



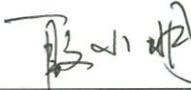
Report No. 2012SAR355

SAR TEST REPORT

Report No. 2012SAR355

FCC ID: Q78-V970T
Applicant: ZTE Corporation
Product: WCDMA/GSM (GPRS) Dual-Mode Digital
Mobile Phone
Model: V970T
HW Version: weyA
SW Version: TMO_US_P943EV1.0.0B02
Issue Date: 2012-12-27

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(General Manager)



Remark: This report details the results of the testing carried out on the samples specified in this report, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. The report shall be reproduced except in full, without written approval of the Company.

Standards

Applicable Limit Regulations	<p>ANSI/IEEE C95.1-2005 Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields. 3 kHz to 300 GHz</p>
	<p>ANSI/IEEE C95.3-2002 Recommended Practice For Measurements and Computations of Radio Frequency Electromagnetic Fields with Respect to Human Exposure to such Fields. 100 kHz-300 GHz</p>
Applicable Standards	<p>IEEE Std 1528™-2003: IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques</p>
	<p>OET Bulletin 65-(Edition 97-01) Supplement C (edition01-01) Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields---Additional Supplement C (Edition 01-01)Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radiofrequency Emissions</p>

Conclusion

Localized Specific Absorption Rate (SAR) of this equipment has been measured in all cases requested by the relevant standards above. Maximum localized SAR is below exposure limits as well.

Change History

Version	Change Contents	Author	Date
V1.0	First edition	Chenqiang	2012-10-21
V2.0	Remove the photos of DUT.	Yin Xiaoming	2012-12-27

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1. Administrative Information

1.1 Project Information

Date of start test 2012-10-09
Date of end test: 2012-10-21

1.2 Test Laboratory Information

Company: Shanghai Tejet Communications Technology Co., Ltd Testing Center
Address: Room 6205-6208, Building 6, No.399 Cailun Rd. Zhangjiang Hi-Tech
 Park, Shanghai, China
Post Code: 210203
Tel: +86-21-61650880
Fax: +86-21-61650881
Website: www.tejet.cn

1.3 Test Environment

Temperature: 20°C~25 °C
Relative Humidity: 20%~70%

2. Client Information

2.1 Applicant information

Company Name: ZTE Corporation
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Country: China
Telephone: +86-21-68895196
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2.2 Manufacturer Information

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Postal Code: 518057
Country: China
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Fax: +86-21-61460600

3. Equipment Under Test (EUT) and Accessory Equipment (AE)

3.1 Information of EUT

Device Type	Portable device	
Product	WCDMA/GSM (GPRS) Dual-Mode Digital Mobile Phone	
Model	V970T	
Exposure Category	Uncontrolled environment / general population	
Device operation configuration:		
Operating Mode(s):	GSM850	
	PCS1900	
	WCDMA BAND II/IV/V	
Test Modulation	(GSM)GMSK, (WCDMA) QPSK	
GPRS Operation Class	B	
GPRS Multislot Class	10	
EDGE Class	10	
DTM Support	N/A	
AP Support	Yes	
Rated Output Power	GSM 850:33dBm	
	PCS1900: 30dBm	
	WCDMA BAND II/IV/V: 24dBm	
Antenna Type:	Internal antenna	
Operating Frequency Range(s):	Band	Tx(MHz)
	GSM850	824.2~848.8
	PCS1900	1850.2~1909.8
	WCDMA BAND II	1852.4~1907.6
	WCDMA BAND IV	1712.4-1752.6
	WCDMA BAND V	826.4~846.6
Power Class	GSM850: 4, test with power level 5	
	PCS1900: 1, test with power level 0	
	WCDMA BAND II/IV/V: 3, test with maximum output power	

3.2 Identification of EUT

EUT ID	SN or IMEI	HW Version	SW Version	Received Date
TN04	867820010010315	weyA	TMO_US_P943EV1.0.0B02	2012-09-16

*EUT ID: identify the test sample in the lab internally.

3.3 Identification of AE

AE ID*	Description
AE1	Battery
AE2	Travel Adaptor
AE3	Earphone

AE1

Model	Li3716T42P3h594650
Manufacturer	ZTE CORPORATION
Capacitance	1650mAh
Nominal Voltage	3.7V

AE2

Model	STC-A51-Z
Manufacturer	RUIDE
Length of DC line	0cm with USB connector

AE3

Model	HMZ8-C4-OMTP
Manufacturer	ZTE CORPORATION
Length of DC line	160cm

*AE ID: identify the test sample in the lab internally.

4. Operational Conditions during Test

4.1 General description of test procedures

A communication link is set up with a system simulator by air link, and a call is established. The absolute radio frequency channel is allocated to low, middle and high respectively in the case of each band. The EUT is commanded to operate at maximum transmitting power.

Connection to the EUT is established via air interface with CMU200, and the EUT is set to maximum output power by CMU200. The antenna connected to the output of the base station simulator shall be placed at least 50 cm away from the EUT. The signal transmitted by the simulator to the antenna feeding point shall be lower than the output power level of the EUT by at least 30dB.

4.2 GSM Test Configuration

SAR test for GSM 850/1900, a communication link is set up with a system simulator by air link. Using CMU200 the power level is set to "5" in SAR of GSM850, set to "0" in SAR of GSM 1900, The tests in the band of GSM850/1900 are performed in the mode of data transfer function.

4.3 WCDMA Test Configuration

SAR test for WCDMA BANDII/IV/V, a communication link is set up with a system simulator by air link. Using CMU200 the power level is set to "3" in SAR of WCDMA BAND II/IV/V. The tests in the band of WCDMA BAND II/IV/V are performed in the mode of RMC 12.2kbps transfer function.

SAR for body exposure configurations in voice and data modes is measured using 12.2kbps RMC with TPC bits configured to all "1's". SAR for other spreading codes and multiple DPDCHn, when supported by the DUT, are not required when the maximum average output of each RF channel, for each spreading code and DPDCHn configuration, are less than 1/4 dB higher than those measured in 12.2 kbps RMC. Otherwise, SAR is measured on the maximum output channel with an applicable RMC configuration for the corresponding spreading code or DPDCHn using the exposure configuration that results in the highest SAR with 12.2 kbps RMC. When more than 2 DPDCHn are supported by the DUT, it may be necessary to configure additional DPDCHn for a DUT using FTM(Factory Test Mode) or other chipset based test approaches with parameters similar to those used in 384kbps and 968 kbps RMC.

HSDPA Test Configuration

Body SAR is also measured for HSDPA when the maximum average output of each RF channel with HSDPA active is at least 1/4 dB higher than that measured without HSDPA using 12.2 kbps

RMC or the maximum SAR 12.2 kbps RMC is above 75% of the SAR limit. Body SAR is measured using an FRC with H-Set 1 in Sub-test 1 and a 12.2 kbps RMC configured in Test Loop Mode 1, using the highest body SAR configuration in 12.2 kbps RMC without HSDPA. HSDPA should be configured according to the UE category of a test device. The number of HS-DSCH/HS-PDSCHs, HARQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set f. To maintain a consistent test configuration and stable transmission condition, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4 ms with a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. DPCCH and DODCH gain factors (β_c, β_d), and HS-DPCCH power offset parameters ($\Delta_{ACK}, \Delta_{NACK}, \Delta_{CQI}$) should be set according to values indicated in the Table below. The CQI value is determined by the UE category, transport block size, number of HS_PDSCHs and modulation used in the H-set.

Table 1: Subtest for UMTS Release 5 HSDPA

Sub-set	β_c	β_d	Bd (SF)	B_c/β_d	β_{hs}	CM (dB)
1	2/15	15/15	64	2/15	4/15	0.0
2	12/15	15/15	64	12/15	24/15	1.0
3	15/15	8/15	64	15/8	30/15	1.5
4	15/15	4/15	64	15/4	30/15	1.5

Note 1: $\Delta_{ACK}, \Delta_{NACK}, \Delta_{CQI}=8 \Leftrightarrow A_{hs}=\beta_{hs}/\beta_c=30/15 \Leftrightarrow \beta_{hs}=30/15c$
 Note 2: CM=1 for $\beta_c/\beta_d=12/15, \beta_{hs}/\beta_c=24/15$
 Note 3: For subset 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factor for the reference TFC (TFC1, TF1) to $\beta_c=11/15$ and $\beta_d=15/15$.

Table 2: Settings of required H-set 1 QPSK in HSDPA mode

Parameter	Unit	Value
Nominal Avg. Inf. Bit Rate	Kbps	534
Inter-TTI Distance	TTI's	3
Number of HARQ Processes	Processes	2
Information Bit Payload	Bitw	3202
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bots	4800
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	9600
Coding Rate	/	0.67
Number of Physical Channel Codes	Codes	5
Modulation	/	QPSK

Table 3: HSDPA UE category

HS-DSCH Category	Maximum HS_DSCH Codes Received	Minimum Inter-TTI Interval	Maximum Transport Bits/HS-DSCH	Total Channel

1	5	3	7298	19200
2	5	3	7298	28800
3	5	2	7298	28800
4	5	2	7298	38400
5	5	1	7298	57600
6	5	1	7298	67200
7	10	1	14411	115200
8	10	1	14411	134400
9	15	1	25251	172800
1 2	15	1	27952	172800
1 1	5	2	3630	14400
1 2	5	1	3630	28800
1 3	15	1	34800	259200
1 4	15	1	42196	259200
1 5	15	1	23370	345600
1 6	15	1	27952	345600

HSUPA Test Configuration

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	$\beta_{br}^{(1)}$	β_{ec}	β_{ed}	β_{ed} (SF)	β_{ed} (codes)	CM ⁽²⁾ (dB)	MPR (dB)	AG ⁽⁴⁾ Index	E-TFCI
1	11/15 ⁽³⁾	15/15 ⁽³⁾	64	11/15 ⁽³⁾	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	$\beta_{min}: 47/15$ $\beta_{max}: 47/15$	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15 ⁽⁴⁾	15/15 ⁽⁴⁾	64	15/15 ⁽⁴⁾	30/15	24/15	134/15	4	1	1.0	0.0	21	81

Note 1: $\Delta_{ACK}, \Delta_{NACK}$ and $\Delta_{CQI} = 8 \Leftrightarrow A_{br} = \beta_{br}/\beta_c = 30/15 \Leftrightarrow \beta_{br} = 30/15 * \beta_c$.

Note 2: CM = 1 for $\beta_c/\beta_d = 12/15, \beta_{br}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.

Note 3: For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 10/15$ and $\beta_d = 15/15$.

Note 4: For subtest 5 the β_c/β_d ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 14/15$ and $\beta_d = 15/15$.

Note 5: Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g.

Note 6: β_{ed} can not be set directly; it is set by Absolute Grant Value.

applicable only if Maximum Power Reduction (MPR) is implemented according to Cubic Metric (CM) requirements.³⁷

4.4 Bluetooth Test Configuration

The Bluetooth transmitter of the device under test can be excluded from stand-alone and simultaneous SAR evaluation, per the requirements from FCC KDB 648474, as follows:

1. The separation between the Bluetooth antenna and the main antenna is 8.3 cm > 5cm
2. The maximum conducted output power of Bluetooth is 1.64mW < 2 · P(Ref)=24mW.
3. The maximum conducted output power of Bluetooth is 1.64mW < 60/f=24.49mW

According to FCC KDB648474, stand along SAR and Simultaneous Transmission SAR are not required.

4.5 Wi-Fi Test Configuration

The Wi-Fi is set to different data rate and channels by the software.

According to KDB648474:

1. The separation between the Wi-Fi antenna and the main antenna is 8.3cm ≥ 5cm
2. The maximum conducted output power of Wi-Fi is 26.24mW > 2 · P(Ref)=24mW.

So stand along SAR is needed.

According to KDB248227

SAR is not required for 802.11g channels when the maximum average output power is less than 0.25dB higher than that measured on the corresponding 802.11b channels.

The AP is supported,

According to KDB941225 D06,

1. The device size is 13.0 cm x 6.2 cm > 9 cm x 5 cm, so test separation distance was 10mm.
2. SAR must be tested for all surfaces and edges with a transmit antenna within 2.5cm, at a test separation distance of 10mm. And also the worst position of head are tested with Wi-Fi keep transmitting.



Picture of antennas

5. SAR Measurements system configuration

5.1 SAR Measurement set-up

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

- A standard high precision 6-axis robot (Staubli TX=RX family) with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic _field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running WinXP and the DASY5 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The generic twin phantom enabling the testing of left-hand and right-hand usage.
- The device holder for handheld mobile phones.
- Tissue simulating liquid mixed according to the given recipes.
- System validation dipoles allowing to validate the proper functioning of the system.

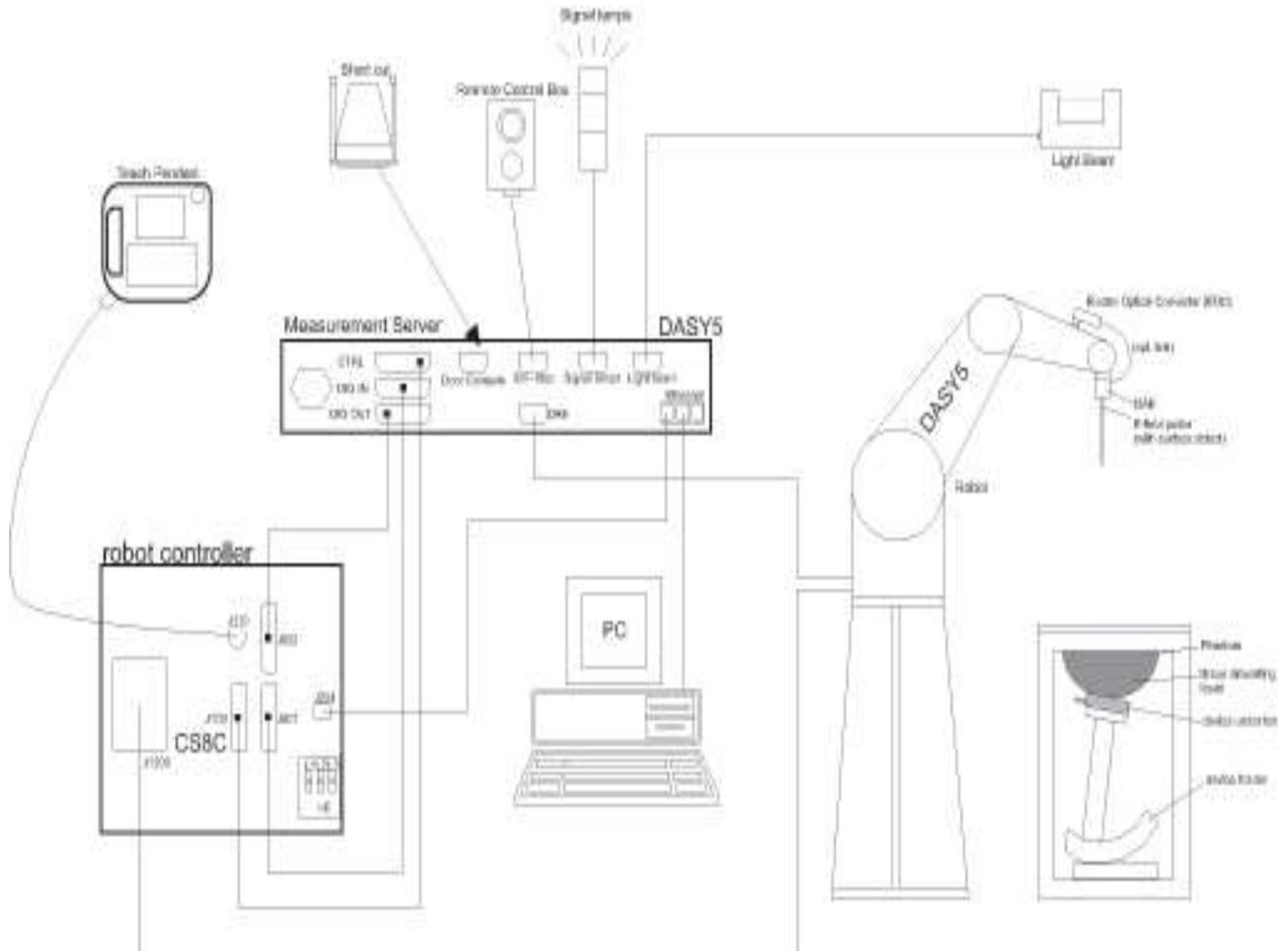


Figure 5-1 SAR Lab Test Measurement Set-up

5.2 DASY5 E-field Probe System

The SAR measurements were conducted with the dosimetric probe ES3DV3 (manufactured by SPEAG), designed in the classical triangular configuration and optimized for dosimetric evaluation.

5.2.1 Es3DV3 Probe Specification

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	Basic Broad Band Calibration in air Conversion Factors (CF) for HSL 850 and HSL 1750 Additional CF for other liquids and frequencies upon request
Frequency	10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)
Dynamic Range	10 μ W/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 μ W/g)

Dimensions	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.



Figure 5-2.ES3DV3 E-field Probe



Figure 5-3. ES3DV3 E-field probe

5.2.2 E-field Probe Calibration

Each probe is calibrated according to a dosimetric assessment procedure with accuracy better than $\pm 10\%$. The spherical isotropy was evaluated and found to be better than $\pm 0.25\text{dB}$. The sensitivity parameters (NormX, NormY, NormZ), the diode compression parameter (DCP) and the conversion factor (ConvF) of the probe are tested.

The free space E-field from amplified probe outputs is determined in a test chamber. This is performed in a TEM cell for frequencies below 1 GHz, and in a wave guide above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees.

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

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

Where: Δt = Exposure time (30 seconds),
 C = Heat capacity of tissue (brain or muscle),
 ΔT = Temperature increase due to RF exposure.
 Or

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

Where:

σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m³).

5.3 Other Test Equipment

5.3.1 Device Holder for Transmitters

The DASY5 device holder is designed to cope with the different positions given in the standard. It has two scales for device rotation (with respect to the body axis) and device inclination (with respect to the line between the ear reference points). The rotation centers for both scales are the ear reference point (ERP). Thus the device needs no repositioning when changing the angles. 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.



Figure 5-4. Device Holder

5.3.2 Phantom

The Generic Twin Phantom is constructed of a fiberglass shell integrated in a wooden frame. The shape of the shell is based on data from an anatomical study designed to determine the maximum exposure in at least 90% of all users. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents the evaporation of the liquid. Reference markings on the Phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points in the robot.

Shell Thickness	2±0.1 mm
Filling Volume	Approx. 20 liters
Dimensions	810 x 1000 x 500 mm (H x L x W)



Figure 5-5. Generic Twin Phantom

5.4 Scanning procedure

The DASY5 installation includes predefined files with recommended procedures for measurements and validation. They are read-only document files and destined as fully defined but unmeasured masks. All test positions (head or body-worn) are tested with the same configuration of test steps differing only in the grid definition for the different test positions.

- The “reference” and “drift” measurements are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure. The indicated drift is mainly the variation of the DUT’s output power and should vary max. $\pm 5\%$.

- The “surface check” measurement tests the optical surface detection system of the DASY5 system by repeatedly detecting the surface with the optical and mechanical surface detector and comparing the results. The output gives the detecting heights of both systems, the difference between the two systems and the standard deviation of the detection repeatability. Air bubbles or refraction in the liquid due to separation of the sugar-water mixture gives poor repeatability (above $\pm 0.1\text{mm}$). To prevent wrong results tests are only executed when the liquid is free of air bubbles. The difference between the optical surface detection and the actual surface depends on the probe and is specified with each probe. (It does not depend on the surface reflectivity or the probe angle to the surface within $\pm 30^\circ$.)

- Area Scan

The Area Scan is used as a fast scan in two dimensions to find the area of high field values before running a detailed measurement around the hot spot. Before starting the area scan a grid spacing of 15 mm x 15 mm is set. During the scan the distance of the probe to the phantom remains unchanged.

After finishing area scan, the field maxima within a range of 2 dB will be ascertained.

- Zoom Scan

Zoom Scans are used to estimate the peak spatial SAR values within a cubic averaging volume containing 1 g and 10 g of simulated tissue. The default Zoom Scan is done by 7x7x7 points within a cube whose base is centered around the maxima found in the preceding area scan.

- Spatial Peak Detection

The procedure for spatial peak SAR evaluation has been implemented and can determine values of masses of 1g and 10g, as well as for user-specific masses. The DASY5 system allows evaluations that combine measured data and robot positions, such as:

- maximum search
- extrapolation
- boundary correction
- peak search for averaged SAR

During a maximum search, global and local maxima searches are automatically performed in 2-D after each Area Scan measurement with at least 6 measurement points. It is based on the evaluation of the local SAR gradient calculated by the Quadratic Shepard's method. The algorithm will find the global maximum and all local maxima within -2 dB of the global maxima for all SAR distributions.

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. Several measurements at different distances are necessary for the extrapolation. Extrapolation routines require at least 10 measurement points in 3-D space.

They are used in the Zoom Scan to obtain SAR values between the lowest measurement points and the inner phantom surface. The routine uses the modified Quadratic Shepard's method for extrapolation. For a grid using 7x7x7 measurement points with 5mm resolution amounting to 343 measurement points, the uncertainty of the extrapolation routines is less than 1% for 1g and 10g cubes.

- A Z-axis scan measures the total SAR value at the x-and y-position of the maximum SAR value found during the cube 7x7x7 scan. The probe is moved away in z-direction from the bottom of the SAM phantom in 5mm steps.

5.5 Data Storage and Evaluation

5.5.1 Data Storage

The DASY5 software stores the acquired data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all necessary software parameters

for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension “.DA4”. The 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 incorrect parameter settings. For example, if a measurement has been performed with a wrong crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be re-evaluated. The measured data can be visualized or exported in different units or formats, depending on the selected probe type ([V/m], [A/m], [°C], [mW/g], [mW/cm²], [dBrel], etc.). Some of these units are not available in certain situations or show meaningless results, e.g., a SAR output in a lossless media will always be zero. Raw data can also be exported to perform the evaluation with other software packages.

5.5.2 Data Evaluation by SEMCAD

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

Probe parameters:	- Sensitivity	Norm _i , a _{i0} , a _{i1} , a _{i2}
	- Conversion factor	ConvF _i
	- Diode compression point	Dcp _i
Device parameters:	- Frequency	f
	- Crest factor	cf
Media parameters:	- Conductivity	
	- Density	

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 DASY5 components. In the direct measuring mode of the multimeter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics.

If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as:

$$V_i = U_i + U_i^2 \cdot c f / d c p_i$$

With V_i = compensated signal of channel i (i = x, y, z)

U_i = input signal of channel i (i = x, y, z)

cf = crest factor of exciting field (DASY parameter)

dcp_i = diode compression point (DASY parameter)

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

E-field probes: $E_i = (V_i / Norm_i \cdot ConvF)^{1/2}$

H-field probes: $H_i = (V_i)^{1/2} \cdot (a_{i0} + a_{i1} f + a_{i2} f^2) / f$

With **V_i** = compensated signal of channel i (i = x, y, z)

Norm_i = sensor sensitivity of channel i (i = x, y, z)

[mV/(V/m)²] for E-field Probes

ConvF = sensitivity enhancement in solution

a_{ij} = sensor sensitivity factors for H-field probes

f = carrier frequency [GHz]

E_i = electric field strength of channel i in V/m

H_i = magnetic field strength of channel i in A/m

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

$$E_{tot} = (E_x^2 + E_y^2 + E_z^2)^{1/2}$$

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

$$SAR = (E_{tot}^2 \cdot \epsilon) / (\rho \cdot 1000)$$

with **SAR** = local specific absorption rate in mW/g

E_{tot} = total field strength in V/m

= conductivity in [mho/m] or [Siemens/m]

= equivalent tissue density in g/cm³

Note that the density is normally set to 1 (or 1.06), to account for actual brain density rather than the density of the simulation liquid. The power flow density is calculated assuming the excitation field to be a free space field.

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

with P_{pwe} = equivalent power density of a plane wave in mW/cm^2

E_{tot} = total electric field strength in V/m

H_{tot} = total magnetic field strength in A/m

5.6 System check

The manufacturer calibrates the probes annually. Dielectric parameters of the tissue simulates were measured every day using the dielectric probe kit and the network analyzer. A system check measurement was made following the determination of the dielectric parameters of the simulates, using the dipole validation kit. A power level of 250 mW was supplied to the dipole antenna, which was placed under the flat section of the twin SAM phantom. The system check results (dielectric parameters and SAR values) are given in the 6.2.1 and 6.2.2

System check results have to be equal or near the values determined during dipole calibration with the relevant liquids and test system ($\pm 10\%$).

System check is performed regularly on all frequency bands where tests are performed with the DASY 5 system.

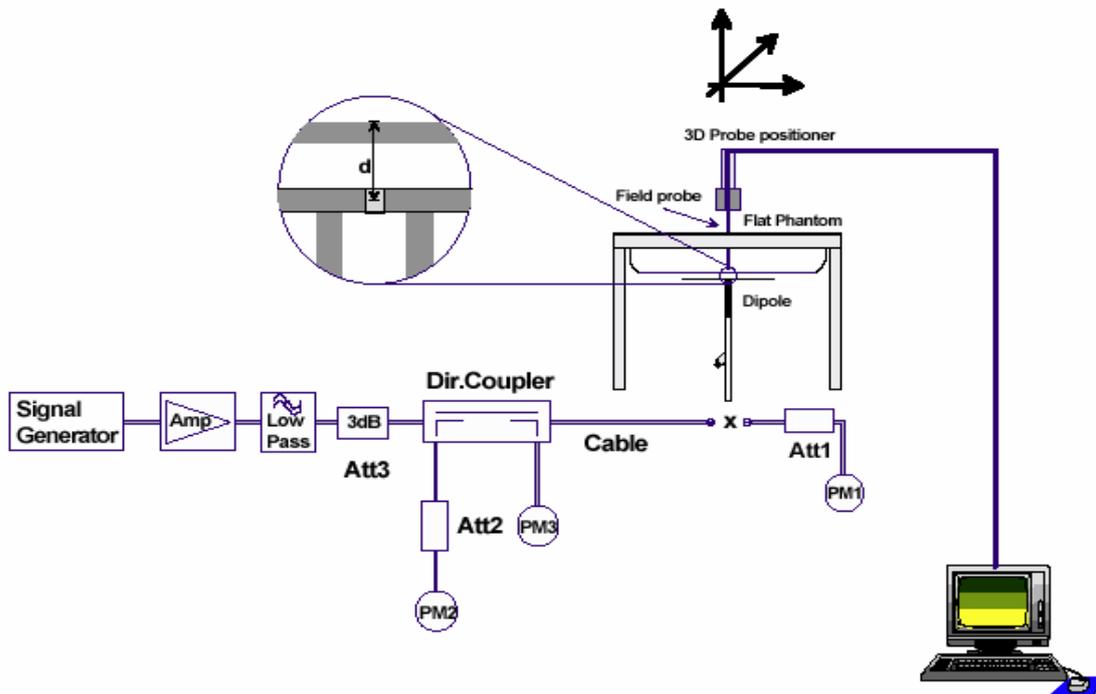


Figure 5-6. System Check Set-up

5.7 Equivalent Tissues

The liquid is consisted of water, salt, Glycol, Sugar, Preventol and Cellulose. The liquid has previously been proven to be suited for worst-case. The Table show the detail solution. It's

satisfying the latest tissue dielectric parameters requirements proposed by the OET 65.

MIXTURE%	FREQUENCY(head) 835MHz
Water	40.4
Sugar	56
Salt	2.5
Preventol	0.1
Cellulose	1.0
Dielectric Parameters Target Value	f=835MHz $\epsilon=41.5$ $\sigma=0.90$
MIXTURE%	FREQUENCY(body) 835MHz
Water	52.5
Sugar	45
Salt	1.4
Preventol	0.1
Cellulose	1.0
Dielectric Parameters Target Value	f=835MHz $\epsilon=55.2$ $\sigma=0.97$
MIXTURE%	FREQUENCY(head)1900MHz
Water	55.242
Glycol monobutyl	44.452
Salt	0.306
Dielectric Parameters Target Value	f=1900MHz $\epsilon=40.0$ $\sigma=1.40$
MIXTURE%	FREQUENCY(body)1900MHz
Water	69.91
Glycol monobutyl	29.96
Salt	0.13
Dielectric Parameters Target Value	f=1900MHz $\epsilon=53.3$ $\sigma=1.52$
MIXTURE%	FREQUENCY(head)1750MHz
Water	55.242
Glycol monobutyl	44.452
Salt	0.306
Dielectric Parameters Target Value	f=1750MHz $\epsilon=40.0$ $\sigma=1.40$
MIXTURE%	FREQUENCY(body)1750MHz
Water	69.91
Glycol monobutyl	29.96
Salt	0.13

Dielectric Parameters Target Value	f=1750MHz ϵ=53.3 σ=1.52
MIXTURE%	FREQUENCY(head)2450MHz
Water	56
Glycol monobutyl	44
Salt	0.00
Dielectric Parameters Target Value	f=2450MHz ϵ=39.2 σ=1.8
MIXTURE%	FREQUENCY(body)2450MHz
Water	70
Glycol monobutyl	30
Salt	0
Dielectric Parameters Target Value	f=2450MHz ϵ=52.7 σ=1.95

6. Summary of Test Results

6.1 Conducted Output Power Measurement

6.1.1 Summary

The DUT is tested using a CMU200 communications tester as controller unit to set test channels and maximum output power to the DUT, as well as for measuring the conducted power.

Conducted output power was measured using an integrated RF connector and attached RF cable.

This result contains conducted output power for the EUT.

6.1.2 Conducted Power Results

GSM850		Conducted output power (dBm)						
		low	middle	high				
		CH128	CH189	CH251				
		824.2MHz	836.6MHz	848.6MHz				
GSM		32.6	32.6	32.4	(dB)	CH128	CH189	CH251
GPRS	1 TX-slot result	32.9	32.9	32.8	-9.03	23.87	23.87	23.77
	2 TX-slot result	29.4	29.3	29.3	-6.02	23.38	23.28	23.28
EDGE (GMSK)	1 TX-slot result	32.9	32.9	32.8	-9.03	23.87	23.87	23.77
	2 TX-slot result	29.4	29.3	29.4	-6.02	23.38	23.28	23.38

GSM1900		Conducted output power (dBm)						
		low	middle	high				
		CH512	CH661	CH810				
		1850.2MHz	1880MHz	1909.8MHz				
GSM		28.9	28.8	28.7	(dB)	CH512	CH661	CH810
GPRS	1 TX-slot result	29.1	29.0	28.9	-9.03	20.07	19.97	19.87
	2 TX-slot result	25.7	25.6	25.6	-6.02	19.68	19.58	19.58
EDGE (GMSK)	1 TX-slot result	29.1	29.0	28.9	-9.03	20.07	19.97	19.87
	2 TX-slot result	25.7	25.6	25.5	-6.02	19.68	19.58	19.48

Note: To average the power, the division factor is as follows:

1 TX-slot = 1 transmit time slot of 8 time slots

=>conducted power divided by (8/1) =>-9.03dB

2 TX-slot = 2 transmit time slot of 8 time slots

=>conducted power divided by (8/2) =>-6.02dB

WCDMA BAND II		Conducted Output power (dBm)		
		low	middle	high
		CH9262	CH9400	CH9538
		1852.4MHz	1800MHz	1907.6MHz
12.2kbps RMC		22.91	22.75	22.66
HSDPA	SUB-TEST 1	22.89	22.58	22.60
	SUB-TEST 2	20.35	20.09	20.24
	SUB-TEST 3	19.55	19.48	19.29
	SUB-TEST 4	18.99	18.37	18.64
HSUPA	SUB-TEST 1	22.83	22.17	22.01
	SUB-TEST 2	20.46	20.26	20.51
	SUB-TEST 3	18.83	18.23	18.56
	SUB-TEST 4	19.24	19.16	19.47
	SUB-TEST 5	21.74	21.79	21.54

WCDMA BAND IV		Conducted Output power (dBm)		
		low	middle	high
		CH1312	CH1413	CH1513
		1712.4MHz	1732.5MHz	1752.6MHz
12.2kbps RMC		22.35	22.43	22.37
HSDPA	SUB-TEST 1	21.94	21.74	21.36
	SUB-TEST 2	20.70	20.32	19.96
	SUB-TEST 3	19.74	19.84	19.88
	SUB-TEST 4	18.91	18.01	18.4
HSUPA	SUB-TEST 1	21.31	20.85	20.52
	SUB-TEST 2	19.51	19.36	19.93
	SUB-TEST 3	17.58	17.24	17.95
	SUB-TEST 4	18.44	18.18	18.11
	SUB-TEST 5	20.98	20.74	20.27

WCDMA BAND V		Conducted Output power (dBm)		
		low	middle	high
		CH4132	CH4183	CH4233
		826.4 MHz	836.6MHz	846.6MHz
12.2kbps RMC		22.71	23.37	22.88
HSDPA	SUB-TEST 1	22.20	22.87	23.07
	SUB-TEST 2	21.02	21.57	21.74
	SUB-TEST 3	20.17	20.70	20.94
	SUB-TEST 4	19.92	20.26	20.46

HSUPA	SUB-TEST 1	23.54	23.40	23.70
	SUB-TEST 2	21.98	21.62	21.71
	SUB-TEST 3	19.32	19.70	19.80
	SUB-TEST 4	20.06	20.34	20.92
	SUB-TEST 5	22.32	22.70	22.90

802.11b (dBm)

Channel\data rate			1Mbps	2Mbps	5.5Mbps	11Mbps
low	2412MHz	1	14.24	14.18	13.99	14
middle	2437MHz	6	13.94	13.89	13.83	13.73
high	2462MHz	11	13.63	13.63	13.56	13.44

802.11g (dBm)

Channel\data rate			6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
low	2412MHz	1	13.15	12.96	12.9	12.75	12.61	12.31	11.96	11.91
middle	2437MHz	6	12.82	12.71	12.61	12.42	12.26	12.01	11.69	11.5
high	2462MHz	11	12.5	12.38	12.39	12.24	12.11	11.83	11.55	11.34

802.11n (20M) (dBm)

Channel\data rate			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
low	2412MHz	1	12.08	11.88	11.74	11.56	11.28	10.81	10.68	10.53
middle	2437MHz	6	11.72	11.65	11.36	11.2	10.92	10.64	10.55	10.51
high	2462MHz	11	11.38	11.29	11.09	10.85	10.68	10.37	10.32	10.18

6.2 Test Results

6.2.1. Dielectric Performance

Dielectric Performance of Tissue Simulating Liquid

Frequency	Description	Dielectric Parameters ϵ_r	σ (s/m)	temp °C
835MHz (head)	Target value 5% window	41.5 39.43-43.58	0.90 0.89- 0.99	/
	Measurement value 2012-10-15	42.9	0.90	21.8
	Measurement value 2012-10-19	43.1	0.91	21.7
835MHz (body)	Target value 5% window	55.2 52.44-57.96	0.97 0.92-1.02	/
	Measurement value 2012-10-16	54.7	0.96	21.7
	Measurement value 2012-10-17	54.3	0.95	22.1
1750MHz (head)	Target value 5% window	40.0 38-42	1.40 1.33 -1.47	/
	Measurement value 2012-10-18	39.8	1.42	21.8
	Measurement value 2012-10-19	39.5	1.39	21.9
1750MHz (body)	Target value 5% window	53.3 50.63-55.96	1.52 1.44-1.60	/
	Measurement value 2012-10-17	52.5	1.49	21.9
	Measurement value 2012-10-18	52.7	1.53	21.7
1900MHz (head)	Target value 5% window	40.0 38-42	1.40 1.33 -1.47	/
	Measurement value 2012-10-12	39.5	1.41	21.7
	Measurement value 2012-10-15	39.3	1.38	21.9
1900MHz (body)	Target value 5% window	53.3 50.63-55.96	1.52 1.44 -1.60	/

	Measurement value 2012-10-09	52.6	1.49	22.1
	Measurement value 2012-10-10	52.4	1.53	21.8
	Measurement value 2012-10-11	52.5	1.52	22.0
2450MHz (head)	Target value 5% window	39.2 37.24-41.16	1.8 1.71-1.89	/
	Measurement value 2012-10-20	37.9	1.79	21.7
2450MHz (body)	Target value 5% window	52.7 50.06-55.33	1.95 1.85 -2.05	/
	Measurement value 2012-10-21	51.9	1.92	21.8

6.2.2. System Check Results

System Check for tissue simulation liquid

Frequency	Description	SAR(W/kg)		Dielectric Parameters ϵ_r	σ (s/m)	Temp °C
		10g	1g			
835 MHz (head)	Recommended result $\pm 10\%$ window	1.51 1.36-1.66	2.31 2.08-2.54	41.5	0.90	/
	Measurement value 2012-10-15	1.59	2.38	42.9	0.90	21.8
	Measurement value 2012-10-19	1.61	2.38	43.1	0.91	21.7
835MHz (body)	Recommended result $\pm 10\%$ window	1.59 1.43-1.75	2.43 2.19-2.67	55.2	0.97	/
	Measurement value 2012-10-16	1.54	2.35	54.7	0.96	21.7
	Measurement value 2012-10-17	1.66	2.54	54.3	0.95	22.1
1750 MHz (head)	Recommended result $\pm 10\%$ window	4.76 4.28-5.24	8.87 7.98-9.76	40.0	1.40	/
	Measurement value 2012-10-18	4.48	8.61	39.8	1.42	21.8
	Measurement value 2012-10-19	4.47	8.61	39.5	1.39	21.9

1750 MHz (body)	Recommended result ±10% window	5.01 4.51-5.75	9.3 8.89-10.87	53.3	1.52	/
	Measurement value 2012-10-17	4.91	9.35	52.5	1.49	21.9
	Measurement value 2012-10-18	4.79	9.11	52.7	1.53	21.7
1900MHz (head)	Recommended result ±10% window	5.09 4.58-5.60	9.65 8.75-10.60	40.0	1.40	/
	Measurement value 2012-10-12	5.3	10.4	39.5	1.41	21.7
	Measurement value 2012-10-15	5.05	9.68	39.3	1.38	21.9
1900MHz (body)	Recommended result ±10% window	5.3 4.77-5.83	10 9.00-11.00	53.3	1.52	/
	Measurement value 2012-10-09	5.61	10.9	52.6	1.49	22.1
	Measurement value 2012-10-10	5.54	10.8	52.4	1.53	21.8
	Measurement value 2012-10-11	5.43	10.5	52.5	1.52	22.0
2450MHz (head)	Recommended result ±10% window	6.27 5.64-6.90	13.4 12.06-14.74	39.2	1.8	/
	Measurement value 2012-10-20	6	13.1	37.9	1.79	21.7
2450MHz (body)	Recommended result ±10% window	6.03 5.43-6.63	12.9 11.61-14.19	52.7	1.95	/
	Measurement value 2012-10-21	6.11	13.5	51.9	1.92	21.8

Note: 1. the graph results see ANNEX B.1.

2. Recommended Values used derive from the calibration certificate and 250 mW is used as feeding power to the calibrated dipole.

6.2.3 Test Results

6.2.3.1 Summary of Measurement Results (GSM850)

SAR Values (GSM850)

Test Case		Measurement Result(W/kg)	Power Drift(dB)	Note
Different Test Position	Channel	1 g		
		Average		
Test position of Head				
Left head, Touch cheek	middle	0.543	-0.05	
Left head, Tilt 15 Degree	middle	0.359	-0.04	
Right head, Touch cheek	middle	0.587	-0.05	
Right head, Tilt 15 Degree	middle	0.361	-0.10	
Right head, Touch cheek	low	0.596	-0.03	max
	high	0.586	-0.19	
Test position of Body with GPRS(1UP) (Distance 10mm)				
Towards phantom	middle	0.531	0.02	
Towards Ground	middle	0.680	-0.01	
Front	middle	0.124	0.14	
Left side	middle	0.481	0.03	
Right side	middle	0.537	0.07	
Towards Ground	low	0.725	0.06	
	high	0.664	-0.04	
Worst case position of Body with GPRS(1UP) (Distance 10mm)				
Towards Ground	low	0.649	-0.02	earphone
Towards Ground	low	0.731	0.04	EDGE(1up) max

Note: 1. The value with blue color is the maximum SAR Value of test case of head and body in each test band.

2. Upper and lower frequencies were measured at the worst position.

3. The SAR test shall be performed at the high, middle and low frequency channels of each operating mode. If the SAR measured at mid-band channel for each test configuration is at least 3.0 dB lower than the SAR limit ($< 0.8W/kg$), testing at the high and low channels is optional.

6.2.3.2 Summary of Measurement Results (PCS1900)

SAR Values (PCS1900)

Test Case		Measurement Result(W/kg)		Power Drift(dB)	Note
Different Test Position	Channel	1 g	Average		
Test position of Head					
Left head, Touch cheek	middle	0.203		-0.06	
Left head, Tilt 15 Degree	middle	0.099		0.02	
Right head, Touch cheek	middle	0.292		0.06	
Right head, Tilt 15 Degree	middle	0.087		-0.00	
Right head, Touch cheek	low	0.274		0.06	
	high	0.294		0.12	max
Test position of Body with GPRS(1UP) (Distance 10mm)					
Towards phantom	middle	0.361		-0.06	
Towards Ground	middle	0.472		-0.02	max
Front	middle	0.408		0.15	
Left side	middle	0.088		-0.09	
Right side	middle	0.107		-0.12	
Towards Ground	low	0.405		0.10	
	high	0.472		0.14	
Worst case position of Body with GPRS(1UP) (Distance 10mm)					
Towards Ground	middle	0.422		0.17	earphone
Towards Ground	middle	0.418		0.17	EDGE(1up)

Note: 1.The value with blue color is the maximum SAR Value of test case of head and body in

each test band.

2. Upper and lower frequencies were measured at the worst position.
3. The SAR test shall be performed at the high, middle and low frequency channels of each operating mode. If the SAR measured at mid-band channel for each test configuration is at least 3.0 dB lower than the SAR limit ($< 0.8W/kg$), testing at the high and low channels is optional.

6.2.3.3 Summary of Measurement Results (WCDMA BAND II)

SAR Values (WCDMA BANDII)

Test Case		Measurement Result(W/kg)	Power Drift(dB)	Note
Different Test Position	Channel	1 g		
		Average		
Test position of Head				
Left head, Touch cheek	middle	0.287	0.05	
Left head, Tilt 15 Degree	middle	0.147	0.09	
Right head, Touch cheek	middle	0.404	0.14	max
Right head, Tilt 15 Degree	middle	0.149	0.02	
Right head, Tilt 15 Degree	low	0.319	-0.00	
	high	0.378	0.13	
Test position of Body (Distance 10mm)				
Towards phantom	middle	0.652	-0.01	
Towards Ground	middle	0.825	0.01	max
Front	middle	0.623	0.09	
Left side	middle	0.142	0.18	
Right side	middle	0.180	-0.06	
Towards Ground	low	0.583	0.08	
	high	0.686	0.13	
Worst case position of Body with (Distance 10mm)				

Towards Ground	middle	0.672	0.14	earphone
Towards Ground	middle	0.770	0.18	HSDPA
Towards Ground	middle	0.767	0.16	HSUPA

Note: 1. The value with blue color is the maximum SAR Value of test case of head and body in each test band.

2. Upper and lower frequencies were measured at the worst position.
3. The SAR test shall be performed at the high, middle and low frequency channels of each operating mode. If the SAR measured at mid-band channel for each test configuration is at least 3.0 dB lower than the SAR limit (< 0.8W/kg), testing at the high and low channels is optional.

6.2.3.4 Summary of Measurement Results (WCDMA BAND IV)

SAR Values (WCDMA BANDIV)

Test Case		Measurement Result(W/kg)	Power Drift(dB)	Note
Different Test Position	Channel	1 g Average		
Test position of Head				
Left head, Touch cheek	middle	0.545	-0.16	
Left head, Tilt 15 Degree	middle	0.227	0.05	
Right head, Touch cheek	middle	0.651	0.00	
Right head, Tilt 15 Degree	middle	0.180	0.03	
Right head, Touch cheek	low	0.667	-0.03	max
	high	0.616	-0.01	
Test position of Body (Distance 10mm)				
Towards phantom	middle	1.04	-0.04	
Towards Ground	middle	1.01	0.05	
Front	middle	0.770	0.11	
Left side	middle	0.256	0.05	
Right side	middle	0.301	0.04	

Towards phantom	low	1.04	0.14	
	high	1.08	-0.04	
Towards Ground	low	0.957	0.01	
	high	0.962	-0.11	
Worst case position of Body with (Distance 10mm)				
Towards phantom	high	1.11	-0.01	earphone max
Towards phantom	high	0.795	0.02	HSDPA
Towards phantom	high	0.796	-0.09	HSUPA

Note: 1. The value with blue color is the maximum SAR Value of test case of head and body in each test band.

2. Upper and lower frequencies were measured at the worst position.
3. The SAR test shall be performed at the high, middle and low frequency channels of each operating mode. If the SAR measured at mid-band channel for each test configuration is at least 3.0 dB lower than the SAR limit ($< 0.8W/kg$), testing at the high and low channels is optional.

6.2.3.5 Summary of Measurement Results (WCDMA BAND V)

SAR Values (WCDMA BAND V)

Test Case		Measurement Result(W/kg)		Power Drift(dB)	Note
Different Test Position	Channel	1 g	Average		
		Test position of Head			
Left head, Touch cheek	middle	0.465	-0.10		
Left head, Tilt 15 Degree	middle	0.296	0.08		
Right head, Touch cheek	middle	0.508	-0.10		
Right head, Tilt 15 Degree	middle	0.345	0.12		
Right head, Touch cheek	low	0.564	-0.03		
	high	0.737	-0.13	max	
Test position of Body (Distance 10mm)					

Towards phantom	middle	0.492	-0.03	
Towards Ground	middle	0.667	-0.07	
Front	middle	0.121	-0.08	
Left side	middle	0.425	0.02	
Right side	middle	0.499	-0.01	
Towards Ground	low	0.836	-0.06	max
	high	0.783	-0.02	
Worst case position of Body with (Distance 10mm)				
Towards Ground	low	0.787	-0.11	earphone
Towards Ground	low	0.493	0.06	HSDPA
Towards Ground	low	0.488	0.10	HSUPA

Note: 1. The value with blue color is the maximum SAR Value of test case of head and body in each test band.

2. Upper and lower frequencies were measured at the worst position.
3. The SAR test shall be performed at the high, middle and low frequency channels of each operating mode. If the SAR measured at mid-band channel for each test configuration is at least 3.0 dB lower than the SAR limit (< 0.8W/kg), testing at the high and low channels is optional.

6.2.3.6 Summary of Measurement Results (802.11b/g/n)

SAR Values (802.11b/g/n)

Test Case		Measurement Result(W/kg)	Power Drift(dB)	Note
Different Test Position	Channel	1 g		
		Average		
Test position of Head				
Left head, Touch cheek	middle	0.171	0.14	
Left head, Tilt 15 Degree	middle	0.136	0.15	
Right head, Touch cheek	middle	0.096	-0.07	

Right head, Tilt 15 Degree	middle	0.079	-0.06	
Left head, Touch cheek	low	0.192	-0.23	max
	high	0.186	0.08	
Left head, Touch cheek	low	0.166	-0.12	802.11g
Left head, Touch cheek	low	0.135	0.06	802.11n
Test position of Body (Distance 10mm)				
Towards phantom	middle	0.068	0.07	
Towards Ground	middle	0.133	0.88	
Back	middle	0.058	0.31	
Left side	middle	0.087	0.32	
Right side	middle	0.020	0.04	
Towards Ground	low	0.162	0.48	max
	high	0.131	0.65	
Towards Ground	low	0.125	0.42	802.11g
Towards Ground	low	0.068	-0.38	802.11n

Note: 1. The value with blue color is the maximum SAR Value of test case of head and body in each test band.

2. Upper and lower frequencies were measured at the worst position.

3. The SAR test shall be performed at the high, middle and low frequency channels of each operating mode. If the SAR measured at mid-band channel for each test configuration is at least 3.0 dB lower than the SAR limit ($< 0.8W/kg$), testing at the high and low channels is optional.

6.2.4 Maximum SAR

TEST BAND	Worst Position		CHANNEL	Maximum SAR(1g) (W/kg)	Limit of SAR(1g)
GSM850	Head	Right head, Touch cheek	low	0.596	1.6
	Body	Towards Ground with EDGE(1up)	low	0.731	1.6
PCS1900	Head	Right head, Touch cheek	high	0.294	1.6
	Body	Towards Ground with GPRS(1up)	middle	0.472	1.6
WCDMA BAND II	Head	Right head, Touch cheek	middle	0.404	1.6
	Body	Towards Ground	middle	0.825	1.6
WCDMA BAND IV	Head	Right head, Touch cheek	low	0.667	1.6
	Body	Towards Phantom with earphone	high	1.11	1.6
WCDMA BAND V	Head	Right head, Touch cheek	high	0.737	1.6
	Body	Towards Ground	low	0.836	1.6
Wi-Fi	Head	Left head, Touch cheek	low	0.192	1.6
	Body	Towards Ground	low	0.162	1.6

Evaluation for Simultaneous SAR

TEST MODE	Wi-Fi		Main Mode SAR(1g) (W/kg)	Wi-Fi SAR(1g) (W/kg)	Summation SAR(1g) (W/kg)	SAR -to-peak-location Separation Ratio	Simultaneous Measurement Required?
GSM850	802.11b	Head	0.596	0.192	<1.6	/	No
		Body	0.731	0.162	<1.6	/	No
GSM1900	802.11b	Head	0.294	0.192	<1.6	/	No
		Body	0.472	0.162	<1.6	/	No

WCDMA BAND II	802.11b	Head	0.404	0.192	<1.6	/	No
		Body	0.825	0.162	<1.6	/	No
WCDMA BAND IV	802.11b	Head	0.667	0.192	<1.6	/	No
		Body	1.11	0.162	<1.6	/	No
WCDMA BAND V	802.11b	Head	0.737	0.192	<1.6	/	No
		Body	0.836	0.162	<1.6	/	No

General Judgment: PASS

7. Test Equipments Utilized

No.	Name	Type	S/N	Calibration Date	Valid Period
01	Network analyzer	Agilent E5071E	MY46109425	Oct 14th, 2012	One year
02	Dielectric Probe Kit	Agilent 85070E	MY44300524	No Calibration Requested	
03	Power meter	Agilent E4418B	MY50000852	Oct 14th, 2012	One year
04	Power sensor	Agilent E9200B	MY50300011	Oct 14th, 2012	One year
05	Signal Generator	Agilent N5182A	MY49071248	Oct 14th, 2012	One year
06	Amplifier	ZHL-42W	QA1020005	No Calibration Requested	
07	BTS	CMU200	121464	Oct 14th, 2012	One year
08	E-field Probe	ES3DV3	3297	Apr 10th, 2012	One year
09	E-field Probe	ES3DV3	3241	Aug 31 th , 2012	One year
10	DAE	DAE4	1327	Apr 11th, 2012	One year
11	DAE	DAE4	1226	Sep 03 th , 2012	One year
12	Validation Kit 835MHz	D835V2	4d120	June 13th, 2012	One year
13	Validation Kit 1750MHz	D1750V2	1034	Aug 28th, 2012	One year
14	Validation Kit 1900MHz	D1900V2	5d155	April 03th, 2012	One year
15	Validation Kit 2450MHz	D2450V2	735	June 15th, 2012	One year

8. Measurement Uncertainty

No.	source	type	Uncertainty Value (%)	Probability Distribution	k	c_i	Standard uncertainty $i u$ (%)	Degree of freedom V_{eff} or v_i
1	-System repetivity	A	0.3	N	1	1	0.5	9
Measurement system								
2	— probe calibration	B	7	N	2	1	3.5	∞
3	— axial isotropy of the probe	B	4.7	R	$\sqrt{3}$	0.5	4.3	∞
4	— Hemispherical isotropy of the probe	B	9.4	R	$\sqrt{3}$	1	0	∞
5	— probe linearity	B	4.7	R	$\sqrt{3}$	1	2.7	∞
6	— System detection limits	B	1.0	R	$\sqrt{3}$	1	0.6	∞
7	— boundary effect	B	11.0	R	$\sqrt{3}$	1	6.4	∞
8	— response time	B	0	R	$\sqrt{3}$	1	0	∞
9	— noise	B	0	N	$\sqrt{3}$	1	0	∞
10	— integration time	B	5.0	R	$\sqrt{3}$	1	2.9	∞
11	— readout Electronics	B	0.4	R	$\sqrt{3}$	1	0.2	∞
12	— phantom	B	2.9	R	$\sqrt{3}$	1	1.7	∞
13	— Probe Positioning with respect to Phantom Shell	B	2.9	R	$\sqrt{3}$	1	1.7	∞
14	— Device Holder Uncertainty	A	4.9	R	1	1	4.9	5
Setup								
15	-liquid density	B	0	R	$\sqrt{3}$	1	0	∞
16	-liquid conductivity (deviation from target)	B	5.0	R	$\sqrt{3}$	0.5	2.9	∞
17	-liquid conductivity (measurement uncertainty)	A	0.23	N	1	1	0.23	9

18	-liquid permittivity (deviation from target)	B	5.0	R	$\sqrt{3}$	0.5	2.9	∞
19	-liquid permittivity (measurement uncertainty)	A	0.46	N	1	1	0.46	9
20	– Probe Positioner Mechanical Tolerance	B	5.0	R	$\sqrt{3}$	1	2.9	∞
21	– Environment	B	3.0	R	$\sqrt{3}$	1	1.7	∞
22	– Extrapolation, interpolation and Integration Algorithms for Max. SAR Evaluation	B	3.9	R	$\sqrt{3}$	1	2.3	∞
Combined standard uncertainty		$u_c = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$					12.2	88.7
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$		N	K=2		24.4	

ANNEX A: Detailed Test Results

Annex A.1 System Check Results

System check 835head

Date/Time: 15/10/2012 9:02:04

Communication System: CW; Communication System Band: D835 (835.0 MHz);

Frequency: 835 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 835$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 42.943$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(6.36, 6.36, 6.36); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM1; Type: SAM; Serial: TP1576
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

835head/d=15mm, Pin=250 mW/Area Scan (61x121x1): Measurement grid:

$dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 2.73 mW/g

835head/d=15mm, Pin=250 mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

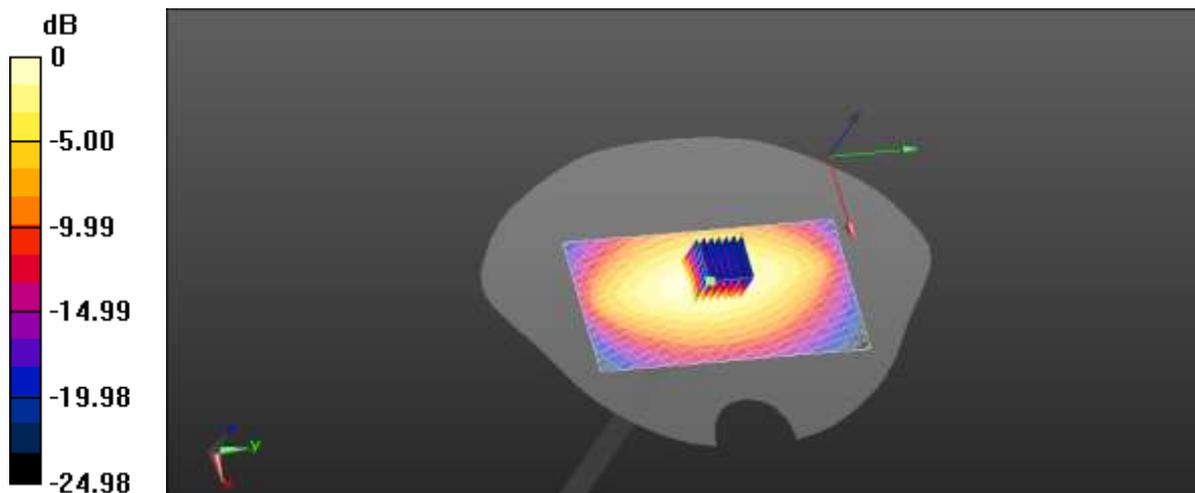
Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 54.880 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 3.442 mW/g

SAR(1 g) = 2.38 mW/g; SAR(10 g) = 1.59 mW/g

Maximum value of SAR (measured) = 2.75 mW/g



0 dB = 2.73 mW/g = 8.71 dB mW/g

System check 835head

Date/Time: 19/10/2012 10:43:00

Communication System: CW; Communication System Band: D835 (835.0 MHz);

Frequency: 835 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.91 \text{ mho/m}$; $\epsilon_r = 43.053$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(6.36, 6.36, 6.36); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM1; Type: SAM; Serial: TP1576
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

835head/d=15mm, Pin=250 mW/Area Scan (61x121x1): Measurement grid:

$dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 2.73 mW/g

835head/d=15mm, Pin=250 mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

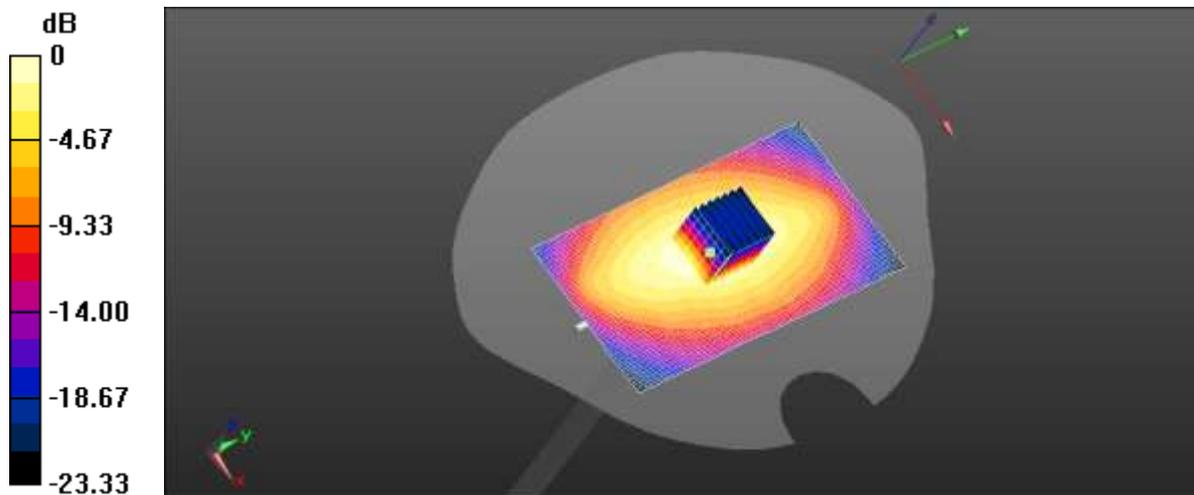
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 56.834 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.372 mW/g

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

Maximum value of SAR (measured) = 2.76 mW/g



0 dB = 2.73 mW/g = 8.73 dB mW/g

System check 835body

Date/Time: 16/10/2012 08:55:49

Communication System: CW; Communication System Band: D835 (835.0 MHz);
 Frequency: 835 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 835$ MHz; $\sigma = 0.968$ mho/m; $\epsilon_r = 54.655$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(6.25, 6.25, 6.25); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

835body/d=15mm, Pin=250 mW/Area Scan (61x121x1): Measurement grid:
 dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.71 mW/g

835body/d=15mm, Pin=250 mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

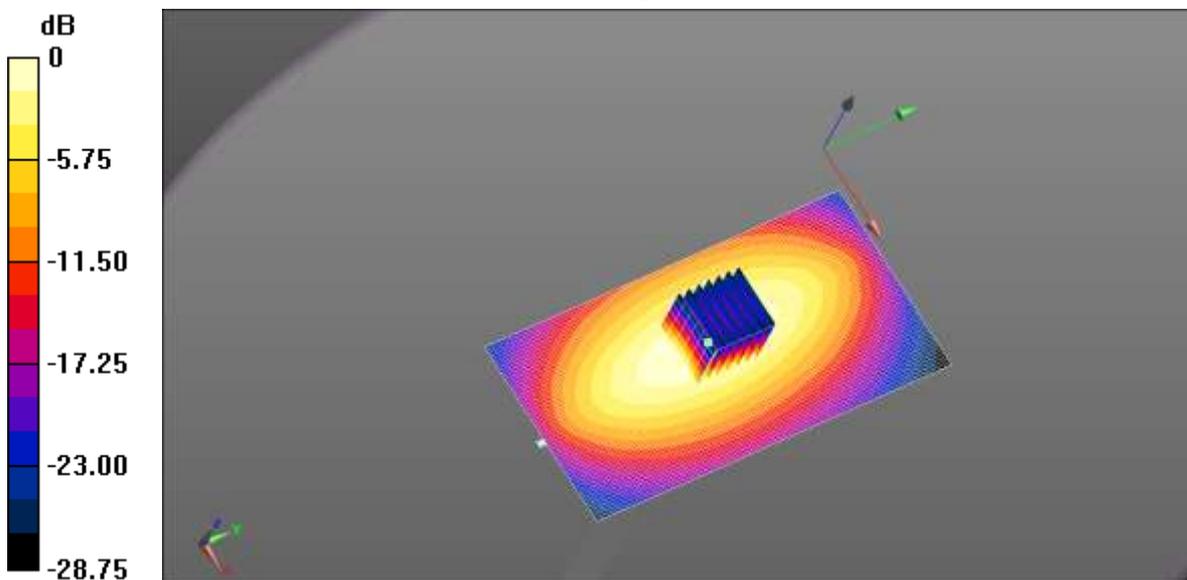
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.040 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.502 mW/g

SAR(1 g) = 2.35 mW/g; SAR(10 g) = 1.54 mW/g

Maximum value of SAR (measured) = 2.77 mW/g



0 dB = 2.71 mW/g = 8.67 dB mW/g

System check 835body

Date/Time: 17/10/2012 09:27:34

Communication System: CW; Communication System Band: D835 (835.0 MHz);

Frequency: 835 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 835$ MHz; $\sigma = 0.947$ mho/m; $\epsilon_r = 54.255$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(6.25, 6.25, 6.25); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

835body/d=15mm, Pin=250 mW/Area Scan (61x121x1): Measurement grid:

dx=15mm, dy=15mm

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

835body/d=15mm, Pin=250 mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

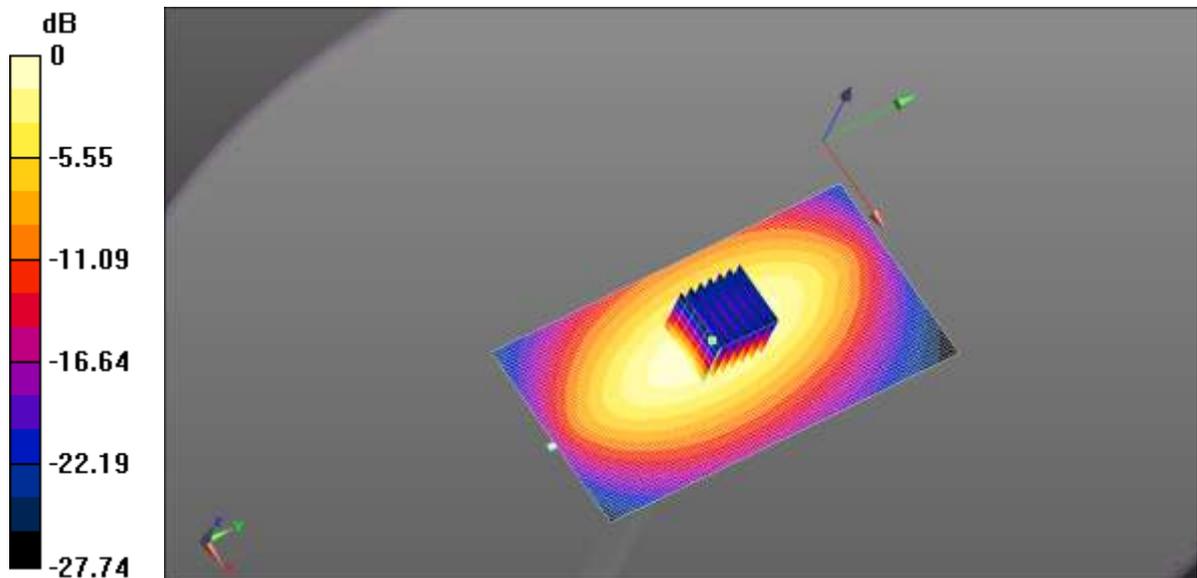
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 57.474 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 3.776 mW/g

SAR(1 g) = 2.54 mW/g; SAR(10 g) = 1.66 mW/g

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



0 dB = 2.92 mW/g = 9.32 dB mW/g

System check 1750head

Date/Time: 18/10/2012 8:27:34

Communication System: CW; Communication System Band: D1750 (1750.0 MHz);

Frequency: 1750 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 39.786$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(5.73, 5.73, 5.73); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM2; Type: SAM; Serial: TP-1575
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

1750head/d=10mm, Pin=250 mW/Area Scan (41x61x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 11.2 mW/g

1750head/d=10mm, Pin=250 mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

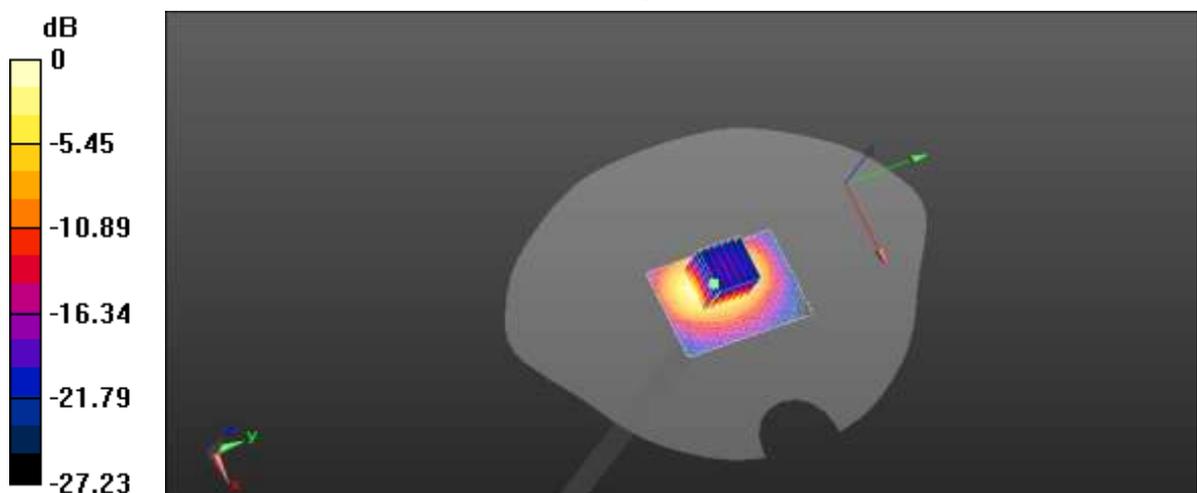
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 71.137 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 15.919 mW/g

SAR(1 g) = 8.61 mW/g; SAR(10 g) = 4.48 mW/g

Maximum value of SAR (measured) = 11.0 mW/g



0 dB = 11.2 mW/g = 20.99 dB mW/g

System check 1750head

Date/Time: 19/10/2012 8:19:15

Communication System: CW; Communication System Band: D1750 (1750.0 MHz);

Frequency: 1750 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 39.456$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(5.73, 5.73, 5.73); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM2; Type: SAM; Serial: TP-1575
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

1750head/d=10mm, Pin=250 mW/Area Scan (41x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 11.1 mW/g

1750head/d=10mm, Pin=250 mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

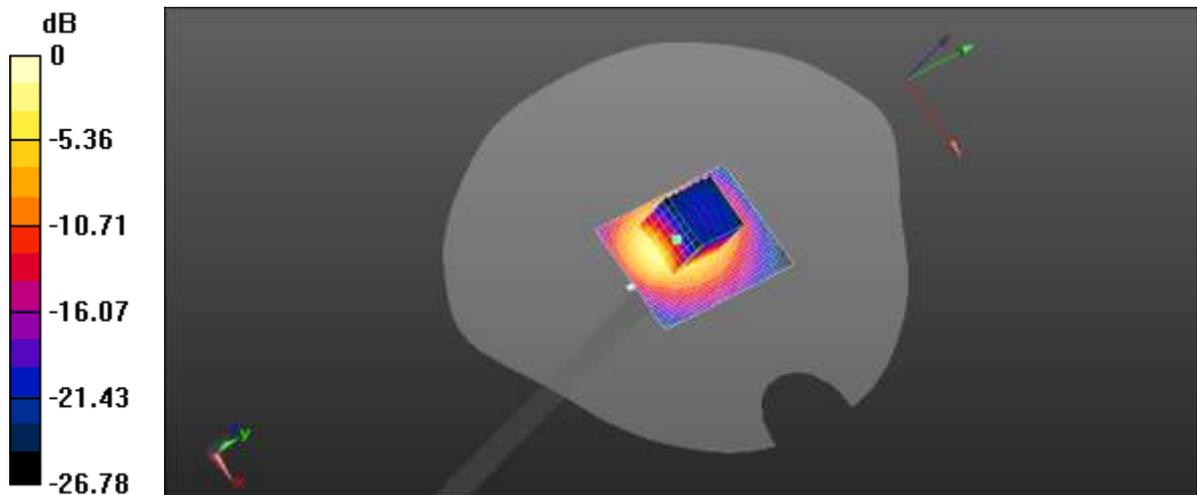
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 77.609 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 15.979 mW/g

SAR(1 g) = 8.61 mW/g; SAR(10 g) = 4.47 mW/g

Maximum value of SAR (measured) = 11.0 mW/g



0 dB = 11.1 mW/g = 20.90 dB mW/g

System check 1750body

Date/Time: 17/10/2012 16:30:49

Communication System: CW; Communication System Band: D1750 (1750.0 MHz);
 Frequency: 1750 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.493$ mho/m; $\epsilon_r = 52.458$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.05, 5.05, 5.05); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

1750body/d=10mm, Pin=250 mW, dist=3.0mm (ES-Probe)/Area Scan (41x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 12.0 mW/g

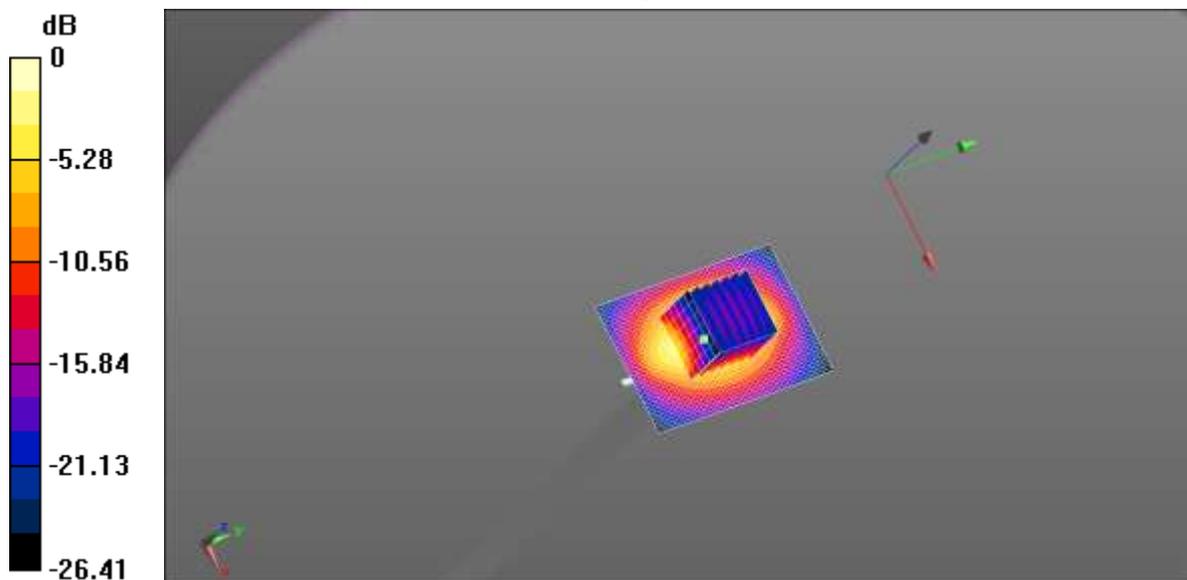
1750body/d=10mm, Pin=250 mW, dist=3.0mm (ES-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 90.948 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 16.391 mW/g

SAR(1 g) = 9.35 mW/g; SAR(10 g) = 4.91 mW/g

Maximum value of SAR (measured) = 11.8 mW/g



0 dB = 12.0 mW/g = 21.58 dB mW/g

System check 1750body

Date/Time: 18/10/2012 07:54:35

Communication System: CW; Communication System Band: D1750 (1750.0 MHz);

Frequency: 1750 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.533$ mho/m; $\epsilon_r = 52.658$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.05, 5.05, 5.05); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

1750body/d=10mm, Pin=250 mW, dist=3.0mm (ES-Probe)/Area Scan (41x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 11.9 mW/g

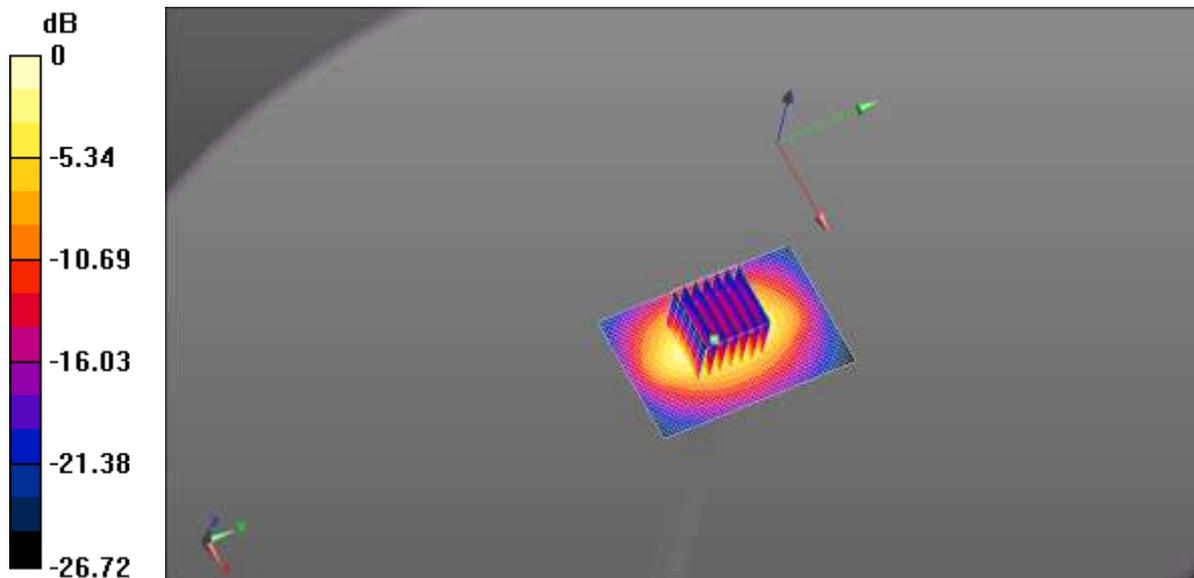
1750body/d=10mm, Pin=250 mW, dist=3.0mm (ES-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 89.305 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 15.985 mW/g

SAR(1 g) = 9.11 mW/g; SAR(10 g) = 4.79 mW/g

Maximum value of SAR (measured) = 11.5 mW/g



0 dB = 11.9 mW/g = 21.51 dB mW/g

System check 1900head

Date/Time: 12/10/2012 11:43:36

Communication System: CW; Communication System Band: D1900 (1900.0 MHz);

Frequency: 1900 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.413$ mho/m; $\epsilon_r = 39.548$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.12, 5.12, 5.12); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: SAM 1; Type: SAM; Serial: TP:1702
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

1900head/d=10mm, Pin=250 mW/Area Scan (41x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 13.6 mW/g

1900head/d=10mm, Pin=250 mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

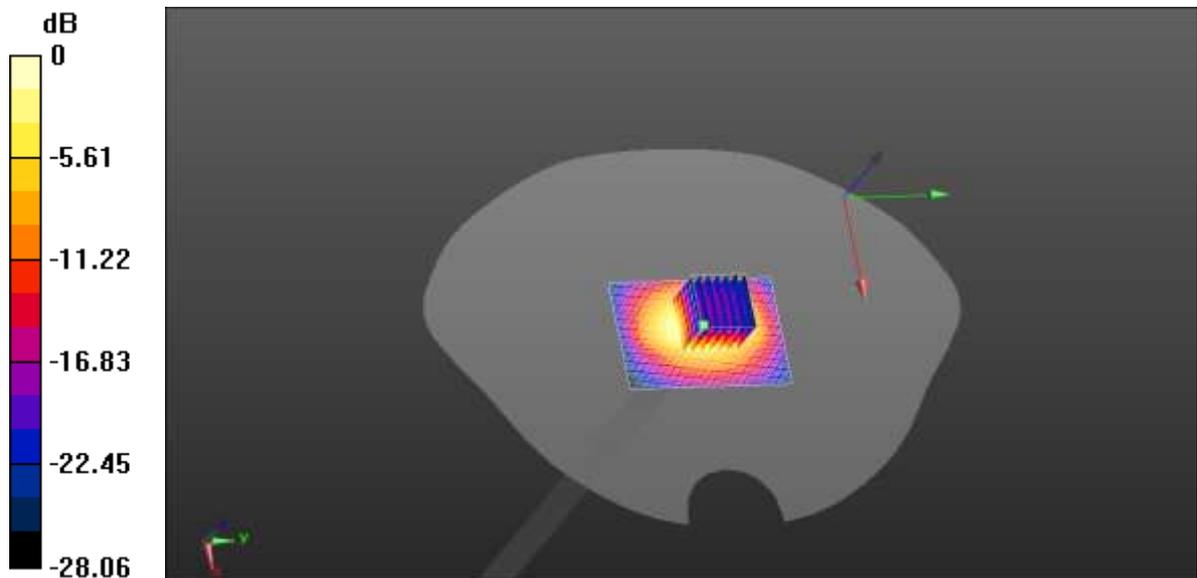
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 95.846 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 19.695 mW/g

SAR(1 g) = 10.4 mW/g; SAR(10 g) = 5.3 mW/g

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



0 dB = 13.6 mW/g = 22.67 dB mW/g

System check 1900head

Date/Time: 15/10/2012 08:31:56

Communication System: CW; Communication System Band: D1900 (1900.0 MHz);

Frequency: 1900 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.381$ mho/m; $\epsilon_r = 39.268$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.12, 5.12, 5.12); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: SAM 1; Type: SAM; Serial: TP:1702
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

1900head/d=10mm, Pin=250 mW/Area Scan (41x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 13.0 mW/g

1900head/d=10mm, Pin=250 mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

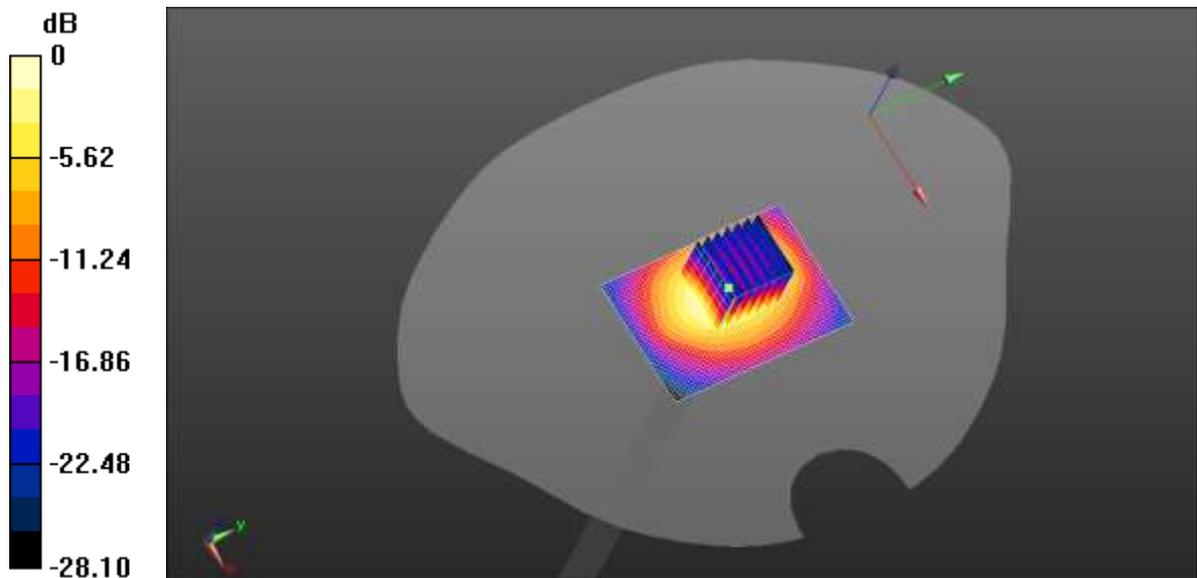
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 89.986 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 18.032 mW/g

SAR(1 g) = 9.68 mW/g; SAR(10 g) = 5.05 mW/g

Maximum value of SAR (measured) = 12.3 mW/g



0 dB = 13.0 mW/g = 22.27 dB mW/g

System check 1900body

Date/Time: 09/10/2012 09:11:22

Communication System: CW; Communication System Band: D1900 (1900.0 MHz);

Frequency: 1900 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.492$ mho/m; $\epsilon_r = 52.557$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

1900body/d=10mm, Pin=250 mW/Area Scan (41x61x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 14.6 mW/g

1900body/d=10mm, Pin=250 mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

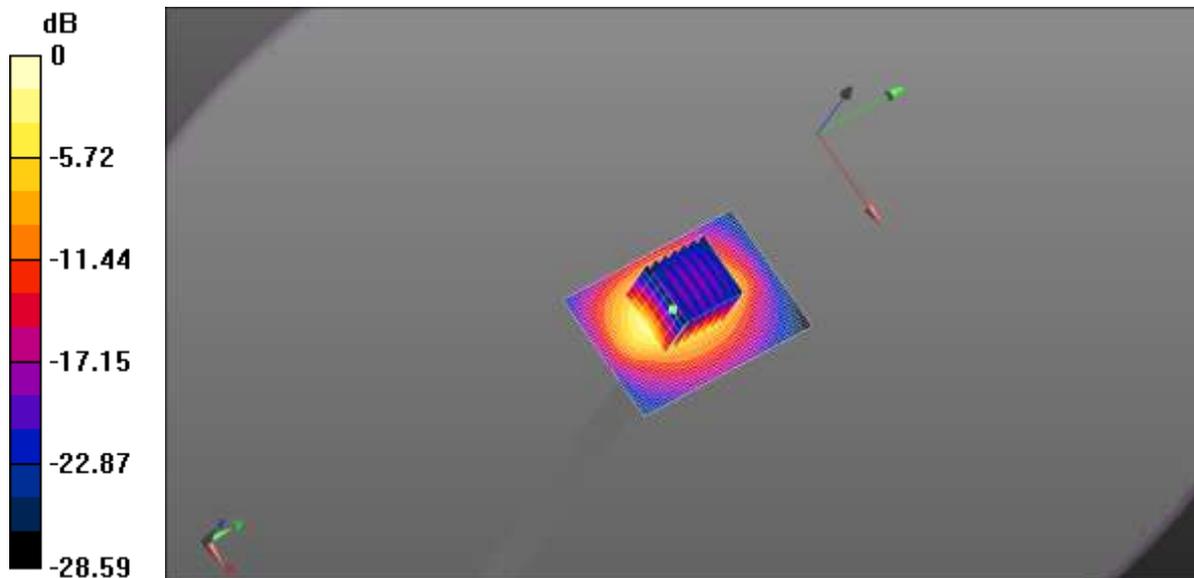
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 94.550 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 19.443 mW/g

SAR(1 g) = 10.9 mW/g; SAR(10 g) = 5.61 mW/g

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



0 dB = 14.6 mW/g = 23.26 dB mW/g

System check 1900body

Date/Time: 10/10/2012 10:05:04

Communication System: CW; Communication System Band: D1900 (1900.0 MHz);

Frequency: 1900 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.525$ mho/m; $\epsilon_r = 52.357$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

1900body/d=10mm, Pin=250 mW/Area Scan (41x61x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 14.0 mW/g

1900body/d=10mm, Pin=250 mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

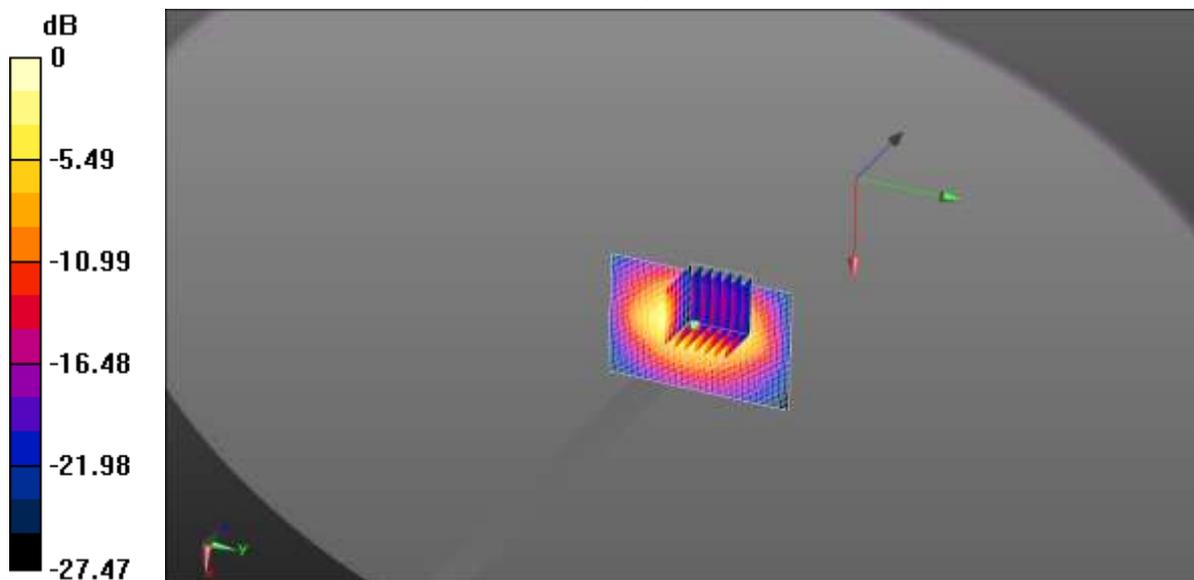
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 95.821 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 19.213 mW/g

SAR(1 g) = 10.8 mW/g; SAR(10 g) = 5.54 mW/g

Maximum value of SAR (measured) = 13.7 mW/g



0 dB = 14.0 mW/g = 22.92 dB mW/g

System check 1900body

Date/Time: 11/10/2012 08:59:12

Communication System: CW; Communication System Band: D1900 (1900.0 MHz);

Frequency: 1900 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.515$ mho/m; $\epsilon_r = 52.537$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

1900body/d=10mm, Pin=250 mW/Area Scan (41x61x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 14.0 mW/g

1900body/d=10mm, Pin=250 mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

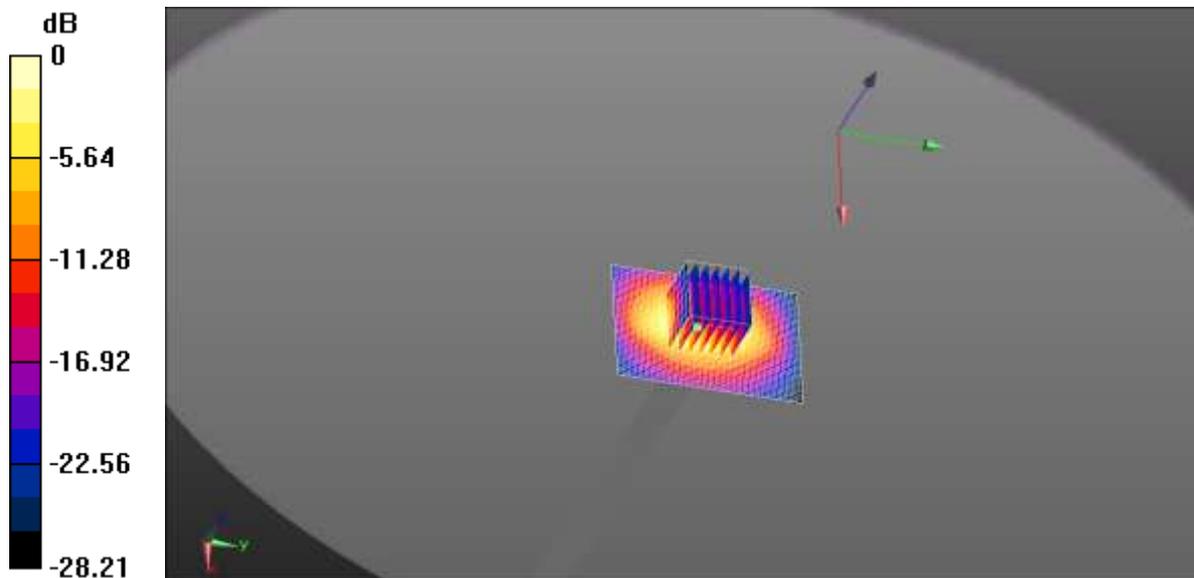
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 94.428 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 18.792 mW/g

SAR(1 g) = 10.5 mW/g; SAR(10 g) = 5.43 mW/g

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



0 dB = 14.0 mW/g = 22.93 dB mW/g

System check 2450head

Date/Time: 20/10/2012 12:43:24

Communication System: CW; Communication System Band: D2450 (2450.0 MHz);
 Frequency: 2450 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.789$ mho/m; $\epsilon_r = 37.941$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(4.59, 4.59, 4.59); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM2; Type: SAM; Serial: TP-1575
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

2450head/d=10mm, Pin=250 mW/Area Scan (41x61x1): Measurement grid:
 dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 19.7 mW/g

2450head/d=10mm, Pin=250 mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

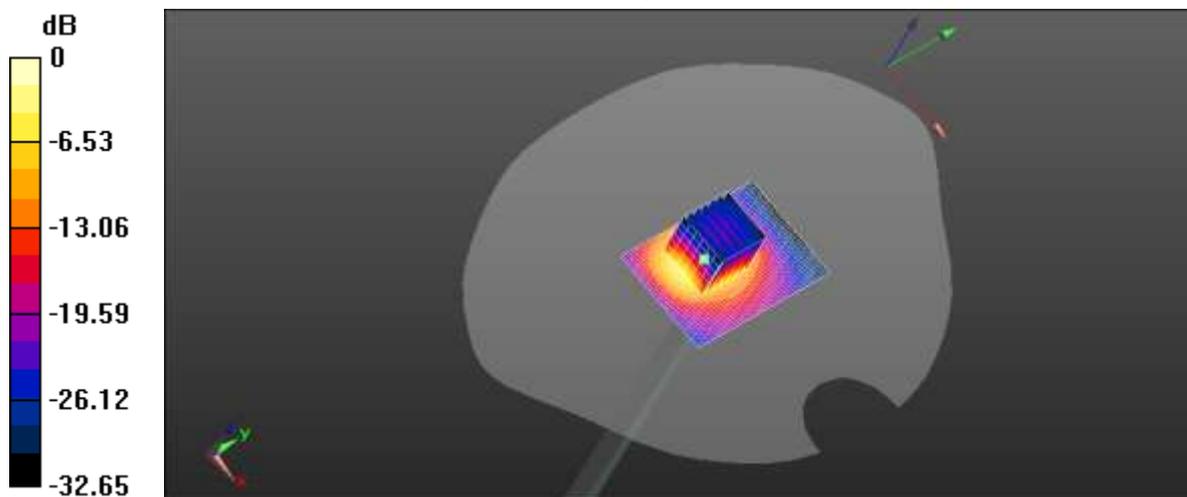
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 76.725 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 27.333 mW/g

SAR(1 g) = 13.1 mW/g; SAR(10 g) = 6 mW/g

Maximum value of SAR (measured) = 17.4 mW/g



0 dB = 19.7 mW/g = 25.88 dB mW/g

System check 2450body

Date/Time: 21/10/2012 09:57:44

Communication System: CW; Communication System Band: D2450 (2450.0 MHz);

Frequency: 2450 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.92$ mho/m; $\epsilon_r = 51.85$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.2, 4.2, 4.2); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

2450body/d=10mm, Pin=250 mW/Area Scan (41x61x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 18.9 mW/g

2450body/d=10mm, Pin=250 mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

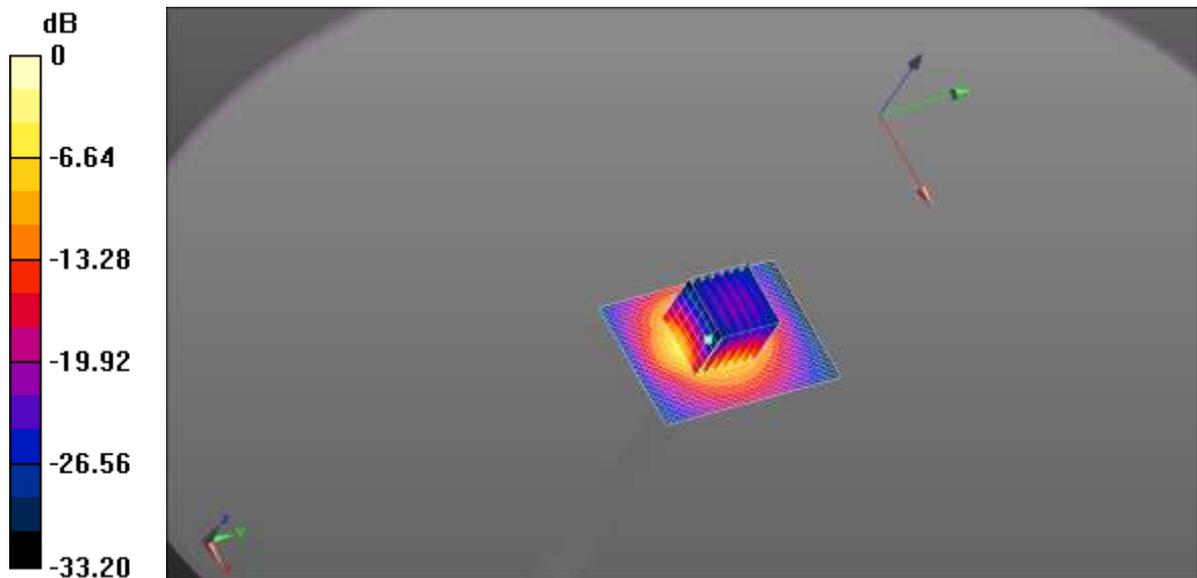
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 91.434 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 29.320 mW/g

SAR(1 g) = 13.5 mW/g; SAR(10 g) = 6.11 mW/g

Maximum value of SAR (measured) = 17.7 mW/g



0 dB = 18.9 mW/g = 25.51 dB mW/g

Annex A.2 Graph Result

GSM850 left touch mid

Date/Time: 15/10/2012 18:55:01

Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 837$ MHz; $\sigma = 0.914$ mho/m; $\epsilon_r = 43.026$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(6.36, 6.36, 6.36); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM1; Type: SAM; Serial: TP1576
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

left/touch mid/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.555 mW/g

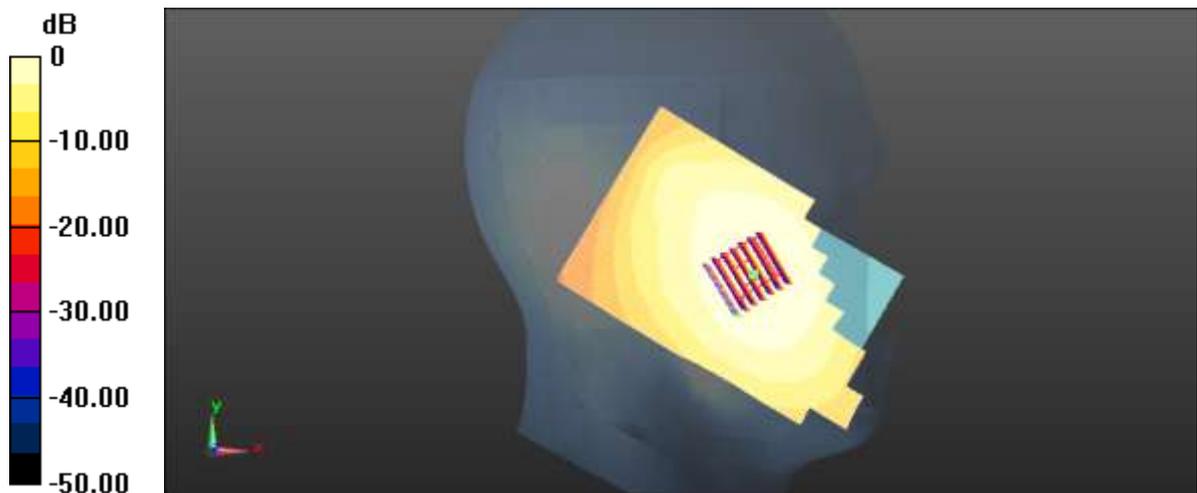
left/touch mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.397 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.703 mW/g

SAR(1 g) = 0.543 mW/g; SAR(10 g) = 0.409 mW/g

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



0 dB = 0.555 mW/g = -5.11 dB mW/g

GSM850 left tilt mid

Date/Time: 15/10/2012 19:34:00

Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 837$ MHz; $\sigma = 0.914$ mho/m; $\epsilon_r = 43.026$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(6.36, 6.36, 6.36); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM1; Type: SAM; Serial: TP1576
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

left/tilt mid/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.379 mW/g

left/tilt mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.638 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.423 mW/g

SAR(1 g) = 0.359 mW/g; SAR(10 g) = 0.286 mW/g

Maximum value of SAR (measured) = 0.381 mW/g

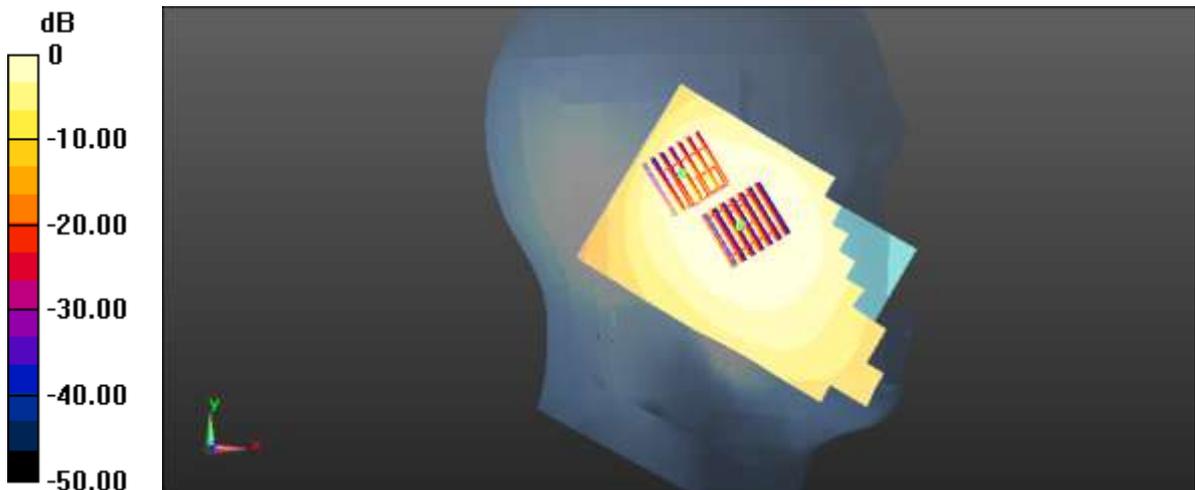
left/tilt mid/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.638 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.544 mW/g

SAR(1 g) = 0.298 mW/g; SAR(10 g) = 0.210 mW/g

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



0 dB = 0.379 mW/g = -8.43 dB mW/g

GSM850 right touch mid

Date/Time: 15/10/2012 20:21:56

Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 837$ MHz; $\sigma = 0.914$ mho/m; $\epsilon_r = 43.026$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(6.36, 6.36, 6.36); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM1; Type: SAM; Serial: TP1576
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

right/touch mid/Area Scan (91x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.630 mW/g

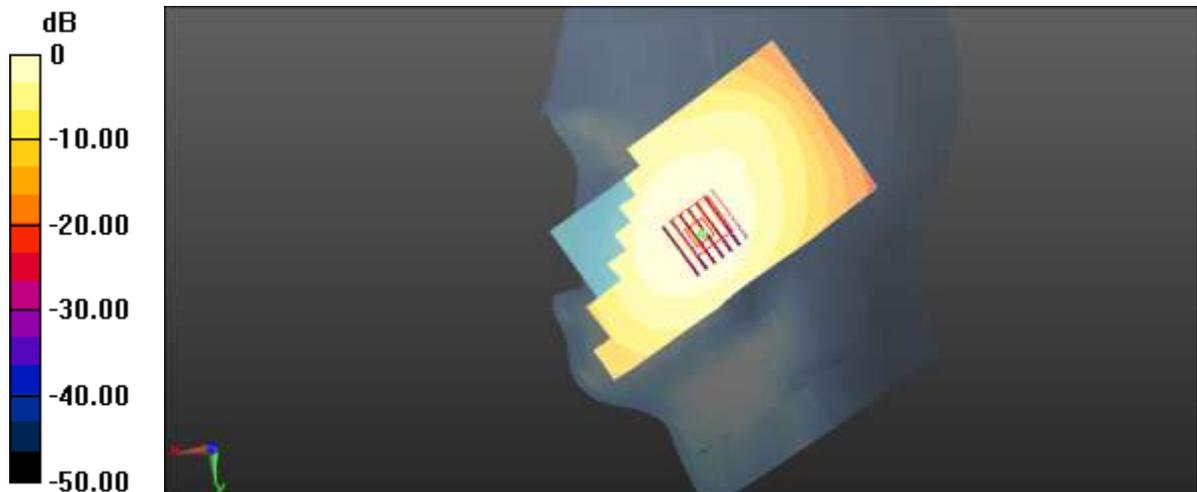
right/touch mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.908 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.756 mW/g

SAR(1 g) = 0.587 mW/g; SAR(10 g) = 0.442 mW/g

Maximum value of SAR (measured) = 0.623 mW/g



0 dB = 0.630 mW/g = -4.01 dB mW/g

GSM850 right tilt mid

Date/Time: 15/10/2012 20:55:58

Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 837$ MHz; $\sigma = 0.914$ mho/m; $\epsilon_r = 43.026$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(6.36, 6.36, 6.36); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM1; Type: SAM; Serial: TP1576
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

right/tilt mid/Area Scan (91x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.383 mW/g

right/tilt mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.927 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.425 mW/g

SAR(1 g) = 0.361 mW/g; SAR(10 g) = 0.287 mW/g

Maximum value of SAR (measured) = 0.379 mW/g

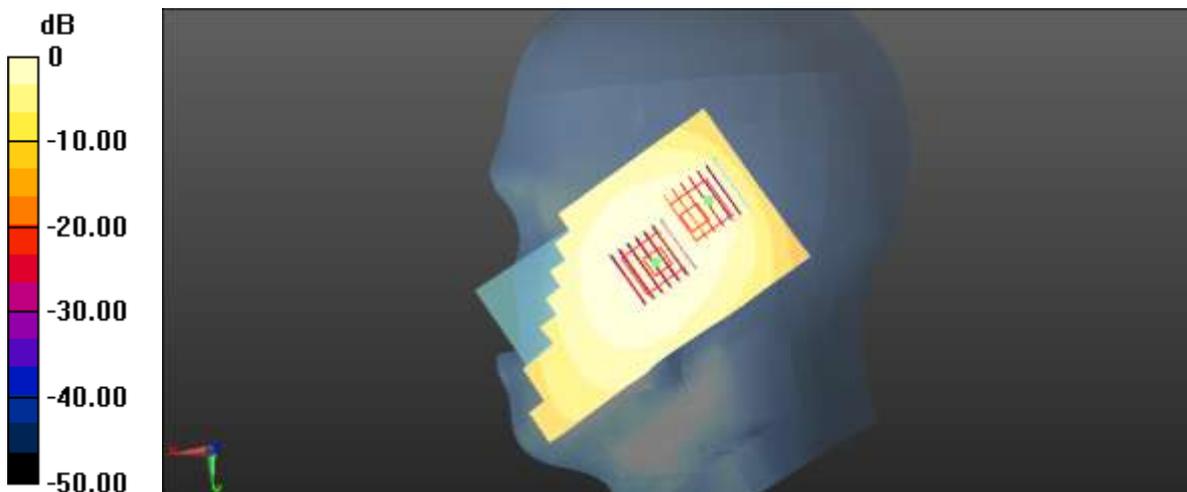
right/tilt mid/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.927 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.392 mW/g

SAR(1 g) = 0.256 mW/g; SAR(10 g) = 0.182 mW/g

Maximum value of SAR (measured) = 0.293 mW/g



0 dB = 0.383 mW/g = -8.34 dB mW/g

GSM850 right touch low

Date/Time: 15/10/2012 21:42:24

Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 824.2 MHz; Communication System PAR: 9.191 dB

Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.899$ mho/m; $\epsilon_r = 43.205$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(6.36, 6.36, 6.36); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM1; Type: SAM; Serial: TP1576
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

right/touch low/Area Scan (91x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.652 mW/g

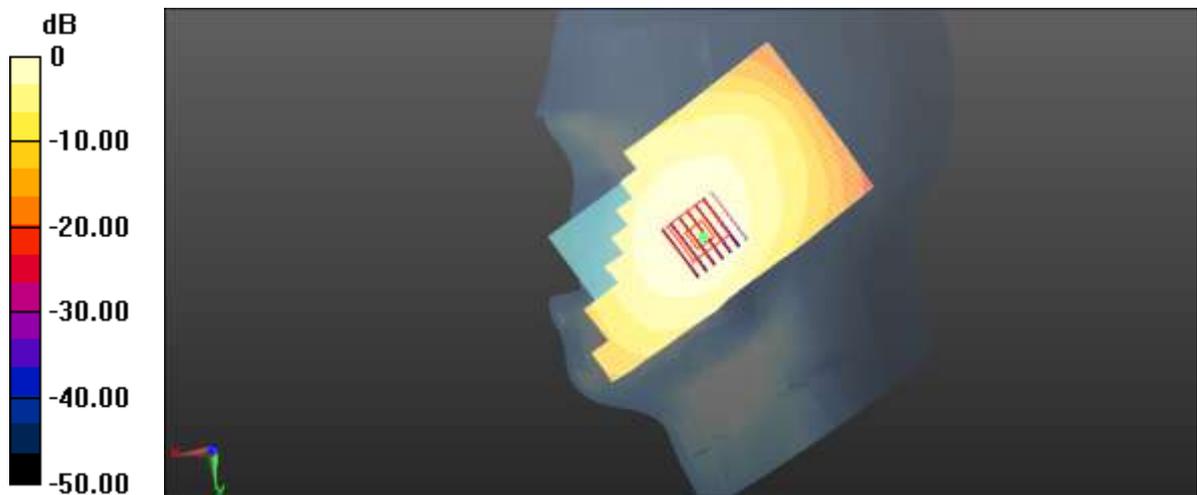
right/touch low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.201 V/m; Power Drift = -0.03 dB

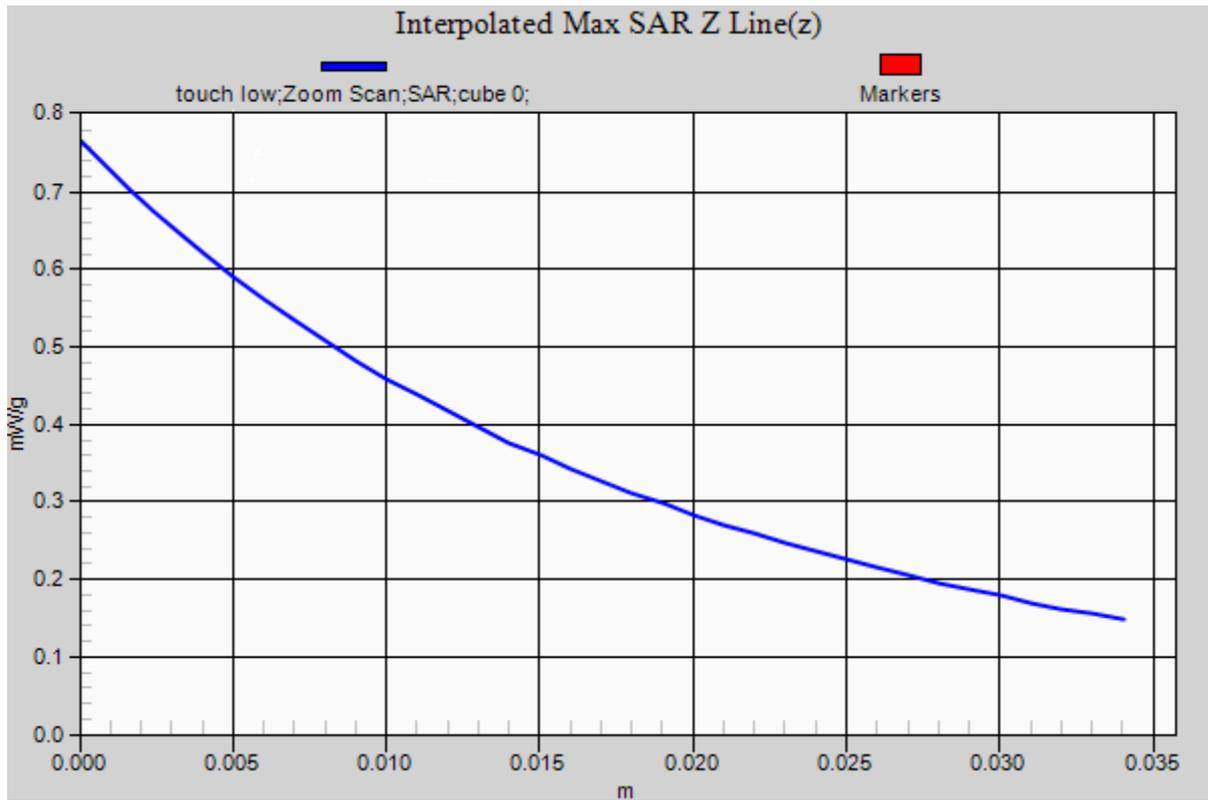
Peak SAR (extrapolated) = 0.766 mW/g

SAR(1 g) = 0.596 mW/g; SAR(10 g) = 0.445 mW/g

Maximum value of SAR (measured) = 0.627 mW/g



0 dB = 0.652 mW/g = -3.71 dB mW/g



GSM850 right touch high

Date/Time: 15/10/2012 22:20:25

Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 848.6 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 849$ MHz; $\sigma = 0.924$ mho/m; $\epsilon_r = 42.848$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(6.36, 6.36, 6.36); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM1; Type: SAM; Serial: TP1576
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

right/touch high/Area Scan (91x161x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.644 mW/g

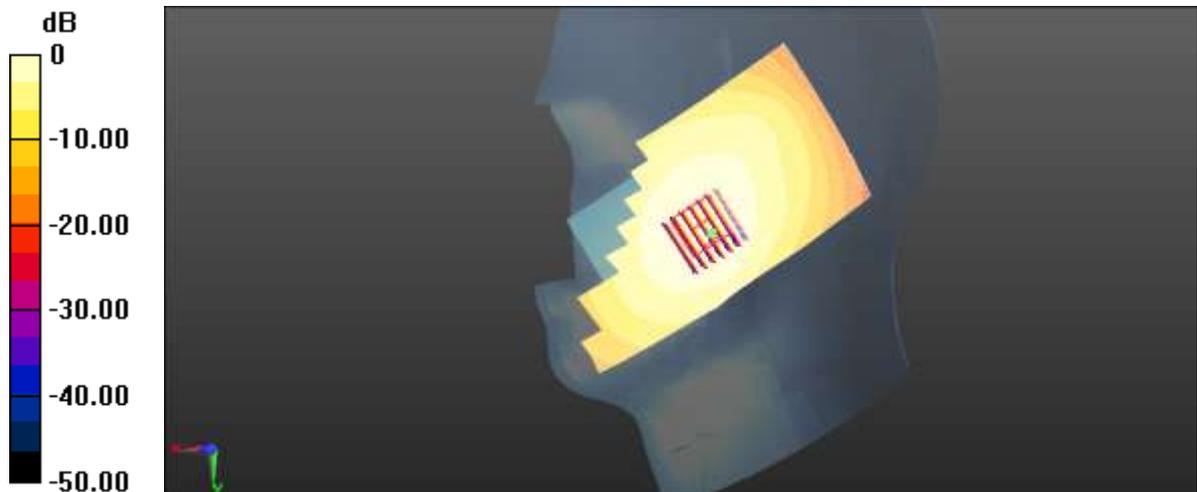
right/touch high/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.421 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.783 mW/g

SAR(1 g) = 0.586 mW/g; SAR(10 g) = 0.437 mW/g

Maximum value of SAR (measured) = 0.617 mW/g



0 dB = 0.644 mW/g = -3.83 dB mW/g

GSM850 towards phantom mid

Date/Time: 16/10/2012 10:49:42

Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 837$ MHz; $\sigma = 0.951$ mho/m; $\epsilon_r = 54.241$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(6.25, 6.25, 6.25); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards phantom mid/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.558 mW/g

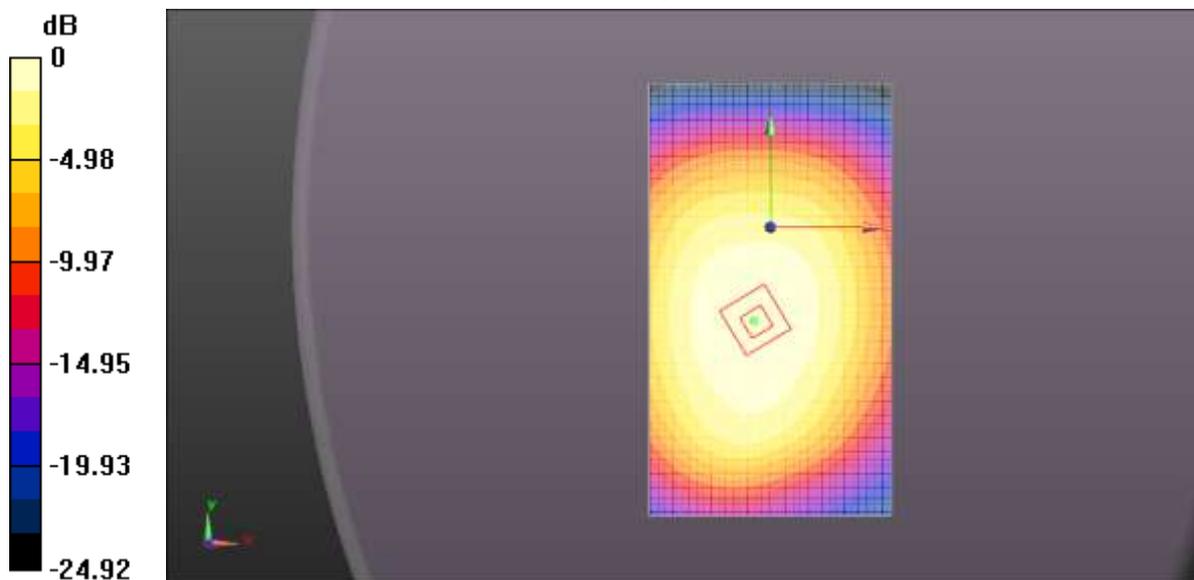
body/towards phantom mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.608 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.646 mW/g

SAR(1 g) = 0.531 mW/g; SAR(10 g) = 0.409 mW/g

Maximum value of SAR (measured) = 0.554 mW/g



0 dB = 0.558 mW/g = -5.07 dB mW/g

GSM850 towards ground mid

Date/Time: 16/10/2012 11:31:19

Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 837$ MHz; $\sigma = 0.951$ mho/m; $\epsilon_r = 54.241$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(6.25, 6.25, 6.25); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards ground mid/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.708 mW/g

body/towards ground mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.717 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.844 mW/g

SAR(1 g) = 0.680 mW/g; SAR(10 g) = 0.512 mW/g

Maximum value of SAR (measured) = 0.711 mW/g

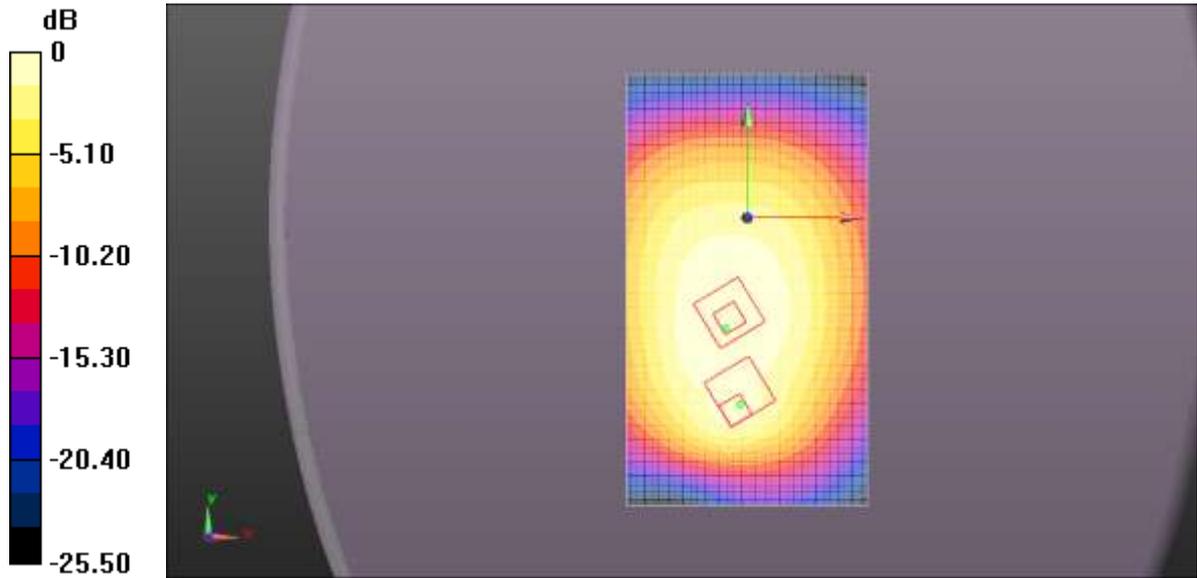
body/towards ground mid/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.717 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.923 mW/g

SAR(1 g) = 0.519 mW/g; SAR(10 g) = 0.342 mW/g

Maximum value of SAR (measured) = 0.583 mW/g



0 dB = 0.708 mW/g = -3.00 dB mW/g

GSM850 front mid

Date/Time: 16/10/2012 13:52:10

Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 837$ MHz; $\sigma = 0.951$ mho/m; $\epsilon_r = 54.241$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(6.25, 6.25, 6.25); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/front mid/Area Scan (71x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.131 mW/g

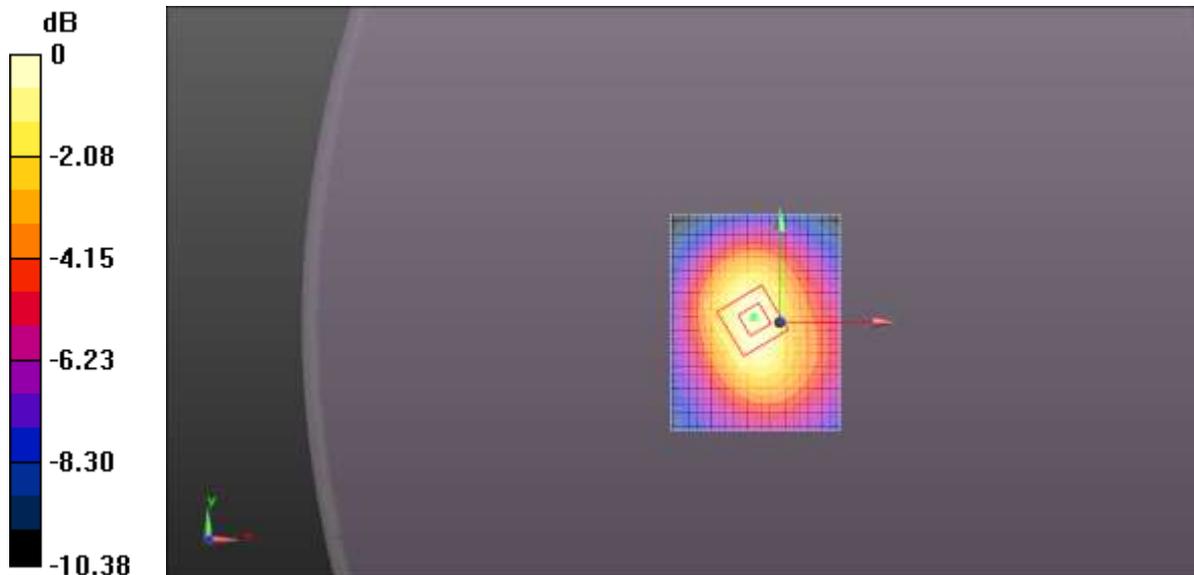
body/front mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.750 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.270 mW/g

SAR(1 g) = 0.124 mW/g; SAR(10 g) = 0.067 mW/g

Maximum value of SAR (measured) = 0.134 mW/g



0 dB = 0.131 mW/g = -17.63 dB mW/g

GSM850 left side mid

Date/Time: 16/10/2012 12:36:23

Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 837$ MHz; $\sigma = 0.951$ mho/m; $\epsilon_r = 54.241$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(6.25, 6.25, 6.25); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body2/left side mid/Area Scan (71x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.511 mW/g

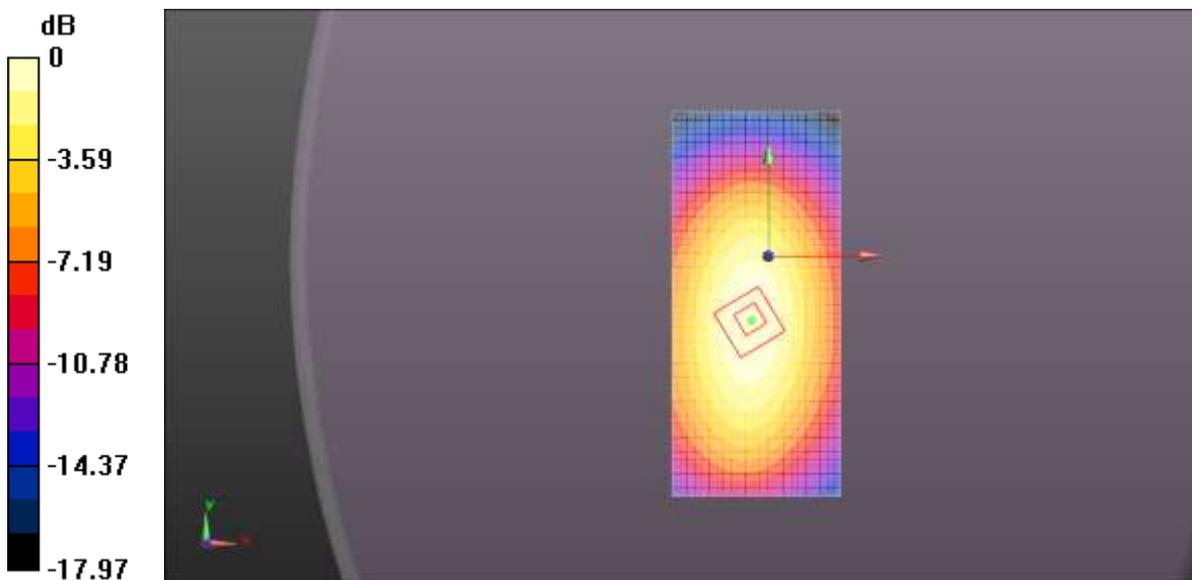
body2/left side mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.508 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.686 mW/g

SAR(1 g) = 0.481 mW/g; SAR(10 g) = 0.327 mW/g

Maximum value of SAR (measured) = 0.520 mW/g



0 dB = 0.511 mW/g = -5.83 dB mW/g

GSM850 right side mid

Date/Time: 16/10/2012 13:08:02

Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 837$ MHz; $\sigma = 0.951$ mho/m; $\epsilon_r = 54.241$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(6.25, 6.25, 6.25); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body2/right side mid/Area Scan (71x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.578 mW/g

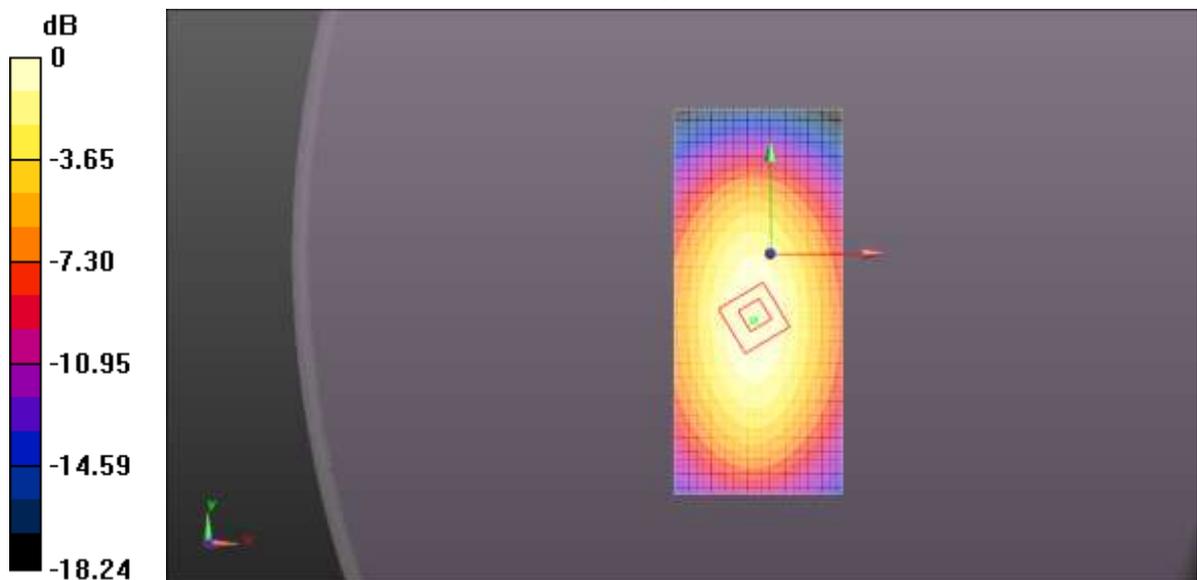
body2/right side mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.761 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.760 mW/g

SAR(1 g) = 0.537 mW/g; SAR(10 g) = 0.368 mW/g

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



0 dB = 0.578 mW/g = -4.76 dB mW/g

GSM850 towards ground low

Date/Time: 16/10/2012 14:23:12

Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 824.2 MHz; Communication System PAR: 9.191 dB

Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.933$ mho/m; $\epsilon_r = 54.311$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(6.25, 6.25, 6.25); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards ground low/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.762 mW/g

body/towards ground low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.879 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.909 mW/g

SAR(1 g) = 0.725 mW/g; SAR(10 g) = 0.546 mW/g

Maximum value of SAR (measured) = 0.761 mW/g

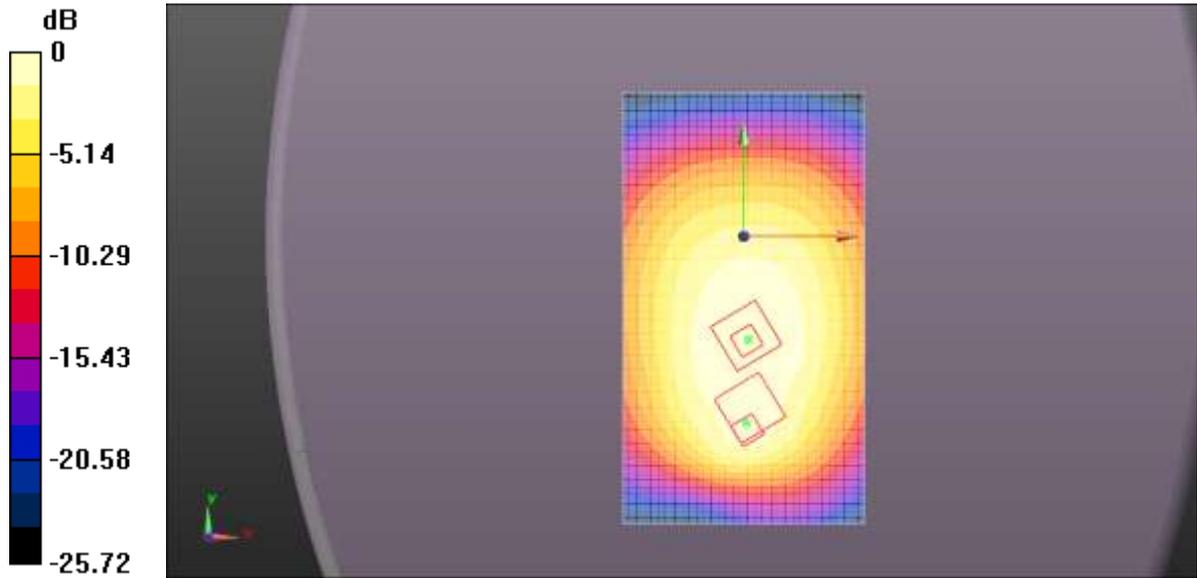
body/towards ground low/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.879 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.057 mW/g

SAR(1 g) = 0.591 mW/g; SAR(10 g) = 0.399 mW/g

Maximum value of SAR (measured) = 0.685 mW/g



0 dB = 0.762 mW/g = -2.36 dB mW/g

GSM850 towards ground high

Date/Time: 16/10/2012 15:15:12

Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 848.6 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 849$ MHz; $\sigma = 0.967$ mho/m; $\epsilon_r = 54.15$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASYS Configuration:

- Probe: ES3DV3 - SN3241; ConvF(6.25, 6.25, 6.25); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards ground high/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.701 mW/g

body/towards ground high/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.145 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.834 mW/g

SAR(1 g) = 0.664 mW/g; SAR(10 g) = 0.497 mW/g

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

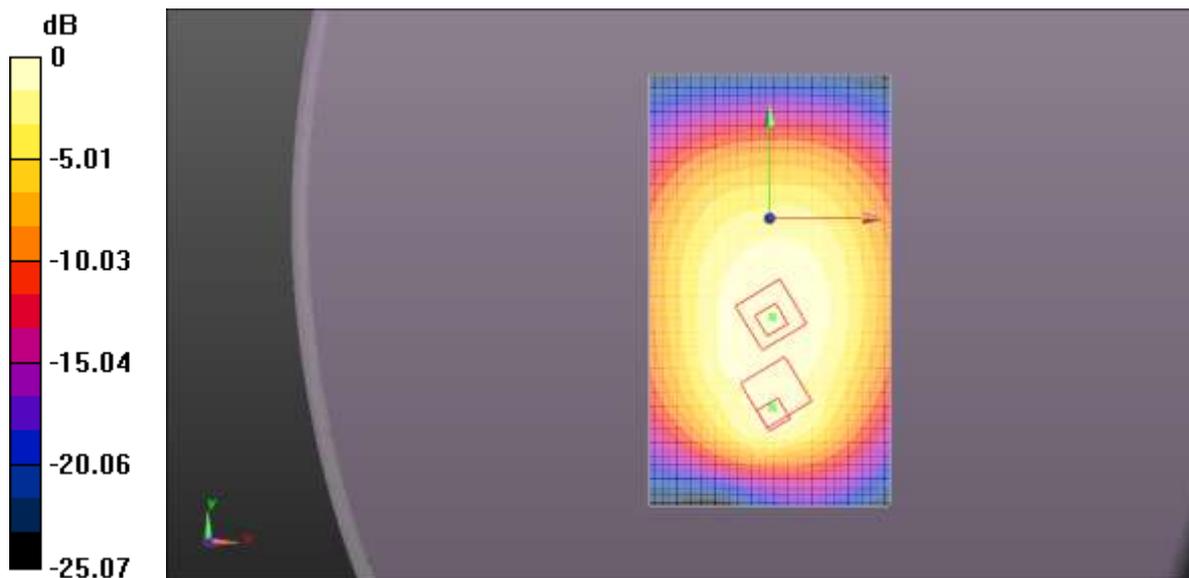
body/towards ground high/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.145 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.005 mW/g

SAR(1 g) = 0.547 mW/g; SAR(10 g) = 0.348 mW/g

Maximum value of SAR (measured) = 0.596 mW/g



0 dB = 0.701 mW/g = -3.09 dB mW/g

GSM850 towards ground low with earphone

Date/Time: 16/10/2012 16:41:08

Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 824.2 MHz; Communication System PAR: 9.191 dB

Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.933$ mho/m; $\epsilon_r = 54.311$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(6.25, 6.25, 6.25); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards ground low with earphone/Area Scan (101x181x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.696 mW/g

body/towards ground low with earphone/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 16.871 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.196 mW/g

SAR(1 g) = 0.649 mW/g; SAR(10 g) = 0.372 mW/g

Maximum value of SAR (measured) = 0.719 mW/g

body/towards ground low with earphone/Zoom Scan (7x7x7)/Cube 1:

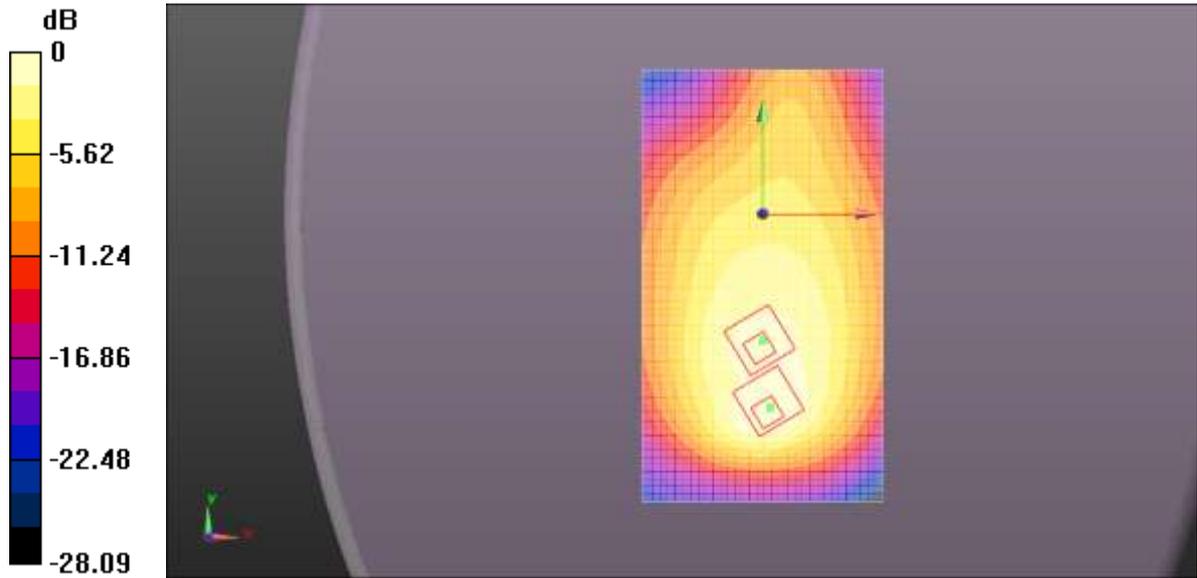
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.871 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.661 mW/g

SAR(1 g) = 0.483 mW/g; SAR(10 g) = 0.349 mW/g

Maximum value of SAR (measured) = 0.509 mW/g



0 dB = 0.696 mW/g = -3.15 dB mW/g

GSM850 towards ground low with EDGE(1UP)

Date/Time: 16/10/2012 18:46:19

Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 824.2 MHz; Communication System PAR: 9.191 dB

Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.933$ mho/m; $\epsilon_r = 54.311$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(6.25, 6.25, 6.25); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards ground low with EDGE(1UP)/Area Scan (101x181x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.775 mW/g

body/towards ground low with EDGE(1UP)/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 22.145 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.915 mW/g

SAR(1 g) = 0.731 mW/g; SAR(10 g) = 0.551 mW/g

Maximum value of SAR (measured) = 0.768 mW/g

body/towards ground low with EDGE(1UP)/Zoom Scan (7x7x7)/Cube 1:

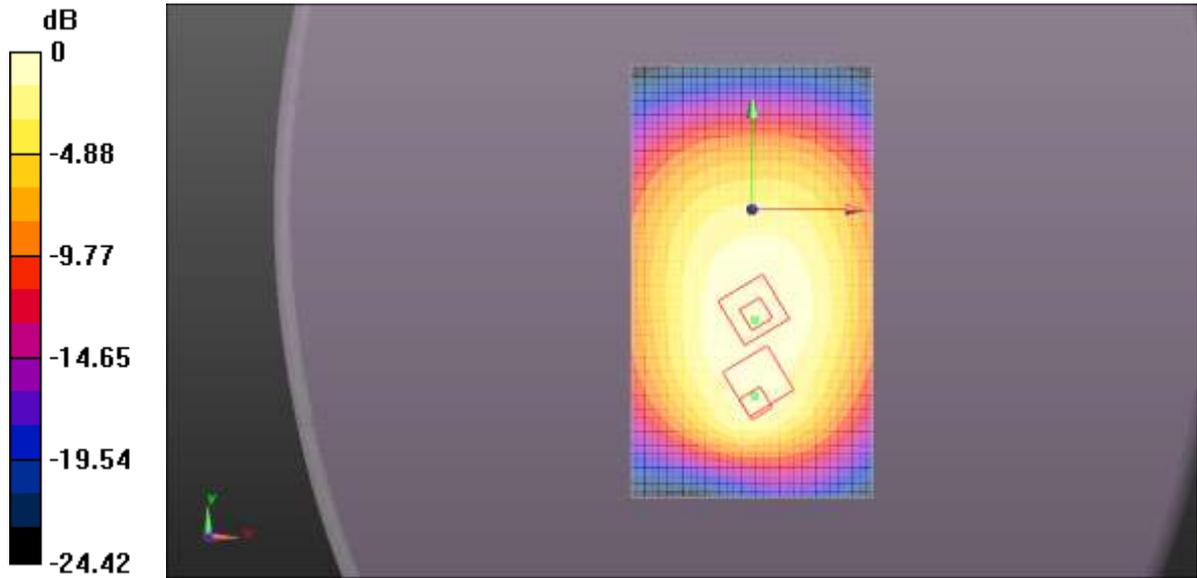
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.145 V/m; Power Drift = 0.04 dB

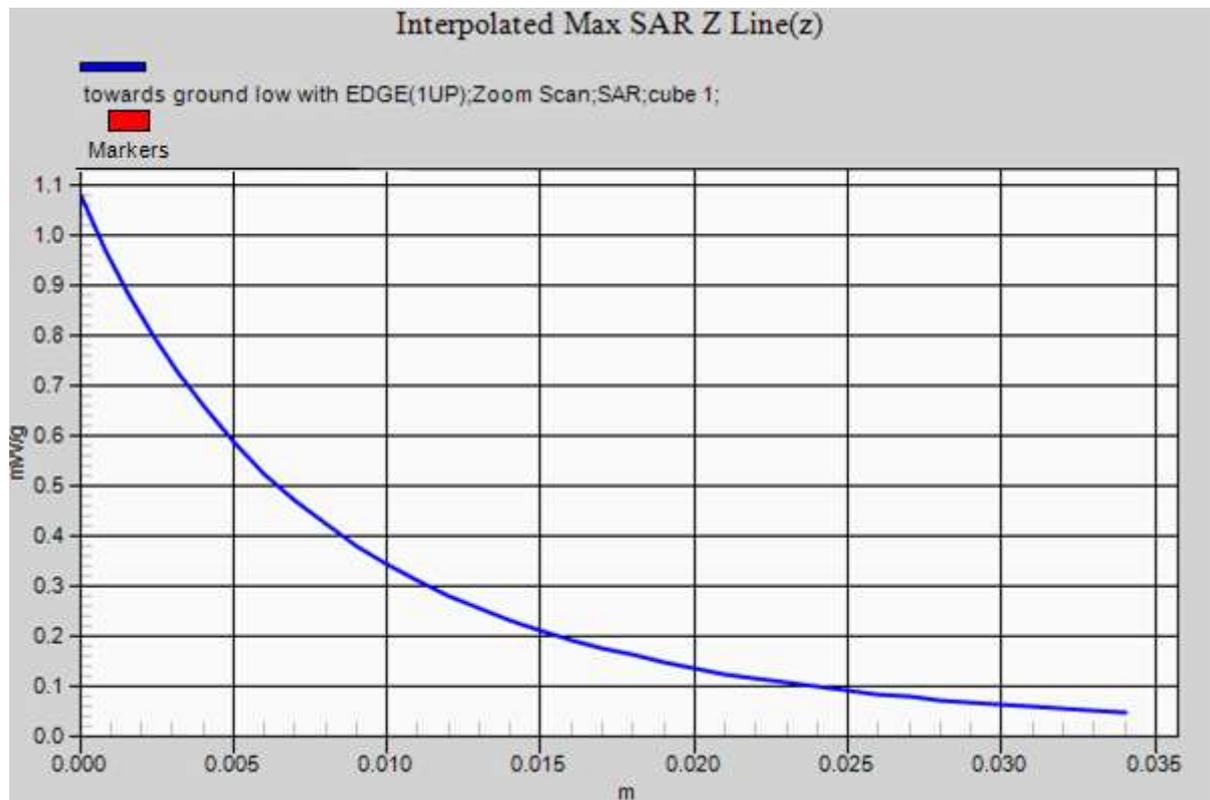
Peak SAR (extrapolated) = 1.080 mW/g

SAR(1 g) = 0.602 mW/g; SAR(10 g) = 0.404 mW/g.

Maximum value of SAR (measured) = 0.686 mW/g



0 dB = 0.775 mW/g = -2.21 dB mW/g



GSM1900 left touch mid

Date/Time: 15/10/2012 08:36:12

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.364$ mho/m; $\epsilon_r = 39.144$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.12, 5.12, 5.12); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: SAM 1; Type: SAM; Serial: TP:1702
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

left/touch mid/Area Scan (101x171x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.222 mW/g

left/touch mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.226 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.328 mW/g

SAR(1 g) = 0.203 mW/g; SAR(10 g) = 0.121 mW/g

Maximum value of SAR (measured) = 0.220 mW/g

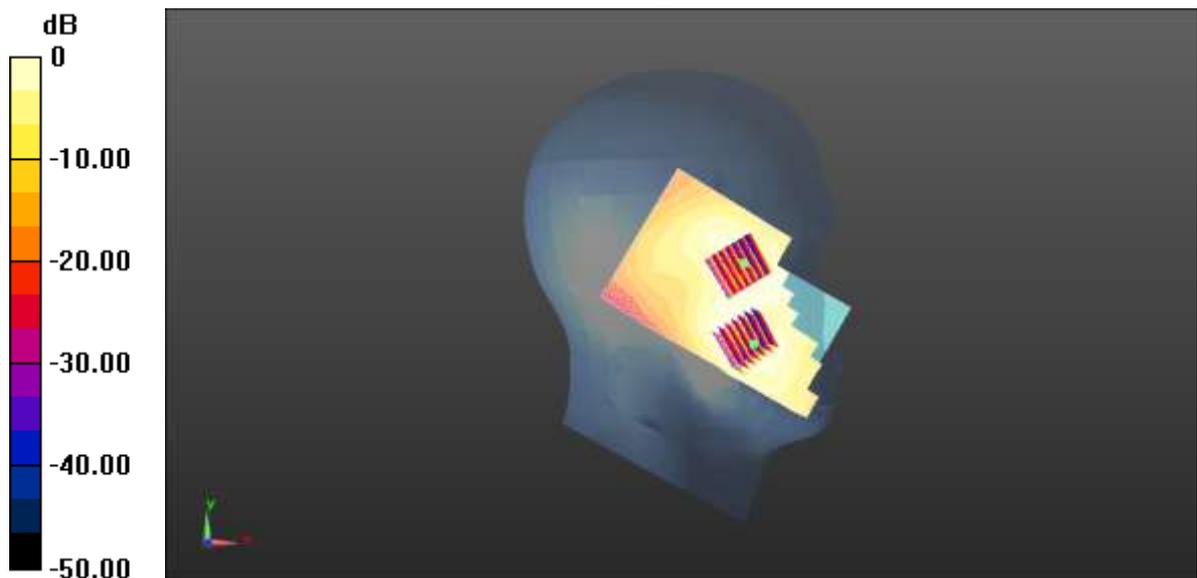
left/touch mid/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.226 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.266 mW/g

SAR(1 g) = 0.169 mW/g; SAR(10 g) = 0.107 mW/g

Maximum value of SAR (measured) = 0.183 mW/g



0 dB = 0.222 mW/g = -13.06 dB mW/g

GSM1900 left tilt mid

Date/Time: 15/10/2012 09:16:04

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.364$ mho/m; $\epsilon_r = 39.144$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.12, 5.12, 5.12); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: SAM 1; Type: SAM; Serial: TP:1702
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

left/tilt mid/Area Scan (91x171x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.110 mW/g

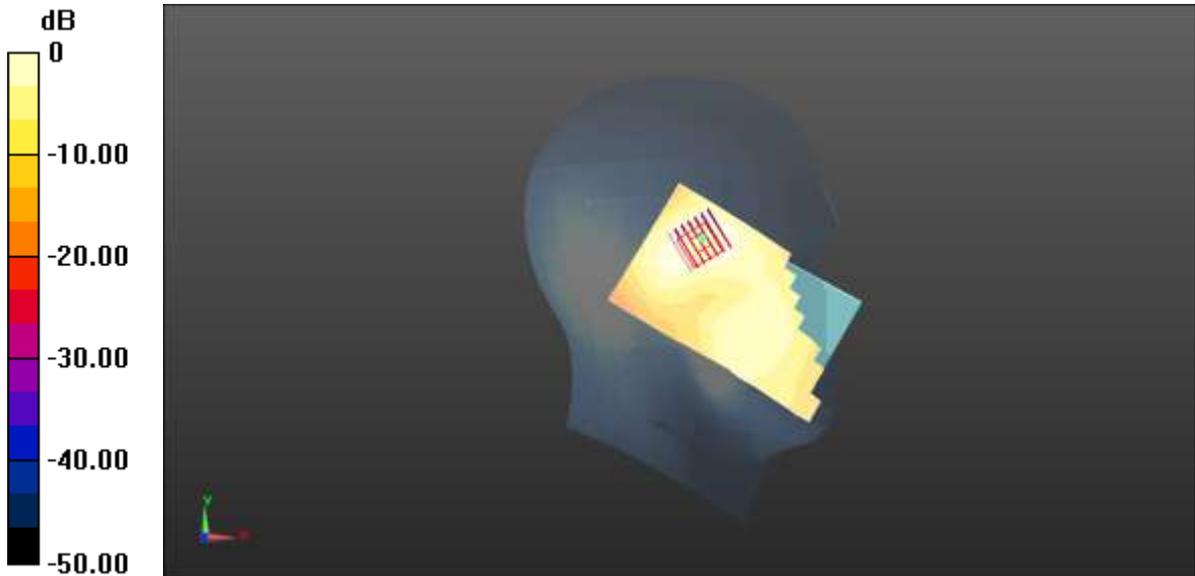
left/tilt mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.230 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.154 mW/g

SAR(1 g) = 0.099 mW/g; SAR(10 g) = 0.061 mW/g

Maximum value of SAR (measured) = 0.108 mW/g



0 dB = 0.110 mW/g = -19.15 dB mW/g

GSM1900 right touch mid

Date/Time: 15/10/2012 09:47:45

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.364$ mho/m; $\epsilon_r = 39.144$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.12, 5.12, 5.12); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: SAM 1; Type: SAM; Serial: TP:1702
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

right/touch mid/Area Scan (91x171x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.319 mW/g

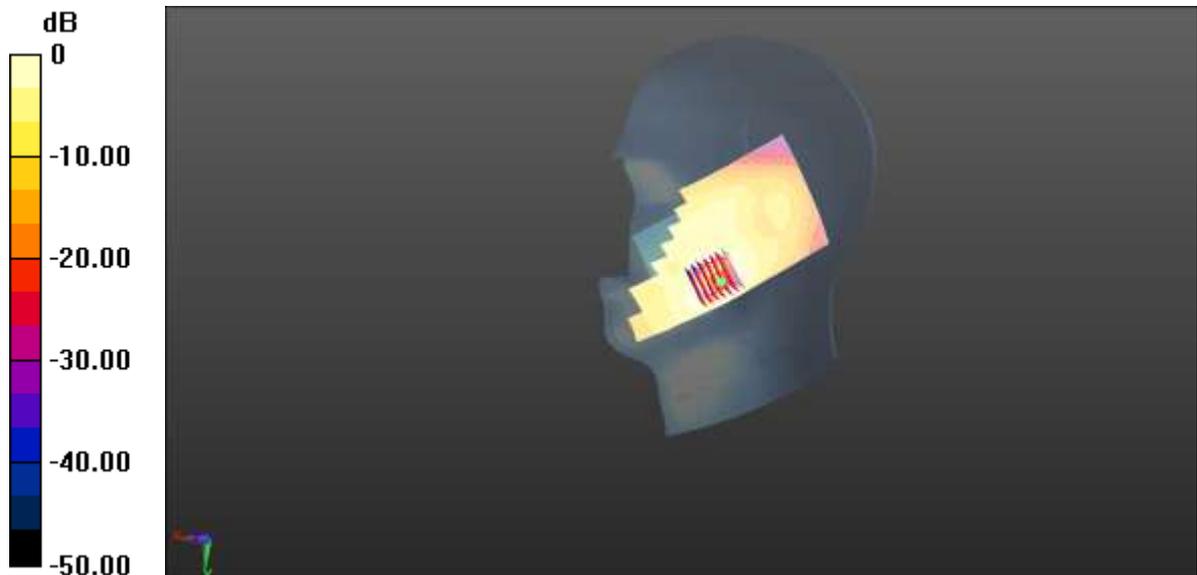
right/touch mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.535 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.452 mW/g

SAR(1 g) = 0.292 mW/g; SAR(10 g) = 0.176 mW/g

Maximum value of SAR (measured) = 0.319 mW/g



0 dB = 0.319 mW/g = -9.93 dB mW/g

GSM1900 right tilt mid

Date/Time: 15/10/2012 10:19:16

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.364$ mho/m; $\epsilon_r = 39.144$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.12, 5.12, 5.12); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: SAM 1; Type: SAM; Serial: TP:1702
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

right/tilt mid/Area Scan (91x171x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.0966 mW/g

right/tilt mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.559 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.138 mW/g

SAR(1 g) = 0.087 mW/g; SAR(10 g) = 0.051 mW/g

Maximum value of SAR (measured) = 0.0942 mW/g



0 dB = 0.0966 mW/g = -20.30 dB mW/g

GSM1900 right touch low

Date/Time: 15/10/2012 10:50:26

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1850.2 MHz; Communication System PAR: 9.191 dB

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.339$ mho/m; $\epsilon_r = 39.255$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.12, 5.12, 5.12); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: SAM 1; Type: SAM; Serial: TP:1702
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

right/touch low/Area Scan (91x171x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.301 mW/g

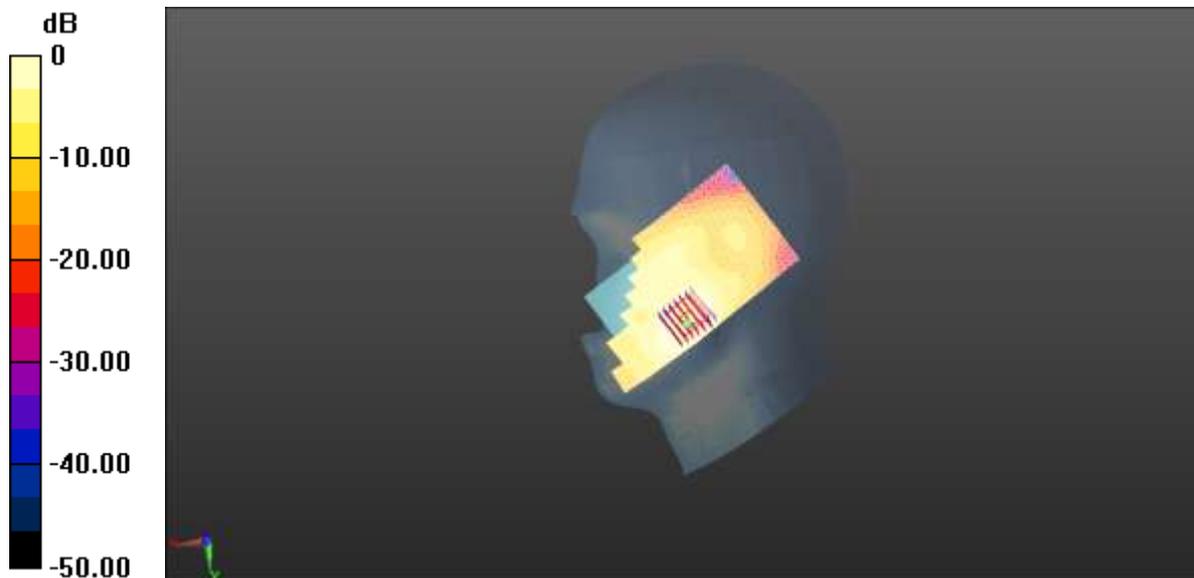
right/touch low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.129 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.424 mW/g

SAR(1 g) = 0.274 mW/g; SAR(10 g) = 0.167 mW/g

Maximum value of SAR (measured) = 0.301 mW/g



0 dB = 0.301 mW/g = -10.44 dB mW/g

GSM1900 right touch high

Date/Time: 15/10/2012 11:21:50

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1909.8 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.393$ mho/m; $\epsilon_r = 39.011$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.12, 5.12, 5.12); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: SAM 1; Type: SAM; Serial: TP:1702
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

right/touch high/Area Scan (91x171x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.319 mW/g

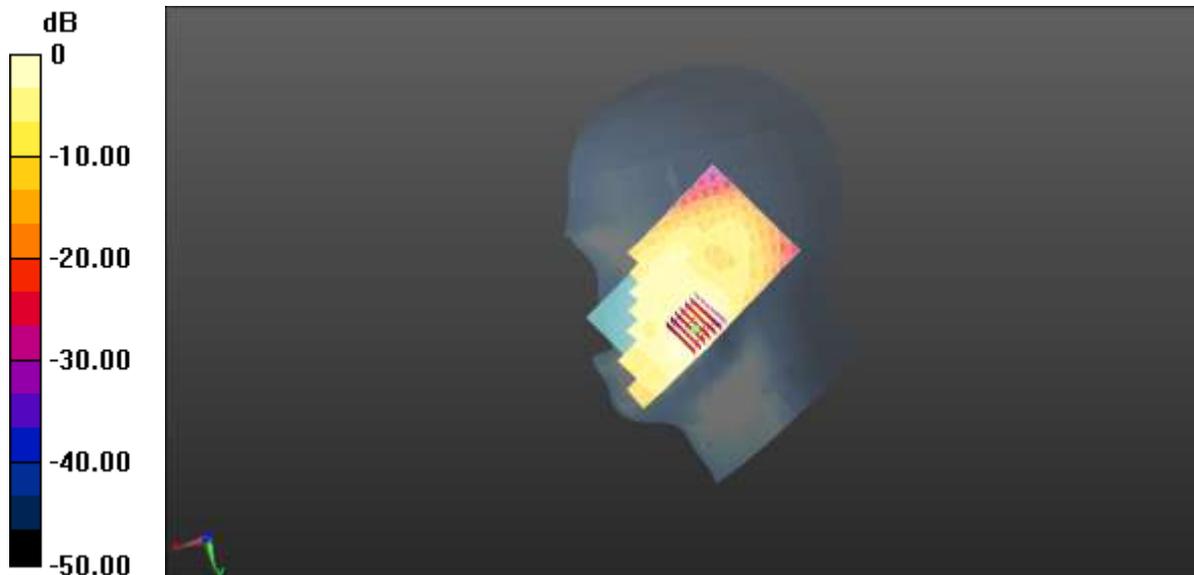
right/touch high/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.741 V/m; Power Drift = 0.12 dB

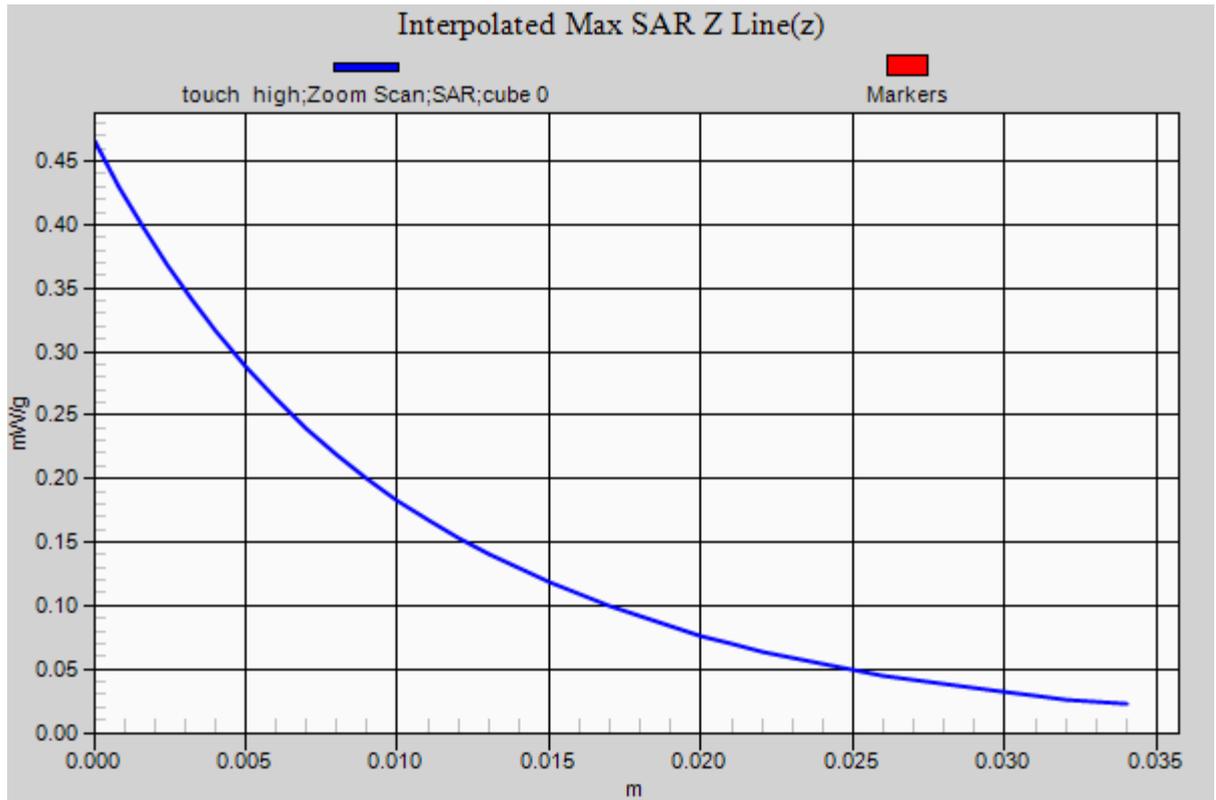
Peak SAR (extrapolated) = 0.465 mW/g

SAR(1 g) = 0.294 mW/g; SAR(10 g) = 0.176 mW/g

Maximum value of SAR (measured) = 0.322 mW/g



0 dB = 0.319 mW/g = -9.92 dB mW/g



GSM1900 towards phantom mid

Date/Time: 10/10/2012 12:17:24

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.477$ mho/m; $\epsilon_r = 52.425$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards phantom mid/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.398 mW/g

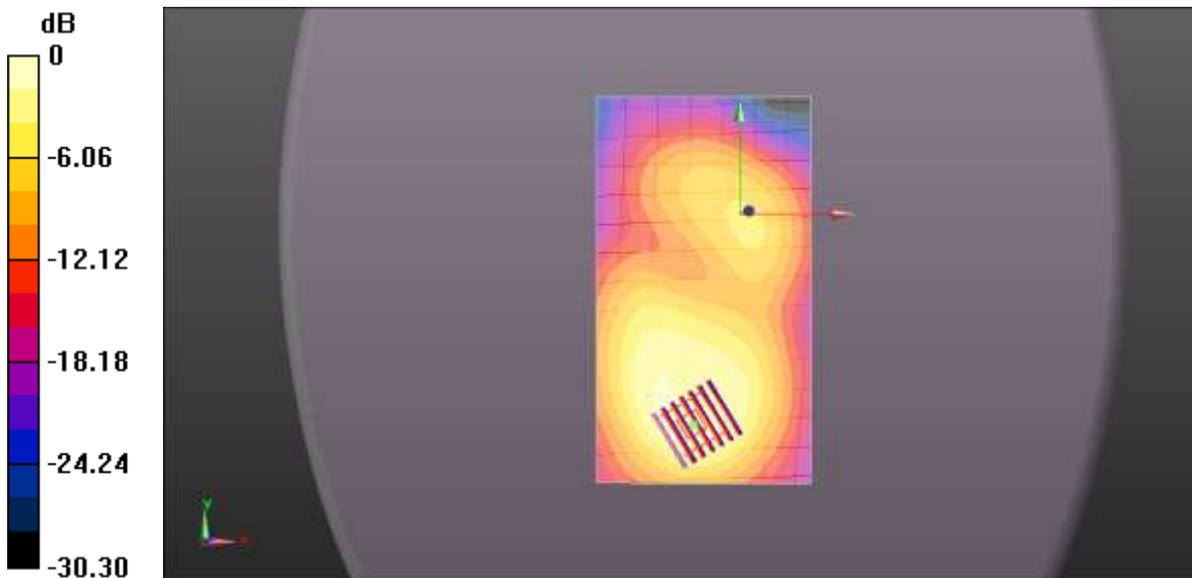
body/towards phantom mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.377 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.600 mW/g

SAR(1 g) = 0.361 mW/g; SAR(10 g) = 0.202 mW/g

Maximum value of SAR (measured) = 0.407 mW/g



0 dB = 0.398 mW/g = -8.00 dB mW/g

GSM1900 towards ground mid

Date/Time: 10/10/2012 12:56:03

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.477$ mho/m; $\epsilon_r = 52.425$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards ground mid/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.525 mW/g

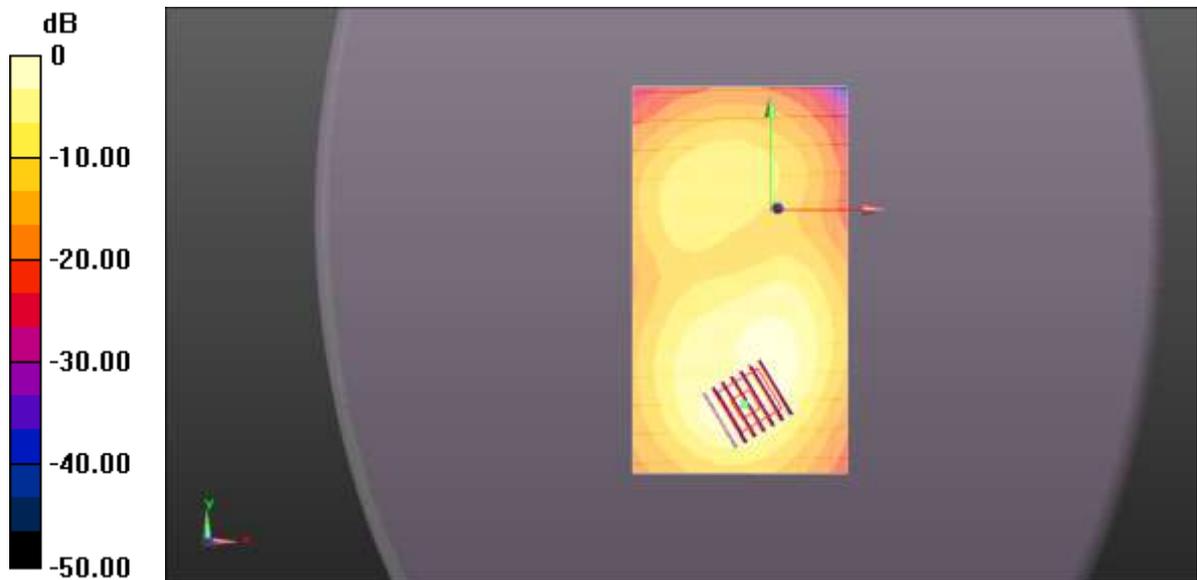
body/towards ground mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.526 V/m; Power Drift = -0.02 dB

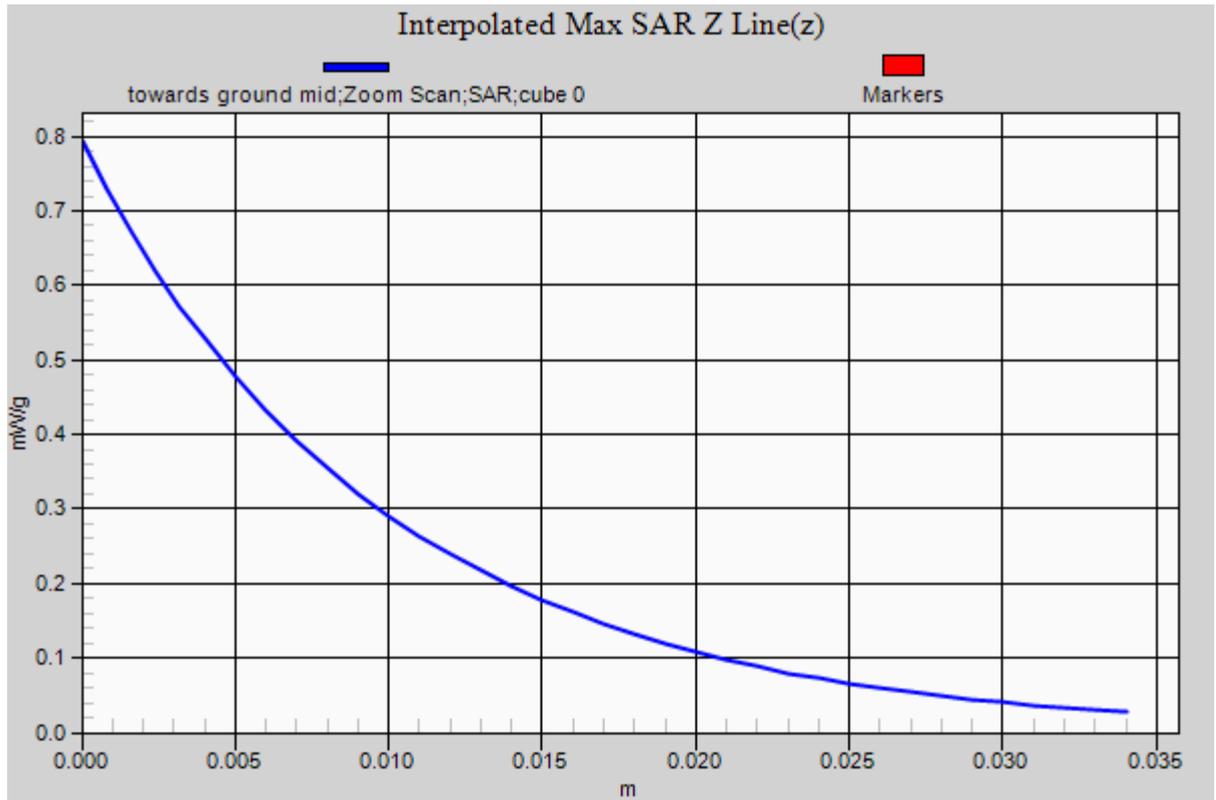
Peak SAR (extrapolated) = 0.793 mW/g

SAR(1 g) = 0.472 mW/g; SAR(10 g) = 0.266 mW/g

Maximum value of SAR (measured) = 0.529 mW/g



0 dB = 0.525 mW/g = -5.59 dB mW/g



GSM1900 front mid

Date/Time: 10/10/2012 15:05:48

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.477$ mho/m; $\epsilon_r = 52.425$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/front mid/Area Scan (71x91x1): Measurement grid: dx=10mm, dy=10mm

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

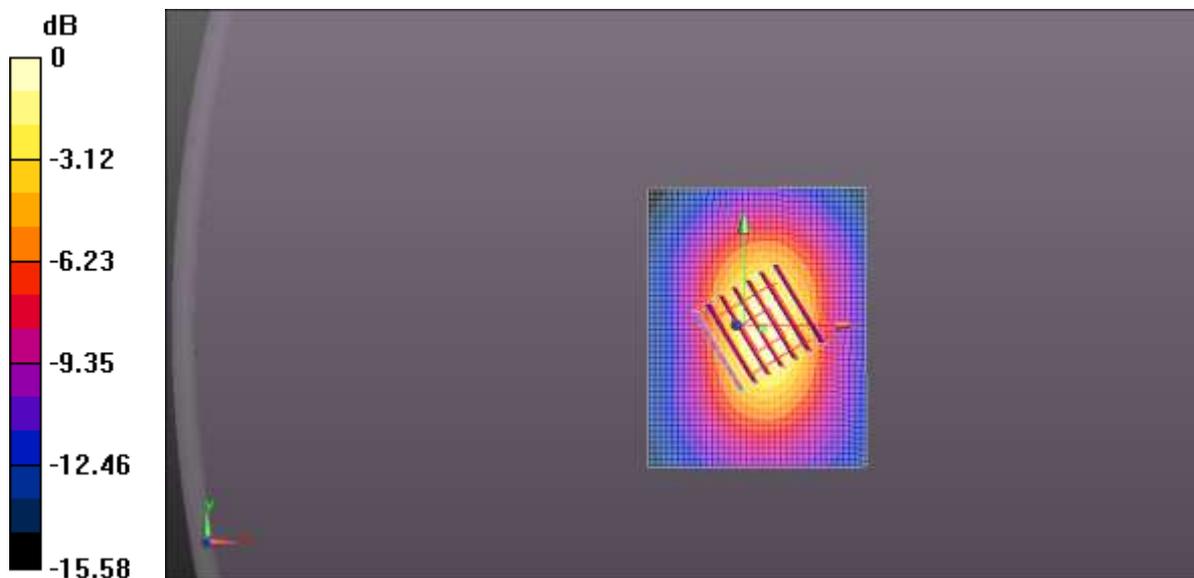
body/front mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.382 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.703 mW/g

SAR(1 g) = 0.408 mW/g; SAR(10 g) = 0.218 mW/g

Maximum value of SAR (measured) = 0.462 mW/g



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

GSM1900 left side mid

Date/Time: 10/10/2012 13:00:48

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.477$ mho/m; $\epsilon_r = 52.425$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body2/left side mid/Area Scan (71x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.0979 mW/g

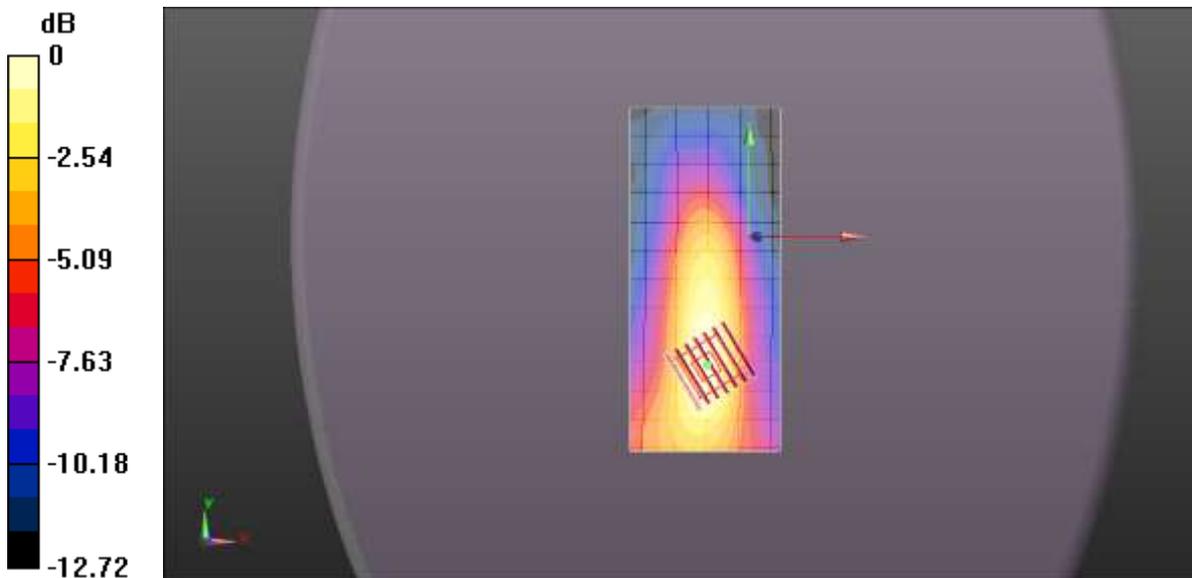
body2/left side mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.977 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.145 mW/g

SAR(1 g) = 0.088 mW/g; SAR(10 g) = 0.052 mW/g

Maximum value of SAR (measured) = 0.0965 mW/g



0 dB = 0.0979 mW/g = -20.19 dB mW/g

GSM1900 right side mid

Date/Time: 10/10/2012 13:30:05

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.477$ mho/m; $\epsilon_r = 52.425$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body2/right side mid/Area Scan (71x161x1): Measurement grid: dx=10mm, dy=10mm

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

body2/right side mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.234 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.172 mW/g

SAR(1 g) = 0.107 mW/g; SAR(10 g) = 0.064 mW/g

Maximum value of SAR (measured) = 0.118 mW/g

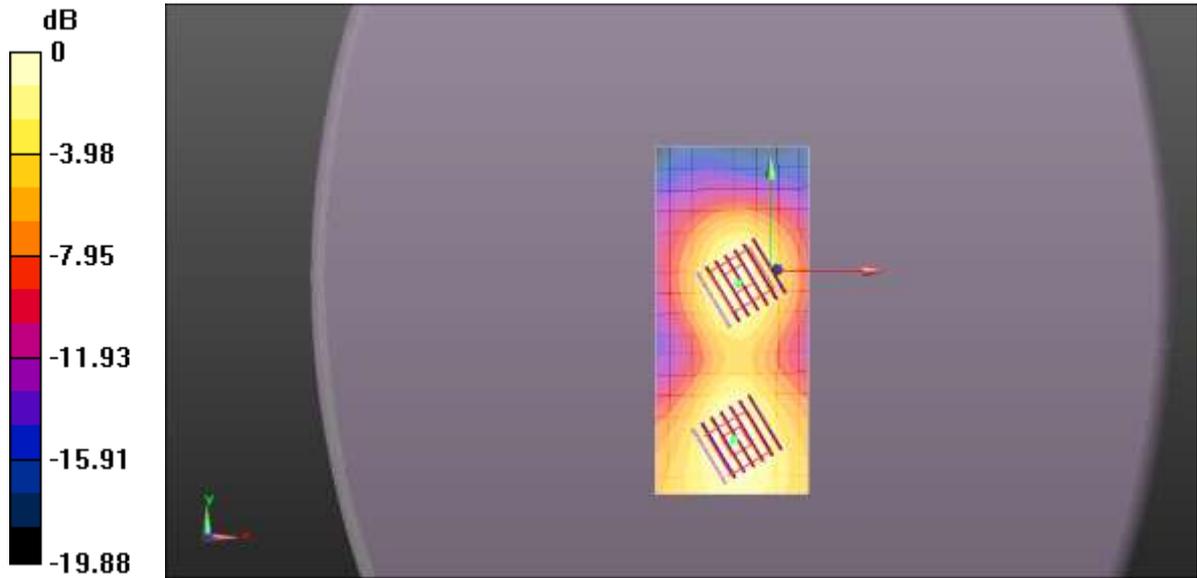
body2/right side mid/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.234 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.157 mW/g

SAR(1 g) = 0.096 mW/g; SAR(10 g) = 0.056 mW/g

Maximum value of SAR (measured) = 0.106 mW/g



0 dB = 0.119 mW/g = -18.52 dB mW/g

GSM1900 towards ground low

Date/Time: 10/10/2012 15:56:51

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1850.2 MHz; Communication System PAR: 9.191 dB

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.448$ mho/m; $\epsilon_r = 52.486$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards ground low/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.457 mW/g

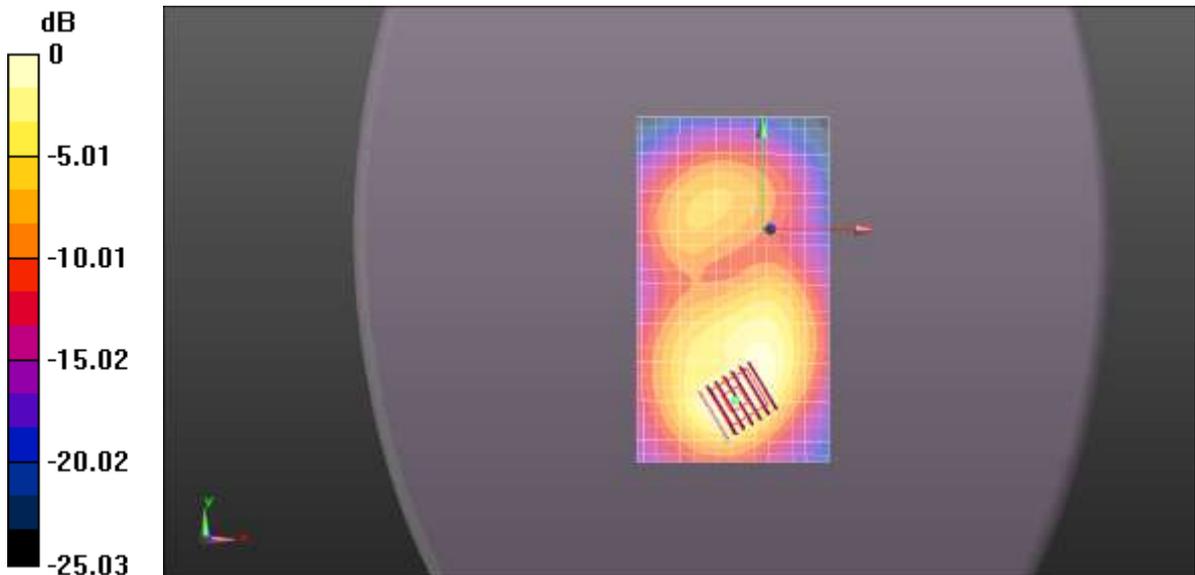
body/towards ground low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.635 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.660 mW/g

SAR(1 g) = 0.405 mW/g; SAR(10 g) = 0.232 mW/g

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



0 dB = 0.457 mW/g = -6.80 dB mW/g

GSM1900 towards ground high

Date/Time: 10/10/2012 16:37:39

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1909.8 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.503$ mho/m; $\epsilon_r = 52.325$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards ground high/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.527 mW/g

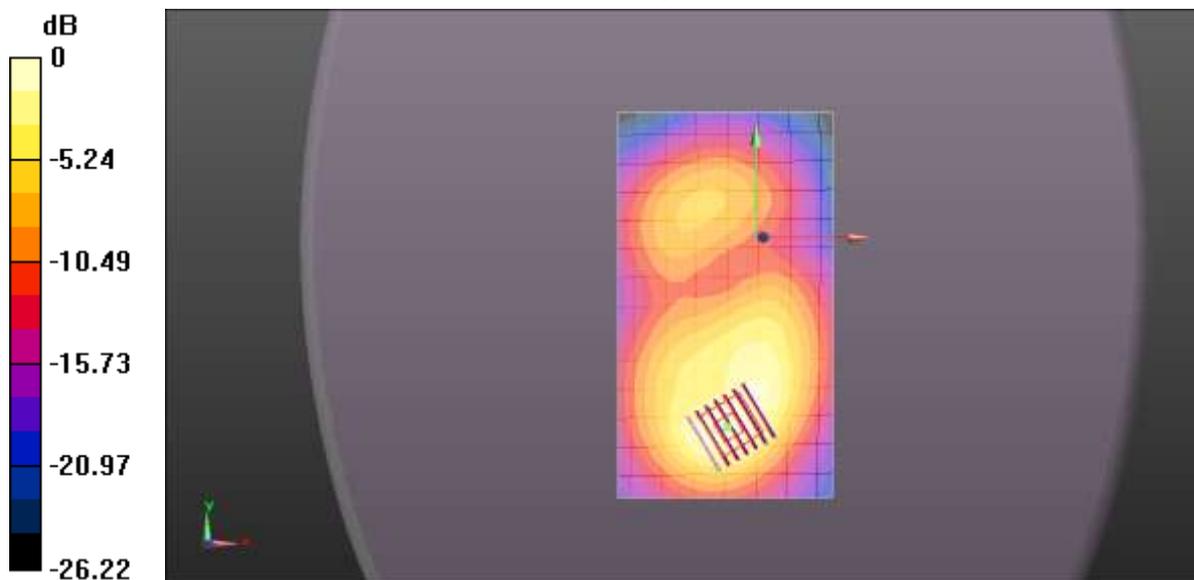
body/towards ground high/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.034 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.799 mW/g

SAR(1 g) = 0.472 mW/g; SAR(10 g) = 0.263 mW/g

Maximum value of SAR (measured) = 0.528 mW/g



0 dB = 0.527 mW/g = -5.57 dB mW/g

GSM1900 towards ground mid with earphone

Date/Time: 11/10/2012 09:38:01

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.477$ mho/m; $\epsilon_r = 52.425$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards ground mid with earphone/Area Scan (101x181x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.474 mW/g

body/towards ground mid with earphone/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 8.109 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.690 mW/g

SAR(1 g) = 0.422 mW/g; SAR(10 g) = 0.245 mW/g

Maximum value of SAR (measured) = 0.467 mW/g

body/towards ground mid with earphone/Zoom Scan (7x7x7)/Cube 1:

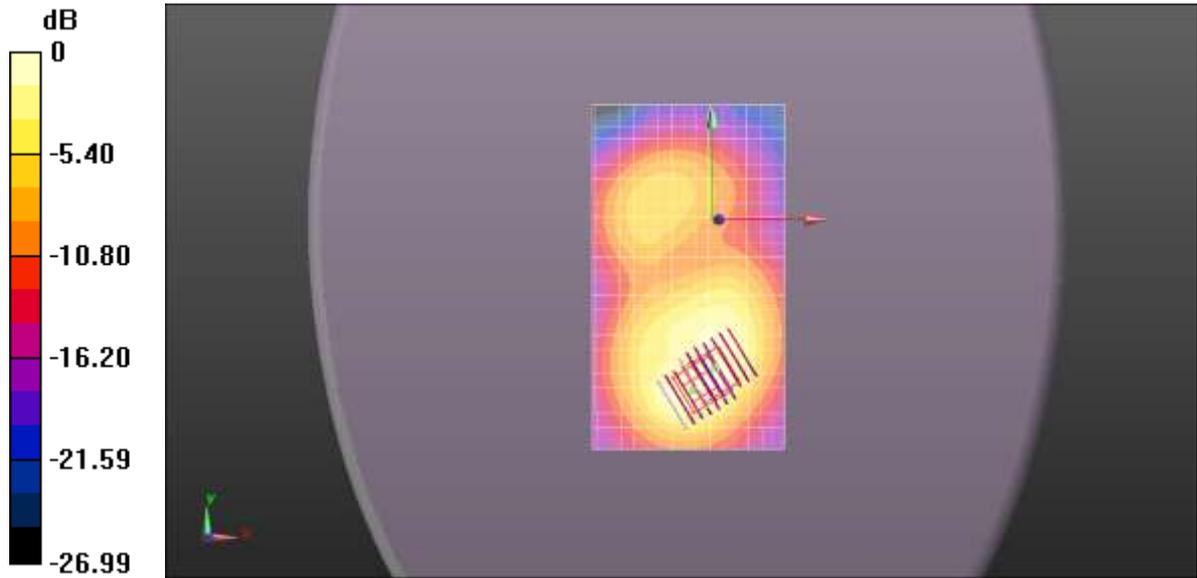
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.109 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.695 mW/g

SAR(1 g) = 0.415 mW/g; SAR(10 g) = 0.239 mW/g

Maximum value of SAR (measured) = 0.468 mW/g



0 dB = 0.474 mW/g = -6.48 dB mW/g

GSM1900 towards ground mid with EDGE(1up)

Date/Time: 11/10/2012 10:30:24

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 9.191 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.477$ mho/m; $\epsilon_r = 52.425$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards ground mid with EDGE(1up)/Area Scan (101x181x1):

Measurement grid: dx=10mm, dy=10mm

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

body/towards ground mid with EDGE(1up)/Zoom Scan (7x7x7)/Cube 0:

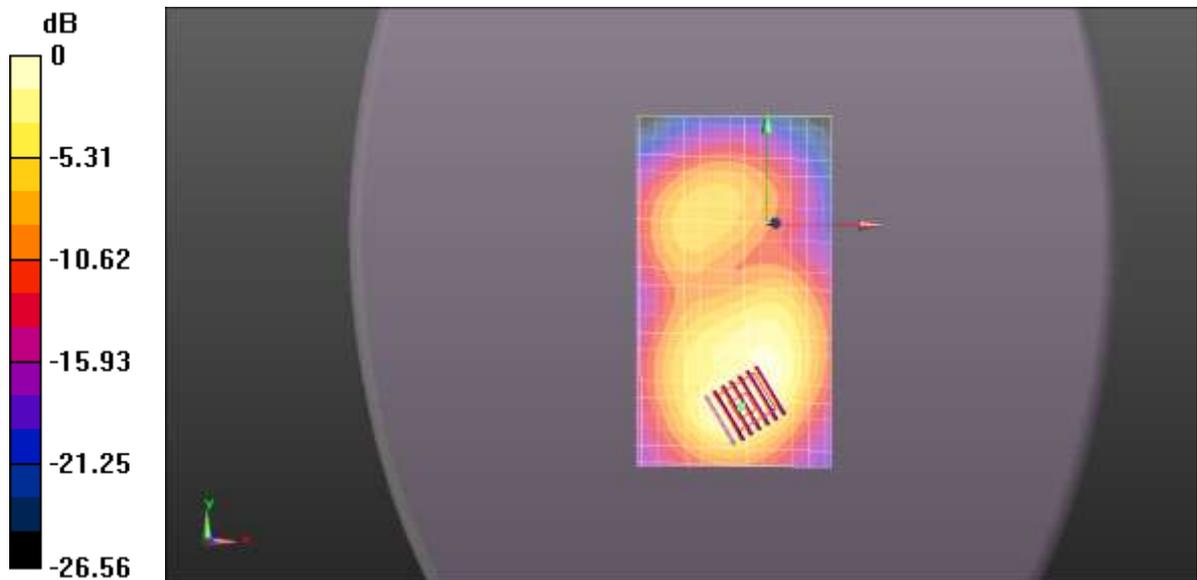
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.009 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.687 mW/g

SAR(1 g) = 0.418 mW/g; SAR(10 g) = 0.239 mW/g

Maximum value of SAR (measured) = 0.466 mW/g



0 dB = 0.465 mW/g = -6.66 dB mW/g

WCDMA BAND II left touch mid

Date/Time: 12/10/2012 12:49:24

Communication System: WCDMA; Communication System Band: BAND 2; Frequency: 1880 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.364$ mho/m; $\epsilon_r = 39.144$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.12, 5.12, 5.12); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: SAM 1; Type: SAM; Serial: TP:1702
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

left/touch mid/Area Scan (101x171x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.314 mW/g

left/touch mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.062 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.468 mW/g

SAR(1 g) = 0.287 mW/g; SAR(10 g) = 0.173 mW/g

Maximum value of SAR (measured) = 0.314 mW/g

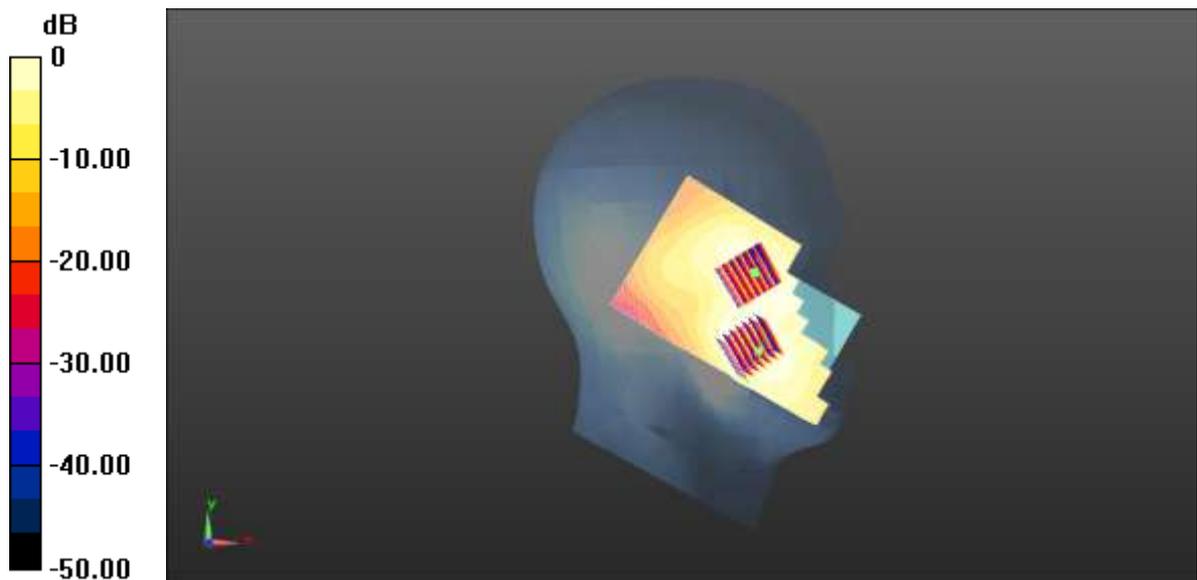
left/touch mid/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.062 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.370 mW/g

SAR(1 g) = 0.236 mW/g; SAR(10 g) = 0.150 mW/g

Maximum value of SAR (measured) = 0.255 mW/g



0 dB = 0.314 mW/g = -10.07 dB mW/g

WCDMA BAND II left tilt mid

Date/Time: 12/10/2012 14:50:36

Communication System: WCDMA; Communication System Band: BAND 2; Frequency: 1880 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.364$ mho/m; $\epsilon_r = 39.144$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.12, 5.12, 5.12); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: SAM 1; Type: SAM; Serial: TP:1702
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

left/tilt mid/Area Scan (101x171x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.161 mW/g

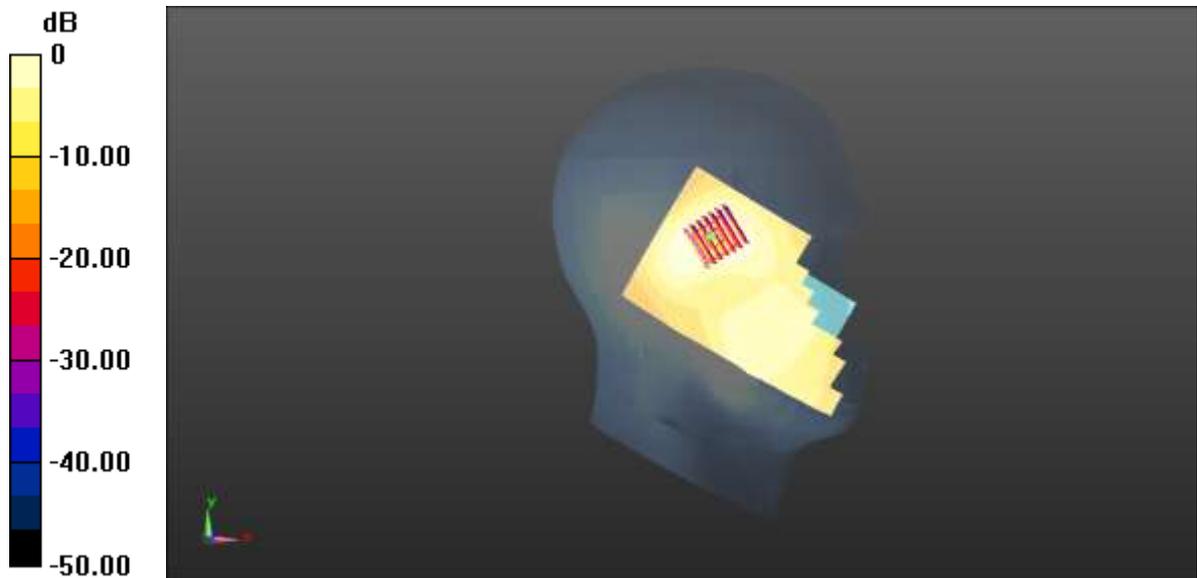
left/tilt mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.640 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.224 mW/g

SAR(1 g) = 0.147 mW/g; SAR(10 g) = 0.091 mW/g

Maximum value of SAR (measured) = 0.158 mW/g



0 dB = 0.161 mW/g = -15.87 dB mW/g

WCDMA BAND II right touch mid

Date/Time: 12/10/2012 11:40:17

Communication System: WCDMA; Communication System Band: BAND 2; Frequency: 1880 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.364$ mho/m; $\epsilon_r = 39.144$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.12, 5.12, 5.12); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: SAM 1; Type: SAM; Serial: TP:1702
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

right/touch mid/Area Scan (91x171x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.434 mW/g

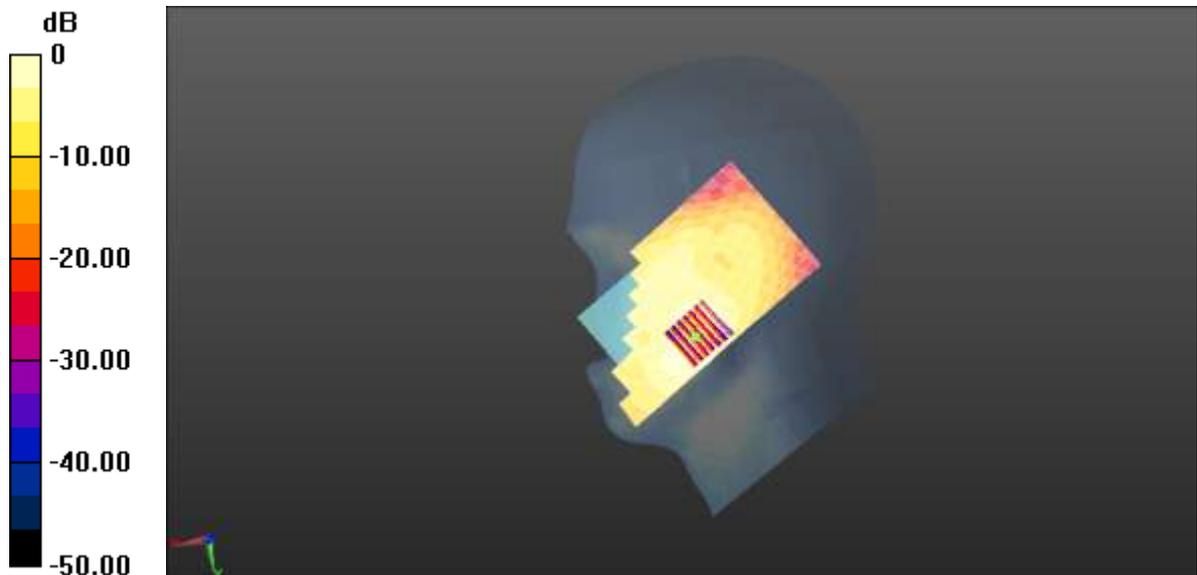
right/touch mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.380 V/m; Power Drift = 0.14 dB

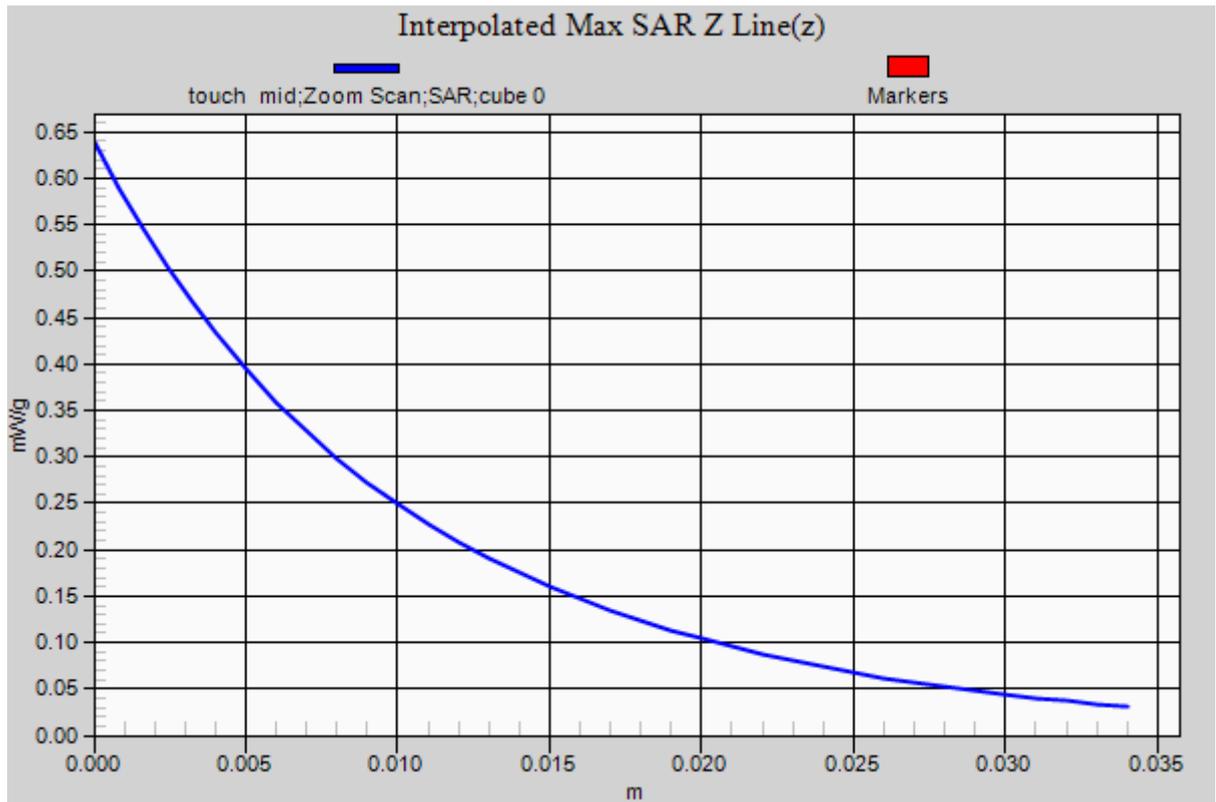
Peak SAR (extrapolated) = 0.638 mW/g

SAR(1 g) = 0.404 mW/g; SAR(10 g) = 0.244 mW/g

Maximum value of SAR (measured) = 0.437 mW/g



0 dB = 0.434 mW/g = -7.24 dB mW/g



WCDMA BAND II right tilt mid

Date/Time: 12/10/2012 12:15:03

Communication System: WCDMA; Communication System Band: BAND 2; Frequency: 1880 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.364$ mho/m; $\epsilon_r = 39.144$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.12, 5.12, 5.12); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: SAM 1; Type: SAM; Serial: TP:1702
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

right/tilt mid/Area Scan (91x171x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.164 mW/g

right/tilt mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.952 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.241 mW/g

SAR(1 g) = 0.149 mW/g; SAR(10 g) = 0.087 mW/g

Maximum value of SAR (measured) = 0.164 mW/g



0 dB = 0.164 mW/g = -15.71 dB mW/g

WCDMA BAND II right touch low

Date/Time: 12/10/2012 15:26:32

Communication System: WCDMA; Communication System Band: BAND 2; Frequency: 1852.4 MHz; Communication System PAR: 0 dB

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.341$ mho/m; $\epsilon_r = 39.247$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.12, 5.12, 5.12); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: SAM 1; Type: SAM; Serial: TP:1702
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

right/touch low/Area Scan (91x171x1): Measurement grid: dx=10mm, dy=10mm

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

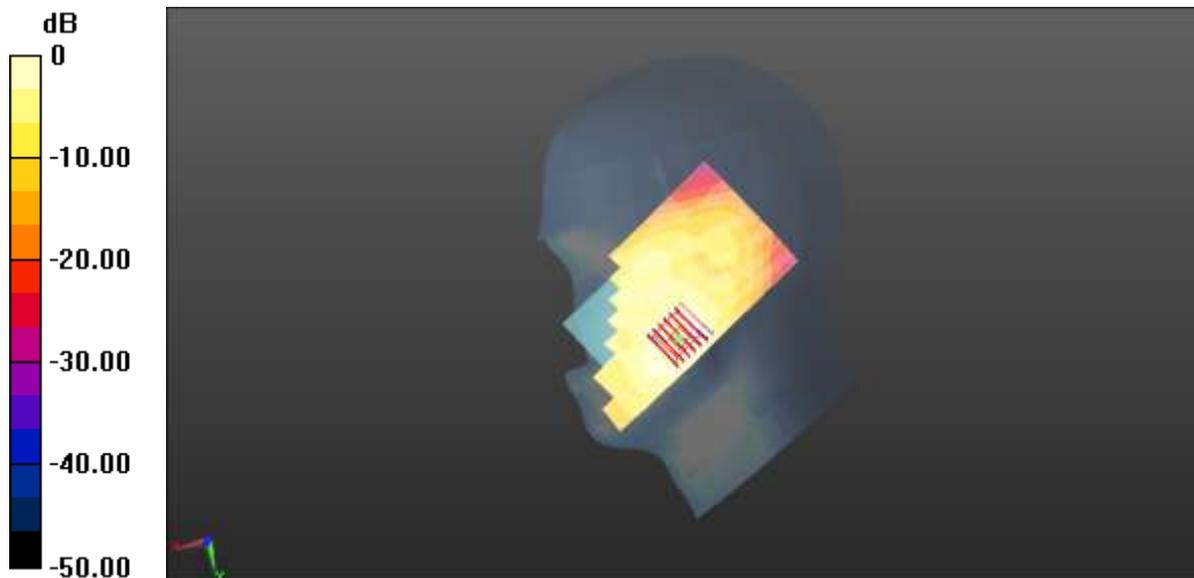
right/touch low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.539 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.509 mW/g

SAR(1 g) = 0.319 mW/g; SAR(10 g) = 0.192 mW/g

Maximum value of SAR (measured) = 0.345 mW/g



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

WCDMA BAND II right touch high

Date/Time: 12/10/2012 15:57:27

Communication System: WCDMA; Communication System Band: BAND 2; Frequency: 1907.6 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1908$ MHz; $\sigma = 1.391$ mho/m; $\epsilon_r = 39.019$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.12, 5.12, 5.12); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: SAM 1; Type: SAM; Serial: TP:1702
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

right/touch high/Area Scan (91x171x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.408 mW/g

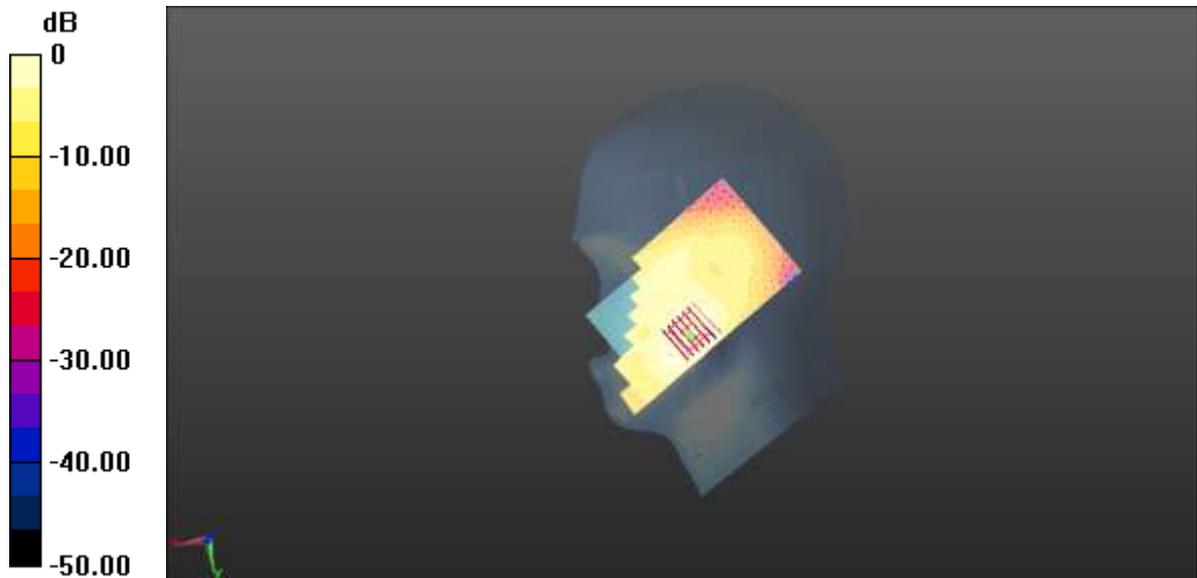
right/touch high/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.435 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.603 mW/g

SAR(1 g) = 0.378 mW/g; SAR(10 g) = 0.224 mW/g

Maximum value of SAR (measured) = 0.412 mW/g



0 dB = 0.408 mW/g = -7.79 dB mW/g

WCDMA BAND II towards phantom mid

Date/Time: 09/10/2012 09:59:43

Communication System: WCDMA; Communication System Band: BAND 2; Frequency: 1880 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.477$ mho/m; $\epsilon_r = 52.425$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards phantom mid/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.731 mW/g

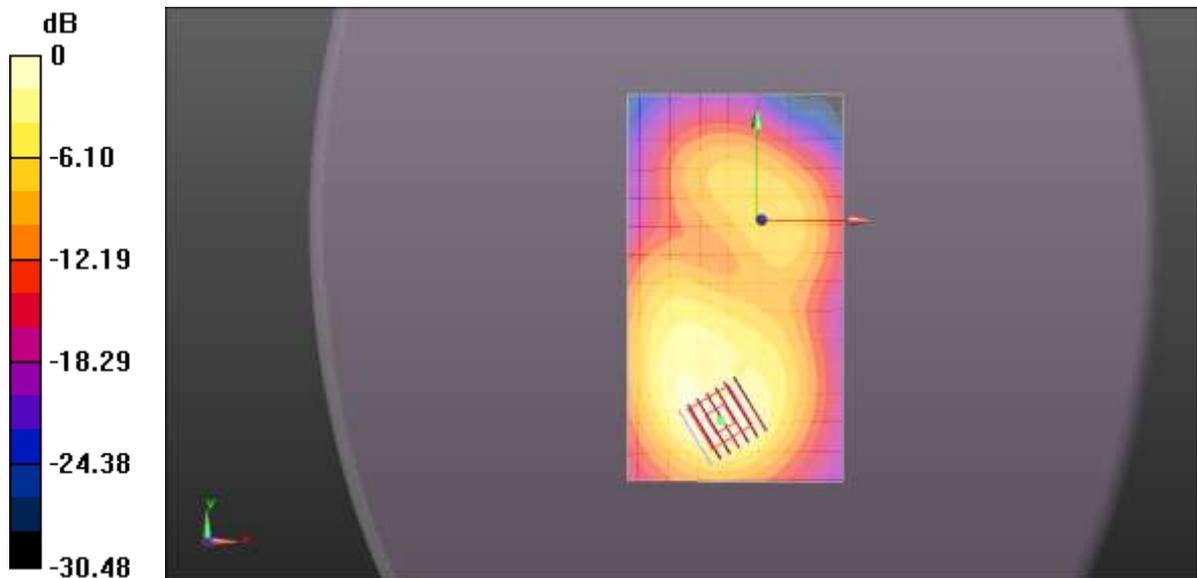
body/towards phantom mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.516 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.089 mW/g

SAR(1 g) = 0.652 mW/g; SAR(10 g) = 0.362 mW/g

Maximum value of SAR (measured) = 0.734 mW/g



0 dB = 0.731 mW/g = -2.73 dB mW/g

WCDMA BAND II towards ground mid

Date/Time: 09/10/2012 11:05:26

Communication System: WCDMA; Communication System Band: BAND 2; Frequency: 1880 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.477$ mho/m; $\epsilon_r = 52.425$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards ground mid/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.933 mW/g

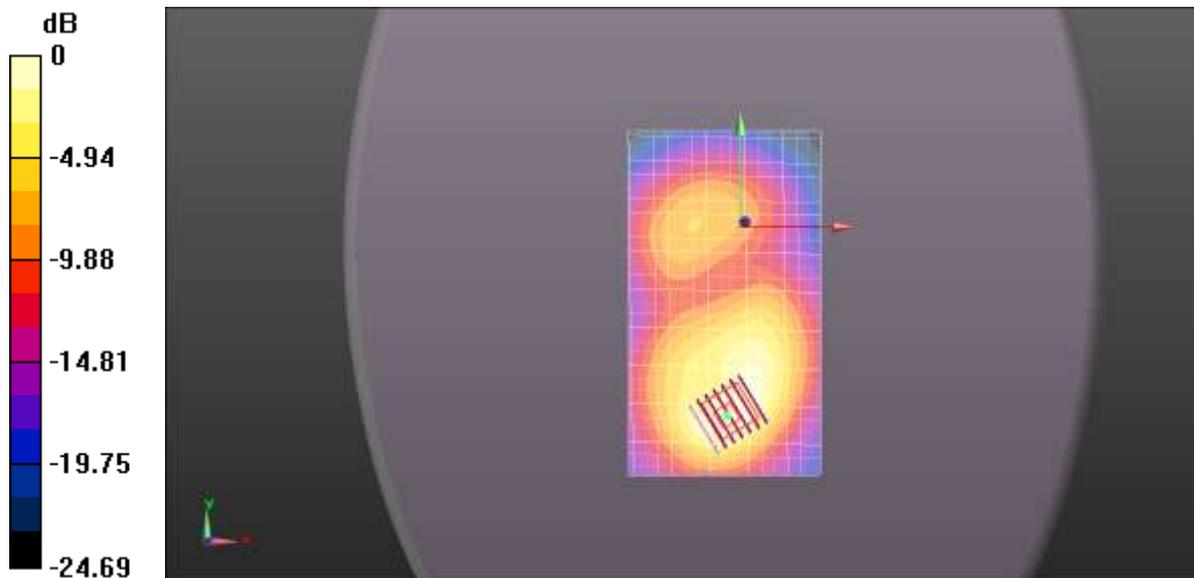
body/towards ground mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.147 V/m; Power Drift = 0.01 dB

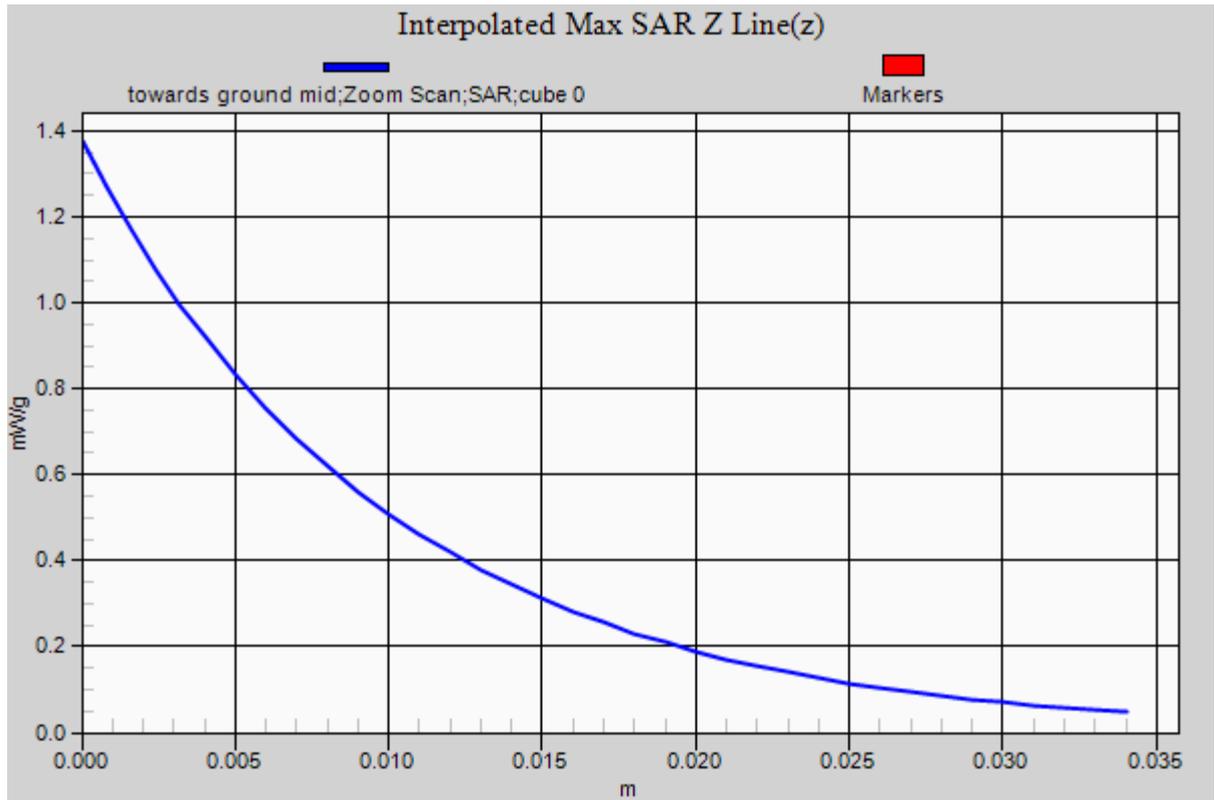
Peak SAR (extrapolated) = 1.375 mW/g

SAR(1 g) = 0.825 mW/g; SAR(10 g) = 0.466 mW/g

Maximum value of SAR (measured) = 0.921 mW/g



0 dB = 0.933 mW/g = -0.60 dB mW/g



WCDMA BAND II front mid

Date/Time: 09/10/2012 15:10:19

Communication System: WCDMA; Communication System Band: BAND 2; Frequency: 1880 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.477$ mho/m; $\epsilon_r = 52.425$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/front mid/Area Scan (71x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.710 mW/g

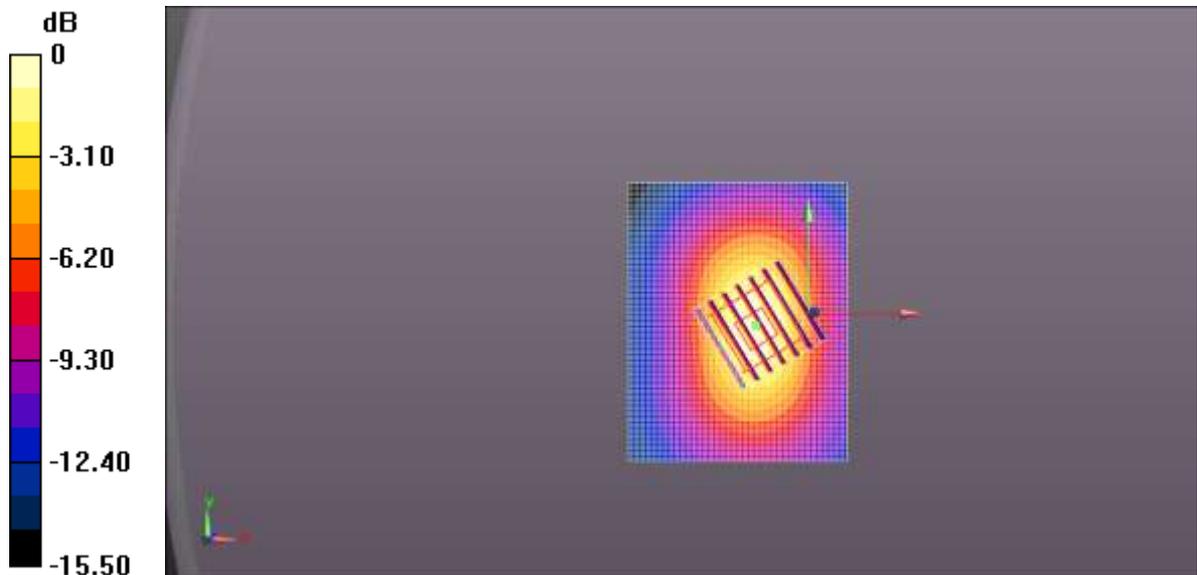
body/front mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.535 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.044 mW/g

SAR(1 g) = 0.623 mW/g; SAR(10 g) = 0.342 mW/g

Maximum value of SAR (measured) = 0.698 mW/g



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

WCDMA BAND II left side mid

Date/Time: 09/10/2012 13:10:16

Communication System: WCDMA; Communication System Band: BAND 2; Frequency: 1880 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.477$ mho/m; $\epsilon_r = 52.425$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body2/left side mid/Area Scan (71x161x1): Measurement grid: dx=10mm, dy=10mm

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

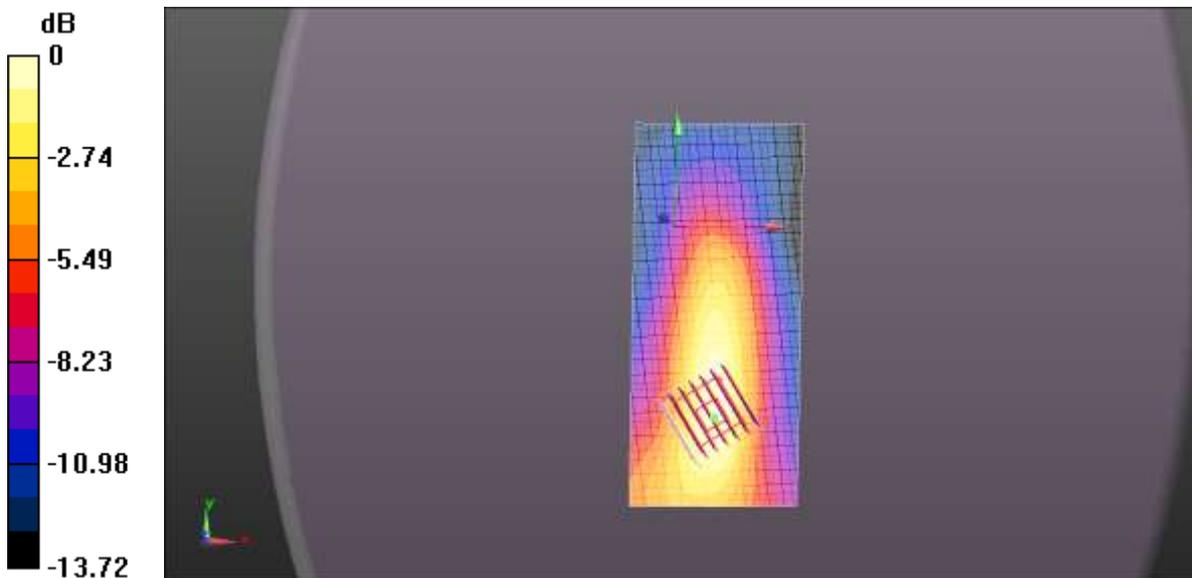
body2/left side mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.214 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.234 mW/g

SAR(1 g) = 0.142 mW/g; SAR(10 g) = 0.083 mW/g

Maximum value of SAR (measured) = 0.157 mW/g



0 dB = 0.159 mW/g = -15.99 dB mW/g

WCDMA BAND II right side mid

Date/Time: 09/10/2012 13:57:02

Communication System: WCDMA; Communication System Band: BAND 2; Frequency: 1880 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.477$ mho/m; $\epsilon_r = 52.425$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body2/right side mid/Area Scan (71x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.199 mW/g

body2/right side mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.924 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.286 mW/g

SAR(1 g) = 0.180 mW/g; SAR(10 g) = 0.107 mW/g

Maximum value of SAR (measured) = 0.197 mW/g

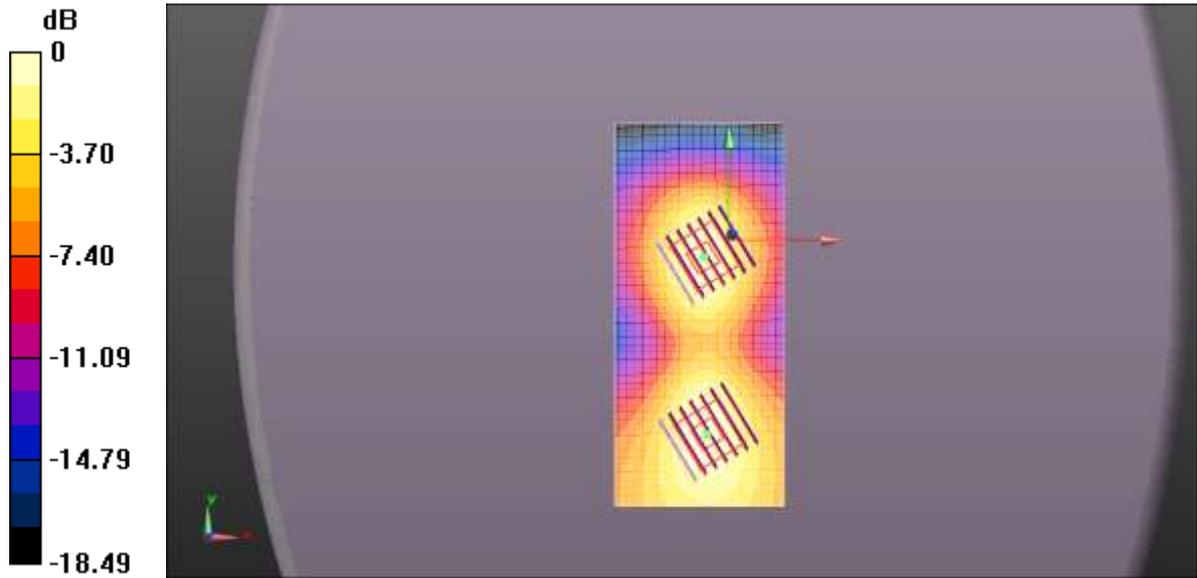
body2/right side mid/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.924 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.272 mW/g

SAR(1 g) = 0.167 mW/g; SAR(10 g) = 0.098 mW/g

Maximum value of SAR (measured) = 0.184 mW/g



0 dB = 0.199 mW/g = -14.03 dB mW/g

WCDMA BAND II towards ground low

Date/Time: 09/10/2012 11:43:34

Communication System: WCDMA; Communication System Band: BAND 2; Frequency: 1852.4 MHz; Communication System PAR: 0 dB

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.451$ mho/m; $\epsilon_r = 52.481$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards ground low/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

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

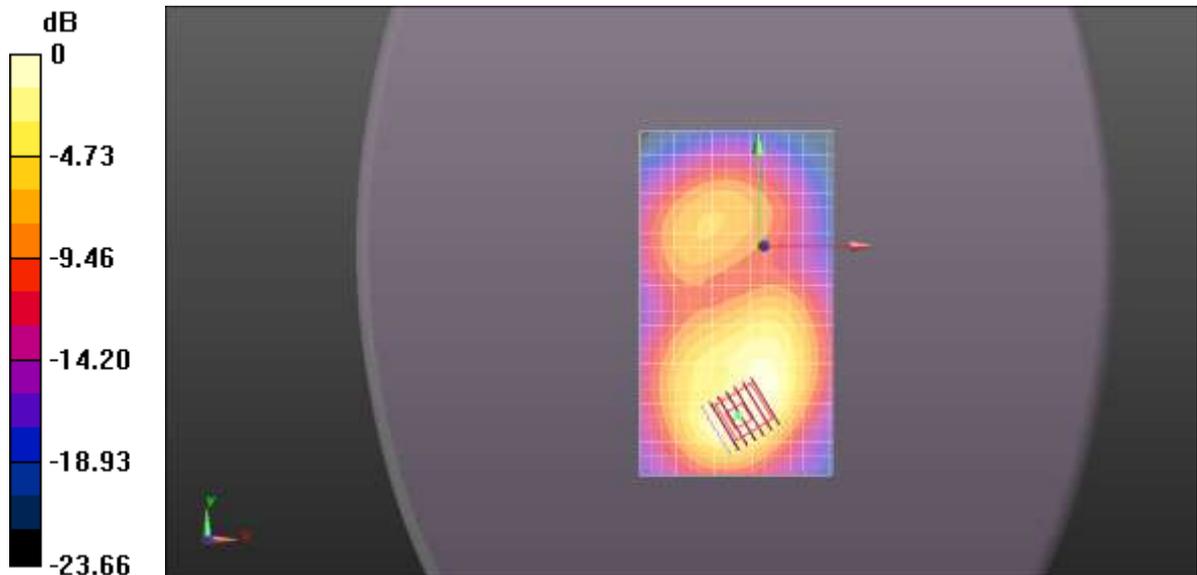
body/towards ground low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.229 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.966 mW/g

SAR(1 g) = 0.583 mW/g; SAR(10 g) = 0.333 mW/g

Maximum value of SAR (measured) = 0.650 mW/g



0 dB = 0.658 mW/g = -3.63 dB mW/g

WCDMA BAND II towards ground high

Date/Time: 09/10/2012 13:04:57

Communication System: WCDMA; Communication System Band: BAND 2; Frequency: 1907.6 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1908$ MHz; $\sigma = 1.502$ mho/m; $\epsilon_r = 52.332$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards ground high/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.784 mW/g

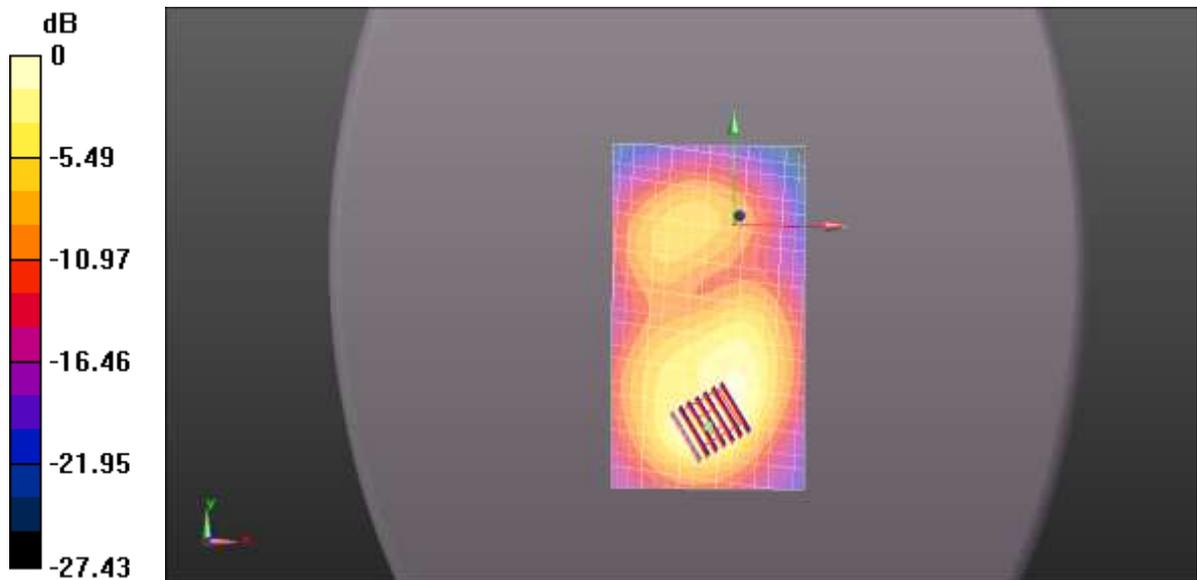
body/towards ground high/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.982 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 1.149 mW/g

SAR(1 g) = 0.686 mW/g; SAR(10 g) = 0.386 mW/g

Maximum value of SAR (measured) = 0.764 mW/g



0 dB = 0.784 mW/g = -2.12 dB mW/g

WCDMA BAND II towards ground mid with earphone

Date/Time: 09/10/2012 15:45:26

Communication System: WCDMA; Communication System Band: BAND 2; Frequency: 1880 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.477$ mho/m; $\epsilon_r = 52.425$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards ground mid with earphone/Area Scan (101x181x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.755 mW/g

body/towards ground mid with earphone/Zoom Scan (7x7x7)/Cube 0:

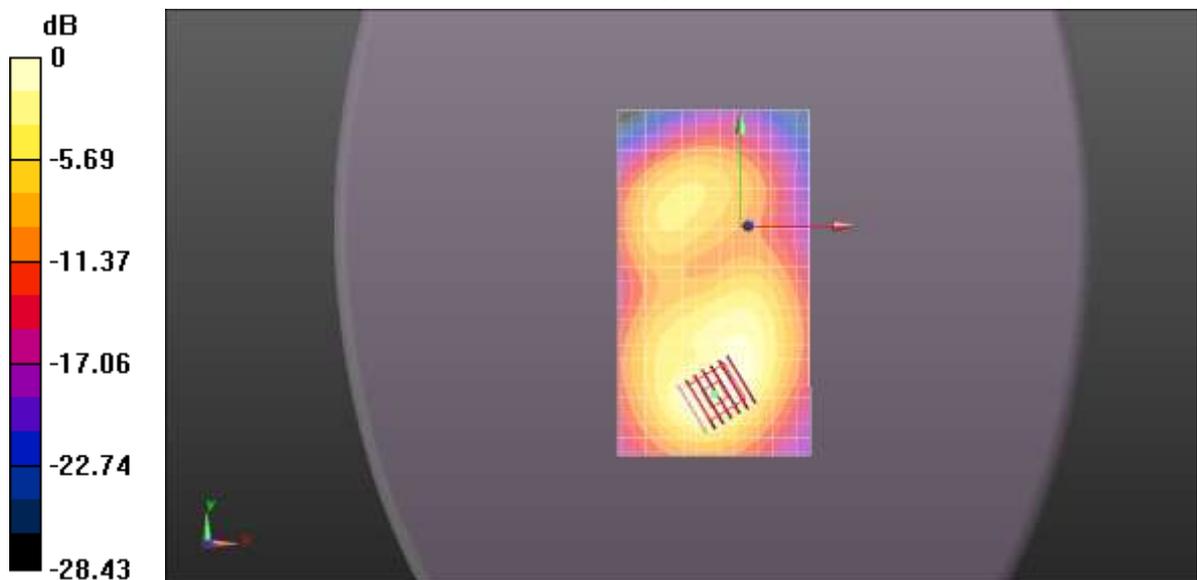
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.237 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 1.103 mW/g

SAR(1 g) = 0.672 mW/g; SAR(10 g) = 0.388 mW/g

Maximum value of SAR (measured) = 0.746 mW/g



0 dB = 0.755 mW/g = -2.44 dB mW/g

WCDMA BAND II towards ground mid with HSDPA

Date/Time: 09/10/2012 16:55:51

Communication System: WCDMA; Communication System Band: BAND 2; Frequency: 1880 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.477$ mho/m; $\epsilon_r = 52.425$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards ground mid with HSDPA/Area Scan (101x181x1): Measurement

grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.882 mW/g

body/towards ground mid with HSDPA/Zoom Scan (7x7x7)/Cube 0:

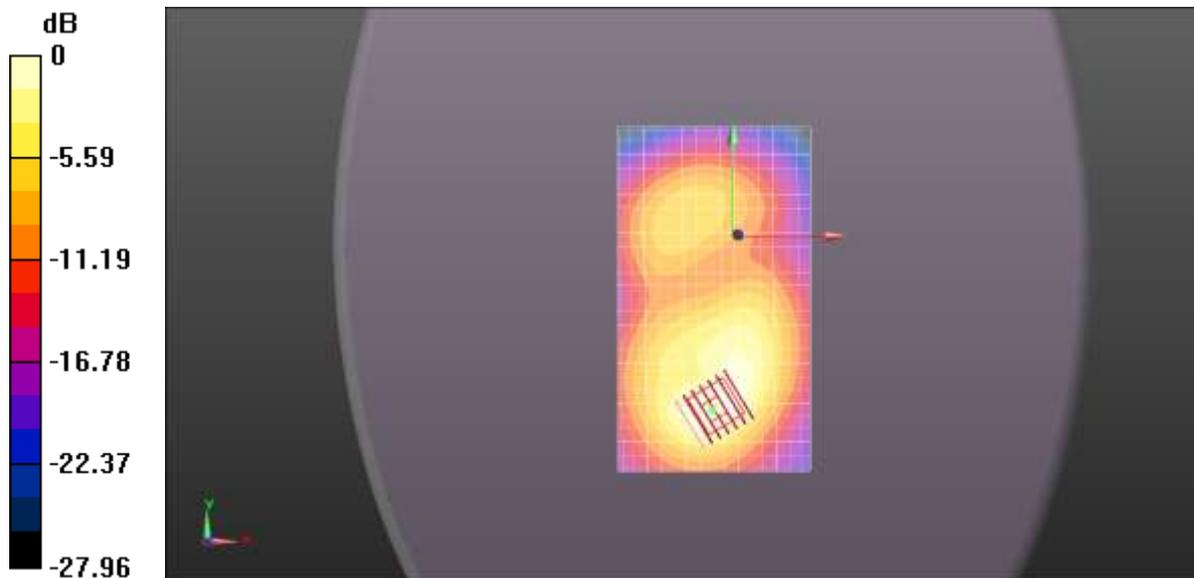
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.320 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 1.277 mW/g

SAR(1 g) = 0.770 mW/g; SAR(10 g) = 0.437 mW/g

Maximum value of SAR (measured) = 0.860 mW/g



0 dB = 0.882 mW/g = -1.10 dB mW/g

WCDMA BAND II towards ground mid with HSUPA

Date/Time: 09/10/2012 17:33:46

Communication System: WCDMA; Communication System Band: BAND 2; Frequency: 1880 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.477$ mho/m; $\epsilon_r = 52.425$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(4.66, 4.66, 4.66); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards ground mid with HSUPA/Area Scan (101x181x1): Measurement

grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.865 mW/g

body/towards ground mid with HSUPA/Zoom Scan (7x7x7)/Cube 0:

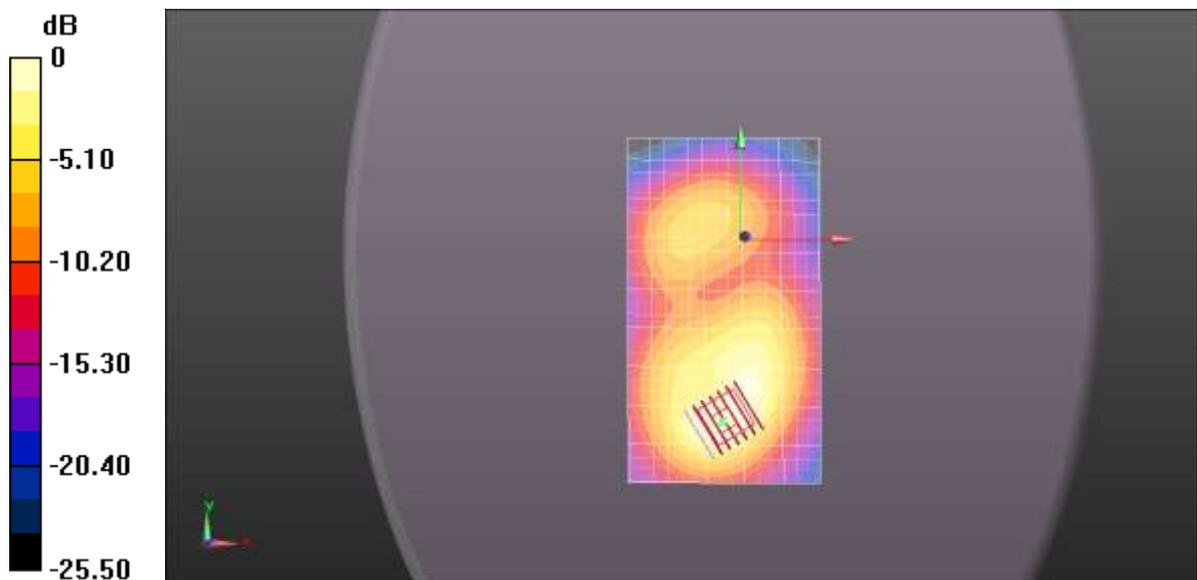
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.392 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 1.273 mW/g

SAR(1 g) = 0.767 mW/g; SAR(10 g) = 0.436 mW/g

Maximum value of SAR (measured) = 0.856 mW/g



0 dB = 0.865 mW/g = -1.26 dB mW/g

WCDMA BAND IV left touch mid

Date/Time: 18/10/2012 20:56:34

Communication System: WCDMA; Communication System Band: BAND 4; Frequency: 1732.5 MHz; Communication System PAR: 0 dB

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.374$ mho/m; $\epsilon_r = 39.262$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(5.73, 5.73, 5.73); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM2; Type: SAM; Serial: TP-1575
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

left/touch mid/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.583 mW/g

left/touch mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.412 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.870 mW/g

SAR(1 g) = 0.545 mW/g; SAR(10 g) = 0.327 mW/g

Maximum value of SAR (measured) = 0.609 mW/g

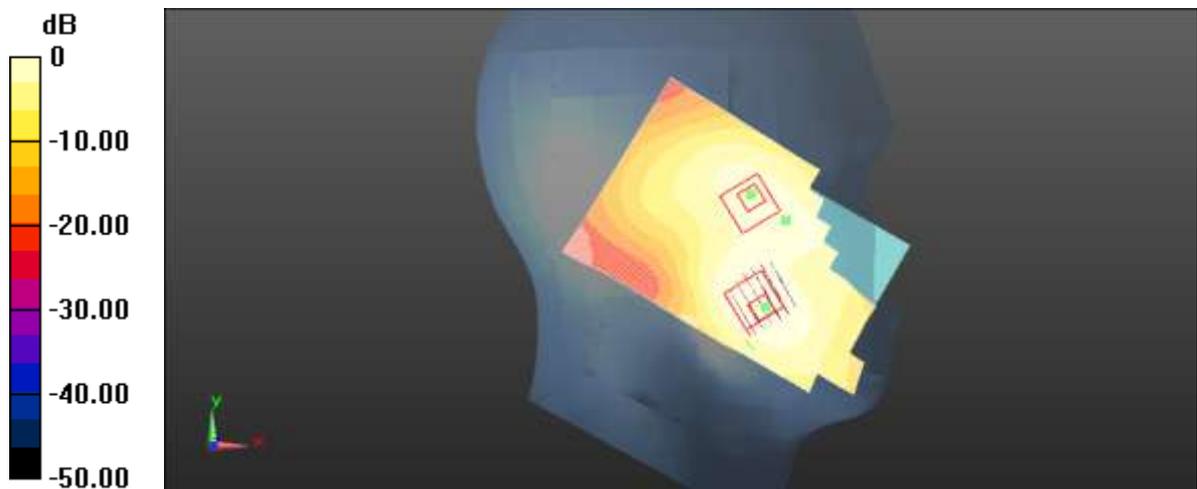
left/touch mid/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.412 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.602 mW/g

SAR(1 g) = 0.377 mW/g; SAR(10 g) = 0.242 mW/g

Maximum value of SAR (measured) = 0.428 mW/g



0 dB = 0.583 mW/g = -4.69 dB mW/g

WCDMA BAND IV left tilt mid

Date/Time: 18/10/2012 21:48:32

Communication System: WCDMA; Communication System Band: BAND 4; Frequency: 1732.5 MHz; Communication System PAR: 0 dB

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.374$ mho/m; $\epsilon_r = 39.262$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(5.73, 5.73, 5.73); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM2; Type: SAM; Serial: TP-1575
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

left/tilt mid/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.245 mW/g

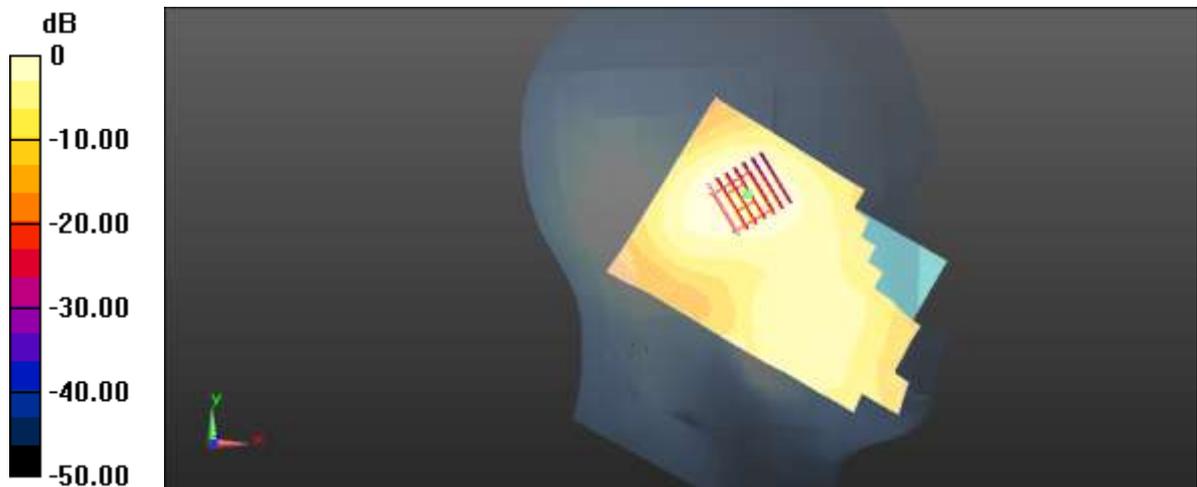
left/tilt mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.458 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.335 mW/g

SAR(1 g) = 0.227 mW/g; SAR(10 g) = 0.144 mW/g

Maximum value of SAR (measured) = 0.246 mW/g



0 dB = 0.245 mW/g = -12.22 dB mW/g

WCDMA BAND IV right touch mid

Date/Time: 18/10/2012 22:44:32

Communication System: WCDMA; Communication System Band: BAND 4; Frequency: 1732.5 MHz; Communication System PAR: 0 dB

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.374$ mho/m; $\epsilon_r = 39.262$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(5.73, 5.73, 5.73); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM2; Type: SAM; Serial: TP-1575
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

right/touch mid/Area Scan (91x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.714 mW/g

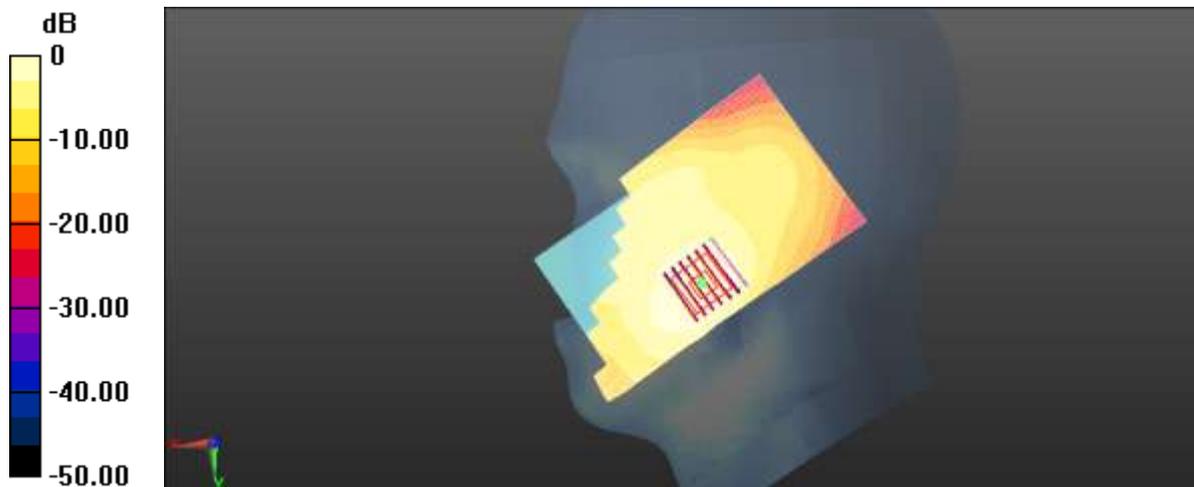
right/touch mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.465 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.032 mW/g

SAR(1 g) = 0.651 mW/g; SAR(10 g) = 0.402 mW/g

Maximum value of SAR (measured) = 0.711 mW/g



0 dB = 0.714 mW/g = -2.93 dB mW/g

WCDMA BAND IV right tilt mid

Date/Time: 19/10/2012 8:50:36

Communication System: WCDMA; Communication System Band: BAND 4; Frequency: 1732.5 MHz; Communication System PAR: 0 dB

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.374$ mho/m; $\epsilon_r = 39.262$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(5.73, 5.73, 5.73); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM2; Type: SAM; Serial: TP-1575
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

right/tilt mid/Area Scan (91x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.196 mW/g

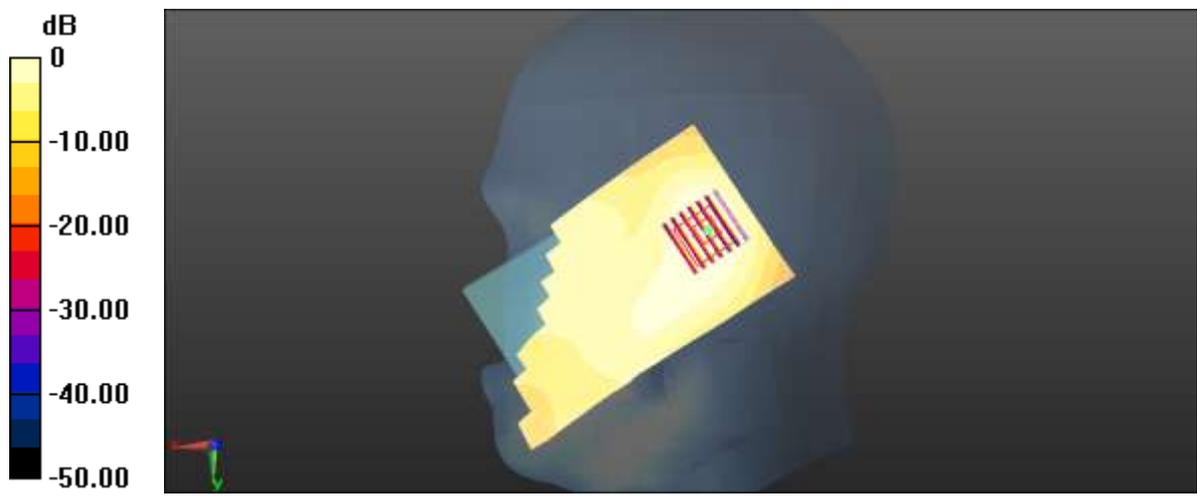
right/tilt mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.639 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.283 mW/g

SAR(1 g) = 0.180 mW/g; SAR(10 g) = 0.111 mW/g

Maximum value of SAR (measured) = 0.196 mW/g



0 dB = 0.196 mW/g = -14.14 dB mW/g

WCDMA BAND IV right touch low

Date/Time: 19/10/2012 9:23:58

Communication System: WCDMA; Communication System Band: BAND 4; Frequency: 1712.4 MHz; Communication System PAR: 0 dB

Medium parameters used (interpolated): $f = 1712.4$ MHz; $\sigma = 1.358$ mho/m; $\epsilon_r = 39.406$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(5.73, 5.73, 5.73); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM2; Type: SAM; Serial: TP-1575
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

right/touch low/Area Scan (91x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.723 mW/g

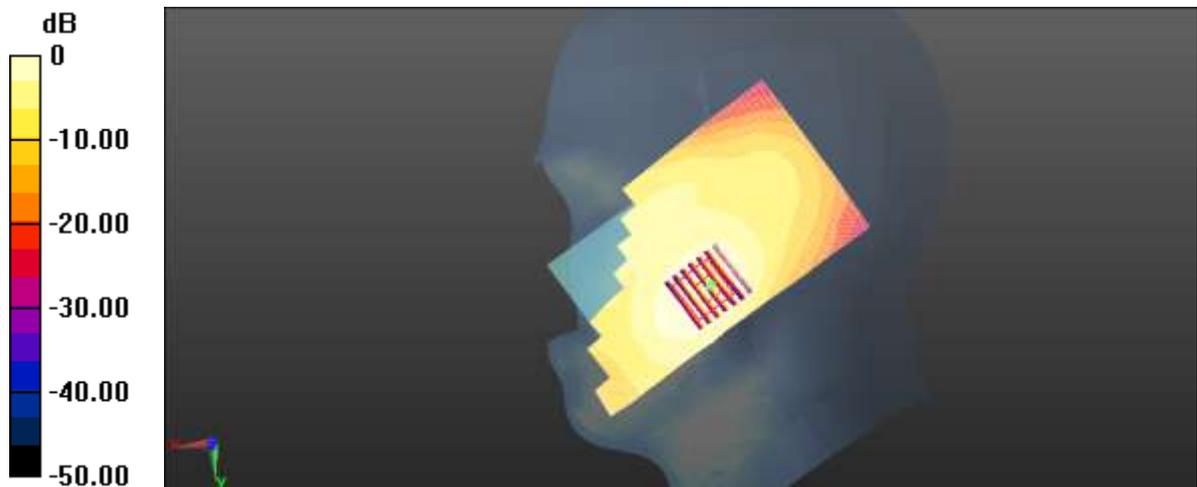
right/touch low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.110 V/m; Power Drift = -0.03 dB

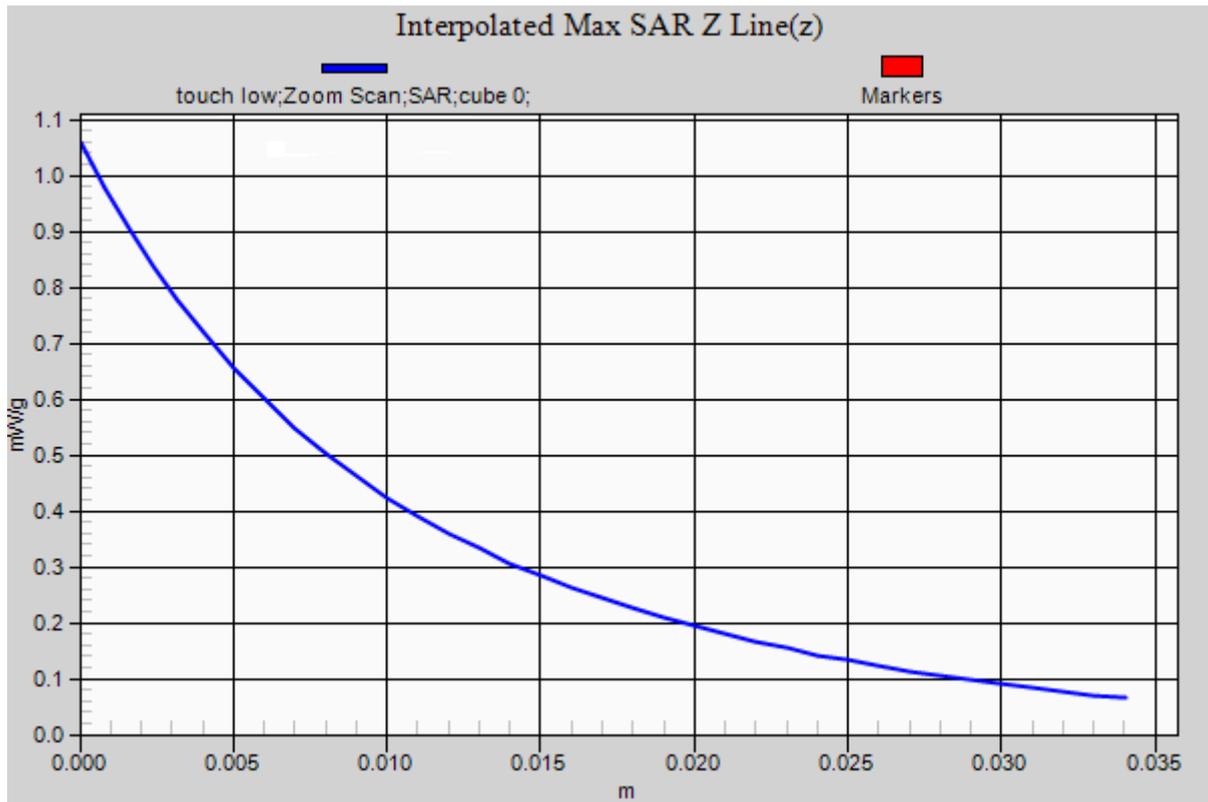
Peak SAR (extrapolated) = 1.058 mW/g

SAR(1 g) = 0.667 mW/g; SAR(10 g) = 0.416 mW/g

Maximum value of SAR (measured) = 0.728 mW/g



0 dB = 0.723 mW/g = -2.82 dB mW/g



WCDMA BAND IV right touch high

Date/Time: 19/10/2012 9:53:59

Communication System: WCDMA; Communication System Band: BAND 4; Frequency: 1752.6 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1753$ MHz; $\sigma = 1.393$ mho/m; $\epsilon_r = 39.155$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(5.73, 5.73, 5.73); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM2; Type: SAM; Serial: TP-1575
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

right/touch high/Area Scan (91x161x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.666 mW/g

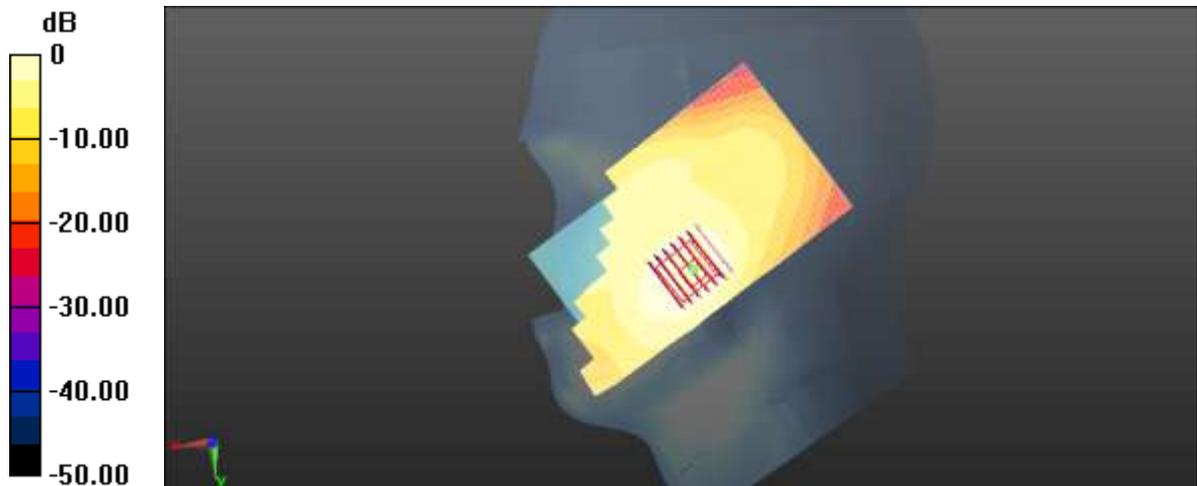
right/touch high/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.467 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.985 mW/g

SAR(1 g) = 0.616 mW/g; SAR(10 g) = 0.379 mW/g

Maximum value of SAR (measured) = 0.690 mW/g



$0 \text{ dB} = 0.666 \text{ mW/g} = -3.53 \text{ dB mW/g}$

WCDMA BAND IV towards phantom mid

Date/Time: 17/10/2012 17:46:39

Communication System: WCDMA; Communication System Band: BAND 4; Frequency: 1732.5 MHz; Communication System PAR: 0 dB

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.496$ mho/m; $\epsilon_r = 51.908$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.05, 5.05, 5.05); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards phantom mid/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.15 mW/g

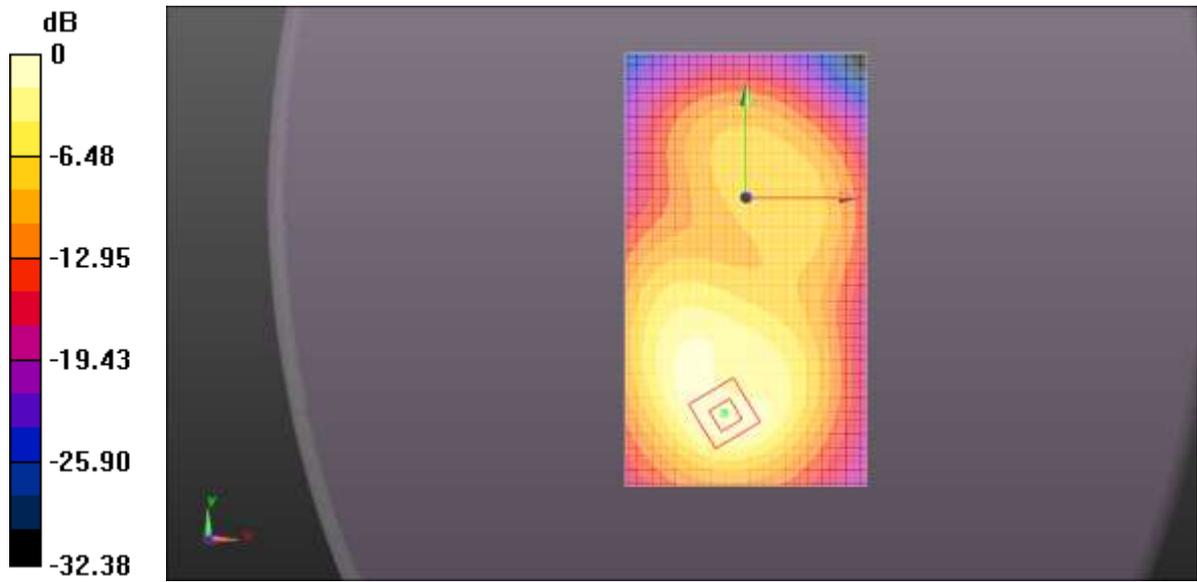
body/towards phantom mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.637 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.700 mW/g

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.582 mW/g

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



0 dB = 1.15 mW/g = 1.24 dB mW/g

WCDMA BAND IV towards ground mid

Date/Time: 17/10/2012 18:43:28

Communication System: WCDMA; Communication System Band: BAND 4; Frequency: 1732.5 MHz; Communication System PAR: 0 dB

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.496$ mho/m; $\epsilon_r = 51.908$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.05, 5.05, 5.05); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards ground mid/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

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

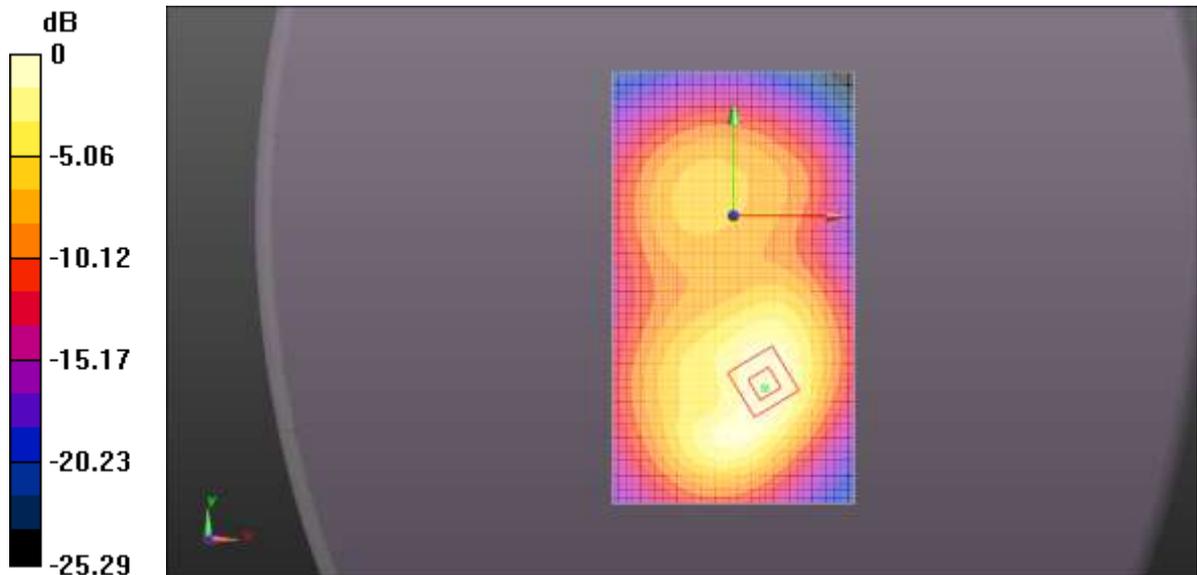
body/towards ground mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.044 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.630 mW/g

SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.599 mW/g

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



0 dB = 1.11 mW/g = 0.92 dB mW/g

WCDMA BAND IV towards front mid

Date/Time: 18/10/2012 13:13:46

Communication System: WCDMA; Communication System Band: BAND 4; Frequency: 1732.5 MHz; Communication System PAR: 0 dB

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.496$ mho/m; $\epsilon_r = 51.908$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.05, 5.05, 5.05); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/front mid/Area Scan (71x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.869 mW/g

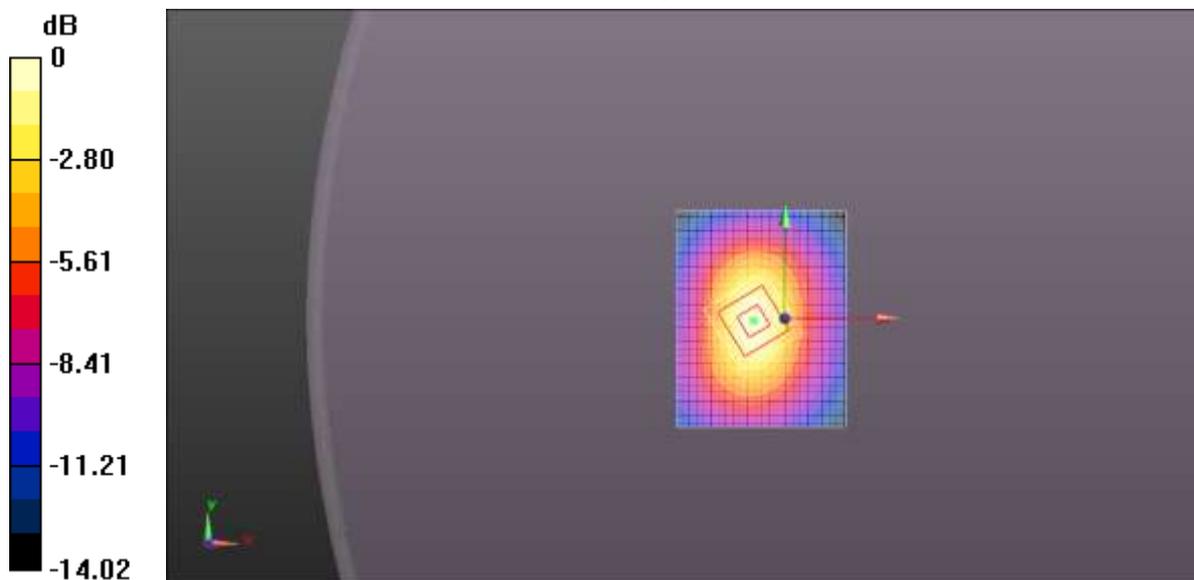
body/front mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.712 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 1.237 mW/g

SAR(1 g) = 0.770 mW/g; SAR(10 g) = 0.442 mW/g

Maximum value of SAR (measured) = 0.856 mW/g



0 dB = 0.869 mW/g = -1.21 dB mW/g

WCDMA BAND IV left side mid

Date/Time: 18/10/2012 10:59:20

Communication System: WCDMA; Communication System Band: BAND 4; Frequency: 1732.5 MHz; Communication System PAR: 0 dB

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.496$ mho/m; $\epsilon_r = 51.908$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.05, 5.05, 5.05); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body2/left side mid/Area Scan (71x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.289 mW/g

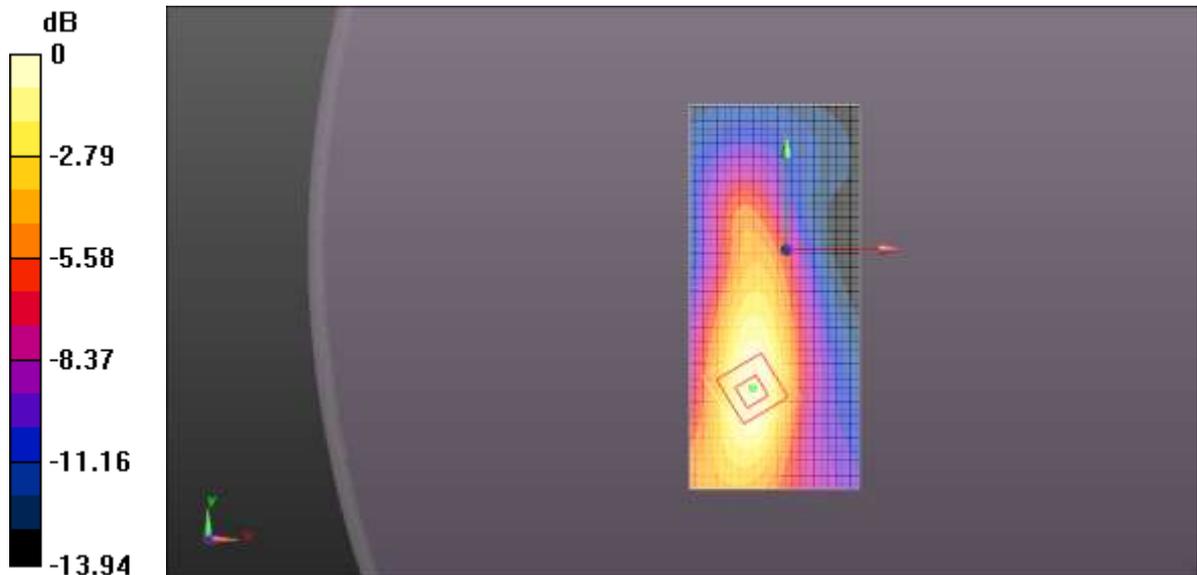
body2/left side mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.865 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.420 mW/g

SAR(1 g) = 0.256 mW/g; SAR(10 g) = 0.150 mW/g

Maximum value of SAR (measured) = 0.283 mW/g



0 dB = 0.289 mW/g = -10.79 dB mW/g

WCDMA BAND IV right side mid

Date/Time: 18/10/2012 09:53:23

Communication System: WCDMA; Communication System Band: BAND 4; Frequency: 1732.5 MHz; Communication System PAR: 0 dB

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.496$ mho/m; $\epsilon_r = 51.908$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.05, 5.05, 5.05); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body2/right side mid/Area Scan (71x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.334 mW/g

body2/right side mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.881 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.481 mW/g

SAR(1 g) = 0.301 mW/g; SAR(10 g) = 0.177 mW/g

Maximum value of SAR (measured) = 0.331 mW/g

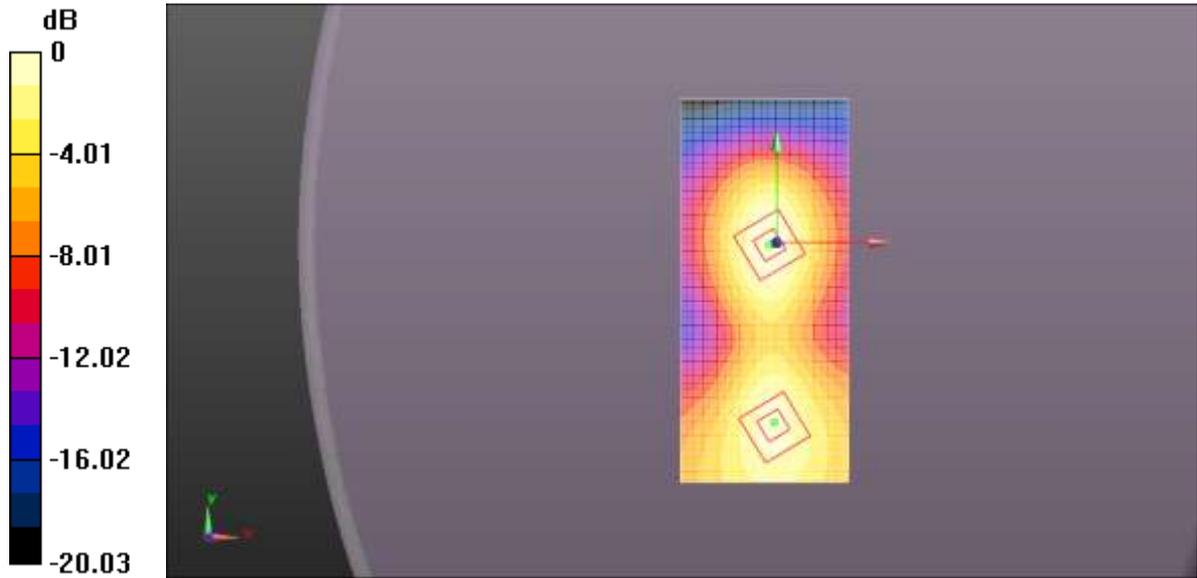
body2/right side mid/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.881 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.419 mW/g

SAR(1 g) = 0.266 mW/g; SAR(10 g) = 0.162 mW/g

Maximum value of SAR (measured) = 0.290 mW/g



0 dB = 0.334 mW/g = -9.54 dB mW/g

WCDMA BAND IV towards phantom low

Date/Time: 18/10/2012 08:22:45

Communication System: WCDMA; Communication System Band: BAND 4; Frequency: 1712.4 MHz; Communication System PAR: 0 dB

Medium parameters used (interpolated): $f = 1712.4$ MHz; $\sigma = 1.476$ mho/m; $\epsilon_r = 51.967$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.05, 5.05, 5.05); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards phantom low/Area Scan (101x181x1): Measurement grid:

$dx=10$ mm, $dy=10$ mm

Maximum value of SAR (interpolated) = 1.14 mW/g

body/towards phantom low/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

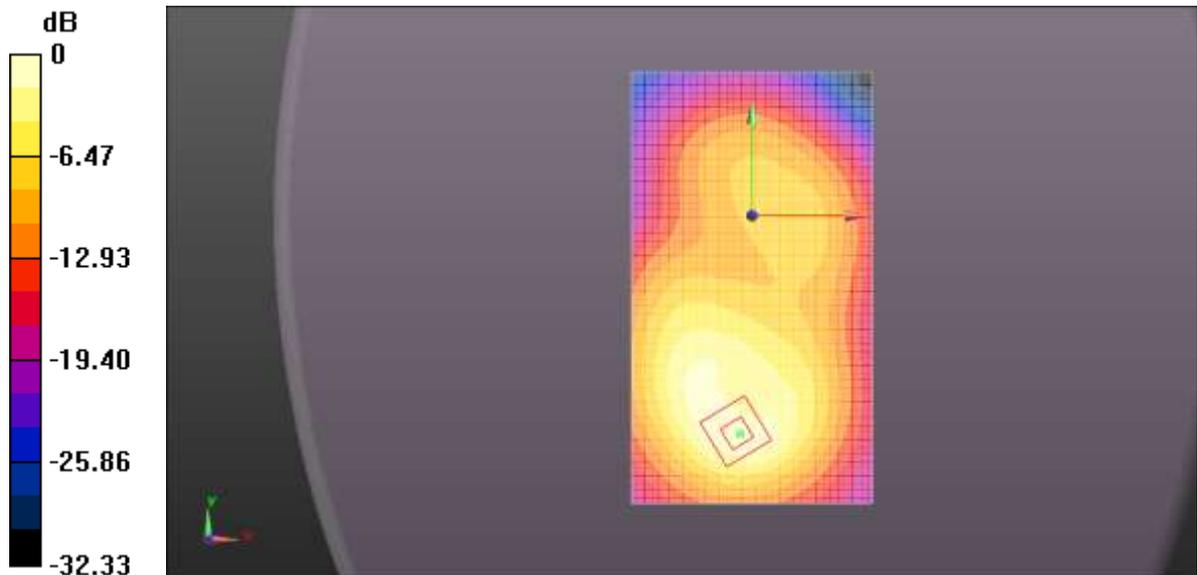
$dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 11.822 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 1.716 mW/g

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.577 mW/g

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



0 dB = 1.14 mW/g = 1.16 dB mW/g

WCDMA BAND IV towards phantom high

Date/Time: 18/10/2012 09:12:06

Communication System: WCDMA; Communication System Band: BAND 4; Frequency: 1752.6 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1753$ MHz; $\sigma = 1.515$ mho/m; $\epsilon_r = 51.849$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.05, 5.05, 5.05); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards phantom high/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.23 mW/g

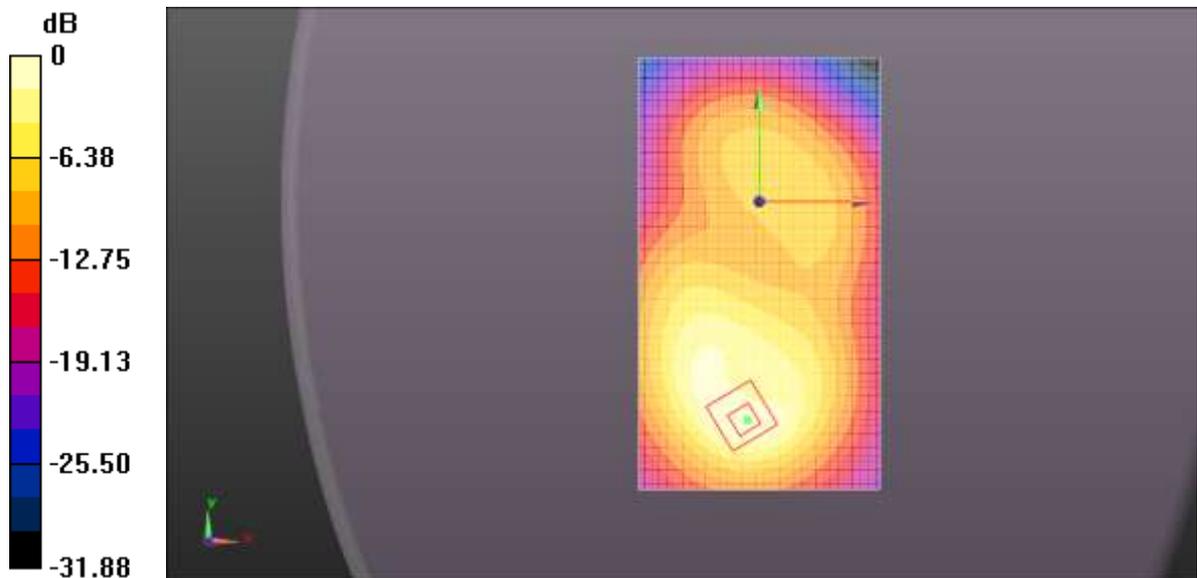
body/towards phantom high/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.714 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.795 mW/g

SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.602 mW/g

Maximum value of SAR (measured) = 1.22 mW/g



0 dB = 1.23 mW/g = 1.77 dB mW/g

WCDMA BAND IV towards ground low

Date/Time: 17/10/2012 19:21:18

Communication System: WCDMA; Communication System Band: BAND 4; Frequency: 1712.4 MHz; Communication System PAR: 0 dB

Medium parameters used (interpolated): $f = 1712.4$ MHz; $\sigma = 1.476$ mho/m; $\epsilon_r = 51.967$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.05, 5.05, 5.05); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards ground low/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.04 mW/g

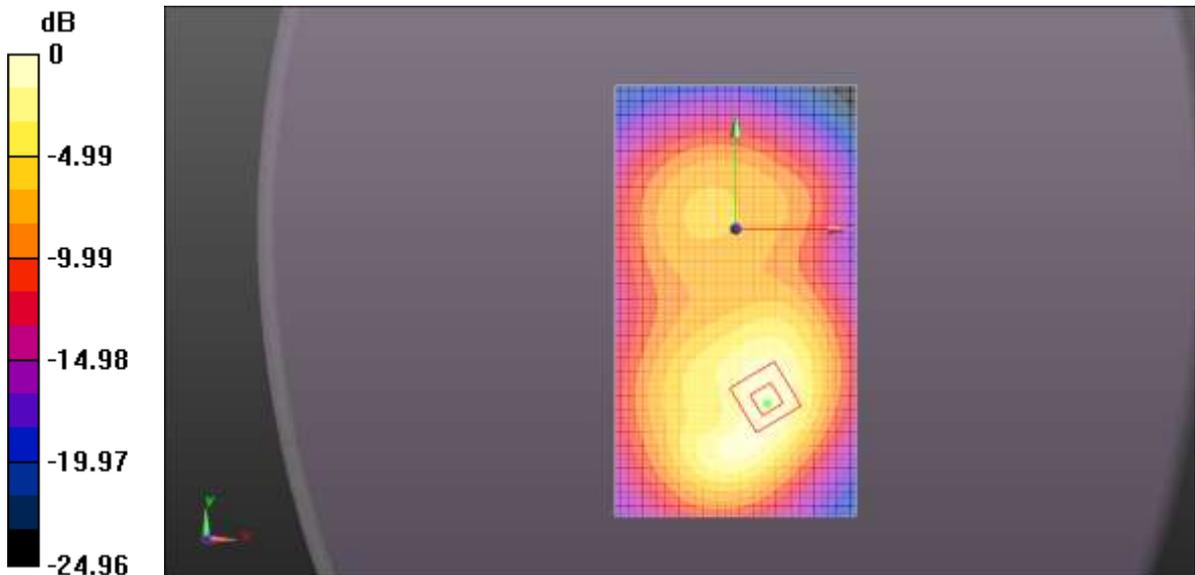
body/towards ground low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.327 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.539 mW/g

SAR(1 g) = 0.957 mW/g; SAR(10 g) = 0.565 mW/g

Maximum value of SAR (measured) = 1.05 mW/g



0 dB = 1.04 mW/g = 0.37 dB mW/g

WCDMA BAND IV towards ground high

Date/Time: 17/10/2012 22:53:29

Communication System: WCDMA; Communication System Band: BAND 4; Frequency: 1752.6 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1753$ MHz; $\sigma = 1.515$ mho/m; $\epsilon_r = 51.849$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.05, 5.05, 5.05); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards ground high/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.06 mW/g

body/towards ground high/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.070 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 1.576 mW/g

SAR(1 g) = 0.962 mW/g; SAR(10 g) = 0.571 mW/g

Maximum value of SAR (measured) = 1.05 mW/g

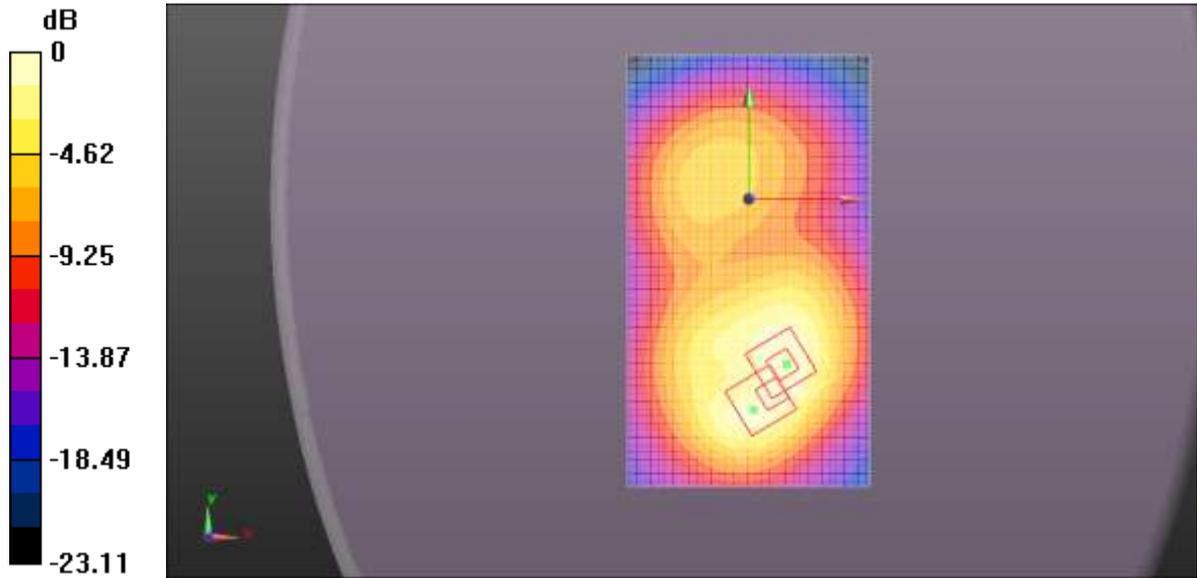
body/towards ground high/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.070 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 1.518 mW/g

SAR(1 g) = 0.862 mW/g; SAR(10 g) = 0.508 mW/g

Maximum value of SAR (measured) = 0.993 mW/g



0 dB = 1.06 mW/g = 0.52 dB mW/g

WCDMA BAND IV towards phantom high with earphone

Date/Time: 18/10/2012 13:48:17

Communication System: WCDMA; Communication System Band: BAND 4; Frequency: 1752.6 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1753$ MHz; $\sigma = 1.515$ mho/m; $\epsilon_r = 51.849$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.05, 5.05, 5.05); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards phantom high with earphone/Area Scan (101x181x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.27 mW/g

body/towards phantom high with earphone/Zoom Scan (7x7x7)/Cube 0:

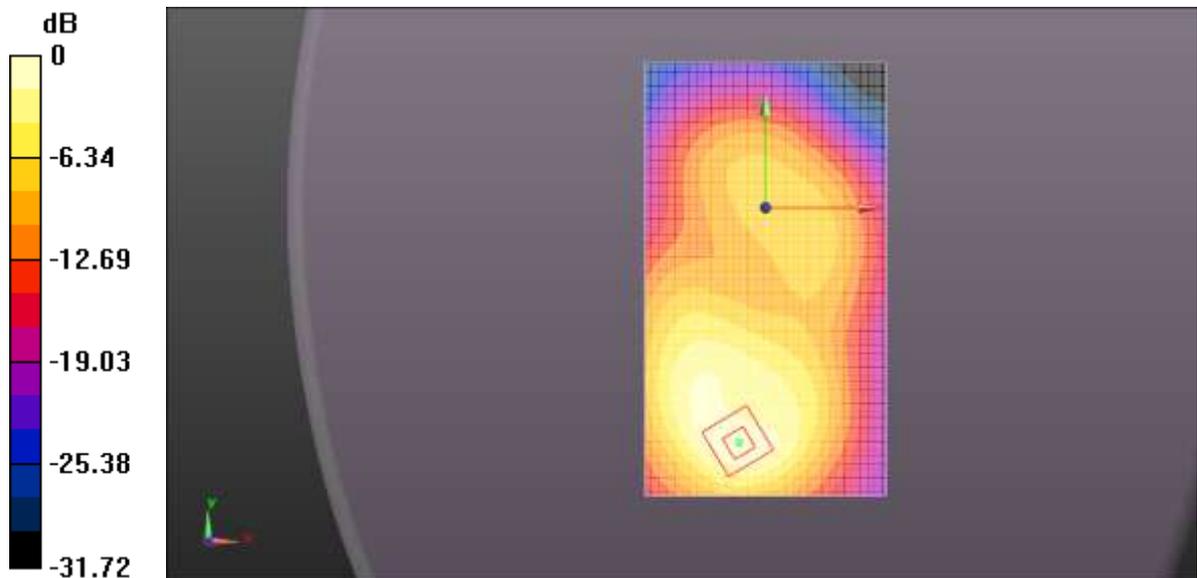
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.511 V/m; Power Drift = -0.01 dB

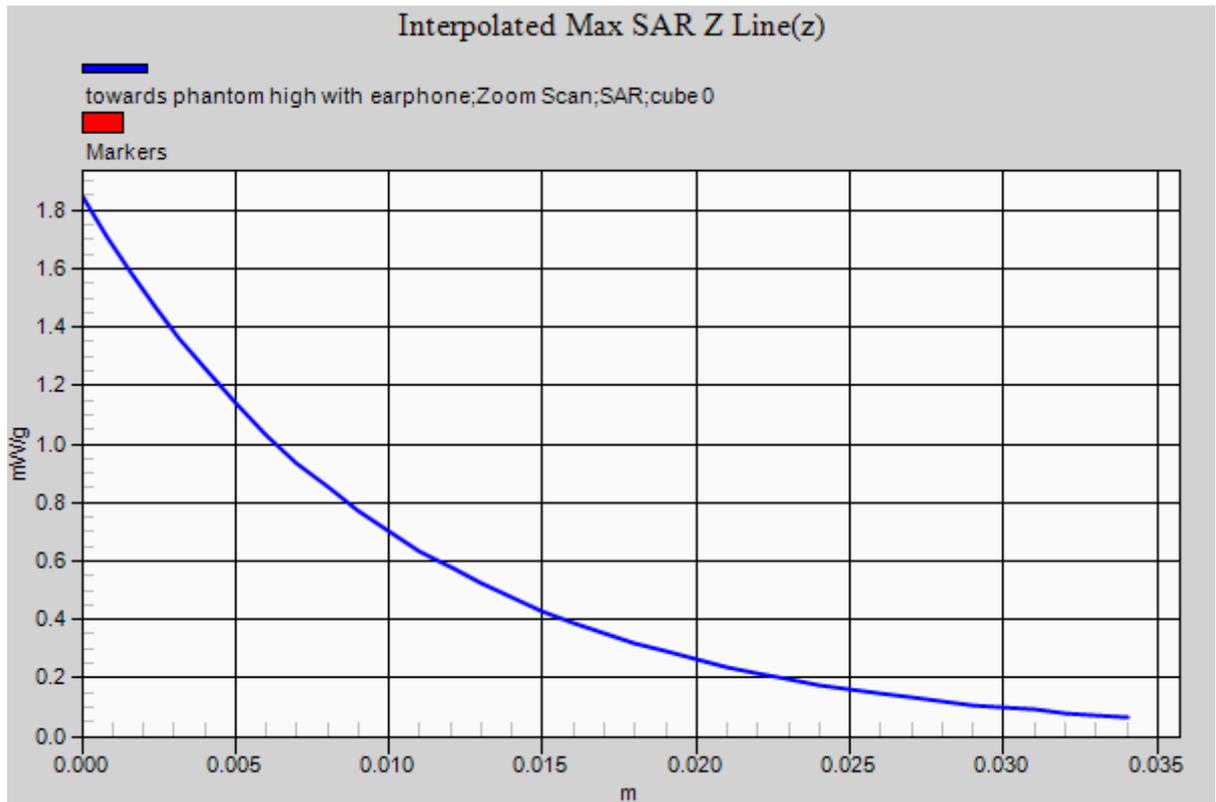
Peak SAR (extrapolated) = 1.846 mW/g

SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.616 mW/g

Maximum value of SAR (measured) = 1.26 mW/g



0 dB = 1.27 mW/g = 2.08 dB mW/g



WCDMA BAND IV towards phantom high with HSDPA

Date/Time: 18/10/2012 15:08:19

Communication System: WCDMA; Communication System Band: BAND 4; Frequency: 1752.6 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1753$ MHz; $\sigma = 1.515$ mho/m; $\epsilon_r = 51.849$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.05, 5.05, 5.05); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards phantom high with HSDPA/Area Scan (101x181x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.876 mW/g

body/towards phantom high with HSDPA/Zoom Scan (7x7x7)/Cube 0:

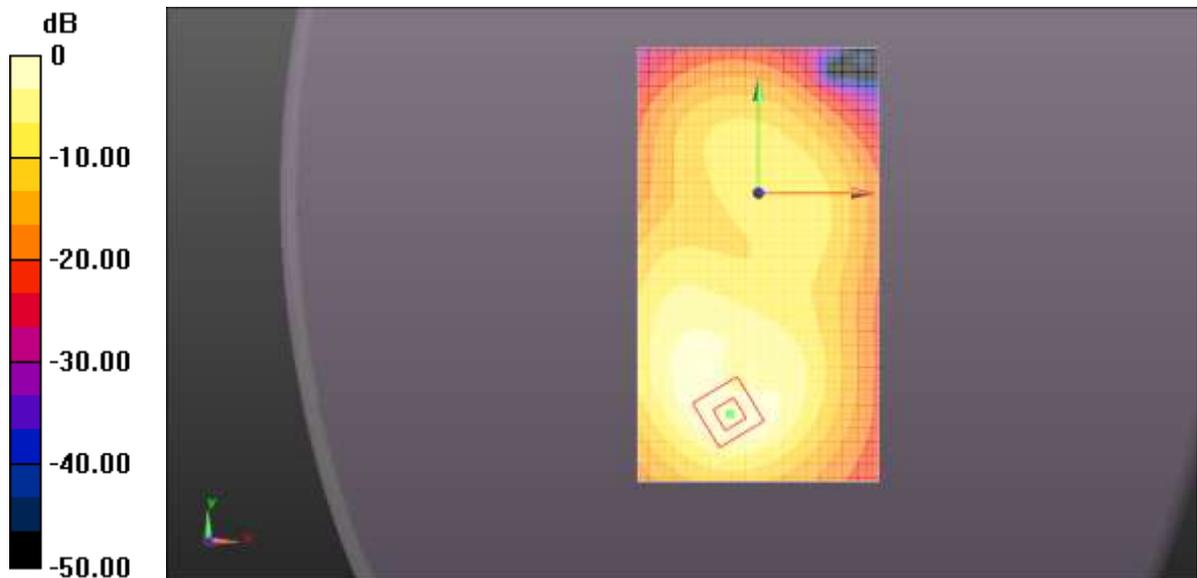
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.265 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.354 mW/g

SAR(1 g) = 0.795 mW/g; SAR(10 g) = 0.427 mW/g

Maximum value of SAR (measured) = 0.909 mW/g



0 dB = 0.876 mW/g = -1.15 dB mW/g

WCDMA BAND IV towards phantom high with HSUPA

Date/Time: 18/10/2012 15:46:04

Communication System: WCDMA; Communication System Band: BAND 4; Frequency: 1752.6 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 1753$ MHz; $\sigma = 1.515$ mho/m; $\epsilon_r = 51.849$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(5.05, 5.05, 5.05); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards phantom high with HSUPA/Area Scan (101x181x1):

Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.902 mW/g

body/towards phantom high with HSUPA/Zoom Scan (7x7x7)/Cube 0:

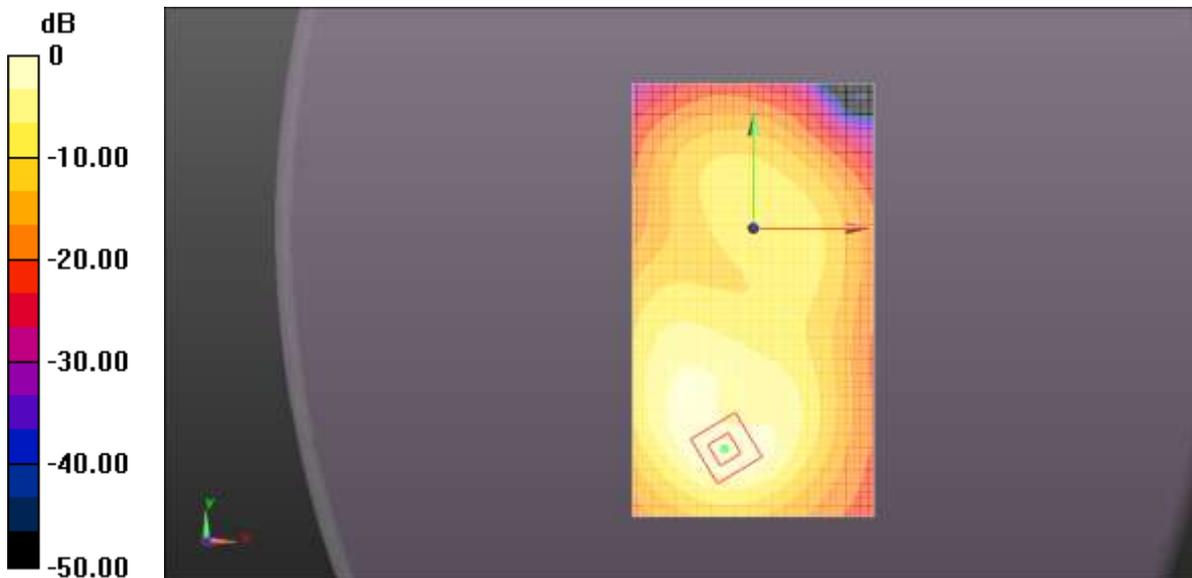
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.323 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.359 mW/g

SAR(1 g) = 0.796 mW/g; SAR(10 g) = 0.427 mW/g

Maximum value of SAR (measured) = 0.909 mW/g



0 dB = 0.902 mW/g = -0.90 dB mW/g

WCDMA BAND V left touch mid

Date/Time: 19/10/2012 11:12:09

Communication System: WCDMA; Communication System Band: BAND 5; Frequency: 836.6 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 837$ MHz; $\sigma = 0.914$ mho/m; $\epsilon_r = 43.026$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(6.36, 6.36, 6.36); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM1; Type: SAM; Serial: TP1576
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

left/touch mid/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.524 mW/g

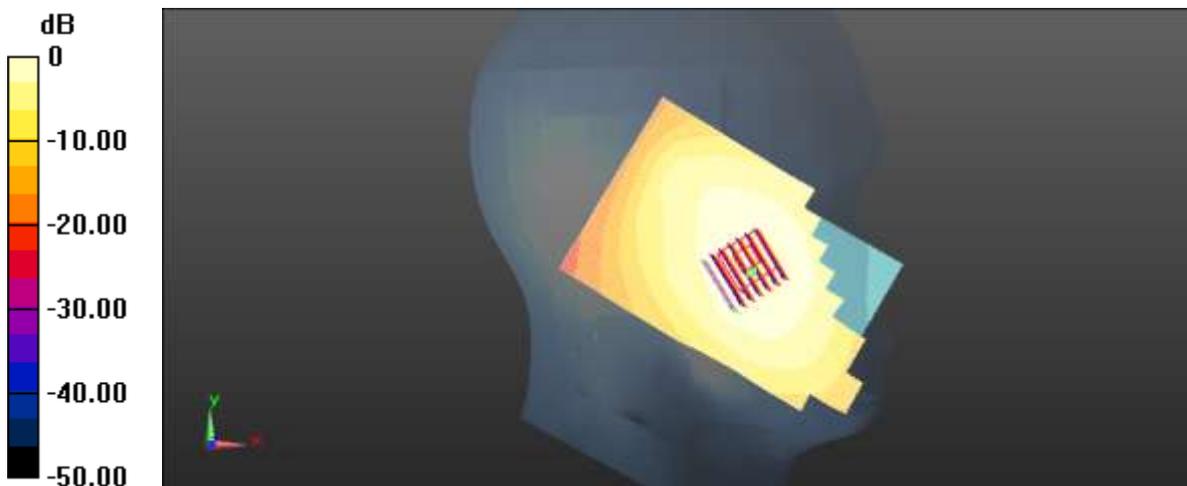
left/touch mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.122 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.657 mW/g

SAR(1 g) = 0.465 mW/g; SAR(10 g) = 0.346 mW/g

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



$0 \text{ dB} = 0.524 \text{ mW/g} = -5.61 \text{ dB mW/g}$

WCDMA BAND V left tilt mid

Date/Time: 19/10/2012 12:42:01

Communication System: WCDMA; Communication System Band: BAND 5; Frequency: 836.6 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 837$ MHz; $\sigma = 0.914$ mho/m; $\epsilon_r = 43.026$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(6.36, 6.36, 6.36); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM1; Type: SAM; Serial: TP1576
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

left/tilt mid/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.316 mW/g

left/tilt mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.368 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.351 mW/g

SAR(1 g) = 0.296 mW/g; SAR(10 g) = 0.239 mW/g

Maximum value of SAR (measured) = 0.307 mW/g

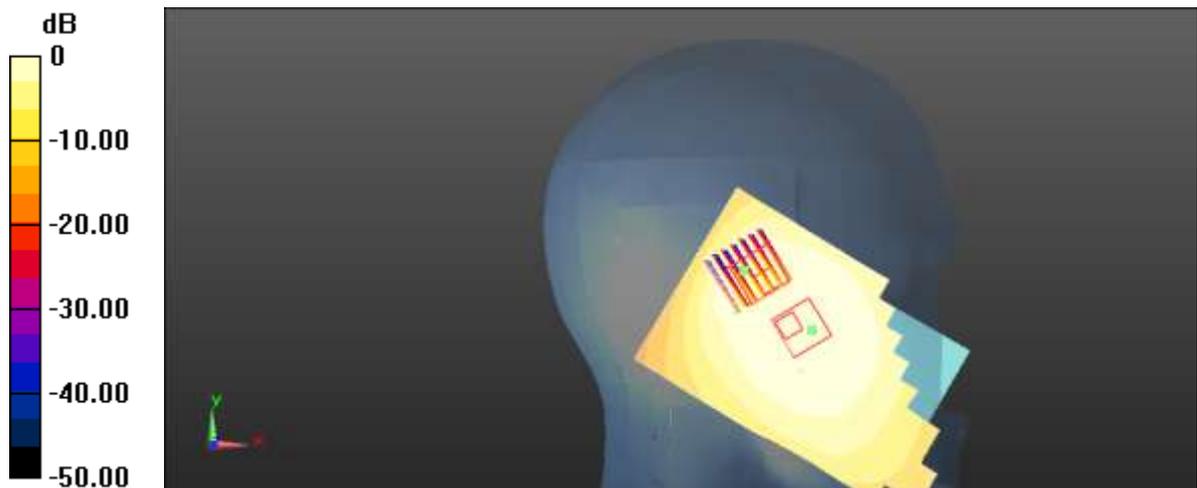
left/tilt mid/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.368 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.507 mW/g

SAR(1 g) = 0.240 mW/g; SAR(10 g) = 0.169 mW/g

Maximum value of SAR (measured) = 0.265 mW/g



0 dB = 0.316 mW/g = -10.01 dB mW/g

WCDMA BAND V right touch mid

Date/Time: 19/10/2012 13:31:36

Communication System: WCDMA; Communication System Band: BAND 5; Frequency: 836.6 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 837$ MHz; $\sigma = 0.914$ mho/m; $\epsilon_r = 43.026$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(6.36, 6.36, 6.36); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM1; Type: SAM; Serial: TP1576
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

right/touch mid/Area Scan (91x161x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.525 mW/g

right/touch mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.878 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.643 mW/g

SAR(1 g) = 0.490 mW/g; SAR(10 g) = 0.366 mW/g

Maximum value of SAR (measured) = 0.525 mW/g

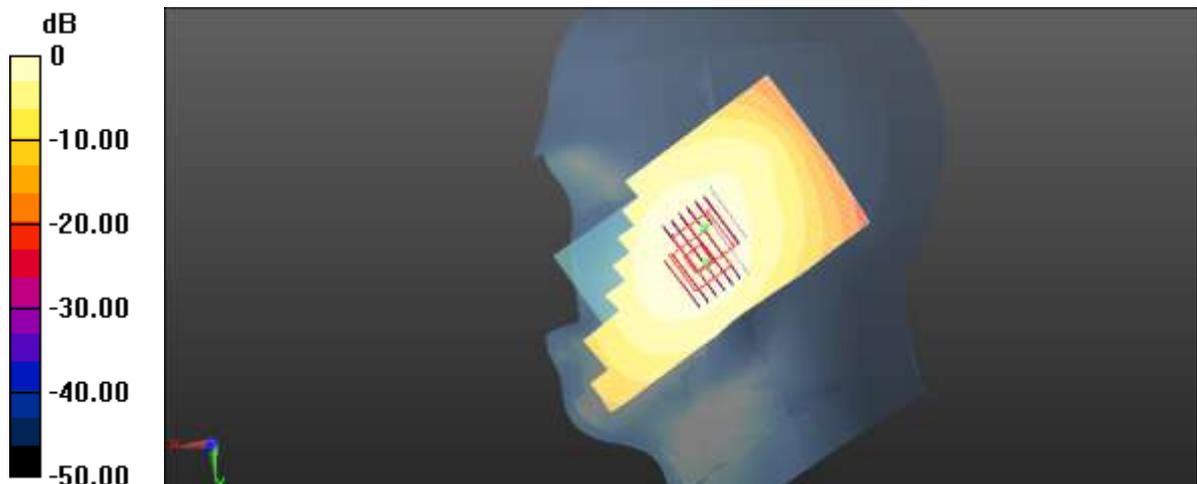
right/touch mid/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.878 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.678 mW/g

SAR(1 g) = 0.508 mW/g; SAR(10 g) = 0.368 mW/g

Maximum value of SAR (measured) = 0.537 mW/g



0 dB = 0.525 mW/g = -5.60 dB mW/g

WCDMA BAND V right tilt mid

Date/Time: 19/10/2012 14:15:36

Communication System: WCDMA; Communication System Band: BAND 5; Frequency: 836.6 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 837$ MHz; $\sigma = 0.914$ mho/m; $\epsilon_r = 43.026$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(6.36, 6.36, 6.36); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM1; Type: SAM; Serial: TP1576
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

right/tilt mid/Area Scan (91x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.374 mW/g

right/tilt mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.649 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.396 mW/g

SAR(1 g) = 0.345 mW/g; SAR(10 g) = 0.278 mW/g

Maximum value of SAR (measured) = 0.360 mW/g

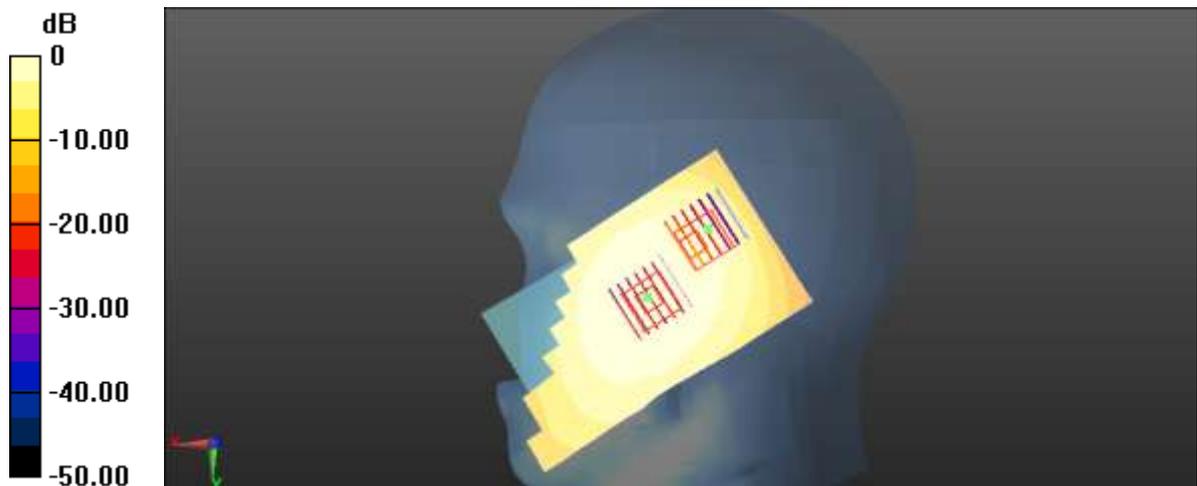
right/tilt mid/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.649 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.371 mW/g

SAR(1 g) = 0.231 mW/g; SAR(10 g) = 0.153 mW/g

Maximum value of SAR (measured) = 0.261 mW/g



0 dB = 0.374 mW/g = -8.55 dB mW/g

WCDMA BAND V right touch low

Date/Time: 19/10/2012 15:24:08

Communication System: WCDMA; Communication System Band: BAND 5; Frequency: 826.4 MHz; Communication System PAR: 0 dB

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.903$ mho/m; $\epsilon_r = 43.191$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(6.36, 6.36, 6.36); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM1; Type: SAM; Serial: TP1576
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

right/touch low/Area Scan (91x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.626 mW/g

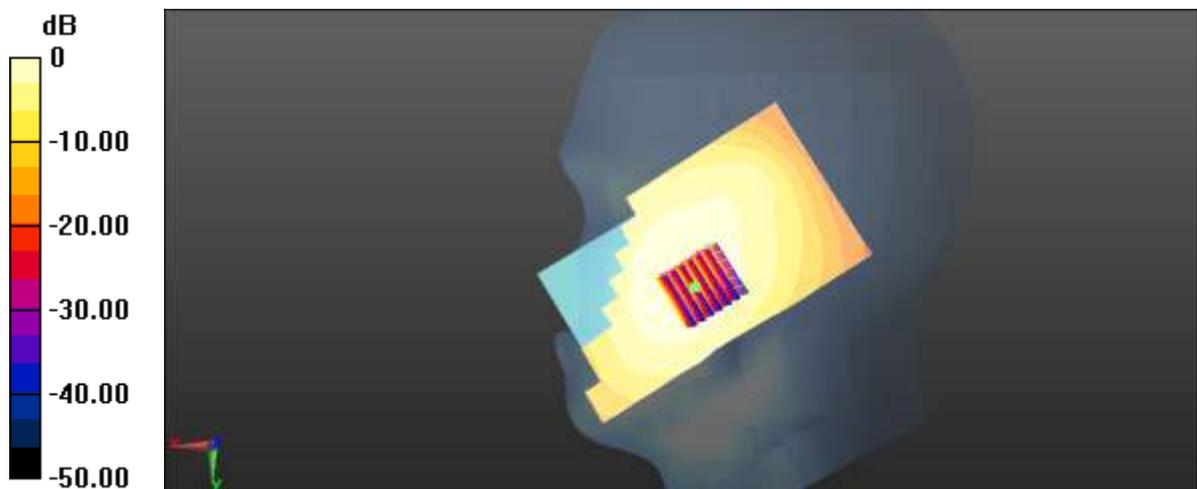
right/touch low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.325 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.730 mW/g

SAR(1 g) = 0.564 mW/g; SAR(10 g) = 0.424 mW/g

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



0 dB = 0.626 mW/g = -4.07 dB mW/g

WCDMA BAND V right touch high

Date/Time: 19/10/2012 16:21:20

Communication System: WCDMA; Communication System Band: BAND 5; Frequency: 846.6 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 847$ MHz; $\sigma = 0.923$ mho/m; $\epsilon_r = 42.875$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3297; ConvF(6.36, 6.36, 6.36); Calibrated: 10/4/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1327; Calibrated: 11/4/2012
- Phantom: SAM1; Type: SAM; Serial: TP1576
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

right/touch high/Area Scan (91x161x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.811 mW/g

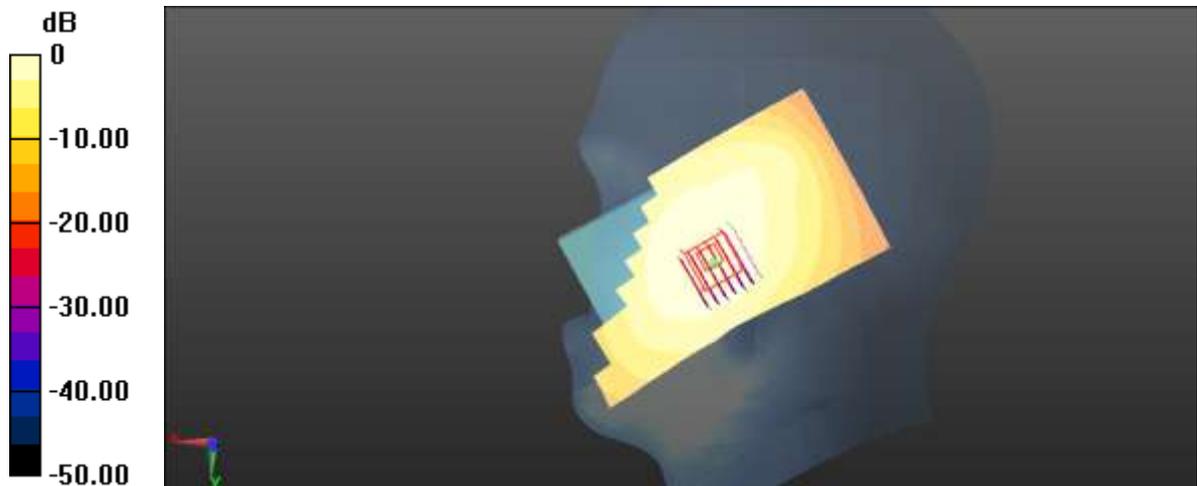
right/touch high/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.906 V/m; Power Drift = -0.13 dB

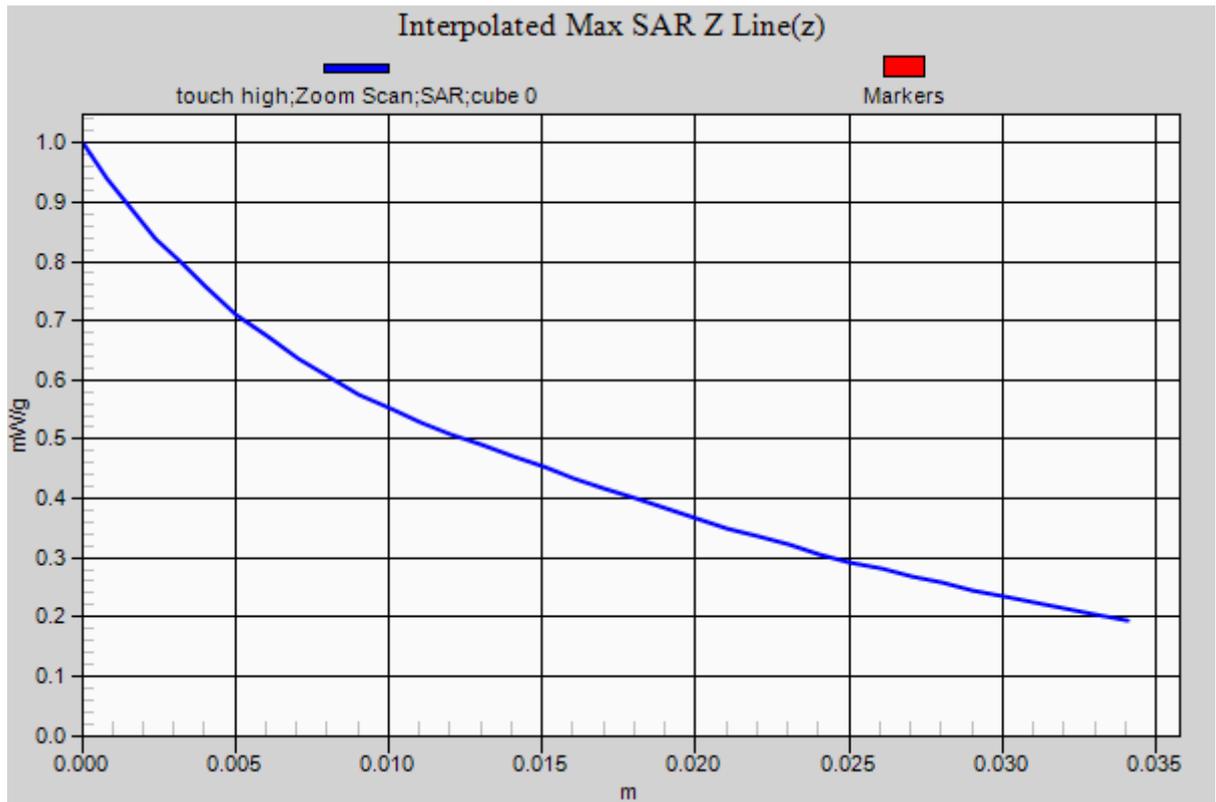
Peak SAR (extrapolated) = 1.000 mW/g

SAR(1 g) = 0.737 mW/g; SAR(10 g) = 0.555 mW/g

Maximum value of SAR (measured) = 0.792 mW/g



$0 \text{ dB} = 0.811 \text{ mW/g} = -1.81 \text{ dB mW/g}$



WCDMA BAND V towards phantom mid

Date/Time: 16/10/2012 19:56:33

Communication System: WCDMA; Communication System Band: BAND 5; Frequency: 836.6 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 837$ MHz; $\sigma = 0.951$ mho/m; $\epsilon_r = 54.241$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(6.25, 6.25, 6.25); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards phantom mid/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

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

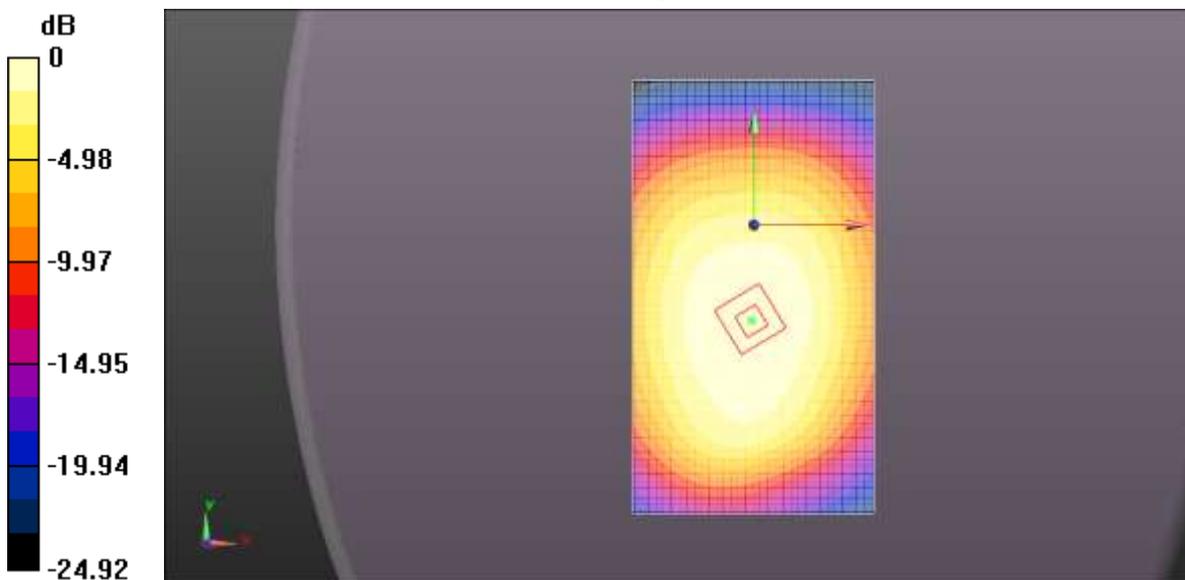
body/towards phantom mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.545 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.599 mW/g

SAR(1 g) = 0.492 mW/g; SAR(10 g) = 0.380 mW/g

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



0 dB = 0.515 mW/g = -5.76 dB mW/g

WCDMA BAND V towards ground mid

Date/Time: 16/10/2012 20:35:50

Communication System: WCDMA; Communication System Band: BAND 5; Frequency: 836.6 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 837$ MHz; $\sigma = 0.951$ mho/m; $\epsilon_r = 54.241$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(6.25, 6.25, 6.25); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/towards ground mid/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.701 mW/g

body/towards ground mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.608 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.833 mW/g

SAR(1 g) = 0.667 mW/g; SAR(10 g) = 0.502 mW/g

Maximum value of SAR (measured) = 0.701 mW/g

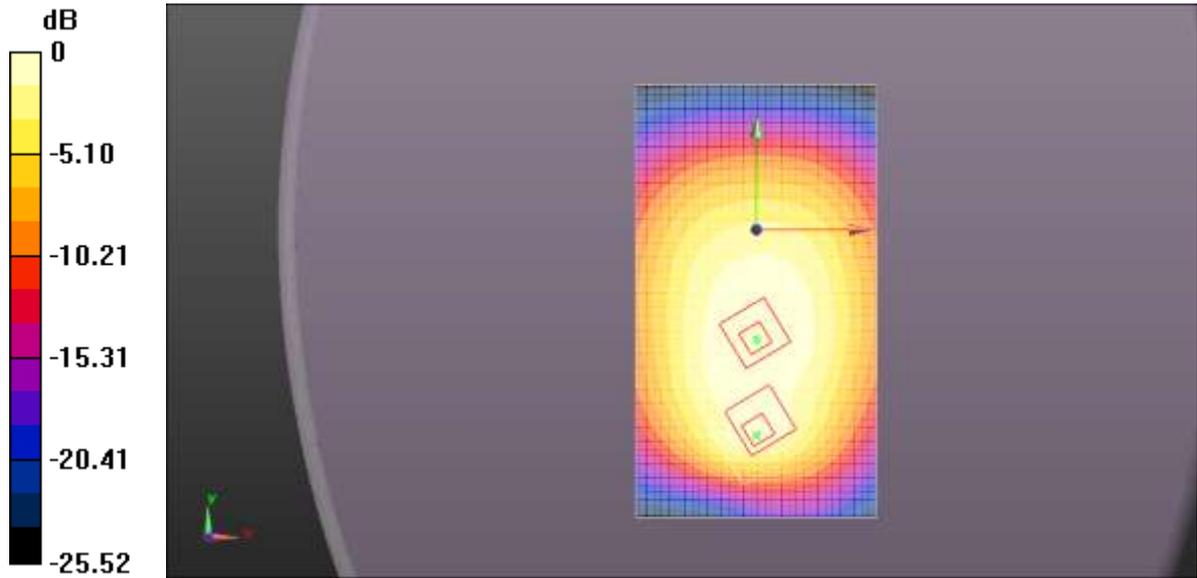
body/towards ground mid/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.608 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 1.133 mW/g

SAR(1 g) = 0.600 mW/g; SAR(10 g) = 0.356 mW/g

Maximum value of SAR (measured) = 0.653 mW/g



0 dB = 0.701 mW/g = -3.08 dB mW/g

WCDMA BAND V front mid

Date/Time: 16/10/2012 22:49:19

Communication System: WCDMA; Communication System Band: BAND 5; Frequency: 836.6 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 837$ MHz; $\sigma = 0.951$ mho/m; $\epsilon_r = 54.241$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(6.25, 6.25, 6.25); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body/front mid/Area Scan (71x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.135 mW/g

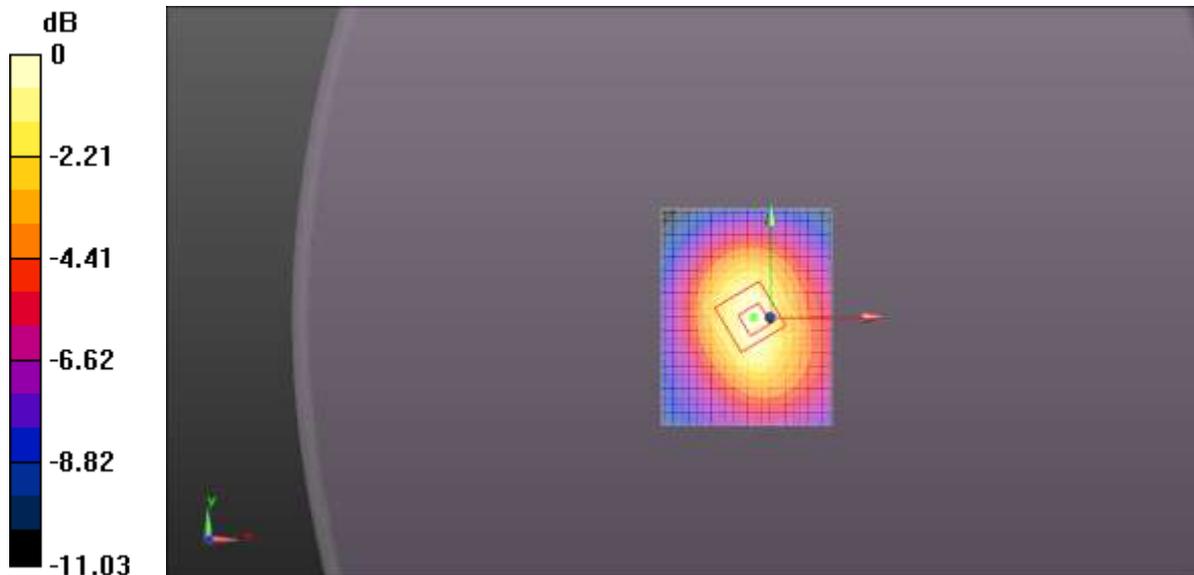
body/front mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.407 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.263 mW/g

SAR(1 g) = 0.121 mW/g; SAR(10 g) = 0.065 mW/g

Maximum value of SAR (measured) = 0.131 mW/g



0 dB = 0.135 mW/g = -17.40 dB mW/g

WCDMA BAND V left side mid

Date/Time: 16/10/2012 21:33:44

Communication System: WCDMA; Communication System Band: BAND 5; Frequency: 836.6 MHz; Communication System PAR: 0 dB

Medium parameters used: $f = 837$ MHz; $\sigma = 0.951$ mho/m; $\epsilon_r = 54.241$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE1528/OET65C)

DASY5 Configuration:

- Probe: ES3DV3 - SN3241; ConvF(6.25, 6.25, 6.25); Calibrated: 31/08/2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1226; Calibrated: 03/09/2012
- Phantom: ELI v4.0; Type: ELI4; Serial: TP:1086
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

body2/left side mid/Area Scan (71x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.455 mW/g

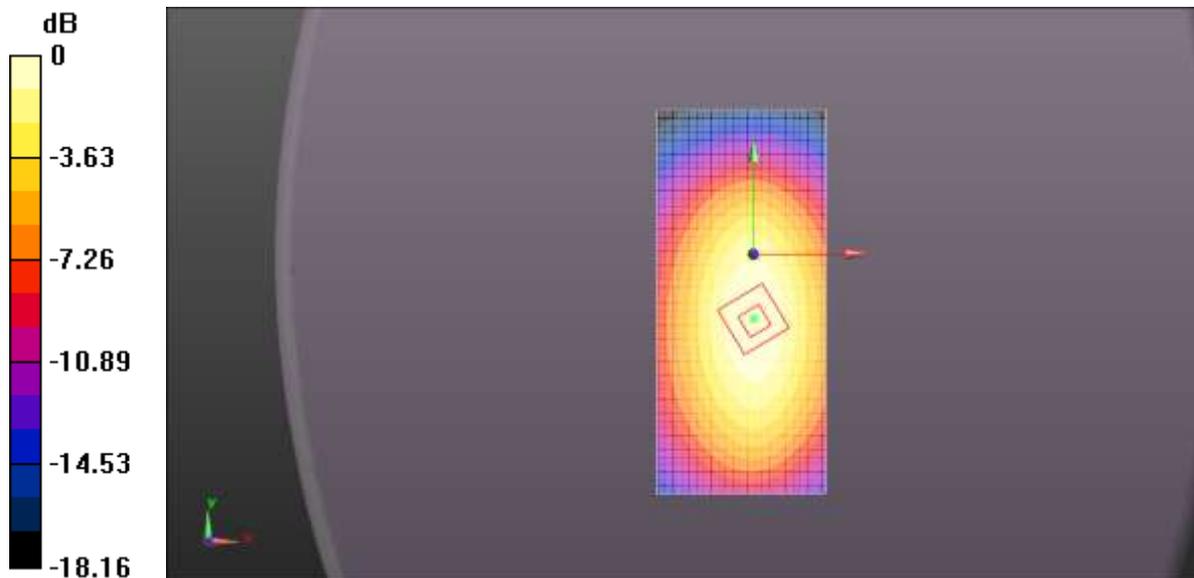
body2/left side mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.034 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.601 mW/g

SAR(1 g) = 0.425 mW/g; SAR(10 g) = 0.289 mW/g

Maximum value of SAR (measured) = 0.456 mW/g



0 dB = 0.455 mW/g = -6.83 dB mW/g