



SAR Test Report

Product Name : Tablet PC
Model No. : xTablet[®]T7200, Fieldbook A2, T7Q, a7360X, a7380X

Applicant : Twinhead International Corp
Address : 10F,550 Rueiguand Rd Neihu,Taipei,Taiwan 114,ROC

Date of Receipt : 2012/02/21
Issued Date : 2012/06/27
Report No. : 122393R-HPUSP09V01
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 Quietek Corporation.

Test Report Certification

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Applicant : Twinhead International Corp
Address : 10F,550 Rueiguand Rd Neihu,Taipei,Taiwan 114,ROC
Manufacturer : Twinhead International Corp
Model No. : xTablet®T7200, Fieldbook A2, T7Q, a7360X, a7380X
Trade Name : MobileDemand, LOGIC INSTRUMENT, DURABOOK,
tabletkiosk
FCC ID : FKGT7Q
Applicable Standard : FCC Oet65 Supplement C June 2001
IEEE Std. 1528-2003
47CFR § 2.1093
Measurement : KDB 447498 , KDB 248227, KDB616217
procedures
Test Result : Max. SAR Measurement (1g)
802.11b/g(2.4GHz): **0.329** W/kg
802.11a(5 GHz): **1.530** W/kg
Application Type : Certification

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Documented By :

(Adm. Assistant / April Chen)

Tested 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
Trade Name	MobileDemand, LOGIC INSTRUMENT, DURABOOK, tabletkiosk
Model No.	xTablet®T7200, Fieldbook A2, T7Q, a7360X, a7380X
FCC ID	FKGT7Q
TX Frequency	802.11b/g/n : 2412MHz~2462MHz 802.11a/n : 5150MHz~5825MHz
Wlan Modular	MFR: Intel, M/N: 6235ANHMW
Type of Modulation	DSSS/OFDM
Antenna Type	PIFA
Device Category	Portable
RF Exposure Environment	Uncontrolled
Max. Output Power (Conducted)	802.11b: 14.60 dBm 802.11g: 15.01 dBm 802.11a: 14.43 dBm

* Note : 1. Per FCC KDB 616217 D01,

- (1) The output power of BT is less than 10mW ,so SAR not required .
- (2) BT & WLAN can't work simultaneously, thus simultaneous mode is no need.

2. The different of the each model is shown as below:

Model	Trademark
xTablet®T7200	MobileDemand
Fieldbook A2	LOGIC INSTRUMENT
T7Q	DURABOOK
a7360X/a7380X	tablet kiosk

* I/O Port and appearance of buttons in each model is not the same.

3. Each model through the pretest, only the worst case (T7Q) is shown in the test report.

1.2 Antenna List

No.	Manufacturer	Part No.	Peak Gain
1	WGT	TWxTablet®T7200, Fieldbook A2, T7Q, a7360X, a7380XWIFI02+A (Main) TWxTablet®T7200, Fieldbook A2, T7Q, a7360X, a7380XWIFI01+A (Aux)	0.48dBi For 2.4GHz 2.43dBi For 5GHz

1.3 Test Environment

Ambient conditions in the laboratory:

Test Date: Mar 12, 2012

Items	Required	Actual
Temperature (°C)	18-25	20.7± 2
Humidity (%RH)	30-70	53

Test Date: Mar 13, 2012

Items	Required	Actual
Temperature (°C)	18-25	21.1± 2
Humidity (%RH)	30-70	51

Site Description:

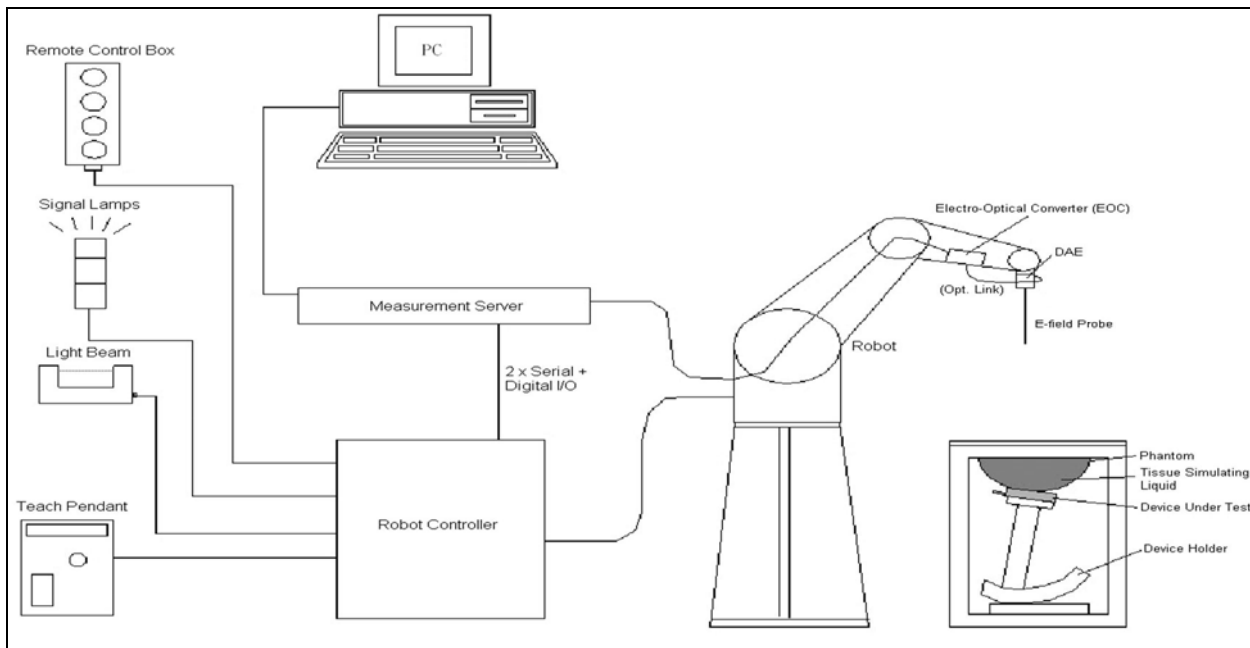
Accredited by TAF
Accredited Number: 0914
Effective through: December 12, 2014

Site Name: Quietek Corporation

Site Address: No. 5-22, Rueishu Keng, Linkou Dist.,
New Taipei City 24451,
Taiwan. R.O.C.
TEL: 886-2-8601-3788 / FAX: 886-2-8601-3789
E-Mail: service@quietek.com

2. SAR Measurement System

2.1 DASYS System Description



The DASYS 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 DASYS 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 10mm² 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/m³ 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.

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

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

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


2.2 DASY5 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.

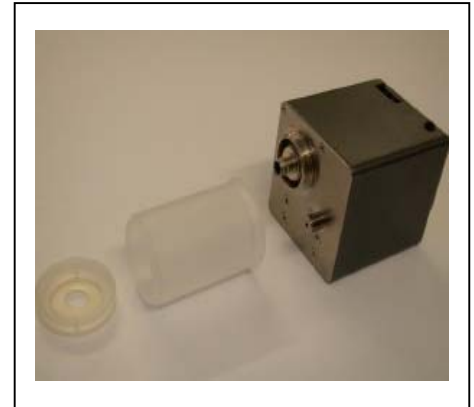
SPEAG conducts the probe calibration in compliance with international and national standards (e.g. IEEE 1528, EN 62209-1, IEC 62209, etc.) under ISO 17025. The calibration data are in Appendix D.

2.2.1 Isotropic E-Field Probe Specification

Model	Ex3DV4	
Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	10 MHz to 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)	
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)	
Dynamic Range	10 µW/g to 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 µW/g)	
Dimensions	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	
Application	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)	2450MHz Head	2450MHz Body	5200MHz Body	5800MHz Body
Water	46.7	73.2	76	75.68
Salt	0.00	0.04	0.00	0.43
Sugar	0.00	0.00	0.00	0.00
HEC	0.00	0.00	0.00	0.00
Preventol	0.00	0.00	0.00	0.00
DGBE	53.3	26.7	4.44	4.42
Triton X-100	0.00	0.00	19.56	19.47

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.

Body Tissue Simulate Measurement				
Frequency [MHz]	Description	Dielectric Parameters		Tissue Temp. [°C]
		ϵ_r	σ [s/m]	
2450 MHz	Reference result ± 5% window	52.7 50.065 to 55.335	1.95 1.8525 to 2.0475	N/A
	12-Mar-12	53.82	1.91	19.2
2412 MHz	Low channel	54.27	1.87	19.2
2437 MHz	Mid channel	53.99	1.89	19.2
2462 MHz	High channel	53.67	1.92	19.2

Body Tissue Simulant Measurement				
Frequency [MHz]	Description	Dielectric Parameters		Tissue Temp. [°C]
		ϵ_r	σ [s/m]	
5200MHz	Reference result ± 5% window	49 46.55 to 51.45	5.3 5.035 to 5.565	N/A
	13-Mar-12	48.08	5.405	18.9
5180 MHz	Low channel	48.43	5.373	18.9
5240 MHz	Mid channel	47.83	5.434	18.9
5320 MHz	High channel	47.66	5.474	18.9
5200MHz	Reference result ± 5% window	49 46.55 to 51.45	5.3 5.035 to 5.565	N/A
	26-Jun-12	48.11	5.40	22.9
5240MHz	Low channel	47.81	5.436	22.9
5260MHz	Mid channel	47.77	5.44	22.9
5270MHz	High channel	47.65	5.45	22.9

Body Tissue Simulant Measurement				
Frequency [MHz]	Description	Dielectric Parameters		Tissue Temp. [°C]
		ϵ_r	σ [s/m]	
5500MHz	Reference result ± 5% window	48.6 46.19 to 51.03	5.65 5.367 to 5.9325	N/A
	13-Mar-12	47.47	5.523	18.9
5500 MHz	Low channel	47.47	5.523	18.9
5510 MHz	Mid channel	47.44	5.527	18.9
5580 MHz	High channel	47.19	5.583	18.9

Body Tissue Simulant Measurement				
Frequency [MHz]	Description	Dielectric Parameters		Tissue Temp. [°C]
		ϵ_r	σ [s/m]	
5800MHz	Reference result ± 5% window	48.2 45.79 to 50.61	6 5.7 to 6.3	N/A
	13-Mar-12	46.44	5.903	19.8
5700 MHz	Low channel	47.33	5.721	19.8
5785 MHz	Mid channel	46.66	5.882	19.8
5825 MHz	High channel	46.37	5.945	19.8

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.

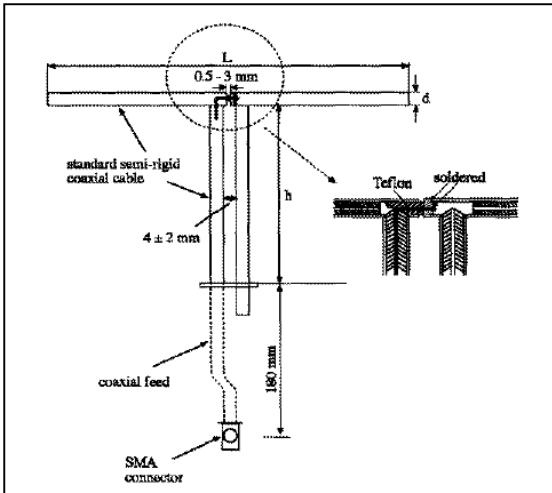
Target Frequency (MHz)	Head		Body	
	ϵ_r	σ (S/m)	ϵ_r	σ (S/m)
150	52.3	0.76	61.9	0.80
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94
835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	0.98	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800 – 2000	40.0	1.40	53.3	1.52
2450	39.2	1.80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

(ϵ_r = relative permittivity, σ = conductivity and $\rho = 1000 \text{ kg/m}^3$)

4. SAR Measurement Procedure

4.1 SAR System Check

4.1.1 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)
2450MHz	53.5	30.4	3.6
5200M~5800MHz	20.6	45.4	3.6

4.1.2 System Check Result

System Performance Check at 2450MHz				
Dipole Kit: ALS-D-2450				
Frequency [MHz]	Description	SAR [w/kg] 1g	SAR [w/kg] 10g	Tissue Temp. [°C]
2450 MHz	Reference result ± 10% window	49.6 44.64 to 54.56	22.88 20.59 to 25.17	N/A
	12-Mar-12	49.2	22	19.2

Note: All SAR values are normalized to 1W forward power.

System Performance Check at 5200MHz				
Dipole Kit: D5GHzV2				
Frequency [MHz]	Description	SAR [w/kg] 1g	SAR [w/kg] 10g	Tissue Temp. [°C]
5200 MHz	Reference result ± 10% window	76.2 68.58 to 83.82	21.3 19.02 to 23.32	N/A
	13-Mar-12	80.4	23.04	18.9
	26-Jun-12	78	22.16	22.9
Note: All SAR values are normalized to 1W forward power.				

System Performance Check at 5500MHz				
Dipole Kit: D5GHzV2				
Frequency [MHz]	Description	SAR [w/kg] 1g	SAR [w/kg] 10g	Tissue Temp. [°C]
5500 MHz	Reference result ± 10% window	80.1 72.09 to 88.11	22.3 20.07 to 24.53	N/A
	13-Mar-12	80.8	23.88	18.9
Note: All SAR values are normalized to 1W forward power.				

System Performance Check at 5800MHz				
Dipole Kit: D5GHzV2				
Frequency [MHz]	Description	SAR [w/kg] 1g	SAR [w/kg] 10g	Tissue Temp. [°C]
5800 MHz	Reference result ± 10% window	75.7 68.13 to 83.27	21 18.9 to 23.1	N/A
	13-Mar-12	70.4	21.12	19.8
Note: All SAR values are normalized to 1W forward power.				

4.2 SAR Measurement Procedure

The Dasy5 calculates SAR using the following equation,

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

σ : represents the simulated tissue conductivity

ρ : 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 1mm²) 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 1mm³).

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)	1.60 W/kg
Spatial Average SAR (whole body)	0.08 W/kg
Spatial Peak SAR (10g for hands, feet, ankles and wrist)	4.00 W/kg

6. Test Equipment List

Instrument	Manufacturer	Model No.	Serial No.	Last Calibration	Next Calibration
Stäubli Robot TX60L	Stäubli	TX60L	F09/5BL1A1/A06	2009/05/18	only once
Controller	Speag	CS8c	N/A	2009/05/18	only once
Apral Reference Dipole 2450MHz	Apral	ALS-D-2450-S	QTK-319	2011/11/22	2012/11/21
Speag Reference Dipole 5GHz	Speag	D5GHzV2	1041	2011/05/20	2013/05/19
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	1207	2012/05/30	2013/05/29
E-Field Probe	Speag	EX3DV4	3698	2011/07/28	2012/07/27
SAR Software	Speag	DASY52	V52.8 (1)	N/A	N/A
Apral Dipole Spaccer	Apral	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	2012/05/14	2013/05/13
Vector Network	Anritsu	MS4623B	992801	2011/07/21	2012/07/20
Signal Generator	Anritsu	MG3694A	041902	2011/08/02	2012/08/01
Power Meter	Anritsu	ML2487A	6K00001447	2011/12/01	2012/11/30
Wide Bandwidth Sensor	Anritsu	MA2491	030677	2011/12/01	2012/11/30

7. Measurement Uncertainty

DASY5 Uncertainty								
Measurement uncertainty for 300 MHz to 3 GHz averaged over 1 gram / 10 gram.								
Error Description	Uncert. value	Prob. Dist.	Div.	(ci) 1g	(ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	(vi) V _{eff}
Measurement System								
Probe Calibration	±6.0%	N	1	1	1	±6.0%	±6.0%	∞
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%	∞
Test Sample Related								
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%	∞
Phantom and Setup								
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						±11%	±10.8%	387
Expanded STD Uncertainty						±22%	±21.5%	

DASY5 Uncertainty Measurement uncertainty for 3GHz to 6 GHz averaged over 1 gram / 10 gram.								
Error Description	Uncert. value	Prob. Dist.	Div.	(ci) 1g	(ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	(vi) V _{eff}
Measurement System								
Probe Calibration	±6.6%	N	1	1	1	±6.6%	±6.6%	∞
Axial Isotropy	±4.7%	R	√3	0.7	0.7	±1.9%	±1.9%	∞
Hemispherical Isotropy	±9.6%	R	√3	0.7	0.7	±3.9%	±3.9%	∞
Boundary Effects	±2.0%	R	√3	1	1	±1.2%	±1.2%	∞
Linearity	±4.7%	R	√3	1	1	±2.7%	±2.7%	∞
System Detection Limits	±1.0%	R	√3	1	1	±0.6%	±0.6%	∞
Readout Electronics	±0.3%	N	1	1	1	±0.3%	±0.3%	∞
Response Time	±0.8%	R	√3	1	1	±0.5%	±0.5%	∞
Integration Time	±2.6%	R	√3	1	1	±1.5%	±1.5%	∞
RF Ambient Noise	±3.0%	R	√3	1	1	±1.7%	±1.7%	∞
RF Ambient Reflections	±3.0%	R	√3	1	1	±1.7%	±1.7%	∞
Probe Positioner	±0.8%	R	√3	1	1	±0.5%	±0.5%	∞
Probe Positioning	±9.9%	R	√3	1	1	±5.7%	±5.7%	∞
Max. SAR Eval.	±4.0%	R	√3	1	1	±2.3%	±2.3%	∞
Test Sample Related								
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	√3	1	1	±2.9%	±2.9%	∞
Phantom and Setup								
Phantom Uncertainty	±4.0%	R	√3	1	1	±2.3%	±2.3%	∞
Liquid Conductivity (target)	±5.0%	R	√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	√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						±12.8%	±12.6%	330
Expanded STD Uncertainty						±25.6%	±25.2%	

8. Conducted Power Measurement

Mode	Frequency (MHz)	Channel	Chain A Average Power(dBm)	Chain B Average Power(dBm)
802.11b	2412	1	14.60	14.04
802.11b	2437	6	14.32	14.08
802.11b	2462	11	14.19	13.47
802.11g	2412	1	11.29	10.65
802.11g	2437	6	15.01	14.13
802.11g	2462	11	11.34	10.24
802.11a	5180	36	11.69	11.58
802.11a	5220	44	13.76	13.49
802.11a	5240	48	14.09	13.98
802.11a	5260	52	14.43	14.40
802.11a	5300	60	14.01	13.74
802.11a	5320	64	13.35	12.88
802.11a	5500	100	12.88	12.37
802.11a	5580	116	12.99	12.85
802.11a	5700	140	13.17	12.78
802.11a	5745	149	13.65	12.64
802.11a	5785	157	14.21	13.55
802.11a	5825	165	13.92	13.45

Mode	Frequency (MHz)	Channel	Chain A Average Power(dBm)	Chain B Average Power(dBm)	Chain A+ChainB Average Power(dBm)
802.11n-20M	2412	1	11.14	9.1	13.25
802.11n-20M	2437	6	11.63	11.1	14.38
802.11n-20M	2462	11	9.73	7.83	11.89
802.11n-20M	5180	36	10.40	10.24	13.33
802.11n-20M	5220	44	11.28	10.98	14.14
802.11n-20M	5240	48	10.94	11.73	14.36
802.11n-20M	5260	52	10.97	11.00	14.00
802.11n-20M	5300	60	11.27	10.46	13.89
802.11n-20M	5320	64	10.59	9.83	13.24
802.11n-20M	5500	100	9.84	10.78	13.35
802.11n-20M	5580	116	9.8	10.37	13.10
802.11n-20M	5700	140	10.39	9.87	13.15
802.11n-20M	5745	149	9.51	8.5	12.04
802.11n-20M	5785	157	10.34	9.4	12.91
802.11n-20M	5825	165	10.79	10.92	13.87
802.11n-40M	2422	3	10.5	9.54	13.06
802.11n-40M	2437	6	10.87	10.87	13.88
802.11n-40M	2452	9	11.7	11.17	14.45
802.11n-40M	5190	38	9.96	9.54	12.77
802.11n-40M	5230	46	9.83	10.52	13.20
802.11n-40M	5270	54	10.92	9.52	13.29
802.11n-40M	5310	62	10.31	9.23	12.81
802.11n-40M	5510	102	8.96	8.62	11.80
802.11n-40M	5590	118	8.88	9.53	12.23
802.11n-40M	5670	134	9.78	8.76	12.31
802.11n-40M	5755	151	9.6	7.95	11.86
802.11n-40M	5795	159	10.76	8.56	12.81

9. Test Results

9.1 SAR Test Results Summary

SAR MEASUREMENT						
Ambient Temperature (°C) : 20.7 ±2				Relative Humidity (%): 53		
Liquid Temperature (°C) : 19.2 ±2				Depth of Liquid (cm):>15		
Test Mode: 802.11b - 2450 MHz- WGT Main Antenna (Chain A), P/N: TWxTablet®T7200, Fieldbook A2, T7Q, a7360X, a7380XWIFI02+A						
Test Position Body	Antenna Position	Frequency		Conducted Power (dBm)	SAR 1g (W/kg)	Limit (W/kg)
		Channel	MHz			
Top	Fixed	1	2412	14.60	0.217	1.6
Top	Fixed	6	2437	14.32	0.329	1.6
Top	Fixed	11	2462	14.19	0.242	1.6
Back	Fixed	6	2437	14.32	0.00379	1.6
Front	Fixed	6	2437	14.32	0.317	1.6
Right-Side	Fixed	6	2437	14.32	0.027	1.6
Test Mode: 802.11b - 2450 MHz- WGT Aux Antenna (Chain B), P/N: TWxTablet®T7200, Fieldbook A2, T7Q, a7360X, a7380XWIFI01+A						
Top	Fixed	6	2437	14.08	0.035	1.6
Back	Fixed	6	2437	14.08	0.00602	1.6
Front	Fixed	6	2437	14.08	0.0380	1.6
Left-Side	Fixed	6	2437	14.08	0.00331	1.6
Test Mode: 802.11g - 2450 MHz- WGT Main Antenna (Chain A), P/N: TWxTablet®T7200, Fieldbook A2, T7Q, a7360X, a7380XWIFI02+A						
Top	Fixed	6	2437	15.01	0.295	1.6
Test Mode: 802.11n (20M) - 2450 MHz – WGT Main Antenna (Chain A), P/N: TWxTablet®T7200, Fieldbook A2, T7Q, a7360X, a7380XWIFI02+A						
Top	Fixed	6	2437	11.63	0.219	1.6
Test Mode: 802.11n (40M) - 2450 MHz – WGT Main Antenna (Chain A), P/N: TWxTablet®T7200, Fieldbook A2, T7Q, a7360X, a7380XWIFI02+A						
Top	Fixed	6	2437	10.87	0.200	1.6
<p>Note : (1) According KDB 447498 D01, for antenna(s) located ≥ 5 cm from side & bottom , the SAR is not required,</p> <p>(2) Summing the SAR values of 802.11b is 0.367W/Kg <1.6W/kg (Main : 0.329W/kg+ Aux: 0.038W/kg), the conducted power of 802.11b is larger than 802.11g/n20/n40 and the AUX conducted power of 802.11g/n20/n40is less than Main conducted power, so the worst SAR testing is 802.11b mode.</p>						

SAR MEASUREMENT						
Ambient Temperature (°C) : 21.1 ±2			Relative Humidity (%): 51			
Liquid Temperature (°C) : 19.8 ±2			Depth of Liquid (cm):>15			
Test Mode: 802.11a - 5 GHz - WGT Main Antenna (Chain A), P/N: TWxTablet®T7200, Fieldbook A2, T7Q, a7360X, a7380XWIPI02+A						
Test Position Body	Antenna Position	Frequency		Conducted Power (dBm)	SAR 1g (W/kg)	Limit (W/kg)
		Channel	MHz			
Top	Fixed	36	5180	13.65	0.882	1.6
Top	Fixed	44	5220	13.76	1.210	1.6
Top	Fixed	48	5240	14.09	1.130	1.6
Top	Fixed	52	5260	14.43	1.390	1.6
Top	Fixed	60	5300	14.01	1.530	1.6
Top	Fixed	64	5320	13.35	1.390	1.6
Top	Fixed	100	5500	12.88	1.510	1.6
Top	Fixed	116	5580	12.99	0.905	1.6
Top	Fixed	140	5700	13.17	1.280	1.6
Top	Fixed	149	5745	13.65	1.490	1.6
Top	Fixed	157	5785	14.21	1.210	1.6
Top	Fixed	165	5825	13.92	1.030	1.6
Back	Fixed	100	5500	12.88	0.068	1.6
Front	Fixed	100	5500	12.88	1.310	1.6
Right-Side	Fixed	100	5500	12.88	0.077	1.6
Note : According KDB 447498 D01, for antenna(s) located ≥ 5 cm from side & bottom , the SAR is not required,						

SAR MEASUREMENT						
Ambient Temperature (°C) : 22.9 ±2			Relative Humidity (%): 53			
Liquid Temperature (°C) : 21.3 ±2			Depth of Liquid (cm):>15			
Test Mode: 802.11a - 5 GHz - WGT AUX Antenna (Chain B), P/N: TWxTablet®T7200, Fieldbook A2, T7Q, a7360X, a7380XWIPI01+A						
Test Position Body	Antenna Position	Frequency		Conducted Power (dBm)	SAR 1g (W/kg)	Limit (W/kg)
		Channel	MHz			
Top	Fixed	52	5260	14.40	0.638	1.6
Back	Fixed	52	5260	14.40	0.023	1.6
Front	Fixed	52	5260	14.40	1.01	1.6
Left-Side	Fixed	52	5260	14.40	0.025	1.6
<p>Note : (1) According KDB 447498 D01, for antenna(s) located ≥ 5 cm from side & bottom , the SAR is not required,</p> <p>(2) Except Front side , SAR Value of the other side are small than 0.8W/Kg and other channels are not required.</p>						

SAR MEASUREMENT						
Ambient Temperature (°C) : 22.9 ±2			Relative Humidity (%) : 53			
Liquid Temperature (°C) : 21.3 ±2			Depth of Liquid (cm) : >15			
Test Mode: 802.11n (20M) - 5 GHz - WGT Main Antenna (Chain A),, P/N: TWxTablet® T7200, Fieldbook A2, T7Q, a7360X, a7380XWIPI02+A						
Top	Fixed	48	5240	10.94	0.580	1.6
Test Mode: 802.11n (20M) - 5 GHz - WGT AUX Antenna (Chain B), P/N: TWxTablet® T7200, Fieldbook A2, T7Q, a7360X, a7380XWIPI01+A						
Front	Fixed	48	5240	11.73	0.613	1.6
Test Mode: 802.11n (40M) - 5 GHz - WGT Main Antenna (Chain A),, P/N: TWxTablet® T7200, Fieldbook A2, T7Q, a7360X, a7380XWIPI02+A						
Top	Fixed	54	5270	10.92	0.519	1.6
Test Mode: 802.11n (40M) - 5 GHz - WGT AUX Antenna (Chain B), P/N: TWxTablet® T7200, Fieldbook A2, T7Q, a7360X, a7380XWIPI01+A						
Front	Fixed	54	5270	9.52	0.434	1.6
<p>Note : (1) According KDB 447498 D01, for antenna(s) located ≥ 5 cm from side & bottom , the SAR is not required,</p> <p>(2) The test channels are chosen with the worst case power of 802.11n 20/40M (Chain A+Chain B)</p> <p>(3) Summing the SAR values of 802.11n(20M) is 1.193W/Kg <1.6W/kg (Main : 0.580W/kg+ Aux: 0.613W/kg).</p> <p>(4) Summing the SAR values of 802.11n(40M) is 0.953W/Kg <1.6W/kg (Main : 0.519W/kg+ Aux: 0.434W/kg).</p>						

Appendix**Appendix A. SAR System Check 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 Check Data

Test Laboratory: QuieTek

Date/Time: 3/12/2012

System Performance Check_2450MHz-Body

DUT: Dipole 2450 MHz; Type: ALS-D-2450-S-2

Communication System: CW; Frequency: 2450 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.91 \text{ mho/m}$; $\epsilon_r = 53.82$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 20.7, Liquid Temperature ($^{\circ}\text{C}$) : 19.2

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(6.6, 6.6, 6.6); Calibrated: 7/28/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/2450MHz_Body/Area Scan (7x7x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 9.088 mW/g

Configuration/2450MHz_Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

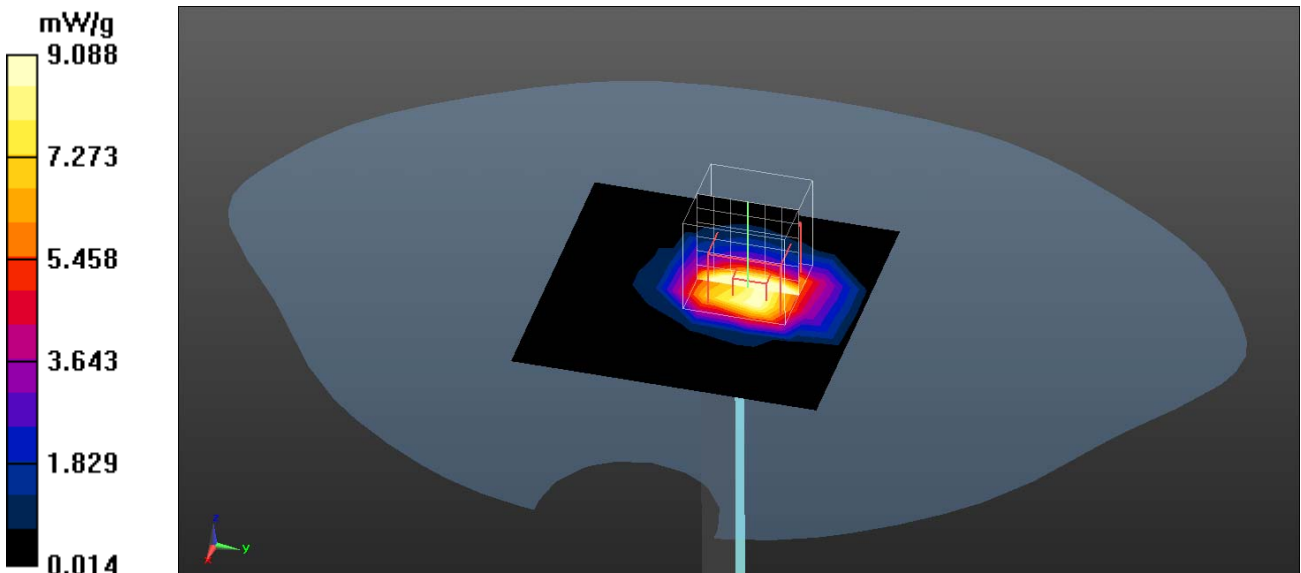
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 66.359 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 26.9700 W/kg

SAR(1 g) = 12.3 mW/g; SAR(10 g) = 5.5 mW/g

Maximum value of SAR (measured) = 14.003 mW/g



Test Laboratory: QuieTek

Date/Time: 3/13/2012

System Performance Check_5200-Body

DUT: Dipole 5GHz; Type: D5GHzV2

Communication System: CW; Frequency: 5200 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5200 \text{ MHz}$; $\sigma = 5.405 \text{ mho/m}$; $\epsilon_r = 48.08$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 21.1, Liquid Temperature ($^{\circ}\text{C}$) : 19.8

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.95, 3.95, 3.95); Calibrated: 7/28/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/5200MHz-Body/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 26.344 mW/g

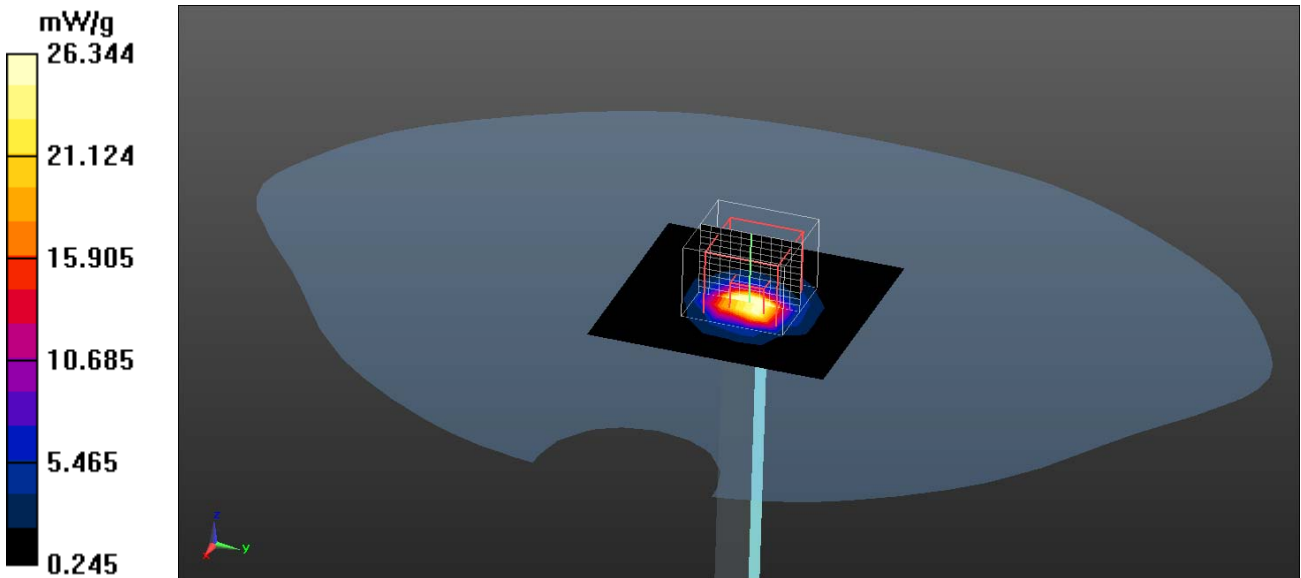
Configuration/5200MHz-Body/Zoom Scan (3x3x2mm, graded), dist=2mm (11x11x12)/Cube 0: Measurement grid: dx=3mm, dy=3mm, dz=2mm

Reference Value = 95.781 V/m; Power Drift = 0.007 dB

Peak SAR (extrapolated) = 78.4750 W/kg

SAR(1 g) = 20.1 mW/g; SAR(10 g) = 5.76 mW/g

Maximum value of SAR (measured) = 41.188 mW/g



Test Laboratory: QuieTek

Date/Time: 6/26/2012

System Performance Check_5200-Body

DUT: Dipole 5GHz; Type: D5GHzV2

Communication System: CW; Frequency: 5200 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5200 \text{ MHz}$; $\sigma = 5.40 \text{ mho/m}$; $\epsilon_r = 48.11$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 21.3, Liquid Temperature ($^{\circ}\text{C}$) : 22.9

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.95, 3.95, 3.95); Calibrated: 7/28/2011;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/5200MHz-Body/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 28.5 mW/g

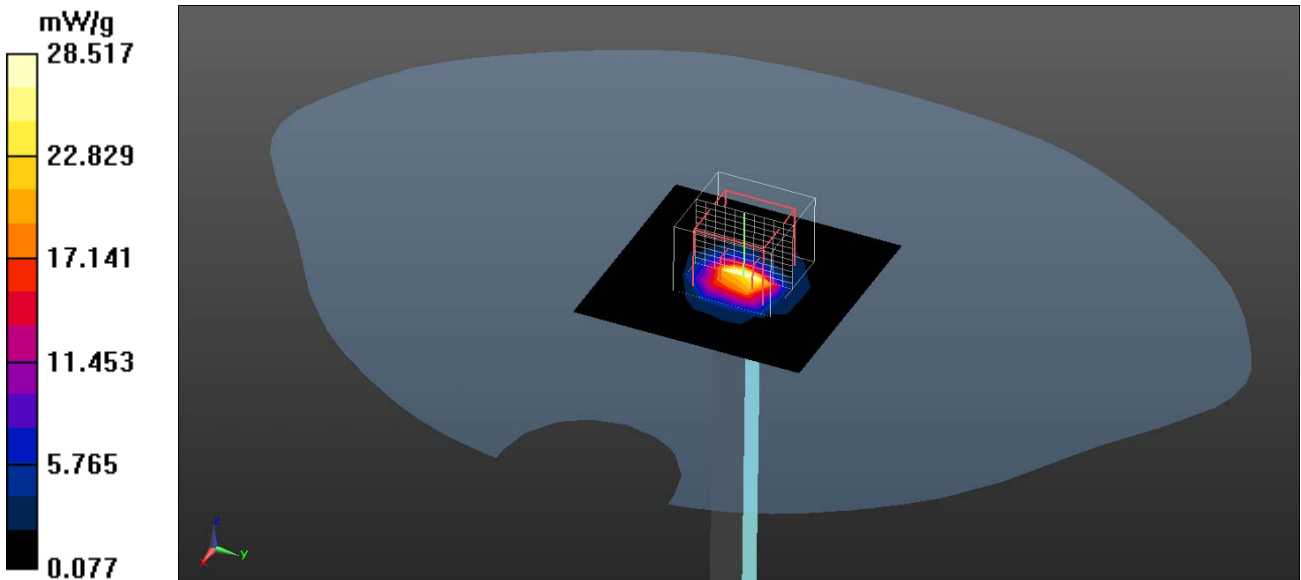
Configuration/5200MHz-Body/Zoom Scan (3x3x2mm, graded), dist=2mm (11x11x12)/Cube 0: Measurement grid: dx=3mm, dy=3mm, dz=2mm

Reference Value = 94.695 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 73.616 mW/g

SAR(1 g) = 19.5 mW/g; SAR(10 g) = 5.54 mW/g

Maximum value of SAR (measured) = 40.6 mW/g



Test Laboratory: QuieTek

Date/Time: 3/13/2012

System Performance Check_5500-Body

DUT: Dipole 5GHz; Type: D5GHzV2

Communication System: CW; Frequency: 5500 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5500 \text{ MHz}$; $\sigma = 5.523 \text{ mho/m}$; $\epsilon_r = 47.47$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 21.1, Liquid Temperature ($^{\circ}\text{C}$) : 19.8

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.68, 3.68, 3.68); Calibrated: 7/28/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/5500MHz-Body/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 26.935 mW/g

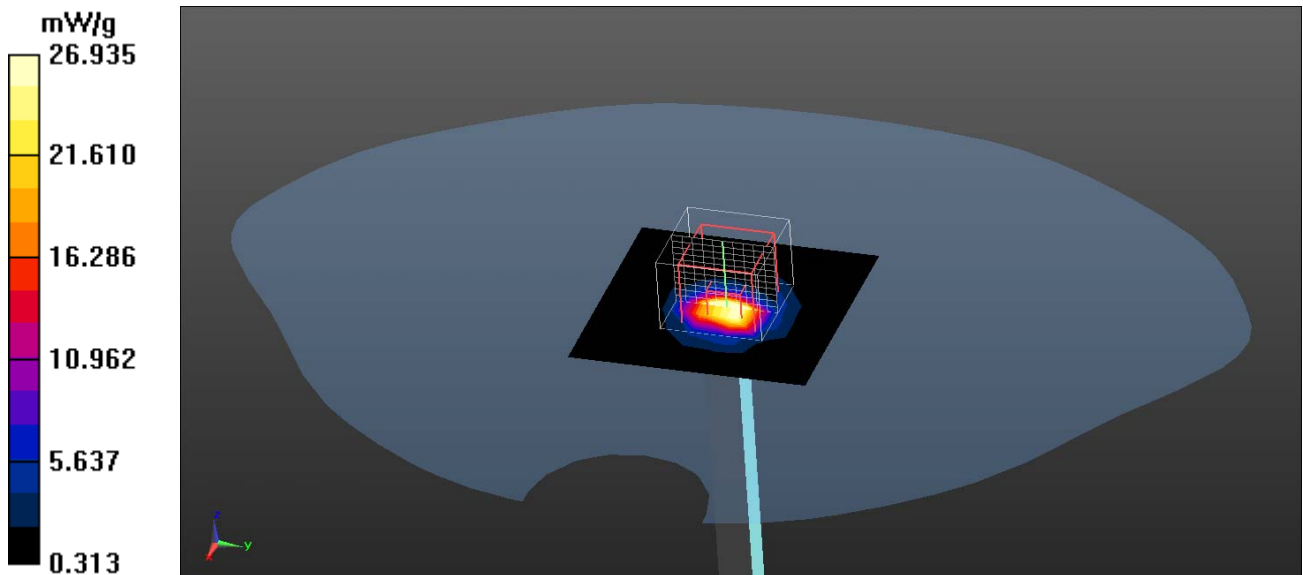
Configuration/5500MHz-Body/Zoom Scan (3x3x2mm, graded), dist=2mm (11x11x12)/Cube 0: Measurement grid: dx=3mm, dy=3mm, dz=2mm

Reference Value = 95.093 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 88.8140 W/kg

SAR(1 g) = 20.2 mW/g; SAR(10 g) = 5.97 mW/g

Maximum value of SAR (measured) = 42.288 mW/g



Test Laboratory: QuieTek

Date/Time: 3/13/2012

System Performance Check_5800-Body

DUT: Dipole 5GHz; Type: D5GHzV2

Communication System: CW; Frequency: 5800 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5800 \text{ MHz}$; $\sigma = 5.903 \text{ mho/m}$; $\epsilon_r = 46.44$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 21.1, Liquid Temperature ($^{\circ}\text{C}$) : 19.8

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.74, 3.74, 3.74); Calibrated: 7/28/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/5800MHz-Body/Area Scan (8x8x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 24.124 mW/g

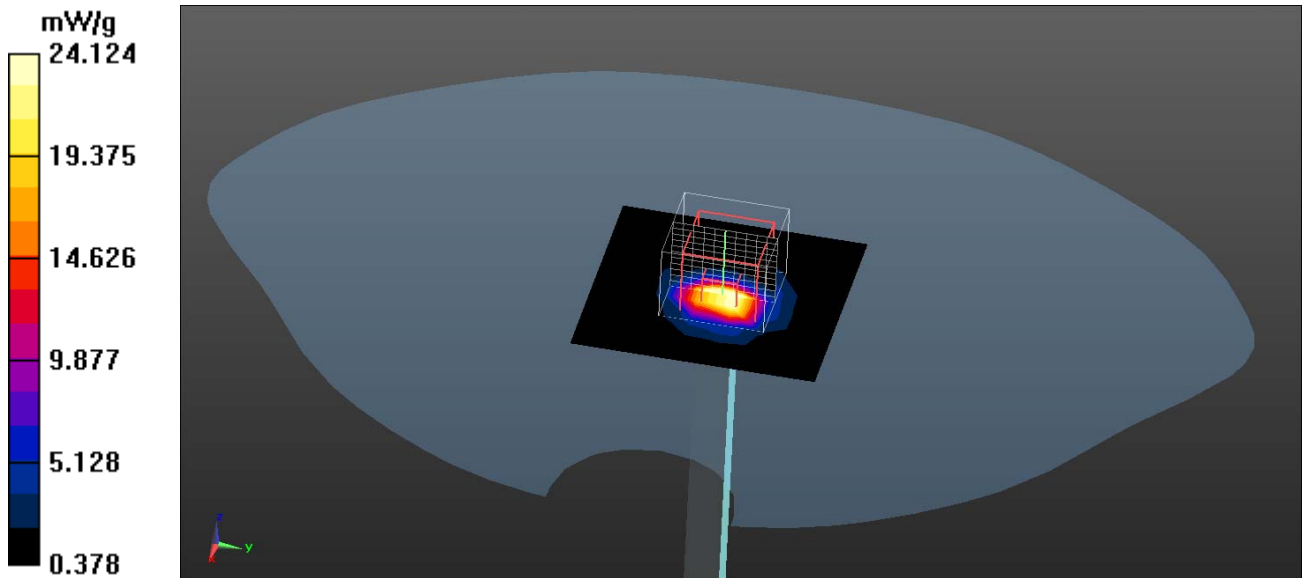
Configuration/5800MHz-Body/Zoom Scan (3x3x2mm, graded), dist=2mm (11x11x12)/Cube 0: Measurement grid: $dx=3\text{mm}$, $dy=3\text{mm}$, $dz=2\text{mm}$

Reference Value = 88.709 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 78.1300 W/kg

SAR(1 g) = 17.6 mW/g; SAR(10 g) = 5.28 mW/g

Maximum value of SAR (measured) = 37.386 mW/g



Appendix B. SAR measurement Data

Antenna Kit : WGT Main Antenna (Chain A):

P/N: TWxTablet®T7200, Fieldbook A2, T7Q, a7360X, a7380XWIPI02+A

Test Laboratory: QuieTek

Date/Time: 3/12/2012

802.11b_1-Top TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 2.4G; Frequency: 2412 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.87 \text{ mho/m}$; $\epsilon_r = 54.27$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 20.7, Liquid Temperature ($^{\circ}\text{C}$) : 19.2

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(6.6, 6.6, 6.6); Calibrated: 7/28/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$

Maximum value of SAR (measured) = 0.230 mW/g

Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

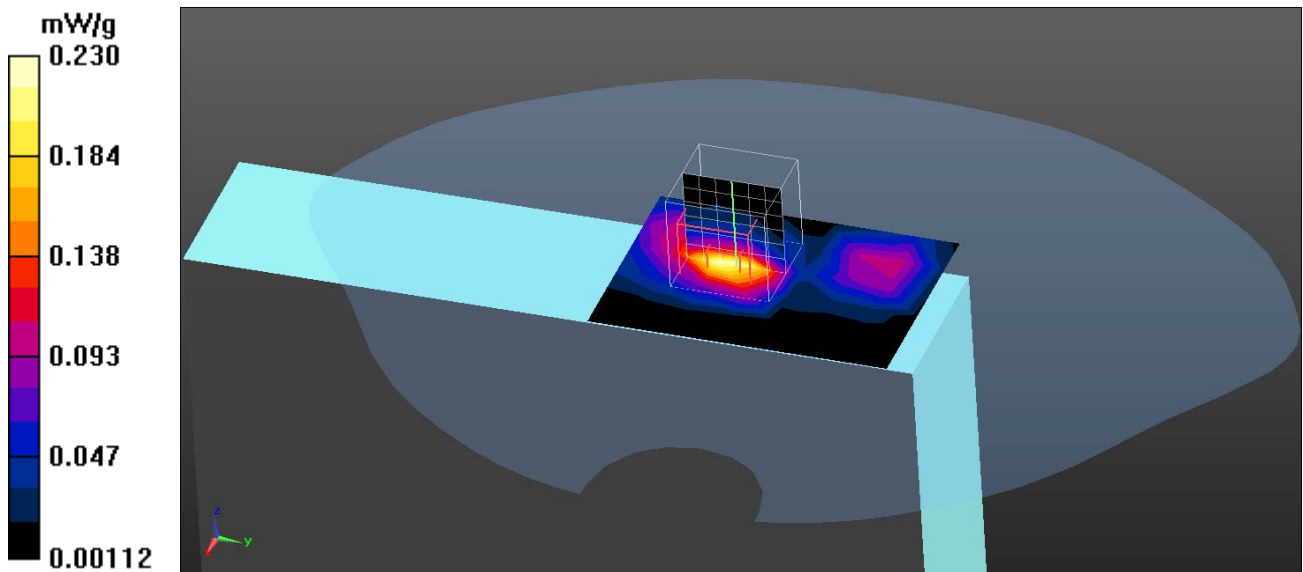
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.642 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.4360 W/kg

SAR(1 g) = 0.217 mW/g; SAR(10 g) = 0.103 mW/g

Maximum value of SAR (measured) = 0.241 mW/g



Test Laboratory: QuieTek

Date/Time: 3/12/2012

802.11b_6-Top TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 2.4G; Frequency: 2437 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.89 \text{ mho/m}$; $\epsilon_r = 53.99$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 20.7, Liquid Temperature ($^{\circ}\text{C}$) : 19.2

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(6.6, 6.6, 6.6); Calibrated: 7/28/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.320 mW/g

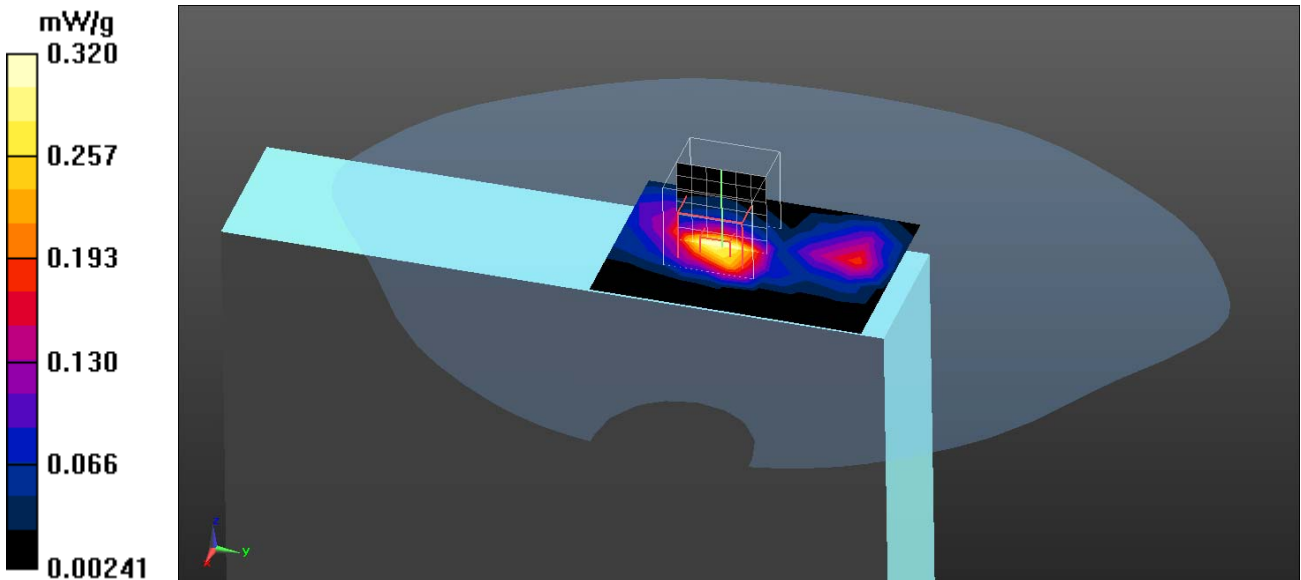
Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 8.680 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.7970 W/kg

SAR(1 g) = 0.329 mW/g; SAR(10 g) = 0.148 mW/g

Maximum value of SAR (measured) = 0.377 mW/g



Test Laboratory: QuieTek

Date/Time: 3/12/2012

802.11b_11-Top TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 2.4G; Frequency: 2462 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.92 \text{ mho/m}$; $\epsilon_r = 53.67$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 20.7, Liquid Temperature ($^{\circ}\text{C}$) : 19.2

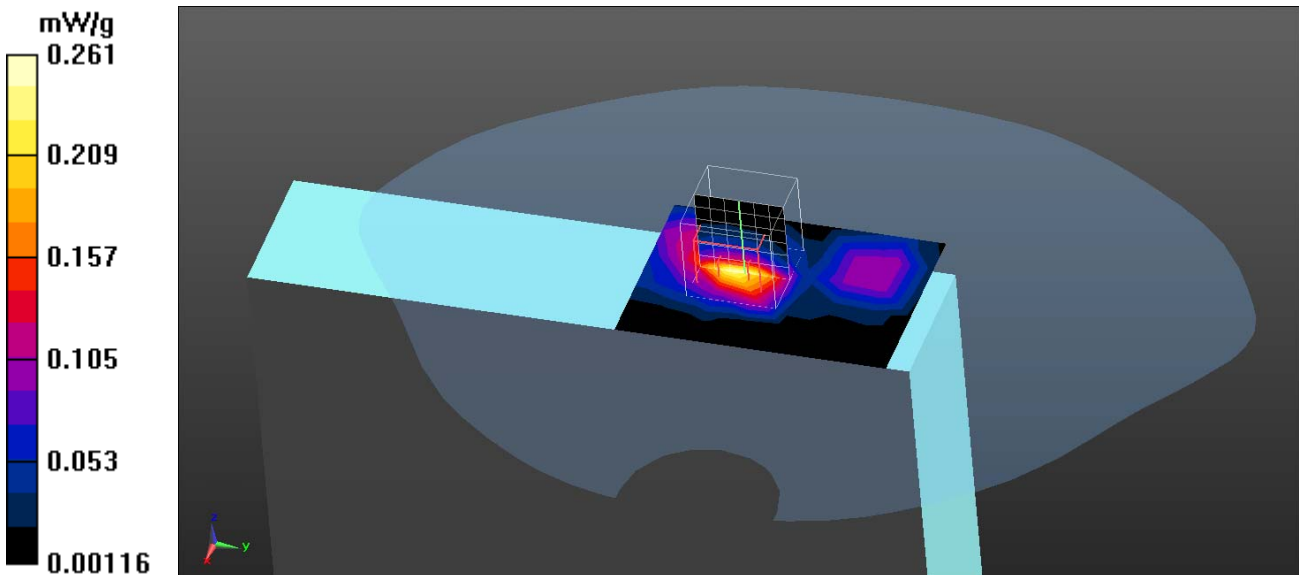
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(6.6, 6.6, 6.6); Calibrated: 7/28/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.261 mW/g

Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
 Reference Value = 6.457 V/m; Power Drift = 0.02 dB
 Peak SAR (extrapolated) = 0.5030 W/kg
SAR(1 g) = 0.242 mW/g; SAR(10 g) = 0.114 mW/g
 Maximum value of SAR (measured) = 0.267 mW/g



Test Laboratory: QuieTek

Date/Time: 3/12/2012

802.11b_6-Back TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 2.4G; Frequency: 2437 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.89$ mho/m; $\epsilon_r = 53.99$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature (°C) : 20.7, Liquid Temperature (°C) : 19.2

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(6.6, 6.6, 6.6); Calibrated: 7/28/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: dx=13mm, dy=13mm
 Maximum value of SAR (measured) = 0.00851 mW/g

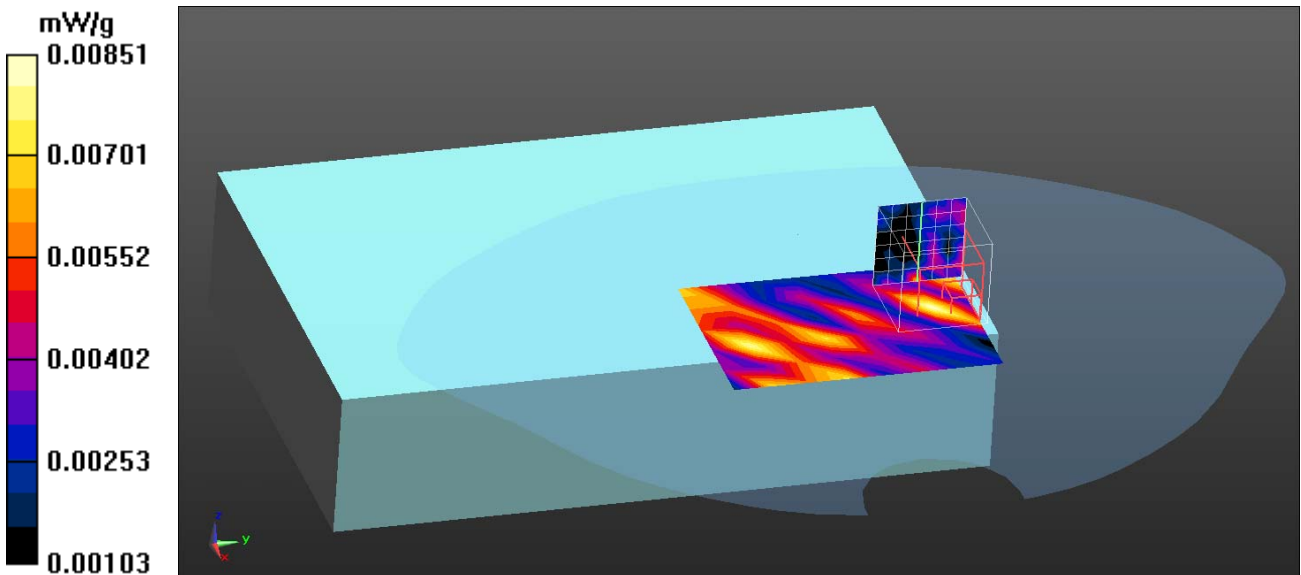
Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.872 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.0190 W/kg

SAR(1 g) = 0.00379 mW/g; SAR(10 g) = 0.0019 mW/g

Maximum value of SAR (measured) = 0.00684 mW/g



Test Laboratory: QuieTek

Date/Time: 3/12/2012

802.11b_6-Front TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 2.4G; Frequency: 2437 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.89$ mho/m; $\epsilon_r = 53.99$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature (°C) : 20.7, Liquid Temperature (°C) : 19.2

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(6.6, 6.6, 6.6); Calibrated: 7/28/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASYS2, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: dx=13mm, dy=13mm
 Maximum value of SAR (measured) = 0.332 mW/g

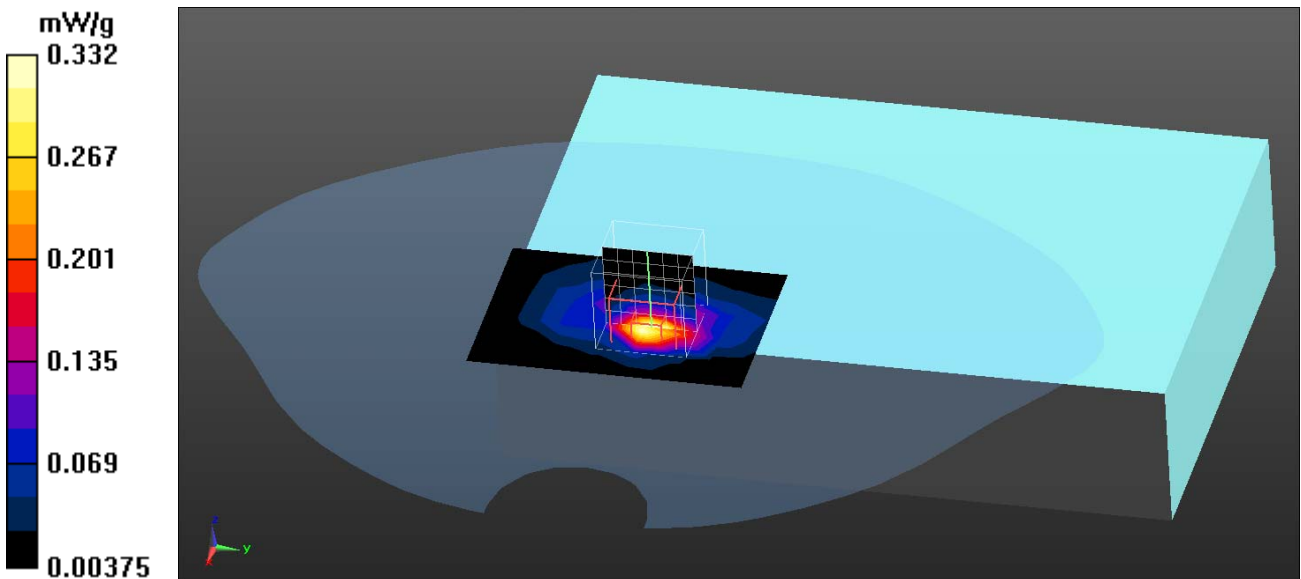
Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.423 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.7990 W/kg

SAR(1 g) = 0.317 mW/g; SAR(10 g) = 0.132 mW/g

Maximum value of SAR (measured) = 0.369 mW/g



Test Laboratory: QuieTek

Date/Time: 3/12/2012

802.11b_6-Right-Side TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 2.4G; Frequency: 2437 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.89$ mho/m; $\epsilon_r = 53.99$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature (°C) : 20.7, Liquid Temperature (°C) : 19.2

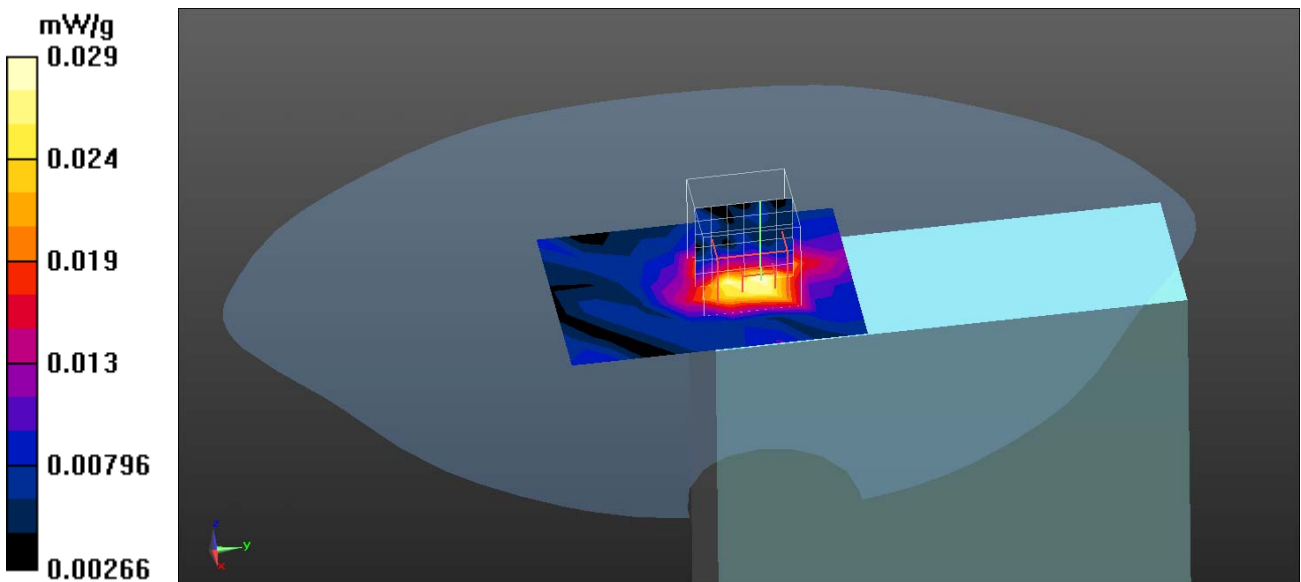
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(6.6, 6.6, 6.6); Calibrated: 7/28/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: dx=13mm, dy=13mm
Maximum value of SAR (measured) = 0.029 mW/g

Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.874 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.0580 W/kg
SAR(1 g) = 0.027 mW/g; SAR(10 g) = 0.015 mW/g
Maximum value of SAR (measured) = 0.033 mW/g



Antenna Kit : WGT Aux Antenna (Chain B):
 P/N: TWxTablet®T7200, Fieldbook A2, T7Q, a7360X, a7380XWIPI01+A

Test Laboratory: QuieTek

Date/Time: 3/12/2012

802.11b_6-Top TX2

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 2.4G; Frequency: 2437 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.89 \text{ mho/m}$; $\epsilon_r = 53.99$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 20.7, Liquid Temperature ($^{\circ}\text{C}$) : 19.2

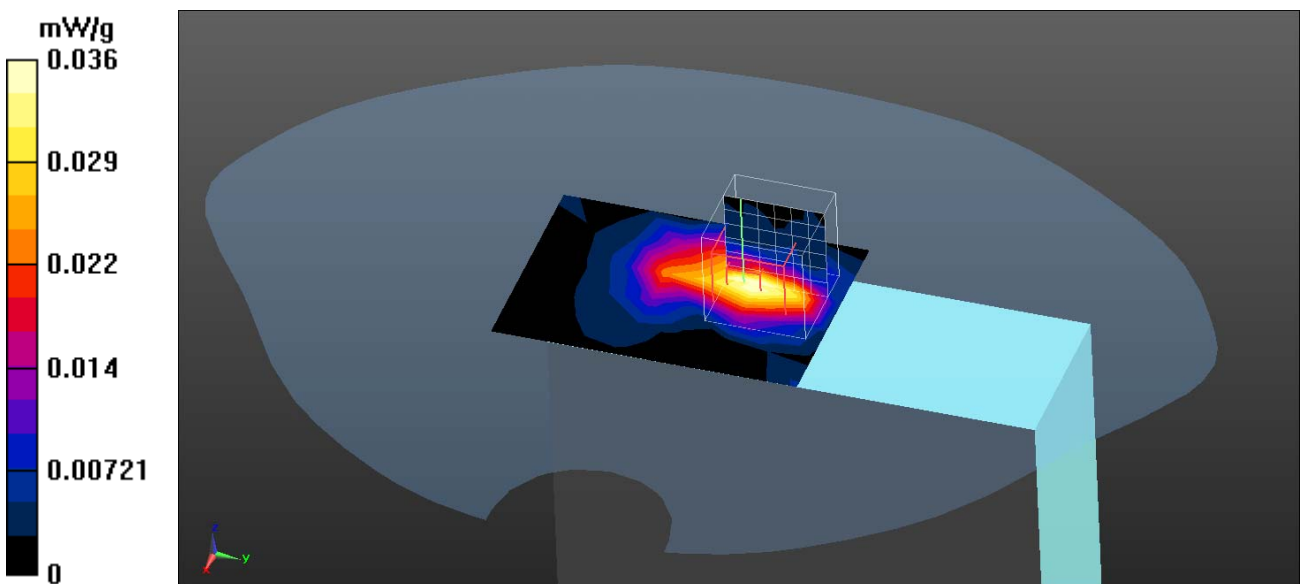
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(6.6, 6.6, 6.6); Calibrated: 7/28/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.036 mW/g

Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
 Reference Value = 1.761 V/m; Power Drift = 0.18 dB
 Peak SAR (extrapolated) = 0.0760 W/kg
SAR(1 g) = 0.035 mW/g; SAR(10 g) = 0.016 mW/g
 Maximum value of SAR (measured) = 0.040 mW/g



Test Laboratory: QuieTek

Date/Time: 3/12/2012

802.11b_6-Back TX2

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 2.4G; Frequency: 2437 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.89 \text{ mho/m}$; $\epsilon_r = 53.99$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 20.7, Liquid Temperature ($^{\circ}\text{C}$) : 19.2

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(6.6, 6.6, 6.6); Calibrated: 7/28/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (8x6x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.00549 mW/g

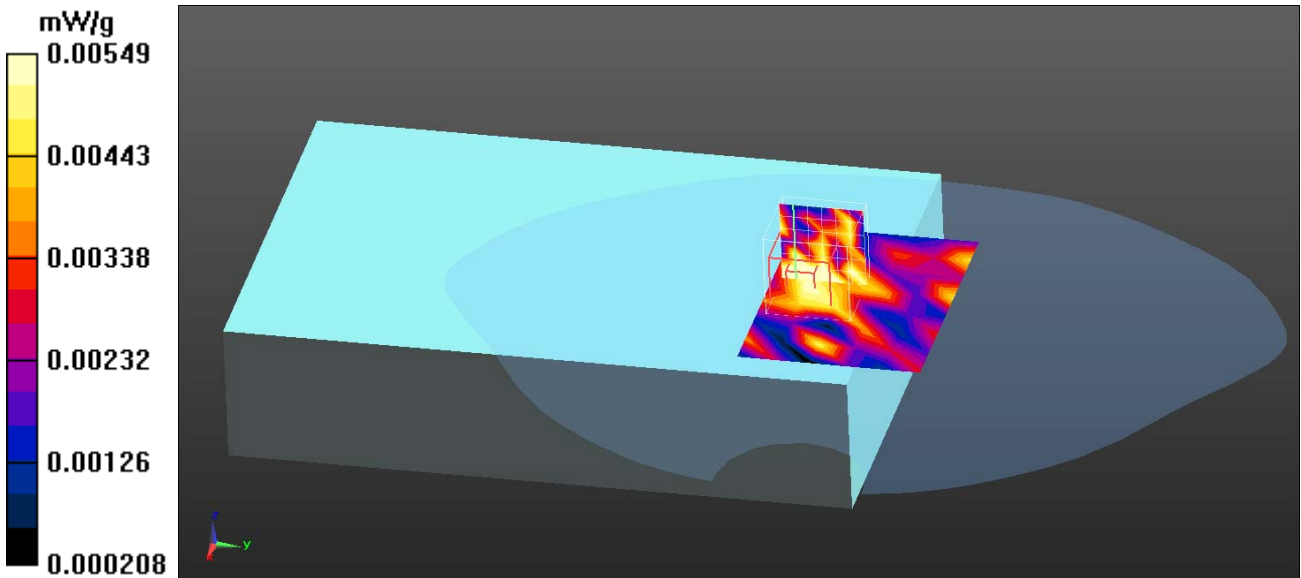
Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 1.169 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 0.0110 W/kg

SAR(1 g) = 0.00602 mW/g; SAR(10 g) = 0.00355 mW/g

Maximum value of SAR (measured) = 0.00741 mW/g



Test Laboratory: QuieTek

Date/Time: 3/12/2012

802.11b_6-Front TX2

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 2.4G; Frequency: 2437 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.89 \text{ mho/m}$; $\epsilon_r = 53.99$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 20.7, Liquid Temperature ($^{\circ}\text{C}$) : 19.2

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(6.6, 6.6, 6.6); Calibrated: 7/28/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (8x6x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.038 mW/g

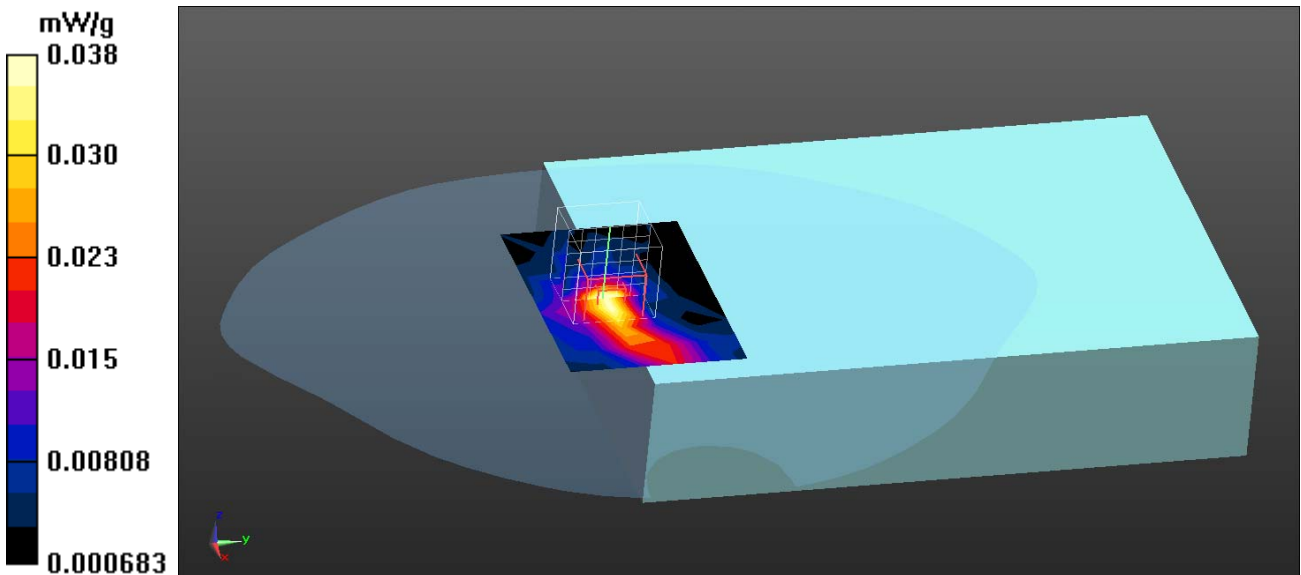
Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.083 V/m; Power Drift = 0.0035 dB

Peak SAR (extrapolated) = 0.0840 W/kg

SAR(1 g) = 0.038 mW/g; SAR(10 g) = 0.018 mW/g

Maximum value of SAR (measured) = 0.045 mW/g



Test Laboratory: QuieTek

Date/Time: 3/12/2012

802.11b_6-Left-Side TX2

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 2.4G; Frequency: 2437 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.89 \text{ mho/m}$; $\epsilon_r = 53.99$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 20.7, Liquid Temperature ($^{\circ}\text{C}$) : 19.2

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(6.6, 6.6, 6.6); Calibrated: 7/28/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$

Maximum value of SAR (measured) = 0.00589 mW/g

Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

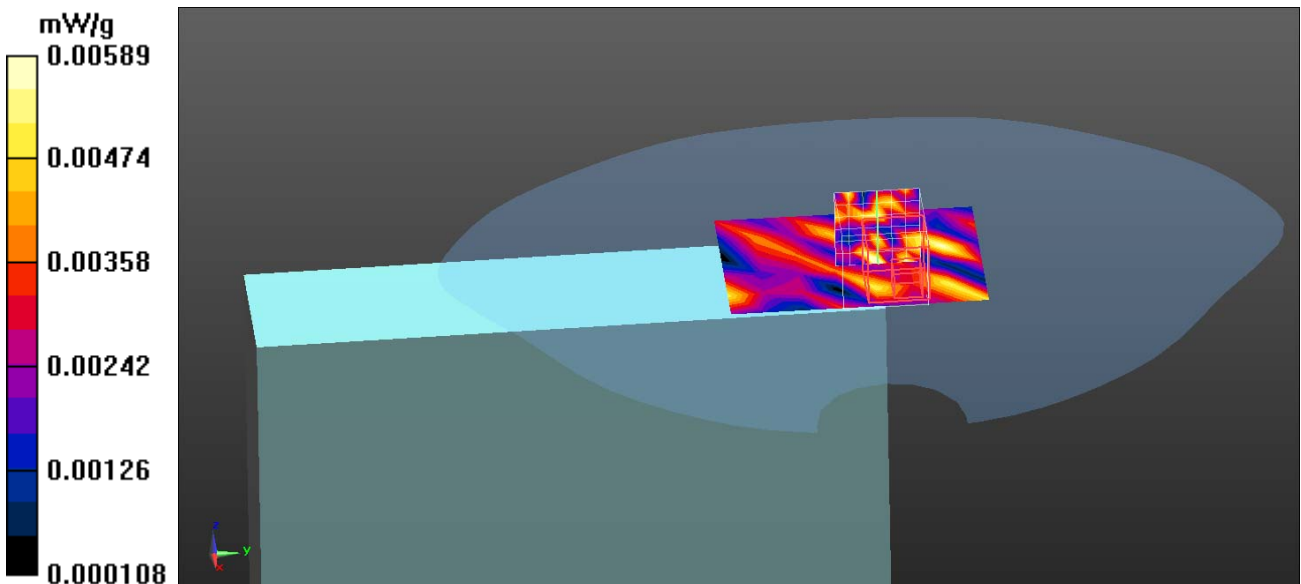
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 1.050 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.0120 W/kg

SAR(1 g) = 0.00331 mW/g; SAR(10 g) = 0.002 mW/g

Maximum value of SAR (measured) = 0.0075 mW/g



Antenna Kit : WGT Main Antenna (Chain A):
 P/N: TWxTablet®T7200, Fieldbook A2, T7Q, a7360X, a7380XWIPI02+A

Test Laboratory: QuieTek

Date/Time: 3/12/2012

802.11g_6-Top TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 2.4G; Frequency: 2437 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.89$ mho/m; $\epsilon_r = 53.99$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature (°C) : 20.7, Liquid Temperature (°C) : 19.2

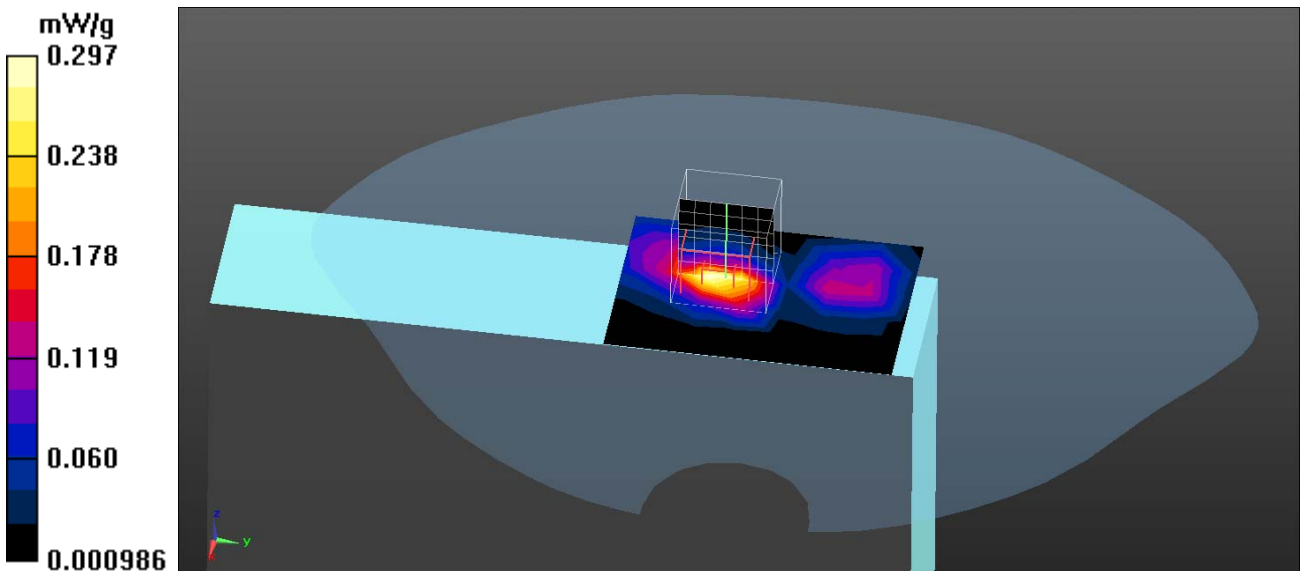
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(6.6, 6.6, 6.6); Calibrated: 7/28/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: dx=13mm, dy=13mm
 Maximum value of SAR (measured) = 0.297 mW/g

Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 dx=5mm, dy=5mm, dz=5mm
 Reference Value = 6.705 V/m; Power Drift = -0.15 dB
 Peak SAR (extrapolated) = 0.7570 W/kg
SAR(1 g) = 0.295 mW/g; SAR(10 g) = 0.132 mW/g
 Maximum value of SAR (measured) = 0.325 mW/g



Test Laboratory: QuieTek

Date/Time: 3/12/2012

802.11n_20M_6-Top TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 2.4G; Frequency: 2437 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.89$ mho/m; $\epsilon_r = 53.99$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature (°C) : 20.7, Liquid Temperature (°C) : 19.2

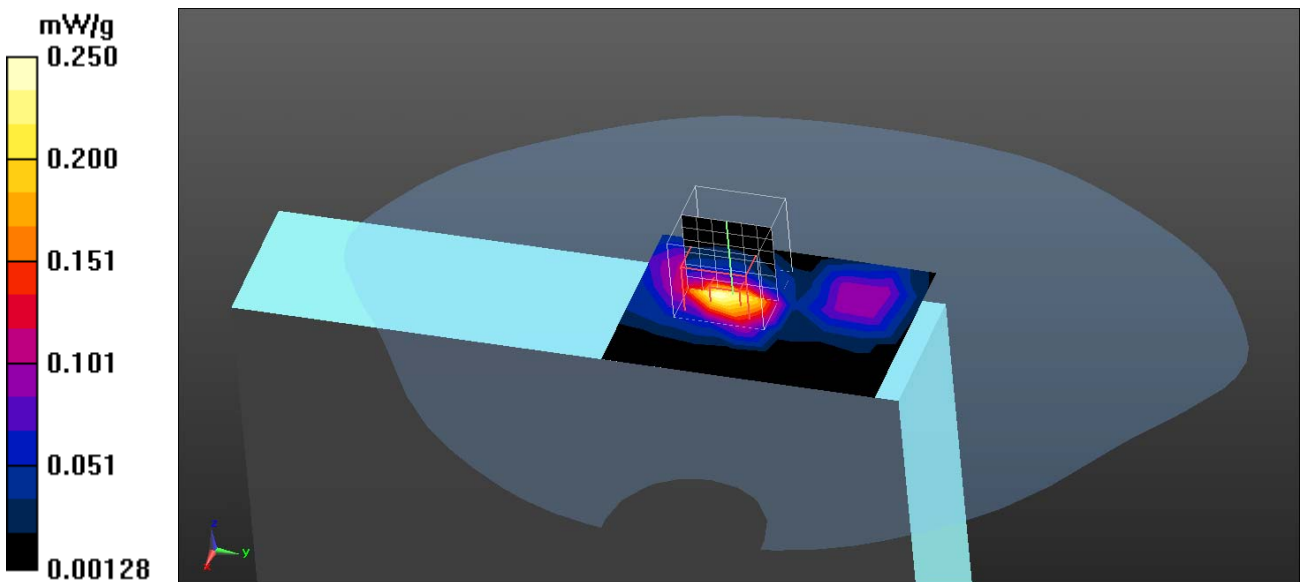
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(6.6, 6.6, 6.6); Calibrated: 7/28/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: dx=13mm, dy=13mm
 Maximum value of SAR (measured) = 0.250 mW/g

Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 dx=5mm, dy=5mm, dz=5mm
 Reference Value = 5.769 V/m; Power Drift = 0.04 dB
 Peak SAR (extrapolated) = 0.5250 W/kg
SAR(1 g) = 0.219 mW/g; SAR(10 g) = 0.103 mW/g
 Maximum value of SAR (measured) = 0.240 mW/g



Test Laboratory: QuieTek

Date/Time: 3/12/2012

802.11n_40M_6-Top TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 2.4G; Frequency: 2437 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.89$ mho/m; $\epsilon_r = 53.99$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature (°C) : 20.7, Liquid Temperature (°C) : 19.2

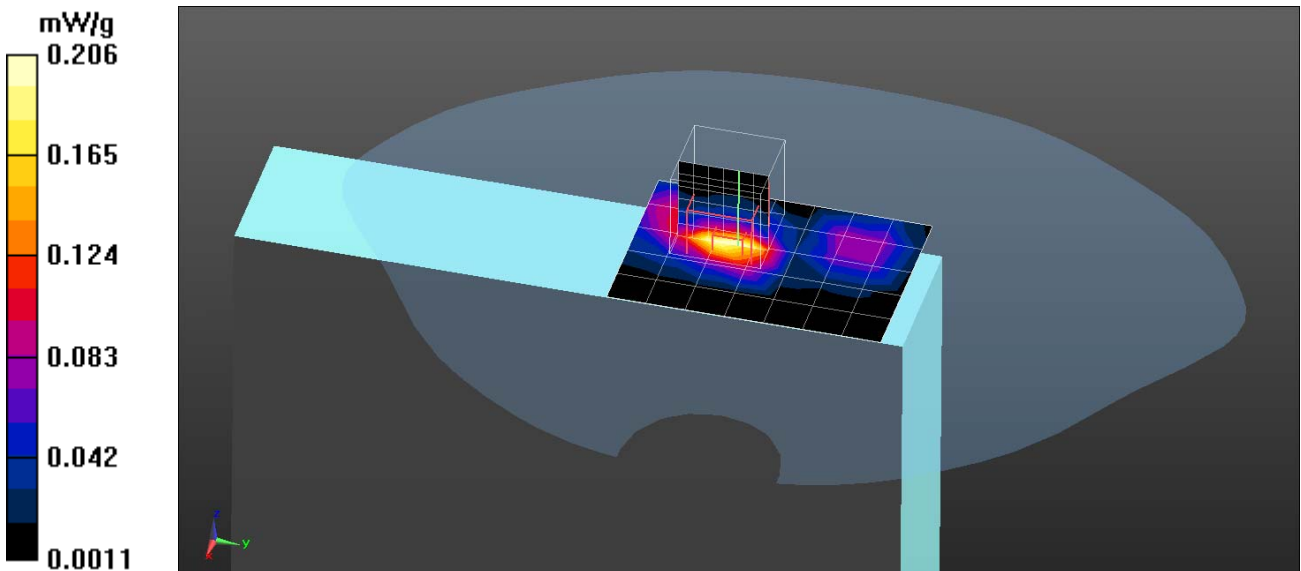
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(6.6, 6.6, 6.6); Calibrated: 7/28/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

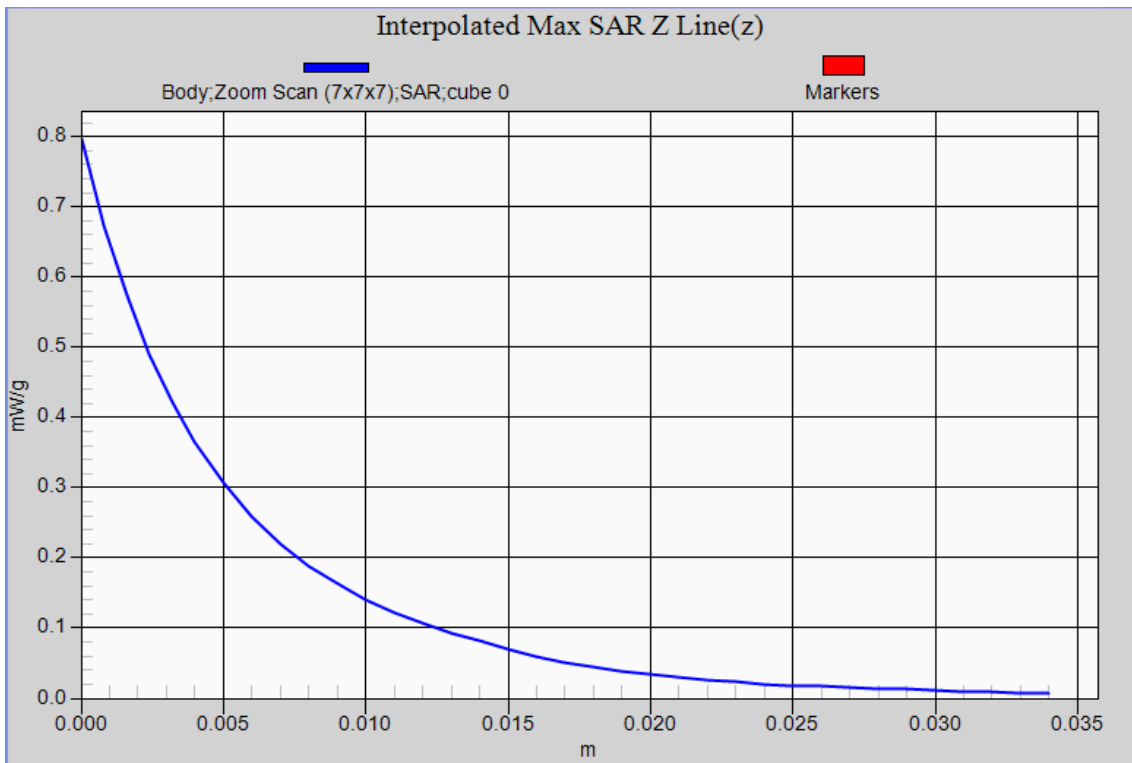
Configuration/Body/Area Scan (6x8x1): Measurement grid: dx=13mm, dy=13mm
 Maximum value of SAR (measured) = 0.206 mW/g

Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 dx=5mm, dy=5mm, dz=5mm
 Reference Value = 4.475 V/m; Power Drift = 0.17 dB
 Peak SAR (extrapolated) = 0.4370 W/kg
SAR(1 g) = 0.200 mW/g; SAR(10 g) = 0.092 mW/g
 Maximum value of SAR (measured) = 0.232 mW/g



802.11b Main Antenna EUT Top Z-Axis plot

Channel: 6



Antenna Kit : WGT Main Antenna (Chain A):
P/N: TWxTablet®T7200, Fieldbook A2, T7Q, a7360X, a7380XWIPI02+A

Test Laboratory: QuieTek

Date/Time: 3/13/2012

802.11a_36-Top TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5180 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5180$ MHz; $\sigma = 5.373$ mho/m; $\epsilon_r = 48.43$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 19.8

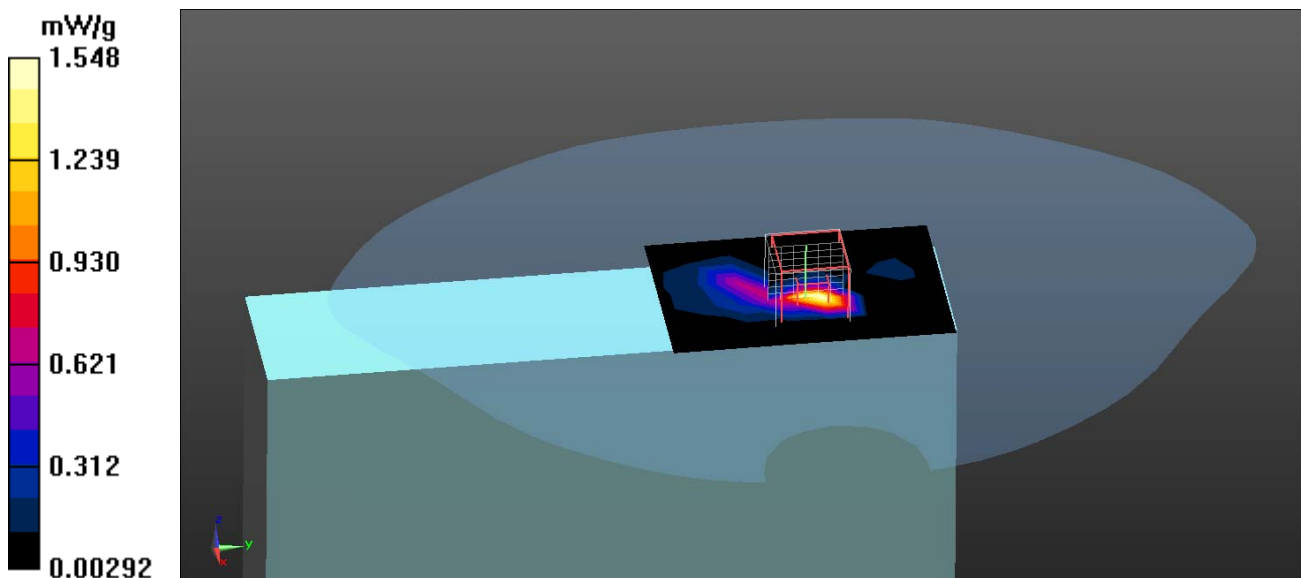
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.95, 3.95, 3.95); Calibrated: 7/28/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASYS2, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: dx=13mm, dy=13mm
Maximum value of SAR (measured) = 1.548 mW/g

Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 17.636 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 3.5740 W/kg
SAR(1 g) = 0.882 mW/g; SAR(10 g) = 0.220 mW/g
Maximum value of SAR (measured) = 1.888 mW/g



Test Laboratory: QuieTek

Date/Time: 3/13/2012

802.11a_44-Top TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5220 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5220 \text{ MHz}$; $\sigma = 5.418 \text{ mho/m}$; $\epsilon_r = 47.98$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 21.1, Liquid Temperature ($^{\circ}\text{C}$) : 19.8

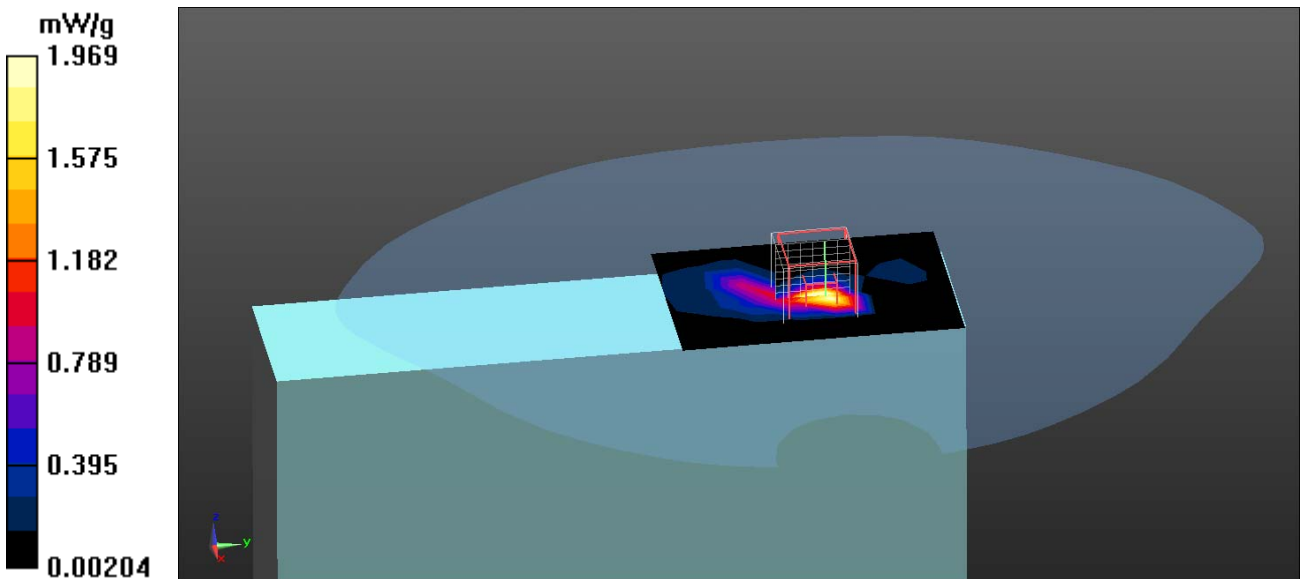
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.95, 3.95, 3.95); Calibrated: 7/28/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 1.969 mW/g

Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$
 Reference Value = 20.645 V/m; Power Drift = 0.07 dB
 Peak SAR (extrapolated) = 5.0950 W/kg
SAR(1 g) = 1.21 mW/g; SAR(10 g) = 0.304 mW/g
 Maximum value of SAR (measured) = 2.628 mW/g



Test Laboratory: QuieTek

Date/Time: 3/13/2012

802.11a_48-Top TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5240 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5240 \text{ MHz}$; $\sigma = 5.434 \text{ mho/m}$; $\epsilon_r = 47.83$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 21.1, Liquid Temperature ($^{\circ}\text{C}$) : 19.8

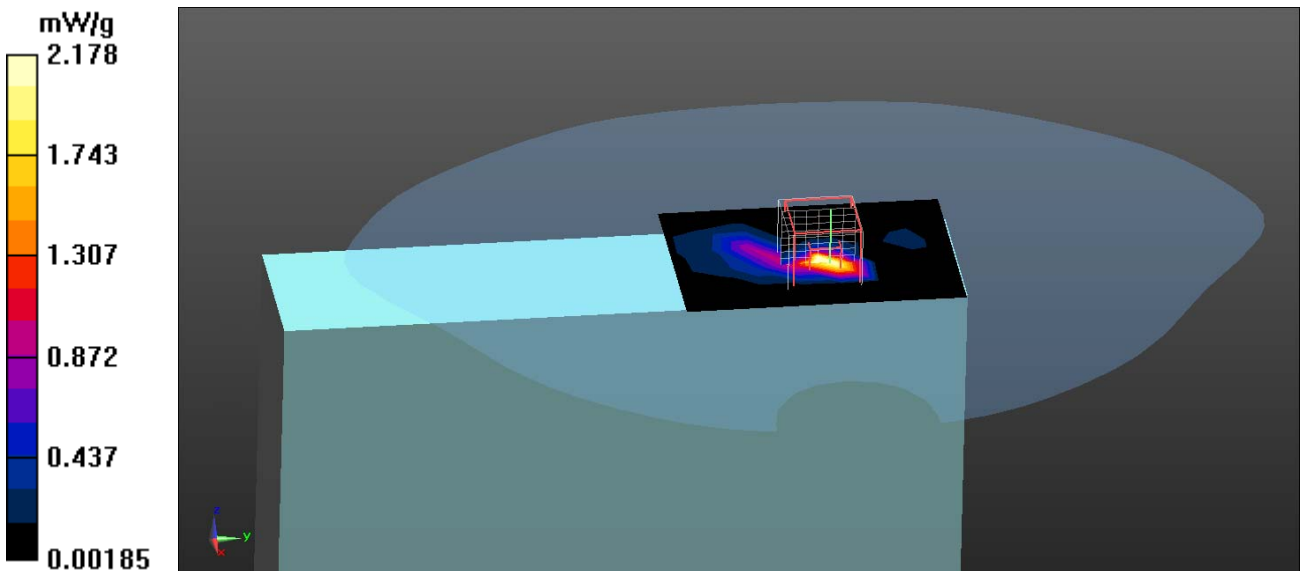
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.95, 3.95, 3.95); Calibrated: 7/28/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 2.178 mW/g

Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$
 Reference Value = 20.980 V/m; Power Drift = -0.17 dB
 Peak SAR (extrapolated) = 3.8670 W/kg
SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.248 mW/g
 Maximum value of SAR (measured) = 2.550 mW/g



Test Laboratory: QuieTek

Date/Time: 3/13/2012

802.11a_52-Top TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5260 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5260 \text{ MHz}$; $\sigma = 5.33 \text{ mho/m}$; $\epsilon_r = 49.16$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 21.1, Liquid Temperature ($^{\circ}\text{C}$) : 19.8

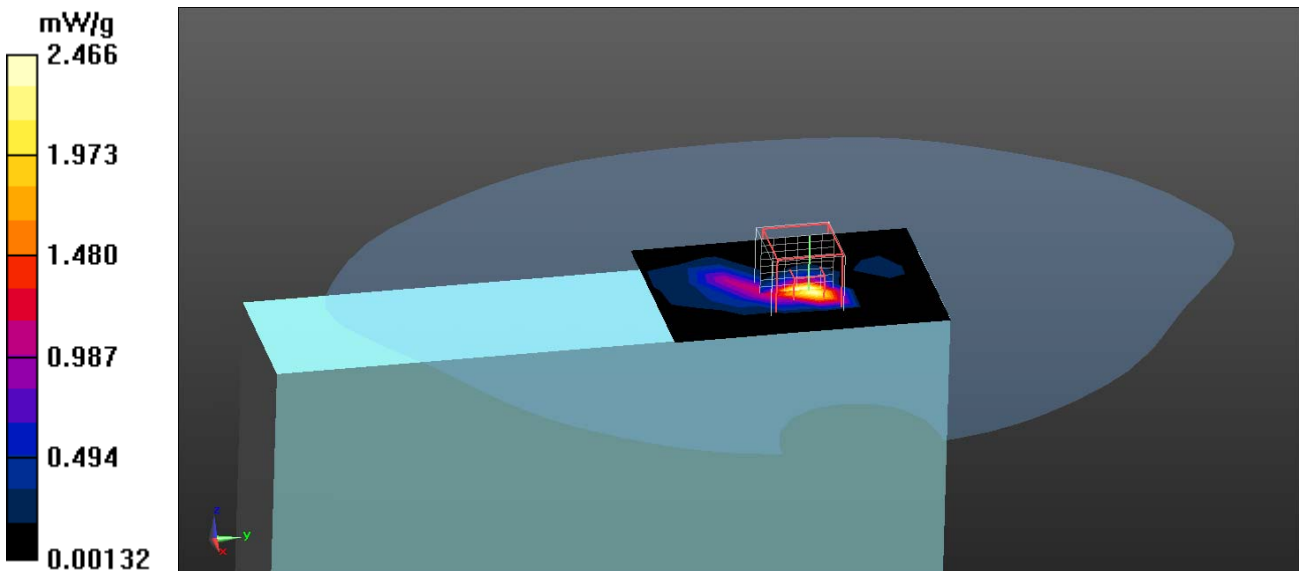
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.74, 3.74, 3.74); Calibrated: 7/28/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 2.466 mW/g

Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$
 Reference Value = 22.639 V/m; Power Drift = -0.18 dB
 Peak SAR (extrapolated) = 6.0050 W/kg
SAR(1 g) = 1.39 mW/g; SAR(10 g) = 0.347 mW/g
 Maximum value of SAR (measured) = 3.059 mW/g



Test Laboratory: QuieTek

Date/Time: 3/13/2012

802.11a_60-Top TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5300 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5300 \text{ MHz}$; $\sigma = 5.462 \text{ mho/m}$; $\epsilon_r = 47.71$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 21.1, Liquid Temperature ($^{\circ}\text{C}$) : 19.8

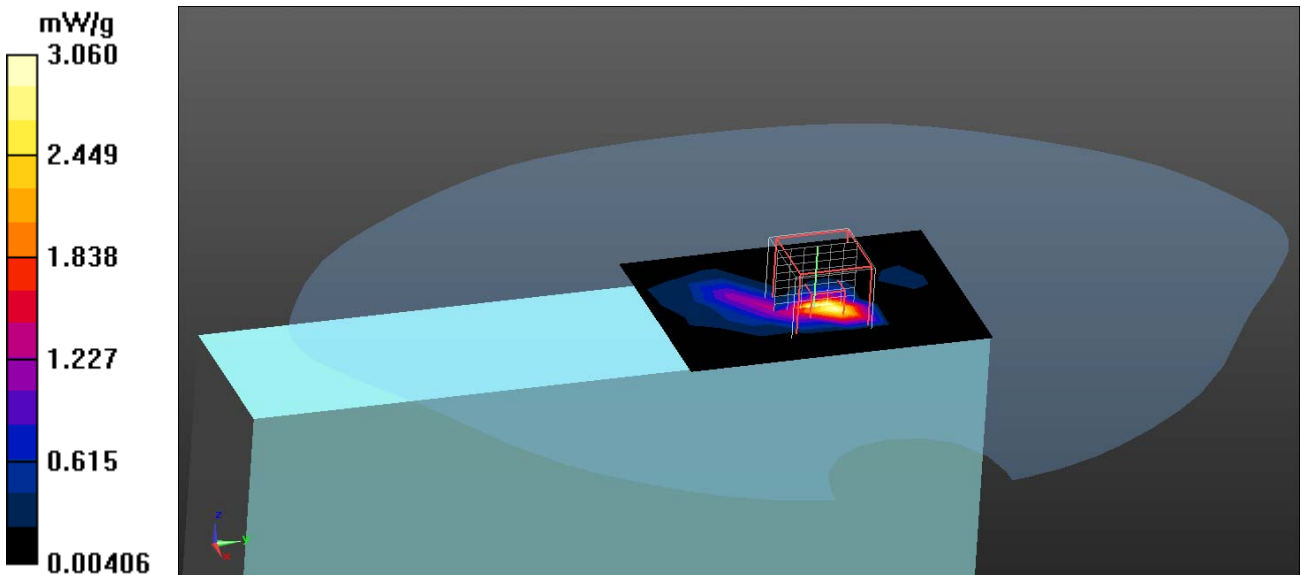
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.74, 3.74, 3.74); Calibrated: 7/28/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 3.060 mW/g

Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$
 Reference Value = 24.142 V/m; Power Drift = -0.18 dB
 Peak SAR (extrapolated) = 8.1490 W/kg
SAR(1 g) = 1.53 mW/g; SAR(10 g) = 0.399 mW/g
 Maximum value of SAR (measured) = 3.522 mW/g



Test Laboratory: QuieTek

Date/Time: 3/13/2012

802.11a_64-Top TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5320 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5320 \text{ MHz}$; $\sigma = 5.474 \text{ mho/m}$; $\epsilon_r = 47.66$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 21.1, Liquid Temperature ($^{\circ}\text{C}$) : 19.8

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.74, 3.74, 3.74); Calibrated: 7/28/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 2.664 mW/g

Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:

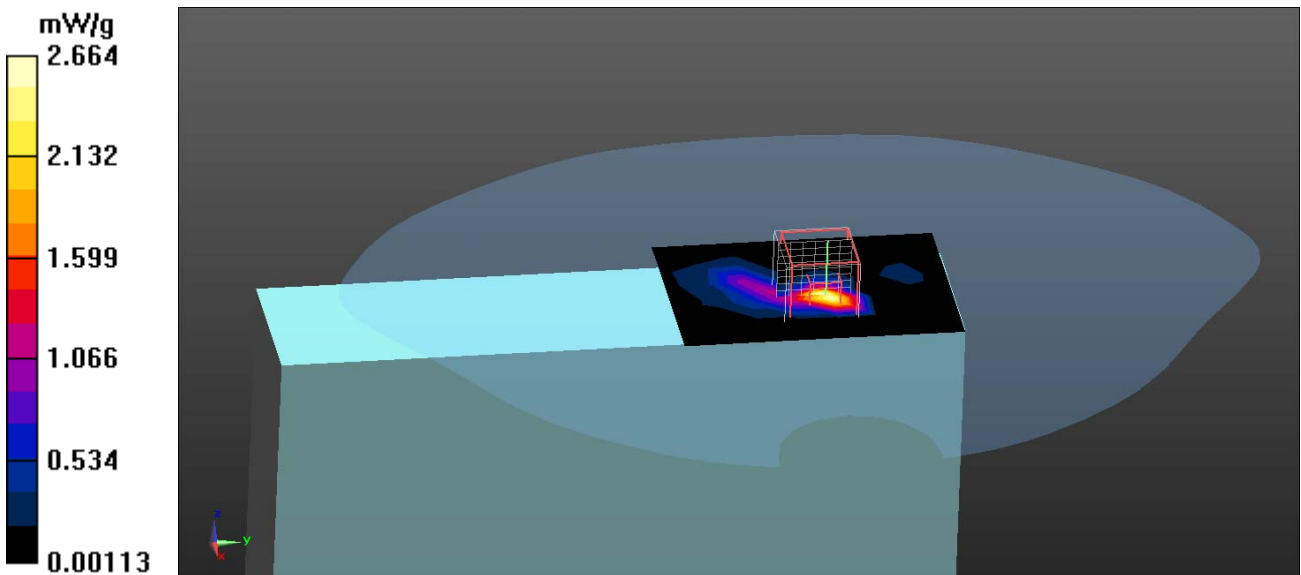
dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 22.193 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 5.8360 W/kg

SAR(1 g) = 1.39 mW/g; SAR(10 g) = 0.345 mW/g

Maximum value of SAR (measured) = 3.109 mW/g



Test Laboratory: QuieTek

Date/Time: 3/13/2012

802.11a_100-Top TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5500 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5500$ MHz; $\sigma = 5.523$ mho/m; $\epsilon_r = 47.47$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 19.8

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.68, 3.68, 3.68); Calibrated: 7/28/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: dx=13mm, dy=13mm

Maximum value of SAR (measured) = 1.785 mW/g

Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:

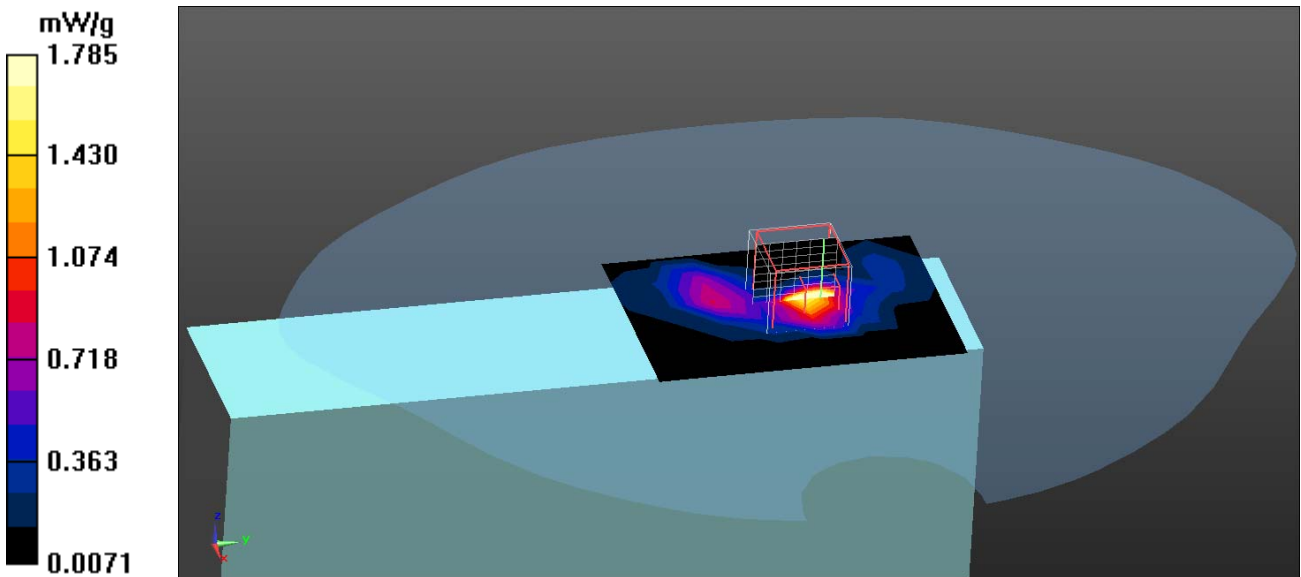
dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 22.087 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 8.0660 W/kg

SAR(1 g) = 1.51 mW/g; SAR(10 g) = 0.363 mW/g

Maximum value of SAR (measured) = 3.432 mW/g



Test Laboratory: QuieTek

Date/Time: 3/13/2012

802.11a_116-Top TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5580 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5580 \text{ MHz}$; $\sigma = 5.876 \text{ mho/m}$; $\epsilon_r = 46.72$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 21.1, Liquid Temperature ($^{\circ}\text{C}$) : 19.8

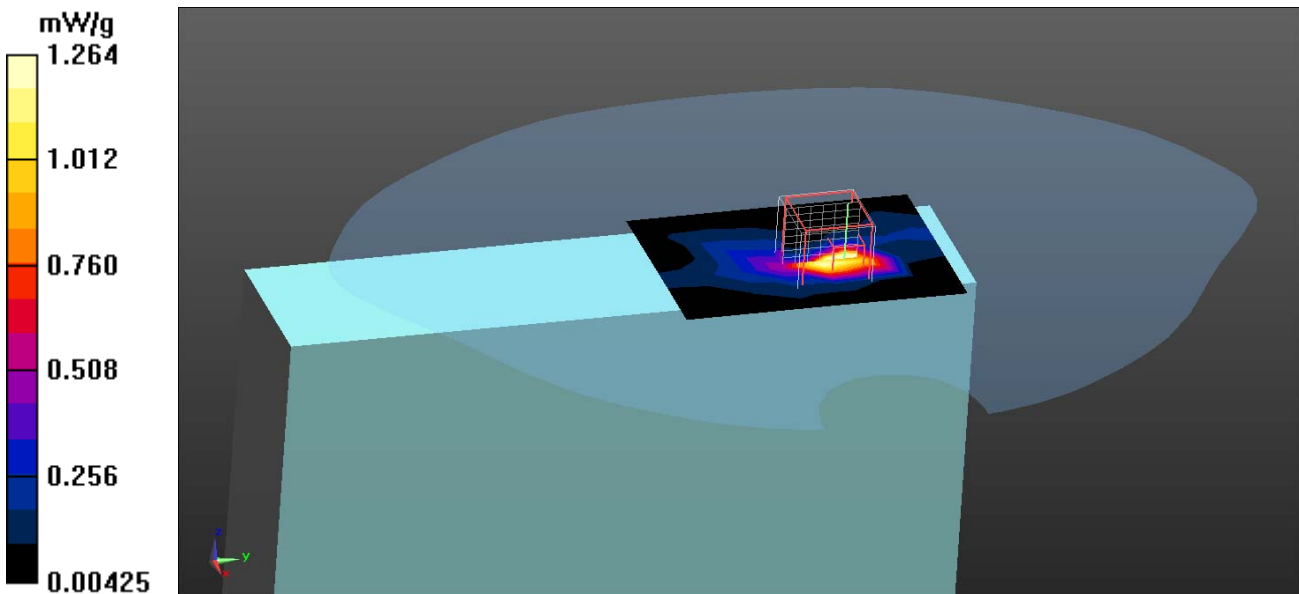
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.42, 3.42, 3.42); Calibrated: 7/28/2011;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (6x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 1.26 mW/g

Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$
 Reference Value = 7.430 V/m; Power Drift = 0.15 dB
 Peak SAR (extrapolated) = 4.155 mW/g
SAR(1 g) = 0.905 mW/g; SAR(10 g) = 0.218 mW/g
 Maximum value of SAR (measured) = 1.94 mW/g



Test Laboratory: QuieTek

Date/Time: 3/13/2012

802.11a_140-Top TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5700 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5700 \text{ MHz}$; $\sigma = 5.721 \text{ mho/m}$; $\epsilon_r = 47.33$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 21.1, Liquid Temperature ($^{\circ}\text{C}$) : 19.8

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.42, 3.42, 3.42); Calibrated: 7/28/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$

Maximum value of SAR (measured) = 2.244 mW/g

Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:

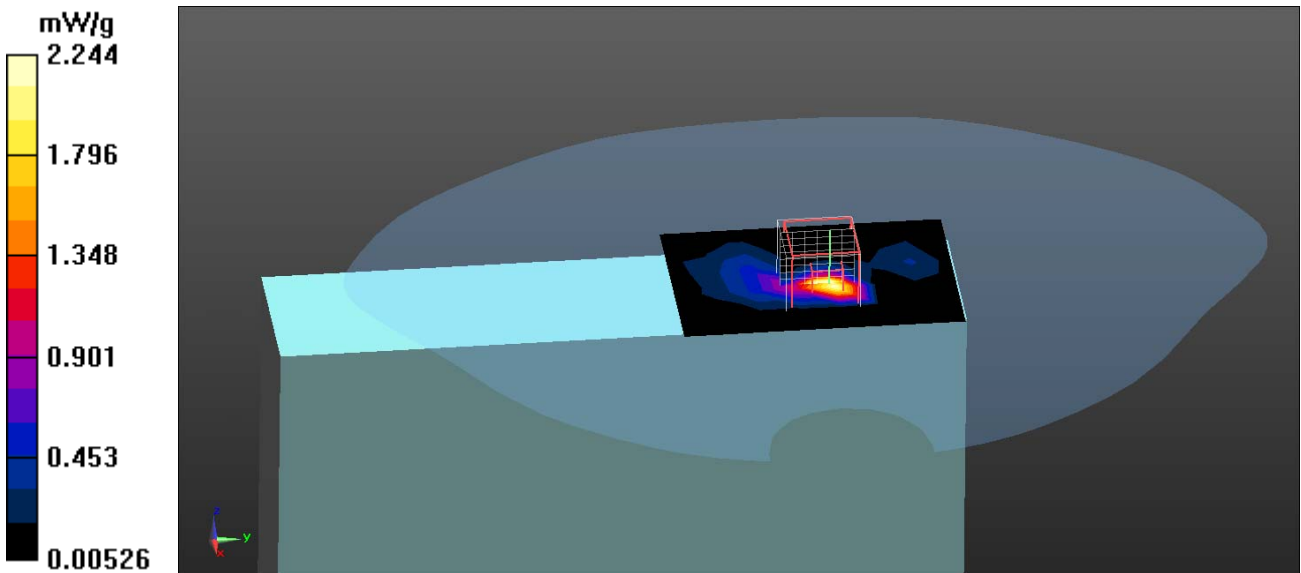
$dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 20.823 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 6.0480 W/kg

SAR(1 g) = 1.28 mW/g; SAR(10 g) = 0.312 mW/g

Maximum value of SAR (measured) = 2.874 mW/g



Test Laboratory: QuieTek

Date/Time: 3/13/2012

802.11a_149-Top TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5745 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5745 \text{ MHz}$; $\sigma = 5.803 \text{ mho/m}$; $\epsilon_r = 46.98$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 21.1, Liquid Temperature ($^{\circ}\text{C}$) : 19.8

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.74, 3.74, 3.74); Calibrated: 7/28/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 2.882 mW/g

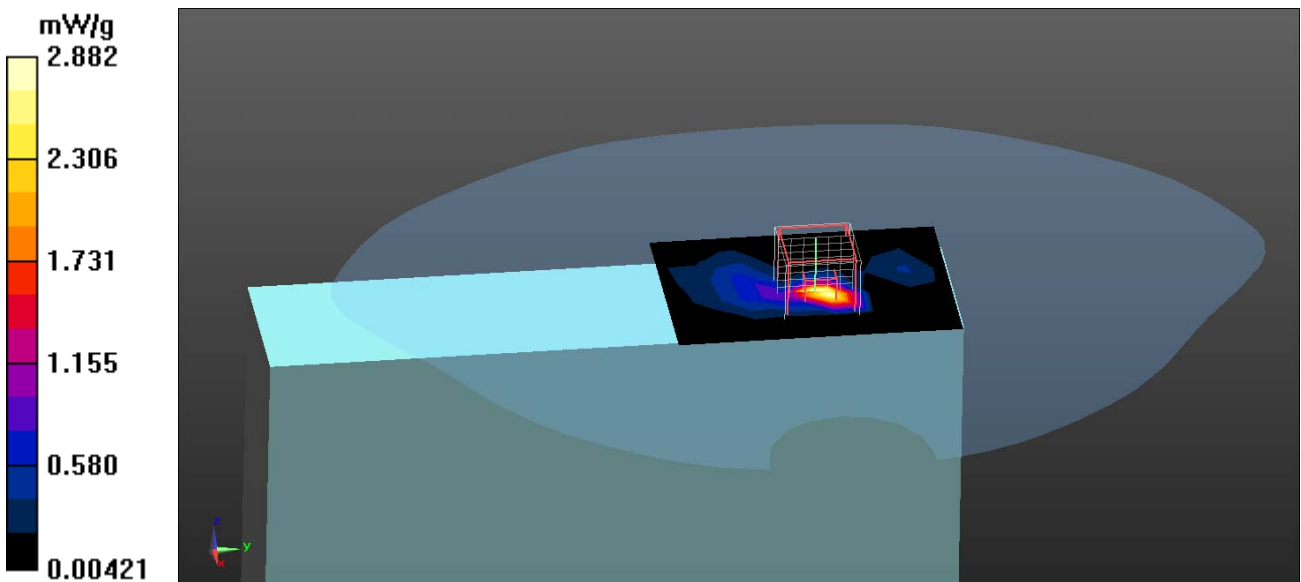
Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 23.200 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 7.2460 W/kg

SAR(1 g) = 1.49 mW/g; SAR(10 g) = 0.374 mW/g

Maximum value of SAR (measured) = 3.429 mW/g



Test Laboratory: QuieTek

Date/Time: 3/13/2012

802.11a_157-Top TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5785 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5785 \text{ MHz}$; $\sigma = 5.882 \text{ mho/m}$; $\epsilon_r = 46.66$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 21.1, Liquid Temperature ($^{\circ}\text{C}$) : 19.8

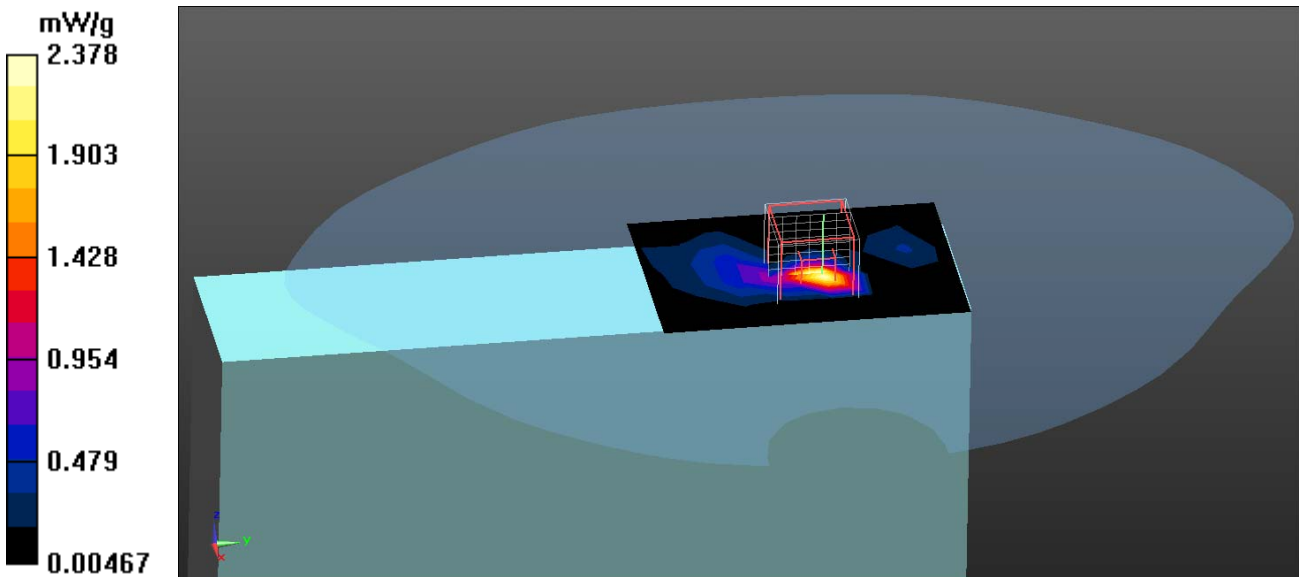
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.74, 3.74, 3.74); Calibrated: 7/28/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASYS2, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 2.378 mW/g

Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$
 Reference Value = 20.329 V/m; Power Drift = -0.11 dB
 Peak SAR (extrapolated) = 5.1040 W/kg
SAR(1 g) = 1.21 mW/g; SAR(10 g) = 0.304 mW/g
 Maximum value of SAR (measured) = 2.618 mW/g



Test Laboratory: QuieTek

Date/Time: 3/13/2012

802.11a_165-Top TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5825 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5825 \text{ MHz}$; $\sigma = 5.945 \text{ mho/m}$; $\epsilon_r = 46.37$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 21.1, Liquid Temperature ($^{\circ}\text{C}$) : 19.8

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.74, 3.74, 3.74); Calibrated: 7/28/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$

Maximum value of SAR (measured) = 1.975 mW/g

Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:

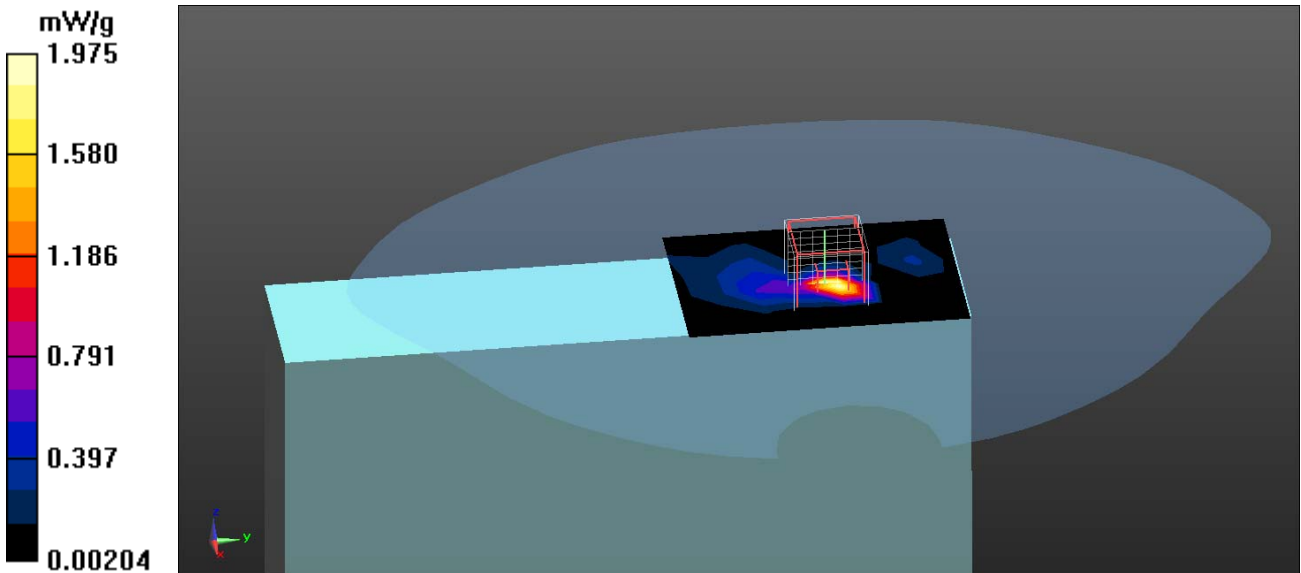
$dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 17.634 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 4.9580 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.255 mW/g

Maximum value of SAR (measured) = 2.314 mW/g



Test Laboratory: QuieTek

Date/Time: 3/13/2012

802.11a_100-Back TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5500 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5500$ MHz; $\sigma = 5.523$ mho/m; $\epsilon_r = 47.47$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 19.8

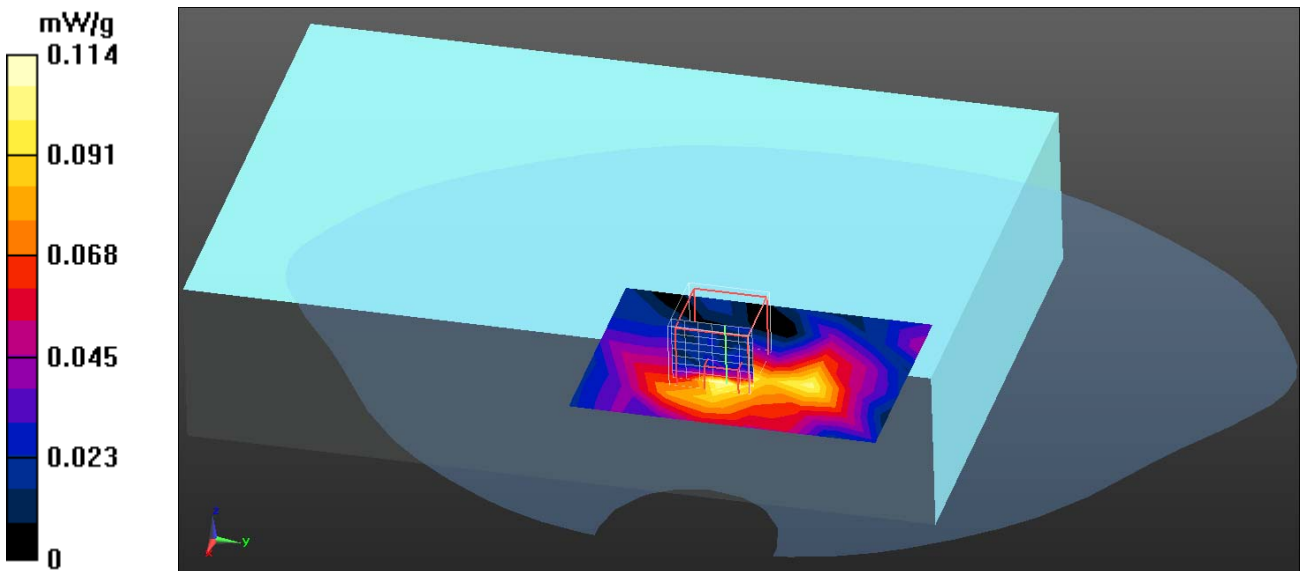
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.68, 3.68, 3.68); Calibrated: 7/28/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: dx=13mm, dy=13mm
 Maximum value of SAR (measured) = 0.114 mW/g

Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 dx=4mm, dy=4mm, dz=2.5mm
 Reference Value = 1.915 V/m; Power Drift = -0.17 dB
 Peak SAR (extrapolated) = 0.2400 W/kg
SAR(1 g) = 0.068 mW/g; SAR(10 g) = 0.032 mW/g
 Maximum value of SAR (measured) = 0.122 mW/g



Test Laboratory: QuieTek

Date/Time: 3/13/2012

802.11a_100-Front TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5500 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5500 \text{ MHz}$; $\sigma = 5.523 \text{ mho/m}$; $\epsilon_r = 47.47$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 21.1, Liquid Temperature ($^{\circ}\text{C}$) : 19.8

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.68, 3.68, 3.68); Calibrated: 7/28/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASYS2, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 1.602 mW/g

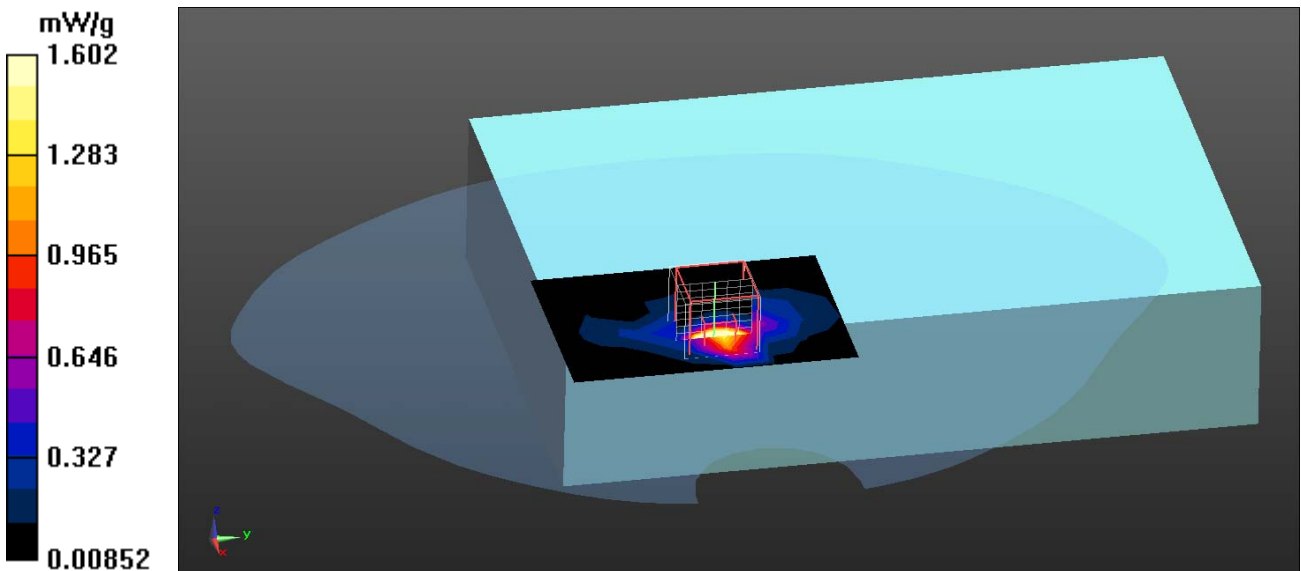
Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 12.754 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 6.3050 W/kg

SAR(1 g) = 1.31 mW/g; SAR(10 g) = 0.342 mW/g

Maximum value of SAR (measured) = 2.864 mW/g



Test Laboratory: QuieTek

Date/Time: 3/13/2012

802.11a_100- Right-Side TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5500 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5500$ MHz; $\sigma = 5.523$ mho/m; $\epsilon_r = 47.47$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature (°C) : 21.1, Liquid Temperature (°C) : 19.8

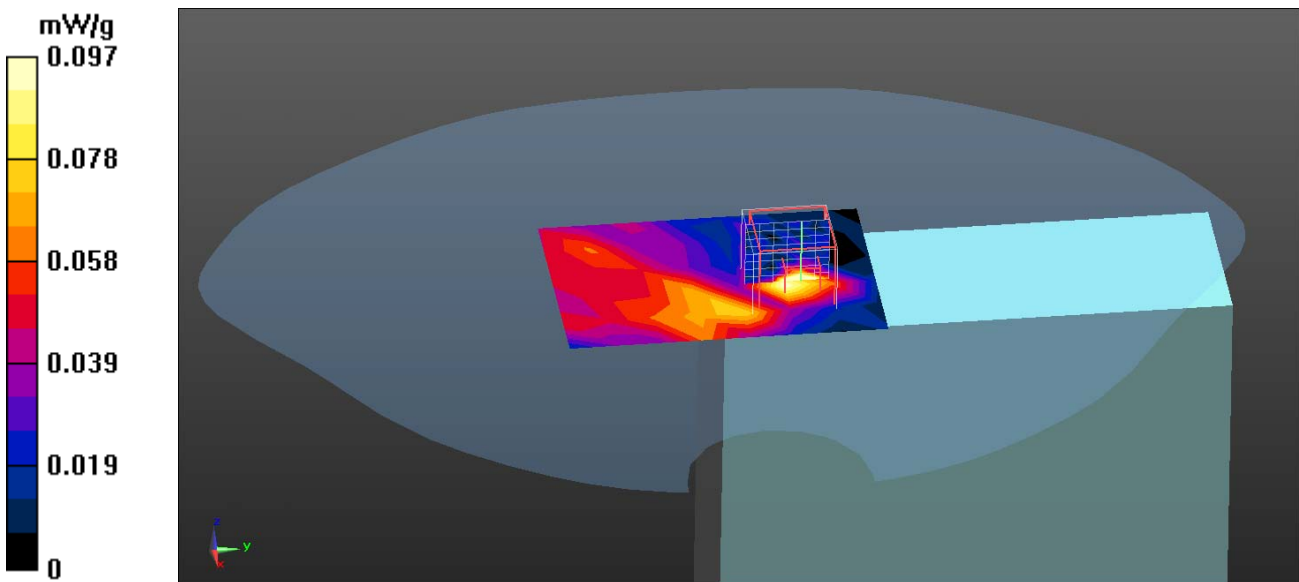
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.68, 3.68, 3.68); Calibrated: 7/28/2011
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/19/2011
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASYS2, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Configuration/Body/Area Scan (6x8x1): Measurement grid: dx=13mm, dy=13mm
 Maximum value of SAR (measured) = 0.097 mW/g

Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 dx=4mm, dy=4mm, dz=2.5mm
 Reference Value = 2.452 V/m; Power Drift = 0.16 dB
 Peak SAR (extrapolated) = 0.3340 W/kg
SAR(1 g) = 0.077 mW/g; SAR(10 g) = 0.019 mW/g
 Maximum value of SAR (measured) = 0.187 mW/g



Antenna Kit : WGT Aux Antenna (Chain B):
 P/N: TWxTablet®T7200, Fieldbook A2, T7Q, a7360X, a7380XWIPI01+A

Test Laboratory: QuieTek

Date/Time: 6/26/2012

802.11a_52-Top TX2

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5260 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5260$ MHz; $\sigma = 5.44$ mho/m; $\epsilon_r = 47.77$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature (°C) : 21.3, Liquid Temperature (°C) : 22.9

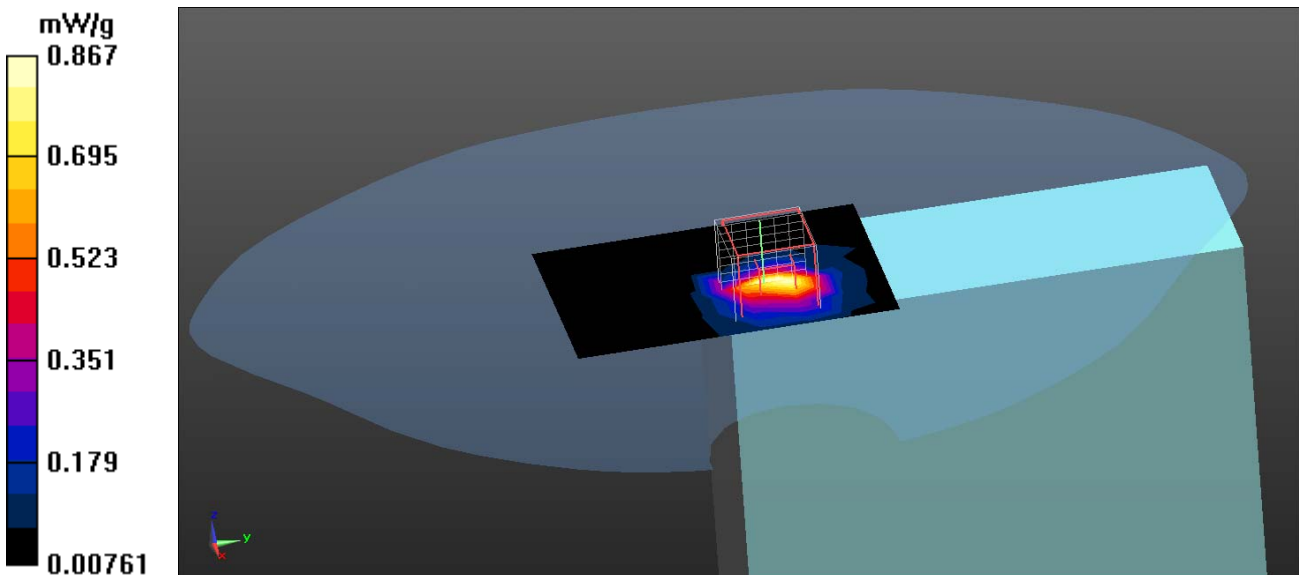
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.74, 3.74, 3.74); Calibrated: 7/28/2011;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (6x8x1): Measurement grid: dx=13mm, dy=13mm
 Maximum value of SAR (measured) = 0.867 mW/g

Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 dx=4mm, dy=4mm, dz=2.5mm
 Reference Value = 5.265 V/m; Power Drift = -0.16 dB
 Peak SAR (extrapolated) = 1.957 mW/g
SAR(1 g) = 0.638 mW/g; SAR(10 g) = 0.224 mW/g
 Maximum value of SAR (measured) = 1.08 mW/g



Test Laboratory: QuieTek

Date/Time: 6/26/2012

802.11a_52-Back TX2

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5260 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5260 \text{ MHz}$; $\sigma = 5.44 \text{ mho/m}$; $\epsilon_r = 47.77$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 21.3, Liquid Temperature ($^{\circ}\text{C}$) : 22.9

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.74, 3.74, 3.74); Calibrated: 7/28/2011;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASYS2, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (8x7x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.0321 mW/g

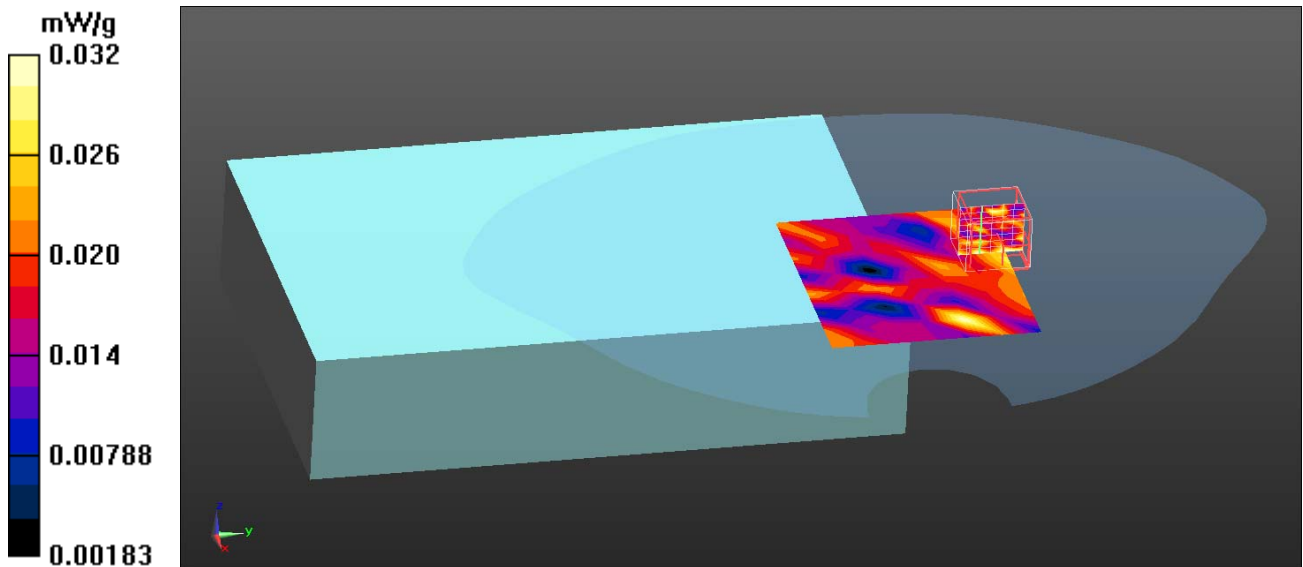
Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 1.979 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.070 mW/g

SAR(1 g) = 0.023 mW/g; SAR(10 g) = 0.019 mW/g

Maximum value of SAR (measured) = 0.0373 mW/g



Test Laboratory: QuieTek

Date/Time: 6/26/2012

802.11a_52-Front TX2

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5260 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5260 \text{ MHz}$; $\sigma = 5.44 \text{ mho/m}$; $\epsilon_r = 47.77$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 21.3, Liquid Temperature ($^{\circ}\text{C}$) : 22.9

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.74, 3.74, 3.74); Calibrated: 7/28/2011;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASYS2, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (6x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 1.69 mW/g

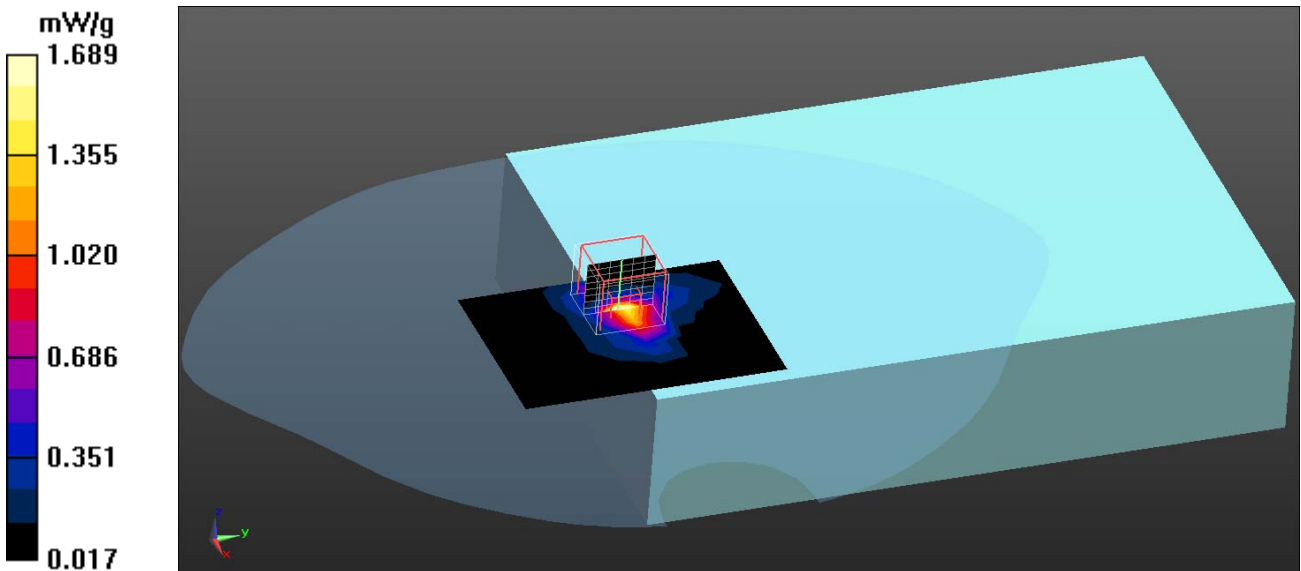
Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 14.550 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.810 mW/g

SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.318 mW/g

Maximum value of SAR (measured) = 2.09 mW/g



Test Laboratory: QuieTek

Date/Time: 6/26/2012

802.11a_52-Left-Side TX2

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5260 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5260 \text{ MHz}$; $\sigma = 5.44 \text{ mho/m}$; $\epsilon_r = 47.77$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 21.3, Liquid Temperature ($^{\circ}\text{C}$) : 22.9

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.74, 3.74, 3.74); Calibrated: 7/28/2011;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASYS2, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (6x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$

Maximum value of SAR (measured) = 0.0409 mW/g

Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:

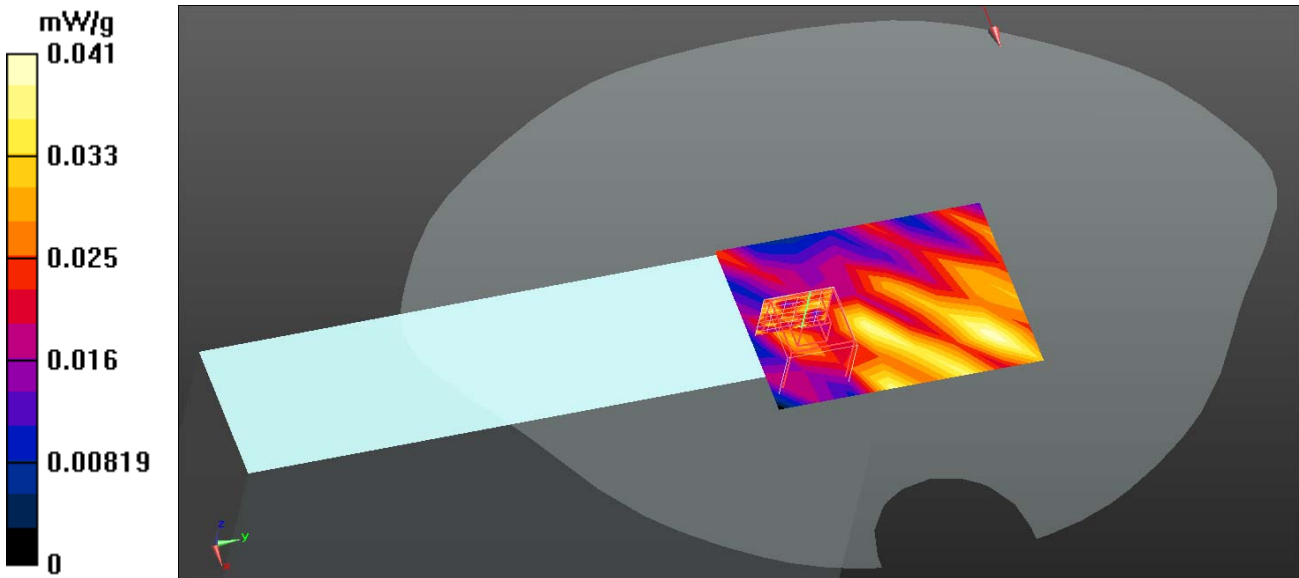
$dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 0.796 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.167 mW/g

SAR(1 g) = 0.025 mW/g; SAR(10 g) = 0.020 mW/g

Maximum value of SAR (measured) = 0.0448 mW/g



Antenna Kit : WGT Main Antenna (Chain A):
 P/N: TWxTablet®T7200, Fieldbook A2, T7Q, a7360X, a7380XWIPI02+A

Test Laboratory: QuieTek

Date/Time: 6/26/2012

802.11n_20M_48-Top TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5240 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5240 \text{ MHz}$; $\sigma = 5.436 \text{ mho/m}$; $\epsilon_r = 47.81$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature (°C) : 21.3, Liquid Temperature (°C) : 22.9

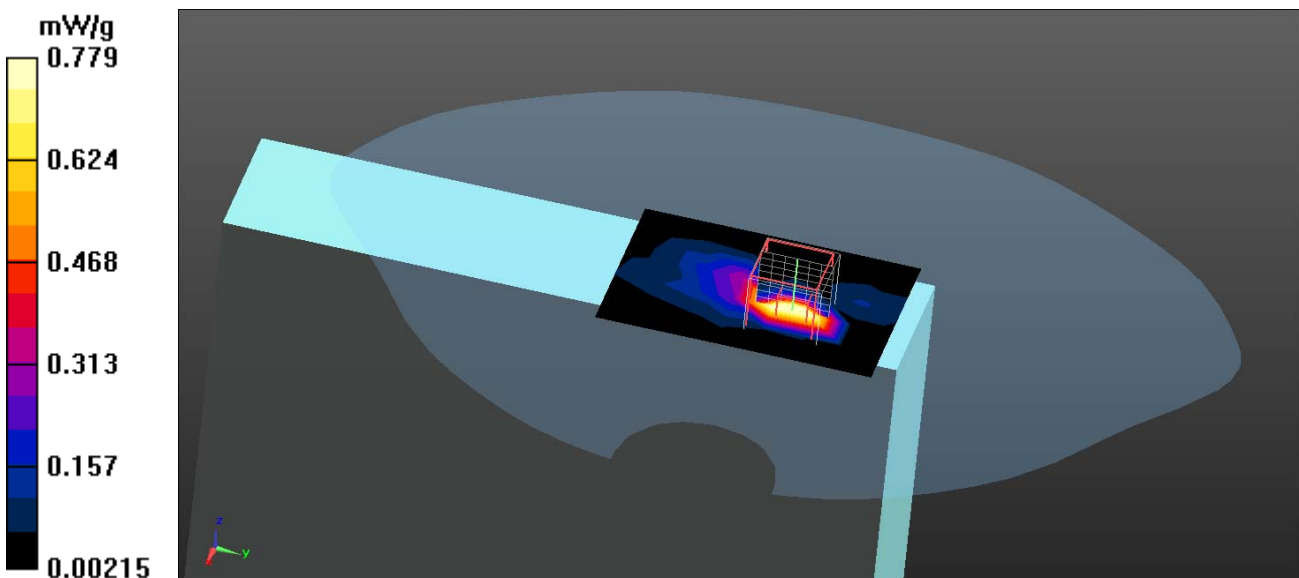
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.95, 3.95, 3.95); Calibrated: 7/28/2011;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (6x8x1): Measurement grid: dx=13mm, dy=13mm
 Maximum value of SAR (measured) = 0.779 mW/g

Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 dx=4mm, dy=4mm, dz=2.5mm
 Reference Value = 6.037 V/m; Power Drift = 0.11 dB
 Peak SAR (extrapolated) = 2.544 mW/g
SAR(1 g) = 0.580 mW/g; SAR(10 g) = 0.151 mW/g
 Maximum value of SAR (measured) = 1.29 mW/g



Antenna Kit : WGT Aux Antenna (Chain B):
 P/N: TWxTablet®T7200, Fieldbook A2, T7Q, a7360X, a7380XWIPI01+A

Test Laboratory: QuieTek

Date/Time: 6/26/2012

802.11n_20M_48-Front TX2

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5240 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5240 \text{ MHz}$; $\sigma = 5.436 \text{ mho/m}$; $\epsilon_r = 47.81$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 21.3, Liquid Temperature ($^{\circ}\text{C}$) : 22.9

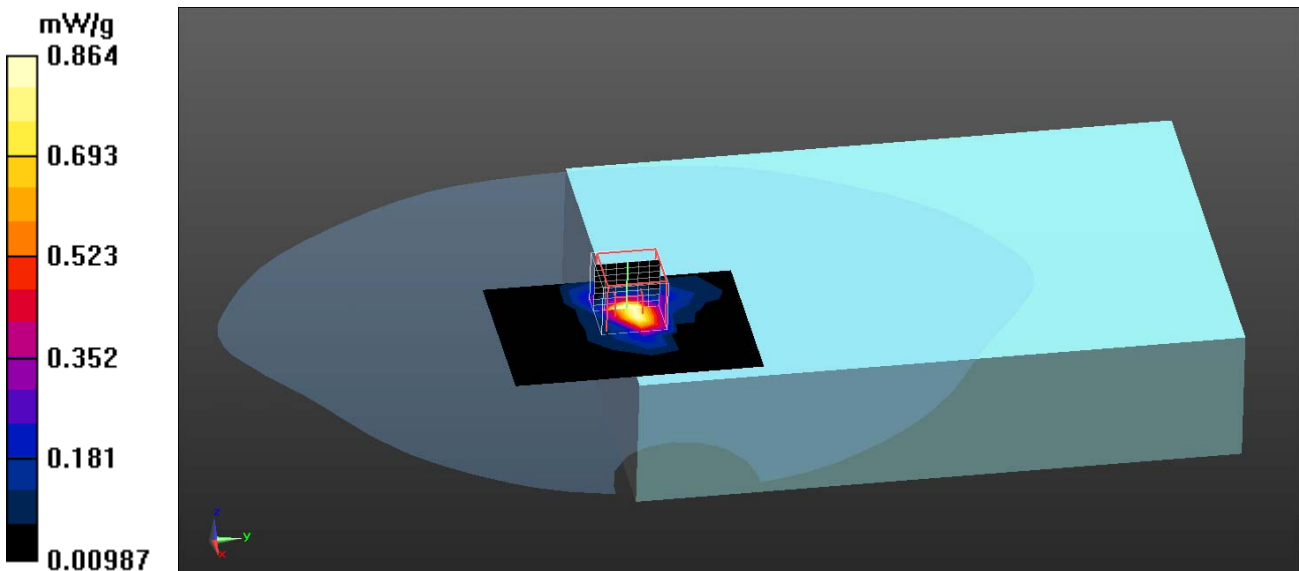
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.95, 3.95, 3.95); Calibrated: 7/28/2011;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (6x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.864 mW/g

Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$
 Reference Value = 11.779 V/m; Power Drift = -0.18 dB
 Peak SAR (extrapolated) = 2.357 mW/g
SAR(1 g) = 0.613 mW/g; SAR(10 g) = 0.179 mW/g
 Maximum value of SAR (measured) = 1.20 mW/g



Antenna Kit : WGT Main Antenna (Chain A):
 P/N: TWxTablet®T7200, Fieldbook A2, T7Q, a7360X, a7380XWIPI02+A

Test Laboratory: QuieTek

Date/Time: 6/26/2012

802.11n_40M_54-Top TX1

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5270 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5270 \text{ MHz}$; $\sigma = 5.45 \text{ mho/m}$; $\epsilon_r = 47.65$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature (°C) : 21.3, Liquid Temperature (°C) : 22.9

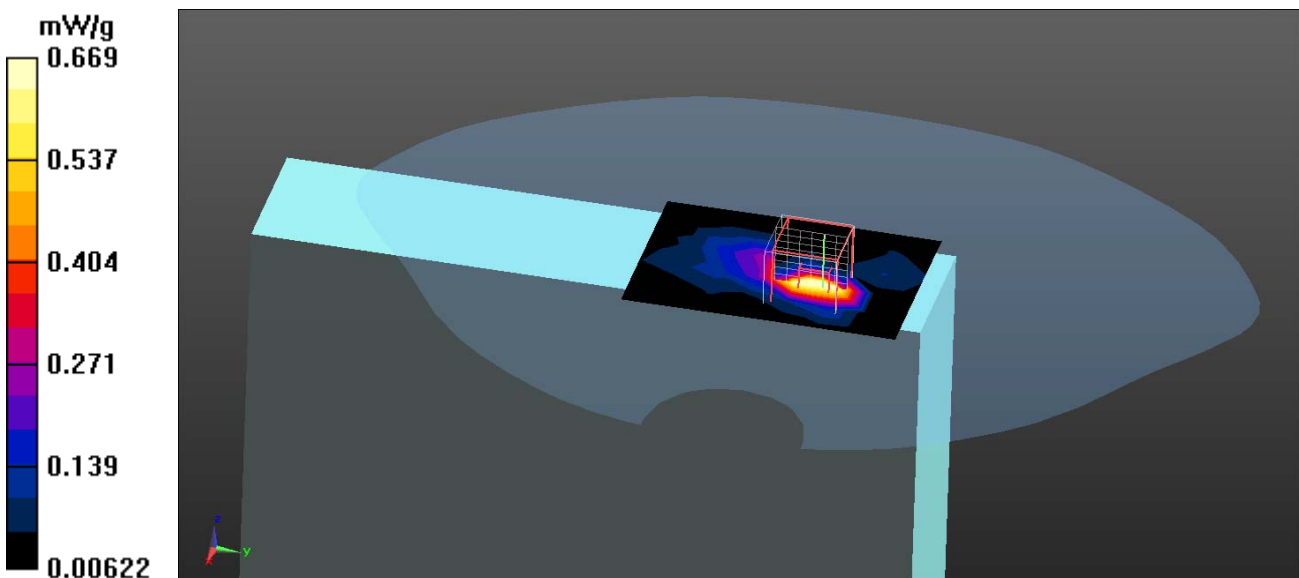
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.74, 3.74, 3.74); Calibrated: 7/28/2011;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASYS2, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (6x8x1): Measurement grid: dx=13mm, dy=13mm
 Maximum value of SAR (measured) = 0.669 mW/g

Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 dx=4mm, dy=4mm, dz=2.5mm
 Reference Value = 5.674 V/m; Power Drift = 0.11 dB
 Peak SAR (extrapolated) = 2.410 mW/g
SAR(1 g) = 0.519 mW/g; SAR(10 g) = 0.134 mW/g
 Maximum value of SAR (measured) = 1.16 mW/g



Antenna Kit : WGT Aux Antenna (Chain B):
 P/N: TWxTablet®T7200, Fieldbook A2, T7Q, a7360X, a7380XWIPI01+A

Test Laboratory: QuieTek

Date/Time: 6/26/2012

802.11n_40M_54-Front TX2

DUT: Tablet PC; Type: T7Q

Communication System: WLAN 5G; Frequency: 5270 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5270 \text{ MHz}$; $\sigma = 5.45 \text{ mho/m}$; $\epsilon_r = 47.65$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 21.3, Liquid Temperature ($^{\circ}\text{C}$) : 22.9

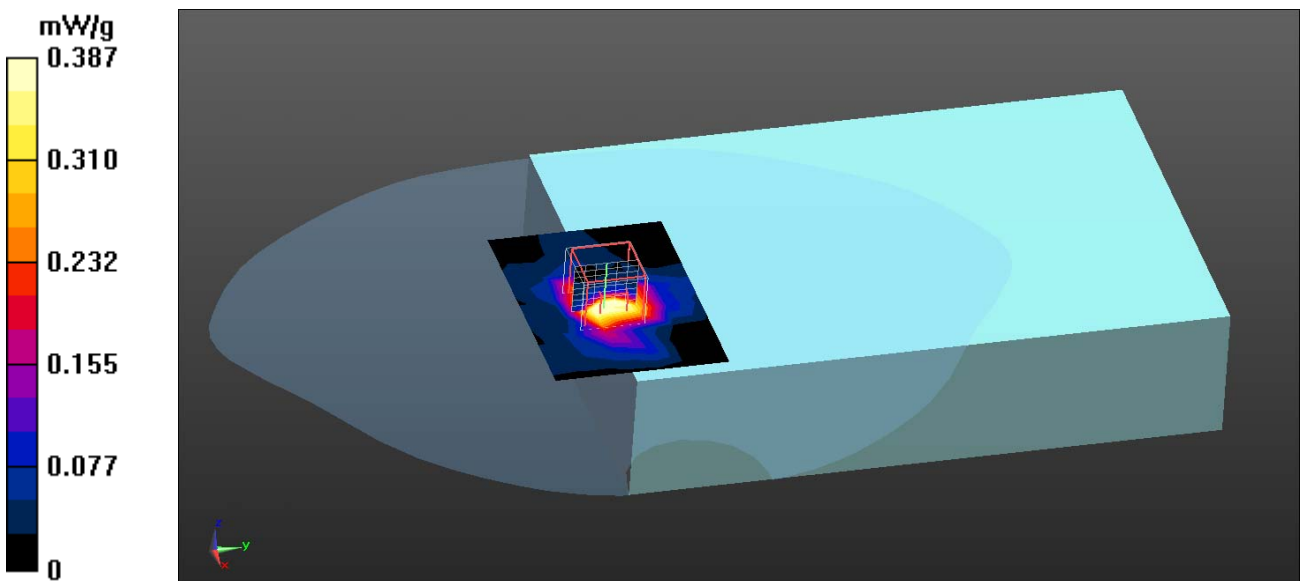
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3698; ConvF(3.74, 3.74, 3.74); Calibrated: 7/28/2011;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with left table; Type: SAM;
- Measurement SW: DASYS2, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

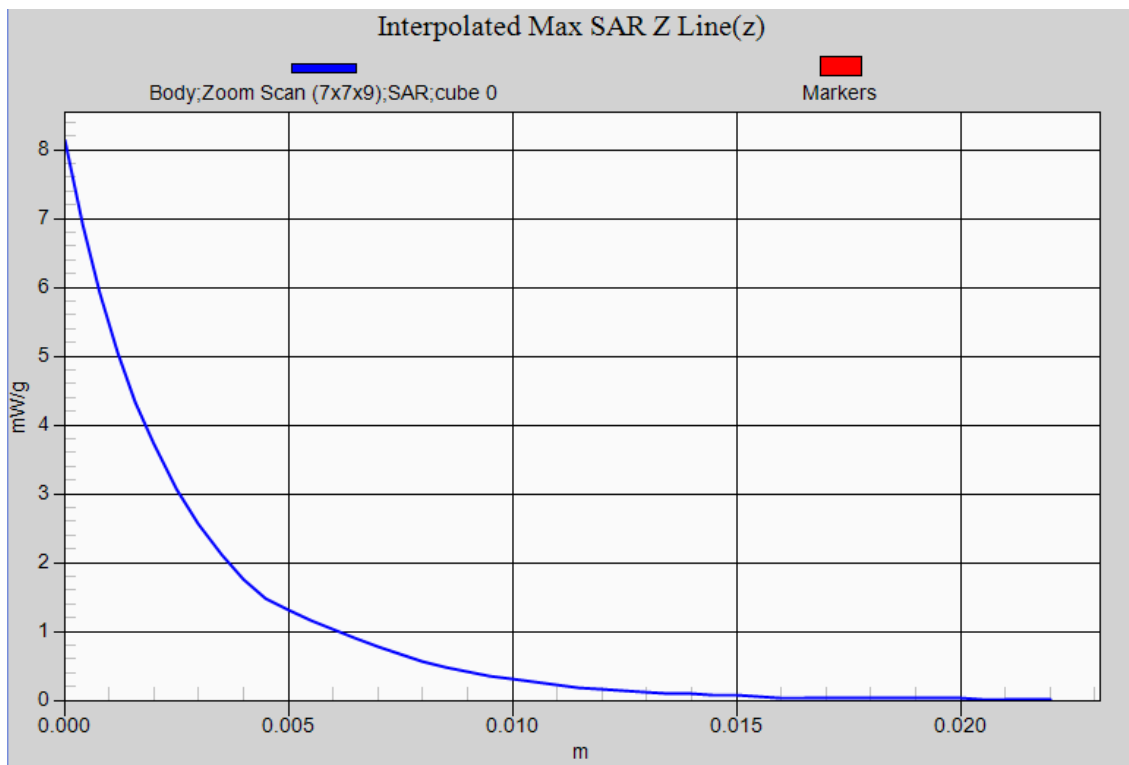
Configuration/Body/Area Scan (8x6x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.387 mW/g

Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$
 Reference Value = 10.321 V/m; Power Drift = -0.10 dB
 Peak SAR (extrapolated) = 1.582 mW/g
SAR(1 g) = 0.434 mW/g; SAR(10 g) = 0.142 mW/g
 Maximum value of SAR (measured) = 0.809 mW/g



802.11a Main Antenna EUT Top Z-Axis plot

Channel: 60





Appendix D. Probe Calibration Data

Object: EX3DV4- SN 3698



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: **EX3-3698_Jul11**

CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:3698**

Calibration procedure(s) **QA CAL-01.v8, QA CAL-14.v3, QA CAL-23.v4, QA CAL-25.v4
Calibration procedure for dosimetric E-field probes**

Calibration date: **July 28, 2011**

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 ± 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	31-Mar-11 (No. 217-01372)	Apr-12
Power sensor E4412A	MY41498087	31-Mar-11 (No. 217-01372)	Apr-12
Reference 3 dB Attenuator	SN: S5054 (3c)	29-Mar-11 (No. 217-01369)	Apr-12
Reference 20 dB Attenuator	SN: S5086 (20b)	29-Mar-11 (No. 217-01367)	Apr-12
Reference 30 dB Attenuator	SN: S5129 (30b)	29-Mar-11 (No. 217-01370)	Apr-12
Reference Probe ES3DV2	SN: 3013	29-Dec-10 (No. ES3-3013_Dec10)	Dec-11
DAE4	SN: 654	3-May-11 (No. DAE4-654_May11)	May-12
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-10)	In house check: Oct-11

	Name	Function	Signature
Calibrated by:	Katja Pokovic	Technical Manager	
Approved by:	Niels Kuster	Quality Manager	
			Issued: July 28, 2011

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



Accredited by the Swiss Accreditation Service (SAS)

Accreditation No.: **SCS 108**

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

Glossary:

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

Calibration is Performed According to the Following Standards:

- 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
- 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:

- NORM_{x,y,z}**: Assessed for E-field polarization $\vartheta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not affect the E²-field uncertainty inside TSL (see below *ConvF*).
- NORM(f)_{x,y,z}** = NORM_{x,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*.
- DCP_{x,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.
- PAR**: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- A_{x,y,z}; B_{x,y,z}; C_{x,y,z}; VR_{x,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 NORM_{x,y,z} * *ConvF* whereby the uncertainty corresponds to that given for *ConvF*. A frequency dependent *ConvF* is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical Isotropy (3D deviation from isotropy)**: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset**: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.

Probe EX3DV4

SN:3698

Manufactured: April 22, 2009
Calibrated: July 28, 2011

Calibrated for DASY/EASY Systems
(Note: non-compatible with DASY2 system!)

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3698

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu\text{V}/(\text{V}/\text{m})^2$) ^A	0.51	0.44	0.45	± 10.1 %
DCP (mV) ^B	99.1	98.8	101.0	

Modulation Calibration Parameters

UID	Communication System Name	PAR		A dB	B dB	C dB	VR mV	Unc ^E (k=2)
10000	CW	0.00	X	0.00	0.00	1.00	115.2	±2.5 %
			Y	0.00	0.00	1.00	105.0	
			Z	0.00	0.00	1.00	108.1	

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%.

^A The uncertainties of NormX,Y,Z do not affect the E²-field uncertainty inside TSL (see Pages 5 and 6).

^B Numerical linearization parameter: uncertainty not required.

^E Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

DASY/EASY - Parameters of Probe: EX3DV4 - SN:3698

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha	Depth (mm)	Unct. (k=2)
750	41.9	0.89	8.77	8.77	8.77	0.80	0.67	± 12.0 %
835	41.5	0.90	8.40	8.40	8.40	0.69	0.74	± 12.0 %
900	41.5	0.97	8.29	8.29	8.29	0.64	0.76	± 12.0 %
1750	40.1	1.37	7.38	7.38	7.38	0.80	0.60	± 12.0 %
1900	40.0	1.40	7.18	7.18	7.18	0.80	0.60	± 12.0 %
2450	39.2	1.80	6.51	6.51	6.51	0.80	0.61	± 12.0 %
2600	39.0	1.96	6.39	6.39	6.39	0.74	0.63	± 12.0 %
3500	37.9	2.91	6.41	6.41	6.41	0.20	1.60	± 13.1 %
5200	36.0	4.66	4.80	4.80	4.80	0.35	1.80	± 13.1 %
5300	35.9	4.76	4.58	4.58	4.58	0.35	1.80	± 13.1 %
5500	35.6	4.96	4.48	4.48	4.48	0.40	1.80	± 13.1 %
5600	35.5	5.07	4.16	4.16	4.16	0.45	1.80	± 13.1 %
5800	35.3	5.27	4.22	4.22	4.22	0.45	1.80	± 13.1 %

^C Frequency validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

DASY/EASY - Parameters of Probe: EX3DV4- SN:3698

Calibration Parameter Determined in Body Tissue Simulating Media

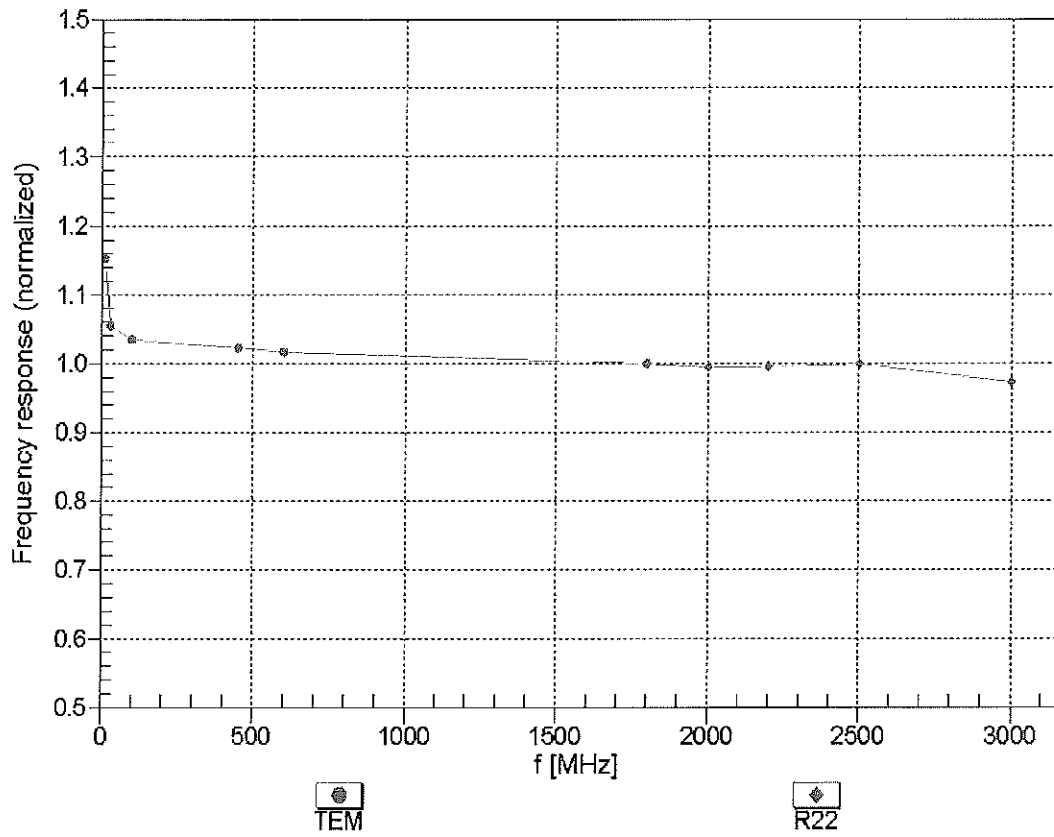
f (MHz) ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha	Depth (mm)	Unct. (k=2)
750	55.5	0.96	8.56	8.56	8.56	0.80	0.71	± 12.0 %
835	55.2	0.97	8.59	8.59	8.59	0.80	0.68	± 12.0 %
900	55.0	1.05	8.31	8.31	8.31	0.74	0.75	± 12.0 %
1750	53.4	1.49	7.09	7.09	7.09	0.80	0.68	± 12.0 %
1900	53.3	1.52	6.74	6.74	6.74	0.80	0.65	± 12.0 %
2450	52.7	1.95	6.60	6.60	6.60	0.80	0.60	± 12.0 %
2600	52.5	2.16	6.40	6.40	6.40	0.80	0.50	± 12.0 %
3500	51.3	3.31	5.73	5.73	5.73	0.23	1.90	± 13.1 %
5200	49.0	5.30	3.95	3.95	3.95	0.55	1.90	± 13.1 %
5300	48.9	5.42	3.74	3.74	3.74	0.55	1.90	± 13.1 %
5500	48.6	5.65	3.68	3.68	3.68	0.50	1.90	± 13.1 %
5600	48.5	5.77	3.42	3.42	3.42	0.60	1.90	± 13.1 %
5800	48.2	6.00	3.74	3.74	3.74	0.60	1.90	± 13.1 %

^C Frequency validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

Frequency Response of E-Field

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

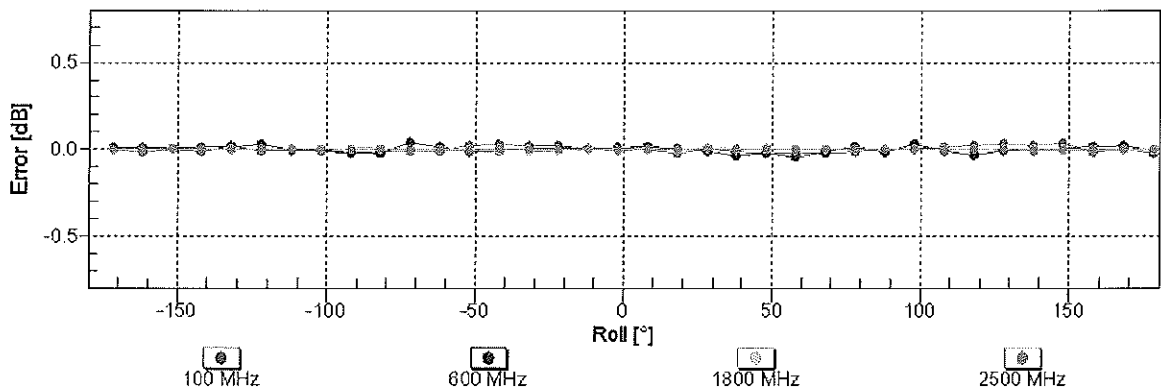
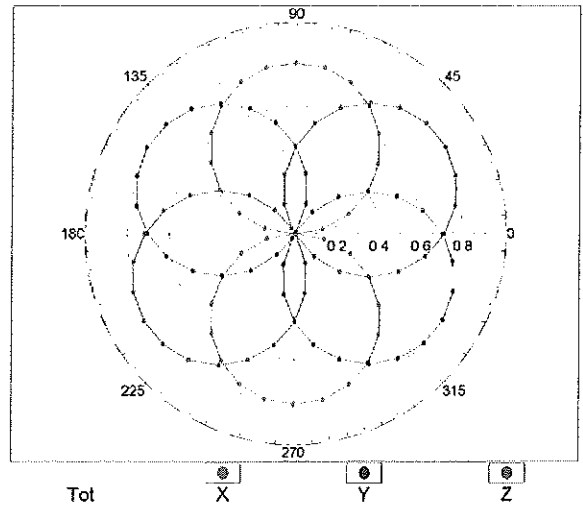
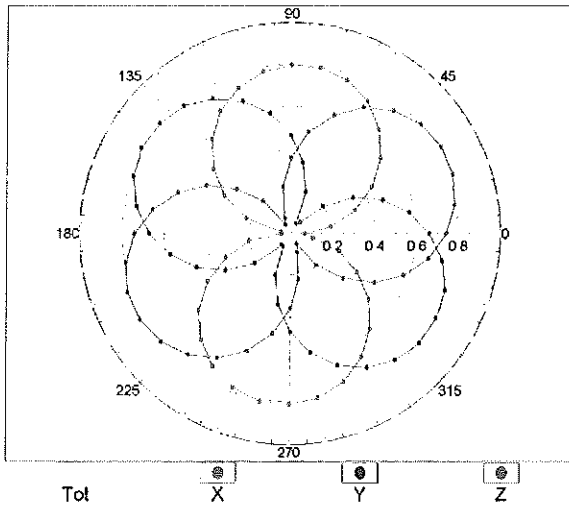


Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ (k=2)

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

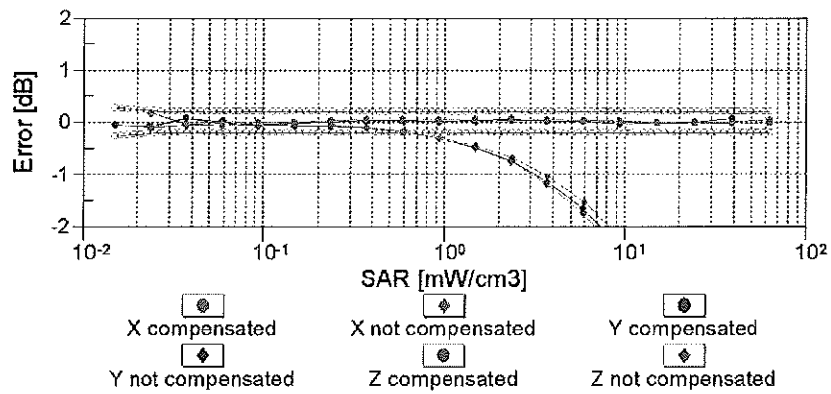
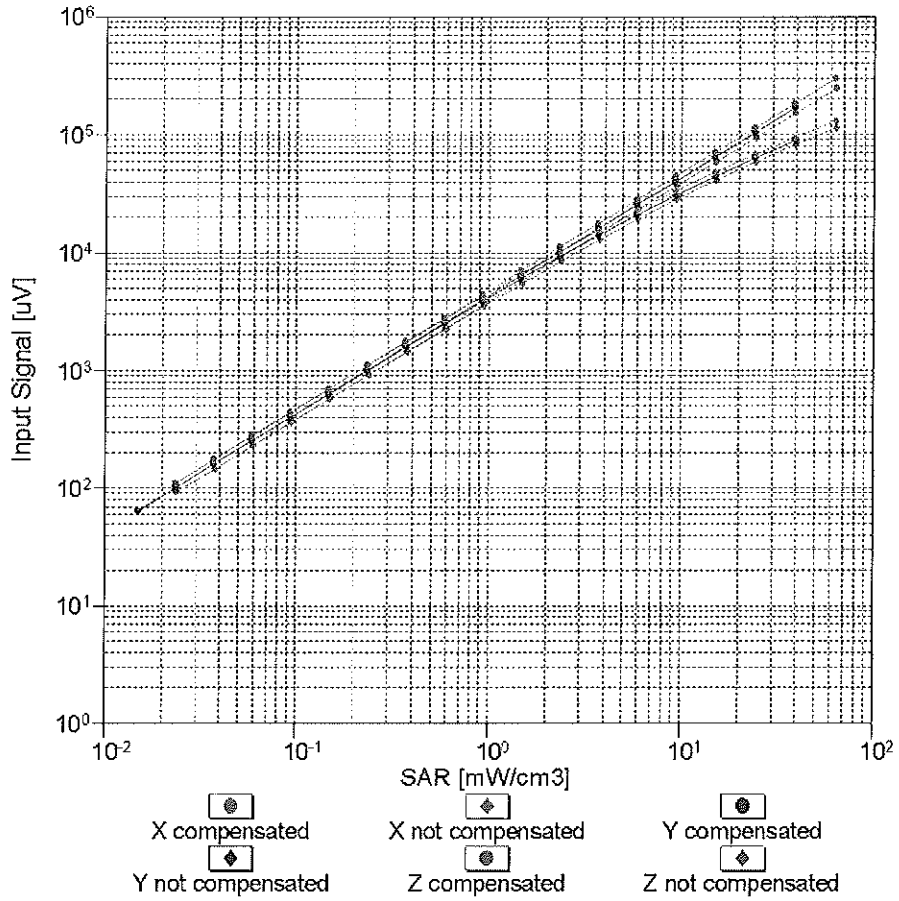
f=600 MHz,TEM

f=1800 MHz,R22



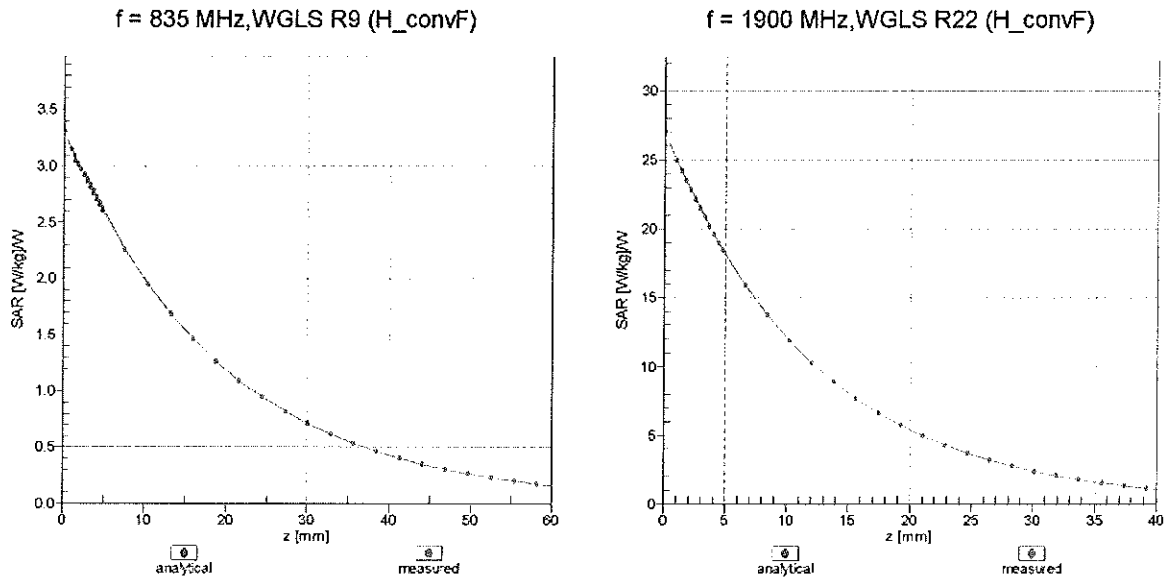
Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ (k=2)

Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell , $f = 900 \text{ MHz}$)



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

Conversion Factor Assessment



Deviation from Isotropy in Liquid Error (ϕ, ϑ), f = 900 MHz

