Deutscher Akkreditierungs Rat

No. DAT-P-114/01-01

No. L0442

TEST REPORT

No. 2007EEE00107

FCCID	QISE660A
Test name	Electromagnetic Field (Specific Absorption Rate)
Product	HSDPA/UMTS/EDGE/GPRS/GSM Dual-mode 7-band Data Card
Model	E660A
Client	HUAWEI Technologies Co., Ltd.
Type of test	Non Type approval

Telecommunication Metrology Center

of Ministry of Information Industry

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Product name	HSDPA/UMTS/EDGE/GPRS/GSM Dual-mode 7-band Data Card	Sample Model	E660A
Client	HUAWEITechnologies Co., Ltd.	Type of test	Non Type Approval
Factory	HUAWEI Technologies Co., Ltd.	Sampling arrival date	Dec 29th, 2006
Manufacturer	HUAWEI Technologies Co., Ltd.		
Sampling/ Sending sample	Sending sample	Sample sent by	Xie Yan
Sampling location	/	Sampling person	/
Sample quantity	1	Sample matrix	/
Series number of the Sample	/		
Manufacture date	/	Manufacture location	China, Shenzhen
Test basis	**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. **IEC 62209-2 (Draft):** Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures – Part 2: Procedure to determine the Specific Absorption Rate (SAR)in the head and body for 30MHz to 6GHz Handheld and Body-Mounted Devices used in close proximity to the Body. **OET Bulletin 65 (Edition 97-01) and Supplement C(Edition 01-01):** Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits. **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. **Vodafone SAR_Data_cards_V1.1:**Global Test Specification for Terminals for Performance Measurements –Performance TST- Specific Absorption Rate (SAR) for Data Cards and External Antennas.		
Test 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 5.2 of this test report. Maximum localized SAR is below exposure limits specified in the relevant standards cited in Clause 5.1 of this test report. General Judgment: **Pass** (Stamp) **Date of issue: Jan 21st, 2007**		
Note	The test results relate only to the items tested of the sample(s).		

Approved by (Lu Minniu) **Deputy Director of the laboratory** **Reviewed by** (Chu Wenhua) **Tested by** (Sun Qian)

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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, Shenzhen, Guangdong
City	Shenzhen
Postal Code	518129
Country	China
Telephone	0755-28780808
Fax	0755-28780808

Table 2: Manufacturer

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

3.2 Constituents of EUT

Table 3: Constituents of Samples

Description	Model	Serial Number	Manufacturer
HSDPA/UMTS/EDGE/GPRS/GSM Dual-mode 7-band Data Card	E660A	\	HUAWEI Technologies Co., Ltd.
External Antenna	E660A	\	HUAWEI Technologies Co., Ltd.

Picture 1-a: Front side of the datacard

Picture 1-b: Back Side of the datacard

Picture 1-c: the External Antenna

Picture 1: Constituents of the sample

3.3 General Description

Equipment Under Test (EUT) are an HSDPA/UMTS/EDGE/GPRS/GSM Dual-mode 7-band Data Card and an external antenna. SAR is tested respectively for WCDMA 850MHz, WCDMA 1900MHz, 850MHz and 1900MHz with 3 different Laptops for the datacard and with one laptop for the external antenna. Also SAR is tested for HSDPA 850 and HSDPA 1900 with the worst cases of WCDMA 850MHz, WCDMA 1900MHz of three different laptops and the external antenna. The EUT has GPRS function, and its GPRS class is 12.

Since the datacard only has the data transfer function, but does not have the speech transfer function, the tests in the band of 850MHz and 1900MHz are only performed in the mode of GPRS both for the datacard and the external antenna.

The sample under test was selected by the Client.
Components list please refer to documents of the manufacturer.

4 OPERATIONAL CONDITIONS DURING TEST

4.1 Schematic Test Configuration

During SAR test of the EUT, it is in Traffic Mode (Channel Allocated) at Normal Voltage Condition. A communication link is set up with the test mode software, and a call is established. At the same time, the RF power is monitored by instruments. The EUT is commanded to operate at maximum transmitting power.

And according to the "2 dB rule" specified in the OET Bulletin 65 (Edition 97-01) and Supplement C(Edition 01-01), **" If the SAR measured at the middle channel for each test configuration (left, right, Cheek/Touch, Tile/Ear, extended and retracted) is at least 2.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s)"**. Then The Absolute Radio Frequency Channel Number (ARFCN) is firstly allocated to 4182, 9400, 190 and 661 respectively in the case of WCDMA(HSDPA) 850MHz, WCDMA (HSDPA)1900MHz, 850MHz and 1900MHz.

For each channel, the datacard is tested at the following 5 test positions:

- Test Position 1: The EUT is plugged in the PCMCIA slot of the portable computer. The back side of the EUT is directed to the bottom of the flat phantom. The separation distance is 1.5cm between the surface of the back side of the EUT and the bottom of the flat phantom.（Picture 2-a）
- Test Position 2: The EUT is plugged in the PCMCIA slot of the portable computer. The front side of the EUT is directed to the bottom of the flat phantom. The separation distance is 1.5cm between the surface of the front side of the EUT and the bottom of the flat phantom.（Picture 2-b）
- Test Position 3: The EUT is plugged in the PCMCIA slot of the portable computer. The flank side of the EUT is directed to the bottom of the flat phantom. The separation distance is 1.5cm between the surface of the flank side of the EUT and the bottom of the flat phantom (PCMCIA extended card needed).（Picture 2-c）

- Test Position 4: The same as Mode 3 except for testing the other side of the flank.（Picture 2-d）
- Test Position 5: The EUT is plugged in the PCMCIA slot of the portable computer. The top of the EUT is directed to the bottom of the flat phantom. The separation distance is 1.5cm between the top of the EUT and the bottom of the flat phantom. (Picture 2-e）

The external antenna is tested at the following 5 test positions all at the middle channel:

- Test Position 1: The EUT is connected to the datacard operating at the maximum power. The back side of the EUT is directed to the bottom of the flat phantom. The separation distance is 1.5cm between the surface of the back side of the EUT and the bottom of the flat phantom.（Picture 2-f）
- Test Position 2: The EUT is connected to the datacard operating at the maximum power. The front side of the EUT is directed to the bottom of the flat phantom. The separation distance is 1.5cm between the surface of the front side of the EUT and the bottom of the flat phantom. Picture 2-g）
- Test Position 3: The EUT is connected to the datacard operating at the maximum power. The flank side of the EUT is directed to the bottom of the flat phantom. The separation distance is 1.5cm between the surface of the flank side of the EUT and the bottom of the flat phantom.（Picture 2-h）
- Test Position 4: The same as Mode 3 except for testing the other side of the flank. （Picture 2-i）
- Test Position 5:The EUT is connected to the datacard operating at the maximum power. The top of the EUT is directed to the bottom of the flat phantom. The separation distance is 1.5cm between the top of the EUT and the bottom of the flat phantom.（Picture 2-j）

Note: When the external antenna is tested at 850MHz, the separation distance is not 1.5cm but 2.5cm.

Picture 2-a: Test position 1 of the Data Card

Picture 2-b: Test position 2 of the Data Card

Picture 2-c: Test position 3 of the Data Card

Picture 2-d: Test position 4 of the Data Card

Picture 2-e: Test position 5 of the Data Card

Picture 2-f: Test position 1 of the Antenna

Picture 2-g: Test position 2 of the Antenna

Picture 2-h: Test position 3 of the Antenna

Picture 2-i: Test position 4 of the Antenna

Picture 2-j: Test position 5 of the Antenna

Picture 2: Test positions of EUTs

During the test of the datacard, three Laptops are used as the test assistant to help to setup communication, whose type are IBM X24 (See Picture 3-a and 3-b), Dell LATIDUE D600 (See Picture 3-c and 3-d), and HP compaq nc6130 ((See Picture 3-e and 3-f).

Picture 3-a: Close

Picture 3-b: Open

Picture 3-c: Close

Picture 3-d: Open

Picture 3-e: Close

Picture 3-f: Open

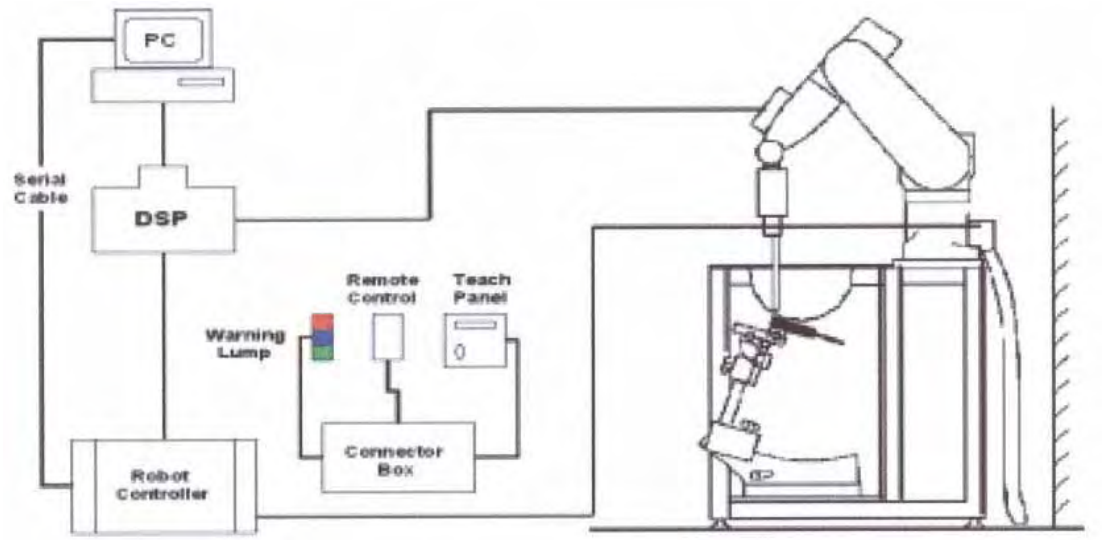
Picture 3: Three laptops as test assistants

4.2 SAR Measurement Set-up

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

Schottky diode and connected via highly resistive lines (length =300mm) to the data acquisition unit.

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



Picture 4: SAR Lab Test Measurement Set-up

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

4.3 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 450MHz, 900MHz and 1.8GHz (accuracy±8%)
	Calibration for other liquids and frequencies upon request
Frequency	l 0 MHz to > 6 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 normal 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 diameter: 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

Picture 5: ET3DV6 E-field Probe

Picvure 6: ET3DV6 E-field

4.4 E-field Probe Calibration

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

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

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

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

Where: Δt = Exposure time (30 seconds),

C = Heat capacity of tissue (brain or muscle),

ΔT = Temperature increase due to RF exposure.

Or

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

Where:

σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m^3).

Note: Please see Annex E to check the probe calibration certificate.

Picture 7: Device Holder

4.5 Other Test Equipment

4.5.1 Device Holder for Transmitters

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

4.5.2 Phantom

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

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

Picture 8: Generic Twin Phantom

4.6 Equivalent Tissues

The liquid used for the frequency range of 800-2000 MHz consisted of water, sugar, salt and Cellulose. The liquid has been previously proven to be suited for worst-case. The Table 4 shows

the detail solution. It's satisfying the latest tissue dielectric parameters requirements proposed by the IEEE 1528.

Table 4. Composition of the Body Tissue Equivalent Matter

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

4.7 System Specifications

4.7.1 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

5 CHARACTERISTICS OF THE TEST

5.1 Applicable Limit Regulations

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

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

ANSI C95.1–1999: IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.

It specifies the maximum exposure limit of **1.6 W/kg** as averaged over any 1 gram of tissue for portable devices being used within 20 cm of the user in the uncontrolled environment.

5.2 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.

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

OET Bulletin 65 (Edition 97-01) and Supplement C (Edition 01-01): Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits.

IEC 62209-2 (Draft): Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures –Part 2: Procedure to determine the Specific Absorption Rate (SAR)in the head and body for 30MHz to 6GHz Handheld and Body-Mounted Devices used in close proximity to the body.

Vodafone SAR_Data_cards_V1.1: Global Test Specification for Terminals for Performance Measurements –Performance TST- Specific Absorption Rate (SAR) for Data Cards and External Antennas.

They specify the measurement method for demonstration of compliance with the SAR limits for such equipments.

6 LABORATORY ENVIRONMENT

Table 5: The Ambient Conditions during EMF Test

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

7 CONDUCTED OUTPUT POWER MEASUREMENT

7.1 Summary

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

7.2 Conducted Power

7.2.1 Measurement Methods

The EUT was set up for the maximum output power. The channel power was measured with Agilent Spectrum Analyzer E4440A. These measurements were done at 3 channels both before SAR test and after SAR test for each test band.

7.2.2 Measurement result

Table 6: Conducted Power Measurement Results

WCDMA 850	**Conducted Power**		
	Channel 4132 (826.4MHz)	**Channel 4182 (836.4MHz)**	**Channel 4233 (846.6MHz)**
Before Test (dBm)	22.87	22.96	22.94
After Test (dBm)	22.83	22.91	22.90
WCDMA 1900	**Conducted Power**		
	Channel 9262 (1852.4MHz)	**Channel 9400 (1880MHz)**	**Channel 9538 (1907.6MHz)**
Before Test (dBm)	23.64	23.65	23.54
After Test (dBm)	23.61	23.64	23.56
HSDPA 850	**Conducted Power**		
	Channel 4132 (826.4MHz)	**Channel 4182 (836.4MHz)**	**Channel 4233 (846.6MHz)**
Before Test (dBm)	21.78	21.86	21.69
After Test (dBm)	21.77	21.87	21.65
HSDPA 1900	**Conducted Power**		
	Channel 9262 (1852.4MHz)	**Channel 9400 (1880MHz)**	**Channel 9538 (1907.6MHz)**
Before Test (dBm)	21.68	21.79	21.65
After Test (dBm)	21.69	21.76	21.63
850MHz	**Conducted Power**		
	Channel 128 (824.2MHz)	**Channel 190 (836.6MHz)**	**Channel 251 (848.8MHz)**
Before Test (dBm)	32.78	32.87	32.74
After Test (dBm)	32.72	32.88	32.71
1900MHZ	**Conducted Power**		
	Channel 512 (1850.2MHz)	**Channel 661 (1880MHz)**	**Channel 810 (1909.8MHz)**
Before Test (dBm)	29.00	29.24	29.17
After Test (dBm)	29.01	29.22	29.15

7.2.3 Power Drift

To control the output power stability during the SAR test, DASY4 system calculates the power drift by measuring the E-field at the same location at the beginning and at the end of the measurement for each test position. These drift values can be found in Table 9 to Table 26 labeled as: (Power Drift [dB]). This ensures that the power drift during one measurement is within 5%.

8 TEST RESULTS

8.1 Dielectric Performance

Table 7: Dielectric Performance of Body Tissue Simulating Liquid

Measurement is made at temperature 23.3 ℃ and relative humidity 49%. Liquid temperature during the test: 22.5℃			
/	**Frequency**	**Permittivity ε**	**Conductivity σ (S/m)**
Target value	850 MHz	55.2	0.97
	1900 MHz	53.3	1.52
Measurement value (Average of 10 tests)	850 MHz	53.4	1.00
	1900 MHz	51.5	1.57

8.2 System Validation

Table 8: System Validation

Measurement is made at temperature 23.3 ℃, relative humidity 49%, input power 250 mW. Liquid temperature during the test: 22.5℃					
Liquid parameters		**Frequency**	**Permittivity ε**		**Conductivity σ (S/m)**
		835 MHz	41.7		0.88
		1900 MHz	39.2		1.45
Verification results	**Frequency**	**Target value (W/kg)**		**Measurement value (W/kg)**	
		10 g Average	**1 g Average**	**10 g Average**	**1 g Average**
	835 MHz	1.55	2.375	1.62	2.48
	1900 MHz	5.31	10.1	5.27	9.91

Note：Target Values used are one fourth of those in IEEE Std 1528-2003 (feeding power is normalized to 1 Watt), i.e. 250 mW is used as feeding power to the validation dipole (SPEAG using).

8.3 Summary of Measurement Results (WCDMA 850)

Table 9: SAR Values (Datacard WCDMA 850 with IBM Laptop)

Limit of SAR (W/kg)	10 g Average	1 g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		
	10 g Average	1 g Average	
Flat Phantom, Test Position 1, Mid frequency (See Figure 1)	0.032	0.049	-0.117
Flat Phantom, Test Position 3, Mid frequency (See Figure 3)	0.030	0.044	0.008
Flat Phantom, Test Position 5, Mid frequency (See Figure 5)	0.010	0.016	0.122
Flat Phantom, Test Position 7, Mid frequency (See Figure 7)	0.014	0.020	0.008
Flat Phantom, Test Position 9, Mid frequency (See Figure 9)	0.00503	0.00758	0.106

Table 10: SAR Values (Datacard WCDMA 850 with Dell Laptop)

Limit of SAR (W/kg)	10 g Average	1 g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		
	10 g Average	1 g Average	
Flat Phantom, Test Position 11, Mid frequency (See Figure 11)	0.035	0.051	-0.142
Flat Phantom, Test Position 13, Mid frequency (See Figure 13)	0.024	0.036	-0.085
Flat Phantom, Test Position 15, Mid frequency (See Figure 15)	0.016	0.023	-0.139
Flat Phantom, Test Position 17, Mid frequency (See Figure 17)	0.010	0.014	0.007
Flat Phantom, Test Position 19, Mid frequency (See Figure 19)	0.00349	0.00586	0.192

Table 11: SAR Values (Datacard WCDMA 850 with HP Laptop)

Limit of SAR (W/kg)	10 g Average	1 g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		
	10 g Average	1 g Average	
Flat Phantom, Test Position 21, Mid frequency (See Figure 21)	0.022	0.033	0.181
Flat Phantom, Test Position 23, Mid frequency (See Figure 23)	0.020	0.029	0.176
Flat Phantom, Test Position 25, Mid frequency (See Figure 25)	0.012	0.019	0.153
Flat Phantom, Test Position 27, Mid frequency (See Figure 27)	0.016	0.025	-0.166
Flat Phantom, Test Position 29, Mid frequency (See Figure 29)	0.00142	0.00736	-0.137

Table 12: SAR Values (External Antenna WCDMA 850)

Limit of SAR (W/kg)	10 g Average	1 g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		
	10 g Average	1 g Average	
Flat Phantom, Test Position 31, Mid frequency (See Figure 31)	0.029	0.042	-0.020
Flat Phantom, Test Position 33, Mid frequency (See Figure 33)	0.028	0.040	0.044
Flat Phantom, Test Position 35, Mid frequency (See Figure 35)	0.014	0.020	-0.192
Flat Phantom, Test Position 37, Mid frequency (See Figure 37)	0.011	0.016	0.089
Flat Phantom, Test Position 39, Mid frequency (See Figure 39)	0.000141	0.000404	-0.200

Table 13: SAR Values (HSDPA 850)

Limit of SAR (W/kg)	10 g Average	1 g Average	Power Drift (dB)
	2.0	1.6	
Test Case	**Measurement Result (W/kg)**		
	10 g Average	**1 g Average**	
Flat Phantom, Test Position 1, Mid frequency with IBM Laptop (See Figure 41)	0.030	0.047	-0.153
Flat Phantom, Test Position 1, Mid frequency with Dell Laptop (See Figure 43)	0.034	0.049	-0.122
Flat Phantom, Test Position 1, Mid frequency HP Laptop (See Figure 45)	0.021	0.031	0.100
Flat Phantom, Test Position 1, Mid frequency with External antenna (See Figure 47)	0.026	0.041	0.109

8.4 Summary of Measurement Results (WCDMA 1900)

Table 14: SAR Values (Datacard WCDMA 1900 with IBM Laptop)

Limit of SAR (W/kg)	10 g Average	1 g Average	Power Drift (dB)
	2.0	1.6	
Test Case	**Measurement Result (W/kg)**		
	10 g Average	**1 g Average**	
Flat Phantom, Test Position 1, Mid frequency (See Figure 49)	0.041	0.065	-0.118
Flat Phantom, Test Position 3, Mid frequency (See Figure 51)	0.040	0.064	-0.200
Flat Phantom, Test Position 5, Mid frequency (See Figure 53)	0.00885	0.025	-0.192
Flat Phantom, Test Position 7, Mid frequency (See Figure 55)	0.024	0.040	0.153
Flat Phantom, Test Position 9, Mid frequency (See Figure 57)	0.00989	0.020	-0.165

Table 15: SAR Values (Datacard WCDMA 1900 with Dell Laptop)

Limit of SAR (W/kg)	10 g Average	1 g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		
	10 g Average	1 g Average	
Flat Phantom, Test Position 11, Mid frequency (See Figure 59)	0.044	0.066	-0.016
Flat Phantom, Test Position 13, Mid frequency (See Figure 61)	0.038	0.060	-0.109
Flat Phantom, Test Position 15, Mid frequency (See Figure 63)	0.088	0.024	0.167
Flat Phantom, Test Position 17, Mid frequency (See Figure 65)	0.020	0.032	0.028
Flat Phantom, Test Position 19, Mid frequency (See Figure 67)	0.016	0.027	-0.108

Table 16: SAR Values (Datacard WCDMA 1900 with HP Laptop)

Limit of SAR (W/kg)	10 g Average	1 g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		
	10 g Average	1 g Average	
Flat Phantom, Test Position 21, Mid frequency (See Figure 69)	0.035	0.053	0.182
Flat Phantom, Test Position 23, Mid frequency (See Figure 71)	0.031	0.050	-0.200
Flat Phantom, Test Position 25, Mid frequency (See Figure 73)	0.017	0.026	-0.178
Flat Phantom, Test Position 27, Mid frequency (See Figure 75)	0.024	0.036	-0.085
Flat Phantom, Test Position 29, Mid frequency (See Figure 77)	0.00649	0.013	0.126

Table 17: SAR Values (External Antenna WCDMA 1900)

Limit of SAR (W/kg)	10 g Average	1 g Average	Power Drift (dB)
	2.0	1.6	
Test Case	**Measurement Result (W/kg)**		
	10 g Average	**1 g Average**	
Flat Phantom, Test Position 31, Mid frequency (See Figure 79)	0.039	0.063	0.152
Flat Phantom, Test Position 33, Mid frequency (See Figure 81)	0.028	0.043	0.132
Flat Phantom, Test Position 35, Mid frequency (See Figure 83)	0.028	0.042	0.119
Flat Phantom, Test Position 37, Mid frequency (See Figure 85)	0.025	0.039	-0.185
Flat Phantom, Test Position 39, Mid frequency (See Figure 87)	0.000191	0.000953	0.197

Table 18: SAR Values (HSDPA 1900)

Limit of SAR (W/kg)	10 g Average	1 g Average	Power Drift (dB)
	2.0	1.6	
Test Case	**Measurement Result (W/kg)**		
	10 g Average	**1 g Average**	
Flat Phantom, Test Position 1, Mid frequency with IBM Laptop (See Figure 89)	0.039	0.064	0.125
Flat Phantom, Test Position 1, Mid frequency with Dell Laptop (See Figure 91)	0.043	0.065	-0.152
Flat Phantom, Test Position 1, Mid frequency HP Laptop (See Figure 93)	0.032	0.052	0.167
Flat Phantom, Test Position 1, Mid frequency with External antenna (See Figure 95)	0.038	0.061	-0.137

8.5 Summary of Measurement Results (850MHz GPRS)

Table 19: SAR Values (Datacard 850 MHZ GPRS with IBM Laptop)

Limit of SAR (W/kg)	10 g Average	1 g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		
	10 g Average	1 g Average	
Flat Phantom, Test Position 1, Mid frequency (See Figure 97)	0.726	1.09	0.003
Flat Phantom, Test Position 3, Mid frequency (See Figure 99)	0.597	0.895	-0.085
Flat Phantom, Test Position 5, Mid frequency (See Figure 101)	0.222	0.338	-0.073
Flat Phantom, Test Position 7, Mid frequency (See Figure 103)	0.372	0.536	-0.014
Flat Phantom, Test Position 9, Mid frequency (See Figure 105)	0.155	0.225	0.033

Table 20: SAR Values (Datacard 850 MHZ GPRS with Dell Laptop)

Limit of SAR (W/kg)	10 g Average	1 g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		
	10 g Average	1 g Average	
Flat Phantom, Test Position 11, Mid frequency (See Figure 107)	0.732	1.05	0.058
Flat Phantom, Test Position 13, Mid frequency (See Figure 109)	0.666	0.974	0.168
Flat Phantom, Test Position 15, Mid frequency (See Figure 111)	0.392	0.579	0.168
Flat Phantom, Test Position 17, Mid frequency (See Figure 113)	0.323	0.445	-0.036
Flat Phantom, Test Position 19, Mid frequency (See Figure 115)	0.110	0.160	0.063

Table 21: SAR Values (Datacard 850 MHZ GPRS with HP Laptop)

Limit of SAR (W/kg)	10 g Average	1 g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		
	10 g Average	1 g Average	
Flat Phantom, Test Position 21, Mid frequency (See Figure 117)	0.717	1.04	0.017
Flat Phantom, Test Position 23, Mid frequency (See Figure 119)	0.589	0.860	0.040
Flat Phantom, Test Position 25, Mid frequency (See Figure 121)	0.211	0.315	-0.111
Flat Phantom, Test Position 27, Mid frequency (See Figure 123)	0.303	0.441	-0.014
Flat Phantom, Test Position 29, Mid frequency (See Figure 125)	0.158	0.237	-0.099

Table 22: SAR Values (External Antenna 850 MHZ GPRS)

Limit of SAR (W/kg)	10 g Average	1 g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		
	10 g Average	1 g Average	
Flat Phantom, Test Position 31, Mid frequency (See Figure 127)	0.564	0.797	0.200
Flat Phantom, Test Position 33, Mid frequency (See Figure 129)	0.549	0.776	-0.016
Flat Phantom, Test Position 35, Mid frequency (See Figure 131)	0.285	0.399	-0.017
Flat Phantom, Test Position 37, Mid frequency (See Figure 133)	0.254	0.356	-0.024
Flat Phantom, Test Position 39, Mid frequency (See Figure 135)	0.021	0.027	-0.017

8.6 Summary of Measurement Results (1900 MHz GPRS)

Table 23: SAR Values (Datacard 1900 MHz GPRS with IBM Laptop)

Limit of SAR (W/kg)	10 g Average	1 g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		
	10 g Average	1 g Average	
Flat Phantom, Test Position 1, Mid frequency (See Figure 137)	0.304	0.506	0.005
Flat Phantom, Test Position 3, Mid frequency (See Figure 139)	0.315	0.526	-0.094
Flat Phantom, Test Position 5, Mid frequency (See Figure 141)	0.084	0.138	0.082
Flat Phantom, Test Position 7, Mid frequency (See Figure 143)	0.179	0.278	0.001
Flat Phantom, Test Position 9, Mid frequency (See Figure 145)	0.091	0.143	-0.088

Table 24: SAR Values (Datacard 1900 MHz GPRS with Dell Laptop)

Limit of SAR (W/kg)	10 g Average	1 g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		
	10 g Average	1 g Average	
Flat Phantom, Test Position 11, Mid frequency (See Figure 147)	0.379	0.626	0.054
Flat Phantom, Test Position 13, Mid frequency (See Figure 149)	0.330	0.559	-0.157
Flat Phantom, Test Position 15, Mid frequency (See Figure 151)	0.081	0.133	0.175
Flat Phantom, Test Position 17, Mid frequency (See Figure 153)	0.247	0.413	0.002
Flat Phantom, Test Position 19, Mid frequency (See Figure 155)	0.126	0.198	-0.075

Table 25: SAR Values (Datacard 1900 MHz GPRS with HP Laptop)

Limit of SAR (W/kg)	10 g Average	1 g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		
	10 g Average	1 g Average	
Flat Phantom, Test Position 21, Mid frequency (See Figure 157)	0.243	0.382	0.200
Flat Phantom, Test Position 23, Mid frequency (See Figure 159)	0.266	0.437	0.159
Flat Phantom, Test Position 25, Mid frequency (See Figure 161)	0.109	0.180	-0.036
Flat Phantom, Test Position 27, Mid frequency (See Figure 163)	0.228	0.378	0.024
Flat Phantom, Test Position 29, Mid frequency (See Figure 165)	0.053	0.082	-0.090

Table 26: SAR Values (External Antenna 1900 MHz GPRS)

Limit of SAR (W/kg)	10 g Average	1 g Average	Power Drift (dB)
	2.0	1.6	
Test Case	Measurement Result (W/kg)		
	10 g Average	1 g Average	
Flat Phantom, Test Position 31, Mid frequency (See Figure 167)	0.270	0.440	-0.103
Flat Phantom, Test Position 33, Mid frequency (See Figure 169)	0.247	0.390	-0.040
Flat Phantom, Test Position 35, Mid frequency (See Figure 171)	0.233	0.374	0.060
Flat Phantom, Test Position 37, Mid frequency (See Figure 173)	0.238	0.382	0.145
Flat Phantom, Test Position 39, Mid frequency (See Figure 175)	0.00256	0.00725	-0.192

8.7 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 5.2 of this report. Maximum localized SAR is below exposure limits specified in the relevant standards cited in Clause 5.1 of this test report.

9 Measurement Uncertainty

SN	a	Type	c	d	e = f(d,k)	f	h = c x f / e	k
	Uncertainty Component		Tol. (± %)	Prob. Dist.	Div.	c_i (1 g)	1 g u_i (±%)	v_i
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	√3	$(1\text{-cp})^{1/2}$	4.3	∞
4	Hemispherical Isotropy	B	9.4	R	√3	$\sqrt{c_p}$		∞
5	Boundary Effect	B	0.4	R	√3	1	0.23	∞
6	Linearity	B	4.7	R	√3	1	2.7	∞
7	System Detection Limits	B	1.0	R	√3	1	0.6	∞
8	Readout Electronics	B	1.0	N	1	1	1.0	∞
9	RF Ambient Conditions	B	3.0	R	√3	1	1.73	∞
10	Probe Positioner Mechanical Tolerance	B	0.4	R	√3	1	0.2	∞
11	Probe Positioning with respect to Phantom Shell	B	2.9	R	√3	1	1.7	∞
12	Extrapolation, interpolation and Integration Algorithms for Max. SAR Evaluation	B	3.9	R	√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	√3	1	2.9	∞
	Phantom and Tissue Parameters							
16	Phantom Uncertainty (shape and thickness tolerances)	B	1.0	R	√3	1	0.6	∞
17	Liquid Conductivity - deviation from target values	B	5.0	R	√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	√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	

10 MAIN TEST INSTRUMENTS

Table 27: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	HP 8753E	US38433212	August 30,2006	One year
02	Power meter	NRVD	101253	June 20, 2006	One year
03	Power sensor	NRV-Z5	100333		
04	Power sensor	NRV-Z6	100011	September 2, 2006	One year
05	Signal Generator	E4433B	US37230472	September 4, 2006	One Year
06	Amplifier	VTL5400	0505	No Calibration Requested	
07	BTS	CMU 200	105948	August 15, 2006	One year
08	E-field Probe	SPEAG ET3DV6	1736	December 1, 2006	One year
09	DAE	SPEAG DAE3	536	July 11, 2006	One year

10 TEST PERIOD

The test is performed from January 16th, 2007 to January 20th, 2007.

11 TEST LOCATION

The test is performed at Radio Communication & Electromagnetic Compatibility Laboratory of Telecommunication Metrology Center of Ministry of Information Industry of The People's Republic of China

END OF REPORT BODY

ANNEX A： MEASUREMENT PROCESS

The evaluation was performed with the following procedure:

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

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

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

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

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

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

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

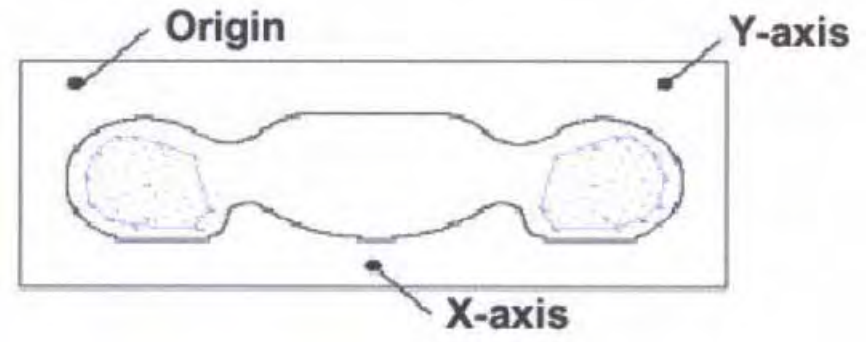
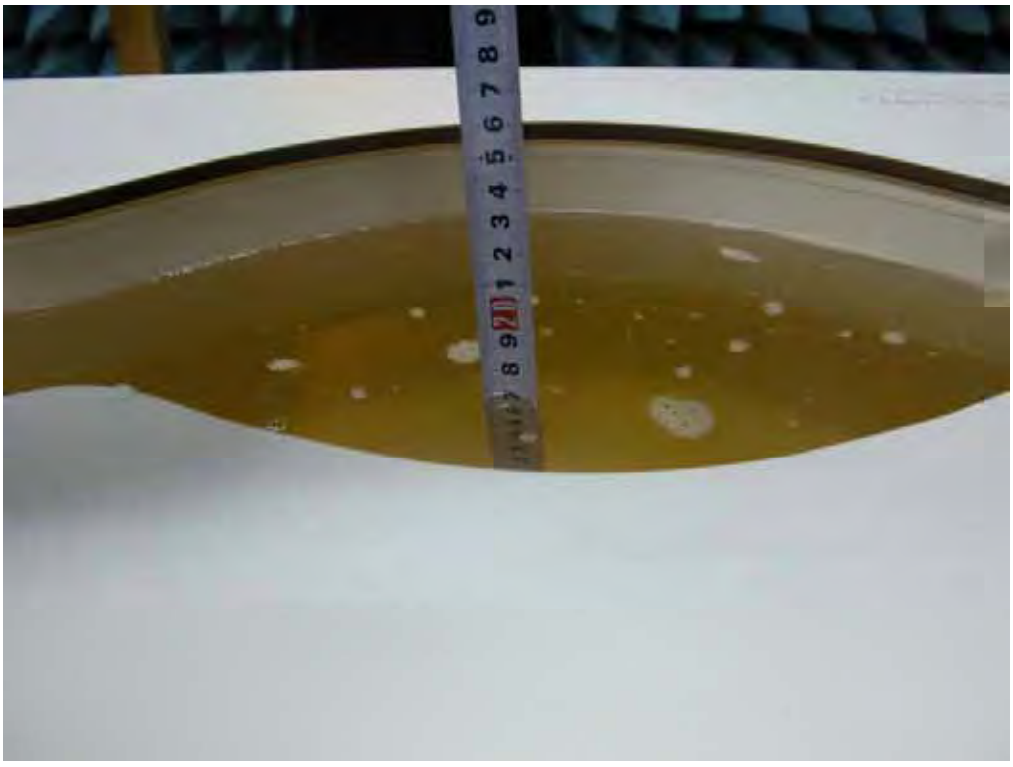


Figure A: SAR Measurement Points in Area Scan

ANNEX B： TEST LAYOUT

Picture B1: Specific Absorption Rate Test Layout



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

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

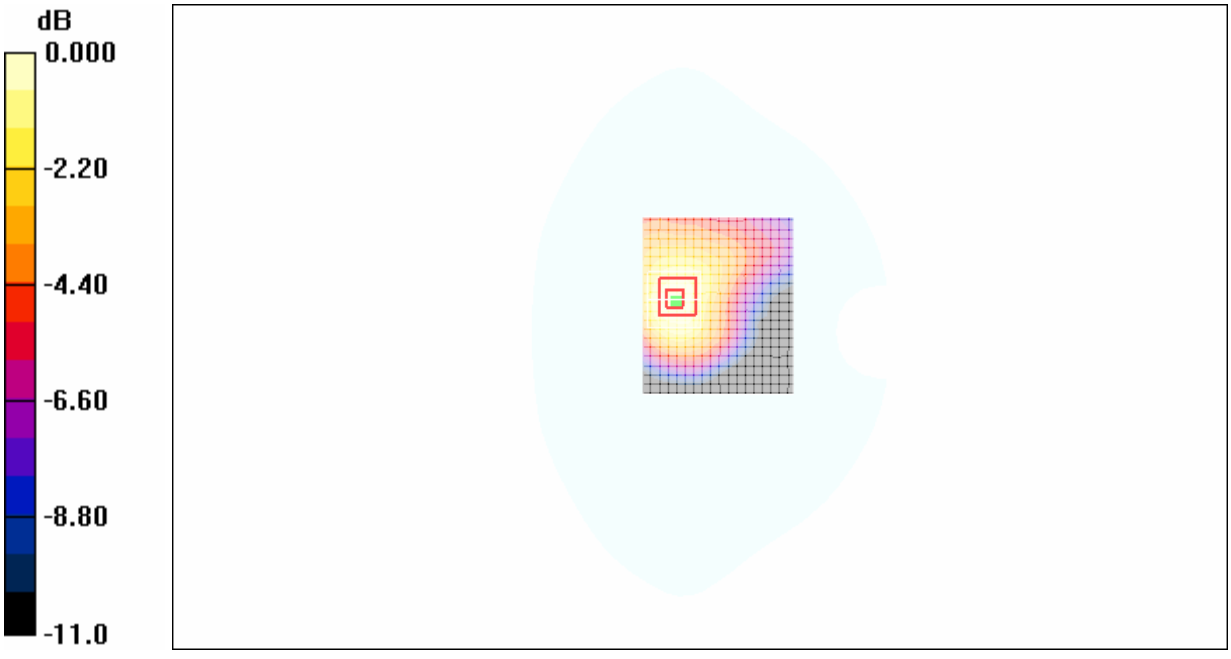
ANNEX C: GRAPH RESULTS

WCDMA 850 Datacard Test Position 1 with IBM Laptop

Date/Time: 2007-1-16 22:48:26
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 1/Area Scan (91x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.053 mW/g

Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.32 V/m; Power Drift = -0.117 dB
Peak SAR (extrapolated) = 0.067 W/kg
SAR(1 g) = 0.049 mW/g; SAR(10 g) = 0.032 mW/g
Maximum value of SAR (measured) = 0.053 mW/g



0 dB = 0.053mW/g

Fig. 1 WCDMA 850 CH4182 Test Position 1

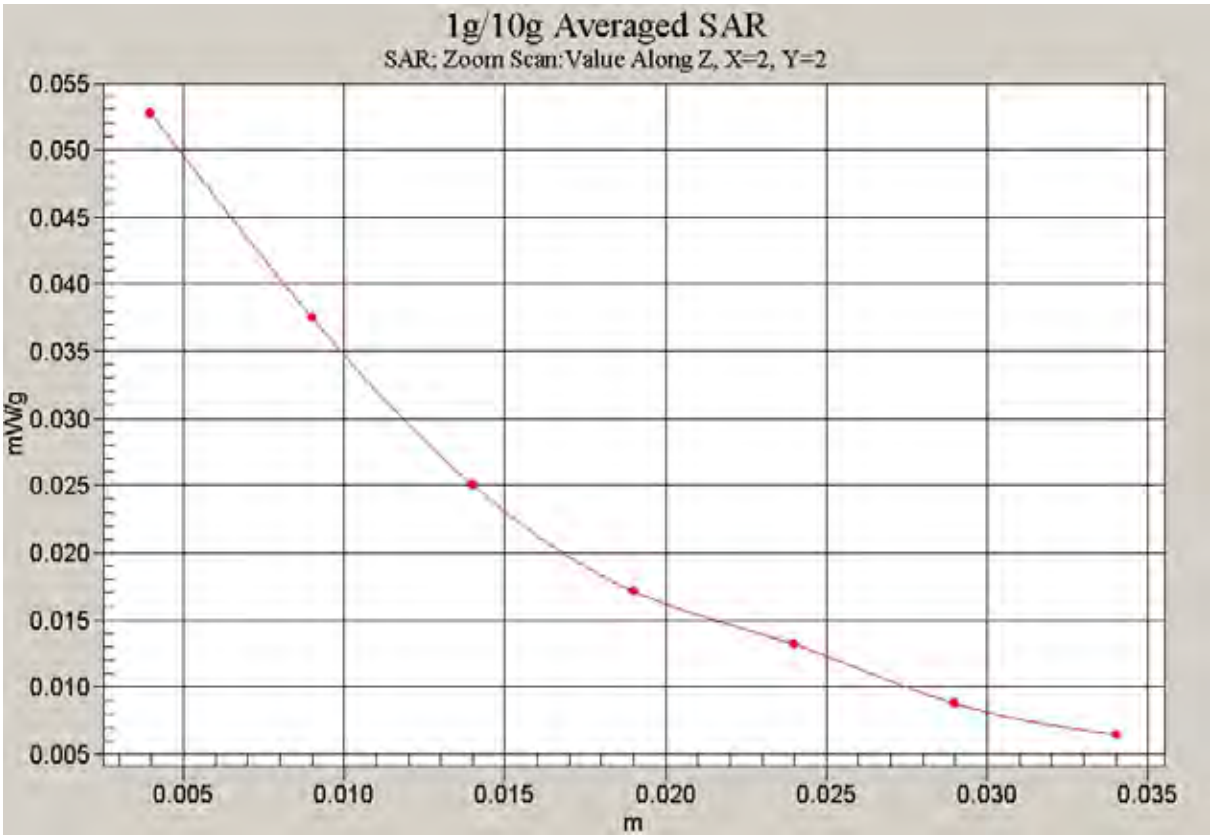


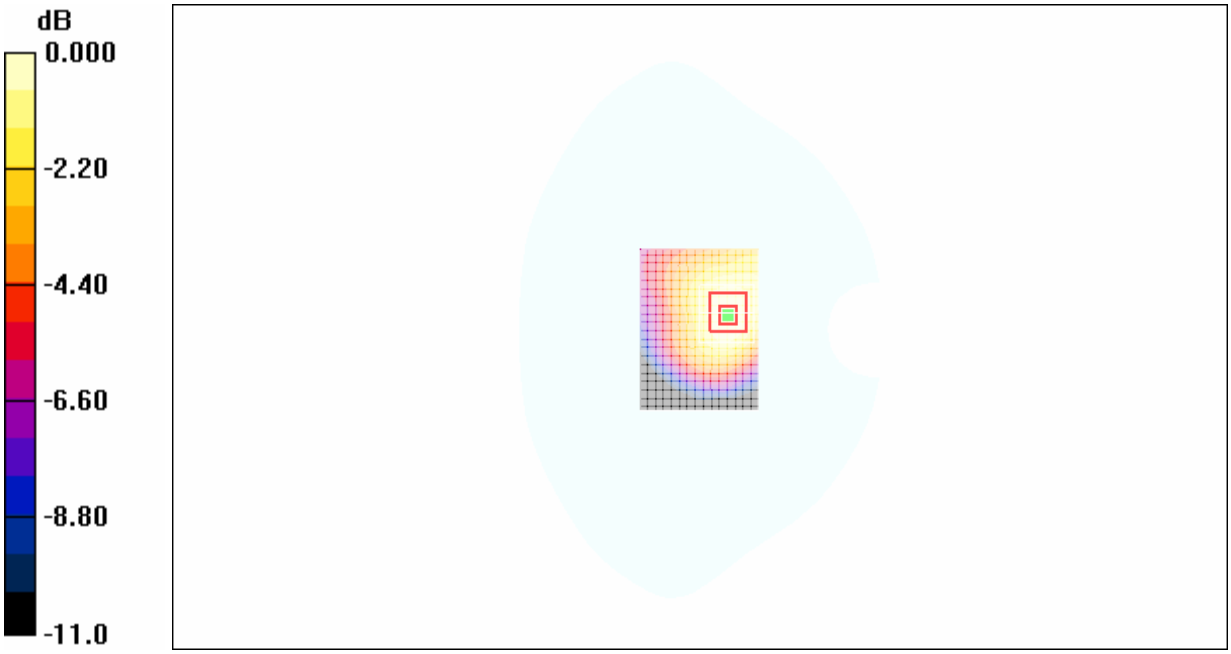
Fig.2 Z-Scan at power reference point (WCDMA 850 CH4182 Test Position 1)

WCDMA 850 Datacard Test Position 2 with IBM Laptop

Date/Time: 2007-1-16 22:33:52
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1738 ConvF(6.45, 6.45, 6.45)

Test Position 2/Area Scan (71x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.052 mW/g

Test Position 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.02 V/m; Power Drift = 0.008 dB
Peak SAR (extrapolated) = 0.061 W/kg
SAR(1 g) = 0.044 mW/g; SAR(10 g) = 0.030 mW/g
Maximum value of SAR (measured) = 0.048 mW/g



0 dB = 0.048mW/g

Fig.3 WCDMA 850 CH4182 Test Position 2

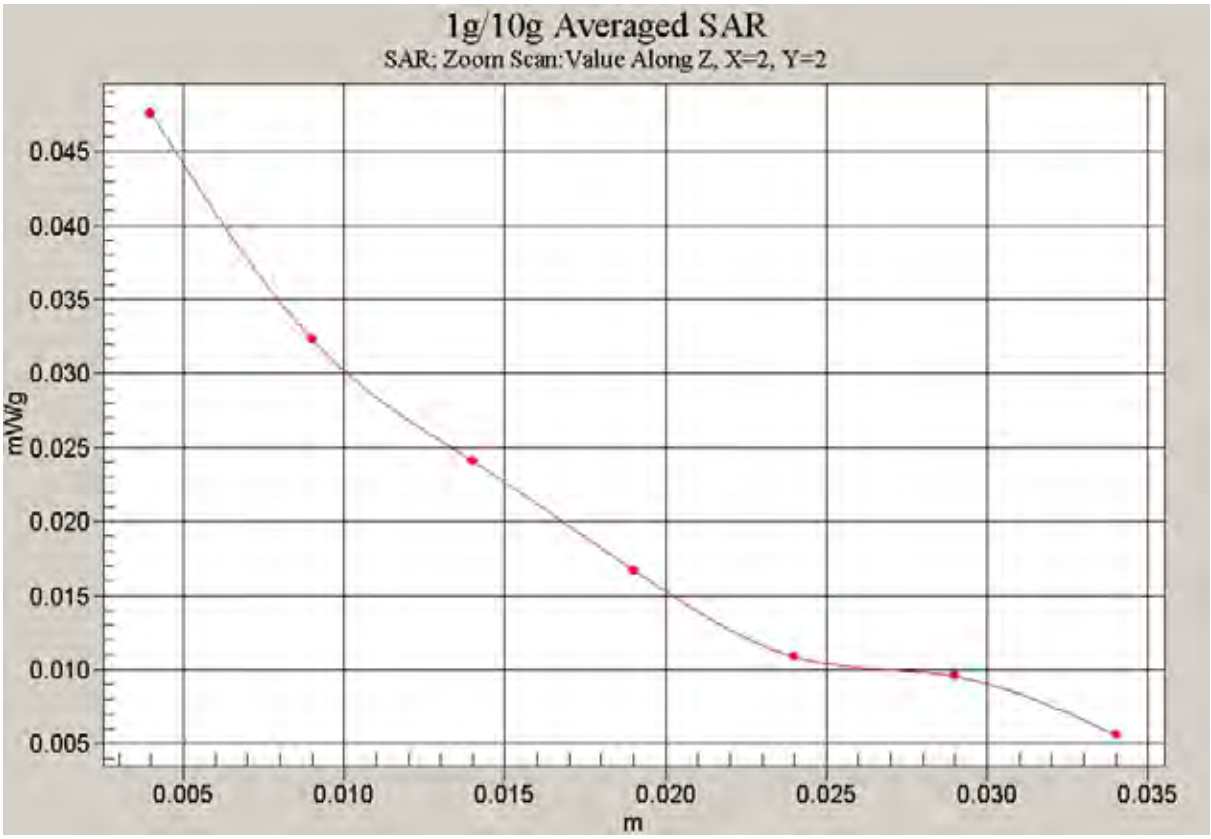


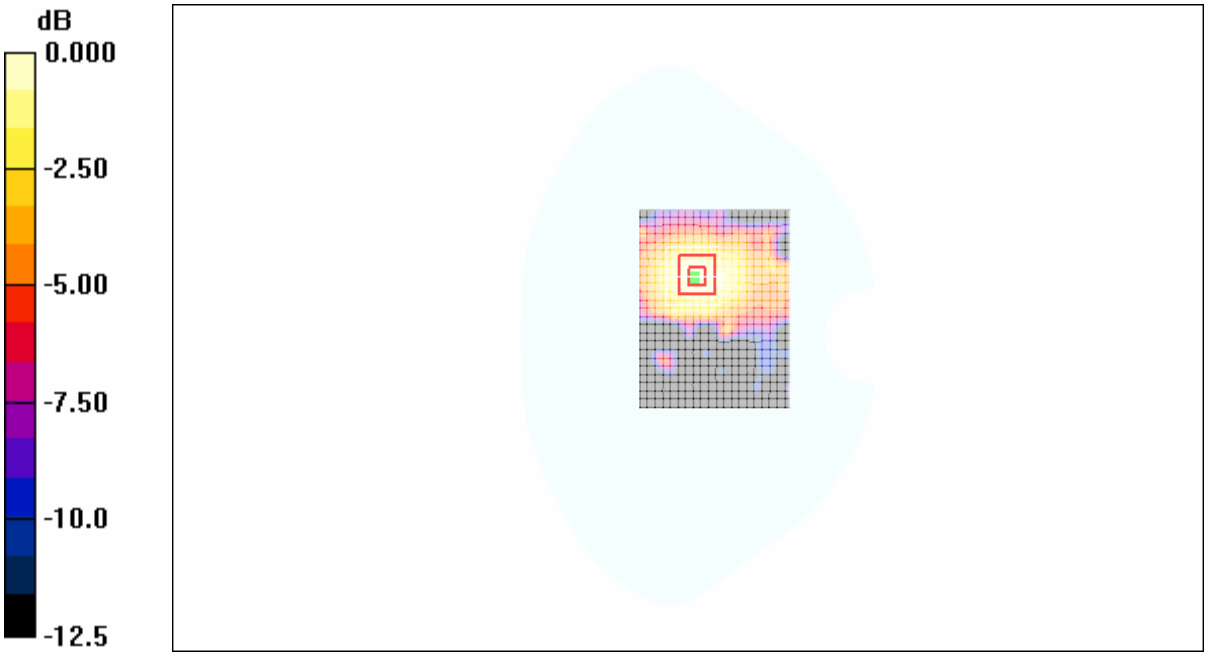
Fig.4 Z-Scan at power reference point (WCDMA 850 CH4182 Test Position 2)

WCDMA 850 Datacard Test Position 3 with IBM Laptop

Date/Time: 2007-1-16 23:25:22
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 3/Area Scan (91x111x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.017 mW/g

Test Position 3/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.14 V/m; Power Drift = 0.122 dB
Peak SAR (extrapolated) = 0.023 W/kg
SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.010 mW/g
Maximum value of SAR (measured) = 0.017 mW/g



0 dB = 0.017mW/g

Fig. 5 WCDMA 850 CH4182 Test Position 3

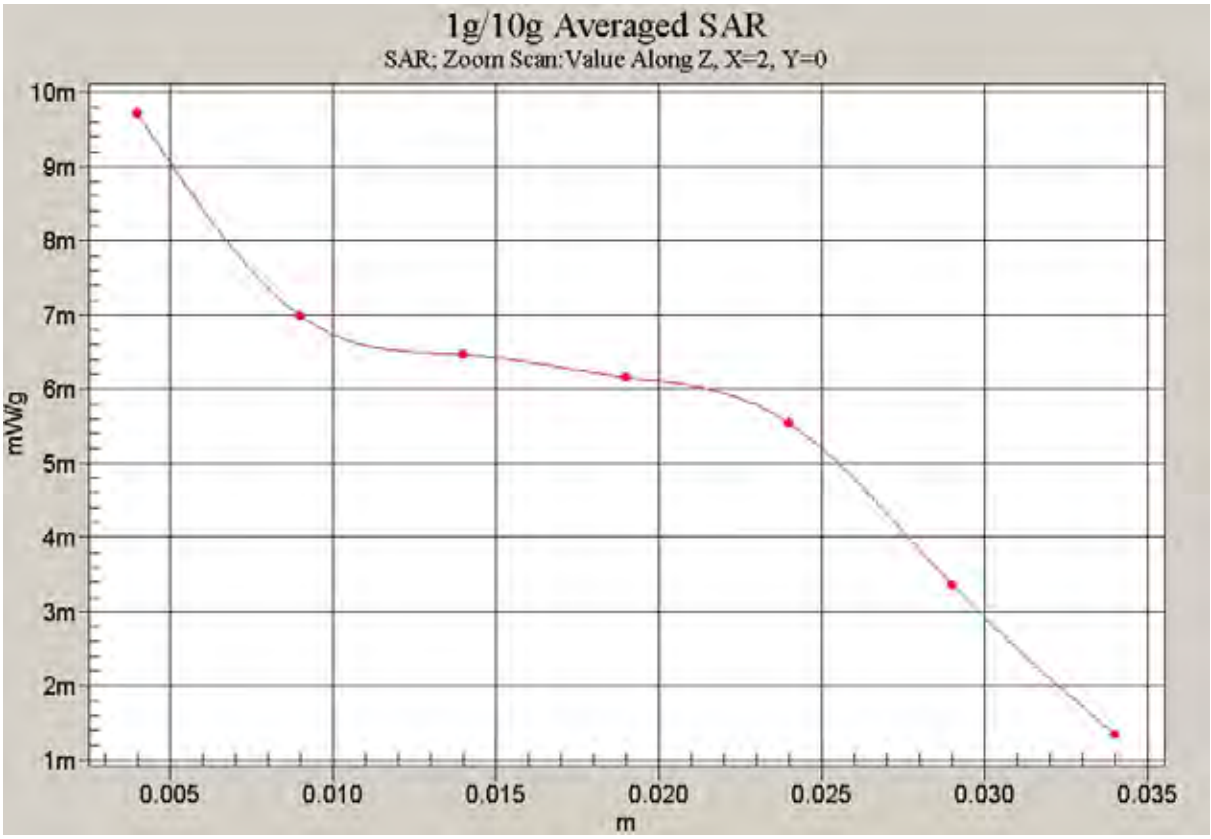


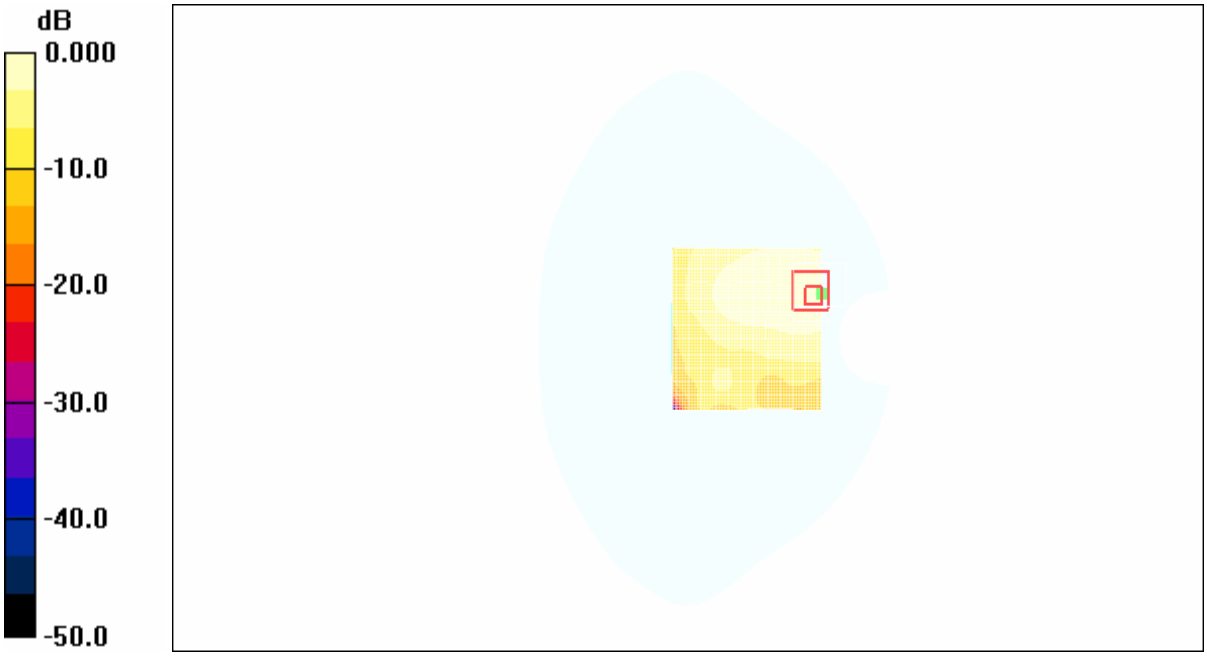
Fig.6 Z-Scan at power reference point (WCDMA 850 CH4182 Test Position 3)

WCDMA 850 Datacard Test Position 4 with IBM Laptop

Date/Time: 2007-1-16 23:43:32
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 4/Area Scan (61x61x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.021 mW/g

Test Position 4/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.14 V/m; Power Drift = 0.008 dB
Peak SAR (extrapolated) = 0.031 W/kg
SAR(1 g) = 0.020 mW/g; SAR(10 g) = 0.014 mW/g
Maximum value of SAR (measured) = 0.022 mW/g



0 dB = 0.022mW/g

Fig. 7 WCDMA 850 CH4182 Test Position 4

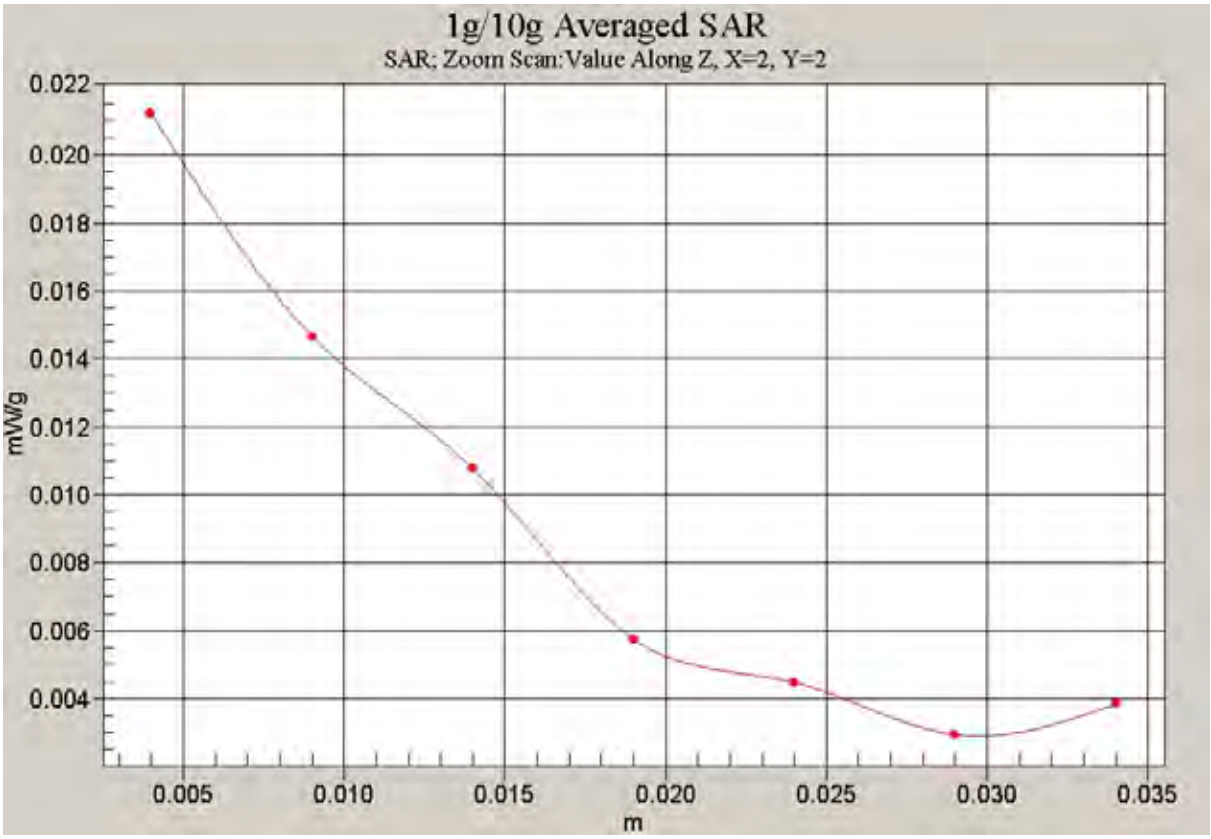


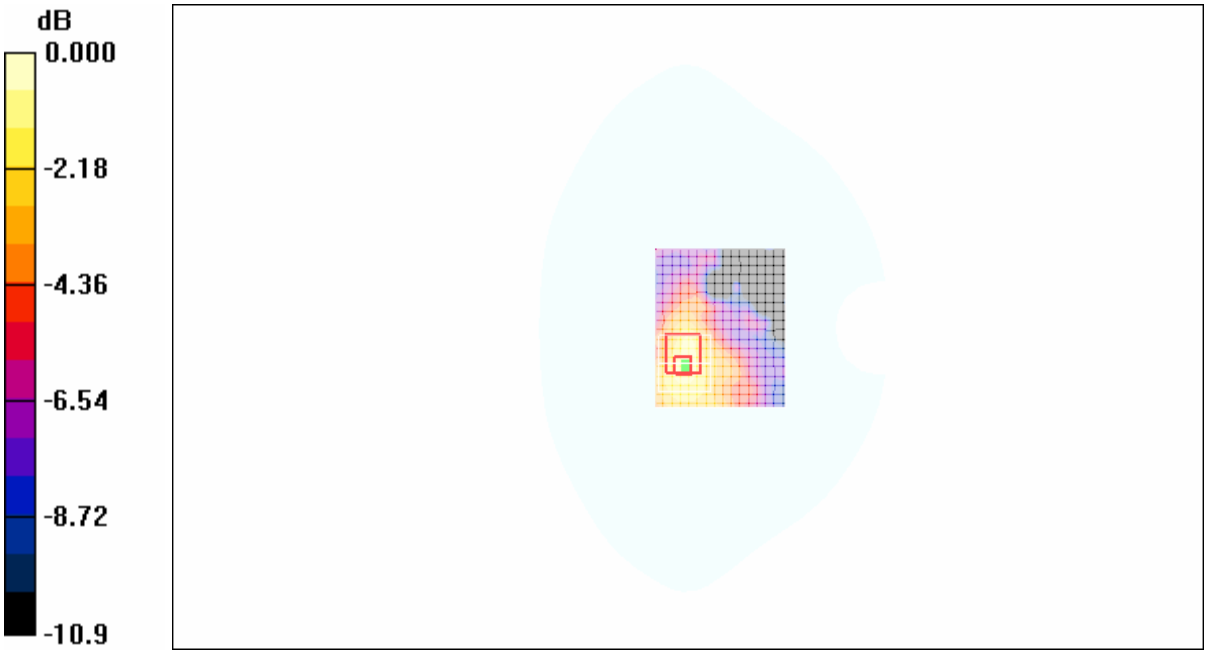
Fig.8 Z-Scan at power reference point (WCDMA 850 CH4182 Test Position 4)

WCDMA 850 DataCard Test Position 5 with IBM Laptop

Date/Time: 2007-1-16 23:05:09
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 5/Area Scan (81x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.009 mW/g

Test Position 5/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.09 V/m; Power Drift = 0.106 dB
Peak SAR (extrapolated) = 0.011 W/kg
SAR(1 g) = 0.00758 mW/g; SAR(10 g) = 0.00503 mW/g
Maximum value of SAR (measured) = 0.011 mW/g



0 dB = 0.011mW/g

Fig.9 WCDMA 850 CH4182 Test Position 5

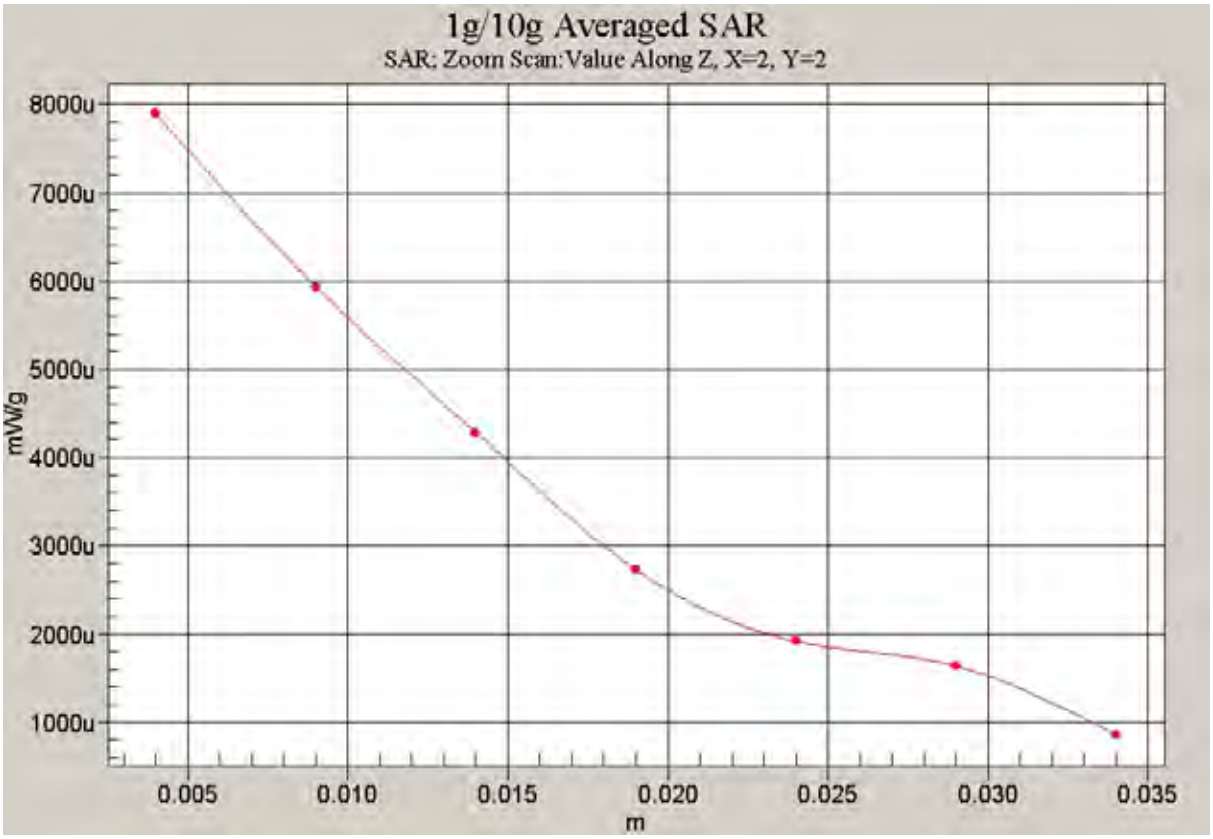


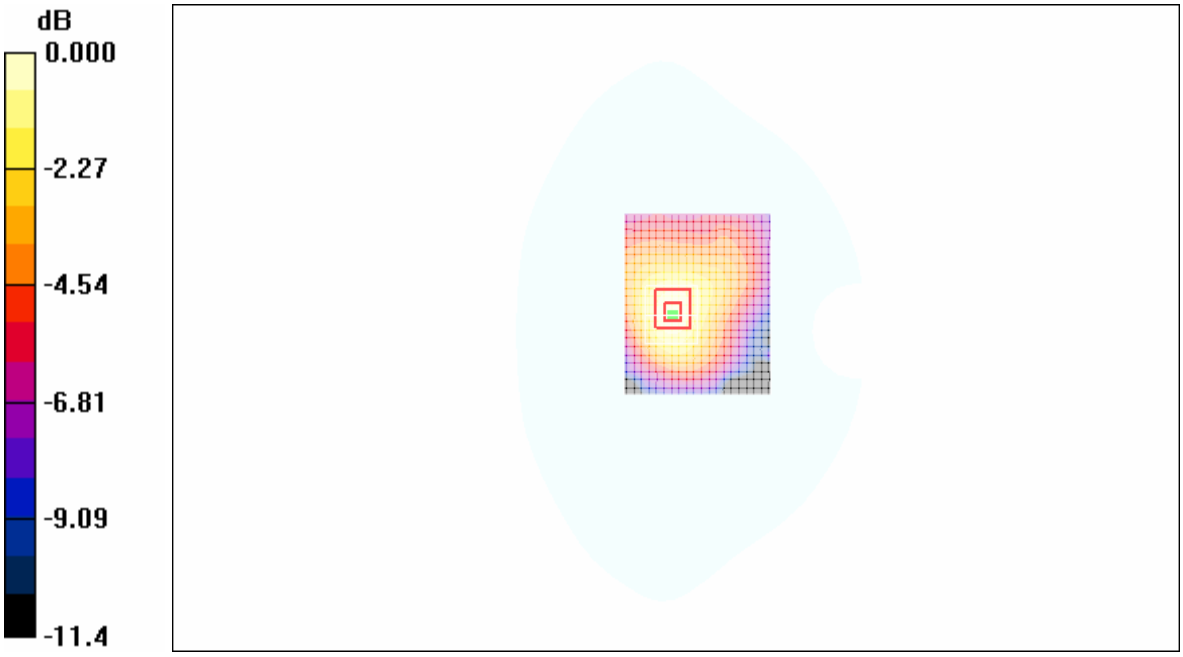
Fig.10 Z-Scan at power reference point (WCDMA 850 CH4182 Test Position 5)

WCDMA 850 Datacard Test Position 1 with Dell Laptop

Date/Time: 2007-1-16 16:17:37
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 1/Area Scan (91x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.055 mW/g

Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.79 V/m; Power Drift = -0.142 dB
Peak SAR (extrapolated) = 0.068 W/kg
SAR(1 g) = 0.051 mW/g; SAR(10 g) = 0.035 mW/g
Maximum value of SAR (measured) = 0.056 mW/g



0 dB = 0.056mW/g

Fig. 11 WCDMA 850 CH4182 Test Position 1

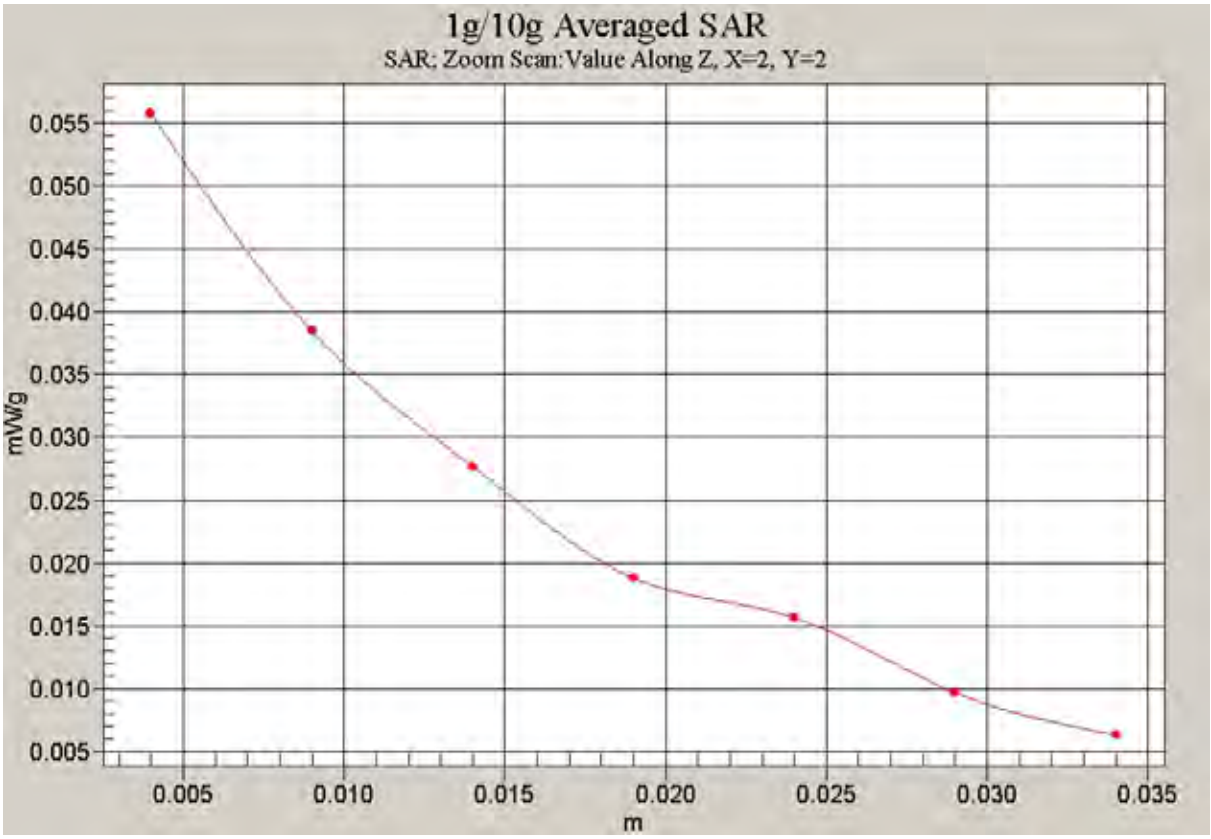


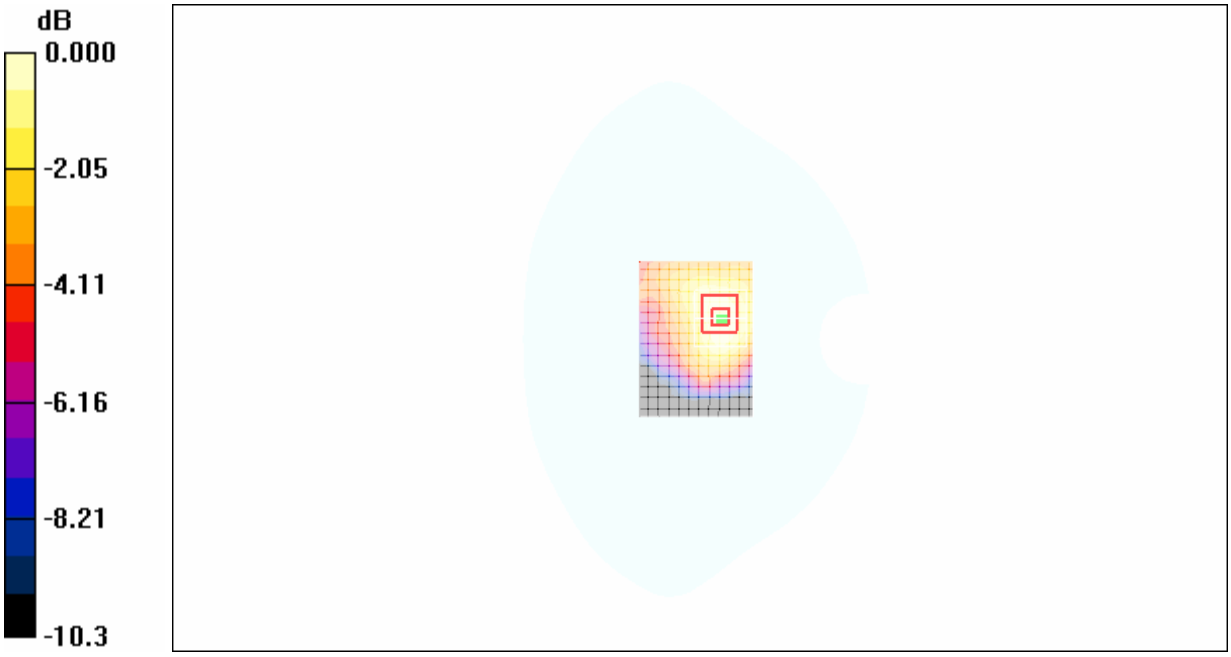
Fig.12 Z-Scan at power reference point (WCDMA 850 CH4182 Test Position 1)

WCDMA 850 Datacard Test Position 2 with Dell Laptop

Date/Time: 2007-1-16 16:01:26
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 2/Area Scan (71x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.038 mW/g

Test Position 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.27 V/m; Power Drift = -0.085 dB
Peak SAR (extrapolated) = 0.052 W/kg
SAR(1 g) = 0.036 mW/g; SAR(10 g) = 0.024 mW/g
Maximum value of SAR (measured) = 0.038 mW/g



0 dB = 0.038mW/g

Fig.13 WCDMA 850 CH4182 Test Position 2

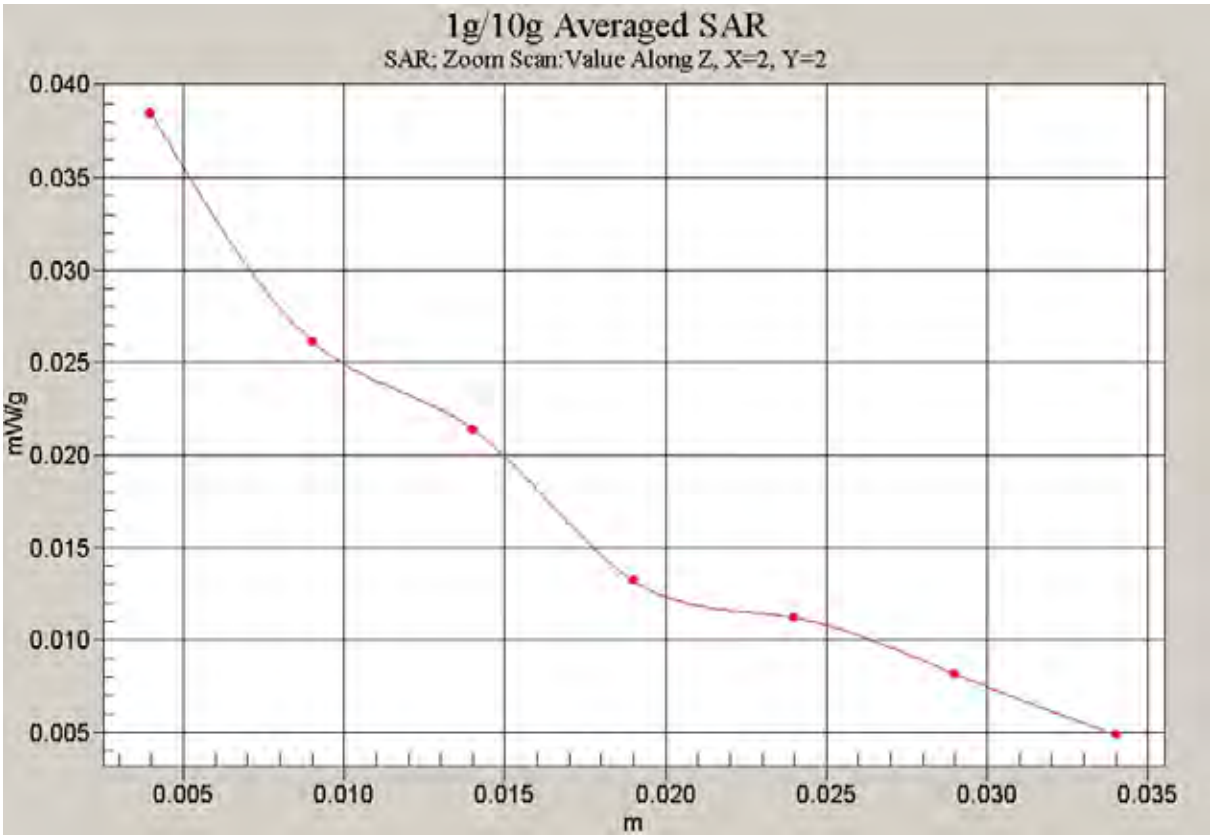


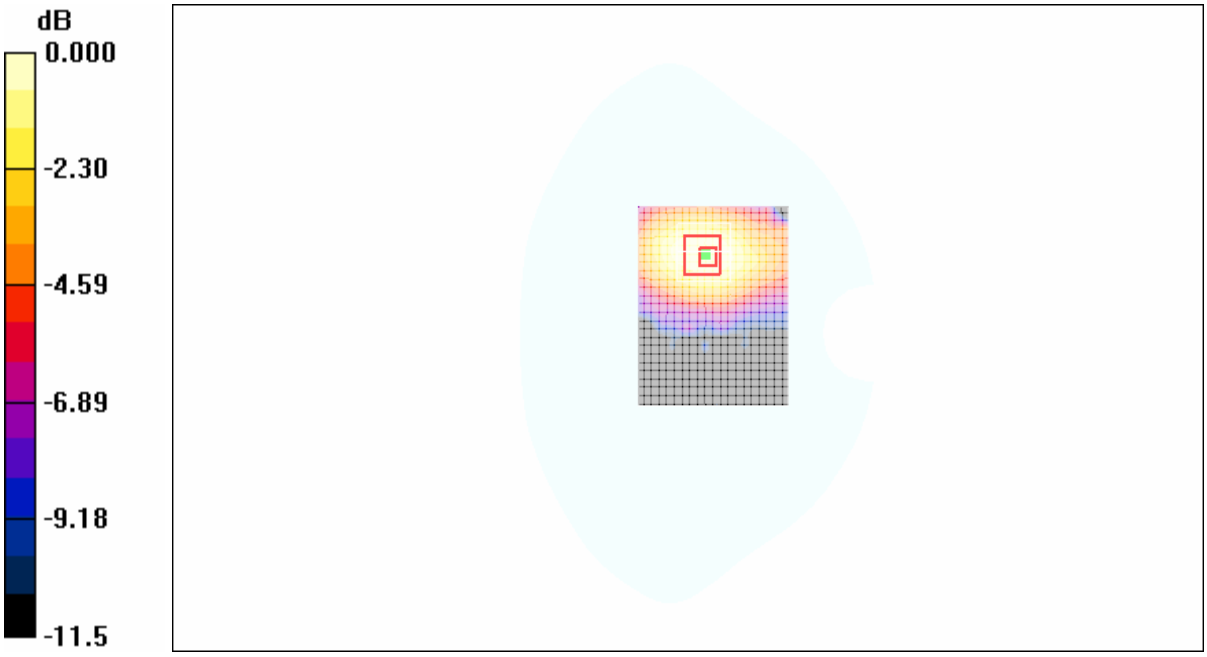
Fig.14 Z-Scan at power reference point (WCDMA 850 CH4182 Test Position 2)

WCDMA 850 Datacard Test Position 3 with Dell Laptop

Date/Time: 2007-1-16 21:21:51
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 3/Area Scan (91x111x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.025 mW/g

Test Position 3/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.82 V/m; Power Drift = -0.139 dB
Peak SAR (extrapolated) = 0.028 W/kg
SAR(1 g) = 0.023 mW/g; SAR(10 g) = 0.016 mW/g
Maximum value of SAR (measured) = 0.024 mW/g



0 dB = 0.024mW/g

Fig. 15 WCDMA 850 CH4182 Test Position 3

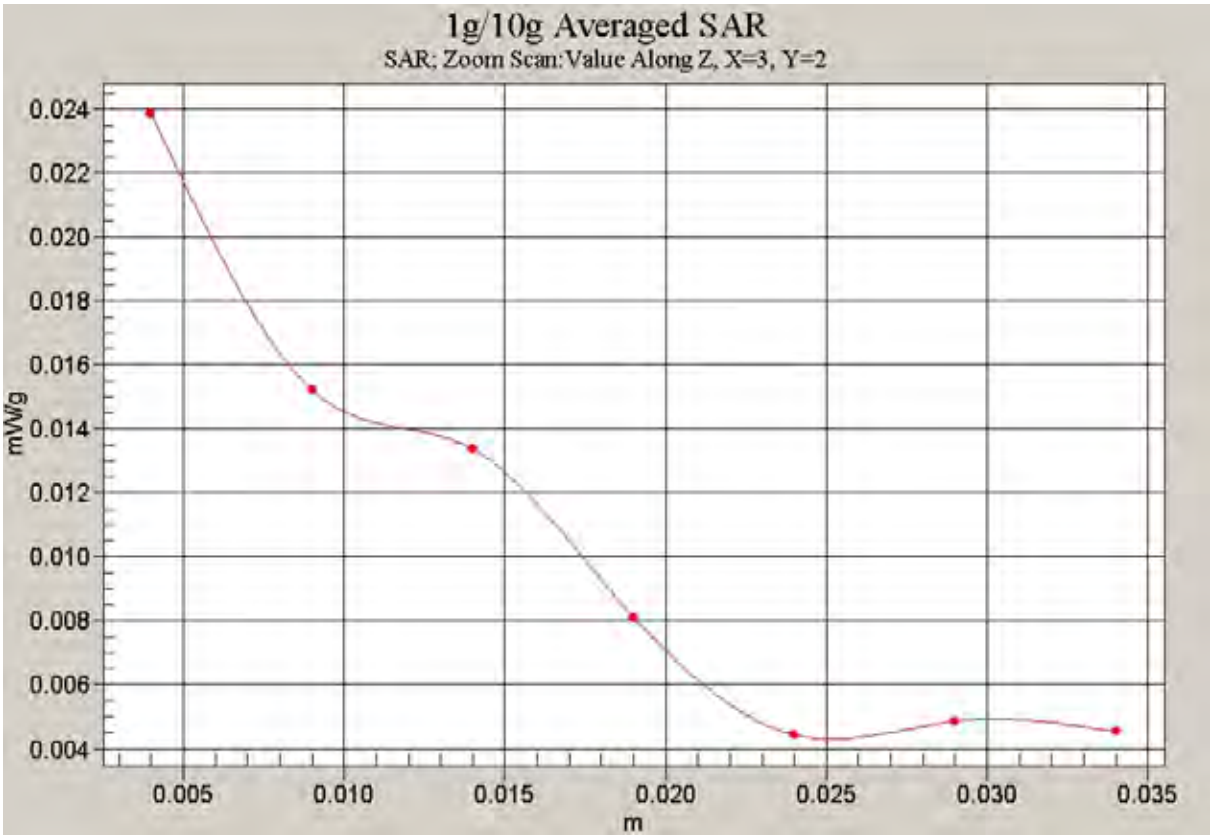


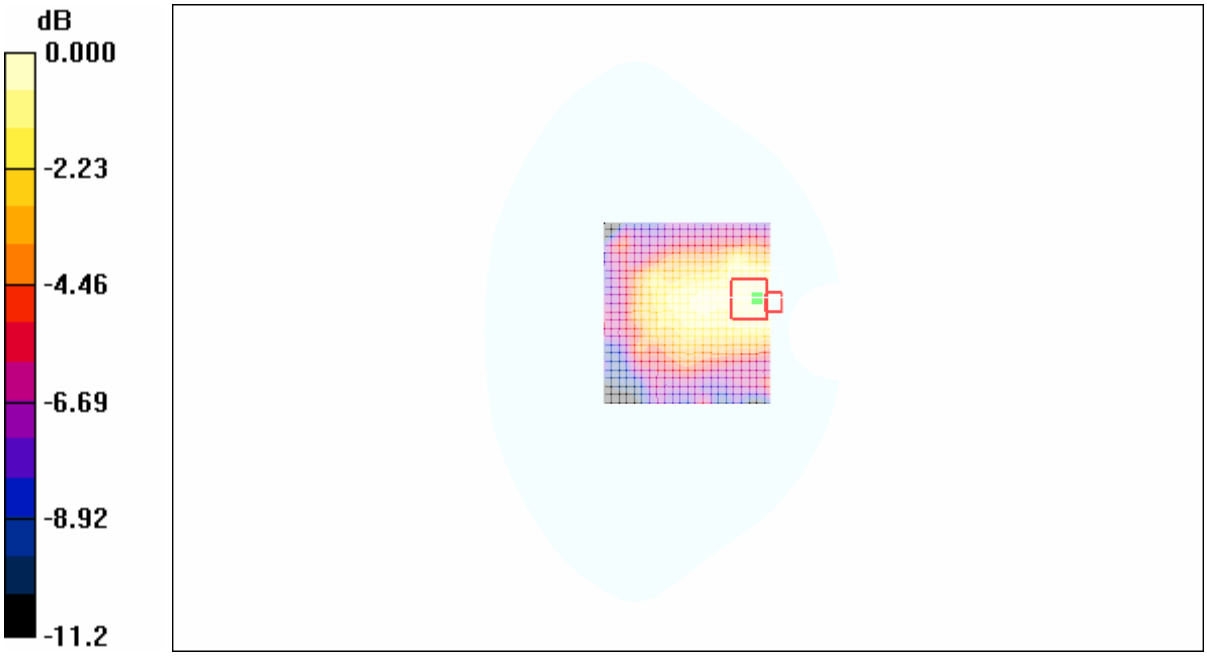
Fig.16 Z-Scan at power reference point (WCDMA 850 CH4182 Test Position 3)

WCDMA 850 Datacard Test Position 4 with Dell Laptop

Date/Time: 2007-1-16 22:11:55
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 4/Area Scan (101x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.015 mW/g

Test Position 4/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.07 V/m; Power Drift = 0.007 dB
Peak SAR (extrapolated) = 0.021 W/kg
SAR(1 g) = 0.014 mW/g; SAR(10 g) = 0.010 mW/g
Maximum value of SAR (measured) = 0.015 mW/g



0 dB = 0.015mW/g

Fig.17 WCDMA 850 CH4182 Test Position 4

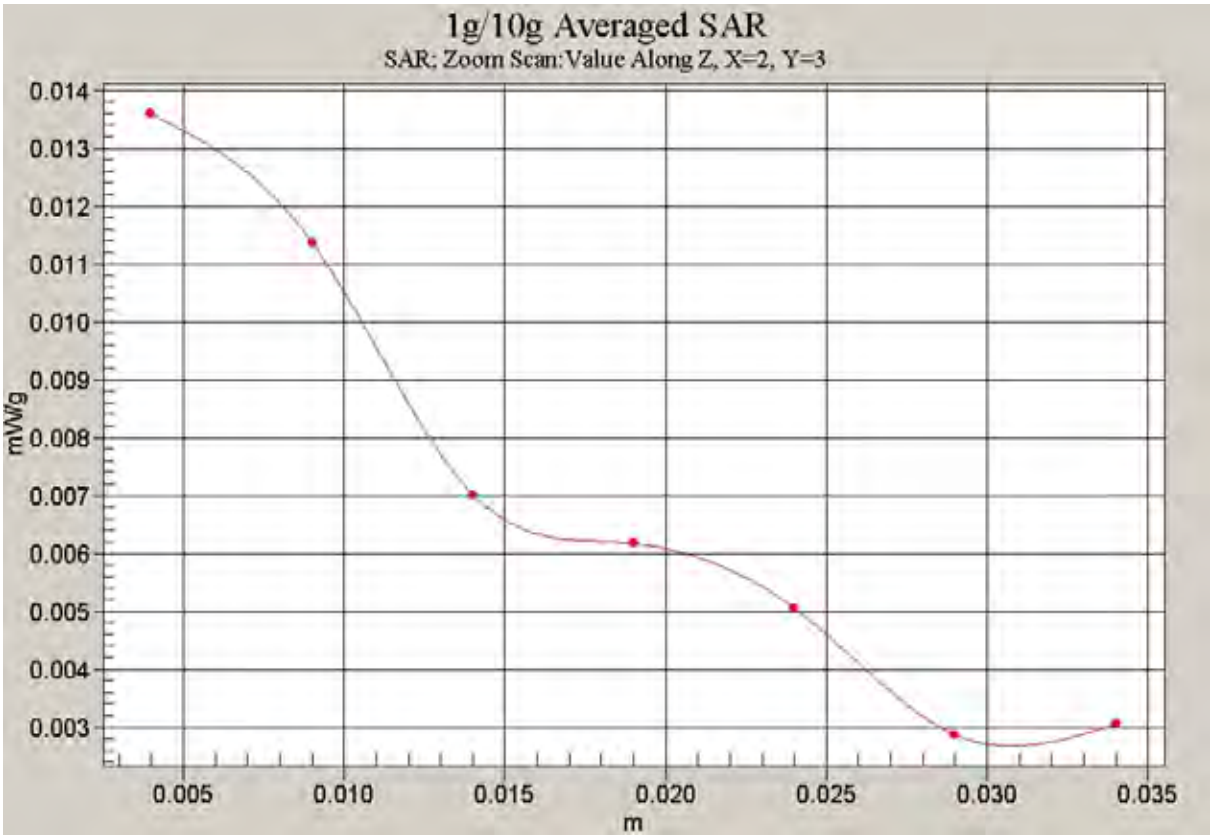


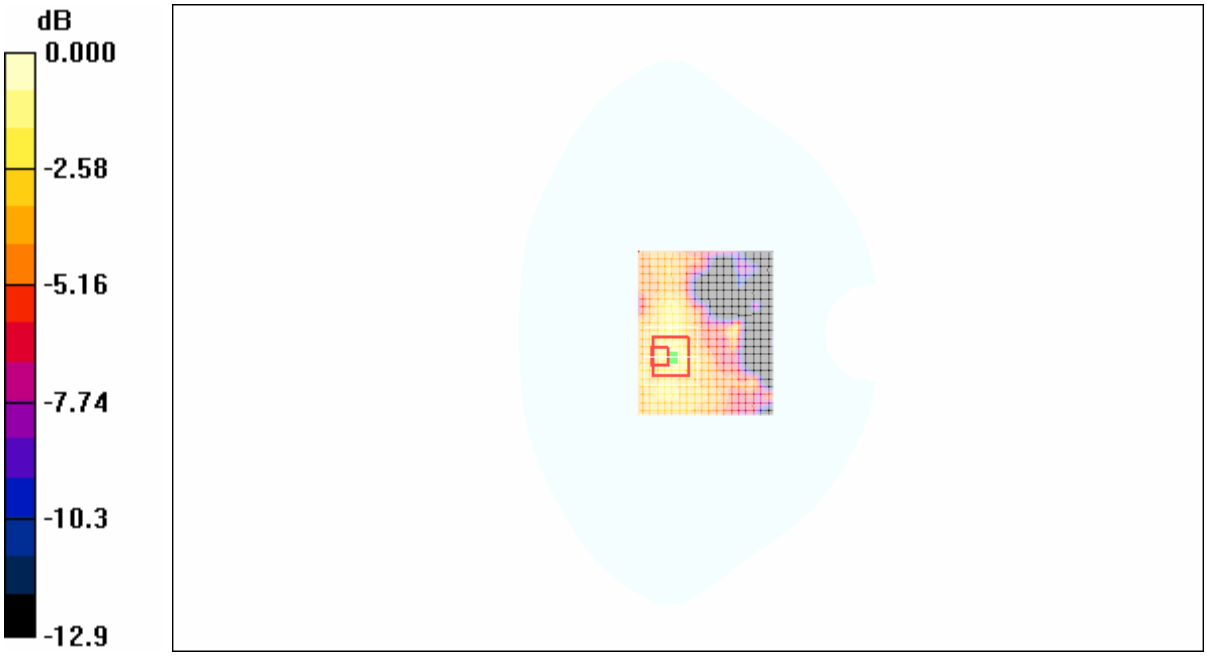
Fig.18 Z-Scan at power reference point (WCDMA 850 CH4182 Test Position 4)

WCDMA 850 DataCard Test Position 5 with Dell Laptop

Date/Time: 2007-1-16 20:58:27
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 5/Area Scan (81x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.006 mW/g

Test Position 5/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.73 V/m; Power Drift = 0.192 dB
Peak SAR (extrapolated) = 0.010 W/kg
SAR(1 g) = 0.00586 mW/g; SAR(10 g) = 0.00349 mW/g
Maximum value of SAR (measured) = 0.009 mW/g



0 dB = 0.009mW/g

Fig.19 WCDMA 850 CH4182 Test Position 5

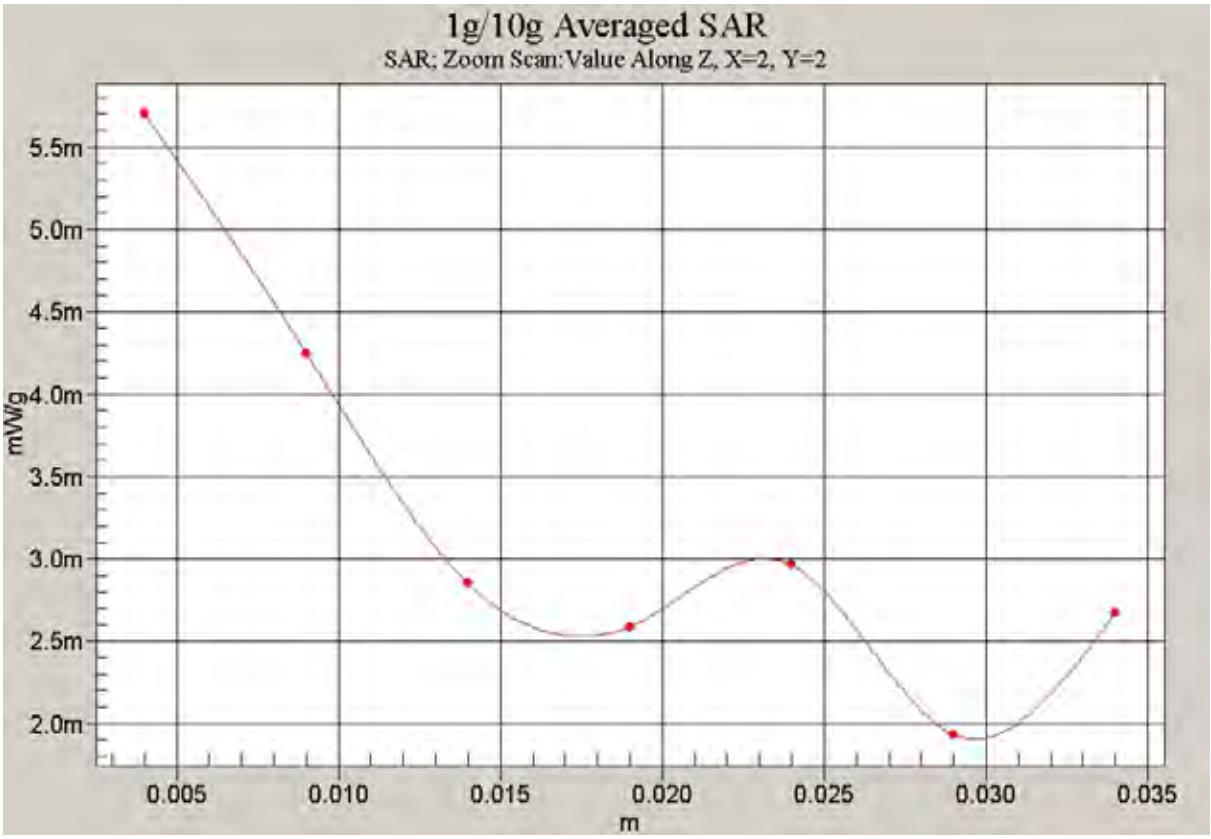


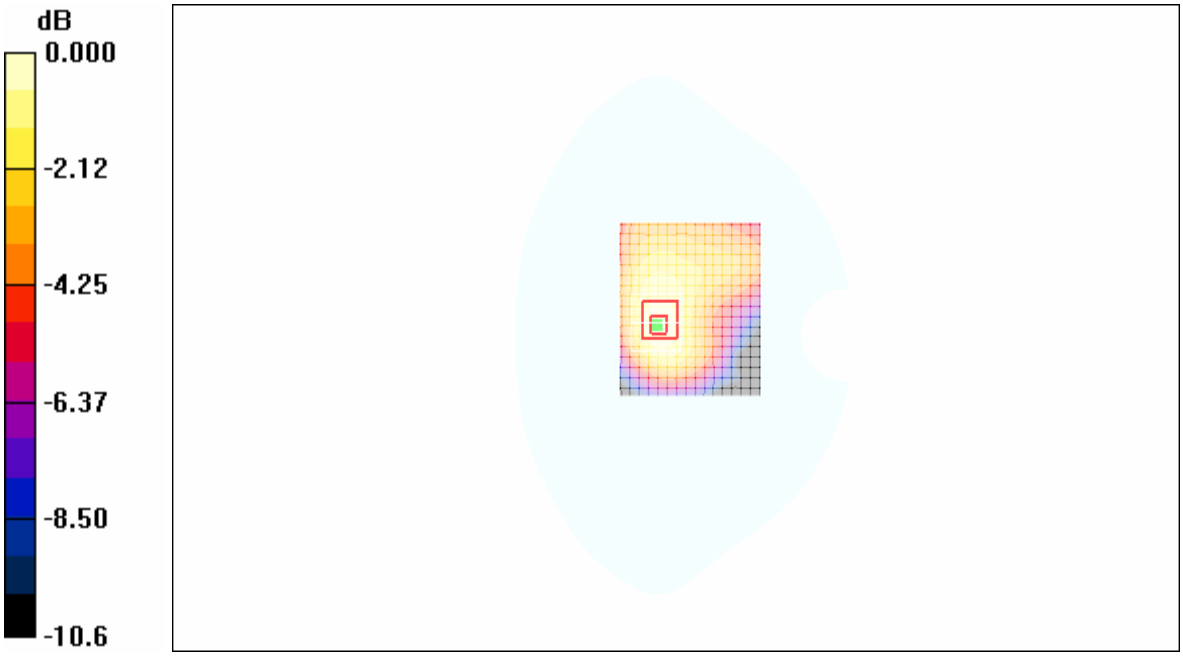
Fig.20 Z-Scan at power reference point (WCDMA 850 CH4182 Test Position 5)

WCDMA 850 Datacard Test Position 1 with HP Laptop

Date/Time: 2007-1-16 09:16:11
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 1/Area Scan (91x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.034 mW/g

Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.02 V/m; Power Drift = 0.181 dB
Peak SAR (extrapolated) = 0.052 W/kg
SAR(1 g) = 0.033 mW/g; SAR(10 g) = 0.022 mW/g
Maximum value of SAR (measured) = 0.035 mW/g



0 dB = 0.035mW/g

Fig. 21 WCDMA 850 CH4182 Test Position 1

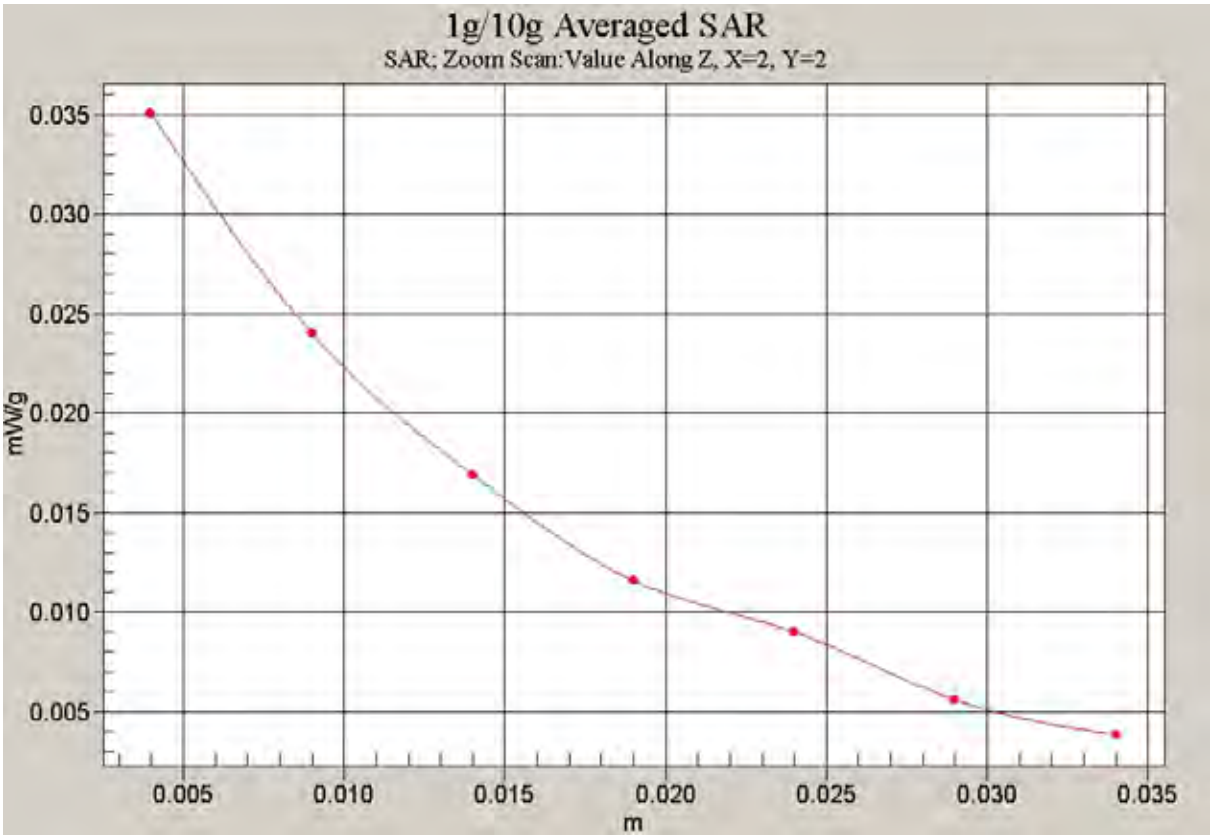


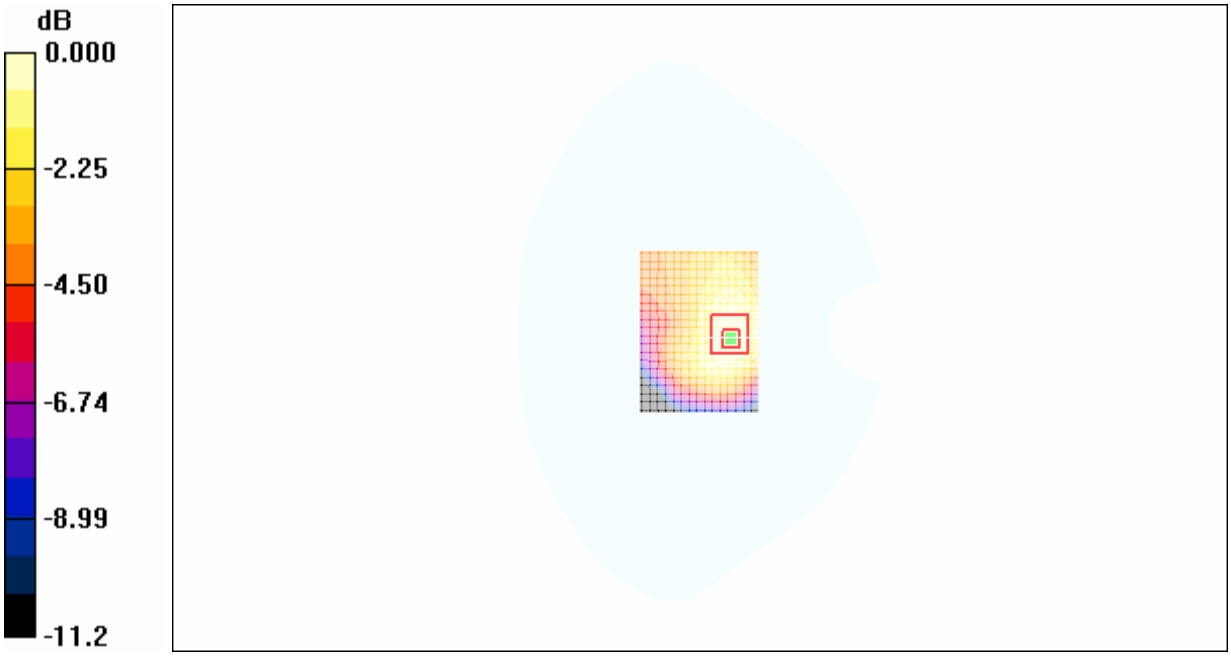
Fig.22 Z-Scan at power reference point (WCDMA 850 CH4182 Test Position 1)

WCDMA 850 Datacard Test Position 2 with HP Laptop

Date/Time: 2007-1-16 09:33:14
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 2/Area Scan (71x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.030 mW/g

Test Position 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.47 V/m; Power Drift = 0.176 dB
Peak SAR (extrapolated) = 0.038 W/kg
SAR(1 g) = 0.029 mW/g; SAR(10 g) = 0.020 mW/g
Maximum value of SAR (measured) = 0.031 mW/g



0 dB = 0.031mW/g

Fig.23 WCDMA 850 CH4182 Test Position 2

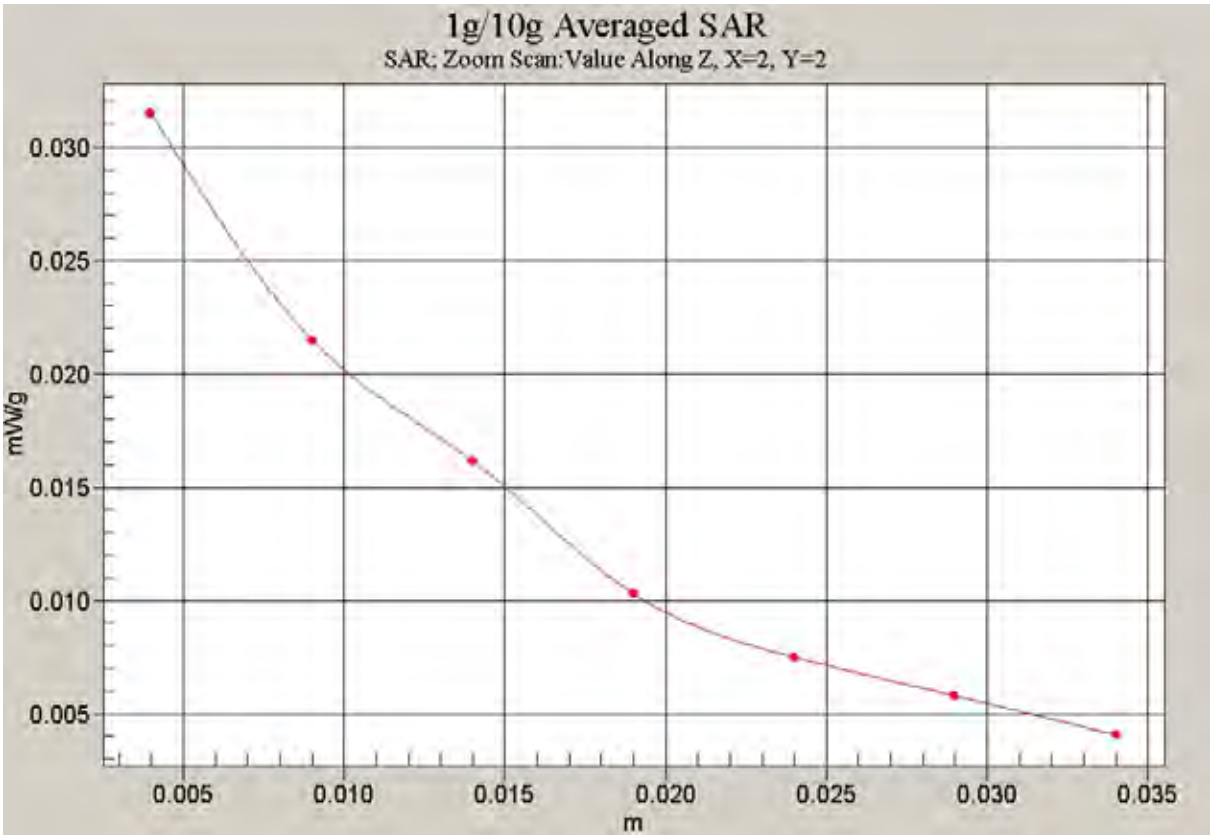


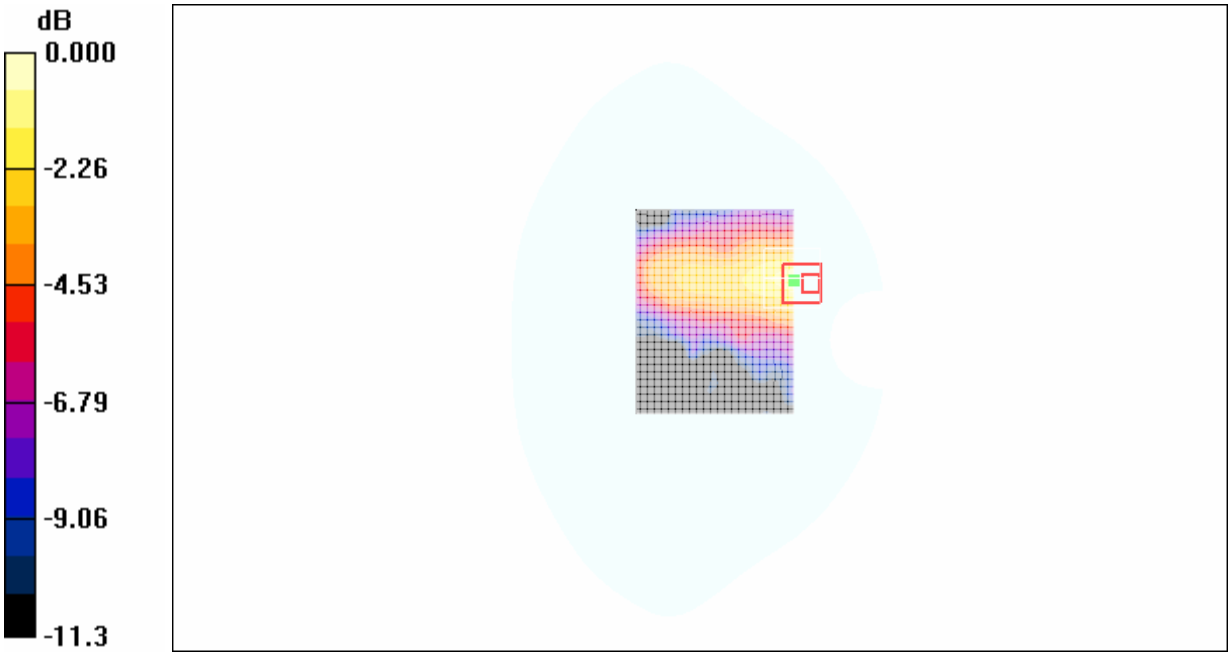
Fig.24 Z-Scan at power reference point (WCDMA 850 CH4182 Test Position 2)

WCDMA 850 Datacard Test Position 3 with HP Laptop

Date/Time: 2007-1-16 10:23:00
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 3/Area Scan (91x111x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.018 mW/g

Test Position 3/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.82 V/m; Power Drift = 0.153 dB
Peak SAR (extrapolated) = 0.031 W/kg
SAR(1 g) = 0.019 mW/g; SAR(10 g) = 0.012 mW/g
Maximum value of SAR (measured) = 0.023 mW/g



0 dB = 0.023mW/g

Fig.25 WCDMA 850 CH4182 Test Position 3

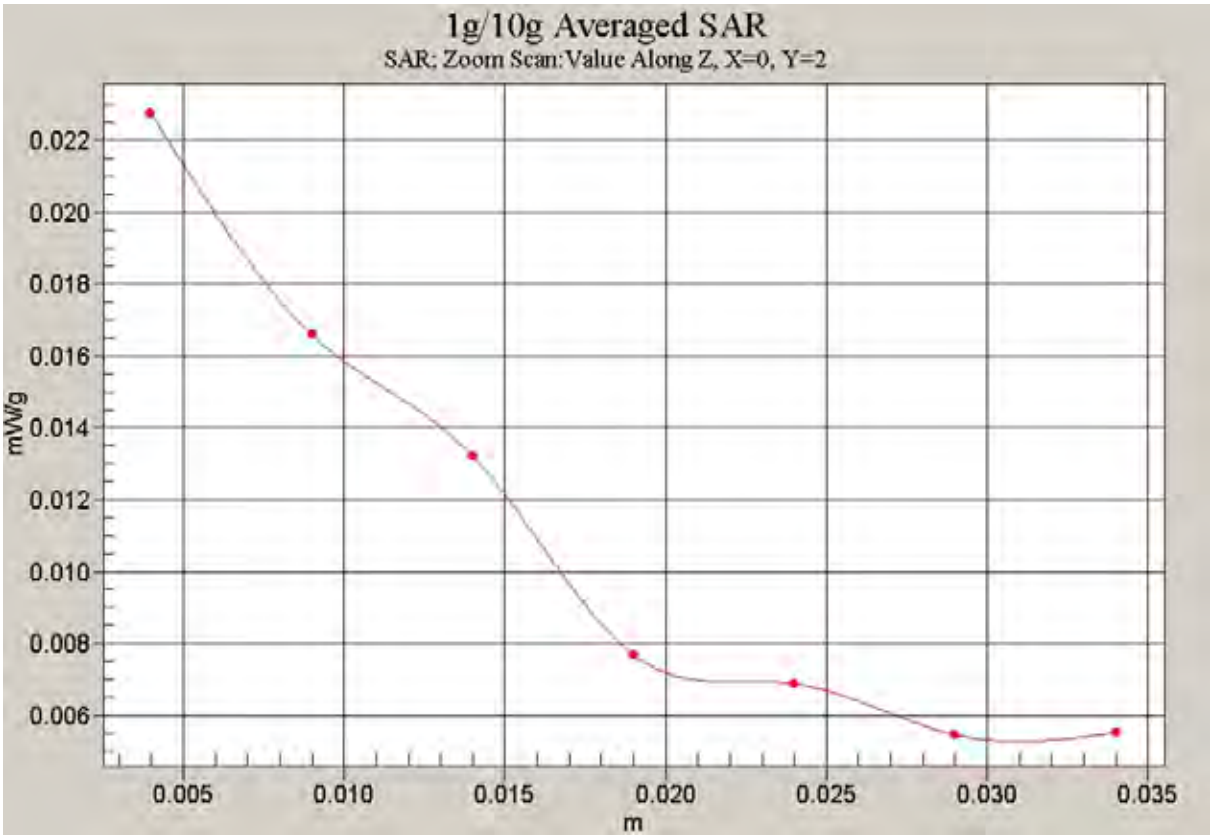


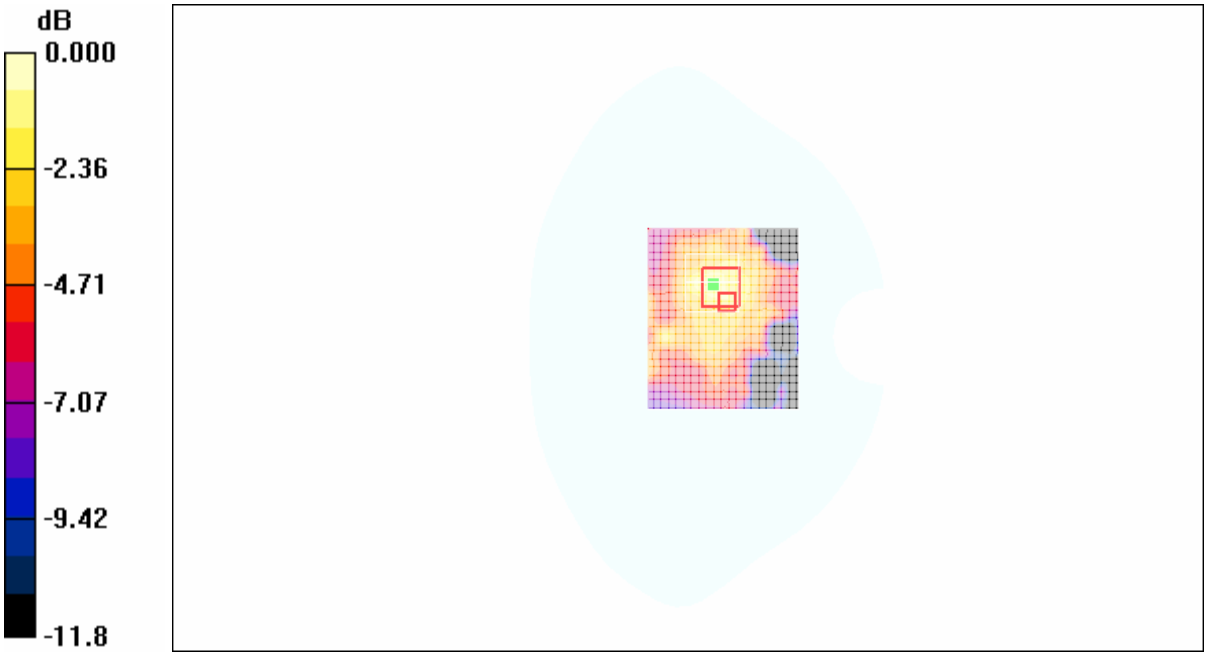
Fig.26 Z-Scan at power reference point (WCDMA 850 CH4182 Test Position 3)

WCDMA 850 Datacard Test Position 4 with HP Laptop

Date/Time: 2007-1-16 10:45:06
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 86.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 4/Area Scan (91x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.035 mW/g

Test Position 4/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.09 V/m; Power Drift = -0.166 dB
Peak SAR (extrapolated) = 0.096 W/kg
SAR(1 g) = 0.025 mW/g; SAR(10 g) = 0.016 mW/g
Maximum value of SAR (measured) = 0.029 mW/g



0 dB = 0.029mW/g

Fig. 27 WCDMA 850 CH4182 Test Position 4

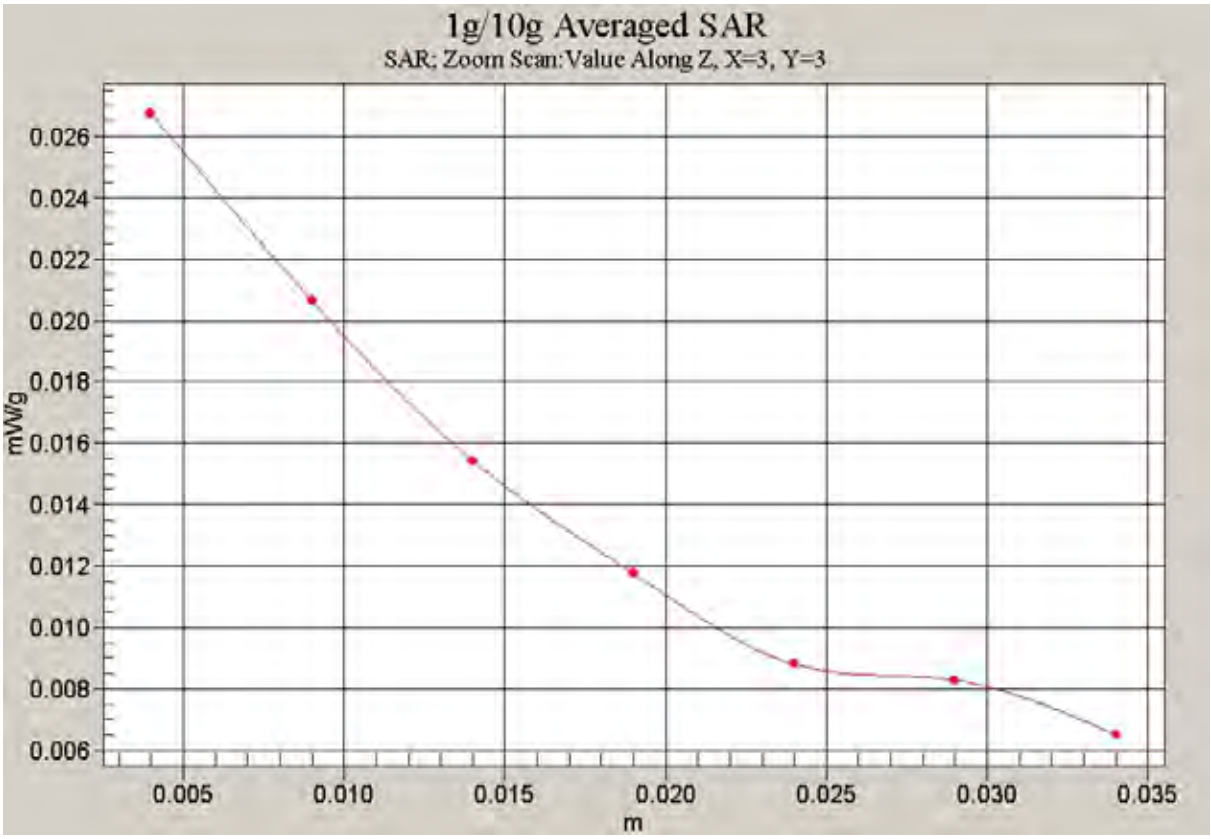


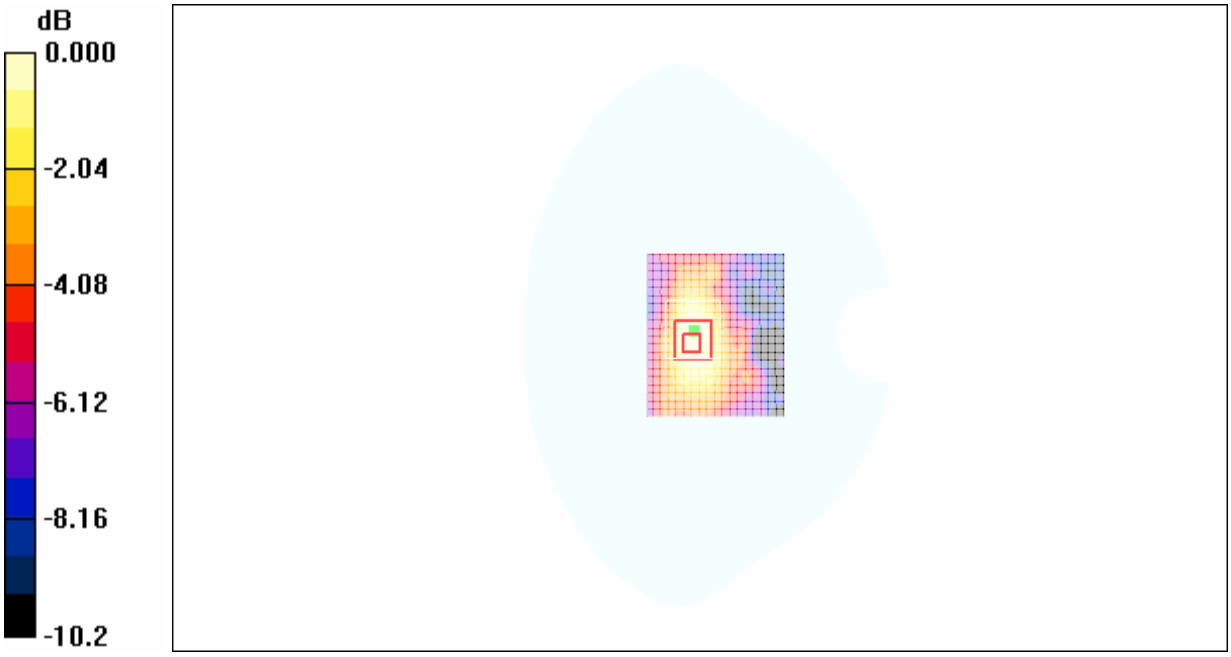
Fig.28 Z-Scan at power reference point (WCDMA 850 CH4182 Test Position 4)

WCDMA 850 DataCard Test Position 5 with HP Laptop

Date/Time: 2007-1-16 11:17:53
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 5/Area Scan (81x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.008 mW/g

Test Position 5/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.77 V/m; Power Drift = 0.137 dB
Peak SAR (extrapolated) = 0.015 W/kg
SAR(1 g) = 0.00736 mW/g; SAR(10 g) = 0.00412 mW/g
Maximum value of SAR (measured) = 0.008 mW/g



0 dB = 0.008mW/g

Fig.29 WCDMA 850 CH4182 Test Position 5

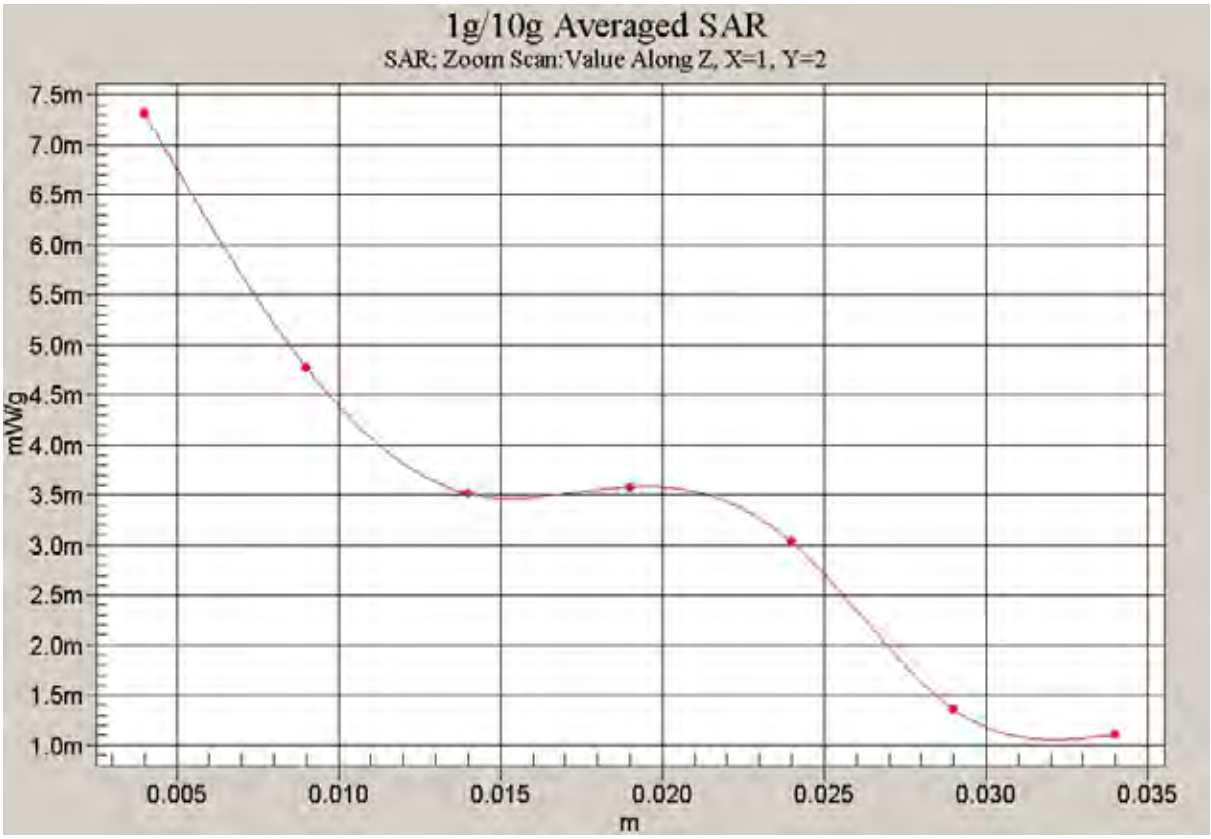


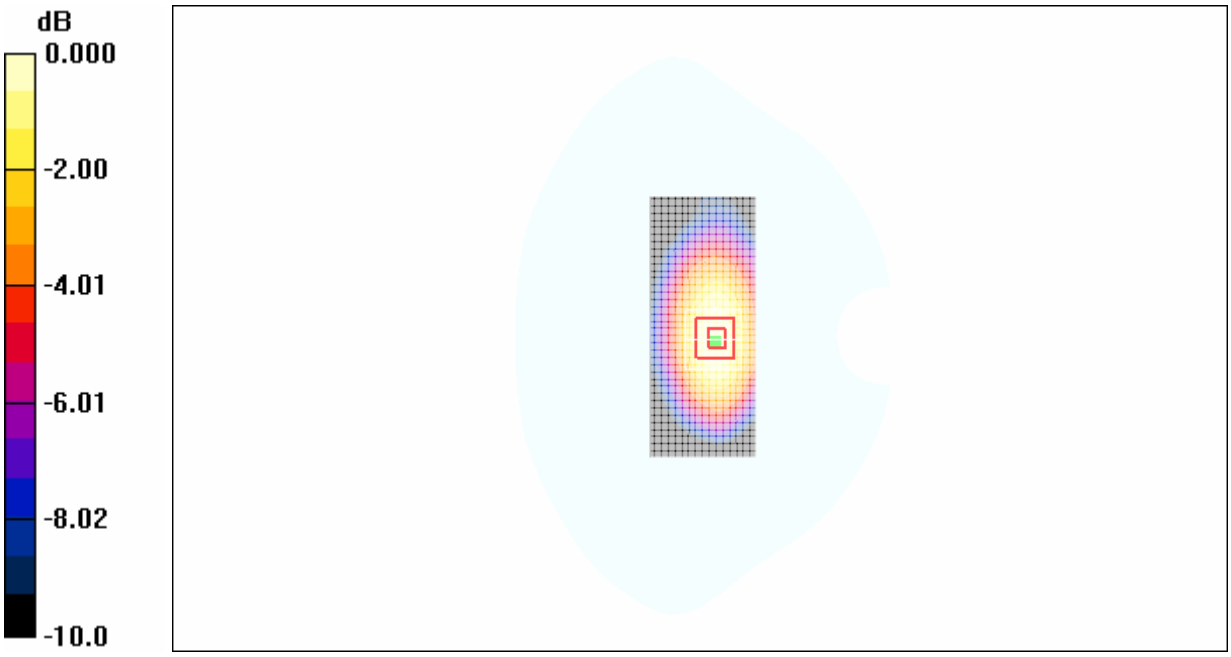
Fig.30 Z-Scan at power reference point (WCDMA 850 CH4182 Test Position 5)

WCDMA 850 External Antenna Test Position 1

Date/Time: 2007-1-16 12:25:07
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

External Antenna Test Position 1/Area Scan (61x141x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.045 mW/g

External Antenna Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.65 V/m; Power Drift = -0.020 dB
Peak SAR (extrapolated) = 0.057 W/kg
SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.029 mW/g
Maximum value of SAR (measured) = 0.045 mW/g



0 dB = 0.045mW/g

Fig. 31 WCDMA 850 CH4182 Test Position 1

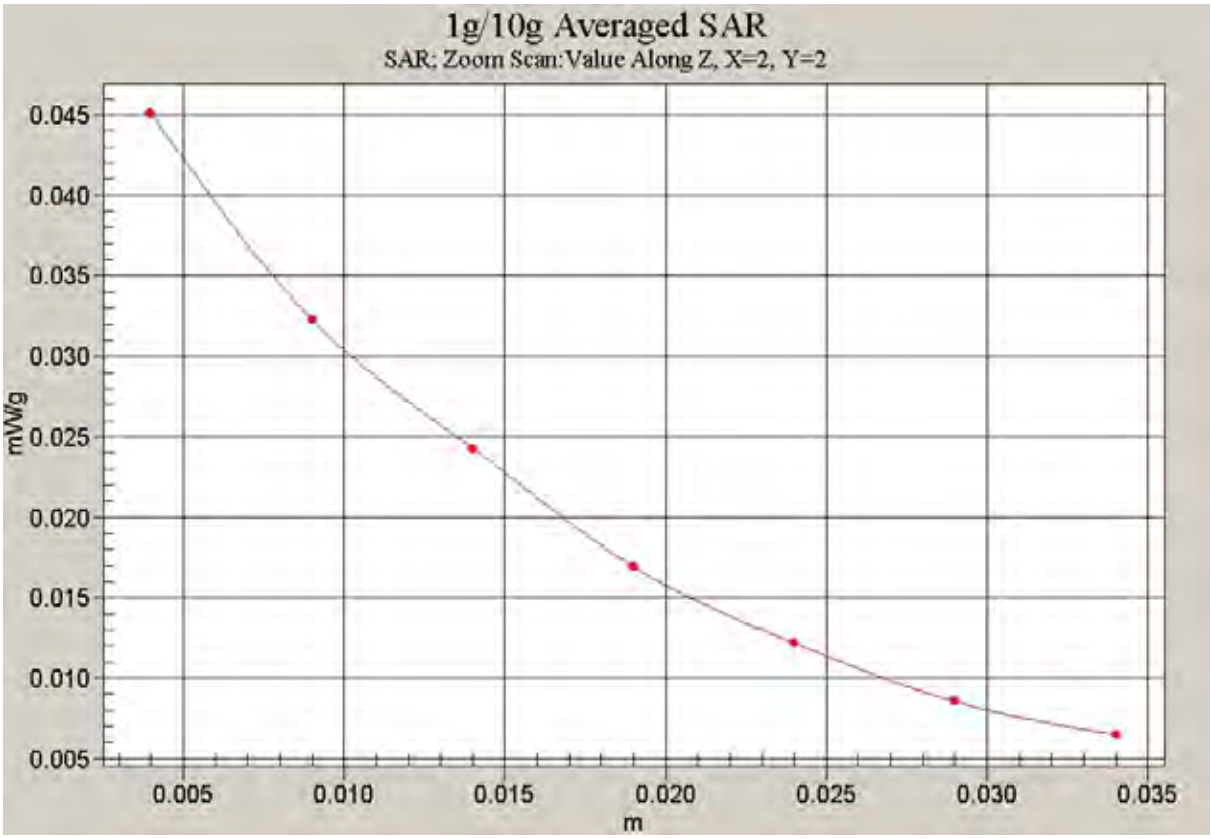


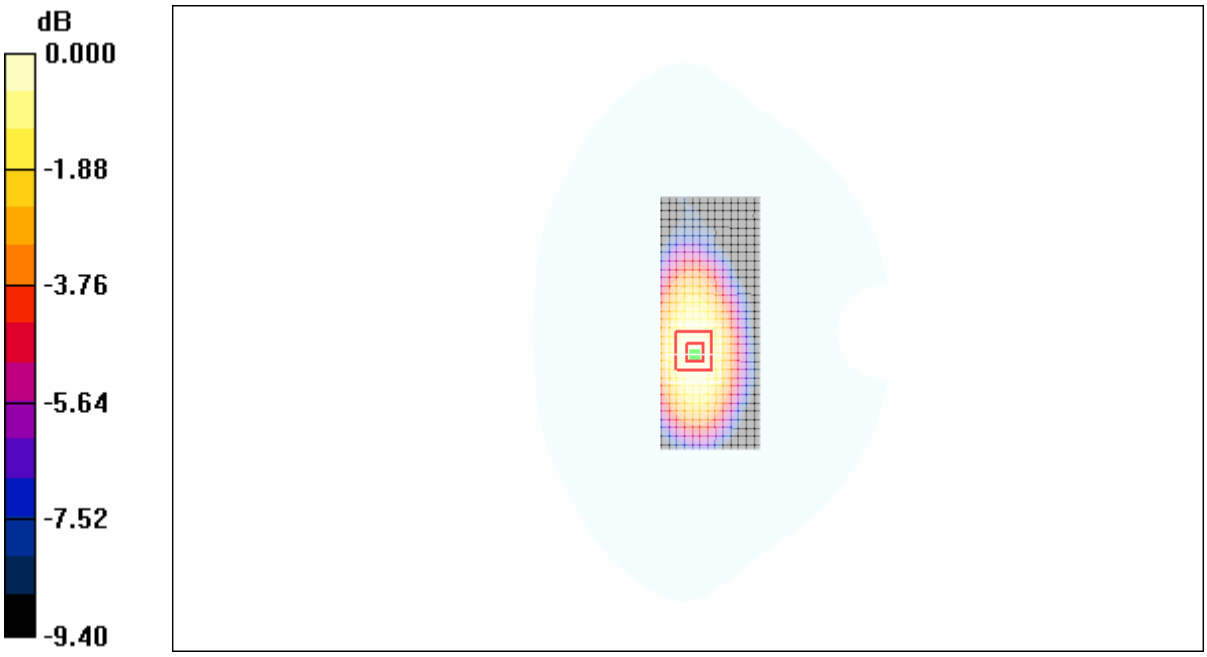
Fig.32 Z-Scan at power reference point (WCDMA 850 CH4182 Test Position 1)

WCDMA 850 External Antenna Test Position 2

Date/Time: 2007-1-16 12:42:25
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: GSM 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

External Antenna Test Position 2/Area Scan (61x141x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.044 mW/g

External Antenna Test Position 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.13 V/m; Power Drift = 0.044 dB
Peak SAR (extrapolated) = 0.057 W/kg
SAR(1 g) = 0.040 mW/g; SAR(10 g) = 0.028 mW/g
Maximum value of SAR (measured) = 0.043 mW/g



0 dB = 0.043mW/g

Fig.33 WCDMA 850 CH4182 Test Position 2

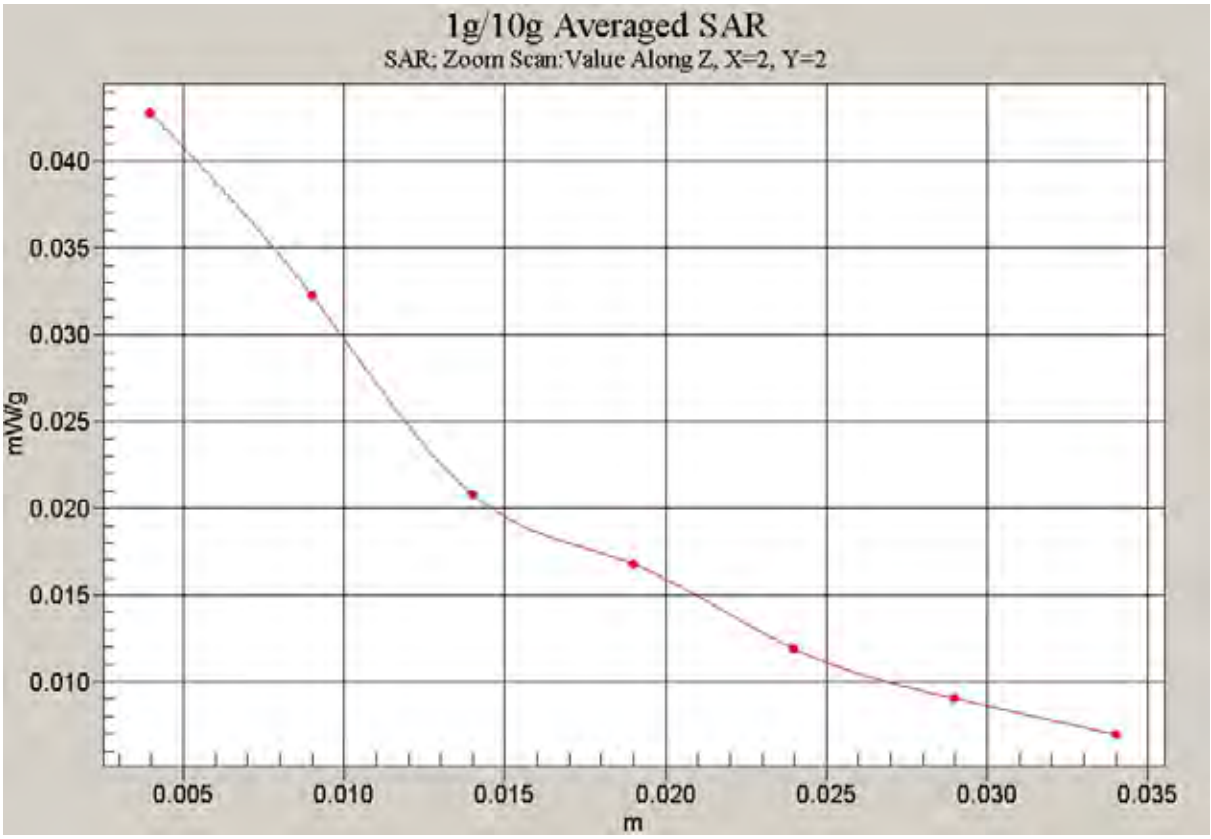


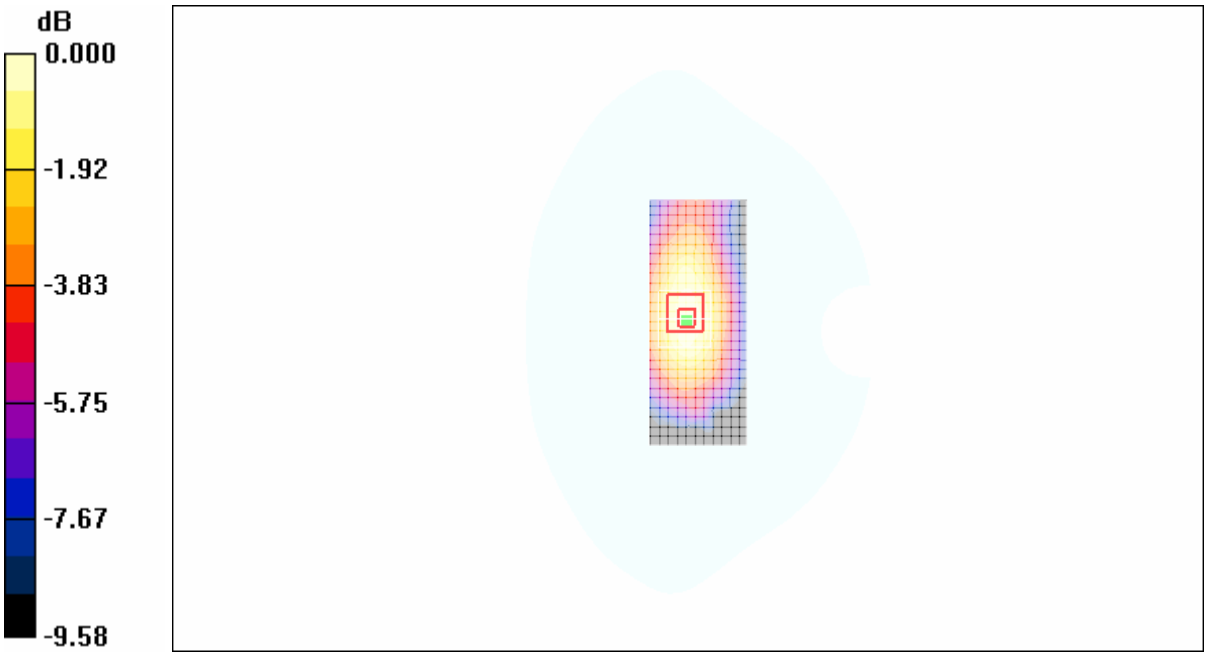
Fig.34 Z-Scan at power reference point (WCDMA 850 CH4182 Test Position 2)

WCDMA 850 External Antenna Test Position 3

Date/Time: 2007-1-16 12:59:37
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

External Antenna Test Position 3/Area Scan (61x141x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.021 mW/g

External Antenna Test Position 3/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.61 V/m; Power Drift = -0.192 dB
Peak SAR (extrapolated) = 0.027 W/kg
SAR(1 g) = 0.020 mW/g; SAR(10 g) = 0.014 mW/g
Maximum value of SAR (measured) = 0.022 mW/g



0 dB = 0.022mW/g

Fig. 35 WCDMA 850 CH4182 Test Position 3

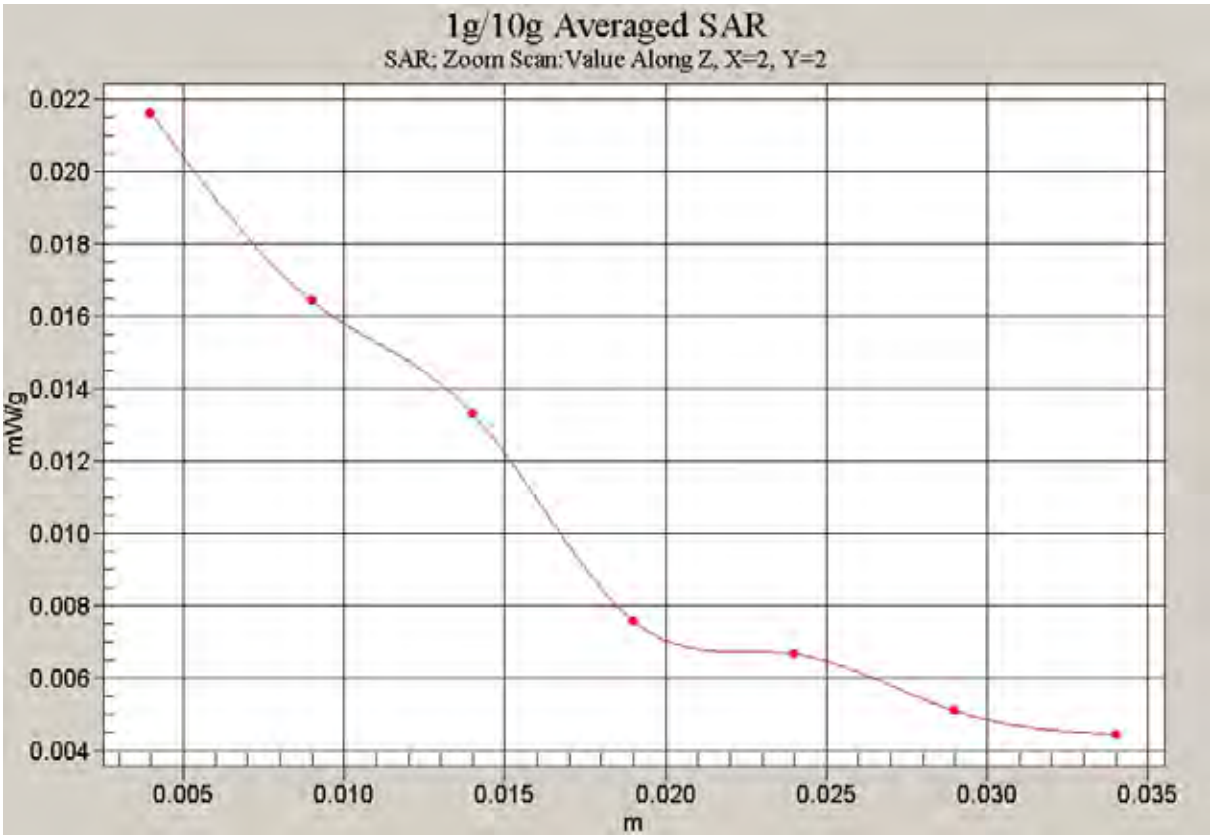


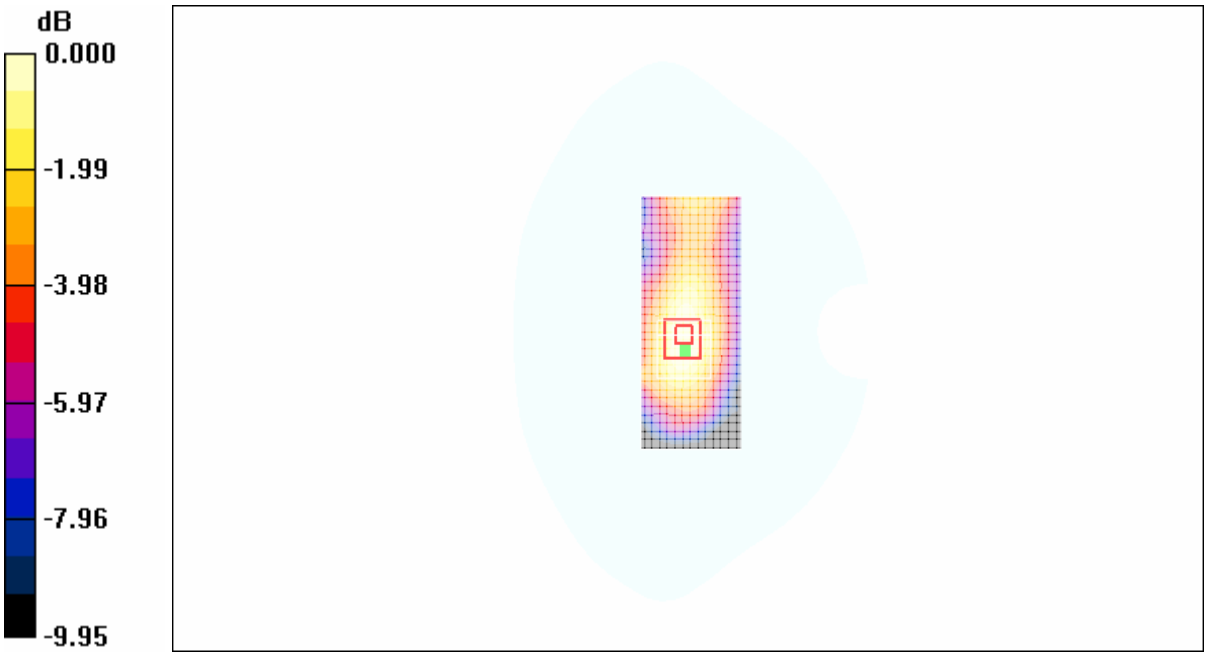
Fig.36 Z-Scan at power reference point (WCDMA 850 CH4182 Test Position 3)

WCDMA 850 External Antenna Test Position 4

Date/Time: 2007-1-16 13:18:26
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

External Antenna Test Position 4/Area Scan (61x141x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.017 mW/g

External Antenna Test Position 4/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.08 V/m; Power Drift = 0.089 dB
Peak SAR (extrapolated) = 0.019 W/kg
SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.011 mW/g
Maximum value of SAR (measured) = 0.017 mW/g



0 dB = 0.017mW/g

Fig.37 WCDMA 850 CH4182 Test Position 4

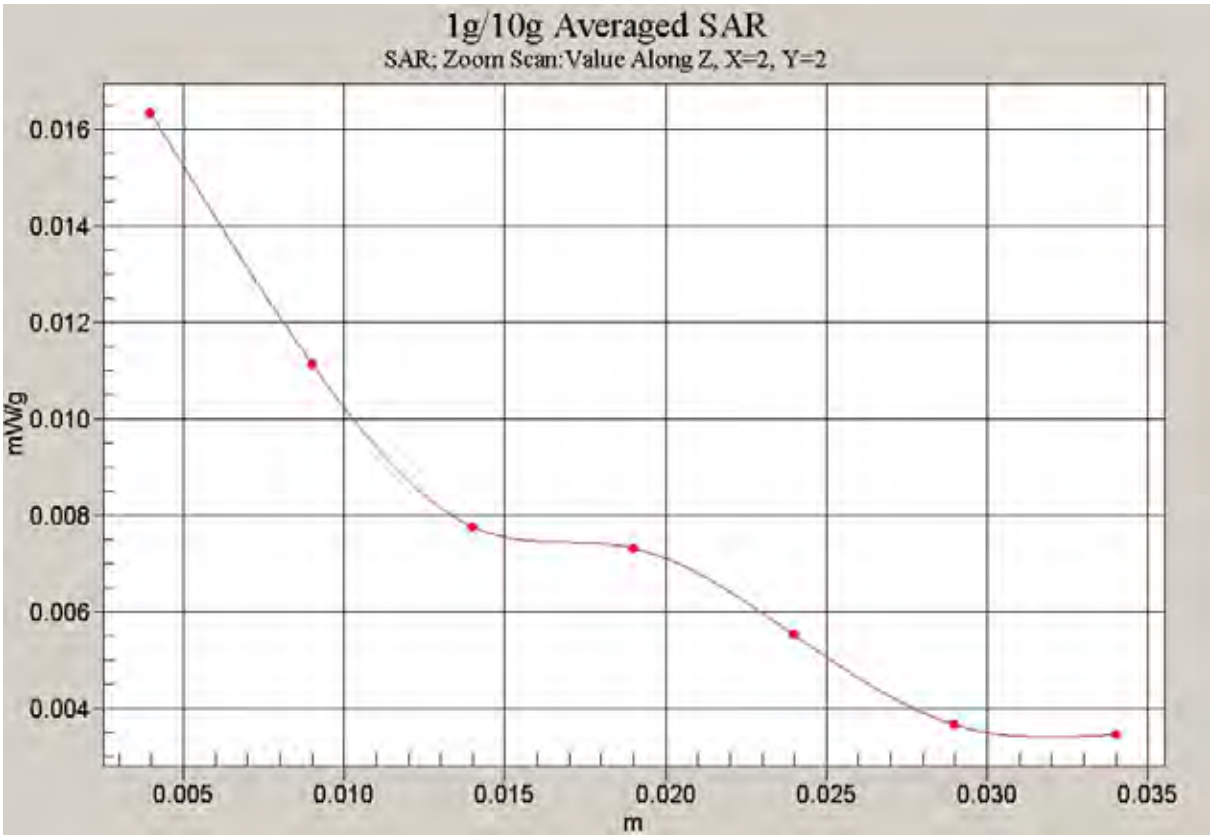


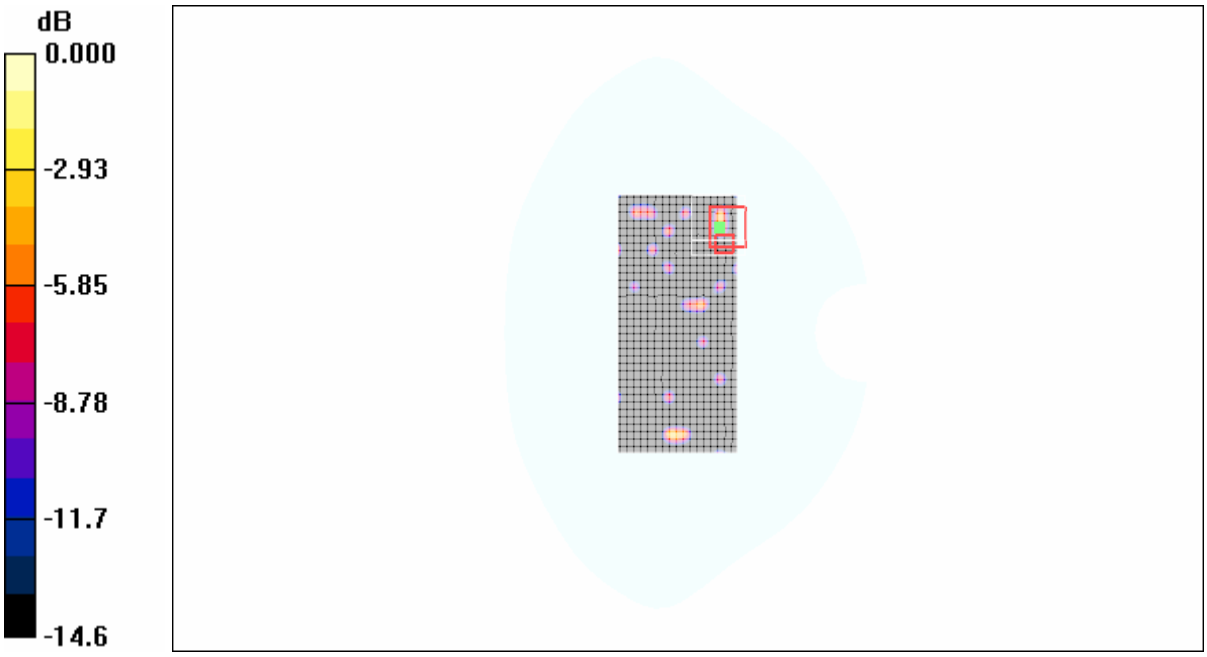
Fig.38 Z-Scan at power reference point (WCDMA 850 CH4182 Test Position 4)

WCDMA 850 External Antenna Test Position 5

Date/Time: 2007-1-16 13:36:15
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

External Antenna Test Position 5/Area Scan (71x141x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.004 mW/g

External Antenna Test Position 5/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.836 V/m; Power Drift = -0.200 dB
Peak SAR (extrapolated) = 0.007 W/kg
SAR(1 g) = 0.000404 mW/g; SAR(10 g) = 0.000141 mW/g
Maximum value of SAR (measured) = 0.007 mW/g



0 dB = 0.007mW/g

Fig.39 WCDMA 850 CH4182 Test Position 5

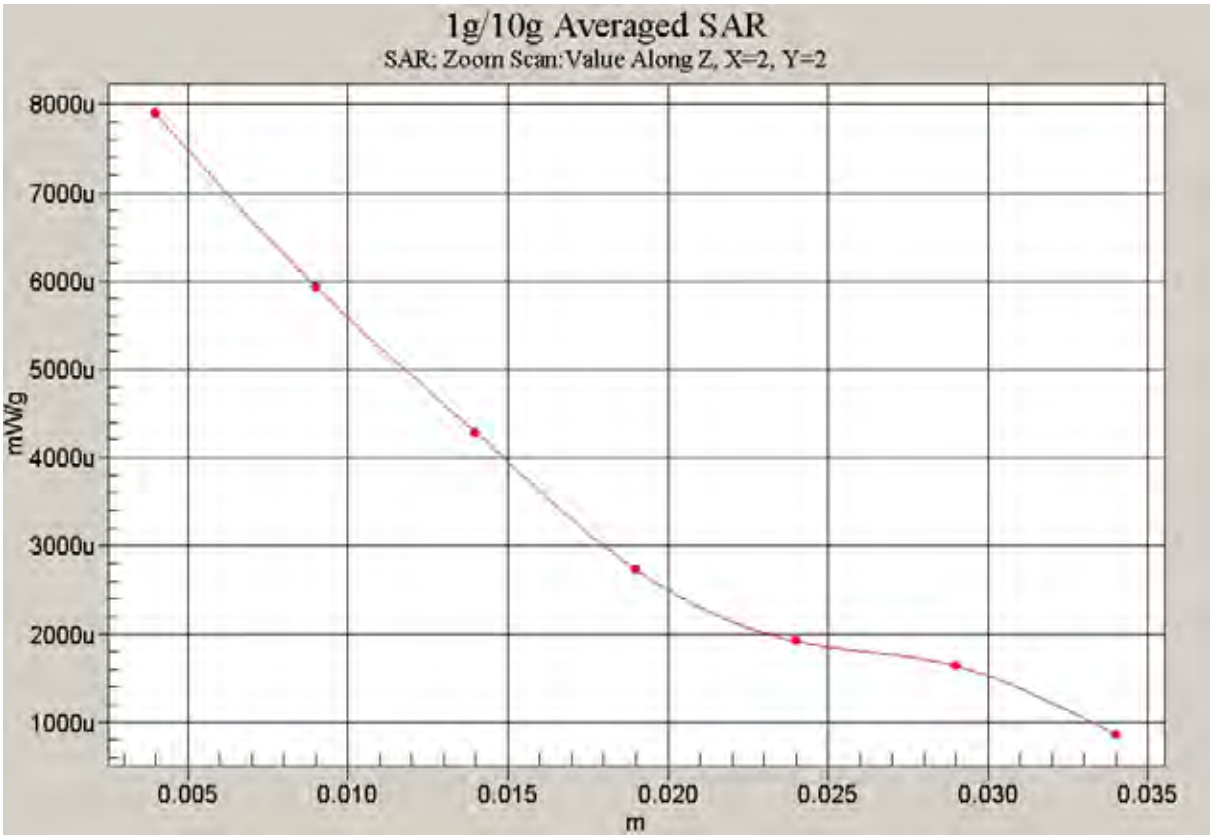


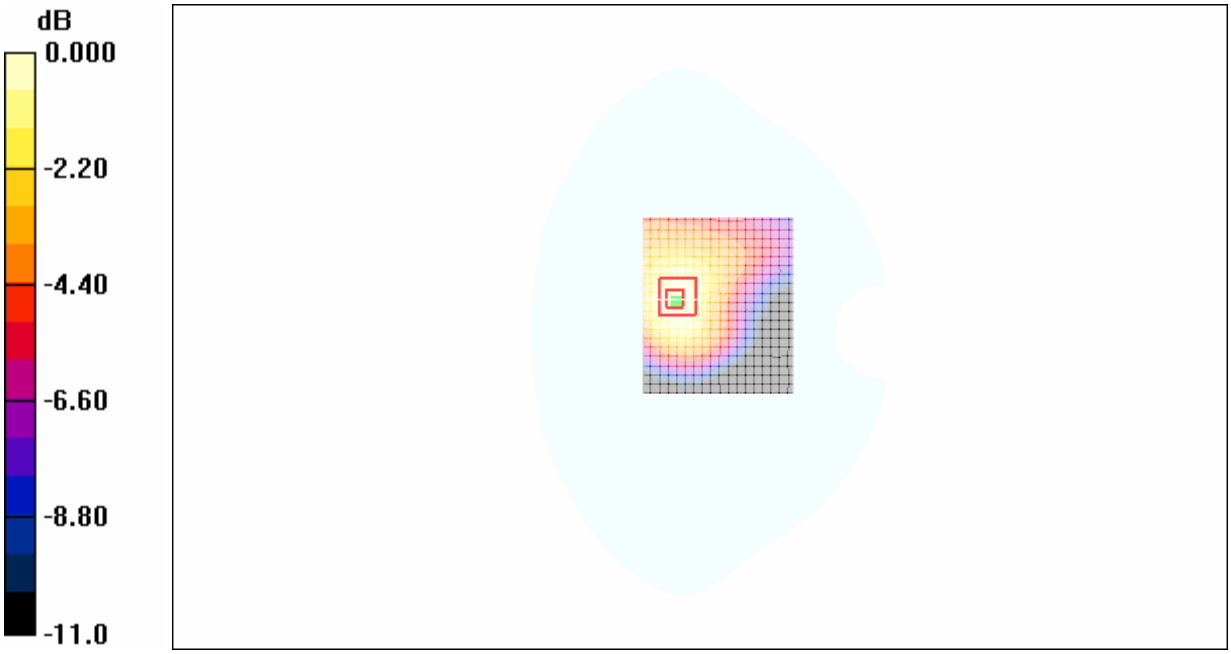
Fig.40 Z-Scan at power reference point (WCDMA 850 CH4182 Test Position 5)

HSDPA 850 Datacard Test Position 1 with IBM Laptop

Date/Time: 2007-1-16 23:59:26
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 1/Area Scan (91x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.050 mW/g

Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.27 V/m; Power Drift = -0.153 dB
Peak SAR (extrapolated) = 0.064 W/kg
SAR(1 g) = 0.047 mW/g; SAR(10 g) = 0.030 mW/g
Maximum value of SAR (measured) = 0.051 mW/g



0 dB = 0.053mW/g

Fig.41 HSDPA 850 CH4182 Test Position 1

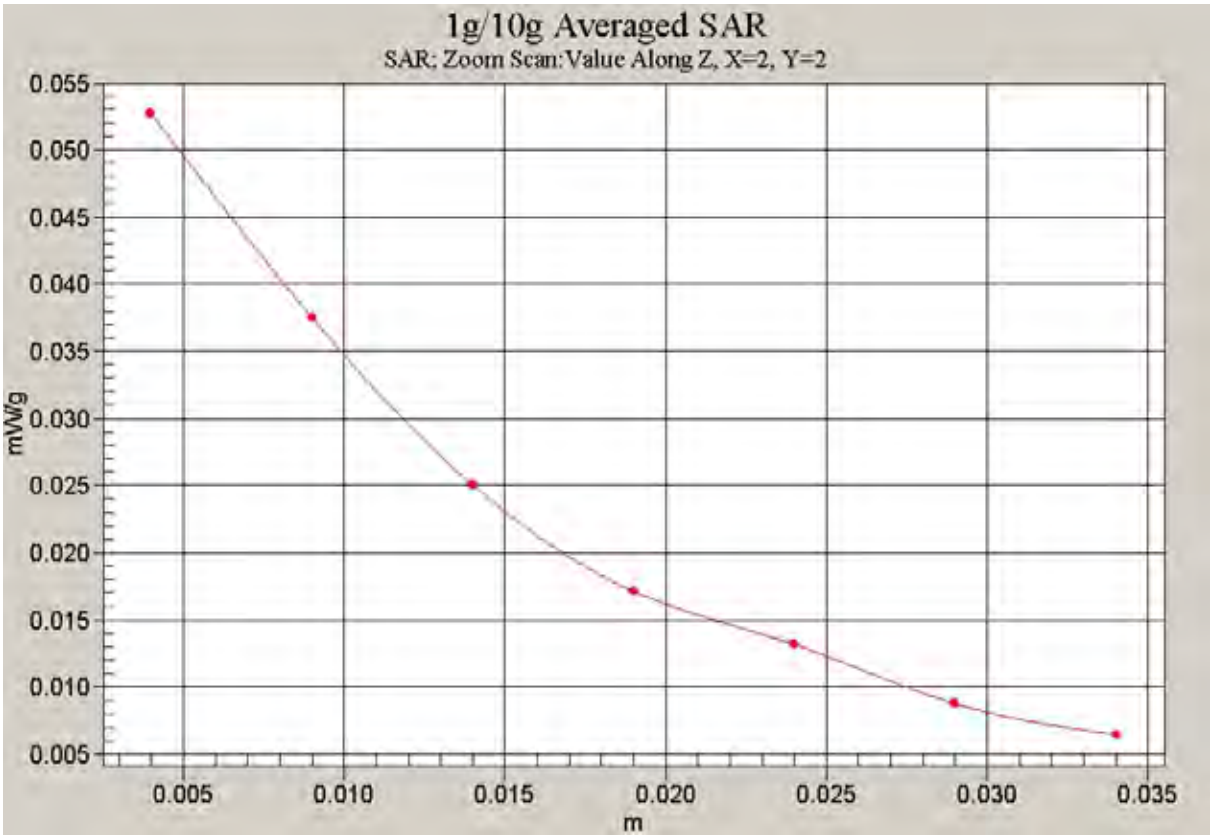


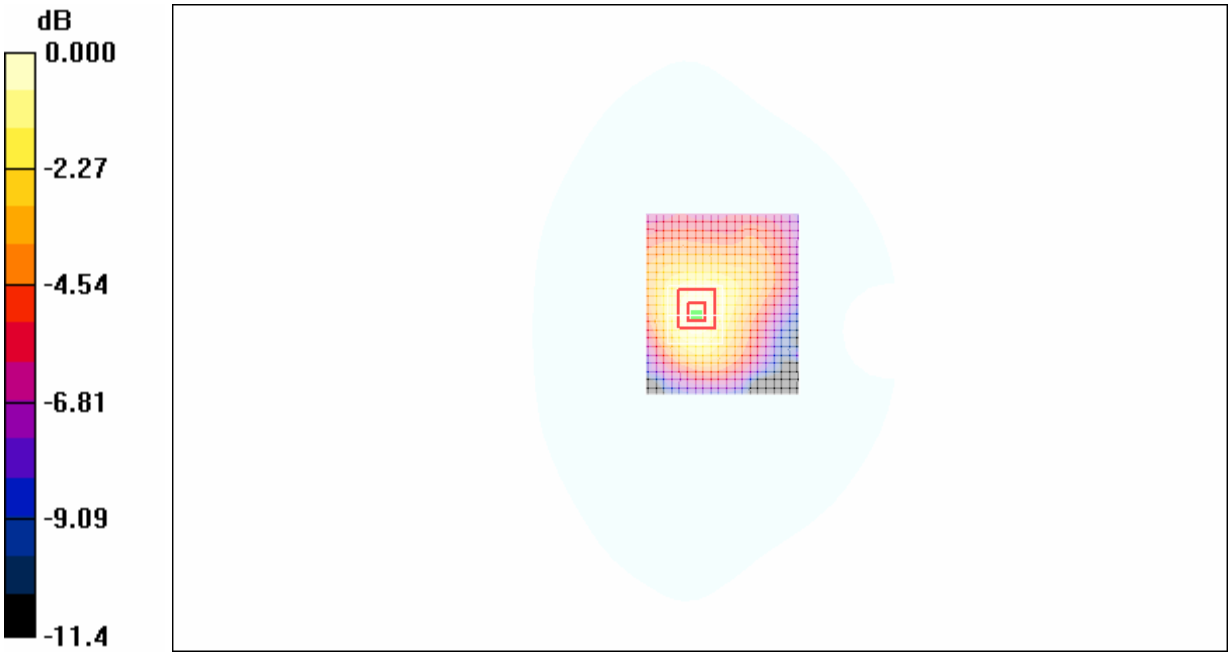
Fig.42 Z-Scan at power reference point (HSDPA 850 CH4182 Test Position 1)

HSDPA 850 Datacard Test Position 1 with Dell Laptop

Date/Time: 2007-1-16 18:23:37
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 1/Area Scan (91x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.051 mW/g

Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.71 V/m; Power Drift = -0.122 dB
Peak SAR (extrapolated) = 0.062 W/kg
SAR(1 g) = 0.049 mW/g; SAR(10 g) = 0.034 mW/g
Maximum value of SAR (measured) = 0.054 mW/g



0 dB = 0.054mW/g

Fig.43 HSDPA 850 CH4182 Test Position 1

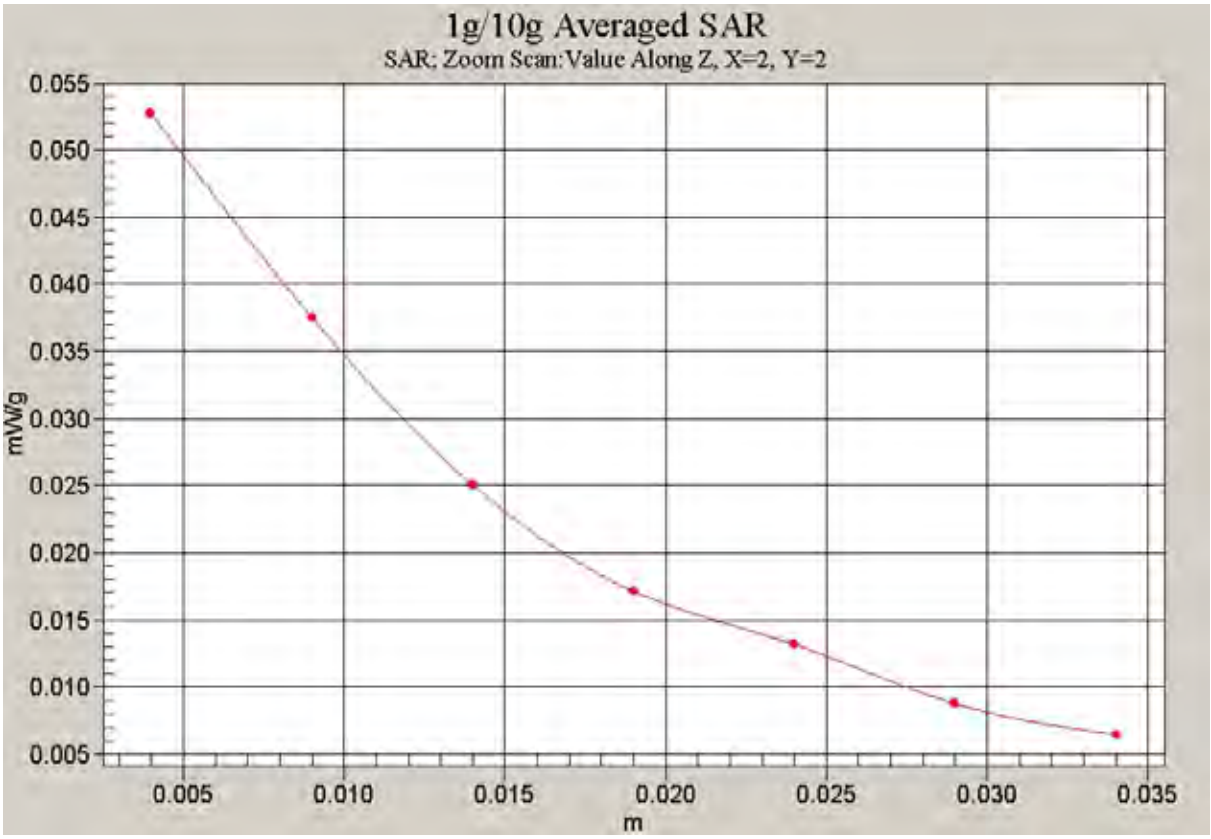


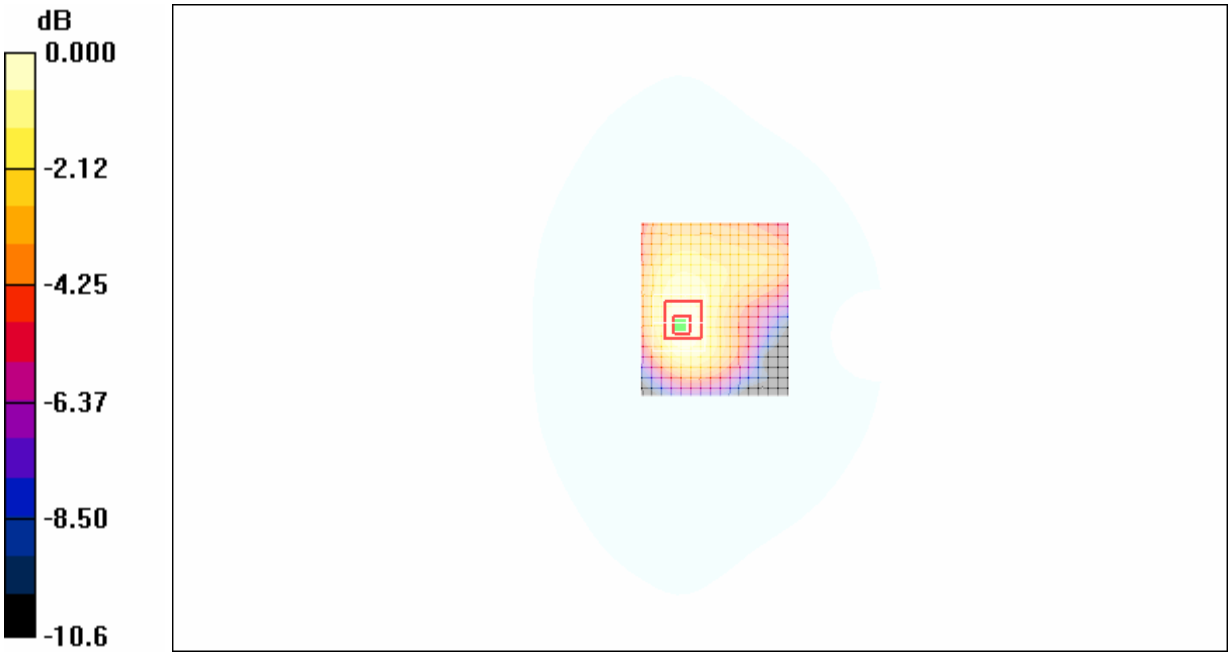
Fig.44 Z-Scan at power reference point (HSDPA 850 CH4182 Test Position 1)

HSDPA 850 Datacard Test Position 1 with HP Laptop

Date/Time: 2007-1-16 15:39:11
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 1/Area Scan (91x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.031 mW/g

Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.98 V/m; Power Drift = 0.100 dB
Peak SAR (extrapolated) = 0.049 W/kg
SAR(1 g) = 0.031 mW/g; SAR(10 g) = 0.021 mW/g
Maximum value of SAR (measured) = 0.034 mW/g



0 dB = 0.034mW/g

Fig.45 HSDPA 850 CH4182 Test Position 1

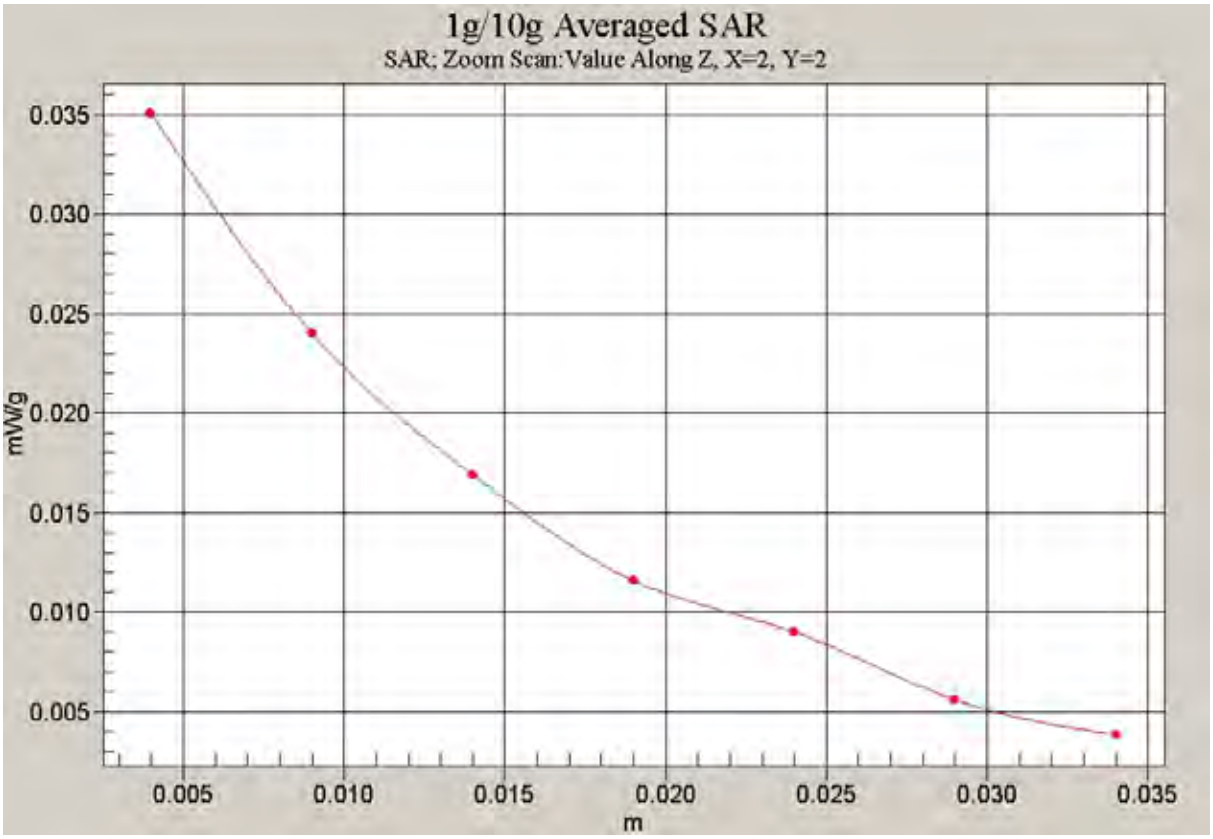


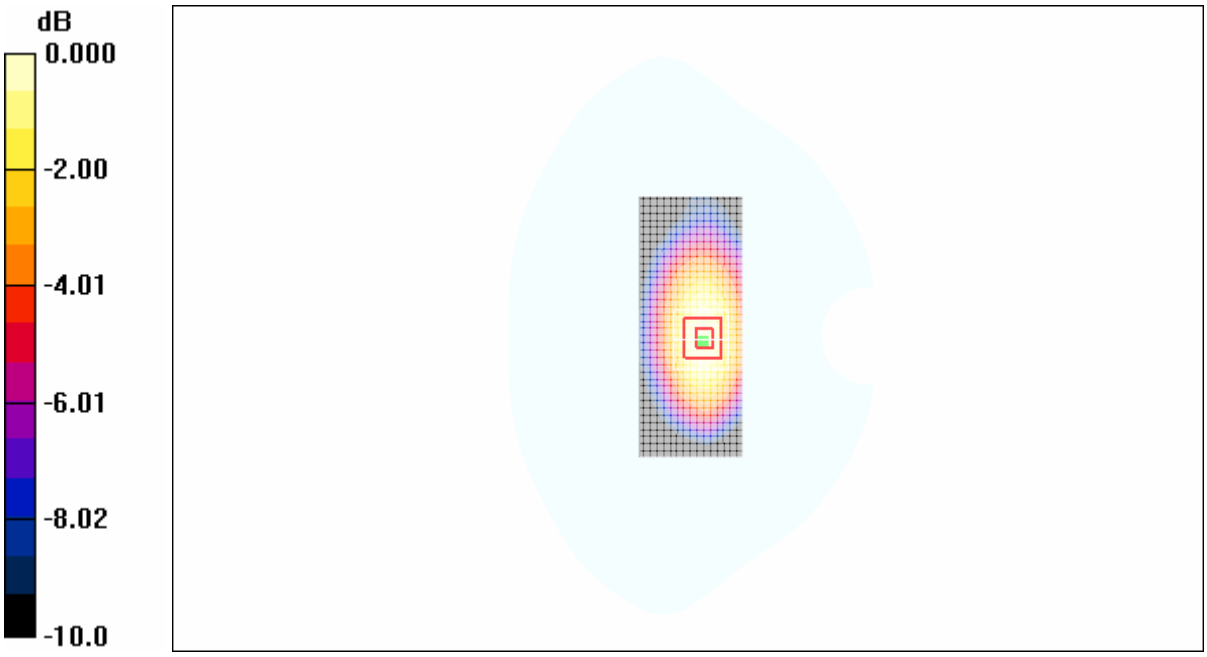
Fig.46 Z-Scan at power reference point (HSDPA 850 CH4182 Test Position 1)

HSDPA 850 External Antenna Test Position 1

Date/Time: 2007-1-16 14:07:07
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Frequency: 836.4 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

External Antenna Test Position 1/Area Scan (61x141x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.042 mW/g

External Antenna Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.61 V/m; Power Drift = 0.109 dB
Peak SAR (extrapolated) = 0.053 W/kg
SAR(1 g) = 0.041 mW/g; SAR(10 g) = 0.026 mW/g
Maximum value of SAR (measured) = 0.043 mW/g



0 dB = 0.043mW/g

Fig.47 HSDPA 850 CH4182 Test Position 1

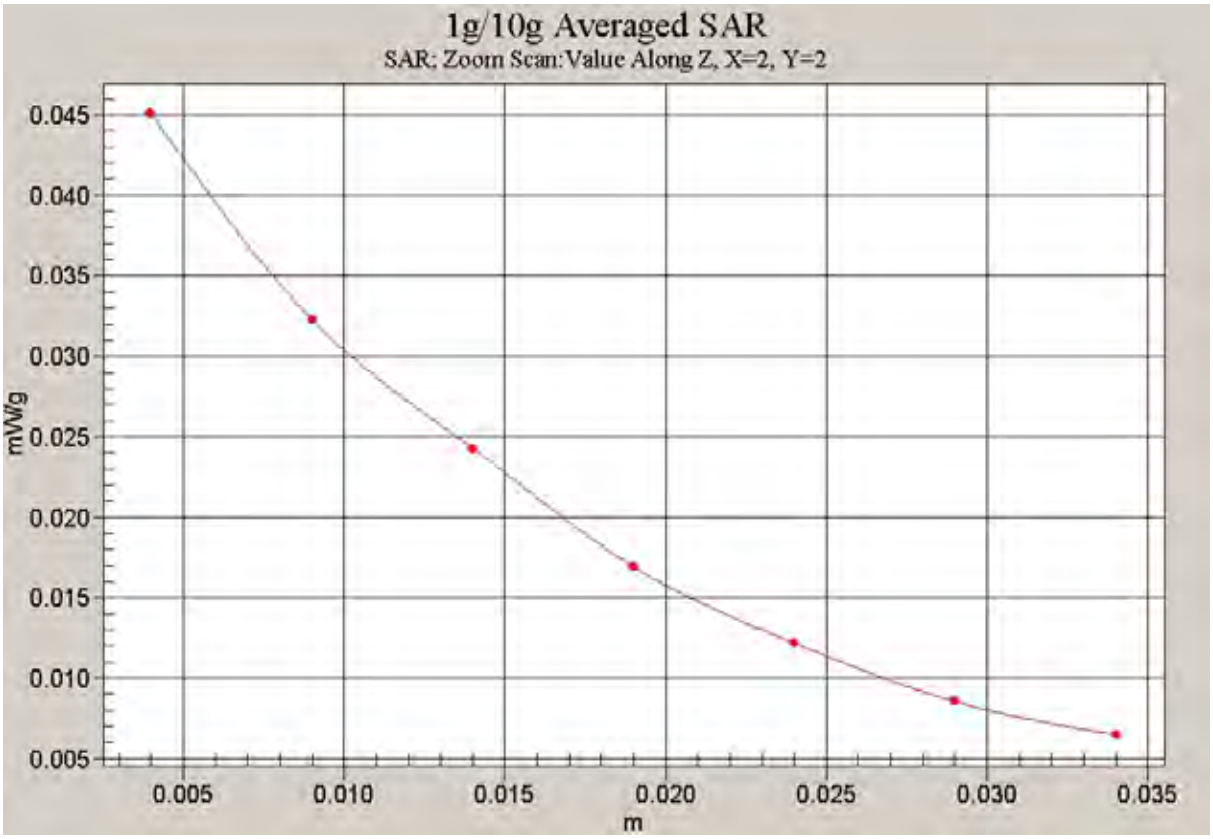


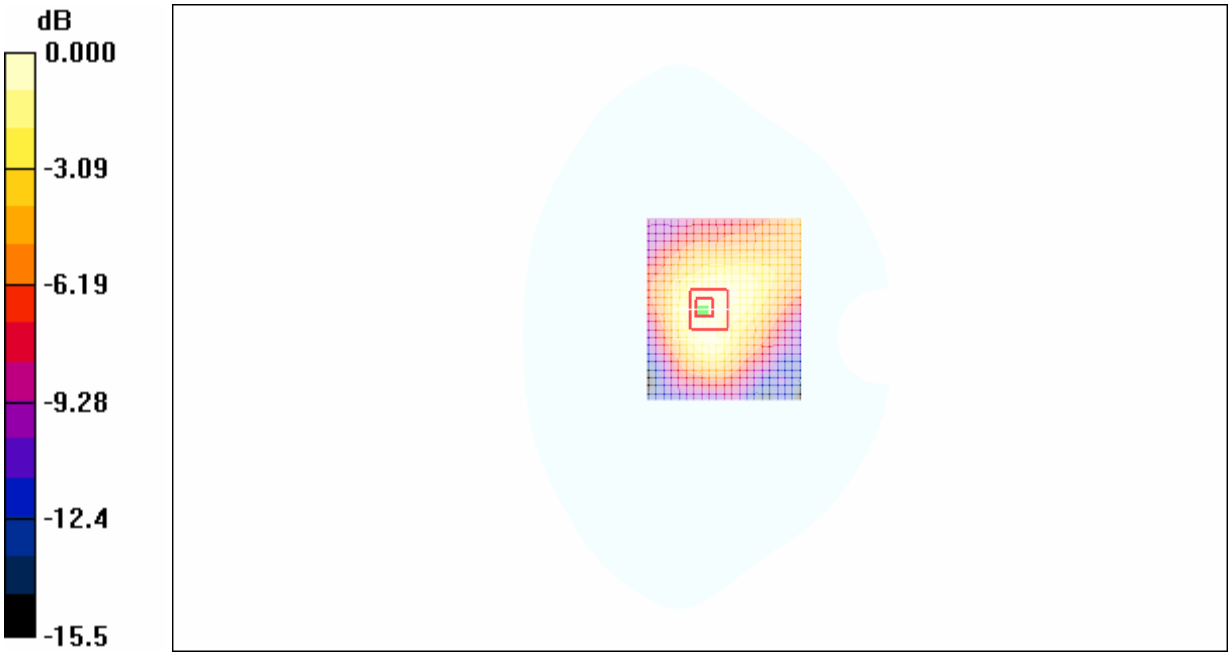
Fig.48 Z-Scan at power reference point (HSDPA 850 CH4182 Test Position 1)

WCDMA 1900 Datacard Test Position 1 with IBM Laptop

Date/Time: 2007-1-19 12:54:39
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 1/Area Scan (91x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.071 mW/g

Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.54 V/m; Power Drift = -0.118 dB
Peak SAR (extrapolated) = 0.117 W/kg
SAR(1 g) = 0.065 mW/g; SAR(10 g) = 0.041 mW/g
Maximum value of SAR (measured) = 0.068 mW/g



0 dB = 0.068mW/g

Fig. 49 WCDMA 1900 CH9400 Test Position 1

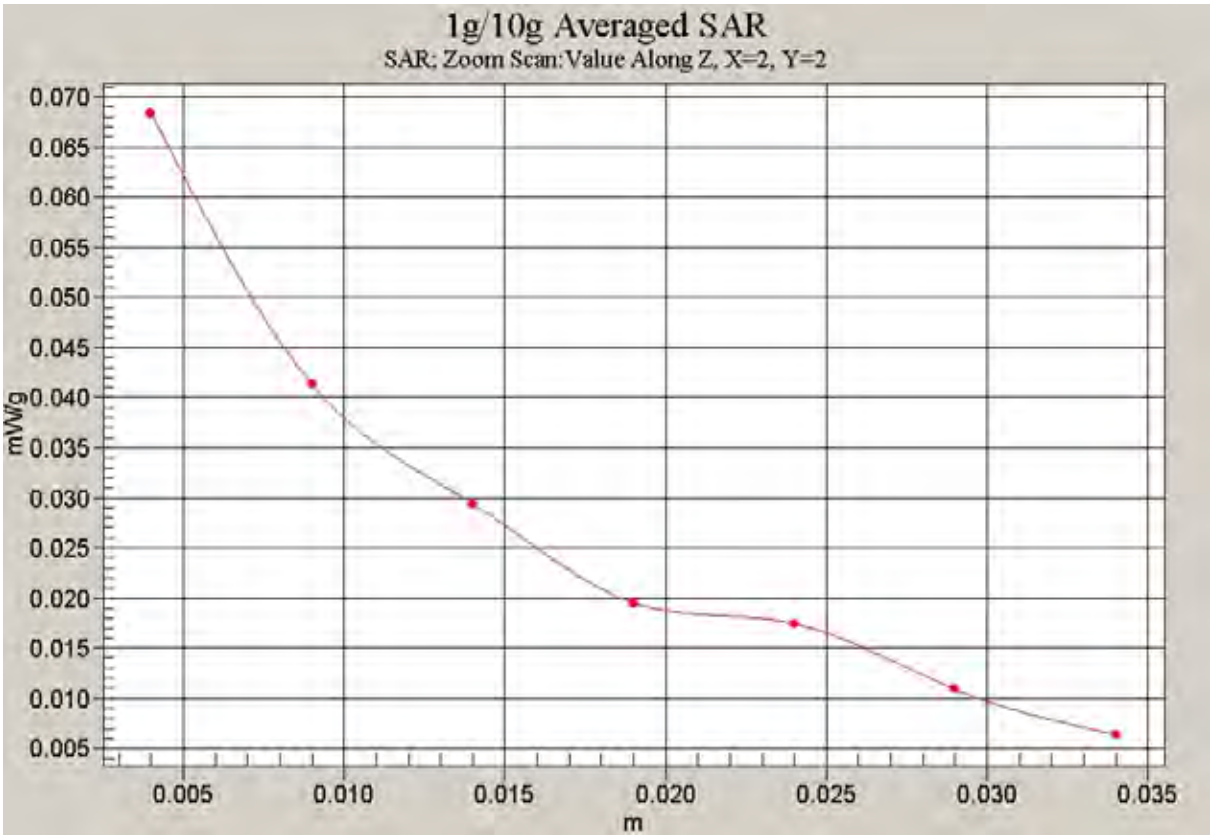


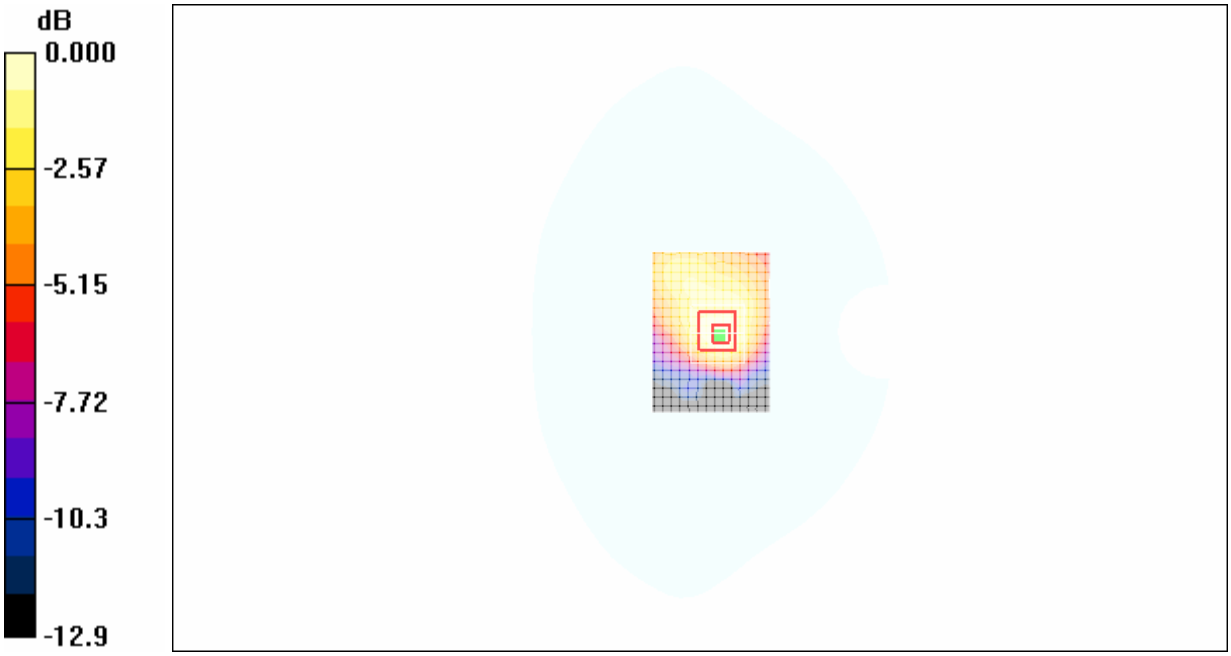
Fig.50 Z-Scan at power reference point (WCDMA 1900 CH9400 Test Position 1)

WCDMA 1900 Datacard Test Position 2 with IBM Laptop

Date/Time: 2007-1-19 12:21:49
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 2/Area Scan (71x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.077 mW/g

Test Position 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.40 V/m; Power Drift = -0.200 dB
Peak SAR (extrapolated) = 0.106 W/kg
SAR(1 g) = 0.064 mW/g; SAR(10 g) = 0.040 mW/g
Maximum value of SAR (measured) = 0.072 mW/g



0 dB = 0.072mW/g

Fig.51 WCDMA 1900 CH9400 Test Position 2

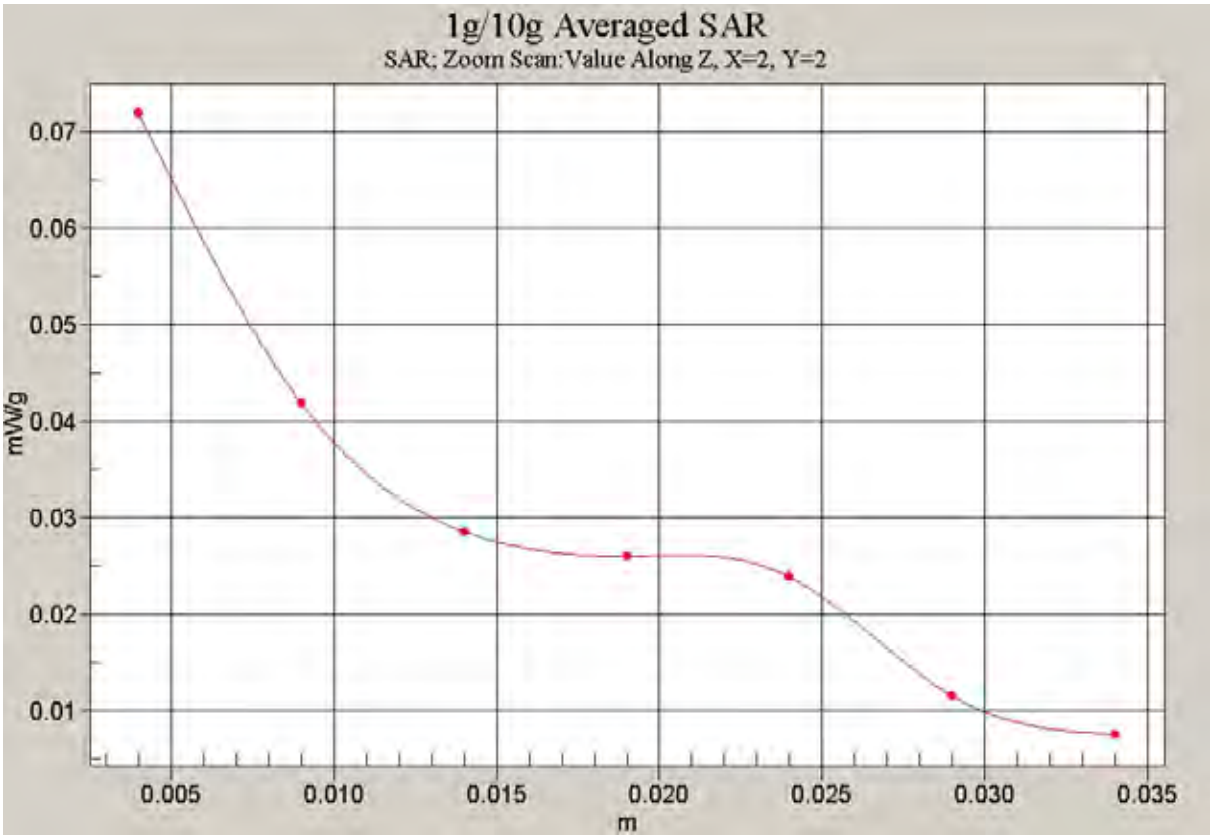


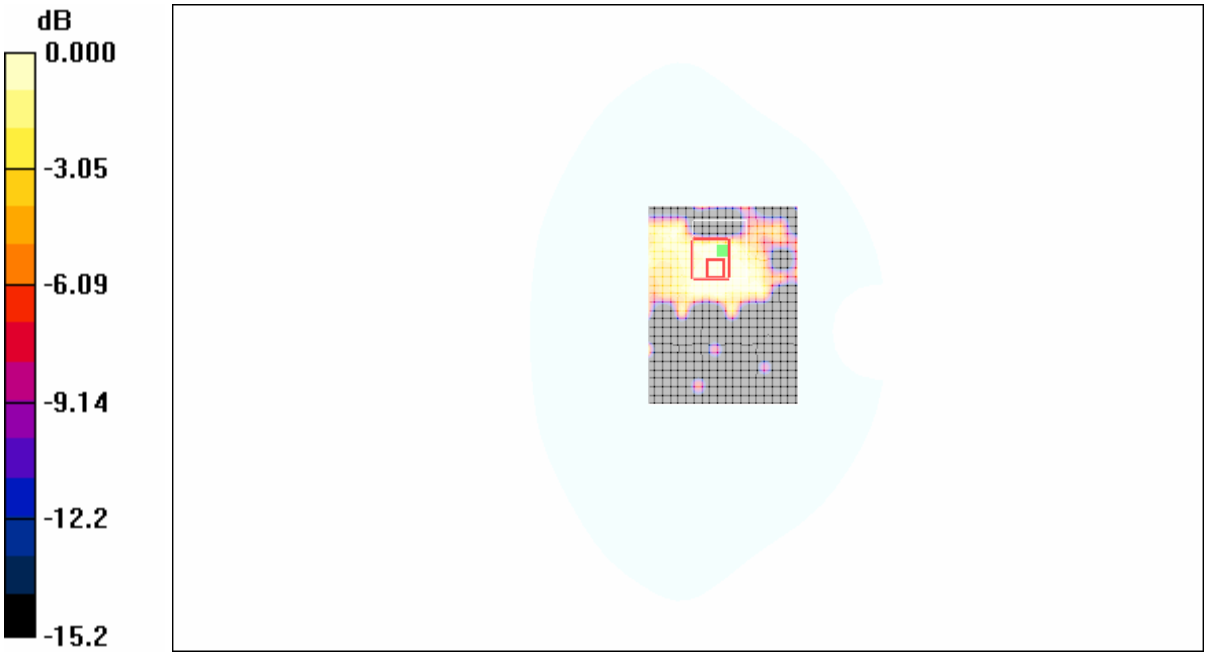
Fig.52 Z-Scan at power reference point (WCDMA 1900 CH9400 Test Position 2)

WCDMA 1900 Datacard Test Position 3 with IBM Laptop

Date/Time: 2007-1-19 13:40:36
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 3/Area Scan (91x111x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.024 mW/g

Test Position 3/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.55 V/m; Power Drift = -0.192 dB
Peak SAR (extrapolated) = 0.122 W/kg
SAR(1 g) = 0.025 mW/g; SAR(10 g) = 0.00885 mW/g
Maximum value of SAR (measured) = 0.024 mW/g



0 dB = 0.024mW/g

Fig. 53 WCDMA 1900 CH9400 Test Position 3

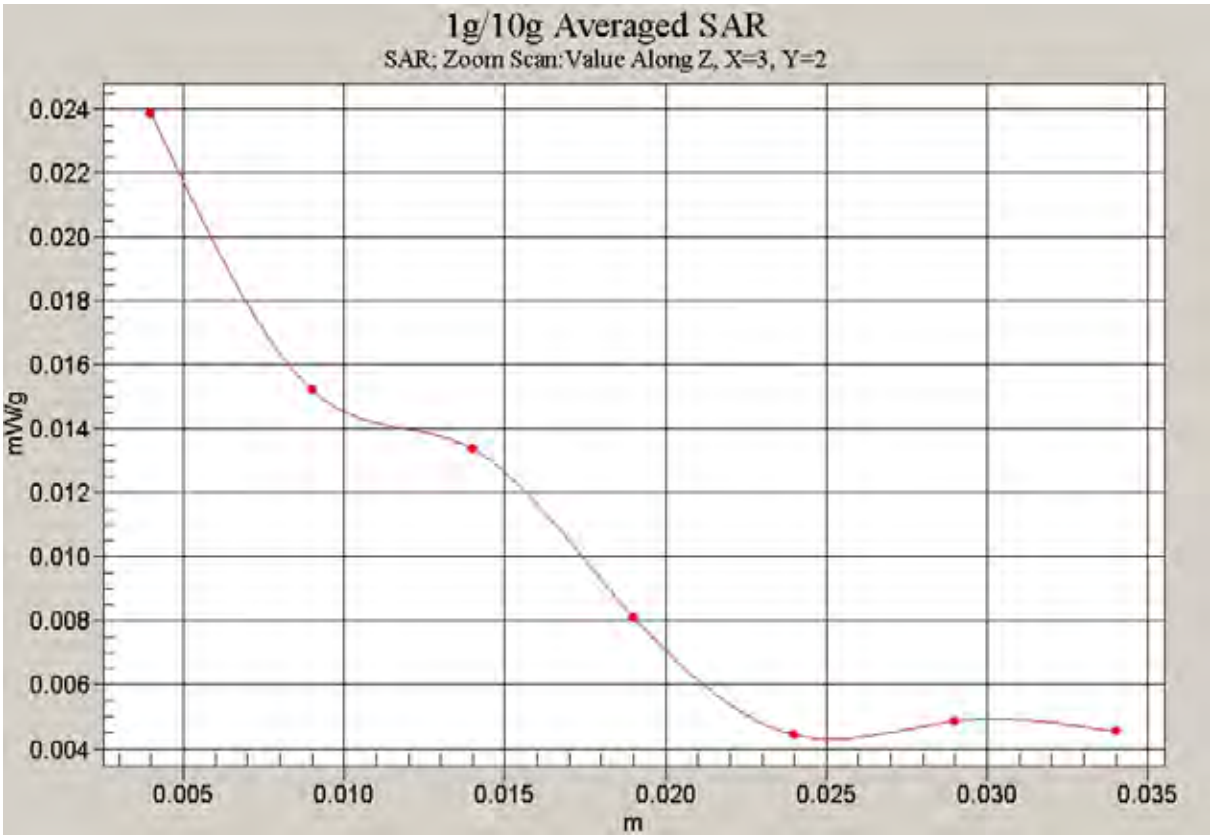


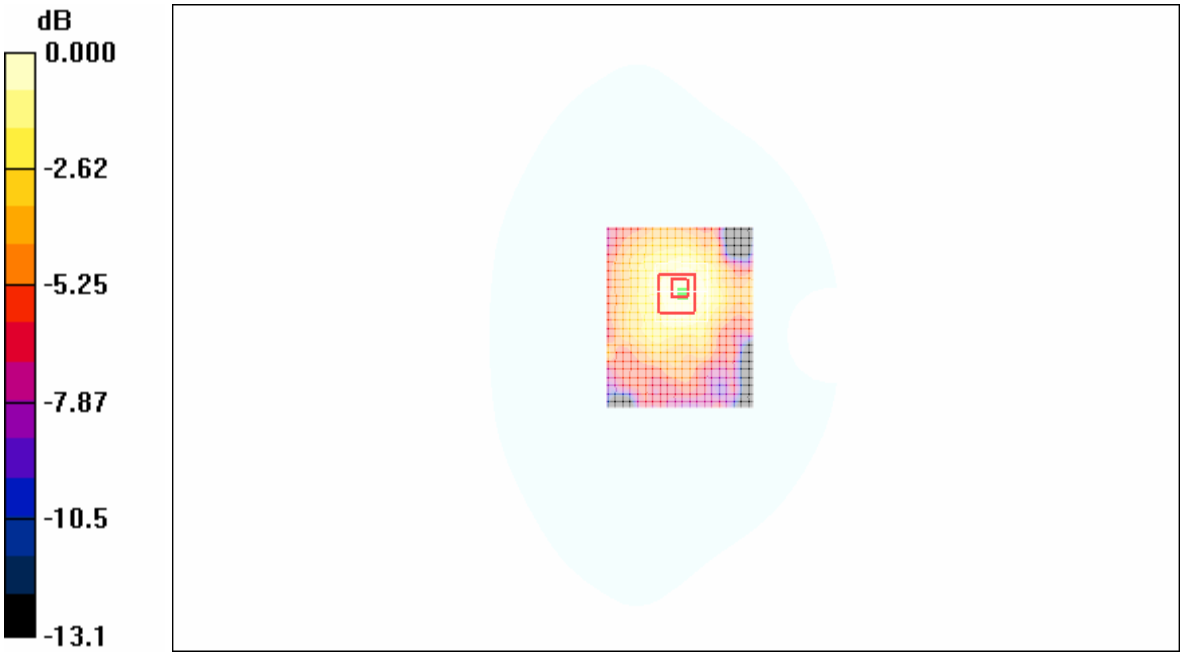
Fig.54 Z-Scan at power reference point (WCDMA 1900 CH9400 Test Position 3)

WCDMA 1900 Datacard Test Position 4 with IBM Laptop

Date/Time: 2007-1-19 14:02:26
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 4/Area Scan (91x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.045 mW/g

Test Position 4/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.21 V/m; Power Drift = 0.153 dB
Peak SAR (extrapolated) = 0.047 W/kg
SAR(1 g) = 0.040 mW/g; SAR(10 g) = 0.024 mW/g
Maximum value of SAR (measured) = 0.044 mW/g



0 dB = 0.044mW/g

Fig. 55 WCDMA 1900 CH9400 Test Position 4

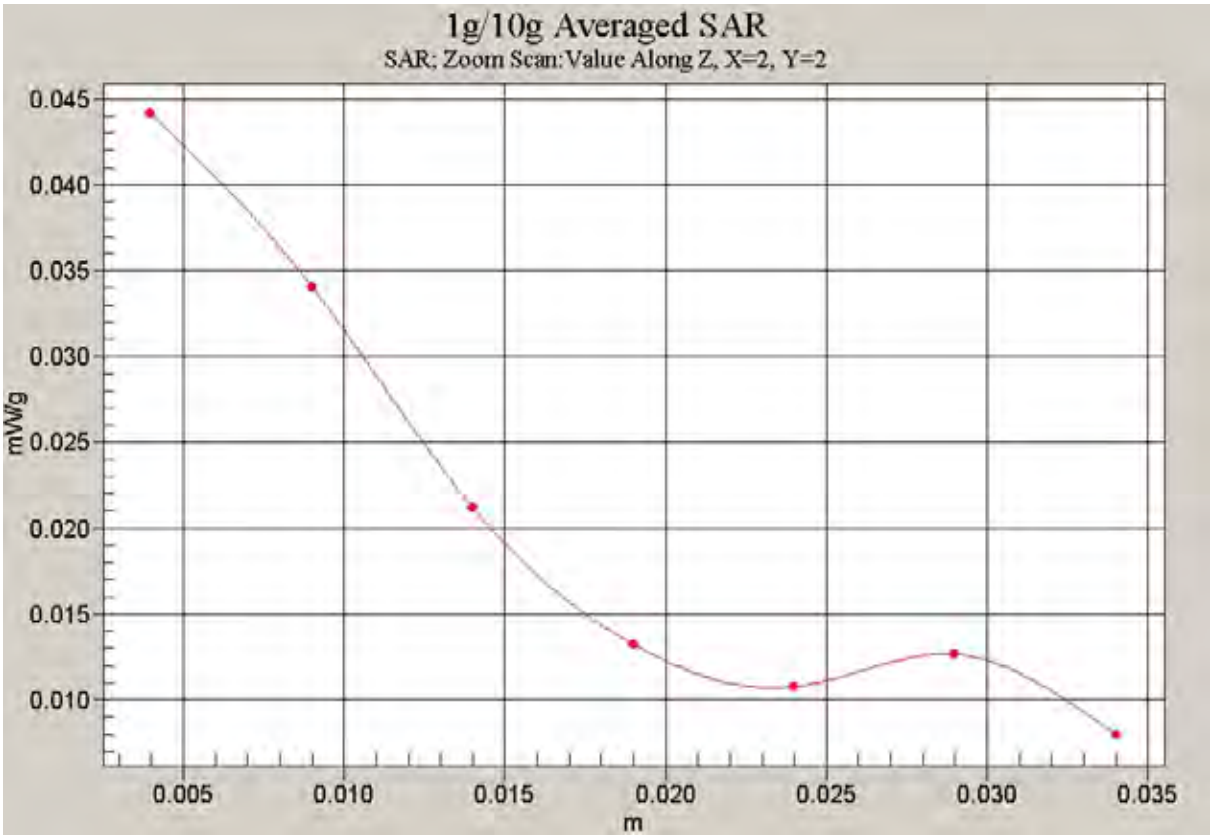


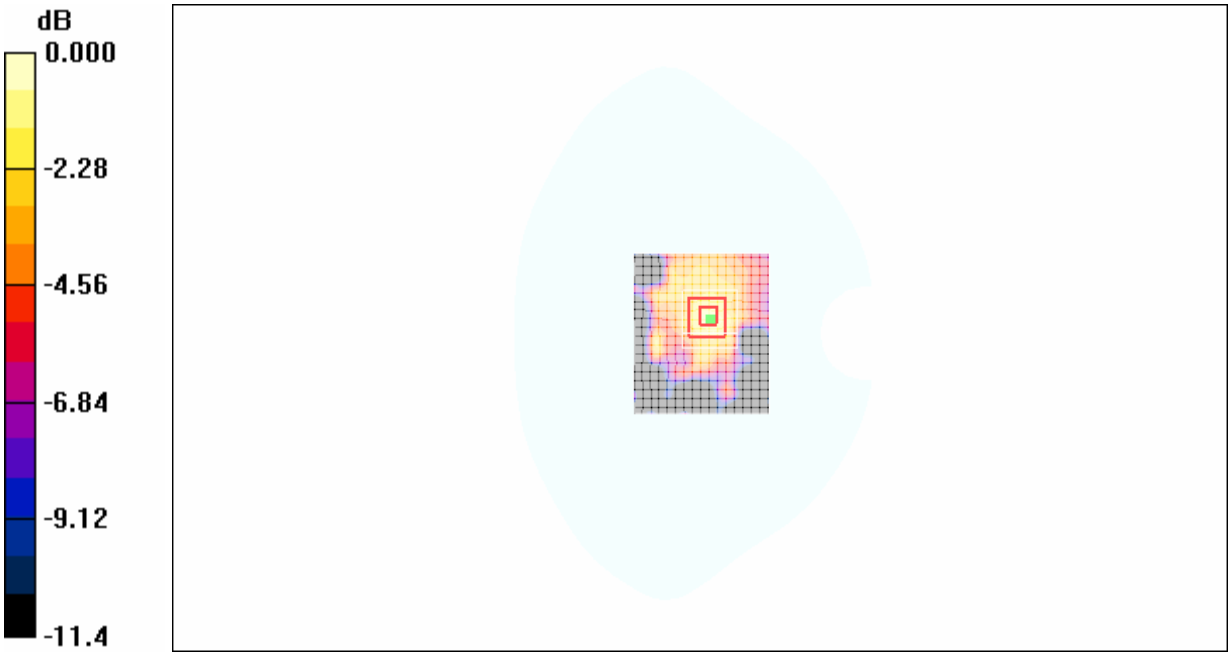
Fig.56 Z-Scan at power reference point (WCDMA 1900 CH9400 Test Position 4)

WCDMA 1900 DataCard Test Position 5 with IBM Laptop

Date/Time: 2007-1-19 13:12:28
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 5/Area Scan (81x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.020 mW/g

Test Position 5/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.30 V/m; Power Drift = -0.165 dB
Peak SAR (extrapolated) = 0.073 W/kg
SAR(1 g) = 0.020 mW/g; SAR(10 g) = 0.00989 mW/g
Maximum value of SAR (measured) = 0.026 mW/g



0 dB = 0.026mW/g

Fig.57 WCDMA 1900 CH9400 Test Position 5

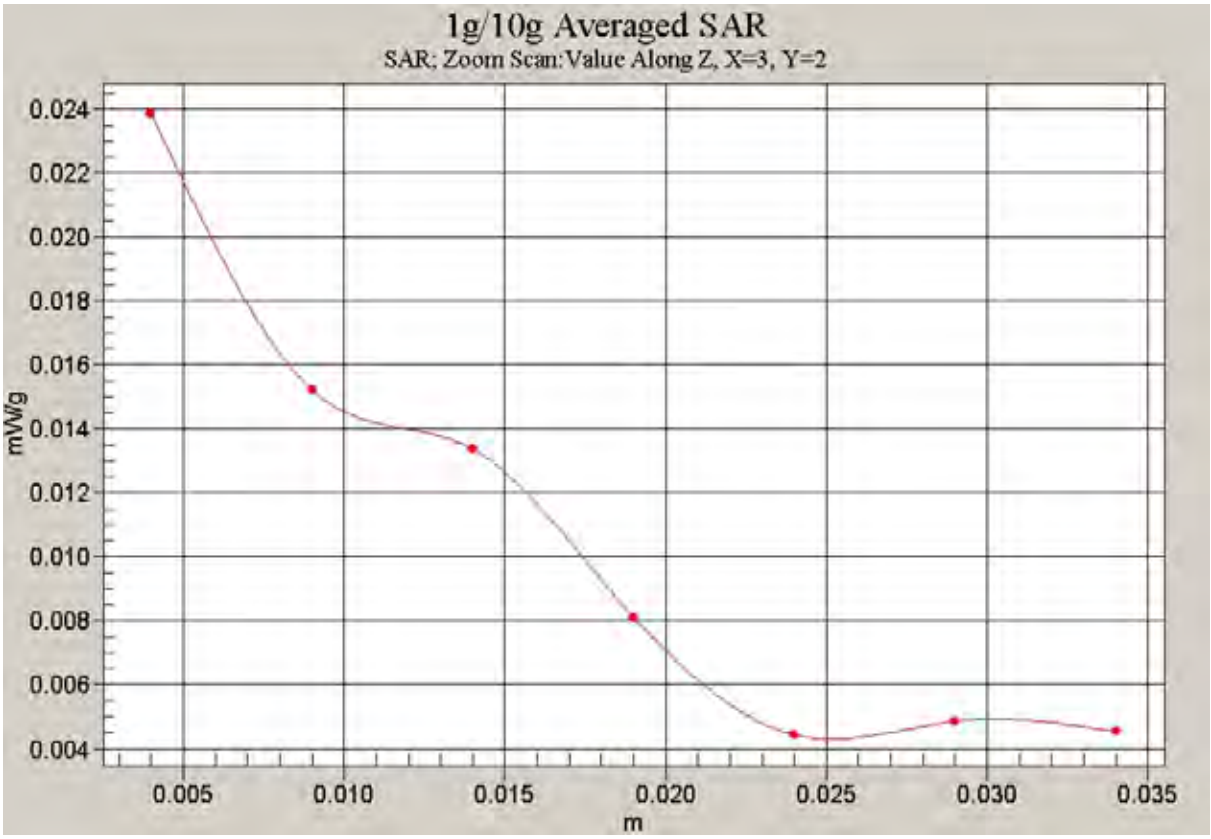


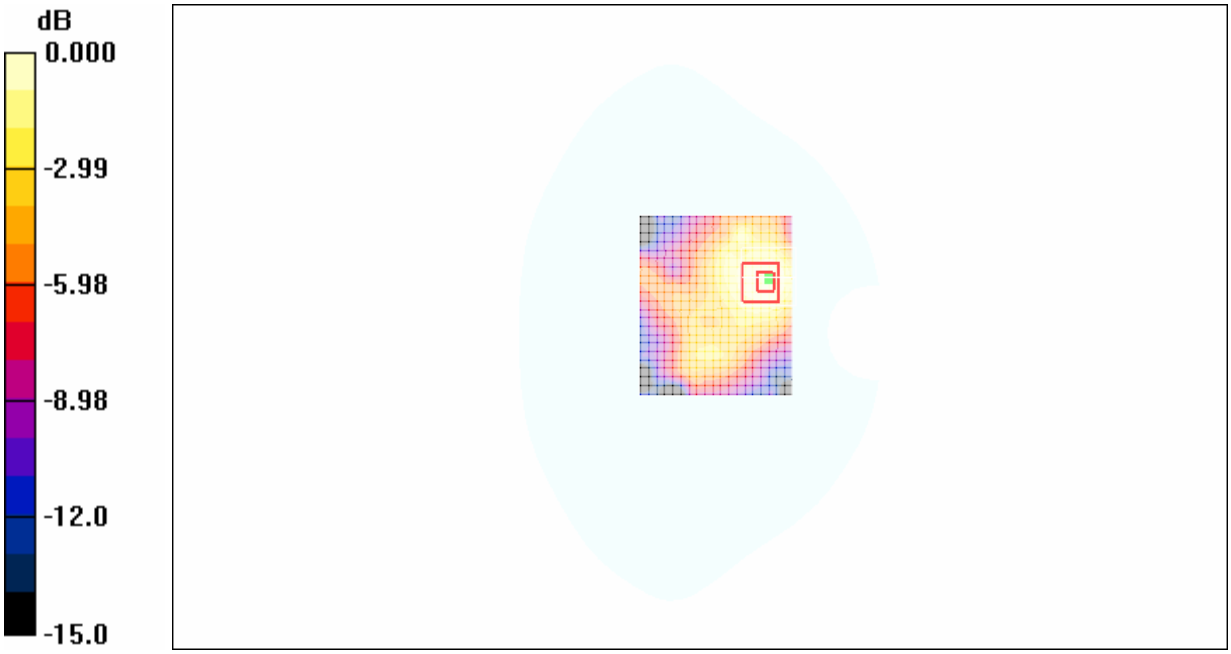
Fig.58 Z-Scan at power reference point (WCDMA 1900 CH9400 Test Position 5)

WCDMA 1900 Datacard Test Position 1 with Dell Laptop

Date/Time: 2007-1-19 10:27:09
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 1/Area Scan (91x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.077 mW/g

Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.80 V/m; Power Drift = -0.016 dB
Peak SAR (extrapolated) = 0.096 W/kg
SAR(1 g) = 0.066 mW/g; SAR(10 g) = 0.044 mW/g
Maximum value of SAR (measured) = 0.071 mW/g



0 dB = 0.071mW/g

Fig. 59 WCDMA 1900 CH9400 Test Position 1

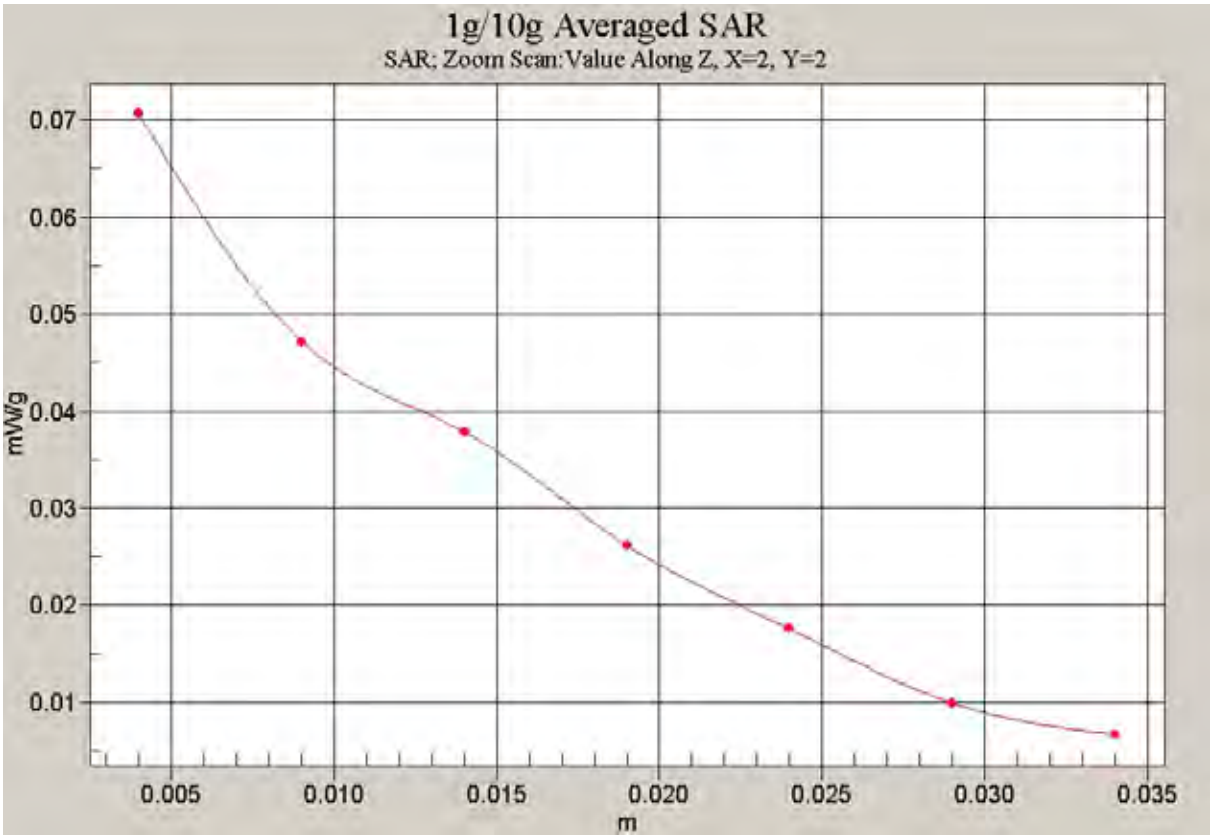


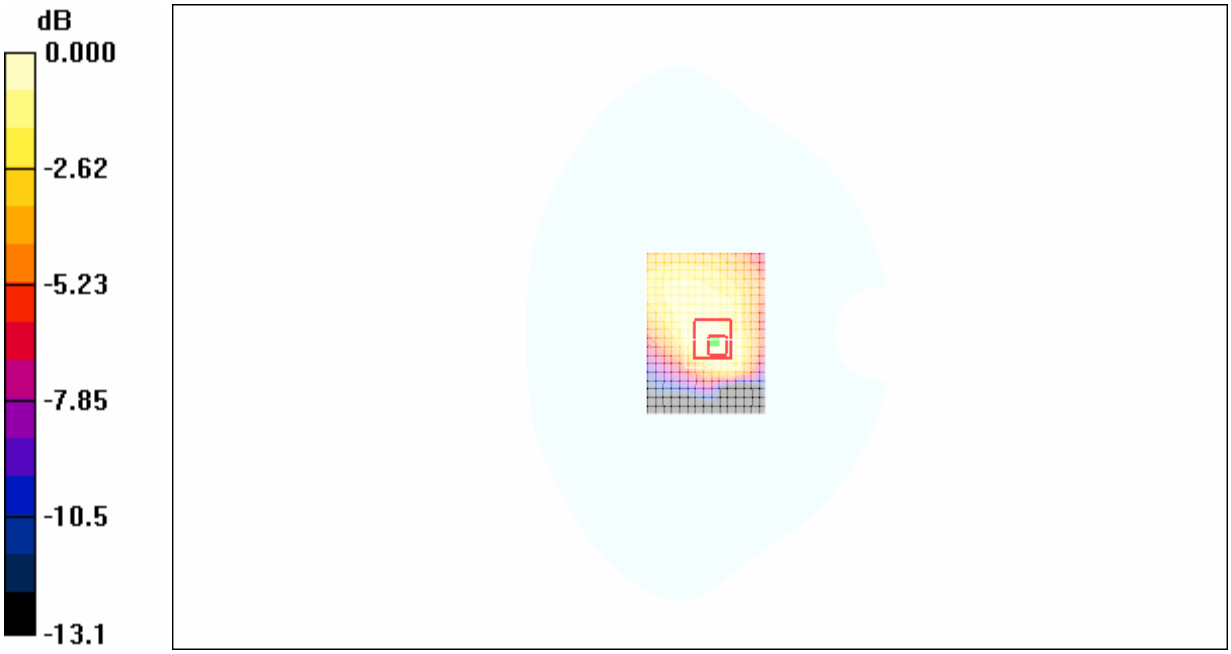
Fig.60 Z-Scan at power reference point (WCDMA 1900 CH9400 Test Position 1)

WCDMA 1900 Datacard Test Position 2 with Dell Laptop

Date/Time: 2007-1-19 9:40:47
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 2/Area Scan (71x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.072 mW/g

Test Position 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.10 V/m; Power Drift = -0.109 dB
Peak SAR (extrapolated) = 0.104 W/kg
SAR(1 g) = 0.060 mW/g; SAR(10 g) = 0.038 mW/g
Maximum value of SAR (measured) = 0.064 mW/g



0 dB = 0.064mW/g

Fig.61 WCDMA 1900 CH9400 Test Position 2

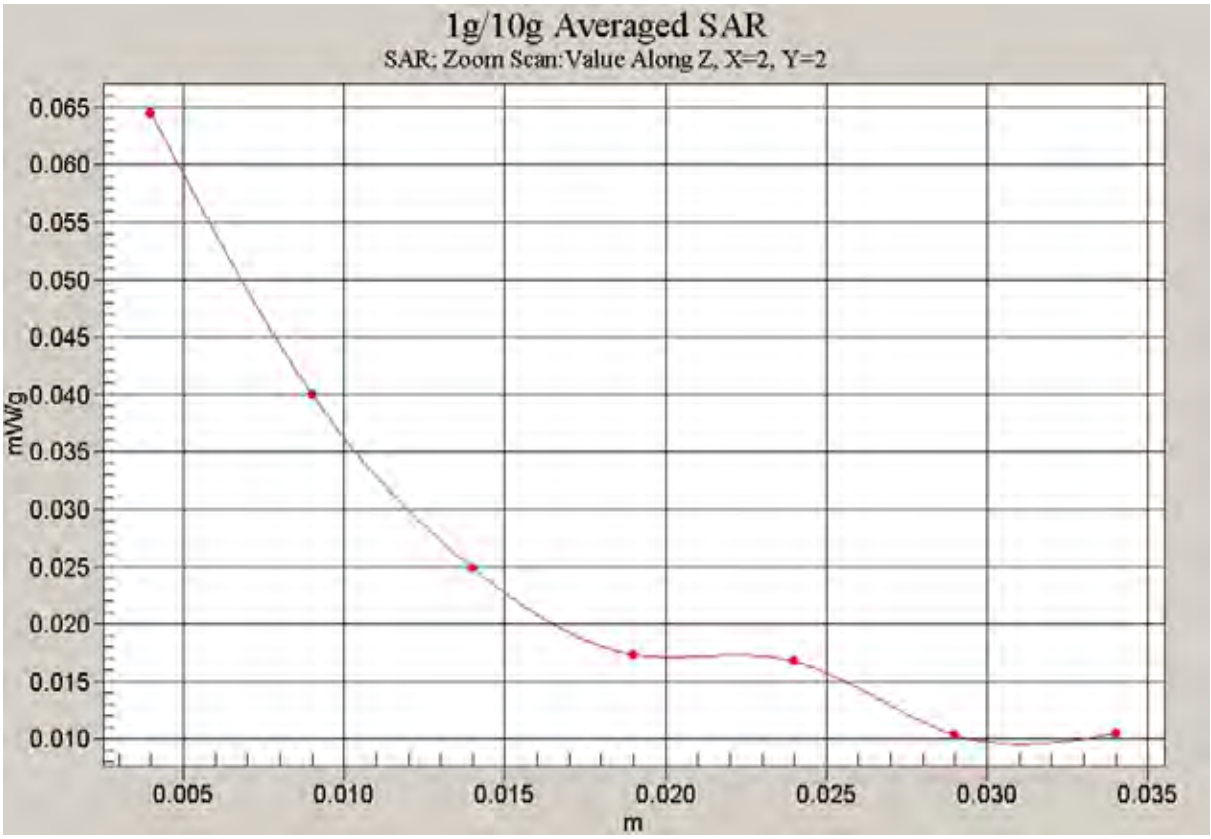


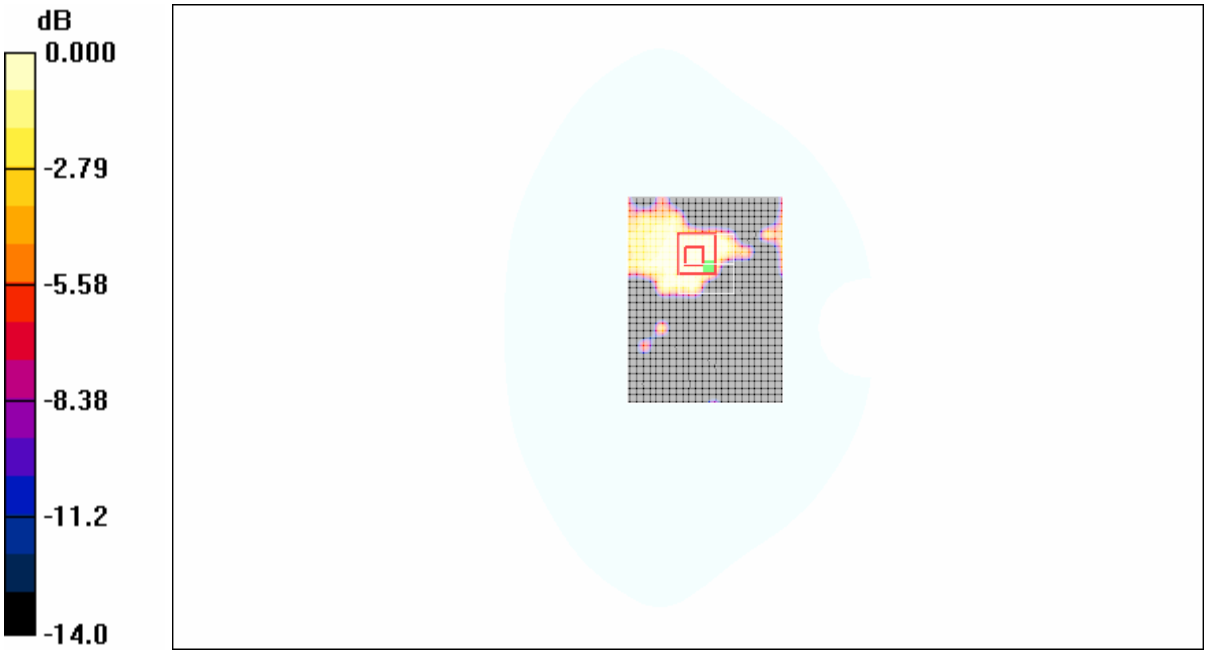
Fig.62 Z-Scan at power reference point (WCDMA 1900 CH9400 Test Position 2)

WCDMA 1900 Datacard Test Position 3 with Dell Laptop

Date/Time: 2007-1-19 11:24:10
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 3/Area Scan (91x111x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.034 mW/g

Test Position 3/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.21 V/m; Power Drift = 0.167 dB
Peak SAR (extrapolated) = 0.098 W/kg
SAR(1 g) = 0.024 mW/g; SAR(10 g) = 0.0088 mW/g
Maximum value of SAR (measured) = 0.020 mW/g



0 dB = 0.020mW/g

Fig.63 WCDMA 1900 CH9400 Test Position 3

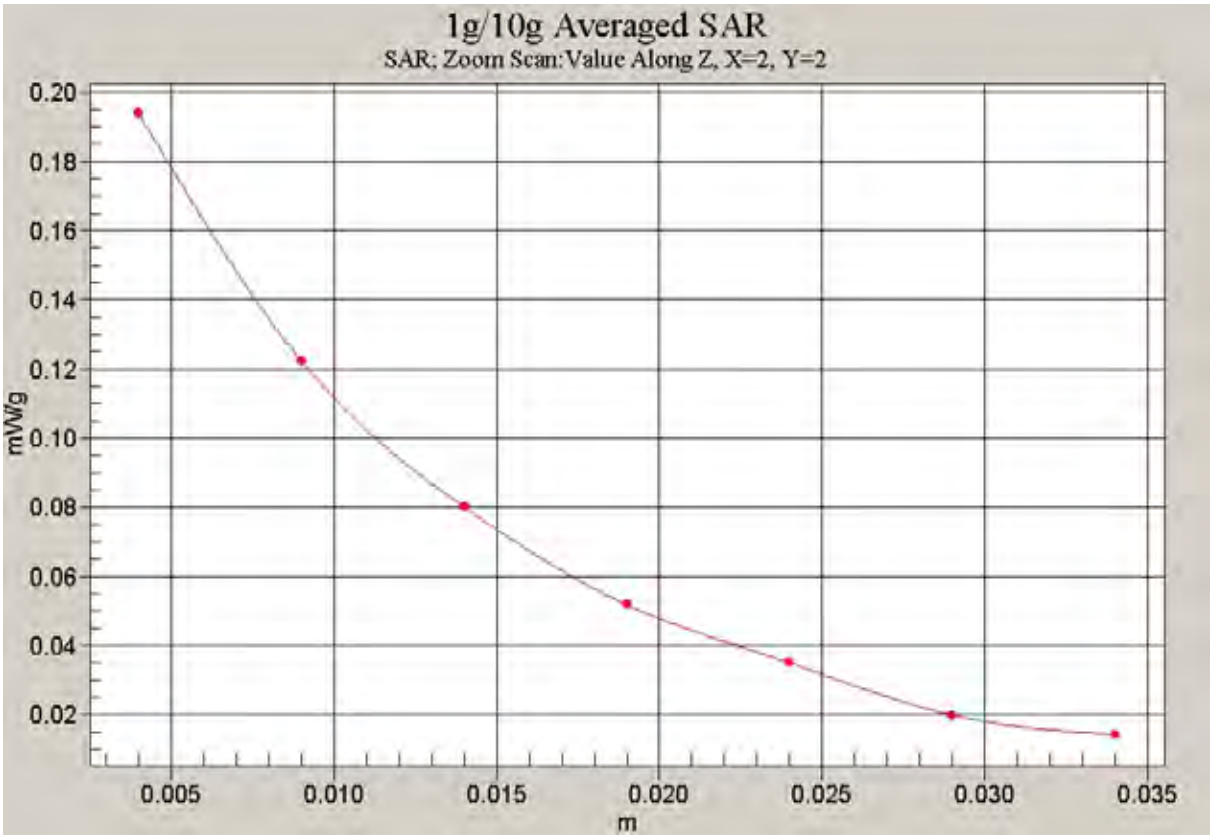


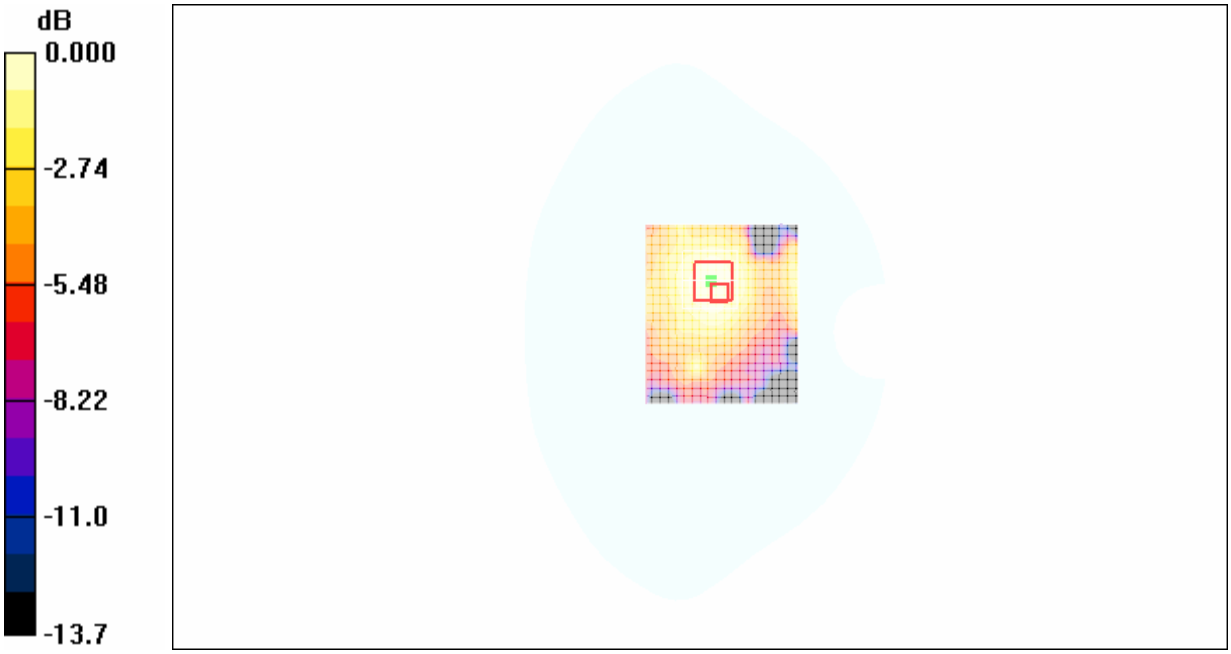
Fig.64 Z-Scan at power reference point (WCDMA 1900 CH9400 Test Position 3)

WCDMA 1900 Datacard Test Position 4 with Dell Laptop

Date/Time: 2007-1-19 11:54:39
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 4/Area Scan (91x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.036 mW/g

Test Position 4/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.88 V/m; Power Drift = 0.028 dB
Peak SAR (extrapolated) = 0.060 W/kg
SAR(1 g) = 0.032 mW/g; SAR(10 g) = 0.020 mW/g
Maximum value of SAR (measured) = 0.036 mW/g



0 dB = 0.036mW/g

Fig.65 WCDMA 1900 CH9400 Test Position 4

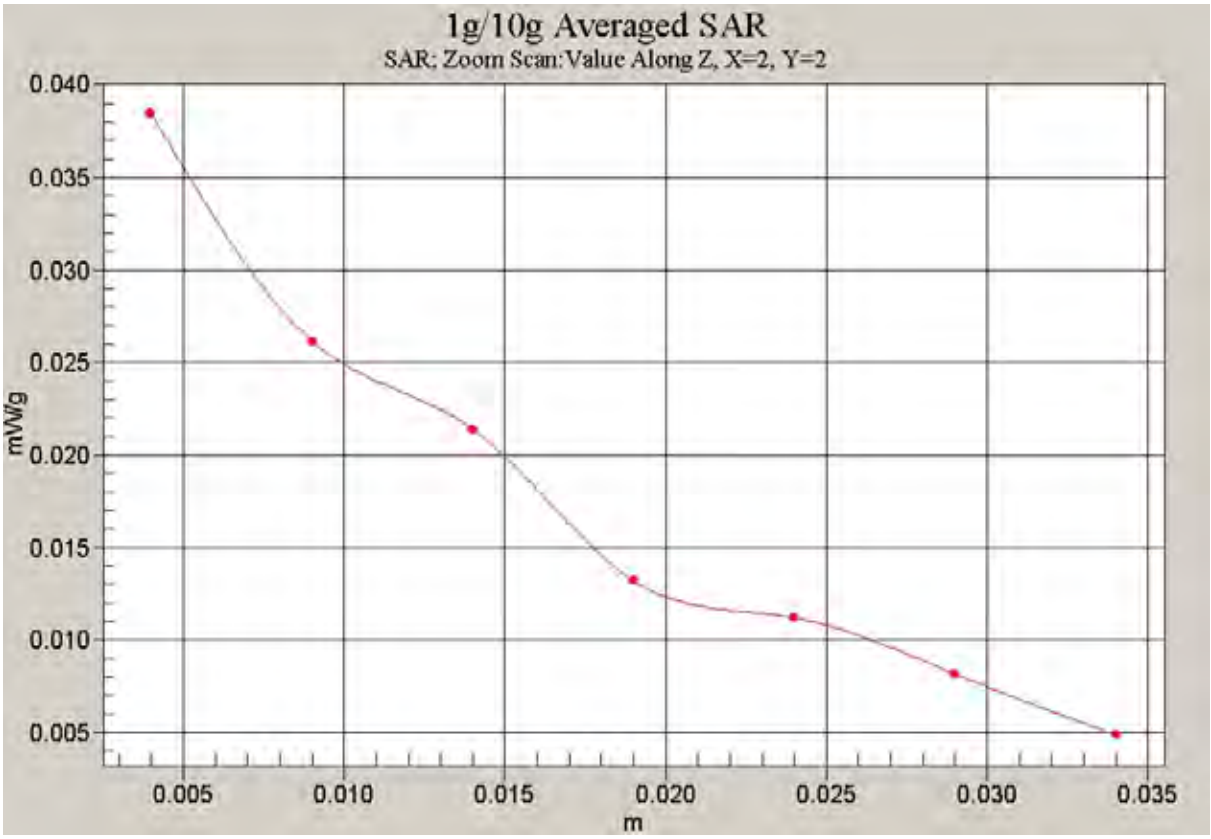


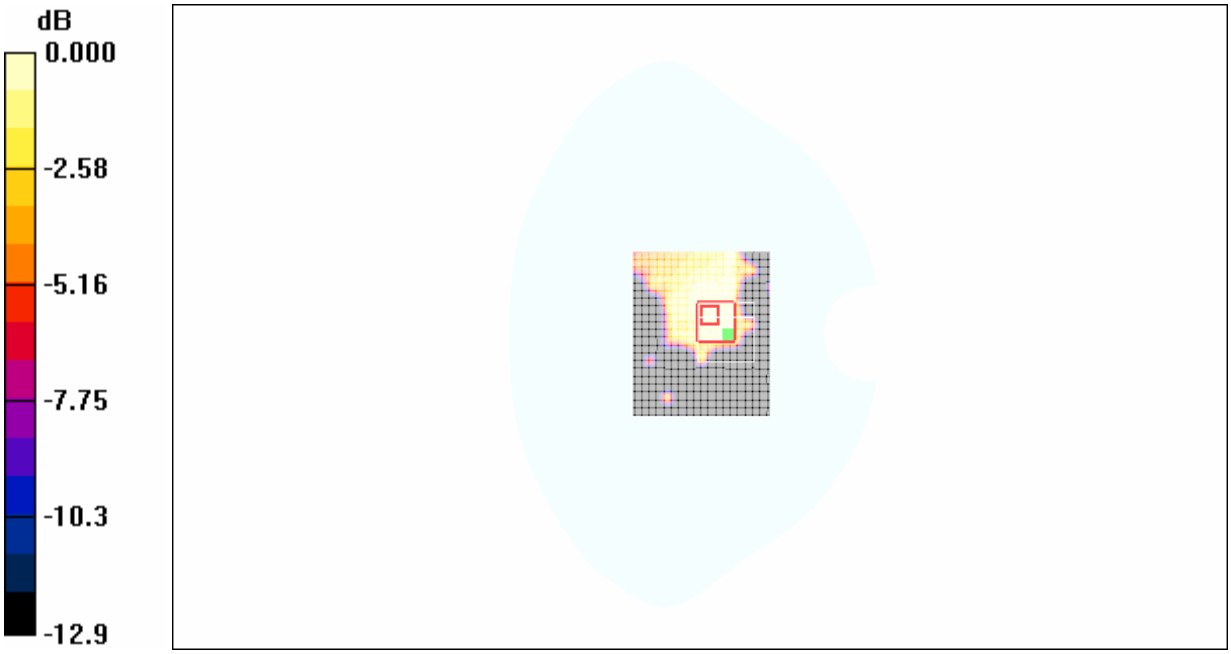
Fig.66 Z-Scan at power reference point (WCDMA 1900 CH9400 Test Position 4)

WCDMA 1900 DataCard Test Position 5 with Dell Laptop

Date/Time: 2007-1-19 10:53:57
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 5/Area Scan (81x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.040 mW/g

Test Position 5/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.82 V/m; Power Drift = -0.108 dB
Peak SAR (extrapolated) = 0.063 W/kg
SAR(1 g) = 0.027 mW/g; SAR(10 g) = 0.016 mW/g
Maximum value of SAR (measured) = 0.027 mW/g



0 dB = 0.027mW/g

Fig.67 WCDMA 1900 CH9400 Test Position 5

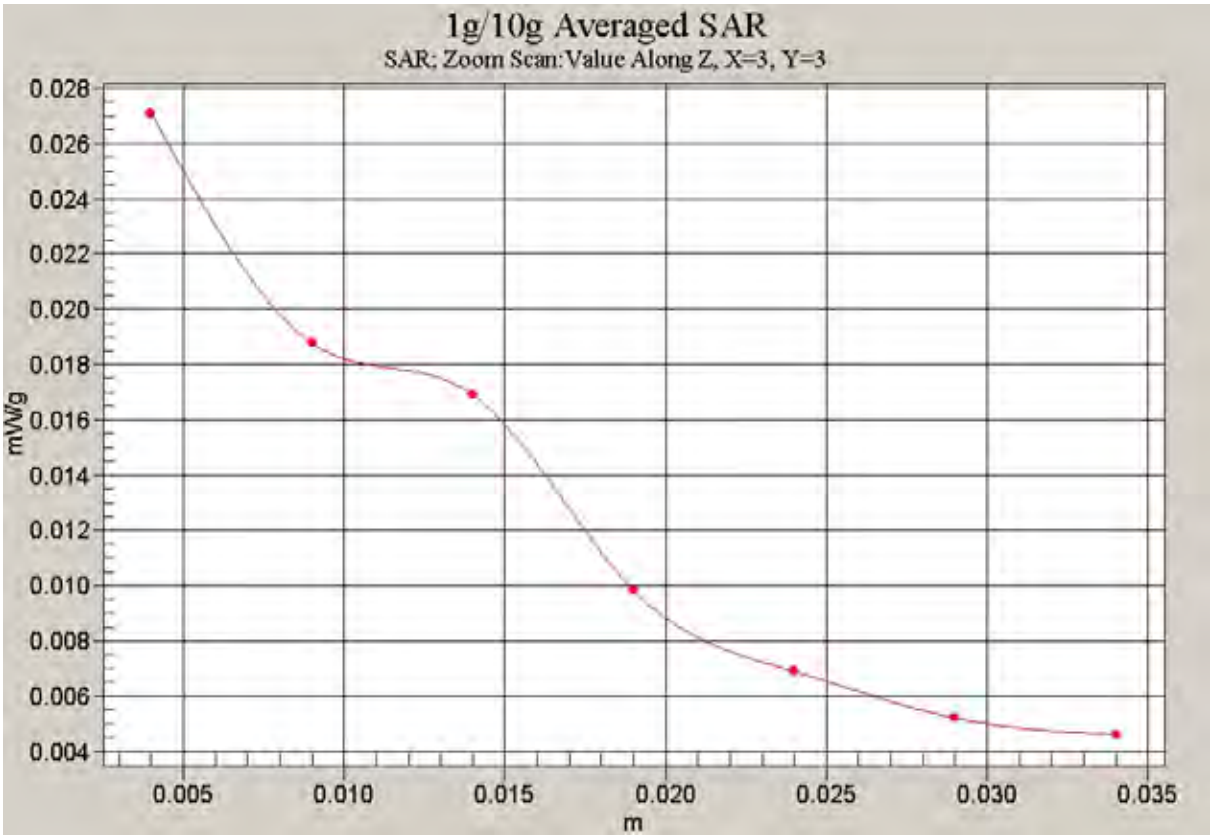


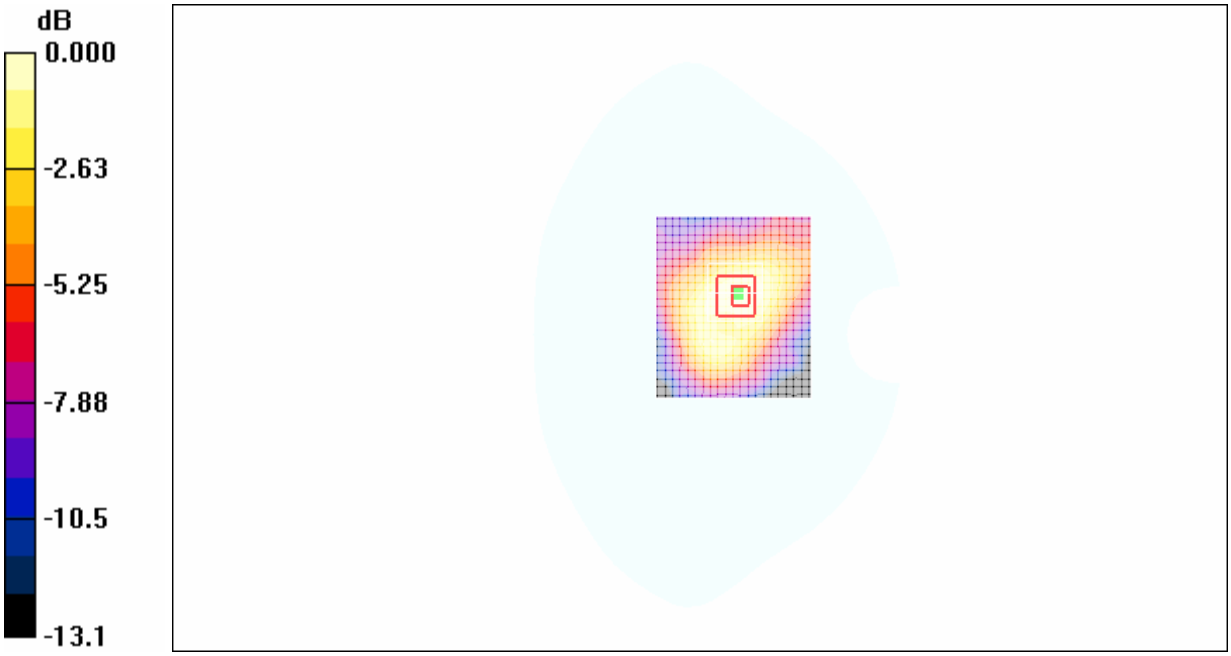
Fig.68 Z-Scan at power reference point (WCDMA 1900 CH9400 Test Position 5)

WCDMA 1900 Datacard Test Position 1 with HP Laptop

Date/Time: 2007-1-19 14:13:24
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 1/Area Scan (91x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.057 mW/g

Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.58 V/m; Power Drift = 0.182 dB
Peak SAR (extrapolated) = 0.089 W/kg
SAR(1 g) = 0.053 mW/g; SAR(10 g) = 0.035 mW/g
Maximum value of SAR (measured) = 0.055 mW/g



0 dB = 0.055mW/g

Fig.69 WCDMA 1900 CH9400 Test Position 1

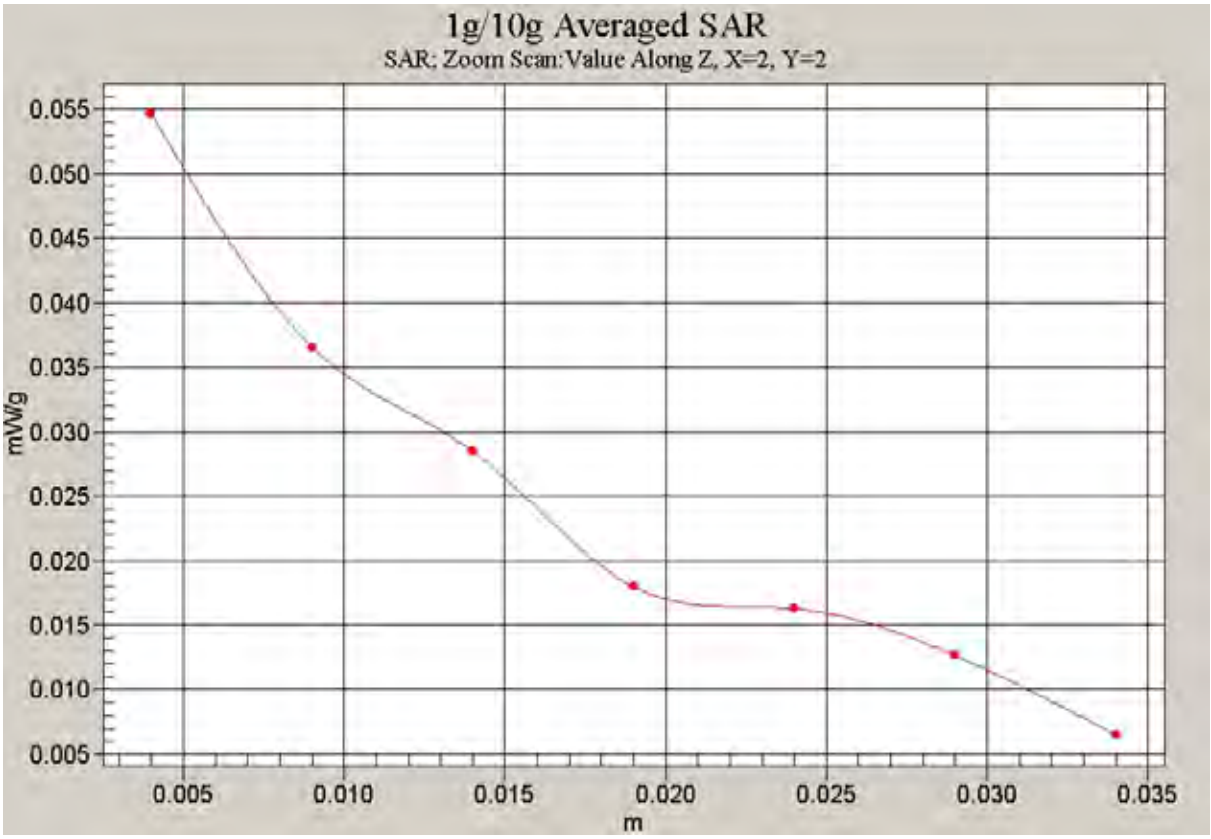


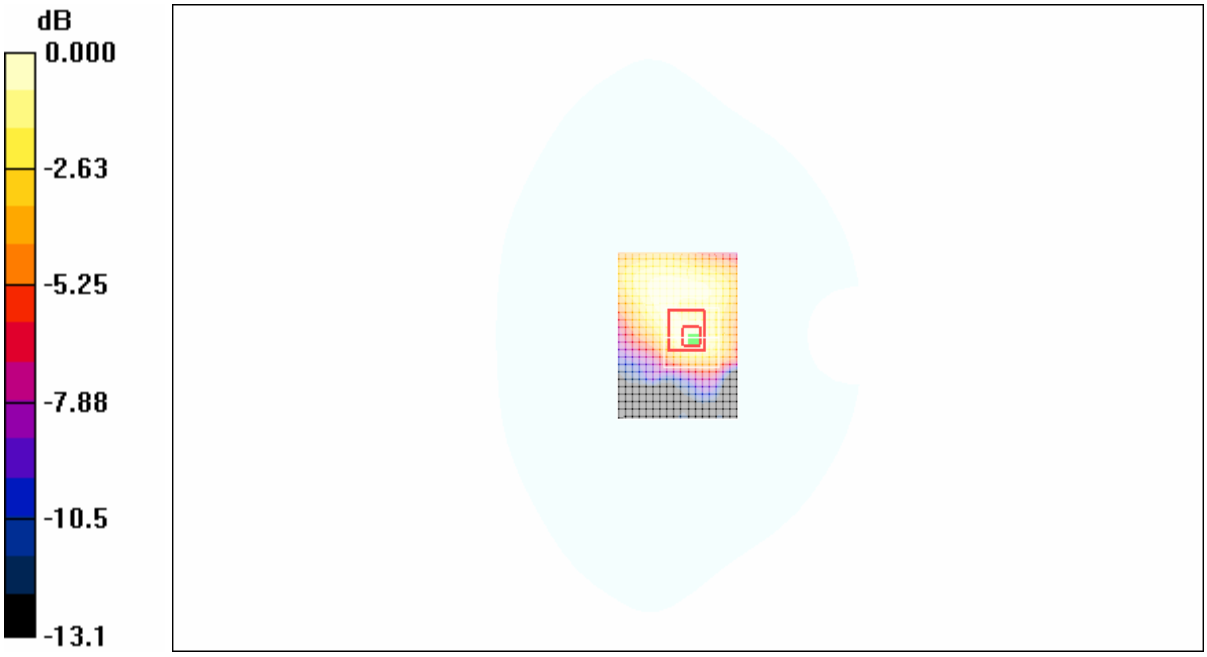
Fig.70 Z-Scan at power reference point (WCDMA 1900 CH9400 Test Position 1)

WCDMA 1900 Datacard Test Position 2 with HP Laptop

Date/Time: 2007-1-19 14:34:04
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 2/Area Scan (71x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.058 mW/g

Test Position 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.34 V/m; Power Drift = -0.200 dB
Peak SAR (extrapolated) = 0.077 W/kg
SAR(1 g) = 0.050 mW/g; SAR(10 g) = 0.031 mW/g
Maximum value of SAR (measured) = 0.056 mW/g



0 dB = 0.056mW/g

Fig.71 WCDMA 1900 CH9400 Test Position 2

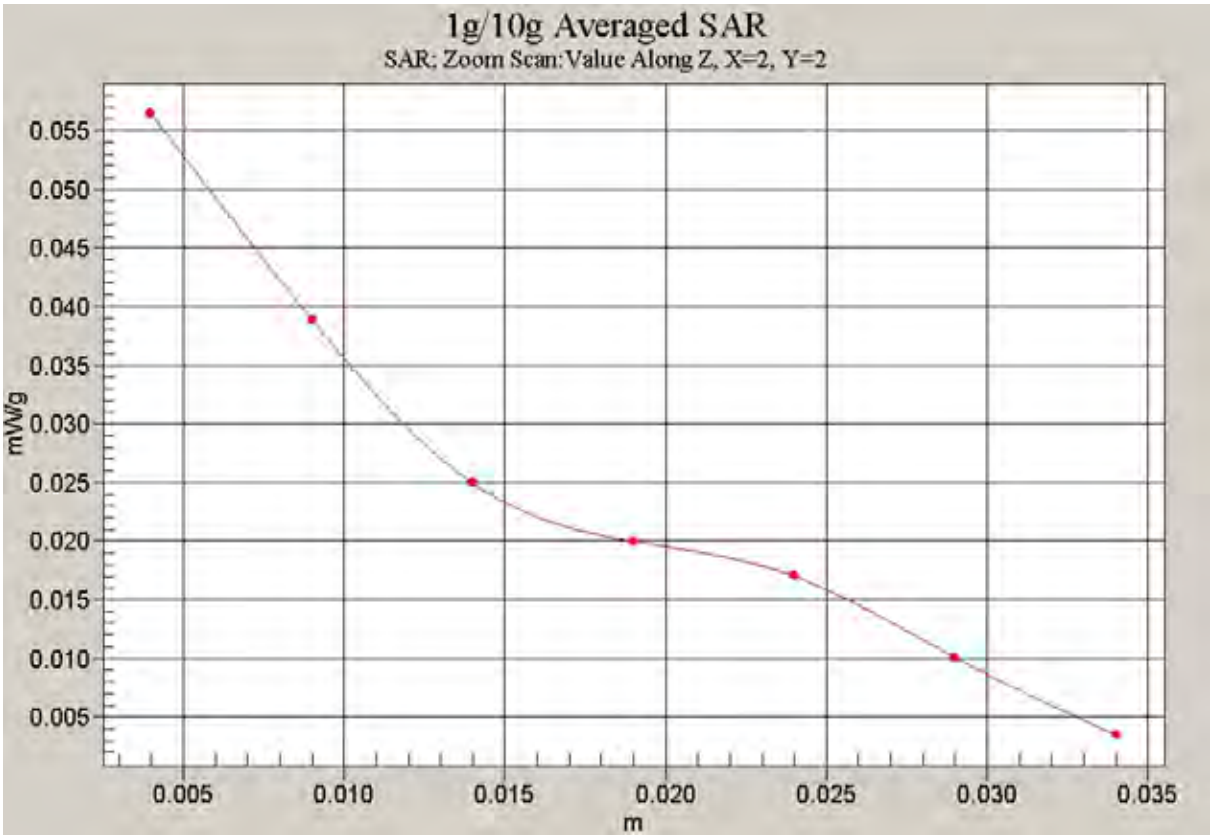


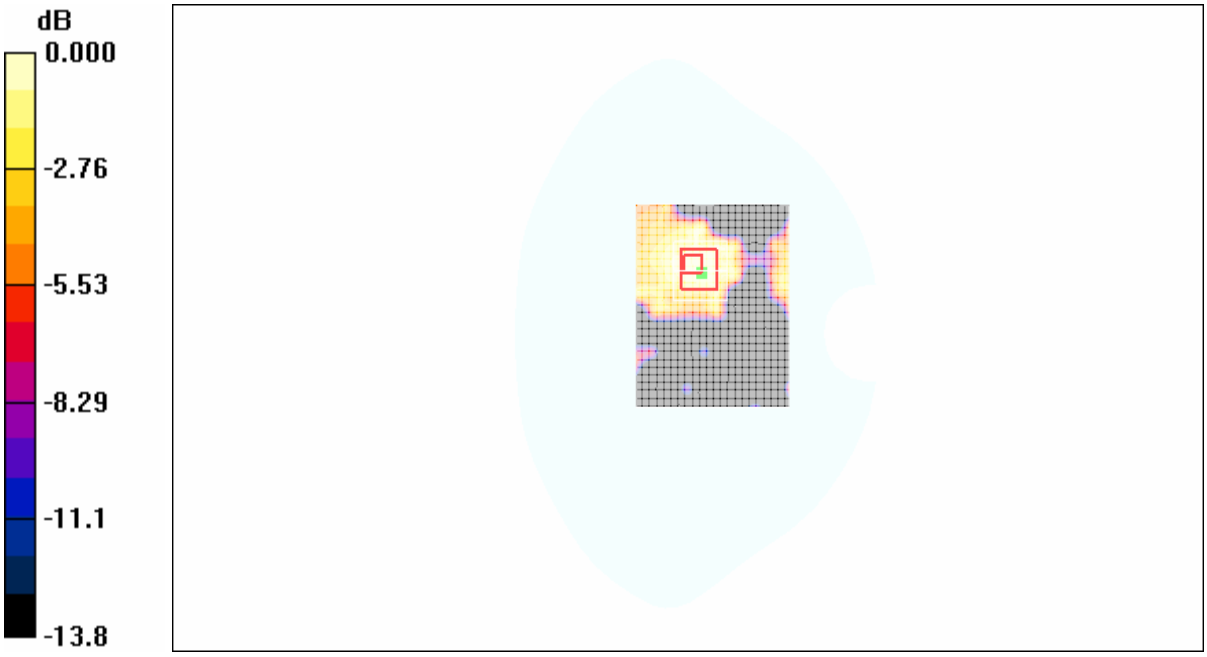
Fig.72 Z-Scan at power reference point (WCDMA 1900 CH9400 Test Position 2)

WCDMA 1900 Datacard Test Position 3 with HP Laptop

Date/Time: 2007-1-19 15:19:38
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 3/Area Scan (91x111x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.028 mW/g

Test Position 3/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.87 V/m; Power Drift = -0.178 dB
Peak SAR (extrapolated) = 0.040 W/kg
SAR(1 g) = 0.026 mW/g; SAR(10 g) = 0.017 mW/g
Maximum value of SAR (measured) = 0.028 mW/g



0 dB = 0.028mW/g

Fig.73 WCDMA 1900 CH9400 Test Position 3

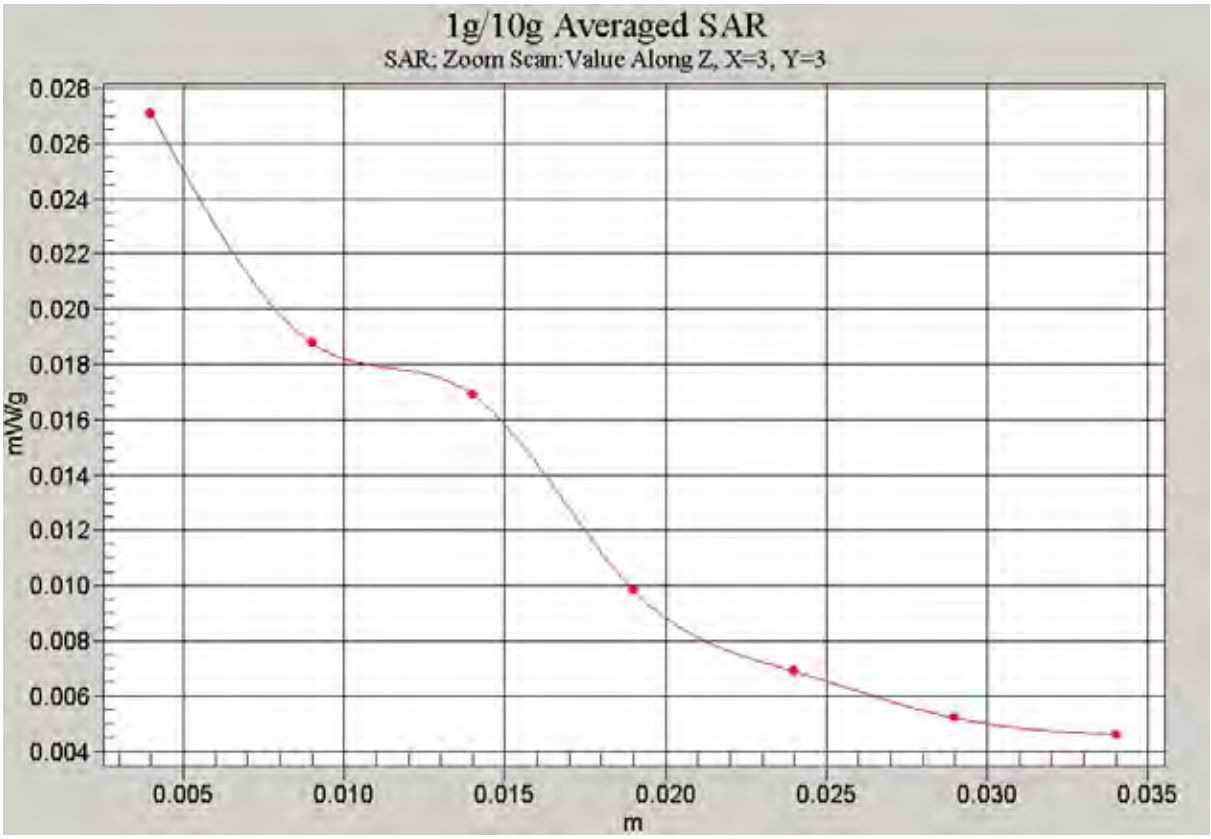


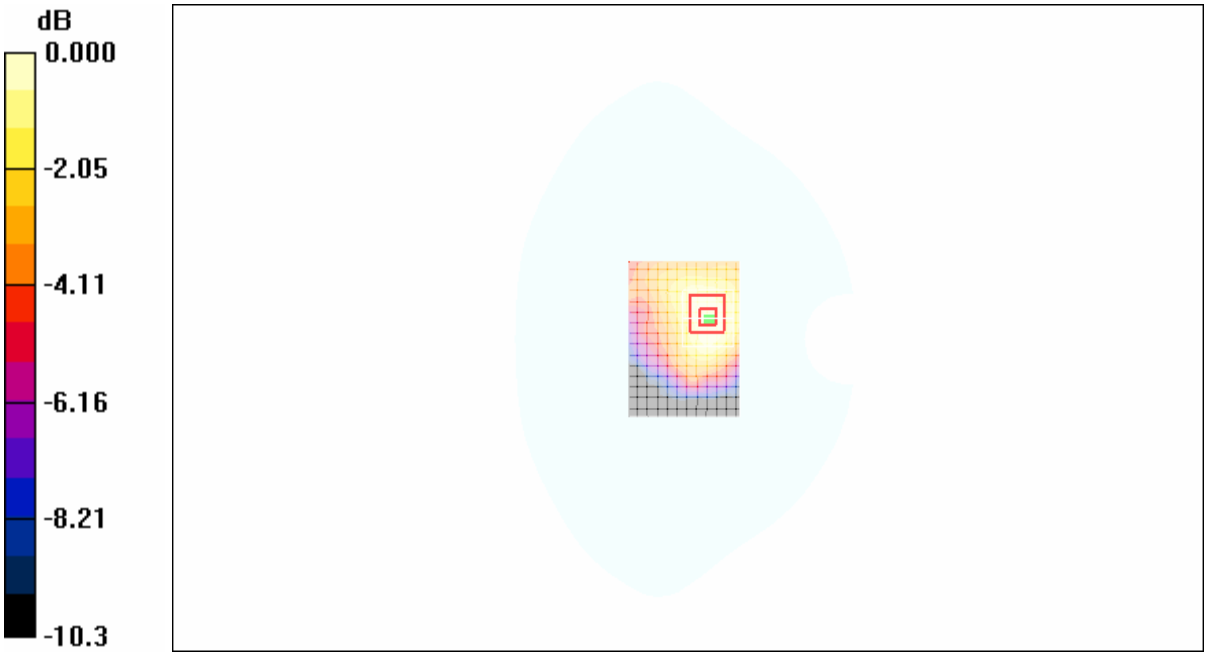
Fig.74 Z-Scan at power reference point (WCDMA 1900 CH9400 Test Position 3)

WCDMA 1900 Datacard Test Position 4 with HP Laptop

Date/Time: 2007-1-19 15:39:38
Electronics: DAE3 Sn536
Medium: Body 1900
Medium parameters used: f = 1880 MHz; σ = 1.51 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 4/Area Scan (91x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.038 mW/g

Test Position 4/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.27 V/m; Power Drift = -0.085 dB
Peak SAR (extrapolated) = 0.052 W/kg
SAR(1 g) = 0.036 mW/g; SAR(10 g) = 0.024 mW/g
Maximum value of SAR (measured) = 0.038 mW/g



0 dB = 0.038mW/g

Fig. 75 WCDMA 1900 CH9400Test Position 4

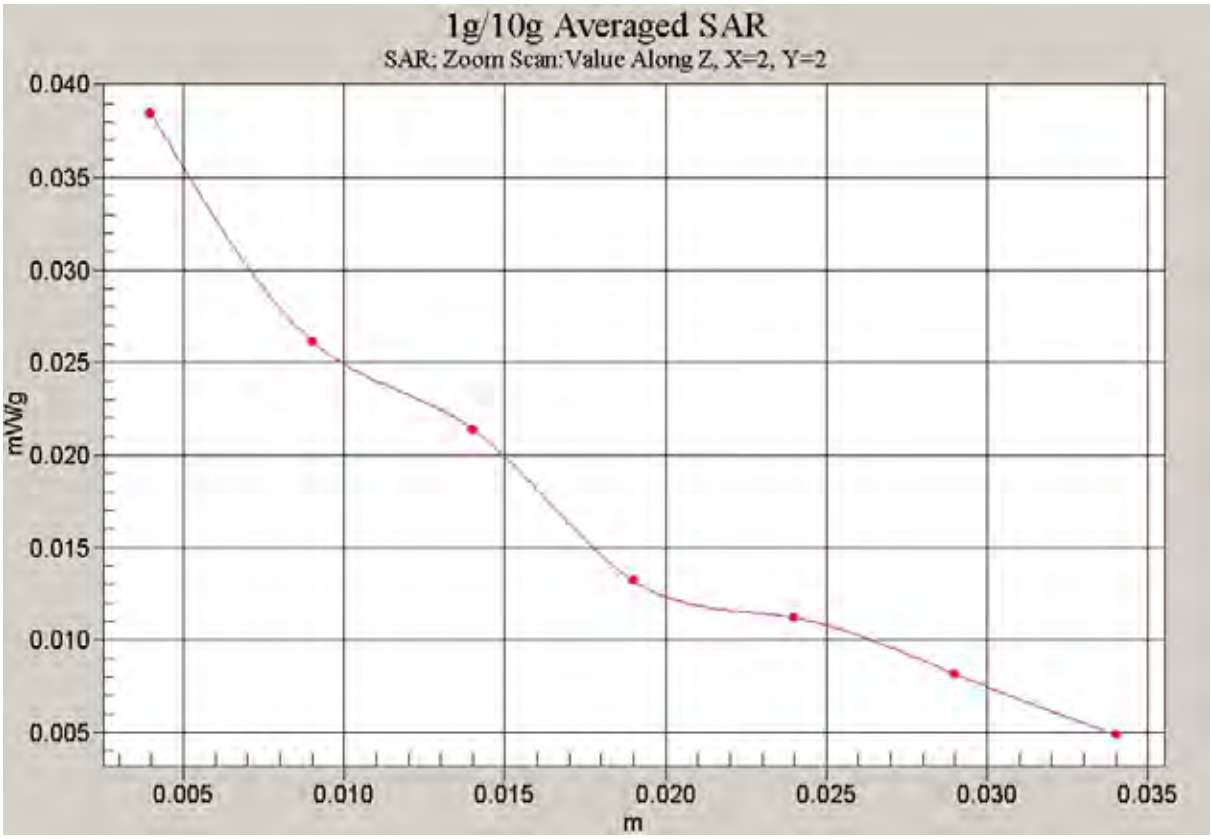


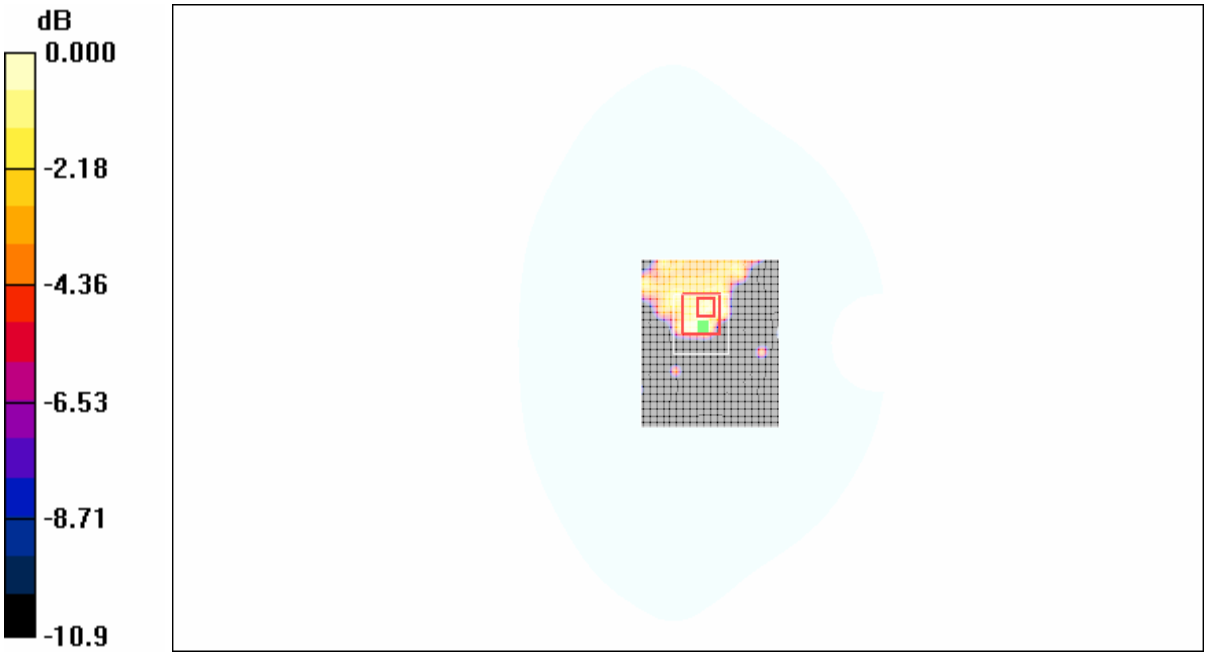
Fig.76 Z-Scan at power reference point (WCDMA 1900 CH9400 Test Position 4)

WCDMA 1900 DataCard Test Position 5 with HP Laptop

Date/Time: 2007-1-19 14:52:14
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 5/Area Scan (81x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.025 mW/g

Test Position 5/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.24 V/m; Power Drift = 0.126 dB
Peak SAR (extrapolated) = 0.048 W/kg
SAR(1 g) = 0.013 mW/g; SAR(10 g) = 0.00649 mW/g
Maximum value of SAR (measured) = 0.019 mW/g



0 dB = 0.019mW/g

Fig.77 WCDMA 1900 CH9400 Test Position 5

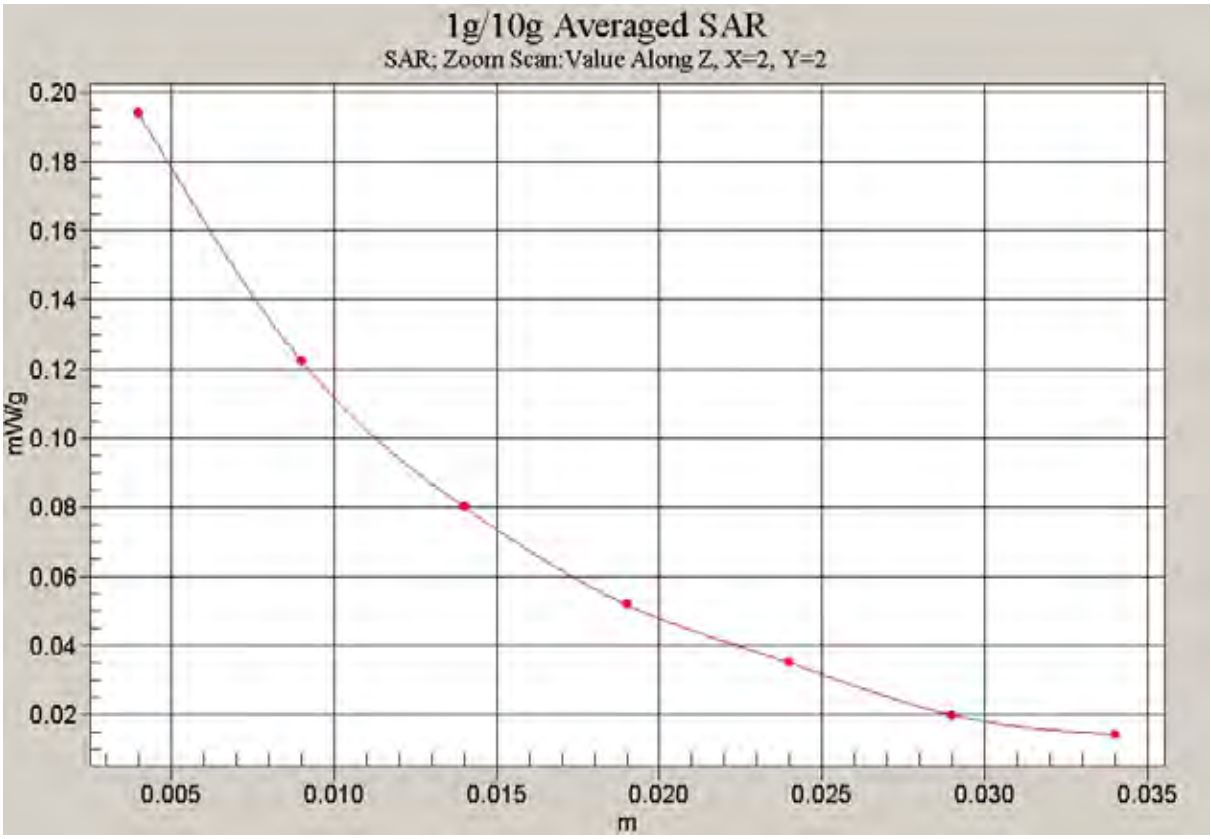


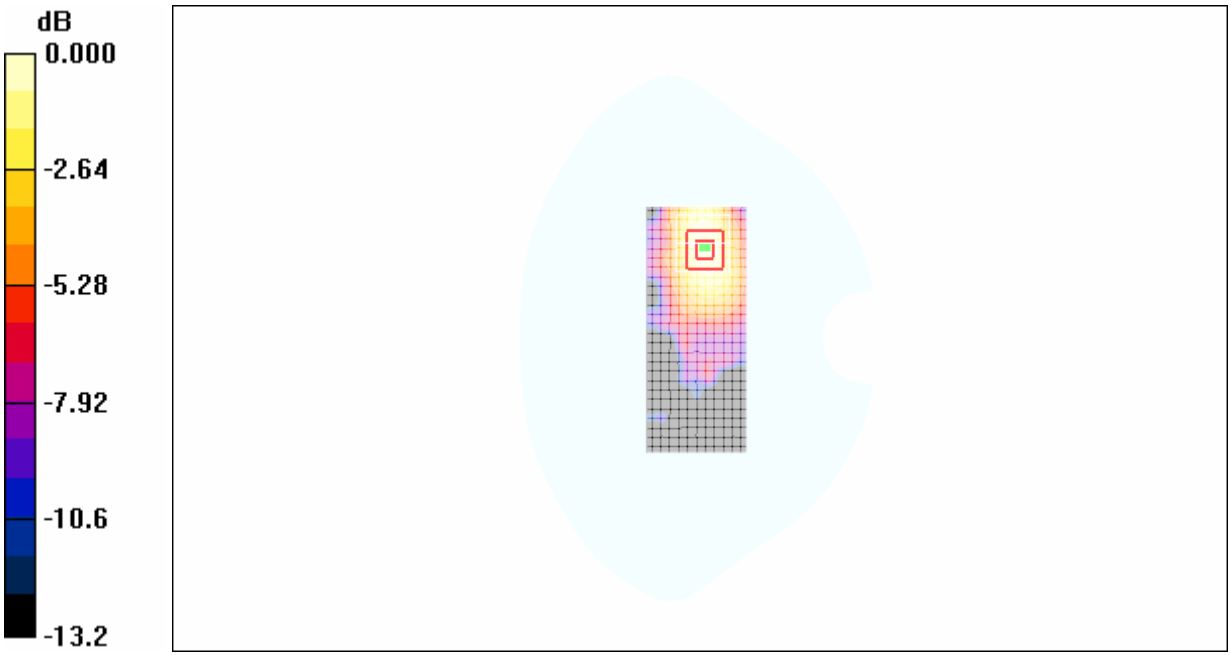
Fig.78 Z-Scan at power reference point (WCDMA 1900 CH9400 Test Position 5)

WCDMA 1900 External Antenna Test Position 1

Date/Time: 2007-1-19 17:26:20
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

External Antenna Test Position 1/Area Scan (61x141x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.068 mW/g

External Antenna Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.76 V/m; Power Drift = 0.152 dB
Peak SAR (extrapolated) = 0.120 W/kg
SAR(1 g) = 0.063 mW/g; SAR(10 g) = 0.039 mW/g
Maximum value of SAR (measured) = 0.067 mW/g



0 dB = 0.067mW/g

Fig.79 WCDMA 1900 CH9400 Test Position 1

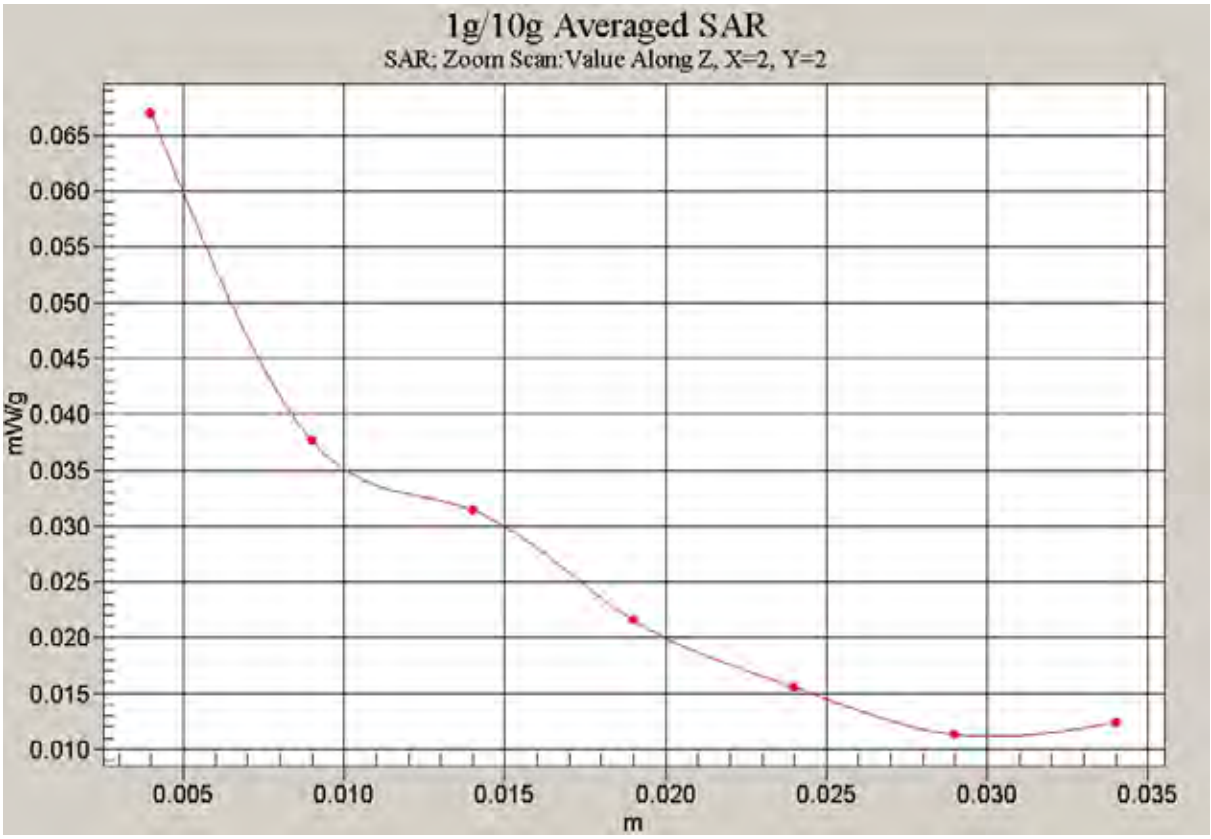


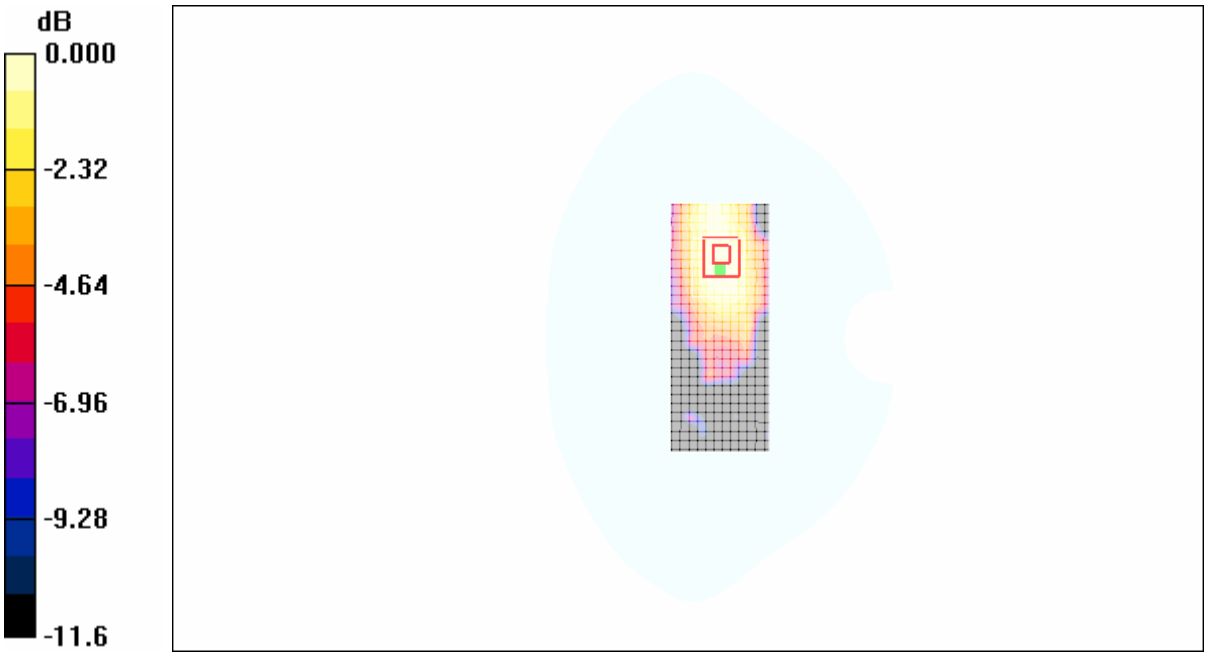
Fig.80 Z-Scan at power reference point (WCDMA 1900 CH9400 Test Position 1)

WCDMA 1900 External Antenna Test Position 2

Date/Time: 2007-1-19 16:56:09
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

External Antenna Test Position 2/Area Scan (61x141x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.045 mW/g

External Antenna Test Position 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.50 V/m; Power Drift = 0.132 dB
Peak SAR (extrapolated) = 0.078 W/kg
SAR(1 g) = 0.043 mW/g; SAR(10 g) = 0.028 mW/g
Maximum value of SAR (measured) = 0.045 mW/g



0 dB = 0.045mW/g

Fig.81 WCDMA 1900 CH9400 Test Position 2

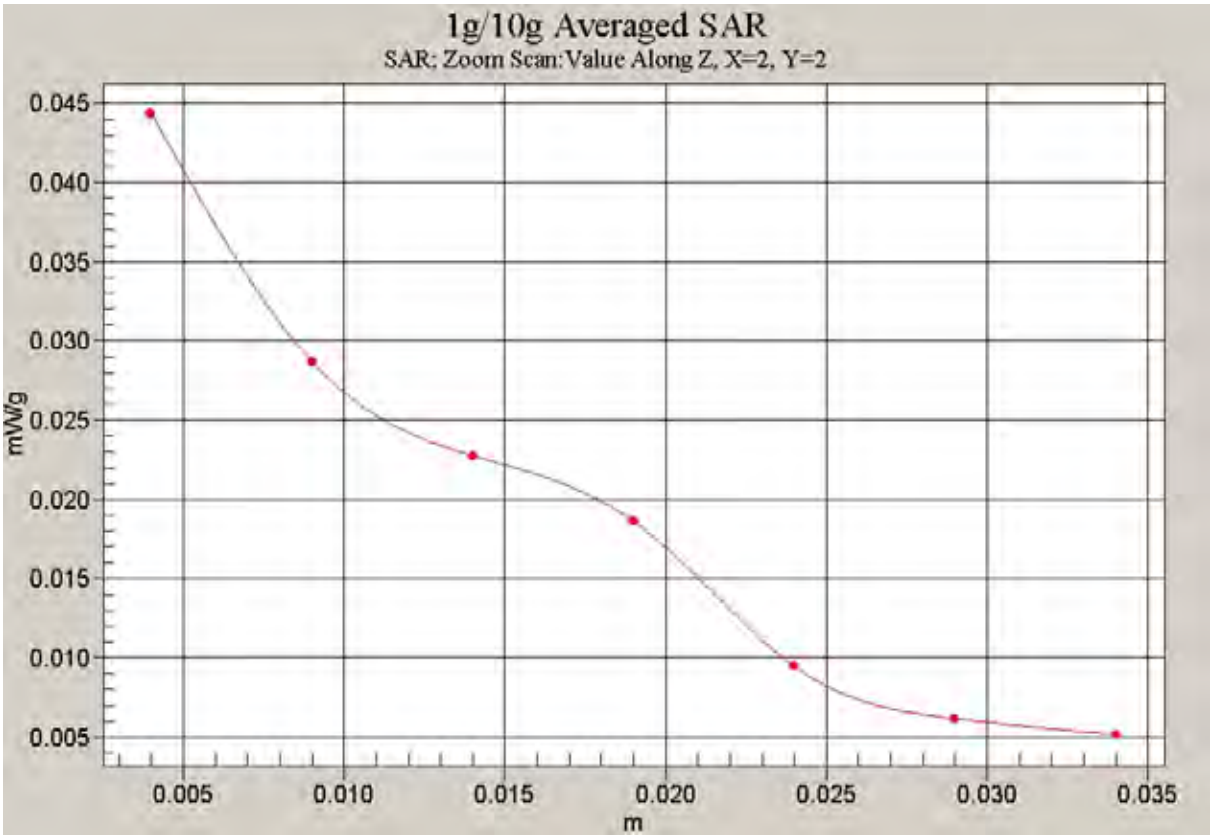


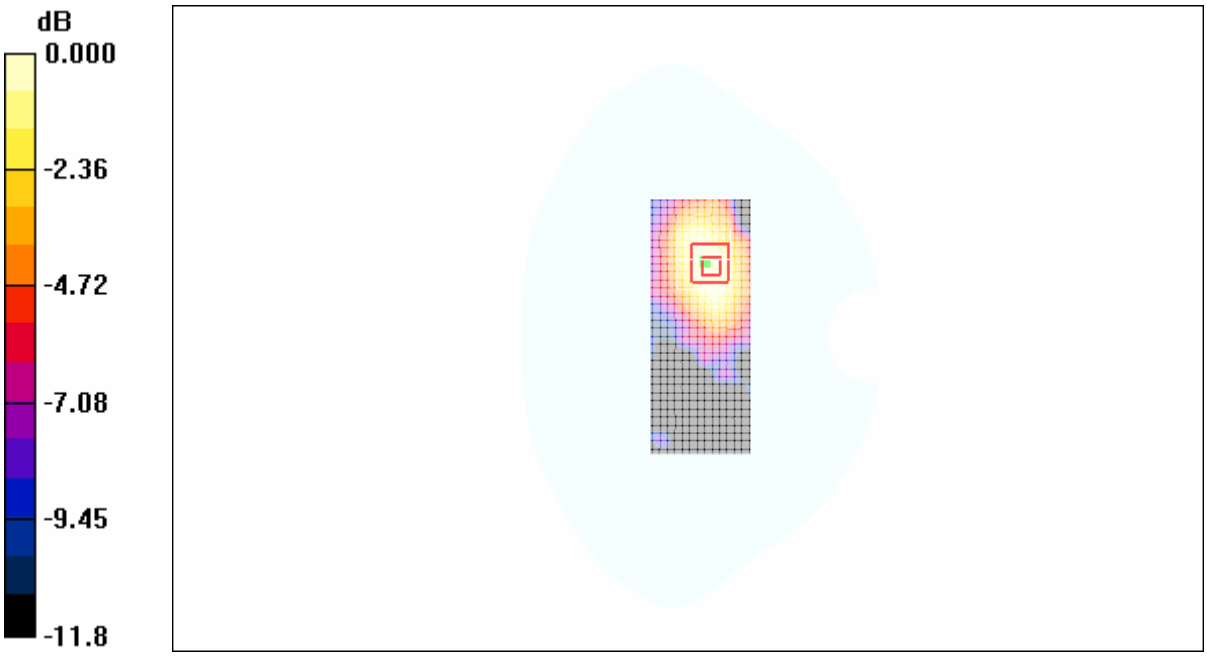
Fig.82 Z-Scan at power reference point (WCDMA 1900 CH9400 Test Position 2)

WCDMA 1900 External Antenna Test Position 3

Date/Time: 2007-1-19 18:22:30
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

External Antenna Test Position 3/Area Scan (61x141x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.046 mW/g

External Antenna Test Position 3/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.61 V/m; Power Drift = 0119dB
Peak SAR (extrapolated) = 0.066 W/kg
SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.028 mW/g
Maximum value of SAR (measured) = 0.044 mW/g



0 dB = 0.044mW/g

Fig.83 WCDMA 1900 CH9400 Test Position 3

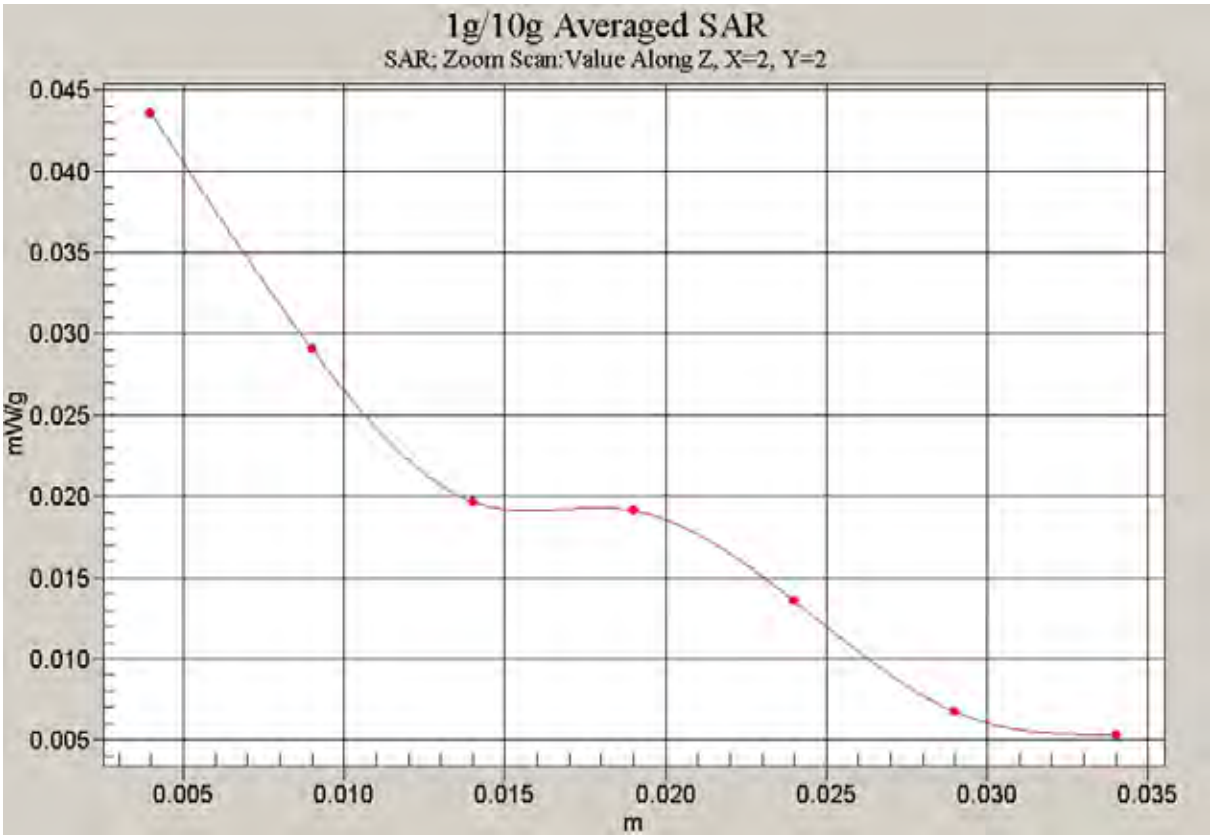


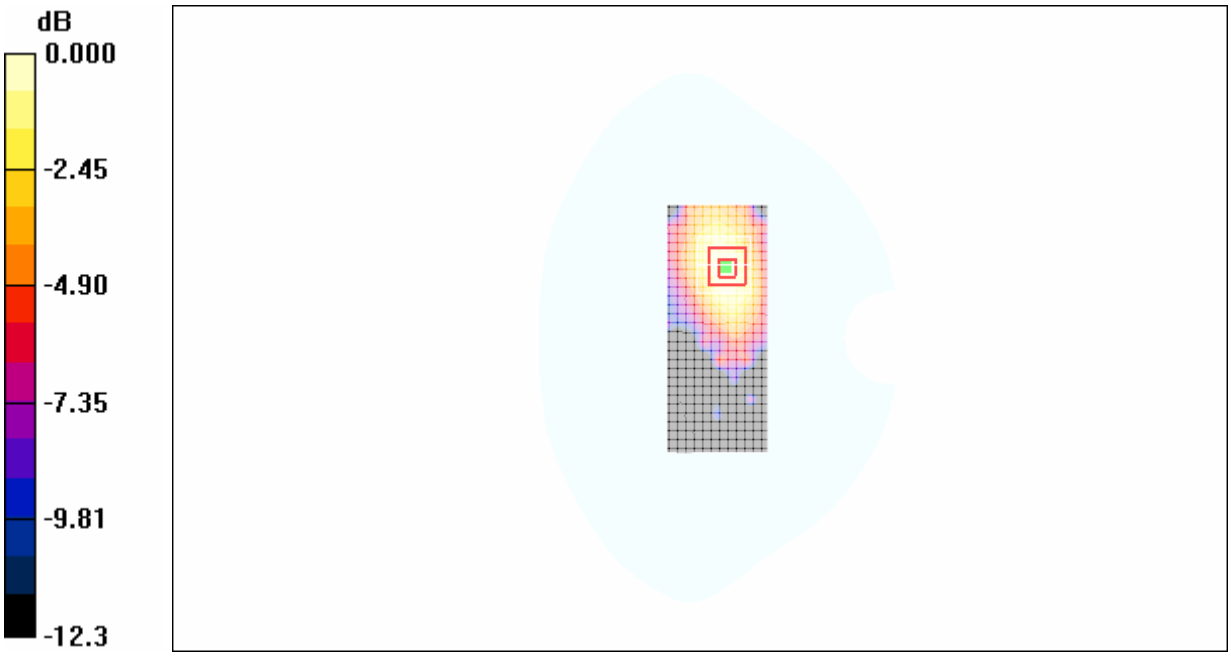
Fig.84 Z-Scan at power reference point (WCDMA 1900 CH9400 Test Position 3)

WCDMA 1900 External Antenna Test Position 4

Date/Time: 2007-1-19 18:03:01
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

External Antenna Test Position 4/Area Scan (61x141x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.041 mW/g

External Antenna Test Position 4/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.18 V/m; Power Drift = -0.185 dB
Peak SAR (extrapolated) = 0.072 W/kg
SAR(1 g) = 0.039 mW/g; SAR(10 g) = 0.025 mW/g
Maximum value of SAR (measured) = 0.041 mW/g



0 dB = 0.041mW/g

Fig.85 WCDMA 1900 CH9400 Test Position 4

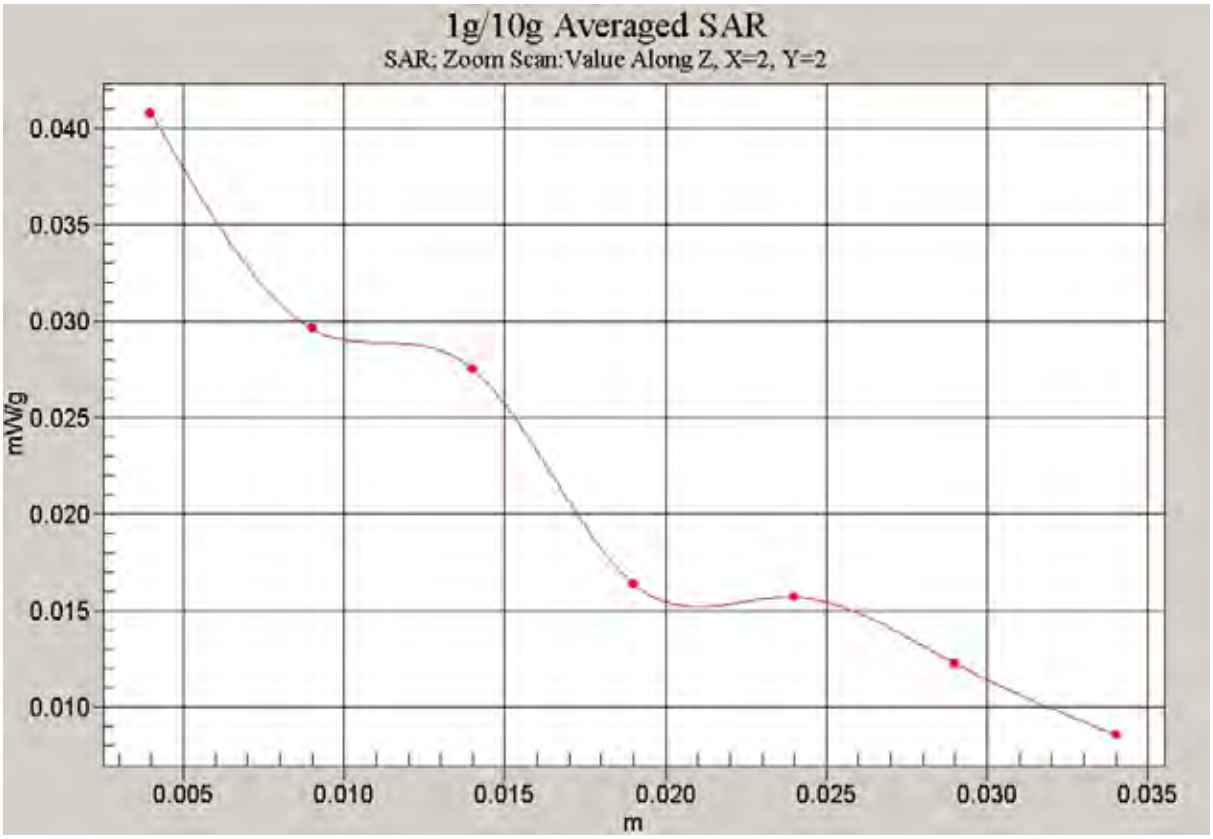


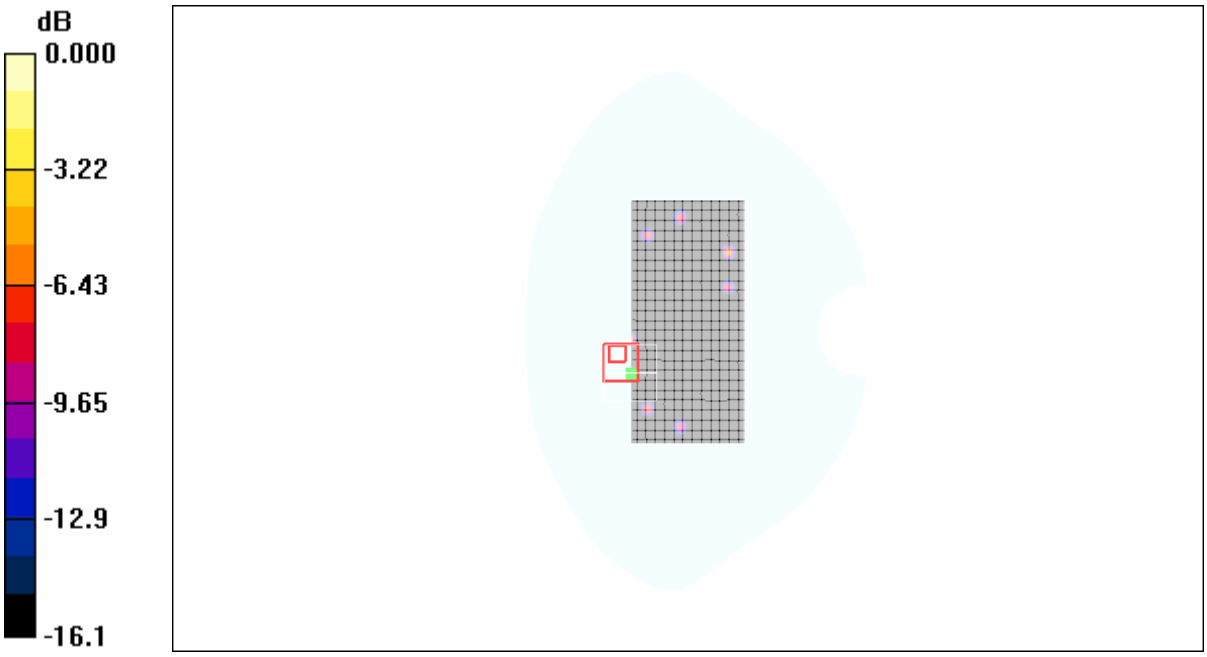
Fig.86 Z-Scan at power reference point (WCDMA 1900 CH9400 Test Position 4)

WCDMA 1900 External Antenna Test Position 5

Date/Time: 2007-1-19 20:22:57
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

External Antenna Test Position 5/Area Scan (71x141x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.008 mW/g

External Antenna Test Position 5/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.863 V/m; Power Drift = 0.197 dB
Peak SAR (extrapolated) = 0.015 W/kg
SAR(1 g) = 0.000953 mW/g; SAR(10 g) = 0.000191 mW/g
Maximum value of SAR (measured) = 0.007 mW/g



0 dB = 0.007mW/g

Fig.87 WCDMA 1900 CH9400 Test Position 5

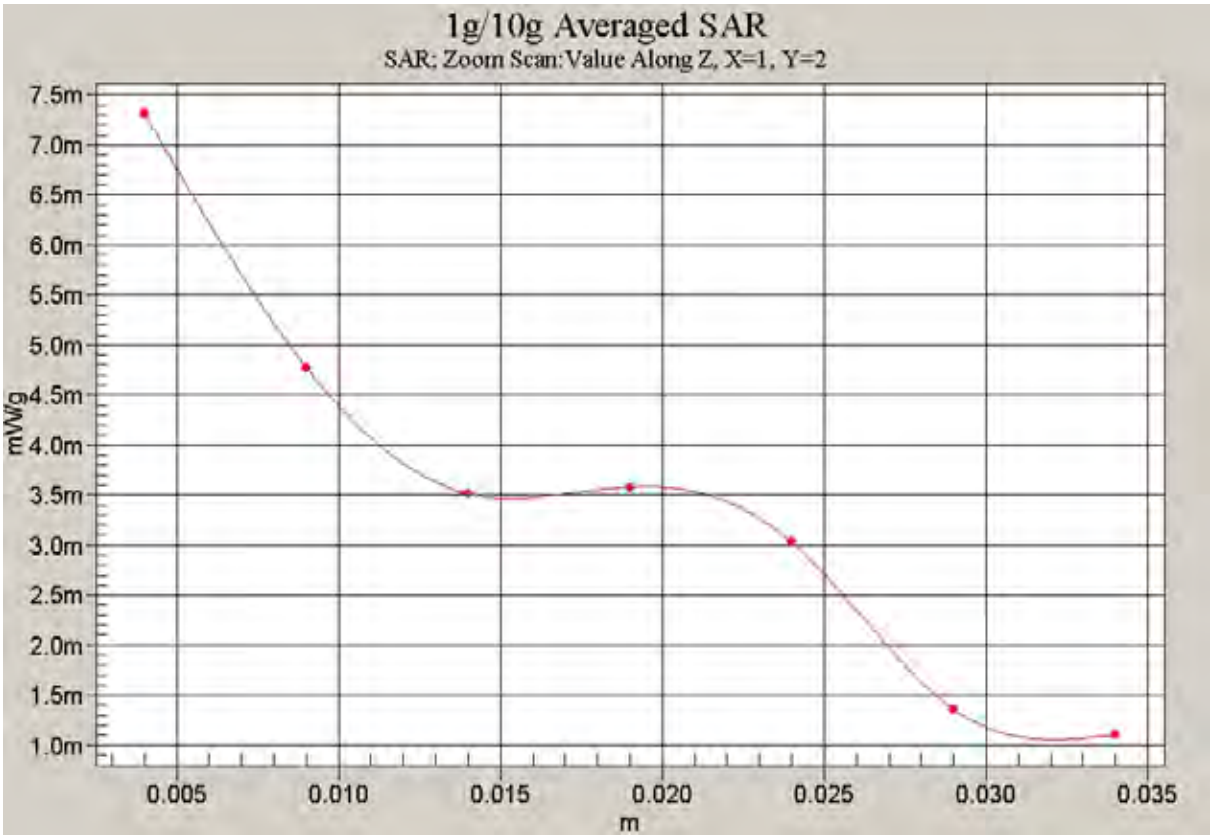


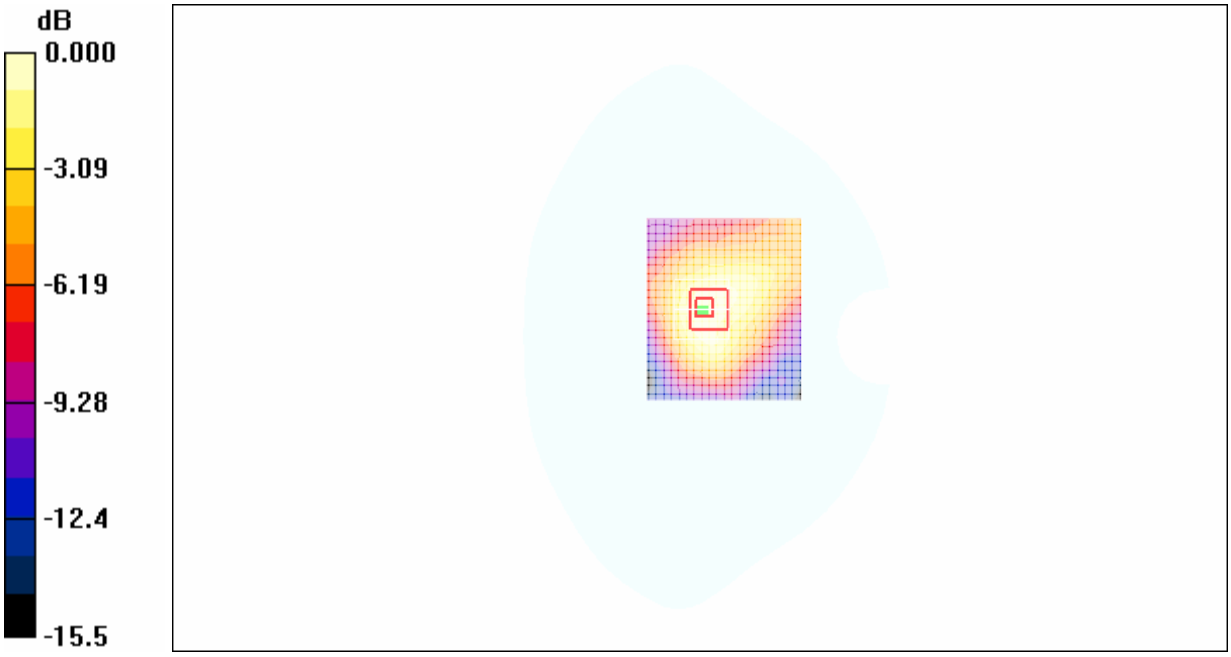
Fig.88 Z-Scan at power reference point (WCDMA 1900 CH9400 Test Position 5)

HSDPA 1900 Datacard Test Position 1 with IBM Laptop

Date/Time: 2007-1-19 16:19:39
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 1/Area Scan (91x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.068 mW/g

Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.51 V/m; Power Drift = 0.125 dB
Peak SAR (extrapolated) = 0.117 W/kg
SAR(1 g) = 0.064 mW/g; SAR(10 g) = 0.039 mW/g
Maximum value of SAR (measured) = 0.067 mW/g



0 dB = 0.067mW/g

Fig.89 HSDPA 1900 CH9400 Test Position 1

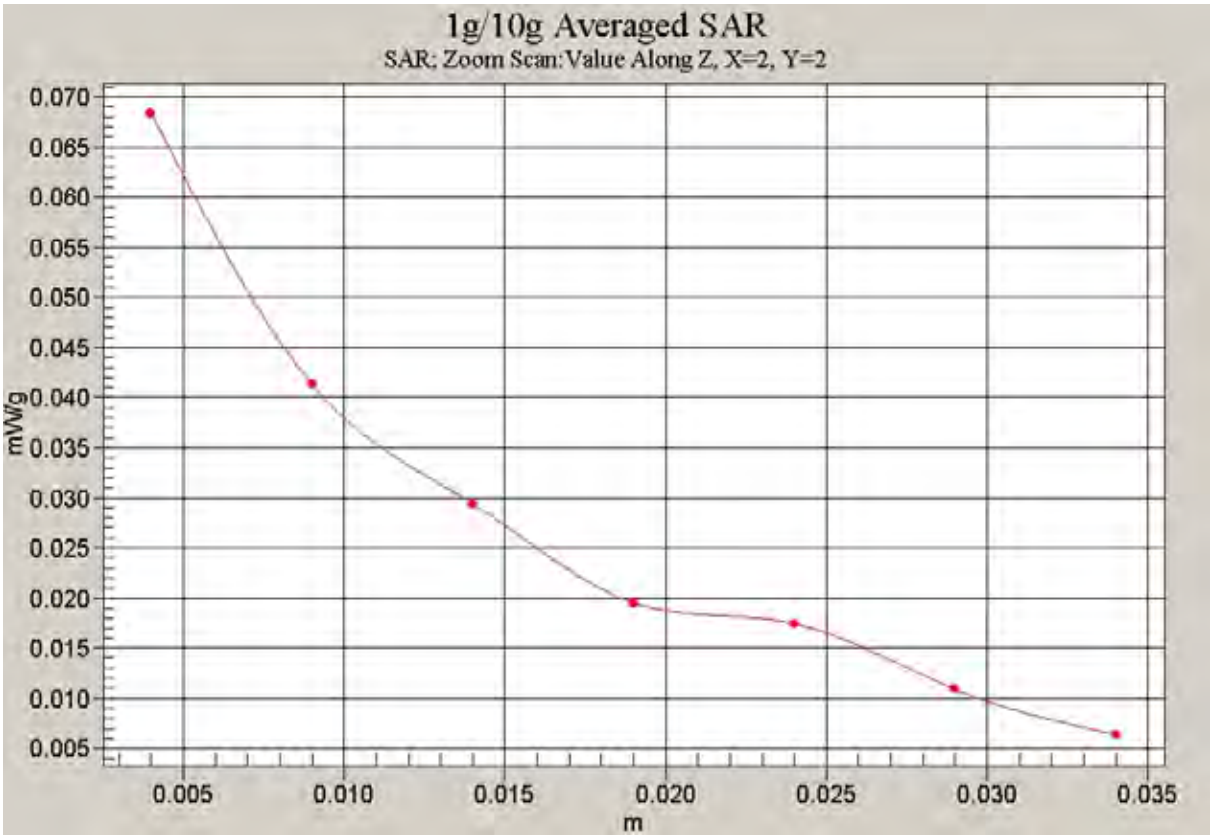


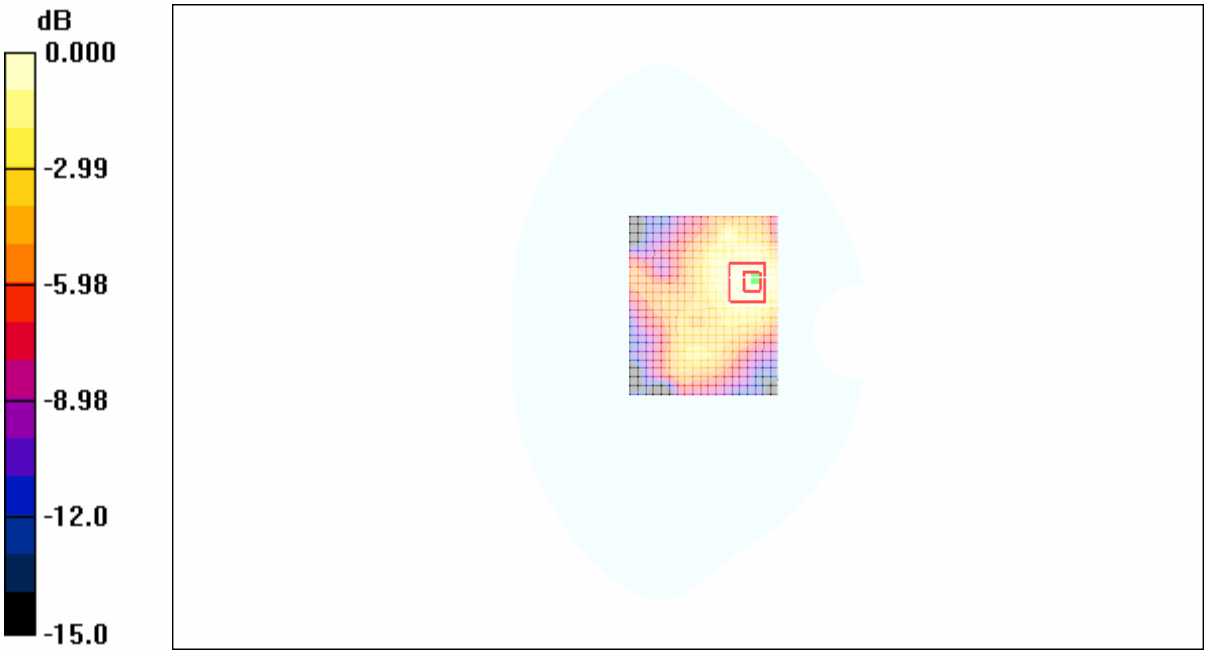
Fig.90 Z-Scan at power reference point (HSDPA 1900 CH9400 Test Position 1)

HSDPA 1900 Datacard Test Position 1 with Dell Laptop

Date/Time: 2007-1-19 12:35:09
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 1/Area Scan (91x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.074 mW/g

Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.76 V/m; Power Drift = -0.152 dB
Peak SAR (extrapolated) = 0.096 W/kg
SAR(1 g) = 0.065 mW/g; SAR(10 g) = 0.043 mW/g
Maximum value of SAR (measured) = 0.070 mW/g



0 dB = 0.070mW/g

Fig.91 HSDPA 1900 CH9400 Test Position 1

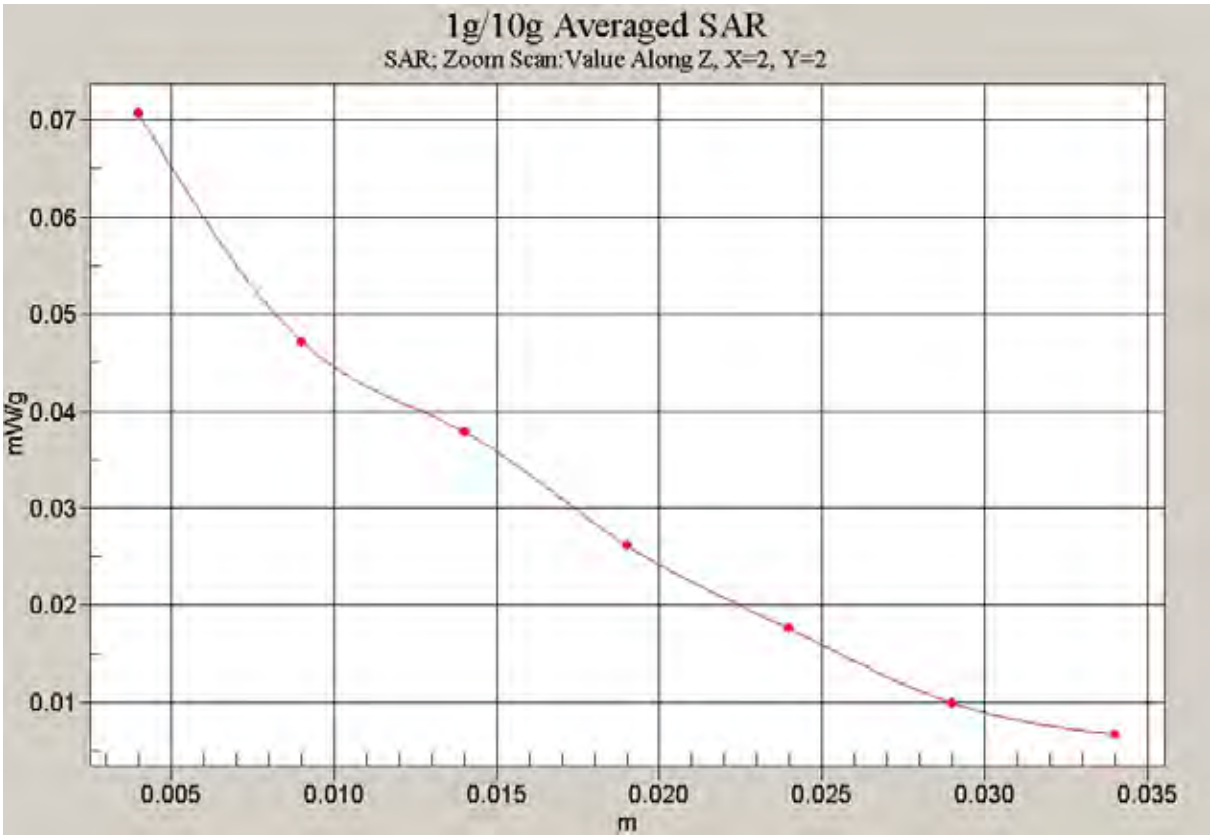


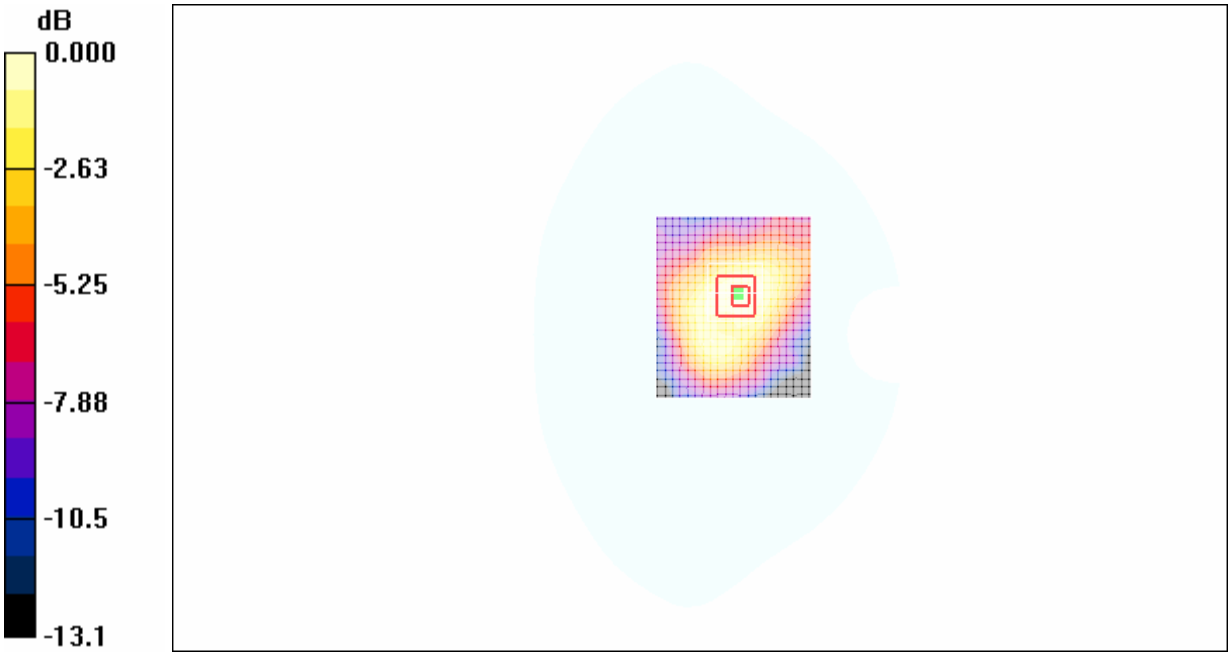
Fig.92 Z-Scan at power reference point (HSDPA 1900 CH9400 Test Position 1)

HSDPA 1900 Datacard Test Position 1 with HP Laptop

Date/Time: 2007-1-19 15:54:24
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 1/Area Scan (91x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.053 mW/g

Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.51 V/m; Power Drift = 0.167 dB
Peak SAR (extrapolated) = 0.089 W/kg
SAR(1 g) = 0.052 mW/g; SAR(10 g) = 0.032 mW/g
Maximum value of SAR (measured) = 0.054 mW/g



0 dB = 0.054mW/g

Fig.93 HSDPA 1900 CH9400 Test Position 1

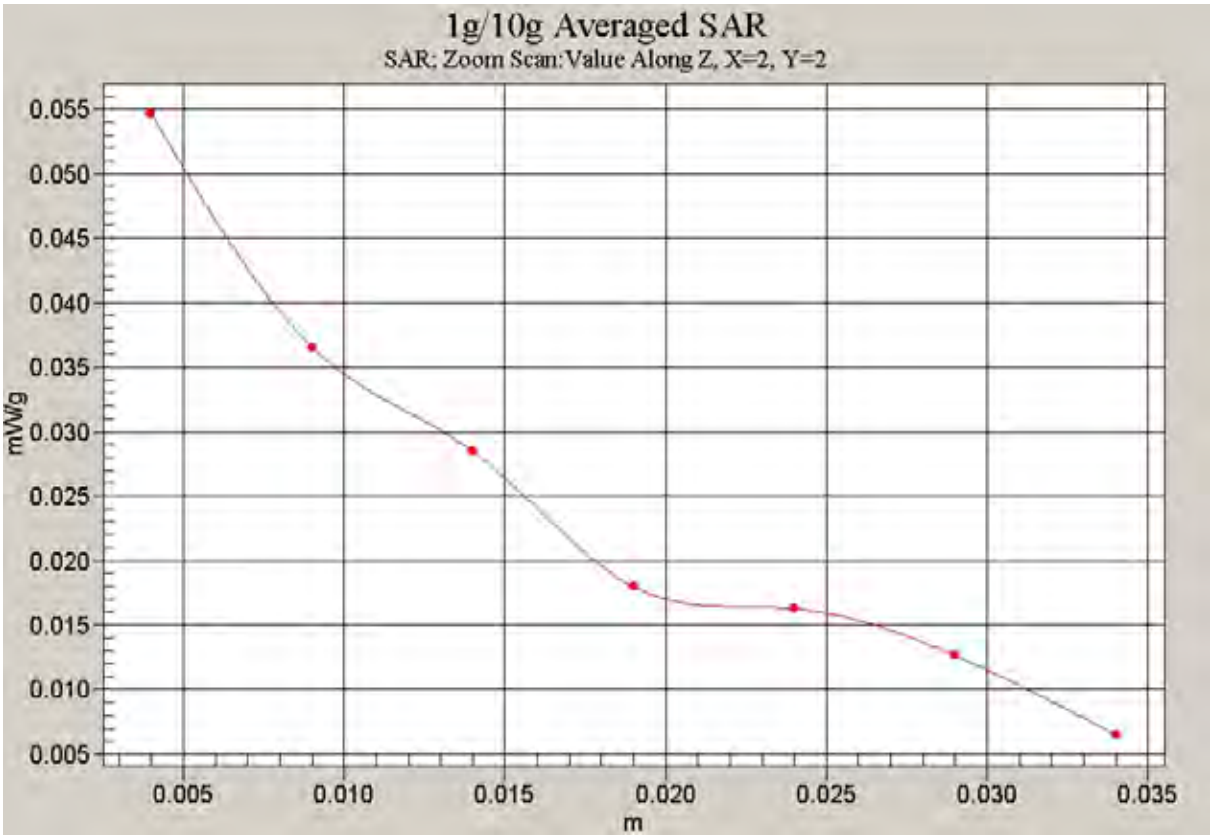


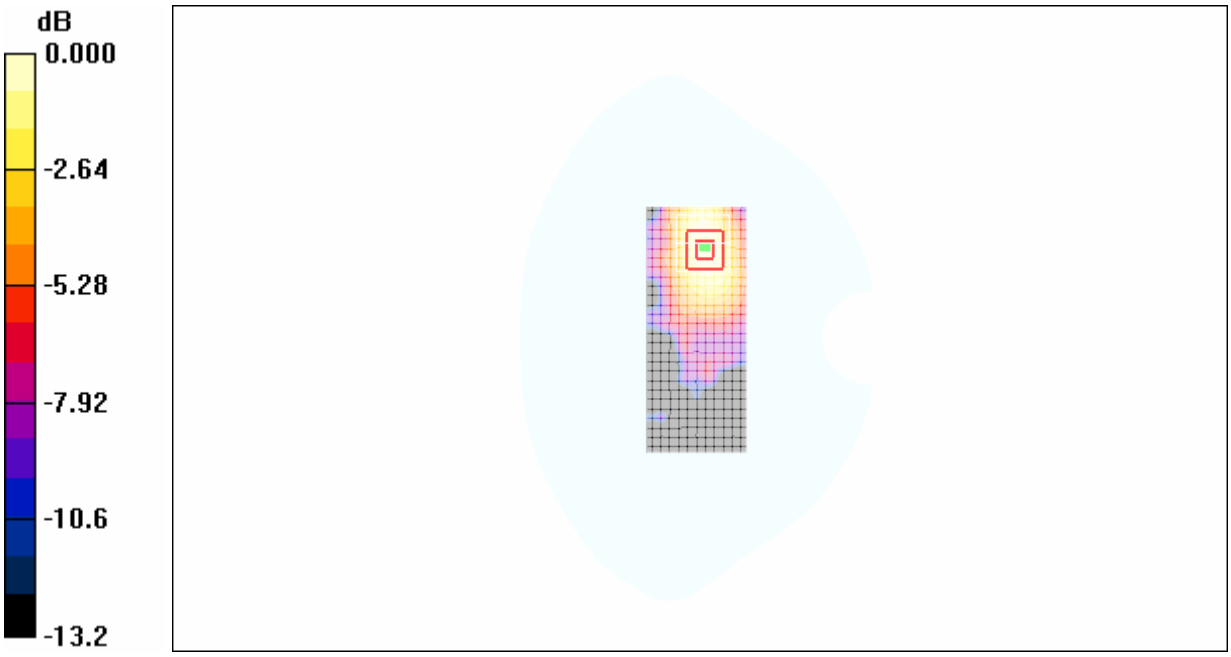
Fig.94 Z-Scan at power reference point (HSDPA 1900 CH9400 Test Position 1)

HSDPA 1900 External Antenna Test Position 1

Date/Time: 2007-1-19 20:48:20
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 1900MHz Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

External Antenna Test Position 1/Area Scan (61x141x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.065 mW/g

External Antenna Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.74 V/m; Power Drift = -0.137 dB
Peak SAR (extrapolated) = 0.120 W/kg
SAR(1 g) = 0.061 mW/g; SAR(10 g) = 0.038 mW/g
Maximum value of SAR (measured) = 0.067 mW/g



0 dB = 0.067mW/g

Fig.95 HSDPA 1900 CH9400 Test Position 1

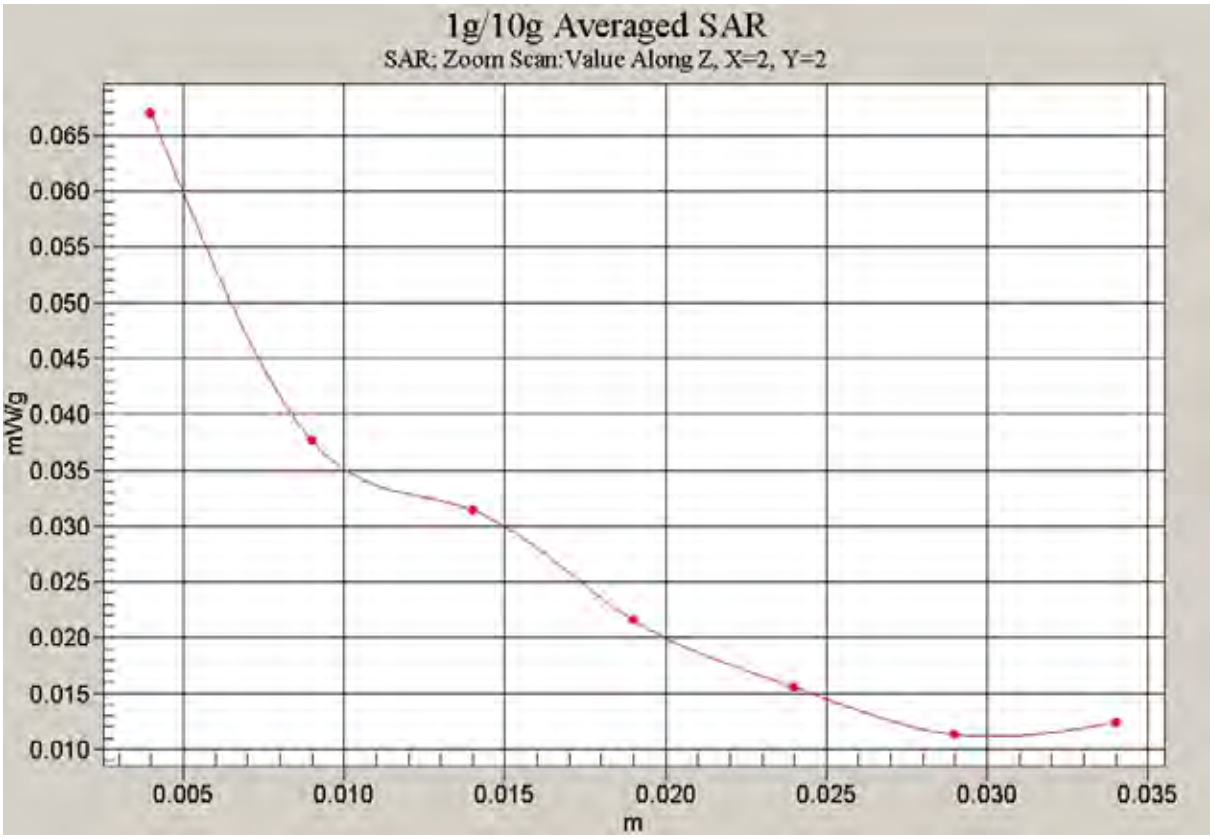


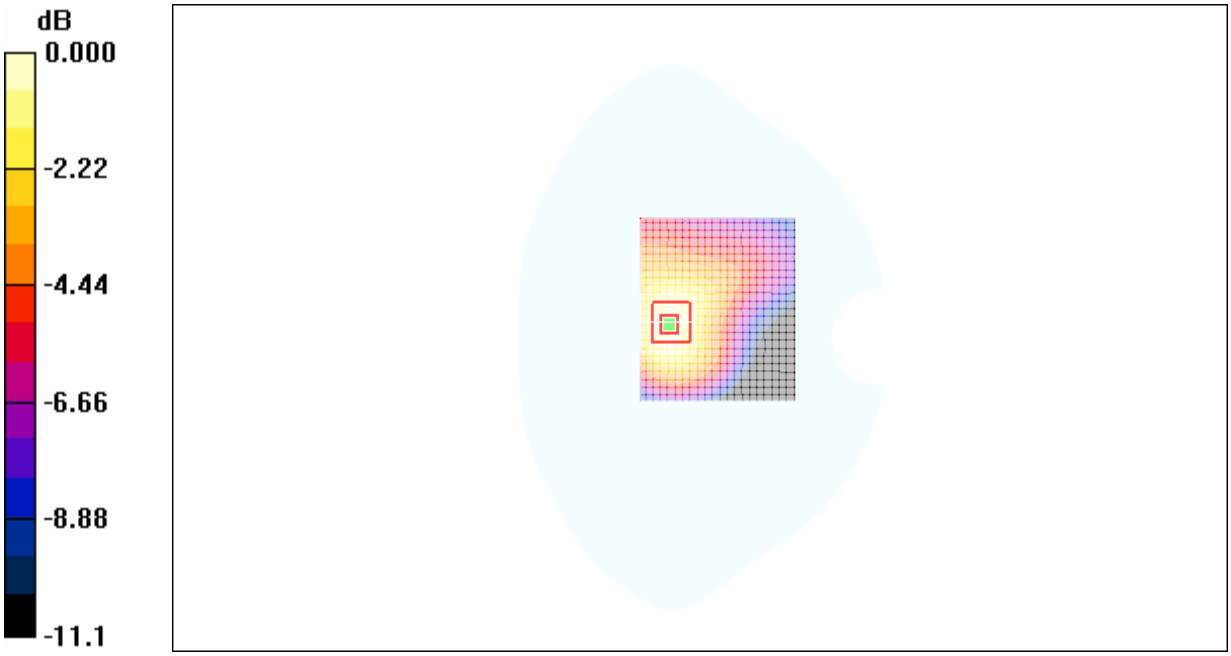
Fig.96 Z-Scan at power reference point (HSDPA 1900 CH9400 Test Position 1)

850MHz GPRS Datacard Test Position 1 with IBM Laptop

Date/Time: 2007-1-17 13:27:35
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Class 12 Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 1/Area Scan (91x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.17 mW/g

Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 28.5 V/m; Power Drift = 0.003 dB
Peak SAR (extrapolated) = 1.59 W/kg
SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.726 mW/g
Maximum value of SAR (measured) = 1.16 mW/g



0 dB = 1.16mW/g

Fig.97 850MHz GPRS CH190 Test Position 1

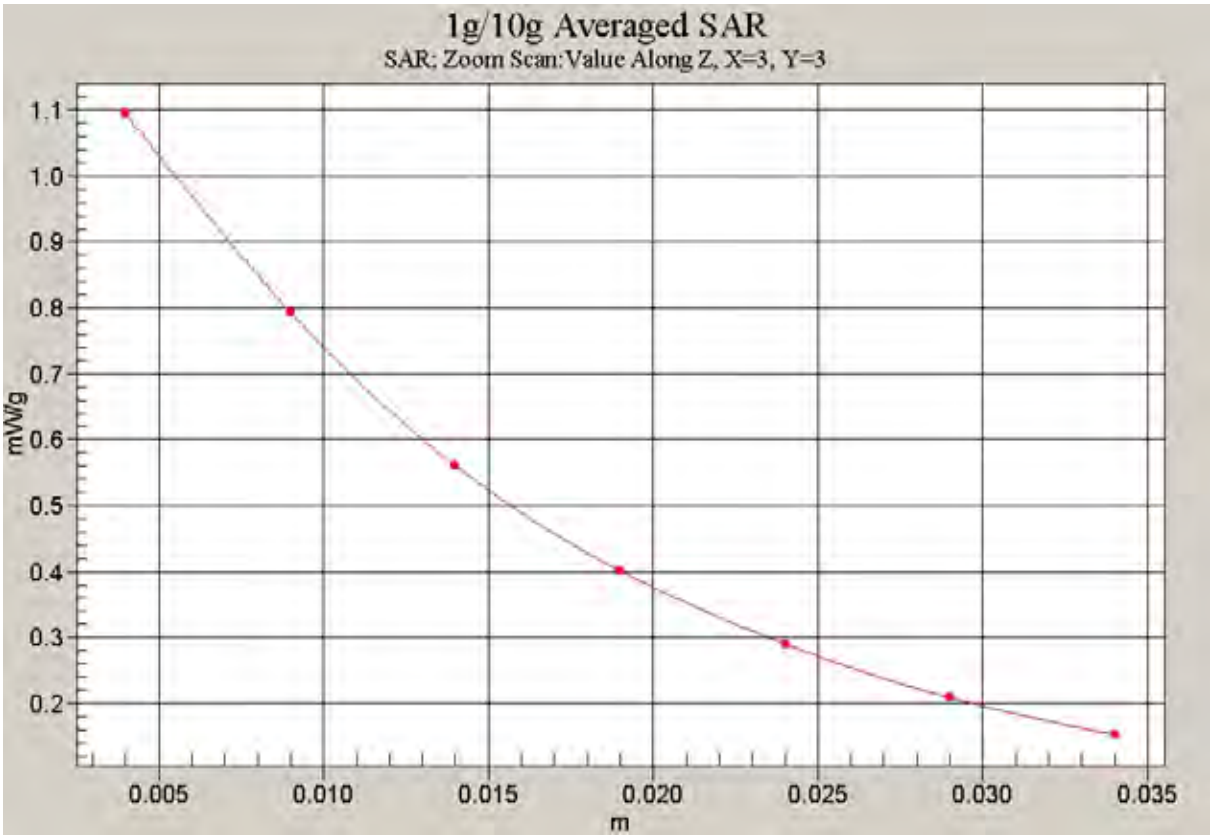


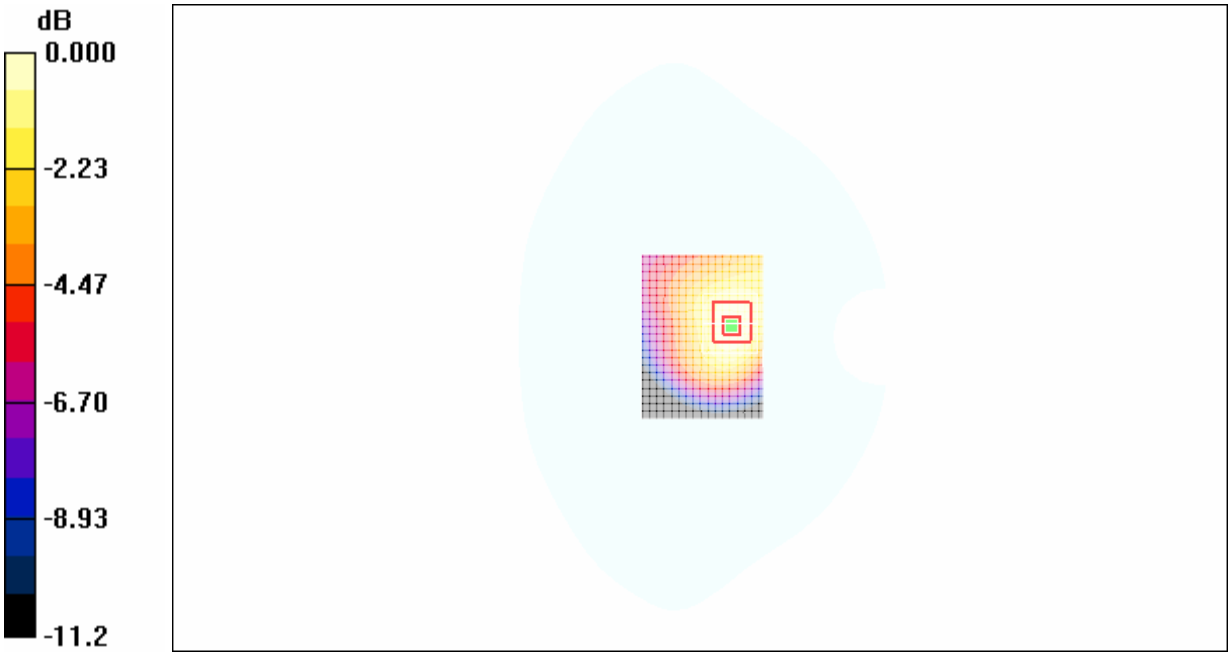
Fig.98 Z-Scan at power reference point (850 MHz GPRS CH190 Test Position 1)

850MHz GPRS Datacard Test Position 2 with IBM Laptop

Date/Time: 2007-1-17 13:10:55
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Class 12 Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 2/Area Scan (71x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.92 mW/g

Test Position 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 27.9 V/m; Power Drift = -0.085 dB
Peak SAR (extrapolated) = 1.25 W/kg
SAR(1 g) = 0.895 mW/g; SAR(10 g) = 0.597 mW/g
Maximum value of SAR (measured) = 0.91 mW/g



0 dB = 0.91mW/g

Fig.99 850MHz GPRS CH190 Test Position 2

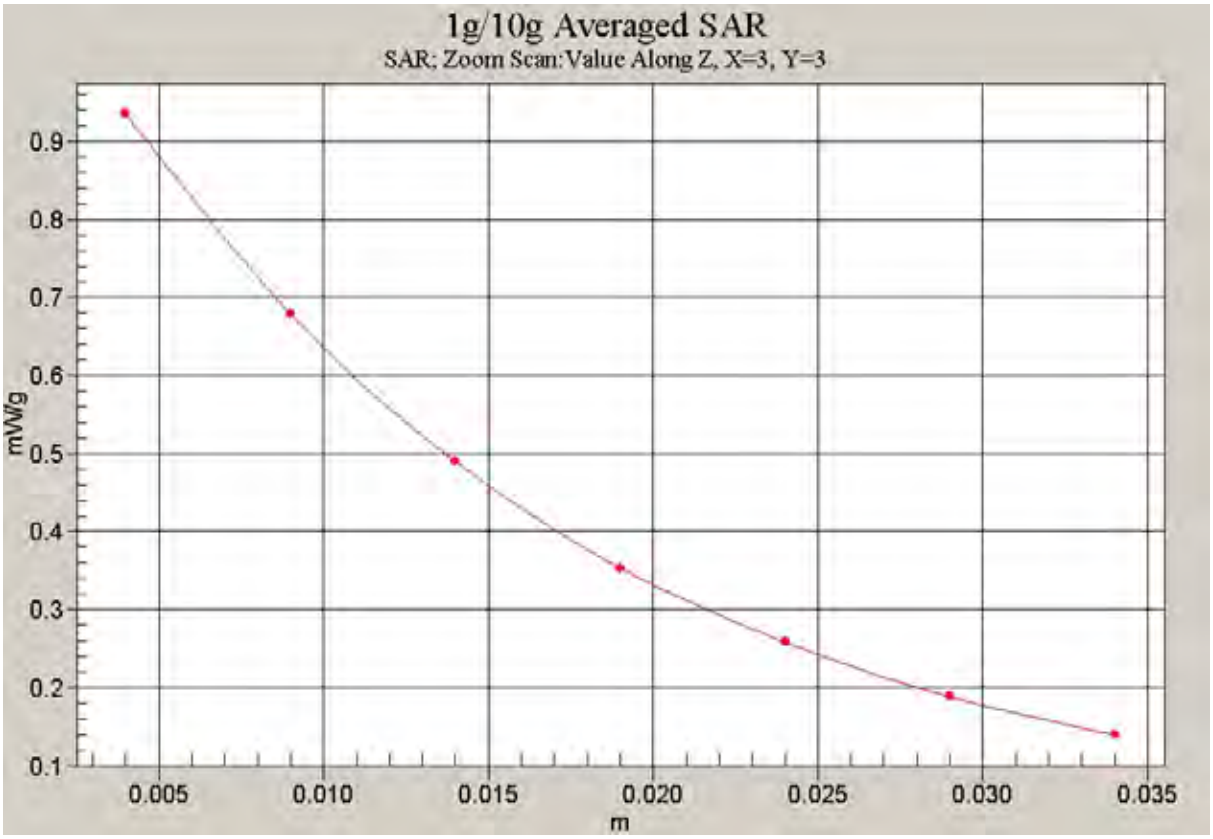


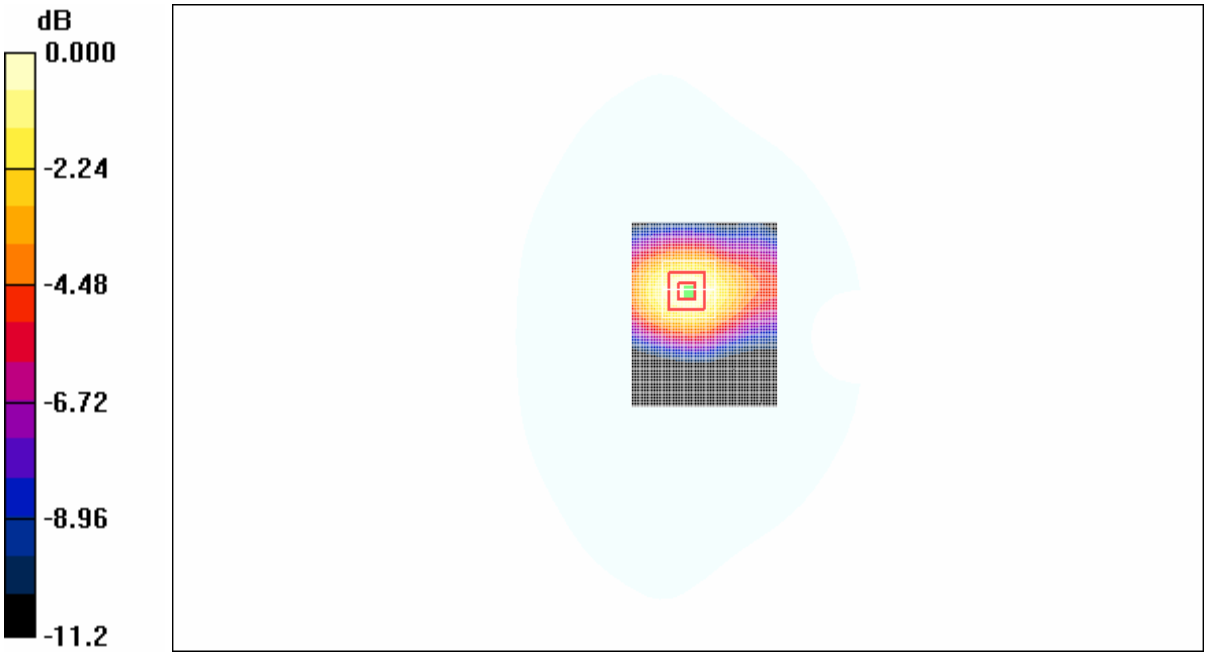
Fig.100 Z-Scan at power reference point (850 MHz GPRS CH190 Test Position 2)

850MHz GPRS Datacard Test Position 3 with IBM Laptop

Date/Time: 2007-1-17 14:16:43
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Class 12 Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 3/Area Scan (61x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.372 mW/g

Test Position 3/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.0 V/m; Power Drift = -0.073 dB
Peak SAR (extrapolated) = 0.471 W/kg
SAR(1 g) = 0.338 mW/g; SAR(10 g) = 0.222 mW/g
Maximum value of SAR (measured) = 0.364 mW/g



0 dB = 0.364mW/g

Fig.101 850MHz GPRS CH190 Test Position 3

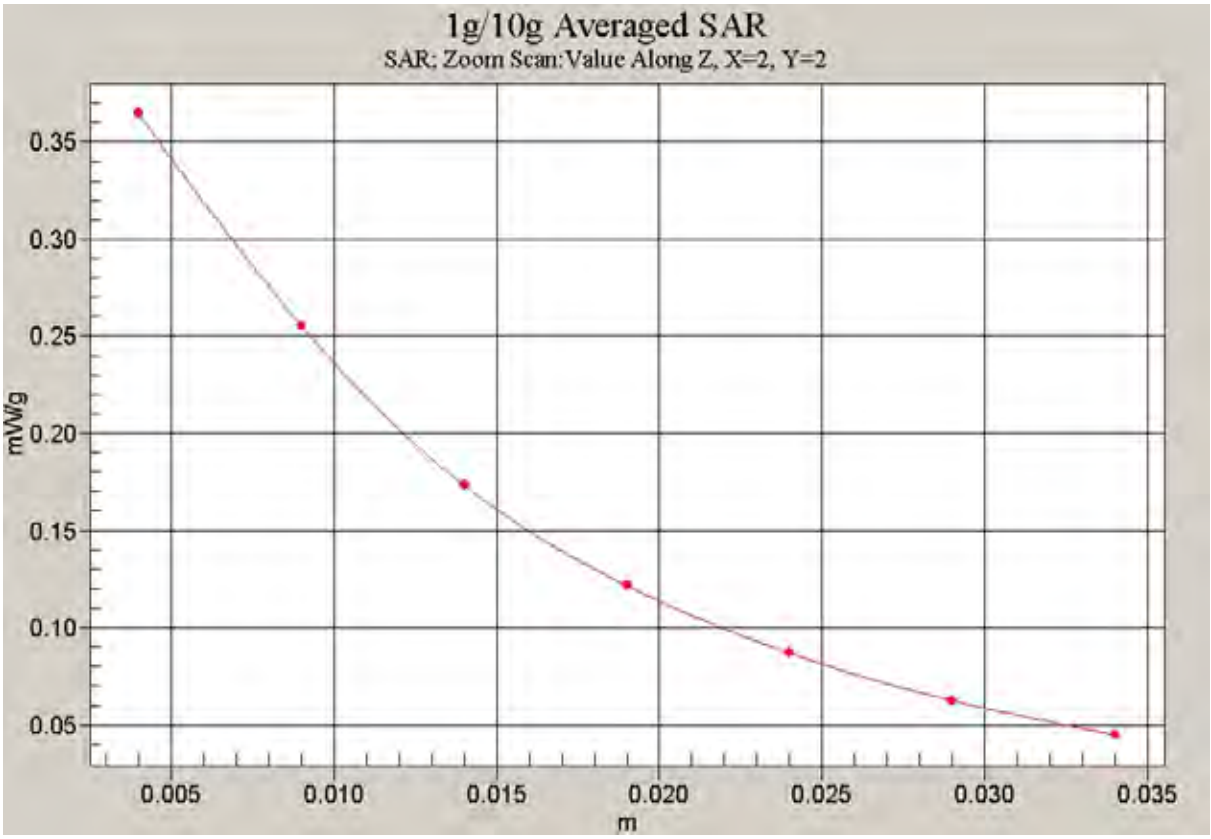


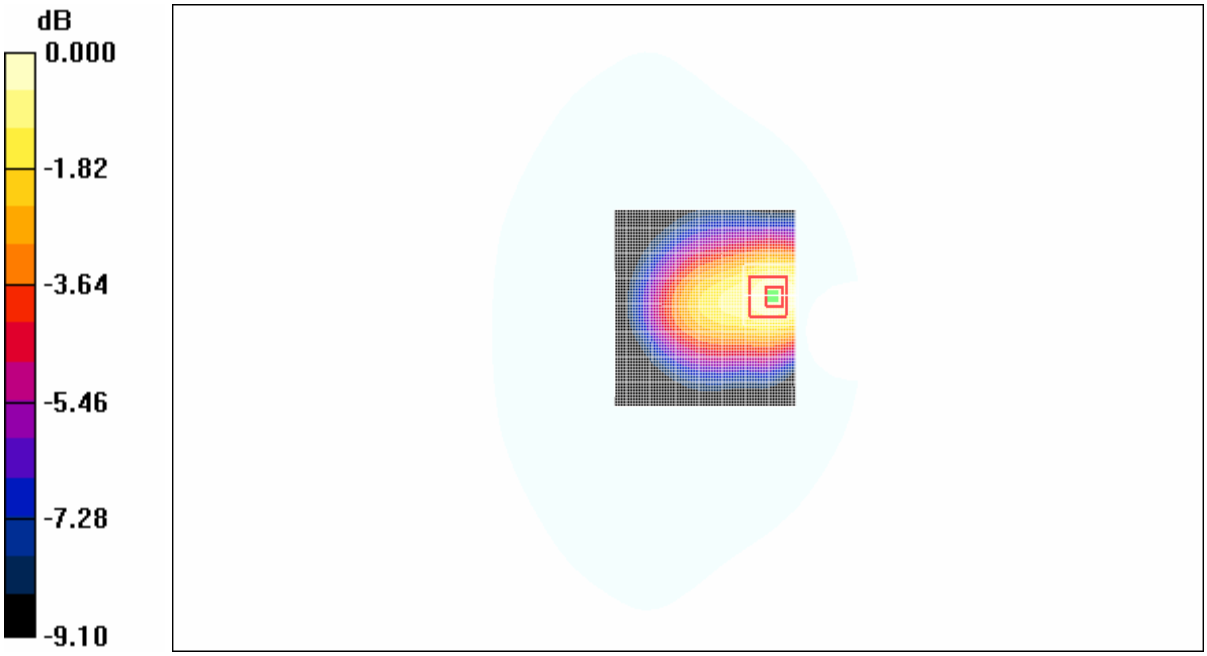
Fig.102 Z-Scan at power reference point (850 MHz GPRS CH190 Test Position 3)

850MHz GPRS Datacard Test Position 4 with IBM Laptop

Date/Time: 2007-1-17 14:56:29
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Glass 12 Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 4/Area Scan (71x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.570 mW/g

Test Position 4/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.5 V/m; Power Drift = -0.014 dB
Peak SAR (extrapolated) = 0.715 W/kg
SAR(1 g) = 0.536 mW/g; SAR(10 g) = 0.372 mW/g
Maximum value of SAR (measured) = 0.574 mW/g



0 dB = 0.574mW/g

Fig.103 850MHz GPRS CH190 Test Position 4

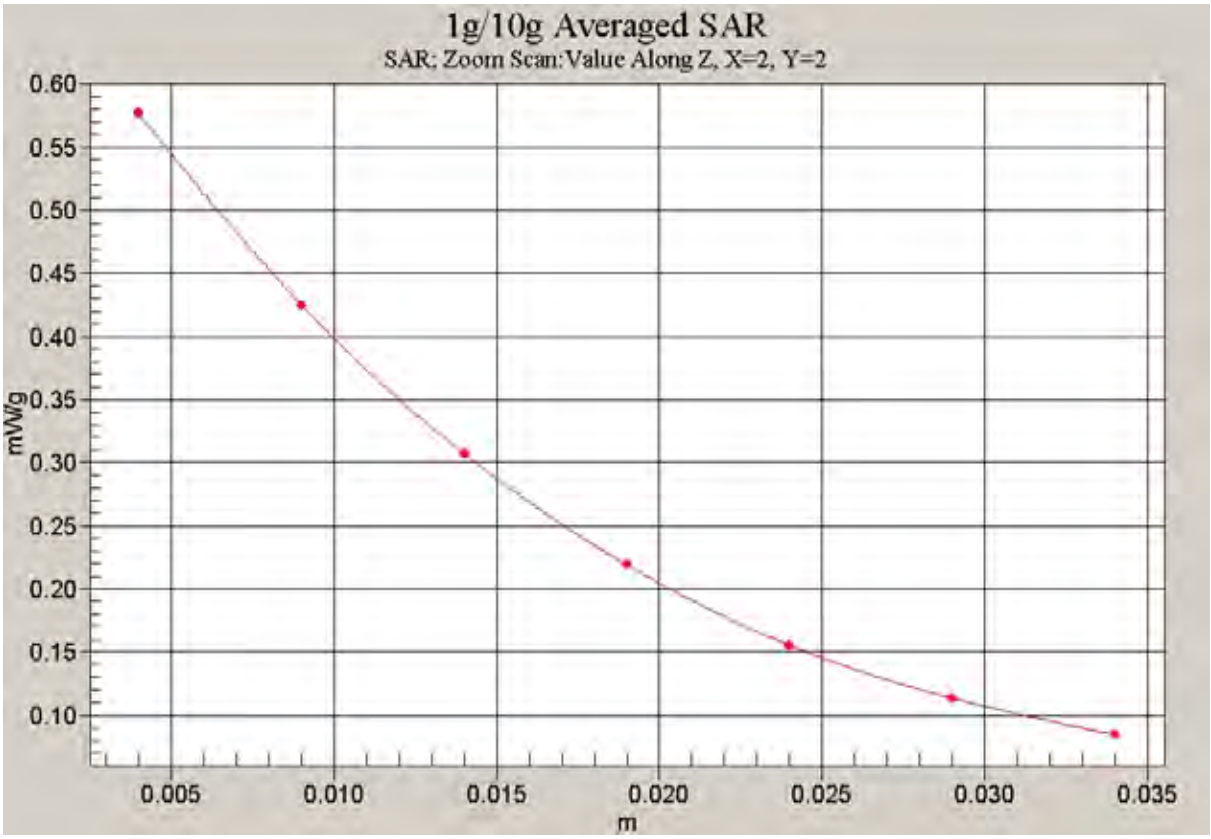


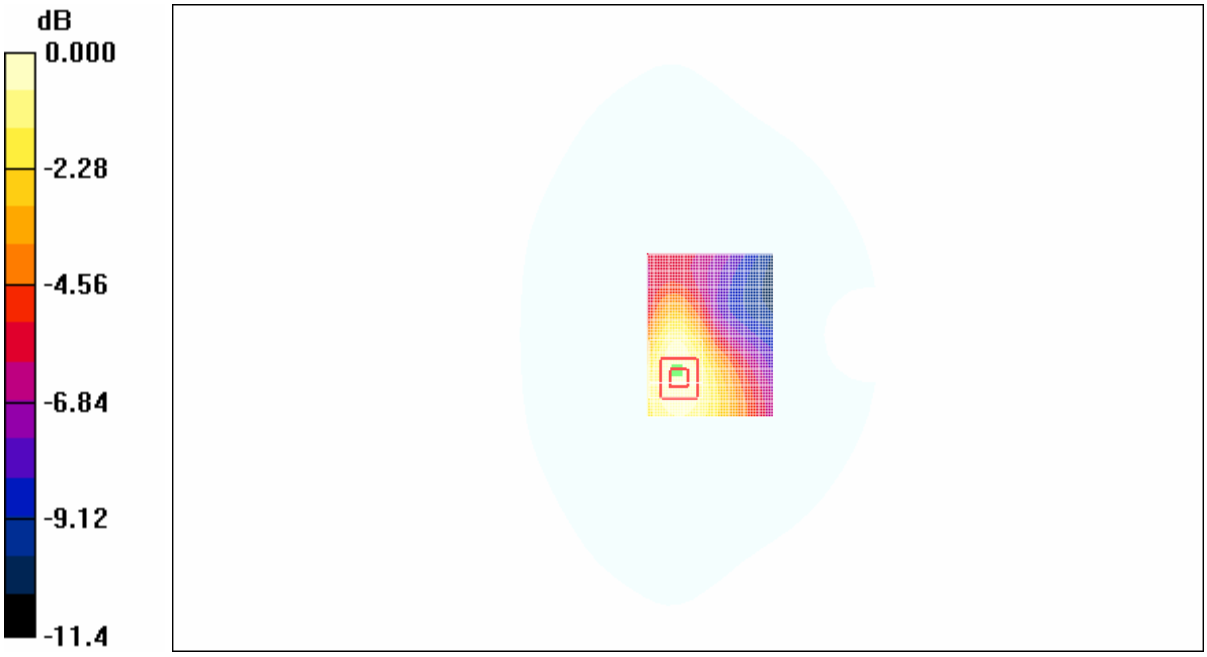
Fig.104 Z-Scan at power reference point (850 MHz GPRS CH190 Test Position 4)

850MHz GPRS Datacard Test Position 5 with IBM Laptop

Date/Time: 2007-1-17 13:49:32
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Class 12 Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 5/Area Scan (51x61x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.242 mW/g

Test Position 5/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.7 V/m; Power Drift = 0.033 dB
Peak SAR (extrapolated) = 0.327 W/kg
SAR(1 g) = 0.225 mW/g; SAR(10 g) = 0.155 mW/g
Maximum value of SAR (measured) = 0.238 mW/g



0 dB = 0.238mW/g

Fig.105 850MHz CH190 GPRS Test Position 5

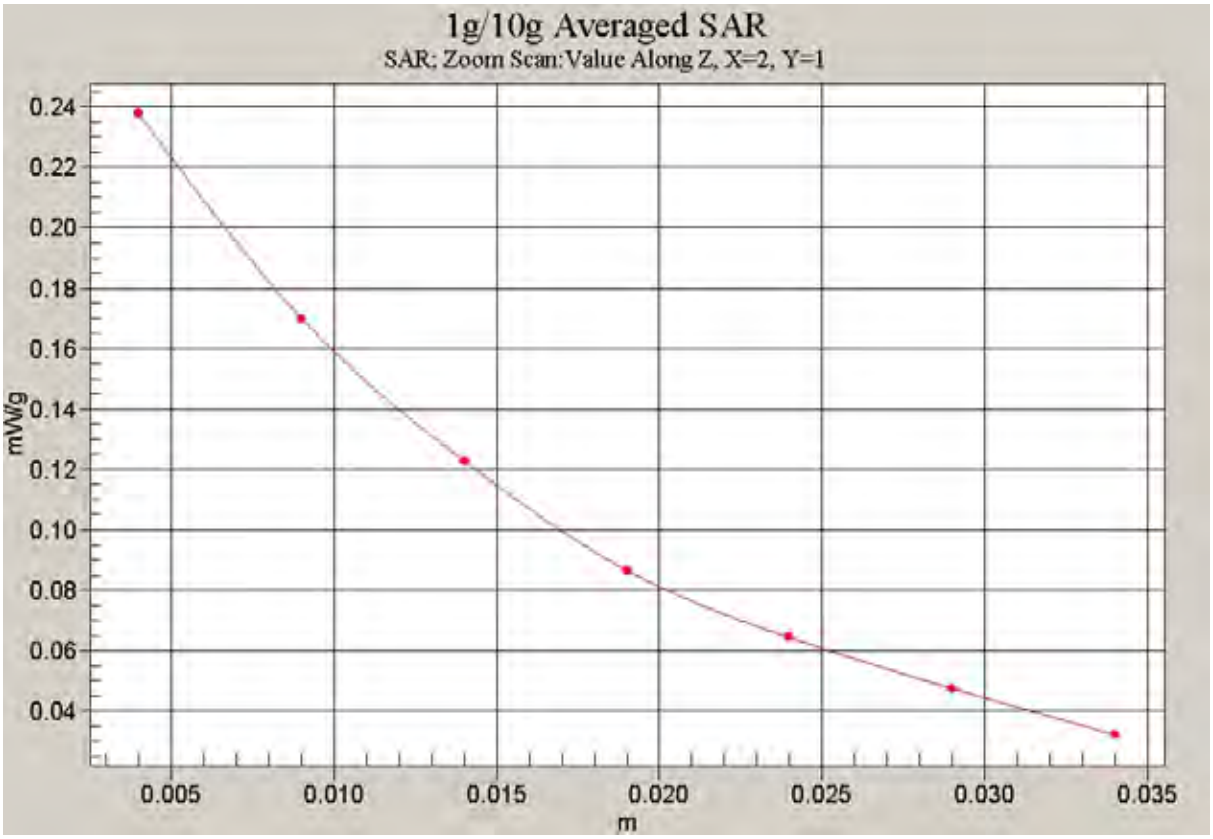


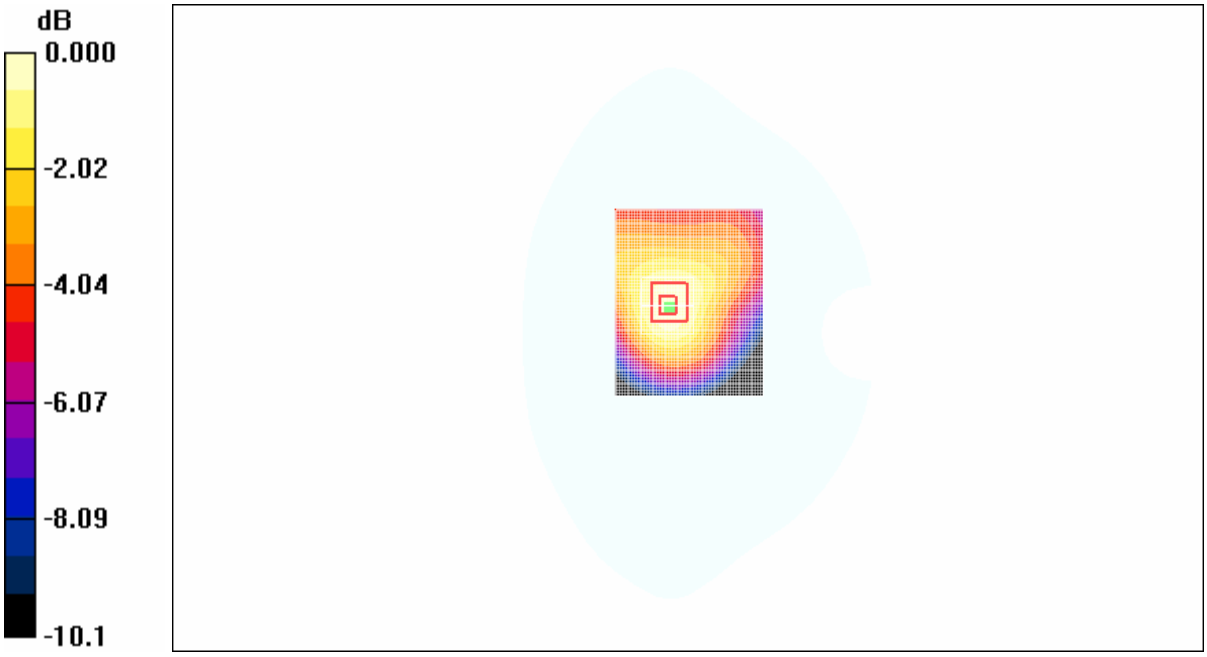
Fig.106 Z-Scan at power reference point (850 MHz GPRS CH190 Test Position 5)

850MHz GPRS Datacard Test Position 1 with Dell Laptop

Date/Time: 2007-1-17 16:35:05
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Class 12 Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 1/Area Scan (61x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.13 mW/g

Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 27.6 V/m; Power Drift = 0.058 dB
Peak SAR (extrapolated) = 1.42 W/kg
SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.732 mW/g
Maximum value of SAR (measured) = 1.13 mW/g



0 dB = 1.13mW/g

Fig.107 850MHz GPRS CH190 Test Position 1

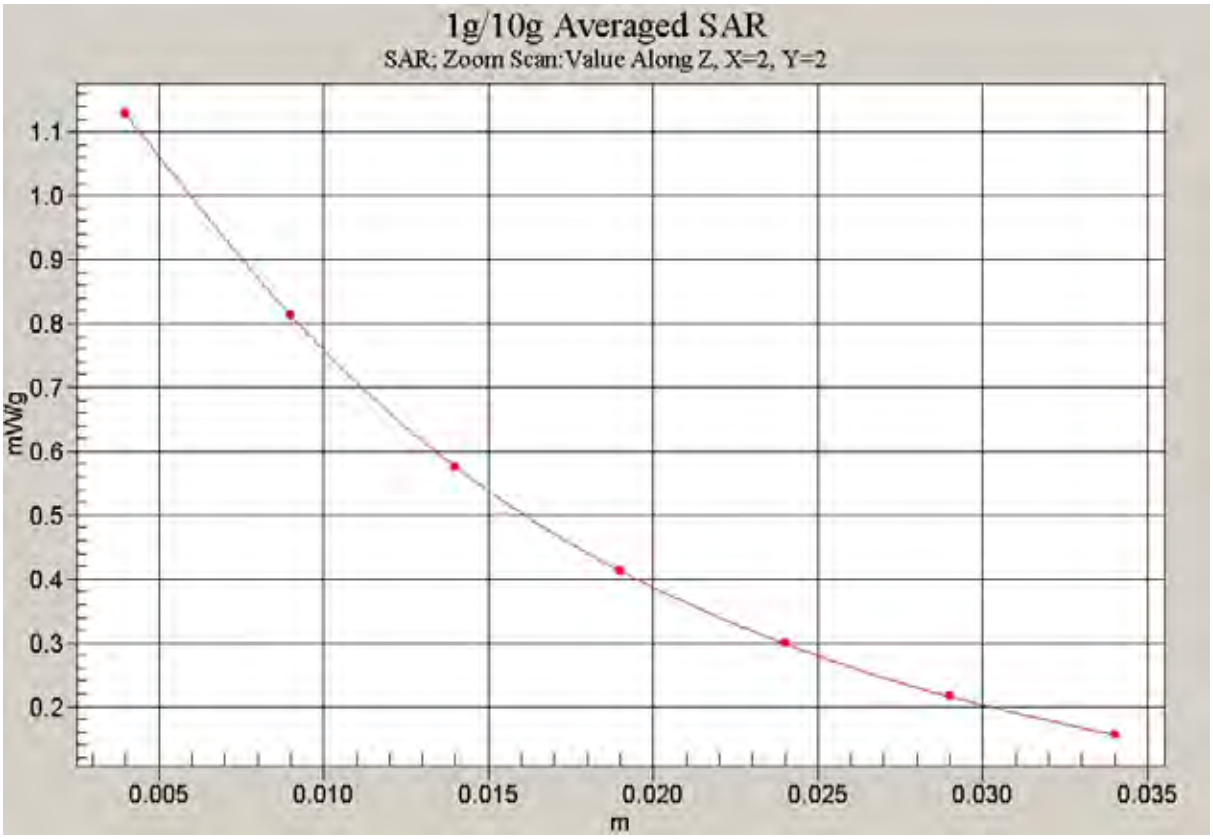


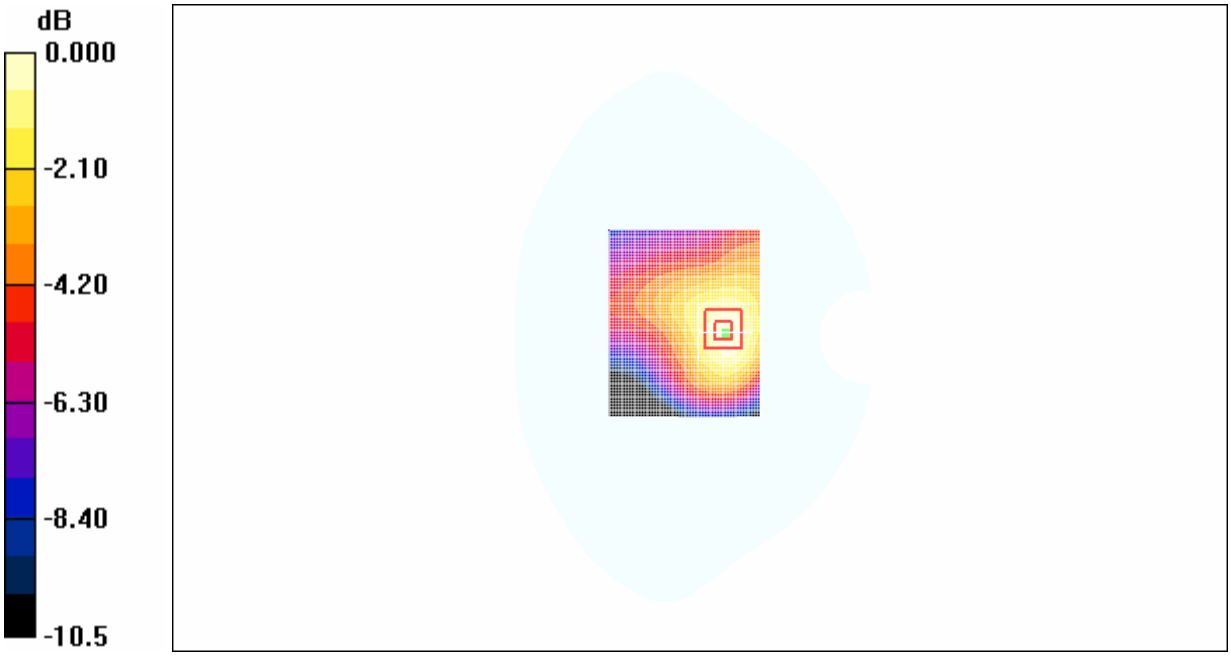
Fig.108 Z-Scan at power reference point (850 MHz GPRS CH190 Test Position 1)

850MHz GPRS Datacard Test Position 2 with Dell Laptop

Date/Time: 2007-1-17 16:08:44
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Class 12 Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 2/Area Scan (61x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.03 mW/g

Test Position 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.8 V/m; Power Drift = 0.168 dB
Peak SAR (extrapolated) = 1.35 W/kg
SAR(1 g) = 0.974 mW/g; SAR(10 g) = 0.666 mW/g
Maximum value of SAR (measured) = 1.05 mW/g



0 dB = 1.05mW/g

Fig.109 850MHz GPRS CH190 Test Position 2

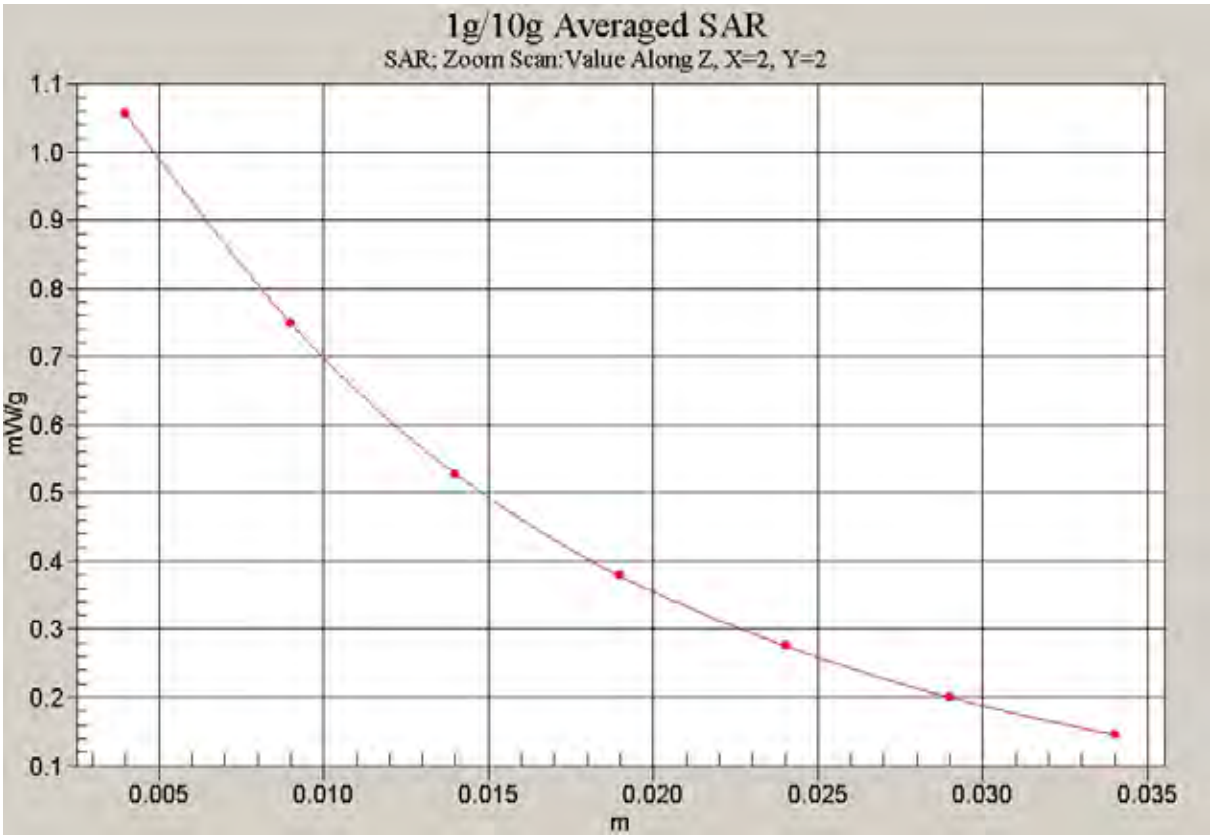


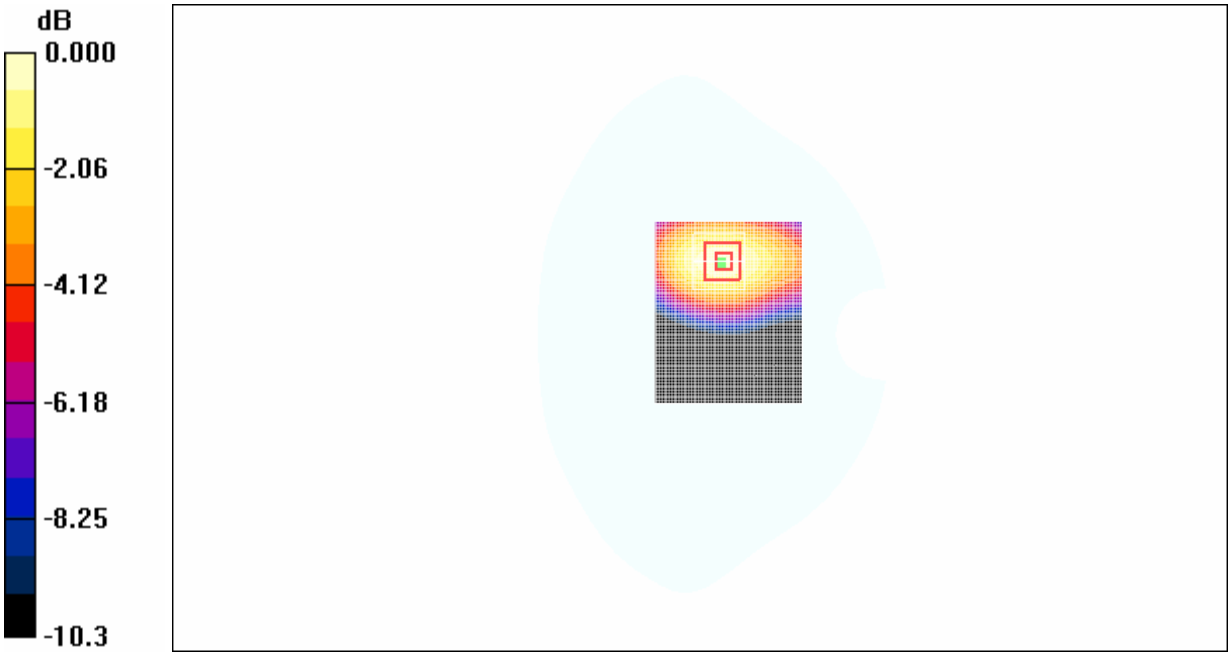
Fig.110 Z-Scan at power reference point (850 MHz GPRS CH190 Test Position 2)

850MHz GPRS Datacard Test Position 3 with Dell Laptop

Date/Time: 2007-1-17 17:08:03
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Class 12 Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 3/Area Scan (61x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.609 mW/g

Test Position 3/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.47 V/m; Power Drift = 0.168 dB
Peak SAR (extrapolated) = 0.790 W/kg
SAR(1 g) = 0.579 mW/g; SAR(10 g) = 0.392 mW/g
Maximum value of SAR (measured) = 0.623 mW/g



0 dB = 0.623mW/g

Fig.111 850MHz GPRS CH190 Test Position 3

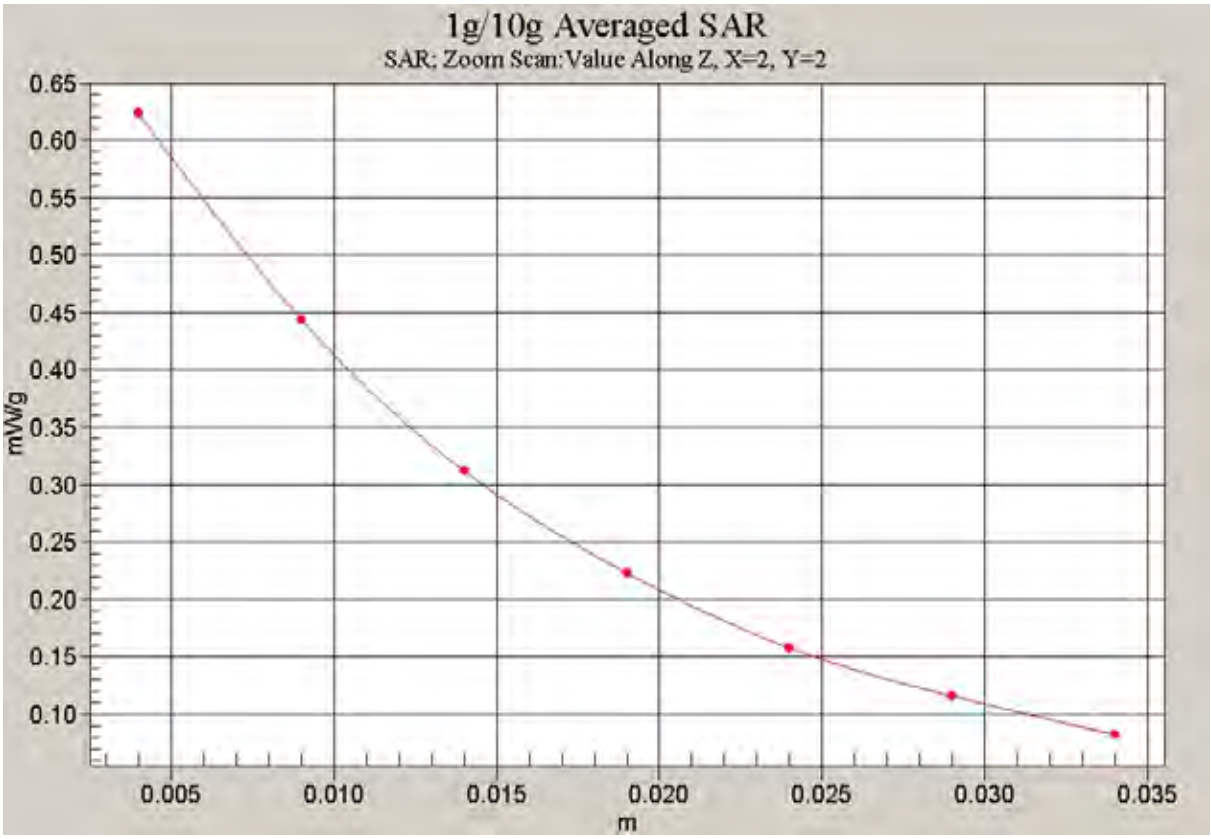


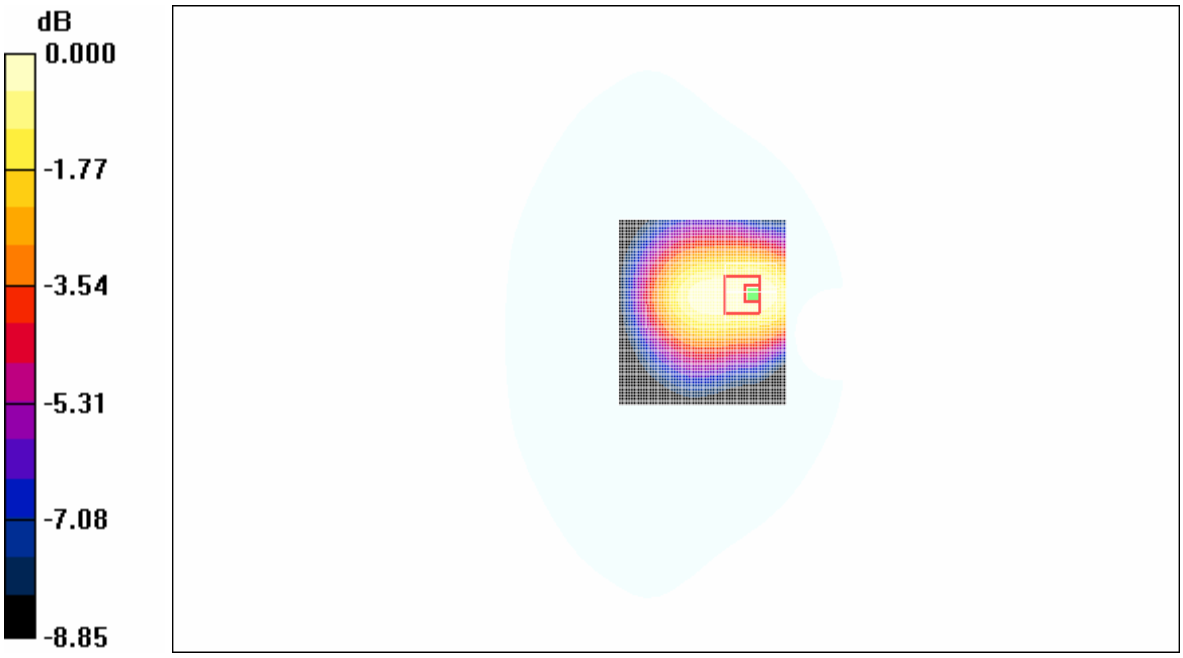
Fig.112 Z-Scan at power reference point (850 MHz GPRS CH190 Test Position 3)

850MHz GPRS Datacard Test Position 4 with Dell Laptop

Date/Time: 2007-1-17 17:21:45
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Class 12 Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 4/Area Scan (71x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.482 mW/g

Test Position 4/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.5 V/m; Power Drift = -0.036 dB
Peak SAR (extrapolated) = 0.592 W/kg
SAR(1 g) = 0.445 mW/g; SAR(10 g) = 0.323 mW/g
Maximum value of SAR (measured) = 0.473 mW/g



0 dB = 0.473mW/g

Fig.113 850MHz GPRS CH190 Test Position 4

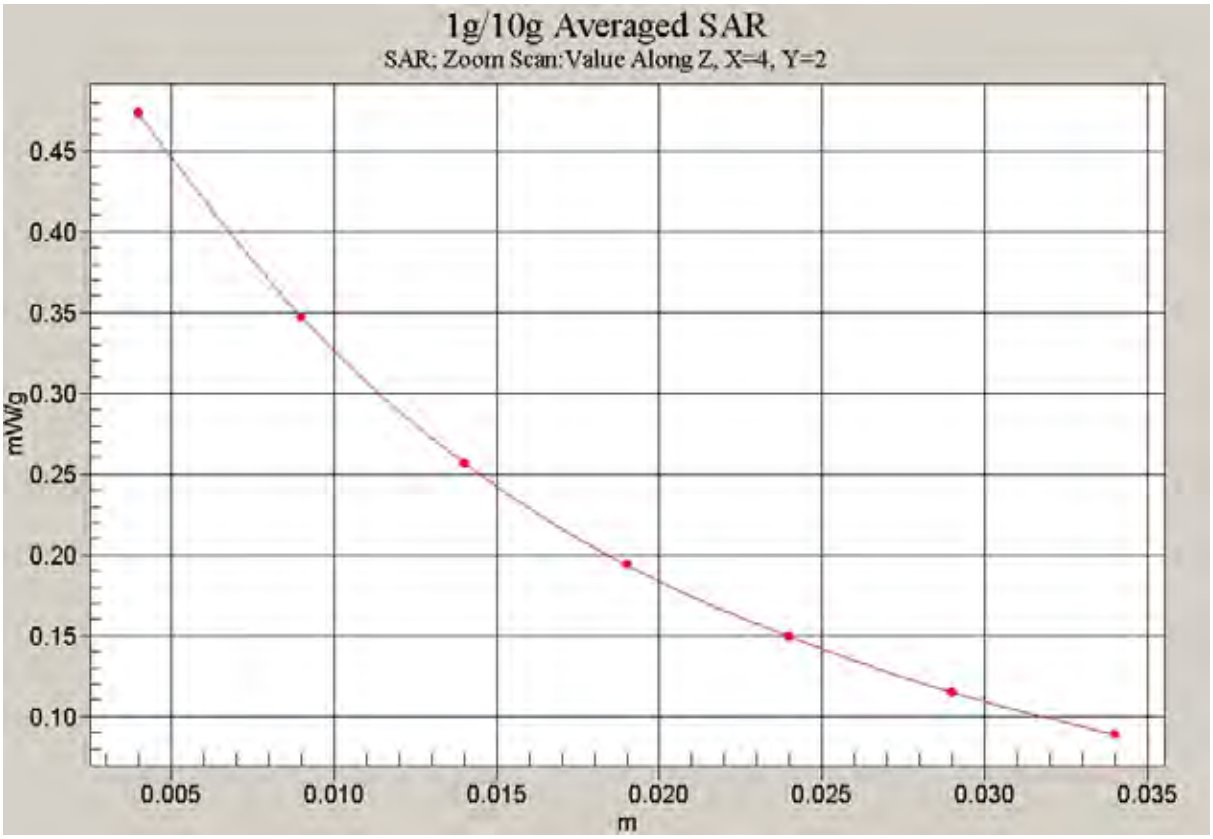


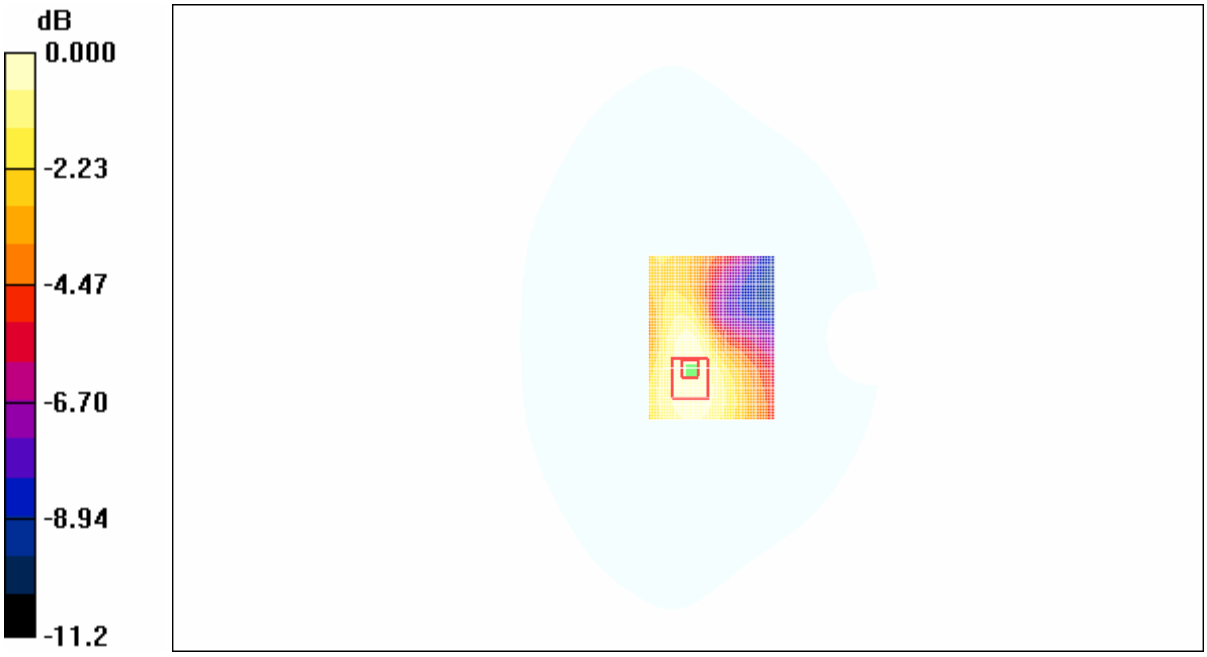
Fig.114 Z-Scan at power reference point (850 MHz GPRS CH190 Test Position 4)

850MHz GPRS Datacard Test Position 5 with Dell Laptop

Date/Time: 2007-1-17 16:47:59
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Class 12 Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 5/Area Scan (51x61x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.171 mW/g

Test Position 5/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.0 V/m; Power Drift = 0.063 dB
Peak SAR (extrapolated) = 0.246 W/kg
SAR(1 g) = 0.160 mW/g; SAR(10 g) = 0.110 mW/g
Maximum value of SAR (measured) = 0.172 mW/g



0 dB = 0.172mW/g

Fig.115 850MHz GPRS CH190 Test Position 5

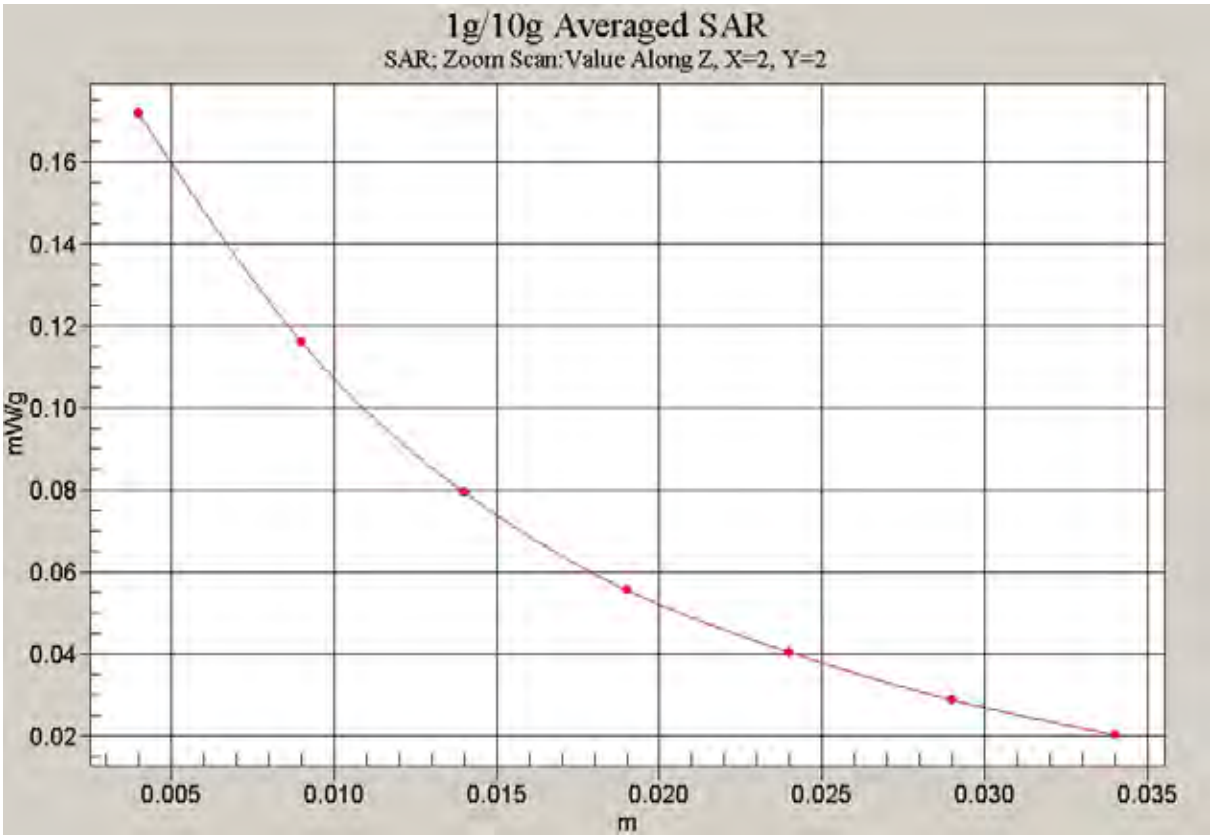


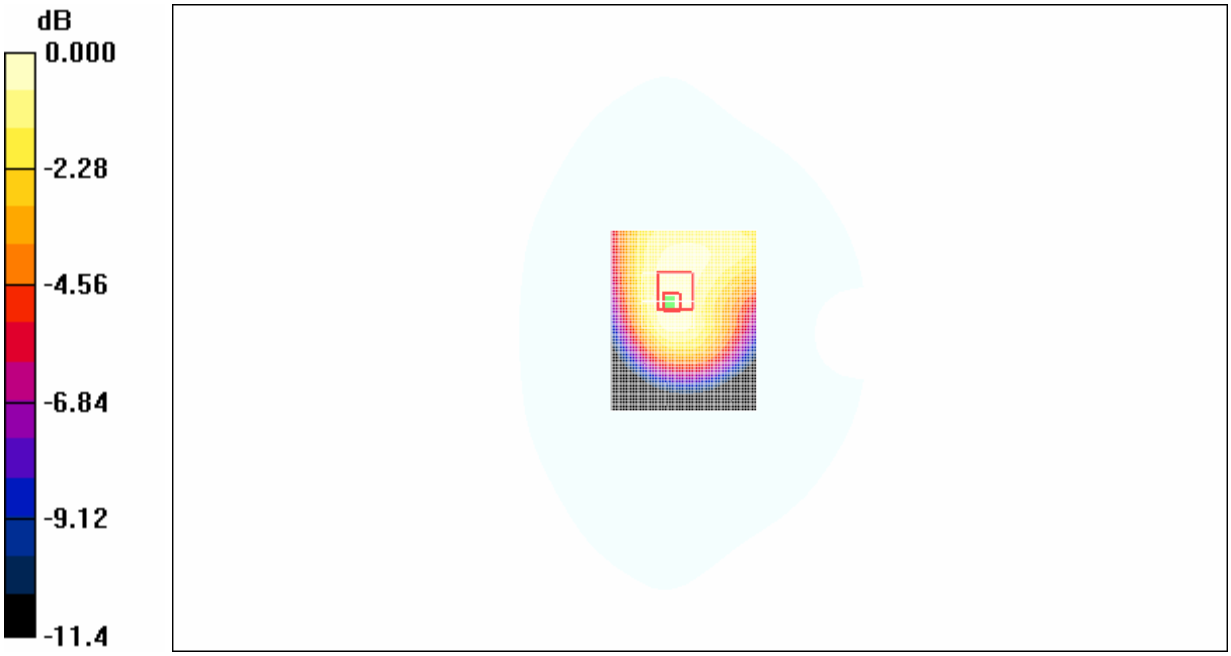
Fig.116 Z-Scan at power reference point (850 MHz GPRS CH190 Test Position 5)

850MHz GPRS Datacard Test Position 1 with HP Laptop

Date/Time: 2007-1-17 19:02:24
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Class 12 Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 1/Area Scan (61x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.09 mW/g

Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 30.2 V/m; Power Drift = 0.017 dB
Peak SAR (extrapolated) = 1.48 W/kg
SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.717 mW/g
Maximum value of SAR (measured) = 1.10 mW/g



0 dB = 1.10mW/g

Fig.117 850MHz GPRS CH190 Test Position 1

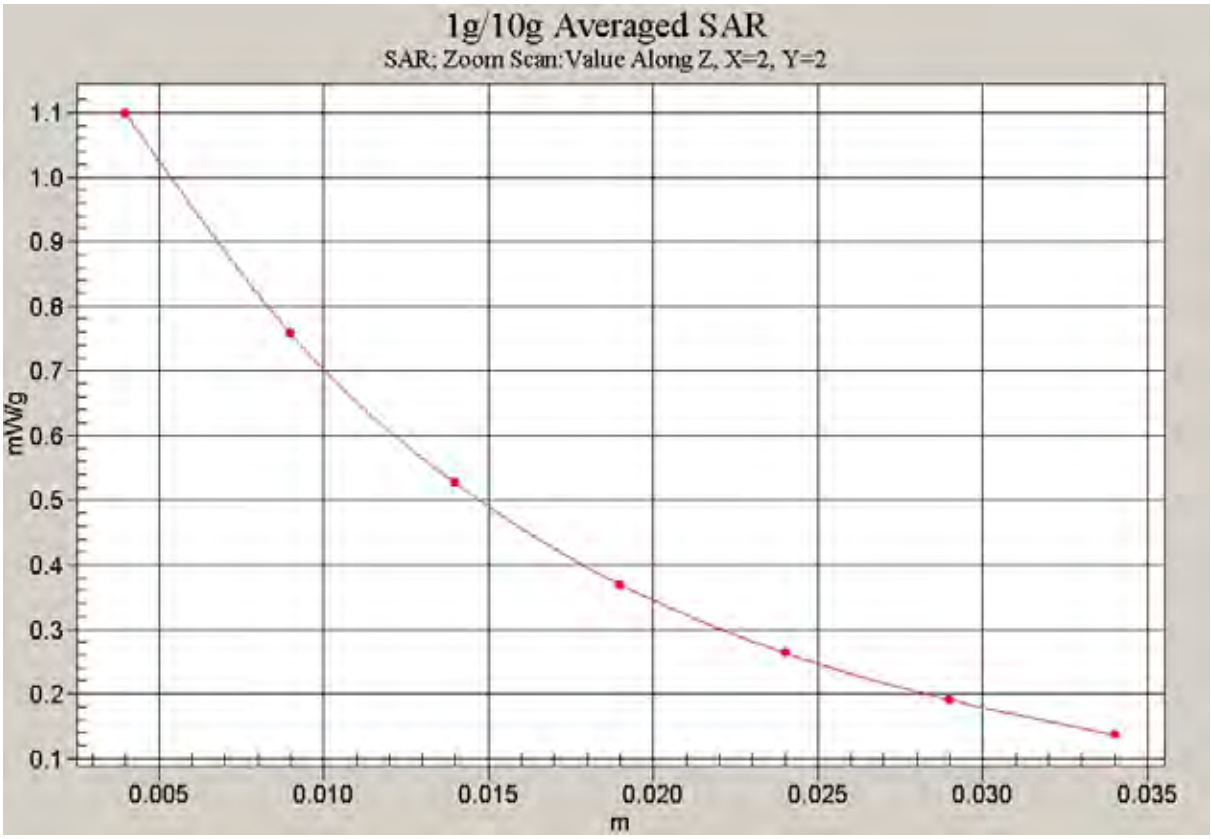


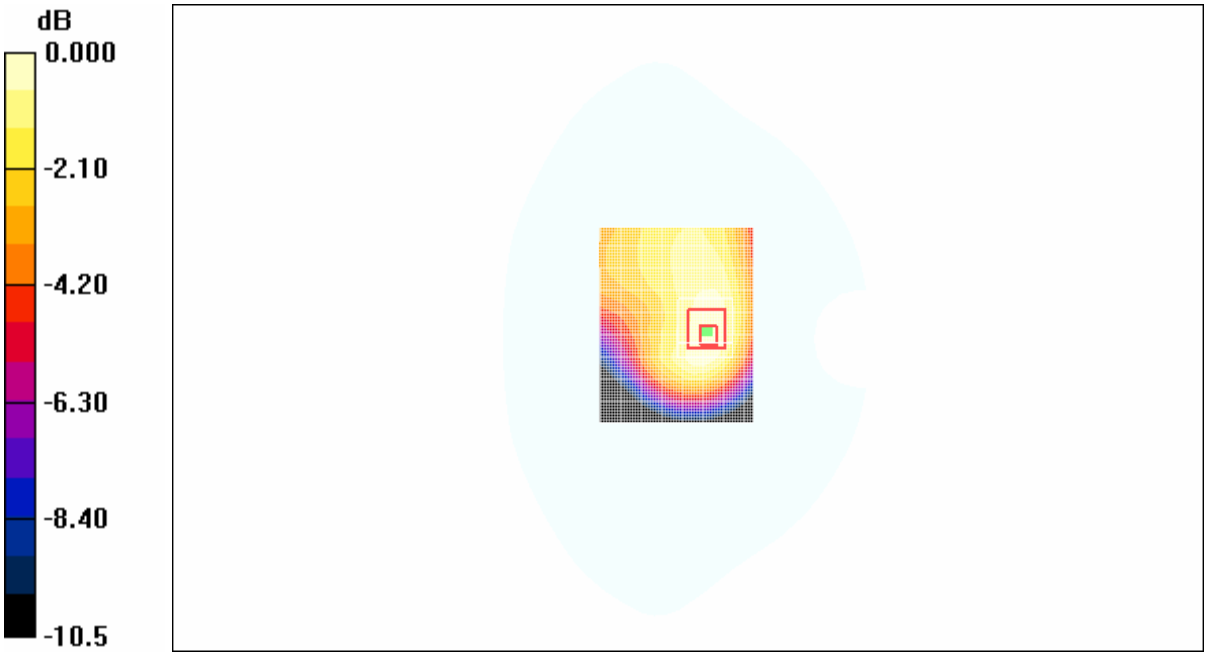
Fig.118 Z-Scan at power reference point (850 MHz GPRS CH190 Test Position 1)

850MHz GPRS Datacard Test Position 2 with HP Laptop

Date/Time: 2007-1-17 18:45:23
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Class 12 Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 2/Area Scan (61x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.909 mW/g

Test Position 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 28.4 V/m; Power Drift = 0.040 dB
Peak SAR (extrapolated) = 1.21 W/kg
SAR(1 g) = 0.860 mW/g; SAR(10 g) = 0.589 mW/g
Maximum value of SAR (measured) = 0.914 mW/g



0 dB = 0.914mW/g

Fig.119 850MHz GPRS CH190 Test Position 2

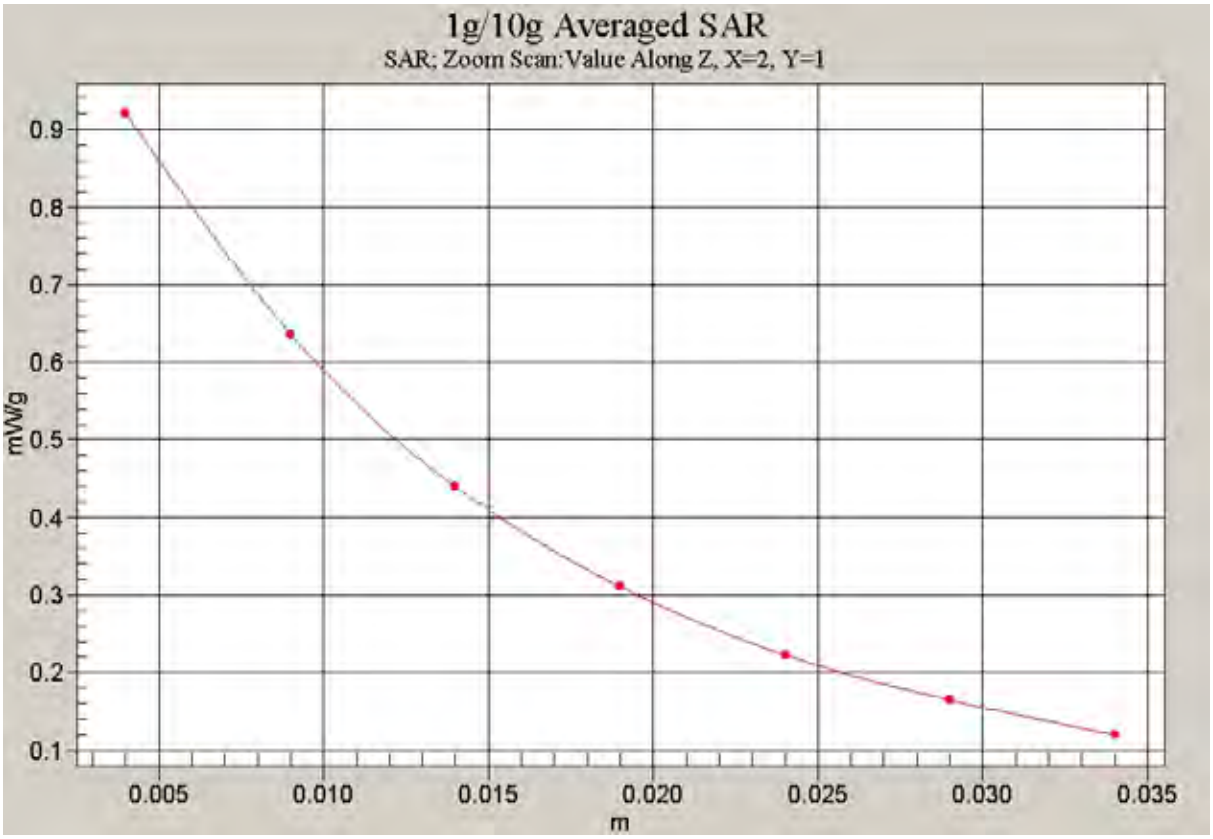


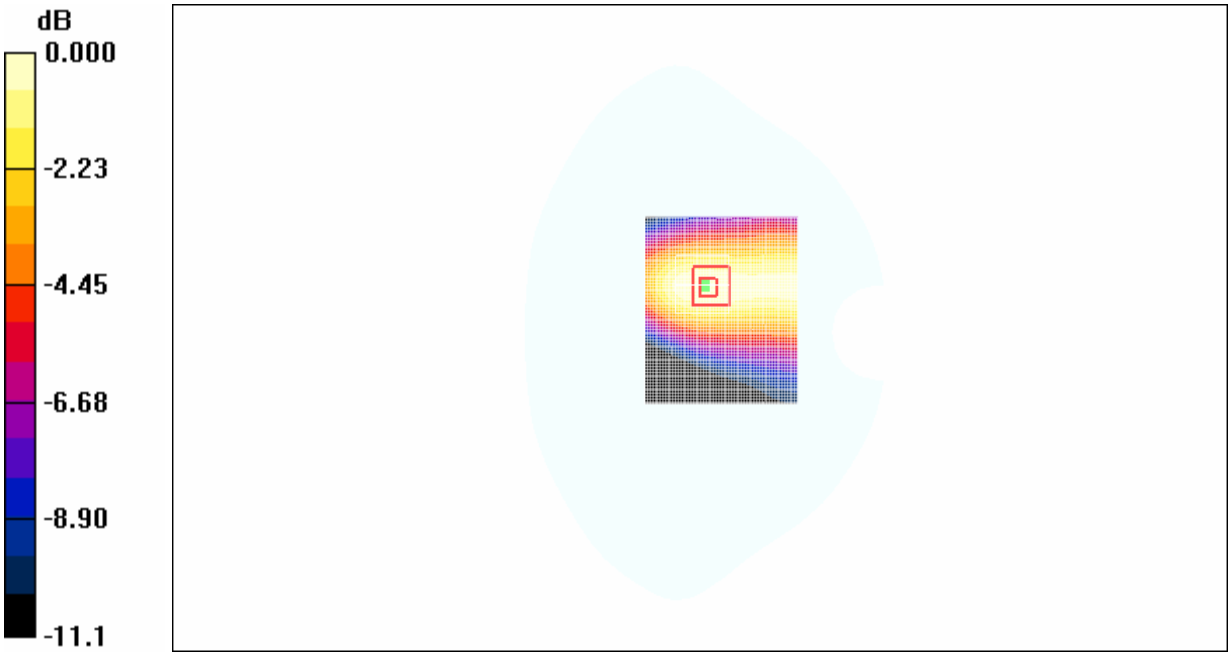
Fig.120 Z-Scan at power reference point (850 MHz GPRS CH190 Test Position 2)

850MHz GPRS Datacard Test Position 3 with HP Laptop

Date/Time: 2007-1-17 18:03:45
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Class 12 Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 3/Area Scan (61x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.345 mW/g

Test Position 3/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.3 V/m; Power Drift = -0.111 dB
Peak SAR (extrapolated) = 0.443 W/kg
SAR(1 g) = 0.315 mW/g; SAR(10 g) = 0.211 mW/g
Maximum value of SAR (measured) = 0.338 mW/g



0 dB = 0.338mW/g

Fig.121 850MHz GPRS CH190 Test Position 3

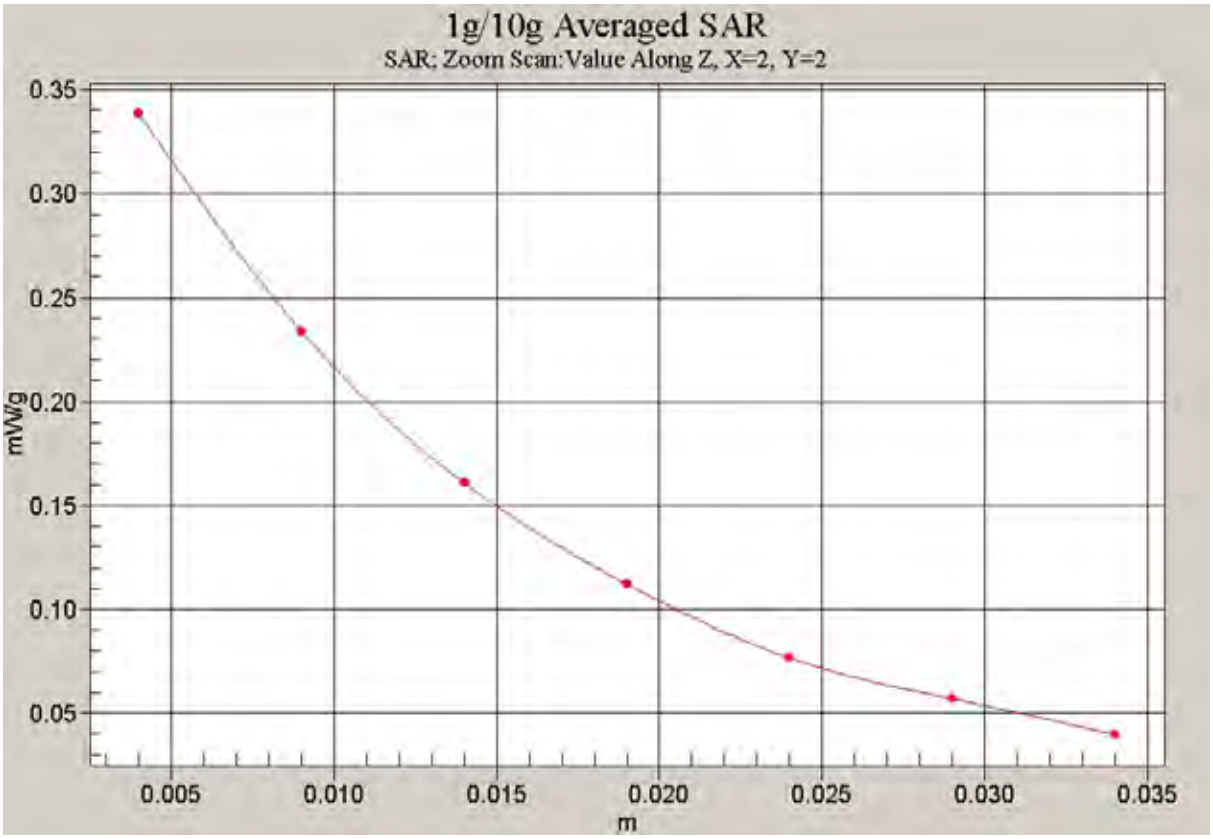


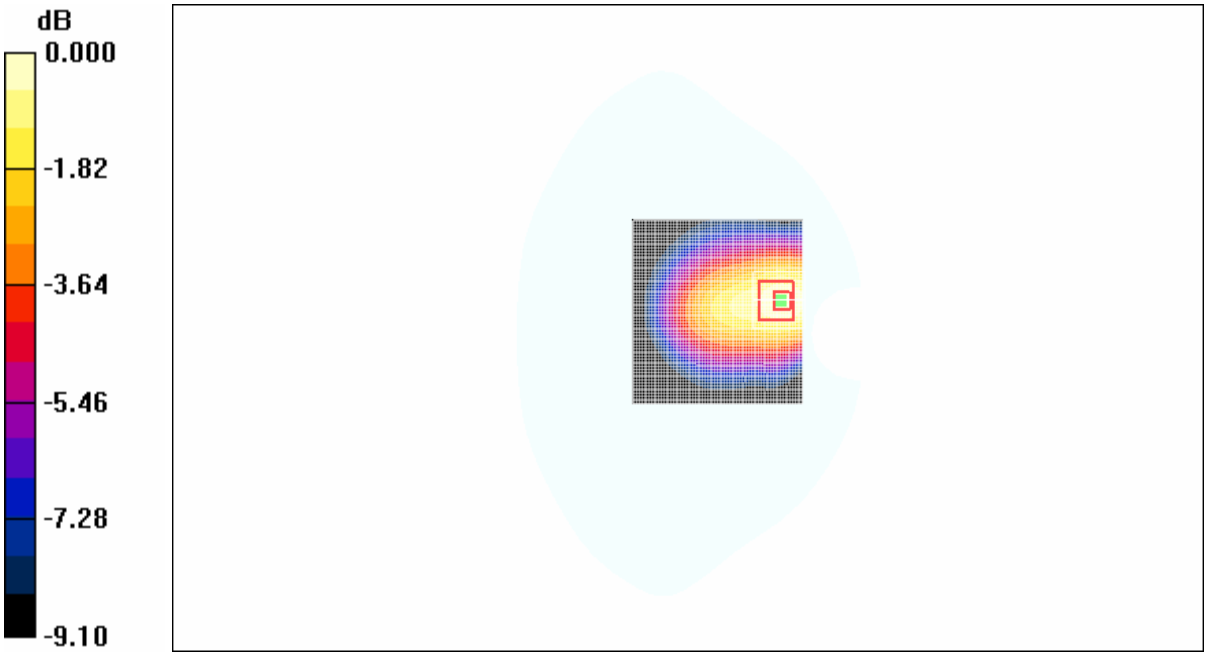
Fig.122 Z-Scan at power reference point (850 MHz GPRS CH190 Test Position 3)

850MHz GPRS Datacard Test Position 4 with HP Laptop

Date/Time: 2007-1-17 19:20:29
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Class 12 Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 4/Area Scan (71x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.501 mW/g

Test Position 4/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.5 V/m; Power Drift = -0.014 dB
Peak SAR (extrapolated) = 0.725 W/kg
SAR(1 g) = 0.441 mW/g; SAR(10 g) = 0.303 mW/g
Maximum value of SAR (measured) = 0.464 mW/g



0 dB = 0.464mW/g

Fig.123 850MHz GPRS CH190 Test Position 4

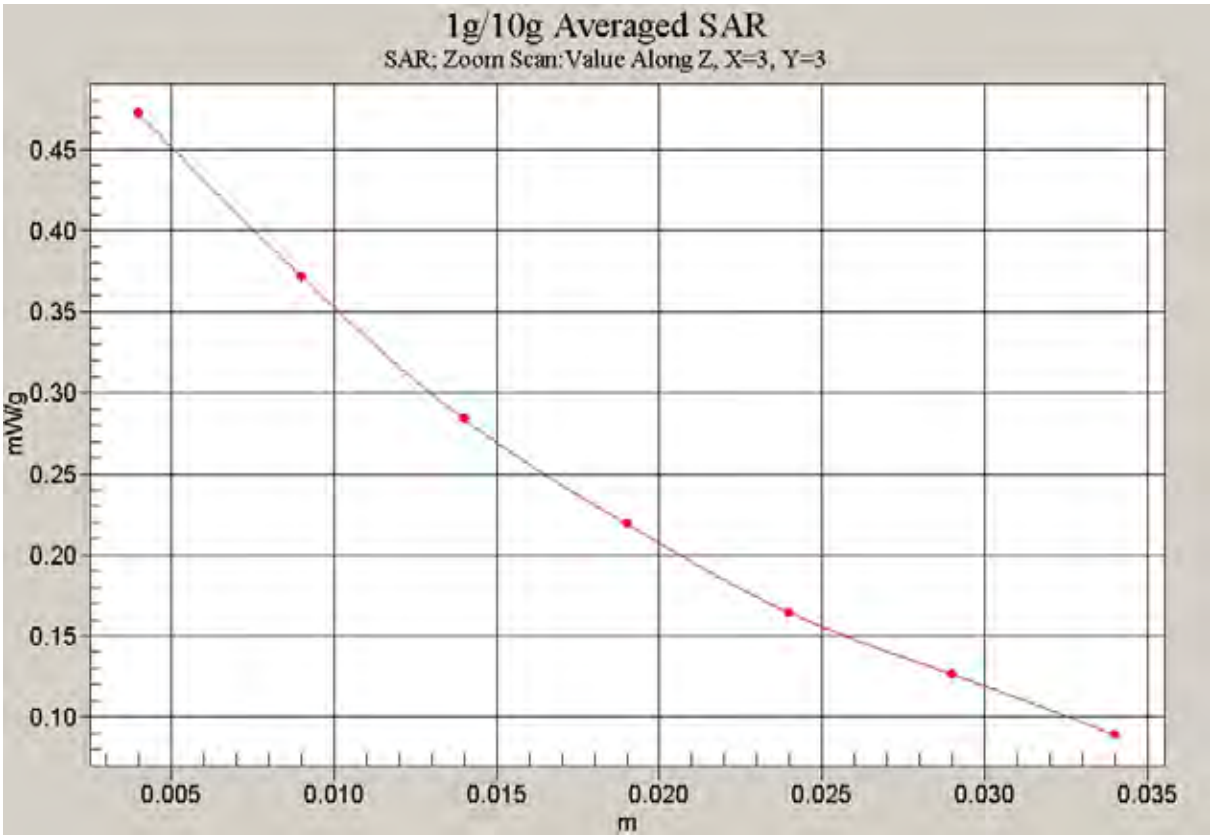


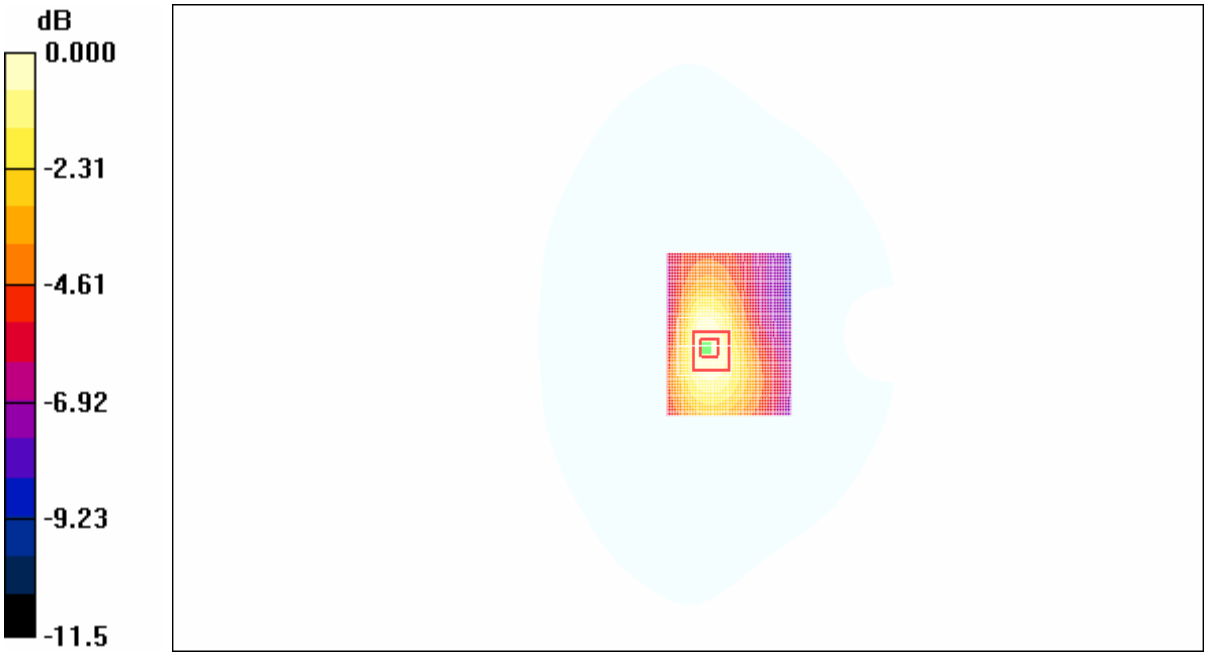
Fig.124 Z-Scan at power reference point (850 MHz GPRS CH190 Test Position 4)

850MHz GPRS Datacard Test Position 5 with HP Laptop

Date/Time: 2007-1-17 18:19:12
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Class 12 Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

Test Position 5/Area Scan (51x61x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.270 mW/g

Test Position 5/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.1 V/m; Power Drift = -0.099 dB
Peak SAR (extrapolated) = 0.345 W/kg
SAR(1 g) = 0.237 mW/g; SAR(10 g) = 0.158 mW/g
Maximum value of SAR (measured) = 0.253 mW/g



0 dB = 0.253mW/g

Fig.125 850MHz GPRS CH190 Test Position 5

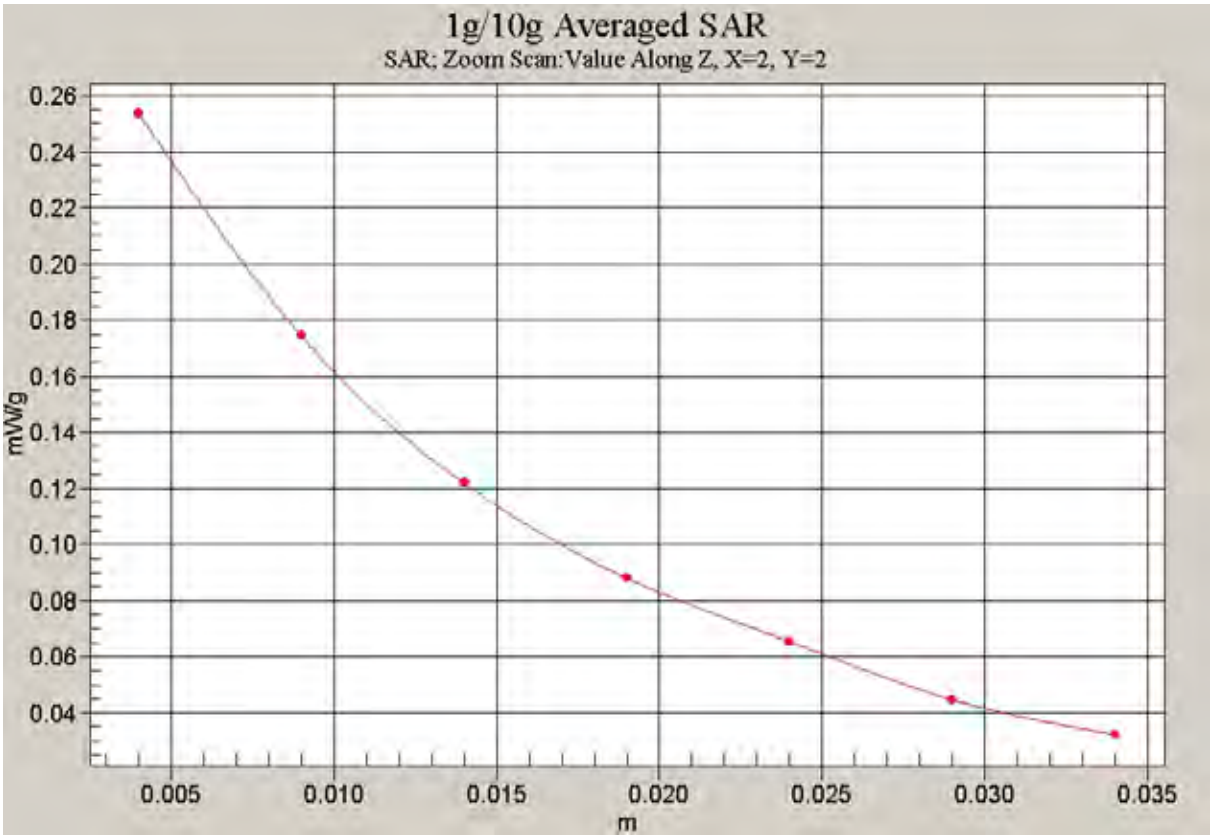


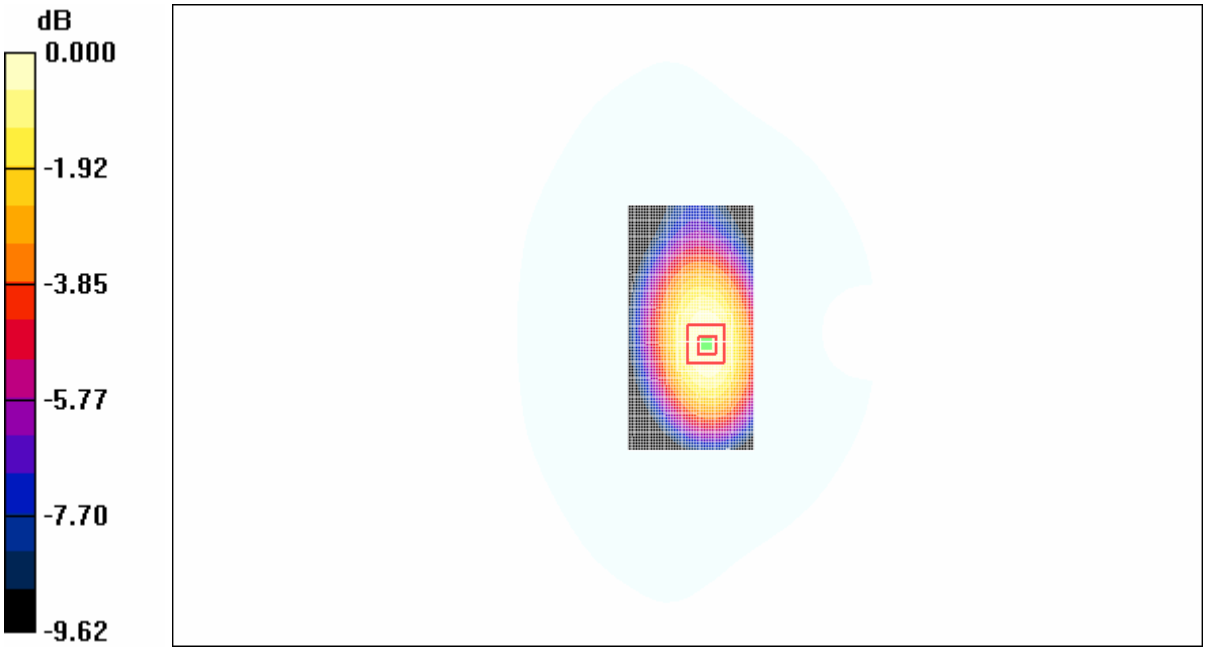
Fig.126 Z-Scan at power reference point (850 MHz GPRS CH190 Test Position 5)

850MHz GPRS External Antenna Test Position 1

Date/Time: 2007-1-17 19:42:04
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Class 12 Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

External Antenna Test Position 1/Area Scan (51x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.858 mW/g

External Antenna Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 29.8 V/m; Power Drift = 0.200 dB
Peak SAR (extrapolated) = 1.05 W/kg
SAR(1 g) = 0.797 mW/g; SAR(10 g) = 0.564 mW/g
Maximum value of SAR (measured) = 0.844 mW/g



0 dB = 0.844mW/g

Fig.127 850MHz GPRS CH190 Test Position 1

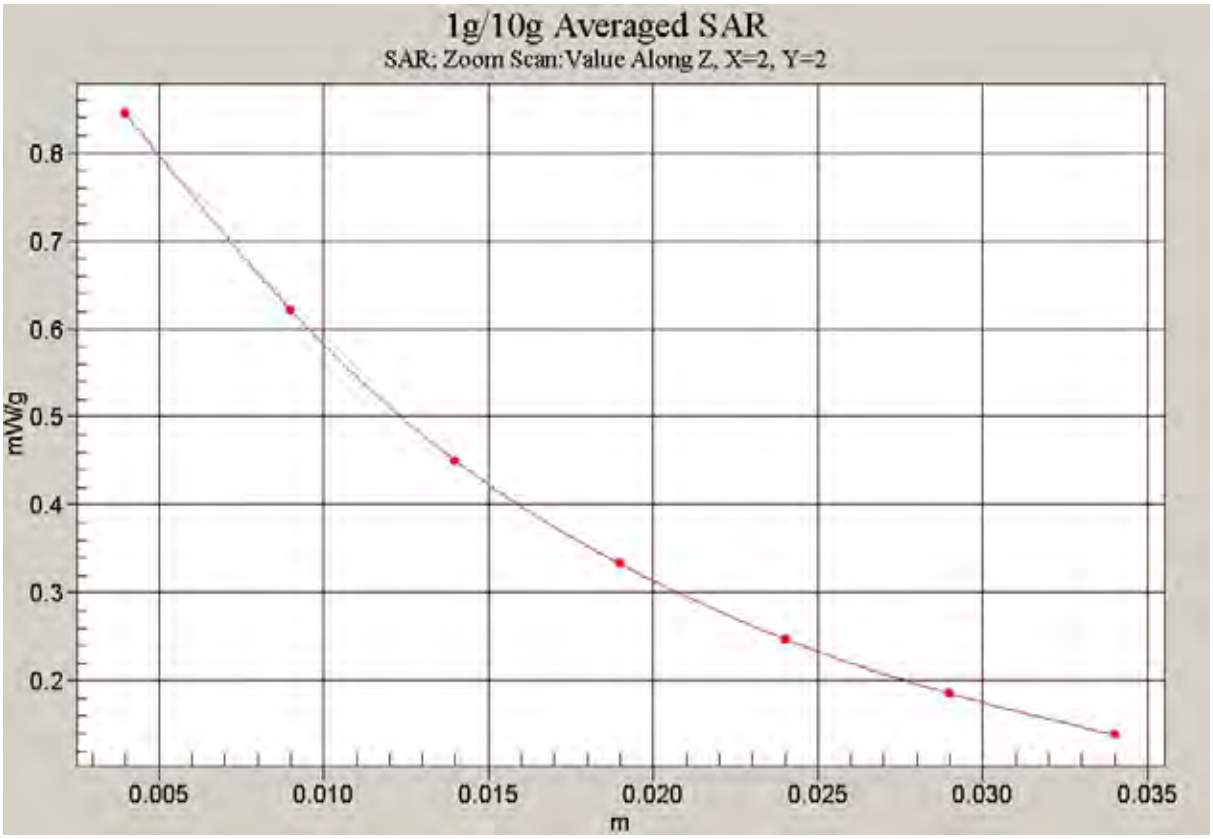


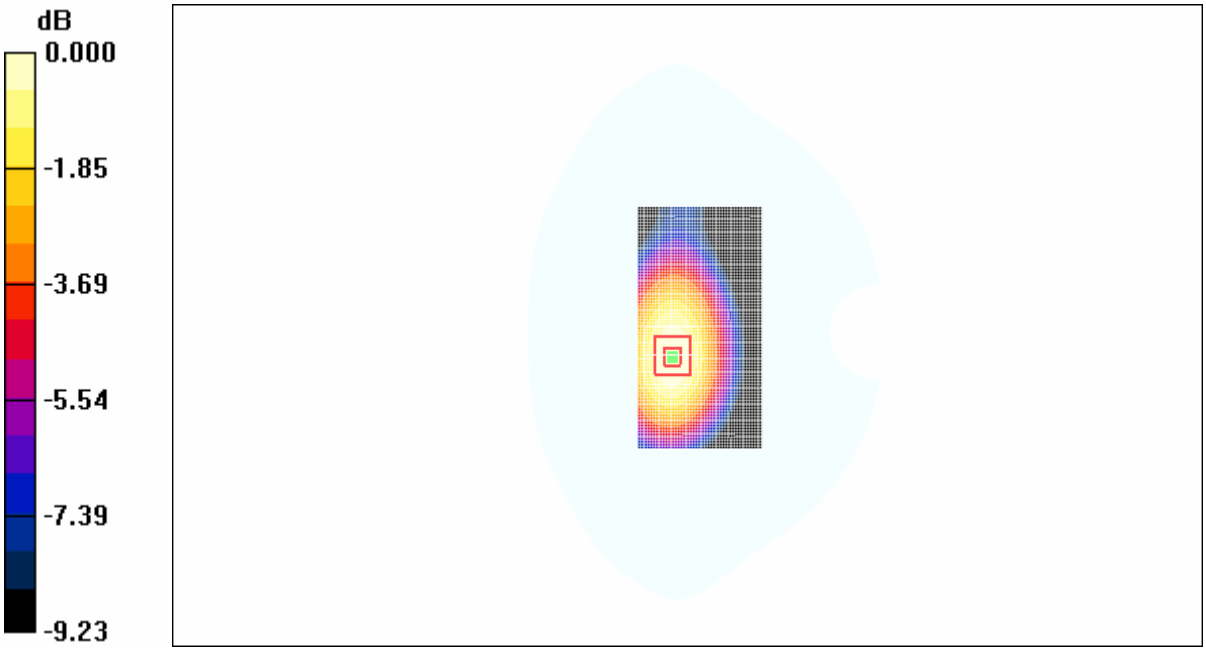
Fig.128 Z-Scan at power reference point (850 MHz GPRS CH190 Test Position 1)

850MHz GPRS External Antenna Test Position 2

Date/Time: 2007-1-17 20:21:26
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Class 12 Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

External Antenna Test Position 2/Area Scan (51x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.829 mW/g

External Antenna Test Position 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.4 V/m; Power Drift = -0.016 dB
Peak SAR (extrapolated) = 1.02 W/kg
SAR(1 g) = 0.776 mW/g; SAR(10 g) = 0.549 mW/g
Maximum value of SAR (measured) = 0.827 mW/g



0 dB = 0.827mW/g

Fig.129 850MHz GPRS CH190 Test Position 2

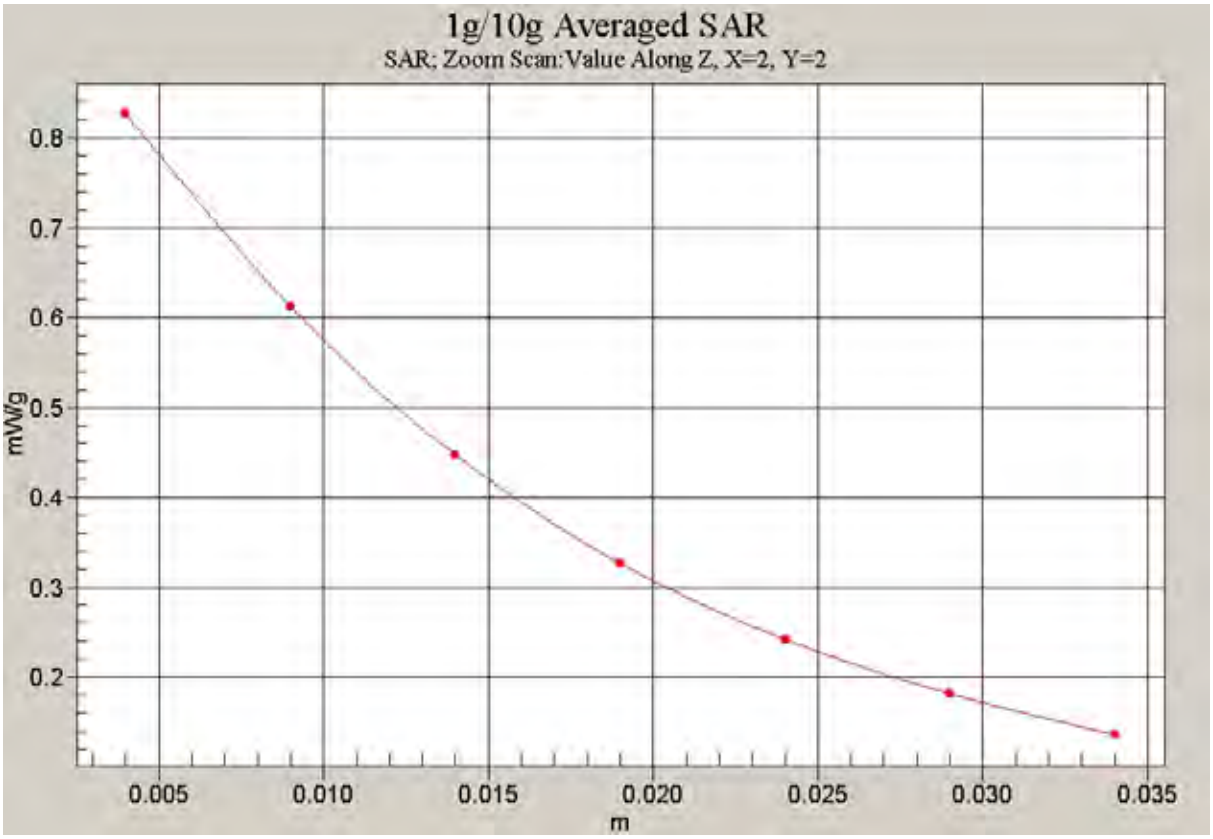


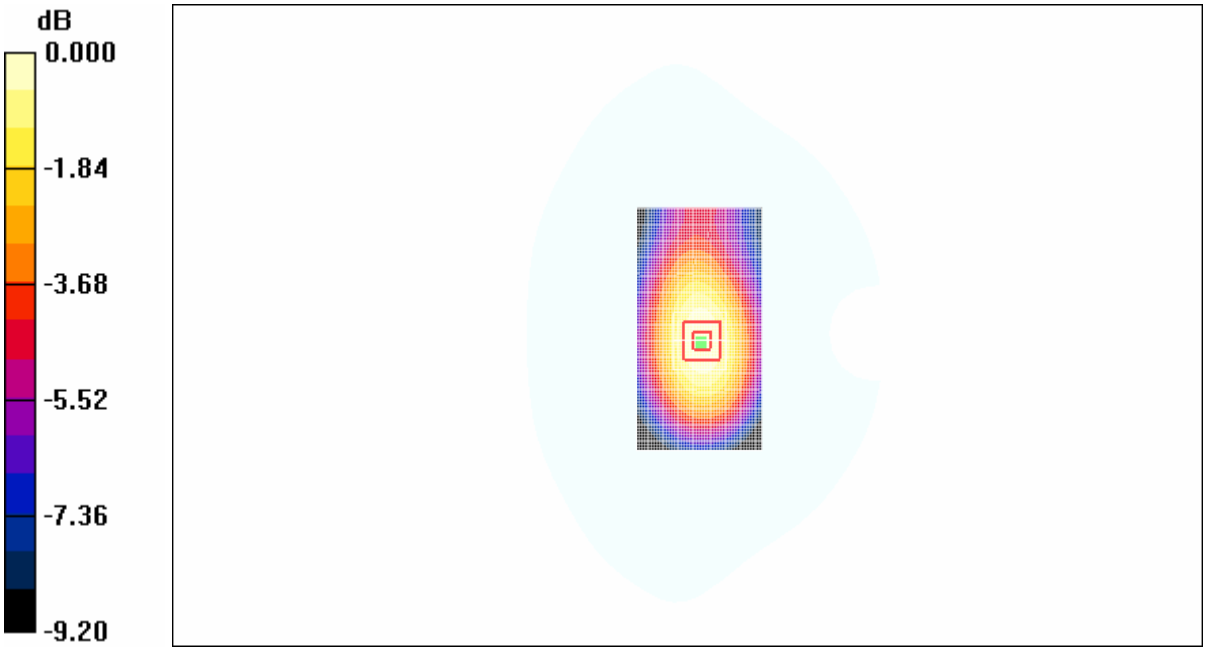
Fig.130 Z-Scan at power reference point (850 MHz GPRS CH190 Test Position 2)

850MHz GPRS External Antenna Test Position 3

Date/Time: 2007-1-17 20:35:36
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Class 12 Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

External Antenna Test Position 3/Area Scan (51x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.430 mW/g

External Antenna Test Position 3/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.5 V/m; Power Drift = -0.017 dB
Peak SAR (extrapolated) = 0.518 W/kg
SAR(1 g) = 0.399 mW/g; SAR(10 g) = 0.285 mW/g
Maximum value of SAR (measured) = 0.425 mW/g



0 dB = 0.425mW/g

Fig.131 850MHz GPRS CH190 Test Position 3

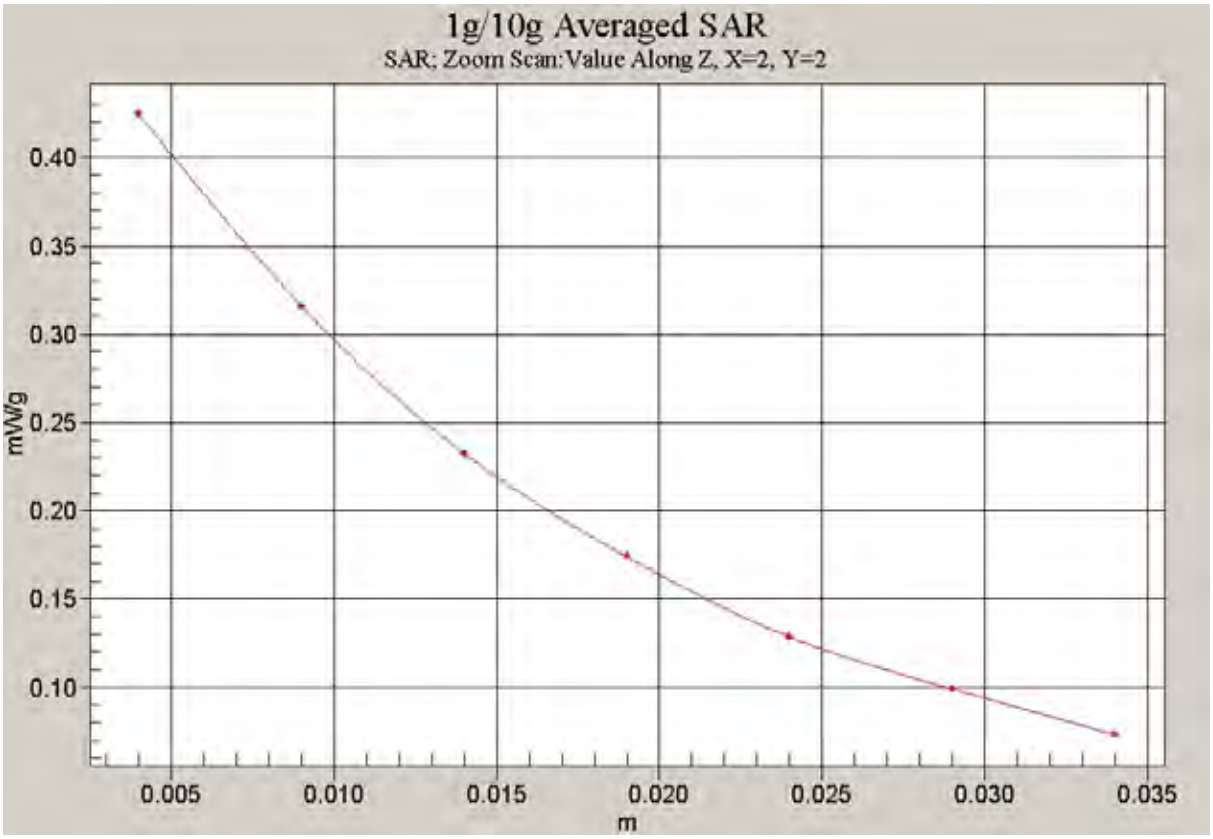


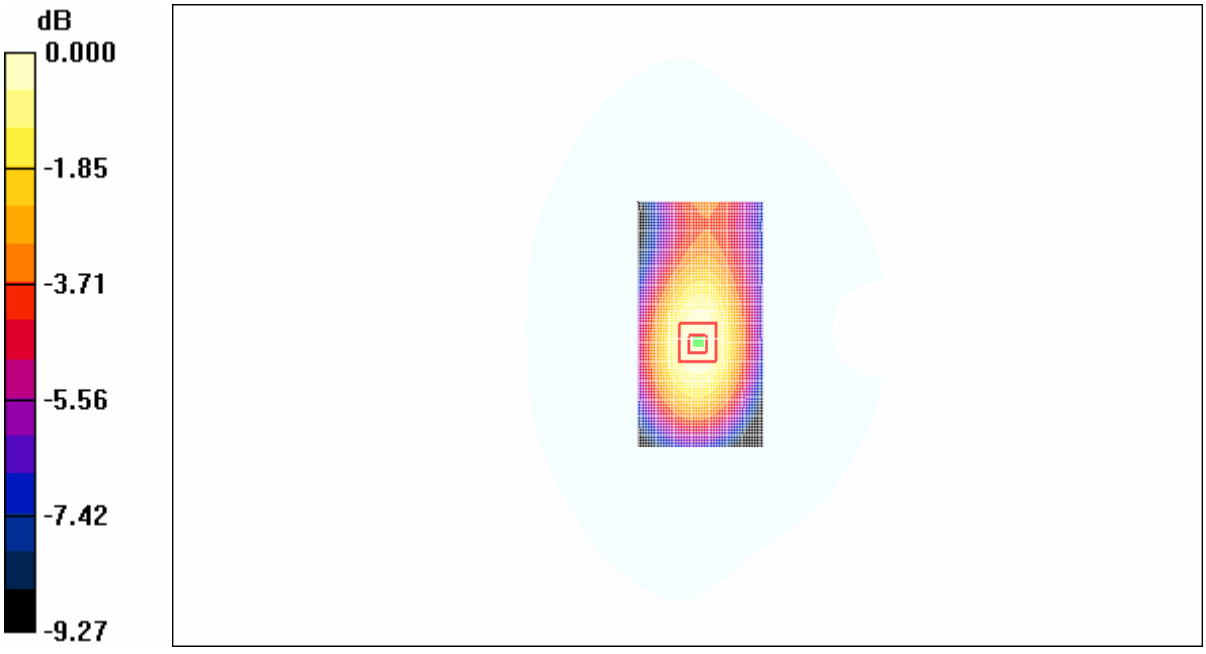
Fig.132 Z-Scan at power reference point (850 MHz GPRS CH190 Test Position 3)

850MHz GPRS External Antenna Test Position 4

Date/Time: 2007-1-17 20:50:15
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Class 12 Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

External Antenna Test Position 4/Area Scan (51x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.380 mW/g

External Antenna Test Position 4/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.0 V/m; Power Drift = -0.024 dB
Peak SAR (extrapolated) = 0.467 W/kg
SAR(1 g) = 0.356 mW/g; SAR(10 g) = 0.254 mW/g
Maximum value of SAR (measured) = 0.378 mW/g



0 dB = 0.378mW/g

Fig.133 850MHz GPRS CH190 Test Position 4

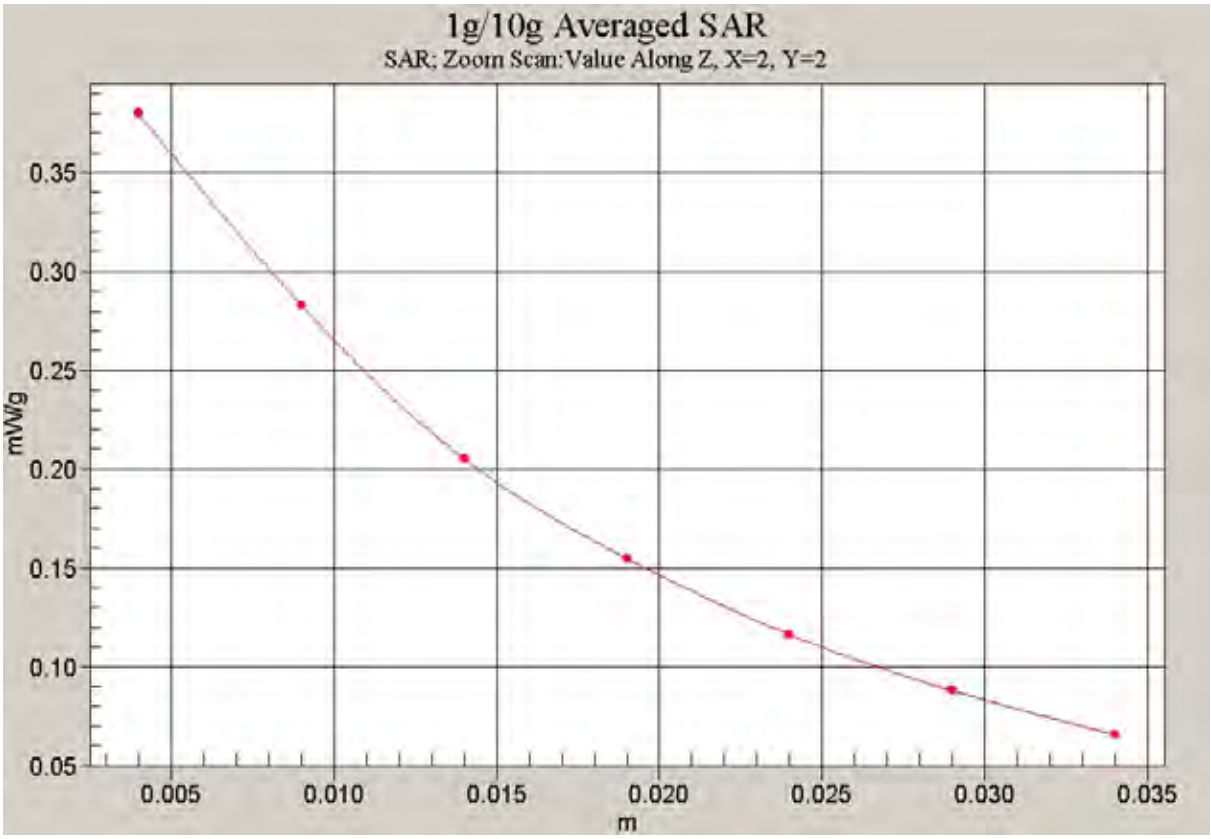


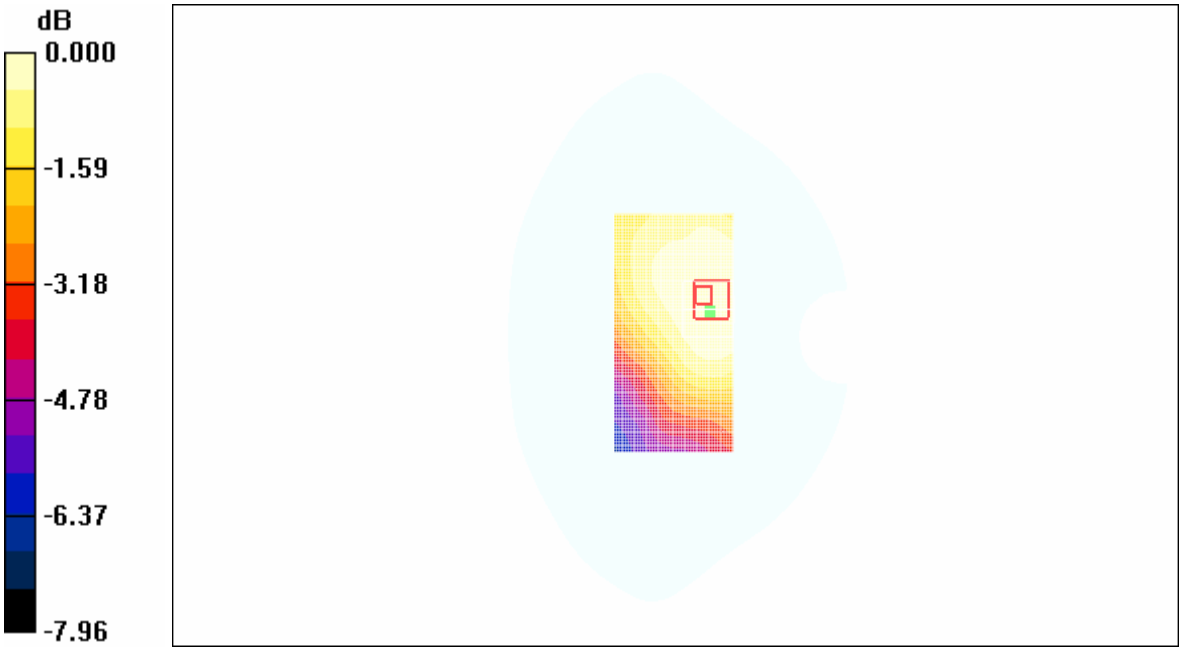
Fig.140 Z-Scan at power reference point (850 MHz GPRS CH190 Test Position 4)

850MHz GPRS External Antenna Test Position 5

Date/Time: 2007-1-17 21:07:39
Electronics: DAE3 Sn536
Medium: 850 Body
Medium parameters used (interpolated):σ = 1.00 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: 850 Class 12 Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: ET3DV6 - SN1736 ConvF(6.45, 6.45, 6.45)

External Antenna Test Position 5/Area Scan (51x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.029 mW/g

External Antenna Test Position 5/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.12 V/m; Power Drift = -0.017 dB
Peak SAR (extrapolated) = 0.032 W/kg
SAR(1 g) = 0.027 mW/g; SAR(10 g) = 0.021 mW/g
Maximum value of SAR (measured) = 0.028 mW/g



0 dB = 0.028mW/g

Fig.141 850MHz GPRS CH190 Test Position 5

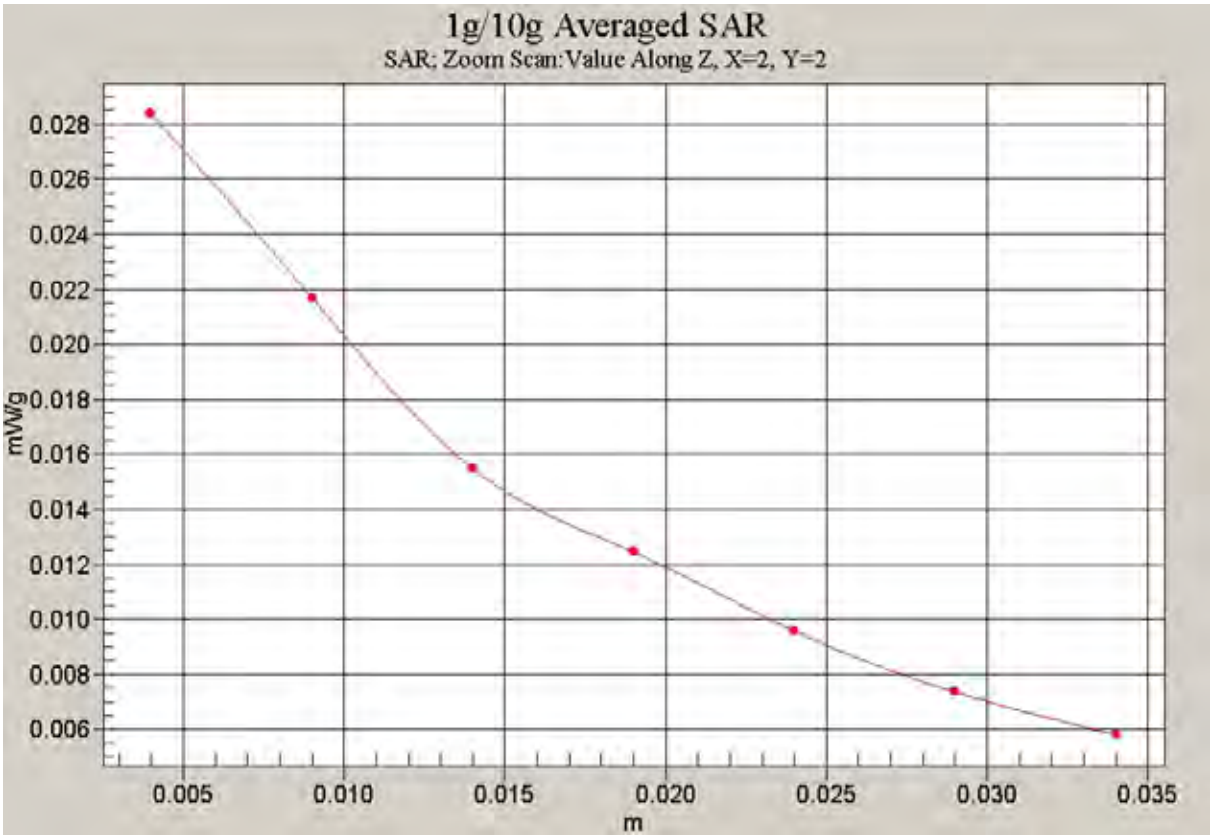


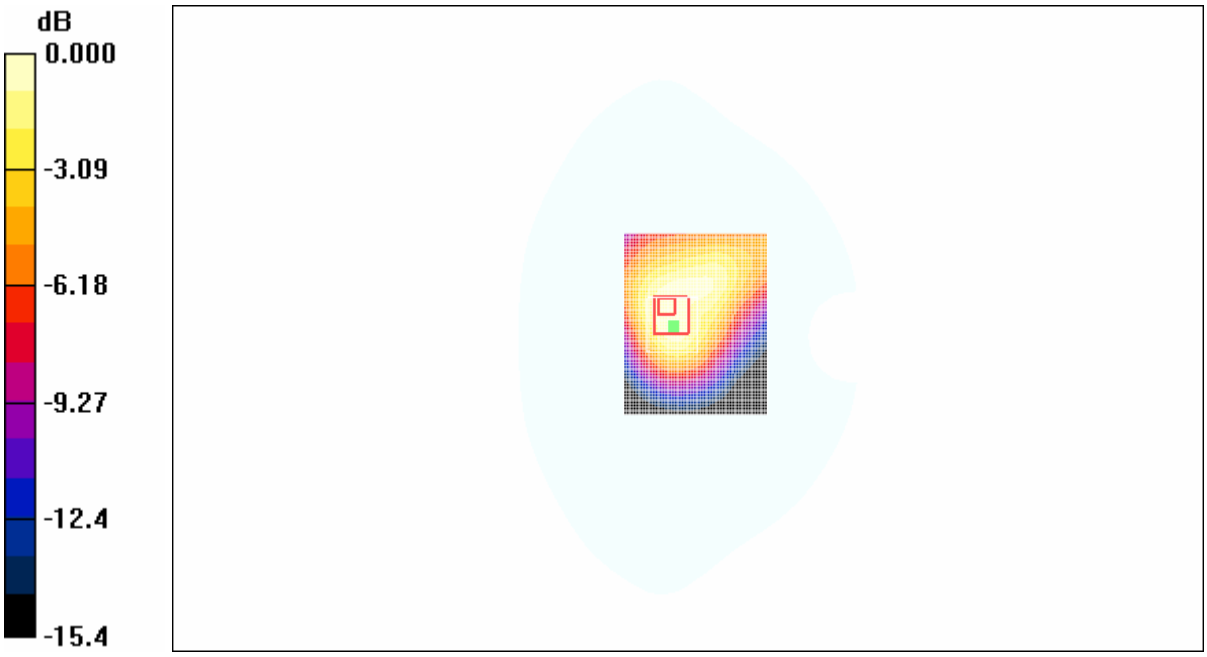
Fig.142 Z-Scan at power reference point (850 MHz GPRS CH190 Test Position 5)

1900MHz GPRS Datacard Test Position 1 with IBM Laptop

Date/Time: 2007-1-20 11:15:33
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: GSM 1900MHz GPRS Class 12 Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 1/Area Scan (61x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.535 mW/g

Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.0 V/m; Power Drift = 0.005 dB
Peak SAR (extrapolated) = 0.852 W/kg
SAR(1 g) = 0.506 mW/g; SAR(10 g) = 0.304 mW/g
Maximum value of SAR (measured) = 0.538 mW/g



0 dB = 0.538mW/g

Fig.143 1900MHz GPRS CH661 Test Position 1

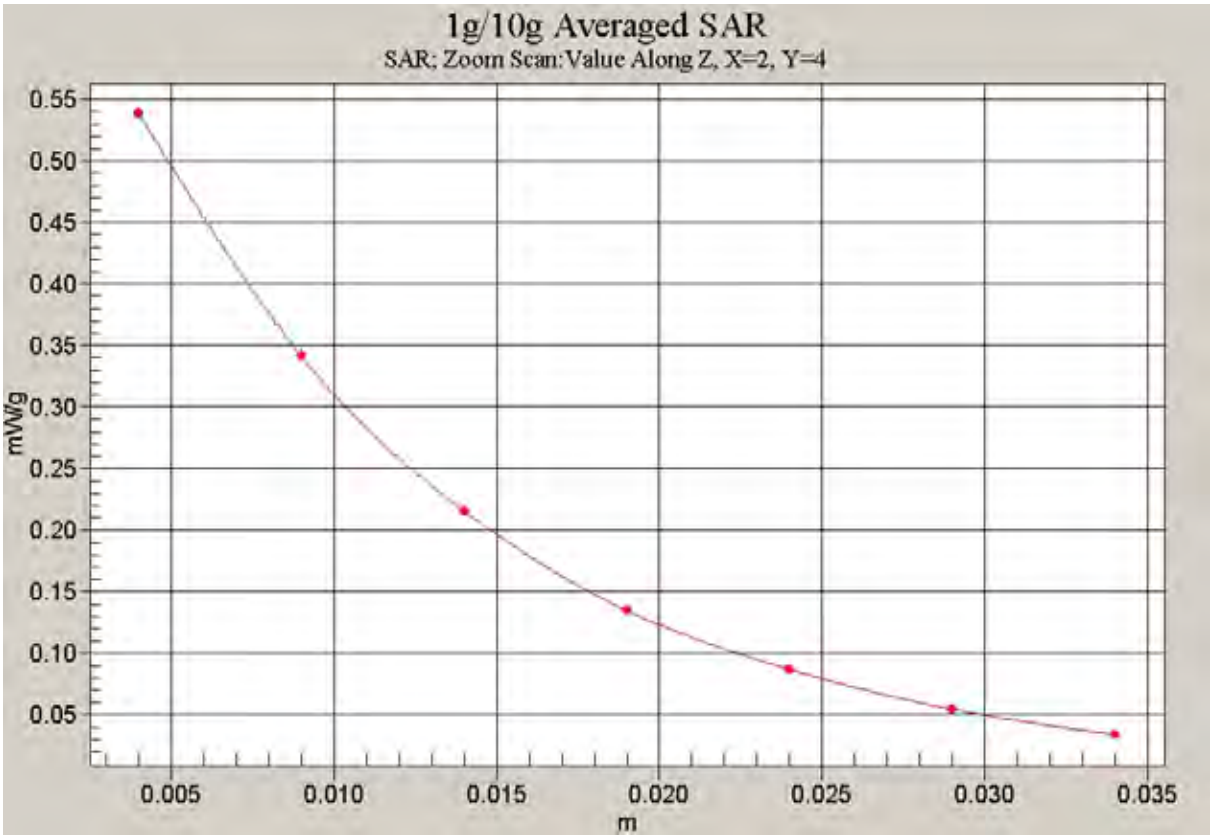


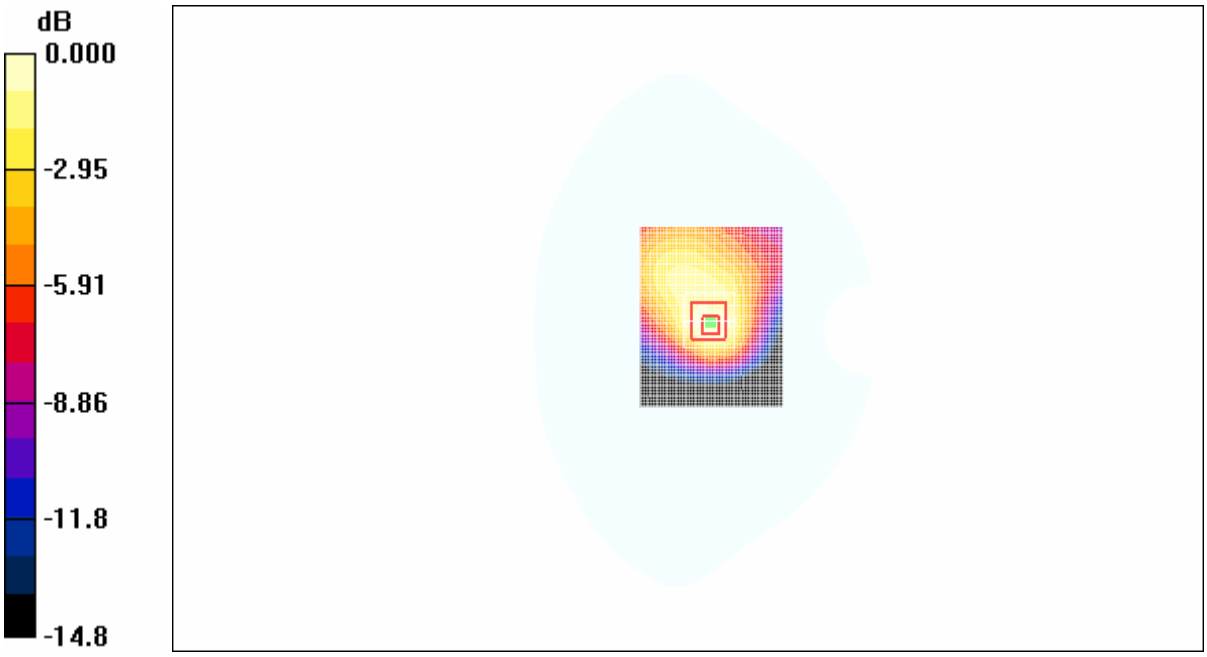
Fig.144 Z-Scan at power reference point (1900 MHz GPRS CH661 Test Position 1)

1900MHz GPRS Datacard Test Position 2 with IBM Laptop

Date/Time: 2007-1-20 10:49:15
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: GSM 1900MHz GPRS Class 12 Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 2/Area Scan (61x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.625 mW/g

Test Position 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.0 V/m; Power Drift = -0.094 dB
Peak SAR (extrapolated) = 0.873 W/kg
SAR(1 g) = 0.526 mW/g; SAR(10 g) = 0.315 mW/g
Maximum value of SAR (measured) = 0.556 mW/g



0 dB = 0.556mW/g

Fig.145 1900 MHz GPRS CH661 Test Position 2

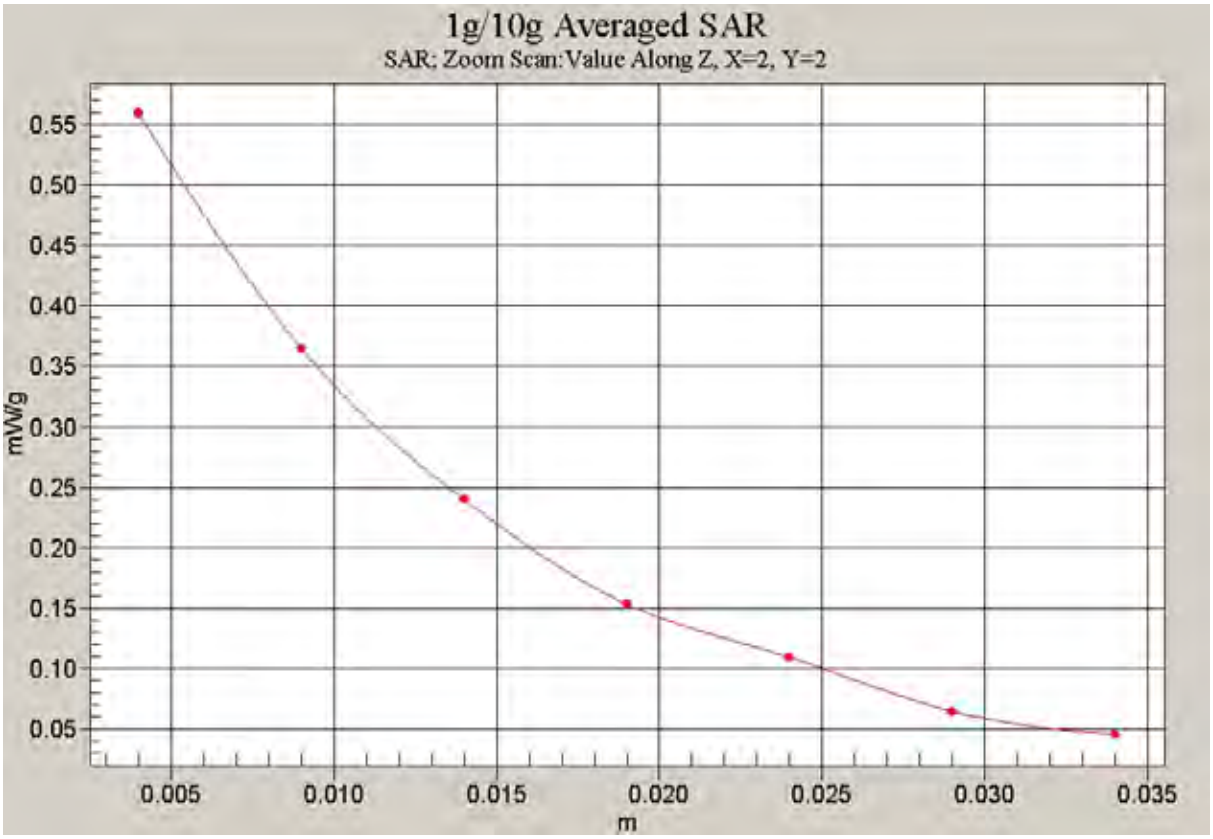


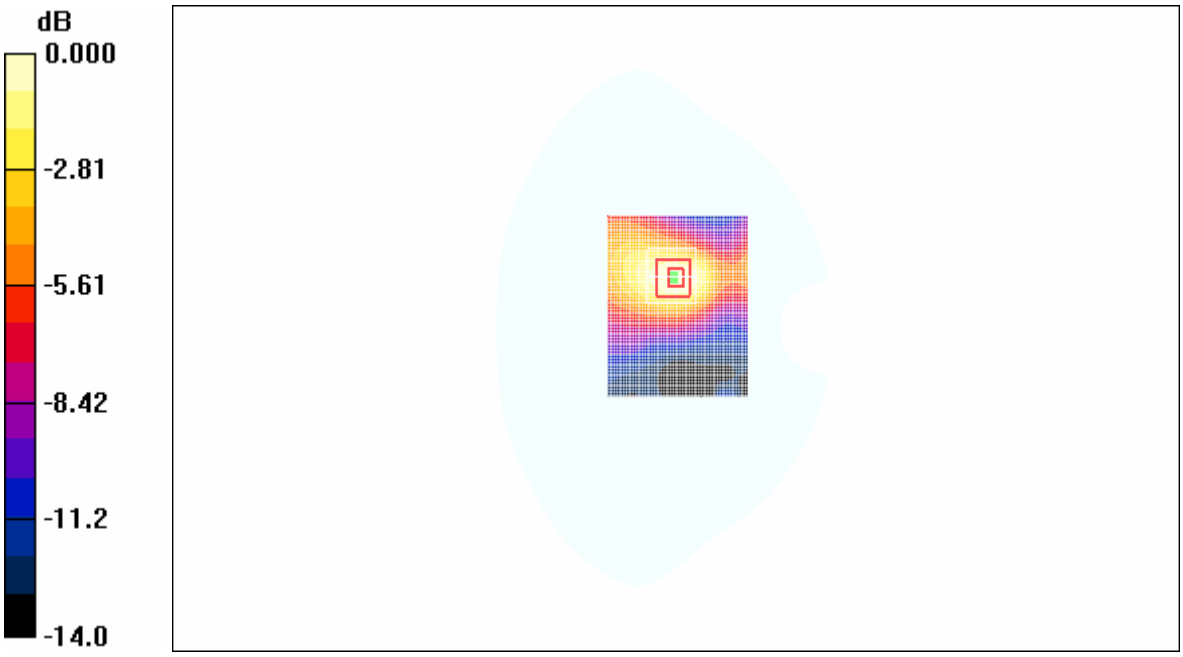
Fig.146 Z-Scan at power reference point (1900 MHz GPRS CH661 Test Position 2)

1900MHz GPRS Datacard Test Position 3 with IBM Laptop

Date/Time: 2007-1-20 13:07:39
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: GSM 1900MHz GPRS Class 12 Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 3/Area Scan (61x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.159 mW/g

Test Position 3/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.18 V/m; Power Drift = 0.082 dB
Peak SAR (extrapolated) = 0.221 W/kg
SAR(1 g) = 0.138 mW/g; SAR(10 g) = 0.084 mW/g
Maximum value of SAR (measured) = 0.148 mW/g



0 dB = 0.148mW/g

Fig.147 1900 MHz GPRS CH661 Test Position 3

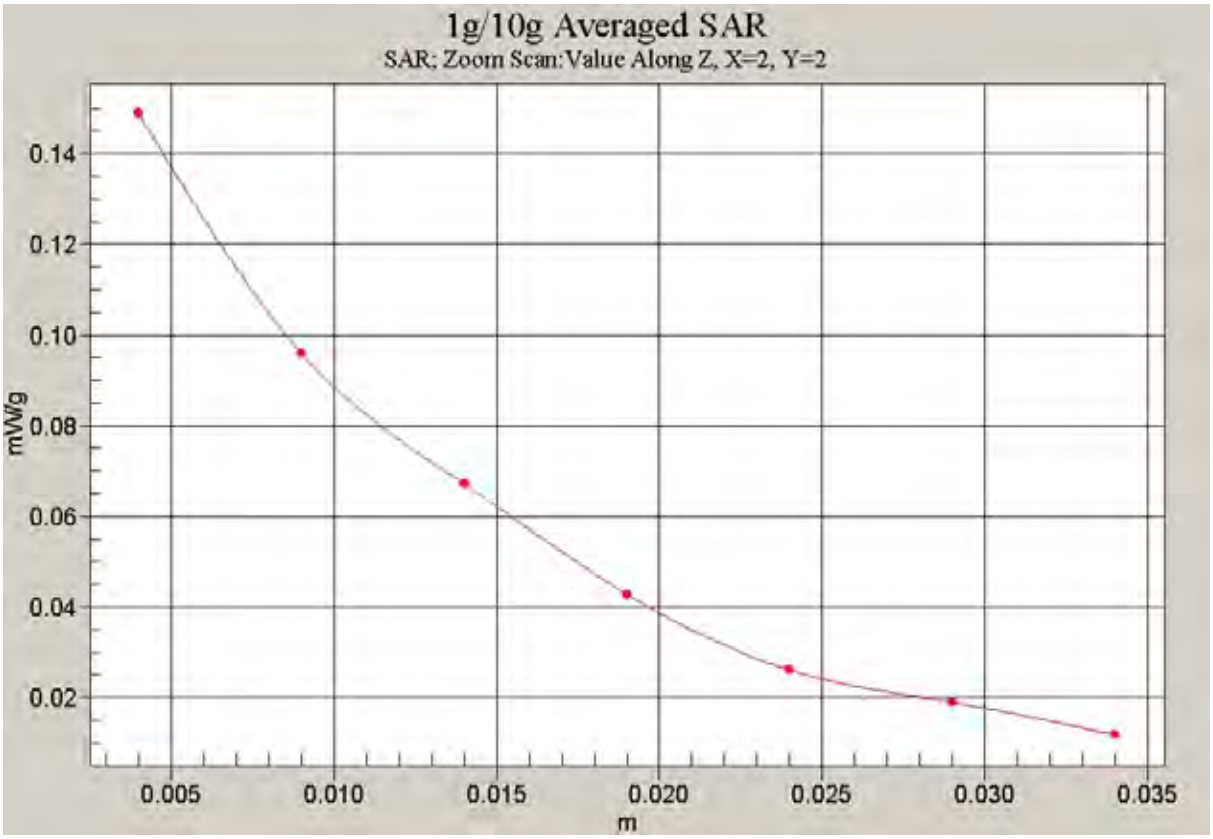


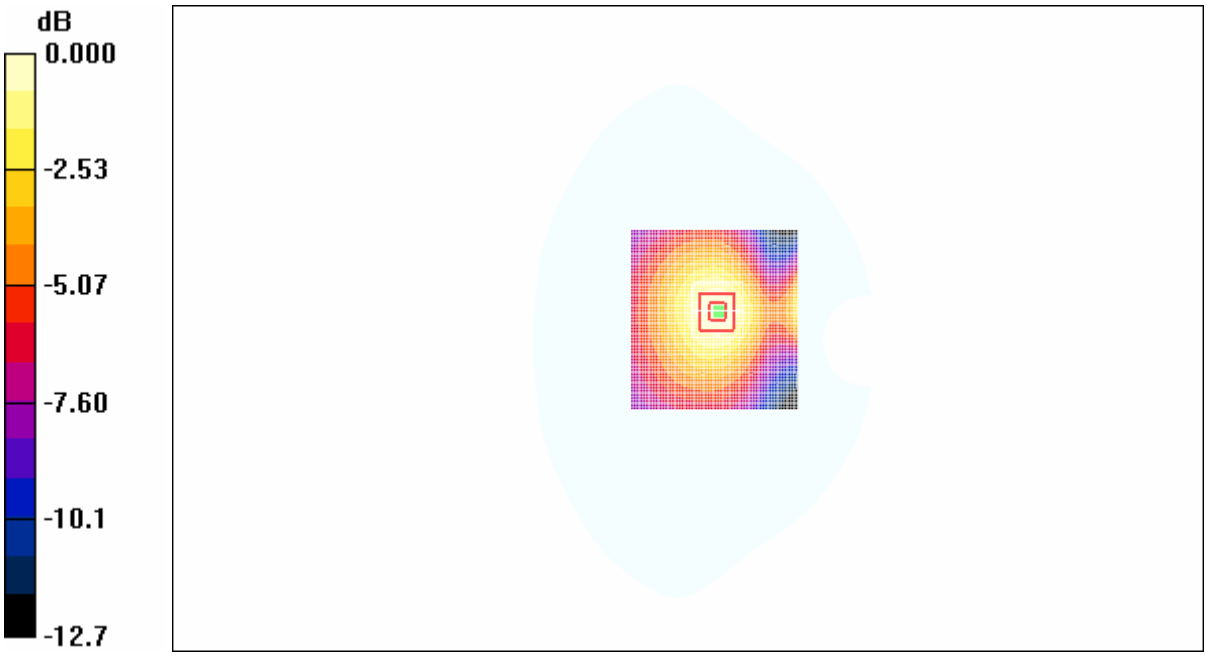
Fig.148 Z-Scan at power reference point (1900 MHz GPRS CH661 Test Position 3)

1900MHz GPRS Datacard Test Position 4 with IBM Laptop

Date/Time: 2007-1-20 13:38:12
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: GSM 1900MHz GPRS Class 12 Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 4/Area Scan (71x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.300 mW/g

Test Position 4/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.4 V/m; Power Drift = 0.001 dB
Peak SAR (extrapolated) = 0.444 W/kg
SAR(1 g) = 0.278 mW/g; SAR(10 g) = 0.179 mW/g
Maximum value of SAR (measured) = 0.298 mW/g



0 dB = 0.298mW/g

Fig.149 1900 MHz GPRS CH661 Test Position 4

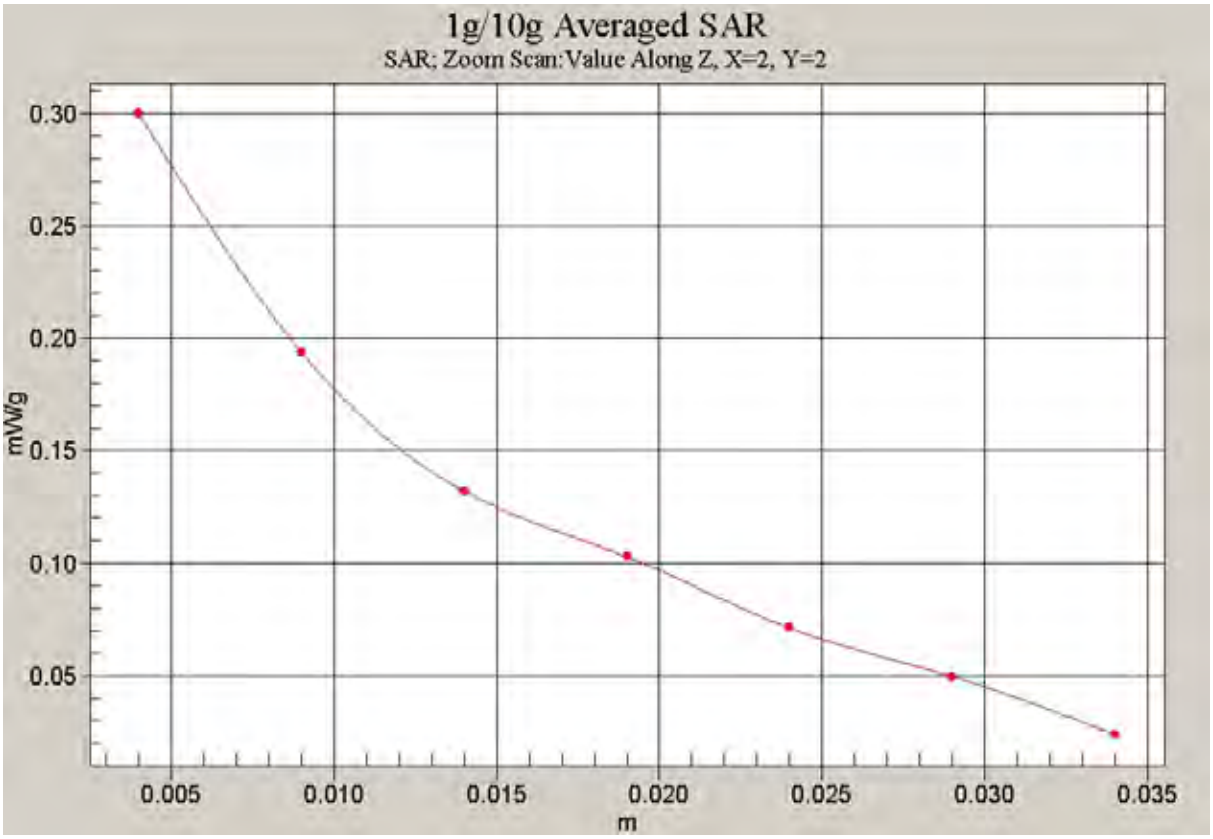


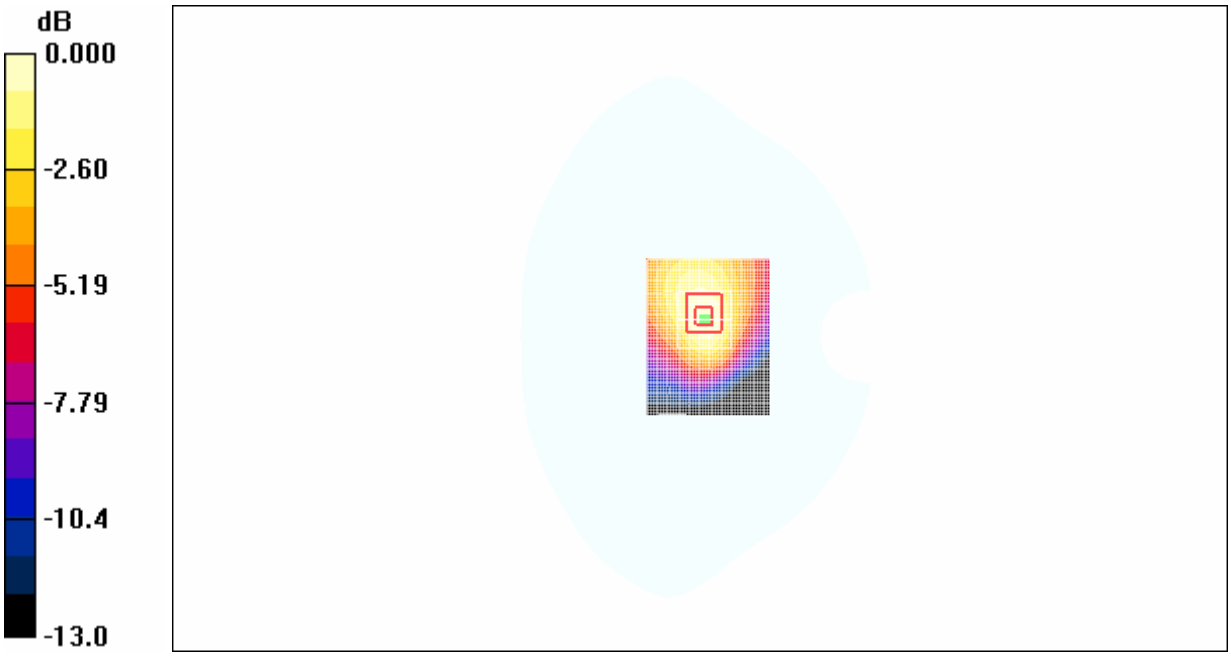
Fig.150 Z-Scan at power reference point (1900 MHz GPRS CH661 Test Position 4)

1900MHz GPRS Datacard Test Position 5 with IBM Laptop

Date/Time: 2007-1-20 11:29:07
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: GSM 1900MHz GPRS Class 12 Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 5/Area Scan (51x61x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.153 mW/g

Test Position 5/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.38 V/m; Power Drift = -0.088 dB
Peak SAR (extrapolated) = 0.228 W/kg
SAR(1 g) = 0.143 mW/g; SAR(10 g) = 0.091 mW/g
Maximum value of SAR (measured) = 0.154 mW/g



0 dB = 0.154mW/g

Fig.151 1900 MHz GPRS CH661 Test Position 5

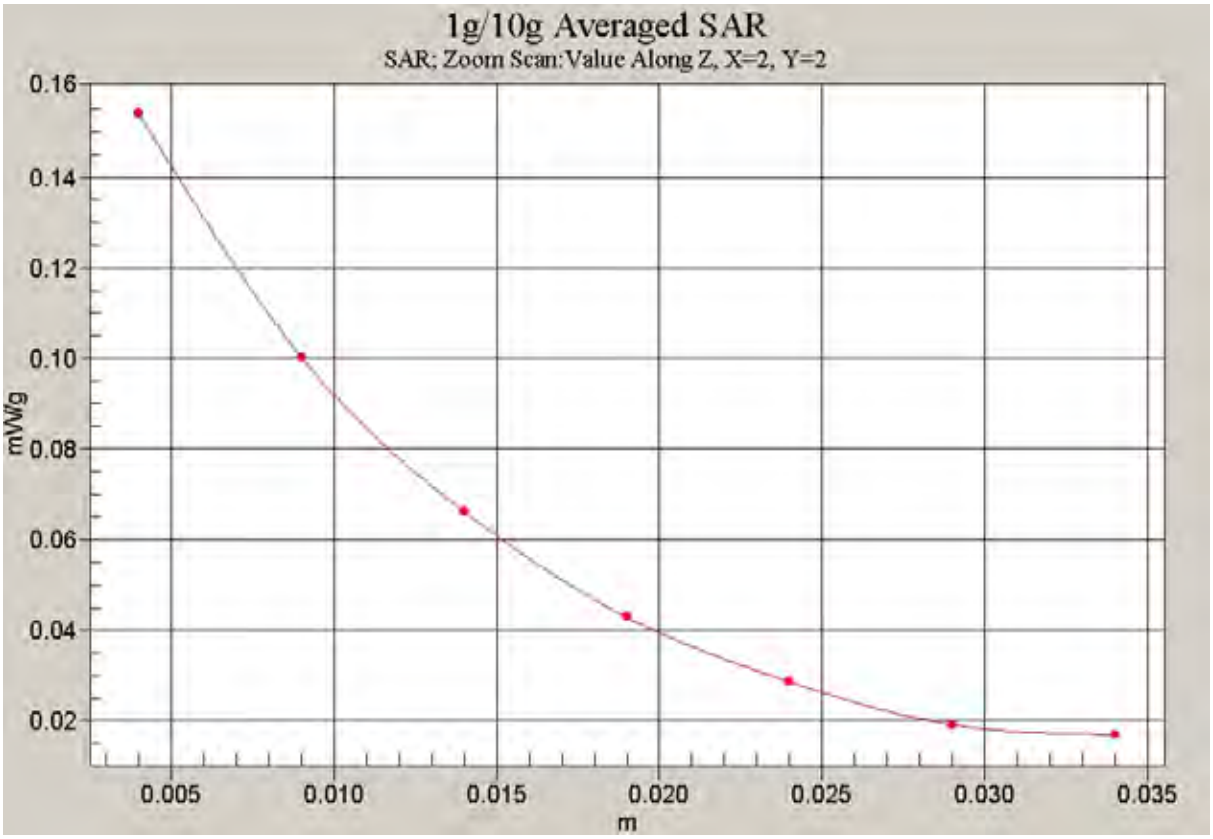


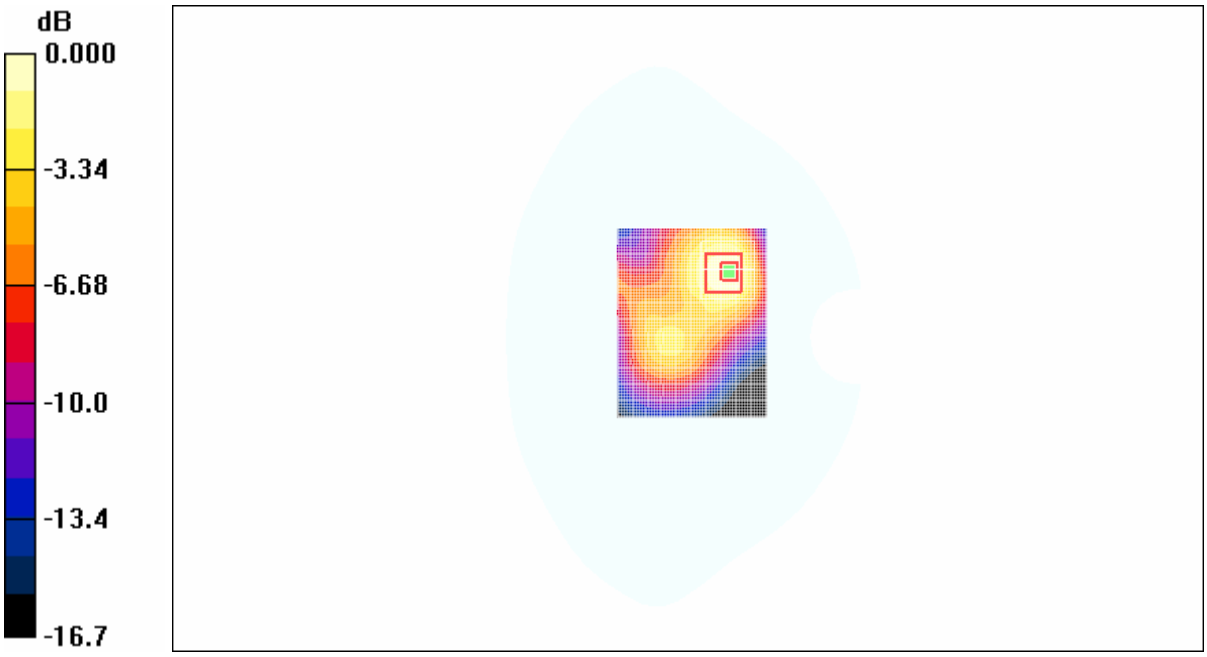
Fig.152 Z-Scan at power reference point (1900 MHz GPRS CH661 Test Position 5)

1900MHz GPRS Datacard Test Position 1 with Dell Laptop

Date/Time: 2007-1-20 14:22:51
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: GSM 1900MHz GPRS Class 12 Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 1/Area Scan (61x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.723 mW/g

Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.2 V/m; Power Drift = 0.054 dB
Peak SAR (extrapolated) = 0.994 W/kg
SAR(1 g) = 0.626 mW/g; SAR(10 g) = 0.379 mW/g
Maximum value of SAR (measured) = 0.686 mW/g



0 dB = 0.686mW/g

Fig.153 1900MHz GPRS CH661 Test Position 1

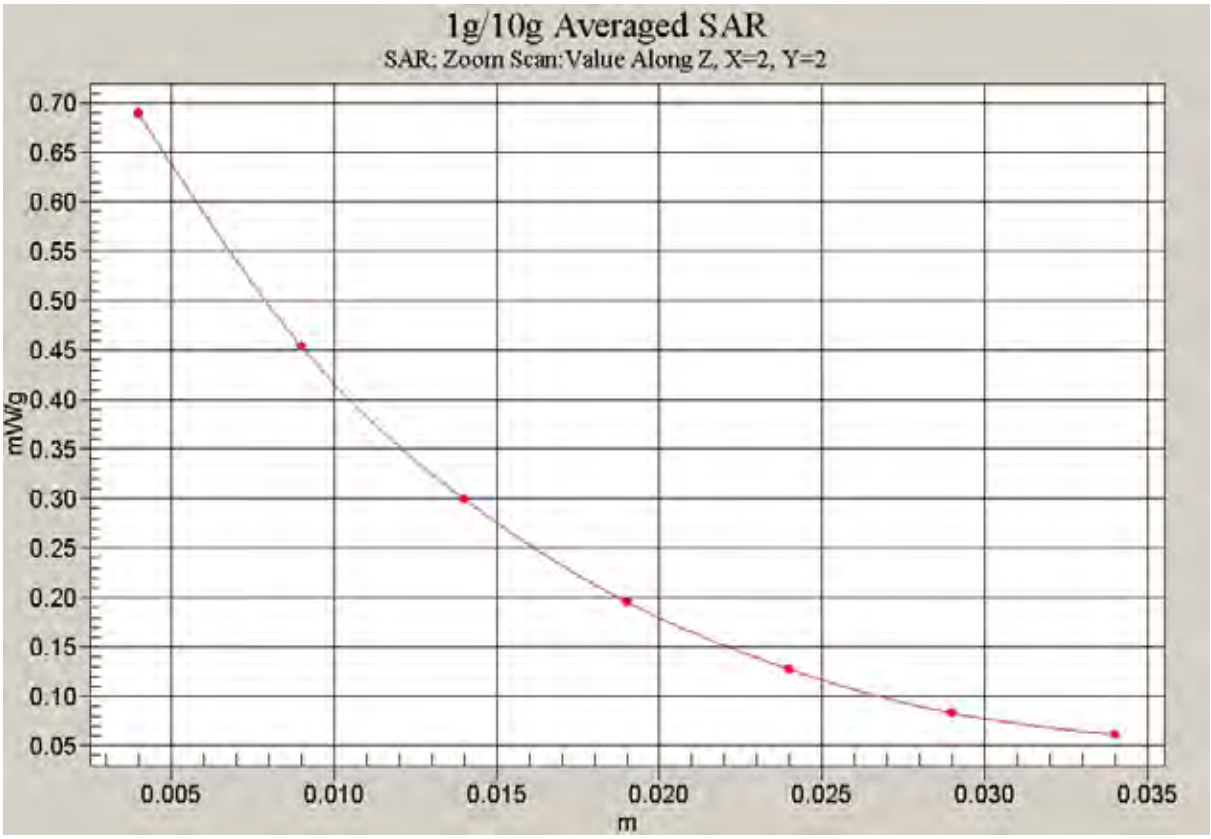


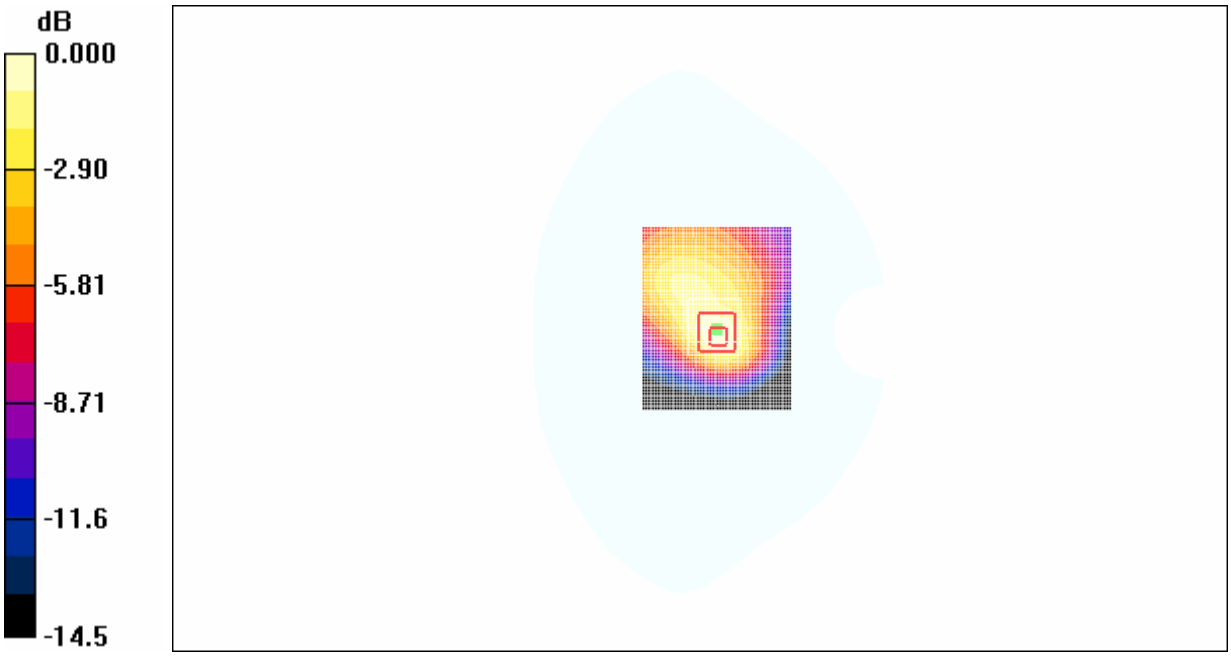
Fig.154 Z-Scan at power reference point (1900 MHz GPRS CH661 Test Position 1)

1900MHz GPRS Datacard Test Position 2 with Dell Laptop

Date/Time: 2007-1-20 13:58:09
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: GSM 1900MHz GPRS Class 12 Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 2/Area Scan (61x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.608 mW/g

Test Position 2/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.7 V/m; Power Drift = -0.157 dB
Peak SAR (extrapolated) = 0.921 W/kg
SAR(1 g) = 0.559 mW/g; SAR(10 g) = 0.330 mW/g
Maximum value of SAR (measured) = 0.597 mW/g



0 dB = 0.597mW/g

Fig.155 1900 MHz GPRS CH661 Test Position 2

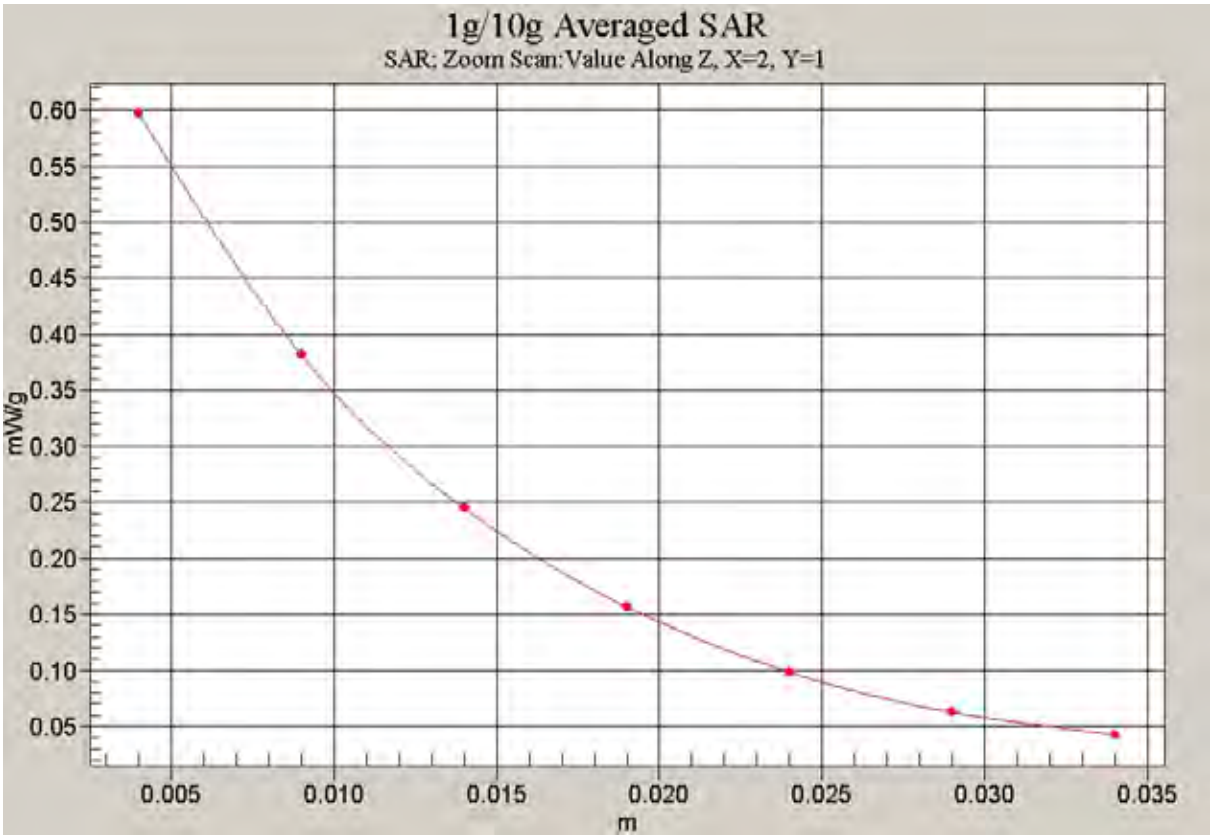


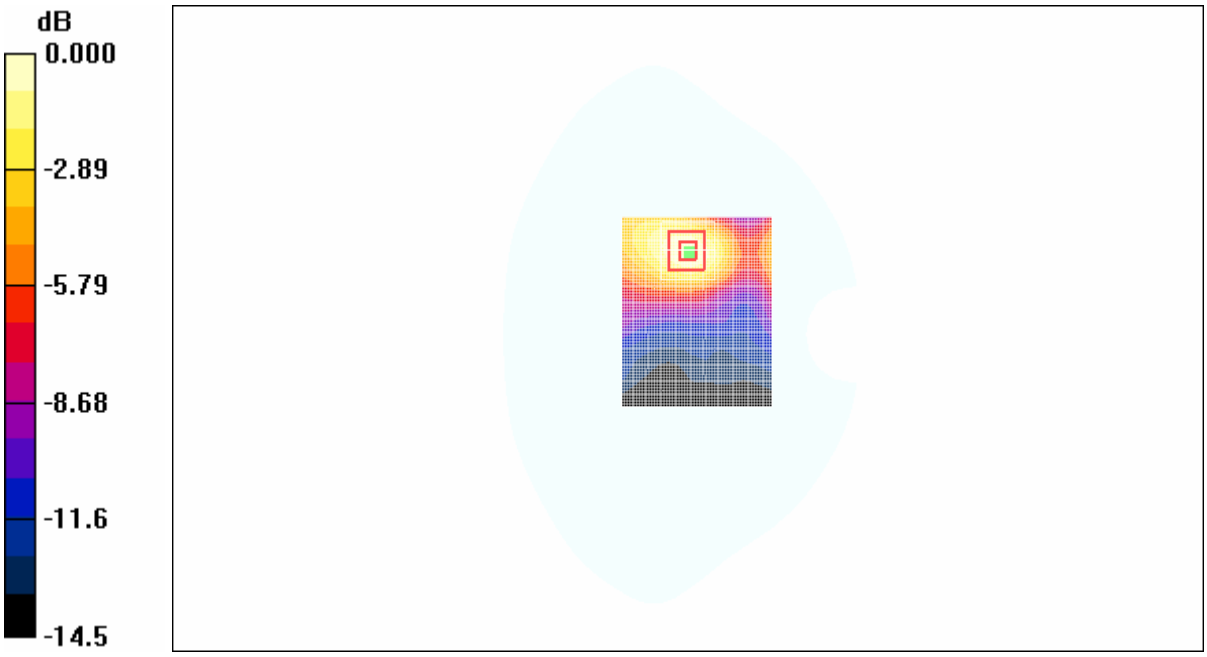
Fig.156 Z-Scan at power reference point (1900 MHz GPRS CH661 Test Position 2)

1900MHz GPRS Datacard Test Position 3 with Dell Laptop

Date/Time: 2007-1-20 15:17:03
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: GSM 1900MHz GPRS Class 12 Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 3/Area Scan (61x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.149 mW/g

Test Position 3/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.54 V/m; Power Drift = 0.175 dB
Peak SAR (extrapolated) = 0.226 W/kg
SAR(1 g) = 0.133 mW/g; SAR(10 g) = 0.081 mW/g
Maximum value of SAR (measured) = 0.146 mW/g



0 dB = 0.146mW/g

Fig.157 1900 MHz GPRS CH661 Test Position 3

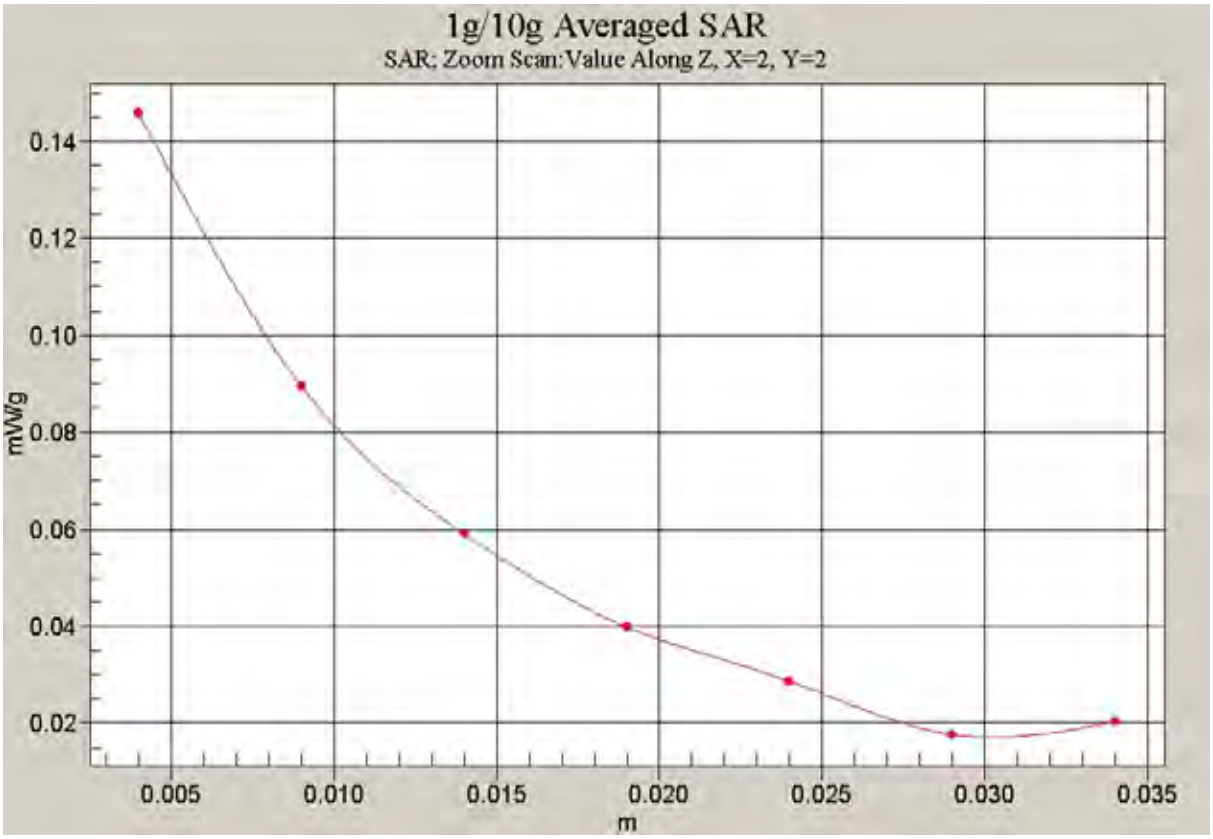


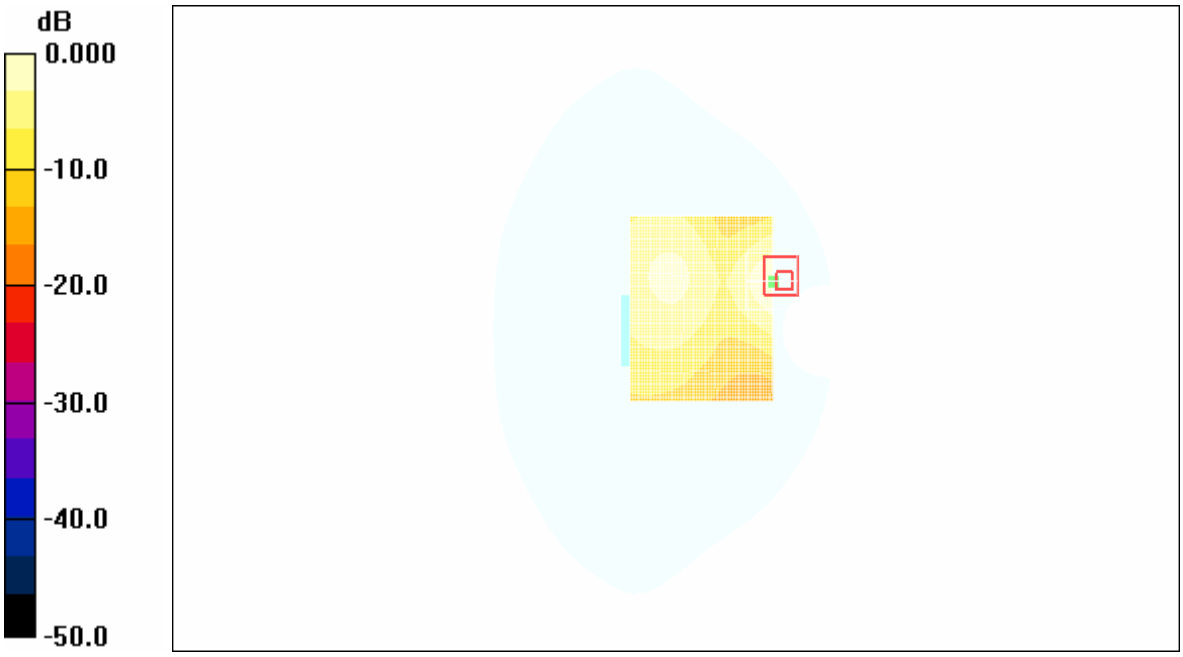
Fig.158 Z-Scan at power reference point (1900 MHz GPRS CH661 Test Position 3)

1900MHz GPRS Datacard Test Position 4 with Dell Laptop

Date/Time: 2007-1-20 15:40:32
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: GSM 1900MHz GPRS Class 12 Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 4/Area Scan (61x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.427 mW/g

Test Position 4/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.97 V/m; Power Drift = 0.002 dB
Peak SAR (extrapolated) = 0.676 W/kg
SAR(1 g) = 0.413 mW/g; SAR(10 g) = 0.247 mW/g
Maximum value of SAR (measured) = 0.447 mW/g



0 dB = 0.447mW/g

Fig.159 1900 MHz GPRS CH661 Test Position 4

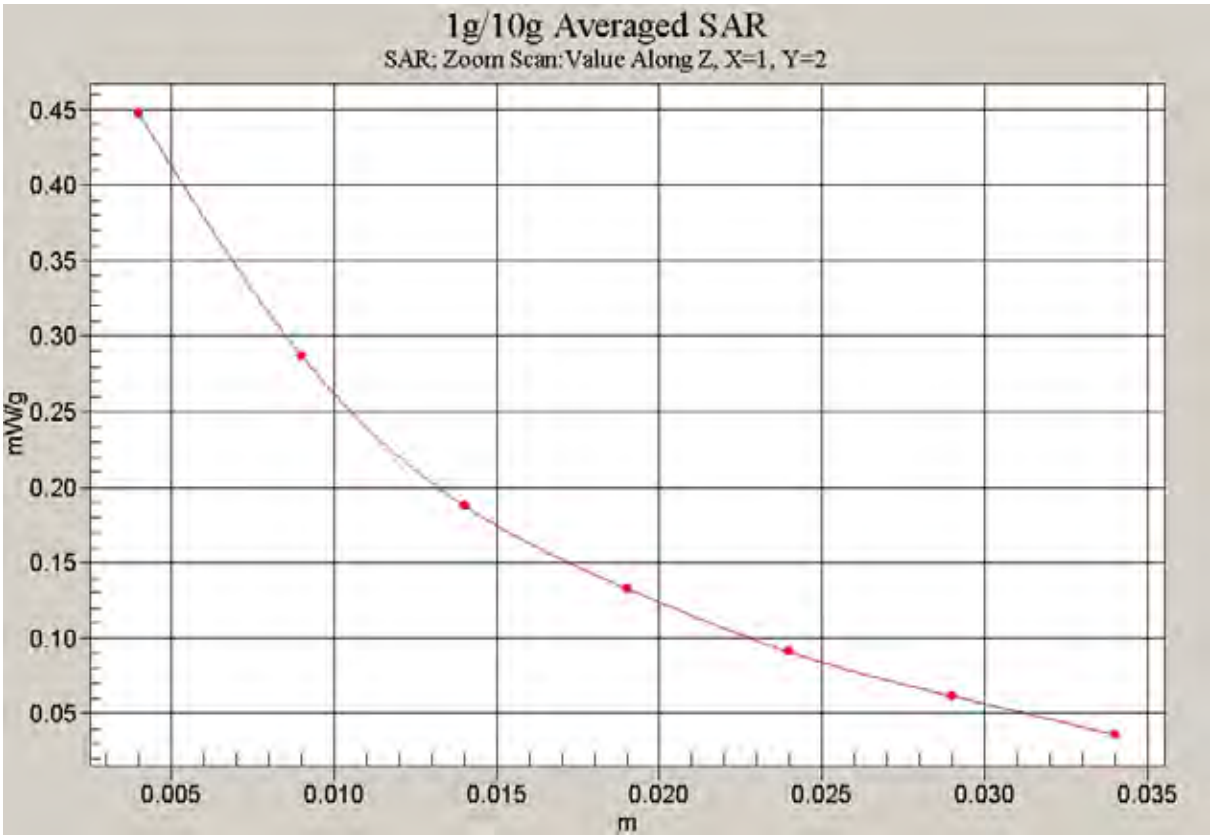


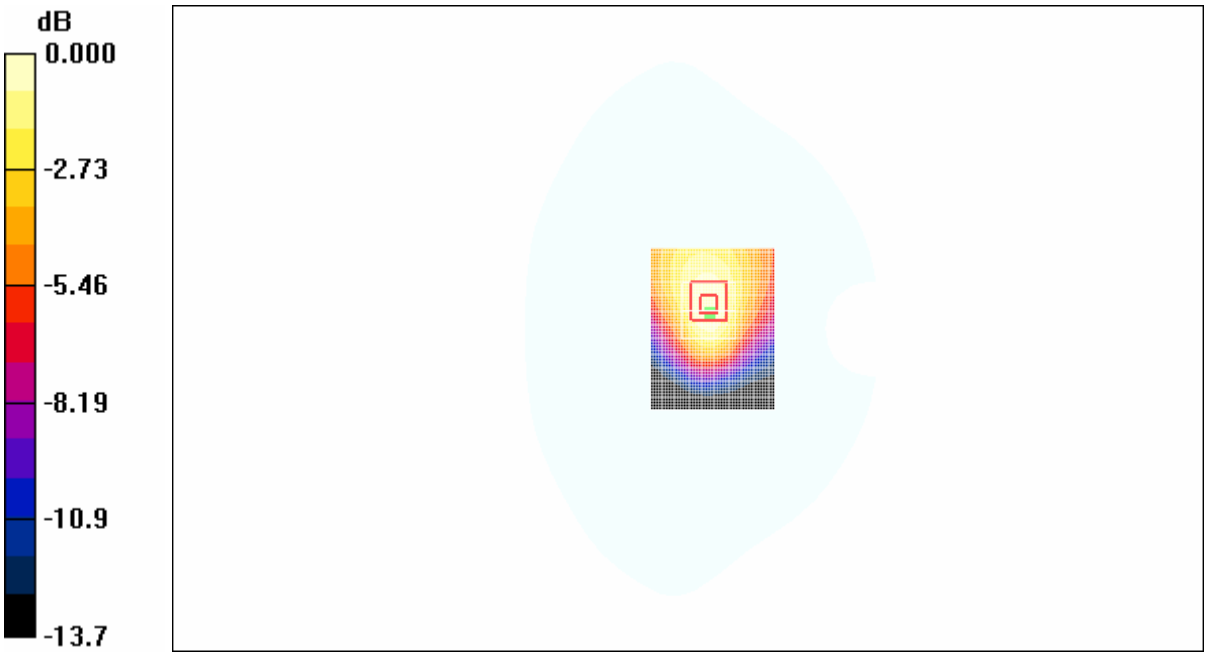
Fig.160 Z-Scan at power reference point (1900 MHz GPRS CH661 Test Position 4)

1900MHz GPRS Datacard Test Position 5 with Dell Laptop

Date/Time: 2007-1-20 14:58:27
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: GSM 1900MHz GPRS Class 12 Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 5/Area Scan (51x61x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.215 mW/g

Test Position 5/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.0 V/m; Power Drift = -0.075 dB
Peak SAR (extrapolated) = 0.321 W/kg
SAR(1 g) = 0.198 mW/g; SAR(10 g) = 0.126 mW/g
Maximum value of SAR (measured) = 0.211 mW/g



0 dB = 0.211mW/g

Fig.161 1900 MHz GPRS CH661 Test Position 5

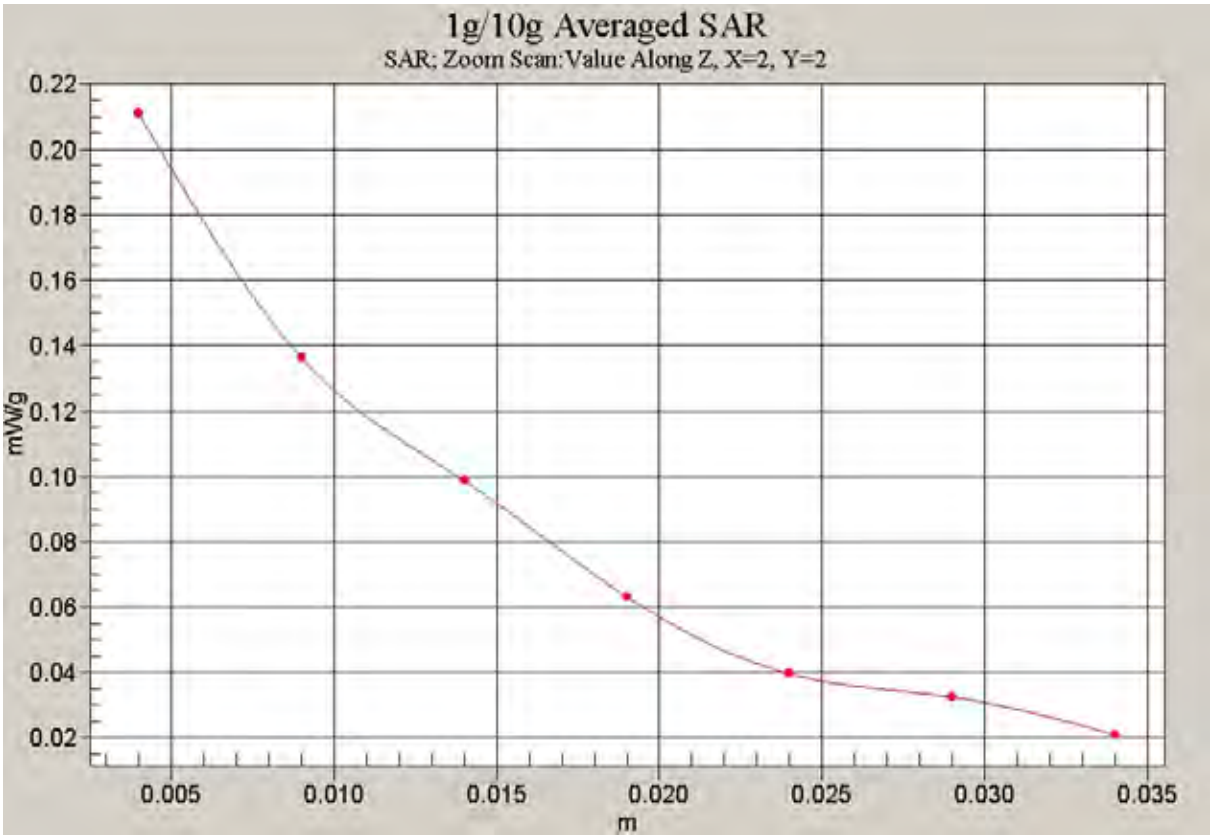


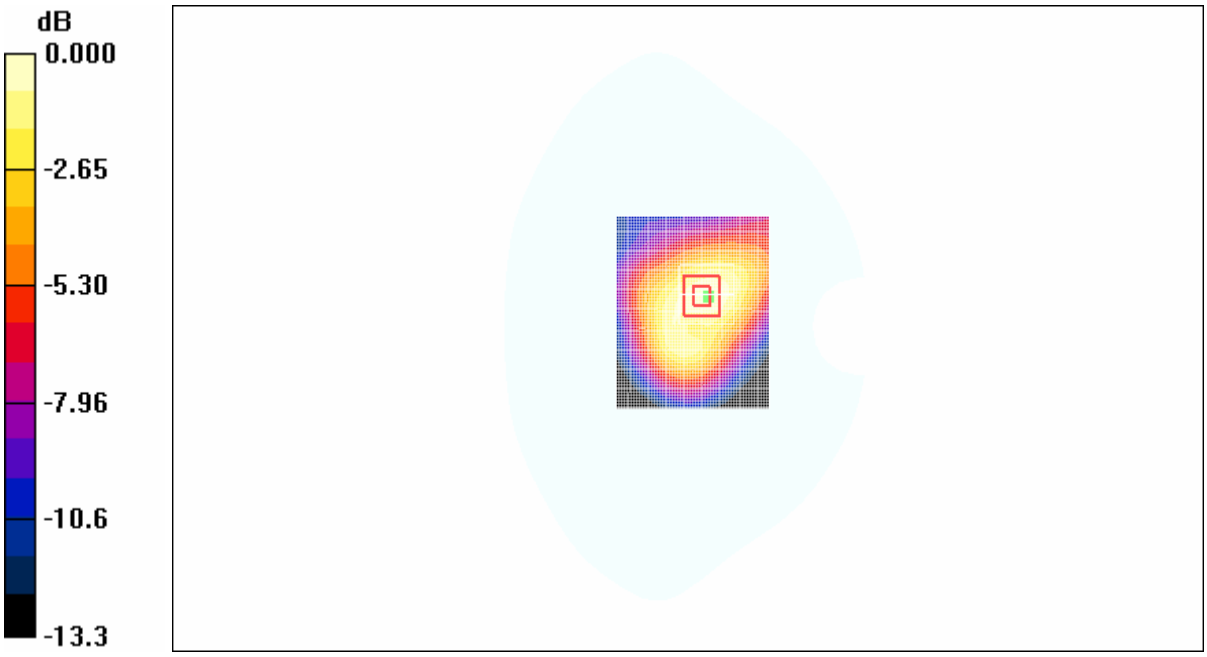
Fig.162 Z-Scan at power reference point (1900 MHz GPRS CH661 Test Position 5)

1900MHz GPRS Datacard Test Position 1 with HP Laptop

Date/Time: 2007-1-20 16:15:33
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: GSM 1900MHz GPRS Class 12 Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 1/Area Scan (61x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.414 mW/g

Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.1 V/m; Power Drift = 0.200 dB
Peak SAR (extrapolated) = 0.597 W/kg
SAR(1 g) = 0.382 mW/g; SAR(10 g) = 0.243 mW/g
Maximum value of SAR (measured) = 0.414 mW/g



0 dB = 0.414mW/g

Fig.163 1900MHz GPRS CH661 Test Position 1

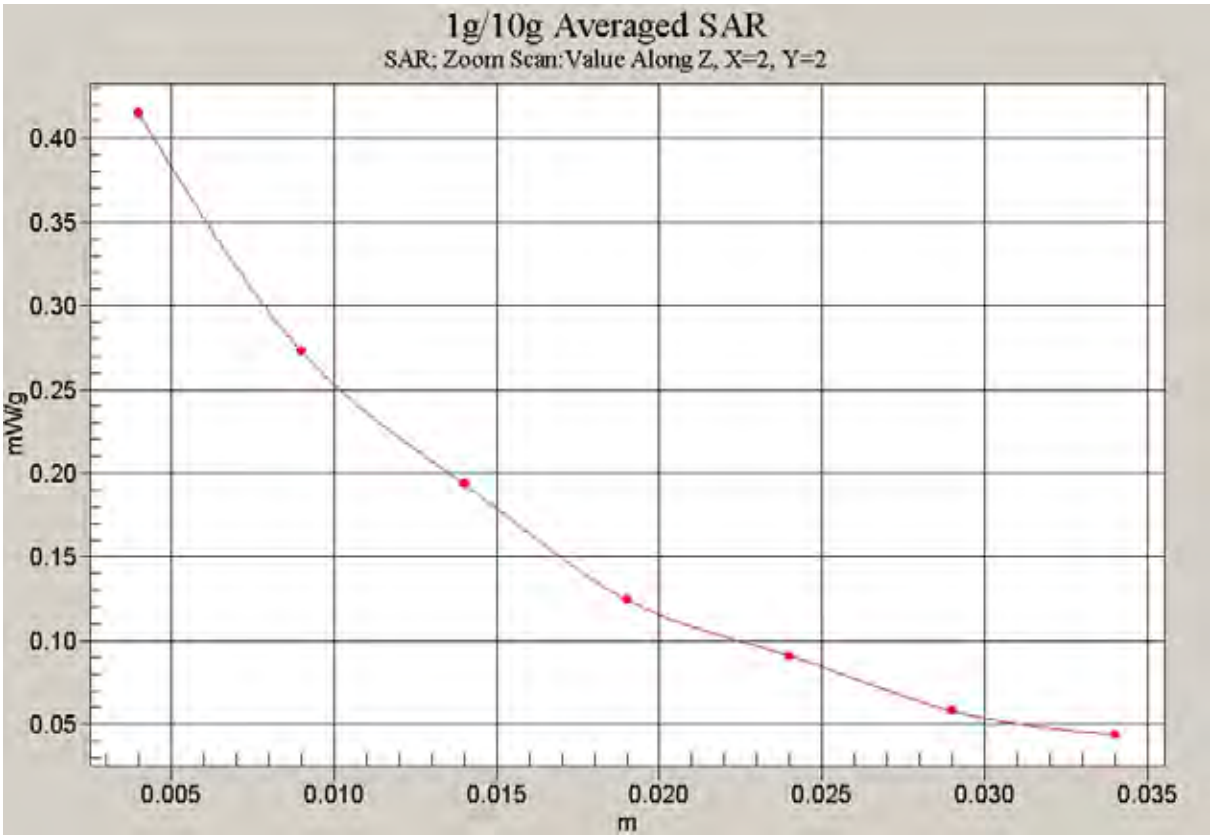


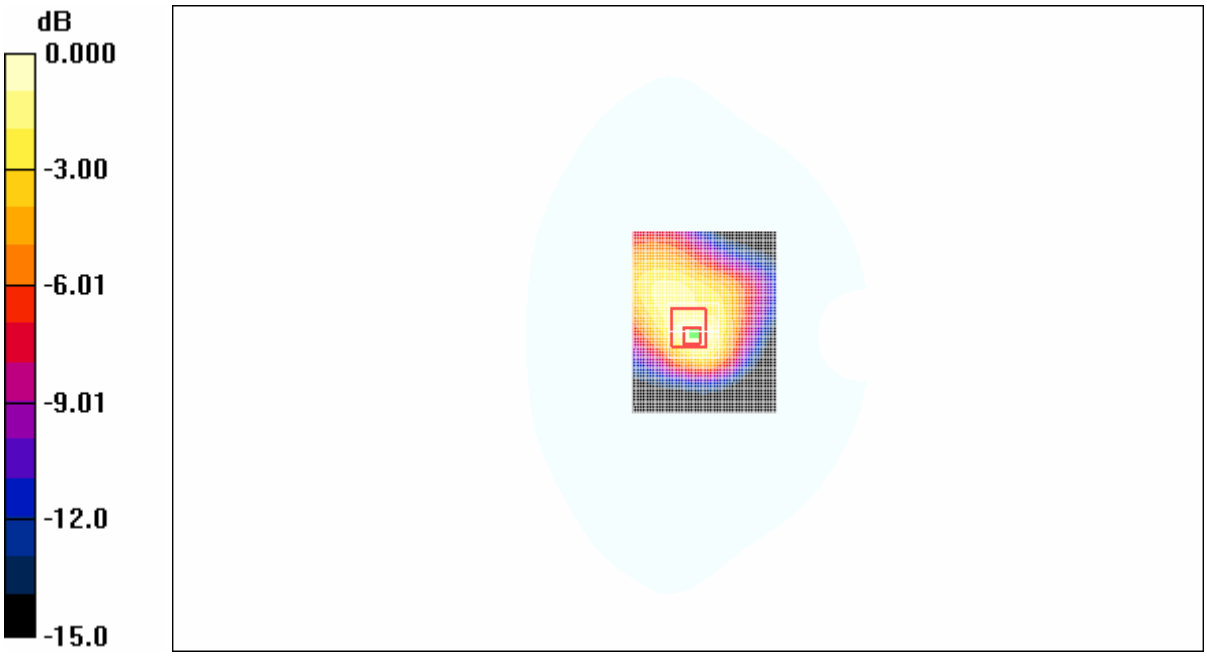
Fig.164 Z-Scan at power reference point (1900 MHz GPRS CH661 Test Position 1)

1900MHz GPRS Datacard Test Position 2 with HP Laptop

Date/Time: 2007-1-20 16:02:21
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: GSM 1900MHz GPRS Class 12 Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 2/Area Scan (61x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.452 mW/g

Test Position 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.4 V/m; Power Drift = 0.159 dB
Peak SAR (extrapolated) = 0.724 W/kg
SAR(1 g) = 0.437 mW/g; SAR(10 g) = 0.266 mW/g
Maximum value of SAR (measured) = 0.456 mW/g



0 dB = 0.456mW/g

Fig.165 1900 MHz GPRS CH661 Test Position 2

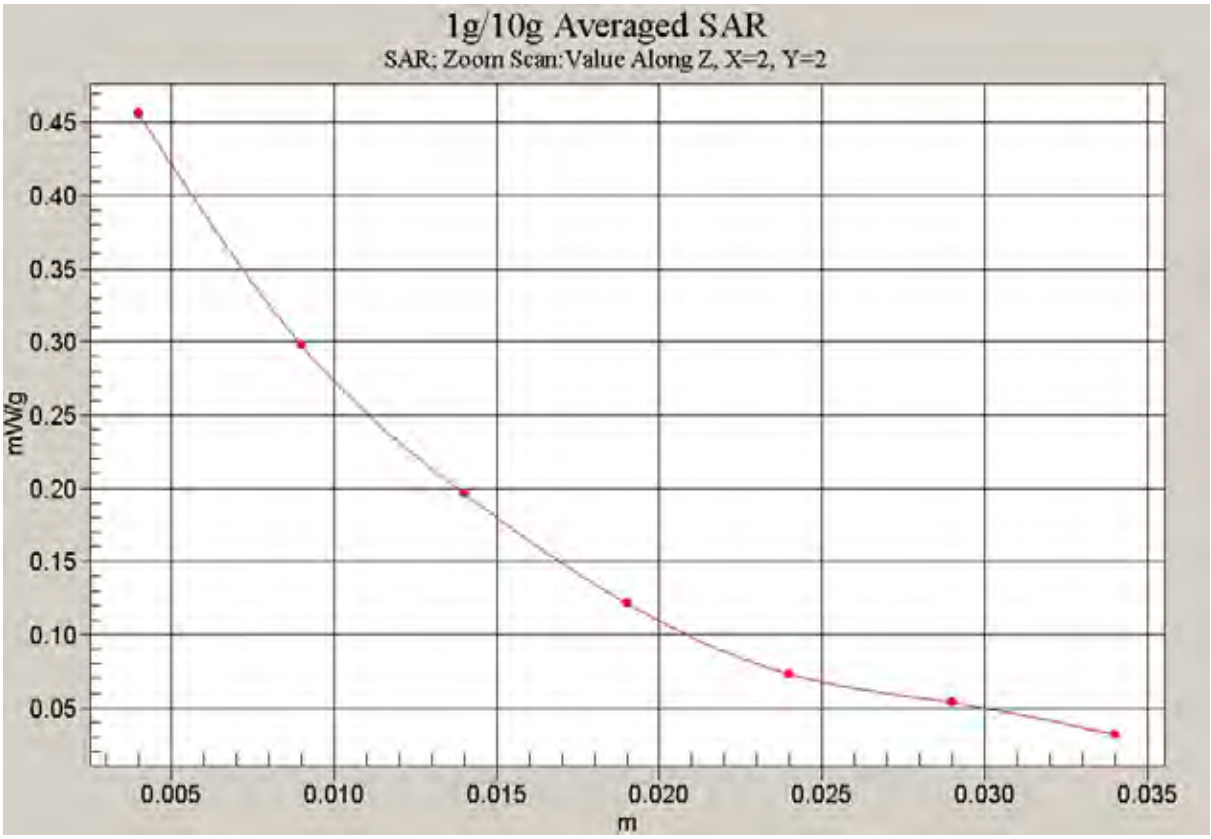


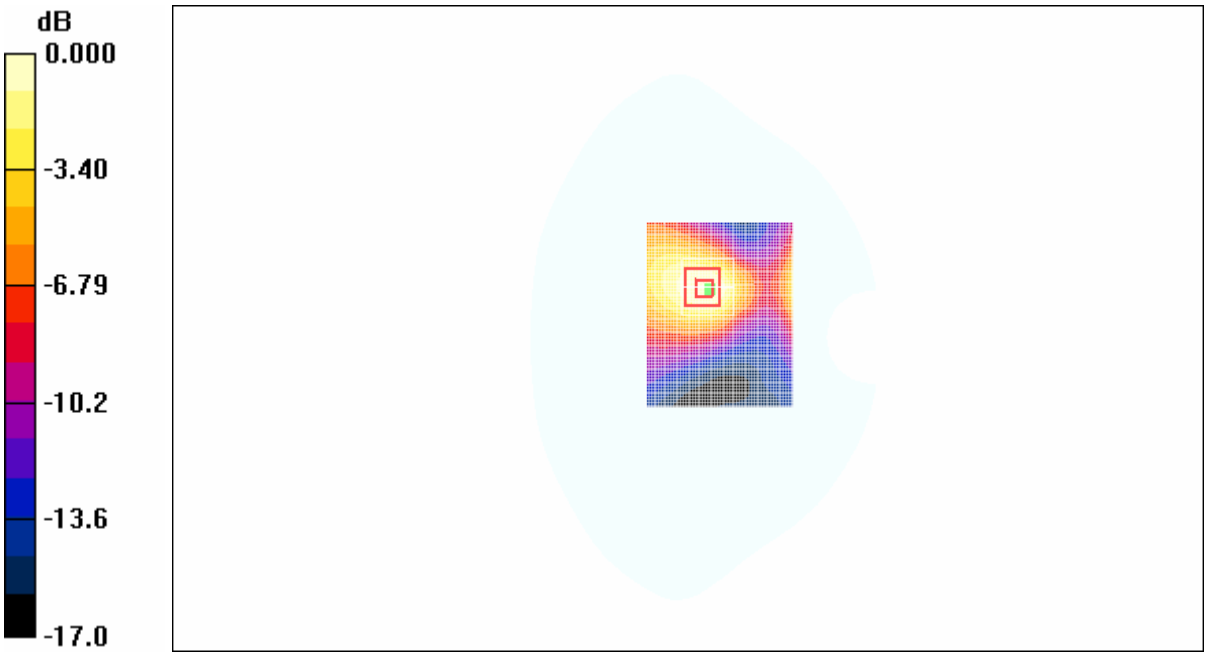
Fig.160 Z-Scan at power reference point (1900 MHz GPRS CH661 Test Position 2)

1900MHz GPRS Datacard Test Position 3 with HP Laptop

Date/Time: 2007-1-20 17:07:49
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: GSM 1900MHz GPRS Class 12 Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 3/Area Scan (61x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.211 mW/g

Test Position 3/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.93 V/m; Power Drift = -0.036 dB
Peak SAR (extrapolated) = 0.298 W/kg
SAR(1 g) = 0.180 mW/g; SAR(10 g) = 0.109 mW/g
Maximum value of SAR (measured) = 0.193 mW/g



0 dB = 0.193mW/g

Fig.161 1900 MHz GPRS CH661 Test Position 3

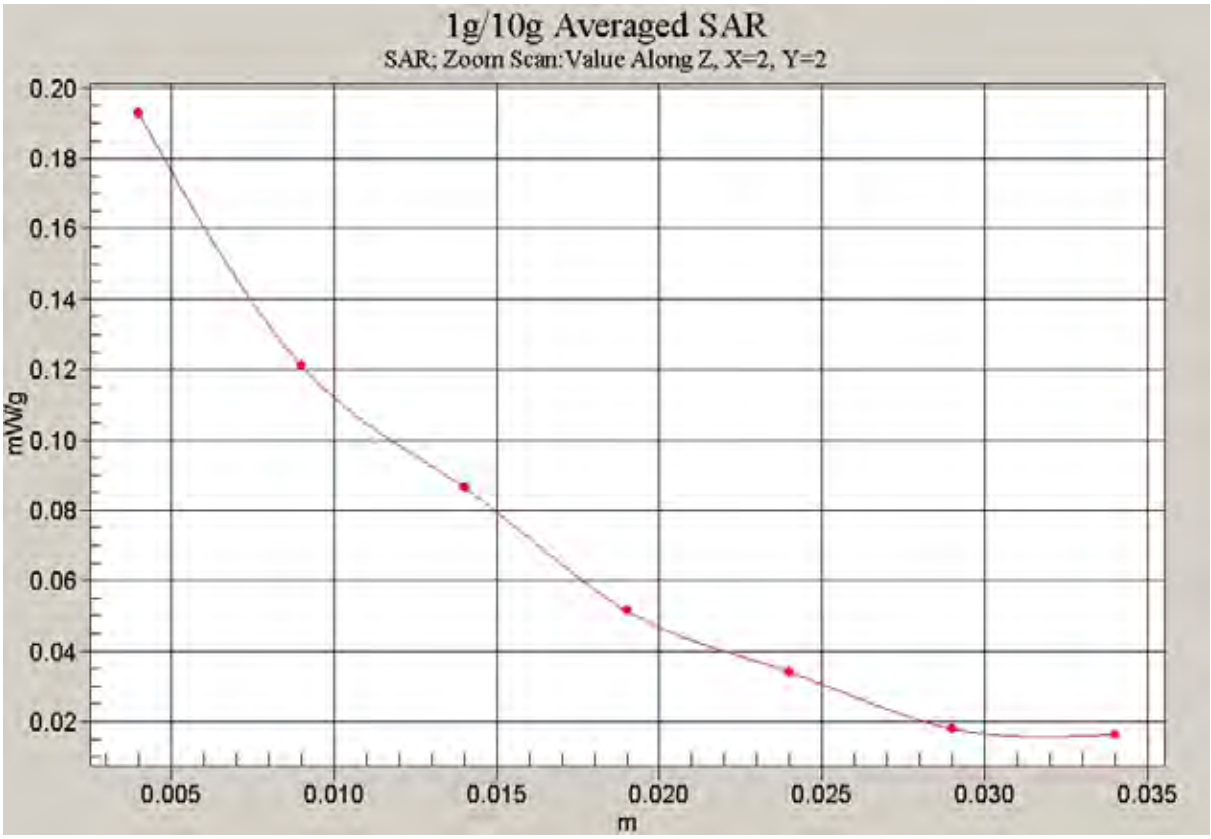


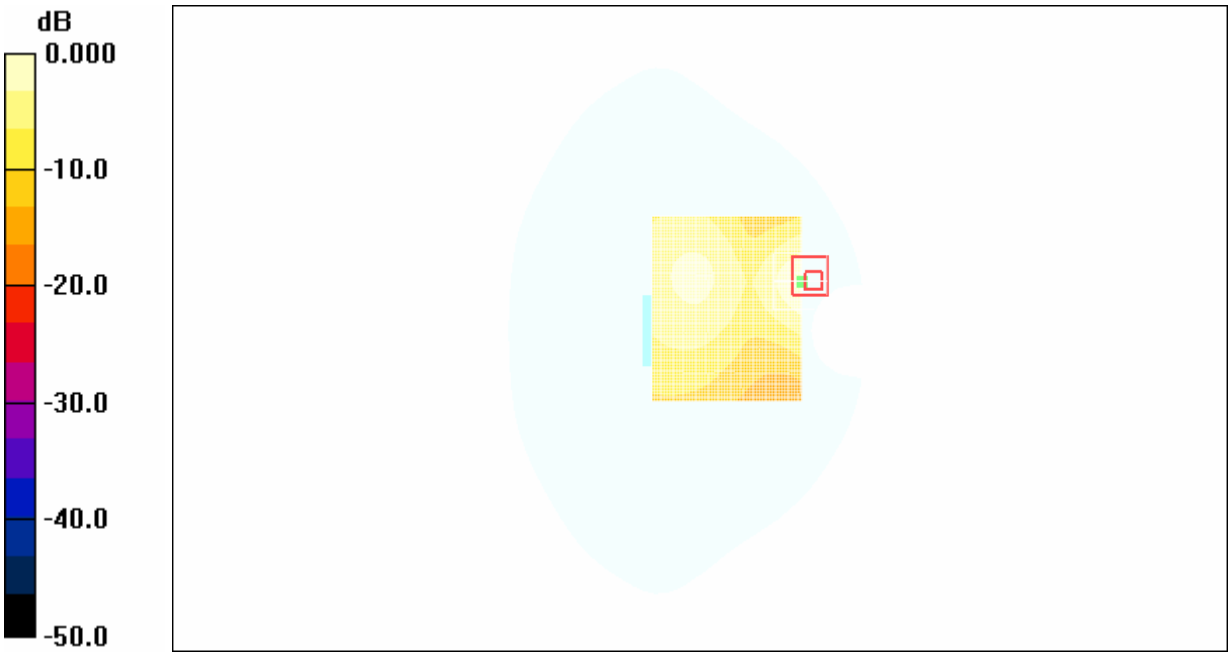
Fig.162 Z-Scan at power reference point (1900 MHz GPRS CH661 Test Position 3)

1900MHz GPRS Datacard Test Position 4 with HP Laptop

Date/Time: 2007-1-20 17:10:32
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: GSM 1900MHz GPRS Class 12 Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 4/Area Scan (61x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.467 mW/g

Test Position 4/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.87 V/m; Power Drift = 0.024 dB
Peak SAR (extrapolated) = 0.626 W/kg
SAR(1 g) = 0.378 mW/g; SAR(10 g) = 0.28 mW/g
Maximum value of SAR (measured) = 0.450 mW/g



0 dB = 0.450mW/g

Fig.163 1900 MHz GPRS CH661 Test Position 4

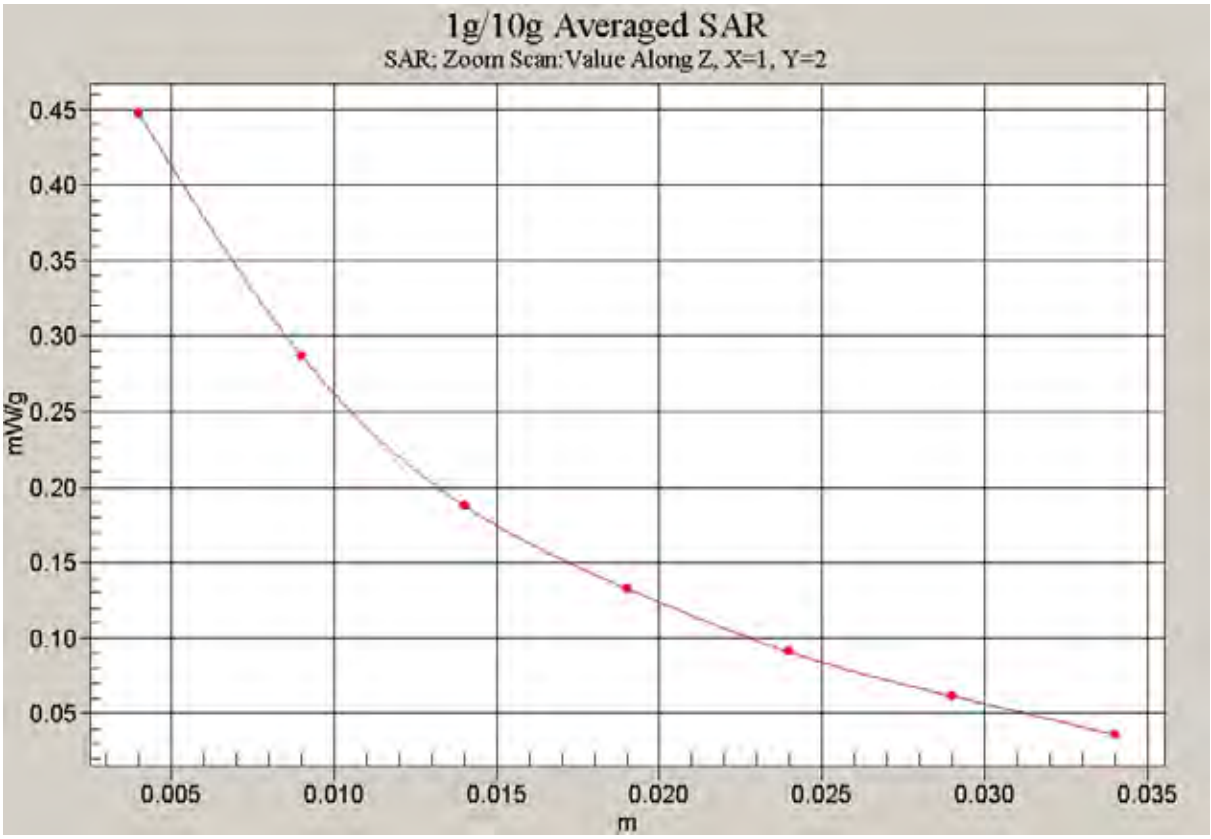


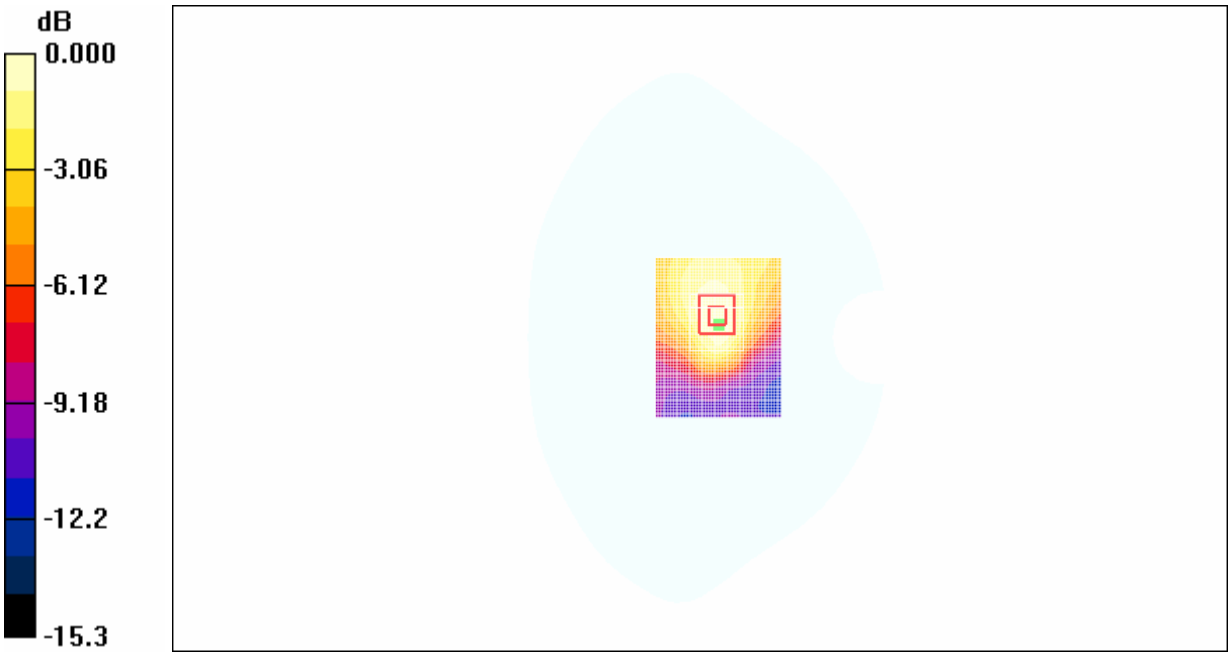
Fig.164 Z-Scan at power reference point (1900 MHz GPRS CH661 Test Position 4)

1900MHz GPRS Datacard Test Position 5 with HP Laptop

Date/Time: 2007-1-20 16:48:45
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: GSM 1900MHz GPRS Class 12 Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

Test Position 5/Area Scan (51x61x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.093 mW/g

Test Position 5/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.99 V/m; Power Drift = -0.090 dB
Peak SAR (extrapolated) = 0.123 W/kg
SAR(1 g) = 0.082 mW/g; SAR(10 g) = 0.053 mW/g
Maximum value of SAR (measured) = 0.088 mW/g



0 dB = 0.088mW/g

Fig.165 1900 MHz GPRS CH661 Test Position 5

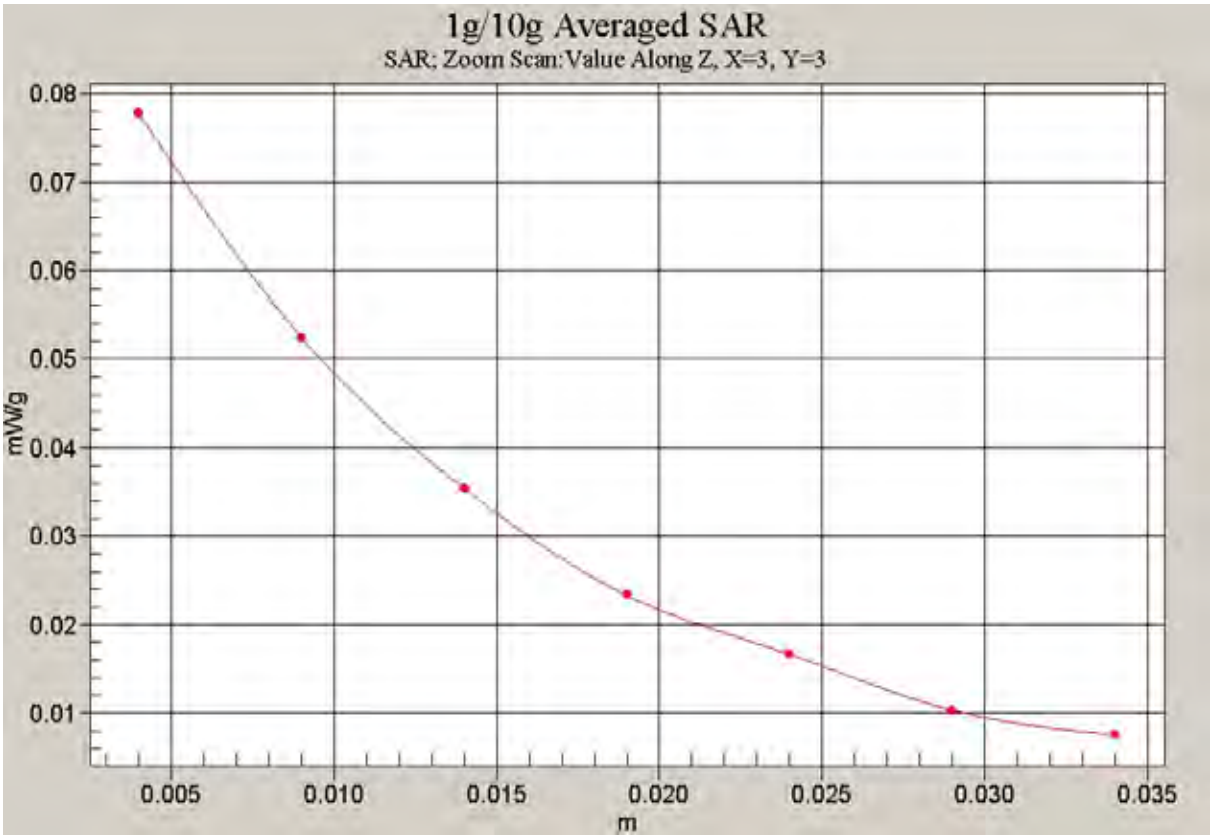


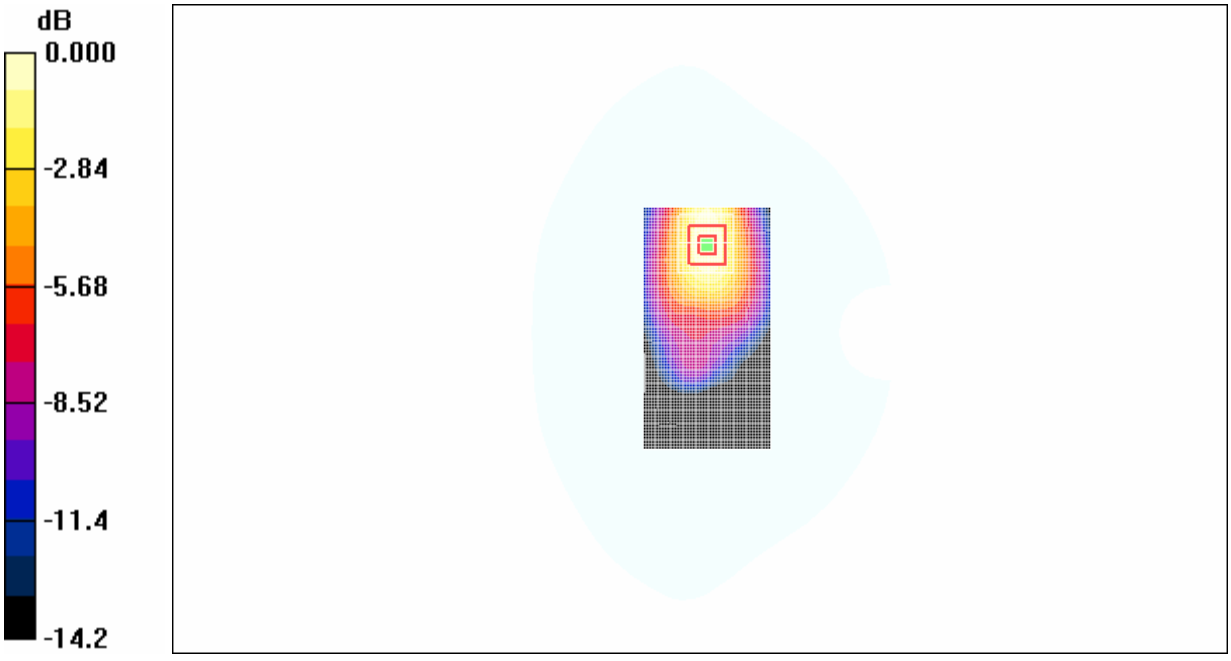
Fig.166 Z-Scan at power reference point (1900 MHz GPRS CH661 Test Position 5)

1900MHz GPRS External Antenna Test Position 1

Date/Time: 2007-1-20 17:36:48
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: GSM 1900MHz GPRS Class 12 Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

External Antenna Test Position 1/Area Scan (51x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.484 mW/g

External Antenna Test Position 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.13 V/m; Power Drift = -0.103 dB
Peak SAR (extrapolated) = 0.717 W/kg
SAR(1 g) = 0.440 mW/g; SAR(10 g) = 0.270 mW/g
Maximum value of SAR (measured) = 0.477 mW/g



0 dB = 0.477mW/g

Fig.167 1900MHz GPRS CH661 Test Position 1

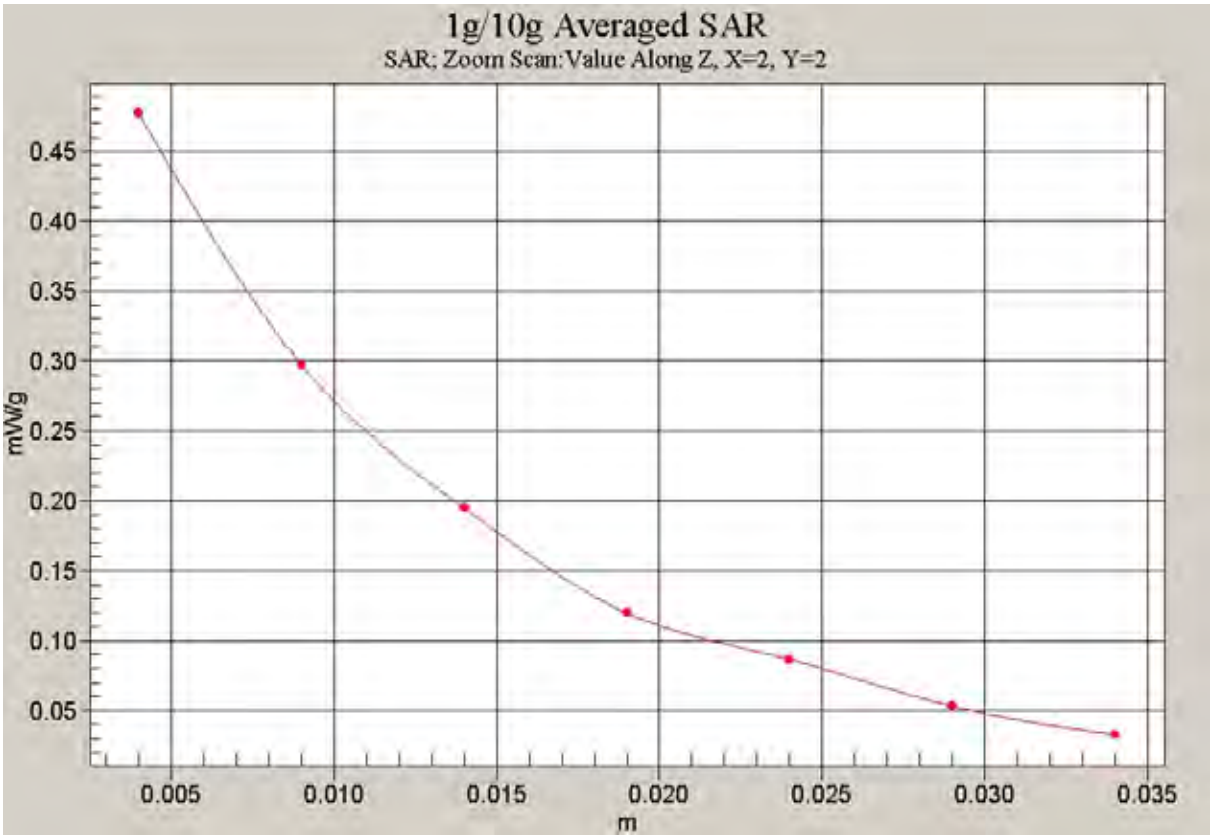


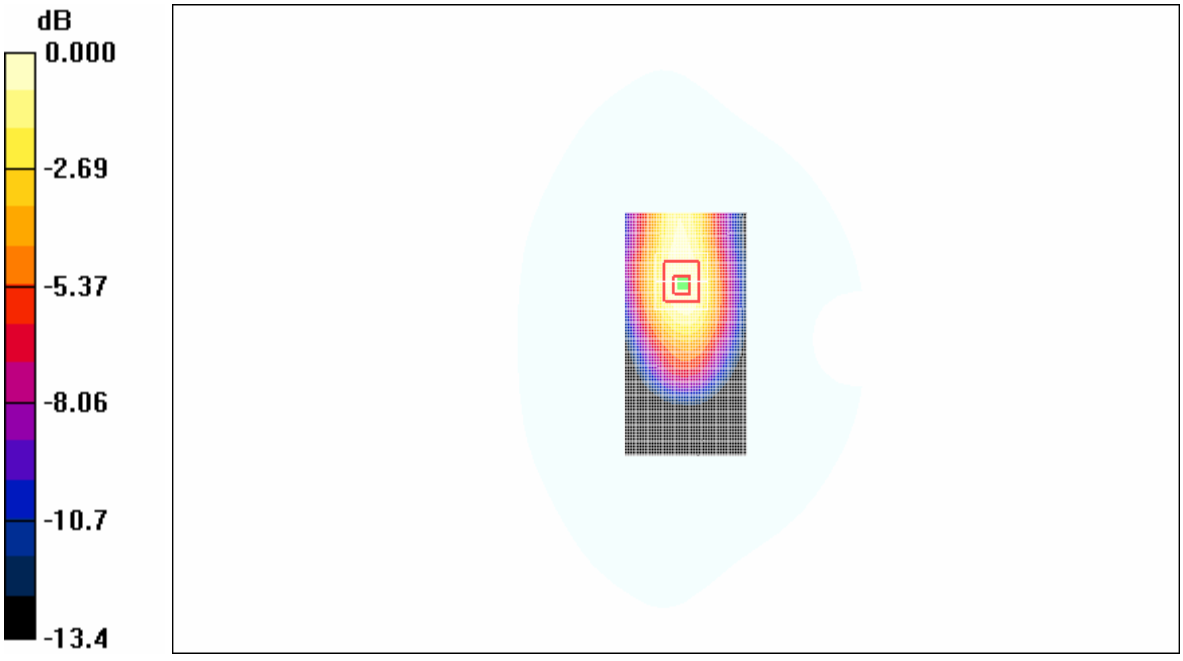
Fig.168 Z-Scan at power reference point (1900 MHz GPRS CH661 Test Position 1)

1900MHz GPRS External Antenna Test Position 2

Date/Time: 2007-1-20 17:49:59
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: GSM 1900MHz GPRS Class 12 Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

External Antenna Test Position 2/Area Scan (51x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.435 mW/g

External Antenna Test Position 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.0 V/m; Power Drift = -0.040 dB
Peak SAR (extrapolated) = 0.638 W/kg
SAR(1 g) = 0.390 mW/g; SAR(10 g) = 0.247 mW/g
Maximum value of SAR (measured) = 0.414 mW/g



0 dB = 0.414mW/g

Fig.169 1900 MHz GPRS CH661 Test Position 2

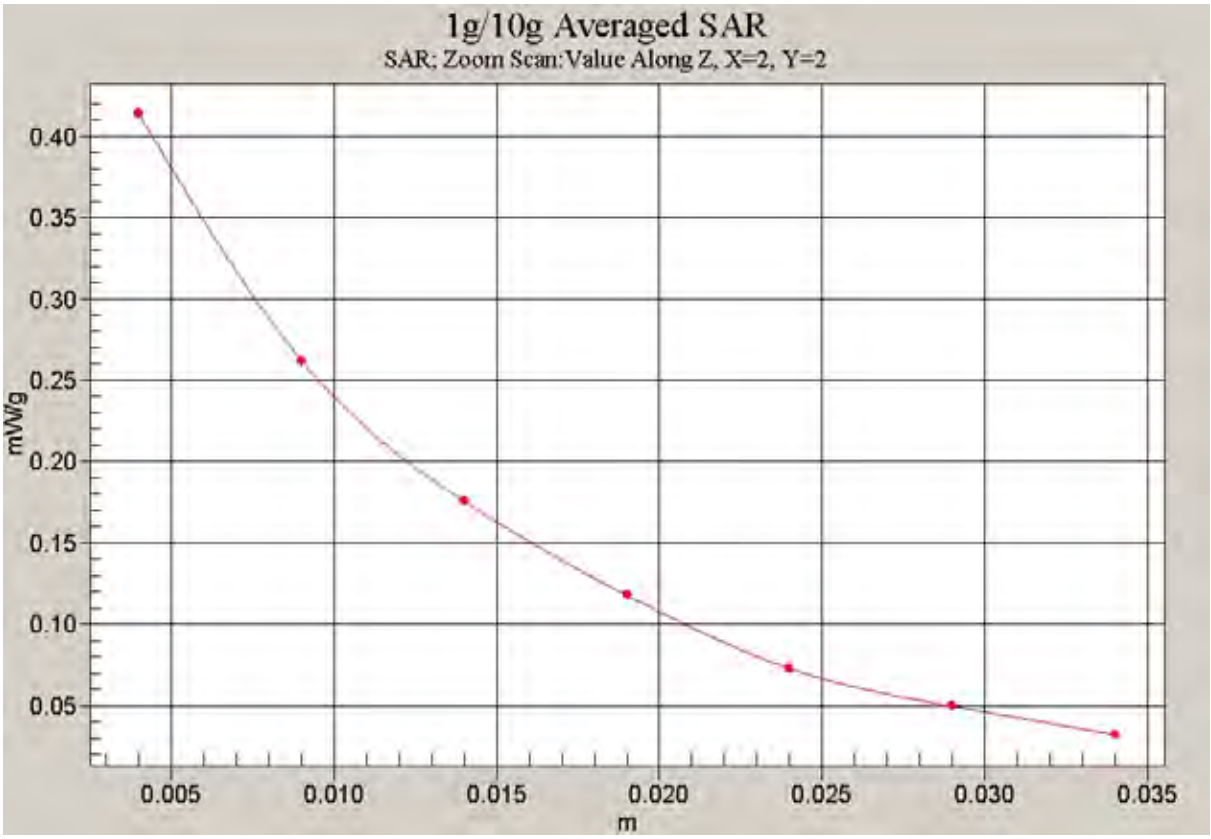


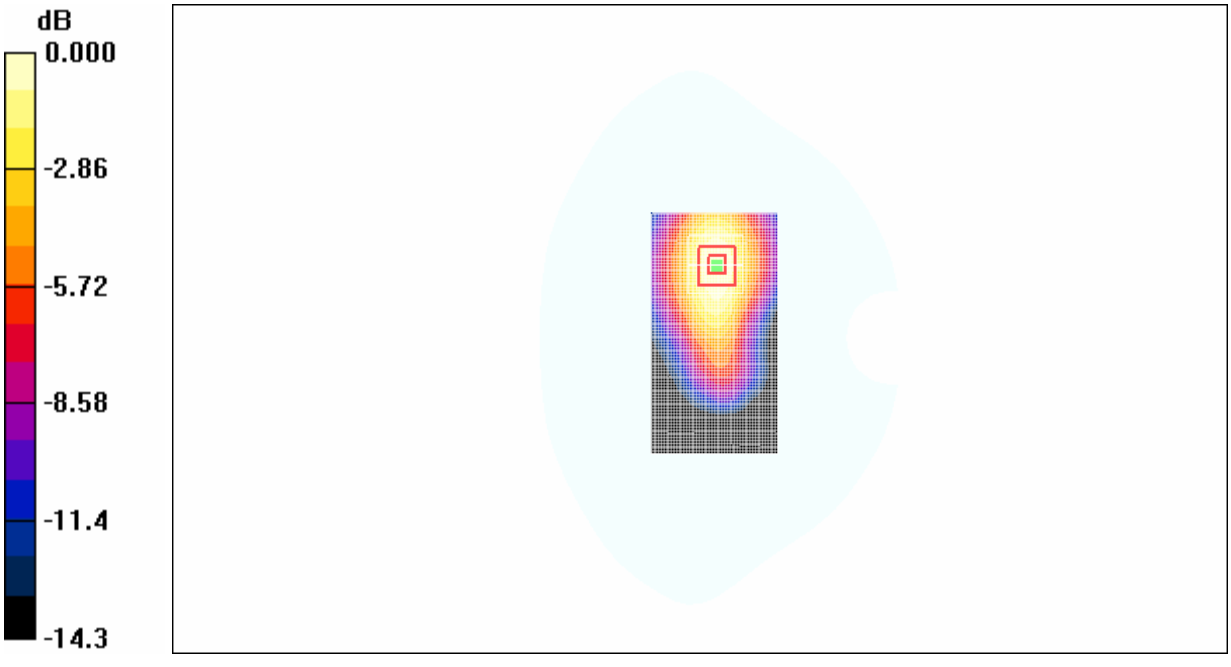
Fig.170 Z-Scan at power reference point (1900 MHz GPRS CH661 Test Position 2)

1900MHz GPRS External Antenna Test Position 3

Date/Time: 2007-1-20 18:04:24
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: GSM 1900MHz GPRS Class 12 Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

External Antenna Test Position 3/Area Scan (51x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.405 mW/g

External Antenna Test Position 3/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.3 V/m; Power Drift = 0.060 dB
Peak SAR (extrapolated) = 0.600 W/kg
SAR(1 g) = 0.374 mW/g; SAR(10 g) = 0.233 mW/g
Maximum value of SAR (measured) = 0.402 mW/g



0 dB = 0.402mW/g

Fig.171 1900 MHz GPRS CH661 Test Position 3

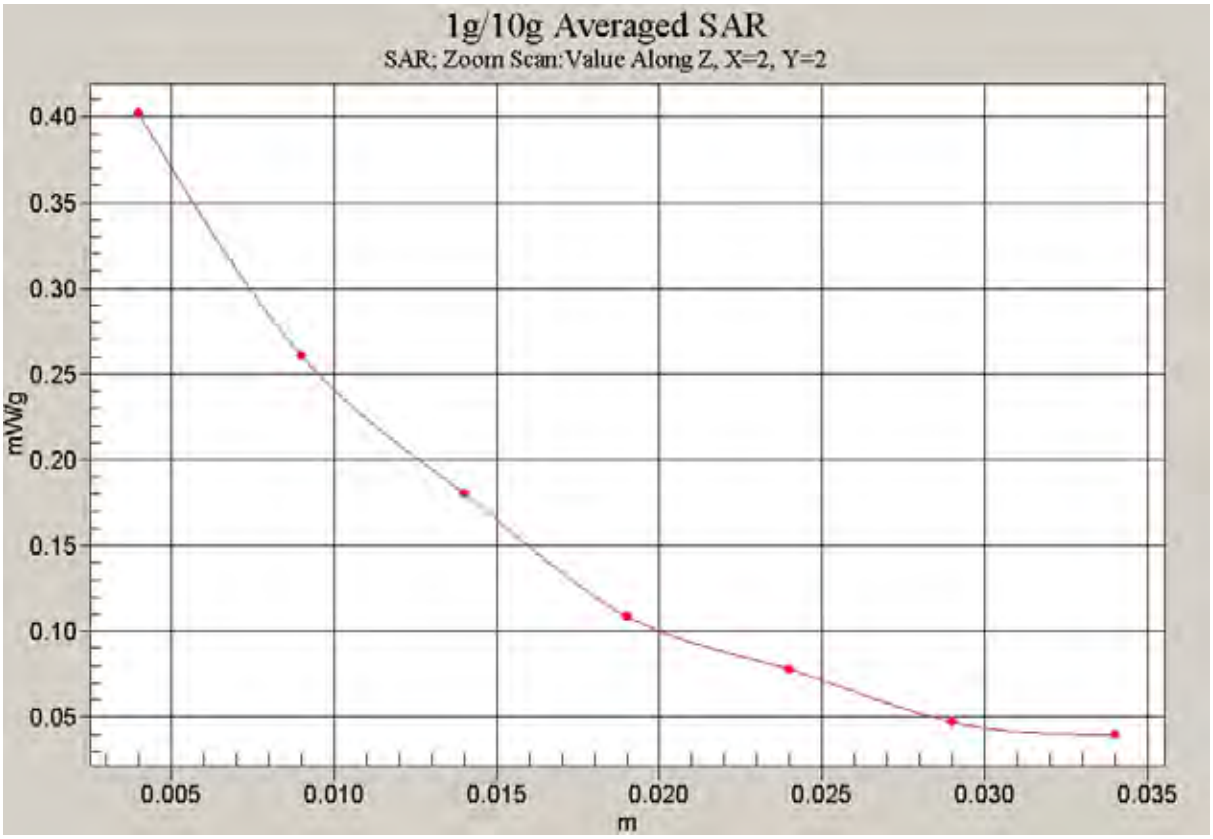


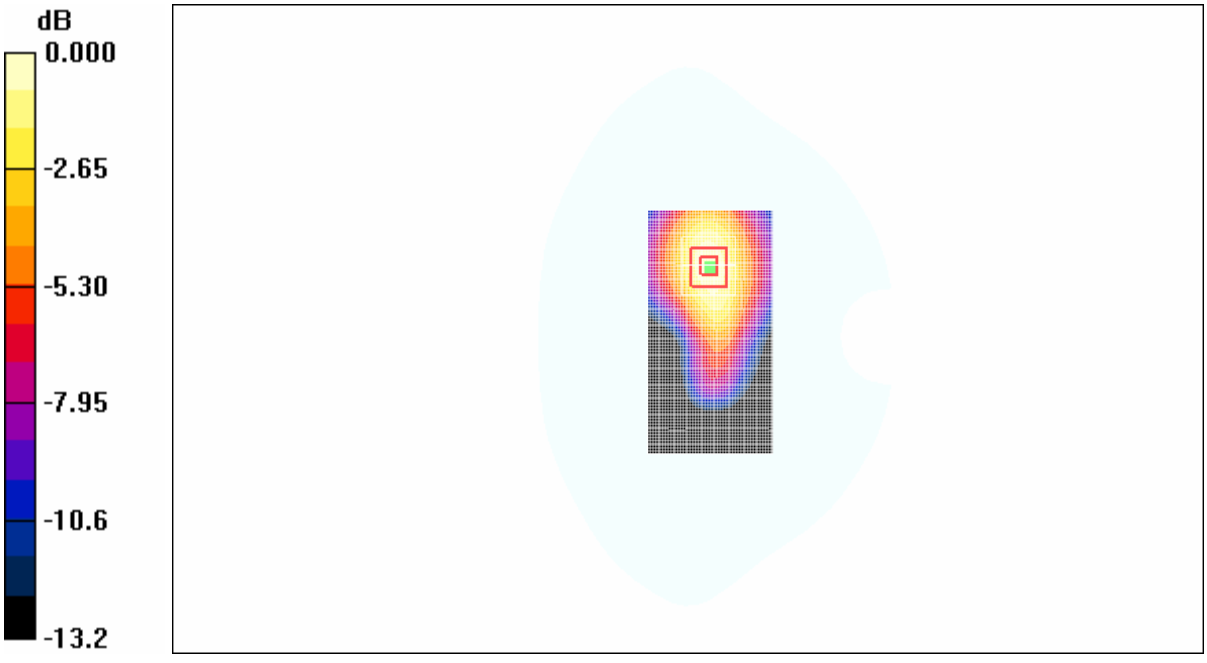
Fig.172 Z-Scan at power reference point (1900 MHz GPRS CH661 Test Position 3)

1900MHz GPRS External Antenna Test Position 4

Date/Time: 2007-1-20 18:18:52
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: GSM 1900MHz GPRS Class 12 Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

External Antenna Test Position 4/Area Scan (51x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.404 mW/g

External Antenna Test Position 4/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.0 V/m; Power Drift = 0.145 dB
Peak SAR (extrapolated) = 0.603 W/kg
SAR(1 g) = 0.382 mW/g; SAR(10 g) = 0.238 mW/g
Maximum value of SAR (measured) = 0.414 mW/g



0 dB = 0.414mW/g

Fig.173 1900 MHz GPRS CH661 Test Position 4

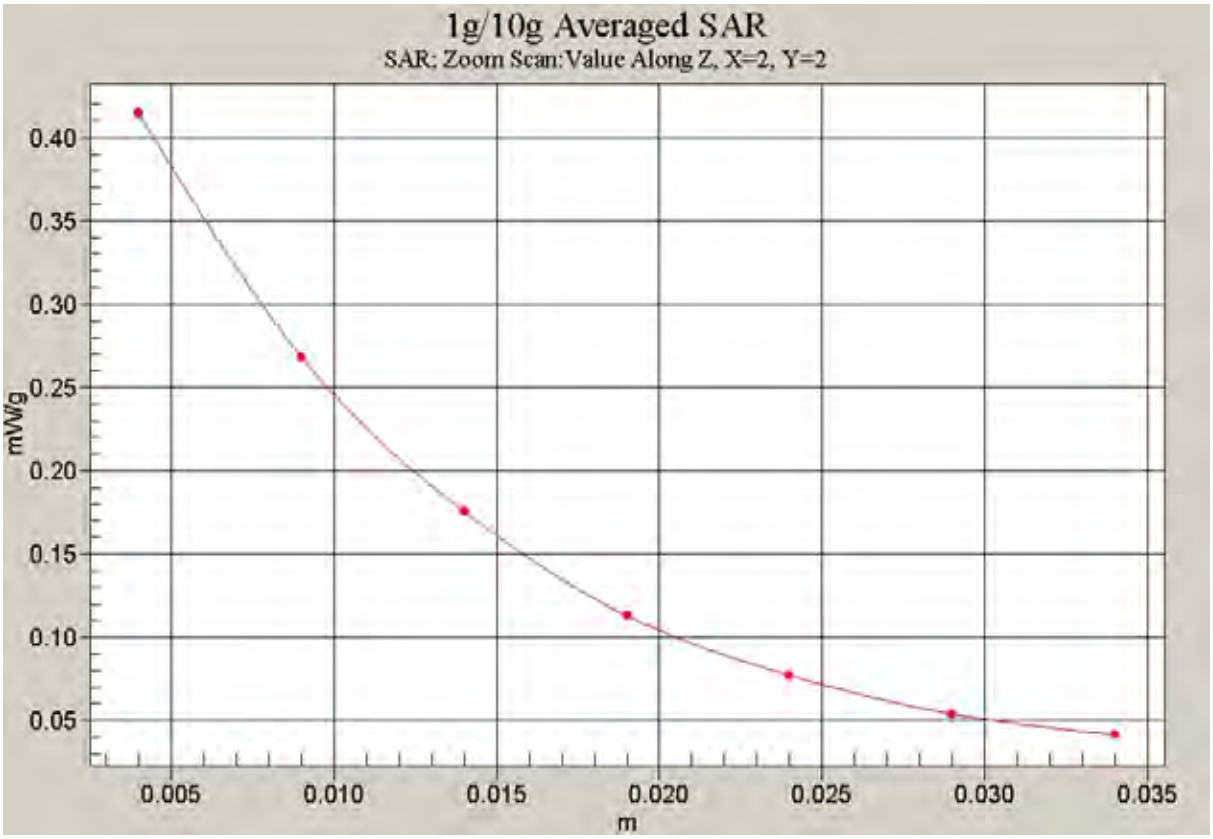


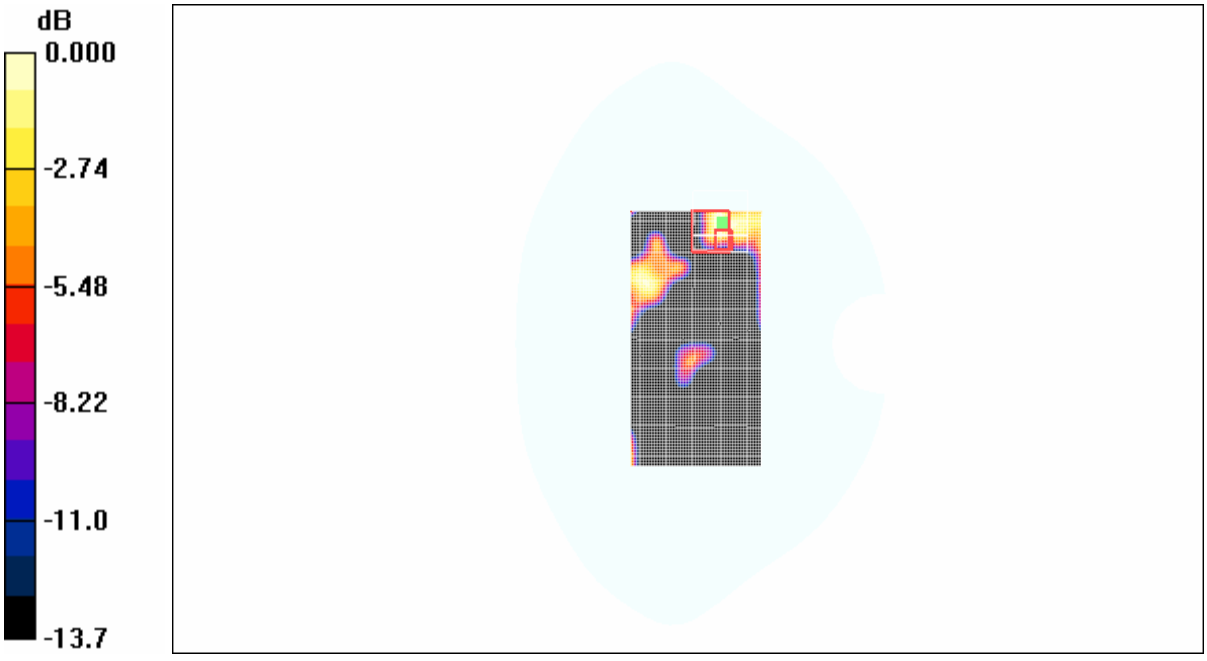
Fig.174 Z-Scan at power reference point (1900 MHz GPRS CH661 Test Position 4)

1900MHz GPRS External Antenna Test Position 5

Date/Time: 2007-1-20 18:52:00
Electronics: DAE3 Sn536
Medium: 1900 Body
Medium parameters used:σ = 1.57 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: GSM 1900MHz GPRS Class 12 Frequency: 1880 MHz Duty Cycle: 1:2.67
Probe: ET3DV6 - SN1736 ConvF(4.88, 4.88, 4.88)

External Antenna Test Position 5/Area Scan (51x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.030 mW/g

External Antenna Test Position 5/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.56 V/m; Power Drift = -0.192 dB
Peak SAR (extrapolated) = 0.025 W/kg
SAR(1 g) = 0.00725 mW/g; SAR(10 g) = 0.00256 mW/g
Maximum value of SAR (measured) = 0.019 mW/g



0 dB = 0.019mW/g

Fig.175 1900 MHz GPRS CH661 Test Position 5

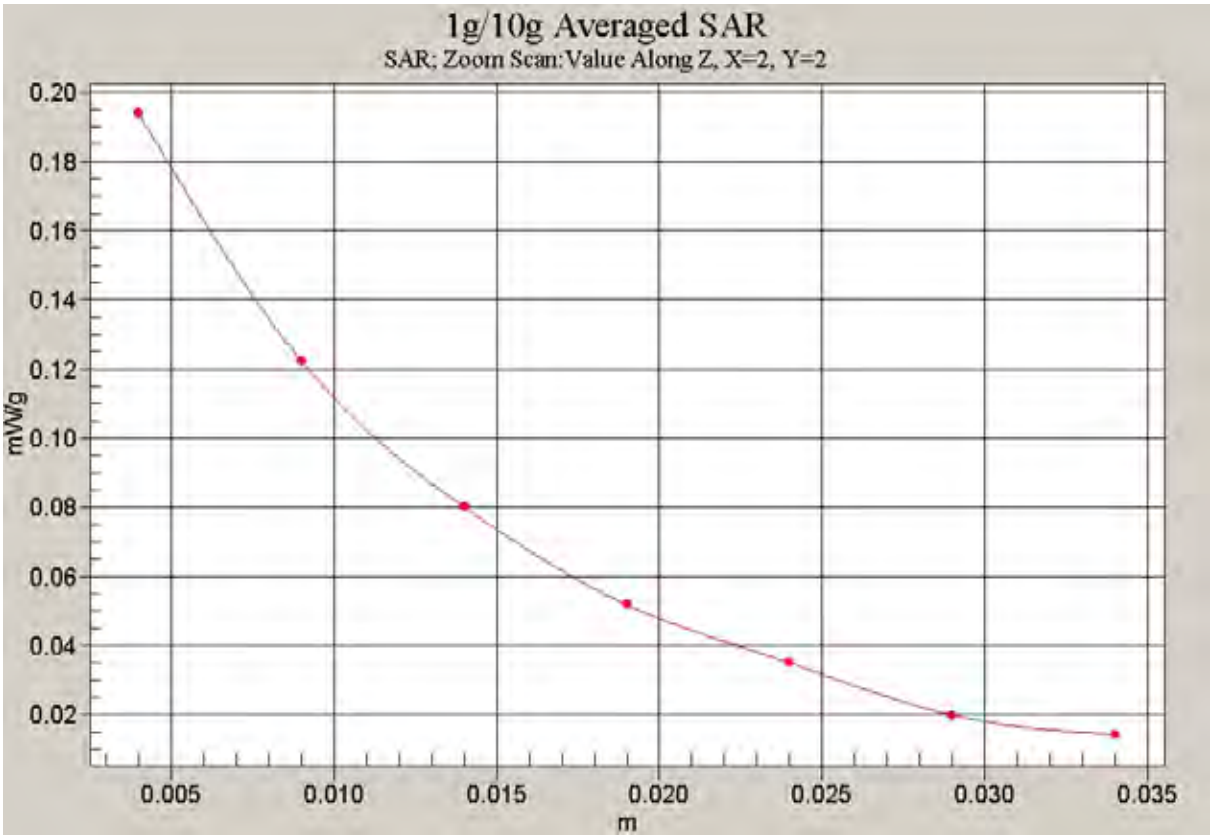


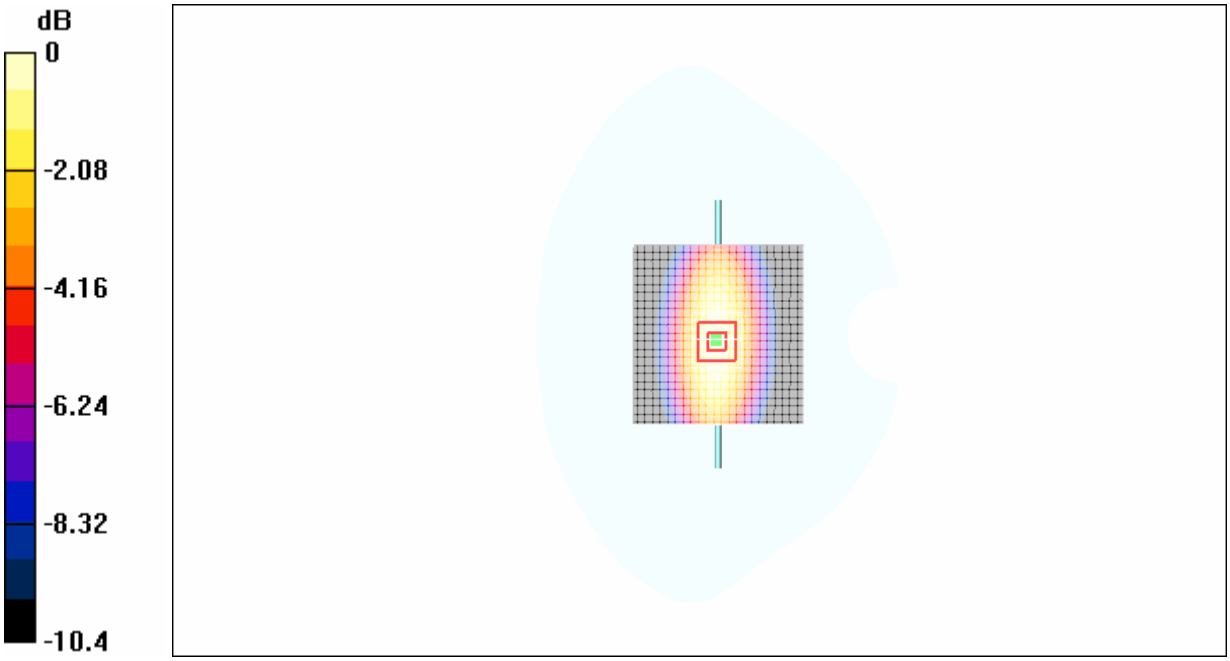
Fig.176 Z-Scan at power reference point (1900 MHz GPRS CH661 Test Position 5)

ANNEX D: SYSTEM VALIDATION RESULTS

835MHzDAE589Probe1736

Date/Time: 2007-01-16 07:27:50
Electronics: DAE3 Sn536
Medium: 835 Head
Medium parameters used (interpolated): $\sigma = 0.88$ mho/m; $\varepsilon_r = 41.7$; $\rho = 1000$ kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.3°C
Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(6.51, 6.51, 6.51)
835MHz/Area Scan (101x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 2.68 mW/g

835MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 56.8 V/m; Power Drift = -0.0 dB
Peak SAR (extrapolated) = 3.67 W/kg
SAR(1 g) = 2.48 mW/g; SAR(10 g) = 1.62 mW/g
Maximum value of SAR (measured) = 2.69 mW/g



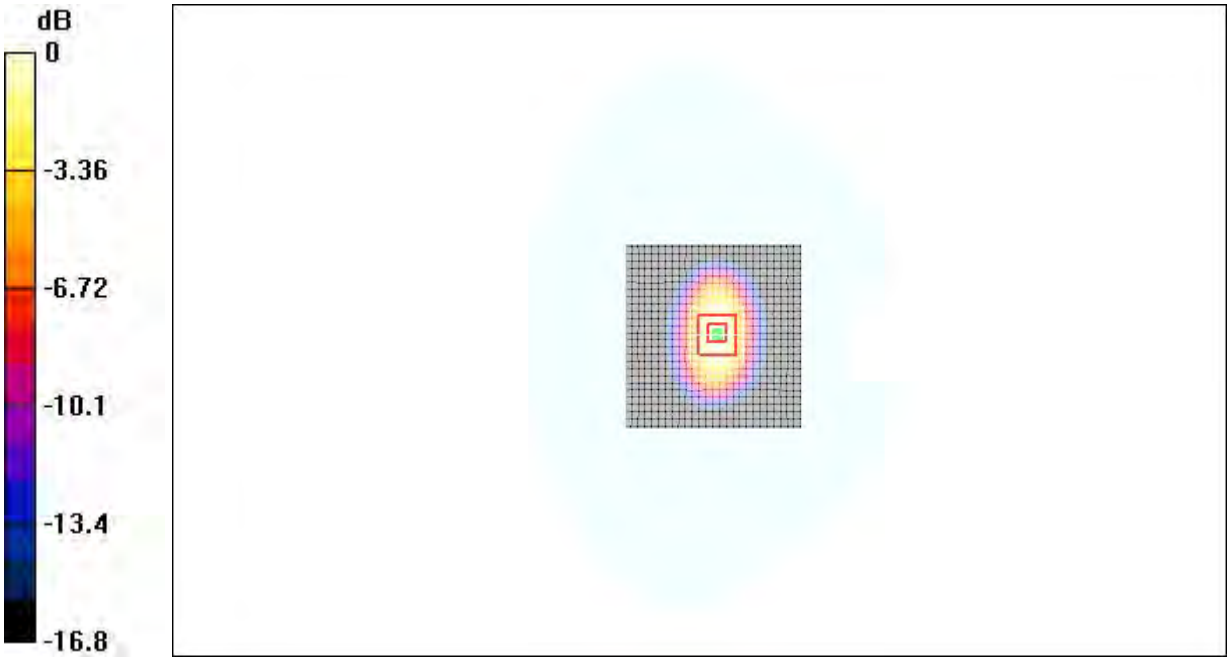
0 dB = 2.69mW/g

Fig.177 validation 835MHz 250mW

1900MHzDAE536Probe1736
Date/Time: 2007-01-19 07:45:17
Electronics: DAE3 Sn536
Medium: 1900 Head
Medium parameters used (interpolated): σ = 1.45 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Ambient Temperature:23.3°C Liqiud Temperature: 22.3°C
Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1
Probe: ET3DV6 - SN1736 ConvF(5.4, 5.4, 5.4)

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

System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 92.1 V/m; Power Drift = 0.1 dB
Peak SAR (extrapolated) = 16.9 W/kg
SAR(1 g) = 9.91 mW/g; SAR(10 g) = 5.27 mW/g
Maximum value of SAR (measured) = 11.3 mW/g



0 dB = 11.3mW/g

Fig.178 validation 1900MHz 250mW

ANNEX E: PROBE CALIBRATION CERTIFICATE

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Swizerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accreditation No.: SCS 108

Accredited by the Swiss Federal Office of metrology and Accreditation
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Client TMC China Certificate No: ET3DV6-1736_Dec06

CALIBRATION CERTIFICATE

Object	**ET3DV6-SN: 1736**
Calibration procedure(s)	**QA CAL-01.v5** **Calibration procedure for dosimetric E-field probes**
Calibration date:	**December 1, 2006**
Condition of the calibrated item	**In Tolerance**

This calibration certify documents the traceability to national standards, which realize the physical units of measurements(SI).
All calibrations have been conducted at an environment temperature (22±3)°C and humidity<70%

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID#	Cal Data (Calibrated by, Certification NO.)	Scheduled Calibration
Power meter E4419B	GB341293874	22-May-06 (METAS, NO. 251-00466)	May-07
Power sensor E4412A	MY41495277	22-May-06 (METAS, NO. 251-00466)	May-07
Power sensor E4412A	MY41498087	22-May-06 (METAS, NO. 251-00466)	May-07
Reference 20 dB Attenuator	SN:S5086 (20b)	22-May-06 (METAS, NO. 251-00467)	May-07
Reference Probe ES3DV2	SN:S5086 (20b)	22-May-06 (METAS, NO. 251-00467)	May-07
DAE4	SN:3013	13-Jan-06 (SPEAG, NO. ES3-3013_Jan06)	Jan-07
Reference Probe ES3DV2	SN: 907	11-Jun-06 (SPEAG, NO.DAE4-907_Jun06)	Jun-07

Secondary Standards	ID#	Check Data (in house)	Scheduled Calibration
RF generator HP8648C	US3642U01700	4-Dec-05(SPEAG, in house check Dec-03)	In house check: Dec-09
Network Analyzer HP 8753E	US37390585	10-Nov-05(SPEAG, NO. DAE4-901_Nov-04)	In house check: Nov-09

	Name	Function	Signature
Calibrated by:	Nico Vetterli	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Director	

Issued: December 1, 2006

This calibration certificate shall not be reported except in full without written approval of the laboratory.

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Federal Office of Metrology and Accreditation
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 108

Glossary:

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
Polarization φ	φ rotation around probe axis
Polarization ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta = 0$ is normal to probe axis

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
b) CENELEC EN 50361, "Basic standard for the measurement of Specific Absorption Rate related to human exposure to electromagnetic fields from mobile phones (300 MHz - 3 GHz), July 2001

Methods Applied and Interpretation of Parameters:

- *NORMx,y,z:* Assessed for E-field polarization $\vartheta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not effect the E^2-field uncertainty inside TSL (see below *ConvF*).
- *NORM(f)x,y,z = NORMx,y,z * frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of *ConvF*.
- *DCPx,y,z:* DCP are numerical linearization parameters assessed based on the data of power sweep (no uncertainty required). DCP does not depend on frequency nor media.
- *ConvF and Boundary Effect Parameters:* Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800$ MHz) and inside waveguide using analytical field distributions based on power measurements for $f > 800$ MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to *NORMx,y,z * ConvF* whereby the uncertainty corresponds to that given for *ConvF*. A frequency dependent *ConvF* is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- *Spherical isotropy (3D deviation from isotropy)*: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset*: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.

Probe ET3DV6

SN: 1736

Manufactured:	September 27, 2002
Last calibrated:	November 25, 2005
Recalibrated:	December 1, 2006

Calibrated for DASY System

DASY - Parameters of Probe: ET3DV6 SN:1736

Sensitivity in Free Space[A] Diode Compression[B]

NormX	**1.97** ± 10.1%	$\mu V/(V/m)^2$	DCP X	**93** mV
NormY	**1.75** ± 10.1%	$\mu V/(V/m)^2$	DCP Y	**93** mV
NormZ	**1.97** ± 10.1%	$\mu V/(V/m)^2$	DCP Z	**93** mV

Sensitivity in Tissue Simulating Liquid (Conversion Factors)

Please see Page 8.

Boundary Effect

TSL **900 MHz** **Typical SAR gradient: 5 % per mm**

Sensor Center to Phantom Surface Distance		**3.7 mm**	**4.7 mm**
SAR_{be} [%]	Without Correction Algorithm	9.6	5.0
SAR_{be} [%]	With Correction Algorithm	0.1	0.3

TSL **1810 MHz** **Typical SAR gradient: 10 % per mm**

Sensor Center to Phantom Surface Distance		**3.7 mm**	**4.7 mm**
SAR_{be} [%]	Without Correction Algorithm	13.2	8.8
SAR_{be} [%]	With Correction Algorithm	0.6	0.1

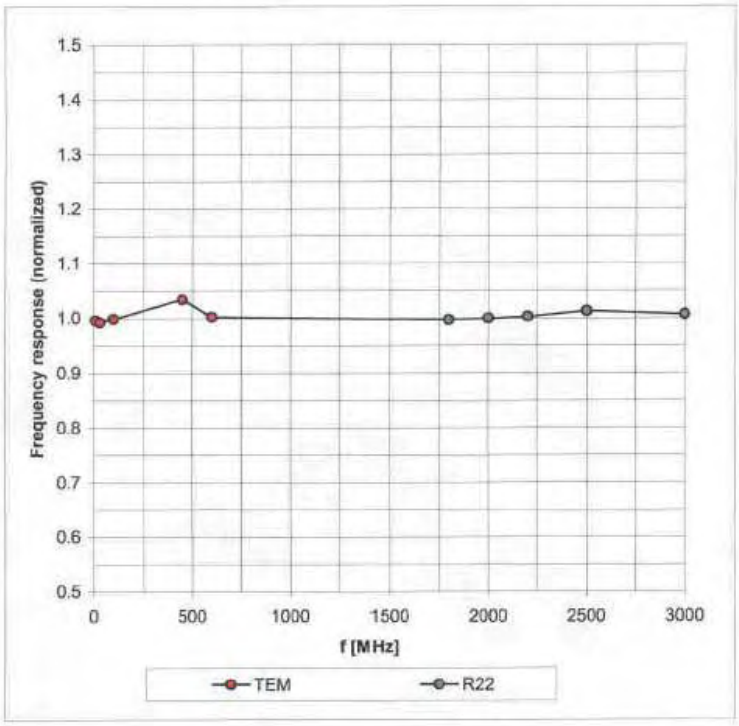
Sensor Offset

Probe Tip to Sensor Center	**2.7** mm

ET3DV6 SN: 1736 December 1, 2006

Frequency Response of E-Field

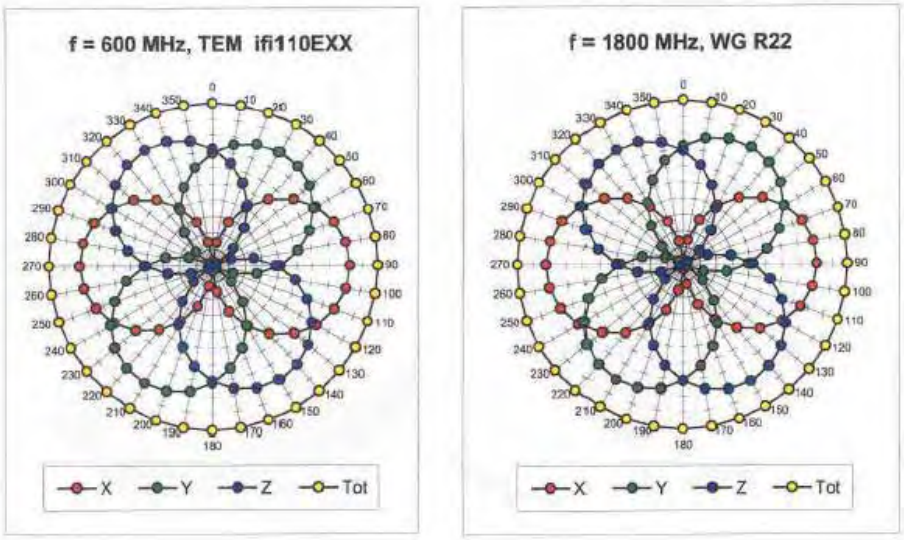
(TEM-Cell:ifi110 EXX, Waveguide: R22)

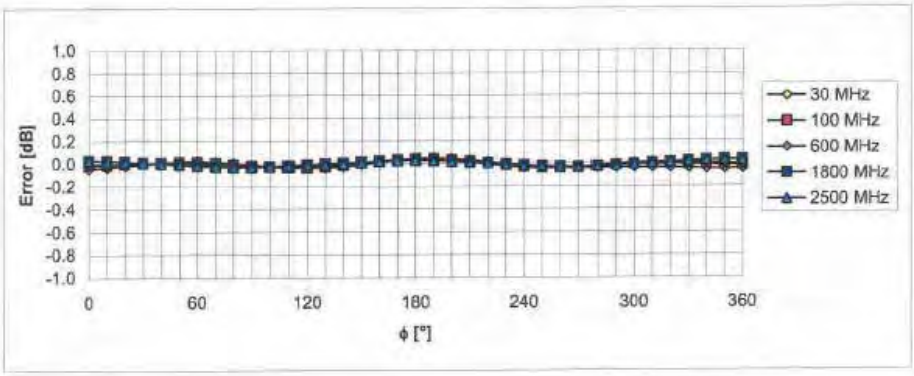


Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

ET3DV6 SN: 1736 December 1, 2006

Receiving Pattern (ϕ), ϑ = 0°



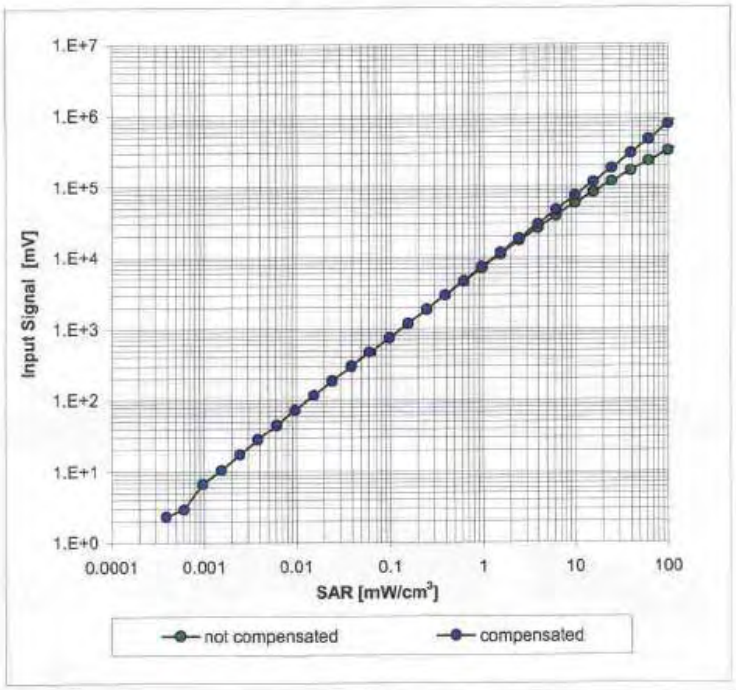


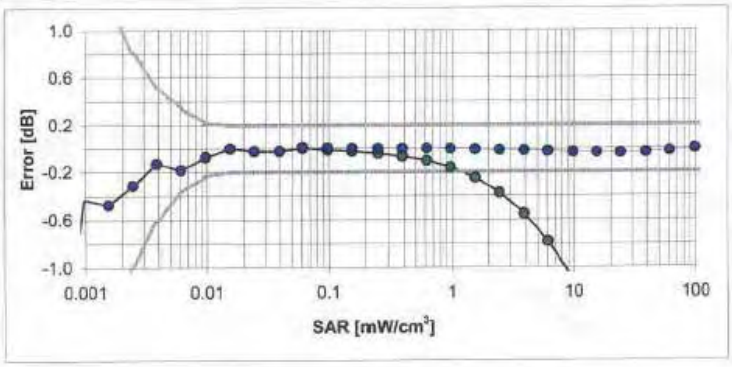
Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

ET3DV6 SN: 1736 December 1, 2006

Dynamic Range f(SAR_{head})

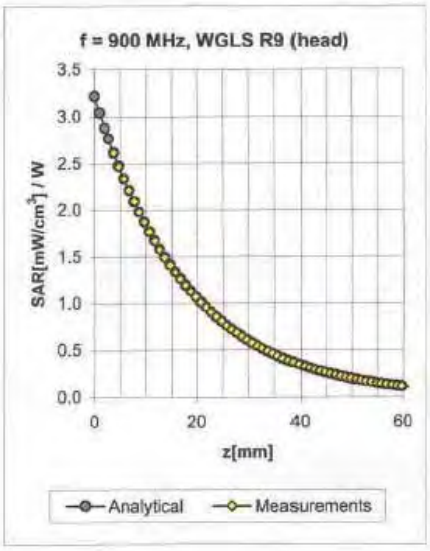
(Waveguide R22, f = 1800 MHz)

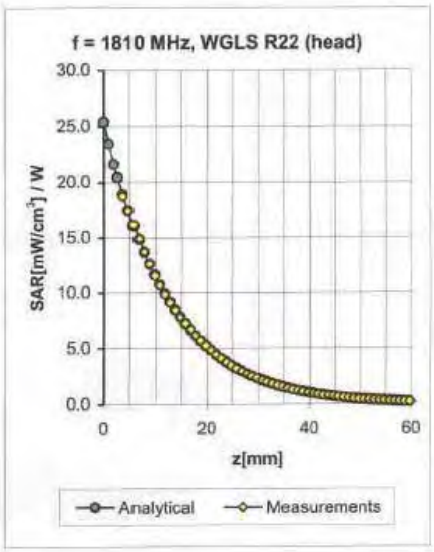




Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment





f [MHz]	Validity [MHz]^C	TSL	Permittivity	Conductivity	Alpha	Depth	ConvF Uncertainty
900	± 50 / ± 100	Head	41.5 ± 5%	0.97 ± 5%	0.56	1.85	6.51 ± 11.0% (k=2)
1810	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.57	2.47	5.40 ± 11.0% (k=2)
2450	± 50 / ± 100	Head	39.2 ± 5%	1.80 ± 5%	0.62	2.29	4.67 ± 11.8% (k=2)
450	± 50 / ± 100	Body	56.7 ± 5%	0.94 ± 5%	0.12	1.61	7.74 ± 13.3% (k=2)
900	± 50 / ± 100	Body	55.0 ± 5%	1.05 ± 5%	0.47	2.15	6.45 ± 11.0% (k=2)
1810	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.53	2.78	4.88 ± 11.0% (k=2)
2450	± 50 / ± 100	Body	52.7 ± 5%	1.95 ± 5%	0.65	2.11	4.35 ± 11.8% (k=2)

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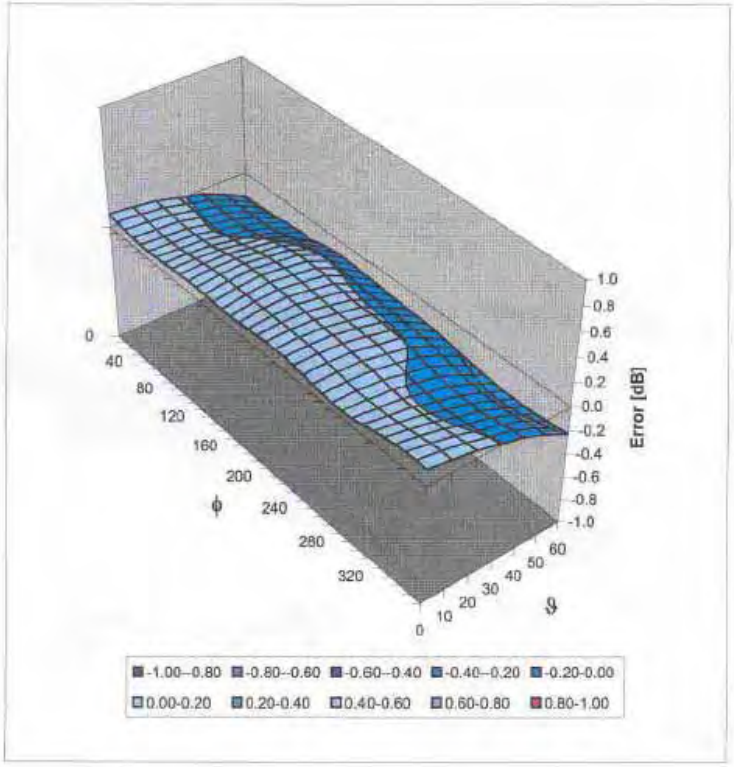
Deviation from Isotropy in HSL

Error (ϕ, ϑ), f = 900 MHz



Uncertainty of Spherical Isotropy Assessment: ± 2.6% (k=2)