

# SAR Test Report

Product Name : Tablet PC

Model No. : T10L

Applicant : Twinhead International Corp

Address : 10F,550 Rueiguand Rd Neihu,Taipei,Taiwan 114,ROC

Date of Receipt : 2010/03/30

Issued Date : 2010/06/10

Report No. : 104046R-HPUSP10V01

Report Version : V1.0

The test results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of Quie Tek Corporation.

## Test Report Certification

Issued Date: 2010/06/10  
Report No.:104046R-HPUSP10V01



Product Name : Tablet PC  
Applicant : Twinhead International Corp  
Address : 10F,550 Rueiguand Rd Neihu,Taipei,Taiwan 114,ROC  
Manufacturer : PROTEK (SHANGHAI) LTD  
FCC ID : FKGMPC10L1  
Model No. : T10L  
Trade Name : Twinhead  
Applicable Standard : FCC Oet65 Supplement C June 2001  
IEEE Std. 1528-2003  
47CFR § 2.1093  
Test Result : Max. SAR Measurement (1g)  
GSM 835MHz: **0.698** W/kg  
PCS 1900MHz: **0.952** W/kg  
WCDMA Band V: **0.633** W/kg  
WCDMA Band II: **1.24** W/kg  
CDMA 835 MHz: **0.370** W/kg  
CDMA 1900 MHz: **1.04** W/kg

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Documented By :

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Approved By :

(Manager / Vincent Lin)

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## 1. General Information

### 1.1 EUT Description

Product Name	Tablet PC
Model No.	T10L
TX Frequency	824MHz~849MHz (GSM 850/WCDMA Band V/CDMA Cellular) 1850MHz ~1910MHz (PCS 1900/WCDMA Band II/CDMA PCS)
Rx Frequency	869MHz~894MHz (GSM 850/WCDMA Band V/CDMA Cellular) 1930MHz ~1990MHz (PCS 1900/WCDMA Band II/CDMA PCS)
Device Category	Portable
3G Modular	MFR: Sireera ; M/N : GOBI2000
RF Exposure Environment	Uncontrolled
Max. Output Power (Conducted)	GSM 850: 32.17 dBm PCS 1900: 29.26 dBm WCDMA Band V: 24.87 dBm WCDMA Band II: 24.89 dBm CDMA 850MHz: 24.86 dBm CDMA 1900MHz: 24.82 dBm

Note:

1. The device have co-located with WLAN card, but non-simultaneously transmit.
2. The test method are refer to FCC KDB 447498, KDB 616217 and KDB 248227.

### 1.2 Antenna List

No.	MFR	Antenna Type	Part No.	Peak Gain
1	WGT	PIFA	TWT10GPPI01+G	1.64 dBi

### 1.3 Test Environment

Ambient conditions in the laboratory:

Test Date: 29-May-10

Items	Required	Actual
Temperature (°C)	18-25	21.5 ± 2
Humidity (%RH)	30-70	55

Test Date: 30-May-10

Items	Required	Actual
Temperature (°C)	18-25	21.1 ± 2
Humidity (%RH)	30-70	56

Site Description:

Accredited by TAF  
Accredited Number: 0914  
Effective through: December 12, 2011

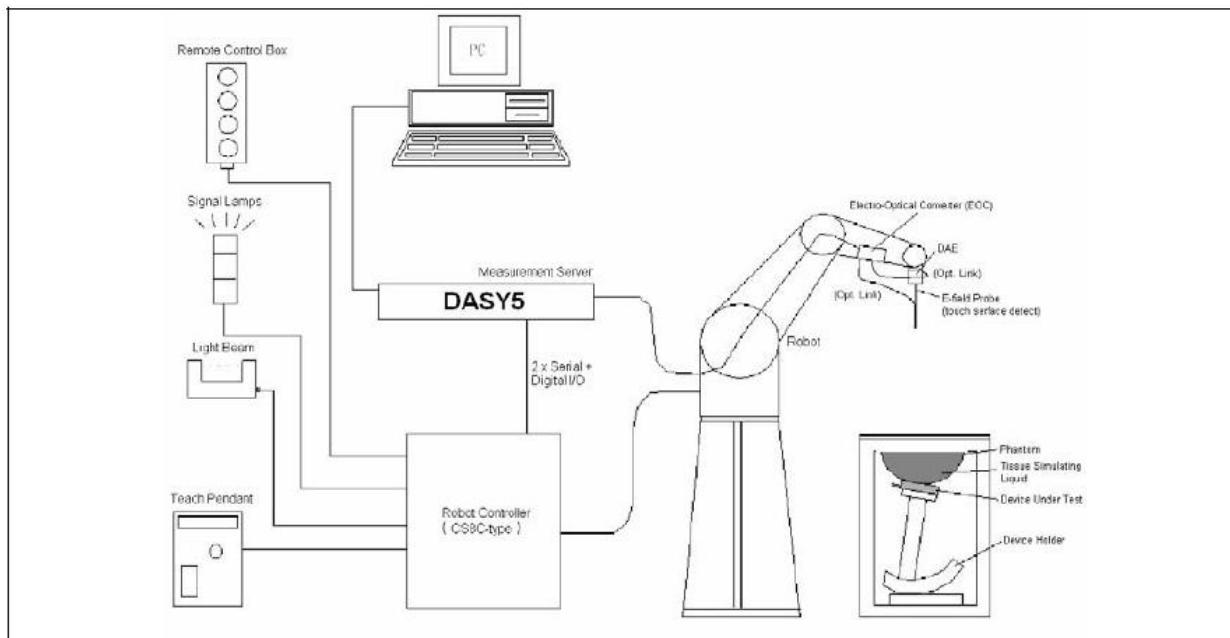


Site Name: Quietek Corporation

Site Address: No. 5-22, Ruei-Shu Valley, Ruei-Ping Tsuen,  
Lin-Kou Shiang, Taipei,  
Taiwan, R.O.C.  
TEL: 886-2-8601-3788 / FAX: 886-2-8601-3789  
E-Mail: [service@quietek.com](mailto:service@quietek.com)

## 2. SAR Measurement System

### 2.1 DASY5 System Description



The DASY5 system for performing compliance tests consists of the following items:

- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running WinXP and the DASY5 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

### **2.1.1 Applications**

Predefined procedures and evaluations for automated compliance testing with all worldwide standards, e.g., IEEE 1528, OET 65, IEC 62209-1, IEC 62209-2, EN 50360, EN 50383 and others.

### **2.1.2 Area Scans**

Area scans are defined prior to the measurement process being executed with a user defined variable spacing between each measurement point (integral) allowing low uncertainty measurements to be conducted. Scans defined for FCC applications utilize a 10mm<sup>2</sup> step integral, with 1mm interpolation used to locate the peak SAR area used for zoom scan assessments.

When an Area Scan has measured all reachable points, it computes the field maxima found in the scanned area, within a range of the global maximum. The range (in dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE 1528-2003, EN 50361 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan).

### **2.1.3 Zoom Scan (Cube Scan Averaging)**

Zoom Scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1 g and 10 g of simulated tissue. A density of 1000 kg/m<sup>3</sup> is used to represent the head and body tissue density and not the phantom liquid density, in order to be consistent with the definition of the liquid dielectric properties, i.e. the side length of the 1 g cube is 10mm, with the side length of the 10 g cube 21,5mm.

The zoom scan integer steps can be user defined so as to reduce uncertainty, but normal practice for typical test applications (including FCC) utilize a physical step of 5x5x7 (8mmx8mmx5mm) providing a volume of 32mm in the X & Y axis, and 30mm in the Z axis.

### **2.1.4 Uncertainty of Inter-/Extrapolation and Averaging**

In order to evaluate the uncertainty of the interpolation, extrapolation and averaged SAR calculation algorithms of the Postprocessor, DASY5 allows the generation of measurement grids which are artificially predefined by analytically based test functions. Therefore, the grids of area scans and zoom scans can be filled with uncertainty test data, according to the SAR benchmark functions of IEEE 1528. The three analytical functions shown in equations as below are used to describe the possible range of the expected SAR distributions for the tested handsets. The field gradients are covered by the spatially flat

distribution f1, the spatially steep distribution f3 and f2 accounts for H-field cancellation on the phantom/tissue surface.

$$f_1(x, y, z) = Ae^{-\frac{z}{2a}} \cos^2 \left( \frac{\pi}{2} \frac{\sqrt{x'^2 + y'^2}}{5a} \right)$$

$$f_2(x, y, z) = Ae^{-\frac{z}{a}} \frac{a^2}{a^2 + x'^2} \left( 3 - e^{-\frac{2z}{a}} \right) \cos^2 \left( \frac{\pi}{2} \frac{y'}{3a} \right)$$

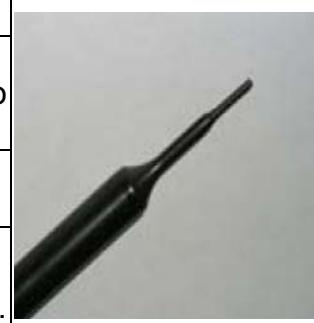
$$f_3(x, y, z) = A \frac{a^2}{\frac{a^2}{4} + x'^2 + y'^2} \left( e^{-\frac{2z}{a}} + \frac{a^2}{2(a + 2z)^2} \right)$$

## 2.2 DASY E-Field Probe

The SAR measurement is conducted with the dosimetric probe manufactured by SPEAG. The probe is specially designed and calibrated for use in liquid with high permittivity. The dosimetric probe has special calibration in liquid at different frequency. SPEAG conducts the probe calibration in compliance with international and national standards (e.g. IEEE 1528, EN 62209-1, IEC 62209, etc.) under ISO 17025. The calibration data are in Appendix D.

### 2.2.1 Isotropic E-Field Probe Specification

<b>Model</b>	Ex3DV4
<b>Construction</b>	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
<b>Frequency</b>	10 MHz to 6 GHz Linearity: $\pm 0.2$ dB (30 MHz to 6 GHz)
<b>Directivity</b>	$\pm 0.3$ dB in HSL (rotation around probe axis) $\pm 0.5$ dB in tissue material (rotation normal to probe axis)
<b>Dynamic Range</b>	10 $\mu$ W/g to 100 mW/g Linearity: $\pm 0.2$ dB (noise: typically < 1 $\mu$ W/g)
<b>Dimensions</b>	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
<b>Application</b>	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.



### 2.3 Boundary Detection Unit and Probe Mounting Device

The DASY probes use a precise connector and an additional holder for the probe, consisting of a plastic tube and a flexible silicon ring to center the probe. The connector at the DAE is flexibly mounted and held in the default position with magnets and springs. Two switching systems in the connector mount detect frontal and lateral probe collisions and trigger the necessary software response.



### 2.4 DATA Acquisition Electronics (DAE) and Measurement Server

The data acquisition electronics (DAE) consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit.

Transmission to the measurement server is accomplished through an optical downlink for data and status information as well as an optical uplink for commands and the clock.

The input impedance of the DAE4 is 200M Ohm; the inputs are symmetrical and floating. Common mode rejection is above 80dB.



The DASY5 measurement server is based on a PC/104 CPU board with a 400MHz intel ULV Celeron, 128MB chipdisk and 128MB RAM. The necessary circuits for communication with the DAE electronics box, as well as the 16 bit AD converter system for optical detection and digital I/O interface are contained on the DASY5 I/O board, which is directly connected to the PC/104 bus of the CPU board.



## 2.5 Robot

The DASY5 system uses the high precision robots TX90 XL type out of the newer series from Stäubli SA (France). For the 6-axis controller DASY5 system, the CS8C robot controller version from Stäubli is used.

The XL robot series have many features that are important for our application:

- High precision (repeatability 0.02 mm)
- High reliability (industrial design)
- Jerk-free straight movements
- Low ELF interference (the closed metallic construction shields against motor control fields)
- 6-axis controller



## 2.6 Light Beam Unit

The light beam switch allows automatic "tooling" of the probe. During the process, the actual position of the probe tip with respect to the robot arm is measured, as well as the probe length and the horizontal probe offset. The software then corrects all movements, such that the robot coordinates are valid for the probe tip.

The repeatability of this process is better than 0.1 mm. If a position has been taught with an aligned probe, the same position will be reached with another aligned probe within 0.1 mm, even if the other probe has different dimensions. During probe rotations, the probe tip will keep its actual position.



## 2.7 Device Holder

The DASY5 device holder is designed to cope with different positions given in the standard. It has two scales for the device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear reference points). The rotation center for both scales is the ear reference point (EPR).

Thus the device needs no repositioning when changing the angles.

The DASY5 device holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivity  $\epsilon_r = 3$  and loss tangent  $\delta = 0.02$ . The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.



## 2.8 SAM Twin Phantom

The SAM twin phantom is a fiberglass shell phantom with 2mm shell thickness (except the ear region where shell thickness increases to 6mm). It has three measurement areas:

- Left head
- Right head
- Flat phantom



The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. A white cover is provided to tap the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. On the phantom top, three reference markers are provided to identify the phantom position with respect to the robot.

### 3. Tissue Simulating Liquid

#### 3.1 The composition of the tissue simulating liquid

INGREDIENT (% Weight)	835MHz Head	835MHz Body	1900MHz Head	1900MHz Body
<b>Water</b>	40.45	52.4	54.90	40.5
<b>Salt</b>	1.45	1.40	0.18	0.50
<b>Sugar</b>	57.6	45.0	0.00	58.0
<b>HEC</b>	0.40	1.00	0.00	0.50
<b>Preventol</b>	0.10	0.20	0.00	0.50
<b>DGBE</b>	0.00	0.00	44.92	0.00

### 3.2 Tissue Calibration Result

The dielectric parameters of the liquids were verified prior to the SAR evaluation using APREL Dielectric Probe Kit and Anritsu MS4623B Vector Network Analyzer.

<b>Body Tissue Simulant Measurement</b>				
Frequency [MHz]	Description	Dielectric Parameters		Tissue Temp. [°C]
		$\epsilon_r$	$\sigma$ [s/m]	
835 MHz	Reference result ± 5% window	55.2 52.44 to 57.96	0.97 0.9215 to 1.0185	N/A
	29-May-10	56.03	0.95	20.6
824.2 MHz	Low Channel	57.12	0.93	20.6
836.4 MHz	Middle Channel	56.74	0.96	20.6
848.8 MHz	High Channel	55.81	0.98	20.6

<b>Body Tissue Simulant Measurement</b>				
Frequency [MHz]	Description	Dielectric Parameters		Tissue Temp. [°C]
		$\epsilon_r$	$\sigma$ [s/m]	
1900 MHz	Reference result ± 5% window	53.3 50.635 to 55.965	1.52 1.444 to 1.596	N/A
	30-May-10	52.71	1.51	20.3
1850.2 MHz	Low Channel	54.67	1.47	20.3
1880 MHz	Middle Channel	53.21	1.49	20.3
1909.8 MHz	High Channel	52.44	1.53	20.3

### 3.3 Tissue Dielectric Parameters for Head and Body Phantoms

The head tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 in P1528 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness variations in a human head. Other head and body tissue parameters that have not been specified in P1528 are derived from the tissue dielectric parameters computed from the 4-Cole-Cole equations described in Reference [12] and extrapolated according to the head parameters specified in P1528.

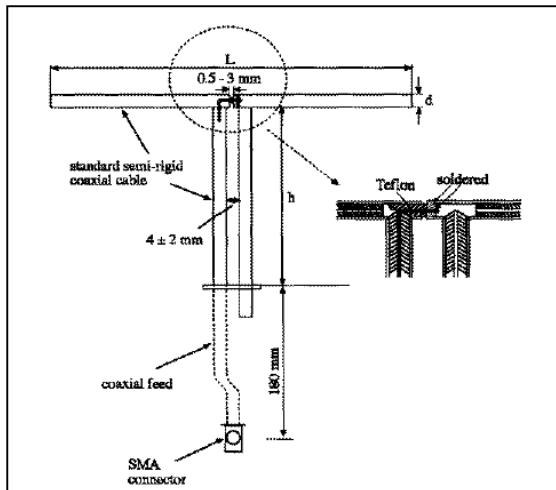
Target Frequency (MHz)	Head		Body	
	$\epsilon_r$	$\sigma$ (S/m)	$\epsilon_r$	$\sigma$ (S/m)
150	52.3	0.76	61.9	0.80
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94
835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	0.98	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800 – 2000	40.0	1.40	53.3	1.52
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	52.0	2.73
5800	35.3	5.27	48.2	6.00

( $\epsilon_r$  = relative permittivity,  $\sigma$  = conductivity and  $\rho$  = 1000 kg/m<sup>3</sup>)

## 4. SAR Measurement Procedure

### 4.1 SAR System Validation

#### 4.1.1 Validation Dipoles



The dipoles used is based on the IEEE-1528 standard, and is complied with mechanical and electrical specifications in line with the requirements of both IEEE and FCC Supplement C. the table below provides details for the mechanical and electrical specifications for the dipoles.

Frequency	L (mm)	h (mm)	d (mm)
835MHz	165.0	900	3.6
1900MHz	68.0	39.5	3.6

#### 4.1.2 Validation Result

##### System Performance Check at 835MHz &1900MHz

###### Validation Kit: D835V2

Frequency [MHz]	Description	SAR [w/kg] 1g	SAR [w/kg] 10g	Tissue Temp. [°C]
835 MHz	Reference result ± 10% window	9.33 8.397 to 10.263	6.42 5.778 to 7.062	N/A
	29-May-10	9.44	5.8	20.6

###### Validation Kit: D1900V2

Frequency [MHz]	Description	SAR [w/kg] 1g	SAR [w/kg] 10g	Tissue Temp. [°C]
1900 MHz	Reference result ± 10% window	36 32.4 to 39.6	20.78 18.702 to 22.858	N/A
	30-May-10	37.48	20.84	20.3

Note: 1. The power level is used 250mW

2. All SAR values are normalized to 1W forward power.

#### **4.2 SAR Measurement Procedure**

The calculates SAR using the following equation,

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

$\sigma$ : represents the simulated tissue conductivity

$\rho$ : represents the tissue density

The EUT is set to transmit at the required power in line with product specification, at each frequency relating to the LOW, MID, and HIGH channel settings.

Pre-scans are made on the device to establish the location for the transmitting antenna, using a large area scan in either air or tissue simulation fluid.

The EUT is placed against the Universal Phantom where the maximum area scan dimensions are larger than the physical size of the resonating antenna. When the scan size is not large enough to cover the peak SAR distribution, it is modified by either extending the area scan size in both the X and Y directions, or the device is shifted within the predefined area.

The area scan is then run to establish the peak SAR location (interpolated resolution set at 1mm<sup>2</sup> )which is then used to orient the center of the zoom scan. The zoom scan is then executed and the 1g and 10g averages are derived from the zoom scan volume (interpolated resolution set at 1mm<sup>3</sup> ).

## 5. SAR Exposure Limits

SAR assessments have been made in line with the requirements of IEEE-1528, FCC Supplement C, and comply with ANSI/IEEE C95.1-1992 "Uncontrolled Environments" limits. These limits apply to a location which is deemed as "Uncontrolled Environment" which can be described as a situation where the general public may be exposed to an RF source with no prior knowledge or control over their exposure.

**Limits for General Population/Uncontrolled Exposure (W/kg)**

Type Exposure	Uncontrolled Environment Limit
Spatial Peak SAR (1g cube tissue for brain or body)	<b>1.60 W/kg</b>
Spatial Average SAR (whole body)	<b>0.08 W/kg</b>
Spatial Peak SAR (10g for hands, feet, ankles and wrist)	<b>4.00 W/kg</b>

## 6. Test Equipment List

Instrument	Manufacturer	Model No.	Serial No.	Last Calibration	Next Calibration
Stäubli Robot TX60L	Stäubli	TX60L	F09/5BL1A1/A06	May. 2009	only once
Controller	Speag	CS8c	N/A	May. 2009	only once
Aprel Reference Dipole 835MHz	Speag	D835V2	SN:4d094	Mar. 2010	Mar. 2012
Aprel Reference Dipole 1900MHz	Speag	D1900V2	SN:5d121	Mar. 2010	Mar. 2012
SAM Twin Phantom	Speag	QD000 P40 CA	Tp 1515	N/A	N/A
Device Holder	Speag	N/A	N/A	N/A	N/A
Data Acquisition Electronic	Speag	DAE4	1204	Apr. 2010	Apr. 2011
E-Field Probe	Speag	EX3DV4	3710	Mar. 2010	Mar. 2011
SAR Software	Speag	DASY5	V5.0 Build 125	N/A	N/A
Aprel Dipole Spaccer	Aprel	ALS-DS-U	QTK-295	N/A	N/A
Power Amplifier	Mini-Circuit	ZHL-42	D051404-20	N/A	N/A
Directional Coupler	Agilent	778D-012	50550	N/A	N/A
Universal Radio Communication Tester	R&S	CMU 200	104846	May. 2010	May. 2011
Vector Network	Anritsu	MS4623B	992801	Aug. 2008	Aug. 2009
Signal Generator	Anritsu	MG3692A	042319	Jun. 2010	Jun. 2011
Power Meter	Anritsu	ML2487A	6K00001447	Apr. 2010	Apr. 2011
Wide Bandwidth Sensor	Anritsu	MA2491	030677	Apr. 2010	Apr. 2011

## 7. Measurement Uncertainty

Uncertainty								
Error Description	Uncertainty value	Prob. Dist.	Div.	( $c_i$ ) 1g	( $c_i$ ) 10g	Std. Unc. (1g)	Std. Unc. (10g)	( $v_i$ ) $v_{eff}$
<b>Measurement System</b>								
Probe Calibration	±5.9 %	N	1	1	1	±5.9 %	±5.9 %	∞
Axial Isotropy	±4.7 %	R	$\sqrt{3}$	0.7	0.7	±1.9 %	±1.9 %	∞
Hemispherical Isotropy	±9.6 %	R	$\sqrt{3}$	0.7	0.7	±3.9 %	±3.9 %	∞
Boundary Effects	±1.0 %	R	$\sqrt{3}$	1	1	±0.6 %	±0.6 %	∞
Linearity	±4.7 %	R	$\sqrt{3}$	1	1	±2.7 %	±2.7 %	∞
System Detection Limits	±1.0 %	R	$\sqrt{3}$	1	1	±0.6 %	±0.6 %	∞
Readout Electronics	±0.3 %	N	1	1	1	±0.3 %	±0.3 %	∞
Response Time	±0.8 %	R	$\sqrt{3}$	1	1	±0.5 %	±0.5 %	∞
Integration Time	±2.6 %	R	$\sqrt{3}$	1	1	±1.5 %	±1.5 %	∞
RF Ambient Noise	±3.0 %	R	$\sqrt{3}$	1	1	±1.7 %	±1.7 %	∞
RF Ambient Reflections	±3.0 %	R	$\sqrt{3}$	1	1	±1.7 %	±1.7 %	∞
Probe Positioner	±0.4 %	R	$\sqrt{3}$	1	1	±0.2 %	±0.2 %	∞
Probe Positioning	±2.9 %	R	$\sqrt{3}$	1	1	±1.7 %	±1.7 %	∞
Max. SAR Eval.	±1.0 %	R	$\sqrt{3}$	1	1	±0.6 %	±0.6 %	∞
<b>Test Sample Related</b>								
Device Positioning	±2.9 %	N	1	1	1	±2.9 %	±2.9 %	145
Device Holder	±3.6 %	N	1	1	1	±3.6 %	±3.6 %	5
Power Drift	±5.0 %	R	$\sqrt{3}$	1	1	±2.9 %	±2.9 %	∞
<b>Phantom and Setup</b>								
Phantom Uncertainty	±4.0 %	R	$\sqrt{3}$	1	1	±2.3 %	±2.3 %	∞
Liquid Conductivity (target)	±5.0 %	R	$\sqrt{3}$	0.64	0.43	±1.8 %	±1.2 %	∞
Liquid Conductivity (meas.)	±2.5 %	N	1	0.64	0.43	±1.6 %	±1.1 %	∞
Liquid Permittivity (target)	±5.0 %	R	$\sqrt{3}$	0.6	0.49	±1.7 %	±1.4 %	∞
Liquid Permittivity (meas.)	±2.5 %	N	1	0.6	0.49	±1.5 %	±1.2 %	∞
Combined Std. Uncertainty						±10.9 %	±10.7 %	387
Expanded STD Uncertainty						±21.9 %	±21.4 %	

## 8. Conducted Power Measurement

### 8.1 GSM Maximum Power

#### Maximum Power-GPRS 850MHz Band 2 Slot

Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
824.2	31.77	0.4	<b>32.17</b>	1.65
836.4	31.88	0.4	<b>32.28</b>	1.69
848.8	31.80	0.4	<b>32.20</b>	1.66

#### Maximum Power-GPRS 1900MHz Band 2 Slot

Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
1850.2	28.56	0.6	<b>29.16</b>	0.82
1880	28.66	0.6	<b>29.26</b>	0.84
1909.8	28.61	0.6	<b>29.21</b>	0.83

#### Maximum Power-EGPRS 850MHz Band 2 Slot

Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
824.2	27.19	0.4	<b>27.59</b>	0.57
836.4	27.21	0.4	<b>27.61</b>	0.58
848.8	27.12	0.4	<b>27.52</b>	0.56

#### Maximum Power-EGPRS 1900MHz Band 2 Slot

Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
1850.2	25.02	0.6	<b>25.62</b>	0.36
1880	25.12	0.6	<b>25.72</b>	0.37
1909.8	25.11	0.6	<b>25.71</b>	0.37

## 8.2 WCDMA Maximum Power

### Maximum Power-WCDMA Band V RMC

Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
826.4	24.31	0.4	<b>24.71</b>	0.30
836.6	24.47	0.4	<b>24.87</b>	0.31
846.6	23.92	0.4	<b>24.32</b>	0.27

### Maximum Power-WCDMA Band II RMC

Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
1852.4	24.11	0.6	<b>24.71</b>	0.30
1880	24.29	0.6	<b>24.89</b>	0.31
1907.6	23.91	0.6	<b>24.51</b>	0.28

### WCDMA Band V HSDPA

Frequency (MHz)	Set 1		Set 2		Set 3		Set 4	
	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)
826.4	<b>24.43</b>	<b>0.28</b>	23.78	0.24	23.62	0.23	23.61	0.23
836.4	<b>24.69</b>	<b>0.29</b>	24.18	0.26	23.81	0.24	24.11	0.26
846.6	<b>24.46</b>	<b>0.28</b>	24.20	0.26	24.08	0.26	24.04	0.25
$\beta_c$	2		12		15		15	
$\beta_d$	15		15		8		4	
$\Delta_{ACK}$ , $\Delta_{NACK}$ $\Delta_{CQI}$	8		8		8		8	
MPR	0		0		0.5		0.5	

Cable loss: 0.4dB for 850MHz ; 0.6dB for 1900MHz

WCDMA Band II HSDPA									
Frequency (MHz)	Set 1		Set 2		Set 3		Set 4		
	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)	
1852.4	<b>24.68</b>	<b>0.29</b>	24.01	0.25	23.88	0.24	23.85	0.24	
1880	<b>24.84</b>	<b>0.30</b>	24.11	0.26	24.28	0.27	23.93	0.25	
1907.6	<b>24.13</b>	<b>0.26</b>	24.07	0.26	24.01	0.25	23.96	0.25	
$\beta_c$	2		12		15		15		
$\beta_d$	15		15		8		4		
$\Delta_{ACK}$ , $\Delta_{NACK}$ $\Delta_{CQI}$	8		8		8		8		
MPR	0		0		0.5		0.5		
Cable loss: 0.4dB for 850MHz ; 0.6dB for 1900MHz									

WCDMA V HSUPA										
Frequency (MHz)	Set 1		Set 2		Set 3		Set 4		Set 5	
	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)	(dBm)	(Watts)
826.4	<b>23.79</b>	<b>0.24</b>	22.70	0.19	22.72	0.19	22.63	0.18	23.28	0.21
836.6	<b>24.06</b>	<b>0.25</b>	22.40	0.17	22.62	0.18	22.96	0.20	23.45	0.22
846.6	<b>24.02</b>	<b>0.25</b>	22.71	0.19	22.88	0.19	23.06	0.20	23.32	0.21
$\beta_c$	11		6		15		2		15	
$\beta_d$	15		15		9		15		15	
$\Delta_{ACK}$ , $\Delta_{NACK}$ $\Delta_{CQI}$	8		8		8		8		8	
AGV	20		12		15		17		21	
Cable loss: 0.4dB for 850MHz ; 0.6dB for 1900MHz										

WCDMA II HSUPA										
Frequency (MHz)	Set 1		Set 2		Set 3		Set 4		Set 5	
	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)
1852.4	<b>23.71</b>	<b>0.23</b>	22.52	0.18	24.02	0.25	23.29	0.21	23.16	0.21
1880	<b>24.37</b>	<b>0.27</b>	23.03	0.20	23.45	0.22	23.21	0.21	23.64	0.23
1907.6	<b>23.60</b>	<b>0.23</b>	22.09	0.16	23.55	0.23	22.42	0.17	23.59	0.23
$\beta_c$	11		6		15		2		15	
$\beta_d$	15		15		9		15		15	
$\Delta_{ACK}$ , $\Delta_{NACK}$ $\Delta_{CQI}$	8		8		8		8		8	
AGV	20		12		15		17		21	

Cable loss: 0.4dB for 850MHz ; 0.6dB for 1900MHz

- Note:
1. All HSDPA & HSUPA testing was done in Set1 configuration.
  2. The MPR has been implemented into the Gobi2000 Module per the 3GPP standard.

### 8.3 CDMA 2000 Maximum Power

Mode	Test Case			BC0 (850MHz) Channel		
	Num.	FWD RC/TA P	REV RC/TAP	Conducted Power (dBm)		
				1013	384	777
1x	1	RC1	RC1 (SO2)	24.64	24.60	24.53
	2	RC1	RC1 (SO55)	24.73	24.49	24.51
	3	RC2	RC2 (SO9)	24.54	24.53	24.48
	4	RC2	RC2 (SO55)	24.51	24.66	24.45
	5	RC3	RC3 (SO55)	24.82	24.86	24.85
	6	RC3	RC3 (SO32)	24.81	24.80	24.86
1x EV-DO Rel 0	7a	FTAP rate = 307kbps (2 slot, QPSK)	RTAP rate = 9.6kbps	24.07	24.14	24.00
	7b		RTAP rate = 19.2kbps	24.06	24.07	23.98
	7c		RTAP rate = 38.4kbps	24.21	24.18	24.04
	7d		RTAP rate = 76.8kbps	24.14	24.17	24.03
	7e		RTAP rate = 153.6kbps	24.09	24.12	23.99
1x EV-DO Rev A	8a	FETAP rate = 307kbps (2 slot, ACK channe l is transm itted at all the slots)	RETAP – payload size = 128	24.66	24.61	24.50
	8b		RETAP – payload size = 256	24.70	24.57	24.54
	8c		RETAP – payload size = 512	24.56	24.48	24.40
	8d		RETAP – payload size = 768	24.47	24.41	24.32
	8e		RETAP – payload size = 1024	24.46	24.39	24.33

	<b>8f</b>	<b>RETAP – payload size = 1536</b>	24.39	24.44	24.35
	<b>8g</b>	<b>RETAP – payload size = 2048</b>	24.49	24.46	24.46
	<b>8h</b>	<b>RETAP – payload size = 3072</b>	24.50	24.43	24.39
	<b>8i</b>	<b>RETAP – payload size = 4096</b>	24.56	24.40	24.25
	<b>8j</b>	<b>RETAP – payload size = 6144</b>	24.29	24.24	24.16
	<b>8k</b>	<b>RETAP – payload size = 8192</b>	24.42	24.44	24.14
	<b>8l</b>	<b>RETAP – payload size = 12288</b>	24.27	24.21	24.15

Mode	Test Case			BC1 (1900MHz) Channel		
	Nu m.	FWD RC/TAP	REV RC/TAP	Conducted Power (dBm)		
				25	600	1175
1x	1	RC1	RC1 (SO2)	24.82	24.78	24.62
	2	RC1	RC1 (SO55)	24.57	24.76	24.58
	3	RC2	RC2 (SO9)	24.54	24.64	24.39
	4	RC2	RC2 (SO55)	24.51	24.63	24.57
	5	RC3	RC3 (SO55)	24.63	24.76	24.15
	6	RC3	RC3 (SO32)	24.78	24.76	24.17
1x EV-DO Rel 0	7a	FTAP rate = 307kbp s (2 slot, QPSK)	RTAP rate = 9.6kbps	24.22	24.31	23.76
	7b		RTAP rate = 19.2kbps	24.15	24.23	23.62
	7c		RTAP rate = 38.4kbps	24.04	24.23	23.61
	7d		RTAP rate = 76.8kbps	24.04	24.25	23.62
	7e		RTAP rate = 153.6kbps	24.02	24.26	23.61
1x EV-DO Rev A	8a	FETAP rate = 307kbp s (2 slot, ACK channel is transmi tted at all the slots)	RETAP – payload size = 128	24.50	24.65	24.11
	8b		RETAP – payload size = 256	24.44	24.59	24.03
	8c		RETAP – payload size = 512	24.46	24.55	23.87
	8d		RETAP – payload size = 768	24.45	24.54	24.00
	8e		RETAP – payload size = 1024	24.49	24.57	24.15
	8f		RETAP – payload size = 1536	24.52	24.56	24.02
	8g		RETAP – payload size = 2048	24.45	24.57	23.81

	<b>8h</b>		<b>RETAP – payload size = 3072</b>	24.32	24.53	23.92
	<b>8i</b>		<b>RETAP – payload size = 4096</b>	24.40	24.49	23.81
	<b>8j</b>		<b>RETAP – payload size = 6144</b>	24.46	24.36	23.80
	<b>8k</b>		<b>RETAP – payload size = 8192</b>	24.29	24.40	23.84
	<b>8l</b>		<b>RETAP – payload size = 12288</b>	24.34	24.42	23.73

**Note:** All conducted measurements are based on an average detector.

## 9. Test Results

### 9.1 SAR Test Results Summary

SAR MEASUREMENT									
Ambient Temperature (°C): $21.5 \pm 2$				Relative Humidity (%): 55					
Liquid Temperature (°C): $20.6 \pm 2$				Depth of Liquid (cm):>15					
Product: Tablet PC									
Test Mode: GSM 850 GPRS 2 Slot									
Test Position Body	Antenna Position	Frequency		Conducted Power (dBm)	<b>SAR 1g</b> (W/kg)	Limit (W/kg)			
		Channel	MHz						
Top	Fixed	128	824.2	32.17	0.611	1.6			
Top	Fixed	189	836.4	32.28	0.643	1.6			
Top	Fixed	251	848.8	32.20	0.698	1.6			
Back	Fixed	189	836.4	32.28	0.262	1.6			
Test Mode: GSM 850 EGPRS 2 Slot									
Top	Fixed	251	848.8	27.52	0.237	1.6			

SAR MEASUREMENT									
Ambient Temperature (°C): 21.1 ± 2				Relative Humidity (%): 56					
Liquid Temperature (°C): 20.3 ± 2				Depth of Liquid (cm):>15					
Product: Tablet PC									
Test Mode: PCS 1900 GPRS 2 Slot									
Test Position Body	Antenna Position	Frequency		Conducted Power (dBm)	SAR 1g (W/kg)	Limit (W/kg)			
Top	Fixed	Channel 512	MHz 1850.2	29.16	0.752	1.6			
Top	Fixed	661	1880	29.26	0.879	1.6			
Top	Fixed	810	1909.8	29.21	0.952	1.6			
Back	Fixed	661	1880	29.26	0.408	1.6			
Test Mode: PCS 1900 EGPRS 2 Slot									
Top	Fixed	810	1909.8	25.71	0.440	1.6			

<b>SAR MEASUREMENT</b>									
Ambient Temperature (°C): 21.5 ± 2				Relative Humidity (%): 55					
Liquid Temperature (°C): 20.6 ± 2				Depth of Liquid (cm):>15					
Product: Tablet PC									
Test Mode: WCDMA Band V RMC									
Test Position Body	Antenna Position	Frequency		Conducted Power (dBm)	<b>SAR 1g (W/kg)</b>	Limit (W/kg)			
		Channel	MHz						
Top	Fixed	4132	826.4	24.71	0.565	1.6			
Top	Fixed	4183	836.6	24.87	0.611	1.6			
Top	Fixed	4233	846.6	24.32	0.633	1.6			
Back	Fixed	4183	836.6	24.87	0.221	1.6			
Test Mode: WCDMA Band V HSDPA									
Top	Fixed	4233	846.6	24.46	0.556	1.6			
Test Mode: WCDMA Band V HSUPA									
Top	Fixed	4233	846.6	24.02	0.558	1.6			

<b>SAR MEASUREMENT</b>									
Ambient Temperature (°C): 21.1 ± 2				Relative Humidity (%): 56					
Liquid Temperature (°C): 20.3 ± 2				Depth of Liquid (cm):>15					
Product: Tablet PC									
Test Mode: Test Mode: WCDMA Band II RMC									
Test Position Body	Antenna Position	Frequency		Conducted Power (dBm)	<b>SAR 1g</b> (W/kg)	Limit (W/kg)			
		Channel	MHz						
Top	Fixed	9262	1852.4	24.71	<b>1.18</b>	1.6			
Top	Fixed	9400	1880	24.89	<b>1.24</b>	1.6			
Top	Fixed	9538	1907.6	24.51	<b>1.09</b>	1.6			
Back	Fixed	9400	1880	24.89	<b>0.487</b>	1.6			
Test Mode: Test Mode: WCDMA Band II HSDPA									
Top	Fixed	9400	1880	24.84	<b>1.11</b>	1.6			
Test Mode: Test Mode: WCDMA Band II HSUPA									
Top	Fixed	9400	1880	24.37	<b>1.06</b>	1.6			

SAR MEASUREMENT									
Ambient Temperature (°C): 21.5 ± 2				Relative Humidity (%): 55					
Liquid Temperature (°C): 20.6 ± 2				Depth of Liquid (cm):>15					
Product: Tablet PC									
Test Mode: CDMA 835 MHz									
Test Position Body	Antenna Position	Frequency		Conducted Power (dBm)	<b>SAR 1g (W/kg)</b>	Limit (W/kg)			
		Channel	MHz						
Top	Fixed	1013	824.7	24.82	0.322	1.6			
Top	Fixed	384	836.52	24.86	0.339	1.6			
Top	Fixed	777	848.31	24.85	0.370	1.6			
Back	Fixed	384	836.52	24.86	0.227	1.6			
Test Mode: EVDO Rel 0 835 MHz									
Top	Fixed	777	848.31	24.04	0.345	1.6			
Test Mode: EVDO Rel A 835 MHz									
Top	Fixed	777	848.31	24.54	0.367	1.6			

<b>SAR MEASUREMENT</b>									
Ambient Temperature (°C): 21.1 ± 2				Relative Humidity (%): 56					
Liquid Temperature (°C): 20.3 ± 2				Depth of Liquid (cm):>15					
Product: Tablet PC									
Test Mode: CDMA 1900 MHz									
Test Position Body	Antenna Position	Frequency		Conducted Power (dBm)	<b>SAR 1g</b> (W/kg)	Limit (W/kg)			
		Channel	MHz						
Top	Fixed	25	1851.25	24.82	0.943	1.6			
Top	Fixed	600	1880	24.78	1.04	1.6			
Top	Fixed	1178	1908.75	24.62	0.952	1.6			
Back	Fixed	600	1880	24.78	0.524	1.6			
Test Mode: EVDO Rel 0 1900 MHz									
Top	Fixed	600	1880	24.31	1.02	1.6			
Test Mode: EVDO Rel A 1900 MHz									
Top	Fixed	600	1880	24.65	1.03	1.6			

**Appendix****Appendix A. SAR System Validation Data****Appendix B. SAR measurement Data****Appendix C. Test Setup Photographs & EUT Photographs****Appendix D. Probe Calibration Data****Appendix E. Dipole Calibration Data**

**Appendix A. SAR System Validation Data**

Date/Time: 5/29/2010

Test Laboratory: Quietek

**SystemPerformanceCheck-835MHz\_Body****DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d094**

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

Medium parameters used :  $f = 835 \text{ MHz}$ ;  $\sigma = 0.95 \text{ mho/m}$ ;  $\epsilon_r = 56$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature (°C) : 21.5, Liquid Temperature (°C) : 20.6

DASY4 Configuration:

- Probe: EX3DV4 – SN3710; ConvF(8.95, 8.95, 8.95); Calibrated: 3/05/2010
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Left Table; Type: SAM
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**835MHz\_Body /Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 3.1 mW/g

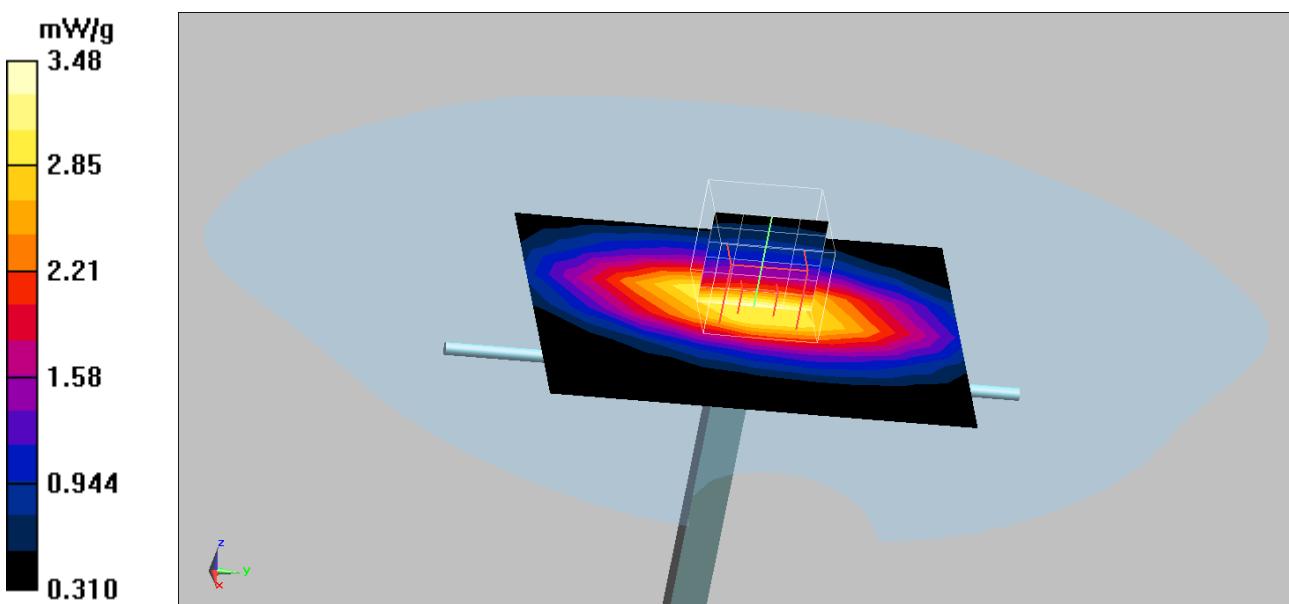
**835MHz\_Body /Zoom Scan (7x7x7) (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

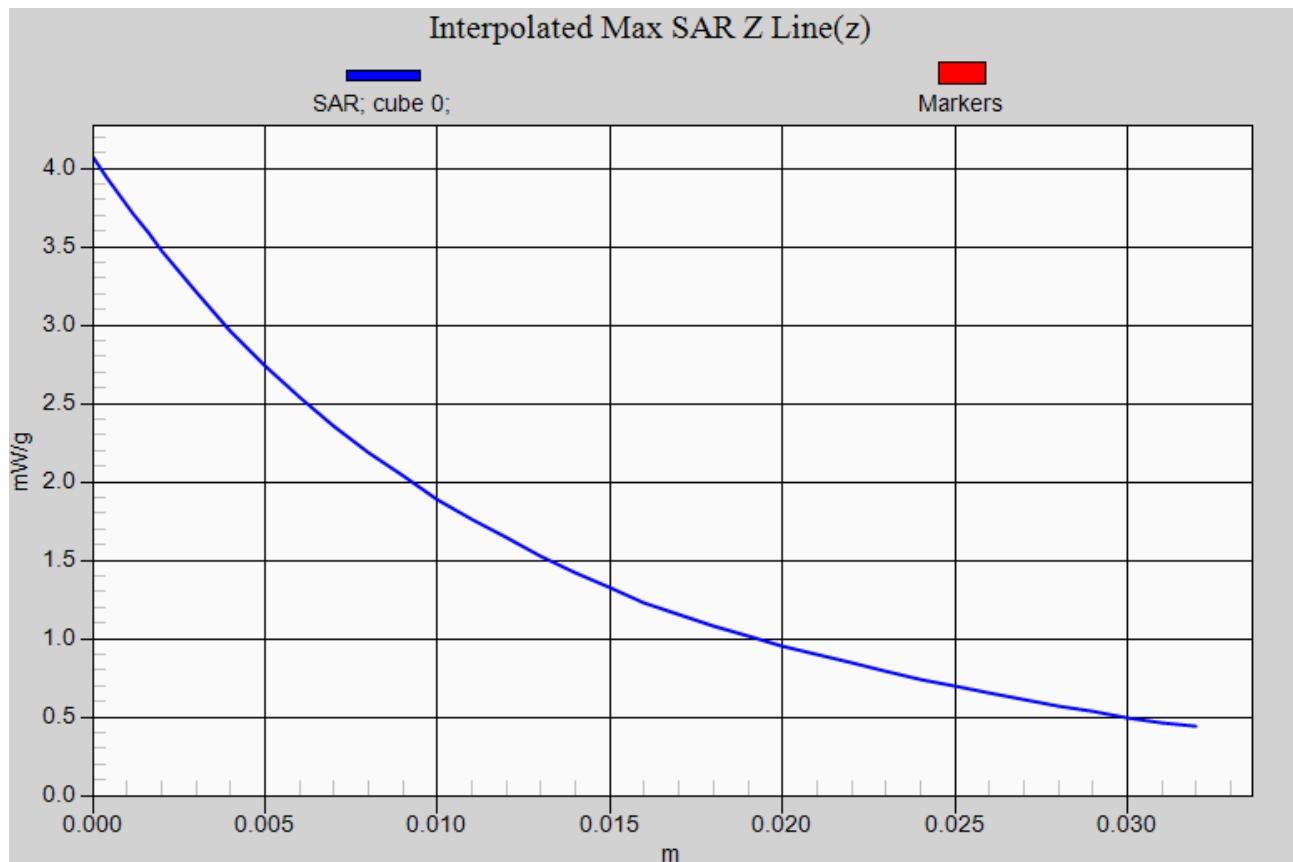
Reference Value = 61.5 V/m; Power Drift = -0.046 dB

Peak SAR (extrapolated) = 4.07 W/kg

**SAR(1 g) = 2.36 mW/g; SAR(10 g) = 1.45 mW/g**

Maximum value of SAR (measured) = 3.48 mW/g





Date/Time: 5/30/2010

Test Laboratory: Quietek

**System Performance Check\_1900MHz-Body****DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d121**

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

Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.51 \text{ mho/m}$ ;  $\epsilon_r = 52.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 20.3

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(7.45, 7.45, 7.45); Calibrated: 3/05/2010
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Right Table; Type: SAM
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**1900MHz\_Body/Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 11 mW/g

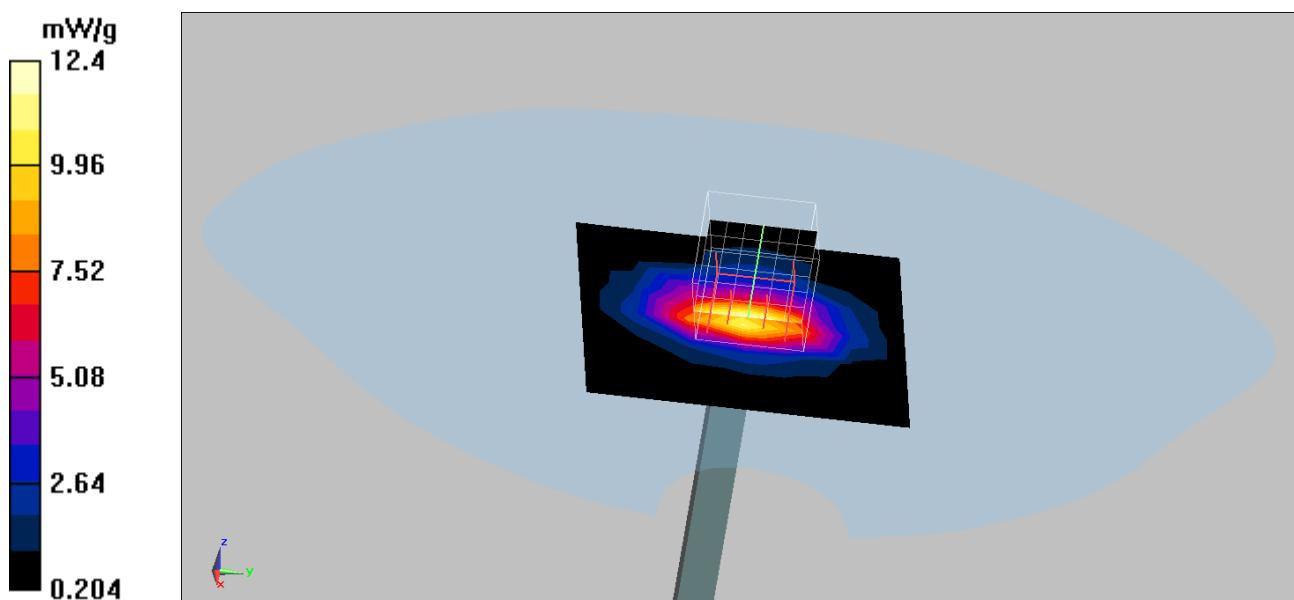
**1900MHz\_Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

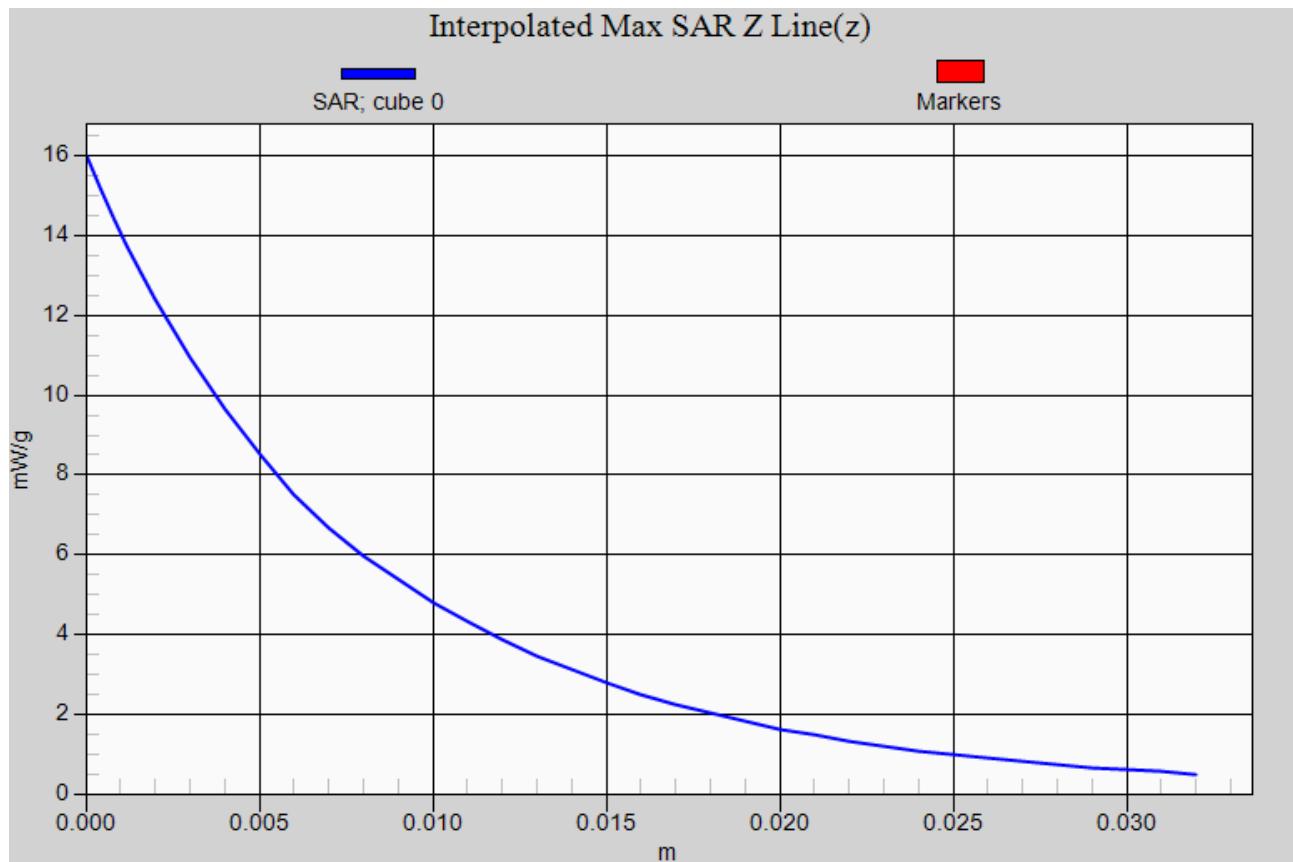
Reference Value = 94.7 V/m; Power Drift = -0.122 dB

Peak SAR (extrapolated) = 16 W/kg

**SAR(1 g) = 9.37 mW/g; SAR(10 g) = 5.21 mW/g**

Maximum value of SAR (measured) = 12.4 mW/g





**Appendix B. SAR measurement Data**

Date/Time: 5/29/2010

Test Laboratory: Quietek

**GSM850\_Body\_128 Top-2 Slot\_GPRS****DUT: Tablet PC ; Type: T10L**

Communication System: FCC GSM\_850MHz\_GPRS -2 Slot; Frequency: 824.2 MHz; Duty Cycle: 1:4.1

Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.93 \text{ mho/m}$ ;  $\epsilon_r = 57.1$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature ( $^{\circ}\text{C}$ ) : 21.5, Liquid Temperature ( $^{\circ}\text{C}$ ) : 20.6

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(8.95, 8.95, 8.95); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Left Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid:  $dx=13\text{mm}$ ,  $dy=13\text{mm}$ 

Maximum value of SAR (measured) = 0.679 mW/g

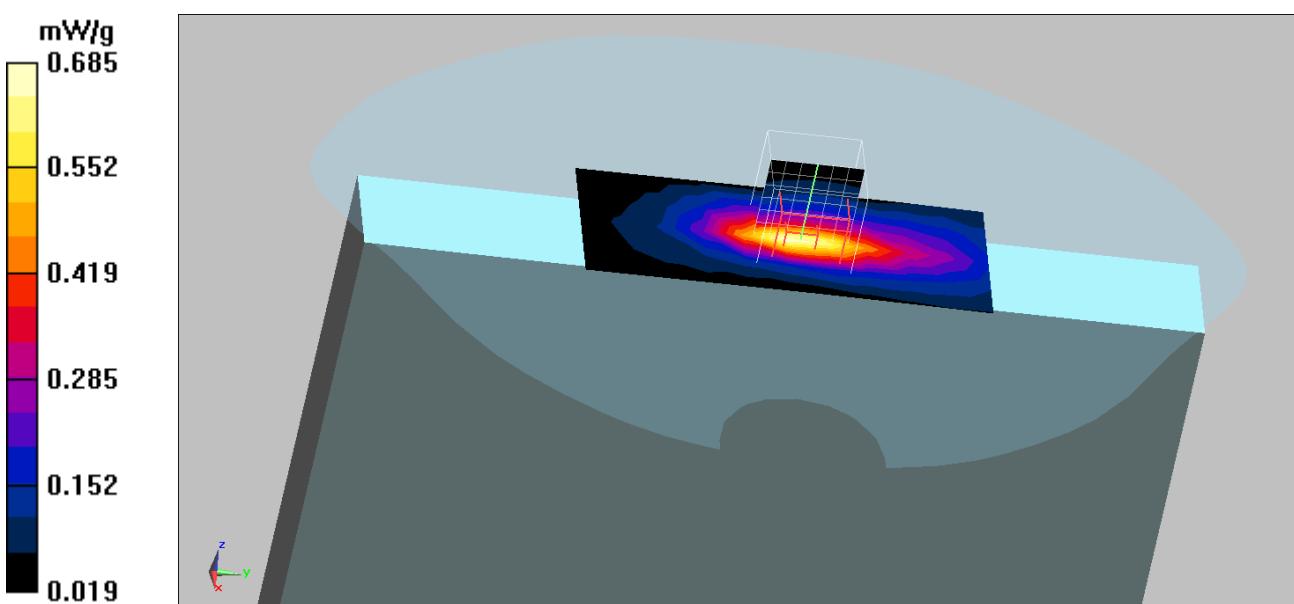
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$ 

Reference Value = 27 V/m; Power Drift = -0.080 dB

Peak SAR (extrapolated) = 1.16 W/kg

**SAR(1 g) = 0.611 mW/g; SAR(10 g) = 0.318 mW/g**

Maximum value of SAR (measured) = 0.685 mW/g



Date/Time: 5/29/2010

Test Laboratory: Quietek

**GSM850\_Body\_189 Top-2 Slot\_GPRS****DUT: Tablet PC ; Type: T10L**

Communication System: FCC GSM\_850MHz\_GPRS -2 Slot; Frequency: 836.4 MHz; Duty Cycle: 1:4.1

Medium parameters used:  $f = 836.4$  MHz;  $\sigma = 0.96$  mho/m;  $\epsilon_r = 56.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature (°C) : 21.5, Liquid Temperature (°C) : 20.6

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(8.95, 8.95, 8.95); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Left Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 0.708 mW/g

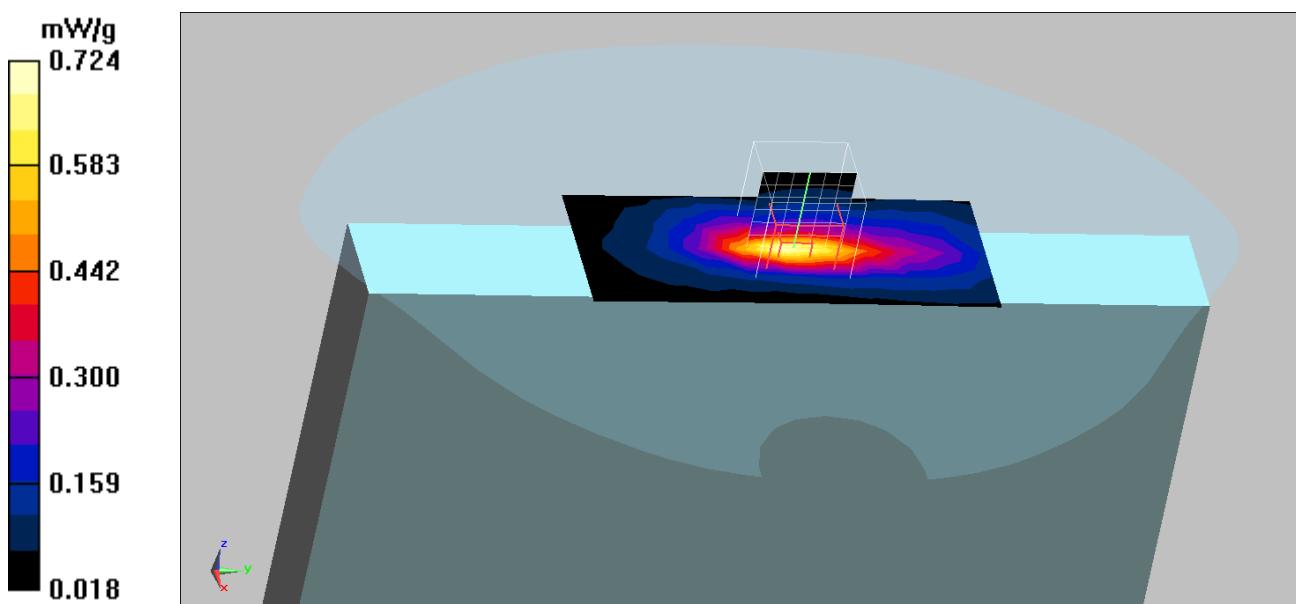
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.3 V/m; Power Drift = 0.112 dB

Peak SAR (extrapolated) = 1.24 W/kg

**SAR(1 g) = 0.643 mW/g; SAR(10 g) = 0.330 mW/g**

Maximum value of SAR (measured) = 0.724 mW/g



Date/Time: 5/29/2010

Test Laboratory: Quietek

**GSM850\_Body\_251 Top-2 Slot\_GPRS****DUT: Tablet PC ; Type: T10L**

Communication System: FCC GSM\_850MHz\_GPRS -2 Slot; Frequency: 848.8 MHz; Duty Cycle: 1:4.1

Medium parameters used:  $f = 848.8$  MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 55.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature (°C) : 21.5, Liquid Temperature (°C) : 20.6

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(8.95, 8.95, 8.95); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Left Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 0.783 mW/g

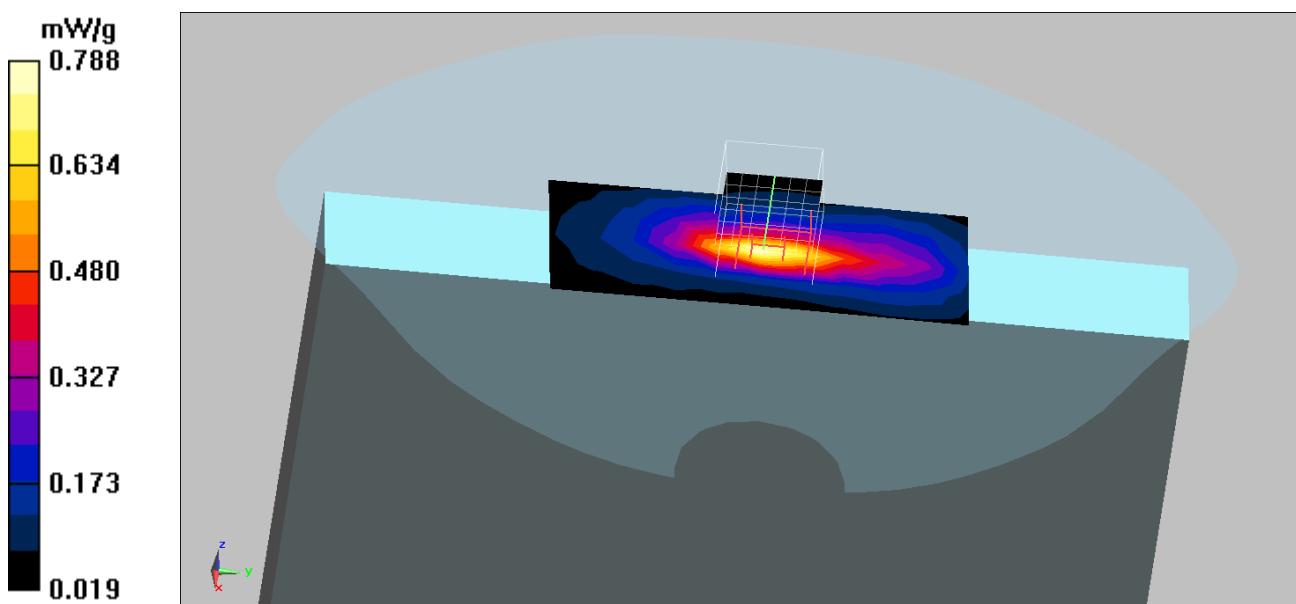
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.1 V/m; Power Drift = 0.061 dB

Peak SAR (extrapolated) = 1.35 W/kg

**SAR(1 g) = 0.698 mW/g; SAR(10 g) = 0.355 mW/g**

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



Date/Time: 5/29/2010

Test Laboratory: Quietek

**GSM850\_Body\_189 Back-2 Slot\_GPRS****DUT: Tablet PC ; Type: T10L**

Communication System: FCC GSM\_850MHz\_GPRS -2 Slot; Frequency: 836.4 MHz; Duty Cycle: 1:4.1

Medium parameters used:  $f = 836.4$  MHz;  $\sigma = 0.96$  mho/m;  $\epsilon_r = 56.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature (°C) : 21.5, Liquid Temperature (°C) : 20.6

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(8.95, 8.95, 8.95); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Left Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 0.266 mW/g

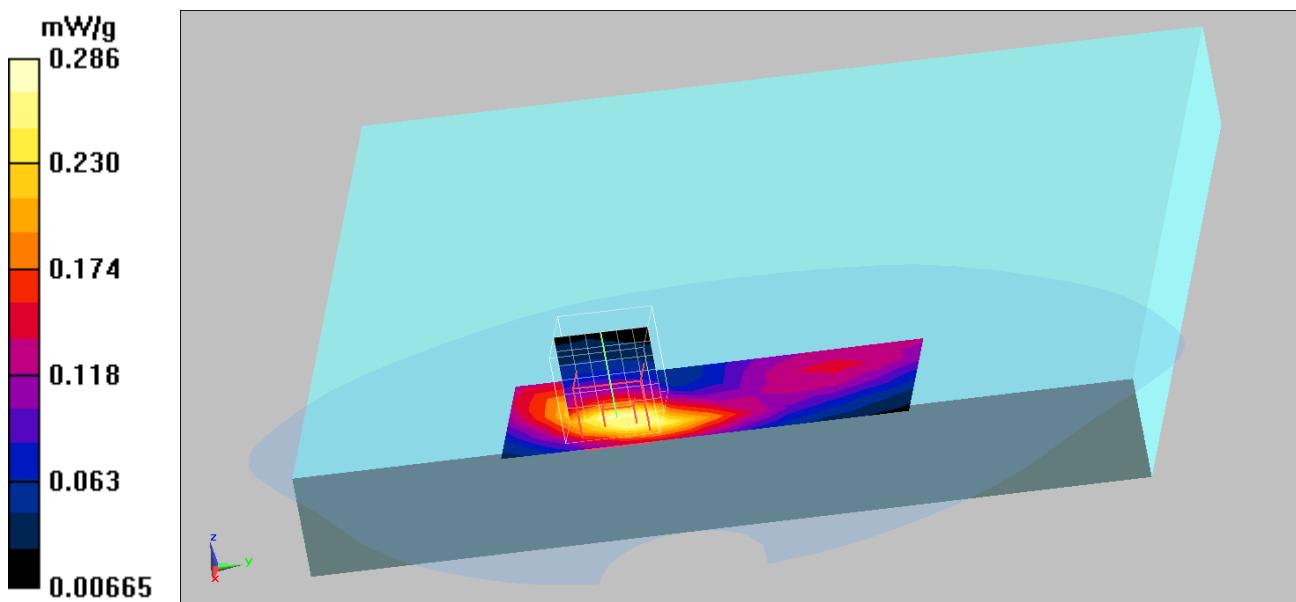
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.2 V/m; Power Drift = -0.122 dB

Peak SAR (extrapolated) = 0.431 W/kg

**SAR(1 g) = 0.262 mW/g; SAR(10 g) = 0.158 mW/g**

Maximum value of SAR (measured) = 0.286 mW/g



Date/Time: 5/29/2010

Test Laboratory: Quietek

**GSM850\_Body\_251 Top-2 Slot\_EGPRS****DUT: Tablet PC ; Type: T10L**

Communication System: FCC GSM\_850MHz\_EGPRS-2 Slot; Frequency: 848.8 MHz; Duty Cycle: 1:4.1

Medium parameters used:  $f = 848.8$  MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 55.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature (°C) : 21.5, Liquid Temperature (°C) : 20.6

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(8.95, 8.95, 8.95); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Left Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

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

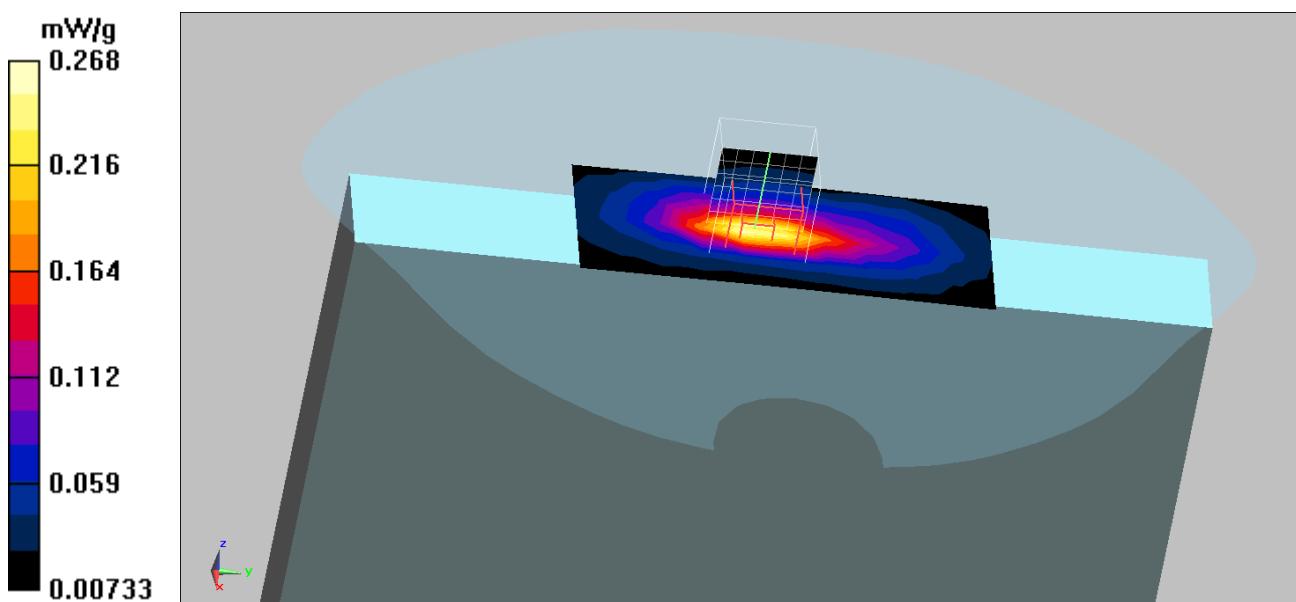
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

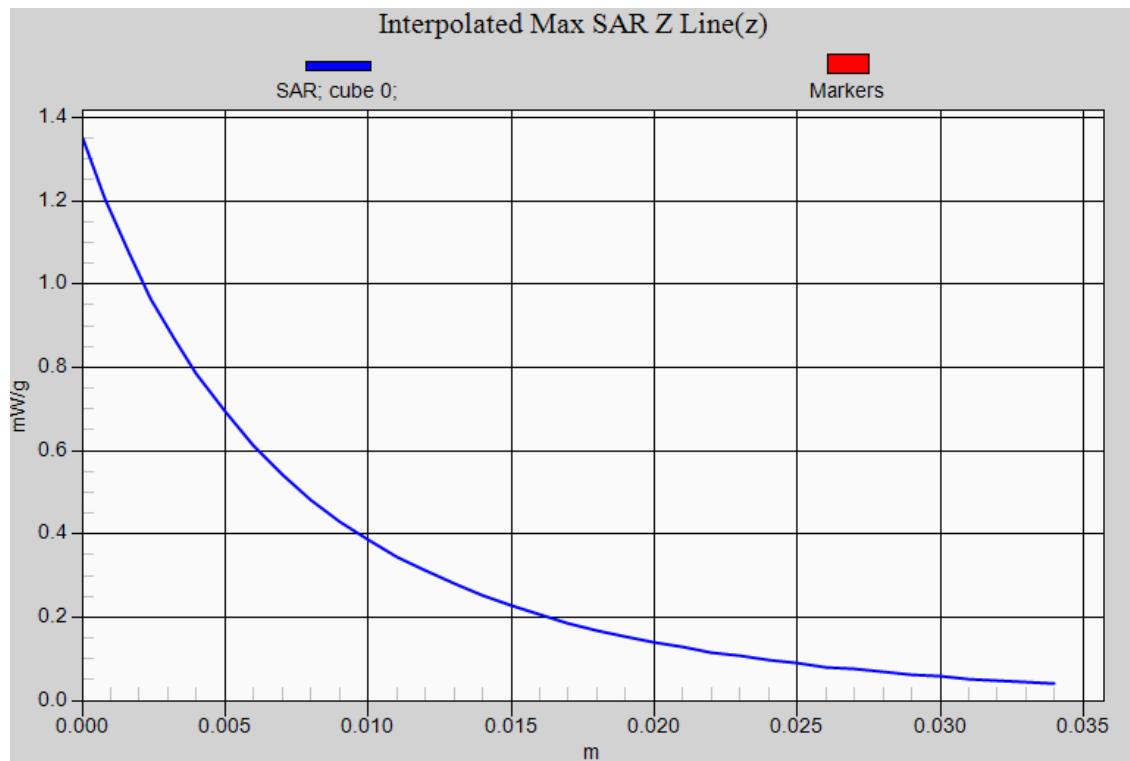
Reference Value = 15.8 V/m; Power Drift = -0.123 dB

Peak SAR (extrapolated) = 0.458 W/kg

**SAR(1 g) = 0.237 mW/g; SAR(10 g) = 0.123 mW/g**

Maximum value of SAR (measured) = 0.268 mW/g



**GSM 850 GPRS EUT Top Z-Axis plot****Channel: 251**

Date/Time: 5/30/2010

Test Laboratory: Quietek

**PCS1900\_Body\_512 Top-2 Slot\_GPRS****DUT: Tablet PC ; Type: T10L**

Communication System: FCC PCS\_1900MHz\_GPRS -2 Slot; Frequency: 1850.2

MHz; Duty Cycle: 1:4.1

Medium parameters used:  $f = 1850.2 \text{ MHz}$ ;  $\sigma = 1.47 \text{ mho/m}$ ;  $\epsilon_r = 54.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 20.3

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(7.45, 7.45, 7.45); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Right Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 0.833 mW/g

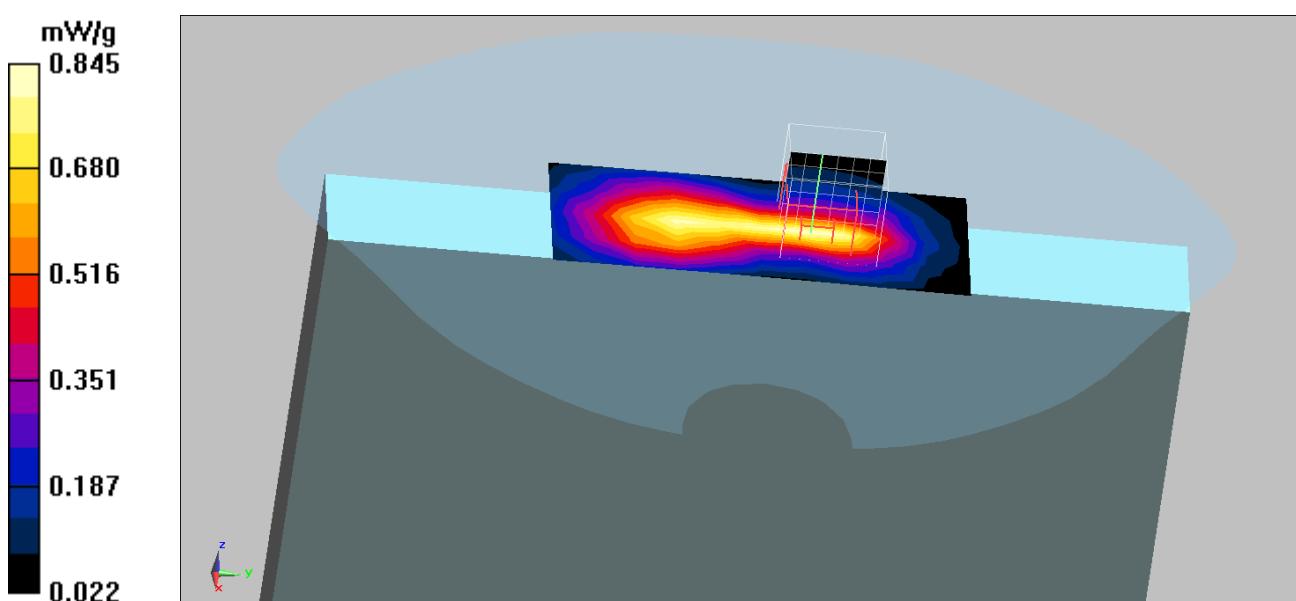
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.2 V/m; Power Drift = -0.057 dB

Peak SAR (extrapolated) = 1.28 W/kg

**SAR(1 g) = 0.752 mW/g; SAR(10 g) = 0.418 mW/g**

Maximum value of SAR (measured) = 0.845 mW/g



Date/Time: 5/30/2010

Test Laboratory: Quietek

**PCS1900\_Body\_661 Top-2 Slot\_GPRS****DUT: Tablet PC ; Type: T10L**

Communication System: FCC PCS\_1900MHz\_GPRS -2 Slot; Frequency: 1880 MHz; Duty Cycle: 1:4.1

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 20.3

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(7.45, 7.45, 7.45); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Right Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

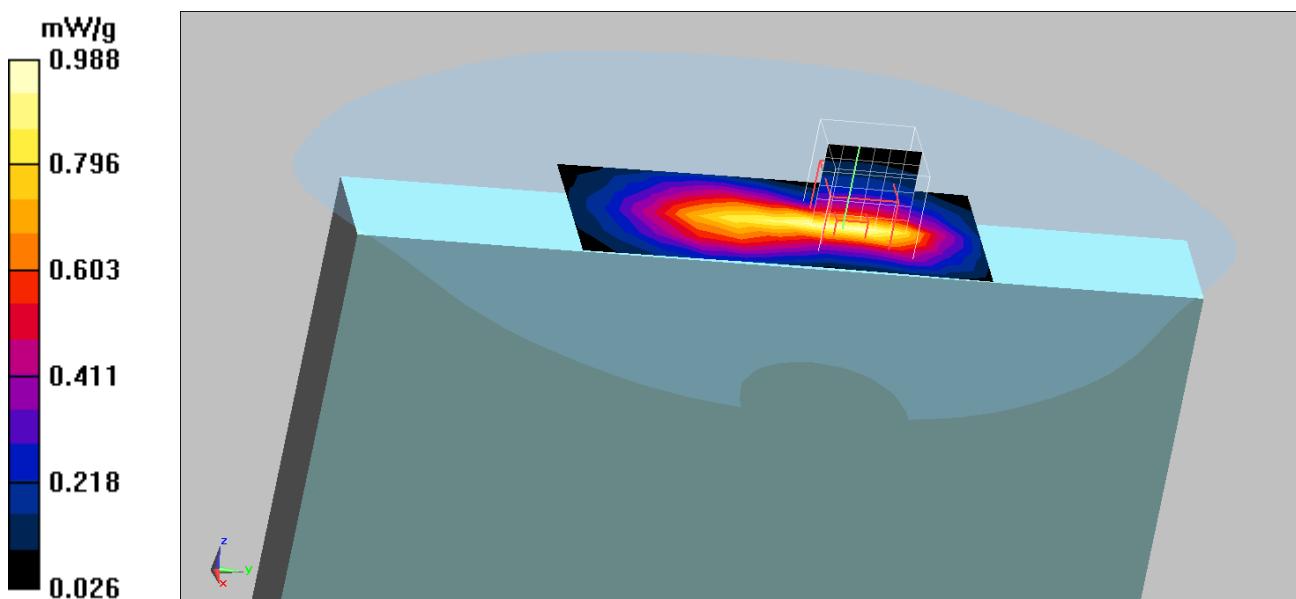
**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 0.988 mW/g

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

Reference Value = 24.2 V/m; Power Drift = -0.011 dB

Peak SAR (extrapolated) = 1.52 W/kg

**SAR(1 g) = 0.879 mW/g; SAR(10 g) = 0.483 mW/g**

Date/Time: 5/30/2010

Test Laboratory: Quietek

**PCS1900\_Body\_810 Top-2 Slot\_GPRS****DUT: Tablet PC ; Type: T10L**

Communication System: FCC PCS\_1900MHz\_GPRS -2 Slot; Frequency: 1909.8

MHz; Duty Cycle: 1:4.1

Medium parameters used:  $f = 1909.8$  MHz;  $\sigma = 1.53$  mho/m;  $\epsilon_r = 52.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 20.3

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(7.45, 7.45, 7.45); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Right Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

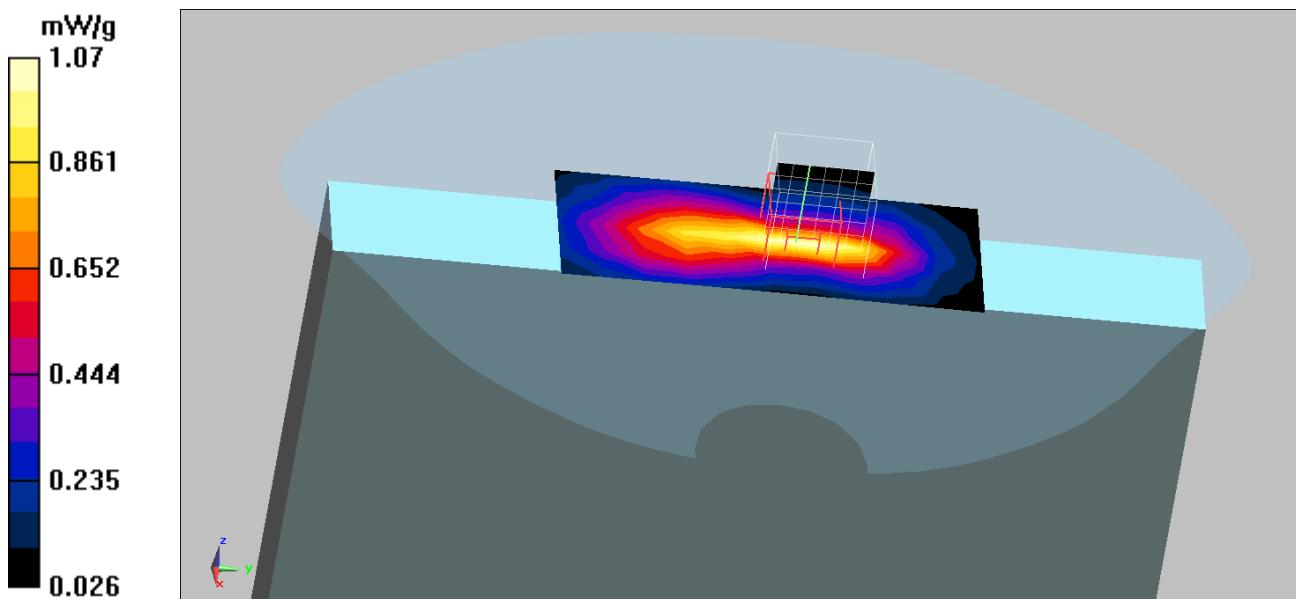
**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 1.07 mW/g

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

Reference Value = 25.9 V/m; Power Drift = 0.00843 dB

Peak SAR (extrapolated) = 1.67 W/kg

**SAR(1 g) = 0.952 mW/g; SAR(10 g) = 0.515 mW/g**

Date/Time: 5/30/2010

Test Laboratory: Quietek

**PCS1900\_Body\_661 Back-2 Slot\_GPRS****DUT: Tablet PC ; Type: T10L**

Communication System: FCC PCS\_1900MHz\_GPRS -2 Slot; Frequency: 1880 MHz; Duty Cycle: 1:4.1

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 20.3

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(7.45, 7.45, 7.45); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Right Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 0.440 mW/g

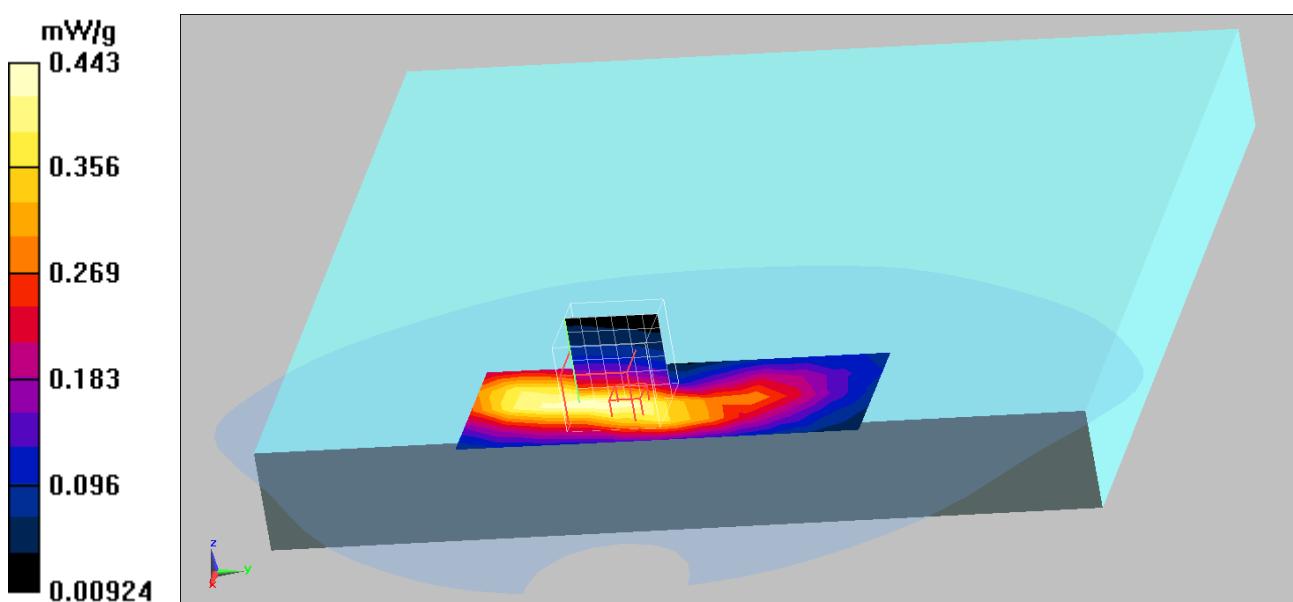
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.5 V/m; Power Drift = -0.074 dB

Peak SAR (extrapolated) = 0.664 W/kg

**SAR(1 g) = 0.408 mW/g; SAR(10 g) = 0.248 mW/g**

Maximum value of SAR (measured) = 0.443 mW/g



Date/Time: 5/30/2010

Test Laboratory: Quietek

**PCS1900\_Body\_810 Top-2 Slot\_EGPRS****DUT: Tablet PC ; Type: T10L**

Communication System: FCC PCS\_1900MHz\_ EGPRS-2 Slot; Frequency: 1909.8

MHz; Duty Cycle: 1:4.1

Medium parameters used:  $f = 1909.8$  MHz;  $\sigma = 1.53$  mho/m;  $\epsilon_r = 52.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 20.3

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(7.45, 7.45, 7.45); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Right Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

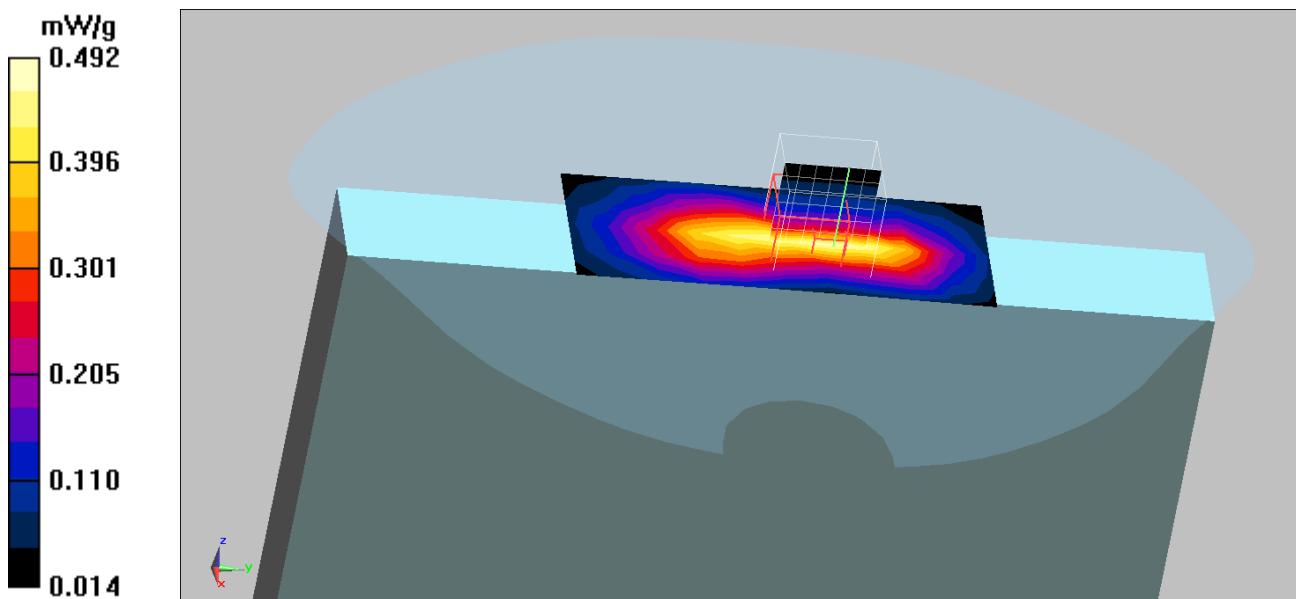
**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

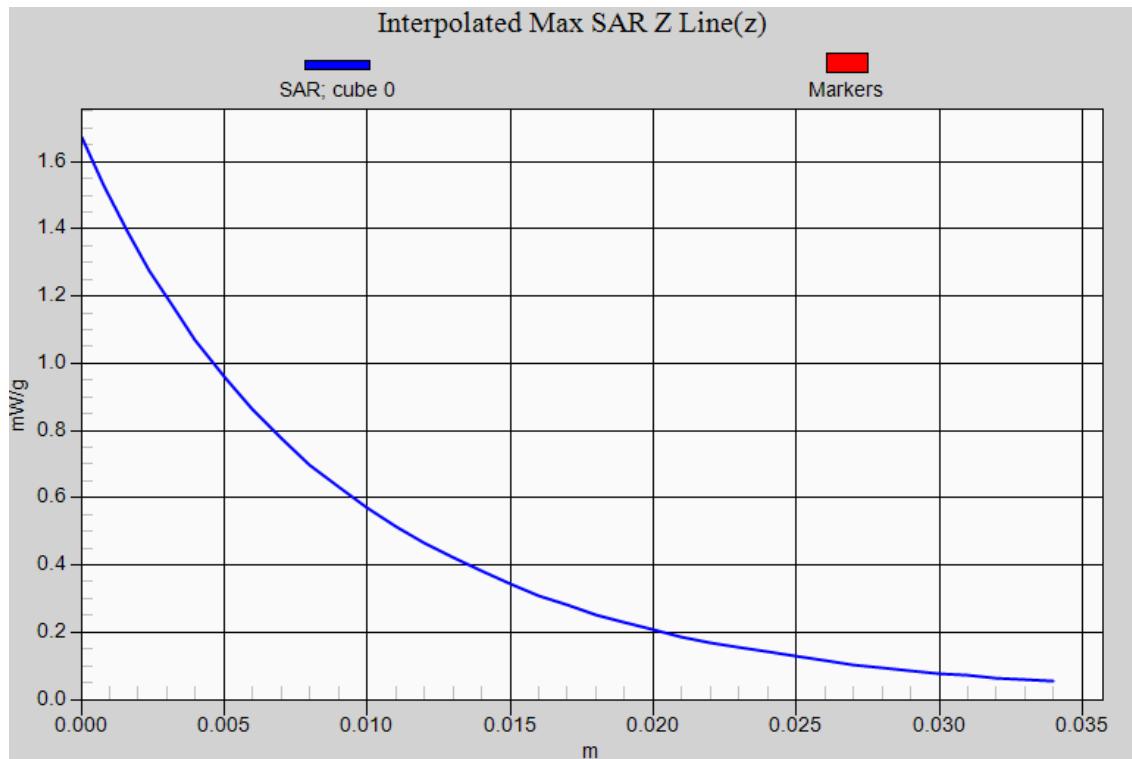
Maximum value of SAR (measured) = 0.492 mW/g

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

Reference Value = 17.3 V/m; Power Drift = -0.125 dB

Peak SAR (extrapolated) = 0.772 W/kg

**SAR(1 g) = 0.440 mW/g; SAR(10 g) = 0.242 mW/g**

**PCS 1900 GPRS EUT Top Z-Axis plot****Channel: 810**

Date/Time: 5/29/2010

Test Laboratory: Quietek

**WCDMA Band V\_Body\_4132 Top\_RMC****DUT: Tablet PC ; Type: T10L**Communication System: FCC WCDMA\_Band-V; Frequency: 826.4 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 826.4 \text{ MHz}$ ;  $\sigma = 0.94 \text{ mho/m}$ ;  $\epsilon_r = 57$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature (°C) : 21.5, Liquid Temperature (°C) : 20.6

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(8.95, 8.95, 8.95); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Left Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 0.489 mW/g

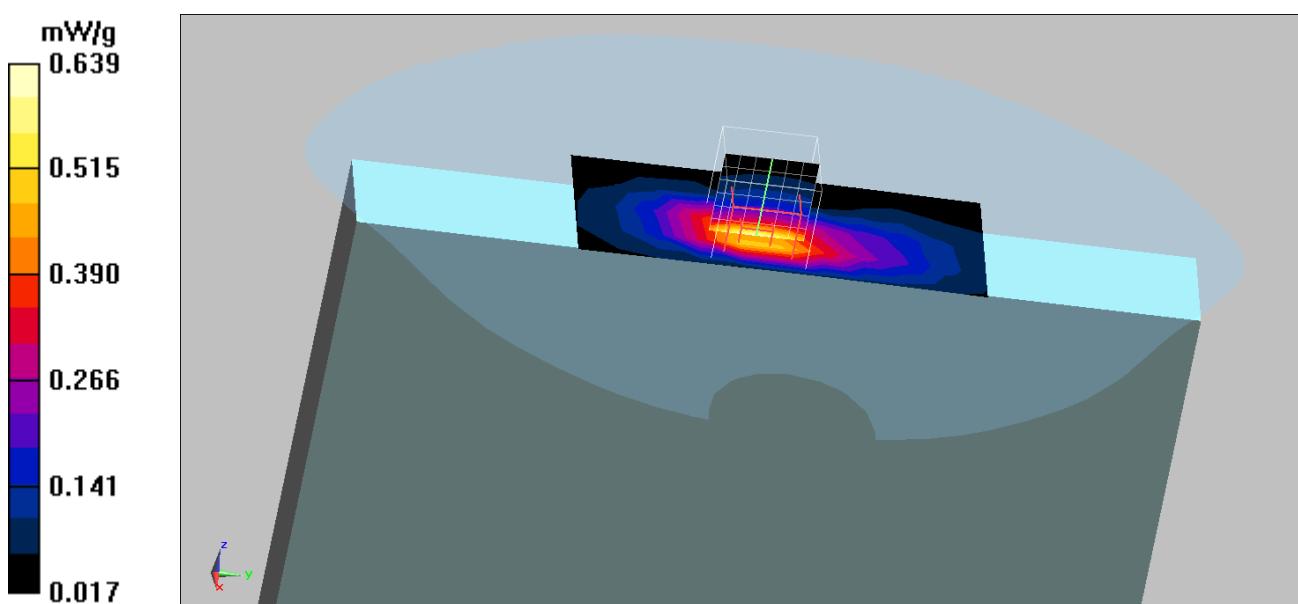
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.8 V/m; Power Drift = -0.104 dB

Peak SAR (extrapolated) = 1.09 W/kg

**SAR(1 g) = 0.565 mW/g; SAR(10 g) = 0.290 mW/g**

Maximum value of SAR (measured) = 0.639 mW/g



Date/Time: 5/29/2010

Test Laboratory: Quietek

**WCDMA Band V\_Body\_4183 Top\_RMC****DUT: Tablet PC ; Type: T10L**Communication System: FCC WCDMA\_Band-V; Frequency: 836.6 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.97 \text{ mho/m}$ ;  $\epsilon_r = 56.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature (°C) : 21.5, Liquid Temperature (°C) : 20.6

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(8.95, 8.95, 8.95); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Left Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 0.608 mW/g

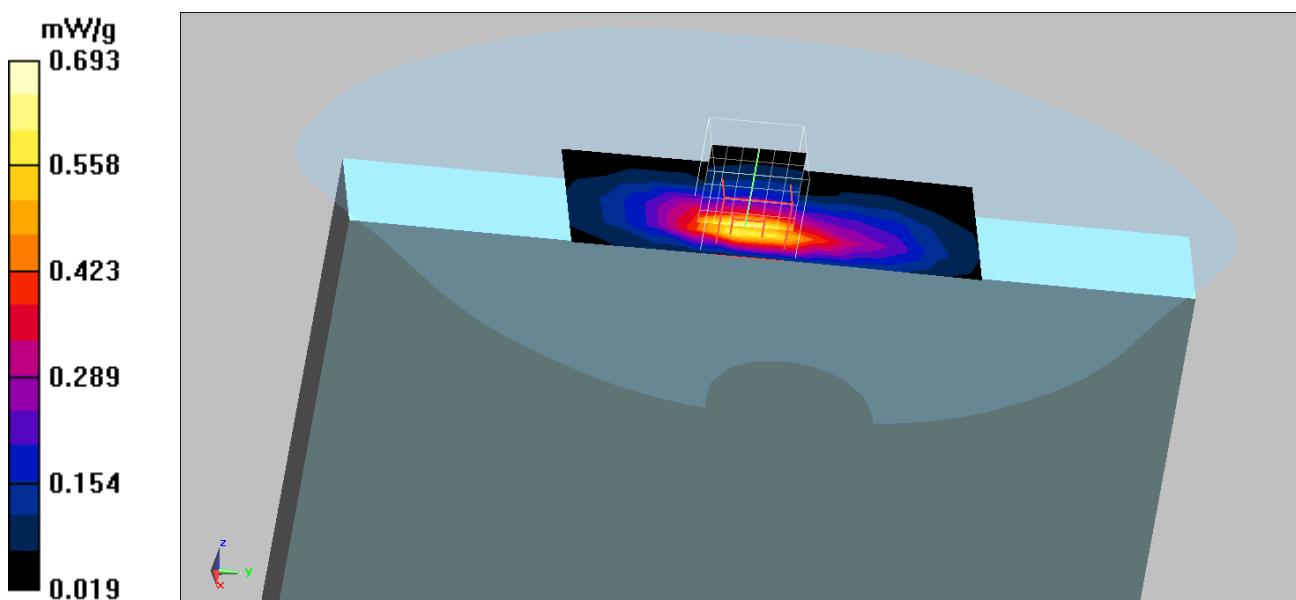
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.9 V/m; Power Drift = -0.113 dB

Peak SAR (extrapolated) = 1.17 W/kg

**SAR(1 g) = 0.611 mW/g; SAR(10 g) = 0.312 mW/g**

Maximum value of SAR (measured) = 0.693 mW/g



Date/Time: 5/29/2010

Test Laboratory: Quietek

**WCDMA Band V\_Body\_4233 Top\_RMC****DUT: Tablet PC ; Type: T10L**Communication System: FCC WCDMA\_Band-V; Frequency: 846.6 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 846.6 \text{ MHz}$ ;  $\sigma = 0.99 \text{ mho/m}$ ;  $\epsilon_r = 55.9$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature (°C) : 21.5, Liquid Temperature (°C) : 20.6

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(8.95, 8.95, 8.95); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Left Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 0.555 mW/g

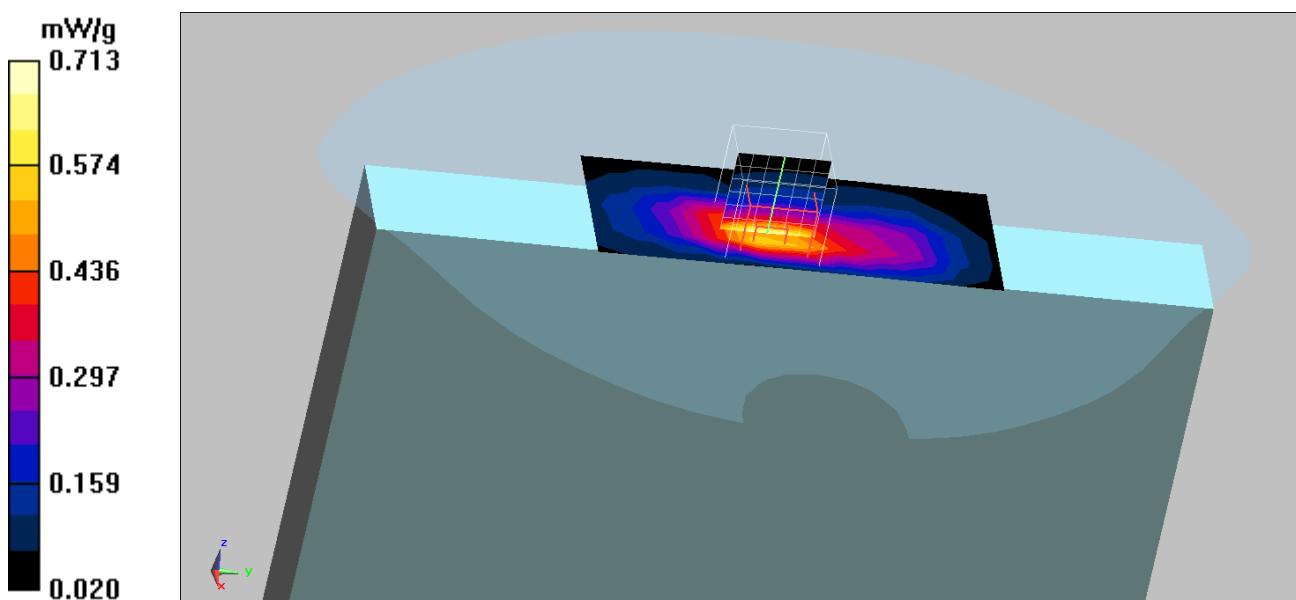
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.5 V/m; Power Drift = -0.185 dB

Peak SAR (extrapolated) = 1.2 W/kg

**SAR(1 g) = 0.633 mW/g; SAR(10 g) = 0.328 mW/g**

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



Date/Time: 5/29/2010

Test Laboratory: Quietek

**WCDMA Band V\_Body\_4183 Back\_RMC****DUT: Tablet PC ; Type: T10L**Communication System: FCC WCDMA\_Band-V; Frequency: 836.6 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.97 \text{ mho/m}$ ;  $\epsilon_r = 56.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature (°C) : 21.5, Liquid Temperature (°C) : 20.6

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(8.95, 8.95, 8.95); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Left Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

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

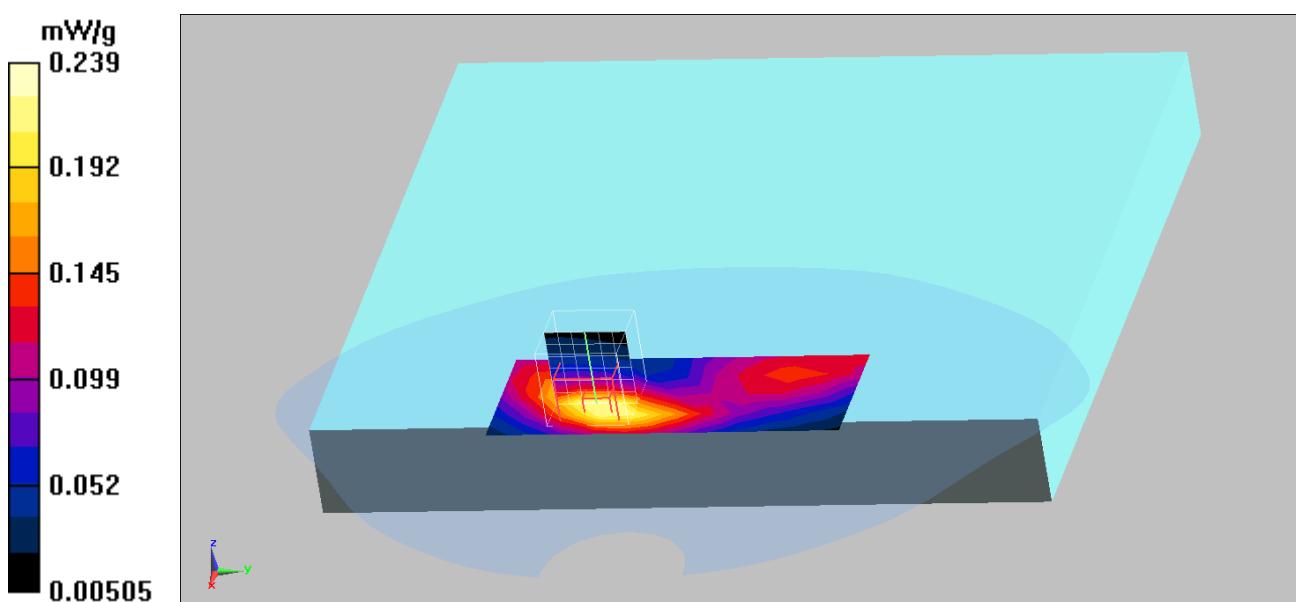
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.3 V/m; Power Drift = -0.125 dB

Peak SAR (extrapolated) = 0.371 W/kg

**SAR(1 g) = 0.221 mW/g; SAR(10 g) = 0.133 mW/g**

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



Date/Time: 5/29/2010

Test Laboratory: Quietek

**WCDMA Band V\_Body\_4233 Top\_HSDPA****DUT: Tablet PC ; Type: T10L**Communication System: FCC WCDMA\_Band-V; Frequency: 846.6 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 846.6 \text{ MHz}$ ;  $\sigma = 0.99 \text{ mho/m}$ ;  $\epsilon_r = 55.9$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature (°C) : 21.5, Liquid Temperature (°C) : 20.6

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(8.95, 8.95, 8.95); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Left Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 0.481 mW/g

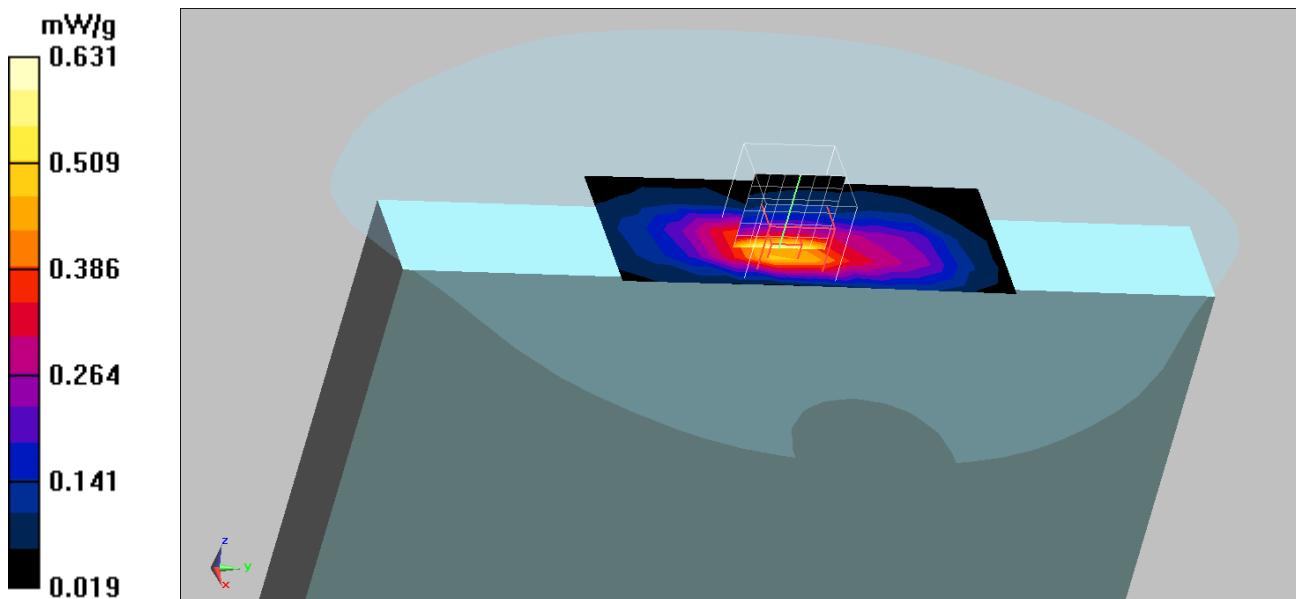
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.1 V/m; Power Drift = -0.159 dB

Peak SAR (extrapolated) = 1.06 W/kg

**SAR(1 g) = 0.556 mW/g; SAR(10 g) = 0.287 mW/g**

Maximum value of SAR (measured) = 0.631 mW/g



Date/Time: 5/29/2010

Test Laboratory: Quietek

**WCDMA Band V\_Body\_4233 Top\_HSUPA****DUT: Tablet PC ; Type: T10L**Communication System: FCC WCDMA\_Band-V; Frequency: 846.6 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 846.6 \text{ MHz}$ ;  $\sigma = 0.99 \text{ mho/m}$ ;  $\epsilon_r = 55.9$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature (°C) : 21.5, Liquid Temperature (°C) : 20.6

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(8.95, 8.95, 8.95); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Left Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 0.479 mW/g

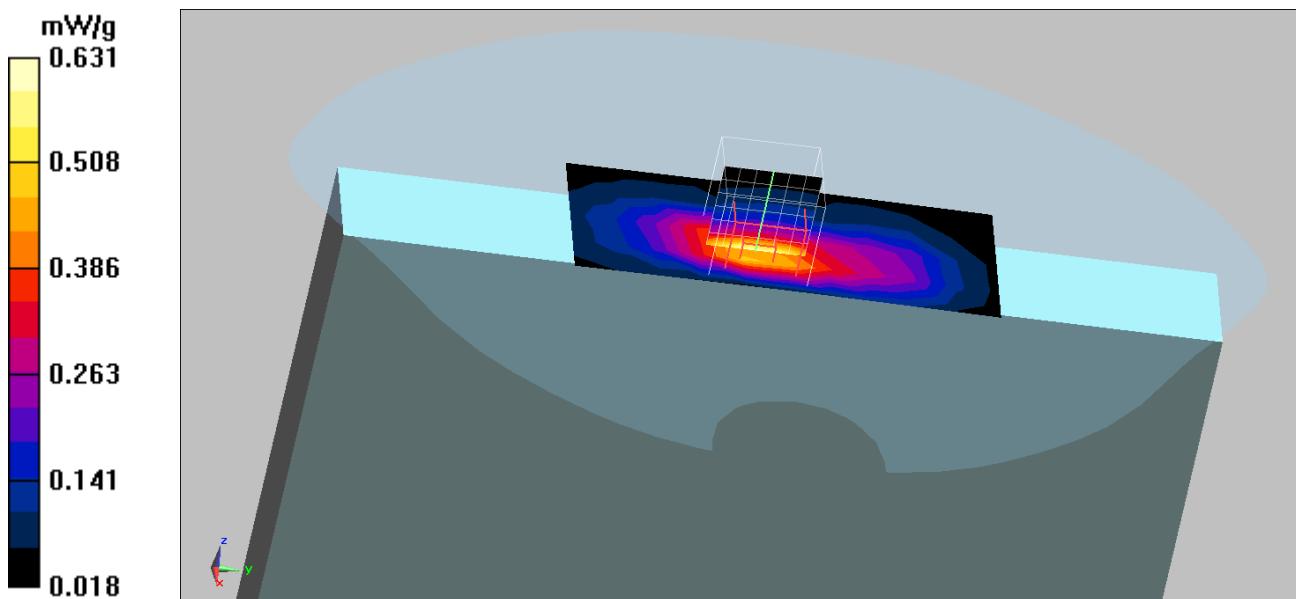
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

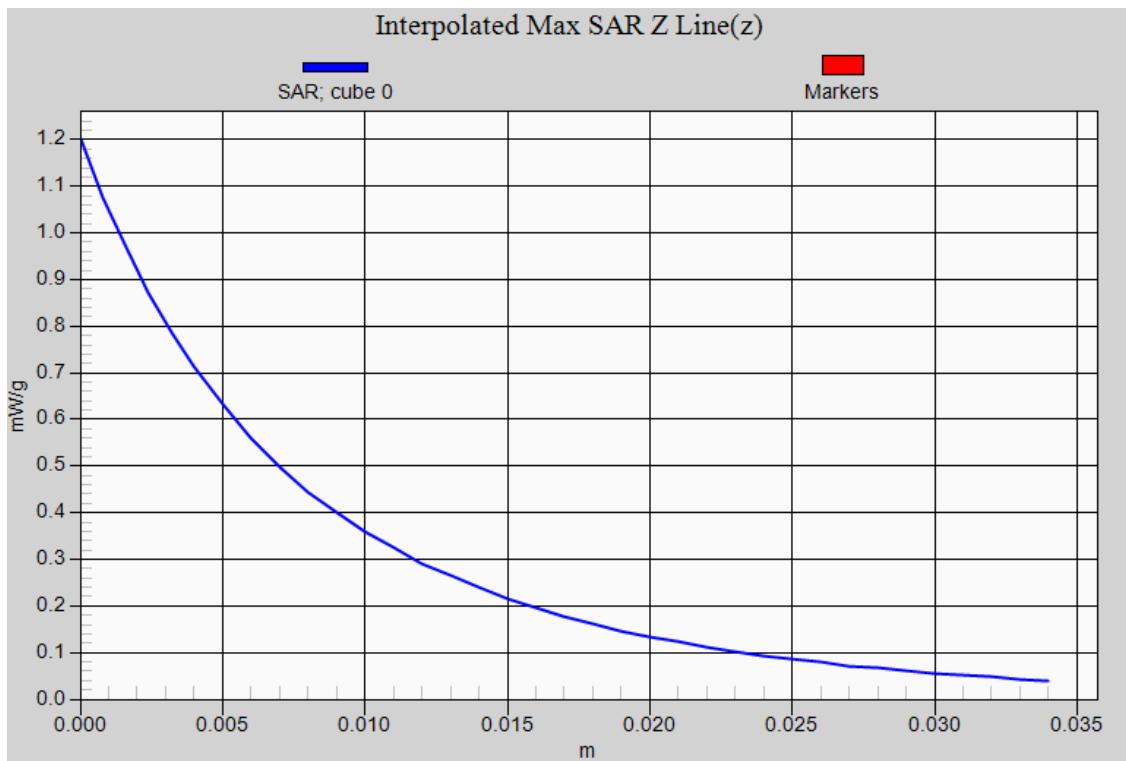
Reference Value = 19 V/m; Power Drift = -0.085 dB

Peak SAR (extrapolated) = 1.06 W/kg

**SAR(1 g) = 0.558 mW/g; SAR(10 g) = 0.288 mW/g**

Maximum value of SAR (measured) = 0.631 mW/g



**WCDMA Band V RMC EUT Top Z-Axis plot****Channel: 4233**

Date/Time: 5/30/2010

Test Laboratory: Quietek

**WCDMA Band II\_Body\_9262 Top\_RMC****DUT: Tablet PC ; Type: T10L**

Communication System: FCC WCDMA\_Band-II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1852.4 \text{ MHz}$ ;  $\sigma = 1.46 \text{ mho/m}$ ;  $\epsilon_r = 54.3$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 20.3

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(7.45, 7.45, 7.45); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Right Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid:  $dx=13\text{mm}$ ,  $dy=13\text{mm}$ 

Maximum value of SAR (measured) = 1.26 mW/g

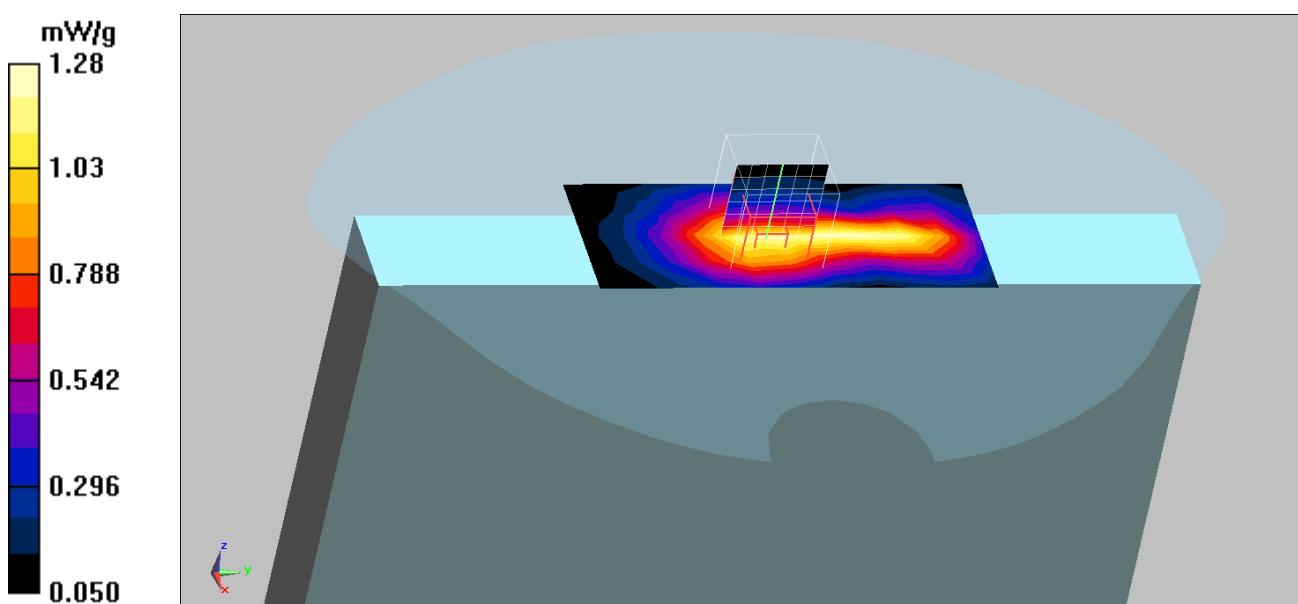
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$ 

Reference Value = 29.4 V/m; Power Drift = -0.036 dB

Peak SAR (extrapolated) = 1.93 W/kg

**SAR(1 g) = 1.18 mW/g; SAR(10 g) = 0.719 mW/g**

Maximum value of SAR (measured) = 1.28 mW/g



Date/Time: 5/30/2010

Test Laboratory: Quietek

**WCDMA Band II\_Body\_9400 Top\_RMC****DUT: Tablet PC ; Type: T10L**

Communication System: FCC WCDMA\_Band-II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.49 \text{ mho/m}$ ;  $\epsilon_r = 53.2$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 20.3

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(7.45, 7.45, 7.45); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Right Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid:  $dx=13\text{mm}$ ,  $dy=13\text{mm}$ 

Maximum value of SAR (measured) = 1.38 mW/g

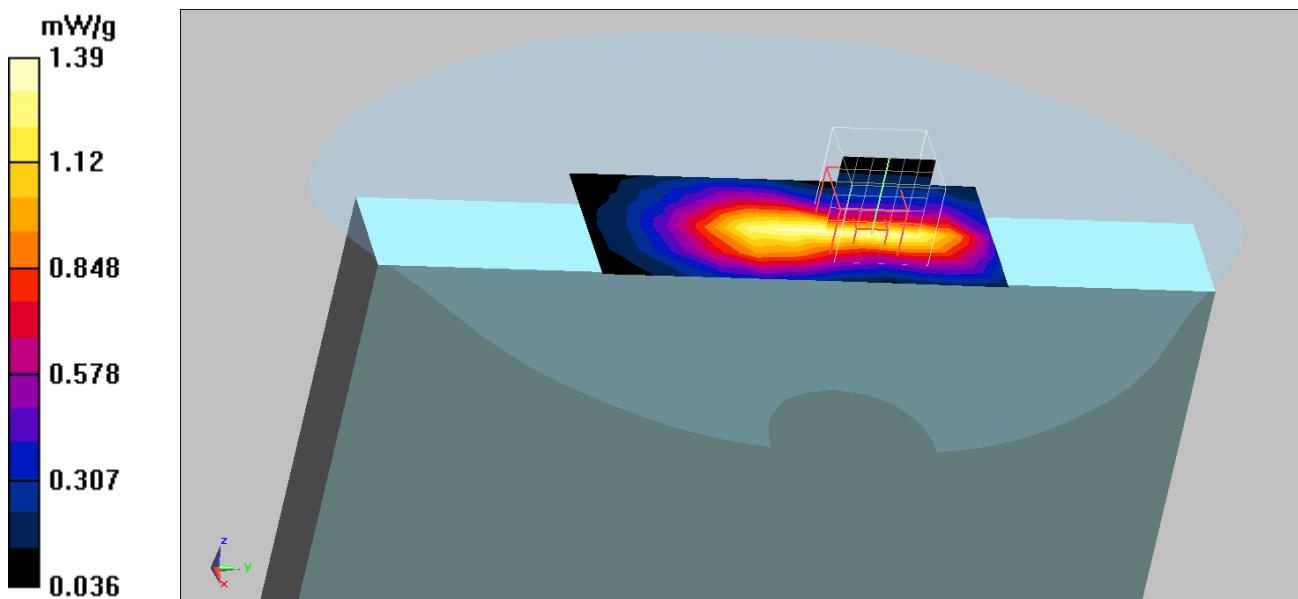
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$ 

Reference Value = 30.2 V/m; Power Drift = -0.085 dB

Peak SAR (extrapolated) = 2.18 W/kg

**SAR(1 g) = 1.24 mW/g; SAR(10 g) = 0.678 mW/g**

Maximum value of SAR (measured) = 1.39 mW/g



Date/Time: 5/30/2010

Test Laboratory: Quietek

**WCDMA Band II\_Body\_9538 Top\_RMC****DUT: Tablet PC ; Type: T10L**Communication System: FCC WCDMA\_Band-II; Frequency: 1907.6 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1907.6 \text{ MHz}$ ;  $\sigma = 1.52 \text{ mho/m}$ ;  $\epsilon_r = 52.8$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 20.3

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(7.45, 7.45, 7.45); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Right Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 1.18 mW/g

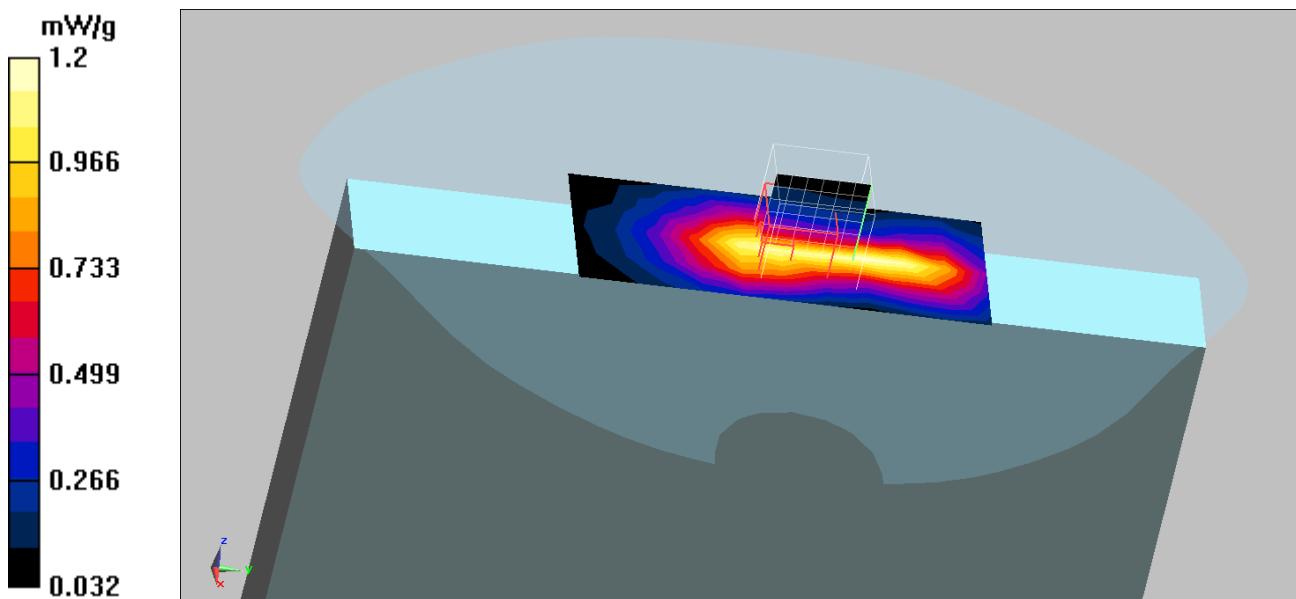
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28 V/m; Power Drift = -0.128 dB

Peak SAR (extrapolated) = 1.93 W/kg

**SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.638 mW/g**

Maximum value of SAR (measured) = 1.2 mW/g



Date/Time: 5/30/2010

Test Laboratory: Quietek

**WCDMA Band II\_Body\_9400 Back\_RMC****DUT: Tablet PC ; Type: T10L**

Communication System: FCC WCDMA\_Band-II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.49 \text{ mho/m}$ ;  $\epsilon_r = 53.2$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 20.3

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(7.45, 7.45, 7.45); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Right Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 0.506 mW/g

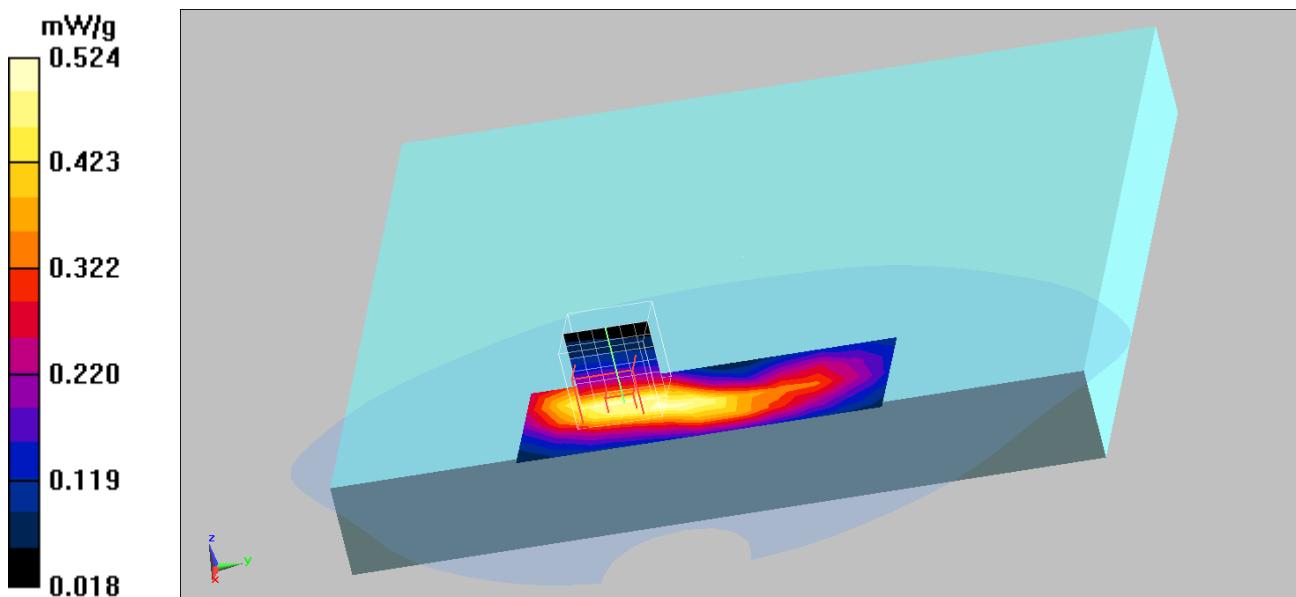
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.8 V/m; Power Drift = -0.00267 dB

Peak SAR (extrapolated) = 0.778 W/kg

**SAR(1 g) = 0.487 mW/g; SAR(10 g) = 0.305 mW/g**

Maximum value of SAR (measured) = 0.524 mW/g



Date/Time: 5/30/2010

Test Laboratory: Quietek

**WCDMA Band II\_Body\_9400 Top\_HSDPA****DUT: Tablet PC ; Type: T10L**Communication System: FCC WCDMA\_Band-II; Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.49 \text{ mho/m}$ ;  $\epsilon_r = 53.2$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 20.3

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(7.45, 7.45, 7.45); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Right Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 1.22 mW/g

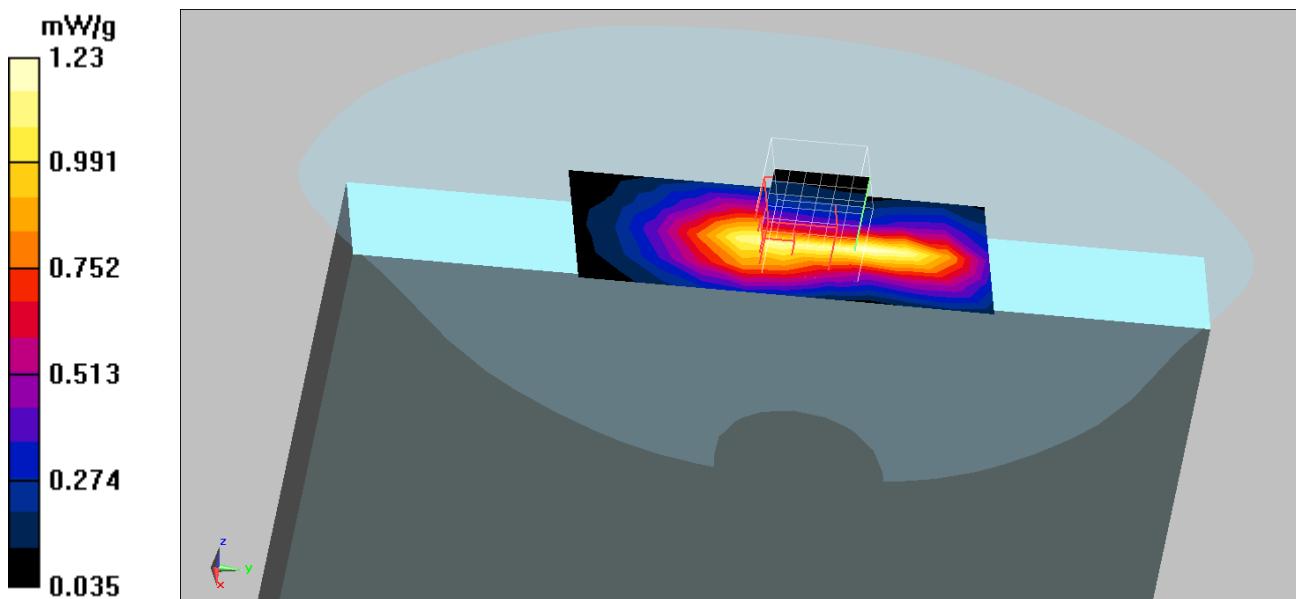
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.5 V/m; Power Drift = -0.070 dB

Peak SAR (extrapolated) = 1.94 W/kg

**SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.657 mW/g**

Maximum value of SAR (measured) = 1.23 mW/g



Date/Time: 5/30/2010

Test Laboratory: Quietek

**WCDMA Band II\_Body\_9400 Top\_HSUPA****DUT: Tablet PC ; Type: T10L**

Communication System: FCC WCDMA\_Band-II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.49 \text{ mho/m}$ ;  $\epsilon_r = 53.2$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 20.3

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(7.45, 7.45, 7.45); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Right Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 1.17 mW/g

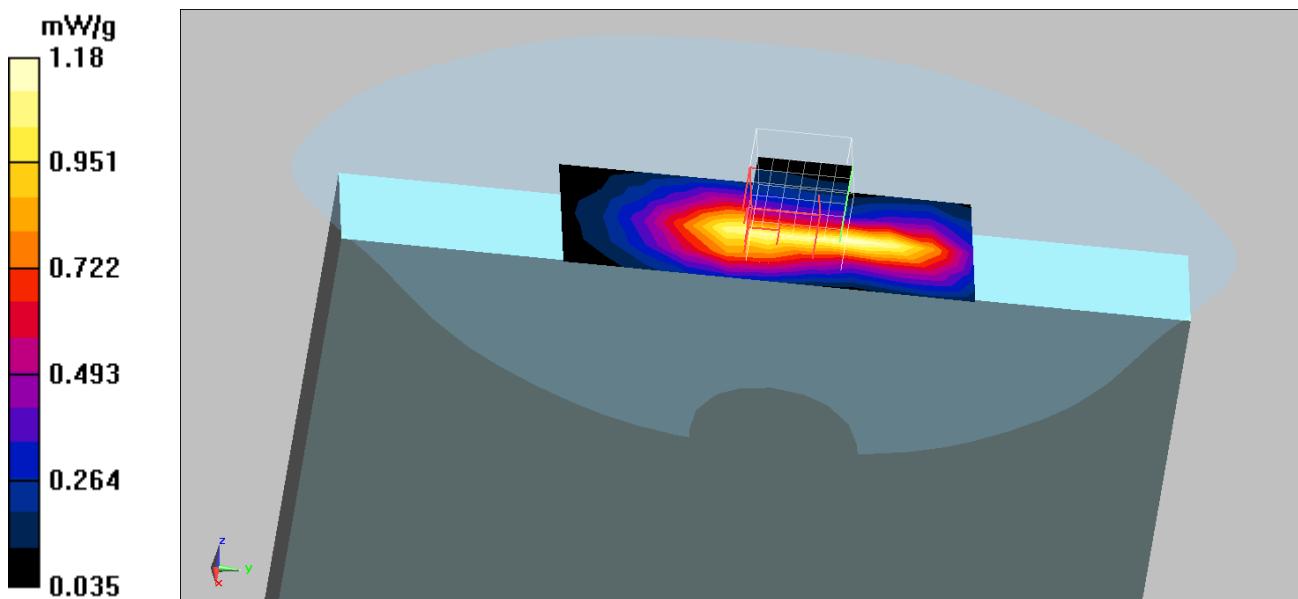
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

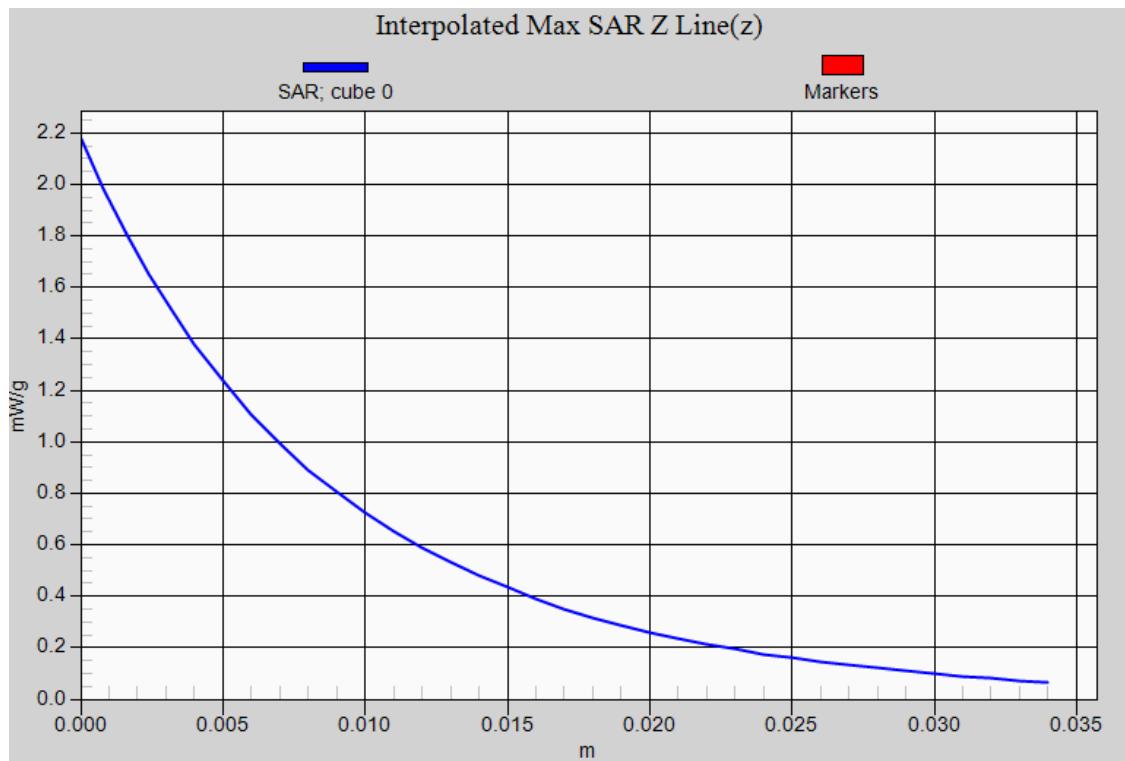
Reference Value = 27.7 V/m; Power Drift = -0.00357 dB

Peak SAR (extrapolated) = 1.87 W/kg

**SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.630 mW/g**

Maximum value of SAR (measured) = 1.18 mW/g



**WCDMA Band II RMC EUT Top Z-Axis plot****Channel: 9400**

Date/Time: 5/29/2010

Test Laboratory: Quietek

**CDMA850\_Body\_1013 Top****DUT: Tablet PC ; Type: T10L**

Communication System: FCC CDMA\_EVDO-850MHz; Frequency: 824.7 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 824.7$  MHz;  $\sigma = 0.93$  mho/m;  $\epsilon_r = 57.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature (°C) : 21.5, Liquid Temperature (°C) : 20.6

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(8.95, 8.95, 8.95); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Left Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 0.339 mW/g

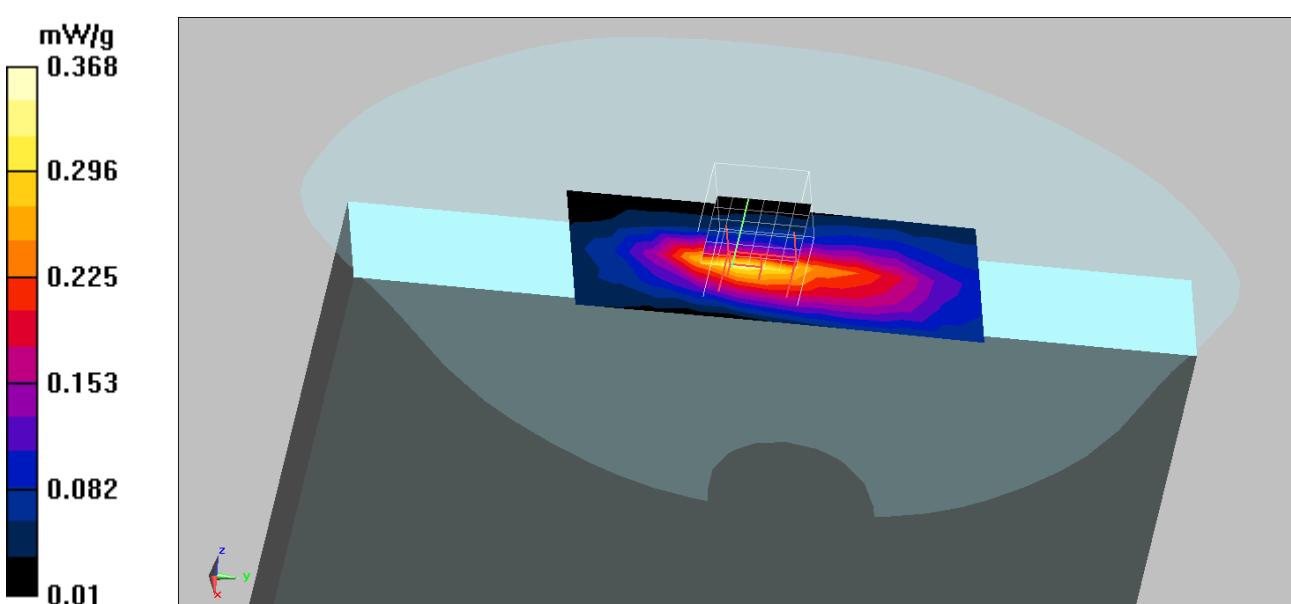
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.1 V/m; Power Drift = -0.103 dB

Peak SAR (extrapolated) = 0.608 W/kg

**SAR(1 g) = 0.322 mW/g; SAR(10 g) = 0.168 mW/g**

Maximum value of SAR (measured) = 0.368 mW/g



Date/Time: 5/29/2010

Test Laboratory: Quietek

**CDMA850\_Body\_384 Top****DUT: Tablet PC ; Type: T10L**

Communication System: FCC CDMA\_EVDO-850MHz; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 836.52 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 56.8$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature ( $^{\circ}\text{C}$ ) : 21.5, Liquid Temperature ( $^{\circ}\text{C}$ ) : 20.6

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(8.95, 8.95, 8.95); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Left Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid:  $dx=13\text{mm}$ ,  $dy=13\text{mm}$ 

Maximum value of SAR (measured) = 0.375 mW/g

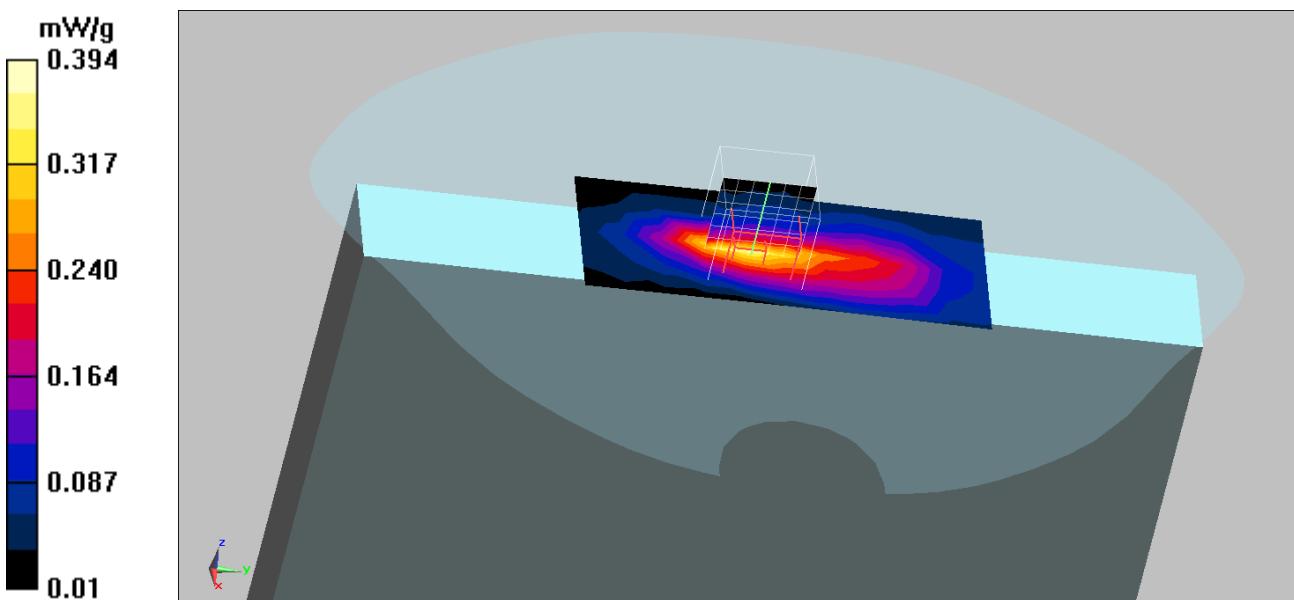
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$ 

Reference Value = 18.4 V/m; Power Drift = -0.190 dB

Peak SAR (extrapolated) = 0.649 W/kg

**SAR(1 g) = 0.339 mW/g; SAR(10 g) = 0.177 mW/g**

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



Date/Time: 5/29/2010

Test Laboratory: Quietek

**CDMA850\_Body\_777 Top****DUT: Tablet PC ; Type: T10L**

Communication System: FCC CDMA\_EVDO-850MHz; Frequency: 848.31 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 848.31 \text{ MHz}$ ;  $\sigma = 0.99 \text{ mho/m}$ ;  $\epsilon_r = 55.8$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature (°C) : 21.5, Liquid Temperature (°C) : 20.6

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(8.95, 8.95, 8.95); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Left Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 0.401 mW/g

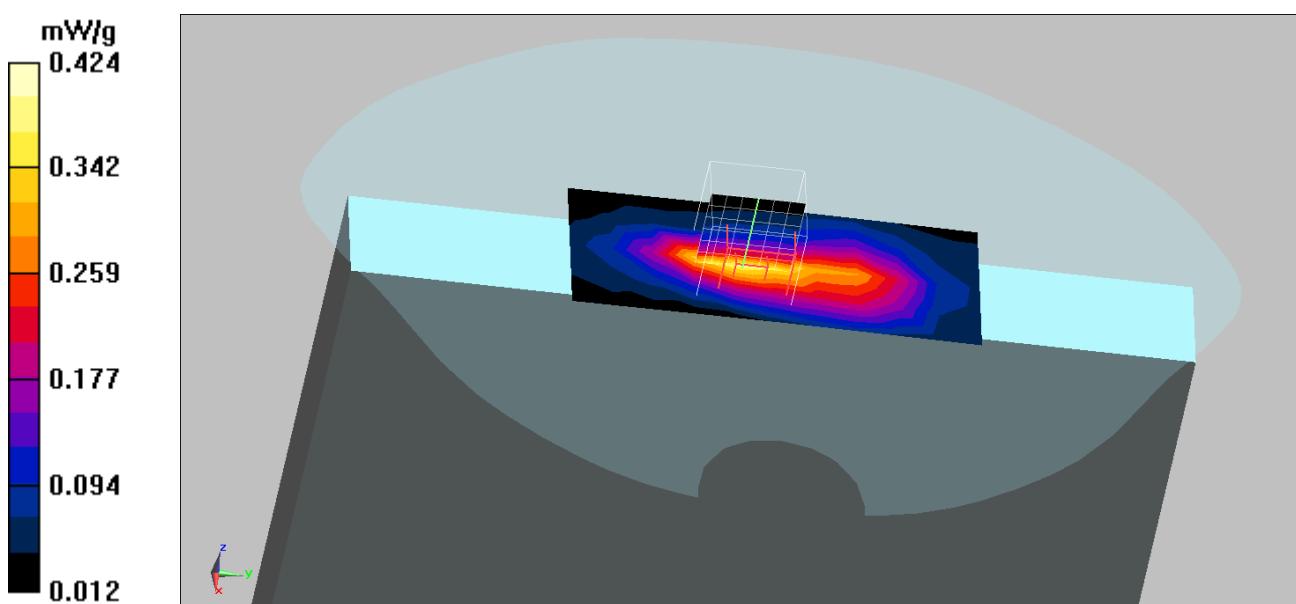
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.2 V/m; Power Drift = -0.106 dB

Peak SAR (extrapolated) = 0.699 W/kg

**SAR(1 g) = 0.370 mW/g; SAR(10 g) = 0.196 mW/g**

Maximum value of SAR (measured) = 0.424 mW/g



Date/Time: 5/29/2010

Test Laboratory: Quietek

**CDMA850\_Body\_384 Back****DUT: Tablet PC ; Type: T10L**

Communication System: FCC CDMA\_EVDO-850MHz; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 836.52 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 56.8$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature (°C) : 21.5, Liquid Temperature (°C) : 20.6

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(8.95, 8.95, 8.95); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Left Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 0.222 mW/g

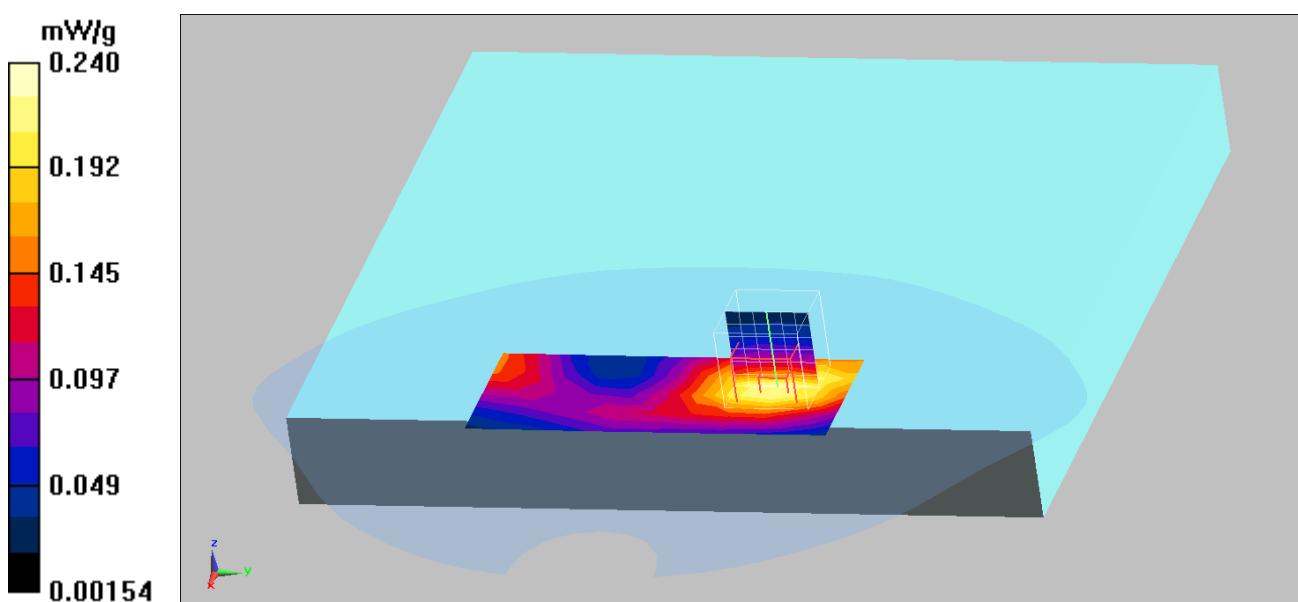
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.1 V/m; Power Drift = 0.119 dB

Peak SAR (extrapolated) = 0.552 W/kg

**SAR(1 g) = 0.227 mW/g; SAR(10 g) = 0.147 mW/g**

Maximum value of SAR (measured) = 0.240 mW/g



Date/Time: 5/29/2010

Test Laboratory: Quietek

**CDMA850\_Body\_777 Top\_EVDO Rel 0****DUT: Tablet PC ; Type: T10L**

Communication System: FCC CDMA\_EVDO-850MHz; Frequency: 848.31 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 848.31 \text{ MHz}$ ;  $\sigma = 0.99 \text{ mho/m}$ ;  $\epsilon_r = 55.8$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature (°C) : 21.5, Liquid Temperature (°C) : 20.6

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(8.95, 8.95, 8.95); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Left Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 0.306 mW/g

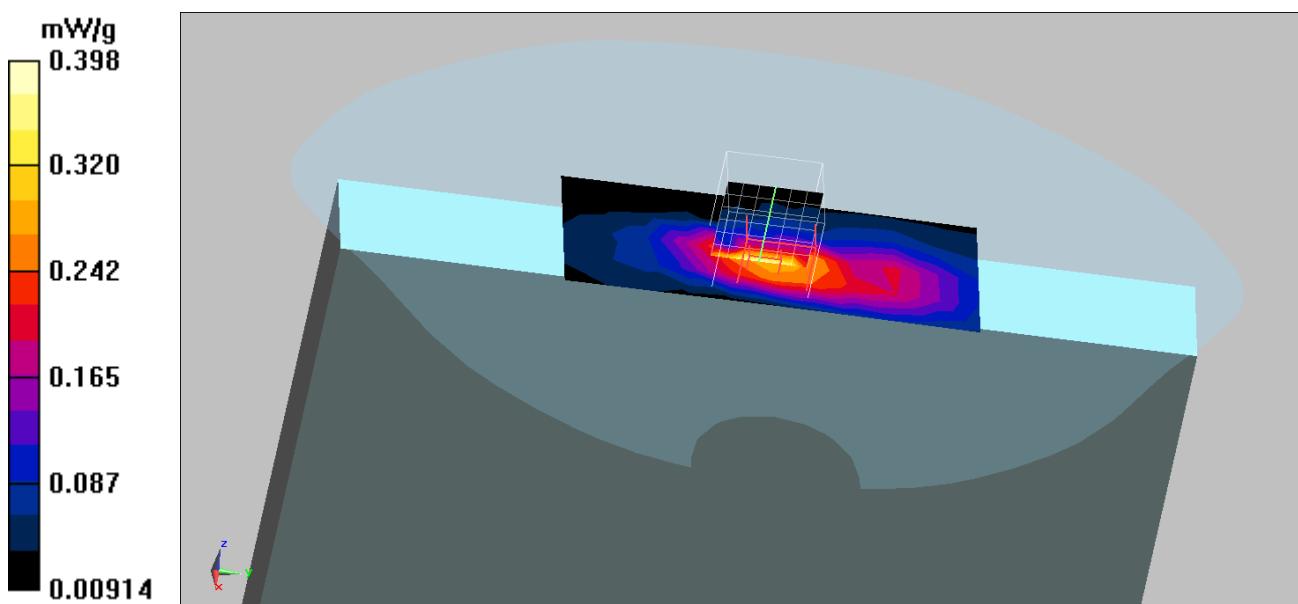
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18 V/m; Power Drift = -0.167 dB

Peak SAR (extrapolated) = 0.885 W/kg

**SAR(1 g) = 0.345 mW/g; SAR(10 g) = 0.174 mW/g**

Maximum value of SAR (measured) = 0.398 mW/g



Date/Time: 5/29/2010

Test Laboratory: Quietek

**CDMA850\_Body\_777 Top\_EVDO Rel A****DUT: Tablet PC ; Type: T10L**

Communication System: FCC CDMA\_EVDO-850MHz; Frequency: 848.31 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 848.31 \text{ MHz}$ ;  $\sigma = 0.99 \text{ mho/m}$ ;  $\epsilon_r = 55.8$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature (°C) : 21.5, Liquid Temperature (°C) : 20.6

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(8.95, 8.95, 8.95); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Left Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 0.348 mW/g

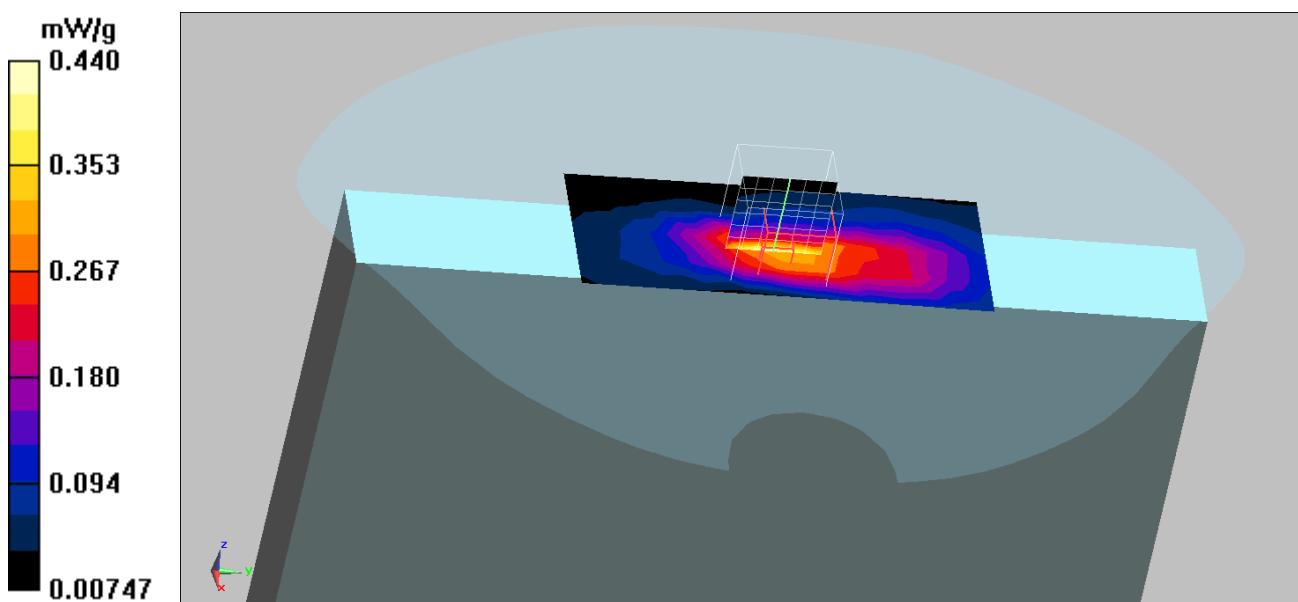
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

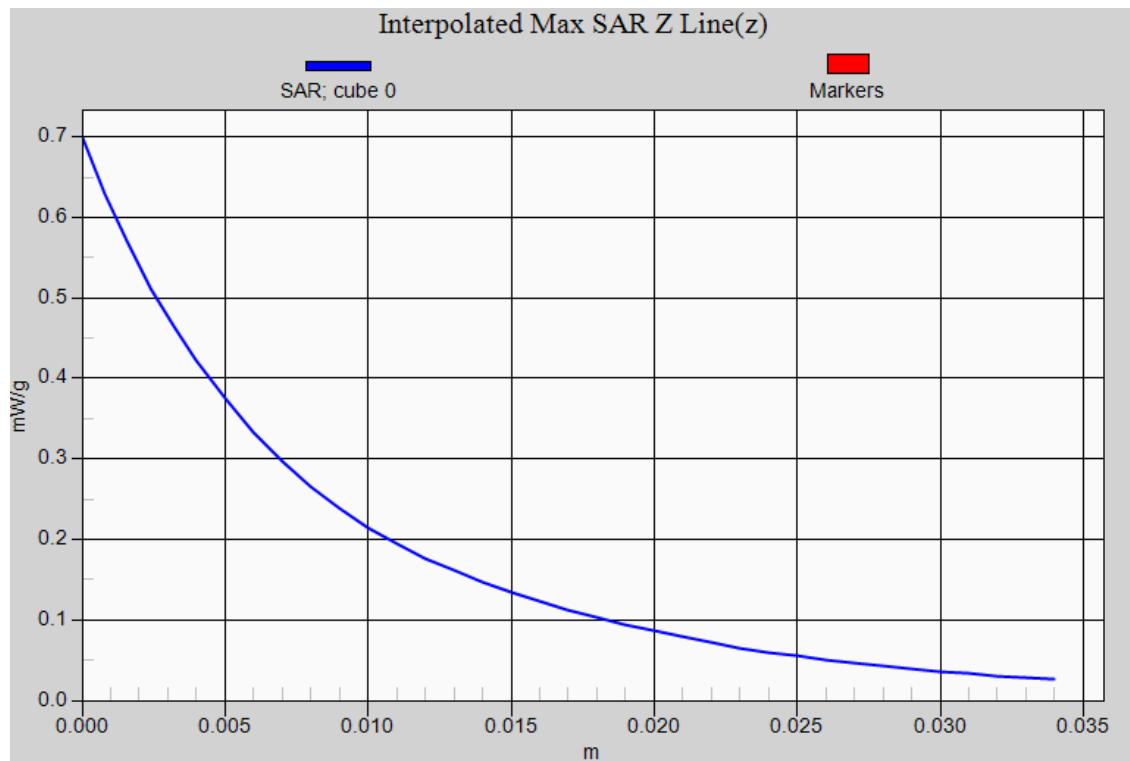
Reference Value = 18.9 V/m; Power Drift = -0.156 dB

Peak SAR (extrapolated) = 0.888 W/kg

**SAR(1 g) = 0.367 mW/g; SAR(10 g) = 0.200 mW/g**

Maximum value of SAR (measured) = 0.440 mW/g



**CDMA 850 MHz EUT Top Z-Axis plot****Channel: 777**

Date/Time: 5/30/2010

Test Laboratory: Quietek

**CDMA1900\_Body\_25 Top****DUT: Tablet PC ; Type: T10L**

Communication System: FCC CDMA EVDO-1900MHz; Frequency: 1851.25 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1851.25$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 54.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 20.3

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(7.45, 7.45, 7.45); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Right Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 0.893 mW/g

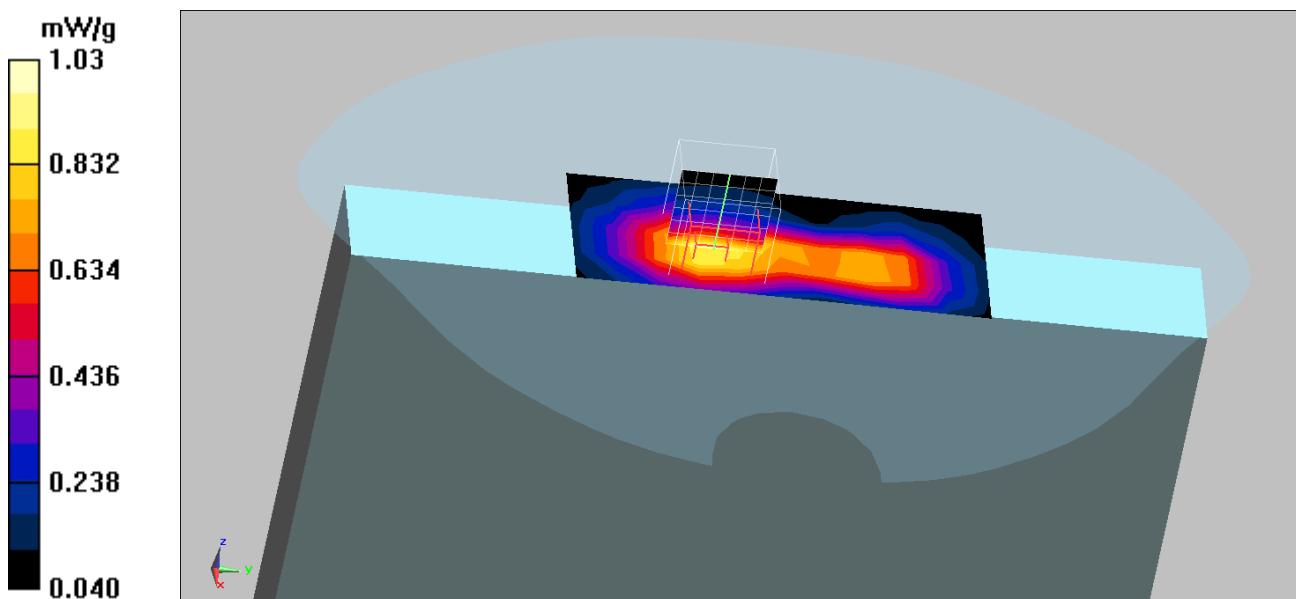
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.1 V/m; Power Drift = -0.114 dB

Peak SAR (extrapolated) = 1.48 W/kg

**SAR(1 g) = 0.943 mW/g; SAR(10 g) = 0.573 mW/g**

Maximum value of SAR (measured) = 1.03 mW/g



Date/Time: 5/30/2010

Test Laboratory: Quietek

**CDMA1900\_Body\_600 Top****DUT: Tablet PC ; Type: T10L**

Communication System: FCC CDMA EVDO-1900MHz; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.49 \text{ mho/m}$ ;  $\epsilon_r = 53.2$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 20.3

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(7.45, 7.45, 7.45); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Right Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid:  $dx=13\text{mm}$ ,  $dy=13\text{mm}$ 

Maximum value of SAR (measured) = 0.975 mW/g

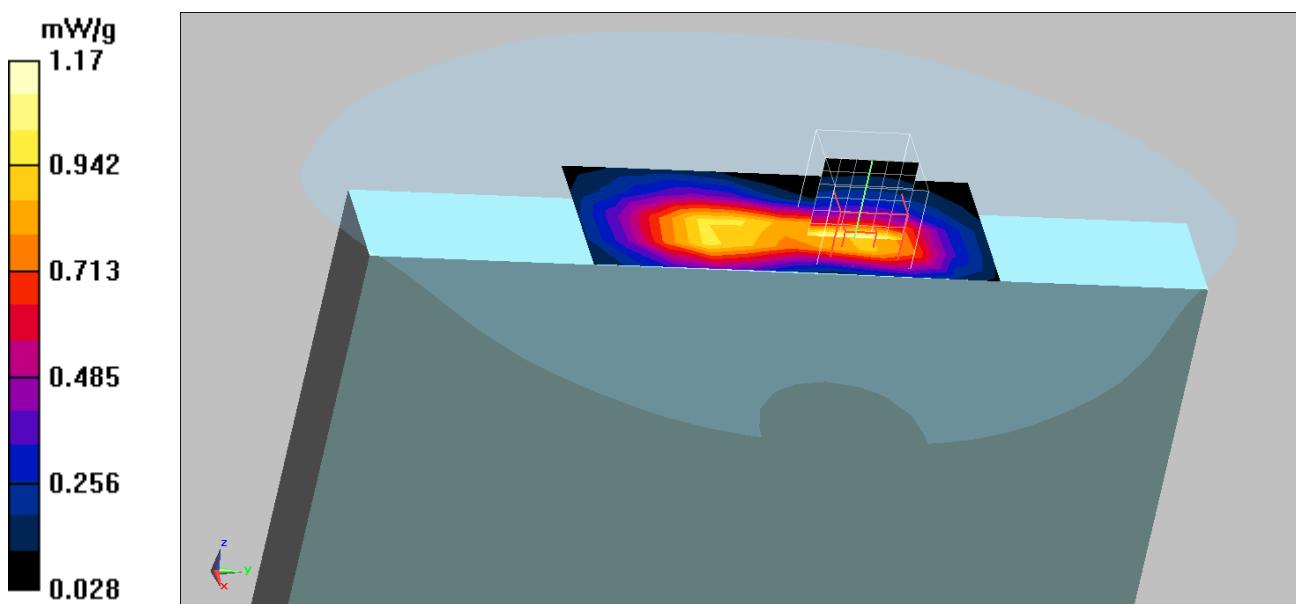
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$ 

Reference Value = 25.1 V/m; Power Drift = -0.097 dB

Peak SAR (extrapolated) = 1.82 W/kg

**SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.565 mW/g**

Maximum value of SAR (measured) = 1.17 mW/g



Date/Time: 5/30/2010

Test Laboratory: Quietek

**CDMA1900\_Body\_1175 Top  
DUT: Tablet PC ; Type: T10L**

Communication System: FCC CDMA EVDO-1900MHz; Frequency: 1908.75 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1908.75$  MHz;  $\sigma = 1.53$  mho/m;  $\epsilon_r = 52.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 20.3

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(7.45, 7.45, 7.45); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Right Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 0.965 mW/g

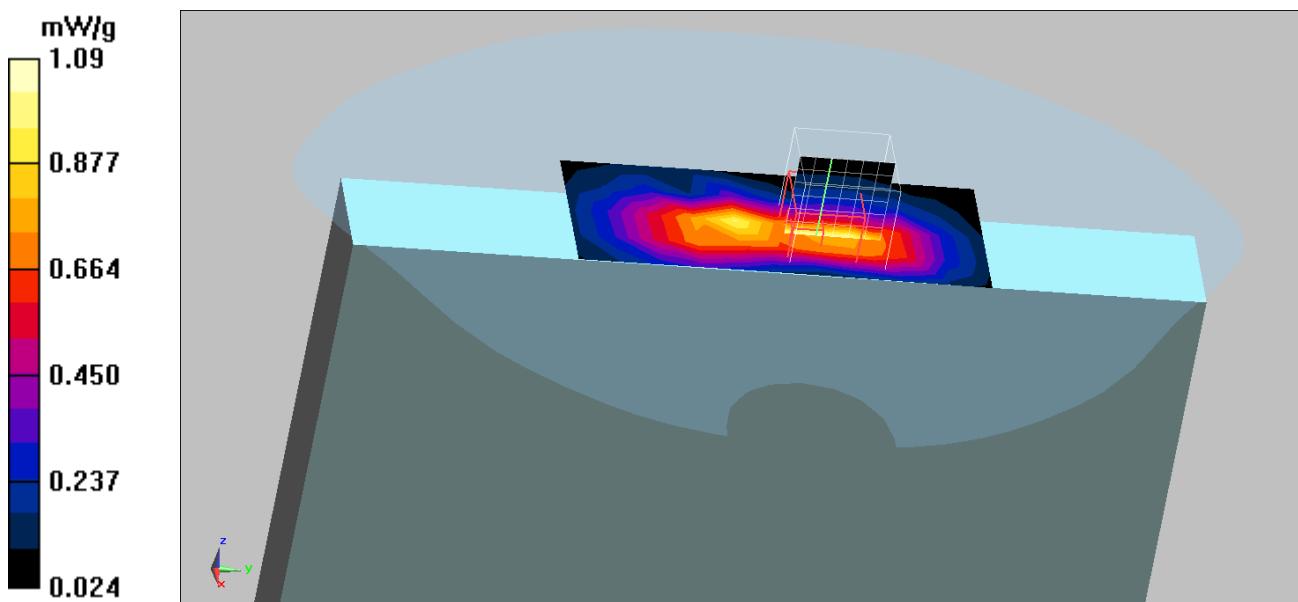
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.3 V/m; Power Drift = 0.053 dB

Peak SAR (extrapolated) = 1.68 W/kg

**SAR(1 g) = 0.952 mW/g; SAR(10 g) = 0.514 mW/g**

Maximum value of SAR (measured) = 1.09 mW/g



Date/Time: 5/30/2010

Test Laboratory: Quietek

**CDMA1900\_Body\_600 Back****DUT: Tablet PC ; Type: T10L**

Communication System: FCC CDMA EVDO-1900MHz; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.49 \text{ mho/m}$ ;  $\epsilon_r = 53.2$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 20.3

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(7.45, 7.45, 7.45); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Right Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid:  $dx=13\text{mm}$ ,  $dy=13\text{mm}$ 

Maximum value of SAR (measured) = 0.541 mW/g

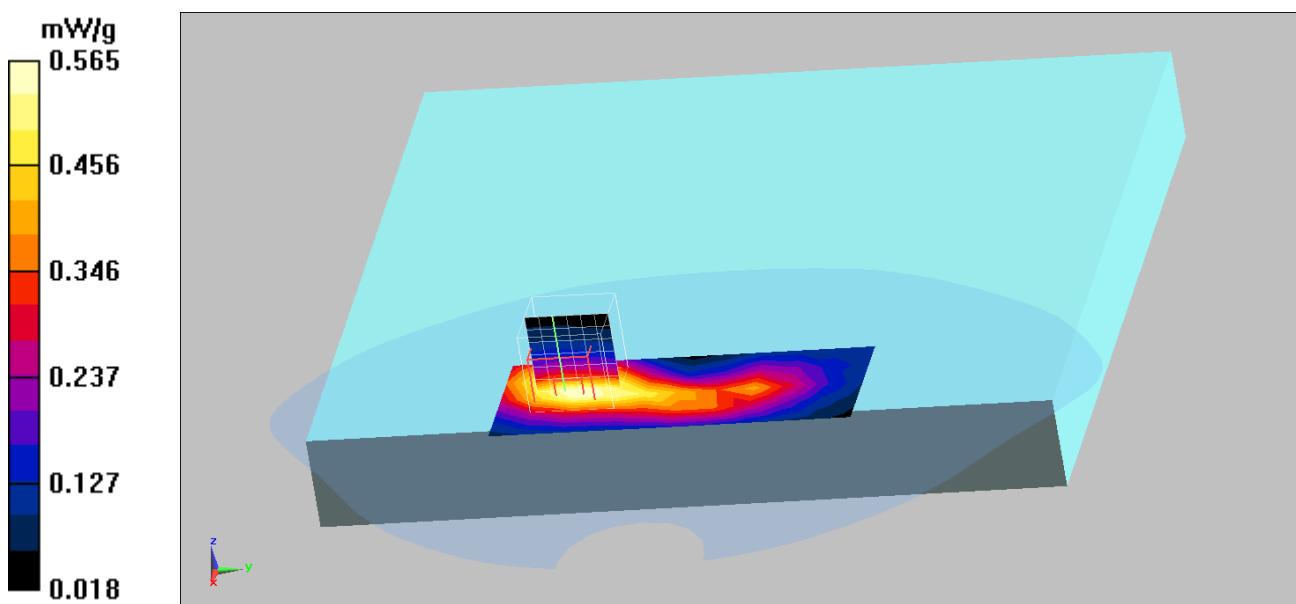
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$ 

Reference Value = 16.1 V/m; Power Drift = 0.117 dB

Peak SAR (extrapolated) = 0.857 W/kg

**SAR(1 g) = 0.524 mW/g; SAR(10 g) = 0.327 mW/g**

Maximum value of SAR (measured) = 0.565 mW/g



Date/Time: 5/30/2010

Test Laboratory: Quietek

**CDMA1900\_Body\_600 Top EVDO Rel 0****DUT: Tablet PC ; Type: T10L**

Communication System: FCC CDMA EVDO-1900MHz; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 20.3

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(7.45, 7.45, 7.45); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Right Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 1.24 mW/g

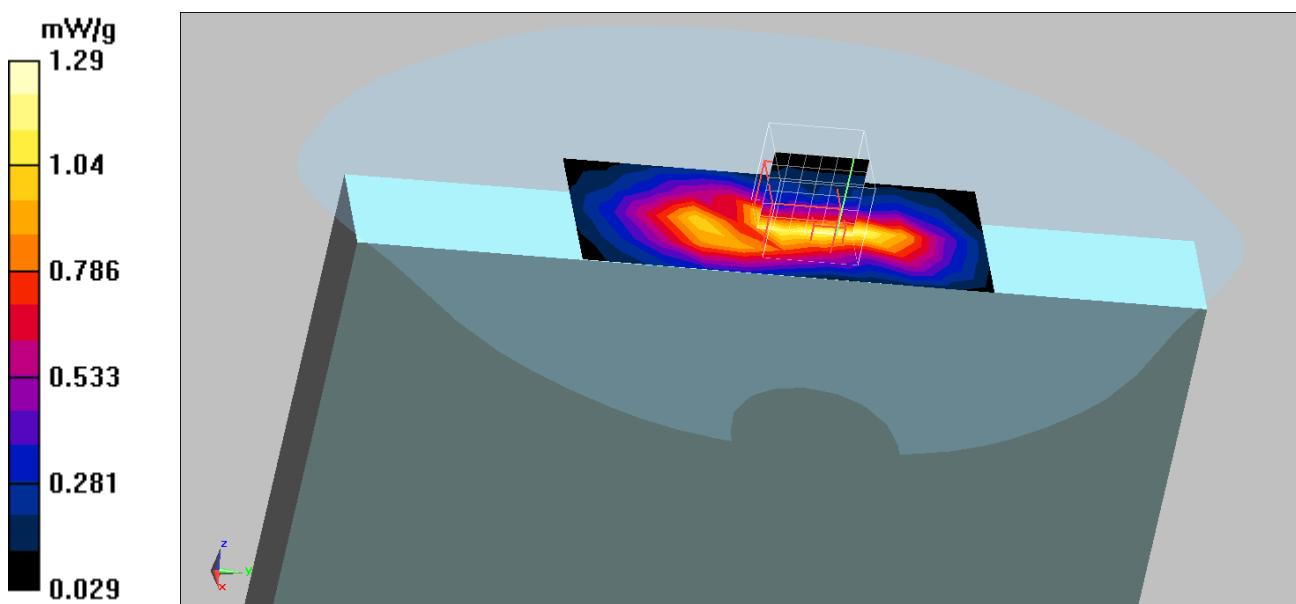
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.5 V/m; Power Drift = 0.142 dB

Peak SAR (extrapolated) = 3.51 W/kg

**SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.627 mW/g**

Maximum value of SAR (measured) = 1.29 mW/g



Date/Time: 5/30/2010

Test Laboratory: Quietek

**CDMA1900\_Body\_600 Top EVDO Rel A****DUT: Tablet PC ; Type: T10L**

Communication System: FCC CDMA EVDO-1900MHz; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 20.3

DASY4 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(7.45, 7.45, 7.45); Calibrated: 3/05/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 4/26/2010
- Phantom: SAM Right Table; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**Body/Area Scan (5x11x1):** Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 1.33 mW/g

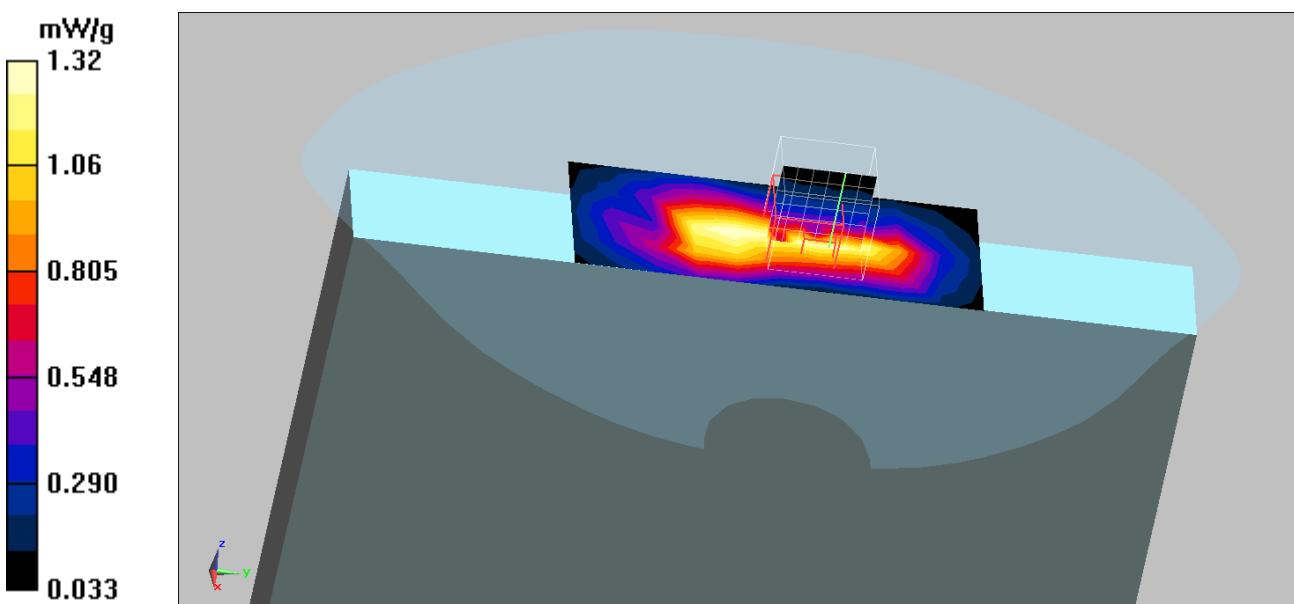
**Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

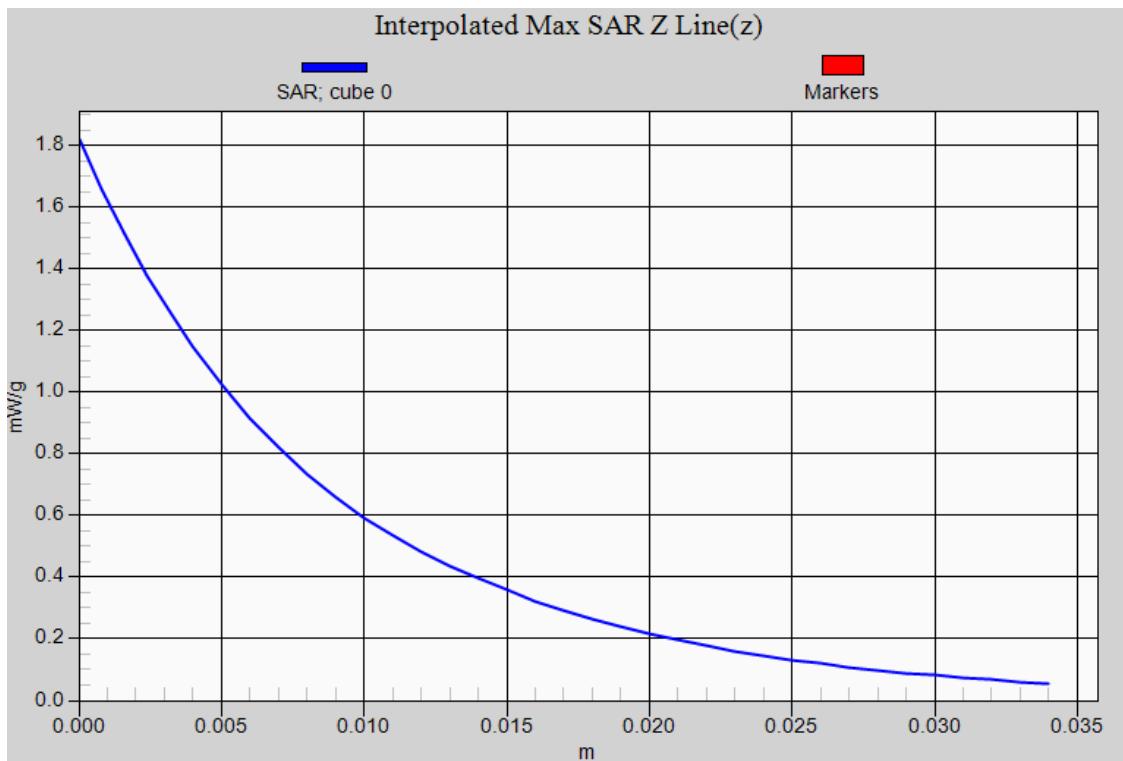
Reference Value = 28.8 V/m; Power Drift = 0.069 dB

Peak SAR (extrapolated) = 2.93 W/kg

**SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.627 mW/g**

Maximum value of SAR (measured) = 1.32 mW/g



**CDMA 1900 MHz EUT Top Z-Axis plot****Channel: 600**



Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA  
 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 108**

Client **Quietek (Auden)**

Certificate No: **EX3-3710\_Mar10**

## CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:3710**

Calibration procedure(s) **QA CAL-01.v6, QA CAL-14.v3, QA CAL-23.v3 and QA CAL-25.v2**  
 Calibration procedure for dosimetric E-field probes

Calibration date: **March 5, 2010**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).  
 The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature ( $22 \pm 3$ )°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter E4419B	GB41293874	1-Apr-09 (No. 217-01030)	Apr-10
Power sensor E4412A	MY41495277	1-Apr-09 (No. 217-01030)	Apr-10
Power sensor E4412A	MY41498087	1-Apr-09 (No. 217-01030)	Apr-10
Reference 3 dB Attenuator	SN: S5054 (3c)	31-Mar-09 (No. 217-01026)	Mar-10
Reference 20 dB Attenuator	SN: S5086 (20b)	31-Mar-09 (No. 217-01028)	Mar-10
Reference 30 dB Attenuator	SN: S5129 (30b)	31-Mar-09 (No. 217-01027)	Mar-10
Reference Probe ES3DV2	SN: 3013	30-Dec-09 (No. ES3-3013_Dec09)	Dec-10
DAE4	SN: 660	29-Sep-09 (No. DAE4-660_Sep09)	Sep-10
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator HP 8648C	US3642U01700	4-Aug-99 (in house check Oct-09)	In house check: Oct-11
Network Analyzer HP 8753E	US37390585	18-Oct-01 (in house check Oct-09)	In house check: Oct10

Calibrated by: **Katja Pokovic**      Function: **Technical Manager**

Approved by: **Niels Kuster**      Quality Manager

Issued: March 5, 2010

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

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



**S** Schweizerischer Kalibrierdienst  
**C** Service suisse d'étalonnage  
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Accredited by the Swiss Accreditation Service (SAS)

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Accreditation No.: **SCS 108**

### Glossary:

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C	modulation dependent linearization parameters
Polarization $\varphi$	$\varphi$ rotation around probe axis
Polarization $\theta$	$\theta$ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\theta = 0$ is normal to probe axis

### Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
- b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005

### Methods Applied and Interpretation of Parameters:

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

# Probe EX3DV4

## SN:3710

Manufactured: July 21, 2009  
Calibrated: March 5, 2010

Calibrated for DASY Systems

(Note: non-compatible with DASY2 system!)

## DASY - Parameters of Probe: EX3DV4 SN:3710

### Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup>	0.48	0.58	0.60	$\pm 10.1\%$
DCP (mV) <sup>B</sup>	90.8	94.4	91.8	

### Modulation Calibration Parameters

UID	Communication System Name	PAR		A dB	B dBuV	C	VR mV	Unc <sup>E</sup> (k=2)
10000	CW	0.00	X Y Z	0.00 0.00 0.00	0.00 0.00 0.00	1.00 1.00 1.00	300 300 300	$\pm 1.5\%$

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

<sup>A</sup> The uncertainties of NormX,Y,Z do not affect the E<sup>2</sup>-field uncertainty inside TSL (see Pages 5 and 6)

<sup>B</sup> Numerical linearization parameter: uncertainty not required.

<sup>E</sup> Uncertainty is determined using the maximum deviation from linear response applying rectangular distribution and is expressed for the square of the field value

## DASY - Parameters of Probe: EX3DV4 SN:3710

### Calibration Parameter Determined in Head Tissue Simulating Media

f [MHz]	Validity [MHz] <sup>C</sup>	Permittivity	Conductivity	ConvF X	ConvF Y	ConvF Z	Alpha	Depth Unc (k=2)
835	± 50 / ± 100	41.5 ± 5%	0.90 ± 5%	8.83	8.83	8.83	0.68	0.64 ± 11.0%
900	± 50 / ± 100	41.5 ± 5%	0.97 ± 5%	8.73	8.73	8.73	0.83	0.58 ± 11.0%
1810	± 50 / ± 100	40.0 ± 5%	1.40 ± 5%	7.69	7.69	7.69	0.62	0.63 ± 11.0%
1950	± 50 / ± 100	40.0 ± 5%	1.40 ± 5%	7.35	7.35	7.35	0.70	0.60 ± 11.0%
2450	± 50 / ± 100	39.2 ± 5%	1.80 ± 5%	6.96	6.96	6.96	0.46	0.75 ± 11.0%
2600	± 50 / ± 100	39.0 ± 5%	1.96 ± 5%	6.88	6.88	6.88	0.31	0.92 ± 11.0%
3500	± 50 / ± 100	37.9 ± 5%	2.91 ± 5%	6.64	6.64	6.64	0.33	1.18 ± 13.1%
5200	± 50 / ± 100	36.0 ± 5%	4.66 ± 5%	4.92	4.92	4.92	0.40	1.90 ± 13.1%
5300	± 50 / ± 100	35.9 ± 5%	4.76 ± 5%	4.60	4.60	4.60	0.40	1.90 ± 13.1%
5500	± 50 / ± 100	35.6 ± 5%	4.96 ± 5%	4.42	4.42	4.42	0.50	1.90 ± 13.1%
5600	± 50 / ± 100	35.5 ± 5%	5.07 ± 5%	4.42	4.42	4.42	0.40	1.90 ± 13.1%
5800	± 50 / ± 100	35.3 ± 5%	5.27 ± 5%	4.26	4.26	4.26	0.50	1.90 ± 13.1%

<sup>C</sup> The validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2). The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

## DASY - Parameters of Probe: EX3DV4 SN:3710

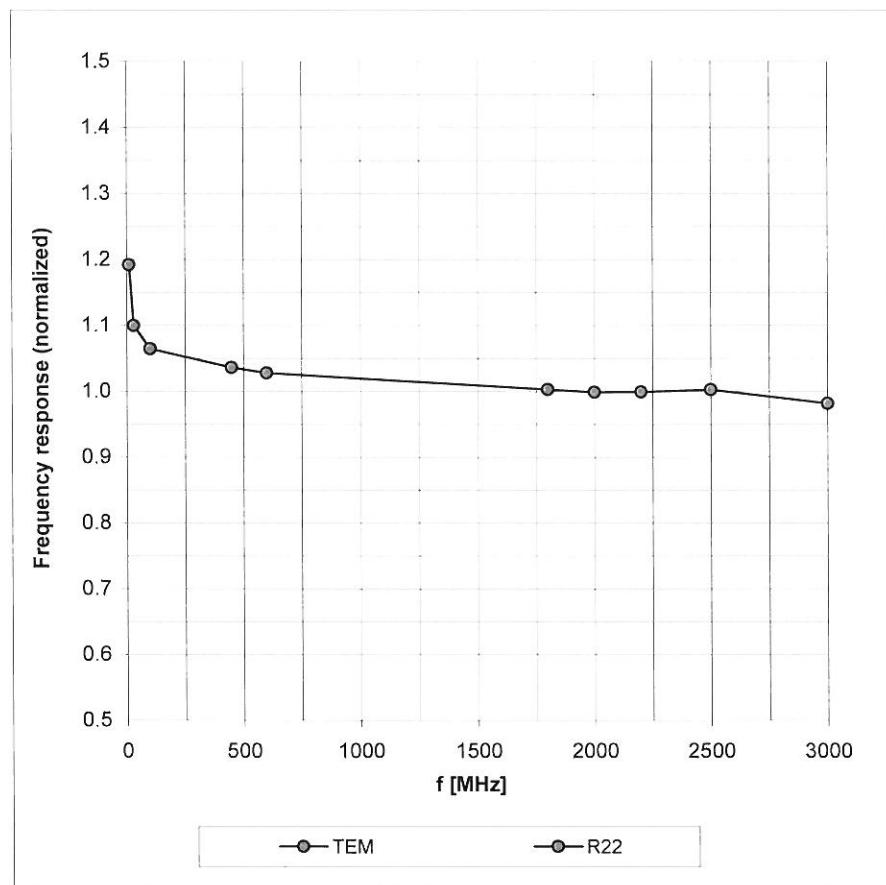
### Calibration Parameter Determined in Body Tissue Simulating Media

f [MHz]	Validity [MHz] <sup>C</sup>	Permittivity	Conductivity	ConvF X	ConvF Y	ConvF Z	Alpha	Depth Unc (k=2)
835	± 50 / ± 100	55.2 ± 5%	0.97 ± 5%	8.95	8.95	8.95	0.84	0.62 ± 11.0%
900	± 50 / ± 100	55.0 ± 5%	1.05 ± 5%	8.80	8.80	8.80	0.65	0.69 ± 11.0%
1810	± 50 / ± 100	53.3 ± 5%	1.52 ± 5%	7.71	7.71	7.71	0.57	0.72 ± 11.0%
1950	± 50 / ± 100	53.3 ± 5%	1.52 ± 5%	7.45	7.45	7.45	0.38	0.87 ± 11.0%
2450	± 50 / ± 100	52.7 ± 5%	1.95 ± 5%	7.00	7.00	7.00	0.32	0.95 ± 11.0%
2600	± 50 / ± 100	52.5 ± 5%	2.16 ± 5%	6.90	6.90	6.90	0.47	0.79 ± 11.0%
3500	± 50 / ± 100	51.3 ± 5%	3.31 ± 5%	6.19	6.19	6.19	0.31	1.44 ± 13.1%
5200	± 50 / ± 100	49.0 ± 5%	5.30 ± 5%	4.13	4.13	4.13	0.50	1.90 ± 13.1%
5300	± 50 / ± 100	48.5 ± 5%	5.42 ± 5%	3.91	3.91	3.91	0.55	1.90 ± 13.1%
5500	± 50 / ± 100	48.6 ± 5%	5.65 ± 5%	3.81	3.81	3.81	0.55	1.90 ± 13.1%
5600	± 50 / ± 100	48.5 ± 5%	5.77 ± 5%	3.58	3.58	3.58	0.60	1.90 ± 13.1%
5800	± 50 / ± 100	48.2 ± 5%	6.00 ± 5%	3.97	3.97	3.97	0.60	1.90 ± 13.1%

<sup>C</sup> The validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2). The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

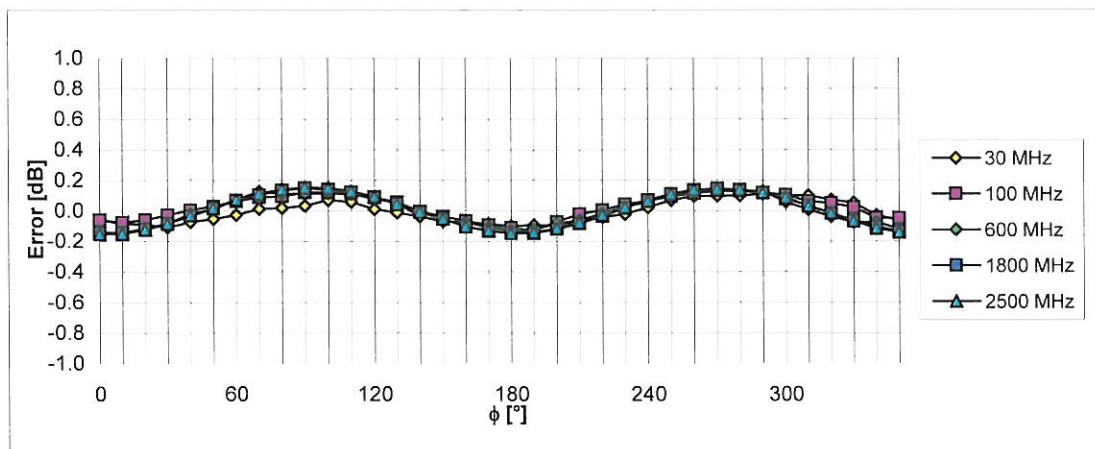
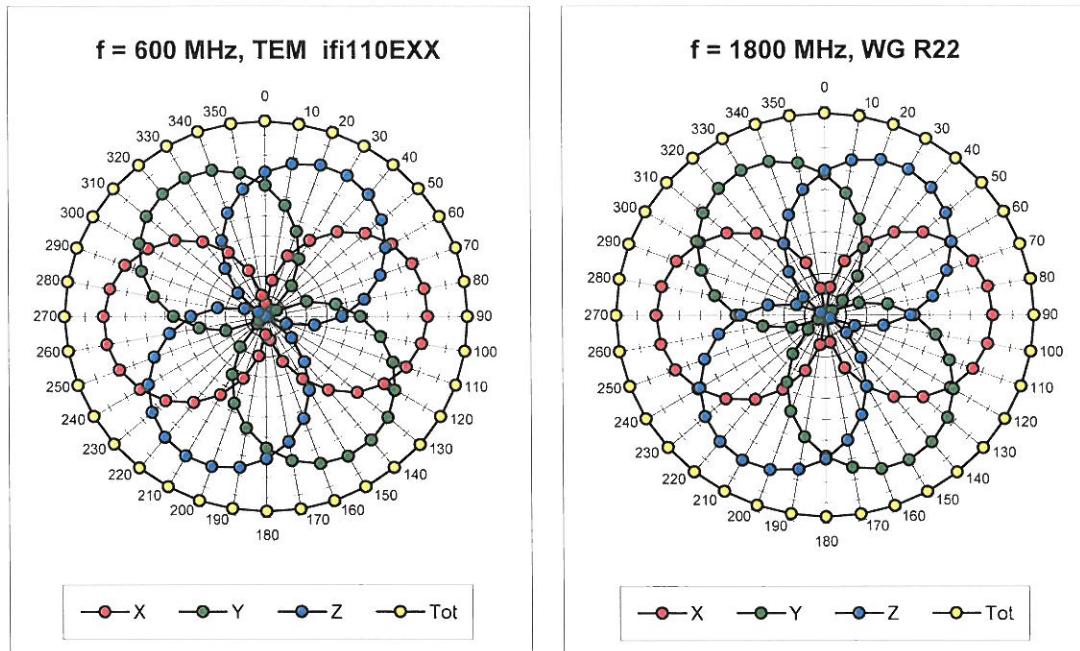
## Frequency Response of E-Field

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



Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

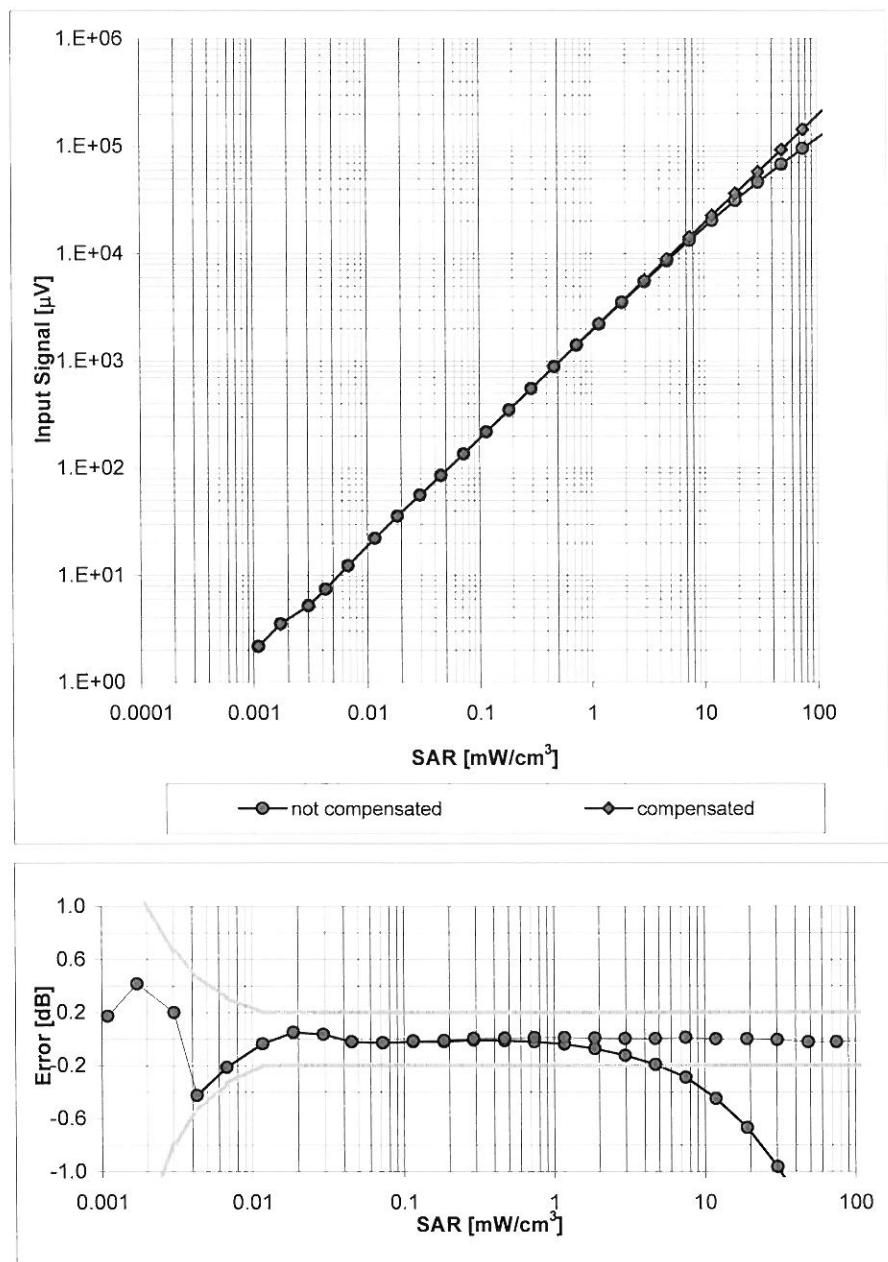
## Receiving Pattern ( $\phi$ ), $\theta = 0^\circ$



Uncertainty of Axial Isotropy Assessment:  $\pm 0.5\%$  (k=2)

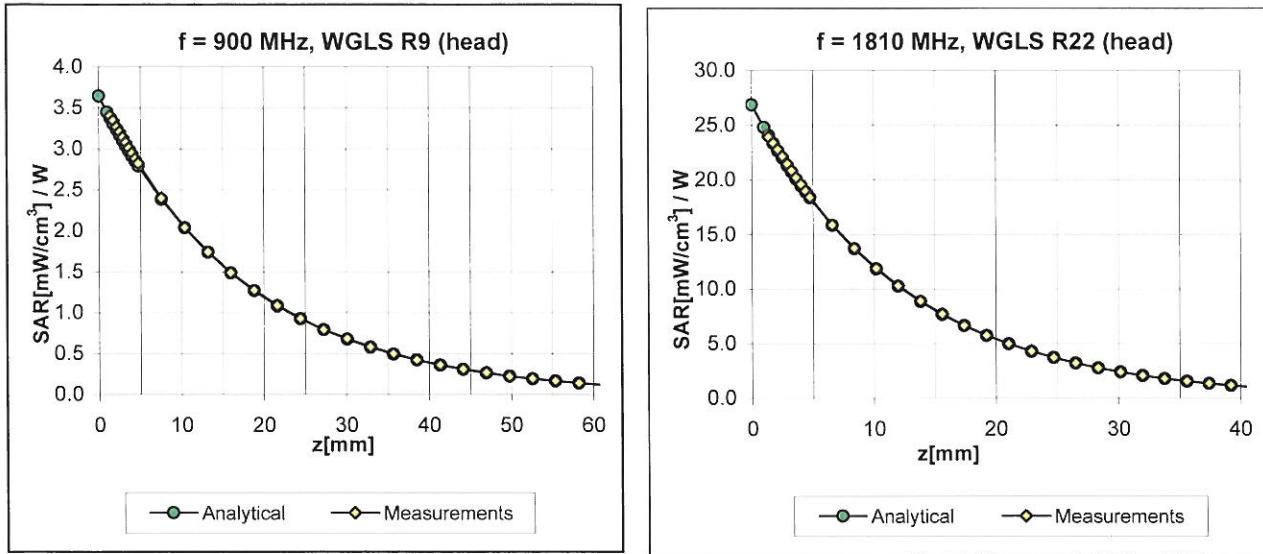
## Dynamic Range f(SAR<sub>head</sub>)

(Waveguide R22, f = 1800 MHz)



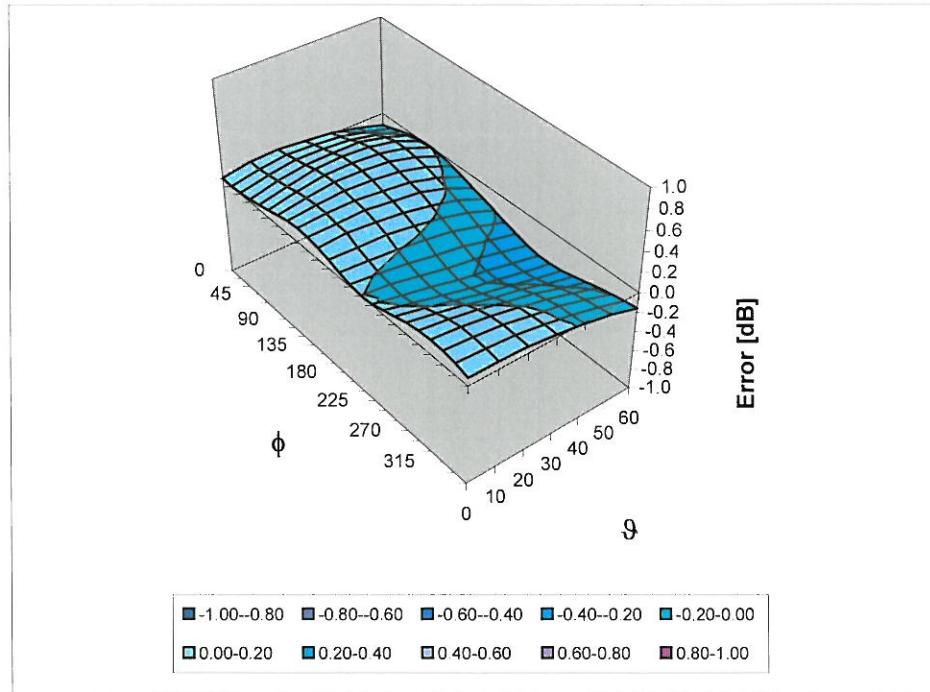
Uncertainty of Linearity Assessment:  $\pm 0.6\%$  ( $k=2$ )

## Conversion Factor Assessment



## Deviation from Isotropy in HSL

Error ( $\phi, \theta$ ),  $f = 900 \text{ MHz}$



Uncertainty of Spherical Isotropy Assessment:  $\pm 2.6\%$  ( $k=2$ )

## Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	Not applicable
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	2 mm