RF EXPOSURE LAB, LLC

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CERTIFICATE OF COMPLIANCE
SAR EVALUATION

Vulcan Portals Inc.
505 Fifth Ave. S
Seattle, WA 98104

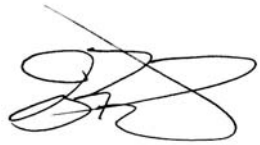
Dates of Test: August 24-31, 2007
Test Report Number: SAR.20070804
Revision B

FCC ID:	UIQE1500
Model(s):	E-1501a
Novatel WWAN Modules:	Model: EU860D, FCC ID: NBZNRM-EU860D
Test Sample:	Production
Serial No.:	MVT1-107
Equipment Type:	Mini-Laptop with WWAN and WLAN
Classification:	Portable Transmitter Next to Body
TX Frequency Range:	824 – 849 MHz, 1850 – 1910 MHz, 2412 – 2462 MHz
Frequency Tolerance:	± 25 ppm
Maximum RF Output: (average rms)	850 MHz (GSM) – 24.3 dBm, 850 MHz (GPRS) – 27.4 dBm, 850 MHz (WCDMA) – 24.6 dBm, 1900 MHz (GSM) – 21.3 dBm, 1900 MHz (GPRS) – 24.4 dBm, 1900 MHz (WCDMA) – 24.5 dBm, 2450 MHz – 14.0 dBm, Conducted
Maximum RF Output: (Peak Power)	850 MHz (GSM) – 33.3 dBm, 835 MHz (GPRS) – 33.4 dBm, 850 MHz (WCDMA) – 27.6 dBm, 1900 MHz (GSM) – 30.6 dBm, 1900 MHz (GPRS) – 30.4 dBm, 1900 MHz (WCDMA) – 27.5 dBm Conducted
Signal Modulation:	DSSS, OFDM, GMSK, 8-PSK, WCDMA
Antenna Type (Length):	Internal 2450 MHz(Universal Scientific Industrial Co., Ltd P/N 200-0038-01{Main}, 200-0039-01{Aux}), 835/1900 MHz(Located on Mother Board)
Battery:	Std. (Vulcan P/N 200-0026-xx), Ext. (Vulcan P/N 200-0251-xx) Battery Pack
Application Type:	Class II
FCC Rule Parts:	Part 22, 24, 15.247
Industry Canada:	RSS-102

This wireless mobile and/or portable device has been shown to be compliant for localized specific absorption rate (SAR) for uncontrolled environment/general exposure limits specified in ANSI/IEEE Std. C95.1-1999 and had been tested in accordance with the measurement procedures specified in IEEE 1528-2003, OET Bulletin 65 Supp. C, RSS-102 and Safety Code 6 (See test report).

I attest to the accuracy of the data. All measurements were performed by myself or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

RF Exposure Lab, LLC certifies that no party to this application has been denied FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 853(a).



Jay M. Moulton
Vice President

ACCREDITED
Certificate # 2387.01

Table of Contents

1. Introduction

This measurement report shows compliance of the Vulcan, Inc. Model E-1501a FCC ID: UIQE1500 with FCC Part 2, 1093, ET Docket 93-62 Rules for mobile and portable devices. The FCC have adopted the guidelines for evaluating the environmental effects of radio frequency radiation in ET Docket 93-62 on August 6, 1996 to protect the public and workers from the potential hazards of RF emissions due to FCC regulated portable devices. [1], [6]

The test procedures, as described in ANSI C95.1 – 1999 Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz [2], ANSI C95.3 – 2002 Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields [3], FCC OET Bulletin 65 Supp. C – 2001 [4], IEEE Std.1528 – 2003 Recommended Practice [5], and Industry Canada Safety Code 6 Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3kHz to 300 GHz were employed.

SAR Definition [5]

Specific Absorption Rate 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).

$$SAR = \frac{d}{dt}\left(\frac{dW}{dm}\right) = \frac{d}{dt}\left(\frac{dW}{\rho dV}\right)$$

SAR is expressed in units of watts per kilogram (W/kg). *SAR* can be related to the electric field at a point by

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

where:

σ = conductivity of the tissue (S/m)

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

E = rms electric field strength (V/m)

2. SAR Measurement Setup

Robotic System

The measurements are conducted utilizing the ALSAS-10-U automated dosimetric assessment system. The ALSAS-10-U is designed and manufactured by Aprel Laboratories in Nepean, Ontario, Canada. The system utilizes a Robcomm 3 robot manufactured by ThermoCRS located in Michigan USA.

System Hardware

The system consists of a six axis articulated arm, controller for precise probe positioning (0.05 mm repeatability), a power supply, a teach pendent for teaching area scans, near field probe, an IBM Pentium 4™ 2.66 GHz PC with Windows XP Pro™, and custom software developed to enable communications between the robot controller software and the host operating system.

An amplifier is located on the articulated arm, which is isolated from the custom designed end effector and robot arm. The end effector provides the mechanical touch detection functionality and probe connection interface. The amplifier is functionally validated within the manufacturer's site and calibrated at NCL Calibration Laboratories. A Data Acquisition Card (DAC) is used to collect the signal as detected by the isotropic e-field probe. The DAC manufacturer calibrates the DAC to NIST standards. A formal validation is executed using all mechanical and electronic components to prove conformity of the measurement platform as a whole.

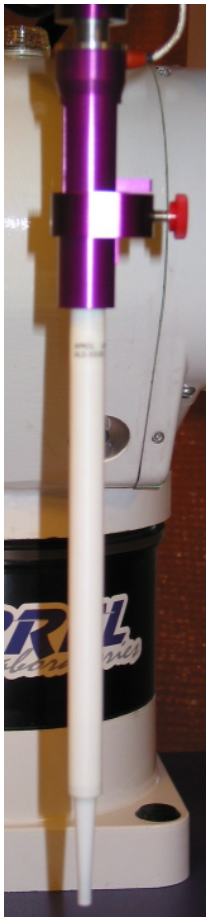
System Description

The ALSAS-10-U has been designed to measure devices within the compliance environment to meet all recognized standards. The system also conforms to standards, which are currently being developed by the scientific and manufacturing community.

The course scan resolution is defined by the operator and reflects the requirements of the standard to which the device is being tested. Precise measurements are made within the predefined course scan area and the values are logged.

The user predefines the sample rate for which the measurements are made so as to ensure that the full duty-cycle of a pulse modulation device is covered during the sample. The following algorithm is an example of the function used by the system for linearization of the output for the probe.

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



The Aprel E-Field probe is evaluated to establish the diode compression point.

A complex algorithm is then used to calculate the values within the measured points down to a resolution of 1mm. The data from this process is then used to provide the co-ordinates from which the cube scan is created for the determination of the 1 g and 10 g averages.

Cube scan averaging consists of a number of complex algorithms, which are used to calculate the one, and ten gram averages. The basis for the cube scan process is centered on the location where the maximum measured SAR value was found. When a secondary peak value is found which is within 60% of the initial peak value, the system will report this back to the operator who can then assess the need for further analysis of both the peak values prior to the one and ten-gram cube scan averaging process. The algorithm consists of 3D cubic Spline, and Lagrange extrapolation to the surface, which form the matrix for calculating the measurement output for the one and ten gram average values. The resolution for the physical scan integral is user defined with a final calculated resolution down to 1mm.

In-depth analysis for the differential of the physical scanning resolution for the cube scan analysis has been carried out, to identify the optimum setting for the probe positioning steps, and this has been determined at 8mm increments on the X, & Y planes. The reduction of the physical step increment increased the time taken for analysis but did not provide a better uncertainty or return on measured values.

The final output from the system provides data for the area scan measurements, physical and splined (1mm resolution) cube scan with physical and calculated values (1mm resolution).

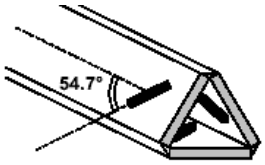
The overall uncertainty for the methodology and algorithms the ALSAS-10-U used during the SAR calculation was evaluated using the data from IEEE 1528 f3 algorithm:

$$f_3(x,y,z) = A\frac{a^2}{\frac{a^2}{4} + x'^2 + y'^2}\left(e^{-\frac{2z}{a}} + \frac{a^2}{2(a+2z)^2}\right)$$

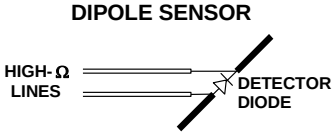
The probe used during the measurement process has been assessed to provide values for diode compression. These values are calculated during the probe calibration exercise and are used in the mathematical calculations for the assessment of SAR.

E-Field Probe

The E-field probe used by RF Exposure Lab, LLC, has been fully calibrated and assessed for isotropic, and boundary effect. The probe utilizes a triangular sensor arrangement as detailed in the diagram below right.



Δ-BEAM



The SAR is assessed with the probe which moves at a default height of 5mm from the center of the diode, which is mounted to the sensor, to the phantom surface (Z height). The diagram above right shows how the center of the sensor is defined with the location of the diode placed at the center of the dipole. The 5mm default in the Z axis is the optimum height for assessing SAR where the boundary effect is at its least, with the probe located closest to the phantom surface (boundary).

3. Robot Specifications

Specifications

Positioner:	ThermoCRS, Robot Model: Robocomm 3
Repeatability:	0.05 mm
No. of axis:	6

Data Acquisition Card (DAC) System

Cell Controller

Processor:	Pentium 4™
Clock Speed:	2.66 GHz
Operating System:	Windows XP Pro™

Data Converter

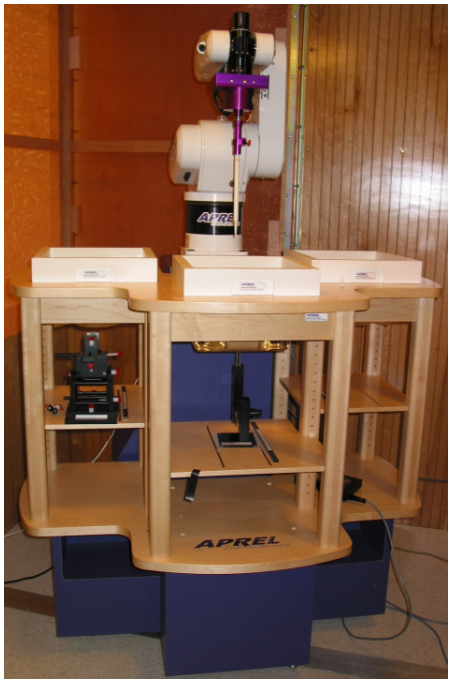
Features:	Signal Amplifier, End Effector, DAC
Software:	ALSAS 10-U Software

E-Field Probe

Model:	Various See Probe Calibration Sheet
Serial Number:	Various See Probe Calibration Sheet
Construction:	Triangular Core Touch Detection System
Frequency:	10MHz to 6GHz

Phantom

Phantom:	Uniphantom, Right Phantom, Left Phantom



4. Probe and Dipole Calibration

See Appendix D and E.

5. Phantom & Simulating Tissue Specifications

SAM Phantom

The Aprel system utilizes three separate phantoms. Each phantom for SAR assessment testing is a low loss dielectric shell, with shape and dimensions derived from the anthropomorphic data of the 90th percentile adult male head dimensions as tabulated by the US Army. The SAM phantom shell is bisected along the mid sagittai plane into right and left halves. The perimeter sidewalls of each phantom half is extended to allow filling with liquid to a depth of 15 cm that is sufficient to minimize reflections from the upper surface [5]. See photos in Appendix C.

Brain & Muscle Simulating Mixture Characterization

The brain and muscle mixtures consist of a glycol based chemical and saline solution. The mixture is calibrated to obtain proper dielectric constant (permittivity) and conductivity of the desired tissue. The head tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 have been incorporated in the following tables. Other head and body tissue parameters that have not been specified in P1528 are derived from the issue dielectric parameters computed from the 4-Cole-Cole equations.

Table 5.1 Typical Composition of Ingredients for Tissue

Ingredients		Simulating Tissue		
		835 MHz Muscle	1900 MHz Muscle	2450 MHz Muscle
Mixing Percentage				
Water		52.40	69.91	73.20
Sugar		0.00	29.96	0.00
Salt		45.00	0.00	0.04
HEC		1.40	0.13	0.00
Bactericide		0.10	0.00	0.00
DGBE		1.00	0.00	26.70
Dielectric Constant	Target	55.20	53.30	52.70
Conductivity (S/m)	Target	0.97	1.52	1.95

Device Holder

In combination with the SAM phantom, the mounting device enables the rotation of the mounted transmitter in spherical coordinates whereby the rotation point is the ear opening. The devices can easily, accurately, and repeatably be positioned according to the FCC specifications. The device holder can be locked at different phantom locations (left head, right head, and uni-phantom).

6. Definition of Reference Points

Ear Reference Point

Figure 6.2 shows the front, back and side views of the SAM Phantom. The point "M" is the reference point for the center of the mouth, "LE" is the left ear reference point (ERP), and "RE" is the right ERP. The ERPs are 15mm posterior to the entrance to the ear canal (EEC) along the B-M line (Back-Mouth), as shown in Figure 6.1. The plane passing through the two ear canals and M is defined as the Reference Plane. The line N-F (Neck-Front) is perpendicular to the reference plane and passing through the RE (or LE) is called the Reference Pivoting Line (see Figure 6.1). Line B-M is perpendicular to the N-F line. Both N-F and B-M lines are marked on the external phantom shell to facilitate handset positioning [5].

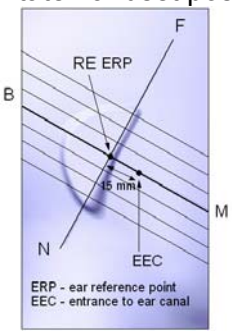


Figure 6.1 Close-up side view of ERP's

Figure 6.2 Front, back and side view of SAM

Device Reference Points

Two imaginary lines on the device need to be established: the vertical centerline and the horizontal line. The test device is placed in a normal operating position with the "test device reference point" located along the "vertical centerline" on the front of the device aligned to the "ear reference point" (See Fig. 6.3). The "test device reference point" is than located at the same level as the center of the ear reference point. The test device is positioned so that the "vertical centerline" is bisecting the front surface of the device at it's top and bottom edges, positioning the "ear reference point" on the outer surface of both the left and right head phantoms on the ear reference point [5].

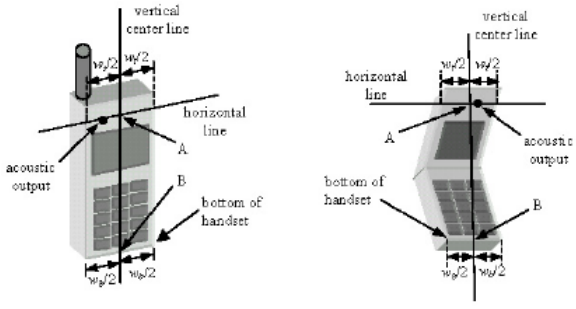


Figure 6.3 Handset Vertical Center & Horizontal Line Reference Points

7. Test Configuration Positions

Positioning for Cheek/Touch [5]

1. Position the device close to the surface of the phantom such that point A is on the (virtual) extension of the line passing through points RE and LE on the phantom (see Figure 7.1), such that the plane defined by the vertical center line and the horizontal line of the device is approximately parallel to the sagittal plane of the phantom.

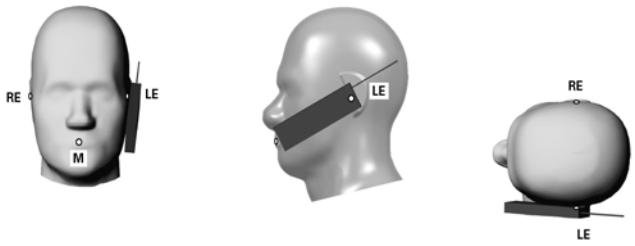


Figure 7.1 Front, Side and Top View of Cheek/Touch Position

2. Translate the device towards the phantom along the line passing through RE and LE until the device touches the ear.

3. While maintaining the device in this plane, rotate it around the LE-RE line until the vertical centerline is in the plane normal to MB-NF including the line MB (called the reference plane).

4. Rotate the device around the vertical centerline until the device (horizontal line) is symmetrical with respect to the line NF.

5. While maintaining the vertical centerline in the reference plane, keeping point A on the line passing through RE and LE and maintaining the device contact with the ear, rotate the device about the line NF until any point on the device is in contact with a phantom point below the ear (cheek). See Figure 7.2.

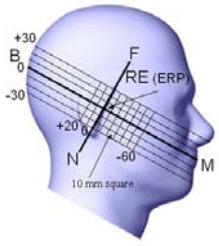


Figure 7.2 Side view w/ relevant markings

Positioning for Ear / 15° Tilt [5]

With the test device aligned in the Cheek/Touch Position":

1. While maintaining the orientation of the device, retracted the device parallel to the reference plane far enough to enable a rotation of the device by 15 degrees.

2. Rotate the device around the horizontal line by 15 degrees.

3. While maintaining the orientation of the device, move the device parallel to the reference plane until any part of the device touches the head. (In this position, point A is located on the line RE-LE). The tilted position is obtained when the contact is on the pinna. If the contact is at any location other than the pinna, the angle of the device shall be reduced. The tilted position is obtained when any part of the device is in contact with the ear as well as a second part of the device is in contact with the head (see Figure 7.3).

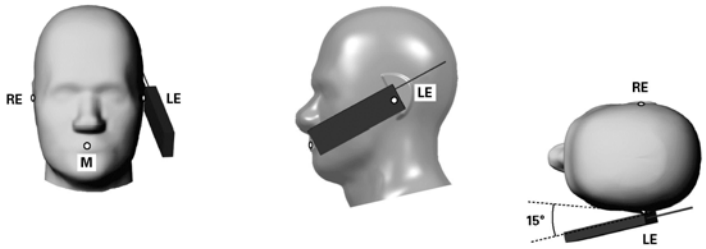


Figure 7.3 Front, Side and Top View of Ear/15° Tilt Position

Body Worn Configurations

Body-worn operating configurations are tested with the accessories attached to the device and positioned against a flat phantom in a normal use configuration. A device with a headset output is tested with a headset connected to the device. Body dielectric parameters are used.

Accessories for Body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then, when multiple accessories that contain metallic components are supplied with the device, the device is tested with each accessory that contains a unique metallic component. If multiple accessories share an identical metallic component (i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

Body-worn accessories may not always be supplied or available as options for some devices intended to be authorized for body-worn use. In this case, a test configuration where a separation distance between the back of the device and the flat phantom is used. All test position spacings are documented.

Transmitters that are designed to operate in front of a person's face, as in push-to-talk configurations, are tested for SAR compliance with the front of the device positioned to face the flat phantom. For devices that are carried next to the body such as a shoulder, waist or chest-worn transmitters, SAR compliance is tested with the accessory(ies), including headsets and microphones, attached to the device and positioned against a flat phantom in a normal use configuration.

In all cases SAR measurements are performed to investigate the worst-case positioning. Worst-case positioning is then documented and used to perform Body SAR testing.

In order for users to be aware of the body-worn operating requirements for meeting RF exposure compliance, operating instructions and cautions statements are included in the user's manual.

8. ANSI/IEEE C95.1 – 1999 RF Exposure Limits [2]

Uncontrolled Environment

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

Controlled Environment

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). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Table 8.1 Human Exposure Limits

	UNCONTROLLED ENVIRONMENT General Population (W/kg) or (mW/g)	CONTROLLED ENVIROMENT Professional Population (W/kg) or (mW/g)
SPATIAL PEAK SAR[1] Brain	1.60	8.00
SPATIAL AVERAGE SAR[2] Whole Body	0.08	0.40
SPATIAL PEAK SAR[3] Hands, Feet, Ankles, Wrists	4.00	20.00

[1] 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.
[2] The Spatial Average value of the SAR averaged over the whole body.
[3] 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.

9. Measurement Uncertainty

Exposure Assessment Measurement Uncertainty

Source of Uncertainty	Tolerance Value	Probability Distribution	Divisor	c_i^1 (1-g)	c_i^1 (10-g)	Standard Uncertainty (1-g) %	Standard Uncertainty (10-g) %
Measurement System							
Probe Calibration	3.5	normal	1	1	1	3.5	3.5
Axial Isotropy	3.7	rectangular	•3	$(1\text{-cp})^{1/2}$	$(1\text{-cp})^{1/2}$	1.5	1.5
Hemispherical Isotropy	10.9	rectangular	•3	•cp	•cp	4.4	4.4
Boundary Effect	1.0	rectangular	•3	1	1	0.6	0.6
Linearity	4.7	rectangular	•3	1	1	2.7	2.7
Detection Limit	1.0	rectangular	•3	1	1	0.6	0.6
Readout Electronics	1.0	normal	1	1	1	1.0	1.0
Response Time	0.8	rectangular	•3	1	1	0.5	0.5
Integration Time	1.7	rectangular	•3	1	1	1.0	1.0
RF Ambient Condition	3.0	rectangular	•3	1	1	1.7	1.7
Probe Positioner Mech.	0.4	rectangular	•3	1	1	0.2	0.2
Restriction							
Probe Positioning with respect to Phantom Shell	2.9	rectangular	•3	1	1	1.7	1.7
Extrapolation and Integration	3.7	rectangular	•3	1	1	2.1	2.1
Test Sample Positioning	4.0	normal	1	1	1	4.0	4.0
Device Holder Uncertainty	2.0	normal	1	1	1	2.0	2.0
Drift of Output Power	4.2	rectangular	•3	1	1	2.4	2.4
Phantom and Setup							
Phantom Uncertainty(shape & thickness tolerance)	3.4	rectangular	•3	1	1	2.0	2.0
Liquid Conductivity(target)	5.0	rectangular	•3	0.7	0.5	2.0	1.4
Liquid Conductivity(meas.)	0.5	normal	1	0.7	0.5	0.4	0.3
Liquid Permittivity(target)	5.0	rectangular	•3	0.6	0.5	1.7	1.4
Liquid Permittivity(meas.)	1.0	normal	1	0.6	0.5	0.6	0.5
Combined Uncertainty		RSS				9.6	9.4
Combined Uncertainty (coverage factor=2)		Normal(k=2)				19.1	18.8

10. System Validation

Tissue Verification

Table 10.1 Measured Tissue Parameters

		835 MHz Body		1900 MHz Body		1900 MHz Body	
Date(s)		Aug. 24, 2007		Aug. 27, 2007		Aug. 31, 2007	
Liquid Temperature (˚C)	20.0	Target	Measured	Target	Measured	Target	Measured
Dielectric Constant: ε		55.20	53.81	53.30	52.73	53.30	53.48
Conductivity: σ		0.970	0.98	1.52	1.58	1.52	1.46
		2450 MHz Body		2450 MHz Body		2450 MHz Body	
Date(s)		Aug. 29, 2007		Aug. 30, 2007		Aug. 31, 2007	
Liquid Temperature (˚C)	20.0	Target	Measured	Target	Measured	Target	Measured
Dielectric Constant: ε		52.70	51.34	52.70	52.65	52.70	53.36
Conductivity: σ		1.95	1.95	1.95	1.94	1.95	1.96

See Appendix A for data printout.

Test System Verification

Prior to assessment, the system is verified to the ±10% of the specifications at the test frequency by using the system kit. Power is extrapolated to 1 watt. (Graphic Plots Attached)

Table 10.2 System Dipole Validation Target & Measured

	Test Frequency	Targeted SAR_{1g} (W/kg)	Measure SAR_{1g} (W/kg)	Deviation (%)
24-Aug-2007	835 MHz	9.072	9.070	- 0.02
27-Aug-2007	1900 MHz	41.336	39.930	- 3.40
31-Aug-2007	1900 MHz	41.336	39.370	- 4.76
29-Aug-2007	2450 MHz	54.230	55.300	+ 1.97
30-Aug-2007	2450 MHz	54.230	54.010	- 0.41
31-Aug-2007	2450 MHz	54.230	54.400	+ 0.31

See Appendix A for data plots.

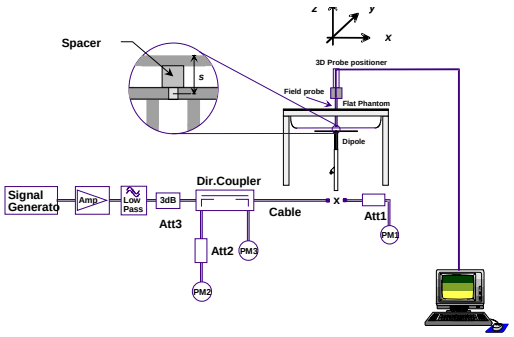


Figure 10.1 Dipole Validation Test Setup

11. SAR Test Data Summary

See Measurement Result Data Pages

See Appendix B for SAR Test Data Plots.
See Appendix C for SAR Test Setup Photos.

Procedures Used To Establish Test Signal

The device was placed into simulated transmit mode using the manufacturer's test codes. Such test signals offer a consistent means for testing SAR and are recommended for evaluating SAR. When test modes are not available or inappropriate for testing a device, the actual transmission is activated through a base station simulator or similar equipment. See data pages for actual procedure used in measurement.

Device Test Condition

The device is battery operated. Each SAR measurement was taken with a fully charged battery. In order to verify that the device was tested at full power, conducted output power measurements were performed before and after each SAR measurement to confirm the output power unless otherwise noted. If a conducted power deviation of more than 5% occurred, the test was repeated.

The unit was required to be disassembled to measure the conducted power. To insure that the integrity of the device was not compromised, the power measurements were conducted at the completion of all testing.

12. FCC 3G Measurement Procedures – June 2006

Power measurements were performed using a base station simulator under average power.

12.1 Procedures Used to Establish RF Signal for SAR

The handset was placed into a simulated call using a base station simulator in a screen room. Such test signals offer a consistent means for testing SAR and re recommended for evaluating SAR. SAR measurements were taken with a fully charged battery. The SAR measurement software calculates a reference point at the start and end of the test to check for power drifts. If conducted power deviations of more than 5% occurred, the tests were repeated.

12.2 SAR Measurement Conditions for UMTS

12.3.1 Output Power Verification

Maximum output power is verified on the High, Middle, and Low channels according to the general descriptions in section 5.2 of 3GPP TS 34.121, using the appropriate RMC or AMR with TPC (transmit power control) set to all "1s". Results for all applicable physical channel configurations (DPCCH, DPDCHn and spreading codes) should be tabulated in the test report. All configurations that are not supported by the DUT or cannot be measured due to technical or equipment limitations should be clearly identified.

12.3.2 Body SAR Measurements

SAR for body exposure configurations are measured using the 12.2 kbps RMC with the TPC bits configured to all "1s".

12.3.3 Devices with HSDPA

Body SAR is not required for devices with HSDPA capabilities, when the maximum average output of each RF channel with HSDPA active is less than ¼ dB higher than that measured in 12.2 kbps RMC without HSDPA. Otherwise, SAR for HSDPA is measured using FRC (fixed reference channel) in the body exposure configuration that results in the highest SAR for that RF channel in 12.2 RMC.

		HSDPA Inactive		HSDPA Active	
	Channel	12.2 kbps RMC [dBm]	12.2 kbps AMR [dBm]	12.2 kbps RMC [dBm]	12.2 kbps AMR [dBm]
Cell	4132	24.51	24.41	21.17	20.97
	4183	24.39	24.32	21.09	20.82
	4233	24.60	24.56	21.12	20.94
PCS	9262	24.52	24.49	17.48	17.23
	9400	24.37	24.31	17.01	16.98
	9538	24.47	24.42	17.41	17.32

802.11g						802.11b				
Freq	Channel	Data Rate	Antenna	Power		Freq	Channel	Data Rate	Antenna	Power
2412	1	6	Main	12.71		2412	1	6	Main	13.54
2437	6	6	Main	12.46		2437	6	6	Main	13.06
2462	11	6	Main	12.53		2462	11	6	Main	13.98
2412	1	6	Aux	12.63		2412	1	6	Aux	13.51
2437	6	6	Aux	12.31		2437	6	6	Aux	12.99
2462	11	6	Aux	12.51		2462	11	6	Aux	13.87
2412	1	9	Main	12.61		2412	11	2	Main	13.74
2412	1	12	Main	12.53		2412	11	5.5	Main	13.52
2412	1	18	Main	12.57		2412	11	11	Main	13.81
2412	1	24	Main	12.39						
2412	1	36	Main	12.46						
2412	1	48	Main	12.42						
2412	1	54	Main	12.55						

802.11b/g Conduct Power Measurements

		GSM	GPRS
	Channel		
850	128	24.03	27.36
	190	24.25	27.41
	251	23.97	27.02
1900	512	21.27	24.07
	661	21.01	23.96
	810	21.32	24.38

Conduct Average Power Measurement for GSM & GPRS

SAR Data Summary – 850 MHz Body GPRS

MEASUREMENT RESULTS							
Position	**Module**	**Frequency**		**Modulation**	**End Power**		**SAR (W/kg)**
		MHz	**Ch.**		**(dBm)**	**Battery**	
Touch	EU860D	824.2	128	GMSK	27.36	Standard	0.523
		836.6	190	GMSK	27.41	Standard	0.624
		848.8	251	GMSK	27.02	Standard	0.635
		824.2	128	GMSK	27.36	Extended	0.353
		836.6	190	GMSK	27.41	Extended	0.420
		848.8	251	GMSK	27.02	Extended	0.416
		848.8	251	GMSK	27.02	Standard	0.642
					Muscle 1.6 W/kg (mW/g) averaged over 1 gram		

1. Battery is fully charged for all tests.
   Power Measured ☒Conducted ☐ERP ☐EIRP
2. SAR Measurement
   Phantom Configuration ☐Left Head ☒Uniphantom ☐Right Head
   SAR Configuration ☐Head ☒Body
3. Test Signal Call Mode ☐Test Code ☒Base Station Simulator
4. Test Configuration ☐With Belt Clip ☐Without Belt Clip ☒N/A

Jay M. Moulton
Vice President

SAR Data Summary – 850 MHz Body WCDMA/HSDPA Inactive

MEASUREMENT RESULTS							
Position	**Module**	**Frequency**		**Modulation**	**End Power**		**SAR (W/kg)**
		MHz	**Ch.**		**(dBm)**	**Battery**	
Touch	EU860D	826.4	4132	WCDMA	24.51	Standard	0.673
		836.6	4183	WCDMA	24.39	Standard	0.503
		846.6	4233	WCDMA	24.60	Standard	0.633
		826.4	4132	WCDMA	24.51	Extended	0.419
		836.6	4183	WCDMA	24.39	Extended	0.395
		846.6	4233	WCDMA	24.60	Extended	0.396
		826.4	4132	WCDMA	24.51	Standard	0.695
					Muscle 1.6 W/kg (mW/g) averaged over 1 gram		

1. Battery is fully charged for all tests.
   Power Measured ☒Conducted ☐ERP ☐EIRP
2. SAR Measurement
   Phantom Configuration ☐Left Head ☒Uniphantom ☐Right Head
   SAR Configuration ☐Head ☒Body
3. Test Signal Call Mode ☐Test Code ☒Base Station Simulator
4. Test Configuration ☐With Belt Clip ☐Without Belt Clip ☒N/A

Jay M. Moulton
Vice President

SAR Data Summary – 1900 MHz Body GPRS

MEASUREMENT RESULTS							
Position	**Module**	**Frequency**		**Modulation**	**End Power**		**SAR (W/kg)**
		MHz	**Ch.**		**(dBm)**	**Battery**	
Touch	EU860D	1850.2	512	GMSK	24.07	Standard	0.536
		1880.0	661	GMSK	23.96	Standard	0.630
		1909.8	810	GMSK	24.38	Standard	0.678
		1850.2	512	GMSK	24.07	Extended	0.248
		1880.0	661	GMSK	23.96	Extended	0.266
		1909.8	810	GMSK	24.38	Extended	0.312
		1909.8	810	GMSK	24.38	Standard	0.699
					Muscle 1.6 W/kg (mW/g) averaged over 1 gram		

1. Battery is fully charged for all tests.
   Power Measured ☒Conducted ☐ERP ☐EIRP

2. SAR Measurement
   Phantom Configuration ☐Left Head ☒Uniphantom ☐Right Head
   SAR Configuration ☐Head ☒Body

3. Test Signal Call Mode ☐Test Code ☒Base Station Simulator

4. Test Configuration ☐With Belt Clip ☐Without Belt Clip ☒N/A

Jay M. Moulton
Vice President

SAR Data Summary – 1900 MHz Body WCDMA/HSDPA Inactive

MEASUREMENT RESULTS							
Position	**Module**	**Frequency**		**Modulation**	**End Power**		**SAR (W/kg)**
		MHz	**Ch.**		**(dBm)**	**Battery**	
Touch	EU860D	1852.4	9262	WCDMA	24.52	Standard	1.338
		1880.0	9400	WCDMA	24.37	Standard	1.346
		1907.6	9538	WCDMA	24.47	Standard	1.226
		1852.4	9262	WCDMA	24.52	Extended	0.864
		1880.0	9400	WCDMA	24.37	Extended	0.985
		1907.6	9538	WCDMA	24.47	Extended	0.986
		1880.0	9400	WCDMA	24.37	Standard	1.423
					Muscle 1.6 W/kg (mW/g) averaged over 1 gram		

1. Battery is fully charged for all tests.
   Power Measured ☒Conducted ☐ERP ☐EIRP
2. SAR Measurement
   Phantom Configuration ☐Left Head ☒Uniphantom ☐Right Head
   SAR Configuration ☐Head ☒Body
3. Test Signal Call Mode ☐Test Code ☒Base Station Simulator
4. Test Configuration ☐With Belt Clip ☐Without Belt Clip ☒N/A

Jay M. Moulton
Vice President

SAR Data Summary – 2450 MHz Body b

MEASUREMENT RESULTS								
Position	**Band**	**Antenna**	**Frequency**		**Modulation**	**End Power**		**SAR (W/kg)**
			MHz	**Ch.**		**(dBm)**	**Battery**	
Touch	b	Main	2412	1	DSSS	13.54	Standard	0.435
			2437	6	DSSS	13.06	Standard	0.448
			2462	11	DSSS	13.98	Standard	0.439
		Aux	2412	1	DSSS	13.51	Standard	0.254
			2437	6	DSSS	12.99	Standard	0.248
			2462	11	DSSS	13.87	Standard	0.249
		Main	2412	1	DSSS	13.54	Extended	0.179
			2437	6	DSSS	13.06	Extended	0.136
			2462	11	DSSS	13.98	Extended	0.161
		Aux	2412	1	DSSS	13.51	Extended	0.127
			2437	6	DSSS	12.99	Extended	0.126
			2462	11	DSSS	13.87	Extended	0.128
		Main	2437	6	DSSS	13.06	Standard	0.463
						Muscle **1.6 W/kg (mW/g)** averaged over 1 gram		

1. Battery is fully charged for all tests.
   Power Measured ☒Conducted ☐ERP ☐EIRP

2. SAR Measurement
   Phantom Configuration ☐Left Head ☒Uniphantom ☐Right Head
   SAR Configuration ☐Head ☒Body

3. Test Signal Call Mode ☒Test Code ☐Base Station Simulator

4. Test Configuration ☐With Belt Clip ☐Without Belt Clip ☒N/A

Jay M. Moulton
Vice President

SAR Data Summary – 2450 MHz Body g

MEASUREMENT RESULTS								
Position	**Band**	**Antenna**	**Frequency**		**Modulation**	**End Power**		**SAR (W/kg)**
			MHz	**Ch.**		**(dBm)**	**Battery**	
Touch	g	Main	2412	1	DSSS	12.71	Standard	0.197
			2437	6	DSSS	12.46	Standard	0.208
			2462	11	DSSS	12.53	Standard	0.199
		Aux	2412	1	DSSS	12.63	Standard	0.188
			2437	6	DSSS	12.31	Standard	0.185
			2462	11	DSSS	12.51	Standard	0.177
		Main	2412	1	DSSS	12.71	Extended	0.156
			2437	6	DSSS	12.46	Extended	0.172
			2462	11	DSSS	12.53	Extended	0.158
		Aux	2412	1	DSSS	12.63	Extended	0.125
			2437	6	DSSS	12.31	Extended	0.121
			2462	11	DSSS	12.51	Extended	0.127
		Main	2462	6	DSSS	12.46	Standard	0.230
						Muscle 1.6 W/kg (mW/g) averaged over 1 gram		

1. Battery is fully charged for all tests.
   Power Measured ☒Conducted ☐ERP ☐EIRP

2. SAR Measurement
   Phantom Configuration ☐Left Head ☒Uniphantom ☐Right Head
   SAR Configuration ☐Head ☒Body

3. Test Signal Call Mode ☒Test Code ☐Base Station Simulator

4. Test Configuration ☐With Belt Clip ☐Without Belt Clip ☒N/A

Jay M. Moulton
Vice President

12.1 Test Equipment List

Table 12.1 Equipment Specifications

Type	Calibration Due Date	Serial Number
ThermoCRS Robot	N/A	RAF0338198
ThermoCRS Controller	N/A	RCF0338224
ThermoCRS Teach Pendant (Joystick)	N/A	STP0334405
IBM Computer, 2.66 MHz P4	N/A	8189D8U KCPR08N
Aprel E-Field Probe ALS-E020	02/14/2008	RFE-215
Aprel E-Field Probe ALS-E030	04/09/2008	AL-E3P1
Aprel Dummy Probe	N/A	023
Aprel Left Phantom	N/A	RFE-267
Aprel Right Phantom	N/A	RFE-268
Aprel UniPhantom	N/A	RFE-273
Aprel Validation Dipole ALS-D-450-S-2	04/30/2009	RFE-362
Aprel Validation Dipole ALS-D-835-S-2	02/16/2008	RFE-274
Aprel Validation Dipole ALS-D-1900-S-2	02/15/2008	RFE-277
Aprel Validation Dipole ALS-D-2450-S-2	02/17/2008	RFE-278
Aprel Validation Dipole ALS-D-BB-S-2	05/23/2009	5258-235-00801
Agilent (HP) 437B Power Meter	12/04/2007	3125U08837
Agilent (HP) 8481B Power Sensor	12/04/2007	3318A05384
Advantest R3261A Spectrum Analyzer	12/04/2007	31720068
Agilent (HP) 8350B Signal Generator	01/30/2008	2749A10226
Agilent (HP) 83525A RF Plug-In	01/30/2008	2647A01172
Agilent (HP) 8753C Vector Network Analyzer	01/30/2008	3135A01724
Agilent (HP) 85047A S-Parameter Test Set	01/30/2008	2904A00595
Agilent (HP) E55125C Base Station Sim.	01/30/2009	GB42361377
Aprel Dielectric Probe Assembly	N/A	0011
Microwave Power Devices 510-10E Amplifier	03/09/2008	6063-001
Microwave Power Devices 1020-9E Amplifier	03/09/2008	5618-1
Brain Equivalent Matter (450 MHz)	N/A	N/A
Brain Equivalent Matter (835 MHz)	N/A	N/A
Brain Equivalent Matter (1900 MHz)	N/A	N/A
Brain Equivalent Matter (2450 MHz)	N/A	N/A
Muscle Equivalent Matter (450 MHz)	N/A	N/A
Muscle Equivalent Matter (835 MHz)	N/A	N/A
Muscle Equivalent Matter (1900 MHz)	N/A	N/A
Muscle Equivalent Matter (2450 MHz)	N/A	N/A
Muscle Equivalent Matter (5200 MHz)	N/A	N/A
Muscle Equivalent Matter (5800 MHz)	N/A	N/A

13.1 Conclusion

The SAR measurement indicates that the EUT complies with the RF radiation exposure limits of the FCC. These measurements are taken to simulate the RF effects exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The tested device complies with the requirements in respect to all parameters subject to the test. The test results and statements relate only to the item(s) tested.

Please note that the absorption and distribution of electromagnetic energy in the body is a very complex phenomena that depends on the mass, shape, and size of the body; the orientation of the body with respect to the field vectors; and, the electrical properties of both the body and the environment. Other variables that may play a substantial role in possible biological effects are those that characterize the environment (e.g. ambient temperature, air velocity, relative humidity, and body insulation) and those that characterize the individual (e.g. age, gender, activity level, debilitation, or disease). Because innumerable factors may interact to determine the specific biological outcome of an exposure to electromagnetic fields, any protection guide shall consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables. [3]

14.1 References

[1] Federal Communications Commission, ET Docket 93-62, Guidelines for Evaluating the Environmental Effects of Radio Frequency Radiation, August 1996

[2] ANSI/IEEE C95.1 – 1999, American National Standard Safety Levels with respect to Human Exposure to Radio Frequency Electromagnetic Fields, 300kHz to 100GHz, New York: IEEE, 1992.

[3] ANSI/IEEE C95.3 – 2002, IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields – RF and Microwave, New York: IEEE, 1992.

[4] Federal Communications Commission, OET Bulletin 65 (Edition 97-01), Supplement C (Edition 01-01), Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields, July 2001.

[5] IEEE Standard 1528 – 2003, IEEE Recommended Practice for Determining the Peak-Spatial Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communication Devices: Measurement Techniques, October 2003.

[6] Industry Canada, RSS – 102e, Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands), November 2005.

[7] Industry Canada, Safety Code 6, Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3kHz to 300 GHz, 1999.

Appendix A – System Validation Plots and Data

```
**********************************************************
Test Result for UIM Dielectric Parameter
Fri 24/Aug/2007 07:19:52
Freq  Frequency(GHz)
FCC_eH      FCC Bulletin 65 Supplement C ( June 2001) Limits for Head Epsilon
FCC_sH      FCC Bulletin 65 Supplement C (June 2001) Limits for Head Sigma
FCC_eB      FCC Limits for Body Epsilon
FCC_sB      FCC Limits for Body Sigma
Test_e      Epsilon  of  UIM
Test_s      Sigma of UIM
**********************************************************
```

Freq	FCC_eB	FCC_sB	Test_e	Test_s
0.8050	55.32	0.97	53.89	0.94
0.8150	55.28	0.97	53.85	0.94
0.8250	55.24	0.97	53.83	0.95
0.8350	55.20	0.97	53.81	0.98
0.8450	55.17	0.98	53.77	0.99
0.8550	55.14	0.99	53.75	1.01
0.8650	55.11	1.01	53.76	1.02

```
**********************************************************
Test Result for UIM Dielectric Parameter
Mon 27/Aug/2007 07:24:10
Freq  Frequency(GHz)
FCC_eH      FCC Bulletin 65 Supplement C ( June 2001) Limits for Head Epsilon
FCC_sH      FCC Bulletin 65 Supplement C (June 2001) Limits for Head Sigma
FCC_eB      FCC Limits for Body Epsilon
FCC_sB      FCC Limits for Body Sigma
Test_e      Epsilon  of  UIM
Test_s      Sigma of UIM
**********************************************************
```

Freq	FCC_eB	FCC_sB	Test_e	Test_s
1.8700	53.30	1.52	52.92	1.51
1.8800	53.30	1.52	52.84	1.53
1.8900	53.30	1.52	52.82	1.55
1.9000	53.30	1.52	52.73	1.58
1.9100	53.30	1.52	52.72	1.59
1.9200	53.30	1.52	52.67	1.62
1.9300	53.30	1.52	52.66	1.64

```
**********************************************************
Test Result for UIM Dielectric Parameter
Fri 31/Aug/2007 07:25:15
Freq  Frequency(GHz)
FCC_eH      FCC Bulletin 65 Supplement C ( June 2001) Limits for Head Epsilon
FCC_sH      FCC Bulletin 65 Supplement C (June 2001) Limits for Head Sigma
FCC_eB      FCC Limits for Body Epsilon
FCC_sB      FCC Limits for Body Sigma
Test_e      Epsilon  of  UIM
Test_s      Sigma of UIM
**********************************************************
```

Freq	FCC_eB	FCC_sB	Test_e	Test_s
1.8700	53.30	1.52	53.63	1.42
1.8800	53.30	1.52	53.61	1.44
1.8900	53.30	1.52	53.52	1.45
1.9000	53.30	1.52	53.48	1.46
1.9100	53.30	1.52	53.38	1.48
1.9200	53.30	1.52	53.31	1.50
1.9300	53.30	1.52	53.26	1.52

```
**********************************************************
Test Result for UIM Dielectric Parameter
Wed 29/Aug/2007 07:29:39
Freq  Frequency(GHz)
FCC_eH      FCC Bulletin 65 Supplement C ( June 2001) Limits for Head Epsilon
FCC_sH      FCC Bulletin 65 Supplement C (June 2001) Limits for Head Sigma
FCC_eB      FCC Limits for Body Epsilon
FCC_sB      FCC Limits for Body Sigma
Test_e      Epsilon  of  UIM
Test_s      Sigma of UIM
**********************************************************
```

Freq	FCC_eB	FCC_sB	Test_e	Test_s
2.4200	52.74	1.92	51.41	1.92
2.4300	52.73	1.93	51.40	1.93
2.4400	52.71	1.94	51.36	1.94
2.4500	52.70	1.95	51.34	1.95
2.4600	52.69	1.96	51.27	1.97
2.4700	52.67	1.98	51.24	1.98
2.4800	52.66	1.99	51.18	1.99

```
**********************************************************
Test Result for UIM Dielectric Parameter
Tue 28/Aug/2007 07:38:11
Freq  Frequency(GHz)
FCC_eH      FCC Bulletin 65 Supplement C ( June 2001) Limits for Head Epsilon
FCC_sH      FCC Bulletin 65 Supplement C (June 2001) Limits for Head Sigma
FCC_eB      FCC Limits for Body Epsilon
FCC_sB      FCC Limits for Body Sigma
Test_e      Epsilon  of  UIM
Test_s      Sigma of UIM
**********************************************************
```

Freq	FCC_eB	FCC_sB	Test_e	Test_s
2.4200	52.74	1.92	52.74	1.90
2.4300	52.73	1.93	52.69	1.92
2.4400	52.71	1.94	52.66	1.92
2.4500	52.70	1.95	52.65	1.94
2.4600	52.69	1.96	52.62	1.95
2.4700	52.67	1.98	52.61	1.95
2.4800	52.66	1.99	52.56	1.99

```
**********************************************************
Test Result for UIM Dielectric Parameter
Fri 31/Aug/2007 06:40:38
Freq  Frequency(GHz)
FCC_eH      FCC Bulletin 65 Supplement C ( June 2001) Limits for Head Epsilon
FCC_sH      FCC Bulletin 65 Supplement C (June 2001) Limits for Head Sigma
FCC_eB      FCC Limits for Body Epsilon
FCC_sB      FCC Limits for Body Sigma
Test_e      Epsilon  of  UIM
Test_s      Sigma of UIM
**********************************************************
```

Freq	FCC_eB	FCC_sB	Test_e	Test_s
2.4200	52.74	1.92	53.42	1.91
2.4300	52.73	1.93	53.42	1.94
2.4400	52.71	1.94	53.38	1.95
2.4500	52.70	1.95	53.36	1.96
2.4600	52.69	1.96	53.28	1.98
2.4700	52.67	1.98	53.27	1.99
2.4800	52.66	1.99	53.19	2.00

SAR Test Report

By Operator : Jay
Measurement Date : 24-Aug-2007
Starting Time : 24-Aug-2007 07:25:41 AM
End Time : 24-Aug-2007 07:40:49 AM
Scanning Time : 908 secs

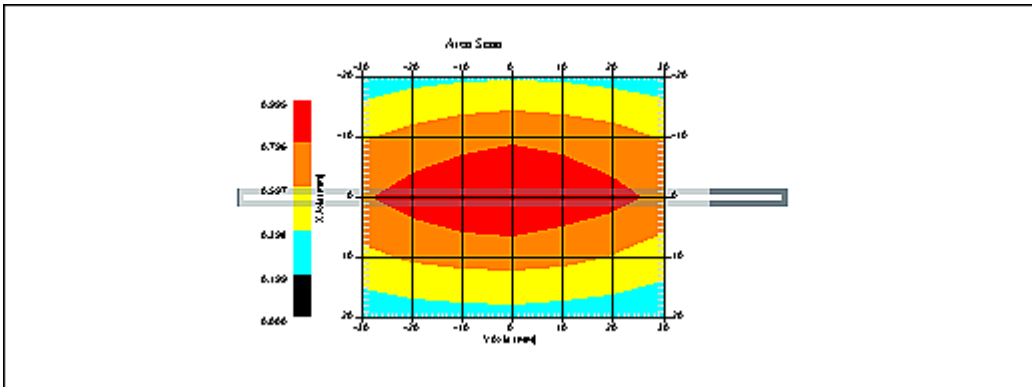
Product Data
Device Name : Validation
Serial No. : 835
Type : Dipole
Model : ALS-D-835-S-2
Frequency : 835.00 MHz
Max. Transmit Pwr : 0.1 W
Drift Time : 0 min(s)
Length : 161 mm
Width : 3.6 mm
Depth : 89.8 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 0.999 W/kg
Power Drift-Finish: 0.972 W/kg
Power Drift (%) : -2.646

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

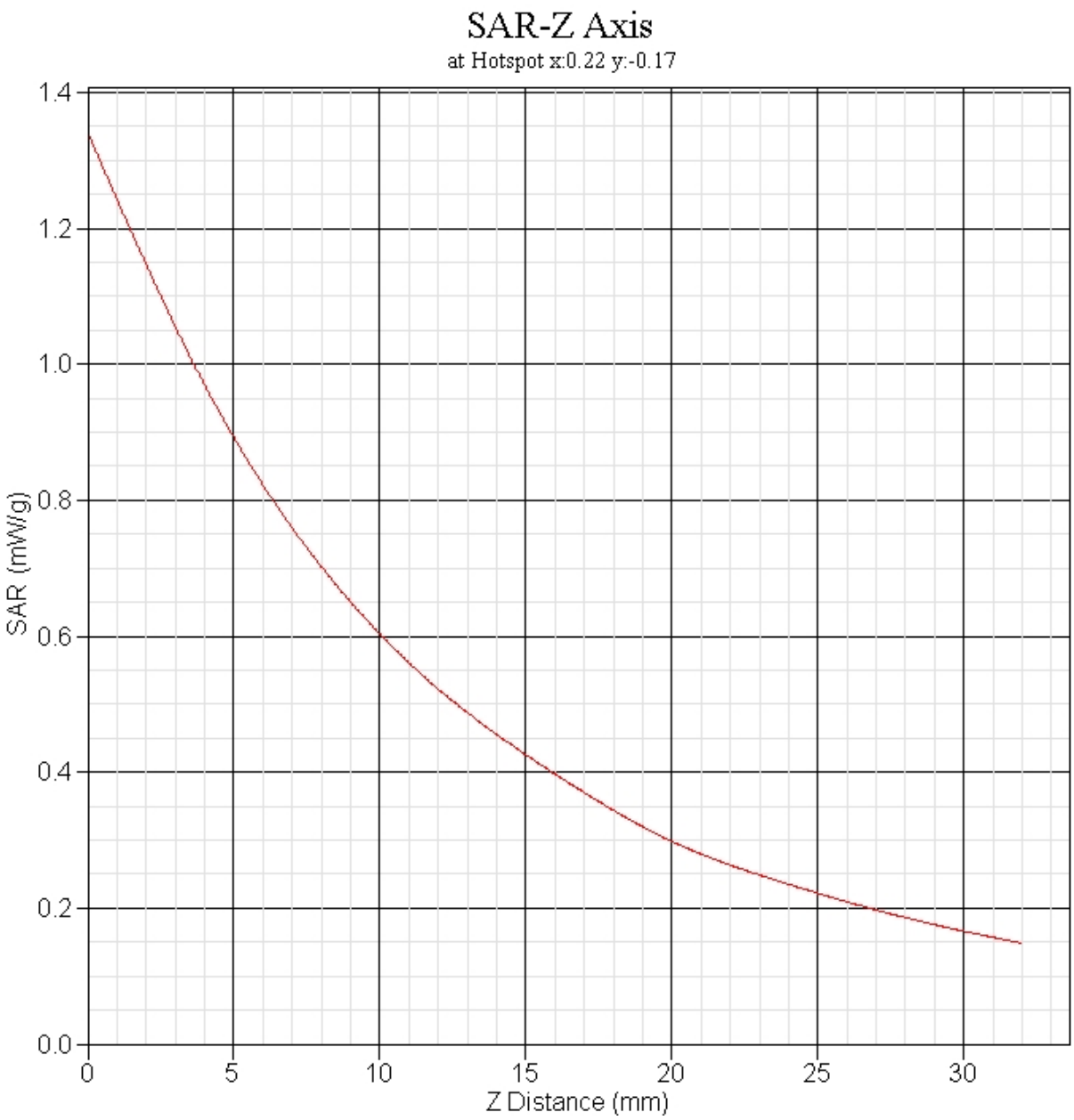
Tissue Data
Type : BODY
Serial No. : 835
Frequency : 835.00 MHz
Last Calib. Date : 24-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 49.00 RH%
Epsilon : 53.81 F/m
Sigma : 0.98 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 835.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 6.3
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 25.00 °C
Set-up Date       : 24-Aug-2007
Set-up Time       : 9:21:48 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Touch
Separation        : 15
Channel           : Mid
```



```
1 gram SAR value    : 0.907 W/kg
10 gram SAR value   : 0.570 W/kg
Area Scan Peak SAR  : 0.994 W/kg
Zoom Scan Peak SAR  : 1.341 W/kg
```



SAR Test Report

By Operator : Jay
Measurement Date : 27-Aug-2007
Starting Time : 27-Aug-2007 07:39:22 AM
End Time : 27-Aug-2007 07:52:21 AM
Scanning Time : 779 secs

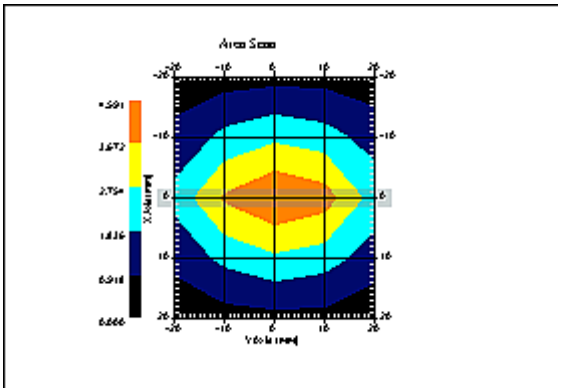
Product Data
Device Name : Validation
Serial No. : 1900
Type : Dipole
Model : ALS-D-1900-S-2
Frequency : 1900.00 MHz
Max. Transmit Pwr : 0.1 W
Drift Time : 0 min(s)
Length : 68 mm
Width : 3.6 mm
Depth : 39.5 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 4.552 W/kg
Power Drift-Finish: 4.532 W/kg
Power Drift (%) : -0.448

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

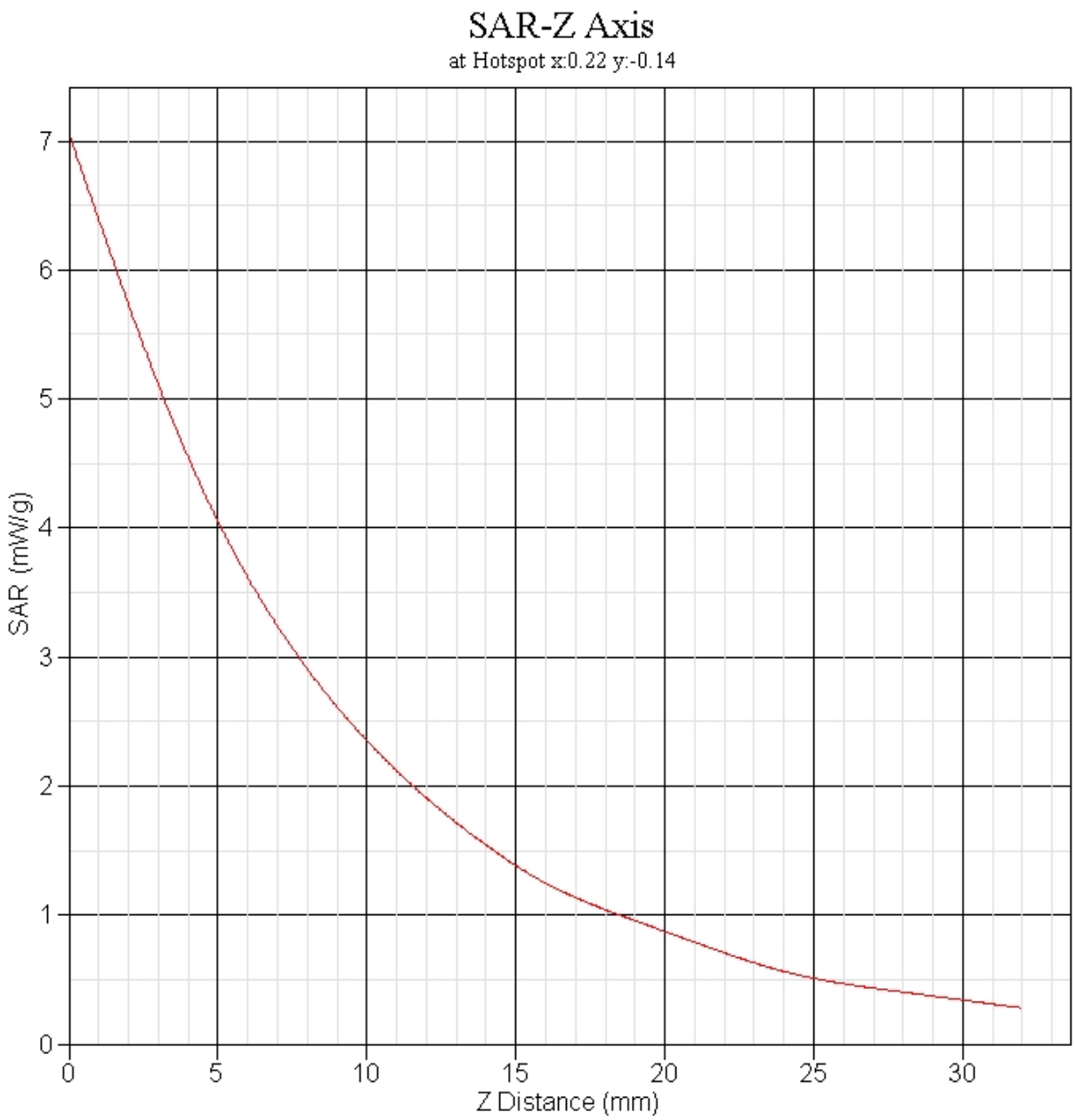
Tissue Data
Type : BODY
Serial No. : 1900
Frequency : 1900.00 MHz
Last Calib. Date : 27-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 49.00 RH%
Epsilon : 52.73 F/m
Sigma : 1.58 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 1900.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 24-Aug-2007
Set-up Time       : 8:39:41 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Touch
Separation        : 10
Channel           : Mid
```



```
1 gram SAR value    : 3.993 W/kg
10 gram SAR value   : 2.076 W/kg
Area Scan Peak SAR  : 4.591 W/kg
Zoom Scan Peak SAR  : 7.066 W/kg
```



SAR Test Report

By Operator : Jay
Measurement Date : 31-Aug-2007
Starting Time : 31-Aug-2007 07:33:41 AM
End Time : 31-Aug-2007 07:47:00 AM
Scanning Time : 799 secs

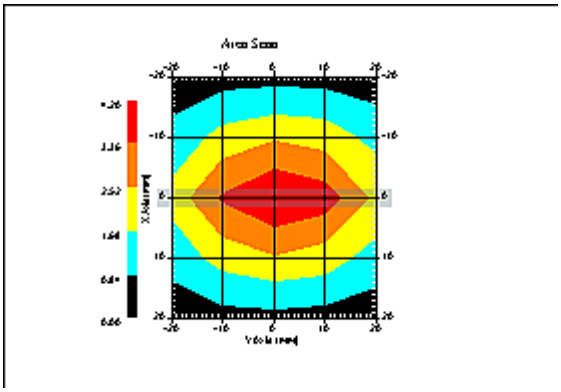
Product Data
Device Name : Validation
Serial No. : 1900
Type : Dipole
Model : ALS-D-1900-S-2
Frequency : 1900.00 MHz
Max. Transmit Pwr : 0.1 W
Drift Time : 0 min(s)
Length : 68 mm
Width : 3.6 mm
Depth : 39.5 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 4.265 W/kg
Power Drift-Finish: 4.284 W/kg
Power Drift (%) : 0.453

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

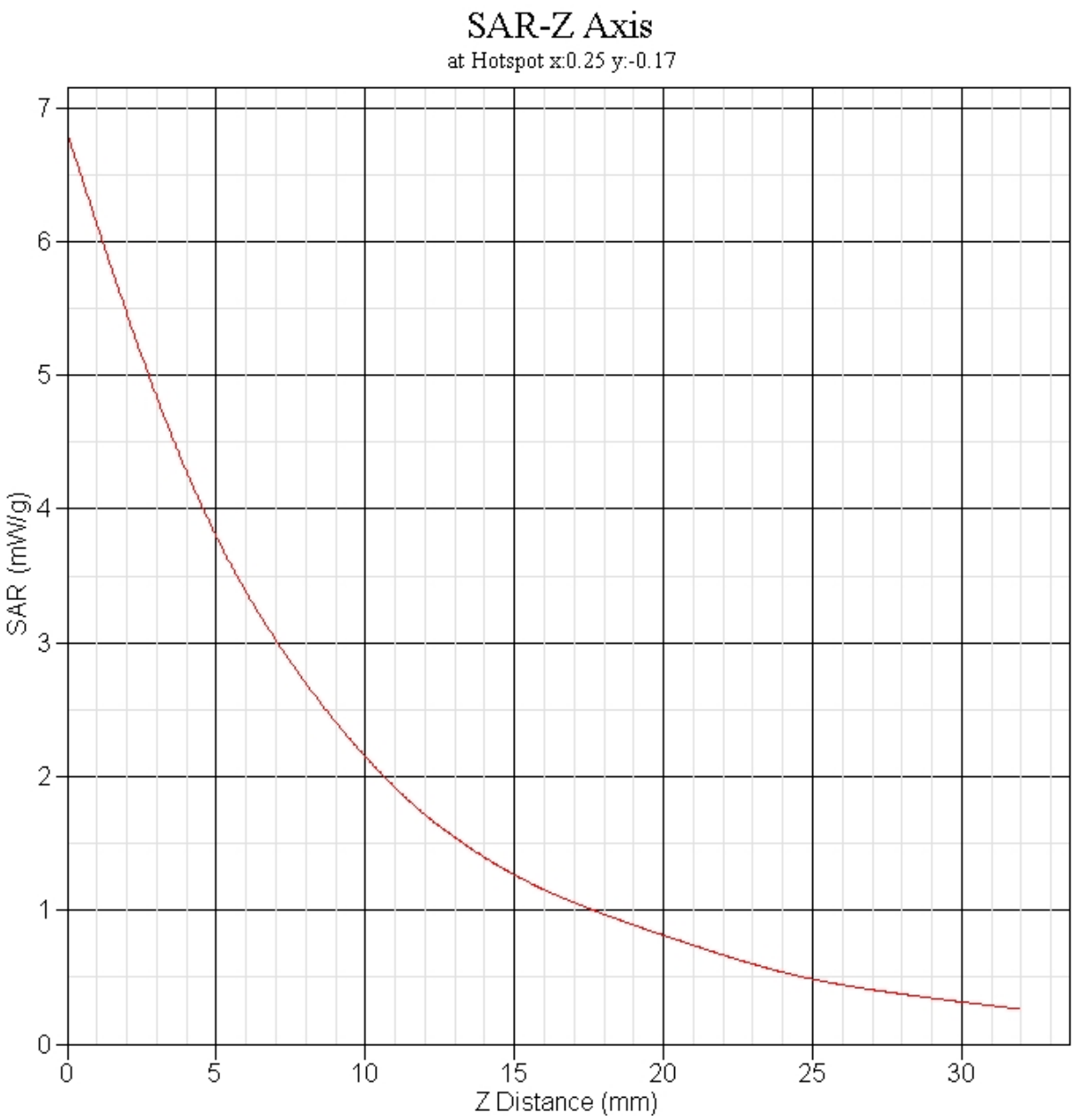
Tissue Data
Type : BODY
Serial No. : 1900
Frequency : 1900.00 MHz
Last Calib. Date : 31-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 49.00 RH%
Epsilon : 53.48 F/m
Sigma : 1.46 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 1900.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Aug-2007
Set-up Time       : 8:39:41 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Touch
Separation        : 10
Channel           : Mid
```



```
1 gram SAR value    : 3.937 W/kg
10 gram SAR value   : 1.933 W/kg
Area Scan Peak SAR  : 4.200 W/kg
Zoom Scan Peak SAR  : 6.816 W/kg
```



SAR Test Report

By Operator : Jay
Measurement Date : 29-Aug-2007
Starting Time : 29-Aug-2007 07:33:22 AM
End Time : 29-Aug-2007 07:46:16 AM
Scanning Time : 774 secs

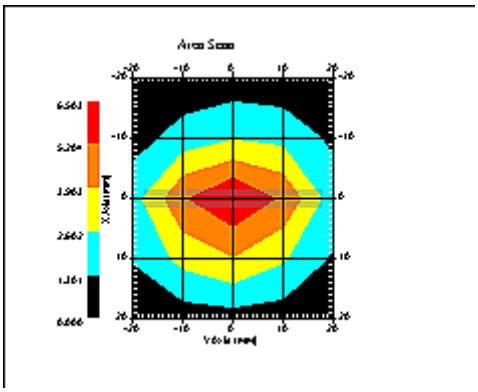
Product Data
Device Name : Validation
Serial No. : 2450
Type : Dipole
Model : ALS-D-2450-S-2
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.1 W
Drift Time : 0 min(s)
Length : 51.5 mm
Width : 3.6 mm
Depth : 30.4 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 6.390 W/kg
Power Drift-Finish: 6.601 W/kg
Power Drift (%) : 3.301

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

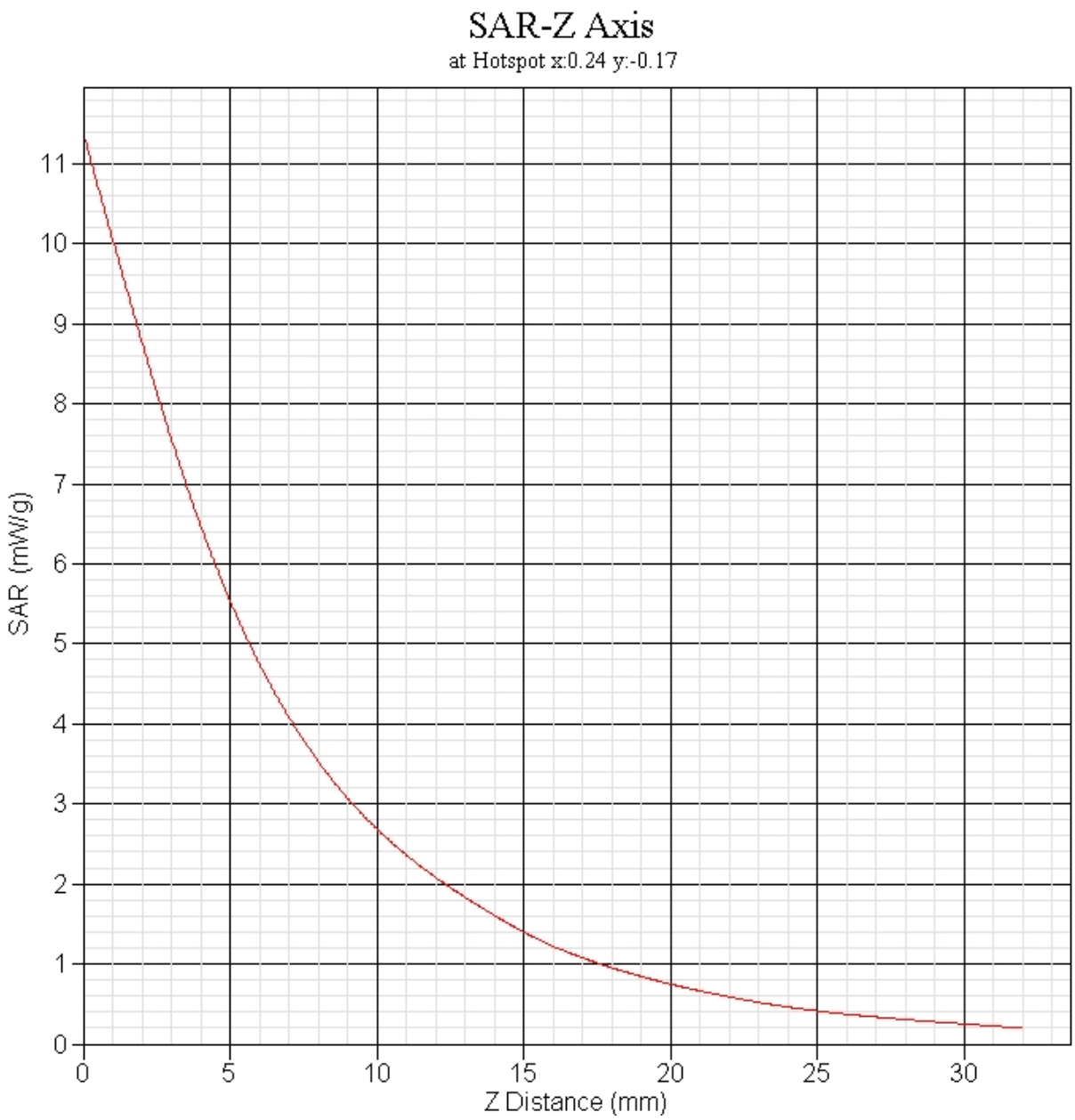
Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 29-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 51.34 F/m
Sigma : 1.95 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 29-Aug-2007
Set-up Time       : 7:40:13 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Touch
Separation        : 10
Channel           : Mid
```



```
1 gram SAR value    : 5.530 W/kg
10 gram SAR value   : 2.536 W/kg
Area Scan Peak SAR  : 6.503 W/kg
Zoom Scan Peak SAR  : 11.390 W/kg
```



SAR Test Report

By Operator : Jay
Measurement Date : 30-Aug-2007
Starting Time : 30-Aug-2007 07:44:38 AM
End Time : 30-Aug-2007 07:57:36 AM
Scanning Time : 778 secs

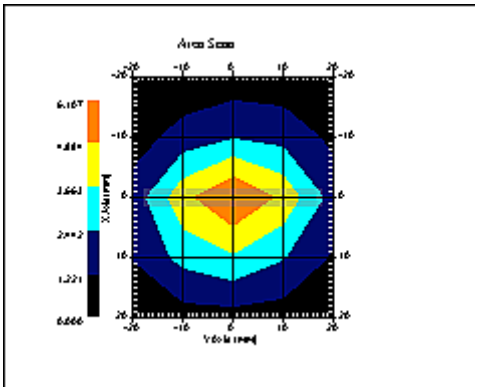
Product Data
Device Name : Validation
Serial No. : 2450
Type : Dipole
Model : ALS-D-2450-S-2
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.1 W
Drift Time : 0 min(s)
Length : 51.5 mm
Width : 3.6 mm
Depth : 30.4 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 5.255 W/kg
Power Drift-Finish: 5.385 W/kg
Power Drift (%) : 2.315

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

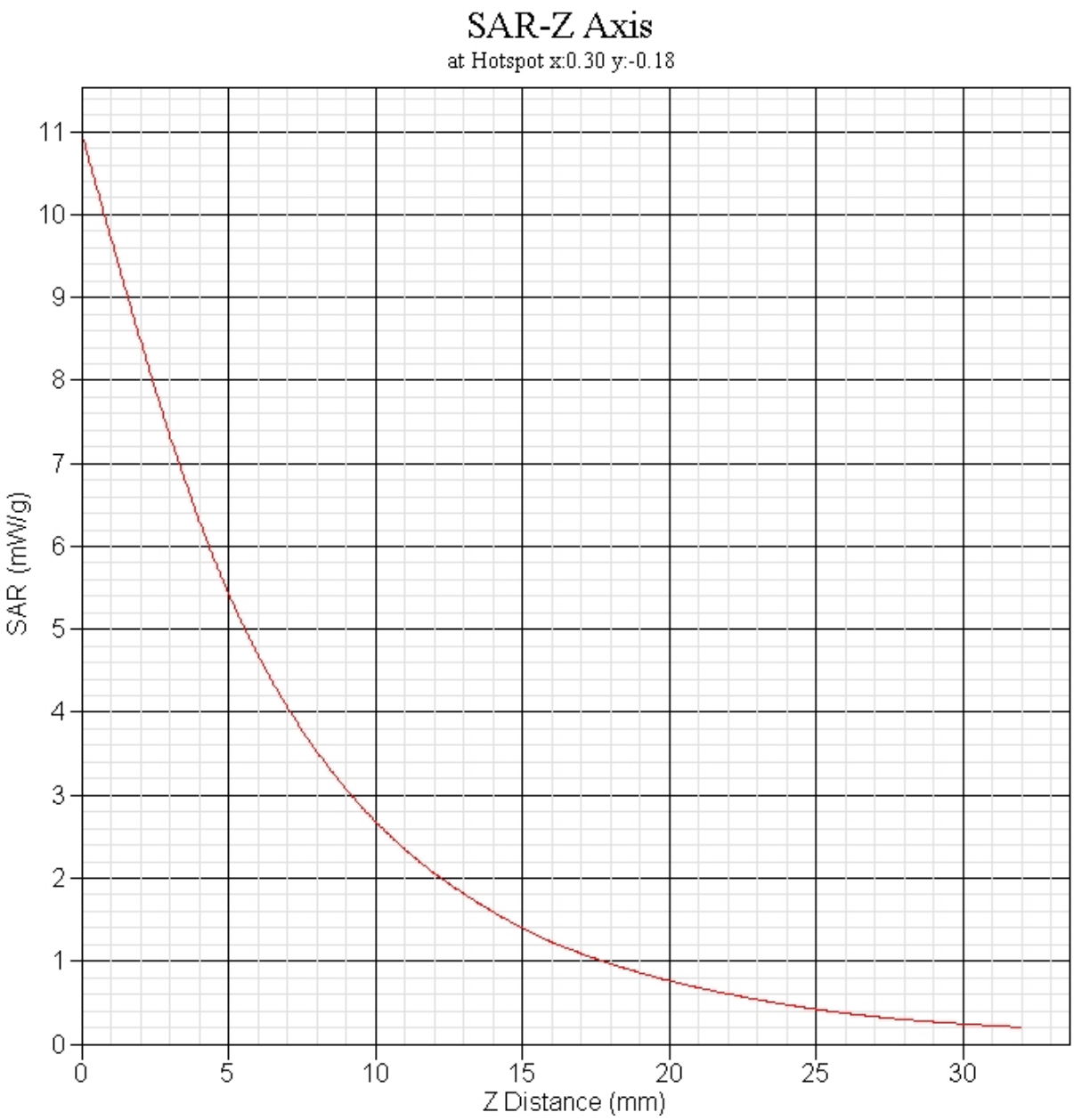
Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 30-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 52.65 F/m
Sigma : 1.94 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 30-Aug-2007
Set-up Time       : 7:40:13 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Touch
Separation        : 10
Channel           : Mid
```



```
1 gram SAR value    : 5.401 W/kg
10 gram SAR value   : 2.484 W/kg
Area Scan Peak SAR  : 6.107 W/kg
Zoom Scan Peak SAR  : 10.990 W/kg
```



SAR Test Report

By Operator : Jay
Measurement Date : 31-Aug-2007
Starting Time : 31-Aug-2007 06:52:56 AM
End Time : 31-Aug-2007 07:06:02 AM
Scanning Time : 786 secs

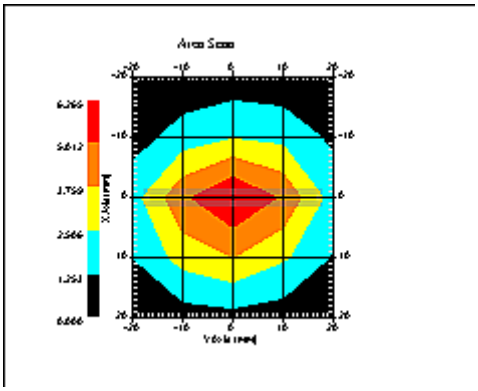
Product Data
Device Name : Validation
Serial No. : 2450
Type : Dipole
Model : ALS-D-2450-S-2
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.1 W
Drift Time : 0 min(s)
Length : 51.5 mm
Width : 3.6 mm
Depth : 30.4 mm
Antenna Type : Internal
Orientation : Touch
Power Drift-Start : 6.381 W/kg
Power Drift-Finish: 6.404 W/kg
Power Drift (%) : 0.355

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

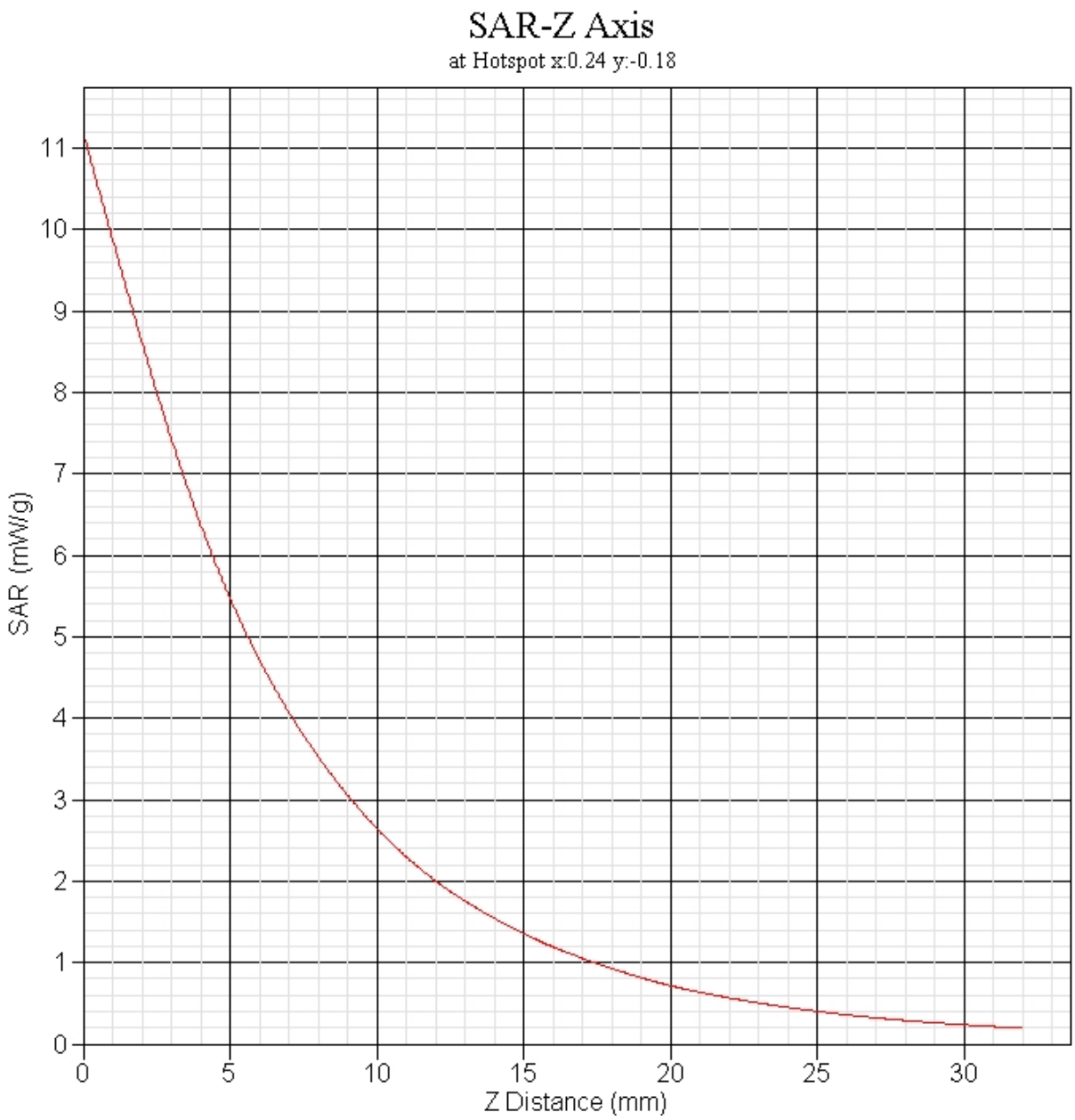
Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 31-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 53.36 F/m
Sigma : 1.96 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Aug-2007
Set-up Time       : 7:40:13 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Touch
Separation        : 10
Channel           : Mid
```



```
1 gram SAR value    : 5.440 W/kg
10 gram SAR value   : 2.476 W/kg
Area Scan Peak SAR  : 6.265 W/kg
Zoom Scan Peak SAR  : 11.190 W/kg
```

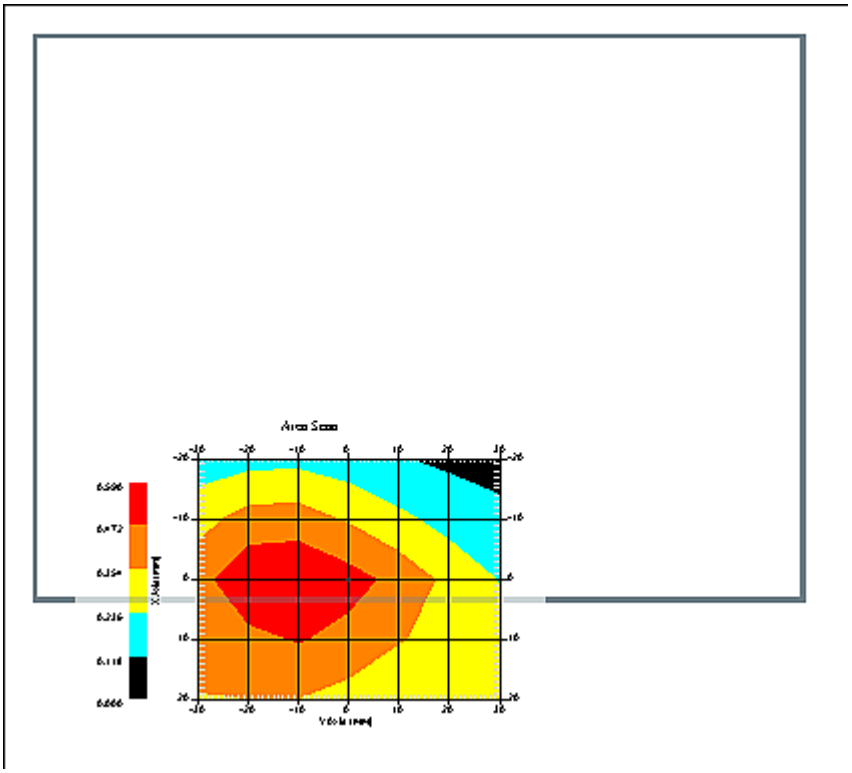


Appendix B – SAR Test Data Plots

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 24-Aug-2007
Starting Time     : 24-Aug-2007  11:49:20 AM
End Time          : 24-Aug-2007  12:04:20 PM
Scanning Time     : 900 secs

Product Data
Device Name       : Vulcan Inc.
Serial No.        : MVT1-107
Type              : Other
Model             : E-1001s
Frequency         : 835.00 MHz
Max. Transmit Pwr : 2 W
Drift Time        : 0 min(s)
Length            : 150 mm
Width             : 110 mm
Depth             : 40 mm
Antenna Type      : Internal
Orientation       : Rotated Right 90°
Power Drift-Start : 0.491 W/kg
Power Drift-Finish: 0.498 W/kg
Power Drift (%)   : 1.388

Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 835
Frequency         : 835.00 MHz
Last Calib. Date  : 24-Aug-2007
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 49.00 RH%
Epsilon           : 53.81 F/m
Sigma             : 0.98 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe 215 - RFEL
Model             : E020
Type              : E-Field Triangle
Serial No.        : 215
Last Calib. Date  : 14-Feb-2007
Frequency         : 835.00 MHz
Duty Cycle Factor: 0.25
Conversion Factor: 6.3
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)²
Compression Point: 95.00 mV
Offset            : 1.56 mm
```

```
Measurement Data
Crest Factor      : 0.25
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 24-Aug-2007
Set-up Time       : 8:34:52 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Low
```



```
1 gram SAR value    : 0.523 W/kg
10 gram SAR value   : 0.338 W/kg
Area Scan Peak SAR  : 0.588 W/kg
Zoom Scan Peak SAR  : 0.800 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 24-Aug-2007
Starting Time : 24-Aug-2007 11:28:46 AM
End Time : 24-Aug-2007 11:43:42 AM
Scanning Time : 896 secs

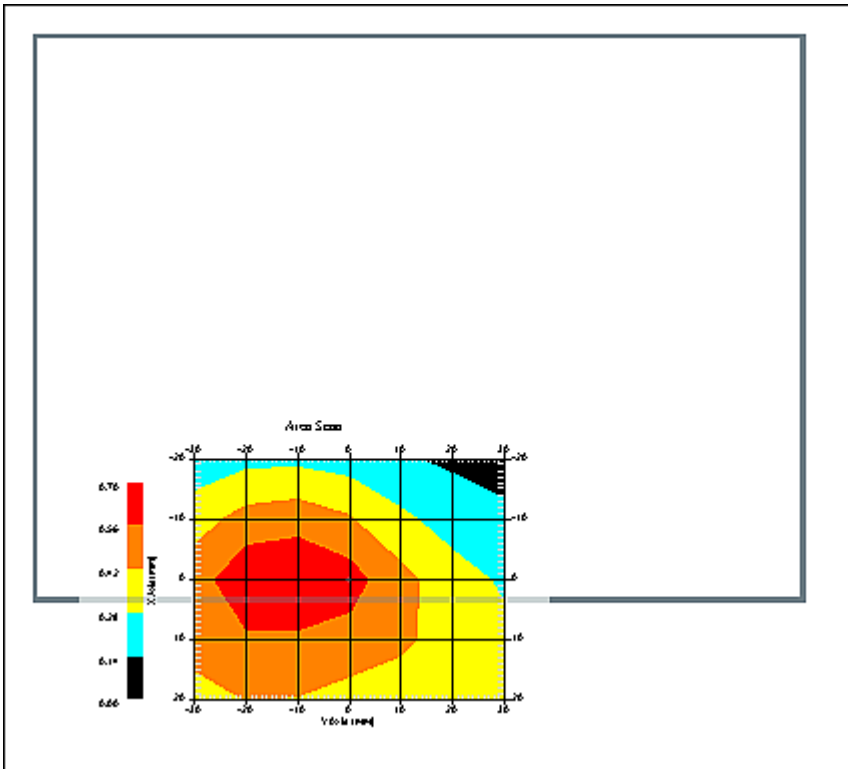
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 835.00 MHz
Max. Transmit Pwr : 2 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.641 W/kg
Power Drift-Finish: 0.612 W/kg
Power Drift (%) : -4.524

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 835
Frequency : 835.00 MHz
Last Calib. Date : 24-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 49.00 RH%
Epsilon : 53.81 F/m
Sigma : 0.98 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 835.00 MHz
Duty Cycle Factor: 0.25
Conversion Factor: 6.3
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 0.25
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 24-Aug-2007
Set-up Time       : 8:34:52 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Mid
```



```
1 gram SAR value    : 0.624 W/kg
10 gram SAR value   : 0.400 W/kg
Area Scan Peak SAR  : 0.700 W/kg
Zoom Scan Peak SAR  : 0.890 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 24-Aug-2007
Starting Time : 24-Aug-2007 01:16:29 PM
End Time : 24-Aug-2007 01:31:25 PM
Scanning Time : 896 secs

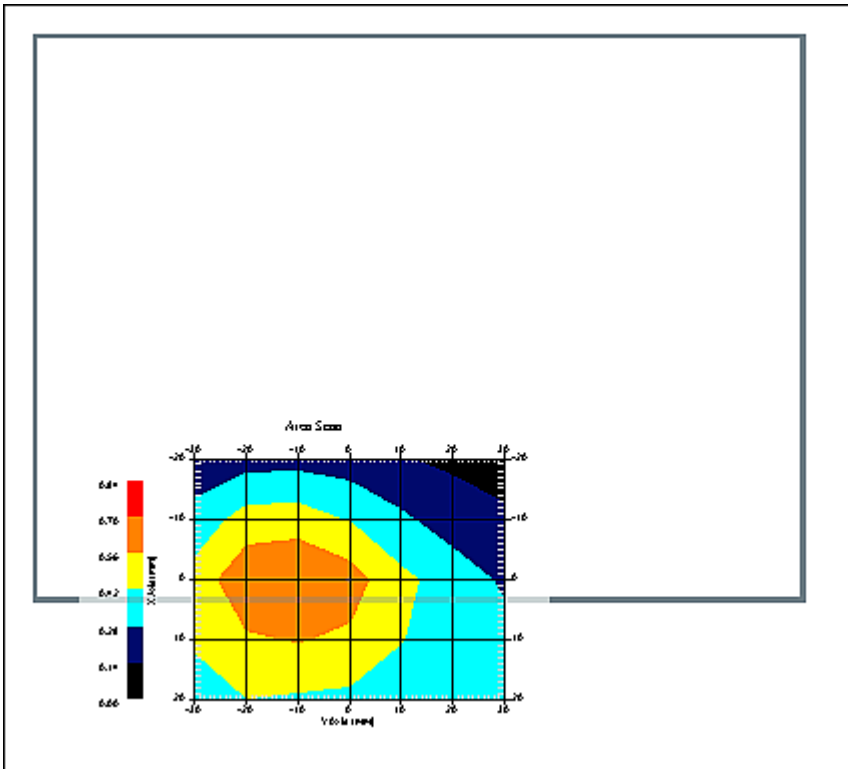
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 835.00 MHz
Max. Transmit Pwr : 2 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.658 W/kg
Power Drift-Finish: 0.633 W/kg
Power Drift (%) : -3.799

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 835
Frequency : 835.00 MHz
Last Calib. Date : 24-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 49.00 RH%
Epsilon : 53.81 F/m
Sigma : 0.98 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 835.00 MHz
Duty Cycle Factor: 0.25
Conversion Factor: 6.3
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 0.25
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 24-Aug-2007
Set-up Time       : 8:34:52 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : High
```



```
1 gram SAR value    : 0.635 W/kg
10 gram SAR value   : 0.409 W/kg
Area Scan Peak SAR  : 0.701 W/kg
Zoom Scan Peak SAR  : 0.990 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 24-Aug-2007
Starting Time : 24-Aug-2007 02:29:06 PM
End Time : 24-Aug-2007 02:44:12 PM
Scanning Time : 906 secs

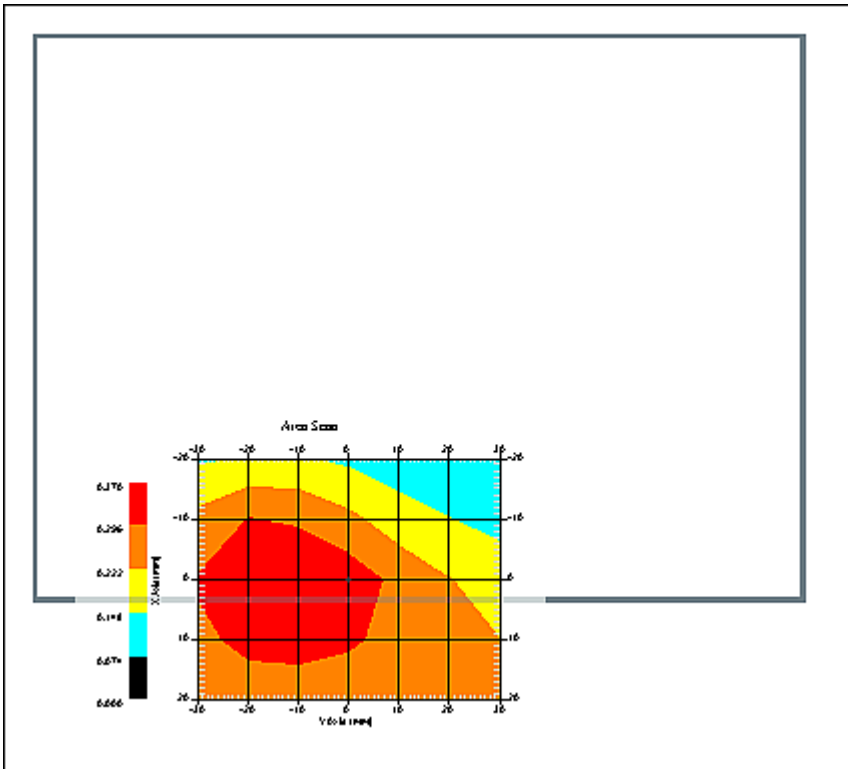
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 835.00 MHz
Max. Transmit Pwr : 2 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.333 W/kg
Power Drift-Finish: 0.326 W/kg
Power Drift (%) : -2.169

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 835
Frequency : 835.00 MHz
Last Calib. Date : 24-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 49.00 RH%
Epsilon : 53.81 F/m
Sigma : 0.98 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 835.00 MHz
Duty Cycle Factor: 0.25
Conversion Factor: 6.3
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 0.25
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 24-Aug-2007
Set-up Time       : 8:34:52 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Low
```



```
1 gram SAR value    : 0.353 W/kg
10 gram SAR value   : 0.242 W/kg
Area Scan Peak SAR  : 0.368 W/kg
Zoom Scan Peak SAR  : 0.510 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 24-Aug-2007
Starting Time : 24-Aug-2007 02:11:19 PM
End Time : 24-Aug-2007 02:26:19 PM
Scanning Time : 900 secs

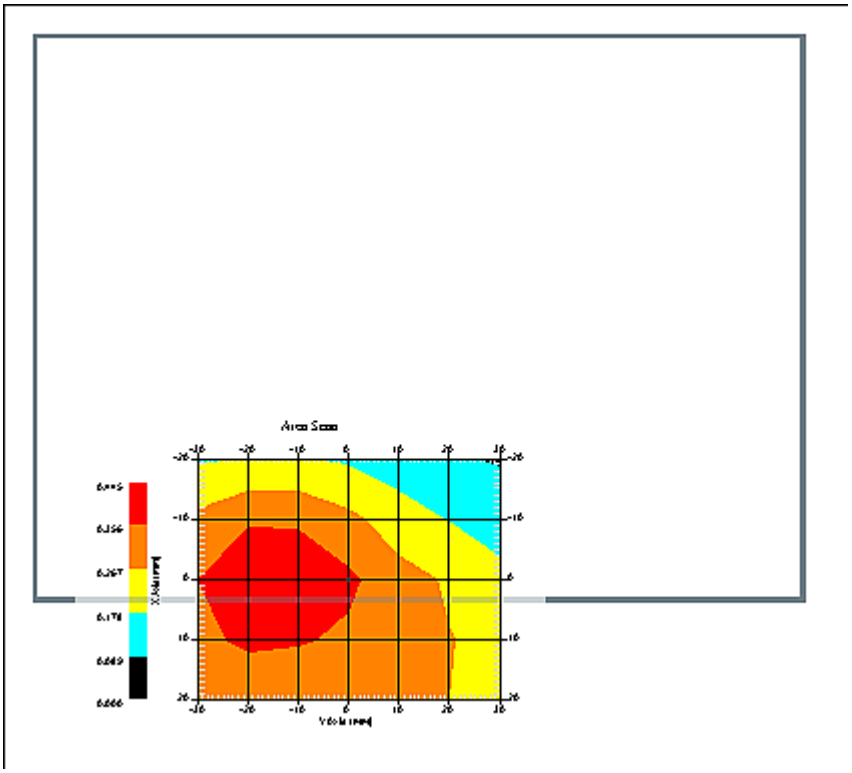
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 835.00 MHz
Max. Transmit Pwr : 2 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.385 W/kg
Power Drift-Finish: 0.376 W/kg
Power Drift (%) : -2.168

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 835
Frequency : 835.00 MHz
Last Calib. Date : 24-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 49.00 RH%
Epsilon : 53.81 F/m
Sigma : 0.98 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 835.00 MHz
Duty Cycle Factor: 0.25
Conversion Factor: 6.3
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 0.25
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 24-Aug-2007
Set-up Time       : 8:34:52 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Mid
```



```
1 gram SAR value    : 0.420 W/kg
10 gram SAR value   : 0.283 W/kg
Area Scan Peak SAR  : 0.443 W/kg
Zoom Scan Peak SAR  : 0.660 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 24-Aug-2007
Starting Time : 24-Aug-2007 01:55:19 PM
End Time : 24-Aug-2007 02:10:14 PM
Scanning Time : 895 secs

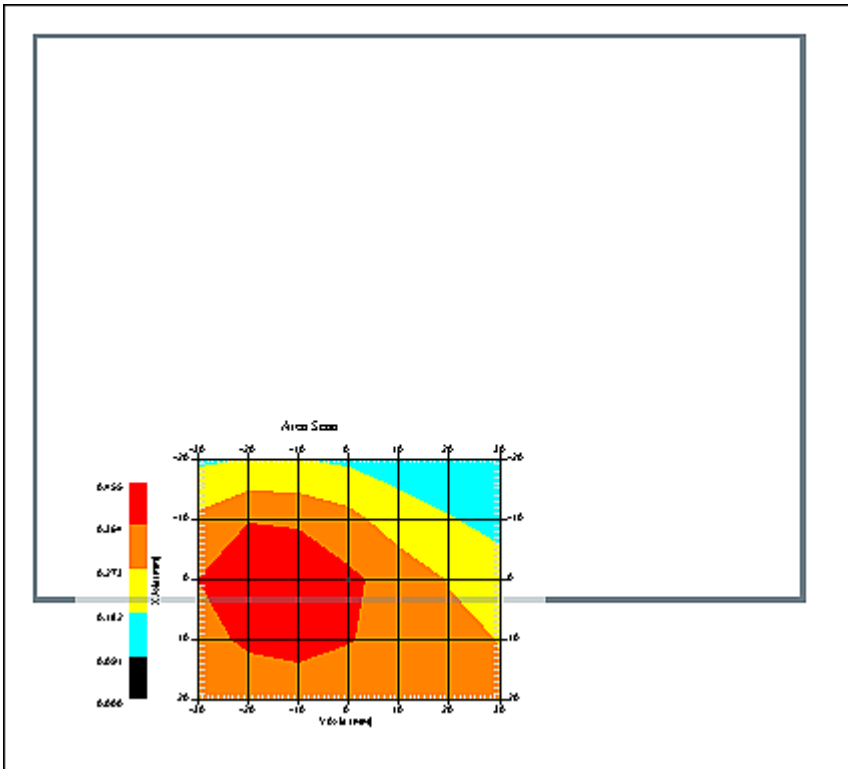
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 835.00 MHz
Max. Transmit Pwr : 2 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.413 W/kg
Power Drift-Finish: 0.406 W/kg
Power Drift (%) : -1.558

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 835
Frequency : 835.00 MHz
Last Calib. Date : 24-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 49.00 RH%
Epsilon : 53.81 F/m
Sigma : 0.98 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 835.00 MHz
Duty Cycle Factor: 0.25
Conversion Factor: 6.3
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 0.25
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 24-Aug-2007
Set-up Time       : 8:34:52 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : High
```



```
1 gram SAR value    : 0.416 W/kg
10 gram SAR value   : 0.283 W/kg
Area Scan Peak SAR  : 0.455 W/kg
Zoom Scan Peak SAR  : 0.570 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 24-Aug-2007
Starting Time : 24-Aug-2007 01:37:45 PM
End Time : 24-Aug-2007 01:52:32 PM
Scanning Time : 887 secs

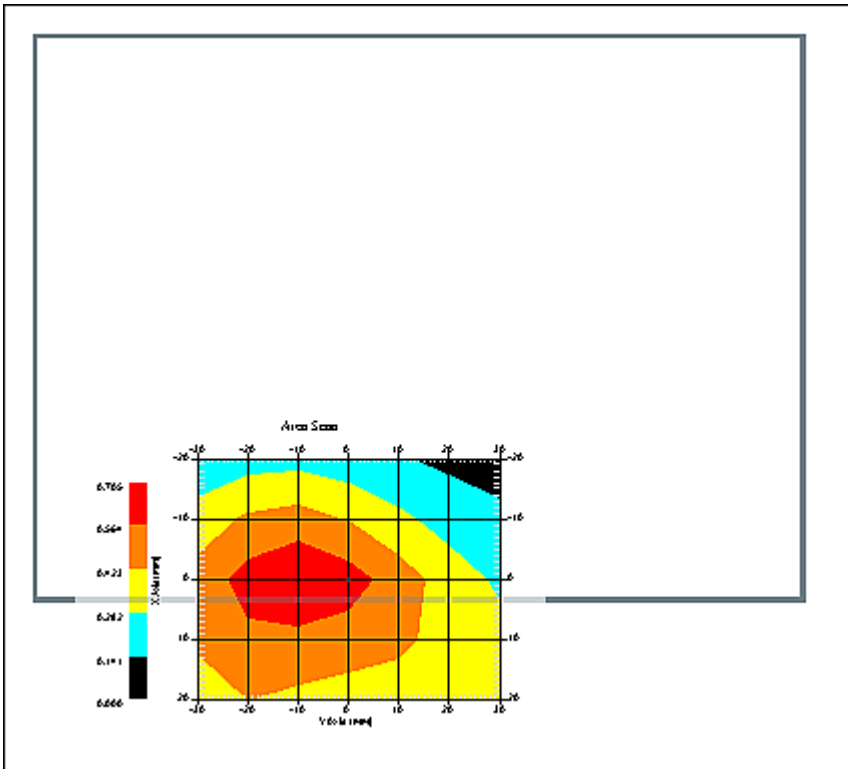
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 835.00 MHz
Max. Transmit Pwr : 2 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.624 W/kg
Power Drift-Finish: 0.642 W/kg
Power Drift (%) : 2.747

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

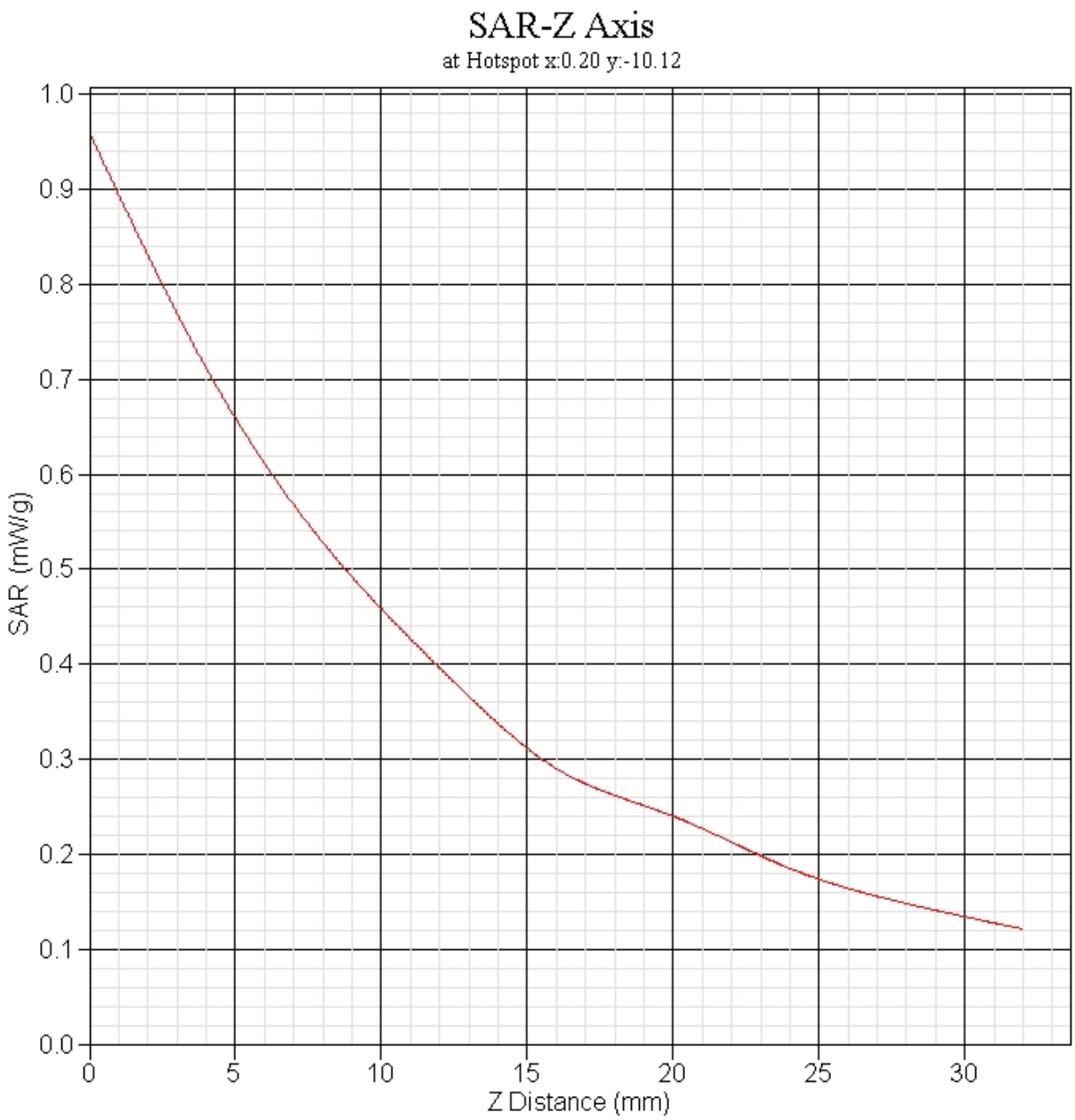
Tissue Data
Type : BODY
Serial No. : 835
Frequency : 835.00 MHz
Last Calib. Date : 24-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 49.00 RH%
Epsilon : 53.81 F/m
Sigma : 0.98 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 835.00 MHz
Duty Cycle Factor: 0.25
Conversion Factor: 6.3
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 0.25
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 24-Aug-2007
Set-up Time       : 8:34:52 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : High
```



```
1 gram SAR value    : 0.642 W/kg
10 gram SAR value   : 0.415 W/kg
Area Scan Peak SAR  : 0.705 W/kg
Zoom Scan Peak SAR  : 0.960 W/kg
```



SAR Test Report

By Operator : Jay
Measurement Date : 24-Aug-2007
Starting Time : 24-Aug-2007 10:01:48 AM
End Time : 24-Aug-2007 10:16:43 AM
Scanning Time : 895 secs

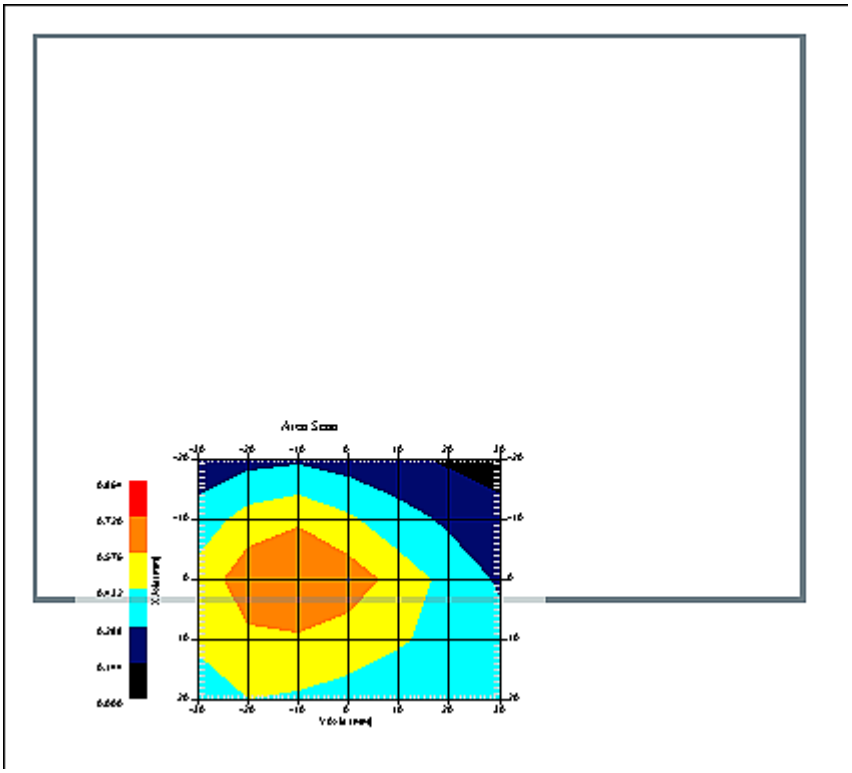
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 835.00 MHz
Max. Transmit Pwr : 0.29 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.629 W/kg
Power Drift-Finish: 0.656 W/kg
Power Drift (%) : 4.293

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 835
Frequency : 835.00 MHz
Last Calib. Date : 24-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 49.00 RH%
Epsilon : 53.81 F/m
Sigma : 0.98 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 835.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 6.3
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 24-Aug-2007
Set-up Time       : 8:34:52 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Low
```



```
1 gram SAR value    : 0.673 W/kg
10 gram SAR value   : 0.427 W/kg
Area Scan Peak SAR  : 0.721 W/kg
Zoom Scan Peak SAR  : 1.040 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 24-Aug-2007
Starting Time : 24-Aug-2007 10:18:00 AM
End Time : 24-Aug-2007 10:33:00 AM
Scanning Time : 900 secs

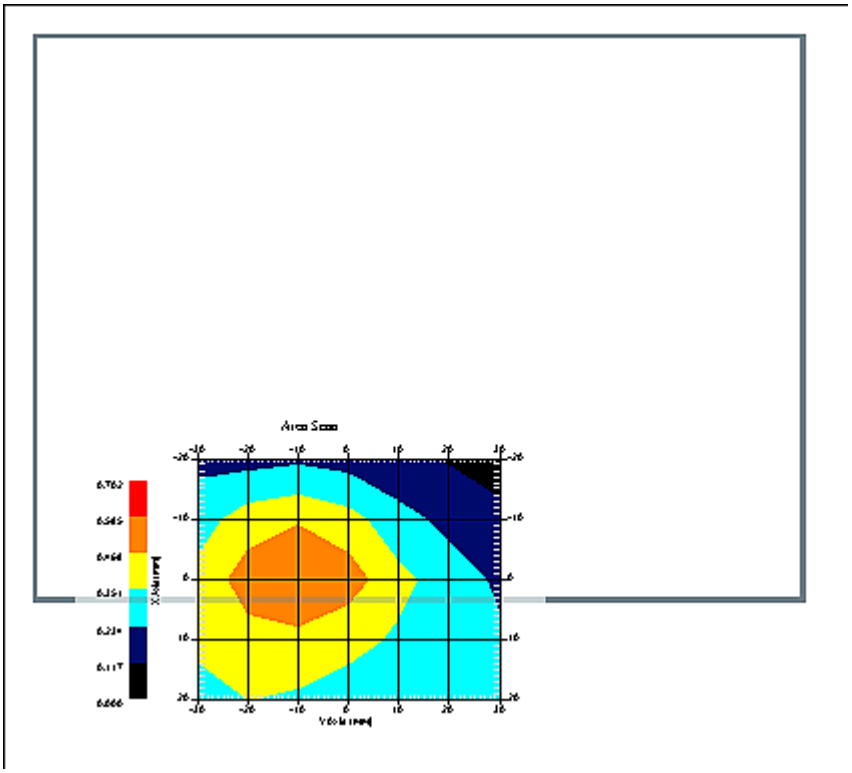
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 835.00 MHz
Max. Transmit Pwr : 0.29 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.471 W/kg
Power Drift-Finish: 0.481 W/kg
Power Drift (%) : 2.123

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 835
Frequency : 835.00 MHz
Last Calib. Date : 24-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 49.00 RH%
Epsilon : 53.81 F/m
Sigma : 0.98 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 835.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 6.3
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 24-Aug-2007
Set-up Time       : 8:34:52 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Mid
```



```
1 gram SAR value    : 0.503 W/kg
10 gram SAR value   : 0.326 W/kg
Area Scan Peak SAR  : 0.586 W/kg
Zoom Scan Peak SAR  : 0.750 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 24-Aug-2007
Starting Time : 24-Aug-2007 10:34:52 AM
End Time : 24-Aug-2007 10:49:44 AM
Scanning Time : 892 secs

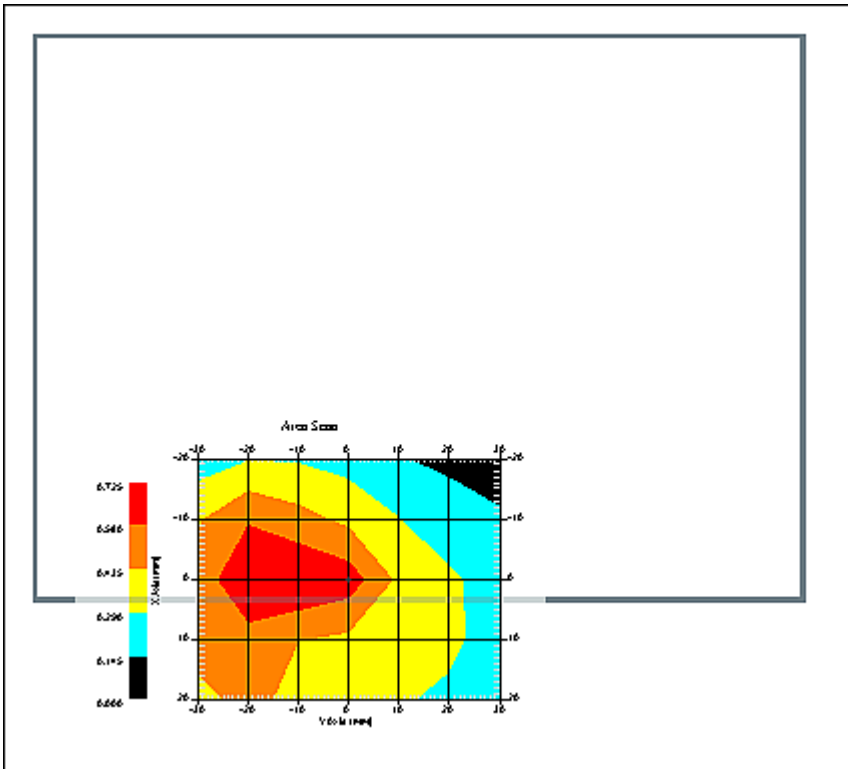
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 835.00 MHz
Max. Transmit Pwr : 0.29 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.640 W/kg
Power Drift-Finish: 0.657 W/kg
Power Drift (%) : 2.803

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 835
Frequency : 835.00 MHz
Last Calib. Date : 24-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 49.00 RH%
Epsilon : 53.81 F/m
Sigma : 0.98 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 835.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 6.3
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 24-Aug-2007
Set-up Time       : 8:34:52 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : High
```



```
1 gram SAR value    : 0.633 W/kg
10 gram SAR value   : 0.399 W/kg
Area Scan Peak SAR  : 0.724 W/kg
Zoom Scan Peak SAR  : 0.990 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 24-Aug-2007
Starting Time : 24-Aug-2007 09:20:38 AM
End Time : 24-Aug-2007 09:35:38 AM
Scanning Time : 900 secs

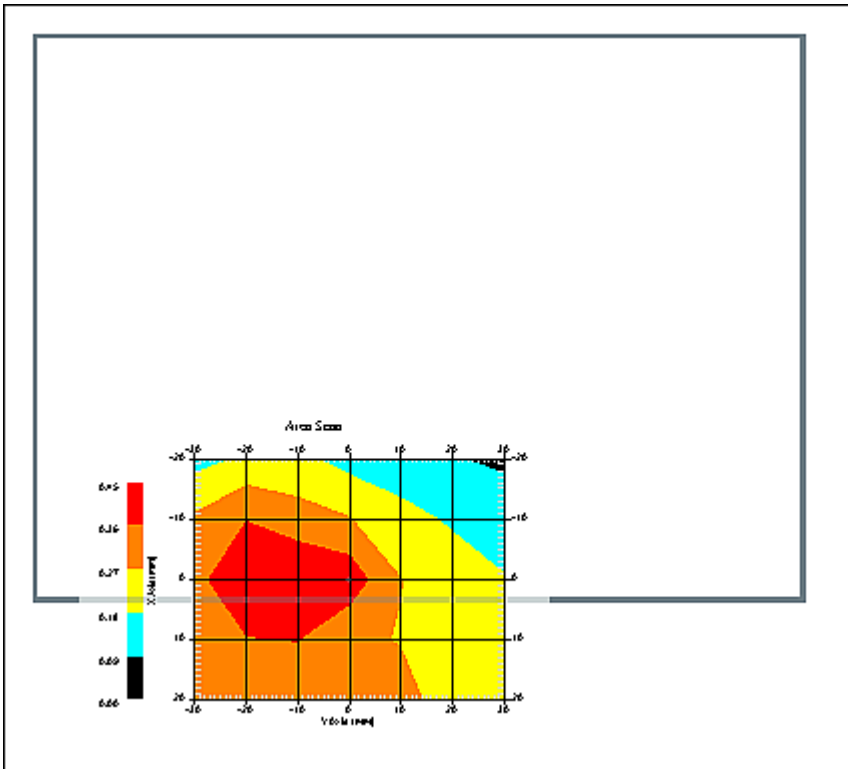
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 835.00 MHz
Max. Transmit Pwr : 0.29 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.274 W/kg
Power Drift-Finish: 0.285 W/kg
Power Drift (%) : 4.015

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 835
Frequency : 835.00 MHz
Last Calib. Date : 24-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 49.00 RH%
Epsilon : 53.81 F/m
Sigma : 0.98 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 835.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 6.3
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 24-Aug-2007
Set-up Time       : 8:34:52 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Low
```



```
1 gram SAR value    : 0.419 W/kg
10 gram SAR value   : 0.278 W/kg
Area Scan Peak SAR  : 0.449 W/kg
Zoom Scan Peak SAR  : 0.590 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 24-Aug-2007
Starting Time : 24-Aug-2007 09:02:51 AM
End Time : 24-Aug-2007 09:18:05 AM
Scanning Time : 914 secs

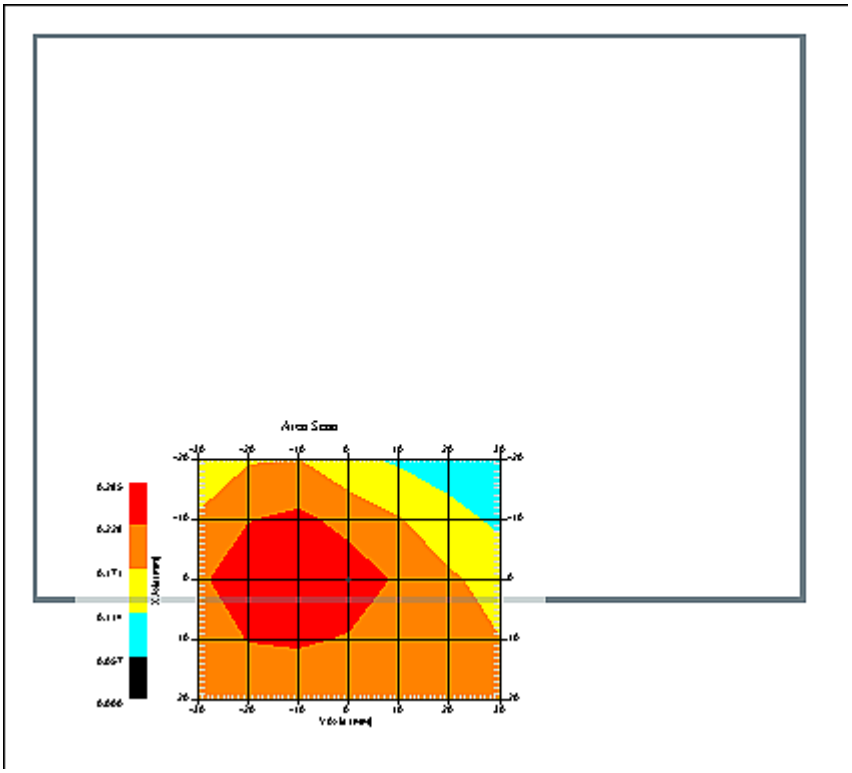
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 835.00 MHz
Max. Transmit Pwr : 0.29 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.264 W/kg
Power Drift-Finish: 0.271 W/kg
Power Drift (%) : 2.652

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 835
Frequency : 835.00 MHz
Last Calib. Date : 24-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 49.00 RH%
Epsilon : 53.81 F/m
Sigma : 0.98 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 835.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 6.3
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 24-Aug-2007
Set-up Time       : 8:34:52 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Mid
```



```
1 gram SAR value    : 0.395 W/kg
10 gram SAR value   : 0.263 W/kg
Area Scan Peak SAR  : 0.285 W/kg
Zoom Scan Peak SAR  : 0.680 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 24-Aug-2007
Starting Time : 24-Aug-2007 09:37:50 AM
End Time : 24-Aug-2007 09:52:50 AM
Scanning Time : 900 secs

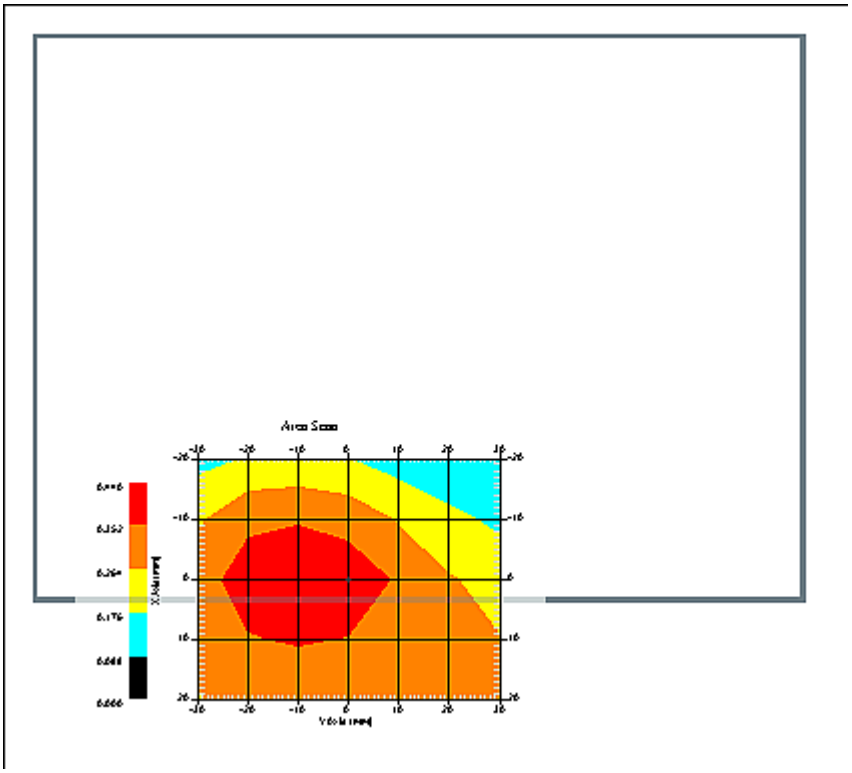
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 835.00 MHz
Max. Transmit Pwr : 0.29 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.400 W/kg
Power Drift-Finish: 0.389 W/kg
Power Drift (%) : -2.629

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 835
Frequency : 835.00 MHz
Last Calib. Date : 24-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 49.00 RH%
Epsilon : 53.81 F/m
Sigma : 0.98 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 835.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 6.3
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 24-Aug-2007
Set-up Time       : 8:34:52 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : High
```



```
1 gram SAR value    : 0.396 W/kg
10 gram SAR value   : 0.273 W/kg
Area Scan Peak SAR  : 0.440 W/kg
Zoom Scan Peak SAR  : 0.540 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 24-Aug-2007
Starting Time : 24-Aug-2007 10:52:49 AM
End Time : 24-Aug-2007 11:07:41 AM
Scanning Time : 892 secs

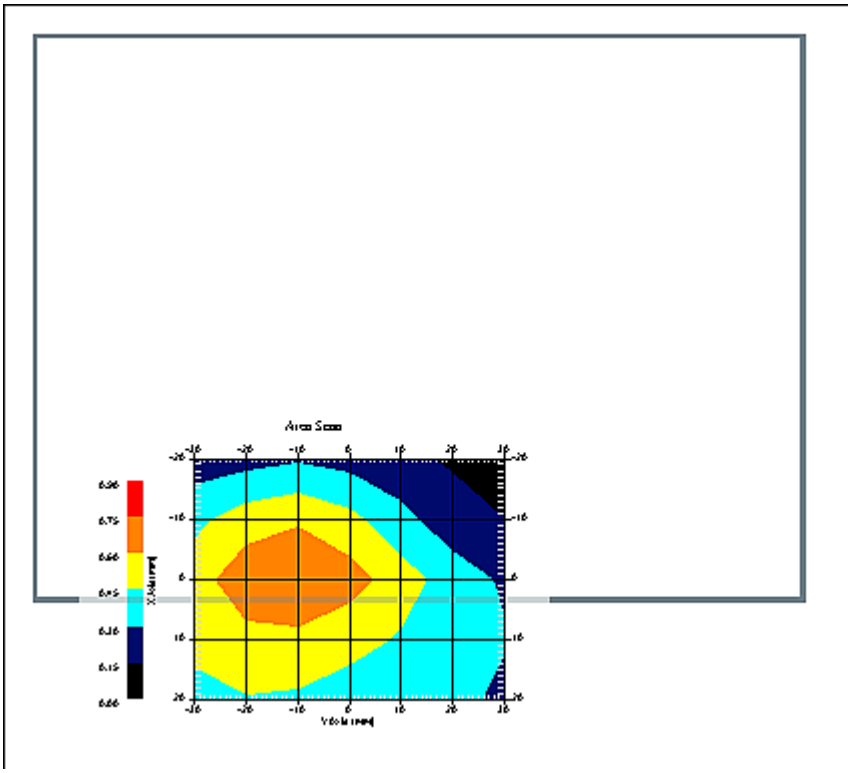
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 835.00 MHz
Max. Transmit Pwr : 0.29 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.537 W/kg
Power Drift-Finish: 0.552 W/kg
Power Drift (%) : 3.166

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

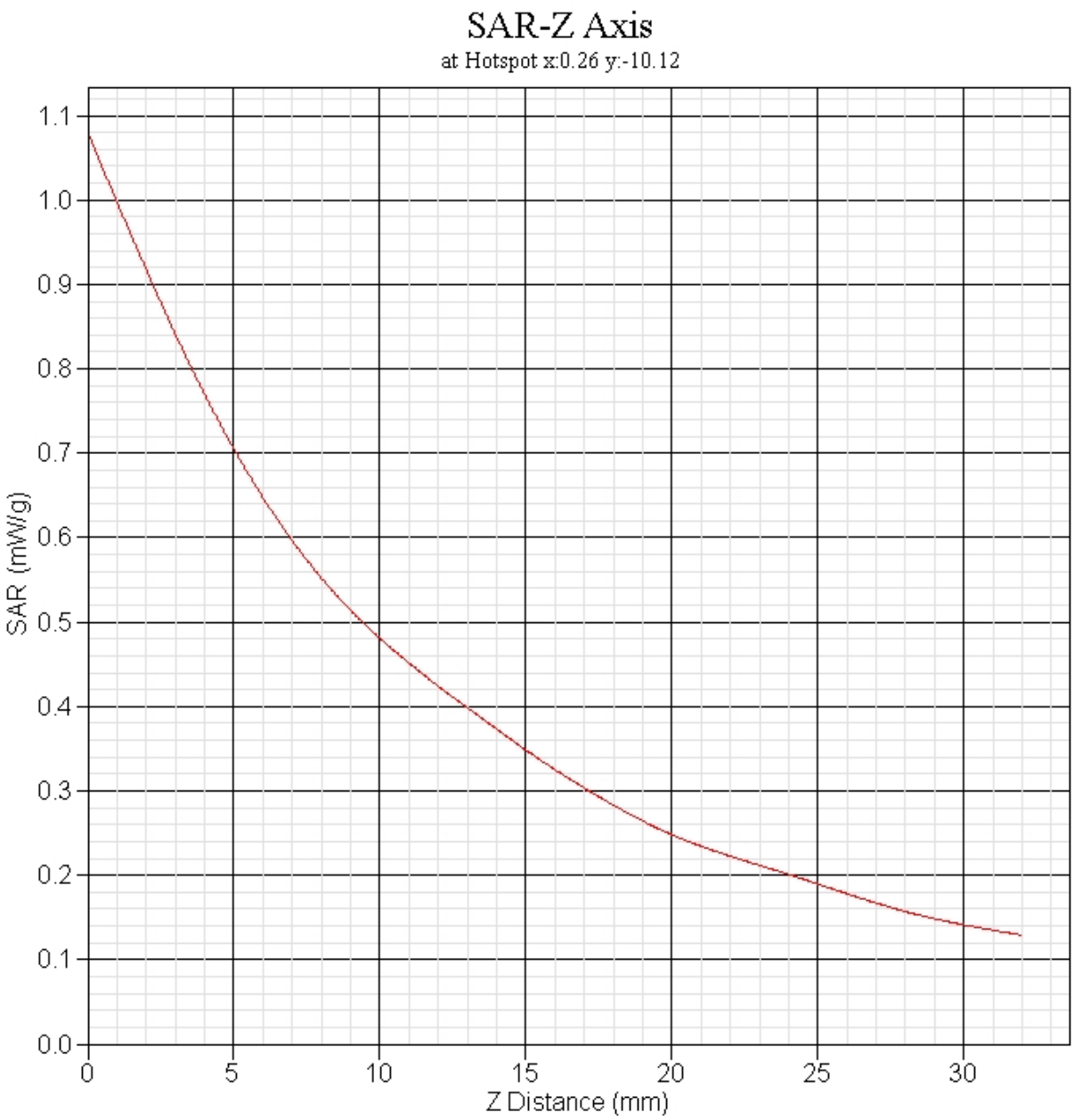
Tissue Data
Type : BODY
Serial No. : 835
Frequency : 835.00 MHz
Last Calib. Date : 24-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 49.00 RH%
Epsilon : 53.81 F/m
Sigma : 0.98 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 835.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 6.3
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 24-Aug-2007
Set-up Time       : 8:34:52 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Low
```



```
1 gram SAR value    : 0.695 W/kg
10 gram SAR value   : 0.446 W/kg
Area Scan Peak SAR  : 0.752 W/kg
Zoom Scan Peak SAR  : 1.080 W/kg
```



SAR Test Report

By Operator : Jay
Measurement Date : 31-Aug-2007
Starting Time : 31-Aug-2007 09:39:36 AM
End Time : 31-Aug-2007 09:52:45 AM
Scanning Time : 789 secs

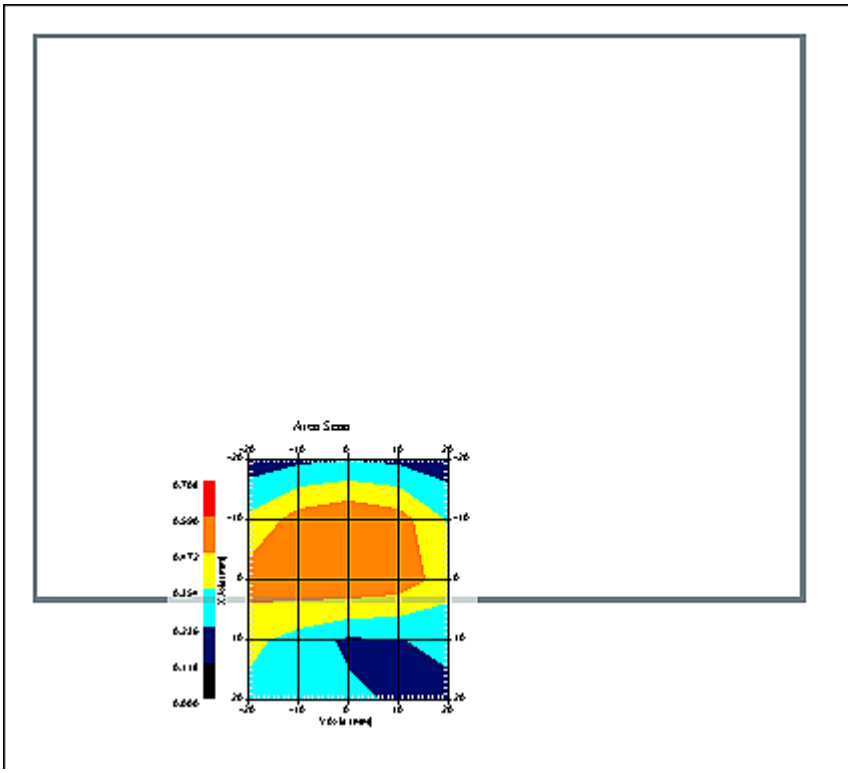
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 1900.00 MHz
Max. Transmit Pwr : 1 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.572 W/kg
Power Drift-Finish: 0.560 W/kg
Power Drift (%) : -1.976

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1900
Frequency : 1900.00 MHz
Last Calib. Date : 31-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 52.00 RH%
Epsilon : 53.48 F/m
Sigma : 1.46 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 1900.00 MHz
Duty Cycle Factor: 0.25
Conversion Factor: 5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 0.25
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Aug-2007
Set-up Time       : 8:47:38 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Low
```



```
1 gram SAR value    : 0.536 W/kg
10 gram SAR value   : 0.315 W/kg
Area Scan Peak SAR  : 0.591 W/kg
Zoom Scan Peak SAR  : 0.880 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 31-Aug-2007
Starting Time : 31-Aug-2007 09:54:41 AM
End Time : 31-Aug-2007 10:07:58 AM
Scanning Time : 797 secs

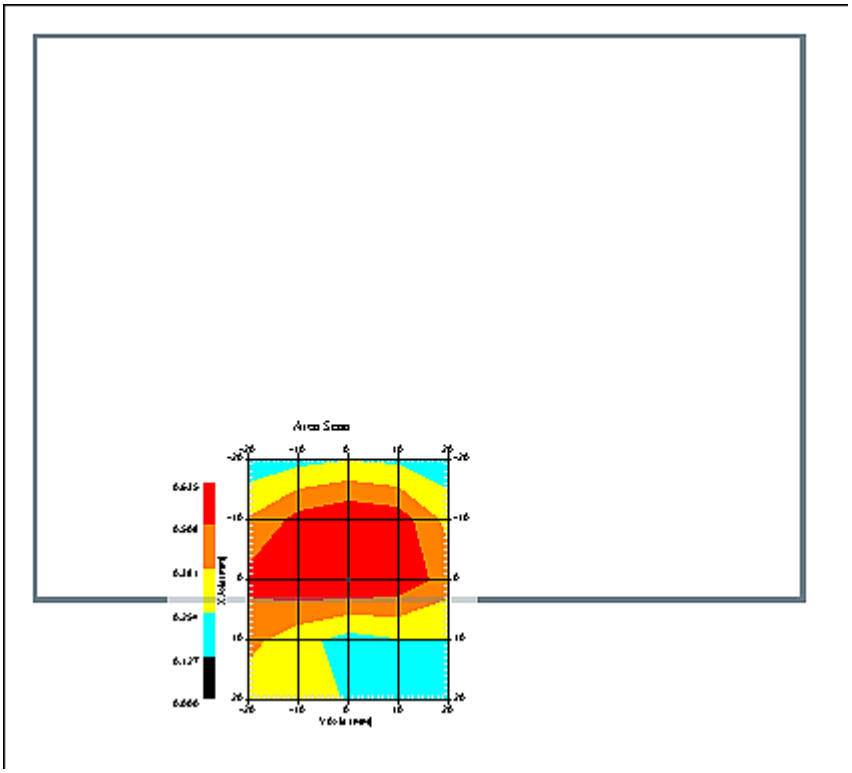
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 1900.00 MHz
Max. Transmit Pwr : 1 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.622 W/kg
Power Drift-Finish: 0.634 W/kg
Power Drift (%) : 1.862

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1900
Frequency : 1900.00 MHz
Last Calib. Date : 31-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 52.00 RH%
Epsilon : 53.48 F/m
Sigma : 1.46 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 1900.00 MHz
Duty Cycle Factor: 0.25
Conversion Factor: 5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 0.25
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Aug-2007
Set-up Time       : 8:47:38 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Mid
```

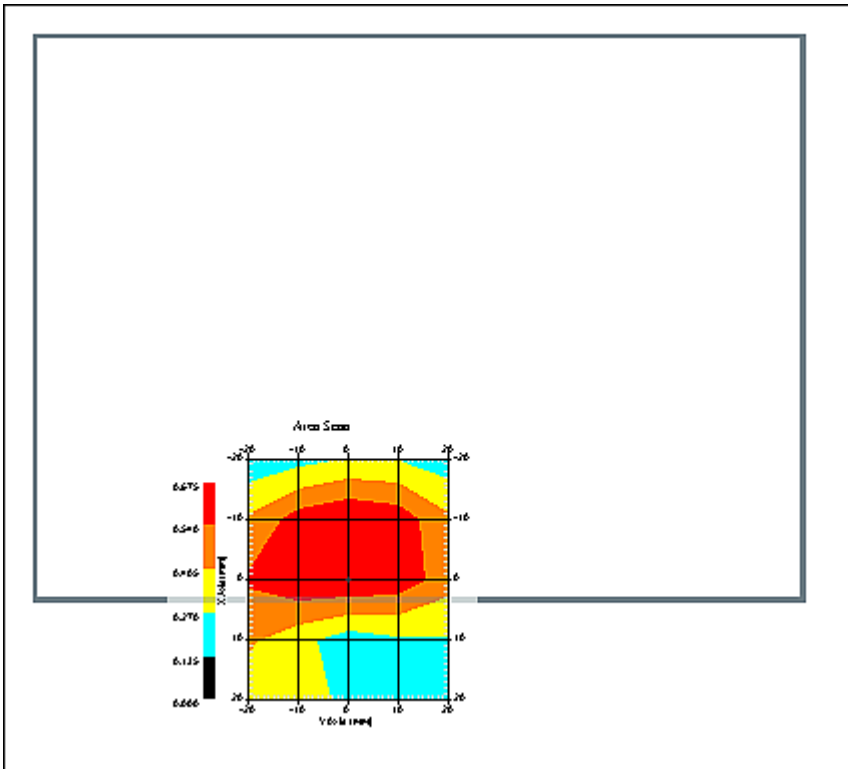


```
1 gram SAR value    : 0.630 W/kg
10 gram SAR value   : 0.365 W/kg
Area Scan Peak SAR  : 0.634 W/kg
Zoom Scan Peak SAR  : 1.090 W/kg
```

SAR Test Report

```
By Operator       : Jay
Measurement Date  : 31-Aug-2007
Starting Time     : 31-Aug-2007  10:11:10 AM
End Time          : 31-Aug-2007  10:24:35 AM
Scanning Time     : 805 secs

Product Data
Device Name       : Vulcan Inc.
Serial No.        : MVT1-107
Type              : Other
Model             : E-1001s
Frequency         : 1900.00 MHz
Max. Transmit Pwr : 1 W
Drift Time        : 0 min(s)
Length            : 150 mm
Width             : 110 mm
Depth             : 40 mm
Antenna Type      : Internal
Orientation       : Rotated Right 90°
Power Drift-Start : 0.688 W/kg
Power Drift-Finish: 0.699 W/kg
Power Drift (%)   : 1.633

Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 1900
Frequency         : 1900.00 MHz
Last Calib. Date  : 31-Aug-2007
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 52.00 RH%
Epsilon           : 53.48 F/m
Sigma             : 1.46 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe 215 - RFEL
Model             : E020
Type              : E-Field Triangle
Serial No.        : 215
Last Calib. Date  : 14-Feb-2007
Frequency         : 1900.00 MHz
Duty Cycle Factor: 0.25
Conversion Factor: 5
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)²
Compression Point: 95.00 mV
Offset            : 1.56 mm
```

```
Measurement Data
Crest Factor      : 0.25
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Aug-2007
Set-up Time       : 8:47:38 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : High
```



```
1 gram SAR value    : 0.678 W/kg
10 gram SAR value   : 0.350 W/kg
Area Scan Peak SAR  : 0.675 W/kg
Zoom Scan Peak SAR  : 1.241 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 31-Aug-2007
Starting Time : 31-Aug-2007 12:01:04 PM
End Time : 31-Aug-2007 12:14:10 PM
Scanning Time : 786 secs

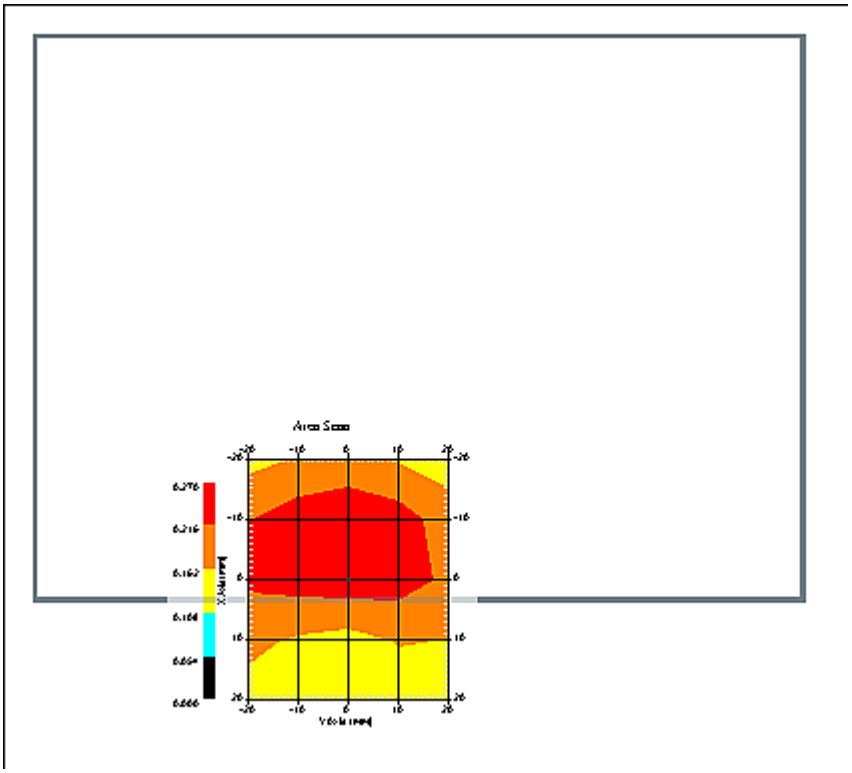
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 1900.00 MHz
Max. Transmit Pwr : 1 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.245 W/kg
Power Drift-Finish: 0.246 W/kg
Power Drift (%) : 0.514

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1900
Frequency : 1900.00 MHz
Last Calib. Date : 31-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 52.00 RH%
Epsilon : 53.48 F/m
Sigma : 1.46 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 1900.00 MHz
Duty Cycle Factor: 0.25
Conversion Factor: 5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 0.25
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Aug-2007
Set-up Time       : 8:47:38 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Low
```



```
1 gram SAR value    : 0.248 W/kg
10 gram SAR value   : 0.170 W/kg
Area Scan Peak SAR  : 0.270 W/kg
Zoom Scan Peak SAR  : 0.390 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 31-Aug-2007
Starting Time : 31-Aug-2007 11:45:58 AM
End Time : 31-Aug-2007 11:59:15 AM
Scanning Time : 797 secs

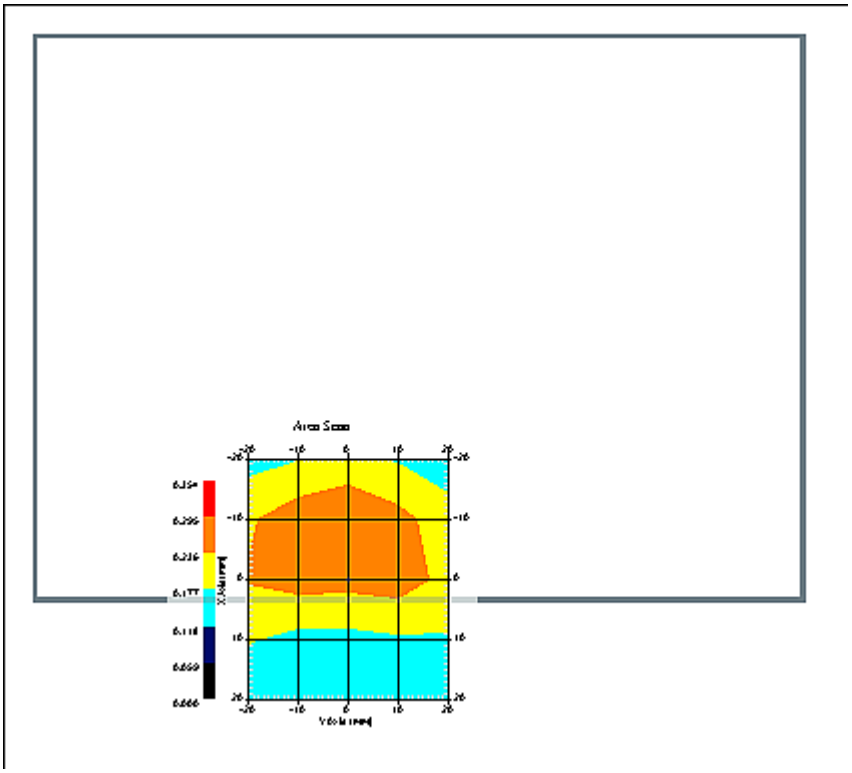
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 1900.00 MHz
Max. Transmit Pwr : 1 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.277 W/kg
Power Drift-Finish: 0.270 W/kg
Power Drift (%) : -2.614

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1900
Frequency : 1900.00 MHz
Last Calib. Date : 31-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 52.00 RH%
Epsilon : 53.48 F/m
Sigma : 1.46 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 1900.00 MHz
Duty Cycle Factor: 0.25
Conversion Factor: 5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 0.25
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Aug-2007
Set-up Time       : 8:47:38 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Mid
```



```
1 gram SAR value    : 0.266 W/kg
10 gram SAR value   : 0.173 W/kg
Area Scan Peak SAR  : 0.296 W/kg
Zoom Scan Peak SAR  : 0.390 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 31-Aug-2007
Starting Time : 31-Aug-2007 11:13:49 AM
End Time : 31-Aug-2007 11:27:15 AM
Scanning Time : 806 secs

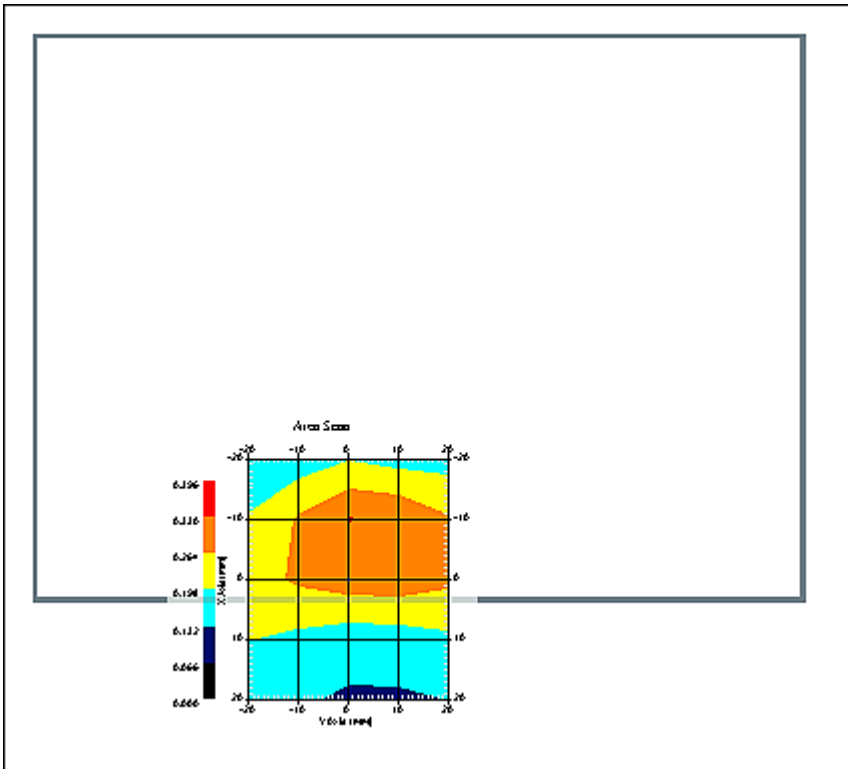
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 1900.00 MHz
Max. Transmit Pwr : 1 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.302 W/kg
Power Drift-Finish: 0.303 W/kg
Power Drift (%) : 0.318

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1900
Frequency : 1900.00 MHz
Last Calib. Date : 31-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 52.00 RH%
Epsilon : 53.48 F/m
Sigma : 1.46 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 1900.00 MHz
Duty Cycle Factor: 0.25
Conversion Factor: 5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 0.25
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Aug-2007
Set-up Time       : 8:47:38 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : High
```



```
1 gram SAR value    : 0.312 W/kg
10 gram SAR value   : 0.191 W/kg
Area Scan Peak SAR  : 0.332 W/kg
Zoom Scan Peak SAR  : 0.510 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 31-Aug-2007
Starting Time : 31-Aug-2007 10:49:59 AM
End Time : 31-Aug-2007 11:03:09 AM
Scanning Time : 790 secs

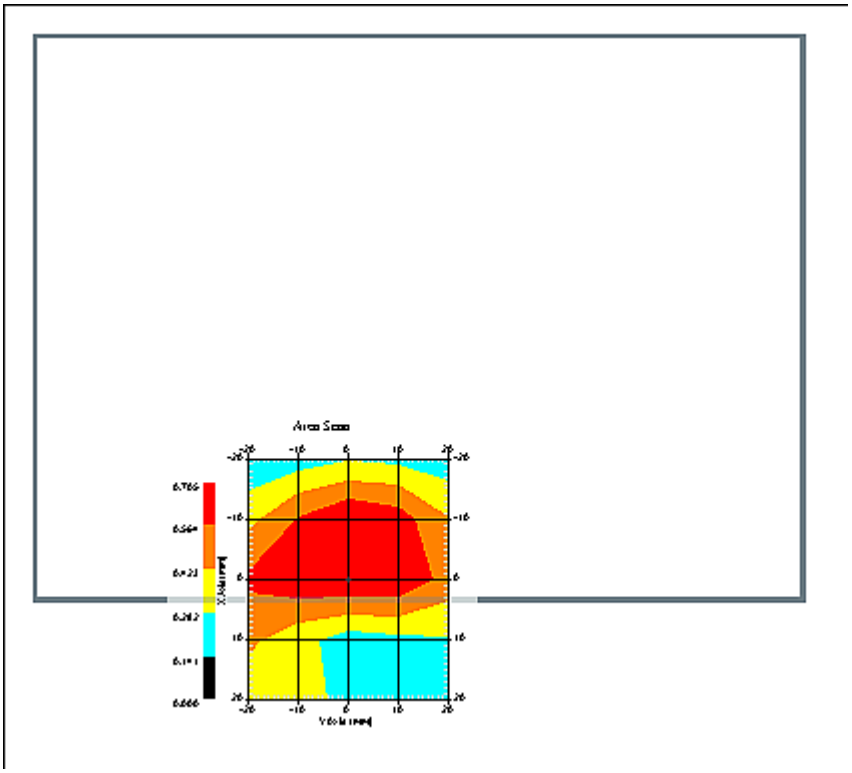
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 1900.00 MHz
Max. Transmit Pwr : 1 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.683 W/kg
Power Drift-Finish: 0.696 W/kg
Power Drift (%) : 1.822

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

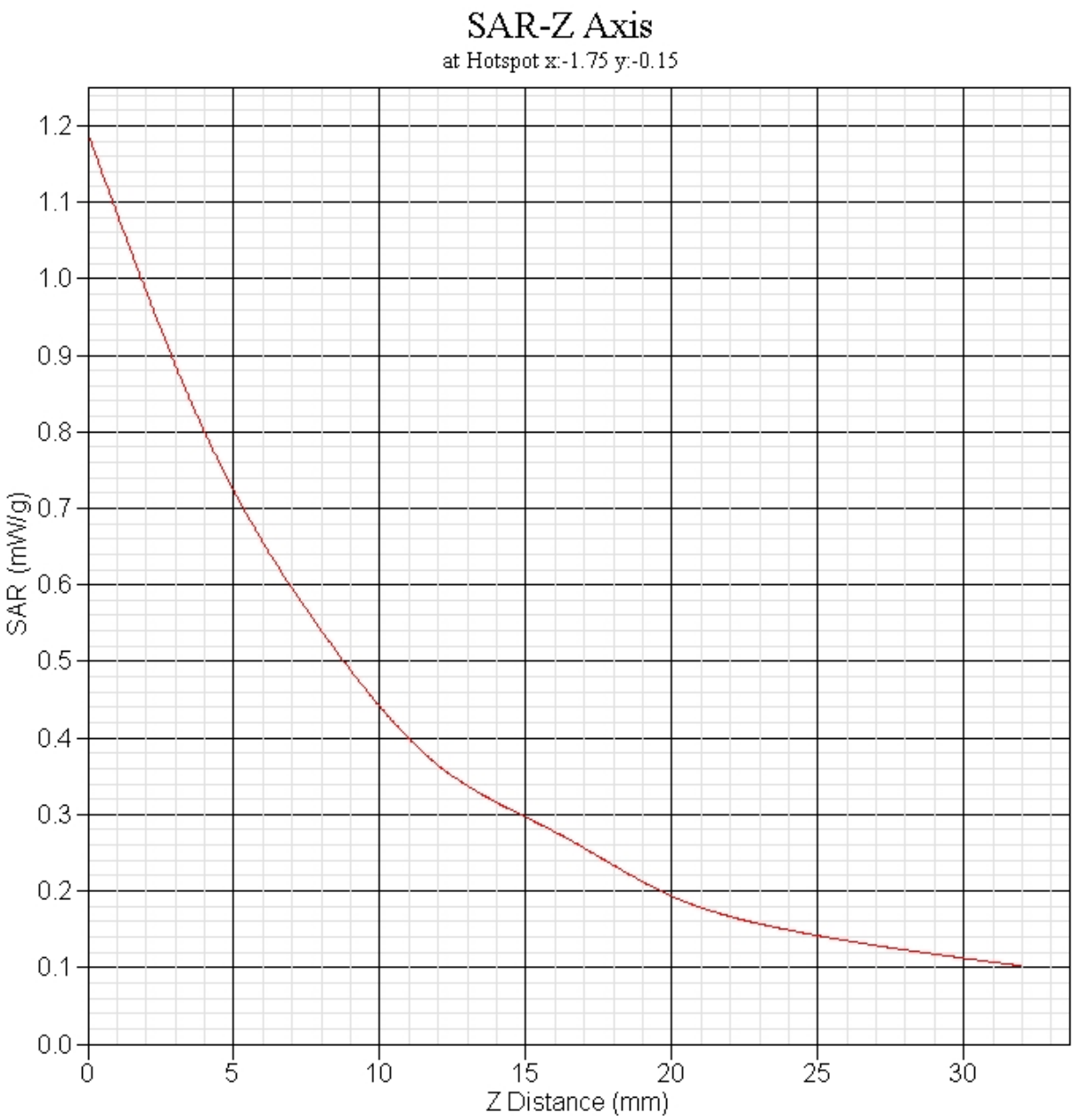
Tissue Data
Type : BODY
Serial No. : 1900
Frequency : 1900.00 MHz
Last Calib. Date : 31-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 52.00 RH%
Epsilon : 53.48 F/m
Sigma : 1.46 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 1900.00 MHz
Duty Cycle Factor: 0.25
Conversion Factor: 5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 0.25
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Aug-2007
Set-up Time       : 8:47:38 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : High
```



```
1 gram SAR value    : 0.699 W/kg
10 gram SAR value   : 0.376 W/kg
Area Scan Peak SAR  : 0.704 W/kg
Zoom Scan Peak SAR  : 1.191 W/kg
```



SAR Test Report

By Operator : Jay
Measurement Date : 27-Aug-2007
Starting Time : 27-Aug-2007 10:34:46 AM
End Time : 27-Aug-2007 10:49:53 AM
Scanning Time : 907 secs

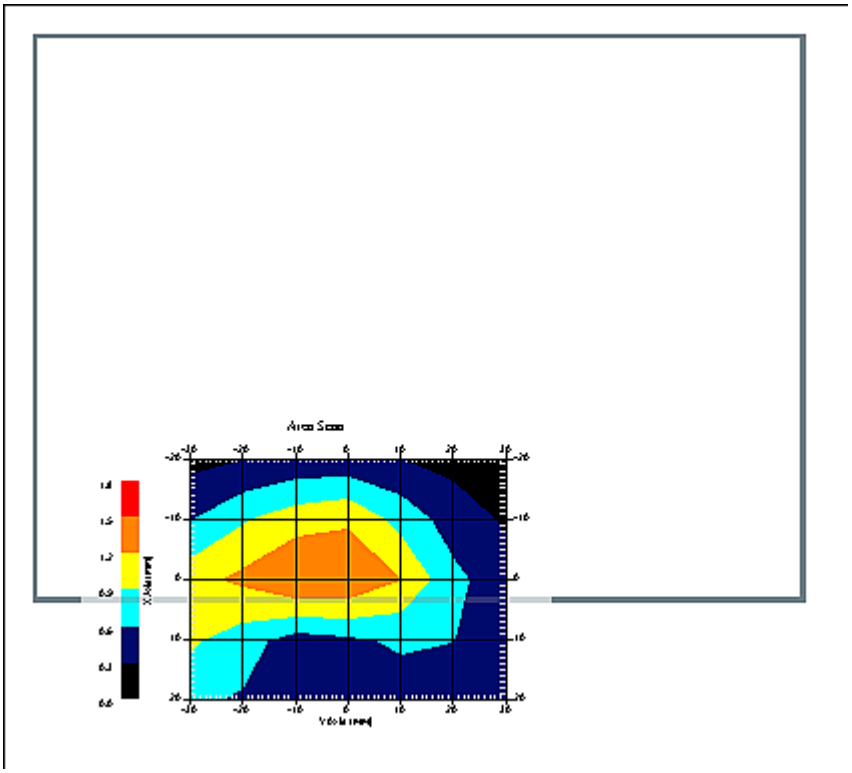
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 1900.00 MHz
Max. Transmit Pwr : 0.28 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 1.499 W/kg
Power Drift-Finish: 1.504 W/kg
Power Drift (%) : 0.361

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1900
Frequency : 1900.00 MHz
Last Calib. Date : 27-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 52.00 RH%
Epsilon : 52.73 F/m
Sigma : 1.58 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 1900.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 27-Aug-2007
Set-up Time       : 7:57:39 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Low
```



```
1 gram SAR value    : 1.338 W/kg
10 gram SAR value   : 0.729 W/kg
Area Scan Peak SAR  : 1.501 W/kg
Zoom Scan Peak SAR  : 2.422 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 27-Aug-2007
Starting Time : 27-Aug-2007 10:18:04 AM
End Time : 27-Aug-2007 10:33:23 AM
Scanning Time : 919 secs

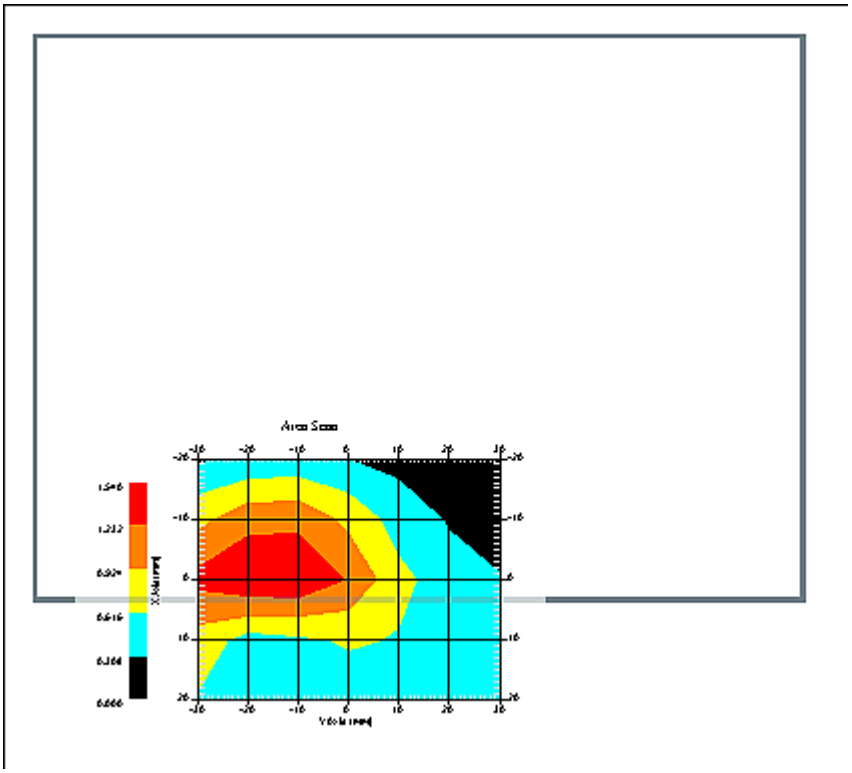
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 1900.00 MHz
Max. Transmit Pwr : 0.28 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 1.198 W/kg
Power Drift-Finish: 1.219 W/kg
Power Drift (%) : 1.762

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1900
Frequency : 1900.00 MHz
Last Calib. Date : 27-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 52.00 RH%
Epsilon : 52.73 F/m
Sigma : 1.58 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 1900.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 27-Aug-2007
Set-up Time       : 7:57:39 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Mid
```



```
1 gram SAR value    : 1.346 W/kg
10 gram SAR value   : 0.733 W/kg
Area Scan Peak SAR  : 1.540 W/kg
Zoom Scan Peak SAR  : 2.372 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 27-Aug-2007
Starting Time : 27-Aug-2007 10:00:49 AM
End Time : 27-Aug-2007 10:16:01 AM
Scanning Time : 912 secs

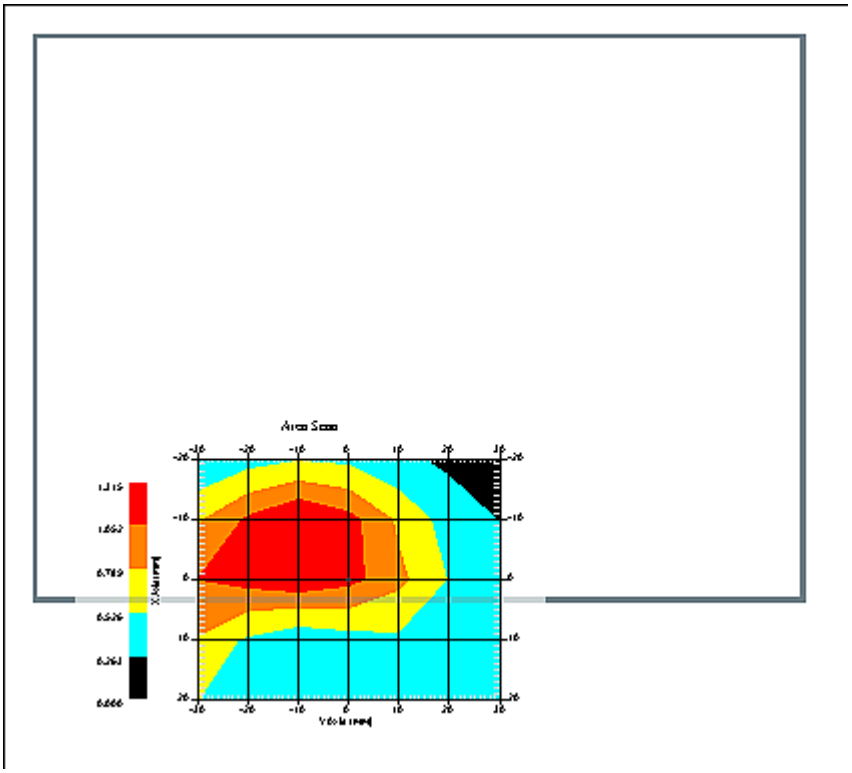
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 1900.00 MHz
Max. Transmit Pwr : 0.28 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 1.172 W/kg
Power Drift-Finish: 1.169 W/kg
Power Drift (%) : -0.264

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1900
Frequency : 1900.00 MHz
Last Calib. Date : 27-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 52.00 RH%
Epsilon : 52.73 F/m
Sigma : 1.58 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 1900.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 27-Aug-2007
Set-up Time       : 7:57:39 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : High
```



```
1 gram SAR value    : 1.226 W/kg
10 gram SAR value   : 0.640 W/kg
Area Scan Peak SAR  : 1.314 W/kg
Zoom Scan Peak SAR  : 2.131 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 27-Aug-2007
Starting Time : 27-Aug-2007 08:53:05 AM
End Time : 27-Aug-2007 09:08:31 AM
Scanning Time : 926 secs

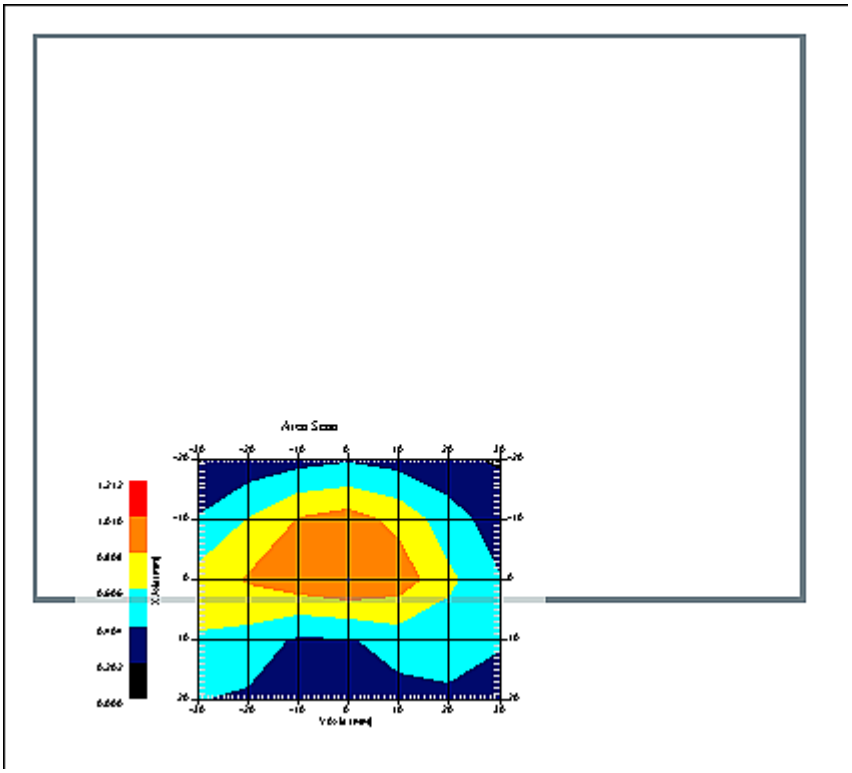
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 1900.00 MHz
Max. Transmit Pwr : 0.28 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 1.011 W/kg
Power Drift-Finish: 1.008 W/kg
Power Drift (%) : -0.327

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1900
Frequency : 1900.00 MHz
Last Calib. Date : 27-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 52.00 RH%
Epsilon : 52.73 F/m
Sigma : 1.58 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 1900.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 27-Aug-2007
Set-up Time       : 7:57:39 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Low
```



```
1 gram SAR value    : 0.864 W/kg
10 gram SAR value   : 0.512 W/kg
Area Scan Peak SAR  : 1.012 W/kg
Zoom Scan Peak SAR  : 1.411 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 27-Aug-2007
Starting Time : 27-Aug-2007 08:31:48 AM
End Time : 27-Aug-2007 08:47:35 AM
Scanning Time : 947 secs

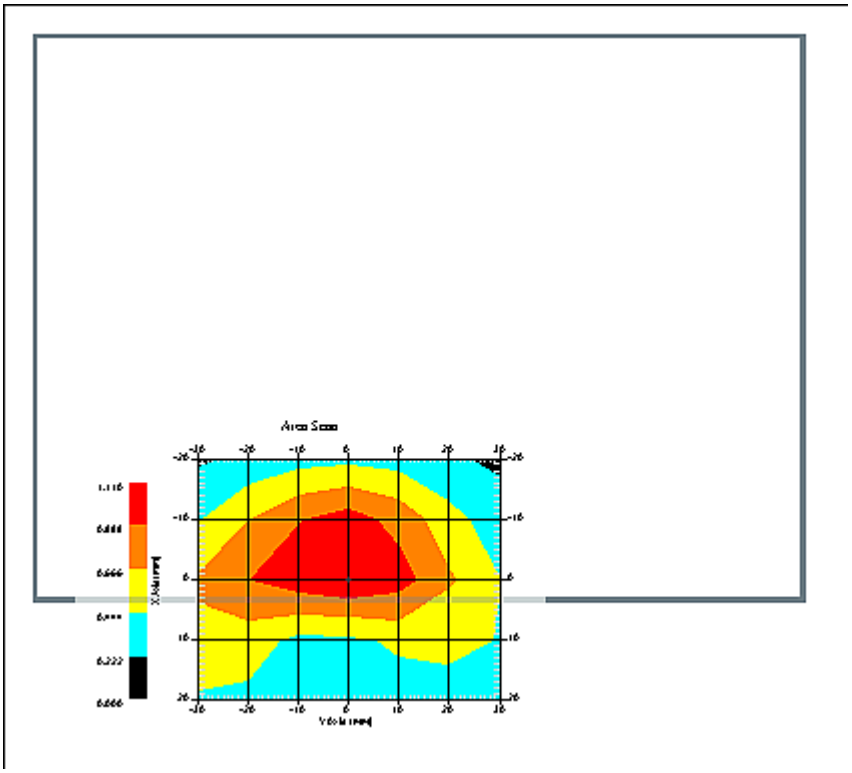
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 1900.00 MHz
Max. Transmit Pwr : 0.28 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 1.122 W/kg
Power Drift-Finish: 1.095 W/kg
Power Drift (%) : -2.426

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1900
Frequency : 1900.00 MHz
Last Calib. Date : 27-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 52.00 RH%
Epsilon : 52.73 F/m
Sigma : 1.58 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 1900.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 27-Aug-2007
Set-up Time       : 7:57:39 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Mid
```



```
1 gram SAR value    : 0.985 W/kg
10 gram SAR value   : 0.577 W/kg
Area Scan Peak SAR  : 1.109 W/kg
Zoom Scan Peak SAR  : 1.581 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 27-Aug-2007
Starting Time : 27-Aug-2007 09:14:28 AM
End Time : 27-Aug-2007 09:29:40 AM
Scanning Time : 912 secs

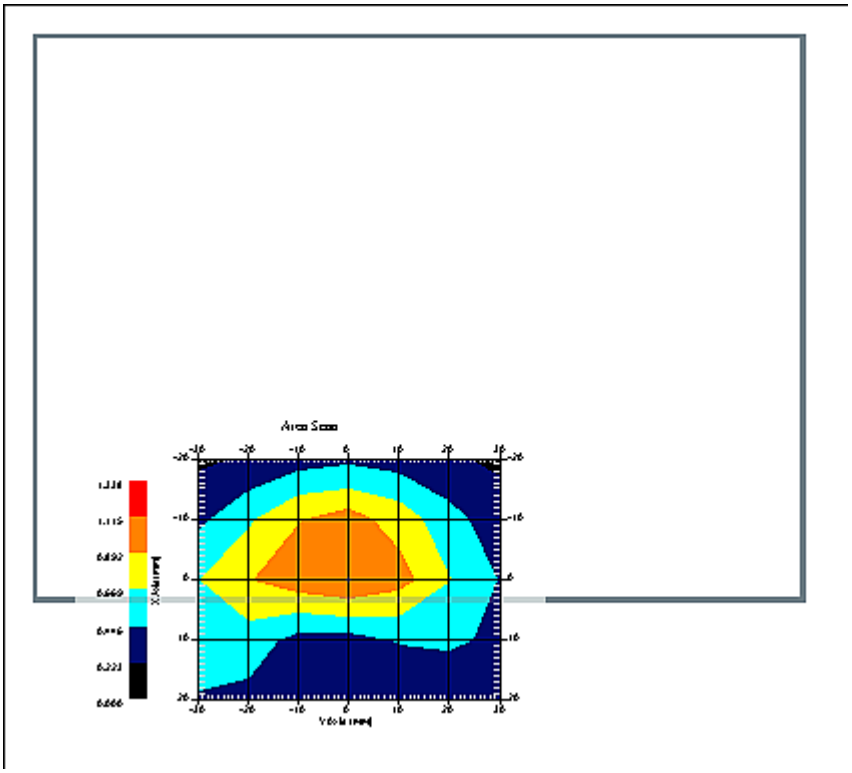
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 1900.00 MHz
Max. Transmit Pwr : 0.28 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 1.096 W/kg
Power Drift-Finish: 1.116 W/kg
Power Drift (%) : 1.862

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 1900
Frequency : 1900.00 MHz
Last Calib. Date : 27-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 52.00 RH%
Epsilon : 52.73 F/m
Sigma : 1.58 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 1900.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 27-Aug-2007
Set-up Time       : 7:57:39 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : High
```



```
1 gram SAR value    : 0.986 W/kg
10 gram SAR value   : 0.566 W/kg
Area Scan Peak SAR  : 1.117 W/kg
Zoom Scan Peak SAR  : 1.591 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 27-Aug-2007
Starting Time : 27-Aug-2007 11:18:05 AM
End Time : 27-Aug-2007 11:33:28 AM
Scanning Time : 923 secs

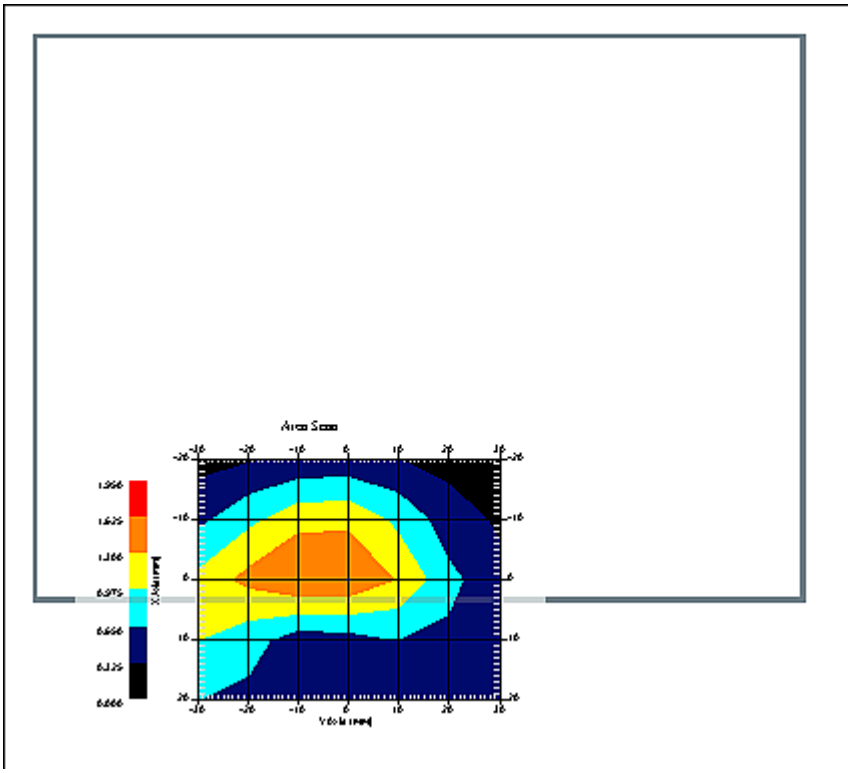
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 1900.00 MHz
Max. Transmit Pwr : 0.28 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 1.628 W/kg
Power Drift-Finish: 1.617 W/kg
Power Drift (%) : -0.659

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

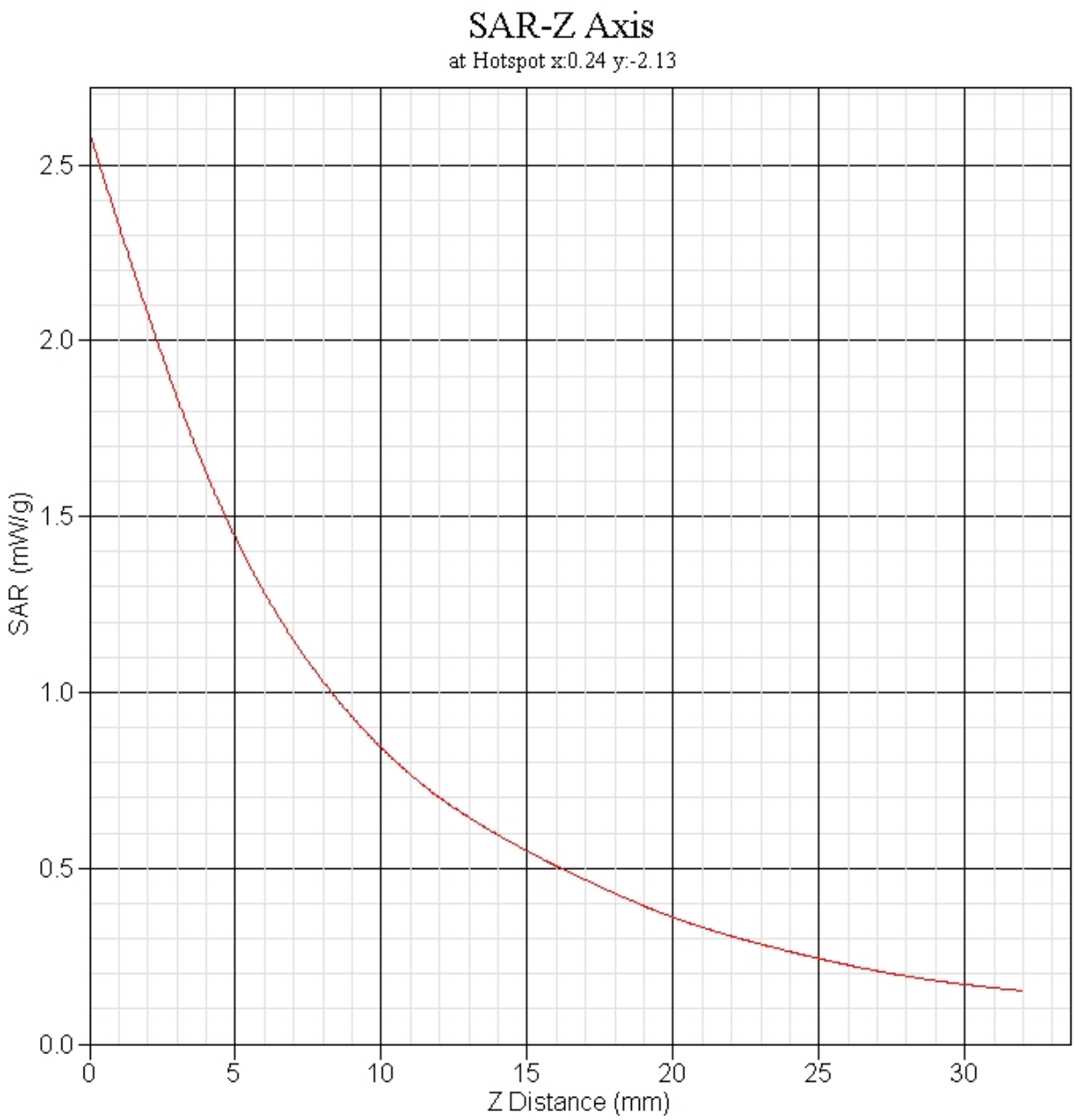
Tissue Data
Type : BODY
Serial No. : 1900
Frequency : 1900.00 MHz
Last Calib. Date : 27-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 52.00 RH%
Epsilon : 52.73 F/m
Sigma : 1.58 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 1900.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 27-Aug-2007
Set-up Time       : 7:57:39 AM
Area Scan         : 5x7x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Mid
```



```
1 gram SAR value    : 1.423 W/kg
10 gram SAR value   : 0.765 W/kg
Area Scan Peak SAR  : 1.627 W/kg
Zoom Scan Peak SAR  : 2.592 W/kg
```



SAR Test Report

By Operator : Jay
Measurement Date : 30-Aug-2007
Starting Time : 30-Aug-2007 02:28:37 PM
End Time : 30-Aug-2007 02:41:31 PM
Scanning Time : 774 secs

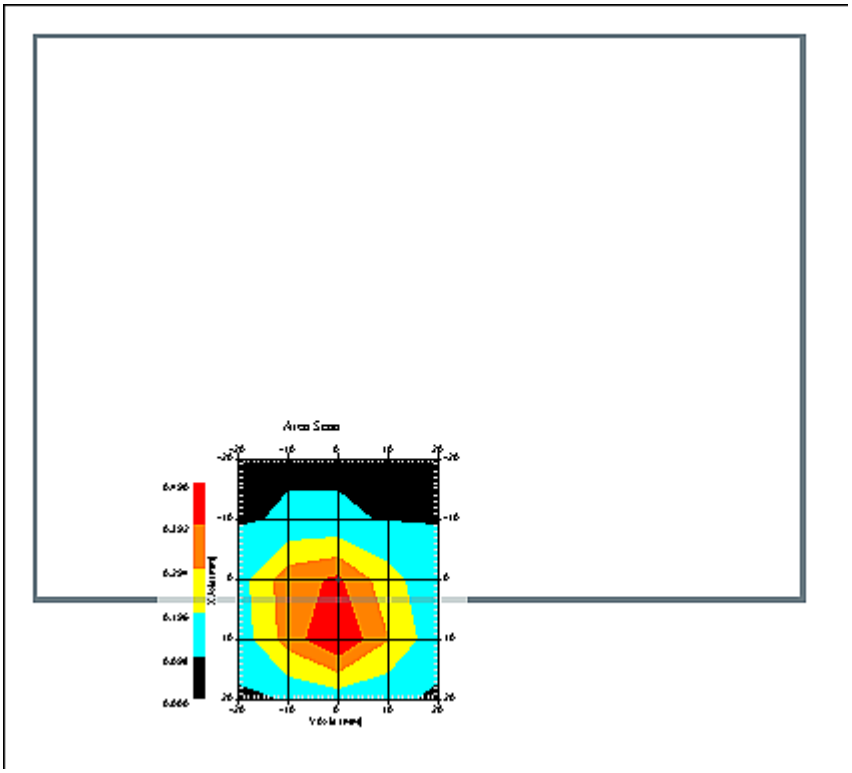
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.412 W/kg
Power Drift-Finish: 0.416 W/kg
Power Drift (%) : 0.906

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 30-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 52.65 F/m
Sigma : 1.94 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 30-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Mid
```



```
1 gram SAR value    : 0.435 W/kg
10 gram SAR value   : 0.214 W/kg
Area Scan Peak SAR  : 0.489 W/kg
Zoom Scan Peak SAR  : 0.930 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 30-Aug-2007
Starting Time : 30-Aug-2007 02:14:24 PM
End Time : 30-Aug-2007 02:27:17 PM
Scanning Time : 773 secs

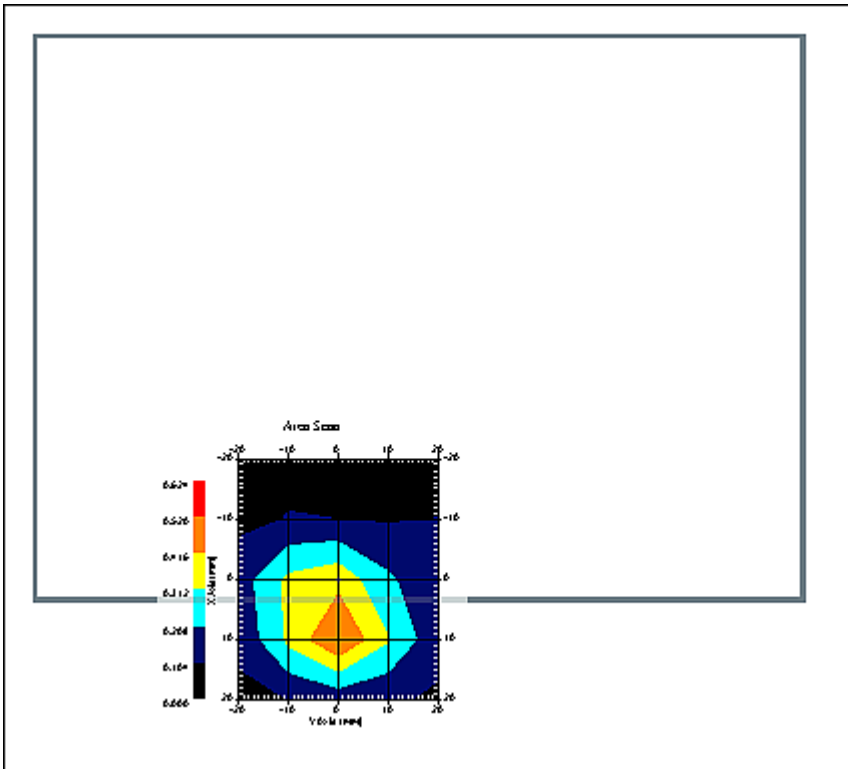
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.395 W/kg
Power Drift-Finish: 0.379 W/kg
Power Drift (%) : -3.914

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 30-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 52.65 F/m
Sigma : 1.94 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 30-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Low
```



```
1 gram SAR value    : 0.448 W/kg
10 gram SAR value   : 0.216 W/kg
Area Scan Peak SAR  : 0.522 W/kg
Zoom Scan Peak SAR  : 0.970 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 30-Aug-2007
Starting Time : 30-Aug-2007 02:45:48 PM
End Time : 30-Aug-2007 02:58:52 PM
Scanning Time : 784 secs

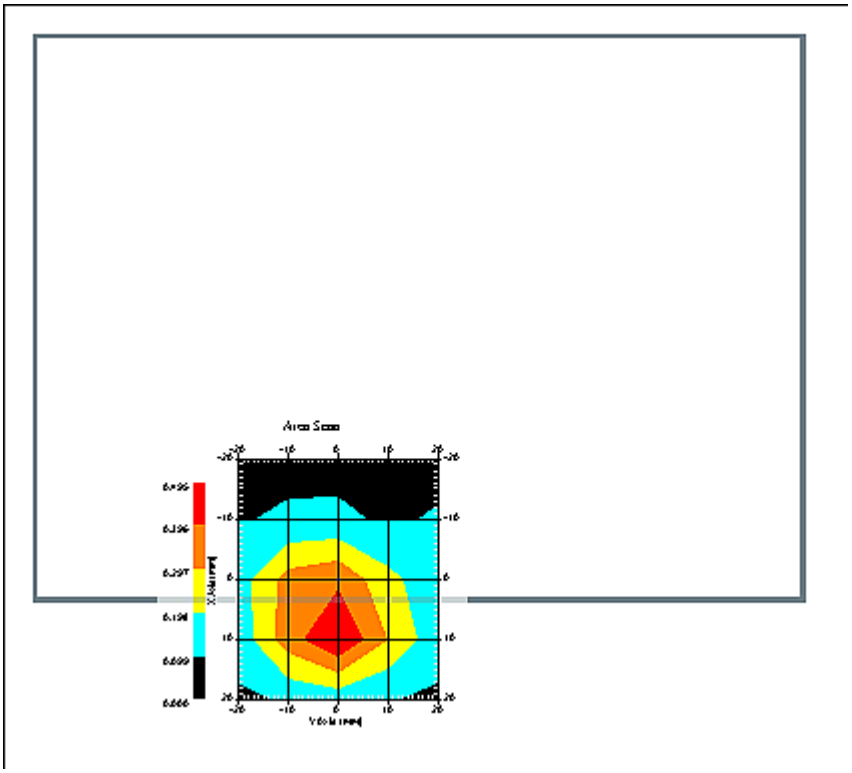
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.381 W/kg
Power Drift-Finish: 0.391 W/kg
Power Drift (%) : 2.604

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 30-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 52.65 F/m
Sigma : 1.94 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 30-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : High
```



```
1 gram SAR value    : 0.439 W/kg
10 gram SAR value   : 0.216 W/kg
Area Scan Peak SAR  : 0.494 W/kg
Zoom Scan Peak SAR  : 0.940 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 30-Aug-2007
Starting Time : 30-Aug-2007 01:42:35 PM
End Time : 30-Aug-2007 01:55:25 PM
Scanning Time : 770 secs

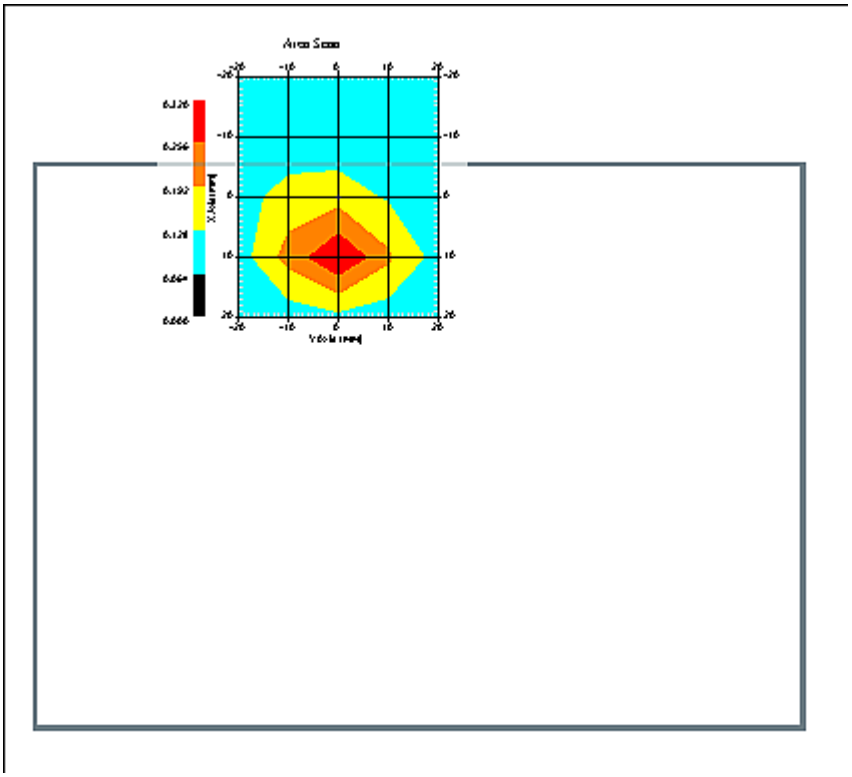
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.176 W/kg
Power Drift-Finish: 0.177 W/kg
Power Drift (%) : 0.320

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 30-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 52.65 F/m
Sigma : 1.94 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 30-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Low
```



```
1 gram SAR value    : 0.254 W/kg
10 gram SAR value   : 0.140 W/kg
Area Scan Peak SAR  : 0.320 W/kg
Zoom Scan Peak SAR  : 0.470 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 30-Aug-2007
Starting Time : 30-Aug-2007 01:28:15 PM
End Time : 30-Aug-2007 01:41:03 PM
Scanning Time : 768 secs

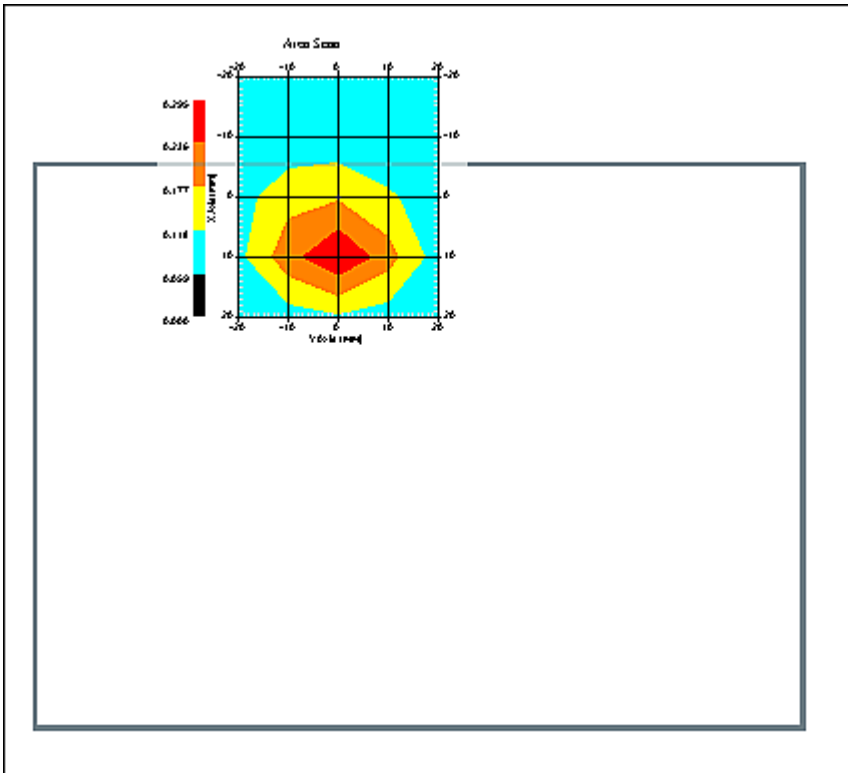
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.173 W/kg
Power Drift-Finish: 0.175 W/kg
Power Drift (%) : 1.066

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 30-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 52.65 F/m
Sigma : 1.94 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 30-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Mid
```



```
1 gram SAR value    : 0.248 W/kg
10 gram SAR value   : 0.137 W/kg
Area Scan Peak SAR  : 0.295 W/kg
Zoom Scan Peak SAR  : 0.480 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 30-Aug-2007
Starting Time : 30-Aug-2007 01:57:51 PM
End Time : 30-Aug-2007 02:10:40 PM
Scanning Time : 769 secs

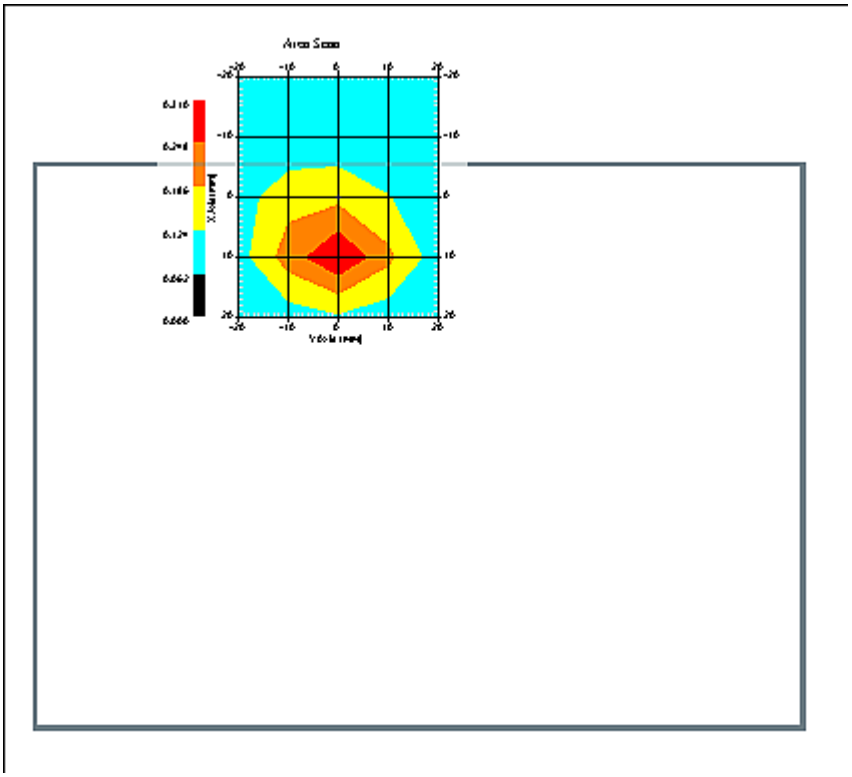
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.171 W/kg
Power Drift-Finish: 0.176 W/kg
Power Drift (%) : 3.138

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 30-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 52.65 F/m
Sigma : 1.94 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 30-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : High
```



```
1 gram SAR value    : 0.249 W/kg
10 gram SAR value   : 0.138 W/kg
Area Scan Peak SAR  : 0.308 W/kg
Zoom Scan Peak SAR  : 0.470 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 29-Aug-2007
Starting Time : 29-Aug-2007 03:47:42 PM
End Time : 29-Aug-2007 04:00:51 PM
Scanning Time : 789 secs

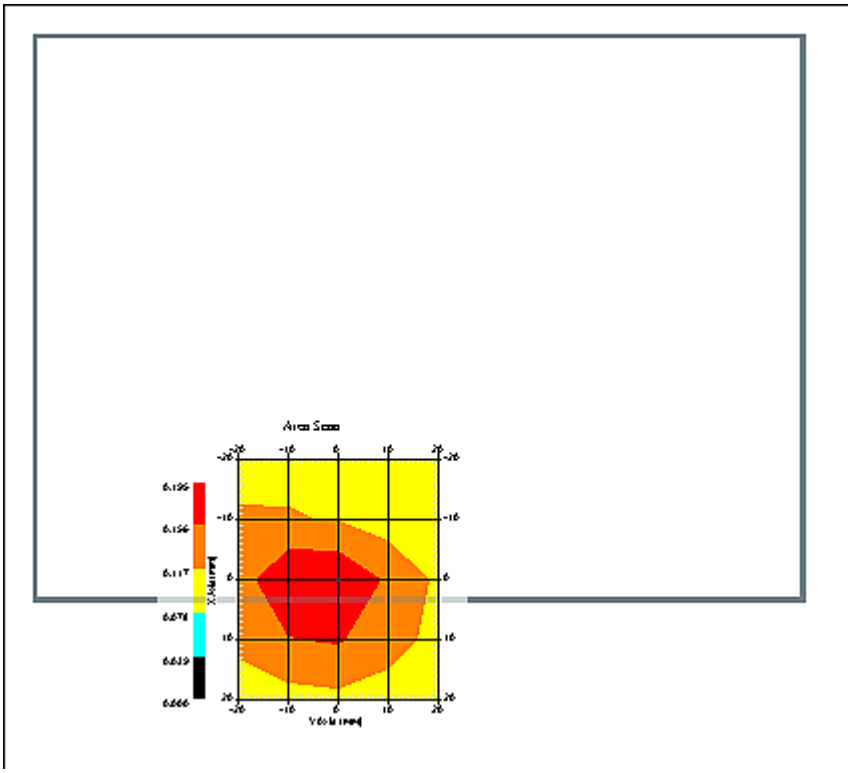
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.192 W/kg
Power Drift-Finish: 0.197 W/kg
Power Drift (%) : 2.670

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 29-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 51.34 F/m
Sigma : 1.95 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 29-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Low
```



```
1 gram SAR value    : 0.179 W/kg
10 gram SAR value   : 0.129 W/kg
Area Scan Peak SAR  : 0.194 W/kg
Zoom Scan Peak SAR  : 0.270 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 29-Aug-2007
Starting Time : 29-Aug-2007 02:46:06 PM
End Time : 29-Aug-2007 02:59:20 PM
Scanning Time : 794 secs

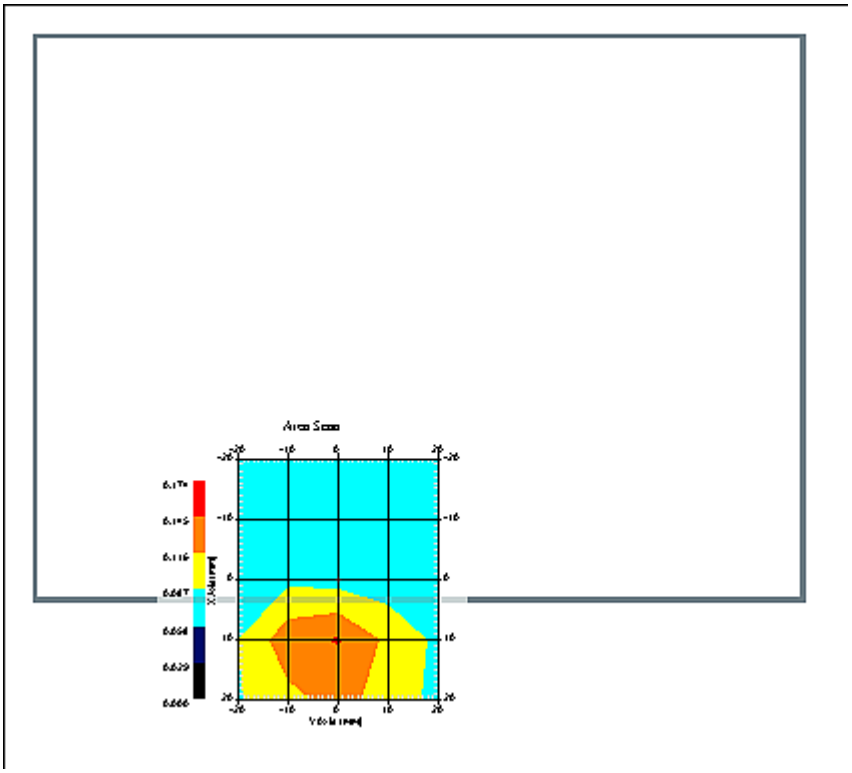
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.077 W/kg
Power Drift-Finish: 0.074 W/kg
Power Drift (%) : -3.501

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 29-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 51.34 F/m
Sigma : 1.95 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 29-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Mid
```



```
1 gram SAR value    : 0.136 W/kg
10 gram SAR value   : 0.096 W/kg
Area Scan Peak SAR  : 0.147 W/kg
Zoom Scan Peak SAR  : 0.210 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 29-Aug-2007
Starting Time : 29-Aug-2007 04:02:14 PM
End Time : 29-Aug-2007 04:15:33 PM
Scanning Time : 799 secs

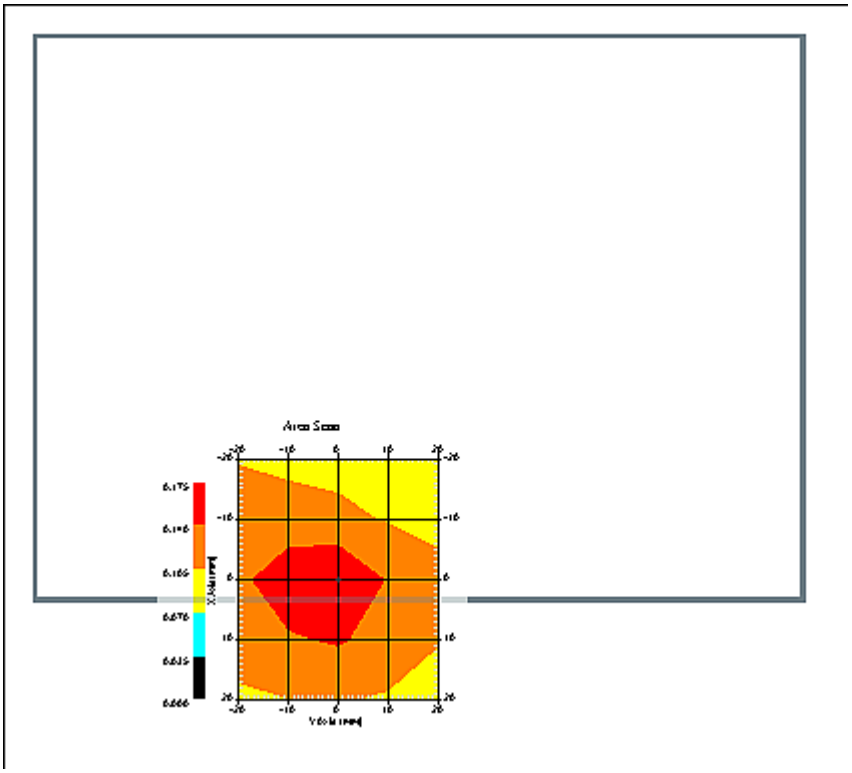
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.171 W/kg
Power Drift-Finish: 0.171 W/kg
Power Drift (%) : -0.002

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 29-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 51.34 F/m
Sigma : 1.95 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 29-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : High
```



```
1 gram SAR value    : 0.161 W/kg
10 gram SAR value   : 0.121 W/kg
Area Scan Peak SAR  : 0.173 W/kg
Zoom Scan Peak SAR  : 0.200 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 30-Aug-2007
Starting Time : 30-Aug-2007 12:56:02 PM
End Time : 30-Aug-2007 01:09:07 PM
Scanning Time : 785 secs

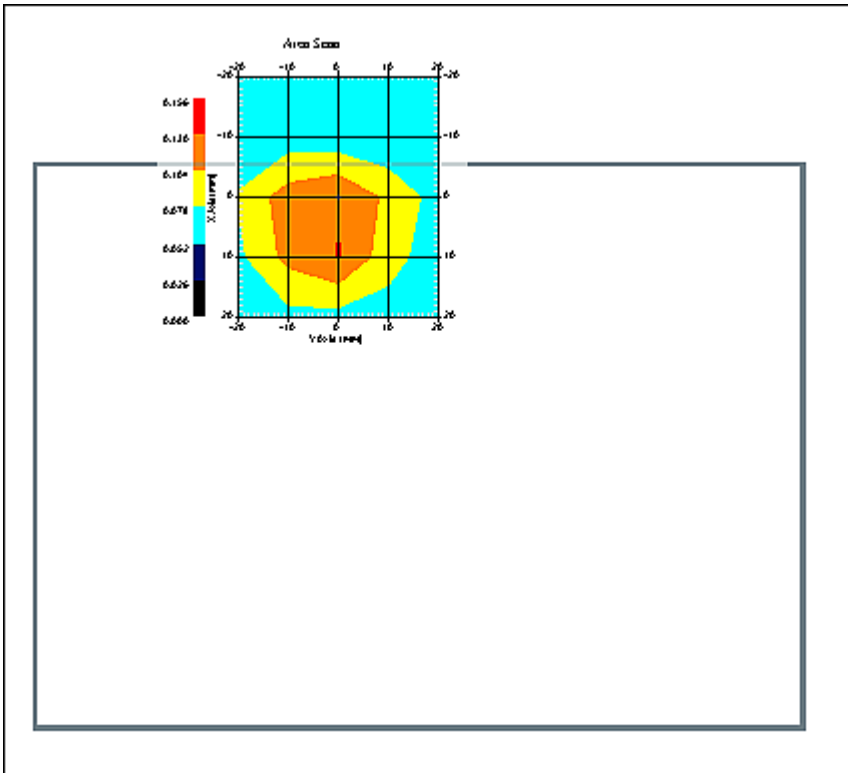
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.129 W/kg
Power Drift-Finish: 0.128 W/kg
Power Drift (%) : -0.546

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 30-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 52.65 F/m
Sigma : 1.94 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 30-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Low
```



```
1 gram SAR value    : 0.127 W/kg
10 gram SAR value   : 0.083 W/kg
Area Scan Peak SAR  : 0.131 W/kg
Zoom Scan Peak SAR  : 0.210 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 30-Aug-2007
Starting Time : 30-Aug-2007 12:41:34 PM
End Time : 30-Aug-2007 12:54:39 PM
Scanning Time : 785 secs

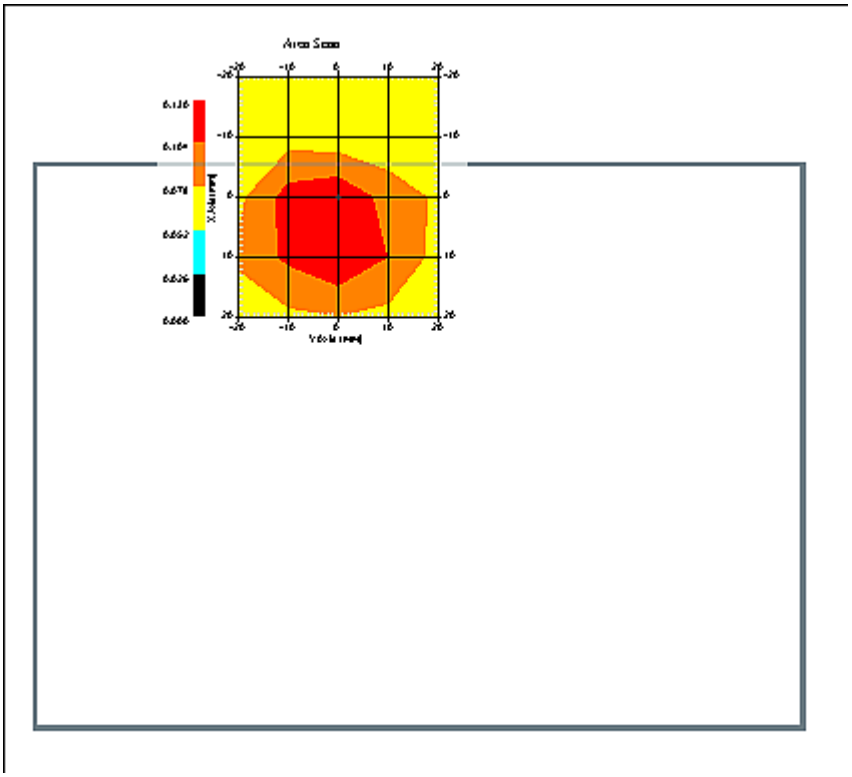
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.121 W/kg
Power Drift-Finish: 0.125 W/kg
Power Drift (%) : 2.911

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 30-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 52.65 F/m
Sigma : 1.94 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 30-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Mid
```



```
1 gram SAR value    : 0.126 W/kg
10 gram SAR value   : 0.086 W/kg
Area Scan Peak SAR  : 0.129 W/kg
Zoom Scan Peak SAR  : 0.210 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 30-Aug-2007
Starting Time : 30-Aug-2007 01:10:57 PM
End Time : 30-Aug-2007 01:23:55 PM
Scanning Time : 778 secs

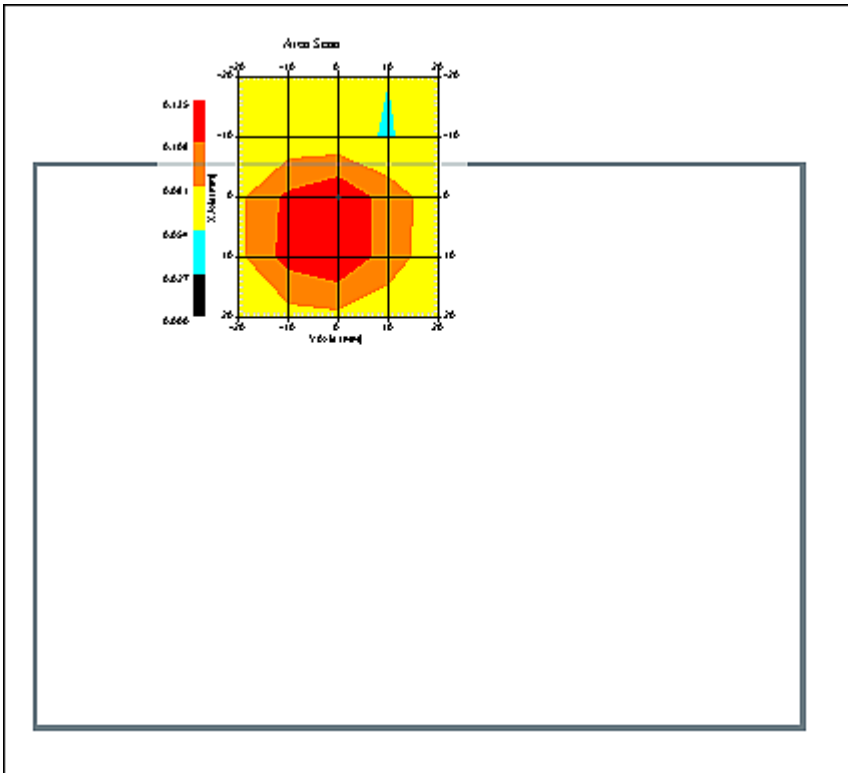
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.129 W/kg
Power Drift-Finish: 0.134 W/kg
Power Drift (%) : 4.158

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 30-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 52.65 F/m
Sigma : 1.94 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 30-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : High
```



```
1 gram SAR value    : 0.128 W/kg
10 gram SAR value   : 0.084 W/kg
Area Scan Peak SAR  : 0.133 W/kg
Zoom Scan Peak SAR  : 0.230 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 30-Aug-2007
Starting Time : 30-Aug-2007 03:01:27 PM
End Time : 30-Aug-2007 03:14:23 PM
Scanning Time : 776 secs

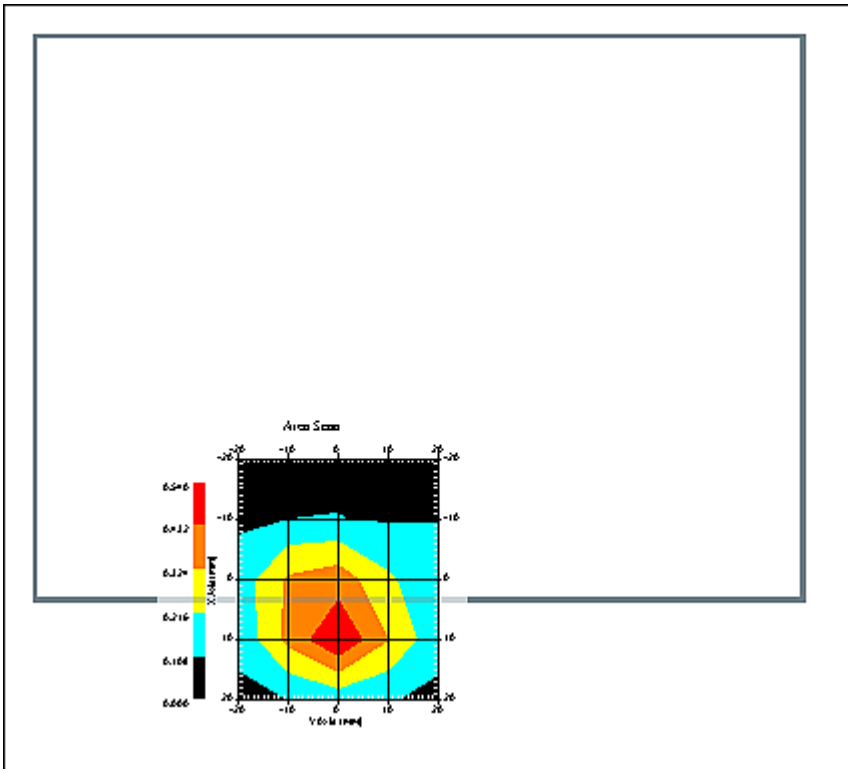
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.387 W/kg
Power Drift-Finish: 0.397 W/kg
Power Drift (%) : 2.577

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

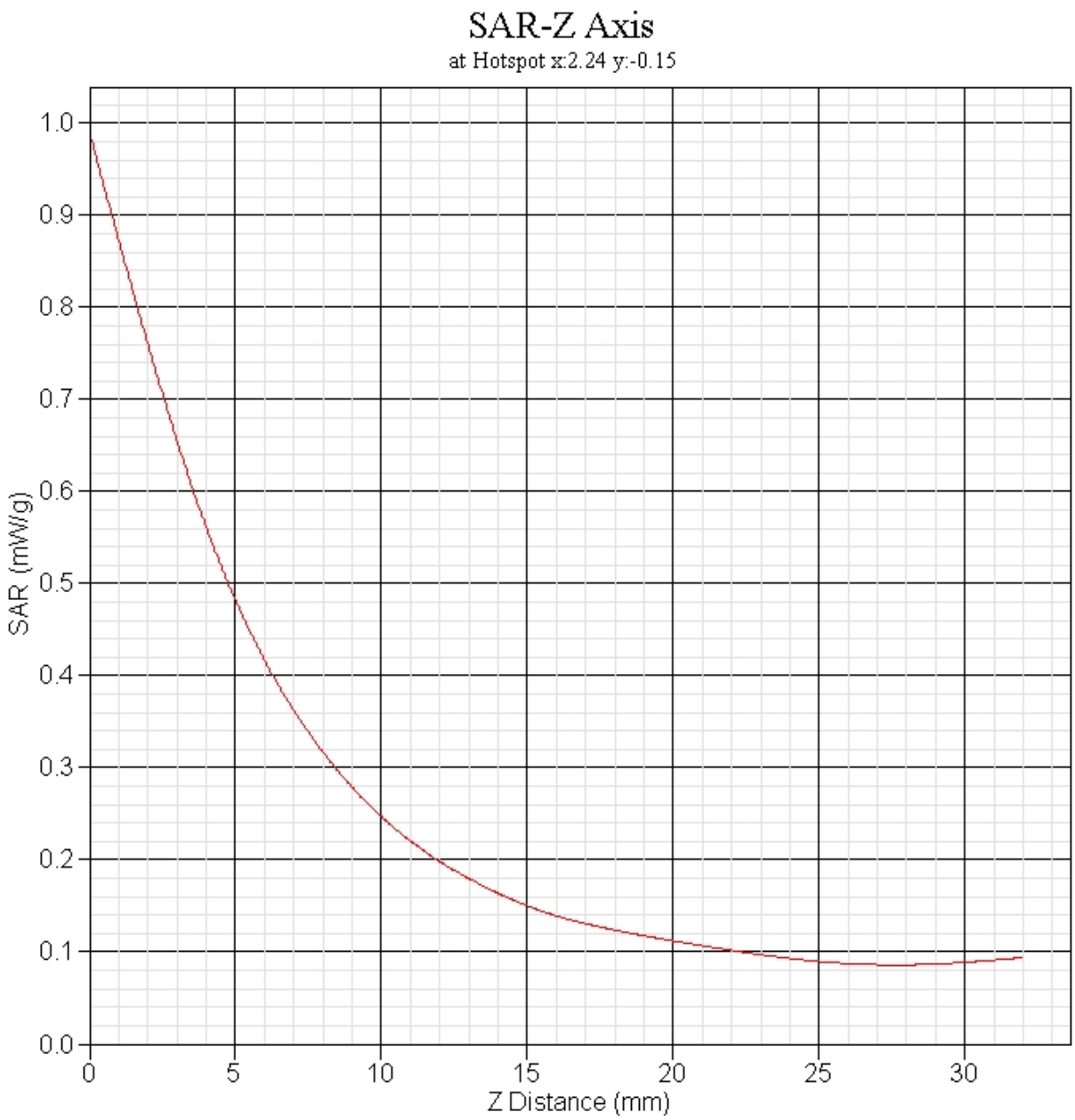
Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 30-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 52.65 F/m
Sigma : 1.94 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 30-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Mid
```



```
1 gram SAR value    : 0.463 W/kg
10 gram SAR value   : 0.223 W/kg
Area Scan Peak SAR  : 0.538 W/kg
Zoom Scan Peak SAR  : 0.990 W/kg
```



SAR Test Report

By Operator : Jay
Measurement Date : 31-Aug-2007
Starting Time : 31-Aug-2007 07:49:14 AM
End Time : 31-Aug-2007 08:02:22 AM
Scanning Time : 788 secs

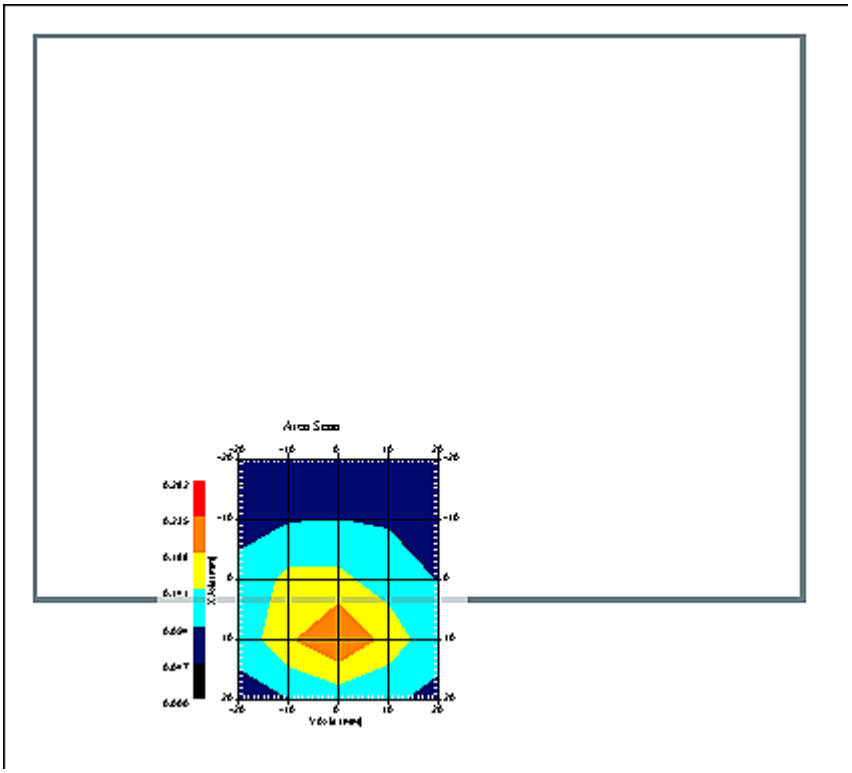
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.157 W/kg
Power Drift-Finish: 0.157 W/kg
Power Drift (%) : -0.457

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 31-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 53.36 F/m
Sigma : 1.96 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Aug-2007
Set-up Time       : 7:30:03 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Low
```



```
1 gram SAR value    : 0.197 W/kg
10 gram SAR value   : 0.129 W/kg
Area Scan Peak SAR  : 0.236 W/kg
Zoom Scan Peak SAR  : 0.310 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 31-Aug-2007
Starting Time : 31-Aug-2007 07:32:31 AM
End Time : 31-Aug-2007 07:46:04 AM
Scanning Time : 813 secs

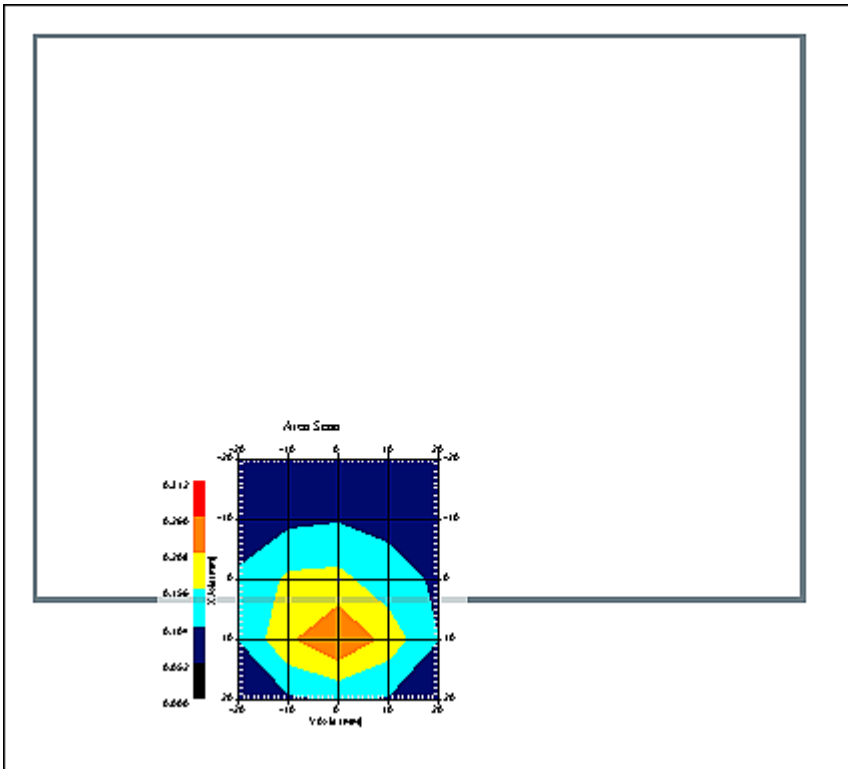
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.172 W/kg
Power Drift-Finish: 0.169 W/kg
Power Drift (%) : -1.662

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 31-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 53.36 F/m
Sigma : 1.96 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Aug-2007
Set-up Time       : 7:30:03 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Mid
```



```
1 gram SAR value    : 0.208 W/kg
10 gram SAR value   : 0.133 W/kg
Area Scan Peak SAR  : 0.261 W/kg
Zoom Scan Peak SAR  : 0.350 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 31-Aug-2007
Starting Time : 31-Aug-2007 08:06:36 AM
End Time : 31-Aug-2007 08:19:34 AM
Scanning Time : 778 secs

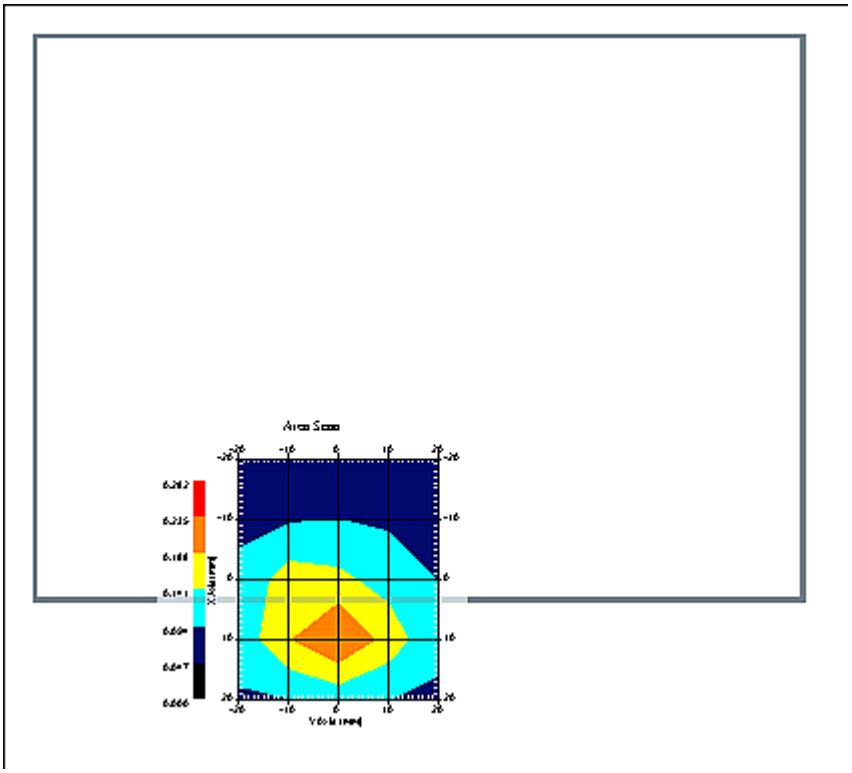
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.159 W/kg
Power Drift-Finish: 0.158 W/kg
Power Drift (%) : -0.800

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 31-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 53.36 F/m
Sigma : 1.96 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Aug-2007
Set-up Time       : 7:30:03 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : High
```



```
1 gram SAR value    : 0.199 W/kg
10 gram SAR value   : 0.128 W/kg
Area Scan Peak SAR  : 0.237 W/kg
Zoom Scan Peak SAR  : 0.360 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 30-Aug-2007
Starting Time : 30-Aug-2007 06:18:23 PM
End Time : 30-Aug-2007 06:31:18 PM
Scanning Time : 775 secs

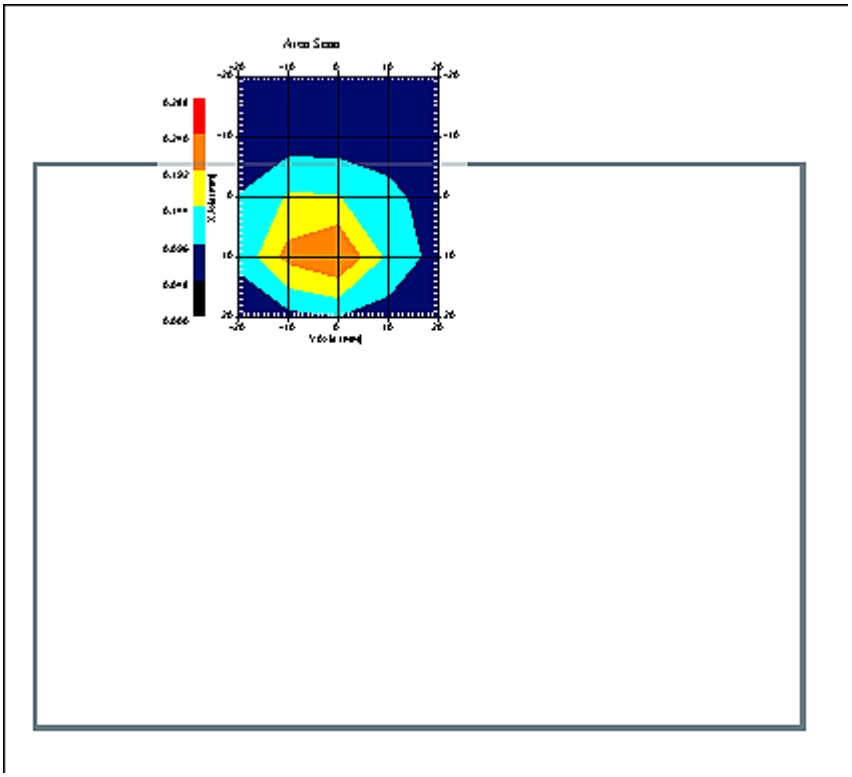
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.150 W/kg
Power Drift-Finish: 0.152 W/kg
Power Drift (%) : 1.037

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 30-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 52.65 F/m
Sigma : 1.94 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 30-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Low
```



```
1 gram SAR value    : 0.188 W/kg
10 gram SAR value   : 0.112 W/kg
Area Scan Peak SAR  : 0.242 W/kg
Zoom Scan Peak SAR  : 0.350 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 30-Aug-2007
Starting Time : 30-Aug-2007 06:04:40 PM
End Time : 30-Aug-2007 06:17:32 PM
Scanning Time : 772 secs

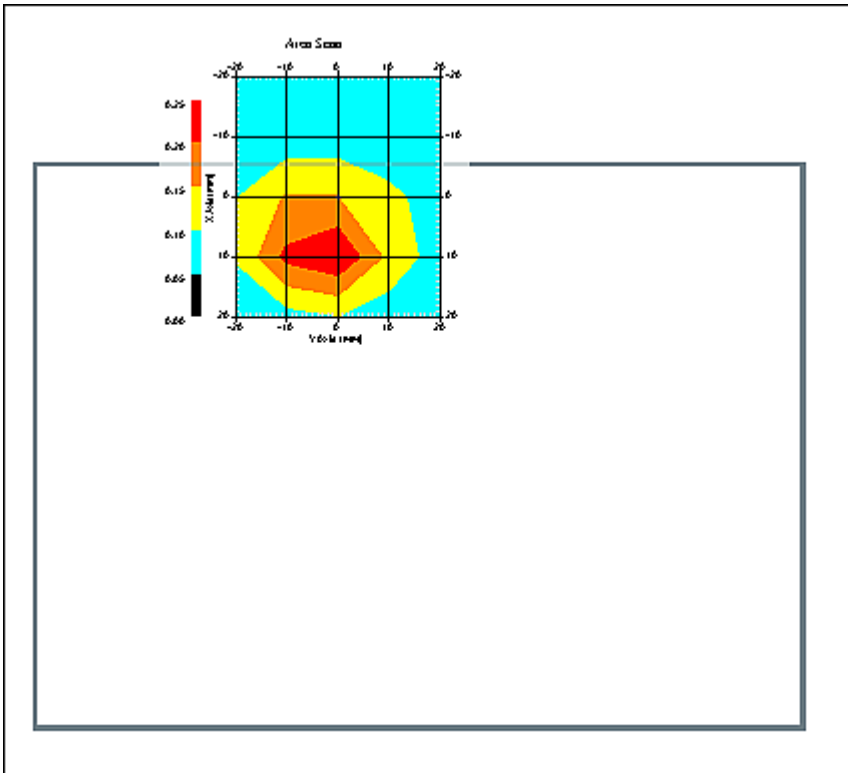
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.154 W/kg
Power Drift-Finish: 0.153 W/kg
Power Drift (%) : -0.365

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 30-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 52.65 F/m
Sigma : 1.94 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 30-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Mid
```



```
1 gram SAR value    : 0.185 W/kg
10 gram SAR value   : 0.110 W/kg
Area Scan Peak SAR  : 0.249 W/kg
Zoom Scan Peak SAR  : 0.340 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 30-Aug-2007
Starting Time : 30-Aug-2007 06:31:57 PM
End Time : 30-Aug-2007 06:45:05 PM
Scanning Time : 788 secs

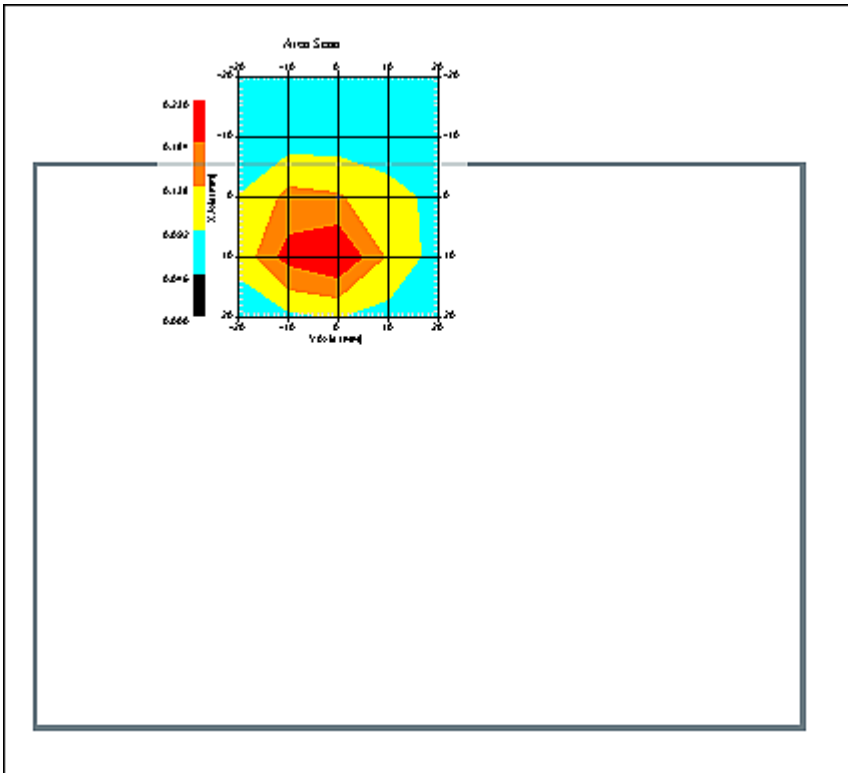
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.148 W/kg
Power Drift-Finish: 0.145 W/kg
Power Drift (%) : -2.190

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 30-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 52.65 F/m
Sigma : 1.94 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 30-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : High
```



```
1 gram SAR value    : 0.177 W/kg
10 gram SAR value   : 0.108 W/kg
Area Scan Peak SAR  : 0.230 W/kg
Zoom Scan Peak SAR  : 0.340 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 30-Aug-2007
Starting Time : 30-Aug-2007 03:33:30 PM
End Time : 30-Aug-2007 03:46:35 PM
Scanning Time : 785 secs

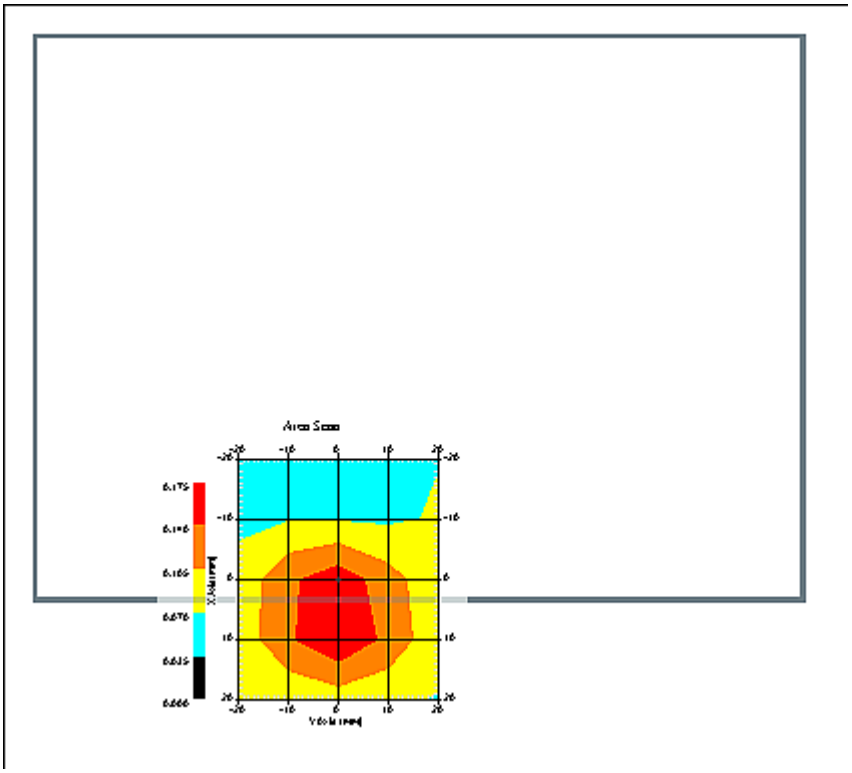
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.166 W/kg
Power Drift-Finish: 0.161 W/kg
Power Drift (%) : -3.395

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 30-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 52.65 F/m
Sigma : 1.94 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 30-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Low
```



```
1 gram SAR value    : 0.156 W/kg
10 gram SAR value   : 0.099 W/kg
Area Scan Peak SAR  : 0.173 W/kg
Zoom Scan Peak SAR  : 0.280 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 30-Aug-2007
Starting Time : 30-Aug-2007 03:18:53 PM
End Time : 30-Aug-2007 03:31:52 PM
Scanning Time : 779 secs

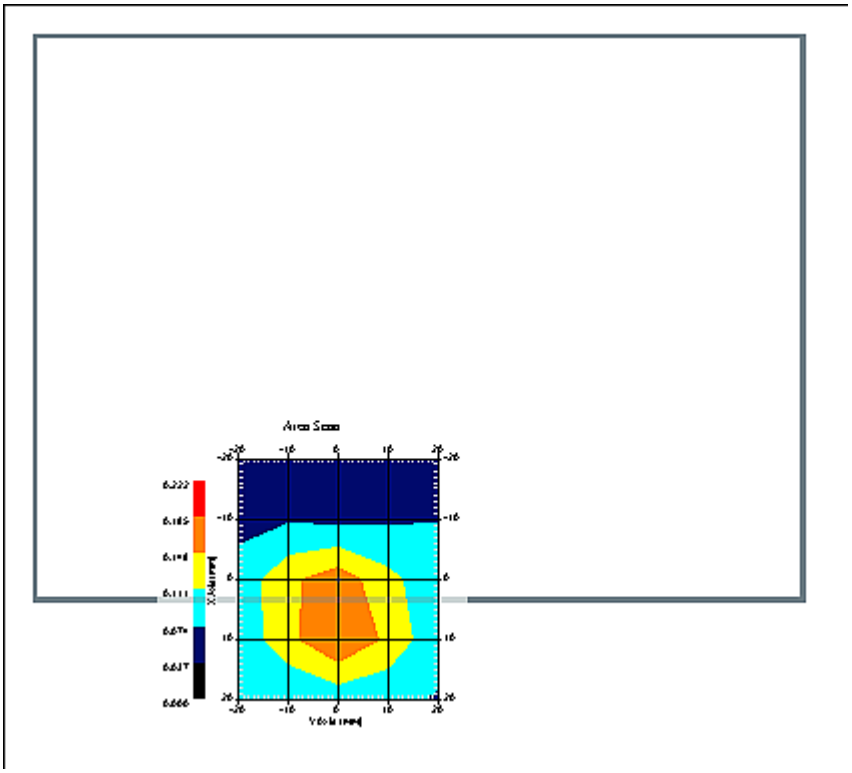
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.168 W/kg
Power Drift-Finish: 0.168 W/kg
Power Drift (%) : -0.079

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 30-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 52.65 F/m
Sigma : 1.94 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 30-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Mid
```



```
1 gram SAR value    : 0.172 W/kg
10 gram SAR value   : 0.106 W/kg
Area Scan Peak SAR  : 0.186 W/kg
Zoom Scan Peak SAR  : 0.310 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 30-Aug-2007
Starting Time : 30-Aug-2007 03:49:12 PM
End Time : 30-Aug-2007 04:02:13 PM
Scanning Time : 781 secs

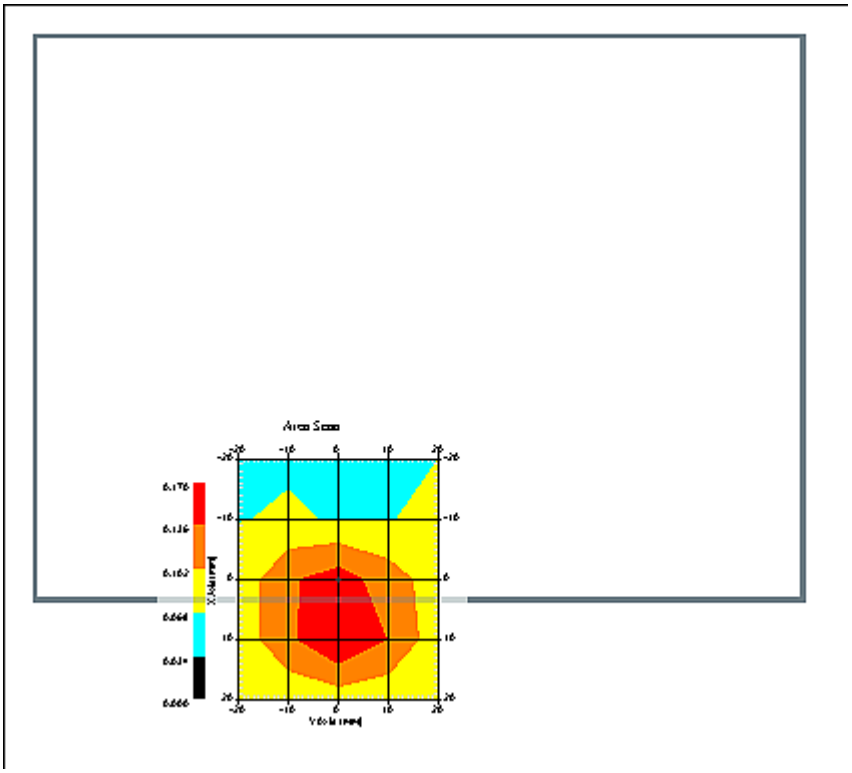
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.156 W/kg
Power Drift-Finish: 0.162 W/kg
Power Drift (%) : 3.809

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 30-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 52.65 F/m
Sigma : 1.94 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 30-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : High
```



```
1 gram SAR value    : 0.158 W/kg
10 gram SAR value   : 0.100 W/kg
Area Scan Peak SAR  : 0.169 W/kg
Zoom Scan Peak SAR  : 0.290 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 30-Aug-2007
Starting Time : 30-Aug-2007 05:25:26 PM
End Time : 30-Aug-2007 05:38:16 PM
Scanning Time : 770 secs

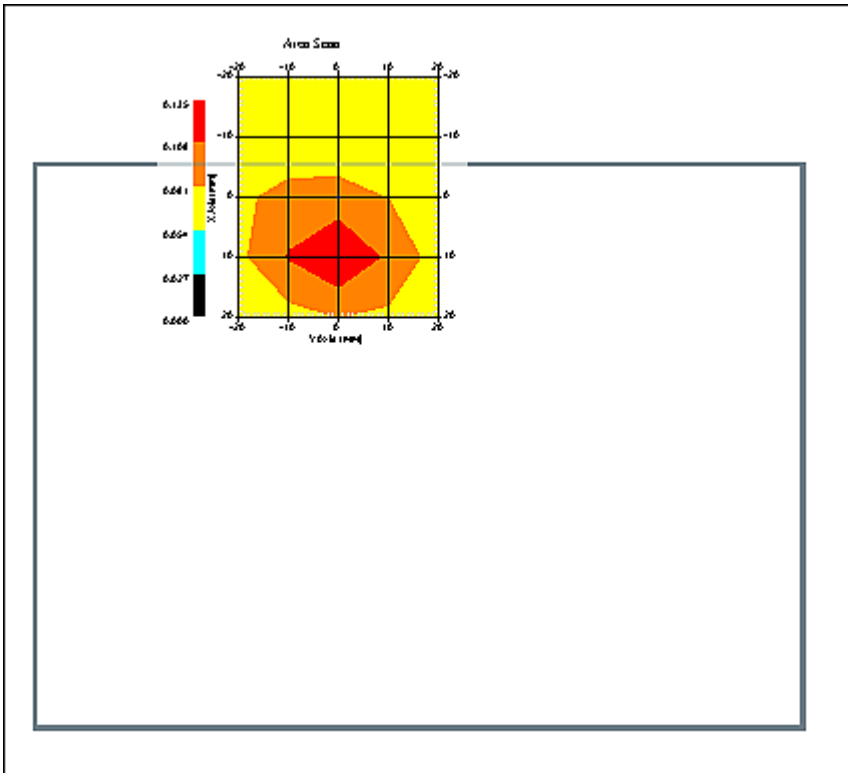
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.094 W/kg
Power Drift-Finish: 0.098 W/kg
Power Drift (%) : 4.045

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 30-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 52.65 F/m
Sigma : 1.94 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 30-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : High
```



```
1 gram SAR value    : 0.125 W/kg
10 gram SAR value   : 0.085 W/kg
Area Scan Peak SAR  : 0.135 W/kg
Zoom Scan Peak SAR  : 0.210 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 30-Aug-2007
Starting Time : 30-Aug-2007 05:11:32 PM
End Time : 30-Aug-2007 05:24:22 PM
Scanning Time : 770 secs

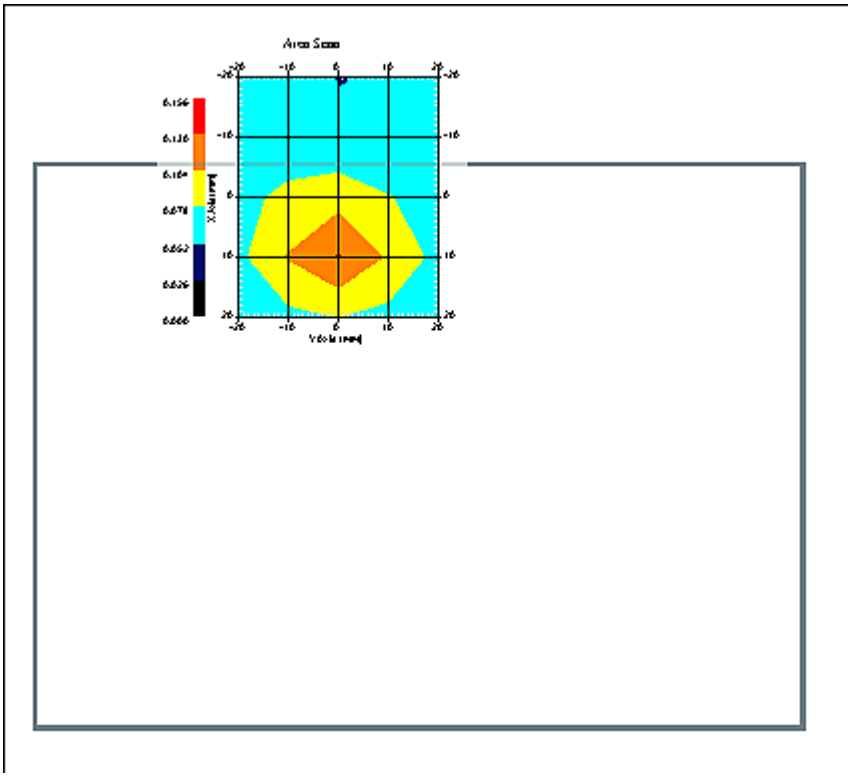
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.097 W/kg
Power Drift-Finish: 0.101 W/kg
Power Drift (%) : 3.471

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 30-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 52.65 F/m
Sigma : 1.94 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 30-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Mid
```



```
1 gram SAR value    : 0.121 W/kg
10 gram SAR value   : 0.084 W/kg
Area Scan Peak SAR  : 0.132 W/kg
Zoom Scan Peak SAR  : 0.210 W/kg
```

SAR Test Report

By Operator : Jay
Measurement Date : 30-Aug-2007
Starting Time : 30-Aug-2007 05:42:11 PM
End Time : 30-Aug-2007 05:55:12 PM
Scanning Time : 781 secs

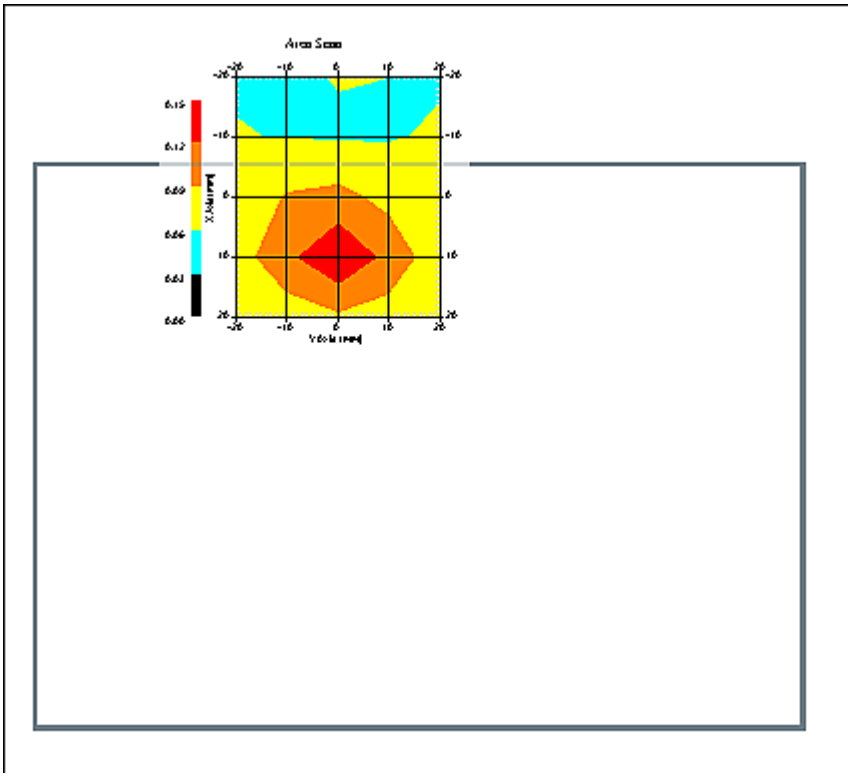
Product Data
Device Name : Vulcan Inc.
Serial No. : MVT1-107
Type : Other
Model : E-1001s
Frequency : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time : 0 min(s)
Length : 150 mm
Width : 110 mm
Depth : 40 mm
Antenna Type : Internal
Orientation : Rotated Right 90°
Power Drift-Start : 0.096 W/kg
Power Drift-Finish: 0.097 W/kg
Power Drift (%) : 0.149

Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Size (mm) : 280 x 280 x 200
Serial No. : System Default
Location : Center
Description : Uni-Phantom

Tissue Data
Type : BODY
Serial No. : 2450
Frequency : 2450.00 MHz
Last Calib. Date : 30-Aug-2007
Temperature : 20.00 °C
Ambient Temp. : 23.00 °C
Humidity : 45.00 RH%
Epsilon : 52.65 F/m
Sigma : 1.94 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : Probe 215 - RFEL
Model : E020
Type : E-Field Triangle
Serial No. : 215
Last Calib. Date : 14-Feb-2007
Frequency : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point: 95.00 mV
Offset : 1.56 mm

```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 30-Aug-2007
Set-up Time       : 2:36:28 PM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : High
```

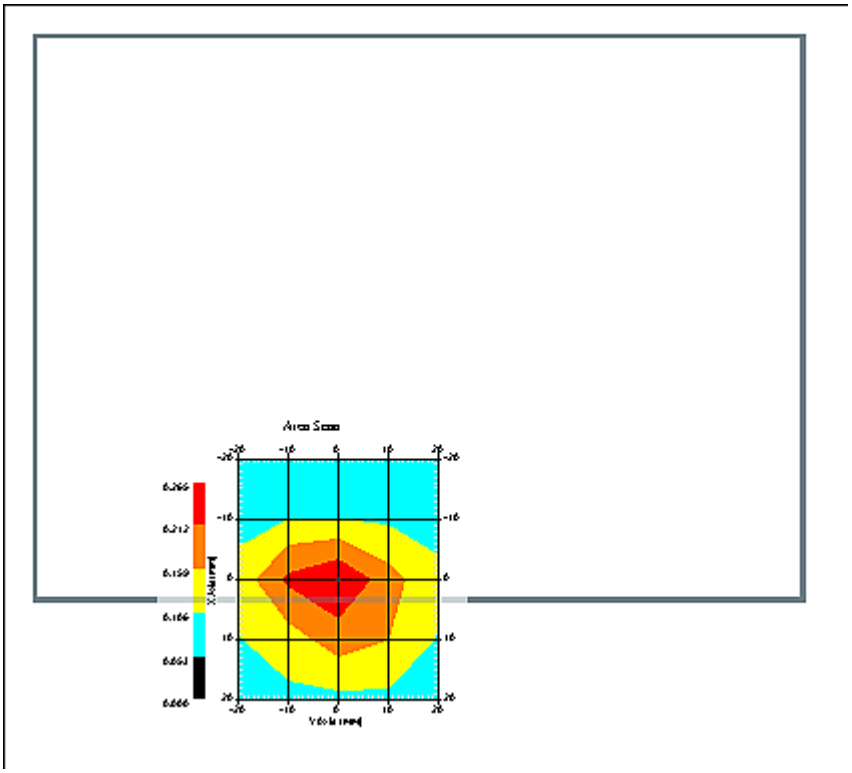


```
1 gram SAR value    : 0.127 W/kg
10 gram SAR value   : 0.087 W/kg
Area Scan Peak SAR  : 0.150 W/kg
Zoom Scan Peak SAR  : 0.190 W/kg
```

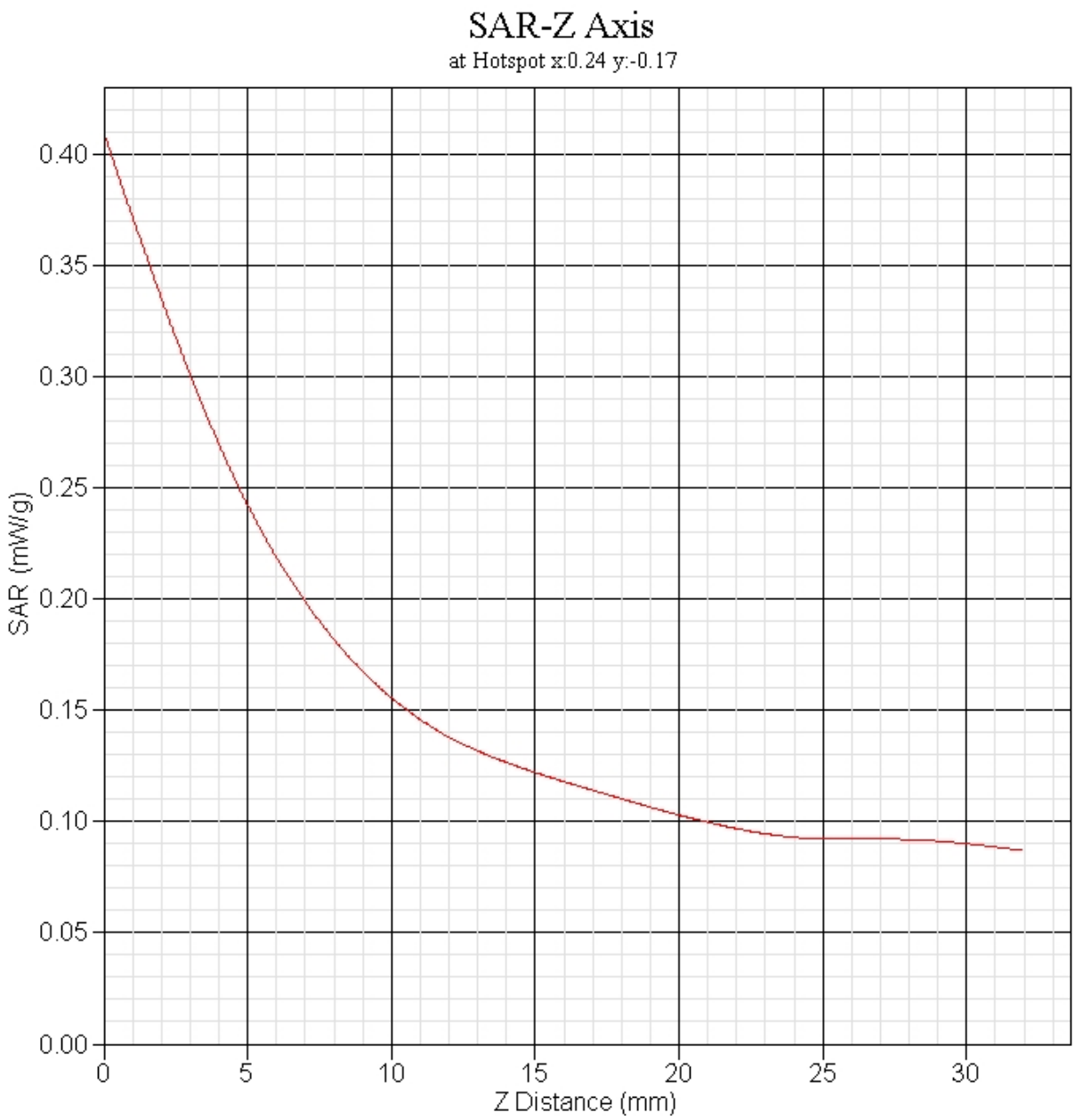
SAR Test Report

```
By Operator       : Jay
Measurement Date  : 31-Aug-2007
Starting Time     : 31-Aug-2007  08:23:26 AM
End Time          : 31-Aug-2007  08:36:24 AM
Scanning Time     : 778 secs

Product Data
Device Name       : Vulcan Inc.
Serial No.        : MVT1-107
Type              : Other
Model             : E-1001s
Frequency         : 2450.00 MHz
Max. Transmit Pwr : 0.024 W
Drift Time        : 0 min(s)
Length            : 150 mm
Width             : 110 mm
Depth             : 40 mm
Antenna Type      : Internal
Orientation       : Rotated Right 90°
Power Drift-Start : 0.267 W/kg
Power Drift-Finish: 0.274 W/kg
Power Drift (%)   : 2.735

Phantom Data
Name              : APREL-Uni
Type              : Uni-Phantom
Size (mm)         : 280 x 280 x 200
Serial No.        : System Default
Location          : Center
Description       : Uni-Phantom

Tissue Data
Type              : BODY
Serial No.        : 2450
Frequency         : 2450.00 MHz
Last Calib. Date  : 31-Aug-2007
Temperature       : 20.00 °C
Ambient Temp.     : 23.00 °C
Humidity          : 45.00 RH%
Epsilon           : 53.36 F/m
Sigma             : 1.96 S/m
Density           : 1000.00 kg/cu. m

Probe Data
Name              : Probe 215 - RFEL
Model             : E020
Type              : E-Field Triangle
Serial No.        : 215
Last Calib. Date  : 14-Feb-2007
Frequency         : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 4.5
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)²
Compression Point: 95.00 mV
Offset            : 1.56 mm
```

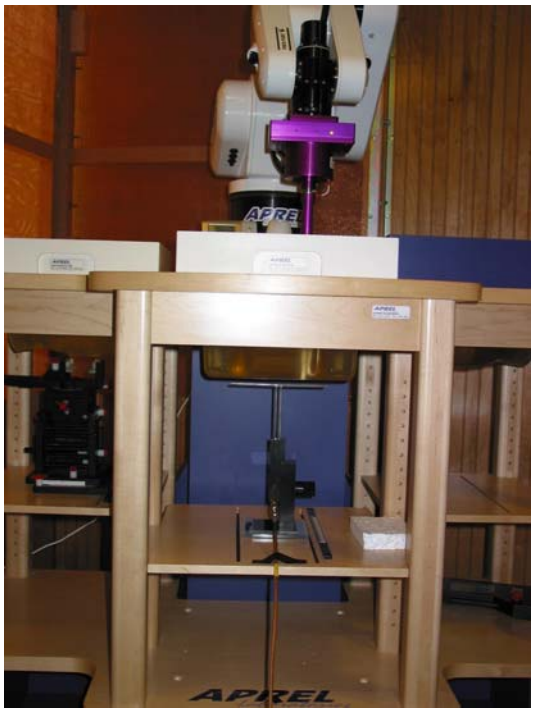
```
Measurement Data
Crest Factor      : 1
Scan Type         : Complete
Tissue Temp.      : 20.00 °C
Ambient Temp.     : 23.00 °C
Set-up Date       : 31-Aug-2007
Set-up Time       : 7:30:03 AM
Area Scan         : 5x5x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan         : 5x5x8 : Measurement x=8mm, y=8mm, z=4mm

Other Data
DUT Position      : Rotated Right 90°
Separation        : 0
Channel           : Mid
```



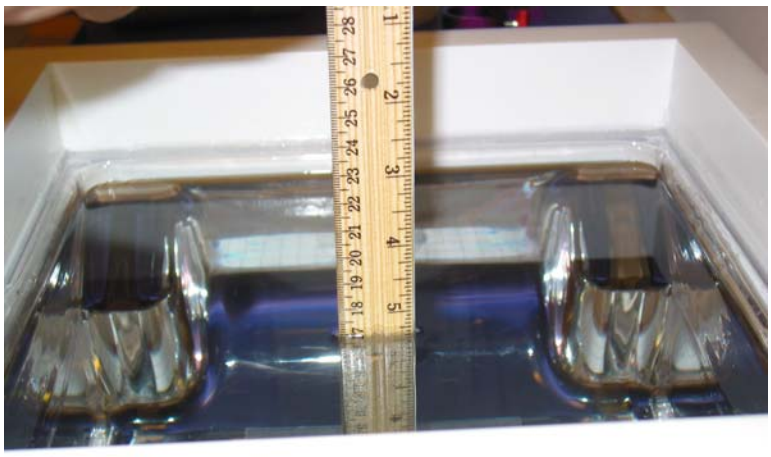
```
1 gram SAR value    : 0.230 W/kg
10 gram SAR value   : 0.142 W/kg
Area Scan Peak SAR  : 0.265 W/kg
Zoom Scan Peak SAR  : 0.410 W/kg
```



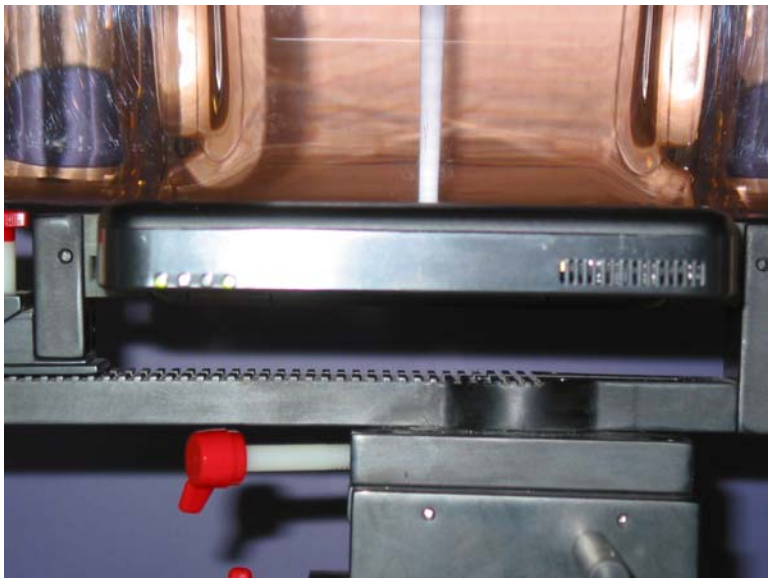
Appendix C – SAR Test Setup Photos



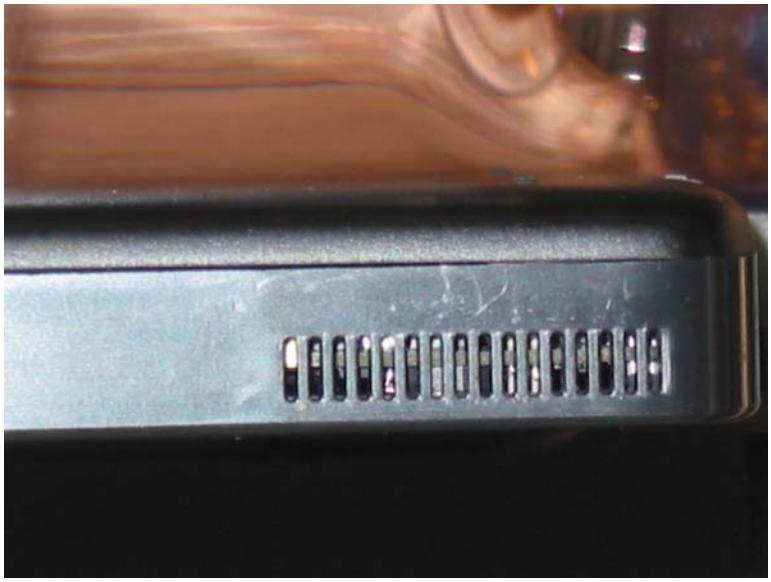
System Body Configuration



Body Tissue Depth

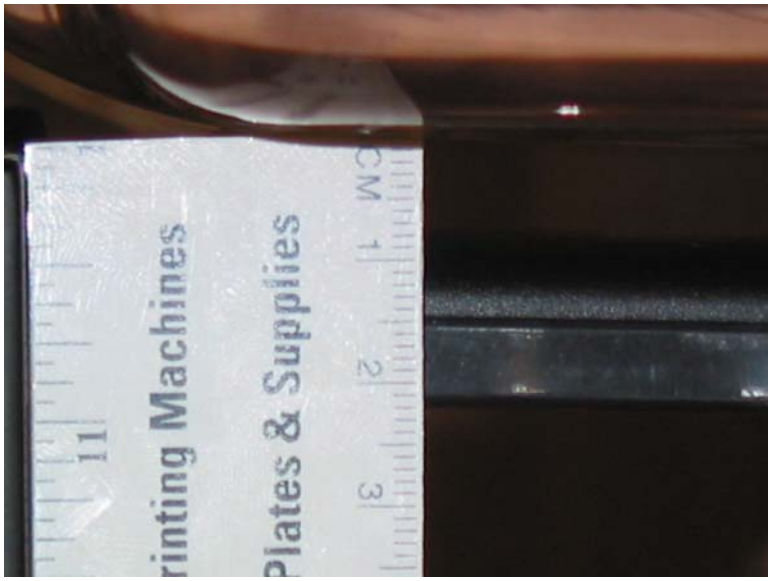


Front Standard Battery WWAN Testing Front View



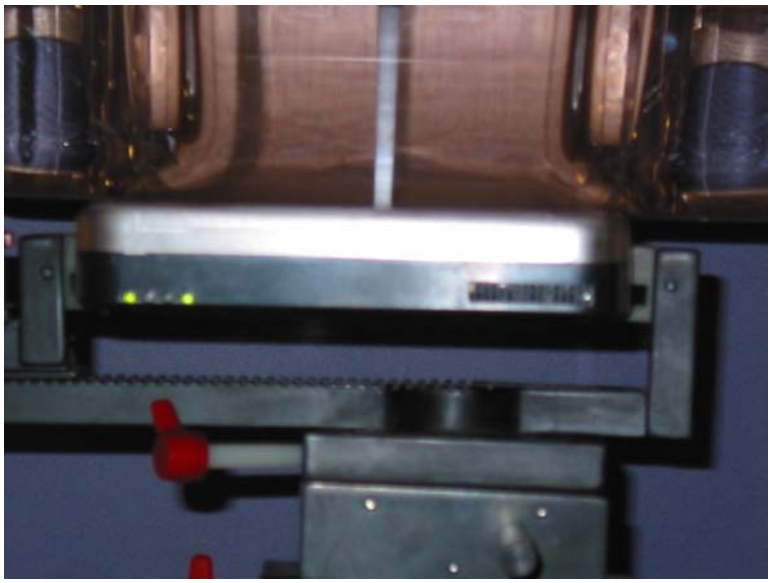
Front Standard Battery WWAN Testing Near View

Side of LCD Near Phantom With Standard Battery WWAN Testing

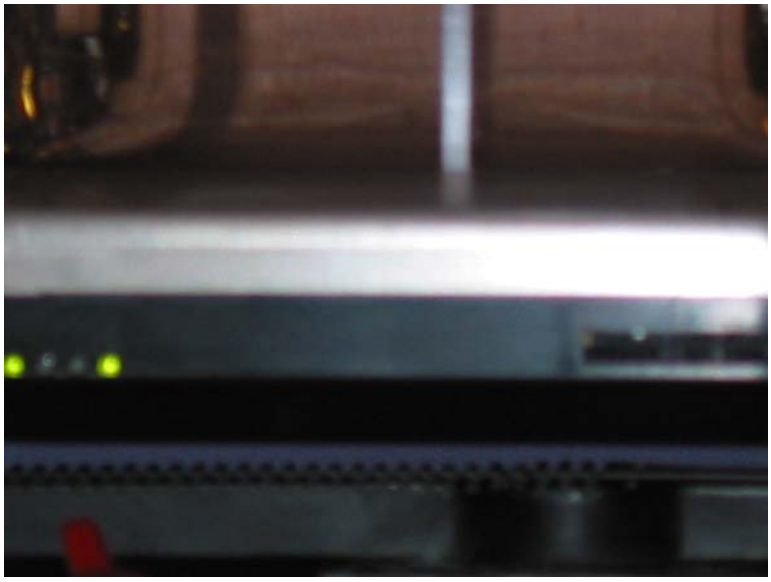


Side of LCD Measurement from Phantom With Standard Battery WWAN Testing

Measurement of LCD from Surface in 180 Deg. With Standard Battery



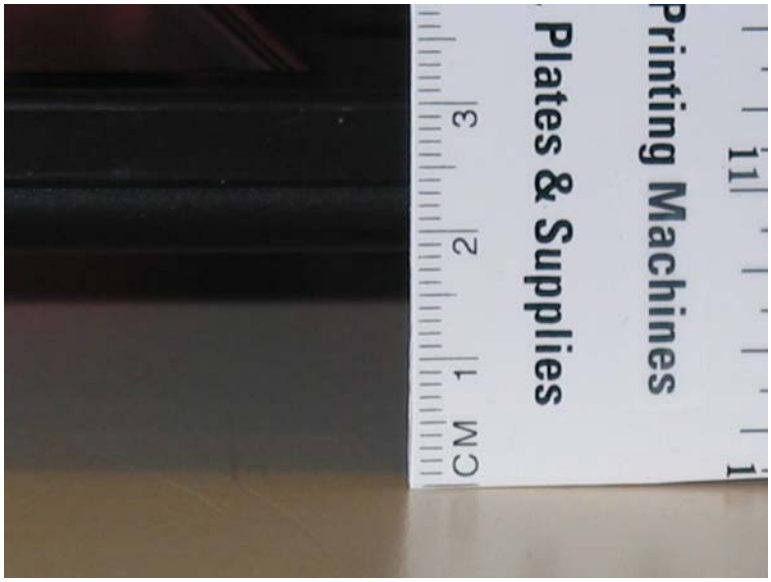
Front Extended Battery Front WWAN Testing View



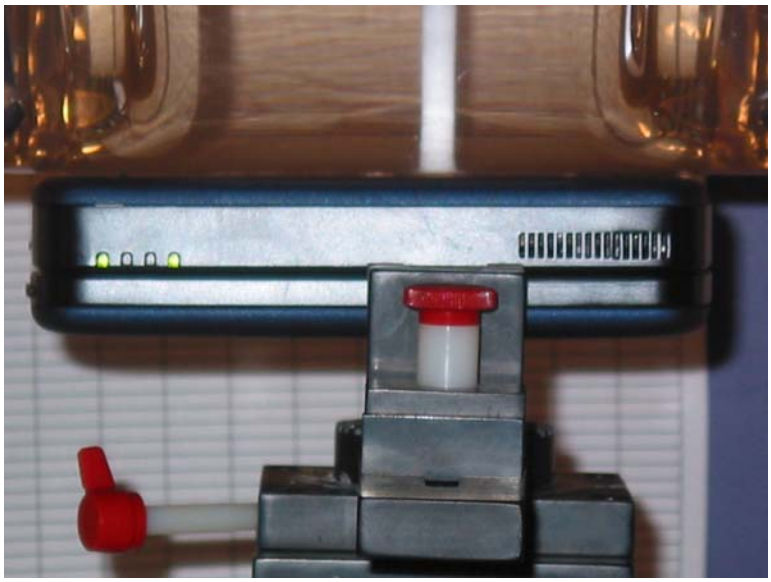
Front Extended Battery Near WWAN Testing View

Side of LCD Near Phantom With Extended Battery WWAN Testing

Side of LCD Measurement from Phantom With Extended Battery WWAN Testing

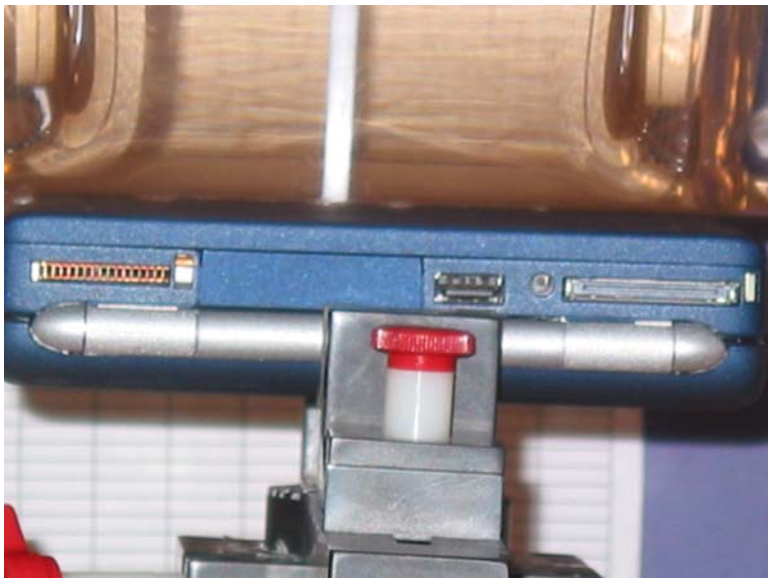


Measurement of LCD from Surface in 180 Deg. With Extended Battery



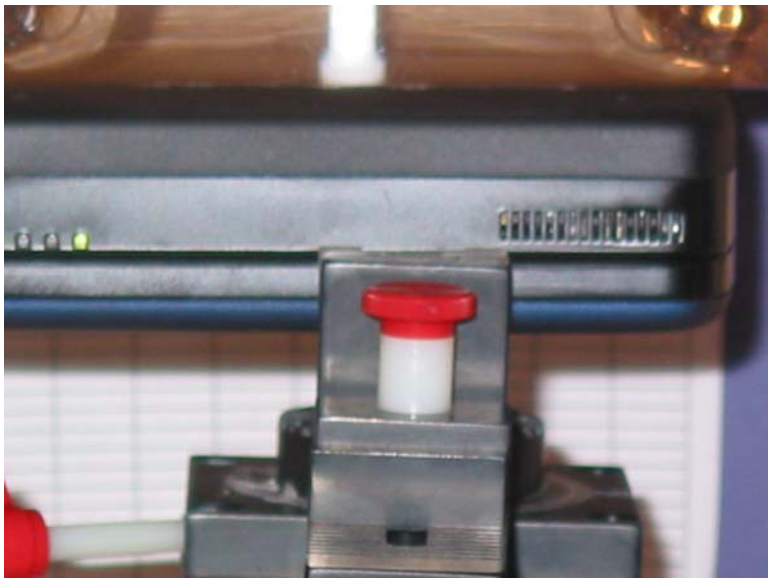
Front Standard Battery Main Antenna WLAN View

Side Standard Battery Main Antenna WLAN View



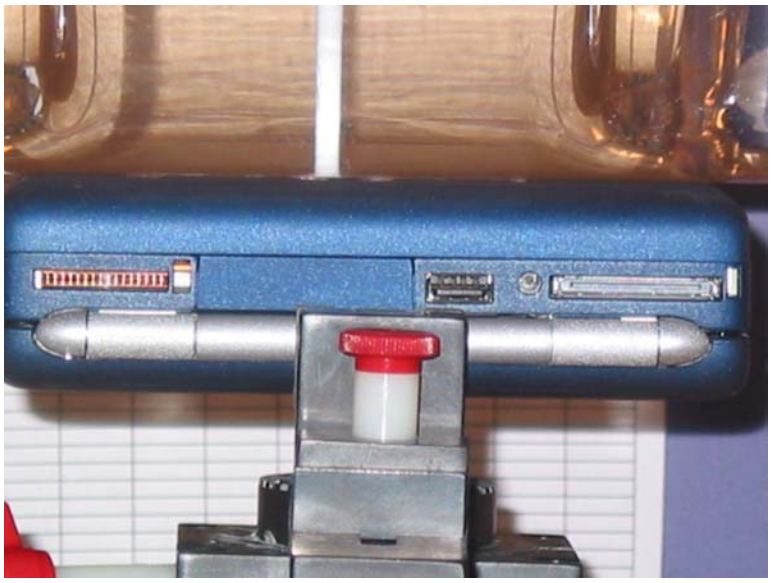
Front Standard Battery Aux Antenna WLAN View

Side Standard Battery Aux Antenna WLAN View



Front Extended Battery Main Antenna WLAN View

Side Extended Battery Main Antenna WLAN View



Front Extended Battery Aux Antenna WLAN View

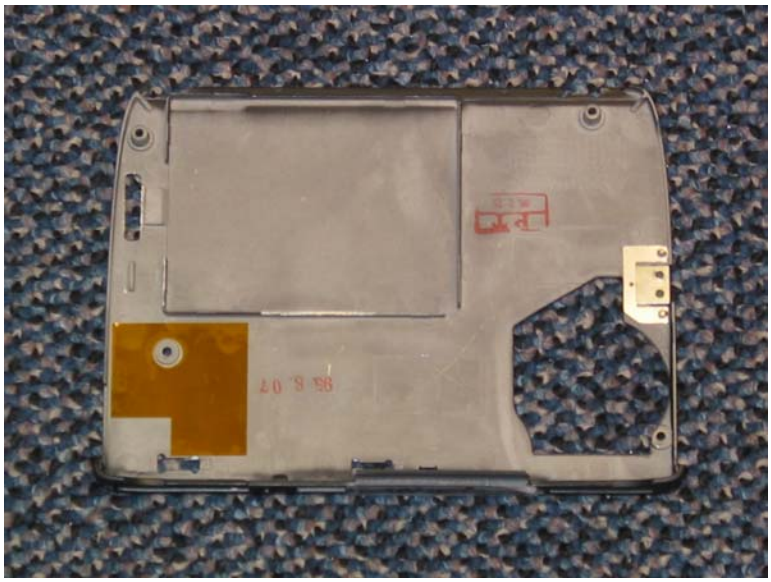
Side Extended Battery Aux Antenna WLAN View

Unit Front

Unit Back w/o Battery

Unit LCD Open

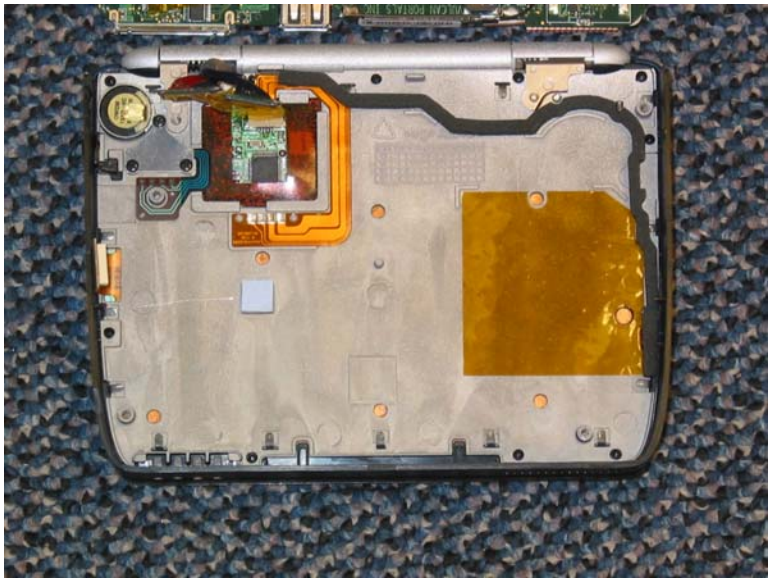
Unit w/o Back Cover



Back Cover Inside Shield

PWB Hard Drive Side

PWB Circuit Side With LAN Module

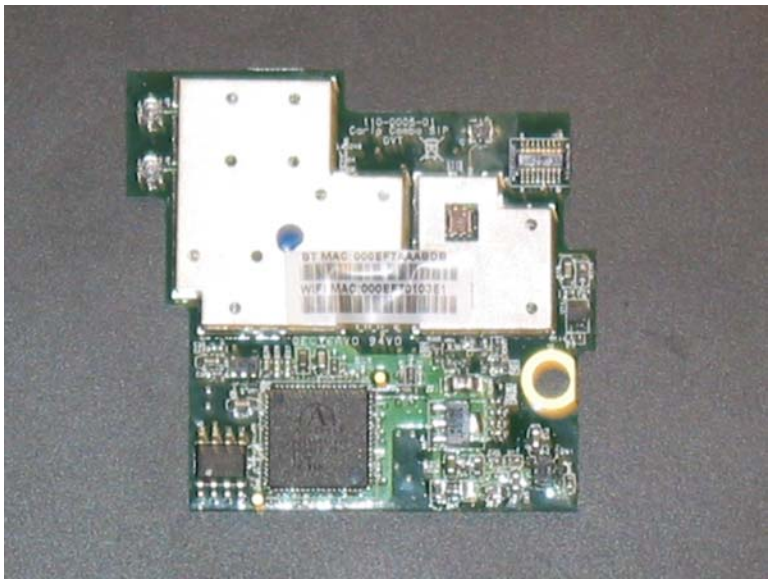


Shielding Below Keyboard

PWB Circuit Side

LAN Module in Place

LAN Module Back



LAN Module Front

Cover Removed Behind LCD With WWAN Module

WWAN Module On PCB

WAN Module Front

Standard Battery Back

Extended Battery Back