



# A Test Lab Techno Corp.

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## SAR EVALUATION REPORT



Test Report No.	:	1304FS11-05
Applicant	:	Netgear Incorporated
Product Type	:	Wireless Mobile HotSpot
Model Number	:	AirCard 771S
Date of Received	:	Feb. 19, 2013
Test Period	:	Feb. 22 ~ May 12, 2013
Date of Issued	:	Jun. 20, 2013
Test Environment	:	Ambient Temperature : $22 \pm 2^{\circ} \text{C}$ Relative Humidity : 40 - 70 %
Standard	:	ANSI/IEEE C95.1-1999 IEEE Std. 1528-2003 IEEE Std. 1528a-2005 47 CFR Part §2.1093; FCC/OET Bulletin 65 Supplement C [July 2001]
Max. SAR	:	1.438 W/kg Body SAR
Test Lab Location	:	Chang-an Lab



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2. The test results are under chamber environment of A Test Lab Techno Corp. A Test Lab Techno Corp. does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples.
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Approved By : Yung-Tan Tsai (Yung Tan Tsai)      Tested By : Bill Hu (Bill Hu)



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## 1. Description of Equipment under Test (EUT)

Applicant	Netgear Incorporated	
Applicant Address	13811 Wireless Way, Richmond, BC, Canada, V6V 3A4	
Manufacture	Netgear Incorporated	
Manufacture Address	13811 Wireless Way, Richmond, BC, Canada, V6V 3A4	
Product Type	Wireless Mobile HotSpot	
Model Number	AirCard 771S	
FCC ID	PY3AC771S	
RF Function	GPRS/EGPRS 850 GPRS/EGPRS 1900 WCDMA(RMC 12.2K) / HSDPA / HSUPA / HSPA+ Band II WCDMA(RMC 12.2K) / HSDPA / HSUPA / HSPA+ Band V CDMA /1xRTT/1xEV-DO 800 (BC0) CDMA /1xRTT/1xEV-DO 1900 (BC1) CDMA /1xRTT/1xEV-DO Sec. 800 (BC10) LTE Band 25 / Band 26 / Band 41 IEEE 802.11b / 802.11g / IEEE 802.11n 20MHz (2.4GHz)	
Tx Frequency	Band	Operate Frequency (MHz)
	GPRS/EGPRS 850	824.2 - 848.8
	GPRS/EGPRS 1900	1850.2 - 1909.8
	WCDMA(RMC 12.2K) / HSDPA / HSUPA / HSPA+ Band II	1852.4 - 1907.6
	WCDMA(RMC 12.2K) / HSDPA / HSUPA / HSPA+ Band V	826.4 - 846.6
	CDMA /1xRTT/1xEV-DO 800 (BC0)	824.70 - 848.31
	CDMA /1xRTT/1xEV-DO 1900 (BC1)	1851.25 - 1908.75
	CDMA /1xRTT/1xEV-DO Sec. 800 (BC10)	817.25 - 822.75
	LTE Band 25 (BW 3, 5, 10 MHz)	1851.5 - 1913.5
	LTE Band 26 (BW 3, 5, 10 MHz)	818.5 - 847.5
	LTE Band 41 (BW 5, 10, 15, 20 MHz)	2498.5 - 2687.5
IEEE 802.11b / 802.11g / IEEE 802.11n 20MHz	2412 - 2462	
RF Conducted Power (Avg.)	Band	Power (W / dBm)
	GPRS/EGPRS 850	1.910 / 32.81
	GPRS/EGPRS 1900	0.855 / 29.32
	WCDMA(RMC 12.2K) / HSDPA / HSUPA / HSPA+ Band II	0.202 / 23.05
	WCDMA(RMC 12.2K) / HSDPA / HSUPA / HSPA+ Band V	0.204 / 23.10
	CDMA /1xRTT/1xEV-DO 800 (BC0)	0.208 / 23.18
	CDMA /1xRTT/1xEV-DO 1900 (BC1)	0.211 / 23.24
	CDMA /1xRTT/1xEV-DO Sec. 800 (BC10)	0.209 / 23.20
	LTE Band 25	0.183 / 22.62
	LTE Band 26	0.187 / 22.73
	LTE Band 41	0.178 / 22.50
IEEE 802.11b	0.017 / 12.23	
IEEE 802.11g	0.012 / 10.77	
IEEE 802.11n 20MHz (2.4GHz)	0.012 / 10.95	
Max. SAR Measurement	1.438 W/kg Body SAR	
Device Category	Portable Device	
RF Exposure Environment	General Population / Uncontrolled	
Application Type	Certification	

This wireless portable device has been shown to be capable of compliance for localized specific absorption rate (SAR) for uncontrolled environment / general population exposure limits specified in Standard C95.1-1999 and had been tested in accordance with the measurement procedures specified in IEEE Std. 1528-2003 and IEEE Std. 1528a-2005.



## 2. Introduction

The A Test Lab Techno Corp. has performed measurements of the maximum potential exposure to the user of **Netgear Incorporated Model(s) : AirCard 771S**. The test procedures, as described in American National Standards, Institute C95.1-1999 [ 1 ] , FCC/OET Bulletin 65 Supplement C [July 2001] were employed and they specify the maximum exposure limit of 1.6mW/g as averaged over any 1 gram of tissue for portable devices being used within 20cm between user and EUT in the uncontrolled environment. A description of the product and operating configuration, detailed summary of the test results, methodology and procedures used in the equipment used are included within this test report.

### 2.1 SAR Definition

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

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

Figure 2. SAR Mathematical Equation

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

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

Where :

$\sigma$  = conductivity of the tissue (S/m)

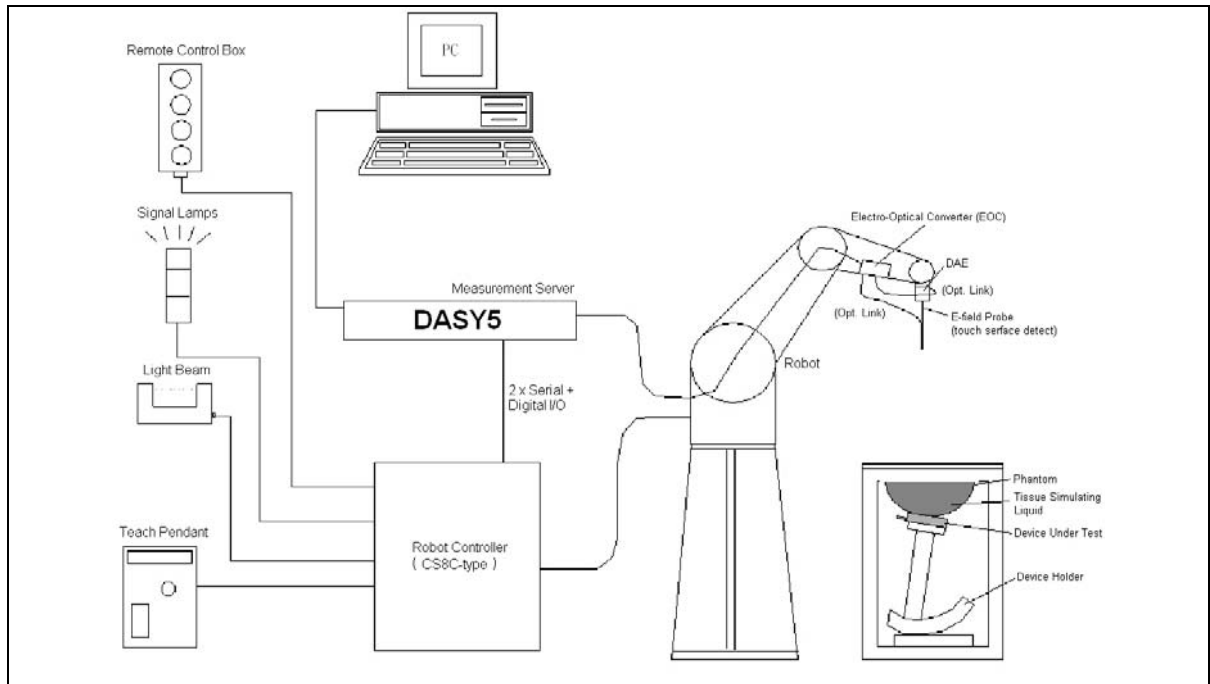
$\rho$  = mass density of the tissue (kg/m<sup>3</sup>)

$E$  = RMS electric field strength (V/m)

\*Note :

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

### 3. SAR Measurement Setup



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

1. A standard high precision 6-axis robot (Stäubli TX family) with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
2. A dosimetric probe, i.e., an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
3. 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.
4. The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
5. A probe alignment unit which improves the (absolute) accuracy of the probe positioning.
6. A computer operating Windows 2000 or Windows XP.
7. DASY5 software.
8. Remote controls with teach pendant and additional circuitry for robot safety such as warning lamps, etc.
9. The SAM twin phantom enabling testing left-hand and right-hand usage.
10. The device holder for handheld mobile phones.
11. Tissue simulating liquid mixed according to the given recipes.
12. Validation dipole kits allowing validating the proper functioning of the system.



### 3.1 DASYS E-Field Probe System

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

### 3.1.1 E-Field Probe Specification

Construction	<p>Symmetrical design with triangular core</p> <p>Built-in optical fiber for surface detection System</p> <p>Built-in shielding against static charges</p> <p>PEEK enclosure material (resistant to organic solvents, e.q., glycol)</p>
Calibration	<p>In air from 10 MHz to 6 GHz</p> <p>In brain and muscle simulating tissue at frequencies of 835MHz, 1900MHz, 2450MHz and 2600MHz (accuracy <math>\pm 8\%</math>)</p> <p>Calibration for other liquids and frequencies upon request</p>
Frequency	$\pm 0.2$ dB (30 MHz to 6 GHz)
Directivity	<p><math>\pm 0.3</math> dB in brain tissue (rotation around probe axis)</p> <p><math>\pm 0.5</math> dB in brain tissue (rotation normal probe axis)</p> <p>Dynamic Range 10<math>\mu</math>W/g to &gt; 100mW/g; Linearity: <math>\pm 0.2</math>dB</p>
Dimensions	<p>Overall length: 337mm</p> <p>Tip length: 9mm</p> <p>Body diameter: 10mm</p> <p>Tip diameter: 2.5mm</p> <p>Distance from probe tip to dipole centers: 1.0mm</p>
Application	<p>General dosimetry up to 6GHz</p> <p>Compliance tests of mobile phones</p> <p>Fast automatic scanning in arbitrary phantoms</p>



Figure 3. E-field Probe

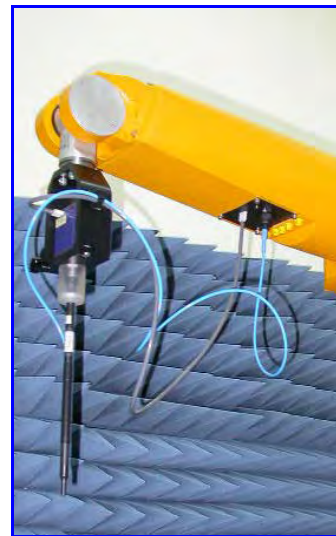


Figure 4. Probe setup on robot





### 3.1.2 E-Field Probe Calibration process

#### Dosimetric Assessment Procedure

Each E-Probe/Probe Amplifier combination has unique calibration parameters. A TEM cell calibration procedure is conducted to determine the proper amplifier settings to enter in the probe parameters. The amplifier settings are determined for a given frequency by subjecting the probe to a known E-field density (1 mW/cm<sup>2</sup>) using an RF Signal generator, TEM cell, and RF Power Meter.

#### Free Space Assessment

The free space E-field from amplified probe outputs is determined in a test chamber. This calibration can be performed in a TEM cell if the frequency is below 1 GHz and in a waveguide or other methodologies above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is rotated 360 degrees until the three channels show the maximum reading. The power density readings equates to 1 mW/cm<sup>2</sup>.

#### Temperature Assessment

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated head tissue. The E-field in the medium correlates with the temperature rise in the dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$SAR = C \frac{\Delta T}{\Delta t}$$

Where :

$\Delta t$  = Exposure time (30 seconds),

C = Heat capacity of tissue (head or body),

$\Delta T$  = Temperature increase due to RF exposure.

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

Where :

$\sigma$  = Simulated tissue conductivity,

$\rho$  = Tissue density (kg/m<sup>3</sup>).



### 3.2 Data Acquisition Electronic (DAE) System

#### Cell Controller

Processor : Intel Core(TM)2 CPU  
Clock Speed : @ 1.86GHz  
Operating System : Windows XP Professional

#### Data Converter

Features : Signal Amplifier, multiplexer, A/D converter, and control logic  
Software : DASYS v5.0 (Build 125) & SEMCAD X Version 13.4 Build 125  
Connecting Lines : Optical downlink for data and status info  
Optical uplink for commands and clock

### 3.3 Robot

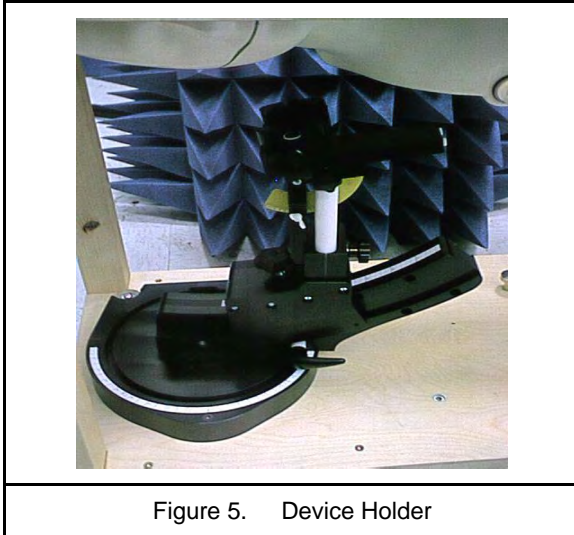
Positioner : Stäubli Unimation Corp. Robot Model: TX90XL  
Repeatability :  $\pm 0.02$  mm  
No. of Axis : 6

### 3.4 Measurement Server

Processor : PC/104 with a 400MHz intel ULV Celeron  
I/O-board : Link to DAE4 (or DAE3)  
16-bit A/D converter for surface detection system  
Digital I/O interface  
Serial link to robot  
Direct emergency stop output for robot

### 3.5 Device Holder

The DASY device holder is constructed of low-loss POM material having the following dielectric parameters: relative permittivity  $\epsilon=3$  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.



### 3.6 Phantom - SAM v4.0

The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE 1528 and IEC 62209. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points with the robot.

Shell Thickness	2 ±0.2 mm
Filling Volume	Approx. 25 liters
Dimensions	1000x500 mm (LxW)
Table 1. Specification of SAM v4.0	



### 3.7 Oval Flat Phantom - ELI 4.0

The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (Oval Flat) phantom defined in IEEE 1528-2003, IEEE Std. 1528a-2005, CENELEC 50361 and IEC 62209. It enables the dosimetric evaluation of wireless portable device usage as well as body mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points with the robot.

Shell Thickness	2 ±0.2 mm
Filling Volume	Approx. 30 liters
Dimensions	190×600×400 mm (H×L×W)
Table 2. Specification of ELI 4.0	

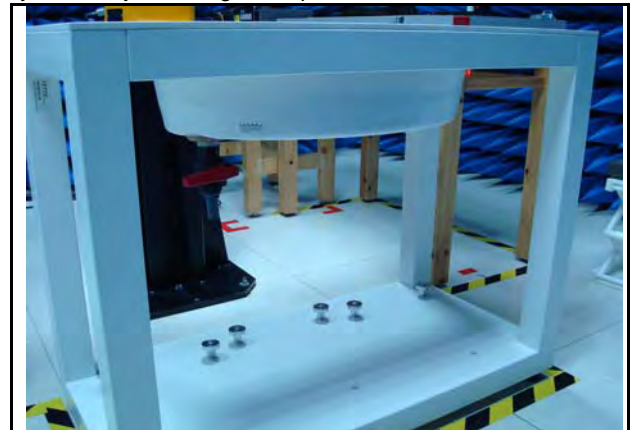


Figure 7. Oval Flat Phantom

### 3.8 Data Storage and Evaluation

#### 3.8.1 Data Storage

The DASY software stores the assessed data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all the necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension DA4 or DA5. The post processing software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of erroneous parameter settings. For example, if a measurement has been performed with an incorrect crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be reevaluated.



### 3.8.2 Data Evaluation

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

- Probe parameters : - Sensitivity  $Norm_i, ai0, ai1, ai2$   
- Conversion factor  $ConvFi$   
- Diode compression point  $dcp_i$
- Device parameters : - Frequency  $f$   
- Crest factor  $cf$
- Media parameters : - Conductivity  $\sigma$   
- Density  $\rho$

These parameters must be set correctly in the software. They can be found in the component documents or they can be imported into the software from the configuration files issued for the DASY components. In the direct measuring mode of the multimeter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics. If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as :

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

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

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

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



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

H-field probes :

- with  $V_i$  = compensated signal of channel i (i = x, y, z)  
*Normi* = sensor sensitivity of channel i (i = x, y, z)  
 $\mu V/(V/m)^2$  for E-field Probes  
*ConvF* = sensitivity enhancement in solution  
 $a_{ij}$  = sensor sensitivity factors for H-field probes  
 $f$  = carrier frequency [GHz]  
 $E_i$  = electric field strength of channel i in V/m  
 $H_i$  = magnetic field strength of channel i in A/m

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

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

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

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

- with  $SAR$  = local specific absorption rate in mW/g  
 $E_{tot}$  = total field strength in V/m  
 $\sigma$  = conductivity in [mho/m] or [Siemens/m]  
 $\rho$  = equivalent tissue density in g/cm<sup>3</sup>

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

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

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

- with  $P_{pwe}$  = equivalent power density of a plane wave in mW/cm<sup>2</sup>  
 $E_{tot}$  = total electric field strength in V/m  
 $H_{tot}$  = total magnetic field strength in A/m



#### 4. Tissue Simulating Liquids

The mixture is calibrated to obtain proper dielectric constant (permittivity) and conductivity of the tissue. The dielectric parameters of the liquids were verified prior to the SAR evaluation using an 85070C Dielectric Probe Kit and an E5071B Network Analyzer.

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

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

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

Table 3. Tissue dielectric parameters for head and body phantoms



## 4.1 Ingredients

The following ingredients are used:

- Water: deionized water (pure H<sub>2</sub>O), resistivity  $\geq 16 \text{ M } \Omega$  -as basis for the liquid
- Sugar: refined white sugar (typically 99.7 % sucrose, available as crystal sugar in food shops)  
-to reduce relative permittivity
- Salt: pure NaCl -to increase conductivity
- Cellulose: Hydroxyethyl-cellulose, medium viscosity (75-125 mPa.s, 2% in water, 20 °C), CAS # 54290 -to increase viscosity and to keep sugar in solution.
- Preservative: Preventol D-7 Bayer AG, D-51368 Leverkusen, CAS # 55965-84-9 -to prevent the spread of bacteria and molds
- DGBE: Diethylenglycol-monobutyl ether (DGBE), Fluka Chemie GmbH, CAS # 112-34-5 -to reduce relative permittivity

## 4.2 Recipes

The following tables give the recipes for tissue simulating liquids to be used in different frequency bands.

Note: The goal dielectric parameters (at 22 °C) must be achieved within a tolerance of  $\pm 5\%$  for  $\epsilon$  and  $\pm 5\%$  for  $\sigma$ .

Ingredients (% by weight)	Frequency (MHz)											
	750		835		1750		1900		2450		2600	
Tissue Type	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Water	39.28	51.30	41.45	52.40	54.50	40.20	54.90	40.40	62.70	73.20	60.30	71.40
Salt (NaCl)	1.47	1.42	1.45	1.50	0.17	0.49	0.18	0.50	0.50	0.10	0.60	0.20
Sugar	58.15	46.18	56.00	45.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HEC	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bactericide	0.10	0.10	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Triton X-100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DGBE	0.00	0.00	0.00	0.00	45.33	59.31	44.92	59.10	36.80	26.70	39.10	28.40
Dielectric Constant	41.88	54.60	42.54	56.10	40.10	53.60	39.90	54.00	39.80	52.50	39.00	52.51
Conductivity (S/m)	0.90	0.97	0.91	0.95	1.39	1.49	1.42	1.45	1.88	1.78	1.960	2.163

Salt: 99% Pure Sodium Chloride

Sugar: 98% Pure Sucrose

Water: De-ionized,  $16 \text{ M } \Omega$  resistivity

HEC: Hydroxyethyl Cellulose

DGBE: 99% Di(ethylene glycol) butyl ether, [2-(2-butoxyethoxy)ethanol]

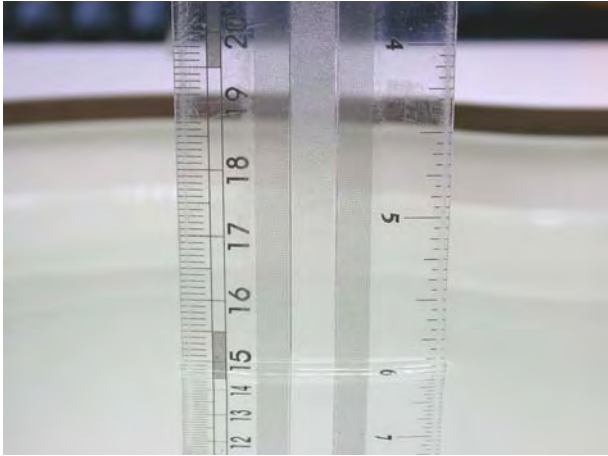

Triton X-100 (ultra pure): Polyethylene glycol mono [4-(1,1, 3, 3-tetramethylbutyl)phenyl]ether



### 4.3 Liquid Depth

The liquid level was during measurement 15cm  $\pm$ 0.5cm.

According to KDB865664 ,the depth of tissue-equivalent liquid in a phantom must be  $\geq 15.0$  cm  $\pm$ 0.5 cm for SAR measurements  $\leq 3$  GHz and  $\geq 10.0$  cm  $\pm$ 0.5 cm for measurements  $> 3$  GHz.

	
Figure 8. Head-Position	Figure 9. Body-Position



## 5. SAR Testing with RF Transmitters

### 5.1 SAR Testing with GSM/GPRS/EGPRS Transmitters

Configure the basestation to support GMSK and 8PSK call respectively, and set timeslot transmission for GMSK GSM/GPRS and 8PSK EDGE. Measure and record power outputs for both modulations, that test is applicable.

### 5.2 SAR Testing with WCDMA Transmitters

Configure the basestation to support all WCDMA tests in respect to the 3GPP 34.121. Measure the power at Ch4132, 4183 and 4233 for US cell; Ch9262, 9400 and 9538 for US PCS Band.

- Step 1: set a Test Mode 1 loop back with a 12.2kbps Reference Measurement Channel (RMC).
- Step 2: set and send continuously up power control commands to the device.
- Step 3: measure the power at the device antenna connector using the power meter with average detector and test SAR

### 5.3 SAR Testing with HSDPA Transmitters

#### HSDPA Date Devices setup for SAR Measurement

HSDPA should be configured according to the UE category of a test device. The number of HS-DSCH/HS-PDSCHs, HARQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set. To maintain a consistent test configuration and stable transmission conditions, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4 ms with a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. DPCCH and DPDCH gain factors ( $\beta_c$ ,  $\beta_d$ ), and HS-DPCCH power offset parameters ( $\Delta_{ACK}$ ,  $\Delta_{NACK}$ ,  $\Delta_{CQI}$ ) should be set according to values indicated in the Table below. The CQI value is determined by the UE category, transport block size, number of HS-PDSCHs and modulation used in the H-set.

Setup for Release 5 HSDPA							
Sub-test	$\beta_c$	$\beta_d$	$\beta_d$ (SF)	$\beta_c/\beta_d$	$\beta_{hs}^{(1,2)}$	CM <sup>(3)</sup> (dB)	MRP <sup>(3)</sup> (dB)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15(4)	15/15(4)	64	12/15(4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note

1.  $\Delta_{ACK}$ ,  $\Delta_{NACK}$  and  $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$
2. For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A and HSDPA EVM with phase discontinuity in clause 5.13.1AA,  $\Delta_{ACK}$  and  $\Delta_{NACK} = 30/15$  with  $\beta_{hs} = 30/15 * \beta_c$  and  $\Delta_{CQI} = 24/15$  with  $\beta_{hs} = 24/15 * \beta_c$
3. CM = 1 for  $\beta_c/\beta_d = 12/15$ ,  $\beta_{hs}/\beta_c = 24/15$ . For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.
4. For subtest 2 the  $\beta_c/\beta_d$  ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 11/15$  and  $\beta_d = 15/15$ .



### **HSPA Data Devices setup for SAR Measurement.**

The following procedures are applicable to HSPA (HSUPA/HSDPA) data devices operating under 3GPP Release 6. Body exposure conditions generally apply to these devices, including handsets and data modems operating in various electronic devices. HSUPA operates in conjunction with WCDMA and HSDPA. SAR is initially measured in WCDMA test configurations without HSPA. The default test configuration is to establish a radio link between the DUT and a communication test set to configure a 12.2 kbps RMC (reference measurement channel) in Test Loop Mode 1. SAR for HSPA is selectively measured with HS-DPCCH, EDPCCH and E-DPDCH, all enabled, along with a 12.2 kbps RMC using the highest SAR configuration in WCDMA with 12.2 kbps RMC only. An FRC is configured according to HSDPCCH Sub-test 1 using H-set 1 and QPSK. HSPA is configured according to E-DCH Subtest 5 requirements. SAR for other HSPA sub-test configurations is also confirmed selectively according to output power, exposure conditions and E-DCH UE Category. Maximum output power is verified according to procedures in applicable versions of 3GPP TS 34.121 and SAR must be measured according to these maximum output conditions. The UE Categories for HSDPCCH and HSPA should be clearly identified in the SAR report. The following procedures are applicable only if Maximum Power Reduction (MPR) is implemented according to Cubic Metric (CM) requirements.

When voice transmission and head exposure conditions are applicable to a WCDMA/HSPA data device, head exposure is measured according to the 'Head SAR Measurements' procedures in the 'WCDMA Handsets' section of this document. SAR for body exposure configurations are measured according to the 'Body SAR Measurements' procedures in the 'WCDMA Handsets' section of this document. In addition, body SAR is also measured for HSPA when the maximum average output of each RF channel with HSPA active is at least ¼ dB higher than that measured without HSPA using 12.2 kbps RMC or the maximum SAR for 12.2 kbps RMC is above 75% of the SAR limit. Body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set 1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 with power control algorithm 2, according to the highest body SAR configuration in 12.2 kbps RMC without HSPA. When VOIP is applicable for head exposure, SAR is not required when the maximum output of each RF channel with HSPA is less than ¼ dB higher than that measured using 12.2 kbps RMC; otherwise, the same HSPA configuration used for body measurements should be used to test for head exposure.

Due to inner loop power control requirements in HSPA, a commercial communication test set should be used for the output power and SAR tests. The 12.2 kbps RMC, FRC H-set 1 and E-DCH configurations for HSPA should be configured according to the  $\beta$  values indicated below as well as other applicable procedures described in the 'WCDMA Handset' and 'Release 5 HSDPA Data Devices' sections of this document.



The highest body SAR measured in Antenna Extended & Retracted configurations on a channel in 12.2 kbps RMC. The possible channels are the High, Middle & Low channel. Contact the FCC Laboratory for test and approval requirements if the maximum output power measured in E-DCH Sub-test 2 - 4 is higher than Sub-test 5.

Setup for Release 6 HSPA / Release 7 HSPA+													
Sub-test	$\beta_c$	$\beta_d$	$\beta_d$ (SF)	$\beta_c/\beta_d$	$\beta_{hs}^{(1)}$	$\beta_{ec}$	$\beta_{ed}$	Bed (SF)	Bed (codes)	CM <sup>(2)</sup> (dB)	MPR (dB)	AG <sup>(4)</sup> Index	E-TFCI
1	11/15 <sup>(3)</sup>	15/15 <sup>(3)</sup>	64	11/15 <sup>(3)</sup>	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	$\beta_{ed1}: 47/15$ $\beta_{ed2}: 47/15$	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15 <sup>(4)</sup>	15/15 <sup>(4)</sup>	64	15/15 <sup>(4)</sup>	30/15	24/15	134/15	4	1	1.0	0.0	21	81

Note

- $\Delta_{ACK}$ ,  $\Delta_{NACK}$  and  $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$ .
- CM = 1 for  $\beta_c/\beta_d = 12/15$ ,  $\beta_{hs}/\beta_c = 24/15$ . For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.
- For subtest 1 the  $\beta_c/\beta_d$  ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 10/15$  and  $\beta_d = 15/15$ .
- For subtest 5 the  $\beta_c/\beta_d$  ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 14/15$  and  $\beta_d = 15/15$ .
- Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g.
- $\beta_{ed}$  can not be set directly; it is set by Absolute Grant Value.



## 5.4 SAR Testing with CDMA2000 Transmitters

The following procedures were performed according to FCC “SAR Measurement Procedures for 3G Devices” v02, October 2007.

### Output Power Verification

See 3GPP2 C.S0011/TIA-98-E as recommended by “SAR Measurement Procedures for 3G Devices” v02, October 2007. Maximum output power is verified on the High, Middle and Low channels according to procedures in section 4.4.5.2 of 3GPP2 C.S0011/TIA-98-E. SO55 tests were measured with power control bits in the “All Up” condition.

1. If the mobile station (MS) supports Reverse TCH RC 1 and Forward TCH RC 1, set up a call using Fundamental Channel Test Mode 1 (RC=1/1) with 9600 bps data rate only.
2. Under RC1, C.S0011 Table 4.4.5.2-1, Table 6. parameters were applied.
3. If the MS supports the RC 3 Reverse FCH, RC3 Reverse SCH0 and demodulation of RC 3,4, or 5, set up a call using Supplemental Channel Test Mode 3 (RC 3/3) with 9600 bps Fundamental Channel and 9600 bps SCH0 data rate.
4. Under RC3, C.S0011 Table 4.4.5.2-2, Table 7 was applied.
5. FCHs were configured at full rate for maximum SAR with “All Up” power control bits.

Parameter	Units	Value
$I_{or}$	dBm/1.23MHz	-104
$\frac{\text{Pilot } E_c}{I_{or}}$	dB	-7
$\frac{\text{Traffic } E_c}{I_{or}}$	dB	-7.4
Table 4. Parameters for Max. Power for RC1		

Parameter	Units	Value
$I_{or}$	dBm/1.23MHz	-86
$\frac{\text{Pilot } E_c}{I_{or}}$	dB	-7
$\frac{\text{Traffic } E_c}{I_{or}}$	dB	-7.4
Table 5. Parameters for Max. Power for RC3		



### **Body SAR Measurements**

SAR for body exposure configurations is measured in RC3 with the DUT configured to transmit at full rate on FCH with all other code channels disabled using TDSO / SO32. SAR for multiple code channels (FCH + SCHn) is not required when the maximum average output of each RF channel is less than ¼ dB higher than that measured with FCH only. Otherwise, SAR is measured on the maximum output channel (FCH + SCHn) with FCH at full rate and SCH0 enabled at 9600 bps using the exposure configuration that results in the highest SAR for that channel with FCH only. When multiple code channels are enabled, the DUT output may shift by more than 0.5 dB and lead to higher SAR drifts and SCH dropouts. Body SAR was measured using TDSO / SO32 with power control bits in the “All Up”

Body SAR in RC1 is not required when the maximum average output of each channel is less than ¼ dB higher than that measured in RC3. Otherwise, SAR is measured on the maximum output channel in RC1; with Loopback Service Option SO55, at full rate, using the body exposure configuration that results in the highest SAR for that channel in RC3.

#### **1xEVDO**

SAR is measured using FTAP/RTAP and FETAP/RETAP respectively for Rev. 0 and Rev. A devices. The AT is tested with a Reverse Data Channel rate of 153.6 kbps in Subtype 0/1 Physical Layer configurations; and a Reverse Data Channel payload size of 4096 bits and Termination Target of 16 slots in Subtype 2 Physical Layer configurations. Both FTAP and FETAP are configured with a Forward Traffic Channel data rate corresponding to the 2-slot version of 307.2 kbps with the ACK Channel transmitting in all slots. AT power control should be in “All Bits Up” conditions for TAP/ETAP.

## **5.5 SAR Testing with LTE-FDD Transmitters**

All SAR measurements for LTE were performed using the Anritsu MT8820C. A closed loop power control setting allowed the UE to transmit at the maximum output power during the SAR measurements. Configure the basestation to support LTE tests in respect to the 3GPP 36.521-1, and set ch , RB allocation number , RB allocation offset , and send continuously Up power control commands to the device.

MPR was enabled for this device. A-MPR was disabled for all SAR test measurements.



## 5.6 SAR Testing with LTE-TDD Transmitters

All SAR measurements for LTE were performed using the Anritsu MT8820C. A closed loop power control setting allowed the UE to transmit at the maximum output power during the SAR measurements. Configure the basestation to support LTE tests in respect to the 3GPP 36.521-1, and set ch , TDD mode , RB allocation number ,RB allocation offset , and send continuously Up power control commands to the device.

MPR was enabled for this device. A-MPR was disabled for all SAR test measurements.

For 3GPP table 4.2.1 as below, support configurations and worst-case UpPTS information into the table.

**3GPP Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS).**

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink			EUT Support Special subframe	Worst case UpPTS	
	DwPTS	UpPTS		DwPTS	UpPTS				
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink			
0	$6592 \times T_s$	$2192 \times T_s$	$2560 \times T_s$	$7680 \times T_s$	$2192 \times T_s$	$2560 \times T_s$	<input type="checkbox"/>	<input type="checkbox"/>	
1	$19760 \times T_s$			$20480 \times T_s$			<input type="checkbox"/>	<input type="checkbox"/>	
2	$21952 \times T_s$			$23040 \times T_s$			<input type="checkbox"/>	<input type="checkbox"/>	
3	$24144 \times T_s$			$25600 \times T_s$			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4	$26336 \times T_s$			$7680 \times T_s$			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5	$6592 \times T_s$	$4384 \times T_s$	$5120 \times T_s$	$20480 \times T_s$	$4384 \times T_s$	$5120 \times T_s$	<input type="checkbox"/>	<input type="checkbox"/>	
6	$19760 \times T_s$			$23040 \times T_s$			<input type="checkbox"/>	<input type="checkbox"/>	
7	$21952 \times T_s$			$12800 \times T_s$			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
8	$24144 \times T_s$			-			-	<input type="checkbox"/>	<input type="checkbox"/>
9	$13168 \times T_s$			-			-	<input type="checkbox"/>	<input type="checkbox"/>

**Table 4.2.2: Uplink-downlink configuration.**

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number										
		0	1	2	3	4	5	6	7	8	9	
0	5ms	D	S	U	U	U	D	S	U	U	U	
1	5ms	D	S	U	U	D	D	S	U	U	D	
2	5ms	D	S	U	D	D	D	S	U	D	D	
3	10ms	D	S	U	U	U	D	D	D	D	D	
4	10ms	D	S	U	U	D	D	D	D	D	D	
5	10ms	D	S	U	D	D	D	D	D	D	D	
6	5ms	D	S	U	U	U	D	S	U	U	D	

SAR evaluation was performed in configuration 0 and 1, which represent the worst-case scenario.



## 5.7 LTE Frequency range and channel bandwidth

Channel bandwidth support:

Band	BW (MHz)					
	1.4	3	5	10	15	20
LTE Band 25		V	V	V		
LTE Band 26		V	V	V		
LTE Band 41			V	V	V	V

LTE Band	Bandwidth (MHz)	Test Frequency ID	N <sub>UL</sub>	Frequency of Uplink (MHz)
LTE Band 25	3	Low Range	26055	1851.5
	3	Mid Range	26365	1882.5
	3	High Range	26675	1913.5
	5	Low Range	26065	1852.5
	5	Mid Range	26365	1882.5
	5	High Range	26665	1912.5
	10	Low Range	26090	1855.0
	10	Mid Range	26365	1882.5
	10	High Range	26640	1910.0
LTE Band 26	3	Low Range	26735	818.5
	3	Mid Range	26865	831.5
	3	High Range	27025	847.5
	5	Low Range	26755	820.5
	5	Mid Range	26865	831.5
	5	High Range	27015	846.5
	10	Low Range	26770	822.0
	10	Mid Range	26865	831.5
	10	High Range	26990	844.0
LTE Band 41	5	Low Range	39675	2498.5
	5	Mid Range	40620	2593.0
	5	High Range	41565	2687.5
	10	Low Range	39700	2501.0
	10	Mid Range	40620	2593.0
	10	High Range	41540	2685.0
	15	Low Range	39725	2503.5
	15	Mid Range	40620	2593.0
	15	High Range	41515	2682.5
	20	Low Range	39750	2506.0
	20	Mid Range	40620	2593.0
	20	High Range	41490	2680.0





### 5.7.1 Maximum power reduction (MPR)

Identify the LTE voice/data requirements in each operating mode and exposure condition with respect to head and body test configurations, antenna locations, handset flip-cover or slide positions, antenna diversity conditions etc.

The voice and data transmission:

- ◆ Data only device.

Identify if Maximum Power Reduction (MPR) is optional or mandatory, i.e. built-in by design:

- ◆ Maximum Power Reduction (MPR) is mandatory, i.e. built-in by design.
- ◆ A-MPR (additional MPR) must be disabled
- ◆ A-MPR was disabled during testing.

Maximum Power Reduction (MPR) for Power Class 3							
Channel bandwidth / Transmission bandwidth configuration (RB)							
Modulation	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20MHz	MPR (dB)
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2

### 5.7.2 Power reduction

No power reduction issue.



## 5.8 SAR Testing with 802.11 Transmitters

Normal network operating configurations are not suitable for measuring the SAR of 802.11 b/g transmitters. Unpredictable fluctuations in network traffic and antenna diversity conditions can introduce undesirable variations in SAR results. The SAR for these devices should be measured using chipset based test mode software to ensure the results are consistent and reliable.

## 5.9 General Device Setup

Chipset based test mode software is hardware dependent and generally varies among manufacturers. The device operating parameters established in test mode for SAR measurements must be identical to those programmed in production units, including output power levels, amplifier gain settings and other RF performance tuning parameters. The test frequencies should correspond to actual channel frequencies defined for domestic use. SAR for devices with switched diversity should be measured with only one antenna transmitting at a time during each SAR measurement, according to a fixed modulation and data rate. The same data pattern should be used for all measurements.

### Frequency Channel Configurations

802.11 a/b/g and 4.9 GHz operating modes are tested independently according to the service requirements in each frequency band. 802.11 b/g modes are tested on channels 1, 6 and 11. 802.11a is tested for UNII operations on channels 36 and 48 in the 5.15-5.25 GHz band; channels 52 and 64 in the 5.25-5.35 GHz band; channels 104, 116, 124 and 136 in the 5.470-5.725 GHz band; and channels 149 and 161 in the 5.8 GHz band. When 5.8 GHz §15.247 is also available, channels 149, 157 and 165 should be tested instead of the UNII channels. 4.9 GHz is tested on channels 1, 10 and 5 or 6, whichever has the higher output power, for 5 MHz channels; channels 11, 15 and 19 for 10 MHz channels; and channels 21 and 25 for 20 MHz channels. These are referred to as the “default test channels”. 802.11g mode was evaluated only if the output power was 0.25 dB higher than the 802.11b mode.

802.11 Test Channels per FCC Requirement							
Mode	GHz	Channel	Turbo Channel	Default Test “Channels”			
				§15.247		UNII	
				802.11b	802.11g		
IEEE 802.11 b/g	2412	1		✓	▽		
	2437	6	6	✓	▽		
	2462	11		✓	▽		



## 5.10 Conducted Power

Band	Modulation	Data Rate	CH	Frequency (MHz)	Average Power (dBm)	
					Time Average	Burst Average
GPRS 850 Multi Class :12 Max Up:4 Max Down:4 Sum:5	GMSK	4Down1Up Duty factor 1/8	Lowest	824.2	23.39	32.42
			Middle	836.6	23.78	32.81
			Highest	848.8	23.77	32.80
		3Down2Up Duty factor 2/8	Lowest	824.2	24.25	30.27
			Middle	836.6	24.17	30.19
			Highest	848.8	24.45	30.47
		2Down3Up Duty factor 3/8	Lowest	824.2	23.96	28.22
			Middle	836.6	24.10	28.36
			Highest	848.8	24.04	28.30
		1Down4Up Duty factor 4/8	Lowest	824.2	24.40	27.41
			Middle	836.6	24.44	27.45
			Highest	848.8	24.42	27.43
EGPRS 850 Multi Class :12 Max Up:4 Max Down:4 Sum:5	8PSK	4Down1Up Duty factor 1/8	Lowest	824.2	18.62	27.65
			Middle	836.6	18.57	27.60
			Highest	848.8	18.65	27.68
		3Down2Up Duty factor 2/8	Lowest	824.2	21.54	27.56
			Middle	836.6	21.63	27.65
			Highest	848.8	21.62	27.64
		2Down3Up Duty factor 3/8	Lowest	824.2	21.03	25.29
			Middle	836.6	21.05	25.31
			Highest	848.8	21.16	25.42
		1Down4Up Duty factor 4/8	Lowest	824.2	22.03	25.04
			Middle	836.6	22.06	25.07
			Highest	848.8	22.18	25.19

Note: 1. Time Average power slot duty cycle factor calculate:

1up: Average burst power+10\*LOG(1/8)

2up: Average burst power+10\*LOG(2/8)

3up: Average burst power+10\*LOG(3/8)

4up: Average burst power+10\*LOG(4/8)



Band	Modulation	Data Rate	CH	Frequency (MHz)	Average Power (dBm)	
					Time Average	Burst Average
GPRS 1900 Multi Class :12 Max Up:4 Max Down:4 Sum:5	GMSK	4Down1Up Duty factor 1/8	Lowest	1850.2	20.10	29.13
			Middle	1880.0	20.07	29.10
			Highest	1909.8	20.29	29.32
		3Down2Up Duty factor 2/8	Lowest	1850.2	23.30	29.32
			Middle	1880.0	23.00	29.02
			Highest	1909.8	23.20	29.22
		2Down3Up Duty factor 3/8	Lowest	1850.2	22.77	27.03
			Middle	1880.0	22.79	27.05
			Highest	1909.8	22.93	27.19
		1Down4Up Duty factor 4/8	Lowest	1850.2	22.94	25.95
			Middle	1880.0	22.97	25.98
			Highest	1909.8	23.13	26.14
EGPRS 1900 Multi Class :12 Max Up:4 Max Down:4 Sum:5	8PSK	4Down1Up Duty factor 1/8	Lowest	1850.2	16.31	25.34
			Middle	1880.0	16.35	25.38
			Highest	1909.8	16.58	25.61
		3Down2Up Duty factor 2/8	Lowest	1850.2	19.22	25.24
			Middle	1880.0	19.27	25.29
			Highest	1909.8	19.49	25.51
		2Down3Up Duty factor 3/8	Lowest	1850.2	20.19	24.45
			Middle	1880.0	20.27	24.53
			Highest	1909.8	20.44	24.70
		1Down4Up Duty factor 4/8	Lowest	1850.2	21.27	24.28
			Middle	1880.0	21.38	24.39
			Highest	1909.8	21.56	24.57

Note: 1. Time Average power slot duty cycle factor calculate:

1up: Average burst power+10\*LOG(1/8)

2up: Average burst power+10\*LOG(2/8)

3up: Average burst power+10\*LOG(3/8)

4up: Average burst power+10\*LOG(4/8)



Band	Modulation	Sub-test	CH	Frequency (MHz)	Burst Average Power (dBm)
WCDMA Band II	RMC12.2K	---	Lowest	1852.4	22.95
			Middle	1880.0	23.05
			Highest	1907.6	22.87
HSDPA Band II	QPSK	1	Lowest	1852.4	22.15
			Middle	1880.0	22.06
			Highest	1907.6	21.81
		2	Lowest	1852.4	22.12
			Middle	1880.0	22.04
			Highest	1907.6	21.80
		3	Lowest	1852.4	21.63
			Middle	1880.0	21.56
			Highest	1907.6	21.27
		4	Lowest	1852.4	21.60
			Middle	1880.0	21.52
			Highest	1907.6	21.25
HSUPA/HSPA+ Band II	QPSK	1	Lowest	1852.4	21.59
			Middle	1880.0	20.70
			Highest	1907.6	20.77
		2	Lowest	1852.4	19.65
			Middle	1880.0	18.70
			Highest	1907.6	18.80
		3	Lowest	1852.4	20.61
			Middle	1880.0	19.68
			Highest	1907.6	19.73
		4	Lowest	1852.4	19.61
			Middle	1880.0	18.61
			Highest	1907.6	18.74
		5	Lowest	1852.4	21.56
			Middle	1880.0	20.66
			Highest	1907.6	20.73



Band	Modulation	Sub-test	CH	Frequency (MHz)	Burst Average Power (dBm)
WCDMA Band V	RMC12.2K	---	Lowest	826.4	22.95
			Middle	836.6	22.89
			Highest	846.6	23.10
HSDPA Band V	QPSK	1	Lowest	826.4	21.74
			Middle	836.6	21.86
			Highest	846.6	21.96
		2	Lowest	826.4	21.71
			Middle	836.6	21.84
			Highest	846.6	21.94
		3	Lowest	826.4	21.28
			Middle	836.6	21.41
			Highest	846.6	21.54
		4	Lowest	826.4	21.26
			Middle	836.6	21.35
			Highest	846.6	21.50
HSUPA/HSPA+ Band V	QPSK	1	Lowest	826.4	21.74
			Middle	836.6	21.64
			Highest	846.6	20.62
		2	Lowest	826.4	19.75
			Middle	836.6	19.70
			Highest	846.6	18.66
		3	Lowest	826.4	20.75
			Middle	836.6	20.67
			Highest	846.6	19.66
		4	Lowest	826.4	19.76
			Middle	836.6	19.66
			Highest	846.6	18.62
		5	Lowest	826.4	21.71
			Middle	836.6	21.60
			Highest	846.6	20.56



Band	Modulation	RC/TAP (REV)	CH	Frequency (MHz)	Burst Average Power (dBm)
CDMA 800 (BC0)	QPSK	RC1/SO55	Lowest	824.70	23.13
			Middle	836.52	23.18
			Highest	848.31	22.96
1xRTT 800 (BC0)	QPSK	RC3/SO55	Lowest	824.70	23.06
			Middle	836.52	23.08
			Highest	848.31	22.91
		RC3/SO32	Lowest	824.70	23.01
			Middle	836.52	23.06
			Highest	848.31	22.86
1xEV-DO 800 (BC0)	QPSK	Rev.0	Lowest	824.70	22.62
			Middle	836.52	22.65
			Highest	848.31	22.52
		Rev.A	Lowest	824.70	22.59
			Middle	836.52	22.64
			Highest	848.31	22.49

Band	Modulation	RC/TAP (REV)	CH	Frequency (MHz)	Burst Average Power (dBm)
CDMA 1900 (BC1)	QPSK	RC1/SO55	Lowest	1851.25	23.24
			Middle	1880.00	23.11
			Highest	1908.75	22.96
1xRTT 1900 (BC1)	QPSK	RC3/SO55	Lowest	1851.25	23.19
			Middle	1880.00	23.07
			Highest	1908.75	22.99
		RC3/SO32	Lowest	1851.25	23.16
			Middle	1880.00	23.07
			Highest	1908.75	22.97
1xEV-DO 1900 (BC1)	QPSK	Rev.0	Lowest	1851.25	23.19
			Middle	1880.00	23.16
			Highest	1908.75	23.07
		Rev.A	Lowest	1851.25	23.16
			Middle	1880.00	23.14
			Highest	1908.75	22.97



Band	Modulation	RC/TAP (REV)	CH	Frequency (MHz)	Burst Average Power (dBm)
CDMA Sec. 800 (BC10)	QPSK	RC1/SO55	Lowest	817.25	23.20
			Middle	820.00	23.11
			Highest	822.75	23.09
1xRTT Sec. 800 (BC10)	QPSK	RC3/SO55	Lowest	817.25	23.11
			Middle	820.00	23.09
			Highest	822.75	23.05
		RC3/SO32	Lowest	817.25	22.96
			Middle	820.00	22.89
			Highest	822.75	22.88
1xEV-DO Sec. 800 (BC10)	QPSK	Rev.0	Lowest	817.25	22.99
			Middle	820.00	22.95
			Highest	822.75	22.91
		Rev.A	Lowest	817.25	22.97
			Middle	820.00	22.93
			Highest	822.75	22.88





Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Burst Average Power (dBm)
					Size	Offset	
LTE Band 25	3 MHz	QPSK	26055	1851.5	1	0	22.48
					1	7	22.45
					1	14	22.42
					8	0	21.50
					8	4	21.40
					8	7	21.52
			15	0	21.37		
			1	0	22.46		
			1	7	22.45		
			1	14	22.42		
			8	0	21.36		
			8	4	21.45		
			8	7	21.46		
			15	0	21.46		
			1	0	22.41		
			1	7	22.36		
			1	14	22.29		
			8	0	21.52		
		8	4	21.42			
		8	7	21.38			
		15	0	21.33			
		1	0	21.45			
		1	7	21.37			
		1	14	21.26			
		8	0	20.31			
		8	4	20.20			
		8	7	20.33			
		15	0	20.32			
		1	0	21.44			
		1	7	21.41			
		1	14	21.39			
		8	0	20.22			
		8	4	20.20			
		8	7	20.19			
		15	0	20.29			
		1	0	21.43			
		1	7	21.39			
		1	14	21.22			
		8	0	20.24			
		8	4	20.23			
		8	7	20.14			
		15	0	20.27			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Burst Average Power (dBm)
					Size	Offset	
LTE Band 25	5 MHz	QPSK	26065	1852.5	1	0	22.62
					1	12	22.59
					1	24	22.56
					12	0	21.68
					12	6	21.64
					12	11	21.60
			25	0	21.58		
			1	0	22.60		
			1	12	22.56		
			1	24	22.55		
			12	0	21.66		
			12	6	21.63		
			12	11	21.58		
			25	0	21.57		
			1	0	22.59		
			1	12	22.55		
			1	24	22.52		
			12	0	21.62		
		12	6	21.60			
		12	11	21.56			
		25	0	21.54			
		1	0	21.69			
		1	12	21.67			
		1	24	21.64			
		12	0	20.76			
		12	6	20.73			
		12	11	20.72			
		25	0	20.69			
		1	0	21.67			
		1	12	21.62			
		1	24	21.61			
		12	0	20.72			
		12	6	20.70			
		12	11	20.66			
		25	0	20.64			
		1	0	21.66			
1	12	21.60					
1	24	21.58					
12	0	20.69					
12	6	20.66					
12	11	20.65					
25	0	20.62					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Burst Average Power (dBm)
					Size	Offset	
LTE Band 25	10 MHz	QPSK	26090	1855.0	1	0	22.51
					1	24	22.50
					1	49	22.49
					25	0	21.63
					25	12	21.60
					25	24	21.58
			50	0	21.55		
			1	0	22.49		
			1	24	22.48		
			1	49	22.45		
			25	0	21.60		
			25	12	21.57		
			25	24	21.55		
			50	0	21.54		
			1	0	22.48		
			1	24	22.46		
			1	49	22.42		
			25	0	21.58		
		25	12	21.57			
		25	24	21.55			
		50	0	21.53			
		1	0	21.59			
		1	24	21.56			
		1	49	21.55			
		25	0	20.71			
		25	12	20.68			
		25	24	20.65			
		50	0	20.62			
		1	0	21.56			
		1	24	21.51			
		1	49	21.50			
		25	0	20.69			
		25	12	20.66			
		25	24	20.64			
		50	0	20.60			
		1	0	21.55			
1	24	21.50					
1	49	21.48					
25	0	20.66					
25	12	20.64					
25	24	20.61					
50	0	20.58					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Burst Average Power (dBm)
					Size	Offset	
LTE Band 26	3MHz	QPSK	26735	818.5	1	0	22.62
					1	2	22.50
					1	5	22.35
					3	0	22.42
					3	1	22.45
					3	2	22.31
			6	0	21.34		
			1	0	22.53		
			1	2	22.47		
			1	5	22.44		
			3	0	22.38		
			3	1	22.36		
			3	2	22.39		
			6	0	21.38		
			1	0	22.47		
			1	2	22.41		
			1	5	22.34		
			3	0	22.40		
		3	1	22.37			
		3	2	22.34			
		6	0	21.40			
		1	0	21.57			
		1	2	21.53			
		1	5	21.51			
		3	0	21.40			
		3	1	21.47			
		3	2	21.37			
		6	0	20.44			
		1	0	21.69			
		1	2	21.67			
		1	5	21.53			
		3	0	21.43			
		3	1	21.41			
		3	2	21.44			
		6	0	20.50			
		1	0	21.70			
1	2	21.62					
1	5	21.59					
3	0	21.49					
3	1	21.48					
3	2	21.45					
6	0	20.54					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Burst Average Power (dBm)
					Size	Offset	
LTE Band 26	5MHz	QPSK	26755	820.5	1	0	22.70
					1	12	22.61
					1	24	22.56
					12	0	21.78
					12	6	21.74
					12	11	21.73
			25	0	21.71		
			26865	831.5	1	0	22.48
			1		12	22.46	
			1		24	22.44	
			12		0	21.62	
			12		6	21.60	
			12		11	21.56	
			25	0	21.55		
			27015	846.5	1	0	22.50
			1		12	22.47	
			1		24	22.43	
			12		0	21.67	
		12	6		21.63		
		12	11		21.60		
		25	0	21.58			
		26755	820.5	1	0	21.78	
		1		12	21.67		
		1		24	21.64		
		12		0	20.86		
		12		6	20.82		
		12		11	20.77		
		25	0	20.73			
		26865	831.5	1	0	21.59	
		1		12	21.57		
		1		24	21.54		
		12		0	20.72		
		12		6	20.68		
		12		11	20.63		
		25	0	20.57			
		27015	846.5	1	0	21.63	
1	12	21.59					
1	24	21.57					
12	0	20.76					
12	6	20.72					
12	11	20.67					
25	0	20.59					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Burst Average Power (dBm)
					Size	Offset	
LTE Band 26	10MHz	QPSK	26770	822.0	1	0	22.73
					1	24	22.66
					1	49	22.63
					25	0	21.73
					25	12	21.65
					25	24	21.61
			50	0	21.60		
			1	0	22.60		
			1	24	22.56		
			1	49	22.53		
			25	0	21.69		
			25	12	21.67		
			25	24	21.62		
			50	0	21.57		
			1	0	22.57		
			1	24	22.55		
			1	49	22.51		
			25	0	21.64		
		25	12	21.60			
		25	24	21.57			
		50	0	21.48			
		1	0	21.75			
		1	24	21.72			
		1	49	21.71			
		25	0	20.90			
		25	12	20.88			
		25	24	20.81			
		50	0	20.70			
		1	0	21.68			
		1	24	21.66			
		1	49	21.60			
		25	0	20.83			
		25	12	20.78			
		25	24	20.74			
		50	0	20.66			
		1	0	21.62			
1	24	21.59					
1	49	21.56					
25	0	20.69					
25	12	20.67					
25	24	20.61					
50	0	20.56					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Burst Average Power (dBm)
					Size	Offset	
LTE Band 41 (Config 1)	5MHz	QPSK	39675	2498.5	1	0	21.55
					1	12	21.81
					1	24	22.05
					12	0	20.77
					12	6	20.86
					12	11	20.95
			25	0	20.75		
			1	0	22.32		
			1	12	22.39		
			1	24	22.50		
			12	0	21.42		
			12	6	21.45		
			12	11	21.48		
			25	0	21.39		
			1	0	21.99		
			1	12	21.83		
			1	24	21.85		
			12	0	21.17		
		12	6	21.08			
		12	11	21.03			
		25	0	21.02			
		1	0	20.68			
		1	12	20.97			
		1	24	21.13			
		12	0	19.82			
		12	6	20.03			
		12	11	20.11			
		25	0	19.80			
		1	0	21.73			
		1	12	21.77			
		1	24	21.87			
		12	0	20.75			
		12	6	20.77			
		12	11	20.79			
		25	0	20.52			
		1	0	21.55			
1	12	21.36					
1	24	21.31					
12	0	20.29					
12	6	20.28					
12	11	20.27					
25	0	20.13					
16QAM	39675	2498.5	1	0	20.68		
			1	12	20.97		
			1	24	21.13		
			12	0	19.82		
			12	6	20.03		
			12	11	20.11		
	25	0	19.80				
	1	0	21.73				
	1	12	21.77				
	1	24	21.87				
	12	0	20.75				
	12	6	20.77				
	12	11	20.79				
	25	0	20.52				
	1	0	21.55				
	1	12	21.36				
	1	24	21.31				
	12	0	20.29				
12	6	20.28					
12	11	20.27					
25	0	20.13					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Burst Average Power (dBm)
					Size	Offset	
LTE Band 41 (Config 1)	10MHz	QPSK	39700	2501.0	1	0	21.58
					1	24	22.00
					1	49	22.13
					25	0	21.21
					25	12	21.43
					25	24	21.47
			50	0	21.16		
			1	0	22.27		
			1	24	22.37		
			1	49	22.45		
			25	0	21.32		
			25	12	21.41		
			25	24	21.53		
			50	0	21.28		
			1	0	22.27		
			1	24	21.90		
			1	49	21.84		
			25	0	21.35		
		25	12	21.24			
		25	24	21.22			
		50	0	21.31			
		1	0	20.82			
		1	24	21.38			
		1	49	21.65			
		25	0	19.88			
		25	12	20.13			
		25	24	20.25			
		50	0	19.84			
		1	0	21.72			
		1	24	21.81			
		1	49	21.87			
		25	0	20.45			
		25	12	20.52			
		25	24	20.55			
		50	0	20.41			
		1	0	21.33			
1	24	21.15					
1	49	21.07					
25	0	19.98					
25	12	19.79					
25	24	19.77					
50	0	19.79					





Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Burst Average Power (dBm)
					Size	Offset	
LTE Band 41 (Config 1)	15MHz	QPSK	39725	2503.5	1	0	21.71
					1	74	22.37
					36	0	20.82
					36	18	21.06
					36	35	21.07
					75	0	21.03
			40620	2593.0	1	0	22.26
					1	74	22.44
					36	0	21.36
					36	18	21.45
					36	35	21.53
					75	0	21.35
			41515	2682.5	1	0	22.33
					1	74	21.89
					36	0	21.35
		36			18	21.28	
		36			35	21.25	
		75			0	21.34	
		16QAM	39725	2503.5	1	0	20.92
					1	74	21.55
					36	0	19.58
					36	18	19.88
					36	35	19.92
					75	0	19.53
			40620	2593.0	1	0	21.66
					1	74	21.81
					36	0	20.01
					36	18	20.09
					36	35	20.11
					75	0	19.98
41515	2682.5		1	0	21.41		
			1	74	20.95		
			36	0	19.94		
		36	18	19.89			
		36	35	19.85			
		75	0	19.90			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Burst Average Power (dBm)
					Size	Offset	
LTE Band 41 (Config 1)	20MHz	QPSK	39750	2506.0	1	0	21.64
					1	99	22.33
					50	0	20.83
					50	25	20.99
					50	49	21.03
					100	0	20.82
			40620	2593.0	1	0	22.18
					1	99	22.40
					50	0	21.25
					50	25	21.23
					50	49	21.44
					100	0	21.21
			41490	2680.0	1	0	22.38
					1	99	21.91
					50	0	21.06
		50			25	20.93	
		50			49	20.70	
		100			0	21.02	
		16QAM	39750	2506.0	1	0	21.08
					1	99	21.76
					50	0	19.81
					50	25	19.98
					50	49	20.01
					100	0	19.77
			40620	2593.0	1	0	21.25
					1	99	21.57
					50	0	20.01
					50	25	20.02
					50	49	20.04
					100	0	20.01
41490	2680.0		1	0	21.45		
			1	99	20.98		
			50	0	19.95		
		50	25	19.93			
		50	49	19.78			
		100	0	19.93			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Burst Average Power (dBm)
					Size	Offset	
LTE Band 41 (Config 0)	5MHz	QPSK	39675	2498.5	1	0	19.91
					1	12	20.53
					1	24	20.36
					12	0	20.34
					12	6	20.60
					12	11	20.59
			25	0	20.47		
			1	0	20.78		
			1	12	21.03		
			1	24	20.57		
			12	0	21.00		
			12	6	21.10		
			12	11	20.98		
			25	0	20.96		
			1	0	20.67		
			1	12	20.75		
			1	24	20.01		
			12	0	20.84		
		12	6	20.84			
		12	11	20.61			
		25	0	20.68			
		1	0	20.04			
		1	12	20.67			
		1	24	20.52			
		12	0	20.39			
		12	6	20.63			
		12	11	20.63			
		25	0	20.55			
		1	0	20.78			
		1	12	21.07			
		1	24	20.63			
		12	0	20.94			
		12	6	21.04			
		12	11	20.91			
		25	0	20.95			
		1	0	21.00			
1	12	21.08					
1	24	20.38					
12	0	21.06					
12	6	21.06					
12	11	20.82					
25	0	20.95					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Burst Average Power (dBm)
					Size	Offset	
LTE Band 41 (Config 0)	10MHz	QPSK	39700	2501.0	1	0	19.42
					1	24	20.62
					1	49	20.01
					25	0	20.26
					25	12	20.62
					25	24	20.53
			50	0	20.38		
			1	0	20.23		
			1	24	20.91		
			1	49	19.94		
			25	0	20.79		
			25	12	20.92		
			25	24	20.64		
			50	0	20.70		
			1	0	20.62		
			1	24	21.03		
			1	49	19.45		
			25	0	21.05		
		25	12	21.02			
		25	24	20.51			
		50	0	20.76			
		1	0	19.58			
		1	24	20.71			
		1	49	20.14			
		25	0	20.34			
		25	12	20.70			
		25	24	20.64			
		50	0	20.49			
		1	0	20.32			
		1	24	20.94			
		1	49	19.95			
		25	0	20.77			
		25	12	20.91			
		25	24	20.64			
		50	0	20.70			
		1	0	20.98			
1	24	21.32					
1	49	19.76					
25	0	21.30					
25	12	21.27					
25	24	20.79					
50	0	21.04					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Burst Average Power (dBm)
					Size	Offset	
LTE Band 41 (Config 0)	15MHz	QPSK	39725	2503.5	1	0	19.38
					1	37	20.60
					1	74	19.93
					36	0	20.21
					36	18	20.60
					36	35	20.53
			75	0	20.34		
			1	0	20.23		
			1	37	20.82		
			1	74	19.68		
			36	0	20.68		
			36	18	20.78		
			36	35	20.52		
			75	0	20.57		
			1	0	20.83		
			1	37	21.07		
			1	74	19.13		
			36	0	21.13		
		36	18	21.04			
		36	35	20.49			
		75	0	20.76			
		1	0	19.55			
		1	37	20.76			
		1	74	20.12			
		36	0	20.24			
		36	18	20.64			
		36	35	20.58			
		75	0	20.45			
		1	0	20.25			
		1	37	20.84			
		1	74	19.73			
		36	0	20.60			
		36	18	20.72			
		36	35	20.47			
		75	0	20.55			
		1	0	21.05			
1	37	21.33					
1	74	19.46					
36	0	21.28					
36	18	21.21					
36	35	20.70					
75	0	20.98					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Burst Average Power (dBm)
					Size	Offset	
LTE Band 41 (Config 0)	20MHz	QPSK	39750	2506.0	1	0	19.27
					1	49	20.65
					1	99	19.96
					50	0	20.34
					50	25	20.70
					50	49	20.62
			100	0	20.47		
			1	0	20.23		
			1	49	20.79		
			1	99	19.53		
			50	0	20.77		
			50	25	20.80		
			50	49	20.46		
			100	0	20.61		
			1	0	20.85		
			1	49	21.14		
			1	99	18.89		
			50	0	21.27		
		50	25	21.11			
		50	49	20.41			
		100	0	20.85			
		1	0	19.44			
		1	49	20.82			
		1	99	20.14			
		50	0	20.43			
		50	25	20.80			
		50	49	20.72			
		100	0	20.57			
		1	0	20.28			
		1	49	20.83			
		1	99	19.58			
		50	0	20.76			
		50	25	20.80			
		50	49	20.45			
		100	0	20.60			
		1	0	21.00			
1	49	21.33					
1	99	19.12					
50	0	21.42					
50	25	21.27					
50	49	20.60					
100	0	21.02					



Band	Data Rate	CH	Frequency (MHz)	Average Power (dBm)
IEEE 802.11b	1 M	1	2412.0	12.23
		6	2437.0	10.12
		11	2462.0	7.79
	2 M	1	2412.0	12.12
		6	2437.0	10.08
		11	2462.0	7.78
	5.5 M	1	2412.0	12.01
		6	2437.0	10.00
		11	2462.0	7.71
	11 M	1	2412.0	11.91
		6	2437.0	9.94
		11	2462.0	7.63
IEEE 802.11g	6 M	1	2412.0	10.77
		6	2437.0	10.13
		11	2462.0	9.16
	9 M	1	2412.0	10.75
		6	2437.0	10.07
		11	2462.0	9.06
	12 M	1	2412.0	10.72
		6	2437.0	9.98
		11	2462.0	8.91
	18 M	1	2412.0	10.68
		6	2437.0	9.86
		11	2462.0	8.71
	24 M	1	2412.0	10.65
		6	2437.0	9.77
		11	2462.0	8.51
	36 M	1	2412.0	10.63
		6	2437.0	9.65
		11	2462.0	8.36
	48 M	1	2412.0	10.60
		6	2437.0	9.56
		11	2462.0	8.26
	54 M	1	2412.0	10.62
		6	2437.0	9.43
		11	2462.0	8.03

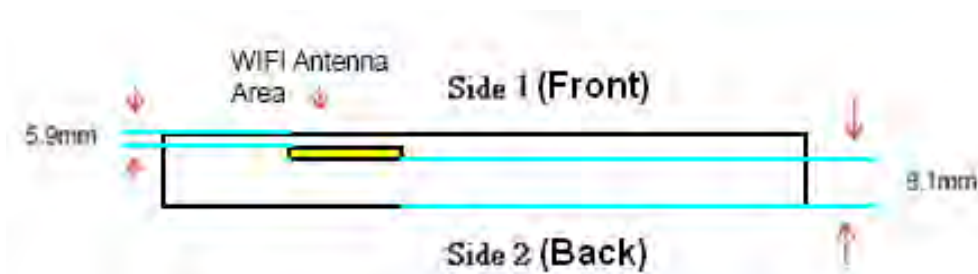
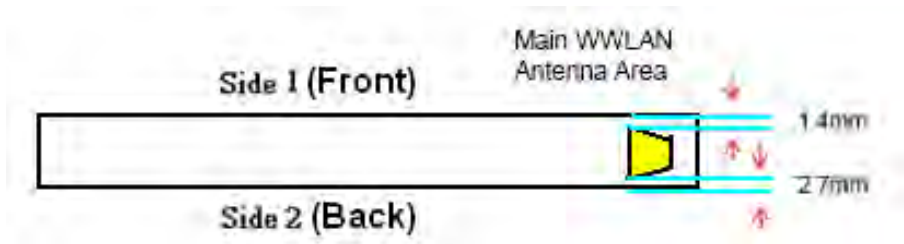


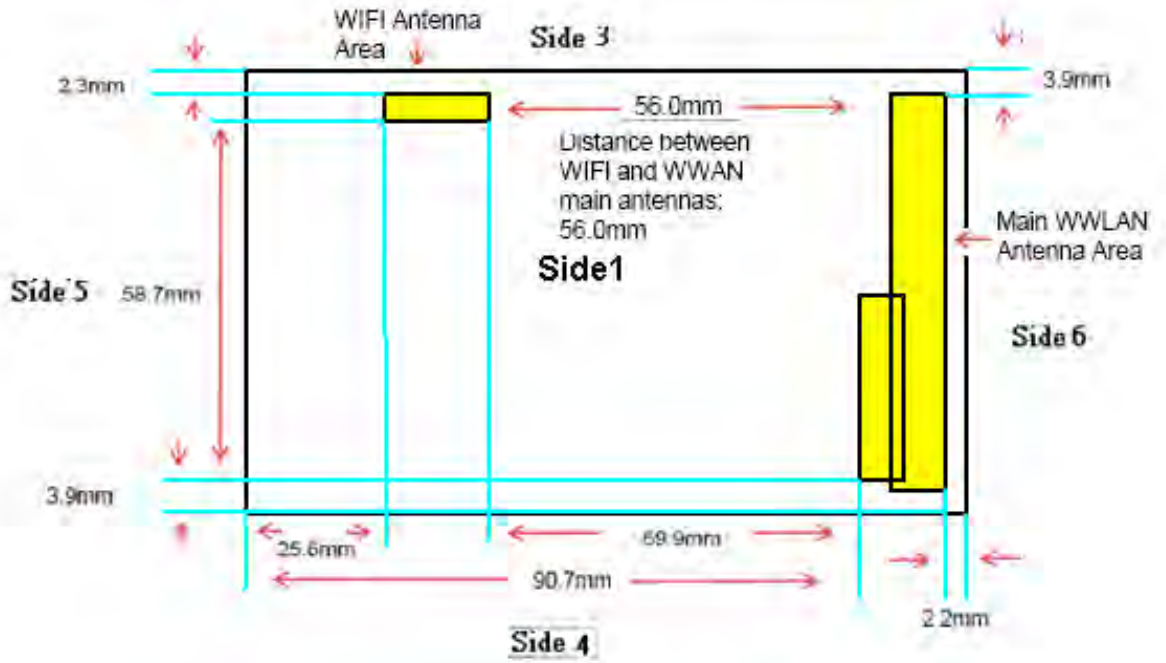
Band	Data Rate	CH	Frequency (MHz)	Average Power (dBm)
IEEE 802.11n 20MHz (2.4 GHz)	6.5 M	1	2412.0	10.95
		6	2437.0	10.07
		11	2462.0	9.15
	13.0 M	1	2412.0	10.85
		6	2437.0	10.02
		11	2462.0	9.12
	19.5 M	1	2412.0	10.81
		6	2437.0	9.95
		11	2462.0	9.08
	26.0 M	1	2412.0	10.77
		6	2437.0	9.91
		11	2462.0	8.89
	39.0 M	1	2412.0	10.75
		6	2437.0	9.90
		11	2462.0	8.82
	52.0 M	1	2412.0	10.72
		6	2437.0	9.88
		11	2462.0	8.79
	58.5 M	1	2412.0	10.70
		6	2437.0	9.84
		11	2462.0	8.75
65.0 M	1	2412.0	10.65	
	6	2437.0	9.81	
	11	2462.0	8.72	



### 5.11 Antenna location

Antenna-User			
Distance of WLAN to edge		Distance of WWAN to edge	
WLAN to Side 1	5.9mm	WWAN to Side 1	1.4mm
WLAN to Side 2	8.1mm	WWAN to Side 2	2.7mm
WLAN to Side 3	2.3mm	WWAN to Side 3	3.9mm
WLAN to Side 4	58.7mm	WWAN to Side 4	3.9mm
WLAN to Side 5	25.6mm	WWAN to Side 5	90.7mm
WLAN to Side 6	69.9mm	WWAN to Side 6	2.2mm
Antenna-Antenna			
Antenna account		Distance (cm)	
WWAN to WLAN(BT)		56	







## 5.12 Stand-alone SAR Evaluate

There have no exclusion issue for transmitters.

**Transmitter and antenna implementation as below:**

Band	WWAN Main antenna	WWAN Aux antenna	WLAN antenna
WWAN	V	X (Rx only)	X
WLAN	X	X (Rx only)	V

**Stand-alone transmission configurations as below:**

Band	Side 1	Side 2	Side 3	Side 4	Side 5	Side 6
GPRS/EGPRS 850	V	V	V	V		V
GPRS/EGPRS 1900	V	V	V	V		V
WCDMA/HSDPA/HSUPA/HSPA+ Band II	V	V	V	V		V
WCDMA/HSDPA/HSUPA/HSPA+ Band V	V	V	V	V		V
CDMA/1xRTT/1xEvdo 800 (BC0)	V	V	V	V		V
CDMA/1xRTT/1xEvdo 1900 (BC1)	V	V	V	V		V
CDMA/1xRTT/1xEvdo Sec.800 (BC10)	V	V	V	V		V
LTE Band 25	V	V	V	V		V
LTE Band 26	V	V	V	V		V
LTE Band 41	V	V	V	V		V
IEEE 802.11b/g/n	V	V	V			

Note: Stand-alone SAR is required when SAR must be measured for all sides and surfaces with a transmitting antenna located within 25 mm from that surface or edge, detail refer antenna location.

## 5.13 Simultaneous Transmitting Evaluate

**Simultaneous transmission configurations as below:**

Condition	Side	Frequency Band	
		WWAN	WLAN
1	1	V	V
2	2	V	V
3	3	V	V



### 5.13.1 Sum of 1-g or 10-g SAR of all simultaneously transmitting

When the sum of 1-g or 10-g SAR of all simultaneously transmitting antennas in and operating mode and exposure condition combination is within the SAR limit, SAR test exclusion applies to that simultaneous transmission configuration.

Sum of 1-g SAR of summary as below:

Phantom Position	Spacing (mm)	ASSY	Simult Tx 1		Simult Tx 2		$\Sigma$ SAR <sup>1g</sup> (mW/g)	Event
			Band	SAR <sup>1g</sup> (mW/g)	Band	SAR <sup>1g</sup> (mW/g)		
Flat	Side 1	N/A	WLAN	0.024	GPRS 850	1.340	1.364	<1.6
		N/A	WLAN	0.024	GPRS 1900	1.220	1.244	<1.6
		N/A	WLAN	0.024	WCDMA Band II	1.150	1.174	<1.6
		N/A	WLAN	0.024	WCDMA Band V	0.810	0.834	<1.6
		N/A	WLAN	0.024	CDMA 800 (BC0)	0.940	0.964	<1.6
		N/A	WLAN	0.024	1xRTT 800 (BC0)	0.940	0.964	<1.6
		N/A	WLAN	0.024	1xEVDO 800 (BC0)	1.050	1.074	<1.6
		N/A	WLAN	0.024	CDMA 1900 (BC1)	1.120	1.144	<1.6
		N/A	WLAN	0.024	1xEVDO 1900 (BC1)	1.100	1.124	<1.6
		N/A	WLAN	0.024	CDMA Sec. 800 (BC10)	1.020	1.044	<1.6
		N/A	WLAN	0.024	1xEVDO Sec.800 (BC10)	1.010	1.034	<1.6
		N/A	WLAN	0.024	LTE Band 25	1.229	1.253	<1.6
		N/A	WLAN	0.024	LTE Band 26	1.048	1.072	<1.6
		N/A	WLAN	0.024	LTE Band 41	1.438	1.462	<1.6
Flat	Side 2	N/A	WLAN	0.036	GPRS 850	1.300	1.336	<1.6
		N/A	WLAN	0.036	GPRS 1900	1.350	1.386	<1.6
		N/A	WLAN	0.036	WCDMA Band II	1.190	1.226	<1.6
		N/A	WLAN	0.036	WCDMA Band V	0.890	0.926	<1.6
		N/A	WLAN	0.036	CDMA 800 (BC0)	0.990	1.026	<1.6
		N/A	WLAN	0.036	1xRTT 800 (BC0)	0.980	1.016	<1.6
		N/A	WLAN	0.036	1xEVDO 800 (BC0)	1.020	1.056	<1.6
		N/A	WLAN	0.036	CDMA 1900 (BC1)	1.130	1.166	<1.6
		N/A	WLAN	0.036	1xEVDO 1900 (BC1)	1.270	1.306	<1.6
		N/A	WLAN	0.036	CDMA Sec. 800 (BC10)	1.040	1.076	<1.6
		N/A	WLAN	0.036	1xEVDO Sec.800 (BC10)	1.040	1.076	<1.6
		N/A	WLAN	0.036	LTE Band 25	1.420	1.456	<1.6
		N/A	WLAN	0.036	LTE Band 26	1.056	1.092	<1.6
		N/A	WLAN	0.036	LTE Band 41	0.636	0.672	<1.6



Phantom Position		Spacing (mm)	ASSY	Simult Tx 1		Simult Tx 2		$\Sigma$ SAR <sup>1g</sup> (mW/g)	Event
				Band	SAR <sup>1g</sup> (mW/g)	Band	SAR <sup>1g</sup> (mW/g)		
Flat	Side 3	10	N/A	WLAN	0.040	GPRS 850	0.600	0.640	<1.6
		10	N/A	WLAN	0.040	GPRS 1900	0.210	0.250	<1.6
		10	N/A	WLAN	0.040	WCDMA Band II	0.160	0.200	<1.6
		10	N/A	WLAN	0.040	WCDMA Band V	0.370	0.410	<1.6
		10	N/A	WLAN	0.040	CDMA 800 (BC0)	0.370	0.410	<1.6
		10	N/A	WLAN	0.040	1xRTT 800 (BC0)	0.450	0.490	<1.6
		10	N/A	WLAN	0.040	1xEVDO 800 (BC0)	0.510	0.550	<1.6
		10	N/A	WLAN	0.040	CDMA 1900 (BC1)	0.180	0.220	<1.6
		10	N/A	WLAN	0.040	1xEVDO 1900 (BC1)	0.200	0.240	<1.6
		10	N/A	WLAN	0.040	CDMA Sec. 800 (BC10)	0.410	0.450	<1.6
		10	N/A	WLAN	0.040	1xEVDO Sec.800 (BC10)	0.440	0.480	<1.6
		10	N/A	WLAN	0.040	LTE Band 25	0.179	0.219	<1.6
		10	N/A	WLAN	0.040	LTE Band 26	0.476	0.516	<1.6
		10	N/A	WLAN	0.040	LTE Band 41	0.120	0.160	<1.6

### 5.13.2 SAR to peak location separation ratio (SPLSR)

When the sum of SAR is larger than the limit, SAR test exclusion is determined by the SAR to peak location separation ratio. The ratio is determined by  $(SAR1 + SAR2)^{1.5}/R_i$ , rounded to two decimal digits, and must be  $\leq 0.04$  for all antenna pairs in the configuration to qualify for 1-g SAR test exclusion.

**All of sum of SAR < 1.6 W/Kg, therefore SPLSR is not required.**



## 5.14 SAR test reduction according to KDB

General:

- The test data reported are the worst-case SAR value with the position set in a typical configuration. Test procedures used were according to FCC/OET Bulletin 65, Supplement C [June 2001], IEEE1528-2003 and IEEE Std. 1528a-2005.
- All modes of operation were investigated, and worst-case results are reported.
- Tissue parameters and temperatures are listed on the SAR plots.
- Batteries are fully charged for all readings.
- When the Channel's SAR 1g of maximum conducted power is > 0.8 mW/g, low, middle and high channel are supposed to be tested.

KDB 447498:

- The test data reported are the worst-case SAR value with the position set in a typical configuration. Test procedures used were according to FCC/OET Bulletin 65, Supplement C [June 2001], IEEE1528-2003 and IEEE Std. 1528a-2005.

KDB 865664:

- Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg.
- When the original highest measured SAR is  $\geq 0.80$  W/kg, repeat that measurement once.
- Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is  $\geq 1.45$  W/kg.
- Perform a third repeated measurement only if the original, first or second repeated measurement is  $\geq 1.5$  W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

KDB 941225:

- In order to qualify for the above test reduction, the maximum burst-averaged output power for each mode (GMS/GPRS/EDGE) and the corresponding multi-slot class must be clearly identified in the SAR report for each frequency band. We perform worst case SAR with maximum time-average power on GMS/GPRS/EDGE mode.
- When HSDPA & (HSUPA / HSPA+ uplink with QPSK) power are not more than WCDMA 12.2K RMC 0.25dB and the SAR value of WCDMA < 1.2 mW/g, therefore HSDPA & HSUPA / HSPA+ Stand-alone SAR is not required.
- SAR for EVDO Rev. A is not required when the maximum average output of each RF channels is less than that measured in Subtype 0/1 Physical layer configurations.
- For 1xRTT SAR is not required when the maximum average output of each channel is less than 1/4 dB higher than that measured in EVDO Rev.0.
- When the reported SAR is  $\leq 0.8$  W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation, otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel.
- For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation in 5.2.1 and 5.2.2 are  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
- SAR is required only when the highest maximum output power for the configuration in the higher order modulation is > 1/2 dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.



- For smaller channel bandwidth SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is  $> \frac{1}{2}$  dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is  $> 1.45$  W/kg.
- SAR must be measured for all sides and surfaces with a transmitting antenna located within 25 mm from that surface or edge.

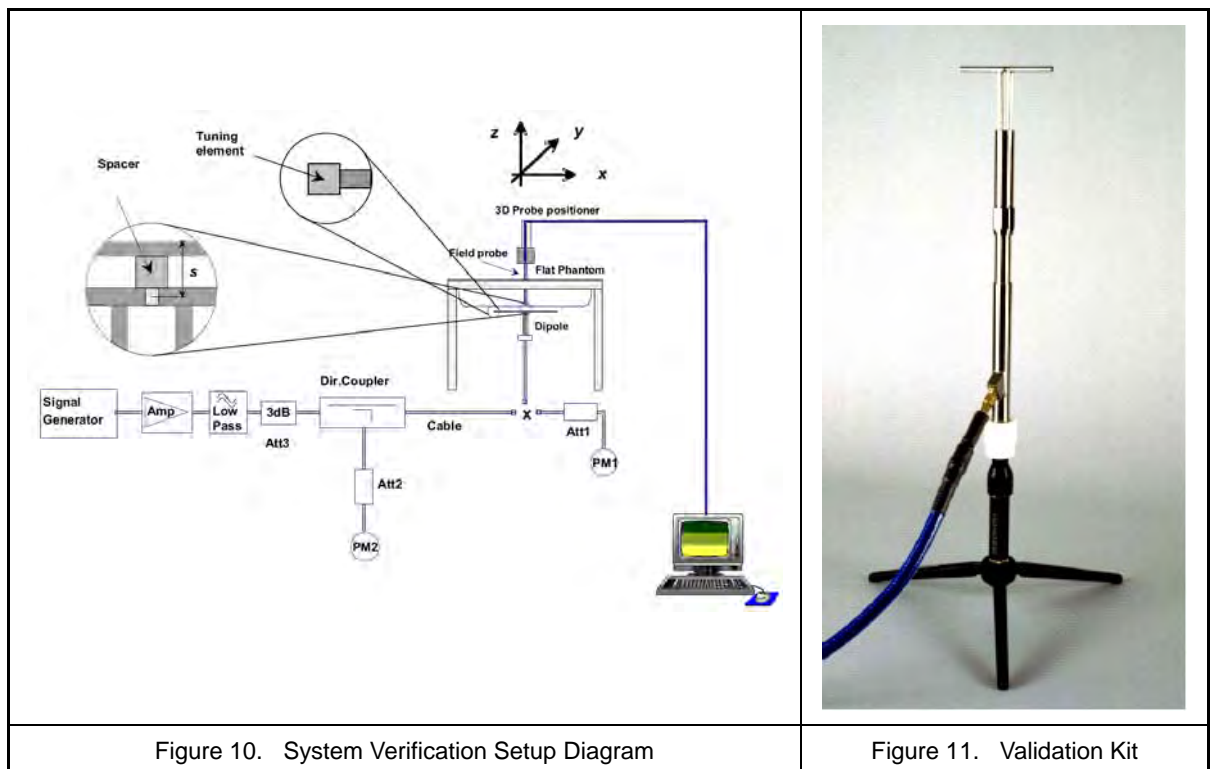
KDB 248227:

- If the conducted power of (IEEE 802.11g and IEEE 802.11n) are higher than IEEE 802.11b 0.25dB, (IEEE 802.11g and IEEE 802.11n) are supposed to be tested.

## 6. System Verification and Validation

### 6.1 Symmetric Dipoles for System Verification

Construction	Symmetrical dipole with 1/4 balun enables measurement of feed point impedance with NWA matched for use near flat phantoms filled with head simulating solutions Includes distance holder and tripod adaptor Calibration Calibrated SAR value for specified position and input power at the flat phantom in head simulating solutions.
Frequency	835, 1900, 2450 and 2600 MHz
Return Loss	> 20 dB at specified verification position
Power Capability	> 100 W (f < 1GHz); > 40 W (f > 1GHz)
Options	Dipoles for other frequencies or solutions and other calibration conditions are available upon request
Dimensions	D835V2: dipole length 161 mm; overall height 340 mm D1900V2: dipole length 67.7 mm; overall height 300 mm D2450V2: dipole length 51.5 mm; overall height 300 mm D2600V2: dipole length 49.2 mm; overall height 290 mm







## 6.2 Liquid Parameters

Liquid Verify								
Ambient Temperature : 22 ± 2 °C ; Relative Humidity : 40 -70%								
Liquid Type	Frequency	Temp (°C)	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)	Measured Date
835MHz (Body)	820MHz	22.0	$\epsilon_r$	55.26	54.11	-2.08	± 5	Feb, 24, 2013
			$\sigma$	0.969	0.955	-1.45	± 5	
	835MHz	22.0	$\epsilon_r$	55.20	53.86	-2.43	± 5	
			$\sigma$	0.970	0.973	0.31	± 5	
	850MHz	22.0	$\epsilon_r$	55.15	53.78	-2.48	± 5	
			$\sigma$	0.988	1.003	1.52	± 5	
835MHz (Body)	820MHz	22.0	$\epsilon_r$	55.26	54.11	-2.08	± 5	Feb, 24, 2013
			$\sigma$	0.969	0.955	-1.45	± 5	
	835MHz	22.0	$\epsilon_r$	55.20	53.86	-2.43	± 5	
			$\sigma$	0.970	0.973	0.31	± 5	
	850MHz	22.0	$\epsilon_r$	55.15	53.78	-2.48	± 5	
			$\sigma$	0.988	1.003	1.52	± 5	
835MHz (Body)	820MHz	22.0	$\epsilon_r$	55.26	54.11	-2.08	± 5	Feb, 26, 2013
			$\sigma$	0.969	0.955	-1.45	± 5	
	835MHz	22.0	$\epsilon_r$	55.20	53.86	-2.43	± 5	
			$\sigma$	0.970	0.973	0.31	± 5	
	850MHz	22.0	$\epsilon_r$	55.15	53.78	-2.48	± 5	
			$\sigma$	0.988	1.003	1.52	± 5	
835MHz (Body)	820MHz	22.0	$\epsilon_r$	55.26	54.11	-2.08	± 5	Feb, 27, 2013
			$\sigma$	0.969	0.955	-1.45	± 5	
	835MHz	22.0	$\epsilon_r$	55.20	53.86	-2.43	± 5	
			$\sigma$	0.970	0.973	0.31	± 5	
	850MHz	22.0	$\epsilon_r$	55.15	53.78	-2.48	± 5	
			$\sigma$	0.988	1.003	1.52	± 5	
835MHz (Body)	820MHz	22.0	$\epsilon_r$	55.26	54.11	-2.08	± 5	Mar. 06, 2013
			$\sigma$	0.969	0.955	-1.45	± 5	
	835MHz	22.0	$\epsilon_r$	55.20	53.86	-2.43	± 5	
			$\sigma$	0.970	0.973	0.31	± 5	
	850MHz	22.0	$\epsilon_r$	55.15	53.78	-2.48	± 5	
			$\sigma$	0.988	1.003	1.52	± 5	

Table 6. Measured Tissue dielectric parameters for body phantoms -1



Liquid Verify								
Ambient Temperature : 22 ± 2 °C ; Relative Humidity : 40 -70%								
Liquid Type	Frequency	Temp (°C)	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)	Measured Date
1900MHz (Body)	1850MHz	22.0	$\epsilon_r$	53.30	53.60	0.56	± 5	Feb, 22, 2013
			$\sigma$	1.520	1.453	-4.41	± 5	
	1900MHz	22.0	$\epsilon_r$	53.30	53.42	0.23	± 5	
			$\sigma$	1.520	1.507	-0.86	± 5	
	1930MHz	22.0	$\epsilon_r$	53.30	53.27	-0.06	± 5	
			$\sigma$	1.520	1.539	1.25	± 5	
1900MHz (Body)	1850MHz	22.0	$\epsilon_r$	53.30	53.60	0.56	± 5	Feb, 23, 2013
			$\sigma$	1.520	1.453	-4.41	± 5	
	1900MHz	22.0	$\epsilon_r$	53.30	53.42	0.23	± 5	
			$\sigma$	1.520	1.507	-0.86	± 5	
	1930MHz	22.0	$\epsilon_r$	53.30	53.27	-0.06	± 5	
			$\sigma$	1.520	1.539	1.25	± 5	
1900MHz (Body)	1850MHz	22.0	$\epsilon_r$	53.30	53.60	0.56	± 5	Feb, 25, 2013
			$\sigma$	1.520	1.453	-4.41	± 5	
	1900MHz	22.0	$\epsilon_r$	53.30	53.42	0.23	± 5	
			$\sigma$	1.520	1.507	-0.86	± 5	
	1930MHz	22.0	$\epsilon_r$	53.30	53.27	-0.06	± 5	
			$\sigma$	1.520	1.539	1.25	± 5	
1900MHz (Body)	1850MHz	22.0	$\epsilon_r$	53.30	53.60	0.56	± 5	Feb, 27, 2013
			$\sigma$	1.520	1.453	-4.41	± 5	
	1900MHz	22.0	$\epsilon_r$	53.30	53.42	0.23	± 5	
			$\sigma$	1.520	1.507	-0.86	± 5	
	1930MHz	22.0	$\epsilon_r$	53.30	53.27	-0.06	± 5	
			$\sigma$	1.520	1.539	1.25	± 5	
1900MHz (Body)	1850MHz	22.0	$\epsilon_r$	53.30	53.60	0.56	± 5	Mar. 05, 2013
			$\sigma$	1.520	1.453	-4.41	± 5	
	1900MHz	22.0	$\epsilon_r$	53.30	53.42	0.23	± 5	
			$\sigma$	1.520	1.507	-0.86	± 5	
	1930MHz	22.0	$\epsilon_r$	53.30	53.27	-0.06	± 5	
			$\sigma$	1.520	1.539	1.25	± 5	

Table 7. Measured Tissue dielectric parameters for body phantoms -2



Liquid Verify								
Ambient Temperature : 22 ± 2 °C ; Relative Humidity : 40 -70%								
Liquid Type	Frequency	Temp (°C)	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)	Measured Date
2450MHz (Body)	2400MHz	22.0	$\epsilon_r$	52.77	52.13	-1.21	± 5	Mar. 05, 2013
			$\sigma$	1.902	1.889	-0.68	± 5	
	2450MHz	22.0	$\epsilon_r$	52.70	51.92	-1.48	± 5	
			$\sigma$	1.950	1.964	0.72	± 5	
	2500MHz	22.0	$\epsilon_r$	52.64	51.77	-1.65	± 5	
			$\sigma$	2.021	2.038	0.84	± 5	
2600MHz (Body)	2590MHz	22.0	$\epsilon_r$	52.52	51.53	-1.89	± 5	Feb, 28, 2013
			$\sigma$	2.149	2.104	-2.09	± 5	
	2600MHz	22.0	$\epsilon_r$	52.51	51.45	-2.02	± 5	
			$\sigma$	2.163	2.116	-2.17	± 5	
	2690MHz	22.0	$\epsilon_r$	52.39	51.27	-2.14	± 5	
			$\sigma$	2.290	2.228	-2.71	± 5	
2600MHz (Body)	2590MHz	22.0	$\epsilon_r$	52.65	52.54	-0.21	± 5	Mar. 01, 2013
			$\sigma$	2.007	2.104	4.83	± 5	
	2600MHz	22.0	$\epsilon_r$	52.51	52.14	-0.71	± 5	
			$\sigma$	2.163	2.243	3.70	± 5	
	2690MHz	22.0	$\epsilon_r$	52.50	52.08	-0.80	± 5	
			$\sigma$	2.177	2.256	3.63	± 5	
2600MHz (Body)	2590MHz	22.0	$\epsilon_r$	52.52	51.53	-1.89	± 5	May 11, 2013
			$\sigma$	2.149	2.104	-2.09	± 5	
	2600MHz	22.0	$\epsilon_r$	52.51	51.45	-2.02	± 5	
			$\sigma$	2.163	2.116	-2.17	± 5	
	2690MHz	22.0	$\epsilon_r$	52.39	51.27	-2.14	± 5	
			$\sigma$	2.290	2.228	-2.71	± 5	
2600MHz (Body)	2590MHz	22.0	$\epsilon_r$	52.52	51.53	-1.89	± 5	May 12, 2013
			$\sigma$	2.149	2.104	-2.09	± 5	
	2600MHz	22.0	$\epsilon_r$	52.51	51.45	-2.02	± 5	
			$\sigma$	2.163	2.116	-2.17	± 5	
	2690MHz	22.0	$\epsilon_r$	52.39	51.27	-2.14	± 5	
			$\sigma$	2.290	2.228	-2.71	± 5	

Table 8. Measured Tissue dielectric parameters for body phantoms -3



Liquid Verify								
Ambient Temperature : 22 ± 2 °C ; Relative Humidity : 40 -70%								
Liquid Type	Frequency	Temp (°C)	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)	Measured Date
2600MHz (Body)	2590MHz	22.0	εr	52.65	52.54	-0.21	± 5	May 12, 2013
			σ	2.007	2.104	4.83	± 5	
	2600MHz	22.0	εr	52.51	52.14	-0.71	± 5	
			σ	2.163	2.243	3.70	± 5	
	2690MHz	22.0	εr	52.50	52.08	-0.80	± 5	
			σ	2.177	2.256	3.63	± 5	

Table 9. Measured Tissue dielectric parameters for body phantoms -4

### 6.3 Verification Summary

Prior to the assessment, the system validation kit was used to test whether the system was operating within its specifications of ± 7%. The verification was performed at 835, 1900, 2450 and 2600MHz.

Mixture Type	Frequency (MHz)	Power	SAR <sub>1g</sub> (mW/g)	SAR <sub>10g</sub> (mW/g)	Drift (dB)	Difference percentage		Probe Model / Serial No.	Dipole Model / Serial No.	1W Target		Date
						1g	10g			SAR <sub>1g</sub> (mW/g)	SAR <sub>10g</sub> (mW/g)	
Body	835	250 mW	2.43	1.62	0.009	1.90%	3.00%	EX3DV4 SN:3820	D835V2 SN:4d082	9.54	6.29	Feb. 24, 2013
		Normalize to 1 Watt	9.72	6.48								
Body	835	250 mW	2.41	1.6	-0.012	1.00%	1.70%	EX3DV4 SN:3820	D835V2 SN:4d082	9.54	6.29	Feb. 24, 2013
		Normalize to 1 Watt	9.64	6.40								
Body	835	250 mW	2.44	1.62	-0.005	2.30%	3.00%	EX3DV4 SN:3820	D835V2 SN:4d082	9.54	6.29	Feb. 26, 2013
		Normalize to 1 Watt	9.76	6.48								
Body	835	250 mW	2.42	1.61	-0.012	1.50%	2.40%	EX3DV4 SN:3820	D835V2 SN:4d082	9.54	6.29	Feb. 27, 2013
		Normalize to 1 Watt	9.68	6.44								
Body	835	250 mW	2.42	1.61	-0.13	1.50%	2.40%	EX3DV4 SN:3820	D835V2 SN:4d082	9.54	6.29	Mar. 06, 2013
		Normalize to 1 Watt	9.68	6.44								
Body	1900	250 mW	9.84	5.13	0.003	-2.30%	-3.70%	EX3DV4 SN:3820	D1900V2 SN:5d111	40.30	21.30	Feb. 22, 2013
		Normalize to 1 Watt	39.36	20.52								
Body	1900	250 mW	9.79	5.19	-0.006	-2.80%	-2.50%	EX3DV4 SN:3820	D1900V2 SN:5d111	40.30	21.30	Feb. 23, 2013
		Normalize to 1 Watt	39.16	20.76								
Body	1900	250 mW	10	5.29	-0.029	-0.70%	-0.70%	EX3DV4 SN:3820	D1900V2 SN:5d111	40.30	21.30	Feb. 25, 2013
		Normalize to 1 Watt	40.00	21.16								



Mixture Type	Frequency (MHz)	Power	SAR <sub>1g</sub> (mW/g)	SAR <sub>10g</sub> (mW/g)	Drift (dB)	Difference percentage		Probe Model / Serial No.	Dipole Model / Serial No.	1W Target		Date
						1g	10g			SAR <sub>1g</sub> (mW/g)	SAR <sub>10g</sub> (mW/g)	
Body	1900	250 mW	10.3	5.42	-0.144	2.20%	1.80%	EX3DV4 SN:3820	D1900V2 SN:5d111	40.30	21.30	Feb. 27, 2013
		Normalize to 1 Watt	41.20	21.68								
Body	1900	250 mW	10.3	5.35	-0.056	2.20%	0.50%	EX3DV4 SN:3820	D1900V2 SN:5d111	40.30	21.30	Mar. 05, 2013
		Normalize to 1 Watt	41.20	21.40								
Body	2450	250 mW	12.8	5.9	-0.109	0.40%	-1.70%	EX3DV4 SN:3820	D2450V2 SN:869	51.00	24.00	Mar. 5, 2013
		Normalize to 1 Watt	51.20	23.60								
Body	2600	250 mW	13.8	6.15	0.019	0.00%	-0.80%	EX3DV4 SN:3898	D2600V2 SN:1007	55.20	24.80	Feb. 27, 2013
		Normalize to 1 Watt	55.20	24.60								
Body	2600	250 mW	13.7	6	0.018	-0.70%	-3.20%	EX3DV4 SN:3898	D2600V2 SN:1007	55.20	24.80	Mar. 01, 2013
		Normalize to 1 Watt	54.80	24.00								
Body	2600	250 mW	14.2	6.3	-0.149	2.90%	1.60%	EX3DV3 SN:3519	D2600V2 SN:1007	55.20	24.80	May 11, 2013
		Normalize to 1 Watt	56.80	25.20								
Body	2600	250 mW	13.6	6.11	-0.116	-1.40%	-1.50%	EX3DV3 SN:3519	D2600V2 SN:1007	55.20	24.80	May 12, 2013
		Normalize to 1 Watt	54.40	24.44								
Body	2600	250 mW	13.4	5.97	-0.029	-2.90%	-3.70%	EX3DV3 SN:3519	D2600V2 SN:1007	55.20	24.80	May 12, 2013
		Normalize to 1 Watt	53.60	23.88								



## 6.4 Validation Summary

Per FCC KDB 865664 D02v01, SAR system validation status should be documented to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles were used with the required tissue- equivalent media for system validation, according to the procedures outlined in IEEE 1528-2003 and FCC KDB 865664 D01v01. Since SAR probe calibrations are frequency dependent, each probe calibration point was validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue-equivalent media.

A tabulated summary of the system validation status including the validation date(s), measurement frequencies, SAR probes and tissue dielectric parameters as below.

Probe Type Model / Serial No.	Prob Cal. Point (MHz)	Head / Body	Cond.	Perm.	CW Validation			Mod. Validation			Date
			$\epsilon_r$	$\sigma$	Sensitivity	Probe	Probe	Mod. Type	Duty Factor	PAR	
						Linearity	Isotropy				
EX3DV4 SN:3820	835	Body	53.86	0.973	Pass	Pass	Pass	GMSK	Pass	N/A	Feb. 24, 2013
EX3DV4 SN:3820	835	Body	53.86	0.973	Pass	Pass	Pass	GMSK	Pass	N/A	Feb. 24, 2013
EX3DV4 SN:3820	835	Body	53.86	0.973	Pass	Pass	Pass	GMSK	Pass	N/A	Feb. 26, 2013
EX3DV4 SN:3820	835	Body	53.86	0.973	Pass	Pass	Pass	GMSK	Pass	N/A	Feb. 27, 2013
EX3DV4 SN:3820	835	Body	53.86	0.973	Pass	Pass	Pass	GMSK	Pass	N/A	Mar. 06, 2013
EX3DV4 SN:3820	1900	Body	53.42	1.507	Pass	Pass	Pass	GMSK	Pass	N/A	Feb. 22, 2013
EX3DV4 SN:3820	1900	Body	53.42	1.507	Pass	Pass	Pass	GMSK	Pass	N/A	Feb. 23, 2013
EX3DV4 SN:3820	1900	Body	53.42	1.507	Pass	Pass	Pass	GMSK	Pass	N/A	Feb. 25, 2013
EX3DV4 SN:3820	1900	Body	53.42	1.507	Pass	Pass	Pass	GMSK	Pass	N/A	Feb. 27, 2013
EX3DV4 SN:3820	1900	Body	53.42	1.507	Pass	Pass	Pass	GMSK	Pass	N/A	Mar. 05, 2013
EX3DV4 SN:3820	2450	Body	51.92	1.964	Pass	Pass	Pass	OFDM	N/A	Pass	Mar. 5, 2013
EX3DV4 SN:3898	2600	Body	51.45	2.116	Pass	Pass	Pass	QPSK	Pass	N/A	Feb. 27, 2013
EX3DV4 SN:3898	2600	Body	52.14	2.243	Pass	Pass	Pass	QPSK	Pass	N/A	Mar. 01, 2013
EX3DV3 SN:3519	2600	Body	52.14	2.243	Pass	Pass	Pass	QPSK	Pass	N/A	May 11, 2013
EX3DV3 SN:3519	2600	Body	52.14	2.243	Pass	Pass	Pass	QPSK	Pass	N/A	May 12, 2013
EX3DV3 SN:3519	2600	Body	51.45	2.116	Pass	Pass	Pass	QPSK	Pass	N/A	May 12, 2013



## 7. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	835MHz System Validation Kit	D835V2	4d082	Jul. 25, 2012	Jul. 25, 2013
SPEAG	1900MHz System Validation Kit	D1900V2	5d111	Jul. 20, 2012	Jul. 20, 2013
SPEAG	2450MHz System Validation Kit	D2450V2	869	Jun. 15, 2012	Jun. 15, 2013
SPEAG	2600MHz System Validation Kit	D2600V2	1007	Sep. 25, 2012	Sep. 25, 2013
SPEAG	Dosimetric E-Field Probe	EX3DV4	3820	Dec. 10, 2012	Dec. 10, 2013
SPEAG	Dosimetric E-Field Probe	EX3DV4	3898	Jan. 14, 2013	Jan. 14, 2014
SPEAG	Dosimetric E-Field Probe	EX3DV3	3519	Feb. 20, 2013	Feb. 20, 2014
SPEAG	Data Acquisition Electronics	DAE4	913	Jan. 17, 2013	Jan. 17, 2014
SPEAG	Data Acquisition Electronics	DAE4	779	Feb. 13, 2013	Feb. 13, 2014
SPEAG	Device Holder	N/A	N/A	NCR	
SPEAG	Measurement Server	SE UMS 011 AA	1025	NCR	
SPEAG	Phantom	SAM V4.0	TP-1150	NCR	
SPEAG	Robot	Staubli TX90XL	F07/564ZA1/C/01	NCR	
SPEAG	Software	DASY5 V5.0 Build 125	N/A	NCR	
SPEAG	Software	SEMCAD V13.4 Build 125	N/A	NCR	
Agilent	Dielectric Probe Kit	85070C	US99360094	NCR	
Agilent	ENA Series Network Analyzer	E5071B	MY42404655	Apr. 05, 2012	Apr. 05, 2014
R&S	Power Sensor	NRP-Z22	100179	May 16, 2012	May 16, 2013
Agilent	MXG Vector Signal Generator	N5182A	MY47420962	May 24, 2012	May 24, 2014
Agilent	Dual Directional Coupler	778D	50334	NCR	
Mini-Circuits	Power Amplifier	ZHL-42W-SMA	D111103#5	NCR	
Mini-Circuits	Power Amplifier	ZVE-8G-SMA	D042005 671800514	NCR	
Aisi	Attenuator	IEAT 3dB	N/A	NCR	

Table 10. Test Equipment List



## 8. **Measurement Uncertainty**

Measurement uncertainties in SAR measurements are difficult to quantify due to several variables including biological, physiological, and environmental. However, we estimate the measurement uncertainties in SAR to be less than  $\pm 19.62\%$  [ 8 ] . The frequency range of the measurement uncertainty is 750 ~ 5800MHz  $\pm 10.1\%$

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

According to CENELEC [ 10 ] , typical worst-case uncertainty of field measurements is  $\pm 5$  dB. For well-defined modulation characteristics the uncertainty can be reduced to  $\pm 3$  dB.





Item	Uncertainty Component	Uncertainty Value	Prob. Dist	Div.	$c_i$ (1g)	$c_i$ (10g)	Std. Unc. (1-g)	Std. Unc. (10-g)	$V_i$ or $V_{eff}$
Measurement System									
u1	Probe Calibration ( $k=1$ )	$\pm 5.05\%$	Normal	1	1	1	$\pm 5.05\%$	$\pm 5.05\%$	$\infty$
u2	Probe Isotropy	$\pm 7.6\%$	Rectangular	$\sqrt{3}$	0.7	0.7	$\pm 3.1\%$	$\pm 3.1\%$	$\infty$
u3	Boundary Effect	$\pm 1.0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.6\%$	$\pm 0.6\%$	$\infty$
u4	Linearity	$\pm 4.7\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 2.7\%$	$\pm 2.7\%$	$\infty$
u5	System Detection Limit	$\pm 1.0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.58\%$	$\pm 0.58\%$	$\infty$
u6	Readout Electronics	$\pm 0.3\%$	Normal	1	1	1	$\pm 0.3\%$	$\pm 0.3\%$	$\infty$
u7	Response Time	$\pm 0.8\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.5\%$	$\pm 0.5\%$	$\infty$
u8	Integration Time	$\pm 2.6\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 1.5\%$	$\pm 1.5\%$	$\infty$
u9	RF Ambient Conditions	$\pm 0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0\%$	$\pm 0\%$	$\infty$
u10	RF Ambient Reflections	$\pm 0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0\%$	$\pm 0\%$	$\infty$
u11	Probe Positioner Mechanical Tolerance	$\pm 0.4\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.2\%$	$\pm 0.2\%$	$\infty$
u12	Probe Positioning with respect to Phantom Shell	$\pm 2.9\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 1.7\%$	$\pm 1.7\%$	$\infty$
u13	Extrapolation, interpolation and integration Algorithms for Max. SAR Evaluation	$\pm 1.0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.6\%$	$\pm 0.6\%$	$\infty$
Test sample Related									
u14	Test sample Positioning	$\pm 3.6\%$	Normal	1	1	1	$\pm 3.6\%$	$\pm 3.6\%$	89
u15	Device Holder Uncertainty	$\pm 3.5\%$	Normal	1	1	1	$\pm 3.5\%$	$\pm 3.5\%$	5
u16	Output Power Variation - SAR drift measurement	$\pm 5.0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 2.9\%$	$\pm 2.9\%$	$\infty$
Phantom and Tissue Parameters									
u17	Phantom Uncertainty ( shape and thickness tolerances)	$\pm 4.0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 2.3\%$	$\pm 2.3\%$	$\infty$
u18	Liquid Conductivity - deviation from target values	$\pm 5.0\%$	Rectangular	$\sqrt{3}$	0.64	0.43	$\pm 1.8\%$	$\pm 1.2\%$	$\infty$
u19	Liquid Conductivity - measurement uncertainty	$\pm 1.93\%$	Normal	1	0.64	0.43	$\pm 1.24\%$	$\pm 0.83\%$	69
u20	Liquid Permittivity - deviation from target values	$\pm 5.0\%$	Rectangular	$\sqrt{3}$	0.6	0.49	$\pm 1.7\%$	$\pm 1.4\%$	$\infty$
u21	Liquid Permittivity - measurement uncertainty	$\pm 1.4\%$	Normal	1	0.6	0.49	$\pm 0.84\%$	$\pm 1.69\%$	69
Combined standard uncertainty			RSS				$\pm 9.81\%$	$\pm 9.62\%$	313
Expanded uncertainty (95% CONFIDENCE LEVEL )			$k=2$				$\pm 19.62\%$	$\pm 19.24\%$	

Table 11. Uncertainty Budget of DASY



## 9. Measurement Procedure

The measurement procedures are as follows:

1. For WLAN function, engineering testing software installed on Notebook can provide continuous transmitting signal.
2. Measure output power through RF cable and power meter
3. Set scan area, grid size and other setting on the DASY software
4. Find out the largest SAR result on these testing positions of each band
5. Measure SAR results for other channels in worst SAR testing position if the SAR of highest power channel is larger than 0.8 W/kg

According to the test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

1. Power reference measurement
2. Area scan
3. Zoom scan
4. Power drift measurement

### 9.1 Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the test standard. It can be conducted for 1g and 10g, as well as for user-specific masses. The DASY software includes all numerical procedures necessary to evaluate the spatial peak SAR value.

The base for the evaluation is a "cube" measurement. The measured volume must include the 1g and 10g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan.

The entire evaluation of the spatial peak values is performed within the post-processing engine (SEMCAD). The system always gives the maximum values for the 1g and 10g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages

1. Extraction of the measured data (grid and values) from the Zoom Scan
2. Calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)
3. Generation of a high-resolution mesh within the measured volume
4. Interpolation of all measured values from the measurement grid to the high-resolution grid
5. Extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface
6. Calculation of the averaged SAR within masses of 1g and 10g



## 9.2 Area & Zoom Scan Procedures

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan measures points and step size follow as below. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g.

Grid Type	Frequency		Step size (mm)			X*Y*Z (Point)	Cube size			Step size		
			X	Y	Z		X	Y	Z	X	Y	Z
uniform grid	≤ 3GHz	≤ 2GHz	≤ 8	≤ 8	≤ 5	5*5*7	32	32	30	8	8	5
		2G - 3G	≤ 5	≤ 5	≤ 5	7*7*7	30	30	30	5	5	5
	3 - 6GHz	3 - 4GHz	≤ 5	≤ 5	≤ 4	7*7*8	30	30	28	5	5	4
		4 - 5GHz	≤ 4	≤ 4	≤ 3	8*8*10	28	28	27	4	4	3
		5 - 6GHz	≤ 4	≤ 4	≤ 2	8*8*12	28	28	22	4	4	2

(Our measure settings are refer KDB Publication 865664 D01v01)

## 9.3 Volume Scan Procedures

The volume scan is used for assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the DUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing. When all volume scan were completed, the software, SEMCAD postprocessor can combine and subsequently superpose these measurement data to calculating the multiband SAR.

## 9.4 SAR Averaged Methods

In DASYS, the interpolation and extrapolation are both based on the modified Quadratic Shepard's method. The interpolation scheme combines a least-square fitted function method and a weighted average method which are the two basic types of computational interpolation and approximation. Extrapolation routines are used to obtain SAR values between the lowest measurement points and the inner phantom surface. The extrapolation distance is determined by the surface detection distance and the probe sensor offset. The uncertainty increases with the extrapolation distance. To keep the uncertainty within 1% for the 1 g and 10 g cubes, the extrapolation distance should not be larger than 5 mm.

## 9.5 Power Drift Monitoring

All SAR testing is under the DUT install full charged battery and transmit maximum output power. In DASYS measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of DUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in dB. If the power drift more than 5%, the SAR will be retested.



## 10. SAR Test Results Summary

### 10.1 Head Measurement SAR

Evaluated head SAR is not available.

### 10.2 Body Measurement SAR

Evaluated body SAR refers to Hot-spot mode measurement results.

### 10.3 Hot-spot mode Measurement SAR

Index	Position	Band	Ch.	Data Rate or Sub-Test	Side to Phantom	Spacing (mm)	SAR <sub>1g</sub> (mW/g)	Power Drift	Burst Avg Power	Source-Time-Avg power (dBm)	Max tune-up	Time-Avg Tune-Up	Reported SAR <sub>1g</sub> (mW/g)
#16	Flat	GPRS 850	128	3D2U	1	10	1.140	-0.025	30.27	24.25	30.5	24.48	1.200
#17	Flat		190	3D2U	1	10	1.250	-0.079	30.19	24.17	30.5	24.48	1.340
#15	Flat		251	3D2U	1	10	1.280	0.013	30.47	24.45	30.5	24.48	1.290
#19	Flat		128	3D2U	2	10	1.080	0.039	30.27	24.25	30.5	24.48	1.140
#20	Flat		190	3D2U	2	10	1.210	-0.042	30.19	24.17	30.5	24.48	1.300
#18	Flat		251	3D2U	2	10	1.240	0.041	30.47	24.45	30.5	24.48	1.250
#21	Flat		251	3D2U	3	10	0.592	-0.057	30.47	24.45	30.5	24.48	0.600
#175	Flat		128	3D2U	4	10	0.756	-0.014	30.27	24.25	30.5	24.48	0.800
#176	Flat		190	3D2U	4	10	0.775	-0.054	30.19	24.17	30.5	24.48	0.830
#22	Flat		251	3D2U	4	10	0.797	-0.054	30.47	24.45	30.5	24.48	0.800
#23	Flat		251	3D2U	6	10	0.051	-0.047	30.47	24.45	30.5	24.48	0.050
#51	Flat		GPRS 1900	512	3D2U	1	10	0.902	0.005	29.32	23.30	30.0	23.98
#52	Flat	661		3D2U	1	10	0.972	-0.001	29.02	23.00	30.0	23.98	1.220
#53	Flat	810		3D2U	1	10	0.960	-0.050	29.22	23.20	30.0	23.98	1.150
#54	Flat	512		3D2U	2	10	1.070	-0.022	29.32	23.30	30.0	23.98	1.250
#55	Flat	661		3D2U	2	10	1.080	-0.013	29.02	23.00	30.0	23.98	1.350
#56	Flat	810		3D2U	2	10	1.020	0.028	29.22	23.20	30.0	23.98	1.220
#57	Flat	512		3D2U	3	10	0.176	0.047	29.32	23.30	30.0	23.98	0.210
#58	Flat	512		3D2U	4	10	0.459	0.032	29.32	23.30	30.0	23.98	0.540
#59	Flat	512		3D2U	6	10	0.747	-0.032	29.32	23.30	30.0	23.98	0.870

Note: 1. According KDB 447498 D01 V05 section 4.1.4, the "Reported" explanation as below:

"When SAR or MPE is measured at or scaled to the maximum tune-up tolerance limit, the results are referred to as reported."

- If actual power less than tune-up power that Scaling SAR is required.
- The formula of Reported SAR, that represent as below:  

$$\text{Reported SAR} = \text{Original SAR} * 10^{[(\text{Tune-up power} - \text{Actual power})/10]}$$
- If the Channel's SAR 1g of maximum conducted power is > 0.8 mW/g, low, middle and high channel are supposed to be tested.
- For (side 5) mode, that WWAN antenna to (side 5) >2.5cm, therefore the WWAN Stand-alone SAR is not required.



Index.	Position	Band	Ch.	Data Rate or Sub-Test	Side to Phantom	Spacing (mm)	SAR <sub>1g</sub> (mW/g)	Power Drift	Burst Avg Power	Max tune-up	Reported SAR <sub>1g</sub> (mW/g)
#2	Flat	WCDMA Band II	9262	---	1	10	0.861	0.143	22.95	23.5	0.980
#1	Flat		9400	---	1	10	1.010	0.001	23.05	23.5	1.120
#3	Flat		9538	---	1	10	0.997	0.011	22.87	23.5	1.150
#5	Flat		9262	---	2	10	0.977	0.001	22.95	23.5	1.110
#4	Flat		9400	---	2	10	1.050	-0.004	23.05	23.5	1.160
#6	Flat		9538	---	2	10	1.030	-0.036	22.87	23.5	1.190
#7	Flat		9400	---	3	10	0.144	-0.020	23.05	23.5	0.160
#8	Flat		9400	---	4	10	0.441	-0.009	23.05	23.5	0.490
#9	Flat		9400	---	6	10	0.686	0.040	23.05	23.5	0.760
#171	Flat	WCDMA Band V	4132	---	1	10	0.689	-0.018	22.95	23.5	0.780
#172	Flat		4183	---	1	10	0.706	-0.055	22.89	23.5	0.810
#10	Flat		4233	---	1	10	0.727	-0.025	23.10	23.5	0.800
#173	Flat		4132	---	2	10	0.757	0.046	22.95	23.5	0.860
#174	Flat		4183	---	2	10	0.776	0.091	22.89	23.5	0.890
#11	Flat		4233	---	2	10	0.799	0.028	23.10	23.5	0.880
#12	Flat		4233	---	3	10	0.339	0.005	23.10	23.5	0.370
#13	Flat		4233	---	4	10	0.493	0.006	23.10	23.5	0.540
#14	Flat		4233	---	6	10	0.033	0.137	23.10	23.5	0.040

- Note: 1. According KDB 447498 D01 V05 section 4.1.4, the "Reported" explanation as below:  
 "When SAR or MPE is measured at or scaled to the maximum tune-up tolerance limit, the results are referred to as reported."  
 2. If actual power less than tune-up power that Scaling SAR is required.  
 3. The formula of Reported SAR, that represent as below:  

$$\text{Reported SAR} = \text{Original SAR} * 10^{[(\text{Tune-up power} - \text{Actual power})/10]}$$
  
 4. If the Channel's SAR 1g of maximum conducted power is > 0.8 mW/g, low, middle and high channel are supposed to be tested.  
 5. For (side 5) mode, that WWAN antenna to (side 5) >2.5cm, therefore the WWAN Stand-alone SAR is not required.  
 6. HSDPA & (HSUPA/HSPA+\_QPSK UpLink) power are not more than WCDMA Band II / WCDMA Band V 0.25dB and the SAR value of WCDMA Band II / WCDMA Band V <1.2 mW/g, therefore HSDPA & HSUPA Stand-alone SAR is not required.



Index.	Position	Band	Ch.	Data Rate or Sub-Test	Side to Phantom	Spacing (mm)	SAR <sub>1g</sub> (mW/g)	Power Drift	Burst Avg Power	Max tune-up	Reported SAR <sub>1g</sub> (mW/g)
#26	Flat	CDMA 800 (BC0)	1013	---	1	10	0.867	-0.020	23.13	23.5	0.940
#24	Flat		384	---	1	10	0.864	0.030	23.18	23.5	0.930
#25	Flat		777	---	1	10	0.831	-0.076	22.96	23.5	0.940
#35	Flat		1013	---	2	10	0.900	0.011	23.13	23.5	0.980
#33	Flat		384	---	2	10	0.905	-0.169	23.18	23.5	0.970
#34	Flat		777	---	2	10	0.874	0.016	22.96	23.5	0.990
#42	Flat		384	---	3	10	0.341	0.032	23.18	23.5	0.370
#45	Flat		384	---	4	10	0.518	0.003	23.18	23.5	0.560
#48	Flat		384	---	6	10	0.030	-0.110	23.18	23.5	0.030
#29	Flat	1xEVDO 800 (BC0) Rev.0	1013	---	1	10	0.851	-0.008	22.62	23.5	1.040
#27	Flat		384	---	1	10	0.863	-0.053	22.65	23.5	1.050
#28	Flat		777	---	1	10	0.810	-0.060	22.52	23.5	1.020
#38	Flat		1013	---	2	10	0.819	-0.017	22.62	23.5	1.000
#36	Flat		384	---	2	10	0.835	-0.103	22.65	23.5	1.020
#37	Flat		777	---	2	10	0.816	-0.050	22.52	23.5	1.020
#43	Flat		384	---	3	10	0.421	0.018	22.65	23.5	0.510
#46	Flat		384	---	4	10	0.560	-0.042	22.65	23.5	0.680
#49	Flat		384	---	6	10	0.031	-0.071	22.65	23.5	0.040
#32	Flat	1xRTT 800 (BC0)	1013	---	1	10	0.838	-0.065	23.01	23.5	0.940
#30	Flat		384	---	1	10	0.810	-0.047	23.06	23.5	0.900
#31	Flat		777	---	1	10	0.736	-0.021	22.86	23.5	0.850
#41	Flat		1013	---	2	10	0.874	-0.011	23.01	23.5	0.980
#39	Flat		384	---	2	10	0.868	0.027	23.06	23.5	0.960
#40	Flat		777	---	2	10	0.763	-0.011	22.86	23.5	0.880
#44	Flat		384	---	3	10	0.404	-0.010	23.06	23.5	0.450
#47	Flat		384	---	4	10	0.581	-0.017	23.06	23.5	0.640
#50	Flat		384	---	6	10	0.029	-0.033	23.06	23.5	0.030

- Note: 1. According KDB 447498 D01 V05 section 4.1.4, the "Reported" explanation as below:  
 "When SAR or MPE is measured at or scaled to the maximum tune-up tolerance limit, the results are referred to as reported."
- If actual power less than tune-up power that Scaling SAR is required.
  - The formula of Reported SAR, that represent as below:  

$$\text{Reported SAR} = \text{Original SAR} * 10^{[(\text{Tune-up power} - \text{Actual power})/10]}$$
  - If the Channel's SAR 1g of maximum conducted power is > 0.8 mW/g, low, middle and high channel are supposed to be tested.
  - Body SAR is measured using Subtype for Rev. 0.
  - SAR for Rev. A, when the maximum average output of each RF channels is less than that measured in Rev. 0.
  - For (side 5) mode, that WWAN antenna to (side 5) >2.5cm, therefore the WWAN Stand-alone SAR is not required



Index.	Position	Band	Ch.	Data Rate or Sub-Test	Side to Phantom	Spacing (mm)	SAR <sub>1g</sub> (mW/g)	Power Drift	Burst Avg Power	Max tune-up	Reported SAR <sub>1g</sub> (mW/g)
#61	Flat	CDMA 1900 (BC1)	25	---	1	10	0.799	-0.009	23.24	23.5	0.850
#60	Flat		600	---	1	10	0.902	0.010	23.11	23.5	0.990
#62	Flat		1175	---	1	10	0.985	-0.161	22.96	23.5	1.120
#67	Flat		25	---	2	10	0.929	0.003	23.24	23.5	0.990
#66	Flat		600	---	2	10	1.030	-0.074	23.11	23.5	1.130
#68	Flat		1175	---	2	10	0.989	-0.012	22.96	23.5	1.120
#72	Flat		25	---	3	10	0.172	-0.046	23.24	23.5	0.180
#74	Flat		25	---	4	10	0.535	-0.024	23.24	23.5	0.570
#77	Flat		25	---	6	10	0.770	-0.034	23.24	23.5	0.820
#76	Flat		600	---	6	10	0.835	-0.022	23.11	23.5	0.910
#78	Flat		1175	---	6	10	0.823	-0.130	22.96	23.5	0.930
#64	Flat		1xEVDO 1900 (BC1) Rev.0	25	---	1	10	0.841	0.027	23.19	23.5
#63	Flat	600		---	1	10	0.993	-0.001	23.16	23.5	1.070
#65	Flat	1175		---	1	10	0.997	0.037	23.07	23.5	1.100
#70	Flat	25		---	2	10	0.816	-0.032	23.19	23.5	0.880
#69	Flat	600		---	2	10	1.020	-0.086	23.16	23.5	1.100
#71	Flat	1175		---	2	10	1.150	0.185	23.07	23.5	1.270
#73	Flat	25		---	3	10	0.185	0.082	23.19	23.5	0.200
#75	Flat	25		---	4	10	0.489	0.102	23.19	23.5	0.530
#80	Flat	25		---	6	10	0.905	0.066	23.19	23.5	0.970
#79	Flat	600		---	6	10	0.792	-0.024	23.16	23.5	0.860
#81	Flat	1175		---	6	10	0.795	-0.086	23.07	23.5	0.880

- Note: 1. According KDB 447498 D01 V05 section 4.1.4, the "Reported" explanation as below:  
 "When SAR or MPE is measured at or scaled to the maximum tune-up tolerance limit, the results are referred to as reported."  
 2. If actual power less than tune-up power that Scaling SAR is required.  
 3. The formula of Reported SAR, that represent as below:  

$$\text{Reported SAR} = \text{Original SAR} * 10^{[(\text{Tune-up power} - \text{Actual power})/10]}$$
  
 4. If the Channel's SAR 1g of maximum conducted power is > 0.8 mW/g, low, middle and high channel are supposed to be tested.  
 5. Body SAR is measured using Subtype for Rev. 0.  
 6. SAR for Rev. A, when the maximum average output of each RF channels is less than that measured in Rev. 0.  
 7. When the maximum average output of each channel is less than ¼ dB higher than that measured in Subtype 0/1 Physical Layer configurations for Rev. 0 the SAR is not required for 1xRTT  
 8. For (side 5) mode, that WWAN antenna to (side 5) >2.5cm, therefore the WWAN Stand-alone SAR is not required



Index.	Position	Band	Ch.	Data Rate or Sub-Test	Side to Phantom	Spacing (mm)	SAR <sub>1g</sub> (mW/g)	Power Drift	Burst Avg Power	Max tune-up	Reported SAR <sub>1g</sub> (mW/g)
#82	Flat	CDMA Sec. 800 (BC10)	450	---	1	10	0.952	0.015	23.20	23.5	1.020
#83	Flat		560	---	1	10	0.930	-0.089	23.11	23.5	1.020
#84	Flat		670	---	1	10	0.914	-0.052	23.09	23.5	1.000
#88	Flat		450	---	2	10	0.969	-0.028	23.20	23.5	1.040
#89	Flat		560	---	2	10	0.948	-0.119	23.11	23.5	1.040
#90	Flat		670	---	2	10	0.948	0.010	23.09	23.5	1.040
#94	Flat		450	---	3	10	0.384	0.049	23.20	23.5	0.410
#96	Flat		450	---	4	10	0.563	0.031	23.20	23.5	0.600
#98	Flat		450	---	6	10	0.034	0.188	23.20	23.5	0.040
#85	Flat	1xEVDO Sec. 800 (BC10) Rev.0	450	---	1	10	0.886	-0.016	22.99	23.5	1.000
#86	Flat		560	---	1	10	0.887	0.014	22.95	23.5	1.010
#87	Flat		670	---	1	10	0.880	-0.044	22.91	23.5	1.010
#91	Flat		450	---	2	10	0.902	0.047	22.99	23.5	1.010
#92	Flat		560	---	2	10	0.905	0.017	22.95	23.5	1.030
#93	Flat		670	---	2	10	0.908	0.008	22.91	23.5	1.040
#95	Flat		450	---	3	10	0.393	-0.031	22.99	23.5	0.440
#97	Flat		450	---	4	10	0.561	-0.017	22.99	23.5	0.630
#99	Flat		450	---	6	10	0.028	-0.044	22.99	23.5	0.030

- Note: 1. According KDB 447498 D01 V05 section 4.1.4, the "Reported" explanation as below:  
 "When SAR or MPE is measured at or scaled to the maximum tune-up tolerance limit, the results are referred to as reported."  
 2. If actual power less than tune-up power that Scaling SAR is required.  
 3. The formula of Reported SAR, that represent as below:  

$$\text{Reported SAR} = \text{Original SAR} * 10^{[(\text{Tune-up power} - \text{Actual power})/10]}$$
  
 4. If the Channel's SAR 1g of maximum conducted power is > 0.8 mW/g, low, middle and high channel are supposed to be tested.  
 5. Body SAR is measured using Subtype for Rev. 0.  
 6. SAR for Rev. A, when the maximum average output of each RF channels is less than that measured in Rev. 0.  
 7. When the maximum average output of each channel is less than ¼ dB higher than that measured in Subtype 0/1 Physical Layer configurations for Rev. 0 the SAR is not required for 1xRTT  
 8. For (side 5) mode, that WWAN antenna to (side 5) >2.5cm, therefore the WWAN Stand-alone SAR is not required





941225 D05 SAR for LTE Devices v02	
Section of KDB 941225 D05	Test Item
5.2.1. QPSK with 1 RB allocation	#103- #111, #120 ~ #128, #137 ~ #145, #152 ~ #160, #168 ~ #170, #183
5.2.2. QPSK with 50% RB allocation	#112- #114, #116 ~ #118, #129 ~ #131, #133 ~ #135, #146-#148, #177-#179
5.2.3. QPSK with 100% RB allocation	#115, #119, #132, #136, #149-#151, #180-#182
5.2.4. Higher order modulations	N/A
5.3. Other channel bandwidth standalone SAR test requirements	N/A

Index	Position	Band	Ch.	BW (MHz)	RB Size	RB Offset	Side to Phantom	Spacing (mm)	SAR <sub>1g</sub> (mW/g)	Power Drift	Burst Avg Power	Max tune-up	Reported SAR <sub>1g</sub> (mW/g)
#103	Flat	LTE Band 25 (QPSK)	26090	10	1	0	1	10	0.750	0.009	22.51	23.0	0.840
#104	Flat		26365	10	1	0	1	10	0.962	0.046	22.49	23.0	1.082
#105	Flat		26640	10	1	0	1	10	1.090	-0.021	22.48	23.0	1.229
#106	Flat		26090	10	1	0	2	10	0.907	0.010	22.51	23.0	1.015
#107	Flat		26365	10	1	0	2	10	1.050	0.046	22.49	23.0	1.181
#108	Flat		26640	10	1	0	2	10	1.260	-0.048	22.48	23.0	1.420
#109	Flat		26090	10	1	0	3	10	0.160	0.058	22.51	23.0	0.179
#110	Flat		26090	10	1	0	4	10	0.389	0.002	22.51	23.0	0.435
#111	Flat		26090	10	1	0	6	10	0.610	0.050	22.51	23.0	0.683
#112	Flat		26090	10	25	0	1	10	0.676	0.060	21.63	---	0.676
#113	Flat		26365	10	25	0	1	10	0.831	0.043	21.6	---	0.831
#114	Flat		26640	10	25	0	1	10	0.870	0.017	21.58	---	0.870
#116	Flat		26090	10	25	0	2	10	0.704	-0.015	21.63	---	0.704
#117	Flat		26365	10	25	0	2	10	0.839	-0.013	21.6	---	0.839
#118	Flat		26640	10	25	0	2	10	0.920	-0.049	21.58	---	0.920
#115	Flat		26090	10	50	0	1	10	0.689	-0.019	21.55	---	0.689
#119	Flat		26090	10	50	0	2	10	0.708	0.010	21.55	---	0.708

- Note: 1. According KDB 447498 D01 V05 section 4.1.4, the "Reported" explanation as below:  
 "When SAR or MPE is measured at or scaled to the maximum tune-up tolerance limit, the results are referred to as reported."
- If actual power less than tune-up power that Scaling SAR is required.
  - The formula of Reported SAR, that represent as below:  

$$\text{Reported SAR} = \text{Original SAR} * 10^{[(\text{Tune-up power} - \text{Actual power})/10]}$$
  - Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
  - According to 5.3 of KDB 941225 D05, that about the test reduction for other channel bandwidth, if the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is > ½ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg, then SAR need to test.
  - For (side 5) mode, that WWAN antenna to (side 5) >2.5cm, therefore the WWAN Stand-alone SAR is not required



Index.	Position	Band	Ch.	BW (MHz)	RB Size	RB Offset	Side to Phantom	Spacing (mm)	SAR <sub>1g</sub> (mW/g)	Power Drift	Burst Avg Power	Max tune-up	Reported SAR <sub>1g</sub> (mW/g)
#120	Flat	LTE Band 26 (QPSK)	26770	10	1	0	1	10	0.848	0.015	22.72	23.5	1.015
#121	Flat		26865	10	1	0	1	10	0.831	-0.050	22.60	23.5	1.022
#122	Flat		26990	10	1	0	1	10	0.846	-0.004	22.57	23.5	1.048
#123	Flat		26770	10	1	0	2	10	0.882	-0.171	22.72	23.5	1.056
#124	Flat		26865	10	1	0	2	10	0.838	-0.028	22.60	23.5	1.031
#125	Flat		26990	10	1	0	2	10	0.852	0.018	22.57	23.5	1.055
#126	Flat		26770	10	1	0	3	10	0.398	-0.007	22.72	23.5	0.476
#127	Flat		26770	10	1	0	4	10	0.608	-0.008	22.72	23.5	0.728
#128	Flat		26770	10	1	0	6	10	0.033	0.140	22.72	23.5	0.039
#129	Flat		26770	10	25	0	1	10	0.642	-0.012	21.74	---	0.642
#130	Flat		26865	10	25	0	1	10	0.674	-0.013	21.69	---	0.674
#131	Flat		26990	10	25	0	1	10	0.700	-0.009	21.64	---	0.700
#133	Flat		26770	10	25	0	2	10	0.651	0.014	21.59	---	0.629
#134	Flat		26865	10	25	0	2	10	0.676	-0.030	21.74	---	0.651
#135	Flat		26990	10	25	0	2	10	0.692	0.005	21.69	---	0.676
#132	Flat		26770	10	50	0	1	10	0.629	0.045	21.64	---	0.692
#136	Flat		26770	10	50	0	2	10	0.635	-0.060	21.59	---	0.635

- Note: 1. According KDB 447498 D01 V05 section 4.1.4, the "Reported" explanation as below:  
 "When SAR or MPE is measured at or scaled to the maximum tune-up tolerance limit, the results are referred to as reported."
- If actual power less than tune-up power that Scaling SAR is required.
  - The formula of Reported SAR, that represent as below:  

$$\text{Reported SAR} = \text{Original SAR} * 10^{[(\text{Tune-up power} - \text{Actual power})/10]}$$
  - Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
  - According to 5.3 of KDB 941225 D05, that about the test reduction for other channel bandwidth, if the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is > ½ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg, then SAR need to test.
  - For (side 5) mode, that WWAN antenna to (side 5) >2.5cm, therefore the WWAN Stand-alone SAR is not required



Index.	Position	Band	Ch.	BW (MHz)	RB Size	RB Offset	Side to Phantom	Spacing (mm)	SAR <sub>1g</sub> (mW/g)	Power Drift	Burst Avg Power	Max tune-up	Reported SAR <sub>1g</sub> (mW/g)
#138	Flat	LTE Band 41 (QPSK) Config 1	39750	20	1	99	1	10	1.300	0.140	22.33	22.5	1.352
#137	Flat		40620	20	1	99	1	10	1.190	0.058	22.40	22.5	1.218
#139	Flat		41490	20	1	0	1	10	1.390	0.115	22.38	22.5	1.429
#141	Flat		39750	20	1	99	2	10	0.543	-0.037	22.33	22.5	0.565
#140	Flat		40620	20	1	99	2	10	0.444	-0.176	22.40	22.5	0.454
#142	Flat		41490	20	1	0	2	10	0.539	0.187	22.38	22.5	0.554
#143	Flat		40620	20	1	99	3	10	0.077	-0.081	22.40	22.5	0.079
#144	Flat		40620	20	1	99	4	10	0.124	-0.144	22.40	22.5	0.127
#145	Flat		40620	20	1	99	6	10	0.017	-0.172	22.40	22.5	0.017
#147	Flat		39750	20	50	49	1	10	0.859	0.121	21.03	---	0.859
#146	Flat		40620	20	50	49	1	10	0.833	0.129	21.44	---	0.833
#148	Flat		41490	20	50	0	1	10	0.972	0.113	21.06	---	0.972
#150	Flat		39750	20	100	0	1	10	0.847	-0.012	20.82	---	0.847
#149	Flat		40620	20	100	0	1	10	0.862	-0.187	21.21	---	0.862
#151	Flat		41490	20	100	0	1	10	0.896	0.104	21.02	---	0.896

- Note: 1. According KDB 447498 D01 V05 section 4.1.4, the "Reported" explanation as below:  
 "When SAR or MPE is measured at or scaled to the maximum tune-up tolerance limit, the results are referred to as reported."
2. If actual power less than tune-up power that Scaling SAR is required.
  3. The formula of Reported SAR, that represent as below:  

$$\text{Reported SAR} = \text{Original SAR} * 10^{[(\text{Tune-up power} - \text{Actual power})/10]}$$
  4. Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
  5. According to 5.3 of KDB 941225 D05, that about the test reduction for other channel bandwidth, if the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is > ½ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg, then SAR need to test.
  6. For (side 5) mode, that WWAN antenna to (side 5) >2.5cm, therefore the WWAN Stand-alone SAR is not required



Index.	Position	Band	Ch.	BW (MHz)	RB Size	RB Offset	Side to Phantom	Spacing (mm)	SAR <sub>1g</sub> (mW/g)	Power Drift	Burst Avg Power	Max tune-up	Reported SAR <sub>1g</sub> (mW/g)
#152	Flat	LTE Band 41 (QPSK) Config 0	41490	20	1	49	1	10	1.230	0.097	21.14	21.5	1.336
#153	Flat		40620	20	1	49	1	10	1.120	0.141	20.79	21.5	1.319
#154	Flat		39750	20	1	49	1	10	1.210	0.029	20.75	21.5	1.438
#155	Flat		41490	20	1	49	2	10	0.511	-0.176	21.14	21.5	0.555
#156	Flat		40620	20	1	49	2	10	0.518	0.110	20.79	21.5	0.610
#157	Flat		39750	20	1	49	2	10	0.535	-0.073	20.75	21.5	0.636
#158	Flat		41490	20	1	49	3	10	0.110	-0.025	21.14	21.5	0.120
#159	Flat		41490	20	1	49	4	10	0.186	0.113	21.14	21.5	0.202
#160	Flat		41490	20	1	49	6	10	0.011	-0.193	21.14	21.5	0.012
#177	Flat		41490	20	50	0	1	10	1.150	0.191	21.27	21.5	1.150
#178	Flat		40620	20	50	25	1	10	0.932	-0.065	20.80	---	0.932
#179	Flat		39750	20	50	25	1	10	0.961	0.025	20.70	---	0.961
#180	Flat		41490	20	100	0	1	10	0.975	0.121	20.85	---	0.975
#181	Flat		40620	20	100	0	1	10	0.935	0.128	20.61	---	0.935
#182	Flat		39750	20	100	0	1	10	0.943	0.120	20.47	---	0.943

- Note: 1. According KDB 447498 D01 V05 section 4.1.4, the "Reported" explanation as below:  
 "When SAR or MPE is measured at or scaled to the maximum tune-up tolerance limit, the results are referred to as reported."
- If actual power less than tune-up power that Scaling SAR is required.
  - The formula of Reported SAR, that represent as below:  

$$\text{Reported SAR} = \text{Original SAR} * 10^{[(\text{Tune-up power} - \text{Actual power})/10]}$$
  - Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
  - According to 5.3 of KDB 941225 D05, that about the test reduction for other channel bandwidth, if the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is > ½ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg, then SAR need to test.
  - For (side 5) mode, that WWAN antenna to (side 5) >2.5cm, therefore the WWAN Stand-alone SAR is not required



Index.	Position	Band	Ch.	Data Rate or Sub-Test	Side to Phantom	Spacing (mm)	SAR <sub>1g</sub> (mW/g)	Power Drift	Burst Avg Power	Max tune-up	Reported SAR <sub>1g</sub> (mW/g)
#100	Flat	IEEE 802.11b	01	1M	1	10	0.024	0.182	15.82	15.82	0.024
#101	Flat		01	1M	2	10	0.036	-0.097	15.82	15.82	0.036
#102	Flat		01	1M	3	10	0.040	0.174	15.82	15.82	0.040

- Note: 1. According KDB 447498 D01 V05 section 4.1.4, the "Reported" explanation as below:  
 "When SAR or MPE is measured at or scaled to the maximum tune-up tolerance limit, the results are referred to as reported."
- If actual power less than tune-up power that Scaling SAR is required.
  - The formula of Reported SAR, that represent as below:  

$$\text{Reported SAR} = \text{Original SAR} * 10^{[(\text{Tune-up power} - \text{Actual power})/10]}$$
  - If the Channel's SAR 1g of maximum conducted power is > 0.8 mW/g, low, middle and high channel are supposed to be tested.
  - If the conducted power of (IEEE 802.11g / IEEE 802.11n) are higher than IEEE 802.11b 0.25dB, (IEEE 802.11g / IEEE 802.11n) are supposed to be tested.
  - For (side 4, 5, 6) mode, that WLAN antenna to edge >2.5cm, therefore the WLAN Stand-alone SAR is not required



## 10.4 Extremity Measurement SAR

Evaluated extremity SAR is not available.

## 10.5 SAR Measurement Variability

Detailed evaluations please refer KDB 865664 on "SAR test reduction according to KDB" section.

Index.	Position	Band	Ch.	Side to Phantom	Spacing (mm)	SAR <sub>1g</sub> (mW/g)	Power Drift	Burst Avg Power	Source-Time-Avg power (dBm)	Max tune-up	Time-Avg Tune-Up	Reported SAR <sub>1g</sub> (mW/g)	Repeated measurement Ratio
#163	Flat	GPRS 850 (3D2U)	190	1	0	1.230	-0.069	30.19	24.17	30.5	24.48	1.320	1.02 < 1.2
#166	Flat	GPRS 1900 (3D2U)	661	2	0	1.080	-0.011	29.02	23.00	30.0	23.98	1.350	1.00 < 1.2
#161	Flat	WCDMA Band II	9538	2	0	1.010	-0.015	22.87	---	23.5	---	1.170	1.02 < 1.2
#162	Flat	WCDMA Band V	4183	2	0	0.766	0.038	23.10	---	23.5	---	0.840	1.01 < 1.2
#164	Flat	1xEVDO 850 (BC0) Rev.0	384	1	0	0.861	-0.041	22.65	---	23.5	---	1.050	1.00 < 1.2
#165	Flat	1xEVDO 1900 (BC1) Rev.0	1175	2	0	1.160	0.166	23.07	---	23.5	---	1.160	1.01 < 1.2
#167	Flat	CDMA Sec.850 (BC10)	450	2	0	0.966	-0.021	23.20	---	23.5	---	1.040	1.00 < 1.2

Index.	Position	Band	Ch.	BW (MHz)	RB Size	RB Offset	Side to Phantom	Spacing (mm)	SAR <sub>1g</sub> (mW/g)	Power Drift	Burst Avg Power	Max tune-up	Reported SAR <sub>1g</sub> (mW/g)	Repeated measurement Ratio
#168	Flat	LTE Band 25 (QPSK)	26640	10	1	0	2	10	1.260	-0.027	22.48	23.0	1.420	1.00 < 1.2
#169	Flat	LTE Band 26 (QPSK)	26770	10	1	0	2	10	0.878	-0.103	22.72	23.5	1.051	
#170	Flat	LTE Band 41 (QPSK) Config 1	41490	20	1	0	1	10	1.350	0.136	22.38	22.5	1.388	1.03 < 1.2
#183	Flat	LTE Band 41 (QPSK) Config 0	39750	20	1	49	1	10	1.180	0.070	20.75	21.5	1.402	

- Note: 1. According KDB 447498 D01 V05 section 4.1.4, the "Reported" explanation as below:  
 "When SAR or MPE is measured at or scaled to the maximum tune-up tolerance limit, the results are referred to as reported."  
 2. If actual power less than tune-up power that Scaling SAR is required.  
 3. The formula of Reported SAR, that represent as below:  

$$\text{Reported SAR} = \text{Original SAR} * 10^{[(\text{Tune-up power} - \text{Actual power})/10]}$$
  
 4. The original highest measured SAR is  $\geq 0.80$  W/kg, repeat that measurement once.  
 5. Perform a second repeated measurement the ratio of largest to smallest SAR for the original and first repeated measurements is  $< 1.2$ , the original or repeated measurement is  $\geq 1.45$  W/kg (~ 10% from the 1-g SAR limit).



## 10.6 Std. C95.1-1999 RF Exposure Limit

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

Table 12. Safety Limits for Partial Body Exposure

### Notes :

- \* The Spatial Peak value of the SAR averaged over any 1 gram of tissue.  
( defined as a tissue volume in the shape of a cube ) and over the appropriate averaging time.
- \*\* The Spatial Average value of the SAR averaged over the whole – body.
- \*\*\* The Spatial Average value of the SAR averaged over the partial – body.
- \*\*\*\* The Spatial Peak value of the SAR averaged over any 10 grams of tissue.  
( defined as a tissue volume in the shape of a cube ) and over the appropriate averaging time.

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

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

## 11. Conclusion

The SAR test values found for the portable mobile phone **Netgear Incorporated Model(s) : AirCard 771S** is below the maximum recommended level of 1.6 W/kg (mW/g).

## 12. References

- [1] Std. C95.1-1999, "American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 300KHz to 100GHz", New York.
- [2] NCRP, National Council on Radiation Protection and Measurements, "Biological Effects and Exposure Criteria for Radio frequency Electromagnetic Fields", NCRP report NO. 86, 1986.
- [3] T. Schmid, O. Egger, and N. Kuster, "Automatic E-field scanning system for dosimetric assessments", IEEE Transactions on Microwave Theory and Techniques, vol. 44, pp, 105-113, Jan. 1996.
- [4] K. Pokovi<sup>c</sup>, T. Schmid, and N. Kuster, "Robust setup for precise calibration of E-field probes in tissue simulating liquids at mobile communications frequency", in ICECOM'97, Dubrovnik, October 15-17, 1997, pp.120-124.
- [5] K. Pokovi<sup>c</sup>, T. Schmid, and N. Kuster, "E-field probe with improved isotropy in brain simulating liquids", in Proceedings of the ELMAR, Zadar, Croatia, 23-25 June, 1996, pp.172-175.
- [6] N. Kuster, and Q. Balzano, "Energy absorption mechanism by biological bodies in the near field of dipole antennas above 300MHz", IEEE Transaction on Vehicular Technology, vol. 41, no. 1, Feb. 1992, pp. 17-23.
- [7] Robert J. Renka, "Multivariate Interpolation Of Large Sets Of Scattered Data", University of North Texas ACM Transactions on Mathematical Software, vol. 14, no. 2, June 1988 , pp. 139-148.
- [8] N. Kuster, R. Kastle, T. Schmid, Dosimetric evaluation of mobile communications equipment with known precision, IEEE Transaction on Communications, vol. E80-B, no. 5, May 1997, pp. 645-652.
- [9] Std. C95.3-1991, "IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields – RF and Microwave, New York: IEEE, Aug. 1992.
- [10] CENELEC CLC/SC111B, European Prestandard (prENV 50166-2), Human Exposure to Electromagnetic Fields High-frequency: 10KHz-300GHz, Jan. 1995.
- [11] IEEE Std 1528<sup>TM</sup>-2003 - IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head From Wireless Communications Devices: Measurement Techniques
- [12] IEEE Std 1528a<sup>TM</sup>-2005 (Amendment to IEEE Std 1528<sup>TM</sup>-2003), IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques

## 13. SAR Measurement Guidance

- [1] KDB 865664 D01 SAR measurement 100 MHz to 6 GHz v01
- [2] KDB 447498 D01 General RF Exposure Guidance v05
- [3] KDB 248227 D01 SAR meas for 802 11 a b g v01r02.
- [4] KDB 648474 D01 SAR Handsets Multi Xmitter and Ant v01r05
- [5] KDB 941225 D01 SAR test for 3G devices v02
- [6] KDB 941225 D02 Guidance PBA for 3GPP R6 HSPA v02r01
- [7] KDB 941225 D03 SAR Test Reduction GSM GPRS EDGE vo1
- [8] KDB 941225 D05 SAR for LTE Devices v02r01
- [9] KDB 941225 D06 Hot Spot SAR v01





## Appendix A - System Performance Check

Test Laboratory: A Test Lab Techno Corp.

Date/Time: 2/24/2013 12:55:07 AM

System Performance Check at 835MHz\_20130224\_Body

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d082

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

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.973$  mho/m;  $\epsilon_r = 53.86$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

System Performance Check at 835MHz/Area Scan (61x121x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 3.11 mW/g

System Performance Check at 835MHz/Zoom Scan (7x7x7)/Cube 0:

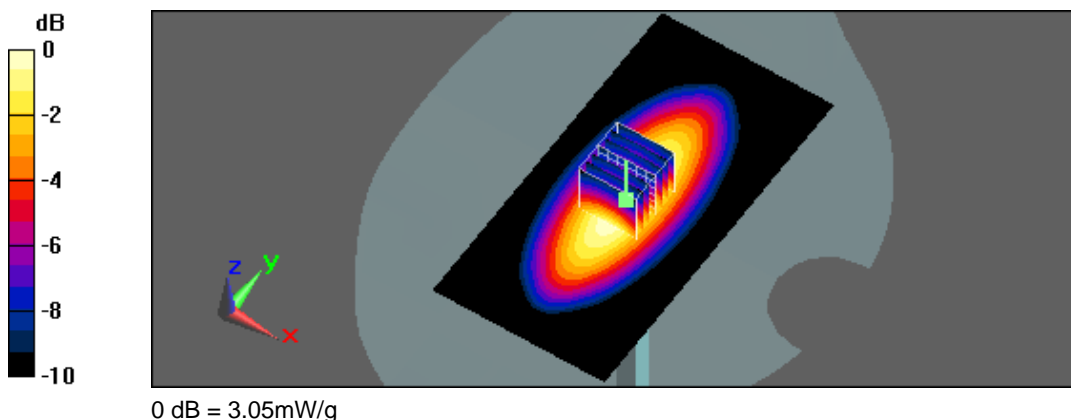
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 58 V/m; Power Drift = 0.00939 dB

Peak SAR (extrapolated) = 3.54 W/kg

SAR(1 g) = 2.43 mW/g; SAR(10 g) = 1.62 mW/g

Maximum value of SAR (measured) = 3.05 mW/g





Test Laboratory: A Test Lab Techno Corp.

Date/Time: 2/24/2013 11:48:39 PM

System Performance Check at 835MHz\_20130224\_Body

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d082

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

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.973 \text{ mho/m}$ ;  $\epsilon_r = 53.86$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

System Performance Check at 835MHz/Area Scan (61x121x1):

Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 2.98 mW/g

System Performance Check at 835MHz/Zoom Scan (7x7x7)/Cube 0:

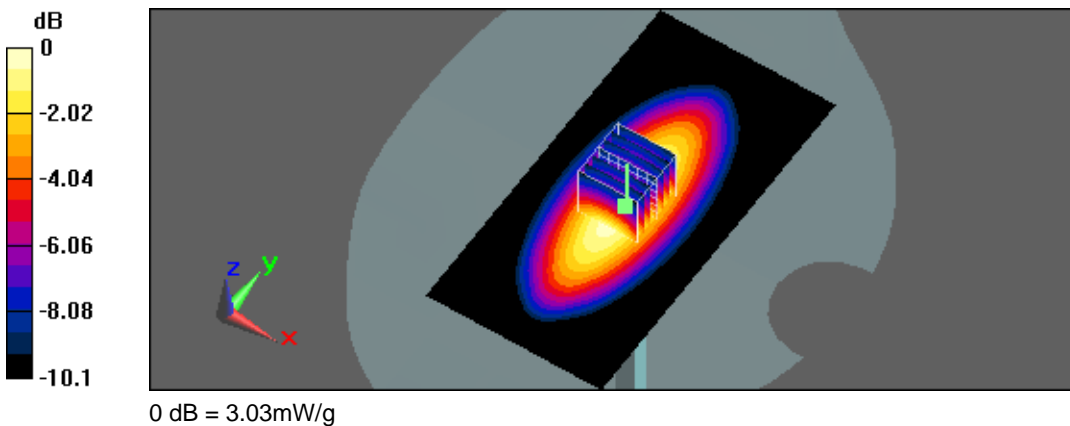
Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 56.9 V/m; Power Drift = -0.012 dB

Peak SAR (extrapolated) = 3.51 W/kg

SAR(1 g) = 2.41 mW/g; SAR(10 g) = 1.6 mW/g

Maximum value of SAR (measured) = 3.03 mW/g





Test Laboratory: A Test Lab Techno Corp.

Date/Time: 2/26/2013 2:32:23 AM

System Performance Check at 835MHz\_20130226\_Body

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d082

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

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.973$  mho/m;  $\epsilon_r = 53.86$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

System Performance Check at 835MHz/Area Scan (61x121x1):

Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (interpolated) = 3.05 mW/g

System Performance Check at 835MHz/Zoom Scan (7x7x7)/Cube 0:

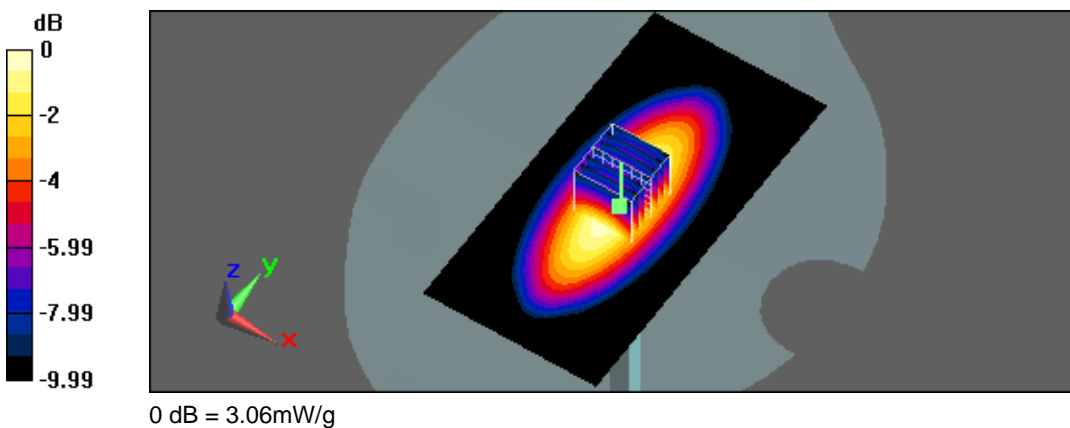
Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 57.3 V/m; Power Drift = -0.00527 dB

Peak SAR (extrapolated) = 3.55 W/kg

SAR(1 g) = 2.44 mW/g; SAR(10 g) = 1.62 mW/g

Maximum value of SAR (measured) = 3.06 mW/g





Test Laboratory: A Test Lab Techno Corp.

Date/Time: 2/27/2013 2:51:48 PM

System Performance Check at 835MHz\_20130227\_Body

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d082

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

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.973$  mho/m;  $\epsilon_r = 53.86$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

System Performance Check at 835MHz/Area Scan (61x121x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 3.03 mW/g

System Performance Check at 835MHz/Zoom Scan (7x7x7)/Cube 0:

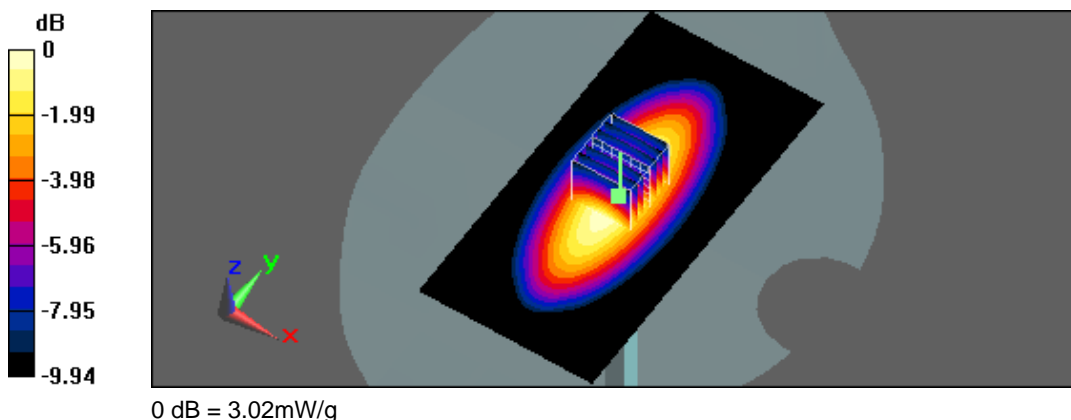
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 57.3 V/m; Power Drift = -0.012 dB

Peak SAR (extrapolated) = 3.52 W/kg

SAR(1 g) = 2.42 mW/g; SAR(10 g) = 1.61 mW/g

Maximum value of SAR (measured) = 3.02 mW/g





Test Laboratory: A Test Lab Techno Corp.

Date/Time: 3/6/2013 3:38:49 AM

System Performance Check at 835MHz\_20130306\_Body

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d082

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

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.982$  mho/m;  $\epsilon_r = 54.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

System Performance Check at 835MHz/Area Scan (61x121x1):

Measurement grid: dx=15mm, dy=15mm

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

System Performance Check at 835MHz/Zoom Scan (7x7x7)/Cube 0:

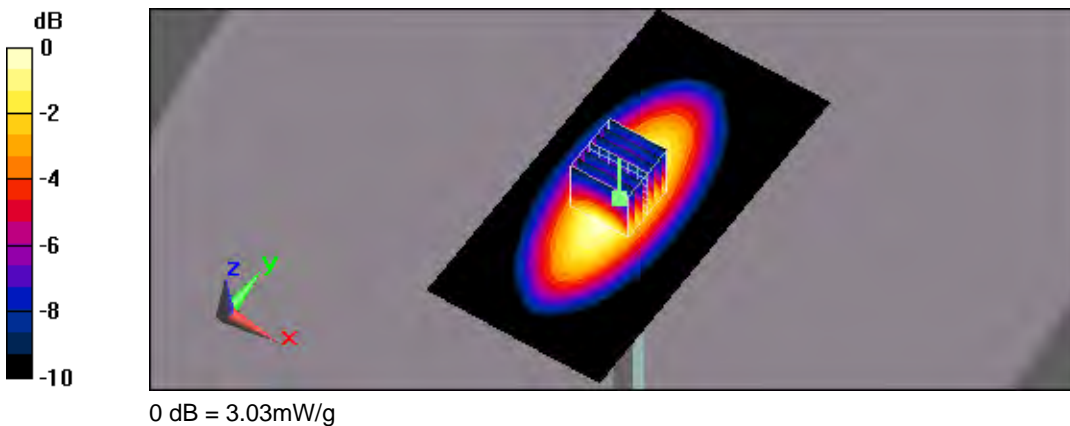
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 56.7 V/m; Power Drift = -0.130 dB

Peak SAR (extrapolated) = 3.51 W/kg

SAR(1 g) = 2.42 mW/g; SAR(10 g) = 1.61 mW/g

Maximum value of SAR (measured) = 3.03 mW/g





Test Laboratory: A Test Lab Techno Corp.

Date/Time: 2/22/2013 9:29:22 PM

System Performance Check at 1900MHz\_20130222\_Body

DUT: Dipole D1900V2\_SN5d111; Type: D1900V2; Serial: D1900V2 - SN:5d111

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

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.507$  mho/m;  $\epsilon_r = 53.42$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

System Performance Check at 1900MHz/Area Scan (61x61x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 13.5 mW/g

System Performance Check at 1900MHz/Zoom Scan (7x7x7)/Cube 0:

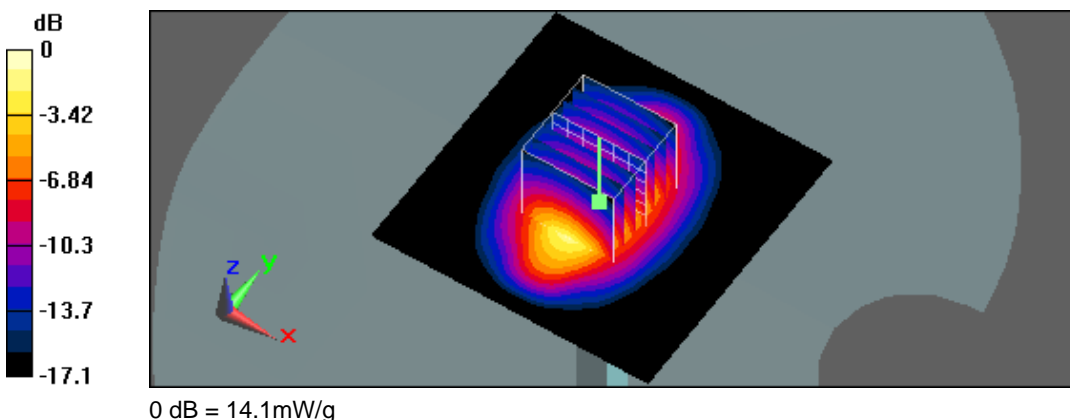
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 96.9 V/m; Power Drift = 0.0026 dB

Peak SAR (extrapolated) = 17.6 W/kg

SAR(1 g) = 9.84 mW/g; SAR(10 g) = 5.13 mW/g

Maximum value of SAR (measured) = 14.1 mW/g





Test Laboratory: A Test Lab Techno Corp.

Date/Time: 2/23/2013 8:01:35 PM

System Performance Check at 1900MHz\_20130223\_Body

DUT: Dipole D1900V2\_SN5d111; Type: D1900V2; Serial: D1900V2 - SN:5d111

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

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.507$  mho/m;  $\epsilon_r = 53.42$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

System Performance Check at 1900MHz/Area Scan (61x61x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 13.9 mW/g

System Performance Check at 1900MHz/Zoom Scan (7x7x7)/Cube 0:

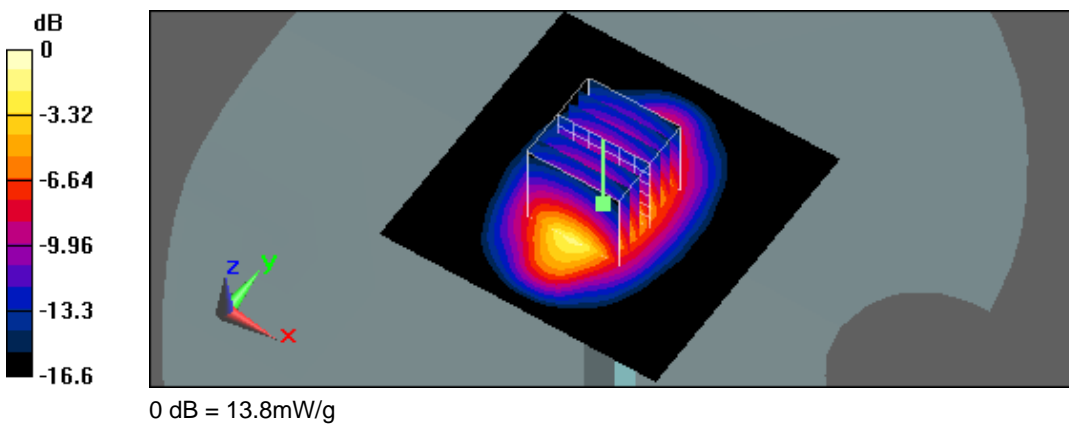
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 98 V/m; Power Drift = -0.00585 dB

Peak SAR (extrapolated) = 17.1 W/kg

SAR(1 g) = 9.79 mW/g; SAR(10 g) = 5.19 mW/g

Maximum value of SAR (measured) = 13.8 mW/g





Test Laboratory: A Test Lab Techno Corp.

Date/Time: 2/25/2013 2:48:08 AM

System Performance Check at 1900MHz\_20130225\_Body

DUT: Dipole D1900V2\_SN5d111; Type: D1900V2; Serial: D1900V2 - SN:5d111

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

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.507$  mho/m;  $\epsilon_r = 53.42$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

System Performance Check at 1900MHz/Area Scan (61x61x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 13.3 mW/g

System Performance Check at 1900MHz/Zoom Scan (7x7x7)/Cube 0:

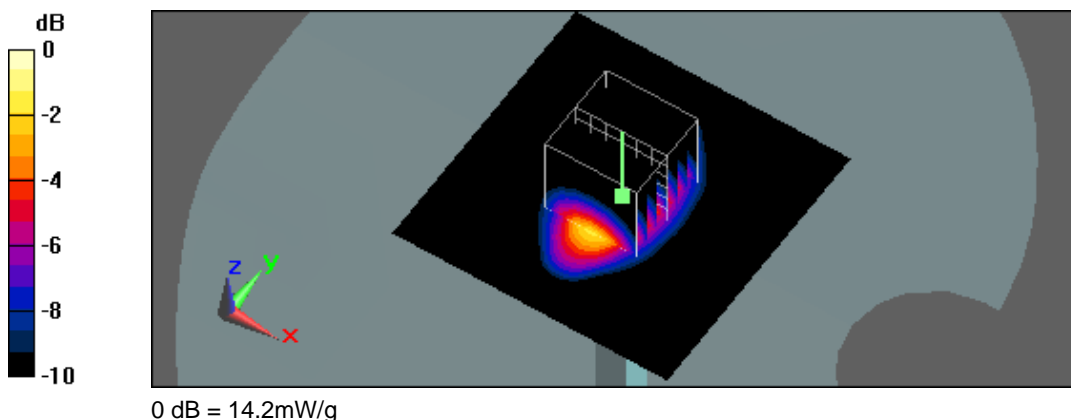
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 96.4 V/m; Power Drift = -0.029 dB

Peak SAR (extrapolated) = 17.7 W/kg

SAR(1 g) = 10 mW/g; SAR(10 g) = 5.29 mW/g

Maximum value of SAR (measured) = 14.2 mW/g







Test Laboratory: A Test Lab Techno Corp.

Date/Time: 2/27/2013 10:53:53 AM

System Performance Check at 1900MHz\_20130227\_Body

DUT: Dipole D1900V2\_SN5d111; Type: D1900V2; Serial: D1900V2 - SN:5d111

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

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.507$  mho/m;  $\epsilon_r = 53.42$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

System Performance Check at 1900MHz/Area Scan (61x61x1):

Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Maximum value of SAR (interpolated) = 15.1 mW/g

System Performance Check at 1900MHz/Zoom Scan (7x7x7)/Cube 0:

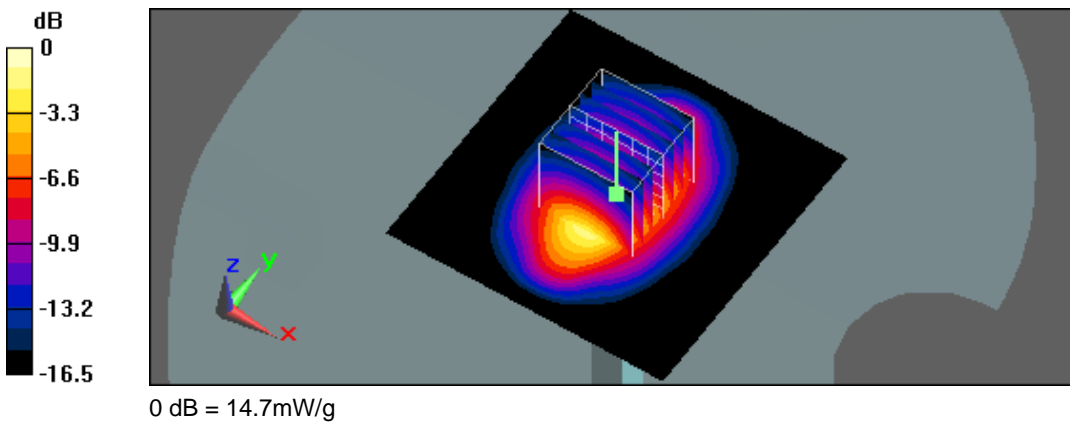
Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 102.8 V/m; Power Drift = -0.144 dB

Peak SAR (extrapolated) = 18.4 W/kg

SAR(1 g) = 10.3 mW/g; SAR(10 g) = 5.42 mW/g

Maximum value of SAR (measured) = 14.7 mW/g





Test Laboratory: A Test Lab Techno Corp.

Date/Time: 3/5/2013 12:04:38 PM

System Performance Check at 1900MHz\_20130305\_Body

DUT: Dipole D1900V2\_SN5d111; Type: D1900V2; Serial: D1900V2 - SN:5d111

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

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.507$  mho/m;  $\epsilon_r = 53.42$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

System Performance Check at 1900MHz/Area Scan (61x61x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 14.7 mW/g

System Performance Check at 1900MHz/Zoom Scan (7x7x7)/Cube 0:

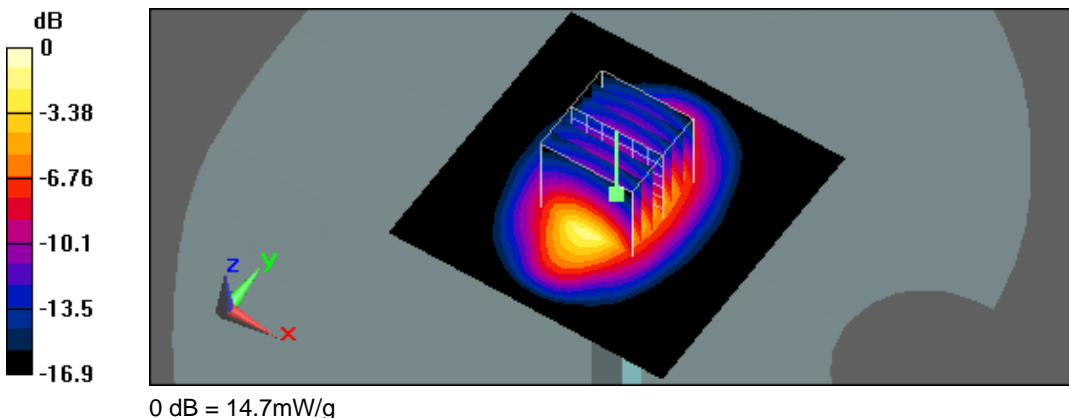
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 101.5 V/m; Power Drift = -0.056 dB

Peak SAR (extrapolated) = 18.5 W/kg

SAR(1 g) = 10.3 mW/g; SAR(10 g) = 5.35 mW/g

Maximum value of SAR (measured) = 14.7 mW/g





Test Laboratory: A Test Lab Techno Corp.

Date/Time: 3/5/2013 7:01:01 PM

System Performance Check at 2450MHz\_20130305\_Body

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:869

Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.964$  mho/m;  $\epsilon_r = 51.92$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(6.84, 6.84, 6.84); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

System Performance Check at 2450MHz/Area Scan (61x61x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 19.4 mW/g

System Performance Check at 2450MHz/Zoom Scan (7x7x7)/Cube 0:

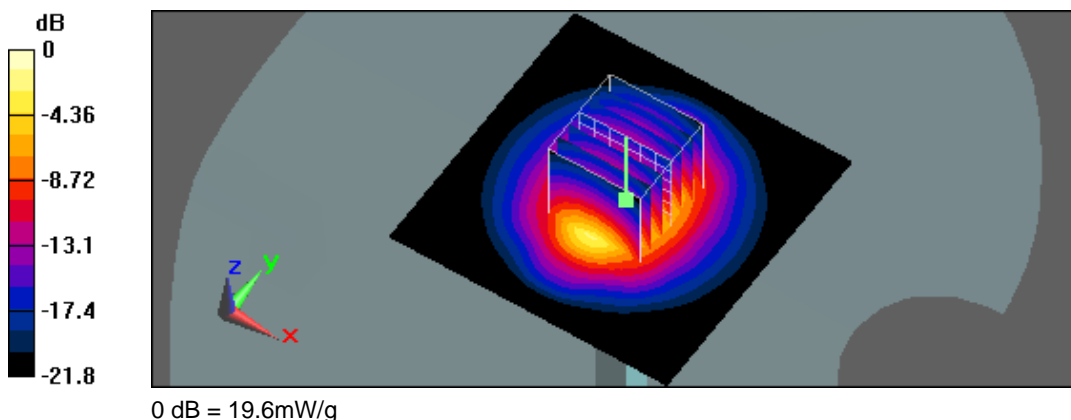
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 100.7 V/m; Power Drift = -0.109 dB

Peak SAR (extrapolated) = 26.5 W/kg

SAR(1 g) = 12.8 mW/g; SAR(10 g) = 5.9 mW/g

Maximum value of SAR (measured) = 19.6 mW/g





Test Laboratory: A Test Lab Techno Corp.

Date/Time: 2/28/2013 5:44:05 AM

System Performance Check at 2600MHz\_20130227\_Body

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1007

Communication System: CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.116$  mho/m;  $\epsilon_r = 51.45$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3898; ConvF(6.99, 6.99, 6.99); Calibrated: 1/14/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

System Performance Check at 2600MHz/Area Scan (61x61x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 22.6 mW/g

System Performance Check at 2600MHz/Zoom Scan (7x7x7)/Cube 0:

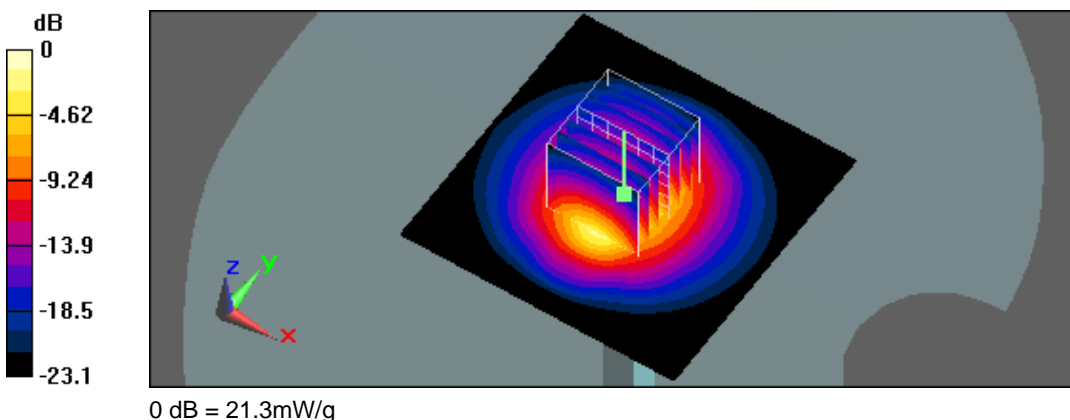
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 104.0 V/m; Power Drift = 0.019 dB

Peak SAR (extrapolated) = 29.3 W/kg

SAR(1 g) = 13.8 mW/g; SAR(10 g) = 6.15 mW/g

Maximum value of SAR (measured) = 21.3 mW/g





Test Laboratory: A Test Lab Techno Corp.

Date/Time: 3/1/2013 12:38:40 AM

System Performance Check at 2600MHz\_20130301\_Body

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1007

Communication System: CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.243$  mho/m;  $\epsilon_r = 52.14$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3898; ConvF(6.99, 6.99, 6.99); Calibrated: 1/14/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

System Performance Check at 2600MHz/Area Scan (61x61x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 21.5 mW/g

System Performance Check at 2600MHz/Zoom Scan (7x7x7)/Cube 0:

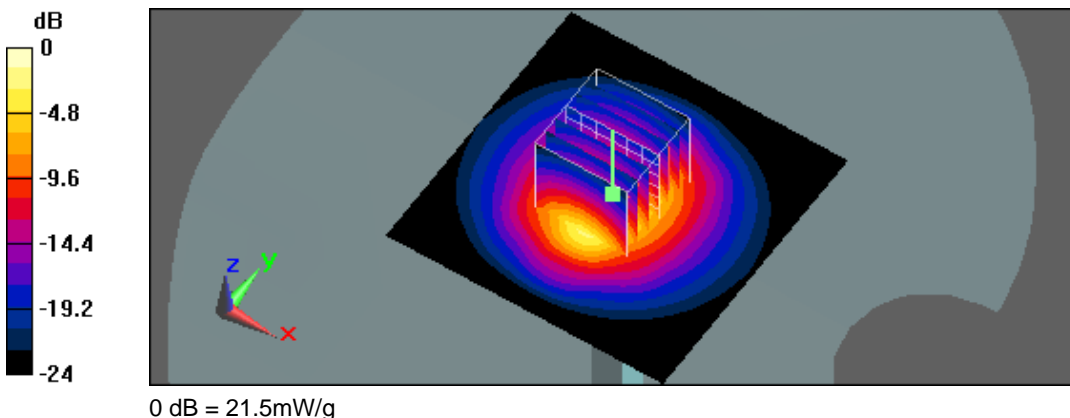
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 98.6 V/m; Power Drift = 0.018 dB

Peak SAR (extrapolated) = 30.2 W/kg

SAR(1 g) = 13.7 mW/g; SAR(10 g) = 6 mW/g

Maximum value of SAR (measured) = 21.5 mW/g



Test Laboratory: A Test Lab Techno Corp.

Date/Time: 5/11/2013 4:11:41 AM

System Performance Check at 2600MHz\_20130511\_Body

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1007

Communication System: CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.12$  mho/m;  $\epsilon_r = 51.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV3 - SN3519; ConvF(7.61, 7.61, 7.61); Calibrated: 2/20/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2/13/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

System Performance Check at 2600MHz/Area Scan (61x61x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 20.7 mW/g

System Performance Check at 2600MHz/Zoom Scan (7x7x7)/Cube 0:

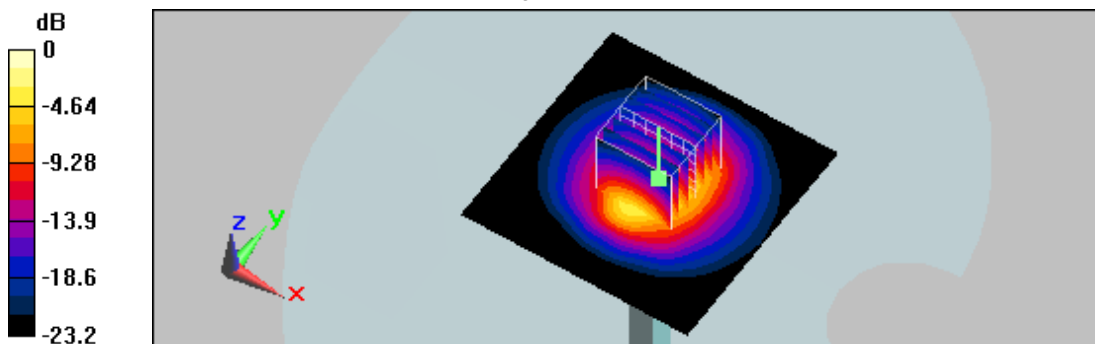
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 97.5 V/m; Power Drift = -0.149 dB

Peak SAR (extrapolated) = 30.7 W/kg

SAR(1 g) = 14.2 mW/g; SAR(10 g) = 6.3 mW/g

Maximum value of SAR (measured) = 22.1 mW/g



0 dB = 22.1 mW/g



Test Laboratory: A Test Lab Techno Corp.

Date/Time: 5/12/2013 3:05:53 AM

System Performance Check at 2600MHz\_20130513\_Body

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1007

Communication System: CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.12$  mho/m;  $\epsilon_r = 51.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV3 - SN3519; ConvF(7.61, 7.61, 7.61); Calibrated: 2/20/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2/13/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

System Performance Check at 2600MHz/Area Scan (61x61x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 21.3 mW/g

System Performance Check at 2600MHz/Zoom Scan (7x7x7)/Cube 0:

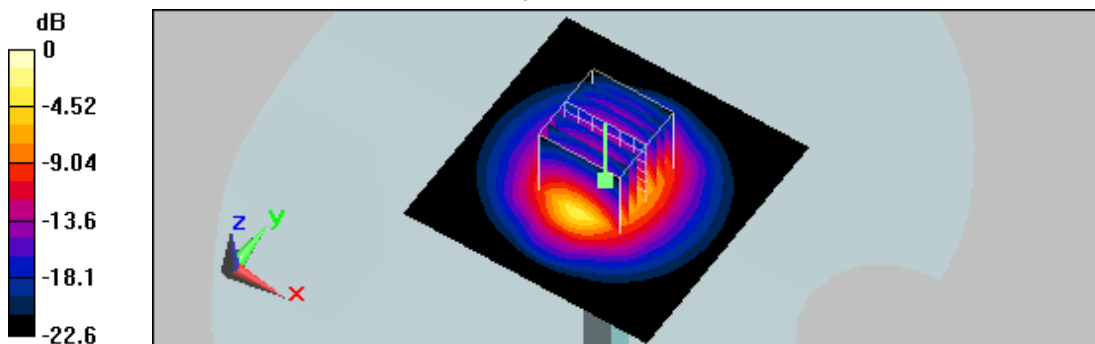
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 100.9 V/m; Power Drift = -0.116 dB

Peak SAR (extrapolated) = 29.3 W/kg

SAR(1 g) = 13.6 mW/g; SAR(10 g) = 6.11 mW/g

Maximum value of SAR (measured) = 21.3 mW/g



0 dB = 21.3mW/g



Test Laboratory: A Test Lab Techno Corp.

Date/Time: 5/12/2013 8:34:13 AM

System Performance Check at 2600MHz\_20130512\_Body

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1007

Communication System: CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.24$  mho/m;  $\epsilon_r = 52.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV3 - SN3519; ConvF(7.61, 7.61, 7.61); Calibrated: 2/20/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2/13/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

System Performance Check at 2600MHz/Area Scan (61x61x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 21 mW/g

System Performance Check at 2600MHz/Zoom Scan (7x7x7)/Cube 0:

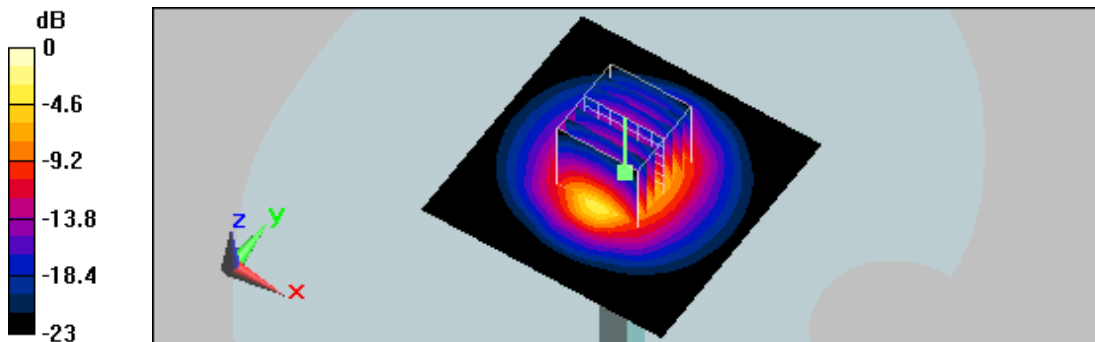
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 96.7 V/m; Power Drift = -0.029 dB

Peak SAR (extrapolated) = 29.2 W/kg

SAR(1 g) = 13.4 mW/g; SAR(10 g) = 5.97 mW/g

Maximum value of SAR (measured) = 21.2 mW/g



0 dB = 21.2mW/g





## Appendix B - SAR Measurement Data

Test Laboratory: A Test Lab Techno Corp.

Date/Time: 2/24/2013 12:04:28 PM

#16\_Flat\_GPRS 850 CH128\_Side 1 to phantom 10mm\_3D2U

DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: GPRS 850 (3Down, 2Up); Frequency: 824.2 MHz; Duty Cycle: 1:4

Medium parameters used (interpolated):  $f = 824.2$  MHz;  $\sigma = 0.959$  mho/m;  $\epsilon_r = 54$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.3 mW/g

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

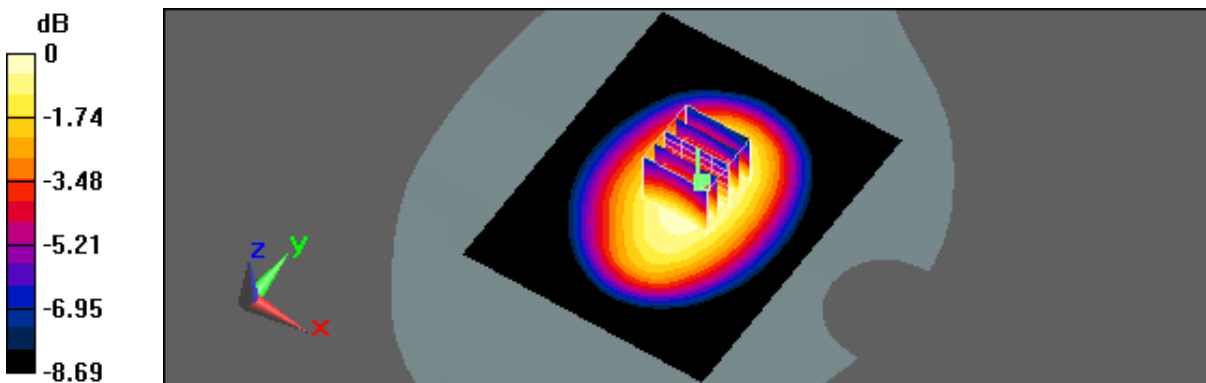
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 37.2 V/m; Power Drift = -0.025 dB

Peak SAR (extrapolated) = 1.43 W/kg

SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.868 mW/g

Maximum value of SAR (measured) = 1.31 mW/g



0 dB = 1.31mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 12:30:31 PM

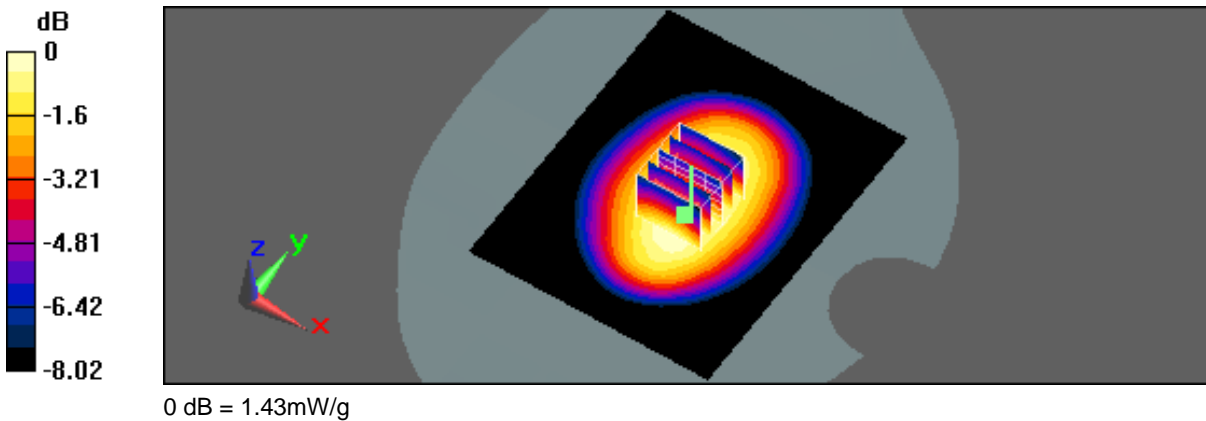
#17\_Flat\_GPRS 850 CH190\_Side 1 to phantom 10mm\_3D2U  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: GPRS 850 (3Down, 2Up); Frequency: 836.6 MHz; Duty Cycle: 1:4  
Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.977$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.43 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 39.2 V/m; Power Drift = -0.079 dB  
Peak SAR (extrapolated) = 1.55 W/kg  
SAR(1 g) = 1.25 mW/g; SAR(10 g) = 0.959 mW/g  
Maximum value of SAR (measured) = 1.43 mW/g



Test Laboratory: A Test Lab Techno Corp.  
 Date/Time: 2/24/2013 11:39:40 AM

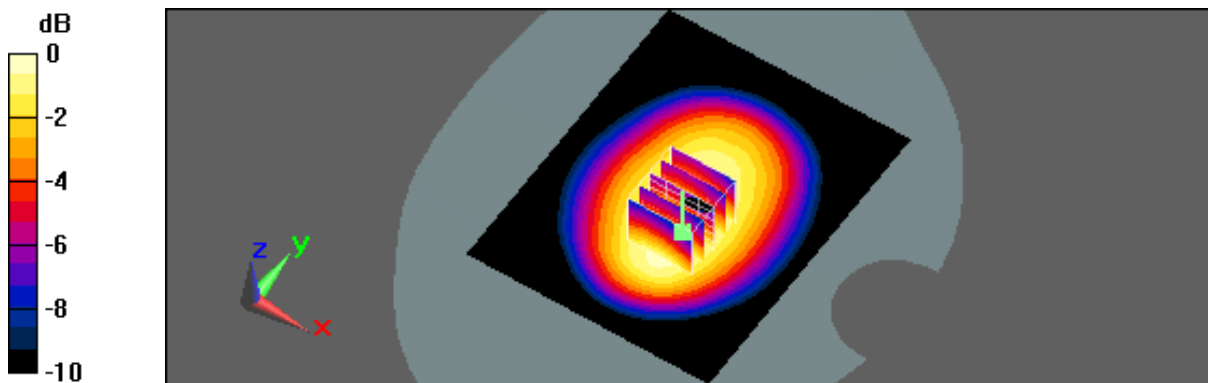
#15\_Flat\_GPRS 850 CH251\_Side 1 to phantom 10mm\_3D2U  
 DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: GPRS 850 (3Down, 2Up); Frequency: 848.8 MHz; Duty Cycle: 1:4  
 Medium parameters used:  $f = 849 \text{ MHz}$ ;  $\sigma = 1 \text{ mho/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Phantom section: Flat Section  
 Measurement Standard: DASYS5 (IEEE/IEC)  
 DASYS5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
 Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 1.5 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
 Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 38.4 V/m; Power Drift = 0.013 dB  
 Peak SAR (extrapolated) = 1.63 W/kg  
 $\text{SAR}(1 \text{ g}) = 1.28 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.970 \text{ mW/g}$   
 Maximum value of SAR (measured) = 1.47 mW/g



0 dB = 1.47mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 1:26:42 PM

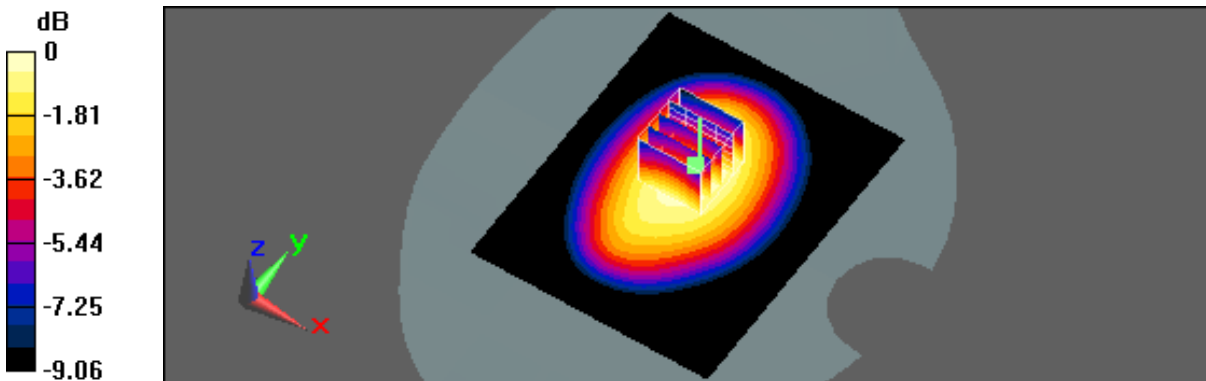
#19\_Flat\_GPRS 850 CH128\_Side 2 to phantom 10mm\_3D2U  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: GPRS 850 (3Down, 2Up); Frequency: 824.2 MHz; Duty Cycle: 1:4  
Medium parameters used (interpolated):  $f = 824.2$  MHz;  $\sigma = 0.959$  mho/m;  $\epsilon_r = 54$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.24 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 35.4 V/m; Power Drift = 0.039 dB  
Peak SAR (extrapolated) = 1.37 W/kg  
SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.813 mW/g  
Maximum value of SAR (measured) = 1.24 mW/g



0 dB = 1.24mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 1:55:37 PM

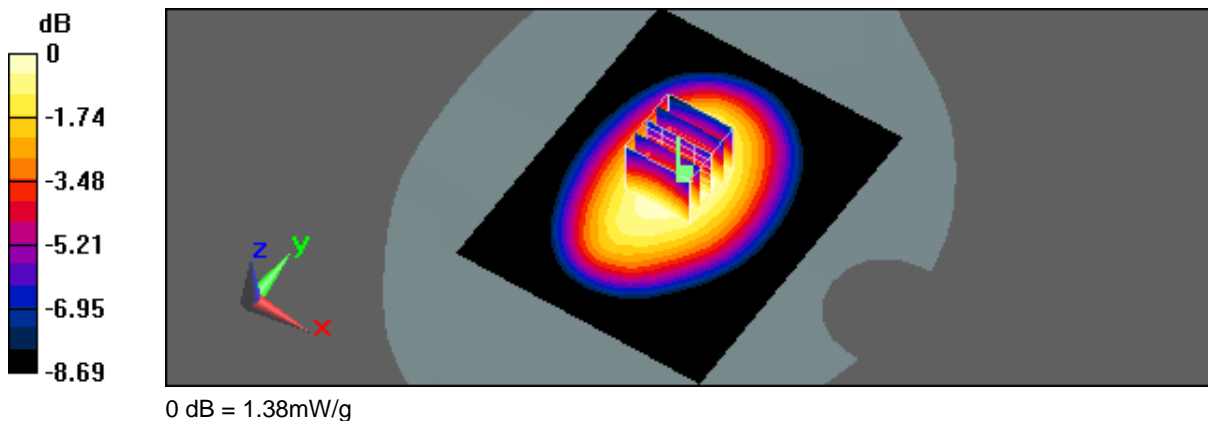
#20\_Flat\_GPRS 850 CH190\_Side 2 to phantom 10mm\_3D2U  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: GPRS 850 (3Down, 2Up); Frequency: 836.6 MHz; Duty Cycle: 1:4  
Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.977$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.37 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 38.1 V/m; Power Drift = -0.042 dB  
Peak SAR (extrapolated) = 1.52 W/kg  
SAR(1 g) = 1.21 mW/g; SAR(10 g) = 0.919 mW/g  
Maximum value of SAR (measured) = 1.38 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 1:08:42 PM

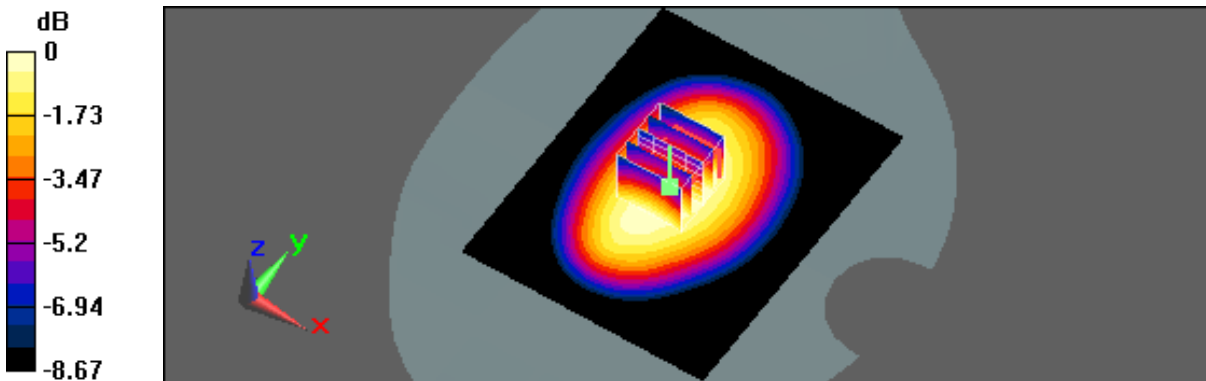
#18\_Flat\_GPRS 850 CH251\_Side 2 to phantom 10mm\_3D2U  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: GPRS 850 (3Down, 2Up); Frequency: 848.8 MHz; Duty Cycle: 1:4  
Medium parameters used:  $f = 849$  MHz;  $\sigma = 1$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.39 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 37.7 V/m; Power Drift = 0.041 dB  
Peak SAR (extrapolated) = 1.52 W/kg  
SAR(1 g) = 1.24 mW/g; SAR(10 g) = 0.925 mW/g  
Maximum value of SAR (measured) = 1.4 mW/g



0 dB = 1.4mW/g

Test Laboratory: A Test Lab Techno Corp.  
 Date/Time: 2/24/2013 3:33:46 PM

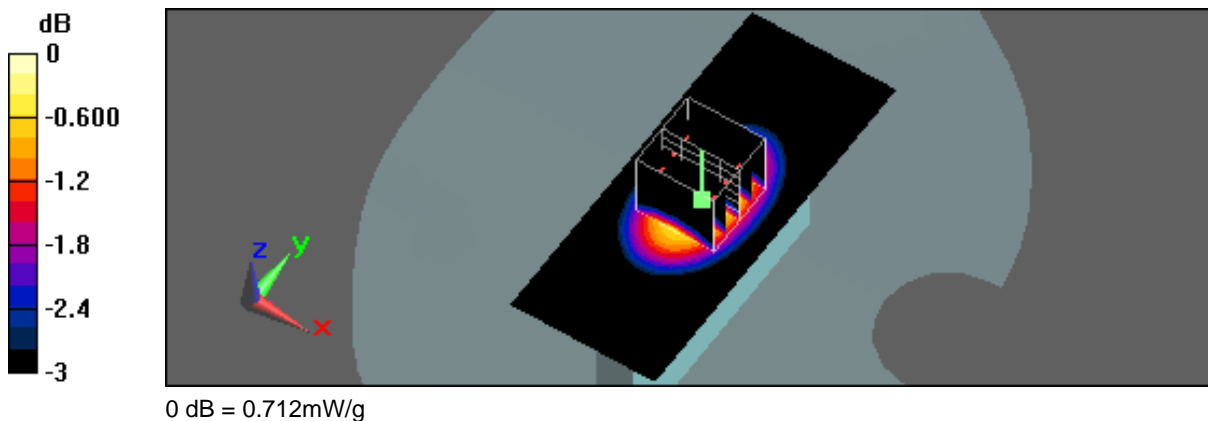
#21\_Flat\_GPRS 850 CH251\_Side 3 to phantom 10mm\_3D2U  
 DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: GPRS 850 (3Down, 2Up); Frequency: 848.8 MHz; Duty Cycle: 1:4  
 Medium parameters used:  $f = 849 \text{ MHz}$ ;  $\sigma = 1 \text{ mho/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Phantom section: Flat Section  
 Measurement Standard: DASYS5 (IEEE/IEC)  
 DASYS5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
 Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 0.716 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
 Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 27.5 V/m; Power Drift = -0.057 dB  
 Peak SAR (extrapolated) = 0.801 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.592 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.424 \text{ mW/g}$   
 Maximum value of SAR (measured) = 0.712 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/6/2013 7:33:17 AM

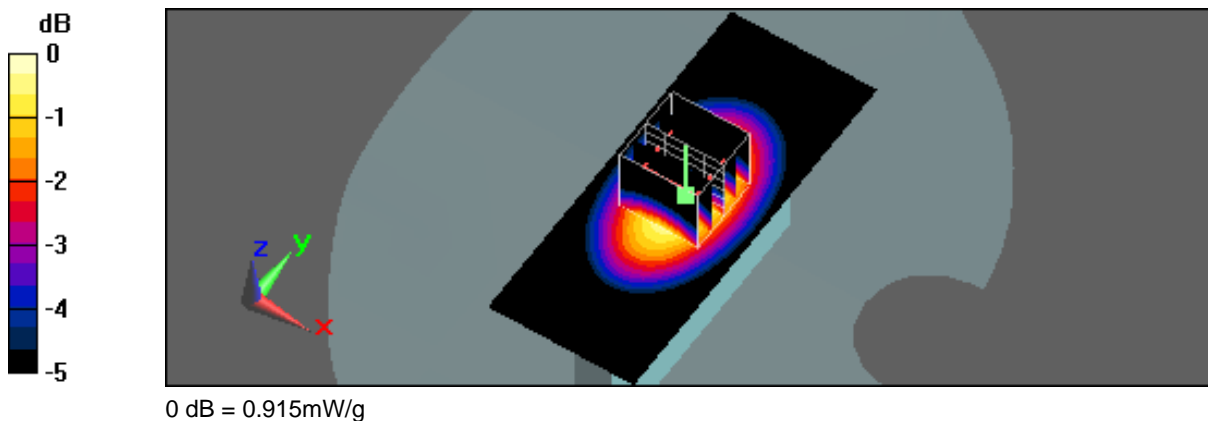
#175\_Flat\_GPRS 850 CH128\_Side 4 to phantom 10mm\_3D2U  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: GPRS 850 (3Down, 2Up); Frequency: 824.2 MHz; Duty Cycle: 1:4  
Medium parameters used (interpolated):  $f = 824.2$  MHz;  $\sigma = 0.959$  mho/m;  $\epsilon_r = 54$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.932 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 30.5 V/m; Power Drift = -0.014 dB  
Peak SAR (extrapolated) = 1.04 W/kg  
SAR(1 g) = 0.756 mW/g; SAR(10 g) = 0.528 mW/g  
Maximum value of SAR (measured) = 0.915 mW/g







Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/6/2013 8:01:27 AM

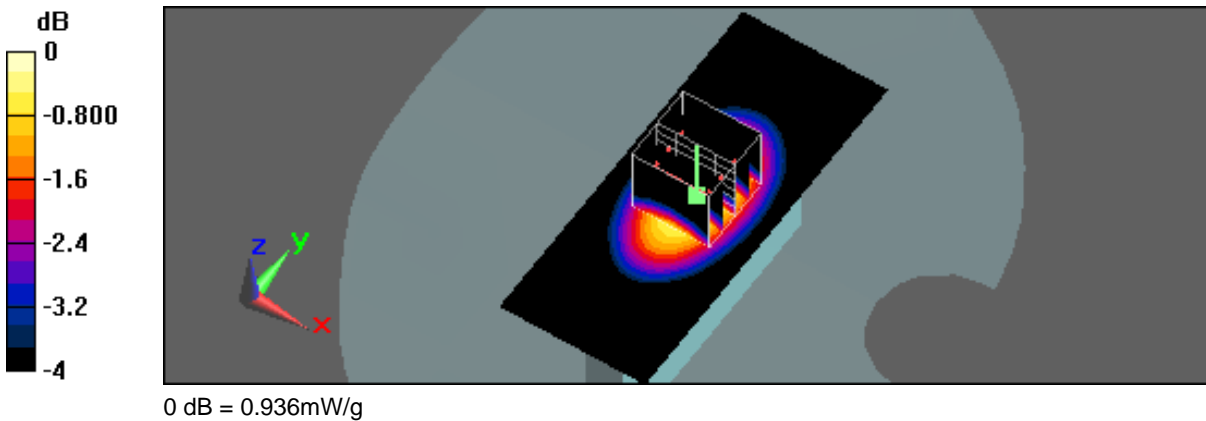
#176\_Flat\_GPRS 850 CH190\_Side 4 to phantom 10mm\_3D2U  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: GPRS 850 (3Down, 2Up); Frequency: 836.6 MHz; Duty Cycle: 1:4  
Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.977$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.953 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 32 V/m; Power Drift = -0.054 dB  
Peak SAR (extrapolated) = 1.06 W/kg  
SAR(1 g) = 0.775 mW/g; SAR(10 g) = 0.542 mW/g  
Maximum value of SAR (measured) = 0.936 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 3:52:07 PM

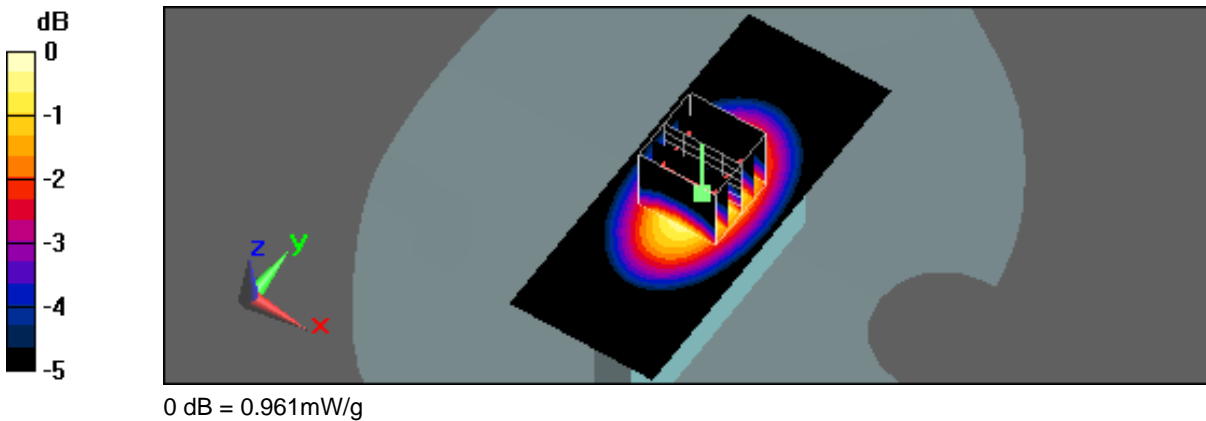
#22\_Flat\_GPRS 850 CH251\_Side 4 to phantom 10mm\_3D2U  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: GPRS 850 (3Down, 2Up); Frequency: 848.8 MHz; Duty Cycle: 1:4  
Medium parameters used:  $f = 849$  MHz;  $\sigma = 1$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.979 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 32.1 V/m; Power Drift = -0.054 dB  
Peak SAR (extrapolated) = 1.09 W/kg  
SAR(1 g) = 0.797 mW/g; SAR(10 g) = 0.559 mW/g  
Maximum value of SAR (measured) = 0.961 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 4:09:02 PM

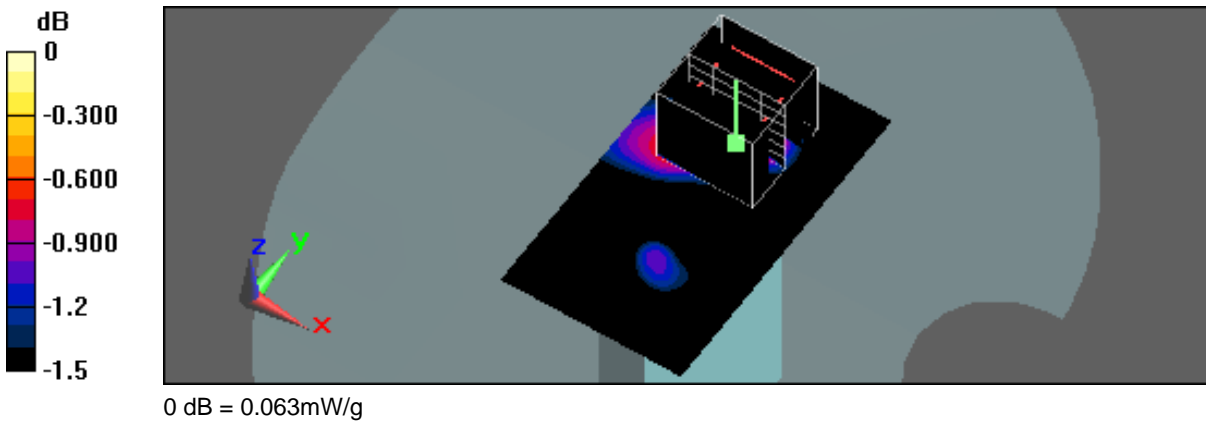
#23\_Flat\_GPRS 850 CH251\_Side 6 to phantom 10mm\_3D2U  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: GPRS 850 (3Down, 2Up); Frequency: 848.8 MHz; Duty Cycle: 1:4  
Medium parameters used:  $f = 849$  MHz;  $\sigma = 1$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x71x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.064 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 7.21 V/m; Power Drift = -0.047 dB  
Peak SAR (extrapolated) = 0.074 W/kg  
SAR(1 g) = 0.051 mW/g; SAR(10 g) = 0.035 mW/g  
Maximum value of SAR (measured) = 0.063 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 1:12:30 PM

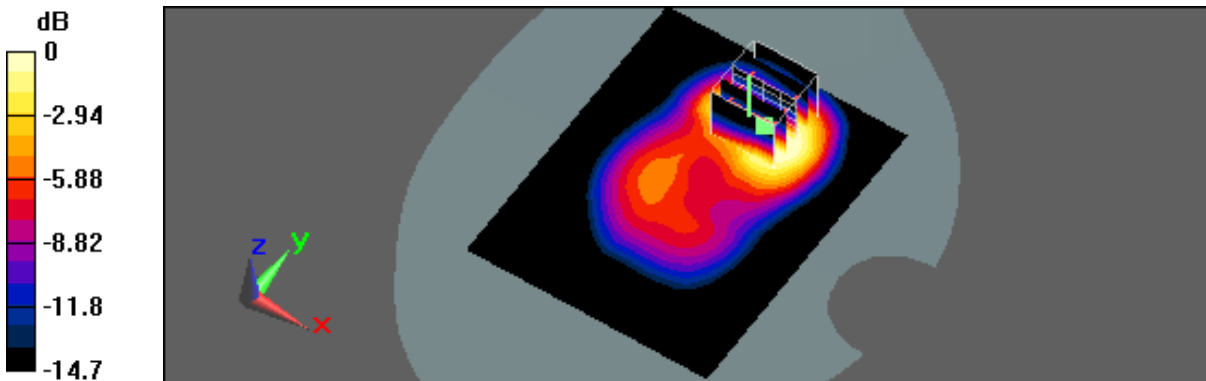
#51\_Flat\_GPRS PCS CH512\_Side 1 to phantom 10mm\_3D2U  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: GPRS PCS (3Down,2Up); Frequency: 1850.2 MHz;Duty Cycle: 1:4  
Medium parameters used (interpolated):  $f = 1850.2$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.22 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 17.3 V/m; Power Drift = 0.00535 dB  
Peak SAR (extrapolated) = 1.47 W/kg  
SAR(1 g) = 0.902 mW/g; SAR(10 g) = 0.561 mW/g  
Maximum value of SAR (measured) = 1.17 mW/g



0 dB = 1.17mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 1:42:37 PM

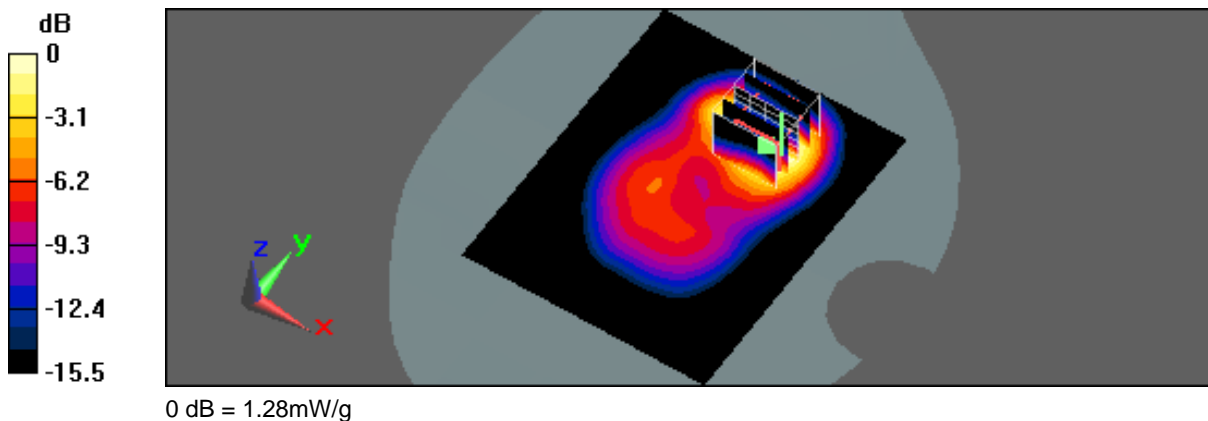
#52\_Flat\_GPRS PCS CH661\_Side 1 to phantom 10mm\_3D2U  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: GPRS PCS (3Down,2Up); Frequency: 1880 MHz;Duty Cycle: 1:4  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASY5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.3 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 17.1 V/m; Power Drift = -0.00123 dB  
Peak SAR (extrapolated) = 1.63 W/kg  
SAR(1 g) = 0.972 mW/g; SAR(10 g) = 0.583 mW/g  
Maximum value of SAR (measured) = 1.28 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 2:01:31 PM

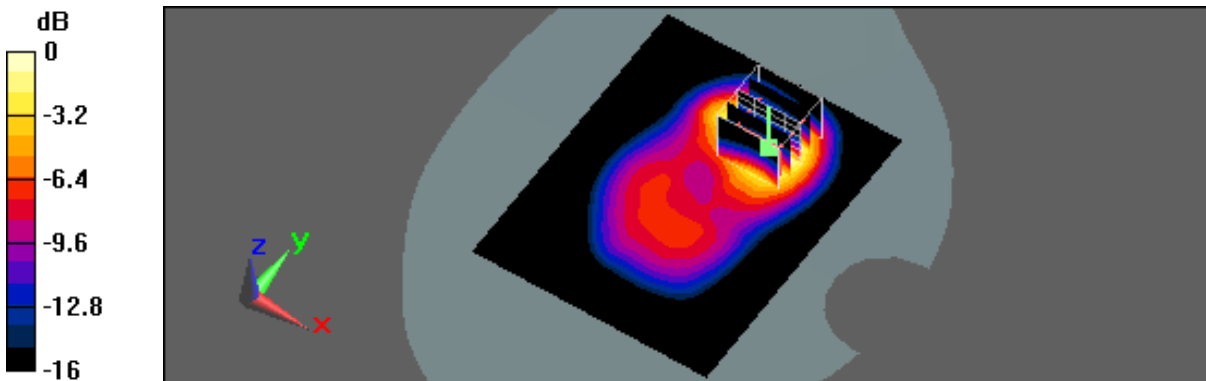
#53\_Flat\_GPRS PCS CH810\_Side 1 to phantom 10mm\_3D2U  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: GPRS PCS (3Down,2Up); Frequency: 1909.8 MHz;Duty Cycle: 1:4  
Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASY5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.3 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 16.1 V/m; Power Drift = -0.050 dB  
Peak SAR (extrapolated) = 1.62 W/kg  
SAR(1 g) = 0.960 mW/g; SAR(10 g) = 0.569 mW/g  
Maximum value of SAR (measured) = 1.25 mW/g



0 dB = 1.25mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 2:21:45 PM

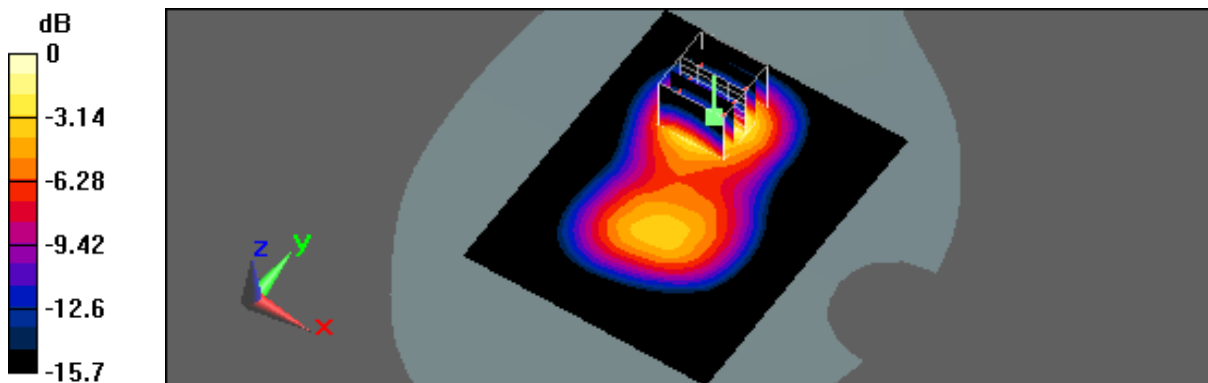
#54\_Flat\_GPRS PCS CH512\_Side 2 to phantom 10mm\_3D2U  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: GPRS PCS (3Down,2Up); Frequency: 1850.2 MHz;Duty Cycle: 1:4  
Medium parameters used (interpolated):  $f = 1850.2$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.46 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 21.1 V/m; Power Drift = -0.022 dB  
Peak SAR (extrapolated) = 1.69 W/kg  
SAR(1 g) = 1.07 mW/g; SAR(10 g) = 0.634 mW/g  
Maximum value of SAR (measured) = 1.41 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 2:40:46 PM

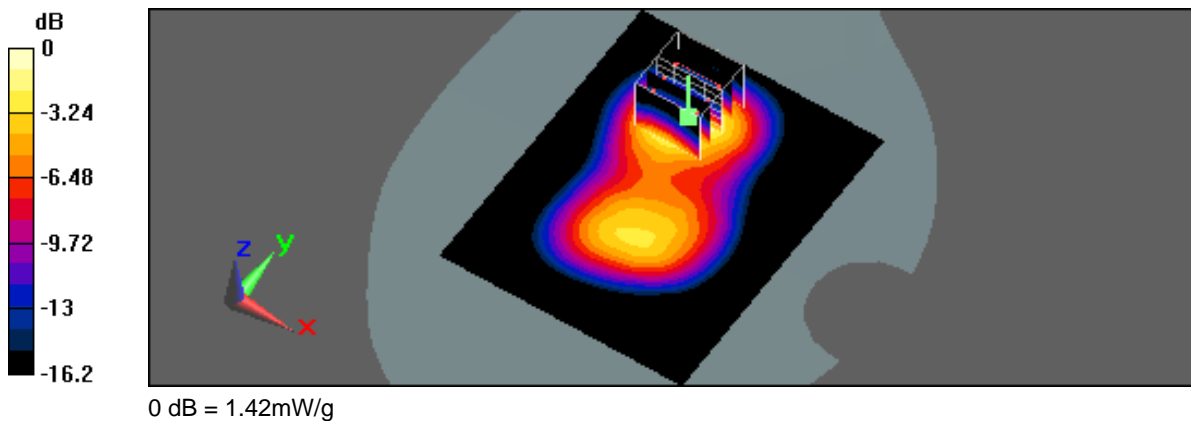
#55\_Flat\_GPRS PCS CH661\_Side 2 to phantom 10mm\_3D2U  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: GPRS PCS (3Down,2Up); Frequency: 1880 MHz;Duty Cycle: 1:4  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.49 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 21.4 V/m; Power Drift = -0.013 dB  
Peak SAR (extrapolated) = 1.72 W/kg  
SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.638 mW/g  
Maximum value of SAR (measured) = 1.42 mW/g







Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 2:58:43 PM

#56\_Flat\_GPRS PCS CH810\_Side 2 to phantom 10mm\_3D2U  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

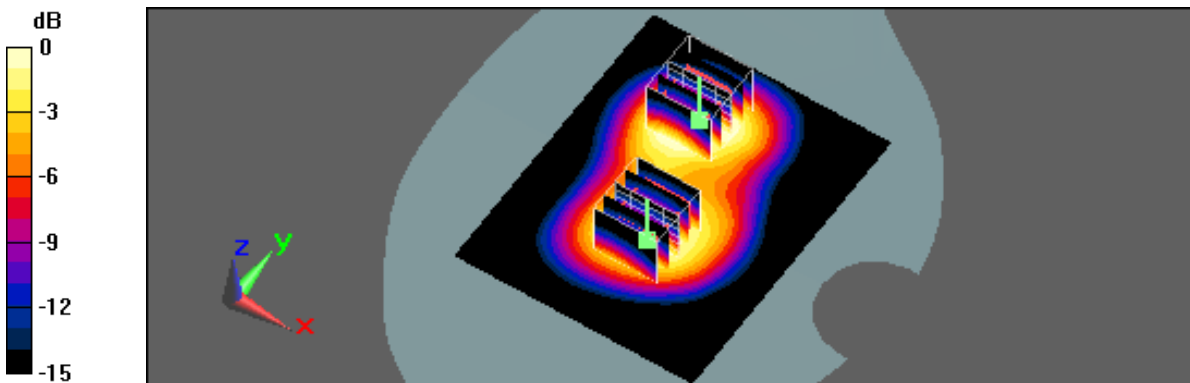
Communication System: GPRS PCS (3Down,2Up); Frequency: 1909.8 MHz;Duty Cycle: 1:4  
Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.43 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 20.5 V/m; Power Drift = 0.028 dB  
Peak SAR (extrapolated) = 1.65 W/kg  
SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.599 mW/g  
Maximum value of SAR (measured) = 1.35 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 20.5 V/m; Power Drift = 0.028 dB  
Peak SAR (extrapolated) = 1.11 W/kg  
SAR(1 g) = 0.742 mW/g; SAR(10 g) = 0.480 mW/g  
Maximum value of SAR (measured) = 0.933 mW/g



0 dB = 0.933mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 3:31:35 PM

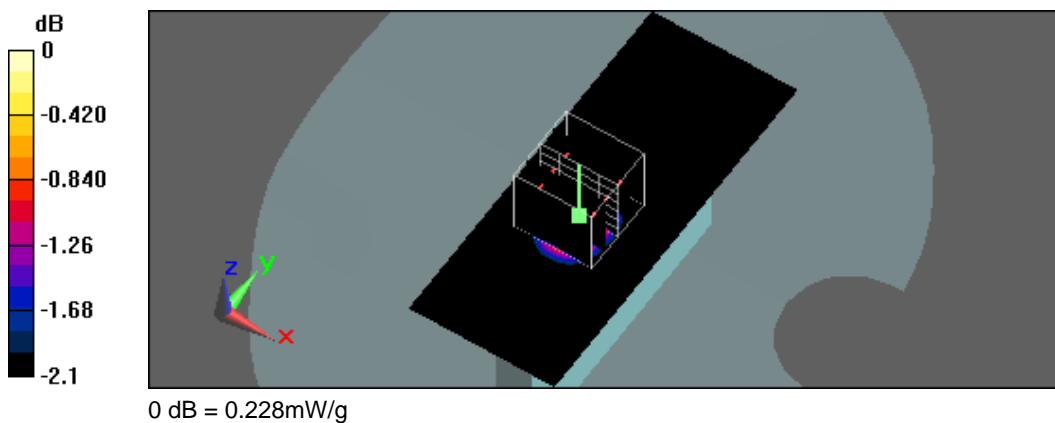
#57\_Flat\_GPRS PCS CH512\_Side 3 to phantom 10mm\_3D2U  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: GPRS PCS (3Down,2Up); Frequency: 1850.2 MHz;Duty Cycle: 1:4  
Medium parameters used (interpolated):  $f = 1850.2$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.232 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 11.9 V/m; Power Drift = 0.047 dB  
Peak SAR (extrapolated) = 0.274 W/kg  
SAR(1 g) = 0.176 mW/g; SAR(10 g) = 0.109 mW/g  
Maximum value of SAR (measured) = 0.228 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 3:47:35 PM

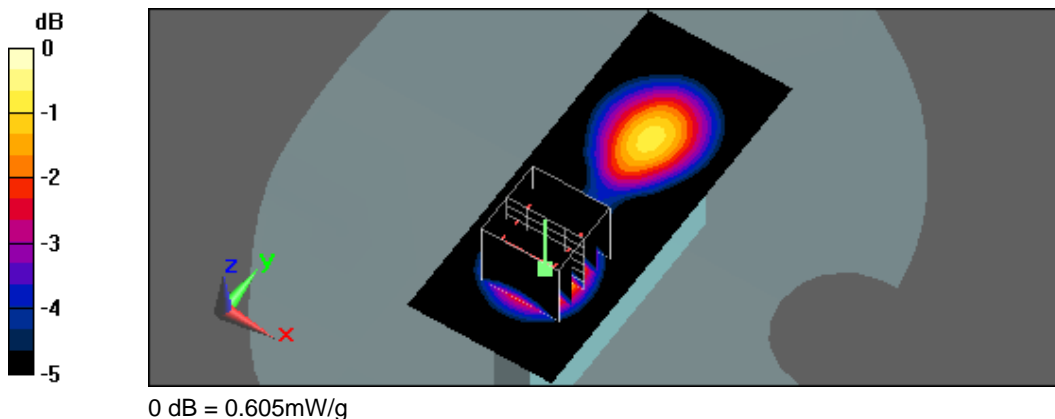
#58\_Flat\_GPRS PCS CH512\_Side 4 to phantom 10mm\_3D2U  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: GPRS PCS (3Down,2Up); Frequency: 1850.2 MHz;Duty Cycle: 1:4  
Medium parameters used (interpolated):  $f = 1850.2$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.615 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 13.2 V/m; Power Drift = 0.032 dB  
Peak SAR (extrapolated) = 0.725 W/kg  
SAR(1 g) = 0.459 mW/g; SAR(10 g) = 0.272 mW/g  
Maximum value of SAR (measured) = 0.605 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 4:10:28 PM

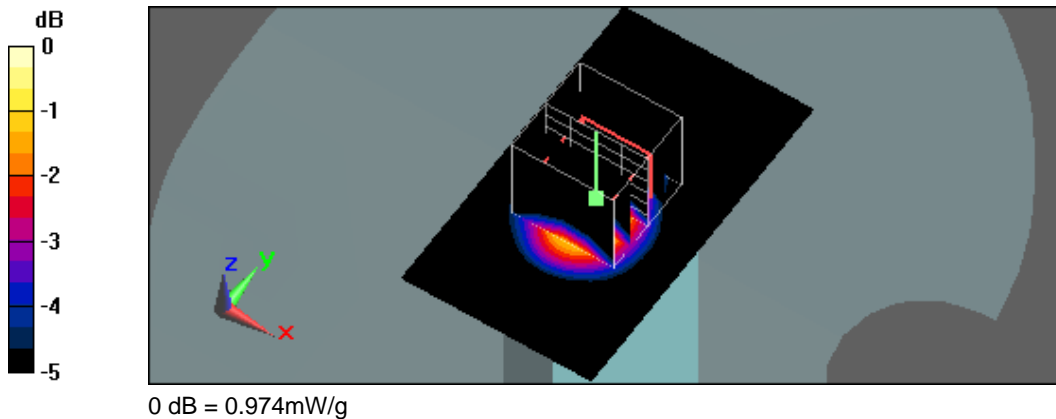
#59\_Flat\_GPRS PCS CH512\_Side 6 to phantom 10mm\_3D2U  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: GPRS PCS (3Down,2Up); Frequency: 1850.2 MHz;Duty Cycle: 1:4  
Medium parameters used (interpolated):  $f = 1850.2$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASY5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x71x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.999 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 26.6 V/m; Power Drift = -0.032 dB  
Peak SAR (extrapolated) = 1.16 W/kg  
SAR(1 g) = 0.747 mW/g; SAR(10 g) = 0.442 mW/g  
Maximum value of SAR (measured) = 0.974 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/22/2013 10:29:44 PM

#2\_Flat\_WCDMA Band II CH9262\_Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

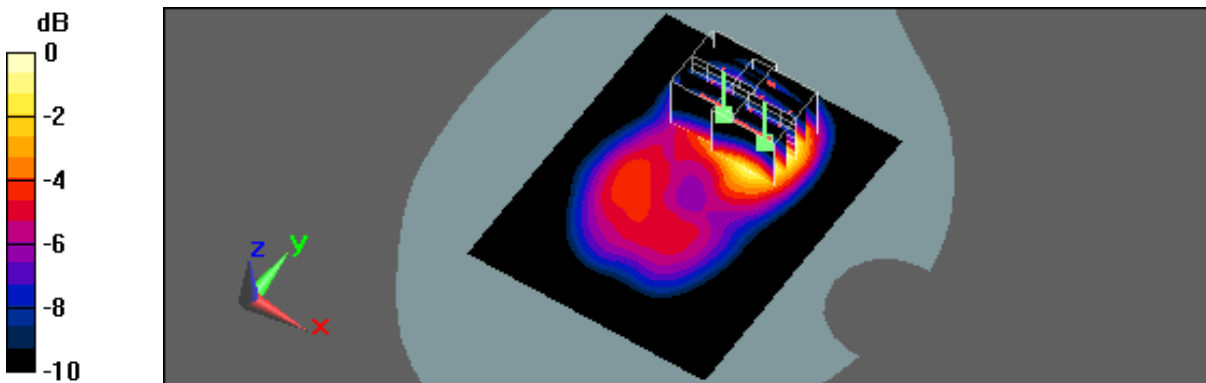
Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1852.4$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.25 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 13.1 V/m; Power Drift = 0.143 dB  
Peak SAR (extrapolated) = 1.42 W/kg  
SAR(1 g) = 0.861 mW/g; SAR(10 g) = 0.520 mW/g  
Maximum value of SAR (measured) = 1.13 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 13.1 V/m; Power Drift = 0.143 dB  
Peak SAR (extrapolated) = 1.18 W/kg  
SAR(1 g) = 0.791 mW/g; SAR(10 g) = 0.488 mW/g  
Maximum value of SAR (measured) = 0.999 mW/g



0 dB = 0.999mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/22/2013 10:03:54 PM

#1\_Flat\_WCDMA Band II CH9400\_Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

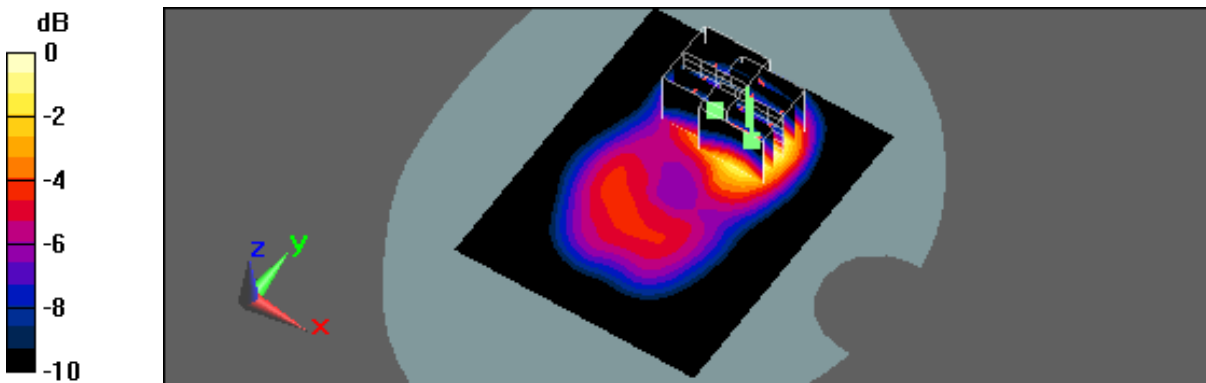
Communication System: WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.5 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 13.5 V/m; Power Drift = 0.000765 dB  
Peak SAR (extrapolated) = 1.69 W/kg  
SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.595 mW/g  
Maximum value of SAR (measured) = 1.34 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 13.5 V/m; Power Drift = 0.000765 dB  
Peak SAR (extrapolated) = 1.41 W/kg  
SAR(1 g) = 0.862 mW/g; SAR(10 g) = 0.519 mW/g  
Maximum value of SAR (measured) = 1.16 mW/g



0 dB = 1.16mW/g

Test Laboratory: A Test Lab Techno Corp.  
 Date/Time: 2/22/2013 10:59:28 PM

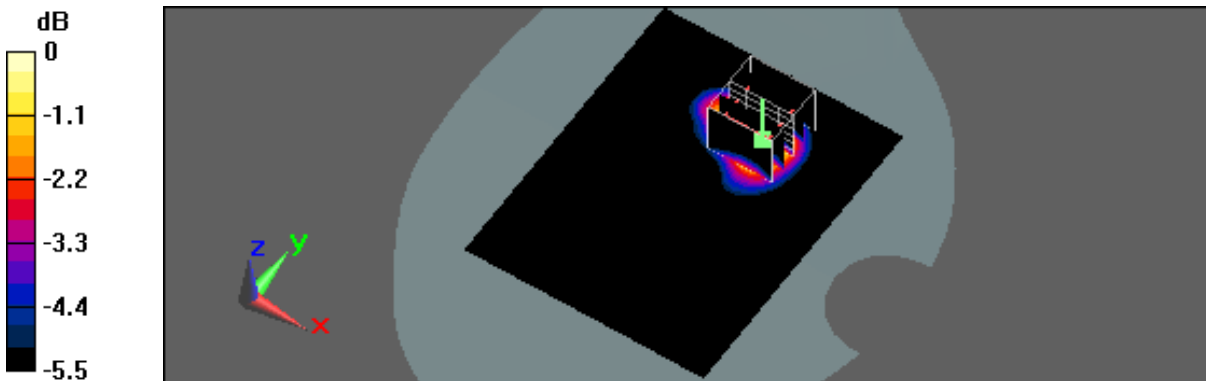
#3\_Flat\_WCDMA Band II CH9538\_Side 1 to phantom 10mm  
 DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: WCDMA Band II; Frequency: 1907.6 MHz; Duty Cycle: 1:1  
 Medium parameters used:  $f = 1908 \text{ MHz}$ ;  $\sigma = 1.52 \text{ mho/m}$ ;  $\epsilon_r = 53.4$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Phantom section: Flat Section  
 Measurement Standard: DASYS (IEEE/IEC)  
 DASYS Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
 Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 1.48 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
 Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 12.3 V/m; Power Drift = 0.011 dB  
 Peak SAR (extrapolated) = 1.67 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.997 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.585 \text{ mW/g}$   
 Maximum value of SAR (measured) = 1.34 mW/g



0 dB = 1.34mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/22/2013 11:37:49 PM

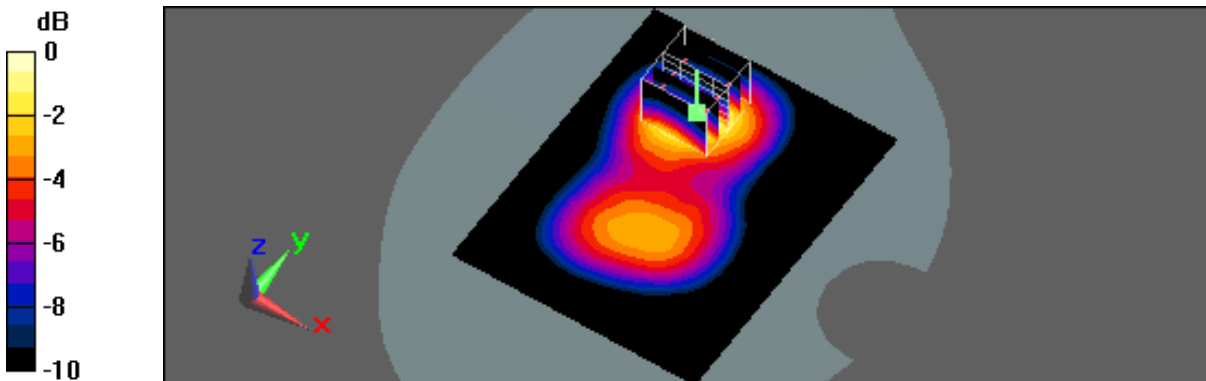
#5\_Flat\_WCDMA Band II CH9262\_Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1852.4$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.31 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 17.8 V/m; Power Drift = 0.000958 dB  
Peak SAR (extrapolated) = 1.53 W/kg  
SAR(1 g) = 0.977 mW/g; SAR(10 g) = 0.584 mW/g  
Maximum value of SAR (measured) = 1.28 mW/g





Test Laboratory: A Test Lab Techno Corp.  
 Date/Time: 2/22/2013 11:18:40 PM

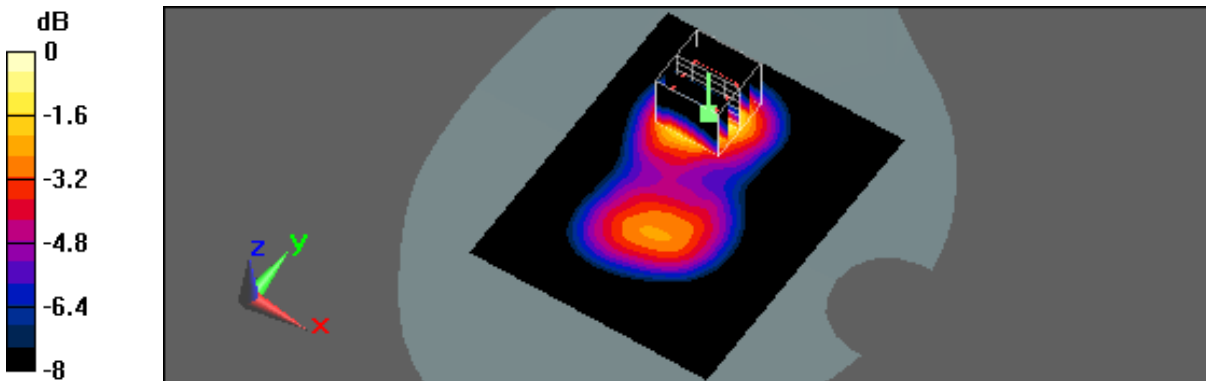
#4\_Flat\_WCDMA Band II CH9400\_Side 2 to phantom 10mm  
 DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1  
 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section  
 Measurement Standard: DASYS5 (IEEE/IEC)  
 DASYS5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
 Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 1.41 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
 Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 18.4 V/m; Power Drift = -0.00425 dB  
 Peak SAR (extrapolated) = 1.67 W/kg  
 SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.623 mW/g  
 Maximum value of SAR (measured) = 1.38 mW/g



0 dB = 1.38mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/22/2013 11:59:56 PM

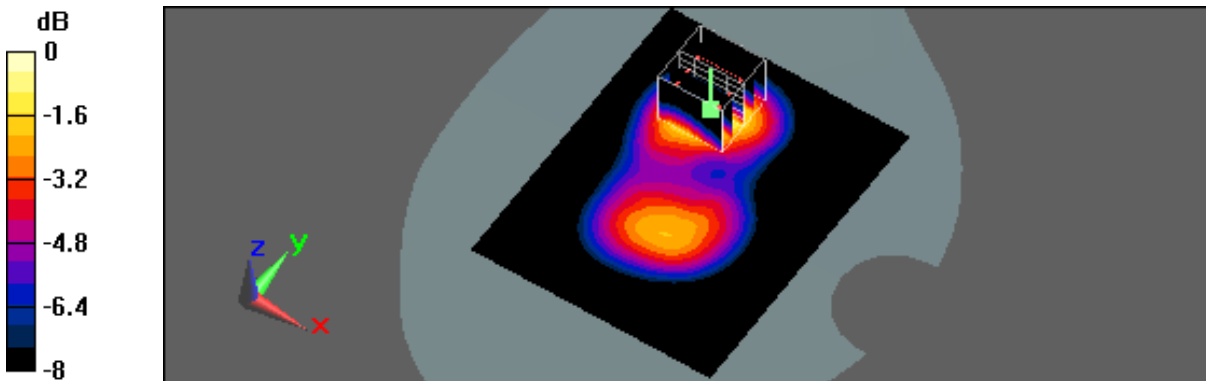
#6\_Flat\_WCDMA Band II CH9538\_Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: WCDMA Band II; Frequency: 1907.6 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1908$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.39 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 18.2 V/m; Power Drift = -0.036 dB  
Peak SAR (extrapolated) = 1.64 W/kg  
SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.608 mW/g  
Maximum value of SAR (measured) = 1.35 mW/g



0 dB = 1.35mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/23/2013 12:21:01 AM

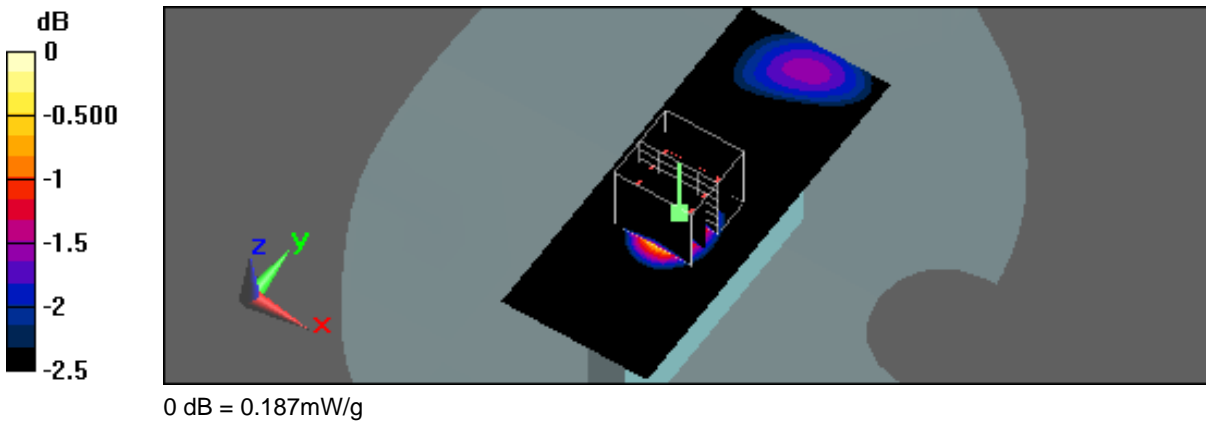
#7\_Flat\_WCDMA Band II CH9400\_Side 3 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: WCDMA Band II; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.188 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 10.7 V/m; Power Drift = -0.020 dB  
Peak SAR (extrapolated) = 0.223 W/kg  
SAR(1 g) = 0.144 mW/g; SAR(10 g) = 0.090 mW/g  
Maximum value of SAR (measured) = 0.187 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/23/2013 1:13:48 AM

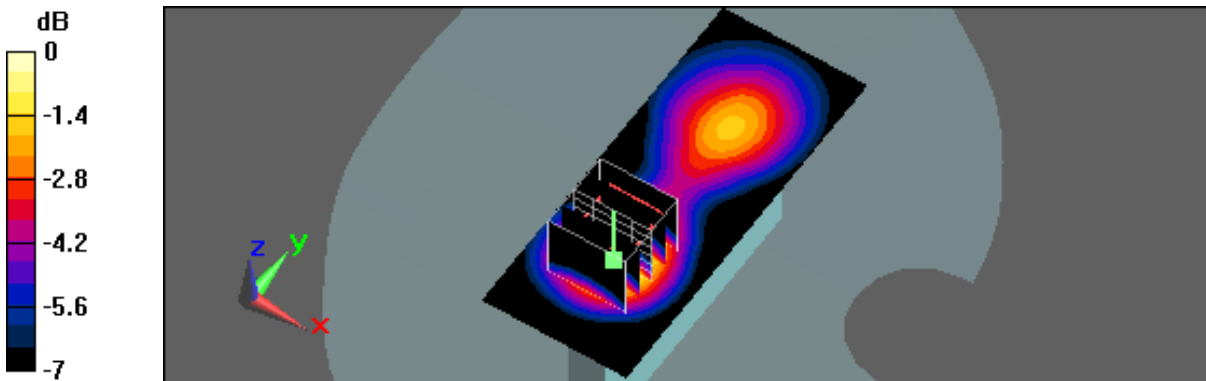
#8\_Flat\_WCDMA Band II CH9400\_Side 4 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.587 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 12.6 V/m; Power Drift = -0.00926 dB  
Peak SAR (extrapolated) = 0.685 W/kg  
SAR(1 g) = 0.441 mW/g; SAR(10 g) = 0.265 mW/g  
Maximum value of SAR (measured) = 0.568 mW/g



0 dB = 0.568mW/g

Test Laboratory: A Test Lab Techno Corp.  
 Date/Time: 2/23/2013 2:01:30 AM

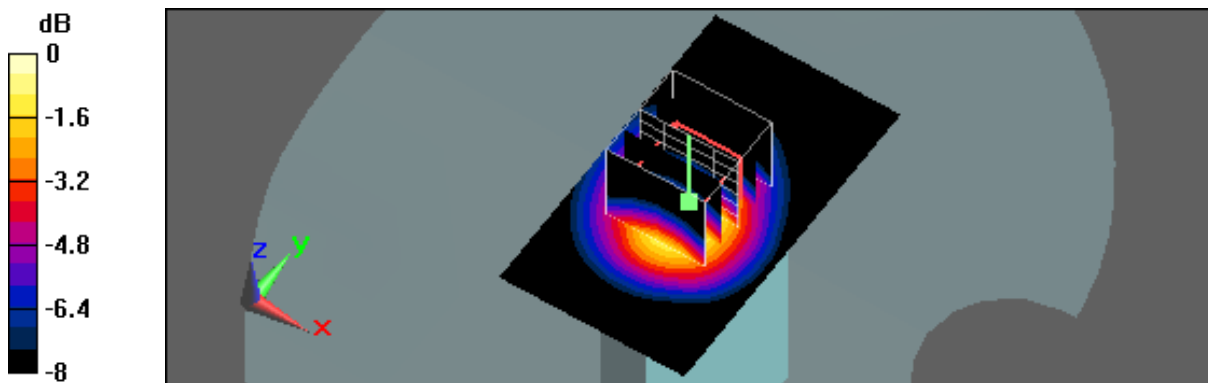
#9\_Flat\_WCDMA Band II CH9400\_Side 6 to phantom 10mm  
 DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1  
 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section  
 Measurement Standard: DASYS5 (IEEE/IEC)  
 DASYS5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x71x1):  
 Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 0.910 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
 Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 25 V/m; Power Drift = 0.040 dB  
 Peak SAR (extrapolated) = 1.06 W/kg  
 SAR(1 g) = 0.686 mW/g; SAR(10 g) = 0.408 mW/g  
 Maximum value of SAR (measured) = 0.885 mW/g



0 dB = 0.885mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/6/2013 5:21:17 AM

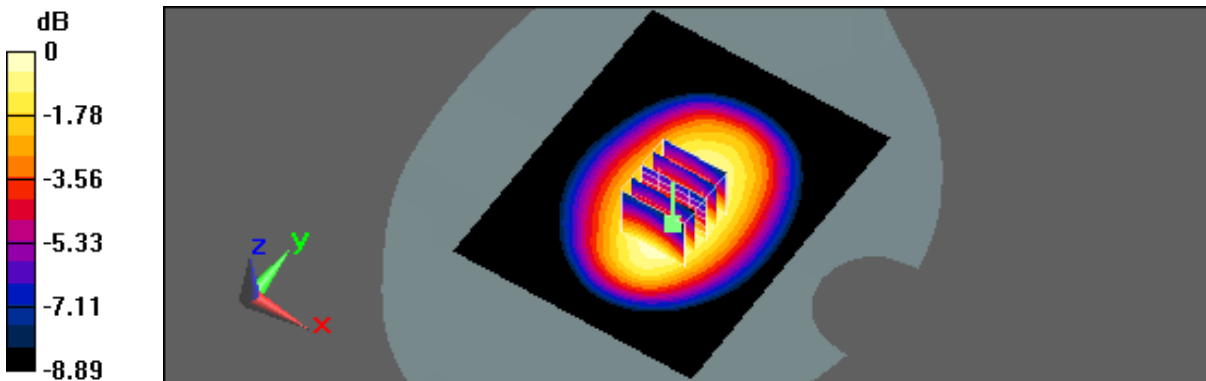
#171\_Flat\_WCDMA Band V CH4132\_Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: WCDMA Band V; Frequency: 826.4 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 826.4$  MHz;  $\sigma = 0.961$  mho/m;  $\epsilon_r = 54$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.811 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 27.8 V/m; Power Drift = -0.018 dB  
Peak SAR (extrapolated) = 0.867 W/kg  
SAR(1 g) = 0.689 mW/g; SAR(10 g) = 0.523 mW/g  
Maximum value of SAR (measured) = 0.793 mW/g



0 dB = 0.793mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/6/2013 5:51:28 AM

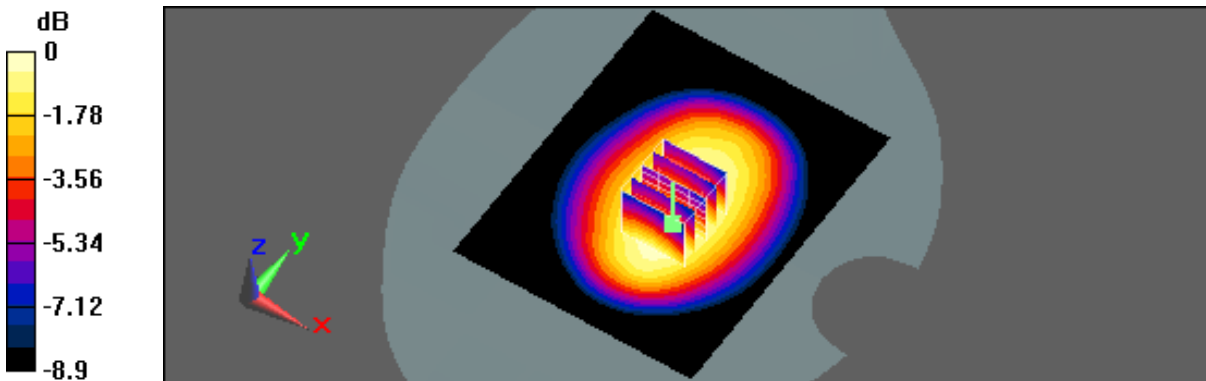
#172\_Flat\_WCDMA Band V CH4183\_Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: WCDMA Band V; Frequency: 836.6 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.977$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.832 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 28.4 V/m; Power Drift = -0.055 dB  
Peak SAR (extrapolated) = 0.889 W/kg  
SAR(1 g) = 0.706 mW/g; SAR(10 g) = 0.536 mW/g  
Maximum value of SAR (measured) = 0.813 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 7:31:38 AM

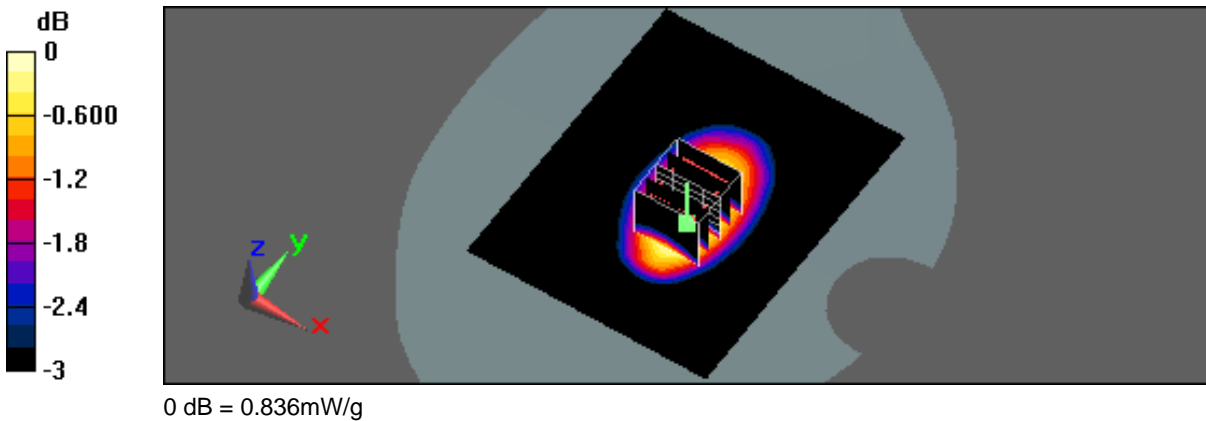
#10\_Flat\_WCDMA Band V CH4233\_Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: WCDMA Band V; Frequency: 846.6 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 847$  MHz;  $\sigma = 0.998$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DAS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DAS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.856 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 29 V/m; Power Drift = -0.025 dB  
Peak SAR (extrapolated) = 0.915 W/kg  
SAR(1 g) = 0.727 mW/g; SAR(10 g) = 0.551 mW/g  
Maximum value of SAR (measured) = 0.836 mW/g







Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/6/2013 6:20:15 AM

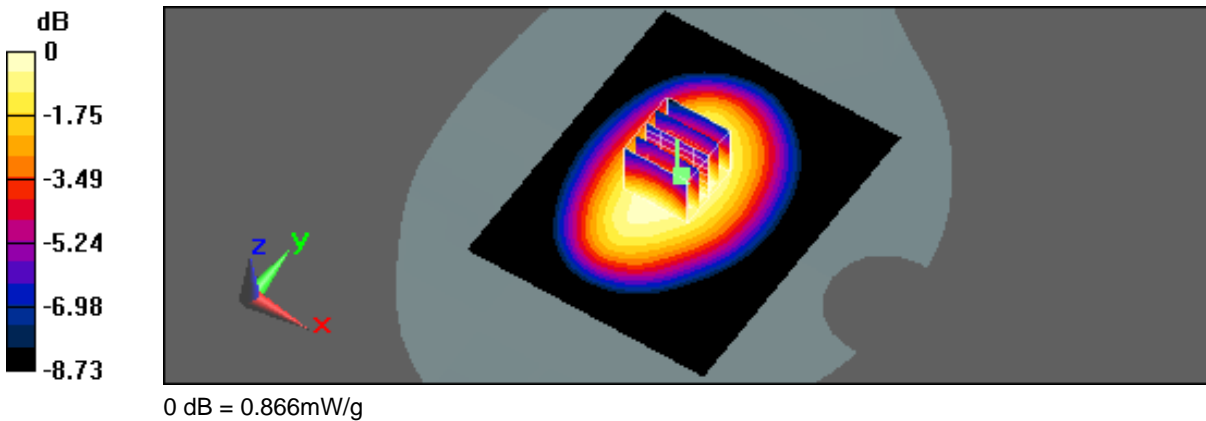
#173\_Flat\_WCDMA Band V CH4132\_Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: WCDMA Band V; Frequency: 826.4 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 826.4$  MHz;  $\sigma = 0.961$  mho/m;  $\epsilon_r = 54$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.881 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 36.8 V/m; Power Drift = 0.046 dB  
Peak SAR (extrapolated) = 0.944 W/kg  
SAR(1 g) = 0.757 mW/g; SAR(10 g) = 0.579 mW/g  
Maximum value of SAR (measured) = 0.866 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/6/2013 6:41:32 AM

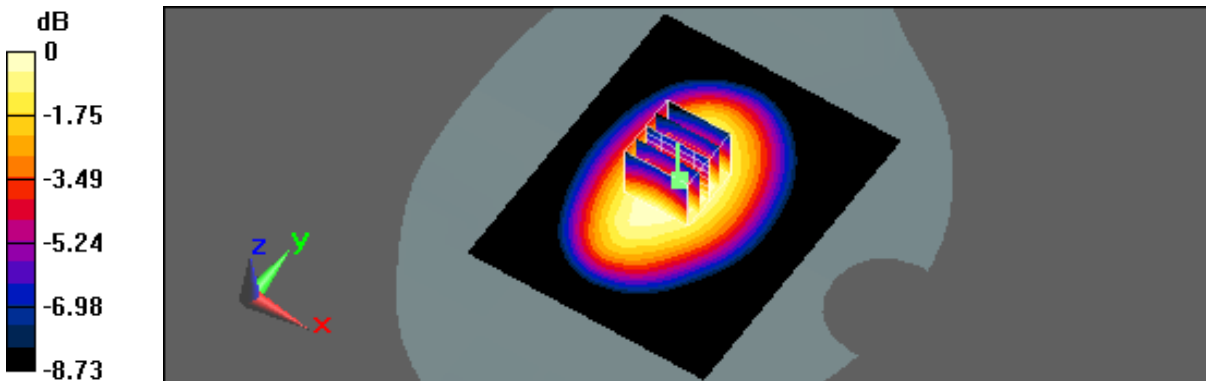
#174\_Flat\_WCDMA Band V CH4183\_Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: WCDMA Band V; Frequency: 836.6 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.977$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.904 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 29.5 V/m; Power Drift = 0.091 dB  
Peak SAR (extrapolated) = 0.968 W/kg  
SAR(1 g) = 0.776 mW/g; SAR(10 g) = 0.594 mW/g  
Maximum value of SAR (measured) = 0.888 mW/g



0 dB = 0.888mW/g

Test Laboratory: A Test Lab Techno Corp.  
 Date/Time: 2/24/2013 7:50:10 AM

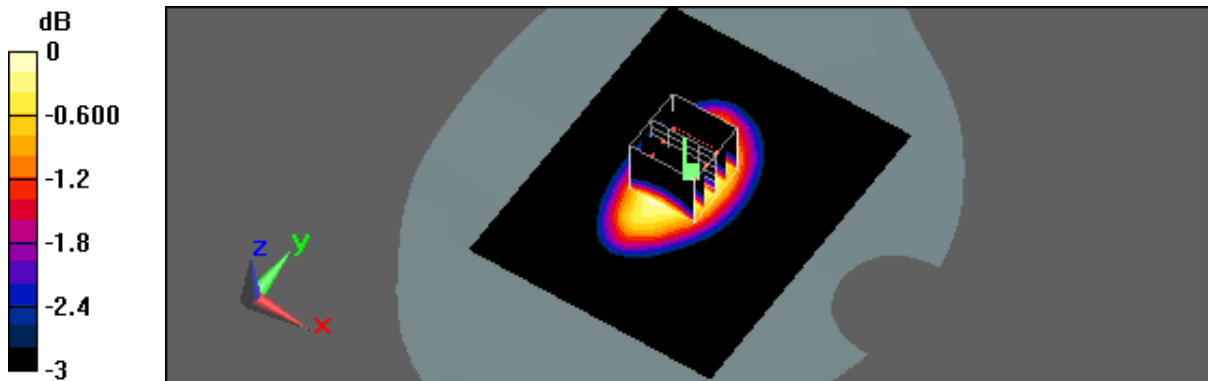
#11\_Flat\_WCDMA Band V CH4233\_Side 2 to phantom 10mm  
 DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: WCDMA Band V; Frequency: 846.6 MHz; Duty Cycle: 1:1  
 Medium parameters used:  $f = 847$  MHz;  $\sigma = 0.998$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section  
 Measurement Standard: DASYS5 (IEEE/IEC)  
 DASYS5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
 Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 0.930 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
 Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 30.6 V/m; Power Drift = 0.028 dB  
 Peak SAR (extrapolated) = 0.996 W/kg  
 SAR(1 g) = 0.799 mW/g; SAR(10 g) = 0.611 mW/g  
 Maximum value of SAR (measured) = 0.913 mW/g



0 dB = 0.913mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 8:20:25 AM

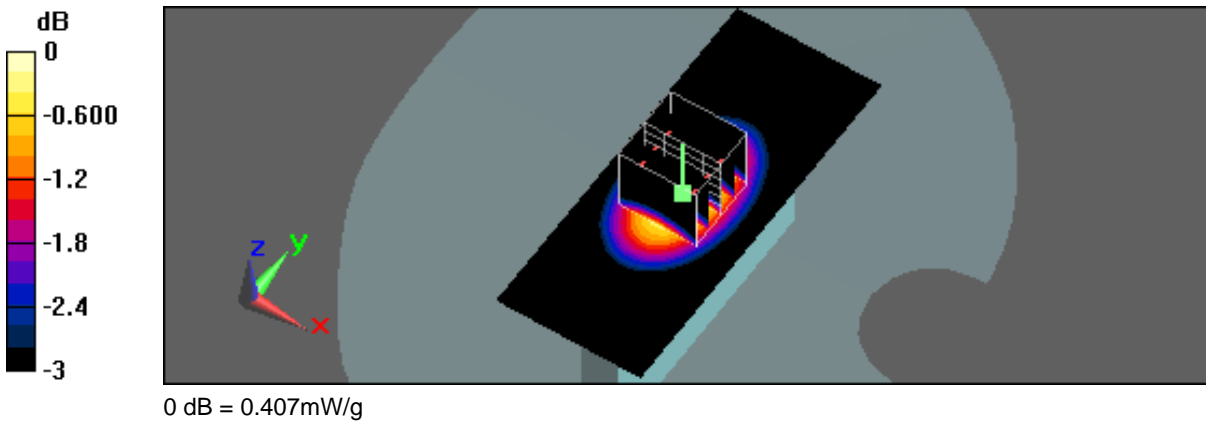
#12\_Flat\_WCDMA Band V CH4233\_Side 3 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: WCDMA Band V; Frequency: 846.6 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 847$  MHz;  $\sigma = 0.998$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.409 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 20.8 V/m; Power Drift = 0.00507 dB  
Peak SAR (extrapolated) = 0.459 W/kg  
SAR(1 g) = 0.339 mW/g; SAR(10 g) = 0.243 mW/g  
Maximum value of SAR (measured) = 0.407 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 8:35:11 AM

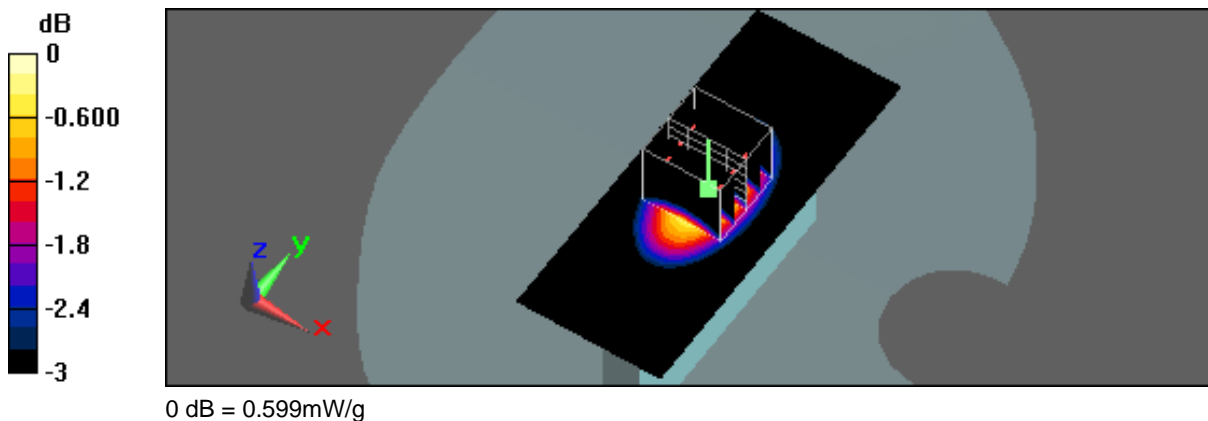
#13\_Flat\_WCDMA Band V CH4233\_Side 4 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: WCDMA Band V; Frequency: 846.6 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 847$  MHz;  $\sigma = 0.998$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.603 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 25.1 V/m; Power Drift = 0.00552 dB  
Peak SAR (extrapolated) = 0.682 W/kg  
SAR(1 g) = 0.493 mW/g; SAR(10 g) = 0.346 mW/g  
Maximum value of SAR (measured) = 0.599 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 8:52:08 AM

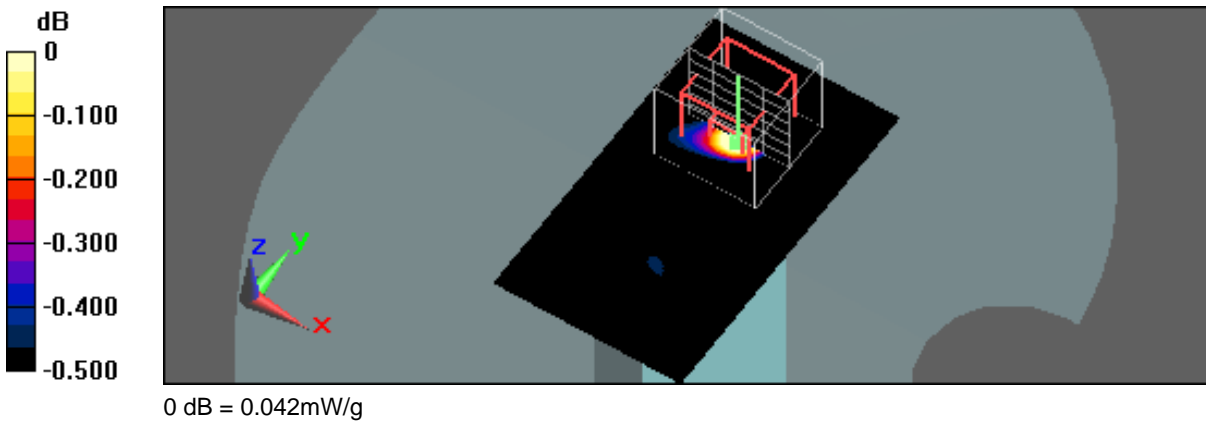
#14\_Flat\_WCDMA Band V CH4233\_Side 6 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: WCDMA Band V; Frequency: 846.6 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 847$  MHz;  $\sigma = 0.998$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x71x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.043 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 5.57 V/m; Power Drift = 0.137 dB  
Peak SAR (extrapolated) = 0.049 W/kg  
SAR(1 g) = 0.033 mW/g; SAR(10 g) = 0.023 mW/g  
Maximum value of SAR (measured) = 0.042 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 7:09:06 PM

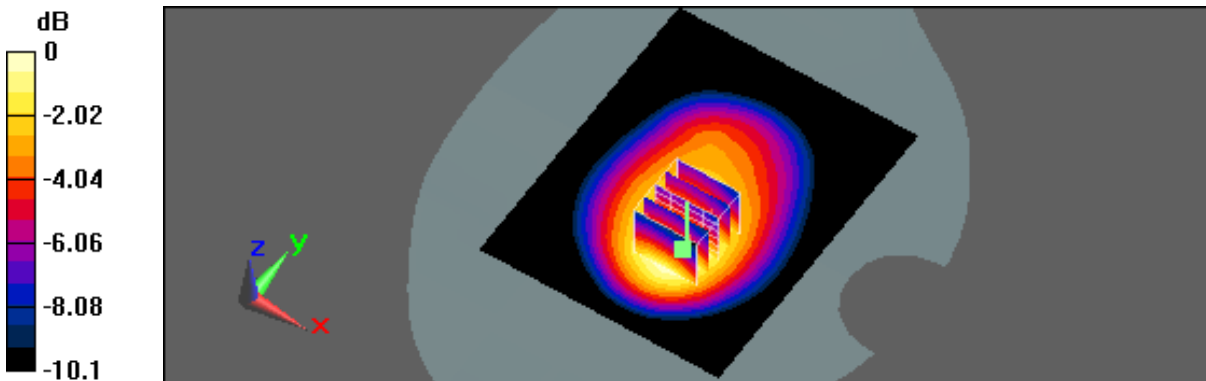
#26\_Flat\_CDMA Cell CH1013\_Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA Cellular ; Frequency: 824.7 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 825 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.05 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 27.2 V/m; Power Drift = -0.020 dB  
Peak SAR (extrapolated) = 1.15 W/kg  
SAR(1 g) = 0.867 mW/g; SAR(10 g) = 0.626 mW/g  
Maximum value of SAR (measured) = 1.01 mW/g



0 dB = 1.01mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 6:25:05 PM

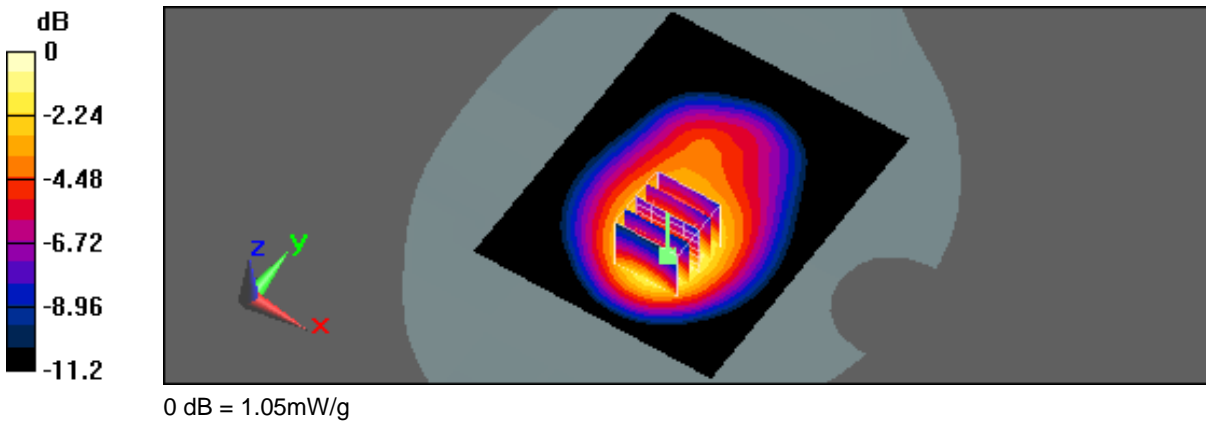
#24\_Flat\_CDMA Cell CH384\_Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA Cellular ; Frequency: 836.52 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.977$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.04 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 24.4 V/m; Power Drift = 0.030 dB  
Peak SAR (extrapolated) = 1.17 W/kg  
SAR(1 g) = 0.864 mW/g; SAR(10 g) = 0.609 mW/g  
Maximum value of SAR (measured) = 1.05 mW/g







Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 6:43:21 PM

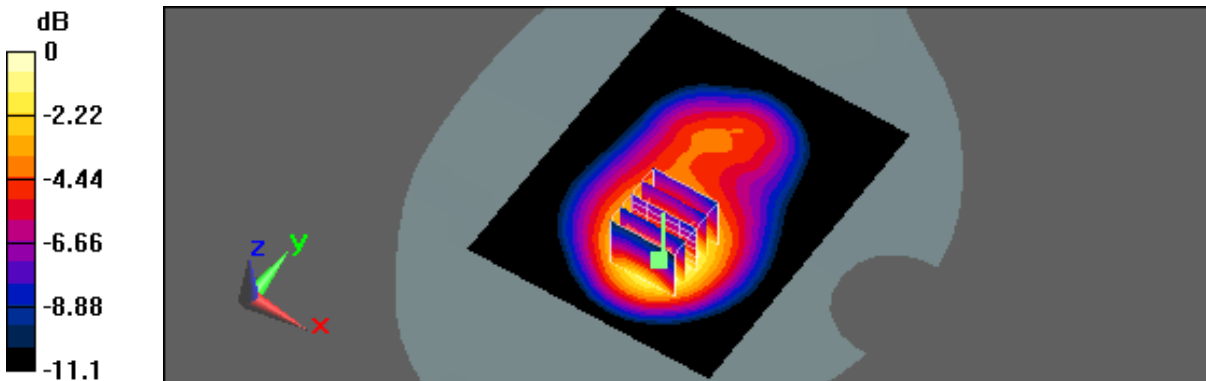
#25\_Flat\_CDMA Cell CH777\_Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA Cellular ; Frequency: 848.31 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 848.31$  MHz;  $\sigma = 0.999$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.04 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 21.1 V/m; Power Drift = -0.076 dB  
Peak SAR (extrapolated) = 1.16 W/kg  
SAR(1 g) = 0.831 mW/g; SAR(10 g) = 0.572 mW/g  
Maximum value of SAR (measured) = 1.01 mW/g



0 dB = 1.01mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 6:05:23 PM

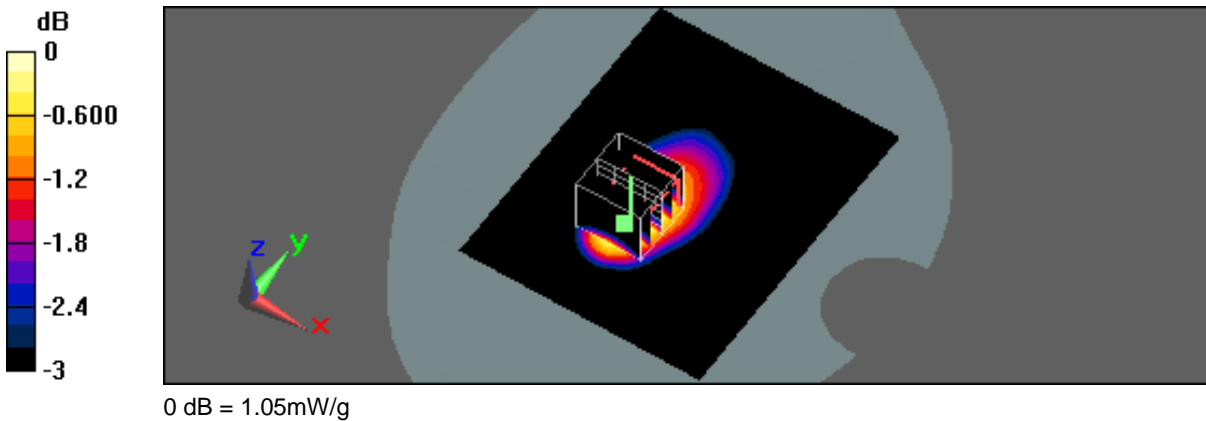
#35\_Flat\_CDMA Cell CH1013\_Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA Cellular ; Frequency: 824.7 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 825$  MHz;  $\sigma = 0.96$  mho/m;  $\epsilon_r = 54$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASY5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.08 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 30.9 V/m; Power Drift = 0.011 dB  
Peak SAR (extrapolated) = 1.18 W/kg  
SAR(1 g) = 0.900 mW/g; SAR(10 g) = 0.666 mW/g  
Maximum value of SAR (measured) = 1.05 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 5:14:23 PM

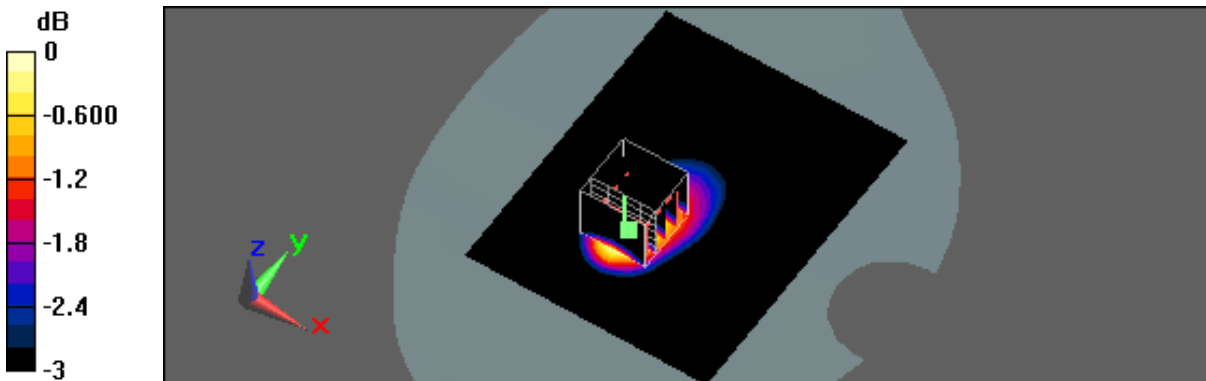
#33\_Flat\_CDMA Cell CH384\_Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA Cellular ; Frequency: 836.52 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.977$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.11 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 29.2 V/m; Power Drift = -0.169 dB  
Peak SAR (extrapolated) = 1.24 W/kg  
SAR(1 g) = 0.905 mW/g; SAR(10 g) = 0.647 mW/g  
Maximum value of SAR (measured) = 1.08 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 5:45:28 PM

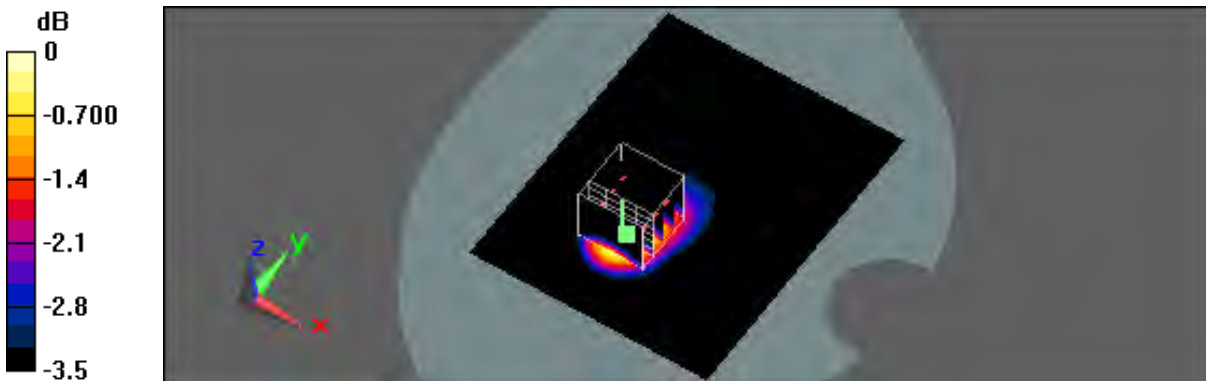
#34\_Flat\_CDMA Cell CH777\_Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA Cellular ; Frequency: 848.31 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 848.31$  MHz;  $\sigma = 0.999$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASY5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.09 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 25.4 V/m; Power Drift = 0.016 dB  
Peak SAR (extrapolated) = 1.23 W/kg  
SAR(1 g) = 0.874 mW/g; SAR(10 g) = 0.607 mW/g  
Maximum value of SAR (measured) = 1.06 mW/g



0 dB = 1.06mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 1:30:58 AM

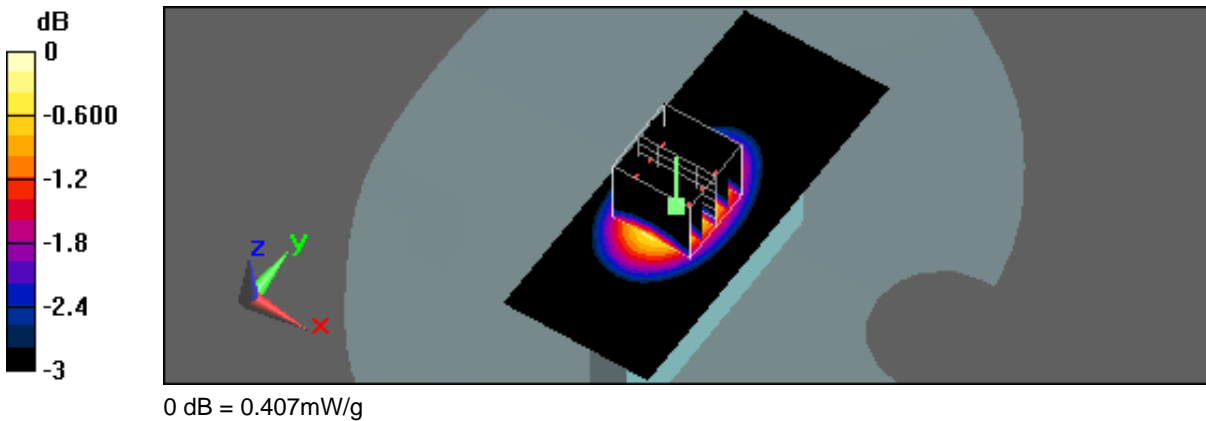
#42\_Flat\_CDMA Cell CH384\_Side 3 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA Cellular ; Frequency: 836.52 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.977$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.407 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 20.6 V/m; Power Drift = 0.032 dB  
Peak SAR (extrapolated) = 0.456 W/kg  
SAR(1 g) = 0.341 mW/g; SAR(10 g) = 0.245 mW/g  
Maximum value of SAR (measured) = 0.407 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 1:45:52 AM

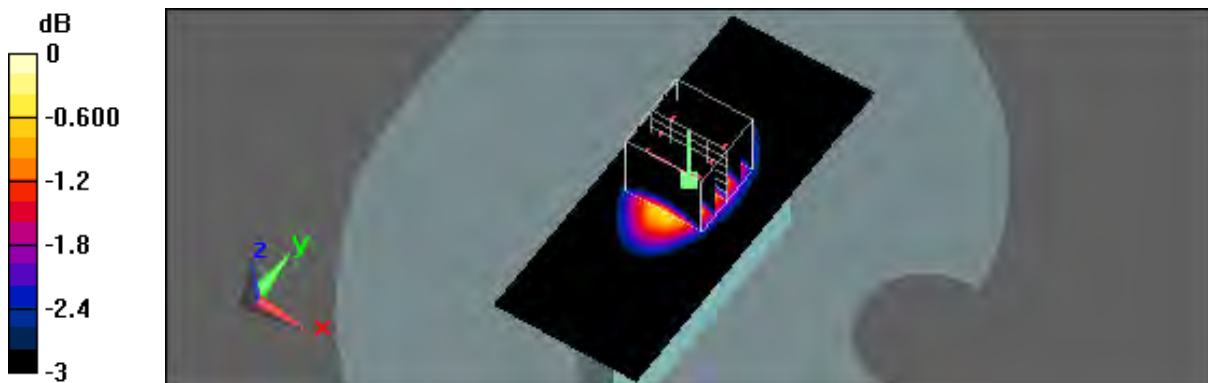
#45\_Flat\_CDMA Cell CH384\_Side 4 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA Cellular ; Frequency: 836.52 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.977$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.630 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 25.5 V/m; Power Drift = 0.00324 dB  
Peak SAR (extrapolated) = 0.717 W/kg  
SAR(1 g) = 0.518 mW/g; SAR(10 g) = 0.364 mW/g  
Maximum value of SAR (measured) = 0.630 mW/g



0 dB = 0.630mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 2:02:59 AM

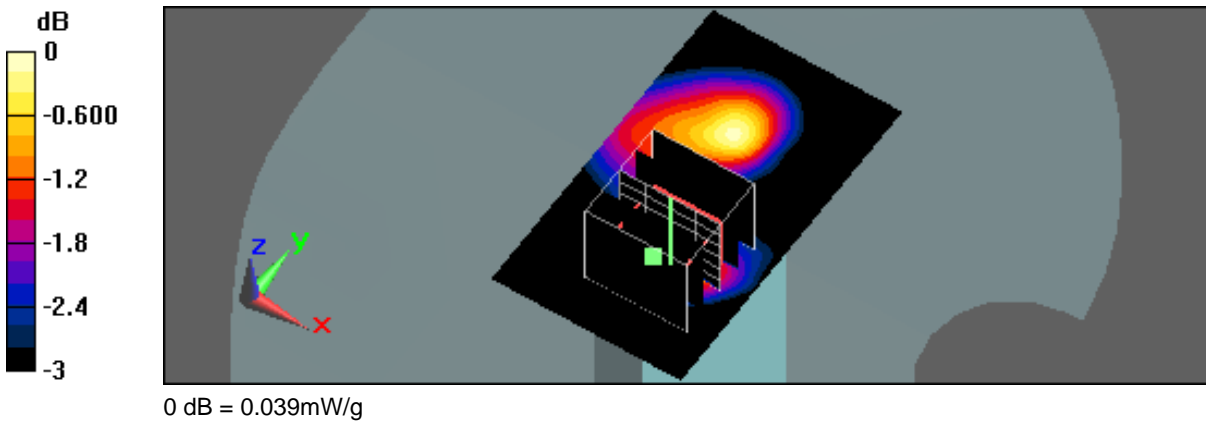
#48\_Flat\_CDMA Cell CH384\_Side 6 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA Cellular ; Frequency: 836.52 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.977$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x71x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.040 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 5.48 V/m; Power Drift = -0.110 dB  
Peak SAR (extrapolated) = 0.048 W/kg  
SAR(1 g) = 0.030 mW/g; SAR(10 g) = 0.019 mW/g  
Maximum value of SAR (measured) = 0.039 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 8:48:14 PM

#29\_Flat\_1xEVDO Cell CH1013\_Side 1 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

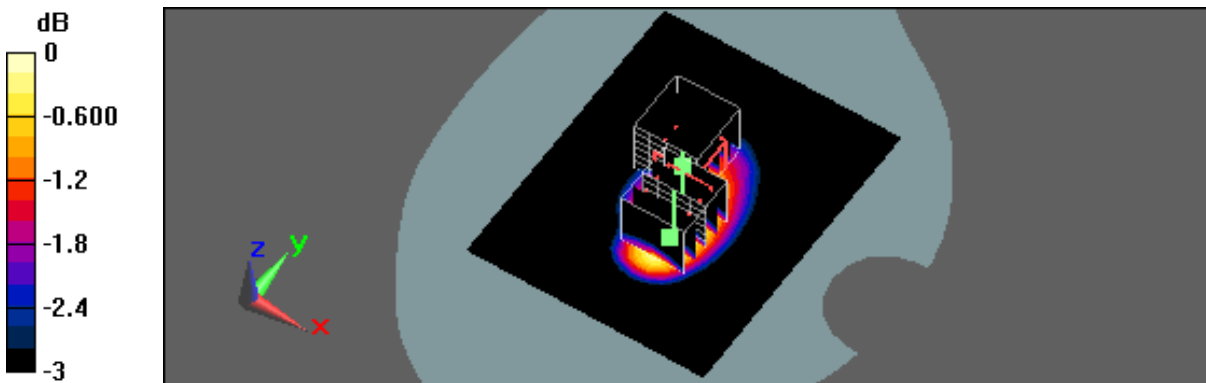
Communication System: 1xEVDO Cellular; Frequency: 824.7 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 825 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.991 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 30.9 V/m; Power Drift = -0.00808 dB  
Peak SAR (extrapolated) = 1.09 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.851 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.634 \text{ mW/g}$   
Maximum value of SAR (measured) = 0.989 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 30.9 V/m; Power Drift = -0.00808 dB  
Peak SAR (extrapolated) = 1.04 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.765 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.533 \text{ mW/g}$   
Maximum value of SAR (measured) = 0.942 mW/g



0 dB = 0.942mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 7:41:35 PM

#27\_Flat\_1xEVDO Cell CH384\_Side 1 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

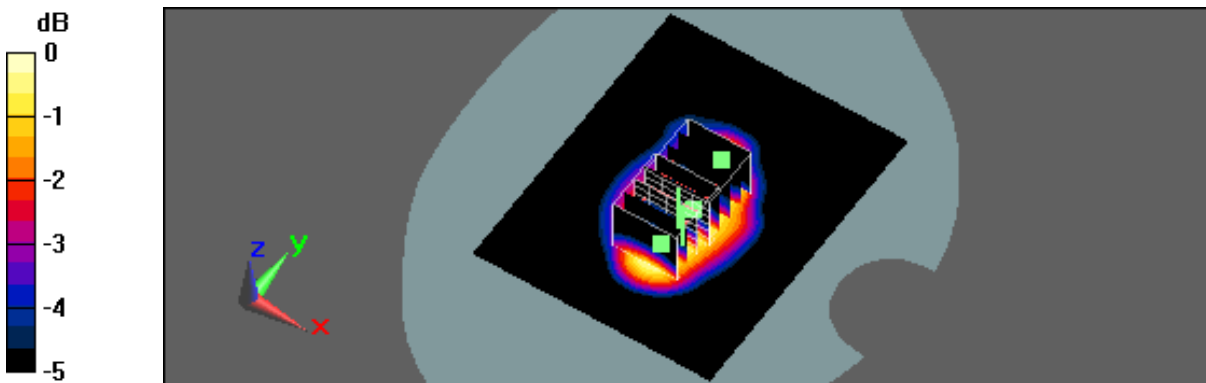
Communication System: 1xEVDO Cellular; Frequency: 836.52 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 837 \text{ MHz}$ ;  $\sigma = 0.977 \text{ mho/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 1.06 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 29.4 V/m; Power Drift = -0.053 dB  
Peak SAR (extrapolated) = 1.16 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.863 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.639 \text{ mW/g}$   
Maximum value of SAR (measured) = 1.05 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 29.4 V/m; Power Drift = -0.053 dB  
Peak SAR (extrapolated) = 1.11 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.819 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.581 \text{ mW/g}$   
Maximum value of SAR (measured) = 1.01 mW/g



0 dB = 1.01mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 8:30:39 PM

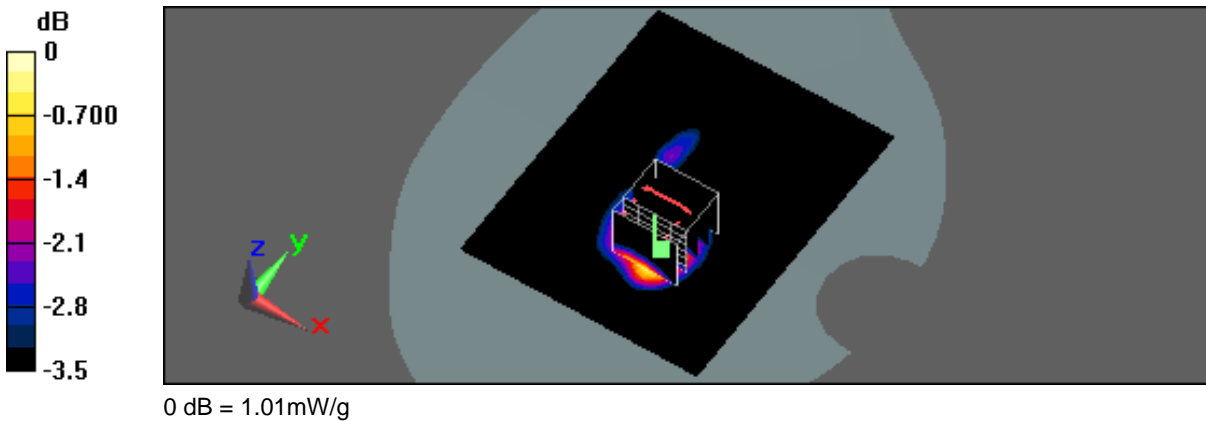
#28\_Flat\_1xEVDO Cell CH777\_Side 1 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: 1xEVDO Cellular; Frequency: 848.31 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 848.31$  MHz;  $\sigma = 0.999$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.994 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 29.7 V/m; Power Drift = -0.060 dB  
Peak SAR (extrapolated) = 1.14 W/kg  
SAR(1 g) = 0.810 mW/g; SAR(10 g) = 0.575 mW/g  
Maximum value of SAR (measured) = 1.01 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 12:58:13 AM

#38\_Flat\_1xEVDO Cell CH1013\_Side 2 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

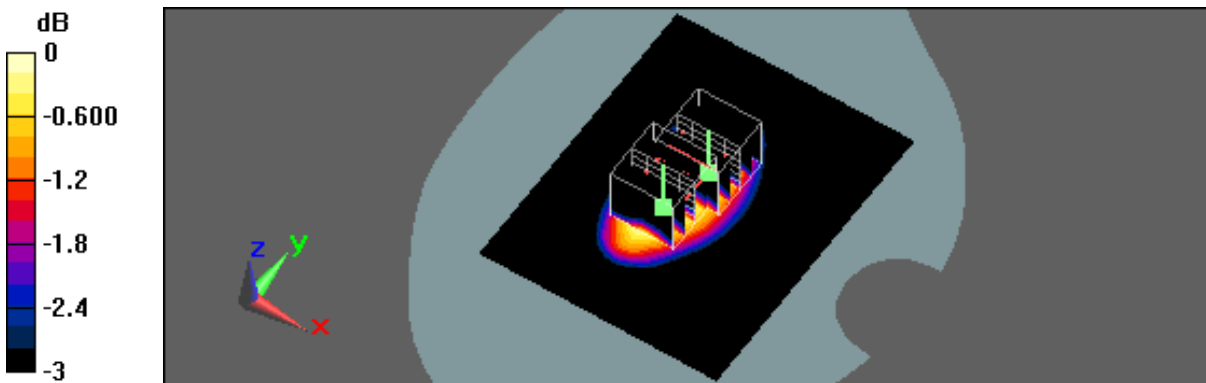
Communication System: 1xEVDO Cellular; Frequency: 824.7 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 825 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.969 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 31.3 V/m; Power Drift = -0.017 dB  
Peak SAR (extrapolated) = 1.05 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.807 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.605 \text{ mW/g}$   
Maximum value of SAR (measured) = 0.971 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 31.3 V/m; Power Drift = -0.017 dB  
Peak SAR (extrapolated) = 1.04 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.819 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.625 \text{ mW/g}$   
Maximum value of SAR (measured) = 0.937 mW/g



0 dB = 0.937mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 11:38:01 PM

#36\_Flat\_1xEVDO Cell CH384\_Side 2 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

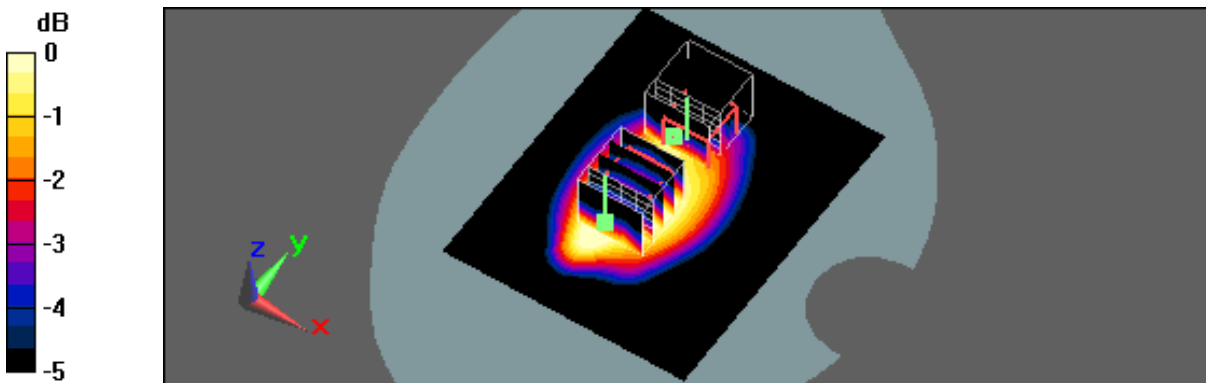
Communication System: 1xEVDO Cellular; Frequency: 836.52 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 837 \text{ MHz}$ ;  $\sigma = 0.977 \text{ mho/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 1.02 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 32 V/m; Power Drift = -0.103 dB  
Peak SAR (extrapolated) = 1.09 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.835 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.630 \text{ mW/g}$   
Maximum value of SAR (measured) = 0.970 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 32 V/m; Power Drift = -0.103 dB  
Peak SAR (extrapolated) = 0.968 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.611 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.378 \text{ mW/g}$   
Maximum value of SAR (measured) = 0.836 mW/g



0 dB = 0.836mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 12:38:27 AM

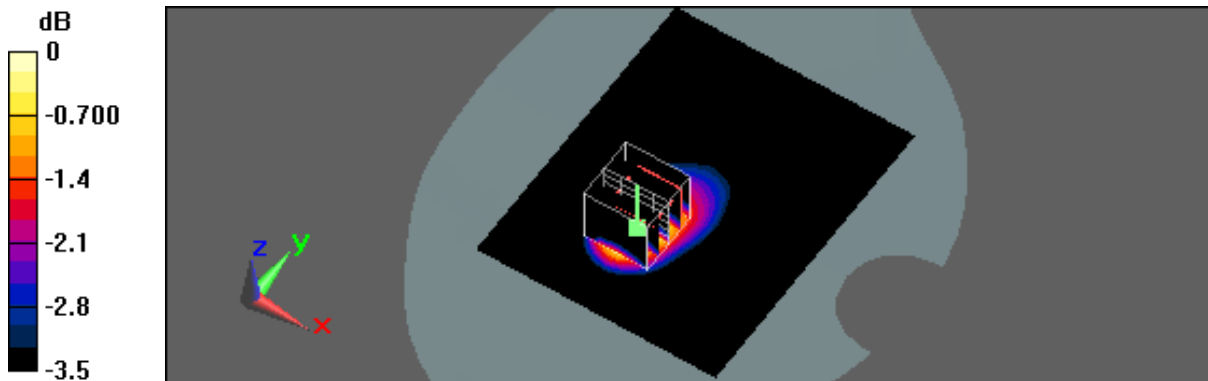
#37\_Flat\_1xEVDO Cell CH777\_Side 2 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: 1xEVDO Cellular; Frequency: 848.31 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 848.31$  MHz;  $\sigma = 0.999$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 25.7 V/m; Power Drift = -0.050 dB  
Peak SAR (extrapolated) = 1.12 W/kg  
SAR(1 g) = 0.816 mW/g; SAR(10 g) = 0.573 mW/g  
Maximum value of SAR (measured) = 0.987 mW/g



0 dB = 0.987mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/26/2013 11:26:10 AM

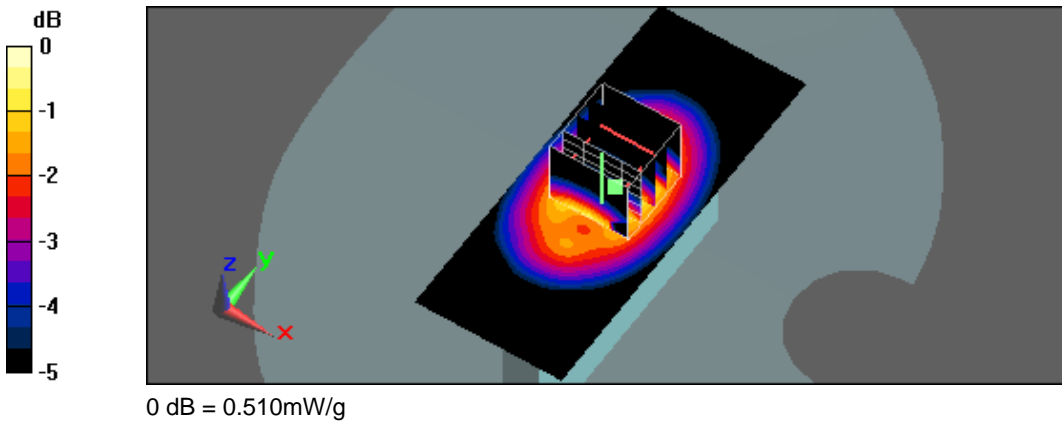
#43\_Flat\_1xEVDO Cell CH384\_Side 3 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: 1xEVDO Cellular; Frequency: 836.52 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 837 \text{ MHz}$ ;  $\sigma = 0.977 \text{ mho/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.530 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 23.9 V/m; Power Drift = 0.018 dB  
Peak SAR (extrapolated) = 0.571 W/kg  
SAR(1 g) = 0.421 mW/g; SAR(10 g) = 0.299 mW/g  
Maximum value of SAR (measured) = 0.510 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/26/2013 12:28:06 PM

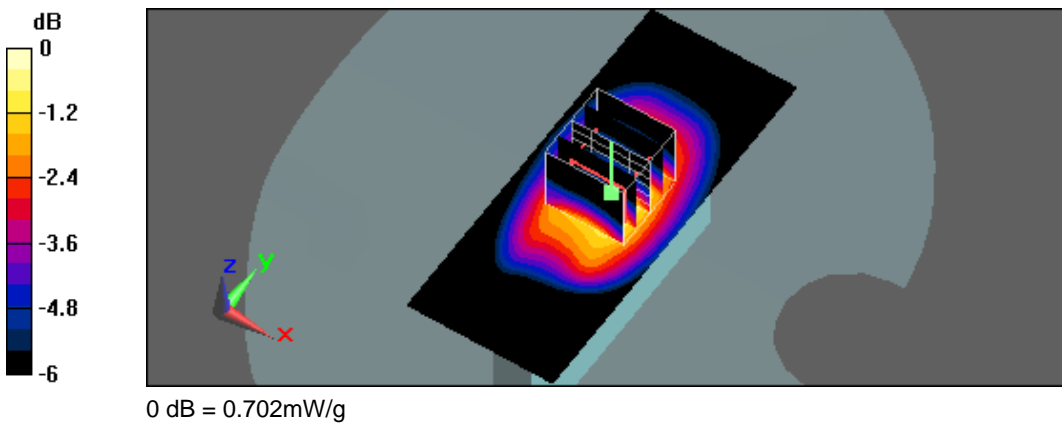
#46\_Flat\_1xEVDO Cell CH384\_Side 4 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: 1xEVDO Cellular; Frequency: 836.52 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 837 \text{ MHz}$ ;  $\sigma = 0.977 \text{ mho/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.687 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 25.8 V/m; Power Drift = -0.042 dB  
Peak SAR (extrapolated) = 0.791 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.560 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.384 \text{ mW/g}$   
Maximum value of SAR (measured) = 0.702 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/26/2013 12:54:33 PM

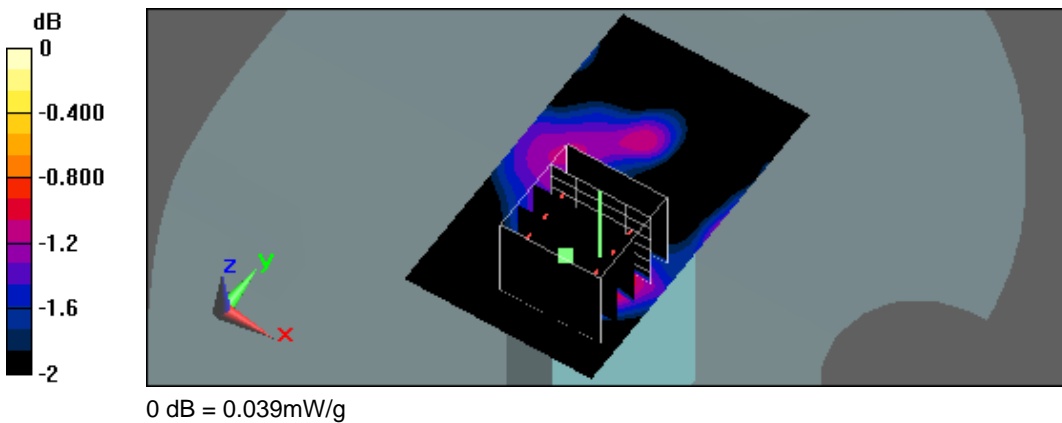
#49\_Flat\_1xEVDO Cell CH384\_Side 6 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: 1xEVDO Cellular; Frequency: 836.52 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 837 \text{ MHz}$ ;  $\sigma = 0.977 \text{ mho/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x71x1):  
Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.039 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 5.17 V/m; Power Drift = -0.071 dB  
Peak SAR (extrapolated) = 0.048 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.031 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.020 \text{ mW/g}$   
Maximum value of SAR (measured) = 0.039 mW/g







Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 9:57:42 PM

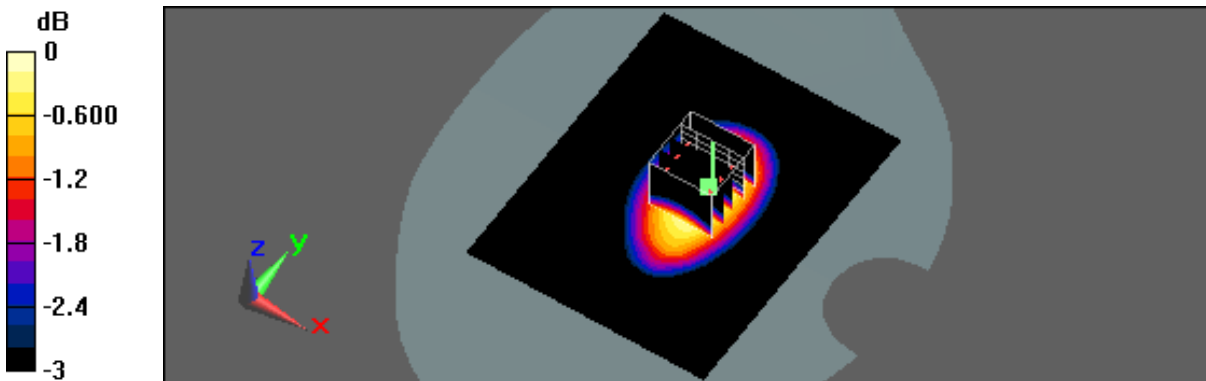
#32\_Flat\_CDMA 1xRTT Cell CH1013\_Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA 1xRTT Cellular; Frequency: 824.7 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 825$  MHz;  $\sigma = 0.96$  mho/m;  $\epsilon_r = 54$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.959 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 31.8 V/m; Power Drift = -0.065 dB  
Peak SAR (extrapolated) = 1.05 W/kg  
SAR(1 g) = 0.838 mW/g; SAR(10 g) = 0.637 mW/g  
Maximum value of SAR (measured) = 0.958 mW/g



0 dB = 0.958mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 9:22:04 PM

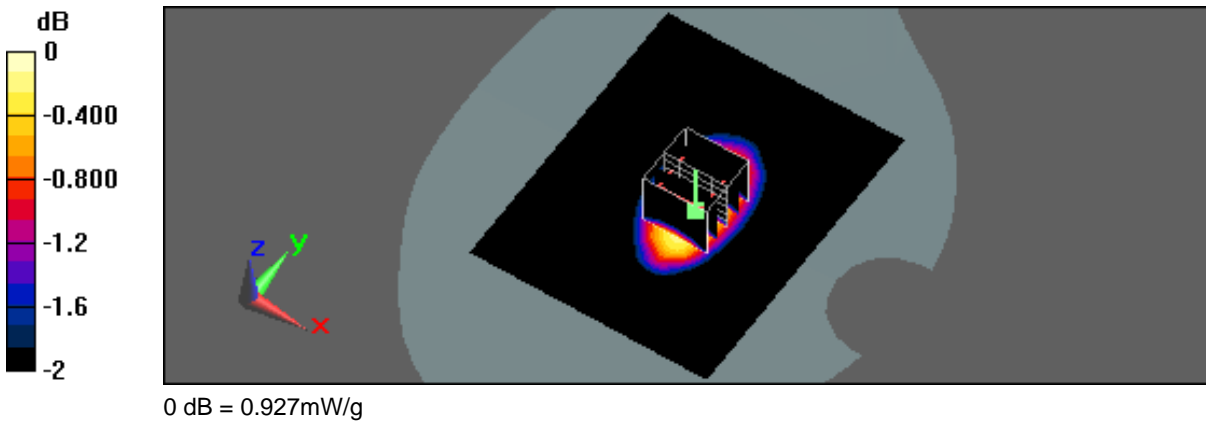
#30\_Flat\_CDMA 1xRTT Cell CH384\_Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA 1xRTT Cellular; Frequency: 836.52 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.977$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.927 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 31.2 V/m; Power Drift = -0.047 dB  
Peak SAR (extrapolated) = 1.01 W/kg  
SAR(1 g) = 0.810 mW/g; SAR(10 g) = 0.617 mW/g  
Maximum value of SAR (measured) = 0.927 mW/g



Test Laboratory: A Test Lab Techno Corp.  
 Date/Time: 2/24/2013 9:40:08 PM

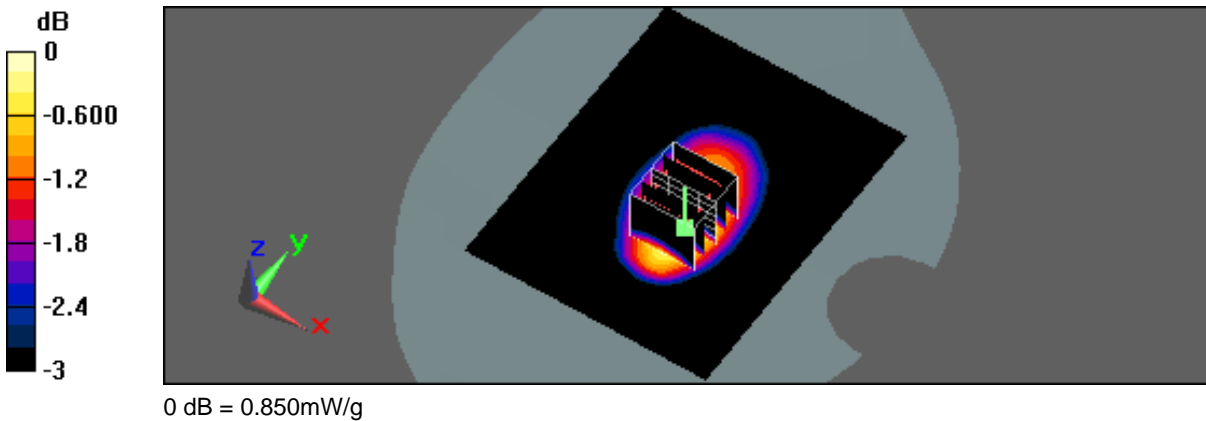
#31\_Flat\_CDMA 1xRTT Cell CH777\_Side 1 to phantom 10mm  
 DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA 1xRTT Cellular; Frequency: 848.31 MHz; Duty Cycle: 1:1  
 Medium parameters used (interpolated):  $f = 848.31$  MHz;  $\sigma = 0.999$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section  
 Measurement Standard: DASYS5 (IEEE/IEC)  
 DASYS5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
 Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 0.851 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
 Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 28.7 V/m; Power Drift = -0.021 dB  
 Peak SAR (extrapolated) = 0.934 W/kg  
 SAR(1 g) = 0.736 mW/g; SAR(10 g) = 0.554 mW/g  
 Maximum value of SAR (measured) = 0.850 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 10:26:19 PM

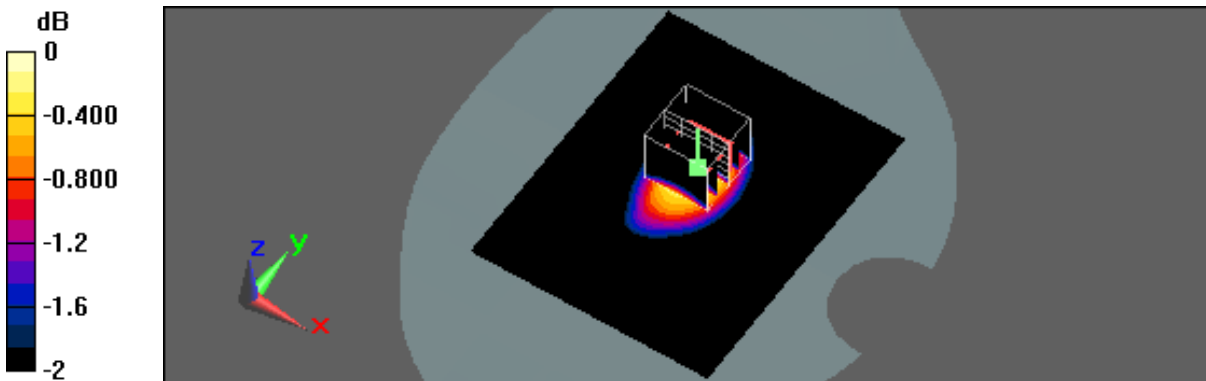
#41\_Flat\_CDMA 1xRTT Cell CH1013\_Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA 1xRTT Cellular; Frequency: 824.7 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 825 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 1.01 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 32.2 V/m; Power Drift = -0.011 dB  
Peak SAR (extrapolated) = 1.11 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.874 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.660 \text{ mW/g}$   
Maximum value of SAR (measured) = 1.01 mW/g



0 dB = 1.01mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 10:43:58 PM

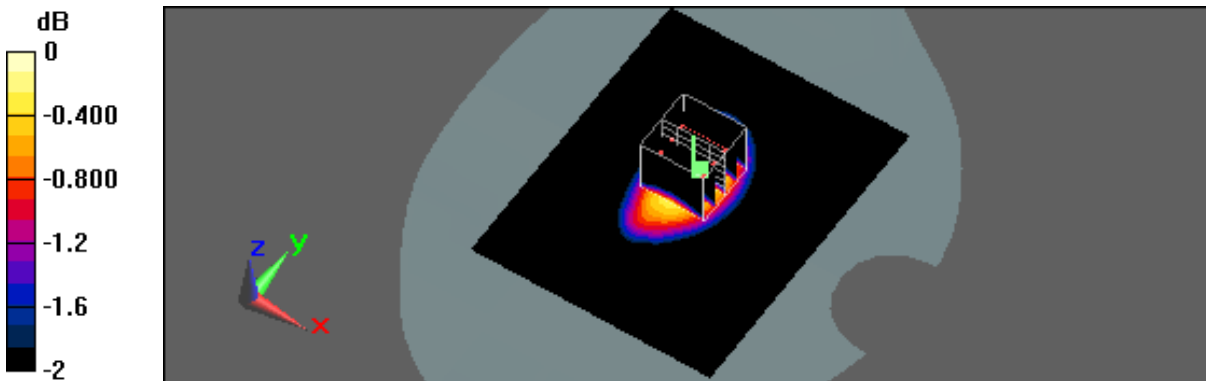
#39\_Flat\_CDMA 1xRTT Cell CH384\_Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA 1xRTT Cellular; Frequency: 836.52 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.977$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.994 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 32.2 V/m; Power Drift = 0.027 dB  
Peak SAR (extrapolated) = 1.09 W/kg  
SAR(1 g) = 0.868 mW/g; SAR(10 g) = 0.659 mW/g  
Maximum value of SAR (measured) = 0.996 mW/g



0 dB = 0.996mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 11:09:45 PM

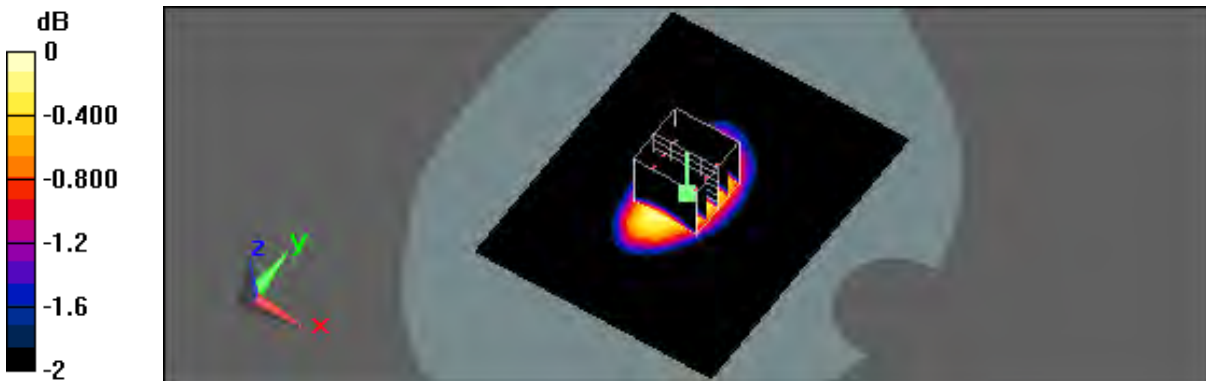
#40\_Flat\_CDMA 1xRTT Cell CH777\_Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA 1xRTT Cellular; Frequency: 848.31 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 848.31$  MHz;  $\sigma = 0.999$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.871 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 30.3 V/m; Power Drift = -0.011 dB  
Peak SAR (extrapolated) = 0.949 W/kg  
SAR(1 g) = 0.763 mW/g; SAR(10 g) = 0.583 mW/g  
Maximum value of SAR (measured) = 0.873 mW/g



0 dB = 0.873mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/26/2013 11:44:30 AM

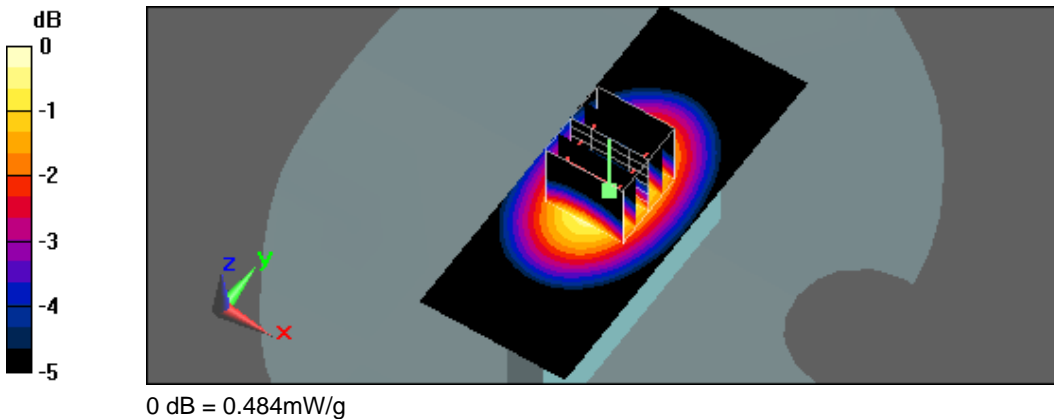
#44\_Flat\_CDMA 1xRTT Cell CH384\_Side 3 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA 1xRTT Cellular; Frequency: 836.52 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 837 \text{ MHz}$ ;  $\sigma = 0.977 \text{ mho/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.483 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 22.8 V/m; Power Drift = -0.010 dB  
Peak SAR (extrapolated) = 0.544 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.404 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.288 \text{ mW/g}$   
Maximum value of SAR (measured) = 0.484 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/26/2013 12:01:03 PM

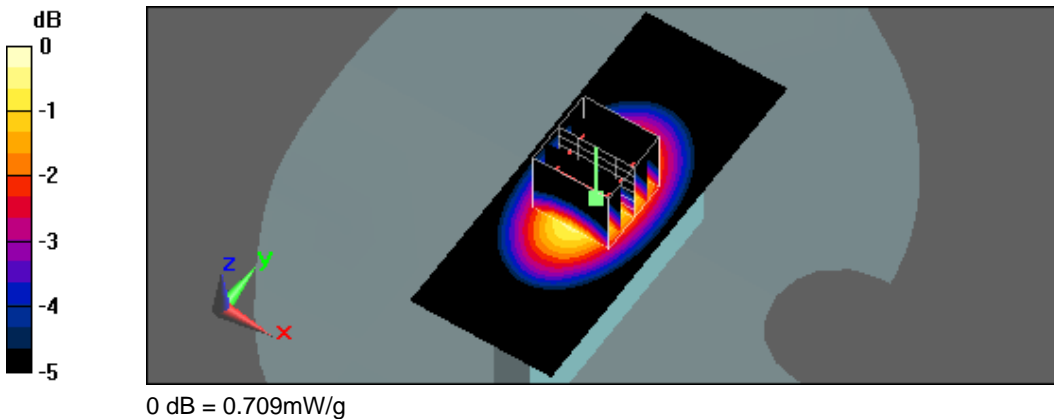
#47\_Flat\_CDMA 1xRTT Cell CH384\_Side 4 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA 1xRTT Cellular; Frequency: 836.52 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 837 \text{ MHz}$ ;  $\sigma = 0.977 \text{ mho/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.704 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 27.6 V/m; Power Drift = -0.017 dB  
Peak SAR (extrapolated) = 0.806 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.581 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.406 \text{ mW/g}$   
Maximum value of SAR (measured) = 0.709 mW/g







Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/26/2013 1:21:32 PM

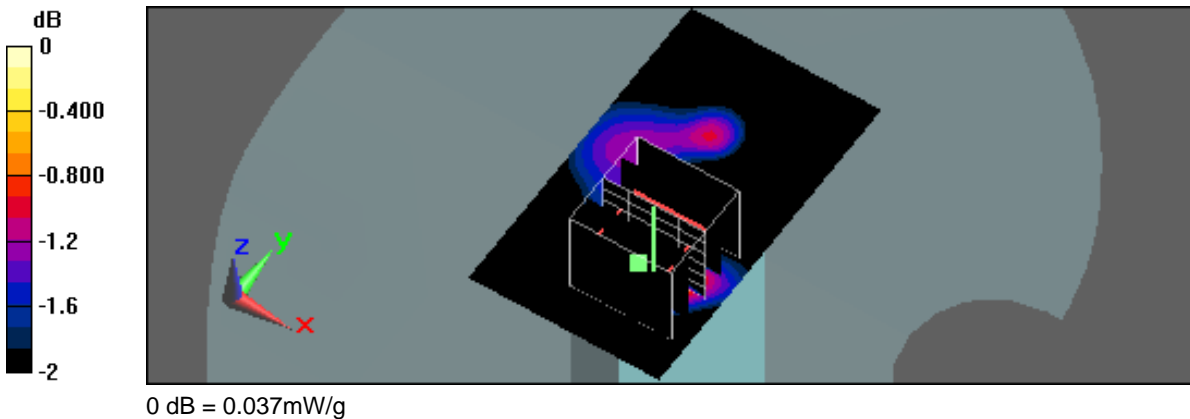
#50\_Flat\_CDMA 1xRTT Cell CH384\_Side 6 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA 1xRTT Cellular; Frequency: 836.52 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 837 \text{ MHz}$ ;  $\sigma = 0.977 \text{ mho/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x71x1):  
Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.038 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 5.07 V/m; Power Drift = -0.033 dB  
Peak SAR (extrapolated) = 0.046 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.029 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.019 \text{ mW/g}$   
Maximum value of SAR (measured) = 0.037 mW/g



Test Laboratory: A Test Lab Techno Corp.  
 Date/Time: 2/25/2013 4:51:01 PM

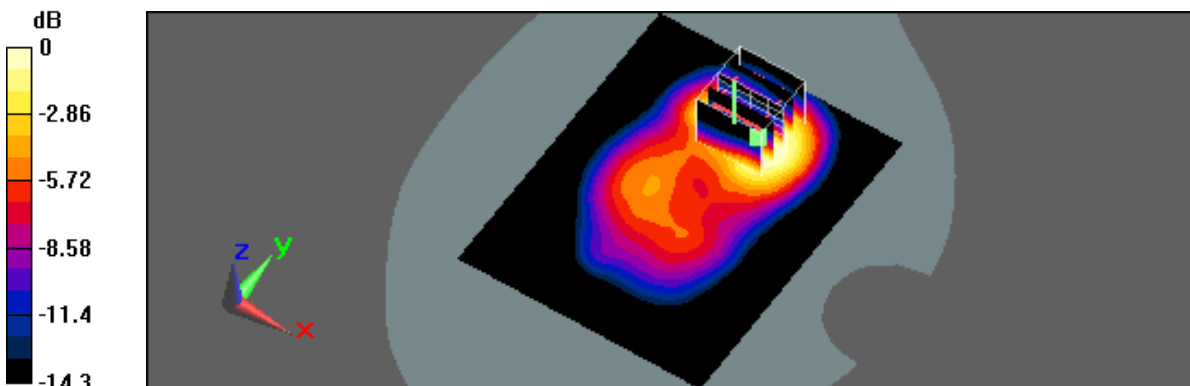
#61\_Flat\_CDMA PCS CH25\_Side 1 to phantom 10mm  
 DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA PCS ; Frequency: 1851.25 MHz; Duty Cycle: 1:1  
 Medium parameters used (interpolated):  $f = 1851.25 \text{ MHz}$ ;  $\sigma = 1.45 \text{ mho/m}$ ;  $\epsilon_r = 53.6$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Phantom section: Flat Section  
 Measurement Standard: DASYS5 (IEEE/IEC)  
 DASYS5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
 Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 1.1 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
 Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 16.8 V/m; Power Drift = -0.00944 dB  
 Peak SAR (extrapolated) = 1.26 W/kg  
 SAR(1 g) = 0.799 mW/g; SAR(10 g) = 0.490 mW/g  
 Maximum value of SAR (measured) = 1.01 mW/g



0 dB = 1.01mW/g

Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 4:30:59 PM

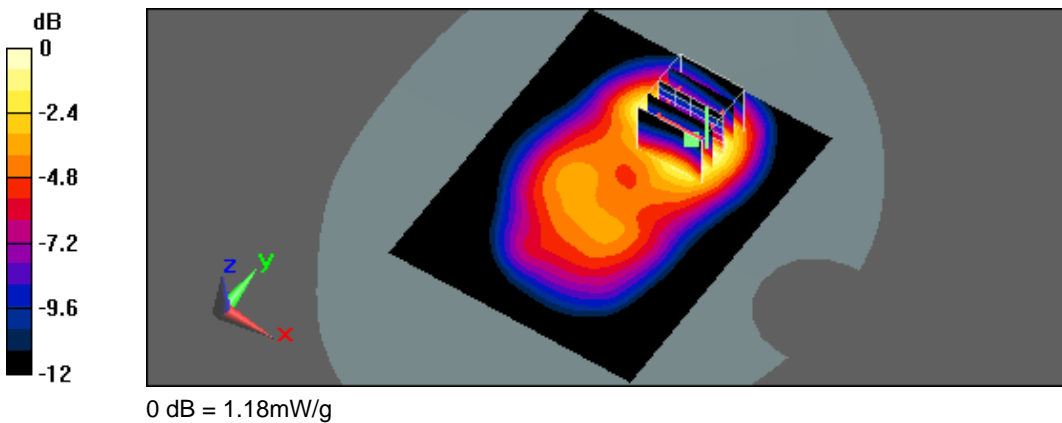
#60\_Flat\_CDMA PCS CH600\_Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA PCS ; Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.3 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 17.7 V/m; Power Drift = 0.00979 dB  
Peak SAR (extrapolated) = 1.51 W/kg  
SAR(1 g) = 0.902 mW/g; SAR(10 g) = 0.545 mW/g  
Maximum value of SAR (measured) = 1.18 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 5:46:19 PM

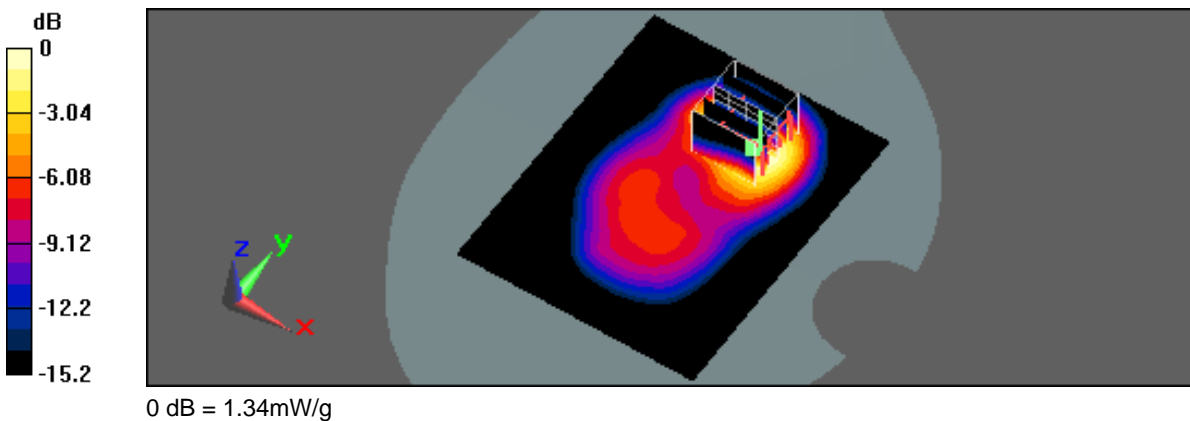
#62\_Flat\_CDMA PCS CH1175\_Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA PCS ; Frequency: 1908.75 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1909$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.37 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 16.9 V/m; Power Drift = -0.161 dB  
Peak SAR (extrapolated) = 1.67 W/kg  
SAR(1 g) = 0.985 mW/g; SAR(10 g) = 0.586 mW/g  
Maximum value of SAR (measured) = 1.34 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/5/2013 1:44:11 PM

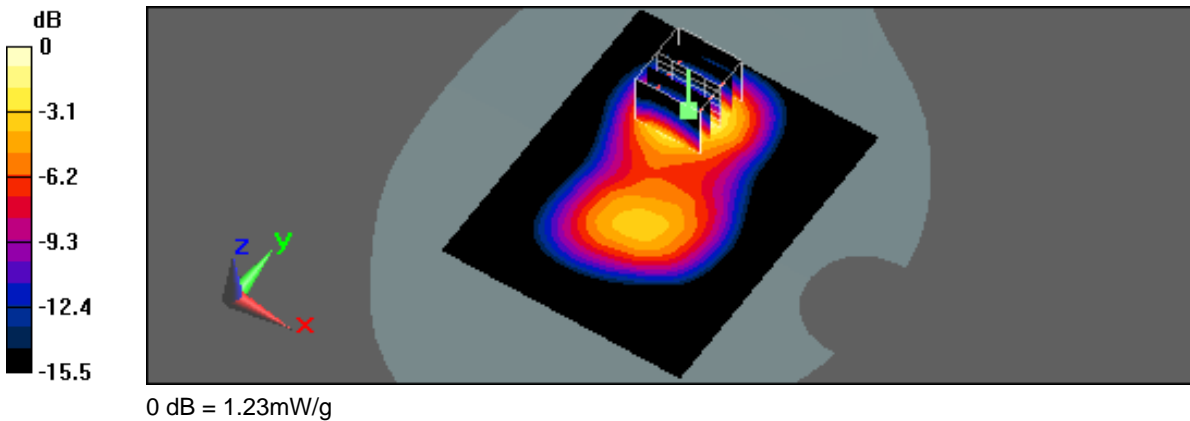
#67\_Flat\_CDMA PCS CH25\_Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA PCS ; Frequency: 1851.25 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1851.25$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.27 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 19.7 V/m; Power Drift = 0.00308 dB  
Peak SAR (extrapolated) = 1.47 W/kg  
SAR(1 g) = 0.929 mW/g; SAR(10 g) = 0.553 mW/g  
Maximum value of SAR (measured) = 1.23 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/5/2013 1:14:25 PM

#66\_Flat\_CDMA PCS CH600\_Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

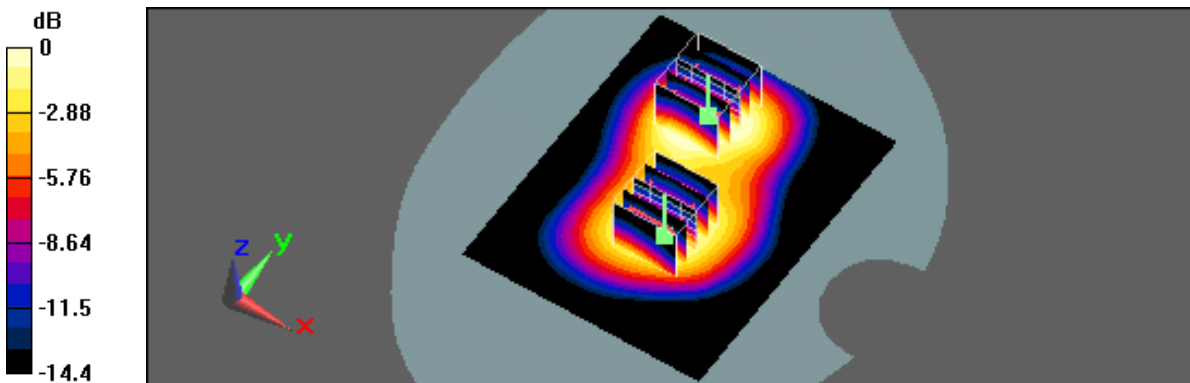
Communication System: CDMA PCS ; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.43 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 22.2 V/m; Power Drift = -0.074 dB  
Peak SAR (extrapolated) = 1.65 W/kg  
SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.604 mW/g  
Maximum value of SAR (measured) = 1.37 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 22.2 V/m; Power Drift = -0.074 dB  
Peak SAR (extrapolated) = 1.05 W/kg  
SAR(1 g) = 0.713 mW/g; SAR(10 g) = 0.467 mW/g  
Maximum value of SAR (measured) = 0.890 mW/g



0 dB = 0.890mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/5/2013 2:02:32 PM

#68\_Flat\_CDMA PCS CH1175\_Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

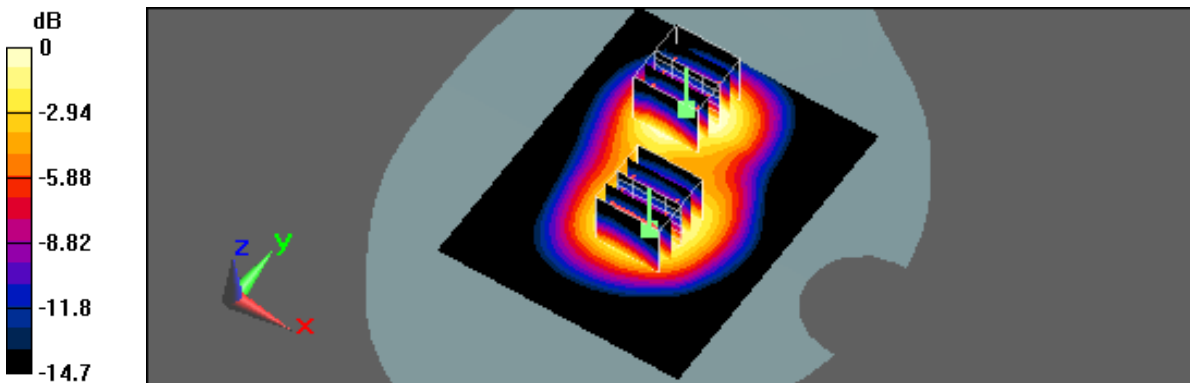
Communication System: CDMA PCS ; Frequency: 1908.75 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1909$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.39 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 21.2 V/m; Power Drift = -0.012 dB  
Peak SAR (extrapolated) = 1.6 W/kg  
SAR(1 g) = 0.989 mW/g; SAR(10 g) = 0.576 mW/g  
Maximum value of SAR (measured) = 1.31 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 21.2 V/m; Power Drift = -0.012 dB  
Peak SAR (extrapolated) = 1.09 W/kg  
SAR(1 g) = 0.742 mW/g; SAR(10 g) = 0.482 mW/g  
Maximum value of SAR (measured) = 0.928 mW/g



0 dB = 0.928mW/g

Test Laboratory: A Test Lab Techno Corp.  
 Date/Time: 2/27/2013 12:47:42 PM

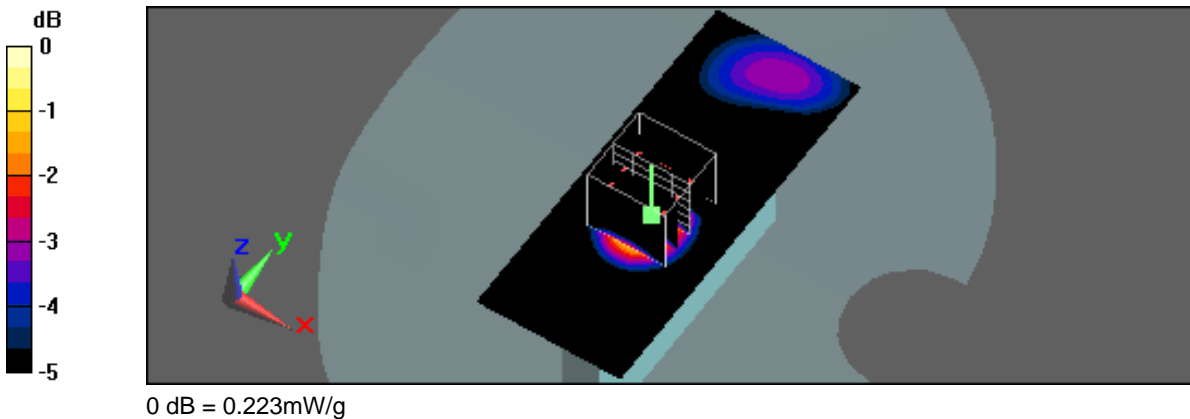
#72\_Flat\_CDMA PCS CH25\_Side 3 to phantom 10mm  
 DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA PCS ; Frequency: 1851.25 MHz; Duty Cycle: 1:1  
 Medium parameters used (interpolated):  $f = 1851.25$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section  
 Measurement Standard: DASYS5 (IEEE/IEC)  
 DASYS5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
 Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 0.226 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
 Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 11.7 V/m; Power Drift = -0.046 dB  
 Peak SAR (extrapolated) = 0.264 W/kg  
 SAR(1 g) = 0.172 mW/g; SAR(10 g) = 0.108 mW/g  
 Maximum value of SAR (measured) = 0.223 mW/g







Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/27/2013 1:06:37 PM

#74\_Flat\_CDMA PCS CH25\_Side 4 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

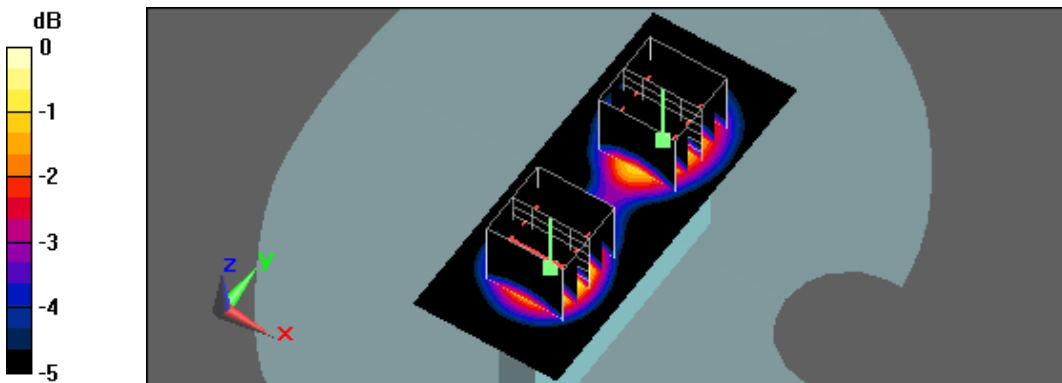
Communication System: CDMA PCS ; Frequency: 1851.25 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1851.25$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.726 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 13.9 V/m; Power Drift = -0.024 dB  
Peak SAR (extrapolated) = 0.844 W/kg  
SAR(1 g) = 0.535 mW/g; SAR(10 g) = 0.316 mW/g  
Maximum value of SAR (measured) = 0.705 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 13.9 V/m; Power Drift = -0.024 dB  
Peak SAR (extrapolated) = 0.684 W/kg  
SAR(1 g) = 0.451 mW/g; SAR(10 g) = 0.282 mW/g  
Maximum value of SAR (measured) = 0.579 mW/g



0 dB = 0.579mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/26/2013 12:53:48 AM

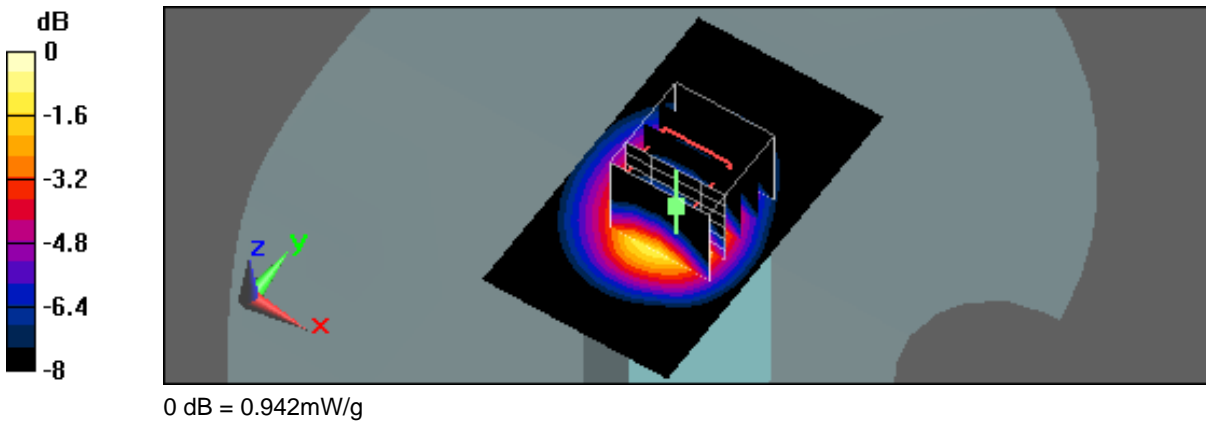
#77\_Flat\_CDMA PCS CH25\_Side 6 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA PCS ; Frequency: 1851.25 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1851.25$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x71x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.02 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 27.1 V/m; Power Drift = -0.034 dB  
Peak SAR (extrapolated) = 1.19 W/kg  
SAR(1 g) = 0.770 mW/g; SAR(10 g) = 0.458 mW/g  
Maximum value of SAR (measured) = 0.942 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/26/2013 12:41:49 AM

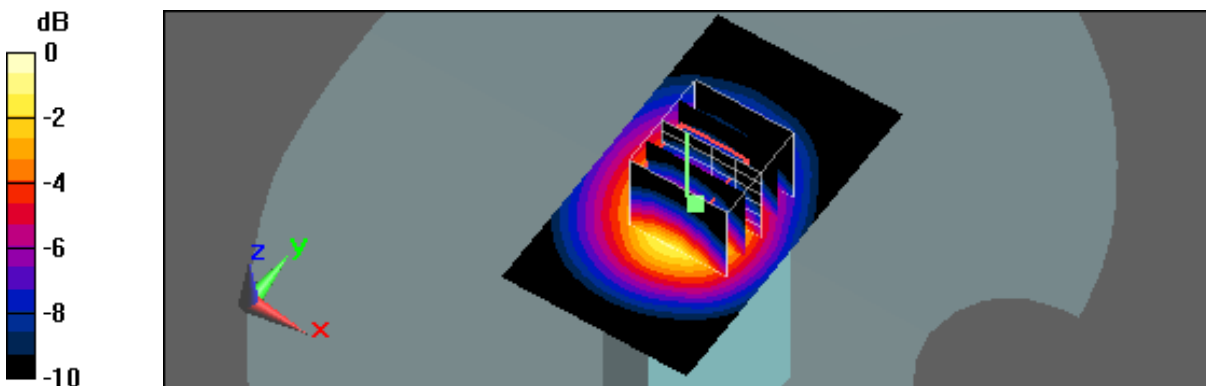
#76\_Flat\_CDMA PCS CH600\_Side 6 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA PCS ; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x71x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.1 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 27.9 V/m; Power Drift = -0.022 dB  
Peak SAR (extrapolated) = 1.29 W/kg  
SAR(1 g) = 0.835 mW/g; SAR(10 g) = 0.495 mW/g  
Maximum value of SAR (measured) = 1.04 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/26/2013 1:05:23 AM

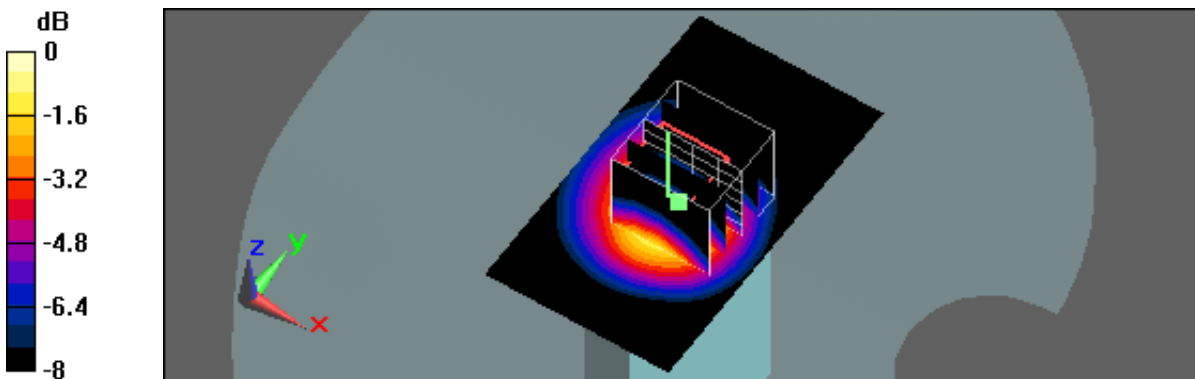
#78\_Flat\_CDMA PCS CH1175\_Side 6 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA PCS ; Frequency: 1908.75 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1909$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x71x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.09 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 27.6 V/m; Power Drift = -0.130 dB  
Peak SAR (extrapolated) = 1.28 W/kg  
SAR(1 g) = 0.823 mW/g; SAR(10 g) = 0.487 mW/g  
Maximum value of SAR (measured) = 1.03 mW/g



0 dB = 1.03mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/5/2013 4:35:56 PM

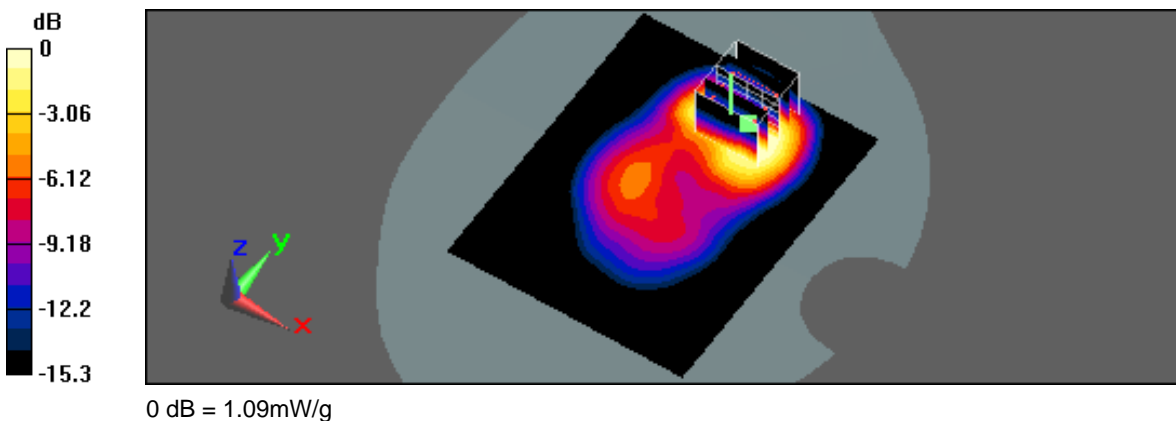
#64\_Flat\_1xEVDO PCS CH25\_Side 1 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: 1xEVDO PCS ; Frequency: 1851.25 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1851.25$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.13 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 16.2 V/m; Power Drift = 0.027 dB  
Peak SAR (extrapolated) = 1.36 W/kg  
SAR(1 g) = 0.841 mW/g; SAR(10 g) = 0.520 mW/g  
Maximum value of SAR (measured) = 1.09 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/5/2013 4:15:45 PM

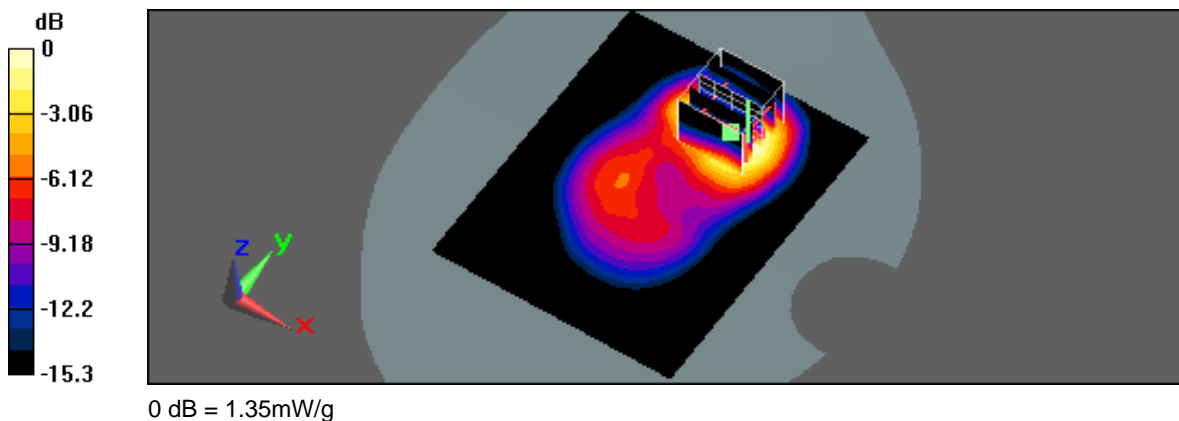
#63\_Flat\_1xEVDO PCS CH600\_Side 1 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: 1xEVDO PCS ; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.33 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 17.2 V/m; Power Drift = -0.00142 dB  
Peak SAR (extrapolated) = 1.67 W/kg  
SAR(1 g) = 0.993 mW/g; SAR(10 g) = 0.598 mW/g  
Maximum value of SAR (measured) = 1.35 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/5/2013 4:56:33 PM

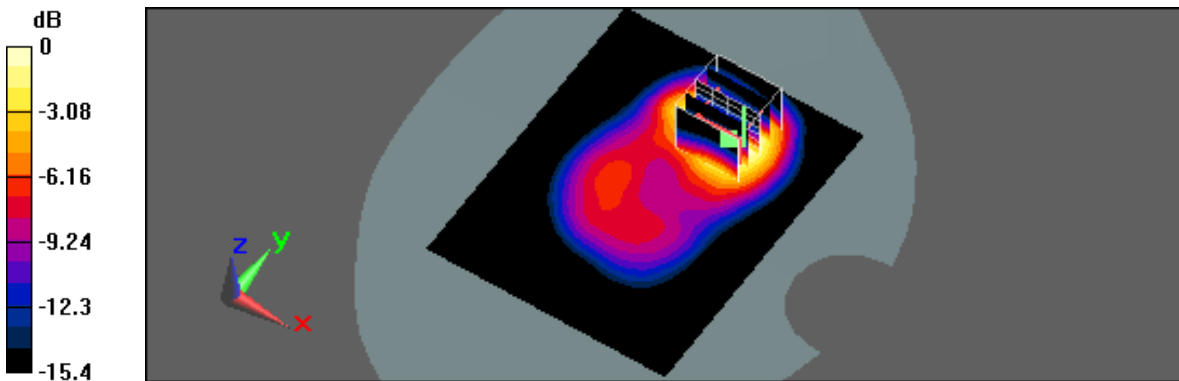
#65\_Flat\_1xEVDO PCS CH1175\_Side 1 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: 1xEVDO PCS ; Frequency: 1908.75 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1909$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.33 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 16.2 V/m; Power Drift = 0.037 dB  
Peak SAR (extrapolated) = 1.7 W/kg  
SAR(1 g) = 0.997 mW/g; SAR(10 g) = 0.602 mW/g  
Maximum value of SAR (measured) = 1.32 mW/g



0 dB = 1.32mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/5/2013 3:24:11 PM

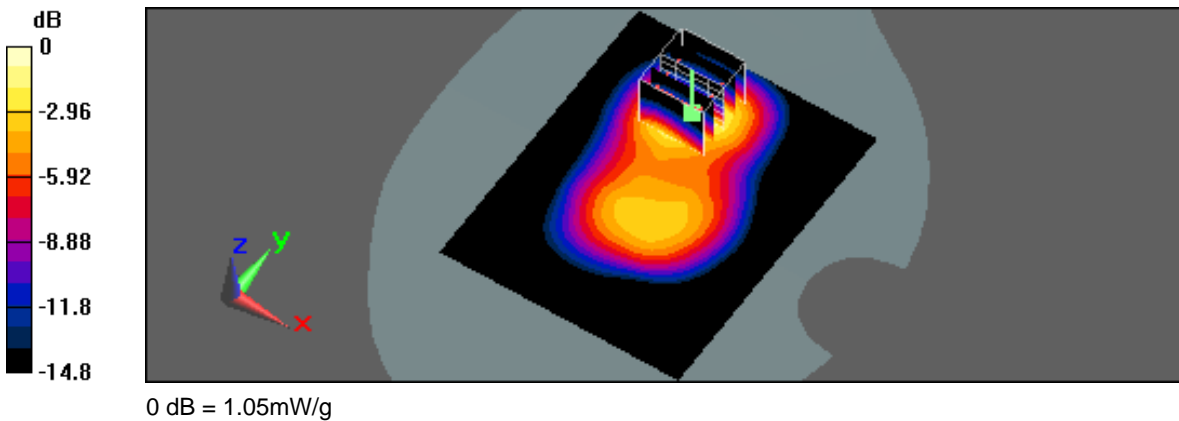
#70\_Flat\_1xEVDO PCS CH25\_Side 2 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: 1xEVDO PCS ; Frequency: 1851.25 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1851.25$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.1 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 20.5 V/m; Power Drift = -0.032 dB  
Peak SAR (extrapolated) = 1.29 W/kg  
SAR(1 g) = 0.816 mW/g; SAR(10 g) = 0.483 mW/g  
Maximum value of SAR (measured) = 1.05 mW/g







Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/5/2013 5:21:33 PM

#69\_Flat\_1xEVDO PCS CH600\_Side 2 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

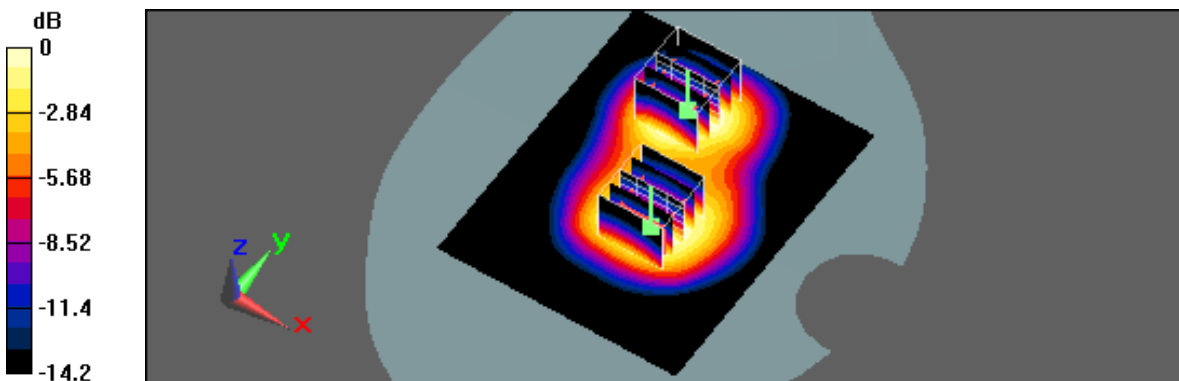
Communication System: 1xEVDO PCS ; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.43 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 22.3 V/m; Power Drift = -0.086 dB  
Peak SAR (extrapolated) = 1.64 W/kg  
SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.594 mW/g  
Maximum value of SAR (measured) = 1.36 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 22.3 V/m; Power Drift = -0.086 dB  
Peak SAR (extrapolated) = 1.16 W/kg  
SAR(1 g) = 0.797 mW/g; SAR(10 g) = 0.521 mW/g  
Maximum value of SAR (measured) = 0.999 mW/g



0 dB = 0.999mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/5/2013 3:43:20 PM

#71\_Flat\_1xEVDO PCS CH1175\_Side 2 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

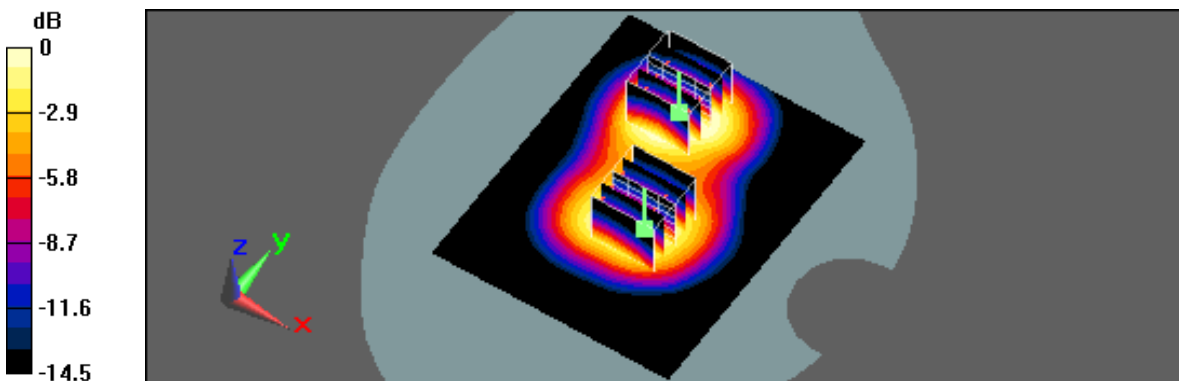
Communication System: 1xEVDO PCS ; Frequency: 1908.75 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1909$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.49 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 21.7 V/m; Power Drift = 0.185 dB  
Peak SAR (extrapolated) = 1.85 W/kg  
SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.665 mW/g  
Maximum value of SAR (measured) = 1.53 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 21.7 V/m; Power Drift = 0.185 dB  
Peak SAR (extrapolated) = 1.15 W/kg  
SAR(1 g) = 0.785 mW/g; SAR(10 g) = 0.508 mW/g  
Maximum value of SAR (measured) = 0.970 mW/g



0 dB = 0.970mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/27/2013 12:30:12 PM

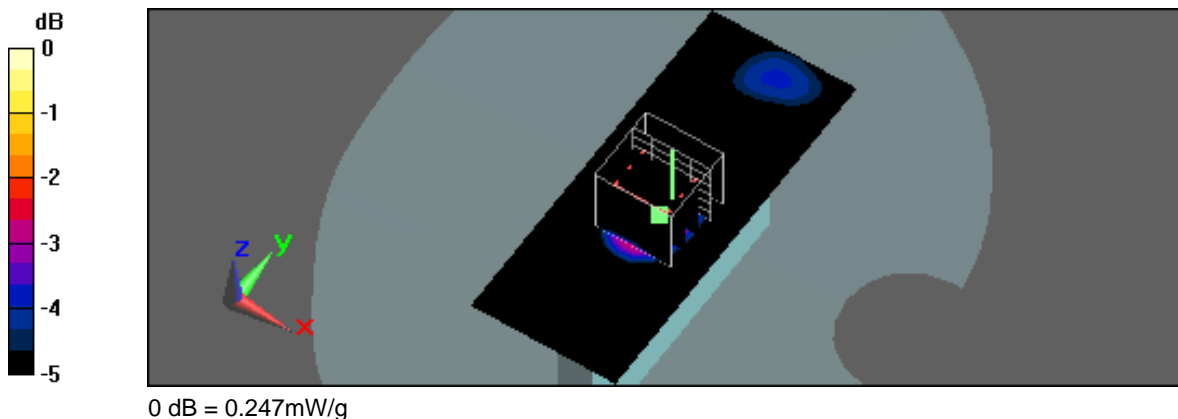
#73\_Flat\_1xEVDO PCS CH25\_Side 3 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: 1xEVDO PCS ; Frequency: 1851.25 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1851.25$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.218 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 13.2 V/m; Power Drift = 0.082 dB  
Peak SAR (extrapolated) = 0.293 W/kg  
SAR(1 g) = 0.185 mW/g; SAR(10 g) = 0.115 mW/g  
Maximum value of SAR (measured) = 0.247 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/27/2013 1:34:42 PM

#75\_Flat\_1xEVDO PCS CH25\_Side 4 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

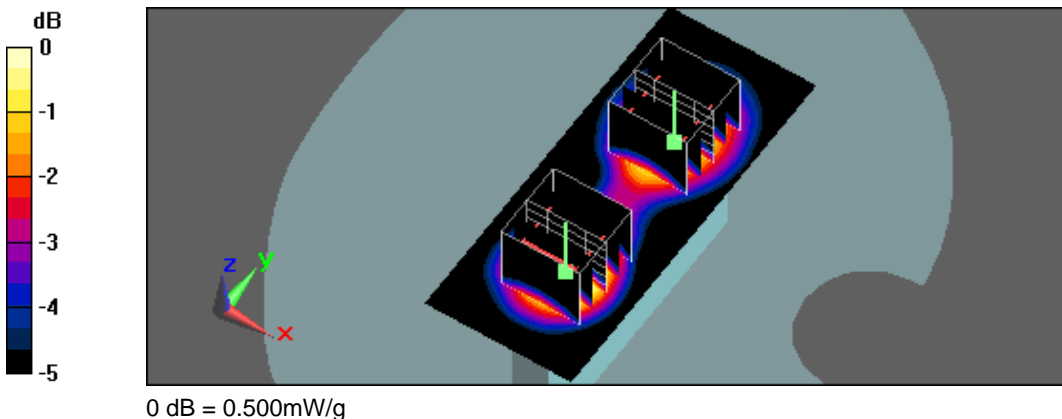
Communication System: 1xEVDO PCS ; Frequency: 1851.25 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1851.25$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.662 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 13.4 V/m; Power Drift = 0.102 dB  
Peak SAR (extrapolated) = 0.775 W/kg  
SAR(1 g) = 0.489 mW/g; SAR(10 g) = 0.288 mW/g  
Maximum value of SAR (measured) = 0.645 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 13.4 V/m; Power Drift = 0.102 dB  
Peak SAR (extrapolated) = 0.590 W/kg  
SAR(1 g) = 0.390 mW/g; SAR(10 g) = 0.244 mW/g  
Maximum value of SAR (measured) = 0.500 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/27/2013 1:58:28 PM

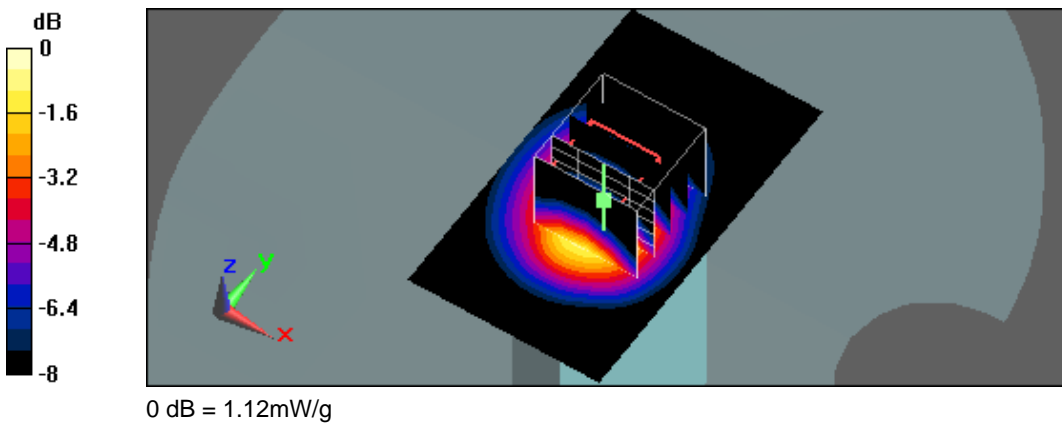
#80\_Flat\_1xEVDO PCS CH25\_Side 6 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: 1xEVDO PCS ; Frequency: 1851.25 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1851.25$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x71x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.2 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 29 V/m; Power Drift = 0.066 dB  
Peak SAR (extrapolated) = 1.42 W/kg  
SAR(1 g) = 0.905 mW/g; SAR(10 g) = 0.531 mW/g  
Maximum value of SAR (measured) = 1.12 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/26/2013 1:24:53 AM

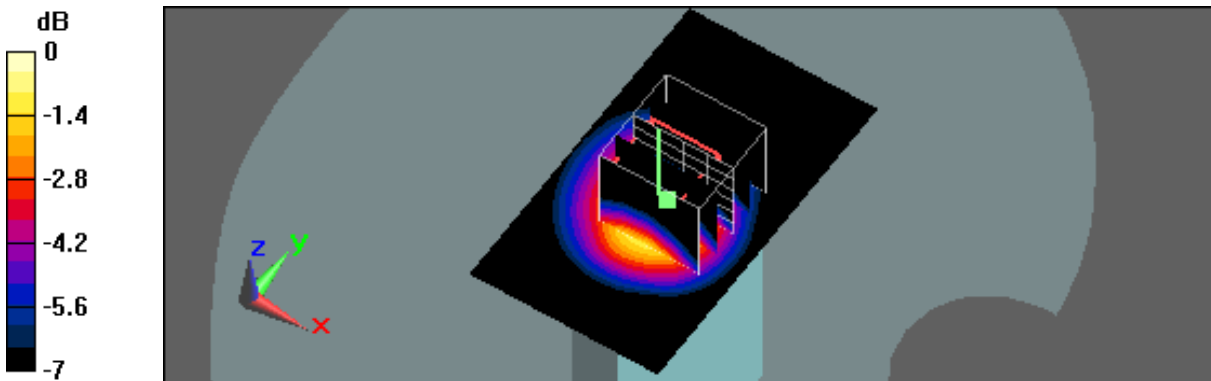
#79\_Flat\_1xEVDO PCS CH600\_Side 6 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: 1xEVDO PCS ; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x71x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.05 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 27.1 V/m; Power Drift = -0.024 dB  
Peak SAR (extrapolated) = 1.23 W/kg  
SAR(1 g) = 0.792 mW/g; SAR(10 g) = 0.473 mW/g  
Maximum value of SAR (measured) = 0.989 mW/g



0 dB = 0.989mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/27/2013 2:12:43 PM

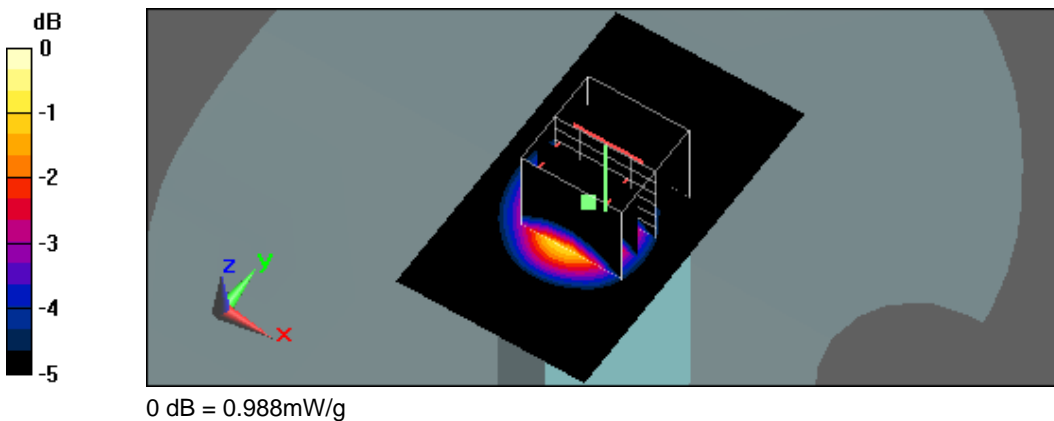
#81\_Flat\_1xEVDO PCS CH1175\_Side 6 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: 1xEVDO PCS ; Frequency: 1908.75 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1909$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x71x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.06 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 27.2 V/m; Power Drift = -0.086 dB  
Peak SAR (extrapolated) = 1.27 W/kg  
SAR(1 g) = 0.795 mW/g; SAR(10 g) = 0.465 mW/g  
Maximum value of SAR (measured) = 0.988 mW/g



Test Laboratory: A Test Lab Techno Corp.  
 Date/Time: 2/27/2013 3:33:36 PM

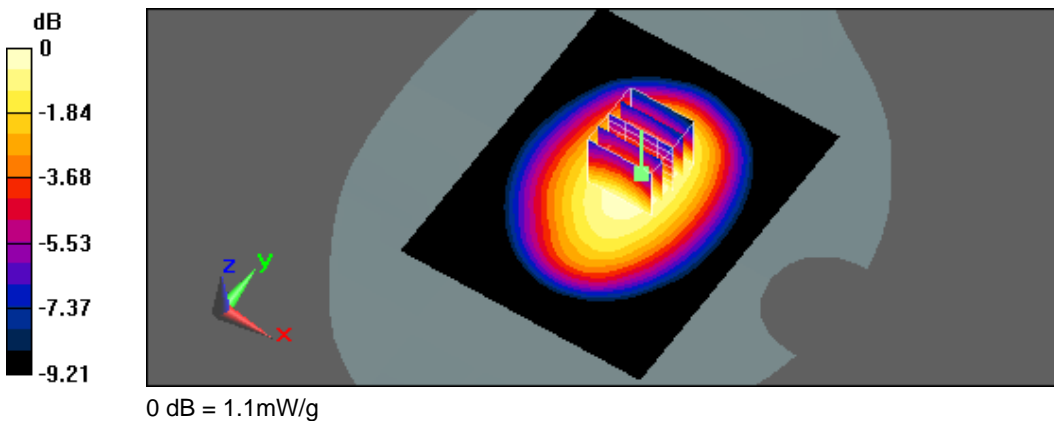
#82\_Flat\_CDMA Secondary 800MHz CH450\_Side 1 to phantom 10mm  
 DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA Secondary 800MHz; Frequency: 817.25 MHz; Duty Cycle: 1:1  
 Medium parameters used (interpolated):  $f = 817.25 \text{ MHz}$ ;  $\sigma = 0.953 \text{ mho/m}$ ;  $\epsilon_r = 54.2$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Phantom section: Flat Section  
 Measurement Standard: DASYS5 (IEEE/IEC)  
 DASYS5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
 Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 1.1 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
 Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 34.3 V/m; Power Drift = 0.015 dB  
 Peak SAR (extrapolated) = 1.2 W/kg  
 SAR(1 g) = 0.952 mW/g; SAR(10 g) = 0.720 mW/g  
 Maximum value of SAR (measured) = 1.1 mW/g







Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/27/2013 3:52:11 PM

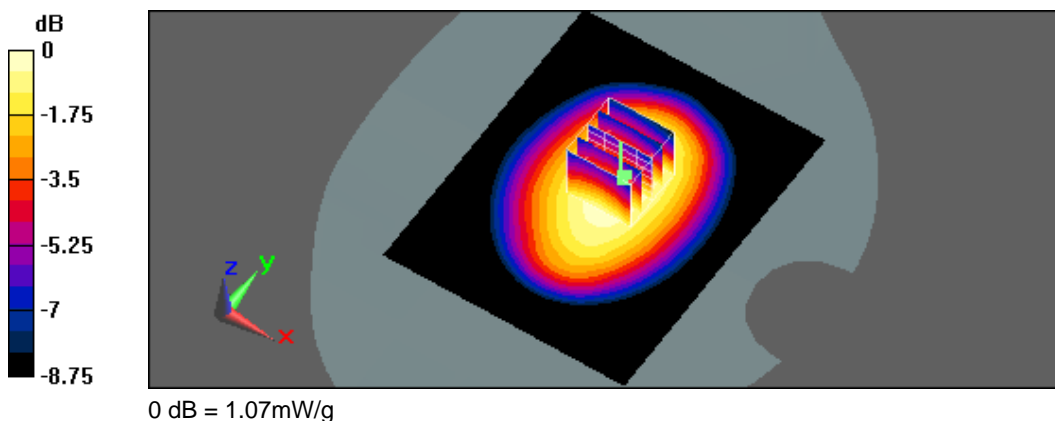
#83\_Flat\_CDMA Secondary 800MHz CH560\_Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA Secondary 800MHz; Frequency: 822 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 822 \text{ MHz}$ ;  $\sigma = 0.955 \text{ mho/m}$ ;  $\epsilon_r = 54.1$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 1.08 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 33.9 V/m; Power Drift = -0.089 dB  
Peak SAR (extrapolated) = 1.17 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.930 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.705 \text{ mW/g}$   
Maximum value of SAR (measured) = 1.07 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/27/2013 4:34:54 PM

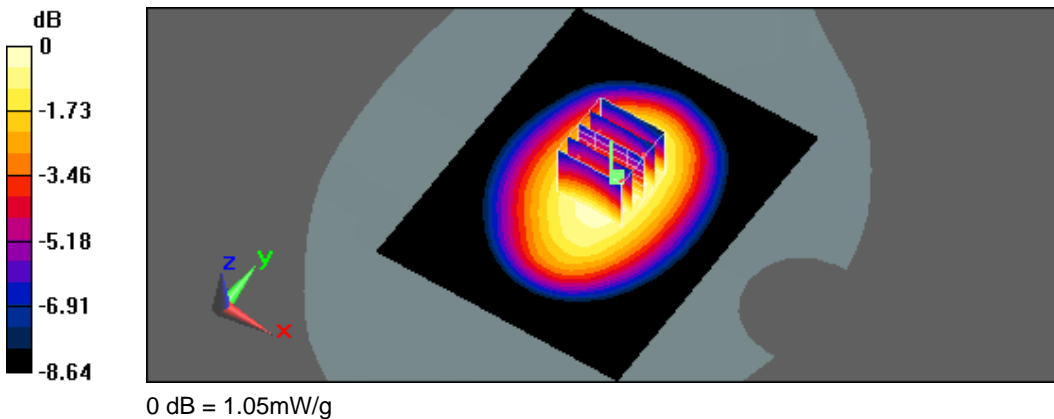
#84\_Flat\_CDMA Secondary 800MHz CH670\_Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA Secondary 800MHz; Frequency: 822.75 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 823 \text{ MHz}$ ;  $\sigma = 0.958 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 1.05 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 33.6 V/m; Power Drift = -0.052 dB  
Peak SAR (extrapolated) = 1.14 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.914 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.694 \text{ mW/g}$   
Maximum value of SAR (measured) = 1.05 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/27/2013 11:35:48 PM

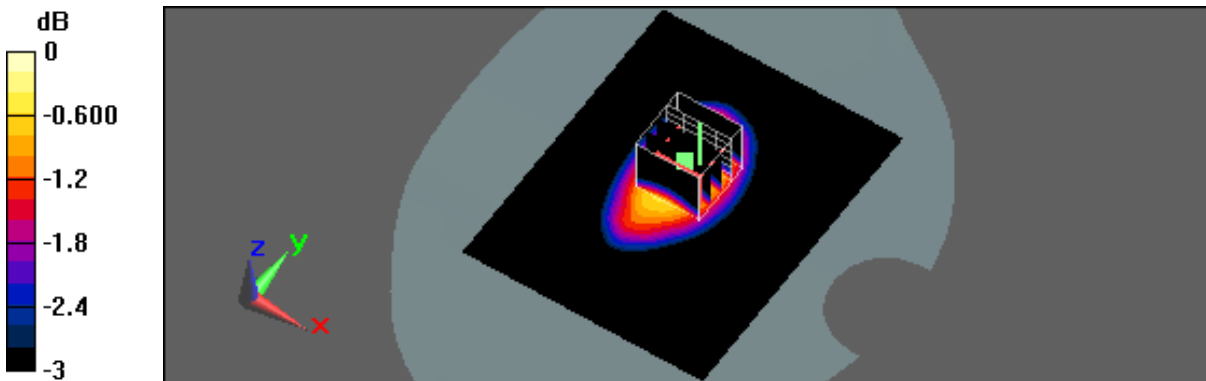
#88\_Flat\_CDMA Secondary 800MHz CH450\_Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA Secondary 800MHz; Frequency: 817.25 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 817.25$  MHz;  $\sigma = 0.953$  mho/m;  $\epsilon_r = 54.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.08 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 33.3 V/m; Power Drift = -0.028 dB  
Peak SAR (extrapolated) = 1.25 W/kg  
SAR(1 g) = 0.969 mW/g; SAR(10 g) = 0.728 mW/g  
Maximum value of SAR (measured) = 1.12 mW/g



0 dB = 1.12mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/27/2013 10:26:44 PM

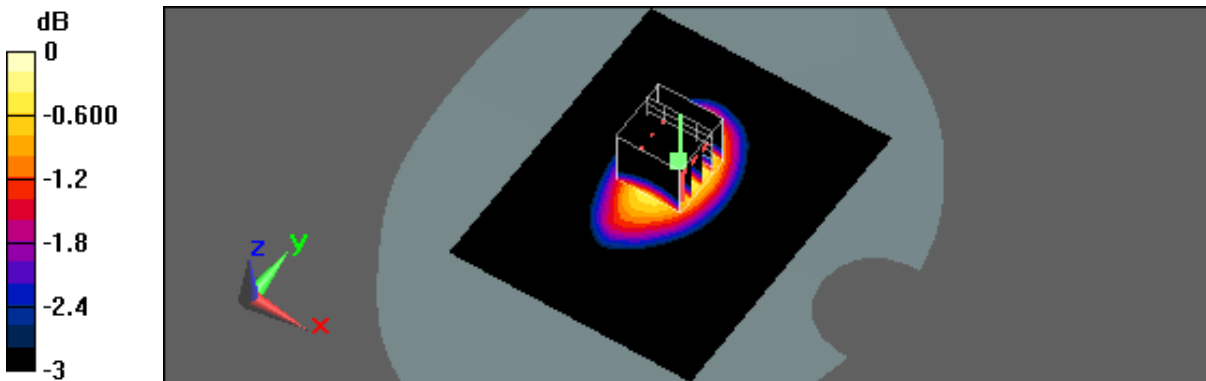
#89\_Flat\_CDMA Secondary 800MHz CH560\_Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA Secondary 800MHz; Frequency: 822 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 822 \text{ MHz}$ ;  $\sigma = 0.955 \text{ mho/m}$ ;  $\epsilon_r = 54.1$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 1.12 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 33.6 V/m; Power Drift = -0.119 dB  
Peak SAR (extrapolated) = 1.22 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.948 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.715 \text{ mW/g}$   
Maximum value of SAR (measured) = 1.1 mW/g



0 dB = 1.1mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/27/2013 10:56:53 PM

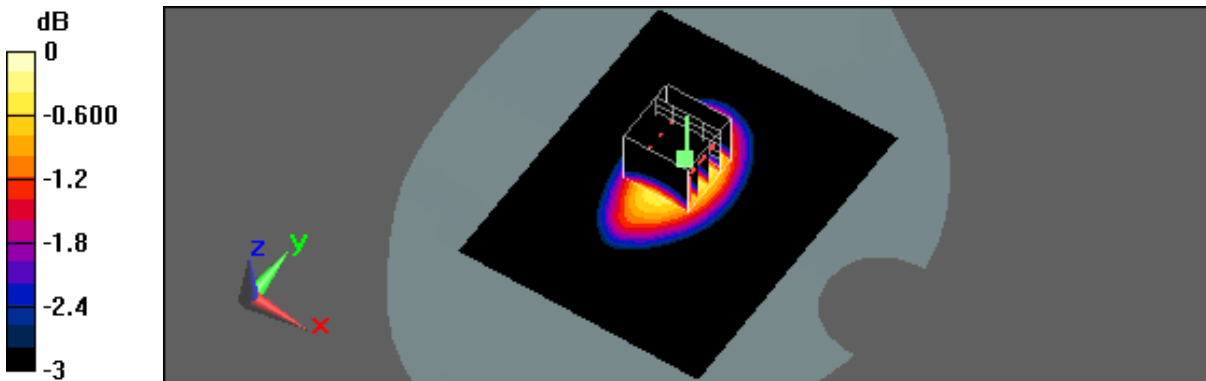
#90\_Flat\_CDMA Secondary 800MHz CH670\_Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA Secondary 800MHz; Frequency: 822.75 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 823 \text{ MHz}$ ;  $\sigma = 0.958 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 1.1 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 33.3 V/m; Power Drift = 0.0099 dB  
Peak SAR (extrapolated) = 1.21 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.948 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.716 \text{ mW/g}$   
Maximum value of SAR (measured) = 1.1 mW/g



0 dB = 1.1mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/28/2013 12:16:00 AM

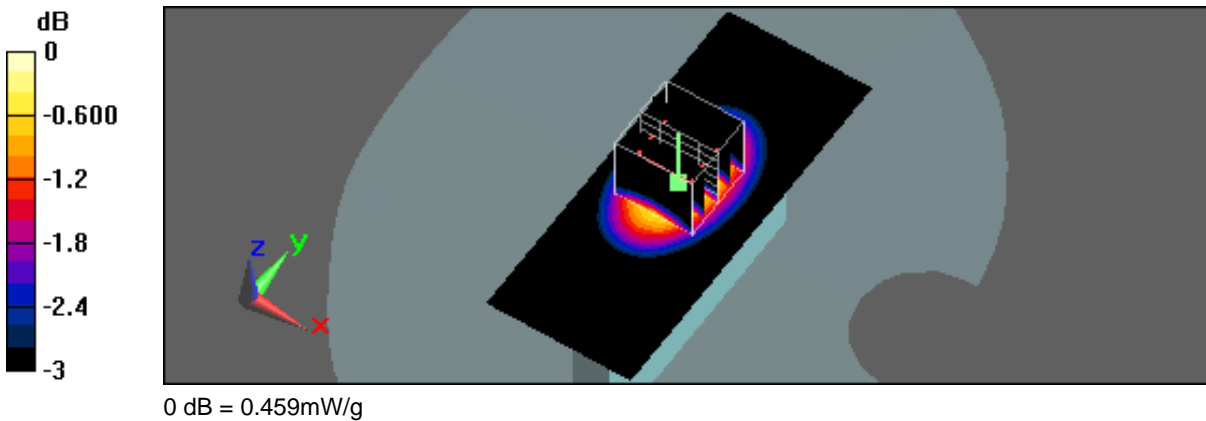
#94\_Flat\_CDMA Secondary 800MHz CH450\_Side 3 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA Secondary 800MHz; Frequency: 817.25 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 817.25$  MHz;  $\sigma = 0.953$  mho/m;  $\epsilon_r = 54.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.462 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 22.2 V/m; Power Drift = 0.049 dB  
Peak SAR (extrapolated) = 0.517 W/kg  
SAR(1 g) = 0.384 mW/g; SAR(10 g) = 0.276 mW/g  
Maximum value of SAR (measured) = 0.459 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/28/2013 1:10:51 AM

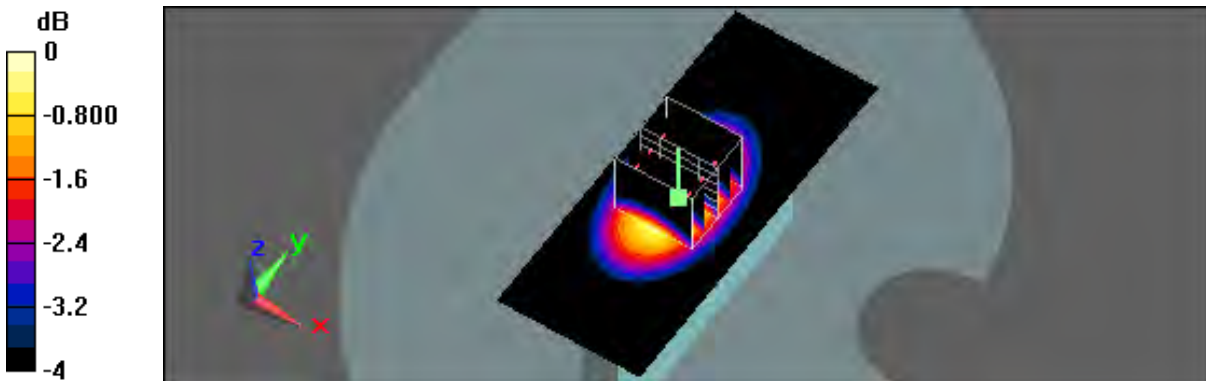
#96\_Flat\_CDMA Secondary 800MHz CH450\_Side 4 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA Secondary 800MHz; Frequency: 817.25 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 817.25$  MHz;  $\sigma = 0.953$  mho/m;  $\epsilon_r = 54.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASY5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.686 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 27.4 V/m; Power Drift = 0.031 dB  
Peak SAR (extrapolated) = 0.772 W/kg  
SAR(1 g) = 0.563 mW/g; SAR(10 g) = 0.396 mW/g  
Maximum value of SAR (measured) = 0.681 mW/g



0 dB = 0.681mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/28/2013 1:26:34 AM

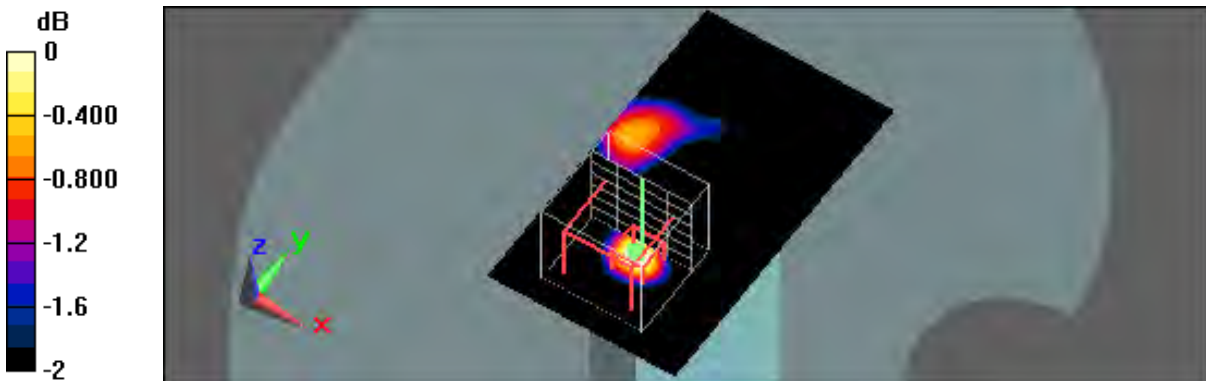
#98\_Flat\_CDMA Secondary 800MHz CH450\_Side 6 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA Secondary 800MHz; Frequency: 817.25 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 817.25$  MHz;  $\sigma = 0.953$  mho/m;  $\epsilon_r = 54.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x71x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.043 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 5.7 V/m; Power Drift = 0.188 dB  
Peak SAR (extrapolated) = 0.051 W/kg  
SAR(1 g) = 0.034 mW/g; SAR(10 g) = 0.024 mW/g  
Maximum value of SAR (measured) = 0.042 mW/g



0 dB = 0.042mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/27/2013 6:36:45 PM

#85\_Flat\_1xEVDO Secondary 800MHz CH450\_Side 1 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

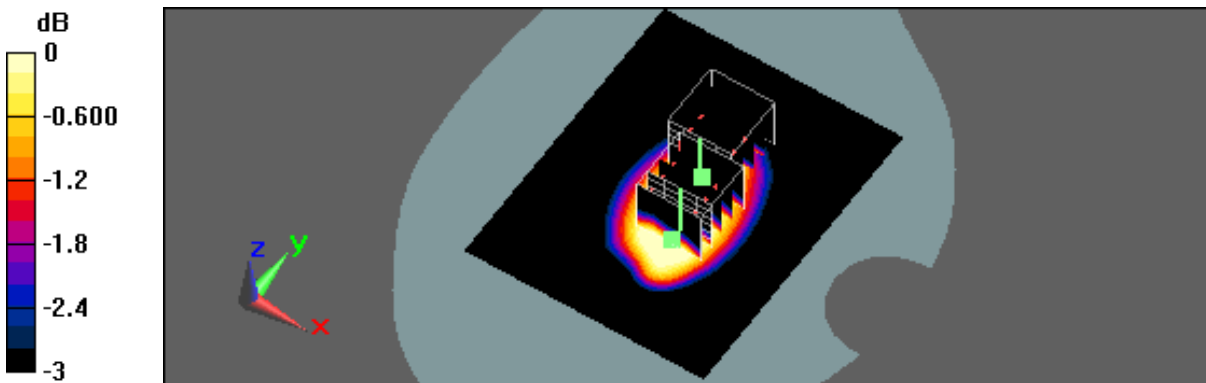
Communication System: 1xEVDO Secondary 800MHz; Frequency: 817.25 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 817.25$  MHz;  $\sigma = 0.953$  mho/m;  $\epsilon_r = 54.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.03 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 32.6 V/m; Power Drift = -0.016 dB  
Peak SAR (extrapolated) = 1.13 W/kg  
SAR(1 g) = 0.886 mW/g; SAR(10 g) = 0.672 mW/g  
Maximum value of SAR (measured) = 1.03 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 32.6 V/m; Power Drift = -0.016 dB  
Peak SAR (extrapolated) = 0.967 W/kg  
SAR(1 g) = 0.732 mW/g; SAR(10 g) = 0.509 mW/g  
Maximum value of SAR (measured) = 0.881 mW/g



0 dB = 0.881mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/27/2013 5:44:39 PM

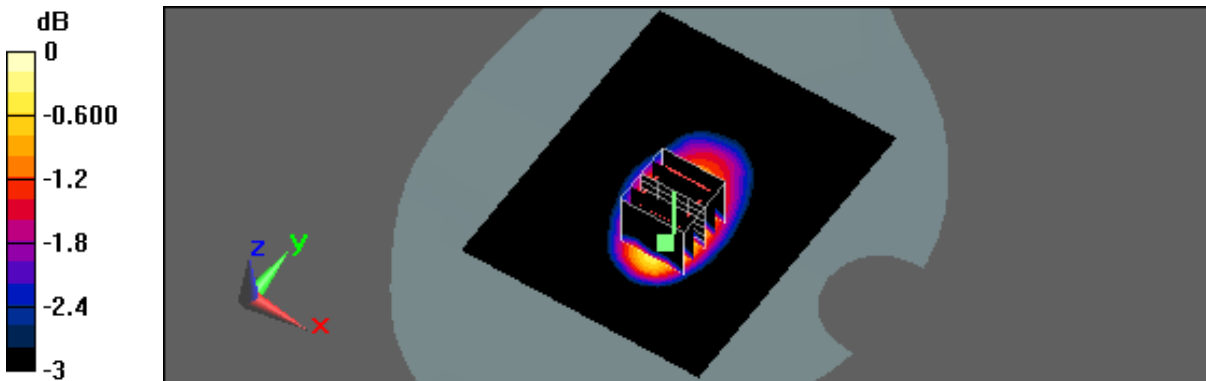
#86\_Flat\_1xEVDO Secondary 800MHz CH560\_Side 1 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: 1xEVDO Secondary 800MHz; Frequency: 822 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 822 \text{ MHz}$ ;  $\sigma = 0.955 \text{ mho/m}$ ;  $\epsilon_r = 54.1$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 1.02 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 31.7 V/m; Power Drift = 0.014 dB  
Peak SAR (extrapolated) = 1.14 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.887 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.665 \text{ mW/g}$   
Maximum value of SAR (measured) = 1.03 mW/g



0 dB = 1.03mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/27/2013 6:14:51 PM

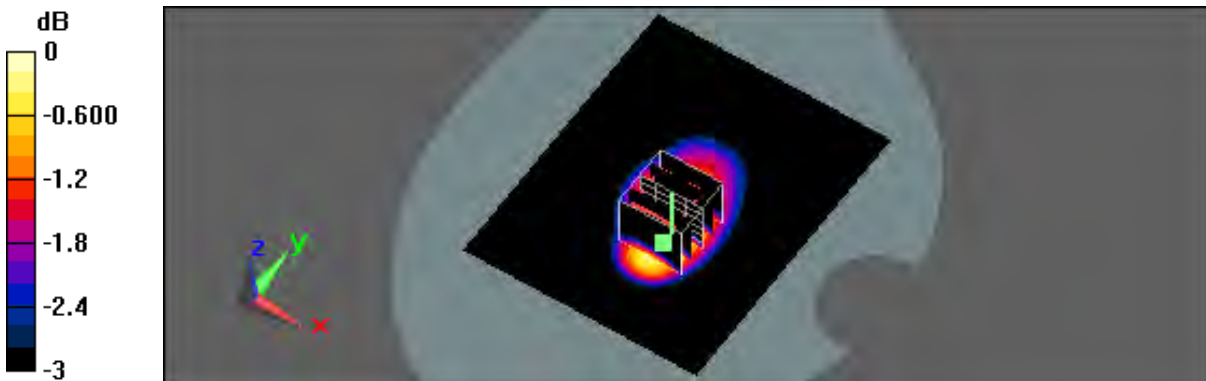
#87\_Flat\_1xEVDO Secondary 800MHz CH670\_Side 1 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: 1xEVDO Secondary 800MHz; Frequency: 822.75 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 823 \text{ MHz}$ ;  $\sigma = 0.958 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.03 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 31.3 V/m; Power Drift = -0.044 dB  
Peak SAR (extrapolated) = 1.13 W/kg  
SAR(1 g) = 0.880 mW/g; SAR(10 g) = 0.658 mW/g  
Maximum value of SAR (measured) = 1.02 mW/g



0 dB = 1.02mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/27/2013 8:26:50 PM

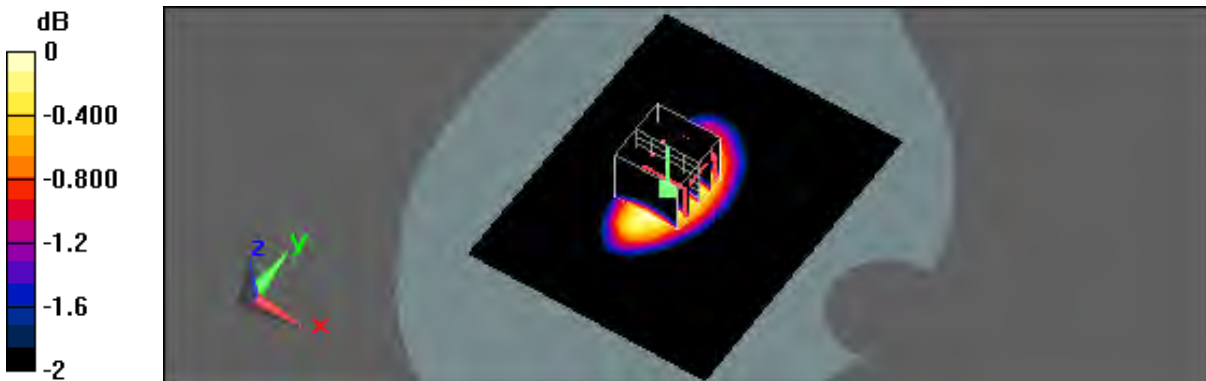
#91\_Flat\_1xEVDO Secondary 800MHz CH450\_Side 2 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: 1xEVDO Secondary 800MHz; Frequency: 817.25 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 817.25$  MHz;  $\sigma = 0.953$  mho/m;  $\epsilon_r = 54.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.04 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 33.2 V/m; Power Drift = 0.047 dB  
Peak SAR (extrapolated) = 1.11 W/kg  
SAR(1 g) = 0.902 mW/g; SAR(10 g) = 0.690 mW/g  
Maximum value of SAR (measured) = 1.02 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/27/2013 8:53:41 PM

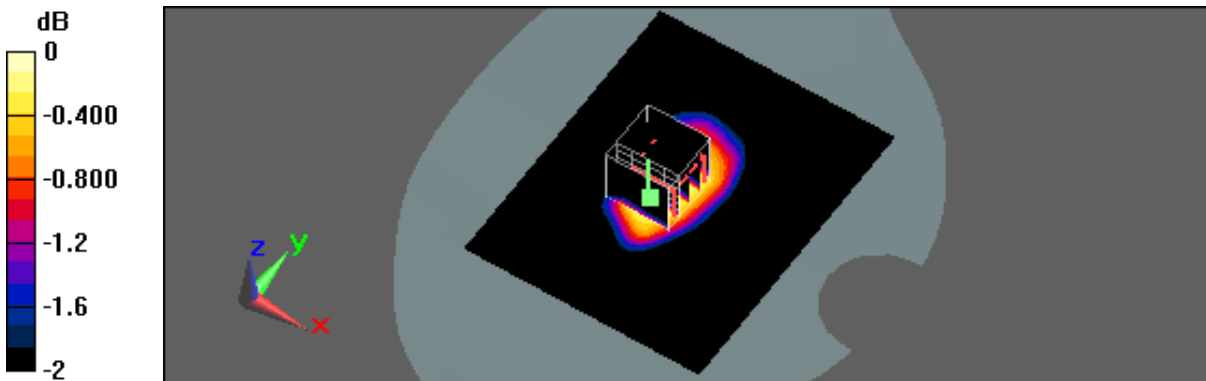
#92\_Flat\_1xEVDO Secondary 800MHz CH560\_Side 2 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: 1xEVDO Secondary 800MHz; Frequency: 822 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 822 \text{ MHz}$ ;  $\sigma = 0.955 \text{ mho/m}$ ;  $\epsilon_r = 54.1$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 1.05 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 33.4 V/m; Power Drift = 0.017 dB  
Peak SAR (extrapolated) = 1.14 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.905 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.697 \text{ mW/g}$   
Maximum value of SAR (measured) = 1.03 mW/g



0 dB = 1.03mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/27/2013 10:03:12 PM

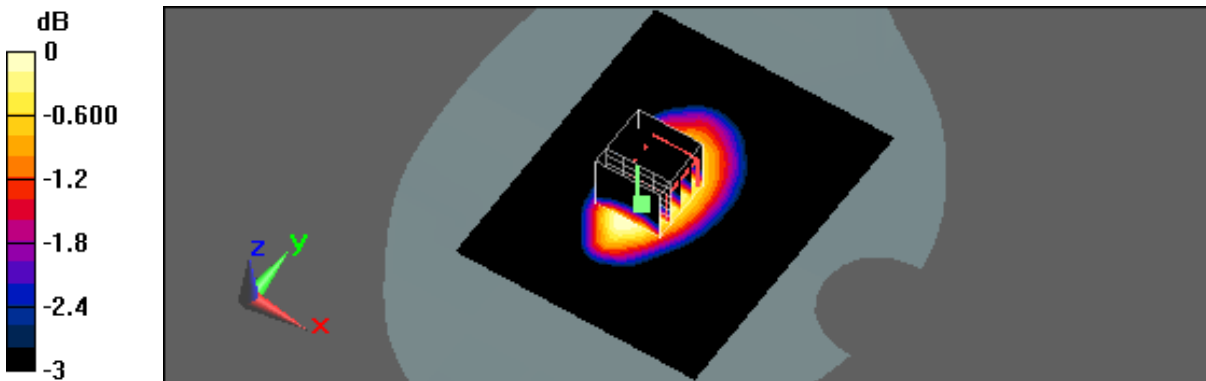
#93\_Flat\_1xEVDO Secondary 800MHz CH670\_Side 2 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: 1xEVDO Secondary 800MHz; Frequency: 822.75 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 823 \text{ MHz}$ ;  $\sigma = 0.958 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 1.06 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 33.3 V/m; Power Drift = 0.00797 dB  
Peak SAR (extrapolated) = 1.13 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.908 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.692 \text{ mW/g}$   
Maximum value of SAR (measured) = 1.03 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/28/2013 12:36:26 AM

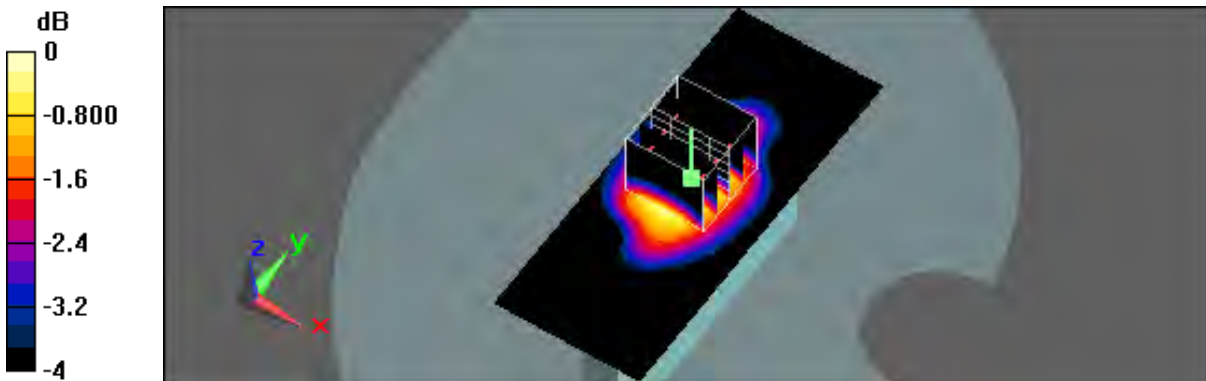
#95\_Flat\_1xEVDO Secondary 800MHz CH450\_Side 3 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: 1xEVDO Secondary 800MHz; Frequency: 817.25 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 817.25$  MHz;  $\sigma = 0.953$  mho/m;  $\epsilon_r = 54.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.474 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 22.7 V/m; Power Drift = -0.031 dB  
Peak SAR (extrapolated) = 0.526 W/kg  
SAR(1 g) = 0.393 mW/g; SAR(10 g) = 0.282 mW/g  
Maximum value of SAR (measured) = 0.467 mW/g



0 dB = 0.467mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/28/2013 12:51:06 AM

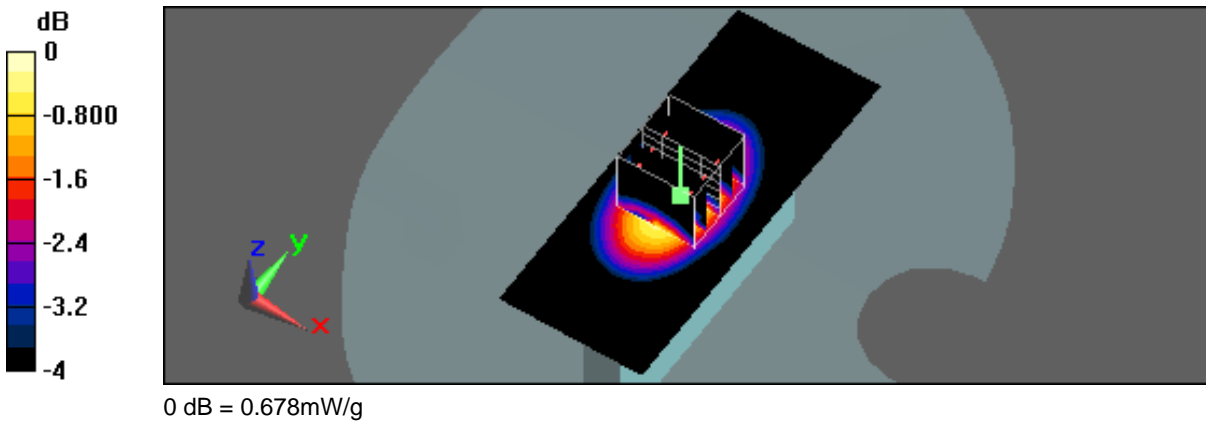
#97\_Flat\_1xEVDO Secondary 800MHz CH450\_Side 4 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: 1xEVDO Secondary 800MHz; Frequency: 817.25 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 817.25$  MHz;  $\sigma = 0.953$  mho/m;  $\epsilon_r = 54.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.680 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 27.1 V/m; Power Drift = -0.017 dB  
Peak SAR (extrapolated) = 0.792 W/kg  
SAR(1 g) = 0.561 mW/g; SAR(10 g) = 0.387 mW/g  
Maximum value of SAR (measured) = 0.678 mW/g







Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/28/2013 3:13:52 AM

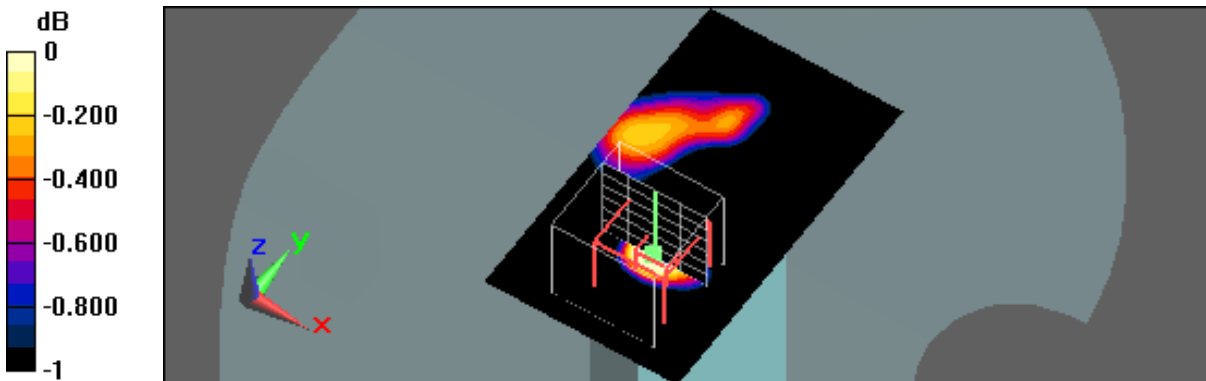
#99\_Flat\_1xEVDO Secondary 800MHz CH450\_Side 6 to phantom 10mm\_Rev.0  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: 1xEVDO Secondary 800MHz; Frequency: 817.25 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 817.25$  MHz;  $\sigma = 0.953$  mho/m;  $\epsilon_r = 54.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x71x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.037 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 5.48 V/m; Power Drift = -0.044 dB  
Peak SAR (extrapolated) = 0.044 W/kg  
SAR(1 g) = 0.028 mW/g; SAR(10 g) = 0.019 mW/g  
Maximum value of SAR (measured) = 0.036 mW/g



0 dB = 0.036mW/g

Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/5/2013 9:39:33 PM

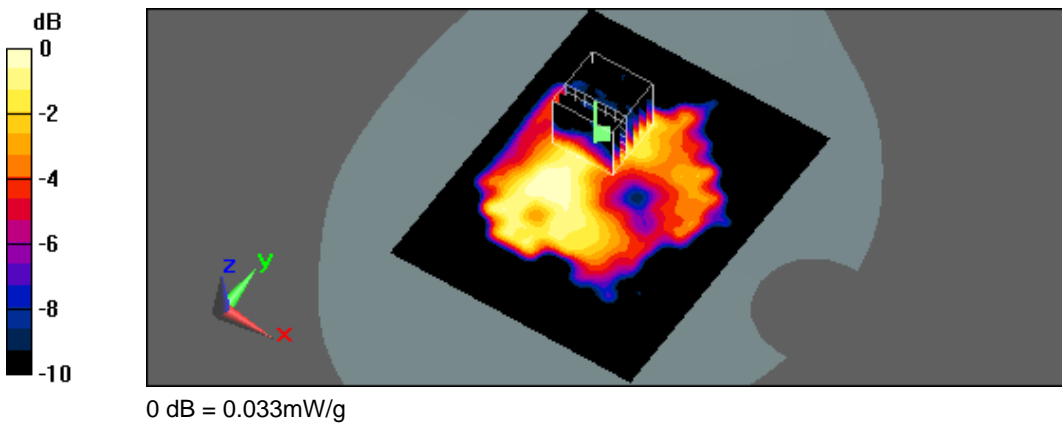
#100\_Flat\_802.11b CH1\_1M\_Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: IEEE 802.11b; Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.9 \text{ mho/m}$ ;  $\epsilon_r = 52$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(6.84, 6.84, 6.84); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):  
Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$   
Maximum value of SAR (interpolated) = 0.033 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:  
Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 2.48 V/m; Power Drift = 0.182 dB  
Peak SAR (extrapolated) = 0.041 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.024 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.014 \text{ mW/g}$   
Maximum value of SAR (measured) = 0.033 mW/g



Test Laboratory: A Test Lab Techno Corp.  
 Date/Time: 3/5/2013 10:18:02 PM

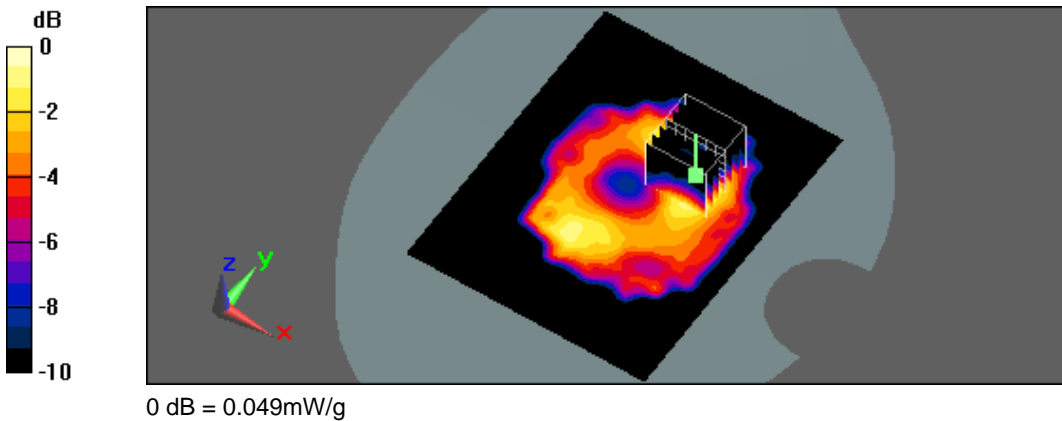
#101\_Flat\_802.11b CH1\_1M\_Side 2 to phantom 10mm  
 DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: IEEE 802.11b; Frequency: 2412 MHz; Duty Cycle: 1:1  
 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.9 \text{ mho/m}$ ;  $\epsilon_r = 52$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Phantom section: Flat Section  
 Measurement Standard: DASYS (IEEE/IEC)  
 DASYS Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(6.84, 6.84, 6.84); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):  
 Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$   
 Maximum value of SAR (interpolated) = 0.049 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:  
 Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 2.24 V/m; Power Drift = -0.097 dB  
 Peak SAR (extrapolated) = 0.065 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.036 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.020 \text{ mW/g}$   
 Maximum value of SAR (measured) = 0.049 mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/5/2013 10:55:58 PM

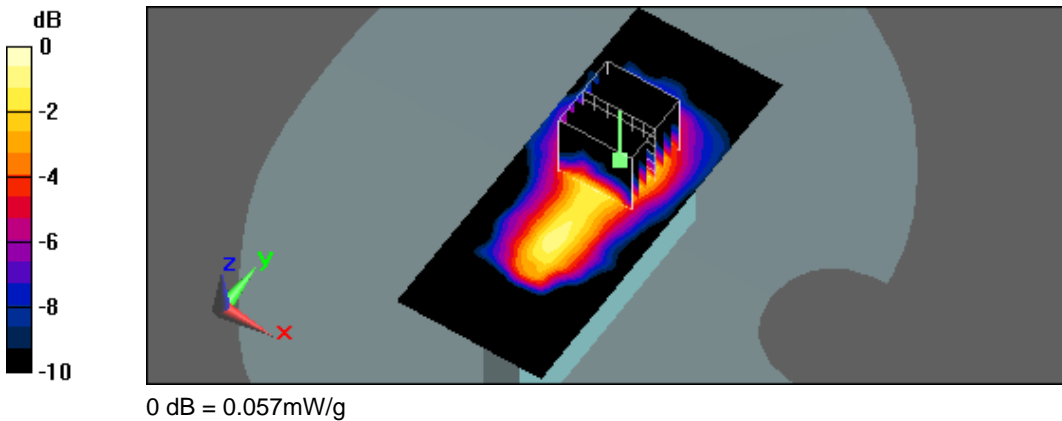
#102\_Flat\_802.11b CH1\_1M\_Side 3 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: IEEE 802.11b; Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.9$  mho/m;  $\epsilon_r = 52$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(6.84, 6.84, 6.84); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (61x151x1):  
Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.055 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:  
Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 4.65 V/m; Power Drift = 0.174 dB  
Peak SAR (extrapolated) = 0.074 W/kg  
SAR(1 g) = 0.040 mW/g; SAR(10 g) = 0.022 mW/g  
Maximum value of SAR (measured) = 0.057 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/23/2013 8:32:44 PM

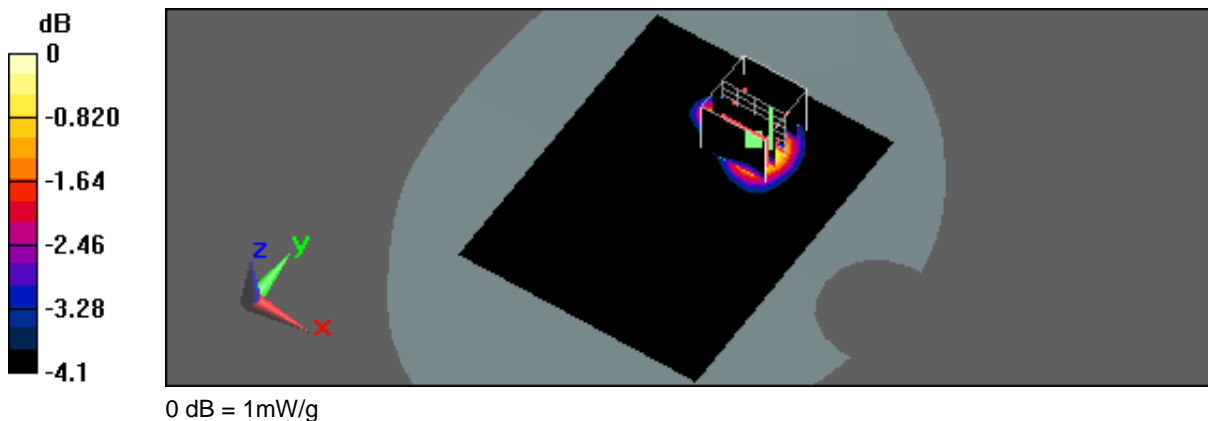
#103\_Flat\_LTE Band 25 BW 10M CH26090\_QPSK with 1 RB Size 0 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 25 BW:10M; Frequency: 1855 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1855$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 13.5 V/m; Power Drift = 0.00897 dB  
Peak SAR (extrapolated) = 1.22 W/kg  
SAR(1 g) = 0.750 mW/g; SAR(10 g) = 0.464 mW/g  
Maximum value of SAR (measured) = 1 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/23/2013 8:51:54 PM

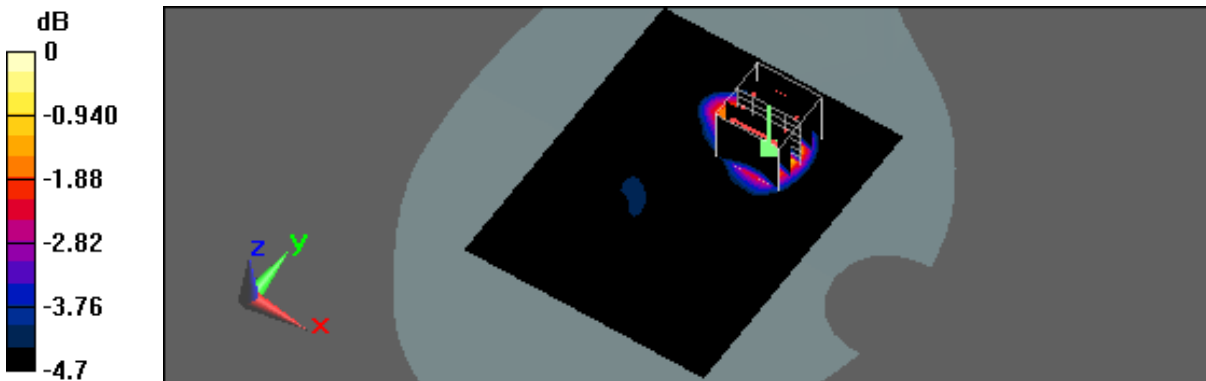
#104\_Flat\_LTE Band 25 BW 10M CH26365\_QPSK with 1 RB Size 0 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 25 BW:10M; Frequency: 1882.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1882.5$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.31 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 13.7 V/m; Power Drift = 0.046 dB  
Peak SAR (extrapolated) = 1.56 W/kg  
SAR(1 g) = 0.962 mW/g; SAR(10 g) = 0.584 mW/g  
Maximum value of SAR (measured) = 1.27 mW/g



0 dB = 1.27mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/23/2013 9:09:18 PM

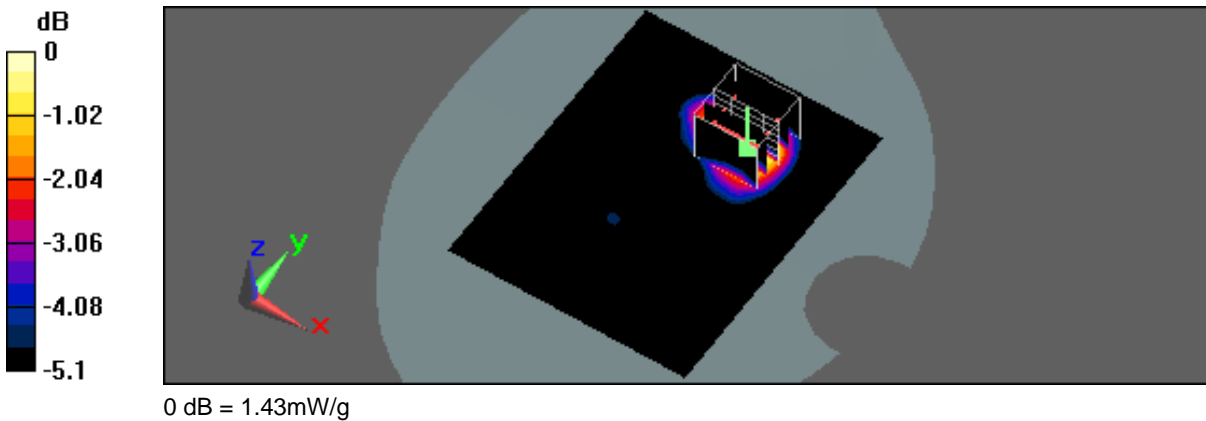
#105\_Flat\_LTE Band 25 BW 10M CH26640\_QPSK with 1 RB Size 0 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 25 BW:10M; Frequency: 1910 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.51 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 13.4 V/m; Power Drift = -0.021 dB  
Peak SAR (extrapolated) = 1.78 W/kg  
SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.661 mW/g  
Maximum value of SAR (measured) = 1.43 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/23/2013 9:30:05 PM

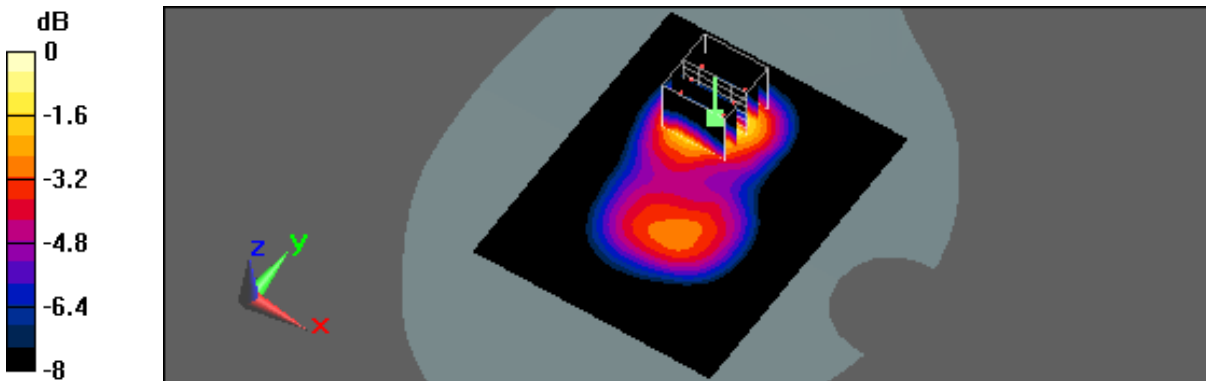
#106\_Flat\_LTE Band 25 BW 10M CH26090\_QPSK with 1 RB Size 0 RB Offset Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 25 BW:10M; Frequency: 1855 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1855$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.23 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 17.5 V/m; Power Drift = 0.010 dB  
Peak SAR (extrapolated) = 1.41 W/kg  
SAR(1 g) = 0.907 mW/g; SAR(10 g) = 0.548 mW/g  
Maximum value of SAR (measured) = 1.17 mW/g



0 dB = 1.17mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 6:59:46 PM

#107\_Flat\_LTE Band 25 BW 10M CH26365\_QPSK with 1 RB Size 0 RB Offset Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

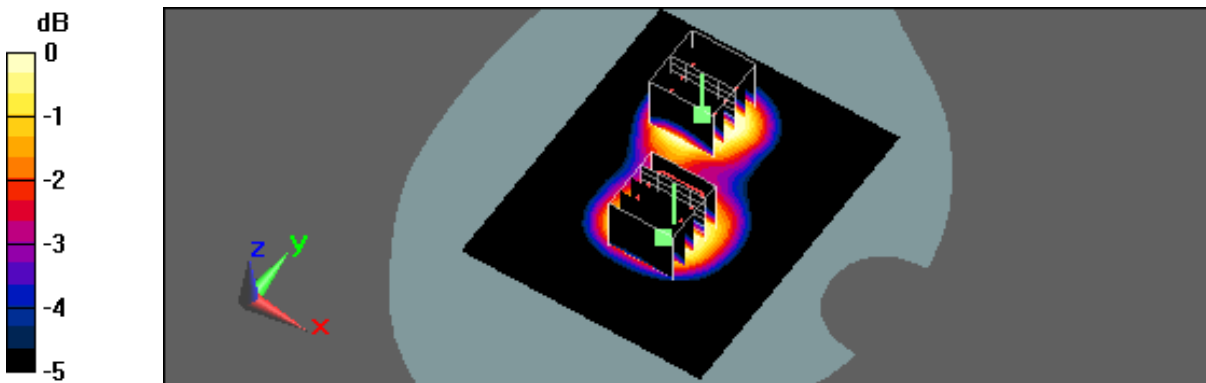
Communication System: LTE Band 25 BW:10M; Frequency: 1882.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1882.5$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.7 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 22.3 V/m; Power Drift = 0.046 dB  
Peak SAR (extrapolated) = 1.67 W/kg  
SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.612 mW/g  
Maximum value of SAR (measured) = 1.39 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 22.3 V/m; Power Drift = 0.046 dB  
Peak SAR (extrapolated) = 1.18 W/kg  
SAR(1 g) = 0.817 mW/g; SAR(10 g) = 0.539 mW/g  
Maximum value of SAR (measured) = 1.01 mW/g



0 dB = 1.01mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 6:32:20 PM

#108\_Flat\_LTE Band 25 BW 10M CH26640\_QPSK with 1 RB Size 0 RB Offset Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

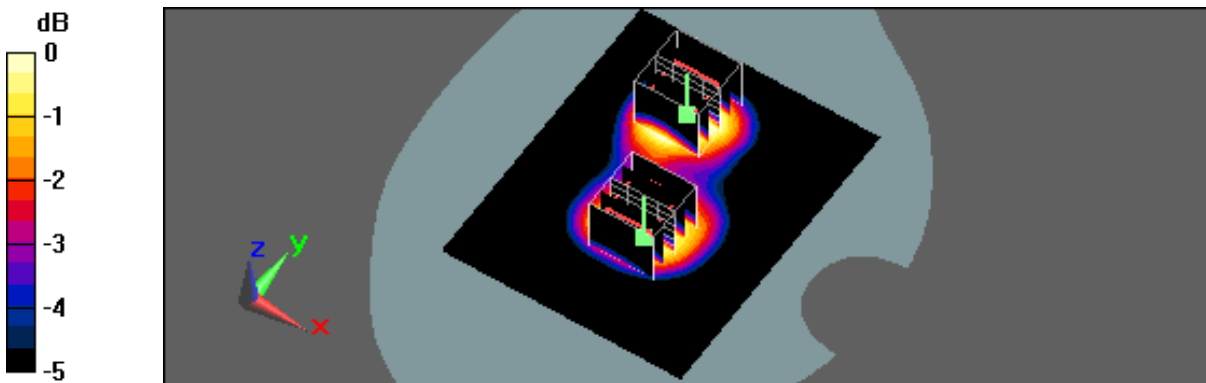
Communication System: LTE Band 25 BW:10M; Frequency: 1910 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.77 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 23 V/m; Power Drift = -0.048 dB  
Peak SAR (extrapolated) = 2.05 W/kg  
SAR(1 g) = 1.26 mW/g; SAR(10 g) = 0.738 mW/g  
Maximum value of SAR (measured) = 1.67 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 23 V/m; Power Drift = -0.048 dB  
Peak SAR (extrapolated) = 1.37 W/kg  
SAR(1 g) = 0.929 mW/g; SAR(10 g) = 0.604 mW/g  
Maximum value of SAR (measured) = 1.16 mW/g



0 dB = 1.16mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/23/2013 10:30:33 PM

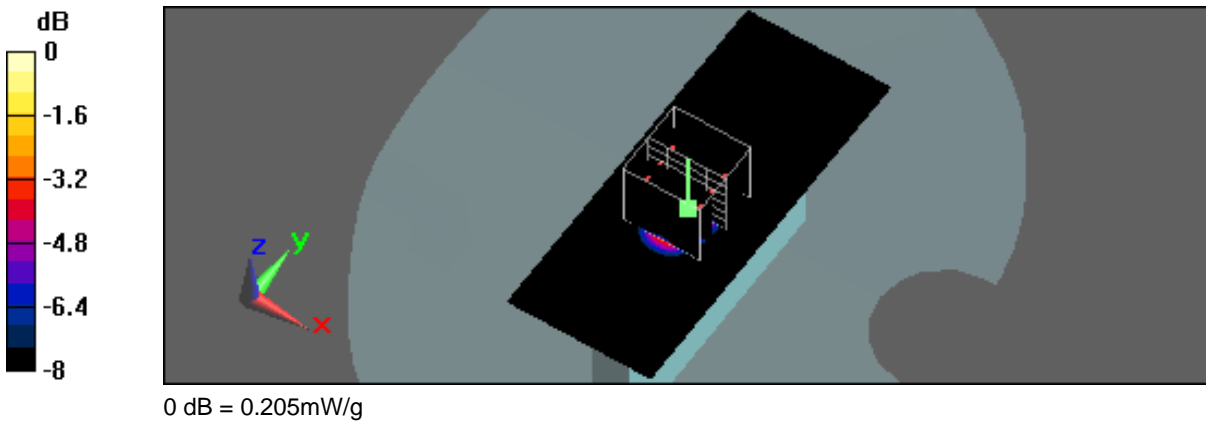
#109\_Flat\_LTE Band 25 BW 10M CH26090\_QPSK with 1 RB Size 0 RB Offset Side 3 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 25 BW:10M; Frequency: 1855 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1855$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.208 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 11.6 V/m; Power Drift = 0.058 dB  
Peak SAR (extrapolated) = 0.241 W/kg  
SAR(1 g) = 0.160 mW/g; SAR(10 g) = 0.100 mW/g  
Maximum value of SAR (measured) = 0.205 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/23/2013 10:46:17 PM

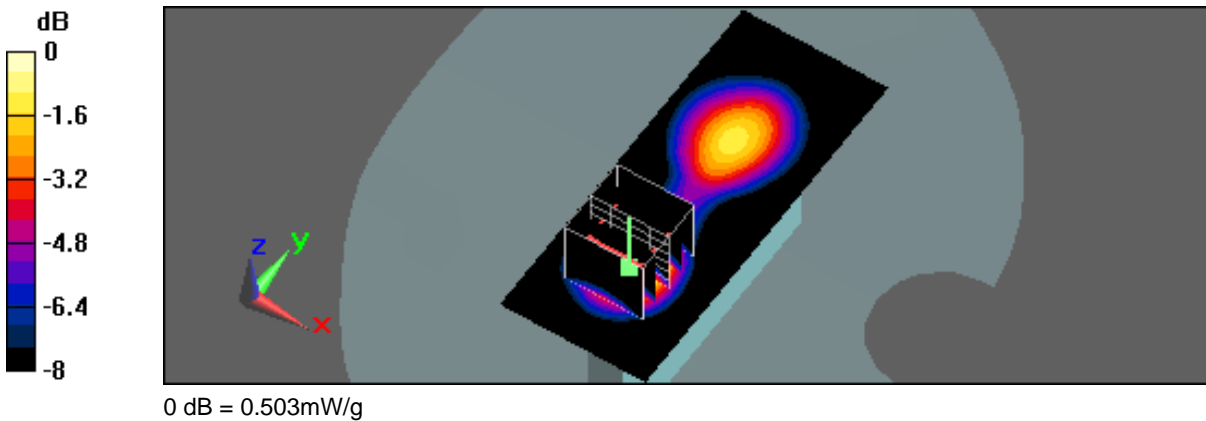
#110\_Flat\_LTE Band 25 BW 10M CH26090\_QPSK with 1 RB Size 0 RB Offset Side 4 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 25 BW:10M; Frequency: 1855 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1855$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASY5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.527 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 13.1 V/m; Power Drift = 0.00155 dB  
Peak SAR (extrapolated) = 0.598 W/kg  
SAR(1 g) = 0.389 mW/g; SAR(10 g) = 0.235 mW/g  
Maximum value of SAR (measured) = 0.503 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/23/2013 11:03:13 PM

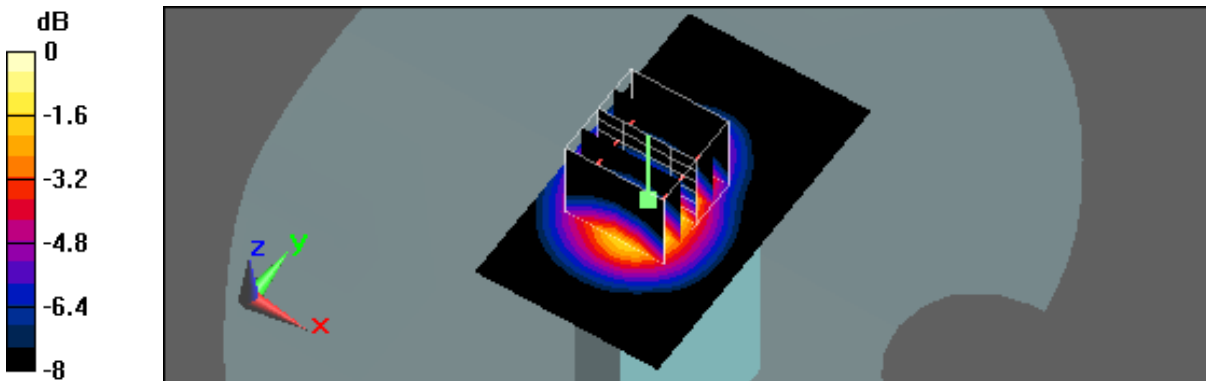
#111\_Flat\_LTE Band 25 BW 10M CH26090\_QPSK with 1 RB Size 0 RB Offset Side 6 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 25 BW:10M; Frequency: 1855 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1855$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x71x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.817 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 22.8 V/m; Power Drift = 0.050 dB  
Peak SAR (extrapolated) = 0.925 W/kg  
SAR(1 g) = 0.610 mW/g; SAR(10 g) = 0.367 mW/g  
Maximum value of SAR (measured) = 0.784 mW/g



0 dB = 0.784mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/23/2013 11:18:41 PM

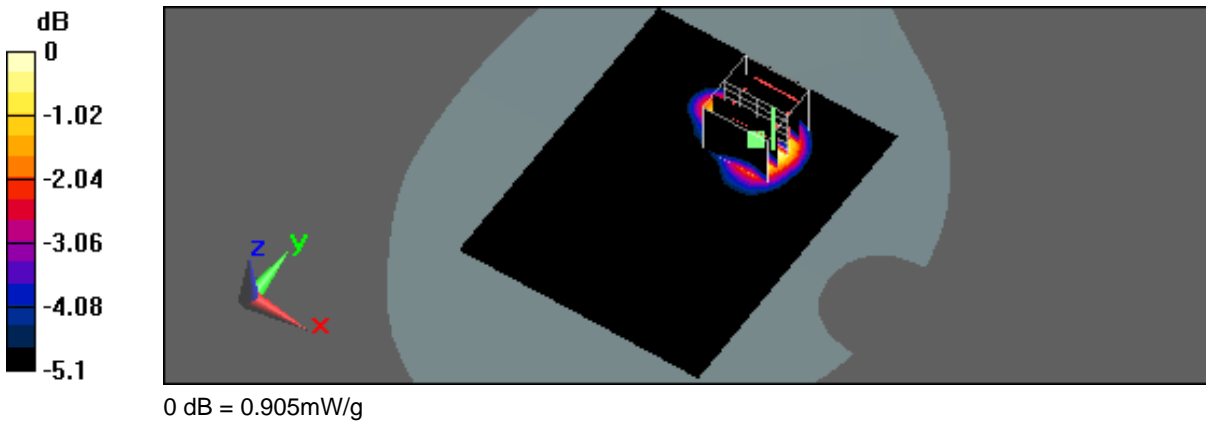
#112\_Flat\_LTE Band 25 BW 10M CH26090\_QPSK with 25 RB Size 0 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 25 BW:10M; Frequency: 1855 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1855$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASY5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.924 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 11.7 V/m; Power Drift = 0.060 dB  
Peak SAR (extrapolated) = 1.12 W/kg  
SAR(1 g) = 0.676 mW/g; SAR(10 g) = 0.416 mW/g  
Maximum value of SAR (measured) = 0.905 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 10:10:20 AM

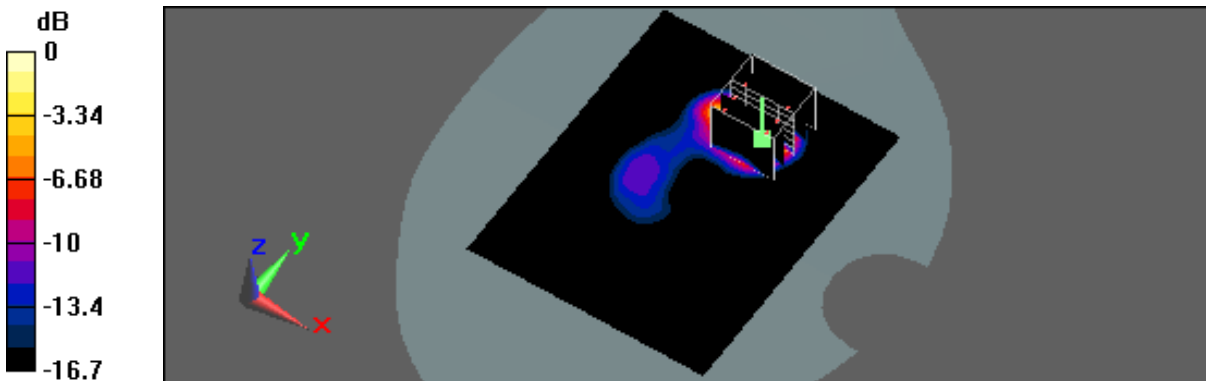
#113\_Flat\_LTE Band 25 BW 10M CH26365\_QPSK with 25 RB Size 0 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 25 BW:10M; Frequency: 1882.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1882.5$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.22 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 15 V/m; Power Drift = 0.043 dB  
Peak SAR (extrapolated) = 1.39 W/kg  
SAR(1 g) = 0.831 mW/g; SAR(10 g) = 0.486 mW/g  
Maximum value of SAR (measured) = 1.13 mW/g



0 dB = 1.13mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 10:32:13 AM

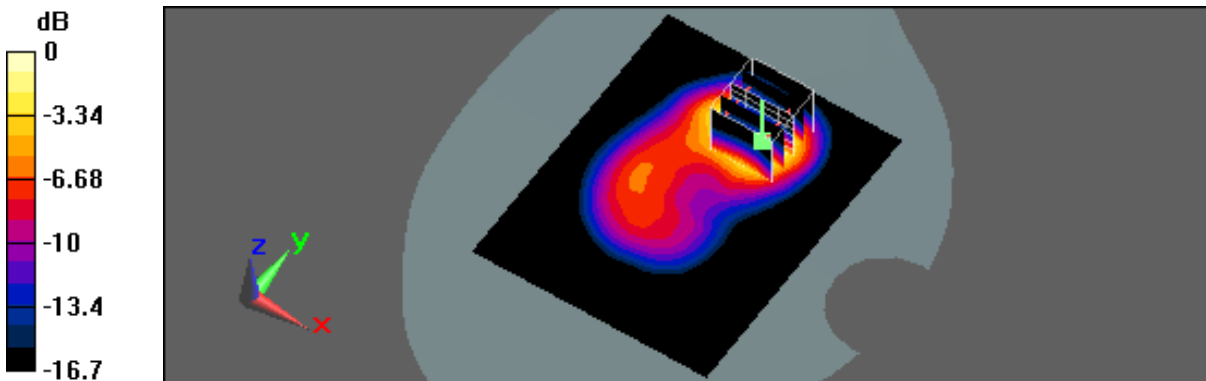
#114\_Flat\_LTE Band 25 BW 10M CH26640\_QPSK with 25 RB Size 0 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 25 BW:10M; Frequency: 1910 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.3 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 14.6 V/m; Power Drift = 0.017 dB  
Peak SAR (extrapolated) = 1.44 W/kg  
SAR(1 g) = 0.870 mW/g; SAR(10 g) = 0.513 mW/g  
Maximum value of SAR (measured) = 1.17 mW/g



0 dB = 1.17mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/23/2013 11:55:54 PM

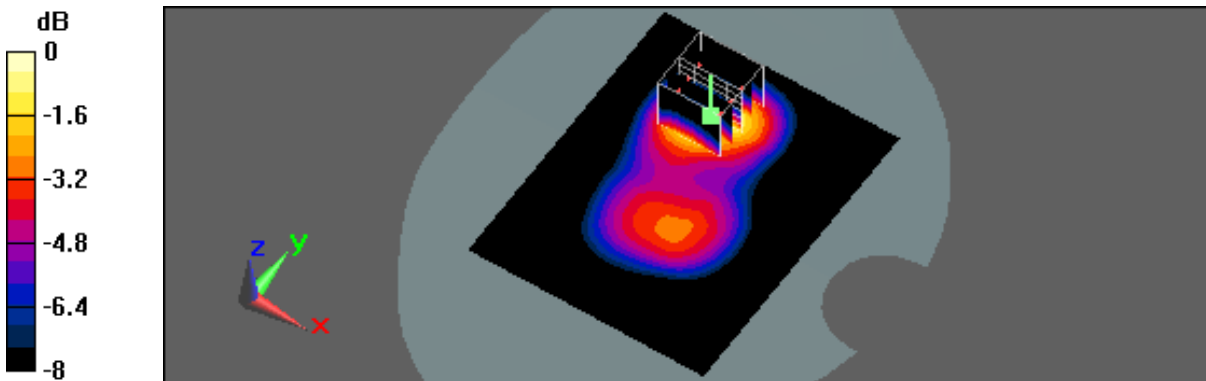
#116\_Flat\_LTE Band 25 BW 10M CH26090\_QPSK with 25 RB Size 0 RB Offset Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 25 BW:10M; Frequency: 1855 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1855$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.957 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 15.6 V/m; Power Drift = -0.015 dB  
Peak SAR (extrapolated) = 1.09 W/kg  
SAR(1 g) = 0.704 mW/g; SAR(10 g) = 0.425 mW/g  
Maximum value of SAR (measured) = 0.919 mW/g



0 dB = 0.919mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 10:53:32 AM

#117\_Flat\_LTE Band 25 BW 10M CH26365\_QPSK with 25 RB Size 0 RB Offset Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

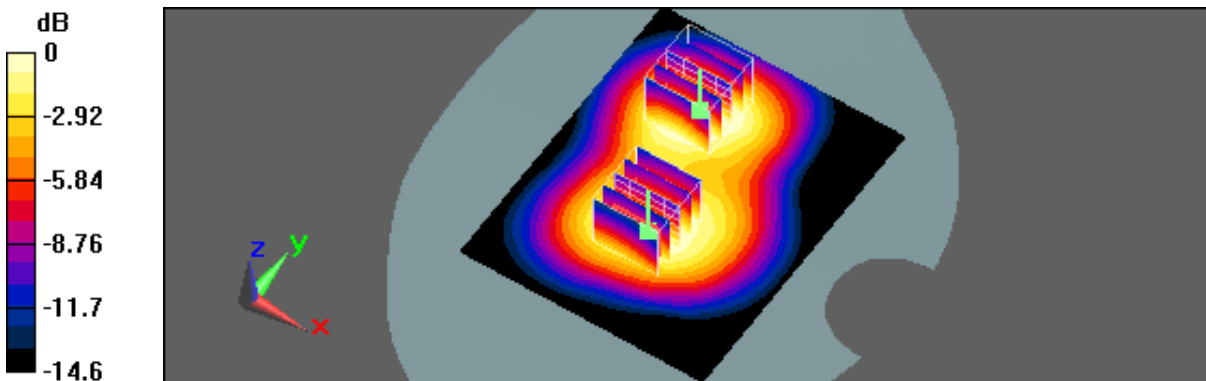
Communication System: LTE Band 25 BW:10M; Frequency: 1882.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1882.5$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.15 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 18.1 V/m; Power Drift = -0.013 dB  
Peak SAR (extrapolated) = 1.36 W/kg  
SAR(1 g) = 0.839 mW/g; SAR(10 g) = 0.488 mW/g  
Maximum value of SAR (measured) = 1.12 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 18.1 V/m; Power Drift = -0.013 dB  
Peak SAR (extrapolated) = 0.867 W/kg  
SAR(1 g) = 0.589 mW/g; SAR(10 g) = 0.387 mW/g  
Maximum value of SAR (measured) = 0.734 mW/g



0 dB = 0.734mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 11:38:21 AM

#118\_Flat\_LTE Band 25 BW 10M CH26640\_QPSK with 25 RB Size 0 RB Offset Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

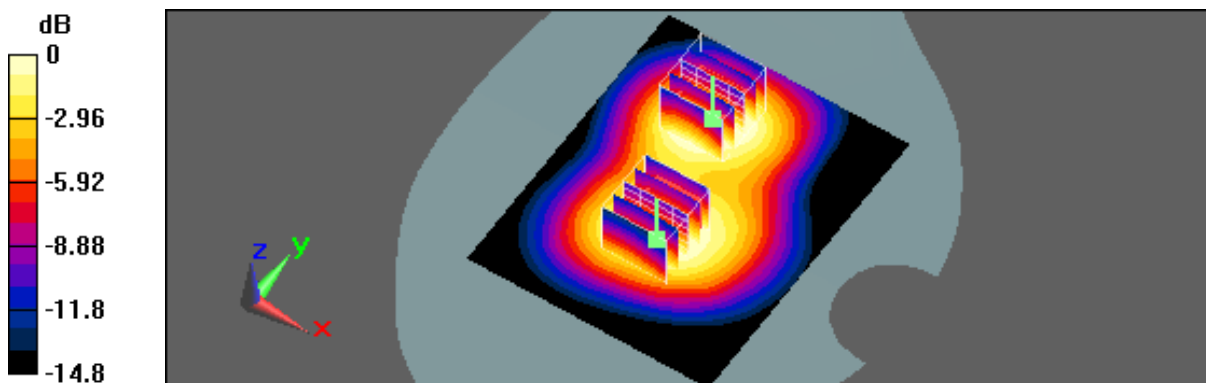
Communication System: LTE Band 25 BW:10M; Frequency: 1910 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.28 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 19.1 V/m; Power Drift = -0.049 dB  
Peak SAR (extrapolated) = 1.5 W/kg  
SAR(1 g) = 0.920 mW/g; SAR(10 g) = 0.531 mW/g  
Maximum value of SAR (measured) = 1.24 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 19.1 V/m; Power Drift = -0.049 dB  
Peak SAR (extrapolated) = 0.926 W/kg  
SAR(1 g) = 0.631 mW/g; SAR(10 g) = 0.412 mW/g  
Maximum value of SAR (measured) = 0.782 mW/g



0 dB = 0.782mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/23/2013 11:36:10 PM

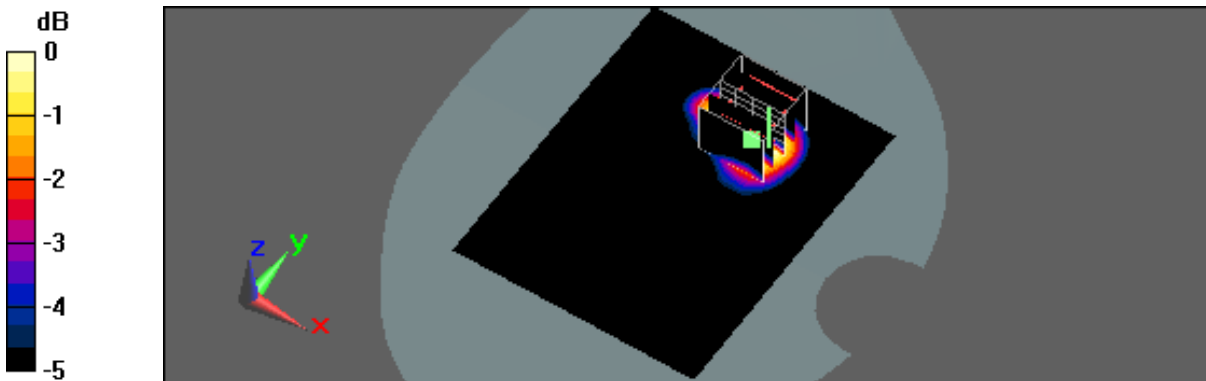
#115\_Flat\_LTE Band 25 BW 10M CH26090\_QPSK with 50 RB Size 0 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 25 BW:10M; Frequency: 1855 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1855$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.950 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 11.9 V/m; Power Drift = -0.019 dB  
Peak SAR (extrapolated) = 1.14 W/kg  
SAR(1 g) = 0.689 mW/g; SAR(10 g) = 0.424 mW/g  
Maximum value of SAR (measured) = 0.922 mW/g



0 dB = 0.922mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 12:13:50 AM

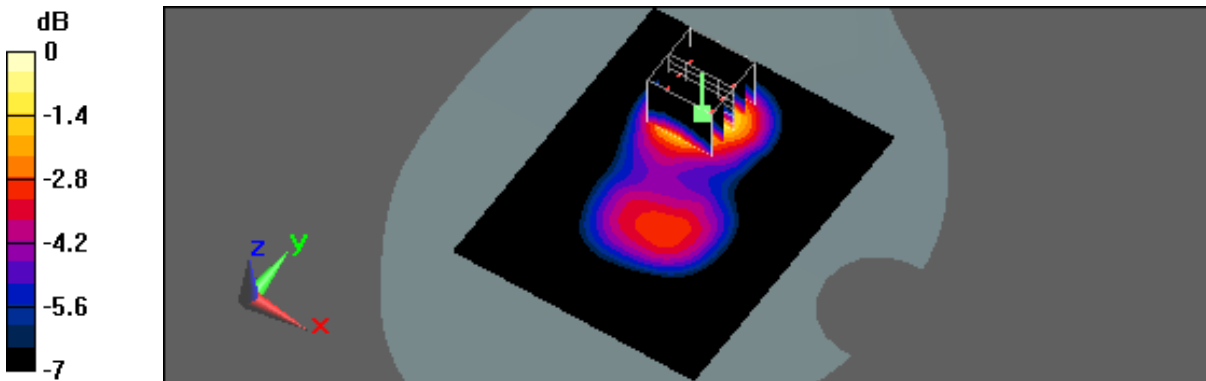
#119\_Flat\_LTE Band 25 BW 10M CH26090\_QPSK with 50 RB Size 0 RB Offset Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 25 BW:10M; Frequency: 1855 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1855$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 53.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.958 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 15.7 V/m; Power Drift = 0.0095 dB  
Peak SAR (extrapolated) = 1.09 W/kg  
SAR(1 g) = 0.708 mW/g; SAR(10 g) = 0.430 mW/g  
Maximum value of SAR (measured) = 0.917 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 1:25:03 AM

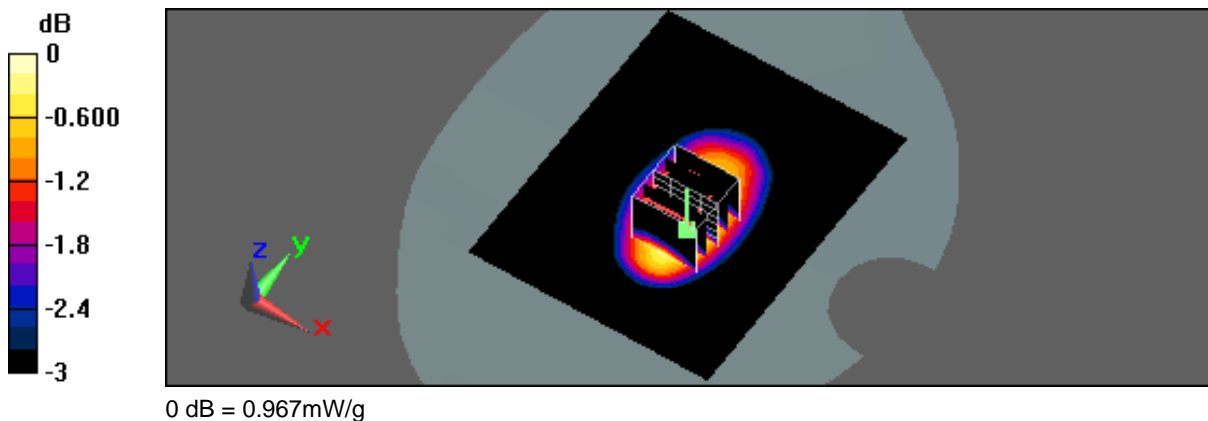
#120\_Flat\_LTE Band 26 BW 10M CH26770\_QPSK with 1 RB Size 0 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 26 BW:10M; Frequency: 822 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 822$  MHz;  $\sigma = 0.955$  mho/m;  $\epsilon_r = 54.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.972 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 32 V/m; Power Drift = 0.015 dB  
Peak SAR (extrapolated) = 1.07 W/kg  
SAR(1 g) = 0.848 mW/g; SAR(10 g) = 0.644 mW/g  
Maximum value of SAR (measured) = 0.967 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 1:44:12 AM

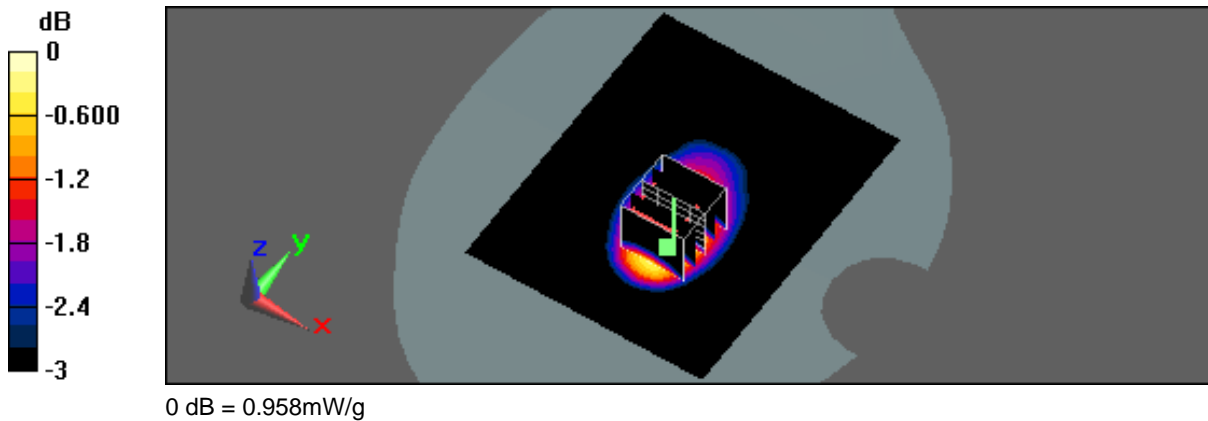
#121\_Flat\_LTE Band 26 BW 10M CH26865\_QPSK with 1 RB Size 0 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 26 BW:10M; Frequency: 831.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 831.5$  MHz;  $\sigma = 0.968$  mho/m;  $\epsilon_r = 53.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.952 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 29.6 V/m; Power Drift = -0.050 dB  
Peak SAR (extrapolated) = 1.06 W/kg  
SAR(1 g) = 0.831 mW/g; SAR(10 g) = 0.619 mW/g  
Maximum value of SAR (measured) = 0.958 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 2:10:32 AM

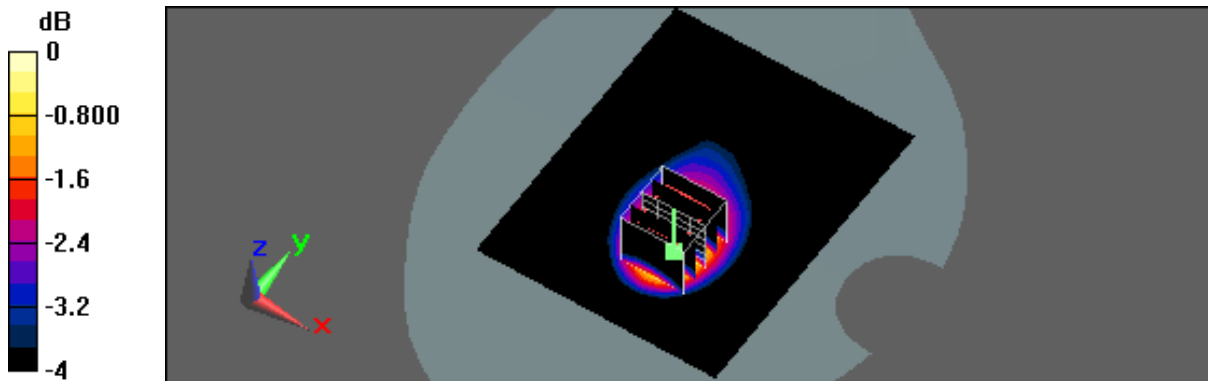
#122\_Flat\_LTE Band 26 BW 10M CH26990\_QPSK with 1 RB Size 0 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 26 BW:10M; Frequency: 844 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 844 \text{ MHz}$ ;  $\sigma = 0.991 \text{ mho/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.02 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 26.3 V/m; Power Drift = -0.0038 dB  
Peak SAR (extrapolated) = 1.13 W/kg  
SAR(1 g) = 0.846 mW/g; SAR(10 g) = 0.612 mW/g  
Maximum value of SAR (measured) = 1 mW/g



0 dB = 1mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 3:17:56 AM

#123\_Flat\_LTE Band 26 BW 10M CH26770\_QPSK with 1 RB Size 0 RB Offset Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

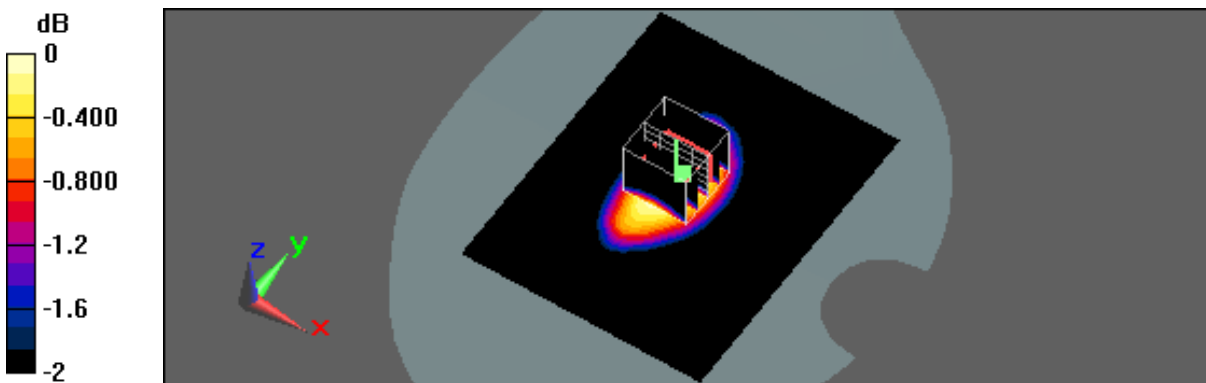
Communication System: LTE Band 26 BW:10M; Frequency: 822 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 822$  MHz;  $\sigma = 0.955$  mho/m;  $\epsilon_r = 54.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.02 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 33.5 V/m; Power Drift = -0.171 dB  
Peak SAR (extrapolated) = 1.09 W/kg  
SAR(1 g) = 0.882 mW/g; SAR(10 g) = 0.677 mW/g  
Maximum value of SAR (measured) = 1.01 mW/g



0 dB = 1.01mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 3:43:57 AM

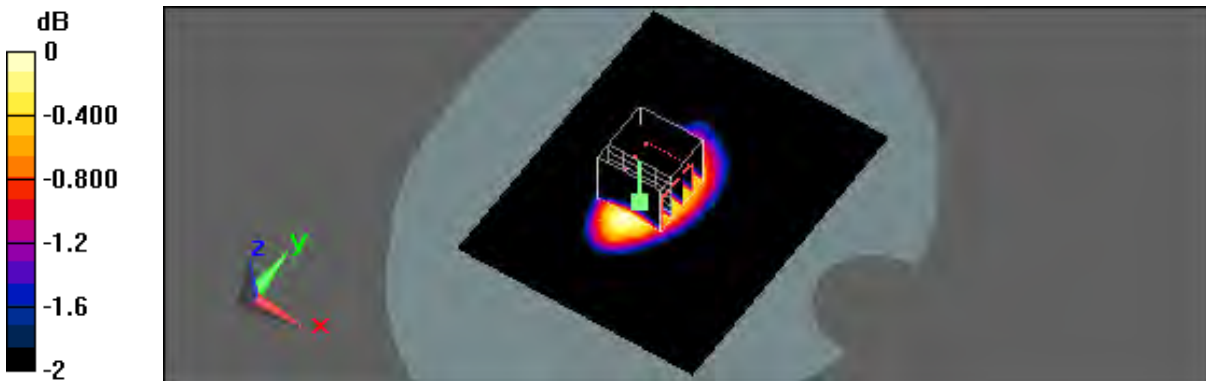
#124\_Flat\_LTE Band 26 BW 10M CH26865\_QPSK with 1 RB Size 0 RB Offset Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 26 BW:10M; Frequency: 831.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 831.5$  MHz;  $\sigma = 0.968$  mho/m;  $\epsilon_r = 53.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.964 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 31.7 V/m; Power Drift = -0.028 dB  
Peak SAR (extrapolated) = 1.04 W/kg  
SAR(1 g) = 0.838 mW/g; SAR(10 g) = 0.643 mW/g  
Maximum value of SAR (measured) = 0.953 mW/g



0 dB = 0.953mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 4:18:18 AM

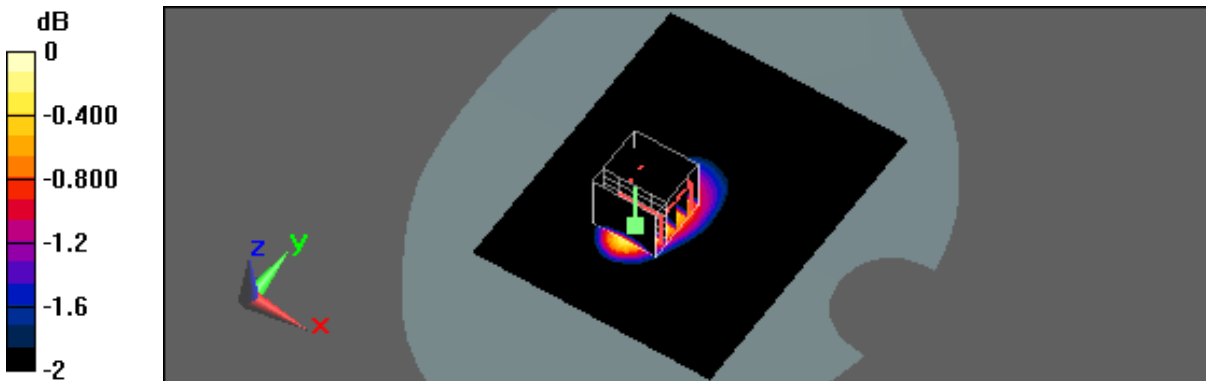
#125\_Flat\_LTE Band 26 BW 10M CH26990\_QPSK with 1 RB Size 0 RB Offset Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 26 BW:10M; Frequency: 844 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 844 \text{ MHz}$ ;  $\sigma = 0.991 \text{ mho/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.02 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 29.7 V/m; Power Drift = 0.018 dB  
Peak SAR (extrapolated) = 1.12 W/kg  
SAR(1 g) = 0.852 mW/g; SAR(10 g) = 0.630 mW/g  
Maximum value of SAR (measured) = 0.996 mW/g



0 dB = 0.996mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 5:27:33 AM

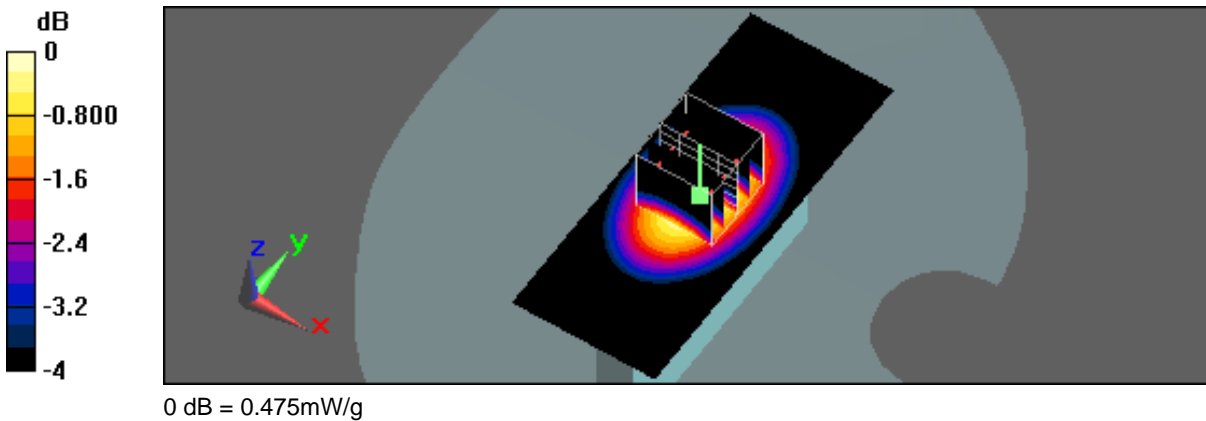
#126\_Flat\_LTE Band 26 BW 10M CH26770\_QPSK with 1 RB Size 0 RB Offset Side 3 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 26 BW:10M; Frequency: 822 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 822$  MHz;  $\sigma = 0.955$  mho/m;  $\epsilon_r = 54.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.484 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 23.2 V/m; Power Drift = -0.00653 dB  
Peak SAR (extrapolated) = 0.533 W/kg  
SAR(1 g) = 0.398 mW/g; SAR(10 g) = 0.287 mW/g  
Maximum value of SAR (measured) = 0.475 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 5:43:11 AM

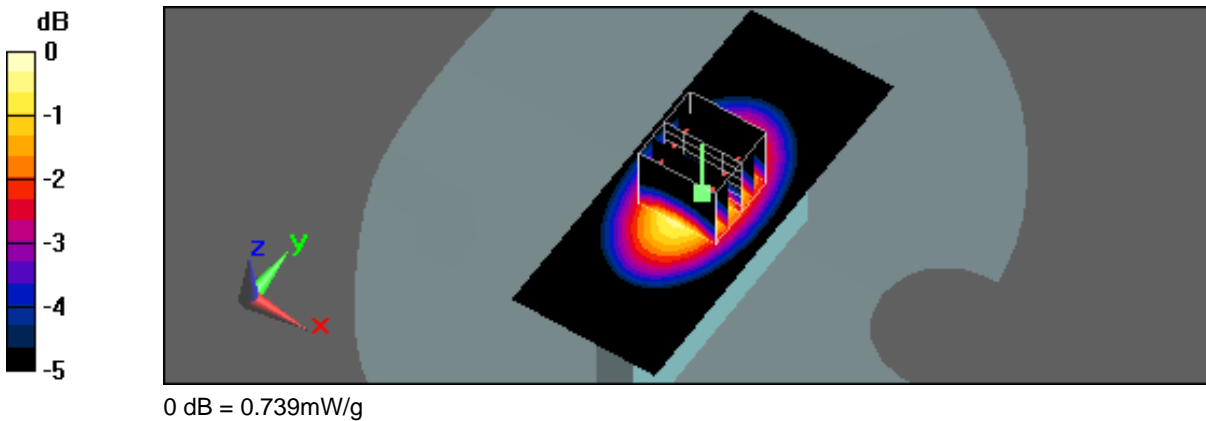
#127\_Flat\_LTE Band 26 BW 10M CH26770\_QPSK with 1 RB Size 0 RB Offset Side 4 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 26 BW:10M; Frequency: 822 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 822 \text{ MHz}$ ;  $\sigma = 0.955 \text{ mho/m}$ ;  $\epsilon_r = 54.1$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.734 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 28.3 V/m; Power Drift = -0.00847 dB  
Peak SAR (extrapolated) = 0.837 W/kg  
SAR(1 g) = 0.608 mW/g; SAR(10 g) = 0.427 mW/g  
Maximum value of SAR (measured) = 0.739 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 6:41:51 AM

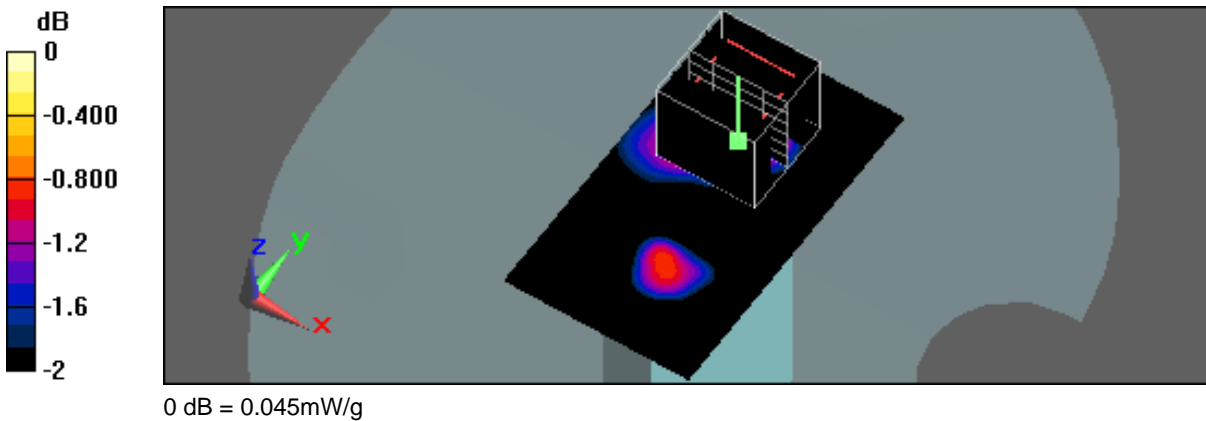
#128\_Flat\_LTE Band 26 BW 10M CH26770\_QPSK with 1 RB Size 0 RB Offset Side 6 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 26 BW:10M; Frequency: 822 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 822$  MHz;  $\sigma = 0.955$  mho/m;  $\epsilon_r = 54.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (41x71x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.042 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 5.8 V/m; Power Drift = 0.140 dB  
Peak SAR (extrapolated) = 0.050 W/kg  
SAR(1 g) = 0.033 mW/g; SAR(10 g) = 0.023 mW/g  
Maximum value of SAR (measured) = 0.042 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 2:29:08 AM

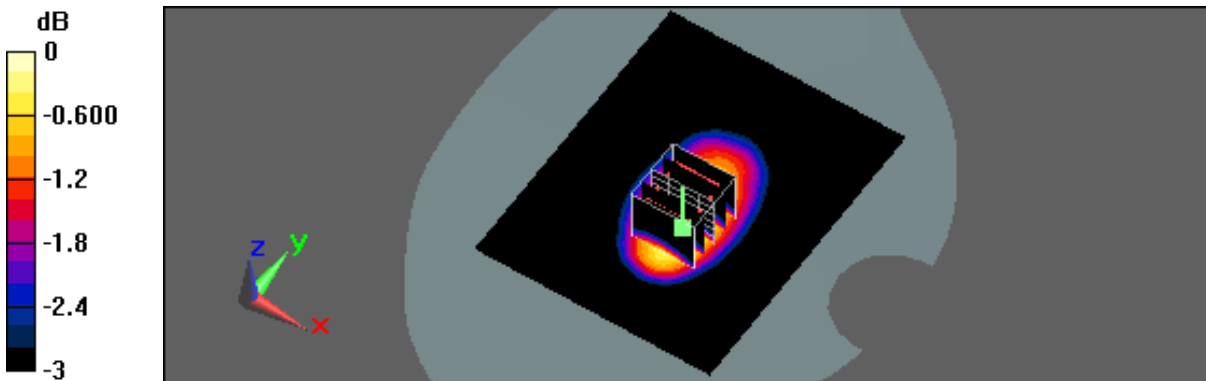
#129\_Flat\_LTE Band 26 BW 10M CH26770\_QPSK with 25 RB Size 0 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 26 BW:10M; Frequency: 822 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 822$  MHz;  $\sigma = 0.955$  mho/m;  $\epsilon_r = 54.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.734 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 27.4 V/m; Power Drift = -0.012 dB  
Peak SAR (extrapolated) = 0.811 W/kg  
SAR(1 g) = 0.642 mW/g; SAR(10 g) = 0.487 mW/g  
Maximum value of SAR (measured) = 0.740 mW/g



0 dB = 0.740mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 10:21:01 AM

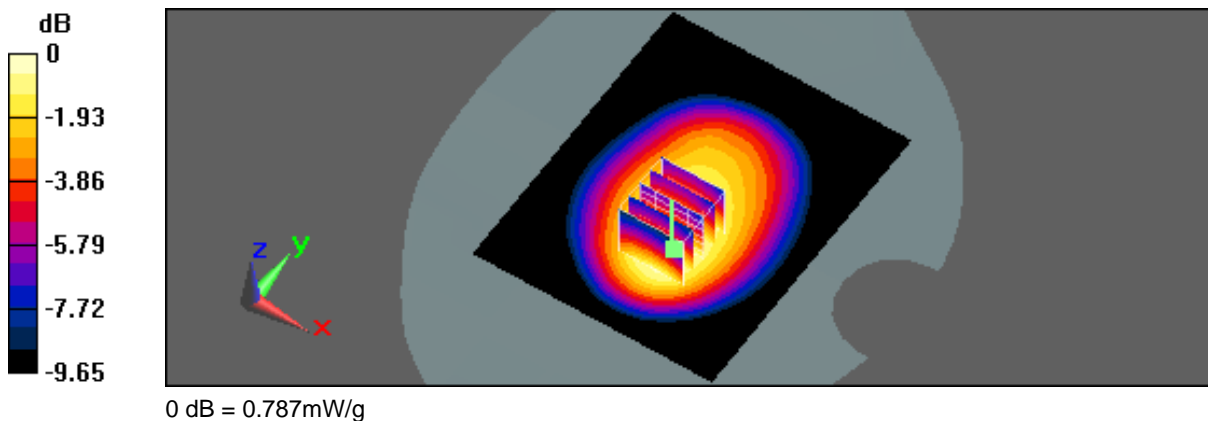
#130\_Flat\_LTE Band 26 BW 10M CH26865\_QPSK with 25 RB Size 0 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 26 BW:10M; Frequency: 831.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 831.5$  MHz;  $\sigma = 0.968$  mho/m;  $\epsilon_r = 53.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.788 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 26.1 V/m; Power Drift = -0.013 dB  
Peak SAR (extrapolated) = 0.876 W/kg  
SAR(1 g) = 0.674 mW/g; SAR(10 g) = 0.498 mW/g  
Maximum value of SAR (measured) = 0.787 mW/g







Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 10:49:50 AM

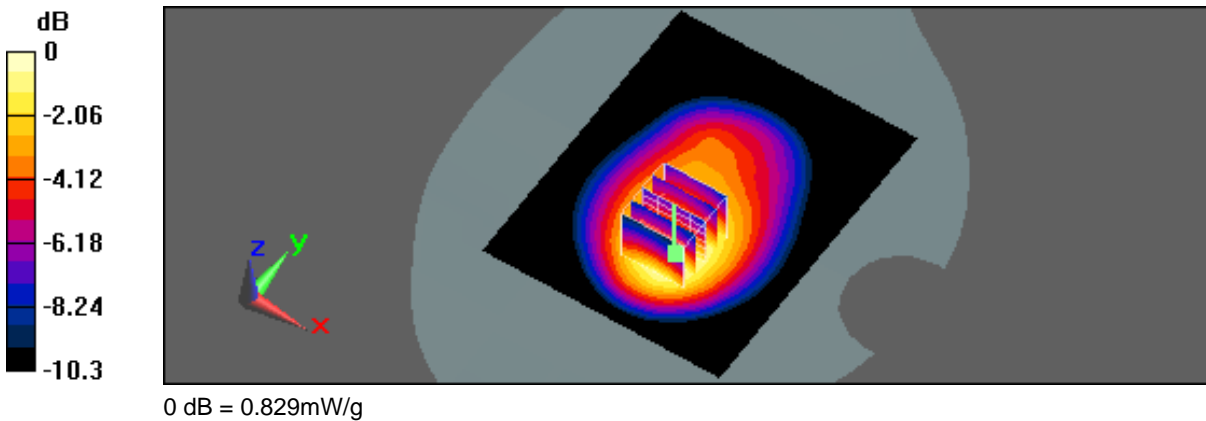
#131\_Flat\_LTE Band 26 BW 10M CH26990\_QPSK with 25 RB Size 0 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 26 BW:10M; Frequency: 844 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 844$  MHz;  $\sigma = 0.991$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.846 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 22.8 V/m; Power Drift = -0.00941 dB  
Peak SAR (extrapolated) = 0.948 W/kg  
SAR(1 g) = 0.700 mW/g; SAR(10 g) = 0.498 mW/g  
Maximum value of SAR (measured) = 0.829 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 4:44:50 AM

#133\_Flat\_LTE Band 26 BW 10M CH26770\_QPSK with 25 RB Size 0 RB Offset Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

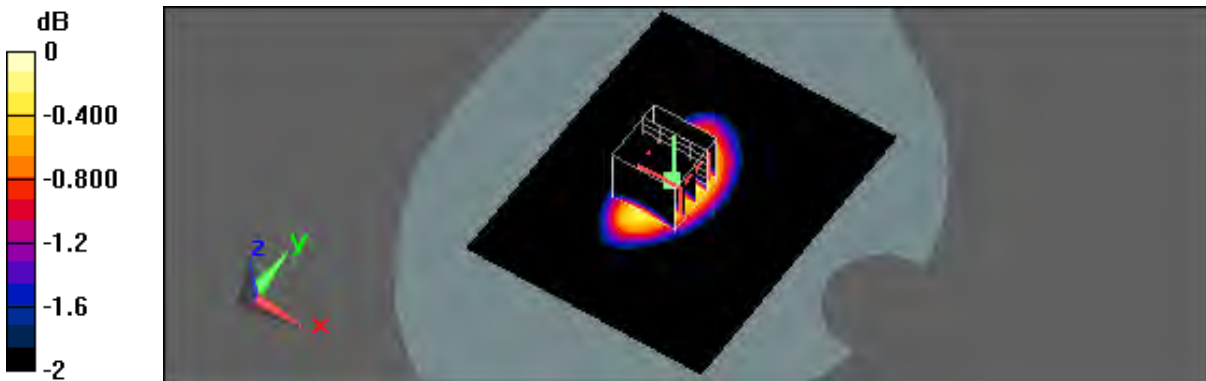
Communication System: LTE Band 26 BW:10M; Frequency: 822 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 822$  MHz;  $\sigma = 0.955$  mho/m;  $\epsilon_r = 54.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.742 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 28.3 V/m; Power Drift = 0.014 dB  
Peak SAR (extrapolated) = 0.806 W/kg  
SAR(1 g) = 0.651 mW/g; SAR(10 g) = 0.500 mW/g  
Maximum value of SAR (measured) = 0.738 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 9:26:45 AM

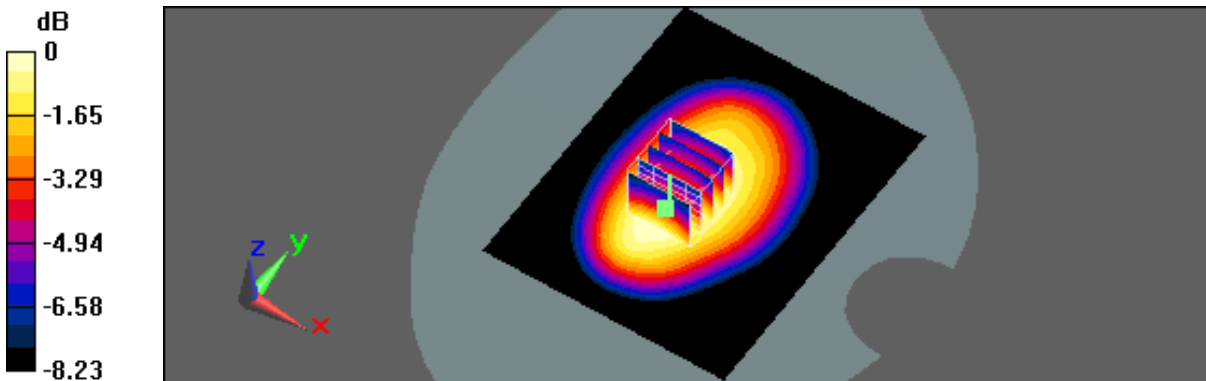
#134\_Flat\_LTE Band 26 BW 10M CH26865\_QPSK with 25 RB Size 0 RB Offset Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 26 BW:10M; Frequency: 831.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 831.5$  MHz;  $\sigma = 0.968$  mho/m;  $\epsilon_r = 53.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.783 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 28.6 V/m; Power Drift = -0.030 dB  
Peak SAR (extrapolated) = 0.854 W/kg  
SAR(1 g) = 0.676 mW/g; SAR(10 g) = 0.510 mW/g  
Maximum value of SAR (measured) = 0.775 mW/g



0 dB = 0.775mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 9:53:38 AM

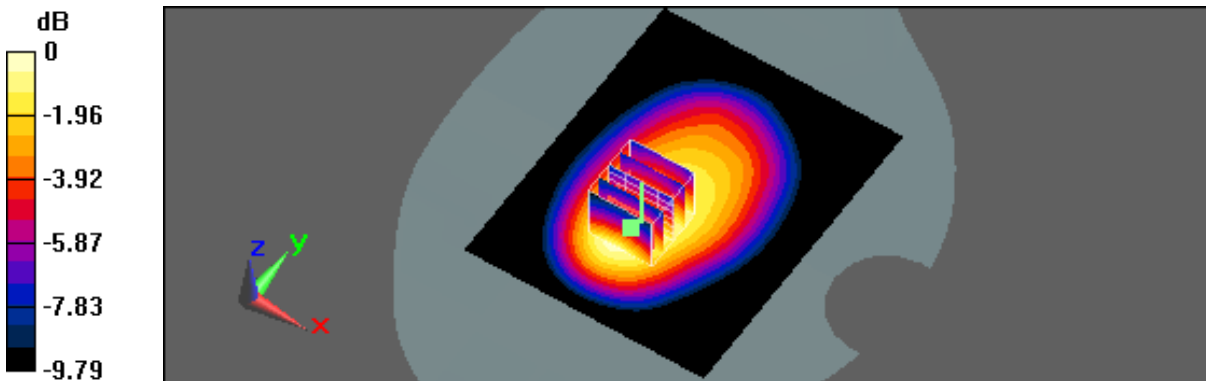
#135\_Flat\_LTE Band 26 BW 10M CH26990\_QPSK with 25 RB Size 0 RB Offset Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 26 BW:10M; Frequency: 844 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 844$  MHz;  $\sigma = 0.991$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.837 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 25.9 V/m; Power Drift = 0.00491 dB  
Peak SAR (extrapolated) = 0.932 W/kg  
SAR(1 g) = 0.692 mW/g; SAR(10 g) = 0.503 mW/g  
Maximum value of SAR (measured) = 0.811 mW/g



0 dB = 0.811mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 2:47:16 AM

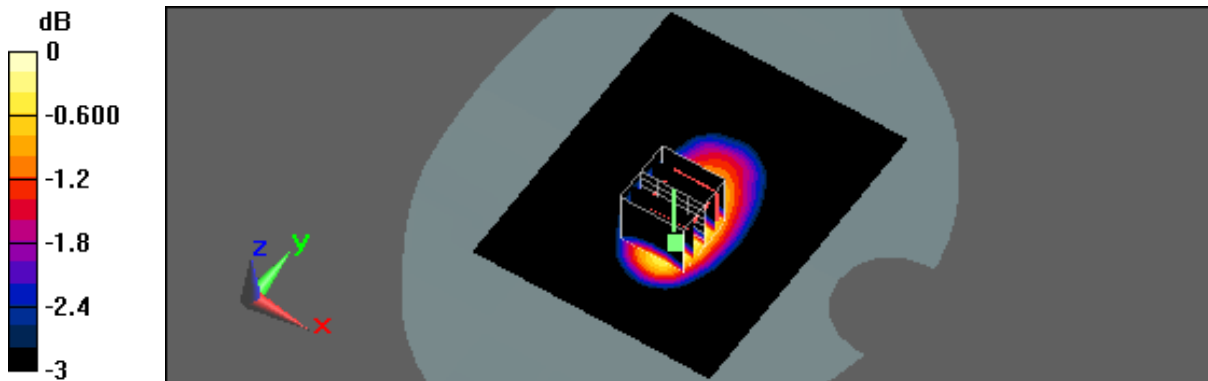
#132\_Flat\_LTE Band 26 BW 10M CH26770\_QPSK with 50 RB Size 0 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 26 BW:10M; Frequency: 822 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 822$  MHz;  $\sigma = 0.955$  mho/m;  $\epsilon_r = 54.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.716 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 26.6 V/m; Power Drift = 0.045 dB  
Peak SAR (extrapolated) = 0.798 W/kg  
SAR(1 g) = 0.629 mW/g; SAR(10 g) = 0.475 mW/g  
Maximum value of SAR (measured) = 0.721 mW/g



0 dB = 0.721mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 5:03:18 AM

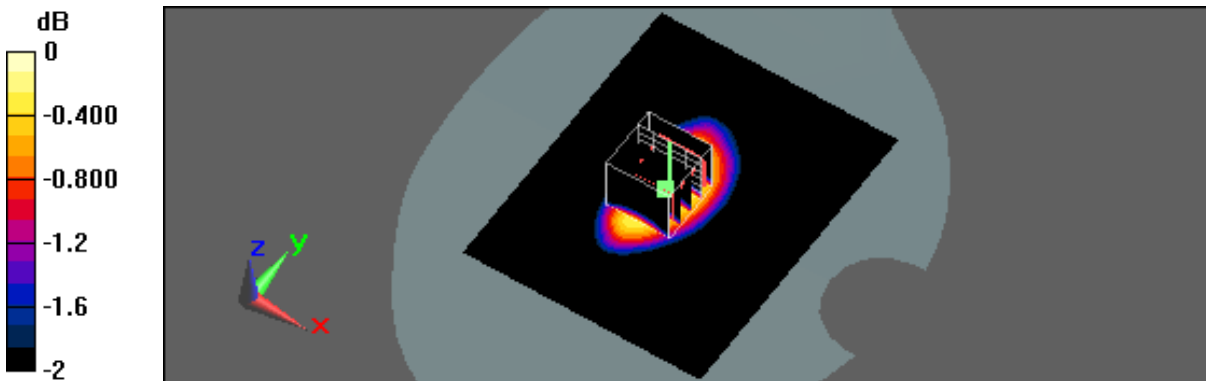
#136\_Flat\_LTE Band 26 BW 10M CH26770\_QPSK with 50 RB Size 0 RB Offset Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 26 BW:10M; Frequency: 822 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 822 \text{ MHz}$ ;  $\sigma = 0.955 \text{ mho/m}$ ;  $\epsilon_r = 54.1$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.720 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 28 V/m; Power Drift = -0.060 dB  
Peak SAR (extrapolated) = 0.784 W/kg  
SAR(1 g) = 0.635 mW/g; SAR(10 g) = 0.488 mW/g  
Maximum value of SAR (measured) = 0.721 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/1/2013 3:44:58 AM

#138\_Flat\_LTE Band 41 (Config 1) BW 20M CH39750\_QPSK with 1 RB Size 99 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2506 MHz;Duty Cycle: 1:2.31  
Medium parameters used:  $f = 2506$  MHz;  $\sigma = 2.12$  mho/m;  $\epsilon_r = 52.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3898; ConvF(6.99, 6.99, 6.99); Calibrated: 1/14/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 2 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:

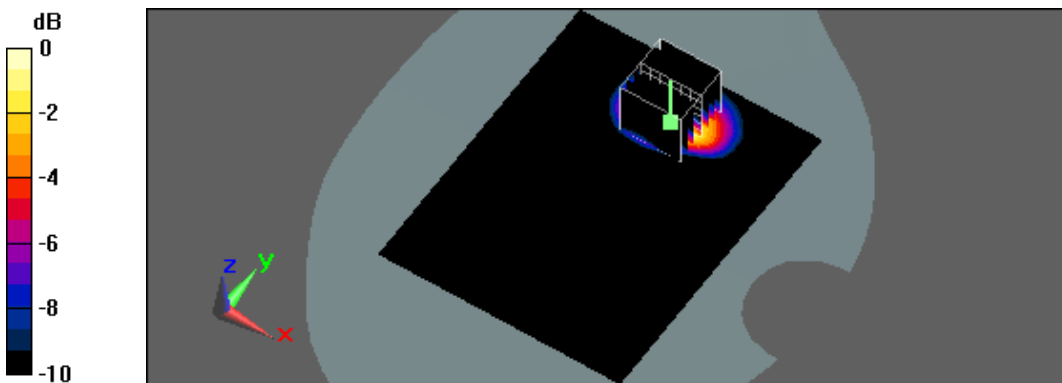
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.32 V/m; Power Drift = 0.140 dB

Peak SAR (extrapolated) = 2.53 W/kg

SAR(1 g) = 1.3 mW/g; SAR(10 g) = 0.631 mW/g

Maximum value of SAR (measured) = 1.9 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/28/2013 9:58:57 AM

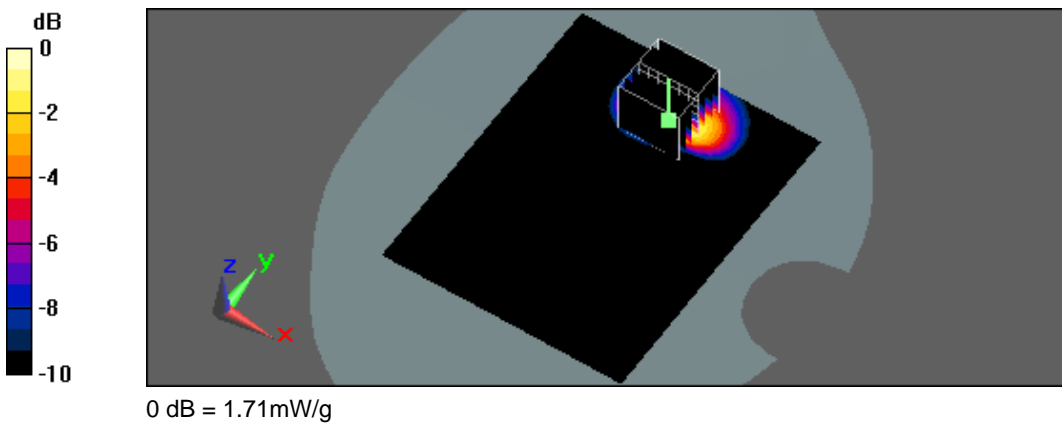
#137\_Flat\_LTE Band 41 (Config 1) BW 20M CH40620\_QPSK with 1 RB Size 99 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2593 MHz;Duty Cycle: 1:2.31  
Medium parameters used:  $f = 2593$  MHz;  $\sigma = 2.11$  mho/m;  $\epsilon_r = 51.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3898; ConvF(6.99, 6.99, 6.99); Calibrated: 1/14/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):  
Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 1.84 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:  
Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 1.16 V/m; Power Drift = 0.058 dB  
Peak SAR (extrapolated) = 2.27 W/kg  
SAR(1 g) = 1.19 mW/g; SAR(10 g) = 0.597 mW/g  
Maximum value of SAR (measured) = 1.71 mW/g







Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/28/2013 4:31:35 PM

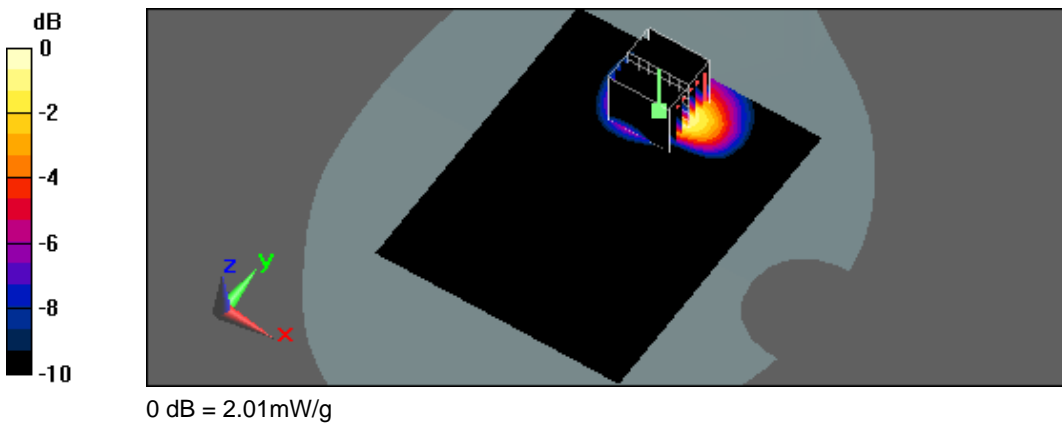
#139\_Flat\_LTE Band 41 (Config 1) BW 20M CH41490\_QPSK with 1 RB Size 0 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2680 MHz;Duty Cycle: 1:2.31  
Medium parameters used:  $f = 2680$  MHz;  $\sigma = 2.23$  mho/m;  $\epsilon_r = 51.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3898; ConvF(6.99, 6.99, 6.99); Calibrated: 1/14/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):  
Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 2.13 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:  
Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 3.24 V/m; Power Drift = 0.115 dB  
Peak SAR (extrapolated) = 2.71 W/kg  
SAR(1 g) = 1.39 mW/g; SAR(10 g) = 0.702 mW/g  
Maximum value of SAR (measured) = 2.01 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/1/2013 6:42:34 AM

#141\_Flat\_LTE Band 41 (Config 1) BW 20M CH39750\_QPSK with 1 RB Size 99 RB Offset Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2506 MHz;Duty Cycle: 1:2.31  
Medium parameters used:  $f = 2506$  MHz;  $\sigma = 2.12$  mho/m;  $\epsilon_r = 52.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3898; ConvF(6.99, 6.99, 6.99); Calibrated: 1/14/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.779 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:

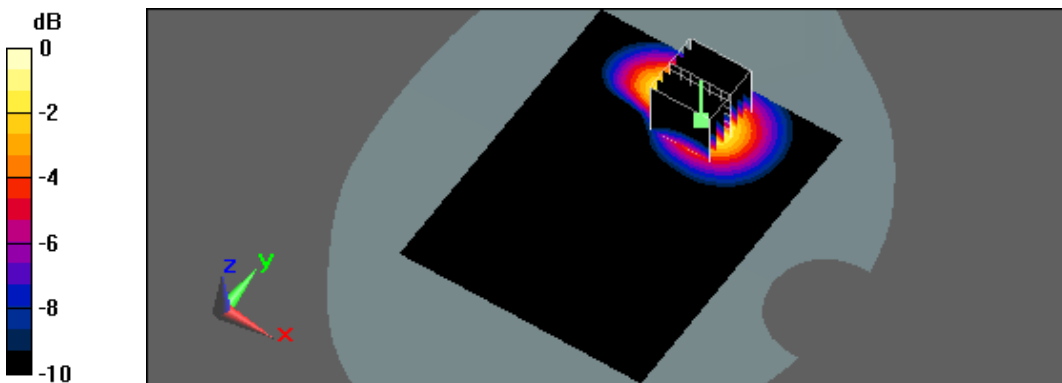
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.54 V/m; Power Drift = -0.037 dB

Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.543 mW/g; SAR(10 g) = 0.287 mW/g

Maximum value of SAR (measured) = 0.778 mW/g



0 dB = 0.778mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/28/2013 11:40:29 AM

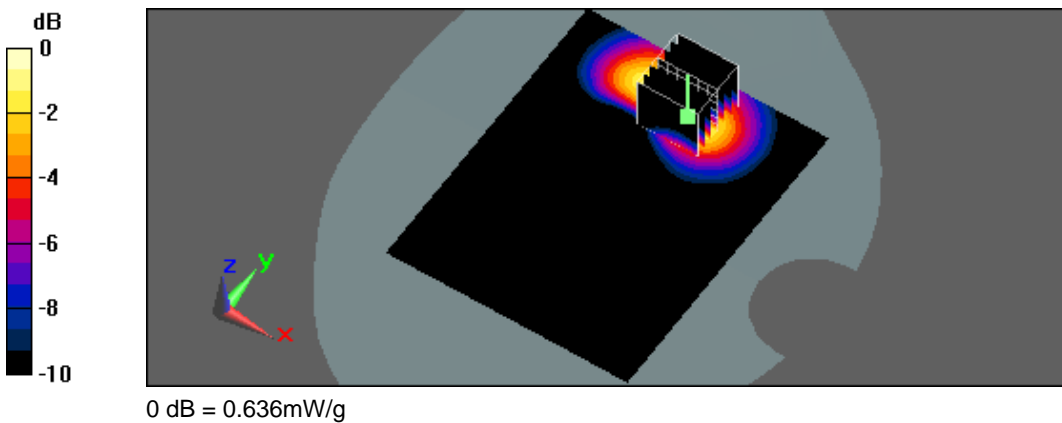
#140\_Flat\_LTE Band 41 (Config 1) BW 20M CH40620\_QPSK with 1 RB Size 99 RB Offset Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2593 MHz;Duty Cycle: 1:2.31  
Medium parameters used:  $f = 2593$  MHz;  $\sigma = 2.11$  mho/m;  $\epsilon_r = 51.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3898; ConvF(6.99, 6.99, 6.99); Calibrated: 1/14/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):  
Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.633 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:  
Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 2.27 V/m; Power Drift = -0.176 dB  
Peak SAR (extrapolated) = 0.834 W/kg  
SAR(1 g) = 0.444 mW/g; SAR(10 g) = 0.235 mW/g  
Maximum value of SAR (measured) = 0.636 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/28/2013 12:24:43 PM

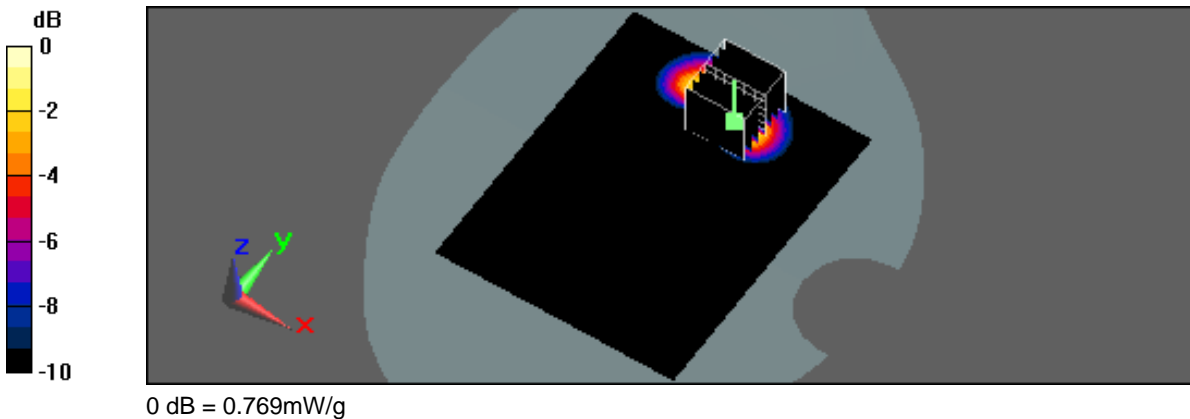
#142\_Flat\_LTE Band 41 (Config 1) BW 20M CH41490\_QPSK with 1 RB Size 0 RB Offset Side 2 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2680 MHz;Duty Cycle: 1:2.31  
Medium parameters used:  $f = 2680$  MHz;  $\sigma = 2.23$  mho/m;  $\epsilon_r = 51.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3898; ConvF(6.99, 6.99, 6.99); Calibrated: 1/14/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):  
Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.794 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:  
Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 3.74 V/m; Power Drift = 0.187 dB  
Peak SAR (extrapolated) = 1.01 W/kg  
SAR(1 g) = 0.539 mW/g; SAR(10 g) = 0.287 mW/g  
Maximum value of SAR (measured) = 0.769 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/28/2013 2:22:43 PM

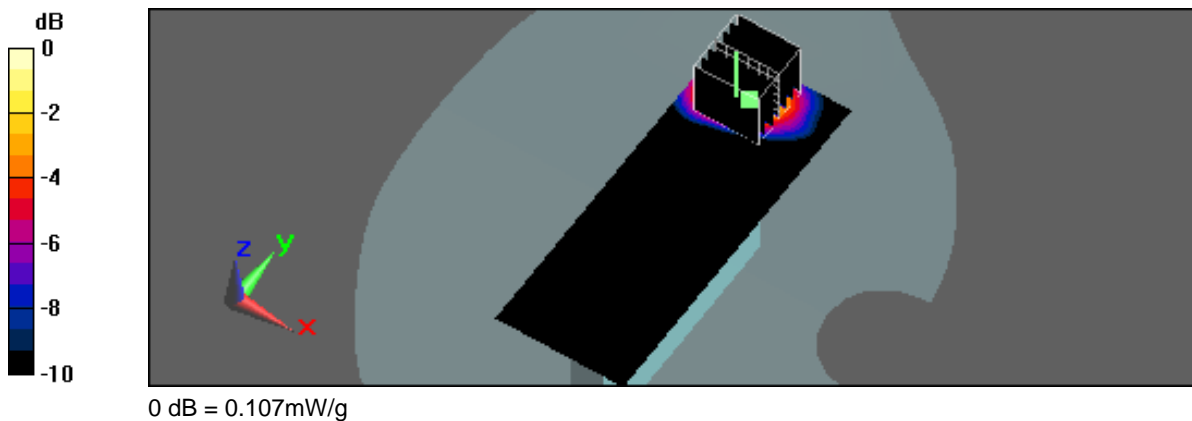
#143\_Flat\_LTE Band 41 (Config 1) BW 10M CH40620\_QPSK with 1 RB Size 99 RB Offset Side 3 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2593 MHz;Duty Cycle: 1:2.31  
Medium parameters used:  $f = 2593$  MHz;  $\sigma = 2.11$  mho/m;  $\epsilon_r = 51.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3898; ConvF(6.99, 6.99, 6.99); Calibrated: 1/14/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (61x161x1):  
Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.105 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:  
Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 2.48 V/m; Power Drift = -0.081 dB  
Peak SAR (extrapolated) = 0.139 W/kg  
SAR(1 g) = 0.077 mW/g; SAR(10 g) = 0.045 mW/g  
Maximum value of SAR (measured) = 0.107 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/28/2013 3:08:44 PM

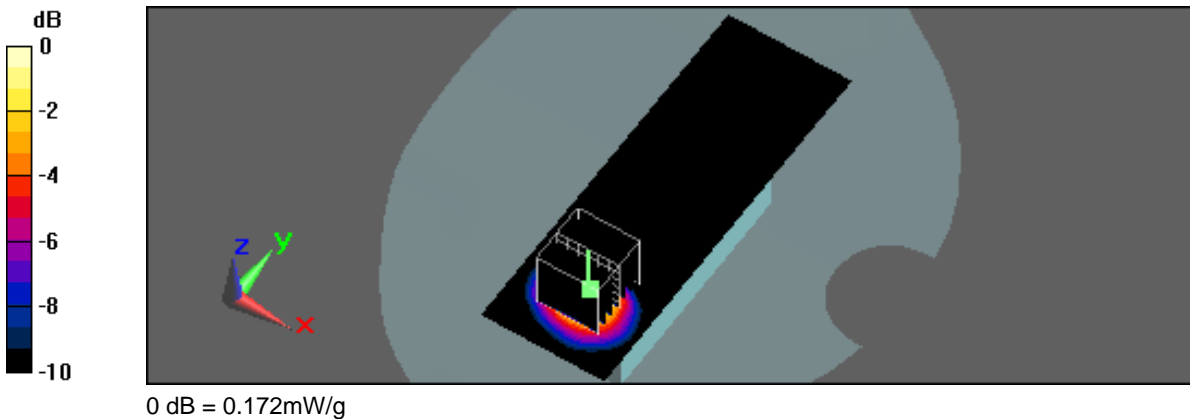
#144\_Flat\_LTE Band 41 (Config 1) BW 10M CH40620\_QPSK with 1 RB Size 99 RB Offset Side 4 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2593 MHz;Duty Cycle: 1:2.31  
Medium parameters used:  $f = 2593$  MHz;  $\sigma = 2.11$  mho/m;  $\epsilon_r = 51.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3898; ConvF(6.99, 6.99, 6.99); Calibrated: 1/14/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (61x181x1):  
Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.174 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:  
Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 1.62 V/m; Power Drift = -0.144 dB  
Peak SAR (extrapolated) = 0.227 W/kg  
SAR(1 g) = 0.124 mW/g; SAR(10 g) = 0.073 mW/g  
Maximum value of SAR (measured) = 0.172 mW/g



Test Laboratory: A Test Lab Techno Corp.  
 Date/Time: 2/28/2013 3:46:39 PM

#145\_Flat\_LTE Band 41 (Config 1) BW 10M CH40620\_QPSK with 1 RB Size 99 RB Offset Side 6 to phantom 10mm  
 DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2593 MHz;Duty Cycle: 1:2.31  
 Medium parameters used:  $f = 2593 \text{ MHz}$ ;  $\sigma = 2.11 \text{ mho/m}$ ;  $\epsilon_r = 51.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3898; ConvF(6.99, 6.99, 6.99); Calibrated: 1/14/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (61x101x1):

Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.026 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:

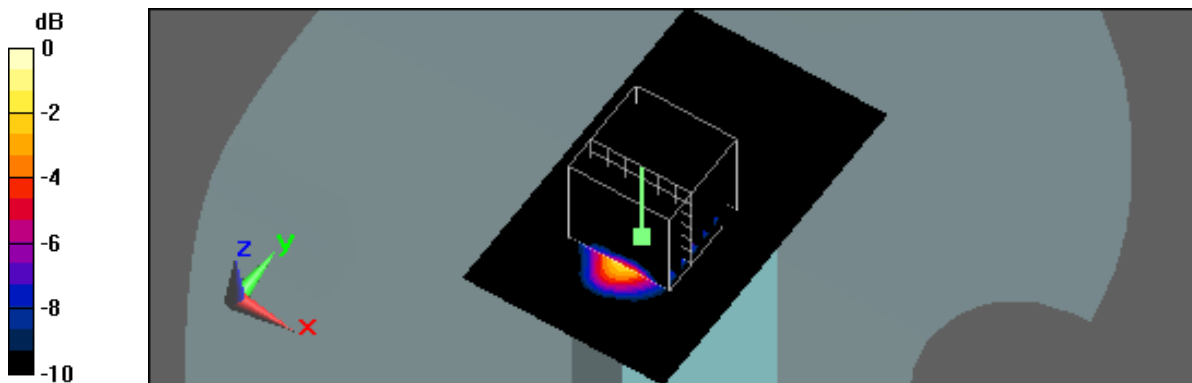
Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 3.25 V/m; Power Drift = -0.172 dB

Peak SAR (extrapolated) = 0.035 W/kg

SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.00837 mW/g

Maximum value of SAR (measured) = 0.026 mW/g



0 dB = 0.026mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/1/2013 5:27:42 AM

#147\_Flat\_LTE Band 41 (Config 1) BW 20M CH39750\_QPSK with 50 RB Size 49 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2506 MHz;Duty Cycle: 1:2.31  
Medium parameters used:  $f = 2506$  MHz;  $\sigma = 2.12$  mho/m;  $\epsilon_r = 52.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3898; ConvF(6.99, 6.99, 6.99); Calibrated: 1/14/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.31 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:

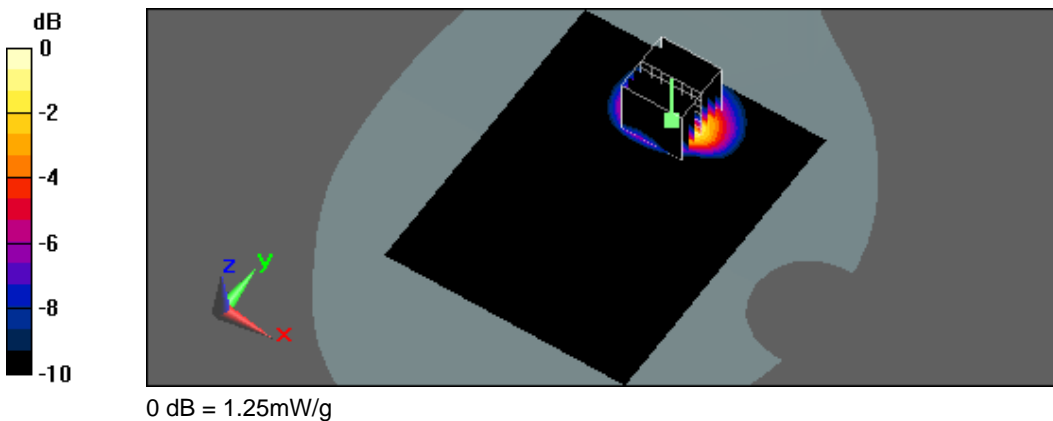
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.5 V/m; Power Drift = 0.121 dB

Peak SAR (extrapolated) = 1.65 W/kg

SAR(1 g) = 0.859 mW/g; SAR(10 g) = 0.430 mW/g

Maximum value of SAR (measured) = 1.25 mW/g







Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/28/2013 6:32:18 PM

#146\_Flat\_LTE Band 41 (Config 1) BW 20M CH40620\_QPSK with 50 RB Size 49 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2593 MHz;Duty Cycle: 1:2.31  
Medium parameters used:  $f = 2593$  MHz;  $\sigma = 2.11$  mho/m;  $\epsilon_r = 51.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3898; ConvF(6.99, 6.99, 6.99); Calibrated: 1/14/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):

Measurement grid: dx=10mm, dy=10mm

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

Flat/Zoom Scan (7x7x7)/Cube 0:

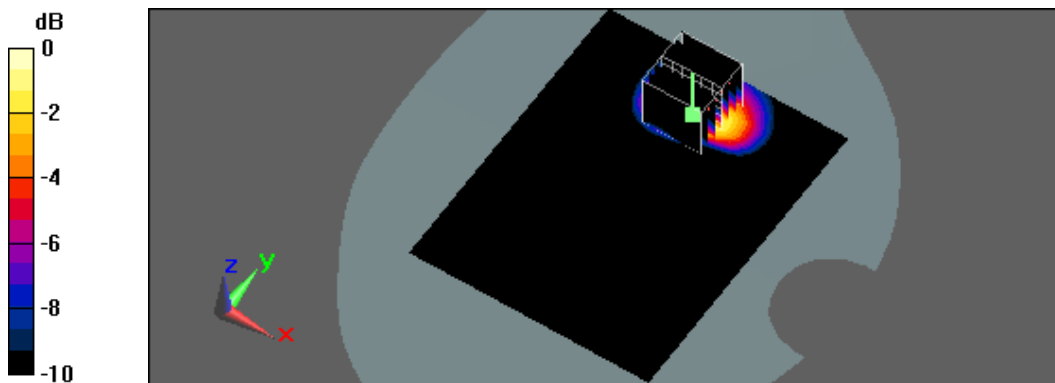
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.54 V/m; Power Drift = 0.129 dB

Peak SAR (extrapolated) = 1.6 W/kg

SAR(1 g) = 0.833 mW/g; SAR(10 g) = 0.421 mW/g

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



0 dB = 1.2mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/28/2013 5:15:18 PM

#148\_Flat\_LTE Band 41 (Config 1) BW 20M CH41490\_QPSK with 50 RB Size 0 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2680 MHz;Duty Cycle: 1:2.31  
Medium parameters used:  $f = 2680$  MHz;  $\sigma = 2.23$  mho/m;  $\epsilon_r = 51.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3898; ConvF(6.99, 6.99, 6.99); Calibrated: 1/14/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.47 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:

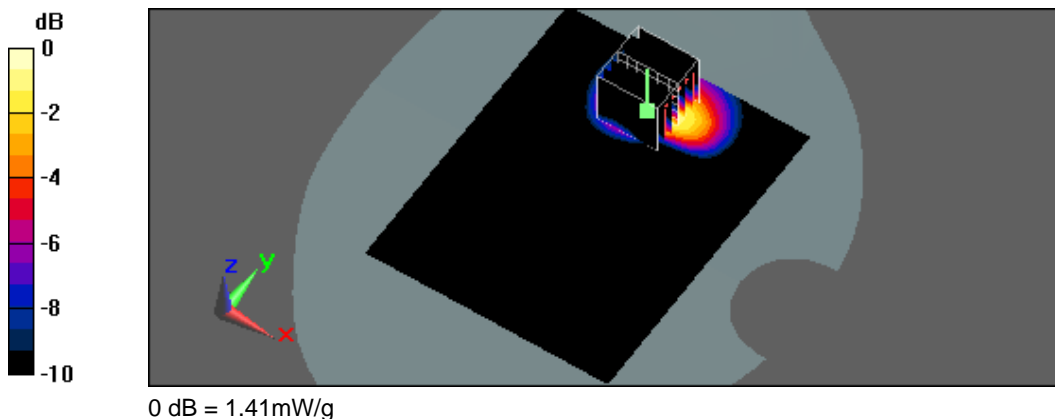
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.52 V/m; Power Drift = 0.113 dB

Peak SAR (extrapolated) = 1.91 W/kg

SAR(1 g) = 0.972 mW/g; SAR(10 g) = 0.488 mW/g

Maximum value of SAR (measured) = 1.41 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/1/2013 6:04:40 AM

#150\_Flat\_LTE Band 41 (Config 1) BW 20M CH39750\_QPSK with 100 RB Size 0 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2506 MHz;Duty Cycle: 1:2.31  
Medium parameters used:  $f = 2506$  MHz;  $\sigma = 2.12$  mho/m;  $\epsilon_r = 52.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3898; ConvF(6.99, 6.99, 6.99); Calibrated: 1/14/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.31 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:

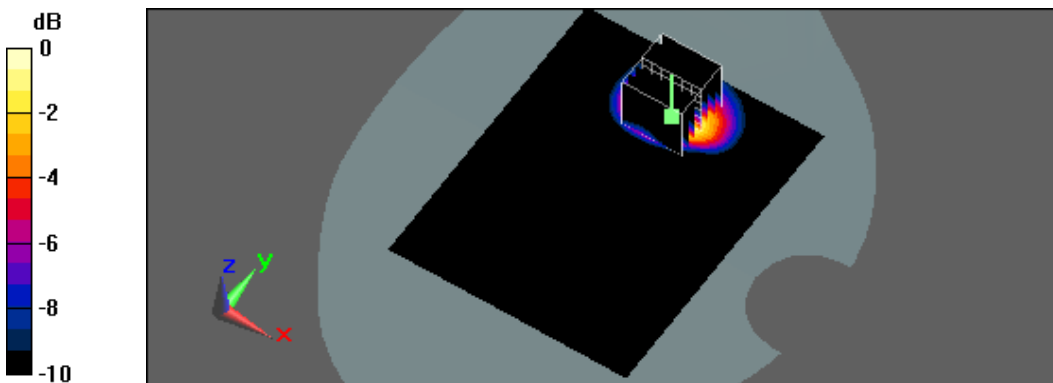
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.57 V/m; Power Drift = -0.012 dB

Peak SAR (extrapolated) = 1.62 W/kg

SAR(1 g) = 0.847 mW/g; SAR(10 g) = 0.424 mW/g

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



0 dB = 1.23mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/28/2013 7:11:23 PM

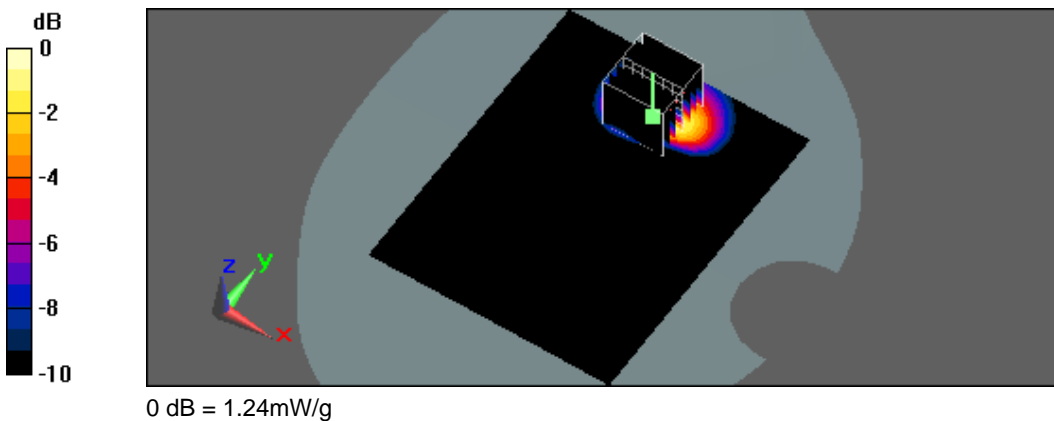
#149\_Flat\_LTE Band 41 (Config 1) BW 20M CH40620\_QPSK with 100 RB Size 0 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2593 MHz;Duty Cycle: 1:2.31  
Medium parameters used:  $f = 2593$  MHz;  $\sigma = 2.11$  mho/m;  $\epsilon_r = 51.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3898; ConvF(6.99, 6.99, 6.99); Calibrated: 1/14/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):  
Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 1.34 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:  
Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 1.3 V/m; Power Drift = -0.187 dB  
Peak SAR (extrapolated) = 1.65 W/kg  
SAR(1 g) = 0.862 mW/g; SAR(10 g) = 0.436 mW/g  
Maximum value of SAR (measured) = 1.24 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/28/2013 5:53:45 PM

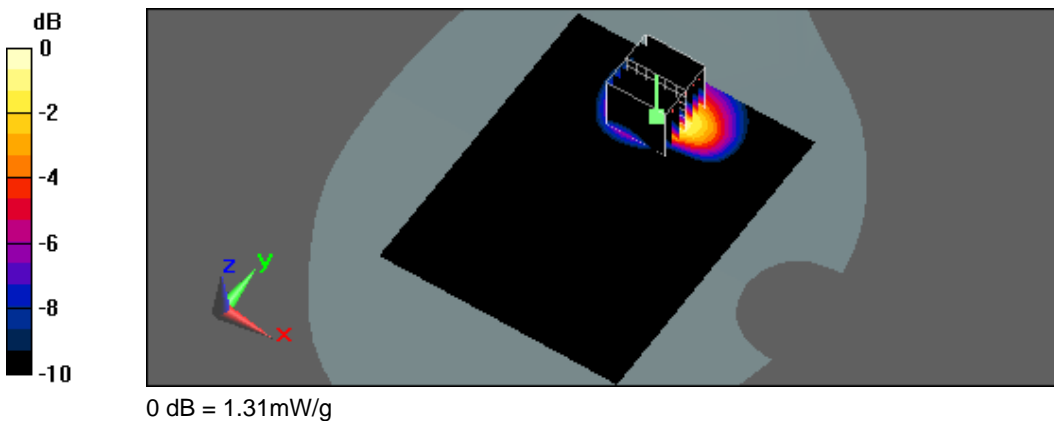
#151\_Flat\_LTE Band 41 (Config 1) BW 20M CH41490\_QPSK with 100 RB Size 0 RB Offset Side 1 to phantom 10mm  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2680 MHz;Duty Cycle: 1:2.31  
Medium parameters used:  $f = 2680$  MHz;  $\sigma = 2.23$  mho/m;  $\epsilon_r = 51.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3898; ConvF(6.99, 6.99, 6.99); Calibrated: 1/14/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):  
Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 1.34 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:  
Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 2.3 V/m; Power Drift = 0.104 dB  
Peak SAR (extrapolated) = 1.76 W/kg  
SAR(1 g) = 0.896 mW/g; SAR(10 g) = 0.450 mW/g  
Maximum value of SAR (measured) = 1.31 mW/g





Test Laboratory: A Test Lab Techno Corp.

Date/Time: 5/12/2013 1:48:30 AM

#152\_Flat\_LTE Band 41 (Config 0) BW 20M CH41490\_QPSK with 1 RB Size 49 RB Offset Side 1 to phantom 10mm

DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2680 MHz;Duty Cycle: 1:1.58

Medium parameters used:  $f = 2680$  MHz;  $\sigma = 2.23$  mho/m;  $\epsilon_r = 51.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV3 - SN3519; ConvF(7.61, 7.61, 7.61); Calibrated: 2/20/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2/13/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.86 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:

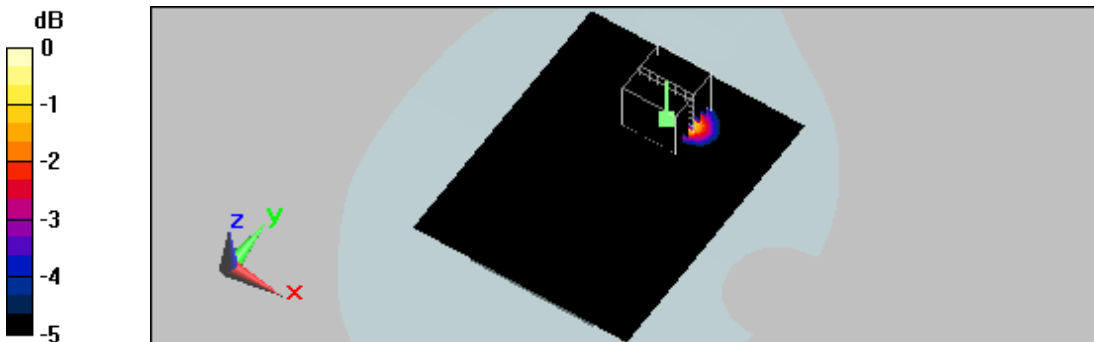
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.99 V/m; Power Drift = 0.097 dB

Peak SAR (extrapolated) = 2.43 W/kg

SAR(1 g) = 1.23 mW/g; SAR(10 g) = 0.620 mW/g

Maximum value of SAR (measured) = 1.81 mW/g



0 dB = 1.81mW/g



Test Laboratory: A Test Lab Techno Corp.

Date/Time: 5/12/2013 2:24:56 AM

#153\_Flat\_LTE Band 41 (Config 0) BW 20M CH40620\_QPSK with 1 RB Size 49 RB Offset Side 1 to phantom 10mm

DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2593 MHz;Duty Cycle: 1:1.58

Medium parameters used:  $f = 2593$  MHz;  $\sigma = 2.11$  mho/m;  $\epsilon_r = 51.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV3 - SN3519; ConvF(7.61, 7.61, 7.61); Calibrated: 2/20/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2/13/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.68 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:

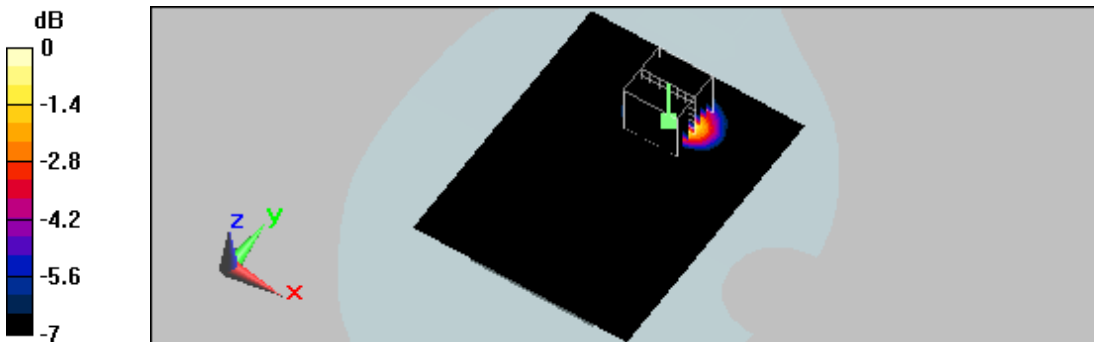
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.03 V/m; Power Drift = 0.141 dB

Peak SAR (extrapolated) = 2.14 W/kg

SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.570 mW/g

Maximum value of SAR (measured) = 1.61 mW/g



0 dB = 1.61mW/g

Test Laboratory: A Test Lab Techno Corp.

Date/Time: 5/12/2013 8:59:14 AM

#154\_Flat\_LTE Band 41 (Config 0) BW 20M CH39750\_QPSK with 1 RB Size 49 RB Offset Side 1 to phantom 10mm

DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2506 MHz;Duty Cycle: 1:1.58

Medium parameters used:  $f = 2506 \text{ MHz}$ ;  $\sigma = 2.12 \text{ mho/m}$ ;  $\epsilon_r = 52.4$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV3 - SN3519; ConvF(7.61, 7.61, 7.61); Calibrated: 2/20/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2/13/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):

Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 2.18 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:

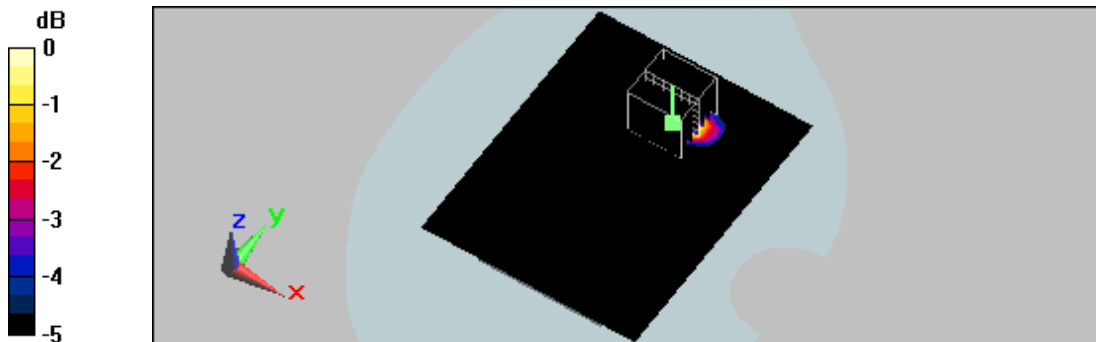
Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 1.01 V/m; Power Drift = 0.029 dB

Peak SAR (extrapolated) = 2.32 W/kg

SAR(1 g) = 1.21 mW/g; SAR(10 g) = 0.613 mW/g

Maximum value of SAR (measured) = 1.73 mW/g



0 dB = 1.73mW/g





Test Laboratory: A Test Lab Techno Corp.

Date/Time: 5/12/2013 3:31:29 AM

#155\_Flat\_LTE Band 41 (Config 0) BW 20M CH41490\_QPSK with 1 RB Size 49 RB Offset Side 2 to phantom 10mm

DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2680 MHz;Duty Cycle: 1:1.58

Medium parameters used:  $f = 2680$  MHz;  $\sigma = 2.23$  mho/m;  $\epsilon_r = 51.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV3 - SN3519; ConvF(7.61, 7.61, 7.61); Calibrated: 2/20/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2/13/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.771 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:

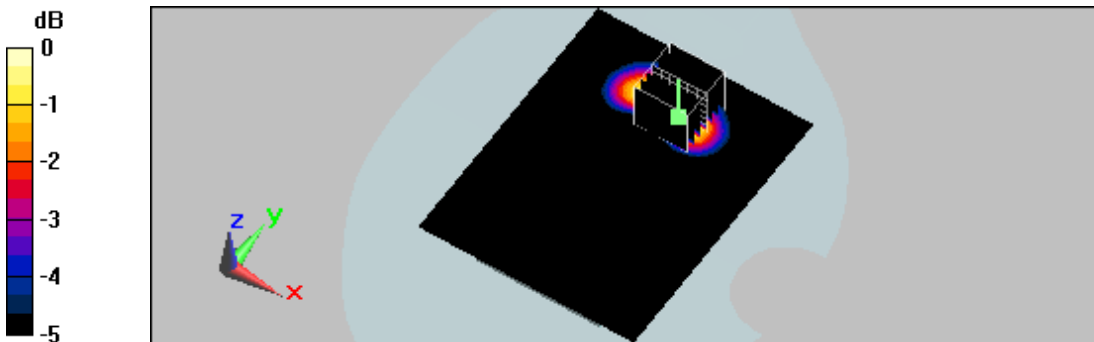
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.66 V/m; Power Drift = -0.176 dB

Peak SAR (extrapolated) = 0.989 W/kg

SAR(1 g) = 0.511 mW/g; SAR(10 g) = 0.269 mW/g

Maximum value of SAR (measured) = 0.736 mW/g



0 dB = 0.736mW/g

Test Laboratory: A Test Lab Techno Corp.

Date/Time: 5/12/2013 4:09:52 AM

#156\_Flat\_LTE Band 41 (Config 0) BW 20M CH40620\_QPSK with 1 RB Size 49 RB Offset Side 2 to phantom 10mm

DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2593 MHz;Duty Cycle: 1:1.58

Medium parameters used:  $f = 2593$  MHz;  $\sigma = 2.11$  mho/m;  $\epsilon_r = 51.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV3 - SN3519; ConvF(7.61, 7.61, 7.61); Calibrated: 2/20/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2/13/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.744 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:

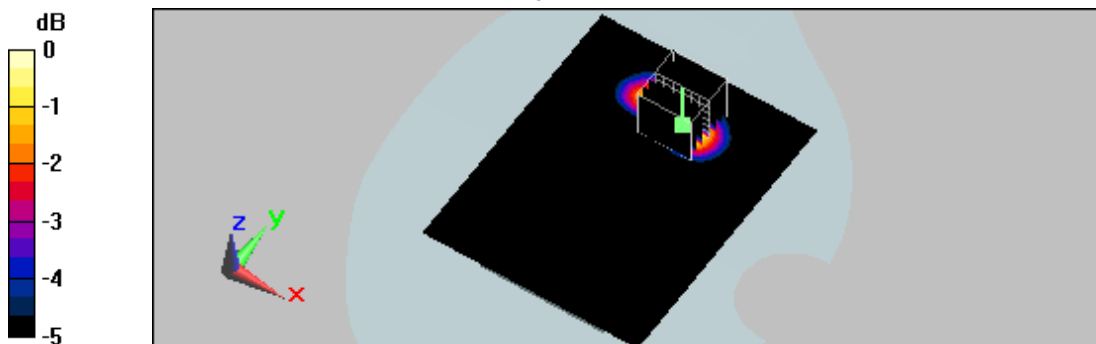
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.48 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.981 W/kg

SAR(1 g) = 0.518 mW/g; SAR(10 g) = 0.275 mW/g

Maximum value of SAR (measured) = 0.742 mW/g



0 dB = 0.742mW/g



Test Laboratory: A Test Lab Techno Corp.

Date/Time: 5/12/2013 11:16:38 AM

#157\_Flat\_LTE Band 41 (Config 0) BW 20M CH39750\_QPSK with 1 RB Size 49 RB Offset Side 2 to phantom 10mm

DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2506 MHz;Duty Cycle: 1:1.58

Medium parameters used:  $f = 2506$  MHz;  $\sigma = 2.12$  mho/m;  $\epsilon_r = 52.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV3 - SN3519; ConvF(7.61, 7.61, 7.61); Calibrated: 2/20/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2/13/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.764 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:

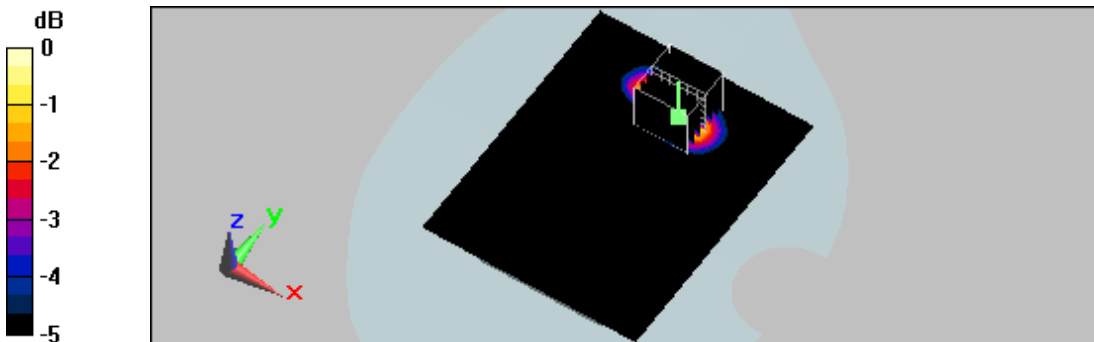
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.48 V/m; Power Drift = -0.073 dB

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.535 mW/g; SAR(10 g) = 0.285 mW/g

Maximum value of SAR (measured) = 0.763 mW/g



0 dB = 0.763mW/g

Test Laboratory: A Test Lab Techno Corp.

Date/Time: 5/12/2013 4:51:06 AM

#158\_Flat\_LTE Band 41 (Config 0) BW 20M CH41490\_QPSK with 1 RB Size 49 RB Offset Side 3 to phantom 10mm

DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2680 MHz;Duty Cycle: 1:1.58

Medium parameters used:  $f = 2680$  MHz;  $\sigma = 2.23$  mho/m;  $\epsilon_r = 51.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV3 - SN3519; ConvF(7.61, 7.61, 7.61); Calibrated: 2/20/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2/13/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (61x151x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.150 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:

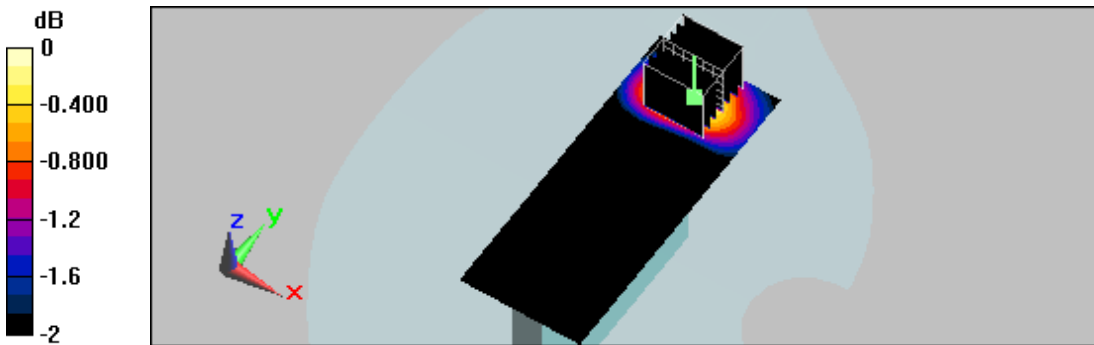
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.73 V/m; Power Drift = -0.025 dB

Peak SAR (extrapolated) = 0.199 W/kg

SAR(1 g) = 0.110 mW/g; SAR(10 g) = 0.066 mW/g

Maximum value of SAR (measured) = 0.152 mW/g



0 dB = 0.152mW/g



Test Laboratory: A Test Lab Techno Corp.

Date/Time: 5/12/2013 5:20:23 AM

#159\_Flat\_LTE Band 41 (Config 0) BW 20M CH41490\_QPSK with 1 RB Size 49 RB Offset Side 4 to phantom 10mm

DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2680 MHz;Duty Cycle: 1:1.58

Medium parameters used:  $f = 2680$  MHz;  $\sigma = 2.23$  mho/m;  $\epsilon_r = 51.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV3 - SN3519; ConvF(7.61, 7.61, 7.61); Calibrated: 2/20/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2/13/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (61x161x1):

Measurement grid: dx=10mm, dy=10mm

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

Flat/Zoom Scan (7x7x7)/Cube 0:

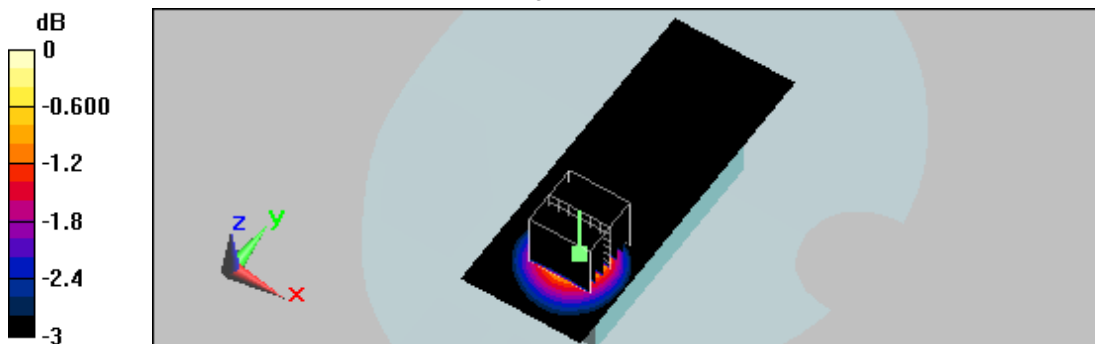
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.4 V/m; Power Drift = 0.113 dB

Peak SAR (extrapolated) = 0.342 W/kg

SAR(1 g) = 0.186 mW/g; SAR(10 g) = 0.105 mW/g

Maximum value of SAR (measured) = 0.260 mW/g



0 dB = 0.260mW/g

Test Laboratory: A Test Lab Techno Corp.

Date/Time: 5/12/2013 1:31:29 PM

#160\_Flat\_LTE Band 41 (Config 0) BW 20M CH41490\_QPSK with 1 RB Size 49 RB Offset Side 6 to phantom 10mm

DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2680 MHz;Duty Cycle: 1:1.58

Medium parameters used:  $f = 2680$  MHz;  $\sigma = 2.23$  mho/m;  $\epsilon_r = 51.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV3 - SN3519; ConvF(7.61, 7.61, 7.61); Calibrated: 2/20/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2/13/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (61x101x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.018 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:

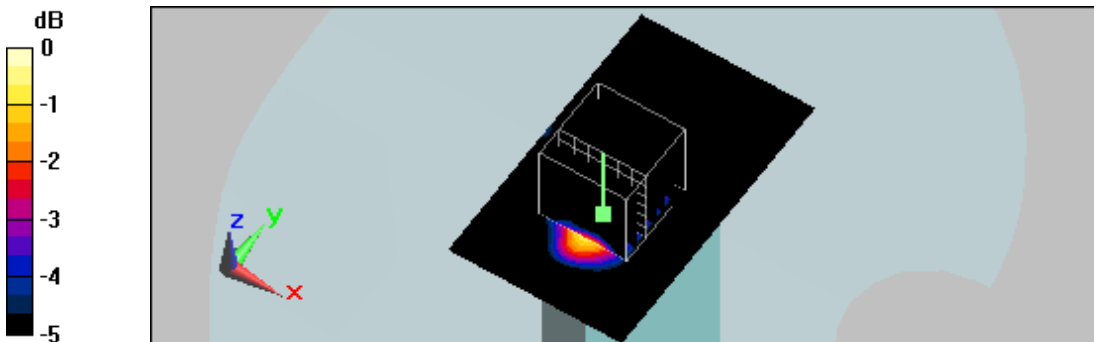
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.6 V/m; Power Drift = -0.193 dB

Peak SAR (extrapolated) = 0.024 W/kg

SAR(1 g) = 0.011 mW/g; SAR(10 g) = 0.00565 mW/g

Maximum value of SAR (measured) = 0.017 mW/g



0 dB = 0.017mW/g

Test Laboratory: A Test Lab Techno Corp.

Date/Time: 5/12/2013 5:51:00 AM

#177\_Flat\_LTE Band 41 (Config 0) BW 20M CH41490\_QPSK with 50 RB Size 0 RB Offset Side 1 to phantom 10mm  
 DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2680 MHz;Duty Cycle: 1:1.58

Medium parameters used:  $f = 2680$  MHz;  $\sigma = 2.23$  mho/m;  $\epsilon_r = 51.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV3 - SN3519; ConvF(7.61, 7.61, 7.61); Calibrated: 2/20/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2/13/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.77 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:

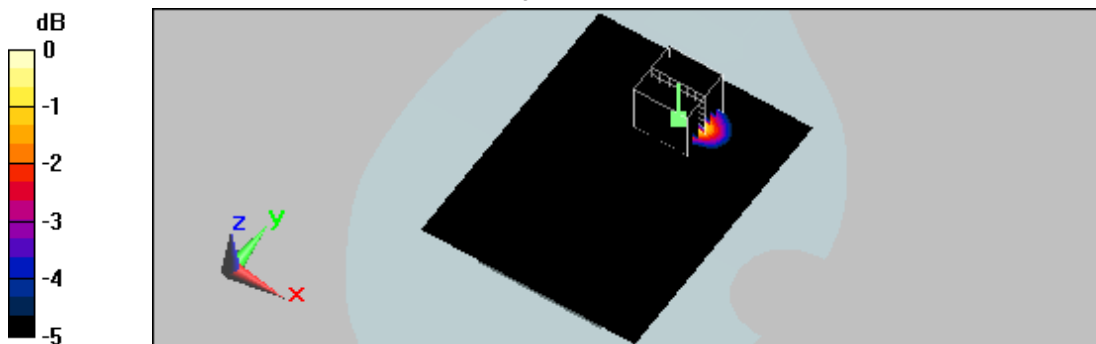
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.69 V/m; Power Drift = 0.191 dB

Peak SAR (extrapolated) = 2.26 W/kg

SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.577 mW/g

Maximum value of SAR (measured) = 1.69 mW/g



0 dB = 1.69mW/g

Test Laboratory: A Test Lab Techno Corp.

Date/Time: 5/12/2013 6:26:30 AM

#178\_Flat\_LTE Band 41 (Config 0) BW 20M CH40620\_QPSK with 50 RB Size 25 RB Offset Side 1 to phantom 10mm

DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2593 MHz;Duty Cycle: 1:1.58

Medium parameters used:  $f = 2593 \text{ MHz}$ ;  $\sigma = 2.11 \text{ mho/m}$ ;  $\epsilon_r = 51.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV3 - SN3519; ConvF(7.61, 7.61, 7.61); Calibrated: 2/20/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2/13/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):

Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 1.41 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:

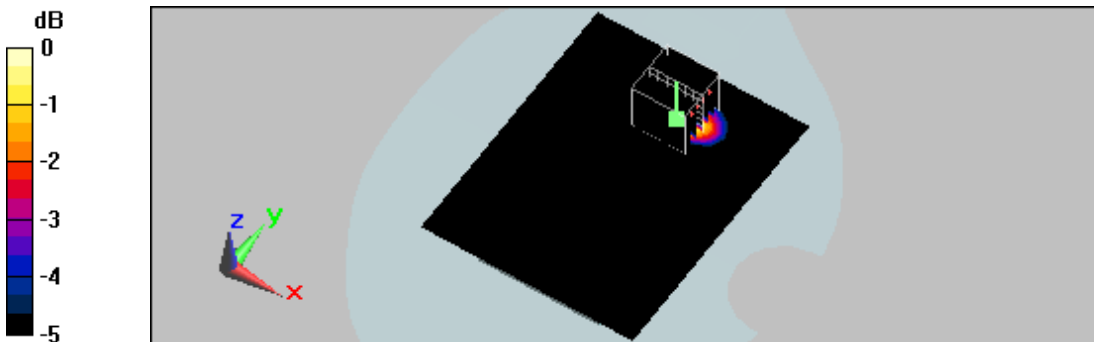
Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 1.95 V/m; Power Drift = -0.065 dB

Peak SAR (extrapolated) = 1.8 W/kg

SAR(1 g) = 0.932 mW/g; SAR(10 g) = 0.474 mW/g

Maximum value of SAR (measured) = 1.36 mW/g







Test Laboratory: A Test Lab Techno Corp.

Date/Time: 5/12/2013 9:58:54 AM

#179\_Flat\_LTE Band 41 (Config 0) BW 20M CH39750\_QPSK with 50 RB Size 25 RB Offset Side 1 to phantom 10mm

DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2506 MHz;Duty Cycle: 1:1.58

Medium parameters used:  $f = 2506$  MHz;  $\sigma = 2.12$  mho/m;  $\epsilon_r = 52.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV3 - SN3519; ConvF(7.61, 7.61, 7.61); Calibrated: 2/20/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2/13/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.48 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:

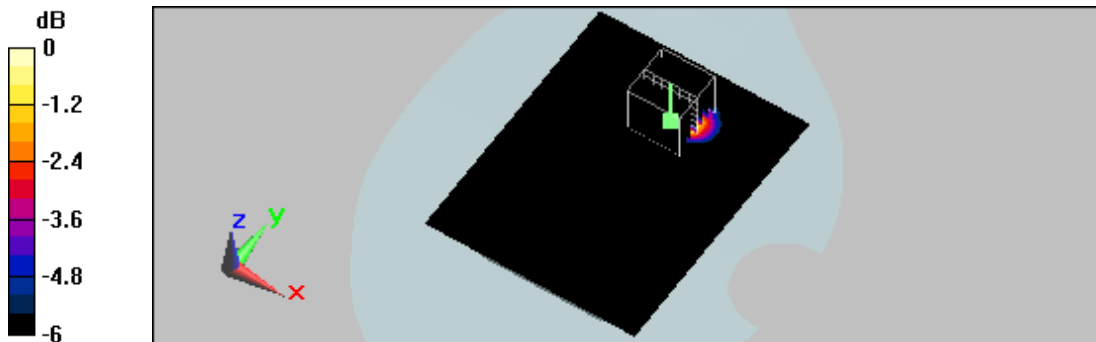
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.657 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 1.85 W/kg

SAR(1 g) = 0.961 mW/g; SAR(10 g) = 0.483 mW/g

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



0 dB = 1.38mW/g

Test Laboratory: A Test Lab Techno Corp.

Date/Time: 5/12/2013 7:38:20 AM

#180\_Flat\_LTE Band 41 (Config 0) BW 20M CH41490\_QPSK with 100 RB Size 0 RB Offset Side 1 to phantom 10mm

DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2680 MHz;Duty Cycle: 1:1.58

Medium parameters used:  $f = 2680$  MHz;  $\sigma = 2.23$  mho/m;  $\epsilon_r = 51.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV3 - SN3519; ConvF(7.61, 7.61, 7.61); Calibrated: 2/20/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2/13/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.45 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:

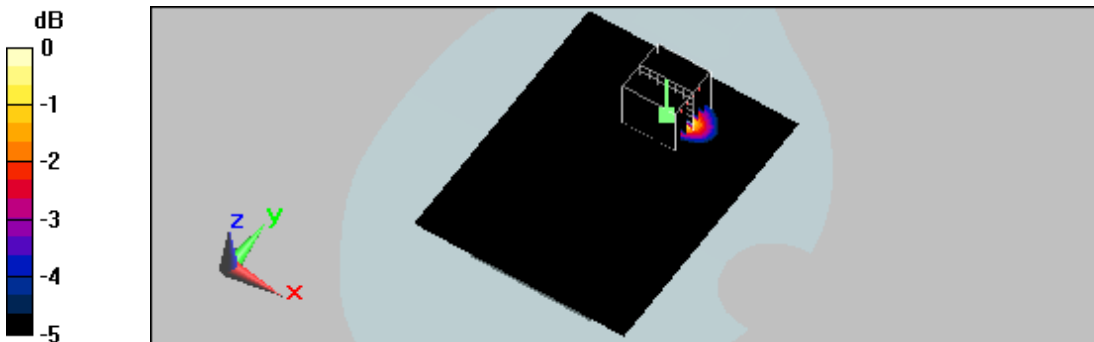
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.32 V/m; Power Drift = 0.121 dB

Peak SAR (extrapolated) = 1.93 W/kg

SAR(1 g) = 0.975 mW/g; SAR(10 g) = 0.488 mW/g

Maximum value of SAR (measured) = 1.44 mW/g



0 dB = 1.44mW/g

Test Laboratory: A Test Lab Techno Corp.

Date/Time: 5/12/2013 7:02:22 AM

#181\_Flat\_LTE Band 41 (Config 0) BW 20M CH40620\_QPSK with 100 RB Size 0 RB Offset Side 1 to phantom 10mm  
 DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2593 MHz;Duty Cycle: 1:1.58

Medium parameters used:  $f = 2593 \text{ MHz}$ ;  $\sigma = 2.11 \text{ mho/m}$ ;  $\epsilon_r = 51.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV3 - SN3519; ConvF(7.61, 7.61, 7.61); Calibrated: 2/20/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2/13/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):

Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 1.4 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:

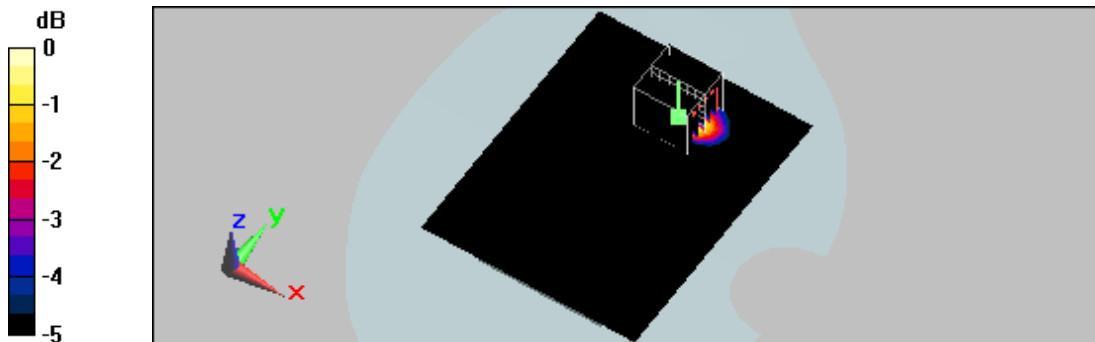
Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 1.83 V/m; Power Drift = 0.128 dB

Peak SAR (extrapolated) = 1.8 W/kg

SAR(1 g) = 0.935 mW/g; SAR(10 g) = 0.473 mW/g

Maximum value of SAR (measured) = 1.35 mW/g



0 dB = 1.35mW/g



Test Laboratory: A Test Lab Techno Corp.

Date/Time: 5/12/2013 10:36:43 AM

#182\_Flat\_LTE Band 41 (Config 0) BW 20M CH39750\_QPSK with 100 RB Size 0 RB Offset Side 1 to phantom 10mm

DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2506 MHz;Duty Cycle: 1:1.58

Medium parameters used:  $f = 2506$  MHz;  $\sigma = 2.12$  mho/m;  $\epsilon_r = 52.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV3 - SN3519; ConvF(7.61, 7.61, 7.61); Calibrated: 2/20/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2/13/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.46 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:

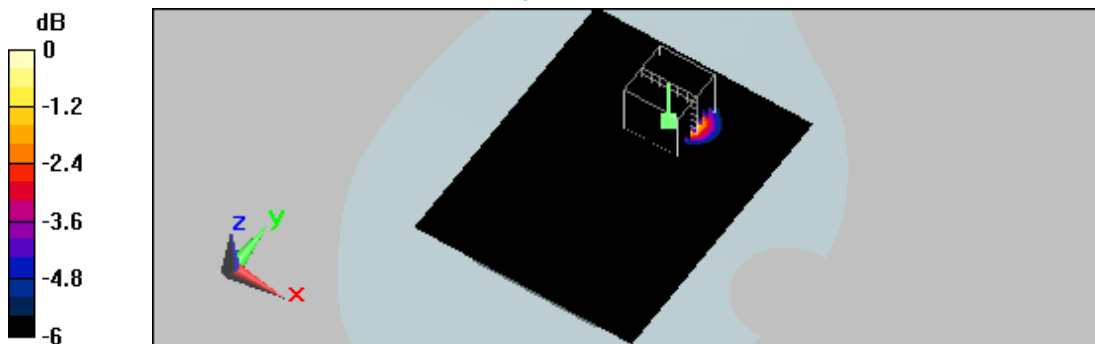
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.588 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 1.81 W/kg

SAR(1 g) = 0.943 mW/g; SAR(10 g) = 0.474 mW/g

Maximum value of SAR (measured) = 1.35 mW/g



0 dB = 1.35mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 4:20:21 PM

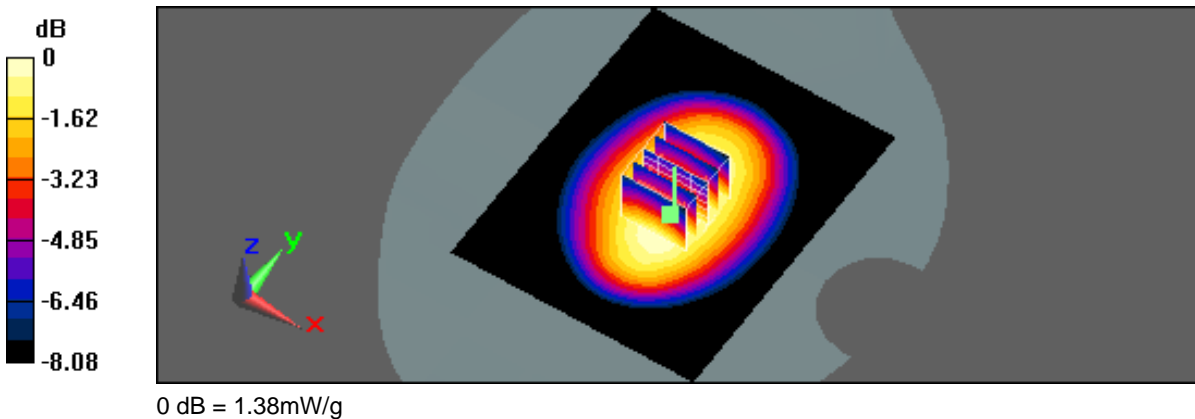
#163\_Flat\_GPRS 850 CH190\_ For #17\_Side 1 to phantom 10mm\_3D2U\_measurement once  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: GPRS 850 (3Down, 2Up); Frequency: 836.6 MHz; Duty Cycle: 1:4  
Medium parameters used:  $f = 837 \text{ MHz}$ ;  $\sigma = 0.977 \text{ mho/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 1.38 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 38.1 V/m; Power Drift = -0.069 dB  
Peak SAR (extrapolated) = 1.5 W/kg  
 $\text{SAR}(1 \text{ g}) = 1.23 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.938 \text{ mW/g}$   
Maximum value of SAR (measured) = 1.38 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/5/2013 4:42:12 PM

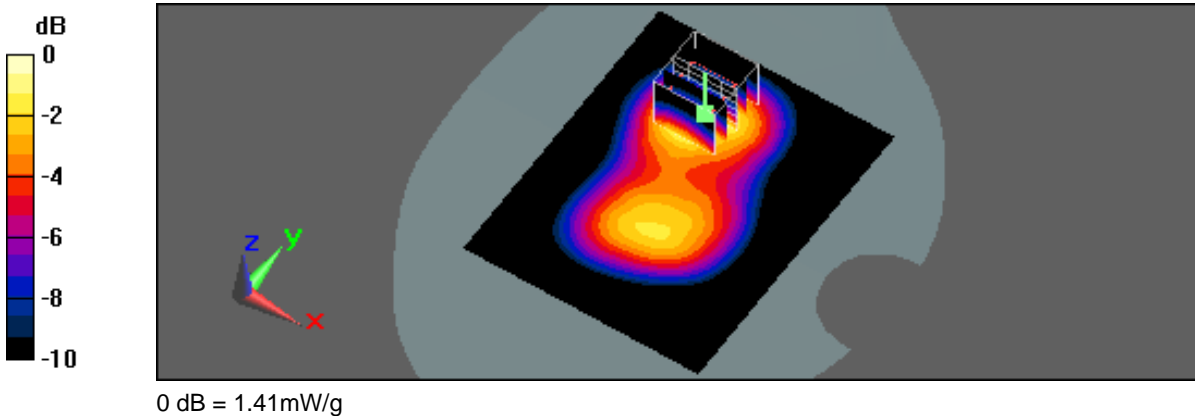
#166\_Flat\_GPRS PCS CH661\_ For #55\_Side 2 to phantom 10mm\_3D2U\_measurement once  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: GPRS PCS (3Down,2Up); Frequency: 1880 MHz;Duty Cycle: 1:4  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.48 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 21.2 V/m; Power Drift = -0.011 dB  
Peak SAR (extrapolated) = 1.7 W/kg  
SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.621 mW/g  
Maximum value of SAR (measured) = 1.41 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/23/2013 2:39:51 AM

#161\_Flat\_WCDMA Band II CH9538\_For #6\_Side 2 to phantom 10mm\_measurement once  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

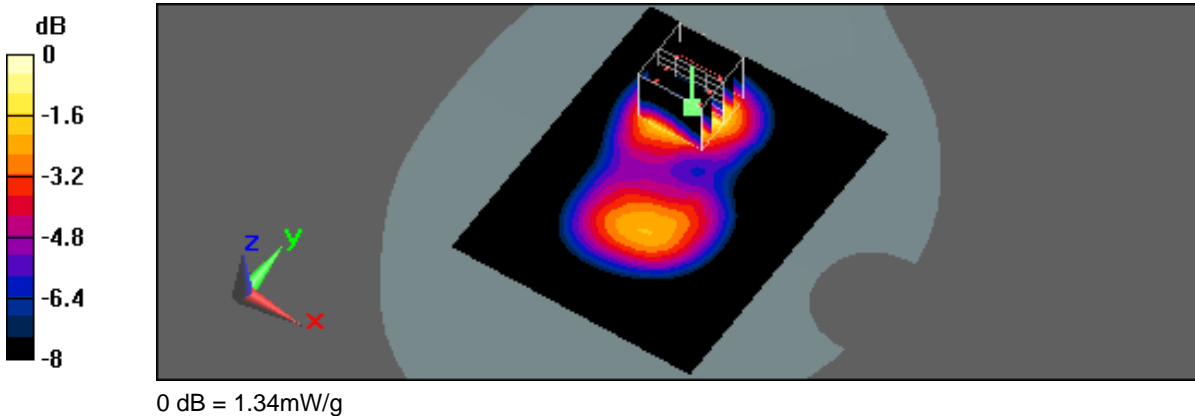
Communication System: WCDMA Band II; Frequency: 1907.6 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1908$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.38 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 17.9 V/m; Power Drift = -0.015 dB  
Peak SAR (extrapolated) = 1.63 W/kg  
SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.601 mW/g  
Maximum value of SAR (measured) = 1.34 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/6/2013 7:01:13 AM

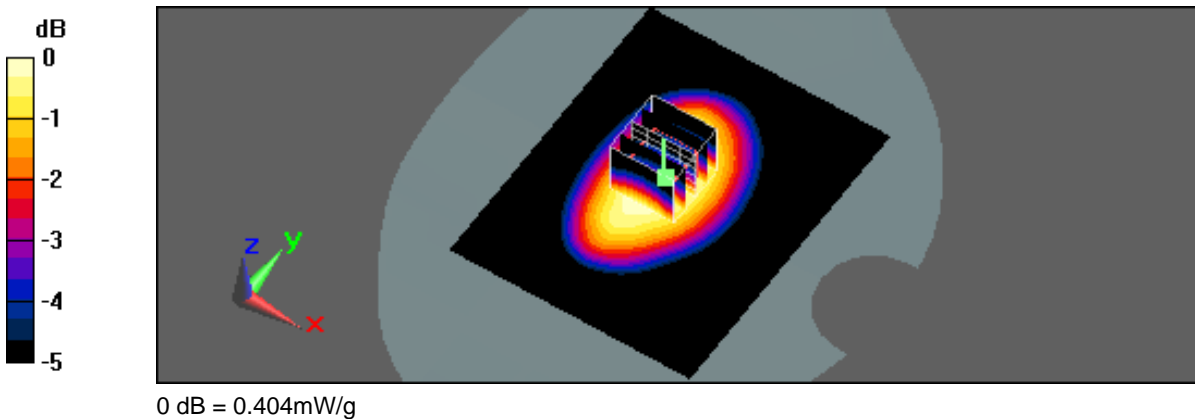
#162\_Flat\_WCDMA Band V CH4183\_ For #174\_Side 2 to phantom 10mm\_measurement once  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: WCDMA Band V; Frequency: 836.6 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.977$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.411 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 29.2 V/m; Power Drift = 0.038 dB  
Peak SAR (extrapolated) = 0.443 W/kg  
SAR(1 g) = 0.766 mW/g; SAR(10 g) = 0.583 mW/g  
Maximum value of SAR (measured) = 0.404 mW/g







Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/26/2013 1:51:55 PM

#164\_Flat\_1xEVDO Cell CH384\_ For #27\_Side 1 to phantom 10mm\_Rev.0\_measurement once  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

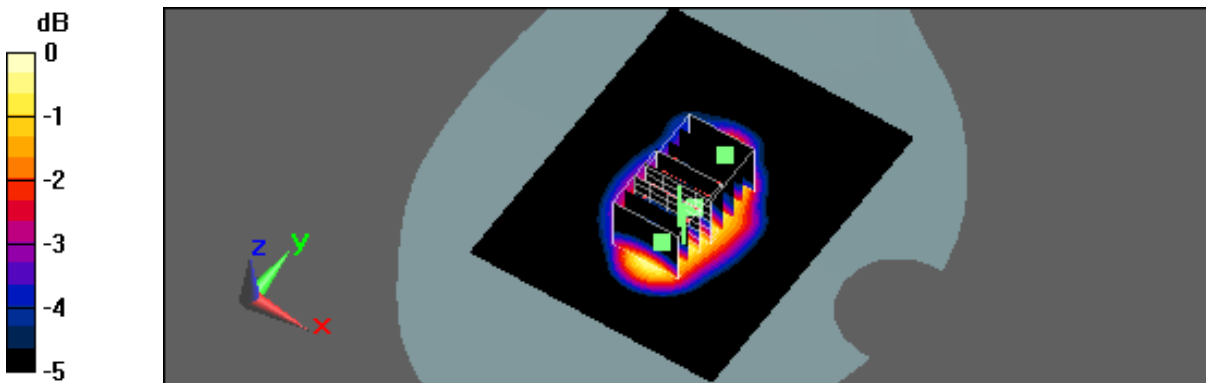
Communication System: 1xEVDO Cellular; Frequency: 836.52 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 837 \text{ MHz}$ ;  $\sigma = 0.977 \text{ mho/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 1.06 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 29.1 V/m; Power Drift = -0.041 dB  
Peak SAR (extrapolated) = 1.15 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.861 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.638 \text{ mW/g}$   
Maximum value of SAR (measured) = 1.04 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:  
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 29.1 V/m; Power Drift = -0.041 dB  
Peak SAR (extrapolated) = 1.11 W/kg  
 $\text{SAR}(1 \text{ g}) = 0.817 \text{ mW/g}$ ;  $\text{SAR}(10 \text{ g}) = 0.577 \text{ mW/g}$   
Maximum value of SAR (measured) = 1.01 mW/g





Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/5/2013 4:13:11 PM

#165\_Flat\_1xEVDO PCS CH1175\_ For #71\_Side 2 to phantom 10mm\_Rev.0\_measurement once  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

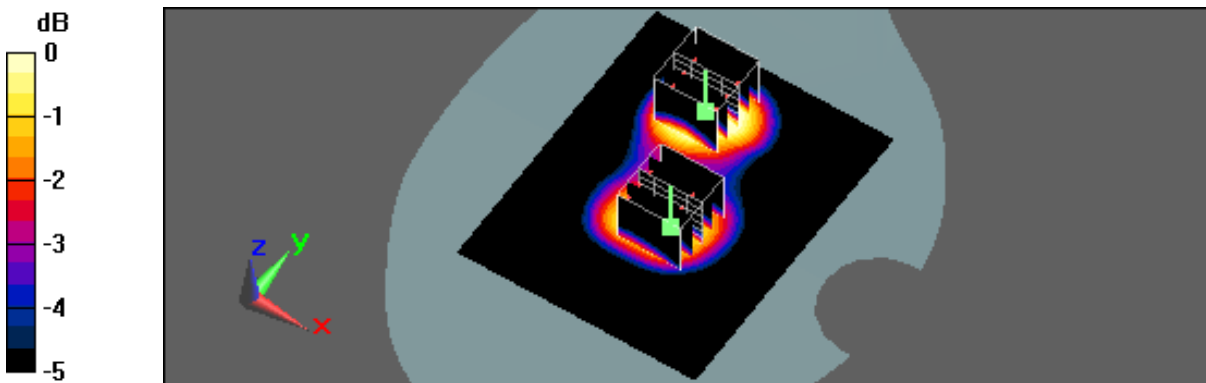
Communication System: 1xEVDO PCS ; Frequency: 1908.75 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1909$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.48 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 21.1 V/m; Power Drift = 0.166 dB  
Peak SAR (extrapolated) = 1.83 W/kg  
SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.698 mW/g  
Maximum value of SAR (measured) = 1.52 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 21.1 V/m; Power Drift = 0.166 dB  
Peak SAR (extrapolated) = 1.14 W/kg  
SAR(1 g) = 0.779 mW/g; SAR(10 g) = 0.511 mW/g  
Maximum value of SAR (measured) = 0.957 mW/g



0 dB = 0.957mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/28/2013 3:31:27 AM

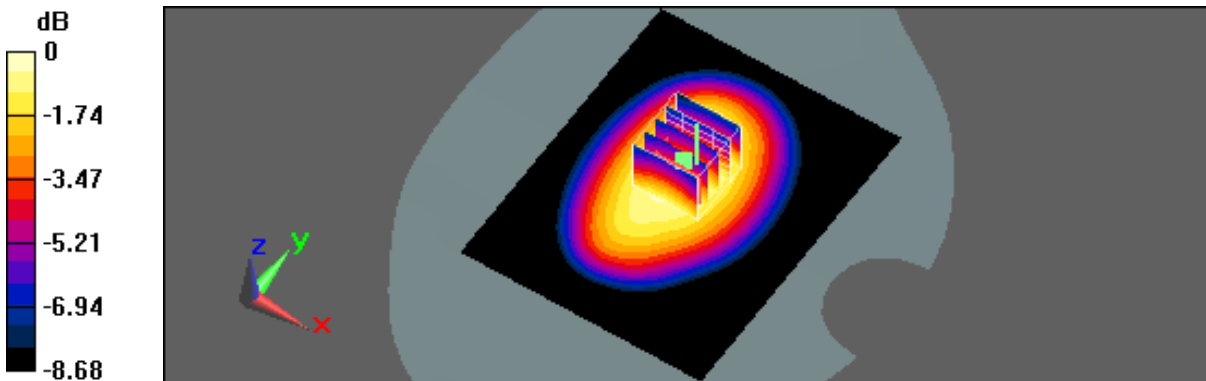
#167\_Flat\_CDMA Secondary 800MHz CH450\_ For #88\_Side 2 to phantom 10mm\_measurement once  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: CDMA Secondary 800MHz; Frequency: 817.25 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 817.25$  MHz;  $\sigma = 0.953$  mho/m;  $\epsilon_r = 54.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.08 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 33.1 V/m; Power Drift = -0.021 dB  
Peak SAR (extrapolated) = 1.24 W/kg  
SAR(1 g) = 0.966 mW/g; SAR(10 g) = 0.729 mW/g  
Maximum value of SAR (measured) = 1.11 mW/g



0 dB = 1.11mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/25/2013 6:55:12 PM

#168\_Flat\_LTE Band 25 BW 10M CH26640\_QPSK with 1 RB Size 0 RB Offset For #108\_Side 2 to phantom  
10mm\_measurement once  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

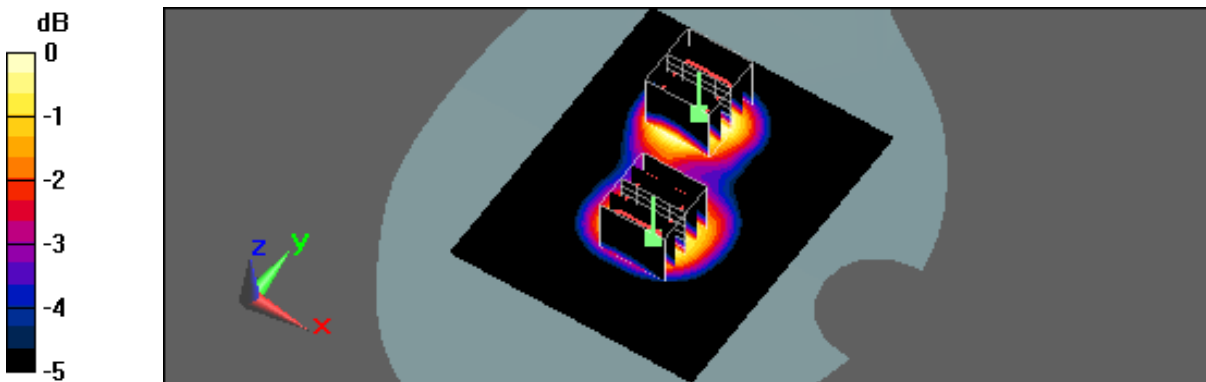
Communication System: LTE Band 25 BW:10M; Frequency: 1910 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(7.3, 7.3, 7.3); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.75 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 22.6 V/m; Power Drift = -0.027 dB  
Peak SAR (extrapolated) = 2.02 W/kg  
SAR(1 g) = 1.21 mW/g; SAR(10 g) = 0.723 mW/g  
Maximum value of SAR (measured) = 1.66 mW/g

Flat/Zoom Scan (5x5x7)/Cube 1:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 22.6 V/m; Power Drift = -0.027 dB  
Peak SAR (extrapolated) = 1.35 W/kg  
SAR(1 g) = 0.919 mW/g; SAR(10 g) = 0.601 mW/g  
Maximum value of SAR (measured) = 1.15 mW/g



0 dB = 1.15mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 2/24/2013 11:32:23 AM

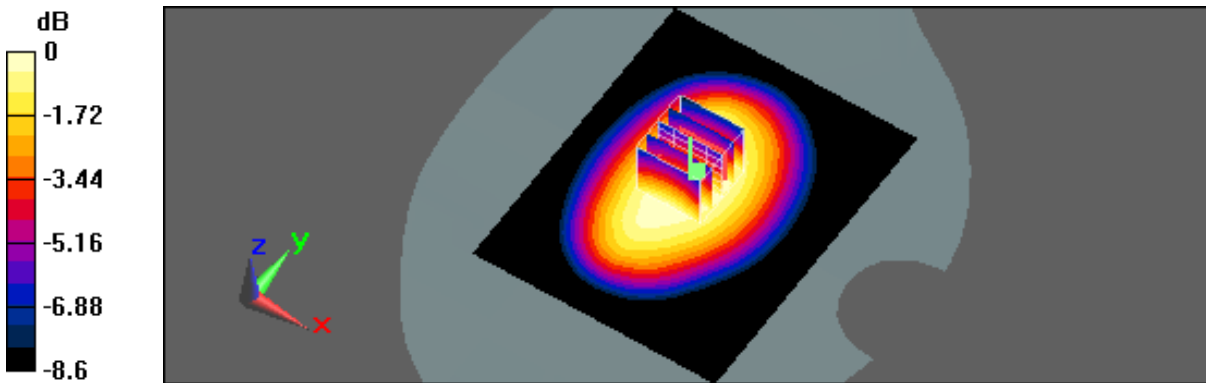
#169\_Flat\_LTE Band 26 BW 10M CH26770\_QPSK with 1 RB Size 0 RB Offset For #123\_Side 2 to phantom  
10mm\_measurement once  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 26 BW:10M; Frequency: 822 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 822 \text{ MHz}$ ;  $\sigma = 0.955 \text{ mho/m}$ ;  $\epsilon_r = 54.1$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASYS (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3820; ConvF(9.07, 9.07, 9.07); Calibrated: 12/10/2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (81x101x1):  
Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.02 mW/g

Flat/Zoom Scan (5x5x7)/Cube 0:  
Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 33.0 V/m; Power Drift = -0.103 dB  
Peak SAR (extrapolated) = 1.09 W/kg  
SAR(1 g) = 0.878 mW/g; SAR(10 g) = 0.683 mW/g  
Maximum value of SAR (measured) = 0.997 mW/g



0 dB = 0.997mW/g



Test Laboratory: A Test Lab Techno Corp.  
Date/Time: 3/1/2013 6:51:35 AM

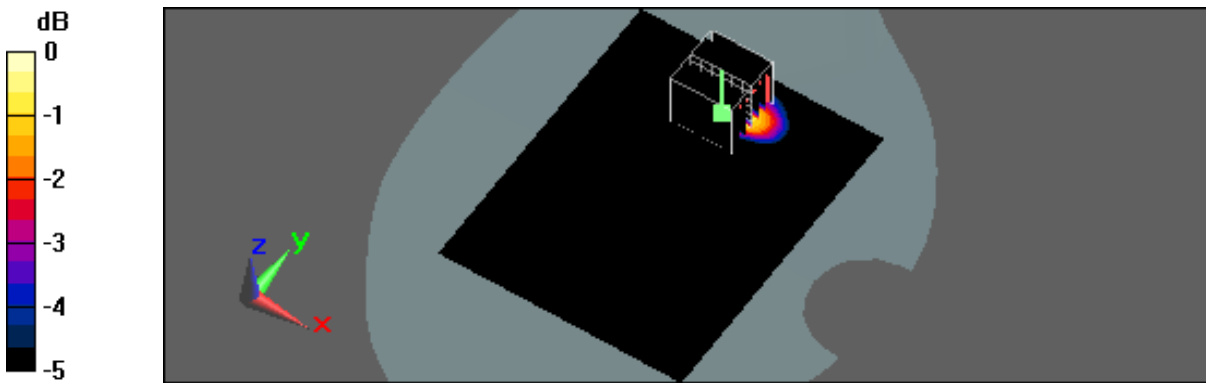
#170\_Flat\_LTE Band 41 (Config 1) BW 20M CH41490\_QPSK with 1 RB Size 0 RB Offset For #139\_Side 1 to phantom  
10mm\_measurement once  
DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2680 MHz;Duty Cycle: 1:2.31  
Medium parameters used:  $f = 2680$  MHz;  $\sigma = 2.23$  mho/m;  $\epsilon_r = 51.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section  
Measurement Standard: DASYS5 (IEEE/IEC)  
DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3898; ConvF(6.99, 6.99, 6.99); Calibrated: 1/14/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn913; Calibrated: 1/17/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS5, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):  
Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 2.1 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:  
Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 3.24 V/m; Power Drift = 0.136 dB  
Peak SAR (extrapolated) = 2.68 W/kg  
SAR(1 g) = 1.35 mW/g; SAR(10 g) = 0.687 mW/g  
Maximum value of SAR (measured) = 1.99 mW/g



0 dB = 1.99mW/g



Test Laboratory: A Test Lab Techno Corp.

Date/Time: 5/13/2013 4:08:19 AM

#183\_Flat\_LTE Band 41 (Config 0) BW 20M CH39750\_QPSK with 1 RB Size 49 RB Offset for #154\_ Side 1 to phantom  
10mm\_measurement once

DUT: AirCard 771S; Type: Wireless Mobile HotSpot; FCC ID: PY3AC771S

Communication System: LTE Band 41 BW:20MHz; Frequency: 2506 MHz;Duty Cycle: 1:1.58

Medium parameters used:  $f = 2506$  MHz;  $\sigma = 2.12$  mho/m;  $\epsilon_r = 52.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC)

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV3 - SN3519; ConvF(7.61, 7.61, 7.61); Calibrated: 2/20/2013
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2/13/2013
- Phantom: SAM with CRP; Type: SAM; Serial: TP-1150 and higher
- Measurement SW: DASYS, V5.0 Build 125;SEMCAD X Version 13.4 Build 125

Flat/Area Scan (121x151x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.95 mW/g

Flat/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.54 V/m; Power Drift = 0.070 dB

Peak SAR (extrapolated) = 2.26 W/kg

SAR(1 g) = 1.18 mW/g; SAR(10 g) = 0.590 mW/g

Maximum value of SAR (measured) = 1.7 mW/g

