



SAR Test Report

Product Name : ASUS Tablet

Model No. : TF810C

Applicant : ASUSTeK COMPUTER INC.

Address : 4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan, R.O.C.

Date of Receipt : 2012/07/13

Issued Date : 2012/08/15

Report No. : 127293R-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

Issued Date: 2012/08/15

Report No.:127293R-HPUSP09V01



Product Name : ASUS Tablet
 Applicant : ASUSTeK COMPUTER INC.
 Address : 4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan, R.O.C.
 Manufacturer : 1. PEGATRON CORPORATION Taoyuan Mfg
 2. Protek (Shanghai) Limited.
 3. Tech-Com(Shanghai) Computer Co.Ltd.
 4.Wistron InfoComm(Kunshan) Co., Ltd.
 Model No. : TF810C
 Trade Name : ASUS
 FCC ID : MSQTF810CAH691
 Applicable Standard : FCC Oet65 Supplement C June 2001
 IEEE Std. 1528-2003
 47CFR § 2.1093
 Measurement procedures : KDB 447498 , KDB 248227, KDB616217
 Test Result : Max. SAR Measurement (1g)
 802.11b/g(2.4GHz): **1.130** W/kg
 802.11a(5 GHz): **1.490** W/kg
 Application Type : Certification

The test results relate only to the samples tested.

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Documented By : April Chen
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Approved By : [Signature]
 (Manager / Vincent Lin)

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1. General Information

1.1 EUT Description

| | |
|----------------------------------|--|
| Product Name | ASUS Tablet |
| Trade Name | ASUS |
| Model No. | TF810C |
| FCC ID | MSQTF810CAH691 |
| TX Frequency | 802.11b/g/n : 2412MHz~2462MHz 802.11a/n : 5150MHz~5825MHz |
| Wlan Modular | MFR: Azurewave, M/N: AW-AH691 |
| Type of Modulation | DSSS/OFDM |
| Antenna Type | PIFA |
| Device Category | Portable |
| RF Exposure Environment | Uncontrolled |
| Max. Output Power (Conducted) | 802.11b: 13.11 dBm 802.11g: 12.83 dBm 802.11a: 10.33 dBm |

* Note : 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.

1.2 Antenna List

| No. | Manufacturer | Part No. | Peak Gain |
|-----|--------------|---|--|
| 1 | INPAQ | WA-P-LBLB-04-002 (Main) WA-P-LBLB-04-002 (Aux) | 2.83dBi For 2.4GHz 2.75dBi For 5GHz |

1.3 Test Environment

Ambient conditions in the laboratory:

Test Date: Aug 01, 2012

| Items | Required | Actual |
|------------------|----------|---------|
| Temperature (°C) | 18-25 | 22.9± 2 |
| Humidity (%RH) | 30-70 | 52 |

Test Date: Aug 06, 2012

| Items | Required | Actual |
|------------------|----------|---------|
| Temperature (°C) | 18-25 | 23.4± 2 |
| Humidity (%RH) | 30-70 | 46 |

Site Description:

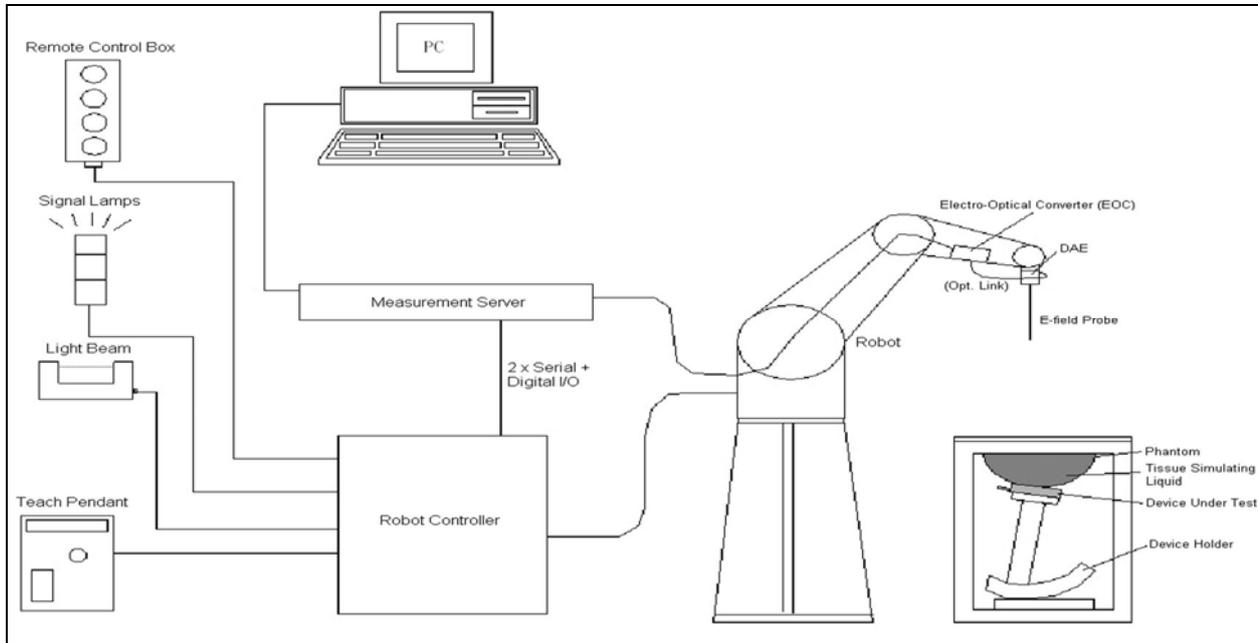
Accredited by TAF
 Accredited Number: 0914
 Effective through: December 12, 2014

Site Name: Quietek Corporation

Site Address: No. 5-22, Rueishu Keng, Linkou Dist.,
 New Taipei City 24451,
 Taiwan. R.O.C.
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 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 f_1 , the spatially steep distribution f_3 and f_2 accounts for H-field cancellation on the phantom/tissue surface.

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

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

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

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 μ W/g to 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 μ W/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 |
| | 06-Aug-12 | 52.86 | 1.91 | 22.1 |
| 2412 MHz | Low channel | 53.44 | 1.88 | 22.1 |
| 2437 MHz | Mid channel | 53.07 | 1.89 | 22.1 |
| 2462 MHz | High channel | 52.72 | 1.92 | 22.1 |

| 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 |
| | 01-Aug-12 | 49.99 | 5.29 | 21.8 |
| 5180 MHz | Low channel | 50.28 | 5.25 | 21.8 |
| 5240 MHz | Mid channel | 49.81 | 5.36 | 21.8 |
| 5320 MHz | High channel | 49.47 | 5.47 | 21.8 |

| 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 |
| | 01-Aug-12 | 49.31 | 5.59 | 21.8 |
| 5500 MHz | Low channel | 49.31 | 5.59 | 21.8 |
| 5510 MHz | Mid channel | 49.26 | 5.62 | 21.8 |
| 5580 MHz | High channel | 48.88 | 5.77 | 21.8 |

| 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 |
| | 01-Aug-12 | 46.46 | 6.24 | 21.8 |
| 5700 MHz | Low channel | 47.92 | 5.91 | 21.8 |
| 5785 MHz | Mid channel | 46.89 | 6.12 | 21.8 |
| 5825 MHz | High channel | 46.03 | 6.26 | 21.8 |

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.

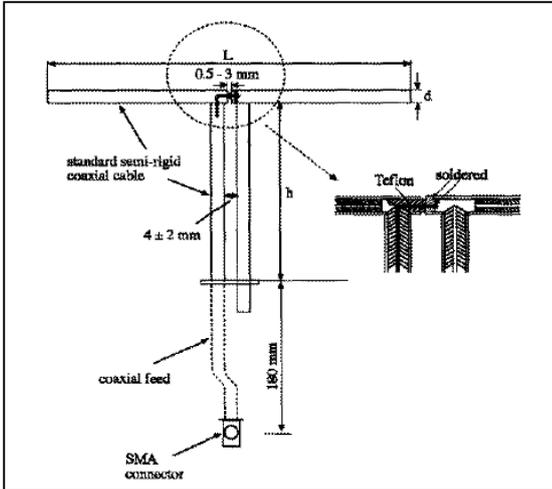
| Target Frequency (MHz) | Head | | Body | |
|---------------------------|--------------|----------------|--------------|----------------|
| | ϵ_r | σ (S/m) | ϵ_r | σ (S/m) |
| 150 | 52.3 | 0.76 | 61.9 | 0.80 |
| 300 | 45.3 | 0.87 | 58.2 | 0.92 |
| 450 | 43.5 | 0.87 | 56.7 | 0.94 |
| 835 | 41.5 | 0.90 | 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 |
| | 06-Aug-12 | 49.6 | 22.32 | 22.1 |
| Note: (1) The power level is used 250mW (2) All SAR values are normalized to 1W forward power. (3) The reference result is from Appendix E. | | | | |

| 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 | 21.2 19.08 to 23.32 | N/A |
| | 01-Aug-12 | 70 | 20.72 | 21.8 |
| Note: (1) The power level is used 100mW (2) All SAR values are normalized to 1W forward power. (3) The reference result is from Appendix E. | | | | |

| 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 |
| | 01-Aug-12 | 74.4 | 21.88 | 21.8 |
| Note: (1) The power level is used 100mW (2) All SAR values are normalized to 1W forward power. (3) The reference result is from Appendix E. | | | | |

| 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 |
| | 01-Aug-12 | 74.8 | 22.92 | 21.8 |
| Note: (1) The power level is used 100mW (2) All SAR values are normalized to 1W forward power. (3) The reference result is from Appendix E. | | | | |

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 |
| Aprél Reference Dipole 2450MHz | Aprél | 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 | 3578 | 2012/06/21 | 2013/06/20 |
| SAR Software | Speag | DASY52 | V52.8 (1) | N/A | N/A |
| Aprél Dipole Spaccer | Aprél | 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 | 2012/07/30 | 2013/07/29 |
| Signal Generator | Anritsu | MG3694A | 041902 | 2012/08/03 | 2013/08/02 |
| 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 | 12.3 | 13.11 |
| 802.11b | 2437 | 6 | 12.58 | 12.92 |
| 802.11b | 2462 | 11 | 12.5 | 12.8 |
| 802.11g | 2412 | 1 | 12.27 | 12.83 |
| 802.11g | 2437 | 6 | 12.18 | 12.78 |
| 802.11g | 2462 | 11 | 12.19 | 12.64 |
| 802.11a | 5180 | 36 | 9.66 | 8.63 |
| 802.11a | 5220 | 44 | 9.56 | 8.46 |
| 802.11a | 5240 | 48 | 9.71 | 8.18 |
| 802.11a | 5260 | 52 | 9.38 | 8.11 |
| 802.11a | 5300 | 60 | 9.28 | 7.98 |
| 802.11a | 5320 | 64 | 9.22 | 7.67 |
| 802.11a | 5500 | 100 | 10.09 | 7.82 |
| 802.11a | 5580 | 116 | 10.17 | 7.24 |
| 802.11a | 5700 | 140 | 10.33 | 7.06 |
| 802.11a | 5745 | 149 | 9.96 | 7.11 |
| 802.11a | 5785 | 157 | 9.89 | 7.47 |
| 802.11a | 5825 | 165 | 9.75 | 7.63 |

| 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 | 11.36 | 11.78 | 14.59 |
| 802.11n-20M | 2437 | 6 | 11.31 | 11.69 | 14.51 |
| 802.11n-20M | 2462 | 11 | 11.21 | 11.36 | 14.30 |
| 802.11n-20M | 5180 | 36 | 8.37 | 7.12 | 10.80 |
| 802.11n-20M | 5220 | 44 | 8.24 | 7.11 | 10.72 |
| 802.11n-20M | 5240 | 48 | 8.23 | 6.93 | 10.64 |
| 802.11n-20M | 5260 | 52 | 8.06 | 6.84 | 10.50 |
| 802.11n-20M | 5300 | 60 | 8.06 | 6.57 | 11.49 |
| 802.11n-20M | 5320 | 64 | 7.75 | 6.58 | 10.21 |
| 802.11n-20M | 5500 | 100 | 8.96 | 6.58 | 10.94 |
| 802.11n-20M | 5580 | 116 | 8.96 | 6.02 | 10.74 |
| 802.11n-20M | 5700 | 140 | 9.12 | 5.91 | 10.82 |
| 802.11n-20M | 5745 | 149 | 9.06 | 5.89 | 10.79 |
| 802.11n-20M | 5785 | 157 | 8.81 | 6.22 | 10.72 |
| 802.11n-20M | 5825 | 165 | 6.22 | 6.41 | 9.33 |
| 802.11n-40M | 2422 | 3 | 9.93 | 10.03 | 12.99 |
| 802.11n-40M | 2437 | 6 | 10.03 | 9.88 | 12.97 |
| 802.11n-40M | 2452 | 9 | 9.67 | 9.78 | 12.74 |
| 802.11n-40M | 5190 | 38 | 6.11 | 5 | 8.60 |
| 802.11n-40M | 5230 | 46 | 5.91 | 4.76 | 8.38 |
| 802.11n-40M | 5270 | 54 | 5.67 | 4.51 | 8.14 |
| 802.11n-40M | 5310 | 62 | 5.66 | 4.21 | 8.01 |
| 802.11n-40M | 5510 | 102 | 7.21 | 4.75 | 9.16 |
| 802.11n-40M | 5590 | 118 | 7.27 | 4.54 | 9.13 |
| 802.11n-40M | 5670 | 134 | 7.37 | 3.81 | 8.96 |
| 802.11n-40M | 5755 | 151 | 7.31 | 4.35 | 9.09 |
| 802.11n-40M | 5795 | 159 | 7.31 | 4.52 | 9.15 |

9. Test Results

9.1 SAR Test Results Summary

| SAR MEASUREMENT | | | | | | |
|---|---------------------|-----------|------|-----------------------------|------------------|-----------------|
| Ambient Temperature (°C) : 23.4 ±2 | | | | Relative Humidity (%): 46 | | |
| Liquid Temperature (°C) : 22.1 ±2 | | | | Depth of Liquid (cm):>15 | | |
| Test Mode: 802.11b - 2450 MHz- INPAQ Main(Chain A) Antenna, P/N: WA-P-LBLB-04-002 | | | | | | |
| Test Position Body | Antenna Position | Frequency | | Conducted Power (dBm) | SAR 1g (W/kg) | Limit (W/kg) |
| | | Channel | MHz | | | |
| Front | Fixed | 1 | 2412 | 12.3 | 1.130 | 1.6 |
| Front | Fixed | 6 | 2437 | 12.58 | 0.853 | 1.6 |
| Front | Fixed | 11 | 2462 | 12.5 | 0.918 | 1.6 |
| Top | Fixed | 6 | 2437 | 12.58 | 0.395 | 1.6 |
| Back | Fixed | 6 | 2437 | 12.58 | 0.600 | 1.6 |
| Side | Fixed | 6 | 2437 | 12.58 | 0.072 | 1.6 |
| Test Mode: 802.11b - 2450 MHz- INPAQ Aux(Chain B) Antenna, P/N: WA-P-LBLB-04-002 | | | | | | |
| Front | Fixed | 1 | 2412 | 13.11 | 0.283 | 1.6 |
| Top | Fixed | 1 | 2412 | 13.11 | 0.018 | 1.6 |
| Back | Fixed | 1 | 2412 | 13.11 | 0.090 | 1.6 |
| Side | Fixed | 1 | 2412 | 13.11 | 0.00249 | 1.6 |
| Test Mode: 802.11n (20M) - 2450 MHz –INPAQ (Chain A + Chain B) Antenna | | | | | | |
| Front | Fixed | 1 | 2412 | 14.59 | 0.792 | 1.6 |
| Test Mode: 802.11n (40M) - 2450 MHz –INPAQ (Chain A + Chain B) Antenna | | | | | | |
| Front | Fixed | 3 | 2422 | 12.99 | 0.639 | 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) According KDB 248227 D01, SAR is not required for 802.11g channels when the maximum average output power is less the 1/4dB higher than that measured on the corresponding 802.11b channels.</p> <p>(3) Except Front side, SAR Value of the other side are small than 0.8W/Kg and other channels are not required.</p> <p>(4) The test channel are chosen with the worst case power of 802.11n 20/40M (Chain A+Chain B)</p> <p>(5) When testing 802.11n(20/40), The Chain A & B are simultaneous transmission for MIMO.</p> | | | | | | |

| SAR MEASUREMENT | | | | | | |
|--|---------------------|-----------|----------------------------|-----------------------------|------------------|-----------------|
| Ambient Temperature (°C) : 22.9 ±2 | | | Relative Humidity (%) : 52 | | | |
| Liquid Temperature (°C) : 21.8 ±2 | | | Depth of Liquid (cm) : >15 | | | |
| Test Mode: 802.11a - 5 GHz - INPAQ Main(Chain A) Antenna, P/N: WA-P-LBLB-04-002 | | | | | | |
| Test Position Body | Antenna Position | Frequency | | Conducted Power (dBm) | SAR 1g (W/kg) | Limit (W/kg) |
| | | Channel | MHz | | | |
| Front | Fixed | 36 | 5180 | 9.66 | 1.290 | 1.6 |
| Front | Fixed | 44 | 5220 | 9.56 | 1.310 | 1.6 |
| Front | Fixed | 48 | 5240 | 9.71 | 1.370 | 1.6 |
| Front | Fixed | 52 | 5260 | 9.38 | 1.390 | 1.6 |
| Front | Fixed | 60 | 5300 | 9.28 | 1.210 | 1.6 |
| Front | Fixed | 64 | 5320 | 9.22 | 1.020 | 1.6 |
| Front | Fixed | 100 | 5500 | 10.09 | 0.936 | 1.6 |
| Front | Fixed | 116 | 5580 | 10.17 | 1.050 | 1.6 |
| Front | Fixed | 140 | 5700 | 10.33 | 1.280 | 1.6 |
| Front | Fixed | 149 | 5745 | 9.96 | 1.240 | 1.6 |
| Front | Fixed | 157 | 5785 | 9.89 | 1.320 | 1.6 |
| Front | Fixed | 165 | 5825 | 9.75 | 1.490 | 1.6 |
| Top | Fixed | 140 | 5700 | 10.33 | 0.662 | 1.6 |
| Back | Fixed | 140 | 5700 | 10.33 | 0.227 | 1.6 |
| Side | Fixed | 140 | 5700 | 10.33 | 0.023 | 1.6 |
| Test Mode: 802.11a - 5 GHz - INPAQ Aux(Chain B) Antenna, P/N: WA-P-LBLB-04-002 | | | | | | |
| Front | Fixed | 36 | 5180 | 8.63 | 0.687 | 1.6 |
| Top | Fixed | 36 | 5180 | 8.63 | 0.466 | 1.6 |
| Back | Fixed | 36 | 5180 | 8.63 | 0.150 | 1.6 |
| Side | Fixed | 36 | 5180 | 8.63 | 0.021 | 1.6 |
| Note : (1) According KDB 447498 D01, for antenna(s) located ≥ 5 cm from side & bottom , the SAR is not required, (2) Except Front side, SAR Value of the other side are small than 0.8W/Kg and other channels are not required. | | | | | | |

| | | | | | | |
|--|-------|-----|---------------------------|-------|-------|-----|
| SAR MEASUREMENT | | | | | | |
| Ambient Temperature (°C) : 22.9 ±2 | | | Relative Humidity (%): 52 | | | |
| Liquid Temperature (°C) : 21.8 ±2 | | | Depth of Liquid (cm):>15 | | | |
| Test Mode: 802.11n (20M) - 5 GHz - INPAQ (Chain A + Chain B) Antenna | | | | | | |
| Front | Fixed | 100 | 5500 | 10.94 | 0.792 | 1.6 |
| Test Mode: 802.11n (40M) - 5 GHz - INPAQ (Chain A + Chain B) Antenna | | | | | | |
| Front | Fixed | 102 | 5510 | 9.16 | 0.376 | 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 channel are chosen with the worst case power of 802.11n 20/40M (Chain A+Chain B)</p> <p>(3) When testing 802.11n(20/40), The Chain A & B are simultaneous transmission for MIMO.</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: 8/6/2012

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: $f = 2450 \text{ MHz}$; $\sigma = 1.91 \text{ mho/m}$; $\epsilon_r = 52.86$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 23.4, Liquid Temperature ($^{\circ}\text{C}$) : 22.1

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.43, 6.43, 6.43); Calibrated: 6/21/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASYS52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

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

Maximum value of SAR (measured) = 12.2 mW/g

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

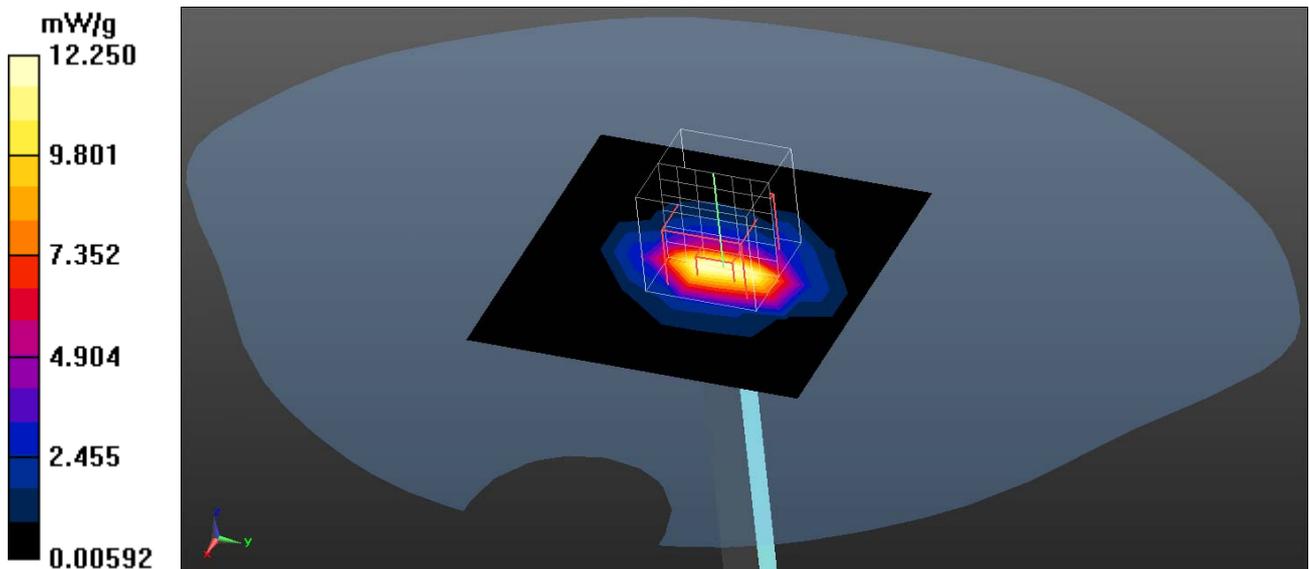
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 86.648 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 25.345 mW/g

SAR(1 g) = 12.4 mW/g; SAR(10 g) = 5.58 mW/g

Maximum value of SAR (measured) = 12.8 mW/g



Test Laboratory: QuieTek

Date/Time: 8/1/2012

System Performance Check_5200-Body

DUT: Dipole 5GHz; Type: D5GHzV2

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

Medium parameters used: $f = 5200$ MHz; $\sigma = 5.29$ mho/m; $\epsilon_r = 49.99$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature (°C) : 22.9, Liquid Temperature (°C) : 21.8

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.93, 3.93, 3.93); Calibrated: 6/21/2012;
- 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/5200MHz-Body/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 23.1 mW/g

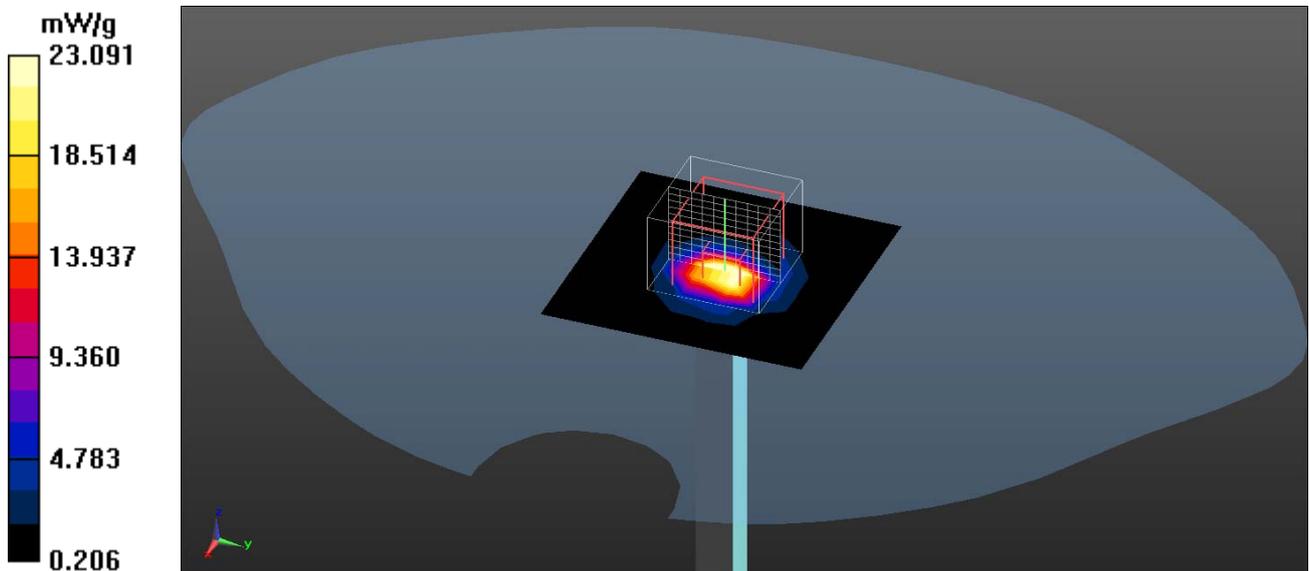
Configuration/5200MHz-Body/Zoom Scan (3x3x2mm, graded), dist=2mm (11x11x12)/Cube 0: Measurement grid: dx=3mm, dy=3mm, dz=2mm

Reference Value = 88.575 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 69.992 mW/g

SAR(1 g) = 17.5 mW/g; SAR(10 g) = 5.18 mW/g

Maximum value of SAR (measured) = 35.9 mW/g



Test Laboratory: QuieTek

Date/Time: 8/1/2012

System Performance Check_5500-Body

DUT: Dipole 5GHz; Type: D5GHzV2

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

Medium parameters used: $f = 5500$ MHz; $\sigma = 5.59$ mho/m; $\epsilon_r = 49.31$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature (°C) : 22.9, Liquid Temperature (°C) : 21.8

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.45, 3.45, 3.45); Calibrated: 6/21/2012;
- 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/5500MHz-Body/Area Scan (8x8x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 25.3 mW/g

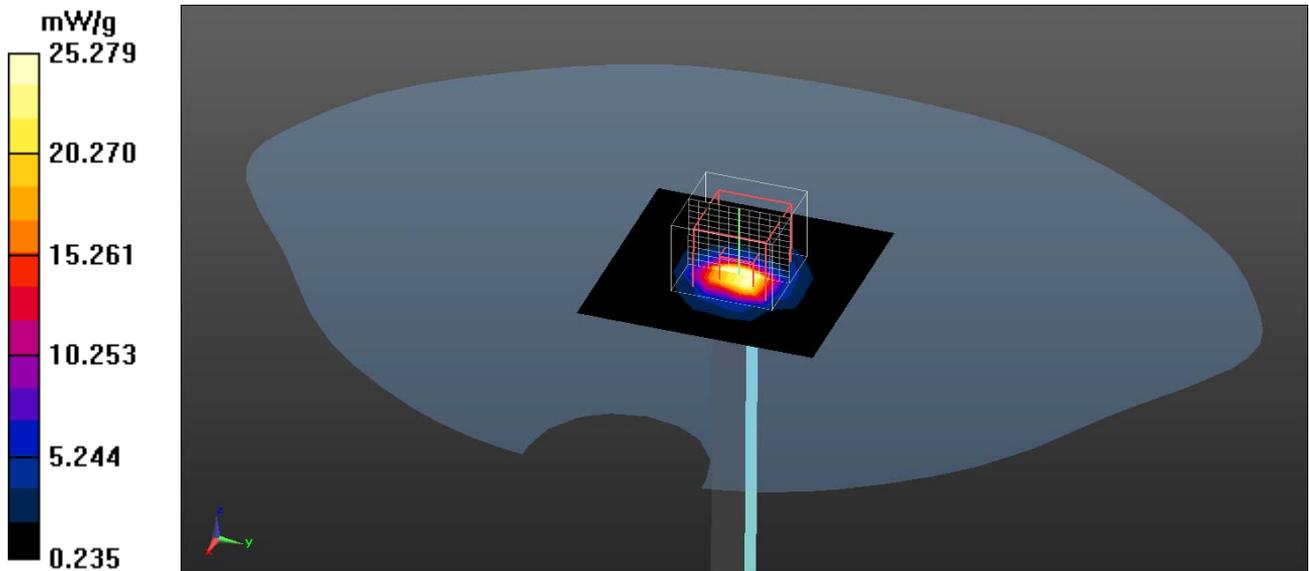
Configuration/5500MHz-Body/Zoom Scan (3x3x2mm, graded), dist=2mm (11x11x12)/Cube 0: Measurement grid: dx=3mm, dy=3mm, dz=2mm

Reference Value = 92.704 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 78.308 mW/g

SAR(1 g) = 18.6 mW/g; SAR(10 g) = 5.47 mW/g

Maximum value of SAR (measured) = 38.8 mW/g



Test Laboratory: QuieTek

Date/Time: 8/1/2012

System Performance Check_5800-Body

DUT: Dipole 5GHz; Type: D5GHzV2

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

Medium parameters used: $f = 5800 \text{ MHz}$; $\sigma = 6.24 \text{ mho/m}$; $\epsilon_r = 46.46$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 22.9, Liquid Temperature ($^{\circ}\text{C}$) : 21.8

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.43, 3.43, 3.43); Calibrated: 6/21/2012;
- 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/5800MHz-Body/Area Scan (8x8x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 25.1 mW/g

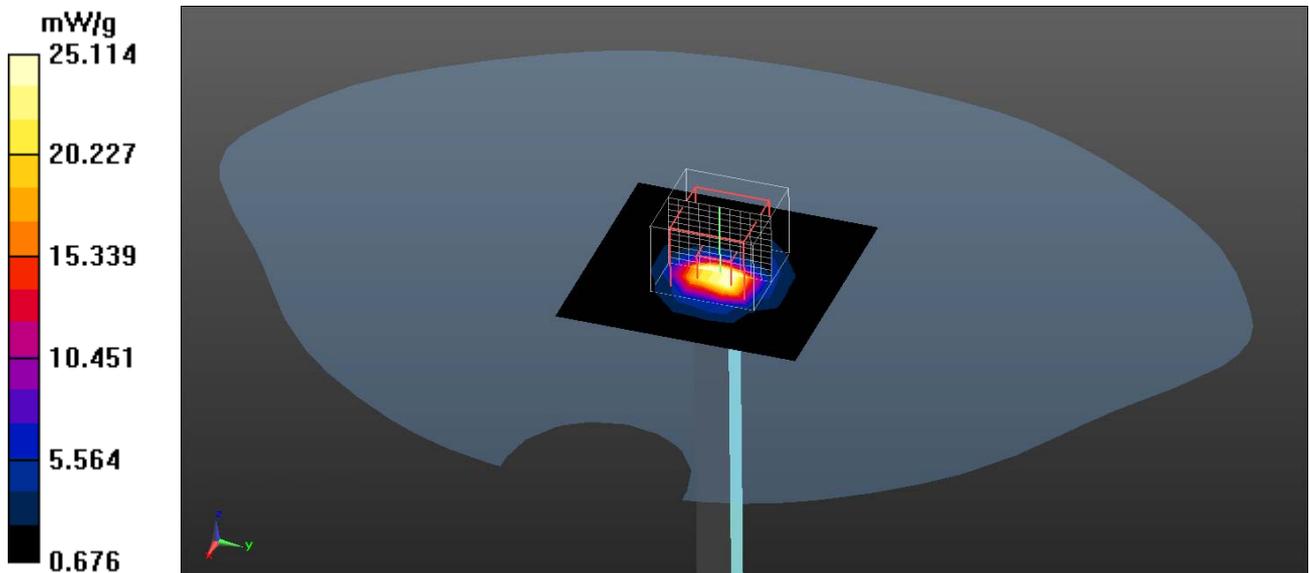
Configuration/5800MHz-Body/Zoom Scan (3x3x2mm, graded), dist=2mm (11x11x12)/Cube 0: Measurement grid: $dx=3\text{mm}$, $dy=3\text{mm}$, $dz=2\text{mm}$

Reference Value = 91.249 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 85.038 mW/g

SAR(1 g) = 18.7 mW/g; SAR(10 g) = 5.73 mW/g

Maximum value of SAR (measured) = 39.2 mW/g



Appendix B. SAR measurement Data

Antenna Kit: INPAQ Main Antenna, P/N: WA-P-LBLB-04-002

Test Laboratory: QuieTek

Date/Time: 8/6/2012

802.11b_1-Front Main

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 2412$ MHz; $\sigma = 1.88$ mho/m; $\epsilon_r = 53.44$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature (°C) : 23.4, Liquid Temperature (°C) : 22.1

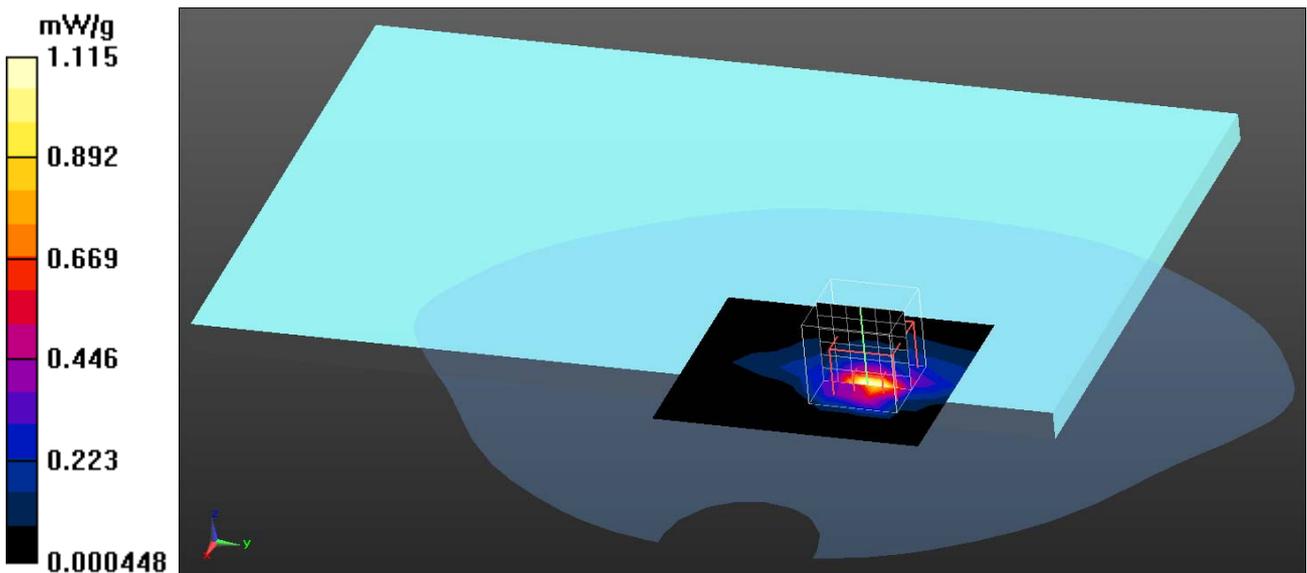
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.43, 6.43, 6.43); Calibrated: 6/21/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASYS2, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x8x1): Measurement grid: dx=13mm, dy=13mm
 Maximum value of SAR (measured) = 1.12 mW/g

Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 13.745 V/m; Power Drift = -0.11 dB
 Peak SAR (extrapolated) = 3.105 mW/g
SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.427 mW/g
 Maximum value of SAR (measured) = 1.32 mW/g



Test Laboratory: QuieTek

Date/Time: 8/6/2012

802.11b_6-Front Main

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.89 \text{ mho/m}$; $\epsilon_r = 53.07$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 23.4, Liquid Temperature ($^{\circ}\text{C}$) : 22.1

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.43, 6.43, 6.43); Calibrated: 6/21/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASYS2, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.905 mW/g

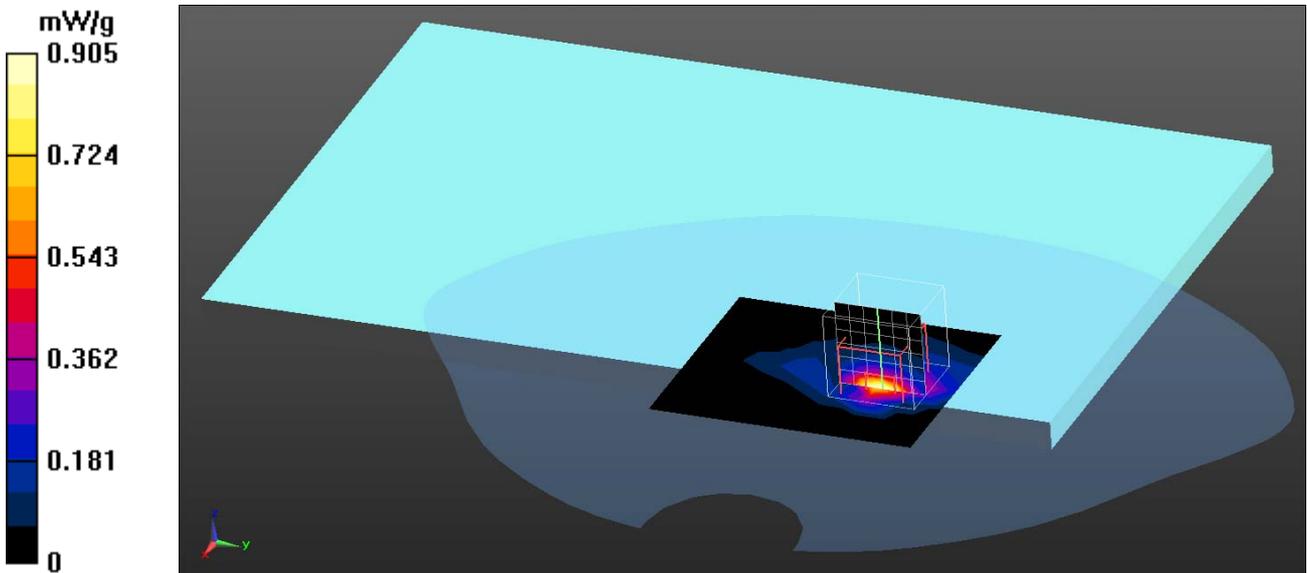
Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.187 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 1.933 mW/g

SAR(1 g) = 0.853 mW/g; SAR(10 g) = 0.335 mW/g

Maximum value of SAR (measured) = 1.02 mW/g



Test Laboratory: QuieTek

Date/Time: 8/6/2012

802.11b_11-Front Main

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.92 \text{ mho/m}$; $\epsilon_r = 52.72$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 23.4, Liquid Temperature ($^{\circ}\text{C}$) : 22.1

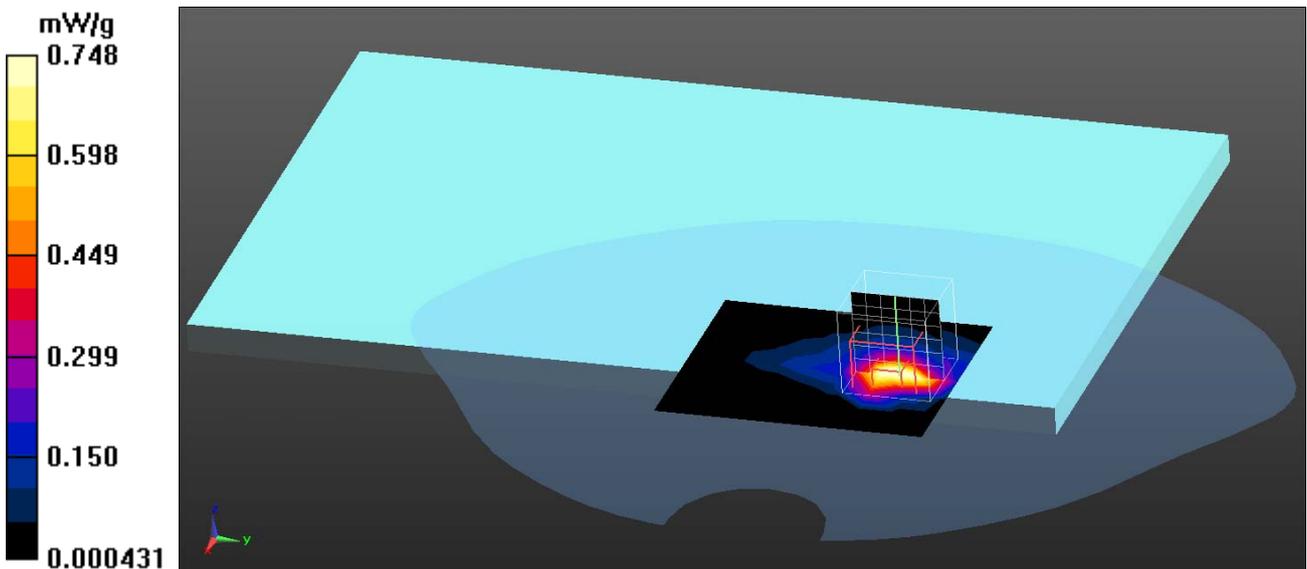
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.43, 6.43, 6.43); Calibrated: 6/21/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.748 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 = 9.662 V/m; Power Drift = 0.19 dB
 Peak SAR (extrapolated) = 2.726 mW/g
SAR(1 g) = 0.918 mW/g; SAR(10 g) = 0.329 mW/g
 Maximum value of SAR (measured) = 1.10 mW/g



Test Laboratory: QuieTek

Date/Time: 8/6/2012

802.11b_6-Top Main**DUT: ASUS Tablet; Type: TF810C**

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

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.89$ mho/m; $\epsilon_r = 53.07$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature (°C) : 23.4, Liquid Temperature (°C) : 22.1

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.43, 6.43, 6.43); Calibrated: 6/21/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

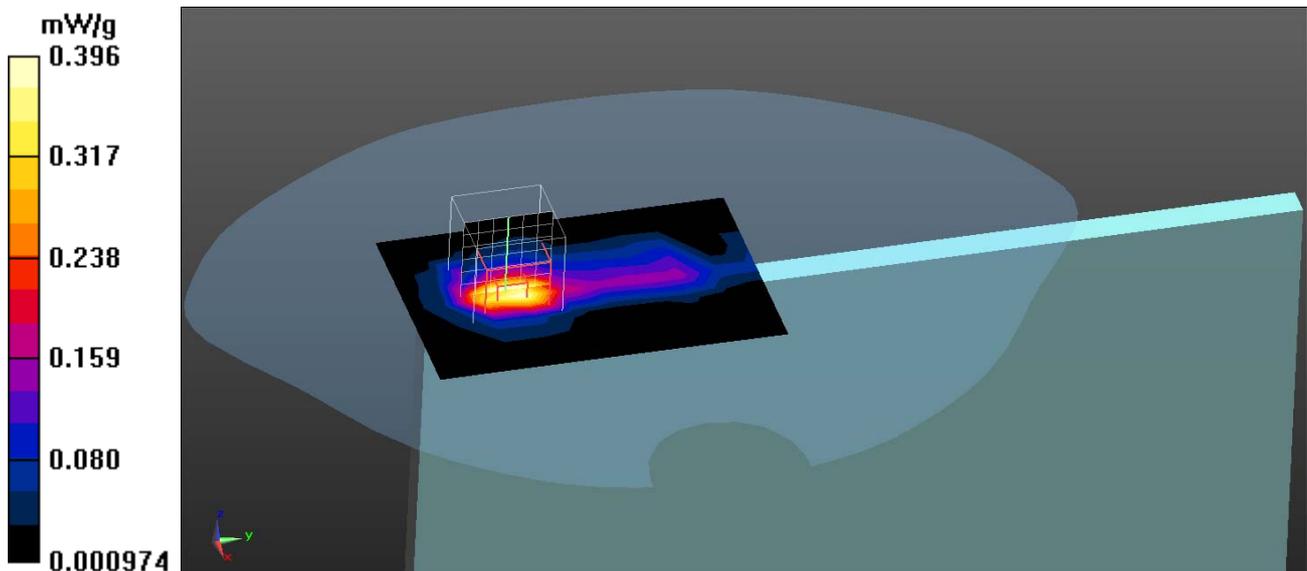
Configuration/Body/Area Scan (7x10x1): Measurement grid: dx=13mm, dy=13mm
Maximum value of SAR (measured) = 0.396 mW/g**Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:
dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.351 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.818 mW/g

SAR(1 g) = 0.395 mW/g; SAR(10 g) = 0.180 mW/g

Maximum value of SAR (measured) = 0.461 mW/g



Test Laboratory: QuieTek

Date/Time: 8/6/2012

802.11b_6-Back Main

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.89 \text{ mho/m}$; $\epsilon_r = 53.07$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 23.4, Liquid Temperature ($^{\circ}\text{C}$) : 22.1

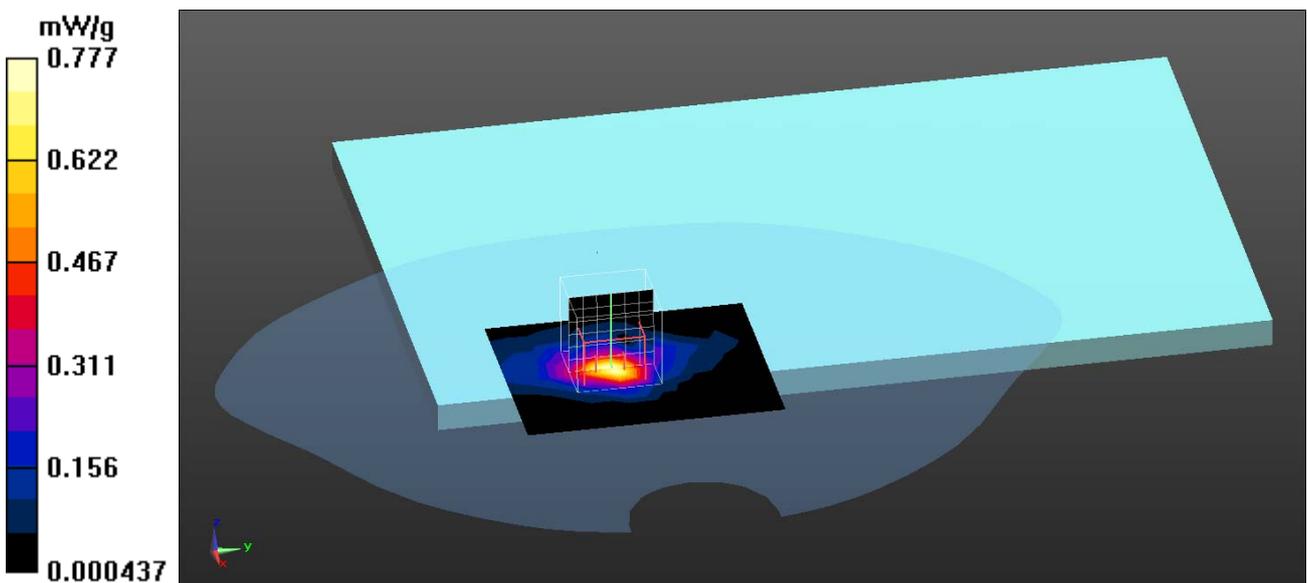
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.43, 6.43, 6.43); Calibrated: 6/21/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.777 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 = 12.984 V/m; Power Drift = -0.15 dB
 Peak SAR (extrapolated) = 1.167 mW/g
SAR(1 g) = 0.600 mW/g; SAR(10 g) = 0.272 mW/g
 Maximum value of SAR (measured) = 0.826 mW/g



Test Laboratory: QuieTek

Date/Time: 8/6/2012

802.11b_6-Side Main

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.89$ mho/m; $\epsilon_r = 53.07$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature (°C) : 23.4, Liquid Temperature (°C) : 22.1

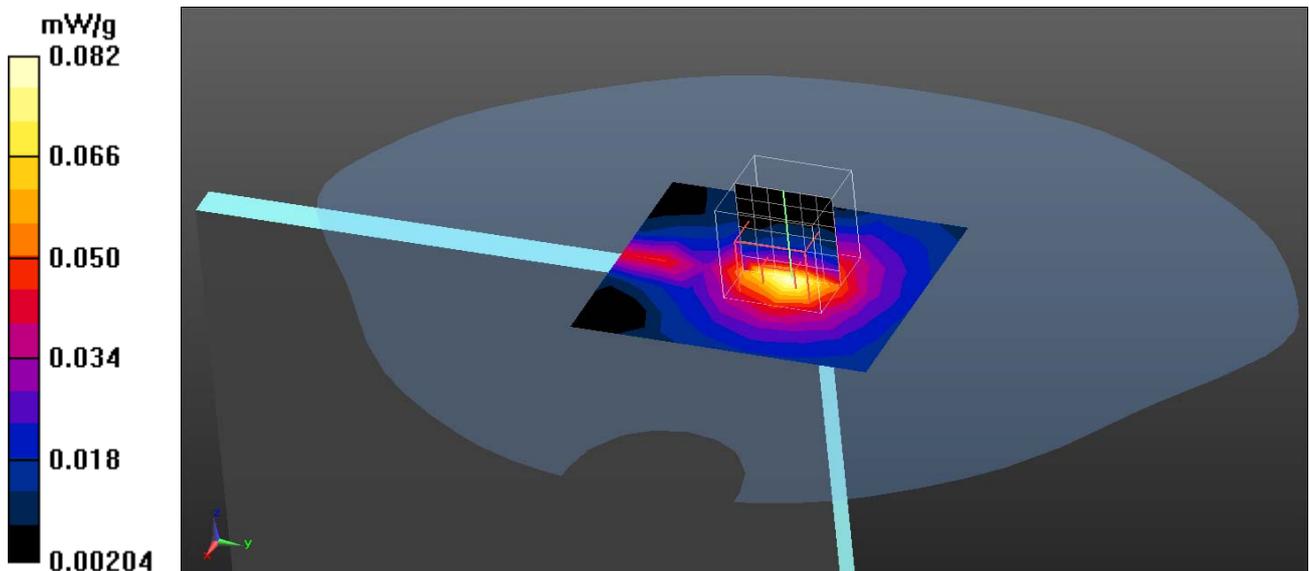
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.43, 6.43, 6.43); Calibrated: 6/21/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x8x1): Measurement grid: dx=13mm, dy=13mm
 Maximum value of SAR (measured) = 0.0817 mW/g

Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 dx=5mm, dy=5mm, dz=5mm
 Reference Value = 6.796 V/m; Power Drift = -0.15 dB
 Peak SAR (extrapolated) = 0.155 mW/g
SAR(1 g) = 0.072 mW/g; SAR(10 g) = 0.037 mW/g
 Maximum value of SAR (measured) = 0.0797 mW/g



Antenna Kit : INPAQ Aux Antenna, P/N: WA-P-LBLB-04-002

Test Laboratory: QuieTek

Date/Time: 8/6/2012

802.11b_1-Front Aux

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.88 \text{ mho/m}$; $\epsilon_r = 53.44$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 23.4, Liquid Temperature ($^{\circ}\text{C}$) : 22.1

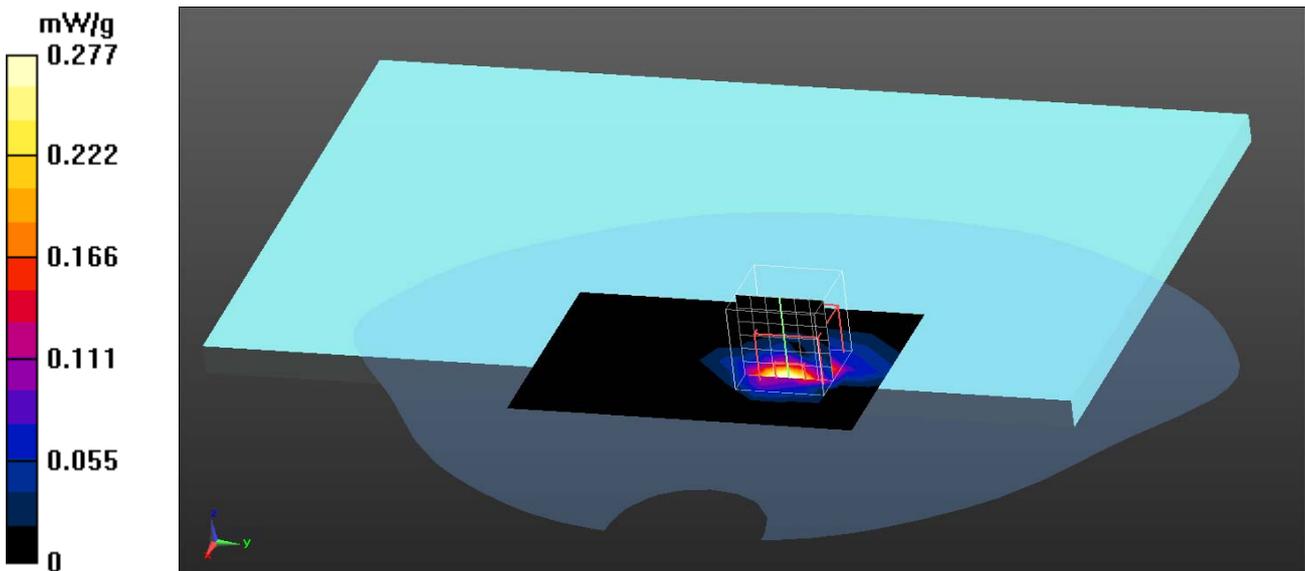
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.43, 6.43, 6.43); Calibrated: 6/21/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x10x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.277 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 = 8.292 V/m; Power Drift = 0.12 dB
 Peak SAR (extrapolated) = 0.726 mW/g
SAR(1 g) = 0.283 mW/g; SAR(10 g) = 0.112 mW/g
 Maximum value of SAR (measured) = 0.336 mW/g



Test Laboratory: QuieTek

Date/Time: 8/6/2012

802.11b_1-Top Aux

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.88 \text{ mho/m}$; $\epsilon_r = 53.44$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 23.4, Liquid Temperature ($^{\circ}\text{C}$) : 22.1

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.43, 6.43, 6.43); Calibrated: 6/21/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASYS52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x10x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.0193 mW/g

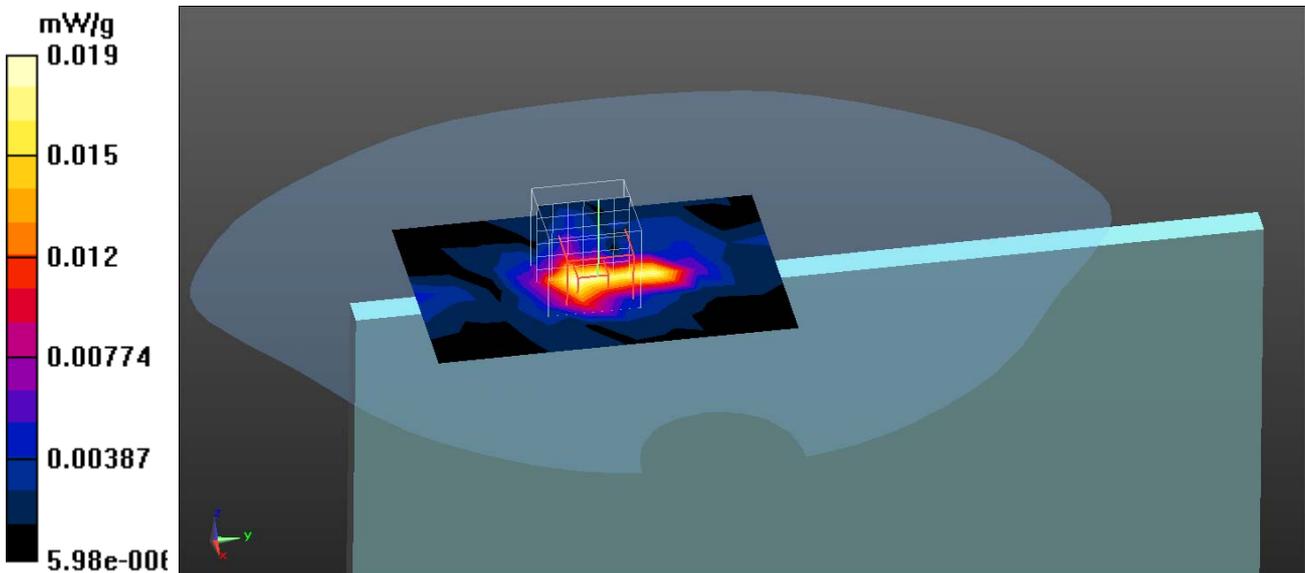
Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.271 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.069 mW/g

SAR(1 g) = 0.018 mW/g; SAR(10 g) = 0.00895 mW/g

Maximum value of SAR (measured) = 0.0203 mW/g



Test Laboratory: QuieTek

Date/Time: 8/6/2012

802.11b_1-Back Aux

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.88 \text{ mho/m}$; $\epsilon_r = 53.44$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 23.4, Liquid Temperature ($^{\circ}\text{C}$) : 22.1

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.43, 6.43, 6.43); Calibrated: 6/21/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASYS2, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x10x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.0888 mW/g

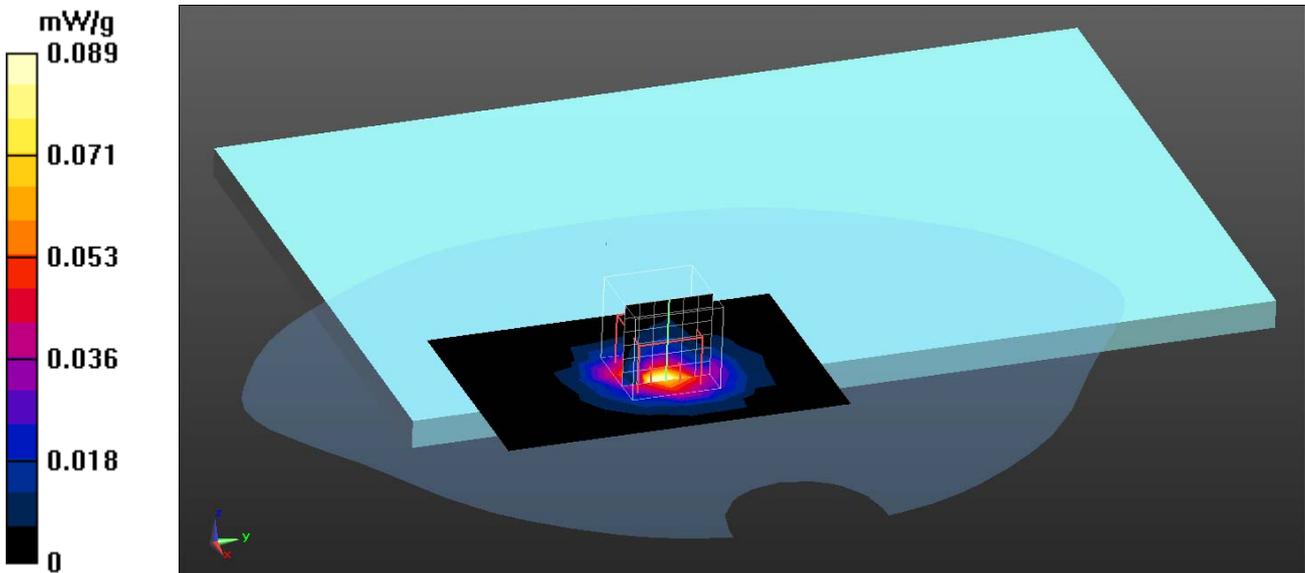
Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 4.347 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.201 mW/g

SAR(1 g) = 0.090 mW/g; SAR(10 g) = 0.037 mW/g

Maximum value of SAR (measured) = 0.102 mW/g



Test Laboratory: QuieTek

Date/Time: 8/6/2012

802.11b_1-Side Aux

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.88 \text{ mho/m}$; $\epsilon_r = 53.44$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 23.4, Liquid Temperature ($^{\circ}\text{C}$) : 22.1

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.43, 6.43, 6.43); Calibrated: 6/21/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASYS2, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.00400 mW/g

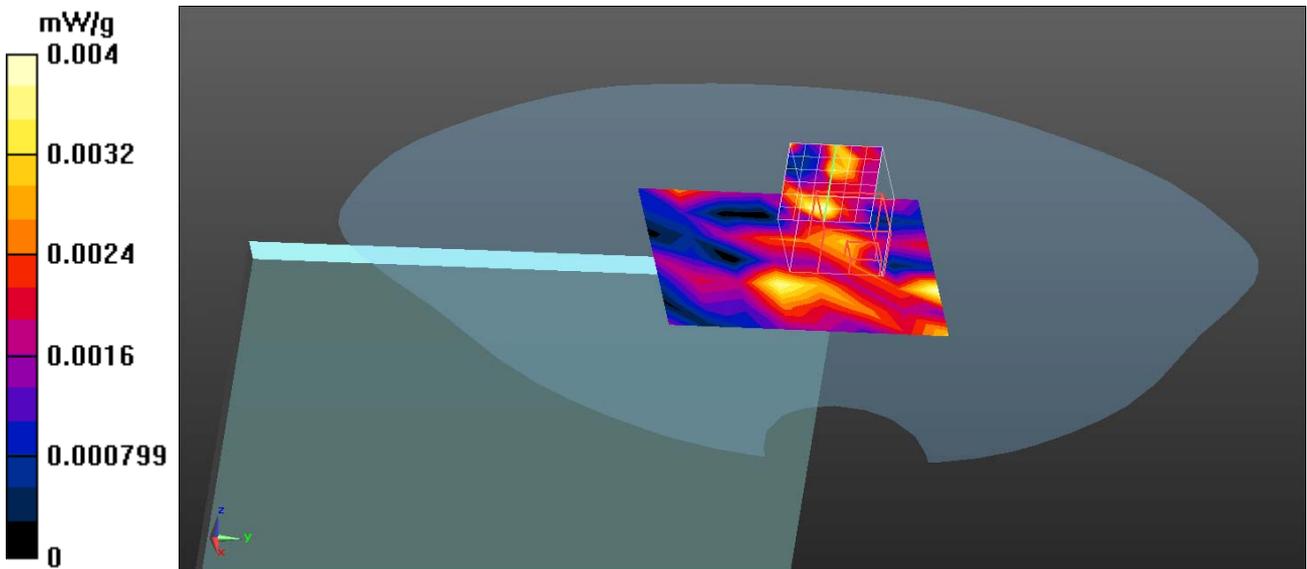
Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 1.122 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.0068 mW/g

SAR(1 g) = 0.00249 mW/g; SAR(10 g) = 0.00187 mW/g

Maximum value of SAR (measured) = 0.0397 mW/g



Antenna Kit: INPAQ Main Antenna, P/N: WA-P-LBLB-04-002
 INPAQ Aux Antenna, P/N: WA-P-LBLB-04-002

Test Laboratory: QuieTek

Date/Time: 8/6/2012

802.11n_20M_1-Front Main&Aux
 DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 2412$ MHz; $\sigma = 1.88$ mho/m; $\epsilon_r = 53.44$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature (°C) : 23.4, Liquid Temperature (°C) : 22.1

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.43, 6.43, 6.43); Calibrated: 6/21/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x10x1): Measurement grid: dx=13mm, dy=13mm
 Maximum value of SAR (measured) = 1.05 mW/g

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

Reference Value = 23.686 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 2.441 mW/g

SAR(1 g) = 0.792 mW/g; SAR(10 g) = 0.334 mW/g

Maximum value of SAR (measured) = 0.995 mW/g

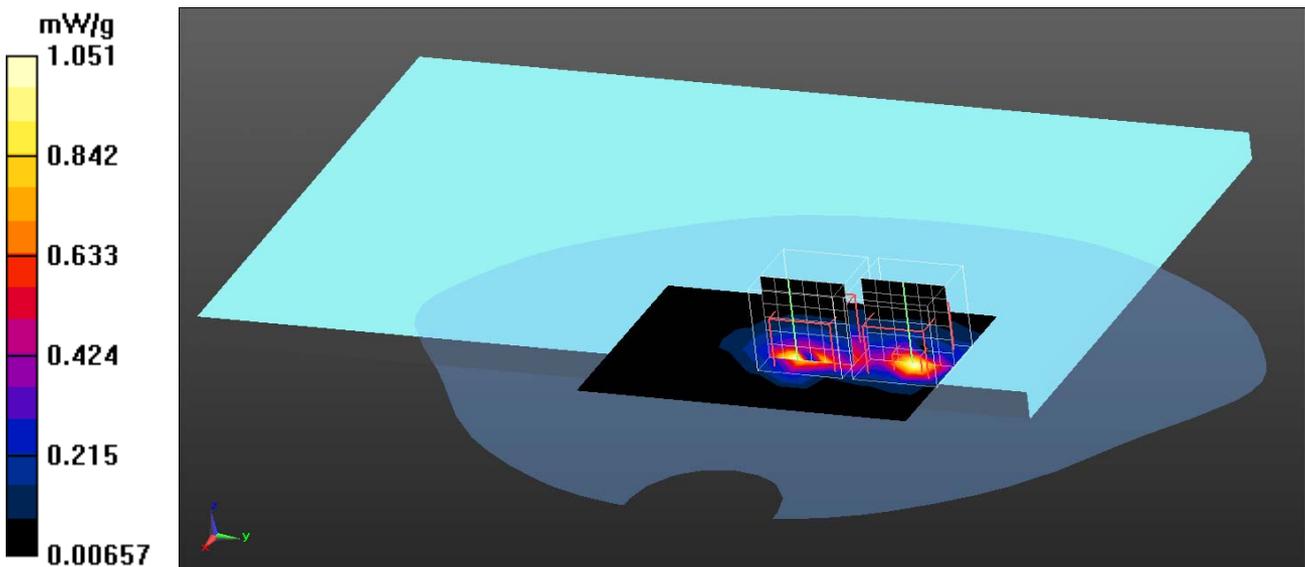
Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid:
 dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.686 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 2.068 mW/g

SAR(1 g) = 0.766 mW/g; SAR(10 g) = 0.367 mW/g

Maximum value of SAR (measured) = 1.11 mW/g



Antenna Kit: INPAQ Main Antenna, P/N: WA-P-LBLB-04-002
INPAQ Aux Antenna, P/N: WA-P-LBLB-04-002

Test Laboratory: QuieTek

Date/Time: 8/6/2012

802.11n_40M_1-Front Main&Aux

DUT: ASUS Tablet; Type: TF810C

Communication System: WLAN 2.4G; Frequency: 2422 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2422$ MHz; $\sigma = 1.88$ mho/m; $\epsilon_r = 53.26$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature (°C) : 23.4, Liquid Temperature (°C) : 22.1

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.43, 6.43, 6.43); Calibrated: 6/21/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASYS2, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x11x1): Measurement grid: dx=13mm, dy=13mm
Maximum value of SAR (measured) = 0.639 mW/g

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

Reference Value = 17.946 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 3.642 mW/g

SAR(1 g) = 0.627 mW/g; SAR(10 g) = 0.257 mW/g

Maximum value of SAR (measured) = 0.717 mW/g

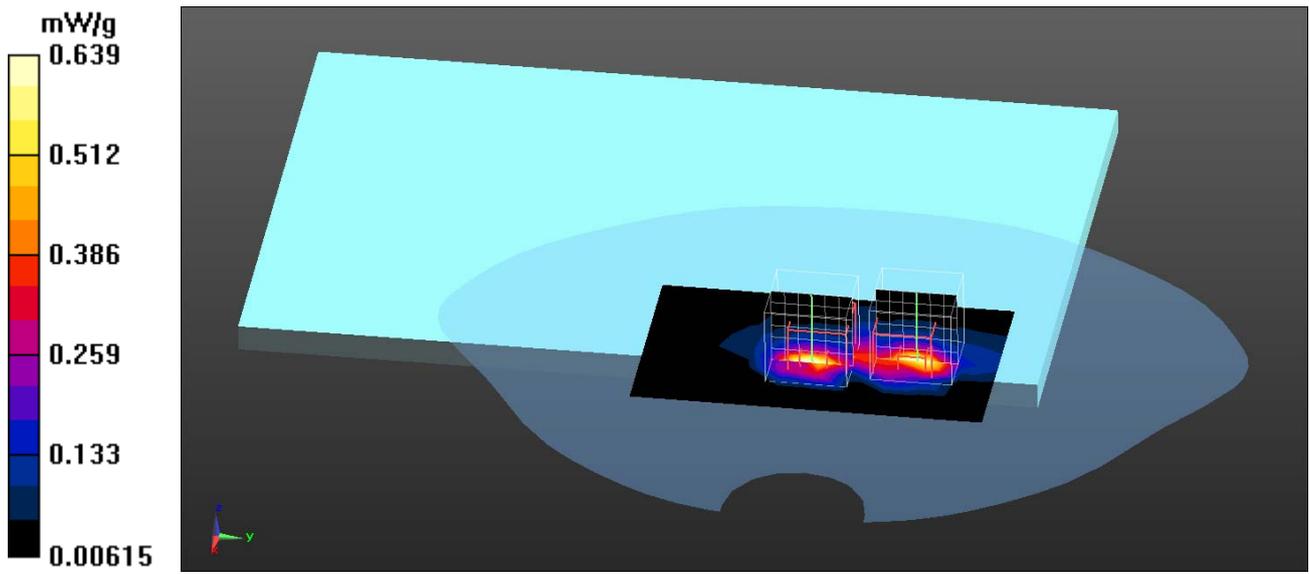
Configuration/Body/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid:
dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.946 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 1.755 mW/g

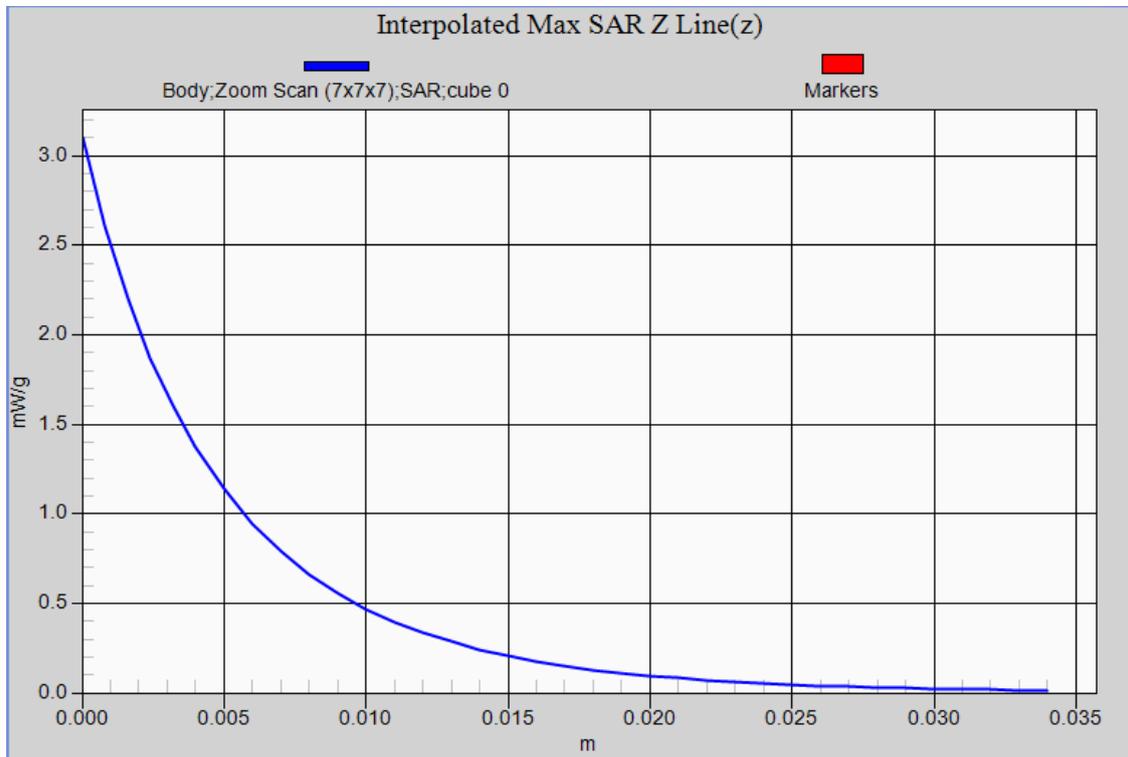
SAR(1 g) = 0.639 mW/g; SAR(10 g) = 0.261 mW/g

Maximum value of SAR (measured) = 0.756 mW/g



802.11b Main Antenna EUT Front Z-Axis plot

Channel: 1



Antenna Kit: INPAQ Main Antenna, P/N: WA-P-LBLB-04-002

Test Laboratory: QuieTek

Date/Time: 8/1/2012

802.11a_36-Front Main

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 5180 \text{ MHz}$; $\sigma = 5.25 \text{ mho/m}$; $\epsilon_r = 50.28$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 22.9, Liquid Temperature ($^{\circ}\text{C}$) : 21.8

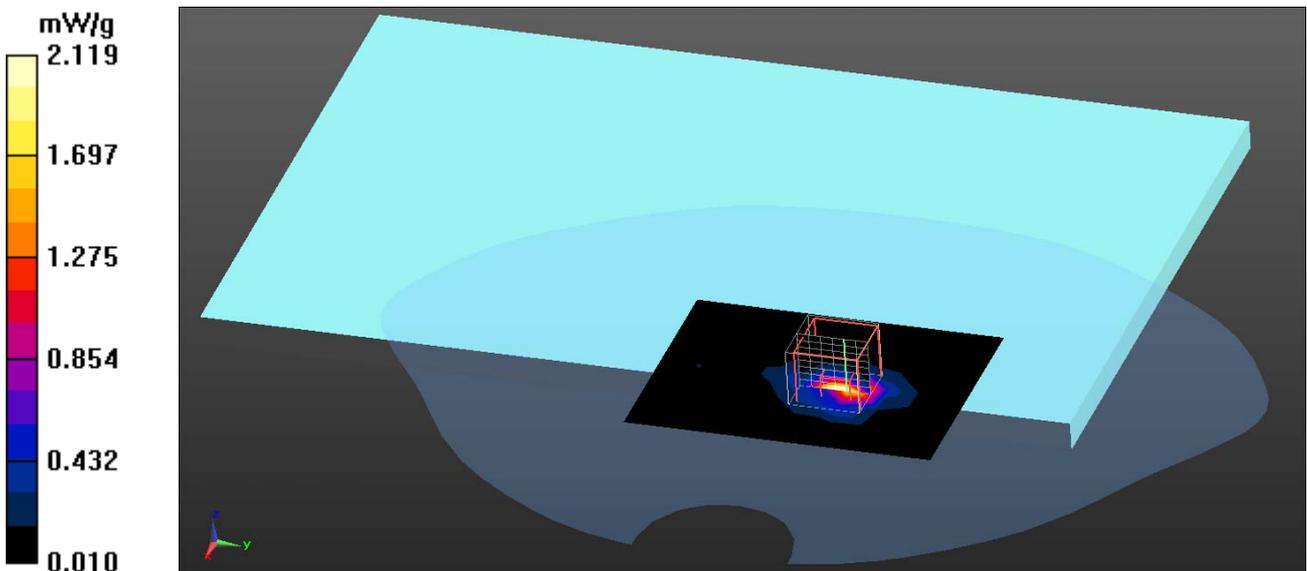
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.93, 3.93, 3.93); Calibrated: 6/21/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x9x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 2.12 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 = 8.885 V/m; Power Drift = 0.02 dB
 Peak SAR (extrapolated) = 6.408 mW/g
SAR(1 g) = 1.29 mW/g; SAR(10 g) = 0.375 mW/g
 Maximum value of SAR (measured) = 2.83 mW/g



Test Laboratory: QuieTek

Date/Time: 8/1/2012

802.11a_44-Front Main

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 5220 \text{ MHz}$; $\sigma = 5.33 \text{ mho/m}$; $\epsilon_r = 49.91$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 22.9, Liquid Temperature ($^{\circ}\text{C}$) : 21.8

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.93, 3.93, 3.93); Calibrated: 6/21/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASYS2, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x9x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 1.86 mW/g

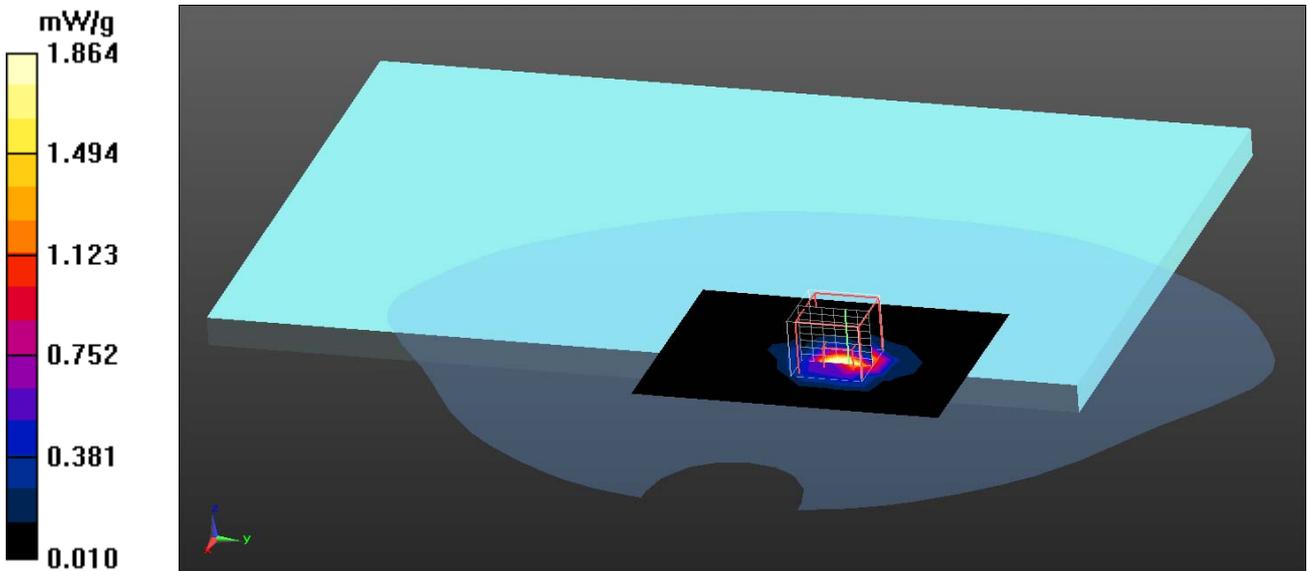
Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 9.920 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 5.845 mW/g

SAR(1 g) = 1.31 mW/g; SAR(10 g) = 0.387 mW/g

Maximum value of SAR (measured) = 2.91 mW/g



Test Laboratory: QuieTek

Date/Time: 8/1/2012

802.11a_48-Front Main

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 5240 \text{ MHz}$; $\sigma = 5.36 \text{ mho/m}$; $\epsilon_r = 49.81$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 22.9, Liquid Temperature ($^{\circ}\text{C}$) : 21.8

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.93, 3.93, 3.93); Calibrated: 6/21/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x9x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 1.79 mW/g

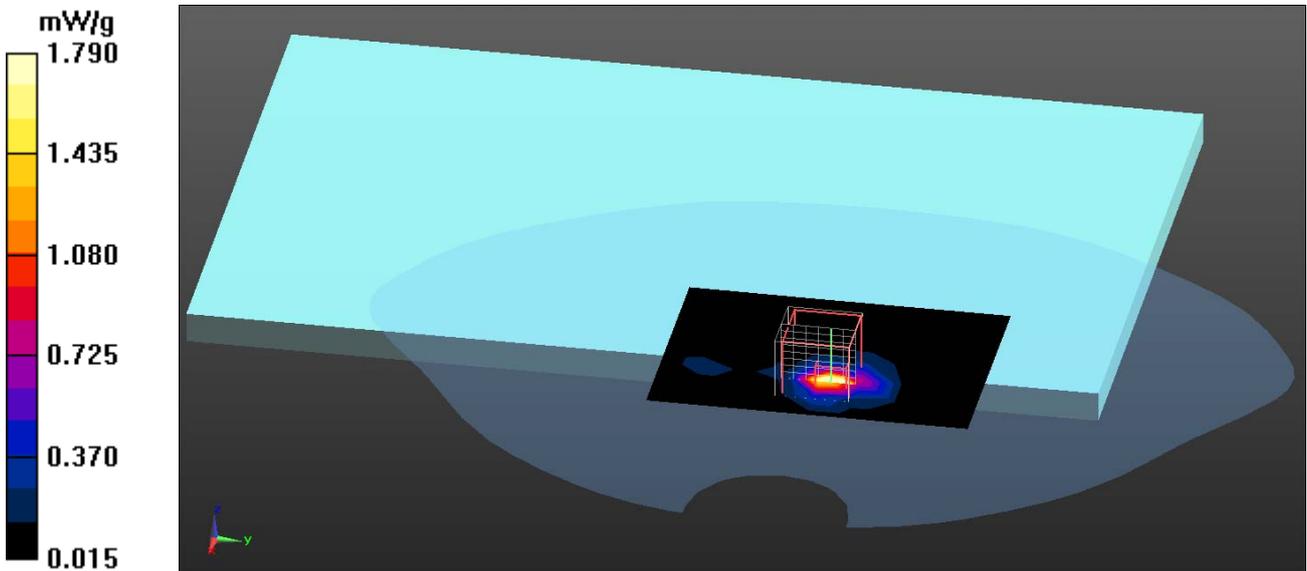
Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 7.623 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 8.156 mW/g

SAR(1 g) = 1.37 mW/g; SAR(10 g) = 0.374 mW/g

Maximum value of SAR (measured) = 3.23 mW/g



Test Laboratory: QuieTek

Date/Time: 8/1/2012

802.11a_52-Front Main

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 5260$ MHz; $\sigma = 5.39$ mho/m; $\epsilon_r = 49.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature (°C) : 22.9, Liquid Temperature (°C) : 21.8

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.66, 3.66, 3.66); Calibrated: 6/21/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x9x1): Measurement grid: dx=13mm, dy=13mm
Maximum value of SAR (measured) = 2.58 mW/g

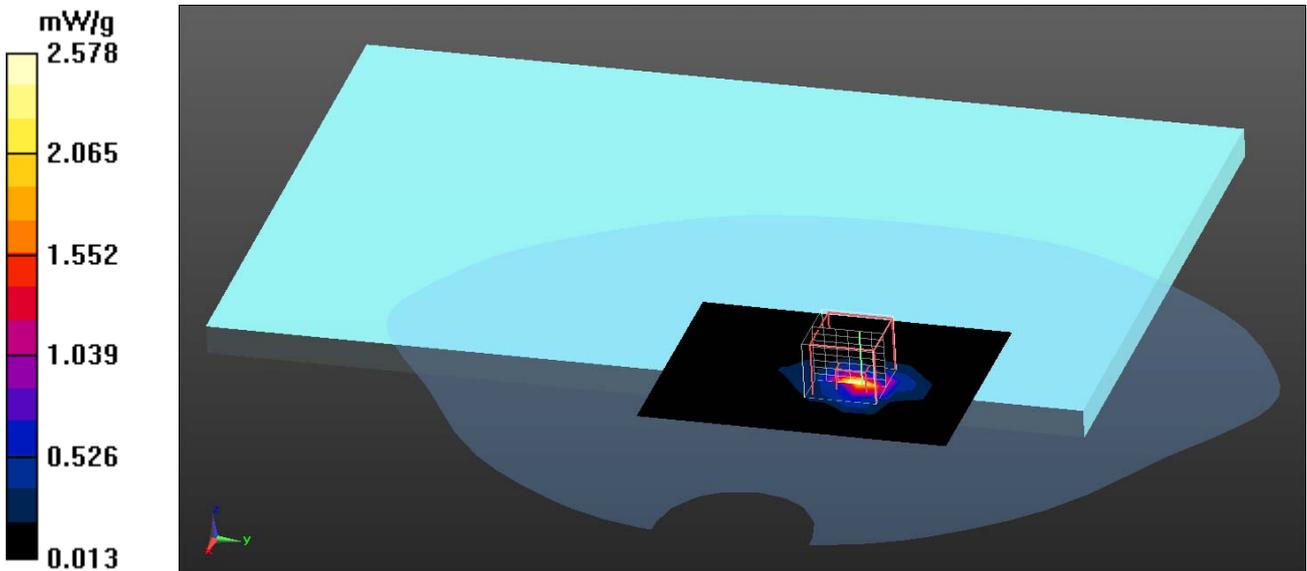
Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 8.316 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 6.199 mW/g

SAR(1 g) = 1.39 mW/g; SAR(10 g) = 0.407 mW/g

Maximum value of SAR (measured) = 3.26 mW/g



Test Laboratory: QuieTek

Date/Time: 8/1/2012

802.11a_60-Front Main

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 5300 \text{ MHz}$; $\sigma = 5.41 \text{ mho/m}$; $\epsilon_r = 49.62$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 22.9, Liquid Temperature ($^{\circ}\text{C}$) : 21.8

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.66, 3.66, 3.66); Calibrated: 6/21/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASYS2, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x9x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 1.28 mW/g

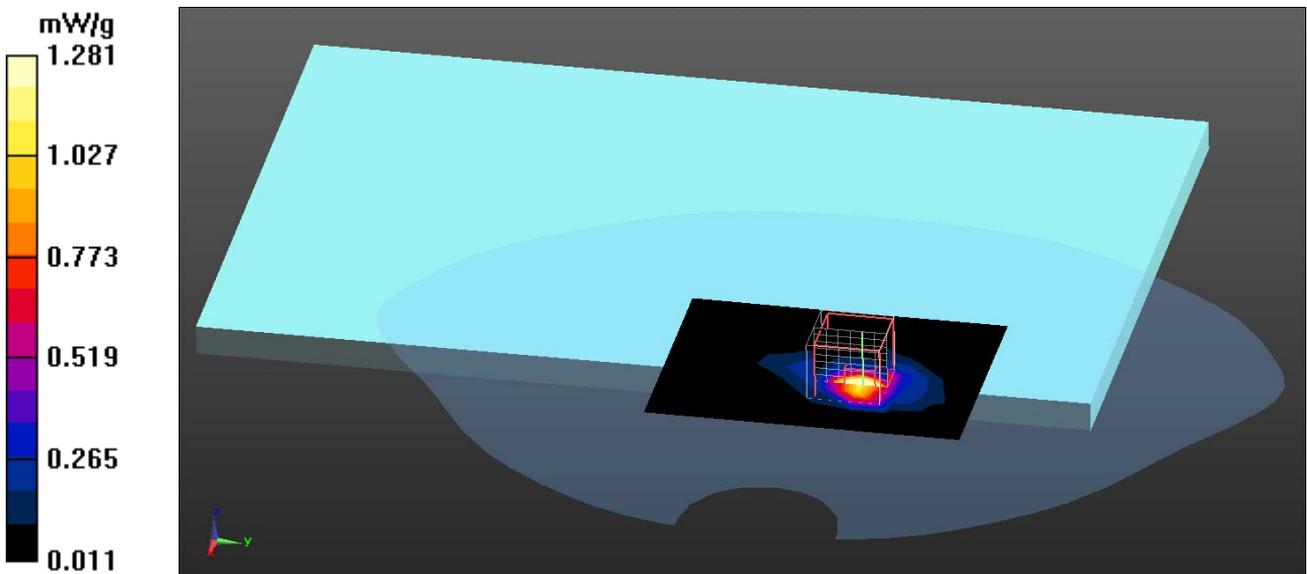
Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 7.233 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 5.469 mW/g

SAR(1 g) = 1.21 mW/g; SAR(10 g) = 0.325 mW/g

Maximum value of SAR (measured) = 2.23 mW/g



Test Laboratory: QuieTek

Date/Time: 8/1/2012

802.11a_64-Front Main

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 5320 \text{ MHz}$; $\sigma = 5.47 \text{ mho/m}$; $\epsilon_r = 49.47$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 22.9, Liquid Temperature ($^{\circ}\text{C}$) : 21.8

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.66, 3.66, 3.66); Calibrated: 6/21/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASYS2, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x9x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 1.26 mW/g

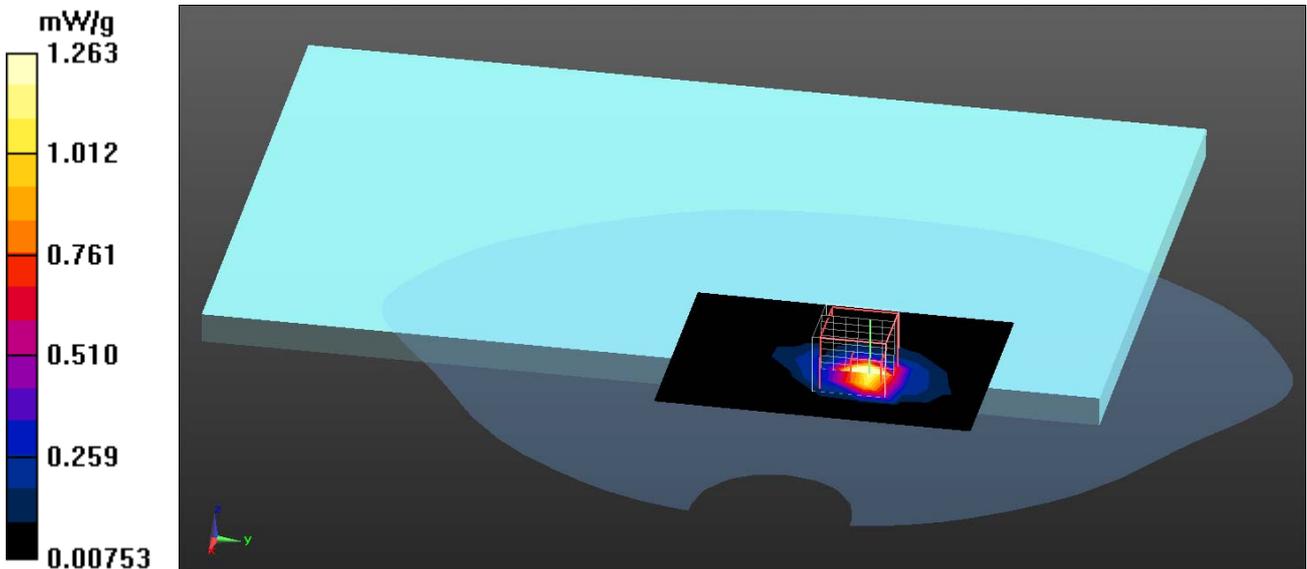
Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 7.754 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 3.883 mW/g

SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.290 mW/g

Maximum value of SAR (measured) = 2.41 mW/g



Test Laboratory: QuieTek

Date/Time: 8/1/2012

802.11a_100-Front Main

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 5500 \text{ MHz}$; $\sigma = 5.59 \text{ mho/m}$; $\epsilon_r = 49.31$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 22.9, Liquid Temperature ($^{\circ}\text{C}$) : 21.8

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.45, 3.45, 3.45); Calibrated: 6/21/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASYS2, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x9x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.737 mW/g

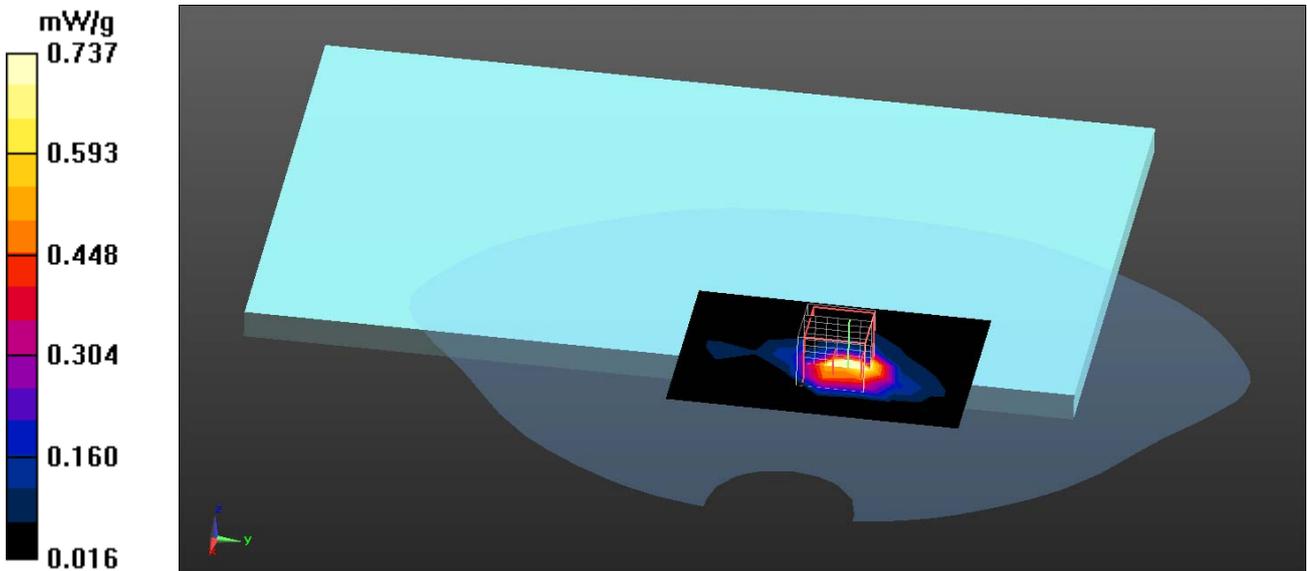
Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 9.731 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 3.803 mW/g

SAR(1 g) = 0.936 mW/g; SAR(10 g) = 0.254 mW/g

Maximum value of SAR (measured) = 1.85 mW/g



Test Laboratory: QuieTek

Date/Time: 8/1/2012

802.11a_116-Front Main

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 5580 \text{ MHz}$; $\sigma = 5.77 \text{ mho/m}$; $\epsilon_r = 48.88$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 22.9, Liquid Temperature ($^{\circ}\text{C}$) : 21.8

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.25, 3.25, 3.25); Calibrated: 6/21/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x9x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.736 mW/g

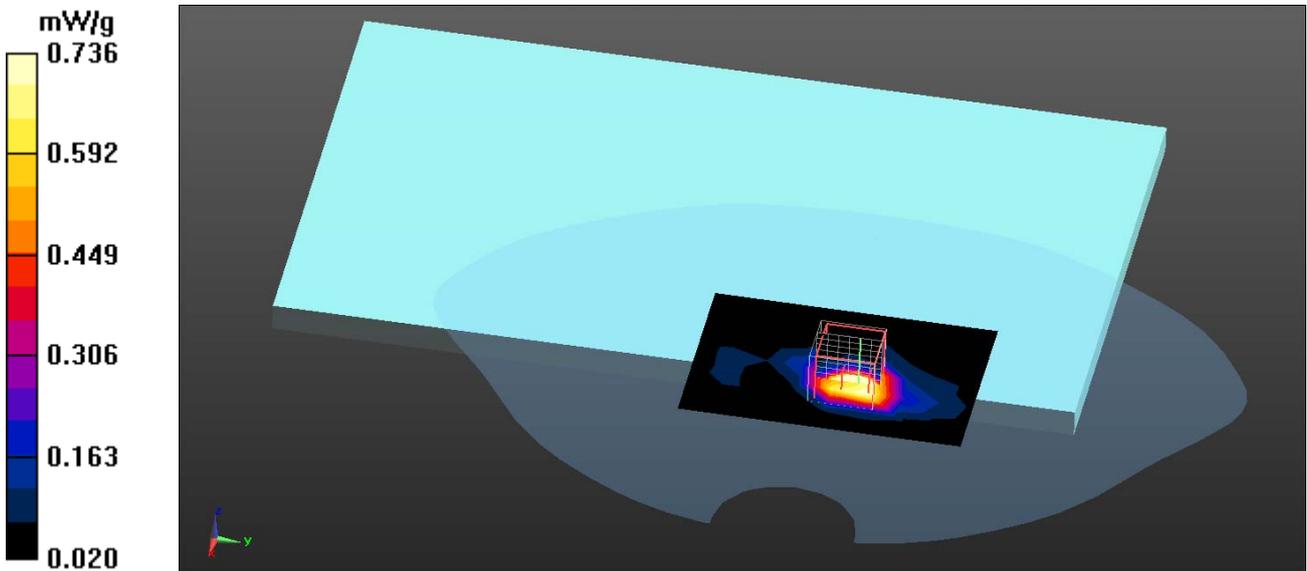
Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 8.748 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 5.325 mW/g

SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.278 mW/g

Maximum value of SAR (measured) = 2.08 mW/g



Test Laboratory: QuieTek

Date/Time: 8/1/2012

802.11a_140-Front Main

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 5700 \text{ MHz}$; $\sigma = 5.91 \text{ mho/m}$; $\epsilon_r = 47.92$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 22.9, Liquid Temperature ($^{\circ}\text{C}$) : 21.8

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.25, 3.25, 3.25); Calibrated: 6/21/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASYS2, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x9x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 2.43 mW/g

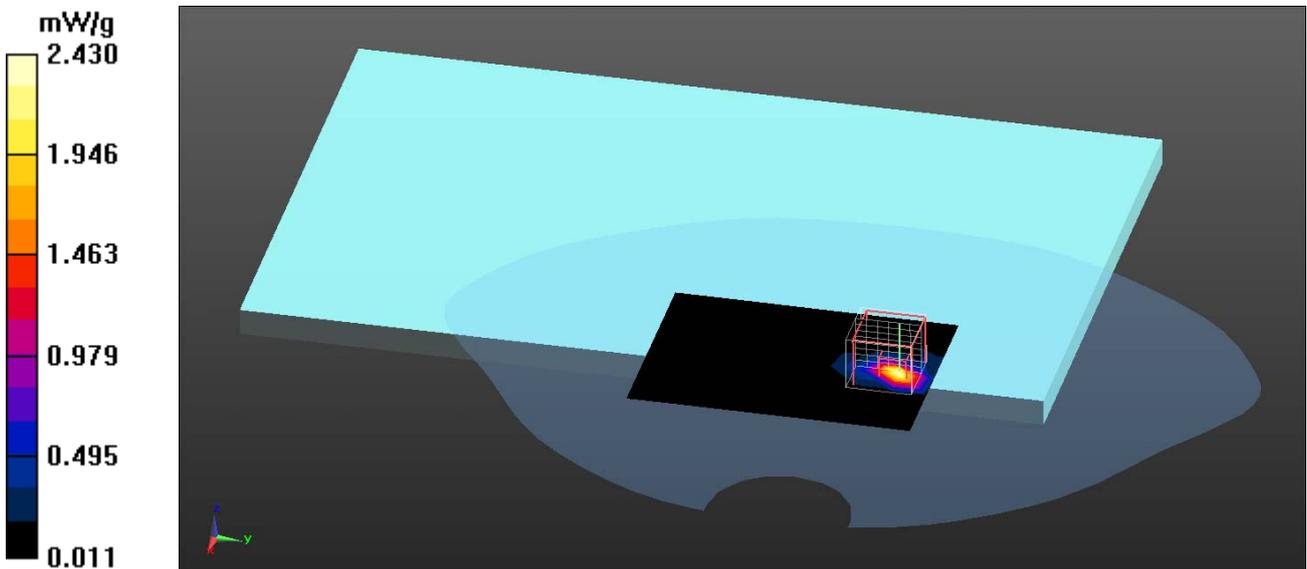
Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 5.995 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 6.253 mW/g

SAR(1 g) = 1.28 mW/g; SAR(10 g) = 0.333 mW/g

Maximum value of SAR (measured) = 3.08 mW/g



Test Laboratory: QuieTek

Date/Time: 8/1/2012

802.11a_149-Front Main

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 5745 \text{ MHz}$; $\sigma = 5.98 \text{ mho/m}$; $\epsilon_r = 47.36$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 22.9, Liquid Temperature ($^{\circ}\text{C}$) : 21.8

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.43, 3.43, 3.43); Calibrated: 6/21/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x9x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 1.45 mW/g

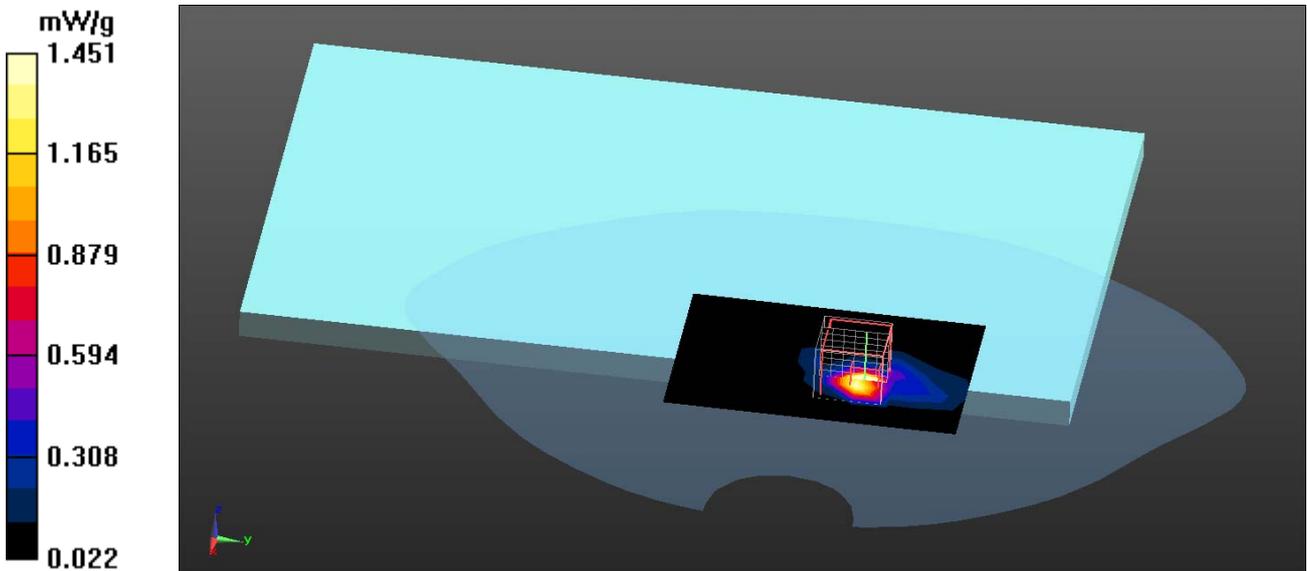
Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 7.916 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 6.422 mW/g

SAR(1 g) = 1.24 mW/g; SAR(10 g) = 0.317 mW/g

Maximum value of SAR (measured) = 2.48 mW/g



Test Laboratory: QuieTek

Date/Time: 8/1/2012

802.11a_157-Front Main

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 5785 \text{ MHz}$; $\sigma = 6.12 \text{ mho/m}$; $\epsilon_r = 46.89$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 22.9, Liquid Temperature ($^{\circ}\text{C}$) : 21.8

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.43, 3.43, 3.43); Calibrated: 6/21/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x9x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 1.36 mW/g

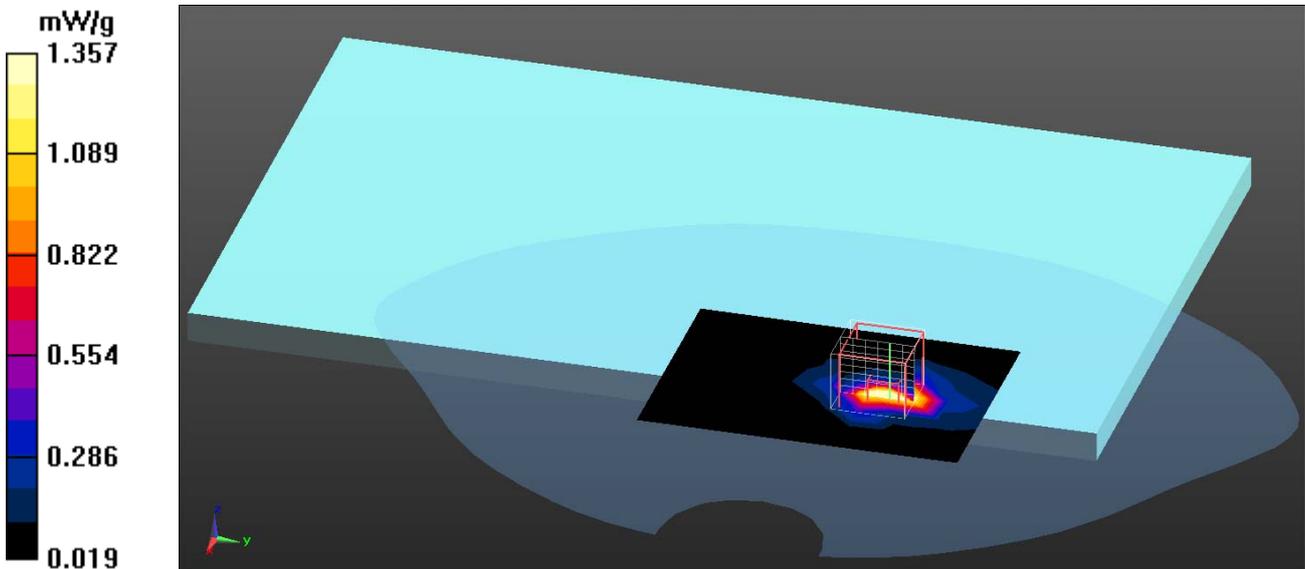
Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 7.251 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 7.660 mW/g

SAR(1 g) = 1.32 mW/g; SAR(10 g) = 0.391 mW/g

Maximum value of SAR (measured) = 2.90 mW/g



Test Laboratory: QuieTek

Date/Time: 8/1/2012

802.11a_165-Front Main

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 5825 \text{ MHz}$; $\sigma = 6.26 \text{ mho/m}$; $\epsilon_r = 46.03$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 22.9, Liquid Temperature ($^{\circ}\text{C}$) : 21.8

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.43, 3.43, 3.43); Calibrated: 6/21/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASYS2, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x10x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 2.72 mW/g

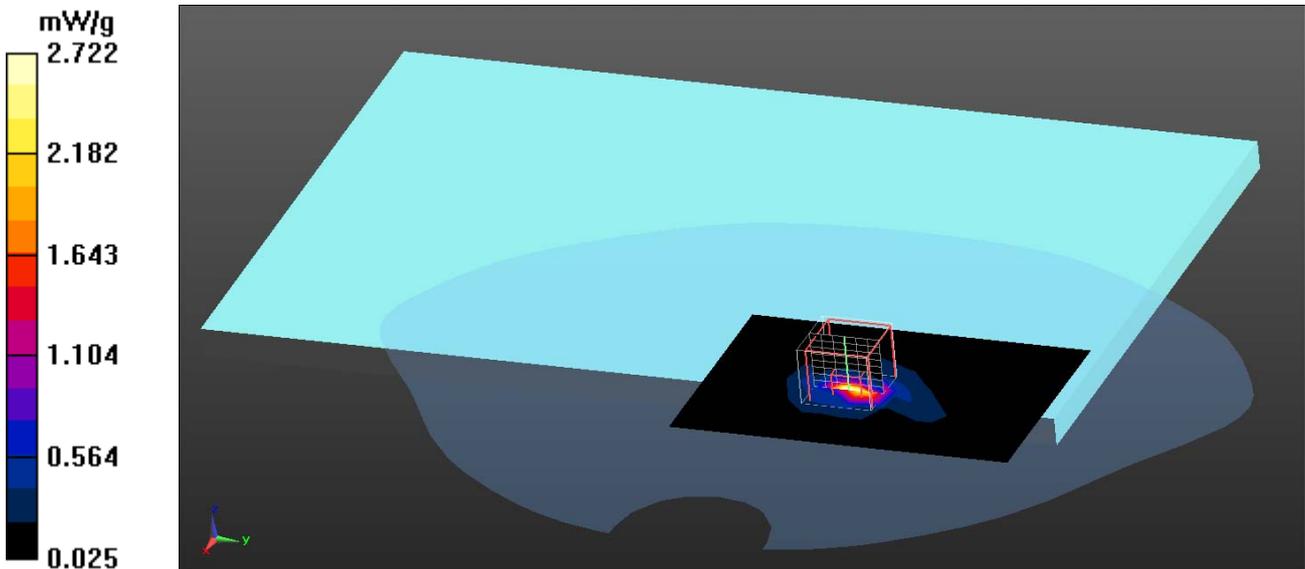
Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 8.096 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 8.629 mW/g

SAR(1 g) = 1.49 mW/g; SAR(10 g) = 0.432 mW/g

Maximum value of SAR (measured) = 3.43 mW/g



Test Laboratory: QuieTek

Date/Time: 8/1/2012

802.11a_140-Top Main

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 5700 \text{ MHz}$; $\sigma = 5.91 \text{ mho/m}$; $\epsilon_r = 47.92$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 22.9, Liquid Temperature ($^{\circ}\text{C}$) : 21.8

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.25, 3.25, 3.25); Calibrated: 6/21/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 1.41 mW/g

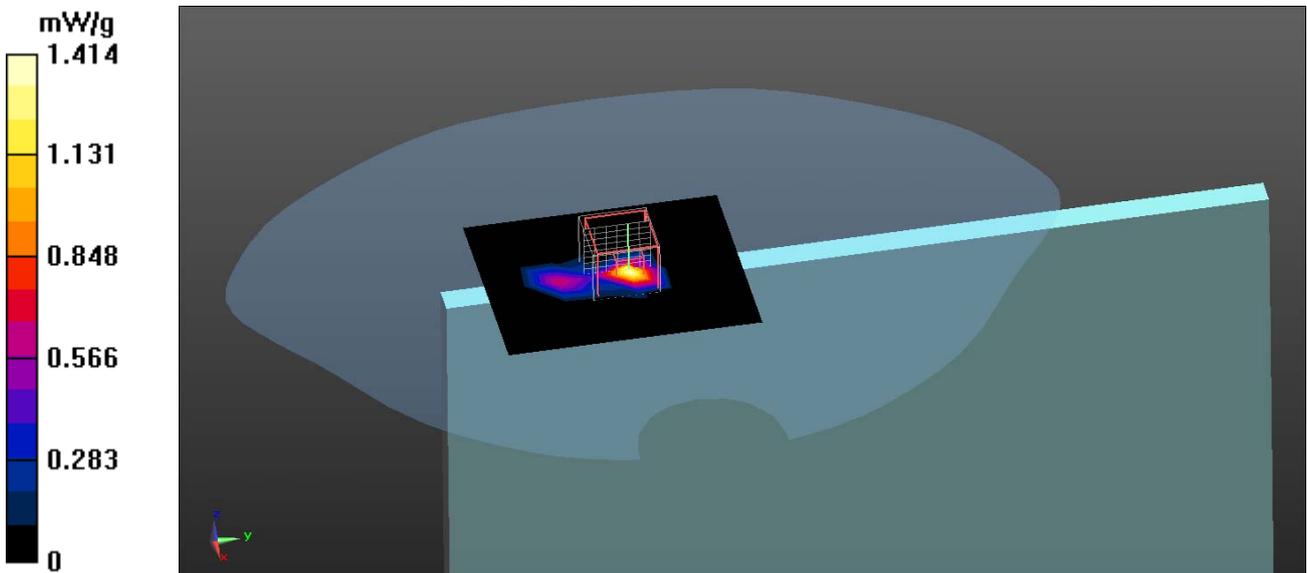
Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 9.600 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 2.616 mW/g

SAR(1 g) = 0.662 mW/g; SAR(10 g) = 0.170 mW/g

Maximum value of SAR (measured) = 1.59 mW/g



Test Laboratory: QuieTek

Date/Time: 8/1/2012

802.11a_140-Back Main

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 5700 \text{ MHz}$; $\sigma = 5.91 \text{ mho/m}$; $\epsilon_r = 47.92$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 22.9, Liquid Temperature ($^{\circ}\text{C}$) : 21.8

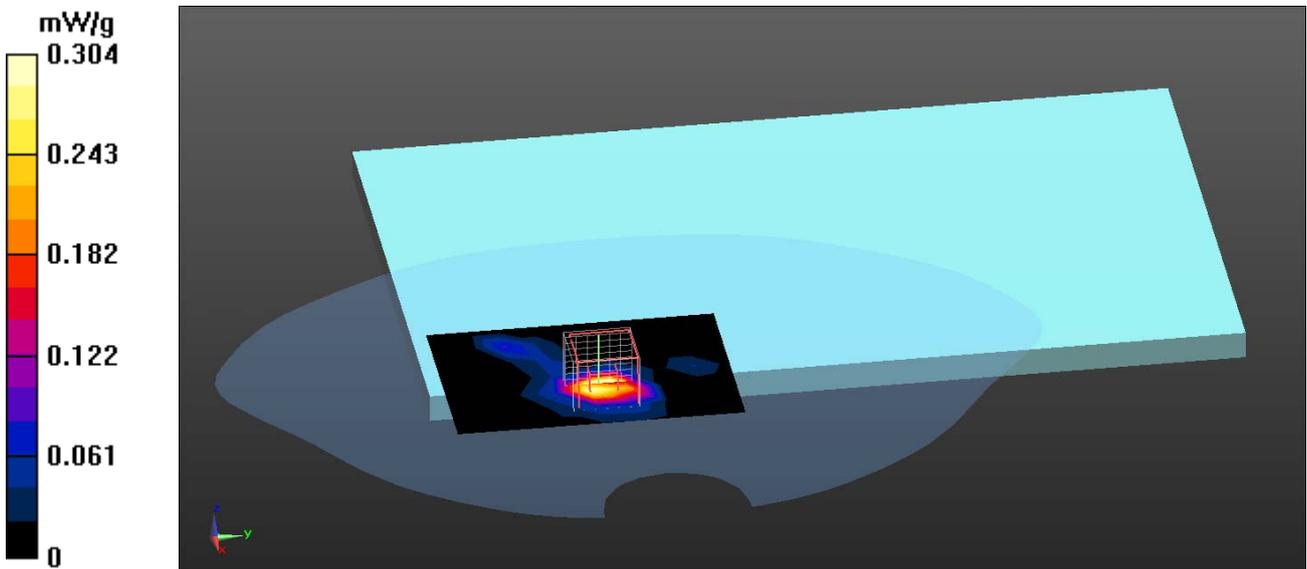
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.25, 3.25, 3.25); Calibrated: 6/21/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x9x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.304 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 = 2.723 V/m; Power Drift = 0.15 dB
 Peak SAR (extrapolated) = 0.938 mW/g
SAR(1 g) = 0.227 mW/g; SAR(10 g) = 0.065 mW/g
 Maximum value of SAR (measured) = 0.388 mW/g



Test Laboratory: QuieTek

Date/Time: 8/1/2012

802.11a_140-Side Main

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 5700 \text{ MHz}$; $\sigma = 5.91 \text{ mho/m}$; $\epsilon_r = 47.92$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 22.9, Liquid Temperature ($^{\circ}\text{C}$) : 21.8

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.25, 3.25, 3.25); Calibrated: 6/21/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.0246 mW/g

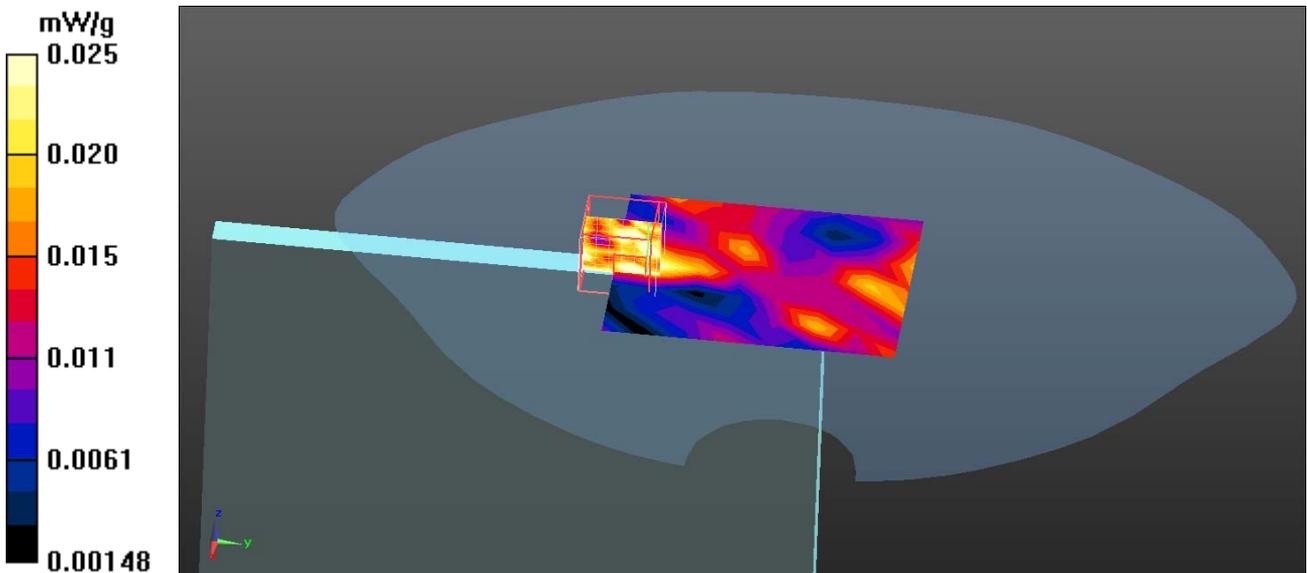
Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 1.559 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.070 mW/g

SAR(1 g) = 0.023 mW/g; SAR(10 g) = 0.017 mW/g

Maximum value of SAR (measured) = 0.0366 mW/g



Antenna Kit : INPAQ Aux Antenna, P/N: WA-P-LBLB-04-002

Test Laboratory: QuieTek

Date/Time: 8/1/2012

802.11a_36-Front Aux

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 5180 \text{ MHz}$; $\sigma = 5.25 \text{ mho/m}$; $\epsilon_r = 50.28$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 22.9, Liquid Temperature ($^{\circ}\text{C}$) : 21.8

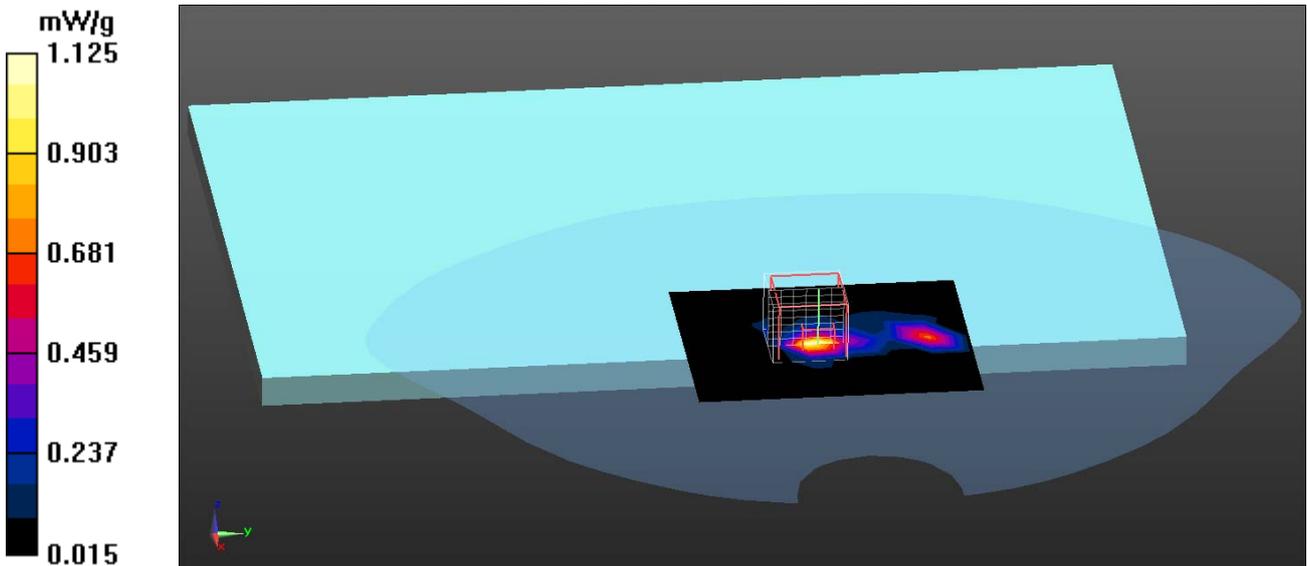
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.93, 3.93, 3.93); Calibrated: 6/21/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 1.13 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 = 12.265 V/m; Power Drift = -0.12 dB
 Peak SAR (extrapolated) = 2.488 mW/g
SAR(1 g) = 0.687 mW/g; SAR(10 g) = 0.196 mW/g
 Maximum value of SAR (measured) = 1.33 mW/g



Test Laboratory: QuieTek

Date/Time: 8/1/2012

802.11a_36-Top Aux

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 5180 \text{ MHz}$; $\sigma = 5.25 \text{ mho/m}$; $\epsilon_r = 50.28$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 22.9, Liquid Temperature ($^{\circ}\text{C}$) : 21.8

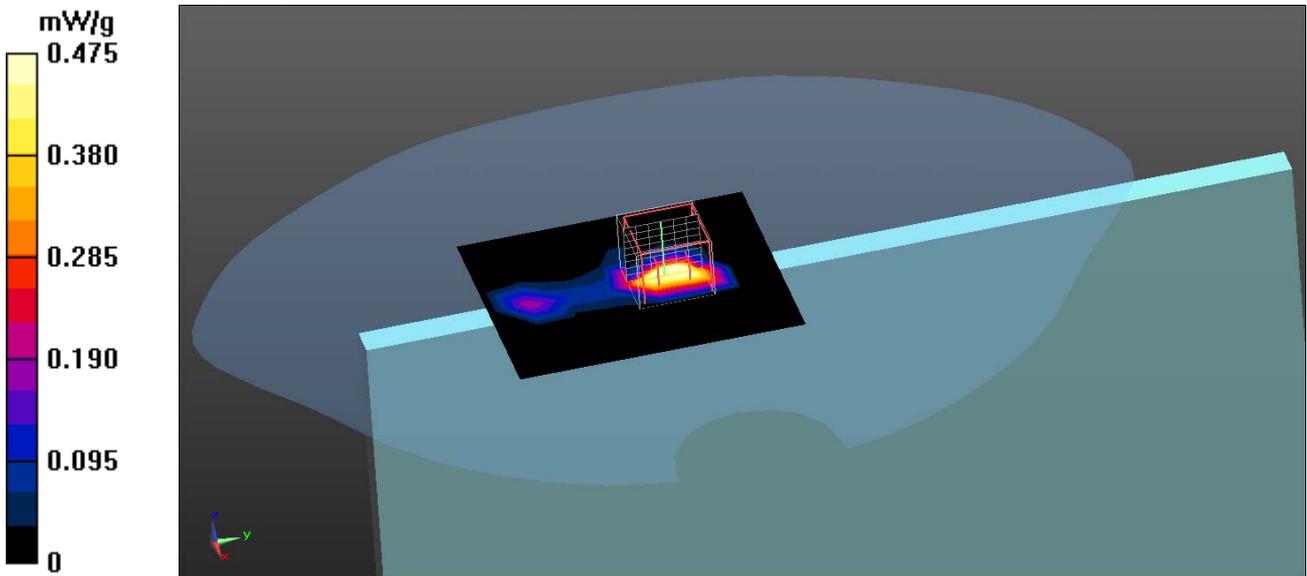
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.93, 3.93, 3.93); Calibrated: 6/21/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.475 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 = 13.764 V/m; Power Drift = 0.17 dB
 Peak SAR (extrapolated) = 1.875 mW/g
SAR(1 g) = 0.466 mW/g; SAR(10 g) = 0.105 mW/g
 Maximum value of SAR (measured) = 0.886 mW/g



Test Laboratory: QuieTek

Date/Time: 8/1/2012

802.11a_36-Back Aux

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 5180 \text{ MHz}$; $\sigma = 5.25 \text{ mho/m}$; $\epsilon_r = 50.28$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 22.9, Liquid Temperature ($^{\circ}\text{C}$) : 21.8

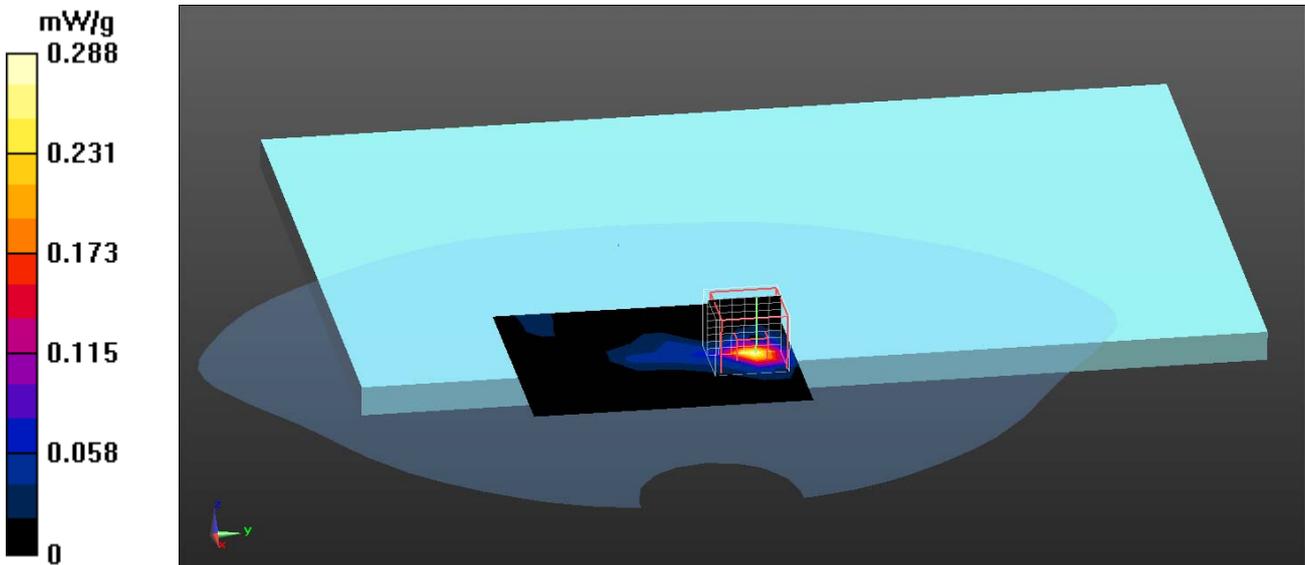
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.93, 3.93, 3.93); Calibrated: 6/21/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.288 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 = 3.484 V/m; Power Drift = 0.15 dB
 Peak SAR (extrapolated) = 0.462 mW/g
SAR(1 g) = 0.150 mW/g; SAR(10 g) = 0.044 mW/g
 Maximum value of SAR (measured) = 0.278 mW/g



Test Laboratory: QuieTek

Date/Time: 8/1/2012

802.11a_36-Side Aux

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 5180 \text{ MHz}$; $\sigma = 5.25 \text{ mho/m}$; $\epsilon_r = 50.28$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature ($^{\circ}\text{C}$) : 22.9, Liquid Temperature ($^{\circ}\text{C}$) : 21.8

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.93, 3.93, 3.93); Calibrated: 6/21/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x8x1): Measurement grid: $dx=13\text{mm}$, $dy=13\text{mm}$
 Maximum value of SAR (measured) = 0.0226 mW/g

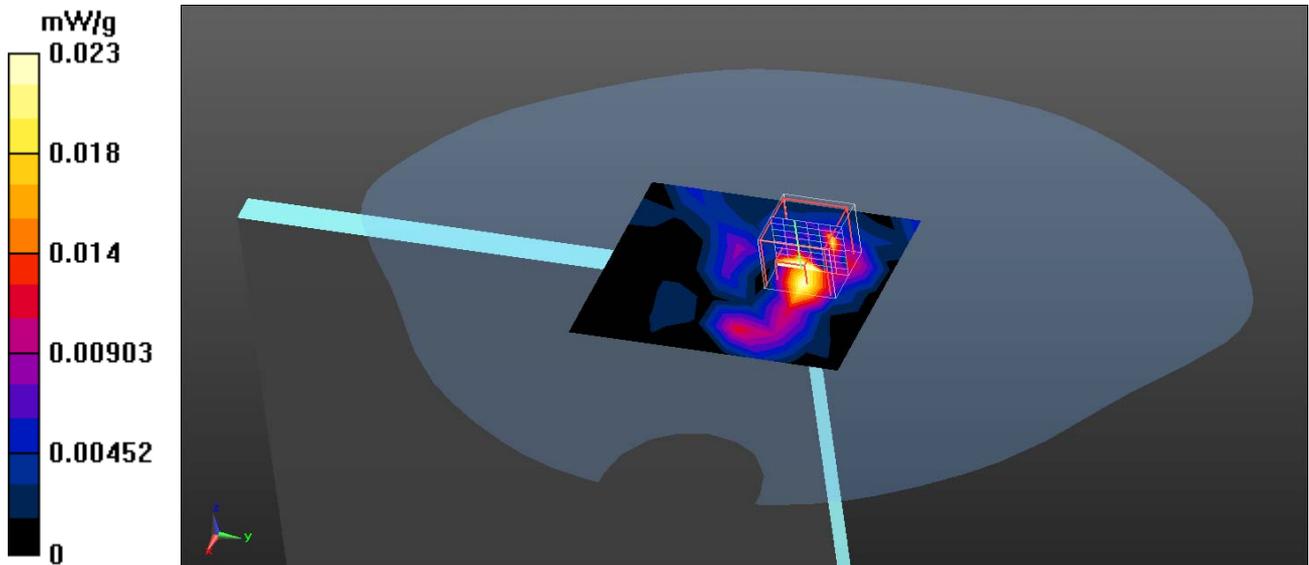
Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 0: Measurement grid:
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 3.099 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.152 mW/g

SAR(1 g) = 0.021 mW/g; SAR(10 g) = 0.00609 mW/g

Maximum value of SAR (measured) = 0.0401 mW/g



Antenna Kit: INPAQ Main Antenna, P/N: WA-P-LBLB-04-002
 INPAQ Aux Antenna, P/N: WA-P-LBLB-04-002

Test Laboratory: QuieTek

Date/Time: 8/1/2012

802.11n_20M_100-Front Main&Aux

DUT: ASUS Tablet; Type: TF810C

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

Medium parameters used: $f = 5500$ MHz; $\sigma = 5.59$ mho/m; $\epsilon_r = 49.31$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature (°C) : 22.9, Liquid Temperature (°C) : 21.8

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.45, 3.45, 3.45); Calibrated: 6/21/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x10x1): Measurement grid: dx=13mm, dy=13mm
 Maximum value of SAR (measured) = 1.11 mW/g

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

Reference Value = 12.347 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 4.134 mW/g

SAR(1 g) = 0.792 mW/g; SAR(10 g) = 0.264 mW/g

Maximum value of SAR (measured) = 1.64 mW/g

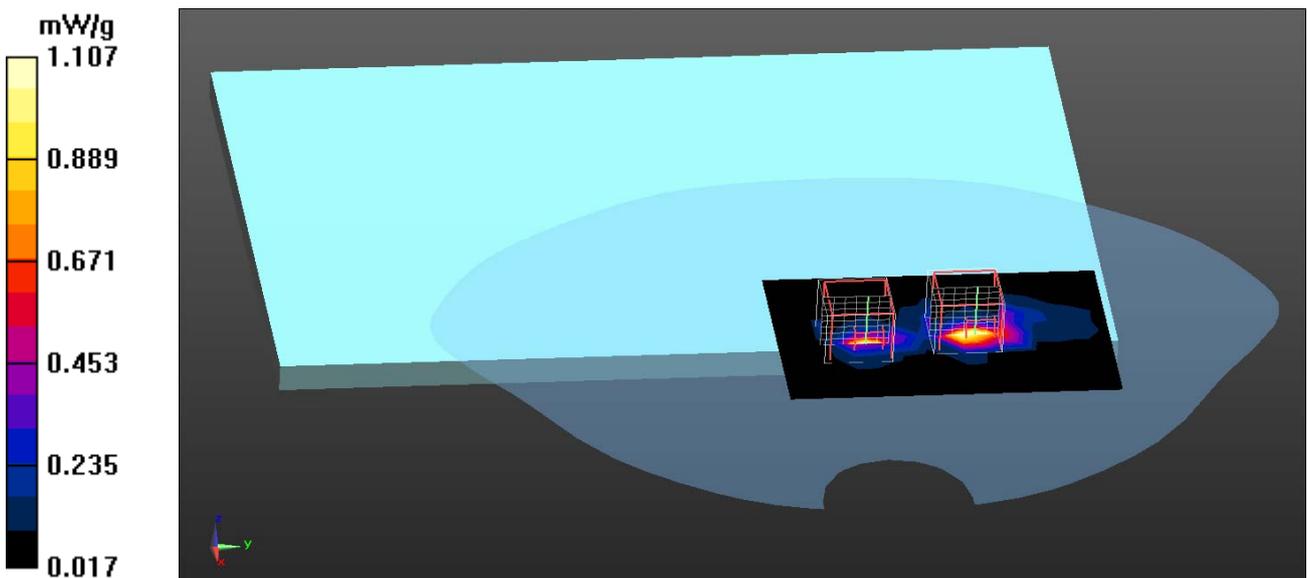
Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 1: Measurement grid:
 dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 12.347 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 2.480 mW/g

SAR(1 g) = 0.623 mW/g; SAR(10 g) = 0.189 mW/g

Maximum value of SAR (measured) = 1.19 mW/g



Antenna Kit: INPAQ Main Antenna, P/N: WA-P-LBLB-04-002
 INPAQ Aux Antenna, P/N: WA-P-LBLB-04-002

Test Laboratory: QuieTek

Date/Time: 8/1/2012

802.11n_40M_102-Front Main&Aux

DUT: ASUS Tablet; Type: TF810C

Communication System: WLAN 5G; Frequency: 5510 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 5510 \text{ MHz}$; $\sigma = 5.62 \text{ mho/m}$; $\epsilon_r = 49.26$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Ambient Temperature (°C) : 22.9, Liquid Temperature (°C) : 21.8

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(3.45, 3.45, 3.45); Calibrated: 6/21/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1207; Calibrated: 5/30/2012
- Phantom: SAM with right table; Type: SAM;
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Configuration/Body/Area Scan (7x10x1): Measurement grid: dx=13mm, dy=13mm
 Maximum value of SAR (measured) = 0.347 mW/g

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

Reference Value = 7.322 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 2.053 mW/g

SAR(1 g) = 0.376 mW/g; SAR(10 g) = 0.099 mW/g

Maximum value of SAR (measured) = 0.743 mW/g

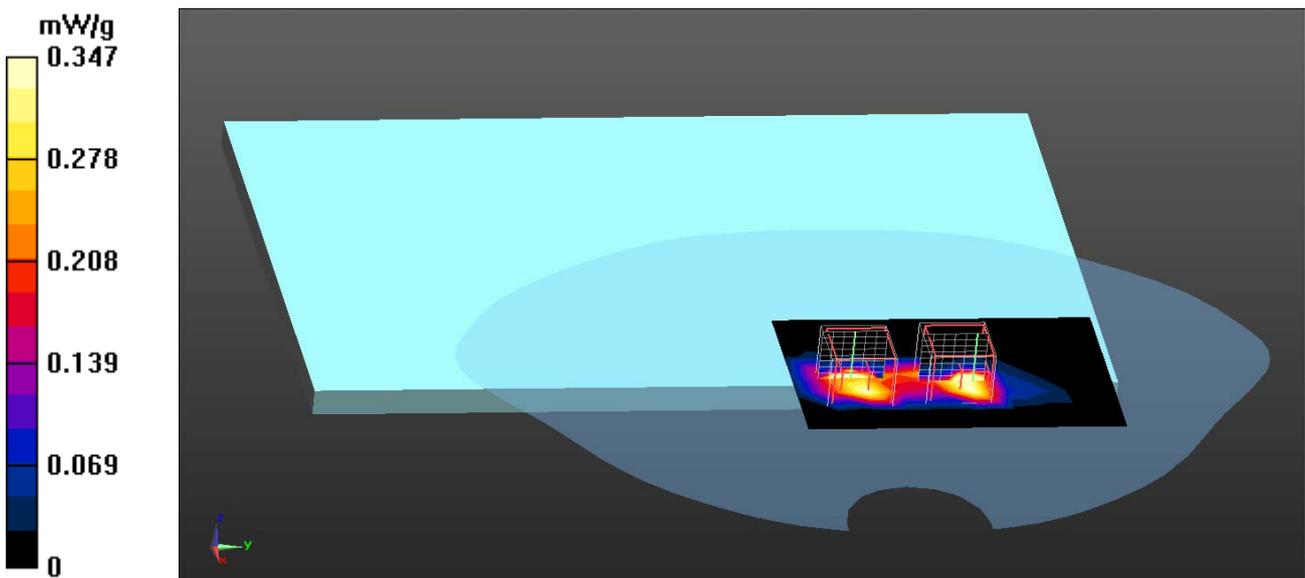
Configuration/Body/Zoom Scan (7x7x9) (7x7x9)/Cube 1: Measurement grid:
 dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 7.322 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.499 mW/g

SAR(1 g) = 0.341 mW/g; SAR(10 g) = 0.080 mW/g

Maximum value of SAR (measured) = 0.658 mW/g



802.11a Main Antenna EUT Front Z-Axis plot

Channel: 165

