A Test Lab Techno Corp.

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SAR EVALUATION REPORT

Test Report No.	:	**0701FS13**
Applicant	:	**Inventec Corporation**
FCC ID	:	**DGIBC0153AAA000**
Trade Name	:	**Inventec**
Model Number	:	**Mercury 619**
Product Type		**PDA PHONE**
Dates of Test	:	**Dec. 12, 2006 – Feb.12,2007**
Test Environment	:	**Ambient Temperature： 22 ±3˚C** **Relative Humidity：40 - 70 %**
Test Specification	:	**Standard C95.1-1999** **IEEE Std. 1528-2003**
Max. SAR	:	**0.191 W/kg Head SAR (GSM 850)** **0.270 W/kg Head SAR (PCS 1900)** **0.396 W/kg Body SAR (GSM 850)** **0.216 W/kg Body SAR (PCS 1900)** **0.678 W/kg Body SAR (GSM 850 / GPRS with Bluetooth)** **0.386 W/kg Body SAR (PCS 1900 / GPRS with Bluetooth)** **0.509 W/kg Body SAR (GSM 850 / EGPRS with Bluetooth)** **0.308 W/kg Body SAR (PCS 1900 / EGPRS with Bluetooth)**
FCC Rule Part(s)	:	**2.1093;FCC/OET Bulletin 65 Supplement C [July 2001]**
Test Lab	:	**Changan Lab**

1. The test operations have to be performed with cautious behavior, the test results are as attached.
2. The test results are under chamber environment of A Test Lab Techno Corp. A Test Lab Techno Corp. does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples.
3. The measurement report has to be written approval of A Test Lab Techno Corp. It may only be reproduced or published in full.

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Measurement Center Manager

Sam Chuang **20070213**
Testing Engineer

Contents

1. Description of Equipment Under Test (EUT)

Applicant : **Inventec Corporation**
No.66,Hou-Kang Street Shih-Lin District, Taipei 111710, Taiwan

Manufacturer	:	Inventec Corporation
FCC ID	:	DGIBC0153AAA000
Product Type	:	PDA PHONE
Trade Name	:	Inventec
Model Number	:	Mercury 619
Test Device	:	Production Unit
Tx Frequency	:	824.2 - 848.8 MHz (GSM 850) 1850.2 - 1909.8 MHz (PCS 1900)
Max. RF Conducted Power	:	1.365 W - 32.35 dBm (GSM 850) 0.935 W - 29.71 dBm (PCS 1900) 1.396 W - 31.53 dBm (GSM 850 /GPRS with Bluetooth) 0.634 W - 28.80 dBm (PCS 1900 / GPRS with Bluetooth) 0.524 W - 27.24 dBm (GSM 850 /EGPRS with Bluetooth) 0.439 W - 26.58 dBm (PCS 1900 / EGPRS with Bluetooth)
Max. SAR Measurement	:	0.191 W/kg Head SAR (GSM 850) 0.270 W/kg Head SAR (PCS 1900) 0.396 W/kg Body SAR (GSM 850) 0.216 W/kg Body SAR (PCS 1900) 0.678 W/kg Body SAR (GSM 850 / GPRS with Bluetooth) 0.386 W/kg Body SAR (PCS 1900 / GPRS with Bluetooth) 0.509 W/kg Body SAR (GSM 850 / EGPRS with Bluetooth) 0.308 W/kg Body SAR (PCS 1900 / EGPRS with Bluetooth)
HW Version	:	1.0
SW Version	:	021
Antenna Type	:	Internal Type
Device Category	:	Portable
RF Exposure Environment	:	General Population / Uncontrolled
Battery Option	:	Standard
Application Type	:	Certification

This wireless portable device has been shown to be capable of compliance for localized specific absorption rate (SAR) for uncontrolled environment / general population exposure limits specified in Standard C95.1-1999 and had been tested in accordance with the measurement procedures specified in IEEE Std. 1528-2003.

	
Front view	**Back view**

Figure 1. EUT Photo

2. Other Accessories

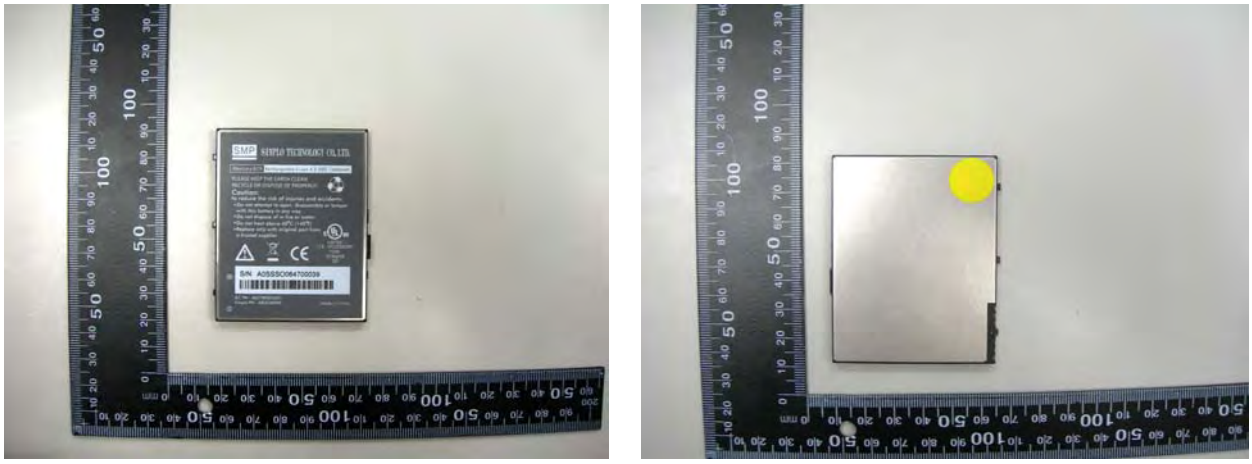


Figure 2. Battery(Li-ion 4.2V 1660mAh)

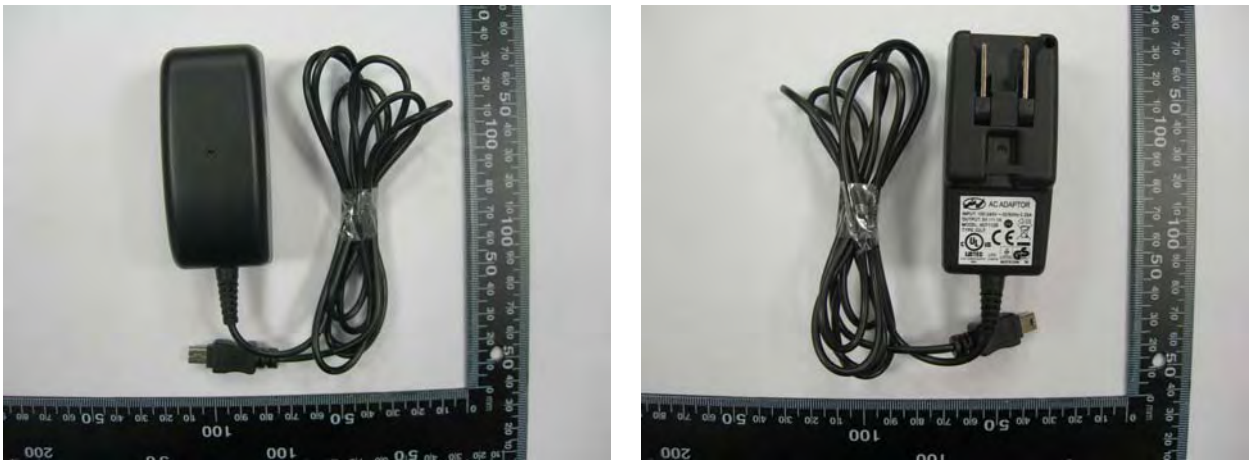


Figure 3. Base-AC Power

3. Introduction

The A Test Lab Techno Corp. has performed measurements of the maximum potential exposure to the user of **Inventec Corporation Trade Name：Inventec　Model(s)：Mercury 619**. The test procedures, as described in American National Standards, Institute C95.1 - 1999〔1〕, FCC/OET Bulletin 65 Supplement C [July 2001] were employed and they specify the maximum exposure limit of 1.6mW/g as averaged over any 1 gram of tissue for portable devices being used within 20cm between user and EUT in the uncontrolled environment. A description of the product and operating configuration, detailed summary of the test results, methodology and procedures used in the equipment used are included within this test report.

4. SAR Definition

Specific Absorption Rate (SAR) is defined as the time derivative (rate) of the incremental energy (dw) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). It is also defined as the rate of RF energy absorption per unit mass at a point in an absorbing body (see Figure 2).

$$SAR = \frac{d}{dt}\left(\frac{dw}{dm}\right) = \frac{d}{dt}\left(\frac{dw}{\rho dv}\right)$$

Figure 4. SAR Mathematical Equation

SAR is expressed in units of Watts per kilogram (W/kg)

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

Where：

σ = conductivity of the tissue (S/m)

ρ = mass density of the tissue (kg/m^3)

E = RMS electric field strength (V/m)

＊**Note**：

The primary factors that control rate of energy absorption were found to be the wavelength of the incident field in relations to the dimensions and geometry of the irradiated organism, the orientation of the organism in relation to the polarity of field vectors, the presence of reflecting surfaces, and whether conductive contact is made by the organism with a ground plane〔2〕

5. SAR Measurement Setup

These measurements were performed with the automated near-field scanning system DASY4 from Schmid & Partner Engineering AG (SPEAG). The system is based on a high precision robot (working range greater than 0.9m) which positions the probes with a positional repeatability of better than ±0.025mm. 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, teach pendant (Joystick), and remote control, is used to drive the robot motors. The Measurement Server is based on a PC/104 CPU board with a 166MHz low-power Pentium, 32MB chipdisk and 64MB RAM. The necessary circuits for communication with either the DAE3 electronic box as well as the 16-bit AD-converter system for optical detection and digital I/O interface are contained on the DASY4 I/O-board, which is directly connected to the PC/104 bus of the CPU board. The PC consists of the Intel Pentium 4 2.4GHz computer with Windows2000 system and SAR Measurement Software DASY4, Post Processor SEMCAD, monitor, mouse, and keyboard. The Staubli 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 converter (EOC). The EOC performs the conversion from the optical into digital electric signal of the DAE and transfers data to the Measurement Server.

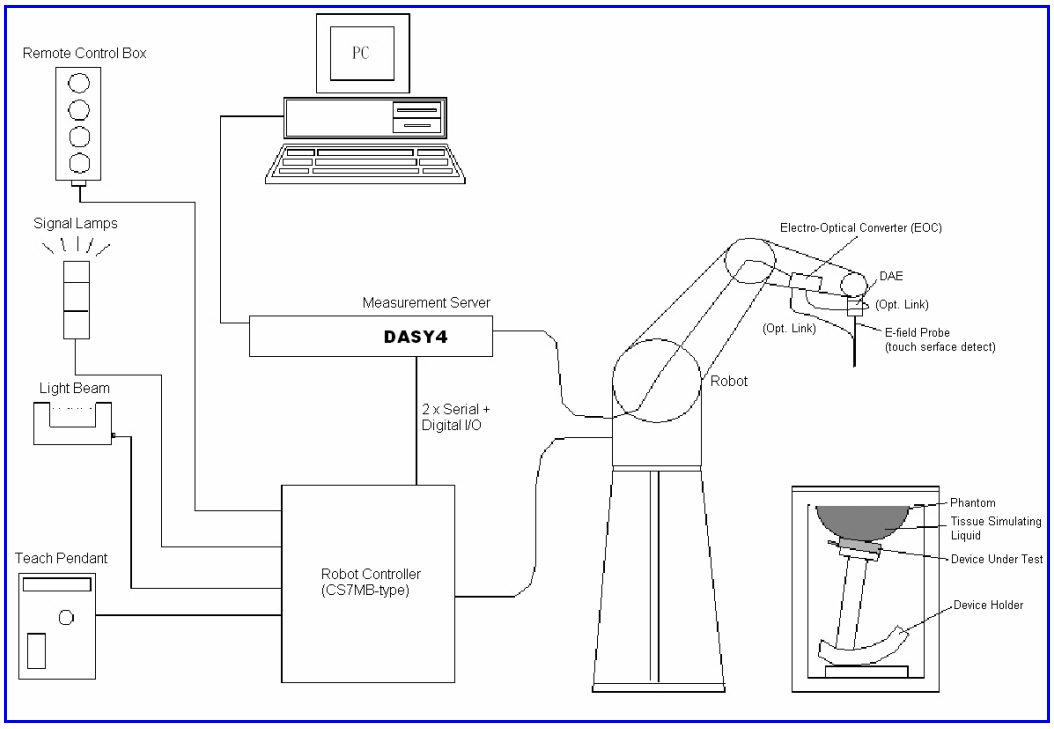


Figure 5. SAR Lab Test Measurement Setup

The DAE3 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. The system is described in detail in〔3〕.

6. System Components

6.1 DASY4 E-Field Probe System

The SAR measurements were conducted with the dosimetric probe ET3DV6 (manufactured by SPEAG), designed in the classical triangular configuration〔3〕and optimized for dosimetric evaluation. The probes is constructed using the thick film technique; with printed resistive lines on ceramic substrates. The probe is equipped with an optical multi-fiber line ending at the front of the probe tip. It is connected to the EOC box on the robot arm and provides an automatic detection of the phantom surface. Half of the fibers are connected to a pulsed infrared transmitter, the other half to a synchronized receiver. As the probe approaches the surface, the reflection from the surface produces a coupling from the transmitting to the receiving fibers. This reflection increases first during the approach, reaches maximum and then decreases. If the probe is flatly touching the surface, the coupling is zero. The distance of the coupling maximum to the surface is independent of the surface reflectivity and largely independent of the surface to probe angle. The DASY4 software reads the reflection during a software approach and looks for the maximum using a 2nd order fitting. The approach is stopped when reaching the maximum.

6.1.1 EX3DV3 E-Field Probe Specification

Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection System (EX3DV3 only) Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., glycol)
Calibration	In air from 10 MHz to 6 GHz In brain and muscle simulating tissue at frequencies of 900MHz, 1800MHz, 5200MHz and 5500MHz and 5800MHz (accuracy ±8%) Calibration for other liquids and frequencies upon request
Frequency	10 MHz to > 6 GHz; Linearity: ±0.2 dB (30 MHz to 3 GHz)
Directivity	±0.3 dB in brain tissue (rotation around probe axis) ±0.5 dB in brain tissue (rotation normal probe axis)
Dynamic Range	10 μW/g to > 100mW/g; Linearity: ±0.2dB
Surface Detection	±0.2 mm repeatability in air and clear liquids over diffuse reflecting surface(EX3DV3 only)
Dimensions	Overall length: 330mm Tip length: 20mm Body diameter: 12mm Tip diameter: 2.5mm Distance from probe tip to dipole centers: 1.0mm
Application	General dosimetry up to 6GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms

Figure 6. EX3DV3 E-field Probe

Figure 7. Probe setup on robot

6.1.2 EX3DV3 E-Field Probe Calibration

Each probe is calibrated according to a dosimetric assessment procedure described in〔4〕with accuracy better than ±10%. The spherical isotropy was evaluated with the procedure described in〔5〕and found to be better than ±0.25dB. The sensitivity parameters (NormX, NormY, and 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 1GHz, and in a wave guide above 1GHz 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 (head or body),

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).

6.2 Data Acquisition Electronic (DAE) System

Cell Controller

Processor：	Intel Pentium 4
Clock Speed：	2.4GHz
Operating System：	Windows 2000 Professional

Data Converter

Features：	Signal Amplifier, multiplexer, A/D converter, and control logic
Software：	DASY4 v4.7 (Build 44) & SEMCAD v1.8 (Build 171)
	DASY4 v4.7 (Build 53) & SEMCAD v1.8 (Build 172)
Connecting Lines：	Optical downlink for data and status info
	Optical uplink for commands and clock

6.3 Robot

Positioner：	Stäubli Unimation Corp. Robot Model: RX90L
Repeatability：	±0.025 mm
No. of Axis：	6

6.4 Measurement Server

Processor：	PC/104 with a 166MHz low-power Pentium
I/O-board：	Link to DAE3
	16-bit A/D converter for surface detection system
	Digital I/O interface
	Serial link to robot
	Direct emergency stop output for robot

6.5 Device Holder for Transmitters

In combination with the SAM Twin Phantom V4.0, the Mounting Device (POM) enables the rotation of the mounted transmitter in spherical coordinates whereby the rotation points is the ear opening. The devices can be easily, accurately, and repeat ably positioned according to the IEEE SCC34-SC2 and CENELEC specifications. The device holder can be locked at different phantom locations (left head, right head, and flat phantom).

∗**Note**：A simulating human hand is not used due to the complex anatomical and geometrical structure of the hand that may produced infinite number of configurations〔6〕. To produce the worst-case condition (the hand absorbs antenna output power), the hand is omitted during the tests.

Larger DUT cannot be tested using this device holder. Instead a support of bigger polystyrene cubes and thin polystyrene plates is used to position the DUT in all relevant positions to find and measure spots with maximum SAR values. Therefore those devices are normally only tested at the flat part of the SAM.

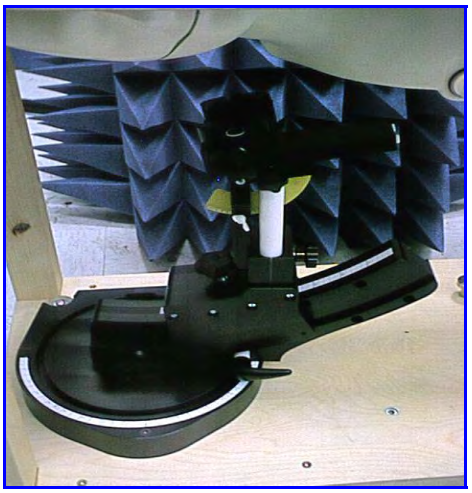


Figure 8. Device Holder

6.6 Phantom - SAM v4.0

The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE 1528-2003, CENELEC 50361 and IEC 62209. 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 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 with the robot.

Figure 9. SAM Twin Phantom

Shell Thickness	2 ±0.2 mm
Filling Volume	Approx. 25 liters
Dimensions	810x1000x500 mm (HxLxW)

Table 1. Specification of SAM v4.0

6.7 Data Storage and Evaluation

6.7.1 Data Storage

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

6.7.2 Data Evaluation

The DASY4 post processing software (SEMCAD) automatically executes the following procedures to calculate the field units from the microvolt readings at the probe connector. The parameters used in the evaluation are stored in the configuration modules of the software：

Probe parameters：	- Sensitivity	Normi, ai0, ai1, ai2
	- Conversion factor	ConvFi
	- Diode compression point	dcpi
Device parameters：	- Frequency	f
	- Crest factor	cf
Media parameters：	- Conductivity	σ
	- Density	ρ

These parameters must be set correctly in the software. They can be found in the component documents or they can be imported into the software from the configuration files issued for the DASY components. In the direct measuring mode of the multimeter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.
The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics. If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as：

$$V_i = U_i + U_i^2 \cdot \frac{cf}{dcp_i}$$

with V_i = compensated signal of channel i (i = x, y, z)
U_i = input signal of channel i (i = x, y, z)
cf = crest factor of exciting field (DASY parameter)
dcp_i = diode compression point (DASY parameter)

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

E-field probes： $$E_i = \sqrt{\frac{V_i}{Norm_i \cdot ConvF}}$$

H-field probes：

$$H_i = \sqrt{V_i} \cdot \frac{a_{i0} + a_{i1} f + a_{i2} f^2}{f}$$

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

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

μV/(V/m)^2 for E-field Probes

$ConvF$ = sensitivity enhancement in solution

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

f = carrier frequency [GHz]

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

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

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

$$E_{tot} = \sqrt{E_x^2 + E_y^2 + E_z^2}$$

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

$$SAR = E_{tot}^2 \cdot \frac{\sigma}{\rho \cdot 1000}$$

with SAR = local specific absorption rate in mW/g

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

σ = conductivity in [mho/m] or [Siemens/m]

ρ = equivalent tissue density in g/cm^3

∗**Note**：that the density is set to 1, to account for actual head tissue density rather than the density of the tissue simulating liquid.

The power flow density is calculated assuming the excitation field to be a free space field.

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

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

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

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

7. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	Dosimetric E-Filed Probe	ET3DV6	1531	Jul. 21, 2006	Jul. 21, 2007
SPEAG	Dosimetric E-Filed Probe	ET3DV6	1530	Sep. 21, 2006	Sep. 21, 2007
SPEAG	900MHz System Validation Kit	D900V2	SN:073	Jul. 17, 2006	Jul. 17, 2007
SPEAG	900MHz System Validation Kit	D900V2	SN:172	Jan. 19, 2006 Jan. 22, 2007	Jan. 19, 2007 Jan. 22, 2008
SPEAG	1800MHz System Validation Kit	D1800V2	SN:2d057	Jan. 24, 2006	Jan. 24, 2007
SPEAG	1800MHz System Validation Kit	D1800V2	SN:265	Oct. 17, 2006	Oct. 17, 2007
SPEAG	Data Acquisition Electronics	DAE3	SN:393	Sep. 05, 2006	Sep. 05, 2007
SPEAG	Data Acquisition Electronics	DAE4	SN:541	Oct. 16, 2006	Oct. 16, 2007
SPEAG	Device Holder	N/A	N/A	NCR	NCR
SPEAG	Phantom	SAM V4.0	1009	NCR	NCR
SPEAG	Robot	Staubli RX90L	F00/589B1/A/01	NCR	NCR
SPEAG	Software	DASY4 V4.7 Build 44	N/A	NCR	NCR
SPEAG	Software	SEMCAD V1.8 Build 171	N/A	NCR	NCR
SPEAG	Software	DASY4 V4.7 Build 53	N/A	NCR	NCR
SPEAG	Software	SEMCAD V1.8 Build 172	N/A	NCR	NCR
SPEAG	Measurement Server	SE UMS 001 BA	1021	NCR	NCR
Agilent	Wireless Communication Test Set	8960(E5515C)	GB41450409	Mar. 01, 2006	Mar. 01, 2007
Agilent	S-Parameter Network Analyzer	8720ES	US39172472	Aug. 15, 2006	Aug. 15, 2007
Agilent	Dielectric Probe Kit	85070C	US99360094	NCR	NCR
Agilent	Power Meter	E4418B	GB40206143	Apr. 24, 2006	Apr. 24, 2007
Agilent	Power Sensor	8481H	3318A20779	Apr. 25, 2006	Apr. 25, 2007
Agilent	Signal Generator	8648C	3847A05201	Jul. 06, 2006	Jul. 06, 2007
Agilent	Dual Directional Coupler	778D	50334	NCR	NCR
Mini-Circuits	Power Amplifier	ZHL-42W-SMA	D111103#5	NCR	NCR
Mini-Circuits	Power Amplifier	ZVE-8G-SMA	D042005 671800514	NCR	NCR

Table 2. Test Equipment List

8. Tissue Simulating Liquids

The mixture is calibrated to obtain proper dielectric constant (permittivity) and conductivity of the tissue.

The dielectric parameters of the liquids were verified prior to the SAR evaluation using an 85070C Dielectric Probe Kit and an 8720ES Network Analyzer.

INGREDIENT	FREQUENCY	
	HSL5G (Head)	MSL5G (Body)
Water	64%	78%
Mineral Oil	18%	11%
Emulsifiers	15%	9%
Additives and Salt	3%	2%

Table 3. Recipes for Head & Body Tissue Simulating Liquids

IEEE SCC-34/SC-2 in 1528 recommended Tissue Dielectric Parameters

The head tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 in 1528 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness variations in human head. Other head and body tissue parameters that have not been specified in 1528 are derived from the tissue dielectric parameters computed from the 4-Cole-Cole equation and extrapolated according to the head parameter specified in 1528.

Target Frequency	Head		Body	
(MHz)	ε_r	σ (S/m)	ε_r	σ (S/m)
150	52.3	0.76	61.9	0.80
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94
835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	0.98	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800 - 2000	40.0	1.40	53.3	1.52
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	52.0	2.73
5800	35.3	5.27	48.2	6.00
(ε_r = relative permittivity, σ = conductivity and ρ = 1000 kg/m^3)				

Table 4. Tissue dielectric parameters for head and body phantoms

8.1 Liquid Confirmation

8.1.1 Parameters

Liquid Verify								
Ambient Temperature： 22 ± 3 °C；Relative Humidity：40 -70%								
Liquid Type	**Frequency**	**Temp (°C)**	**Parameters**	**Target Value**	**Measured Value**	**Deviation (%)**	**Limit (%)**	**Measured Date**
900MHz Head	900MHz	22.0	**εr**	41.5	**40.5**	-2.40 %	± 5 %	Dec. 12, 2006
			σ	0.97	**0.959**	-1.13 %	± 5 %	
900MHz Body	900MHz	22.0	**εr**	55.5	**53.9**	-2.88 %	± 5 %	Dec. 14, 2006
			σ	1.05	**1.02**	-2.85 %	± 5 %	
900MHz Body	900MHz	22.0	**εr**	55.5	**53.6**	-3.42%	± 5 %	Jan. 10, 2007
			σ	1.05	**1.50**	0 %	± 5 %	
900MHz Body	1800MHz	22.0	**εr**	55.5	**53.6**	-3.42%	± 5 %	Feb. 06, 2007
			σ	1.05	**1.05**	0 %	± 5 %	
900MHz Body	1800MHz	22.0	**εr**	55.5	**53.6**	-3.42%	± 5 %	Feb. 12, 2007
			σ	1.05	**1.05**	0 %	± 5 %	
1800MHz Head	1800MHz	22.0	**εr**	40.0	**39.6**	-1.00%	± 5 %	Dec. 14, 2006
			σ	1.40	**1.45**	3.57 %	± 5 %	
1800MHz Body	1800MHz	22.0	**εr**	53.3	**52.5**	-1.50 %	± 5 %	Dec. 14, 2006
			σ	1.52	**1.56**	2.63 %	± 5 %	
1800MHz Body	900MHz	22.0	**εr**	53.3	**51.9**	-2.63 %	± 5 %	Jan. 10, 2007
			σ	1.52	**1.56**	2.63 %	± 5 %	
1800MHz Body	1800MHz	22.0	**εr**	53.3	**51.9**	-2.63 %	± 5 %	Feb. 06, 2007
			σ	1.52	**1.56**	2.63 %	± 5 %	
1800MHz Body	900MHz	22.0	**εr**	53.3	**51.9**	-2.63 %	± 5 %	Feb. 07, 2007
			σ	1.52	**1.56**	2.63 %	± 5 %	
1800MHz Body	1800MHz	22.0	**εr**	53.3	**51.9**	-2.63 %	± 5 %	Feb. 12, 2007
			σ	1.52	**1.56**	2.63 %	± 5 %	

Table 5. Measured Tissue dielectric parameters for head and body phantoms

8.1.2 Liquid Depth

The liquid level was during measurement 15cm ±0.5cm.

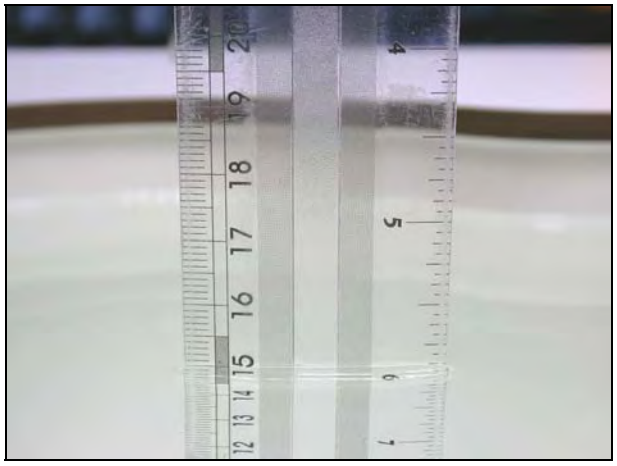


Figure 10. Head-Tissue-Simulating-Liquid

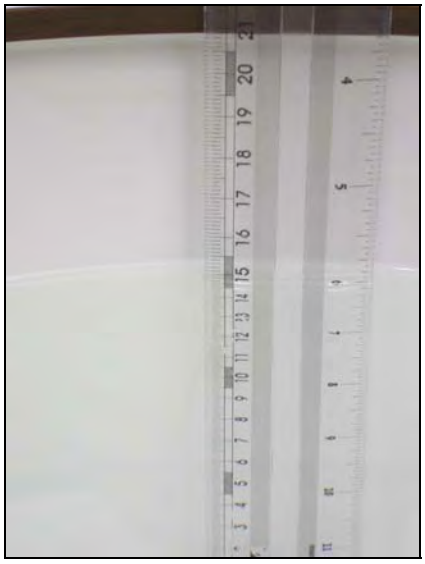


Figure 11. Body-Tissue-Simulating-Liquid

9. Measurement Process

9.1 Device and Test Conditions

The Test Device was provided by **Inventec Corporation** for this evaluation. The spatial peak SAR values were assessed for the lowest, middle and highest channels defined by **GSM 850** (#128=824.2MHz, #190=836.6MHz, #251=848.8MHz) and **PCS 1900** (#512=1850.2MHz, #661=1880.0MHz, #810=1909.8MHz) systems. The antenna(s), battery and accessories shall be those specified by the manufacturer. The battery shall be fully charged before each measurement and there shall be no external connections.

Usage	Operates with a built-in test mode by client		Distance between antenna axis at the joint and the liquid surface:	For Head, EUT left head, right head, to phantom, 0mm separation. For Body, EUT front to phantom, 15mm separation.	
Simulating human Head/Body	Body		EUT Battery	Fully-charged with Ni-MH batteries.	
Conducted power	Channel		Frequency MHz	Before SAR Test (dBm)	After SAR Test (dBm)
	GSM 850	Lowest CH - 128	824.2	31.32	31.31
		Middle CH - 190	836.6	32.31	32.30
		Highest CH - 251	848.8	32.35	32.34
	GSM 850 (GPRS/BT)	Lowest CH - 128	824.2	31.45	31.44
		Middle CH - 190	836.6	31.52	32.51
		Highest CH - 251	848.8	31.53	32.50
	GSM 850 (EGPRS/BT)	Lowest CH - 128	824.2	27.19	27.18
		Middle CH - 190	836.6	27.24	27.23
		Highest CH - 251	848.8	27.22	27.21
	PCS 1900	Lowest CH - 512	1850.2	29.44	29.43
		Middle CH - 661	1880.0	29.71	29.70
		Highest CH - 810	1909.8	29.32	29.31
	PCS 1900 (GPRS/BT)	Lowest CH - 512	1850.2	28.02	28.01
		Middle CH - 661	1880.0	28.37	28.36
		Highest CH - 810	1909.8	28.80	28.79
	PCS 1900 (EGPRS/BT)	Lowest CH - 512	1850.2	26.42	26.41
		Middle CH - 661	1880.0	26.40	26.39
		Highest CH - 810	1909.8	26.58	26.57

Note:

1. The EUT has built-in test mode that used to evaluate SAR.
2. The EUT take Nickel-Metal as its power source. Each test was preceded under the condition of fully-charged EUT.

9.2 System Performance Check

9.2.1 Symmetric Dipoles for System Validation

Construction	Symmetrical dipole with I/4 balun enables measurement of feed point impedance with NWA matched for use near flat phantoms filled with head simulating solutions Includes distance holder and tripod adaptor Calibration Calibrated SAR value for specified position and input power at the flat phantom in head simulating solutions.
Frequency	450, 900, 1800, 2000, 2450, 5000MHz
Return Loss	> 20 dB at specified validation position
Power Capability	> 100 W (f < 1GHz); > 40 W (f > 1GHz)
Options	Dipoles for other frequencies or solutions and other calibration conditions are available upon request
Dimensions	D450V2：dipole length 270 mm; overall height 330 mm D900V2：dipole length 149 mm; overall height 330 mm D1800V2：dipole length 72 mm; overall height 300 mm D2000V2：dipole length 65 mm; overall height 300 mm D2450V2：dipole length 51.5 mm; overall height 300 mm D5GHzV2：dipole length 20.6 mm; overall height 450 mm

Figure 12. Validation Kit

9.2.2 Validation

Prior to the assessment, the system validation kit was used to test whether the system was operating within its specifications of ± 7%. The validation was performed at 850MHz and 1900MHz.

Validation kit	Mixture Type	SAR_{1g} [mW/g]	SAR_{10g} [mW/g]	Date of Calibration
D900V2-SN073	Head	10.96	7.04	Jul, 17, 2006
	Body	11.12	7.2	
D900V2-SN172	Head	10.76	6.84	Jan, 19, 2006
	Body	10.64	6.84	
	Head	10.68	6.83	Jan, 22, 2007
	Body	10.52	6.88	

Frequency (MHz)	Power (dBm)	SAR_{1g} (mW/g)	SAR_{10g} (mW/g)	Drift (dB)	Difference percentage		Date
					1g	10g	
900 (Head)	250mW	2.79	1.81	-0.065	1.8 %	2.8 %	Dec. 12, 2006
	Normalize to 1 Watt	11.16	7.24				
900 (Body)	250mW	2.84	1.85	-0.015	2.2 %	2.8 %	Dec. 14, 2006
	Normalize to 1 Watt	11.36	7.4				
900 (Body)	250mW	2.86	1.86	-0.064	2.9 %	3.3 %	Jan. 10, 2007
	Normalize to 1 Watt	11.44	7.44				
900 (Body)	250mW	2.86	1.86	-0.030	2.9 %	3.3 %	Feb. 06, 2007
	Normalize to 1 Watt	11.44	7.44				
900 (Body)	250mW	2.56	1.78	-0.061	-2.7 %	3.5 %	Feb. 12, 2007
	Normalize to 1 Watt	10.24	7.12				

Validation kit	Mixture Type	SAR_{1g} [mW/g]	SAR_{10g} [mW/g]	Date of Calibration
D1800V2-SN2d057	Head	39.68	21.00	Jan, 24, 2006
	Body	39.72	21.32	
D1800V2-SN265	Head	37.60	20.08	Oct, 17, 2006
	Body	39.04	20.88	

Frequency (MHz)	Power (dBm)	SAR_{1g} (mW/g)	SAR_{10g} (mW/g)	Drift (dB)	Difference percentage		Date
					1g	10g	
1800 (Head)	250mW	9.99	5.27	**-0.083**	**0.7 %**	**0.4 %**	**Dec. 14, 2006**
	Normalize to 1 Watt	**39.96**	**21.08**				
1800 (Body)	250mW	10.1	5.4	**-0.023**	**1.7 %**	**1.3 %**	**Dec. 14, 2006**
	Normalize to 1 Watt	**40.4**	**21.6**				
1800 (Body)	250mW	9.94	5.35	**-0.036**	**1.8 %**	**2.5 %**	**Jan. 10, 2007**
	Normalize to 1 Watt	**39.76**	**21.4**				
1800 (Body)	250mW	9.29	4.99	**-0.198**	**-4.8 %**	**-4.4 %**	**Feb. 06, 2007**
	Normalize to 1 Watt	**37.16**	**19.96**				
1800 (Body)	250mW	10.2	5.55	**-0.026**	**4.5 %**	**6.3 %**	**Feb. 07, 2007**
	Normalize to 1 Watt	**40.8**	**22.2**				
1800 (Body)	250mW	9.46	5.19	**-0.196**	**-3.1 %**	**-0.6 %**	**Feb. 12, 2007**
	Normalize to 1 Watt	**37.84**	**20.76**				

9.3 Dosimetric Assessment Setup

9.3.1 Headset Test Position – Body-Worn

Body-Worn Configuration

Body–worn operating configurations should be tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in normal use configurations. Devices with a handset output should be tested with a handset connected to the device.

Body-worn accessories may not always be supplied or available as options for some devices that are intended to be authorized for body-worn use. A separation distance of 1.5 cm between the back of the device and a flat phantom is recommended for testing body-worn SAR compliance under such circumstances.

For this test：

☐ The EUT is placed into the holster/belt clip and the holster is positioned against the surface of the phantom in a normal operating position.

■ Since this EUT doesn't supply any body-worn accessory to the end user, a distance of 15 mm was tested to confirm the necessary "minimum SAR separation distance".

(＊Note：This distance includes the 2 mm phantom shell thickness.)

9.3.2 Measurement Procedures

The evaluation was performed with the following procedures：

Surface Check： A surface checks job gathers data used with optical surface detection. It determines the distance from the phantom surface where the reflection from the optical detector has its peak. Any following measurement jobs using optical surface detection will then rely on this value. The surface check performs its search a specified number of times, so that the repeatability can be verified. The probe tip distance is 1.3mm to phantom inner surface during scans.

Reference： The reference job measures the field at a specified reference position, at 4 mm from the selected section's grid reference point.

Area Scan： The area scan is used as a fast scan in two dimensions to find the area of high field values, before doing a finer measurement around the hot spot. The sophisticated interpolation routines can find the maximum locations even in relatively coarse grids. When an area scan has measured all reachable points, it computes the field maxima found in the scanned area, within a range of the global maximum. Any following zoom scan within the same procedure will then perform fine scans around these maxima. The area covered the entire dimension of the EUT and the horizontal grid spacing was 15 mm × 15 mm.

Zoom Scan： Zoom scans are used to assess the highest averaged SAR for cubic averaging volumes with 1 g and 10 g of simulated tissue. The zoom scan measures 5 x 5 x 7 points in a 32 x 32 x 30 mm cube whose base faces are centered around the maxima returned from a preceding area scan within the same procedure.

Drift： The drift job measures the field at the same location as the most recent reference job within the same procedure, with the same settings. The drift measurement gives the field difference in dB from the last reference measurement. Several drift measurements are possible for each reference measurement. This allows monitoring of the power drift of the device in the batch process. If the value changed by more than 5%, the evaluation was repeated.

9.4 Spatial Peak SAR Evaluation

The DASY4 software includes all numerical procedures necessary to evaluate the spatial peak SAR values. Based on the Draft: SCC-34, SC-2, WG-2 - Computational Dosimetry, IEEE P1529/D0.0 (Draft Recommended Practice for Determining the Spatial-Peak Specific Absorption Rate (SAR) Associated with the Use of Wireless Handsets - Computational Techniques), a new algorithm has been implemented. The spatial-peak SAR can be computed over any required mass.

The base for the evaluation is a ”cube” measurement in a volume of (32x32x30)mm^3 (5x5x7 points). The measured volume must include the 1g and 10g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan. If the 10g cube or both cubes are not entirely inside the measured volumes, the system issues a warning regarding the evaluated spatial peak values within the Postprocessing engine (SEMCAD). This means that if the measured volume is shifted, higher values might be possible. To get the correct values you can use a finer measurement grid for the area scan. In complicated field distributions, a large grid spacing for the area scan might miss some details and give an incorrectly interpolated peak location.
The entire evaluation of the spatial peak values is performed within the Postprocessing engine (SEMCAD). The system always gives the maximum values for the 1g and 10g cubes. The algorithm to find the cube with highest averaged SAR is divided into three stages:

Interpolation and Extrapolation

The probe is calibrated at the center of the dipole sensors which is located 1 to 2.7mm away from the probe tip. During measurements, the probe stops shortly above the phantom surface, depending on the probe and the surface detecting system. Both distances are included as parameters in the probe configuration file. The software always knows exactly how far away the measured point is from the surface. As the probe cannot directly measure at the surface, the values between the deepest measured point and the surface must be extrapolated.

In DASY4, the choice of the coordinate system defining the location of the measurement points has no influence on the uncertainty of the interpolation, Maxima Search and SAR extrapolation routines. The interpolation, Maxima Search and extrapolation routines are all based on the modified Quadratic Shepard’s method [7].

10. Measurement Uncertainty

Measurement uncertainties in SAR measurements are difficult to quantify due to several variables including biological, physiological, and environmental. However, we estimate the measurement uncertainties in SAR to be less than ±27 %〔8〕.

According to Std. C95.3〔9〕, the overall uncertainties are difficult to assess and will vary with the type of meter and usage situation. However, accuracy's of ± 1 to 3 dB can be expected in practice, with greater uncertainties in near-field situations and at higher frequencies (shorter wavelengths), or areas where large reflecting objects are present. Under optimum measurement conditions, SAR measurement uncertainties of at least ± 2dB can be expected.

According to CENELEC〔10〕, typical worst-case uncertainty of field measurements is ± 5 dB. For well-defined modulation characteristics the uncertainty can be reduced to ± 3 dB.

Source of Uncertainty	Uncertainty Value	Probability Distribution	Divisor	c_i	Standard Uncertainty ±1%(1-g)	v_i or V_{eff}
Type-A	0.9 %	Normal	1	1	0.9	9
Measurement System						
Probe Calibration	7 %	Normal	2	1	3.5	∞
Axial Isotropy	0.2dB	Rectangular	$\sqrt{3}$	$\sqrt{0.5}$	1.9	∞
Hemispherical Isotropy	9.6 %	Rectangular	$\sqrt{3}$	$\sqrt{0.5}$	3.9	∞
Spatial Resolution	0 %	Rectangular	$\sqrt{3}$	1	0	∞
Boundary Effect	11.0 %	Rectangular	$\sqrt{3}$	1	6.4	∞
Linearity	0.2dB	Rectangular	$\sqrt{3}$	1	2.7	∞
Detection Limit	1.0 %	Rectangular	$\sqrt{3}$	1	0.6	∞
Readout Electronics	1.0 %	Normal	1	1	1.0	∞
RF Ambient Conditions	3.0 %	Rectangular	$\sqrt{3}$	1	1.73	∞
Probe Positioner Mech. Const.	0.4 %	Rectangular	$\sqrt{3}$	1	0.2	∞
Probe Positioning	0.35 %	Rectangular	$\sqrt{3}$	1	0.2	∞
Extrapolation and Integration	3.9 %	Rectangular	$\sqrt{3}$	1	2.3	∞
Test sample Related						
Test sample Positioning	4.7 %	Normal	1	1	4.7	5
Device Holder Uncertainty	6.1 %	Normal	1	1	6.1	5
Drift of Output Power	5.0 %	Rectangular	$\sqrt{3}$	1	2.9	∞
Phantom and Setup						
Phantom Uncertainty (Including temperature effects)	4.0%	Rectangular	$\sqrt{3}$	1	2.3	∞
Liquid Conductivity (target)	5.0%	Rectangular	$\sqrt{3}$	0.6	1.7	∞
Liquid Conductivity (meas.)	10.0%	Rectangular	$\sqrt{3}$	0.6	3.4	∞
Liquid Permittivity (target)	5.0%	Rectangular	$\sqrt{3}$	0.6	1.7	∞
Liquid Permittivity (meas.)	5.0%	Rectangular	$\sqrt{3}$	0.6	1.7	∞
Combined standard uncertainty		RSS			13.5	88.7
Expanded uncertainty (Coverage factor = 2)		Normal (k=2)			27	

Table 6. Uncertainty Budget of DASY

11. SAR Test Results Summary

11.1 GSM 850MHz SAR Test Results – Head

Ambient :

Temperature (℃) :	22 ± 3	Relative HUMIDITY (%) :	40-70

Liquid :

Mixture Type :	HSL900	Liquid Temperature (℃) :	22
Dielectric Constant :	40.5	Depth of liquid (cm) :	15
Conductivity :	0.959		

Measurement :

Crest Factor :	8.3	Probe S/N :	1531

Frequency		Band	Power (dBm)	Phantom Position	Antenna Position	SAR_{10g} [mW/g]	Power Drift	Remark
MHz	Ch.							
824.2	128	GSM 850	32.32	Right-Cheek	Internal	0.158	-0.160	-
836.6	190	GSM 850	32.31	Right-Cheek	Internal	0.149	-0.141	-
848.8	251	GSM 850	32.35	Right-Cheek	Internal	0.121	0.046	-
824.2	128	GSM 850	32.32	Right-Tilted	Internal	0.136	-0.069	-
836.6	190	GSM 850	32.31	Right-Tilted	Internal	0.126	0.042	-
848.8	251	GSM 850	32.35	Right-Tilted	Internal	0.105	0.076	-
824.2	128	GSM 850	32.32	Left-Cheek	Internal	0.191	-0.062	-
836.6	190	GSM 850	32.31	Left-Cheek	Internal	0.188	-0.123	-
848.8	251	GSM 850	32.35	Left-Cheek	Internal	0.159	-0.002	-
824.2	128	GSM 850	32.32	Left-Tilted	Internal	0.134	0.088	-
836.6	190	GSM 850	32.31	Left-Tilted	Internal	0.126	0.030	-
848.8	251	GSM 850	32.35	Left-Tilted	Internal	0.106	0.044	-
Safety Limit / Spatial Peak European Council Recommendation 1999 519 EC DGT CNS14959						Brain 2.0 W/kg (mW/g) Averaged over 10 gram		

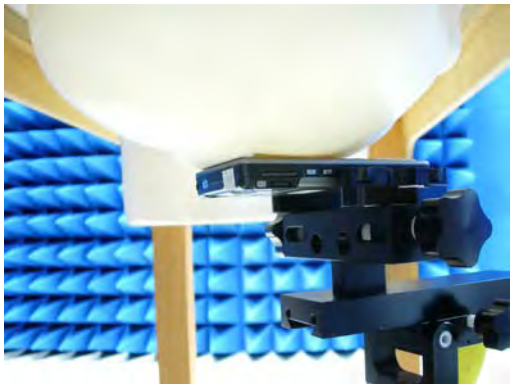


Figure 13. Right Head SAR Test Setup (Cheek)

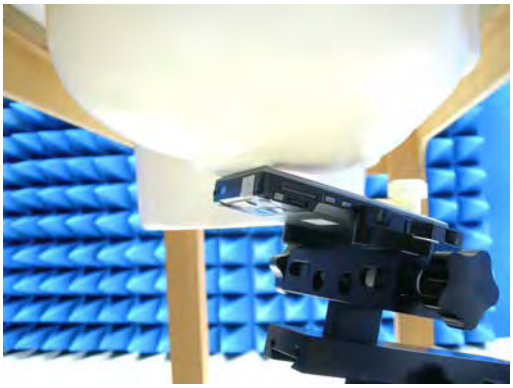


Figure 14. Right Head SAR Test Setup (Tilted)

11.2 PCS 1900MHz SAR Test Results – Head

Ambient :

Temperature (℃) :	22 ± 3	Relative HUMIDITY (%) :	40-70

Liquid :

Mixture Type :	HSL1800	Liquid Temperature (℃) :	22
Dielectric Constant :	39.60	Depth of liquid (cm) :	15
Conductivity :	1.45		

Measurement :

Crest Factor :	8.3	Probe S/N :	1531

Frequency		Band	Power (dBm)	Phantom Position	Antenna Position	SAR_{10g} [mW/g]	Power Drift	Remark
MHz	Ch.							
1850.2	512	PCS	29.44	Right-Cheek	Internal	0.270	0.018	-
1880.0	661	PCS	29.71	Right-Cheek	Internal	0.218	-0.101	-
1909.8	810	PCS	29.32	Right-Cheek	Internal	0.192	-0.059	-
1850.2	512	PCS	29.44	Right-Tilted	Internal	0.104	-0.055	-
1880.0	661	PCS	29.71	Right-Tilted	Internal	0.085	-0.097	-
1909.8	810	PCS	29.32	Right-Tilted	Internal	0.085	-0.119	-
1850.2	512	PCS	29.44	Left-Cheek	Internal	0.154	-0.081	-
1880.0	661	PCS	29.71	Left-Cheek	Internal	0.158	-0.195	-
1909.8	810	PCS	29.32	Left-Cheek	Internal	0.144	-0.048	-
1850.2	512	PCS	29.44	Left-Tilted	Internal	0.097	-0.004	-
1880.0	661	PCS	29.71	Left-Tilted	Internal	0.075	-0.036	-
1909.8	810	PCS	29.32	Left-Tilted	Internal	0.068	-0.027	-
Safety Limit / Spatial Peak European Council Recommendation 1999 519 EC DGT CNS14959						Brain 2.0 W/kg (mW/g) Averaged over 10 gram		

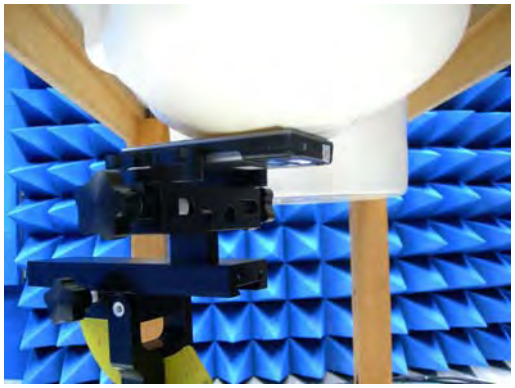


Figure 15. Left Head SAR Test Setup (Cheek)

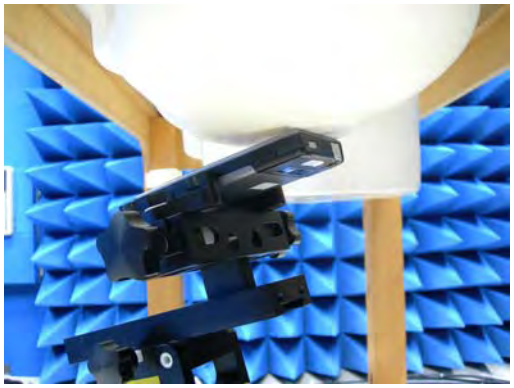


Figure 16. Left Head SAR Test Setup (Tilted)

11.3 GSM 850MHz - Body SAR

Ambient :

Temperature (℃) : 22 ± 3 — Relative HUMIDITY (%) : 40-70

Liquid :

Mixture Type : MSL900 — Liquid Temperature (℃) : 22.0

Depth of liquid (cm) : 15

Measurement :

Crest Factor : 8.3 — Probe S/N : 1531

Frequency		Band	Power (dBm)	Phantom Position	Antenna Position	Accessory	SAR_{1g} [mW/g]	Power Drift (dB)	Remark
MHz	CH								
824.2	128	GSM 850	31.45	Flat	Internal	Headset	0.396	0.107	-
836.6	190	GSM 850	31.52	Flat	Internal	Headset	0.346	0.027	-
848.8	251	GSM 850	31.53	Flat	Internal	Headset	0.290	0.034	-
Std. C95.1-1999 - Safety Limit Spatial Peak Uncontrolled Exposure/General Population					1.6 W/kg (mW/g) Averaged over 1 gram				

11.4 PCS 1900MHz - Body SAR

Ambient :

Temperature (℃) : 22 ± 3 — Relative HUMIDITY (%) : 40-70

Liquid :

Mixture Type : MSL1800 — Liquid Temperature (℃) : 22.0

Depth of liquid (cm) : 15

Measurement :

Crest Factor : 8.3 — Probe S/N : 1531

Frequency		Band	Power (dBm)	Phantom Position	Antenna Position	Accessory	SAR_{1g} [mW/g]	Power Drift (dB)	Remark
MHz	CH								
1850.2	512	PCS	28.02	Flat	Internal	Headset	0.216	-0.009	-
1880.0	661	PCS	28.37	Flat	Internal	Headset	0.169	-0.068	-
1909.8	810	PCS	28.80	Flat	Internal	Headset	0.157	-0.114	-
Std. C95.1-1999 - Safety Limit Spatial Peak Uncontrolled Exposure/General Population					1.6 W/kg (mW/g) Averaged over 1 gram				

11.5 GSM 850MHz / GPRS with Bluetooth - Body SAR

Ambient :

Temperature (℃) :	22 ± 3	Relative HUMIDITY (%) :	40-70

Liquid :

Mixture Type :	MSL900	Liquid Temperature (℃) :	22.0
		Depth of liquid (cm) :	15

Measurement :

Crest Factor :	4.2	Probe S/N :	1530

Frequency		Band	Power (dBm)	Phantom Position	Antenna Position	Accessory	SAR_{1g} [mW/g]	Power Drift (dB)	Remark
MHz	CH								
824.2	128	GSM 850	31.45	Flat	Internal	Headset	0.678	-0.182	ON
824.2	128	GSM 850	31.45	Flat	Internal	Headset	0.519	-0.117	OFF
836.6	190	GSM 850	31.52	Flat	Internal	Headset	0.618	0.010	ON
848.8	251	GSM 850	31.53	Flat	Internal	Headset	0.526	0.017	ON
Std. C95.1-1999 - Safety Limit Spatial Peak Uncontrolled Exposure/General Population					1.6 W/kg (mW/g) Averaged over 1 gram				

Note:

1. The Test mode open GPRS function
2. The EUT B/T Function “ON” or “OFF” see the remark.

11.6 PCS 1900MHz / GPRS with Bluetooth - Body SAR

Ambient :

Temperature (℃) : 22 ± 3 Relative HUMIDITY (%) : 40-70

Liquid :

Mixture Type : MSL1800 Liquid Temperature (℃) : 22.0

Depth of liquid (cm) : 15

Measurement :

Crest Factor : 4.2 Probe S/N : 1530

Frequency		Band	Power (dBm)	Phantom Position	Antenna Position	Accessory	SAR_{1g} [mW/g]	Power Drift (dB)	Remark
MHz	CH								
1850.2	512	PCS	28.02	Flat	Internal	Headset	0.386	-0.070	ON
1850.2	512	PCS	28.02	Flat	Internal	Headset	0.367	-0.121	OFF
1880.0	661	PCS	28.37	Flat	Internal	Headset	0.315	0.004	ON
1909.8	810	PCS	28.80	Flat	Internal	Headset	0.299	-0.008	ON
Std. C95.1-1999 - Safety Limit Spatial Peak Uncontrolled Exposure/General Population					1.6 W/kg (mW/g) Averaged over 1 gram				

Note:

1. The Test mode open GPRS function
2. The EUT B/T Function “ON” or “OFF” see the remark.

11.7 GSM 850MHz / EGPRS - Body SAR

Ambient :

Temperature (℃) :	22 ± 3	Relative HUMIDITY (%) :	40-70

Liquid :

Mixture Type :	MSL900	Liquid Temperature (℃) :	22.0
		Depth of liquid (cm) :	15

Measurement :

Crest Factor :	4.2	Probe S/N :	1530

Frequency		Band	Power (dBm)	Phantom Position	Antenna Position	Accessory	SAR_{1g} [mW/g]	Power Drift (dB)	Remark
MHz	CH								
824.2	128	GSM 850	28.02	Flat	Internal	Headset	0.509	-0.019	ON
Std. C95.1-1999 - Safety Limit Spatial Peak Uncontrolled Exposure/General Population					1.6 W/kg (mW/g) Averaged over 1 gram				

Note:

1. The Test mode open EGPRS Function
2. The EUT B/T Function "ON" or "OFF" see the remark.

11.8 PCS 1900MHz / EGPRS - Body SAR

Ambient :

Temperature (℃) :	22 ± 3	Relative HUMIDITY (%) :	40-70

Liquid :

Mixture Type :	MSL900	Liquid Temperature (℃) :	22.0
		Depth of liquid (cm) :	15

Measurement :

Crest Factor :	4.2	Probe S/N :	1530

Frequency		Band	Power (dBm)	Phantom Position	Antenna Position	Accessory	SAR_{1g} [mW/g]	Power Drift (dB)	Remark
MHz	CH								
1850.2	512	PCS 1900	31.45	Flat	Internal	Headset	0.308	0.039	ON
Std. C95.1-1999 - Safety Limit Spatial Peak Uncontrolled Exposure/General Population					1.6 W/kg (mW/g) Averaged over 1 gram				

Note:

1. The Test mode open EGPRS Function
2. The EUT B/T Function "ON" or "OFF" see the remark.

11.9 Setup Photo

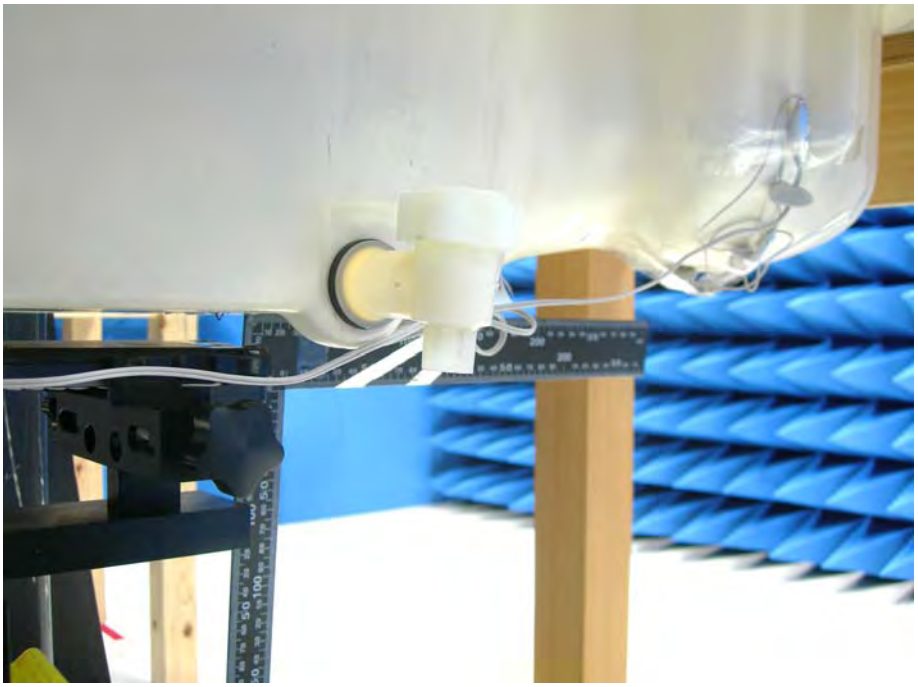


Figure 17. Body SAR Test Setup (Flat Section)_ Back

11.10 Std. C95.1-1999 RF Exposure Limit

Human Exposure	Population Uncontrolled Exposure (W/kg) or (mW/g)	Occupational Controlled Exposure (W/kg) or (mW/g)
Spatial Peak SAR* (head)	1.60	8.00
Spatial Peak SAR** (Whole Body)	0.08	0.40
Spatial Peak SAR*** (Partial-Body)	1.60	8.00
Spatial Peak SAR**** (Hands / Feet / Ankle / Wrist)	4.00	20.00

Table 7. Safety Limits for Partial Body Exposure

Notes：

* The Spatial Peak value of the SAR averaged over any 1 gram of tissue.
(defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

** The Spatial Average value of the SAR averaged over the whole – body.

*** The Spatial Average value of the SAR averaged over the partial – body.

**** The Spatial Peak value of the SAR averaged over any 10 grams of tissue.
(defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

Population / Uncontrolled Environments： are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

Occupational / Controlled Environments： are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation).

12. Conclusion

The SAR test values found for the portable mobile phone **Inventec Corporation Trade Name：Inventec Model(s)：Mercury 619** are below the maximum recommended level of 1.6 W/kg (mW/g).

13. References

[1] Std. C95.1-1999, "*American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 300KHz to 100GHz",* New York.

[2] NCRP, National Council on Radiation Protection and Measurements, "*Biological Effects and Exposure Criteria for Radio frequency Electromagnetic Fields"*, NCRP report NO. 86, 1986.

[3] T. Schmid, O. Egger, and N. Kuster, "*Automatic E-field scanning system for dosimetric assessments*", IEEE Transactions on Microwave Theory and Techniques, vol. 44, pp, 105-113, Jan. 1996.

[4] K. Pokovi ć, T. Schmid, and N. Kuster, "*Robust setup for precise calibration of E-field probes in tissue simulating liquids at mobile communications frequency*", in ICECOM'97, Dubrovnik, October 15-17, 1997, pp.120-124.

[5] K. Pokovi ć, T. Schmid, and N. Kuster, "*E-field probe with improved isotropy in brain simulating liquids*", in Proceedings of the ELMAR, Zadar, Croatia, 23-25 June, 1996, pp.172-175.

[6] N. Kuster, and Q. Balzano, "*Energy absorption mechanism by biological bodies in the near field of dipole antennas above 300MHz"*, IEEE Transaction on Vehicular Technology, vol. 41, no. 1, Feb. 1992, pp. 17-23.

[7] Robert J. Renka, "*Multivariate Interpolation Of Large Sets Of Scattered Data*", University of North Texas ACM Transactions on Mathematical Software, vol. 14, no. 2, June 1988 , pp. 139-148.

[8] N. Kuster, R. Kastle, T. Schmid, *Dosimetric evaluation of mobile communications equipment with known precision*, IEEE Transaction on Communications, vol. E80-B, no. 5, May 1997, pp. 645-652.

[9] Std. C95.3-1991, "*IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields – RF and Microwave,* New York: IEEE, Aug. 1992.

[10] CENELEC CLC/SC111B, European Prestandard (prENV 50166-2), *Human Exposure to Electromagnetic Fields High-frequency*: 10KHz-300GHz, Jan. 1995.

Appendix A – System Performance Check

See following Attached Pages for System Performance Check.

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/12/2006 2:53:08 PM

System Performance Check at 900MHz_20061212_Head-1

DUT: Dipole 900 MHz; Type: D900V2; Serial: D900V2 - SN:073

Communication System: CW; Frequency: 900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 900 MHz;

σ = 0.959 mho/m; ε_r = 40.5; ρ = 1000 kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

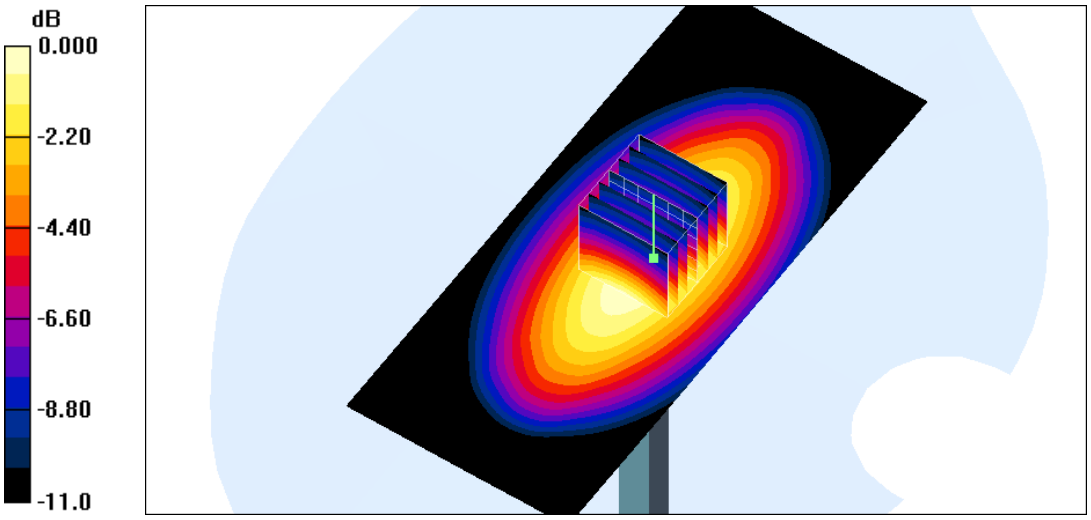
- Probe: ET3DV6 - SN1531; ConvF(6.18, 6.18, 6.18); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

System Performance Check at 900MHz/Area Scan (51x121x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 3.12 mW/g

System Performance Check at 900MHz/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 58.8 V/m; Power Drift = -0.065 dB
Peak SAR (extrapolated) = 4.10 W/kg
SAR(1 g) = 2.79 mW/g; SAR(10 g) = 1.81 mW/g
Maximum value of SAR (measured) = 3.02 mW/g



0 dB = 3.02mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/14/2006 11:10:44 PM

System Performance Check at 900MHz_20061214_Body

DUT: Dipole 900 MHz; Type: D900V2; Serial: D900V2 - SN:073

Communication System: CW; Frequency: 900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 900 MHz;

σ = 1.02 mho/m; ε_r = 53.9; ρ = 1000 kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

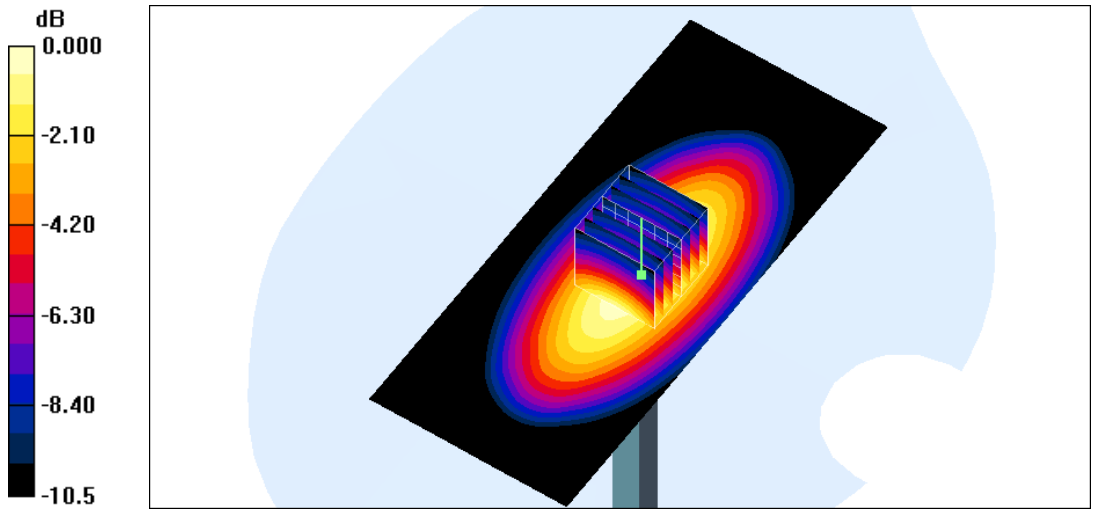
- Probe: ET3DV6 - SN1531; ConvF(5.96, 5.96, 5.96); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

System Performance Check at 900MHz/Area Scan (51x121x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 3.10 mW/g

System Performance Check at 900MHz/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 56.1 V/m; Power Drift = -0.015 dB
Peak SAR (extrapolated) = 4.07 W/kg
SAR(1 g) = 2.84 mW/g; SAR(10 g) = 1.85 mW/g
Maximum value of SAR (measured) = 3.10 mW/g



0 dB = 3.10mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 1/10/2007 2:43:06 AM

System Performance Check for 900 MHz_20070110_Body

DUT: Dipole 900 MHz; Type: D900V2; Serial: D900V2 - SN:073

Communication System: CW; Frequency: 900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 900 MHz;

σ = 1.5 mho/m; ε_r = 53.6; ρ = 1000 kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

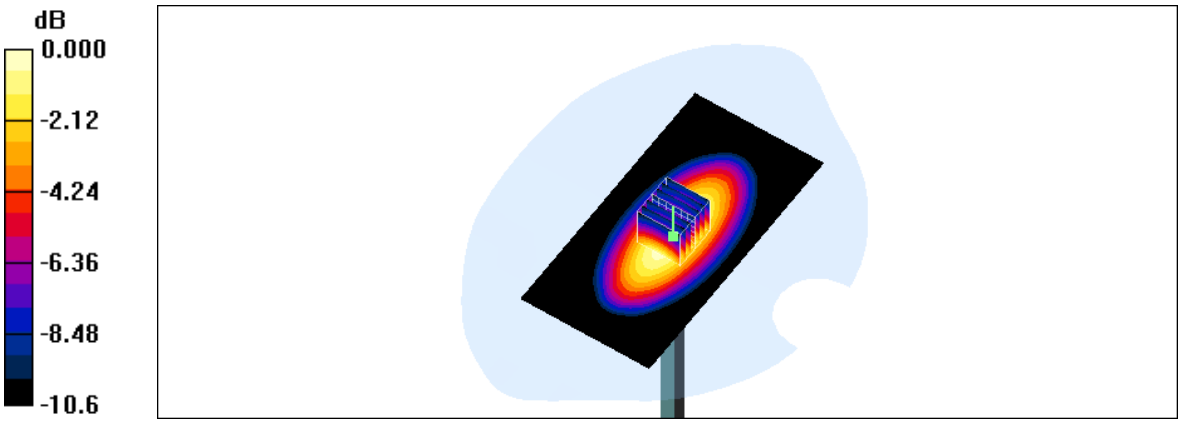
- Probe: ET3DV6 - SN1530; ConvF(5.66, 5.66, 5.66); Calibrated: 9/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 10/16/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

System Performance check at 900MHz/Area Scan (61x121x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 3.10 mW/g

System Performance check at 900MHz/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 57.9 V/m; Power Drift = -0.064 dB
Peak SAR (extrapolated) = 4.10 W/kg
SAR(1 g) = 2.86 mW/g; SAR(10 g) = 1.86 mW/g
Maximum value of SAR (measured) = 3.11 mW/g



0 dB = 3.11mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 2/6/2007 8:37:25 AM

System Performance Check for 900 MHz_20070206_Body

DUT: Dipole 900 MHz; Type: D900V2; Serial: D900V2 - SN:073

Communication System: CW; Frequency: 900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 900 MHz;

σ = 1.05 mho/m; ε_r = 53.6; ρ = 1000 kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

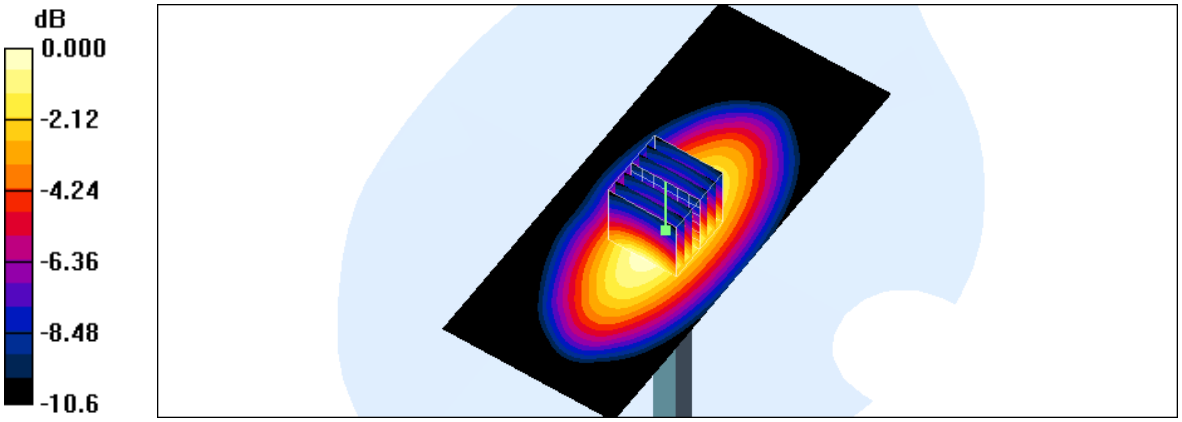
- Probe: ET3DV6 - SN1530; ConvF(5.66, 5.66, 5.66); Calibrated: 9/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 10/16/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

System Performance Check at 900MHz/Area Scan (51x121x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 3.13 mW/g

System Performance Check at 900MHz/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.9 V/m; Power Drift = -0.030 dB
Peak SAR (extrapolated) = 4.09 W/kg
SAR(1 g) = 2.86 mW/g; SAR(10 g) = 1.86 mW/g
Maximum value of SAR (measured) = 3.09 mW/g



0 dB = 3.09mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 2/12/2007 4:13:21 PM

System Performance Check for 900 MHz_20070212_Body

DUT: Dipole 900 MHz; Type: D900V2; Serial: D900V2 - SN:172

Communication System: CW; Frequency: 900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 900 MHz;

σ = 1.05 mho/m; ε_r = 53.6; ρ = 1000 kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

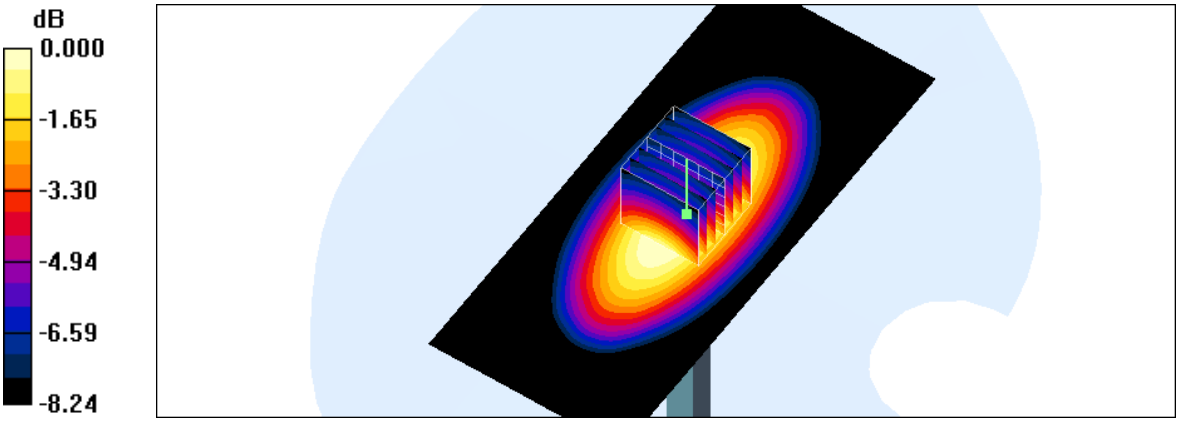
- Probe: ET3DV6 - SN1530; ConvF(5.66, 5.66, 5.66); Calibrated: 9/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 10/16/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

System Performance Check at 1800MHz/Area Scan (51x121x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 3.08 mW/g

System Performance Check at 1800MHz/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 56.8 V/m; Power Drift = -0.061 dB
Peak SAR (extrapolated) = 3.42 W/kg
SAR(1 g) = 2.56 mW/g; SAR(10 g) = 1.78 mW/g
Maximum value of SAR (measured) = 2.76 mW/g



0 dB = 2.76mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/14/2006 3:20:42 PM

System Performance Check at 1800MHz_20061214_Head

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:2d057

Communication System: CW; Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz;

σ = 1.45 mho/m; ε_r = 39.6; ρ = 1000 kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

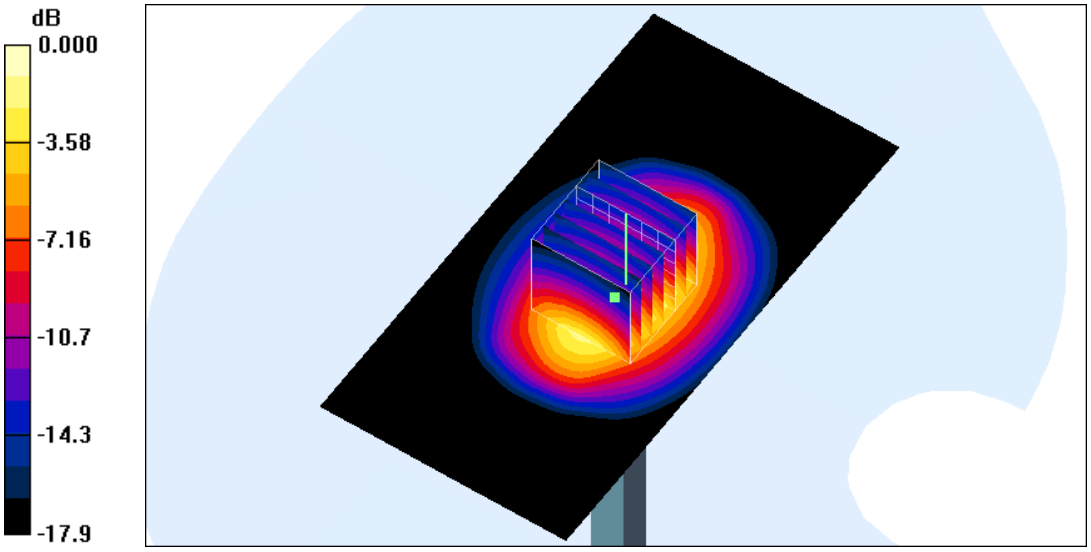
- Probe: ET3DV6 - SN1531; ConvF(5.09, 5.09, 5.09); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

System Performance Check at 1800MHz/Area Scan (51x101x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 11.7 mW/g

System Performance Check at 1800MHz/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 91.3 V/m; Power Drift = -0.083 dB
Peak SAR (extrapolated) = 17.4 W/kg
SAR(1 g) = 9.99 mW/g; SAR(10 g) = 5.27 mW/g
Maximum value of SAR (measured) = 11.2 mW/g



0 dB = 11.2mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/14/2006 8:46:10 PM

System Performance Check at 1800MHz_20061214_Body

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:2d057

Communication System: CW; Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz;

σ = 1.56 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

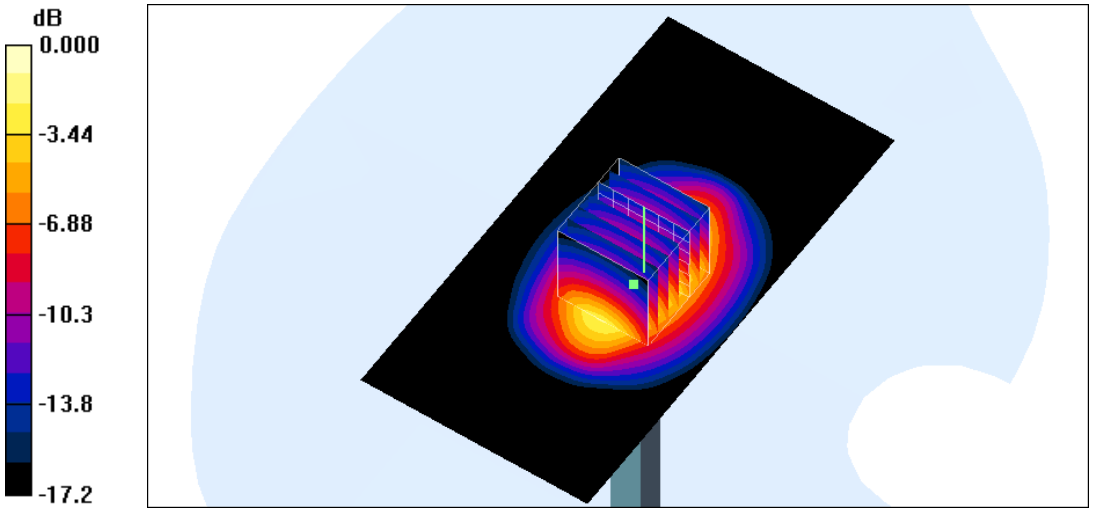
- Probe: ET3DV6 - SN1531; ConvF(4.62, 4.62, 4.62); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

System Performance Check at 1800MHz/Area Scan (51x101x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 11.9 mW/g

System Performance Check at 1800MHz/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 87.8 V/m; Power Drift = -0.023 dB
Peak SAR (extrapolated) = 16.9 W/kg
SAR(1 g) = 10.1 mW/g; SAR(10 g) = 5.4 mW/g
Maximum value of SAR (measured) = 11.5 mW/g



0 dB = 11.5mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 1/10/2007 3:21:06 AM

System Performance Check for 1800 MHz_20070110_Body

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:265

Communication System: CW; Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz;

σ = 1.56 mho/m; ε_r = 51.9; ρ = 1000 kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

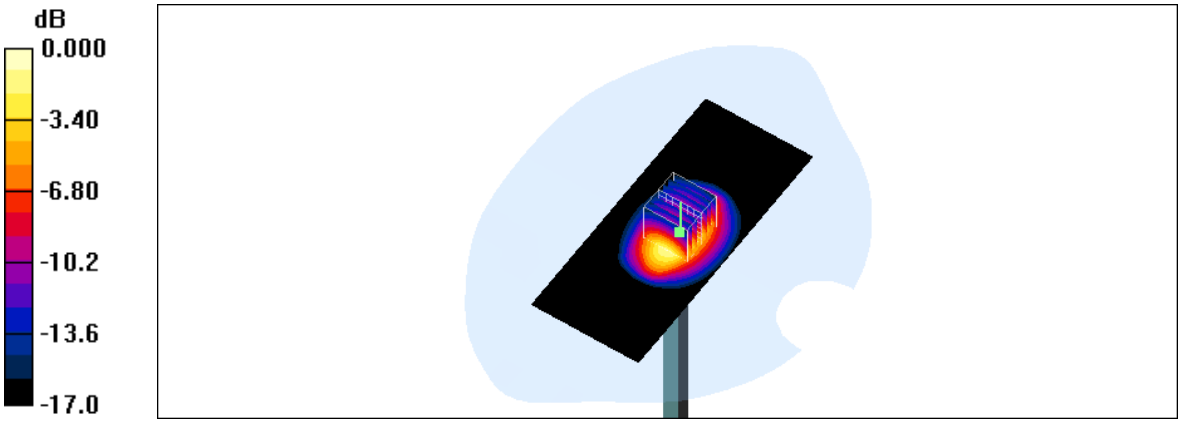
- Probe: ET3DV6 - SN1530; ConvF(4.4, 4.4, 4.4); Calibrated: 9/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 10/16/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

System Performance Check at 1800MHz/Area Scan (51x121x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 11.6 mW/g

System Performance Check at 1800MHz/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 92.5 V/m; Power Drift = -0.036 dB
Peak SAR (extrapolated) = 16.0 W/kg
SAR(1 g) = 9.94 mW/g; SAR(10 g) = 5.35 mW/g
Maximum value of SAR (measured) = 11.3 mW/g



0 dB = 11.3mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 2/6/2007 9:29:48 AM

System Performance Check for 1800 MHz_20070206_Body

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:265

Communication System: CW; Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz;

σ = 1.56 mho/m; ε_r = 51.9; ρ = 1000 kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

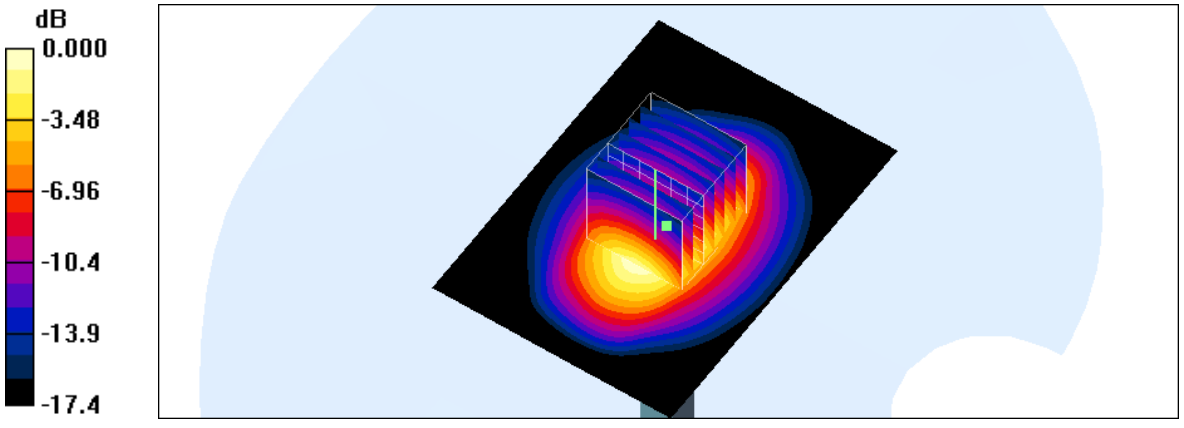
- Probe: ET3DV6 - SN1530; ConvF(4.4, 4.4, 4.4); Calibrated: 9/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 10/16/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

System Performance Check at 1800MHz/Area Scan (51x71x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 12.4 mW/g

System Performance Check at 1800MHz/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 91.7 V/m; Power Drift = -0.198 dB
Peak SAR (extrapolated) = 15.2 W/kg
SAR(1 g) = 9.29 mW/g; SAR(10 g) = 4.99 mW/g
Maximum value of SAR (measured) = 10.5 mW/g



0 dB = 10.5mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 2/7/2007 11:24:51 AM

System Performance Check for 1800 MHz_20070207_Body

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:265

Communication System: CW; Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz;

σ = 1.56 mho/m; ε_r = 51.9; ρ = 1000 kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

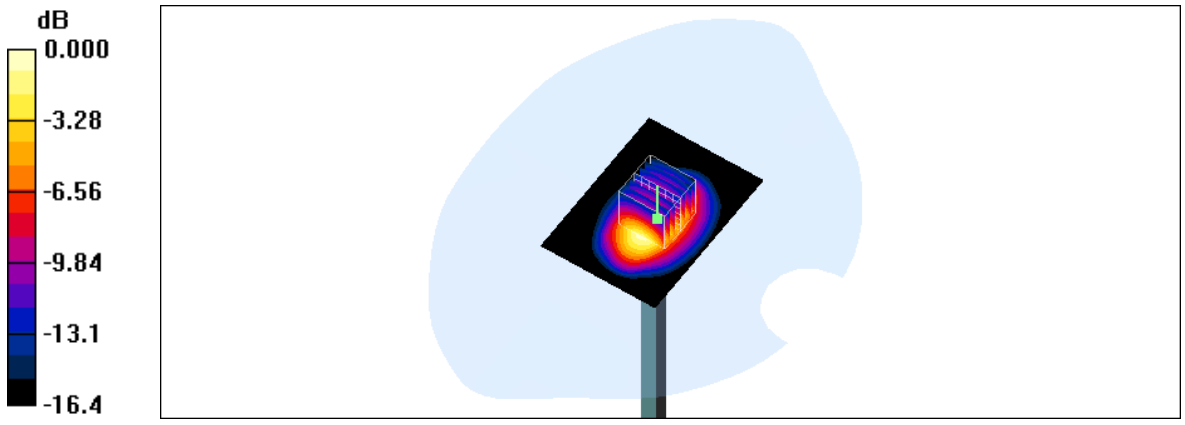
- Probe: ET3DV6 - SN1530; ConvF(4.4, 4.4, 4.4); Calibrated: 9/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 10/16/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

System Performance Check at 1800MHz/Area Scan (51x71x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 12.4 mW/g

System Performance Check at 1800MHz/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 92.1 V/m; Power Drift = -0.026 dB
Peak SAR (extrapolated) = 16.1 W/kg
SAR(1 g) = 10.2 mW/g; SAR(10 g) = 5.55 mW/g
Maximum value of SAR (measured) = 11.5 mW/g



0 dB = 11.5mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 2/12/2007 8:17:08 AM

System Performance Check for 1800 MHz_20070212_Body

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:265

Communication System: CW; Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz;

σ = 1.56 mho/m; ε_r = 51.9; ρ = 1000 kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

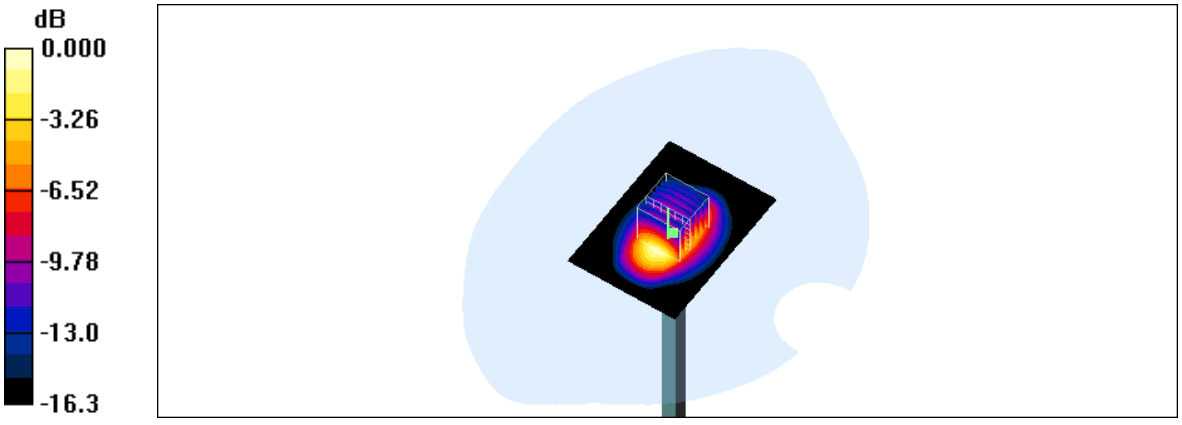
- Probe: ET3DV6 - SN1530; ConvF(4.4, 4.4, 4.4); Calibrated: 9/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 10/16/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

System Performance Check at 1800MHz/Area Scan (51x71x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 12.6 mW/g

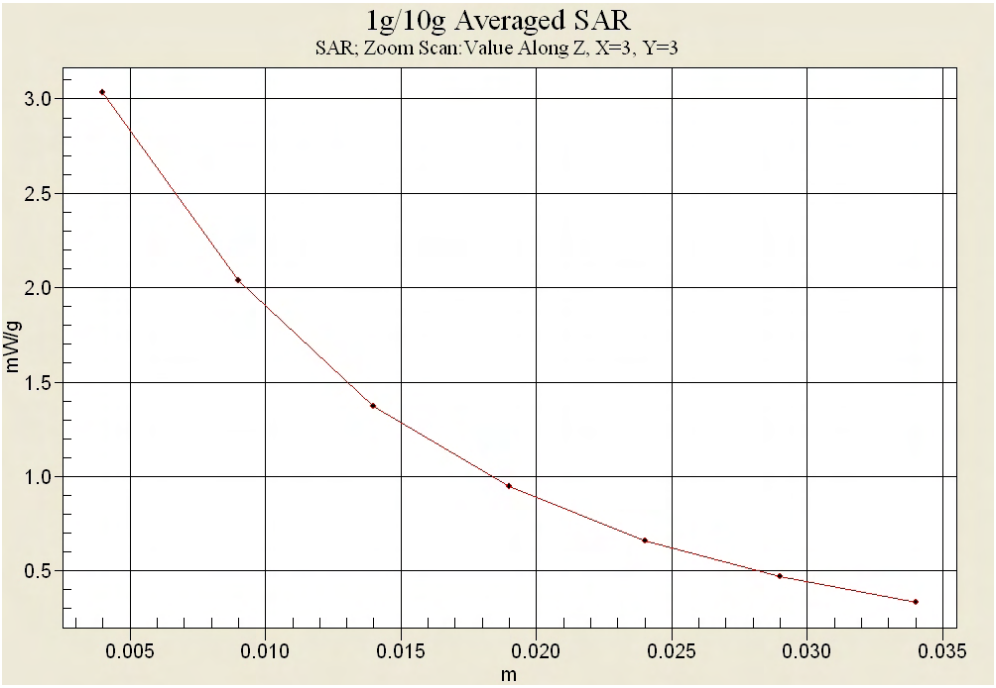
System Performance Check at 1800MHz/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 91.3 V/m; Power Drift = -0.196 dB
Peak SAR (extrapolated) = 14.9 W/kg
SAR(1 g) = 9.46 mW/g; SAR(10 g) = 5.19 mW/g
Maximum value of SAR (measured) = 10.7 mW/g

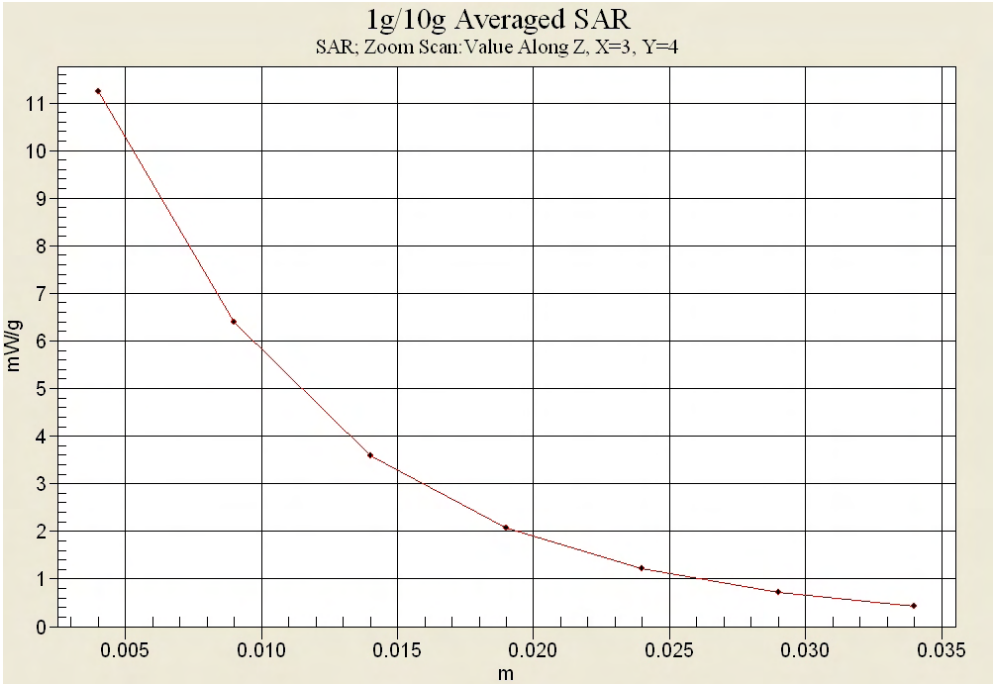


0 dB = 10.7mW/g

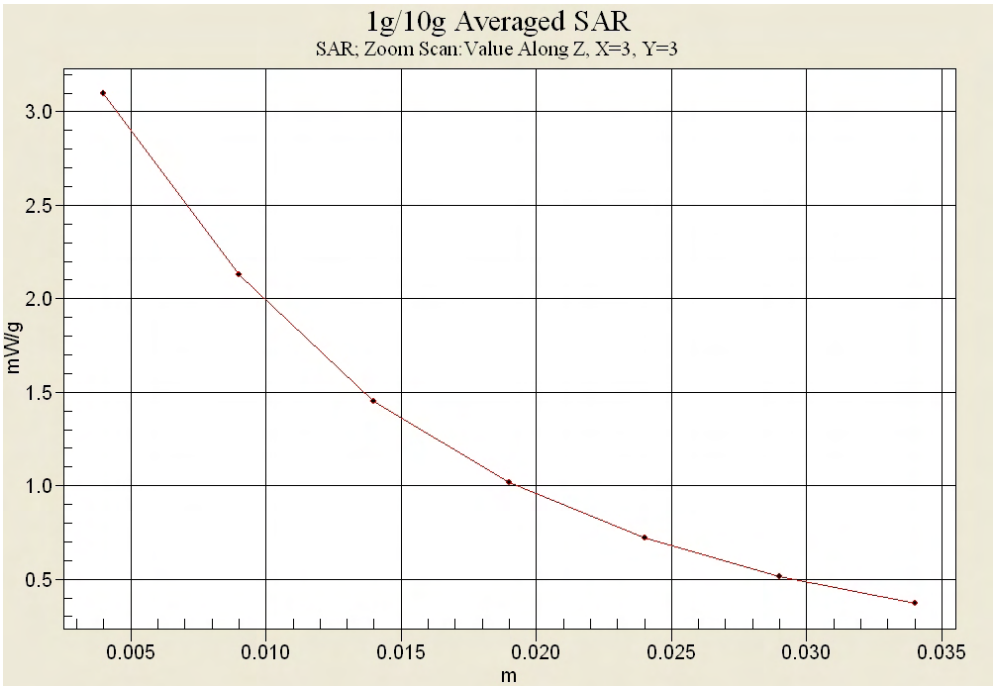
Z-axis Plot of System Performance Check



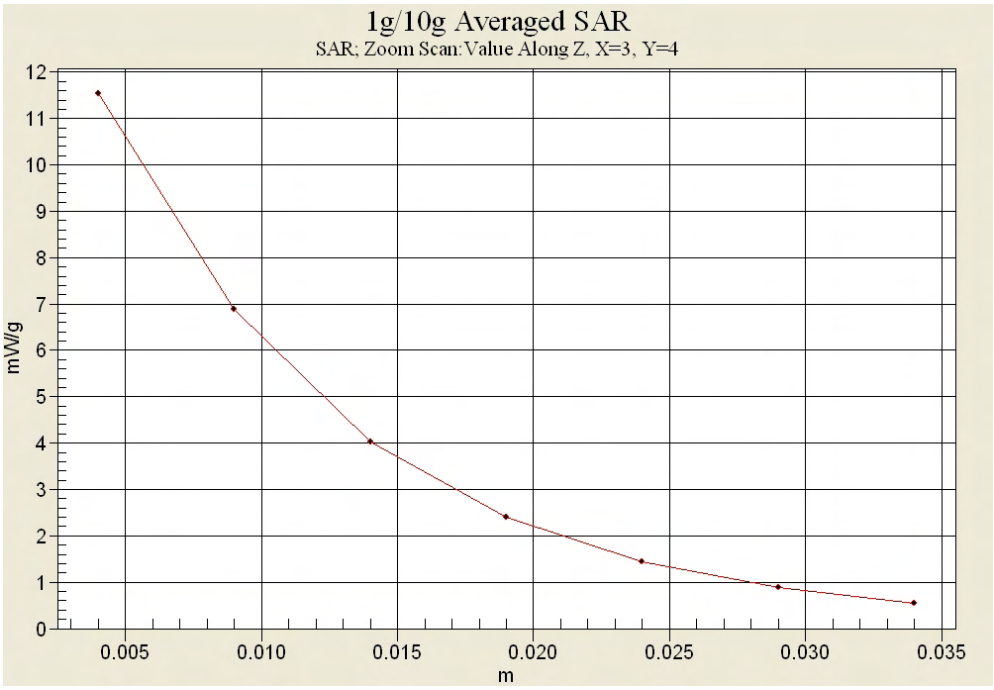
Head-Tissue-Simulating-Liquid 900MHz(20061212)



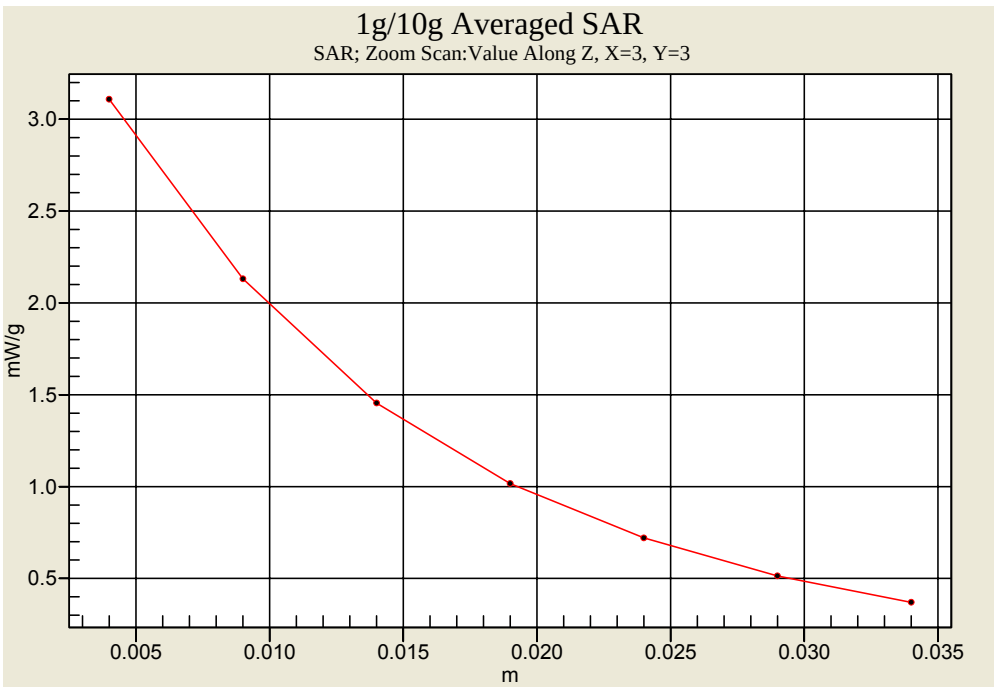
Head-Tissue-Simulating-Liquid 1800MHz(20061214)



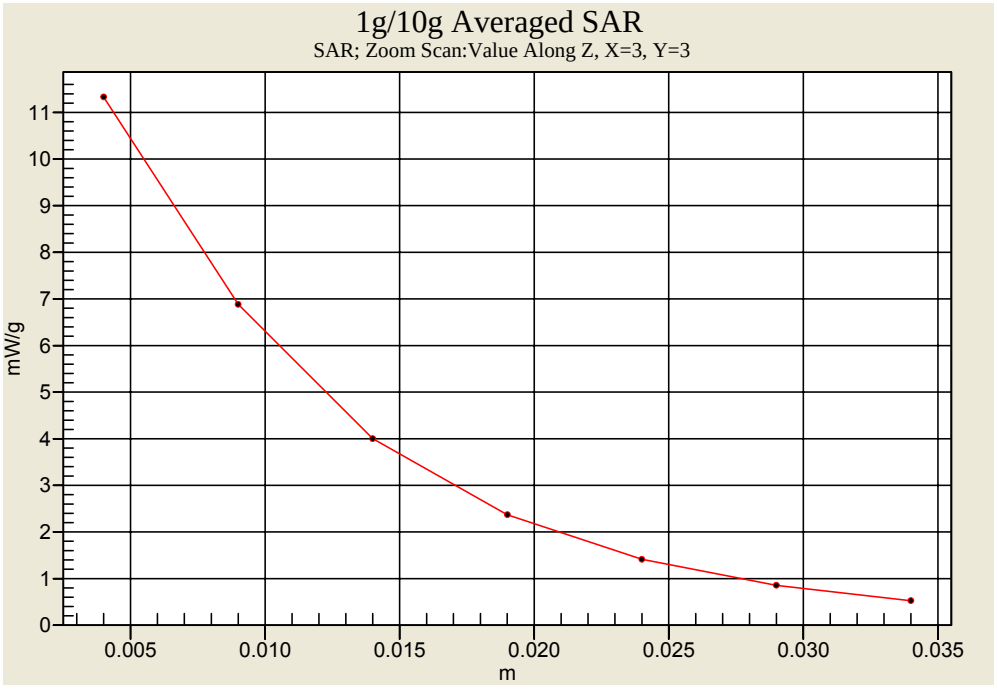
Body-Tissue-Simulating-Liquid 900MHz(2006124)



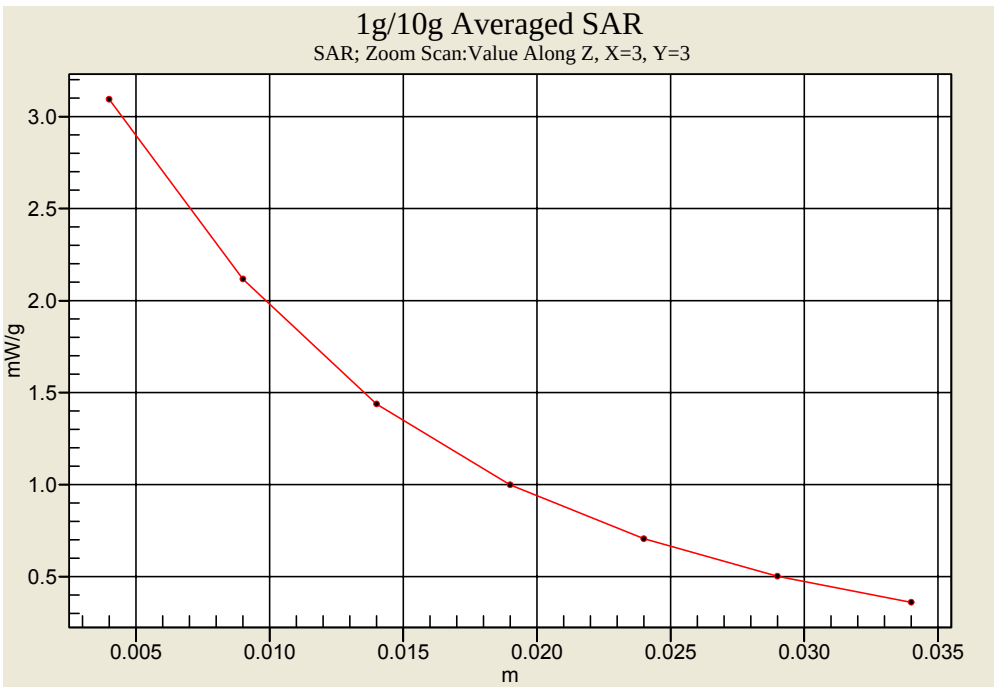
Body-Tissue-Simulating-Liquid 1800MHz(20061214)



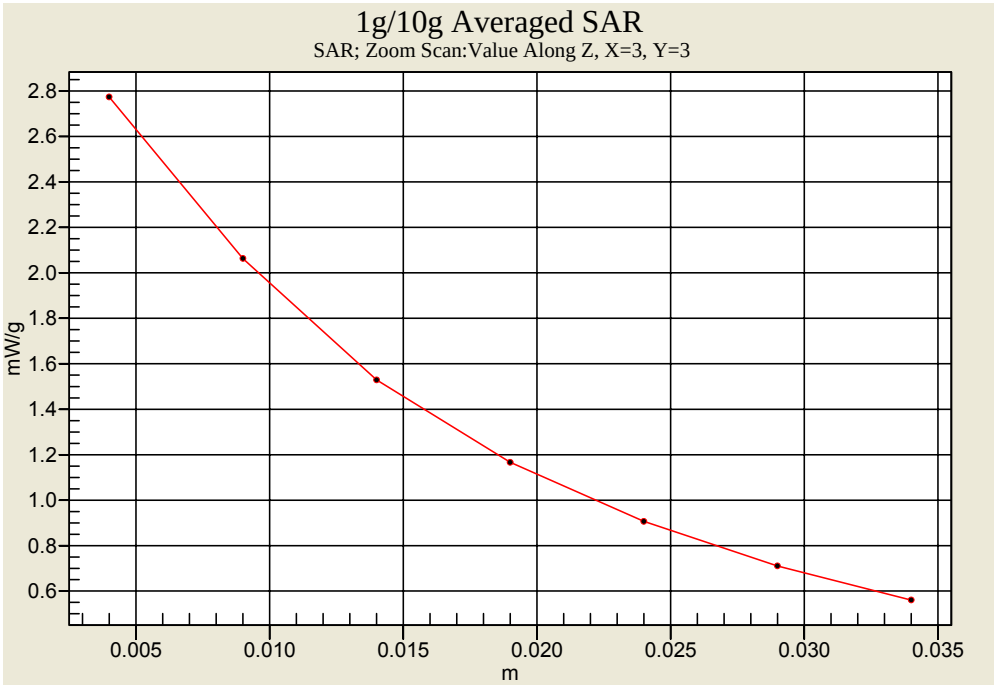
Body-Tissue-Simulating-Liquid 900MHz(20070110)



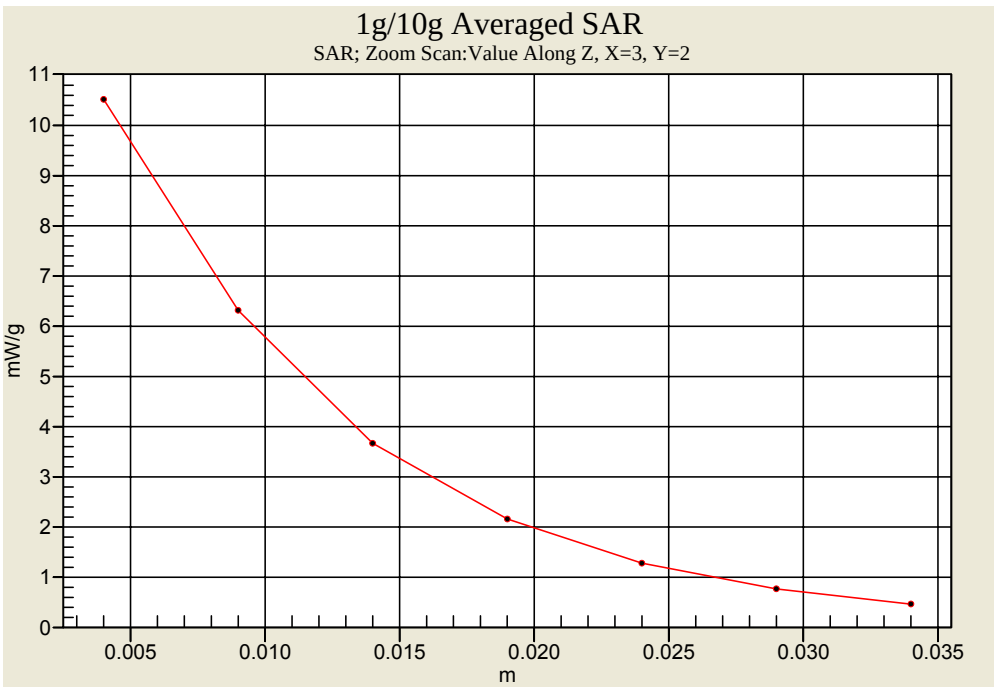
Body-Tissue-Simulating-Liquid 1800MHz(20070110)



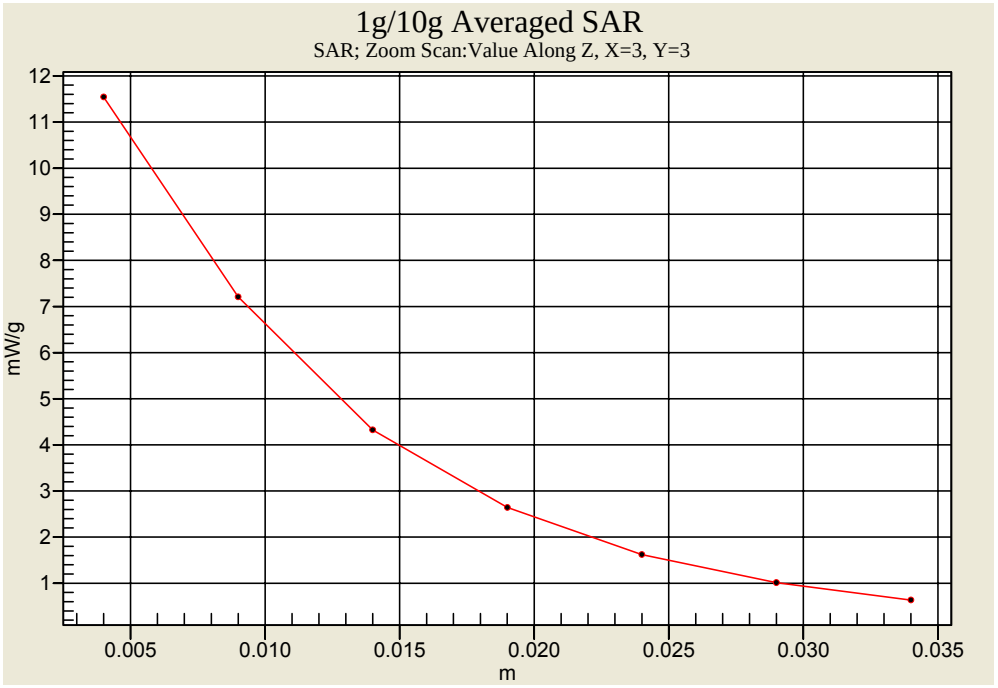
Body-Tissue-Simulating-Liquid 900MHz(20070206)



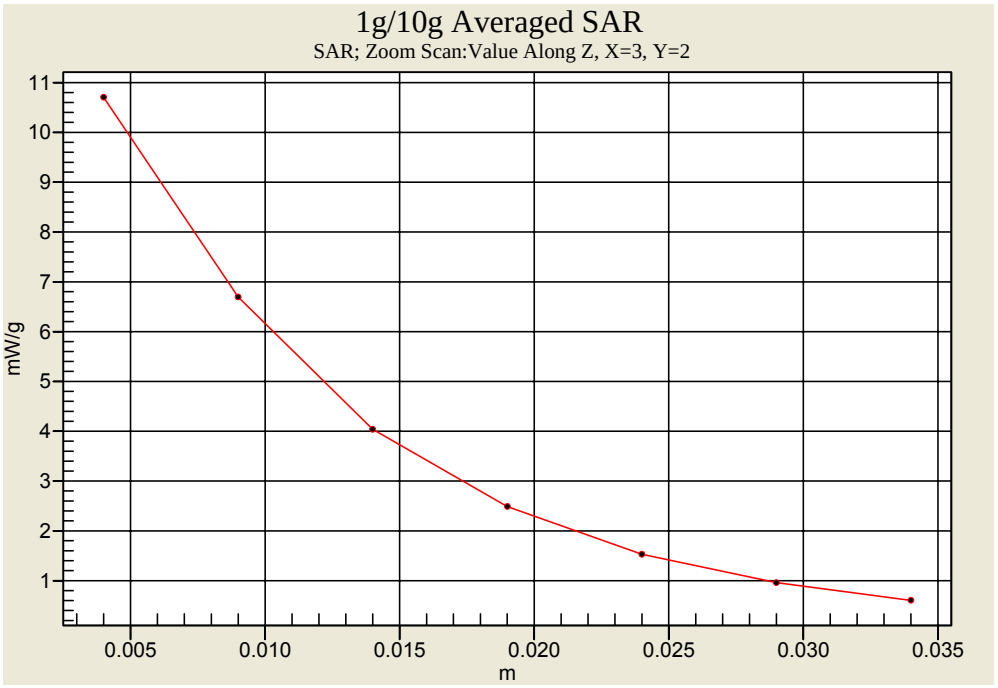
Body-Tissue-Simulating-Liquid 1800MHz(20070212)



Body-Tissue-Simulating-Liquid 900MHz(20070206)



Body-Tissue-Simulating-Liquid 1800MHz(20070207)



Body-Tissue-Simulating-Liquid 1800MHz(20070212)

Appendix B – SAR Measurement Data

See following Attached Pages for SAR Measurement Data.

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/12/2006 4:27:57 PM

RC_GSM850 CH128

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: GSM850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 824.2 MHz;

σ = 0.89 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3

Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

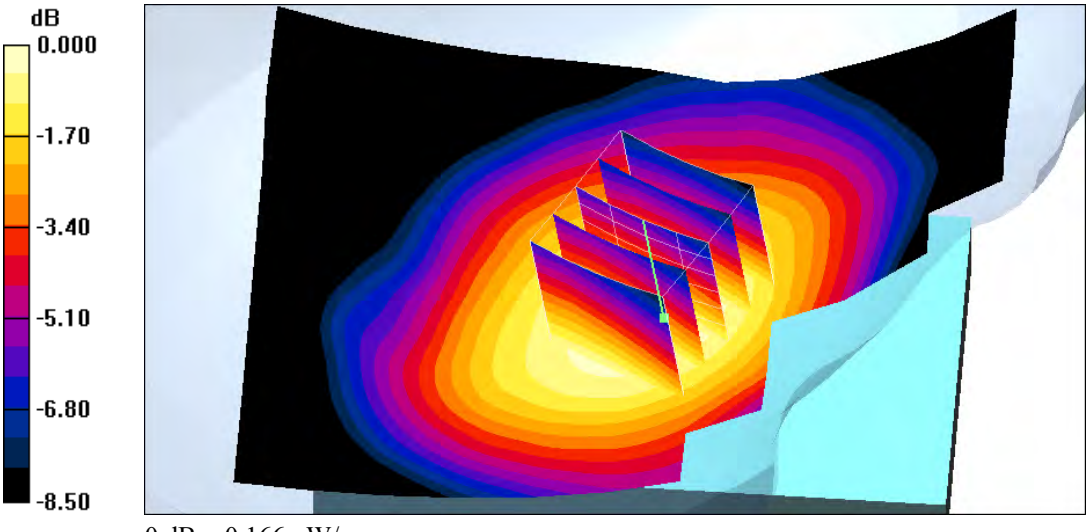
- Probe: ET3DV6 - SN1531; ConvF(6.18, 6.18, 6.18); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Cheek/Area Scan (71x101x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.167 mW/g

Right Cheek/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.98 V/m; Power Drift = -0.160 dB
Peak SAR (extrapolated) = 0.189 W/kg
SAR(1 g) = 0.158 mW/g; SAR(10 g) = 0.122 mW/g
Maximum value of SAR (measured) = 0.166 mW/g



0 dB = 0.166mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/12/2006 4:50:50 PM

RC_GSM850 CH190

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: GSM850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.6 MHz;

σ = 0.902 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3

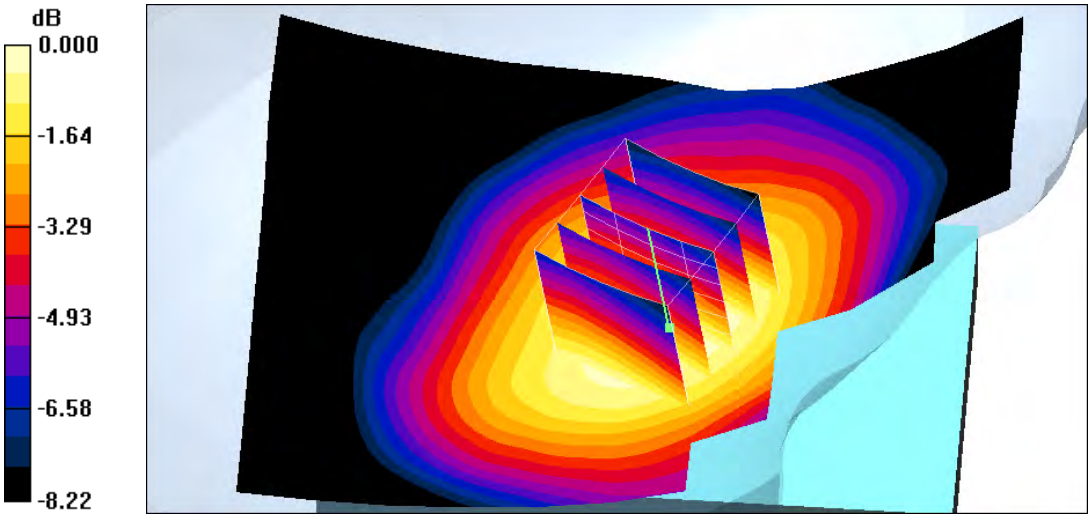
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1531; ConvF(6.18, 6.18, 6.18); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Cheek/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.158 mW/g

Right Cheek/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.77 V/m; Power Drift = -0.141 dB
Peak SAR (extrapolated) = 0.180 W/kg
SAR(1 g) = 0.149 mW/g; SAR(10 g) = 0.116 mW/g
Maximum value of SAR (measured) = 0.155 mW/g



0 dB = 0.155mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/12/2006 5:07:16 PM

RC_GSM850 CH251

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 848.8 MHz;

$\sigma = 0.914$ mho/m; $\varepsilon_r = 41$; $\rho = 1000$ kg/m^3

Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

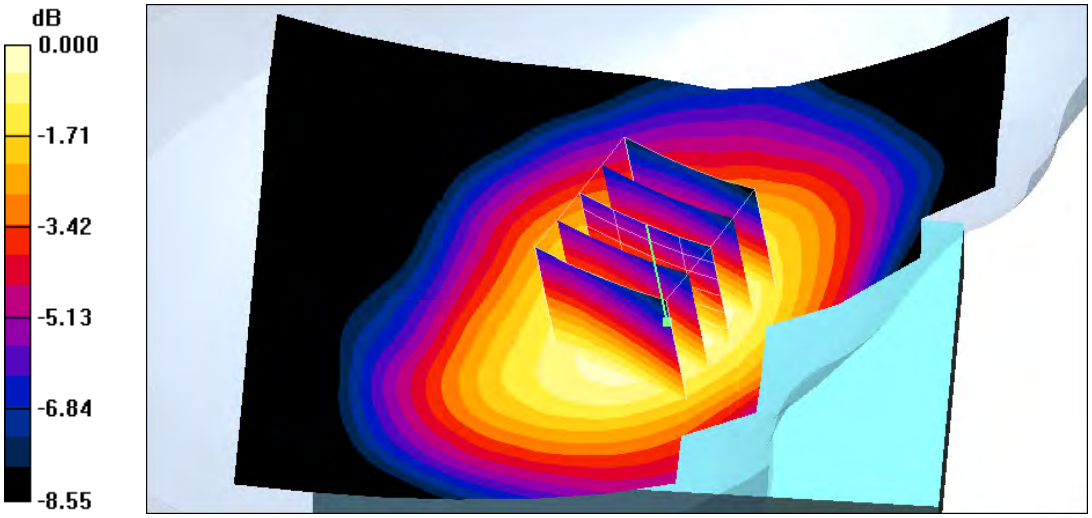
- Probe: ET3DV6 - SN1531; ConvF(6.18, 6.18, 6.18); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Cheek/Area Scan (71x101x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.128 mW/g

Right Cheek/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.34 V/m; Power Drift = 0.046 dB
Peak SAR (extrapolated) = 0.146 W/kg
SAR(1 g) = 0.121 mW/g; SAR(10 g) = 0.093 mW/g
Maximum value of SAR (measured) = 0.126 mW/g



0 dB = 0.126mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/12/2006 6:47:43 PM

RT_GSM850 CH128

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: GSM850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 824.2 MHz;

σ = 0.89 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3

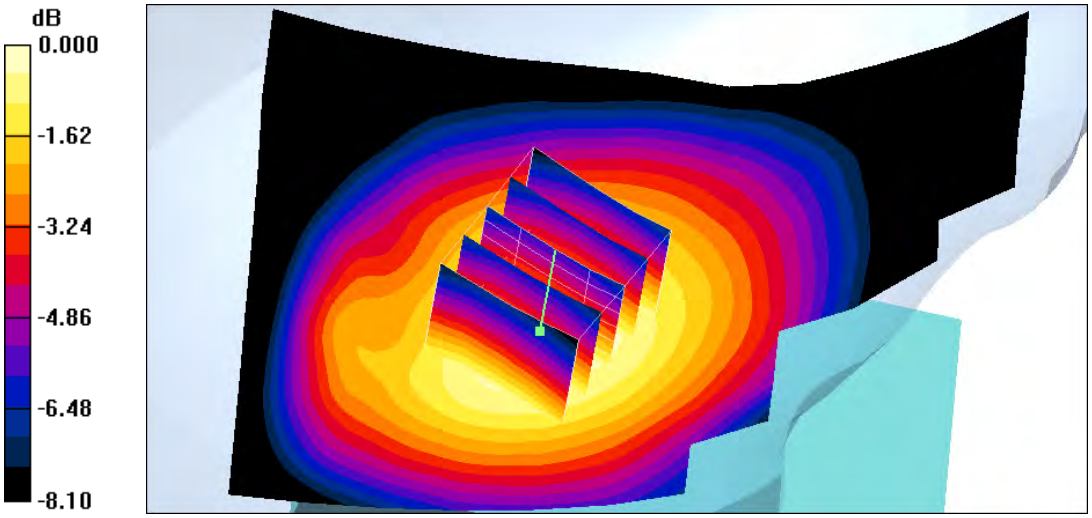
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1531; ConvF(6.18, 6.18, 6.18); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Tilted/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.139 mW/g

Right Tilted/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.97 V/m; Power Drift = -0.069 dB
Peak SAR (extrapolated) = 0.166 W/kg
SAR(1 g) = 0.136 mW/g; SAR(10 g) = 0.104 mW/g
Maximum value of SAR (measured) = 0.143 mW/g



0 dB = 0.143mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/12/2006 7:07:23 PM

RT_GSM850 CH190

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: GSM850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.6 MHz;

σ = 0.902 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3

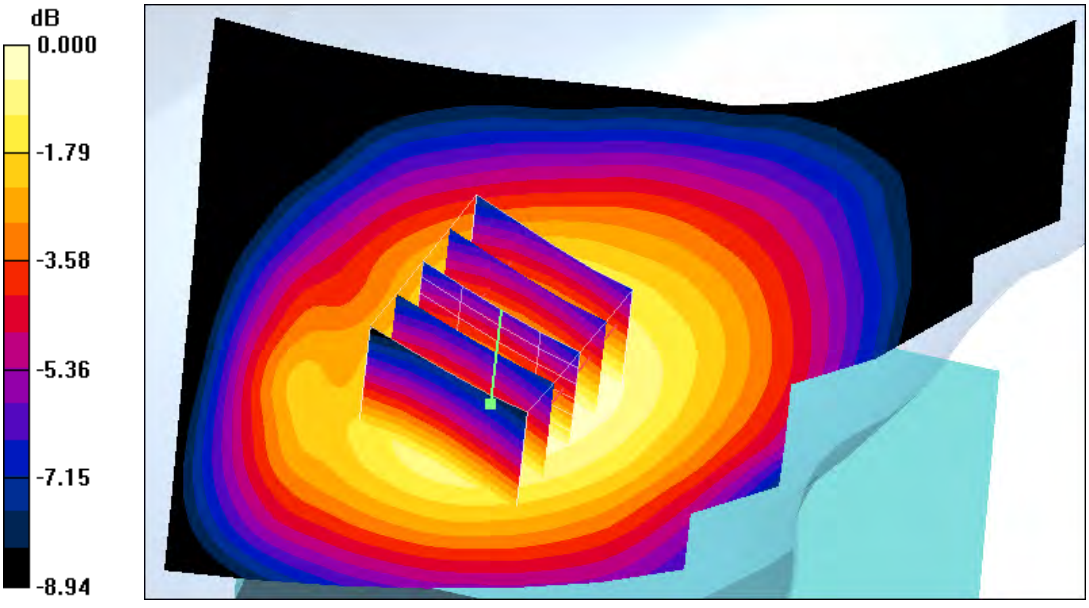
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1531; ConvF(6.18, 6.18, 6.18); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Tilted/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.130 mW/g

Right Tilted/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.56 V/m; Power Drift = 0.042 dB
Peak SAR (extrapolated) = 0.154 W/kg
SAR(1 g) = 0.126 mW/g; SAR(10 g) = 0.097 mW/g
Maximum value of SAR (measured) = 0.132 mW/g



0 dB = 0.132mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/12/2006 7:24:54 PM

RT_GSM850 CH251

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 848.8 MHz;

$\sigma = 0.914$ mho/m; $\varepsilon_r = 41$; $\rho = 1000$ kg/m^3

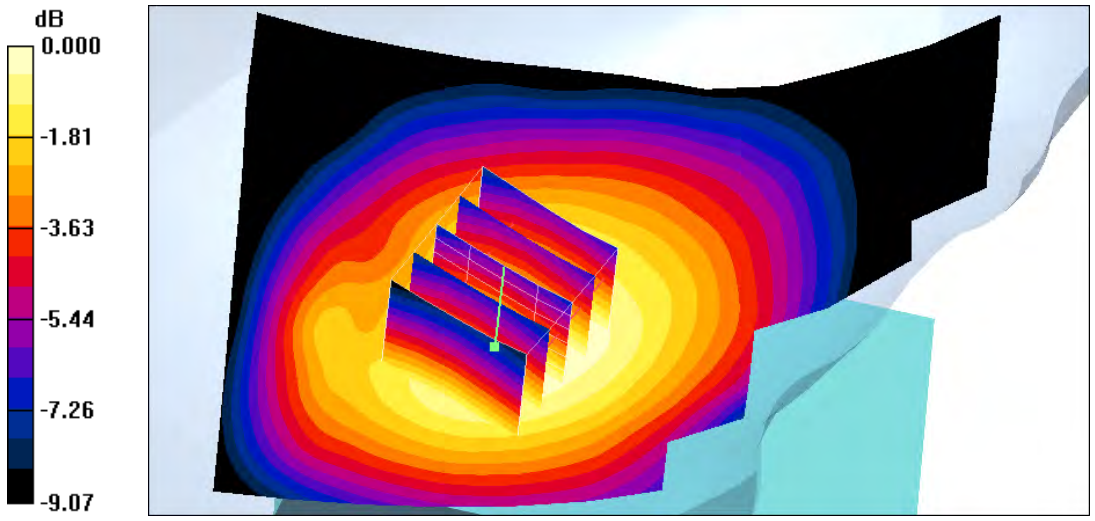
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1531; ConvF(6.18, 6.18, 6.18); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Tilted/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.109 mW/g

Right Tilted/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.63 V/m; Power Drift = 0.076 dB
Peak SAR (extrapolated) = 0.128 W/kg
SAR(1 g) = 0.105 mW/g; SAR(10 g) = 0.080 mW/g
Maximum value of SAR (measured) = 0.110 mW/g



0 dB = 0.110mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/12/2006 8:22:16 PM

LC_GSM850 CH128

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: GSM850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 824.2 MHz;

$\sigma = 0.89$ mho/m; $\varepsilon_r = 41.3$; $\rho = 1000$ kg/m^3

Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

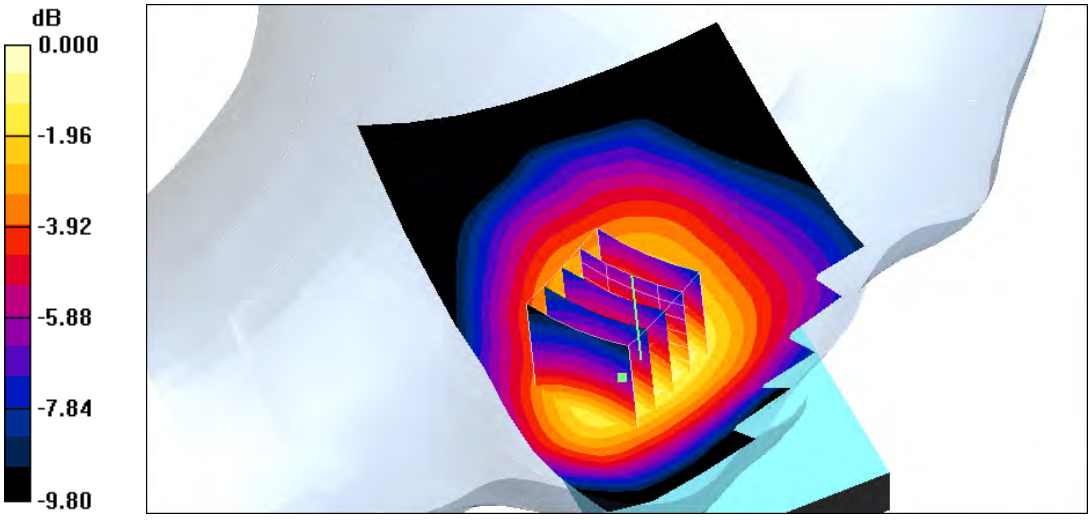
- Probe: ET3DV6 - SN1531; ConvF(6.18, 6.18, 6.18); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Cheek/Area Scan (71x101x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.204 mW/g

Right Cheek/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.94 V/m; Power Drift = -0.062 dB
Peak SAR (extrapolated) = 0.259 W/kg
SAR(1 g) = 0.191 mW/g; SAR(10 g) = 0.137 mW/g.
Maximum value of SAR (measured) = 0.207 mW/g



0 dB = 0.207mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/12/2006 8:06:21 PM

LC_GSM850 CH190

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: GSM850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.6 MHz;

σ = 0.902 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3

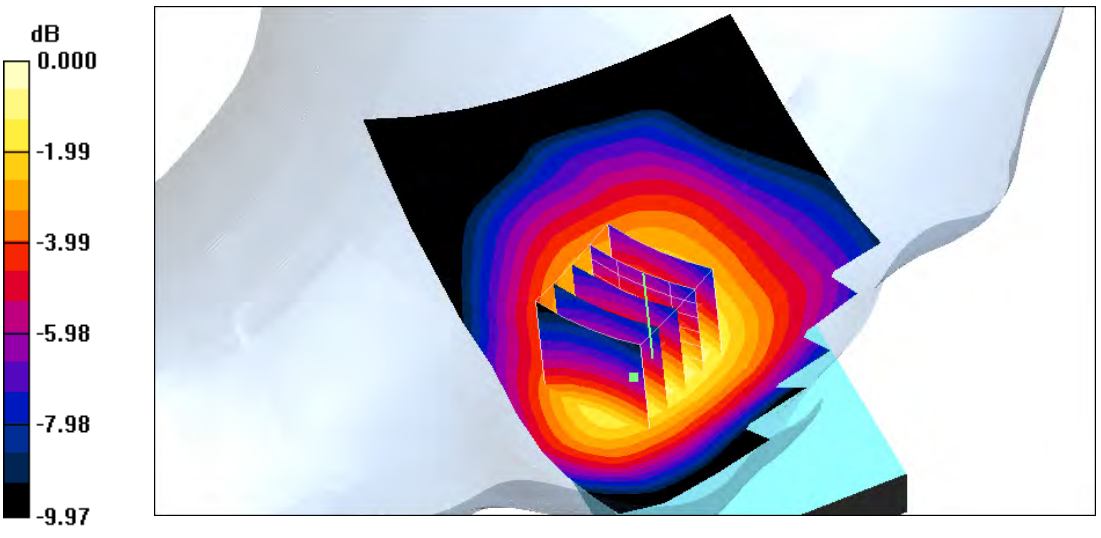
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1531; ConvF(6.18, 6.18, 6.18); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Cheek/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.200 mW/g

Right Cheek/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.89 V/m; Power Drift = -0.123 dB
Peak SAR (extrapolated) = 0.259 W/kg
SAR(1 g) = 0.188 mW/g; SAR(10 g) = 0.134 mW/g
Maximum value of SAR (measured) = 0.204 mW/g



0 dB = 0.204mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/12/2006 7:49:24 PM

LC_GSM850 CH251

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 848.8 MHz;

$\sigma = 0.914$ mho/m; $\varepsilon_r = 41$; $\rho = 1000$ kg/m^3

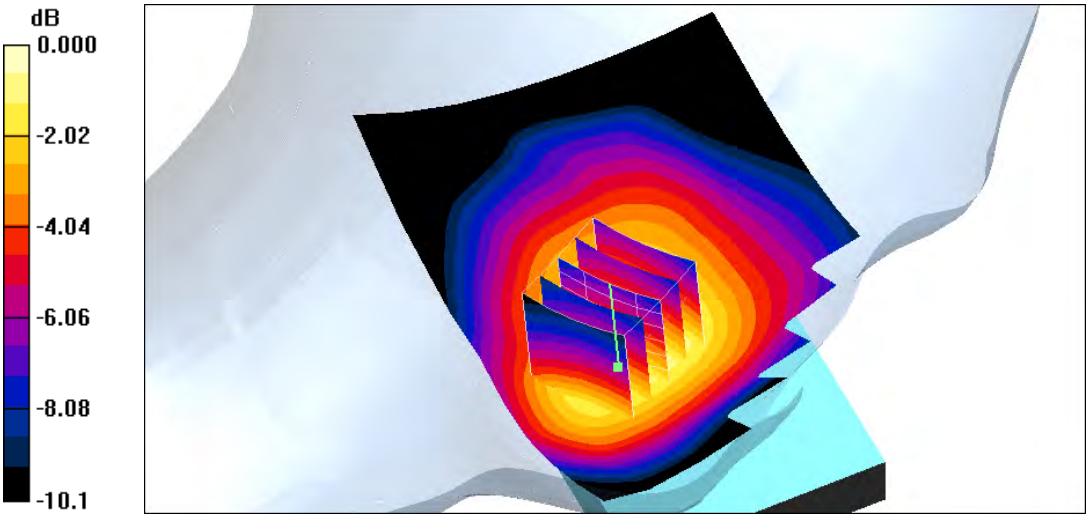
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1531; ConvF(6.18, 6.18, 6.18); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Cheek/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.170 mW/g

Right Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.33 V/m; Power Drift = -0.002 dB
Peak SAR (extrapolated) = 0.222 W/kg
SAR(1 g) = 0.159 mW/g; SAR(10 g) = 0.113 mW/g
Maximum value of SAR (measured) = 0.172 mW/g



0 dB = 0.172mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/12/2006 9:33:20 PM

LT_GSM850 CH128

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: GSM850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 824.2 MHz;

σ = 0.89 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3

Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

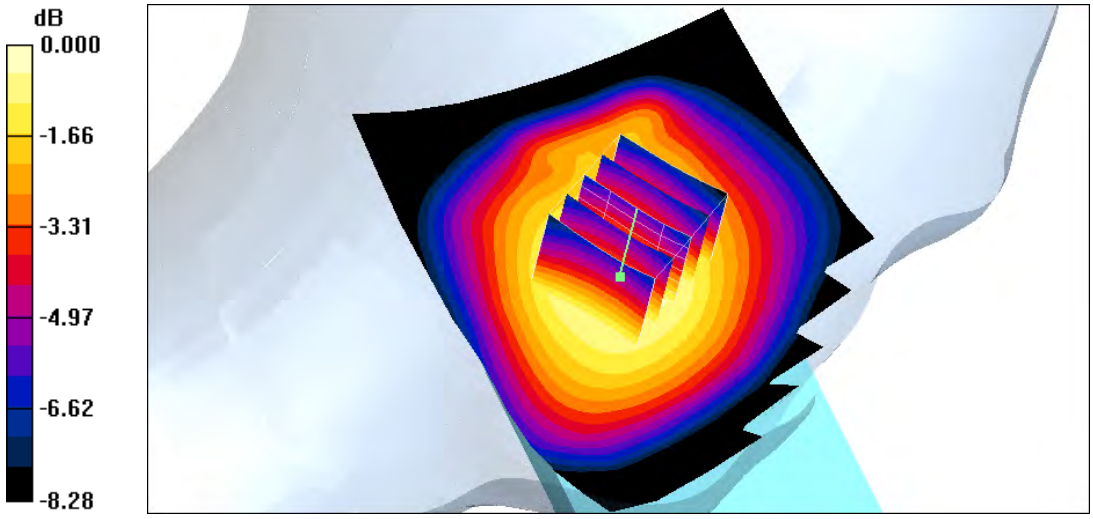
- Probe: ET3DV6 - SN1531; ConvF(6.18, 6.18, 6.18); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Tilted/Area Scan (71x101x1):

Measurement grid: dx=15mm, dy=15mm.
Maximum value of SAR (interpolated) = 0.144 mW/g

Right Tilted/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.1 V/m; Power Drift = 0.088 dB
Peak SAR (extrapolated) = 0.163 W/kg
SAR(1 g) = 0.134 mW/g; SAR(10 g) = 0.104 mW/g
Maximum value of SAR (measured) = 0.141 mW/g



0 dB = 0.141mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/12/2006 9:48:23 PM

LT_GSM850 CH190

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: GSM850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.6 MHz;

σ = 0.902 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3

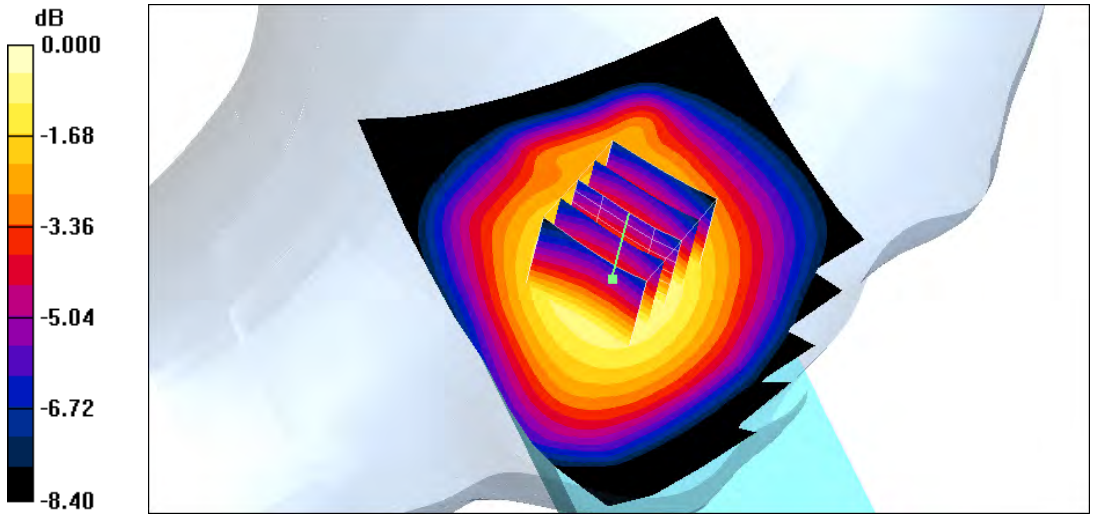
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1531; ConvF(6.18, 6.18, 6.18); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Tilted/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.132 mW/g

Right Tilted/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.44 V/m; Power Drift = 0.030 dB
Peak SAR (extrapolated) = 0.154 W/kg
SAR(1 g) = 0.126 mW/g; SAR(10 g) = 0.096 mW/g
Maximum value of SAR (measured) = 0.133 mW/g



0 dB = 0.133mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/12/2006 10:03:35 PM

LT_GSM850 CH251

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 848.8 MHz;

σ = 0.914 mho/m; ε_r = 41; ρ = 1000 kg/m^3

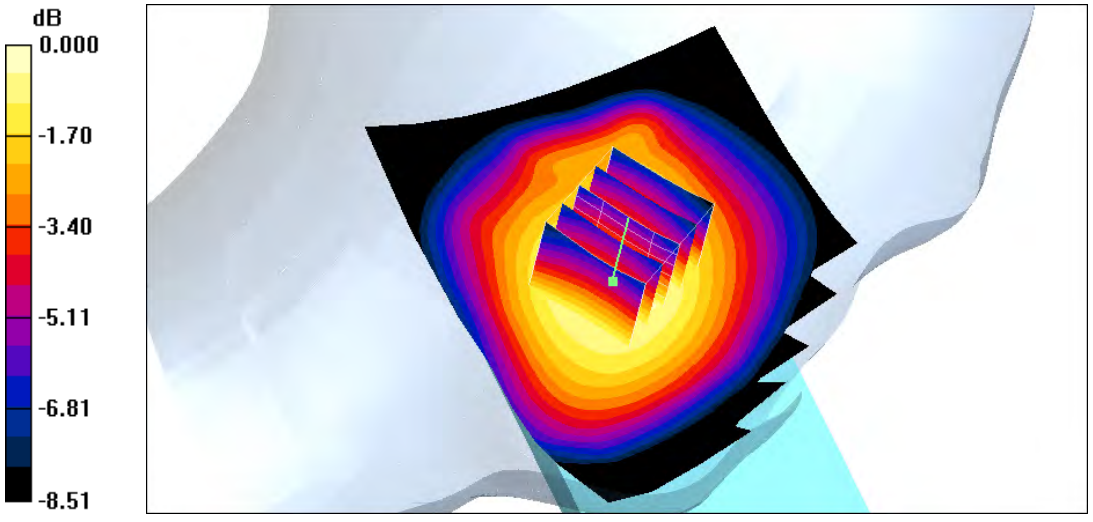
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1531; ConvF(6.18, 6.18, 6.18); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Tilted/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.113 mW/g

Right Tilted/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.57 V/m; Power Drift = 0.044 dB
Peak SAR (extrapolated) = 0.130 W/kg
SAR(1 g) = 0.106 mW/g; SAR(10 g) = 0.081 mW/g
Maximum value of SAR (measured) = 0.111 mW/g



0 dB = 0.111mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/13/2006 6:41:30 AM

RC_PCS CH512

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: PCS; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 1850.2 MHz;

σ = 1.38 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3

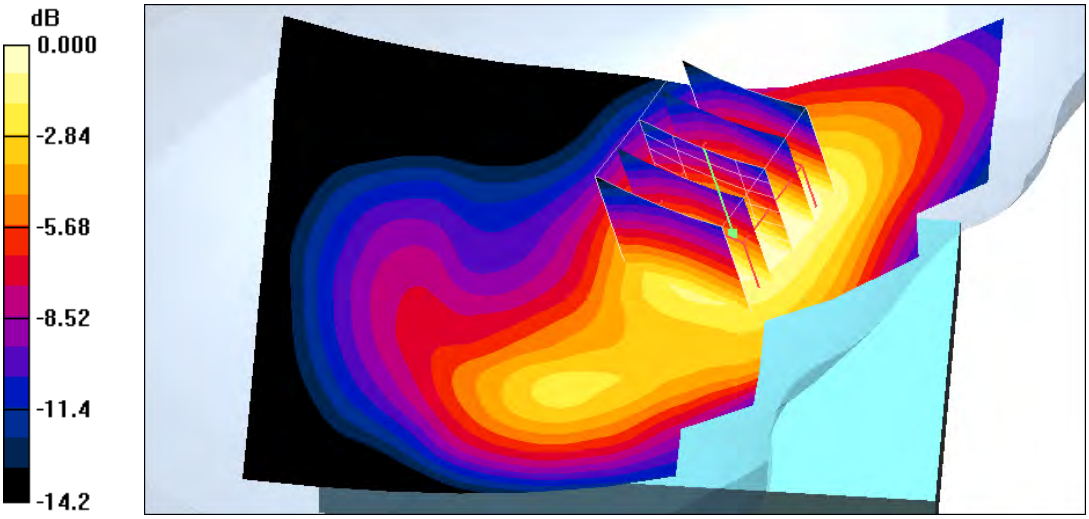
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1531; ConvF(5.09, 5.09, 5.09); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Cheek/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm.
Maximum value of SAR (interpolated) = 0.313 mW/g

Right Cheek/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.78 V/m; Power Drift = 0.018 dB
Peak SAR (extrapolated) = 0.381 W/kg
SAR(1 g) = 0.270 mW/g; SAR(10 g) = 0.176 mW/g
Maximum value of SAR (measured) = 0.285 mW/g



0 dB = 0.285mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/13/2006 6:57:43 AM

RC_PCS CH661

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz;

σ = 1.41 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3

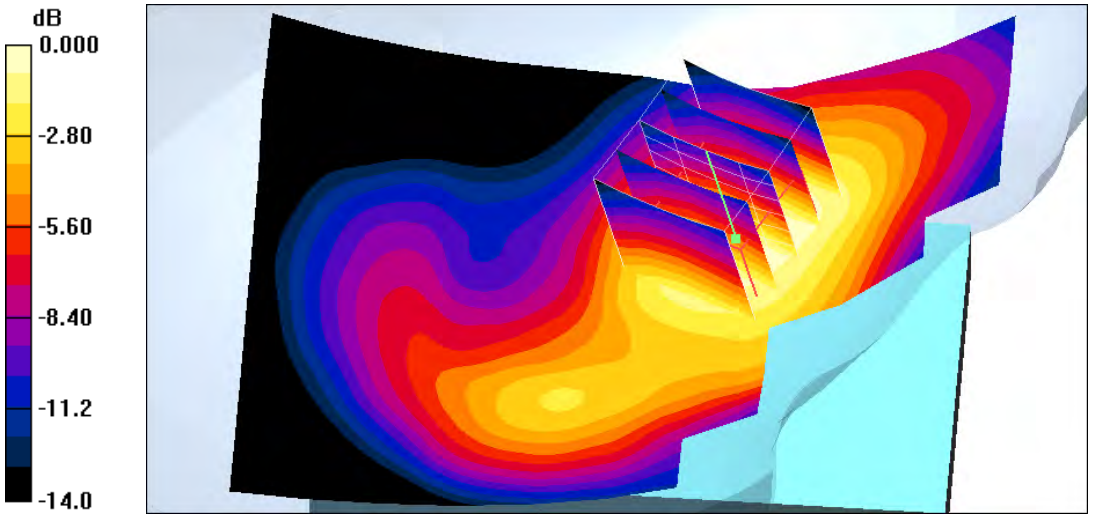
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1531; ConvF(5.09, 5.09, 5.09); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Cheek/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.252 mW/g

Right Cheek/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.22 V/m; Power Drift = -0.101 dB
Peak SAR (extrapolated) = 0.312 W/kg
SAR(1 g) = 0.218 mW/g; SAR(10 g) = 0.141 mW/g
Maximum value of SAR (measured) = 0.233 mW/g



0 dB = 0.233mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/13/2006 7:14:30 AM

RC_PCS CH810

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1909.8 MHz;

σ = 1.44 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3

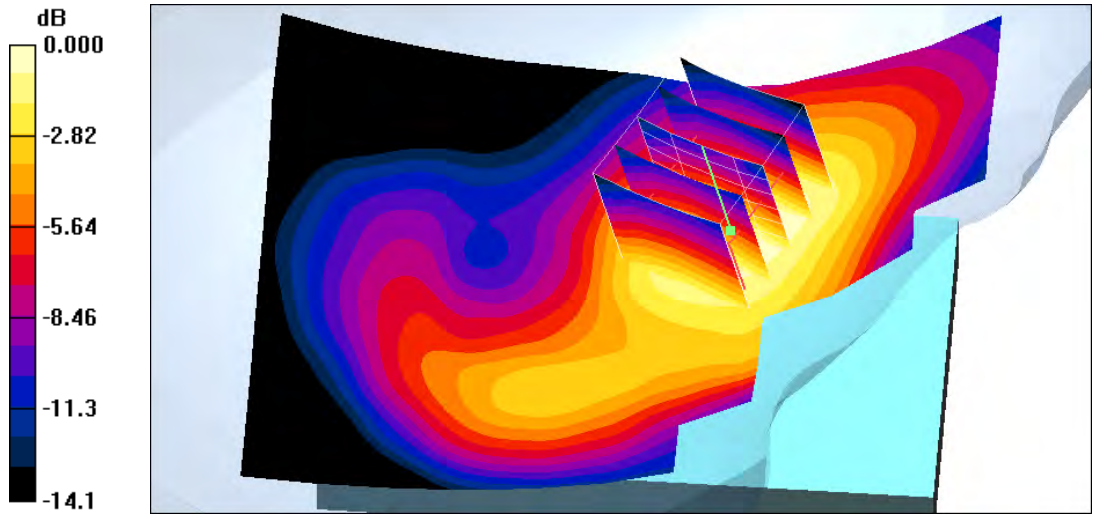
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1531; ConvF(5.09, 5.09, 5.09); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Cheek/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.222 mW/g

Right Cheek/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.99 V/m; Power Drift = -0.059 dB
Peak SAR (extrapolated) = 0.280 W/kg
SAR(1 g) = 0.192 mW/g; SAR(10 g) = 0.124 mW/g
Maximum value of SAR (measured) = 0.205 mW/g



0 dB = 0.205mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/13/2006 7:35:35 AM

RT_PCS CH512

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: PCS; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 1850.2 MHz;

σ = 1.38 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3

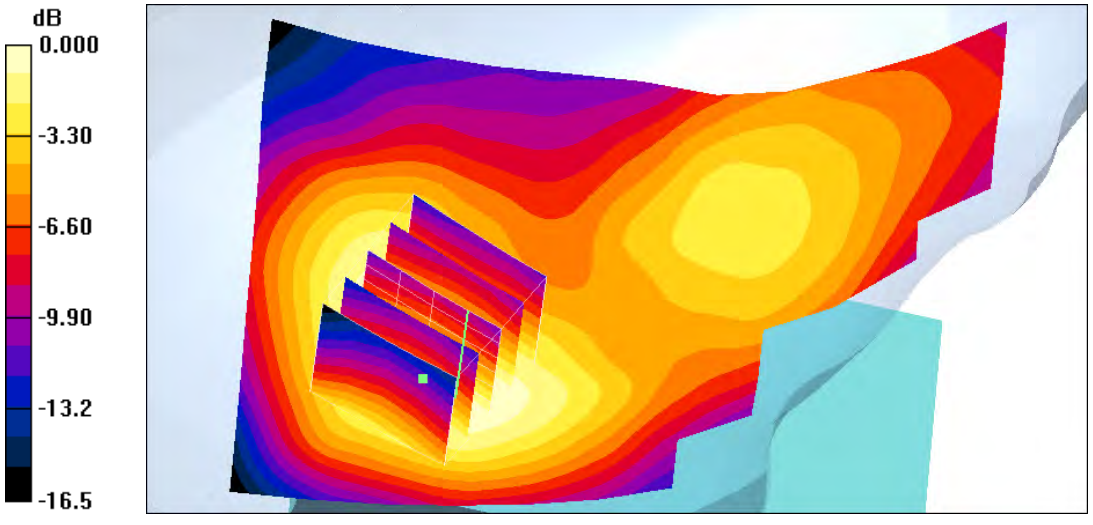
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1531; ConvF(5.09, 5.09, 5.09); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Tilted/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.120 mW/g

Right Tilted/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.63 V/m; Power Drift = -0.055 dB
Peak SAR (extrapolated) = 0.148 W/kg
SAR(1 g) = 0.104 mW/g; SAR(10 g) = 0.069 mW/g
Maximum value of SAR (measured) = 0.112 mW/g



0 dB = 0.112mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/13/2006 7:55:21 AM

RT_PCS CH661

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz;

σ = 1.41 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3

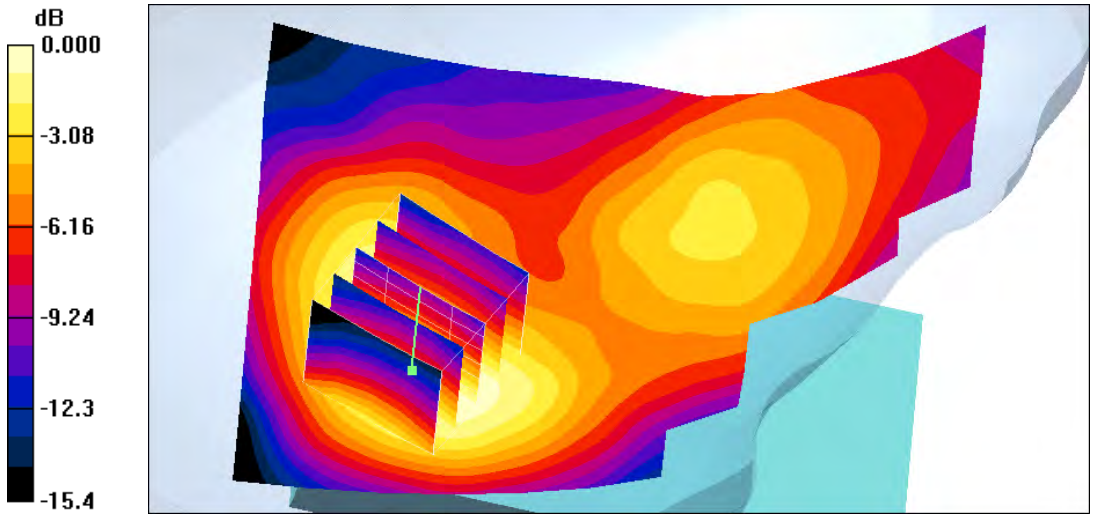
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1531; ConvF(5.09, 5.09, 5.09); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Tilted/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.101 mW/g

Right Tilted/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.50 V/m; Power Drift = -0.097 dB
Peak SAR (extrapolated) = 0.121 W/kg
SAR(1 g) = 0.085 mW/g; SAR(10 g) = 0.055 mW/g
Maximum value of SAR (measured) = 0.091 mW/g



0 dB = 0.091mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/13/2006 8:11:53 AM

RT_PCS CH810

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1909.8 MHz;

σ = 1.44 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3

Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

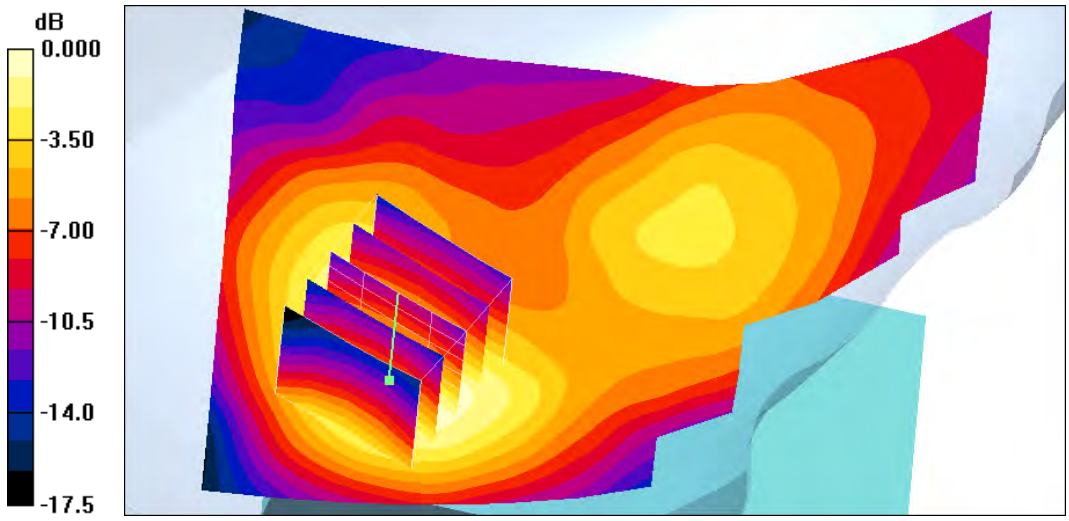
- Probe: ET3DV6 - SN1531; ConvF(5.09, 5.09, 5.09); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Tilted/Area Scan (71x101x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.102 mW/g

Right Tilted/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.00 V/m; Power Drift = -0.119 dB
Peak SAR (extrapolated) = 0.121 W/kg
SAR(1 g) = 0.085 mW/g; SAR(10 g) = 0.053 mW/g
Maximum value of SAR (measured) = 0.091 mW/g



0 dB = 0.091mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/13/2006 8:39:43 AM

LC_PCS CH512

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: PCS; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 1850.2 MHz;

σ = 1.38 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3

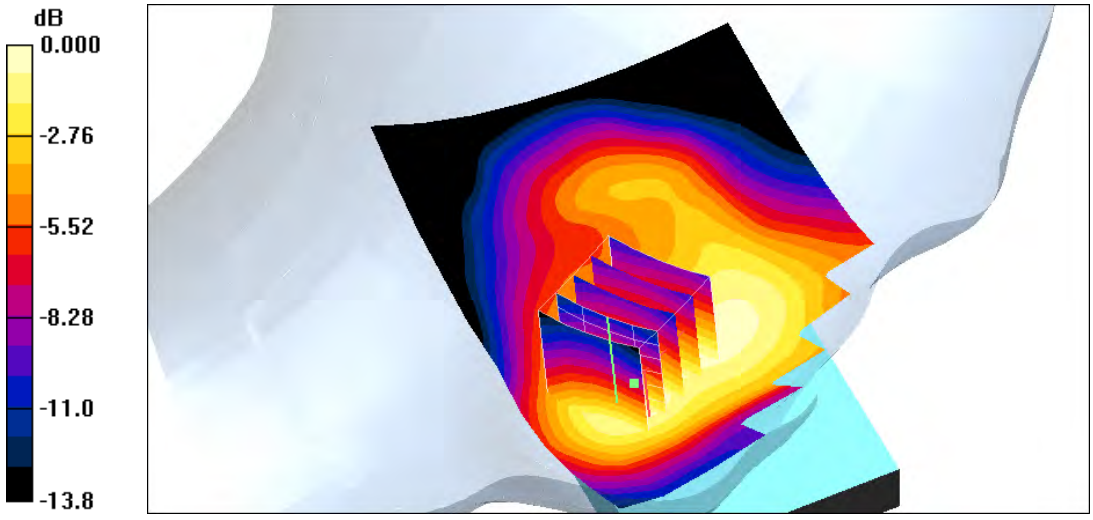
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1531; ConvF(5.09, 5.09, 5.09); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Left Cheek/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.178 mW/g

Left Cheek/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.86 V/m; Power Drift = -0.081 dB
Peak SAR (extrapolated) = 0.234 W/kg
SAR(1 g) = 0.154 mW/g; SAR(10 g) = 0.101 mW/g
Maximum value of SAR (measured) = 0.166 mW/g



0 dB = 0.166mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/14/2006 4:53:21 PM

LC_PCS CH661

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz;

σ = 1.41 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3

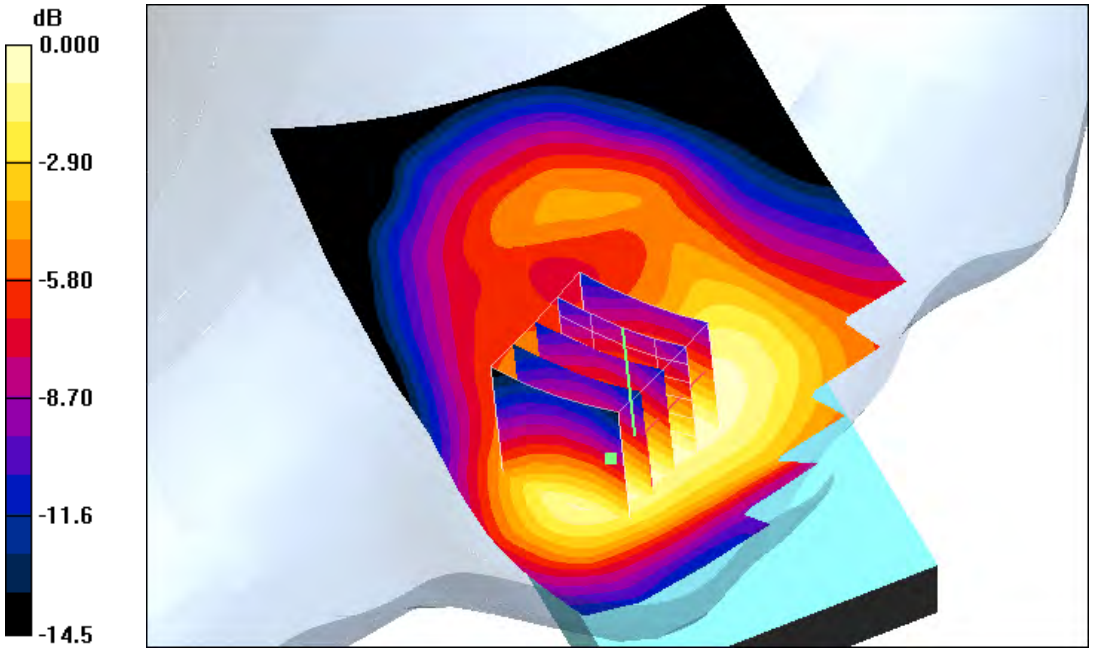
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1531; ConvF(5.09, 5.09, 5.09); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Left Cheek/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.186 mW/g

Left Cheek/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.71 V/m; Power Drift = -0.195 dB
Peak SAR (extrapolated) = 0.223 W/kg
SAR(1 g) = 0.158 mW/g; SAR(10 g) = 0.109 mW/g
Maximum value of SAR (measured) = 0.169 mW/g



0 dB = 0.169mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/14/2006 5:12:46 PM

LC_PCS CH810

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1909.8 MHz;

σ = 1.44 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3

Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

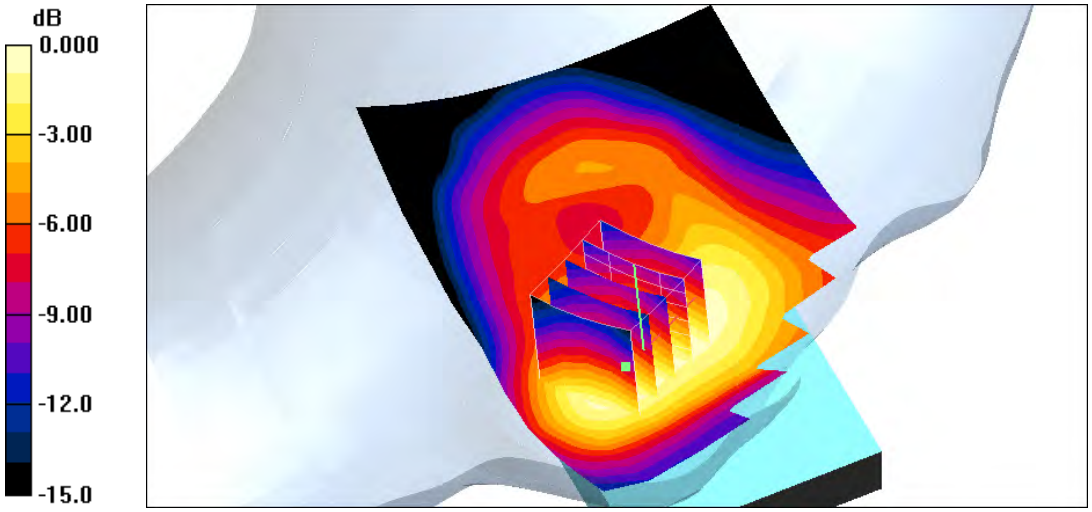
- Probe: ET3DV6 - SN1531; ConvF(5.09, 5.09, 5.09); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Left Cheek/Area Scan (71x101x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.171 mW/g

Left Cheek/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.17 V/m; Power Drift = -0.048 dB
Peak SAR (extrapolated) = 0.208 W/kg
SAR(1 g) = 0.144 mW/g; SAR(10 g) = 0.098 mW/g
Maximum value of SAR (measured) = 0.155 mW/g



0 dB = 0.155mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/14/2006 5:33:37 PM

LT_PCS CH512

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: PCS; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 1850.2 MHz;

σ = 1.38 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3

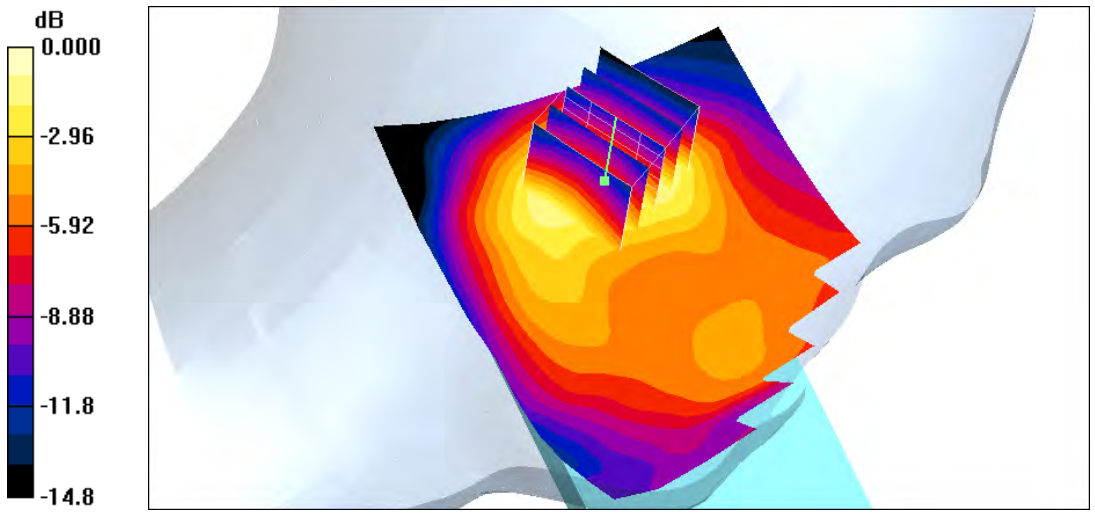
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1531; ConvF(5.09, 5.09, 5.09); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Left Tilted/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.111 mW/g

Left Tilted/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.14 V/m; Power Drift = -0.004 dB
Peak SAR (extrapolated) = 0.141 W/kg
SAR(1 g) = 0.097 mW/g; SAR(10 g) = 0.059 mW/g
Maximum value of SAR (measured) = 0.106 mW/g



0 dB = 0.106mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/14/2006 5:50:13 PM

LT_PCS CH661

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz;

σ = 1.41 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3

Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

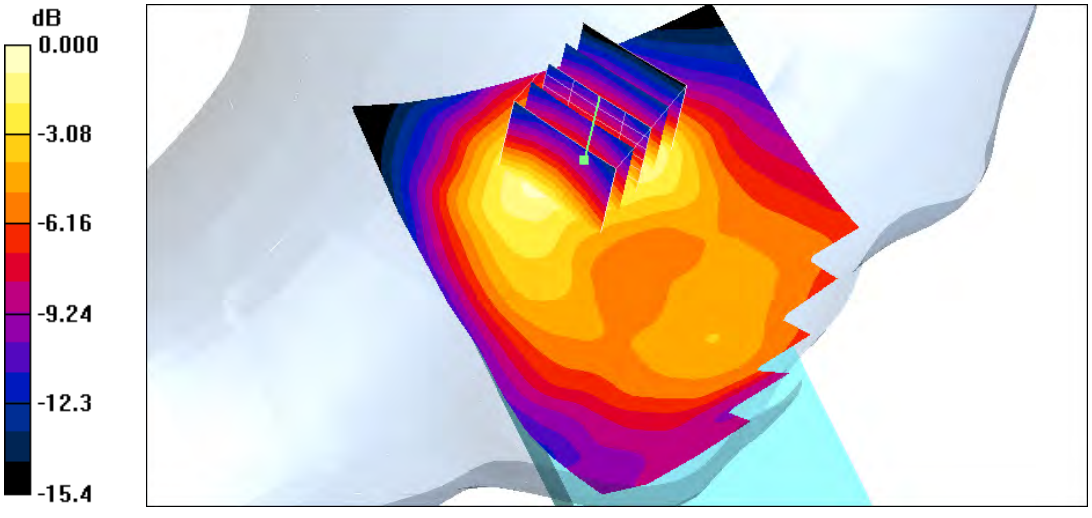
- Probe: ET3DV6 - SN1531; ConvF(5.09, 5.09, 5.09); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Left Tilted/Area Scan (71x101x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.086 mW/g

Left Tilted/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.24 V/m; Power Drift = -0.036 dB
Peak SAR (extrapolated) = 0.113 W/kg
SAR(1 g) = 0.075 mW/g; SAR(10 g) = 0.045 mW/g
Maximum value of SAR (measured) = 0.084 mW/g



0 dB = 0.084mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/14/2006 6:27:07 PM

LT_PCS CH810

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1909.8 MHz;

σ = 1.44 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3

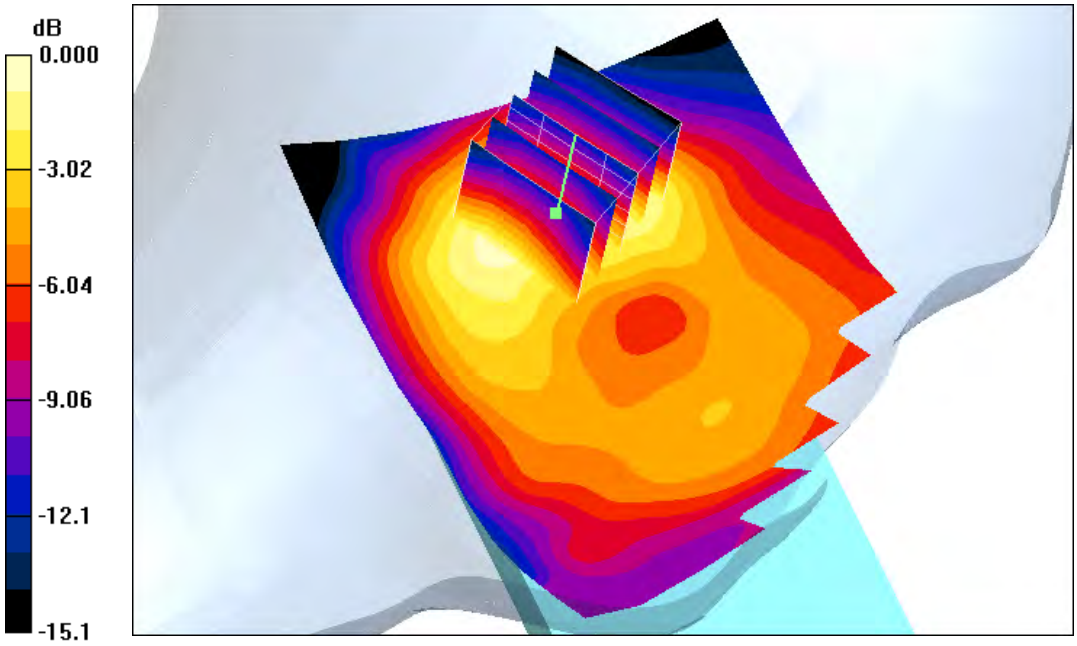
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1531; ConvF(5.09, 5.09, 5.09); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Left Tilted/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.078 mW/g

Left Tilted/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.91 V/m; Power Drift = -0.027 dB
Peak SAR (extrapolated) = 0.102 W/kg
SAR(1 g) = 0.068 mW/g; SAR(10 g) = 0.041 mW/g
Maximum value of SAR (measured) = 0.075 mW/g



0 dB = 0.075mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/14/2006 11:39:10 PM

Flat_GSM850 CH128_muscle 15mm

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: GSM850/GPRS; Frequency: 824.2 MHz;Duty Cycle: 1:4.2
Medium parameters used (interpolated): f = 824.2 MHz;

$\sigma = 0.951$ mho/m; $\varepsilon_r = 54.9$; $\rho = 1000$ kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

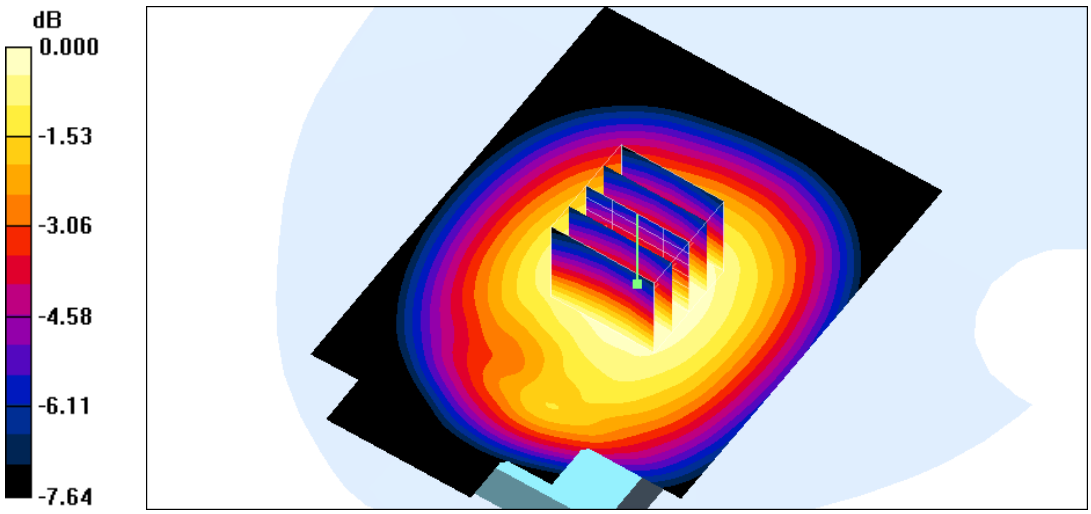
- Probe: ET3DV6 - SN1531; ConvF(5.96, 5.96, 5.96); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Flat/Area Scan (71x101x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.430 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.2 V/m; Power Drift = 0.107 dB
Peak SAR (extrapolated) = 0.477 W/kg
SAR(1 g) = 0.396 mW/g; SAR(10 g) = 0.307 mW/g
Maximum value of SAR (measured) = 0.415 mW/g



0 dB = 0.415mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/14/2006 11:53:51 PM

Flat_GSM850 CH190_muscle 15mm

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: GSM850/GPRS; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.6 MHz;

$\sigma = 0.96$ mho/m; $\varepsilon_r = 54.7$; $\rho = 1000$ kg/m^3

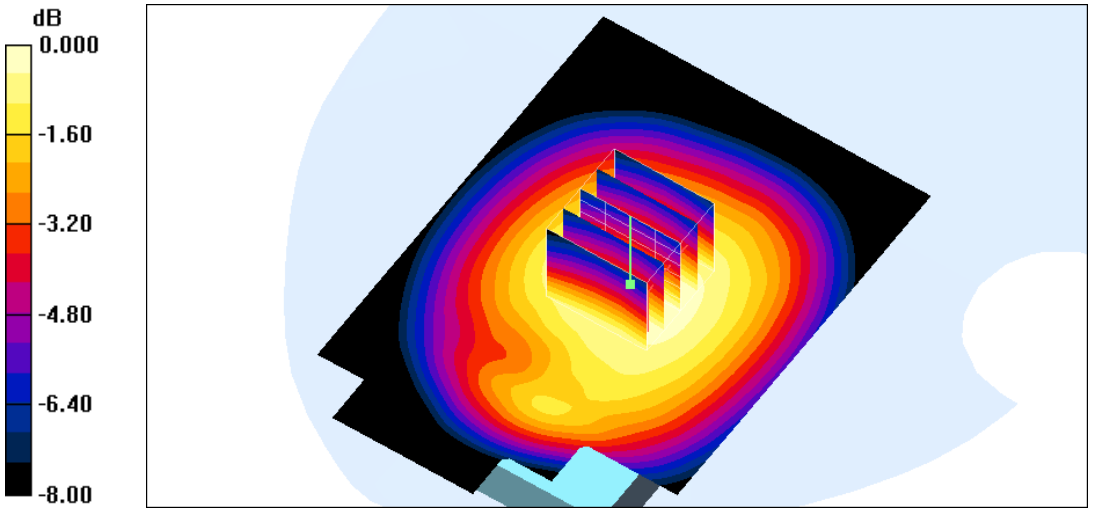
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1531; ConvF(5.96, 5.96, 5.96); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Flat/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.359 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.25 V/m; Power Drift = 0.027 dB
Peak SAR (extrapolated) = 0.416 W/kg
SAR(1 g) = 0.346 mW/g; SAR(10 g) = 0.267 mW/g
Maximum value of SAR (measured) = 0.364 mW/g



0 dB = 0.364mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/15/2006 12:23:33 AM

Flat_GSM850 CH251_muscle 15mm

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: GSM850/GPRS; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 848.8 MHz;

σ = 0.973 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3

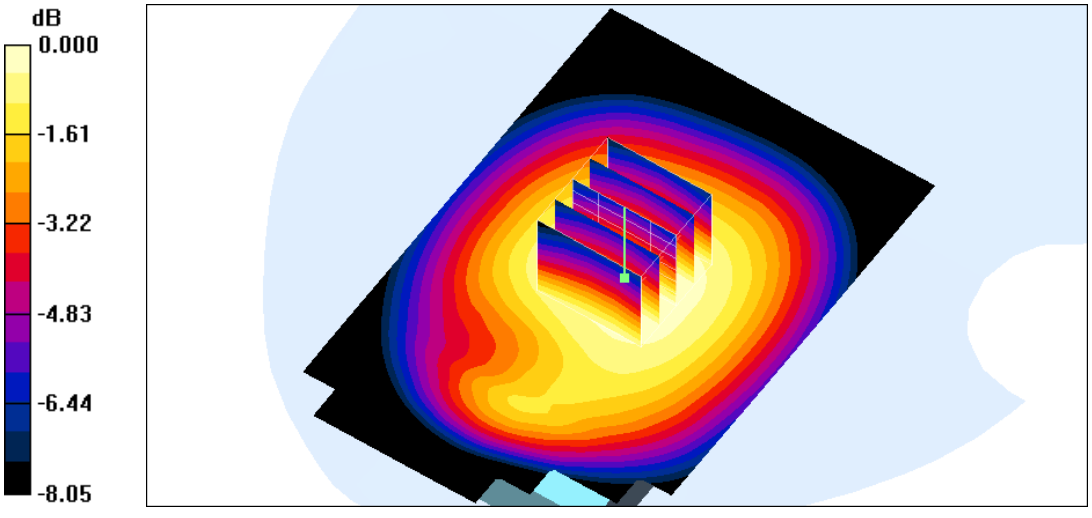
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1531; ConvF(5.96, 5.96, 5.96); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Flat/Area Scan (101x151x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.304 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.46 V/m; Power Drift = 0.034 dB
Peak SAR (extrapolated) = 0.347 W/kg
SAR(1 g) = 0.290 mW/g; SAR(10 g) = 0.225 mW/g
Maximum value of SAR (measured) = 0.304 mW/g



0 dB = 0.304mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/14/2006 10:16:58 PM

Flat_PCS CH512_muscle 15mm

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: PCS/GPRS; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used (interpolated): f = 1850.2 MHz;

σ = 1.52 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

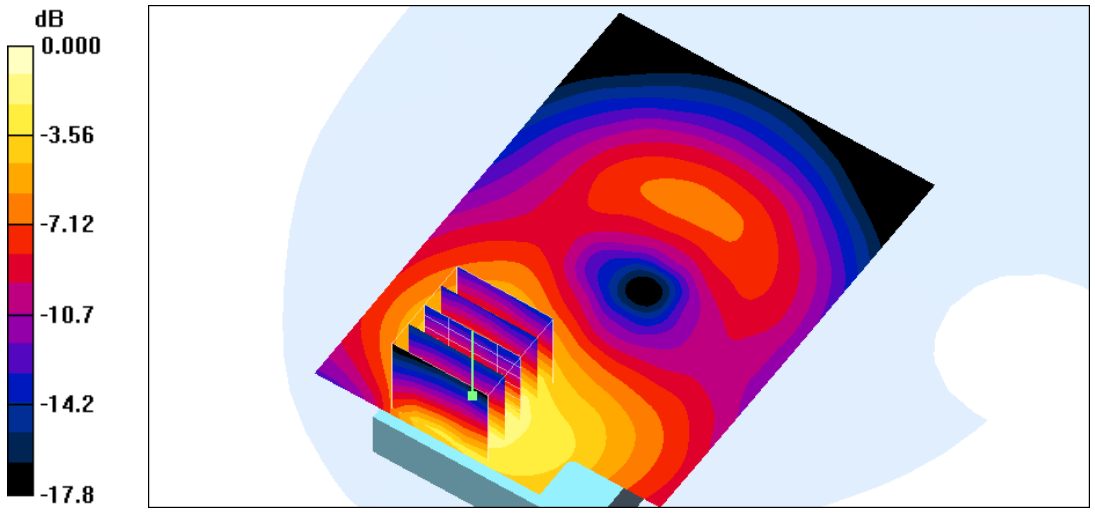
- Probe: ET3DV6 - SN1531; ConvF(4.62, 4.62, 4.62); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Flat/Area Scan (71x101x1):

Measurement grid: dx=15mm, dy=15mm.
Maximum value of SAR (interpolated) = 0.226 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.18 V/m; Power Drift = -0.009 dB
Peak SAR (extrapolated) = 0.404 W/kg
SAR(1 g) = 0.216 mW/g; SAR(10 g) = 0.118 mW/g
Maximum value of SAR (measured) = 0.237 mW/g



0 dB = 0.237mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/14/2006 10:02:02 PM

Flat_PCS CH661_muscle 15mm

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: PCS/GPRS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz;

σ = 1.55 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

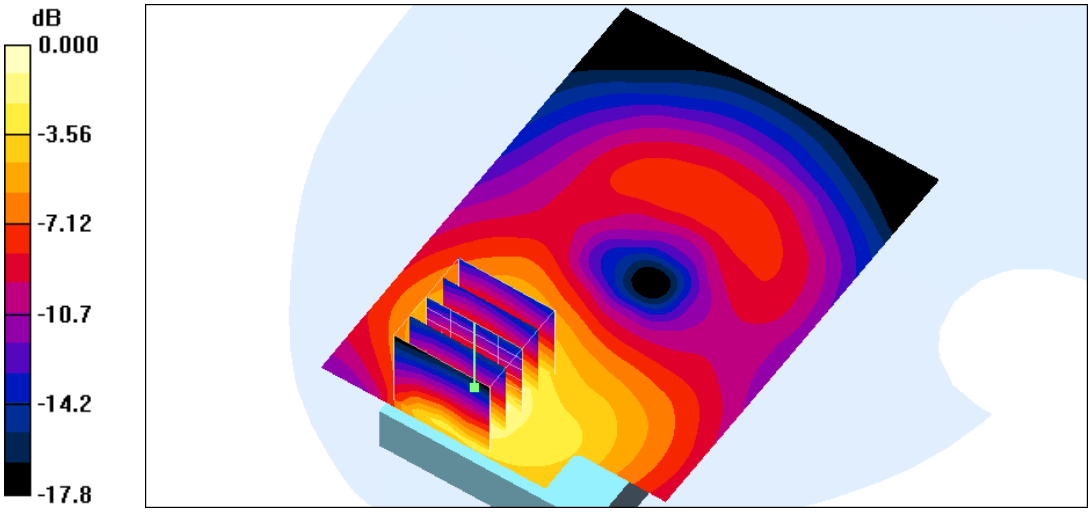
- Probe: ET3DV6 - SN1531; ConvF(4.62, 4.62, 4.62); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Flat/Area Scan (71x101x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.175 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.29 V/m; Power Drift = -0.068 dB
Peak SAR (extrapolated) = 0.325 W/kg
SAR(1 g) = 0.169 mW/g; SAR(10 g) = 0.091 mW/g
Maximum value of SAR (measured) = 0.184 mW/g



0 dB = 0.184mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 12/14/2006 10:33:42 PM

Flat_PCS CH810_muscle 15mm

DUT: Mercury 619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: PCS/GPRS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1909.8 MHz;

σ = 1.57 mho/m; ε_r = 52.7; ρ = 1000 kg/m^3

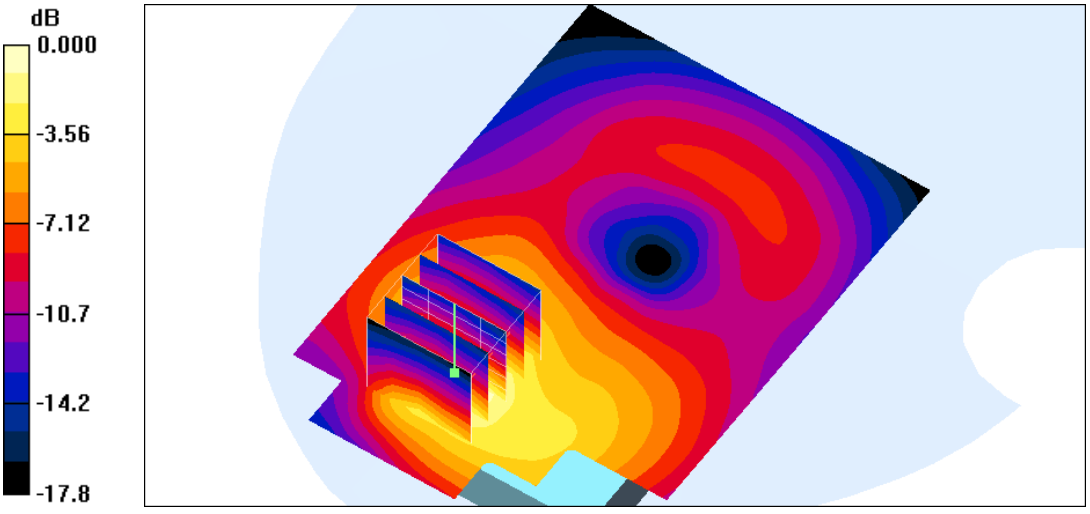
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1531; ConvF(4.62, 4.62, 4.62); Calibrated: 1/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn393; Calibrated: 9/5/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Flat/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.163 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.90 V/m; Power Drift = -0.114 dB
Peak SAR (extrapolated) = 0.304 W/kg
SAR(1 g) = 0.157 mW/g; SAR(10 g) = 0.083 mW/g
Maximum value of SAR (measured) = 0.170 mW/g



0 dB = 0.170mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 1/10/2007 4:25:52 AM

Flat_GSM850 GPRS CH128_2Down 2UP

DUT: M619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: GSM 850 (2Down, 2Up); Frequency: 824.2 MHz;Duty Cycle: 1:4.2
Medium parameters used (interpolated): f = 824.2 MHz;

$\sigma = 0.971$ mho/m; $\varepsilon_r = 54.3$; $\rho = 1000$ kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

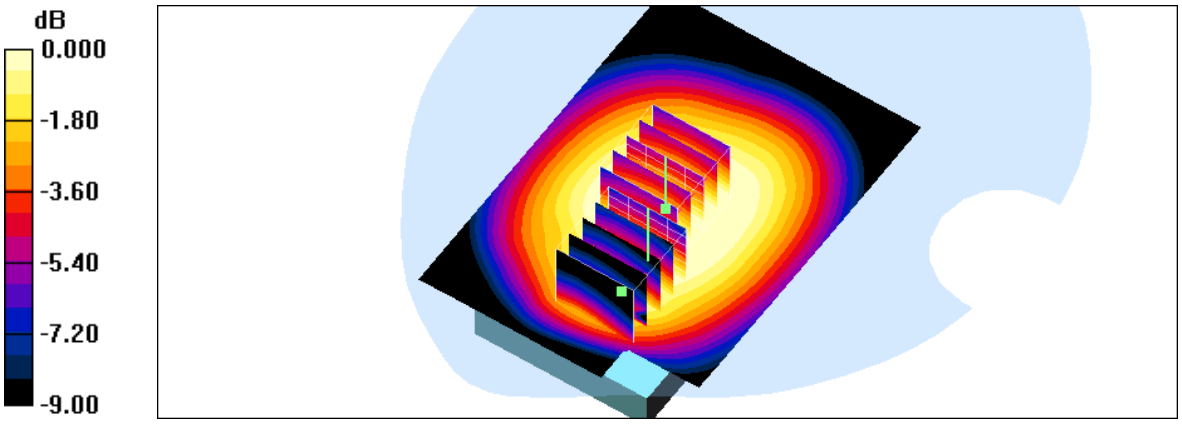
DASY4 Configuration:

- Probe: ET3DV6 - SN1530; ConvF(5.66, 5.66, 5.66); Calibrated: 9/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 10/16/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Flat/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.738 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.8 V/m; Power Drift = -0.182 dB
Peak SAR (extrapolated) = 0.807 W/kg
SAR(1 g) = 0.678 mW/g; SAR(10 g) = 0.526 mW/g
Maximum value of SAR (measured) = 0.709 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.8 V/m; Power Drift = -0.182 dB
Peak SAR (extrapolated) = 0.732 W/kg
SAR(1 g) = 0.535 mW/g; SAR(10 g) = 0.380 mW/g
Maximum value of SAR (measured) = 0.595 mW/g



0 dB = 0.595mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 2/12/2007 2:25:52 PM

Flat_GSM850 GPRS CH128_BT OFF

DUT: M619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: GSM 850 (2Down, 2Up); Frequency: 824.2 MHz;Duty Cycle: 1:4.2
Medium parameters used (interpolated): f = 824.2 MHz;

σ = 0.971 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

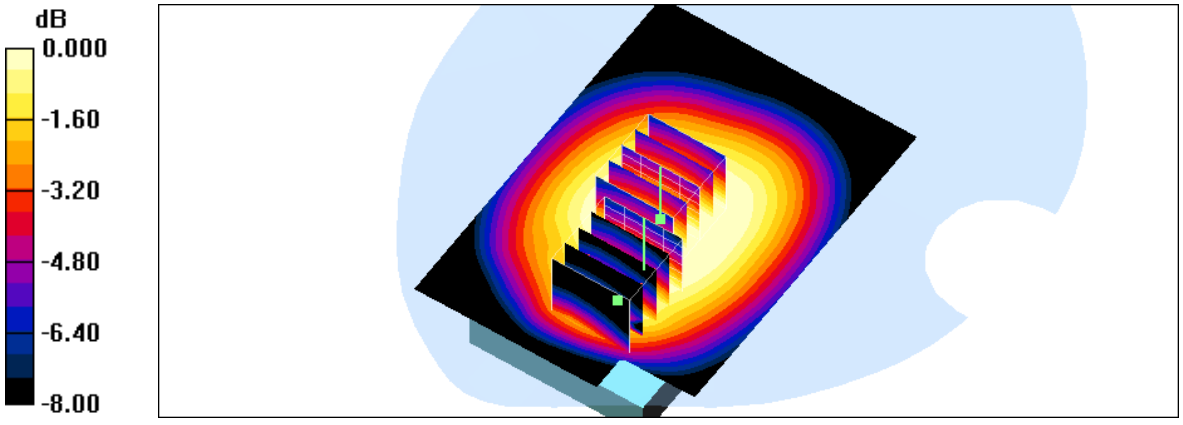
DASY4 Configuration:

- Probe: ET3DV6 - SN1530; ConvF(5.66, 5.66, 5.66); Calibrated: 9/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 10/16/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Flat/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.579 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.6 V/m; Power Drift = -0.117 dB
Peak SAR (extrapolated) = 0.807 W/kg
SAR(1 g) = 0.519 mW/g; SAR(10 g) = 0.393 mW/g
Maximum value of SAR (measured) = 0.551 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.6 V/m; Power Drift = -0.117 dB
Peak SAR (extrapolated) = 0.636 W/kg
SAR(1 g) = 0.507 mW/g; SAR(10 g) = 0.381 mW/g
Maximum value of SAR (measured) = 0.538 mW/g



0 dB = 0.538mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 1/10/2007 4:47:26 AM

Flat_GSM850 GPRS CH190_2Down 2UP

DUT: M619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: GSM 850 (2Down, 2Up); Frequency: 836.6 MHz;Duty Cycle: 1:4.2
Medium parameters used: f = 837 MHz;

σ = 0.984 mho/m; ε_r = 54.2; ρ = 1000 kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

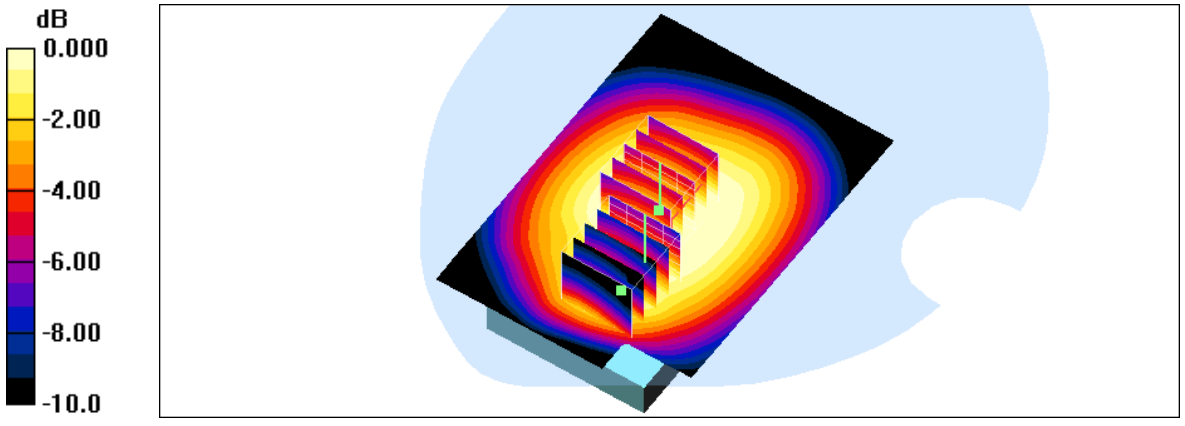
DASY4 Configuration:

- Probe: ET3DV6 - SN1530; ConvF(5.66, 5.66, 5.66); Calibrated: 9/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 10/16/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Flat/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.654 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.3 V/m; Power Drift = 0.010 dB
Peak SAR (extrapolated) = 0.738 W/kg
SAR(1 g) = 0.618 mW/g; SAR(10 g) = 0.478 mW/g
Maximum value of SAR (measured) = 0.646 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.3 V/m; Power Drift = 0.010 dB
Peak SAR (extrapolated) = 0.684 W/kg
SAR(1 g) = 0.478 mW/g; SAR(10 g) = 0.342 mW/g
Maximum value of SAR (measured) = 0.543 mW/g



0 dB = 0.543mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 1/10/2007 5:08:09 AM

Flat_GSM850 GPRS CH251_2Down 2UP

DUT: M619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: GSM 850 (2Down, 2Up); Frequency: 848.8 MHz;Duty Cycle: 1:4.2
Medium parameters used: f = 849 MHz;

σ = 0.996 mho/m; ε_r = 54.1; ρ = 1000 kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

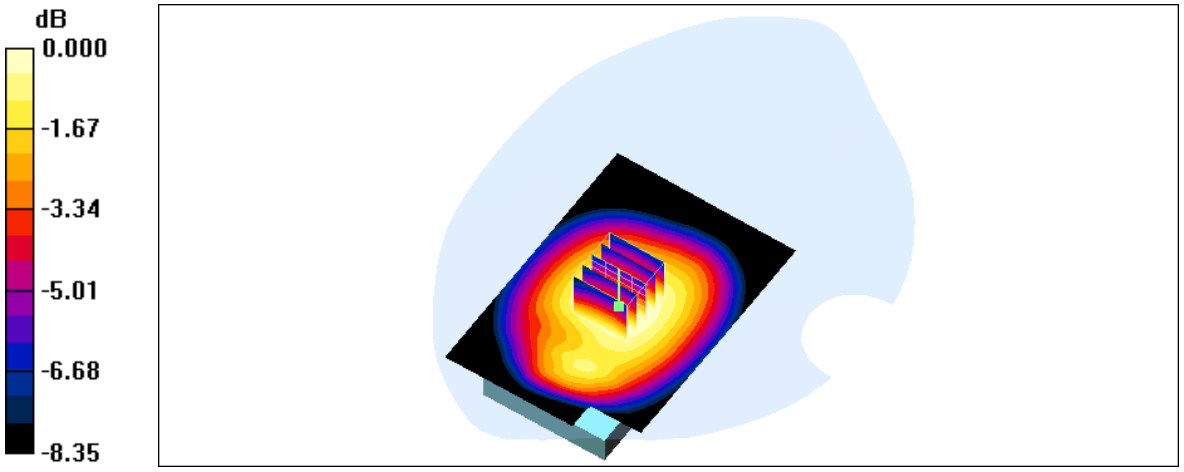
- Probe: ET3DV6 - SN1530; ConvF(5.66, 5.66, 5.66); Calibrated: 9/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 10/16/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Flat/Area Scan (71x101x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.552 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.2 V/m; Power Drift = 0.017 dB
Peak SAR (extrapolated) = 0.642 W/kg
SAR(1 g) = 0.526 mW/g; SAR(10 g) = 0.406 mW/g
Maximum value of SAR (measured) = 0.551 mW/g



0 dB = 0.551mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 1/10/2007 7:33:28 AM

Flat_PCS GPRS CH512_2Down 2UP

DUT: M619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: PCS 1900 GPRS(2Down,2Up); Frequency: 1850.2 MHz;Duty Cycle: 1:4.2
Medium parameters used (interpolated): f = 1850.2 MHz;

σ = 1.52 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

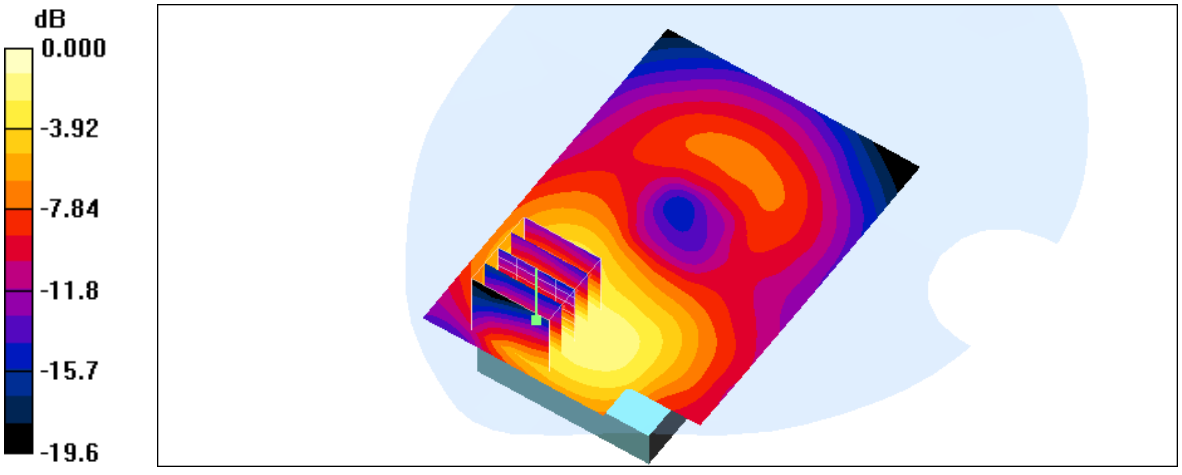
- Probe: ET3DV6 - SN1530; ConvF(4.4, 4.4, 4.4); Calibrated: 9/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 10/16/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Flat/Area Scan (71x101x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.446 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.45 V/m; Power Drift = -0.070 dB
Peak SAR (extrapolated) = 0.701 W/kg
SAR(1 g) = 0.386 mW/g; SAR(10 g) = 0.218 mW/g
Maximum value of SAR (measured) = 0.429 mW/g



0 dB = 0.429mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 2/7/2007 10:22:03 AM

FLAT_PCS GPRS CH512_BT OFF

DUT: M619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: PCS 1900 GPRS(2Down,2Up); Frequency: 1850.2 MHz;Duty Cycle: 1:4.2
Medium parameters used (interpolated): f = 1850.2 MHz;

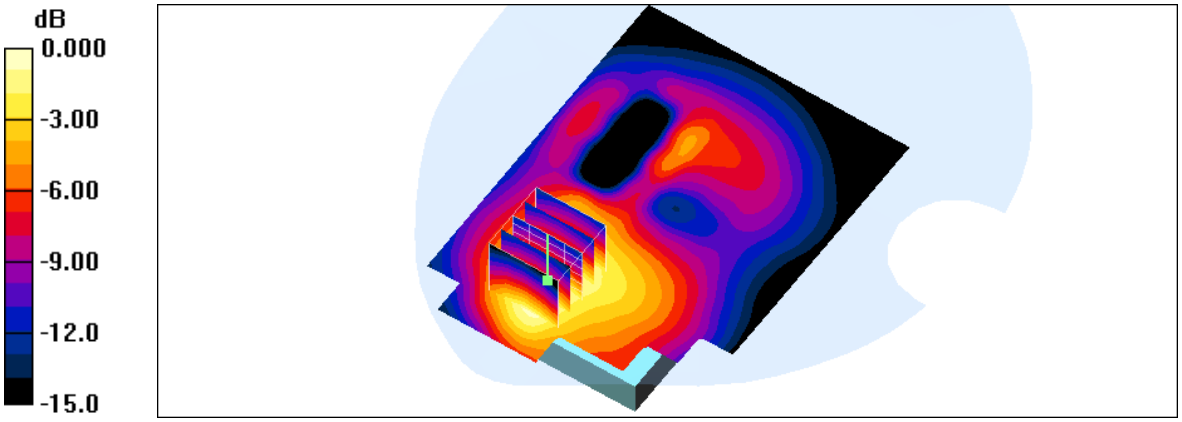
σ = 1.52 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1530; ConvF(4.4, 4.4, 4.4); Calibrated: 9/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 10/16/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Flat/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.411 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.19 V/m; Power Drift = -0.121 dB
Peak SAR (extrapolated) = 0.590 W/kg
SAR(1 g) = 0.367 mW/g; SAR(10 g) = 0.225 mW/g
Maximum value of SAR (measured) = 0.396 mW/g



0 dB = 0.396mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 1/10/2007 7:48:41 AM

Flat_PCS GPRS CH661_2Down 2UP

DUT: M619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: PCS 1900 GPRS(2Down,2Up); Frequency: 1880 MHz;Duty Cycle: 1:4.2
Medium parameters used: f = 1880 MHz;

σ = 1.55 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

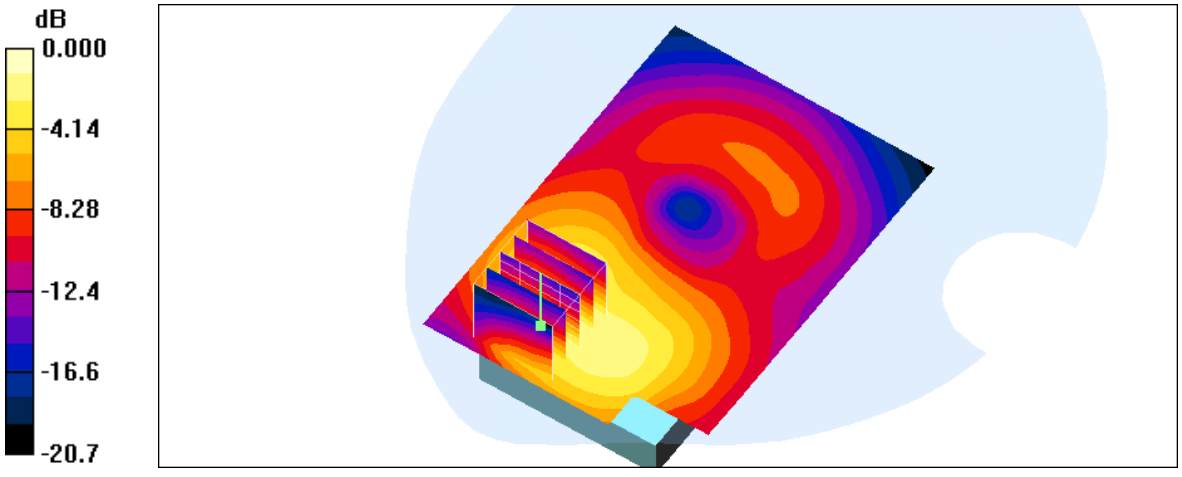
- Probe: ET3DV6 - SN1530; ConvF(4.4, 4.4, 4.4); Calibrated: 9/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 10/16/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Flat/Area Scan (71x101x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.368 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.20 V/m; Power Drift = 0.004 dB
Peak SAR (extrapolated) = 0.586 W/kg
SAR(1 g) = 0.315 mW/g; SAR(10 g) = 0.174 mW/g
Maximum value of SAR (measured) = 0.354 mW/g



0 dB = 0.354mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 1/10/2007 8:05:38 AM

Flat_PCS GPRS CH810_2Down 2UP

DUT: M619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: PCS 1900 GPRS(2Down,2Up); Frequency: 1909.8 MHz;Duty Cycle: 1:4.2
Medium parameters used: f = 1910 MHz;

σ = 1.57 mho/m; ε_r = 52.7; ρ = 1000 kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

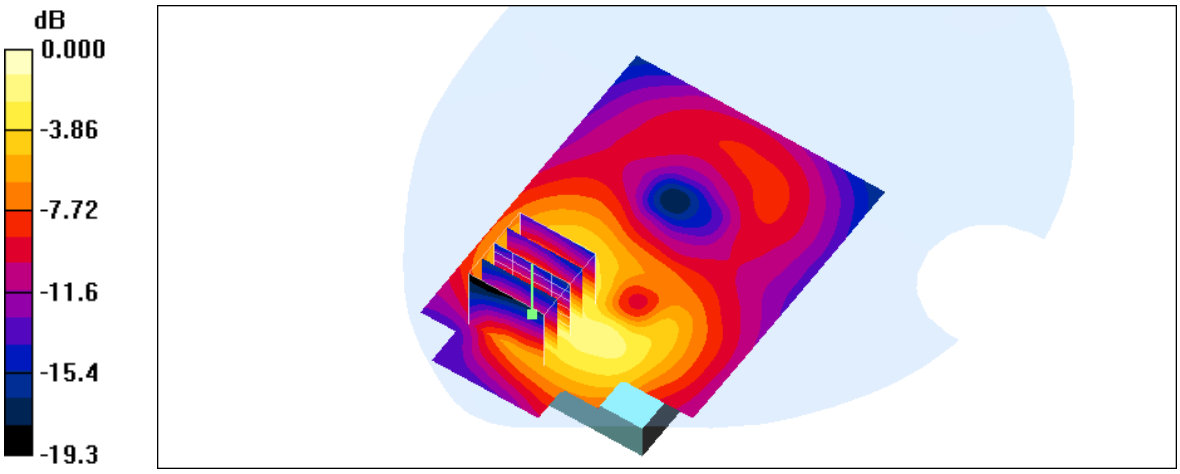
- Probe: ET3DV6 - SN1530; ConvF(4.4, 4.4, 4.4); Calibrated: 9/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 10/16/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Flat/Area Scan (71x101x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.359 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.61 V/m; Power Drift = -0.008 dB
Peak SAR (extrapolated) = 0.565 W/kg
SAR(1 g) = 0.299 mW/g; SAR(10 g) = 0.161 mW/g
Maximum value of SAR (measured) = 0.338 mW/g



0 dB = 0.338mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 2/12/2007 4:25:52 PM

Flat_GSM850 EGPRS CH128_BT ON

DUT: M619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: GSM 850 (2Down, 2Up); Frequency: 824.2 MHz;Duty Cycle: 1:4.2
Medium parameters used (interpolated): f = 824.2 MHz;

$\sigma = 0.971$ mho/m; $\varepsilon_r = 54.3$; $\rho = 1000$ kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

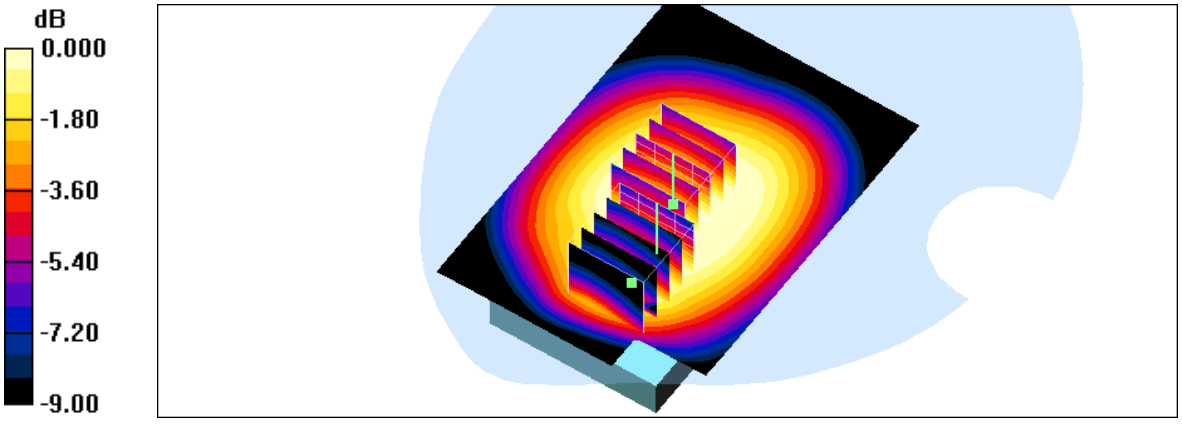
DASY4 Configuration:

- Probe: ET3DV6 - SN1530; ConvF(5.66, 5.66, 5.66); Calibrated: 9/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 10/16/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Flat/Area Scan (71x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.569 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.4 V/m; Power Drift = -0.019 dB
Peak SAR (extrapolated) = 0.799 W/kg
SAR(1 g) = 0.509 mW/g; SAR(10 g) = 0.385 mW/g
Maximum value of SAR (measured) = 0.64 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.4 V/m; Power Drift = -0.019 dB
Peak SAR (extrapolated) = 0.724 W/kg
SAR(1 g) = 0.495 mW/g; SAR(10 g) = 0.371 mW/g
Maximum value of SAR (measured) = 0.626 mW/g



0 dB = 0.626mW/g

Test Laboratory: A Test Lab Techno Corp. Date/Time: 2/12/2007 1:39:24 PM

FLAT_PCS EGPRS CH512_BT ON

DUT: M619; Type: PDA PHONE; FCC ID:DGIBC0153AAA000

Communication System: PCS 1900 GPRS(2Down,2Up); Frequency: 1850.2 MHz;Duty Cycle: 1:4.2
Medium parameters used (interpolated): f = 1850.2 MHz;

σ = 1.52 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3

Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

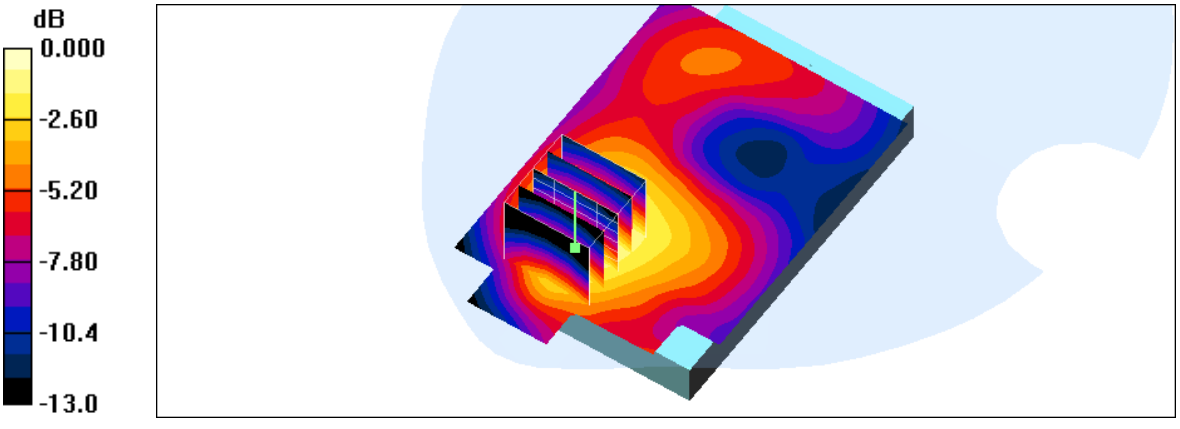
- Probe: ET3DV6 - SN1530; ConvF(4.4, 4.4, 4.4); Calibrated: 9/21/2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn541; Calibrated: 10/16/2006
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Flat/Area Scan (61x91x1):

Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.349 mW/g

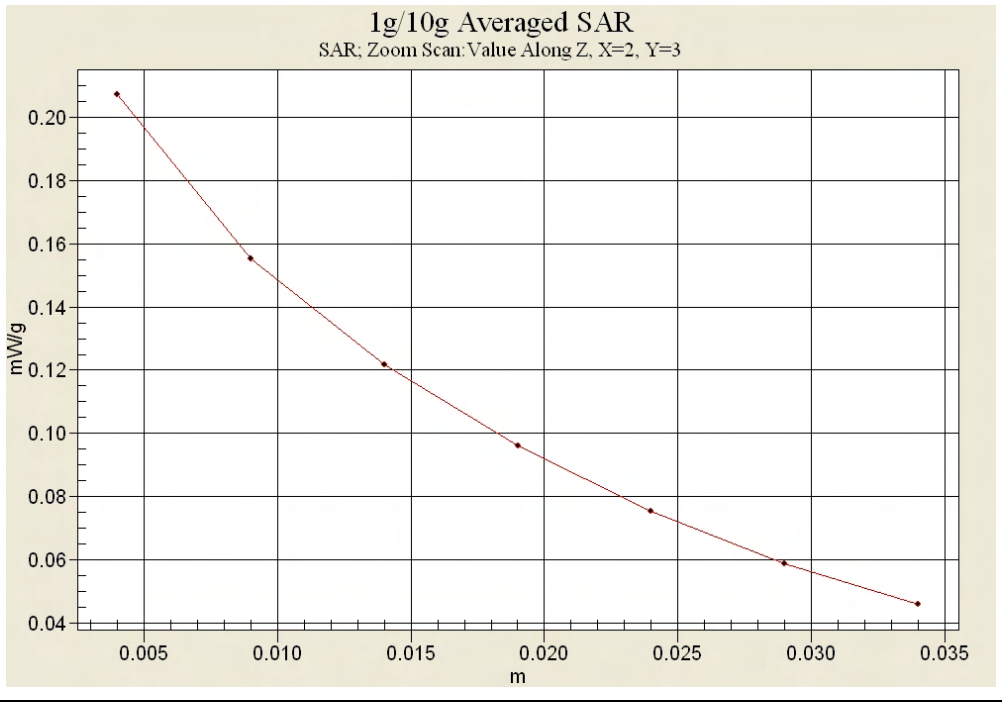
Flat/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.28 V/m; Power Drift = 0.039 dB
Peak SAR (extrapolated) = 0.483 W/kg
SAR(1 g) = 0.308 mW/g; SAR(10 g) = 0.190 mW/g
Maximum value of SAR (measured) = 0.332 mW/g

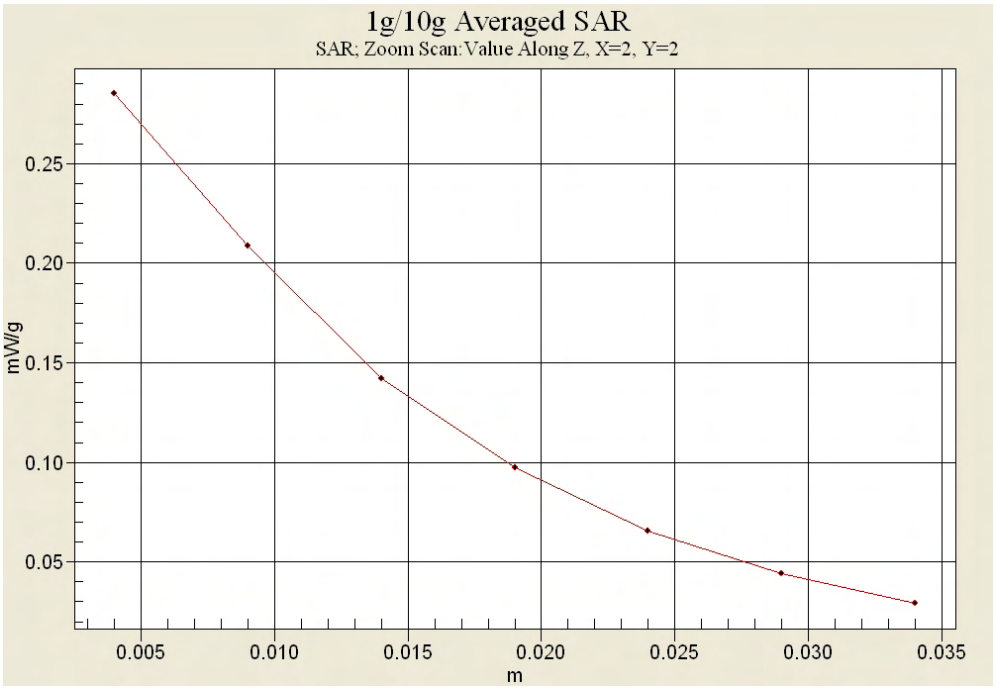


0 dB = 0.332mW/g

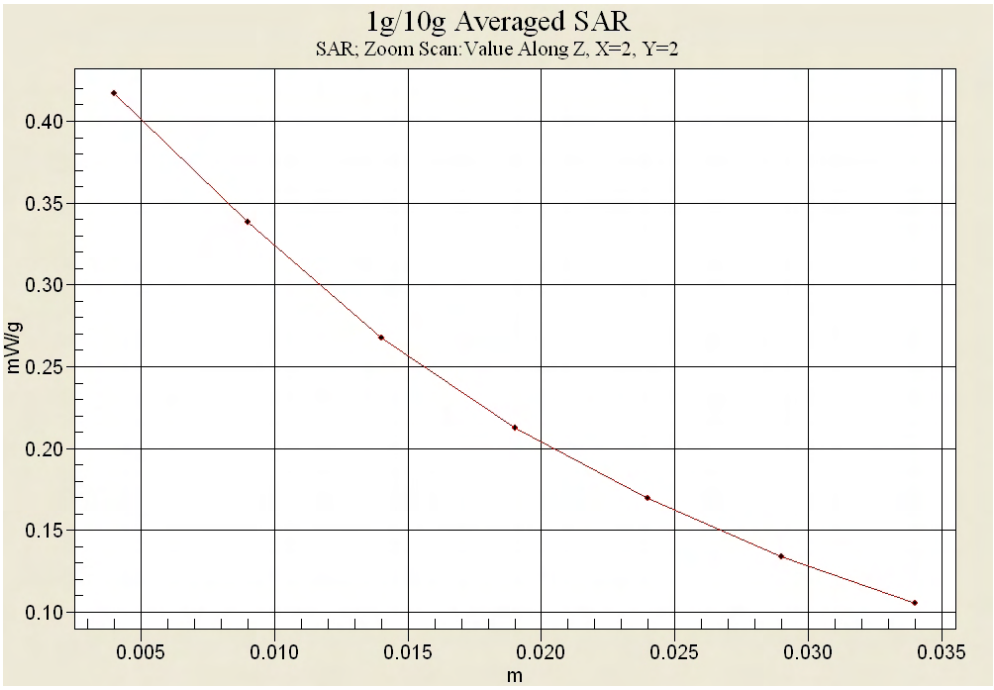
Z-axis Plot of SAR Measurement



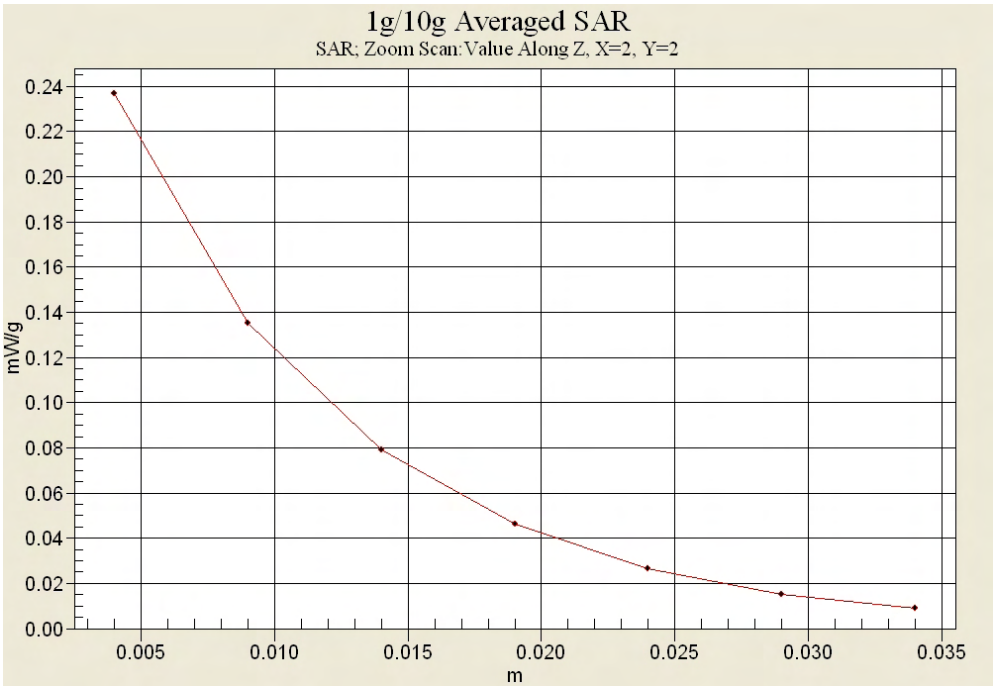
Z-axis Plot of GSM850 CH128



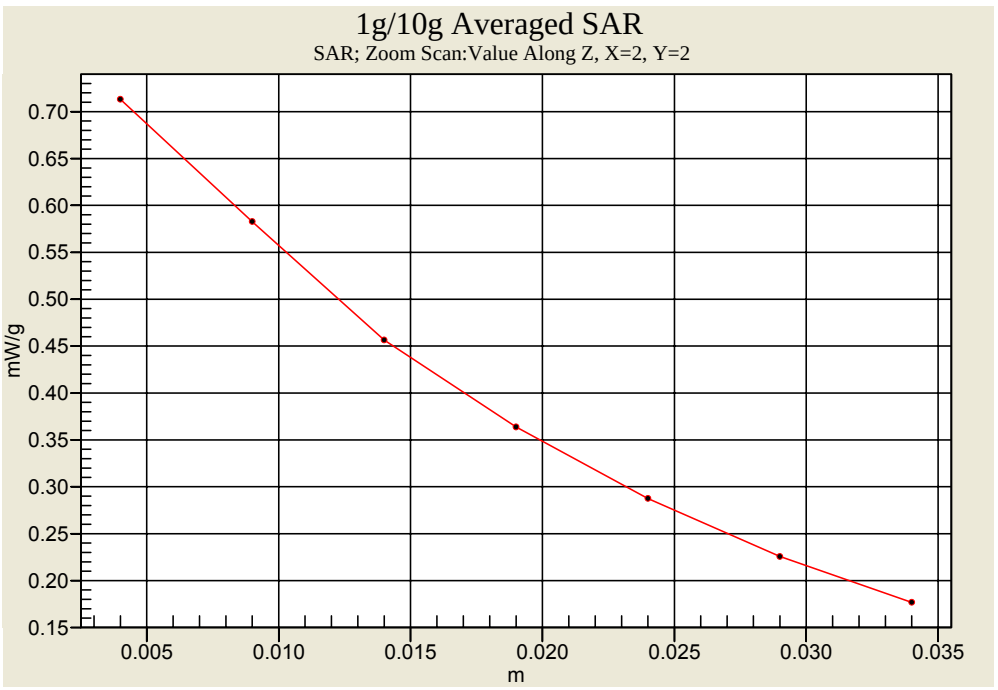
Z-axis Plot of PCS CH512



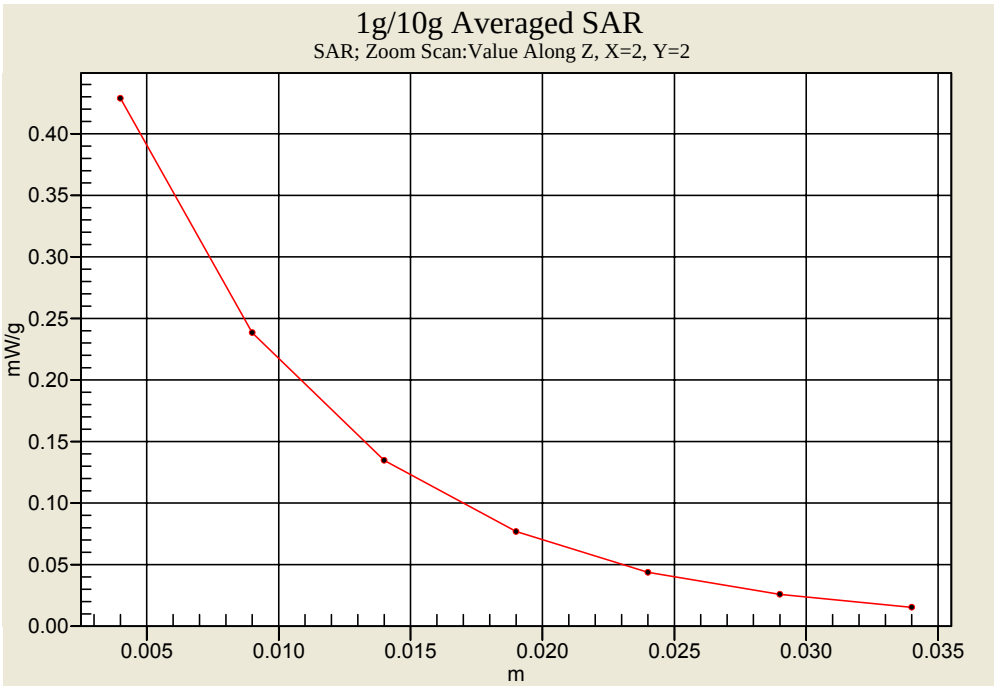
Z-axis Plot of GSM850 Flat CH190



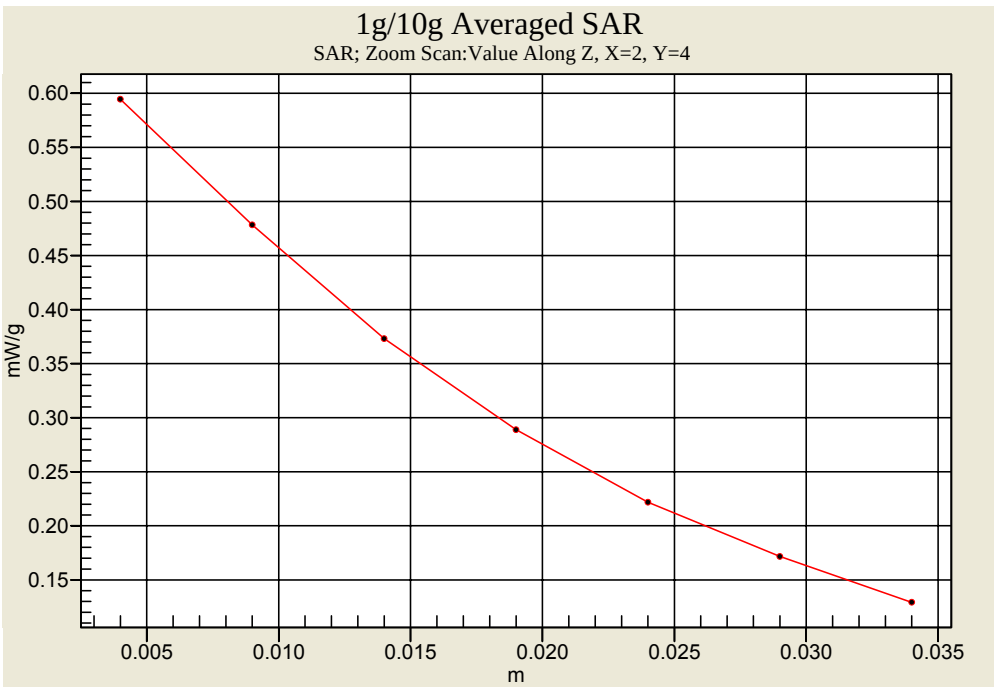
Z-axis Plot of PCS Flat CH512



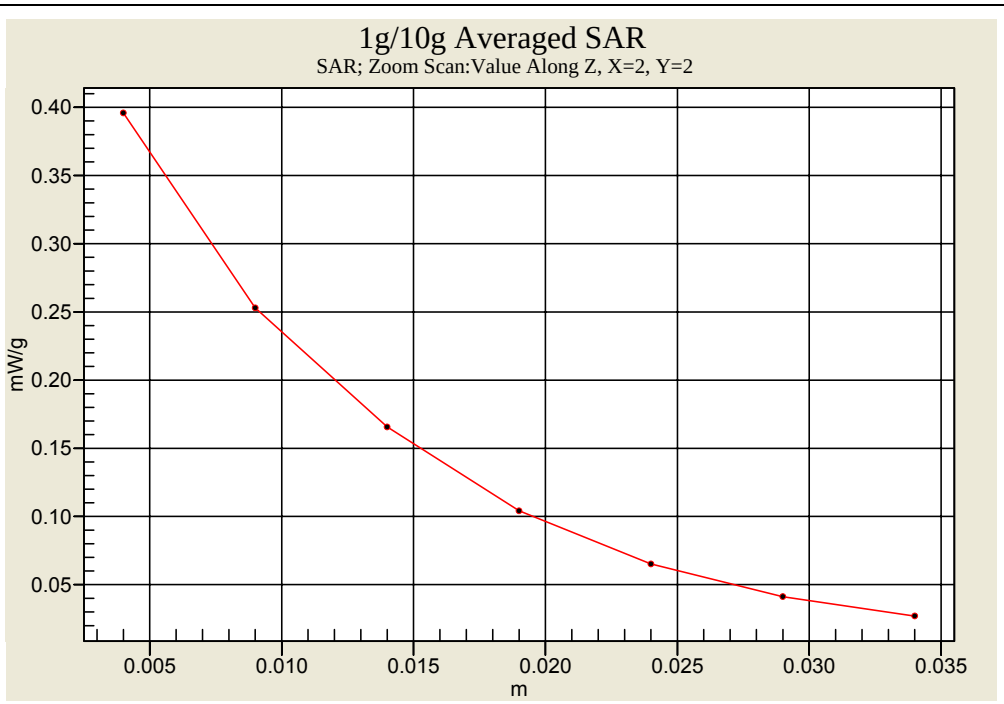
Z-axis Plot of GSM850 Flat CH128



Z-axis Plot of PCS Flat CH512



Z-axis Plot of GSM850 Flat CH128



Z-axis Plot of PCS Flat CH512

Appendix C – Calibration

All of the instruments Calibration information are listed below.

- D900V2 SN:073 Calibration No.D900V2-073_Jul06
- D900V2 SN:172 Calibration No.D900V2-172_Jan06
- D900V2 SN:172 Calibration No.D900V2-172_Jan07
- Dipole _ D1800V2 SN: 2d057 Calibration No.D1800V2d057_Jan06
- Dipole _ D1800V2 SN: 265 Calibration No.D1800V265_Oct06
- Probe _ ET3DV6 SN:1531 Calibration No.ET3-1531_Jan06
- Probe _ ET3DV6 SN:1530 Calibration No.ET3-1530_Sep06
- DAE _ DAE3 SN:393 Calibration No.DAE3-393_Sep06
- DAE _ DAE4 SN:541 Calibration No.DAE4-541_Oct06