



# FCC SAR Test Report

**APPLICANT** : ZTE CORPORATION  
**EQUIPMENT** : WCDMA Digital Mobile Handset  
**BRAND NAME** : ZTE  
**MODEL NAME** : ZTE V6500  
**FCC ID** : Q78-V6500  
**STANDARD** : FCC 47 CFR Part 2 (2.1093)  
ANSI/IEEE C95.1-1992  
IEEE 1528-2003  
FCC OET Bulletin 65 Supplement C (Edition 01-01)

The product was received on Jun. 28, 2012 and completely tested on Jul. 24, 2012. We, SPORTON INTERNATIONAL (KUNSHAN) INC., would like to declare that the tested sample has been evaluated in accordance with the procedures and shown the compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL (KUNSHAN) INC., the test report shall not be reproduced except in full.

Reviewed by:

Jones Tsai / Manager



**SPORTON INTERNATIONAL (KUNSHAN) INC.**  
**No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C.**



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### 1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **ZTE CORPORATION** DUT: **WCDMA Digital Mobile Handset**; Brand Name: **ZTE**; Model Name: **ZTE V6500** are as follows.

<Standalone SAR>

Band	Position	SAR <sub>1g</sub> (W/kg)
GSM850	Head	0.599
GSM1900	Head	0.436
WCDMA Band V	Head	0.504
WCDMA Band II	Head	1.050
WLAN 2.4G	Head	0.127
GSM850	Hotspot (1 cm Gap)	0.884
GSM1900	Hotspot (1 cm Gap)	0.544
WCDMA Band V	Hotspot (1 cm Gap)	0.917
WCDMA Band II	Hotspot (1 cm Gap)	1.250
WLAN 2.4G	Hotspot (1 cm Gap)	0.030
GSM850	Body-worn (1 cm Gap)	0.884
GSM1900	Body-worn (1 cm Gap)	0.544
WCDMA Band V	Body-worn (1 cm Gap)	0.917
WCDMA Band II	Body-worn (1 cm Gap)	1.250
WLAN 2.4G	Body-worn (1 cm Gap)	0.031

This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg) specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2003 and FCC OET Bulletin 65 Supplement C (Edition 01-01).



**2. Administration Data**

**2.1 Testing Laboratory**

Test Site	SPORTON INTERNATIONAL (KUNSHAN) INC.
Test Site Location	No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C. TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958

**2.2 Applicant**

Company Name	ZTE CORPORATION
Address	ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, P.R.China

**2.3 Manufacturer**

Company Name	ZTE CORPORATION
Address	ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, P.R.China

**2.4 Application Details**

Date of Receipt of Application	Jun. 28, 2012
Date of Start during the Test	Jun. 29, 2012
Date of End during the Test	Jul. 24, 2012

### 3. General Information

#### 3.1 Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT	WCDMA Digital Mobile Handset
Brand Name	ZTE
Model Name	ZTE V6500
FCC ID	Q78-V6500
IMEI Code	861476010047496
Tx Frequency	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz WLAN2.4G: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz
Rx Frequency	GSM850: 869.2 MHz ~ 893.8 MHz GSM1900: 1930.2 MHz ~ 1989.8 MHz WCDMA Band V: 871.4 MHz ~ 891.6 MHz WCDMA Band II: 1932.4 MHz ~ 1987.6 MHz WLAN2.4G: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz
Maximum Average Output Power to Antenna	GSM850: 31.64 dBm GSM1900: 28.71 dBm WCDMA Band V: 22.98 dBm WCDMA Band II: 23.17 dBm 802.11b: 14.43 dBm 802.11g: 12.70 dBm Bluetooth: 7.54 dBm

Product Feature & Specification	
Antenna Type	WWAN: PIFA Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna
HW Version	QB7225_01A_V1BMB_A
SW Version	V6500_Z0_CN_PSGDF14300002
Type of Modulation	GSM: GMSK GPRS: GMSK EDGE: GMSK / 8PSK WCDMA: QPSK (Uplink) HSDPA: QPSK (Uplink) HSUPA: QPSK (Uplink) 802.11b: DSSS (BPSK / QPSK / CCK) 802.11g: OFDM (BPSK / QPSK / 16QAM / 64QAM) Bluetooth (1Mbps): GFSK Bluetooth EDR (2Mbps): $\pi/4$ -DQPSK Bluetooth EDR (3Mbps): 8-DPSK
Dual Transfer Mode (DTM) Category	Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.
EUT Stage	Identical Prototype
<b>Remark:</b> The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.	



### 3.2 Product Photos

Please refer to Appendix D.

### 3.3 Applied Standard

The Specific Absorption Rate (SAR) testing specification, method and procedure for this device is in accordance with the following standards:

- FCC 47 CFR Part 2 (2.1093)
- ANSI/IEEE C95.1-1992
- IEEE 1528-2003
- FCC OET Bulletin 65 Supplement C (Edition 01-01)
- FCC KDB 447498 D01 v04
- FCC KDB 648474 D01 v01r05
- FCC KDB 941225 D01 v02
- FCC KDB 941225 D03 v01
- FCC KDB 941225 D06 v01
- FCC KDB 248227 D01 v01r02

### 3.4 Device Category and SAR Limits

This device belongs to portable device category because its radiating structure is allowed to be used within 20 centimeters of the body of the user. Limit for General Population/Uncontrolled exposure should be applied for this device, it is 1.6 W/kg as averaged over any 1 gram of tissue.

### 3.5 Test Conditions

#### 3.5.1 Ambient Condition

Ambient Temperature	20 to 24 °C
Humidity	< 60 %

#### 3.5.2 Test Configuration

The device was controlled by using a base station emulator. Communication between the device and the emulator was established by air link. The distance between the EUT and the 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 EUT. The EUT was set from the emulator to radiate maximum output power during all tests.

For WLAN SAR testing, WLAN engineering testing software installed on the EUT can provide continuous transmitting RF signal.

## **4. Specific Absorption Rate (SAR)**

### **4.1 Introduction**

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.

### **4.2 SAR Definition**

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 ( $\rho$ ). The equation description is as below:

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

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

SAR measurement can be either related to the temperature elevation in tissue by

$$\text{SAR} = c \left( \frac{\delta T}{\delta t} \right)$$

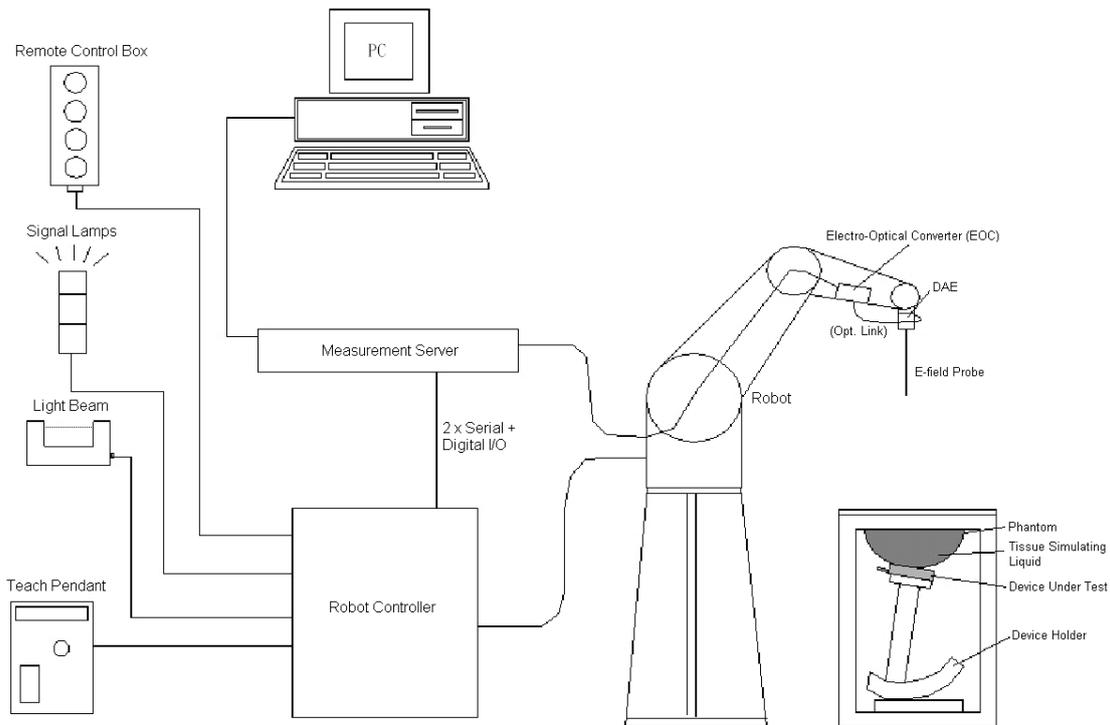
Where: C is the specific heat capacity,  $\delta T$  is the temperature rise and  $\delta t$  is the exposure duration, or related to the electrical field in the tissue by

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

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

However for evaluating SAR of low power transmitter, electrical field measurement is typically applied.

## 5. SAR Measurement System



**Fig 5.1 SPEAG DASY System Configurations**

The DASY system for performance compliance tests is illustrated above graphically. This system consists of the following items:

- A standard high precision 6-axis robot with controller, a teach pendant and software
- A data acquisition electronic (DAE) attached to the robot arm extension
- A dosimetric probe equipped with an optical surface detector system
- The electro-optical converter (EOC) performs the conversion between optical and electrical signals
- A measurement server performs the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- A probe alignment unit which improves the accuracy of the probe positioning
- A computer operating Windows XP
- DASY software
- Remote control with teach pendant and additional circuitry for robot safety such as warning lamps, etc.
- The SAM twin phantom
- A device holder
- Tissue simulating liquid
- Dipole for evaluating the proper functioning of the system

Component details are described in in the following sub-sections.

### 5.1 E-Field Probe

The SAR measurement is conducted with the dosimetric probe (manufactured by SPEAG). The probe is specially designed and calibrated for use in liquid with high permittivity. The dosimetric probe has special calibration in liquid at different frequency. This probe has a built in optical surface detection system to prevent from collision with phantom.

#### 5.1.1 E-Field Probe Specification

##### <ES3DV3 Probe>

<b>Construction</b>	Symmetrical design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	 <p><b>Fig 5.2 Photo of ES3DV3</b></p>
<b>Frequency</b>	10 MHz to 4 GHz; Linearity: $\pm 0.2$ dB	
<b>Directivity</b>	$\pm 0.2$ dB in HSL (rotation around probe axis) $\pm 0.3$ dB in tissue material (rotation normal to probe axis)	
<b>Dynamic Range</b>	5 $\mu$ W/g to 100 mW/g; Linearity: $\pm 0.2$ dB	
<b>Dimensions</b>	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	

##### <EX3DV4 Probe>

<b>Construction</b>	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	 <p><b>Fig 5.3 Photo of EX3DV4</b></p>
<b>Frequency</b>	10 MHz to 6 GHz; Linearity: $\pm 0.2$ dB	
<b>Directivity</b>	$\pm 0.3$ dB in HSL (rotation around probe axis) $\pm 0.5$ dB in tissue material (rotation normal to probe axis)	
<b>Dynamic Range</b>	10 $\mu$ W/g to 100 mW/g; Linearity: $\pm 0.2$ dB (noise: typically $< 1$ $\mu$ W/g)	
<b>Dimensions</b>	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	

#### 5.1.2 E-Field Probe Calibration

Each probe needs to be calibrated according to a dosimetric assessment procedure with accuracy better than  $\pm 10\%$ . The spherical isotropy shall be evaluated and within  $\pm 0.25$  dB. The sensitivity parameters (NormX, NormY, and NormZ), the diode compression parameter (DCP) and the conversion factor (ConvF) of the probe are tested. The calibration data can be referred to appendix C of this report.

### 5.2 Data Acquisition Electronics (DAE)

The data acquisition electronics (DAE) consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information as well as an optical uplink for commands and the clock. The input impedance of the DAE is 200 MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.



Fig 5.4 Photo of DAE

### 5.3 Robot

The SPEAG DASY system uses the high precision robots (DASY5: TX90XL) type from Stäubli SA (France). For the 6-axis controller system, the robot controller version (DASY5: CS8c) from Stäubli is used. The Stäubli robot series have many features that are important for our application:

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



Fig 5.5 Photo of DASY5

### 5.4 Measurement Server

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

The measurement server performs all the real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operations.

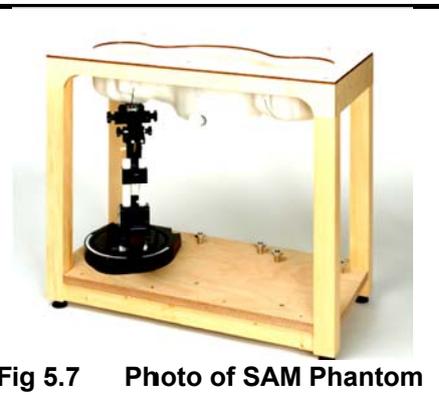


Fig 5.6 Photo of Server for DASY5

### 5.5 Phantom

<SAM Twin Phantom>

Shell Thickness	2 ± 0.2 mm; Center ear point: 6 ± 0.2 mm
Filling Volume	Approx. 25 liters
Dimensions	Length: 1000 mm; Width: 500 mm; Height: adjustable feet
Measurement Areas	Left Hand, Right Hand, Flat Phantom



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

### 5.6 Device Holder

<Device Holder for SAM Twin Phantom>

The SAR in the phantom is approximately inversely proportional to the square of the distance between the source and the liquid surface. For a source at 5 mm distance, a positioning uncertainty of ± 0.5 mm would produce a SAR uncertainty of ± 20 %. Accurate device positioning is therefore crucial for accurate and repeatable measurements. The positions in which the devices must be measured are defined by the standards.

The DASY device holder is designed to cope with different positions given in the standard. It has two scales for the device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear reference points). The rotation center for both scales is the ear reference point (EPR). Thus the device needs no repositioning when changing the angles.

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



Fig 5.8 Device Holder

## **5.7 Data Storage and Evaluation**

### **5.7.1 Data Storage**

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

The measured data can be visualized or exported in different units or formats, depending on the selected probe type (e.g., [V/m], [A/m], [mW/g]). Some of these units are not available in certain situations or give meaningless results, e.g., a SAR-output in a non-lose media, will always be zero. Raw data can also be exported to perform the evaluation with other software packages.

### **5.7.2 Data Evaluation**

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

<b>Probe parameters :</b>	- Sensitivity	Norm <sub>i</sub> , a <sub>i0</sub> , a <sub>i1</sub> , a <sub>i2</sub>
	- Conversion factor	ConvF <sub>i</sub>
	- Diode compression point	dcp <sub>i</sub>
<b>Device parameters :</b>	- Frequency	f
	- Crest factor	cf
<b>Media parameters :</b>	- Conductivity	σ
	- Density	ρ

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

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

The formula for each channel can be given as :

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

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

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

$$\text{E-field Probes : } E_i = \sqrt{\frac{V_i}{\text{Norm}_i \cdot \text{ConvF}}}$$

$$\text{H-field Probes : } H_i = \sqrt{V_i \cdot \frac{a_{i0} + a_{i1}f + a_{i2}f^2}{f}}$$

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

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

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

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

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

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

Note that the density is set to 1, to account for actual head tissue density rather than the density of the tissue simulating liquid.



5.8 Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	Dosimetric E-Field Probe	ES3DV3	3270	Sep. 12, 2011	Sep. 11, 2012
SPEAG	Dosimetric E-Field Probe	EX3DV4	3857	Jun. 20, 2012	Jun. 19, 2013
SPEAG	Data Acquisition Electronics	DAE4	1303	Nov. 10, 2011	Nov. 09, 2012
SPEAG	Data Acquisition Electronics	DAE4	1210	Nov. 18, 2011	Nov. 17, 2012
SPEAG	835MHz System Validation Kit	D835V2	4d091	Nov. 18, 2011	Nov. 17, 2012
SPEAG	1900MHz System Validation Kit	D1900V2	5d118	Nov. 21, 2011	Nov. 20, 2012
SPEAG	2450MHz System Validation Kit	D2450V2	736	Jul. 25, 2011	Jul. 24, 2012
SPEAG	SAM Twin Phantom	QD 000 P40 CD	TP-1670	NCR	NCR
SPEAG	SAM Twin Phantom	QD 000 P40 CD	TP-1671	NCR	NCR
SPEAG	SAM Twin Phantom	QD 000 P40 CB	TP-1477	NCR	NCR
SPEAG	SAM Twin Phantom	QD 000 P40 CB	TP-1479	NCR	NCR
SPEAG	Phone Positioner	N/A	N/A	NCR	NCR
Anritsu	Radio Communication Analyzer	MT8820C	6201091028	Jun. 10, 2012	Jun. 9, 2013
Agilent	Base Station	E5515C	MY50267224	Dec. 29, 2011	Dec. 28, 2012
Agilent	ENA Series Network Analyzer	E5071C	MY46111157	Apr. 13, 2012	Apr. 14, 2013
R&S	Signal Generator	SMR40	100455	Dec. 30, 2011	Dec. 29, 2012
Agilent	Power Meter	E4416A	MY45101555	Aug. 23, 2011	Aug. 22, 2012
Agilent	Power Sensor	E9327A	MY44421198	Aug. 23, 2011	Aug. 22, 2012
R&S	Spectrum Analyzer	FSP30	101400	Jun. 01, 2012	May. 31, 2013

Table 5.1 Test Equipment List

Note: The calibration certificate of DASY can be referred to appendix C of this report.

## 6. Tissue Simulating Liquids

For the measurement of the field distribution inside the SAM phantom with DASY, the phantom must be filled with around 25 liters of homogeneous body tissue simulating liquid. 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, which is shown in Fig. 6.1. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm, which is shown in Fig. 6.2.



Fig 6.1 Photo of Liquid Height for Head SAR



Fig 6.2 Photo of Liquid Height for Body SAR

The following table gives the recipes for tissue simulating liquid.

Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity ( $\sigma$ )	Permittivity ( $\epsilon_r$ )
<b>For Head</b>								
835	40.3	57.9	0.2	1.4	0.2	0	0.90	41.5
1800, 1900, 2000	55.2	0	0	0.3	0	44.5	1.40	40.0
2450	55.0	0	0	0	0	45.0	1.80	39.2
<b>For Body</b>								
835	50.8	48.2	0	0.9	0.1	0	0.97	55.2
1800, 1900, 2000	70.2	0	0	0.4	0	29.4	1.52	53.3
2450	68.6	0	0	0	0	31.4	1.95	52.7

Table 6.1 Recipes of Tissue Simulating Liquid



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

The following table shows the measuring results for simulating liquid.

Freq. (MHz)	Liquid Type	Temp. (°C)	Conductivity ( $\sigma$ )	Permittivity ( $\epsilon_r$ )	Conductivity Target ( $\sigma$ )	Permittivity Target ( $\epsilon_r$ )	Delta ( $\sigma$ ) (%)	Delta ( $\epsilon_r$ ) (%)	Limit (%)	Date
835	Head	21.5	0.92	42.227	0.90	41.5	2.22	1.75	±5	Jun. 29, 2012
835	Head	21.4	0.914	40.255	0.90	41.5	2.22	1.75	±5	Jul. 10, 2012
835	Body	21.6	0.991	55.697	0.97	55.2	2.16	0.90	±5	Jul. 02, 2012
835	Body	21.6	0.976	54.382	0.97	55.2	0.62	-1.48	±5	Jul. 10, 2012
1900	Head	21.4	1.435	38.464	1.40	40.0	2.50	-3.84	±5	Jun. 29, 2012
1900	Head	21.3	1.427	41.191	1.40	40.0	1.93	2.98	±5	Jul. 10, 2012
1900	Body	21.3	1.528	54.867	1.52	53.3	0.53	2.94	±5	Jun. 29, 2012
1900	Body	21.7	1.535	54.565	1.52	53.3	0.99	2.37	±5	Jul. 10, 2012
2450	Head	21.6	1.857	37.67	1.8	39.2	3.17	-3.90	±5	Jul. 24, 2012
2450	Body	21.5	1.949	53.894	1.95	52.7	-0.05	2.27	±5	Jul. 24, 2012

Table 6.2 Measuring Results for Simulating Liquid

## 7. SAR Measurement Evaluation

Each DASY system is equipped with one or more system validation kits. These units, together with the predefined measurement procedures within the DASY software, enable the user to conduct the system performance check and system validation. System validation kit includes a dipole, tripod holder to fix it underneath the flat phantom and a corresponding distance holder.

### 7.1 Purpose of System Performance check

The system performance check verifies that the system operates within its specifications. System and operator errors can be detected and corrected. It is recommended that the system performance check be performed prior to any usage of the system in order to guarantee reproducible results. The system performance check uses normal SAR measurements in a simplified setup with a well characterized source. This setup was selected to give a high sensitivity to all parameters that might fail or vary over time. The system check does not intend to replace the calibration of the components, but indicates situations where the system uncertainty is exceeded due to drift or failure.

### 7.2 System Setup

In the simplified setup for system evaluation, the EUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave that comes from a signal generator. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. The distance holder should touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The equipment setup is shown below:

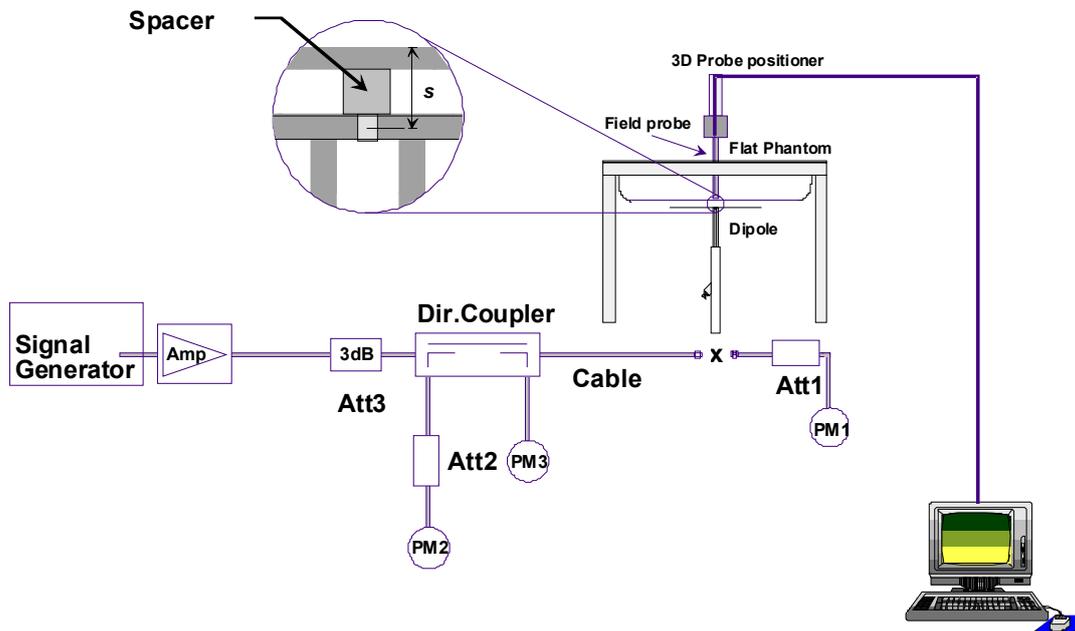


Fig 7.1 System Setup for System Evaluation

1. Signal Generator
2. Amplifier
3. Directional Coupler
4. Power Meter
5. Calibrated Dipole

The output power on dipole port must be calibrated to 24 dBm (250 mW) before dipole is connected.



**Fig 7.2 Photo of Dipole Setup**

**7.3 Validation Results**

Comparing to the original SAR value provided by SPEAG, the validation data should be within its specification of 10 %. Table 7.1 shows the target SAR and measured SAR after normalized to 1W input power. The table below indicates the system performance check can meet the variation criterion and the plots can be referred to Appendix A of this report.

Measurement Date	Frequency (MHz)	Liquid Type	Targeted SAR <sub>1g</sub> (W/kg)	Measured SAR <sub>1g</sub> (W/kg)	Normalized SAR <sub>1g</sub> (W/kg)	Deviation (%)
Jun. 29, 2012	835	Head	9.40	2.49	9.96	5.96
Jul. 10, 2012	835	Head	9.40	2.32	9.28	-1.28
Jul. 02, 2012	835	Body	9.42	2.47	9.88	4.88
Jul. 10, 2012	835	Body	9.42	2.42	9.68	2.76
Jun. 29, 2012	1900	Head	40.30	9.44	37.76	-6.30
Jul. 10, 2012	1900	Head	40.30	10.1	40.40	0.25
Jun. 29, 2012	1900	Body	41.80	10.6	42.40	1.44
Jul. 10, 2012	1900	Body	41.80	10.7	42.80	2.39
Jul. 24, 2012	2450	Head	54.8	14.2	56.80	3.65
Jul. 24, 2012	2450	Body	52.3	12.9	51.60	-1.34

**Table 7.1 Target and Measurement SAR after Normalized**

## 8. EUT Testing Position

This EUT was tested in ten different positions. They are right cheek, right tilted, left cheek, left tilted, Front of the EUT with phantom 1 cm gap, Back of the EUT with phantom 1 cm gap, Top Side of the EUT with phantom 1 cm gap, Bottom Side of the EUT with phantom 1 cm gap, Right Side of the EUT with phantom 1 cm gap, and Left Side of the EUT with phantom 1 cm gap, as illustrated below:

### 8.1 Define two imaginary lines on the handset

- The vertical centerline passes through two points on the front side of the handset - the midpoint of the width  $w_t$  of the handset at the level of the acoustic output, and the midpoint of the width  $w_b$  of the bottom of the handset.
- The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output. The horizontal line is also tangential to the face of the handset at point A.
- The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centerline is not necessarily parallel to the front face of the handset, especially for clamshell handsets, handsets with flip covers, and other irregularly shaped handsets.

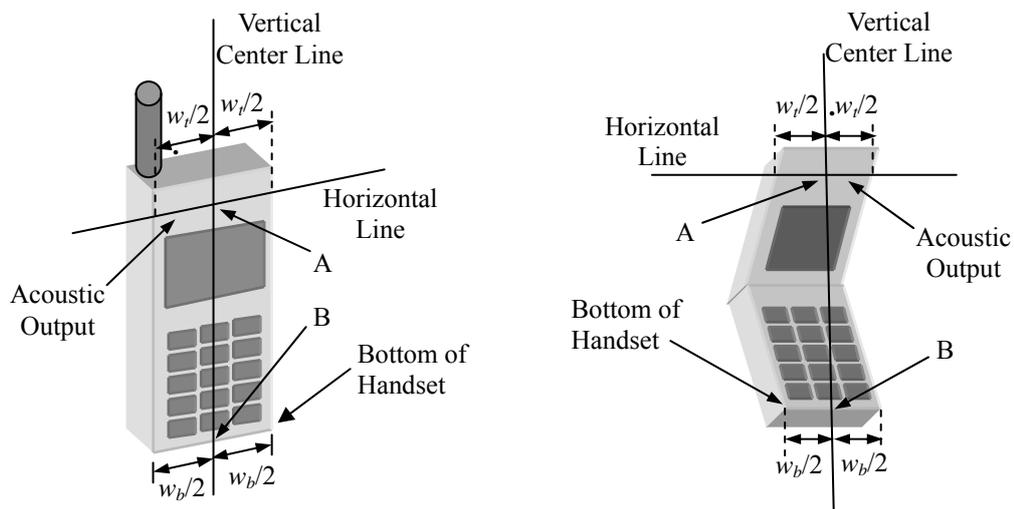


Fig 9.1 Illustration for Handset Vertical and Horizontal Reference Lines

### 8.2 Cheek Position

- (a) To position the device with the vertical center line of the body of the device and the horizontal line crossing the center piece in a plane parallel to the sagittal plane of the phantom. While maintaining the device in this plane, align the vertical center line with the reference plane containing the three ear and mouth reference point (M: Mouth, RE: Right Ear, and LE: Left Ear) and align the center of the ear piece with the line RE-LE.
- (b) To move the device towards the phantom with the ear piece aligned with the line LE-RE until the phone touched the ear. While maintaining the device in the reference plane and maintaining the phone contact with the ear, move the bottom of the phone until any point on the front side is in contact with the cheek of the phantom or until contact with the ear is lost (see Fig. 9.2).

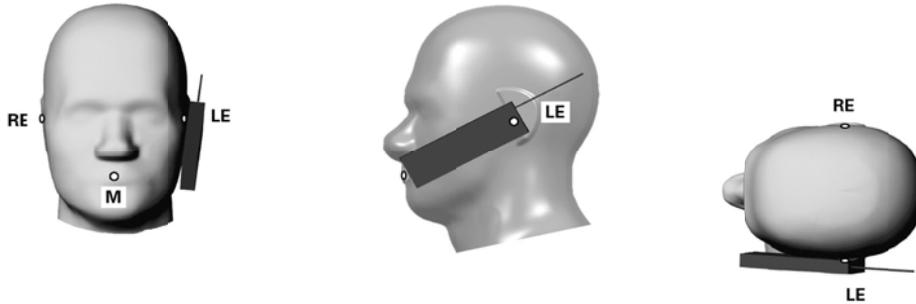


Fig 9.2 Illustration for Cheek Position

### 8.3 Tilted Position

- (a) To position the device in the “cheek” position described above.
- (b) While maintaining the device the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until contact with the ear is lost (see Fig. 9.3).

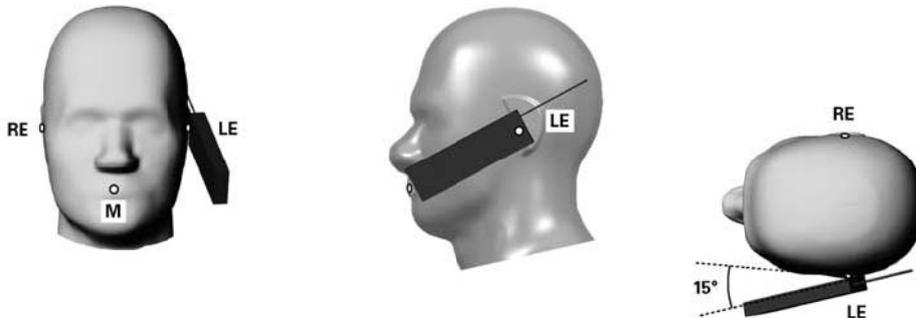
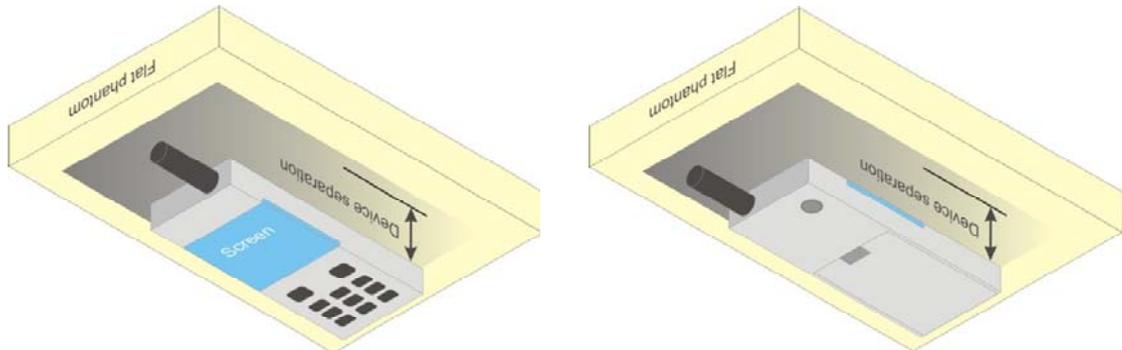


Fig 9.3 Illustration for Tilted Position

### 8.4 Body Worn Position

- (a) To position the device parallel to the phantom surface with either keypad up or down.
- (b) To adjust the device parallel to the flat phantom.
- (c) To adjust the distance between the device surface and the flat phantom to 1 cm.



**Fig 9.4 Illustration for Body Worn Position**

#### <EUT Setup Photos>

Please refer to Appendix E for the test setup photos.

## **9. Measurement Procedures**

The measurement procedures are as follows:

- (a) Use base station simulator (if applicable) or engineering software to transmit RF power continuously (continuous Tx) in the highest power channel.
- (b) Keep EUT to radiate maximum output power or 100% EUTy factor (if applicable)
- (c) Measure output power through RF cable and power meter.
- (d) Place the EUT in the positions as Appendix E demonstrates.
- (e) Set scan area, grid size and other setting on the DASY software.
- (f) Measure SAR results for the highest power channel on each testing position.
- (g) Find out the largest SAR result on these testing positions of each band
- (h) Measure SAR results for other channels in worst SAR testing position if the SAR of highest power channel is larger than 0.8 W/kg

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

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

### **9.1 Spatial Peak SAR Evaluation**

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

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

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

- (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 from 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

### **9.2 Area & Zoom Scan Procedures**

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan measures 5x5x7 points with step size 8, 8 and 5 mm for 300 MHz to 3 GHz, and 8x8x8 points with step size 4, 4 and 2.5 mm for 3 GHz to 6 GHz. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g.



### **9.3 Volume Scan Procedures**

The volume scan is used to 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 EUT remains in the same test position for all measurements and all volume scans use the same spatial resolution and grid spacing (step-size is 4, 4 and 2.5 mm). When all volume scans are completed, the software, SEMCAD postprocessor can combine and subsequently superpose these measurement data to calculate the multiband SAR.

### **9.4 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.

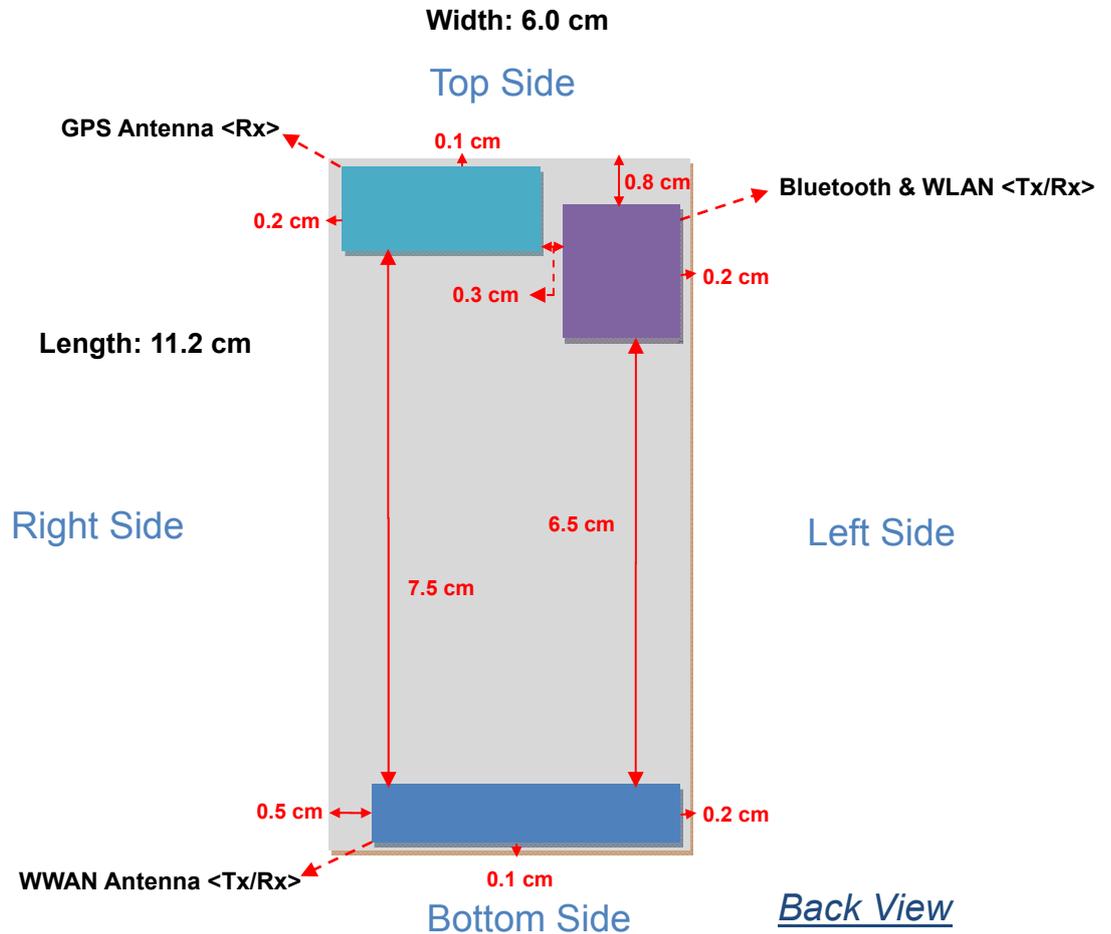
Extrapolation routines are used to obtain SAR values between the lowest measurement points and the inner phantom surface. The extrapolation distance is determined by the surface detection distance and the probe sensor offset. The uncertainty increases with the extrapolation distance. To keep the uncertainty within 1% for the 1 g and 10 g cubes, the extrapolation distance should not be larger than 5 mm.

### **9.5 Power Drift Monitoring**

All SAR testing is under the EUT installed 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 EUT 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 is more than 5%, the SAR will be retested.

## 10. SAR Test Configurations

### 10.1 Exposure Positions Consideration



Antennas	Wireless Interface
WWAN Antenna (Tx / Rx)	GSM850/1900 and WCDMA Band V/II
GPS Antenna (Rx Only)	GPS receiving only
Bluetooth & WLAN Antenna (Tx / Rx)	WLAN 2.4GHz Bluetooth



Sides for SAR tests; Hotspot mode						
Test distance: 10 mm						
Antennas	Back	Front	Top Side	Bottom Side	Right Side	Left Side
WWAN	YES	YES	NO	YES	YES	YES
Bluetooth & WLAN	YES	YES	YES	NO	NO	YES

**Note:**

1. Referring to KDB 941225 D06, when the overall device length and width are  $\geq 9\text{cm} \times 5\text{cm}$ , the test distance is 10 mm. SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge.
2. For WWAN Main antenna, SAR measurements at Top side is not required since the distance between EUT and flat phantom  $> 25\text{mm}$ .
3. For Bluetooth & WLAN antenna, SAR measurements Bottom and Right sides are not required since the distance between EUT and flat phantom  $> 25\text{mm}$ .

**10.2 Conducted RF Output Power (Unit: dBm)**

&lt;GSM/GPRS/EDGE&gt;

Band	Burst Average Power					
	GSM850			GSM1900		
Channel	128	189	251	512	661	810
Frequency (MHz)	824.2	836.4	848.8	1850.2	1880.0	1909.8
GSM (1 Uplink)	<b>31.64</b>	31.58	31.52	28.64	28.44	<b>28.71</b>
GPRS 8 (1 Uplink) – CS1	31.63	31.58	31.52	28.61	28.64	28.70
GPRS 10 (2 Uplink) – CS1	29.04	28.95	28.87	26.33	26.12	26.35
GPRS 11 (3 Uplink) – CS1	27.12	27.02	26.90	24.33	24.15	24.40
GPRS 12 (4 Uplink) – CS1	25.55	25.49	25.42	22.74	22.57	22.79
EDGE 8 (GMSK, 1 Uplink) – MCS1	31.62	31.56	31.51	28.59	28.62	28.70
EDGE 10 (GMSK, 2 Uplink) – MCS1	29.02	28.95	28.87	26.32	26.11	26.34
EDGE 11 (GMSK, 3 Uplink) – MCS1	27.11	27.01	26.90	24.32	24.14	24.39
EDGE 12 (GMSK, 4 Uplink) – MCS1	25.55	25.48	25.41	22.72	22.55	22.77
EDGE 8 (8PSK, 1 Uplink) – MCS9	26.37	26.28	26.17	25.53	25.30	25.42
EDGE 10 (8PSK, 2 Uplink) – MCS9	24.35	24.29	24.20	23.57	23.36	23.50
EDGE 11 (8PSK, 3 Uplink) – MCS9	23.82	23.74	23.64	23.06	22.83	22.95
EDGE 12 (8PSK, 4 Uplink) – MCS9	23.23	23.20	23.07	22.50	22.31	22.14



Source-Based Time-Averaged Power						
Band	GSM850			GSM1900		
Channel	128	189	251	512	661	810
Frequency (MHz)	824.2	836.4	848.8	1850.2	1880.0	1909.8
GSM (1 Uplink)	22.64	22.58	22.52	19.64	19.44	19.71
GPRS 8 (1 Uplink) – CS1	22.63	22.58	22.52	19.61	19.64	19.70
GPRS 10 (2 Uplink) – CS1	23.04	22.95	22.87	20.33	20.12	20.35
GPRS 11 (3 Uplink) – CS1	22.86	22.76	22.64	20.07	19.89	20.14
GPRS 12 (4 Uplink) – CS1	22.55	22.49	22.42	19.74	19.57	19.79
EDGE 8 (GMSK, 1 Uplink) – MCS1	22.62	22.56	22.51	19.59	19.62	19.70
EDGE 10 (GMSK, 2 Uplink) – MCS1	23.02	22.95	22.87	20.32	20.11	20.34
EDGE 11 (GMSK, 3 Uplink) – MCS1	22.85	22.75	22.64	20.06	19.88	20.13
EDGE 12 (GMSK, 4 Uplink) – MCS1	22.55	22.48	22.41	19.72	19.55	19.77
EDGE 8 (8PSK, 1 Uplink) – MCS9	17.37	17.28	17.17	16.53	16.30	16.42
EDGE 10 (8PSK, 2 Uplink) – MCS9	18.35	18.29	18.20	17.57	17.36	17.50
EDGE 11 (8PSK, 3 Uplink) – MCS9	19.56	19.48	19.38	18.80	18.57	18.69
EDGE 12 (8PSK, 4 Uplink) – MCS9	20.23	20.20	20.07	19.50	19.31	19.14

**Remark:** The source-based time-averaged power is linearly scaled the maximum burst averaged power based on time slots. The calculated method are shown as below:

- Source based time averaged power = Maximum burst averaged power (1 Uplink) - 9 dB
- Source based time averaged power = Maximum burst averaged power (2 Uplink) - 6 dB
- Source based time averaged power = Maximum burst averaged power (3 Uplink) - 4.26 dB
- Source based time averaged power = Maximum burst averaged power (4 Uplink) - 3 dB

**Note:**

1. For Head SAR testing, GSM, GPRS and EDGE should be evaluated, therefore the EUT was set in GPRS 10 for GSM850 and set in GPRS 10 for GSM1900 due to its highest source-based time-average power.
2. For Body SAR testing, GSM, GPRS and EDGE should be evaluated, therefore the EUT was set in GPRS 10 for GSM850 and set in GPRS 10 for GSM1900 due to its highest source-based time-average power.
3. Per KDB 447498, the maximum output power channel is used for SAR testing and for further SAR test reduction.
4. EDGE tests with MCS1 setting, GMSK modulation. Burst average power with MCS9 setting 8 PSK modulation, is provided voluntary for reference.
5. The EUT do not support DTM function.



<WCDMA>

Band	WCDMA Band V			WCDMA Band II		
Channel	4132	4182	4233	9262	9400	9538
Frequency (MHz)	826.4	836.4	846.6	1852.4	1880.0	1907.6
AMR	22.95	22.85	22.89	22.97	23.13	23.16
RMC 12.2K	22.98	22.86	22.90	23.02	23.15	23.17
HSDPA Subtest-1	21.51	21.35	21.38	21.55	21.66	21.77
HSDPA Subtest-2	21.48	21.33	21.34	21.43	21.60	21.72
HSDPA Subtest-3	21.32	21.26	21.29	21.45	21.59	21.68
HSDPA Subtest-4	21.41	21.31	21.32	21.46	21.60	21.65
HSUPA Subtest-1	21.49	21.40	21.19	21.45	21.42	21.70
HSUPA Subtest-2	20.45	20.34	20.38	20.21	20.64	20.63
HSUPA Subtest-3	20.76	20.72	20.47	20.73	20.71	21.04
HSUPA Subtest-4	20.49	20.42	20.38	20.31	20.66	20.77
HSUPA Subtest-5	21.50	21.45	21.44	21.48	21.91	21.80

MPR (dB)							
3GPP MPR	Subtest	WCDMA Band V			WCDMA Band II		
0	HSDPA Subtest-1	0.00	0.00	0.00	0.00	0.00	0.00
0	HSDPA Subtest-2	0.03	0.02	0.04	0.12	0.06	0.05
≤ 0.5	HSDPA Subtest-3	0.19	0.09	0.09	0.10	0.07	0.09
≤ 0.5	HSDPA Subtest-4	0.10	0.04	0.06	0.09	0.06	0.12
0	HSUPA Subtest-1	0.01	0.05	0.25	0.03	0.49	0.10
≤ 2	HSUPA Subtest-2	1.05	1.11	1.06	1.27	1.27	1.17
≤ 1	HSUPA Subtest-3	0.74	0.73	0.97	0.75	1.20	0.76
≤ 2	HSUPA Subtest-4	1.01	1.03	1.06	1.17	1.25	1.03
0	HSUPA Subtest-5	0.00	0.00	0.00	0.00	0.00	0.00

Note:

- For Head SAR, per KDB 941225 D01, RMC 12.2kbps setting is used to evaluate SAR. If AMR 12.2kbps power is < 1/4 dB higher than RMC, SAR tests with AMR 12.2kbps can be excluded.
- For Body SAR, per KDB 941225 D01, RMC 12.2kbps setting is used to evaluate SAR. If HSPDA subset-1 and HSUPA subset-5 output power is < 1/4 dB higher than RMC, and SAR with RMC 12.2kbps setting is ≤ 1.2W/kg, HSDPA and HSUPA SAR evaluation can be excluded.
- EUT is designed to follow the MPR of 3GPP Table 5.2B.1 specification. In production units, MPR result deviation from 3GPP is expected; the implementation and expected deviation is detailed in tune-up procedure exhibit.



<WLAN 2.4GHz>

Mode	Channel	Frequency (MHz)	Average power (dBm)			
			Data Rate (bps)			
			1M	2M	5.5M	11M
802.11b	CH 01	2412	14.43	14.29	14.26	14.20
	CH 06	2437	14.13	14.06	14.16	14.15
	CH 11	2462	13.71	13.76	13.78	13.72

Mode	Channel	Frequency (MHz)	Average power (dBm)							
			Data Rate (bps)							
			6M	9M	12M	18M	24M	36M	48M	54M
802.11g	CH 01	2412	12.28	12.28	11.94	11.75	11.41	11.22	12.56	11.54
	CH 06	2437	12.33	12.10	11.84	11.97	11.90	11.79	12.70	11.68
	CH 11	2462	11.51	11.35	11.44	11.47	11.44	11.47	12.43	11.51

Note:

1. Per KDB 248227, choose the highest output power channel to test SAR and determine further SAR exclusion
2. Per KDB 248227, 11g output power is less than 1/4 dB higher than 11b mode, thus the SAR can be excluded.
3. For each frequency band, testing at higher data rates and higher order modulations is not requirement when the maximum average output power for each of these configurations is less than 1/4 dB higher than those measured at the lowest data rate.

<Bluetooth>

Band	Bluetooth		
Channel	0	39	78
Frequency (MHz)	2402	2441	2480
Average Power (dBm)	7.40	7.36	7.54

Note:

1. Per KDB 447498, BT SAR is excluded due to highest output power  $\leq 60/f$  (GHz) mW, where  $60/f$  (GHz) = 24mW = 13.8dBm.

## 11. SAR Test Results

### 11.1 Test Records for Head SAR Test

<GSM>

Plot No.	Band	Mode	Test Position	Ch.	Freq. (MHz)	Output Power (dBm)	Power Drift (dB)	SAR <sub>1g</sub> (W/kg)
45	GSM850	GPRS10	Right Cheek	128	824.2	29.04	-0.10	0.582
46	GSM850	GPRS10	Right Tilted	128	824.2	29.04	-0.01	0.382
47	<b>GSM850</b>	<b>GPRS10</b>	<b>Left Cheek</b>	<b>128</b>	<b>824.2</b>	<b>29.04</b>	<b>-0.09</b>	<b>0.599</b>
48	GSM850	GPRS10	Left Tilted	128	824.2	29.04	0.02	0.388
49	GSM1900	GPRS10	Right Cheek	810	1909.8	26.35	-0.14	0.330
50	GSM1900	GPRS10	Right Tilted	810	1909.8	26.35	0.08	0.226
51	<b>GSM1900</b>	<b>GPRS10</b>	<b>Left Cheek</b>	<b>810</b>	<b>1909.8</b>	<b>26.35</b>	<b>-0.01</b>	<b>0.436</b>
52	GSM1900	GPRS10	Left Tilted	810	1909.8	26.35	-0.12	0.191

Note: Per KDB 447498, if the highest output channel SAR for each exposure position  $\leq 0.8$  W/kg other channels SAR tests are not necessary.

<WCDMA>

Plot No.	Band	Mode	Test Position	Ch.	Freq. (MHz)	Output Power (dBm)	Power Drift (dB)	SAR <sub>1g</sub> (W/kg)
1	WCDMA Band V	RMC12.2K	Right Cheek	4132	826.4	22.98	0.03	0.460
2	WCDMA Band V	RMC12.2K	Right Tilted	4132	826.4	22.98	0.09	0.317
3	<b>WCDMA Band V</b>	<b>RMC12.2K</b>	<b>Left Cheek</b>	<b>4132</b>	<b>826.4</b>	<b>22.98</b>	<b>0.07</b>	<b>0.504</b>
4	WCDMA Band V	RMC12.2K	Left Tilted	4132	826.4	22.98	0.02	0.332
5	WCDMA Band II	RMC12.2K	Right Cheek	9538	1907.6	23.17	-0.12	0.771
6	WCDMA Band II	RMC12.2K	Right Tilted	9538	1907.6	23.17	0.02	0.507
7	WCDMA Band II	RMC12.2K	Left Cheek	9538	1907.6	23.17	0.04	1.040
8	WCDMA Band II	RMC12.2K	Left Tilted	9538	1907.6	23.17	0.06	0.457
9	<b>WCDMA Band II</b>	<b>RMC12.2K</b>	<b>Left Cheek</b>	<b>9262</b>	<b>1852.4</b>	<b>23.02</b>	<b>0.10</b>	<b>1.050</b>
10	WCDMA Band II	RMC12.2K	Left Cheek	9400	1880	23.15	0.03	1.050

Note: Per KDB 447498, if the highest output channel SAR for each exposure position  $\leq 0.8$  W/kg other channels SAR tests are not necessary.

<WLAN>

Plot No.	Band	Mode	Test Position	Ch.	Freq. (MHz)	Output Power (dBm)	Power Drift (dB)	SAR <sub>1g</sub> (W/kg)
53	<b>WLAN2.4G</b>	<b>802.11b</b>	<b>Right Cheek</b>	<b>1</b>	<b>2412</b>	<b>14.43</b>	<b>0.09</b>	<b>0.127</b>
54	WLAN2.4G	802.11b	Right Tilted	1	2412	14.43	0.07	0.052
55	WLAN2.4G	802.11b	Left Cheek	1	2412	14.43	0.03	0.056
56	WLAN2.4G	802.11b	Left Tilted	1	2412	14.43	0.08	0.021

Note: Per KDB 248227, if the highest output channel SAR for each exposure position  $\leq 0.8$  W/kg other channels SAR tests are not necessary.

**11.2 Test Records for Hotspot SAR Test**

**<GSM>**

Plot No.	Band	Mode	Test Position	Gap (cm)	Ch.	Freq. (MHz)	Output Power (dBm)	Power Drift (dB)	SAR <sub>1g</sub> (W/kg)
31	GSM850	GPRS10	Front	1.0	128	824.2	29.04	-0.14	0.632
<b>32</b>	<b>GSM850</b>	<b>GPRS10</b>	<b>Back</b>	<b>1.0</b>	<b>128</b>	<b>824.2</b>	<b>29.04</b>	<b>-0.07</b>	<b>0.884</b>
33	GSM850	GPRS10	Left Side	1.0	128	824.2	29.04	0.03	0.619
34	GSM850	GPRS10	Right Side	1.0	128	824.2	29.04	0.14	0.515
35	GSM850	GPRS10	Bottom Side	1.0	128	824.2	29.04	0.11	0.076
36	GSM850	GPRS10	Back	1.0	189	836.4	28.95	0.03	0.845
37	GSM850	GPRS10	Back	1.0	251	848.8	28.87	-0.12	0.763
39	GSM1900	GPRS10	Front	1.0	810	1909.8	26.35	-0.07	0.446
<b>40</b>	<b>GSM1900</b>	<b>GPRS10</b>	<b>Back</b>	<b>1.0</b>	<b>810</b>	<b>1909.8</b>	<b>26.35</b>	<b>-0.04</b>	<b>0.544</b>
41	GSM1900	GPRS10	Left Side	1.0	810	1909.8	26.35	0.03	0.225
42	GSM1900	GPRS10	Right Side	1.0	810	1909.8	26.35	-0.01	0.141
43	GSM1900	GPRS10	Bottom Side	1.0	810	1909.8	26.35	0.05	0.277

**Note:**

- Per KDB 941225 D06, for EUT dimension ≥ 9cm\*5cm, the test distance is 1cm. SAR must be measured for all surfaces and sides with a transmitting antenna located within 2.5cm from that surface or edge.
- As in (1), SAR for Front/Back/Bottom Side/Left Side/Right Side is necessary.
- Per KDB 447498 if the highest output channel SAR for each exposure position ≤ 0.8 W/kg other channels SAR tests are not necessary.

**<WCDMA>**

Plot No.	Band	Mode	Test Position	Gap (cm)	Ch.	Freq. (MHz)	Output Power (dBm)	Power Drift (dB)	SAR <sub>1g</sub> (W/kg)
23	WCDMA Band V	RMC12.2K	Front	1.0	4132	826.4	22.98	0.16	0.511
24	WCDMA Band V	RMC12.2K	Back	1.0	4132	826.4	22.98	0.01	0.829
25	WCDMA Band V	RMC12.2K	Left Side	1.0	4132	826.4	22.98	0.10	0.512
26	WCDMA Band V	RMC12.2K	Right Side	1.0	4132	826.4	22.98	0.03	0.423
27	WCDMA Band V	RMC12.2K	Bottom Side	1.0	4132	826.4	22.98	0.13	0.063
<b>28</b>	<b>WCDMA Band V</b>	<b>RMC12.2K</b>	<b>Back</b>	<b>1.0</b>	<b>4182</b>	<b>836.4</b>	<b>22.86</b>	<b>0.16</b>	<b>0.917</b>
29	WCDMA Band V	RMC12.2K	Back	1.0	4233	846.6	22.9	0.03	0.755
11	WCDMA Band II	RMC12.2K	Front	1.0	9538	1907.6	23.17	0.01	0.996
12	WCDMA Band II	RMC12.2K	Back	1.0	9538	1907.6	23.17	0.09	1.120
13	WCDMA Band II	RMC12.2K	Left Side	1.0	9538	1907.6	23.17	0.13	0.465
14	WCDMA Band II	RMC12.2K	Right Side	1.0	9538	1907.6	23.17	-0.05	0.295
15	WCDMA Band II	RMC12.2K	Bottom Side	1.0	9538	1907.6	23.17	-0.02	0.604
16	WCDMA Band II	RMC12.2K	Front	1.0	9262	1852.4	23.02	0.05	1.040
17	WCDMA Band II	RMC12.2K	Front	1.0	9400	1880	23.15	-0.05	1.000
<b>18</b>	<b>WCDMA Band II</b>	<b>RMC12.2K</b>	<b>Back</b>	<b>1.0</b>	<b>9262</b>	<b>1852.4</b>	<b>23.02</b>	<b>0.09</b>	<b>1.250</b>
19	WCDMA Band II	RMC12.2K	Back	1.0	9400	1880	23.15	0.06	1.180

**Note:**

- Per KDB 941225 D06, for EUT dimension ≥ 9cm\*5cm, the test distance is 1cm. SAR must be measured for all surfaces and sides with a transmitting antenna located within 2.5cm from that surface or edge.
- As in (1), SAR for Front/Back /Bottom Side/Left Side/Right Side is necessary.
- Per KDB 447498, if the highest output channel SAR for each exposure position ≤ 0.8 W/kg other channels SAR tests are not necessary.



<WLAN>

Plot No.	Band	Mode	Test Position	Gap (cm)	Ch.	Freq. (MHz)	Output Power (dBm)	Power Drift (dB)	SAR <sub>1g</sub> (W/kg)
57	WLAN2.4G	802.11b	Front	1.0	1	2412	14.43	0.07	0.017
58	WLAN2.4G	802.11b	Back	1.0	1	2412	14.43	-0.08	0.025
59	<b>WLAN2.4G</b>	<b>802.11b</b>	<b>Left Side</b>	<b>1.0</b>	<b>1</b>	<b>2412</b>	<b>14.43</b>	<b>0.03</b>	<b>0.030</b>
60	WLAN2.4G	802.11b	Top Side	1.0	1	2412	14.43	0.04	0.000776

Note:

1. Per KDB 941225 D06, for EUT dimension  $\geq 9\text{cm} \times 5\text{cm}$ , the test distance is 1cm. SAR must be measured for all surfaces and sides with a transmitting antenna located within 2.5cm from that surface or edge.
2. As in (1), SAR for Front / Back / Top Side / Left Side is necessary.
3. Per KDB 248227, if the highest output channel SAR for each exposure position  $\leq 0.8$  W/kg other channels SAR tests are not necessary.

**11.3 Test Records for Body-worn SAR Test**

**<GSM>**

Plot No.	Band	Mode	Test Position	Gap (cm)	Ch.	Freq. (MHz)	Output Power (dBm)	Headset	Power Drift (dB)	SAR <sub>1g</sub> (W/kg)
31	GSM850	GPRS10	Front	1.0	128	824.2	29.04	-	-0.14	0.632
<b>32</b>	<b>GSM850</b>	<b>GPRS10</b>	<b>Back</b>	<b>1.0</b>	<b>128</b>	<b>824.2</b>	<b>29.04</b>	-	<b>-0.07</b>	<b>0.884</b>
36	GSM850	GPRS10	Back	1.0	189	836.4	28.95	-	0.03	0.845
37	GSM850	GPRS10	Back	1.0	251	848.8	28.87	-	-0.12	0.763
38	GSM850	GPRS10	Back	1.0	128	824.2	29.04	V	-0.04	0.703
39	GSM1900	GPRS10	Front	1.0	810	1909.8	26.35	-	-0.07	0.446
<b>40</b>	<b>GSM1900</b>	<b>GPRS10</b>	<b>Back</b>	<b>1.0</b>	<b>810</b>	<b>1909.8</b>	<b>26.35</b>	-	<b>-0.04</b>	<b>0.544</b>
44	GSM1900	GPRS10	Back	1.0	810	1909.8	26.35	V	0.03	0.518

**Note:**

1. Per KDB 447498, if the highest output channel SAR for each exposure position  $\leq 0.8$  W/kg other channels SAR tests are not necessary.
2. "V" in the headset column means the earphone is plugged during SAR testing.

**<WCDMA>**

Plot No.	Band	Mode	Test Position	Gap (cm)	Ch.	Freq. (MHz)	Output Power (dBm)	Headset	Power Drift (dB)	SAR <sub>1g</sub> (W/kg)
23	WCDMA Band V	RMC12.2K	Front	1.0	4132	826.4	22.98	-	0.16	0.511
24	WCDMA Band V	RMC12.2K	Back	1.0	4132	826.4	22.98	-	0.01	0.829
<b>28</b>	<b>WCDMA Band V</b>	<b>RMC12.2K</b>	<b>Back</b>	<b>1.0</b>	<b>4182</b>	<b>836.4</b>	<b>22.86</b>	-	<b>0.16</b>	<b>0.917</b>
29	WCDMA Band V	RMC12.2K	Back	1.0	4233	846.6	22.9	-	0.03	0.755
30	WCDMA Band V	RMC12.2K	Back	1.0	4182	836.4	22.86	V	0.09	0.712
11	WCDMA Band II	RMC12.2K	Front	1.0	9538	1907.6	23.17	-	0.01	0.996
12	WCDMA Band II	RMC12.2K	Back	1.0	9538	1907.6	23.17	-	0.09	1.120
16	WCDMA Band II	RMC12.2K	Front	1.0	9262	1852.4	23.02	-	0.05	1.040
17	WCDMA Band II	RMC12.2K	Front	1.0	9400	1880	23.15	-	-0.05	1.000
<b>18</b>	<b>WCDMA Band II</b>	<b>RMC12.2K</b>	<b>Back</b>	<b>1.0</b>	<b>9262</b>	<b>1852.4</b>	<b>23.02</b>	-	<b>0.09</b>	<b>1.250</b>
19	WCDMA Band II	RMC12.2K	Back	1.0	9400	1880	23.15	-	0.06	1.180
20	WCDMA Band II	RMC12.2K	Back	1.0	9262	1852.4	23.02	V	0.18	1.080
21	WCDMA Band II	RMC12.2K	Back	1.0	9400	1880	23.15	V	0.10	1.090
22	WCDMA Band II	RMC12.2K	Back	1.0	9538	1907.6	23.17	V	0.02	1.060

**Note:**

1. Per KDB 447498, if the highest output channel SAR for each exposure position  $\leq 0.8$  W/kg other channels SAR tests are not necessary.
2. "V" in the headset column means the earphone is plugged during SAR testing.



<WLAN>

Plot No.	Band	Mode	Test Position	Gap (cm)	Ch.	Freq. (MHz)	Output Power (dBm)	Headset	Power Drift (dB)	SAR <sub>1g</sub> (W/kg)
57	WLAN2.4G	802.11b	Front	1.0	1	2412	14.43	-	0.07	0.017
58	WLAN2.4G	802.11b	Back	1.0	1	2412	14.43	-	-0.08	0.025
<b>61</b>	<b>WLAN2.4G</b>	<b>802.11b</b>	<b>Back</b>	<b>1.0</b>	<b>1</b>	<b>2412</b>	<b>14.43</b>	<b>V</b>	<b>-0.04</b>	<b>0.031</b>

Note:

1. Per KDB 248227, if the highest output channel SAR for each exposure position  $\leq 0.8$  W/kg other channels SAR tests are not necessary.
2. "V" in the headset column means the earphone is plugged during SAR testing.

**11.4 Simultaneous Multi-band Transmission Analysis**

No.	Applicable Simultaneous Transmission Combination
1	GSM/WCDMA + BT
2	GSM/WCDMA + WLAN 2.4G

**Note:**

1. WLAN and BT share the same antenna, and cannot transmit simultaneously.
2. GSM and WCDMA share the same antenna, and cannot transmit simultaneously.
3. Per KDB 648474 D01, Bluetooth (7.54 dBm) output power  $\leq 2P_{Ref}$  (13.8 dBm) and the distance to WWAN transmitting antenna  $\geq 5\text{cm}$ , therefore, Bluetooth stand-alone SAR is not required; the simultaneous transmission SAR for Bluetooth and WWAN is not required, because Bluetooth stand-alone SAR is not required and the maximum WWAN SAR is 1.250 W/kg, thus the SAR summation is less than 1.6 W/kg.
4. Per KDB 648474 D01, the simultaneous transmission SAR for WWAN and WLAN was not required, because the SAR summation (Head: 1.106 W/kg; Body: 1.275 W/kg) is less than 1.6 W/kg.

**Head SAR>**

Position	WWAN			WLAN		Max. SAR Summation
	WWAN Band	Plot No	Max. WWAN SAR (W/kg)	Plot No	Max. WLAN SAR (W/kg)	
Right Cheek	GSM850	45	0.582	53	0.127	0.709
	GSM1900	49	0.330	53	0.127	0.457
	WCDMA Band V	1	0.460	53	0.127	0.587
	WCDMA Band II	5	0.771	53	0.127	0.898
Right Tilted	GSM850	46	0.382	54	0.052	0.434
	GSM1900	50	0.226	54	0.052	0.278
	WCDMA Band V	2	0.317	54	0.052	0.369
	WCDMA Band II	6	0.507	54	0.052	0.559
Left Cheek	GSM850	47	0.599	55	0.056	0.655
	GSM1900	51	0.436	55	0.056	0.492
	WCDMA Band V	3	0.504	55	0.056	0.560
	WCDMA Band II	9	1.050	55	0.056	<b>1.106</b>
Left Tilted	GSM850	48	0.388	56	0.021	0.409
	GSM1900	52	0.191	56	0.021	0.212
	WCDMA Band V	4	0.332	56	0.021	0.353
	WCDMA Band II	8	0.457	56	0.021	0.478

**Note:**

1. The maximum SAR summation is calculated based on the same configuration and test position.
2. When stand-alone 1-g SAR is not required for a transmitter or antenna, its SAR is considered zero in the 1-g SAR summing process to determine simultaneous transmission SAR evaluation requirements
3. If 1g-SAR scalar summation  $< 1.6\text{W/kg}$ , simultaneous SAR measurement is not necessary.
4. If 1g-SAR summation  $> 1.6\text{W/kg}$ , SPLSR calculation is necessary.



<Hotspot SAR>

Position	WWAN			WLAN		Max. SAR Summation
	WWAN Band	Plot No	Max. WWAN SAR (W/kg)	Plot No	Max. WLAN SAR (W/kg)	
Front	GSM850	31	0.632	57	0.017	0.649
	GSM1900	39	0.446	57	0.017	0.463
	WCDMA Band V	23	0.511	57	0.017	0.528
	WCDMA Band II	16	1.040	57	0.017	1.057
Back	GSM850	32	0.884	58	0.025	0.909
	GSM1900	40	0.544	58	0.025	0.569
	WCDMA Band V	28	0.917	58	0.025	0.942
	WCDMA Band II	18	1.250	58	0.025	1.275
Left Side	GSM850	33	0.619	59	0.030	0.649
	GSM1900	41	0.225	59	0.030	0.255
	WCDMA Band V	25	0.512	59	0.030	0.542
	WCDMA Band II	13	0.465	59	0.030	0.495
Right Side	GSM850	34	0.515	-	-	0.515
	GSM1900	42	0.141	-	-	0.141
	WCDMA Band V	26	0.423	-	-	0.423
	WCDMA Band II	14	0.295	-	-	0.295
Top Side	GSM850	-	-	60	0.000776	0.000776
	GSM1900	-	-	60	0.000776	0.000776
	WCDMA Band V	-	-	60	0.000776	0.000776
	WCDMA Band II	-	-	60	0.000776	0.000776
Bottom Side	GSM850	35	0.076	-	-	0.076
	GSM1900	43	0.277	-	-	0.277
	WCDMA Band V	27	0.063	-	-	0.063
	WCDMA Band II	15	0.604	-	-	0.604

Note:

1. The maximum SAR summation is calculated based on the same configuration and test position.
2. When stand-alone 1-g SAR is not required for a transmitter or antenna, its SAR is considered zero in the 1-g SAR summing process to determine simultaneous transmission SAR evaluation requirements
3. If 1g-SAR scalar summation < 1.6W/kg, simultaneous SAR measurement is not necessary.
4. If 1g-SAR summation > 1.6W/kg, SPLSR calculation is necessary.



<Body-worn SAR>

Position	WWAN			WLAN		Max. SAR Summation
	WWAN Band	Plot No	Max. WWAN SAR (W/kg)	Plot No	Max. WLAN SAR (W/kg)	
Front	GSM850	31	0.632	57	0.017	0.649
	GSM1900	39	0.446	57	0.017	0.463
	WCDMA Band V	23	0.511	57	0.017	0.528
	WCDMA Band II	16	1.040	57	0.017	1.057
Back	GSM850	32	0.884	58	0.025	0.909
	GSM1900	40	0.544	58	0.025	0.569
	WCDMA Band V	28	0.917	58	0.025	0.942
	WCDMA Band II	18	1.250	58	0.025	1.275
Back (with headset)	GSM850	38	0.703	61	0.031	0.734
	GSM1900	44	0.518	61	0.031	0.549
	WCDMA Band V	30	0.712	61	0.031	0.743
	WCDMA Band II	21	1.090	61	0.031	1.121

Note:

1. The maximum SAR summation is calculated based on the same configuration and test position.
2. When stand-alone 1-g SAR is not required for a transmitter or antenna, its SAR is considered zero in the 1-g SAR summing process to determine simultaneous transmission SAR evaluation requirements
3. If 1g-SAR scalar summation < 1.6W/kg, simultaneous SAR measurement is not necessary.
4. If 1g-SAR summation > 1.6W/kg, SPLSR calculation is necessary.

Test Engineer : Jeme Li

## 12. Uncertainty Assessment

The component of uncertainty may generally be categorized according to the methods used to evaluate them. The evaluation of uncertainty by the statistical analysis of a series of observations is termed a Type A evaluation of uncertainty. The evaluation of uncertainty by means other than the statistical analysis of a series of observations is termed a Type B evaluation of uncertainty. Each component of uncertainty, however evaluated, is represented by an estimated standard deviation, termed standard uncertainty, which is determined by the positive square root of the estimated variance.

A Type A evaluation of standard uncertainty may be based on any valid statistical method for treating data. This includes calculating the standard deviation of the mean of a series of independent observations; using the method of least squares to fit a curve to the data in order to estimate the parameter of the curve and their standard deviations; or carrying out an analysis of variance in order to identify and quantify random effects in certain kinds of measurement.

A type B evaluation of standard uncertainty is typically based on scientific judgment using all of the relevant information available. These may include previous measurement data, experience and knowledge of the behavior and properties of relevant materials and instruments, manufacture’s specification, data provided in calibration reports and uncertainties assigned to reference data taken from handbooks. Broadly speaking, the uncertainty is either obtained from an outdoor source or obtained from an assumed distribution, such as the normal distribution, rectangular or triangular distributions indicated in Table 12.1

Uncertainty Distributions	Normal	Rectangular	Triangular	U-Shape
Multi-plying Factor <sup>(a)</sup>	1/k <sup>(b)</sup>	1/√3	1/√6	1/√2

(a) standard uncertainty is determined as the product of the multiplying factor and the estimated range of variations in the measured quantity

(b)  $\kappa$  is the coverage factor

**Table 12.1 Standard Uncertainty for Assumed Distribution**

The combined standard uncertainty of the measurement result represents the estimated standard deviation of the result. It is obtained by combining the individual standard uncertainties of both Type A and Type B evaluation using the usual “root-sum-squares” (RSS) methods of combining standard deviations by taking the positive square root of the estimated variances.

Expanded uncertainty is a measure of uncertainty that defines an interval about the measurement result within which the measured value is confidently believed to lie. It is obtained by multiplying the combined standard uncertainty by a coverage factor. Typically, the coverage factor ranges from 2 to 3. Using a coverage factor allows the true value of a measured quantity to be specified with a defined probability within the specified uncertainty range. For purpose of this document, a coverage factor two is used, which corresponds to confidence interval of about 95 %. The DASY uncertainty Budget is shown in the following tables.



Error Description	Uncertainty	Probability	Divisor	Ci	Ci	Standard	Standard
	Value (±%)	Distribution		(1g)	(10g)	Uncertainty (1g)	Uncertainty (10g)
<b>Measurement System</b>							
Probe Calibration	6.0	Normal	1	1	1	± 6.0 %	± 6.0 %
Axial Isotropy	4.7	Rectangular	√3	0.7	0.7	± 1.9 %	± 1.9 %
Hemispherical Isotropy	9.6	Rectangular	√3	0.7	0.7	± 3.9 %	± 3.9 %
Boundary Effects	1.0	Rectangular	√3	1	1	± 0.6 %	± 0.6 %
Linearity	4.7	Rectangular	√3	1	1	± 2.7 %	± 2.7 %
System Detection Limits	1.0	Rectangular	√3	1	1	± 0.6 %	± 0.6 %
Readout Electronics	0.3	Normal	1	1	1	± 0.3 %	± 0.3 %
Response Time	0.8	Rectangular	√3	1	1	± 0.5 %	± 0.5 %
Integration Time	2.6	Rectangular	√3	1	1	± 1.5 %	± 1.5 %
RF Ambient Noise	3.0	Rectangular	√3	1	1	± 1.7 %	± 1.7 %
RF Ambient Reflections	3.0	Rectangular	√3	1	1	± 1.7 %	± 1.7 %
Probe Positioner	0.4	Rectangular	√3	1	1	± 0.2 %	± 0.2 %
Probe Positioning	2.9	Rectangular	√3	1	1	± 1.7 %	± 1.7 %
Max. SAR Eval.	1.0	Rectangular	√3	1	1	± 0.6 %	± 0.6 %
<b>Test Sample Related</b>							
Device Positioning	2.9	Normal	1	1	1	± 2.9 %	± 2.9 %
Device Holder	3.6	Normal	1	1	1	± 3.6 %	± 3.6 %
Power Drift	5.0	Rectangular	√3	1	1	± 2.9 %	± 2.9 %
<b>Phantom and Setup</b>							
Phantom Uncertainty	4.0	Rectangular	√3	1	1	± 2.3 %	± 2.3 %
Liquid Conductivity (Target)	5.0	Rectangular	√3	0.64	0.43	± 1.8 %	± 1.2 %
Liquid Conductivity (Meas.)	2.5	Normal	1	0.64	0.43	± 1.6 %	± 1.1 %
Liquid Permittivity (Target)	5.0	Rectangular	√3	0.6	0.49	± 1.7 %	± 1.4 %
Liquid Permittivity (Meas.)	2.5	Normal	1	0.6	0.49	± 1.5 %	± 1.2 %
<b>Combined Standard Uncertainty</b>						± 11.0 %	± 10.8 %
<b>Coverage Factor for 95 %</b>						K=2	
<b>Expanded Uncertainty</b>						± 22.0 %	± 21.5 %

Table 12.2 Uncertainty Budget of DASY for frequency range 300 MHz to 3 GHz



### **13. References**

- [1] FCC 47 CFR Part 2 "Frequency Allocations and Radio Treaty Matters; General Rules and Regulations"
- [2] ANSI/IEEE Std. C95.1-1992, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz", September 1992
- [3] IEEE Std. 1528-2003, "Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
- [4] FCC OET Bulletin 65 (Edition 97-01) Supplement C (Edition 01-01), "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields", June 2001
- [5] SPEAG DASY System Handbook
- [6] FCC KDB 248227 D01 v01r02, "SAR Measurement Procedures for 802.11 a/b/g Transmitters", May 2007
- [7] FCC KDB 447498 D01 v04, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", November 2009
- [8] FCC KDB 648474 D01 v01r05, "SAR Evaluation Considerations for Handsets with Multiple Transmitters and Antennas", September 2008
- [9] FCC KDB 941225 D01 v02, "SAR Measurement Procedures for 3G Devices – CDMA 2000 / Ev-Do / WCDMA / HSDPA / HSPA", October 2007
- [10] FCC KDB 941225 D02 v02 "3GPP R6 HSPA and R7 HSPA+ SAR Guidance", December 2009.
- [11] FCC KDB 941225 D03 v01, "Recommended SAR Test Reduction Procedures for GSM / GPRS / EDGE", December 2008
- [12] FCC KDB 941225 D04 v01, "Evaluating SAR for GSM/(E)GPRS Dual Transfer Mode", January 27 2010
- [13] FCC KDB 941225 D06 v01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", April 2011
- [14] FCC KDB 388624 D02, "Permit But Ask List", December 2011.



## ***Appendix A. Plots of System Performance Check***

The plots are shown as follows.

### System Check\_Head\_835MHz\_120629

**DUT: D835V2 - SN: 4d091**

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

Medium: HSL\_835\_120629 Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.92 \text{ mho/m}$ ;  $\epsilon_r = 42.227$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature :  $23.5 \text{ }^\circ\text{C}$  ; Liquid Temperature :  $21.5 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Pin=250mW/Area Scan (61x61x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $2.67 \text{ mW/g}$

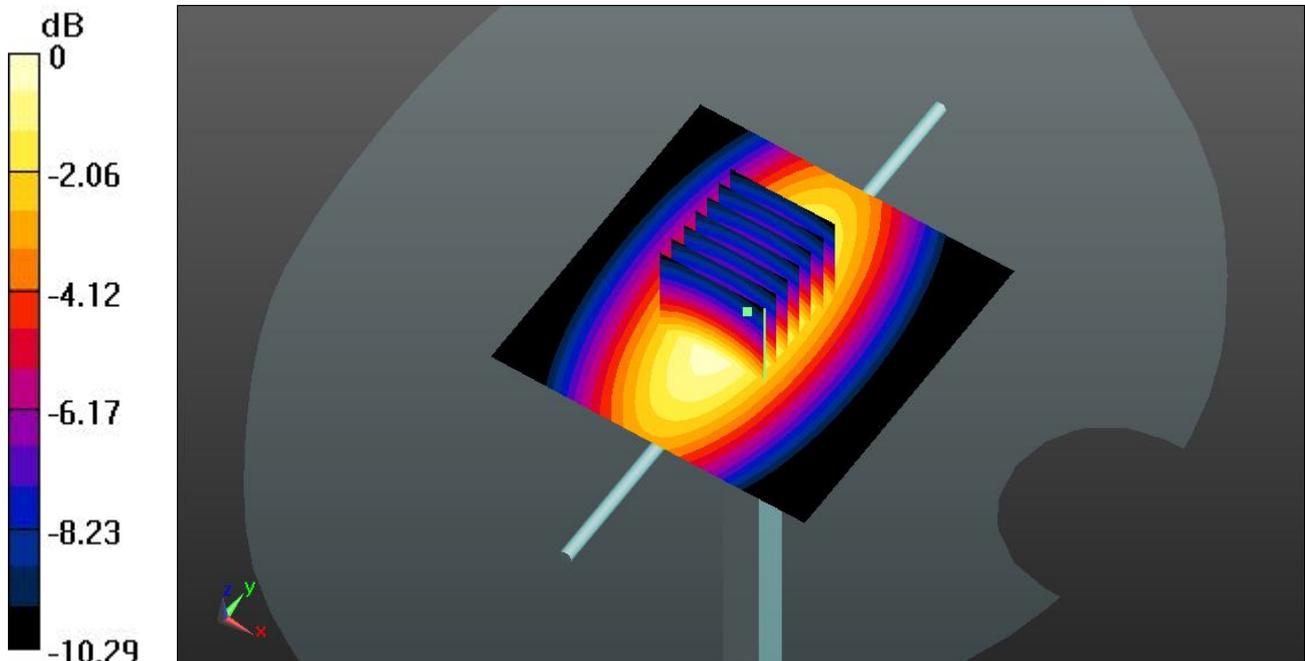
**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $54.148 \text{ V/m}$ ; Power Drift =  $0.01 \text{ dB}$

Peak SAR (extrapolated) =  $3.772 \text{ mW/g}$

**SAR(1 g) =  $2.49 \text{ mW/g}$ ; SAR(10 g) =  $1.63 \text{ mW/g}$**

Maximum value of SAR (measured) =  $2.69 \text{ mW/g}$



0 dB =  $2.69 \text{ mW/g} = 8.60 \text{ dB mW/g}$

**System Check\_Head\_835MHz\_120710**

**DUT: D835V2 - SN: 4d091**

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

Medium: HSL\_835\_120710 Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.914 \text{ mho/m}$ ;  $\epsilon_r = 40.255$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature :  $23.4 \text{ }^\circ\text{C}$  ; Liquid Temperature :  $21.4 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Pin=250mW/Area Scan (61x61x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $2.51 \text{ mW/g}$

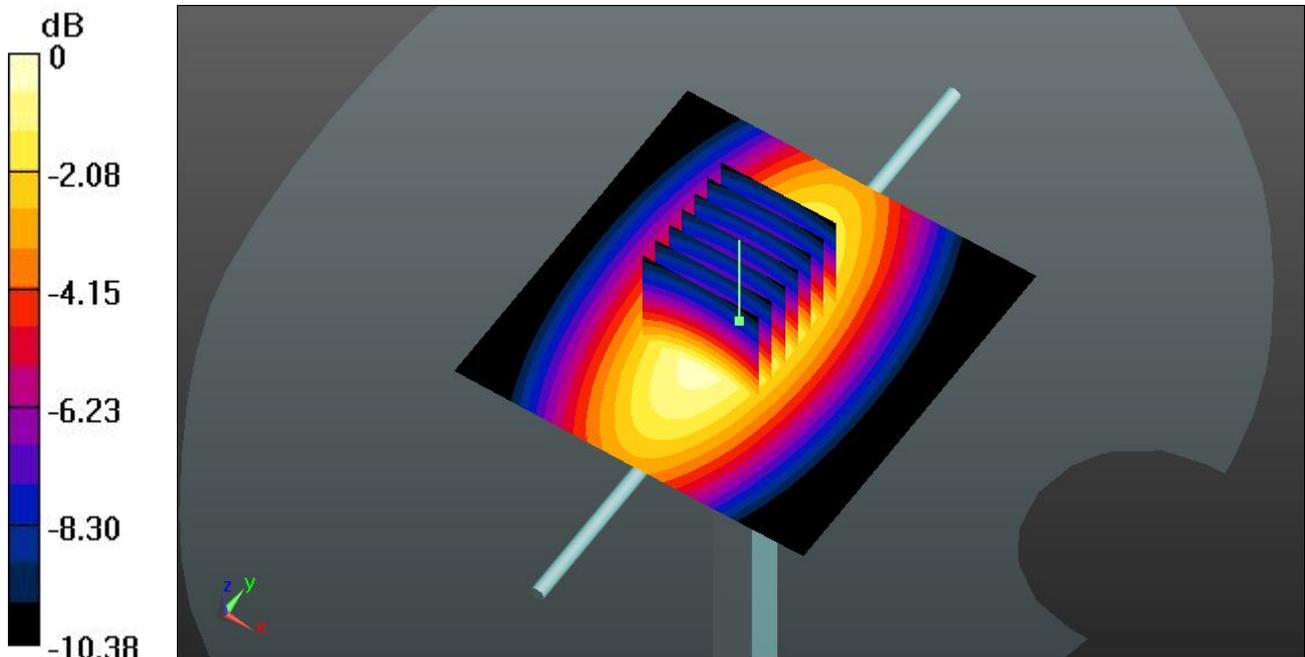
**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $52.589 \text{ V/m}$ ; Power Drift =  $-0.03 \text{ dB}$

Peak SAR (extrapolated) =  $3.531 \text{ mW/g}$

**SAR(1 g) =  $2.32 \text{ mW/g}$ ; SAR(10 g) =  $1.52 \text{ mW/g}$**

Maximum value of SAR (measured) =  $2.50 \text{ mW/g}$



0 dB =  $2.50 \text{ mW/g} = 7.96 \text{ dB mW/g}$

### System Check\_Body\_835MHz\_120702

**DUT: D835V2 - SN: 4d091**

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

Medium: MSL\_835\_120702 Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.991 \text{ mho/m}$ ;  $\epsilon_r = 55.697$ ;

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

Ambient Temperature :  $23.6 \text{ }^\circ\text{C}$ ; Liquid Temperature :  $21.6 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Pin=250mW/Area Scan (61x61x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $2.66 \text{ mW/g}$

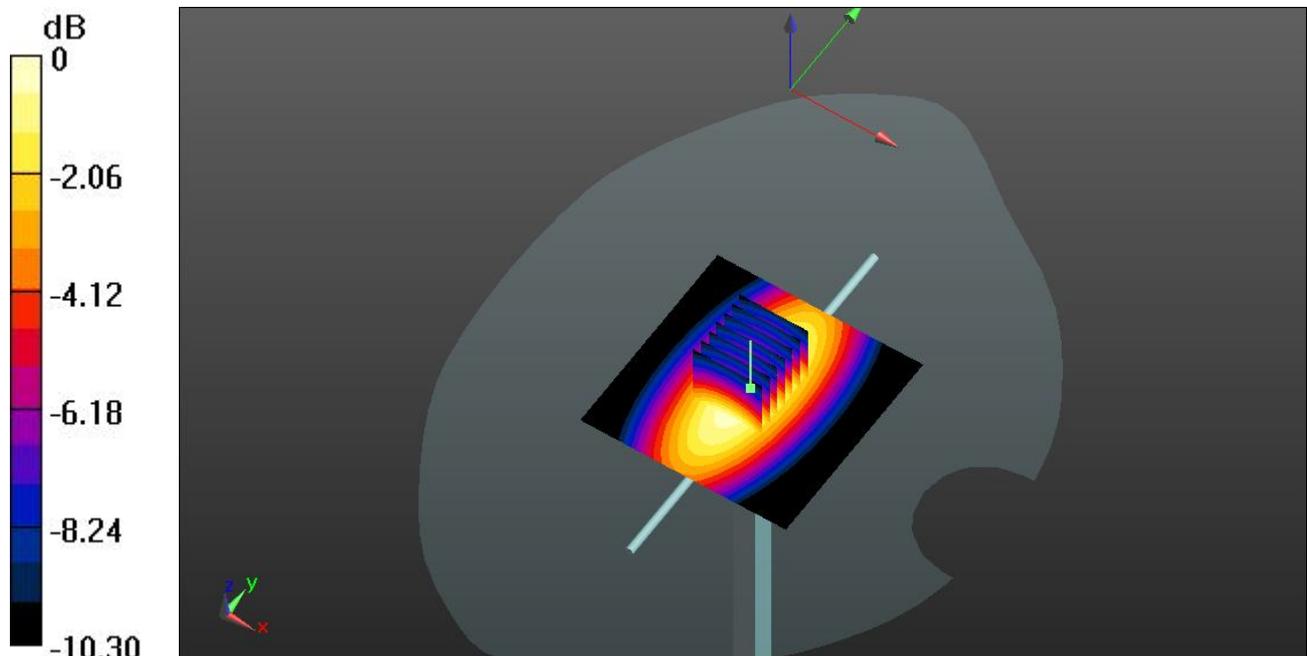
**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $52.198 \text{ V/m}$ ; Power Drift =  $0.01 \text{ dB}$

Peak SAR (extrapolated) =  $3.745 \text{ mW/g}$

**SAR(1 g) =  $2.47 \text{ mW/g}$ ; SAR(10 g) =  $1.61 \text{ mW/g}$**

Maximum value of SAR (measured) =  $2.66 \text{ mW/g}$



0 dB =  $2.66 \text{ mW/g} = 8.50 \text{ dB mW/g}$

**System Check\_Body\_835MHz\_120710**

**DUT: D835V2 - SN: 4d091**

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

Medium: MSL\_835\_120710 Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.976 \text{ mho/m}$ ;  $\epsilon_r = 54.382$ ;

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

Ambient Temperature :  $23.3 \text{ }^\circ\text{C}$ ; Liquid Temperature :  $21.6 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Pin=250mW/Area Scan (61x61x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $2.60 \text{ mW/g}$

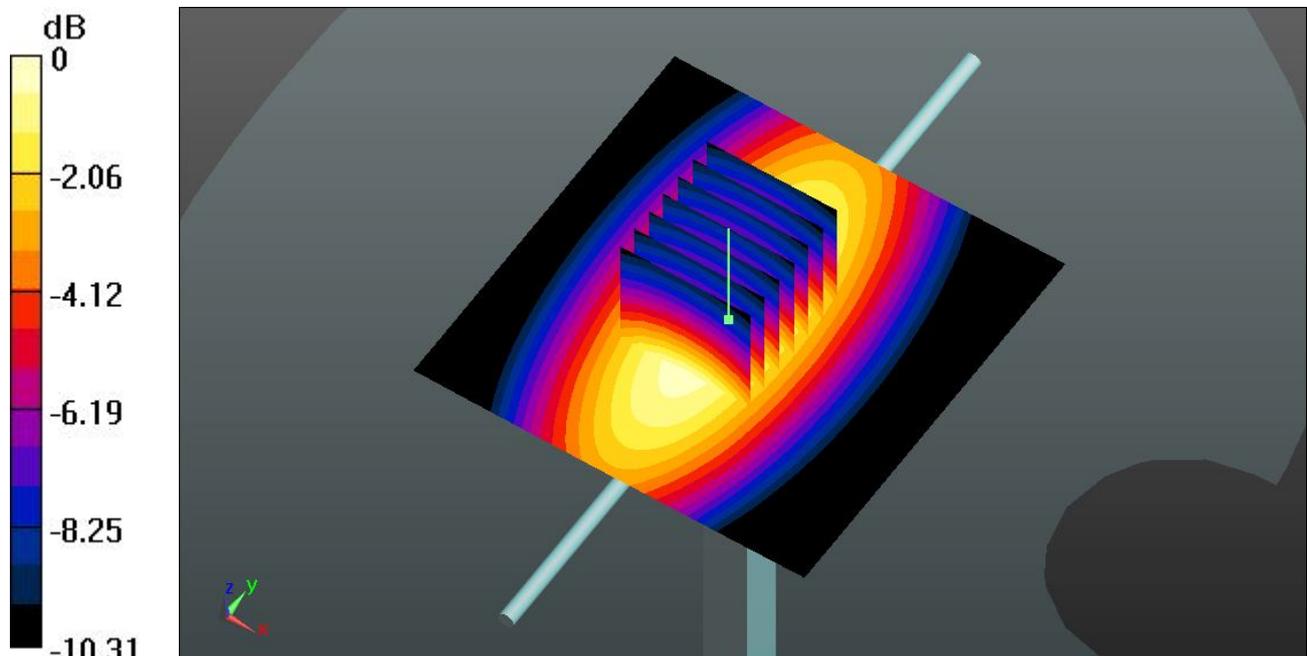
**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $51.777 \text{ V/m}$ ; Power Drift =  $0.01 \text{ dB}$

Peak SAR (extrapolated) =  $3.642 \text{ mW/g}$

**SAR(1 g) =  $2.42 \text{ mW/g}$ ; SAR(10 g) =  $1.58 \text{ mW/g}$**

Maximum value of SAR (measured) =  $2.61 \text{ mW/g}$



0 dB =  $2.61 \text{ mW/g} = 8.33 \text{ dB mW/g}$

**System Check\_Head\_1900MHz\_120629**

**DUT: D1900V2 - SN: 5d118**

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

Medium: HSL\_1900\_120629 Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.435 \text{ mho/m}$ ;  $\epsilon_r =$

$38.464$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature :  $23.4 \text{ }^\circ\text{C}$  ; Liquid Temperature :  $21.4 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Pin=250mW/Area Scan (61x61x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $10.6 \text{ mW/g}$

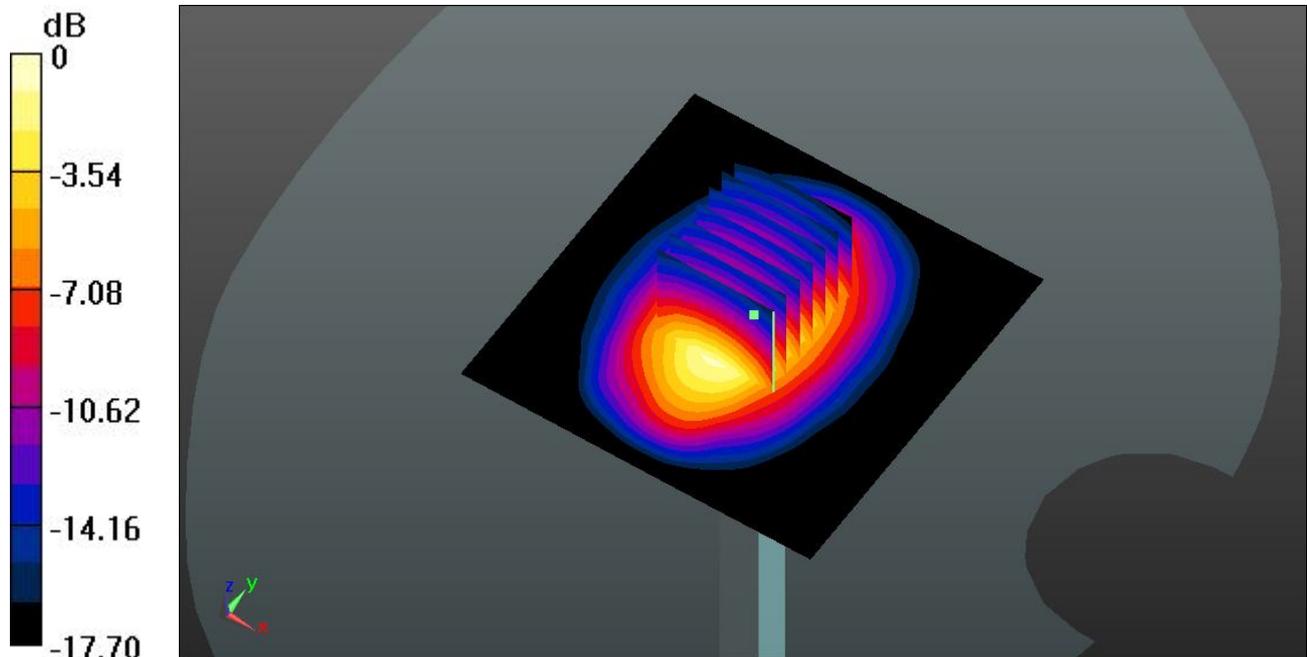
**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $86.367 \text{ V/m}$ ; Power Drift =  $0.06 \text{ dB}$

Peak SAR (extrapolated) =  $17.477 \text{ mW/g}$

**SAR(1 g) =  $9.44 \text{ mW/g}$ ; SAR(10 g) =  $4.91 \text{ mW/g}$**

Maximum value of SAR (measured) =  $10.6 \text{ mW/g}$



0 dB =  $10.6 \text{ mW/g} = 20.51 \text{ dB mW/g}$

**System Check\_Head\_1900MHz\_120710**

**DUT: D1900V2 - SN: 5d118**

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

Medium: HSL\_1900\_120710 Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.427 \text{ mho/m}$ ;  $\epsilon_r =$

$41.191$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature :  $23.5 \text{ }^\circ\text{C}$  ; Liquid Temperature :  $21.3 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Pin=250mW/Area Scan (61x61x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $11.4 \text{ mW/g}$

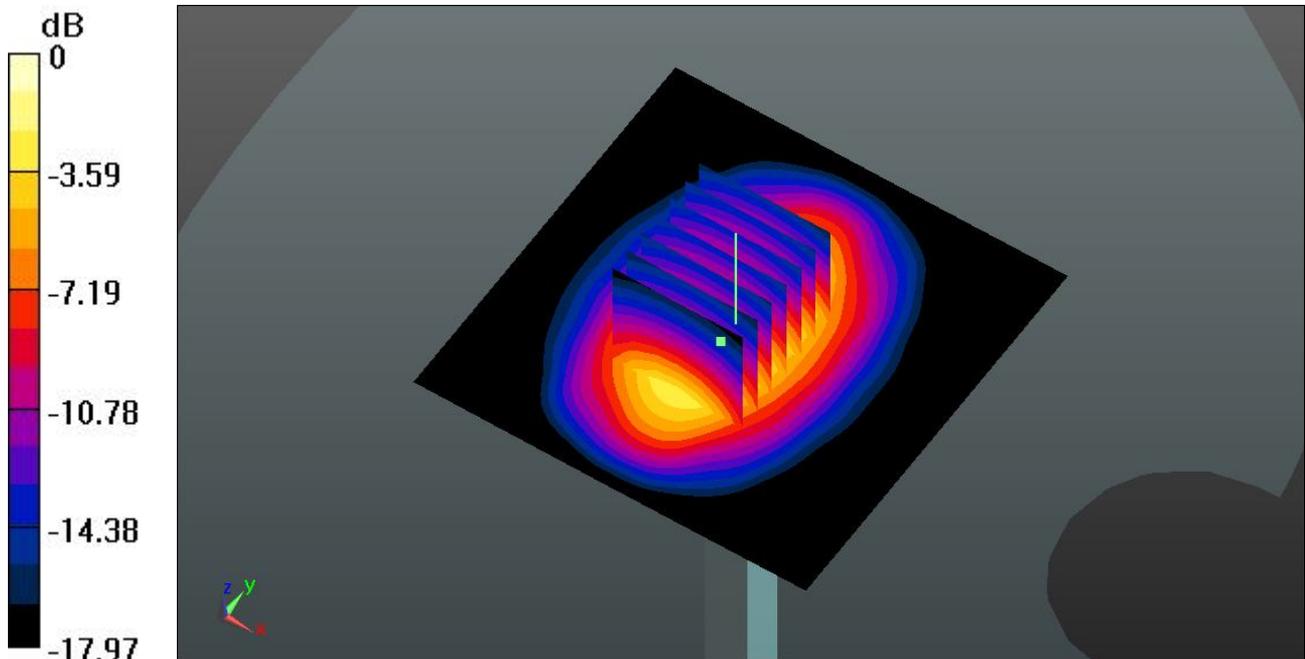
**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $89.847 \text{ V/m}$ ; Power Drift =  $0.04 \text{ dB}$

Peak SAR (extrapolated) =  $18.757 \text{ mW/g}$

**SAR(1 g) =  $10.1 \text{ mW/g}$ ; SAR(10 g) =  $5.22 \text{ mW/g}$**

Maximum value of SAR (measured) =  $11.4 \text{ mW/g}$



0 dB =  $11.4 \text{ mW/g} = 21.14 \text{ dB mW/g}$

**System Check\_Body\_1900MHz\_120629**

**DUT: D1900V2 - SN: 5d118**

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

Medium: MSL\_1900\_120629 Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.528 \text{ mho/m}$ ;  $\epsilon_r =$

$54.867$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature :  $23.5 \text{ }^\circ\text{C}$  ; Liquid Temperature :  $21.3 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Pin=250mW/Area Scan (61x61x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $12.4 \text{ mW/g}$

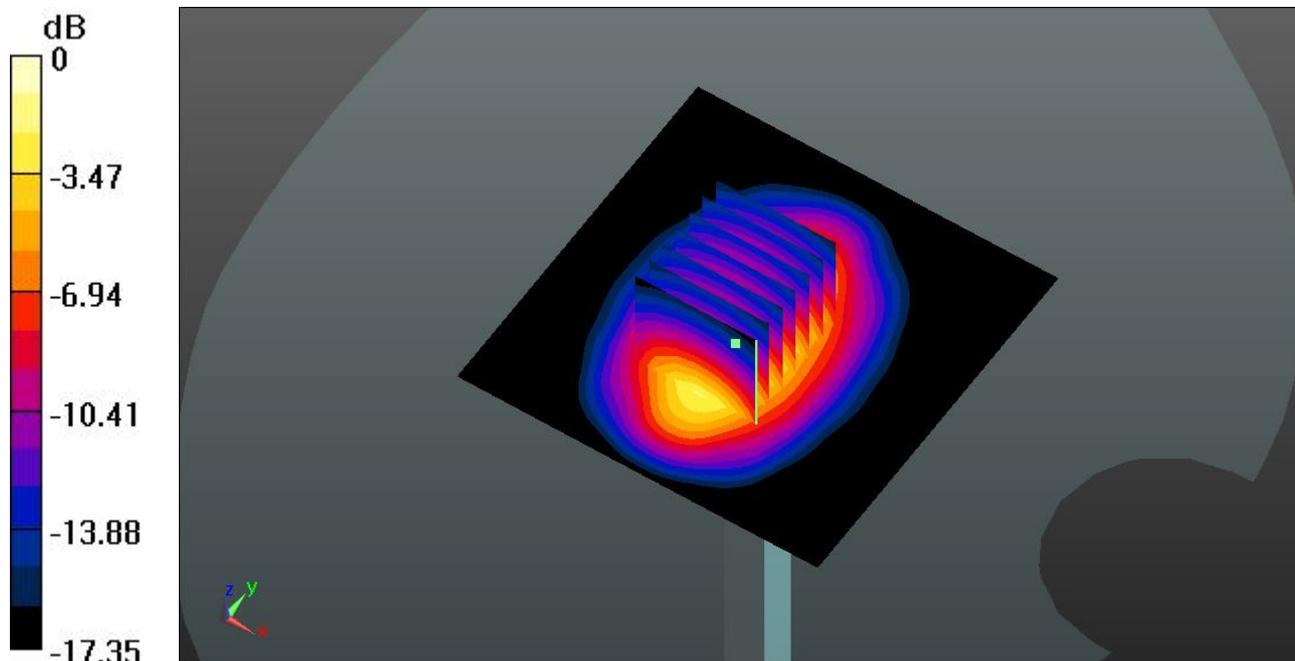
**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $88.882 \text{ V/m}$ ; Power Drift =  $0.01 \text{ dB}$

Peak SAR (extrapolated) =  $19.422 \text{ mW/g}$

**SAR(1 g) =  $10.6 \text{ mW/g}$ ; SAR(10 g) =  $5.53 \text{ mW/g}$**

Maximum value of SAR (measured) =  $12.0 \text{ mW/g}$



0 dB =  $12.0 \text{ mW/g} = 21.58 \text{ dB mW/g}$

**System Check\_Body\_1900MHz\_120710**

**DUT: D1900V2 - SN: 5d118**

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

Medium: MSL\_1900\_120710 Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.535 \text{ mho/m}$ ;  $\epsilon_r =$

$54.565$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature :  $23.7 \text{ }^\circ\text{C}$  ; Liquid Temperature :  $21.7 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Pin=250mW/Area Scan (61x61x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $12.5 \text{ mW/g}$

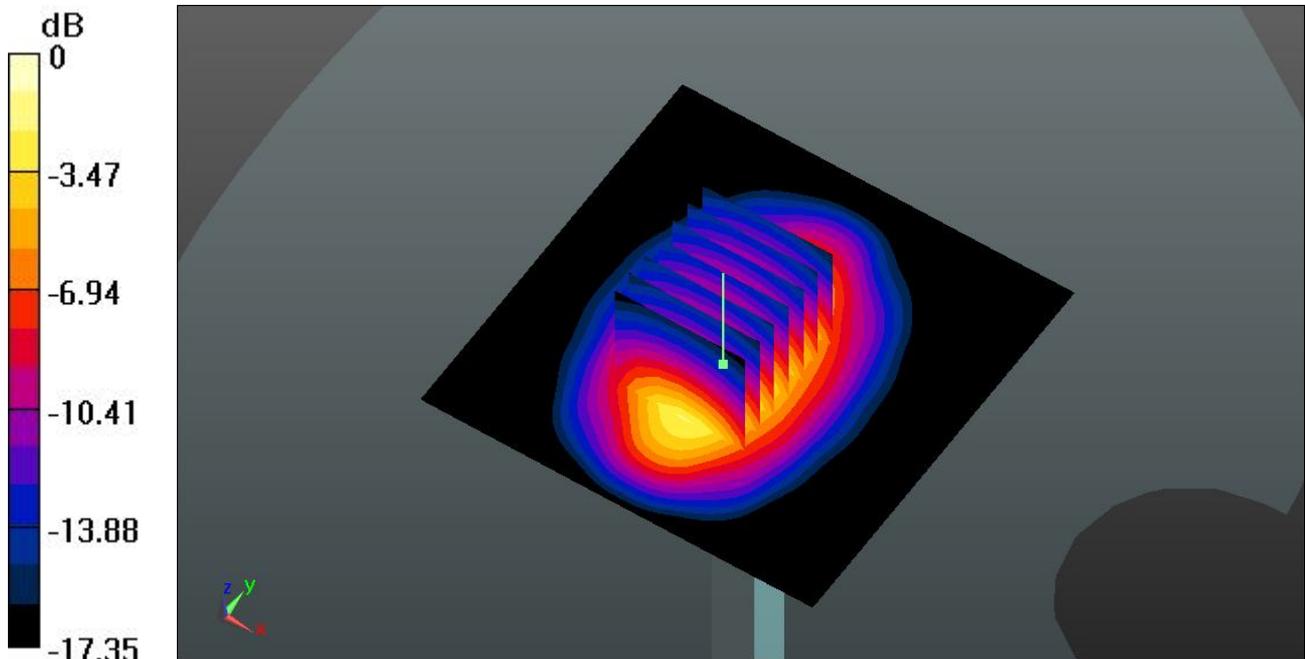
**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $88.882 \text{ V/m}$ ; Power Drift =  $0.01 \text{ dB}$

Peak SAR (extrapolated) =  $19.517 \text{ mW/g}$

**SAR(1 g) =  $10.7 \text{ mW/g}$ ; SAR(10 g) =  $5.56 \text{ mW/g}$**

Maximum value of SAR (measured) =  $12.1 \text{ mW/g}$



0 dB =  $12.1 \text{ mW/g} = 21.66 \text{ dB mW/g}$

## System Check\_Head\_2450MHz\_120724

### DUT: D2450V2 - SN:736

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

Medium: HSL\_2450\_120724 Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.857$  mho/m;  $\epsilon_r =$

$37.67$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.4 °C; Liquid Temperature : 21.6 °C

### DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(6.87, 6.87, 6.87); Calibrated: 2012-6-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2011-11-18
- Phantom: SAM2; Type: QDOVA001BA; Serial: 1479
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of SAR (interpolated) = 16.010 mW/g

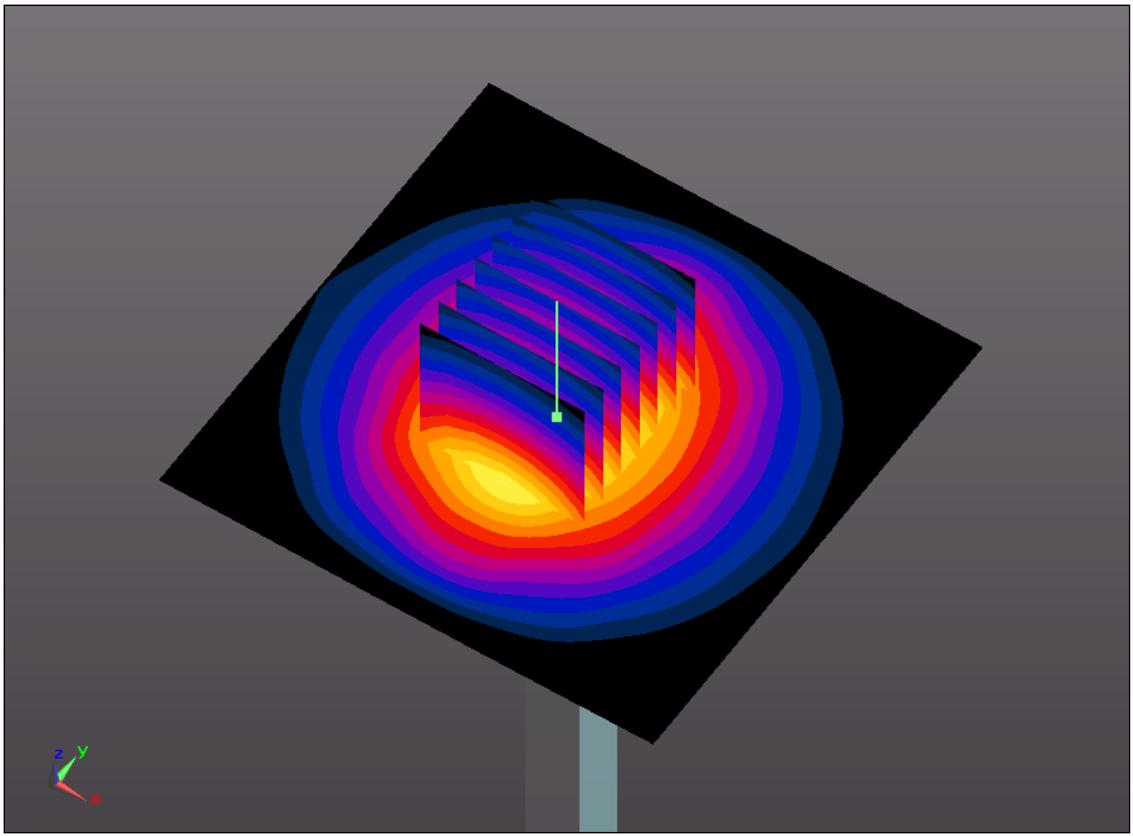
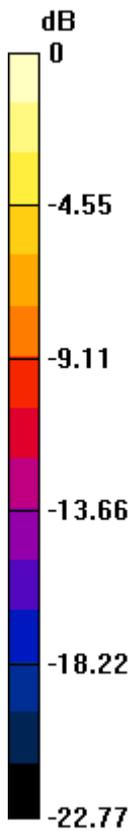
**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 92.167 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 30.995 W/kg

**SAR(1 g) = 14.2 mW/g; SAR(10 g) = 6.44 mW/g**

Maximum value of SAR (measured) = 16.086 mW/g



0 dB = 16.090mW/g

## System Check\_Body\_2450MHz\_120724

### DUT: D2450V2 - SN:736

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

Medium: MSL\_2450\_120724 Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.949$  mho/m;  $\epsilon_r =$

53.894;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.3 °C; Liquid Temperature : 21.5 °C

### DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(6.94, 6.94, 6.94); Calibrated: 2012-6-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2011-11-18
- Phantom: SAM1; Type: QDOVA001BA; Serial: 1477
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

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

Maximum value of SAR (interpolated) = 14.743 mW/g

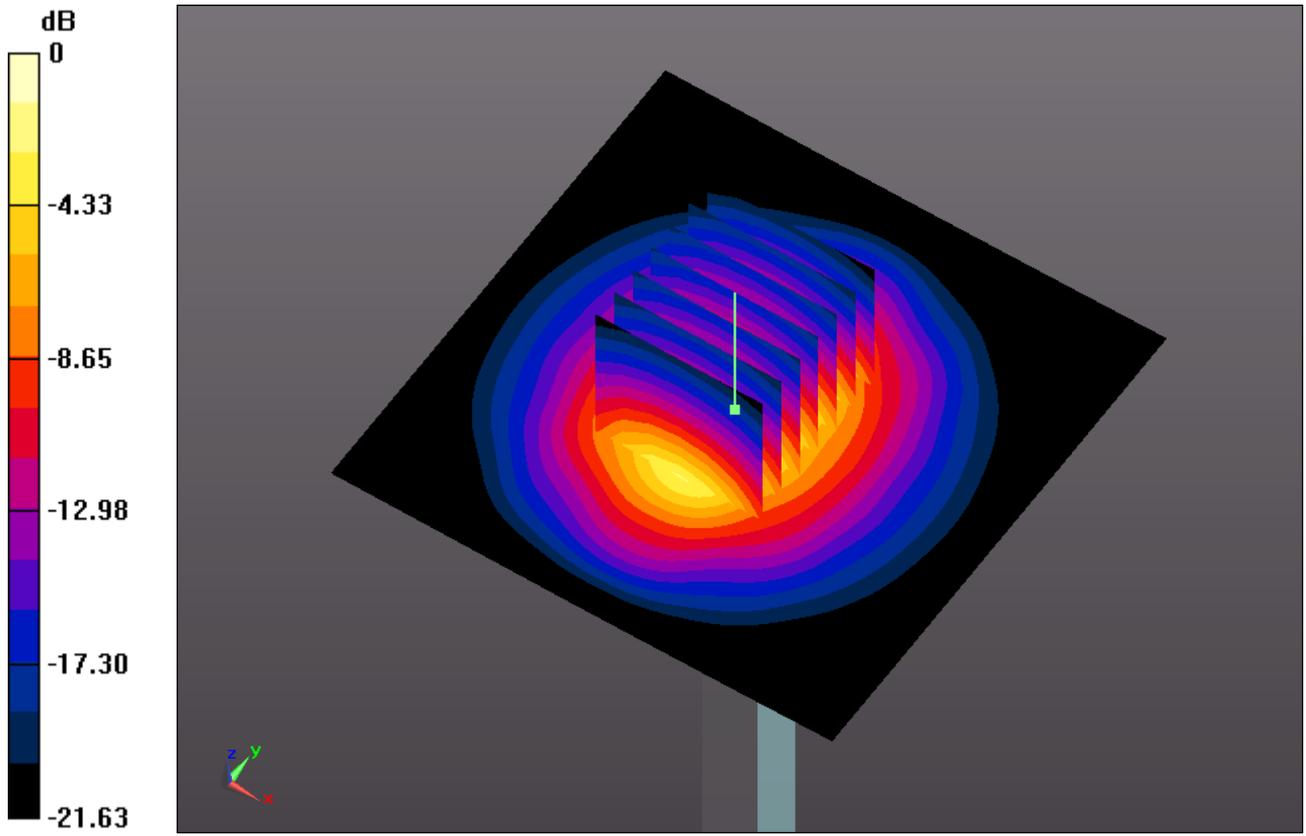
**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 85.822 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 27.048 W/kg

**SAR(1 g) = 12.9 mW/g; SAR(10 g) = 5.94 mW/g**

Maximum value of SAR (measured) = 14.836 mW/g



0 dB = 14.840mW/g



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

The plots are shown as follows.

**45 GSM850\_GPRS10\_Right Cheek\_Ch128**

**DUT: 262807**

Communication System: GPRS/EDGE10; Frequency: 824.2 MHz; Duty Cycle: 1:4

Medium: HSL\_835\_120710 Medium parameters used:  $f = 824.2$  MHz;  $\sigma = 0.904$  mho/m;  $\epsilon_r = 40.383$ ;

$\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.4 °C ; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch128/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.620 mW/g

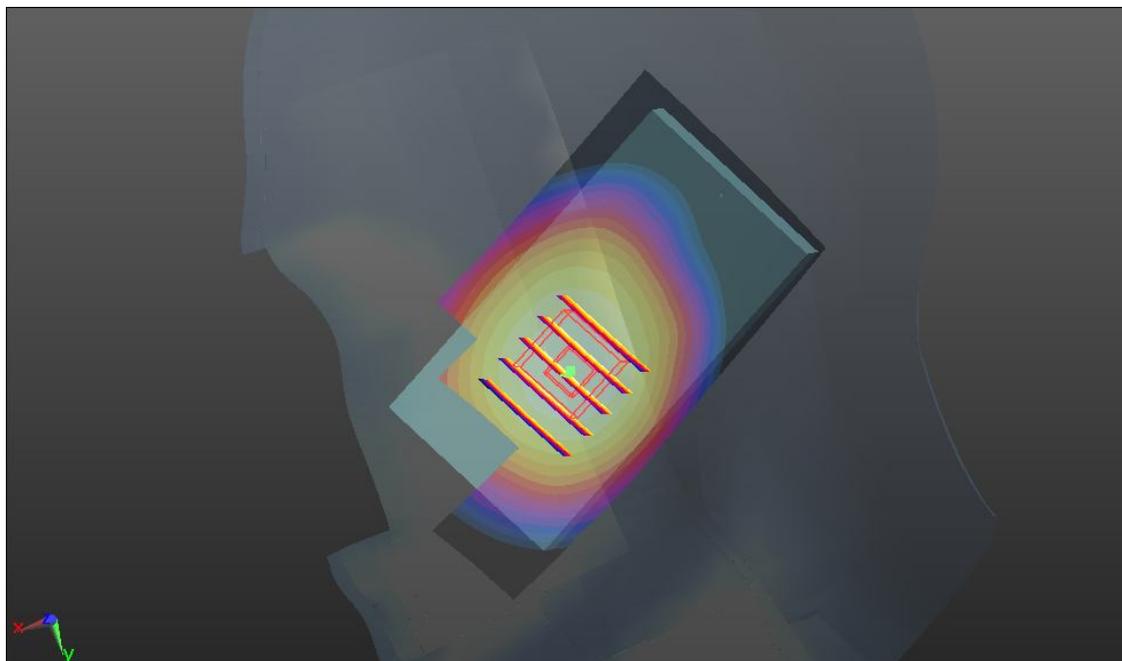
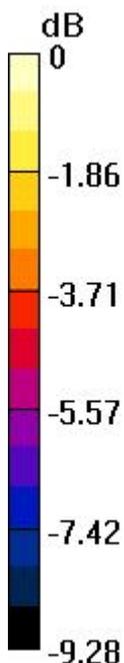
**Ch128/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.314 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.716 mW/g

**SAR(1 g) = 0.582 mW/g; SAR(10 g) = 0.446 mW/g**

Maximum value of SAR (measured) = 0.614 mW/g



0 dB = 0.614 mW/g = -4.24 dB mW/g

### 46 GSM850\_GPRS10\_Right Tilted\_Ch128

**DUT: 262807**

Communication System: GPRS/EDGE10; Frequency: 824.2 MHz; Duty Cycle: 1:4

Medium: HSL\_835\_120710 Medium parameters used:  $f = 824.2$  MHz;  $\sigma = 0.904$  mho/m;  $\epsilon_r = 40.383$ ;

$\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.4 °C ; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch128/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.396 mW/g

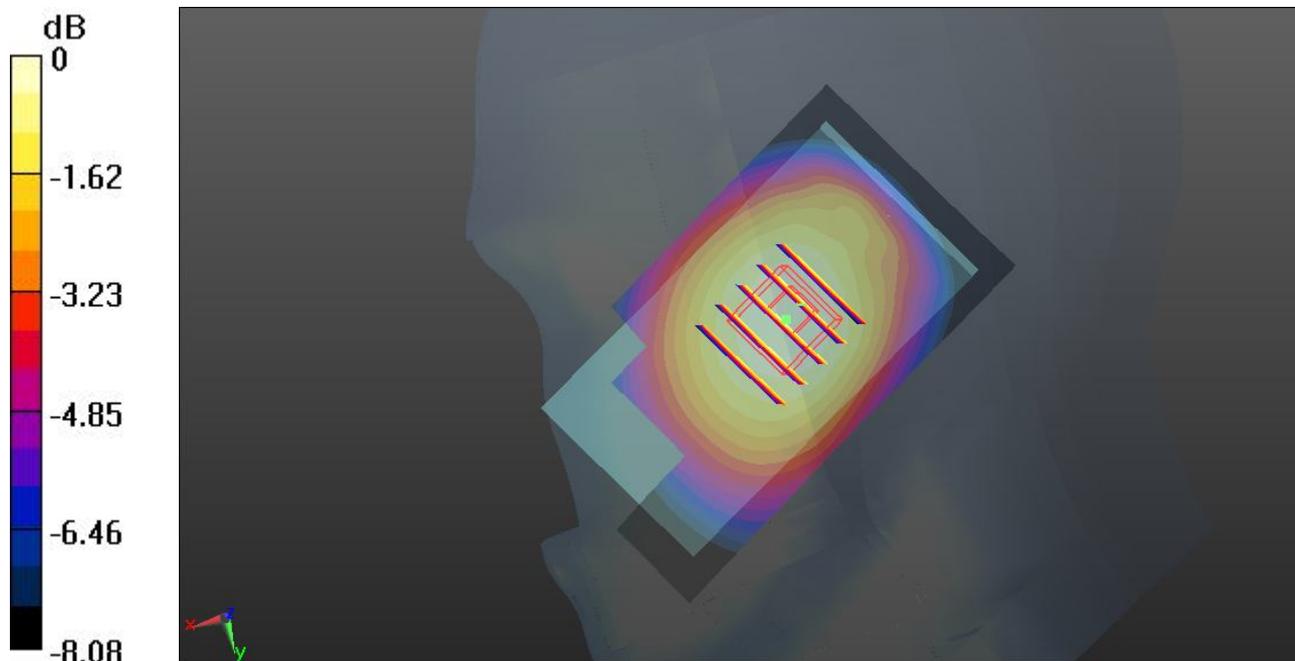
**Ch128/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.259 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.473 mW/g

**SAR(1 g) = 0.382 mW/g; SAR(10 g) = 0.295 mW/g**

Maximum value of SAR (measured) = 0.396 mW/g



0 dB = 0.396 mW/g = -8.05 dB mW/g

### 47 GSM850\_GPRS10\_Left Cheek\_Ch128

**DUT: 262807**

Communication System: GPRS/EDGE10; Frequency: 824.2 MHz; Duty Cycle: 1:4

Medium: HSL\_835\_120710 Medium parameters used:  $f = 824.2$  MHz;  $\sigma = 0.904$  mho/m;  $\epsilon_r = 40.383$ ;

$\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.4 °C ; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch128/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.621 mW/g

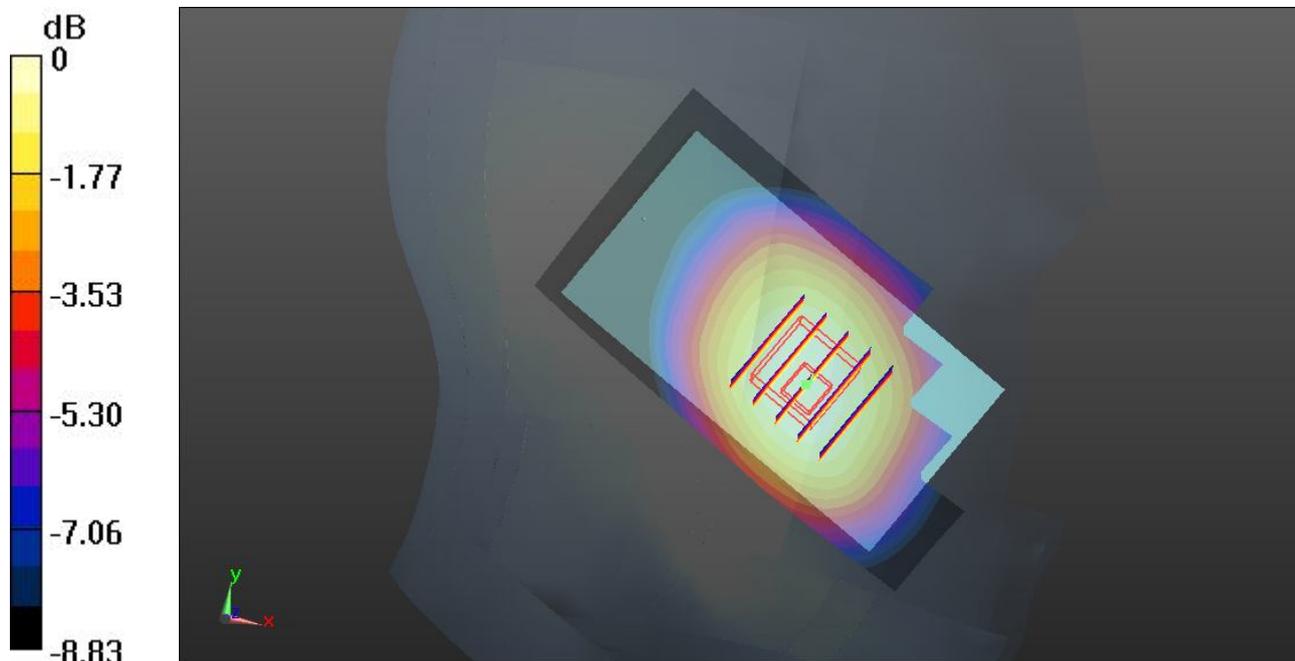
**Ch128/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.077 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.769 mW/g

**SAR(1 g) = 0.599 mW/g; SAR(10 g) = 0.452 mW/g**

Maximum value of SAR (measured) = 0.632 mW/g



0 dB = 0.632 mW/g = -3.99 dB mW/g

### 47 GSM850\_GPRS10\_Left Cheek\_Ch128\_2D

**DUT: 262807**

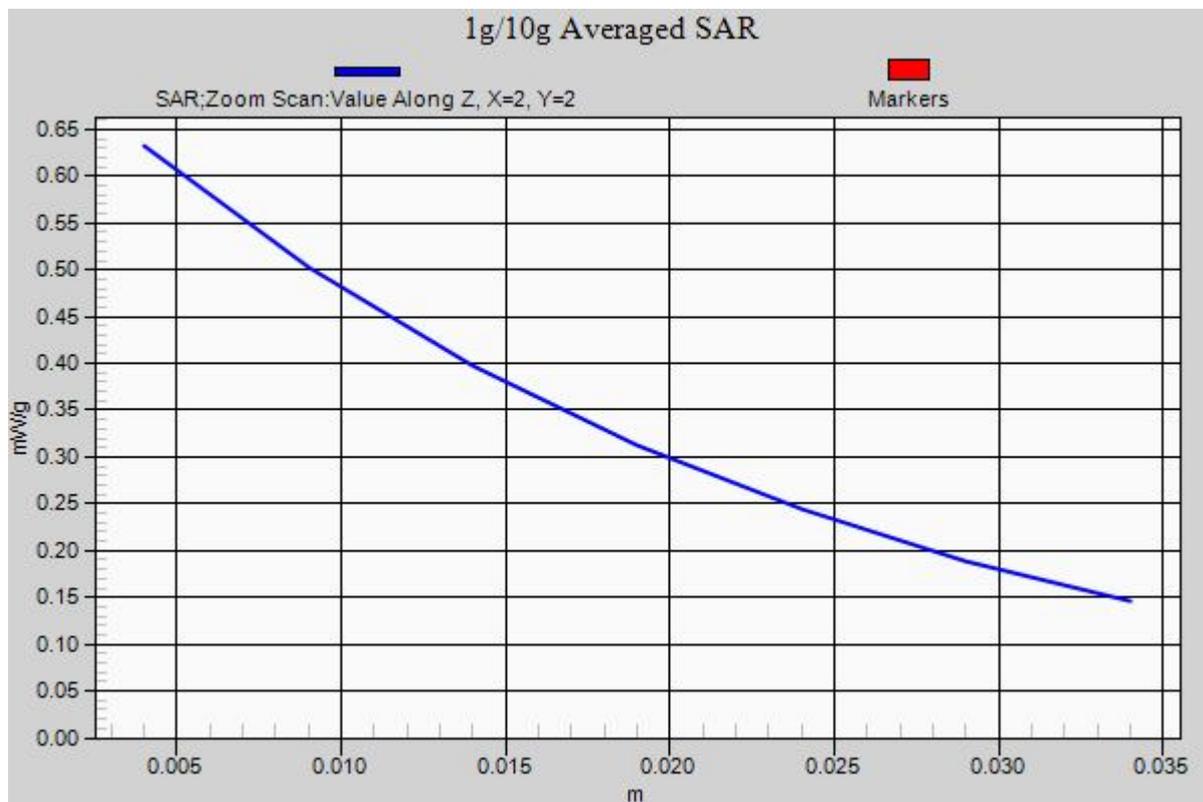
Communication System: GPRS/EDGE10; Frequency: 824.2 MHz; Duty Cycle: 1:4  
Medium: HSL\_835\_120710 Medium parameters used:  $f = 824.2$  MHz;  $\sigma = 0.904$  mho/m;  $\epsilon_r = 40.383$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature : 23.4 °C ; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch128/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.621 mW/g

**Ch128/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 8.077 V/m; Power Drift = -0.09 dB  
Peak SAR (extrapolated) = 0.769 mW/g  
**SAR(1 g) = 0.599 mW/g; SAR(10 g) = 0.452 mW/g**  
Maximum value of SAR (measured) = 0.632 mW/g



### 48 GSM850\_GPRS10\_Left Tilted\_Ch128

**DUT: 262807**

Communication System: GPRS/EDGE10; Frequency: 824.2 MHz; Duty Cycle: 1:4

Medium: HSL\_835\_120710 Medium parameters used:  $f = 824.2$  MHz;  $\sigma = 0.904$  mho/m;  $\epsilon_r = 40.383$ ;

$\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.4 °C ; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch128/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.402 mW/g

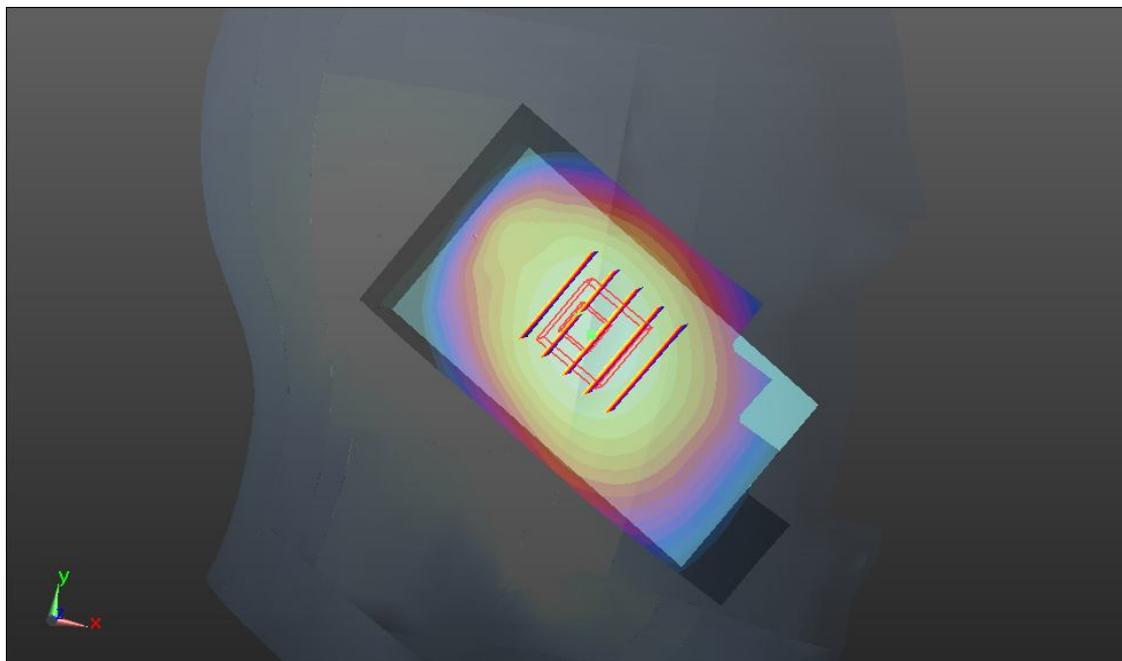
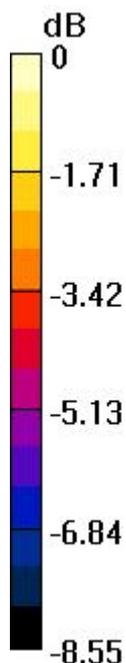
**Ch128/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.904 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.483 mW/g

**SAR(1 g) = 0.388 mW/g; SAR(10 g) = 0.298 mW/g**

Maximum value of SAR (measured) = 0.404 mW/g



0 dB = 0.404 mW/g = -7.87 dB mW/g

### 49 GSM1900\_GPRS10\_Right Cheek\_Ch810

**DUT: 262807**

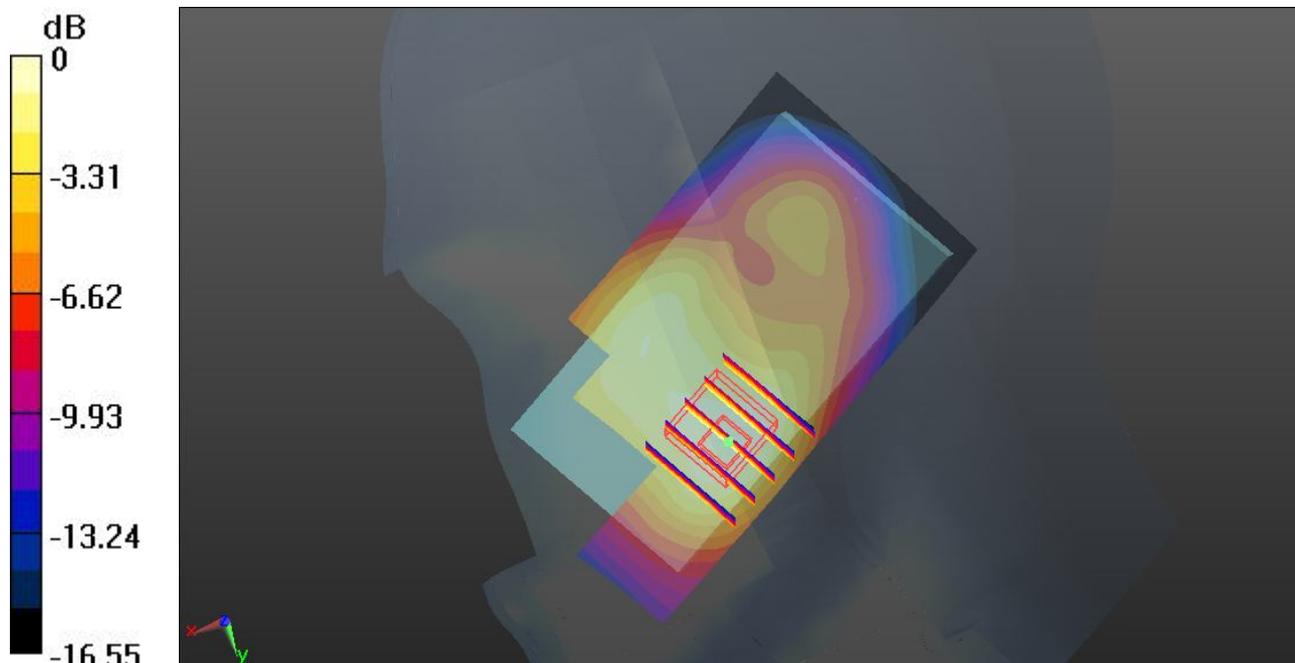
Communication System: GPRS/EDGE10; Frequency: 1909.8 MHz; Duty Cycle: 1:4  
Medium: HSL\_1900\_120710 Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.436$  mho/m;  $\epsilon_r = 41.187$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch810/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.375 mW/g

**Ch810/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 7.556 V/m; Power Drift = -0.14 dB  
Peak SAR (extrapolated) = 0.489 mW/g  
**SAR(1 g) = 0.330 mW/g; SAR(10 g) = 0.208 mW/g**  
Maximum value of SAR (measured) = 0.361 mW/g



0 dB = 0.361 mW/g = -8.85 dB mW/g

### 50 GSM1900\_GPRS10\_Right Tilted\_Ch810

**DUT: 262807**

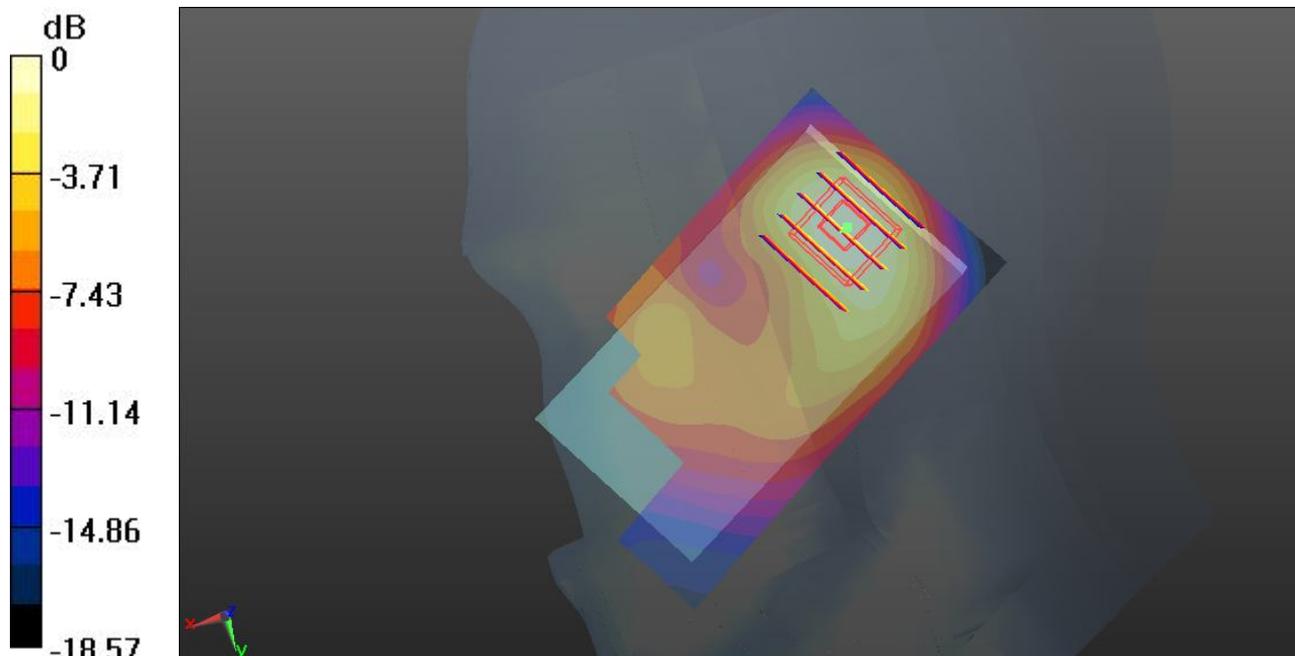
Communication System: GPRS/EDGE10; Frequency: 1909.8 MHz; Duty Cycle: 1:4  
Medium: HSL\_1900\_120710 Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.436$  mho/m;  $\epsilon_r = 41.187$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch810/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.254 mW/g

**Ch810/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 12.129 V/m; Power Drift = 0.08 dB  
Peak SAR (extrapolated) = 0.369 mW/g  
**SAR(1 g) = 0.226 mW/g; SAR(10 g) = 0.129 mW/g**  
Maximum value of SAR (measured) = 0.248 mW/g



0 dB = 0.248 mW/g = -12.11 dB mW/g

### 51 GSM1900\_GPRS10\_Left Cheek\_Ch810

**DUT: 262807**

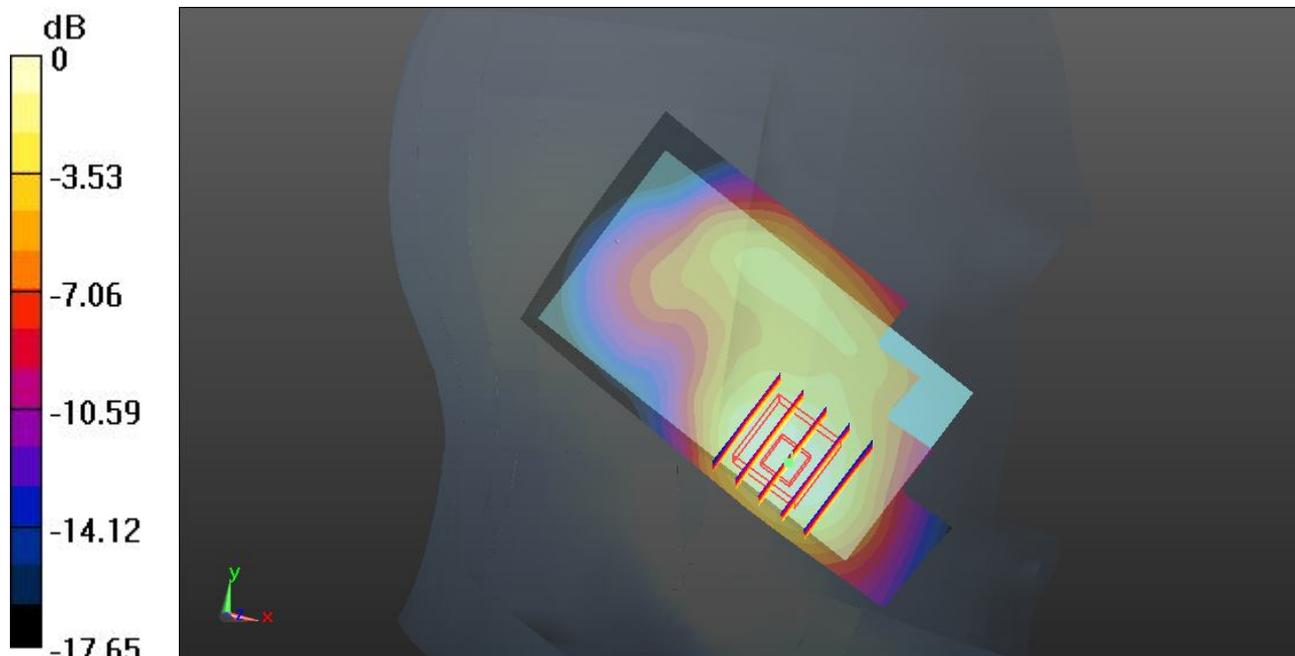
Communication System: GPRS/EDGE10; Frequency: 1909.8 MHz; Duty Cycle: 1:4  
Medium: HSL\_1900\_120710 Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.436$  mho/m;  $\epsilon_r = 41.187$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch810/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.491 mW/g

**Ch810/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 6.204 V/m; Power Drift = -0.01 dB  
Peak SAR (extrapolated) = 0.681 mW/g  
**SAR(1 g) = 0.436 mW/g; SAR(10 g) = 0.263 mW/g**  
Maximum value of SAR (measured) = 0.473 mW/g



0 dB = 0.473 mW/g = -6.50 dB mW/g

**51 GSM1900\_GPRS10\_Left Cheek\_Ch810\_2D**

**DUT: 262807**

Communication System: GPRS/EDGE10; Frequency: 1909.8 MHz; Duty Cycle: 1:4  
 Medium: HSL\_1900\_120710 Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.436$  mho/m;  $\epsilon_r = 41.187$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch810/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 0.491 mW/g

**Ch810/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 6.204 V/m; Power Drift = -0.01 dB  
 Peak SAR (extrapolated) = 0.681 mW/g  
**SAR(1 g) = 0.436 mW/g; SAR(10 g) = 0.263 mW/g**  
 Maximum value of SAR (measured) = 0.473 mW/g



### 52 GSM1900\_GPRS10\_Left Tilted\_Ch810

**DUT: 262807**

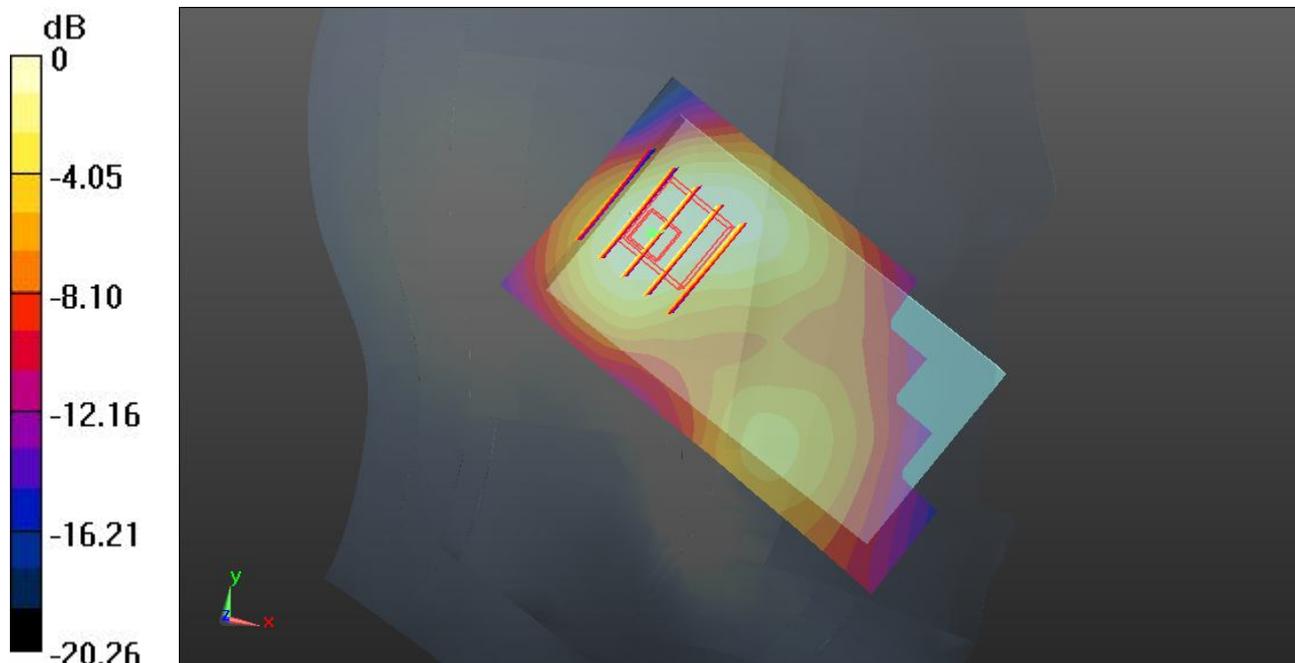
Communication System: GPRS/EDGE10; Frequency: 1909.8 MHz; Duty Cycle: 1:4  
Medium: HSL\_1900\_120710 Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.436$  mho/m;  $\epsilon_r = 41.187$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch810/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.227 mW/g

**Ch810/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 11.263 V/m; Power Drift = -0.12 dB  
Peak SAR (extrapolated) = 0.303 mW/g  
**SAR(1 g) = 0.191 mW/g; SAR(10 g) = 0.117 mW/g**  
Maximum value of SAR (measured) = 0.208 mW/g



0 dB = 0.208 mW/g = -13.64 dB mW/g

### 01 WCDMA Band V\_RMC 12.2K\_Right Cheek\_Ch4132

**DUT: 262807**

Communication System: UMTS; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: HSL\_835\_120629 Medium parameters used:  $f = 826.4$  MHz;  $\sigma = 0.912$  mho/m;  $\epsilon_r = 42.343$ ;

$\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch4132/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.486 mW/g

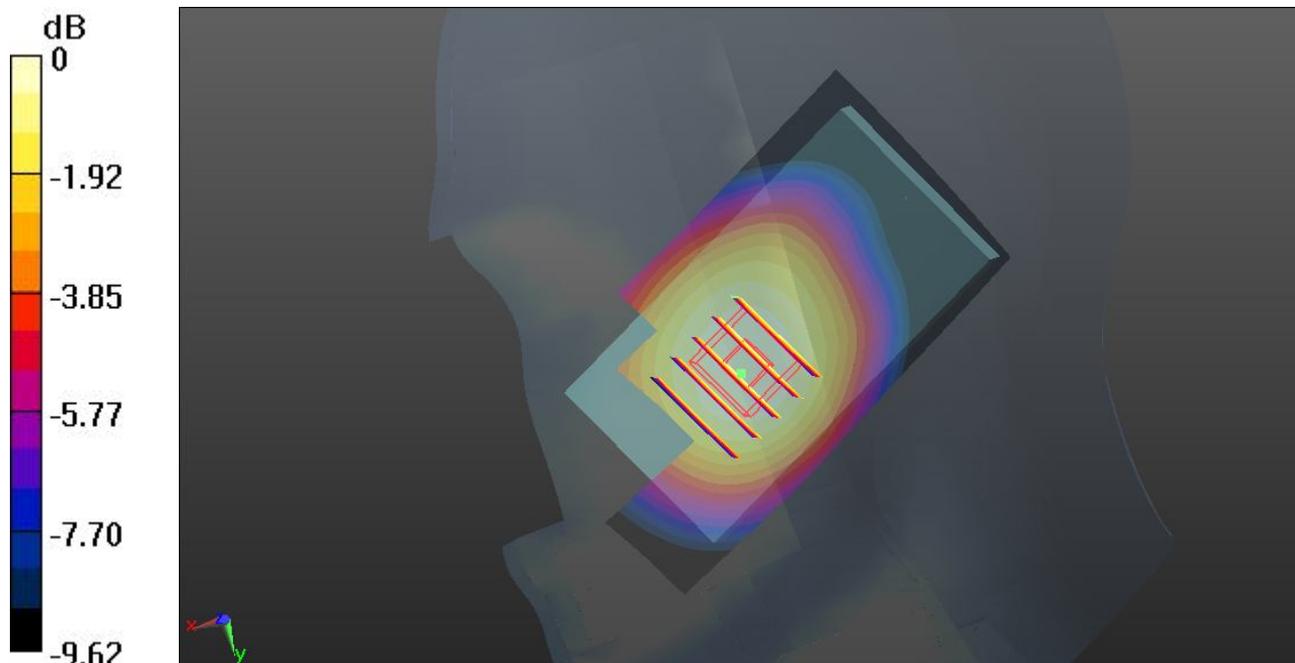
**Ch4132/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.004 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.565 mW/g

**SAR(1 g) = 0.460 mW/g; SAR(10 g) = 0.354 mW/g**

Maximum value of SAR (measured) = 0.477 mW/g



0 dB = 0.477 mW/g = -6.43 dB mW/g

**02 WCDMA Band V\_RMC 12.2K\_Right Tilted\_Ch4132**

**DUT: 262807**

Communication System: UMTS; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: HSL\_835\_120629 Medium parameters used:  $f = 826.4$  MHz;  $\sigma = 0.912$  mho/m;  $\epsilon_r = 42.343$ ;

$\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch4132/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.329 mW/g

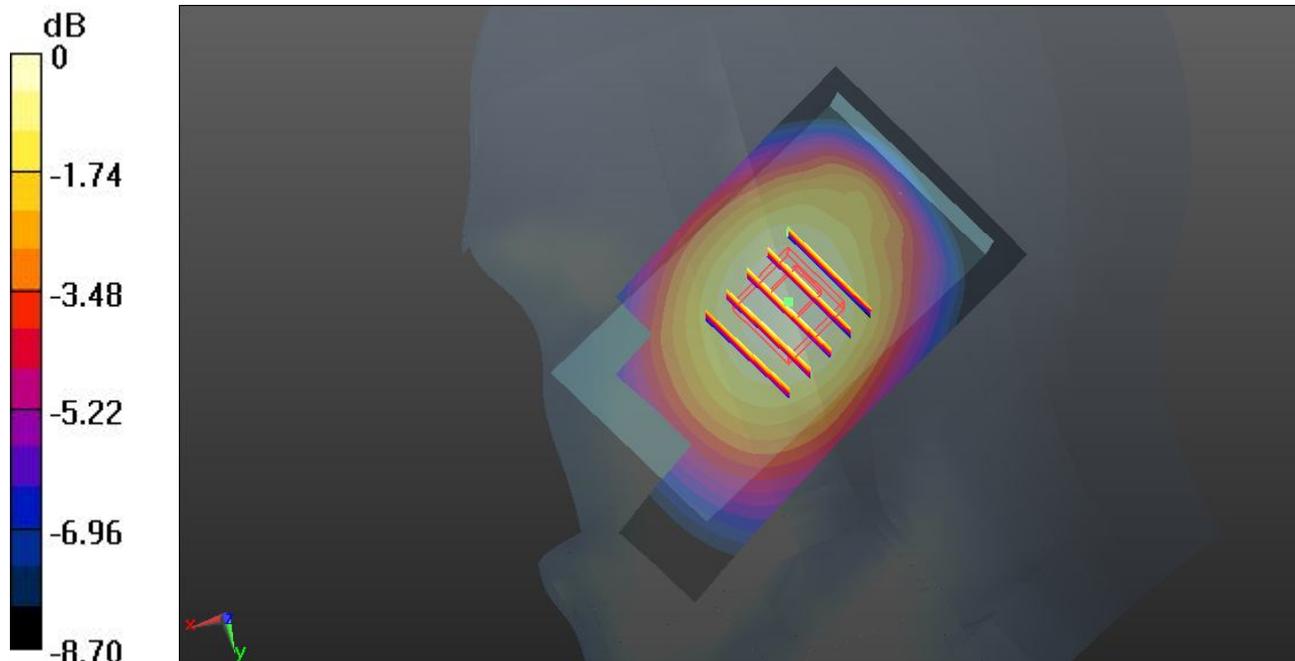
**Ch4132/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.324 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.395 mW/g

**SAR(1 g) = 0.317 mW/g; SAR(10 g) = 0.244 mW/g**

Maximum value of SAR (measured) = 0.329 mW/g



0 dB = 0.329 mW/g = -9.66 dB mW/g

**03 WCDMA Band V\_RMC 12.2K\_Left Cheek\_Ch4132**

**DUT: 262807**

Communication System: UMTS; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: HSL\_835\_120629 Medium parameters used:  $f = 826.4$  MHz;  $\sigma = 0.912$  mho/m;  $\epsilon_r = 42.343$ ;

$\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch4132/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.517 mW/g

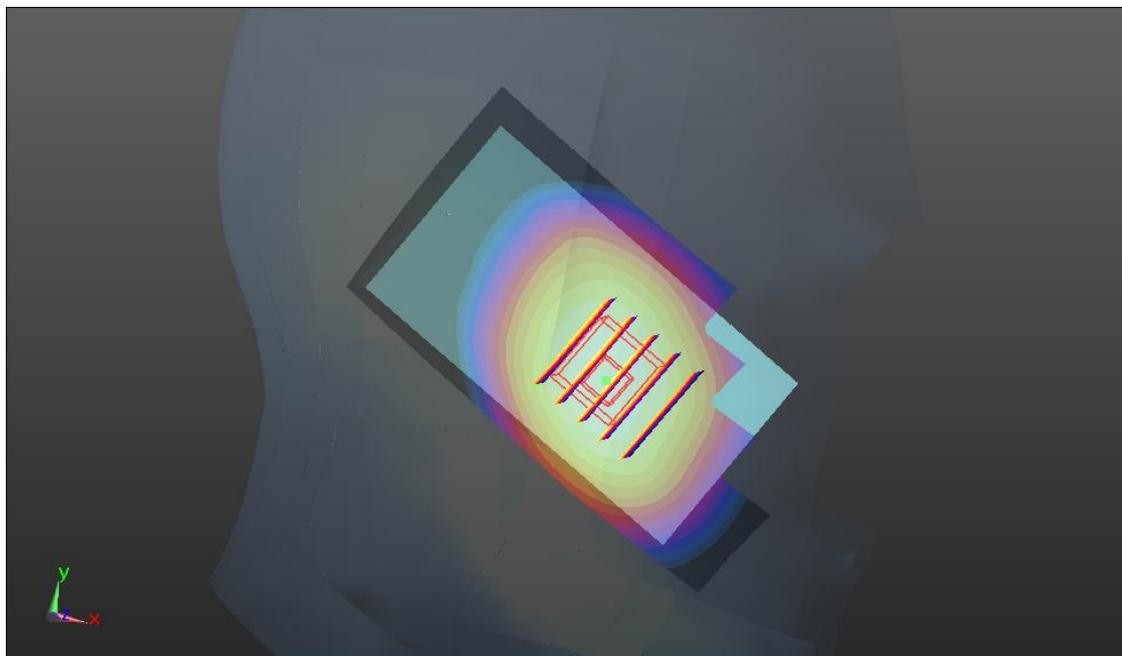
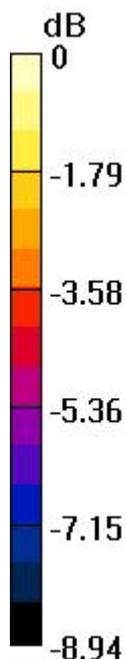
**Ch4132/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.054 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.645 mW/g

**SAR(1 g) = 0.504 mW/g; SAR(10 g) = 0.381 mW/g**

Maximum value of SAR (measured) = 0.532 mW/g



0 dB = 0.532 mW/g = -5.48 dB mW/g

**03 WCDMA Band V\_RMC 12.2K\_Left Cheek\_Ch4132\_2D**

**DUT: 262807**

Communication System: UMTS; Frequency: 826.4 MHz; Duty Cycle: 1:1  
 Medium: HSL\_835\_120629 Medium parameters used:  $f = 826.4$  MHz;  $\sigma = 0.912$  mho/m;  $\epsilon_r = 42.343$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch4132/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.517 mW/g

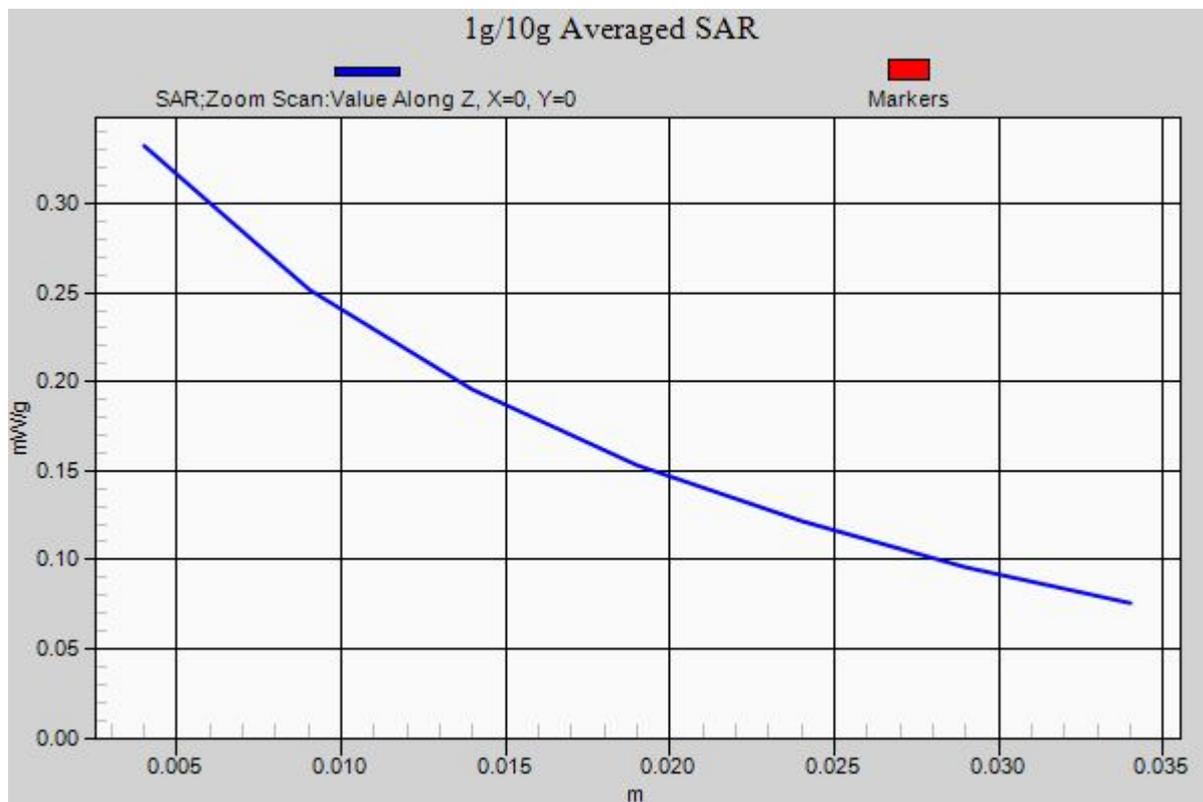
**Ch4132/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.054 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.645 mW/g

**SAR(1 g) = 0.504 mW/g; SAR(10 g) = 0.381 mW/g**

Maximum value of SAR (measured) = 0.532 mW/g



**04 WCDMA Band V\_RMC 12.2K\_Left Tilted\_Ch4132**

**DUT: 262807**

Communication System: UMTS; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: HSL\_835\_120629 Medium parameters used:  $f = 826.4$  MHz;  $\sigma = 0.912$  mho/m;  $\epsilon_r = 42.343$ ;

$\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch4132/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.343 mW/g

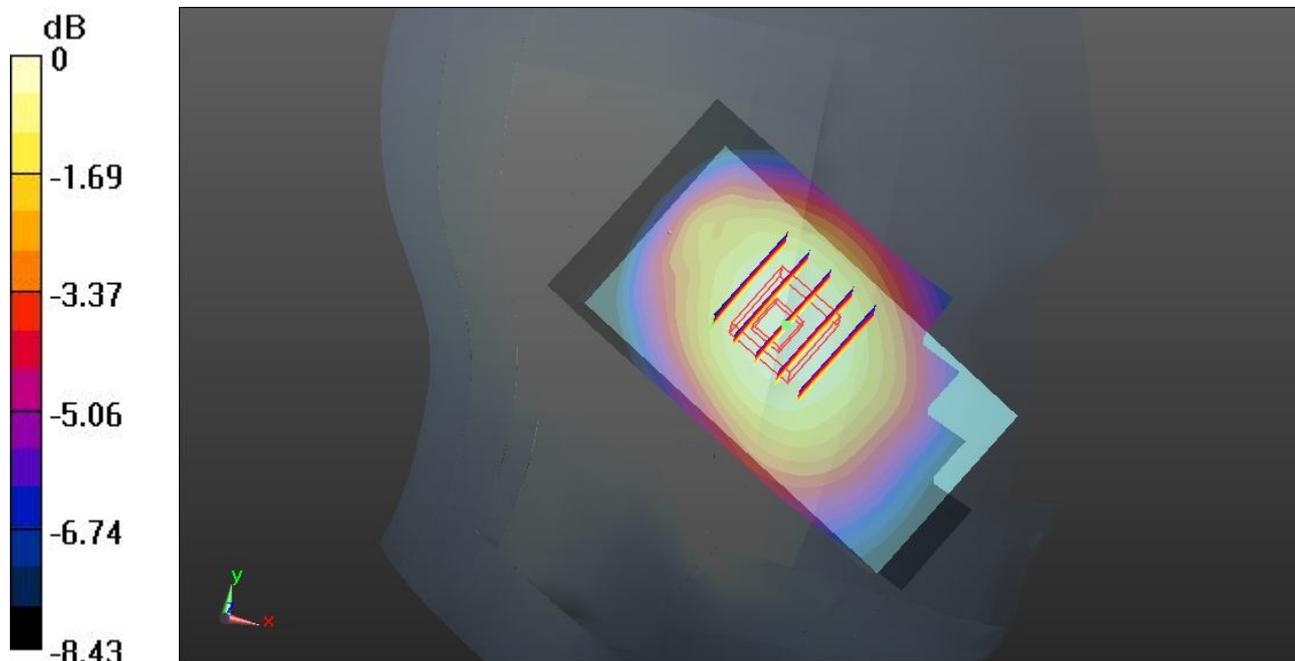
**Ch4132/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.414 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.411 mW/g

**SAR(1 g) = 0.332 mW/g; SAR(10 g) = 0.254 mW/g**

Maximum value of SAR (measured) = 0.343 mW/g



0 dB = 0.343 mW/g = -9.29 dB mW/g

### 05 WCDMA Band II\_RMC 12.2K\_Right Cheek\_Ch9538

**DUT: 262807**

Communication System: UMTS; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: HSL\_1900\_120629 Medium parameters used:  $f = 1908$  MHz;  $\sigma = 1.443$  mho/m;  $\epsilon_r =$

$38.445$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.4 °C ; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch9538/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

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

**Ch9538/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.516 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 1.138 mW/g

**SAR(1 g) = 0.771 mW/g; SAR(10 g) = 0.487 mW/g**

Maximum value of SAR (measured) = 0.827 mW/g

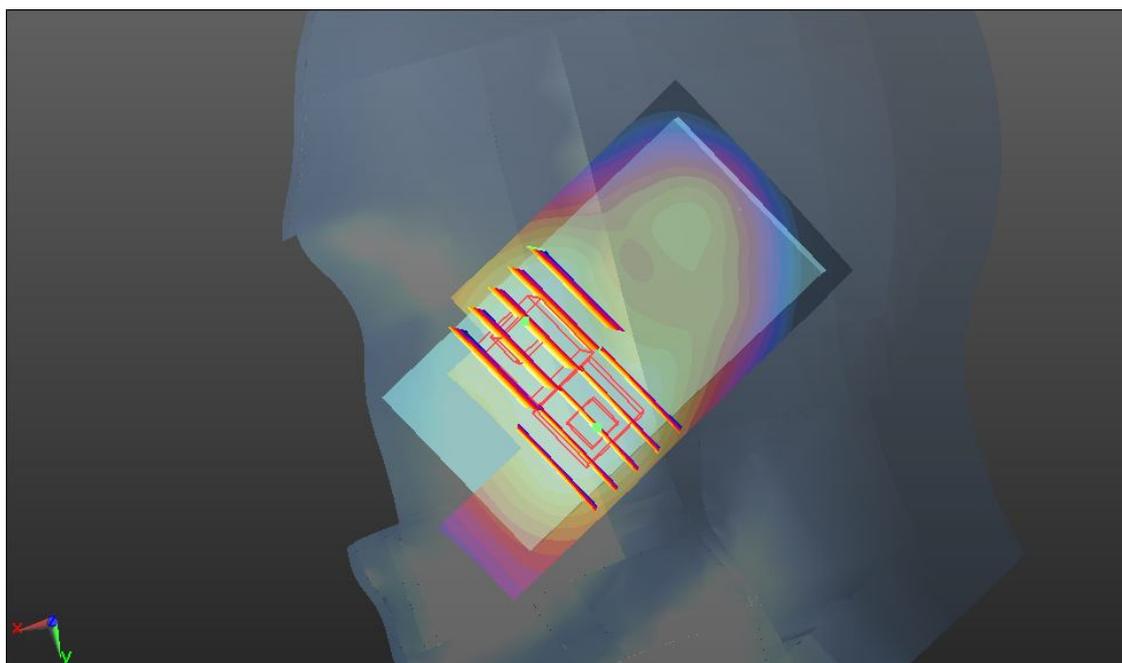
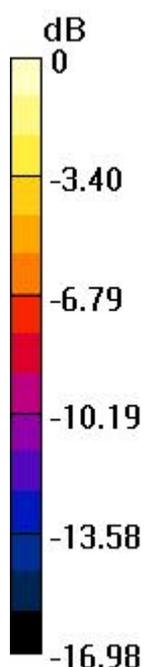
**Ch9538/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.516 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.905 mW/g

**SAR(1 g) = 0.626 mW/g; SAR(10 g) = 0.421 mW/g**

Maximum value of SAR (measured) = 0.661 mW/g



0 dB = 0.661 mW/g = -3.60 dB mW/g

### 06 WCDMA Band II\_RMC 12.2K\_Right Tilted\_Ch9538

**DUT: 262807**

Communication System: UMTS; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: HSL\_1900\_120629 Medium parameters used:  $f = 1908$  MHz;  $\sigma = 1.443$  mho/m;  $\epsilon_r =$

$38.445$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.4 °C ; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch9538/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

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

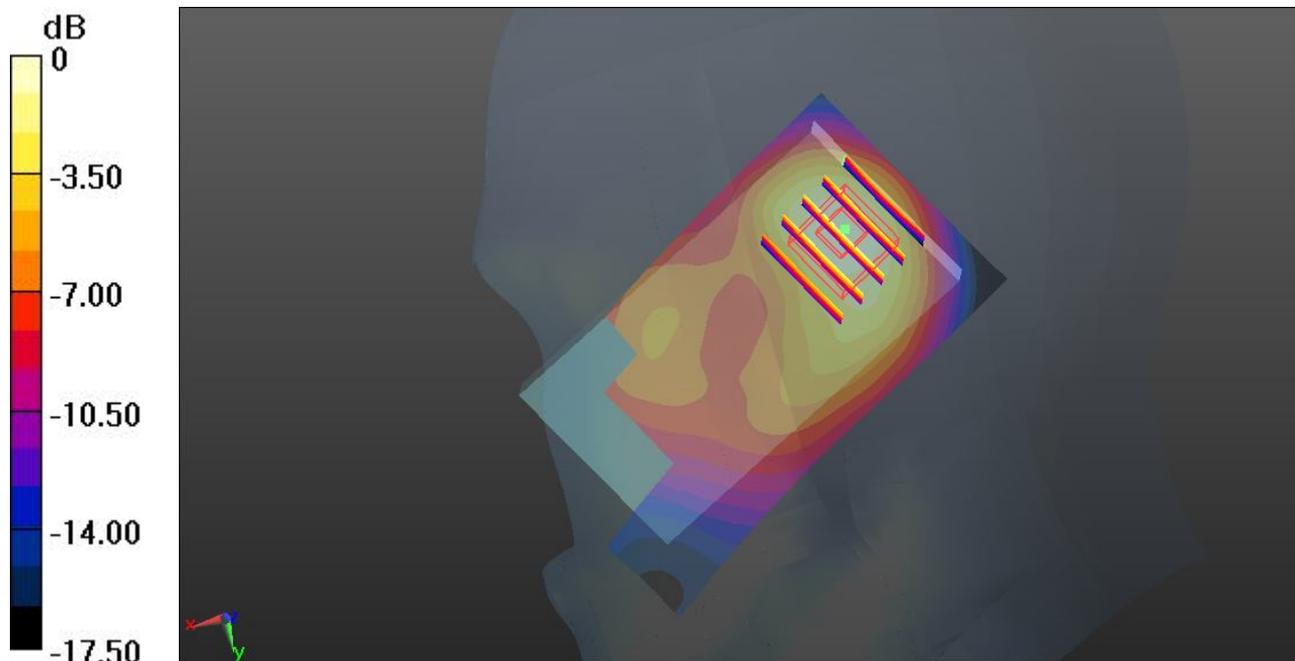
**Ch9538/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.725 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.819 mW/g

**SAR(1 g) = 0.507 mW/g; SAR(10 g) = 0.293 mW/g**

Maximum value of SAR (measured) = 0.561 mW/g



0 dB = 0.561 mW/g = -5.02 dB mW/g

**07 WCDMA Band II\_RMC 12.2K\_Left Cheek\_Ch9538**

**DUT: 262807**

Communication System: UMTS; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: HSL\_1900\_120629 Medium parameters used:  $f = 1908$  MHz;  $\sigma = 1.443$  mho/m;  $\epsilon_r =$

$38.445$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.4 °C ; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch9538/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

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

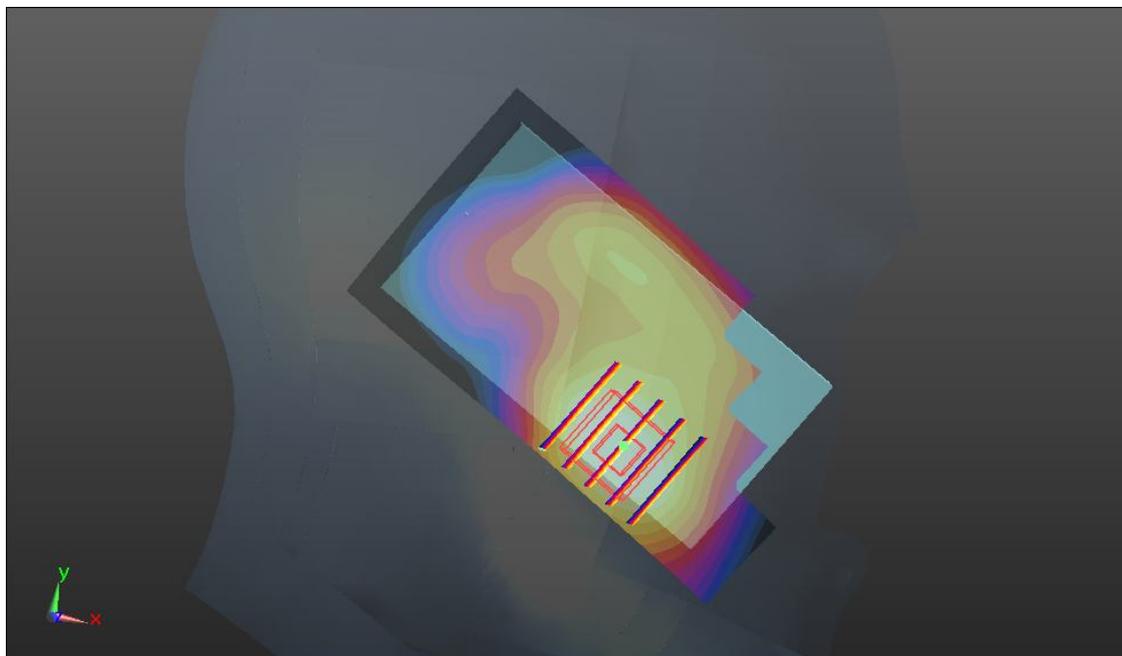
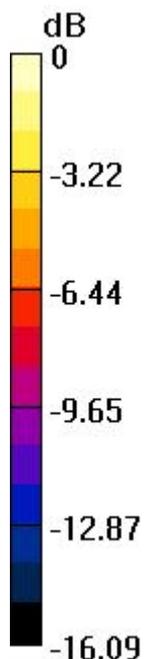
**Ch9538/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.396 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.608 mW/g

**SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.631 mW/g**

Maximum value of SAR (measured) = 1.10 mW/g



0 dB = 1.10 mW/g = 0.83 dB mW/g

### 08 WCDMA Band II\_RMC 12.2K\_Left Tilted\_Ch9538

**DUT: 262807**

Communication System: UMTS; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: HSL\_1900\_120629 Medium parameters used:  $f = 1908$  MHz;  $\sigma = 1.443$  mho/m;  $\epsilon_r =$

$38.445$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.4 °C ; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch9538/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.536 mW/g

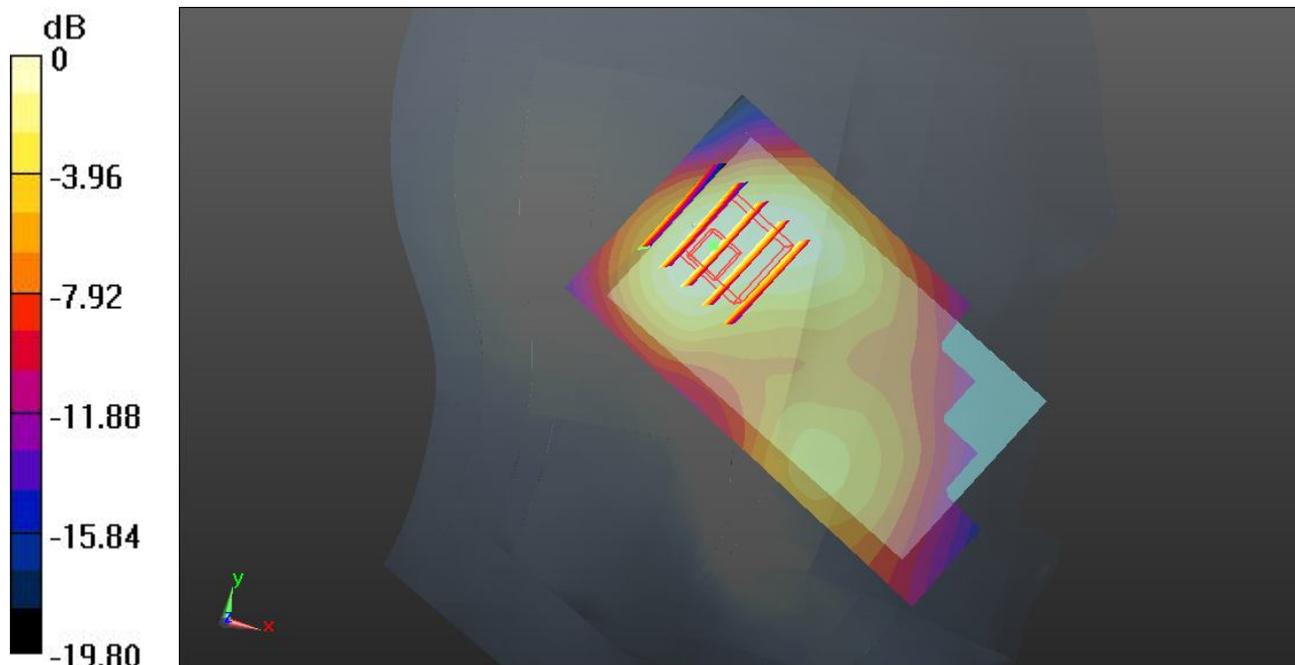
**Ch9538/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.897 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.710 mW/g

**SAR(1 g) = 0.457 mW/g; SAR(10 g) = 0.287 mW/g**

Maximum value of SAR (measured) = 0.491 mW/g



0 dB = 0.491 mW/g = -6.18 dB mW/g

### 09 WCDMA Band II\_RMC 12.2K\_Left Cheek\_Ch9262

**DUT: 262807**

Communication System: UMTS; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium: HSL\_1900\_120629 Medium parameters used:  $f = 1852.4$  MHz;  $\sigma = 1.383$  mho/m;  $\epsilon_r =$

$38.64$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.4 °C ; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch9262/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.20 mW/g

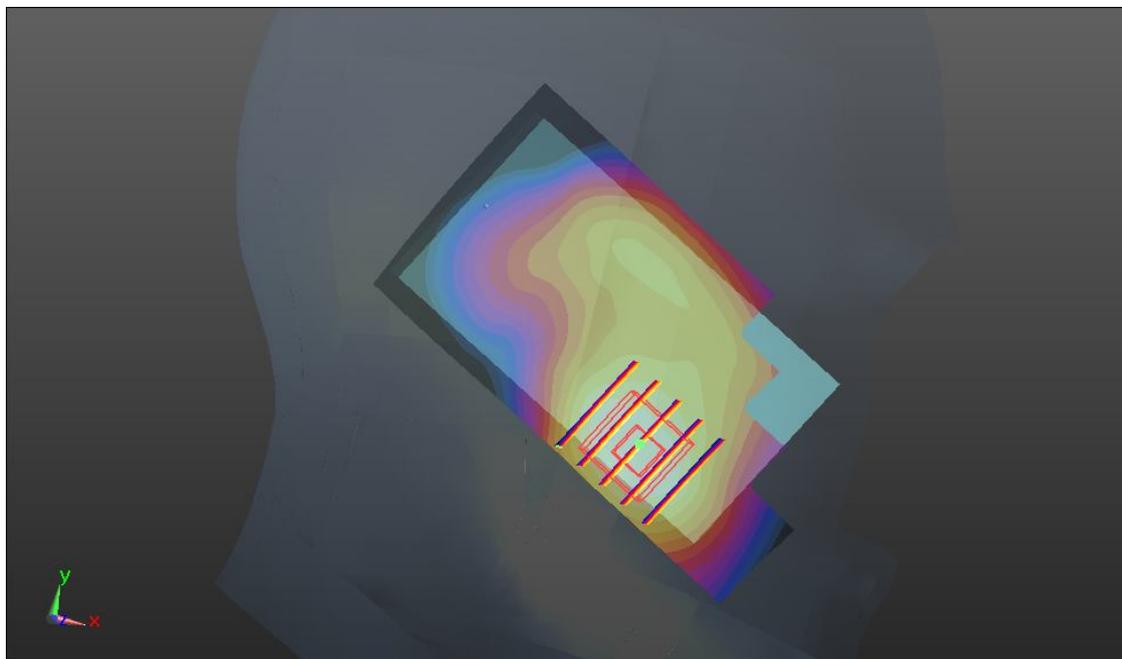
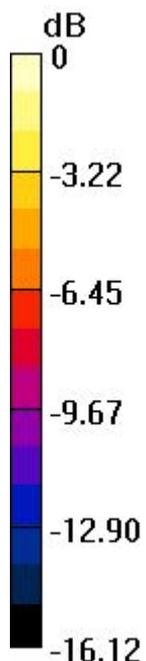
**Ch9262/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.971 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 1.609 mW/g

**SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.643 mW/g**

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



0 dB = 1.11 mW/g = 0.91 dB mW/g

**09 WCDMA Band II\_RMC 12.2K\_Left Cheek\_Ch9262\_2D**

**DUT: 262807**

Communication System: UMTS; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium: HSL\_1900\_120629 Medium parameters used:  $f = 1852.4$  MHz;  $\sigma = 1.383$  mho/m;  $\epsilon_r =$

$38.64$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.4 °C ; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch9262/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.20 mW/g

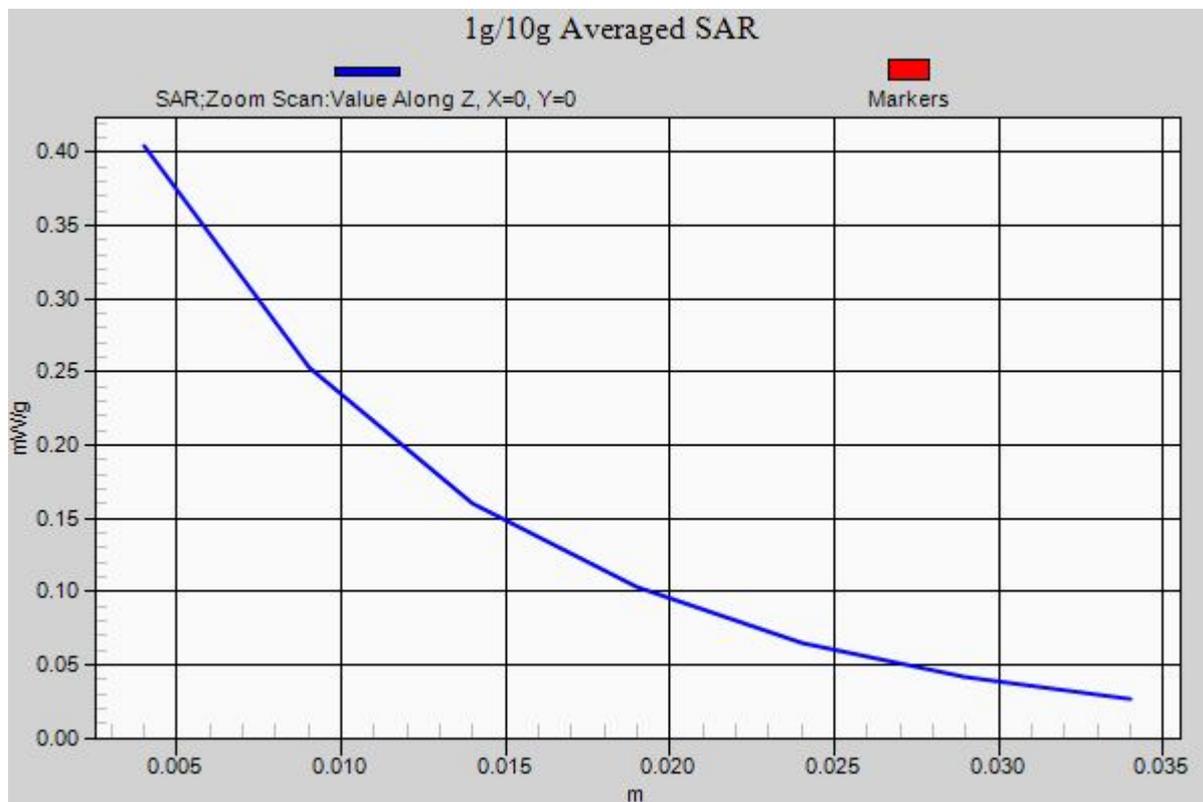
**Ch9262/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.971 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 1.609 mW/g

**SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.643 mW/g**

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



**10 WCDMA Band II\_RMC 12.2K\_Left Cheek\_Ch9400**

**DUT: 262807**

Communication System: UMTS; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL\_1900\_120629 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.412$  mho/m;  $\epsilon_r =$

$38.533$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.4 °C ; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch9400/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.16 mW/g

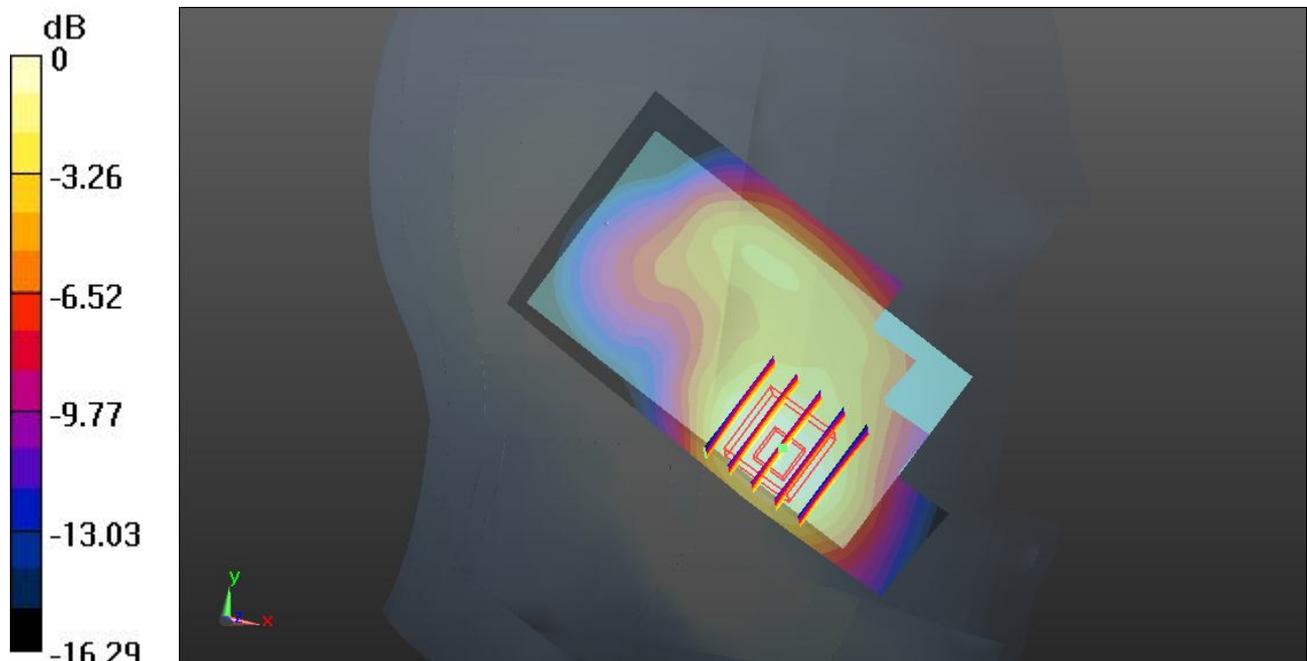
**Ch9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.242 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.601 mW/g

**SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.641 mW/g**

Maximum value of SAR (measured) = 1.10 mW/g



0 dB = 1.10 mW/g = 0.83 dB mW/g

## 53 802.11b\_Right Cheek\_Ch1

**DUT: 262807**

Communication System: WIFI; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL\_2450\_120724 Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.815$  mho/m;  $\epsilon_r =$

$37.813$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.4 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(6.87, 6.87, 6.87); Calibrated: 2012-6-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2011-11-18
- Phantom: SAM2; Type: SAM; Serial: TP-1477
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

**Ch1/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

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

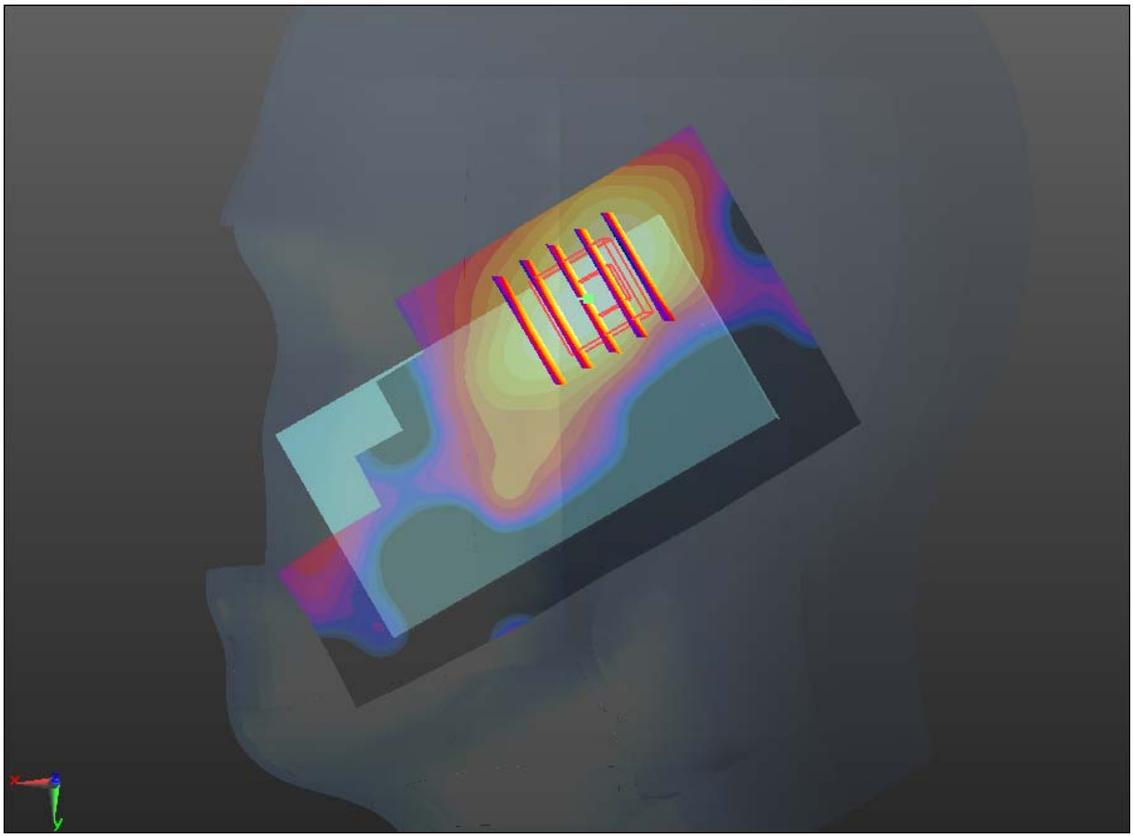
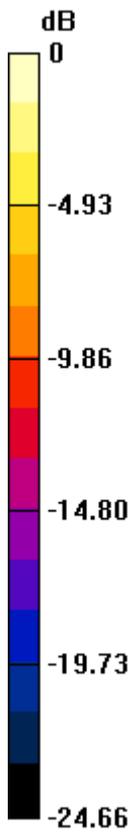
**Ch1/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.676 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.274 W/kg

**SAR(1 g) = 0.127 mW/g; SAR(10 g) = 0.061 mW/g**

Maximum value of SAR (measured) = 0.140 mW/g



0 dB = 0.140mW/g

## 53 802.11b\_Right Cheek\_Ch1\_2D

**DUT: 262807**

Communication System: WIFI; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL\_2450\_120724 Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.815$  mho/m;  $\epsilon_r =$

$37.813$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.4 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(6.87, 6.87, 6.87); Calibrated: 2012-6-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2011-11-18
- Phantom: SAM2; Type: SAM; Serial: TP-1477
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

**Ch1/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

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

**Ch1/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

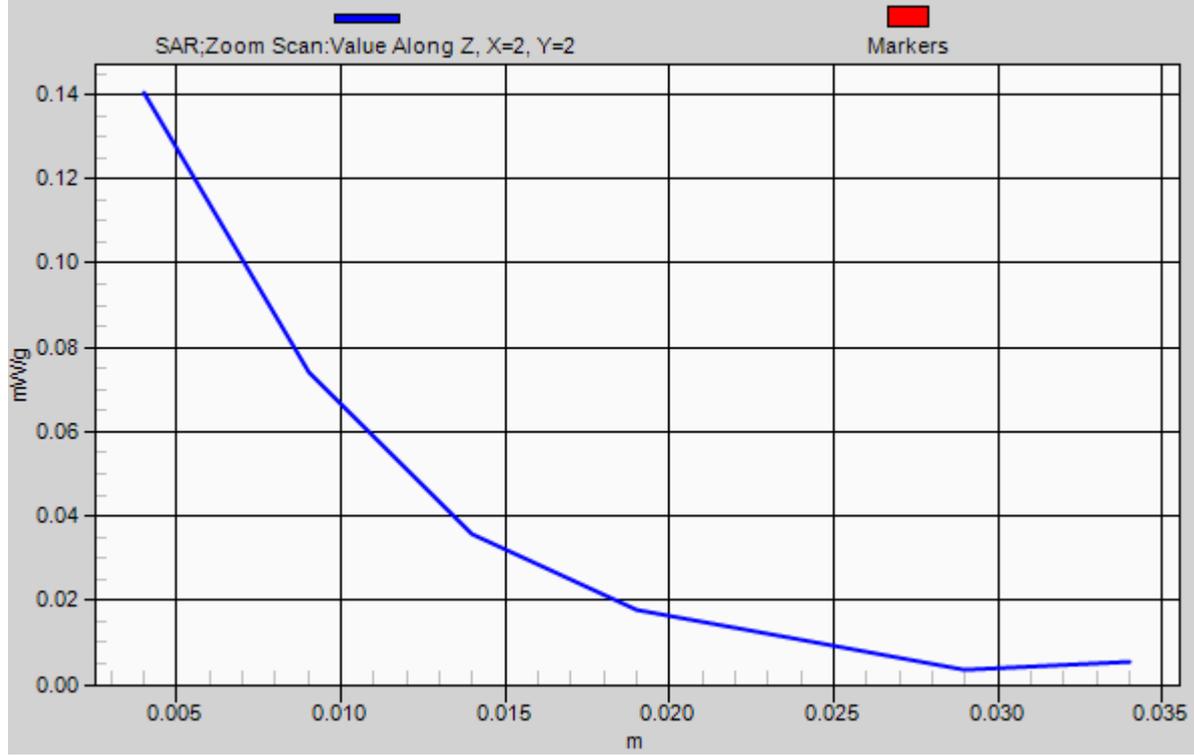
Reference Value = 1.676 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.274 W/kg

**SAR(1 g) = 0.127 mW/g; SAR(10 g) = 0.061 mW/g**

Maximum value of SAR (measured) = 0.140 mW/g

# 1g/10g Averaged SAR



## 54 802.11b\_Right Tilted\_Ch1

### DUT: 262807

Communication System: WIFI; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL\_2450\_120724 Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.815$  mho/m;  $\epsilon_r =$

$37.813$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.4 °C ; Liquid Temperature : 21.6 °C

#### DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(6.87, 6.87, 6.87); Calibrated: 2012-6-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2011-11-18
- Phantom: SAM2; Type: SAM; Serial: TP-1477
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

**Ch1/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.052 mW/g

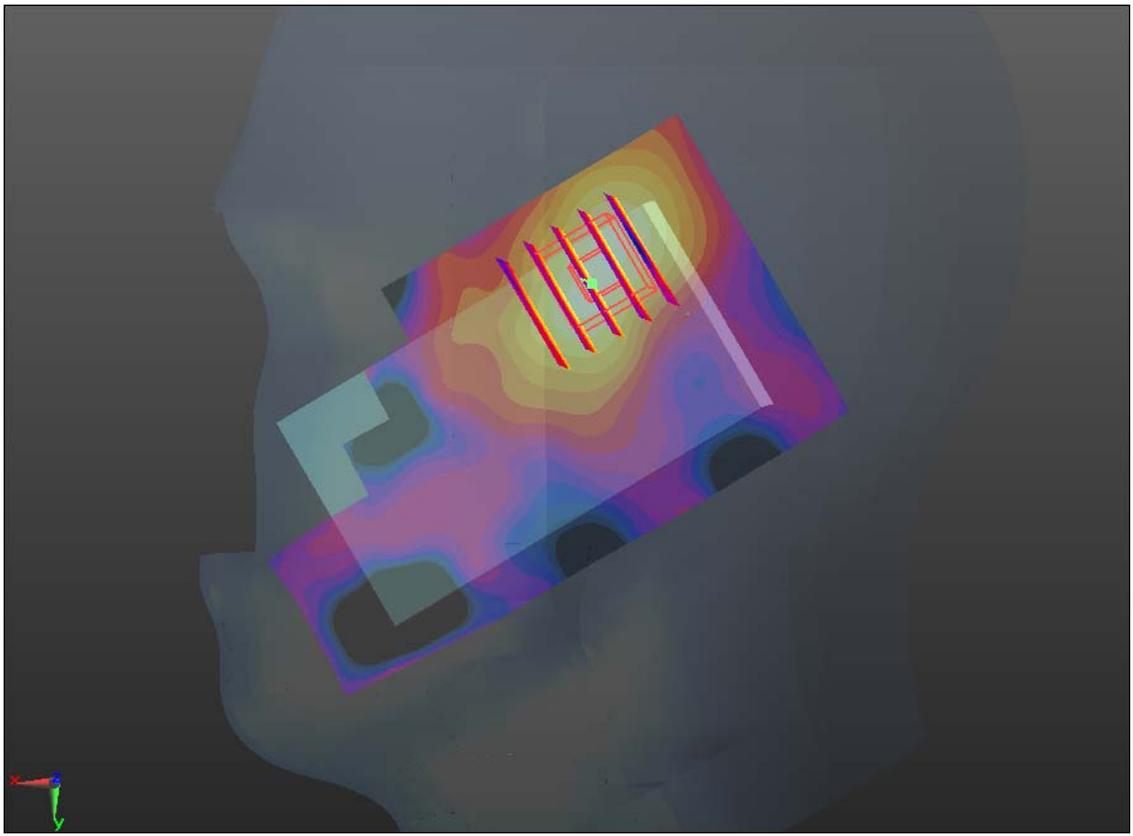
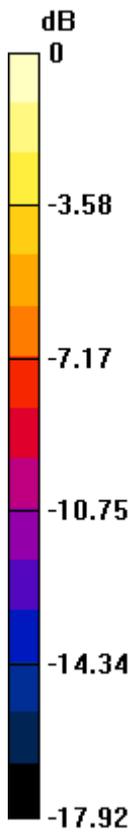
**Ch1/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.208 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.113 W/kg

**SAR(1 g) = 0.052 mW/g; SAR(10 g) = 0.026 mW/g**

Maximum value of SAR (measured) = 0.059 mW/g



0 dB = 0.060mW/g

## 55 802.11b\_Left Cheek\_Ch1

**DUT: 262807**

Communication System: WIFI; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL\_2450\_120724 Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.815$  mho/m;  $\epsilon_r =$

$37.813$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.4 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(6.87, 6.87, 6.87); Calibrated: 2012-6-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2011-11-18
- Phantom: SAM2; Type: SAM; Serial: TP-1477
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

**Ch1/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.072 mW/g

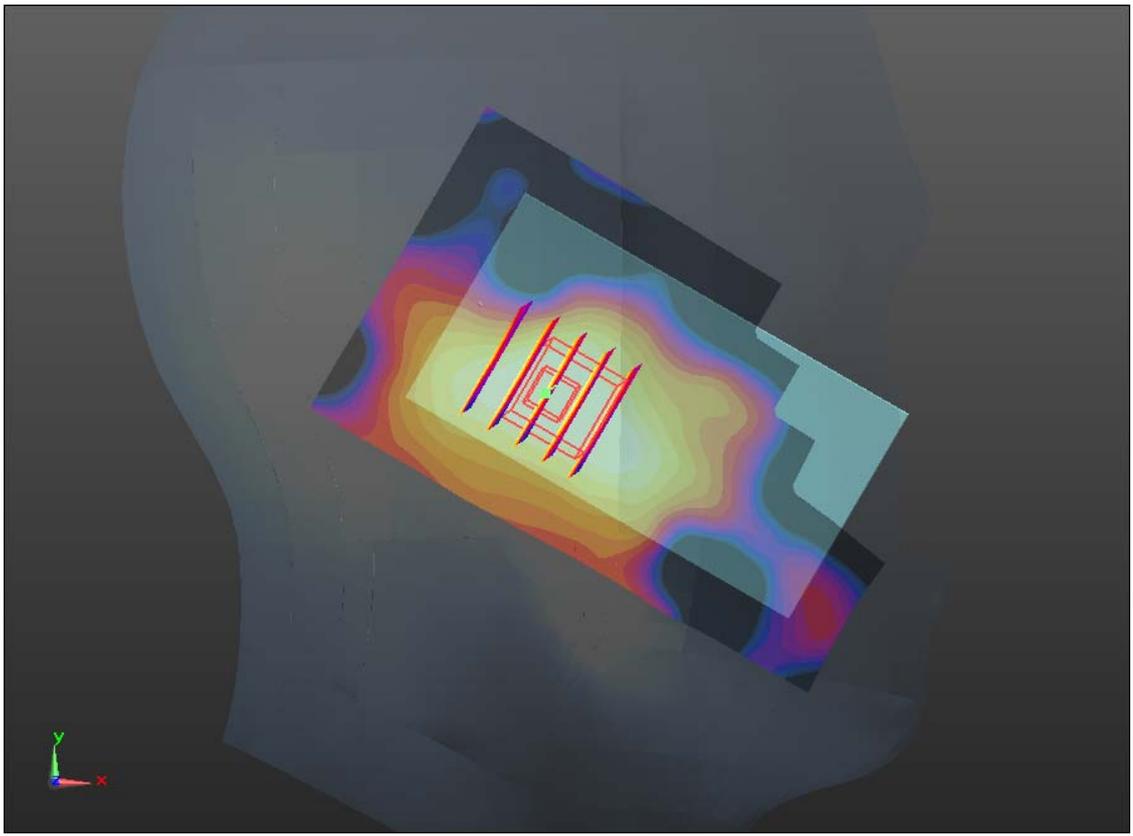
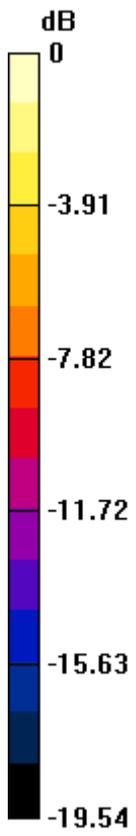
**Ch1/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.259 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.099 W/kg

**SAR(1 g) = 0.056 mW/g; SAR(10 g) = 0.032 mW/g**

Maximum value of SAR (measured) = 0.063 mW/g



0 dB = 0.060mW/g

## 56 802.11b\_Left Tilted\_Ch1

### DUT: 262807

Communication System: WIFI; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL\_2450\_120724 Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.815$  mho/m;  $\epsilon_r =$

$37.813$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.4 °C ; Liquid Temperature : 21.6 °C

#### DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(6.87, 6.87, 6.87); Calibrated: 2012-6-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2011-11-18
- Phantom: SAM2; Type: SAM; Serial: TP-1477
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

**Ch1/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.030 mW/g

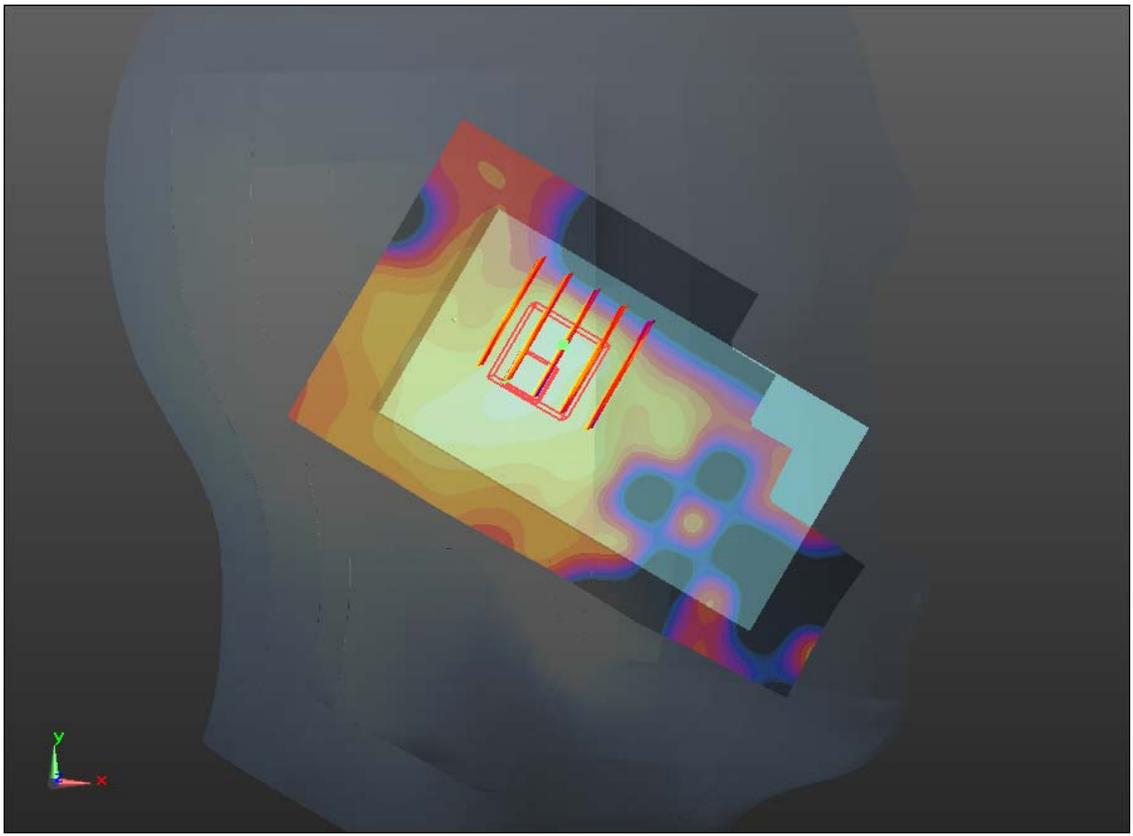
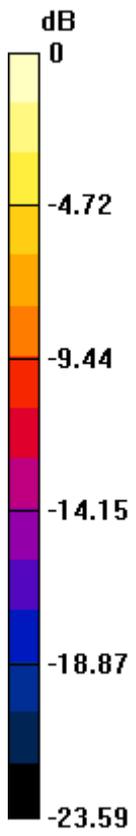
**Ch1/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.368 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.040 W/kg

**SAR(1 g) = 0.021 mW/g; SAR(10 g) = 0.010 mW/g**

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



0 dB = 0.030mW/g

**31 GSM850\_GPRS10\_Front\_1cm\_Ch128**

**DUT: 262807**

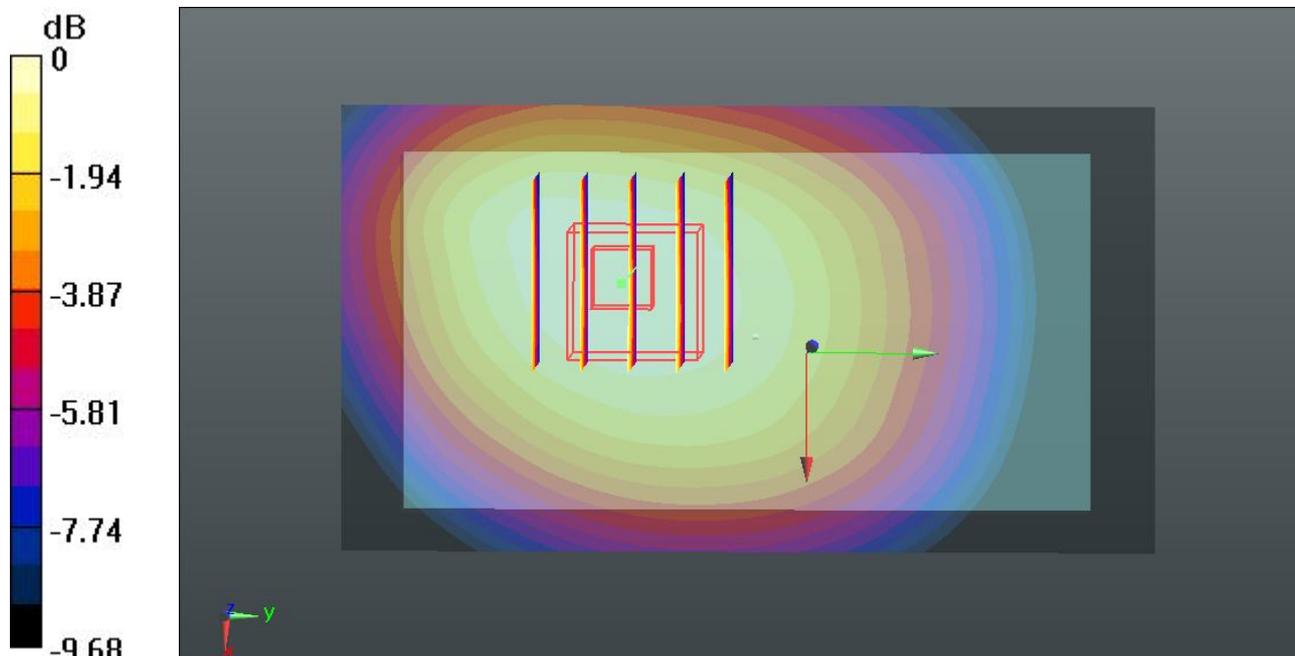
Communication System: GPRS/EDGE10; Frequency: 824.2 MHz; Duty Cycle: 1:4  
 Medium: MSL\_835\_120710 Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.966 \text{ mho/m}$ ;  $\epsilon_r = 54.458$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Ambient Temperature :  $23.3 \text{ }^\circ\text{C}$  ; Liquid Temperature :  $21.6 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch128/Area Scan (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) =  $0.669 \text{ mW/g}$

**Ch128/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value =  $24.505 \text{ V/m}$ ; Power Drift =  $-0.14 \text{ dB}$   
 Peak SAR (extrapolated) =  $0.836 \text{ mW/g}$   
**SAR(1 g) =  $0.632 \text{ mW/g}$ ; SAR(10 g) =  $0.468 \text{ mW/g}$**   
 Maximum value of SAR (measured) =  $0.668 \text{ mW/g}$



0 dB =  $0.668 \text{ mW/g}$  =  $-3.50 \text{ dB mW/g}$

### 32 GSM850\_GPRS10\_Back\_1cm\_Ch128

**DUT: 262807**

Communication System: GPRS/EDGE10; Frequency: 824.2 MHz; Duty Cycle: 1:4  
Medium: MSL\_835\_120710 Medium parameters used:  $f = 824.2$  MHz;  $\sigma = 0.966$  mho/m;  $\epsilon_r = 54.458$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature : 23.3 °C ; Liquid Temperature : 21.6 °C

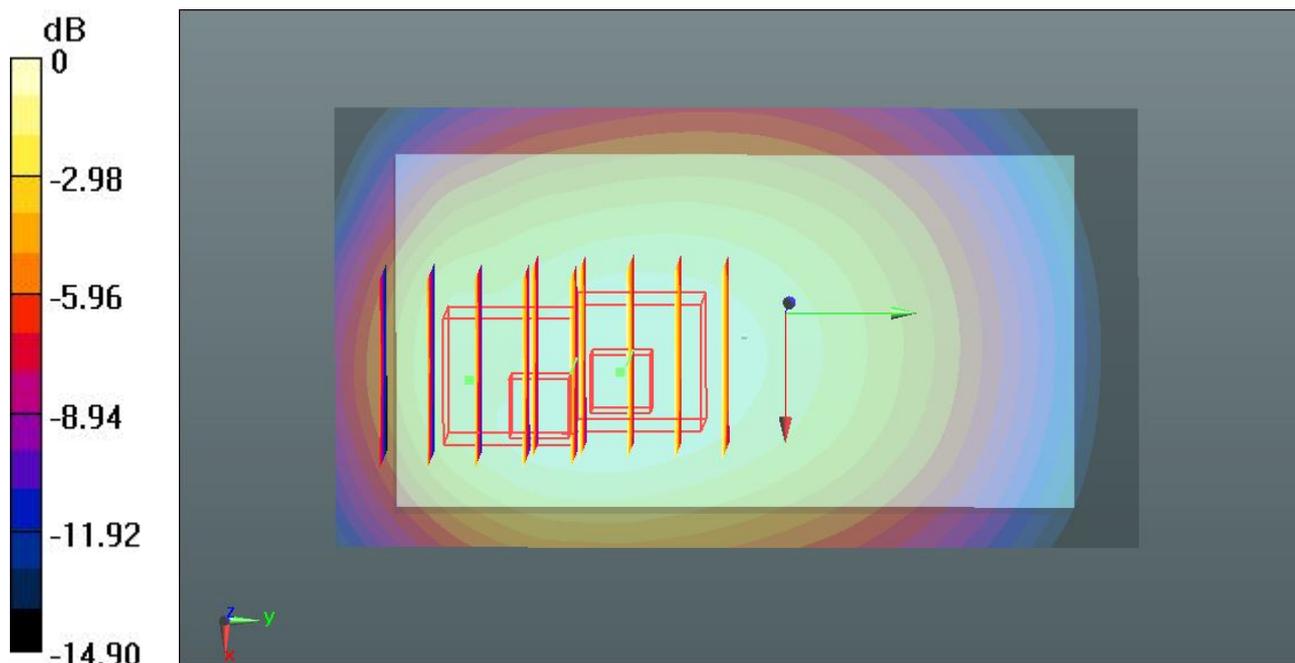
DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch128/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.949 mW/g

**Ch128/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 28.300 V/m; Power Drift = -0.07 dB  
Peak SAR (extrapolated) = 1.251 mW/g  
**SAR(1 g) = 0.884 mW/g; SAR(10 g) = 0.627 mW/g**  
Maximum value of SAR (measured) = 0.927 mW/g

**Ch128/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 28.300 V/m; Power Drift = -0.07 dB  
Peak SAR (extrapolated) = 1.270 mW/g  
**SAR(1 g) = 0.773 mW/g; SAR(10 g) = 0.471 mW/g**  
Maximum value of SAR (measured) = 0.891 mW/g



0 dB = 0.891 mW/g = -1.00 dB mW/g

## **32 GSM850\_GPRS10\_Back\_1cm\_Ch128\_2D**

**DUT: 262807**

Communication System: GPRS/EDGE10; Frequency: 824.2 MHz; Duty Cycle: 1:4  
Medium: MSL\_835\_120710 Medium parameters used:  $f = 824.2$  MHz;  $\sigma = 0.966$  mho/m;  $\epsilon_r = 54.458$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature : 23.3 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch128/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

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

**Ch128/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 28.300 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 1.251 mW/g

**SAR(1 g) = 0.884 mW/g; SAR(10 g) = 0.627 mW/g**

Maximum value of SAR (measured) = 0.927 mW/g

**Ch128/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

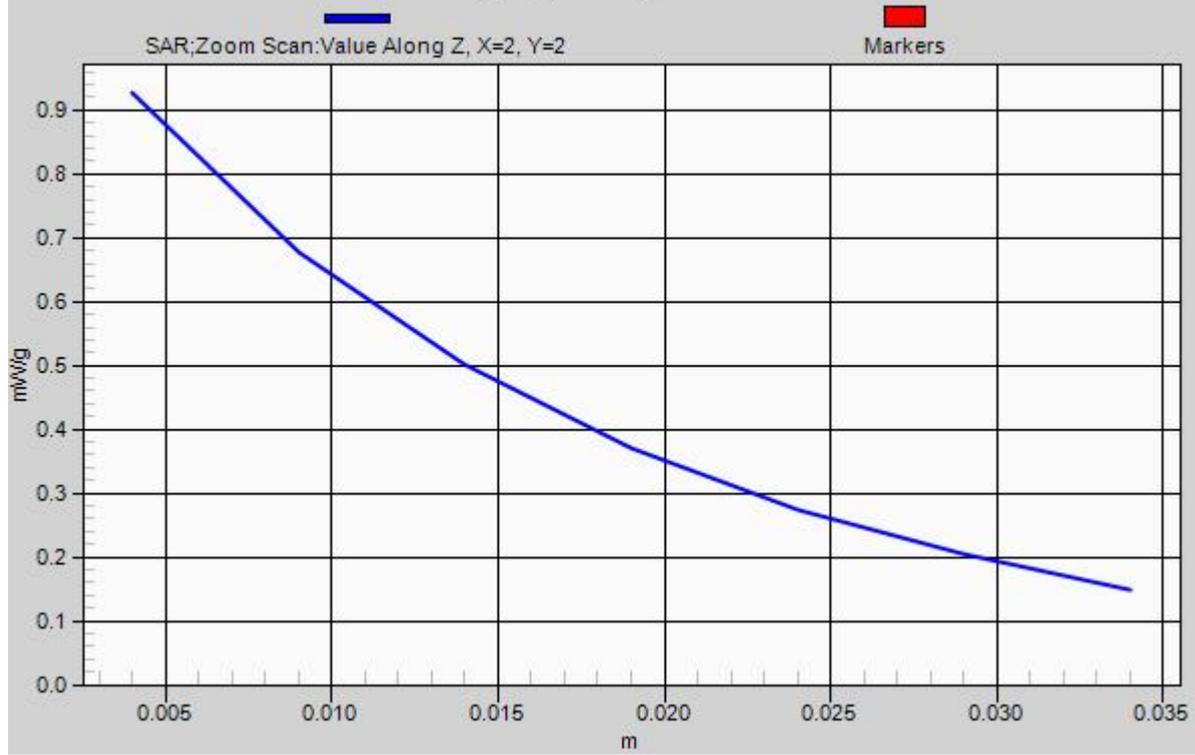
Reference Value = 28.300 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 1.270 mW/g

**SAR(1 g) = 0.773 mW/g; SAR(10 g) = 0.471 mW/g**

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

# 1g/10g Averaged SAR



### 33 GSM850\_GPRS10\_Left Side\_1cm\_Ch128

**DUT: 262807**

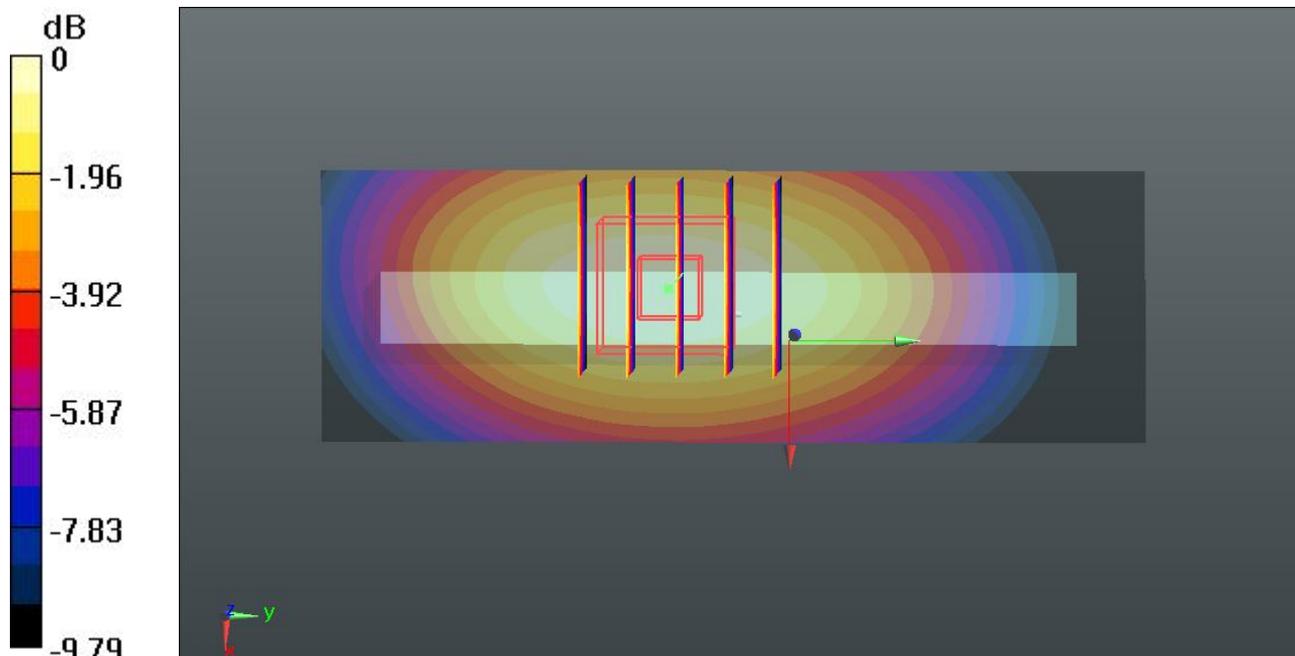
Communication System: GPRS/EDGE10; Frequency: 824.2 MHz; Duty Cycle: 1:4  
 Medium: MSL\_835\_120710 Medium parameters used:  $f = 824.2$  MHz;  $\sigma = 0.966$  mho/m;  $\epsilon_r = 54.458$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Ambient Temperature : 23.3 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch128/Area Scan (31x91x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 0.663 mW/g

**Ch128/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 25.539 V/m; Power Drift = 0.03 dB  
 Peak SAR (extrapolated) = 0.900 mW/g  
**SAR(1 g) = 0.619 mW/g; SAR(10 g) = 0.420 mW/g**  
 Maximum value of SAR (measured) = 0.659 mW/g



0 dB = 0.659 mW/g = -3.62 dB mW/g

**34 GSM850\_GPRS10\_Right Side\_1cm\_Ch128**

**DUT: 262807**

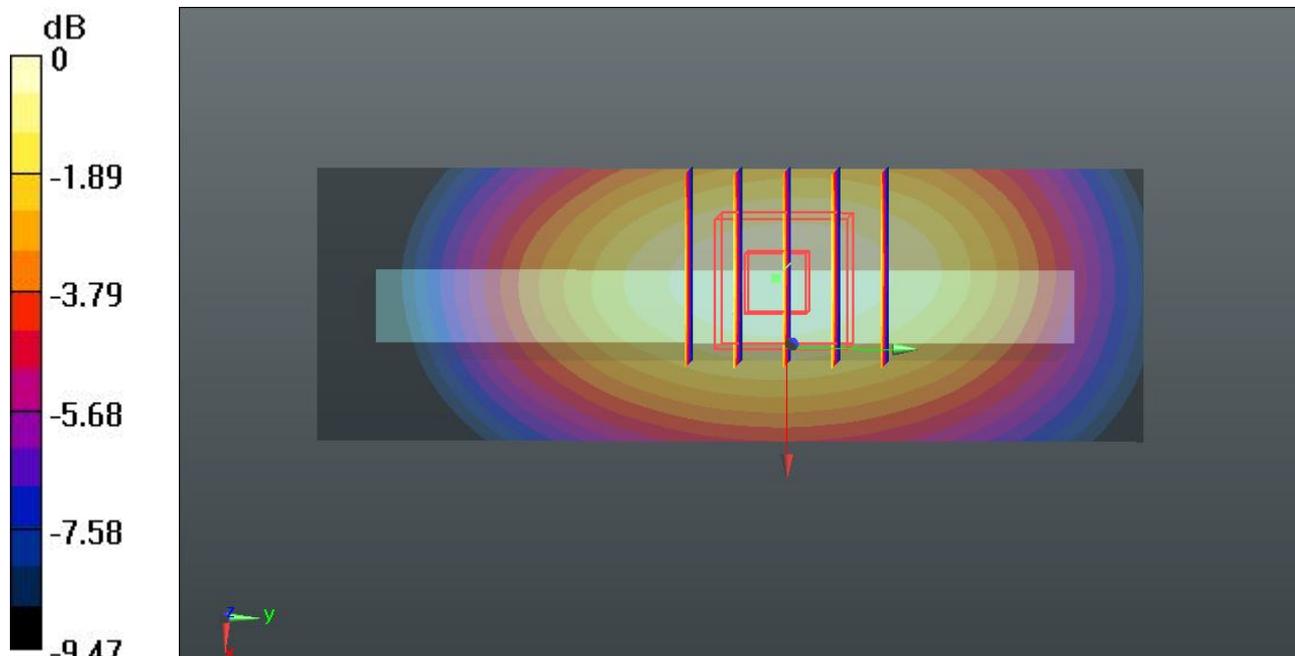
Communication System: GPRS/EDGE10; Frequency: 824.2 MHz; Duty Cycle: 1:4  
 Medium: MSL\_835\_120710 Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.966 \text{ mho/m}$ ;  $\epsilon_r = 54.458$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Ambient Temperature :  $23.3 \text{ }^\circ\text{C}$  ; Liquid Temperature :  $21.6 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch128/Area Scan (31x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) =  $0.544 \text{ mW/g}$

**Ch128/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value =  $23.048 \text{ V/m}$ ; Power Drift =  $0.14 \text{ dB}$   
 Peak SAR (extrapolated) =  $0.741 \text{ mW/g}$   
**SAR(1 g) =  $0.515 \text{ mW/g}$ ; SAR(10 g) =  $0.353 \text{ mW/g}$**   
 Maximum value of SAR (measured) =  $0.546 \text{ mW/g}$



0 dB =  $0.546 \text{ mW/g}$  =  $-5.26 \text{ dB mW/g}$

**35 GSM850\_GPRS10\_Bottom Side\_1cm\_Ch128**

**DUT: 262807**

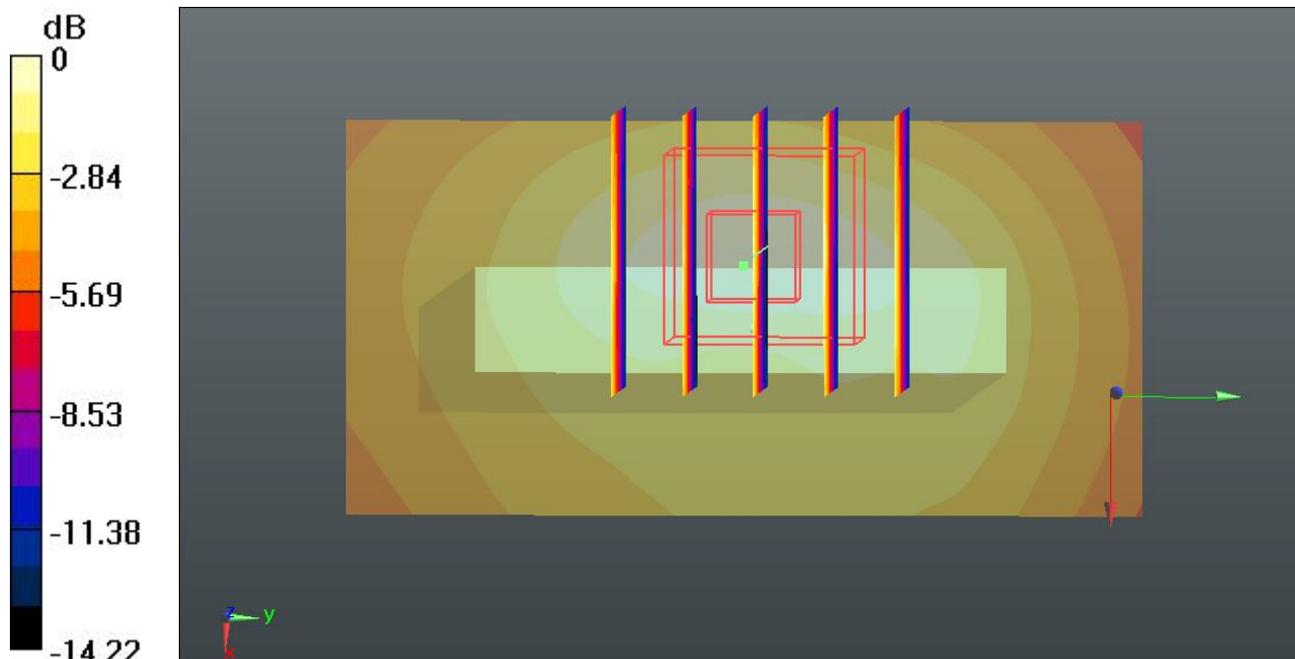
Communication System: GPRS/EDGE10; Frequency: 824.2 MHz; Duty Cycle: 1:4  
 Medium: MSL\_835\_120710 Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.966 \text{ mho/m}$ ;  $\epsilon_r = 54.458$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Ambient Temperature :  $23.3 \text{ }^\circ\text{C}$  ; Liquid Temperature :  $21.6 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch128/Area Scan (31x61x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) =  $0.0827 \text{ mW/g}$

**Ch128/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value =  $7.140 \text{ V/m}$ ; Power Drift =  $0.11 \text{ dB}$   
 Peak SAR (extrapolated) =  $0.153 \text{ mW/g}$   
**SAR(1 g) =  $0.076 \text{ mW/g}$ ; SAR(10 g) =  $0.043 \text{ mW/g}$**   
 Maximum value of SAR (measured) =  $0.0836 \text{ mW/g}$



0 dB =  $0.0836 \text{ mW/g}$  =  $-21.56 \text{ dB mW/g}$

### 36 GSM850\_GPRS10\_Back\_1cm\_Ch189

**DUT: 262807**

Communication System: GPRS/EDGE10; Frequency: 836.4 MHz; Duty Cycle: 1:4  
Medium: MSL\_835\_120710 Medium parameters used:  $f = 836.4$  MHz;  $\sigma = 0.978$  mho/m;  $\epsilon_r = 54.371$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature : 23.3 °C ; Liquid Temperature : 21.6 °C

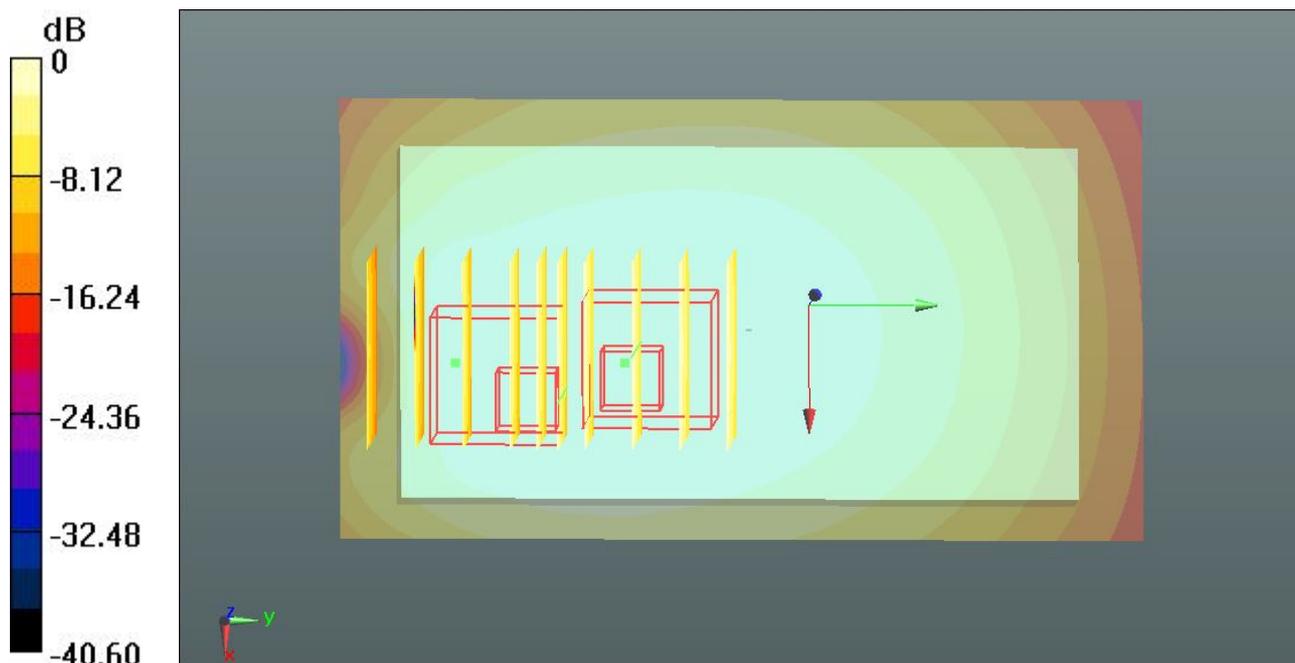
DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch189/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.905 mW/g

**Ch189/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 27.039 V/m; Power Drift = 0.03 dB  
Peak SAR (extrapolated) = 1.193 mW/g  
**SAR(1 g) = 0.845 mW/g; SAR(10 g) = 0.597 mW/g**  
Maximum value of SAR (measured) = 0.887 mW/g

**Ch189/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 27.039 V/m; Power Drift = 0.03 dB  
Peak SAR (extrapolated) = 1.109 mW/g  
**SAR(1 g) = 0.649 mW/g; SAR(10 g) = 0.388 mW/g**  
Maximum value of SAR (measured) = 0.774 mW/g



0 dB = 0.774 mW/g = -2.23 dB mW/g

**37 GSM850\_GPRS10\_Back\_1cm\_Ch251**

**DUT: 262807**

Communication System: GPRS/EDGE10; Frequency: 848.8 MHz; Duty Cycle: 1:4  
 Medium: MSL\_835\_120710 Medium parameters used:  $f = 849$  MHz;  $\sigma = 0.989$  mho/m;  $\epsilon_r = 54.263$ ;  
 $\rho = 1000$  kg/m<sup>3</sup>  
 Ambient Temperature : 23.3 °C ; Liquid Temperature : 21.6 °C

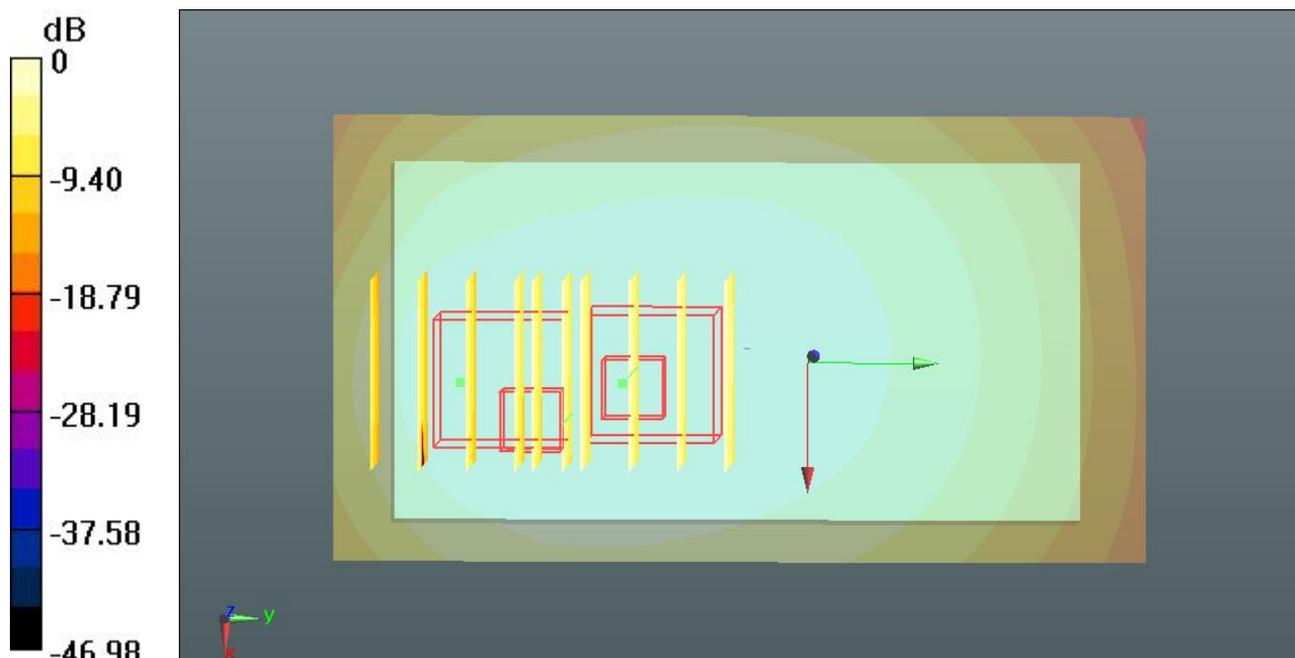
DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch251/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 0.824 mW/g

**Ch251/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 26.793 V/m; Power Drift = -0.12 dB  
 Peak SAR (extrapolated) = 1.076 mW/g  
**SAR(1 g) = 0.763 mW/g; SAR(10 g) = 0.540 mW/g**  
 Maximum value of SAR (measured) = 0.810 mW/g

**Ch251/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 26.793 V/m; Power Drift = -0.12 dB  
 Peak SAR (extrapolated) = 1.076 mW/g  
**SAR(1 g) = 0.630 mW/g; SAR(10 g) = 0.390 mW/g**  
 Maximum value of SAR (measured) = 0.748 mW/g



0 dB = 0.748 mW/g = -2.52 dB mW/g

### 38 GSM850\_GPRS10\_Back\_1cm\_Ch128\_Headset

**DUT: 262807**

Communication System: GPRS/EDGE10; Frequency: 824.2 MHz; Duty Cycle: 1:4.00037  
Medium: MSL\_835\_120710 Medium parameters used:  $f = 824.2$  MHz;  $\sigma = 0.966$  mho/m;  $\epsilon_r = 54.458$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature : 23.3 °C ; Liquid Temperature : 21.6 °C

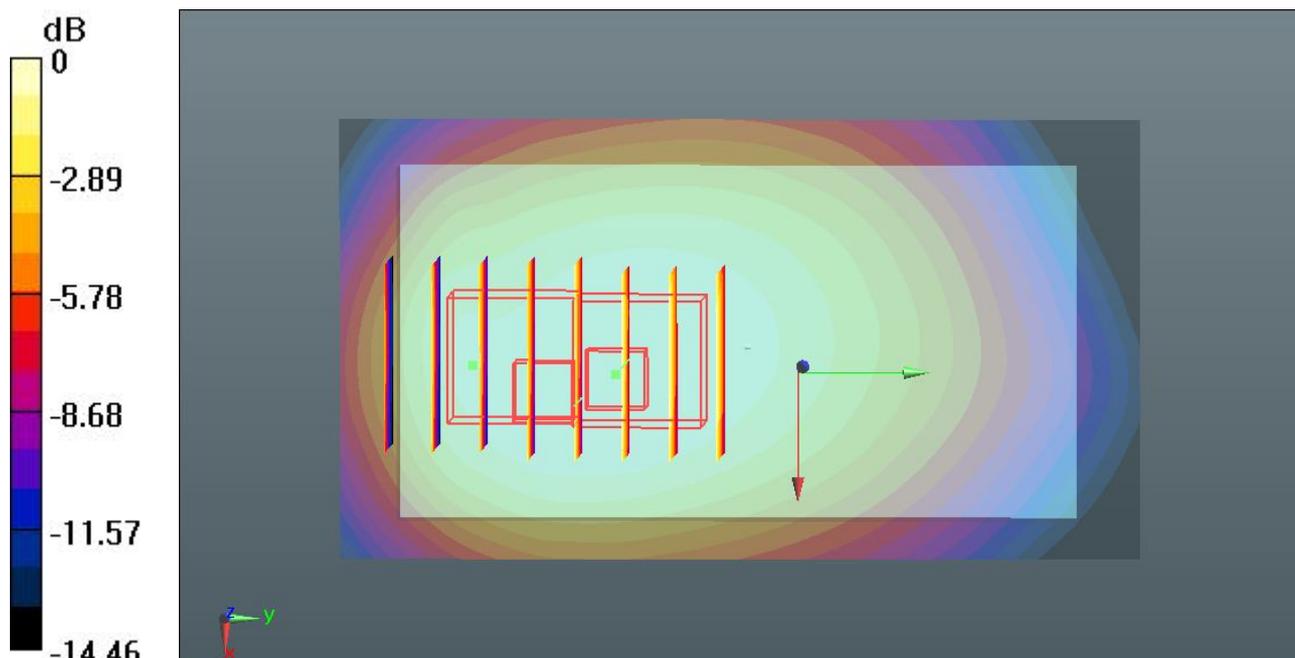
DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch128/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.814 mW/g

**Ch128/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 26.121 V/m; Power Drift = -0.04 dB  
Peak SAR (extrapolated) = 1.007 mW/g  
**SAR(1 g) = 0.703 mW/g; SAR(10 g) = 0.501 mW/g**  
Maximum value of SAR (measured) = 0.739 mW/g

**Ch128/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 26.121 V/m; Power Drift = -0.04 dB  
Peak SAR (extrapolated) = 0.995 mW/g  
**SAR(1 g) = 0.616 mW/g; SAR(10 g) = 0.386 mW/g**  
Maximum value of SAR (measured) = 0.710 mW/g



0 dB = 0.710 mW/g = -2.97 dB mW/g

**39 GSM1900\_GPRS10\_Front\_1cm\_Ch810**

**DUT: 262807**

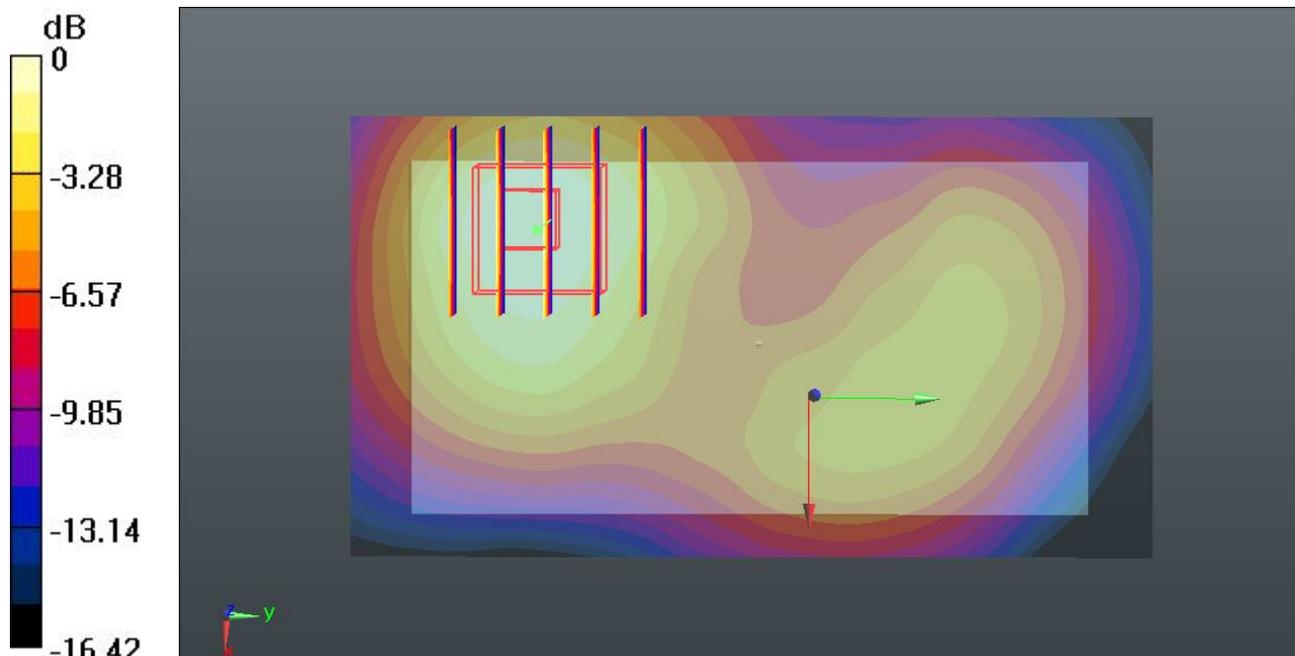
Communication System: GPRS/EDGE10; Frequency: 1909.8 MHz; Duty Cycle: 1:4  
 Medium: MSL\_1900\_120710 Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.544$  mho/m;  $\epsilon_r = 54.546$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Ambient Temperature : 23.7 °C ; Liquid Temperature : 21.7 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch810/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 0.509 mW/g

**Ch810/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 8.430 V/m; Power Drift = -0.07 dB  
 Peak SAR (extrapolated) = 0.737 mW/g  
**SAR(1 g) = 0.446 mW/g; SAR(10 g) = 0.263 mW/g**  
 Maximum value of SAR (measured) = 0.475 mW/g



0 dB = 0.475 mW/g = -6.47 dB mW/g

**40 GSM1900\_GPRS10\_Back\_1cm\_Ch810**

**DUT: 262807**

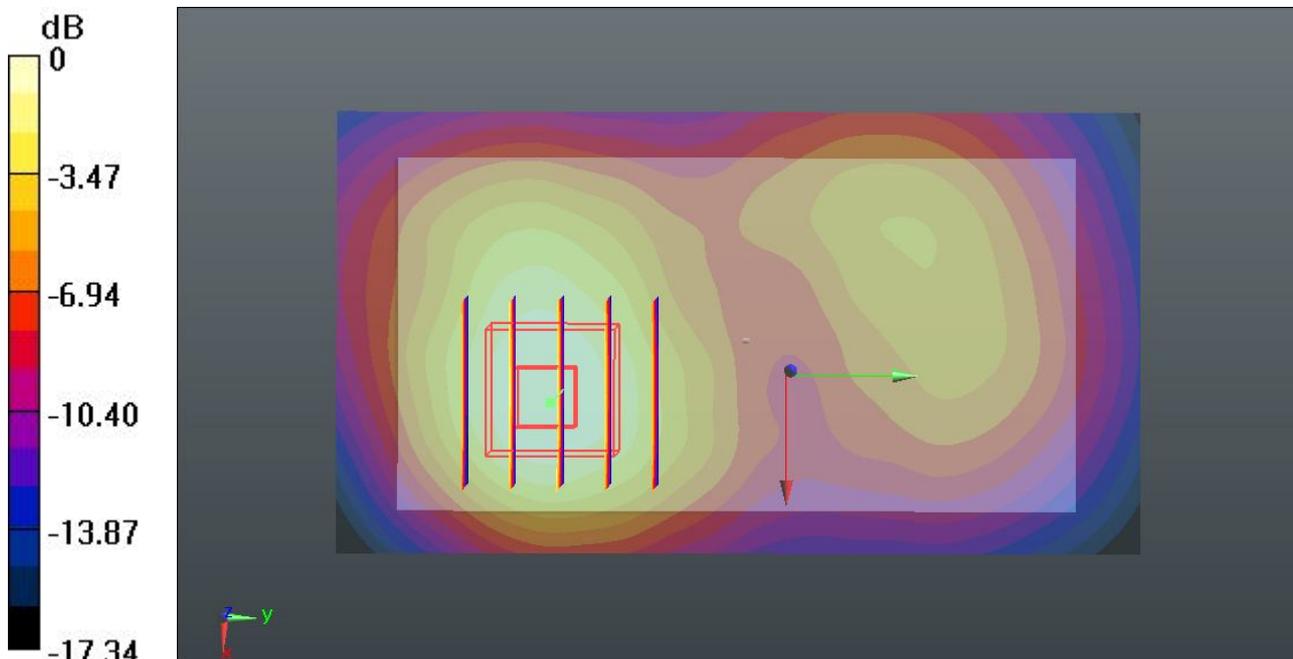
Communication System: GPRS/EDGE10; Frequency: 1909.8 MHz; Duty Cycle: 1:4  
 Medium: MSL\_1900\_120710 Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.544$  mho/m;  $\epsilon_r = 54.546$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Ambient Temperature : 23.7 °C ; Liquid Temperature : 21.7 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch810/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 0.602 mW/g

**Ch810/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 8.514 V/m; Power Drift = -0.04 dB  
 Peak SAR (extrapolated) = 0.919 mW/g  
**SAR(1 g) = 0.544 mW/g; SAR(10 g) = 0.313 mW/g**  
 Maximum value of SAR (measured) = 0.590 mW/g



0 dB = 0.590 mW/g = -4.58 dB mW/g

**40 GSM1900\_GPRS10\_Back\_1cm\_Ch810\_2D**

**DUT: 262807**

Communication System: GPRS/EDGE10; Frequency: 1909.8 MHz; Duty Cycle: 1:4  
 Medium: MSL\_1900\_120710 Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.544$  mho/m;  $\epsilon_r = 54.546$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Ambient Temperature : 23.7 °C ; Liquid Temperature : 21.7 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch810/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 0.602 mW/g

**Ch810/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 8.514 V/m; Power Drift = -0.04 dB  
 Peak SAR (extrapolated) = 0.919 mW/g  
**SAR(1 g) = 0.544 mW/g; SAR(10 g) = 0.313 mW/g**  
 Maximum value of SAR (measured) = 0.590 mW/g



**41 GSM1900\_GPRS10\_Left Side\_1cm\_Ch1810**

**DUT: 262807**

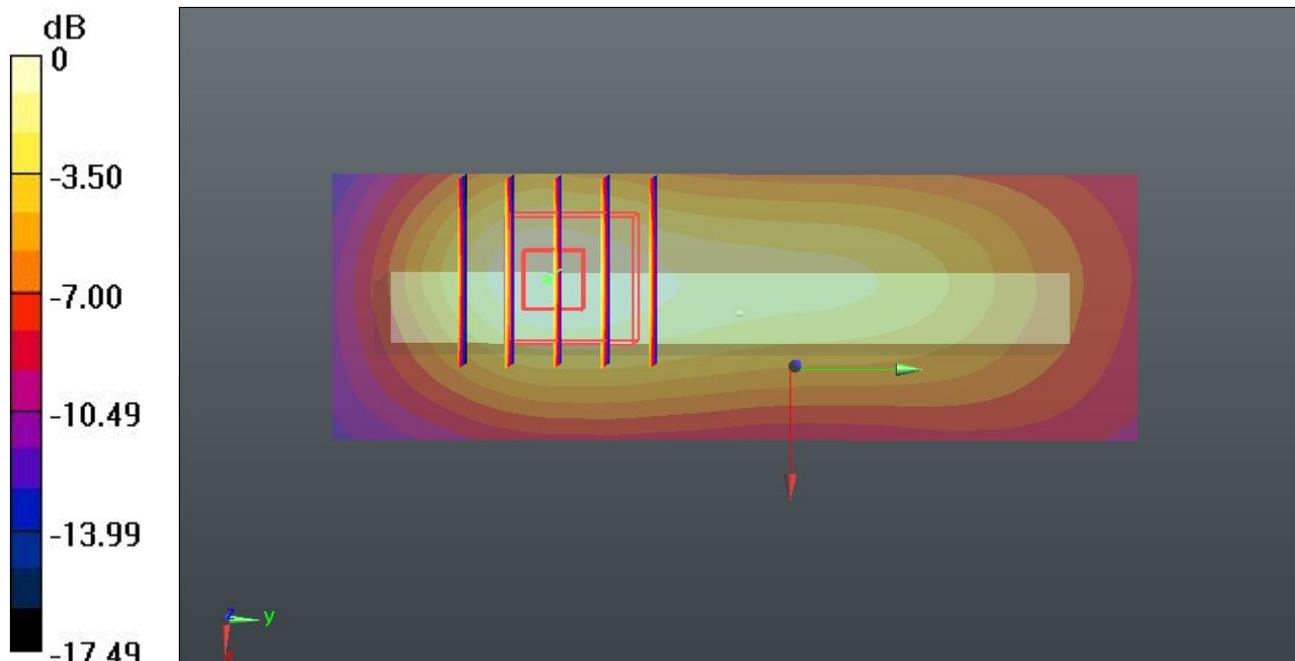
Communication System: GPRS/EDGE10; Frequency: 1909.8 MHz; Duty Cycle: 1:4  
 Medium: MSL\_1900\_120710 Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.544$  mho/m;  $\epsilon_r = 54.546$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Ambient Temperature : 23.7 °C ; Liquid Temperature : 21.7 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch810/Area Scan (31x91x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 0.266 mW/g

**Ch810/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 10.518 V/m; Power Drift = 0.03 dB  
 Peak SAR (extrapolated) = 0.382 mW/g  
**SAR(1 g) = 0.225 mW/g; SAR(10 g) = 0.127 mW/g**  
 Maximum value of SAR (measured) = 0.248 mW/g



0 dB = 0.248 mW/g = -12.11 dB mW/g

**42 GSM1900\_GPRS10\_Right Side\_1cm\_Ch810**

**DUT: 262807**

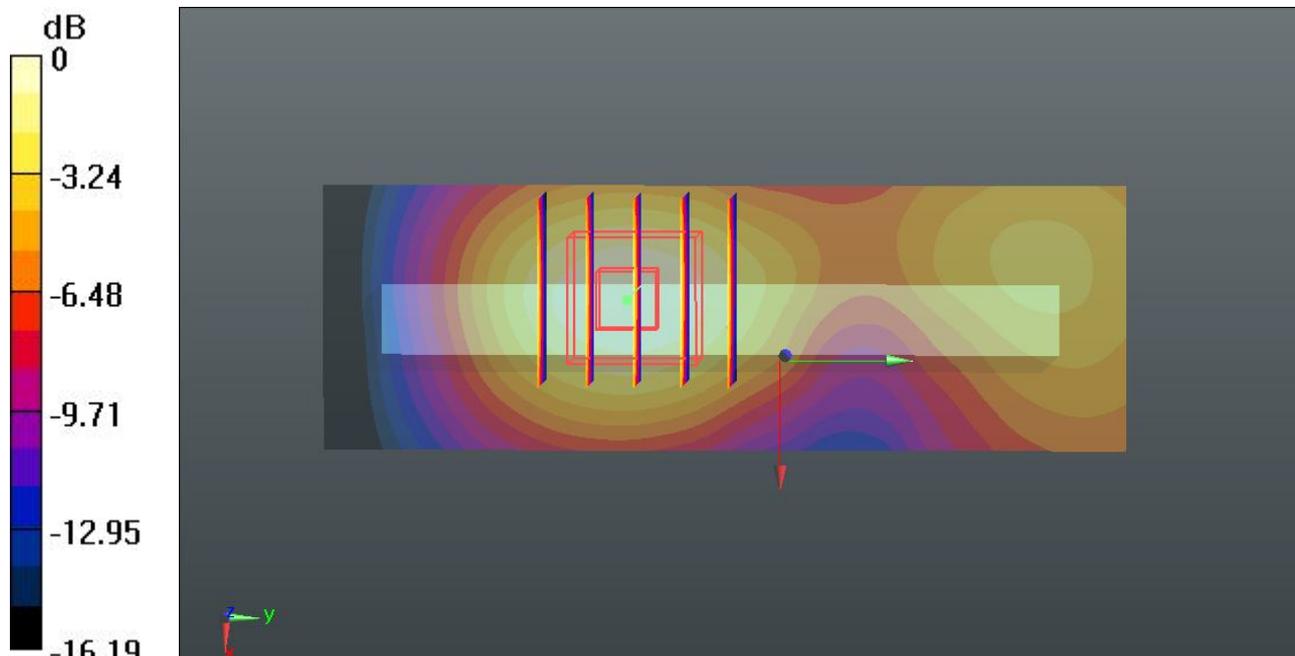
Communication System: GPRS/EDGE10; Frequency: 1909.8 MHz; Duty Cycle: 1:4  
 Medium: MSL\_1900\_120710 Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.544$  mho/m;  $\epsilon_r = 54.546$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Ambient Temperature : 23.7 °C ; Liquid Temperature : 21.7 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch810/Area Scan (31x91x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 0.161 mW/g

**Ch810/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 8.481 V/m; Power Drift = -0.01 dB  
 Peak SAR (extrapolated) = 0.236 mW/g  
**SAR(1 g) = 0.141 mW/g; SAR(10 g) = 0.081 mW/g**  
 Maximum value of SAR (measured) = 0.154 mW/g



0 dB = 0.154 mW/g = -16.25 dB mW/g

**43 GSM1900\_GPRS10\_Bottom Side\_1cm\_Ch810**

**DUT: 262807**

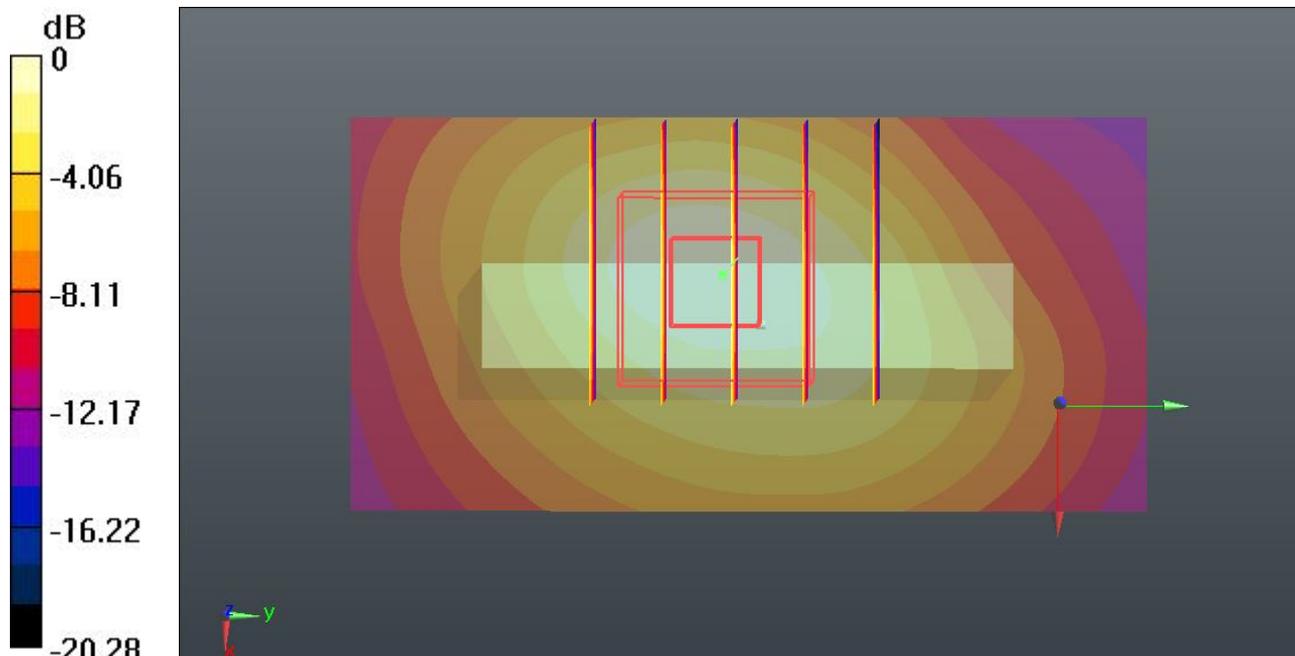
Communication System: GPRS/EDGE10; Frequency: 1909.8 MHz; Duty Cycle: 1:4  
 Medium: MSL\_1900\_120710 Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.544$  mho/m;  $\epsilon_r = 54.546$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Ambient Temperature : 23.7 °C ; Liquid Temperature : 21.7 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch810/Area Scan (31x61x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 0.308 mW/g

**Ch810/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 6.618 V/m; Power Drift = 0.05 dB  
 Peak SAR (extrapolated) = 0.463 mW/g  
**SAR(1 g) = 0.277 mW/g; SAR(10 g) = 0.153 mW/g**  
 Maximum value of SAR (measured) = 0.308 mW/g



0 dB = 0.308 mW/g = -10.23 dB mW/g

**44 GSM1900\_GPRS10\_Back\_1cm\_Ch810\_Headset**

**DUT: 262807**

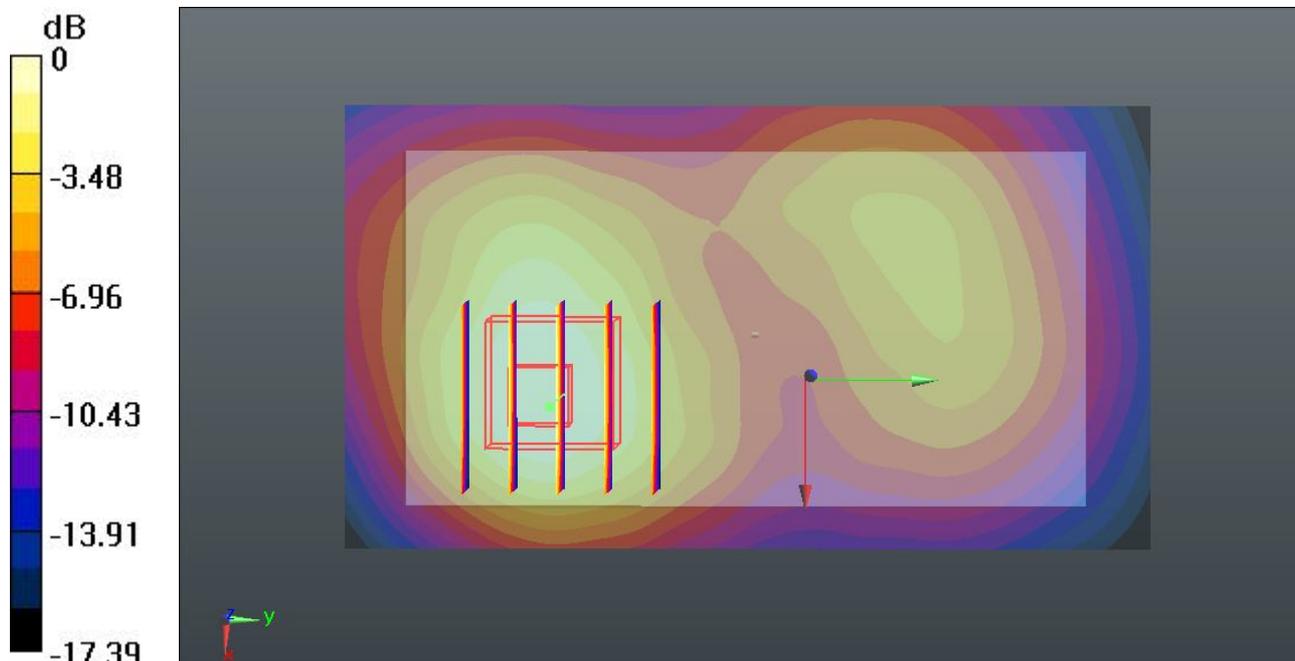
Communication System: GPRS/EDGE10; Frequency: 1909.8 MHz; Duty Cycle: 1:4  
 Medium: MSL\_1900\_120710 Medium parameters used:  $f = 1910 \text{ MHz}$ ;  $\sigma = 1.544 \text{ mho/m}$ ;  $\epsilon_r = 54.546$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Ambient Temperature :  $23.7 \text{ }^\circ\text{C}$  ; Liquid Temperature :  $21.7 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch810/Area Scan (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) =  $0.582 \text{ mW/g}$

**Ch810/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value =  $7.982 \text{ V/m}$ ; Power Drift =  $0.03 \text{ dB}$   
 Peak SAR (extrapolated) =  $0.878 \text{ mW/g}$   
**SAR(1 g) =  $0.518 \text{ mW/g}$ ; SAR(10 g) =  $0.298 \text{ mW/g}$**   
 Maximum value of SAR (measured) =  $0.557 \text{ mW/g}$



0 dB =  $0.557 \text{ mW/g}$  =  $-5.08 \text{ dB mW/g}$

**23 WCDMA Band V\_RMC 12.2K\_Front\_1cm\_Ch4132**

**DUT: 262807**

Communication System: UMTS; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: MSL\_835\_120702 Medium parameters used:  $f = 826.4 \text{ MHz}$ ;  $\sigma = 0.983 \text{ mho/m}$ ;  $\epsilon_r =$

$55.768$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature :  $23.6 \text{ }^\circ\text{C}$  ; Liquid Temperature :  $21.6 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch4132/Area Scan (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $0.535 \text{ mW/g}$

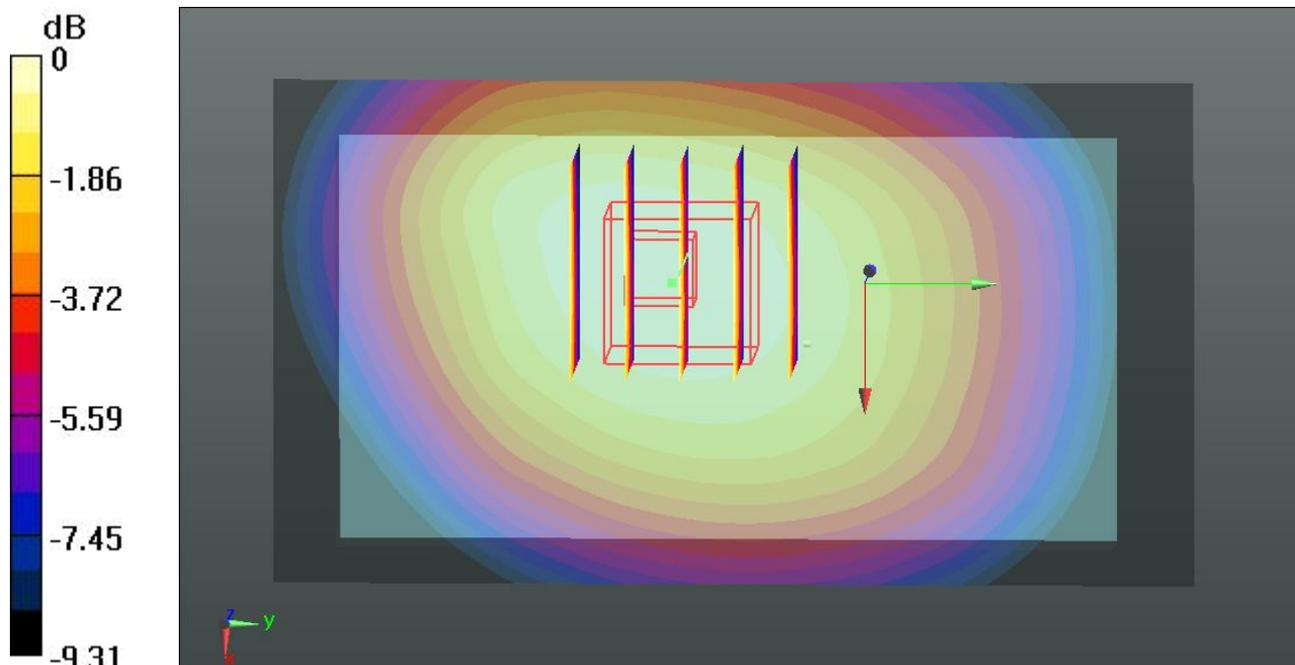
**Ch4132/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $21.383 \text{ V/m}$ ; Power Drift =  $0.16 \text{ dB}$

Peak SAR (extrapolated) =  $0.678 \text{ mW/g}$

**SAR(1 g) =  $0.511 \text{ mW/g}$ ; SAR(10 g) =  $0.380 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.535 \text{ mW/g}$



0 dB =  $0.535 \text{ mW/g}$  = -5.43 dB mW/g

**24 WCDMA Band V\_RMC 12.2K\_Back\_1cm\_Ch4132**

**DUT: 262807**

Communication System: UMTS; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: MSL\_835\_120702 Medium parameters used:  $f = 826.4 \text{ MHz}$ ;  $\sigma = 0.983 \text{ mho/m}$ ;  $\epsilon_r =$

$55.768$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature :  $23.6 \text{ }^\circ\text{C}$  ; Liquid Temperature :  $21.6 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch4132/Area Scan (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $0.869 \text{ mW/g}$

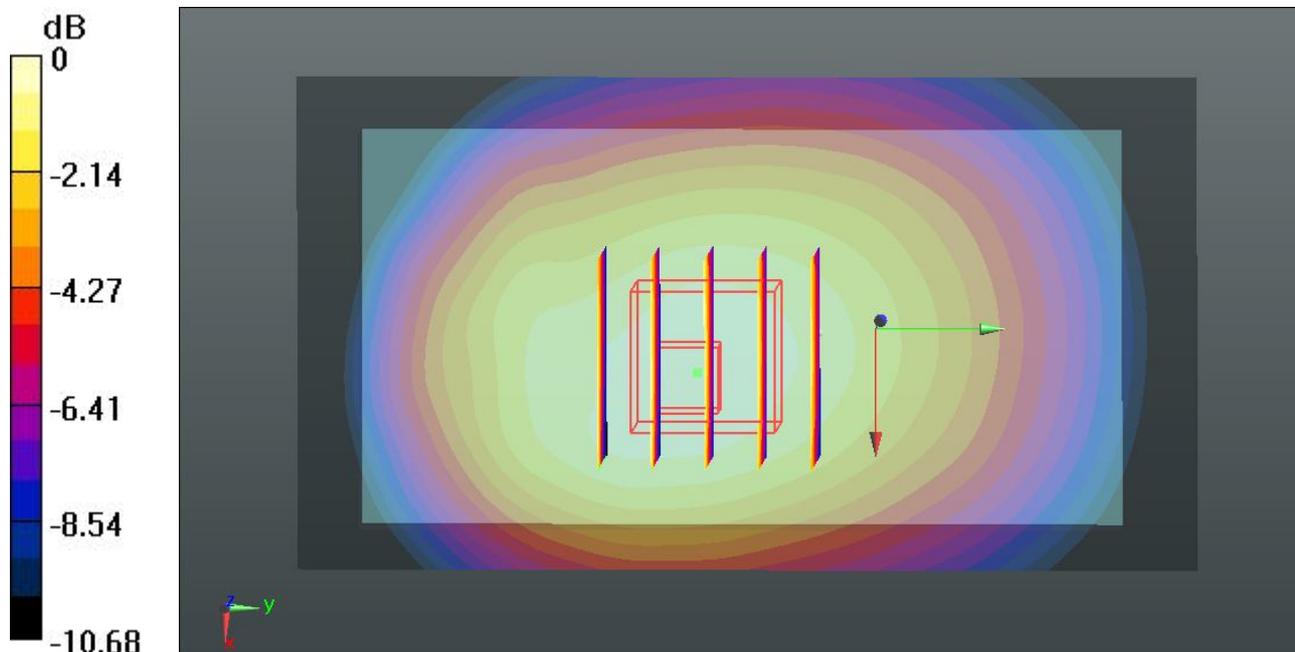
**Ch4132/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $27.019 \text{ V/m}$ ; Power Drift =  $0.01 \text{ dB}$

Peak SAR (extrapolated) =  $1.164 \text{ mW/g}$

**SAR(1 g) =  $0.829 \text{ mW/g}$ ; SAR(10 g) =  $0.587 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.875 \text{ mW/g}$



$0 \text{ dB} = 0.875 \text{ mW/g} = -1.16 \text{ dB mW/g}$

**25 WCDMA Band V\_RMC 12.2K\_Left Side\_1cm\_Ch4132**

**DUT: 262807**

Communication System: UMTS; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: MSL\_835\_120702 Medium parameters used:  $f = 826.4 \text{ MHz}$ ;  $\sigma = 0.983 \text{ mho/m}$ ;  $\epsilon_r =$

$55.768$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature :  $23.6 \text{ }^\circ\text{C}$  ; Liquid Temperature :  $21.6 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch4132/Area Scan (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $0.547 \text{ mW/g}$

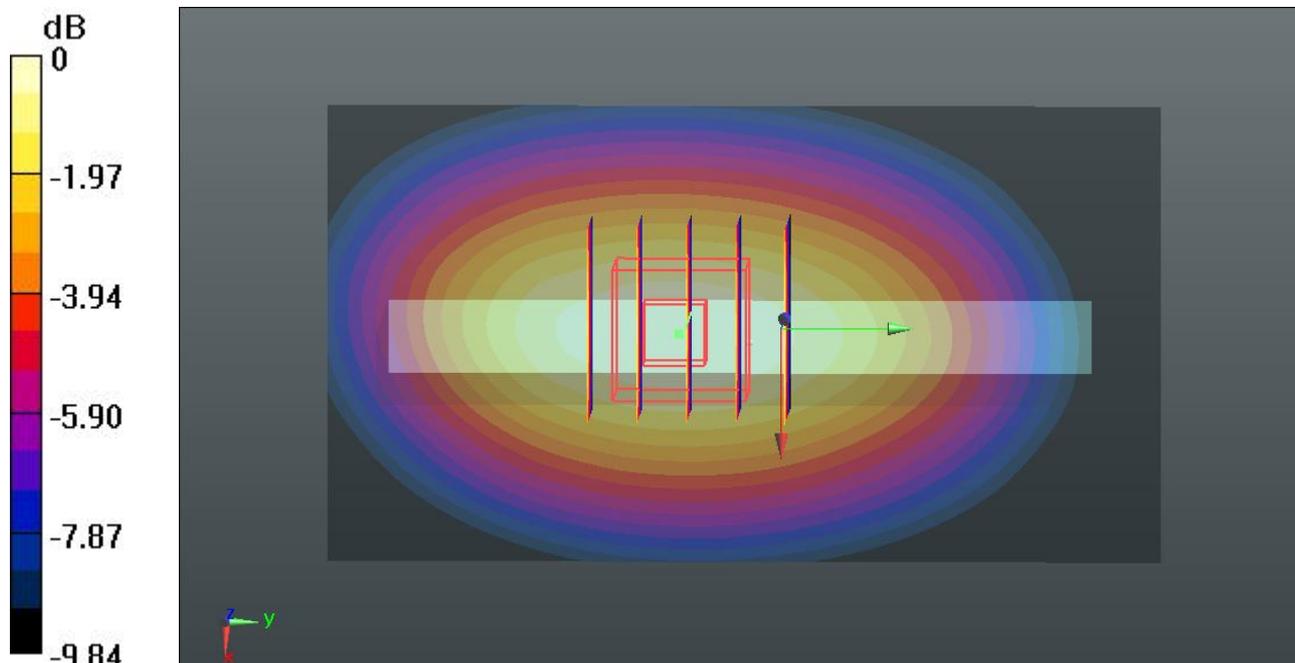
**Ch4132/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $23.015 \text{ V/m}$ ; Power Drift =  $0.10 \text{ dB}$

Peak SAR (extrapolated) =  $0.741 \text{ mW/g}$

**SAR(1 g) =  $0.512 \text{ mW/g}$ ; SAR(10 g) =  $0.347 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.547 \text{ mW/g}$



0 dB =  $0.547 \text{ mW/g}$  =  $-5.24 \text{ dB mW/g}$

**26 WCDMA Band V\_RMC 12.2K\_Right Side\_1cm\_Ch4132**

**DUT: 262807**

Communication System: UMTS; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: MSL\_835\_120702 Medium parameters used:  $f = 826.4$  MHz;  $\sigma = 0.983$  mho/m;  $\epsilon_r =$

$55.768$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.6 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch4132/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.450 mW/g

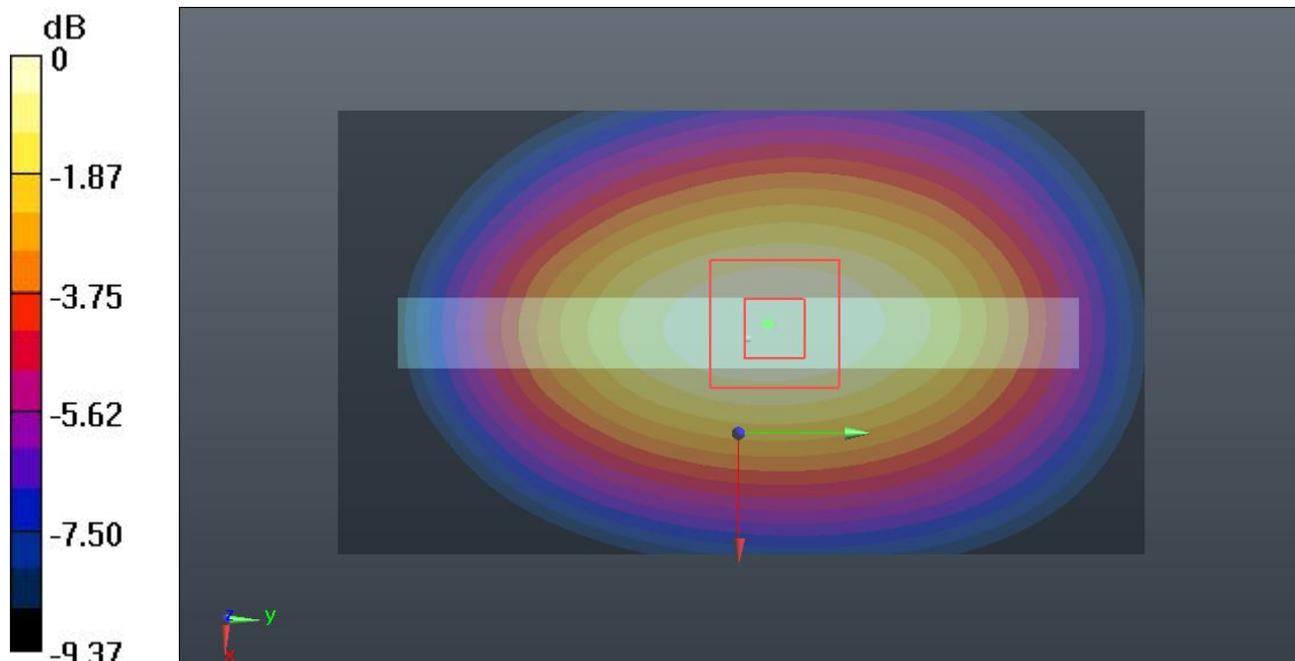
**Ch4132/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.378 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.603 mW/g

**SAR(1 g) = 0.423 mW/g; SAR(10 g) = 0.293 mW/g**

Maximum value of SAR (measured) = 0.449 mW/g



0 dB = 0.449 mW/g = -6.96 dB mW/g

**27 WCDMA Band V\_RMC 12.2K\_Bottom Side\_1cm\_Ch4132**

**DUT: 262807**

Communication System: UMTS; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: MSL\_835\_120702 Medium parameters used:  $f = 826.4 \text{ MHz}$ ;  $\sigma = 0.983 \text{ mho/m}$ ;  $\epsilon_r =$

$55.768$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature :  $23.6 \text{ }^\circ\text{C}$  ; Liquid Temperature :  $21.6 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch4132/Area Scan (41x61x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $0.0638 \text{ mW/g}$

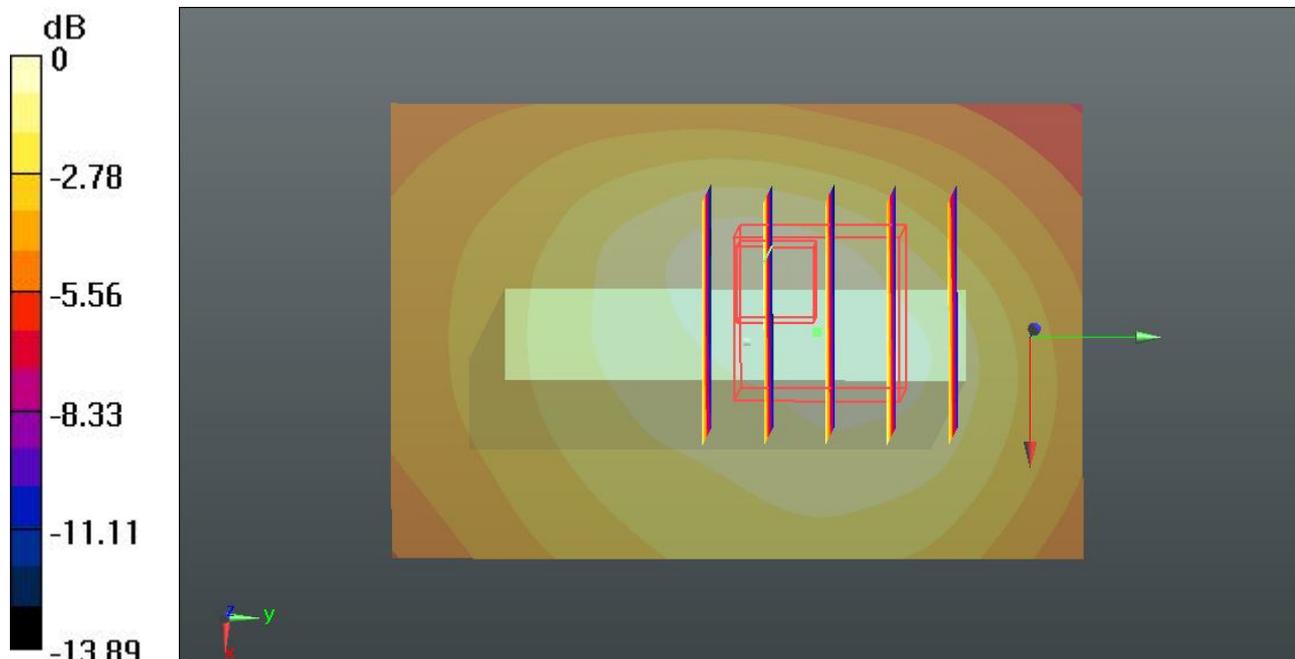
**Ch4132/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $6.763 \text{ V/m}$ ; Power Drift =  $0.13 \text{ dB}$

Peak SAR (extrapolated) =  $0.120 \text{ mW/g}$

**SAR(1 g) =  $0.063 \text{ mW/g}$ ; SAR(10 g) =  $0.037 \text{ mW/g}$**

Maximum value of SAR (measured) =  $0.0671 \text{ mW/g}$



0 dB =  $0.0671 \text{ mW/g}$  =  $-23.47 \text{ dB mW/g}$

### 28 WCDMA Band V\_RMC 12.2K\_Back\_1cm\_Ch4182

**DUT: 262807**

Communication System: UMTS; Frequency: 836.4 MHz; Duty Cycle: 1:1  
Medium: MSL\_835\_120702 Medium parameters used:  $f = 836.4$  MHz;  $\sigma = 0.992$  mho/m;  $\epsilon_r = 55.684$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature : 23.6 °C ; Liquid Temperature : 21.6 °C

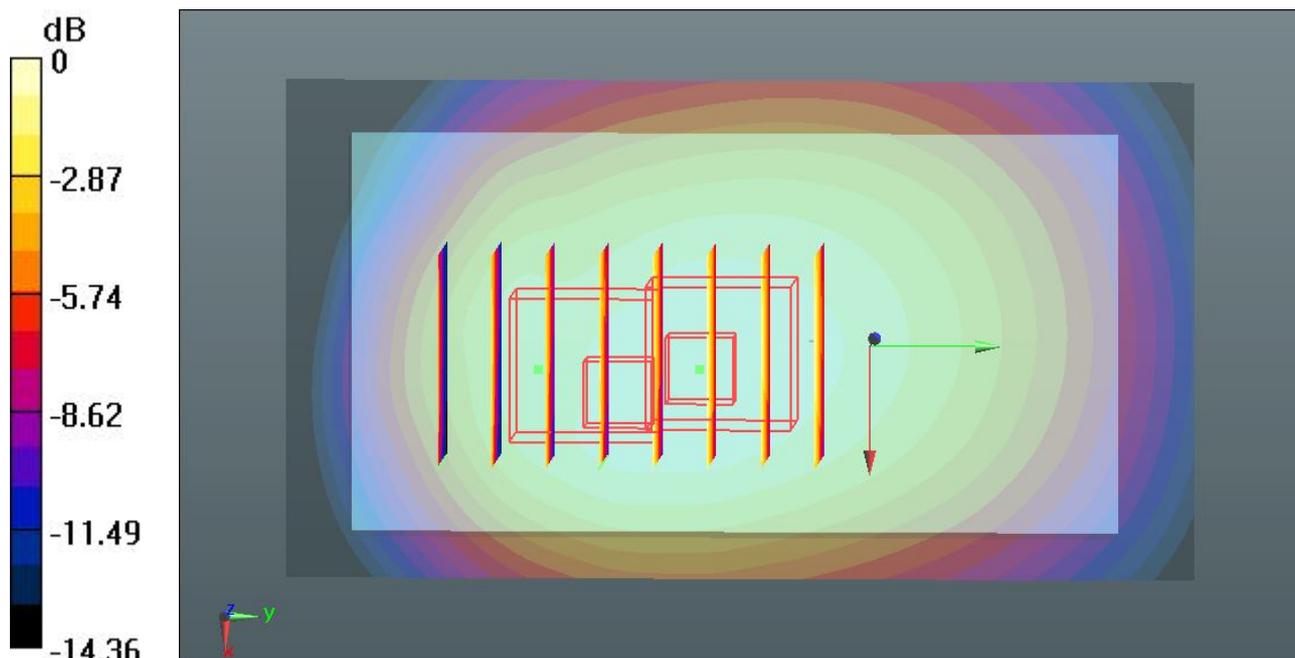
DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch4182/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.966 mW/g

**Ch4182/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 28.751 V/m; Power Drift = 0.16 dB  
Peak SAR (extrapolated) = 1.285 mW/g  
**SAR(1 g) = 0.917 mW/g; SAR(10 g) = 0.649 mW/g**  
Maximum value of SAR (measured) = 0.973 mW/g

**Ch4182/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 28.751 V/m; Power Drift = 0.16 dB  
Peak SAR (extrapolated) = 1.300 mW/g  
**SAR(1 g) = 0.815 mW/g; SAR(10 g) = 0.508 mW/g**  
Maximum value of SAR (measured) = 0.939 mW/g



0 dB = 0.939 mW/g = -0.55 dB mW/g

## **28 WCDMA Band V\_RMC 12.2K\_Back\_1cm\_Ch4182\_2D**

**DUT: 262807**

Communication System: UMTS; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: MSL\_835\_120702 Medium parameters used:  $f = 836.4$  MHz;  $\sigma = 0.992$  mho/m;  $\epsilon_r =$

$55.684$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.6 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch4182/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.966 mW/g

**Ch4182/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 28.751 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 1.285 mW/g

**SAR(1 g) = 0.917 mW/g; SAR(10 g) = 0.649 mW/g**

Maximum value of SAR (measured) = 0.973 mW/g

**Ch4182/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

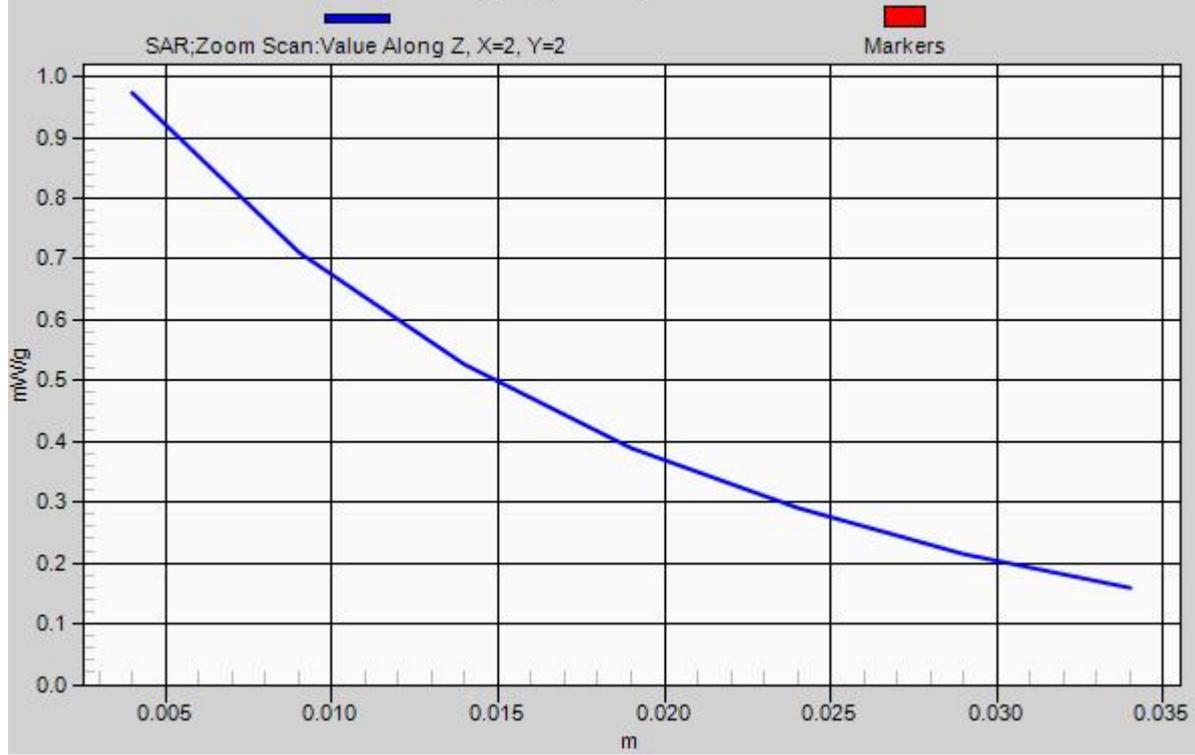
Reference Value = 28.751 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 1.300 mW/g

**SAR(1 g) = 0.815 mW/g; SAR(10 g) = 0.508 mW/g**

Maximum value of SAR (measured) = 0.939 mW/g

# 1g/10g Averaged SAR



### 29 WCDMA Band V\_RMC 12.2K\_Back\_1cm\_Ch4233

**DUT: 262807**

Communication System: UMTS; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: MSL\_835\_120702 Medium parameters used:  $f = 847$  MHz;  $\sigma = 1.002$  mho/m;  $\epsilon_r = 55.589$ ;

$\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.6 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch4233/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.807 mW/g

**Ch4233/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.349 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.063 mW/g

**SAR(1 g) = 0.755 mW/g; SAR(10 g) = 0.534 mW/g**

Maximum value of SAR (measured) = 0.798 mW/g

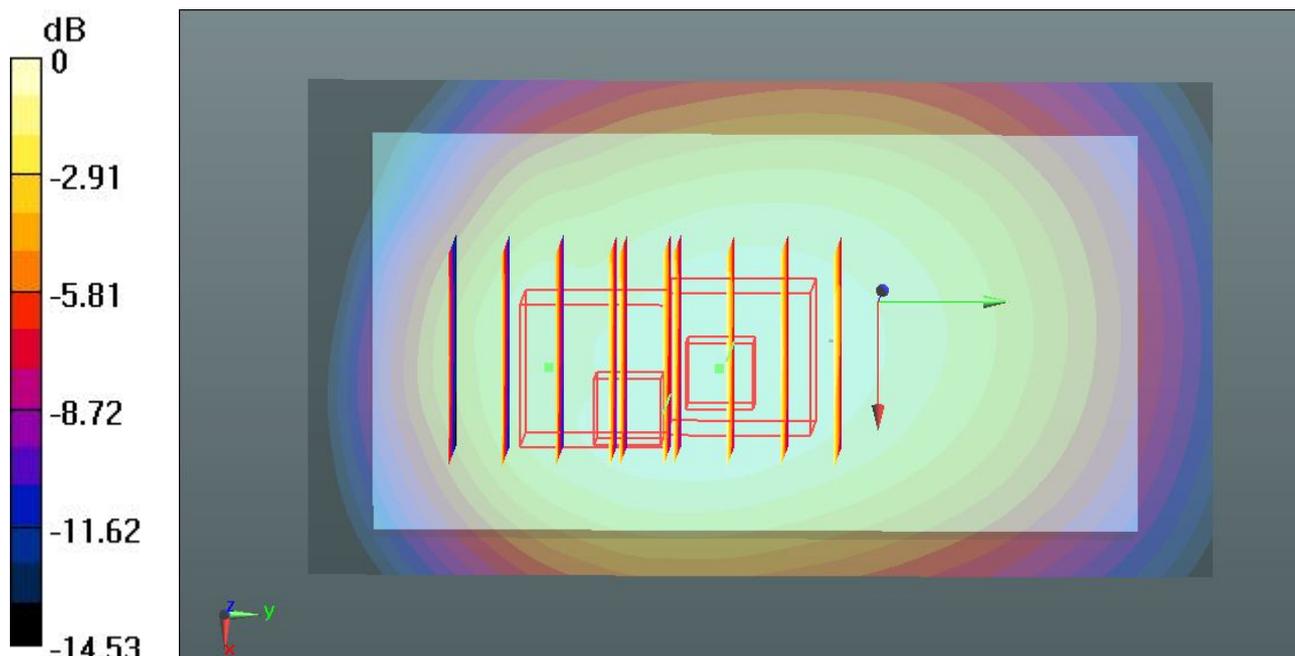
**Ch4233/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.349 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.052 mW/g

**SAR(1 g) = 0.639 mW/g; SAR(10 g) = 0.395 mW/g**

Maximum value of SAR (measured) = 0.747 mW/g



0 dB = 0.747 mW/g = -2.53 dB mW/g

**30 WCDMA Band V\_RMC 12.2K\_Back\_1cm\_Ch4182\_Headset**

**DUT: 262807**

Communication System: UMTS; Frequency: 836.4 MHz; Duty Cycle: 1:1  
 Medium: MSL\_835\_120702 Medium parameters used:  $f = 836.4 \text{ MHz}$ ;  $\sigma = 0.992 \text{ mho/m}$ ;  $\epsilon_r = 55.684$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Ambient Temperature :  $23.6 \text{ }^\circ\text{C}$  ; Liquid Temperature :  $21.6 \text{ }^\circ\text{C}$

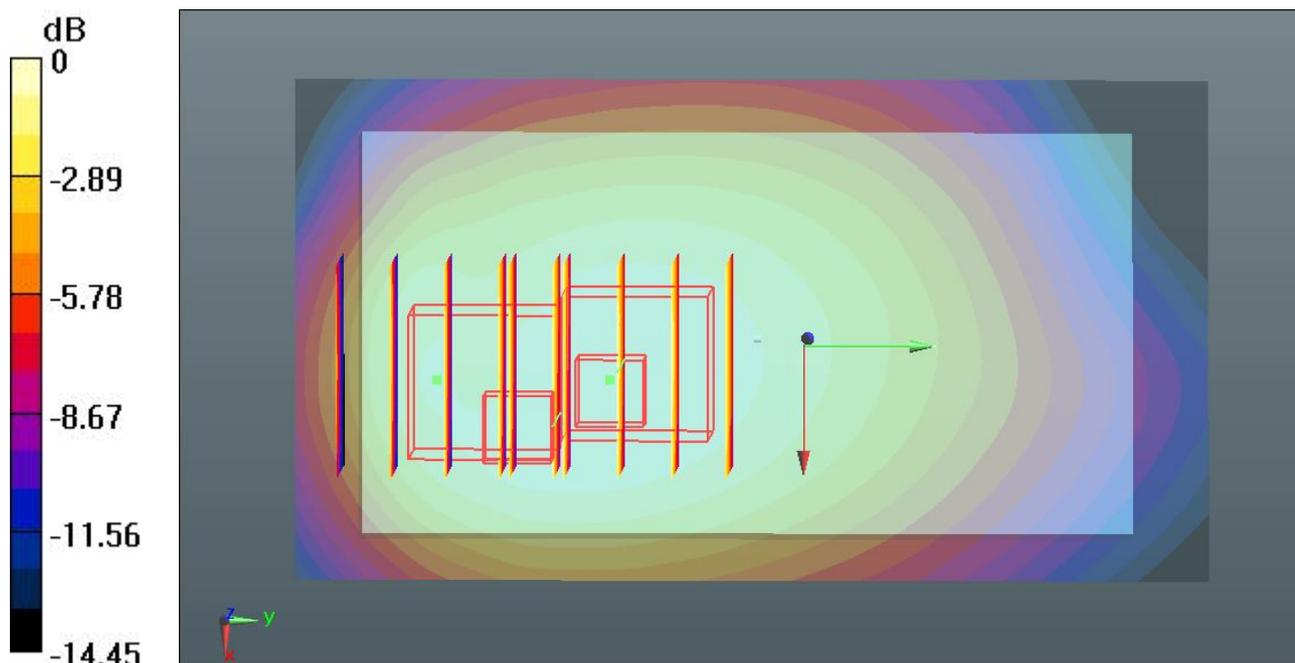
DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch4182/Area Scan (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) =  $0.743 \text{ mW/g}$

**Ch4182/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value =  $24.189 \text{ V/m}$ ; Power Drift =  $0.09 \text{ dB}$   
 Peak SAR (extrapolated) =  $1.032 \text{ mW/g}$   
**SAR(1 g) =  $0.712 \text{ mW/g}$ ; SAR(10 g) =  $0.497 \text{ mW/g}$**   
 Maximum value of SAR (measured) =  $0.754 \text{ mW/g}$

**Ch4182/Zoom Scan (5x5x7)/Cube 1:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value =  $24.189 \text{ V/m}$ ; Power Drift =  $0.09 \text{ dB}$   
 Peak SAR (extrapolated) =  $1.028 \text{ mW/g}$   
**SAR(1 g) =  $0.610 \text{ mW/g}$ ; SAR(10 g) =  $0.377 \text{ mW/g}$**   
 Maximum value of SAR (measured) =  $0.707 \text{ mW/g}$



$0 \text{ dB} = 0.707 \text{ mW/g} = -3.01 \text{ dB mW/g}$

### 11 WCDMA Band II\_RMC 12.2K\_Front\_1cm\_Ch9538

**DUT: 262807**

Communication System: UMTS; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: MSL\_1900\_120629 Medium parameters used:  $f = 1908$  MHz;  $\sigma = 1.535$  mho/m;  $\epsilon_r =$

$54.854$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch9538/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.12 mW/g

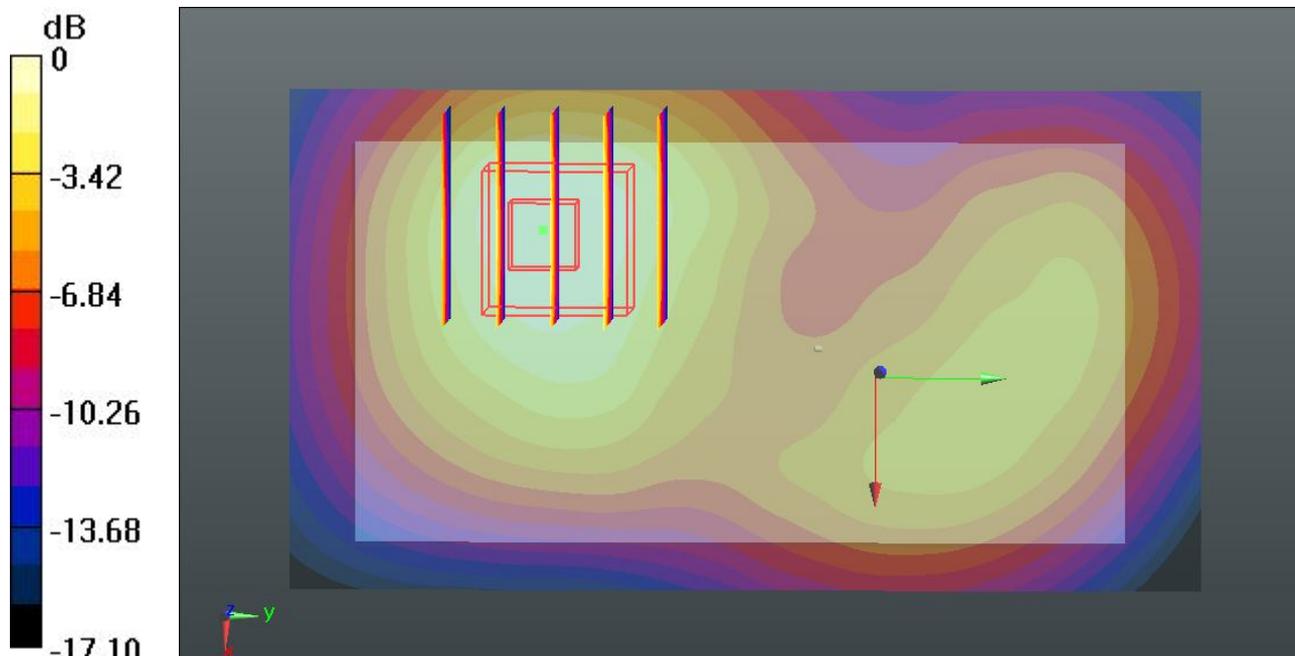
**Ch9538/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.273 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.643 mW/g

**SAR(1 g) = 0.996 mW/g; SAR(10 g) = 0.590 mW/g**

Maximum value of SAR (measured) = 1.08 mW/g



0 dB = 1.08 mW/g = 0.67 dB mW/g

**12 WCDMA Band II\_RMC 12.2K\_Back\_1cm\_Ch9538**

**DUT: 262807**

Communication System: UMTS; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: MSL\_1900\_120629 Medium parameters used:  $f = 1908 \text{ MHz}$ ;  $\sigma = 1.535 \text{ mho/m}$ ;  $\epsilon_r =$

$54.854$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature :  $23.5 \text{ }^\circ\text{C}$  ; Liquid Temperature :  $21.3 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch9538/Area Scan (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $1.25 \text{ mW/g}$

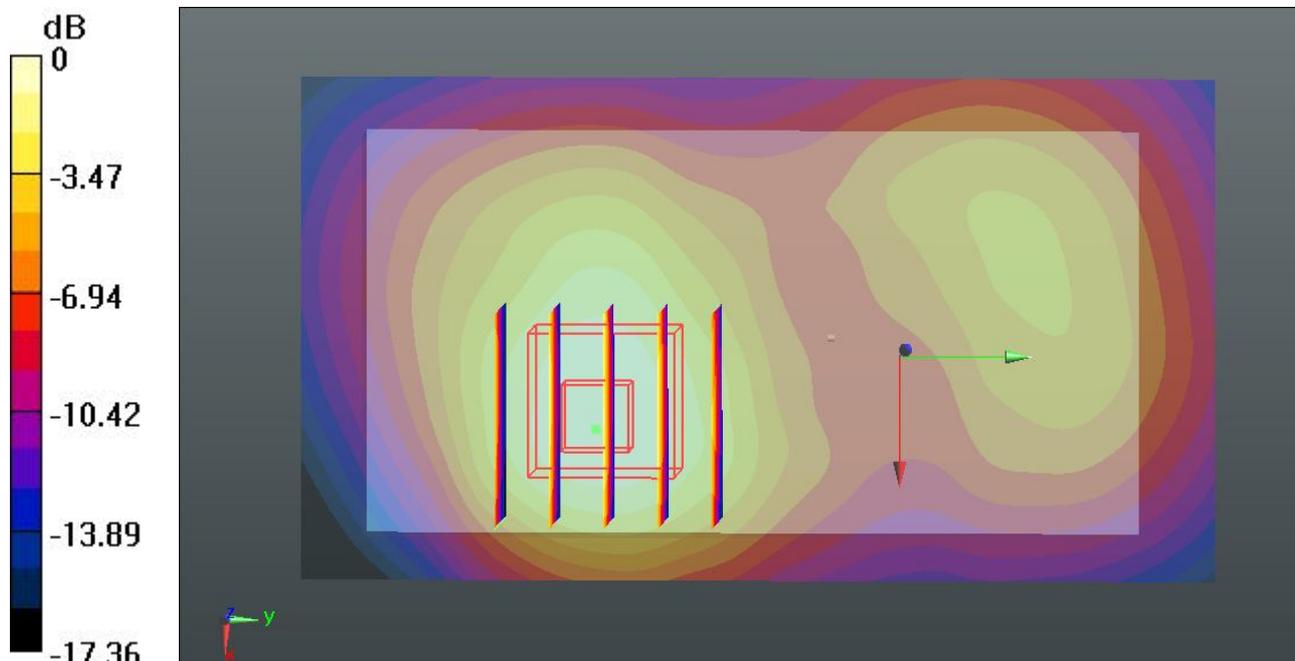
**Ch9538/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $11.736 \text{ V/m}$ ; Power Drift =  $0.09 \text{ dB}$

Peak SAR (extrapolated) =  $1.865 \text{ mW/g}$

**SAR(1 g) =  $1.12 \text{ mW/g}$ ; SAR(10 g) =  $0.654 \text{ mW/g}$**

Maximum value of SAR (measured) =  $1.21 \text{ mW/g}$



0 dB =  $1.21 \text{ mW/g} = 1.66 \text{ dB mW/g}$

**13 WCDMA Band II\_RMC 12.2K\_Left Side\_1cm\_Ch9538**

**DUT: 262807**

Communication System: UMTS; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: MSL\_1900\_120629 Medium parameters used:  $f = 1908$  MHz;  $\sigma = 1.535$  mho/m;  $\epsilon_r =$

54.854;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch9538/Area Scan (31x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.542 mW/g

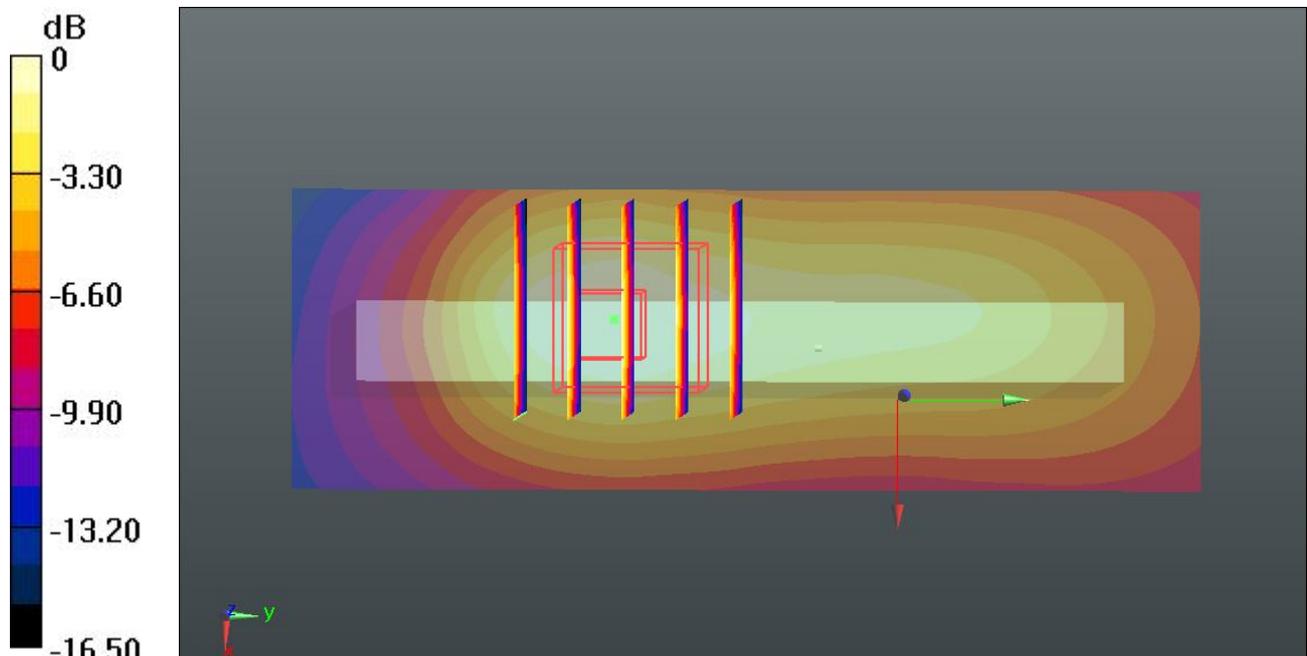
**Ch9538/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.250 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.770 mW/g

**SAR(1 g) = 0.465 mW/g; SAR(10 g) = 0.270 mW/g**

Maximum value of SAR (measured) = 0.502 mW/g



0 dB = 0.502 mW/g = -5.99 dB mW/g

**14 WCDMA Band II\_RMC 12.2K\_Right Side\_1cm\_Ch9538**

**DUT: 262807**

Communication System: UMTS; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: MSL\_1900\_120629 Medium parameters used:  $f = 1908$  MHz;  $\sigma = 1.535$  mho/m;  $\epsilon_r =$

54.854;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch9538/Area Scan (31x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.338 mW/g

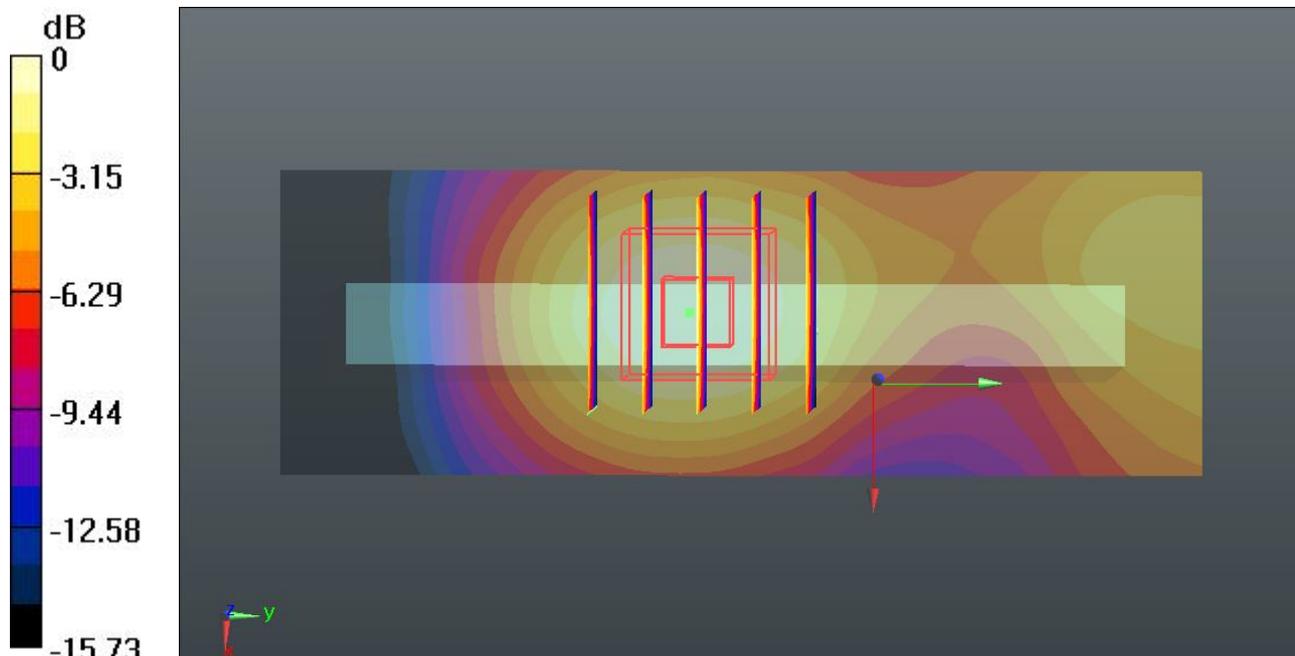
**Ch9538/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.502 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.481 mW/g

**SAR(1 g) = 0.295 mW/g; SAR(10 g) = 0.174 mW/g**

Maximum value of SAR (measured) = 0.323 mW/g



0 dB = 0.323 mW/g = -9.82 dB mW/g

**15 WCDMA Band II\_RMC 12.2K\_Bottom\_1cm\_Ch9538**

**DUT: 262807**

Communication System: UMTS; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: MSL\_1900\_120629 Medium parameters used:  $f = 1908$  MHz;  $\sigma = 1.535$  mho/m;  $\epsilon_r =$

54.854;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch9538/Area Scan (31x61x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.671 mW/g

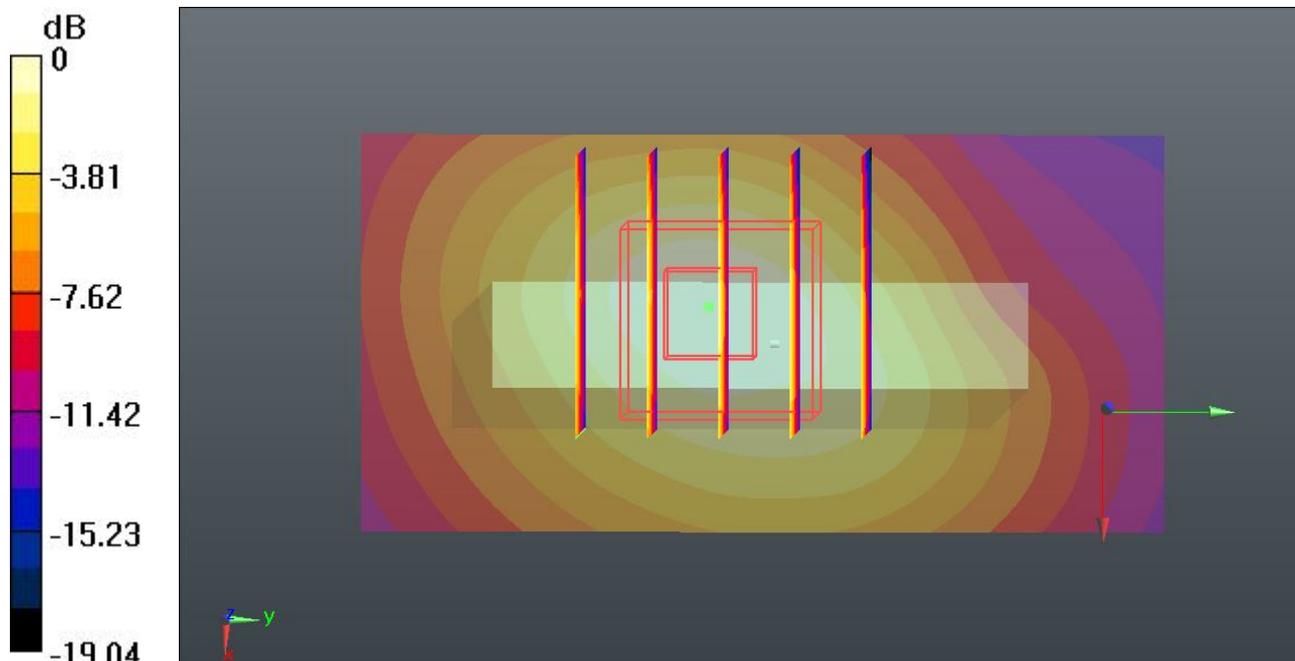
**Ch9538/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.833 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.994 mW/g

**SAR(1 g) = 0.604 mW/g; SAR(10 g) = 0.341 mW/g**

Maximum value of SAR (measured) = 0.672 mW/g



0 dB = 0.672 mW/g = -3.45 dB mW/g

**16 WCDMA Band II\_RMC 12.2K\_Front\_1cm\_Ch9262**

**DUT: 262807**

Communication System: UMTS; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium: MSL\_1900\_120629 Medium parameters used:  $f = 1852.4 \text{ MHz}$ ;  $\sigma = 1.469 \text{ mho/m}$ ;  $\epsilon_r =$

$54.965$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature :  $23.5 \text{ }^\circ\text{C}$  ; Liquid Temperature :  $21.3 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch9262/Area Scan (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $1.15 \text{ mW/g}$

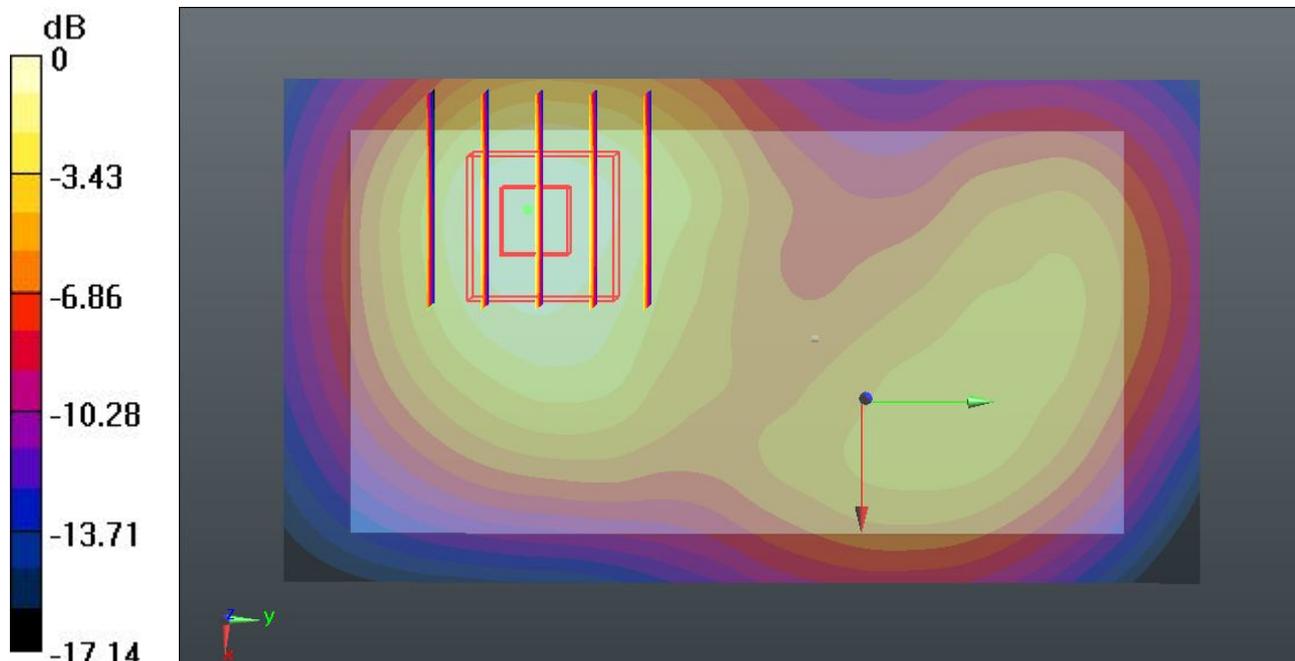
**Ch9262/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $13.507 \text{ V/m}$ ; Power Drift =  $0.05 \text{ dB}$

Peak SAR (extrapolated) =  $1.700 \text{ mW/g}$

**SAR(1 g) =  $1.04 \text{ mW/g}$ ; SAR(10 g) =  $0.617 \text{ mW/g}$**

Maximum value of SAR (measured) =  $1.12 \text{ mW/g}$



$0 \text{ dB} = 1.12 \text{ mW/g} = 0.98 \text{ dB mW/g}$

**17 WCDMA Band II\_RMC 12.2K\_Front\_1cm\_Ch9400**

**DUT: 262807**

Communication System: UMTS; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: MSL\_1900\_120629 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.506$  mho/m;  $\epsilon_r = 54.9$ ;

$\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch9400/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.16 mW/g

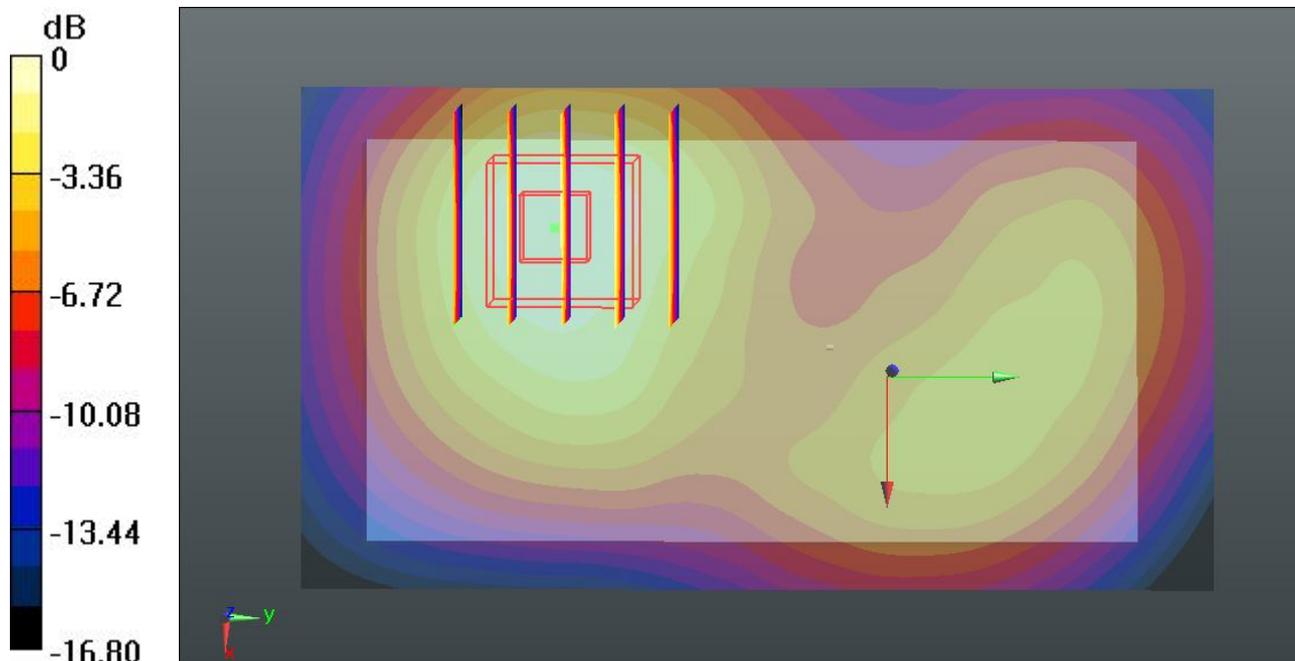
**Ch9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.922 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.644 mW/g

**SAR(1 g) = 1 mW/g; SAR(10 g) = 0.596 mW/g**

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



0 dB = 1.09 mW/g = 0.75 dB mW/g

**18 WCDMA Band II\_RMC 12.2K\_Back\_1cm\_Ch9262**

**DUT: 262807**

Communication System: UMTS; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium: MSL\_1900\_120629 Medium parameters used:  $f = 1852.4$  MHz;  $\sigma = 1.469$  mho/m;  $\epsilon_r =$

$54.965$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch9262/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.34 mW/g

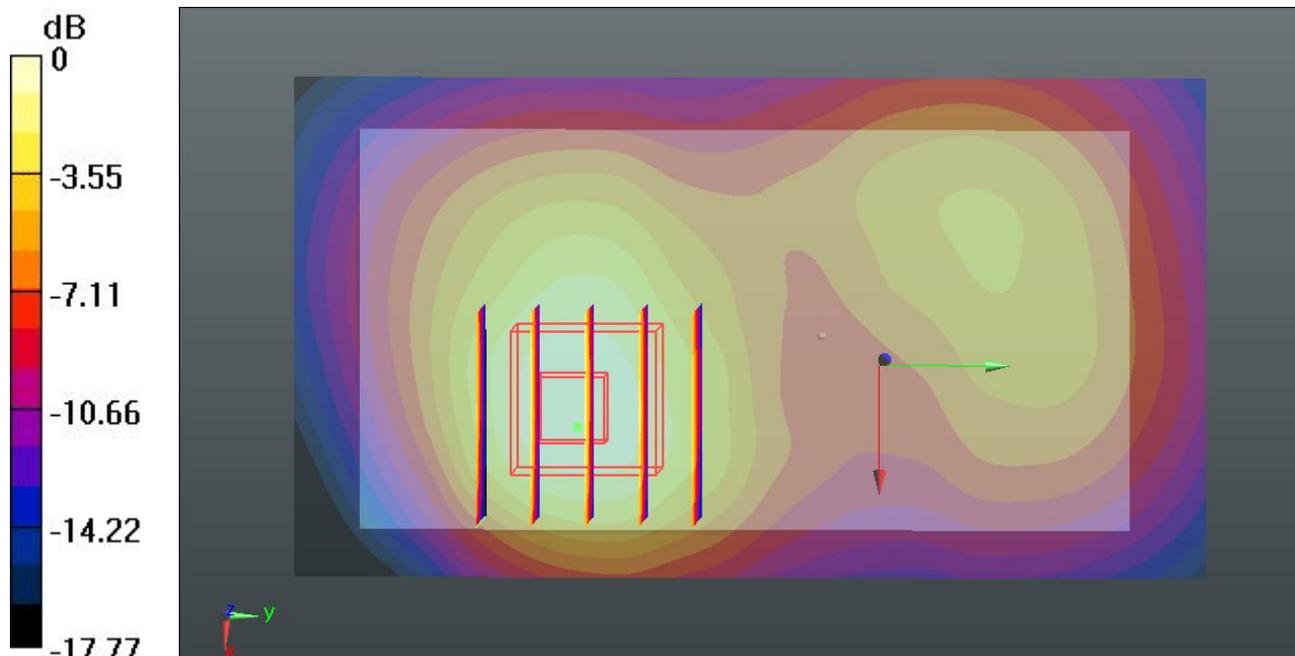
**Ch9262/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.883 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 2.081 mW/g

**SAR(1 g) = 1.25 mW/g; SAR(10 g) = 0.726 mW/g**

Maximum value of SAR (measured) = 1.36 mW/g



0 dB = 1.36 mW/g = 2.67 dB mW/g

### 18 WCDMA Band II\_RMC 12.2K\_Back\_1cm\_Ch9262\_2D

**DUT: 262807**

Communication System: UMTS; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium: MSL\_1900\_120629 Medium parameters used:  $f = 1852.4$  MHz;  $\sigma = 1.469$  mho/m;  $\epsilon_r =$

$54.965$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch9262/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.34 mW/g

**Ch9262/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.883 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 2.081 mW/g

**SAR(1 g) = 1.25 mW/g; SAR(10 g) = 0.726 mW/g**

Maximum value of SAR (measured) = 1.36 mW/g



**19 WCDMA Band II\_RMC 12.2K\_Back\_1cm\_Ch9400**

**DUT: 262807**

Communication System: UMTS; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: MSL\_1900\_120629 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.506$  mho/m;  $\epsilon_r = 54.9$ ;

$\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch9400/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

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

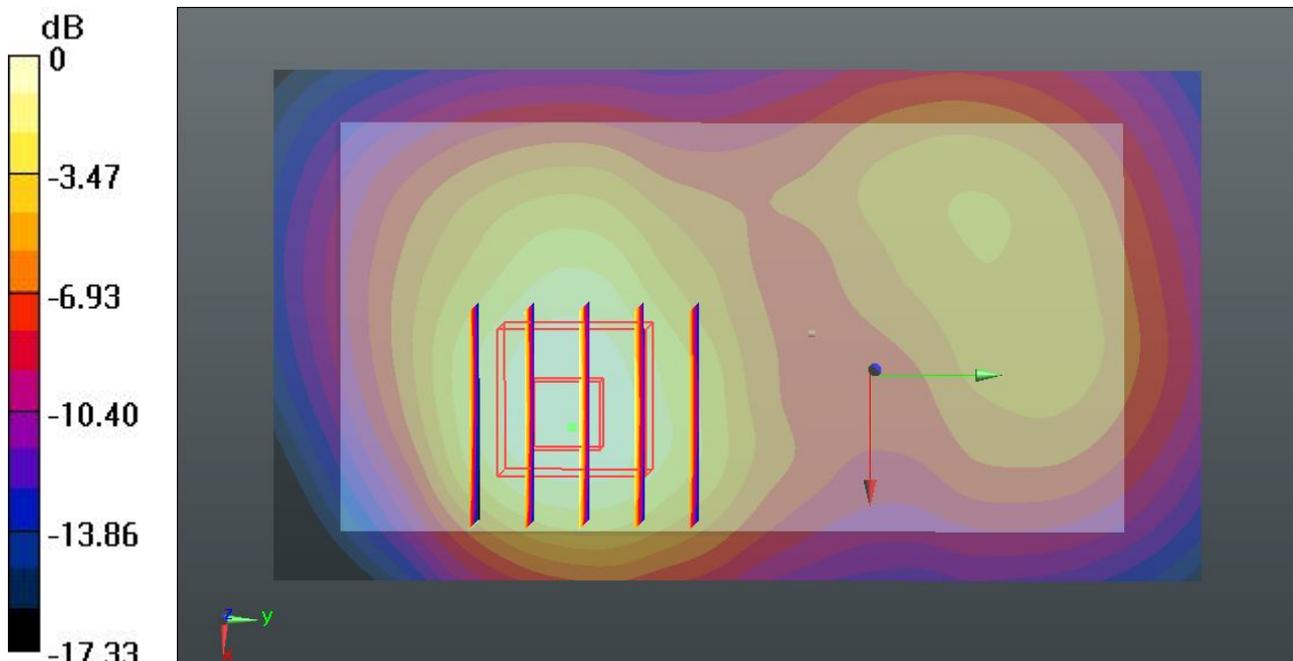
**Ch9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.414 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.979 mW/g

**SAR(1 g) = 1.18 mW/g; SAR(10 g) = 0.686 mW/g**

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



0 dB = 1.28 mW/g = 2.14 dB mW/g

**20 WCDMA Band II\_RMC 12.2K\_Back\_1cm\_Ch9262\_Headset**

**DUT: 262807**

Communication System: UMTS; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium: MSL\_1900\_120629 Medium parameters used:  $f = 1852.4 \text{ MHz}$ ;  $\sigma = 1.469 \text{ mho/m}$ ;  $\epsilon_r =$

$54.965$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature :  $23.5 \text{ }^\circ\text{C}$  ; Liquid Temperature :  $21.3 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch9262/Area Scan (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $1.19 \text{ mW/g}$

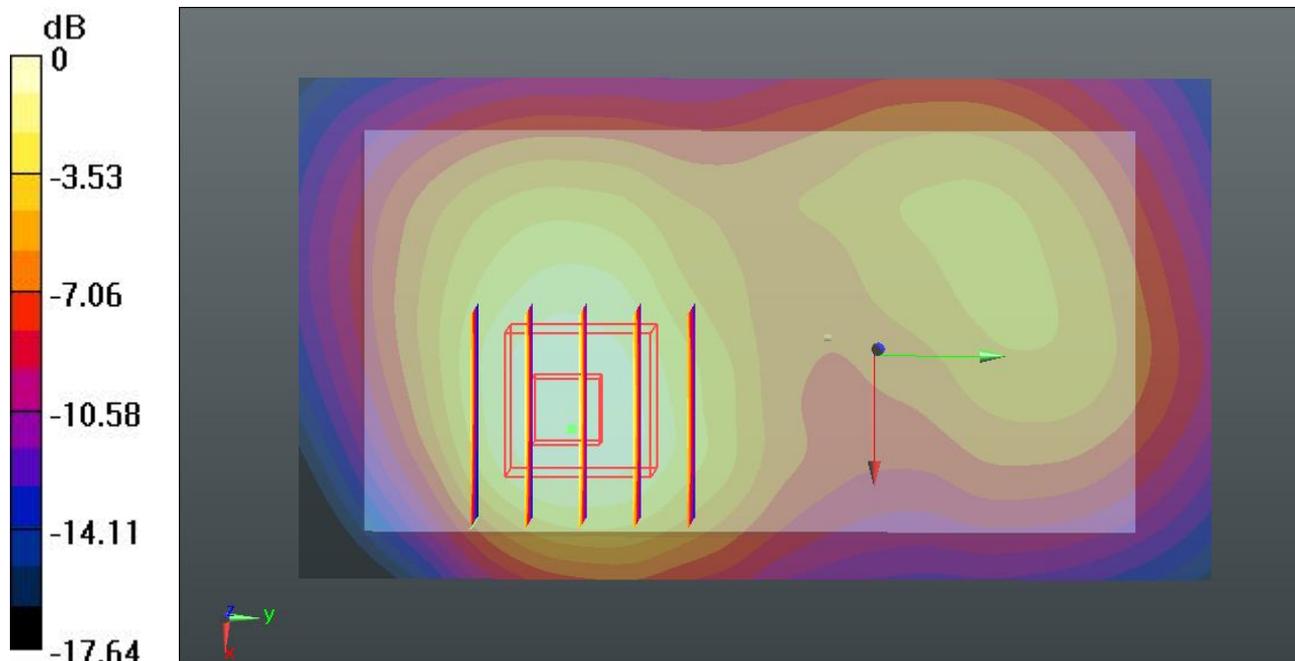
**Ch9262/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $12.539 \text{ V/m}$ ; Power Drift =  $0.18 \text{ dB}$

Peak SAR (extrapolated) =  $1.803 \text{ mW/g}$

**SAR(1 g) =  $1.08 \text{ mW/g}$ ; SAR(10 g) =  $0.631 \text{ mW/g}$**

Maximum value of SAR (measured) =  $1.17 \text{ mW/g}$



0 dB =  $1.17 \text{ mW/g} = 1.36 \text{ dB mW/g}$

**21 WCDMA Band II\_RMC 12.2K\_Back\_1cm\_Ch9400\_Headset**

**DUT: 262807**

Communication System: UMTS; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: MSL\_1900\_120629 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.506$  mho/m;  $\epsilon_r = 54.9$ ;

$\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch9400/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

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

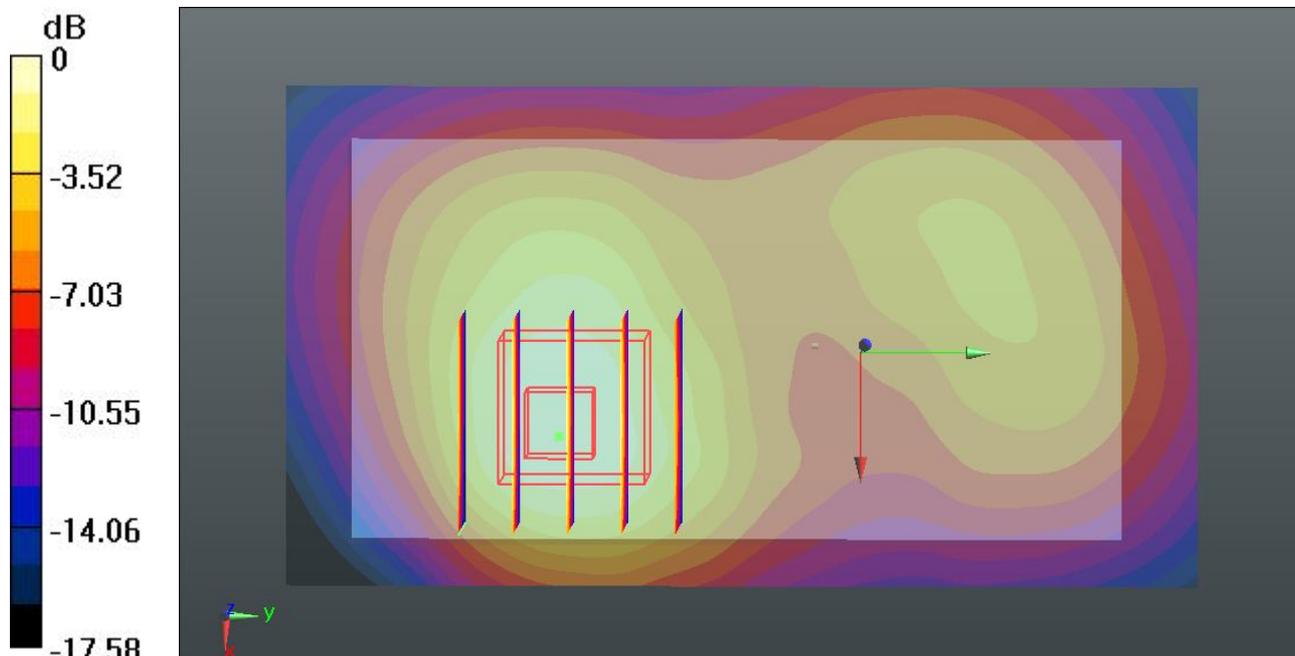
**Ch9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.388 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 1.830 mW/g

**SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.636 mW/g**

Maximum value of SAR (measured) = 1.20 mW/g



0 dB = 1.20 mW/g = 1.58 dB mW/g

**22 WCDMA Band II\_RMC 12.2K\_Back\_1cm\_Ch9538\_Headset**

**DUT: 262807**

Communication System: UMTS; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: MSL\_1900\_120629 Medium parameters used:  $f = 1908$  MHz;  $\sigma = 1.535$  mho/m;  $\epsilon_r =$

54.854;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C ; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 12.09.2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

**Ch9538/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.21 mW/g

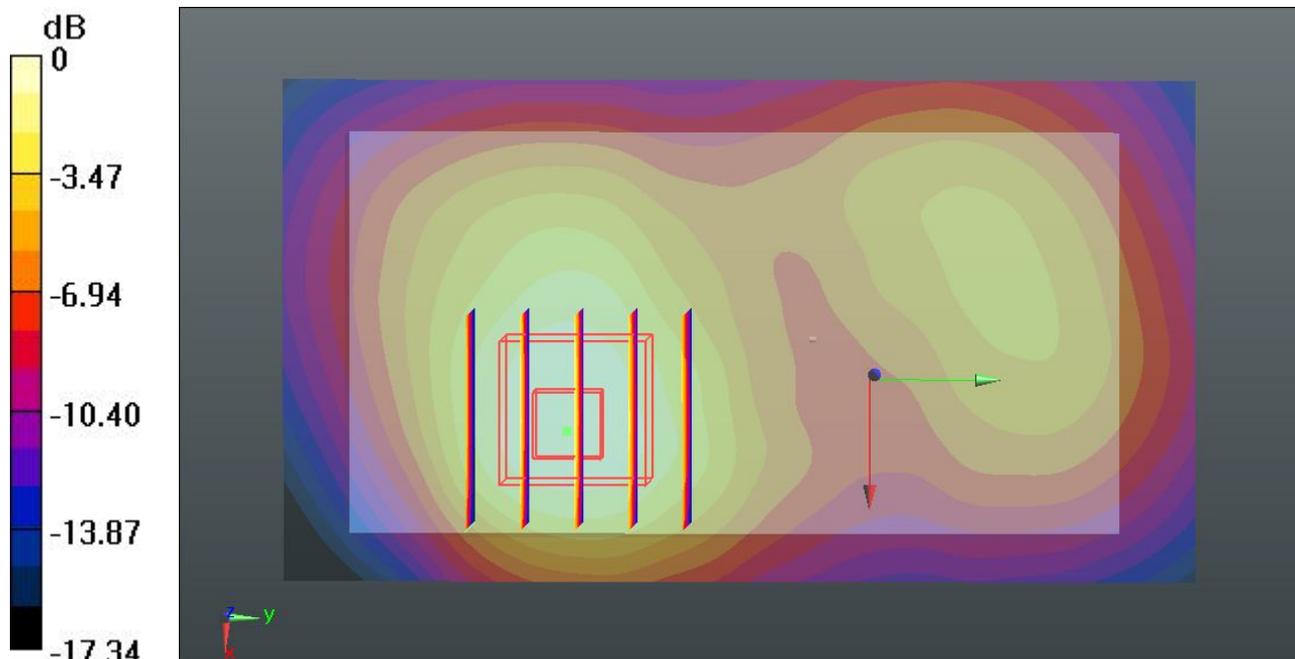
**Ch9538/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.025 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.781 mW/g

**SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.621 mW/g**

Maximum value of SAR (measured) = 1.16 mW/g



0 dB = 1.16 mW/g = 1.29 dB mW/g

**57 802.11b\_Front\_1cm\_1M\_Ch1**

**DUT: 262807**

Communication System: WIFI; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: MSL\_2450\_120724 Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.877$  mho/m;  $\epsilon_r =$

54.002;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.3 °C ; Liquid Temperature : 21.5 °C

**DASY5 Configuration:**

- Probe: EX3DV4 - SN3857; ConvF(6.94, 6.94, 6.94); Calibrated: 2012-6-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2011-11-18
- Phantom: SAM1; Type: SAM; Serial: TP-1479
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

**Ch1/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

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

**Ch1/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.629 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.024 W/kg

**SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.00971 mW/g**

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

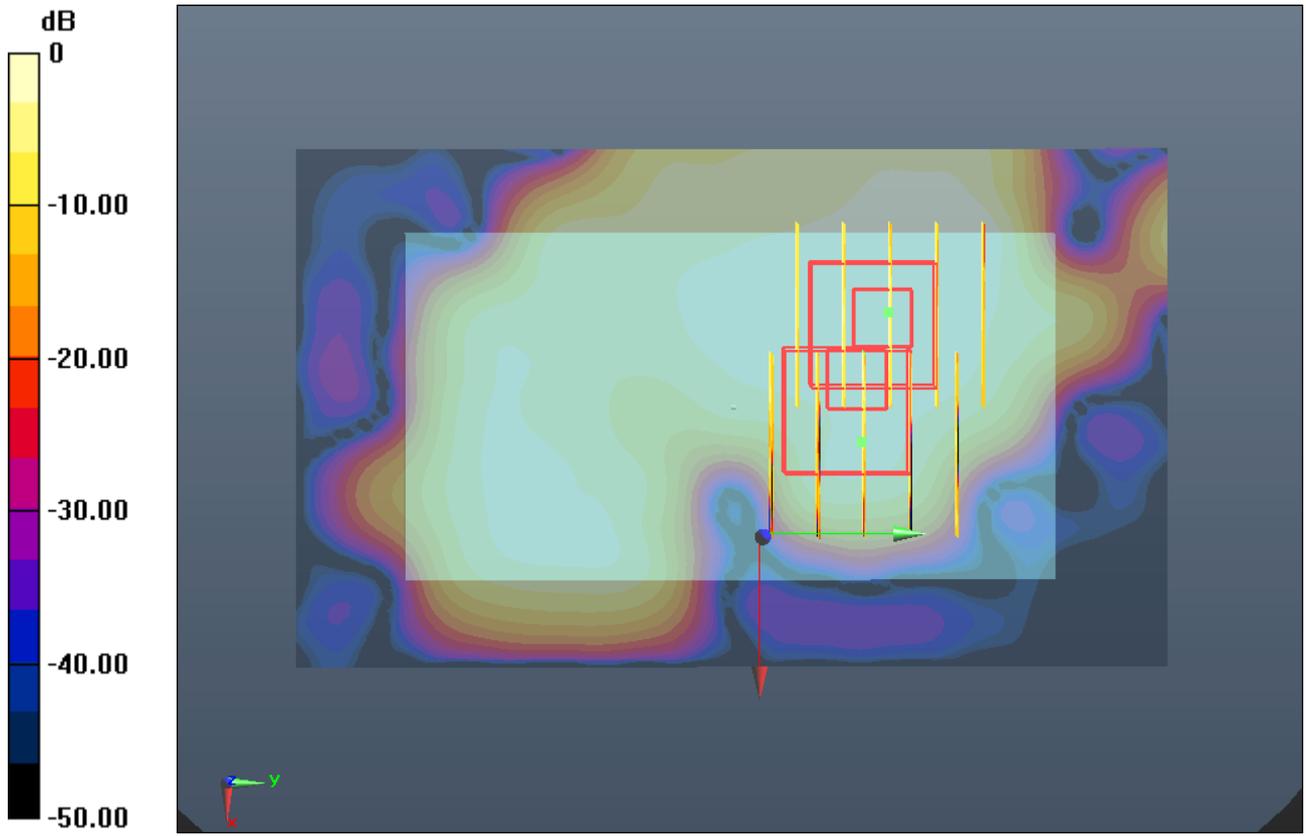
**Ch1/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.629 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.039 W/kg

**SAR(1 g) = 0.014 mW/g; SAR(10 g) = 0.00574 mW/g**

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



0 dB = 0.020mW/g

## 58 802.11b\_Back\_1cm\_1M\_Ch1

**DUT: 262807**

Communication System: WIFI; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: MSL\_2450\_120724 Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.877$  mho/m;  $\epsilon_r =$

54.002;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.3 °C ; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(6.94, 6.94, 6.94); Calibrated: 2012-6-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2011-11-18
- Phantom: SAM1; Type: SAM; Serial: TP-1479
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

**Ch1/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

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

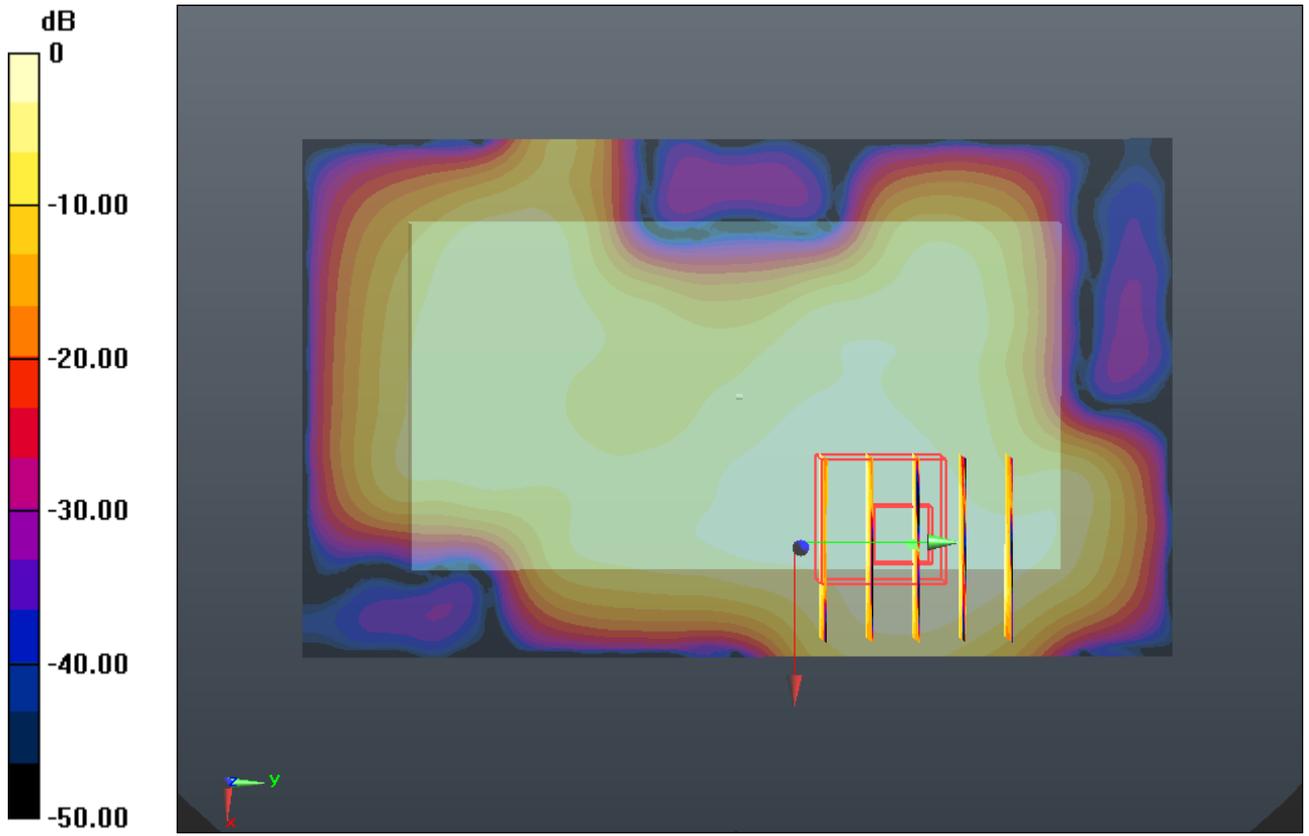
**Ch1/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.273 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.045 W/kg

**SAR(1 g) = 0.025 mW/g; SAR(10 g) = 0.012 mW/g**

Maximum value of SAR (measured) = 0.030 mW/g



0 dB = 0.030mW/g

**59 802.11b\_Left Side\_1cm\_1M\_Ch1**

**DUT: 262807**

Communication System: WIFI; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: MSL\_2450\_120724 Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.877$  mho/m;  $\epsilon_r =$

54.002;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.3 °C ; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(6.94, 6.94, 6.94); Calibrated: 2012-6-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2011-11-18
- Phantom: SAM1; Type: SAM; Serial: TP-1479
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

**Ch1/Area Scan (31x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.051 mW/g

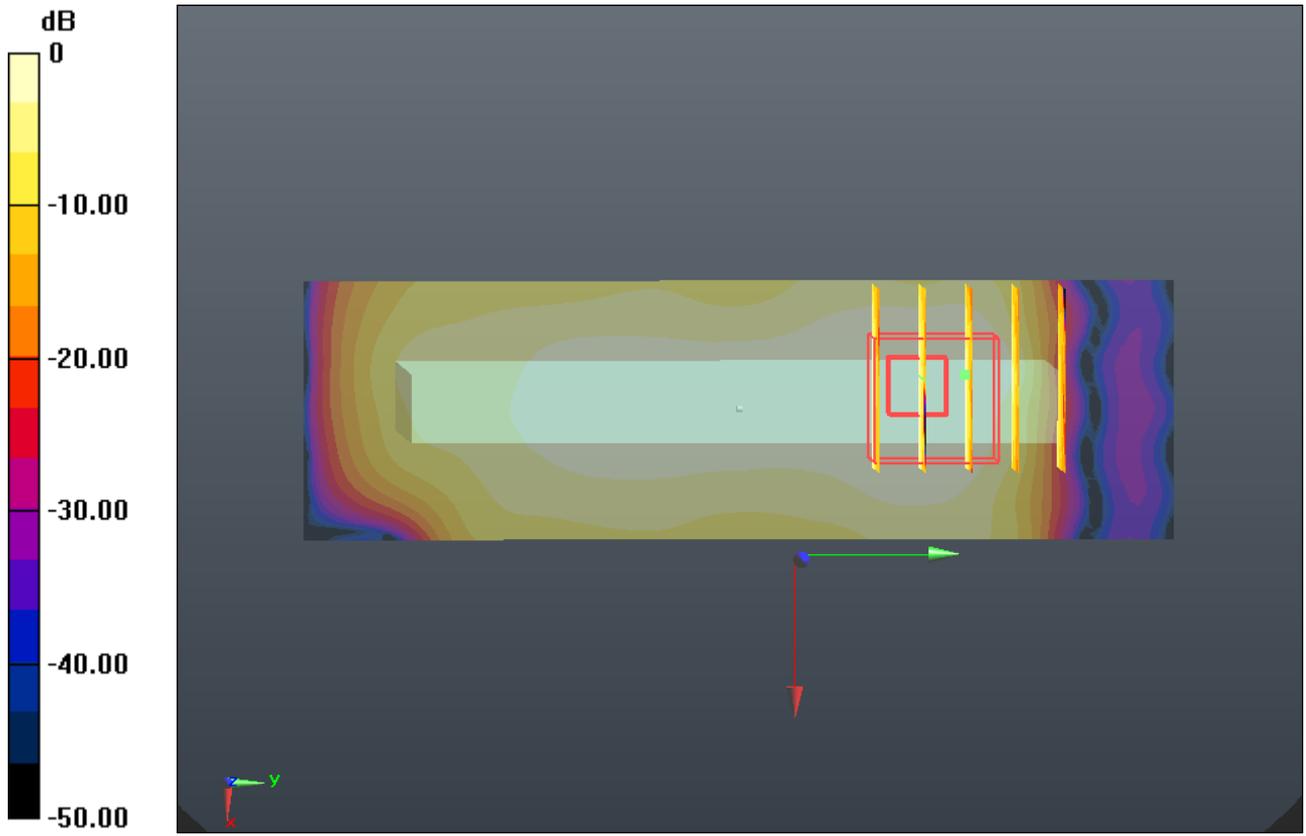
**Ch1/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.178 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.055 W/kg

**SAR(1 g) = 0.030 mW/g; SAR(10 g) = 0.015 mW/g**

Maximum value of SAR (measured) = 0.035 mW/g



0 dB = 0.030mW/g

## 60 802.11b\_Top Side\_1cm\_1M\_Ch1

**DUT: 262807**

Communication System: WIFI; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: MSL\_2450\_120724 Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.877$  mho/m;  $\epsilon_r =$

54.002;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.3 °C ; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(6.94, 6.94, 6.94); Calibrated: 2012-6-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2011-11-18
- Phantom: SAM1; Type: SAM; Serial: TP-1479
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

**Ch1/Area Scan (31x71x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.00128 mW/g

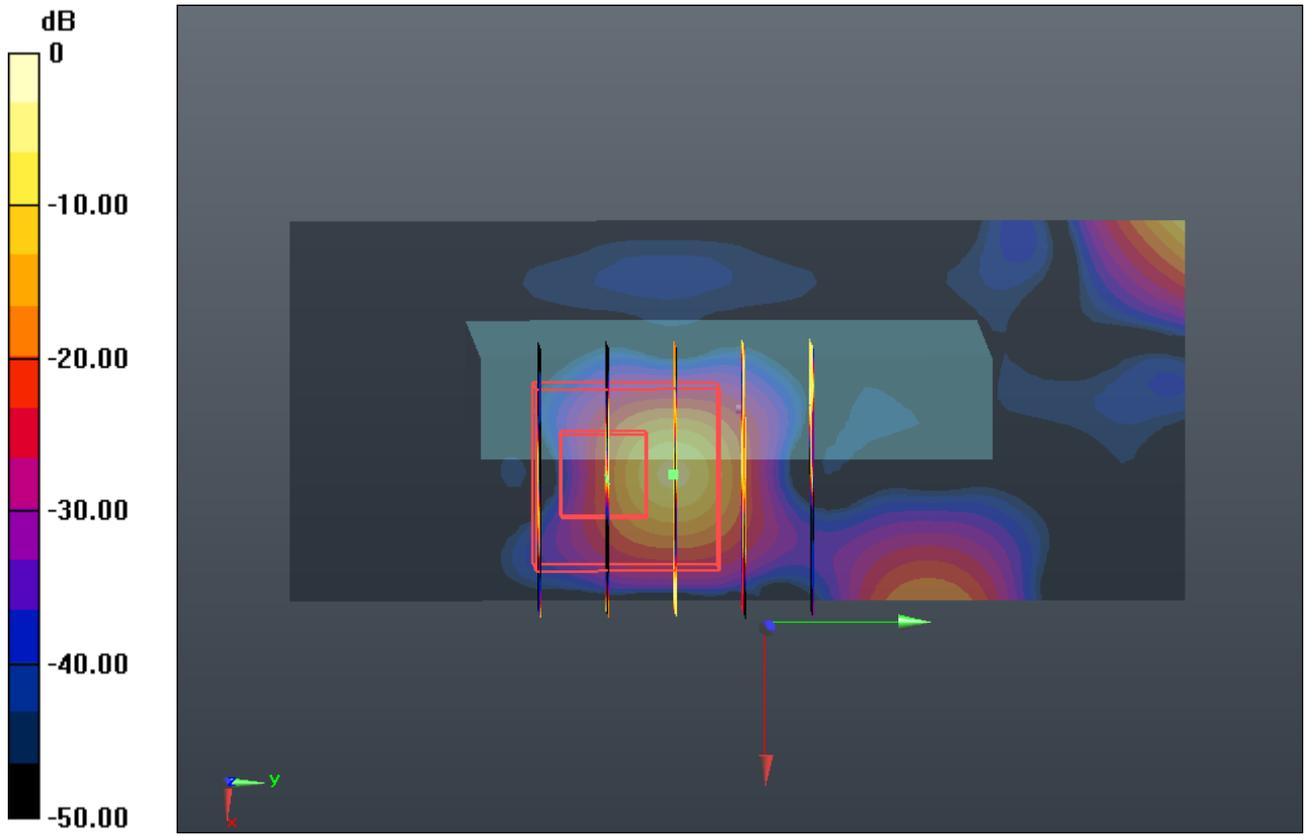
**Ch1/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 0.953 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.017 W/kg

**SAR(1 g) = 0.000776 mW/g; SAR(10 g) = 8.09e-005 mW/g**

Maximum value of SAR (measured) = 0.00463 mW/g



0 dB = 0.0046mW/g

## 61 802.11b\_Back\_1cm\_1M\_Ch1\_Headset

**DUT: 262807**

Communication System: WIFI; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: MSL\_2450\_120724 Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.877$  mho/m;  $\epsilon_r =$

54.002;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.3 °C ; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(6.94, 6.94, 6.94); Calibrated: 2012-6-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2011-11-18
- Phantom: SAM1; Type: SAM; Serial: TP-1479
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

**Ch1/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.039 mW/g

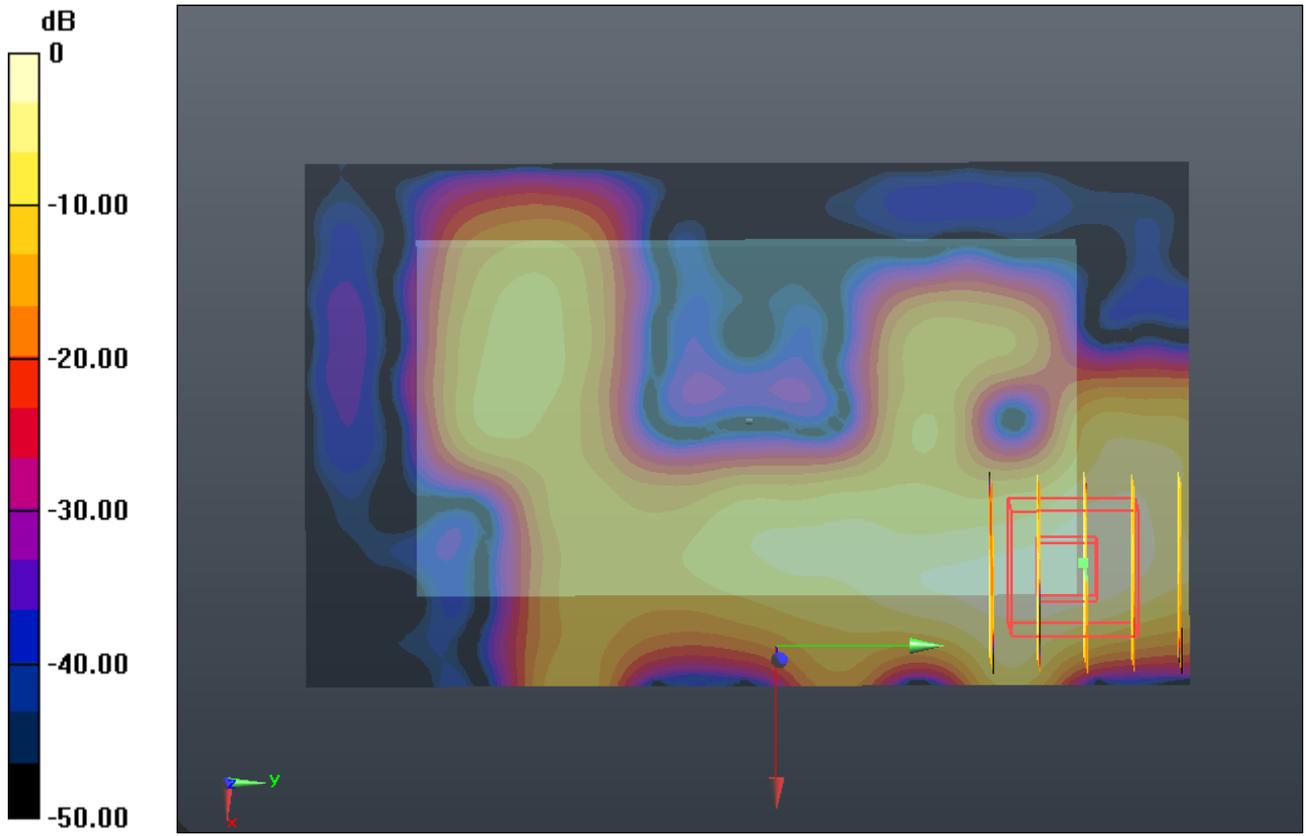
**Ch1/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.365 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.055 W/kg

**SAR(1 g) = 0.031 mW/g; SAR(10 g) = 0.013 mW/g**

Maximum value of SAR (measured) = 0.037 mW/g



0 dB = 0.040mW/g

## 61 802.11b\_Back\_1cm\_1M\_Ch1\_Headset\_2D

**DUT: 262807**

Communication System: WIFI; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: MSL\_2450\_120724 Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.877$  mho/m;  $\epsilon_r =$

54.002;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.3 °C; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(6.94, 6.94, 6.94); Calibrated: 2012-6-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2011-11-18
- Phantom: SAM1; Type: SAM; Serial: TP-1479
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.4.5 (3634)

**Ch1/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.039 mW/g

**Ch1/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.365 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.055 W/kg

**SAR(1 g) = 0.031 mW/g; SAR(10 g) = 0.013 mW/g**

Maximum value of SAR (measured) = 0.037 mW/g

# 1g/10g Averaged SAR

