/kg
SAR(1 g) = 0.776 mW/g; SAR(10 g) = 0.560 mW/g
Maximum value of SAR (measured) = 0.827 mW/g

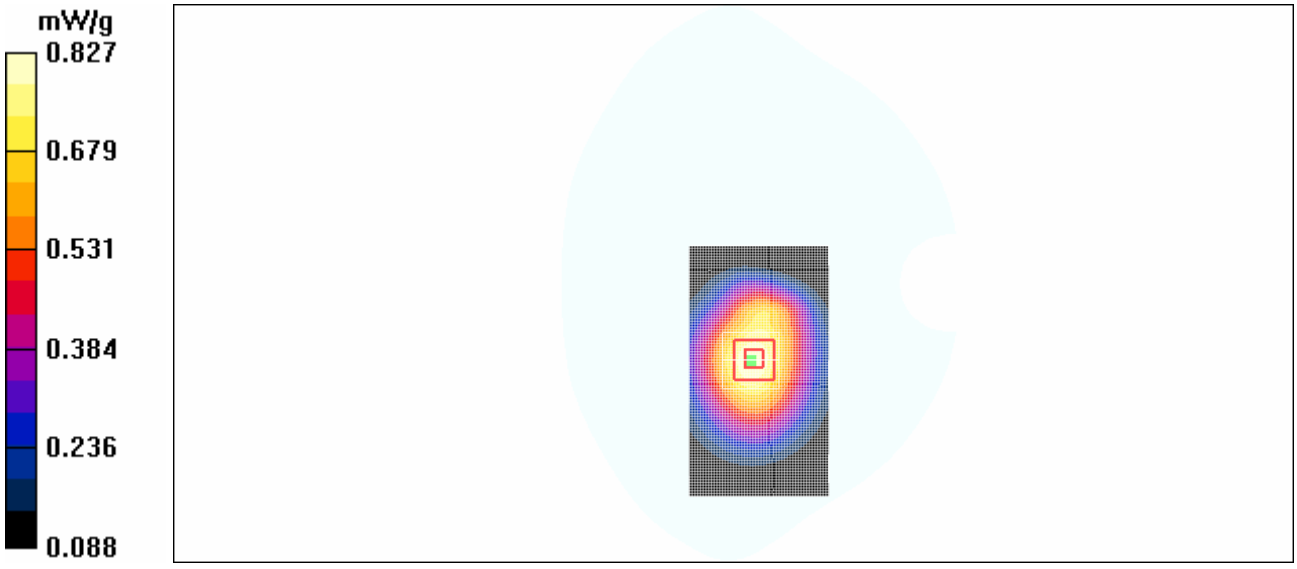


Figure 33 Body, Towards Ground, GSM 850 Channel 190

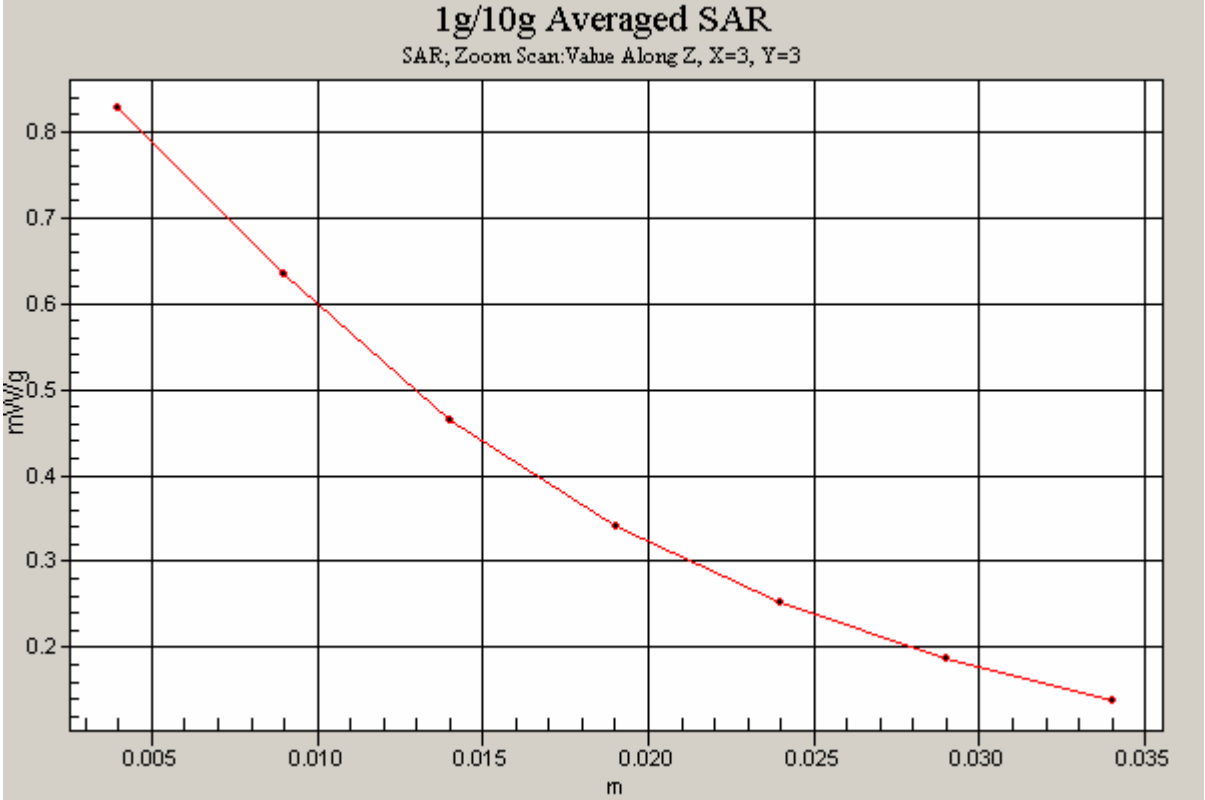


Figure 34 Z-Scan at power reference point (Body, Towards Ground, GSM 850 Channel 190)

GSM 850 Towards Ground Low

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.982 mho/m; ε_r = 54.8; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards Ground Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.861 mW/g

Towards Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.2 V/m; Power Drift = 0.029 dB
Peak SAR (extrapolated) = 1.02 W/kg
SAR(1 g) = 0.814 mW/g; SAR(10 g) = 0.587 mW/g
Maximum value of SAR (measured) = 0.861 mW/g

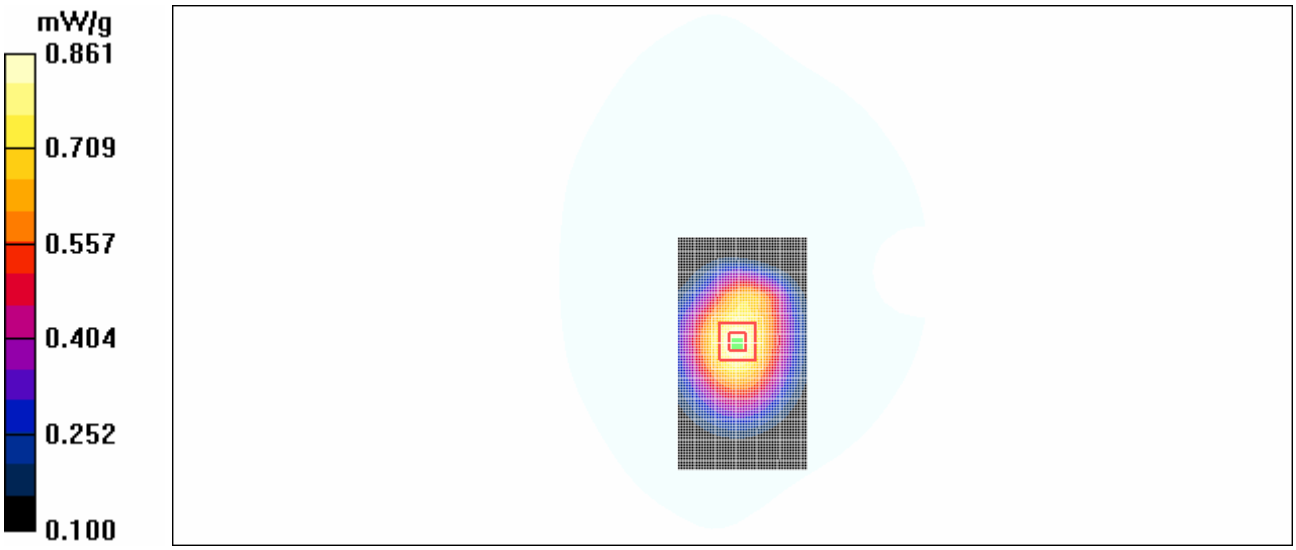


Figure 35 Body, Towards Ground, GSM 850 Channel 128

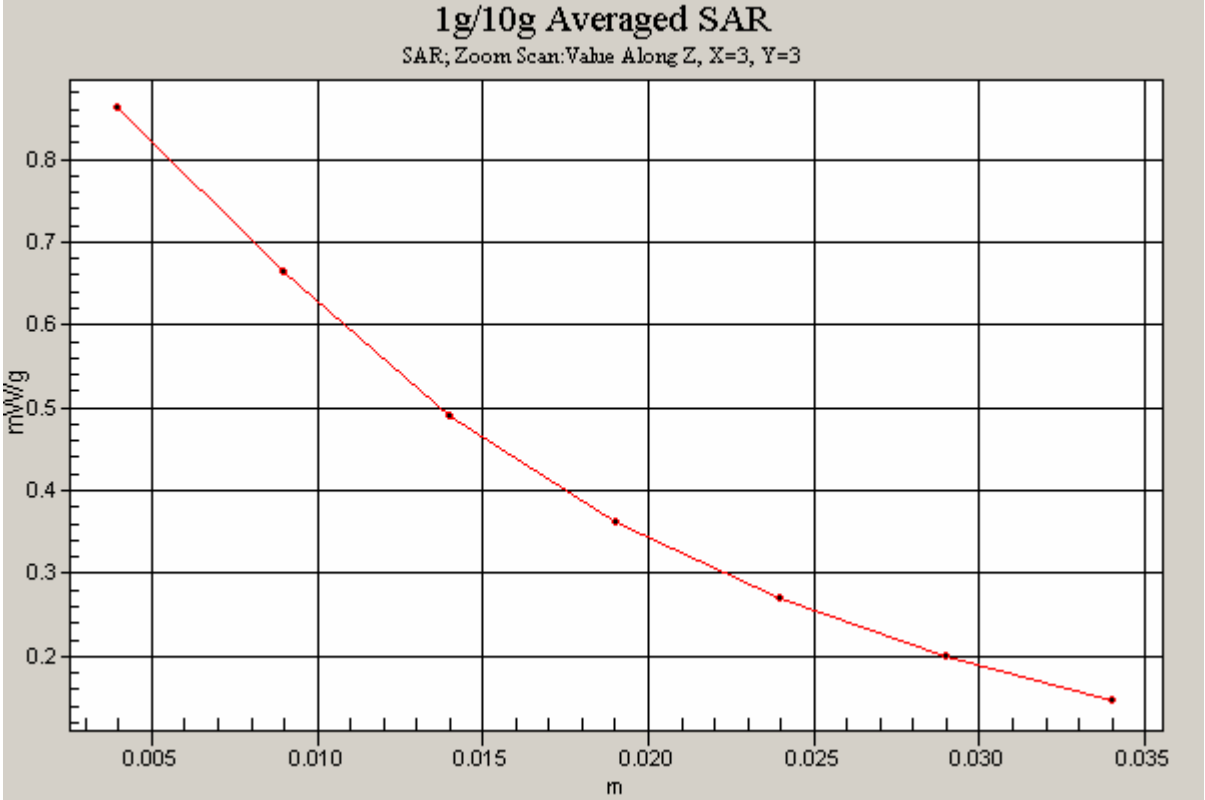


Figure 36 Z-Scan at power reference point (Body, Towards Ground, GSM 850 Channel 128)

GSM 850 Towards Phantom High

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 849 MHz; σ = 1.01 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards Phantom High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.576 mW/g

Towards Phantom High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.1 V/m; Power Drift = -0.010 dB
Peak SAR (extrapolated) = 0.663 W/kg
SAR(1 g) = 0.539 mW/g; SAR(10 g) = 0.393 mW/g
Maximum value of SAR (measured) = 0.573 mW/g

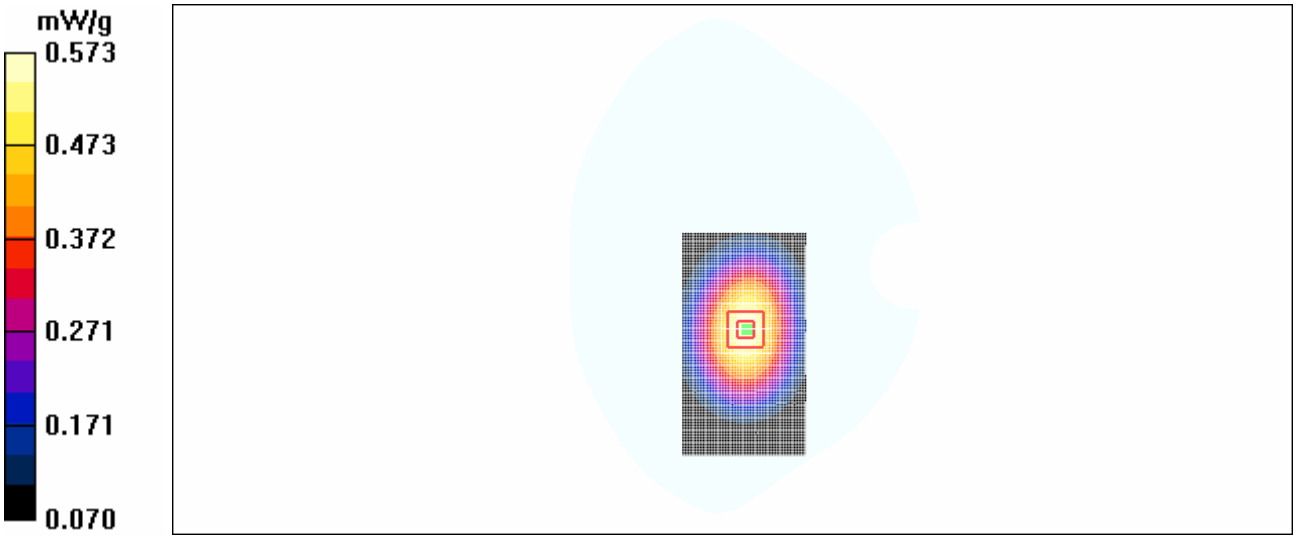


Figure 37 Body, Towards Phantom, GSM 850 Channel 251

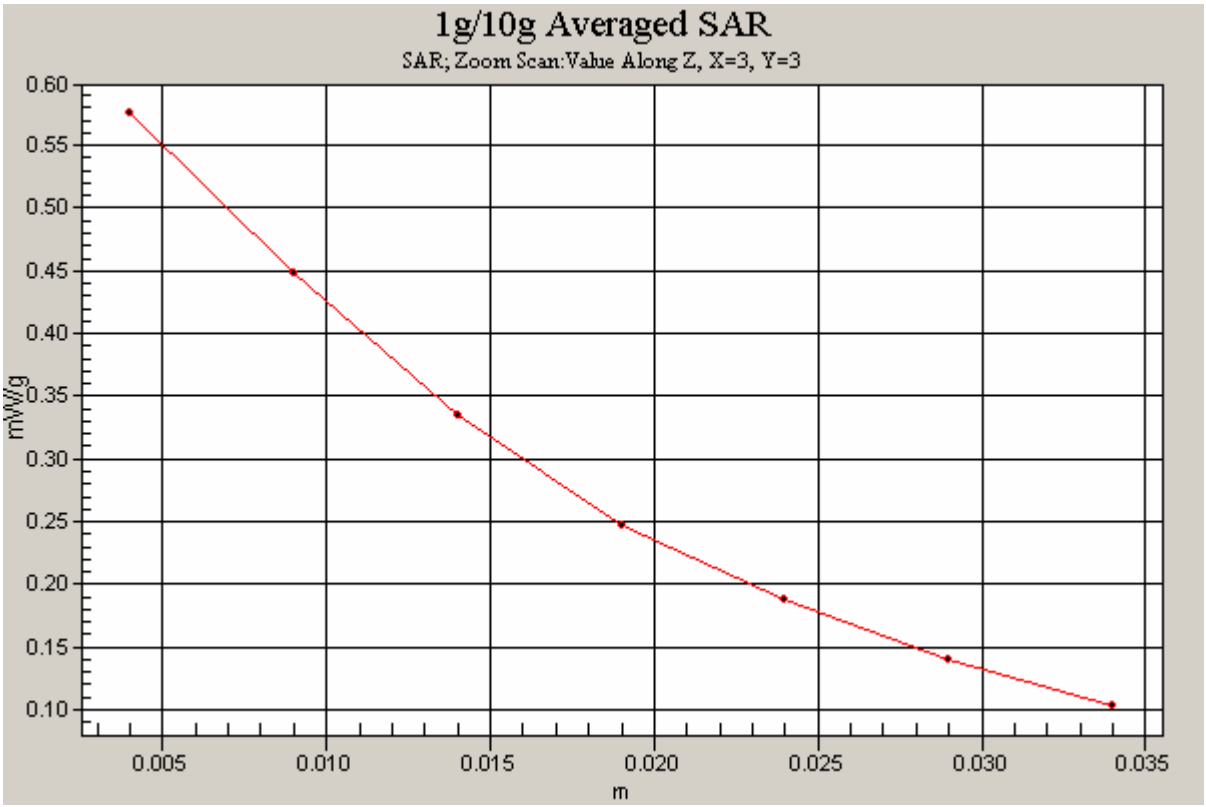


Figure 38 Z-Scan at power reference point (Body, Towards Phantom, GSM 850 Channel 251)

GSM 850 Towards Phantom Middle

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 837 MHz; σ = 0.995 mho/m; ε_r = 54.7; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards Phantom Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.578 mW/g

Towards Phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.5 V/m; Power Drift = 0.006 dB
Peak SAR (extrapolated) = 0.668 W/kg
SAR(1 g) = 0.542 mW/g; SAR(10 g) = 0.396 mW/g
Maximum value of SAR (measured) = 0.578 mW/g

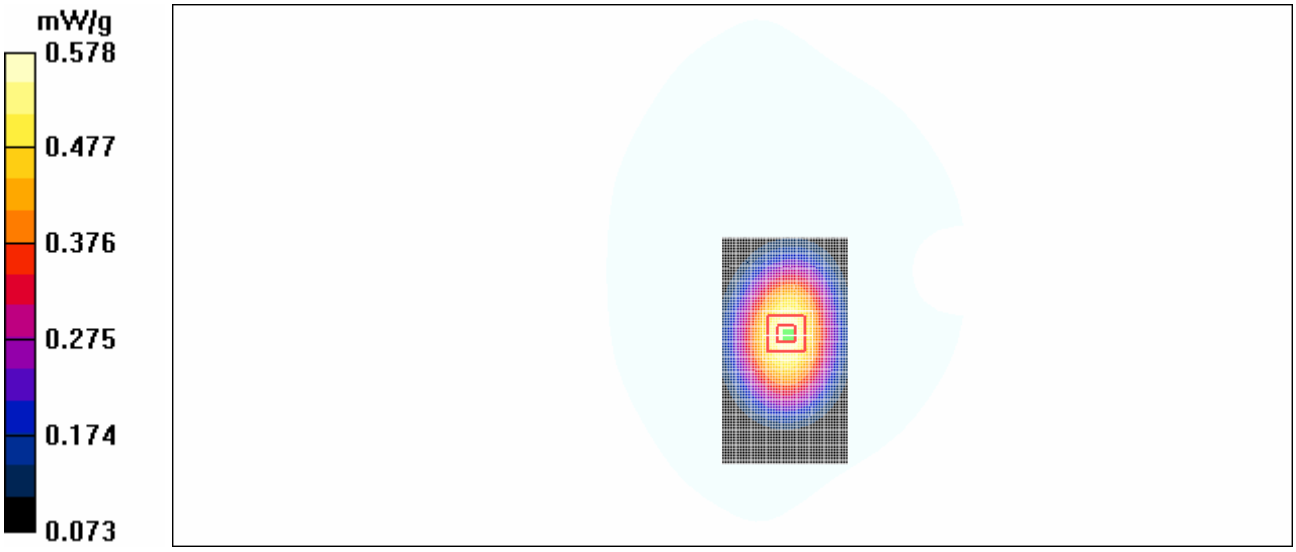


Figure 39 Body, Towards Phantom, GSM 850 Channel 190

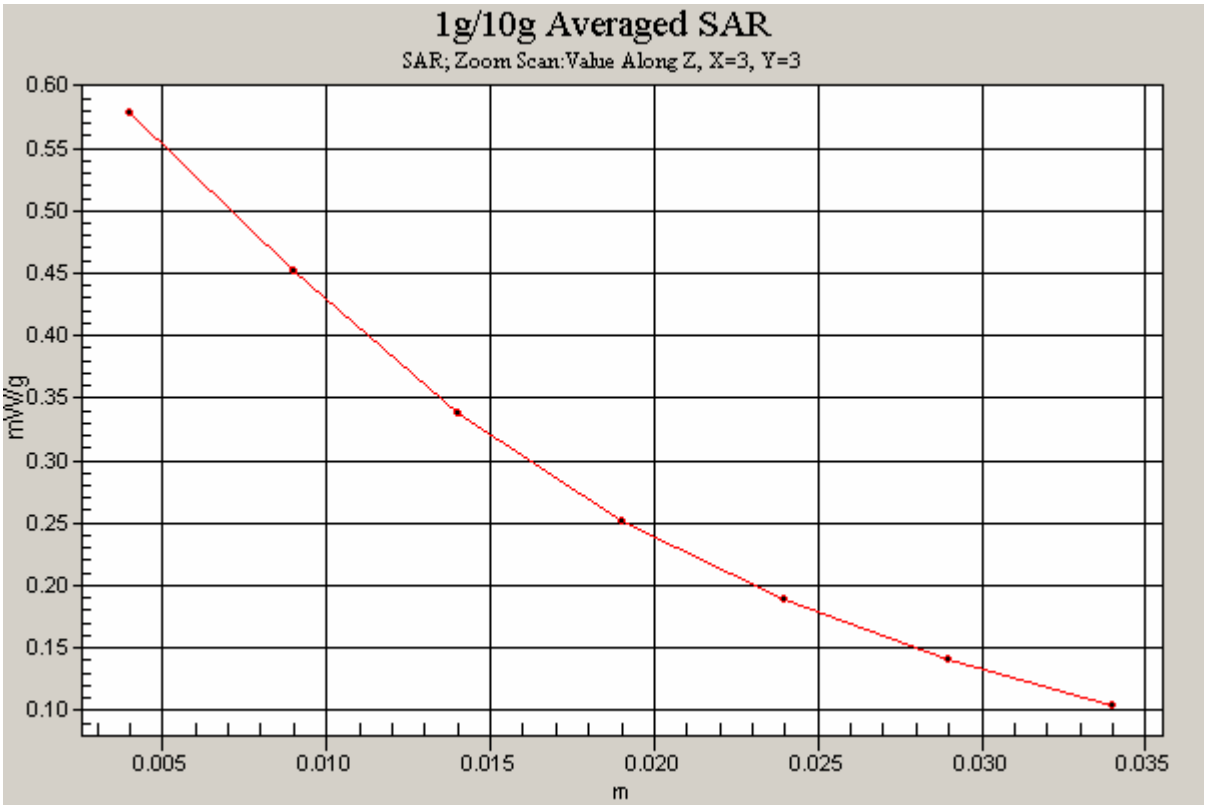


Figure 40 Z-Scan at power reference point (Body, Towards Phantom, GSM 850 Channel 190)

GSM 850 Towards Phantom Low

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.982 mho/m; ε_r = 54.8; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards Phantom Low /Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.574 mW/g

Towards Phantom Low /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.9 V/m; Power Drift = -0.105 dB
Peak SAR (extrapolated) = 0.656 W/kg
SAR(1 g) = 0.535 mW/g; SAR(10 g) = 0.391 mW/g
Maximum value of SAR (measured) = 0.568 mW/g

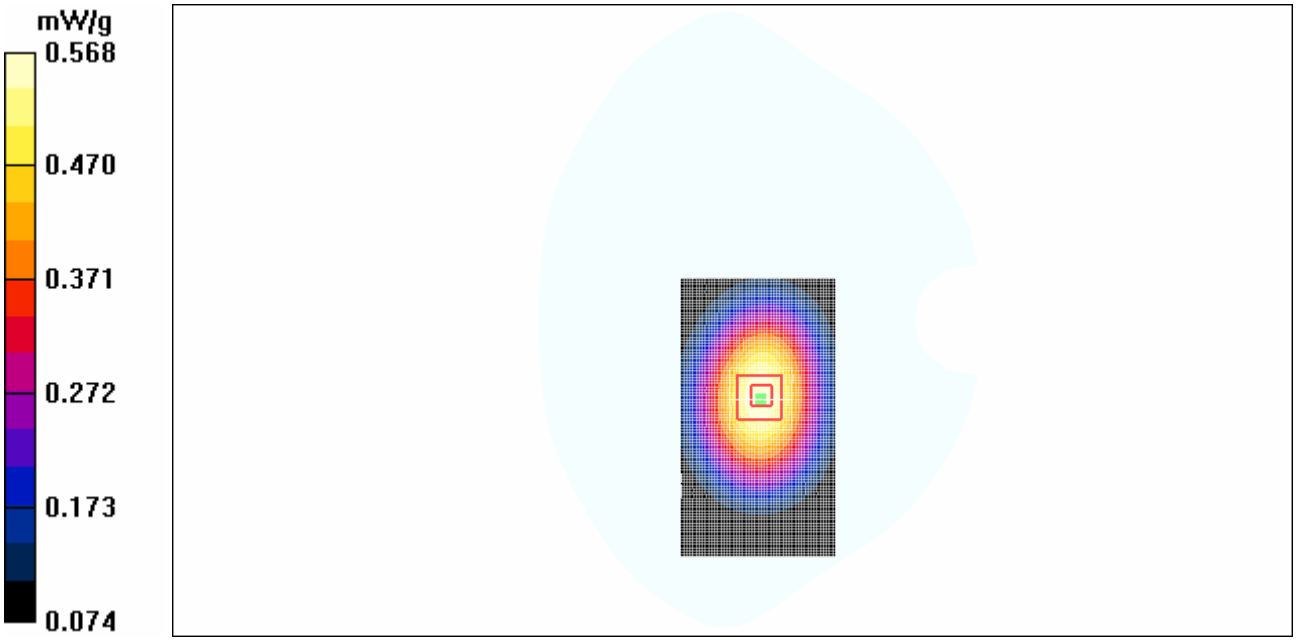


Figure 41 Body, Towards Phantom, GSM 850 Channel 128

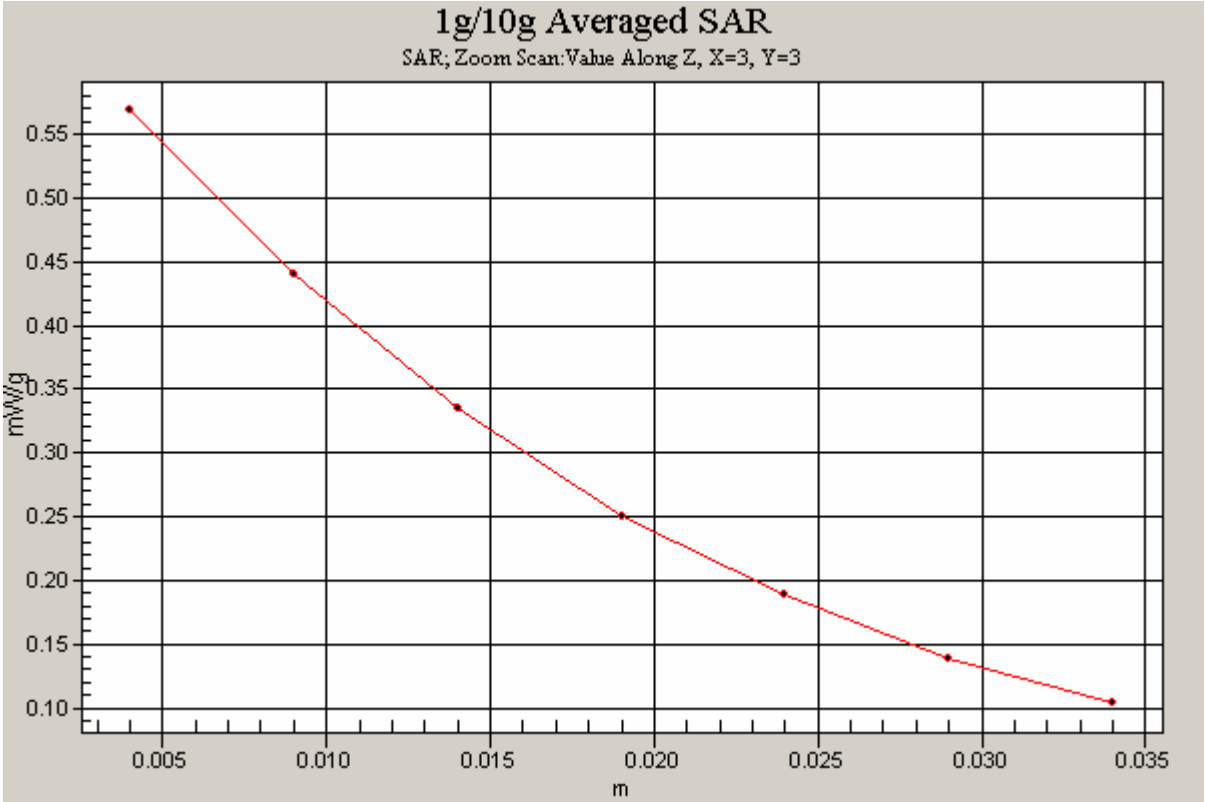


Figure 42 Z-Scan at power reference point (Body, Towards Phantom, GSM 850 Channel 128)

GSM 850 Earphone Towards Ground Low

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.982 mho/m; ε_r = 54.8; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards Ground Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.681 mW/g

Towards Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.4 V/m; Power Drift = -0.076 dB
Peak SAR (extrapolated) = 0.822 W/kg
SAR(1 g) = 0.645 mW/g; SAR(10 g) = 0.464 mW/g
Maximum value of SAR (measured) = 0.687 mW/g

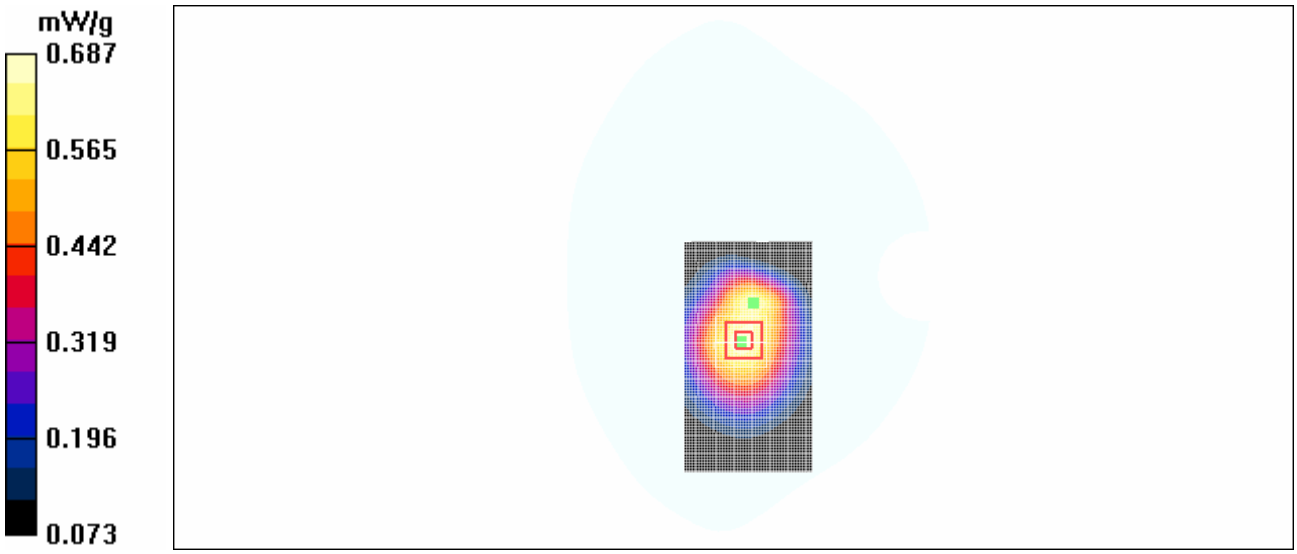


Figure 43 Body with Earphone, Towards Ground, GSM 850, Channel 128

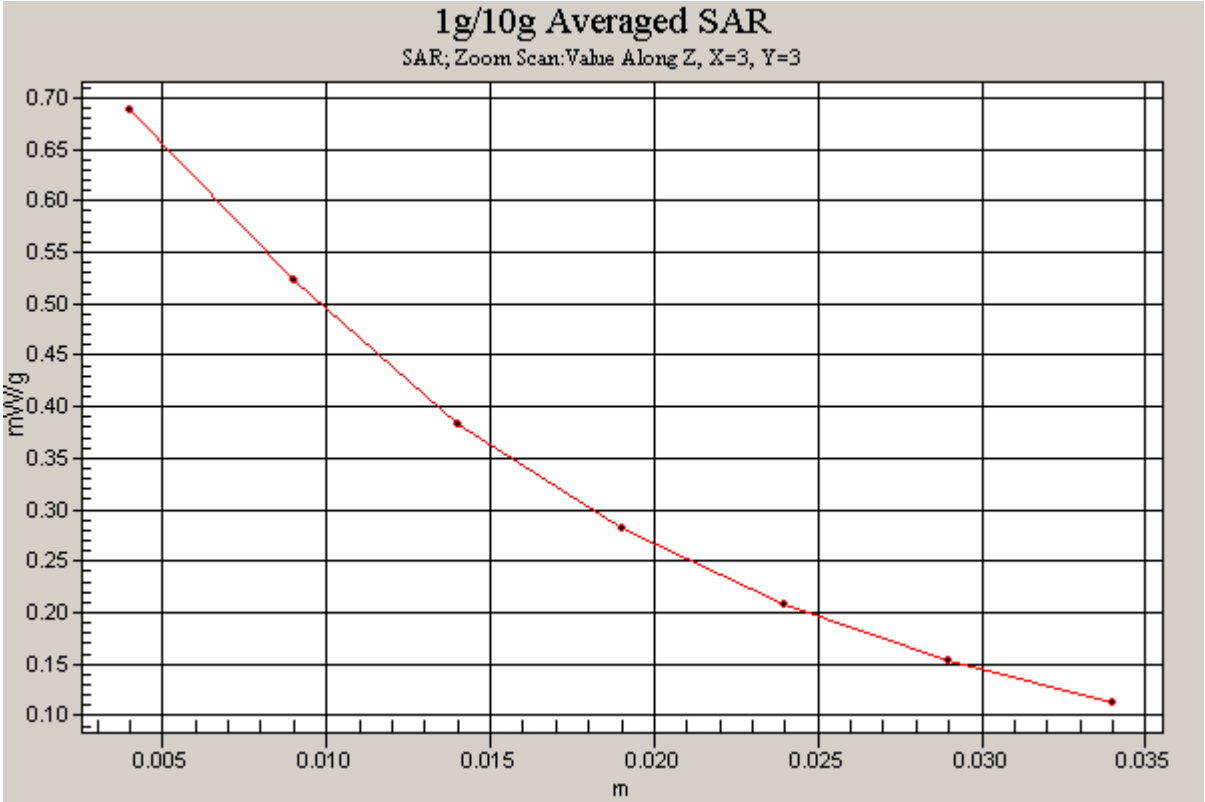


Figure 44 Z-Scan at power reference point (Body with Earphone, Towards Ground, GSM 850, Channel 128)

GSM 850 Bluetooth Earphone Towards Ground Low

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.982 mho/m; ε_r = 54.8; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards Ground Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.859 mW/g

Towards Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.4 V/m; Power Drift = -0.051 dB
Peak SAR (extrapolated) = 1.01 W/kg
SAR(1 g) = 0.802 mW/g; SAR(10 g) = 0.580 mW/g
Maximum value of SAR (measured) = 0.851 mW/g

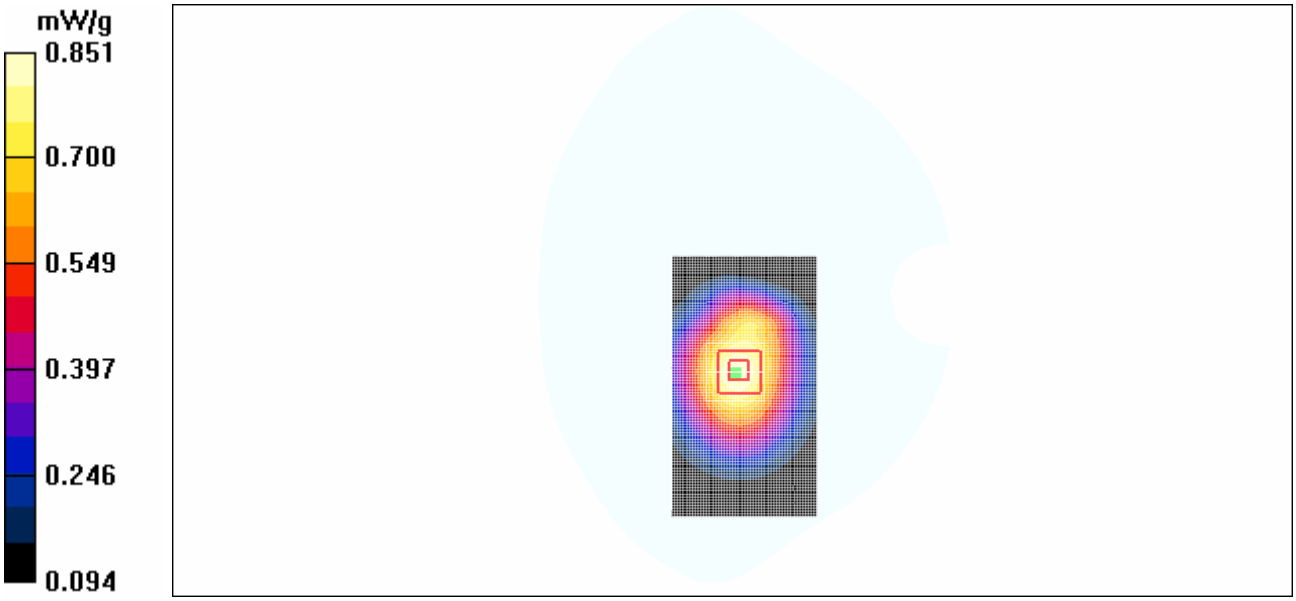


Figure 45 Body with Bluetooth earphone, Towards Ground, GSM 850, Channel 128

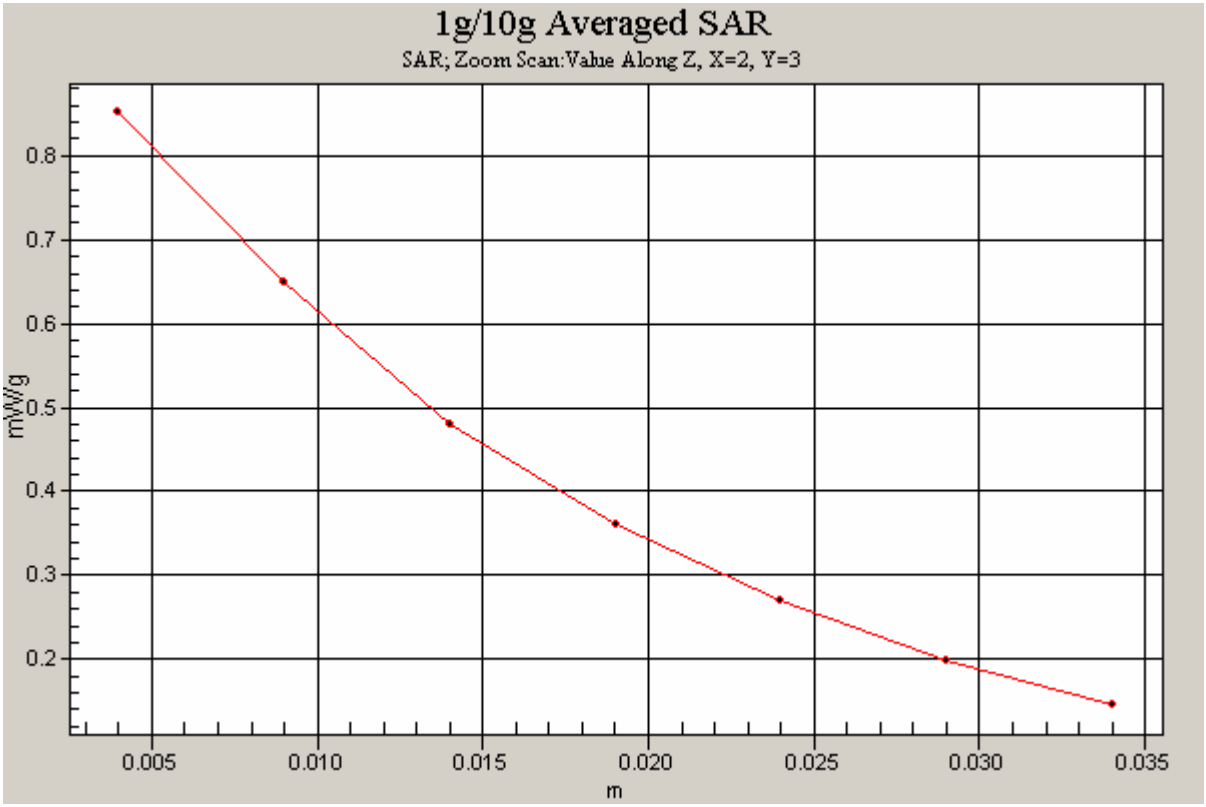


Figure 46 Z-Scan at power reference point (Body with Bluetooth earphone, Towards Ground, GSM 850, Channel 128)

GSM 850 GPRS Towards Ground High

Communication System: GSM850 + GPRS(2Up); Frequency: 848.8 MHz;Duty Cycle: 1:4
Medium parameters used: f = 849 MHz; σ = 1.01 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards ground High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.30 mW/g

Towards ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 29.1 V/m; Power Drift = -0.145 dB
Peak SAR (extrapolated) = 1.55 W/kg
SAR(1 g) = 1.21 mW/g; SAR(10 g) = 0.872 mW/g
Maximum value of SAR (measured) = 1.29 mW/g

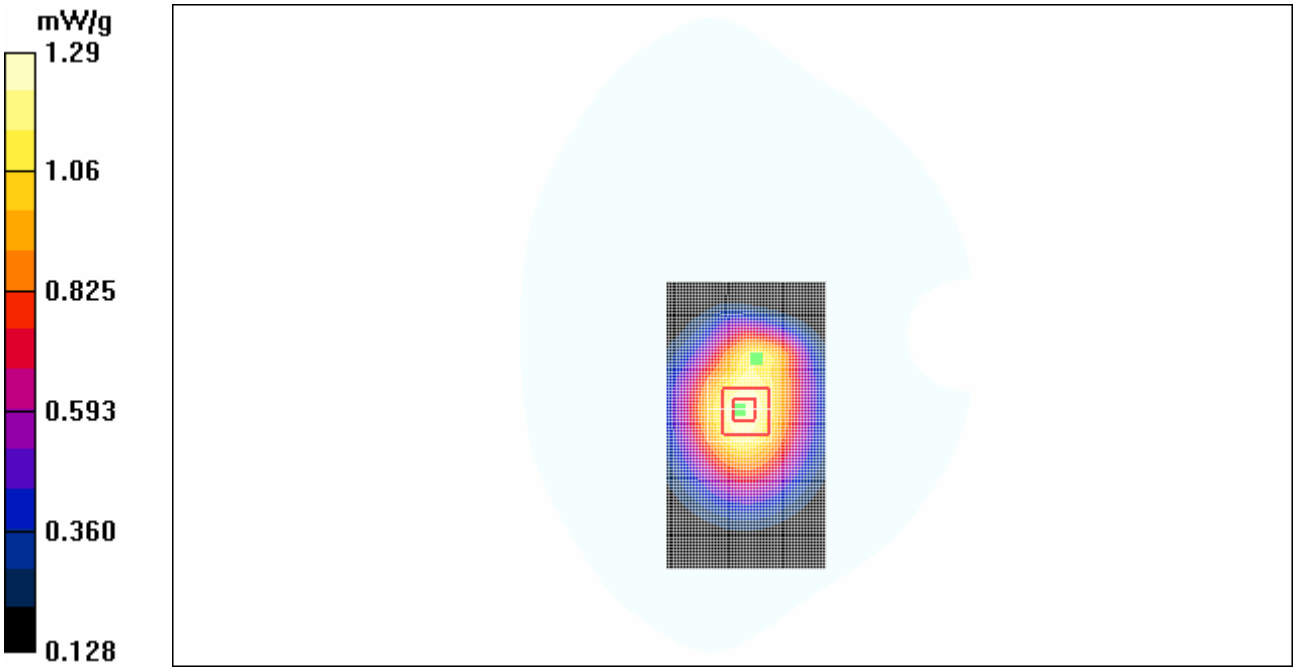


Figure 47 Body, Towards Ground, GSM 850 GPRS, Channel 251

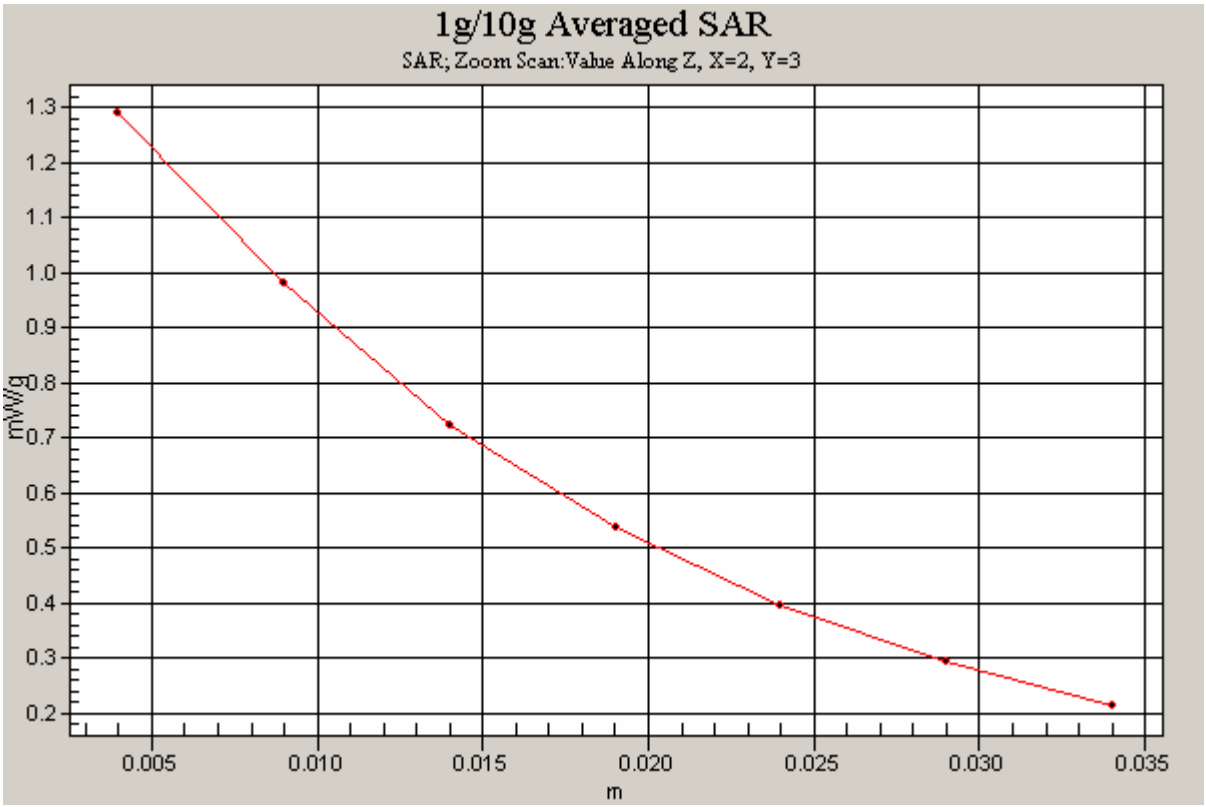


Figure 48 Z-Scan at power reference point (Body, Towards Ground, GSM 850 GPRS, Channel 251)

GSM 850 GPRS Towards Ground Middle

Communication System: GSM850 + GPRS(2Up); Frequency: 836.6 MHz;Duty Cycle: 1:4
Medium parameters used: f = 837 MHz; σ = 0.995 mho/m; ε_r = 54.7; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards ground Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.45 mW/g

Towards ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 31.6 V/m; Power Drift = -0.030 dB
Peak SAR (extrapolated) = 1.69 W/kg
SAR(1 g) = 1.32 mW/g; SAR(10 g) = 0.948 mW/g
Maximum value of SAR (measured) = 1.39 mW/g

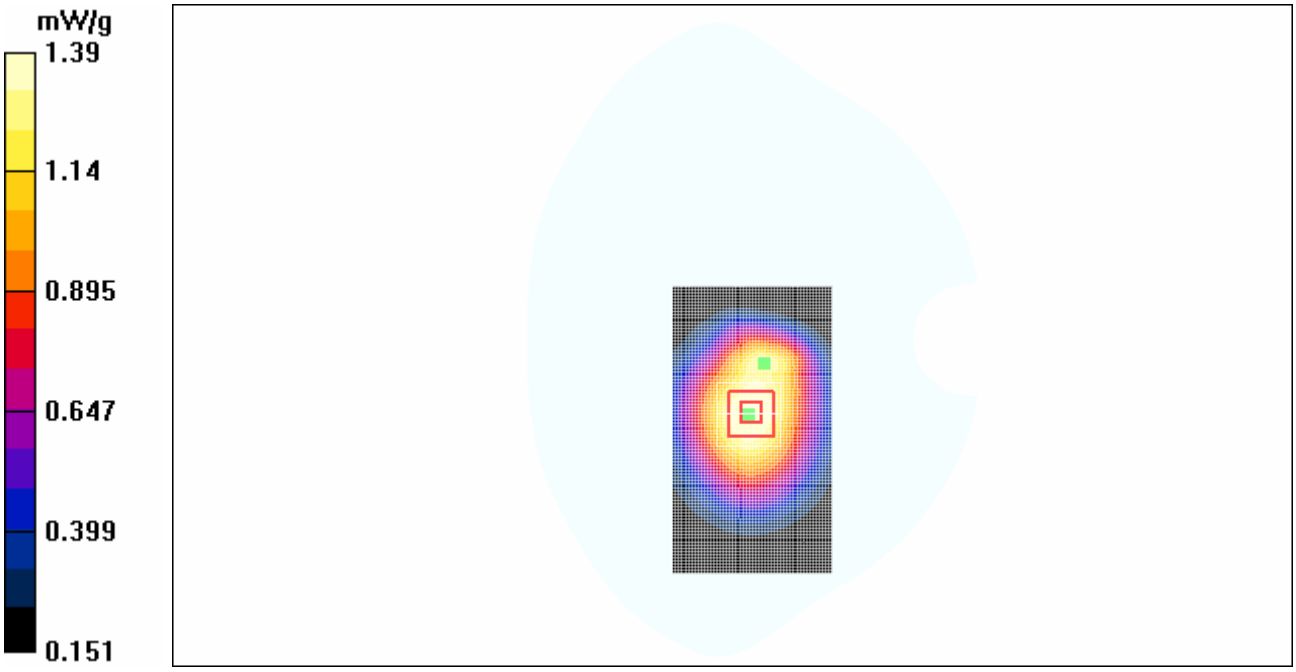


Figure 49 Body, Towards Ground, GSM 850 GPRS Channel 190

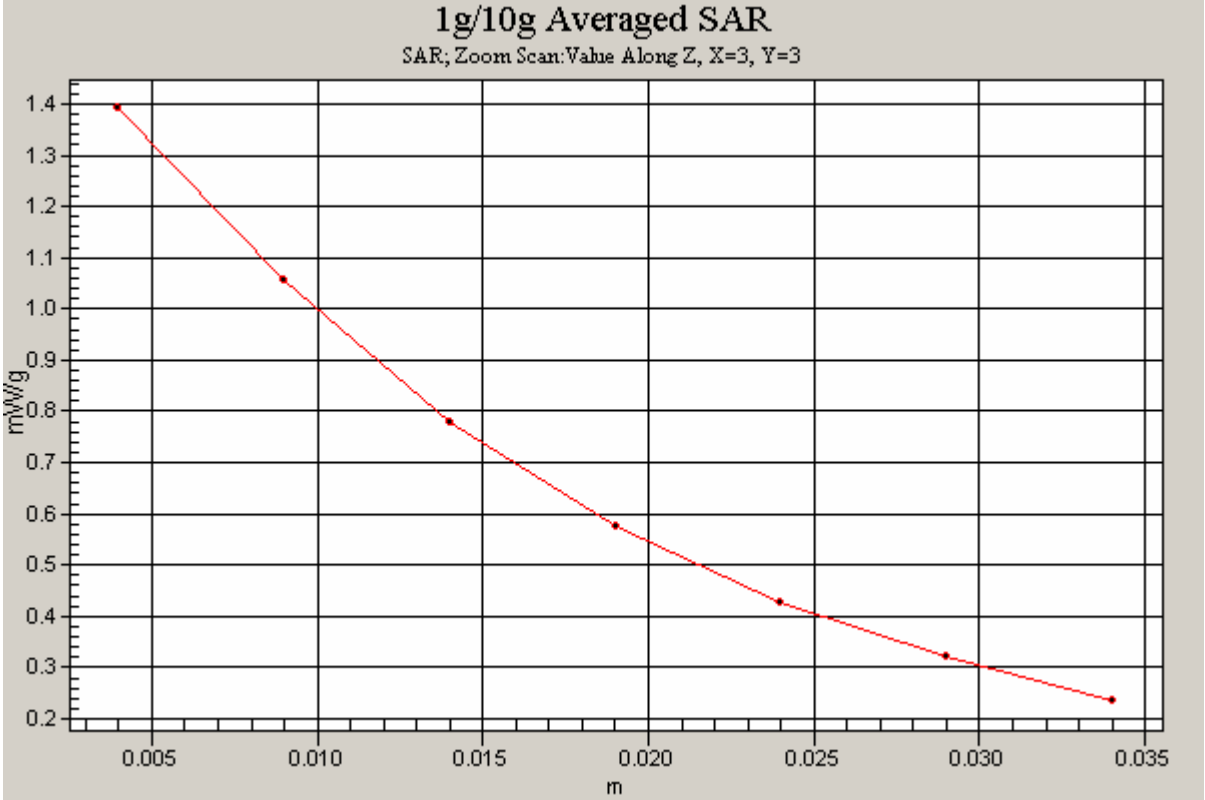


Figure 50 Z-Scan at power reference point (Body, Towards Ground, GSM 850 GPRS Channel 190)

GSM 850 GPRS Towards Ground Low

Communication System: GSM850 + GPRS(2Up); Frequency: 824.2 MHz;Duty Cycle: 1:4
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.982 mho/m; ε_r = 54.8; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards ground Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.50 mW/g

Towards ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 31.7 V/m; Power Drift = -0.115 dB
Peak SAR (extrapolated) = 1.70 W/kg
SAR(1 g) = 1.32 mW/g; SAR(10 g) = 0.949 mW/g
Maximum value of SAR (measured) = 1.39 mW/g

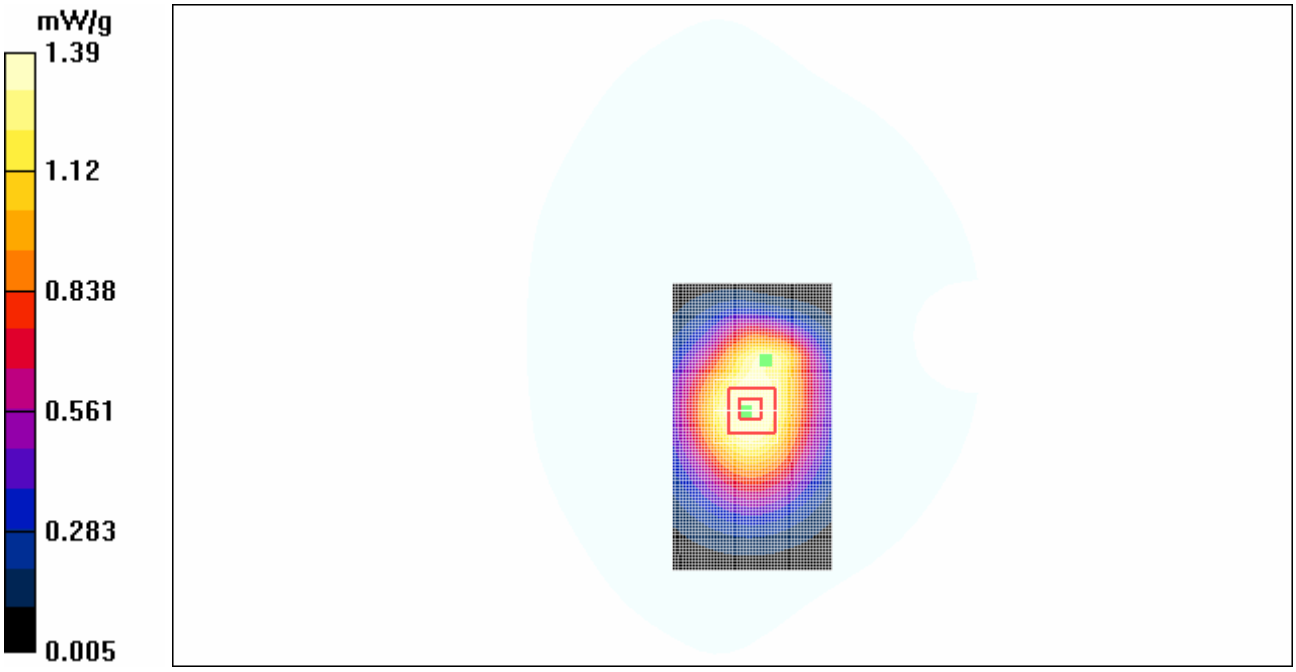


Figure 51 Body, Towards Ground, GSM 850 GPRS Channel 128

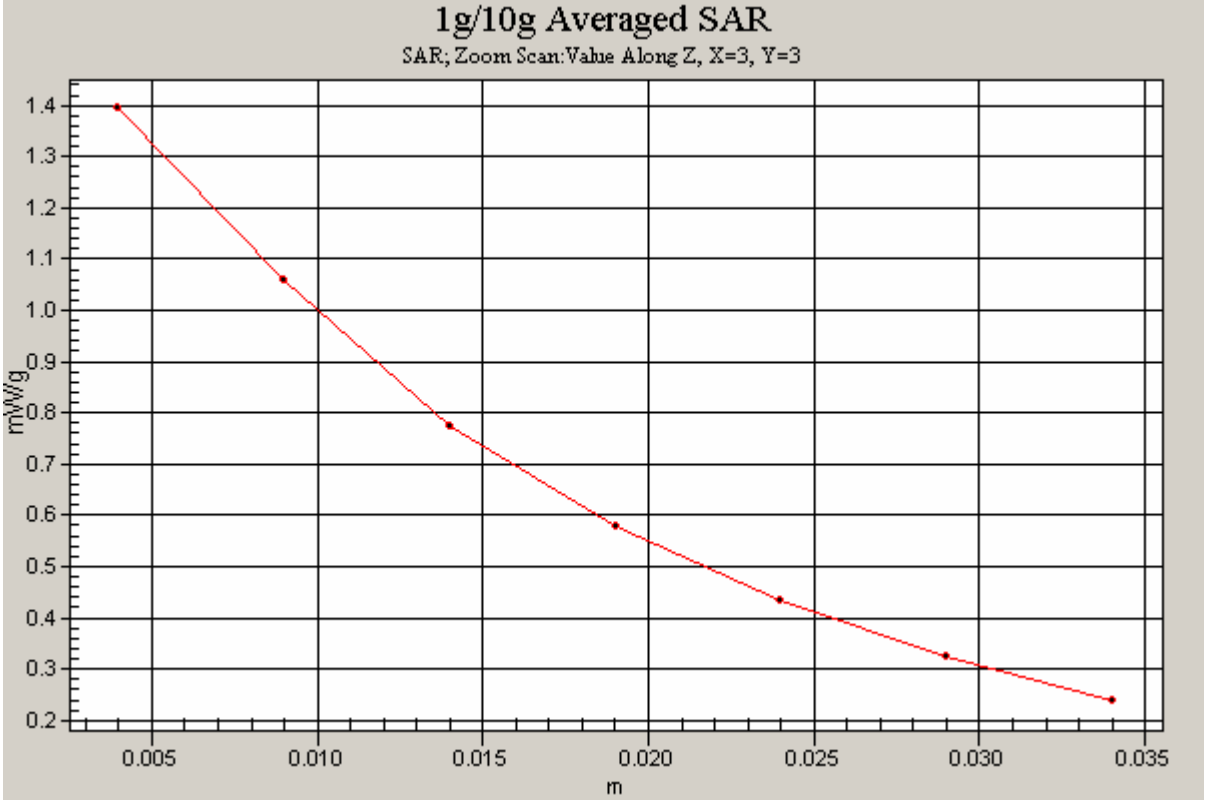


Figure 52 Z-Scan at power reference point (Body, Towards Ground, GSM 850 GPRS Channel 128)

GSM 850 GPRS Towards Phantom High

Communication System: GSM850 + GPRS(2Up); Frequency: 848.8 MHz;Duty Cycle: 1:4
Medium parameters used: f = 849 MHz; σ = 1.01 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards phantom High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.919 mW/g

Towards phantom High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.0 V/m; Power Drift = -0.045 dB
Peak SAR (extrapolated) = 1.09 W/kg
SAR(1 g) = 0.867 mW/g; SAR(10 g) = 0.630 mW/g
Maximum value of SAR (measured) = 0.922 mW/g

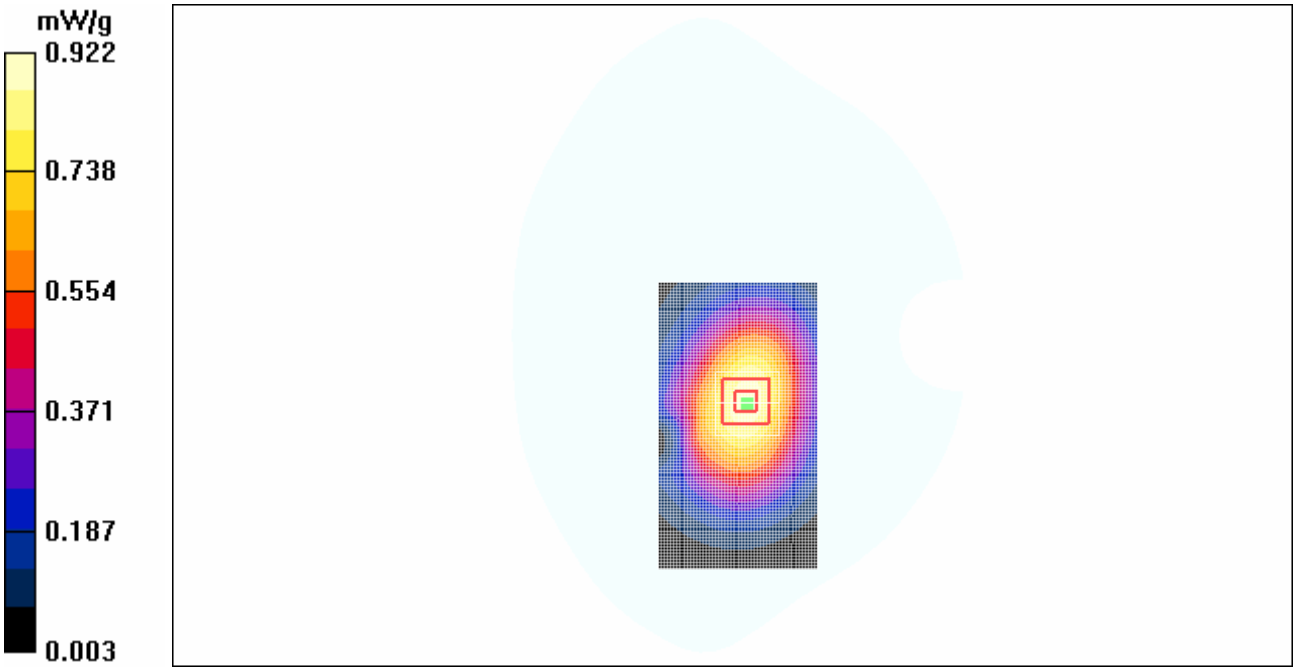


Figure 53 Body, Towards Phantom, GSM 850 GPRS, Channel 251

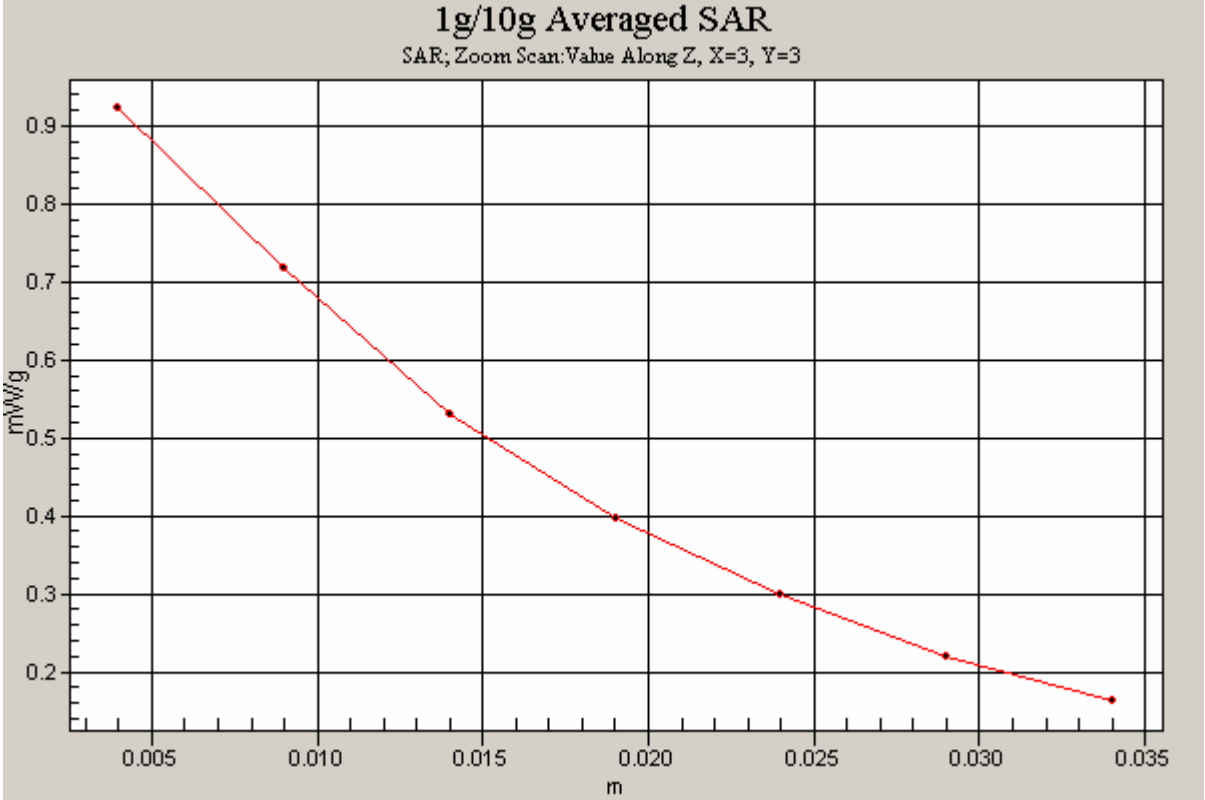


Figure 54 Z-Scan at power reference point (Body, Towards Phantom, GSM 850 GPRS, Channel 251)

GSM 850 GPRS Towards Phantom Middle

Communication System: GSM850 + GPRS(2Up); Frequency: 836.6 MHz;Duty Cycle: 1:4
Medium parameters used: f = 837 MHz; σ = 0.995 mho/m; ε_r = 54.7; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards phantom Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.26 mW/g

Towards phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.4 V/m; Power Drift = 0.024 dB
Peak SAR (extrapolated) = 1.08 W/kg
SAR(1 g) = 0.871 mW/g; SAR(10 g) = 0.630 mW/g
Maximum value of SAR (measured) = 0.925 mW/g

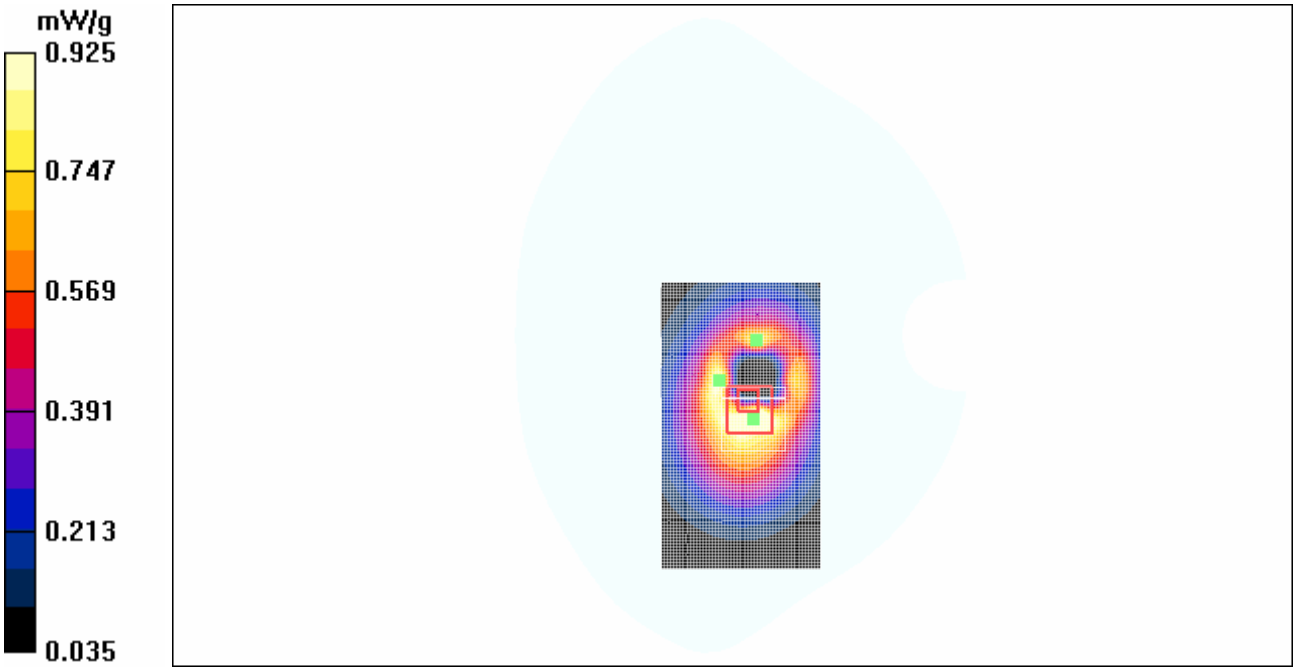


Figure 55 Body, Towards Phantom, GSM 850 GPRS Channel 190

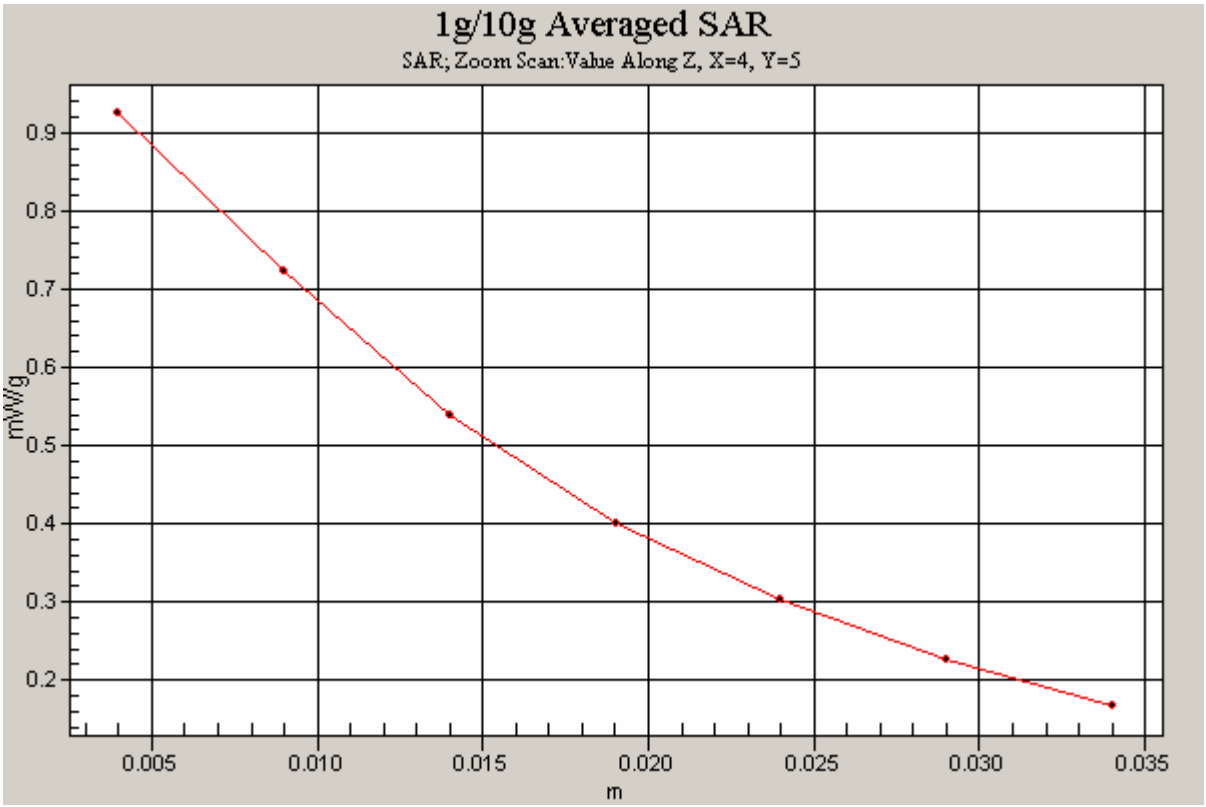


Figure 56 Z-Scan at power reference point (Body, Towards Phantom, GSM 850 GPRS Channel 190)

GSM 850 GPRS Towards Phantom Low

Communication System: GSM850 + GPRS(2Up); Frequency: 824.2 MHz;Duty Cycle: 1:4
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.982 mho/m; ε_r = 54.8; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards phantom Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.902 mW/g

Towards phantom Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.4 V/m; Power Drift = -0.130 dB
Peak SAR (extrapolated) = 1.04 W/kg
SAR(1 g) = 0.819 mW/g; SAR(10 g) = 0.588 mW/g
Maximum value of SAR (measured) = 0.877 mW/g

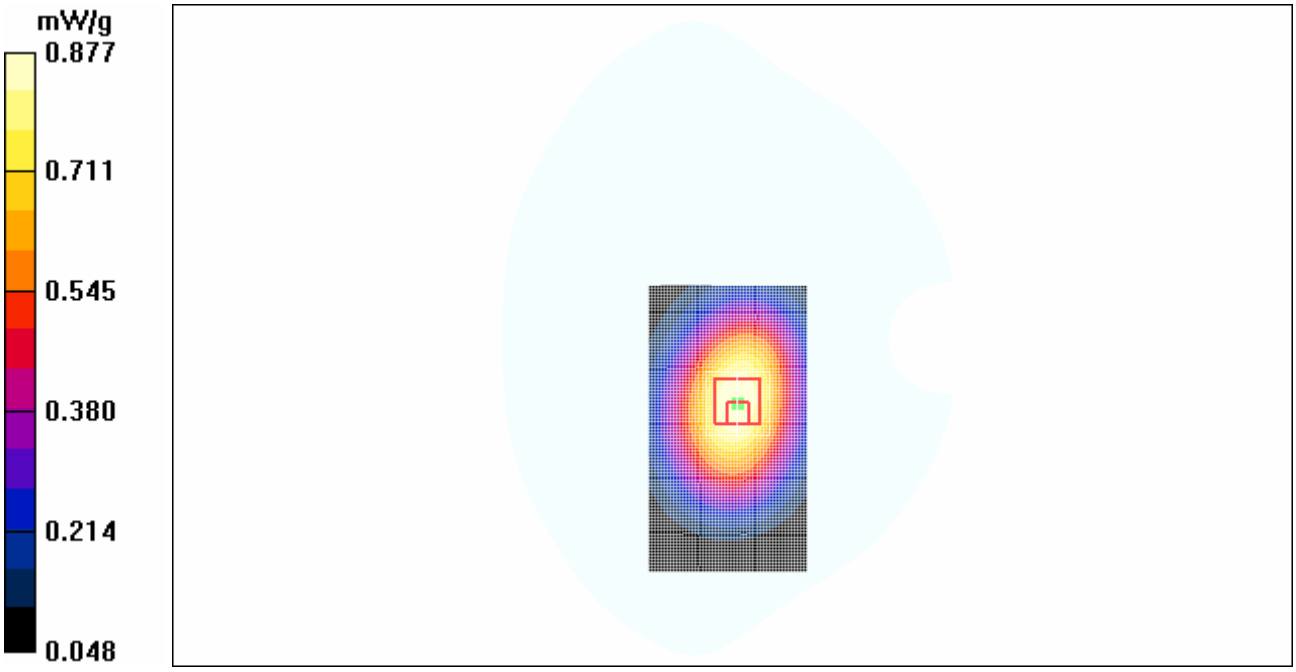


Figure 57 Body, Towards Phantom, GSM 850 GPRS Channel 128

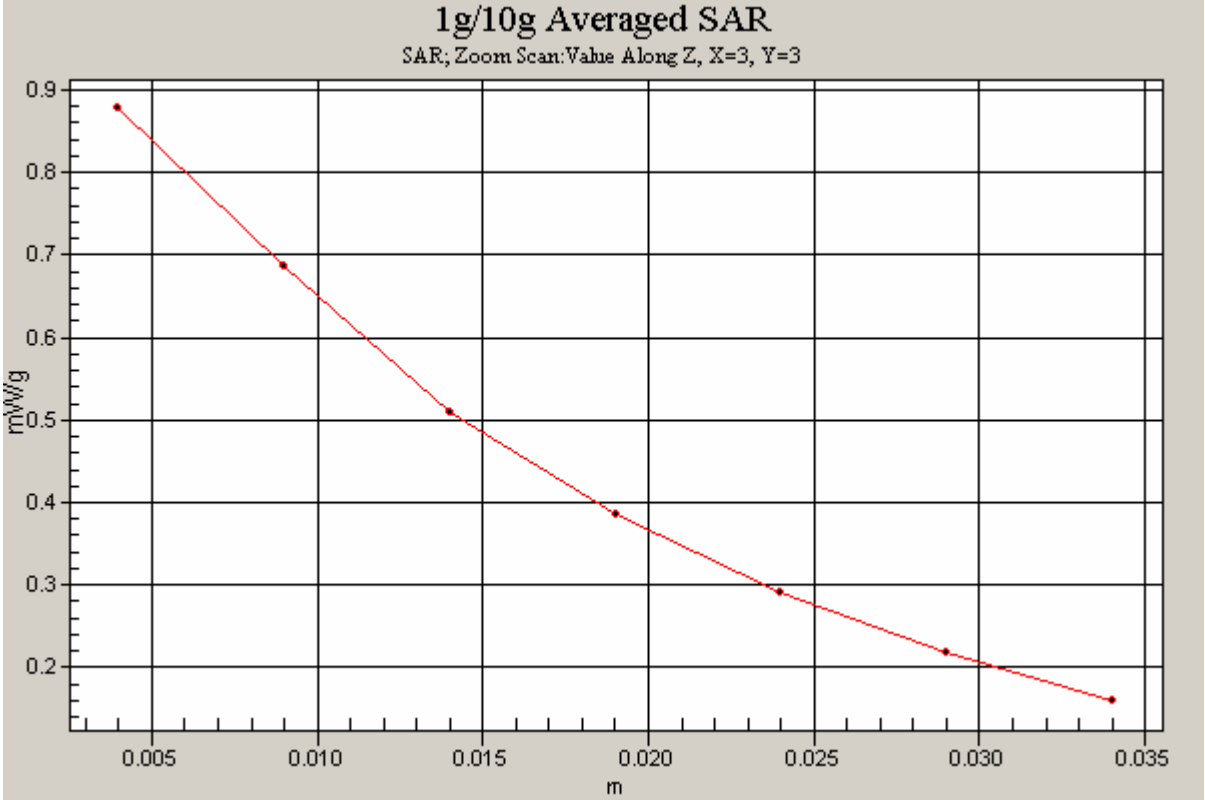


Figure 58 Z-Scan at power reference point (Body, Towards Phantom, GSM 850 GPRS Channel 128)

GSM 850 EGPRS Towards Ground Low

Communication System: GSM850 + EGPRS(2Up); Frequency: 824.2 MHz;Duty Cycle: 1:4
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.982 mho/m; ε_r = 54.8; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards ground Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.451 mW/g

Towards ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.6 V/m; Power Drift = -0.162 dB
Peak SAR (extrapolated) = 0.562 W/kg
SAR(1 g) = 0.435 mW/g; SAR(10 g) = 0.312 mW/g
Maximum value of SAR (measured) = 0.472 mW/g

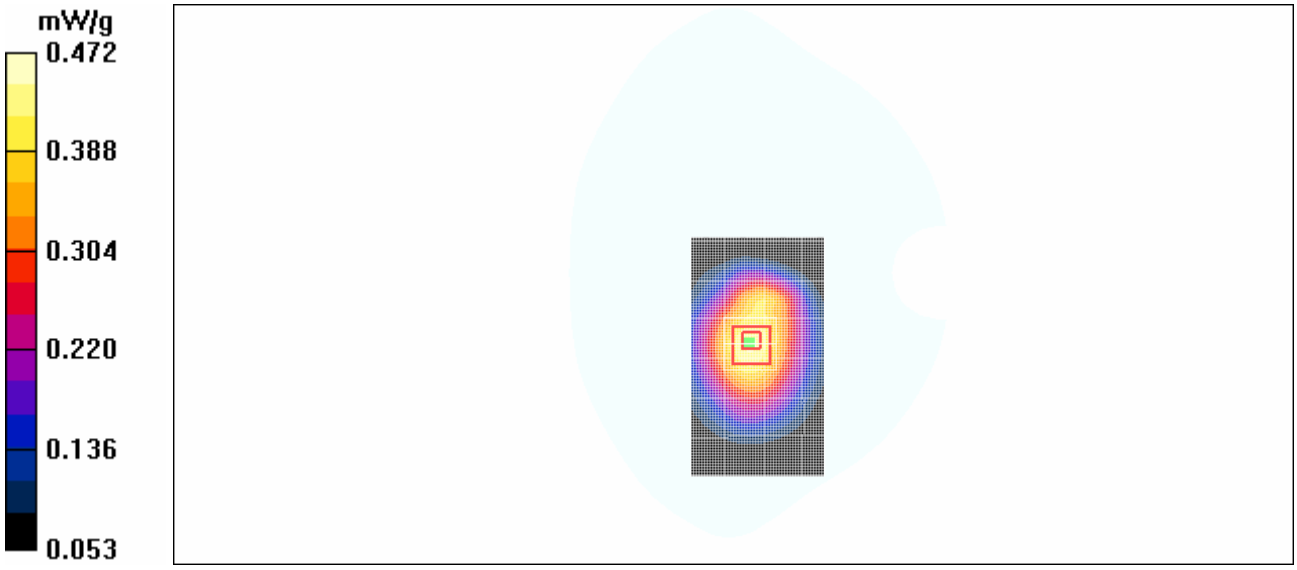


Figure 59 Body, Towards Ground, GSM 850 EGPRS Channel 128

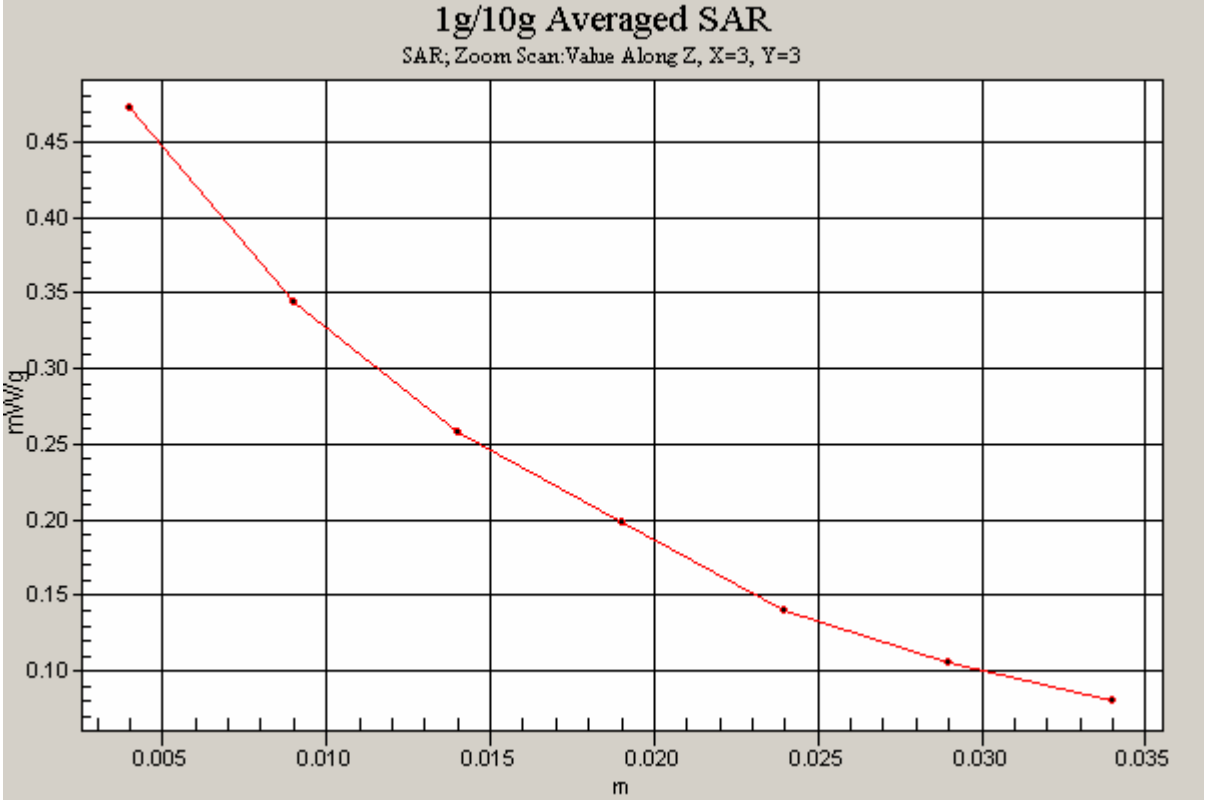


Figure 60 Z-Scan at power reference point (Body, Towards Ground, GSM 850 EGPRS Channel 128)

GSM 1900 Left Cheek High

Communication System: GSM1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1910 MHz; σ = 1.44 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(5.15, 5.15, 5.15);
Electronics: DAE4 Sn679;
Cheek High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.766 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.0 V/m; Power Drift = -0.155 dB
Peak SAR (extrapolated) = 1.46 W/kg
SAR(1 g) = 0.777 mW/g; SAR(10 g) = 0.393 mW/g
Maximum value of SAR (measured) = 0.877 mW/g

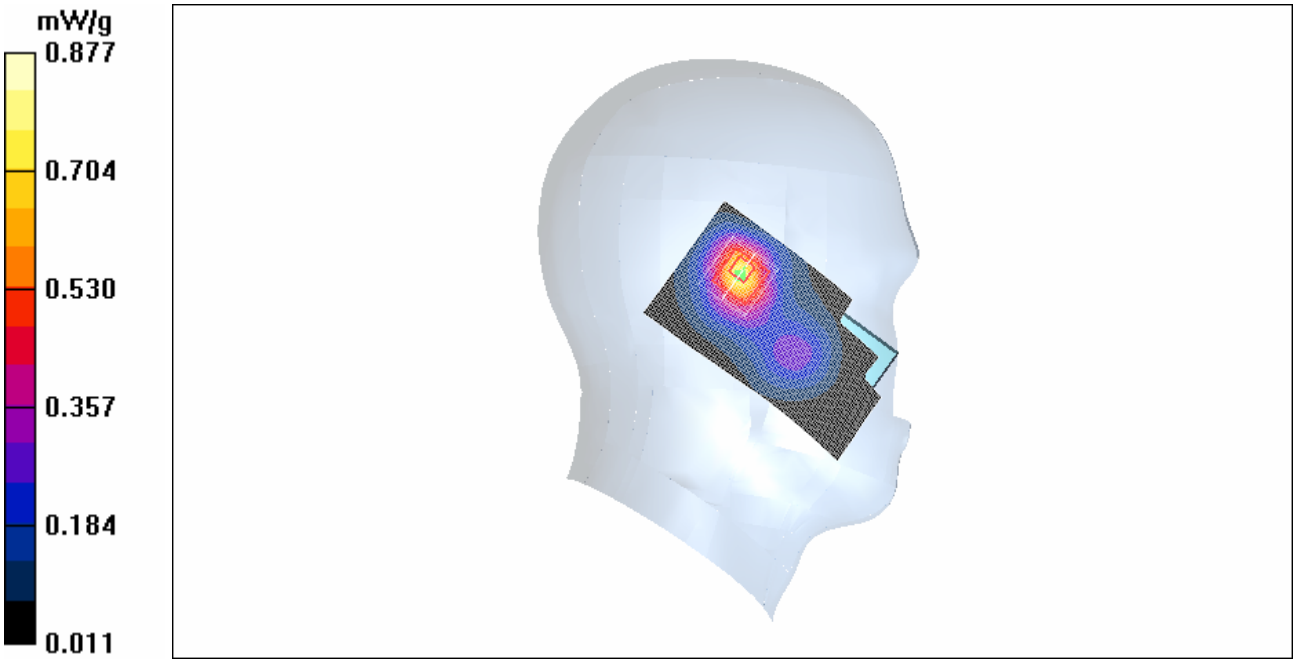


Figure 61 Left Hand Touch Cheek GSM 1900 Channel 810

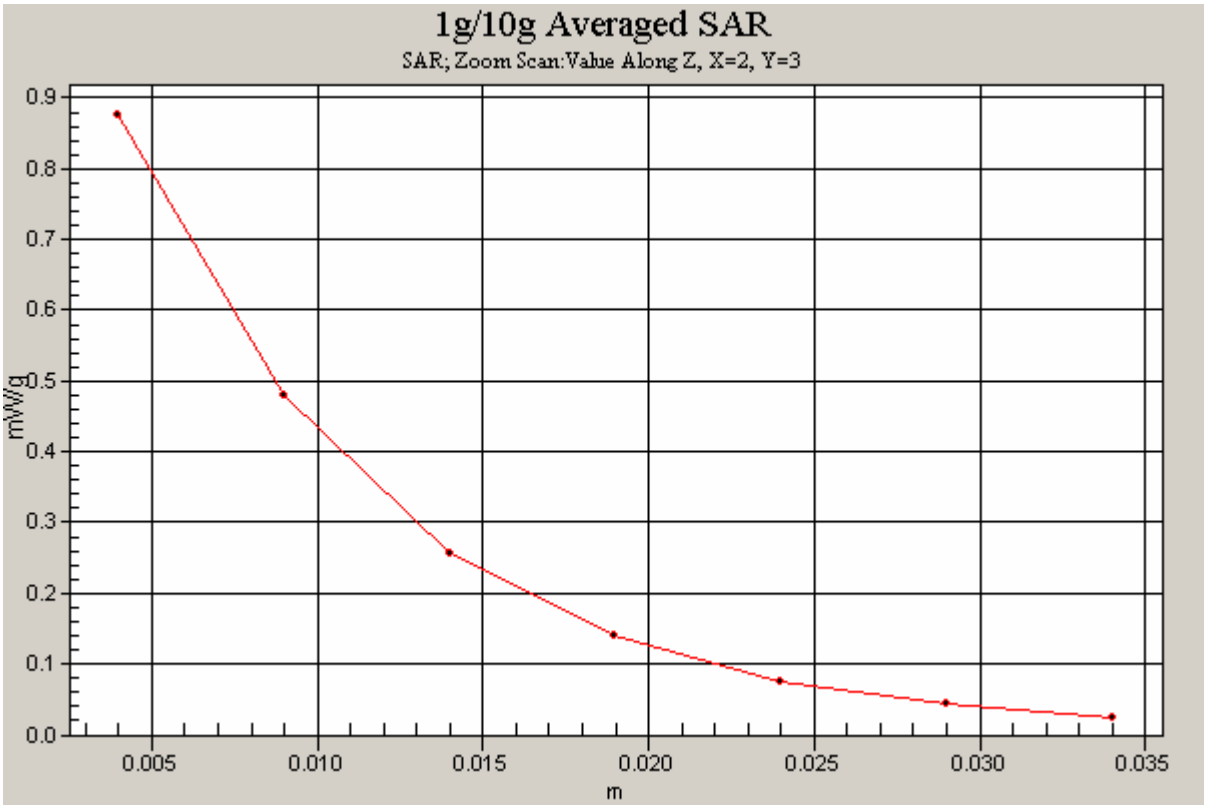


Figure 62 Z-Scan at power reference point (Left Hand Touch Cheek GSM 1900 Channel 810)

GSM 1900 Left Cheek Middle

Communication System: GSM1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(5.15, 5.15, 5.15);
Electronics: DAE4 Sn679;
Cheek Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.08 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.0 V/m; Power Drift = 0.017 dB
Peak SAR (extrapolated) = 2.00 W/kg
SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.555 mW/g
Maximum value of SAR (measured) = 1.24 mW/g

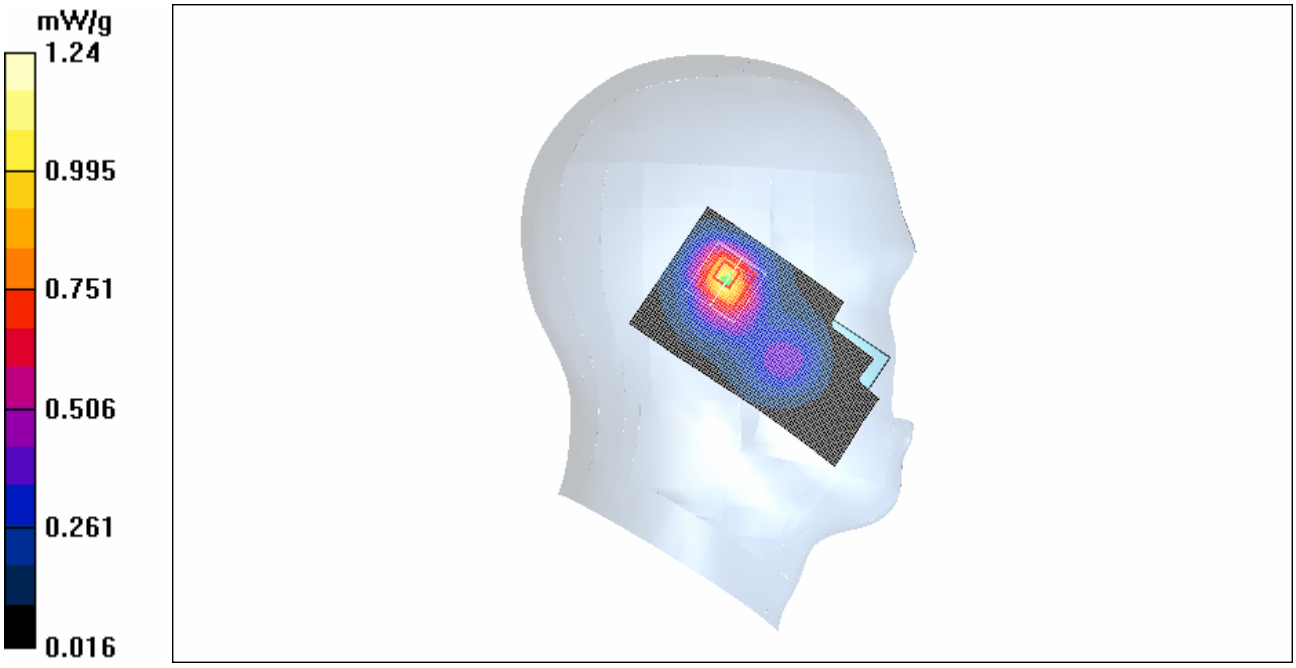


Figure 63 Left Hand Touch Cheek GSM 1900 Channel 661

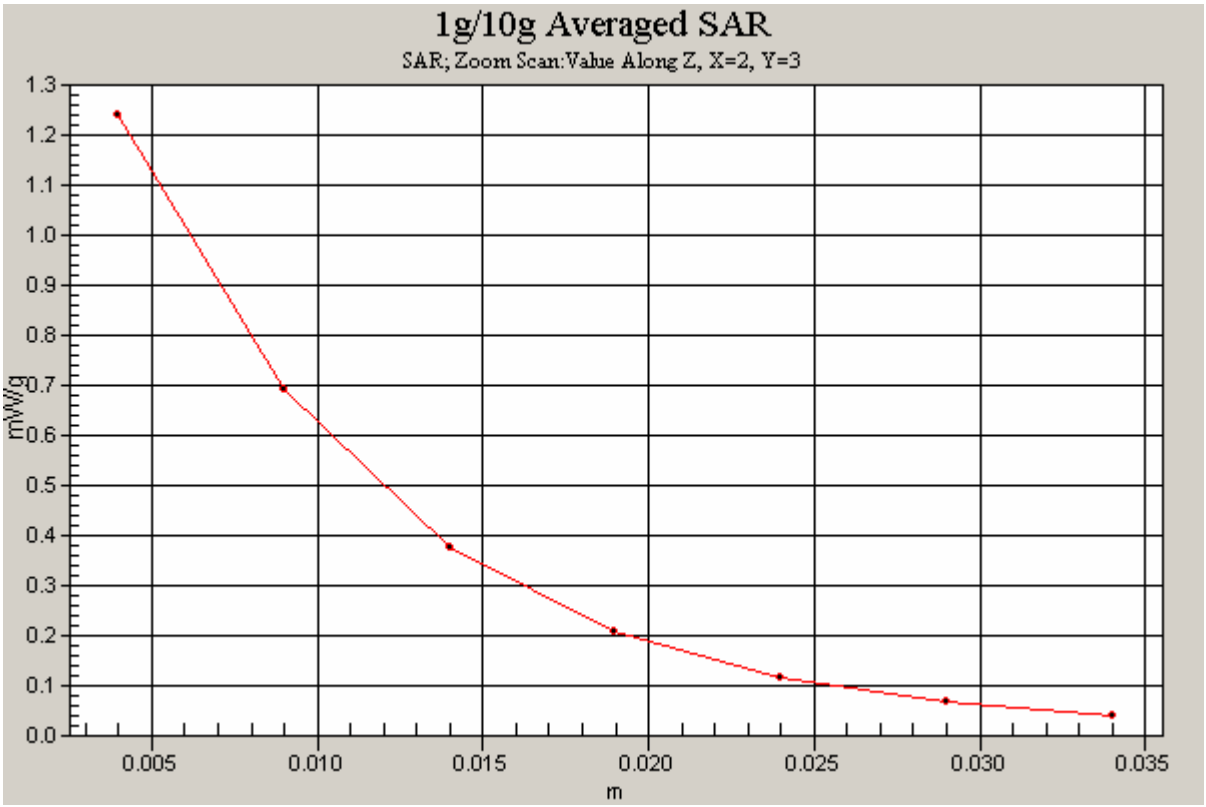


Figure 64 Z-Scan at power reference point (Left Hand Touch Cheek GSM 1900 Channel 661)

GSM 1900 Left Cheek Low

Communication System: GSM1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.39 mho/m; ε_r = 39.9; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(5.15, 5.15, 5.15);
Electronics: DAE4 Sn679;
Cheek Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.12 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.3 V/m; Power Drift = -0.024dB
Peak SAR (extrapolated) = 2.11 W/kg
SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.574 mW/g
Maximum value of SAR (measured) = 1.30 mW/g

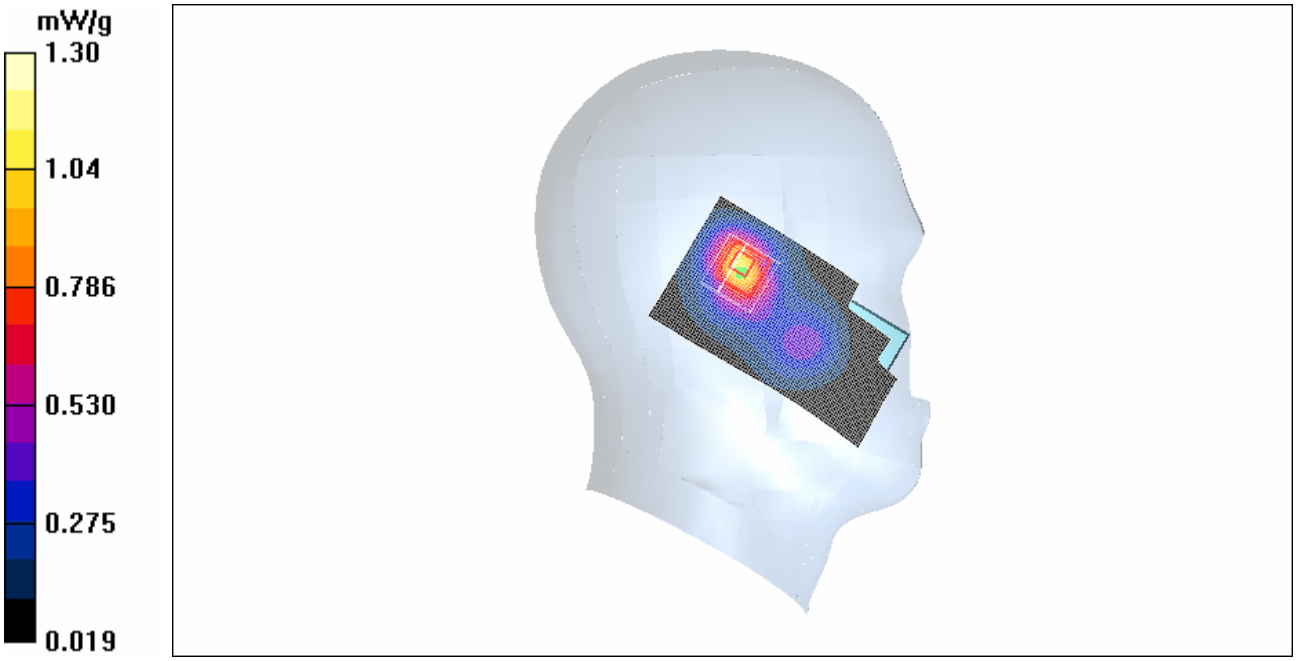


Figure 65 Left Hand Touch Cheek GSM 1900 Channel 512

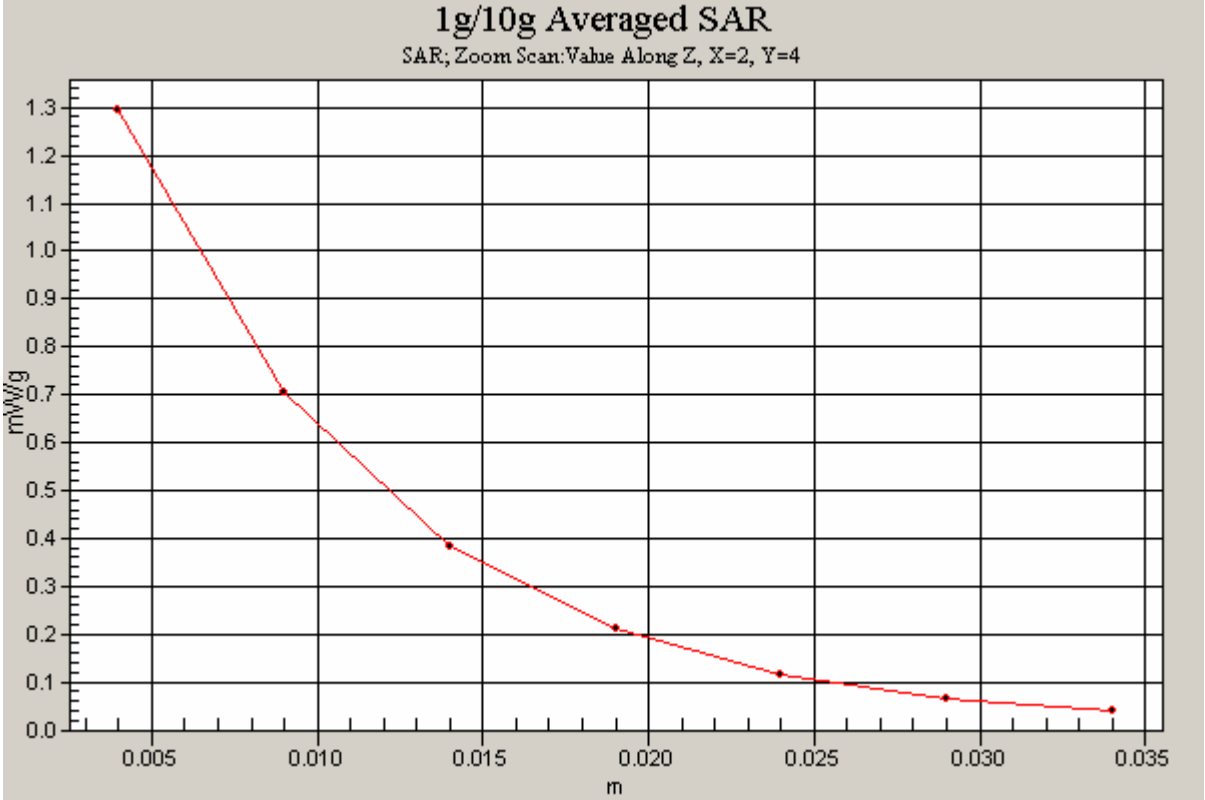


Figure 66 Z-Scan at power reference point (Left Hand Touch Cheek GSM 1900 Channel 512)

GSM 1900 Left Tilt High

Communication System: GSM1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1910 MHz; σ = 1.44 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(5.15, 5.15, 5.15);
Electronics: DAE4 Sn679;
Tilt High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.750 mW/g

Tilt High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.5 V/m; Power Drift = 0.074 dB
Peak SAR (extrapolated) = 1.18 W/kg
SAR(1 g) = 0.670 mW/g; SAR(10 g) = 0.361 mW/g
Maximum value of SAR (measured) = 0.738 mW/g

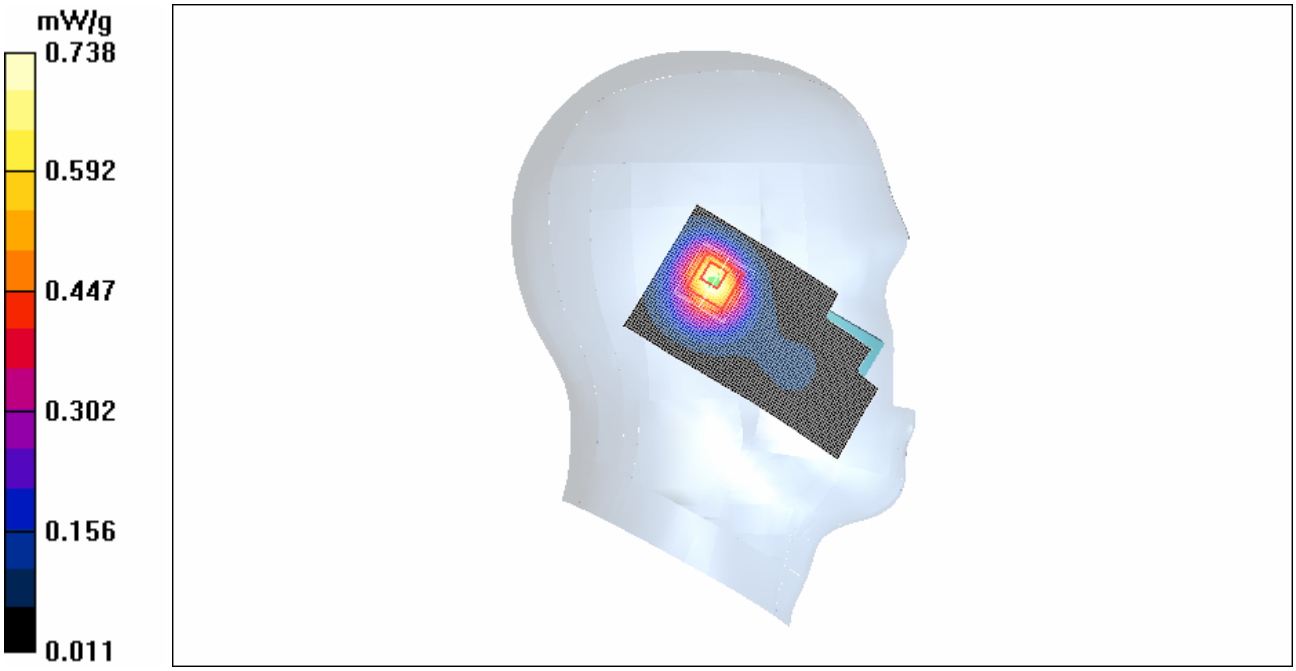


Figure 67 Left Hand Tilt 15°GSM 1900 Channel 810

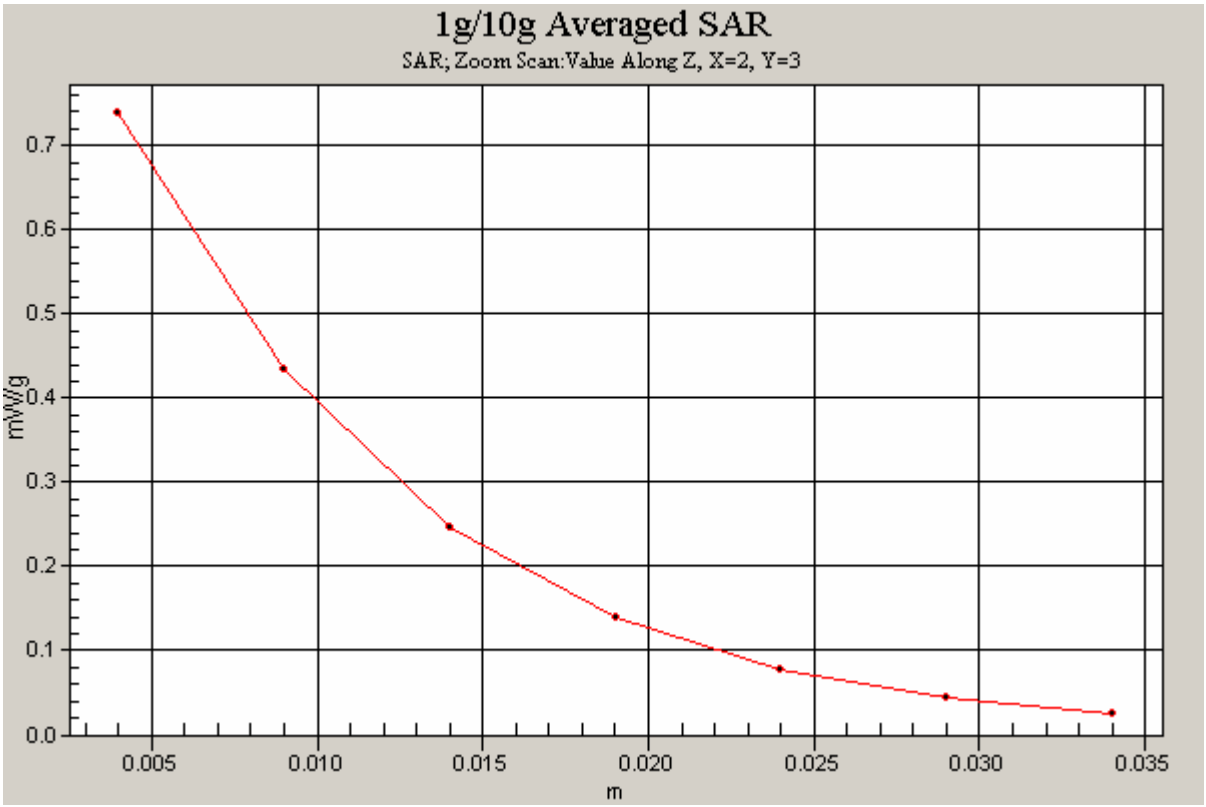


Figure 68 Z-Scan at power reference point (Left Hand Tilt 15°GSM 1900 Channel 810)

GSM 1900 Left Tilt Middle

Communication System: GSM1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(5.15, 5.15, 5.15);
Electronics: DAE4 Sn679;
Tilt Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.10 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.7 V/m; Power Drift = 0.007 dB
Peak SAR (extrapolated) = 1.67 W/kg
SAR(1 g) = 0.973 mW/g; SAR(10 g) = 0.523 mW/g
Maximum value of SAR (measured) = 1.09 mW/g

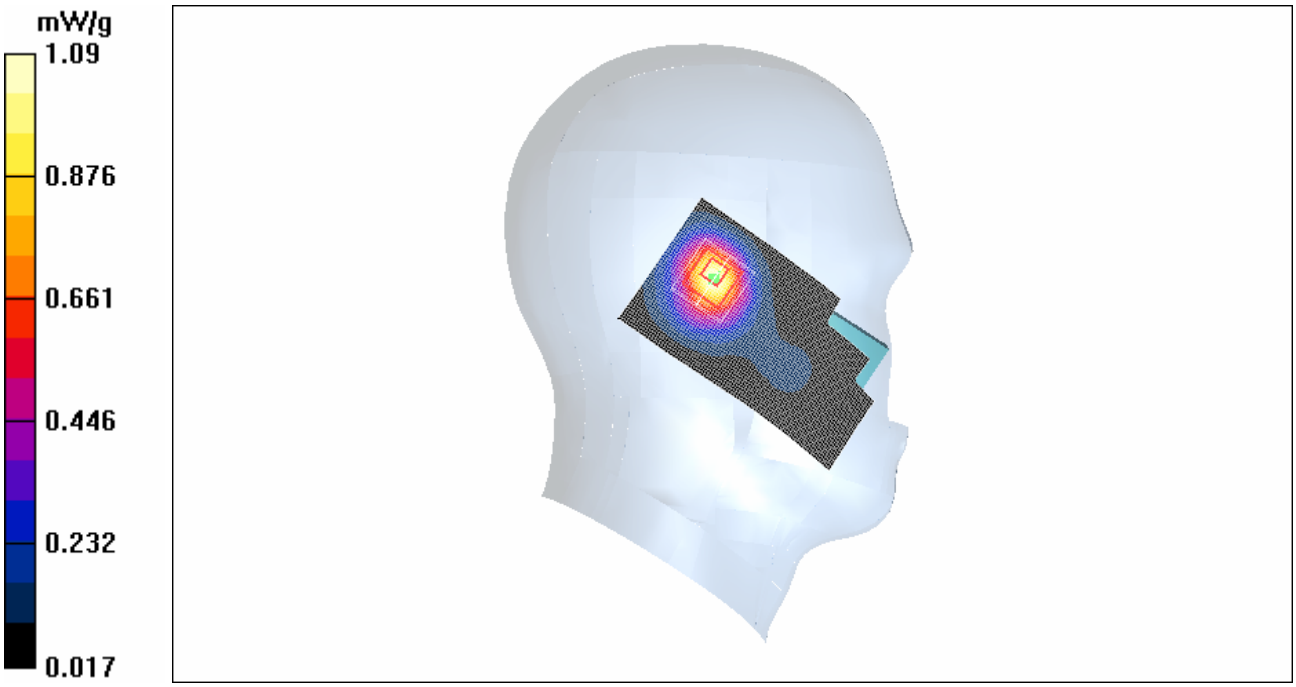


Figure 69 Left Hand Tilt 15° GSM 1900 Channel 661

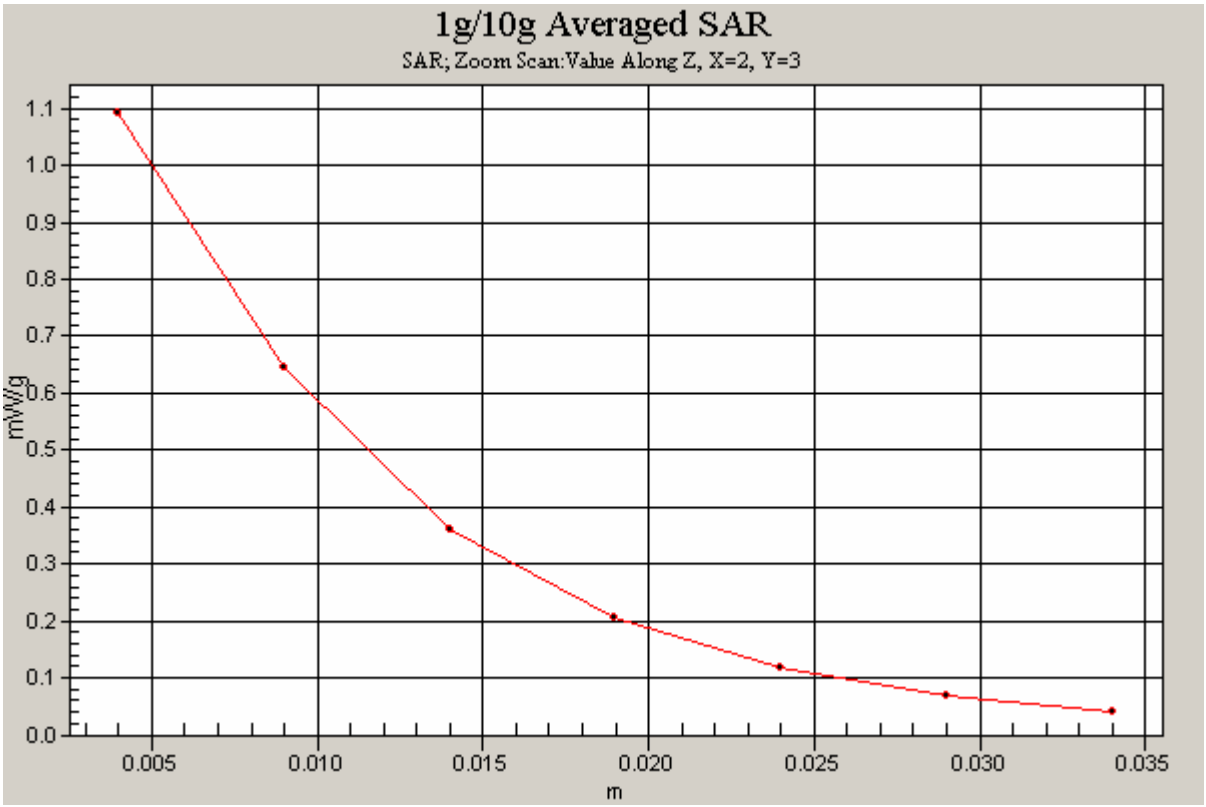


Figure 70 Z-Scan at power reference point (Left Hand Tilt 15° GSM 1900 Channel 661)

GSM 1900 Left Tilt Low

Communication System: GSM1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.39 mho/m; ε_r = 39.9; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(5.15, 5.15, 5.15);
Electronics: DAE4 Sn679;
Tilt Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.20 mW/g

Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.9 V/m; Power Drift = 0.012 dB
Peak SAR (extrapolated) = 1.86 W/kg
SAR(1 g) = 1.07 mW/g; SAR(10 g) = 0.573 mW/g
Maximum value of SAR (measured) = 1.21 mW/g

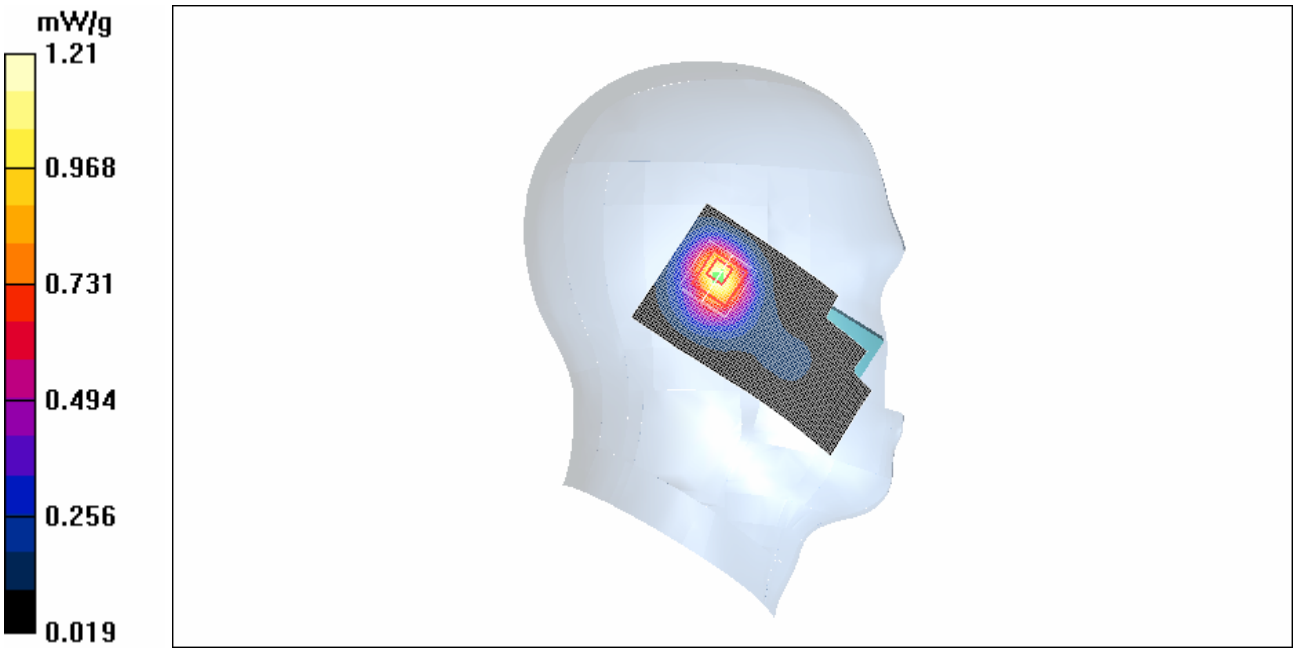


Figure 71 Left Hand Tilt 15° GSM 1900 Channel 512

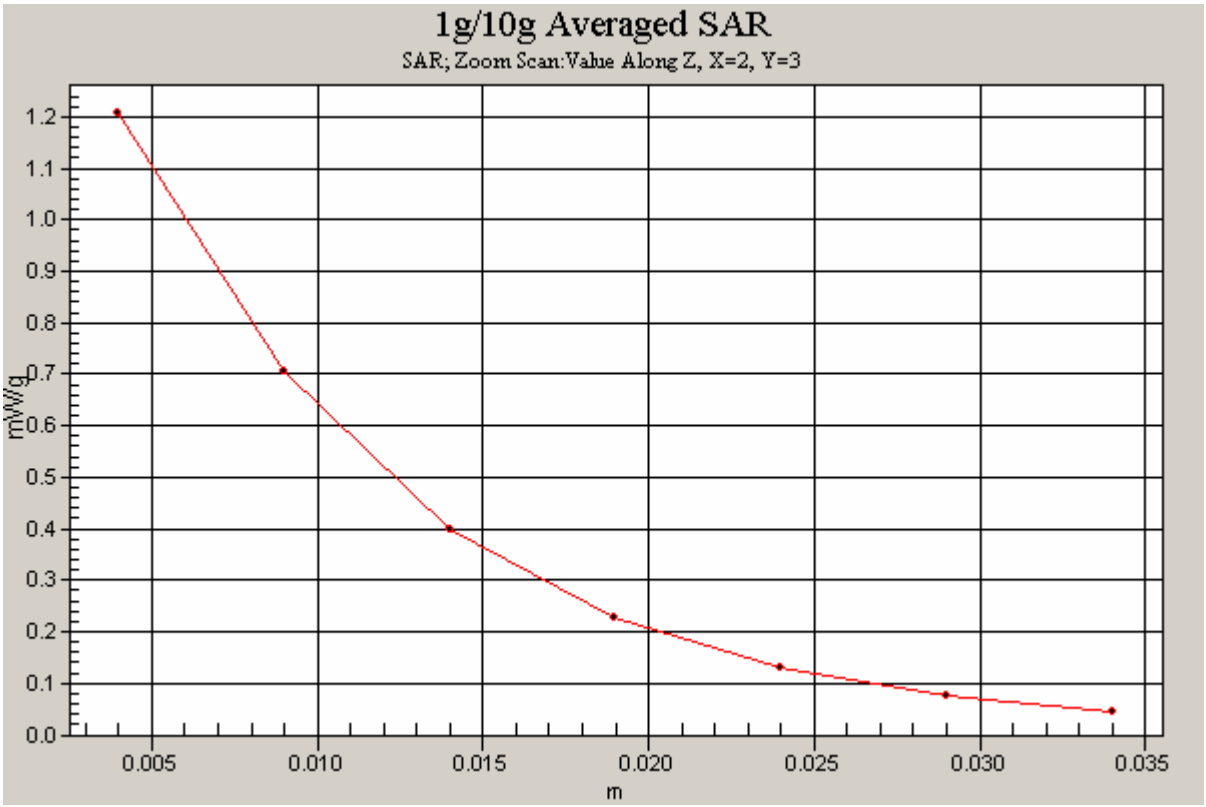


Figure 72 Z-Scan at power reference point (Left Hand Tilt 15° GSM 1900 Channel 512)

GSM 1900 Right Cheek High

Communication System: GSM1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1910 MHz; σ = 1.44 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(5.15, 5.15, 5.15);
Electronics: DAE4 Sn679;
Cheek High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.663 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.2 V/m; Power Drift = 0.075 dB
Peak SAR (extrapolated) = 0.937 W/kg
SAR(1 g) = 0.590 mW/g; SAR(10 g) = 0.348 mW/g
Maximum value of SAR (measured) = 0.663 mW/g

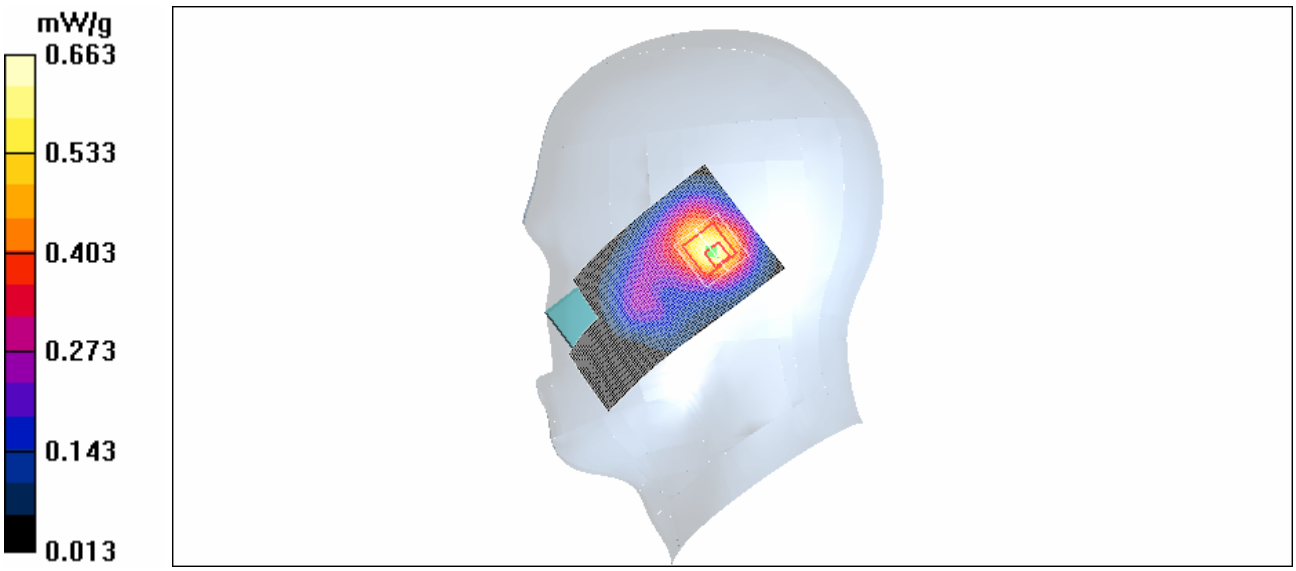


Figure 73 Right Hand Touch Cheek GSM 1900 Channel 810

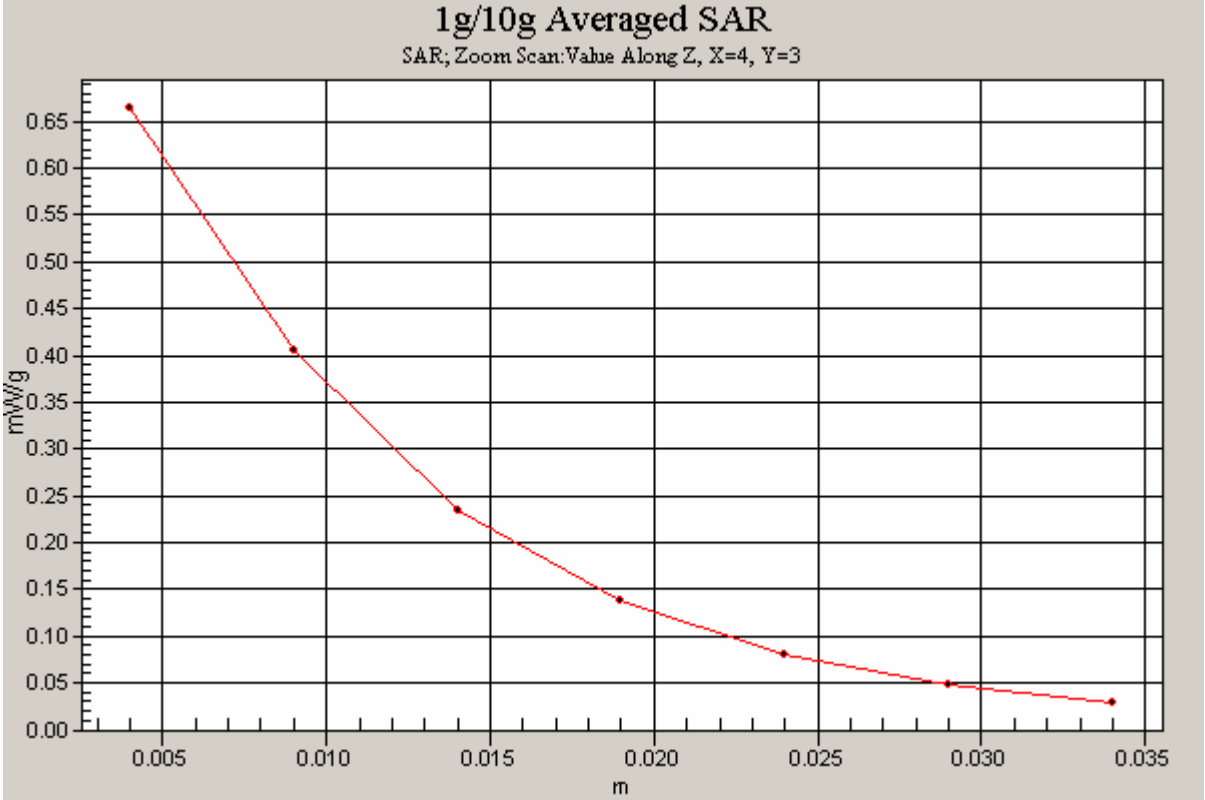


Figure 74 Z-Scan at power reference point (Right Hand Touch Cheek GSM 1900 Channel 810)

GSM 1900 Right Cheek Middle

Communication System: GSM1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(5.15, 5.15, 5.15);
Electronics: DAE4 Sn679;
Cheek Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.918 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.2 V/m; Power Drift = 0.018 dB
Peak SAR (extrapolated) = 1.30 W/kg
SAR(1 g) = 0.819 mW/g; SAR(10 g) = 0.482 mW/g
Maximum value of SAR (measured) = 0.912 mW/g

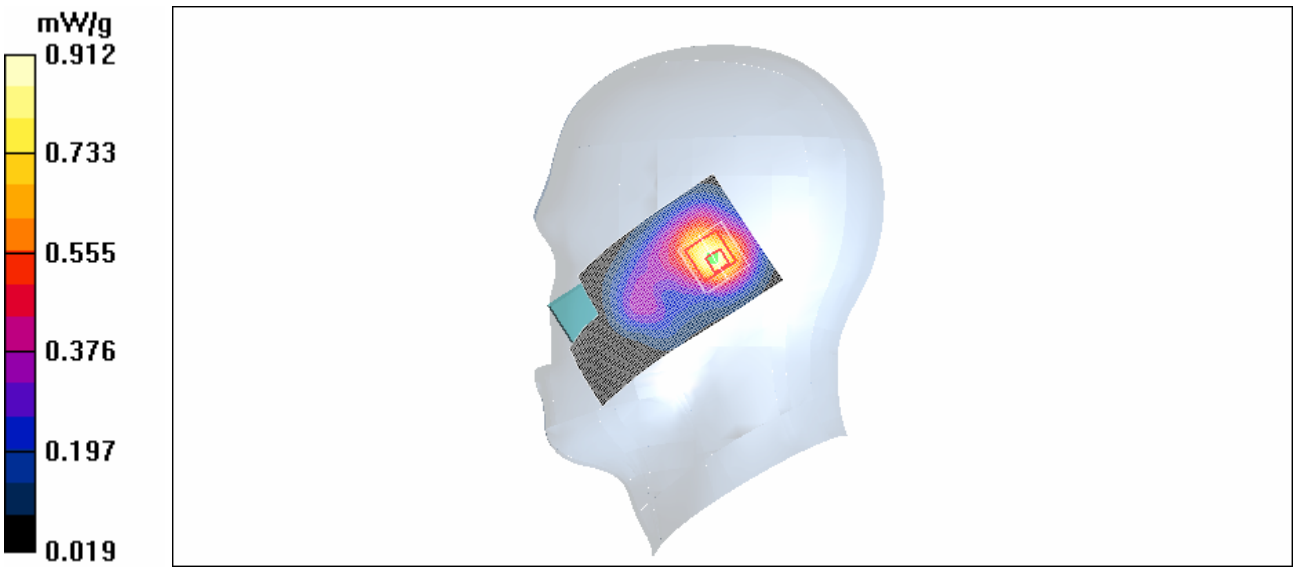


Figure 75 Right Hand Touch Cheek GSM 1900 Channel 661

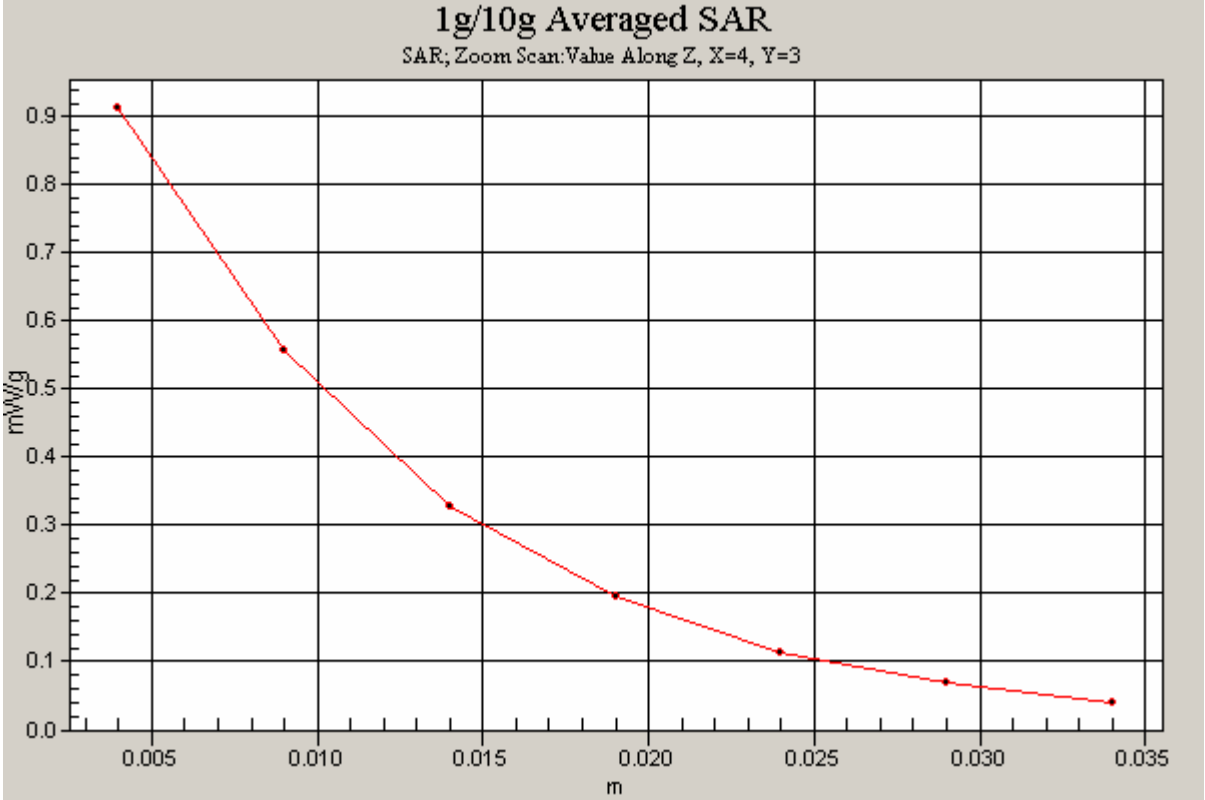


Figure 76 Z-Scan at power reference point (Right Hand Touch Cheek GSM 1900 Channel 661)

GSM 1900 Right Cheek Low

Communication System: GSM1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.39 mho/m; ε_r = 39.9; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(5.15, 5.15, 5.15);
Electronics: DAE4 Sn679;
Cheek Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.968 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 25.1 V/m; Power Drift = -0.060 dB
Peak SAR (extrapolated) = 1.36 W/kg
SAR(1 g) = 0.866 mW/g; SAR(10 g) = 0.512 mW/g
Maximum value of SAR (measured) = 0.960 mW/g

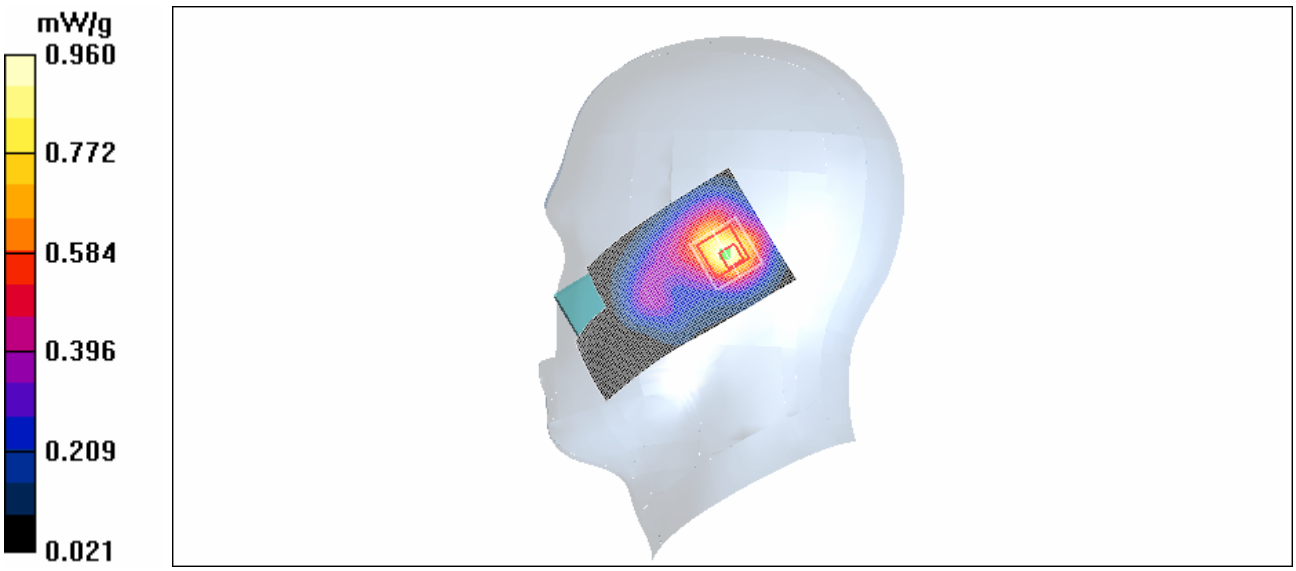


Figure 77 Right Hand Touch Cheek GSM 1900 Channel 512

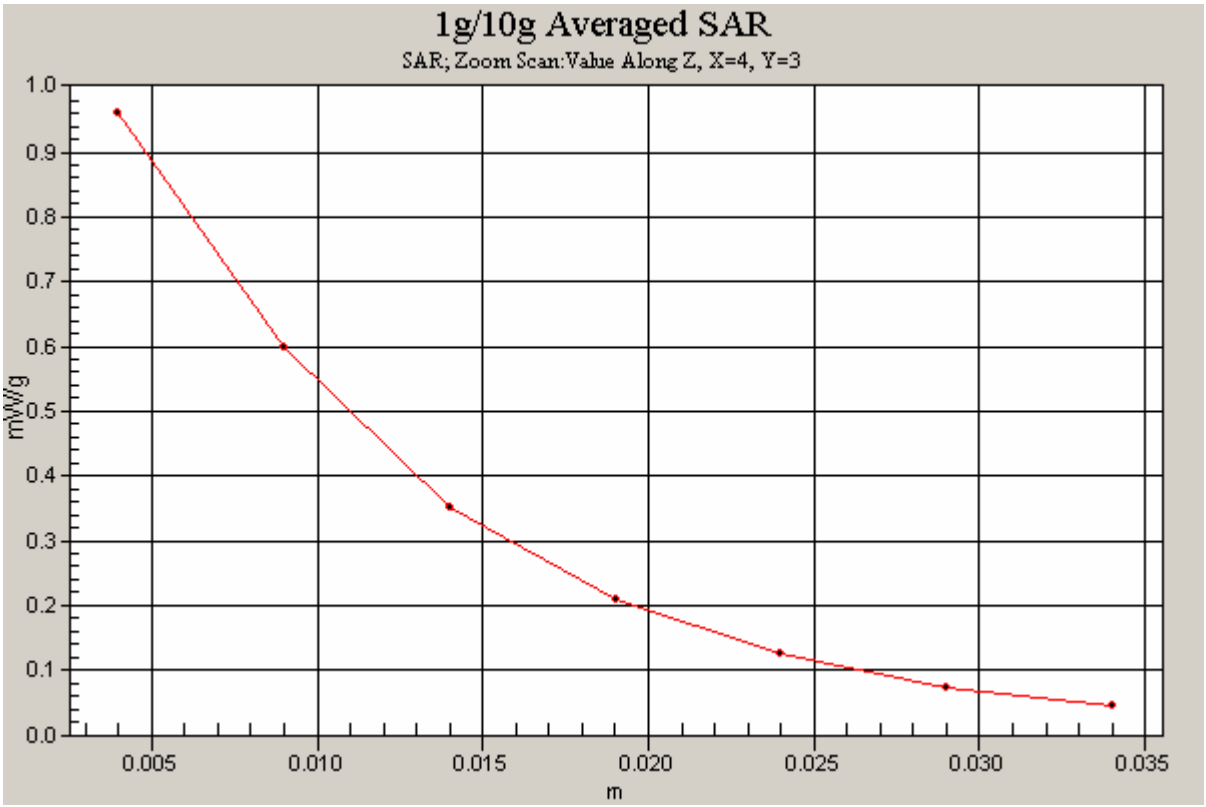


Figure 78 Z-Scan at power reference point (Right Hand Touch Cheek GSM 1900 Channel 512)

GSM 1900 Right Tilt High

Communication System: GSM1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1910 MHz; σ = 1.44 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(5.15, 5.15, 5.15);
Electronics: DAE4 Sn679;
Tilt High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.741 mW/g
Tilt High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.9 V/m; Power Drift = 0.025 dB
Peak SAR (extrapolated) = 1.02 W/kg
SAR(1 g) = 0.638 mW/g; SAR(10 g) = 0.359 mW/g
Maximum value of SAR (measured) = 0.711 mW/g

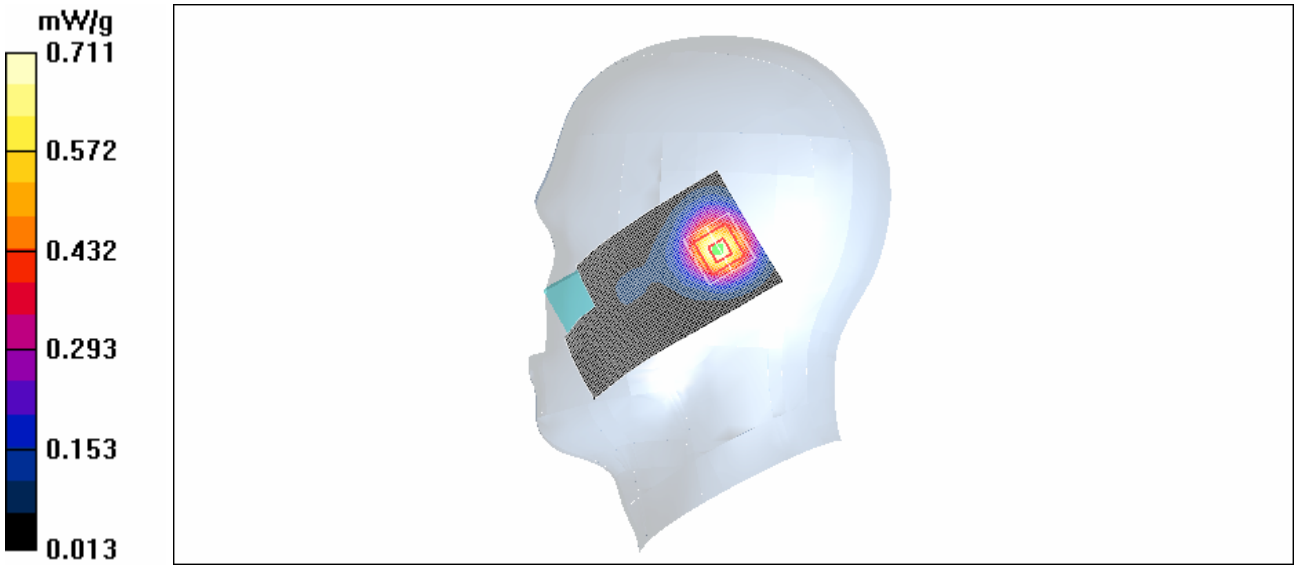


Figure 79 Right Hand Tilt 15° GSM 1900 Channel 810

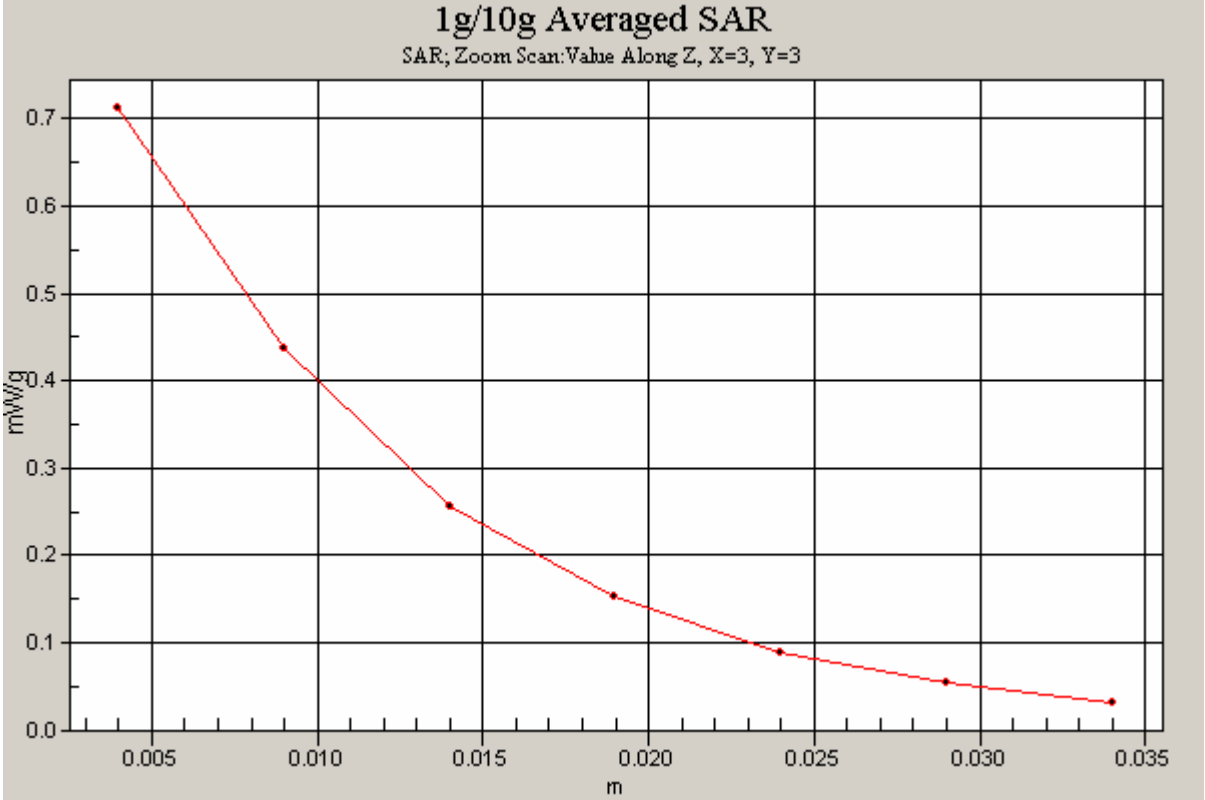


Figure 80 Z-Scan at power reference point (Right Hand Tilt 15° GSM 1900 Channel 810)

GSM 1900 Right Tilt Middle

Communication System: GSM1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(5.15, 5.15, 5.15);
Electronics: DAE4 Sn679;
Tilt Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.05 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 27.7 V/m; Power Drift = 0.009 dB
Peak SAR (extrapolated) = 1.43 W/kg
SAR(1 g) = 0.905 mW/g; SAR(10 g) = 0.512 mW/g
Maximum value of SAR (measured) = 1.00 mW/g

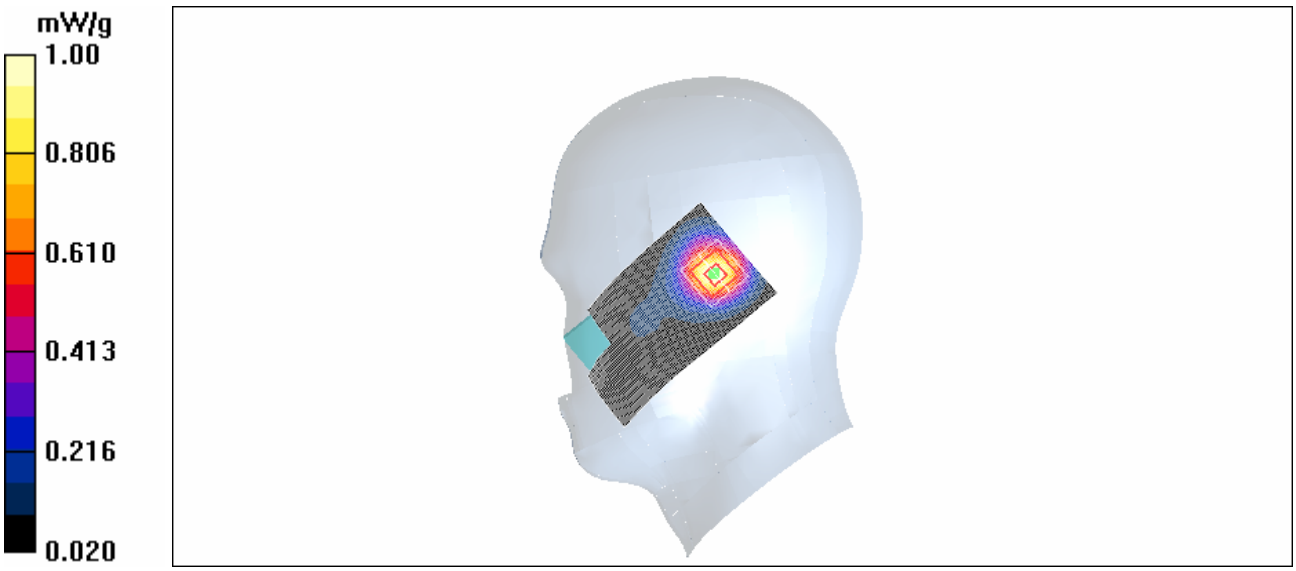


Figure 81 Right Hand Tilt 15° GSM 1900 Channel 661

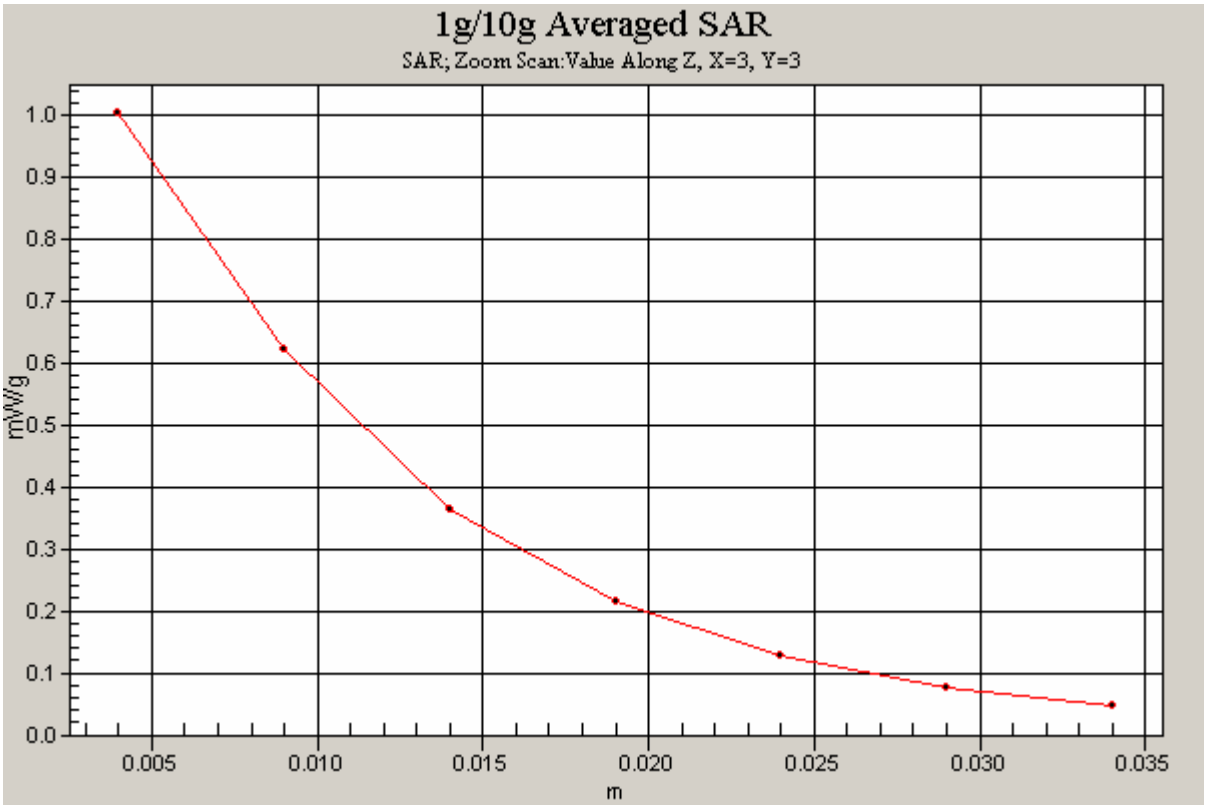


Figure 82 Z-Scan at power reference point (Right Hand Tilt 15° GSM 1900 Channel 661)

GSM 1900 Right Tilt Low

Communication System: GSM1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.39 mho/m; ε_r = 39.9; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(5.15, 5.15, 5.15);
Electronics: DAE4 Sn679;
Tilt Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.20 mW/g

Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 29.4 V/m; Power Drift = 0.142 dB
Peak SAR (extrapolated) = 1.61 W/kg
SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.588 mW/g
Maximum value of SAR (measured) = 1.16 mW/g

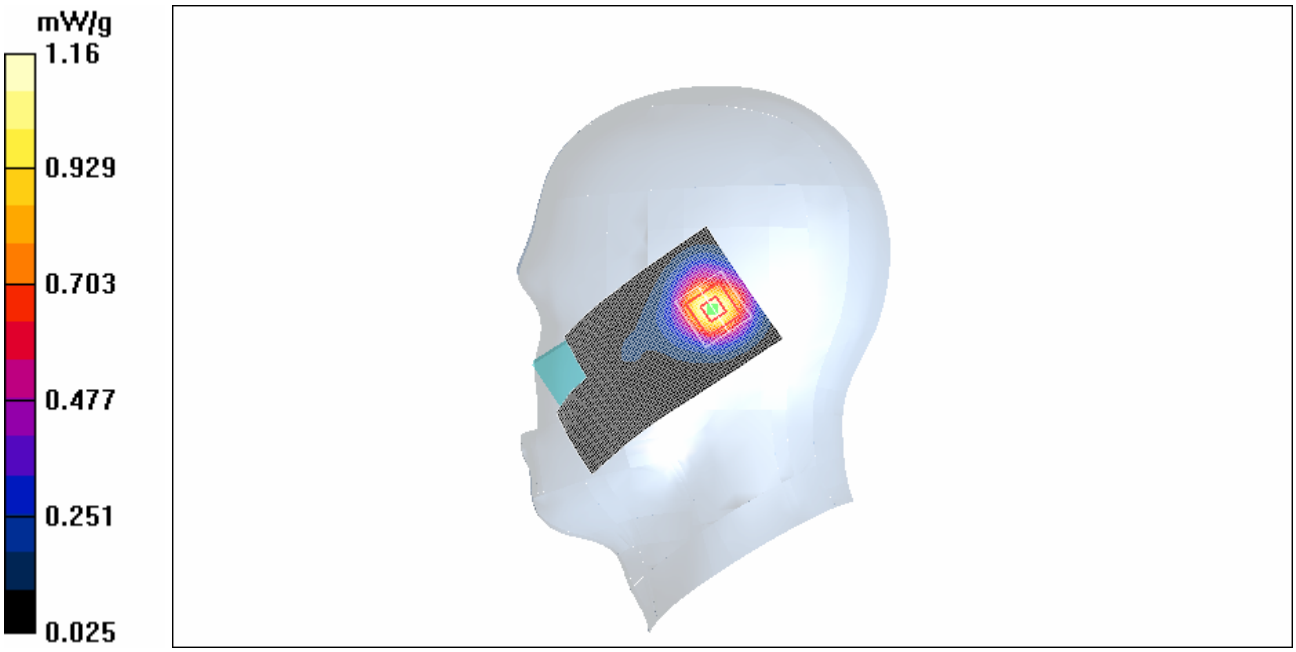


Figure 83 Right Hand Tilt 15° GSM 1900 Channel 512

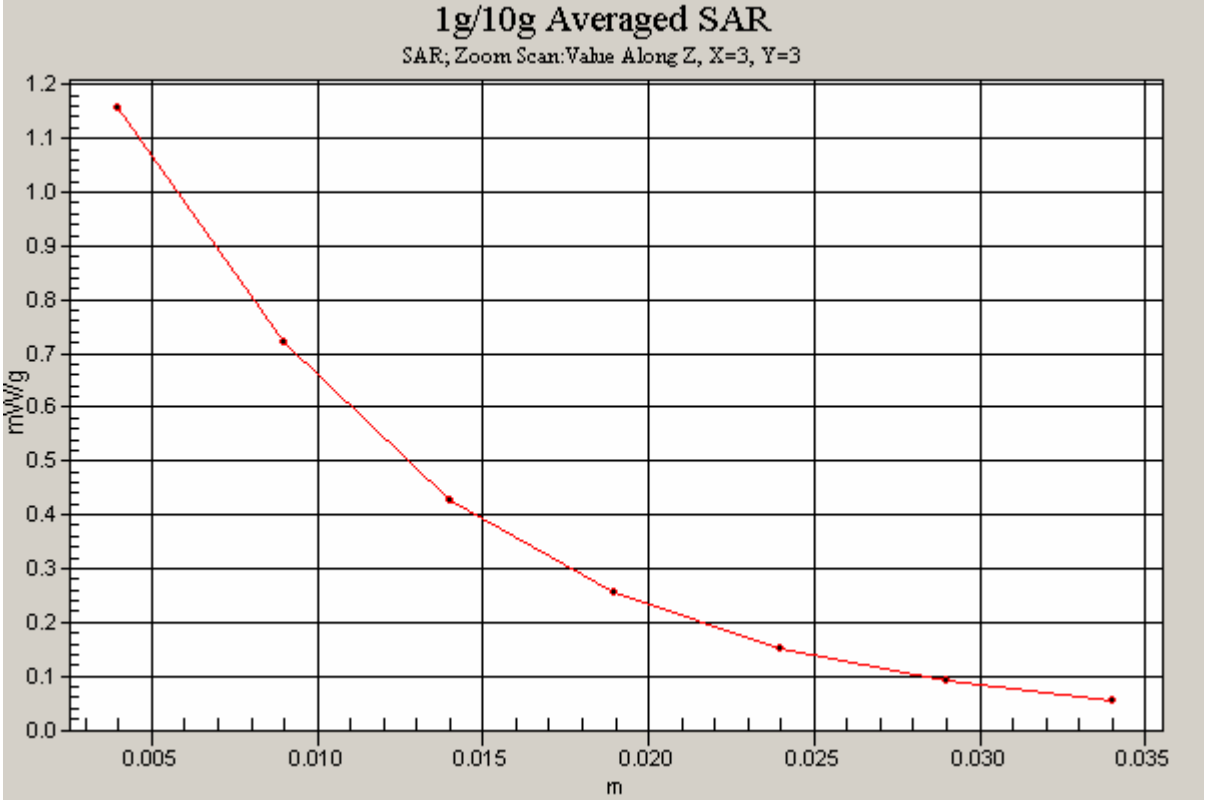


Figure 84 Z-Scan at power reference point (Right Hand Tilt 15° GSM 1900 Channel 512)

GSM 1900 Towards Ground High

Communication System: GSM1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1910 MHz; σ = 1.53 mho/m; ε_r = 52.1; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);
Electronics: DAE4 Sn679;
Towards ground High /Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.447 mW/g

Towards ground High /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.7 V/m; Power Drift = -0.025 dB
Peak SAR (extrapolated) = 0.650 W/kg
SAR(1 g) = 0.420 mW/g; SAR(10 g) = 0.257 mW/g
Maximum value of SAR (measured) = 0.460 mW/g

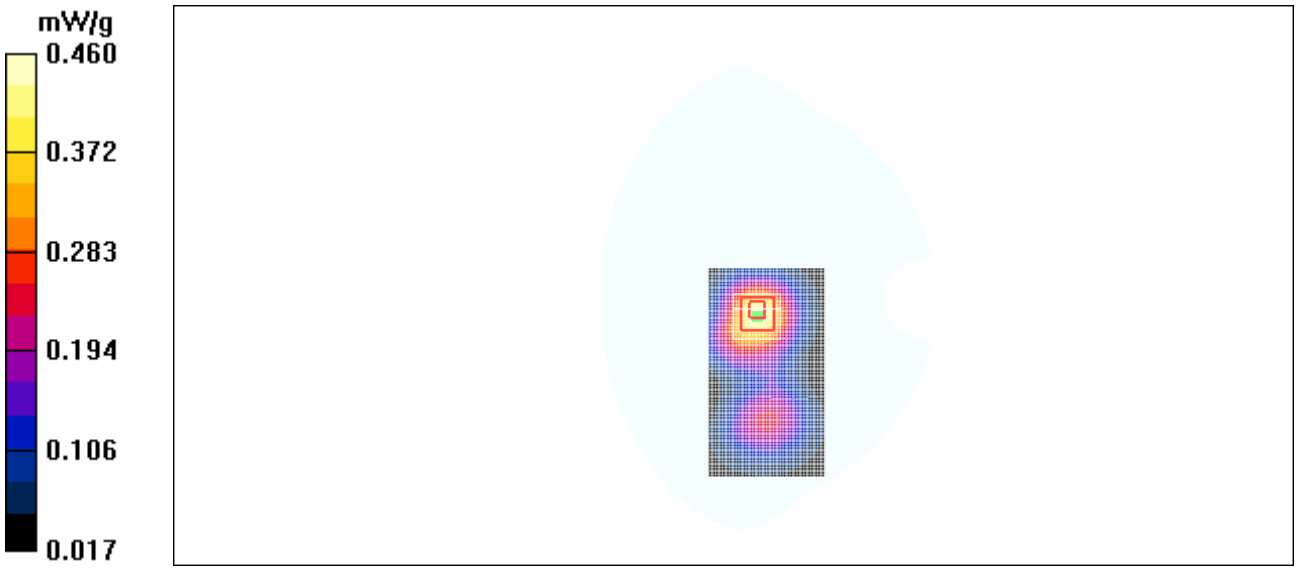


Figure 85 Body, Towards Ground, GSM 1900 Channel 810

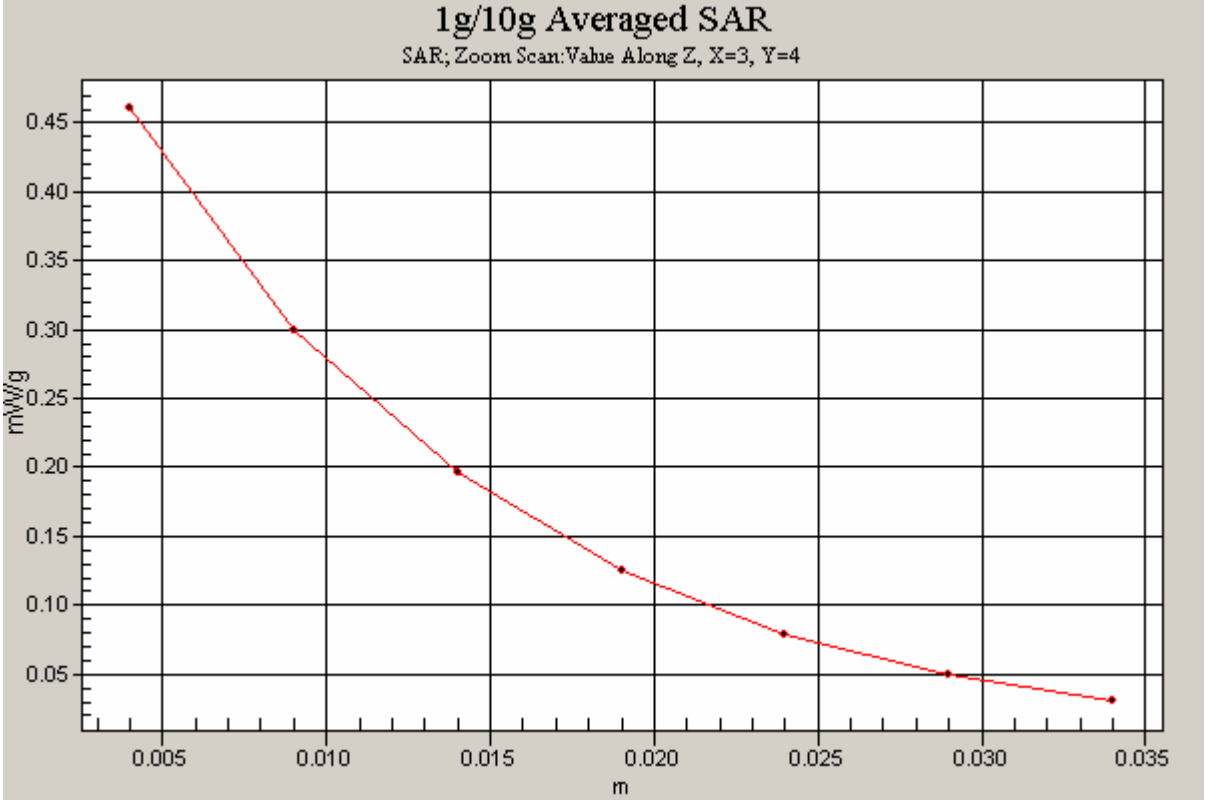


Figure 86 Z-Scan at power reference point (Body, Towards Ground, GSM 1900 Channel 810)

GSM 1900 Towards Ground Middle

Communication System: GSM1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.1; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);
Electronics: DAE4 Sn679;
Towards ground Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.518 mW/g

Towards ground Middle /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.9 V/m; Power Drift = -0.051 dB
Peak SAR (extrapolated) = 0.714 W/kg
SAR(1 g) = 0.473 mW/g; SAR(10 g) = 0.297 mW/g
Maximum value of SAR (measured) = 0.518 mW/g

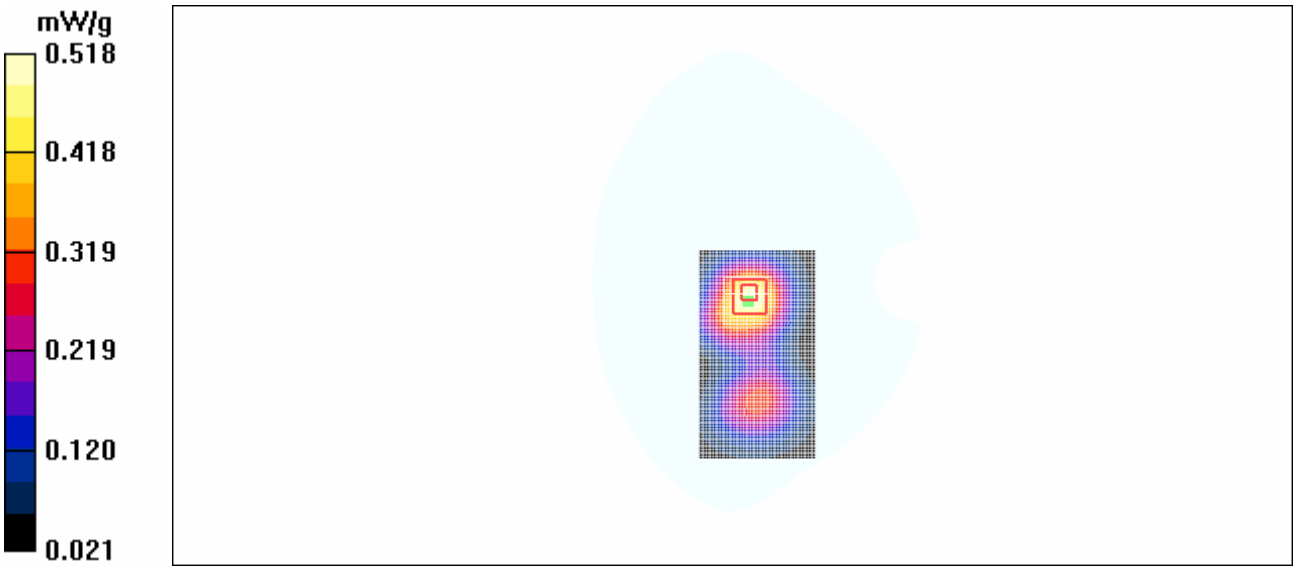


Figure 87 Body, Towards Ground, GSM 1900 Channel 661

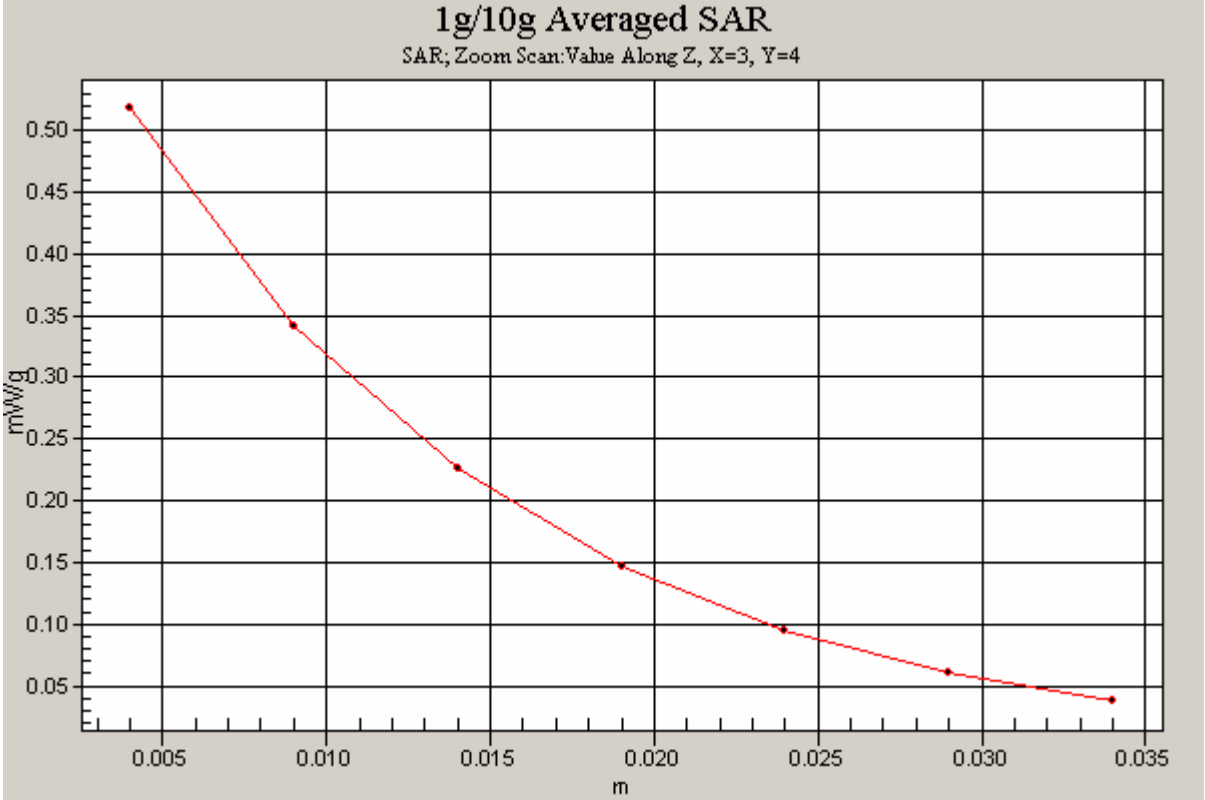


Figure 88 Z-Scan at power reference point (Body, Towards Ground, GSM 1900 Channel 661)

GSM 1900 Towards Ground Low

Communication System: GSM1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.47 mho/m; ε_r = 52.2; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);
Electronics: DAE4 Sn679;
Towards ground Low/Area Scan (51x91x1): 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 = 18.3 V/m; Power Drift = -0.010 dB
Peak SAR (extrapolated) = 0.703 W/kg
SAR(1 g) = 0.476 mW/g; SAR(10 g) = 0.305 mW/g
Maximum value of SAR (measured) = 0.514 mW/g

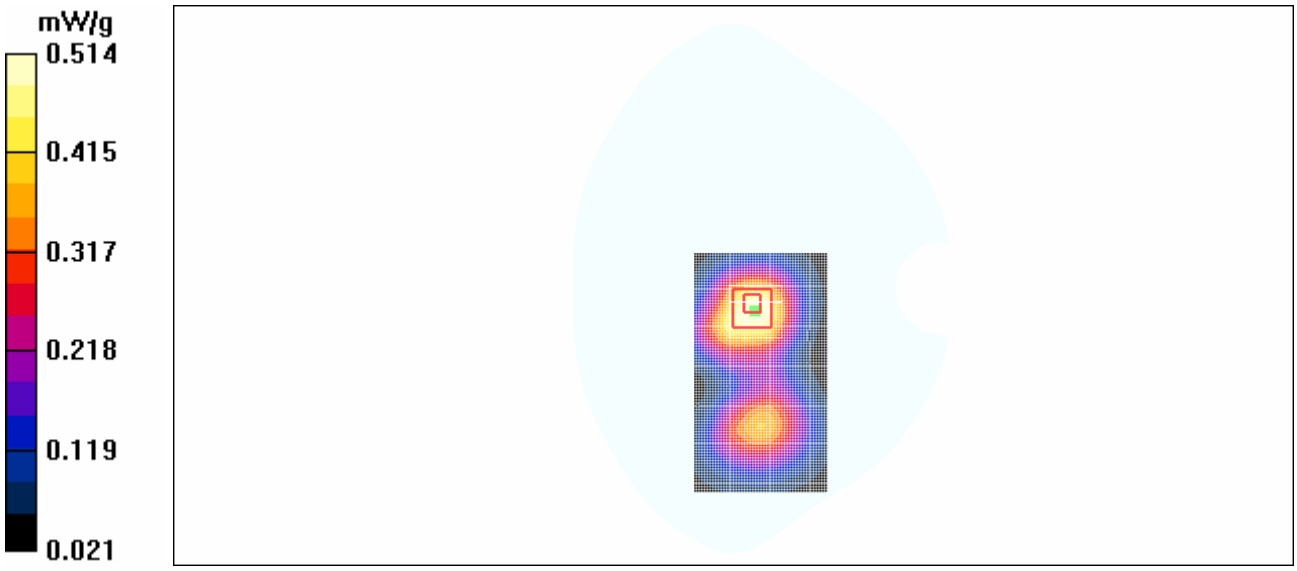


Figure 89 Body, Towards Ground, GSM 1900 Channel 512

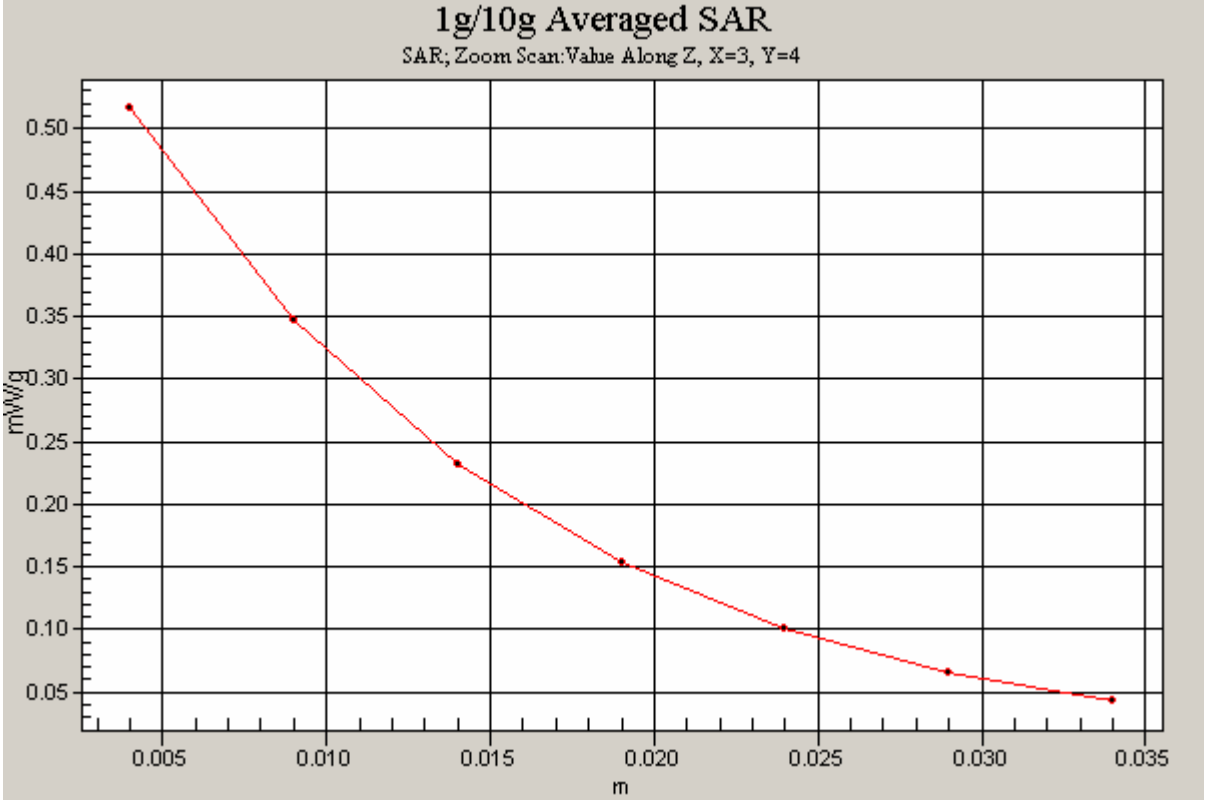


Figure 90 Z-Scan at power reference point (Body, Towards Ground, GSM 1900 Channel 512)

GSM 1900 Towards Phantom High

Communication System: GSM1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1910 MHz; σ = 1.53 mho/m; ε_r = 52.1; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);
Electronics: DAE4 Sn679;
Towards Phantom High /Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.244 mW/g

Towards Phantom High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.4 V/m; Power Drift = -0.015 dB
Peak SAR (extrapolated) = 0.331 W/kg
SAR(1 g) = 0.212 mW/g; SAR(10 g) = 0.127 mW/g
Maximum value of SAR (measured) = 0.229 mW/g

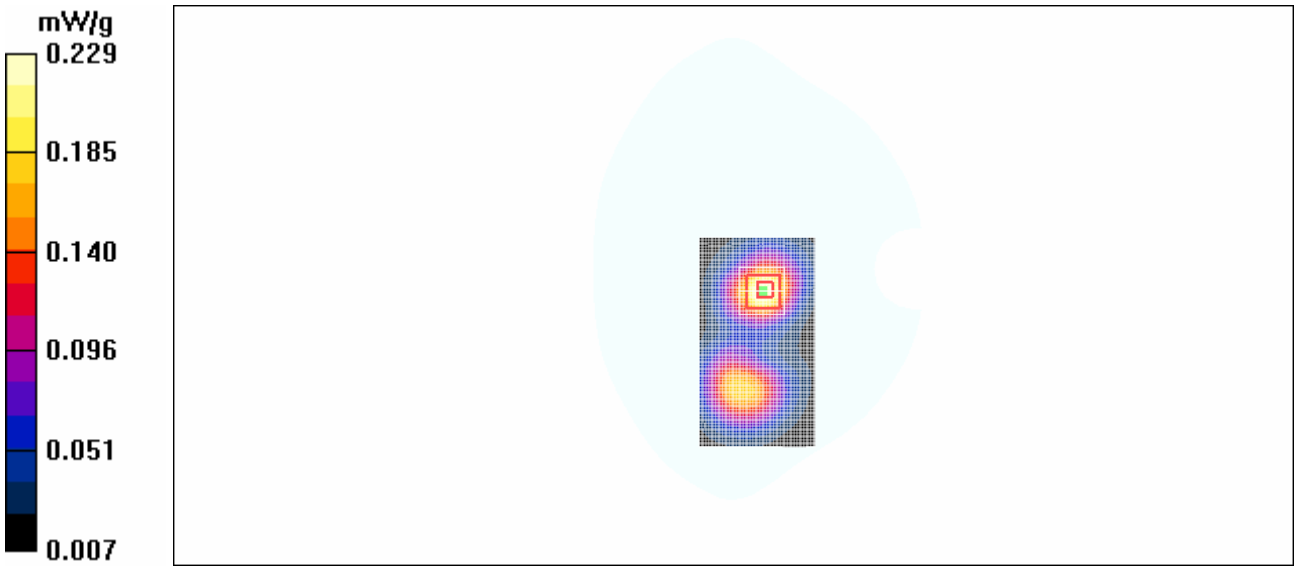


Figure 91 Body, Towards Phantom, GSM 1900 Channel 810

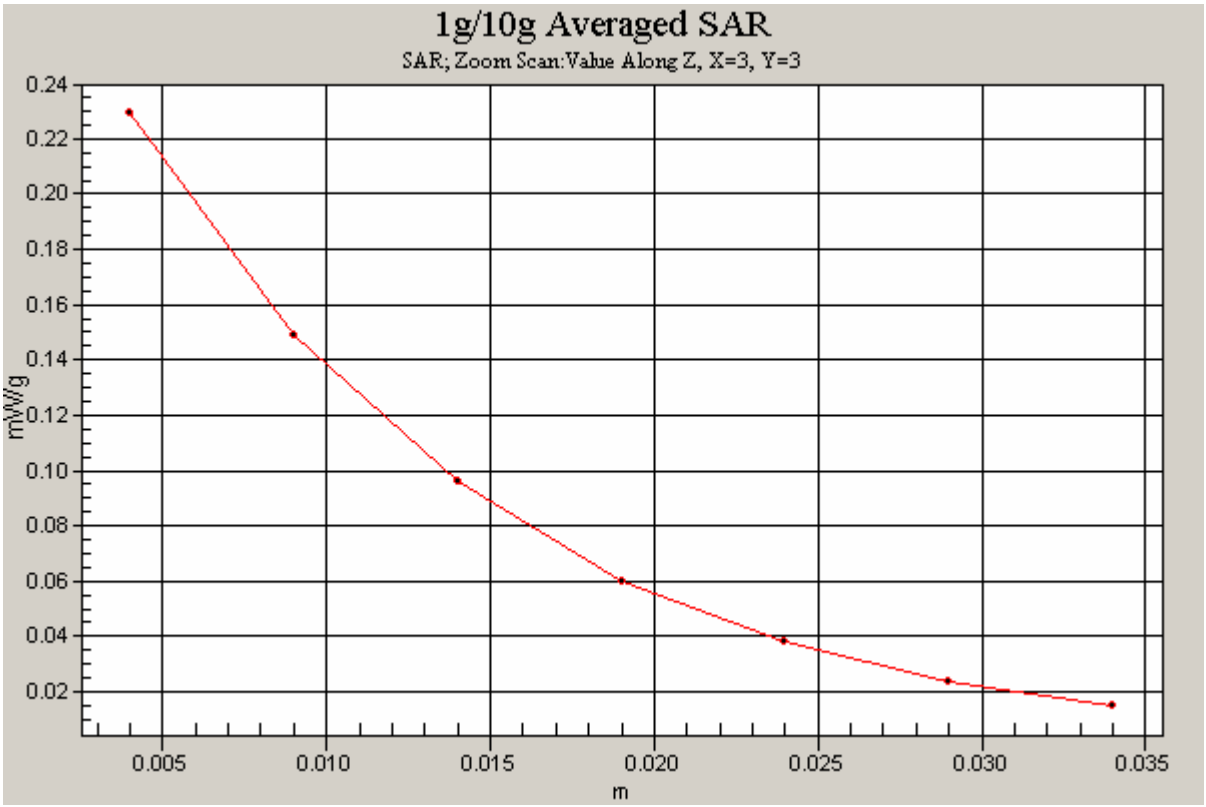


Figure 92 Z-Scan at power reference point (Body, Towards Phantom, GSM 1900 Channel 810)

GSM 1900 Towards Phantom Middle

Communication System: GSM1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.1; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);
Electronics: DAE4 Sn679;
Towards Phantom Middle /Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.357 mW/g

Towards Phantom Middle /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.5 V/m; Power Drift = -0.051 dB
Peak SAR (extrapolated) = 0.473 W/kg
SAR(1 g) = 0.308 mW/g; SAR(10 g) = 0.185 mW/g
Maximum value of SAR (measured) = 0.338 mW/g

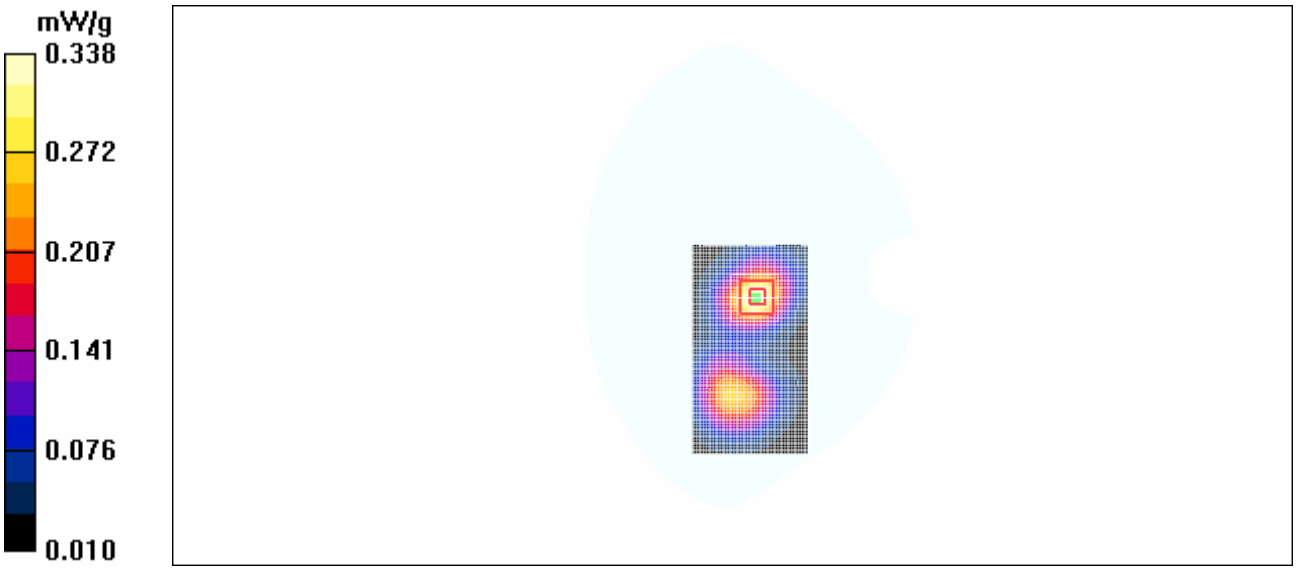


Figure 93 Body, Towards Phantom, GSM 1900 Channel 661

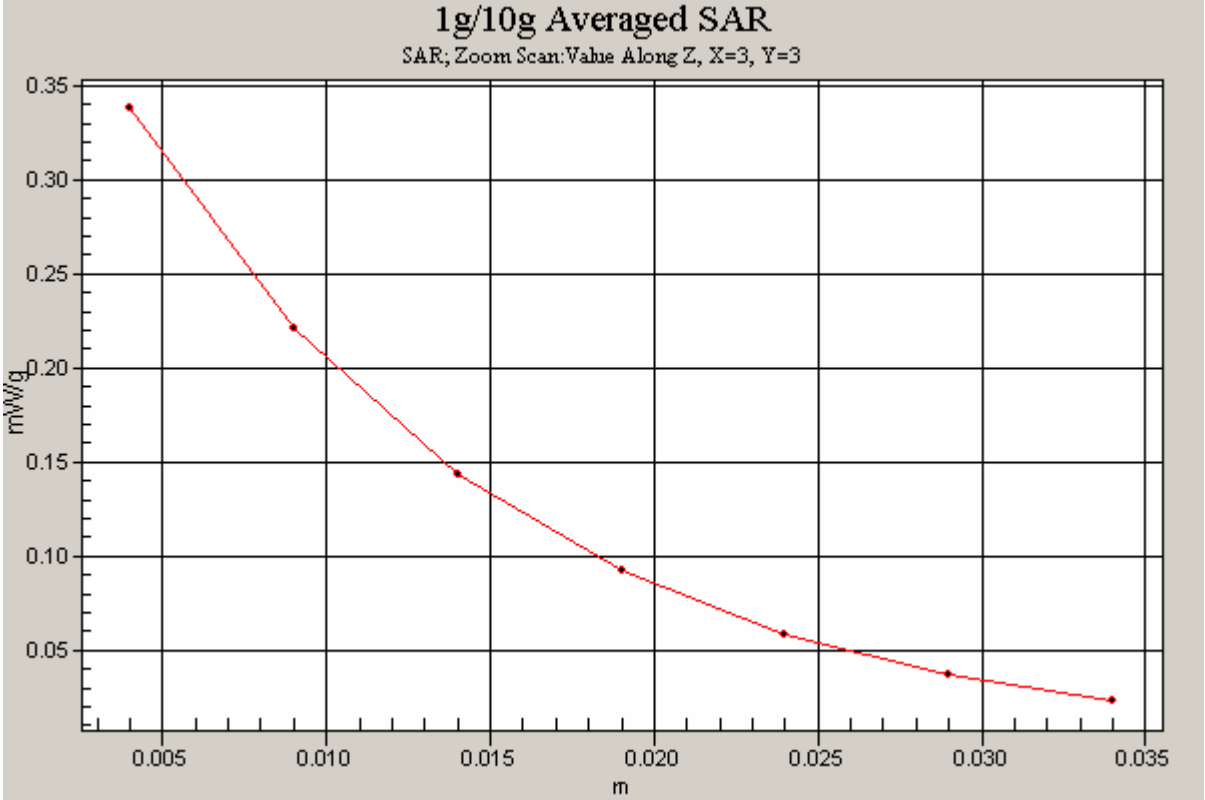


Figure 94 Z-Scan at power reference point (Body, Towards Phantom, GSM 1900 Channel 661)

GSM 1900 Towards Phantom Low

Communication System: GSM1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.47 mho/m; ε_r = 52.2; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);
Electronics: DAE4 Sn679;
Towards Phantom Low /Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.385 mW/g

Towards Phantom Low /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.4 V/m; Power Drift = -0.009 dB
Peak SAR (extrapolated) = 0.518 W/kg
SAR(1 g) = 0.336 mW/g; SAR(10 g) = 0.201 mW/g
Maximum value of SAR (measured) = 0.364 mW/g

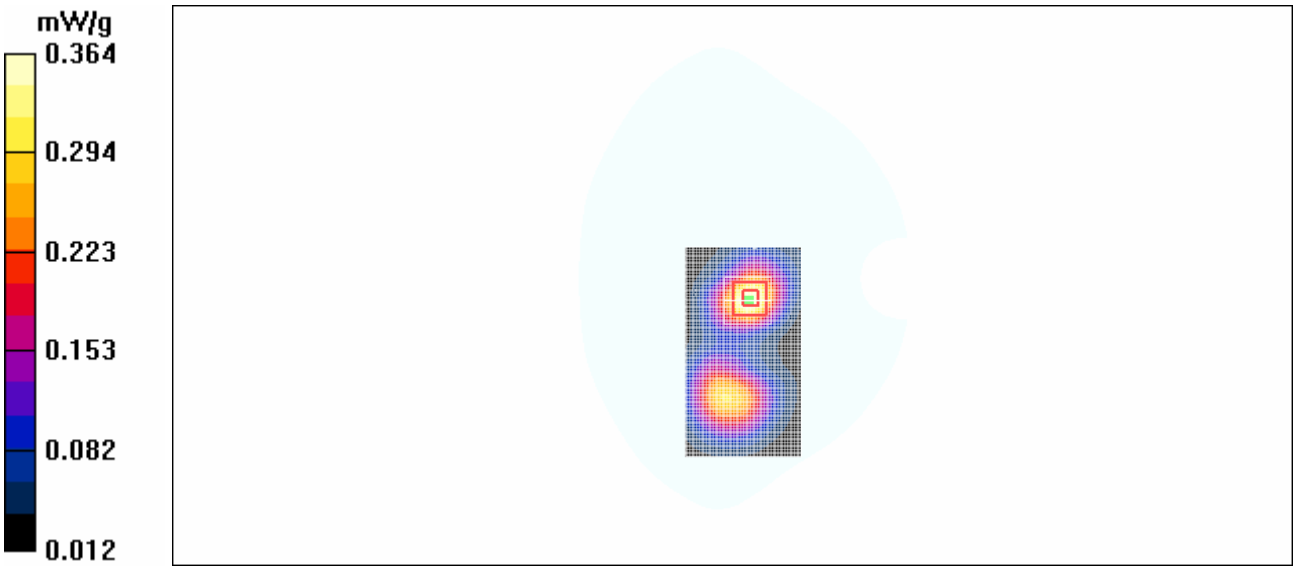


Figure 95 Body, Towards Phantom, GSM 1900 Channel 512

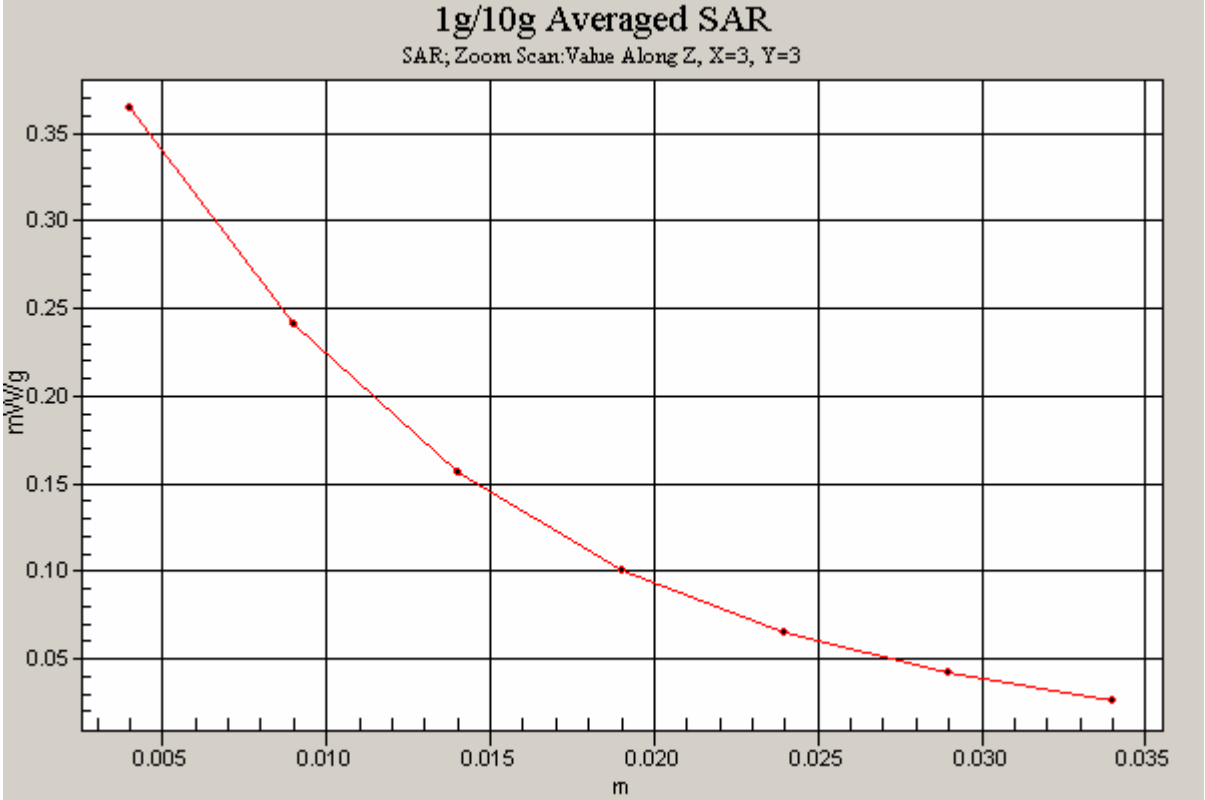


Figure 96 Z-Scan at power reference point (Body, Towards Phantom, GSM 1900 Channel 512)

GSM 1900 Earphone Towards Ground Low

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.47 mho/m; ε_r = 52.2; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);
Electronics: DAE4 Sn679;
Towards ground Low frequency/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.482 mW/g

Towards ground Low frequency/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.5 V/m; Power Drift = -0.009 dB
Peak SAR (extrapolated) = 0.655 W/kg
SAR(1 g) = 0.441 mW/g; SAR(10 g) = 0.279 mW/g
Maximum value of SAR (measured) = 0.479 mW/g

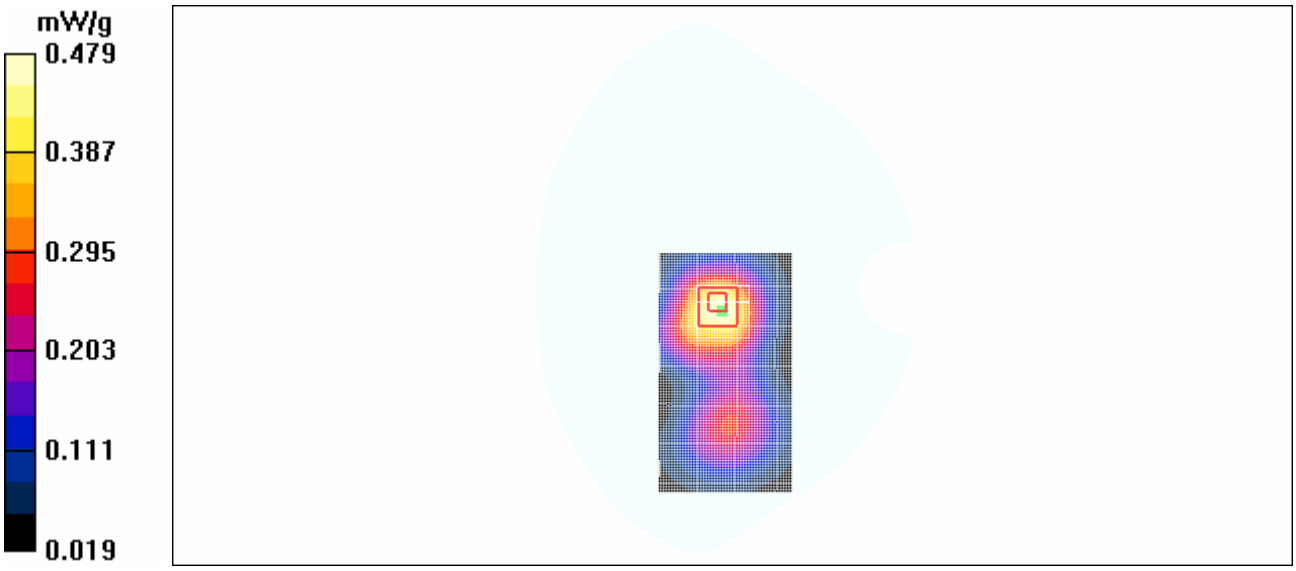


Figure 97 Body with Earphone, Towards Ground, GSM 1900, Channel 512

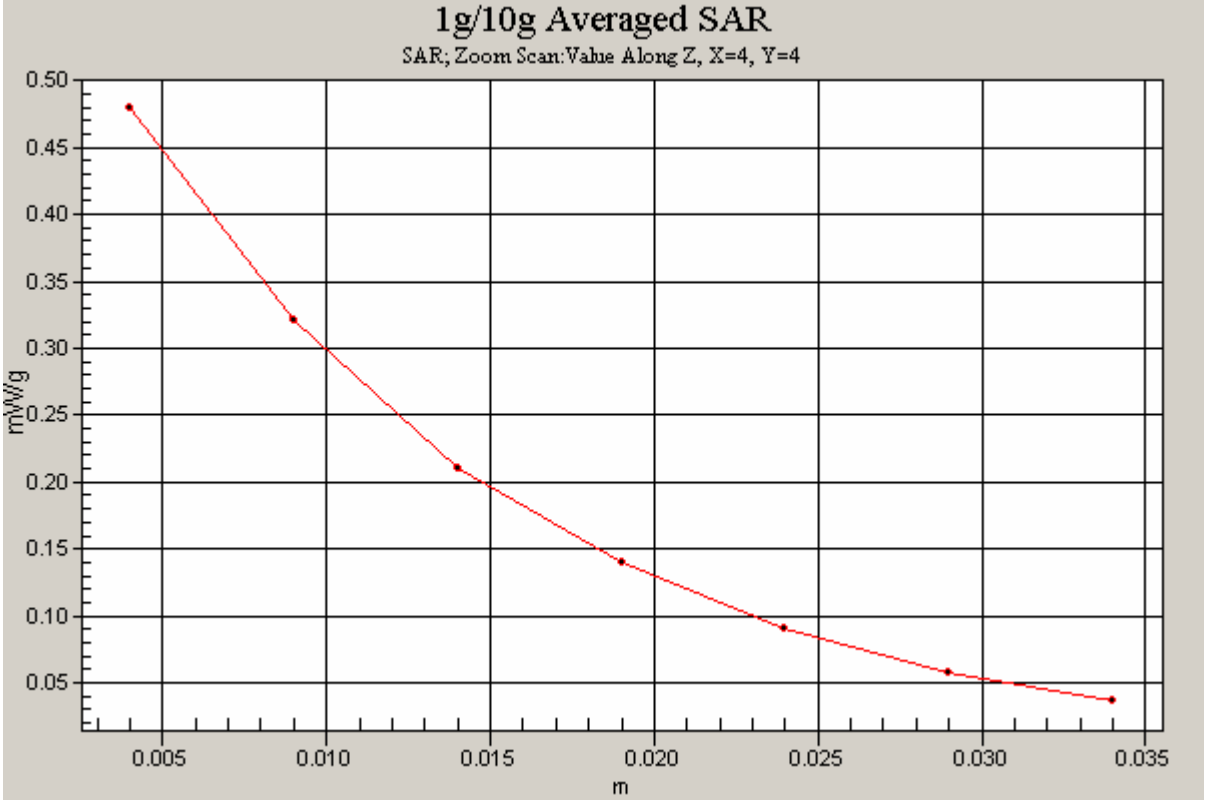


Figure 98 Z-Scan at power reference point (Body with Earphone, Towards Ground, GSM 1900, Channel 512)

GSM 1900 Bluetooth Earphone Towards Ground Low

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

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.47 mho/m; ε_r = 52.2; ρ = 1000 kg/m^3

Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);

Electronics: DAE4 Sn679;

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

Maximum value of SAR (interpolated) = 0.587 mW/g

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

Reference Value = 18.0 V/m; Power Drift = -0.128 dB

Peak SAR (extrapolated) = 0.754 W/kg

SAR(1 g) = 0.511 mW/g; SAR(10 g) = 0.325 mW/g

Maximum value of SAR (measured) = 0.554 mW/g

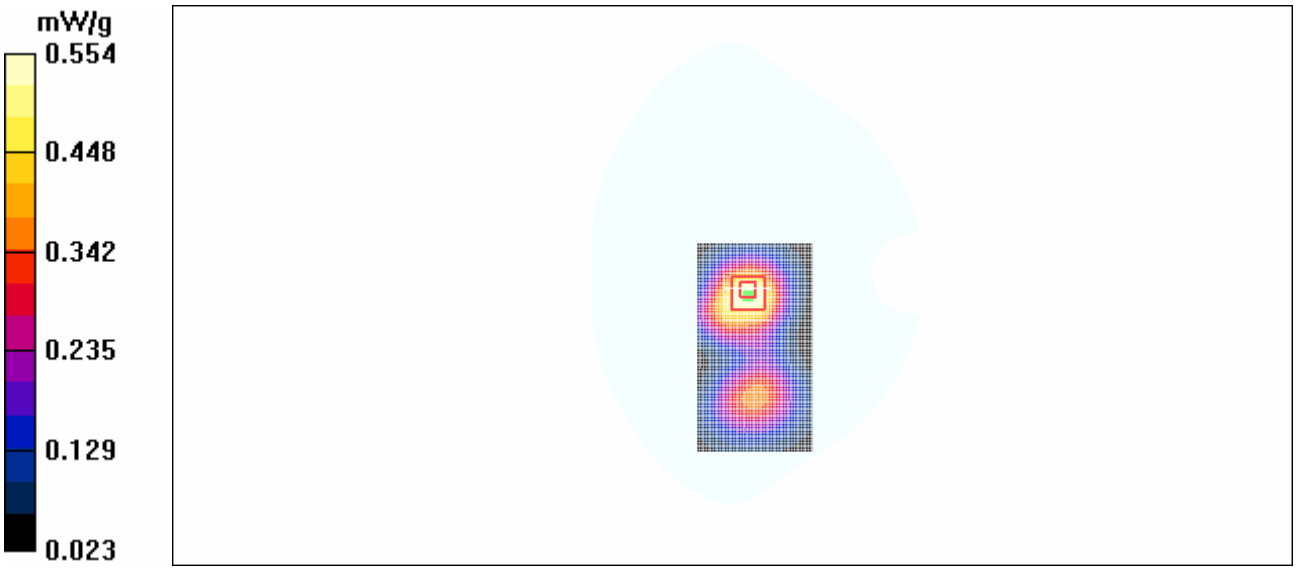


Figure 99 Body with Bluetooth earphone, Towards Ground, GSM 1900, Channel 512

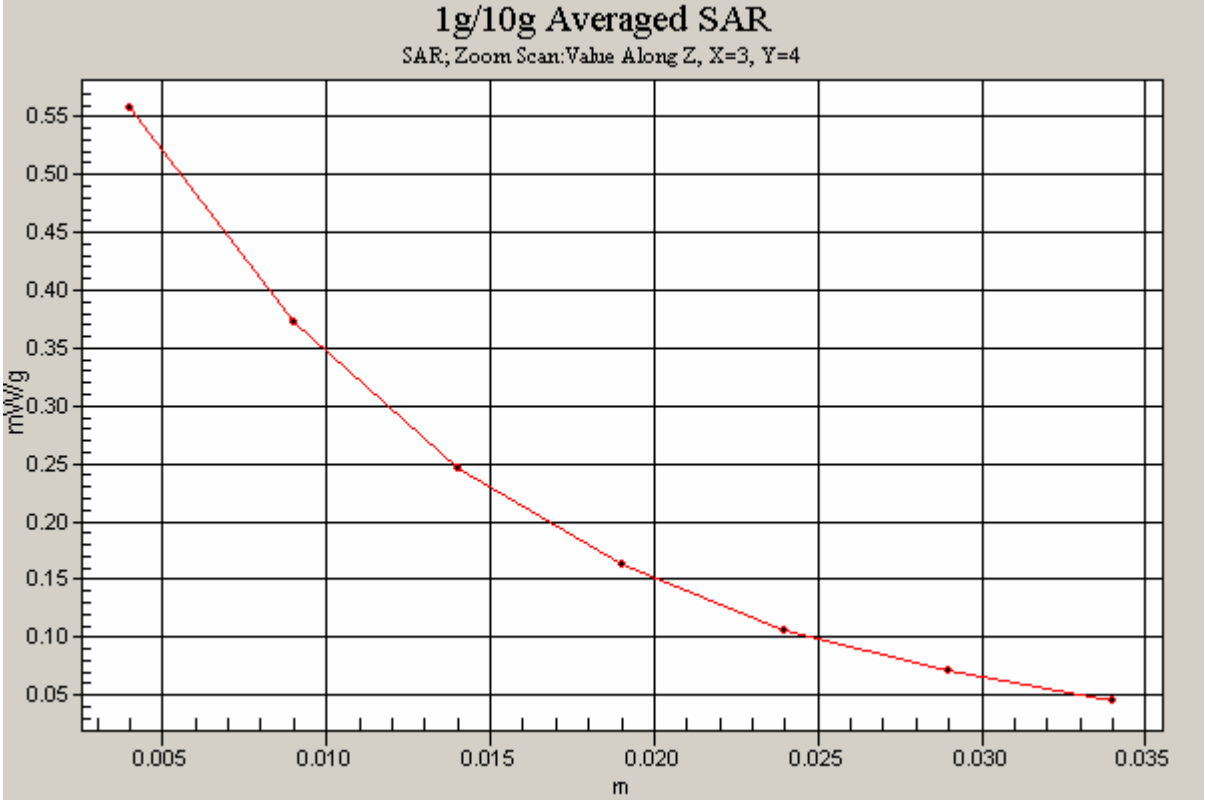


Figure 100 Z-Scan at power reference point (Body with Bluetooth earphone, Towards Ground, GSM 1900, Channel 512)

GSM 1900 GPRS Towards Ground High

Communication System: GSM 1900+GPRS(2Up); Frequency: 1909.8 MHz;Duty Cycle: 1:4
Medium parameters used: f = 1910 MHz; σ = 1.53 mho/m; ε_r = 52.1; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);
Electronics: DAE4 Sn679;
Towards ground High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.850 mW/g

Towards ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.9 V/m; Power Drift = -0.016 dB
Peak SAR (extrapolated) = 1.15 W/kg
SAR(1 g) = 0.751 mW/g; SAR(10 g) = 0.473 mW/g
Maximum value of SAR (measured) = 0.852 mW/g

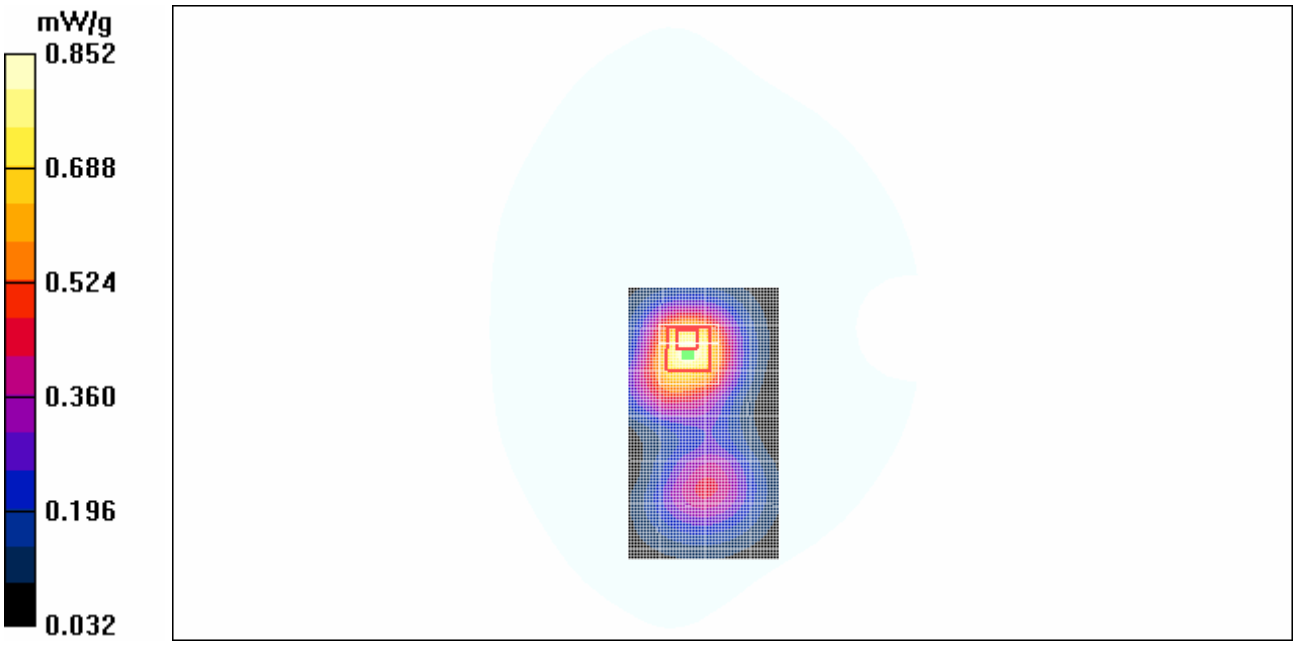


Figure 101 Body, Towards Ground, GSM 1900 GPRS, Channel 810

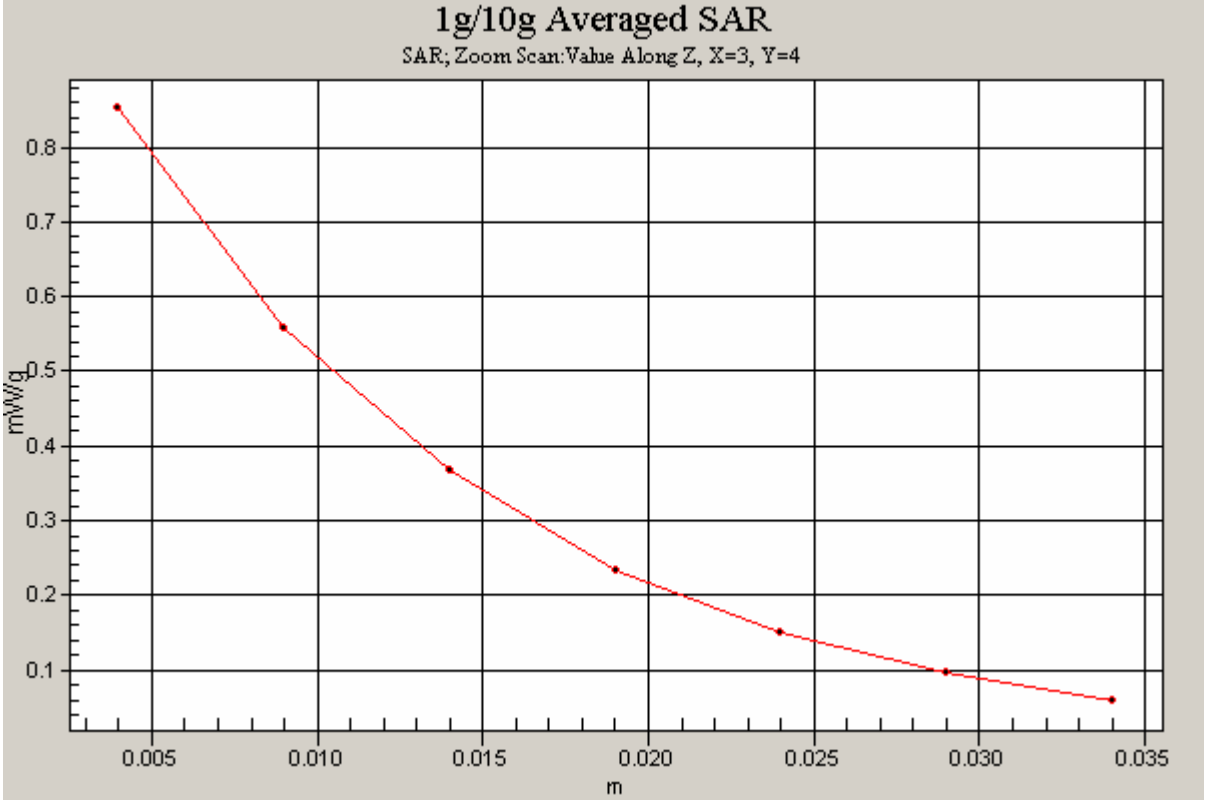


Figure 102 Z-Scan at power reference point (Body, Towards Ground, GSM 1900 GPRS, Channel 810)

GSM 1900 GPRS Towards Ground Middle

Communication System: GSM 1900+GPRS(2Up); Frequency: 1880 MHz;Duty Cycle: 1:4
Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.1; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);
Electronics: DAE4 Sn679;
Towards ground Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.971 mW/g
Towards ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.5 V/m; Power Drift = 0.021 dB
Peak SAR (extrapolated) = 1.32 W/kg
SAR(1 g) = 0.884 mW/g; SAR(10 g) = 0.548 mW/g
Maximum value of SAR (measured) = 0.954 mW/g

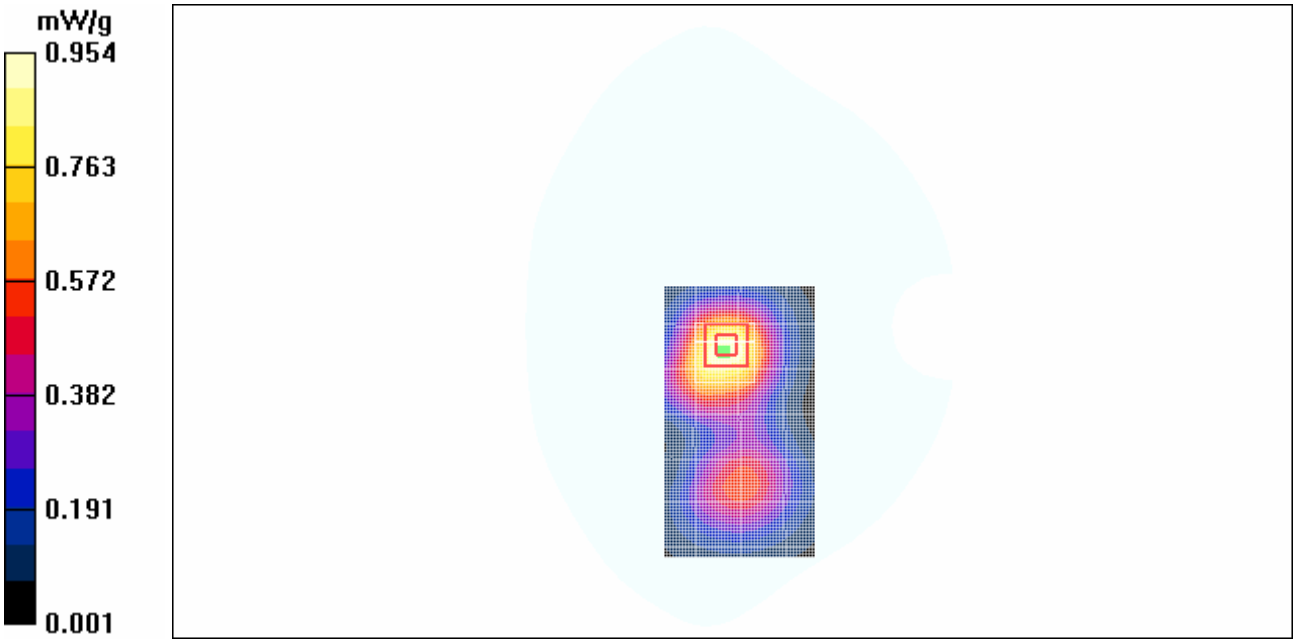


Figure 103 Body, Towards Ground, GSM 1900 GPRS Channel 661

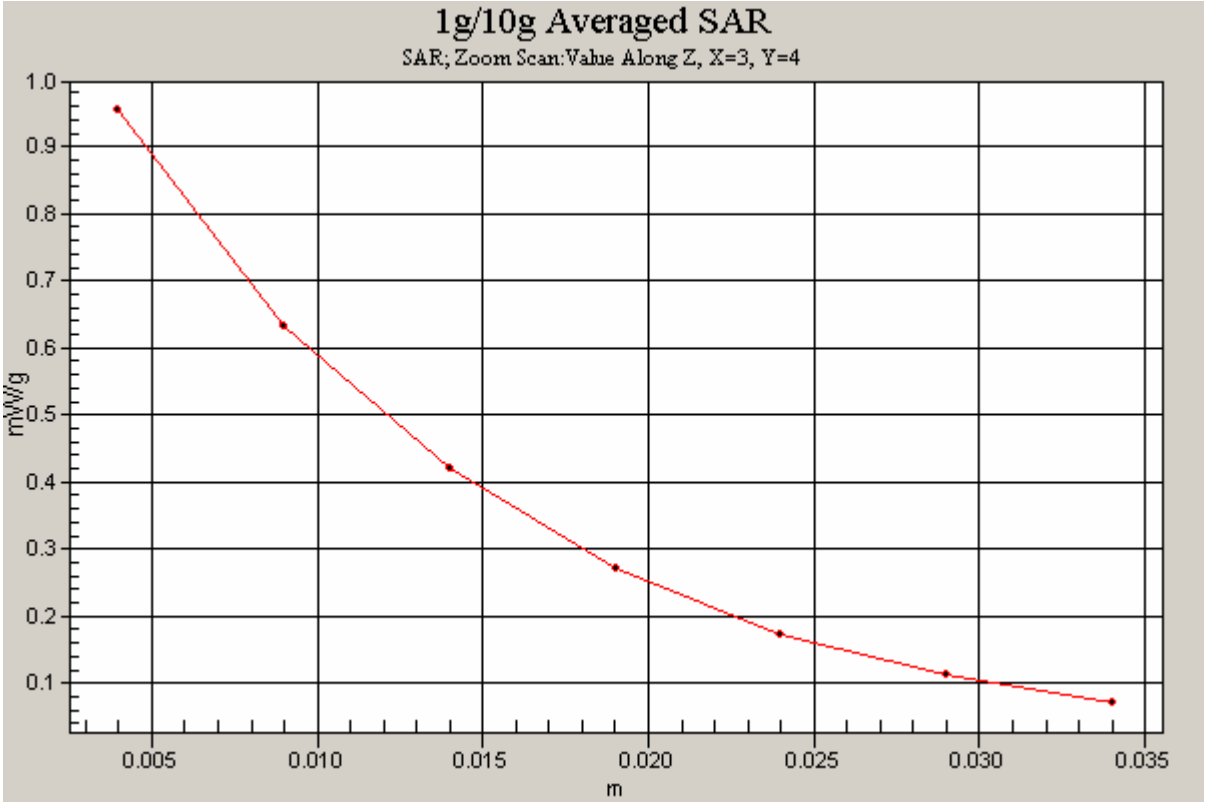


Figure 104 Z-Scan at power reference point (Body, Towards Ground, GSM 1900 GPRS Channel 661)

GSM 1900 GPRS Towards Ground Low

Communication System: GSM 1900+GPRS(2Up); Frequency: 1850.2 MHz;Duty Cycle: 1:4
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.47 mho/m; ε_r = 52.2; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);
Electronics: DAE4 Sn679;
Towards ground Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.990 mW/g

Towards ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.1 V/m; Power Drift = -0.072 dB
Peak SAR (extrapolated) = 1.39 W/kg
SAR(1 g) = 0.884 mW/g; SAR(10 g) = 0.568 mW/g
Maximum value of SAR (measured) = 0.951 mW/g

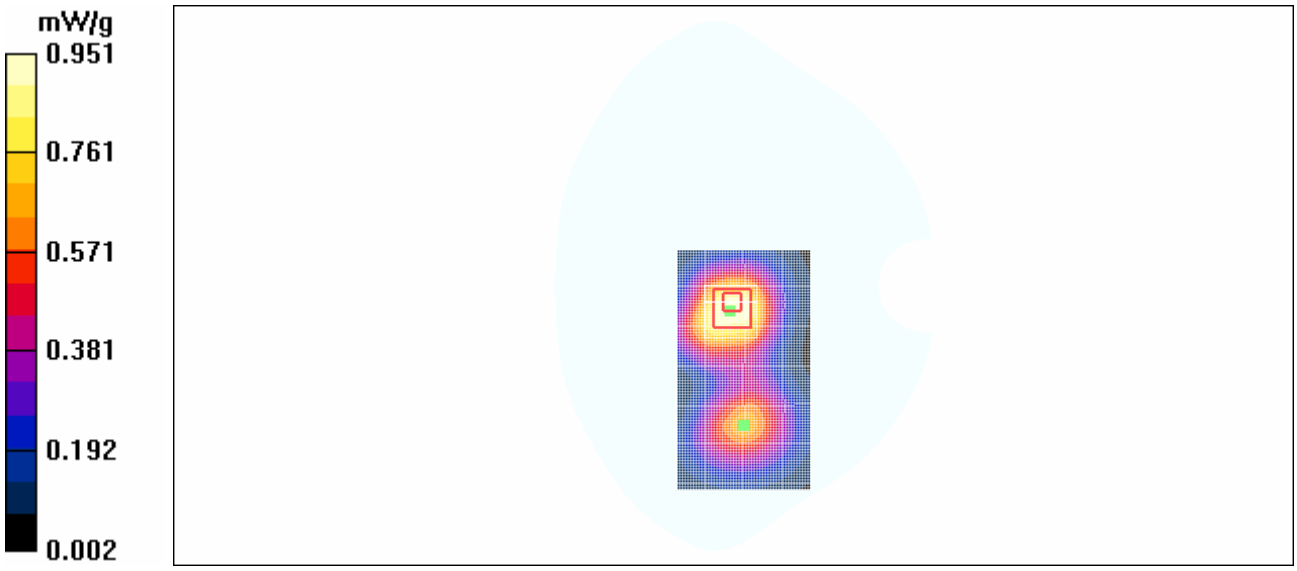


Figure 105 Body, Towards Ground, GSM 1900 GPRS Channel 512

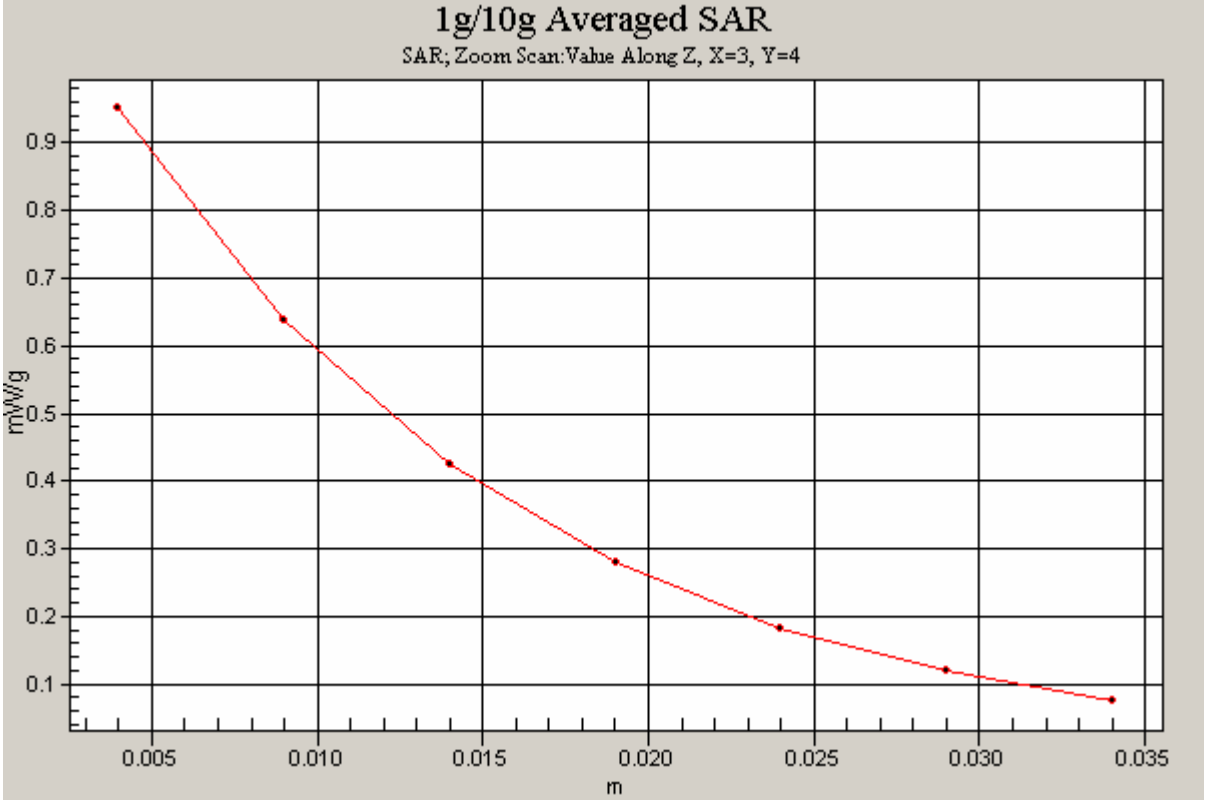


Figure 106 Z-Scan at power reference point (Body, Towards Ground, GSM 1900 GPRS Channel 512)

GSM 1900 GPRS Towards Phantom High

Communication System: GSM 1900+GPRS(2Up); Frequency: 1909.8 MHz;Duty Cycle: 1:4
Medium parameters used: f = 1910 MHz; σ = 1.53 mho/m; ε_r = 52.1; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);
Electronics: DAE4 Sn679;
Towards Phantom High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.448 mW/g

Towards Phantom High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.6 V/m; Power Drift = 0.029 dB
Peak SAR (extrapolated) = 0.812 W/kg
SAR(1 g) = 0.391 mW/g; SAR(10 g) = 0.236 mW/g
Maximum value of SAR (measured) = 0.426 mW/g

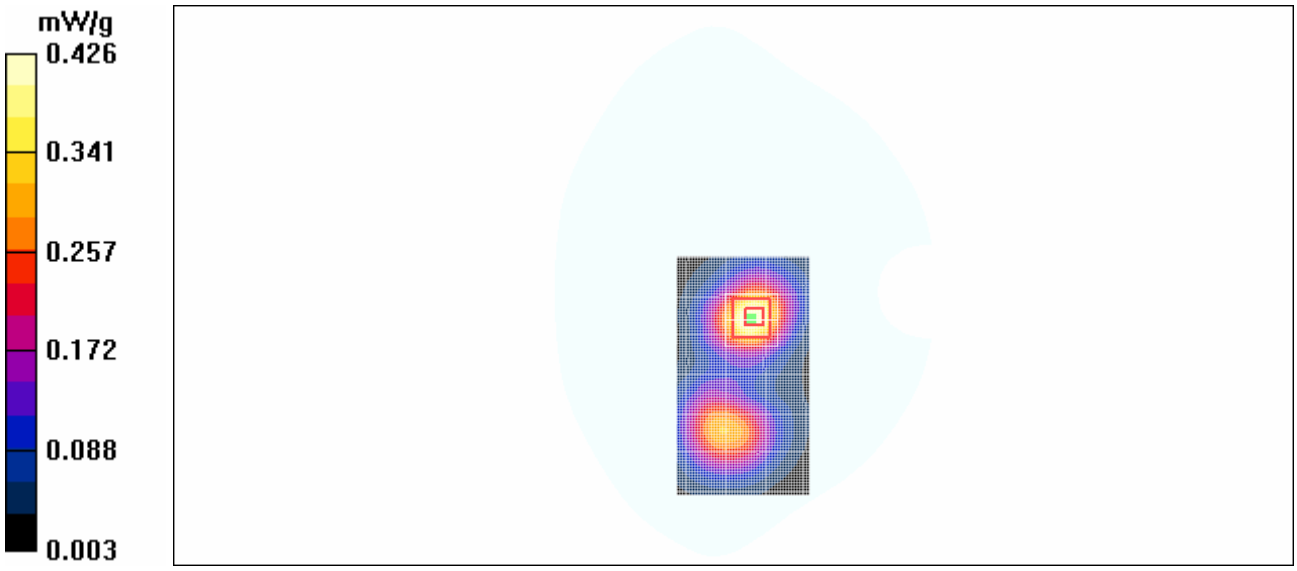


Figure 107 Body, Towards Phantom, GSM 1900 GPRS, Channel 810

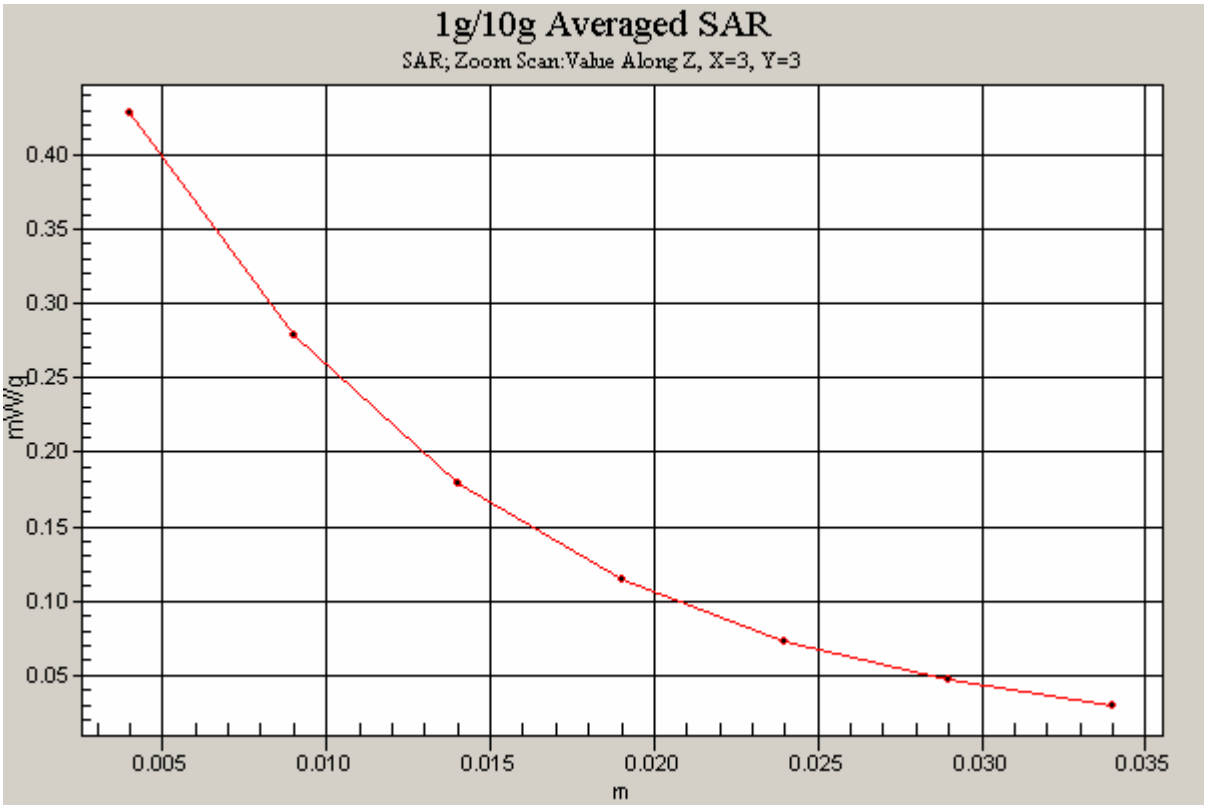


Figure 108 Z-Scan at power reference point (Body, Towards Phantom, GSM 1900 GPRS, Channel 810)

GSM 1900 GPRS Towards Phantom Middle

Communication System: GSM 1900+GPRS(2Up); Frequency: 1880 MHz;Duty Cycle: 1:4
Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.1; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);
Electronics: DAE4 Sn679;
Towards Phantom Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.696 mW/g

Towards Phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.3 V/m; Power Drift = 0.016 dB
Peak SAR (extrapolated) = 0.827 W/kg
SAR(1 g) = 0.557 mW/g; SAR(10 g) = 0.329 mW/g
Maximum value of SAR (measured) = 0.609 mW/g

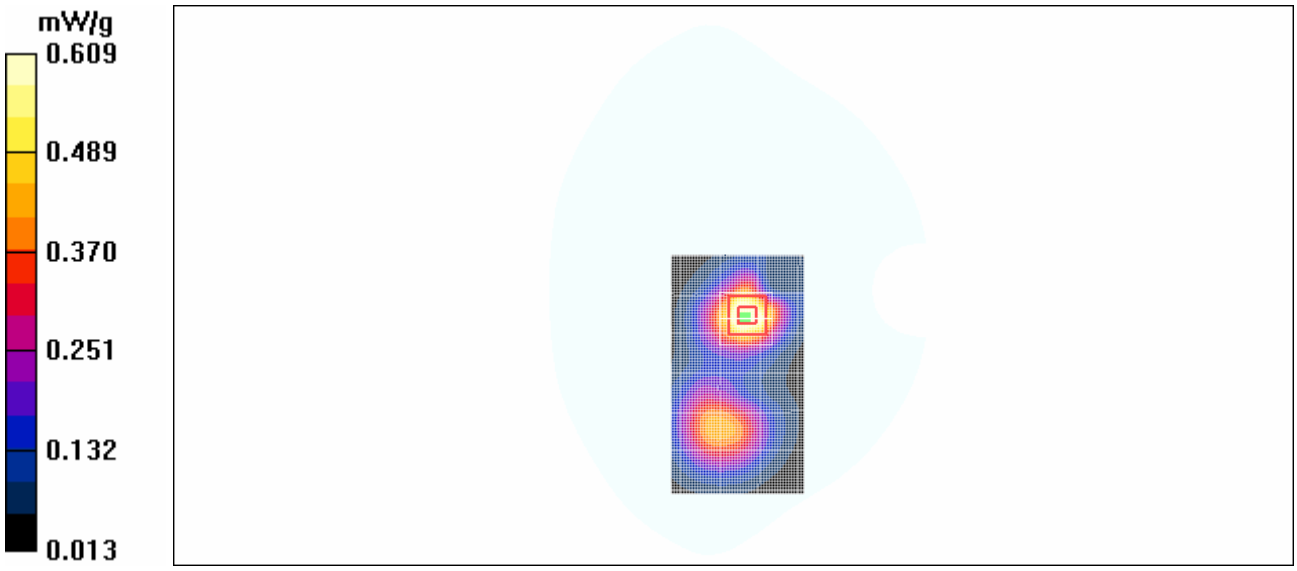


Figure 109 Body, Towards Phantom, GSM 1900 GPRS Channel 661

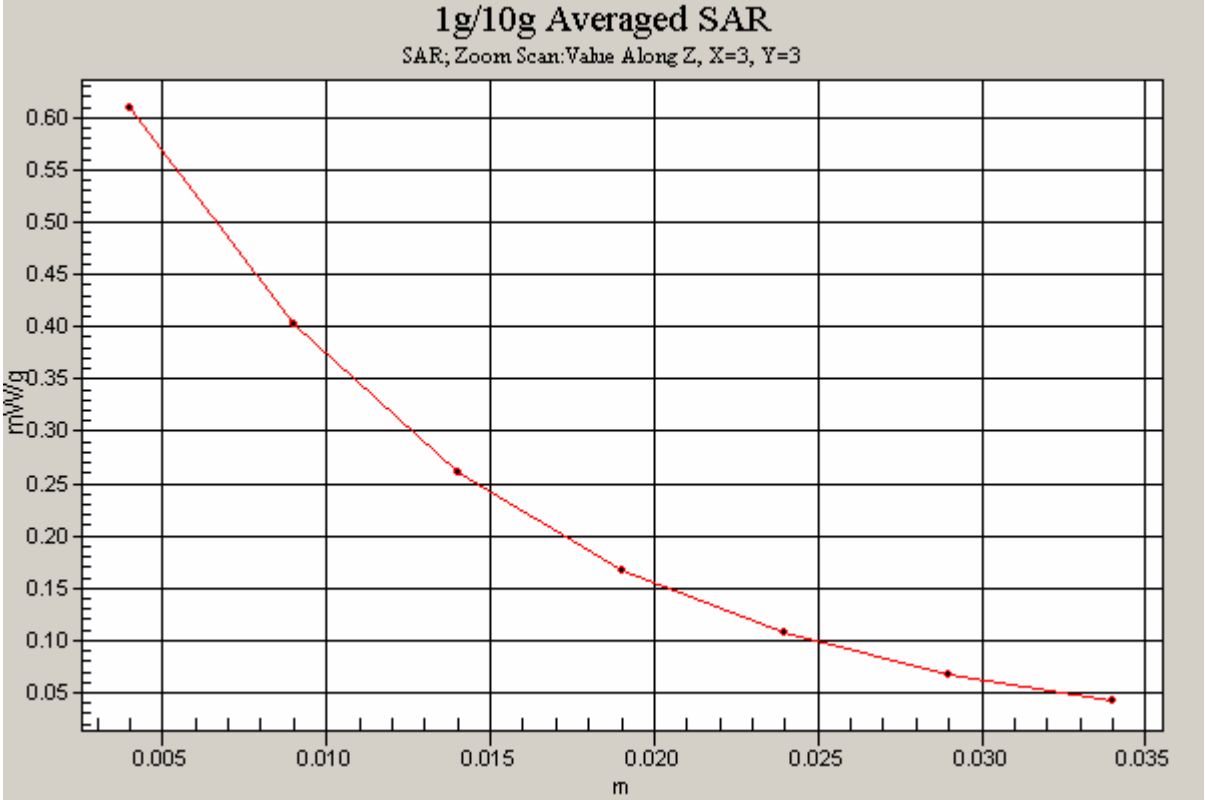


Figure 110 Z-Scan at power reference point (Body, Towards Phantom, GSM 1900 GPRS Channel 661)

GSM 1900 GPRS Towards Phantom Low

Communication System: GSM 1900+GPRS(2Up); Frequency: 1850.2 MHz;Duty Cycle: 1:4
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.47 mho/m; ε_r = 52.2; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);
Electronics: DAE4 Sn679;
Towards Phantom Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.695 mW/g
Towards Phantom Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.4 V/m; Power Drift = -0.029 dB
Peak SAR (extrapolated) = 0.931 W/kg
SAR(1 g) = 0.606 mW/g; SAR(10 g) = 0.360 mW/g
Maximum value of SAR (measured) = 0.660 mW/g

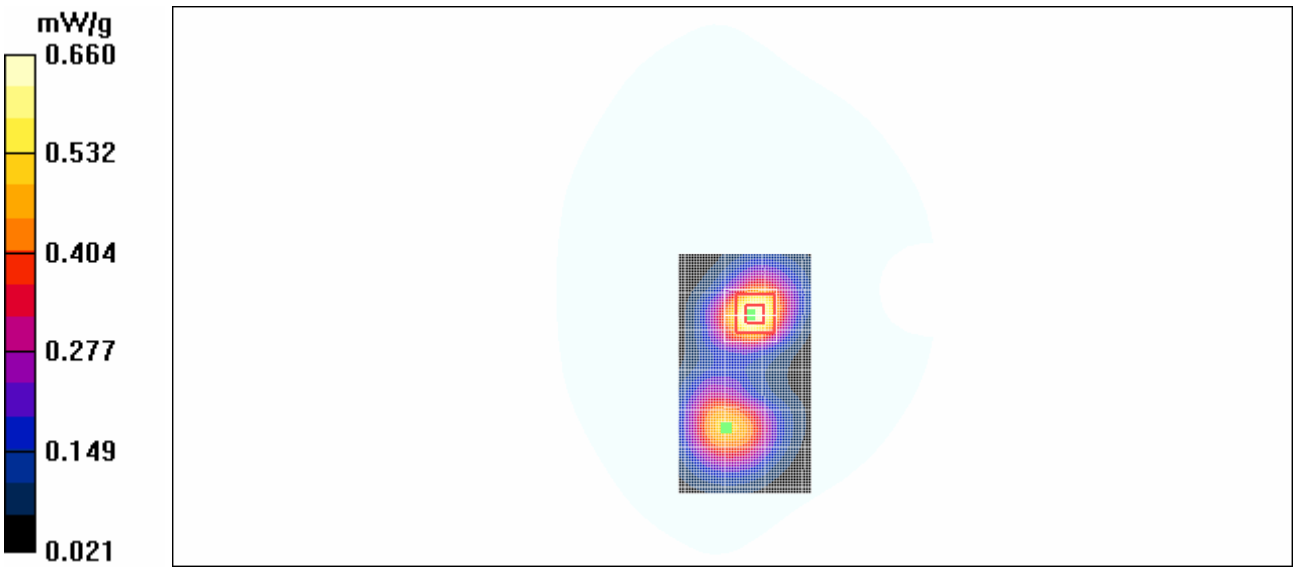


Figure 111 Body, Towards Phantom, GSM 1900 GPRS Channel 512

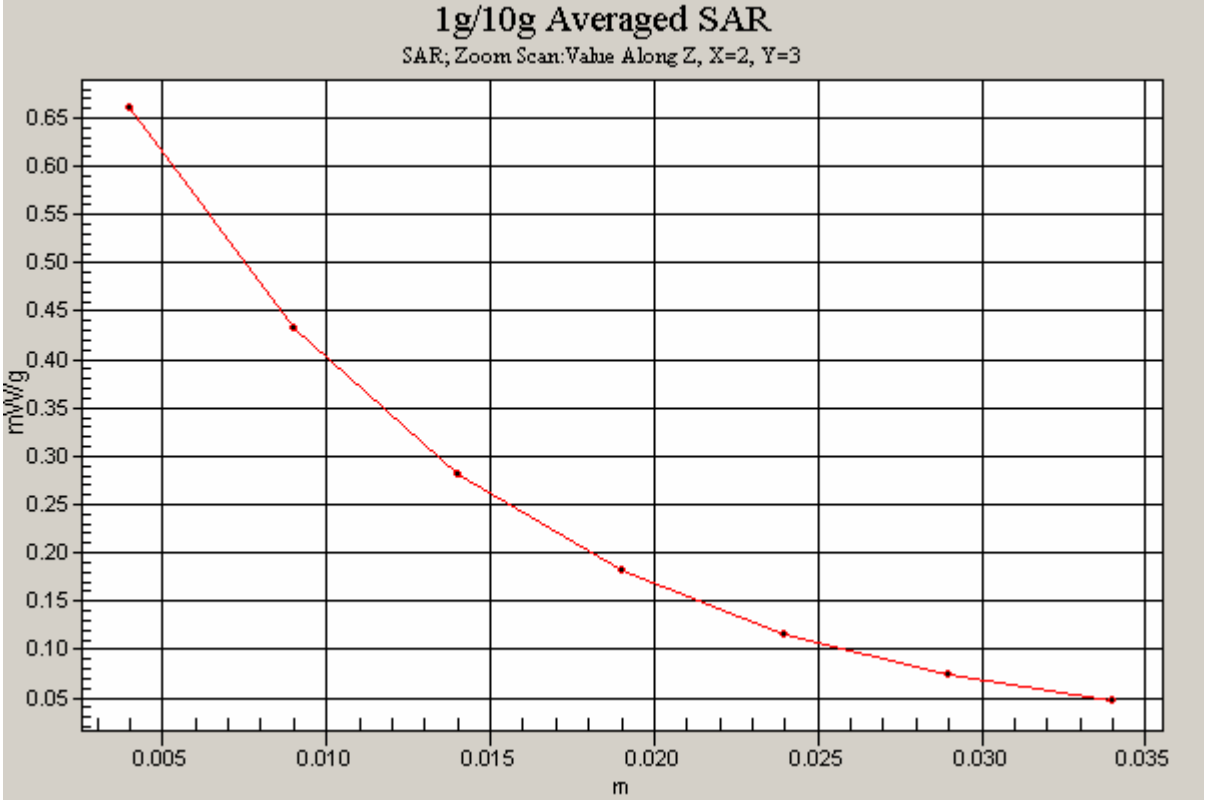


Figure 112 Z-Scan at power reference point (Body, Towards Phantom, GSM 1900 GPRS Channel 512)

GSM 1900 EGPRS Towards Ground Low

Communication System: GSM 1900+EGPRS(2Up); Frequency: 1850.2 MHz;Duty Cycle: 1:4
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.47 mho/m; ε_r = 52.2; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);
Electronics: DAE4 Sn679;
Towards ground Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.542 mW/g
Towards ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.1 V/m; Power Drift = -0.054 dB
Peak SAR (extrapolated) = 0.977 W/kg
SAR(1 g) = 0.400 mW/g; SAR(10 g) = 0.254 mW/g
Maximum value of SAR (measured) = 0.423 mW/g

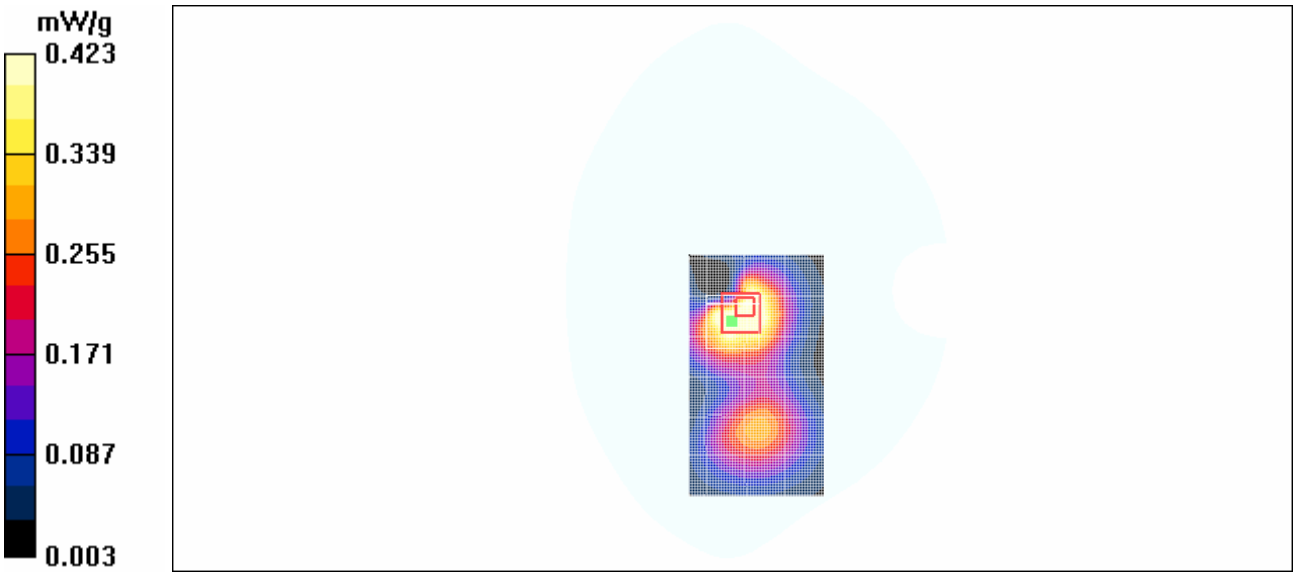


Figure 113 Body, Towards Ground, GSM 1900 EGPRS Channel 512

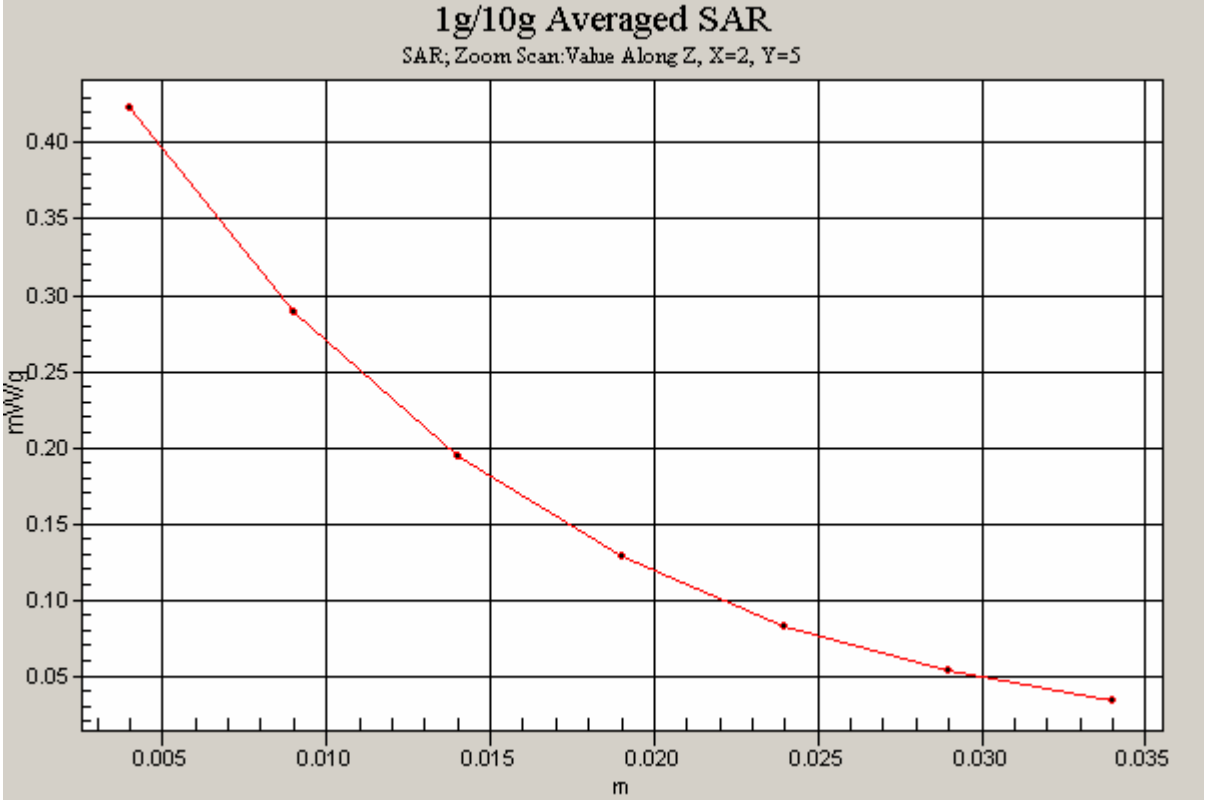


Figure 114 Z-Scan at power reference point (Body, Towards Ground, GSM 1900 EGPRS Channel 512)

WCDMA Band V Left Cheek High

Communication System: WCDMA Band V; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 847 MHz; σ = 0.924 mho/m; ε_r = 42.2; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Cheek High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.05 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.9 V/m; Power Drift = 0.008 dB
Peak SAR (extrapolated) = 1.30 W/kg
SAR(1 g) = 0.973 mW/g; SAR(10 g) = 0.685 mW/g
Maximum value of SAR (measured) = 1.03 mW/g

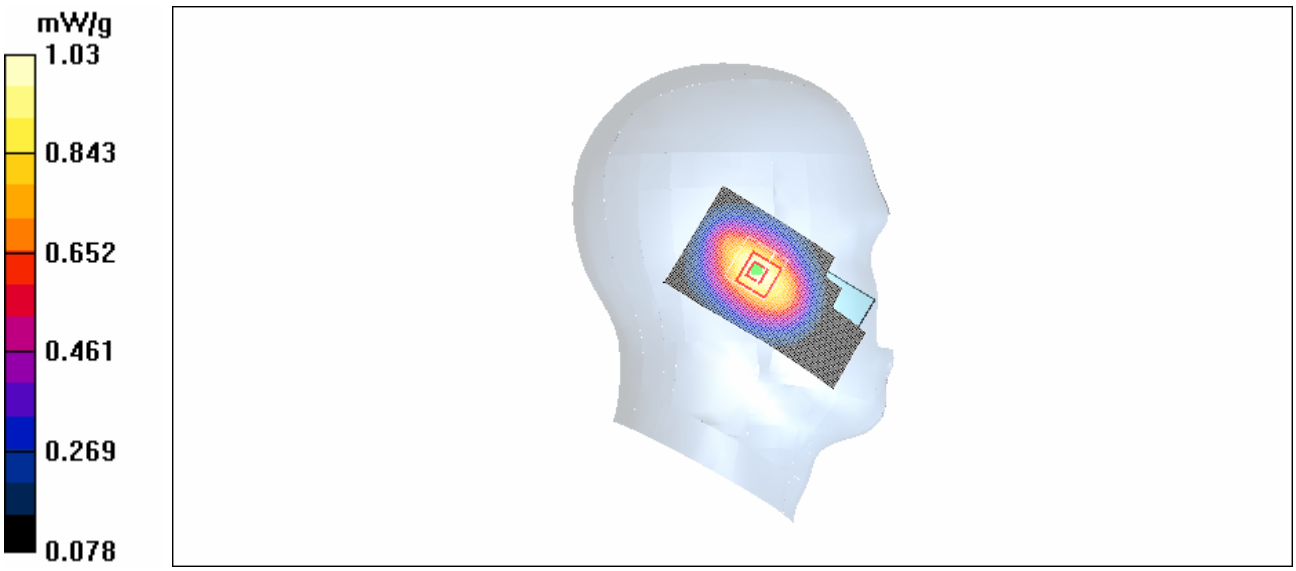


Figure 115 Left Hand Touch Cheek WCDMA Band V Channel 4233

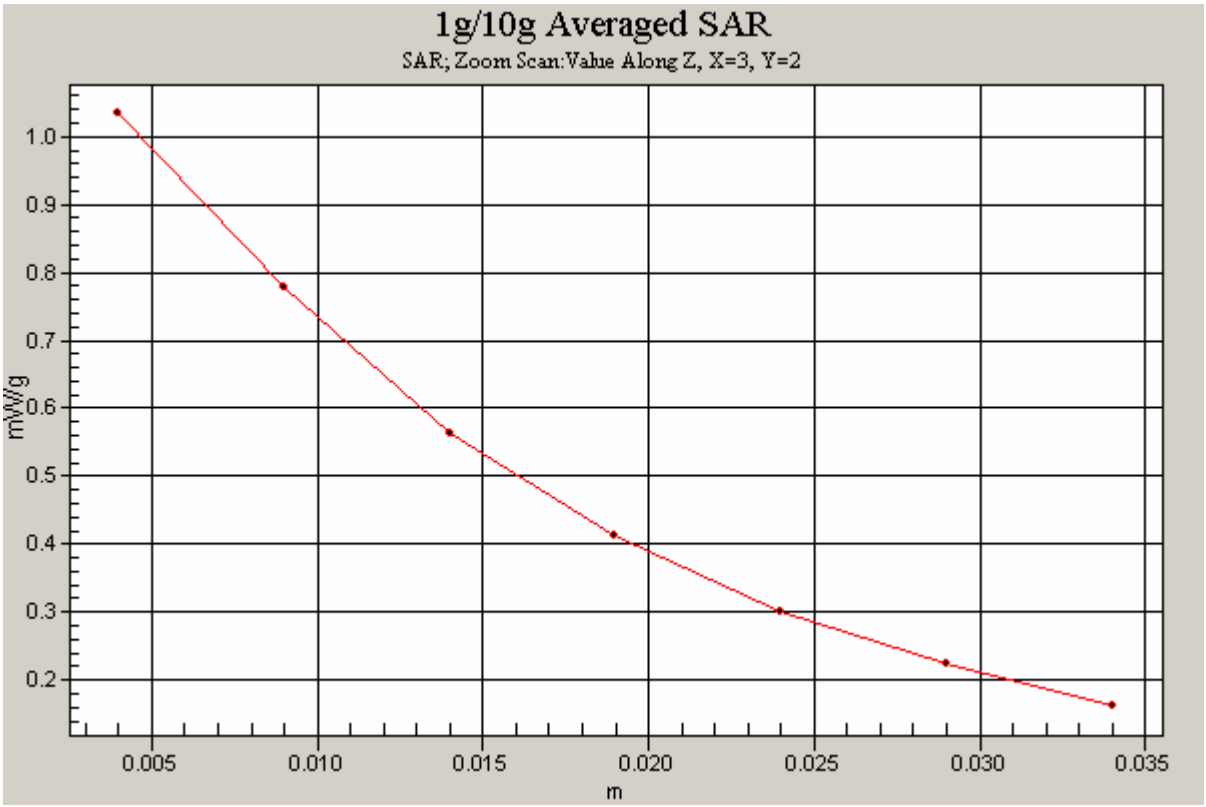


Figure 116 Z-Scan at power reference point (Left Hand Touch Cheek WCDMA Band V Channel 4233)

WCDMA Band V Left Cheek Middle

Communication System: WCDMA Band V; Frequency: 836.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.917 mho/m; ε_r = 42.3; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Cheek Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.933 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 25.4 V/m; Power Drift = -0.041 dB
Peak SAR (extrapolated) = 1.15 W/kg
SAR(1 g) = 0.870 mW/g; SAR(10 g) = 0.612 mW/g
Maximum value of SAR (measured) = 0.923 mW/g

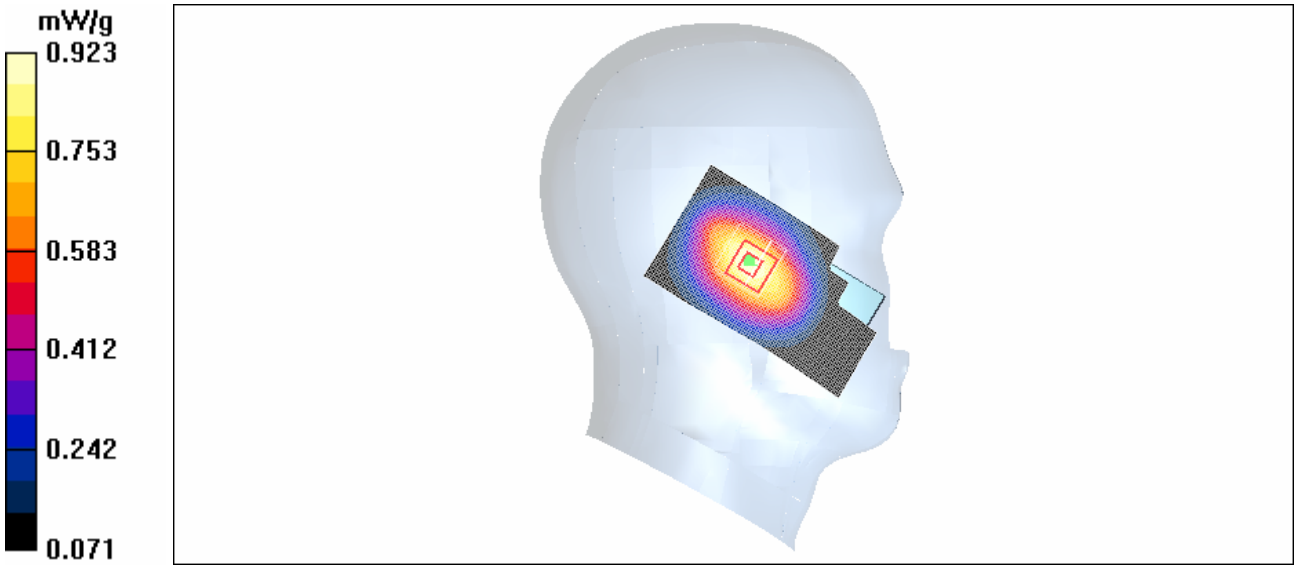


Figure 117 Left Hand Touch Cheek WCDMA Band V Channel 4183

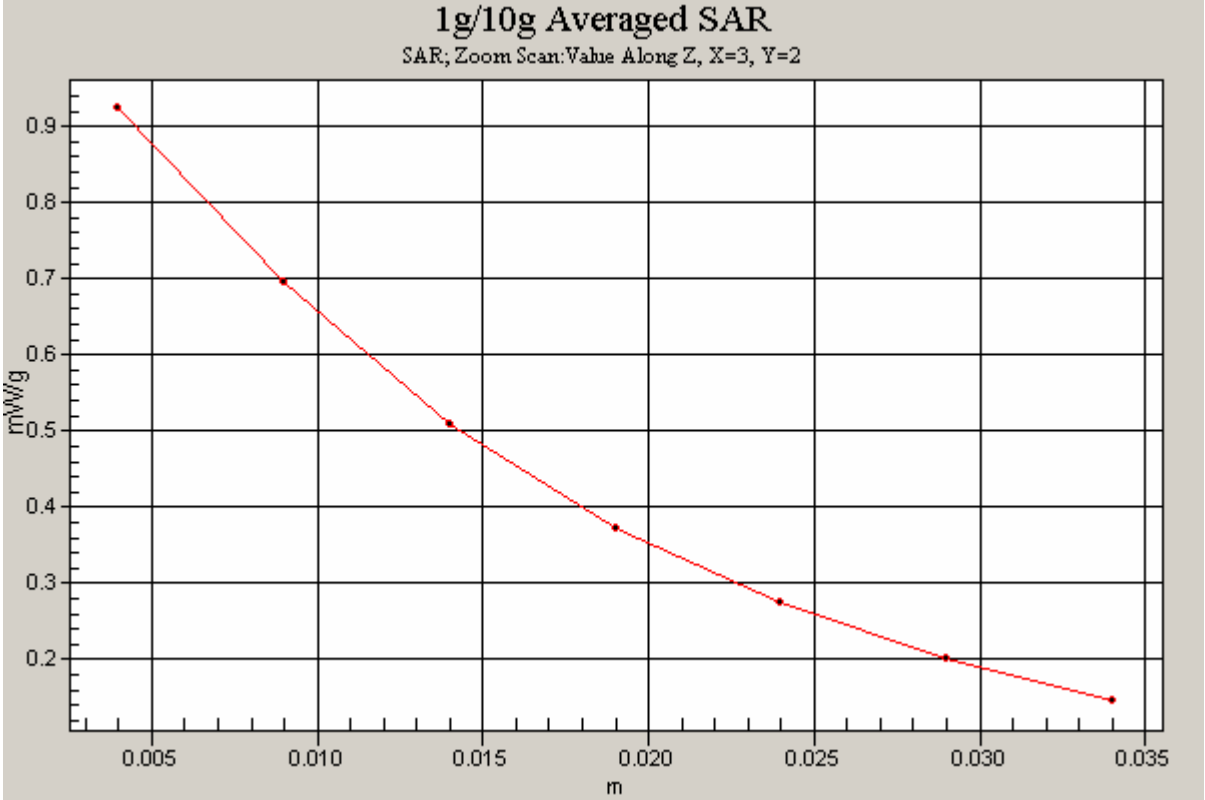


Figure 118 Z-Scan at power reference point (Left Hand Touch Cheek WCDMA Band V Channel 4183)

WCDMA Band V Left Cheek Low

Communication System: WCDMA Band V; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.91 mho/m; ε_r = 42.4; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Cheek Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.06 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 27.6 V/m; Power Drift = -0.020 dB
Peak SAR (extrapolated) = 1.30 W/kg
SAR(1 g) = 0.973 mW/g; SAR(10 g) = 0.681 mW/g
Maximum value of SAR (measured) = 1.05 mW/g

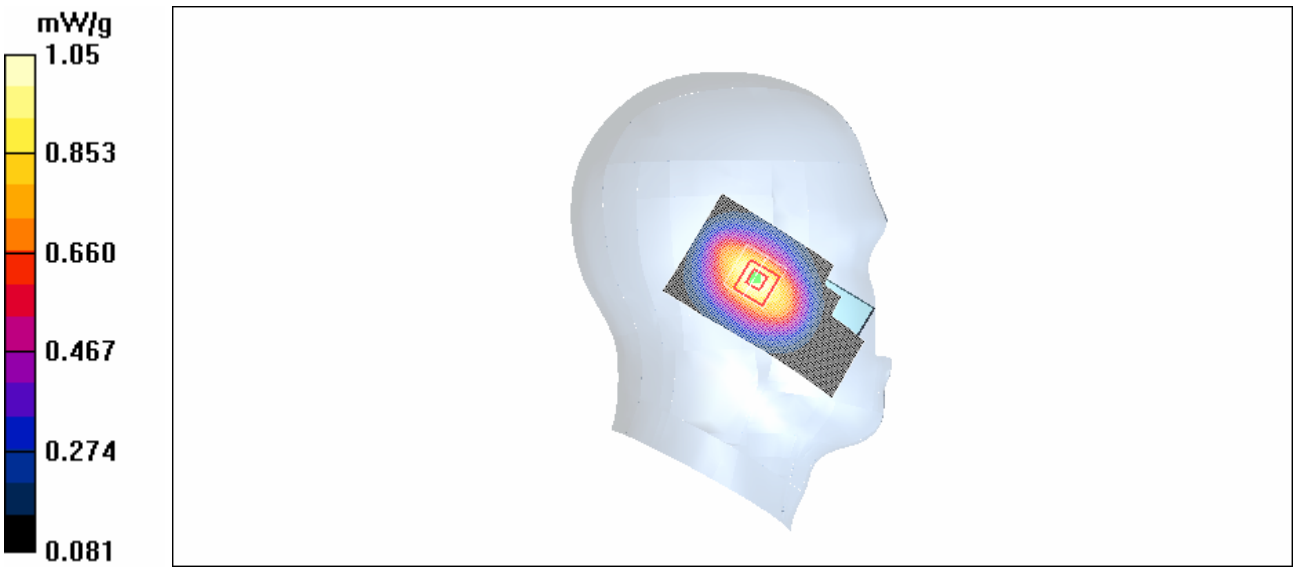


Figure 119 Left Hand Touch Cheek WCDMA Band V Channel 4132

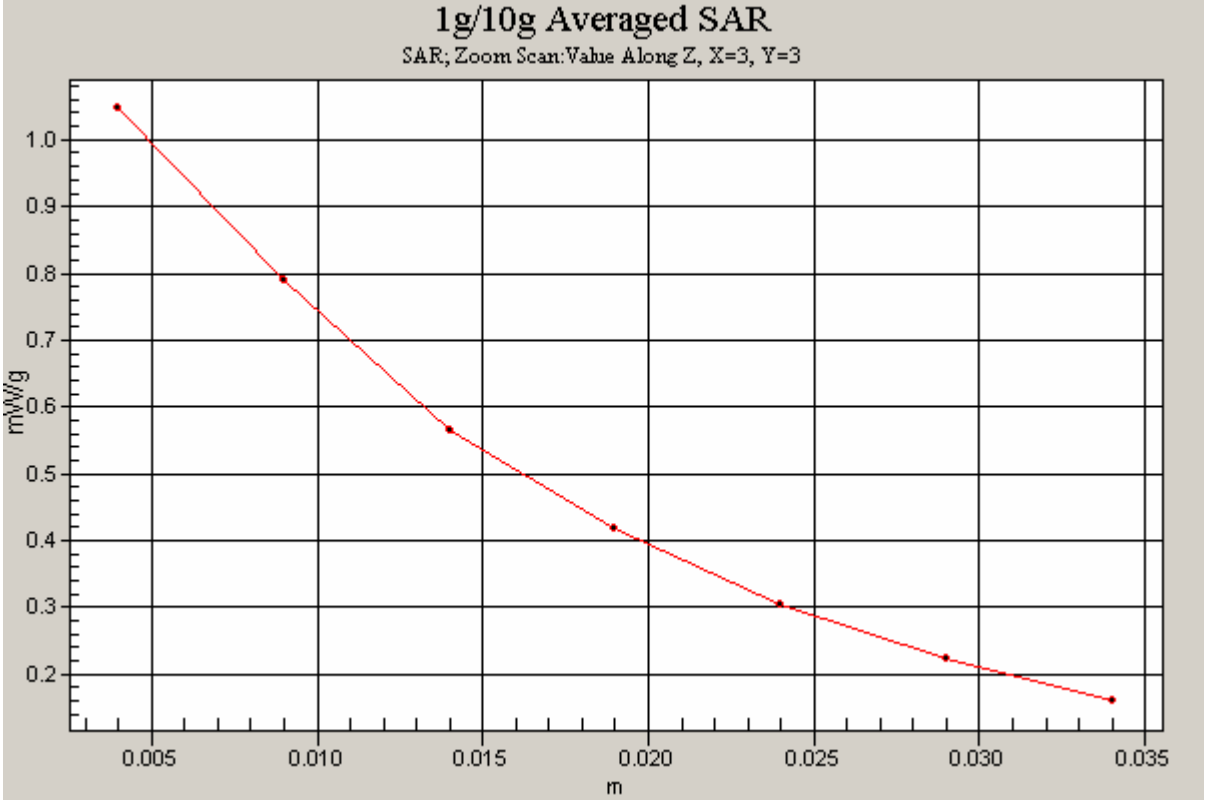


Figure 120 Z-Scan at power reference point (Left Hand Touch Cheek WCDMA Band V Channel 4132)

WCDMA Band V Left Tilt High

Communication System: WCDMA Band V; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 847 MHz; σ = 0.924 mho/m; ε_r = 42.2; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Tilt High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.662 mW/g

Tilt High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 25.3 V/m; Power Drift = -0.103 dB
Peak SAR (extrapolated) = 0.899 W/kg
SAR(1 g) = 0.608 mW/g; SAR(10 g) = 0.429 mW/g
Maximum value of SAR (measured) = 0.652 mW/g

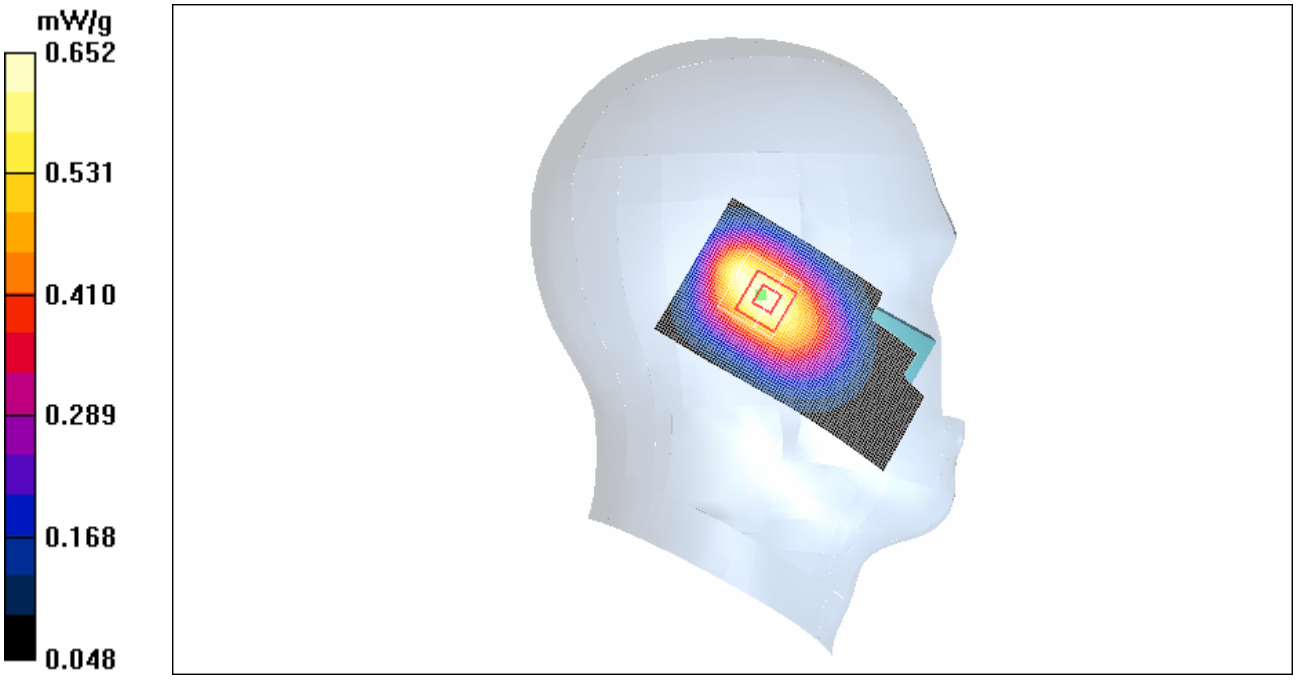


Figure 121 Left Hand Tilt 15°WCDMA Band V Channel 4233

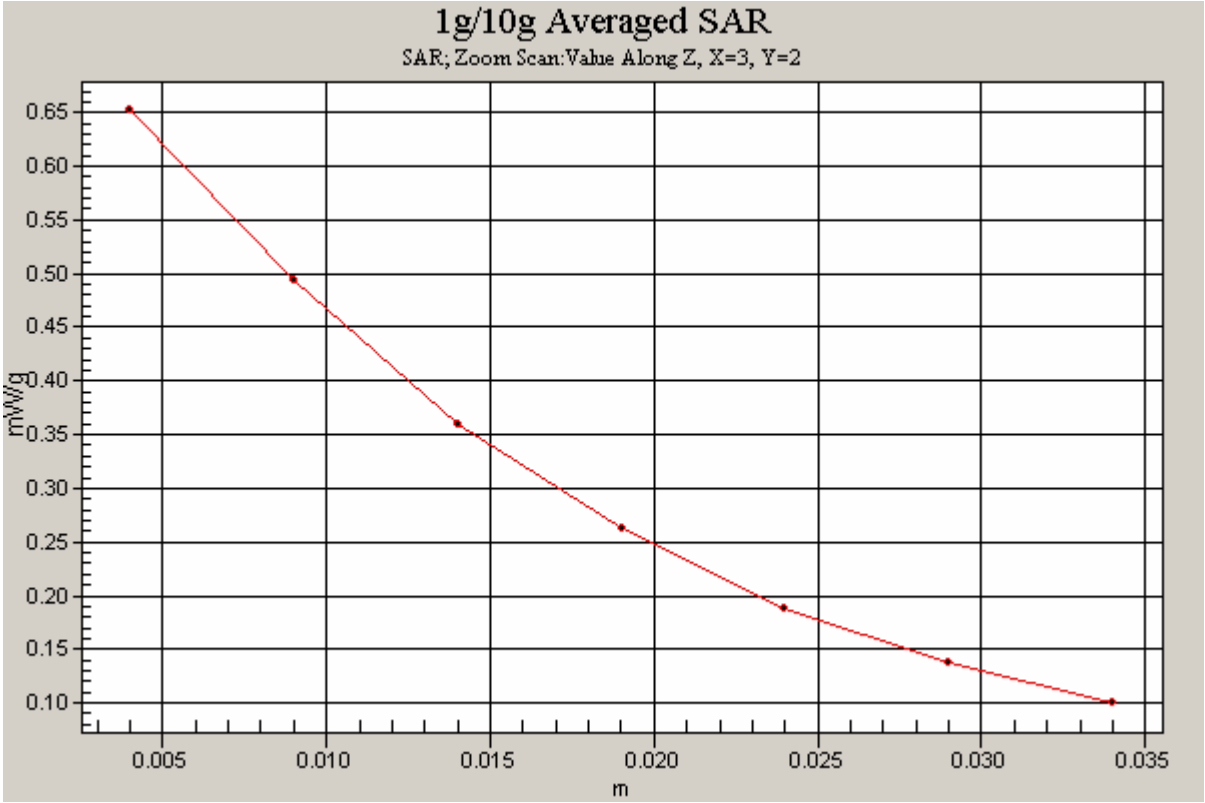


Figure 122 Z-Scan at power reference point (Left Hand Tilt 15°WCDMA Band V Channel 4233)

WCDMA Band V Left Tilt Middle

Communication System: WCDMA Band V; Frequency: 836.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.917 mho/m; ε_r = 42.3; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Tilt Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.563 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.8 V/m; Power Drift = 0.003 dB
Peak SAR (extrapolated) = 0.729 W/kg
SAR(1 g) = 0.522 mW/g; SAR(10 g) = 0.366 mW/g
Maximum value of SAR (measured) = 0.558 mW/g

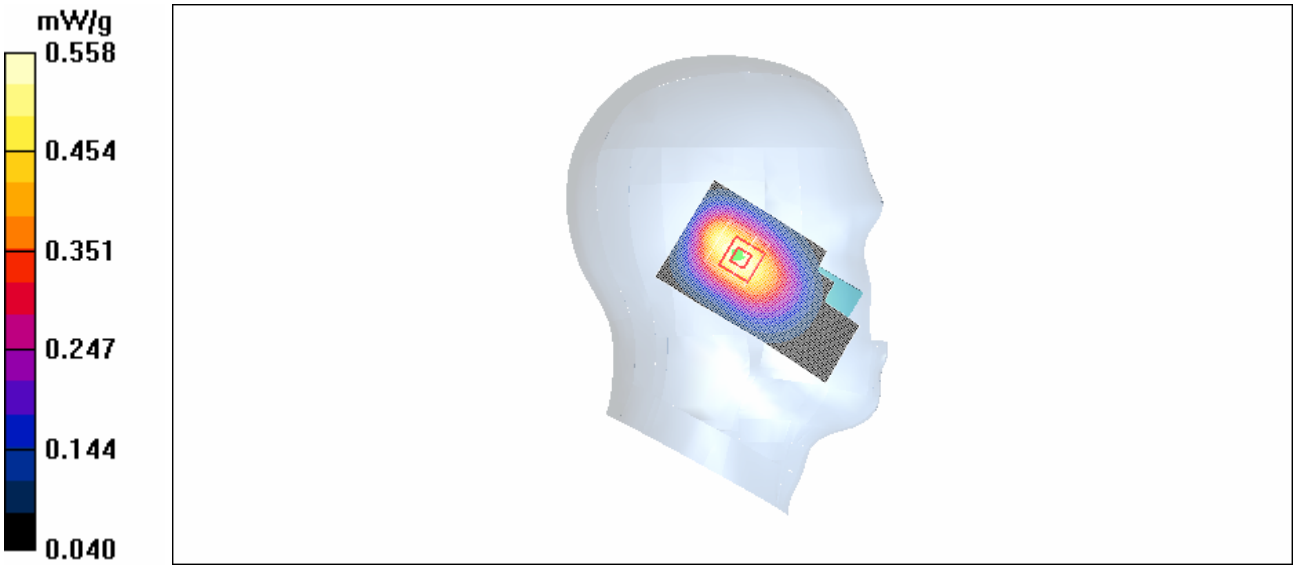


Figure 123 Left Hand Tilt 15° WCDMA Band V Channel 4183

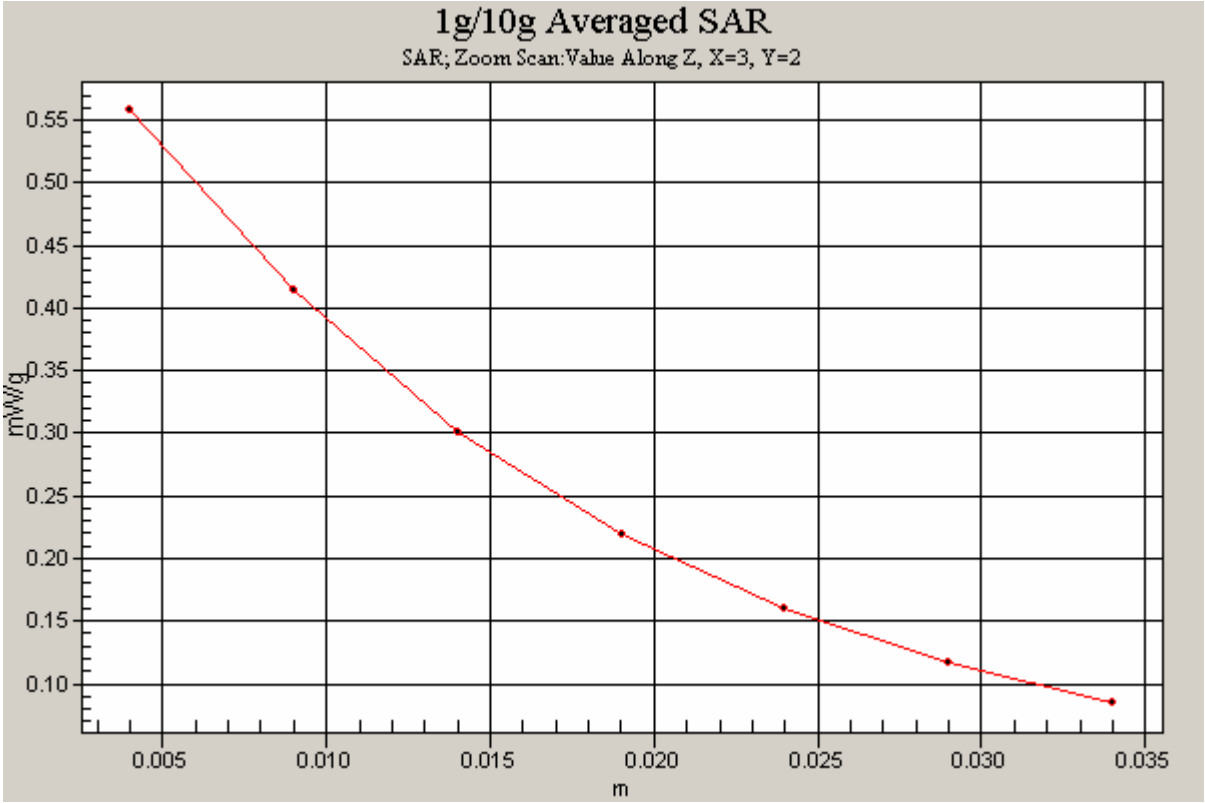


Figure 124 Z-Scan at power reference point (Left Hand Tilt 15° WCDMA Band V Channel 4183)

WCDMA Band V Left Tilt Low

Communication System: WCDMA Band V; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.91 mho/m; ε_r = 42.4; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Tilt Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.679 mW/g

Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 25.1 V/m; Power Drift = -0.125 dB
Peak SAR (extrapolated) = 0.837 W/kg
SAR(1 g) = 0.603 mW/g; SAR(10 g) = 0.425 mW/g
Maximum value of SAR (measured) = 0.640 mW/g

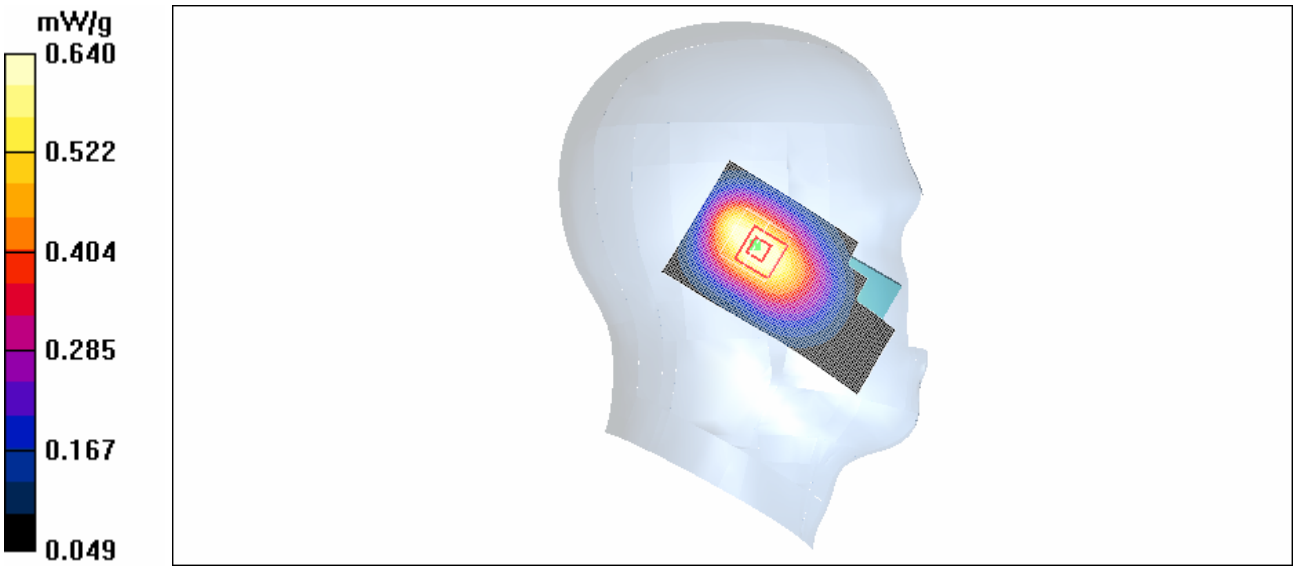


Figure 125 Left Hand Tilt 15° WCDMA Band V Channel 4132

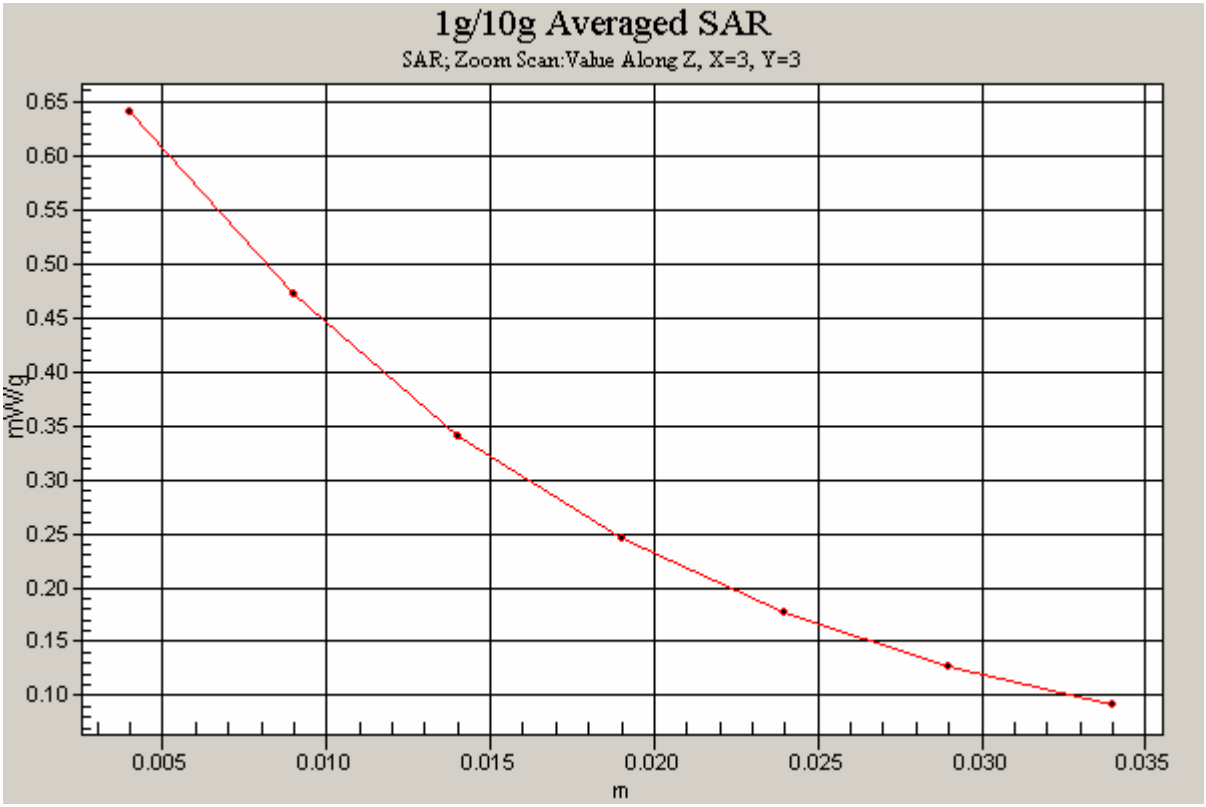


Figure 126 Z-Scan at power reference point (Left Hand Tilt 15° WCDMA Band V Channel 4132)

WCDMA Band V Right Cheek High

Communication System: WCDMA Band V; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 847 MHz; σ = 0.924 mho/m; ε_r = 42.2; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Cheek High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.06 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.2 V/m; Power Drift = -0.053 dB
Peak SAR (extrapolated) = 1.27 W/kg
SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.729 mW/g
Maximum value of SAR (measured) = 1.08 mW/g

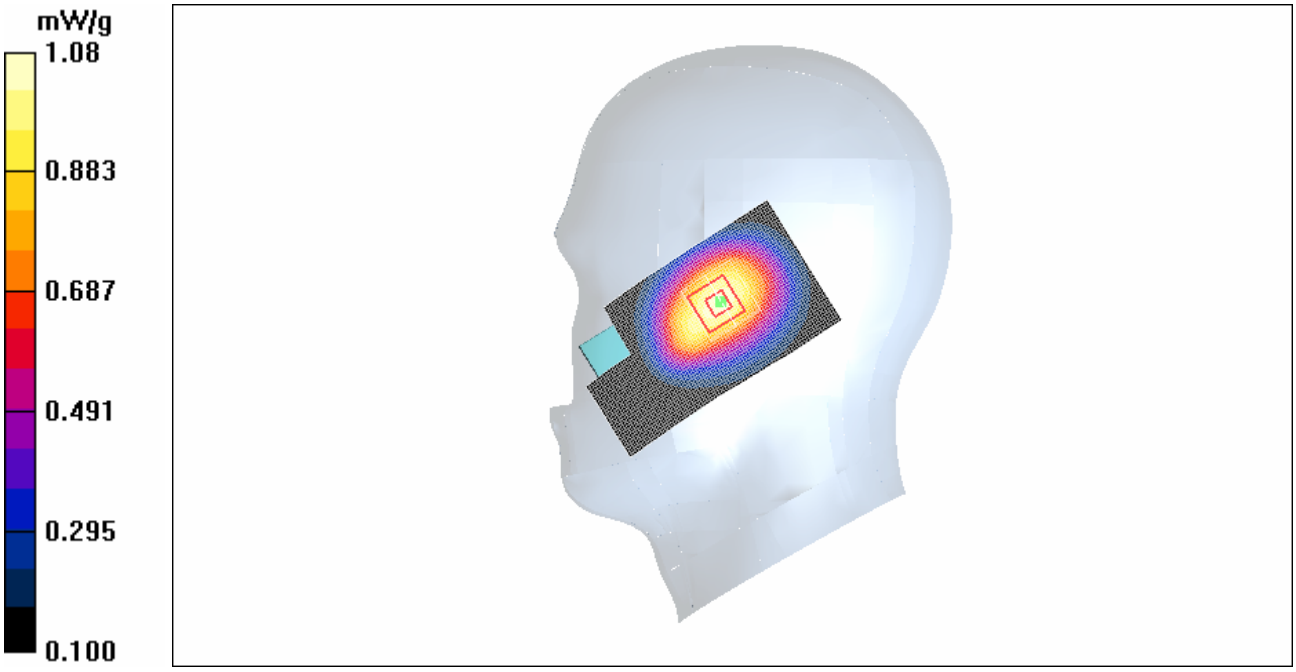


Figure 127 Right Hand Touch Cheek WCDMA Band V Channel 4233

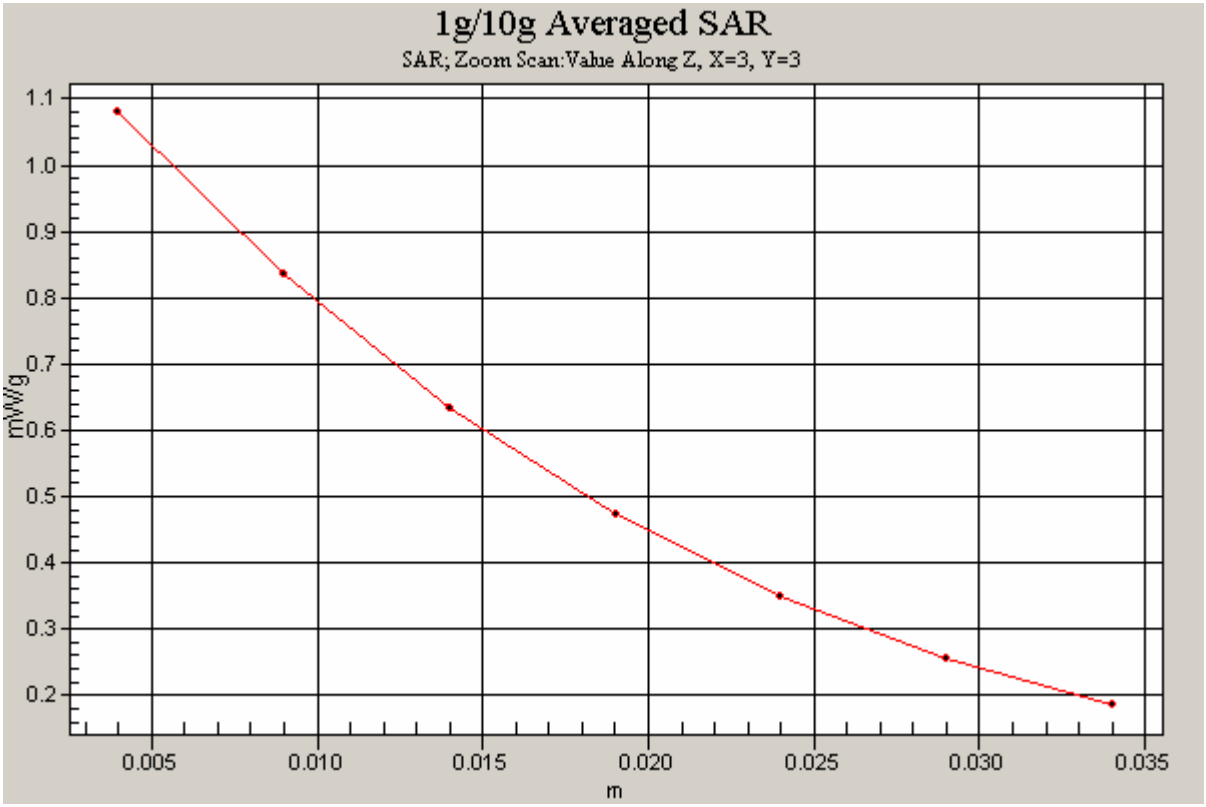


Figure 128 Z-Scan at power reference point (Right Hand Touch Cheek WCDMA Band V Channel 4233)

WCDMA Band V Right Cheek Middle

Communication System: WCDMA Band V; Frequency: 836.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.917 mho/m; ε_r = 42.3; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Cheek Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.958 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.9 V/m; Power Drift = -0.024 dB
Peak SAR (extrapolated) = 1.13 W/kg
SAR(1 g) = 0.907 mW/g; SAR(10 g) = 0.656 mW/g
Maximum value of SAR (measured) = 0.966 mW/g

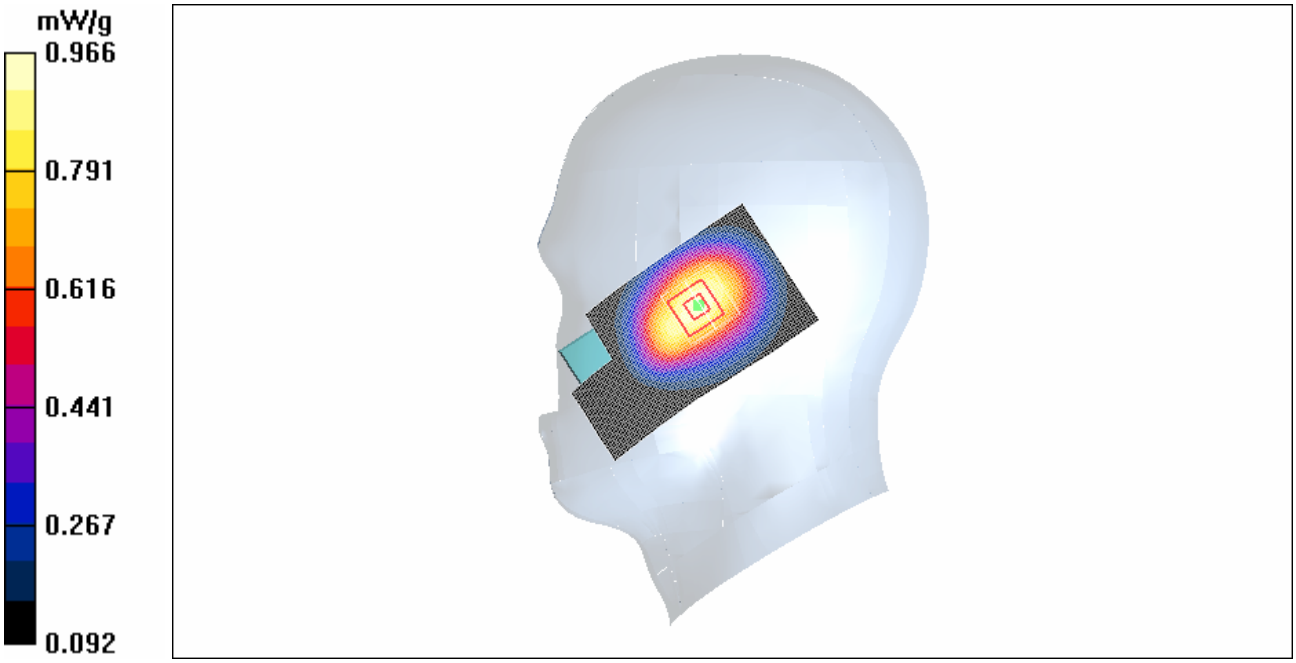


Figure 129 Right Hand Touch Cheek WCDMA Band V Channel 4183

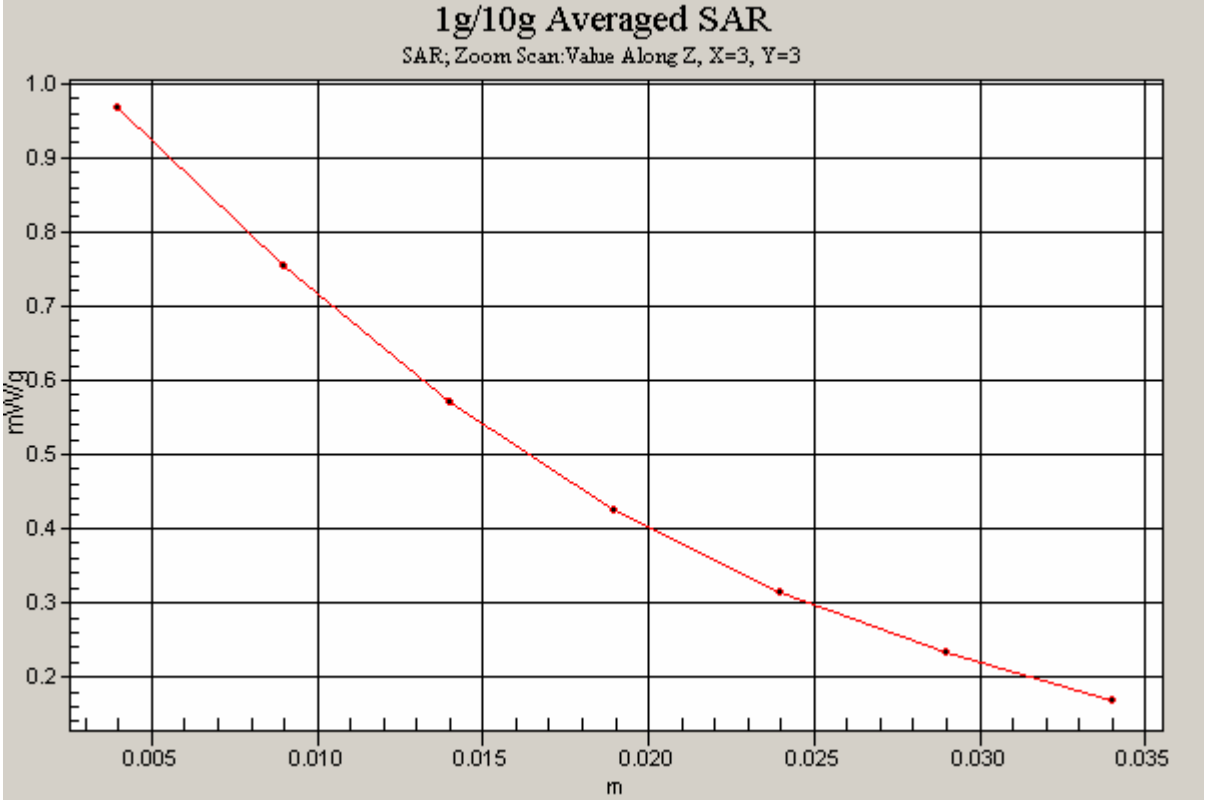


Figure 130 Z-Scan at power reference point (Right Hand Touch Cheek WCDMA Band V Channel 4183)

WCDMA Band V Right Cheek Low

Communication System: WCDMA Band V; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.91 mho/m; ε_r = 42.4; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Cheek Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.14 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 27.2 V/m; Power Drift = -0.147 dB
Peak SAR (extrapolated) = 1.29 W/kg
SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.746 mW/g
Maximum value of SAR (measured) = 1.11 mW/g

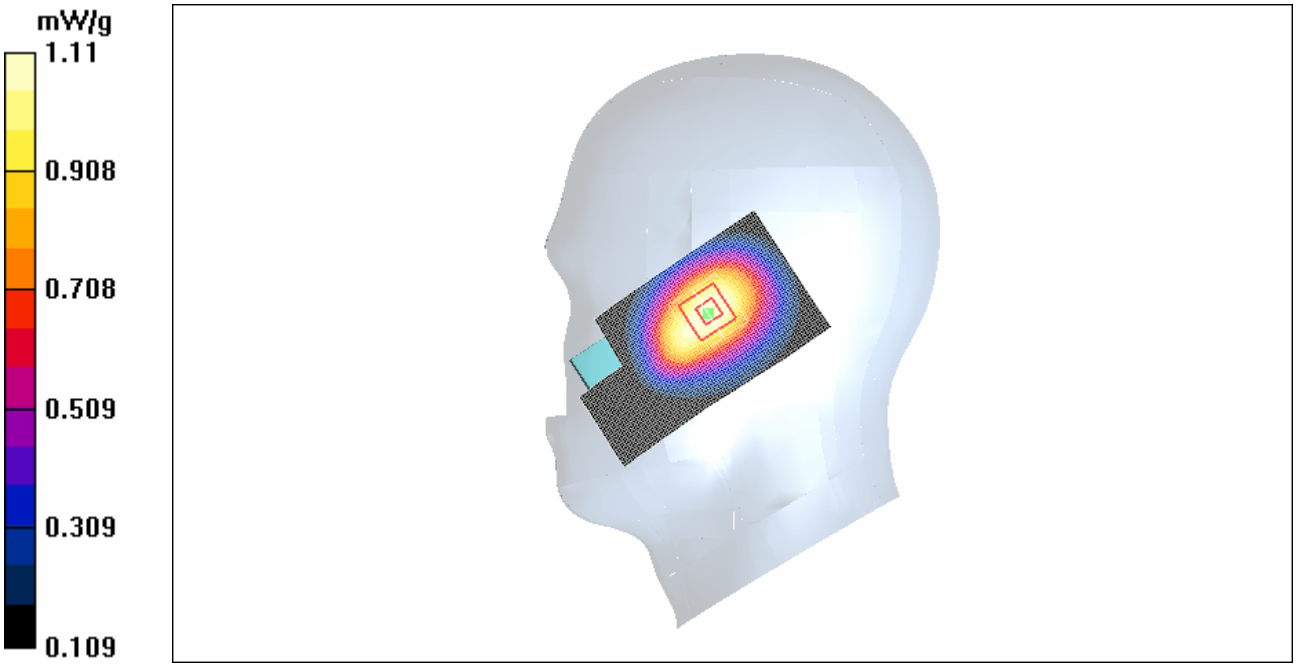


Figure 131 Right Hand Touch Cheek WCDMA Band V Channel 4132

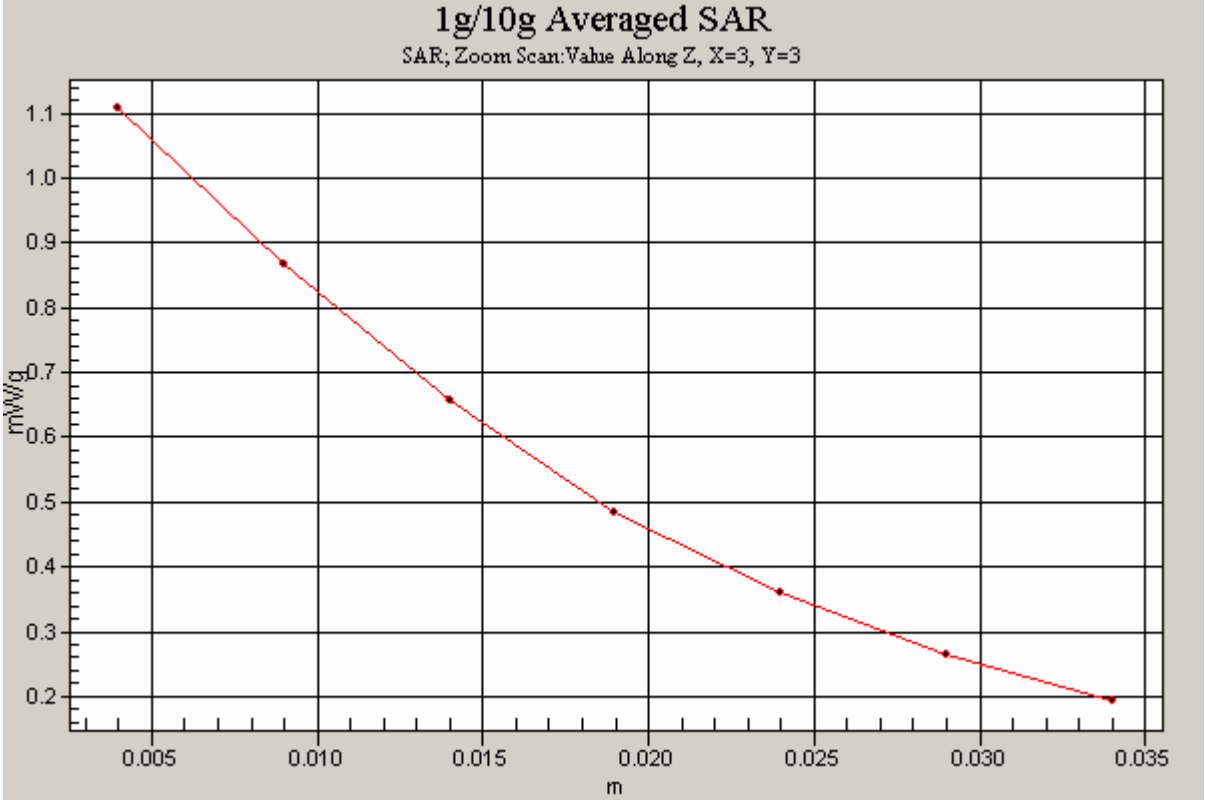


Figure 132 Z-Scan at power reference point (Right Hand Touch Cheek WCDMA Band V Channel 4132)

WCDMA Band V Right Tilt High

Communication System: WCDMA Band V; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 847 MHz; σ = 0.924 mho/m; ε_r = 42.2; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Tilt High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.689 mW/g

Tilt High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.9 V/m; Power Drift = -0.196 dB
Peak SAR (extrapolated) = 0.806 W/kg
SAR(1 g) = 0.630 mW/g; SAR(10 g) = 0.451 mW/g
Maximum value of SAR (measured) = 0.665 mW/g

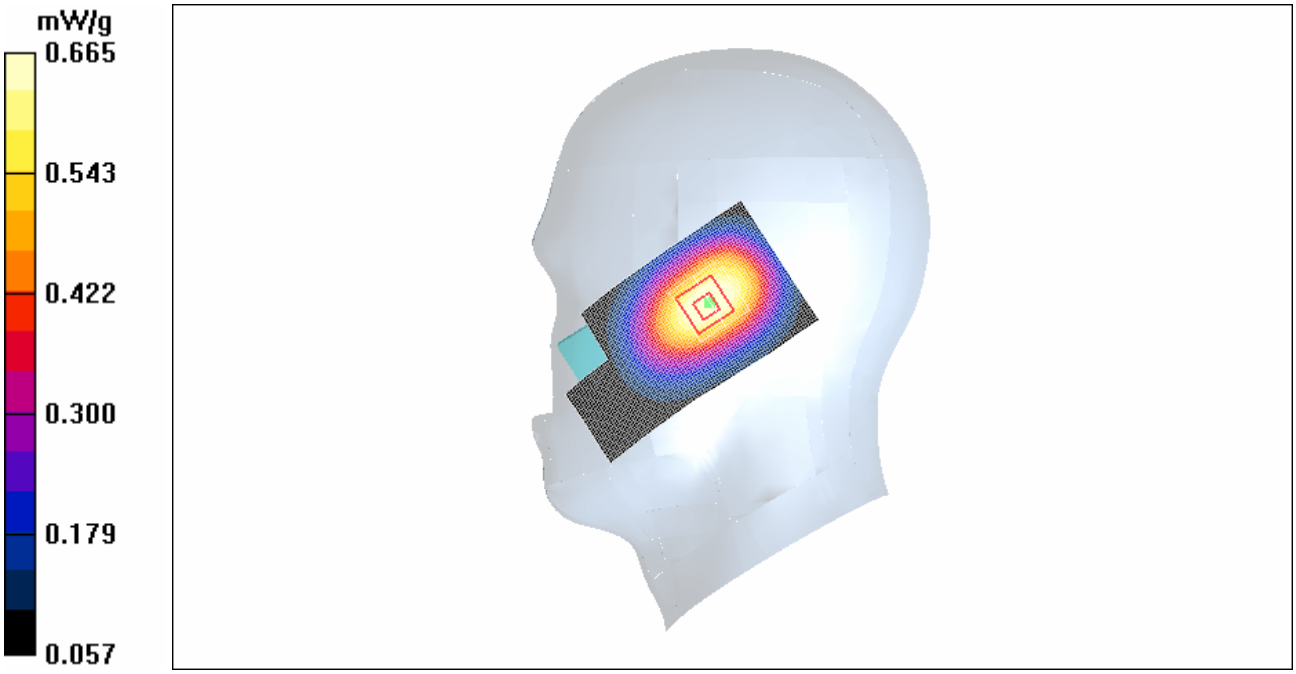


Figure 133 Right Hand Tilt 15° WCDMA Band V Channel 4233

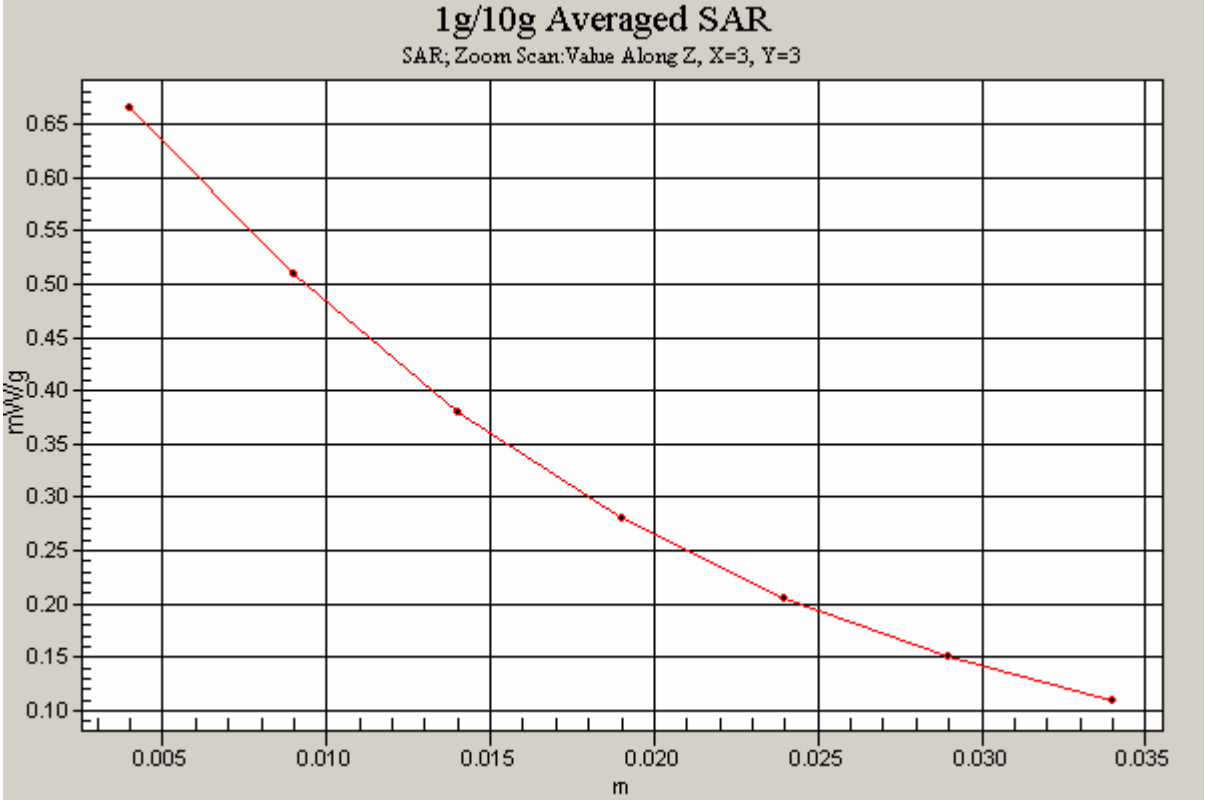


Figure 134 Z-Scan at power reference point (Right Hand Tilt 15° WCDMA Band V Channel 4233)

WCDMA Band V Right Tilt Middle

Communication System: WCDMA Band V; Frequency: 836.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.917 mho/m; ε_r = 42.3; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Tilt Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.644 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.4 V/m; Power Drift = -0.065 dB
Peak SAR (extrapolated) = 0.772 W/kg
SAR(1 g) = 0.610 mW/g; SAR(10 g) = 0.439 mW/g
Maximum value of SAR (measured) = 0.649 mW/g

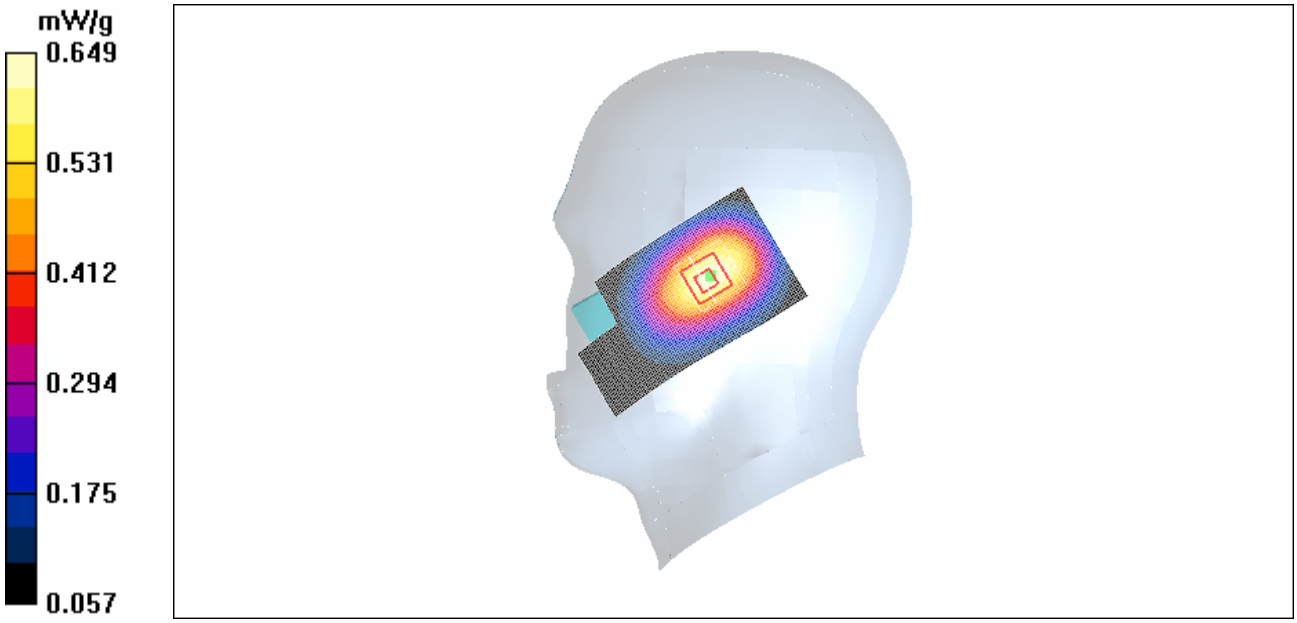


Figure 135 Right Hand Tilt 15° WCDMA Band V Channel 4183

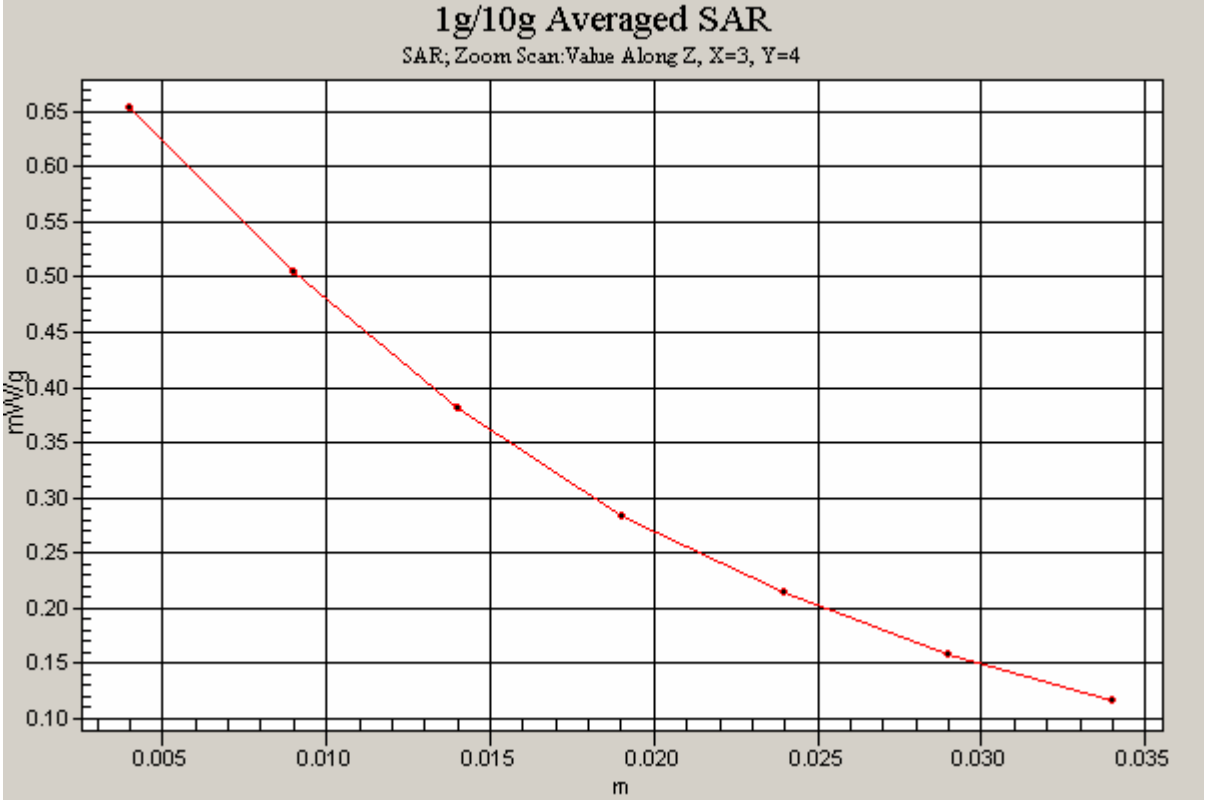


Figure 136 Z-Scan at power reference point (Right Hand Tilt 15° WCDMA Band V Channel 4183)

WCDMA Band V Right Tilt Low

Communication System: WCDMA Band V; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.91 mho/m; ε_r = 42.4; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
Electronics: DAE4 Sn679;
Tilt Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.661 mW/g

Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.9 V/m; Power Drift = -0.100 dB
Peak SAR (extrapolated) = 0.780 W/kg
SAR(1 g) = 0.608 mW/g; SAR(10 g) = 0.437 mW/g
Maximum value of SAR (measured) = 0.651 mW/g

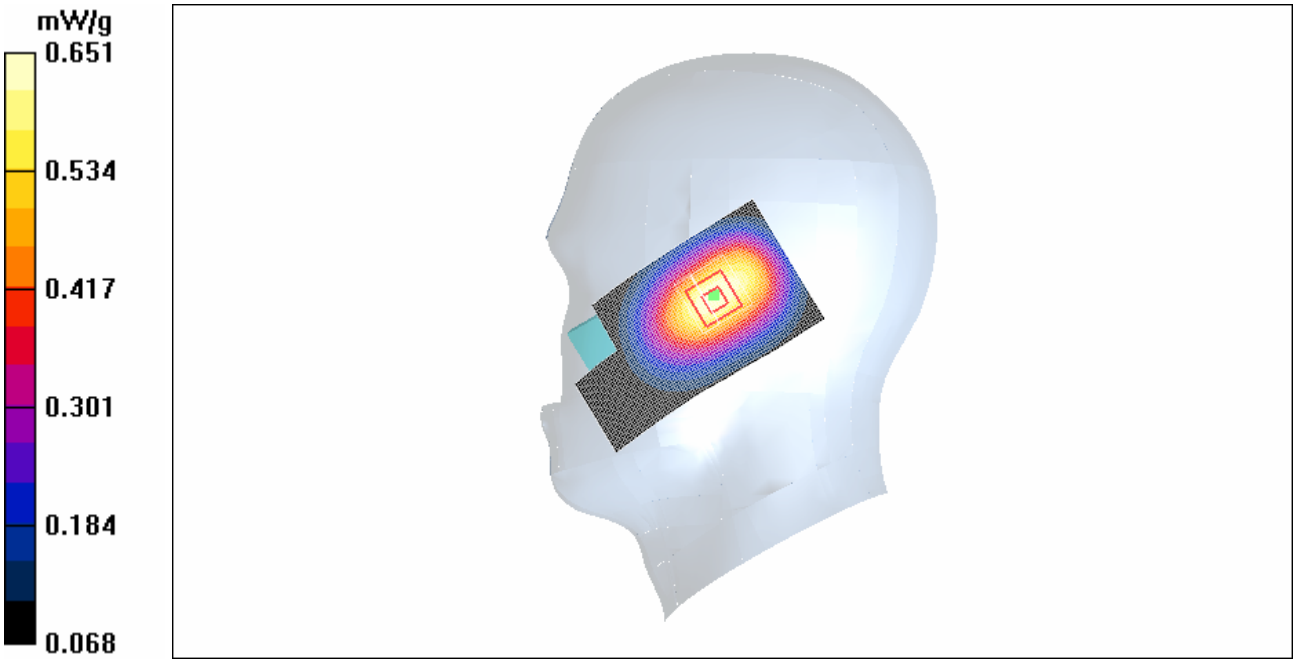


Figure 137 Right Hand Tilt 15° WCDMA Band V Channel 4132

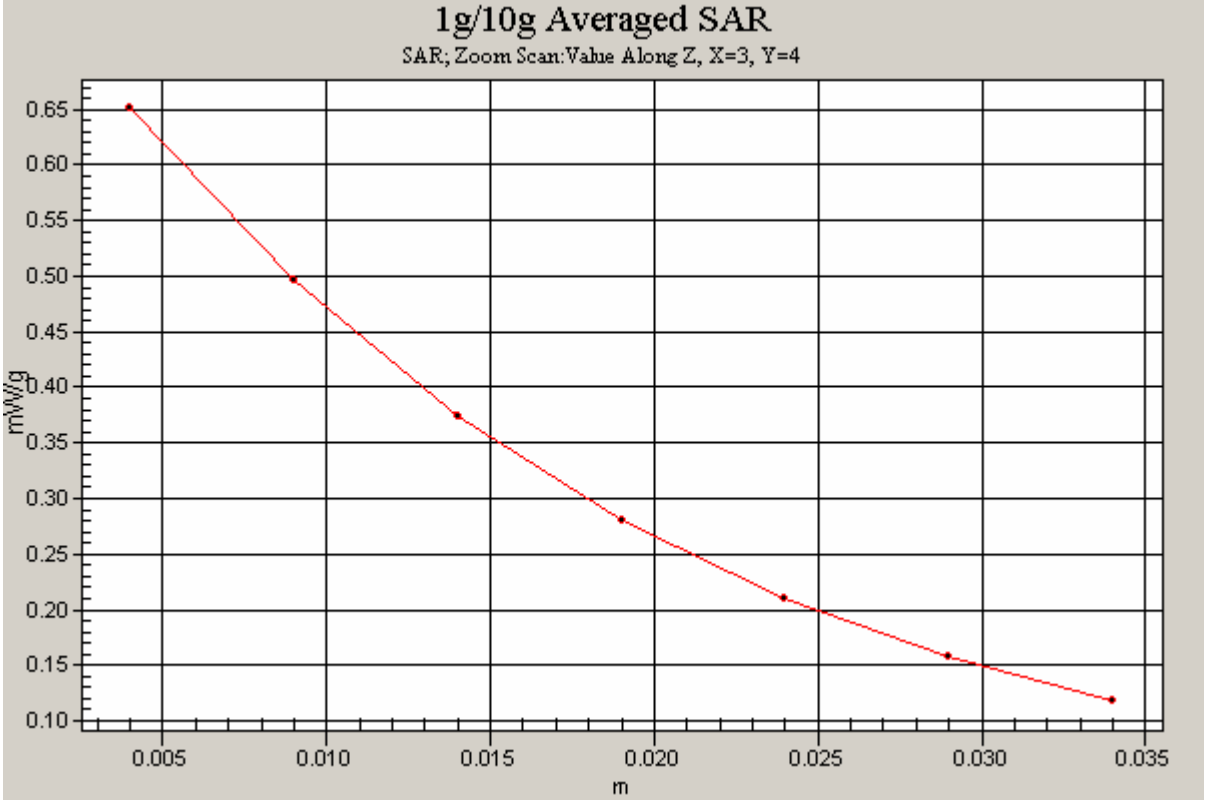


Figure 138 Z-Scan at power reference point (Right Hand Tilt 15° WCDMA Band V Channel 4132)

WCDMA Band V Towards Ground High

Communication System: WCDMA Band V; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 847 MHz; σ = 1.01 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards ground High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.758 mW/g

Towards ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.8 V/m; Power Drift = 0.001 dB
Peak SAR (extrapolated) = 0.915 W/kg
SAR(1 g) = 0.718 mW/g; SAR(10 g) = 0.514 mW/g
Maximum value of SAR (measured) = 0.764 mW/g

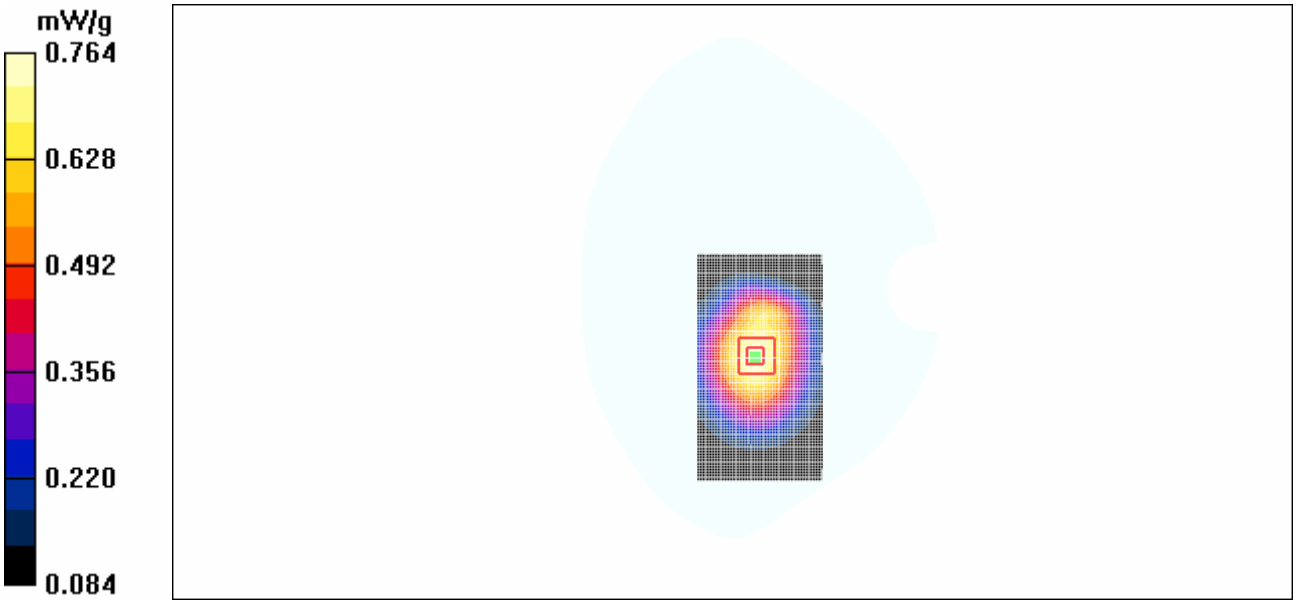


Figure 139 Body, Towards Ground, WCDMA Band V Channel 4233

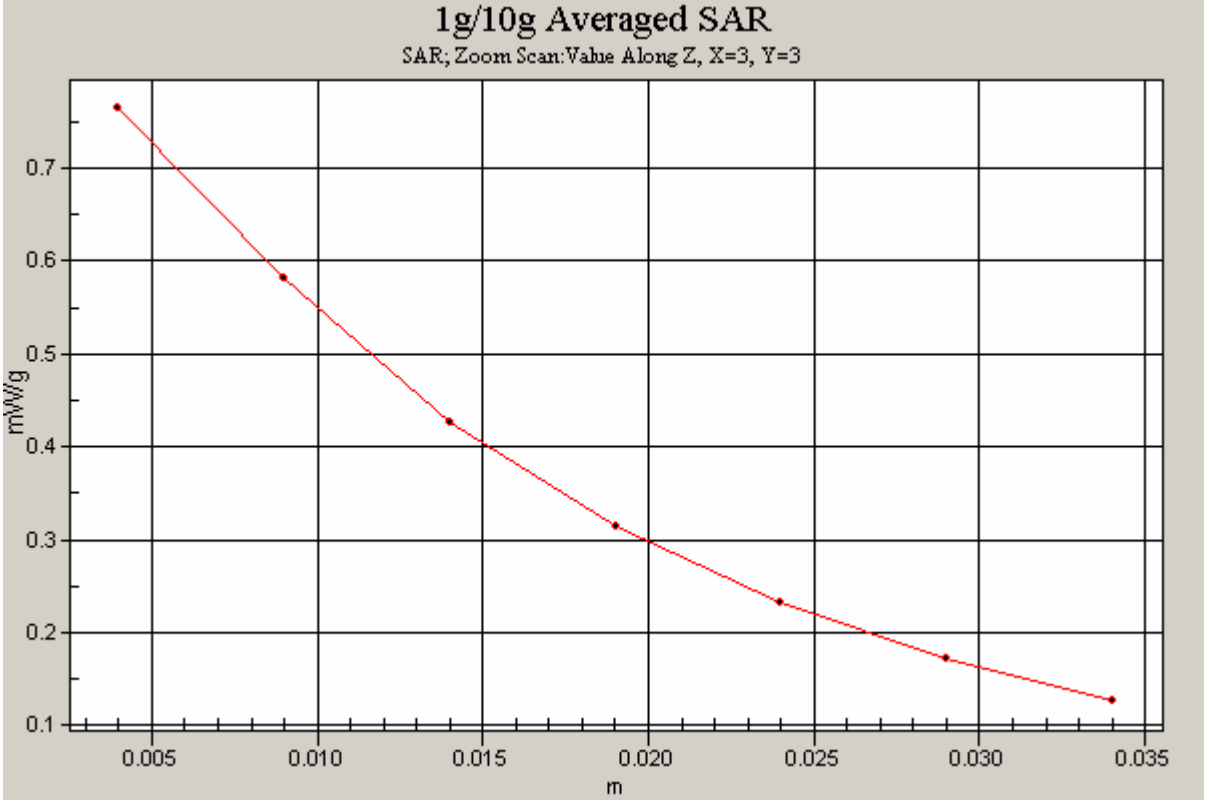


Figure 140 Z-Scan at power reference point (Body, Towards Ground, WCDMA Band V Channel 4233)

WCDMA Band V Towards Ground Middle

Communication System: WCDMA Band V; Frequency: 836.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.995 mho/m; ε_r = 54.7; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards ground Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.912 mW/g

Towards ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.7 V/m; Power Drift = -0.194 dB
Peak SAR (extrapolated) = 1.09 W/kg
SAR(1 g) = 0.846 mW/g; SAR(10 g) = 0.606 mW/g
Maximum value of SAR (measured) = 0.907 mW/g

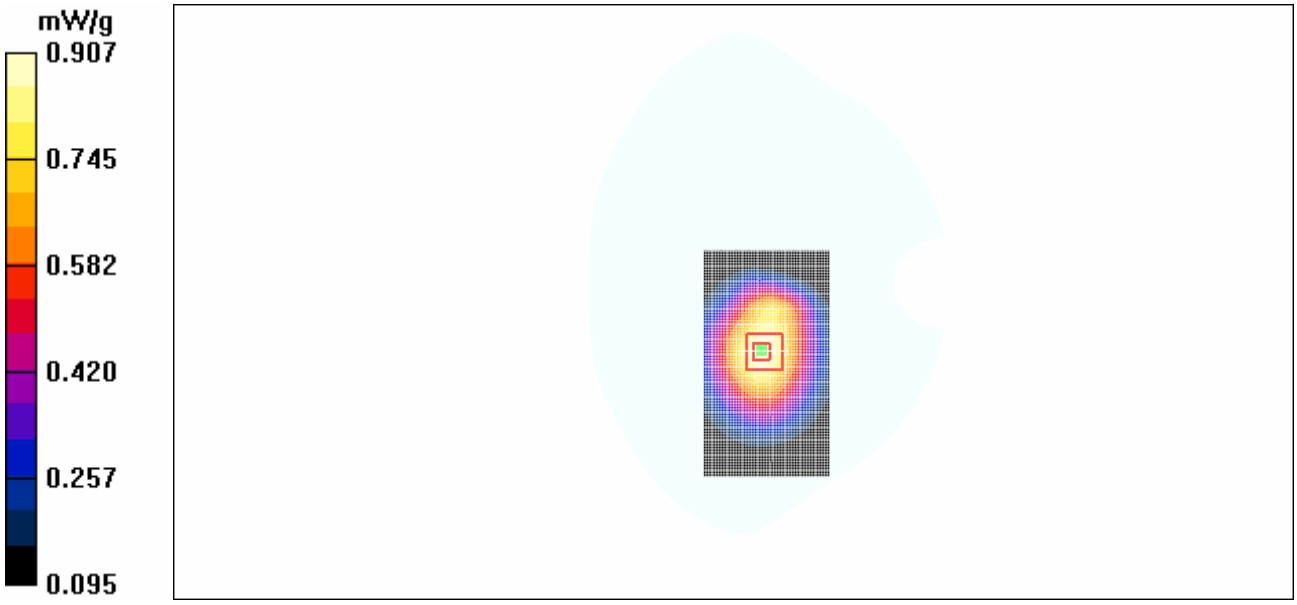


Figure 141 Body, Towards Ground, WCDMA Band V Channel 4183

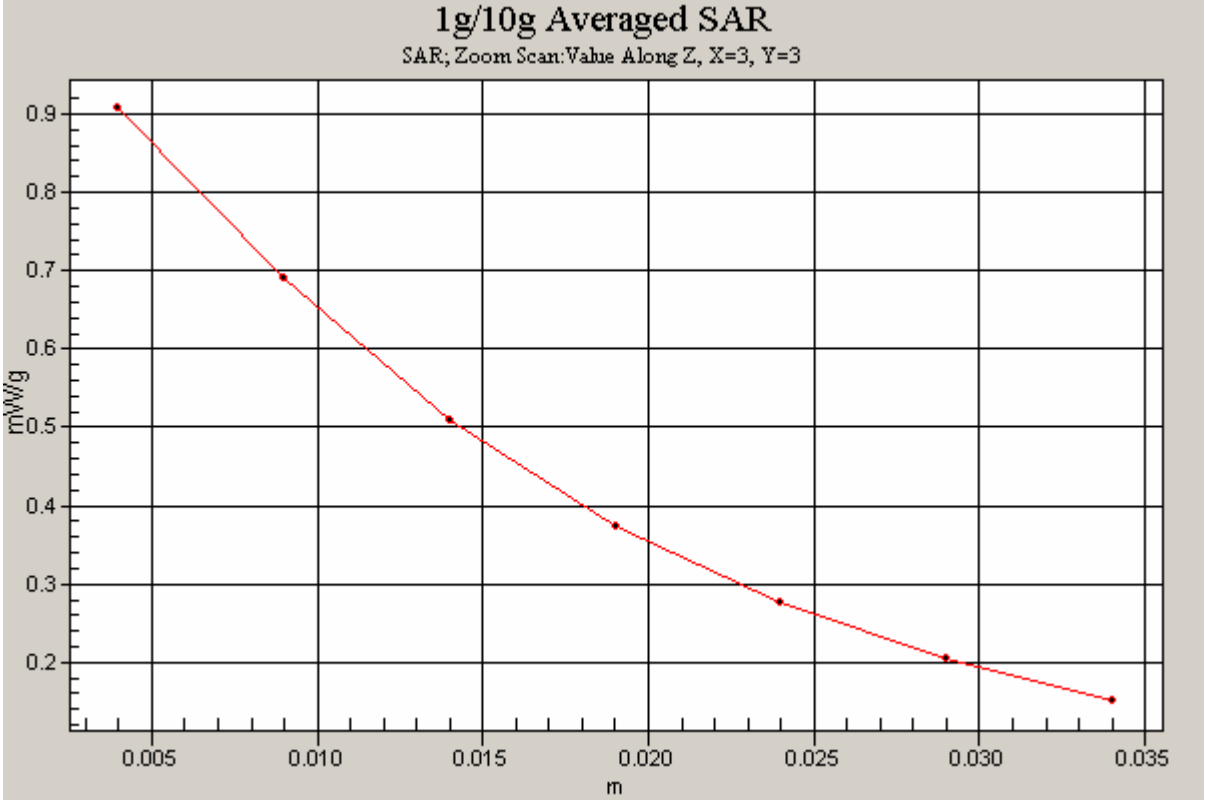


Figure 142 Z-Scan at power reference point (Body, Towards Ground, WCDMA Band V Channel 4183)

WCDMA Band V Towards Ground Low

Communication System: WCDMA Band V; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.984 mho/m; ε_r = 54.8; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards ground Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.851 mW/g

Towards ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.0 V/m; Power Drift = -0.082 dB
Peak SAR (extrapolated) = 1.00 W/kg
SAR(1 g) = 0.792 mW/g; SAR(10 g) = 0.571 mW/g
Maximum value of SAR (measured) = 0.843 mW/g

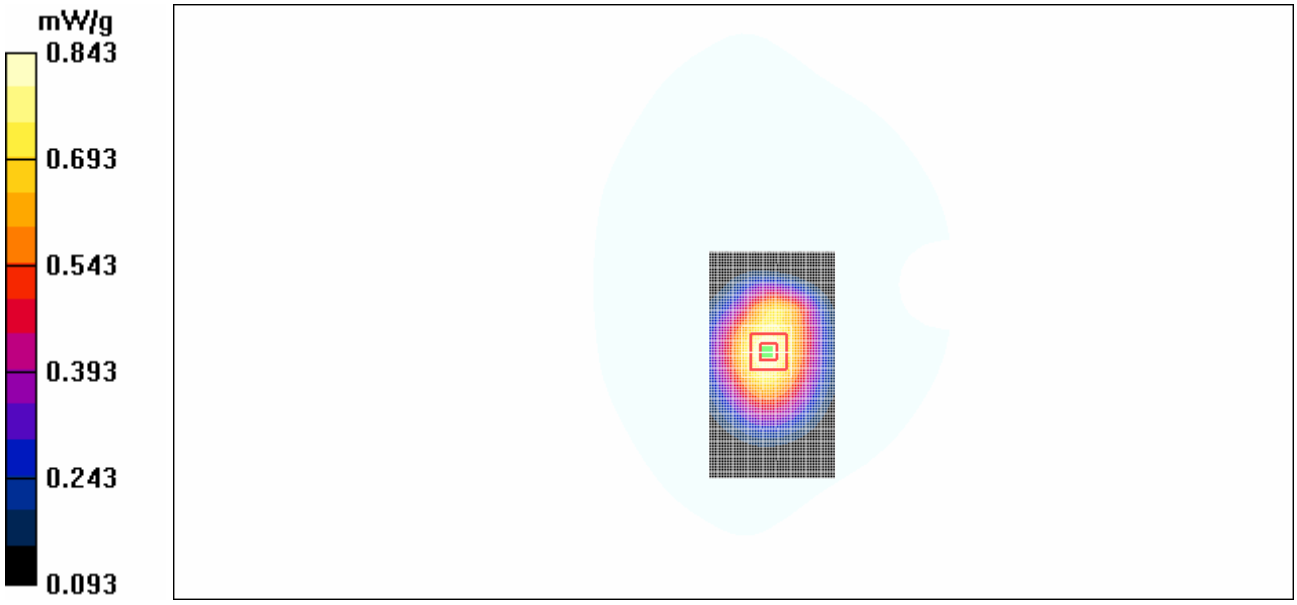


Figure 143 Body, Towards Ground, WCDMA Band V Channel 4132

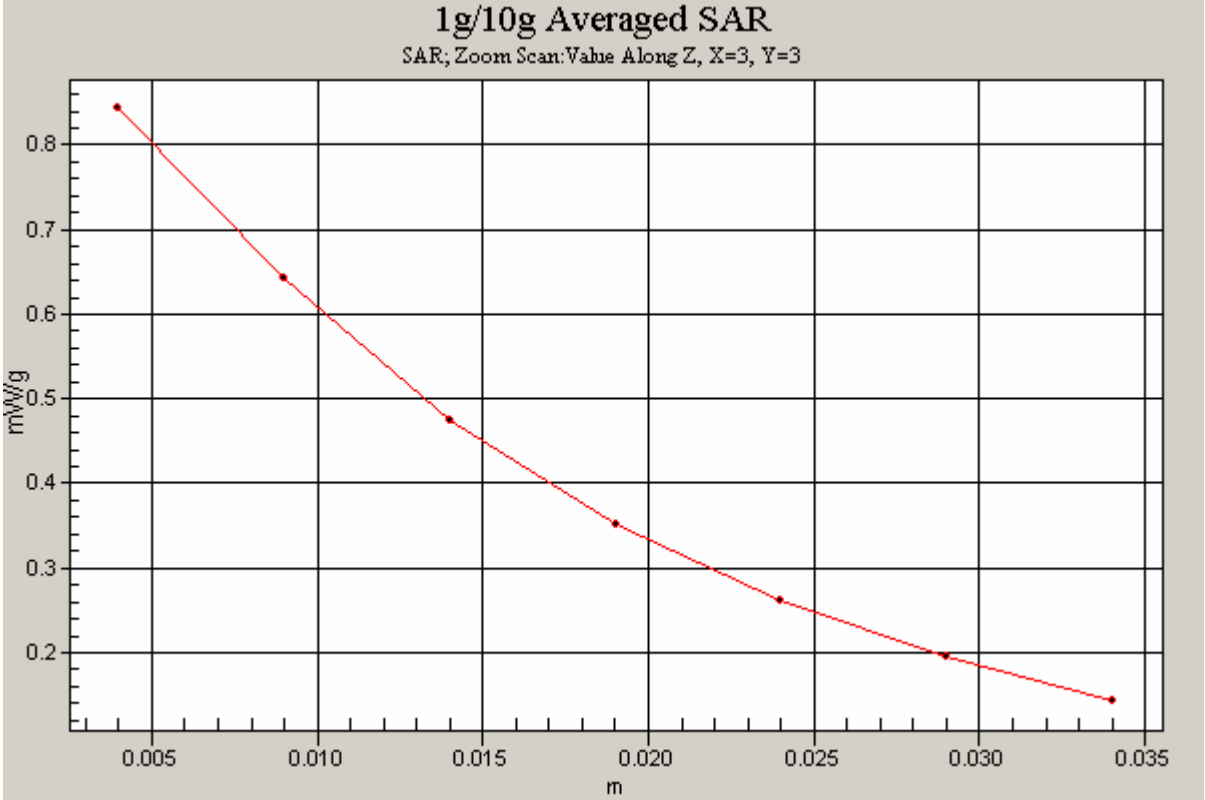


Figure 144 Z-Scan at power reference point (Body, Towards Ground, WCDMA Band V Channel 4132)

WCDMA Band V Towards Phantom High

Communication System: WCDMA Band V; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 847 MHz; σ = 1.01 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards phantom High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.470 mW/g

Towards phantom High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.7 V/m; Power Drift = -0.012 dB
Peak SAR (extrapolated) = 0.542 W/kg
SAR(1 g) = 0.436 mW/g; SAR(10 g) = 0.319 mW/g
Maximum value of SAR (measured) = 0.463 mW/g

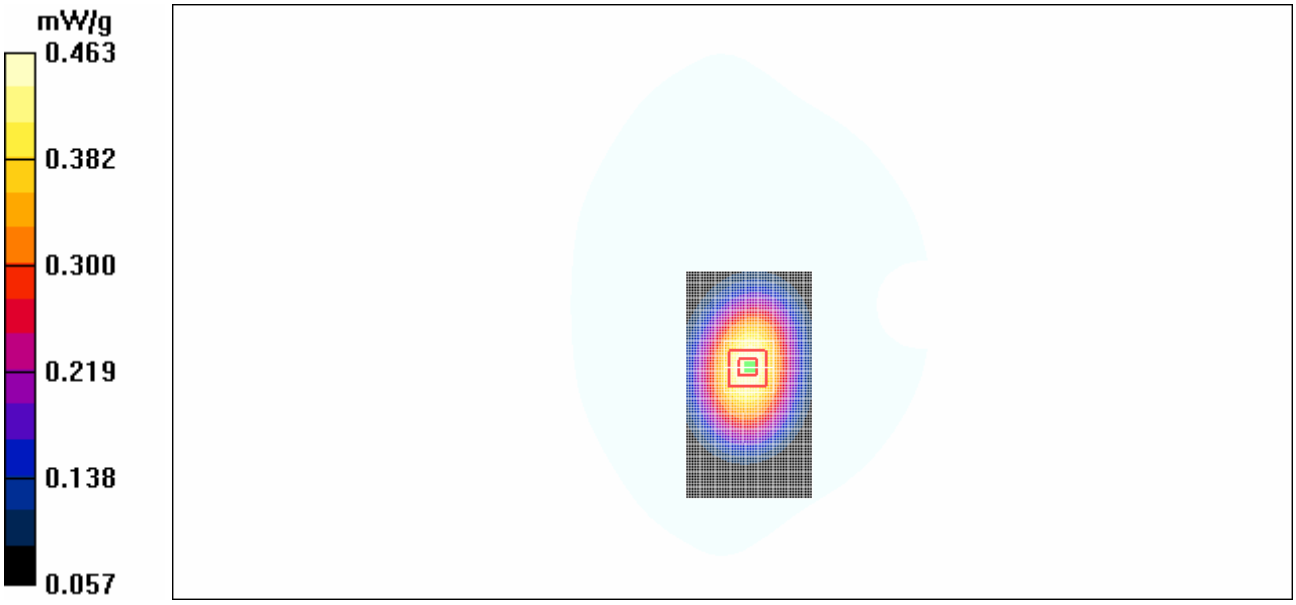


Figure 145 Body, Towards Phantom, WCDMA Band V Channel 4233

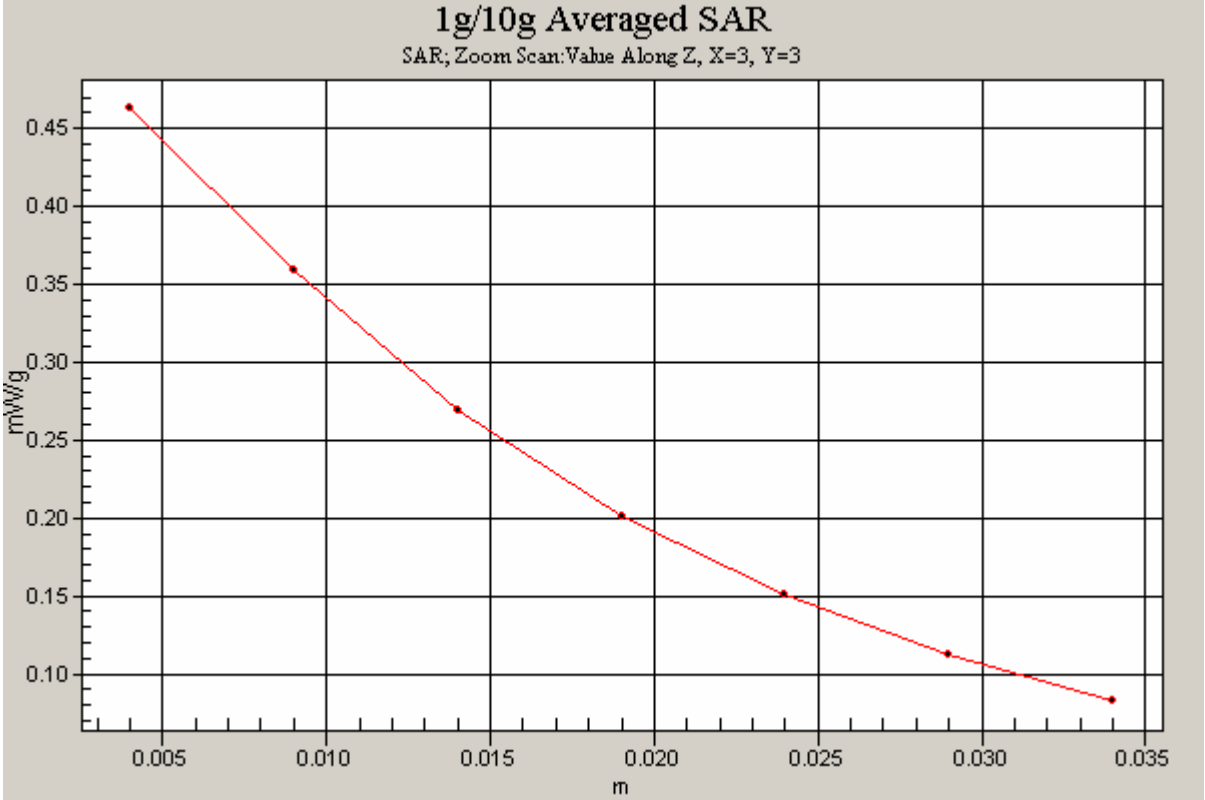


Figure 146 Z-Scan at power reference point (Body, Towards Phantom, WCDMA Band V Channel 4233)

WCDMA Band V Towards Phantom Middle

Communication System: WCDMA Band V; Frequency: 836.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.995 mho/m; ε_r = 54.7; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards phantom Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.463 mW/g

Towards phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.1 V/m; Power Drift = -0.111 dB
Peak SAR (extrapolated) = 0.537 W/kg
SAR(1 g) = 0.433 mW/g; SAR(10 g) = 0.317 mW/g
Maximum value of SAR (measured) = 0.460 mW/g

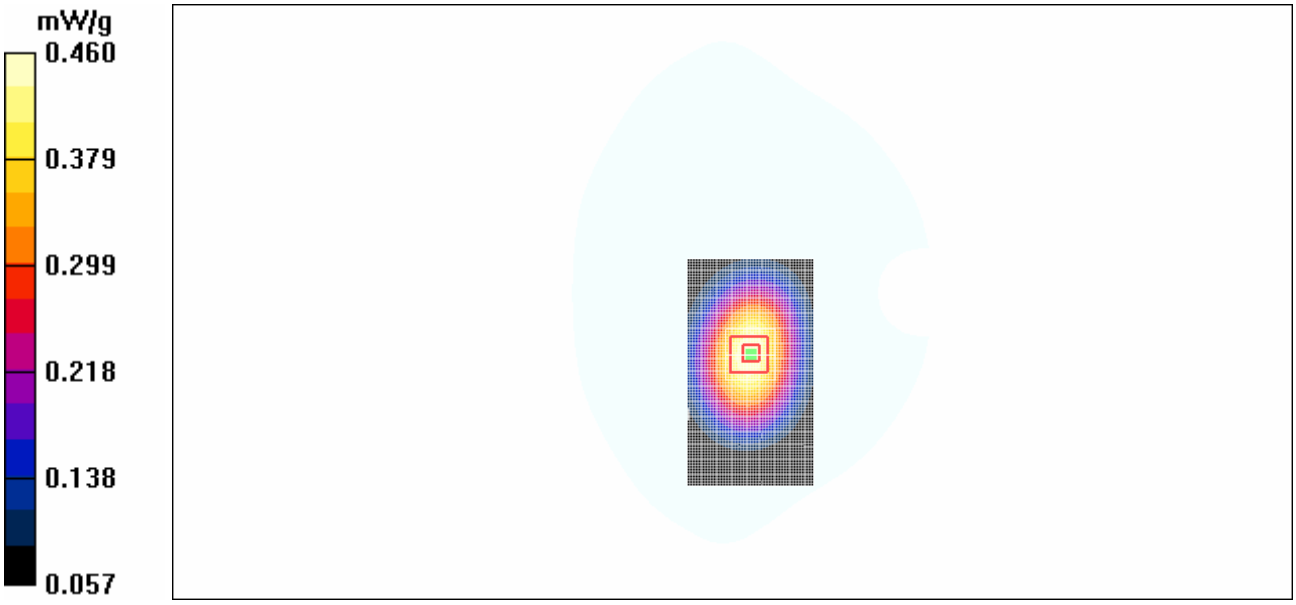


Figure 147 Body, Towards Phantom, WCDMA Band V Channel 4183

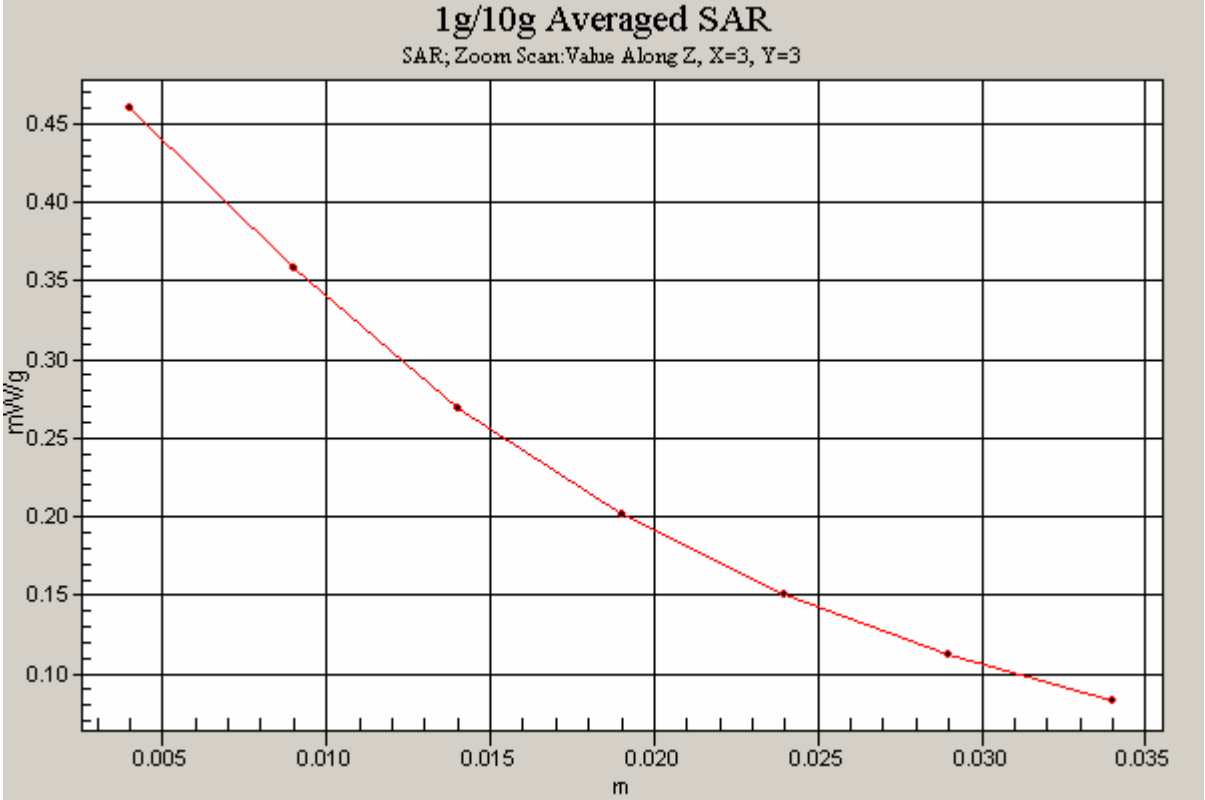


Figure 148 Z-Scan at power reference point (Body, Towards Phantom, WCDMA Band V Channel 4183)

WCDMA Band V Towards Phantom Low

Communication System: WCDMA Band V; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.984 mho/m; ε_r = 54.8; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards phantom Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.476 mW/g

Towards phantom Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.6 V/m; Power Drift = -0.087 dB
Peak SAR (extrapolated) = 0.557 W/kg
SAR(1 g) = 0.452 mW/g; SAR(10 g) = 0.333 mW/g
Maximum value of SAR (measured) = 0.475 mW/g

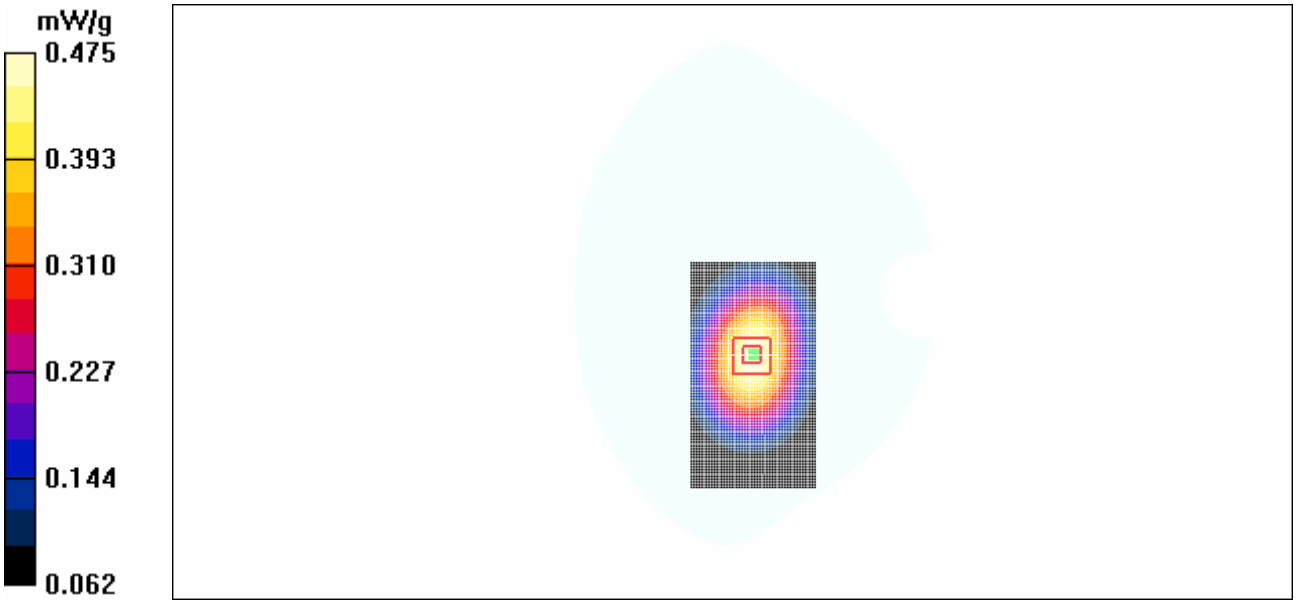


Figure 149 Body, Towards Phantom, WCDMA Band V Channel 4132

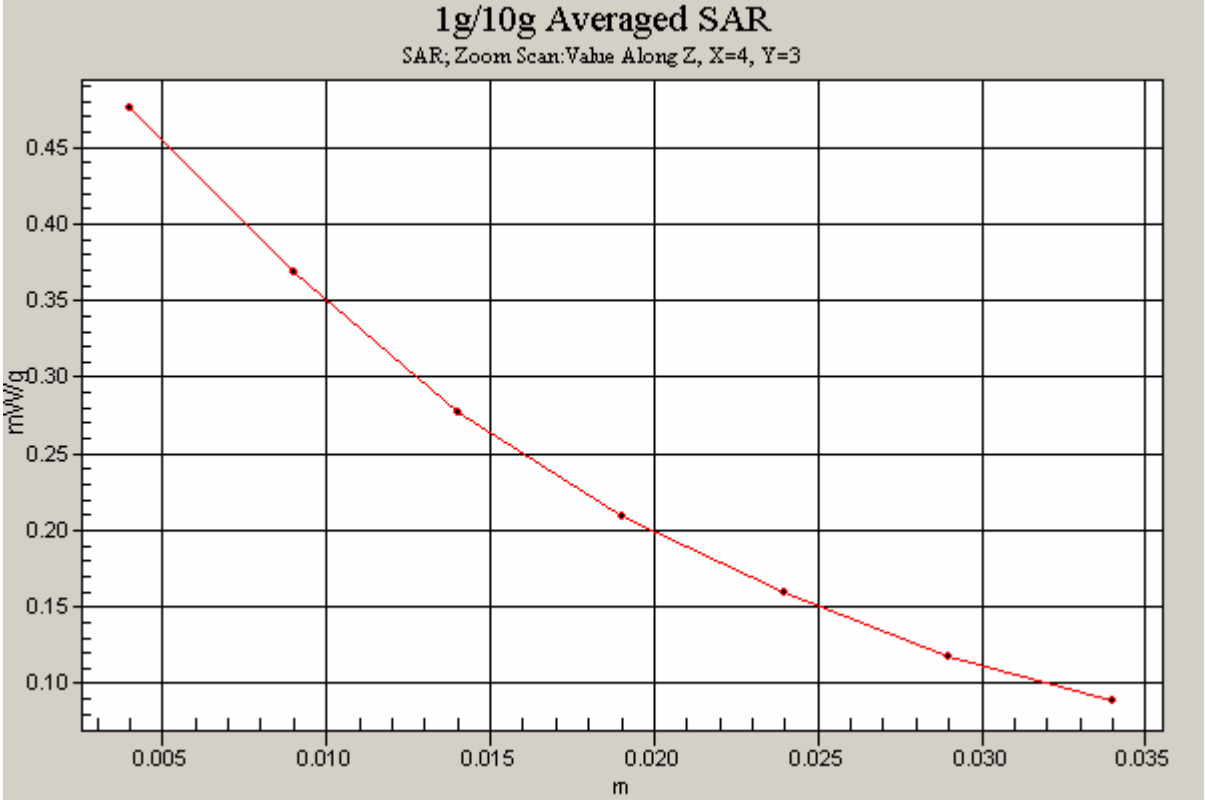


Figure 150 Z-Scan at power reference point (Body, Towards Phantom, WCDMA Band V Channel 4132)

WCDMA Band V Earphone Towards Ground Middle

Communication System: WCDMA Band V; Frequency: 836.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.995 mho/m; ε_r = 54.7; ρ = 1000 kg/m^3
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE4 Sn679;
Towards ground MiddleArea Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.608 mW/g

Towards ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.4 V/m; Power Drift = -0.115 dB
Peak SAR (extrapolated) = 0.716 W/kg
SAR(1 g) = 0.568 mW/g; SAR(10 g) = 0.411 mW/g
Maximum value of SAR (measured) = 0.607 mW/g

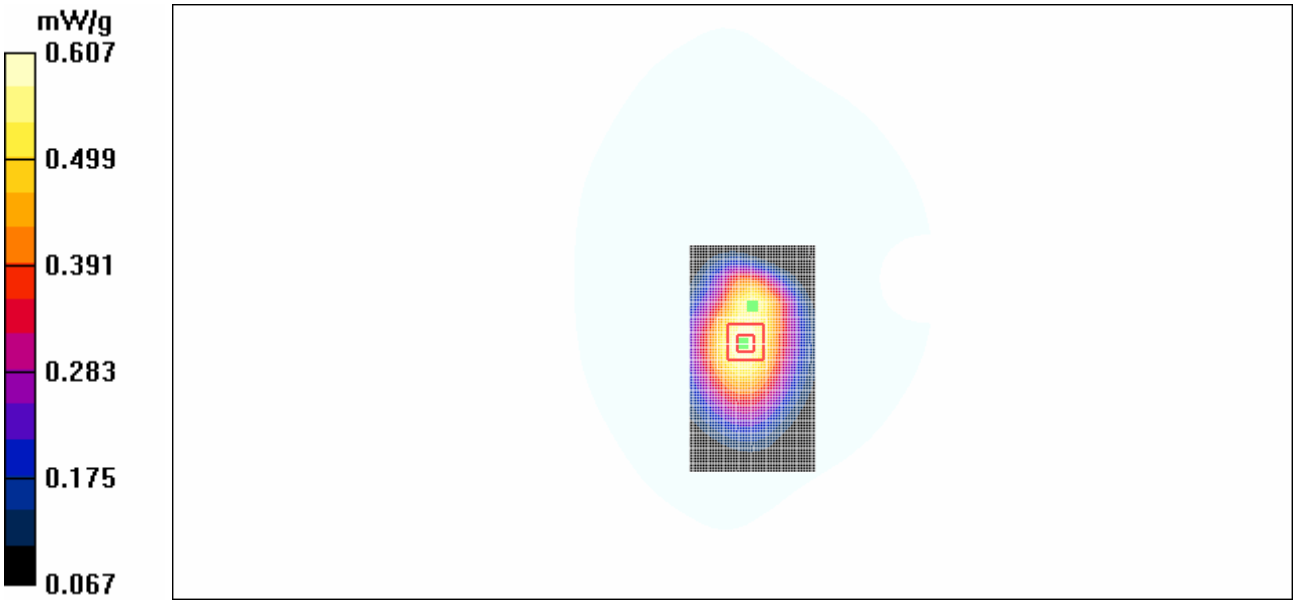


Figure 151 Body with Earphone, Towards Ground, WCDMA Band V, Channel 4183

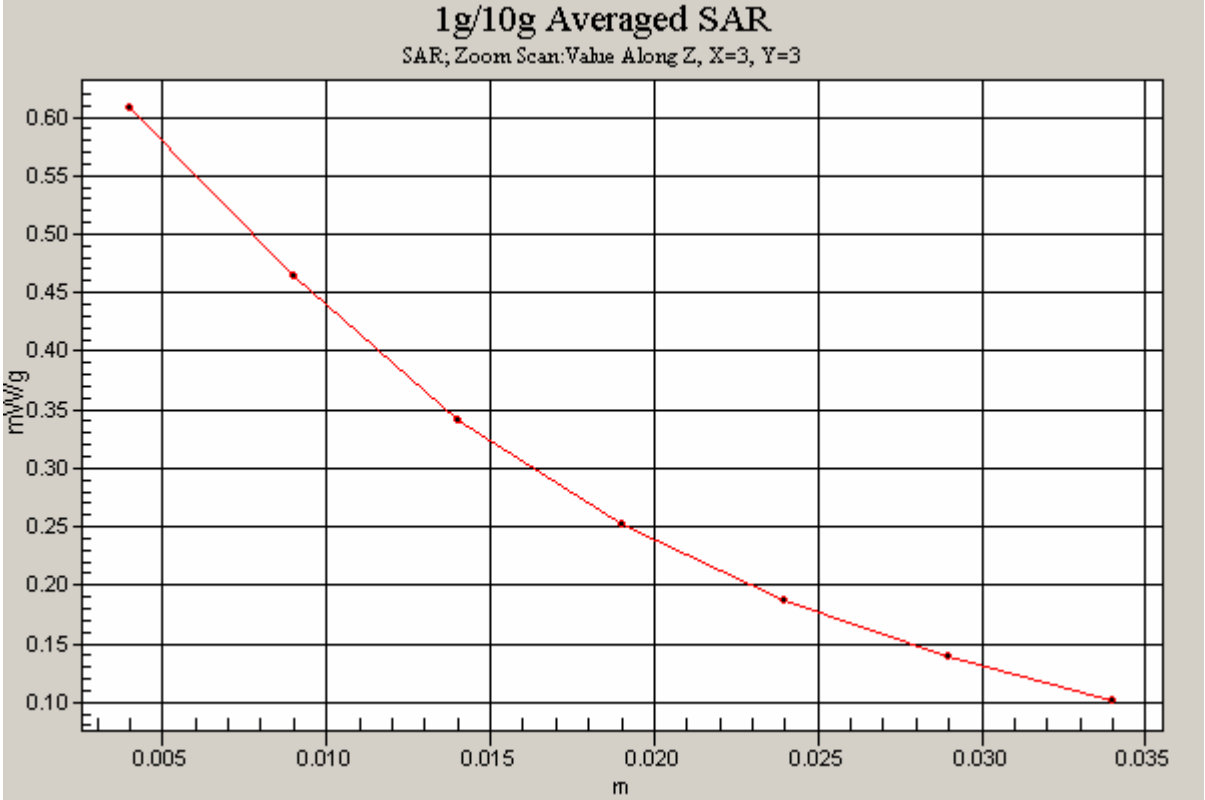


Figure 152 Z-Scan at power reference point (Body with Earphone, Towards Ground, WCDMA Band V, Channel 4183)

WCDMA Band V Bluetooth Earphone Towards Ground Middle

Communication System: WCDMA Band V; Frequency: 836.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.995 mho/m; ε_r = 54.7; ρ = 1000 kg/m^3

Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);

Electronics: DAE4 Sn679;

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

Maximum value of SAR (interpolated) = 0.848 mW/g

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

Reference Value = 19.1 V/m; Power Drift = 0.018 dB

Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.804 mW/g; SAR(10 g) = 0.577 mW/g

Maximum value of SAR (measured) = 0.856 mW/g

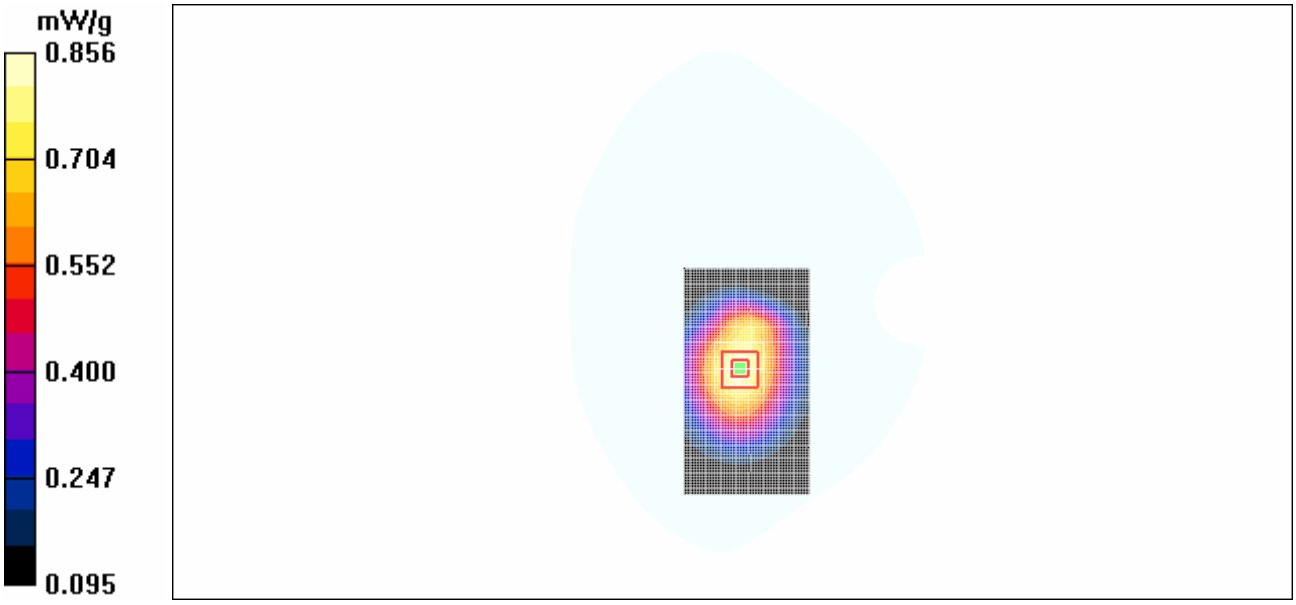


Figure 153 Body with Bluetooth earphone, Towards Ground, WCDMA Band V, Channel 4183

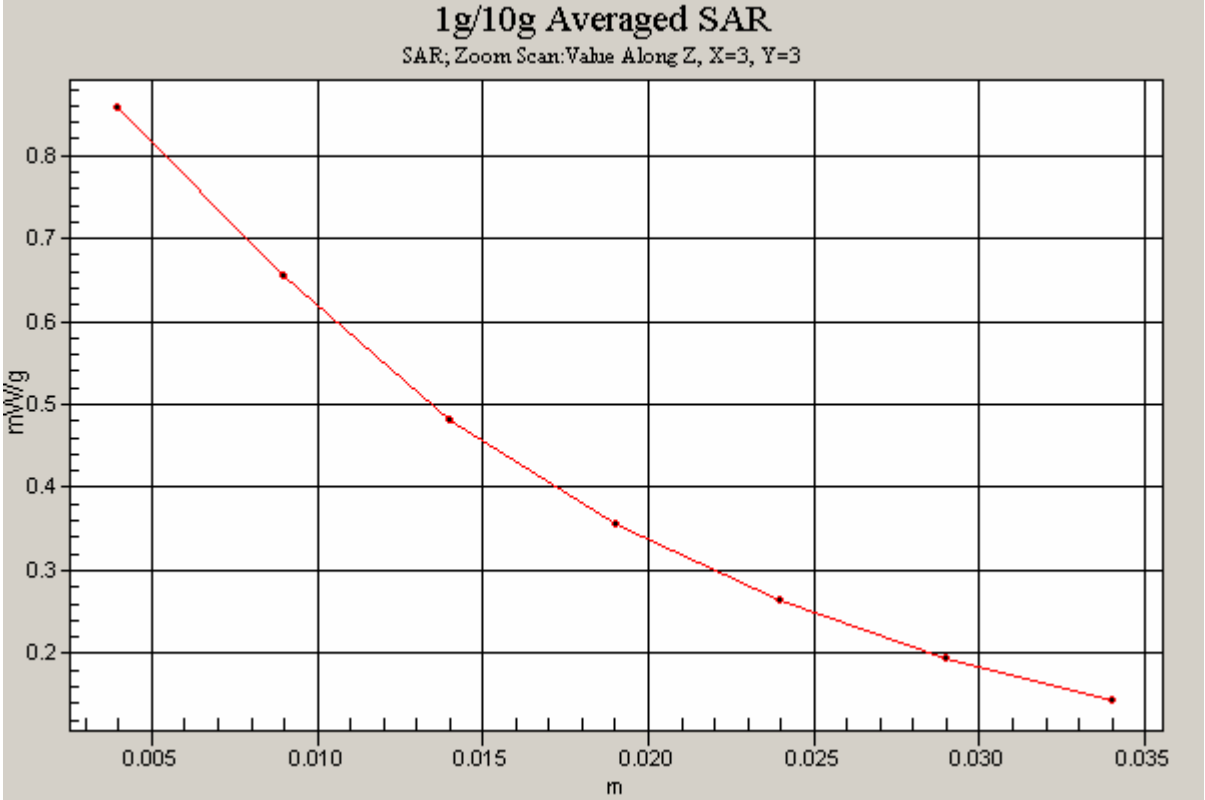


Figure 154 Z-Scan at power reference point (Body with Bluetooth earphone, Towards Ground, WCDMA Band V, Channel 4183)

ANNEX D： SYSTEM VALIDATION RESULTS

System Performance Check at 835 MHz

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 443

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: Head 835MHz

Medium parameters used: f = 835 MHz; σ = 0. 92 mho/m; ε_r = 42.36; ρ = 1000 kg/m^3

- Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);
- Electronics: DAE4 Sn679;

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.54 mW/g

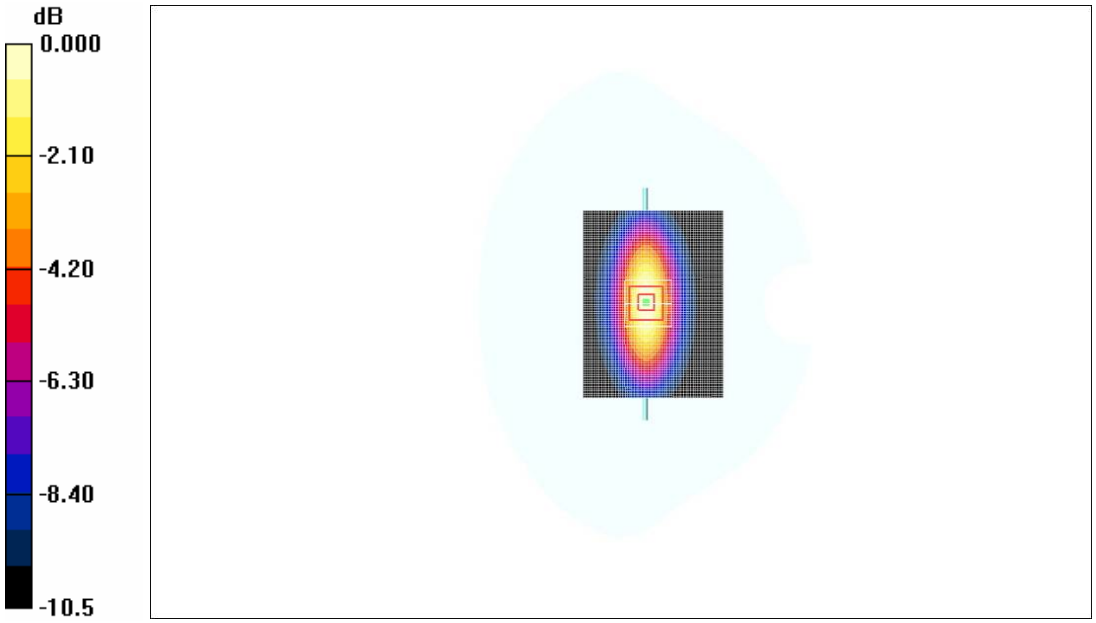
d=15mm, Pin=250mW/Zoom Scan (7x7x7) /Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.0 V/m; Power Drift = -0.061 dB

Peak SAR (extrapolated) = 3.44 W/kg

SAR(1 g) = 2.34 mW/g; SAR(10 g) = 1.53 mW/g

Maximum value of SAR (measured) = 2.52 mW/g



0 dB = 2.52mW/g

Figure 155 System Performance Check 835MHz 250mW

System Performance Check at 1900 MHz

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d018

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1900 MHz; σ = 1.43 mho/m; ε_r = 39.68; ρ = 1000 kg/m^3

Probe: ET3DV6 - SN1531; ConvF(5.15, 5.15, 5.15);

Electronics: DAE4 Sn679;

d=10mm, Pin=250mW 2/Area Scan (101x121x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 10.8 mW/g

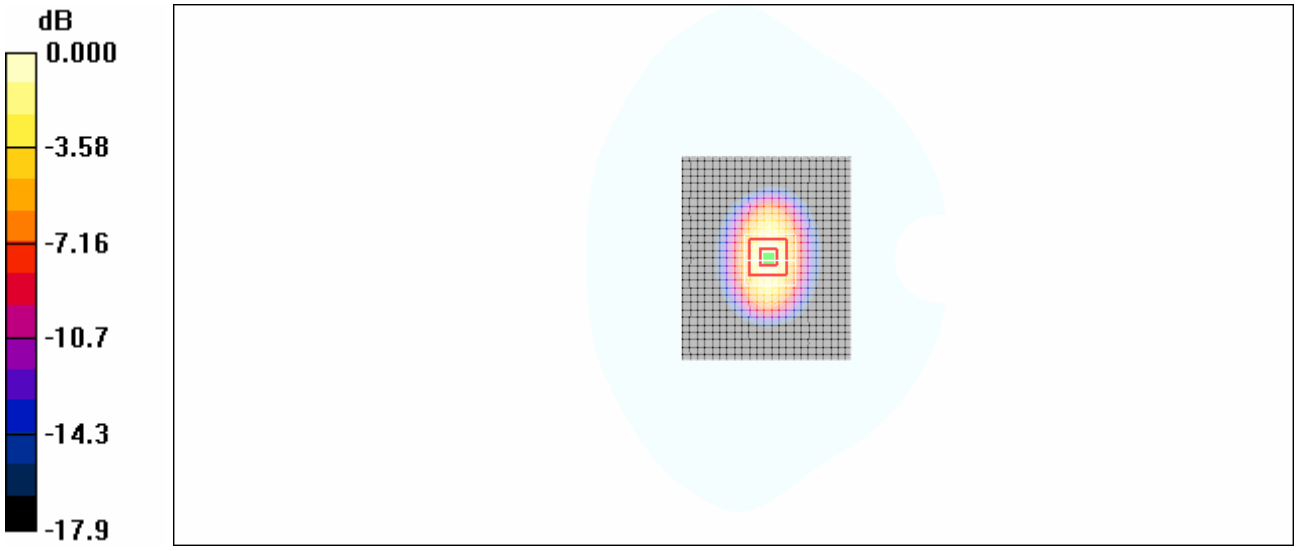
d=10mm, Pin=250mW 2/Zoom Scan (7x7x7) /Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 92.8 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 16.0 W/kg

SAR(1 g) = 9.36 mW/g; SAR(10 g) = 4.93 mW/g

Maximum value of SAR (measured) = 10.7 mW/g



0 dB = 10.7mW/g

Figure 156System Performance Check 1900MHz 250mW