

Report No. : SA111215C07

Applicant : BandRich Inc.

Address : 6F., NO. 71, ZHOUZI ST., NEIHU DIST., TAIPEI CITY 11493, TAIWAN (R.O.C.)

Product : LTE/EVDO Rev. A USB Modem

FCC ID : UZI-C525

Brand : BandLuxe

Model No. : C525

Standards : FCC 47 CFR Part 2 (2.1093) / IEEE C95.1:1991 / IEEE 1528:2003

FCC OET Bulletin 65 Supplement C (Edition 01-01)

KDB 447498 D01 v04 / KDB 447498 D02 v02 / KDB 941225 D01 v02

KDB 941225 D05 v01

Date of Testing : Dec. 17, 2011 ~ Jan. 04, 2012

**CERTIFICATION:** The above equipment have been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch - Taiwan HwaYa Lab**, and found compliance with the requirement of the above standards.
The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's SAR characteristics under the conditions specified in this report.

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# **Release Control Record**

Issue No.	Reason for Change	Date Issued
R01	Original release	Jan. 12, 2012

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# 1. Summary of Maximum SAR Value

Mode / Band	Test Position	SAR-1g (W/kg)
CDMA2000 BC0	Body (0.5 cm Gap)	0.922
CDMA2000 BC1	Body (0.5 cm Gap)	1.1
CDMA2000 BC15	Body (0.5 cm Gap)	0.981
LTE Band IV	Body (0.5 cm Gap)	0.474
LTE Band XII	Body (0.5 cm Gap)	0.493
LTE Band XIII	Body (0.5 cm Gap)	0.662

#### Note:

The SAR limit **(1.6 W/kg)** for general population/uncontrolled exposure is specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1991.

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# 2. <u>Description of Equipment Under Test</u>

DUT Type	LTE/EVDO Rev. A USB Modem
FCC ID	UZI-C525
Brand Name	BandLuxe
Model Name	C525
Tx Frequency Bands (Unit: MHz)	CDMA BC0 : 824 ~ 849 CDMA BC1 : 1850 ~ 1910 CDMA BC15 : 1710 ~ 1755 LTE Band 4 : 1710 ~ 1755 LTE Band 12 : 698 ~ 716 LTE Band 13 : 777 ~ 787
LTE Supports Channel Bandwidth	LTE Band 4 : 5 MHz, 10 MHz LTE Band 12 : 5 MHz, 10 MHz LTE Band 13 : 5 MHz, 10 MHz
LTE CH Number & Frequency	Please refer to section 4.5
Uplink Modulations	CDMA : QPSK LTE : QPSK, 16QAM
Maximum AVG Conducted Power (Unit: dBm)	CDMA BC0 : 24.69 CDMA BC1 : 24.33 CDMA BC15 : 23.86 LTE Band 4 : 23.50 LTE Band 12 : 22.97 LTE Band 13 : 23.15
Antenna Type	Internal monopole antenna
DUT Stage	Identical Prototype

#### Note:

1. The above EUT information is declared by manufacturer and for more detailed features description please refers to the manufacturer's specifications or User's Manual.

#### **List of Accessory:**

USB Cable	Signal Line Type	0.5 meter shielded cable without ferrite core

The DUT is a data transmitter device that contains one WWAN transmitter. The CDMA2000 and LTE cannot transmit simultaneously. Confirming the LTE transmitter follows 3GPP standards, is category 3, BW 5/10 MHz, band 4/12/13, and supports QPSK / 16QAM modulations. Tested per 3GPP 36.521 maximum transmit procedures for both QPSK / 16QAM. The device has one LTE antenna.

# LTE Maximum Power Reduction in accordance with 3GPP 36.101: Power Reduction in accordance to 3GPP is active all times during LTE operation.

Modulation	Channel bandwidth / Transmission bandwidth configuration (RB)		3GPP Requirement	LTE MPR Setting	
	BW 5 MHz	BW 10 MHz	(dB)	(dB)	
QPSK	> 8	> 12	<= 1	1	
16QAM	<= 8	<= 12	<= 1	1	
16QAM	> 8	> 12	<= 2	2	

Note: MPR is according to the standard and implemented in the circuit (mandatory).

In addition, the device is compliant with A-MPR requirements defined in 36.101 section 6.2.4 that may be required to meet 3GPP Adjacent Channel Leakage Ratio ("ACLR") requirements. A-MPR was disabled for all FCC compliance testing.

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# 3. SAR Measurement System

## 3.1 Definition of Specific Absorption Rate (SAR)

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

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

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

SAR measurement can be related to the electrical field in the tissue by

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

Where:  $\sigma$  is the conductivity of the tissue,  $\rho$  is the mass density of the tissue and E is the RMS electrical field strength.

## 3.2 SPEAG DASY System

DASY system consists of high precision robot, probe alignment sensor, phantom, robot controller, controlled measurement server and near-field probe. The robot includes six axes that can move to the precision position of the DASY4/5 software defined. The DASY software can define the area that is detected by the probe. The robot is connected to controlled box. Controlled measurement server is connected to the controlled robot box. The DAE includes amplifier, signal multiplexing, AD converter, offset measurement and surface detection. It is connected to the Electro-optical coupler (ECO). The ECO performs the conversion form the optical into digital electric signal of the DAE and transfers data to the PC.

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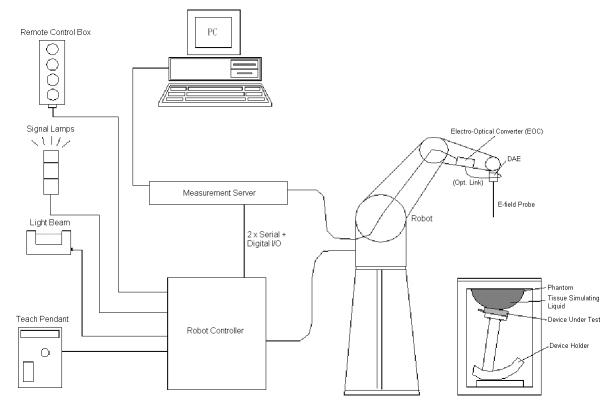
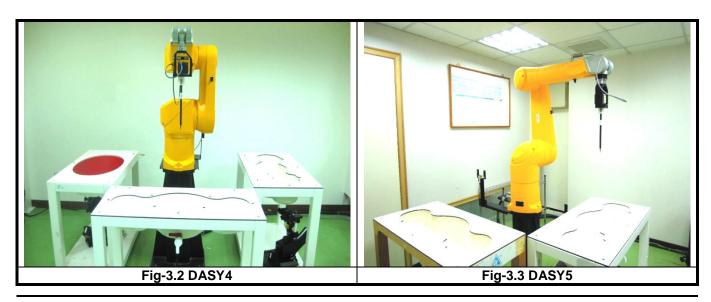


Fig-3.1 DASY System Setup

#### 3.2.1 Robot

The DASY system uses the high precision robots from Stäubli SA (France). For the 6-axis controller system, the robot controller version (DASY4: CS7MB; DASY5: CS8c) from Stäubli is used. The Stäubli robot series have many features that are important for our application:

- High precision (repeatability ±0.035 mm)
- · High reliability (industrial design)
- · Jerk-free straight movements
- · Low ELF interference (the closed metallic construction shields against motor control fields)



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#### 3.2.2 Probes

The SAR measurement is conducted with the dosimetric probe. The probe is specially designed and calibrated for use in liquid with high permittivity. The dosimetric probe has special calibration in liquid at different frequency.

Model	EX3DV4	
Construction	Symmetrical design with triangular core. Built-in shielding against static charges. PEEK enclosure material (resistant to organic solvents, e.g., DGBE).	
Frequency	10 MHz to 6 GHz Linearity: ± 0.2 dB	
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)	
Dynamic Range	10 $\mu$ W/g to 100 mW/g Linearity: $\pm$ 0.2 dB (noise: typically < 1 $\mu$ W/g)	
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	

Model	ES3DV3	
Construction	Symmetrical design with triangular core. Interleaved sensors. Built-in shielding against static charges. PEEK enclosure material (resistant to organic solvents, e.g., DGBE).	
Frequency	10 MHz to 4 GHz Linearity: ± 0.2 dB	
Directivity	± 0.2 dB in HSL (rotation around probe axis) ± 0.3 dB in tissue material (rotation normal to probe axis)	
Dynamic Range	5 μW/g to 100 mW/g Linearity: ± 0.2 dB	
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 3.9 mm (Body: 12 mm) Distance from probe tip to dipole centers: 2.0 mm	

# 3.2.3 Data Acquisition Electronics (DAE)

Model	DAE3, DAE4	
Construction	Signal amplifier, multiplexer, A/D converter and control logic. Serial optical link for communication with DASY4/5 embedded system (fully remote controlled). Two step probe touch detector for mechanical surface detection and emergency robot stop.	
Measurement	-100 to +300 mV (16 bit resolution and two range settings: 4mV,	
Range	400mV)	Tide!
Input Offset Voltage	< 5μV (with auto zero)	
Input Bias Current	< 50 fA	
Dimensions	60 x 60 x 68 mm	

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### 3.2.4 Phantoms

Model	Twin SAM	
Construction	The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE 1528 and IEC 62209-1. 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 teaching three points with the robot.	
Material	Vinylester, glass fiber reinforced (VE-GF)	
Shell Thickness	2 ± 0.2 mm (6 ± 0.2 mm at ear point)	
Dimensions	Length: 1000 mm  Width: 500 mm  Height: adjustable feet	
Filling Volume	approx. 25 liters	1



Model	ELI	
Construction	Phantom for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI is fully compatible with the IEC 62209-2 standard and all known tissue simulating liquids. ELI has been optimized regarding its performance and can be integrated into our standard phantom tables. A cover prevents evaporation of the liquid. Reference markings on the phantom allow installation of the complete setup, including all predefined phantom positions and measurement grids, by teaching three points. The phantom is compatible with all SPEAG dosimetric probes and dipoles.	
Material	Vinylester, glass fiber reinforced (VE-GF)	
Shell Thickness	2.0 ± 0.2 mm (bottom plate)	
Dimensions	Major axis: 600 mm Minor axis: 400 mm	
Filling Volume	approx. 30 liters	



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### 3.2.5 Device Holder

Model	Mounting Device	_
Construction	In combination with the Twin SAM Phantom or ELI4, the Mounting Device enables the rotation of the mounted transmitter device in spherical coordinates. Rotation point is the ear opening point. Transmitter devices can be easily and accurately positioned according to IEC, IEEE, FCC or other specifications. The device holder can be locked for positioning at different phantom sections (left head, right head, flat).	
Material	POM	

Model	Laptop Extensions Kit	
Construction	Simple but effective and easy-to-use extension for Mounting Device that facilitates the testing of larger devices according to IEC 62209-2 (e.g., laptops, cameras, etc.). It is lightweight and fits easily on the upper part of the Mounting Device in place of the phone positioner.	
Material	POM, Acrylic glass, Foam	

# 3.2.6 System Validation Dipoles

Model	D-Serial	
Construction	Symmetrical dipole with I/4 balun. Enables measurement of feed point impedance with NWA. Matched for use near flat phantoms filled with tissue simulating solutions.	
Frequency	750 MHz to 5800 MHz	
Return Loss	> 20 dB	
Power Capability	> 100 W (f < 1GHz), > 40 W (f > 1GHz)	

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#### 3.2.7 Tissue Simulating Liquids

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. The nominal dielectric values of the tissue simulating liquids in the phantom and the tolerance of 5% are listed in below table.

The dielectric properties of the tissue simulating liquids were verified prior to the SAR evaluation using an Agilent 85070D Dielectric Probe Kit and an Agilent Network Analyzer.

**Table-3.1 Targets of Tissue Simulating Liquid** 

Frequency (MHz)	Target Permittivity	Range of ±5%	Target Conductivity	Range of ±5%
		For Head		
750	41.9	39.8 ~ 44.0	0.89	0.85 ~ 0.93
835	41.5	39.4 ~ 43.6	0.90	0.86 ~ 0.95
1750	40.1	38.1 ~ 42.1	1.37	1.30 ~ 1.44
1900	40.0	38.0 ~ 42.0	1.40	1.33 ~ 1.47
		For Body		
750	55.5	52.7 ~ 58.3	0.96	0.91 ~ 1.01
835	55.2	52.4 ~ 58.0	0.97	0.92 ~ 1.02
1750	53.4	50.7 ~ 56.1	1.49	1.42 ~ 1.56
1900	53.3	50.6 ~ 56.0	1.52	1.44 ~ 1.60

The following table gives the recipes for tissue simulating liquids.

Table-3.2 Recipes of Tissue Simulating Liquid

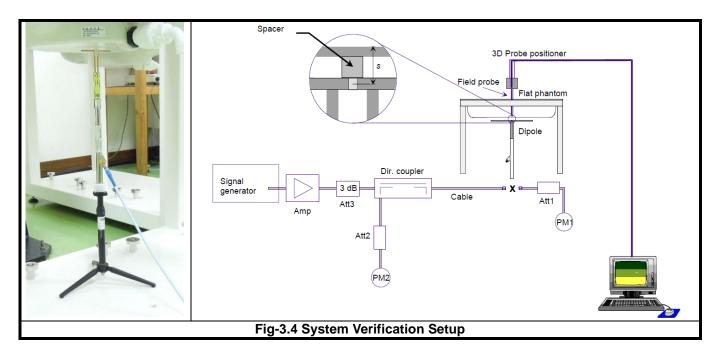
	- unio dia managana di mana										
Tissue Type	Bactericide	DGBE	HEC	NaCl	Sucrose	Triton X-100	Water	Diethylene Glycol Mono- hexylether			
H750	0.2	-	0.2	1.5	56.0	-	42.1	-			
H835	0.2	-	0.2	1.5	57.0	ı	41.1	-			
H1750	-	47.0	ı	0.4	-	ı	52.6	-			
H1900	-	44.5	-	0.2	-	-	55.3	-			
B750	0.2	-	0.2	0.8	48.8	-	50.0	-			
B835	0.2	-	0.2	0.9	48.5	-	50.2	-			
B900	0.2	-	0.2	0.9	48.2		50.5	-			
B1750	-	31.0	-	0.2	-	-	68.8	-			
B1900	-	29.5	-	0.3	-	-	70.2	-			

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### 3.3 SAR System Verification

The system check verifies that the system operates within its specifications. It is performed daily or before every SAR measurement. The system check uses normal SAR measurements in the flat section of the phantom with a matched dipole at a specified distance. The system verification setup is shown as below.



The validation dipole is placed beneath the flat phantom with the specific spacer in place. The distance spacer is touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The power meter PM1 measures the forward power at the location of the system check dipole connector. The signal generator is adjusted for the desired forward power (250 mW is used for 700 MHz to 3 GHz, 100 mW is used for 3.5 GHz to 6 GHz) at the dipole connector and the power meter PM2 is read at that level. After connecting the cable to the dipole, the signal generator is readjusted for the same reading at power meter PM2.

After system check testing, the SAR result will be normalized to 1W forward input power and compared with the reference SAR value derived from validation dipole certificate report. The deviation of system check should be within 10 %.

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#### 3.4SAR Measurement Procedure

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

- (a) Power reference measurement
- (b) Area scan
- (c) Zoom scan
- (d) Power drift measurement

The SAR measurement procedures for each of test conditions are as follows:

- (a) Make EUT to transmit maximum output power
- (b) Measure conducted output power through RF cable
- (c) Place the EUT in the specific position of phantom
- (d) Perform SAR testing steps on the DASY system
- (e) Record the SAR value

#### 3.4.1 Area & Zoom Scan Procedure

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 5x5x7 points with step size 8, 8 and 5 mm for below 3 GHz, and 7x7x9 points with step size 4, 4 and 2.5 mm for above 5 GHz. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g.

#### 3.4.2 Volume Scan Procedure

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.

#### 3.4.3 Power Drift Monitoring

All SAR testing is under the DUT install full charged battery and transmit maximum output power. In DASY 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.

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#### 3.4.4 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:

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

#### 3.4.5 SAR Averaged Methods

In DASY, 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.

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# 4. SAR Measurement Evaluation

#### 4.1 EUT Configuration and Setting

For WWAN SAR testing, the EUT was linked and controlled by base station emulator. Communication between the EUT and the emulator was established by air link. The distance between the EUT and the communicating antenna of the emulator is larger than 50 cm and the output power radiated from the emulator antenna is at least 30 dB smaller than the output power of DUT. The EUT was set from the emulator to radiate maximum output power during SAR testing.

For LTE, set the related parameters of operating band, channel bandwidth, uplink channel number, modulation type, and RB in base station simulator. When the EUT has registered and communicated to base station simulator, set the simulator to make EUT transmitting the maximum radiated power. The steps for system simulator (Anritsu ET8820C) setup are as below.

- 1. Press the "Std" button to select "LTE 22.20S" function
- 2. Choose the "Screen Select" item to "Fundamental Measurement"
- 3. Enter the "Common" item
- 4. Set the Operating Band
- 5. Set the Channel Bandwidth
- 6. Set the UL Channel & Frequency
- 7. Set the Modulation
- 8. Set the RB number and RB shift
- 9. Press "Start Call" button when EUT register to the system simulator
- 10. Set the TX-1 Max. Power to make the EUT transmit maximum output power

#### 4.2 EUT Testing Position

This DUT was tested in four different USB configurations. They are "direct laptop plug-in for configuration 1 and 3", "USB cable plug-in for configuration 2 and 4", and "direct laptop plug-in for DUT Tip Mode" shown as below. Both direct laptop plug-in and USB cable plug-in test configurations are tested with 0.5 cm separation between the particular dongle orientation and the flat phantom.

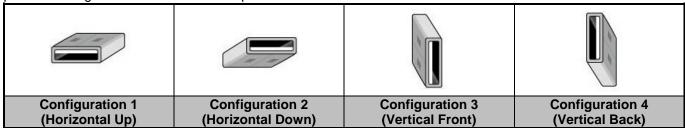


Fig-4.1 Illustration for USB Connector Orientations

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# 4.3 Tissue Verification

The measuring results for tissue simulating liquid are shown as below.

Tissue Type	Frequency (MHz)	Liquid Temp. (°C)	Measured Conductivity (σ)	Measured Permittivity (ε <sub>r</sub> )	Target Conductivity (σ)	Target Permittivity $(\epsilon_r)$	Conductivity Deviation (%)	Permittivity Deviation (%)	Test Date
B750	750	21.7	0.967	55.3	0.96	55.5	0.73	-0.36	Dec. 29, 2011
B750	750	21.5	0.976	56.2	0.96	55.5	1.67	1.26	Dec. 30, 2011
B750	750	21.8	0.968	55.448	0.96	55.5	0.83	-0.09	Jan. 04, 2012
B835	835	21.6	0.972	53.942	0.97	55.2	0.21	-2.28	Dec. 17, 2011
B1750	1750	21.6	1.518	54.334	1.49	53.4	1.88	1.75	Dec. 18, 2011
B1750	1750	21.4	1.52	54.547	1.49	53.4	2.01	2.15	Dec. 30, 2011
B1750	1750	21.6	1.523	54.601	1.49	53.4	2.21	2.25	Jan. 03, 2012
B1900	1900	21.5	1.55	52.3	1.52	53.3	1.97	-1.88	Dec. 26, 2011

#### Note:

The dielectric properties of the tissue simulating liquid must be measured within 24 hours before the SAR testing and within  $\pm 5\%$  of the target values. Liquid temperature during the SAR testing must be within  $\pm 2\%$ .

# 4.4 System Verification

The measuring results for system check are shown as below.

Test Date	Frequency (MHz)	1W Target SAR-1g (W/kg)	Measured SAR-1g (W/kg)	Normalized to 1W SAR-1g (W/kg)	Deviation (%)	Dipole S/N	Probe S/N	DAE S/N
Dec. 29, 2011	750	8.93	2.38	9.52	6.61	1013	3650	579
Dec. 30, 2011	750	8.93	2.40	9.60	7.50	1013	3650	579
Jan. 04, 2012	750	8.93	2.29	9.16	2.58	1013	3800	1277
Dec. 17, 2011	835	10.10	2.51	10.04	-0.59	4d021	3800	579
Dec. 18, 2011	1750	38.00	9.39	37.56	-1.16	1055	3590	861
Dec. 30, 2011	1750	38.00	9.52	38.08	0.21	1055	3800	1277
Jan. 03, 2012	1750	38.00	9.56	38.24	0.63	1055	3800	1277
Dec. 26, 2011	1900	40.90	10.40	41.60	1.71	5d022	3800	1277

#### Note:

Comparing to the reference SAR value provided by SPEAG, the validation data should be within its specification of 10 %. The result indicates the system check can meet the variation criterion and the plots can be referred to Appendix A of this report.

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# 4.5 Conducted Power Results

The measuring conducted power (Unit: dBm) are shown as below.

Band		CDMA BC0			CDMA BC1	
Channel	1013	384	777	25	600	1175
Frequency (MHz)	824.70	836.52	848.31	1851.25	1880.00	1908.75
RC3+SO32	24.28	24.58	23.89	24.24	24.27	23.93
1xEVDO REV.0 RTAP 153.6 Subtype 0	24.40	24.69	23.92	24.33	24.30	24.20
1xEVDO REV.A RETAP 153.6 Subtype 0	24.36	24.65	23.95	24.08	24.25	24.20
1xEVDO REV.A RETAP 4096 Subtype 2	24.38	24.66	23.94	24.05	24.27	24.21

Band		CDMA BC15	
Channel	25	425	875
Frequency (MHz)	1711.25	1731.25	1753.75
RC3+SO32	23.69	23.37	23.59
1xEVDO REV.0 RTAP 153.6 Subtype 0	23.86	23.63	23.72
1xEVDO REV.A RETAP 153.6 Subtype 0	23.73	23.50	23.66
1xEVDO REV.A RETAP 4096 Subtype 2	23.75	23.53	23.67

**Note:** According to KDB 941225, the body SAR evaluation for 1xEVDO data device is using subtype 0/1 physical layer configurations for EVDO Rev.0, and subtype 2 physical layer configurations for 1xEVDO Rev. A.

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				LTE Band	IV			
BW	Modulation	СН	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
		19975	1712.5	1	0	0	23.5	23.35
		20175	1732.5	1	0	0	23.5	23.01
		20375	1752.5	1	0	0	23.5	23.05
		19975	1712.5	1	24	0	23.5	23.43
		20175	1732.5	1	24	0	23.5	23.08
	QPSK	20375	1752.5	1	24	0	23.5	23.23
	QPSK	19975	1712.5	12	6	1	23.5	22.65
		20175	1732.5	12	6	1	23.5	22.35
		20375	1752.5	12	6	1	23.5	22.61
		19975	1712.5	25	0	1	23.5	22.65
		20175	1732.5	25	0	1	23.5	22.44
5 MHz		20375	1752.5	25	0	1	23.5	22.67
3 IVITZ		19975	1712.5	1	0	1	23.5	22.75
		20175	1732.5	1	0	1	23.5	22.86
		20375	1752.5	1	0	1	23.5	22.74
		19975	1712.5	1	24	1	23.5	23.01
		20175	1732.5	1	24	1	23.5	22.76
	400 414	20375	1752.5	1	24	1	23.5	22.93
	16QAM	19975	1712.5	12	6	2	23.5	21.57
		20175	1732.5	12	6	2	23.5	21.39
		20375	1752.5	12	6	2	23.5	21.72
		19975	1712.5	25	0	2	23.5	21.91
		20175	1732.5	25	0	2	23.5	21.48
		20375	1752.5	25	0	2	23.5	21.81

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				LTE Band	IV			
BW	Modulation	СН	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
		20000	1715.0	1	0	0	23.5	23.40
		20175	1732.5	1	0	0	23.5	23.05
		20350	1750.0	1	0	0	23.5	23.08
		20000	1715.0	1	49	0	23.5	23.50
		20175	1732.5	1	49	0	23.5	22.78
	ODCK	20350	1750.0	1	49	0	23.5	23.17
	QPSK	20000	1715.0	25	12	1	23.5	22.90
		20175	1732.5	25	12	1	23.5	22.33
		20350	1750.0	25	12	1	23.5	22.88
		20000	1715.0	50	0	1	23.5	22.76
		20175	1732.5	50	0	1	23.5	22.54
40.8411		20350	1750.0	50	0	1	23.5	22.52
10 MHz		20000	1715.0	1	0	1	23.5	22.25
		20175	1732.5	1	0	1	23.5	22.04
		20350	1750.0	1	0	1	23.5	22.13
		20000	1715.0	1	49	1	23.5	22.24
		20175	1732.5	1	49	1	23.5	22.03
	400.00	20350	1750.0	1	49	1	23.5	21.93
	16QAM	20000	1715.0	25	12	2	23.5	22.02
		20175	1732.5	25	12	2	23.5	21.74
		20350	1750.0	25	12	2	23.5	21.71
		20000	1715.0	50	0	2	23.5	21.85
		20175	1732.5	50	0	2	23.5	21.70
		20350	1750.0	50	0	2	23.5	21.48

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				LTE Band	I XII			
BW	Modulation	СН	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
		23035	701.5	1	0	0	23.5	22.83
		23095	707.5	1	0	0	23.5	22.92
		23155	713.5	1	0	0	23.5	22.69
		23035	701.5	1	24	0	23.5	22.90
		23095	707.5	1	24	0	23.5	22.92
	QPSK	23155	713.5	1	24	0	23.5	22.84
	QPSK	23035	701.5	12	6	1	23.5	22.28
		23095	707.5	12	6	1	23.5	22.20
		23155	713.5	12	6	1	23.5	22.04
		23035	701.5	25	0	1	23.5	22.21
		23095	707.5	25	0	1	23.5	22.29
5 NALL-		23155	713.5	25	0	1	23.5	22.10
5 MHz		23035	701.5	1	0	1	23.5	22.62
		23095	707.5	1	0	1	23.5	22.75
		23155	713.5	1	0	1	23.5	22.47
		23035	701.5	1	24	1	23.5	22.72
		23095	707.5	1	24	1	23.5	22.80
	400 414	23155	713.5	1	24	1	23.5	22.57
	16QAM	23035	701.5	12	6	2	23.5	21.14
		23095	707.5	12	6	2	23.5	21.22
		23155	713.5	12	6	2	23.5	21.02
		23035	701.5	25	0	2	23.5	21.67
		23095	707.5	25	0	2	23.5	21.70
		23155	713.5	25	0	2	23.5	21.48

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				LTE Band	XII			
BW	Modulation	СН	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power
		23060	704.0	1	0	0	23.5	22.82
		23095	707.5	1	0	0	23.5	22.75
		23130	711.0	1	0	0	23.5	22.97
		23060	704.0	1	49	0	23.5	22.92
		23095	707.5	1	49	0	23.5	22.80
	QPSK	23130	711.0	1	49	0	23.5	22.95
	QPSK	23060	704.0	25	12	1	23.5	22.21
		23095	707.5	25	12	1	23.5	22.23
		23130	711.0	25	12	1	23.5	22.27
		23060	704.0	50	0	1	23.5	22.22
		23095	707.5	50	0	1	23.5	22.17
40 MH-		23130	711.0	50	0	1	23.5	22.26
10 MHz		23060	704.0	1	0	1	23.5	22.60
		23095	707.5	1	0	1	23.5	22.54
		23130	711.0	1	0	1	23.5	22.75
		23060	704.0	1	49	1	23.5	22.82
		23095	707.5	1	49	1	23.5	22.58
	400 414	23130	711.0	1	49	1	23.5	22.72
	16QAM	23060	704.0	25	12	2	23.5	21.62
		23095	707.5	25	12	2	23.5	21.64
		23130	711.0	25	12	2	23.5	21.46
		23060	704.0	50	0	2	23.5	21.38
		23095	707.5	50	0	2	23.5	21.34
		23130	711.0	50	0	2	23.5	21.22

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	LTE Band XIII										
BW	Modulation	СН	Frequency (MHz)	RB	RB Offset	MPR	Target Power	Measured Power			
		23205	779.5	1	0	0	23.5	22.90			
		23230	782.0	1	0	0	23.5	23.11			
		23255	784.5	1	0	0	23.5	22.88			
		23205	779.5	1	24	0	23.5	22.61			
		23230	782.0	1	24	0	23.5	22.78			
	ODCK	23255	784.5	1	24	0	23.5	22.58			
	QPSK	23205	779.5	12	6	1	23.5	22.29			
		23230	782.0	12	6	1	23.5	22.31			
		23255	784.5	12	6	1	23.5	22.27			
		23205	779.5	25	0	1	23.5	22.15			
		23230	782.0	25	0	1	23.5	22.26			
5 MII-		23255	784.5	25	0	1	23.5	22.12			
5 MHz		23205	779.5	1	0	1	23.5	22.59			
		23230	782.0	1	0	1	23.5	22.76			
		23255	784.5	1	0	1	23.5	22.54			
		23205	779.5	1	24	1 23.5	23.5	22.40			
		23230	782.0	1	24	1	23.5	22.55			
	400 414	23255	784.5	1	24	1	23.5	22.37			
	16QAM	23205	779.5	12	6	2	23.5	21.18			
		23230	782.0	12	6	2	23.5	21.23			
		23255	784.5	12	6	2	23.5	21.15			
		23205	779.5	25	0	2	23.5	21.55			
		23230	782.0	25	0	2	23.5	21.64			
		23255	784.5	25	0	2	23.5	21.54			
		23230	782.0	1	0	0	23.5	23.15			
	0.0014	23230	782.0	1	49	0	23.5	22.81			
	QPSK	23230	782.0	25	12	1	23.5	22.30			
40.000		23230	782.0	50	0	1	23.5	22.14			
10 MHz		23230	782.0	1	0	1	23.5	22.89			
	400 ***	23230	782.0	1	49	1	23.5	22.47			
	16QAM	23230	782.0	25	12	2	23.5	21.60			
		23230	782.0	50	0	2	23.5	21.37			

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# 4.6 SAR Testing Results

#### 4.6.1 SAR Results for Body

Plot No.	Band	Mode	Test Position Separation  Test Position Distance (cm)		Channel	SAR-1g (W/kg)
101	CDMA2000 BC0	1xEVDO REV.0	Horizontal Up 0.5		384	0.922
102	CDMA2000 BC0	1xEVDO REV.0	Horizontal Down	0.5	384	0.802
103	CDMA2000 BC0	1xEVDO REV.0	Vertical Front	0.5	384	0.375
104	CDMA2000 BC0	1xEVDO REV.0	Vertical Back	0.5	384	0.651
105	CDMA2000 BC0	1xEVDO REV.0	Tip Mode	0.5	384	0.02
116	CDMA2000 BC0	1xEVDO REV.0	Horizontal Up	0.5	1013	0.854
117	CDMA2000 BC0	1xEVDO REV.0	Horizontal Up	0.5	777	0.787
118	CDMA2000 BC0	1xEVDO REV.0	Horizontal Down	0.5	1013	0.746
119	CDMA2000 BC0	1xEVDO REV.0	Horizontal Down	0.5	777	0.685
135	CDMA2000 BC1	1xEVDO REV.0	Horizontal Up	0.5	25	0.912
136	CDMA2000 BC1	1xEVDO REV.0	Horizontal Down	0.5	25	1.1
137	CDMA2000 BC1	1xEVDO REV.0	Vertical Front	0.5	25	0.39
138	CDMA2000 BC1	1xEVDO REV.0	Vertical Back	0.5	25	0.676
139	CDMA2000 BC1	1xEVDO REV.0	Tip Mode	0.5	25	0.161
140	CDMA2000 BC1	1xEVDO REV.0	Horizontal Up	0.5	600	0.709
141	CDMA2000 BC1	1xEVDO REV.0	Horizontal Up	0.5	1175	0.641
142	CDMA2000 BC1	1xEVDO REV.0	Horizontal Down	0.5	600	1.1
143	CDMA2000 BC1	1xEVDO REV.0	Horizontal Down	0.5	1175	0.997
111	CDMA2000 BC15	1xEVDO REV.0	Horizontal Up	0.5	25	0.51
112	CDMA2000 BC15	1xEVDO REV.0	Horizontal Down	0.5	25	0.981
113	CDMA2000 BC15	1xEVDO REV.0	Vertical Front	0.5	25	0.537
114	CDMA2000 BC15	1xEVDO REV.0	Vertical Back	0.5	25	0.631
115	CDMA2000 BC15	1xEVDO REV.0	Tip Mode	0.5	25	0.139
122	CDMA2000 BC15	1xEVDO REV.0	Horizontal Down	0.5	425	0.973
123	CDMA2000 BC15	1xEVDO REV.0	Horizontal Down	0.5	875	0.948

#### Note:

- 1. According to KDB 941225, the SAR testing for 1xEVDO REV.A is not required since the maximum power is less than 1xEVDO REV.0.
- 2. According to KDB 941225, the SAR testing for 1xRTT is not required since the maximum power is less than 1/4 dB higher than 1xEVDO REV.0.

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Plot No.	Band	Mode	Test Position Separation Distance (cm)		Channel	RB	offset	SAR-1g (W/kg)
46	LTE IV	QPSK_10M	Horizontal Up	0.5	20000	25	12	0.279
51	LTE IV	QPSK_10M	Horizontal Up	0.5	20000	1	0	0.277
56	LTE IV	QPSK_10M	Horizontal Up	0.5	20000	1	49	0.065
61	LTE IV	16QAM_10M	Horizontal Up	0.5	20000	25	12	0.048
66	LTE IV	16QAM_10M	Horizontal Up	0.5	20000	1	0	0.1
71	LTE IV	16QAM_10M	Horizontal Up	0.5	20000	1	49	0.182
47	LTE IV	QPSK_10M	Horizontal Down	0.5	20000	25	12	0.123
52	LTE IV	QPSK_10M	Horizontal Down	0.5	20000	1	0	0.173
57	LTE IV	QPSK_10M	Horizontal Down	0.5	20000	1	49	0.118
62	LTE IV	16QAM_10M	Horizontal Down	0.5	20000	25	12	0.098
67	LTE IV	16QAM_10M	Horizontal Down	0.5	20000	1	0	0.194
72	LTE IV	16QAM_10M	Horizontal Down	0.5	20000	1	49	0.12
48	LTE IV	QPSK_10M	Vertical Front	0.5	20000	25	12	0.111
53	LTE IV	QPSK_10M	Vertical Front	0.5	20000	1	0	0.126
58	LTE IV	QPSK_10M	Vertical Front	0.5	20000	1	49	0.083
63	LTE IV	16QAM_10M	Vertical Front	0.5	20000	25	12	0.027
68	LTE IV	16QAM_10M	Vertical Front	0.5	20000	1	0	0.114
73	LTE IV	16QAM_10M	Vertical Front	0.5	20000	1	49	0.134
49	LTE IV	QPSK_10M	Vertical Back	0.5	20000	25	12	0.474
54	LTE IV	QPSK_10M	Vertical Back	0.5	20000	1	0	0.353
59	LTE IV	QPSK_10M	Vertical Back	0.5	20000	1	49	0.113
64	LTE IV	16QAM_10M	Vertical Back	0.5	20000	25	12	0.06
69	LTE IV	16QAM_10M	Vertical Back	0.5	20000	1	0	0.126
74	LTE IV	16QAM_10M	Vertical Back	0.5	20000	1	49	0.052
50	LTE IV	QPSK_10M	Tip Mode	0.5	20000	25	12	0.056
55	LTE IV	QPSK_10M	Tip Mode	0.5	20000	1	0	0.065
60	LTE IV	QPSK_10M	Tip Mode	0.5	20000	1	49	0.038
65	LTE IV	16QAM_10M	Tip Mode	0.5	20000	25	12	0.056
70	LTE IV	16QAM_10M	Tip Mode	0.5	20000	1	0	0.077
75	LTE IV	16QAM_10M	Tip Mode	0.5	20000	1	49	0.042

#### Note:

- 1. According to KDB 941225, the SAR testing for 100% RB is not required since the maximum SAR of 50% RB is less than 1.45 W/kg.
- According to KDB 941225, the SAR testing was performed on largest channel bandwidth, and SAR for other
  channel bandwidths is not required since the maximum power of smaller channel bandwidth is within 1/2 dB
  higher or lower of measured for the largest channel bandwidth and maximum SAR of largest channel bandwidth
  is less than 1.45 W/kg.

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Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Channel	RB	offset	SAR-1g (W/kg)
31	LTE XII	QPSK_10M	Horizontal Up	0.5	23130	25	12	0.416
36	LTE XII	QPSK_10M	Horizontal Up	0.5	23130	1	0	0.429
41	LTE XII	QPSK_10M	Horizontal Up	0.5	23130	1	49	0.493
76	LTE XII	16QAM_10M	Horizontal Up	0.5	23130	25	12	0.367
81	LTE XII	16QAM_10M	Horizontal Up	0.5	23130	1	0	0.403
86	LTE XII	16QAM_10M	Horizontal Up	0.5	23130	1	49	0.422
32	LTE XII	QPSK_10M	Horizontal Down	0.5	23130	25	12	0.242
37	LTE XII	QPSK_10M	Horizontal Down	0.5	23130	1	0	0.246
42	LTE XII	QPSK_10M	Horizontal Down	0.5	23130	1	49	0.274
77	LTE XII	16QAM_10M	Horizontal Down	0.5	23130	25	12	0.235
82	LTE XII	16QAM_10M	Horizontal Down	0.5	23130	1	0	0.263
87	LTE XII	16QAM_10M	Horizontal Down	0.5	23130	1	49	0.297
33	LTE XII	QPSK_10M	Vertical Front	0.5	23130	25	12	0.098
38	LTE XII	QPSK_10M	Vertical Front	0.5	23130	1	0	0.097
43	LTE XII	QPSK_10M	Vertical Front	0.5	23130	1	49	0.13
78	LTE XII	16QAM_10M	Vertical Front	0.5	23130	25	12	0.109
83	LTE XII	16QAM_10M	Vertical Front	0.5	23130	1	0	0.093
88	LTE XII	16QAM_10M	Vertical Front	0.5	23130	1	49	0.121
34	LTE XII	QPSK_10M	Vertical Back	0.5	23130	25	12	0.196
39	LTE XII	QPSK_10M	Vertical Back	0.5	23130	1	0	0.198
44	LTE XII	QPSK_10M	Vertical Back	0.5	23130	1	49	0.225
79	LTE XII	16QAM_10M	Vertical Back	0.5	23130	25	12	0.16
84	LTE XII	16QAM_10M	Vertical Back	0.5	23130	1	0	0.195
89	LTE XII	16QAM_10M	Vertical Back	0.5	23130	1	49	0.228
35	LTE XII	QPSK_10M	Tip Mode	0.5	23130	25	12	0.013
40	LTE XII	QPSK_10M	Tip Mode	0.5	23130	1	0	0.013
45	LTE XII	QPSK_10M	Tip Mode	0.5	23130	1	49	0.015
80	LTE XII	16QAM_10M	Tip Mode	0.5	23130	25	12	0.012
85	LTE XII	16QAM_10M	Tip Mode	0.5	23130	1	0	0.012
90	LTE XII	16QAM_10M	Tip Mode	0.5	23130	1	49	0.016

### Note:

- 1. According to KDB 941225, the SAR testing for 100% RB is not required since the maximum SAR of 50% RB is less than 1.45 W/kg.
- 2. According to KDB 941225, the SAR testing was performed on largest channel bandwidth, and SAR for other channel bandwidths is not required since the maximum power of smaller channel bandwidth is within 1/2 dB higher or lower of measured for the largest channel bandwidth and maximum SAR of largest channel bandwidth is less than 1.45 W/kg.

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Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Channel	RB	offset	SAR-1g (W/kg)
1	LTE XIII	QPSK_10M	Horizontal Up	0.5	23230	25	12	0.507
6	LTE XIII	QPSK_10M	Horizontal Up	0.5	23230	1	0	0.662
11	LTE XIII	QPSK_10M	Horizontal Up	0.5	23230	1	49	0.524
16	LTE XIII	16QAM_10M	Horizontal Up	0.5	23230	25	12	0.445
21	LTE XIII	16QAM_10M	Horizontal Up	0.5	23230	1	0	0.612
26	LTE XIII	16QAM_10M	Horizontal Up	0.5	23230	1	49	0.49
2	LTE XIII	QPSK_10M	Horizontal Down	0.5	23230	25	12	0.379
7	LTE XIII	QPSK_10M	Horizontal Down	0.5	23230	1	0	0.482
12	LTE XIII	QPSK_10M	Horizontal Down	0.5	23230	1	49	0.361
17	LTE XIII	16QAM_10M	Horizontal Down	0.5	23230	25	12	0.29
22	LTE XIII	16QAM_10M	Horizontal Down	0.5	23230	1	0	0.422
27	LTE XIII	16QAM_10M	Horizontal Down	0.5	23230	1	49	0.322
3	LTE XIII	QPSK_10M	Vertical Front	0.5	23230	25	12	0.24
8	LTE XIII	QPSK_10M	Vertical Front	0.5	23230	1	0	0.312
13	LTE XIII	QPSK_10M	Vertical Front	0.5	23230	1	49	0.25
18	LTE XIII	16QAM_10M	Vertical Front	0.5	23230	25	12	0.207
23	LTE XIII	16QAM_10M	Vertical Front	0.5	23230	1	0	0.277
28	LTE XIII	16QAM_10M	Vertical Front	0.5	23230	1	49	0.232
4	LTE XIII	QPSK_10M	Vertical Back	0.5	23230	25	12	0.224
9	LTE XIII	QPSK_10M	Vertical Back	0.5	23230	1	0	0.298
14	LTE XIII	QPSK_10M	Vertical Back	0.5	23230	1	49	0.227
19	LTE XIII	16QAM_10M	Vertical Back	0.5	23230	25	12	0.193
24	LTE XIII	16QAM_10M	Vertical Back	0.5	23230	1	0	0.273
29	LTE XIII	16QAM_10M	Vertical Back	0.5	23230	1	49	0.229
5	LTE XIII	QPSK_10M	Tip Mode	0.5	23230	25	12	0.012
10	LTE XIII	QPSK_10M	Tip Mode	0.5	23230	1	0	0.016
15	LTE XIII	QPSK_10M	Tip Mode	0.5	23230	1	49	0.012
20	LTE XIII	16QAM_10M	Tip Mode	0.5	23230	25	12	0.01
25	LTE XIII	16QAM_10M	Tip Mode	0.5	23230	1	0	0.014
30	LTE XIII	16QAM_10M	Tip Mode	0.5	23230	1	49	0.011

#### Note:

- 1. According to KDB 941225, the SAR testing for 100% RB is not required since the maximum SAR of 50% RB is less than 1.45 W/kg.
- According to KDB 941225, the SAR testing was performed on largest channel bandwidth, and SAR for other channel bandwidths is not required since the maximum power of smaller channel bandwidth is within 1/2 dB higher or lower of measured for the largest channel bandwidth and maximum SAR of largest channel bandwidth is less than 1.45 W/kg.

Test Engineer: Morrison Huang, and Isaac Liao

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# 5. Calibration of Test Equipment

Equipment	Manufacturer	Model	SN	Cal. Date	Cal. Interval
Dosimetric E-Field Probe	SPEAG	EX3DV4	3590	Feb. 25, 2011	Annual
Dosimetric E-Field Probe	SPEAG	EX3DV4	3650	Oct. 26, 2011	Annual
Dosimetric E-Field Probe	SPEAG	EX3DV4	3800	Aug. 05, 2011	Annual
System Validation Kit	SPEAG	D750V3	1013	May 25, 2011	Annual
System Validation Kit	SPEAG	D835V2	4d021	Mar. 23, 2011	Annual
System Validation Kit	SPEAG	D1750V2	1055	Aug. 09, 2011	Annual
System Validation Kit	SPEAG	D1900V2	5d022	Jan. 26, 2011	Annual
Data Acquisition Electronics	SPEAG	DAE3	579	Sep. 23, 2011	Annual
Data Acquisition Electronics	SPEAG	DAE4	861	Aug. 29, 2011	Annual
Data Acquisition Electronics	SPEAG	DAE4	1277	Jul. 29, 2011	Annual
SAM Phantom	SPEAG	QD 000 P40	N/A	N/A	N/A
ELI Phantom	SPEAG	QD OVA 001B	N/A	N/A	N/A
Radio Communication Tester	Agilent	E5515C	MY50266628	Sep. 26, 2011	Biennial
Radio Communication Analyzer	Anritsu	MT8802C	6201010284	Aug. 01, 2011	Biennial
ENA Series Network Analyzer	Agilent	E5071C	MY46104190	Apr. 15, 2011	Annual
Signal Generator	Agilent	E8257C	MY43320668	Dec. 20, 2011	Annual
Power Meter	Anritsu	ML2487A	6K00001571	May 25, 2011	Annual
Power Sensor	Anritsu	MA2491A	030954	May 25, 2011	Annual
Dielectric Probe Kit	Agilent	85070D	N/A	N/A	N/A

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# 6. Measurement Uncertainty

Error Description	Uncertainty Value (±%)	Probability Distribution	Divisor	Ci (1g)	Standard Uncertainty (1g)	Vi
Measurement System						
Probe Calibration	6.0	Normal	1	1	± 6.0 %	∞
Axial Isotropy	4.7	Rectangular	√3	0.7	± 1.9 %	∞
Hemispherical Isotropy	9.6	Rectangular	√3	0.7	± 3.9 %	∞
Boundary Effects	1.0	Rectangular	√3	1	± 0.6 %	∞
Linearity	4.7	Rectangular	√3	1	± 2.7 %	8
System Detection Limits	1.0	Rectangular	√3	1	± 0.6 %	8
Readout Electronics	0.6	Normal	1	1	± 0.6 %	8
Response Time	0.0	Rectangular	√3	1	± 0.0 %	8
Integration Time	1.7	Rectangular	√3	1	± 1.0 %	8
RF Ambient Noise	3.0	Rectangular	√3	1	± 1.7 %	8
RF Ambient Reflections	3.0	Rectangular	√3	1	± 1.7 %	8
Probe Positioner	0.5	Rectangular	√3	1	± 0.3 %	∞
Probe Positioning	2.9	Rectangular	√3	1	± 1.7 %	∞
Max. SAR Eval.	2.3	Rectangular	√3	1	± 1.3 %	8
Test Sample Related						
Device Positioning	3.9	Normal	1	1	± 3.9 %	31
Device Holder	2.7	Normal	1	1	± 2.7 %	19
Power Drift	5.0	Rectangular	√3	1	± 2.9 %	8
Phantom and Setup						
Phantom Uncertainty	4.0	Rectangular	√3	1	± 2.3 %	8
Liquid Conductivity (Target)	5.0	Rectangular	√3	0.64	± 1.8 %	8
Liquid Conductivity (Meas.)	5.0	Normal	1	0.64	± 3.2 %	29
Liquid Permittivity (Target)	5.0	Rectangular	√3	0.6	± 1.7 %	8
Liquid Permittivity (Meas.)	5.0	Normal	1	0.6	± 3.0 %	29
Combined Standard Uncerta	inty				± 11.7 %	
Expanded Uncertainty (K=2)			± 23.4 %			

Uncertainty budget for frequency range 300 MHz to 3 GHz

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# 7. Information on the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

Copies of accreditation and authorization certificates of our laboratories obtained from approval agencies can be downloaded from our web site. If you have any comments, please feel free to contact us at the following:

#### Taiwan HwaYa EMC/RF/Safety/Telecom Lab:

Add: No. 19, Hwa Ya 2nd Rd, Wen Hwa Vil., Kwei Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

Tel: 886-3-318-3232 Fax: 886-3-318-5050

#### Taiwan LinKo EMC/RF Lab:

Add: No. 47, 14th Ling, Chia Pau Vil., Linkou Dist., New Taipei City 244, Taiwan, R.O.C.

Tel: 886-2-2605-2180 Fax: 886-2-2605-1924

#### Taiwan HsinChu EMC/RF Lab:

Add: No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung Vil., Chiung Lin Township, Hsinchu County 307, Taiwan, R.O.C.

Tel: 886-3-593-5343 Fax: 886-3-593-5342

Email: service.adt@tw.bureauveritas.com

Web Site: www.adt.com.tw

The road map of all our labs can be found in our web site also.

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# Appendix A. SAR Plots of System Verification

The plots for system verification are shown as follows.

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# **System Check B750 111229**

**DUT: Dipole 750 MHz; Type: D750V3; SN: 1013** 

Communication System: CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 750 MHz;  $\sigma = 0.967$  mho/m;  $\varepsilon_r = 55.3$ ;  $\rho = 1000$ 

Date: 2011/12/29

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.7 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Pin=250mW/Area Scan (61x131x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.92 mW/g

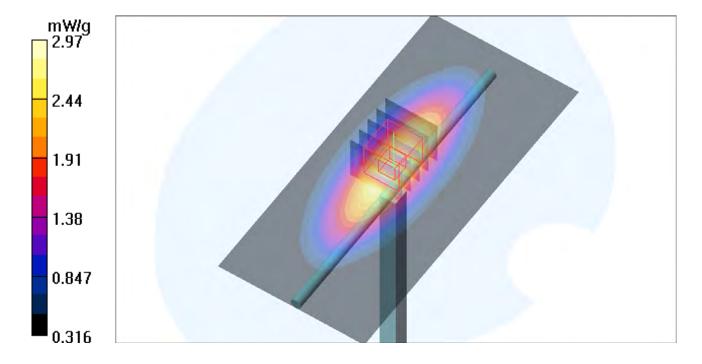
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 56.2 V/m; Power Drift = -0.007 dB

Peak SAR (extrapolated) = 3.43 W/kg

SAR(1 g) = 2.38 mW/g; SAR(10 g) = 1.61 mW/g

Maximum value of SAR (measured) = 2.97 mW/g



# **System Check B750 111230**

### **DUT: Dipole 750 MHz; Type: D750V3; SN: 1013**

Communication System: CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: B750\_1230 Medium parameters used: f = 750 MHz;  $\sigma = 0.976$  mho/m;  $\varepsilon_r = 56.2$ ;  $\rho = 1000$ 

Date: 2011/12/30

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.5 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Pin=250mW/Area Scan (61x131x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.95 mW/g

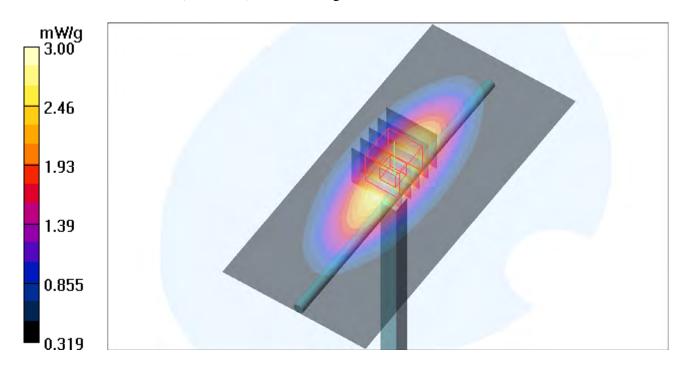
# Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 56.2 V/m; Power Drift = -0.007 dB

Peak SAR (extrapolated) = 3.46 W/kg

# SAR(1 g) = 2.4 mW/g; SAR(10 g) = 1.62 mW/g

Maximum value of SAR (measured) = 3.00 mW/g



# **System Check B750 120104**

**DUT: Dipole 750 MHz; Type: D750V3; SN: 1013** 

Communication System: CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 750 MHz;  $\sigma = 0.968$  mho/m;  $\epsilon_r = 55.448$ ;  $\rho =$ 

Date: 2012/01/04

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.8 °C

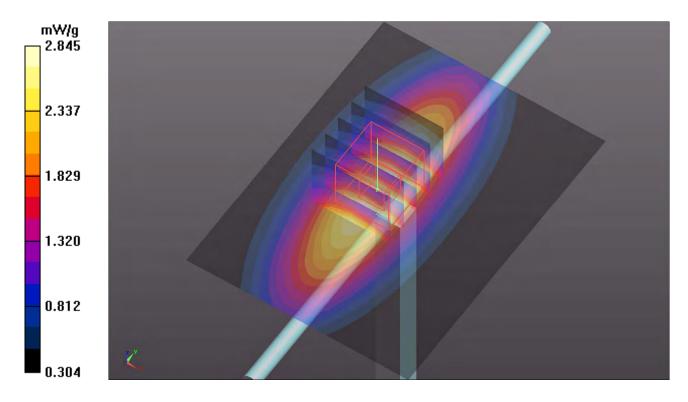
## DASY5 Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

**Pin=250mW/Area Scan (61x81x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 2.817 mW/g

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm Reference Value = 55.590 V/m; Power Drift = -0.01 dB Peak SAR (extrapolated) = 3.3080

SAR(1 g) = 2.29 mW/g; SAR(10 g) = 1.54 mW/gMaximum value of SAR (measured) = 2.845 mW/g



# **System Check B835 111217**

**DUT: Dipole 835 MHz; Type: D835V2; SN: 4d021** 

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

Medium: B835\_1217 Medium parameters used: f = 835 MHz;  $\sigma = 0.972$  mho/m;  $\epsilon_r = 53.942$ ;  $\rho =$ 

Date: 2011/12/17

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.1 °C; Liquid Temperature: 21.6 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3800; ConvF(8.94, 8.94, 8.94); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Front; Type: SAM; Serial: TP-1485
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

Pin=250mW/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 3.155 mW/g

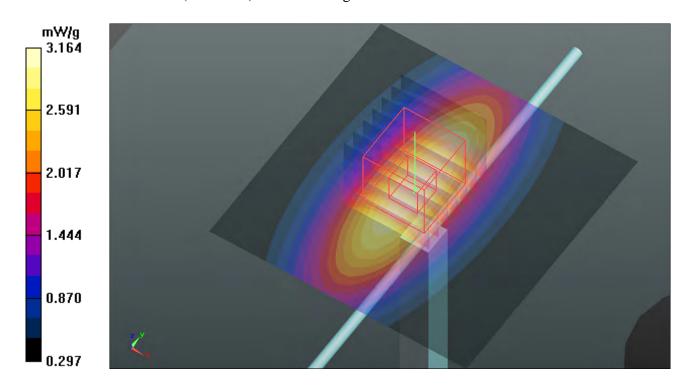
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 57.369 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 3.692 W/kg

SAR(1 g) = 2.51 mW/g; SAR(10 g) = 1.66 mW/g

Maximum value of SAR (measured) = 3.164 mW/g



# **System Check B1750 111218**

### **DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1055**

Communication System: CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: B1800\_1218 Medium parameters used: f = 1750 MHz;  $\sigma = 1.518$  mho/m;  $\varepsilon_r = 54.334$ ;  $\rho = 1.518$  mho/m;  $\varepsilon_r = 54.334$ ;  $\rho = 1.518$  mho/m;  $\varepsilon_r =$ 

Date: 2011/12/18

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.6 °C

## **DASY5** Configuration:

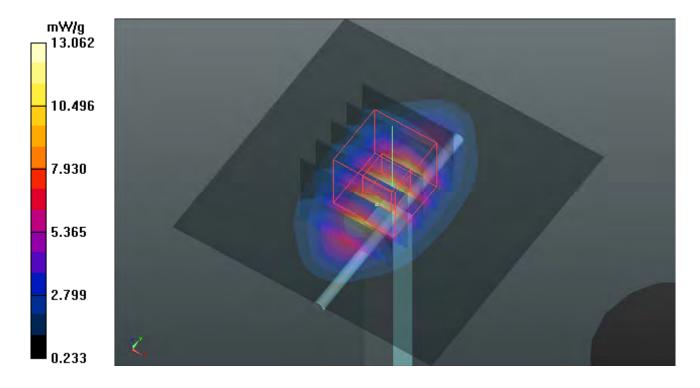
- Probe: EX3DV4 SN3590; ConvF(8.77, 8.77, 8.77); Calibrated: 2011/02/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2011/08/29
- Phantom: SAM with CRP v5.0 Front; Type: QD000P40CD; Serial: TP:1653
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Pin=250mW/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 13.405 mW/g

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm Reference Value = 95.115 V/m; Power Drift = 0.02 dB Peak SAR (extrapolated) = 16.1910

SAR(1 g) = 9.39 mW/g; SAR(10 g) = 5.08 mW/g

Maximum value of SAR (measured) = 13.062 mW/g



# System Check\_B1750\_111230

### **DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1055**

Communication System: CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: B1750\_1230 Medium parameters used: f = 1750 MHz;  $\sigma = 1.52$  mho/m;  $\varepsilon_r = 54.547$ ;  $\rho =$ 

Date: 2011/12/30

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.4 °C

## DASY5 Configuration:

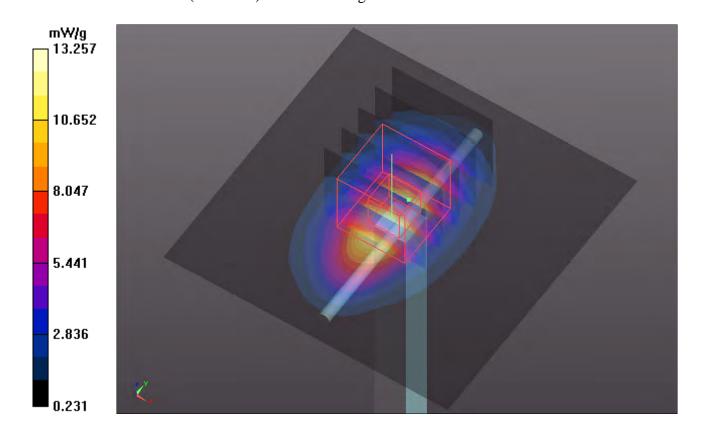
- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

**Pin=250mW/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 13.650 mW/g

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm Reference Value = 93.948 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 16.4900

SAR(1 g) = 9.52 mW/g; SAR(10 g) = 5.11 mW/gMaximum value of SAR (measured) = 13.257 mW/g



# **System Check\_B1750\_120103**

### **DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1055**

Communication System: CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: B1750\_0103 Medium parameters used: f = 1750 MHz;  $\sigma = 1.523$  mho/m;  $\epsilon_r = 54.601$ ;  $\rho =$ 

Date: 2012/01/03

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4°C; Liquid Temperature: 21.6°C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

**Pin=250mW/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 13.728 mW/g

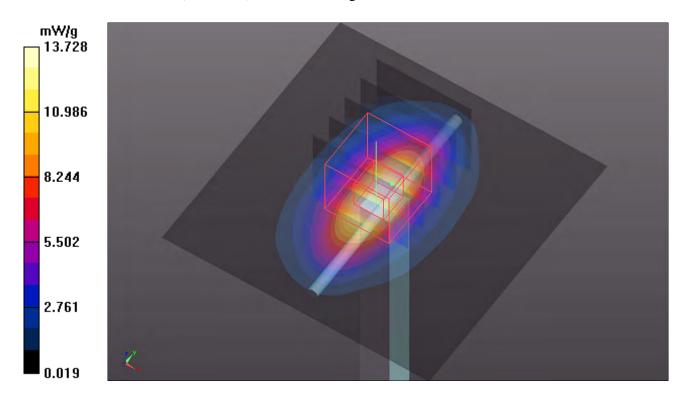
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Peak SAR (extrapolated) = 16.5810

SAR(1 g) = 9.56 mW/g; SAR(10 g) = 5.13 mW/g

Maximum value of SAR (measured) = 13.343 mW/g

Reference Value = 94.908 V/m; Power Drift = 0.04 dB



# System Check\_B1900\_111226

## **DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d022**

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

Medium: B1900\_1226 Medium parameters used: f = 1900 MHz;  $\sigma = 1.55$  mho/m;  $\varepsilon_r = 52.3$ ;  $\rho = 1000$ 

Date: 2011/12/26

 $kg/m^3$ 

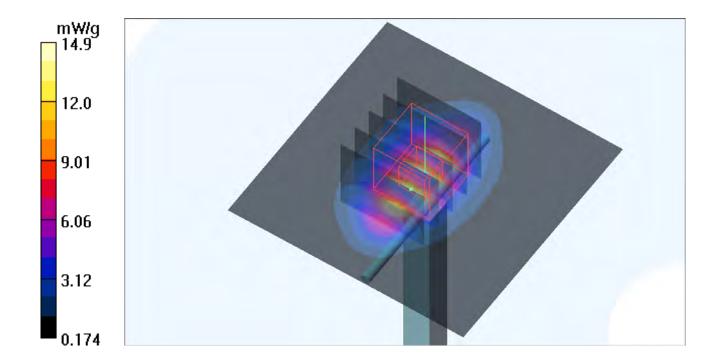
Ambient Temperature: 22.1 °C; Liquid Temperature: 21.5 °C

#### **DASY4** Configuration:

- Probe: EX3DV4 SN3800; ConvF(6.97, 6.97, 6.97); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: SAM Phantom Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# **Pin=250mW/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 15.4 mW/g

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm Reference Value = 98.6 V/m; Power Drift = 0.056 dB Peak SAR (extrapolated) = 19.1 W/kg SAR(1 g) = 10.4 mW/g; SAR(10 g) = 5.37 mW/g Maximum value of SAR (measured) = 14.9 mW/g





# **Appendix B. SAR Plots of SAR Measurement**

The plots for SAR measurement are shown as follows.

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# P101 CDMA2000\_BC0\_EVDO Rev0\_Horizontal Up\_0.5cm\_Ch384

#### **DUT: 111215C07**

Communication System: CDMA2000; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium: B835\_1217 Medium parameters used: f = 837 MHz;  $\sigma = 0.974$  mho/m;  $\epsilon_r = 53.918$ ;  $\rho =$ 

Date: 2011/12/17

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.1 °C; Liquid Temperature: 21.6 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(8.94, 8.94, 8.94); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Front; Type: SAM; Serial: TP-1485
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.6.4 (4989)

Ch384/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 1.100 mW/g

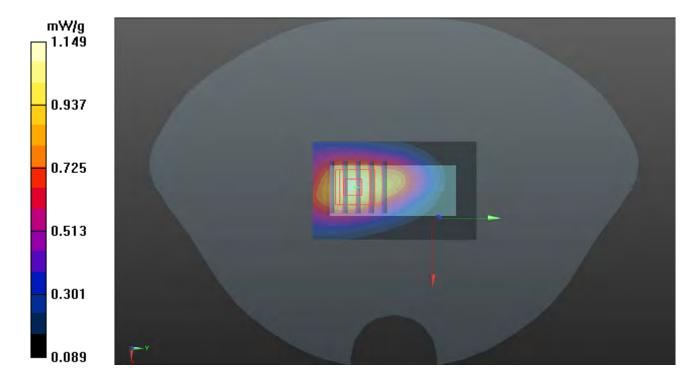
Ch384/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

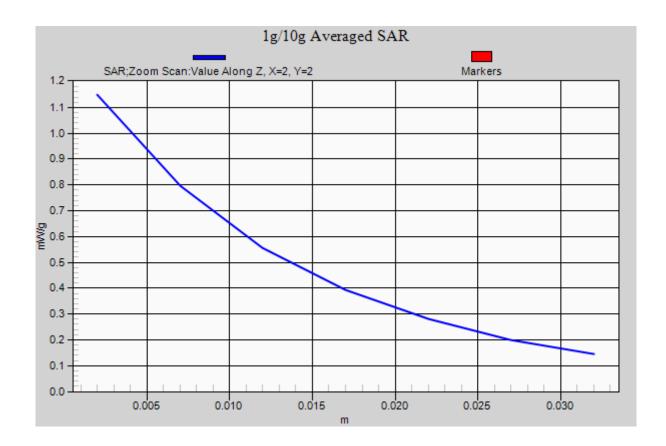
Reference Value = 29.189 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.3510

SAR(1 g) = 0.922 mW/g; SAR(10 g) = 0.605 mW/g

Maximum value of SAR (measured) = 1.149 mW/g





# P102 CDMA2000\_BC0\_EVDO Rev0\_Horizontal Down\_0.5cm\_Ch384

#### **DUT: 111215C07**

Communication System: CDMA2000; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium: B835\_1217 Medium parameters used: f = 837 MHz;  $\sigma = 0.974$  mho/m;  $\varepsilon_r = 53.918$ ;  $\rho =$ 

Date: 2011/12/17

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.1 °C; Liquid Temperature: 21.6 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(8.94, 8.94, 8.94); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Front; Type: SAM; Serial: TP-1485
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

Ch384/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 1.102 mW/g

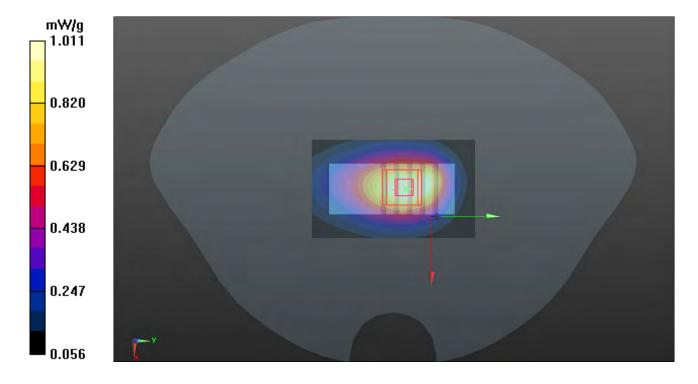
Ch384/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 33.135 V/m; Power Drift = -0.028 dB

Peak SAR (extrapolated) = 1.181 W/kg

SAR(1 g) = 0.802 mW/g; SAR(10 g) = 0.522 mW/g

Maximum value of SAR (measured) = 1.011 mW/g



# P103 CDMA2000\_BC0\_EVDO Rev0\_Vertical Front\_0.5cm\_Ch384

**DUT: 111215C07** 

Communication System: CDMA2000; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium: B835\_1217 Medium parameters used: f = 837 MHz;  $\sigma = 0.974$  mho/m;  $\epsilon_r = 53.918$ ;  $\rho =$ 

Date: 2011/12/17

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.2 °C; Liquid Temperature: 21.6 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(8.94, 8.94, 8.94); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Front; Type: SAM; Serial: TP-1485
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

Ch384/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

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

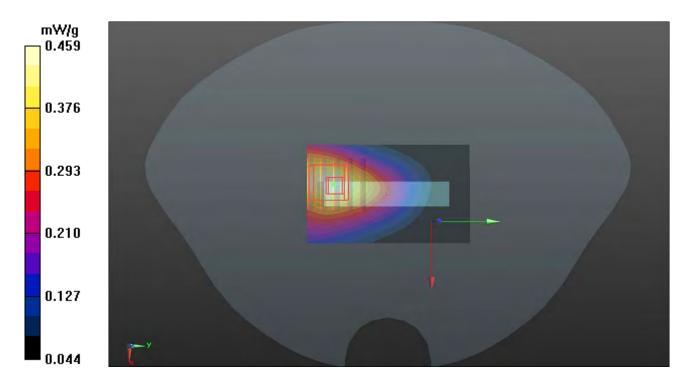
Ch384/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.659 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.529 W/kg

SAR(1 g) = 0.375 mW/g; SAR(10 g) = 0.261 mW/g

Maximum value of SAR (measured) = 0.459 mW/g



# P104 CDMA2000\_BC0\_EVDO Rev0\_Vertical Back\_0.5cm\_Ch384

#### **DUT: 111215C07**

Communication System: CDMA2000; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium: B835\_1217 Medium parameters used: f = 837 MHz;  $\sigma = 0.974$  mho/m;  $\varepsilon_r = 53.918$ ;  $\rho =$ 

Date: 2011/12/17

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.1 °C; Liquid Temperature: 21.6 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(8.94, 8.94, 8.94); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Front; Type: SAM; Serial: TP-1485
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

Ch384/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.820 mW/g

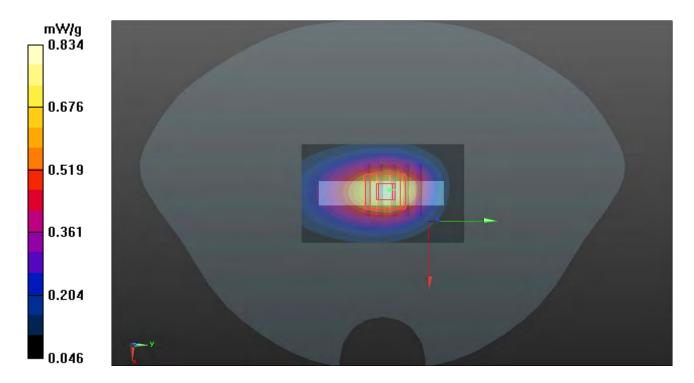
Ch384/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 30.000 V/m; Power Drift = -0.0076 dB

Peak SAR (extrapolated) = 0.996 W/kg

SAR(1 g) = 0.651 mW/g; SAR(10 g) = 0.413 mW/g

Maximum value of SAR (measured) = 0.834 mW/g



# P105 CDMA2000\_BC0\_EVDO Rev0\_Tip Mode\_0.5cm\_Ch384

#### **DUT: 111215C07**

Communication System: CDMA2000; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium: B835\_1217 Medium parameters used: f = 837 MHz;  $\sigma = 0.974$  mho/m;  $\varepsilon_r = 53.918$ ;  $\rho =$ 

Date: 2011/12/17

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.0°C; Liquid Temperature: 21.6°C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(8.94, 8.94, 8.94); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Front; Type: SAM; Serial: TP-1485
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

Ch384/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.025 mW/g

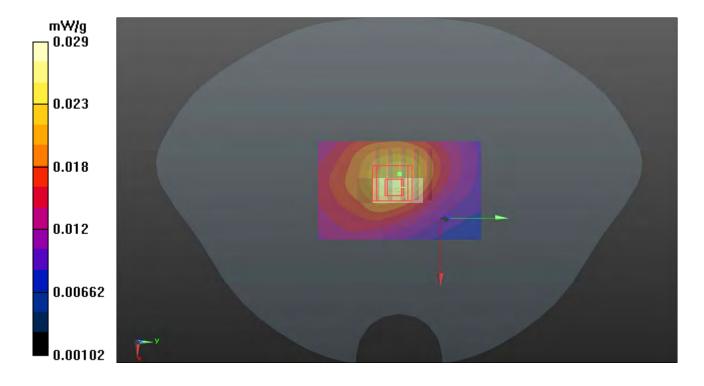
Ch384/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.501 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.038 W/kg

SAR(1 g) = 0.020 mW/g; SAR(10 g) = 0.012 mW/g

Maximum value of SAR (measured) = 0.029 mW/g



# P116 CDMA2000\_BC0\_EVDO Rev0\_Horizontal Up\_0.5cm\_Ch1013

#### **DUT: 111215C07**

Communication System: CDMA2000; Frequency: 824.7 MHz; Duty Cycle: 1:1

Medium: B835\_1217 Medium parameters used: f = 825 MHz;  $\sigma = 0.962$  mho/m;  $\varepsilon_r = 54.037$ ;  $\rho =$ 

Date: 2011/12/17

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.1 °C; Liquid Temperature: 21.6 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(8.94, 8.94, 8.94); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Front; Type: SAM; Serial: TP-1485
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

# Ch1013/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.983 mW/g

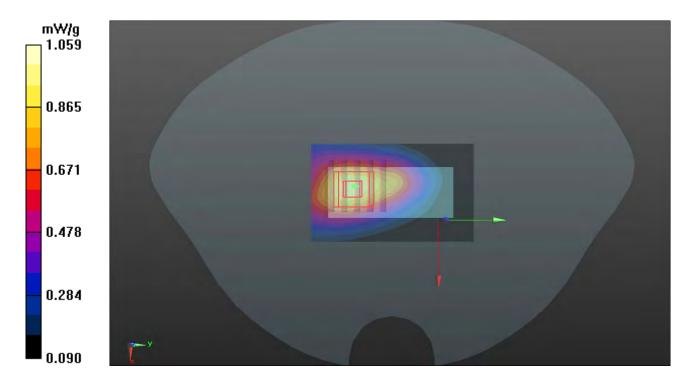
# Ch1013/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 27.678 V/m; Power Drift = 0.123 dB

Peak SAR (extrapolated) = 1.242 W/kg

SAR(1 g) = 0.854 mW/g; SAR(10 g) = 0.564 mW/g

Maximum value of SAR (measured) = 1.059 mW/g



# P117 CDMA2000\_BC0\_EVDO Rev0\_Horizontal Up\_0.5cm\_Ch777

#### **DUT: 111215C07**

Communication System: CDMA2000; Frequency: 848.31 MHz; Duty Cycle: 1:1

Medium: B835\_1217 Medium parameters used: f = 848.31 MHz;  $\sigma = 0.985$  mho/m;  $\epsilon_r = 53.809$ ;  $\rho = 0.985$  mho/m;  $\epsilon_r = 53.809$ ;  $\epsilon_r = 53.809$ ;  $\epsilon_r = 6.985$  mho/m;  $\epsilon_r = 6.$ 

Date: 2011/12/17

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.2 °C; Liquid Temperature: 21.6 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(8.94, 8.94, 8.94); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Front; Type: SAM; Serial: TP-1485
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

# Ch777/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.924 mW/g

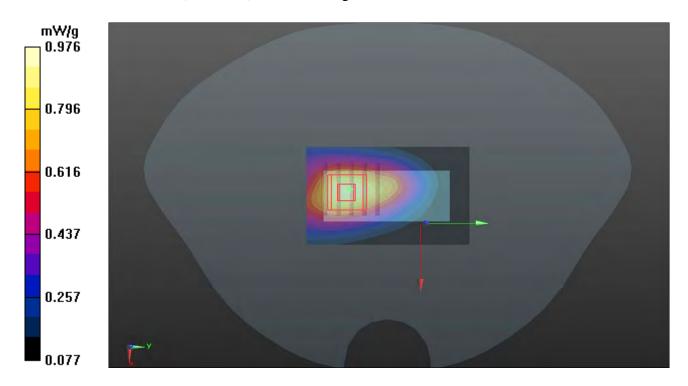
### Ch777/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.450 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.158 W/kg

### SAR(1 g) = 0.787 mW/g; SAR(10 g) = 0.515 mW/g

Maximum value of SAR (measured) = 0.976 mW/g



# P118 CDMA2000\_BC0\_EVDO Rev0\_Horizontal Down\_0.5cm\_Ch1013

#### **DUT: 111215C07**

Communication System: CDMA2000; Frequency: 824.7 MHz; Duty Cycle: 1:1

Medium: B835\_1217 Medium parameters used: f = 825 MHz;  $\sigma = 0.962$  mho/m;  $\varepsilon_r = 54.037$ ;  $\rho =$ 

Date: 2011/12/17

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.1 °C; Liquid Temperature: 21.6 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(8.94, 8.94, 8.94); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Front; Type: SAM; Serial: TP-1485
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

# Ch1013/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.991 mW/g

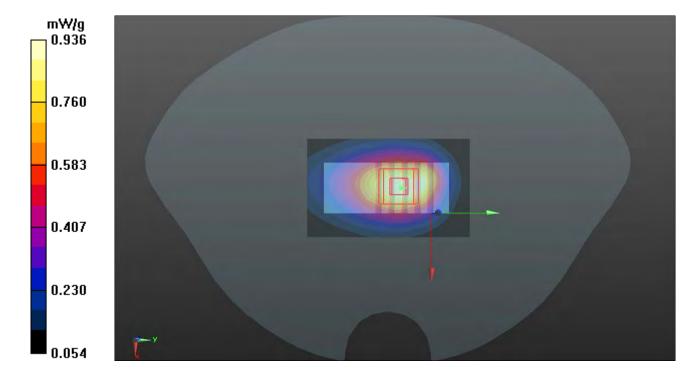
# Ch1013/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 31.253 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.092 W/kg

SAR(1 g) = 0.746 mW/g; SAR(10 g) = 0.488 mW/g

Maximum value of SAR (measured) = 0.936 mW/g



# P119 CDMA2000\_BC0\_EVDO Rev0\_Horizontal Down\_0.5cm\_Ch777

#### **DUT: 111215C07**

Communication System: CDMA2000; Frequency: 848.31 MHz; Duty Cycle: 1:1

Medium: B835\_1217 Medium parameters used: f = 848.31 MHz;  $\sigma = 0.985$  mho/m;  $\epsilon_r = 53.809$ ;  $\rho = 0.985$  mho/m;  $\epsilon_r = 53.809$ ;  $\epsilon_r = 53.809$ ;  $\epsilon_r = 6.985$  mho/m;  $\epsilon_r = 6.$ 

Date: 2011/12/17

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.1 °C; Liquid Temperature: 21.6 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(8.94, 8.94, 8.94); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Front; Type: SAM; Serial: TP-1485
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

Ch777/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.911 mW/g

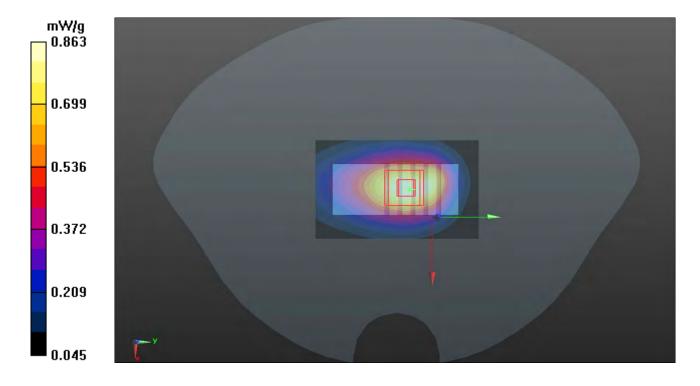
Ch777/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 30.101 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 1.011 W/kg

SAR(1 g) = 0.685 mW/g; SAR(10 g) = 0.447 mW/g

Maximum value of SAR (measured) = 0.863 mW/g



# P111 CDMA2000\_BC15\_EVDO Rev0\_Horizontal Up\_0.5cm\_Ch25

#### **DUT: 111215C07**

Communication System: CDMA2000; Frequency: 1711.25 MHz; Duty Cycle: 1:1

Medium: B1800\_1218 Medium parameters used: f = 1711.25 MHz;  $\sigma = 1.479$  mho/m;  $\varepsilon_r = 54.482$ ;  $\rho$ 

Date: 2011/12/18

 $= 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.6 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3590; ConvF(8.77, 8.77, 8.77); Calibrated: 2011/02/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2011/08/29
- Phantom: SAM with CRP v5.0 Front; Type: QD000P40CD; Serial: TP:1653
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

Ch25/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.573 mW/g

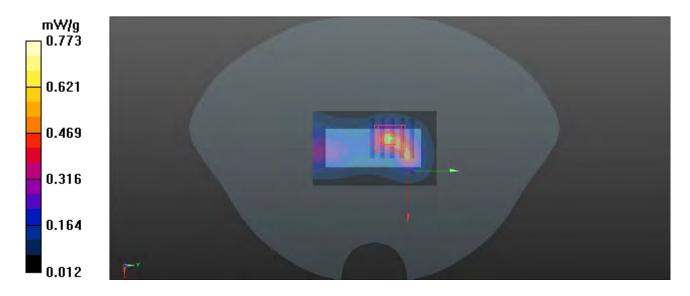
Ch25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.544 V/m; Power Drift = 0.055 dB

Peak SAR (extrapolated) = 0.981 W/kg

SAR(1 g) = 0.510 mW/g; SAR(10 g) = 0.252 mW/g

Maximum value of SAR (measured) = 0.773 mW/g



# P112 CDMA2000\_BC15\_EVDO Rev0\_Horizontal Down\_0.5cm\_Ch25

#### **DUT: 111215C07**

Communication System: CDMA2000; Frequency: 1711.25 MHz; Duty Cycle: 1:1

Medium: B1800\_1218 Medium parameters used: f = 1711.25 MHz;  $\sigma = 1.479$  mho/m;  $\varepsilon_r = 54.482$ ;  $\rho$ 

Date: 2011/12/18

 $= 1000 \text{ kg/m}^3$ 

Ambient Temperature : 22.3 °C; Liquid Temperature : 21.6 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3590; ConvF(8.77, 8.77, 8.77); Calibrated: 2011/02/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2011/08/29
- Phantom: SAM with CRP v5.0 Front; Type: QD000P40CD; Serial: TP:1653
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.6.4 (4989)

Ch25/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 1.292 mW/g

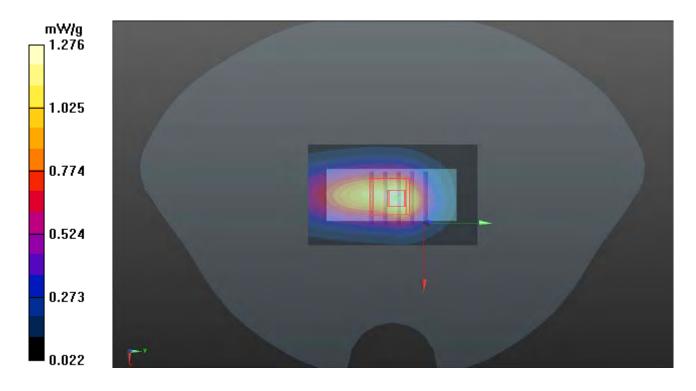
Ch25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

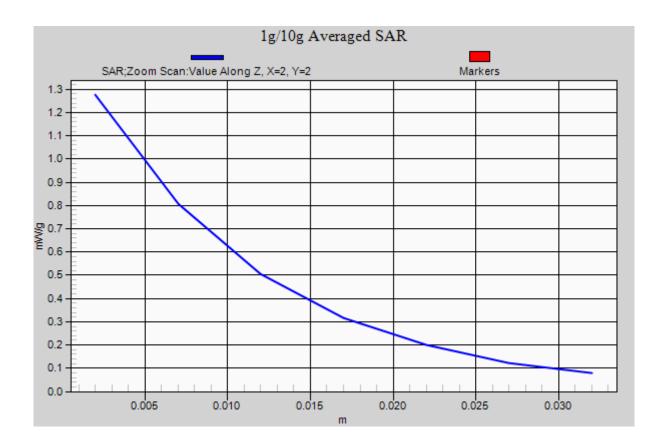
Reference Value = 27.443 V/m; Power Drift = 0.167 dB

Peak SAR (extrapolated) = 1.5760

SAR(1 g) = 0.981 mW/g; SAR(10 g) = 0.592 mW/g

Maximum value of SAR (measured) = 1.276 mW/g





# P113 CDMA2000\_BC15\_EVDO Rev0\_Vertical Front\_0.5cm\_Ch25

#### **DUT: 111215C07**

Communication System: CDMA2000; Frequency: 1711.25 MHz; Duty Cycle: 1:1

Medium: B1800\_1218 Medium parameters used: f = 1711.25 MHz;  $\sigma = 1.479$  mho/m;  $\varepsilon_r = 54.482$ ;  $\rho$ 

Date: 2011/12/18

 $= 1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.6 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3590; ConvF(8.77, 8.77, 8.77); Calibrated: 2011/02/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2011/08/29
- Phantom: SAM with CRP v5.0 Front; Type: QD000P40CD; Serial: TP:1653
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

**Ch25/Area Scan (31x51x1):** Measurement grid: dx=20mm, dy=20mm Maximum value of SAR (interpolated) = 0.662 mW/g

Maximum value of SAR (interpolated) = 0.662 mW/g

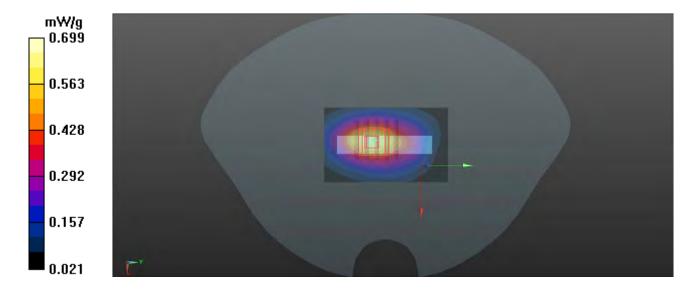
Ch25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.831 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.852 W/kg

SAR(1 g) = 0.537 mW/g; SAR(10 g) = 0.322 mW/g

Maximum value of SAR (measured) = 0.699 mW/g



# P114 CDMA2000\_BC15\_EVDO Rev0\_Vertical Back\_0.5cm\_Ch25

#### **DUT: 111215C07**

Communication System: CDMA2000; Frequency: 1711.25 MHz; Duty Cycle: 1:1

Medium: B1800\_1218 Medium parameters used: f = 1711.25 MHz;  $\sigma = 1.479$  mho/m;  $\varepsilon_r = 54.482$ ;  $\rho$ 

Date: 2011/12/18

 $= 1000 \text{ kg/m}^3$ 

Ambient Temperature : 22.3 °C; Liquid Temperature : 21.6 °C

#### DASY5 Configuration:

- Probe: EX3DV4 SN3590; ConvF(8.77, 8.77, 8.77); Calibrated: 2011/02/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2011/08/29
- Phantom: SAM with CRP v5.0 Front; Type: QD000P40CD; Serial: TP:1653
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

Ch25/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm Maximum value of SAR (interpolated) = 0.740 mW/g

Maximum value of SAR (interpolated) = 0.740 mW/g

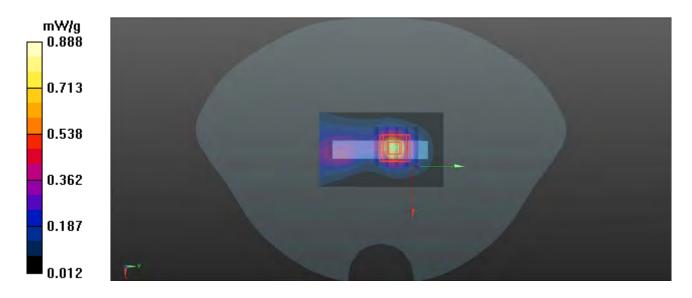
Ch25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.535 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.128 W/kg

SAR(1 g) = 0.631 mW/g; SAR(10 g) = 0.324 mW/g

Maximum value of SAR (measured) = 0.888 mW/g



# P115 CDMA2000\_BC15\_EVDO Rev0\_Tip Mode\_0.5cm\_Ch25

#### **DUT: 111215C07**

Communication System: CDMA2000; Frequency: 1711.25 MHz; Duty Cycle: 1:1

Medium: B1800\_1218 Medium parameters used: f = 1711.25 MHz;  $\sigma = 1.479$  mho/m;  $\varepsilon_r = 54.482$ ;  $\rho$ 

Date: 2011/12/18

 $= 1000 \text{ kg/m}^3$ 

Ambient Temperature : 22.3 °C; Liquid Temperature : 21.6 °C

#### DASY5 Configuration:

- Probe: EX3DV4 SN3590; ConvF(8.77, 8.77, 8.77); Calibrated: 2011/02/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2011/08/29
- Phantom: SAM with CRP v5.0 Front; Type: QD000P40CD; Serial: TP:1653
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

Ch25/Area Scan (31x41x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.142 mW/g

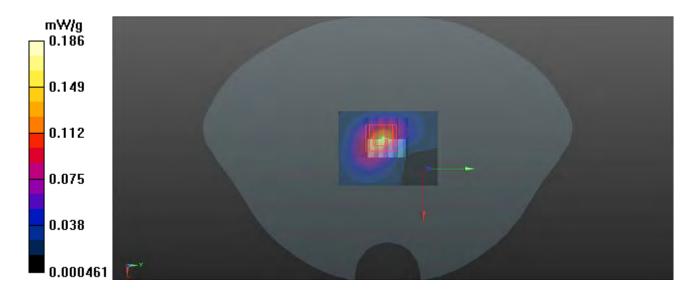
Ch25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.909 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.228 W/kg

SAR(1 g) = 0.139 mW/g; SAR(10 g) = 0.076 mW/g

Maximum value of SAR (measured) = 0.186 mW/g



# P122 CDMA2000\_BC15\_EVDO Rev0\_Horizontal Down\_0.5cm\_Ch425

#### **DUT: 111215C07**

Communication System: CDMA2000; Frequency: 1731.25 MHz; Duty Cycle: 1:1

Medium: B1800\_1218 Medium parameters used: f = 1731.25 MHz;  $\sigma = 1.499$  mho/m;  $\varepsilon_r = 54.407$ ;  $\rho$ 

Date: 2011/12/18

 $= 1000 \text{ kg/m}^3$ 

Ambient Temperature : 22.3 °C; Liquid Temperature : 21.6 °C

#### DASY5 Configuration:

- Probe: EX3DV4 SN3590; ConvF(8.77, 8.77, 8.77); Calibrated: 2011/02/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2011/08/29
- Phantom: SAM with CRP v5.0 Front; Type: QD000P40CD; Serial: TP:1653
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

Ch425/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 1.407 mW/g

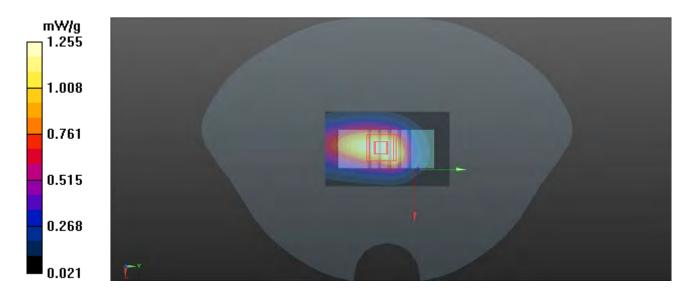
Ch425/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 30.246 V/m; Power Drift = -0.152 dB

Peak SAR (extrapolated) = 1.527 W/kg

SAR(1 g) = 0.973 mW/g; SAR(10 g) = 0.585 mW/g

Maximum value of SAR (measured) = 1.255 mW/g



# P123 CDMA2000\_BC15\_EVDO Rev0\_Horizontal Down\_0.5cm\_Ch875

#### **DUT: 111215C07**

Communication System: CDMA2000; Frequency: 1753.75 MHz; Duty Cycle: 1:1

Medium: B1800\_1218 Medium parameters used: f = 1754 MHz;  $\sigma = 1.522$  mho/m;  $\varepsilon_r = 54.318$ ;  $\rho = 1.522$  mho/m;  $\varepsilon_r = 54.318$ ;  $\rho = 1.522$  mho/m;  $\varepsilon_r =$ 

Date: 2011/12/18

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.6 °C

#### DASY5 Configuration:

- Probe: EX3DV4 SN3590; ConvF(8.77, 8.77, 8.77); Calibrated: 2011/02/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2011/08/29
- Phantom: SAM with CRP v5.0 Front; Type: QD000P40CD; Serial: TP:1653
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

Ch875/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 1.386 mW/g

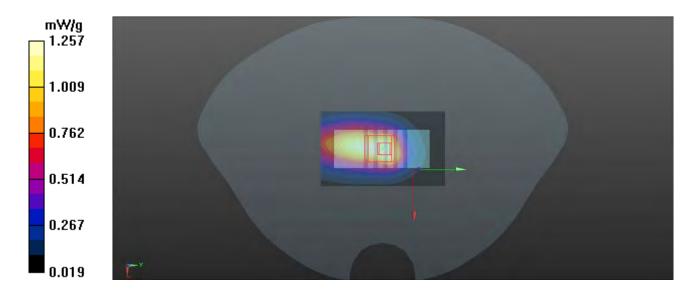
Ch875/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 28.739 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.541 W/kg

SAR(1 g) = 0.948 mW/g; SAR(10 g) = 0.554 mW/g

Maximum value of SAR (measured) = 1.257 mW/g



# P135 CDMA2000 BC1\_EVDO Rev0\_Horizontal Up\_0.5cm\_Ch25

#### **DUT: 111215C07**

Communication System: CDMA2000 BC1; Frequency: 1851.25 MHz; Duty Cycle: 1:1

Medium: B1900\_1226 Medium parameters used: f = 1851.4 MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho =$ 

Date: 2011/12/26

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.2 °C; Liquid Temperature: 21.5 °C

#### DASY4 Configuration:

- Probe: EX3DV4 SN3800; ConvF(6.97, 6.97, 6.97); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Ch25/Area Scan (31x51x1):** Measurement grid: dx=20mm, dy=20mm Maximum value of SAR (interpolated) = 1.30 mW/g

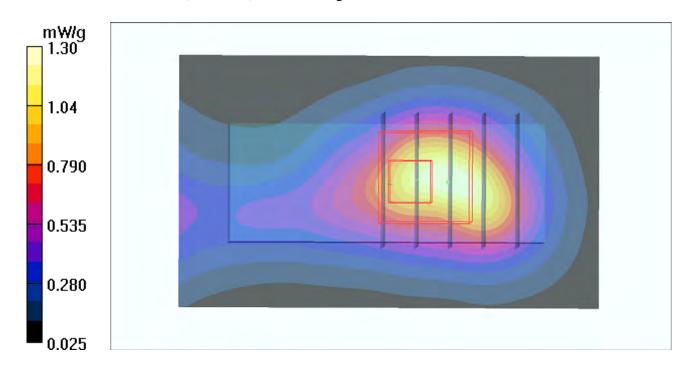
Ch25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 28.2 V/m; Power Drift = -0.121 dB

Peak SAR (extrapolated) = 1.64 W/kg

SAR(1 g) = 0.912 mW/g; SAR(10 g) = 0.473 mW/g

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



# P136 CDMA2000 BC1\_EVDO Rev0\_Horizontal Down\_0.5cm\_Ch25

#### **DUT: 111215C07**

Communication System: CDMA2000 BC1; Frequency: 1851.25 MHz; Duty Cycle: 1:1

Medium: B1900\_1226 Medium parameters used: f=1851.4 MHz;  $\sigma=1.491$  mho/m;  $\epsilon_r=52.483$ ;  $\rho=1.491$  mho/m;  $\epsilon_r=52.483$ 

Date: 2011/12/26

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.5 °C

#### DASY5 Configuration:

- Probe: EX3DV4 SN3800; ConvF(6.97, 6.97, 6.97); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.4 (4989)

Ch25/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 1.672 mW/g

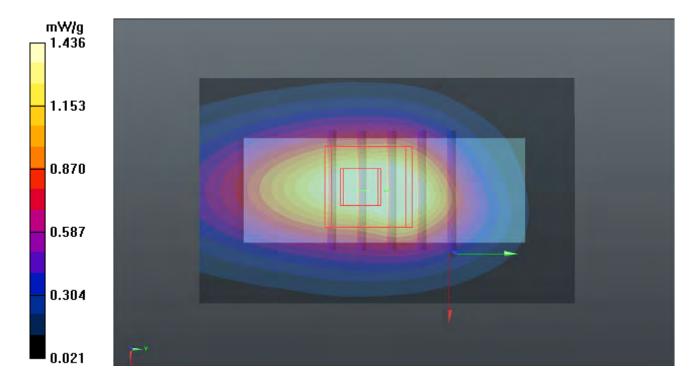
Ch25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

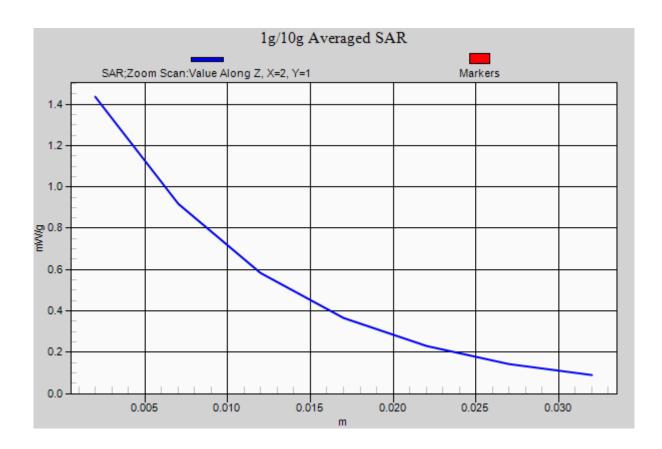
Reference Value = 30.530 V/m; Power Drift = 0.123 dB

Peak SAR (extrapolated) = 1.7500

SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.649 mW/g

Maximum value of SAR (measured) = 1.436 mW/g





# P137 CDMA2000 BC1\_EVDO Rev0\_Vertical Front\_0.5cm\_Ch25

#### **DUT: 111215C07**

Communication System: CDMA2000 BC1; Frequency: 1851.25 MHz; Duty Cycle: 1:1

Medium: B1900\_1226 Medium parameters used: f = 1851.4 MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho =$ 

Date: 2011/12/26

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.5 °C

#### **DASY4** Configuration:

- Probe: EX3DV4 SN3800; ConvF(6.97, 6.97, 6.97); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch25/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.515 mW/g

### Ch25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.3 V/m; Power Drift = 0.095 dB

Peak SAR (extrapolated) = 0.640 W/kg

SAR(1 g) = 0.390 mW/g; SAR(10 g) = 0.228 mW/g

Maximum value of SAR (measured) = 0.523 mW/g

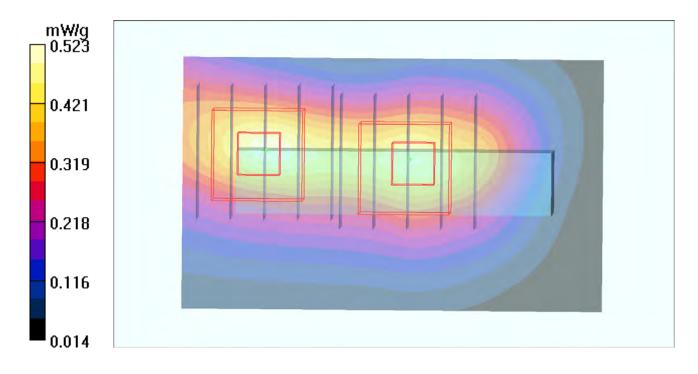
#### Ch25/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.3 V/m; Power Drift = 0.095 dB

Peak SAR (extrapolated) = 0.593 W/kg

SAR(1 g) = 0.362 mW/g; SAR(10 g) = 0.213 mW/g

Maximum value of SAR (measured) = 0.484 mW/g



# P138 CDMA2000 BC1\_EVDO Rev0\_Vertical Back\_0.5cm\_Ch25

#### **DUT: 111215C07**

Communication System: CDMA2000 BC1; Frequency: 1851.25 MHz; Duty Cycle: 1:1

Medium: B1900\_1226 Medium parameters used: f = 1851.4 MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho =$ 

Date: 2011/12/26

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.5 °C

#### DASY4 Configuration:

- Probe: EX3DV4 SN3800; ConvF(6.97, 6.97, 6.97); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Ch25/Area Scan (31x51x1):** Measurement grid: dx=20mm, dy=20mm Maximum value of SAR (interpolated) = 0.619 mW/g

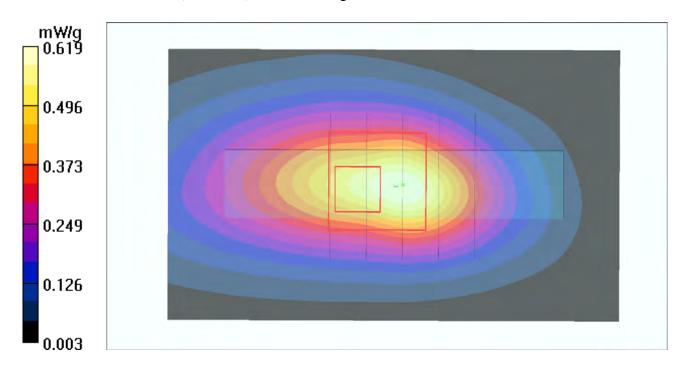
Ch25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.7 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 0.676 mW/g; SAR(10 g) = 0.361 mW/g

Maximum value of SAR (measured) = 0.949 mW/g



# P139 CDMA2000 BC1\_EVDO Rev0\_Tip Mode\_0.5cm\_Ch25

#### **DUT: 111215C07**

Communication System: CDMA2000 BC1; Frequency: 1851.25 MHz; Duty Cycle: 1:1

Medium: B1900\_1226 Medium parameters used: f = 1851.4 MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho =$ 

Date: 2011/12/26

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.5 °C

#### DASY4 Configuration:

- Probe: EX3DV4 SN3800; ConvF(6.97, 6.97, 6.97); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Ch25/Area Scan (31x41x1):** Measurement grid: dx=20mm, dy=20mm Maximum value of SAR (interpolated) = 0.182 mW/g

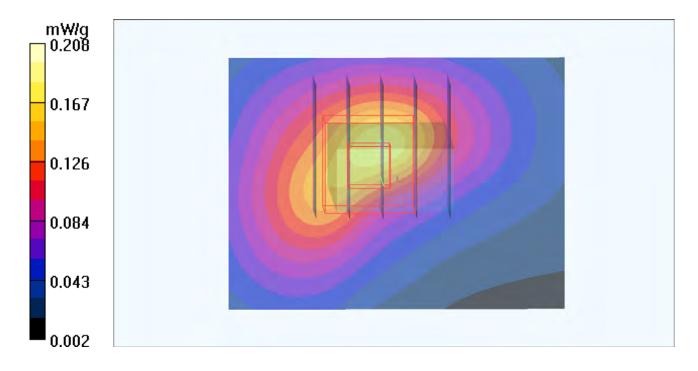
Ch25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.8 V/m; Power Drift = 0.174 dB

Peak SAR (extrapolated) = 0.267 W/kg

SAR(1 g) = 0.161 mW/g; SAR(10 g) = 0.089 mW/g

Maximum value of SAR (measured) = 0.208 mW/g



# P140 CDMA2000 BC1 EVDO Rev0 Horizontal Up 0.5cm Ch600

#### **DUT: 111215C07**

Communication System: CDMA2000 BC1; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: B1900\_1226 Medium parameters used: f = 1880.1 MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 52.4$ ;  $\rho =$ 

Date: 2011/12/26

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.5 °C

#### DASY4 Configuration:

- Probe: EX3DV4 SN3800; ConvF(6.97, 6.97, 6.97); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Ch600/Area Scan (31x51x1):** Measurement grid: dx=20mm, dy=20mm Maximum value of SAR (interpolated) = 1.07 mW/g

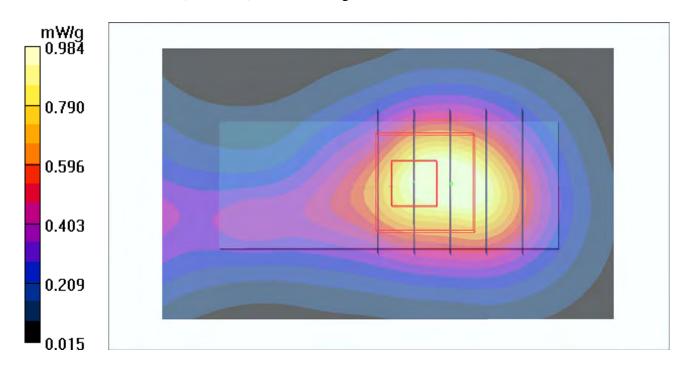
Ch600/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.7 V/m; Power Drift = -0.179 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.709 mW/g; SAR(10 g) = 0.382 mW/g

Maximum value of SAR (measured) = 0.984 mW/g



# P141 CDMA2000 BC1\_EVDO Rev0\_Horizontal Up\_0.5cm\_Ch1175

#### **DUT: 111215C07**

Communication System: CDMA2000 BC1; Frequency: 1908.75 MHz; Duty Cycle: 1:1

Medium: B1900\_1226 Medium parameters used: f = 1908.8 MHz;  $\sigma = 1.56$  mho/m;  $\epsilon_r = 52.3$ ;  $\rho =$ 

Date: 2011/12/26

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.5 °C

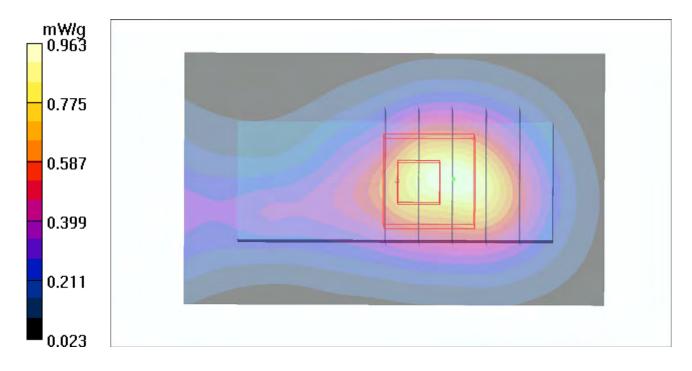
#### DASY4 Configuration:

- Probe: EX3DV4 SN3800; ConvF(6.97, 6.97, 6.97); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# **Ch1175/Area Scan (31x51x1):** Measurement grid: dx=20mm, dy=20mm Maximum value of SAR (interpolated) = 0.963 mW/g

Ch1175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm Reference Value = 22.6 V/m; Power Drift = -0.029 dB Peak SAR (extrapolated) = 1.14 W/kg SAR(1 g) = 0.641 mW/g; SAR(10 g) = 0.344 mW/g

Maximum value of SAR (measured) = 0.891 mW/g



# P142 CDMA2000 BC1\_EVDO Rev0\_Horizontal Down\_0.5cm\_Ch600

#### **DUT: 111215C07**

Communication System: CDMA2000 BC1; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: B1900\_1226 Medium parameters used: f = 1880.1 MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 52.4$ ;  $\rho =$ 

Date: 2011/12/26

 $1000 \text{ kg/m}^3$ 

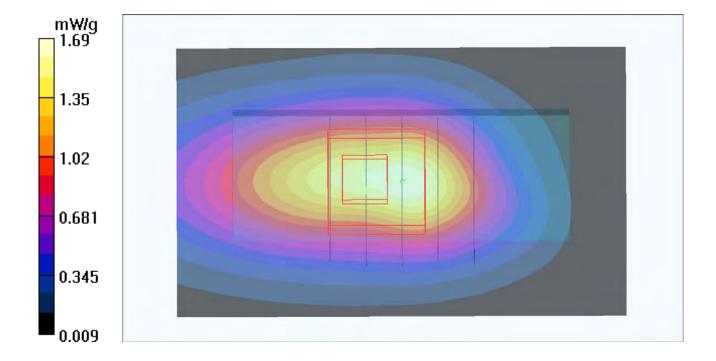
Ambient Temperature: 22.5 °C; Liquid Temperature: 21.5 °C

#### DASY4 Configuration:

- Probe: EX3DV4 SN3800; ConvF(6.97, 6.97, 6.97); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Ch600/Area Scan (31x51x1):** Measurement grid: dx=20mm, dy=20mm Maximum value of SAR (interpolated) = 1.69 mW/g

Ch600/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm Reference Value = 31.9 V/m; Power Drift = -0.129 dB Peak SAR (extrapolated) = 1.76 W/kg SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.646 mW/g Maximum value of SAR (measured) = 1.44 mW/g



# P143 CDMA2000 BC1\_EVDO Rev0\_Horizontal Down\_0.5cm\_Ch1175

#### **DUT: 111215C07**

Communication System: CDMA2000 BC1; Frequency: 1908.75 MHz; Duty Cycle: 1:1

Medium: B1900\_1226 Medium parameters used: f = 1908.8 MHz;  $\sigma = 1.56$  mho/m;  $\epsilon_r = 52.3$ ;  $\rho =$ 

Date: 2011/12/26

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.5 °C

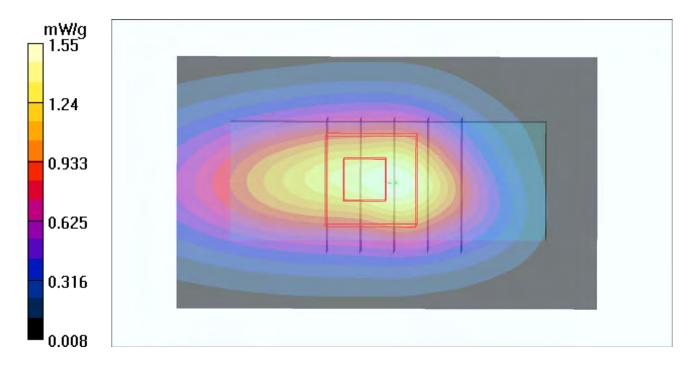
#### DASY4 Configuration:

- Probe: EX3DV4 SN3800; ConvF(6.97, 6.97, 6.97); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# **Ch1175/Area Scan (31x51x1):** Measurement grid: dx=20mm, dy=20mm Maximum value of SAR (interpolated) = 1.55 mW/g

**Ch1175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm Reference Value = 29.7 V/m; Power Drift = -0.115 dB Peak SAR (extrapolated) = 1.61 W/kg

SAR(1 g) = 0.997 mW/g; SAR(10 g) = 0.582 mW/gMaximum value of SAR (measured) = 1.31 mW/g



# P31 LTE XII\_QPSK\_10M\_Horizontal Up\_0.5cm\_Ch23130\_25RB\_Offset 12

#### **DUT: 111215C07**

Communication System: LTE Band XII; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_1230 Medium parameters used: f = 711 MHz;  $\sigma = 0.943$  mho/m;  $\varepsilon_r = 56.5$ ;  $\rho = 1000$ 

Date: 2011/12/30

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.5 °C

#### DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.499 mW/g

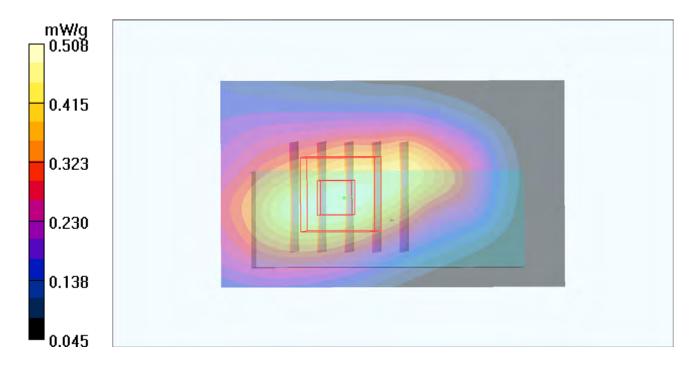
### Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.1 V/m; Power Drift = 0.037 dB

Peak SAR (extrapolated) = 0.591 W/kg

SAR(1 g) = 0.416 mW/g; SAR(10 g) = 0.285 mW/g

Maximum value of SAR (measured) = 0.508 mW/g



# P32 LTE XII\_QPSK\_10M\_Horizontal Down\_0.5cm\_Ch23130\_25RB\_Offset 12

Date: 2012/01/04

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.8 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.310 mW/g

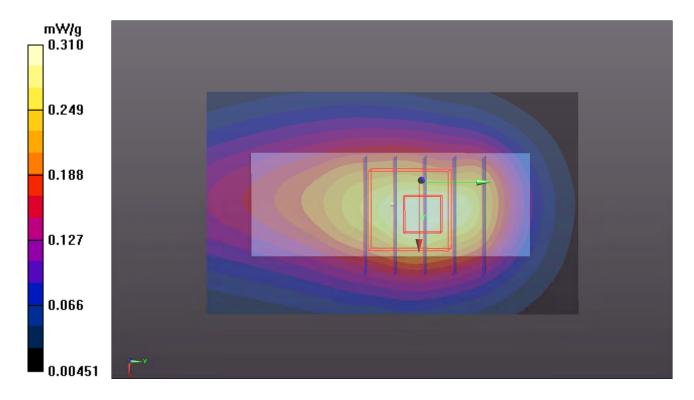
Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.707 V/m; Power Drift = -0.0013 dB

Peak SAR (extrapolated) = 0.3570

SAR(1 g) = 0.242 mW/g; SAR(10 g) = 0.159 mW/g

Maximum value of SAR (measured) = 0.305 mW/g



# P33 LTE XII\_QPSK\_10M\_Vertical Front\_0.5cm\_Ch23130\_25RB\_Offset 12

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

Date: 2012/01/04

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4°C; Liquid Temperature: 21.8°C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

# Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.121 mW/g

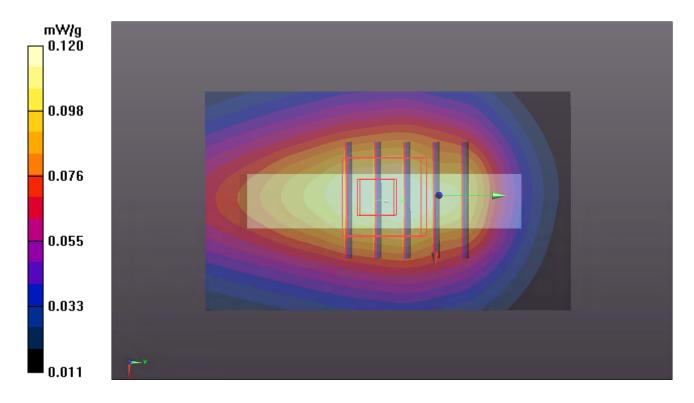
# Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.647 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.1400

SAR(1 g) = 0.098 mW/g; SAR(10 g) = 0.068 mW/g

Maximum value of SAR (measured) = 0.120 mW/g



# P34 LTE XII\_QPSK\_10M\_Vertical Back\_0.5cm\_Ch23130\_25RB\_Offset 12

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

Date: 2012/01/04

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.6°C; Liquid Temperature: 21.8°C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.251 mW/g

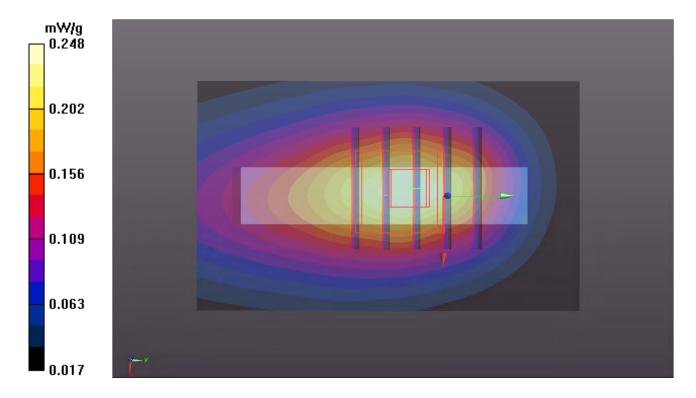
Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.527 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.2890

SAR(1 g) = 0.196 mW/g; SAR(10 g) = 0.130 mW/g

Maximum value of SAR (measured) = 0.248 mW/g



# P35 LTE XII\_QPSK\_10M\_Tip Mode\_0.5cm\_Ch23130\_25RB\_Offset 12

#### **DUT: 111215C07**

Communication System: LTE Band XII; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_1230 Medium parameters used: f = 711 MHz;  $\sigma = 0.943$  mho/m;  $\varepsilon_r = 56.5$ ;  $\rho = 1000$ 

Date: 2011/12/30

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.5 °C

#### DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.016 mW/g

### Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.43 V/m; Power Drift = -0.021 dB

Peak SAR (extrapolated) = 0.025 W/kg

SAR(1 g) = 0.013 mW/g; SAR(10 g) = 0.0082 mW/g

Maximum value of SAR (measured) = 0.018 mW/g



# P36 LTE XII\_QPSK\_10M\_Horizontal Up\_0.5cm\_Ch23130\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE Band XII; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_1230 Medium parameters used: f = 711 MHz;  $\sigma = 0.943$  mho/m;  $\epsilon_r = 56.5$ ;  $\rho = 1000$ 

Date: 2011/12/30

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.5 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.508 mW/g

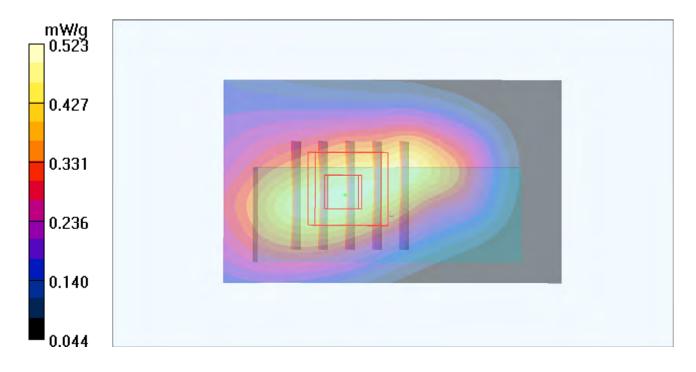
## Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.2 V/m; Power Drift = 0.058 dB

Peak SAR (extrapolated) = 0.604 W/kg

### SAR(1 g) = 0.429 mW/g; SAR(10 g) = 0.295 mW/g

Maximum value of SAR (measured) = 0.523 mW/g



# P37 LTE XII\_QPSK\_10M\_Horizontal Down\_0.5cm\_Ch23130\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

Date: 2012/01/04

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.8 °C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.325 mW/g

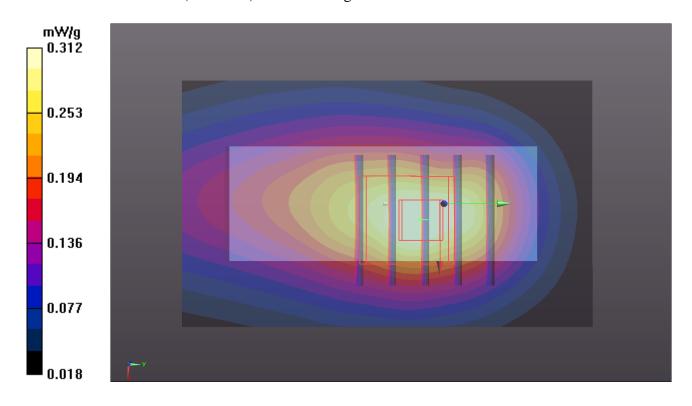
Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.976 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.3630

SAR(1 g) = 0.246 mW/g; SAR(10 g) = 0.162 mW/g

Maximum value of SAR (measured) = 0.312 mW/g



## P38 LTE XII\_QPSK\_10M\_Vertical Front\_0.5cm\_Ch23130\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

Date: 2012/01/04

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.8 °C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.121 mW/g

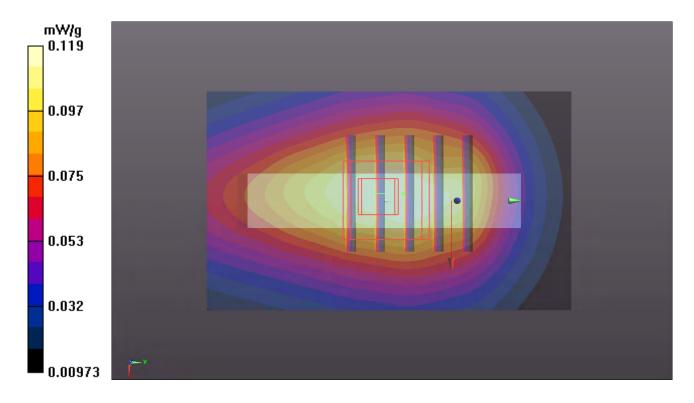
Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.845 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.1390

SAR(1 g) = 0.097 mW/g; SAR(10 g) = 0.067 mW/g

Maximum value of SAR (measured) = 0.119 mW/g



# P39 LTE XII\_QPSK\_10M\_Vertical Back\_0.5cm\_Ch23130\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

Date: 2012/01/04

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.8 °C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.251 mW/g

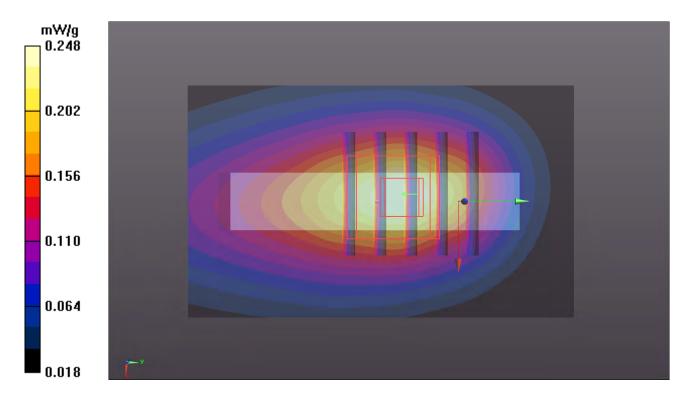
Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.616 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.2890

SAR(1 g) = 0.198 mW/g; SAR(10 g) = 0.131 mW/g

Maximum value of SAR (measured) = 0.248 mW/g



## P40 LTE XII\_QPSK\_10M\_Tip Mode\_0.5cm\_Ch23130\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE Band XII; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_1230 Medium parameters used: f = 711 MHz;  $\sigma = 0.943$  mho/m;  $\varepsilon_r = 56.5$ ;  $\rho = 1000$ 

Date: 2011/12/30

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.5 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.019 mW/g

## Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.43 V/m; Power Drift = 0.010 dB

Peak SAR (extrapolated) = 0.023 W/kg

### SAR(1 g) = 0.013 mW/g; SAR(10 g) = 0.00815 mW/g

Maximum value of SAR (measured) = 0.017 mW/g



# P41 LTE XII\_QPSK\_10M\_Horizontal Up\_0.5cm\_Ch23130\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE Band XII; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_1230 Medium parameters used: f = 711 MHz;  $\sigma = 0.943$  mho/m;  $\varepsilon_r = 56.462$ ;  $\rho =$ 

Date: 2011/12/30

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.5 °C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.4 (4989)

Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.581 mW/g

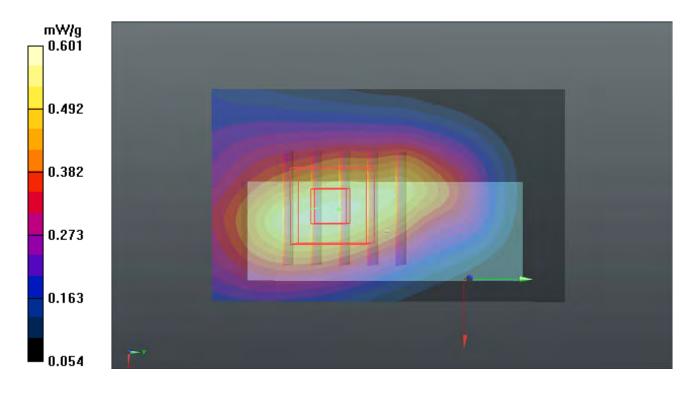
Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

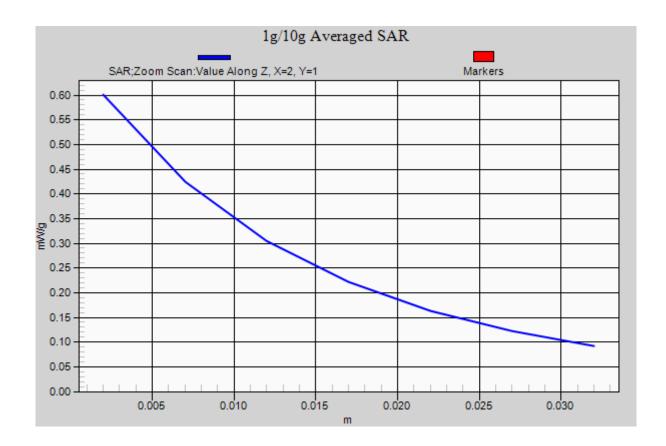
Reference Value = 22.110 V/m; Power Drift = 0.0039 dB

Peak SAR (extrapolated) = 0.7010

SAR(1 g) = 0.493 mW/g; SAR(10 g) = 0.339 mW/g

Maximum value of SAR (measured) = 0.601 mW/g





# P42 LTE XII\_QPSK\_10M\_Horizontal Down\_0.5cm\_Ch23130\_1RB\_Offset 49

Date: 2012/01/04

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.8 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

# Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.356 mW/g

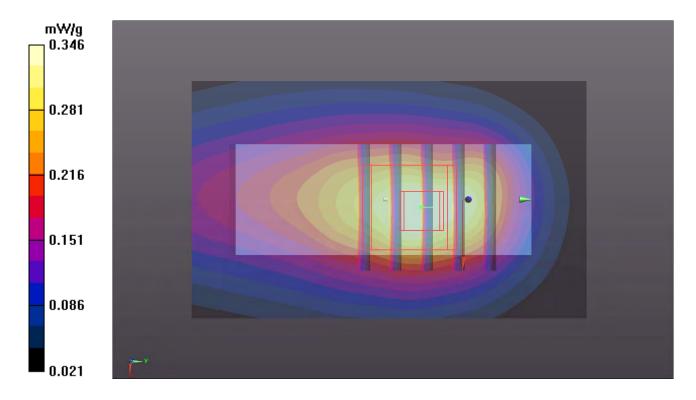
# Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.988 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.4040

## SAR(1 g) = 0.274 mW/g; SAR(10 g) = 0.180 mW/g

Maximum value of SAR (measured) = 0.346 mW/g



## P43 LTE XII\_QPSK\_10M\_Vertical Front\_0.5cm\_Ch23130\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

Date: 2012/01/04

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4°C; Liquid Temperature: 21.8°C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.165 mW/g

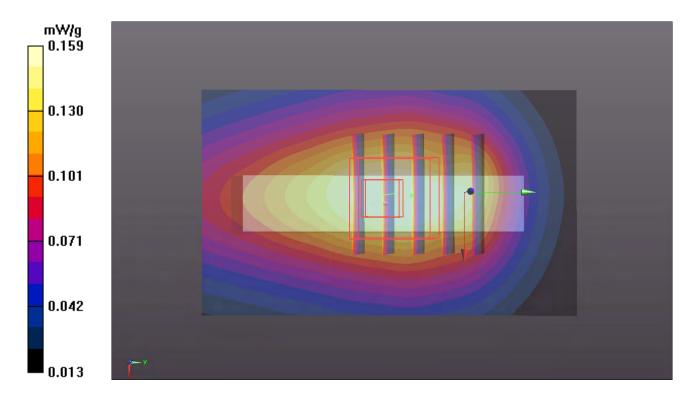
Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.299 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.1850

SAR(1 g) = 0.130 mW/g; SAR(10 g) = 0.091 mW/g

Maximum value of SAR (measured) = 0.159 mW/g



# P44 LTE XII\_QPSK\_10M\_Vertical Back\_0.5cm\_Ch23130\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

Date: 2012/01/04

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.8 °C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.288 mW/g

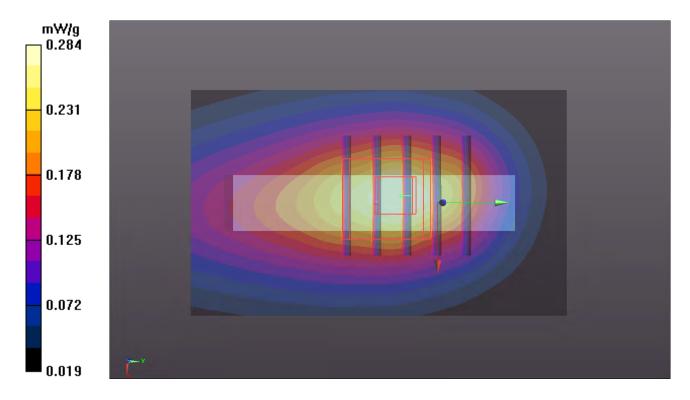
Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.725 V/m; Power Drift = 0.0052 dB

Peak SAR (extrapolated) = 0.3330

SAR(1 g) = 0.225 mW/g; SAR(10 g) = 0.149 mW/g

Maximum value of SAR (measured) = 0.284 mW/g



# P45 LTE XII\_QPSK\_10M\_Tip Mode\_0.5cm\_Ch23130\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE Band XII; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_1230 Medium parameters used: f = 711 MHz;  $\sigma = 0.943$  mho/m;  $\varepsilon_r = 56.5$ ;  $\rho = 1000$ 

Date: 2011/12/30

 $kg/m^3$ 

Ambient Temperature: 22.2 °C; Liquid Temperature: 21.5 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.020 mW/g

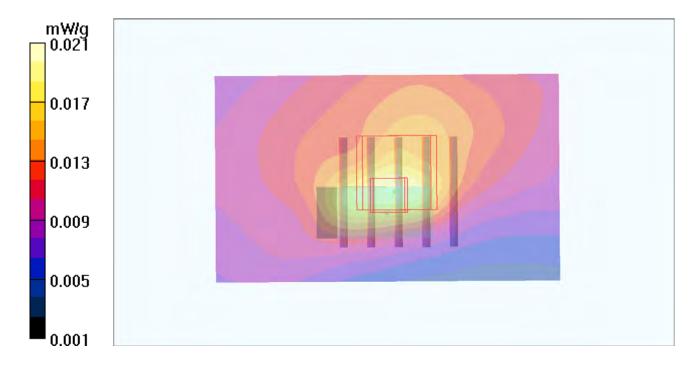
## Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.78 V/m; Power Drift = 0.145 dB

Peak SAR (extrapolated) = 0.028 W/kg

### SAR(1 g) = 0.015 mW/g; SAR(10 g) = 0.00929 mW/g

Maximum value of SAR (measured) = 0.021 mW/g



# P76 LTE XII\_16QAM\_10M\_Horizontal Up\_0.5cm\_Ch23130\_25RB\_Offset 12

Date: 2012/01/04

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.8 °C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.501 mW/g

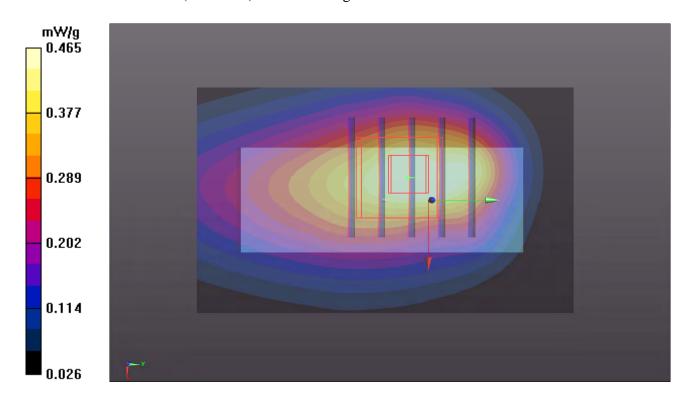
Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.571 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.5430

SAR(1 g) = 0.367 mW/g; SAR(10 g) = 0.239 mW/g

Maximum value of SAR (measured) = 0.465 mW/g



# P77 LTE XII\_16QAM\_10M\_Horizontal Down\_0.5cm\_Ch23130\_25RB\_Offset 12

Date: 2012/01/04

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4°C; Liquid Temperature: 21.8°C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

# Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.305 mW/g

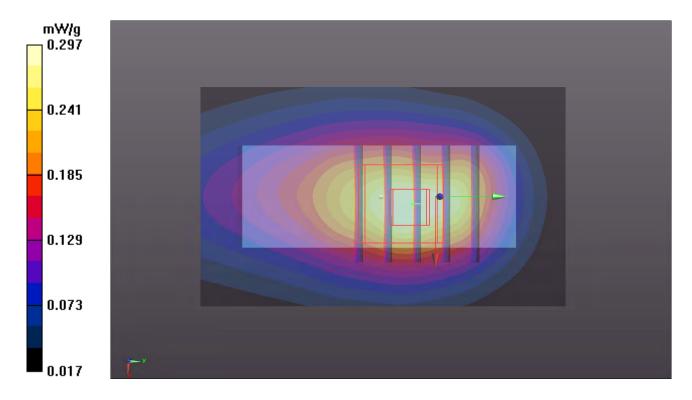
## Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.522 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.3450

SAR(1 g) = 0.235 mW/g; SAR(10 g) = 0.153 mW/g

Maximum value of SAR (measured) = 0.297 mW/g



## P78 LTE XII\_16QAM\_10M\_Vertical Front\_0.5cm\_Ch23130\_25RB\_Offset 12

Date: 2012/01/04

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.8 °C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.136 mW/g

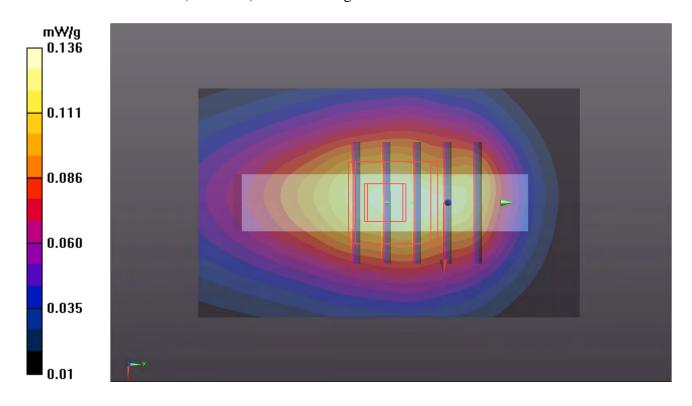
Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.160 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.1590

SAR(1 g) = 0.109 mW/g; SAR(10 g) = 0.074 mW/g

Maximum value of SAR (measured) = 0.136 mW/g



## P79 LTE XII\_16QAM\_10M\_Vertical Back\_0.5cm\_Ch23130\_25RB\_Offset 12

Date: 2012/01/04

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4°C; Liquid Temperature: 21.8°C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.202 mW/g

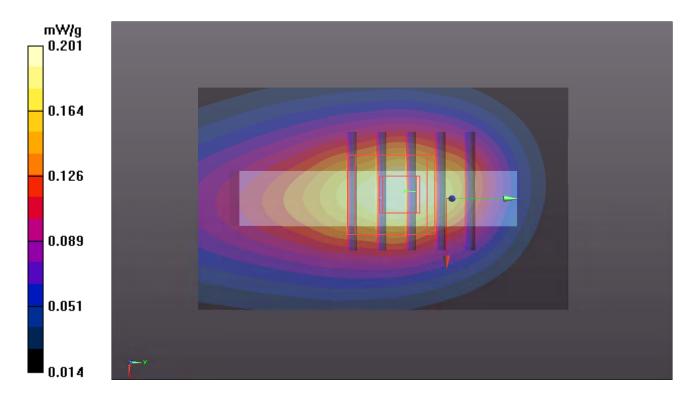
Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.883 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.2350

SAR(1 g) = 0.160 mW/g; SAR(10 g) = 0.107 mW/g

Maximum value of SAR (measured) = 0.201 mW/g



## P80 LTE XII\_16QAM\_10M\_Tip Mode\_0.5cm\_Ch23130\_25RB\_Offset 12

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

Date: 2012/01/04

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.8 °C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

# Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.013 mW/g

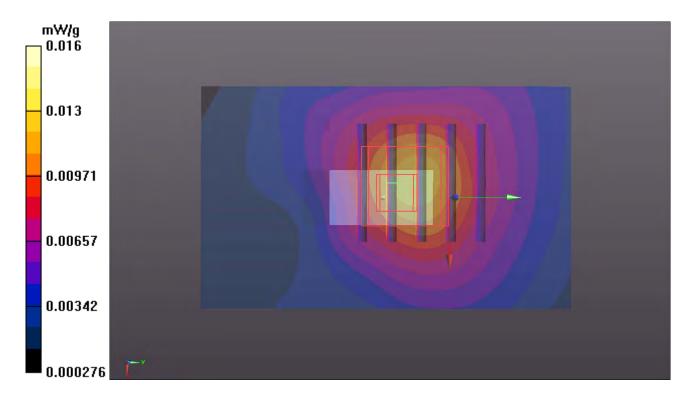
## Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.377 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.0230

SAR(1 g) = 0.012 mW/g; SAR(10 g) = 0.00659 mW/g

Maximum value of SAR (measured) = 0.016 mW/g



# P81 LTE XII\_16QAM\_10M\_Horizontal Up\_0.5cm\_Ch23130\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

Date: 2012/01/04

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.8 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

# Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.551 mW/g

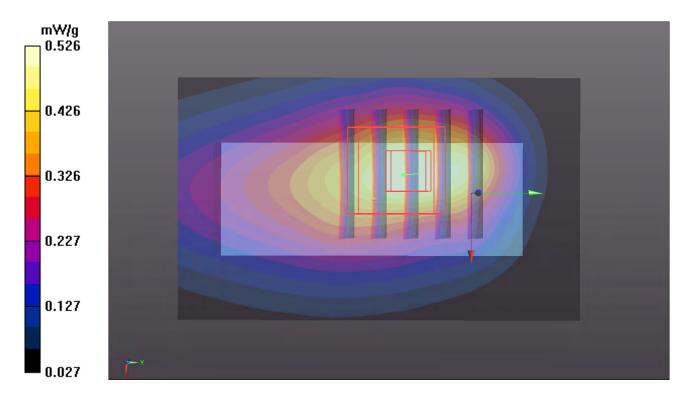
# Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.634 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.6420

SAR(1 g) = 0.403 mW/g; SAR(10 g) = 0.261 mW/g

Maximum value of SAR (measured) = 0.526 mW/g



## P82 LTE XII\_16QAM\_10M\_Horizontal Down\_0.5cm\_Ch23130\_1RB\_Offset 0

Date: 2012/01/04

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.8 °C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.333 mW/g

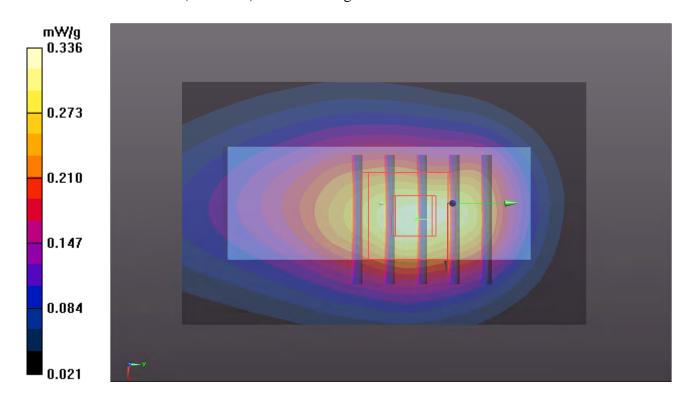
Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.721 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 0.4010

SAR(1 g) = 0.263 mW/g; SAR(10 g) = 0.170 mW/g

Maximum value of SAR (measured) = 0.336 mW/g



## P83 LTE XII\_16QAM\_10M\_Vertical Front\_0.5cm\_Ch23130\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

Date: 2012/01/04

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.8 °C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

# Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.116 mW/g

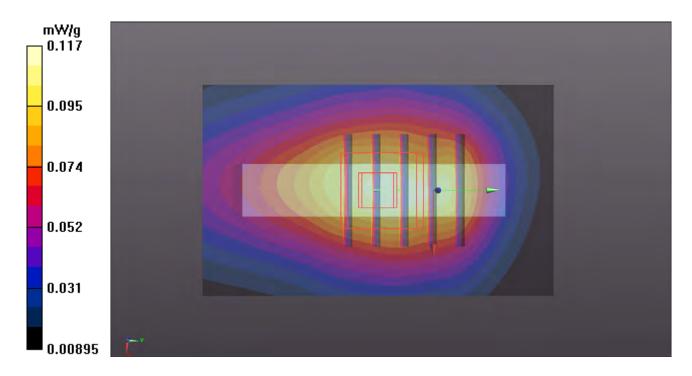
## Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.297 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.1370

SAR(1 g) = 0.093 mW/g; SAR(10 g) = 0.063 mW/g

Maximum value of SAR (measured) = 0.117 mW/g



## P84 LTE XII\_16QAM\_10M\_Vertical Back\_0.5cm\_Ch23130\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

Date: 2012/01/04

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.8 °C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.242 mW/g

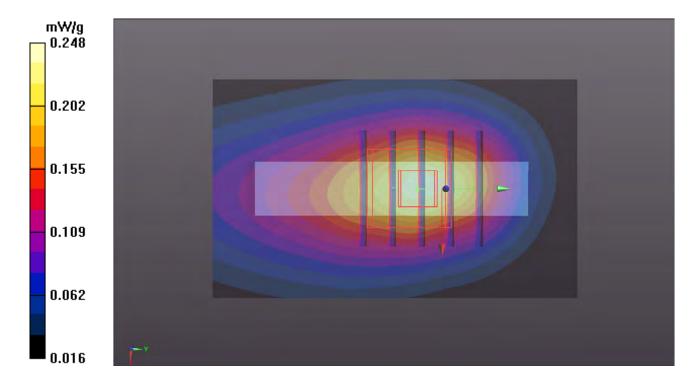
Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.409 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 0.2860

SAR(1 g) = 0.195 mW/g; SAR(10 g) = 0.127 mW/g

Maximum value of SAR (measured) = 0.248 mW/g



# P85 LTE XII\_16QAM\_10M\_Tip Mode\_0.5cm\_Ch23130\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

Date: 2012/01/04

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.8 °C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.013 mW/g

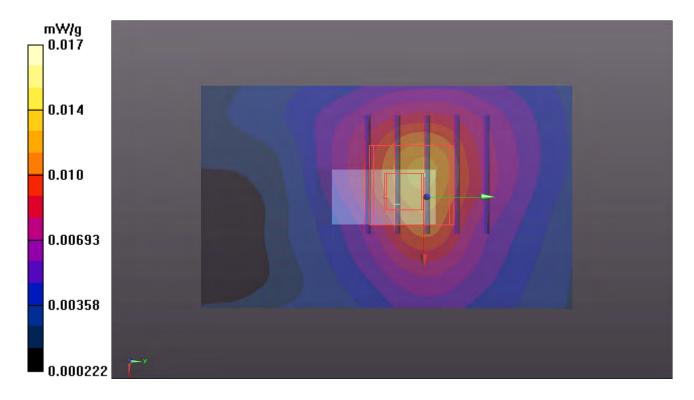
Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.436 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.0240

SAR(1 g) = 0.012 mW/g; SAR(10 g) = 0.00688 mW/g

Maximum value of SAR (measured) = 0.017 mW/g



# P86 LTE XII\_16QAM\_10M\_Horizontal Up\_0.5cm\_Ch23130\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

Date: 2012/01/04

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.8 °C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

# Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.561 mW/g

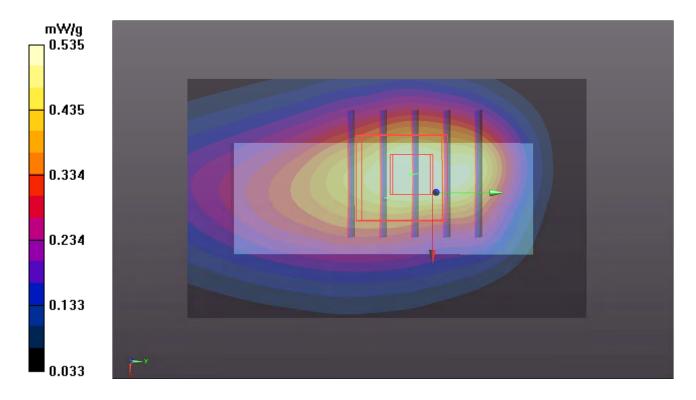
## Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.124 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 0.6130

SAR(1 g) = 0.422 mW/g; SAR(10 g) = 0.276 mW/g

Maximum value of SAR (measured) = 0.535 mW/g



## P87 LTE XII\_16QAM\_10M\_Horizontal Down\_0.5cm\_Ch23130\_1RB\_Offset 49

Date: 2012/01/04

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4°C; Liquid Temperature: 21.8°C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

# Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.388 mW/g

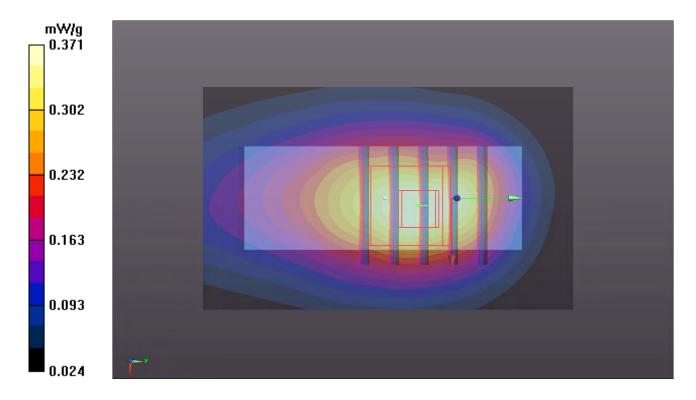
## Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.875 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.4330

## SAR(1 g) = 0.297 mW/g; SAR(10 g) = 0.195 mW/g

Maximum value of SAR (measured) = 0.371 mW/g



## P88 LTE XII\_16QAM\_10M\_Vertical Front\_0.5cm\_Ch23130\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

Date: 2012/01/04

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.8 °C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

# Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.147 mW/g

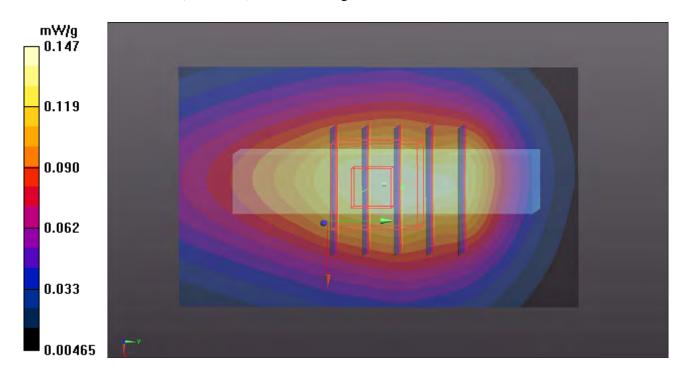
## Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.884 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.1750

SAR(1 g) = 0.121 mW/g; SAR(10 g) = 0.084 mW/g

Maximum value of SAR (measured) = 0.152 mW/g



## P89 LTE XII\_16QAM\_10M\_Vertical Back\_0.5cm\_Ch23130\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

Date: 2012/01/04

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.6°C; Liquid Temperature: 21.8°C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

# Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.293 mW/g

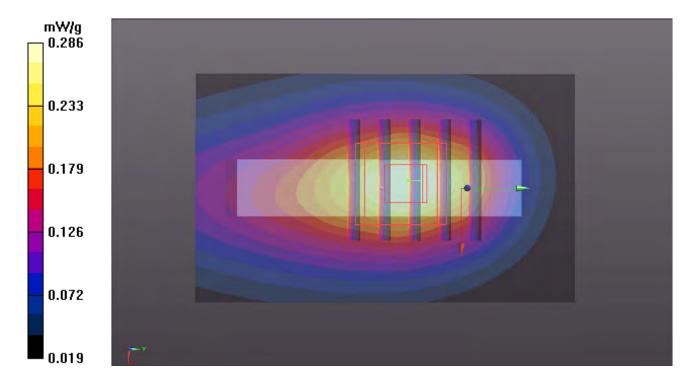
# Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.329 V/m; Power Drift = 0.131 dB

Peak SAR (extrapolated) = 0.3330

SAR(1 g) = 0.228 mW/g; SAR(10 g) = 0.149 mW/g

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



## P90 LTE XII\_16QAM\_10M\_Tip Mode\_0.5cm\_Ch23130\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: B750\_0104 Medium parameters used: f = 711 MHz;  $\sigma = 0.935$  mho/m;  $\varepsilon_r = 55.769$ ;  $\rho =$ 

Date: 2012/01/04

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.6°C; Liquid Temperature: 21.8°C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

# Ch23130/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.017 mW/g

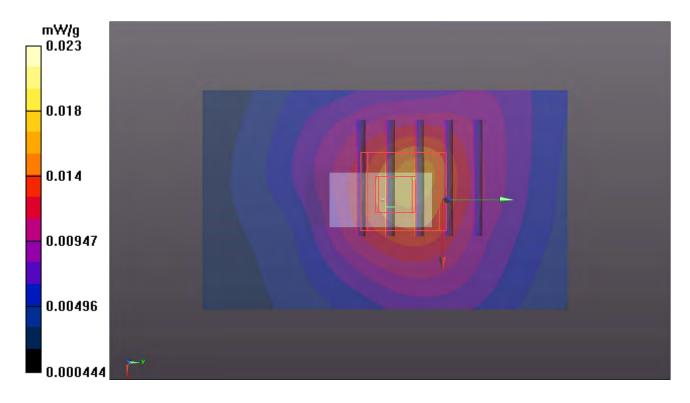
## Ch23130/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.118 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.0320

SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.00898 mW/g

Maximum value of SAR (measured) = 0.023 mW/g



# P01 LTE XIII\_QPSK\_10M\_Horizontal Up\_0.5cm\_Ch23230\_25RB\_Offset12

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 782 MHz;  $\sigma = 0.992$  mho/m;  $\varepsilon_r = 54.931$ ;  $\rho =$ 

Date: 2011/12/29

 $1000 \text{ kg/m}^3$ 

Ambient Temperature : 22.3 °C; Liquid Temperature : 21.7 °C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, Version 4.7 (80); SEMCAD X Version 14.6.4 (4989)

Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.619 mW/g

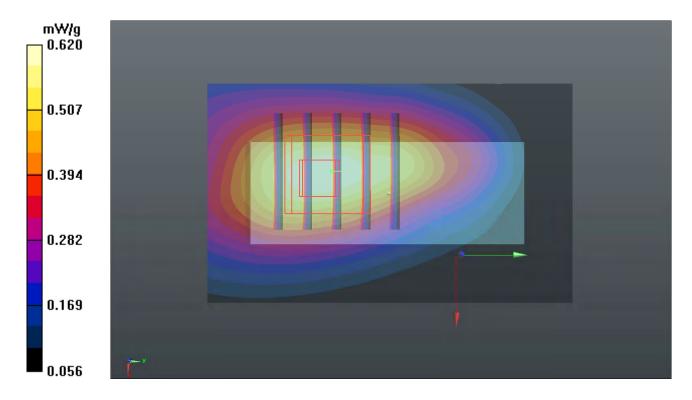
Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.968 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.7320

SAR(1 g) = 0.507 mW/g; SAR(10 g) = 0.340 mW/g

Maximum value of SAR (measured) = 0.620 mW/g



## P02 LTE XIII\_QPSK\_10M\_Horizontal Down\_0.5cm\_Ch23230\_25RB\_Offset 12

Date: 2011/12/29

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 782 MHz;  $\sigma = 0.992$  mho/m;  $\varepsilon_r = 54.9$ ;  $\rho = 1000$ 

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.7 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

## Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.532 mW/g

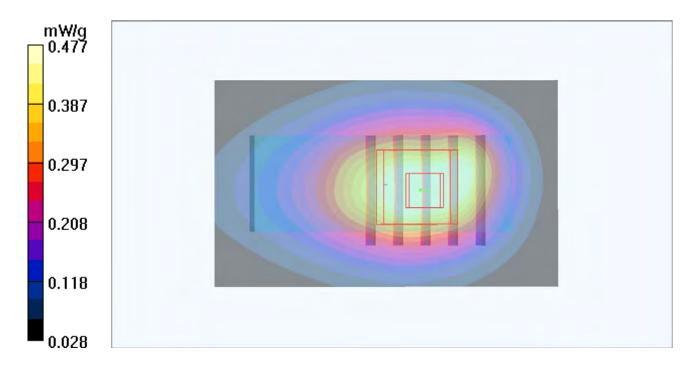
## Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.2 V/m; Power Drift = -0.109 dB

Peak SAR (extrapolated) = 0.575 W/kg

SAR(1 g) = 0.379 mW/g; SAR(10 g) = 0.245 mW/g

Maximum value of SAR (measured) = 0.477 mW/g



## P03 LTE XIII\_QPSK\_10M\_Vertical Front\_0.5cm\_Ch23230\_25RB\_Offset 12

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 782 MHz;  $\sigma = 0.992$  mho/m;  $\varepsilon_r = 54.9$ ;  $\rho = 1000$ 

Date: 2011/12/29

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.7 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.284 mW/g

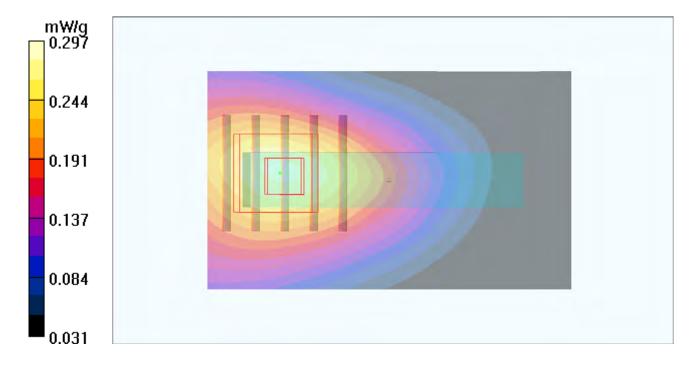
## Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.0 V/m; Power Drift = 0.106 dB

Peak SAR (extrapolated) = 0.348 W/kg

SAR(1 g) = 0.240 mW/g; SAR(10 g) = 0.166 mW/g

Maximum value of SAR (measured) = 0.297 mW/g



## P04 LTE XIII\_QPSK\_10M\_Vertical Back\_0.5cm\_Ch23230\_25RB\_Offset 12

Date: 2011/12/30

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1230 Medium parameters used: f = 782 MHz;  $\sigma = 1$  mho/m;  $\varepsilon_r = 55.9$ ;  $\rho = 1000$ 

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.5 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.288 mW/g

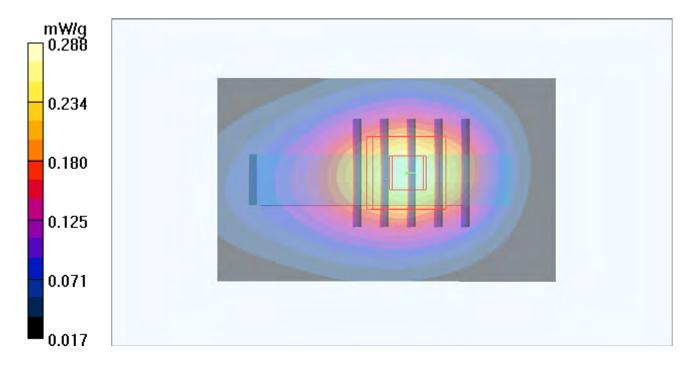
## Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.8 V/m; Power Drift = 0.147 dB

Peak SAR (extrapolated) = 0.342 W/kg

SAR(1 g) = 0.224 mW/g; SAR(10 g) = 0.143 mW/g

Maximum value of SAR (measured) = 0.288 mW/g



## P05 LTE XIII\_QPSK\_10M\_Tip Mode\_0.5cm\_Ch23230\_25RB\_Offset 12

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1230 Medium parameters used: f = 782 MHz;  $\sigma = 1$  mho/m;  $\varepsilon_r = 55.9$ ;  $\rho = 1000$ 

Date: 2011/12/30

 $kg/m^3$ 

Ambient Temperature: 22.4°C; Liquid Temperature: 21.5°C

#### DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.016 mW/g

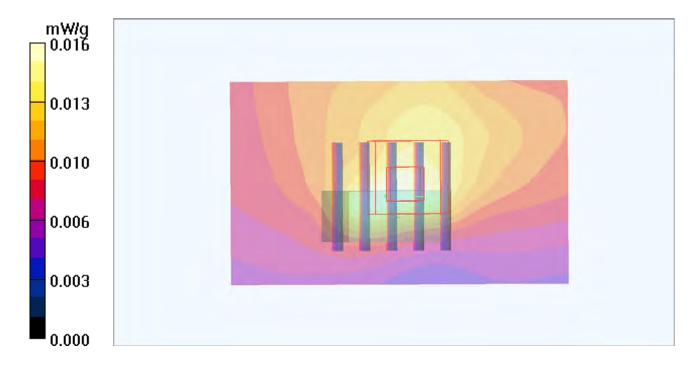
Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.06 V/m; Power Drift = 0.003 dB

Peak SAR (extrapolated) = 0.023 W/kg

SAR(1 g) = 0.012 mW/g; SAR(10 g) = 0.0079 mW/g

Maximum value of SAR (measured) = 0.016 mW/g



# P06 LTE XIII\_QPSK\_10M\_Horizontal Up\_0.5cm\_Ch23230\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 782 MHz;  $\sigma = 0.992$  mho/m;  $\varepsilon_r = 54.9$ ;  $\rho = 1000$ 

Date: 2011/12/29

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.7 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.758 mW/g

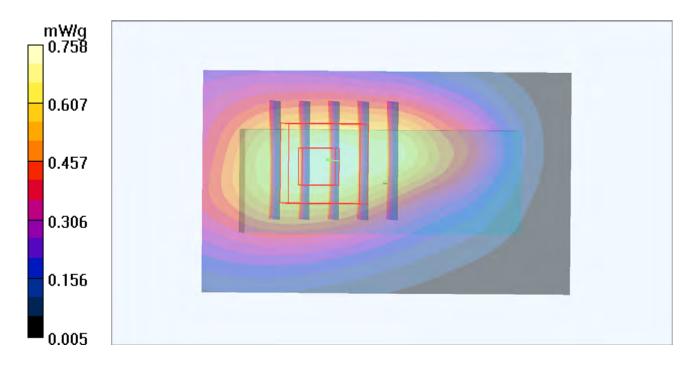
## Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

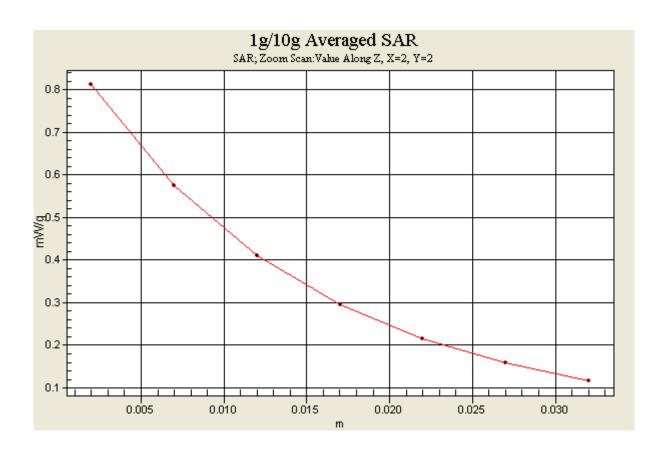
Reference Value = 24.7 V/m; Power Drift = 0.100 dB

Peak SAR (extrapolated) = 0.952 W/kg

SAR(1 g) = 0.662 mW/g; SAR(10 g) = 0.443 mW/g

Maximum value of SAR (measured) = 0.811 mW/g





## P07 LTE XIII\_QPSK\_10M\_Horizontal Down\_0.5cm\_Ch23230\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 782 MHz;  $\sigma = 0.992$  mho/m;  $\varepsilon_r = 54.9$ ;  $\rho = 1000$ 

Date: 2011/12/29

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.7 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.643 mW/g

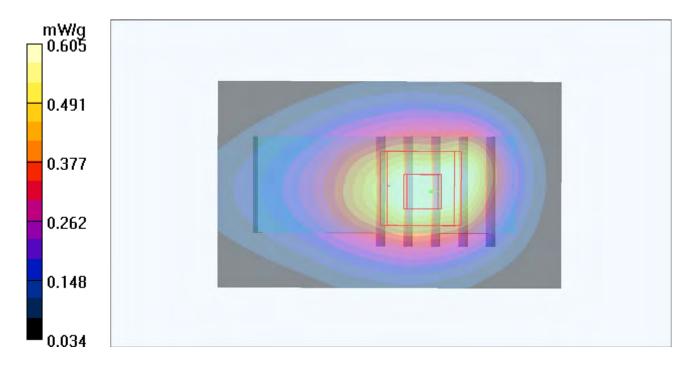
## Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.8 V/m; Power Drift = 0.065 dB

Peak SAR (extrapolated) = 0.712 W/kg

SAR(1 g) = 0.482 mW/g; SAR(10 g) = 0.315 mW/g

Maximum value of SAR (measured) = 0.605 mW/g



## P08 LTE XIII\_QPSK\_10M\_Vertical Front\_0.5cm\_Ch23230\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 782 MHz;  $\sigma = 0.992$  mho/m;  $\varepsilon_r = 54.9$ ;  $\rho = 1000$ 

Date: 2011/12/29

 $kg/m^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.7 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.363 mW/g

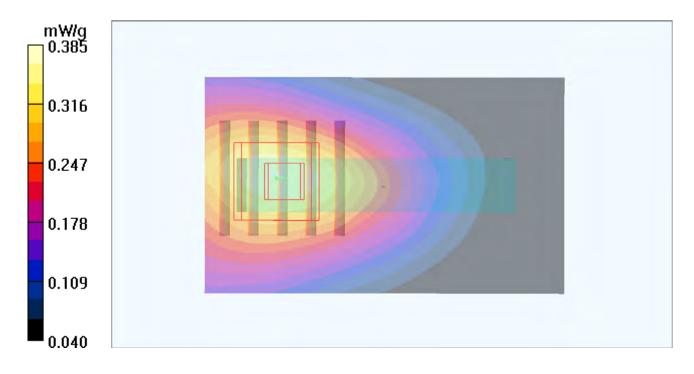
## Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.9 V/m; Power Drift = 0.059 dB

Peak SAR (extrapolated) = 0.451 W/kg

### SAR(1 g) = 0.312 mW/g; SAR(10 g) = 0.214 mW/g

Maximum value of SAR (measured) = 0.385 mW/g



## P09 LTE XIII\_QPSK\_10M\_Vertical Back\_0.5cm\_Ch23230\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1230 Medium parameters used: f = 782 MHz;  $\sigma = 1$  mho/m;  $\varepsilon_r = 55.9$ ;  $\rho = 1000$ 

Date: 2011/12/30

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.5 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.379 mW/g

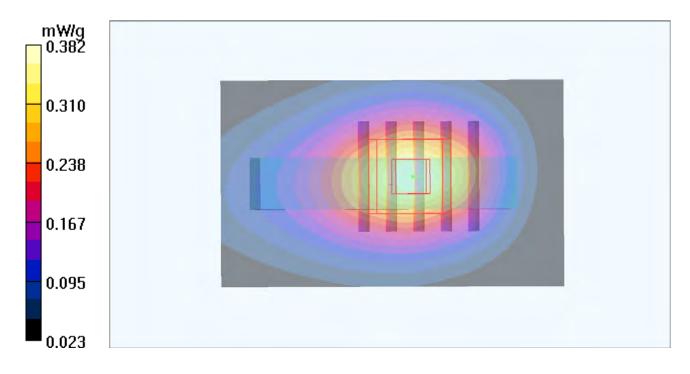
# Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.4 V/m; Power Drift = 0.128 dB

Peak SAR (extrapolated) = 0.454 W/kg

### SAR(1 g) = 0.298 mW/g; SAR(10 g) = 0.191 mW/g

Maximum value of SAR (measured) = 0.382 mW/g



# P10 LTE XIII\_QPSK\_10M\_Tip Mode\_0.5cm\_Ch23230\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1230 Medium parameters used: f = 782 MHz;  $\sigma = 1$  mho/m;  $\varepsilon_r = 55.9$ ;  $\rho = 1000$ 

Date: 2011/12/30

 $kg/m^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.5 °C

#### DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.021 mW/g

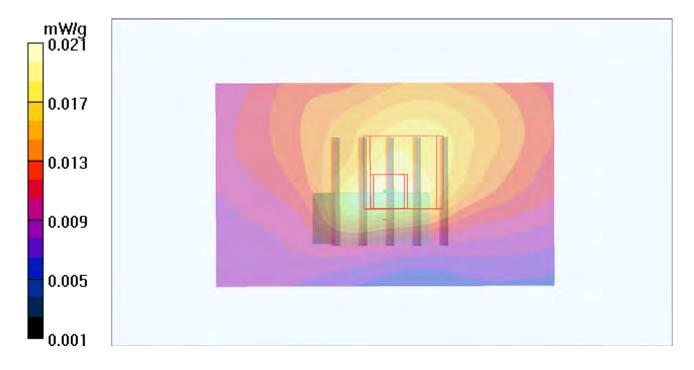
# Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.55 V/m; Power Drift = 0.148 dB

Peak SAR (extrapolated) = 0.029 W/kg

#### SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.010 mW/g

Maximum value of SAR (measured) = 0.021 mW/g



# P11 LTE XIII\_QPSK\_10M\_Horizontal Up\_0.5cm\_Ch23230\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 782 MHz;  $\sigma = 0.992$  mho/m;  $\varepsilon_r = 54.9$ ;  $\rho = 1000$ 

Date: 2011/12/29

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.7 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.624 mW/g

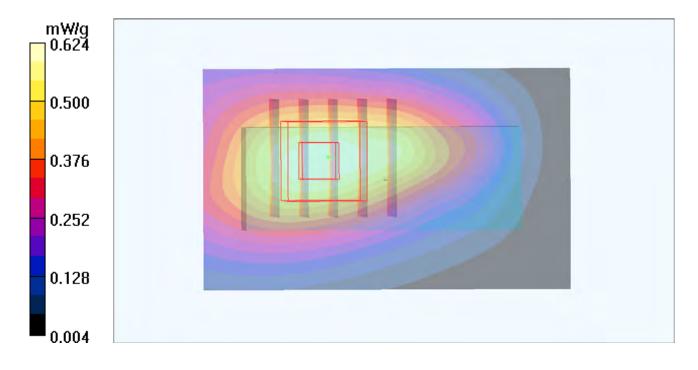
# Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.4 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.759 W/kg

SAR(1 g) = 0.524 mW/g; SAR(10 g) = 0.352 mW/g

Maximum value of SAR (measured) = 0.646 mW/g



# P12 LTE XIII\_QPSK\_10M\_Horizontal Down\_0.5cm\_Ch23230\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 782 MHz;  $\sigma = 0.992$  mho/m;  $\varepsilon_r = 54.9$ ;  $\rho = 1000$ 

Date: 2011/12/29

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.7 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.484 mW/g

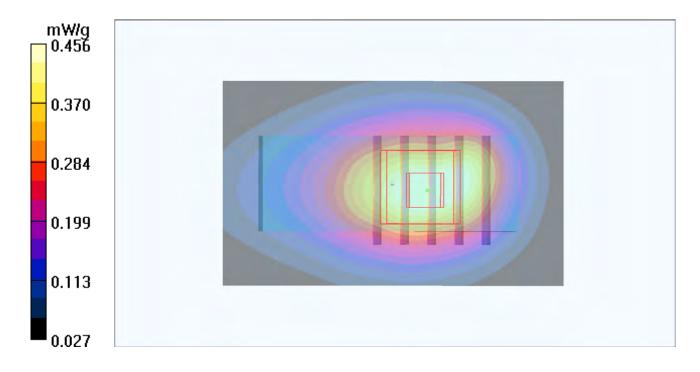
# Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.0 V/m; Power Drift = -0.112 dB

Peak SAR (extrapolated) = 0.535 W/kg

### SAR(1 g) = 0.361 mW/g; SAR(10 g) = 0.235 mW/g

Maximum value of SAR (measured) = 0.456 mW/g



# P13 LTE XIII\_QPSK\_10M\_Vertical Front\_0.5cm\_Ch23230\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 782 MHz;  $\sigma = 0.992$  mho/m;  $\varepsilon_r = 54.9$ ;  $\rho = 1000$ 

Date: 2011/12/29

 $kg/m^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.7 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

## Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.290 mW/g

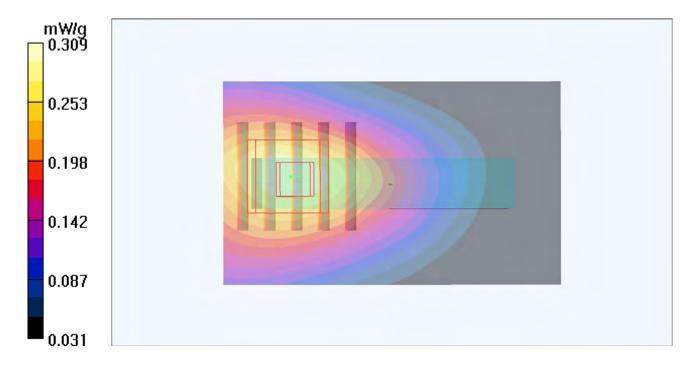
# Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.2 V/m; Power Drift = 0.060 dB

Peak SAR (extrapolated) = 0.359 W/kg

SAR(1 g) = 0.250 mW/g; SAR(10 g) = 0.172 mW/g

Maximum value of SAR (measured) = 0.309 mW/g



## P14 LTE XIII\_QPSK\_10M\_Vertical Back\_0.5cm\_Ch23230\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1230 Medium parameters used: f = 782 MHz;  $\sigma = 1$  mho/m;  $\varepsilon_r = 55.9$ ;  $\rho = 1000$ 

Date: 2011/12/30

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.5 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.297 mW/g

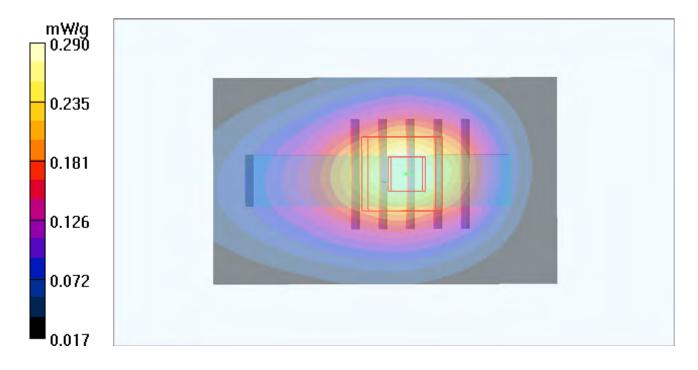
# Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.2 V/m; Power Drift = -0.056 dB

Peak SAR (extrapolated) = 0.345 W/kg

### SAR(1 g) = 0.227 mW/g; SAR(10 g) = 0.145 mW/g

Maximum value of SAR (measured) = 0.290 mW/g



# P15 LTE XIII\_QPSK\_10M\_Tip Mode\_0.5cm\_Ch23230\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1230 Medium parameters used: f = 782 MHz;  $\sigma = 1$  mho/m;  $\varepsilon_r = 55.9$ ;  $\rho = 1000$ 

Date: 2011/12/30

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.5 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.017 mW/g

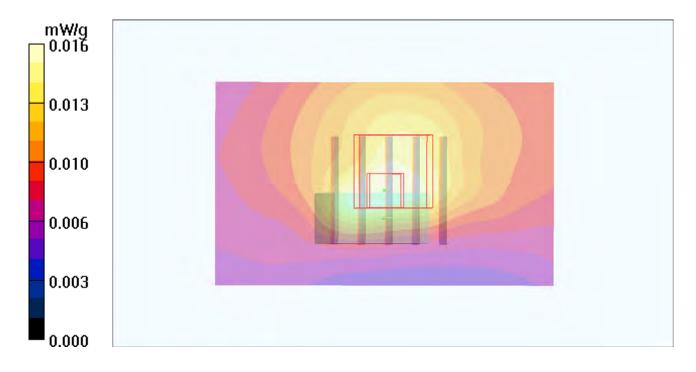
# Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.98 V/m; Power Drift = 0.131 dB

Peak SAR (extrapolated) = 0.024 W/kg

### SAR(1 g) = 0.012 mW/g; SAR(10 g) = 0.00779 mW/g

Maximum value of SAR (measured) = 0.016 mW/g



# P16 LTE XIII\_16QAM\_10M\_Horizontal Up\_0.5cm\_Ch23230\_25RB\_Offset 12

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 782 MHz;  $\sigma = 0.992$  mho/m;  $\varepsilon_r = 54.9$ ;  $\rho = 1000$ 

Date: 2011/12/29

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.7 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

## Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.527 mW/g

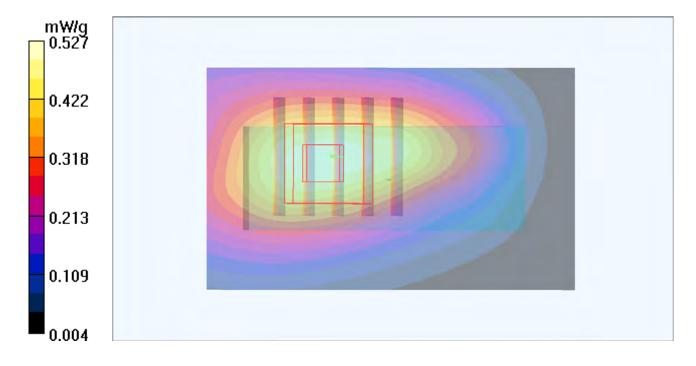
# Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.7 V/m; Power Drift = 0.089 dB

Peak SAR (extrapolated) = 0.649 W/kg

### SAR(1 g) = 0.445 mW/g; SAR(10 g) = 0.298 mW/g

Maximum value of SAR (measured) = 0.550 mW/g



# P17 LTE XIII\_16QAM\_10M\_Horizontal Down\_0.5cm\_Ch23230\_25RB\_Offset 12

Date: 2011/12/29

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 782 MHz;  $\sigma = 0.992$  mho/m;  $\varepsilon_r = 54.9$ ;  $\rho = 1000$ 

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.7 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

## Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.393 mW/g

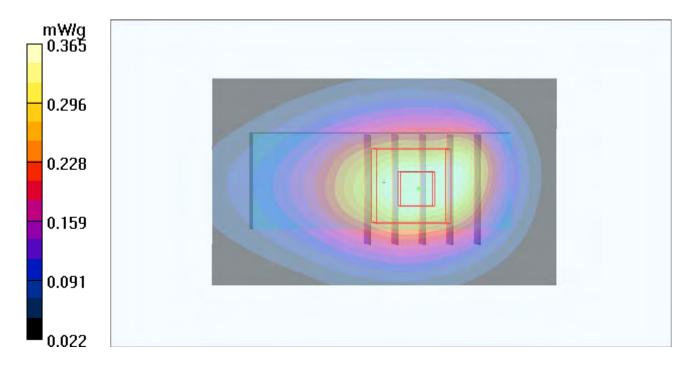
# Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.8 V/m; Power Drift = -0.008 dB

Peak SAR (extrapolated) = 0.429 W/kg

### SAR(1 g) = 0.290 mW/g; SAR(10 g) = 0.191 mW/g

Maximum value of SAR (measured) = 0.365 mW/g



# P18 LTE XIII\_16QAM\_10M\_Vertical Front\_0.5cm\_Ch23230\_25RB\_Offset 12

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 782 MHz;  $\sigma = 0.992$  mho/m;  $\varepsilon_r = 54.9$ ;  $\rho = 1000$ 

Date: 2011/12/29

 $kg/m^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.7 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.243 mW/g

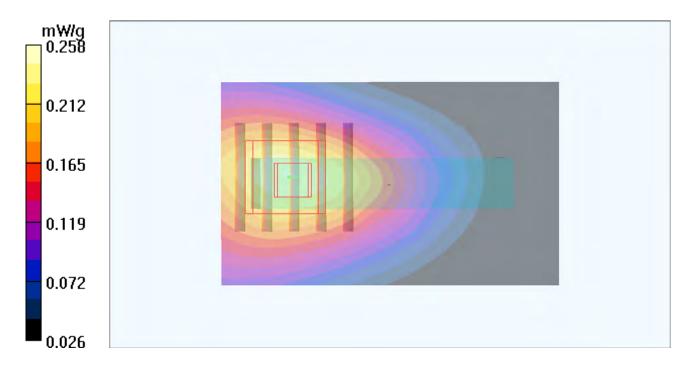
## Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.9 V/m; Power Drift = 0.091 dB

Peak SAR (extrapolated) = 0.299 W/kg

### SAR(1 g) = 0.207 mW/g; SAR(10 g) = 0.142 mW/g

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



# P19 LTE XIII\_16QAM\_10M\_Vertical Back\_0.5cm\_Ch23230\_25RB\_Offset 12

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 782 MHz;  $\sigma = 0.992$  mho/m;  $\varepsilon_r = 54.9$ ;  $\rho = 1000$ 

Date: 2011/12/29

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.7 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.250 mW/g

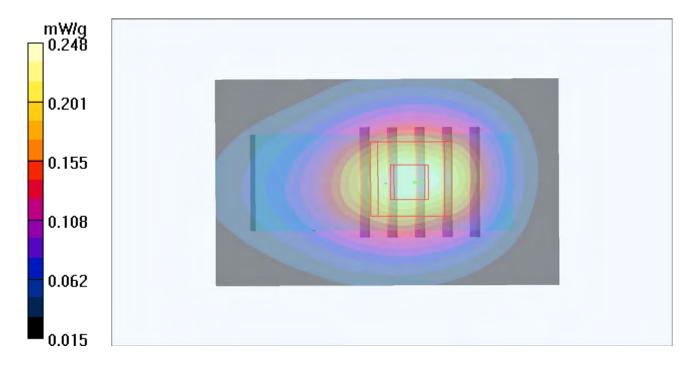
# Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.7 V/m; Power Drift = 0.027 dB

Peak SAR (extrapolated) = 0.294 W/kg

SAR(1 g) = 0.193 mW/g; SAR(10 g) = 0.123 mW/g

Maximum value of SAR (measured) = 0.248 mW/g



# P20 LTE XIII\_16QAM\_10M\_Tip Mode\_0.5cm\_Ch23230\_25RB\_Offset 12

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1230 Medium parameters used: f = 782 MHz;  $\sigma = 1$  mho/m;  $\varepsilon_r = 55.9$ ;  $\rho = 1000$ 

Date: 2011/12/30

 $kg/m^3$ 

Ambient Temperature: 22.2 °C; Liquid Temperature: 21.5 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.014 mW/g

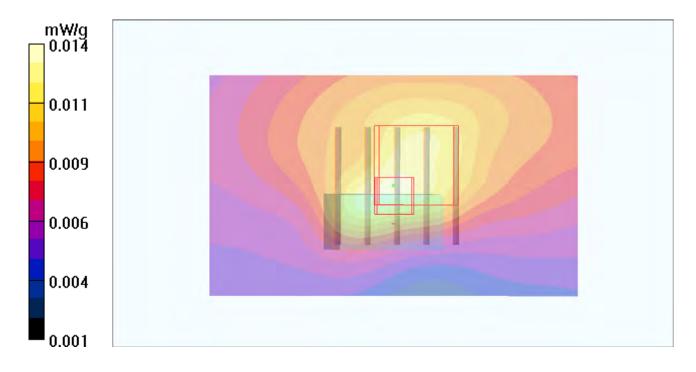
Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.77 V/m; Power Drift = -0.021 dB

Peak SAR (extrapolated) = 0.019 W/kg

SAR(1 g) = 0.010 mW/g; SAR(10 g) = 0.00673 mW/g

Maximum value of SAR (measured) = 0.014 mW/g



# P21 LTE XIII\_16QAM\_10M\_Horizontal Up\_0.5cm\_Ch23230\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 782 MHz;  $\sigma = 0.992$  mho/m;  $\varepsilon_r = 54.9$ ;  $\rho = 1000$ 

Date: 2011/12/29

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.7 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

## Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.720 mW/g

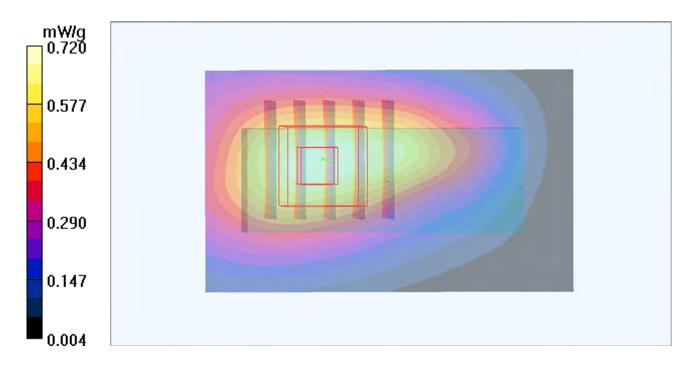
## Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.5 V/m; Power Drift = 0.037 dB

Peak SAR (extrapolated) = 0.904 W/kg

SAR(1 g) = 0.612 mW/g; SAR(10 g) = 0.405 mW/g

Maximum value of SAR (measured) = 0.765 mW/g



# P22 LTE XIII\_16QAM\_10M\_Horizontal Down\_0.5cm\_Ch23230\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 782 MHz;  $\sigma = 0.992$  mho/m;  $\varepsilon_r = 54.9$ ;  $\rho = 1000$ 

Date: 2011/12/29

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.7 °C

#### DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.559 mW/g

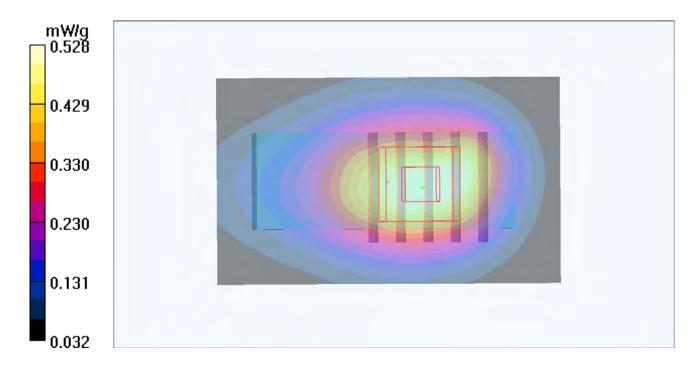
# Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.3 V/m; Power Drift = -0.137 dB

Peak SAR (extrapolated) = 0.603 W/kg

## SAR(1 g) = 0.422 mW/g; SAR(10 g) = 0.275 mW/g

Maximum value of SAR (measured) = 0.528 mW/g



# P23 LTE XIII\_16QAM\_10M\_Vertical Front\_0.5cm\_Ch23230\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 782 MHz;  $\sigma = 0.992$  mho/m;  $\varepsilon_r = 54.9$ ;  $\rho = 1000$ 

Date: 2011/12/29

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.7 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

## Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.326 mW/g

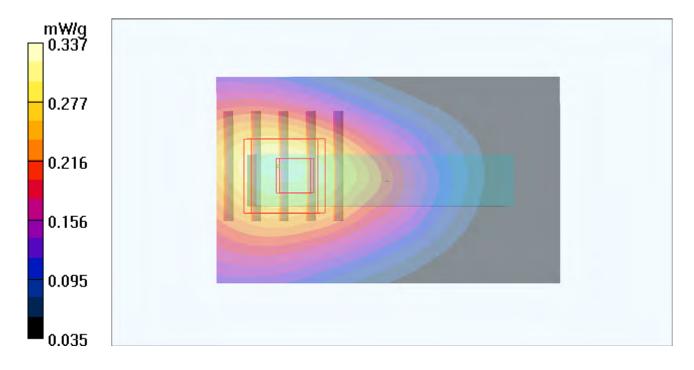
## Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.1 V/m; Power Drift = 0.103 dB

Peak SAR (extrapolated) = 0.398 W/kg

SAR(1 g) = 0.277 mW/g; SAR(10 g) = 0.191 mW/g

Maximum value of SAR (measured) = 0.337 mW/g



# P24 LTE XIII\_16QAM\_10M\_Vertical Back\_0.5cm\_Ch23230\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 782 MHz;  $\sigma = 0.992$  mho/m;  $\varepsilon_r = 54.9$ ;  $\rho = 1000$ 

Date: 2011/12/29

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.7 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.355 mW/g

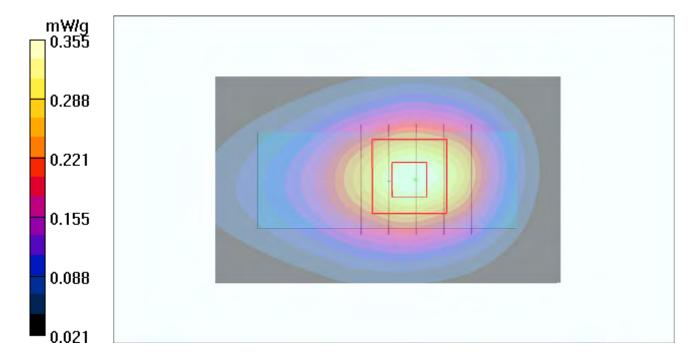
# Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.6 V/m; Power Drift = 0.126 dB

Peak SAR (extrapolated) = 0.428 W/kg

SAR(1 g) = 0.273 mW/g; SAR(10 g) = 0.174 mW/g

Maximum value of SAR (measured) = 0.355 mW/g



# P25 LTE XIII\_16QAM\_10M\_Tip Mode\_0.5cm\_Ch23230\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1230 Medium parameters used: f = 782 MHz;  $\sigma = 1$  mho/m;  $\varepsilon_r = 55.9$ ;  $\rho = 1000$ 

Date: 2011/12/30

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.5 °C

#### DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.018 mW/g

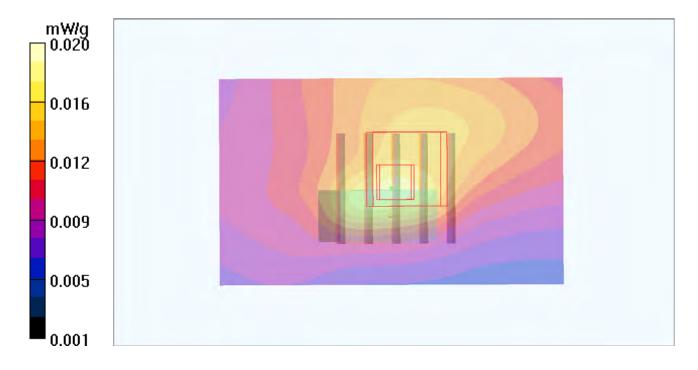
# Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.40 V/m; Power Drift = 0.053 dB

Peak SAR (extrapolated) = 0.027 W/kg

### SAR(1 g) = 0.014 mW/g; SAR(10 g) = 0.00922 mW/g

Maximum value of SAR (measured) = 0.020 mW/g



# P26 LTE XIII\_16QAM\_10M\_Horizontal Up\_0.5cm\_Ch23230\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 782 MHz;  $\sigma = 0.992$  mho/m;  $\varepsilon_r = 54.9$ ;  $\rho = 1000$ 

Date: 2011/12/29

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.7 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.569 mW/g

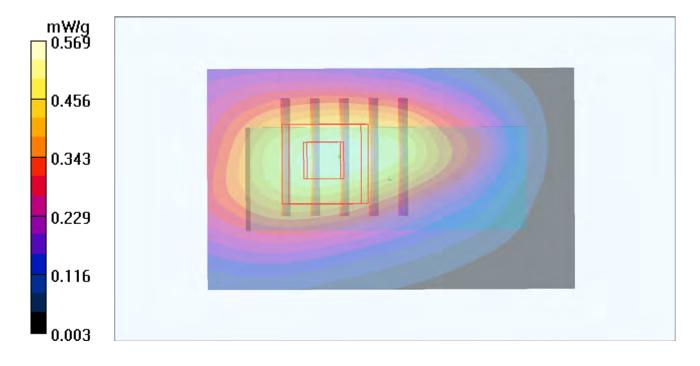
# Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.7 V/m; Power Drift = 0.037 dB

Peak SAR (extrapolated) = 0.691 W/kg

SAR(1 g) = 0.490 mW/g; SAR(10 g) = 0.327 mW/g

Maximum value of SAR (measured) = 0.597 mW/g



# P27 LTE XIII\_16QAM\_10M\_Horizontal Down\_0.5cm\_Ch23230\_1RB\_Offset 49

Date: 2011/12/29

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 782 MHz;  $\sigma = 0.992$  mho/m;  $\varepsilon_r = 54.9$ ;  $\rho = 1000$ 

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.7 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.423 mW/g

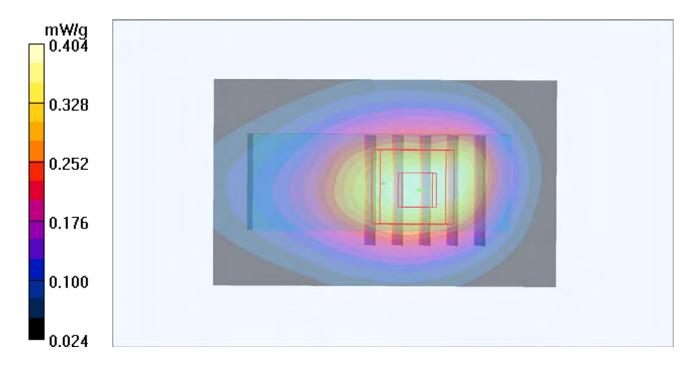
# Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.3 V/m; Power Drift = 0.078 dB

Peak SAR (extrapolated) = 0.463 W/kg

SAR(1 g) = 0.322 mW/g; SAR(10 g) = 0.209 mW/g

Maximum value of SAR (measured) = 0.404 mW/g



# P28 LTE XIII\_16QAM\_10M\_Vertical Front\_0.5cm\_Ch23230\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 782 MHz;  $\sigma = 0.992$  mho/m;  $\varepsilon_r = 54.9$ ;  $\rho = 1000$ 

Date: 2011/12/29

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.7 °C

#### DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

## Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.288 mW/g

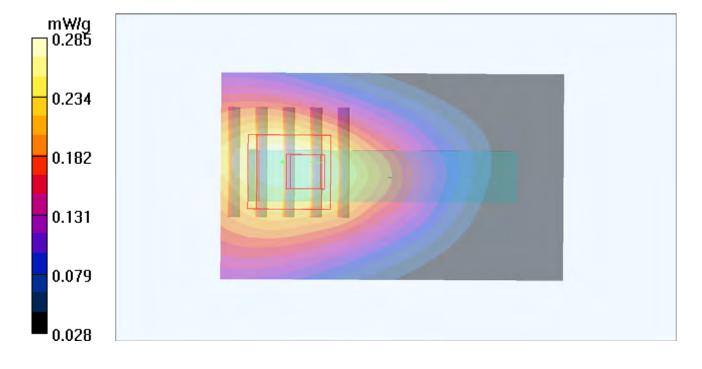
## Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.2 V/m; Power Drift = -0.116 dB

Peak SAR (extrapolated) = 0.333 W/kg

SAR(1 g) = 0.232 mW/g; SAR(10 g) = 0.160 mW/g

Maximum value of SAR (measured) = 0.285 mW/g



# P29 LTE XIII\_16QAM\_10M\_Vertical Back\_0.5cm\_Ch23230\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1229 Medium parameters used: f = 782 MHz;  $\sigma = 0.992$  mho/m;  $\varepsilon_r = 54.9$ ;  $\rho = 1000$ 

Date: 2011/12/29

 $kg/m^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.7 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.308 mW/g

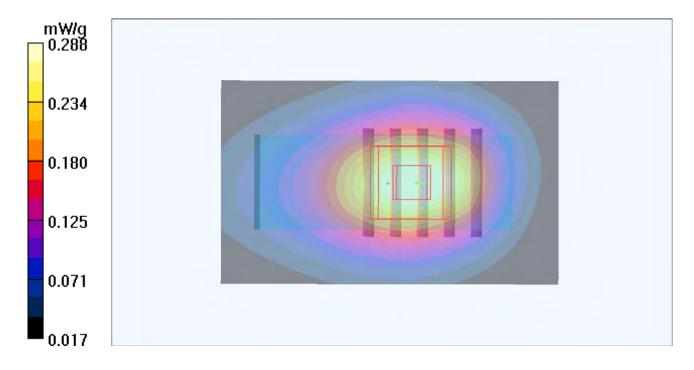
# Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.8 V/m; Power Drift = -0.124 dB

Peak SAR (extrapolated) = 0.346 W/kg

SAR(1 g) = 0.229 mW/g; SAR(10 g) = 0.145 mW/g

Maximum value of SAR (measured) = 0.288 mW/g



# P30 LTE XIII\_16QAM\_10M\_Tip Mode\_0.5cm\_Ch23230\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE band XIII (750); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: B750\_1230 Medium parameters used: f = 782 MHz;  $\sigma = 1$  mho/m;  $\varepsilon_r = 55.9$ ;  $\rho = 1000$ 

Date: 2011/12/30

 $kg/m^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.5 °C

## DASY4 Configuration:

- Probe: EX3DV4 SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

# Ch23230/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.014 mW/g

# Ch23230/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.79 V/m; Power Drift = 0.091 dB

Peak SAR (extrapolated) = 0.021 W/kg

### SAR(1 g) = 0.011 mW/g; SAR(10 g) = 0.00698 mW/g

Maximum value of SAR (measured) = 0.016 mW/g



# P46 LTE IV\_QPSK\_10M\_Horizontal Up\_0.5cm\_Ch20000\_25RB\_Offset 12

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_1230 Medium parameters used: f = 1715 MHz;  $\sigma = 1.483$  mho/m;  $\varepsilon_r = 54.666$ ;  $\rho =$ 

Date: 2011/12/30

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.4 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.420 mW/g

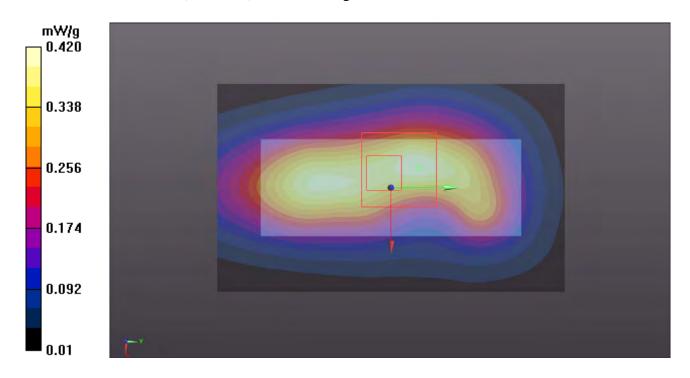
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.027 V/m; Power Drift = -0.165 dB

Peak SAR (extrapolated) = 0.4740

SAR(1 g) = 0.279 mW/g; SAR(10 g) = 0.159 mW/g

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



# P47 LTE IV\_QPSK\_10M\_Horizontal Down\_0.5cm\_Ch20000\_25RB\_Offset 12

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_1230 Medium parameters used: f = 1715 MHz;  $\sigma = 1.483$  mho/m;  $\varepsilon_r = 54.666$ ;  $\rho = 1.483$  mho/m;  $\varepsilon_r = 54.666$ ;  $\rho = 1.483$  mho/m;  $\varepsilon_r =$ 

Date: 2011/12/30

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.4 °C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.207 mW/g

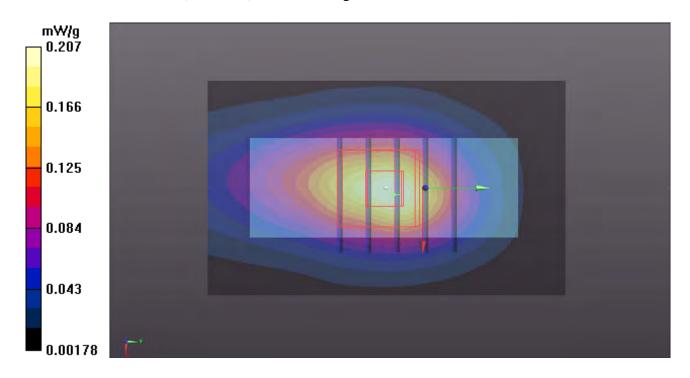
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.818 V/m; Power Drift = -0.122 dB

Peak SAR (extrapolated) = 0.1950

SAR(1 g) = 0.123 mW/g; SAR(10 g) = 0.075 mW/g

Maximum value of SAR (measured) = 0.158 mW/g



# P48 LTE IV\_QPSK\_10M\_Vertical Front\_0.5cm\_Ch20000\_25RB\_Offset 12

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_1230 Medium parameters used: f = 1715 MHz;  $\sigma = 1.483$  mho/m;  $\varepsilon_r = 54.666$ ;  $\rho =$ 

Date: 2011/12/30

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.4 °C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.161 mW/g

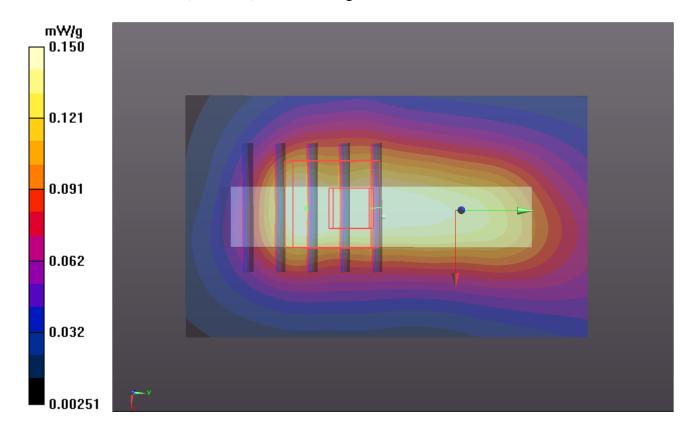
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.030 V/m; Power Drift = 0.134 dB

Peak SAR (extrapolated) = 0.1790

SAR(1 g) = 0.111 mW/g; SAR(10 g) = 0.068 mW/g

Maximum value of SAR (measured) = 0.150 mW/g



# P49 LTE IV\_QPSK\_10M\_Vertical Back\_0.5cm\_Ch20000\_25RB\_Offset 12

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_1230 Medium parameters used: f = 1715 MHz;  $\sigma = 1.483$  mho/m;  $\varepsilon_r = 54.666$ ;  $\rho =$ 

Date: 2011/12/30

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.4 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.483 mW/g

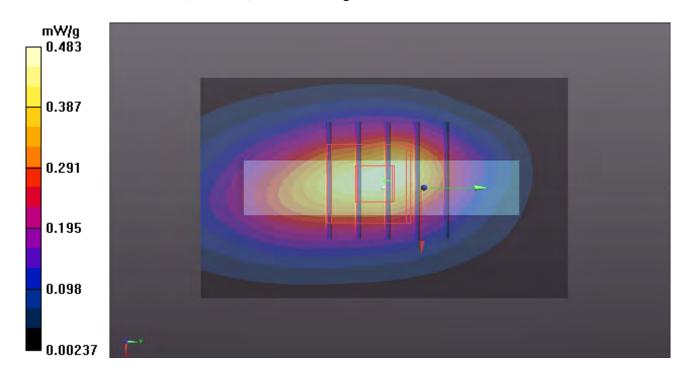
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

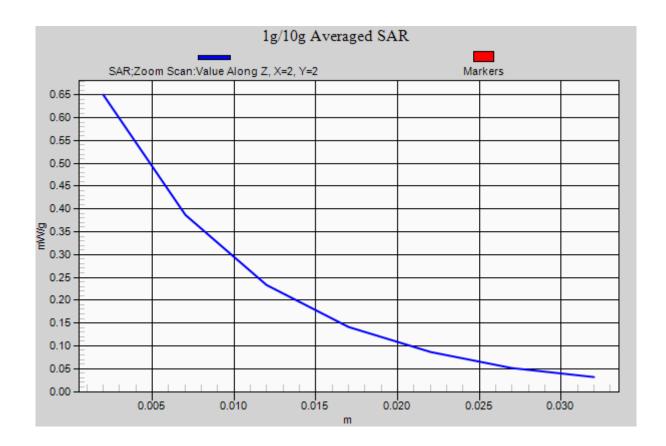
Reference Value = 18.638 V/m; Power Drift = 0.125 dB

Peak SAR (extrapolated) = 0.7950

SAR(1 g) = 0.474 mW/g; SAR(10 g) = 0.265 mW/g

Maximum value of SAR (measured) = 0.650 mW/g





# P50 LTE IV\_QPSK\_10M\_Tip Mode\_0.5cm\_Ch20000\_25RB\_Offset 12

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_1230 Medium parameters used: f = 1715 MHz;  $\sigma = 1.483$  mho/m;  $\varepsilon_r = 54.666$ ;  $\rho =$ 

Date: 2011/12/30

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.4 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.062 mW/g

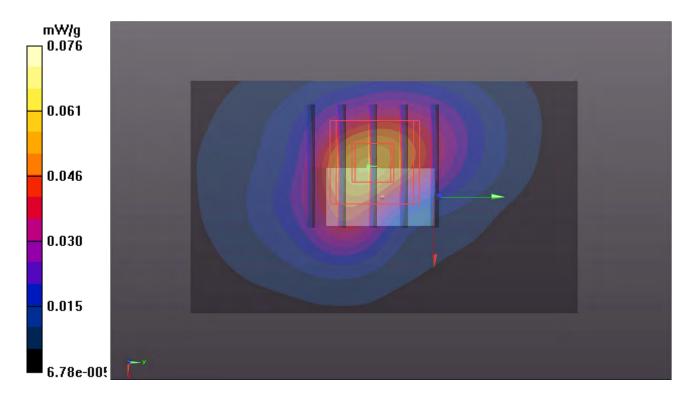
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.644 V/m; Power Drift = 0.145 dB

Peak SAR (extrapolated) = 0.0900

SAR(1 g) = 0.056 mW/g; SAR(10 g) = 0.030 mW/g

Maximum value of SAR (measured) = 0.076 mW/g



# P51 LTE IV\_QPSK\_10M\_Horizontal Up\_0.5cm\_Ch20000\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_1230 Medium parameters used: f = 1715 MHz;  $\sigma = 1.483$  mho/m;  $\varepsilon_r = 54.666$ ;  $\rho = 1.483$  mho/m;  $\varepsilon_r = 54.666$ ;  $\rho = 1.483$  mho/m;  $\varepsilon_r =$ 

Date: 2011/12/30

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.2 °C; Liquid Temperature: 21.4 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

### Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

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

## Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.099 V/m; Power Drift = -0.140 dB

Peak SAR (extrapolated) = 0.4310

SAR(1 g) = 0.277 mW/g; SAR(10 g) = 0.166 mW/g

Maximum value of SAR (measured) = 0.357 mW/g

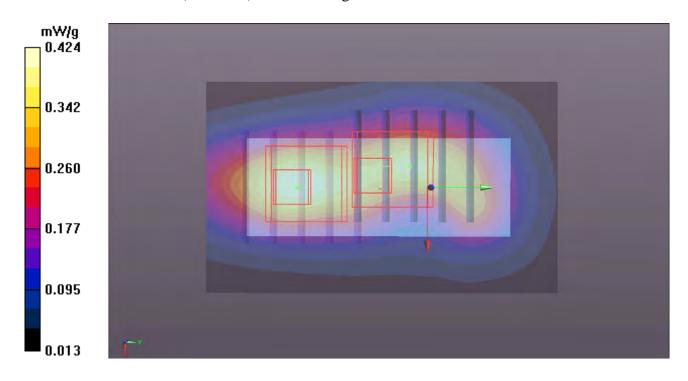
### Ch20000/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.099 V/m; Power Drift = -0.140 dB

Peak SAR (extrapolated) = 0.3650

SAR(1 g) = 0.228 mW/g; SAR(10 g) = 0.127 mW/g

Maximum value of SAR (measured) = 0.287 mW/g



# P52 LTE IV\_QPSK\_10M\_Horizontal Down\_0.5cm\_Ch20000\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_1230 Medium parameters used: f = 1715 MHz;  $\sigma = 1.483$  mho/m;  $\varepsilon_r = 54.666$ ;  $\rho = 1.483$  mho/m;  $\varepsilon_r = 54.666$ ;  $\rho = 1.483$  mho/m;  $\varepsilon_r =$ 

Date: 2011/12/30

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.4 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.284 mW/g

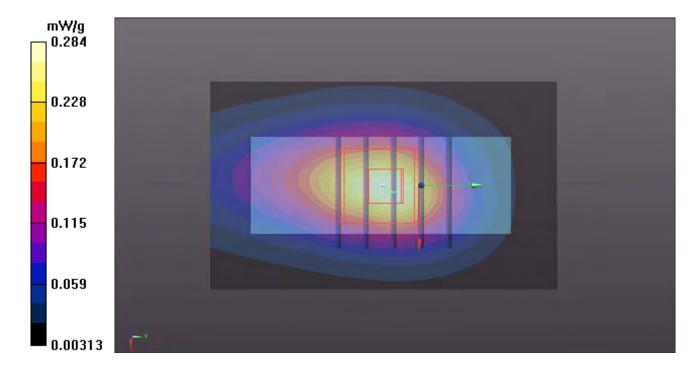
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.682 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.2720

SAR(1 g) = 0.173 mW/g; SAR(10 g) = 0.105 mW/g

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



# P53 LTE IV\_QPSK\_10M\_Vertical Front\_0.5cm\_Ch20000\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_1230 Medium parameters used: f = 1715 MHz;  $\sigma = 1.483$  mho/m;  $\varepsilon_r = 54.666$ ;  $\rho =$ 

Date: 2011/12/30

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.4 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.198 mW/g

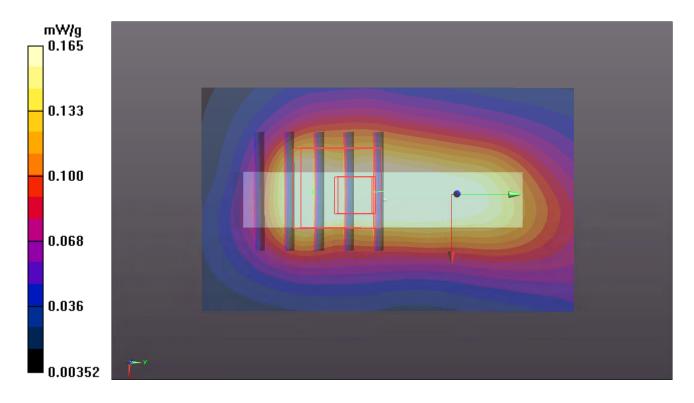
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.517 V/m; Power Drift = -0.135 dB

Peak SAR (extrapolated) = 0.1970

SAR(1 g) = 0.126 mW/g; SAR(10 g) = 0.079 mW/g

Maximum value of SAR (measured) = 0.165 mW/g



# P54 LTE IV\_QPSK\_10M\_Vertical Back\_0.5cm\_Ch20000\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_1230 Medium parameters used: f = 1715 MHz;  $\sigma = 1.483$  mho/m;  $\varepsilon_r = 54.666$ ;  $\rho =$ 

Date: 2011/12/30

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.4 °C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.706 mW/g

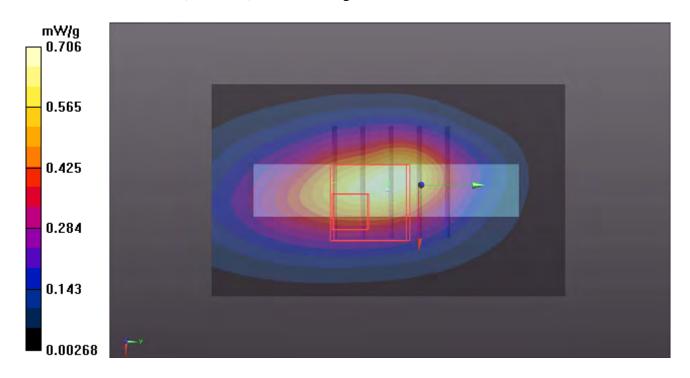
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.662 V/m; Power Drift = -0.168 dB

Peak SAR (extrapolated) = 0.7850

SAR(1 g) = 0.353 mW/g; SAR(10 g) = 0.175 mW/g

Maximum value of SAR (measured) = 0.578 mW/g



# P55 LTE IV\_QPSK\_10M\_Tip Mode\_0.5cm\_Ch20000\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_1230 Medium parameters used: f = 1715 MHz;  $\sigma = 1.483$  mho/m;  $\varepsilon_r = 54.666$ ;  $\rho =$ 

Date: 2011/12/30

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4°C; Liquid Temperature: 21.4°C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.090 mW/g

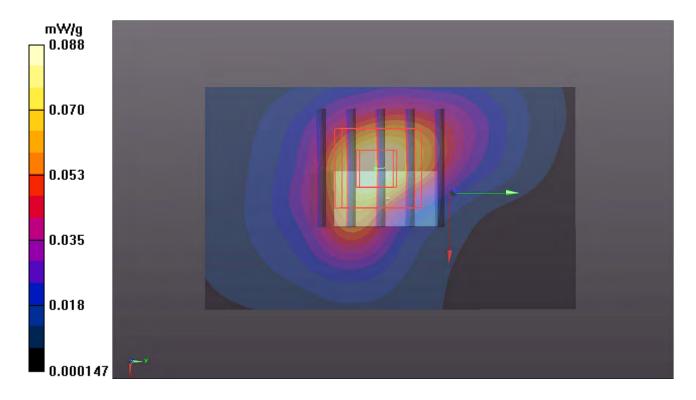
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.871 V/m; Power Drift = -0.169 dB

Peak SAR (extrapolated) = 0.1060

SAR(1 g) = 0.065 mW/g; SAR(10 g) = 0.036 mW/g

Maximum value of SAR (measured) = 0.088 mW/g



## P56 LTE IV\_QPSK\_10M\_Horizontal Up\_0.5cm\_Ch20000\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_1230 Medium parameters used: f = 1715 MHz;  $\sigma = 1.483$  mho/m;  $\varepsilon_r = 54.666$ ;  $\rho =$ 

Date: 2011/12/30

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.2 °C; Liquid Temperature: 21.4 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

### Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.089 mW/g

## Ch20000/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.303 V/m; Power Drift = 0.137 dB

Peak SAR (extrapolated) = 0.1020

SAR(1 g) = 0.065 mW/g; SAR(10 g) = 0.039 mW/g

Maximum value of SAR (measured) = 0.084 mW/g

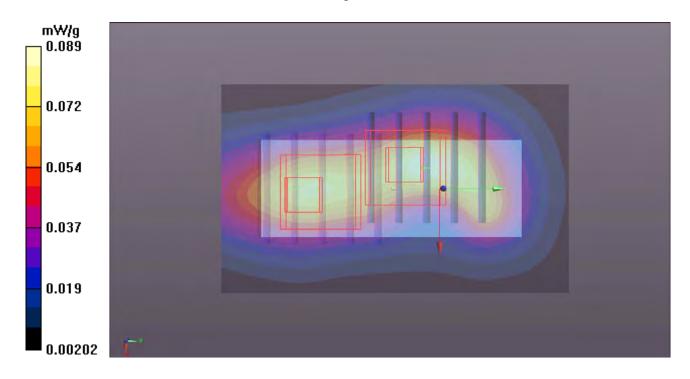
### Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.303 V/m; Power Drift = 0.137 dB

Peak SAR (extrapolated) = 0.1120

SAR(1 g) = 0.062 mW/g; SAR(10 g) = 0.035 mW/g

Maximum value of SAR (measured) = 0.085 mW/g



# P57 LTE IV\_QPSK\_10M\_Horizontal Down\_0.5cm\_Ch20000\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_1230 Medium parameters used: f = 1715 MHz;  $\sigma = 1.483$  mho/m;  $\varepsilon_r = 54.666$ ;  $\rho =$ 

Date: 2011/12/30

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.4 °C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.189 mW/g

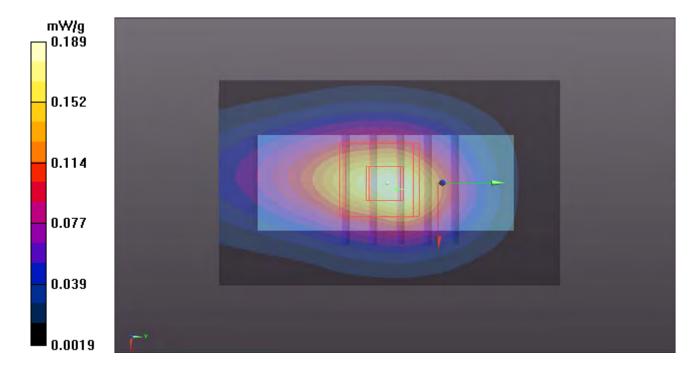
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.205 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.1870

SAR(1 g) = 0.118 mW/g; SAR(10 g) = 0.072 mW/g

Maximum value of SAR (measured) = 0.151 mW/g



# P58 LTE IV\_QPSK\_10M\_Vertical Front\_0.5cm\_Ch20000\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_1230 Medium parameters used: f = 1715 MHz;  $\sigma = 1.483$  mho/m;  $\varepsilon_r = 54.666$ ;  $\rho = 1.483$  mho/m;  $\varepsilon_r = 54.666$ ;  $\rho = 1.483$  mho/m;  $\varepsilon_r =$ 

Date: 2011/12/30

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.4 °C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.107 mW/g

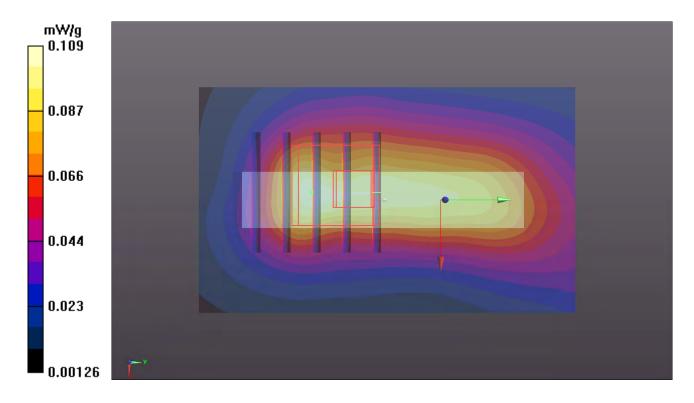
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.947 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.1300

SAR(1 g) = 0.083 mW/g; SAR(10 g) = 0.050 mW/g

Maximum value of SAR (measured) = 0.109 mW/g



# P59 LTE IV\_QPSK\_10M\_Vertical Back\_0.5cm\_Ch20000\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_1230 Medium parameters used: f = 1715 MHz;  $\sigma = 1.483$  mho/m;  $\varepsilon_r = 54.666$ ;  $\rho =$ 

Date: 2011/12/30

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4°C; Liquid Temperature: 21.4°C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.140 mW/g

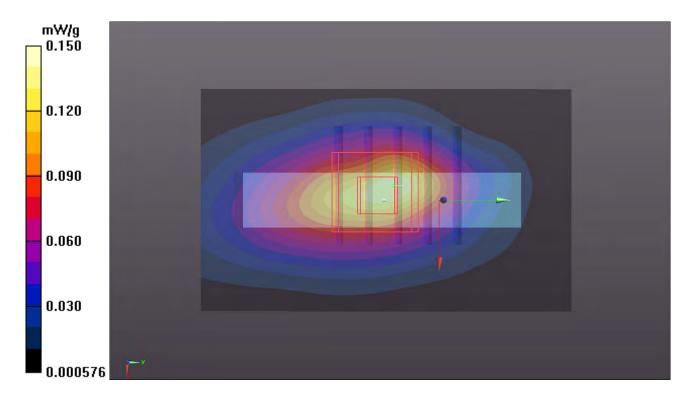
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.134 V/m; Power Drift = 0.046 dB

Peak SAR (extrapolated) = 0.1930

SAR(1 g) = 0.113 mW/g; SAR(10 g) = 0.063 mW/g

Maximum value of SAR (measured) = 0.150 mW/g



## P60 LTE IV\_QPSK\_10M\_Tip Mode\_0.5cm\_Ch20000\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_1230 Medium parameters used: f = 1715 MHz;  $\sigma = 1.483$  mho/m;  $\varepsilon_r = 54.666$ ;  $\rho =$ 

Date: 2011/12/30

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.4 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.046 mW/g

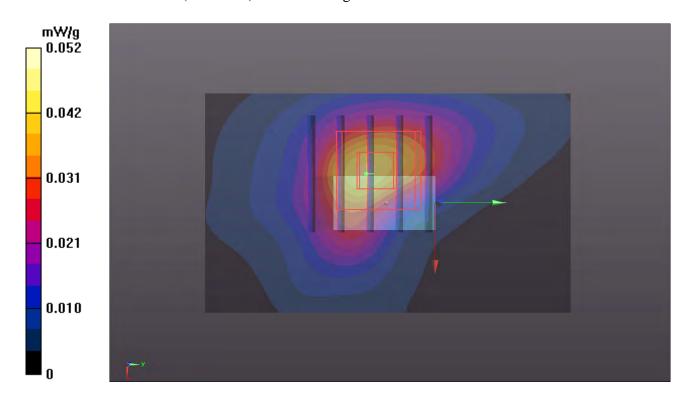
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.667 V/m; Power Drift = 0.043 dB

Peak SAR (extrapolated) = 0.0630

SAR(1 g) = 0.038 mW/g; SAR(10 g) = 0.021 mW/g

Maximum value of SAR (measured) = 0.052 mW/g



## P61 LTE IV\_16QAM\_10M\_Horizontal Up\_0.5cm\_Ch20000\_25RB\_Offset 12

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_0103 Medium parameters used: f = 1715 MHz;  $\sigma = 1.486$  mho/m;  $\epsilon_r = 54.724$ ;  $\rho = 1.486$  mho/m;  $\epsilon_r = 54.724$ ;  $\epsilon_r = 54.72$ 

Date: 2012/01/03

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.6 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

## Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.065 mW/g

## Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.460 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.0850

SAR(1 g) = 0.048 mW/g; SAR(10 g) = 0.025 mW/g

Maximum value of SAR (measured) = 0.065 mW/g

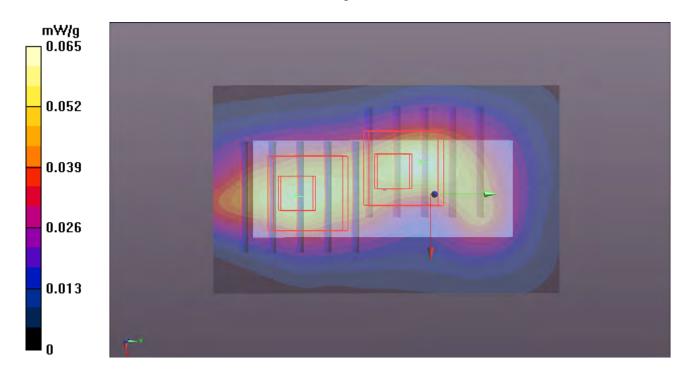
### Ch20000/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.460 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.0740

SAR(1 g) = 0.047 mW/g; SAR(10 g) = 0.028 mW/g

Maximum value of SAR (measured) = 0.061 mW/g



## P62 LTE IV\_16QAM\_10M\_Horizontal Down\_0.5cm\_Ch20000\_25RB\_Offset 12

Date: 2012/01/03

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_0103 Medium parameters used: f = 1715 MHz;  $\sigma = 1.486$  mho/m;  $\varepsilon_r = 54.724$ ;  $\rho =$ 

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.6 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.155 mW/g

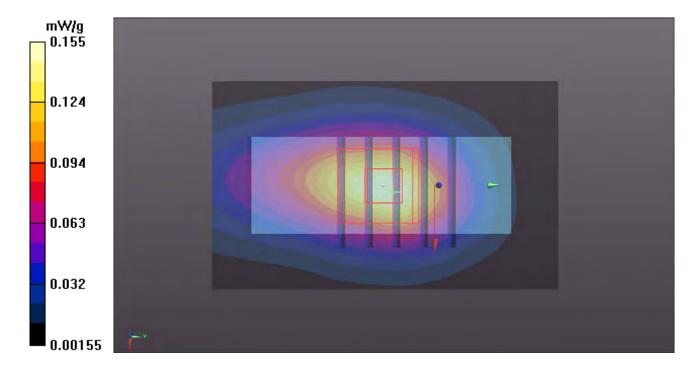
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.383 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.1540

SAR(1 g) = 0.098 mW/g; SAR(10 g) = 0.059 mW/g

Maximum value of SAR (measured) = 0.126 mW/g



## P63 LTE IV\_16QAM\_10M\_Vertical Front\_0.5cm\_Ch20000\_25RB\_Offset 12

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_0103 Medium parameters used: f = 1715 MHz;  $\sigma = 1.486$  mho/m;  $\varepsilon_r = 54.724$ ;  $\rho = 1.486$  mho/m;  $\varepsilon_r = 54.724$ ;  $\rho = 1.486$  mho/m;  $\varepsilon_r =$ 

Date: 2012/01/03

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.5 °C; Liquid Temperature: 21.6 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

## Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.030 mW/g

## Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.345 V/m; Power Drift = 0.096 dB

Peak SAR (extrapolated) = 0.0460

SAR(1 g) = 0.027 mW/g; SAR(10 g) = 0.016 mW/g

Maximum value of SAR (measured) = 0.037 mW/g

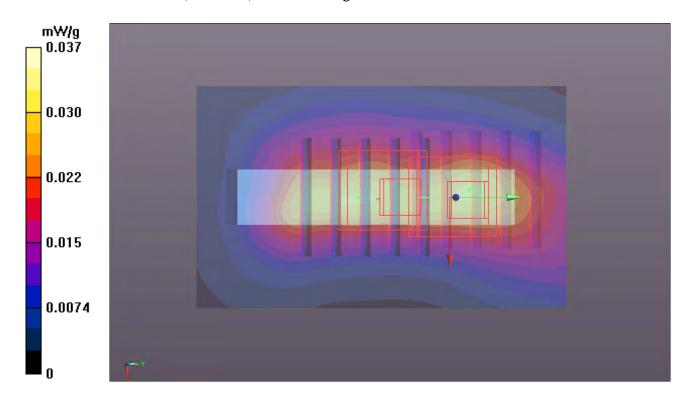
## Ch20000/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.345 V/m; Power Drift = 0.096 dB

Peak SAR (extrapolated) = 0.0400

SAR(1 g) = 0.025 mW/g; SAR(10 g) = 0.015 mW/g

Maximum value of SAR (measured) = 0.033 mW/g



# P64 LTE IV\_16QAM\_10M\_Vertical Back\_0.5cm\_Ch20000\_25RB\_Offset 12

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_0103 Medium parameters used: f = 1715 MHz;  $\sigma = 1.486$  mho/m;  $\varepsilon_r = 54.724$ ;  $\rho =$ 

Date: 2012/01/03

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.6 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.091 mW/g

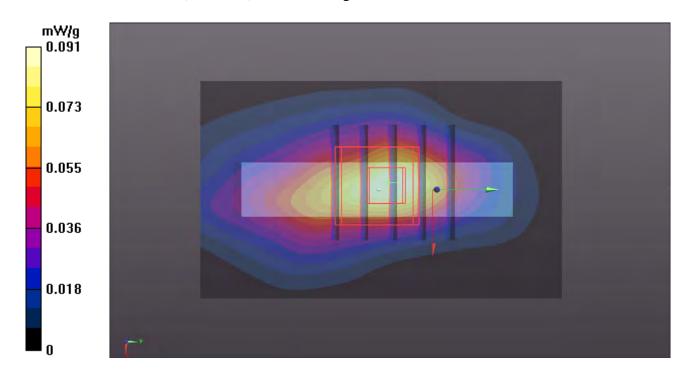
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.734 V/m; Power Drift = -0.113 dB

Peak SAR (extrapolated) = 0.1020

SAR(1 g) = 0.060 mW/g; SAR(10 g) = 0.034 mW/g

Maximum value of SAR (measured) = 0.082 mW/g



## P65 LTE IV\_16QAM\_10M\_Tip Mode\_0.5cm\_Ch20000\_25RB\_Offset 12

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_0103 Medium parameters used: f = 1715 MHz;  $\sigma = 1.486$  mho/m;  $\varepsilon_r = 54.724$ ;  $\rho =$ 

Date: 2012/01/03

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4°C; Liquid Temperature: 21.6°C

## DASY5 Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.070 mW/g

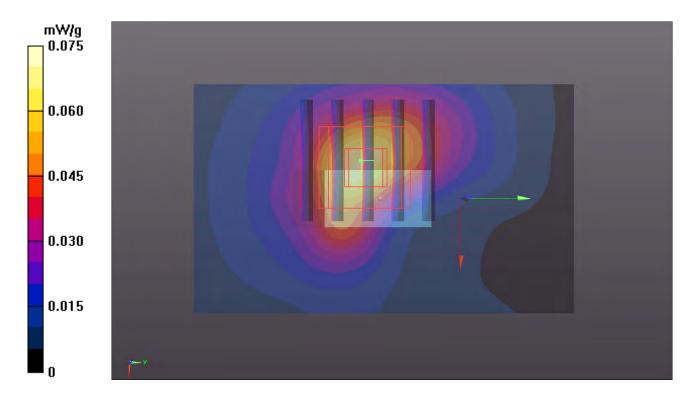
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.836 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.0930

SAR(1 g) = 0.056 mW/g; SAR(10 g) = 0.031 mW/g

Maximum value of SAR (measured) = 0.075 mW/g



## P66 LTE IV\_16QAM\_10M\_Horizontal Up\_0.5cm\_Ch20000\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_0103 Medium parameters used: f = 1715 MHz;  $\sigma = 1.486$  mho/m;  $\varepsilon_r = 54.724$ ;  $\rho =$ 

Date: 2012/01/03

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.6 °C

## **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

## Ch20000/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.144 mW/g

## Ch20000/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.430 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.1560

SAR(1 g) = 0.100 mW/g; SAR(10 g) = 0.059 mW/g

Maximum value of SAR (measured) = 0.130 mW/g

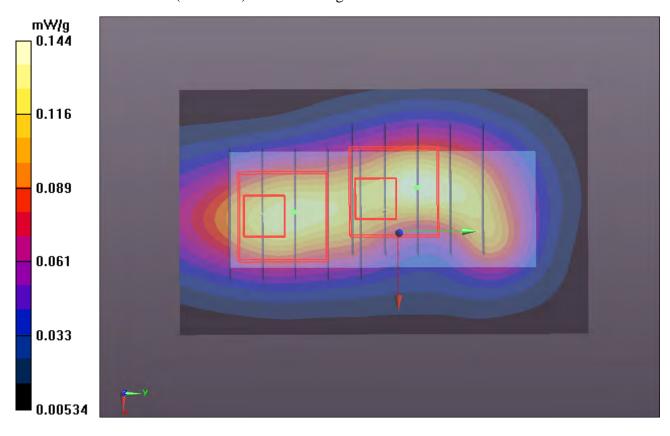
## Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.430 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.1570

SAR(1 g) = 0.090 mW/g; SAR(10 g) = 0.050 mW/g

Maximum value of SAR (measured) = 0.120 mW/g



## P67 LTE IV\_16QAM\_10M\_Horizontal Down\_0.5cm\_Ch20000\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_0103 Medium parameters used: f = 1715 MHz;  $\sigma = 1.486$  mho/m;  $\varepsilon_r = 54.724$ ;  $\rho = 1.486$  mho/m;  $\varepsilon_r = 54.724$ ;  $\rho = 1.486$  mho/m;  $\varepsilon_r =$ 

Date: 2012/01/03

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.6 °C

#### **DASY5** Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.312 mW/g

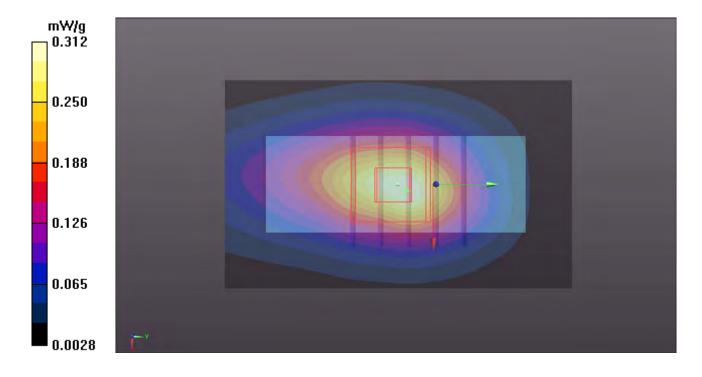
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.557 V/m; Power Drift = -0.125 dB

Peak SAR (extrapolated) = 0.3020

SAR(1 g) = 0.194 mW/g; SAR(10 g) = 0.118 mW/g

Maximum value of SAR (measured) = 0.247 mW/g



## P68 LTE IV\_16QAM\_10M\_Vertical Front\_0.5cm\_Ch20000\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_0103 Medium parameters used: f = 1715 MHz;  $\sigma = 1.486$  mho/m;  $\varepsilon_r = 54.724$ ;  $\rho = 1.486$  mho/m;  $\varepsilon_r = 54.724$ ;  $\rho = 1.486$  mho/m;  $\varepsilon_r =$ 

Date: 2012/01/03

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.6 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.141 mW/g

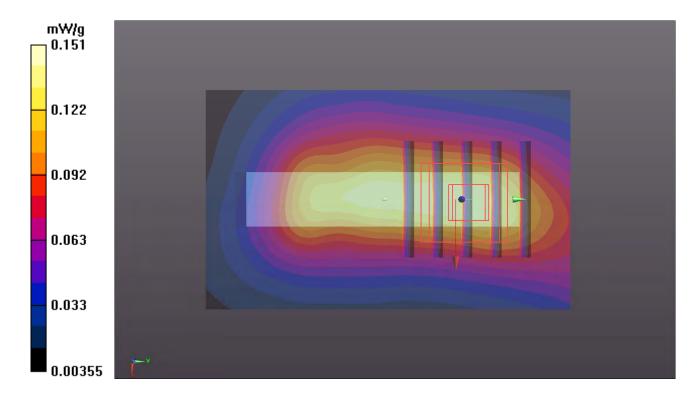
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.887 V/m; Power Drift = -0.120 dB

Peak SAR (extrapolated) = 0.1810

SAR(1 g) = 0.114 mW/g; SAR(10 g) = 0.069 mW/g

Maximum value of SAR (measured) = 0.151 mW/g



## P69 LTE IV\_16QAM\_10M\_Vertical Back\_0.5cm\_Ch20000\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_0103 Medium parameters used: f = 1715 MHz;  $\sigma = 1.486$  mho/m;  $\varepsilon_r = 54.724$ ;  $\rho = 1.486$  mho/m;  $\varepsilon_r = 54.724$ ;  $\rho = 1.486$  mho/m;  $\varepsilon_r =$ 

Date: 2012/01/03

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.6 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.171 mW/g

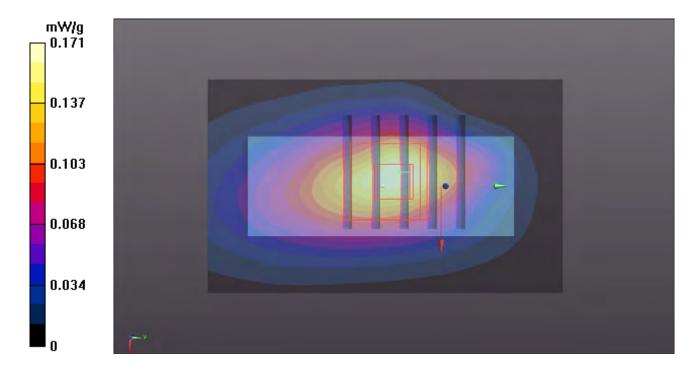
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.004 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.2130

SAR(1 g) = 0.126 mW/g; SAR(10 g) = 0.071 mW/g

Maximum value of SAR (measured) = 0.166 mW/g



## P70 LTE IV\_16QAM\_10M\_Tip Mode\_0.5cm\_Ch20000\_1RB\_Offset 0

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_0103 Medium parameters used: f = 1715 MHz;  $\sigma = 1.486$  mho/m;  $\varepsilon_r = 54.724$ ;  $\rho =$ 

Date: 2012/01/03

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.3 °C; Liquid Temperature: 21.6 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.108 mW/g

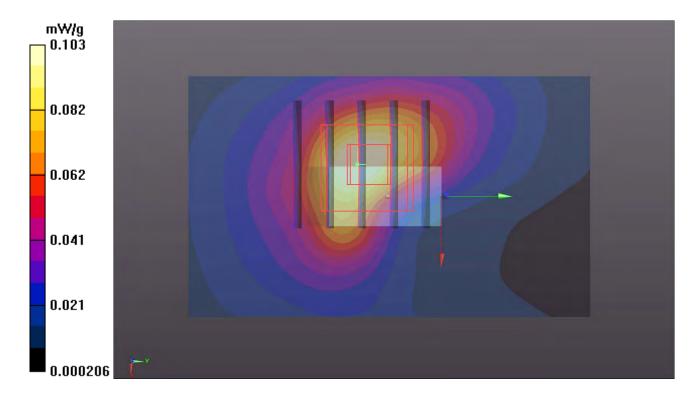
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.382 V/m; Power Drift = -0.172 dB

Peak SAR (extrapolated) = 0.1260

SAR(1 g) = 0.077 mW/g; SAR(10 g) = 0.042 mW/g

Maximum value of SAR (measured) = 0.103 mW/g



# P71 LTE IV\_16QAM\_10M\_Horizontal Up\_0.5cm\_Ch20000\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_0103 Medium parameters used: f = 1715 MHz;  $\sigma = 1.486$  mho/m;  $\varepsilon_r = 54.724$ ;  $\rho =$ 

Date: 2012/01/03

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.6 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.253 mW/g

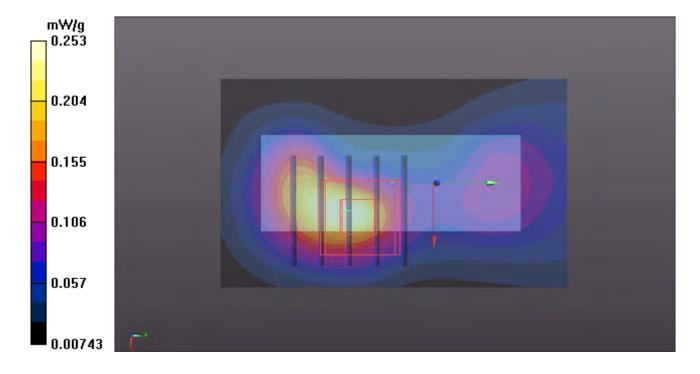
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.421 V/m; Power Drift = 0.156 dB

Peak SAR (extrapolated) = 0.3350

SAR(1 g) = 0.182 mW/g; SAR(10 g) = 0.091 mW/g

Maximum value of SAR (measured) = 0.249 mW/g



## P72 LTE IV\_16QAM\_10M\_Horizontal Down\_0.5cm\_Ch20000\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_0103 Medium parameters used: f = 1715 MHz;  $\sigma = 1.486$  mho/m;  $\varepsilon_r = 54.724$ ;  $\rho = 1.486$  mho/m;  $\varepsilon_r = 54.724$ ;  $\rho = 1.486$  mho/m;  $\varepsilon_r =$ 

Date: 2012/01/03

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.6 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

**Ch20000/Area Scan (61x101x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.682 mW/g

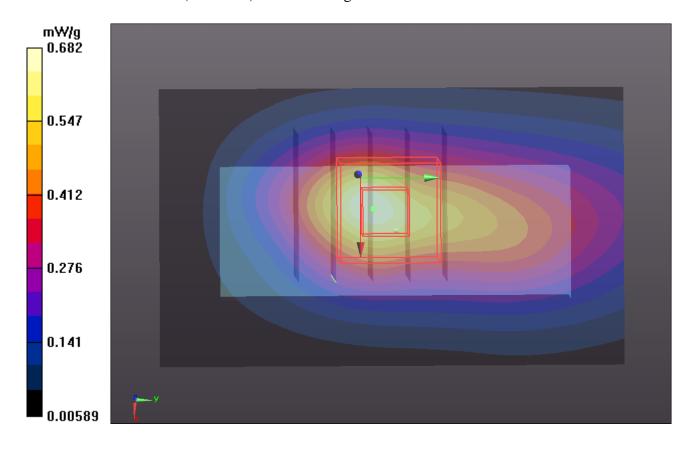
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.909 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 0.2720

SAR(1 g) = 0.120 mW/g; SAR(10 g) = 0.072 mW/g

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



## P73 LTE IV\_16QAM\_10M\_Vertical Front\_0.5cm\_Ch20000\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_0103 Medium parameters used: f = 1715 MHz;  $\sigma = 1.486$  mho/m;  $\varepsilon_r = 54.724$ ;  $\rho =$ 

Date: 2012/01/03

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.6 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.155 mW/g

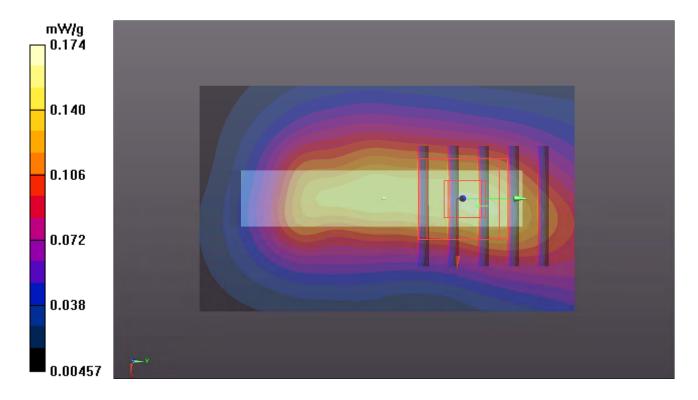
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.038 V/m; Power Drift = 0.122 dB

Peak SAR (extrapolated) = 0.2110

SAR(1 g) = 0.134 mW/g; SAR(10 g) = 0.080 mW/g

Maximum value of SAR (measured) = 0.174 mW/g



# P74 LTE IV\_16QAM\_10M\_Vertical Back\_0.5cm\_Ch20000\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_0103 Medium parameters used: f = 1715 MHz;  $\sigma = 1.486$  mho/m;  $\varepsilon_r = 54.724$ ;  $\rho = 1.486$  mho/m;  $\varepsilon_r = 54.724$ ;  $\rho = 1.486$  mho/m;  $\varepsilon_r =$ 

Date: 2012/01/03

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.6 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.069 mW/g

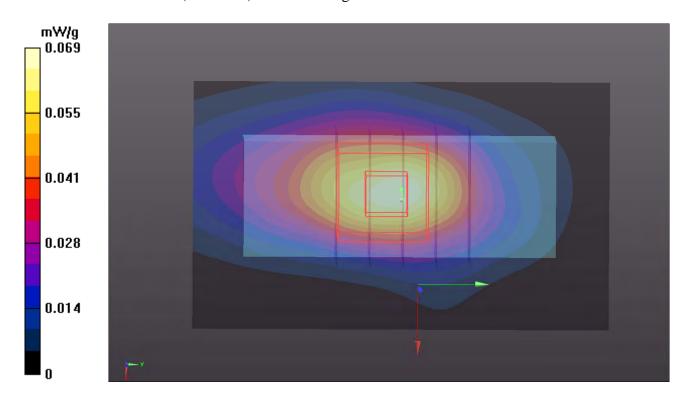
Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.458 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.0870

SAR(1 g) = 0.052 mW/g; SAR(10 g) = 0.029 mW/g

Maximum value of SAR (measured) = 0.070 mW/g



## P75 LTE IV\_16QAM\_10M\_Tip Mode\_0.5cm\_Ch20000\_1RB\_Offset 49

#### **DUT: 111215C07**

Communication System: LTE; Frequency: 1715 MHz; Duty Cycle: 1:1

Medium: B1750\_0103 Medium parameters used: f = 1715 MHz;  $\sigma = 1.486$  mho/m;  $\varepsilon_r = 54.724$ ;  $\rho = 1.486$  mho/m;  $\varepsilon_r = 54.724$ ;  $\rho = 1.486$  mho/m;  $\varepsilon_r =$ 

Date: 2012/01/03

 $1000 \text{ kg/m}^3$ 

Ambient Temperature: 22.4 °C; Liquid Temperature: 21.6 °C

## DASY5 Configuration:

- Probe: EX3DV4 SN3800; ConvF(7.43, 7.43, 7.43); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Ch20000/Area Scan (31x51x1): Measurement grid: dx=20mm, dy=20mm

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

Ch20000/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.320 V/m; Power Drift = 0.160 dB

Peak SAR (extrapolated) = 0.0680

SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.023 mW/g

Maximum value of SAR (measured) = 0.058 mW/g

