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## TEST REPORT

Test Report No.: 1-4254/12-73-02-B

**DAkkS**  
Deutsche  
Akreditierungsstelle  
D-PL-12076-01-01

### Testing Laboratory

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The testing laboratory (area of testing) is accredited according to DIN EN ISO/IEC 17025 (2005) by the Deutsche Akkreditierungsstelle GmbH (DAkkS)

The accreditation is valid for the scope of testing procedures as stated in the accreditation certificate with the registration number: D-PL-12076-01-01

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### Manufacturer

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### Test Standard/s

IEEE 1528-2003

Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques

OET Bulletin 65  
Supplement C

Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency

RSS-102 Issue 4

Electromagnetic Fields

Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency

Bands)

For further applied test standards please refer to section 3 of this test report.

### Test Item

Kind of test item:	Mobile Phone
Device type:	portable device
<b>Model name:</b>	<b>PM-0280-BV</b>
S/N serial number:	CB5A1MAPXC / CB5A1MAQ0T
FCC-ID:	PY7PM-0280
IC:	4170B-PM0280
IMEI-Number:	00440214-629913-0 / 00440214-629991-6 (for WLAN)
Hardware status:	AP1.2
Software status:	10.1.A.0.287 (NV)
Frequency:	see technical details
Antenna:	integrated antenna
Battery option:	integrated battery
Accessories:	stereo headset
Test sample status:	identical prototype
Exposure category:	general population / uncontrolled environment

**Test Report authorised:**2013-01-07 Thomas Vogler  
Senior Testing Manager**Test performed:**2013-01-04 Oleksandr Hnatovskiy  
Testing Manager

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## 2 General information

### 2.1 Notes and disclaimer

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### 2.2 Application details

Date of receipt of order: 2012-12-03

Date of receipt of test item: 2012-12-03

Start of test: 2012-12-04

End of test: 2013-01-02

Person(s) present during the test:

### 2.3 Statement of compliance

The SAR values found for the PM-0280-BV Mobile Phone are below the maximum recommended levels of 1.6 W/Kg as averaged over any 1 g tissue according to the FCC rule §2.1093, the ANSI/IEEE C 95.1:1992, the NCRP Report Number 86 for uncontrolled environment, according to the Health Canada's Safety Code 6 and the Industry Canada Radio Standards Specification RSS-102 for General Population/Uncontrolled exposure.

For body worn operation, this device has been tested and meets FCC RF exposure guidelines when used with any accessory that contains no metal and that positions the handset a minimum of 15 mm from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

According to KDB pub 941225 D06 this device has been tested with 10 mm distance to the phantom for operation in WLAN hot spot mode.

## 2.4 Technical details

Band tested for this test report	Technology	Frequency band	Lowest transmit frequency/MHz	Highest transmit frequency/MHz	Lowest receive Frequency/MHz	Highest receive Frequency/MHz	Kind of modulation	Power Class	Tested power control level	GPRS/EGPRS mobile station class	GPRS/EGPRS multislot class	(E)GPRS voice mode or DTM	Test channel low	Test channel middle	Test channel high	Maximum output power/dBm )*
<input type="checkbox"/>	GSM	GSM	880.2	914.8	925.2	959.8	GMSK 8-PSK	4 E2	5	B	12	no	975	37	124	33.4
<input type="checkbox"/>	GSM	DCS	1710.2	1784.8	1805.2	1879.8	GMSK 8-PSK	1 E2	0	B	12	no	512	698	885	30.3
<input checked="" type="checkbox"/>	GSM	cellular	824.2	848.8	869.2	893.8	GMSK 8-PSK	4 E2	5	B	12	no	128	190	251	33.2
<input checked="" type="checkbox"/>	GSM	PCS	1850.2	1909.8	1930.2	1989.8	GMSK 8-PSK	1 E2	0	B	12	no	512	661	810	30.1
<input type="checkbox"/>	UMTS	FDD I	1922.4	1977.6	2112.4	2167.6	QPSK	3	max	--	--	--	9612	9750	9888	24.0
<input checked="" type="checkbox"/>	UMTS	FDD II	1852.4	1907.6	1982.4	1987.6	QPSK	3	max	--	--	--	9262	9400	9538	22.6
<input checked="" type="checkbox"/>	UMTS	FDD IV	1712.4	1752.6	1807.4	1877.6	QPSK	3	max	--	--	--	1312	1412	1513	23.1
<input checked="" type="checkbox"/>	UMTS	FDD V	826.4	846.6	871.4	891.6	QPSK	3	max	--	--	--	4132	4182	4233	24.2
<input type="checkbox"/>	UMTS	FDD VIII	882.4	912.6	927.4	957.6	QPSK	3	max	--	--	--	2712	2787	2863	23.9
<input type="checkbox"/>	WLAN	ISM	2412	2472	2412	2472	CCK OFDM	--	max	--	--	--	1	7	13	15.6
<input checked="" type="checkbox"/>	WLAN US	ISM	2412	2462	2412	2462	CCK OFDM	--	max	--	--	--	1	6	11	15.6
<input checked="" type="checkbox"/>	WLAN	ISM	5180	5240	5180	5240	OFDM	--	max	--	--	--	36	--	--	9.7
<input checked="" type="checkbox"/>	WLAN	ISM	5260	5320	5260	5320	OFDM	--	max	--	--	--	52	--	--	9.2
<input checked="" type="checkbox"/>	WLAN	ISM	5500	5700	5500	5700	OFDM	--	max	--	--	--	--	120	--	8.8
<input checked="" type="checkbox"/>	WLAN	ISM	5745	5825	5745	5825	OFDM	--	max	--	--	--	--	--	165	9.3
<input type="checkbox"/>	BT	ISM	2402	2480	2402	2480	GFSK	3	max	--	--	--	0	39	78	9.6

supported UMTS features	category	remarks
Release 7 HSDPA	14	QPSK, 16QAM, 64QAM, 21.1 Mbit/s
Release 6 HSUPA	6	no 16QAM , no MIMO, 5.76 Mbit/s

)\*: slotted peak power for GSM, averaged max. RMS power for UMTS, WLAN and BT.

## 2.5 Transmitter and Antenna Operating Configurations

<b>Simultaneous transmission conditions</b>	
GSM / GPRS / EDGE	+ BT/BLE
GSM / GPRS / EDGE	+ WLAN 2.4GHz
GSM / GPRS / EDGE	+ WLAN 5GHz
UMTS / HSPA	+ BT/BLE
UMTS / HSPA	+ WLAN 2.4GHz
UMTS / HSPA	+ WLAN 5GHz

Table 1: Simultaneous transmission conditions

Note: BT and WLAN can be active at the same time, but only with interleaving of packages switched on board level. That means that they don't transmit at the same time.

### 3 Test standards/ procedures references

Test Standard	Version	Test Standard Description
IEEE 1528-2003	2003-04	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
OET Bulletin 65 Supplement C	1997-01 2001-01	Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields
RSS-102 Issue 4	2010-03	Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)
Canada's Safety Code No. 6	99-EHD-237	Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz
IEEE Std. C95-3	2002	IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields – RF and Microwave
IEEE Std. C95-1	1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
IEC 62209-2	2010	Human exposure to radio frequency fields from hand-held and bodymounted wireless communication devices. Human models, instrumentation, and procedures. Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)

FCC KDB publications:

KDB 865664D01v01 FCC OET SAR measurement requirements 100 MHz to 6 GHz, October 24, 2012

KDB 865664D02v01 RF Exposure Compliance Reporting and Documentation Considerations, October 24, 2012

KDB 447498D01v05 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies, October 24, 2012

KDB 648474D04v01 SAR Evaluation Considerations for Handsets with Multiple Transmitters & Antennas, October 24, 2012.

KDB 941225D01v02 SAR Measurements Procedures for 3G Devices, April 10, 2007.

KDB 941225D02v01 3GPP R6 HSPA and R7 HSPA+ SAR Guidance; December 14, 2009

KDB 941225D03v01 SAR Test Reduction Procedure for GSM/GPRS/EDGE, December, 2008.

KDB 941225D06v01 SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities; April 4, 2011

KDB 248227D01v01 SAR Measurement Procedures for 802.11 a/b/g Transmitters, May, 2007.

### 3.1 RF exposure limits

Human Exposure	Uncontrolled Environment General Population	Controlled Environment Occupational
Spatial Peak SAR* (Brain and Trunk)	<b>1.60 mW/g</b>	8.00 mW/g
Spatial Average SAR** (Whole Body)	0.08 mW/g	0.40 mW/g
Spatial Peak SAR*** (Hands/Feet/Ankle/Wrist)	4.00 mW/g	20.00 mW/g

Table 2: RF exposure limits

The limit applied in this test report is shown in bold letters

Notes:

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

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

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

#### 4 Summary of Measurement Results

<input checked="" type="checkbox"/>	<b>No deviations from the technical specifications ascertained</b>		
<input type="checkbox"/>	Deviations from the technical specifications ascertained		
<b>Maximum SAR value reported for 1g (W/kg)</b>			
	PCE	DTS	UNII
<b>head</b>	<b>0.515</b>	<b>1.055</b>	<b>0.693</b>
<b>body worn 15 mm distance</b>	<b>0.613</b>	<b>0.135</b>	---
<b>hotspot operation 10 mm distance</b>	<b>1.096</b>	<b>0.274</b>	---
<b>collocated situations</b>	<b>1.570</b>		

#### 5 Test Environment

Ambient temperature: 20 – 24 °C

Tissue Simulating liquid: 20 – 24 °C

Relative humidity content: 40 – 50 %

Air pressure: not relevant for this kind of testing

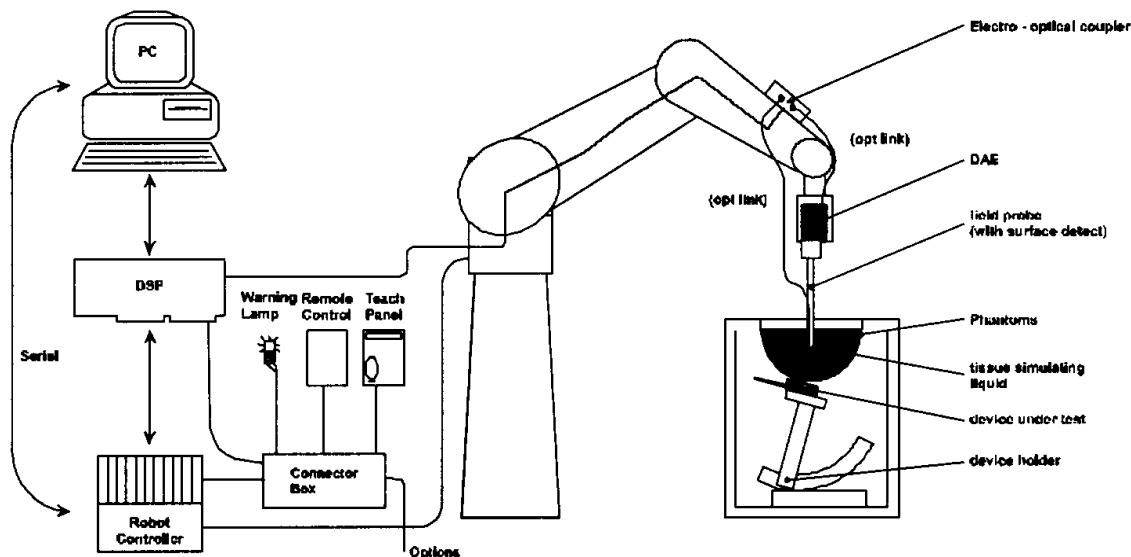
Power supply: 230 V / 50 Hz

Exact temperature values for each test are shown in the table(s) under 7.1 and/or on the measurement plots.

## 6 Test Set-up

### 6.1 Measurement system

#### 6.1.1 System Description



- The DASY system for performing compliance tests consists of the following items:
- A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
- A dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
- A data acquisition electronic (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.
- A unit to operate the optical surface detector which is connected to the EOC.
- The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DASY measurement server.
- The DASY measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation. A computer operating Windows XP or Windows 7.
- DASY software and SEMCAD data evaluation software.
- Remote control with teach panel and 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 check dipoles allowing to validate the proper functioning of the system.

## 6.1.2 Test environment

The DASY measurement system is placed at the head end of a room with dimensions: 5 x 2.5 x 3 m<sup>3</sup>, the SAM phantom is placed in a distance of 75 cm from the side walls and 1.1m from the rear wall. Above the test system a 1.5 x 1.5 m<sup>2</sup> array of pyramid absorbers is installed to reduce reflections from the ceiling.

Picture 1 of the photo documentation shows a complete view of the test environment.  
The system allows the measurement of SAR values larger than 0.005 mW/g.

## 6.1.3 Probe description

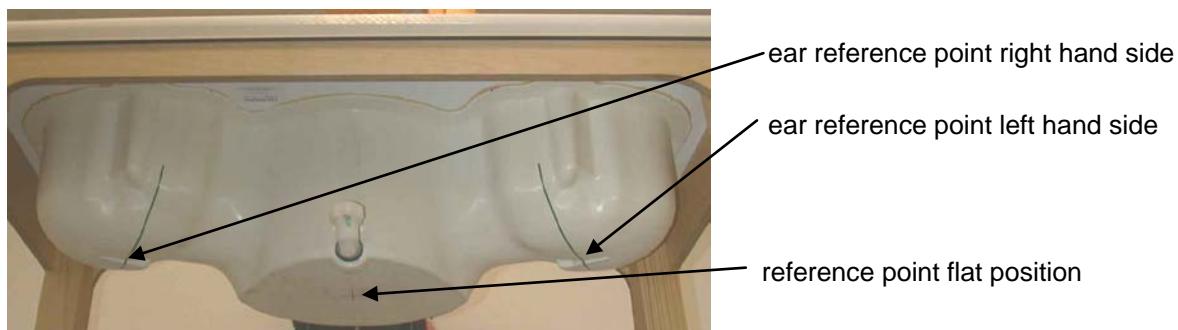
Isotropic E-Field Probe ET3DV6 for Dosimetric Measurements

<b>Technical data according to manufacturer information</b>	
Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection system Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., glycolether)
Calibration	In air from 10 MHz to 2.5 GHz In head tissue simulating liquid (HSL) at 900 (800-1000) MHz and 1.8 GHz (1700-1910 MHz) (accuracy ± 9.5%; k=2) Calibration for other liquids and frequencies upon request
Frequency	10 MHz to 3 GHz (dosimetry); Linearity: ± 0.2 dB (30 MHz to 3 GHz)
Directivity	± 0.2 dB in HSL (rotation around probe axis) ± 0.4 dB in HSL (rotation normal to probe axis)
Dynamic range	5 µW/g to > 100 mW/g; Linearity: ± 0.2 dB
Optical Surface Detection	± 0.2 mm repeatability in air and clear liquids over diffuse reflecting surfaces (ET3DV6 only)
Dimensions	Overall length: 330 mm Tip length: 16 mm Body diameter: 12 mm Tip diameter: 6.8 mm Distance from probe tip to dipole centers: 2.7 mm
Application	General dosimetry up to 3 GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms (ET3DV6)

### 6.1.4 Phantom description

The used SAM Phantom meets the requirements specified in Edition 01-01 of Supplement C to OET Bulletin 65 for Specific Absorption Rate (SAR) measurements.

The phantom consists of a fibreglass shell integrated in a wooden table. It allows left-hand and right-hand head as well as body-worn measurements with a maximum liquid depth of 18 cm in head position and 22 cm in planar position (body measurements). The thickness of the Phantom shell is 2 mm +/- 0.1 mm.



### 6.1.5 Device holder description

The DASY device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65°. The bottom plate contains three pairs of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. This device holder is used for standard mobile phones or PDA's only. If necessary an additional support of polystyrene material is used.



Larger DUT's (e.g. notebooks) cannot be tested using this device holder. Instead a support of bigger polystyrene cubes and thin polystyrene plates is used to position the DUT in all relevant positions to find and measure spots with maximum SAR values.

Therefore those devices are normally only tested at the flat part of the SAM.

### 6.1.6 Scanning procedure

- The DASY installation includes predefined files with recommended procedures for measurements and system check. 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. +/- 5 %.
- The „surface check“ measurement tests the optical surface detection system of the DASY 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  $\pm 30^\circ$ .)
- The „area scan“ measures the SAR above the DUT or verification dipole on a parallel plane to the surface. It is used to locate the approximate location of the peak SAR with 2D spline interpolation. The robot performs a stepped movement along one grid axis while the local electrical field strength is measured by the probe. The probe is touching the surface of the SAM during acquisition of measurement values. The standard scan uses large grid spacing for faster measurement. Standard grid spacing for head measurements is 15 mm in x- and y- dimension. If a finer resolution is needed, the grid spacing can be reduced. Grid spacing and orientation have no influence on the SAR result. For special applications where the standard scan method does not find the peak SAR within the grid, e.g. mobile phones with flip cover, the grid can be adapted in orientation. Results of this coarse scan are shown in annex 2.
- A „7x7x7 zoom scan“ measures the field in a volume around the 2D peak SAR value acquired in the previous „coarse“ scan. This is a fine 7x7 grid where the robot additionally moves the probe in 7 steps along the z-axis away from the bottom of the Phantom. Grid spacing for the cube measurement is 5 mm in x and y-direction and 5 mm in z-direction. DASY is also able to perform repeated zoom scans if more than 1 peak is found during area scan. In this document, the evaluated peak 1g and 10g averaged SAR values are shown in the 2D-graphics in annex 2. Test results relevant for the specified standard (see section 3) are shown in table form in section 7.
- 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 2mm steps. This measurement shows the continuity of the liquid and can - depending in the field strength – also show the liquid depth. A z-axis scan of the measurement with maximum SAR value is shown in annex 2.

### 6.1.7 Spatial Peak SAR Evaluation

The spatial peak SAR - value for 1 and 10 g is evaluated after the Cube measurements have been done. The basis of the evaluation are the SAR values measured at the points of the fine cube grid consisting of  $7 \times 7 \times 7$  points. The algorithm that finds the maximal averaged volume is separated into three different stages.

- The data between the dipole center of the probe and the surface of the phantom are extrapolated. This data cannot be measured since the center of the dipole is 2.7 mm away from the tip of the probe and the distance between the surface and the lowest measuring point is about 1 mm (see probe calibration sheet). The extrapolated data from a cube measurement can be visualized by selecting 'Graph Evaluated'.
- The maximum interpolated value is searched with a straight-forward algorithm. Around this maximum the SAR - values averaged over the spatial volumes (1g or 10 g) are computed using the 3d-spline interpolation algorithm. If the volume cannot be evaluated (i.e., if a part of the grid was cut off by the boundary of the measurement area) the evaluation will be started on the corners of the bottom plane of the cube.
- All neighbouring volumes are evaluated until no neighbouring volume with a higher average value is found.

#### Extrapolation

The extrapolation is based on a least square algorithm [W. Gander, Computermathematik, p.168-180]. Through the points in the first 3 cm along the z-axis, polynomials of order four are calculated. These polynomials are then used to evaluate the points between the surface and the probe tip. The points, calculated from the surface, have a distance of 1 mm from each other.

#### Interpolation

The interpolation of the points is done with a 3d-Spline. The 3d-Spline is composed of three one-dimensional splines with the "Not a knot"-condition [W. Gander, Computermathematik, p.141-150] (x, y and z -direction) [Numerical Recipes in C, Second Edition, p.123ff ].

#### Volume Averaging

At First the size of the cube is calculated. Then the volume is integrated with the trapezoidal algorithm. 8000 points ( $20 \times 20 \times 20$ ) are interpolated to calculate the average.

#### Advanced Extrapolation

DASY uses the advanced extrapolation option which is able to compensate boundary effects on E-field probes.

## 6.1.8 Data Storage and Evaluation

### Data Storage

The DASY 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", ".DA5x". 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/cm<sup>2</sup>], [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.

### 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 <sub>i</sub> , a <sub>i0</sub> , a <sub>i1</sub> , a <sub>i2</sub>
	- Conversion factor	ConvF <sub>i</sub>
	- Diode compression point	Dcp <sub>i</sub>
Device parameters:	- Frequency	f
	- Crest factor	cf
Media parameters:	- Conductivity	$\sigma$
	- Density	$\rho$

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

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

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

$$V_i = U_i + U_i^2 \cdot cf/dcp_i$$

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

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

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

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) <sup>2</sup> ] 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.

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

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

Note that the density is 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 <sup>2</sup>
	$E_{tot}$	= total electric field strength in V/m
	$H_{tot}$	= total magnetic field strength in A/m

### 6.1.9 Tissue simulating liquids: dielectric properties

The following materials are used for producing the tissue-equivalent materials.

(Liquids used for tests described in section 7. are marked with  ) :

Ingredients (% of weight)	Frequency (MHz)								
	<input type="checkbox"/> 450	<input type="checkbox"/> 750	<input checked="" type="checkbox"/> 835	<input type="checkbox"/> 900	<input type="checkbox"/> 1450	<input checked="" type="checkbox"/> 1800	<input checked="" type="checkbox"/> 1900	<input checked="" type="checkbox"/> 2450	<input checked="" type="checkbox"/> 5000
frequency band									
Tissue Type	Head	Head	Head	Head	Head	Head	Head	Head	Head
Water	38.56	41.1	41.45	40.92	52.64	52.64	54.9	62.7	64 - 78
Salt (NaCl)	3.95	1.4	1.45	1.48	0.61	0.36	0.18	0.5	2 - 3
Sugar	56.32	57.0	56.0	56.5	0.0	0.0	0.0	0.0	0.0
HEC	0.98	0.2	1.0	1.0	0.0	0.0	0.0	0.0	0.0
Bactericide	0.19	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Triton X-100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.8	0.0
DGBE	0.0	0.0	0.0	0.0	46.75	47.0	44.92	0.0	0.0
Emulsifiers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 - 15
Mineral Oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11 - 18

Table 3: Head tissue dielectric properties

Ingredients (% of weight)	Frequency (MHz)								
	<input type="checkbox"/> 450	<input type="checkbox"/> 750	<input checked="" type="checkbox"/> 835	<input type="checkbox"/> 900	<input type="checkbox"/> 1450	<input checked="" type="checkbox"/> 1800	<input checked="" type="checkbox"/> 1900	<input checked="" type="checkbox"/> 2450	<input type="checkbox"/> 5000
frequency band									
Tissue Type	Body	Body	Body	Body	Body	Body	Body	Body	Body
Water	51.16	51.7	52.4	56.0	70.97	69.91	69.91	73.2	64 - 78
Salt (NaCl)	1.49	0.9	1.40	0.76	0.43	0.13	0.13	0.04	2 - 3
Sugar	46.78	47.2	45.0	41.76	0.0	0.0	0.0	0.0	0.0
HEC	0.52	0.0	1.0	1.21	0.0	0.0	0.0	0.0	0.0
Bactericide	0.05	0.1	0.1	0.27	0.0	0.0	0.0	0.0	0.0
Triton X-100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DGBE	0.0	0.0	0.0	0.0	28.60	29.96	29.96	26.7	0.0
Emulsifiers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 - 15
Mineral Oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11 - 18

Table 4: Body tissue dielectric properties

Salt: 99+% Pure Sodium Chloride

Sugar: 98+% Pure Sucrose

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

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

Water: De-ionized, 16MΩ+ resistivity

HEC: Hydroxyethyl Cellulose

Note: Due to their availability body tissue simulating liquids as defined by FCC OET Bulletin 65 Supplement C are generally used for body worn SAR testing according to European standards.

### 6.1.10 Tissue simulating liquids: parameters

Liquid HSL	Freq. (MHz)	Target head tissue		Measurement head tissue				Measurement date
		Permittivity	Conductivity [S/m]	Permittivity	Dif. %	Conductivity [S/m]	Dif. %	
850/900	824	41.5	0.90	42.7	2.9%	0.89	-1.1%	2012-12-05
	837	41.5	0.90	42.6	2.7%	0.91	1.1%	2012-12-05
	849	41.5	0.90	42.5	2.4%	0.92	2.2%	2012-12-05
	900	41.5	0.97	41.9	1.0%	0.97	0.0%	2012-12-05
1800	1710	40.0	1.40	39.5	-1.3%	1.35	-3.6%	2012-12-04
	1732	40.0	1.40	39.4	-1.5%	1.37	-2.1%	2012-12-04
	1747	40.0	1.40	39.4	-1.5%	1.39	-0.7%	2012-12-04
	1752	40.0	1.40	39.4	-1.5%	1.40	0.0%	2012-12-04
	1785	40.0	1.40	39.3	-1.8%	1.43	2.1%	2012-12-04
	1800	40.0	1.40	39.2	-2.0%	1.44	2.9%	2012-12-04
1900	1850	40.0	1.40	40.1	0.2%	1.34	-4.3%	2012-12-12
	1880	40.0	1.40	40.0	0.0%	1.37	-2.1%	2012-12-12
	1900	40.0	1.40	39.9	-0.3%	1.38	-1.4%	2012-12-12
	1910	40.0	1.40	39.9	-0.3%	1.40	0.0%	2012-12-12
2450	2412	39.2	1.80	38.9	-0.8%	1.78	-1.1%	2012-12-19
	2437	39.2	1.80	38.8	-1.0%	1.81	0.6%	2012-12-19
	2450	39.2	1.80	38.8	-1.0%	1.82	1.1%	2012-12-19
	2462	39.2	1.80	38.8	-1.0%	1.83	1.7%	2012-12-19
5GHz	5180	36.0	4.66	36.6	1.7%	4.50	-3.4%	2013-01-02
	5200	36.0	4.66	36.6	1.7%	4.52	-3.0%	2013-01-02
	5260	35.9	4.71	36.5	1.7%	4.58	-2.8%	2013-01-02
	5500	35.6	4.96	36.1	1.4%	4.82	-2.8%	2013-01-02
	5600	35.5	5.07	35.9	1.1%	4.91	-3.2%	2013-01-02
	5800	35.3	5.27	35.6	0.8%	5.12	-2.8%	2013-01-02
	5825	35.3	5.27	35.5	0.6%	5.14	-2.5%	2013-01-02

Table 5: Parameter of the head tissue simulating liquid

Liquid MSL	Freq. (MHz)	Target head tissue		Measurement head tissue				Measurement date
		Permittivity	Conductivity [S/m]	Permittivity	Dif. %	Conductivity [S/m]	Dif. %	
850/900	824	55.2	0.97	55.4	0.4%	0.97	0.0%	2012-12-11
	837	55.2	0.97	55.4	0.4%	0.98	1.0%	2012-12-11
	849	55.2	0.97	55.3	0.2%	0.99	2.1%	2012-12-11
	900	55.0	1.05	54.8	-0.4%	1.04	-1.0%	2012-12-11
1800	1710	53.3	1.52	53.4	0.2%	1.46	-3.9%	2012-12-04
	1732	53.3	1.52	53.3	0.0%	1.48	-2.6%	2012-12-04
	1747	53.3	1.52	53.3	0.0%	1.49	-2.0%	2012-12-04
	1752	53.3	1.52	53.3	0.0%	1.50	-1.3%	2012-12-04
	1785	53.3	1.52	53.2	-0.2%	1.54	1.3%	2012-12-04
	1800	53.3	1.52	53.1	-0.4%	1.55	2.0%	2012-12-04
1900	1850	53.3	1.52	53.3	0.0%	1.46	-3.9%	2012-12-06
	1880	53.3	1.52	53.2	-0.2%	1.49	-2.0%	2012-12-06
	1900	53.3	1.52	53.1	-0.4%	1.52	0.0%	2012-12-06
	1910	53.3	1.52	53.1	-0.4%	1.53	0.7%	2012-12-06
2450	2412	52.7	1.95	52.3	-0.8%	1.96	0.5%	2012-12-20
	2437	52.7	1.95	52.3	-0.8%	1.99	2.1%	2012-12-20
	2450	52.7	1.95	52.3	-0.8%	2.00	2.6%	2012-12-20
	2462	52.7	1.95	52.2	-0.9%	2.01	3.1%	2012-12-20

Table 6: Parameter of the body tissue simulating liquid

Note: The dielectric properties have been measured using the contact probe method at 22°C.

### 6.1.11 Measurement uncertainty evaluation for SAR test

Relative DASY4 Uncertainty Budget for SAR Tests According to IEEE 1528/2003 and IEC62209 (0.3-3GHz range)								
Error Description	Uncertainty Value	Probability Distribution	Divisor	c <sub>i</sub>	c <sub>i</sub>	Standard Uncertainty		v <sub>i</sub> <sup>2</sup> or v <sub>eff</sub>
				(1g)	(10g)	± %, (1g)	± %, (10g)	
<b>Measurement System</b>								
Probe calibration	± 6.0 %	Normal	1	1	1	± 6.0 %	± 6.0 %	∞
Axial isotropy	± 4.7 %	Rectangular	√ 3	0.7	0.7	± 1.9 %	± 1.9 %	∞
Hemispherical isotropy	± 9.6 %	Rectangular	√ 3	0.7	0.7	± 3.9 %	± 3.9 %	∞
Boundary effects	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
Probe linearity	± 4.7 %	Rectangular	√ 3	1	1	± 2.7 %	± 2.7 %	∞
System detection limits	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
Readout electronics	± 1.0 %	Normal	1	1	1	± 1.0 %	± 1.0 %	∞
Response time	± 0.8 %	Rectangular	√ 3	1	1	± 0.5 %	± 0.5 %	∞
Integration time	± 2.6 %	Rectangular	√ 3	1	1	± 1.5 %	± 1.5 %	∞
RF ambient reflections	± 3.0 %	Rectangular	√ 3	1	1	± 1.7 %	± 1.7 %	∞
Probe positioner	± 0.4 %	Rectangular	√ 3	1	1	± 0.2 %	± 0.2 %	∞
Probe positioning	± 2.9 %	Rectangular	√ 3	1	1	± 1.7 %	± 1.7 %	∞
Max. SAR evaluation	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
<b>Test Sample Related</b>								
Device positioning	± 2.9 %	Normal	1	1	1	± 2.9 %	± 2.9 %	145
Device holder uncertainty	± 3.6 %	Normal	1	1	1	± 3.6 %	± 3.6 %	5
Power drift	± 5.0 %	Rectangular	√ 3	1	1	± 2.9 %	± 2.9 %	∞
<b>Phantom and Set-up</b>								
Phantom uncertainty	± 4.0 %	Rectangular	√ 3	1	1	± 2.3 %	± 2.3 %	∞
Liquid conductivity (target)	± 5.0 %	Rectangular	√ 3	0.64	0.43	± 1.8 %	± 1.2 %	∞
Liquid conductivity (meas.)	± 5.0 %	Normal	1	0.64	0.43	± 3.2 %	± 2.2 %	∞
Liquid permittivity (target)	± 5.0 %	Rectangular	√ 3	0.6	0.49	± 1.7 %	± 1.4 %	∞
Liquid permittivity (meas.)	± 5.0 %	Normal	1	0.6	0.49	± 3.0 %	± 2.5 %	∞
<b>Combined Uncertainty</b>								
<b>Expanded Std.</b>						± 11.5 %	± 11.0 %	330
<b>Uncertainty</b>						± 23.1 %	± 22.1 %	

Table 7: Measurement uncertainties

Relative DASY4 Uncertainty Budget for SAR Tests According to IEEE 1528/2003 and IEC62209 (3-6GHz range)							
Error Description	Uncertainty Value	Probability Distribution	Divisor	$c_i$	$c_i$	Standard Uncertainty	$v_i^2$ or $v_{eff}$
				(1g)	(10g)	$\pm \%, (1g)$	$\pm \%, (10g)$
<b>Measurement System</b>							
Probe calibration	$\pm 6.6 \%$	Normal	1	1	1	$\pm 6.6 \%$	$\pm 6.6 \%$
Axial isotropy	$\pm 4.7 \%$	Rectangular	$\sqrt{3}$	0.7	0.7	$\pm 1.9 \%$	$\pm 1.9 \%$
Hemispherical isotropy	$\pm 9.6 \%$	Rectangular	$\sqrt{3}$	0.7	0.7	$\pm 3.9 \%$	$\pm 3.9 \%$
Boundary effects	$\pm 2.0 \%$	Rectangular	$\sqrt{3}$	1	1	$\pm 1.2 \%$	$\pm 1.2 \%$
Probe linearity	$\pm 4.7 \%$	Rectangular	$\sqrt{3}$	1	1	$\pm 2.7 \%$	$\pm 2.7 \%$
System detection limits	$\pm 1.0 \%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.6 \%$	$\pm 0.6 \%$
Readout electronics	$\pm 1.0 \%$	Normal	1	1	1	$\pm 1.0 \%$	$\pm 1.0 \%$
Response time	$\pm 0.8 \%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.5 \%$	$\pm 0.5 \%$
Integration time	$\pm 2.6 \%$	Rectangular	$\sqrt{3}$	1	1	$\pm 1.5 \%$	$\pm 1.5 \%$
RF ambient reflections	$\pm 3.0 \%$	Rectangular	$\sqrt{3}$	1	1	$\pm 1.7 \%$	$\pm 1.7 \%$
Probe positioner	$\pm 0.8 \%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.5 \%$	$\pm 0.5 \%$
Probe positioning	$\pm 5.8 \%$	Rectangular	$\sqrt{3}$	1	1	$\pm 3.3 \%$	$\pm 3.3 \%$
Max. SAR evaluation	$\pm 1.0 \%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.6 \%$	$\pm 0.6 \%$
<b>Test Sample Related</b>							
Device positioning	$\pm 2.9 \%$	Normal	1	1	1	$\pm 2.9 \%$	$\pm 2.9 \%$
Device holder uncertainty	$\pm 3.6 \%$	Normal	1	1	1	$\pm 3.6 \%$	$\pm 3.6 \%$
Power drift	$\pm 5.0 \%$	Rectangular	$\sqrt{3}$	1	1	$\pm 2.9 \%$	$\pm 2.9 \%$
<b>Phantom and Set-up</b>							
Phantom uncertainty	$\pm 4.0 \%$	Rectangular	$\sqrt{3}$	1	1	$\pm 2.3 \%$	$\pm 2.3 \%$
Liquid conductivity (target)	$\pm 5.0 \%$	Rectangular	$\sqrt{3}$	0.64	0.43	$\pm 1.8 \%$	$\pm 1.2 \%$
Liquid conductivity (meas.)	$\pm 5.0 \%$	Normal	1	0.64	0.43	$\pm 3.2 \%$	$\pm 2.2 \%$
Liquid permittivity (target)	$\pm 5.0 \%$	Rectangular	$\sqrt{3}$	0.6	0.49	$\pm 1.7 \%$	$\pm 1.4 \%$
Liquid permittivity (meas.)	$\pm 5.0 \%$	Normal	1	0.6	0.49	$\pm 3.0 \%$	$\pm 2.5 \%$
<b>Combined Uncertainty</b>							
<b>Expanded Std. Uncertainty</b>							
						$\pm 24.5 \%$	$\pm 23.6 \%$

Table 8: Measurement uncertainties

Relative DASY5 Uncertainty Budget for SAR Tests								
According to IEEE 1528/2011 and IEC62209/2011 (0.3-3GHz range)								
Error Description	Uncertainty Value	Probability Distribution	Divisor	c <sub>i</sub>	c <sub>i</sub>	Standard Uncertainty		v <sub>i</sub> <sup>2</sup> or v <sub>eff</sub>
				(1g)	(10g)	± %, (1g)	± %, (10g)	
<b>Measurement System</b>								
Probe calibration	± 6.0 %	Normal	1	1	1	± 6.0 %	± 6.0 %	∞
Axial isotropy	± 4.7 %	Rectangular	√ 3	0.7	0.7	± 1.9 %	± 1.9 %	∞
Hemispherical isotropy	± 9.6 %	Rectangular	√ 3	0.7	0.7	± 3.9 %	± 3.9 %	∞
Boundary effects	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
Probe linearity	± 4.7 %	Rectangular	√ 3	1	1	± 2.7 %	± 2.7 %	∞
System detection limits	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
Modulation Response	± 2.4 %	Rectangular	√ 3	1	1	± 1.4 %	± 1.4 %	∞
Readout electronics	± 0.3 %	Normal	1	1	1	± 0.3 %	± 0.3 %	∞
Response time	± 0.8 %	Rectangular	√ 3	1	1	± 0.5 %	± 0.5 %	∞
Integration time	± 2.6 %	Rectangular	√ 3	1	1	± 1.5 %	± 1.5 %	∞
RF ambient noise	± 3.0 %	Rectangular	√ 3	1	1	± 1.7 %	± 1.7 %	∞
RF ambient reflections	± 3.0 %	Rectangular	√ 3	1	1	± 1.7 %	± 1.7 %	∞
Probe positioner	± 0.4 %	Rectangular	√ 3	1	1	± 0.2 %	± 0.2 %	∞
Probe positioning	± 2.9 %	Rectangular	√ 3	1	1	± 1.7 %	± 1.7 %	∞
Max. SAR evaluation	± 2.0 %	Rectangular	√ 3	1	1	± 1.2 %	± 1.2 %	∞
<b>Test Sample Related</b>								
Device positioning	± 2.9 %	Normal	1	1	1	± 2.9 %	± 2.9 %	145
Device holder uncertainty	± 3.6 %	Normal	1	1	1	± 3.6 %	± 3.6 %	5
Power drift	± 5.0 %	Rectangular	√ 3	1	1	± 2.9 %	± 2.9 %	∞
<b>Phantom and Set-up</b>								
Phantom uncertainty	± 6.1 %	Rectangular	√ 3	1	1	± 3.5 %	± 3.5 %	∞
SAR correction	± 1.9 %	Rectangular	√ 3	1	0.84	± 1.1 %	± 0.9 %	∞
Liquid conductivity (meas.)	± 5.0 %	Rectangular	√ 3	0.78	0.71	± 2.3 %	± 2.0 %	∞
Liquid permittivity (meas.)	± 5.0 %	Rectangular	√ 3	0.26	0.26	± 0.8 %	± 0.8 %	∞
Temp. Unc. - Conductivity	± 3.4 %	Rectangular	√ 3	0.78	0.71	± 1.5 %	± 1.4 %	∞
Temp. Unc. - Permittivity	± 0.4 %	Rectangular	√ 3	0.23	0.26	± 0.1 %	± 0.1 %	∞
<b>Combined Uncertainty</b>								
Expanded Std. Uncertainty						± 11.3 %	± 11.3 %	330

Table 9: Measurement uncertainties

### 6.1.12 Measurement uncertainty evaluation for System Check

Uncertainty of a System Performance Check with DASY4 System.								
Source of uncertainty	Uncertainty Value	Probability Distribution	Divisor	c <sub>i</sub>	c <sub>i</sub>	Standard Uncertainty		v <sub>i</sub> <sup>2</sup> or v <sub>eff</sub>
				(1g)	(10g)	± %, (1g)	± %, (10g)	
<b>Measurement System</b>								
Probe calibration	± 6.0 %	Normal	1	1	1	± 6.0 %	± 6.0 %	∞
Axial isotropy	± 4.7 %	Rectangular	√ 3	1	1	± 2.7 %	± 2.7 %	∞
Hemispherical isotropy	± 0.0 %	Rectangular	√ 3	1	1	± 0.0 %	± 0.0 %	∞
Boundary effects	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
Probe linearity	± 4.7 %	Rectangular	√ 3	1	1	± 2.7 %	± 2.7 %	∞
System detection limits	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
Readout electronics	± 0.3 %	Normal	1	1	1	± 0.3 %	± 0.3 %	∞
Response time	± 0.0 %	Rectangular	√ 3	1	1	± 0.0 %	± 0.0 %	∞
Integration time	± 0.0 %	Rectangular	√ 3	1	1	± 0.0 %	± 0.0 %	∞
RF ambient conditions	± 3.0 %	Rectangular	√ 3	1	1	± 1.7 %	± 1.7 %	∞
Probe positioner	± 0.4 %	Rectangular	√ 3	1	1	± 0.2 %	± 0.2 %	∞
Probe positioning	± 2.9 %	Rectangular	√ 3	1	1	± 1.7 %	± 1.7 %	∞
Max. SAR evaluation	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
<b>Test Sample Related</b>								
Source to liquid distance	± 2.0 %	Rectangular	√ 3	1	1	± 1.2 %	± 1.2 %	∞
Power drift	± 4.7 %	Rectangular	√ 3	1	1	± 2.7 %	± 2.7 %	∞
<b>Phantom and Set-up</b>								
Phantom uncertainty	± 4.0 %	Rectangular	√ 3	1	1	± 2.3 %	± 2.3 %	∞
Liquid conductivity (target)	± 5.0 %	Rectangular	√ 3	0.64	0.43	± 1.8 %	± 1.2 %	∞
Liquid conductivity (meas.)	± 5.0 %	Normal	1	0.64	0.43	± 3.2 %	± 2.2 %	∞
Liquid permittivity (target)	± 5.0 %	Rectangular	√ 3	0.6	0.49	± 1.7 %	± 1.4 %	∞
Liquid permittivity (meas.)	± 5.0 %	Normal	1	0.6	0.49	± 3.0 %	± 2.5 %	∞
<b>Combined Uncertainty</b>								
<b>Expanded Std. Uncertainty</b>								
						± 9.9 %	± 9.3 %	∞
						± 19.7 %	± 18.5 %	

Table 10: Measurement uncertainties of a System Check with DASY4

**Uncertainty of a System Performance Check with DASY4 System  
According to IEEE 1528/2003 and IEC62209 (3-6GHz range)**

Source of uncertainty	Uncertainty Value	Probability Distribution	Divisor	$c_i$	$c_i$	Standard Uncertainty		$v_i^2$ or $v_{eff}$
				(1g)	(10g)	± %, (1g)	± %, (10g)	
<b>Measurement System</b>								
Probe calibration	± 6.6 %	Normal	1	1	1	± 6.6 %	± 6.6 %	∞
Axial isotropy	± 4.7 %	Rectangular	$\sqrt{3}$	0.7	0.7	± 1.9 %	± 1.9 %	∞
Hemispherical isotropy	± 0.0 %	Rectangular	$\sqrt{3}$	0.7	0.7	± 0.0 %	± 0.0 %	∞
Boundary effects	± 2.0 %	Rectangular	$\sqrt{3}$	1	1	± 1.2 %	± 1.2 %	∞
Probe linearity	± 4.7 %	Rectangular	$\sqrt{3}$	1	1	± 2.7 %	± 2.7 %	∞
System detection limits	± 1.0 %	Rectangular	$\sqrt{3}$	1	1	± 0.6 %	± 0.6 %	∞
Readout electronics	± 1.0 %	Normal	1	1	1	± 1.0 %	± 1.0 %	∞
Response time	± 0.0 %	Rectangular	$\sqrt{3}$	1	1	± 0.0 %	± 0.0 %	∞
Integration time	± 0.0 %	Rectangular	$\sqrt{3}$	1	1	± 0.0 %	± 0.0 %	∞
RF ambient conditions	± 3.0 %	Rectangular	$\sqrt{3}$	1	1	± 1.7 %	± 1.7 %	∞
Probe positioner	± 0.8 %	Rectangular	$\sqrt{3}$	1	1	± 0.5 %	± 0.5 %	∞
Probe positioning	± 5.8 %	Rectangular	$\sqrt{3}$	1	1	± 3.3 %	± 3.3 %	∞
Max. SAR evaluation	± 1.0 %	Rectangular	$\sqrt{3}$	1	1	± 0.6 %	± 0.6 %	∞
<b>Test Sample Related</b>								
Source to liquid distance	± 2.0 %	Normal	1	1	1	± 2.0 %	± 2.0 %	∞
Power drift	± 4.7 %	Rectangular	$\sqrt{3}$	1	1	± 2.7 %	± 2.7 %	∞
<b>Phantom and Set-up</b>								
Phantom uncertainty	± 4.0 %	Rectangular	$\sqrt{3}$	1	1	± 2.3 %	± 2.3 %	∞
Liquid conductivity (target)	± 5.0 %	Rectangular	$\sqrt{3}$	0.64	0.43	± 1.8 %	± 1.2 %	∞
Liquid conductivity (meas.)	± 5.0 %	Normal	1	0.64	0.43	± 3.2 %	± 2.2 %	∞
Liquid permittivity (target)	± 5.0 %	Rectangular	$\sqrt{3}$	0.6	0.49	± 1.7 %	± 1.4 %	∞
Liquid permittivity (meas.)	± 5.0 %	Normal	1	0.6	0.49	± 3.0 %	± 2.5 %	∞
<b>Combined Uncertainty</b>								
<b>Expanded Std. Uncertainty</b>						± 21.3 %	± 20.2 %	

Table 11: Measurement uncertainties of a System Check with DASY4

### Uncertainty of a System Performance Check with DASY5 System.

Source of uncertainty	Uncertainty Value	Probability Distribution	Divisor	$c_i$	$c_i$	Standard Uncertainty		$v_i^2$ or $v_{eff}$
				(1g)	(10g)	$\pm$ %, (1g)	$\pm$ %, (10g)	
<b>Measurement System</b>								
Probe calibration	$\pm$ 6.0 %	Normal	1	1	1	$\pm$ 6.0 %	$\pm$ 6.0 %	$\infty$
Axial isotropy	$\pm$ 4.7 %	Rectangular	$\sqrt{3}$	0.7	0.7	$\pm$ 1.9 %	$\pm$ 1.9 %	$\infty$
Hemispherical isotropy	$\pm$ 0.0 %	Rectangular	$\sqrt{3}$	0.7	0.7	$\pm$ 0.0 %	$\pm$ 0.0 %	$\infty$
Boundary effects	$\pm$ 1.0 %	Rectangular	$\sqrt{3}$	1	1	$\pm$ 0.6 %	$\pm$ 0.6 %	$\infty$
Probe linearity	$\pm$ 4.7 %	Rectangular	$\sqrt{3}$	1	1	$\pm$ 2.7 %	$\pm$ 2.7 %	$\infty$
System detection limits	$\pm$ 1.0 %	Rectangular	$\sqrt{3}$	1	1	$\pm$ 0.6 %	$\pm$ 0.6 %	$\infty$
Readout electronics	$\pm$ 0.3 %	Normal	1	1	1	$\pm$ 0.3 %	$\pm$ 0.3 %	$\infty$
Response time	$\pm$ 0.0 %	Rectangular	$\sqrt{3}$	1	1	$\pm$ 0.0 %	$\pm$ 0.0 %	$\infty$
Integration time	$\pm$ 0.0 %	Rectangular	$\sqrt{3}$	1	1	$\pm$ 0.0 %	$\pm$ 0.0 %	$\infty$
RF ambient conditions	$\pm$ 3.0 %	Rectangular	$\sqrt{3}$	1	1	$\pm$ 1.7 %	$\pm$ 1.7 %	$\infty$
Probe positioner	$\pm$ 0.4 %	Rectangular	$\sqrt{3}$	1	1	$\pm$ 0.2 %	$\pm$ 0.2 %	$\infty$
Probe positioning	$\pm$ 2.9 %	Rectangular	$\sqrt{3}$	1	1	$\pm$ 1.7 %	$\pm$ 1.7 %	$\infty$
Max. SAR evaluation	$\pm$ 1.0 %	Rectangular	$\sqrt{3}$	1	1	$\pm$ 0.6 %	$\pm$ 0.6 %	$\infty$
<b>Test Sample Related</b>								
Deviation of the	$\pm$ %	Normal	1	1	1	$\pm$ 0.0 %	$\pm$ 0.0 %	$\infty$
Source to liquid distance	$\pm$ 2.0 %	Rectangular	$\sqrt{3}$	1	1	$\pm$ 1.2 %	$\pm$ 1.2 %	$\infty$
Power drift	$\pm$ 4.7 %	Rectangular	$\sqrt{3}$	1	1	$\pm$ 2.7 %	$\pm$ 2.7 %	$\infty$
<b>Phantom and Set-up</b>								
Phantom uncertainty	$\pm$ 4.0 %	Rectangular	$\sqrt{3}$	1	1	$\pm$ 2.3 %	$\pm$ 2.3 %	$\infty$
Algorithm for correcting	$\pm$ 1.9 %	Normal	1	1	0.84	$\pm$ 1.9 %	$\pm$ 1.6 %	$\infty$
Liquid conductivity (meas.)	$\pm$ 5.0 %	Normal	1	0.78	0.71	$\pm$ 3.9 %	$\pm$ 3.6 %	$\infty$
Liquid permittivity (meas.)	$\pm$ 5.0 %	Normal	1	0.23	0.26	$\pm$ 1.2 %	$\pm$ 1.3 %	$\infty$
Temp. Unc. - Conductivity	$\pm$ 5.0 %	Rectangular	$\sqrt{3}$	0.78	0.71	$\pm$ 2.3 %	$\pm$ 2.0 %	$\infty$
Temp. Unc. - Permittivity	$\pm$ 5.0 %	Rectangular	$\sqrt{3}$	0.23	0.26	$\pm$ 0.7 %	$\pm$ 0.8 %	$\infty$
<b>Combined Uncertainty</b>								
<b>Expanded Std. Uncertainty</b>						$\pm$ 9.7 %	$\pm$ 9.5 %	330
						$\pm$ 19.3 %	$\pm$ 18.9 %	

Table 12: Measurement uncertainties of a System Check with DASY5

Note: Worst case probe calibration uncertainty has been applied for all probes used during the measurements.

### 6.1.13 System check

The system check is performed for verifying the accuracy of the complete measurement system and performance of the software. The system check is performed with tissue equivalent material according to IEEE 1528. The following table shows system check results for all frequency bands and tissue liquids used during the tests (plot(s) see annex A).

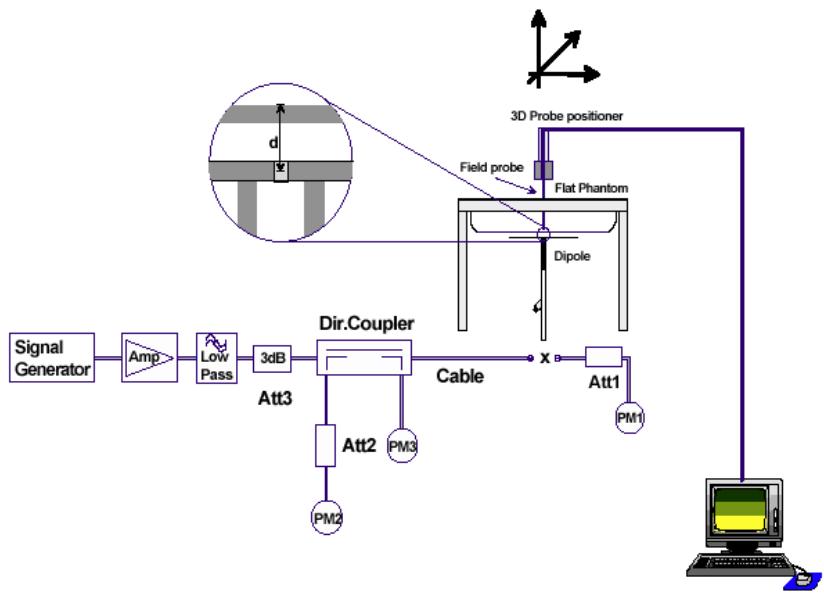
System validation Kit	Frequency	Target SAR <sub>1g</sub> (1000 mW) (+/- 10%)	Target SAR <sub>10g</sub> (1000 mW) (+/- 10%)	Measured SAR <sub>1g</sub> (1000 mW)	Measured SAR <sub>10g</sub> (1000 mW)	Measured date
D900V2 S/N: 102	900 MHz head	10.9 mW/g	6.97 mW/g	11.0 mW/g	7.08 mW/g	2012-12-05
D900V2 S/N: 102	900 MHz head	10.9 mW/g	6.97 mW/g	10.9 mW/g	7.01 mW/g	2012-12-06
D900V2 S/N: 102	900 MHz body	11.2 mW/g	7.24 mW/g	11.2 mW/g	7.31 mW/g	2012-12-11
D900V2 S/N: 102	900 MHz body	11.2 mW/g	7.24 mW/g	11.0 mW/g	7.23 mW/g	2012-12-12
D1800V2 S/N: 287	1800 MHz head	37.5 mW/g	19.7 mW/g	37.7 mW/g	19.9 mW/g	2012-12-04
D1800V2 S/N: 287	1800 MHz body	38.7 mW/g	20.4 mW/g	37.7 mW/g	20.5 mW/g	2012-12-05
D1900V2 S/N: 5d009	1900 MHz head	40.0 mW/g	20.9 mW/g	37.6 mW/g	20.1 mW/g	2012-12-12
D1900V2 S/N: 5d009	1900 MHz head	40.0 mW/g	20.9 mW/g	38.6 mW/g	20.8 mW/g	2012-12-13
D1900V2 S/N: 5d009	1900 MHz body	40.9 mW/g	21.5 mW/g	37.7 mW/g	20.6 mW/g	2012-12-06
D1900V2 S/N: 5d009	1900 MHz body	40.9 mW/g	21.5 mW/g	37.9 mW/g	20.8 mW/g	2012-12-07
D2450V2 S/N: 710	2450 MHz head	51.5 mW/g	24.0 mW/g	54.3 mW/g	25.0 mW/g	2012-12-19
D2450V2 S/N: 710	2450 MHz body	51.2 mW/g	23.9 mW/g	53.9 mW/g	24.2 mW/g	2012-12-20
D5GHzV2 S/N: 1055	5200 MHz head	77.3 mW/g	22.0 mW/g	74.3 mW/g	21.4 mW/g	2013-01-02
D5GHzV2 S/N: 1055	5500 MHz head	81.1 mW/g	23.0 mW/g	86.5 mW/g	24.5 mW/g	2013-01-02
D5GHzV2 S/N: 1055	5800 MHz head	75.4 mW/g	21.3 mW/g	76.2 mW/g	21.4 mW/g	2013-01-02

Table 13: Results system check

### 6.1.14 System check procedure

The system check is performed by using a validation dipole which is positioned parallel to the planar part of the SAM phantom at the reference point. The distance of the dipole to the SAM phantom is determined by a plexiglass spacer. The dipole is connected to the signal source consisting of signal generator and amplifier via a directional coupler, N-connector cable and adaption to SMA. It is fed with a power of 1000 mW for frequencies below 2 GHz or 100 mW for frequencies above 2 GHz. To adjust this power a power meter is used. The power sensor is connected to the cable before the system check to measure the power at this point and do adjustments at the signal generator. At the outputs of the directional coupler both return loss as well as forward power are controlled during the validation to make sure that emitted power at the dipole is kept constant. This can also be checked by the power drift measurement after the test (result on plot).

System check results have to be equal or near the values determined during dipole calibration (target SAR in table above) with the relevant liquids and test system.



## 7 Detailed Test Results

### 7.1 Conducted power measurements

For the measurements a Rohde & Schwarz Radio Communication Tester CMU 200 was used. The output power was measured using an integrated RF connector and attached RF cable. The conducted output power was also checked before and after each SAR measurement. The resulting power values were within a 0.2 dB tolerance of the values shown below.

Note: CMU200 measures GSM peak and average output power for active timeslots.

For SAR the time based average power is relevant. The difference in-between depends on the duty cycle of the TDMA signal:

No. of timeslots	1	2	3	4
Duty Cycle	1 : 8	1: 4	1 : 2.66	1 : 2
time based avg. power compared to slotted avg. power	- 9 dB	- 6 dB	- 4.25 dB	- 3 dB

The signalling modes differ as follows :

mode	coding scheme	modulation
GPRS	CS1 to CS4	GMSK
EGPRS (EDGE)	MCS1 to MCS4	GMSK
EGPRS (EDGE)	MCS5 to MCS9	8PSK

Apart from modulation change (GMSK/8PSK) coding schemes differ in code rate without influence on the RF signal. Therefore one coding scheme per mode was selected for conducted power measurements.

### 7.1.1 Conducted power measurements GSM 850 MHz

Channel / frequency	modulation	timeslots	slotted avg. power	time based avg. Power (calculated)
128 / 824.2 MHz	GMSK	1	33.2 dBm	24.2 dBm
190 / 836.6 MHz	GMSK	1	33.2 dBm	24.2 dBm
251 / 848.0 MHz	GMSK	1	33.2 dBm	24.2 dBm
128 / 824.2 MHz	GMSK	2	30.6 dBm	24.6 dBm
190 / 836.6 MHz	GMSK	2	30.7 dBm	24.7 dBm
251 / 848.0 MHz	GMSK	2	30.7 dBm	24.7 dBm
128 / 824.2 MHz	GMSK	3	29.9 dBm	25.65 dBm
190 / 836.6 MHz	GMSK	3	29.9 dBm	25.65 dBm
251 / 848.0 MHz	GMSK	3	29.9 dBm	25.65 dBm
128 / 824.2 MHz	GMSK	4	28.8 dBm	<b>25.8 dBm</b>
190 / 836.6 MHz	GMSK	4	28.8 dBm	<b>25.8 dBm</b>
251 / 848.0 MHz	GMSK	4	28.8 dBm	<b>25.8 dBm</b>
128 / 824.2 MHz	8PSK	1	27.3 dBm	18.3 dBm
190 / 836.6 MHz	8PSK	1	27.1 dBm	18.1 dBm
251 / 848.0 MHz	8PSK	1	27.1 dBm	18.1 dBm
128 / 824.2 MHz	8PSK	2	25.9 dBm	19.9 dBm
190 / 836.6 MHz	8PSK	2	25.9 dBm	19.9 dBm
251 / 848.0 MHz	8PSK	2	25.9 dBm	19.9 dBm
128 / 824.2 MHz	8PSK	3	24.9 dBm	20.65 dBm
190 / 836.6 MHz	8PSK	3	24.8 dBm	20.55 dBm
251 / 848.0 MHz	8PSK	3	24.8 dBm	20.55 dBm
128 / 824.2 MHz	8PSK	4	22.9 dBm	19.9 dBm
190 / 836.6 MHz	8PSK	4	22.9 dBm	19.9 dBm
251 / 848.0 MHz	8PSK	4	22.8 dBm	19.8 dBm

Table 14: Test results conducted power measurement GSM 850 MHz

### 7.1.2 Conducted power measurements GSM 1900 MHz

Channel / frequency	modulation	timeslots	slotted avg. power	time based avg. Power (calculated)
512 / 1850.2 MHz	GMSK	1	30.1 dBm	21.1 dBm
661 / 1880.0 MHz	GMSK	1	30.1 dBm	21.1 dBm
810 / 1909.8 MHz	GMSK	1	30.0 dBm	21.0 dBm
512 / 1850.2 MHz	GMSK	2	27.6 dBm	21.6 dBm
661 / 1880.0 MHz	GMSK	2	27.5 dBm	21.5 dBm
810 / 1909.8 MHz	GMSK	2	27.4 dBm	21.4 dBm
512 / 1850.2 MHz	GMSK	3	26.2 dBm	21.95 dBm
661 / 1880.0 MHz	GMSK	3	26.1 dBm	21.85 dBm
810 / 1909.8 MHz	GMSK	3	26.0 dBm	21.75 dBm
512 / 1850.2 MHz	GMSK	4	25.2 dBm	22.2 dBm
661 / 1880.0 MHz	GMSK	4	25.1 dBm	22.1 dBm
810 / 1909.8 MHz	GMSK	4	25.1 dBm	22.1 dBm
512 / 1850.2 MHz	8PSK	1	26.2 dBm	17.2 dBm
661 / 1880.0 MHz	8PSK	1	26.2 dBm	17.2 dBm
810 / 1909.8 MHz	8PSK	1	26.1 dBm	17.1 dBm
512 / 1850.2 MHz	8PSK	2	24.8 dBm	18.8 dBm
661 / 1880.0 MHz	8PSK	2	24.7 dBm	18.7 dBm
810 / 1909.8 MHz	8PSK	2	24.6 dBm	18.6 dBm
512 / 1850.2 MHz	8PSK	3	23.8 dBm	19.55 dBm
661 / 1880.0 MHz	8PSK	3	23.7 dBm	19.45 dBm
810 / 1909.8 MHz	8PSK	3	23.6 dBm	19.35 dBm
512 / 1850.2 MHz	8PSK	4	22.8 dBm	19.8 dBm
661 / 1880.0 MHz	8PSK	4	22.7 dBm	19.7 dBm
810 / 1909.8 MHz	8PSK	4	22.6 dBm	19.6 dBm

Table 15: Test results conducted power measurement GSM 1900 MHz

### 7.1.3 Justification of SAR measurements in GSM mode

SAR measurements were performed in GPRS mode with 4 active timeslots because highest time based averaged output power was calculated for that configuration.

For comparison an additional delta measurement was performed with 1 timeslot in speech mode. In EDGE mode no delta measurement was performed.

### 7.1.4 Conducted power measurements 3GPP UMTS FDD V (850 MHz)

mode	Max. RMS output power 850 MHz (FDD V) / dBm		
	4132 / 826.4 MHz	Channel / frequency	4233 / 846.6 MHz
<b>RMC 12.2 kbit/s</b>	<b>24.2</b>	<b>24.2</b>	<b>24.2</b>
RMC 64 kbit/s	24.2	24.1	24.2
RMC 144 kbit/s	24.1	24.1	24.1
RMC 384 kbit/s	24.2	24.1	24.0
AMR 4.75 kbit/s	24.2	24.1	24.2
AMR 5.15 kbit/s	24.2	24.1	24.1
AMR 5.9 kbit/s	24.2	24.1	24.0
AMR 6.7 kbit/s	24.2	24.1	24.1
AMR 7.4 kbit/s	24.2	24.0	24.1
AMR 7.95 kbit/s	24.2	24.1	24.1
AMR 10.2 kbit/s	24.2	24.1	24.1
AMR 12.2 kbit/s	24.2	24.1	24.0
<b>HSDPA Sub test 1</b>	<b>24.2</b>	<b>24.1</b>	<b>24.0</b>
HSDPA Sub test 2	22.9	22.8	22.8
HSDPA Sub test 3	21.9	22.0	21.9
HSDPA Sub test 4	21.2	21.2	21.2
HSUPA Sub test 1	23.7	23.4	23.5
HSUPA Sub test 2	21.0	21.4	21.2
HSUPA Sub test 3	22.0	21.8	22.1
HSUPA Sub test 4	21.1	21.4	21.0
<b>HSUPA Sub test 5</b>	<b>23.1</b>	<b>23.4</b>	<b>23.4</b>

Table 16: Test results conducted power measurement UMTS FDD V 850MHz

### 7.1.5 Conducted power measurements 3GPP UMTS FDD IV (1700 MHz)

mode	Max. RMS output power FDD IV (1700MHz) / dBm		
	1312 / 1712.4 MHz	1412 / 1732.4 MHz	1513 / 1752.6 MHz
<b>RMC 12.2 kbit/s</b>	<b>23.1</b>	<b>23.1</b>	<b>23.1</b>
RMC 64 kbit/s	23.1	22.9	23.1
RMC 144 kbit/s	23.0	22.9	23.1
RMC 384 kbit/s	23.1	22.9	23.1
AMR 4.75 kbit/s	23.1	22.9	23.1
AMR 5.15 kbit/s	23.1	22.9	23.0
AMR 5.9 kbit/s	23.1	22.9	23.1
AMR 6.7 kbit/s	23.1	22.9	23.0
AMR 7.4 kbit/s	23.0	22.8	23.0
AMR 7.95 kbit/s	23.1	22.8	23.0
AMR 10.2 kbit/s	23.1	22.9	23.1
AMR 12.2 kbit/s	23.1	22.9	23.0
<b>HSDPA Sub test 1</b>	<b>22.9</b>	<b>22.6</b>	<b>22.8</b>
HSDPA Sub test 2	21.7	21.4	21.4
HSDPA Sub test 3	20.1	20.0	20.1
HSDPA Sub test 4	20.1	20.1	20.1
HSUPA Sub test 1	22.0	22.3	22.1
HSUPA Sub test 2	20.2	20.1	20.2
HSUPA Sub test 3	20.6	21.3	21.8
HSUPA Sub test 4	19.9	20.2	20.1
<b>HSUPA Sub test 5</b>	<b>21.9</b>	<b>22.3</b>	<b>22.1</b>

Table 17: Test results conducted power measurement UMTS FDD IV 1700MHz

### 7.1.6 Conducted power measurements 3GPP UMTS FDD II (1900 MHz)

mode	Max. RMS output power 1900 MHz (FDD II) / dBm		
	9262 / 1852.4 MHz	Channel / frequency 9400 / 1880.0 MHz	9538 / 1907.6 MHz
<b>RMC 12.2 kbit/s</b>	<b>22.6</b>	<b>22.6</b>	<b>22.6</b>
RMC 64 kbit/s	22.6	22.6	22.5
RMC 144 kbit/s	22.5	22.5	22.5
RMC 384 kbit/s	22.5	22.5	22.5
AMR 4.75 kbit/s	22.5	22.5	22.5
AMR 5.15 kbit/s	22.5	22.5	22.5
AMR 5.9 kbit/s	22.5	22.5	22.5
AMR 6.7 kbit/s	22.6	22.5	22.5
AMR 7.4 kbit/s	22.4	22.4	22.4
AMR 7.95 kbit/s	22.5	22.5	22.4
AMR 10.2 kbit/s	22.5	22.5	22.4
AMR 12.2 kbit/s	22.5	22.5	22.5
<b>HSDPA Sub test 1</b>	<b>22.3</b>	<b>22.2</b>	<b>22.2</b>
HSDPA Sub test 2	21.1	21.2	21.4
HSDPA Sub test 3	19.8	20.1	19.9
HSDPA Sub test 4	19.5	19.8	20.1
HSUPA Sub test 1	21.4	21.9	21.3
HSUPA Sub test 2	19.8	20.0	19.8
HSUPA Sub test 3	20.2	20.4	20.4
HSUPA Sub test 4	19.7	20.0	19.9
<b>HSUPA Sub test 5</b>	<b>21.8</b>	<b>21.9</b>	<b>21.9</b>

Table 18: Test results conducted power measurement UMTS FDD II 1900MHz

Remark: None of the HSDPA/HSUPA settings leads to conducted power values exceeding the conducted power in RMC mode by more than 0.25 dB.

Therefore no additional SAR measurements were performed in HSDPA/HSUPA mode.

### 7.1.7 Test-set-up information for WCDMA / HSPDA / HSUPA

#### a) WCDMA RMC

In RMC (reference measurement channel) mode the conducted power at 4 different bit rates was measured. They correspond with the used spreading factors as follows:

Bit rate	12.2 kbit/s	64 kbit/s	144 kbit/s	384 kbit/s
Spreading factor (SF)	64	16	8	4

In RMC mode only DPCCH and DPDCH are active. As bit rate changes do not influence the relative power of any code channel the measured RMS output power remains on the same level which is set to maximum by TPC (Transmit power control) pattern type 'All 1'.

#### b) HSDPA

HSDPA adds the HS-DPCCH in uplink as a control channel for high speed data transfer in downlink. In HSDPA mode 4 sub-tests are defined by 3GPP 34.121 according to the following table:

Sub-test	$\beta_c$	$\beta_d$	$\beta_d$ (SF)	$\beta_c/\beta_d$	$\beta_{hs}^{(1)}$	CM(dB) <sup>(2)</sup>
1	2/15	15/15	64	2/15	4/15	0.0
2	12/15 <sup>(3)</sup>	15/15 <sup>(3)</sup>	64	12/15 <sup>(3)</sup>	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:  $\Delta_{ACK}, \Delta_{NACK}, \Delta_{CQI} = 8 \iff A_{hs} = \beta_{hs}/\beta_c = 30/15 \iff \beta_{hs} = 30/15 * \beta_c$

Note 2 : CM = 1 for  $\beta_c/\beta_d = 12/15$ ,  $\beta_{hs}/\beta_c = 24/15$

Note 3 : For subtest 2 the  $\beta_c/\beta_d$  ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1,TF1) to  $\beta_c = 11/15$  and  $\beta_d = 15/15$

Table 19: Sub-tests for UMTS Release 5 HSDPA

The  $\beta_c$  and  $\beta_d$  gain factors for DPCCH and DPDCH were set according to the values in the above table,  $\beta_{hs}$  for HS-DPCCH is set automatically to the correct value when  $\Delta_{ACK}, \Delta_{NACK}, \Delta_{CQI} = 8$ . The variation of the  $\beta_c/\beta_d$  ratio causes a power reduction at sub-tests 2 - 4.

The measurements were performed with a Fixed Reference Channel (FRC) and H-Set 1 QPSK.

Parameter	Value
Nominal average inf. bit rate	534 kbit/s
Inter-TTI Distance	3 TTI's
Number of HARQ Processes	2 Processes
Information Bit Payload	3202 Bits
MAC-d PDU size	336 Bits
Number Code Blocks	1 Block
Binary Channel Bits Per TTI	4800 Bits
Total Available SMLs in UE	19200 SMLs
Number of SMLs per HARQ Process	9600 SMLs
Coding Rate	0.67
Number of Physical Channel Codes	5

Table 20: settings of required H-Set 1 QPSK acc. to 3GPP 34.121

## c) HSUPA

In HSUPA mode additional code channels (E-DPCCH, E-DPDCHn) are added for data transfer in uplink at higher bit rates.

5 sub-tests are defined by 3GPP 34.121 according to the following table :

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

Note 1:  $\Delta_{ACK}, \Delta_{NACK}, \Delta_{CQI} = 8 \iff A_{hs} = \beta_{hs}/\beta_c = 30/15 \iff \beta_{hs} = 30/15 * \beta_c$   
Note 2 : CM = 1 for  $\beta_c/\beta_d = 12/15$ ,  $\beta_{hs}/\beta_c = 24/15$ . For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference  
Note 3 : For subtest 1 the  $\beta_c/\beta_d$  ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1,TF1) to  $\beta_c = 10/15$  and  $\beta_d = 15/15$   
Note 4 : For subtest 5 the  $\beta_c/\beta_d$  ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled 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 :  $\beta_{ed}$  can not be set directly; it is set by Absolute Grant Value

Table 21: Subtests for UMTS Release 6 HSUPA

To achieve the settings above some additional procedures were defined by 3GPP 34.121. Those have been included in an application note for the CMU200 and were exactly followed :

- Test mode connection (BS signal tab) :
- RMC 12.2 kbit/s + HSPA 34.108 with loop mode 1
- HS-DSCH settings (BS signal tab):
- FRC with H-set 1 QPSK
- ACK-NACK repetition factor = 3
- CQI feedback cycle = 4ms
- CQI repetition factor = 2
- HSUPA-specific signalling settings (UE signal tab) :
- E-TFCI table index = 0
- E-DCH minimum set E-TFCI = 9
- Puncturing limit non-max = 0.84
- max. number of channelisation codes = 2x SF4
- Initial Serving Grant Value = Off
- HSDPA and HSUPA Gain factors (UE signal tab)

Sub-test	$\beta_c$	$\beta_d$	$\Delta_{ACK}, \Delta_{NACK}, \Delta_{CQI}$	$\Delta E-DPCCH )^*$
1	10	15	8	6
2	6	15	8	8
3	15	9	8	8
4	2	15	8	5
5	14	15	8	7

)\* :  $\beta_{ec}$  and  $\beta_{ed}$  ratios (relative to  $\beta_c$  and  $\beta_d$ ) are set by  $\Delta E-DPCCH$

- HSUPA Reference E-TFCIs (UE signal tab > HSUPA gain factors) :

<b>Sub-test</b>	<b>1, 2, 4, 5</b>				
Number of E-TFCIs	5				
Reference E-TFCI	11	67	71	75	81
Reference E-TFCI power offset	4	18	23	26	27

<b>Sub-test</b>	<b>3</b>	
Number of E-TFCIs	2	
Reference E-TFCI	11	92
Reference E-TFCI power offset	4	18

- HSUPA-specific generator parameters (BS Signal tab > HSUPA > E-AGCH > AG Pattern)

<b>Sub-test</b>	<b>Absolute Grant Value (AG Index)</b>
1	20
2	12
3	15
4	17
5	21

- Power Level settings (BS Signal tab > Node B-settings):

- Level reference : Output Channel Power (lOr)
- Output Channel Power (lOr) : -86 dBm

- Downlink Physical Channel Settings (BS signal tab)

- P-CPICH : -10 dB
- S-CPICH : Off
- P-SCH : -15 dB
- S-SCH : -15 dB
- P-CCPCH : -12 dB
- S-CCPCH : -12 dB
- PICH : -15 dB
- AICH : -12 dB
- DPDCH : -10 dB
- HS-SCCH : -8 dB
- HS-PDSCH : -3 dB
- E-AGCH : -20 dB
- E-RGCH/E-HICH - 20 dB
- E-RGCH Active : Off

The settings above were stored once for each sub-test and recalled before the measurement.

HSUPA test procedure :

To reach maximum output power in HSUPA mode the following procedures were followed:

3 different TPC patterns were defined :

Set 1 : Closed loop with target power 10 dBm

Set 2 : Single Pattern+Alternating with binary pattern '11111' for 1 dB steps 'up'

Set 3 : Single Pattern+Alternating with binary pattern '00000' for 1 dB steps 'down'

After recalling a certain HSUPA sub-test the HSUPA E-AGCH graph with E-TFCI event counter is displayed. After starting with the closed loop command the power is increased in 1 dB steps by activating pattern set 2 until the UE decreases the transmitted E-TFCI.

At this point set 3 is activated once to reduce the output power to the value at which the original E-TFCI, which is required for the sub-test, appears again.

For conducted power measurements the same steps are repeated in the power menu to read out the corresponding maximum RMS output power with the target E-TFCI.

For SAR measurements it is useful to switch to Code Domain Power vs. Time display.

Here the CMU200 shows relative power values (max. and min.) of each code channel which should roughly correspond to the numerators of the gain factors e.g. :

Sub-test	$\beta_c$	$\beta_d$	$\beta_{hs}$	$\beta_{ec}$	$\beta_{ed}$
5	15	15	30	24	134

By this way a surveillance of signalling conditions is possible to make sure that HSUPA code channels are active during the complete SAR measurement.

### 7.1.8 Conducted power measurements WLAN 2.4 GHz

Channel / frequency	modulation	bit rate	time based avg. power
1 / 2412 MHz	CCK	1 MBit/s	<b>15.1dBm</b>
6 / 2437 MHz	CCK	1 MBit/s	<b>15.6dBm</b>
11 / 2462 MHz	CCK	1 MBit/s	<b>15.6dBm</b>
13 / 2472 MHz	CCK	1 MBit/s	<b>15.3dBm</b>
1 / 2412 MHz	OFDM	6 MBit/s	13.8dBm
6 / 2437 MHz	OFDM	6 MBit/s	13.9dBm
11 / 2462 MHz	OFDM	6 MBit/s	14.2dBm
13 / 2472 MHz	OFDM	6 MBit/s	13.9dBm
1 / 2412 MHz	OFDM	6.5 MBit/s	12.8dBm
6 / 2437 MHz	OFDM	6.5 MBit/s	12.7dBm
11 / 2462 MHz	OFDM	6.5 MBit/s	13.2dBm
13 / 2472 MHz	OFDM	6.5 MBit/s	13.0dBm

Table 22: Test results conducted power measurement WLAN 2.4 GHz

### 7.1.9 Conducted power measurements WLAN 5 GHz

Channel	Frequency (MHz)	modulation	bit rate	time based avg. power
36	5180	OFDM	6 MBit/s	<b>9.7dBm</b>
40	5200	OFDM	6 MBit/s	9.5dBm
44	5220	OFDM	6 MBit/s	9.0dBm
48	5240	OFDM	6 MBit/s	9.6dBm
52	5260	OFDM	6 MBit/s	<b>9.2dBm</b>
56	5280	OFDM	6 MBit/s	8.2dBm
60	5300	OFDM	6 MBit/s	9.2dBm
64	5320	OFDM	6 MBit/s	9.1dBm
100	5500	OFDM	6 MBit/s	8.3dBm
104	5520	OFDM	6 MBit/s	8.4dBm
108	5540	OFDM	6 MBit/s	8.1dBm
112	5560	OFDM	6 MBit/s	8.2dBm
116	5580	OFDM	6 MBit/s	8.6dBm
120	5600	OFDM	6 MBit/s	<b>8.8dBm</b>
124	5620	OFDM	6 MBit/s	8.7dBm
128	5640	OFDM	6 MBit/s	8.7dBm
132	5660	OFDM	6 MBit/s	8.6dBm
136	5680	OFDM	6 MBit/s	8.3dBm
140	5700	OFDM	6 MBit/s	8.2dBm
149	5745	OFDM	6 MBit/s	8.5dBm
153	5765	OFDM	6 MBit/s	8.9dBm
157	5785	OFDM	6 MBit/s	9.1dBm
161	5805	OFDM	6 MBit/s	9.2dBm
165	5825	OFDM	6 MBit/s	<b>9.3dBm</b>

Table 23: Test results conducted power measurement WLAN 5 GHz

### 7.1.10 Multiple Transmitter Information

The following tables list information which is relevant for the decision if a simultaneous transmit evaluation is necessary according to FCC KDB 447498D01 General RF Exposure Guidance v05.

Minimum antenna separation distance between main antenna and WLAN – **93.05 mm**

#### a) Head position

Communication system	freq. (MHz)	P <sub>avg</sub> * (dBm)	P <sub>avg</sub> * (mW)	threshold <sub>1-g</sub>	SAR test exclusion
GSM 850	835	24.5	281.8	51.5	no
GSM 1900	1900	21.5	141.3	38.9	no
FDD V 850	835	24.5	281.8	51.5	no
FDD IV 1750	1750	23.5	223.9	59.2	no
FDD II 1900	1900	23.0	199.5	55.0	no
WLAN 2450	2450	16.0	39.8	12.5	no
WLAN 5 GHz	5200	9.9	9.8	4.5	no
Bluetooth 2450	2450	9.6	9.1	2.9	yes

Table 24: Communication systems and SAR values in head position

#### b) Body position

Communication system	freq. (MHz)	distance (mm)	P <sub>avg</sub> * (dBm)	P <sub>avg</sub> * (mW)	threshold <sub>1-g</sub>	SAR test exclusion
GSM 850	835	10	26.0	398.1	36.4	no
GSM 1900	1900	10	22.5	177.8	24.5	no
FDD V 850	835	10	24.5	281.8	25.8	no
FDD IV 1750	1750	10	23.5	223.9	29.6	no
FDD II 1900	1900	10	23.0	199.5	27.5	no
WLAN 2450	2450	10	16.0	39.8	6.2	no
WLAN 5 GHz	5200	10	9.9	9.8	2.2	yes
Bluetooth 2450	2450	10	9.6	9.1	1.4	yes

Table 25: Communication systems and SAR values in body position

The **1-g SAR test exclusion thresholds** for 100 MHz to 6 GHz at *test separation distances*  $\leq 50$  mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR, where:}$$

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

\* - maximum possible output power declared by manufacturer

reported SAR WWAN and WLAN 2.4GHz, $\Sigma$ SAR evaluation				
Frequency band	Position	reported SAR /W/kg		$\Sigma$ SAR
		WWAN	WLAN	<1.6W/kg
GSM 850	left hand	0.515	1.055	<b>1.570</b>
GSM 850	right hand	0.467	0.292	0.759
GSM 850	front	0.646	0.197	0.843
GSM 850	rear	0.616	0.274	0.890
GSM 1900	left hand	0.139	1.055	1.194
GSM 1900	right hand	0.134	0.292	0.426
GSM 1900	rear	0.736	0.274	1.010
WCDMA FDD V	left hand	0.515	1.055	<b>1.570</b>
WCDMA FDD V	right hand	0.488	0.292	0.780
WCDMA FDD V	front	0.599	0.197	0.796
WCDMA FDD V	rear	0.558	0.274	0.832
WCDMA FDD IV	left hand	0.284	1.055	1.339
WCDMA FDD IV	right hand	0.311	0.292	0.603
WCDMA FDD IV	rear	1.041	0.274	1.315
WCDMA FDD II	left hand	0.228	1.055	1.283
WCDMA FDD II	right hand	0.231	0.292	0.523
WCDMA FDD II	rear	1.096	0.274	1.370

Table 26: SAR<sub>max</sub> WWAN and WLAN 2.4GHz,  $\Sigma$ SAR evaluation

**$\Sigma$ SAR < 1.6 W/kg** therefore simultaneous transmission SAR with Volume Scans is **not** required.

reported SAR <b>WWAN</b> and <b>WLAN 5GHz</b> , <b>ΣSAR</b> evaluation				
Frequency band	Position	reported SAR /W/kg		<b>ΣSAR</b>
		WWAN	WLAN	<1,6W/kg
GSM 850	left cheek	0.515	0.693	1.208
GSM 850	right cheek	0.467	0.117	0.584
GSM 850	front	0.646	0.297	0.943
GSM 850	rear	0.616	0.297	0.913
GSM 1900	left cheek	0.139	0.693	0.832
GSM 1900	right cheek	0.134	0.117	0.251
GSM 1900	rear	0.736	0.297	1.033
WCDMA FDD V	left cheek	0.515	0.693	1.208
WCDMA FDD V	right cheek	0.488	0.117	0.605
WCDMA FDD V	front	0.599	0.297	0.896
WCDMA FDD V	rear	0.558	0.297	0.855
WCDMA FDD IV	left cheek	0.284	0.693	0.977
WCDMA FDD IV	right cheek	0.311	0.117	0.428
WCDMA FDD IV	rear	1.041	0.297	1.338
WCDMA FDD II	left cheek	0.228	0.693	0.921
WCDMA FDD II	right cheek	0.231	0.117	0.348
WCDMA FDD II	rear	1.096	0.297	<b>1.393</b>

Table 27: SAR<sub>max</sub> WWAN and WLAN 5GHz, ΣSAR evaluation

Estimated SAR					
Communication system	freq. (GHz)	distance (mm)	P <sub>avg</sub> * (dBm)	P <sub>avg</sub> * (mW)	threshold <sub>1-g</sub> (W/kg)
WLAN 5GHz body	5.2	10	9.9	9.8	<b>0.297</b>

Table 28: Calculated SAR<sub>max</sub> for WLAN 5GHz body

\* - maximum possible output power declared by manufacturer

Frequency band	Position	SARmax /W/kg		<b>ΣSAR</b>
		WWAN	Bluetooth	<1.6W/kg
GSM 850	left hand	0.515	0.381	0.896
GSM 850	right hand	0.467	0.381	0.848
GSM 850	front	0.646	0.190	0.836
GSM 850	rear	0.616	0.190	0.806
GSM 1900	left hand	0.139	0.381	0.520
GSM 1900	right hand	0.134	0.381	0.515
GSM 1900	rear	0.736	0.190	0.926
WCDMA FDD V	left hand	0.515	0.381	0.896
WCDMA FDD V	right hand	0.488	0.381	0.869
WCDMA FDD V	front	0.599	0.190	0.789
WCDMA FDD V	rear	0.558	0.190	0.748
WCDMA FDD IV	left hand	0.284	0.381	0.665
WCDMA FDD IV	right hand	0.311	0.381	0.692
WCDMA FDD IV	rear	1.041	0.190	1.231
WCDMA FDD II	left hand	0.228	0.381	0.609
WCDMA FDD II	right hand	0.231	0.381	0.612
WCDMA FDD II	rear	1.096	0.190	<b>1.286</b>

Table 29: SAR<sub>max</sub> WWAN and **Bluetooth 2450MHz**, ΣSAR evaluation

<b>Estimated SAR</b>					
Communication system	freq. (GHz)	distance (mm)	P <sub>avg</sub> * (dBm)	P <sub>avg</sub> * (mW)	estimated <sub>1-g</sub> (W/kg)
Bluetooth 2450 head	2.45	5	9.6	9.1	0.381
Bluetooth 2450 body	2.45	10	9.6	9.1	0.190

Table 30: Calculated SAR<sub>max</sub> for **Bluetooth 2450MHz** head and body

\* - maximum possible output power declared by manufacturer

When standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:

(max. power of channel, including **tune-up tolerance**, mW)/(min. test separation distance, mm)]·[√f(GHz)/x]  
W/kg for test separation distances ≤ 50 mm;  
where x = 7.5 for 1-g SAR.

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

## Conclusion:

**ΣSAR < 1.6 W/kg** therefore simultaneous transmission SAR with Volume Scans is **not** required.

### 7.1.11 Mobile hotspot SAR measurement positions

Mobile hotspot SAR measurement positions						
mode	front	rear	left edge	right edge	top edge	bottom edge
GSM 850	yes	yes	yes	yes	no	yes
GSM 1900	yes	yes	yes	yes	no	yes
WCDMA FDD V 850	yes	yes	yes	yes	no	yes
WCDMA FDD IV 1700	yes	yes	yes	yes	no	yes
WCDMA FDD II 1900	yes	yes	yes	yes	no	yes
WLAN 2450	yes	yes	no	yes	yes	no

The edges with less than 2.5 cm distance to the TX antennas need to be tested for hotspot SAR.

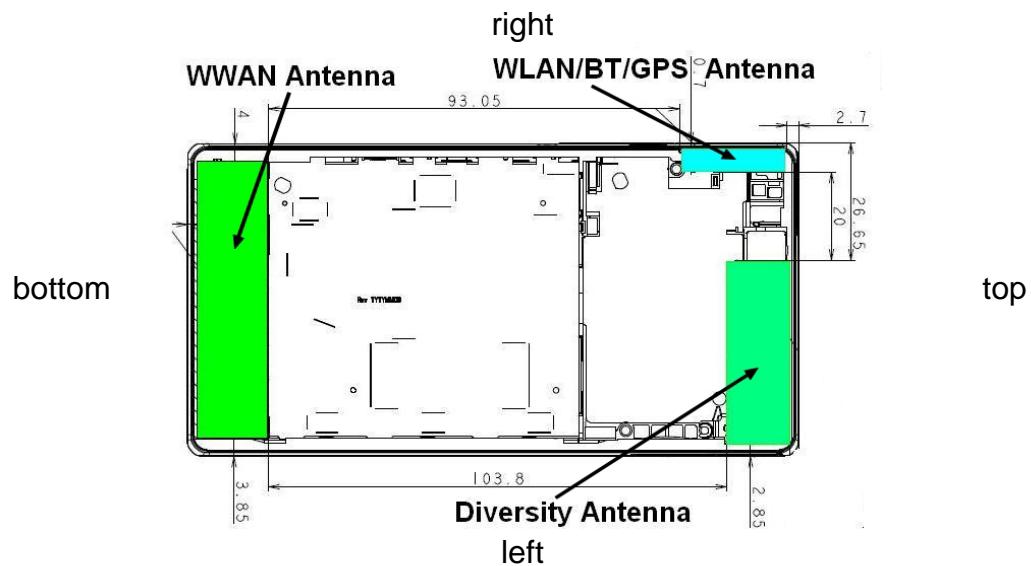


Table 31: Antenna distances and SPLSR evaluation in head position

## 7.2 SAR test results

### 7.2.1 Results overview

measured / extrapolated SAR numbers - Head - GSM 850 MHz							
Channel	Frequency (MHz)	Position	cond. output power (dBm)		SAR <sub>1g</sub> max. results(W/kg)		liquid temp. (°C)
			declared**	measured	Measured	Extrapolated	
128	824.2	left cheek	33.5	33.2	0.310	0.332	21.1
190	836.6	left cheek	33.5	33.2	0.372	0.399	21.1
251	848.8	left cheek	33.5	33.2	0.481	<b>0.515</b>	21.1
128	824.2	left tilted 15°	33.5	33.2	0.198	0.212	21.1
190	836.6	left tilted 15°	33.5	33.2	0.232	0.249	21.1
251	848.8	left tilted 15°	33.5	33.2	0.283	0.303	21.1
128	824.2	right cheek	33.5	33.2	0.261	0.280	21.1
190	836.6	right cheek	33.5	33.2	0.337	0.361	21.1
251	848.8	right cheek	33.5	33.2	0.436	0.467	21.1
128	824.2	right tilted 15°	33.5	33.2	0.165	0.177	21.1
190	836.6	right tilted 15°	33.5	33.2	0.195	0.209	21.1
251	848.8	right tilted 15°	33.5	33.2	0.236	0.253	21.1

Table 32: Test results head SAR GSM 850 MHz

measured / extrapolated SAR numbers - Body - GSM 850 MHz									
Ch.	freq. (MHz)	time slots	distance (mm)	Position	cond. output power (dBm)		SAR <sub>1g</sub> results(W/kg)	liquid temp. (°C)	
					declared**	measured	measured		
128	824.2	4	10	front	29.0	28.8	0.501	0.525	21.6
190	836.6	4	10	front	29.0	28.8	0.566	0.593	21.6
251	848.8	4	10	front	29.0	28.8	0.617	<b>0.646</b>	21.6
128	824.2	4	10	rear	29.0	28.8	0.480	0.503	21.6
190	836.6	4	10	rear	29.0	28.8	0.543	0.569	21.6
251	848.8	4	10	rear	29.0	28.8	0.588	0.616	21.6
190	824.2	4	10	left edge	29.0	28.8	0.311	0.326	21.6
190	836.6	4	10	right edge	29.0	28.8	0.285	0.298	21.6
190	848.8	4	10	bottom edge	29.0	28.8	0.137	0.143	21.6
251	848.8	4	15	front	29.0	28.8	0.585	0.613	21.5
251	848.8	1	15	front	33.5	33.2	0.396	0.424	21.5

Table 33: Test results body SAR GSM 850 MHz

\*\* - maximum possible output power declared by manufacturer

Top edge position is not required since the distance from the main antenna to the edge is greater than 2.5 cm.

measured / extrapolated SAR numbers - Head - GSM 1900 MHz							
Ch.	frequency (MHz)	Position	cond. output power (dBm)		SAR <sub>1g</sub> results(W/kg)		liquid temp. (°C)
			declared**	measured	measured	extrapolated	
512	1850.2	left cheek	30.5	30.1	0.127	<b>0.139</b>	21.4
661	1880.0	left cheek	30.5	30.1	0.109	0.120	21.4
810	1909.8	left cheek	30.5	30.0	0.113	0.127	21.4
512	1850.2	left tilted 15°	30.5	30.1	0.041	0.045	21.4
661	1880.0	left tilted 15°	30.5	30.1	0.030	0.033	21.4
810	1909.8	left tilted 15°	30.5	30.0	0.028	0.032	21.4
512	1850.2	right cheek	30.5	30.1	0.122	0.134	21.4
661	1880.0	right cheek	30.5	30.1	0.116	0.127	21.4
810	1909.8	right cheek	30.5	30.0	0.117	0.131	21.4
512	1850.2	right tilted 15°	30.5	30.1	0.036	0.039	21.4
661	1880.0	right tilted 15°	30.5	30.1	0.029	0.032	21.4
810	1909.8	right tilted 15°	30.5	30.0	0.032	0.035	21.4

Table 34: Test results head SAR GSM 1900 MHz

measured / extrapolated SAR numbers - Body - GSM 1900 MHz									
Ch.	freq. (MHz)	time slots	distance (mm)	Position	cond. output power (dBm)		liquid temp. (°C)		
					declared**	measured			
512	1850.2	4	10	front	25.5	25.2	0.496	0.531	22.1
661	1880.0	4	10	front	25.5	25.1	0.436	0.478	22.1
810	1909.8	4	10	front	25.5	25.1	0.404	0.443	22.1
512	1850.2	4	10	rear	25.5	25.2	0.687	<b>0.736</b>	22.1
661	1880.0	4	10	rear	25.5	25.1	0.641	0.703	22.1
810	1909.8	4	10	rear	25.5	25.1	0.626	0.686	22.1
661	1880.0	4	10	left edge	25.5	25.1	0.105	0.115	22.1
661	1880.0	4	10	right edge	25.5	25.1	0.060	0.066	22.1
661	1880.0	4	10	bottom edge	25.5	25.1	0.642	0.704	22.1
512	1850.0	4	15	rear	25.5	25.2	0.354	0.379	22.1
512	1850.0	1	15	rear	30.5	30.1	0.245	0.269	22.1

Table 35: Test results body SAR GSM 1900 MHz

\*\* - maximum possible output power declared by manufacturer

Top edge position is not required since the distance from the main antenna to the edge is greater than 2.5 cm.

measured / extrapolated SAR numbers - Head - WCDMA FDD V 850 MHz							
Ch.	frequency (MHz)	Position	cond. output power (dBm)		SAR <sub>1g</sub> results(W/kg)		liquid temp. (°C)
			declared**	measured	measured	extrapolated	
4132	826.4	left cheek	24.5	24.2	0.412	0.441	21.1
4182	836.4	left cheek	24.5	24.2	0.359	0.385	21.1
4233	846.6	left cheek	24.5	24.2	0.481	<b>0.515</b>	21.1
4132	826.4	left tilted 15°	24.5	24.2	0.234	0.251	21.1
4182	836.4	left tilted 15°	24.5	24.2	0.209	0.224	21.1
4233	846.6	left tilted 15°	24.5	24.2	0.282	0.302	21.1
4132	826.4	right cheek	24.5	24.2	0.374	0.401	21.1
4182	836.4	right cheek	24.5	24.2	0.341	0.365	21.1
4233	846.6	right cheek	24.5	24.2	0.455	0.488	21.1
4132	826.4	right tilted 15°	24.5	24.2	0.210	0.225	21.1
4182	836.4	right tilted 15°	24.5	24.2	0.174	0.186	21.1
4233	846.6	right tilted 15°	24.5	24.2	0.232	0.249	21.1

Table 36: Test results head SAR UMTS FDD V 850 MHz

measured / extrapolated SAR numbers - Body - WCDMA FDD V 850 MHz									
Ch.	freq. (MHz)	test condition	distance (mm)	Position	cond. output power (dBm)		liquid temp. (°C)		
					declared**	measured			
4132	826.4	RMC	10	front	24.5	24.2	0.532	0.570	21.6
4182	836.4	RMC	10	front	24.5	24.2	0.442	0.474	21.6
4233	846.6	RMC	10	front	24.5	24.2	0.559	<b>0.599</b>	21.6
4132	826.4	RMC	10	rear	24.5	24.2	0.491	0.526	21.6
4182	836.4	RMC	10	rear	24.5	24.2	0.438	0.469	21.6
4233	846.6	RMC	10	rear	24.5	24.2	0.521	0.558	21.6
4182	836.4	RMC	10	left edge	24.5	24.2	0.323	0.346	21.6
4182	836.4	RMC	10	right edge	24.5	24.2	0.249	0.267	21.6
4182	836.4	RMC	10	bottom edge	24.5	24.2	0.139	0.149	21.6
4233	846.6	RMC	15	front	24.5	24.2	0.520	0.557	21.6
4233	846.6	AMR	15	front	24.5	24.2	0.356	0.381	21.6

Table 37: Test results body SAR UMTS FDD V 850 MHz

\*\* - maximum possible output power declared by manufacturer

Top edge position is not required since the distance from the main antenna to the edge is greater than 2.5 cm.

measured / extrapolated SAR numbers - Head - WCDMA FDD IV 1750 MHz							
Ch.	frequency (MHz)	Position	cond. output power (dBm)		SAR <sub>1g</sub> results(W/kg)		liquid temp. (°C)
			declared**	measured	measured	extrapolated	
1312	1712.4	left cheek	23.5	23.1	0.240	0.263	21.3
1412	1732.4	left cheek	23.5	23.1	0.205	0.225	21.3
1513	1752.6	left cheek	23.5	23.1	0.259	0.284	21.3
1312	1712.4	left tilted 15°	23.5	23.1	0.101	0.111	21.3
1412	1732.4	left tilted 15°	23.5	23.1	0.078	0.086	21.3
1513	1752.6	left tilted 15°	23.5	23.1	0.092	0.101	21.3
1312	1712.4	right cheek	23.5	23.1	0.284	<b>0.311</b>	21.3
1412	1732.4	right cheek	23.5	23.1	0.234	0.257	21.3
1513	1752.6	right cheek	23.5	23.1	0.276	0.303	21.3
1312	1712.4	right tilted 15°	23.5	23.1	0.092	0.101	21.3
1412	1732.4	right tilted 15°	23.5	23.1	0.067	0.073	21.3
1513	1752.6	right tilted 15°	23.5	23.1	0.098	0.107	21.3

Table 38: Test results head SAR UMTS FDD IV 1750 MHz

measured / extrapolated SAR numbers - Body - WCDMA FDD IV 1750 MHz								
Ch.	freq. (MHz)	test condition	distance (mm)	Position	cond. output power (dBm)		SAR <sub>1g</sub> results(W/kg)	liquid temp. (°C)
					declared**	measured		
1312	1712.4	RMC	10	front	23.5	23.1	0.656	0.719
1412	1732.4	RMC	10	front	23.5	23.1	0.571	0.626
1513	1752.6	RMC	10	front	23.5	23.1	0.686	0.752
1312	1712.4	RMC	10	rear	23.5	23.1	0.882	0.967
1412	1732.4	RMC	10	rear	23.5	23.1	0.782	0.857
1513	1752.6	RMC	10	rear	23.5	23.1	0.949	<b>1.041</b>
1412	1732.4	RMC	10	left edge	23.5	23.1	0.122	0.134
1412	1732.4	RMC	10	right edge	23.5	23.1	0.072	0.079
1412	1732.4	RMC	10	bottom edge	23.5	23.1	0.666	0.730
1513	1752.6	RMC	10	rear*	23.5	23.1	0.904	0.991
1513	1752.6	RMC	15	rear	23.5	23.1	0.496	0.544
1513	1752.6	AMR	15	rear	23.5	23.1	0.440	0.482

Table 39: Test results body SAR UMTS FDD IV 1750 MHz

\* - repeated at the highest SAR measurement according to the FCC KDB 865664

\*\* - maximum possible output power declared by manufacturer

Top edge position is not required since the distance from the main antenna to the edge is greater than 2.5 cm.

measured / extrapolated SAR numbers - Head - WCDMA FDD II 1900 MHz							
Ch.	frequency (MHz)	Position	cond. output power (dBm)		SAR <sub>1g</sub> results(W/kg)		liquid temp. (°C)
			declared**	measured	measured	extrapolated	
9262	1852.4	left cheek	23.0	22.6	0.208	0.228	22.7
9400	1880.0	left cheek	23.0	22.6	0.190	0.208	22.7
9538	1907.6	left cheek	23.0	22.6	0.179	0.196	22.7
9262	1852.4	left tilted 15°	23.0	22.6	0.070	0.077	22.7
9400	1880.0	left tilted 15°	23.0	22.6	0.063	0.069	22.7
9538	1907.6	left tilted 15°	23.0	22.6	0.047	0.052	22.7
9262	1852.4	right cheek	23.0	22.6	0.174	0.191	22.7
9400	1880.0	right cheek	23.0	22.6	0.211	<b>0.231</b>	22.7
9538	1907.6	right cheek	23.0	22.6	0.190	0.208	22.7
9262	1852.4	right tilted 15°	23.0	22.6	0.067	0.073	22.7
9400	1880.0	right tilted 15°	23.0	22.6	0.062	0.068	22.7
9538	1907.6	right tilted 15°	23.0	22.6	0.052	0.057	22.7

Table 40: Test results head SAR UMTS FDD V 850 MHz

measured / extrapolated SAR numbers - Body - WCDMA FDD II 1900 MHz									
Ch.	freq. (MHz)	test condition	distance (mm)	Position	cond. output power (dBm)		liquid temp. (°C)		
					declared**	measured			
9262	1852.4	RMC	10	front	23.0	22.6	0.539	0.591	22.3
9400	1880.0	RMC	10	front	23.0	22.6	0.536	0.588	22.3
9538	1907.6	RMC	10	front	23.0	22.6	0.506	0.555	22.3
9262	1852.4	RMC	10	rear	23.0	22.6	0.993	1.089	22.3
9400	1880.0	RMC	10	rear	23.0	22.6	1.000	<b>1.096</b>	22.3
9538	1907.6	RMC	10	rear	23.0	22.6	0.959	1.052	22.3
9400	1880.0	RMC	10	left edge	23.0	22.6	0.144	0.158	22.3
9400	1880.0	RMC	10	right edge	23.0	22.6	0.082	0.090	22.3
9262	1852.4	RMC	10	bottom edge	23.0	22.6	0.772	0.846	22.3
9400	1880.0	RMC	10	bottom edge	23.0	22.6	0.836	0.917	22.3
9538	1907.6	RMC	10	bottom edge	23.0	22.6	0.855	0.937	22.3
9400	1880.0	RMC	10	rear*	23.0	22.6	0.999	1.095	22.3
9400	1880.0	RMC	15	rear	23.0	22.6	0.366	0.401	22.3
9400	1880.0	AMR	15	rear	23.0	22.6	0.401	0.440	22.3

Table 41: Test results body SAR UMTS FDD V 850 MHz

\* - repeated at the highest SAR measurement according to the FCC KDB 865664

\*\* - maximum possible output power declared by manufacturer

Top edge position is not required since the distance from the main antenna to the edge is greater than 2.5 cm.

measured / extrapolated SAR numbers - Head - WLAN 2450 MHz							
Ch.	frequency (MHz)	Position	cond. output power (dBm)		SAR <sub>1g</sub> results(W/kg)		liquid temp. (°C)
			declared**	measured	measured	extrapolated	
1	2412	left cheek	16.0	15.1	0.277	0.341	22.2
6	2437	left cheek	16.0	15.6	0.520	0.570	22.2
11	2462	left cheek	16.0	15.6	0.962	<b>1.055</b>	22.2
11*	2462	left cheek*	16.0	15.6	0.846	0.928	22.2
1	2412	left tilted 15°	16.0	15.1	0.119	0.146	22.2
6	2437	left tilted 15°	16.0	15.6	0.248	0.272	22.2
11	2462	left tilted 15°	16.0	15.6	0.366	0.401	22.2
1	2412	right cheek	16.0	15.1	0.082	0.101	22.2
6	2437	right cheek	16.0	15.6	0.190	0.208	22.2
11	2462	right cheek	16.0	15.6	0.266	0.292	22.2
1	2412	right tilted 15°	16.0	15.1	0.049	0.060	22.2
6	2437	right tilted 15°	16.0	15.6	0.101	0.111	22.2
11	2462	right tilted 15°	16.0	15.6	0.158	0.173	22.2

Table 42: Test results head SAR WLAN 2450 MHz

\* - repeated at the highest SAR measurement according to the FCC KDB 865664

measured / extrapolated SAR numbers - Body - WLAN 2450 MHz									
Ch.	freq. (MHz)	Test condition	distance (mm)	Position	cond. output power (dBm)		liquid temp.(°C)		
					declared**	measured			
1	2412	1Mbit/s	10	front	16.0	15.1	0.048	0.059	21.1
6	2437	1Mbit/s	10	front	16.0	15.6	0.123	0.135	21.1
11	2462	1Mbit/s	10	front	16.0	15.6	0.180	0.197	21.1
1	2412	1Mbit/s	10	rear	16.0	15.1	0.072	0.089	21.1
6	2437	1Mbit/s	10	rear	16.0	15.6	0.173	0.190	21.1
11	2462	1Mbit/s	10	rear	16.0	15.6	0.250	<b>0.274</b>	21.1
6	2437	1Mbit/s	10	right dege	16.0	15.1	0.056	0.069	21.1
6	2437	1Mbit/s	10	top edge	16.0	15.6	0.045	0.049	21.1
11	2462	1Mbit/s	15	rear	16.0	15.6	0.123	0.135	21.1

Table 43: Test results body SAR WLAN 2450 MHz

\*\* - maximum possible output power declared by manufacturer

Bottom and left side edge positions are not required since the distance from the WLAN antenna to the edge is greater than 2.5cm.

measured / extrapolated SAR numbers - Head - WLAN 5GHz						
Ch.	frequency (MHz)	Position	cond. output power (dBm)		SAR <sub>1g</sub> results(W/kg)	
			declared**	measured	measured	extrapolated
36	5180	left cheek	9.9	9.7	0.539	0.564
52	5260	left cheek	9.9	9.2	0.260	0.305
120	5600	left cheek	9.9	8.8	0.538	<b>0.693</b>
165	5825	left cheek	9.9	9.3	0.057	0.065
36	5180	left tilted 15°	9.9	9.7	0.231	0.242
52	5260	left tilted 15°	9.9	9.2	0.134	0.157
120	5600	left tilted 15°	9.9	8.8	0.111	0.143
165	5825	left tilted 15°	9.9	9.3	0.032	0.037
36	5180	right cheek	9.9	9.7	0.112	0.117
52	5260	right cheek	9.9	9.2	0.070	0.082
120	5600	right cheek	9.9	8.8	0.084	0.108
165	5825	right cheek	9.9	9.3	0.017	0.020
36	5180	right tilted 15°	9.9	9.7	0.037	0.039
52	5260	right tilted 15°	9.9	9.2	0.002	0.002
120	5600	right tilted 15°	9.9	8.8	0.047	0.061
165	5825	right tilted 15°	9.9	9.3	0.018	0.021

Table 44: Test results head SAR WLAN 5GHz

\*\* - maximum possible output power declared by manufacturer

### 7.2.2 General description of test procedures

- The DUT is tested using a CMU 200 communications tester as controller unit to set test channels and maximum output power to the DUT, as well as for measuring the conducted peak power.
- Test positions as described in the tables above are in accordance with the specified test standard.
- 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 (< 0.8 W/kg), testing at the high and low channels is optional.
- Tests in body position were performed in that configuration, which generates the highest time based averaged output power (see conducted power results).
- Tests in head position with GSM were performed in voice mode with 1 timeslot unless GPRS/EGPRS/DTM function allows parallel voice and data traffic on 2 or more timeslots (see section 2.4 for details).
- UMTS was tested in RMC mode with 12.2 kbit/s and TPC bits set to 'all 1'.
- WLAN was tested in 802.11b mode with 1 MBit/s and in 802.11a mode with 6 MBit/s. According to KDB 248227 the SAR testing for 802.11g/n is not required since the maximum power of 802.11g/n is less ¼ dB higher than maximum power of 802.11a/b.
- Per FCC KDB pub 941225 D06 the edges with antennas within 2.5 cm are required to be evaluated for SAR to cover WLAN hot spot function.
- Tests in body position were performed with 10 mm air gap between DUT and SAM, with additional delta measurements at 15 mm distance to cover voice call operation with headset.
- Additional body worn tests were performed at worst case with 1 time slot in uplink for GSM or in speech mode for UMTS and 15 mm distance from DUT to the phantom in accordance with Sony requirements.

## 8 Test equipment and ancillaries used for tests

To simplify the identification of the test equipment and/or ancillaries which were used, the reporting of the relevant test cases only refer to the test item number as specified in the table below.

used	Equipment	Type	Manufacturer	Serial No.	Last Calibration	Frequency (months)
<input checked="" type="checkbox"/>	Dosimetric E-Field Probe	ET3DV6	Schmid & Partner Engineering AG	1558	August 24, 2012	12
<input checked="" type="checkbox"/>	Dosimetric E-Field Probe	ET3DV6	Schmid & Partner Engineering AG	1559	January 18, 2012	12
<input checked="" type="checkbox"/>	Dosimetric E-Field Probe	EX3DV4	Schmid & Partner Engineering AG	3566	August 23, 2012	12
<input checked="" type="checkbox"/>	900 MHz System Validation Dipole	D900V2	Schmid & Partner Engineering AG	102	August 15, 2011	24
<input checked="" type="checkbox"/>	1800 MHz System Validation Dipole	D1800V2	Schmid & Partner Engineering AG	287	August 17, 2011	24
<input checked="" type="checkbox"/>	1900 MHz System Validation Dipole	D1900V2	Schmid & Partner Engineering AG	5d009	August 17, 2011	24
<input checked="" type="checkbox"/>	2450 MHz System Validation Dipole	D2450V2	Schmid & Partner Engineering AG	710	August 13, 2012	24
<input checked="" type="checkbox"/>	5 GHz System Validation Dipole	D5GHzV2	Schmid & Partner Engineering AG	1055	August 22, 2011	24
<input checked="" type="checkbox"/>	Data acquisition electronics	DAE3V1	Schmid & Partner Engineering AG	413	January 12, 2012	12
<input checked="" type="checkbox"/>	Data acquisition electronics	DAE3V1	Schmid & Partner Engineering AG	477	May 09, 2012	12
<input checked="" type="checkbox"/>	Software	DASY 4 V4.5	Schmid & Partner Engineering AG	---	N/A	--
<input checked="" type="checkbox"/>	Software	DASY52 52.8.1	Schmid & Partner Engineering AG	---	N/A	--
<input checked="" type="checkbox"/>	Phantom	SAM	Schmid & Partner Engineering AG	---	N/A	--
<input checked="" type="checkbox"/>	Universal Radio Communication Tester	CMU 200	Rohde & Schwarz	106826	March 06, 2012	24
<input checked="" type="checkbox"/>	Universal Radio Communication Tester	CMW500	Rohde & Schwarz	102375	January 4, 2011	24
<input checked="" type="checkbox"/>	Network Analyser 300 kHz to 6 GHz	8753ES	Hewlett Packard)*	US39174436	February 24, 2012	24
<input checked="" type="checkbox"/>	Dielectric Probe Kit	85070C	Hewlett Packard	US99360146	N/A	12
<input checked="" type="checkbox"/>	Signal Generator	8665A	Hewlett Packard	2833A00112	January 6, 2012	12
<input checked="" type="checkbox"/>	Amplifier	25S1G4 (25 Watt)	Amplifier Research	20452	N/A	--
<input checked="" type="checkbox"/>	Power Meter	NRP	Rohde & Schwarz	101367	January 6, 2011	24
<input checked="" type="checkbox"/>	Power Meter Sensor	NRP Z22	Rohde & Schwarz	100227	January 9, 2012	12
<input checked="" type="checkbox"/>	Power Meter Sensor	NRP Z22	Rohde & Schwarz	100234	January 9, 2012	12
<input checked="" type="checkbox"/>	Directional Coupler	778D	Hewlett Packard	19171	January 8, 2012	12

)\* : Network analyzer probe calibration against air, distilled water and a shorting block performed before measuring liquid parameters.

## 9 Observations

No observations exceeding those reported with the single test cases have been made.

## Annex A: System performance check

Date/Time: 05.12.2012 08:48:50

### SystemPerformanceCheck-D900 head 2012-12-05

DUT: Dipole 900 MHz; Type: D900V2; Serial: 102

Communication System: CW; Communication System Band: D900 (900.0 MHz); Frequency: 900 MHz;

Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 900$  MHz;  $\sigma = 0.97$  mho/m;  $\epsilon_r = 41.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.98, 5.98, 5.98); Calibrated: 24.08.2012;

- Modulation Compensation:

- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 2.7, 32.7$

- Electronics: DAE3 Sn477; Calibrated: 09.05.2012

- Phantom: SAM Left; Type: SAM ; Serial: TP 1041

- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

### System Performance Check/d=15mm, Pin=1000 mW, dist=4.0mm/Area

**Scan (51x51x1):** Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Maximum value of SAR (interpolated) = 11.6 W/kg

### System Performance Check/d=15mm, Pin=1000 mW, dist=4.0mm/Zoom

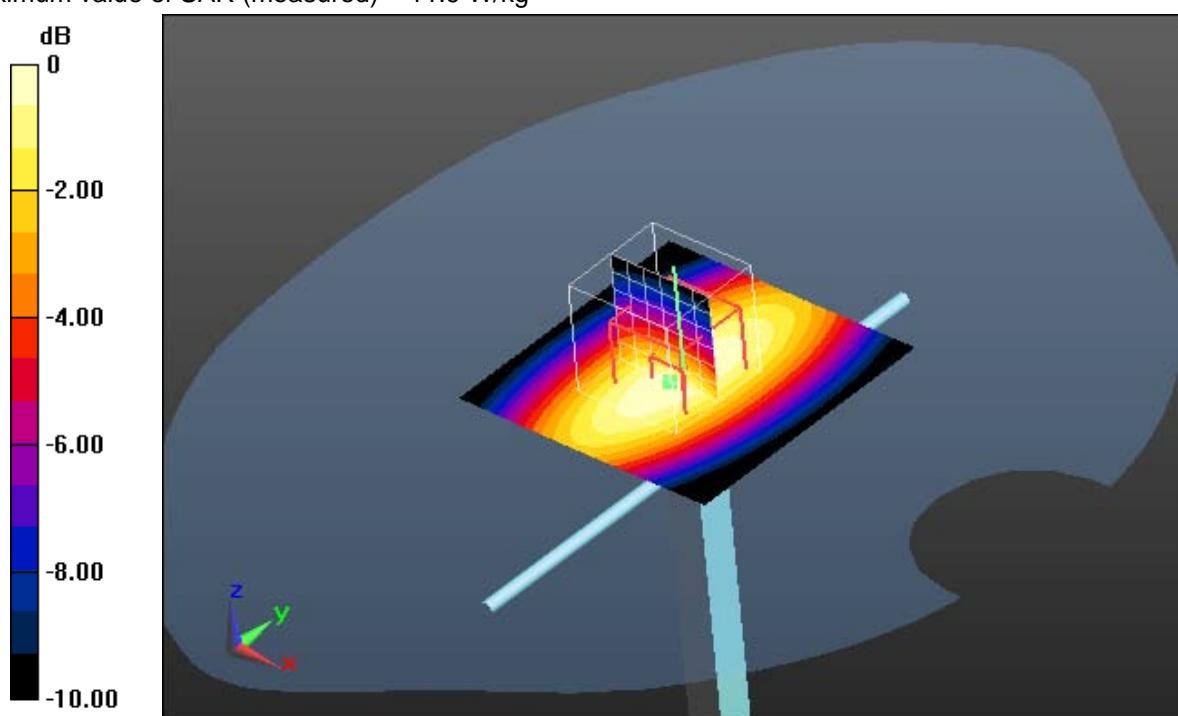
**Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$  mm,  $dy=5$  mm,  $dz=5$  mm

Reference Value = 114.3 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 16.392 mW/g

**SAR(1 g) = 11 mW/g; SAR(10 g) = 7.08 mW/g**

Maximum value of SAR (measured) = 11.9 W/kg



0 dB = 11.9 W/kg = 21.51 dB W/kg

#### Additional information:

ambient temperature: 21.3°C; liquid temperature: 21.1°C

Date/Time: 06.12.2012 08:35:47

## System Performance Check-D900 head 2012-12-06

DUT: Dipole 900 MHz; Type: D900V2; Serial: 102

Communication System: CW; Communication System Band: D900 (900.0 MHz); Frequency: 900 MHz;

Communication System PAR: 0 dB; PMF: 1

Medium parameters used:  $f = 900$  MHz;  $\sigma = 0.97$  mho/m;  $\epsilon_r = 41.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.98, 5.98, 5.98); Calibrated: 24.08.2012;

- Modulation Compensation:

- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 2.7, 32.7$

- Electronics: DAE3 Sn477; Calibrated: 09.05.2012

- Phantom: SAM Left; Type: SAM ; Serial: TP 1041

- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

## System Performance Check/d=15mm, Pin=1000 mW, dist=4.0mm/Area

**Scan (51x51x1):** Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Maximum value of SAR (interpolated) = 11.5 W/kg

## System Performance Check/d=15mm, Pin=1000 mW, dist=4.0mm/Zoom

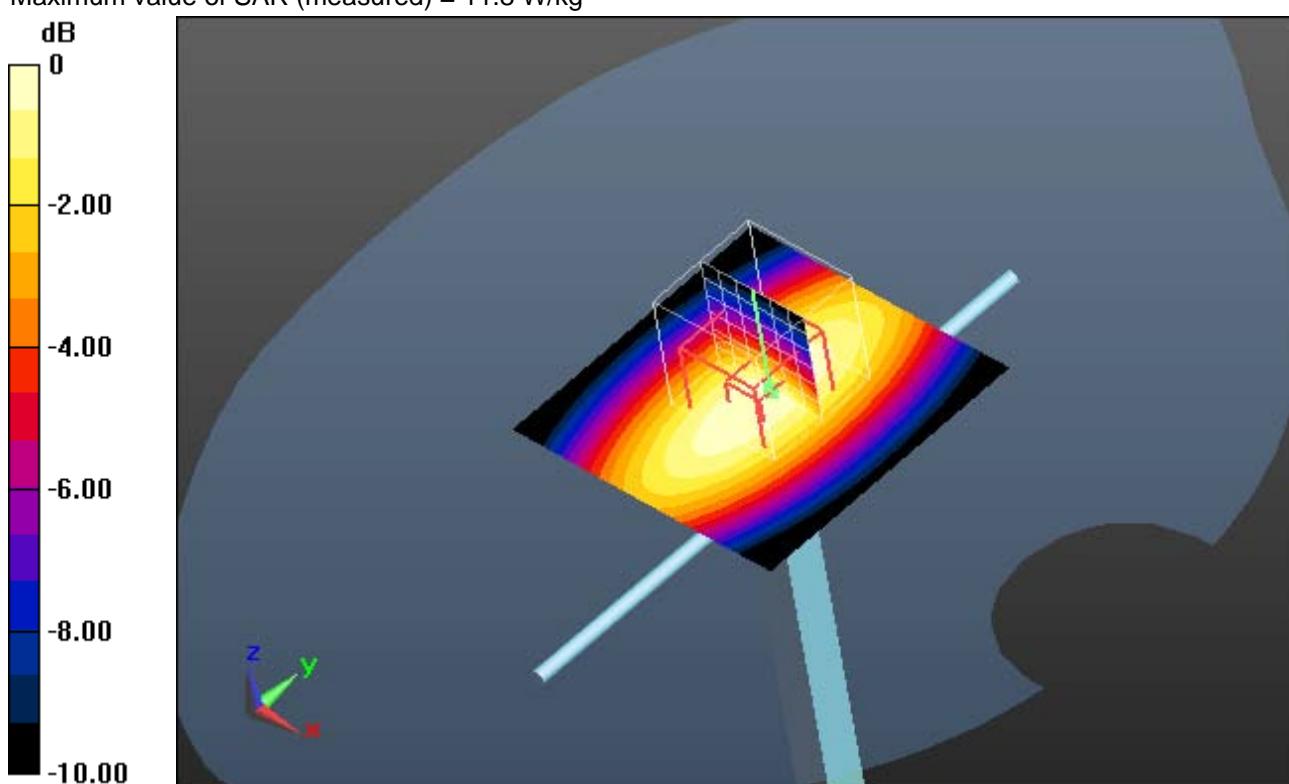
**Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5$  mm,  $dy=5$  mm,  $dz=5$  mm

Reference Value = 115.0 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 16.403 mW/g

**SAR(1 g) = 10.9 mW/g; SAR(10 g) = 7.01 mW/g**

Maximum value of SAR (measured) = 11.8 W/kg



0 dB = 11.8 W/kg = 21.44 dB W/kg

### Additional information:

ambient temperature: 21.7°C; liquid temperature: 21.1°C

Date/Time: 11.12.2012 10:40:31 Date/Time: 11.12.2012 10:43:58

## System Performance Check-D900 body 2012-12-11

**DUT: Dipole 900 MHz; Type: D900V2; Serial: 102**

Communication System: CW; Frequency: 900 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used:  $f = 900 \text{ MHz}$ ;  $\sigma = 1.04 \text{ mho/m}$ ;  $\epsilon_r = 54.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.1, 6.1, 6.1); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**d=15mm, Pin=1000mW/Area Scan (51x51x1):** Measurement grid: dx=15mm, dy=15mm

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

**d=15mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

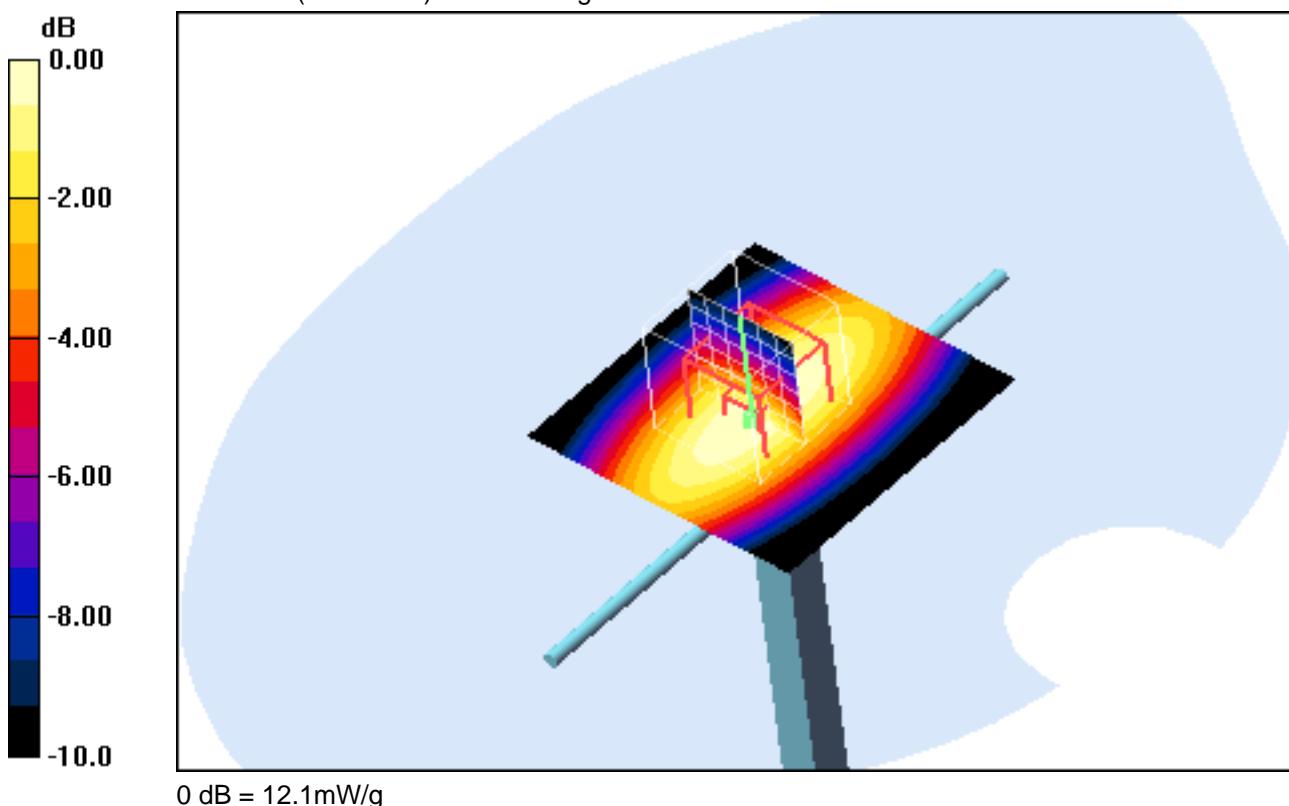
dx=5mm, dy=5mm, dz=5mm

Reference Value = 112.9 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 15.9 W/kg

**SAR(1 g) = 11.2 mW/g; SAR(10 g) = 7.31 mW/g**

Maximum value of SAR (measured) = 12.1 mW/g



**Additional information:**

ambient temperature: 22.6°C; liquid temperature: 21.6°C

Date/Time: 12.12.2012 10:42:37 Date/Time: 12.12.2012 10:46:05

## SystemPerformanceCheck-D900 body 2012-12-12

**DUT: Dipole 900 MHz; Type: D900V2; Serial: 102**

Communication System: CW; Frequency: 900 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used:  $f = 900 \text{ MHz}$ ;  $\sigma = 1.04 \text{ mho/m}$ ;  $\epsilon_r = 54.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.1, 6.1, 6.1); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**d=15mm, Pin=1000mW/Area Scan (51x51x1):** Measurement grid: dx=15mm, dy=15mm

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

**d=15mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

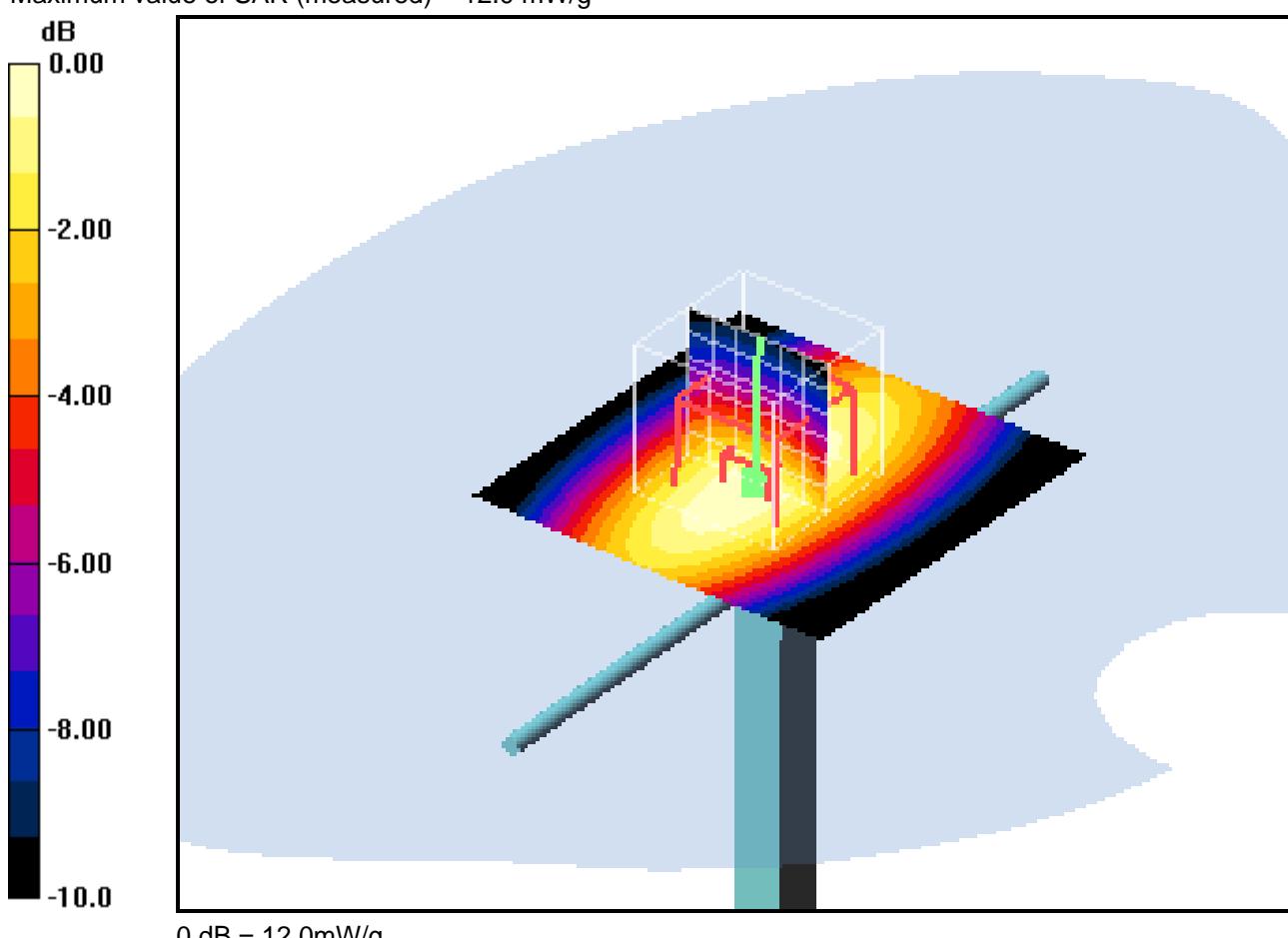
dx=5mm, dy=5mm, dz=5mm

Reference Value = 112.1 V/m; Power Drift = -0.027 dB

Peak SAR (extrapolated) = 15.6 W/kg

**SAR(1 g) = 11 mW/g; SAR(10 g) = 7.23 mW/g**

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



### Additional information:

ambient temperature: 23.7°C; liquid temperature: 21.5°C

Date/Time: 04.12.2012 09:50:04 Date/Time: 04.12.2012 09:53:19

## System Performance Check-D1800 head 2012-12-04

**DUT: Dipole 1800 MHz; Type: D1800V2; Serial: 287**

Communication System: CW; Frequency: 1800 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used:  $f = 1800$  MHz;  $\sigma = 1.44$  mho/m;  $\epsilon_r = 39.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.28, 5.28, 5.28); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**d=10mm, Pin=1000mW/Area Scan (51x51x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 50.6 mW/g

**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

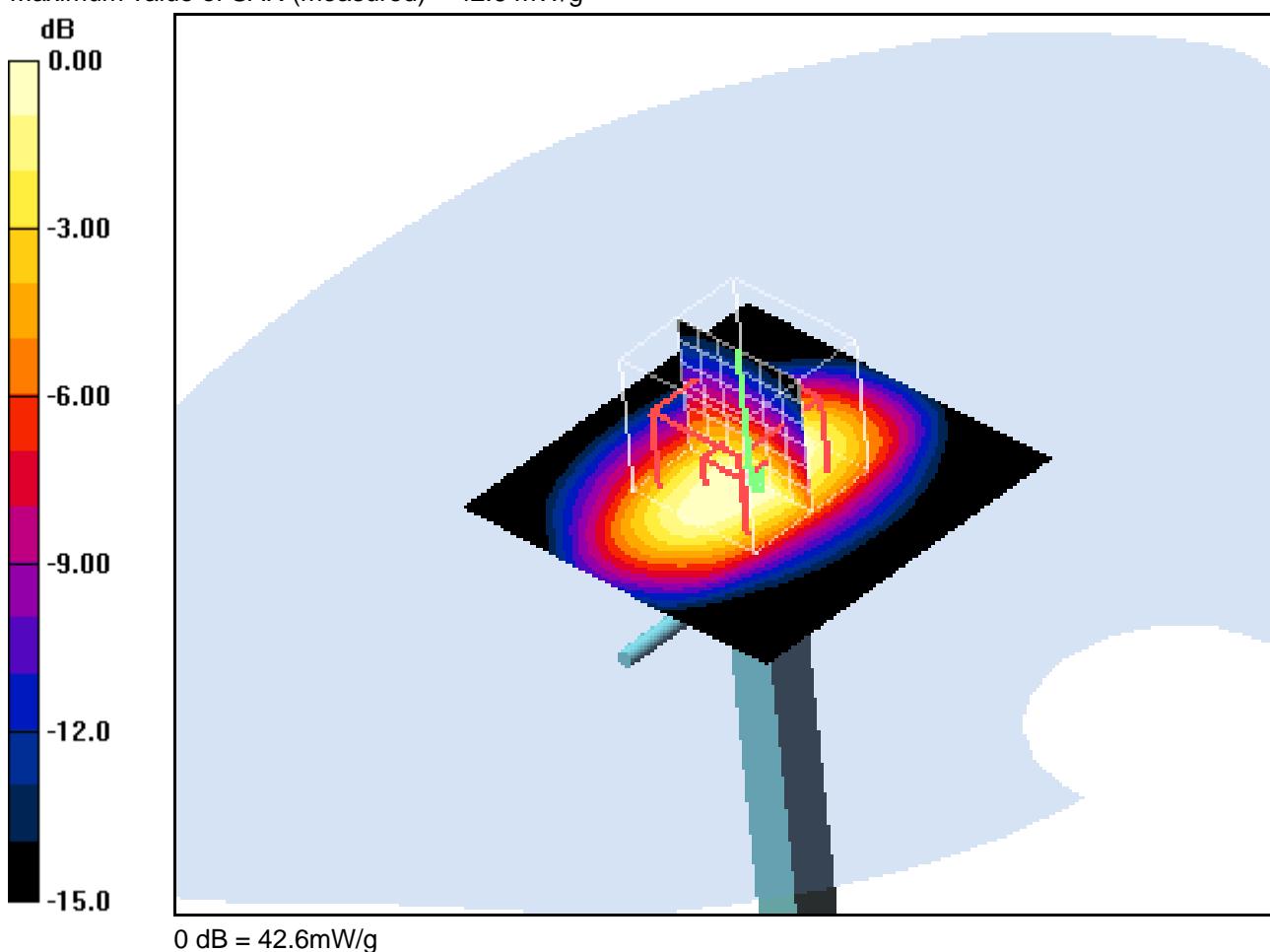
dx=5mm, dy=5mm, dz=5mm

Reference Value = 184.1 V/m; Power Drift = -0.092 dB

Peak SAR (extrapolated) = 65.8 W/kg

**SAR(1 g) = 37.7 mW/g; SAR(10 g) = 19.9 mW/g**

Maximum value of SAR (measured) = 42.6 mW/g



### Additional information:

ambient temperature: 22.0°C; liquid temperature: 21.1°C

Date/Time: 05.12.2012 10:03:36 Date/Time: 05.12.2012 10:06:53

## System Performance Check-D1800 body 2012-12-05

**DUT: Dipole 1800 MHz; Type: D1800V2; Serial: 287**

Communication System: CW; Frequency: 1800 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used:  $f = 1800$  MHz;  $\sigma = 1.55$  mho/m;  $\epsilon_r = 53.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.65, 4.65, 4.65); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**d=10mm, Pin=1000mW/Area Scan (51x51x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 50.8 mW/g

**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

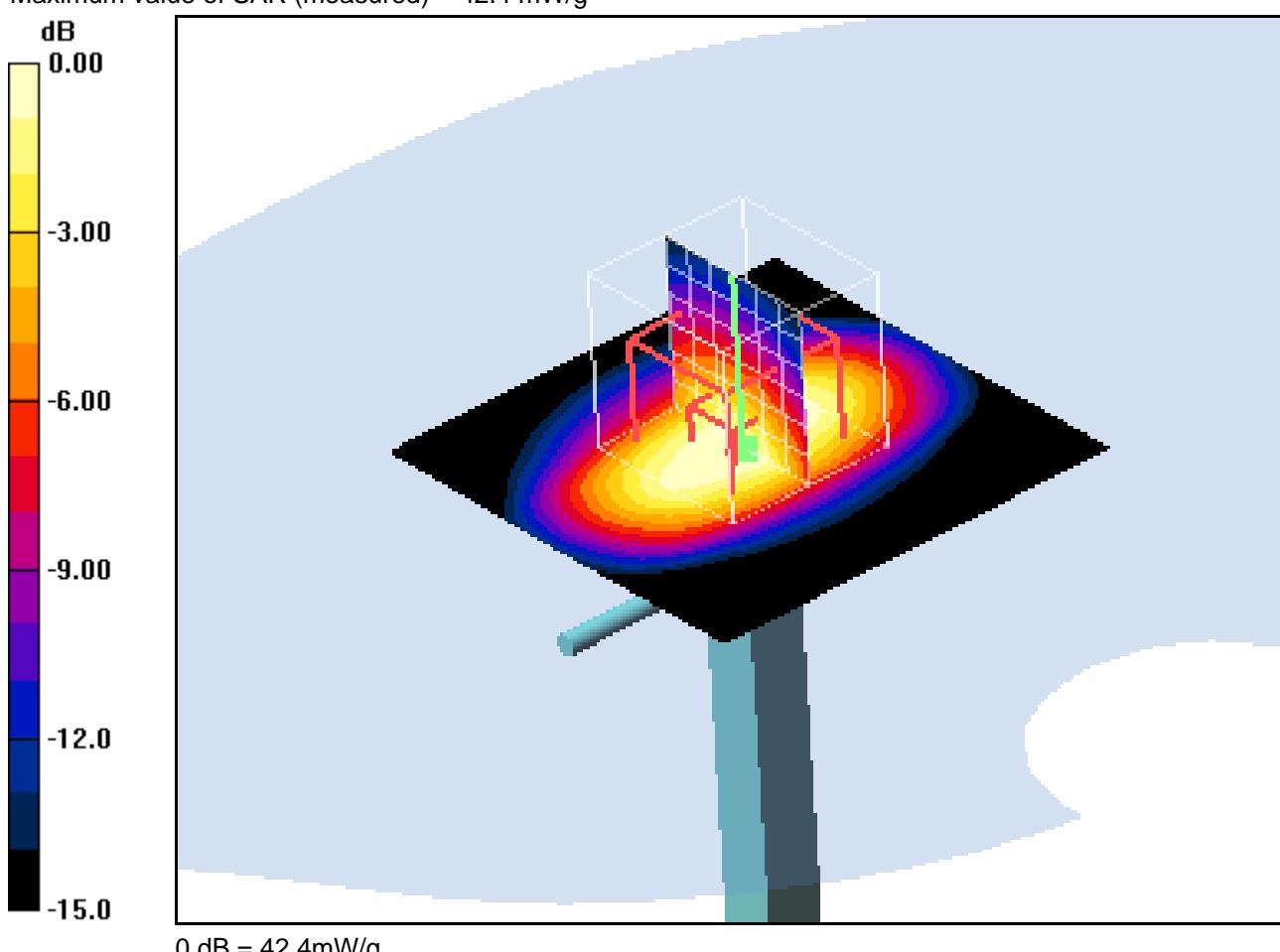
dx=5mm, dy=5mm, dz=5mm

Reference Value = 177.1 V/m; Power Drift = 0.031 dB

Peak SAR (extrapolated) = 59.4 W/kg

**SAR(1 g) = 37.7 mW/g; SAR(10 g) = 20.5 mW/g**

Maximum value of SAR (measured) = 42.4 mW/g



### Additional information:

ambient temperature: 22.7°C; liquid temperature: 22.1°C

Date/Time: 12.12.2012 18:02:36 Date/Time: 12.12.2012 18:05:50

## System Performance Check-D1900 head 2012-12-12

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d009**

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

Medium: HSL1900 Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.38 \text{ mho/m}$ ;  $\epsilon_r = 39.9$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**d=10mm, Pin=1000mW/Area Scan (51x51x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 50.1 mW/g

**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

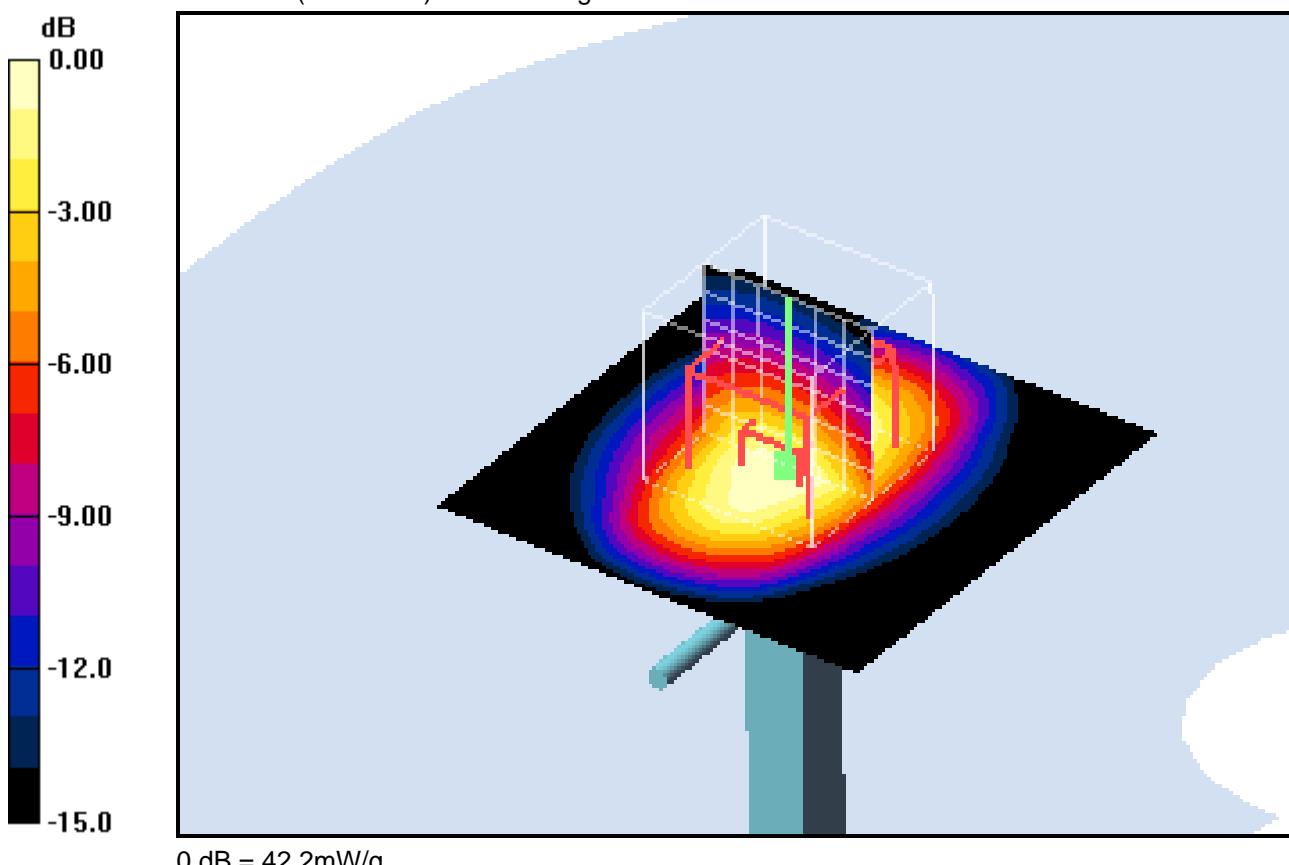
dx=5mm, dy=5mm, dz=5mm

Reference Value = 183.3 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 64.0 W/kg

**SAR(1 g) = 37.6 mW/g; SAR(10 g) = 20.1 mW/g**

Maximum value of SAR (measured) = 42.2 mW/g



### Additional information:

ambient temperature: 23.6°C; liquid temperature: 21.4°C

Date/Time: 13.12.2012 08:15:43 Date/Time: 13.12.2012 08:19:08

## System Performance Check-D1900 head 2012-12-13

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d009**

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

Medium: HSL1900 Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.38 \text{ mho/m}$ ;  $\epsilon_r = 39.9$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**d=10mm, Pin=1000mW/Area Scan (51x51x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 52.5 mW/g

**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

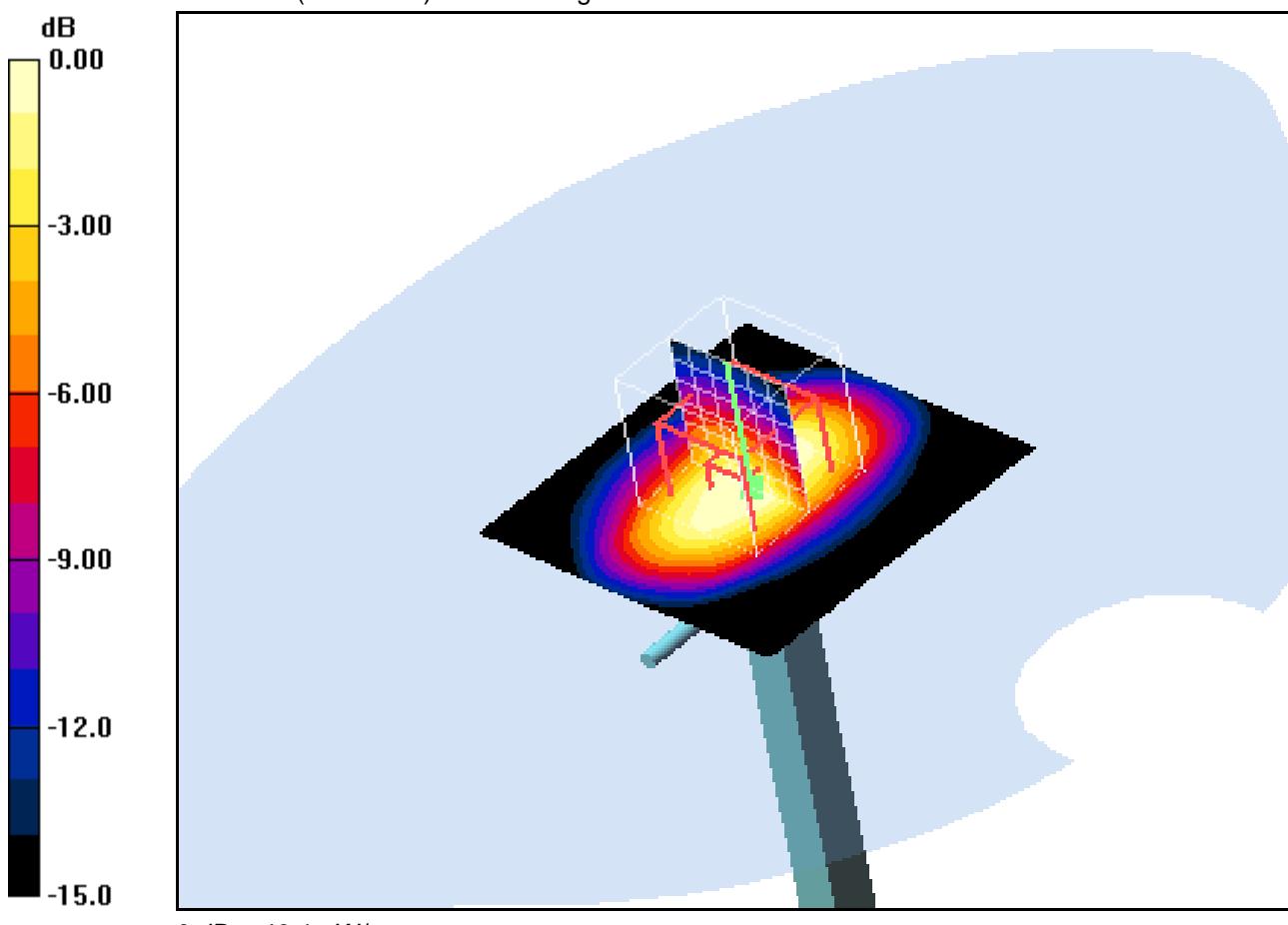
dx=5mm, dy=5mm, dz=5mm

Reference Value = 186.1 V/m; Power Drift = -0.052 dB

Peak SAR (extrapolated) = 65.0 W/kg

**SAR(1 g) = 38.6 mW/g; SAR(10 g) = 20.8 mW/g**

Maximum value of SAR (measured) = 43.1 mW/g



### Additional information:

ambient temperature: 23.4°C; liquid temperature: 23.0°C

Date/Time: 06.12.2012 13:51:24 Date/Time: 06.12.2012 13:54:47

## System Performance Check-D1900 body 2012-12-06

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d009

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

Medium: M1900 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 53.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**d=10mm, Pin=1000mW/Area Scan (51x51x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 53.8 mW/g

**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

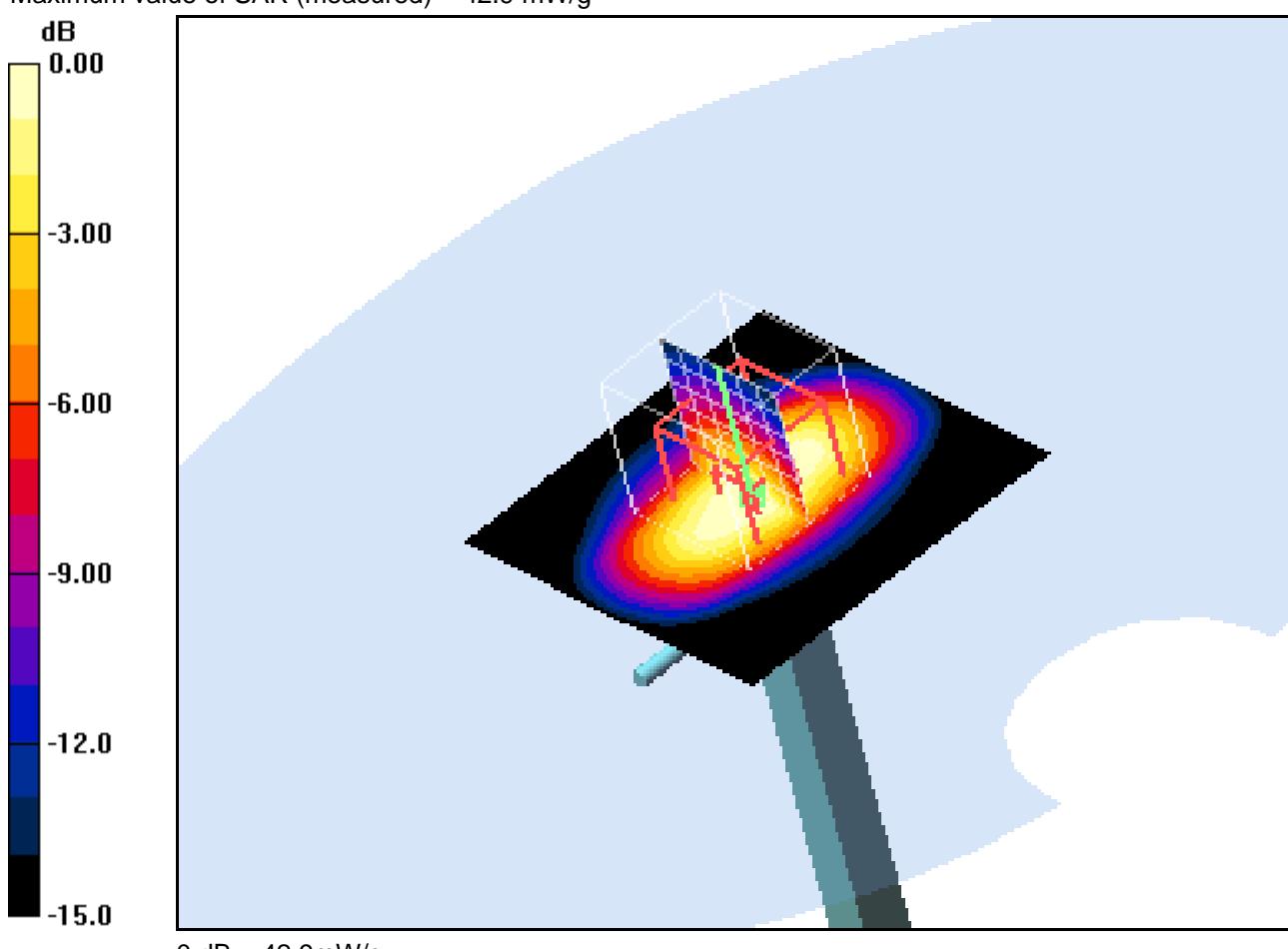
dx=5mm, dy=5mm, dz=5mm

Reference Value = 180.9 V/m; Power Drift = -0.028 dB

Peak SAR (extrapolated) = 59.2 W/kg

**SAR(1 g) = 37.7 mW/g; SAR(10 g) = 20.6 mW/g**

Maximum value of SAR (measured) = 42.9 mW/g



### Additional information:

ambient temperature: 23.5°C; liquid temperature: 22.4°C

Date/Time: 07.12.2012 09:05:35 Date/Time: 07.12.2012 09:08:51

## System Performance Check-D1900 body 2012-12-07

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d009**

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

Medium: M1900 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 53.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**d=10mm, Pin=1000mW/Area Scan (51x51x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 55.3 mW/g

**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

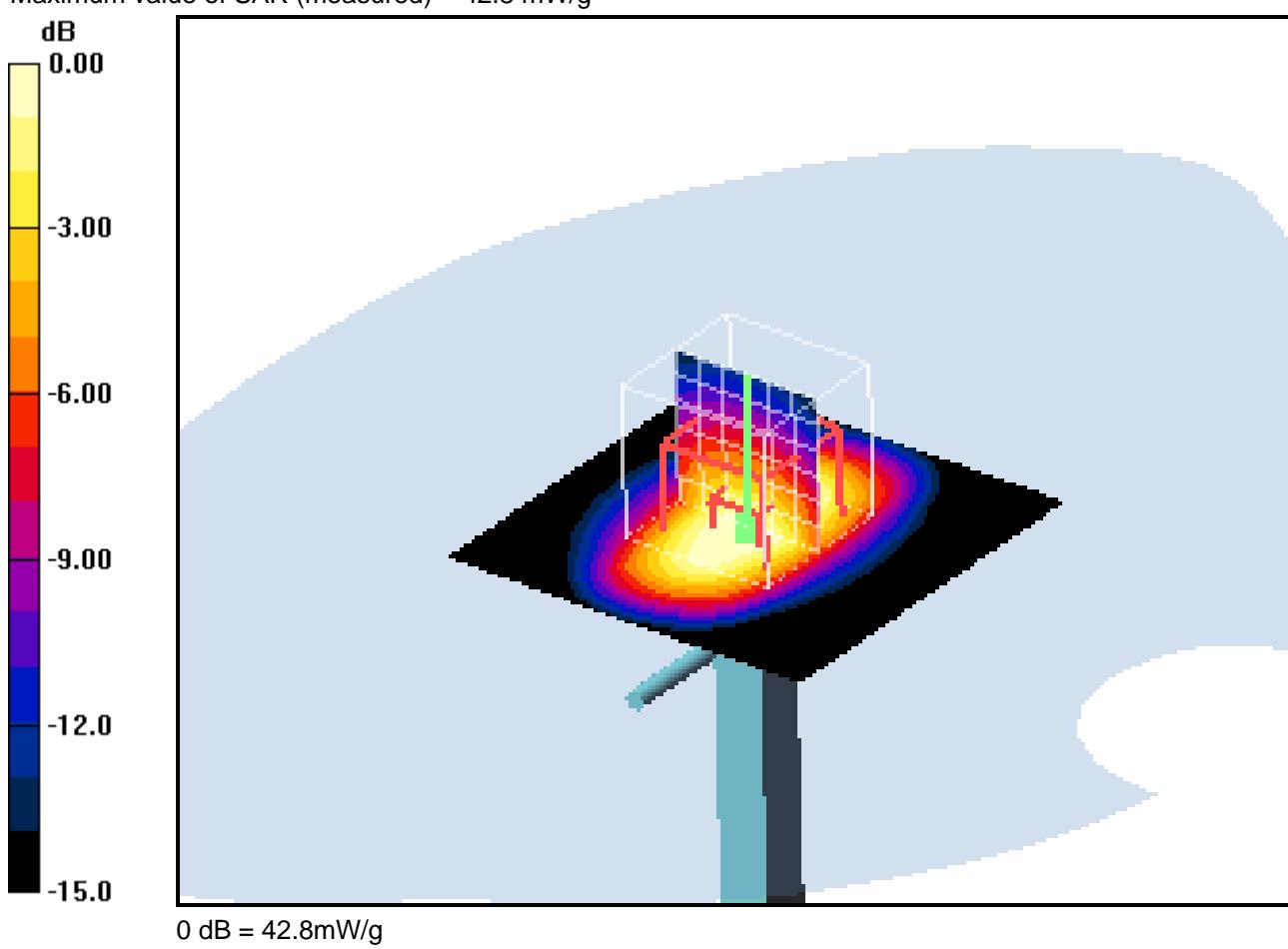
dx=5mm, dy=5mm, dz=5mm

Reference Value = 182.9 V/m; Power Drift = -0.054 dB

Peak SAR (extrapolated) = 58.8 W/kg

**SAR(1 g) = 37.9 mW/g; SAR(10 g) = 20.8 mW/g**

Maximum value of SAR (measured) = 42.8 mW/g



### Additional information:

ambient temperature: 23.3°C; liquid temperature: 22.2°C

Date/Time: 19.12.2012 11:22:21 Date/Time: 19.12.2012 11:25:39

**System Performance Check-D2450 head 2012-12-19****DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 710**

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

Medium: HSL2450 Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.82$  mho/m;  $\epsilon_r = 38.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**d=10mm, Pin=1000mW/Area Scan (51x51x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 80.4 mW/g

**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

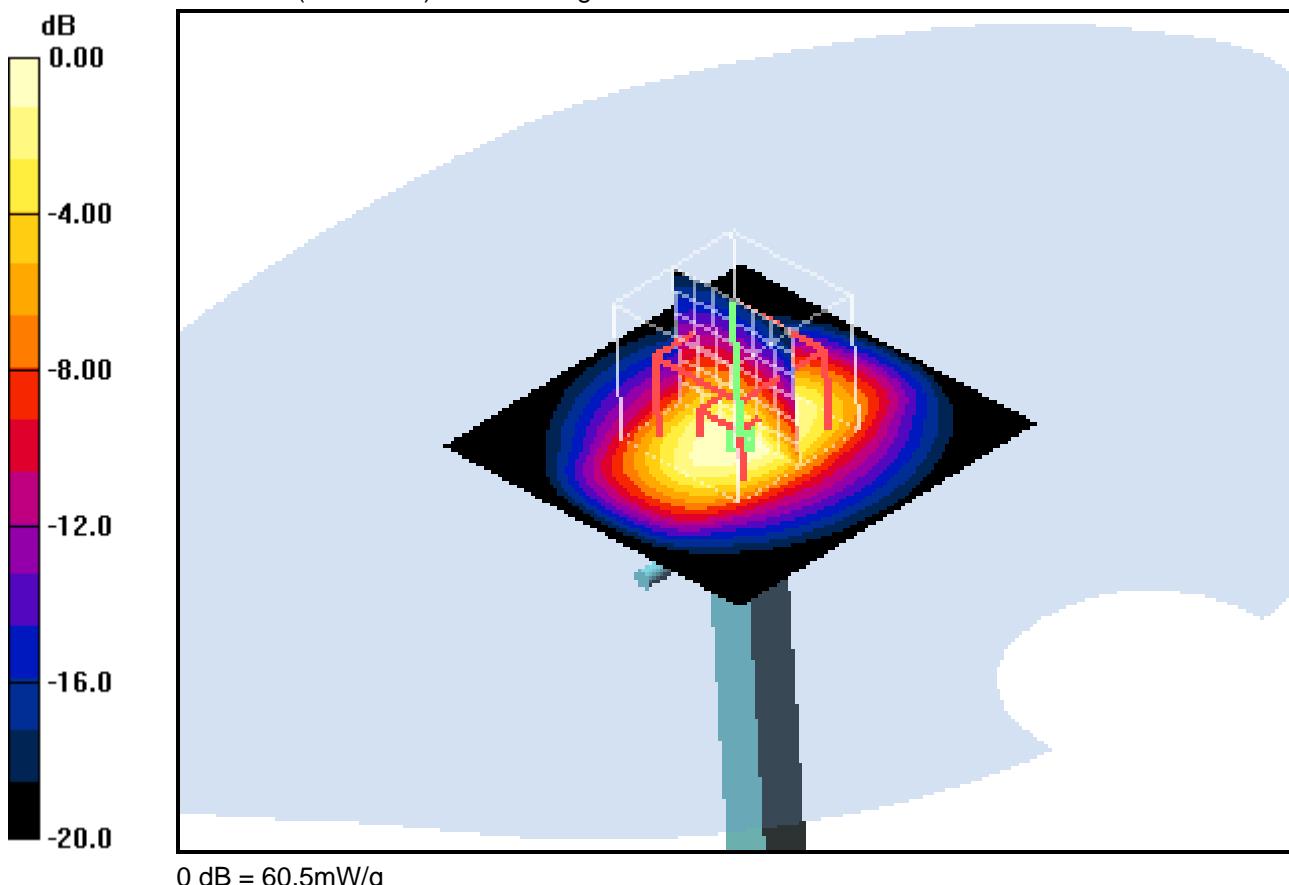
dx=5mm, dy=5mm, dz=5mm

Reference Value = 187.3 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 126.0 W/kg

**SAR(1 g) = 54.3 mW/g; SAR(10 g) = 25 mW/g**

Maximum value of SAR (measured) = 60.5 mW/g

**Additional information:**

ambient temperature: 22.9°C; liquid temperature: 21.7°C

Date/Time: 20.12.2012 13:20:45 Date/Time: 20.12.2012 13:35:32

## System Performance Check-D2450 body 2012-12-20

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 710**

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

Medium: MSL2450 Medium parameters used:  $f = 2450 \text{ MHz}$ ;  $\sigma = 2 \text{ mho/m}$ ;  $\epsilon_r = 52.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(3.88, 3.88, 3.88); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**d=10mm, Pin=1000mW/Area Scan (51x51x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 77.6 mW/g

**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

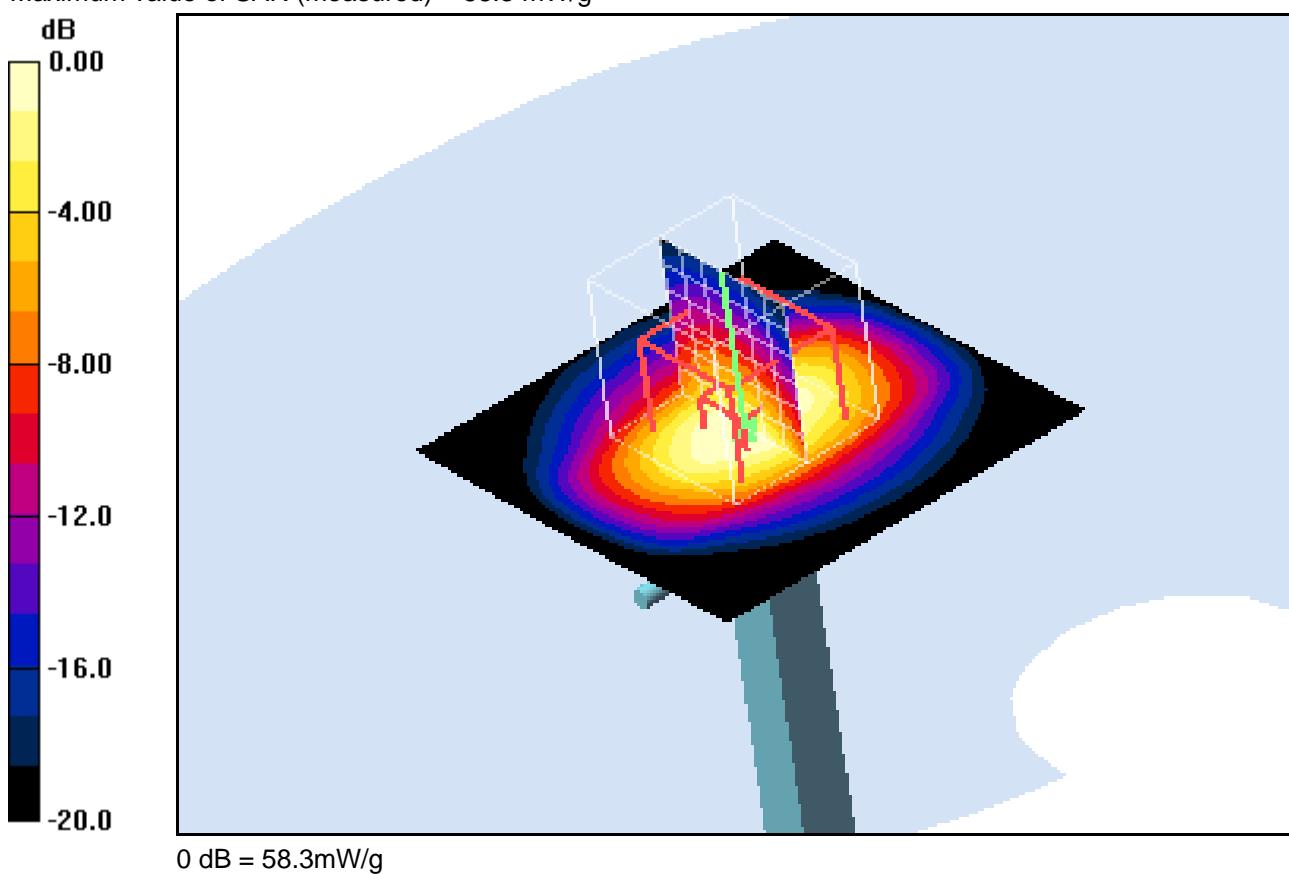
dx=5mm, dy=5mm, dz=5mm

Reference Value = 168.7 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 141.0 W/kg

**SAR(1 g) = 53.9 mW/g; SAR(10 g) = 24.2 mW/g**

Maximum value of SAR (measured) = 58.3 mW/g



### Additional information:

ambient temperature: 23.5°C; liquid temperature: 21.1°C

Date/Time: 02.01.2013 18:08:28

**System Performance Check-D5GHz-head****DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1055**

Communication System: CW; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used:  $f = 5200$  MHz;  $\sigma = 4.52$  mho/m;  $\epsilon_r = 36.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(4.24, 4.24, 4.24); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**d=10mm, Pin=100mW 5.2GHz/Zoom Scan (8x8x8) (8x8x8)/Cube 0:**

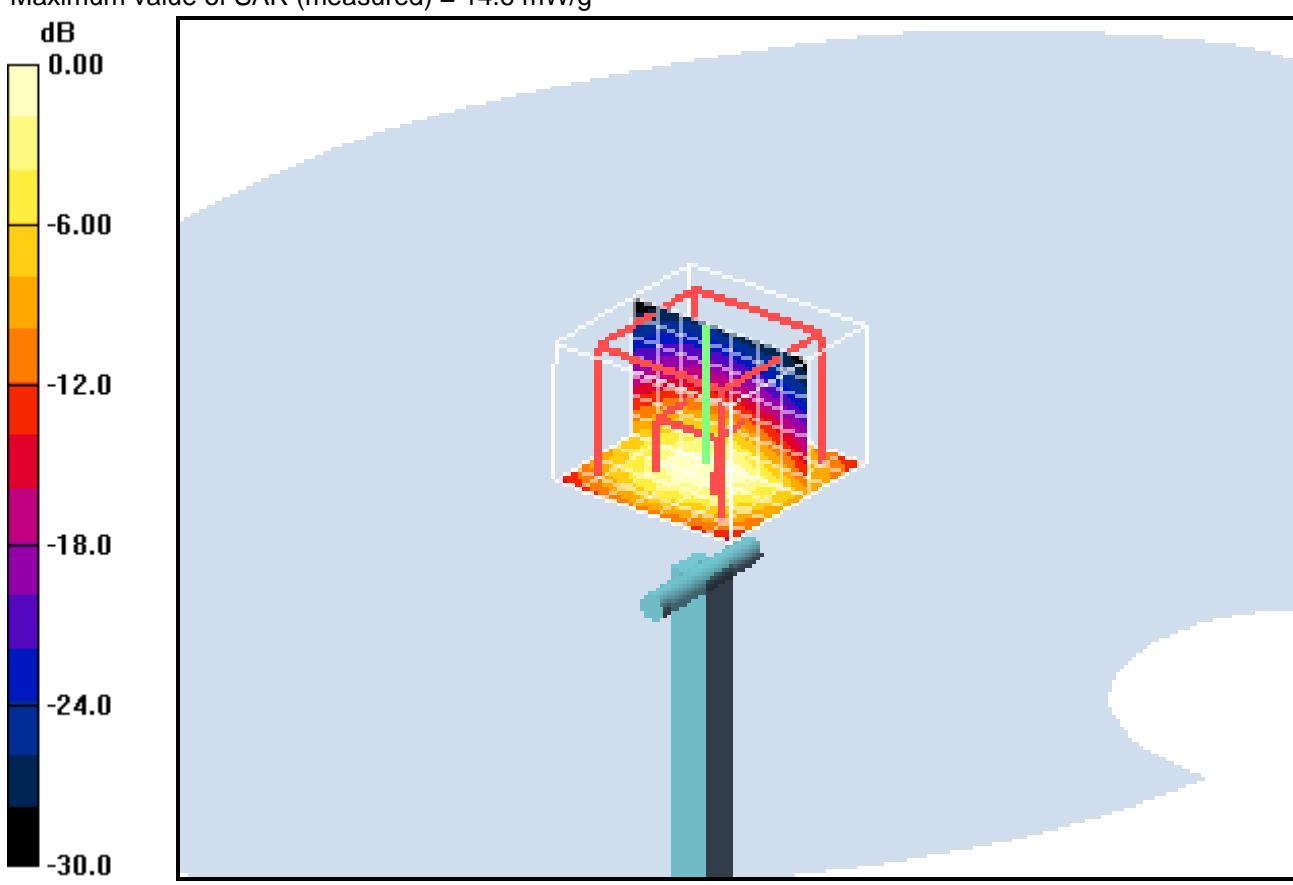
Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 45.2 V/m; Power Drift = -0.091 dB

Peak SAR (extrapolated) = 29.0 W/kg

**SAR(1 g) = 7.43 mW/g; SAR(10 g) = 2.14 mW/g**

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



0 dB = 14.6mW/g

**Additional information:**

ambient temperature: 22.3°C; liquid temperature: 20.2°C

Date/Time: 02.01.2013 18:35:46

**System Performance Check-D5GHz-head****DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1055**

Communication System: CW; Frequency: 5500 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used:  $f = 5500$  MHz;  $\sigma = 4.82$  mho/m;  $\epsilon_r = 36.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(3.72, 3.72, 3.72); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**d=10mm, Pin=100mW 5.5GHz/Zoom Scan (8x8x8) (8x8x8)/Cube 0:**

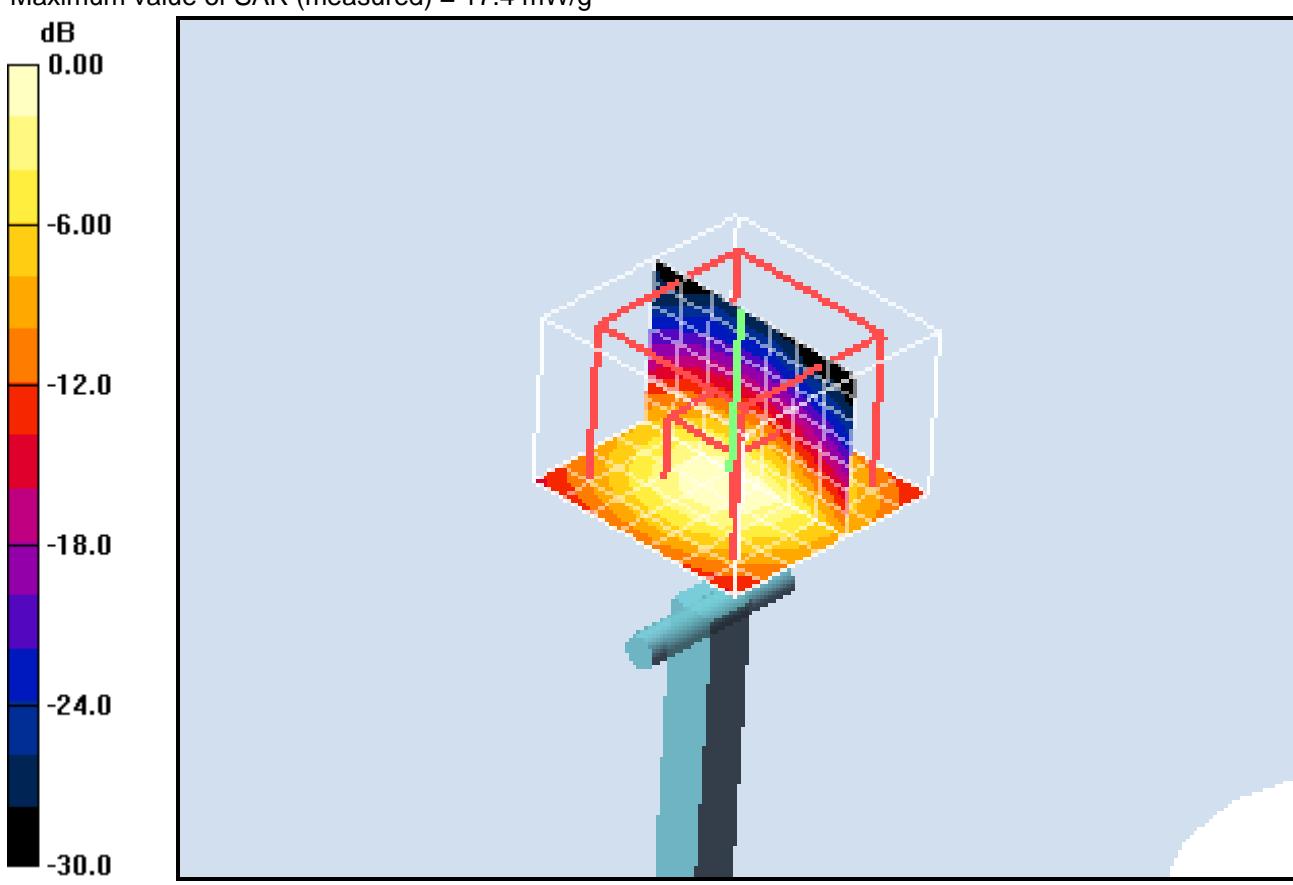
Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 46.2 V/m; Power Drift = -0.022 dB

Peak SAR (extrapolated) = 35.0 W/kg

**SAR(1 g) = 8.65 mW/g; SAR(10 g) = 2.45 mW/g**

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



0 dB = 17.4mW/g

**Additional information:**

ambient temperature: 22.3°C; liquid temperature: 20.2°C

Date/Time: 02.01.2013 19:16:59

**System Performance Check-D5GHz-head****DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1055**

Communication System: CW; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used:  $f = 5800$  MHz;  $\sigma = 5.12$  mho/m;  $\epsilon_r = 35.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(3.65, 3.65, 3.65); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**d=10mm, Pin=100mW 5.8GHz/Zoom Scan (8x8x8) (8x8x8)/Cube 0:**

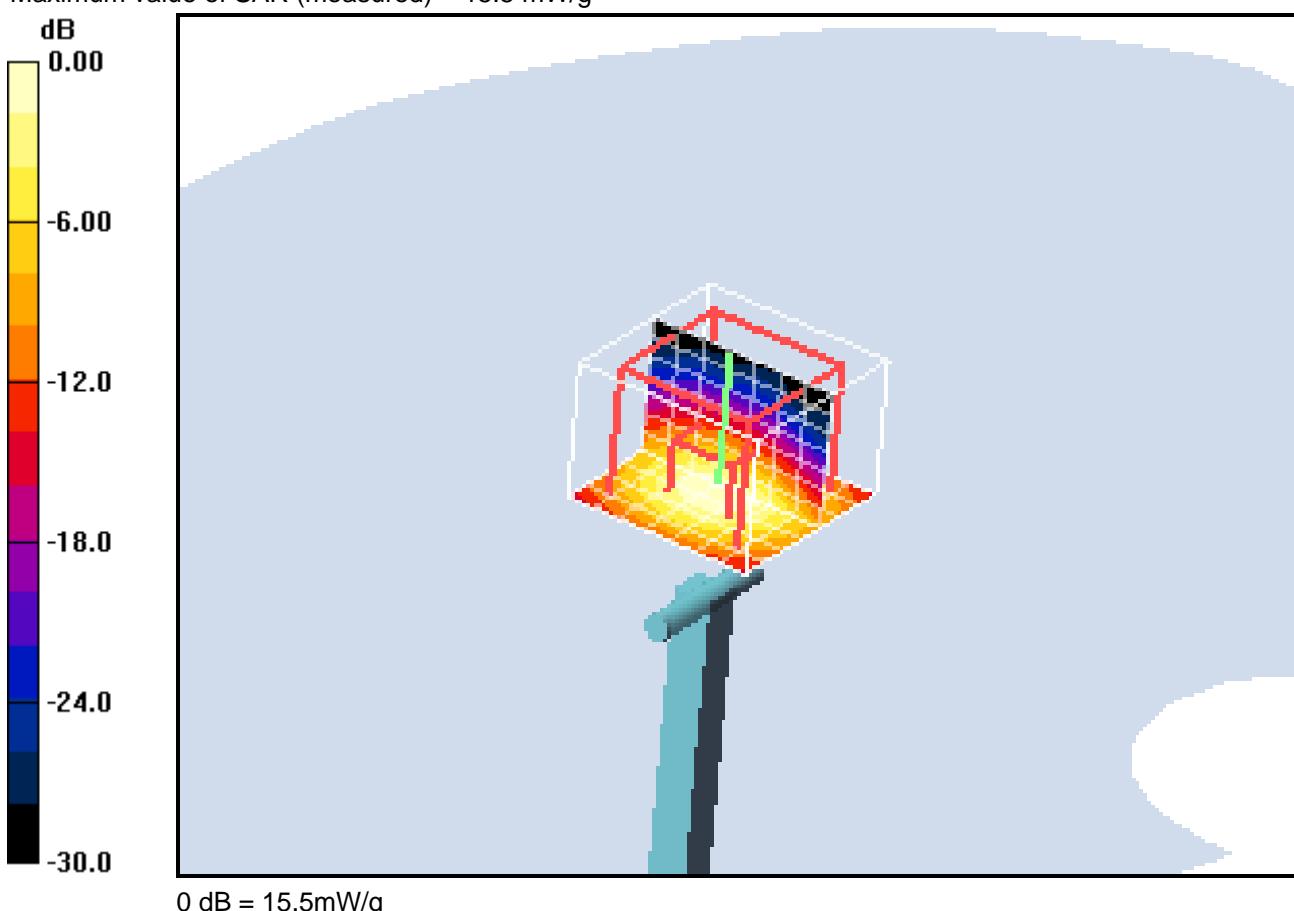
Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 41.5 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 32.5 W/kg

**SAR(1 g) = 7.62 mW/g; SAR(10 g) = 2.14 mW/g**

Maximum value of SAR (measured) = 15.5 mW/g



0 dB = 15.5mW/g

**Additional information:**

ambient temperature: 22.3°C; liquid temperature: 20.2°C

## Annex B: DASY measurement results

### Annex B.1: GSM 850MHz

Date/Time: 05.12.2012 09:15:04

#### IEEE1528-GSM850 head

DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC

Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 824.2 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781

Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 42.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X:  $a=20.6$ ,  $b=99.9$ ,  $c=28.7$ , calibrated PAR=9.4 dB / Y:  $a=16.2$ ,  $b=98.3$ ,  $c=28.5$ , calibrated PAR=9.4 dB / Z:  $a=18.2$ ,  $b=99.4$ ,  $c=28.9$ , calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 2.7, 32.7$
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

#### Left-Hand-Side HSL/Touch Position - Low/Area Scan (111x161x1): Interpolated

grid:  $dx=1.000 \text{ mm}$ ,  $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.324 W/kg

#### Left-Hand-Side HSL/Touch Position - Low/Zoom Scan (7x7x7)/Cube 0:

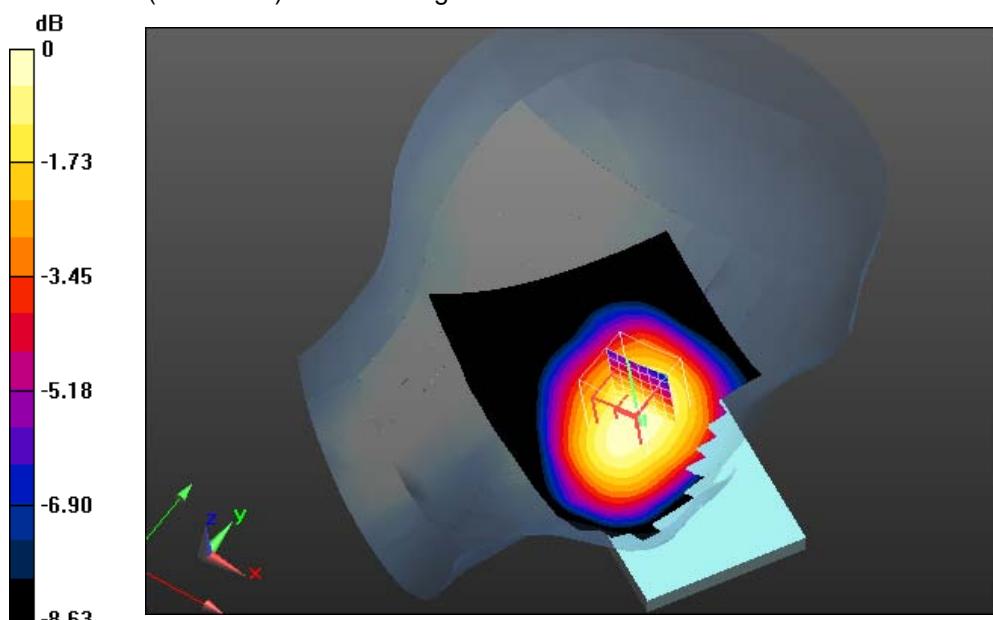
Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 19.728 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.383 mW/g

**SAR(1 g) = 0.310 mW/g; SAR(10 g) = 0.237 mW/g**

Maximum value of SAR (measured) = 0.326 W/kg



0 dB = 0.326 W/kg = -9.74 dB W/kg

#### Additional information:

ambient temperature: 21.3°C; liquid temperature: 21.1°C

Date/Time: 05.12.2012 09:43:24

## IEEE1528-GSM850 head

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781

Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.91 \text{ mho/m}$ ;  $\epsilon_r = 42.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

### Left-Hand-Side HSL/Touch Position - Mid/Area Scan (111x161x1): Interpolated

grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.381 W/kg

### Left-Hand-Side HSL/Touch Position - Mid/Zoom Scan (7x7x7)/Cube 0:

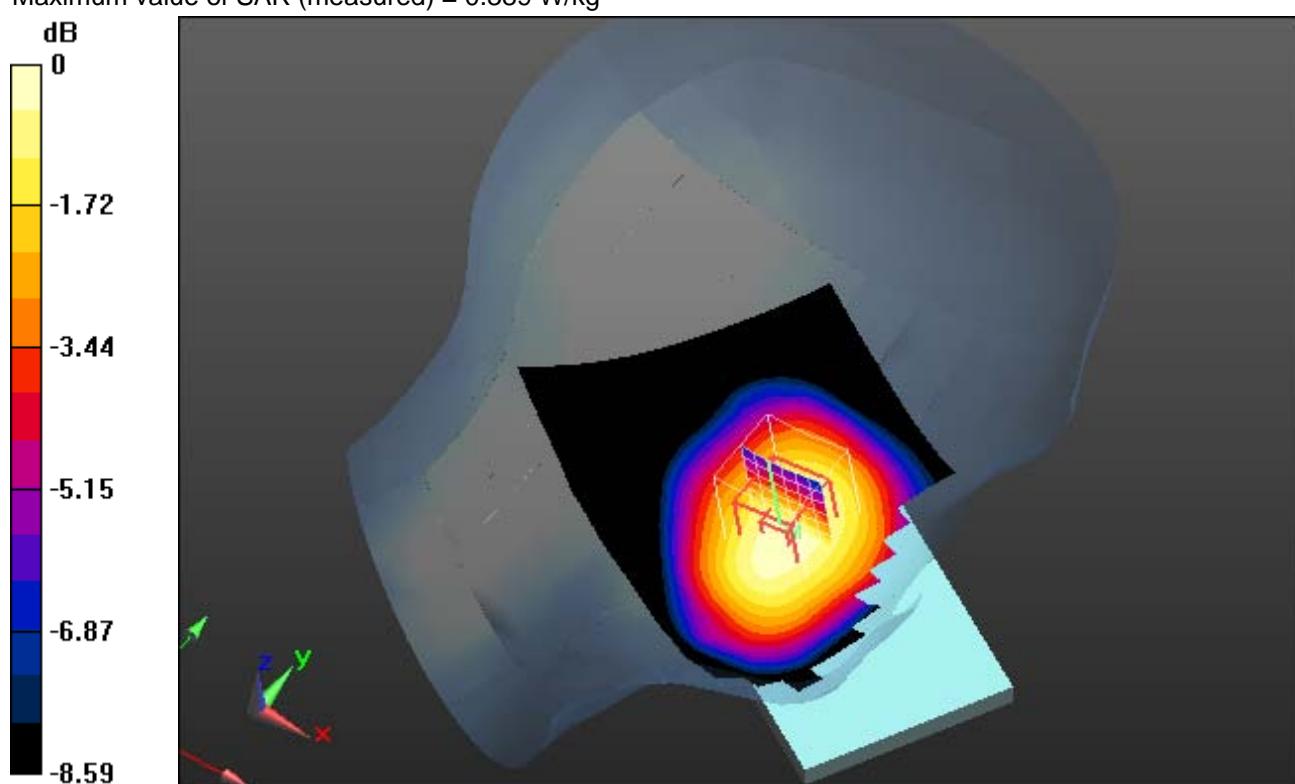
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.314 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.468 mW/g

SAR(1 g) = 0.372 mW/g; SAR(10 g) = 0.281 mW/g

Maximum value of SAR (measured) = 0.389 W/kg



0 dB = 0.389 W/kg = -8.20 dB W/kg

#### Additional information:

ambient temperature: 21.3°C; liquid temperature: 21.1°C

Date/Time: 05.12.2012 10:04:51

## IEEE1528-GSM850 head

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 848.6 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781

Medium parameters used:  $f = 848.8 \text{ MHz}$ ;  $\sigma = 0.92 \text{ mho/m}$ ;  $\epsilon_r = 42.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

### Left-Hand-Side HSL/Touch Position - Hi/Area Scan (111x161x1): Interpolated

grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.496 W/kg

### Left-Hand-Side HSL/Touch Position - Hi/Zoom Scan (7x7x7)/Cube 0:

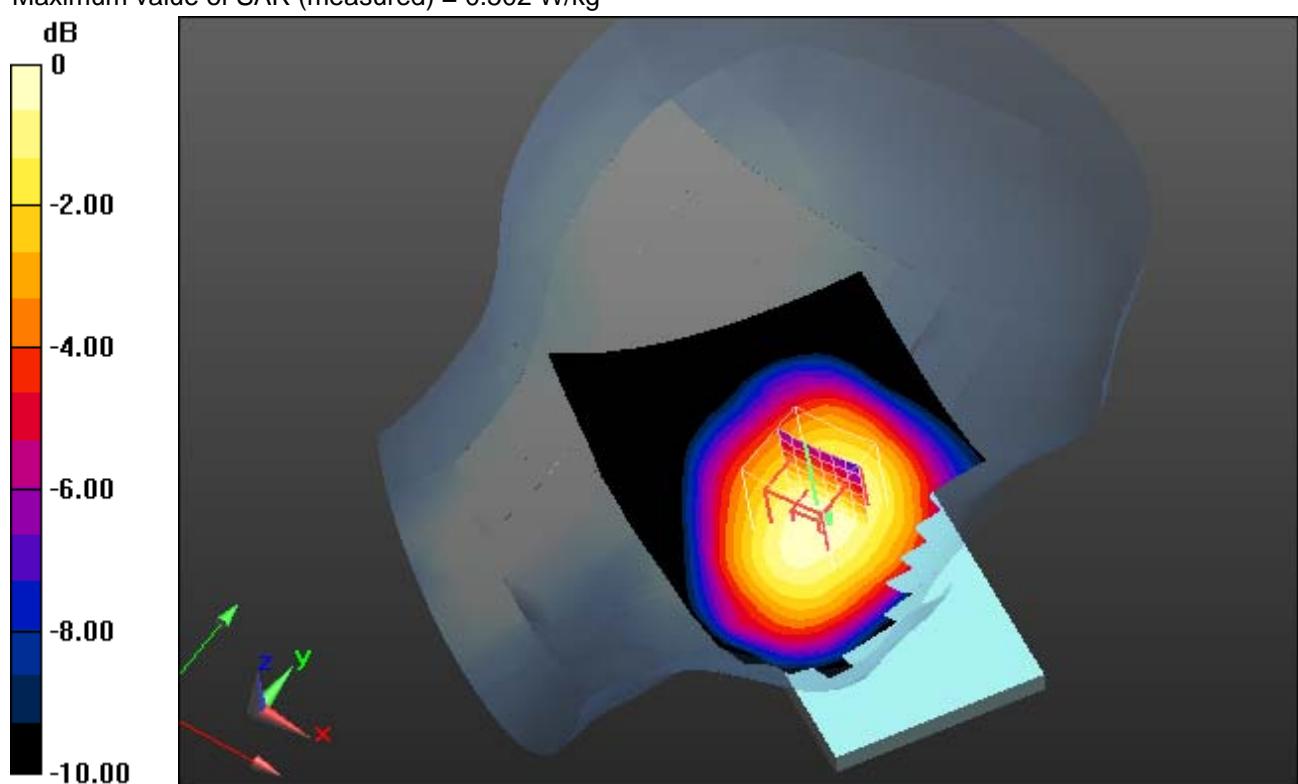
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.074 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.609 mW/g

SAR(1 g) = 0.481 mW/g; SAR(10 g) = 0.361 mW/g

Maximum value of SAR (measured) = 0.502 W/kg



0 dB = 0.502 W/kg = -5.99 dB W/kg

#### Additional information:

ambient temperature: 21.3°C; liquid temperature: 21.1°C

Date/Time: 05.12.2012 11:09:40

## IEEE1528-GSM850 head

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 824.2 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781

Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 42.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

**Left-Hand-Side HSL/Tilt Position - Low/Area Scan (111x161x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
Maximum value of SAR (interpolated) = 0.210 W/kg

## Left-Hand-Side HSL/Tilt Position - Low/Zoom Scan (8x8x7)/Cube 0:

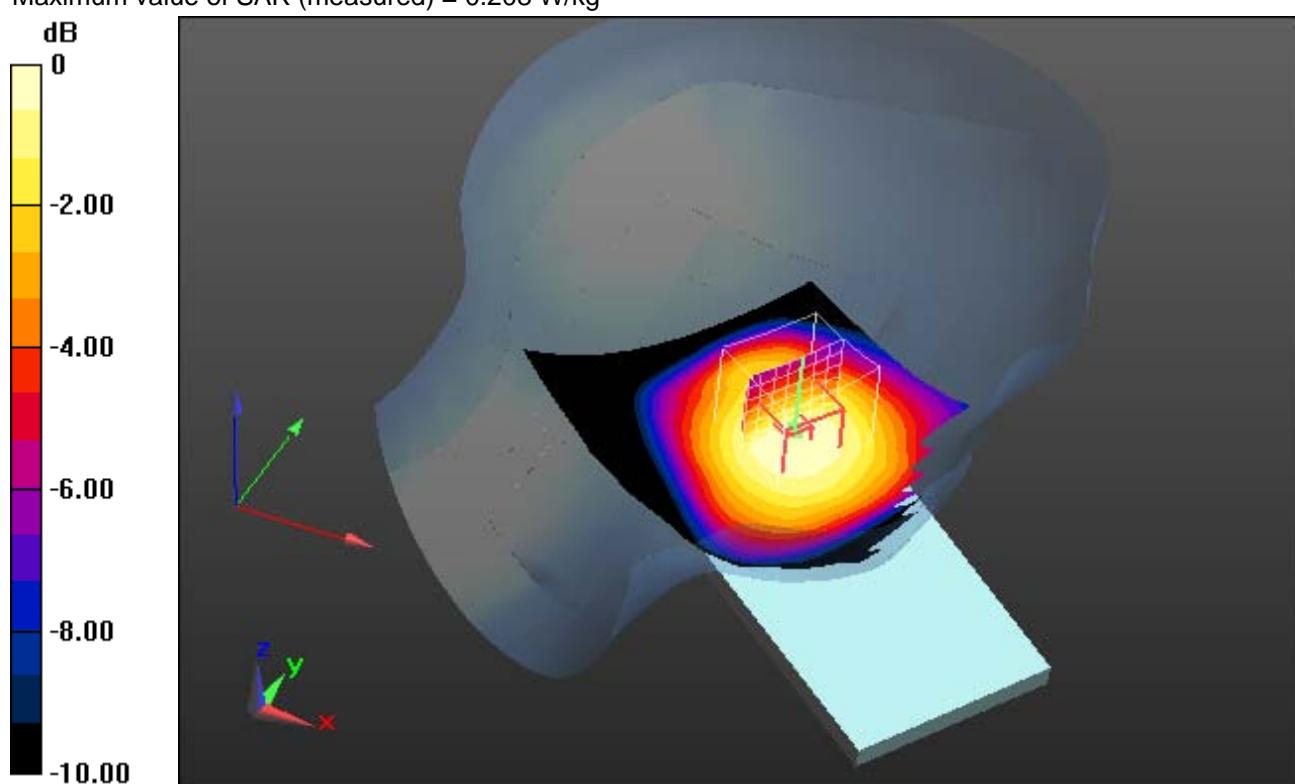
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.705 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.240 mW/g

**SAR(1 g) = 0.198 mW/g; SAR(10 g) = 0.153 mW/g**

Maximum value of SAR (measured) = 0.208 W/kg



0 dB = 0.208 W/kg = -13.64 dB W/kg

### Additional information:

ambient temperature: 21.3°C; liquid temperature: 21.1°C

Date/Time: 05.12.2012 10:47:27

## IEEE1528-GSM850 head

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781

Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.91 \text{ mho/m}$ ;  $\epsilon_r = 42.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

### Left-Hand-Side HSL/Tilt Position - Mid/Area Scan (111x161x1): Interpolated grid:

$dx=1.000 \text{ mm}$ ,  $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.241 W/kg

### Left-Hand-Side HSL/Tilt Position - Mid/Zoom Scan (7x8x7)/Cube 0:

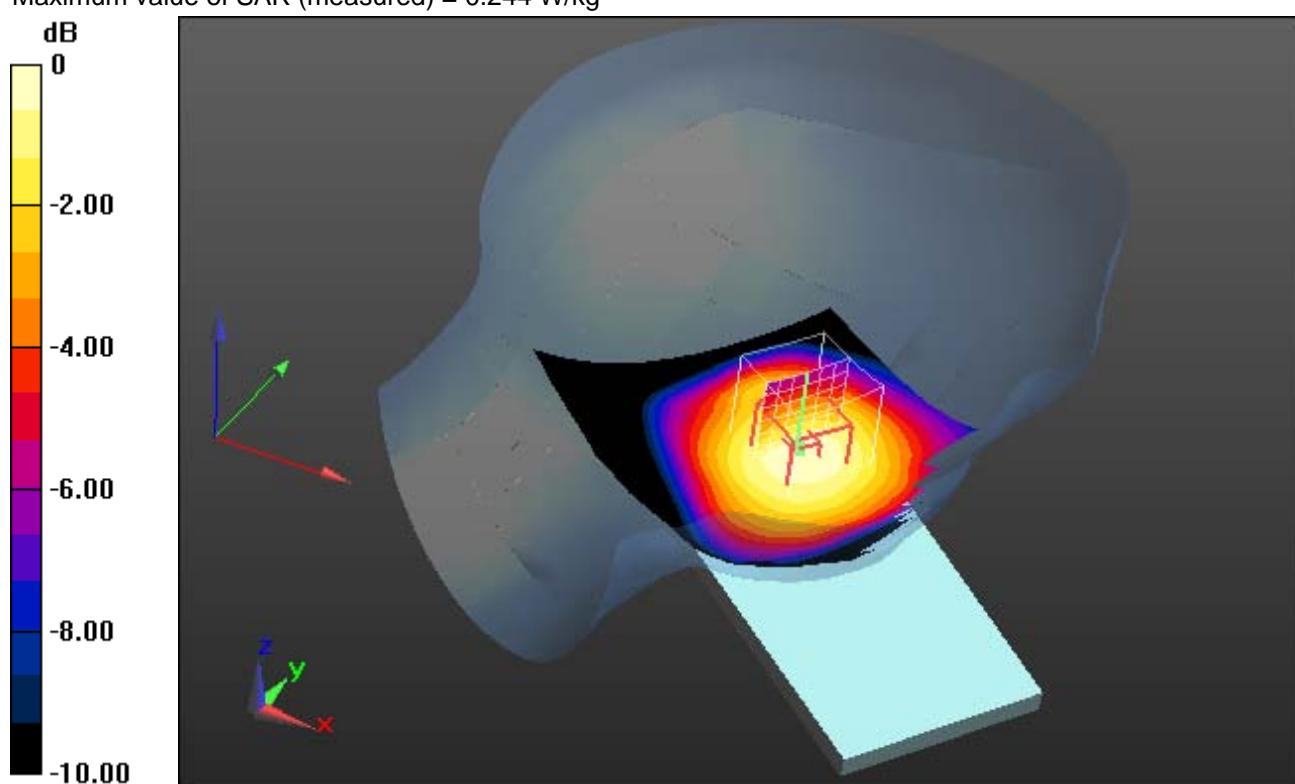
Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 16.933 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.282 mW/g

SAR(1 g) = 0.232 mW/g; SAR(10 g) = 0.178 mW/g

Maximum value of SAR (measured) = 0.244 W/kg



0 dB = 0.244 W/kg = -12.25 dB W/kg

#### Additional information:

ambient temperature: 21.3°C; liquid temperature: 21.1°C

Date/Time: 05.12.2012 10:25:00

## IEEE1528-GSM850 head

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 848.6 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781

Medium parameters used:  $f = 848.8 \text{ MHz}$ ;  $\sigma = 0.92 \text{ mho/m}$ ;  $\epsilon_r = 42.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

### Left-Hand-Side HSL/Tilt Position - Hi/Area Scan (111x161x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.301 W/kg

### Left-Hand-Side HSL/Tilt Position - Hi/Zoom Scan (7x8x7)/Cube 0: Measurement

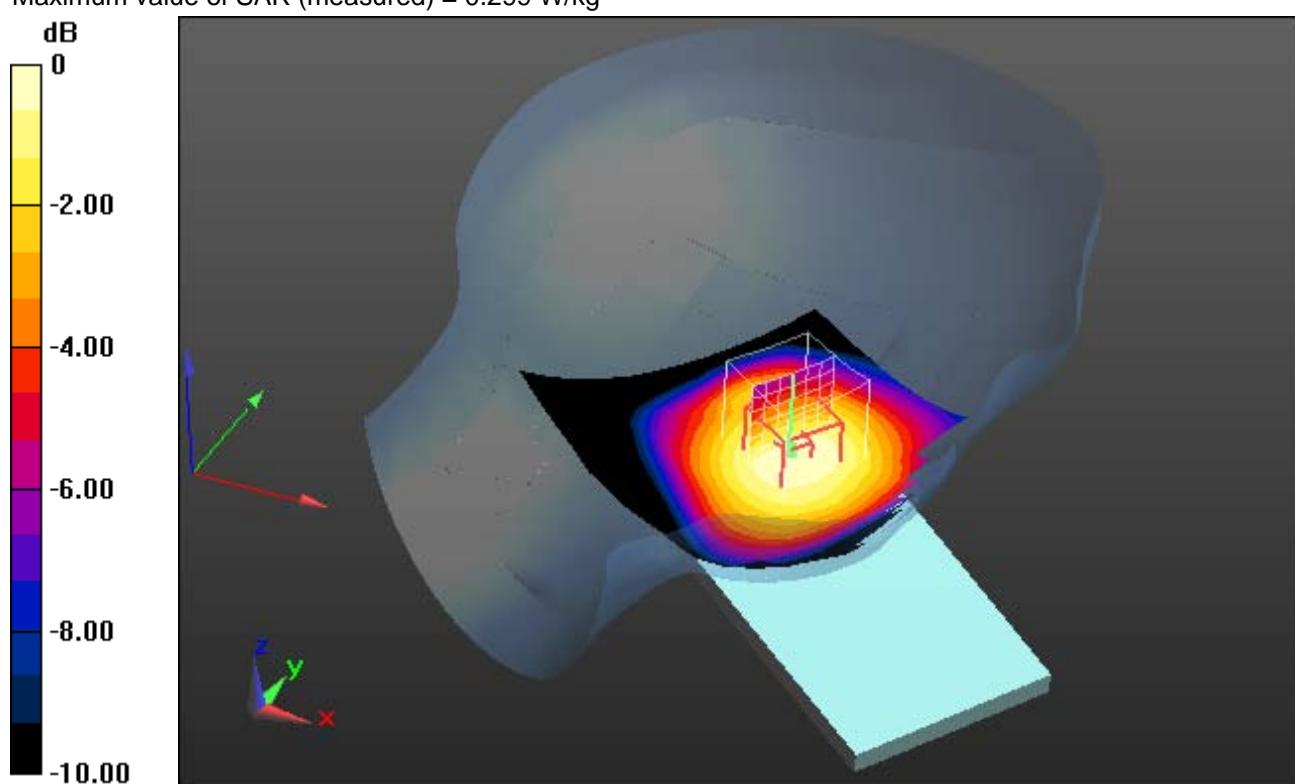
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.622 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.345 mW/g

SAR(1 g) = 0.283 mW/g; SAR(10 g) = 0.217 mW/g

Maximum value of SAR (measured) = 0.299 W/kg



#### Additional information:

ambient temperature: 21.3°C; liquid temperature: 21.1°C

Date/Time: 05.12.2012 13:55:26

## IEEE1528-GSM850 head

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 824.2 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781

Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 42.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

### Right-Hand-Side HSL/Touch Position - Low/Area Scan (111x161x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.281 W/kg

### Right-Hand-Side HSL/Touch Position - Low/Zoom Scan (7x8x7)/Cube 0:

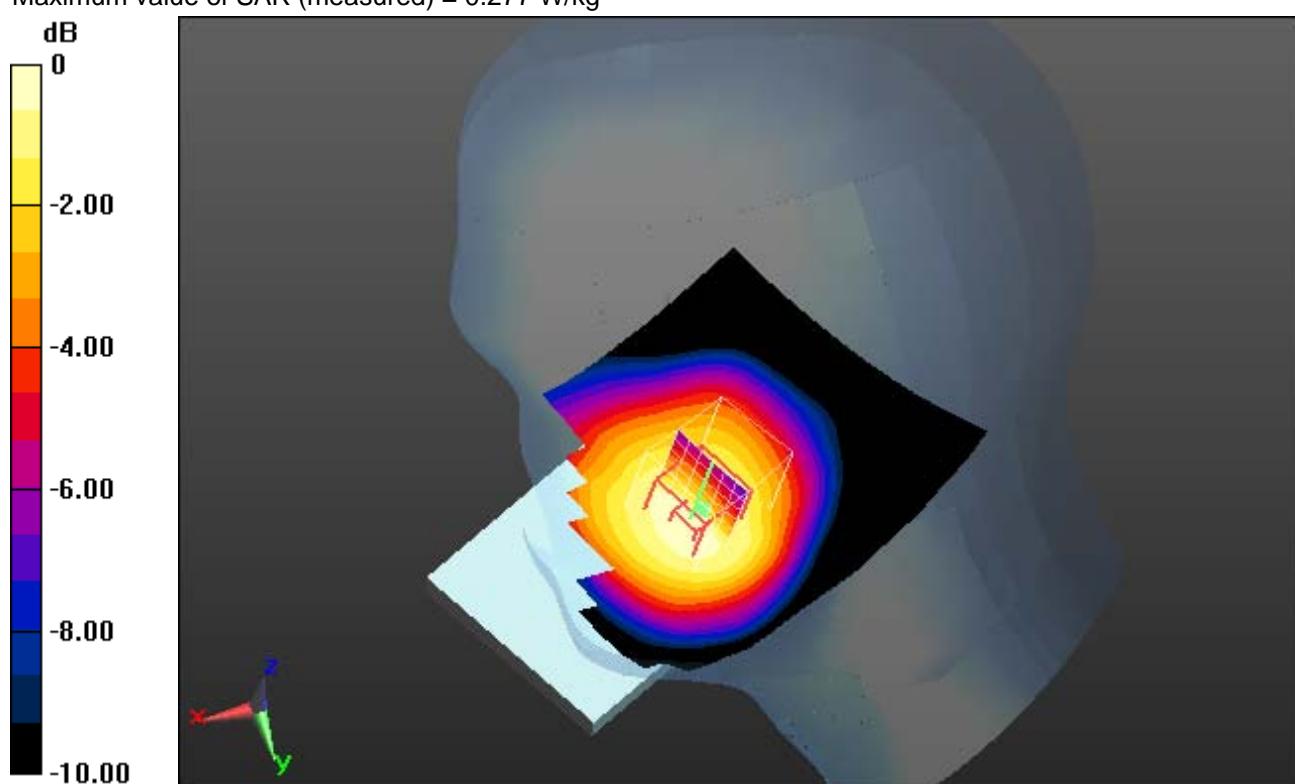
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.701 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.331 mW/g

SAR(1 g) = 0.261 mW/g; SAR(10 g) = 0.200 mW/g

Maximum value of SAR (measured) = 0.277 W/kg



#### Additional information:

ambient temperature: 21.3°C; liquid temperature: 21.1°C

Date/Time: 05.12.2012 13:33:10

## IEEE1528-GSM850 head

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781

Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.91 \text{ mho/m}$ ;  $\epsilon_r = 42.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

## Right-Hand-Side HSL/Touch Position - Middle/Area Scan (111x161x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.359 W/kg

## Right-Hand-Side HSL/Touch Position - Middle/Zoom Scan (7x8x7)/Cube 0:

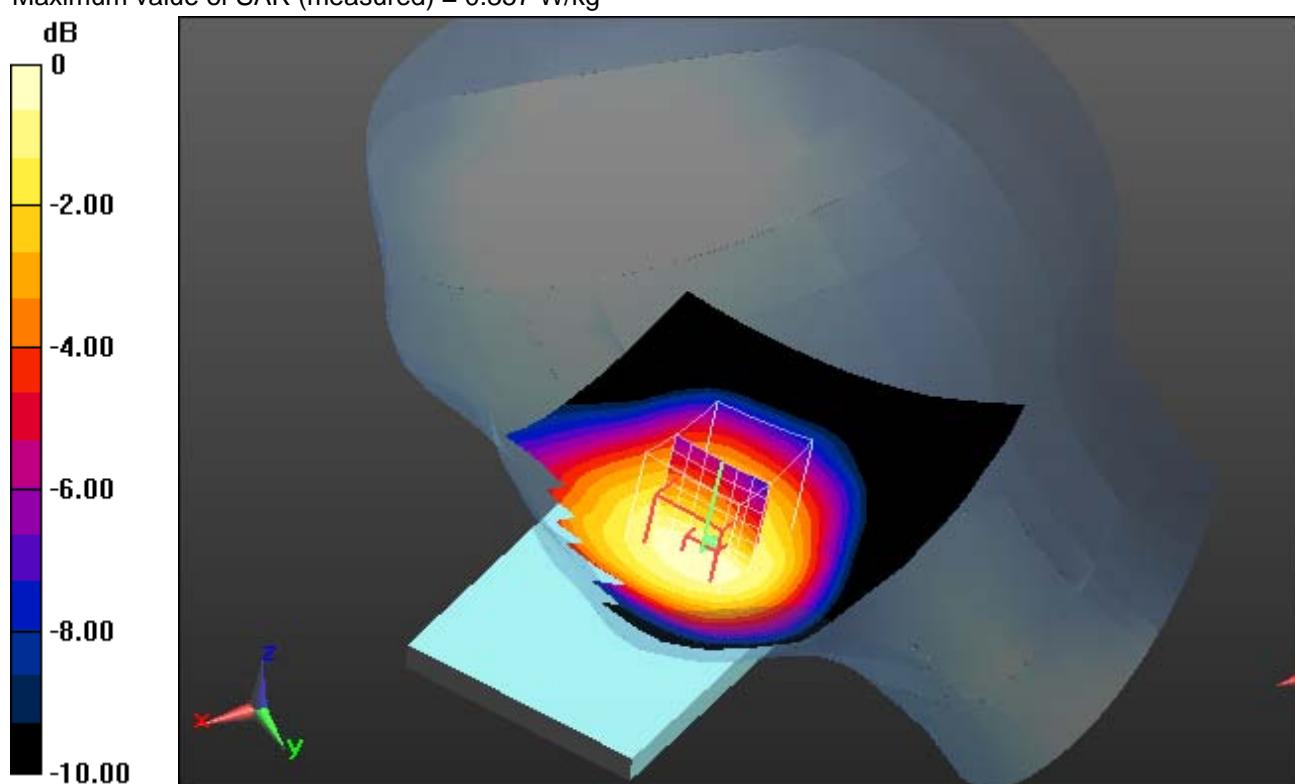
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.910 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.430 mW/g

SAR(1 g) = 0.337 mW/g; SAR(10 g) = 0.256 mW/g

Maximum value of SAR (measured) = 0.357 W/kg



0 dB = 0.357 W/kg = -8.95 dB W/kg

### Additional information:

ambient temperature: 21.3°C; liquid temperature: 21.1°C

Date/Time: 05.12.2012 13:09:54

## IEEE1528-GSM850 head

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 848.6 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781

Medium parameters used:  $f = 848.8 \text{ MHz}$ ;  $\sigma = 0.92 \text{ mho/m}$ ;  $\epsilon_r = 42.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

### Right-Hand-Side HSL/Touch Position - High/Area Scan (111x161x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.468 W/kg

### Right-Hand-Side HSL/Touch Position - High/Zoom Scan (7x8x7)/Cube 0:

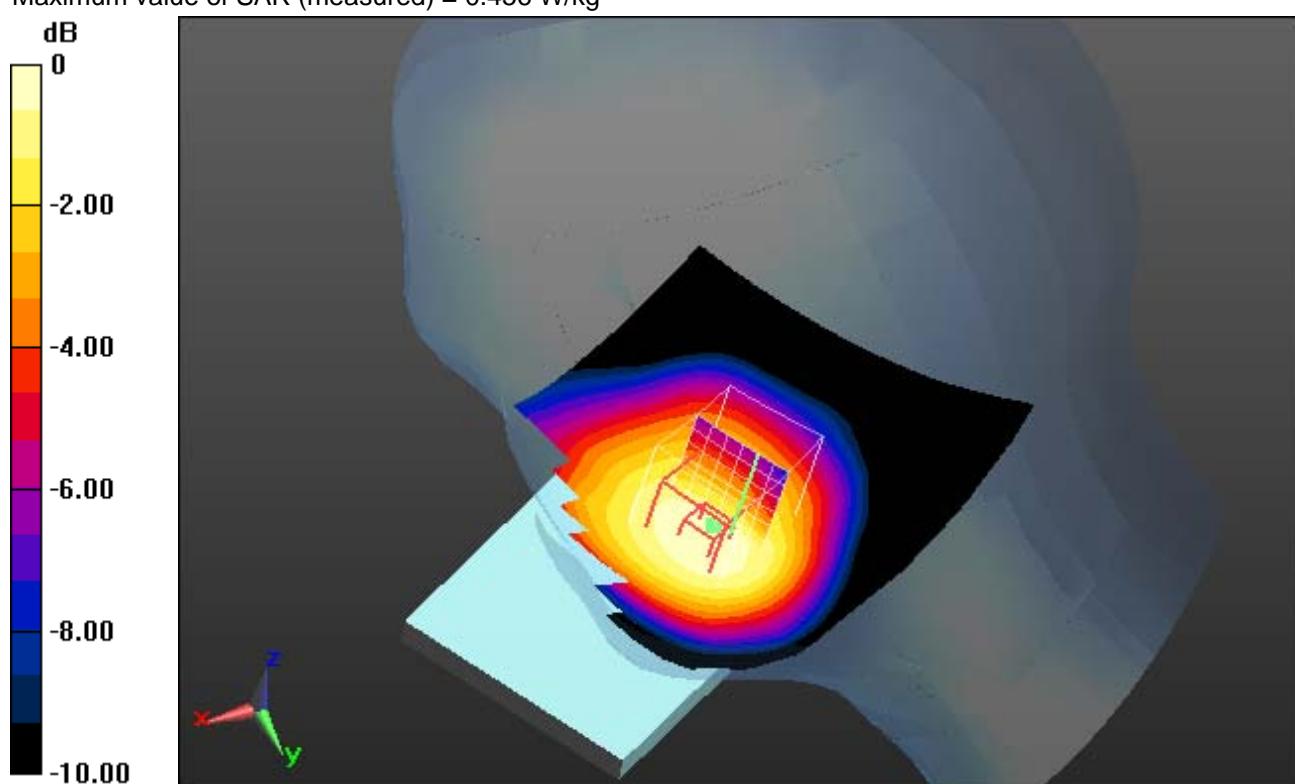
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.707 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.549 mW/g

SAR(1 g) = 0.436 mW/g; SAR(10 g) = 0.332 mW/g

Maximum value of SAR (measured) = 0.456 W/kg



0 dB = 0.456 W/kg = -6.82 dB W/kg

#### Additional information:

ambient temperature: 21.3°C; liquid temperature: 21.1°C

Date/Time: 05.12.2012 11:37:01

**IEEE1528-GSM850 head****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 824.2 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781

Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 42.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

**Right-Hand-Side HSL/Tilt Position - Low/Area Scan (111x161x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
Maximum value of SAR (interpolated) = 0.170 W/kg

**Right-Hand-Side HSL/Tilt Position - Low/Zoom Scan (7x11x7)/Cube 0:**

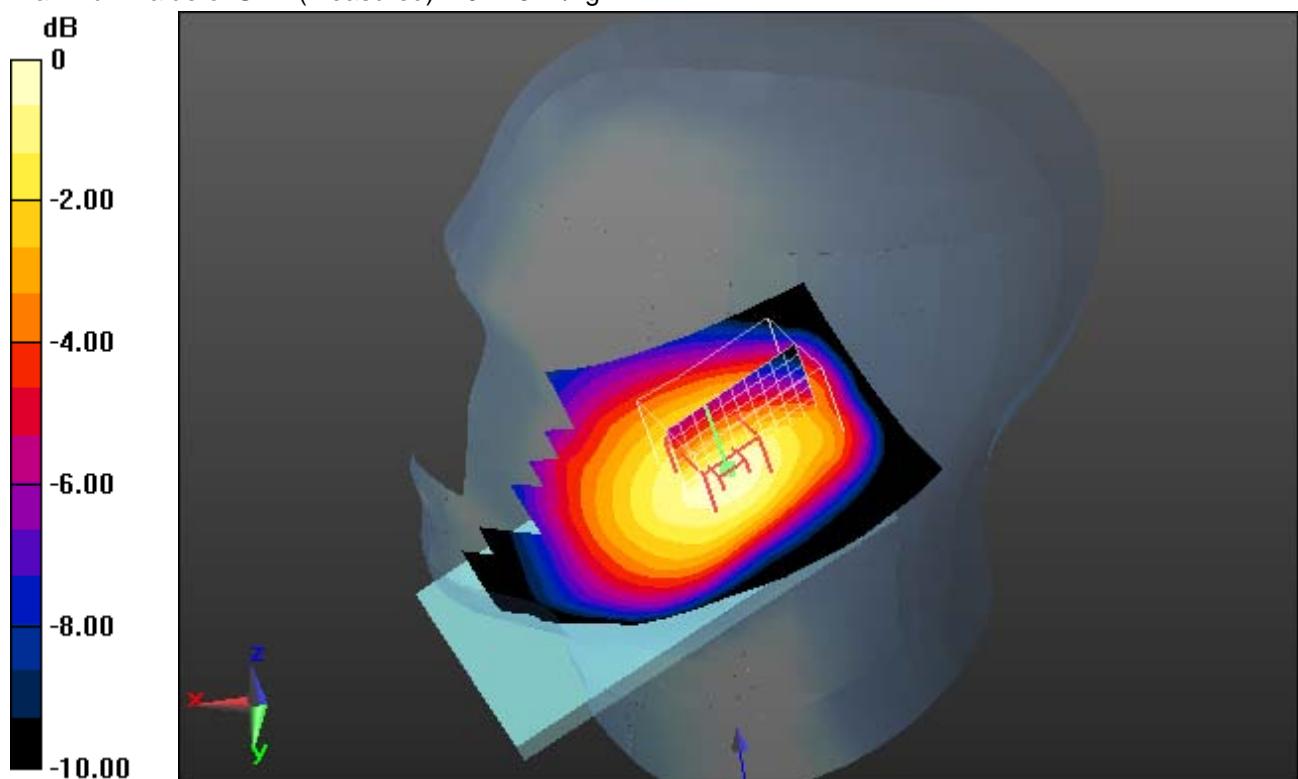
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.023 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.203 mW/g

**SAR(1 g) = 0.165 mW/g; SAR(10 g) = 0.126 mW/g**

Maximum value of SAR (measured) = 0.173 W/kg



0 dB = 0.173 W/kg = -15.24 dB W/kg

**Additional information:**

ambient temperature: 21.3°C; liquid temperature: 21.1°C

Date/Time: 05.12.2012 12:11:43

## IEEE1528-GSM850 head

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781

Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.91 \text{ mho/m}$ ;  $\epsilon_r = 42.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

### Right-Hand-Side HSL/Tilt Position - Middle/Area Scan (111x161x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.204 W/kg

### Right-Hand-Side HSL/Tilt Position - Middle/Zoom Scan (7x12x7)/Cube 0:

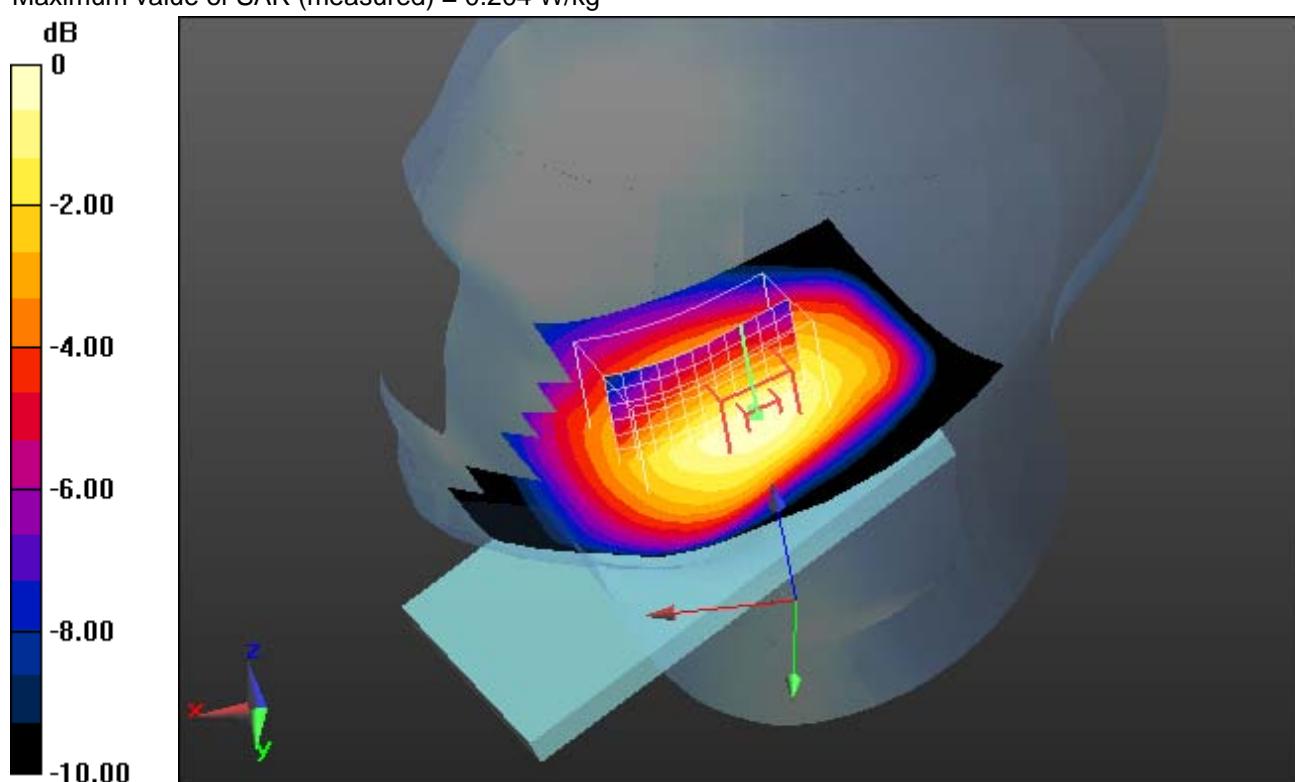
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.310 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.241 mW/g

SAR(1 g) = 0.195 mW/g; SAR(10 g) = 0.148 mW/g

Maximum value of SAR (measured) = 0.204 W/kg



0 dB = 0.204 W/kg = -13.81 dB W/kg

#### Additional information:

ambient temperature: 21.3°C; liquid temperature: 21.1°C

Date/Time: 05.12.2012 12:39:35

## IEEE1528-GSM850 head

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 848.6 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781

Medium parameters used:  $f = 848.8 \text{ MHz}$ ;  $\sigma = 0.92 \text{ mho/m}$ ;  $\epsilon_r = 42.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

**Right-Hand-Side HSL/Tilt Position - High/Area Scan (111x161x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
Maximum value of SAR (interpolated) = 0.247 W/kg

## Right-Hand-Side HSL/Tilt Position - High/Zoom Scan (7x12x7)/Cube 0:

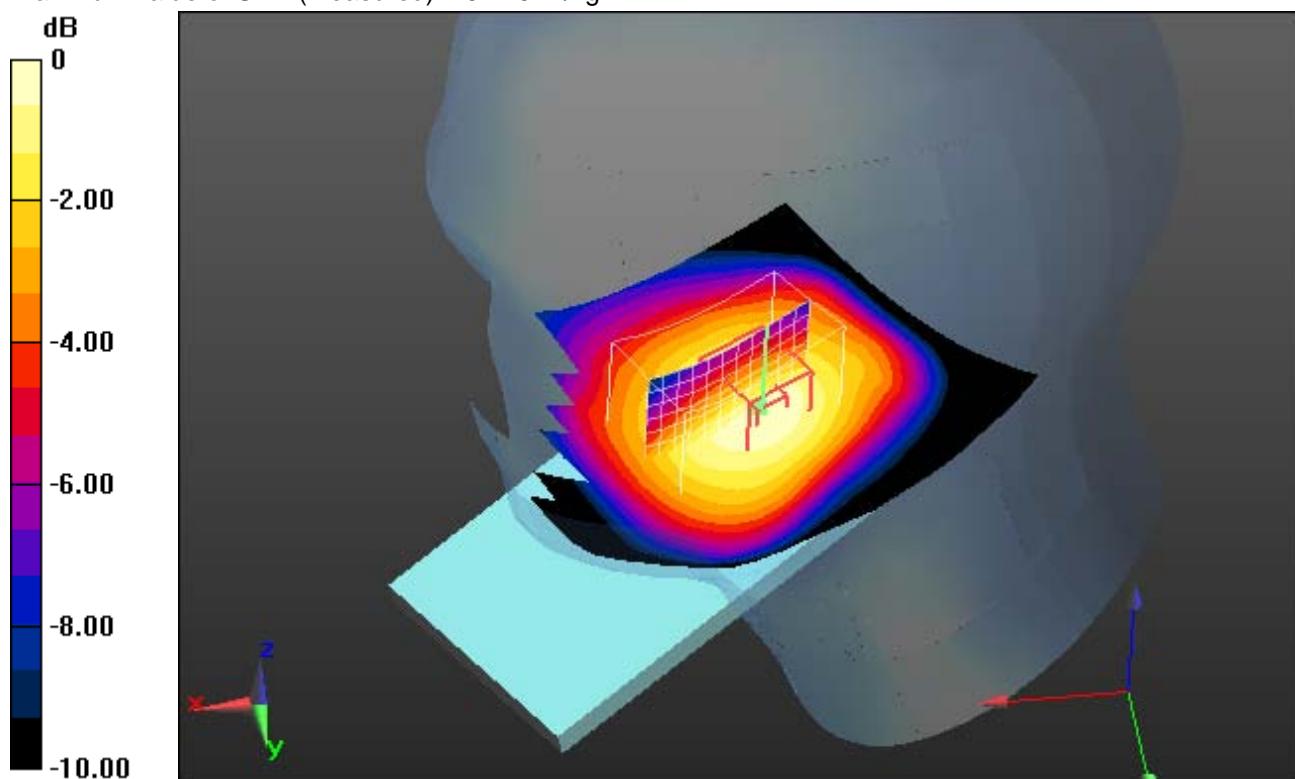
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.785 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.294 mW/g

**SAR(1 g) = 0.236 mW/g; SAR(10 g) = 0.179 mW/g**

Maximum value of SAR (measured) = 0.249 W/kg



0 dB = 0.249 W/kg = -12.08 dB W/kg

### Additional information:

ambient temperature: 21.3°C; liquid temperature: 21.1°C

Date/Time: 11.12.2012 16:44:43 Date/Time: 11.12.2012 16:56:07

**OET65-Body-GSM850 GPRS 4TS****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: PCS 850 GPRS 4TS; Frequency: 824.2 MHz; Duty Cycle: 1:2

Medium: M900 Medium parameters used:  $f = 824.2$  MHz;  $\sigma = 0.97$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.522 mW/g

**Front position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

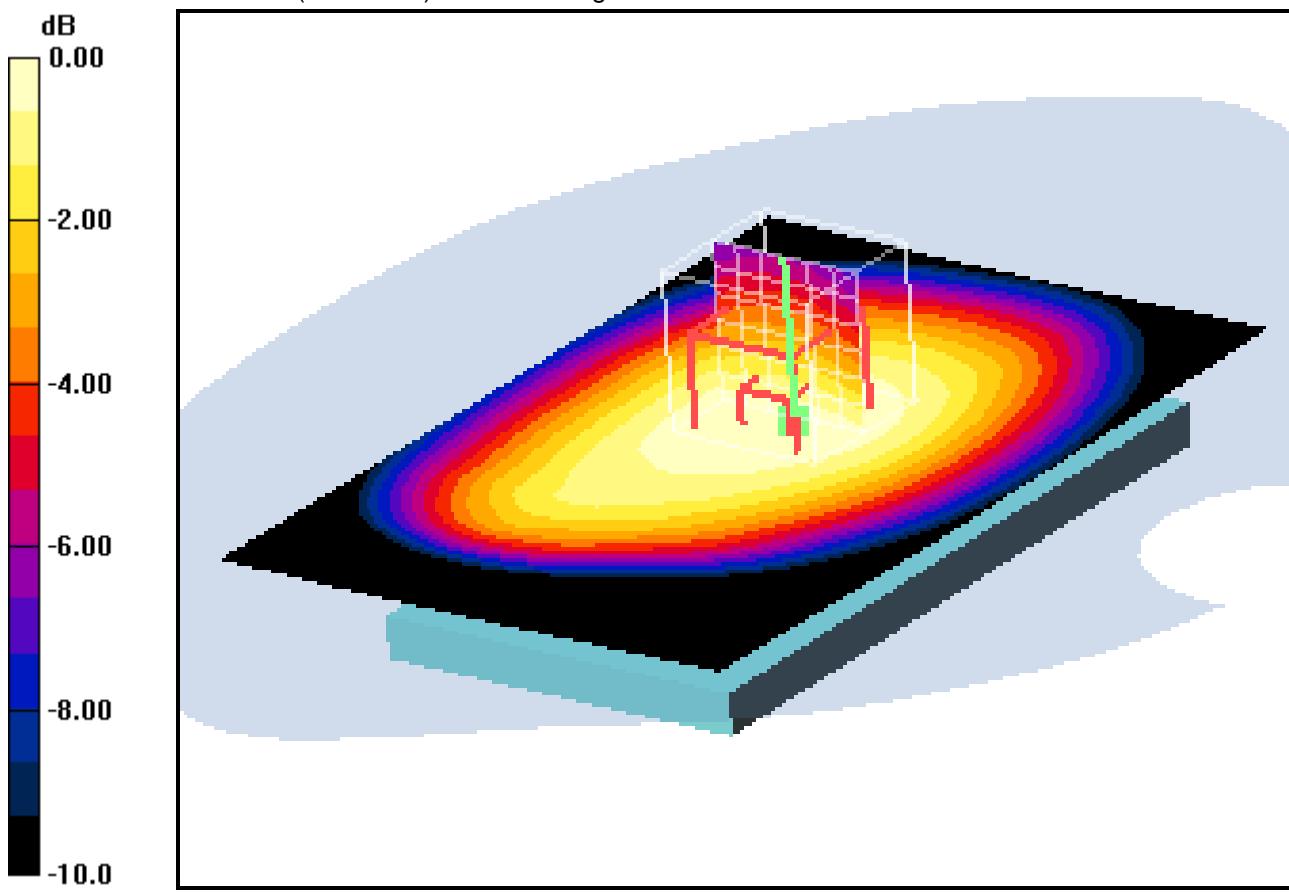
dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.9 V/m; Power Drift = -0.010 dB

Peak SAR (extrapolated) = 0.597 W/kg

**SAR(1 g) = 0.501 mW/g; SAR(10 g) = 0.391 mW/g**

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

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 22.6°C; liquid temperature: 21.6°C

Date/Time: 11.12.2012 17:08:30 Date/Time: 11.12.2012 17:17:33

## OET65-Body-GSM850 GPRS 4TS

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: PCS 850 GPRS 4TS; Frequency: 836.6 MHz; Duty Cycle: 1:2

Medium: M900 Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.588 mW/g

**Front position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

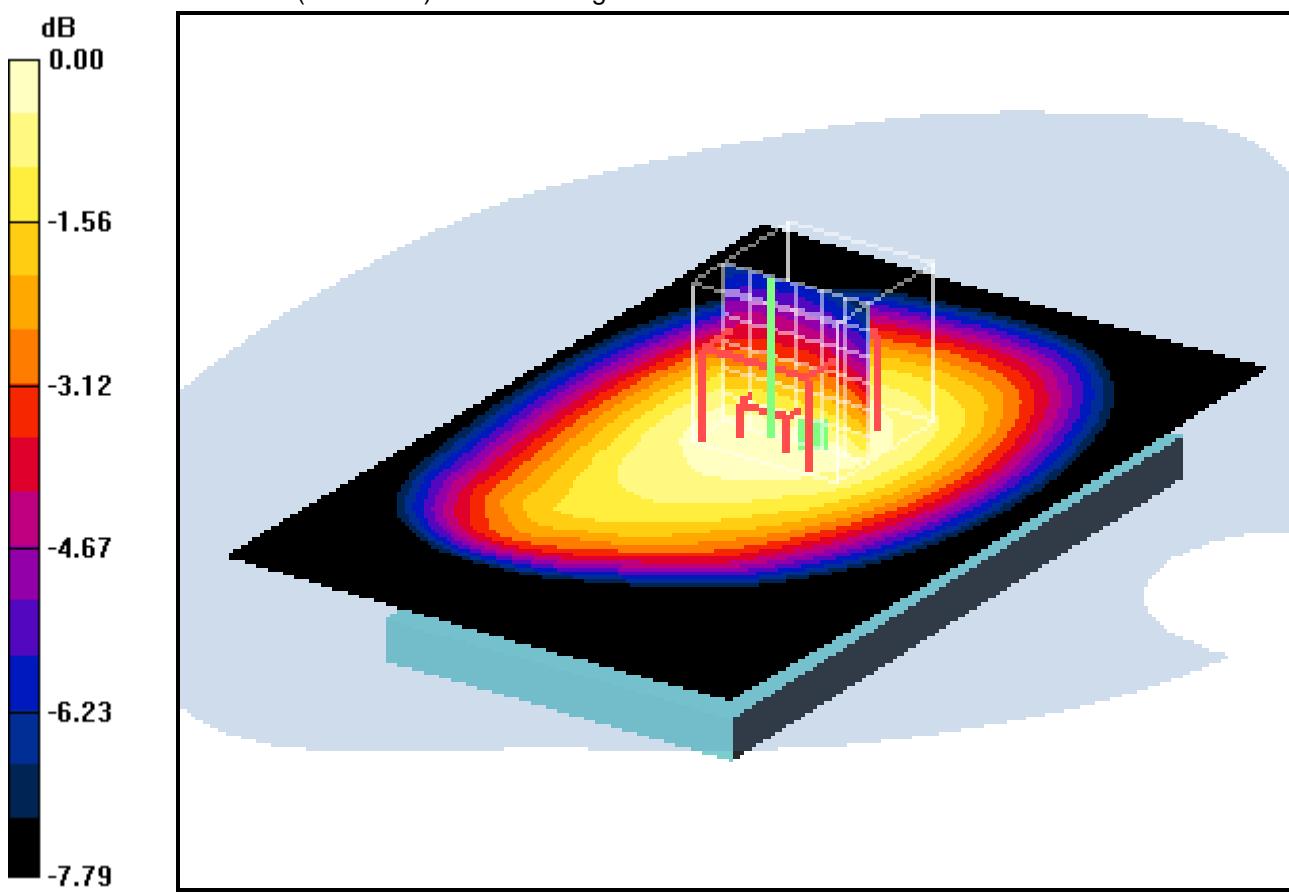
dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.0 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.673 W/kg

**SAR(1 g) = 0.566 mW/g; SAR(10 g) = 0.440 mW/g**

Maximum value of SAR (measured) = 0.594 mW/g



0 dB = 0.594mW/g

### Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 22.6°C; liquid temperature: 21.6°C

Date/Time: 11.12.2012 17:29:07 Date/Time: 11.12.2012 17:38:10

## OET65-Body-GSM850 GPRS 4TS

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: PCS 850 GPRS 4TS; Frequency: 848.8 MHz; Duty Cycle: 1:2

Medium: M900 Medium parameters used:  $f = 848.8$  MHz;  $\sigma = 0.99$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

### Front position - High/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.654 mW/g

### Front position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

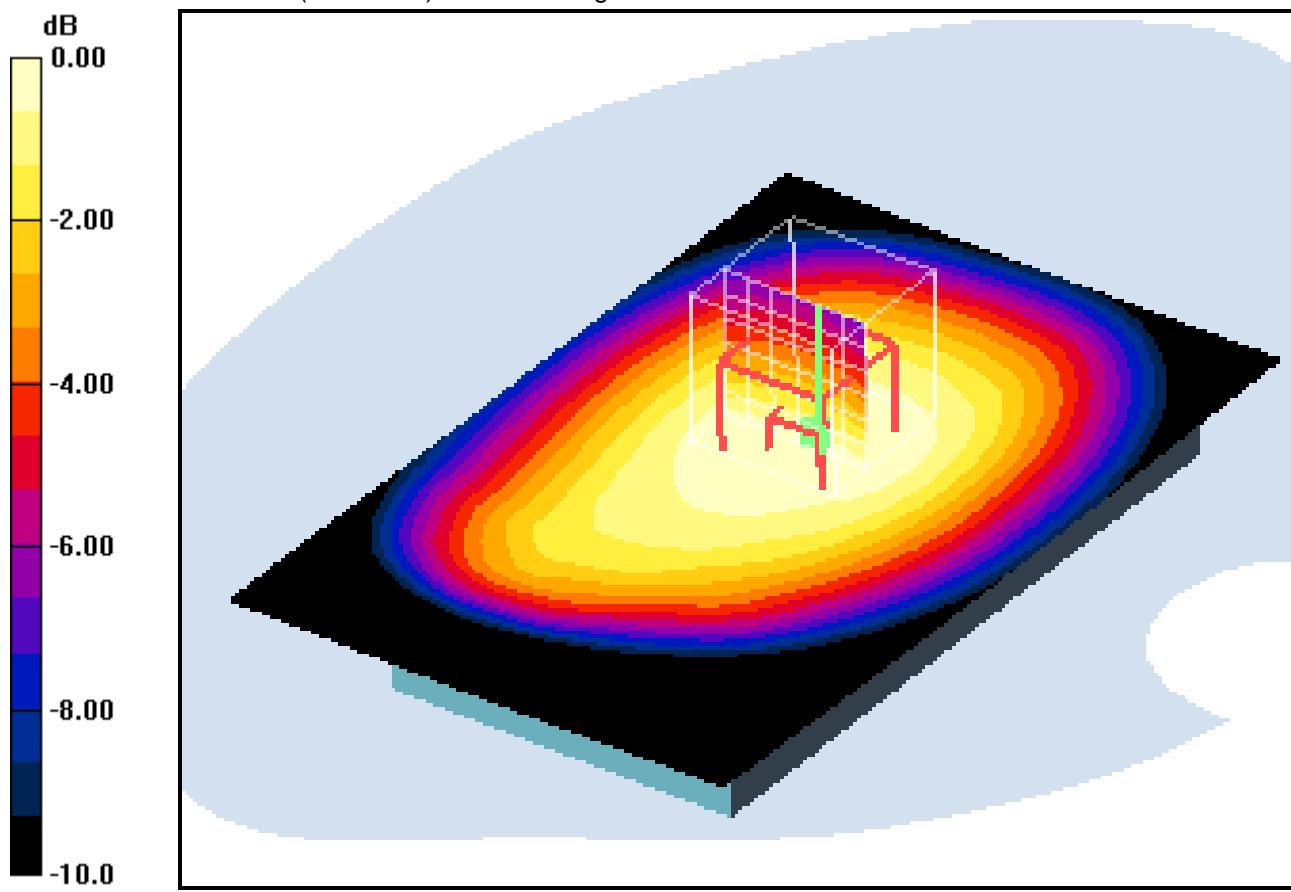
dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.2 V/m; Power Drift = 0.042 dB

Peak SAR (extrapolated) = 0.746 W/kg

**SAR(1 g) = 0.617 mW/g; SAR(10 g) = 0.478 mW/g**

Maximum value of SAR (measured) = 0.647 mW/g



#### Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 22.6°C; liquid temperature: 21.6°C

Date/Time: 11.12.2012 15:23:20 Date/Time: 11.12.2012 15:33:52

**OET65-Body-GSM850 GPRS 4TS****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: PCS 850 GPRS 4TS; Frequency: 824.2 MHz; Duty Cycle: 1:2

Medium: M900 Medium parameters used:  $f = 824.2$  MHz;  $\sigma = 0.97$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.505 mW/g

**Rear position - Low/Zoom Scan (7x7x7) (7x8x7)/Cube 0:** Measurement grid:

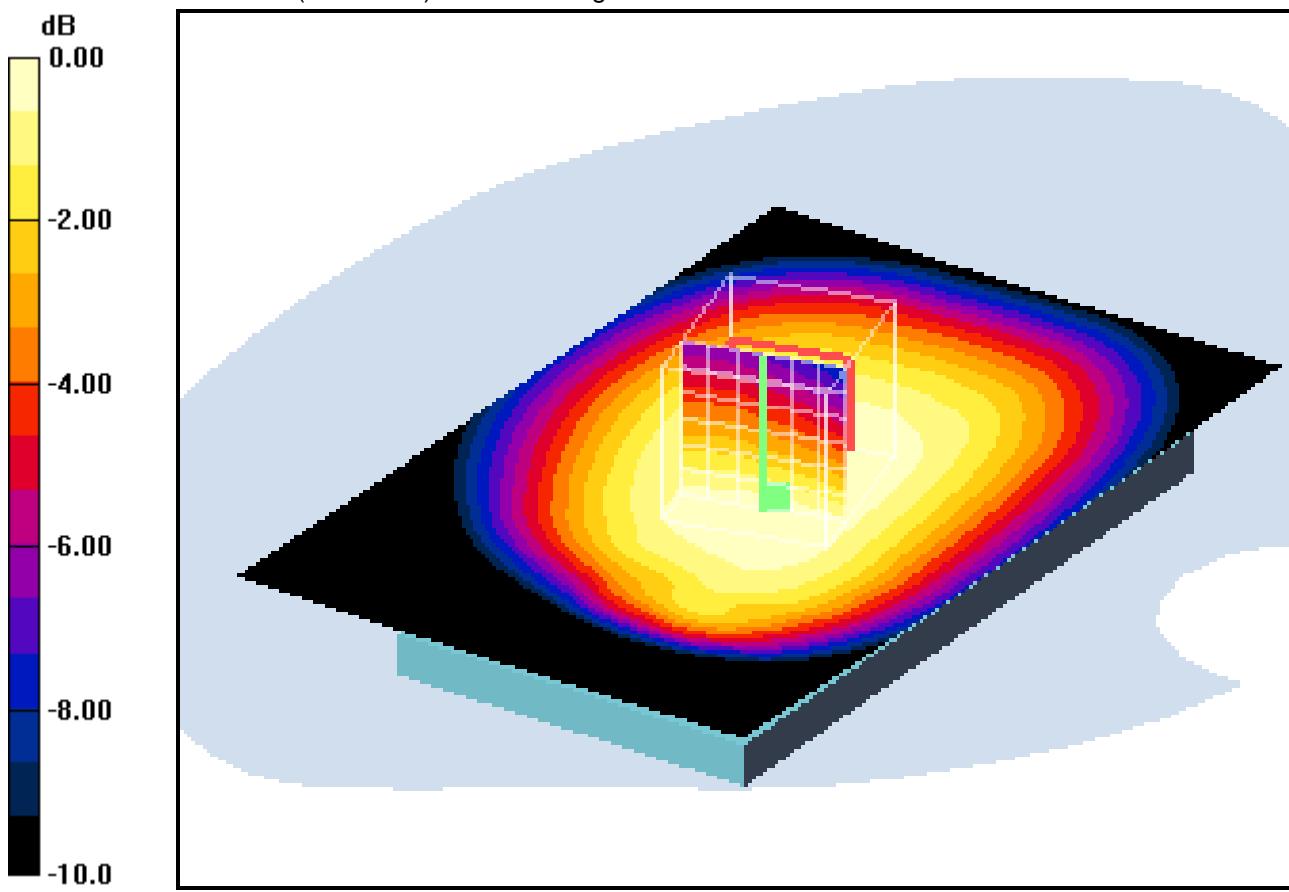
dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.4 V/m; Power Drift = 0.162 dB

Peak SAR (extrapolated) = 0.601 W/kg

**SAR(1 g) = 0.480 mW/g; SAR(10 g) = 0.376 mW/g**

Maximum value of SAR (measured) = 0.505 mW/g



0 dB = 0.505mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 22.6°C; liquid temperature: 21.6°C

Date/Time: 11.12.2012 15:46:55 Date/Time: 11.12.2012 15:57:22

## OET65-Body-GSM850 GPRS 4TS

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: PCS 850 GPRS 4TS; Frequency: 836.6 MHz; Duty Cycle: 1:2

Medium: M900 Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.567 mW/g

**Rear position - Middle/Zoom Scan (7x7x7) (7x8x7)/Cube 0:** Measurement grid:

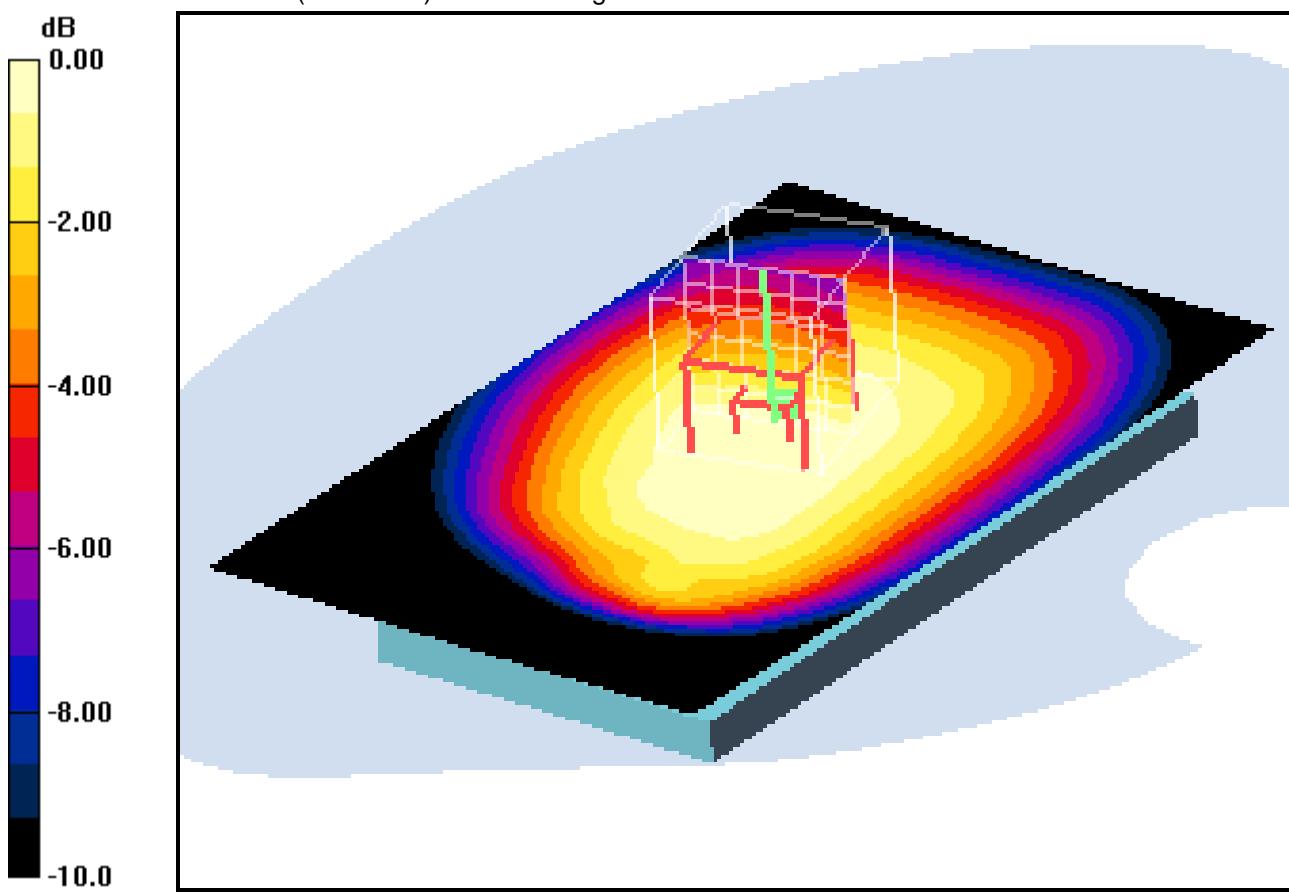
dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.5 V/m; Power Drift = -0.034 dB

Peak SAR (extrapolated) = 0.670 W/kg

**SAR(1 g) = 0.543 mW/g; SAR(10 g) = 0.421 mW/g**

Maximum value of SAR (measured) = 0.568 mW/g



### Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 22.6°C; liquid temperature: 21.6°C

Date/Time: 11.12.2012 16:11:33 Date/Time: 11.12.2012 16:21:44

**OET65-Body-GSM850 GPRS 4TS****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: PCS 850 GPRS 4TS; Frequency: 848.8 MHz; Duty Cycle: 1:2

Medium: M900 Medium parameters used:  $f = 848.8$  MHz;  $\sigma = 0.99$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - High/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.605 mW/g

**Rear position - High/Zoom Scan (7x7x7) (7x9x7)/Cube 0:** Measurement grid:

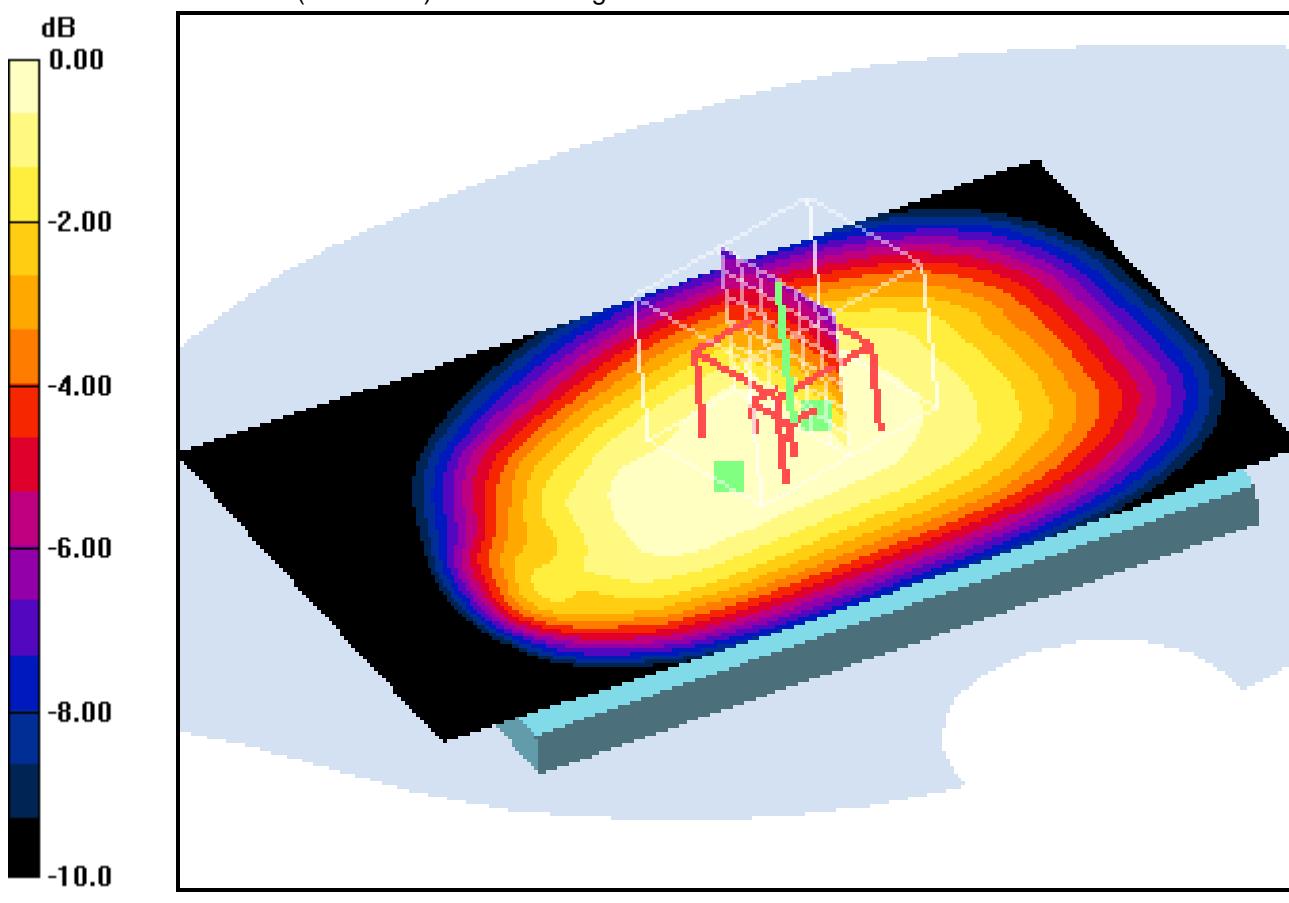
dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.6 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.727 W/kg

**SAR(1 g) = 0.588 mW/g; SAR(10 g) = 0.455 mW/g**

Maximum value of SAR (measured) = 0.616 mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 22.6°C; liquid temperature: 21.6°C

Date/Time: 11.12.2012 14:37:12 Date/Time: 11.12.2012 14:47:04

**OET65-Body-GSM850 GPRS 4TS****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: PCS 850 GPRS 4TS; Frequency: 836.6 MHz; Duty Cycle: 1:2

Medium: M900 Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Edge left position - Middle/Area Scan (61x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.338 mW/g

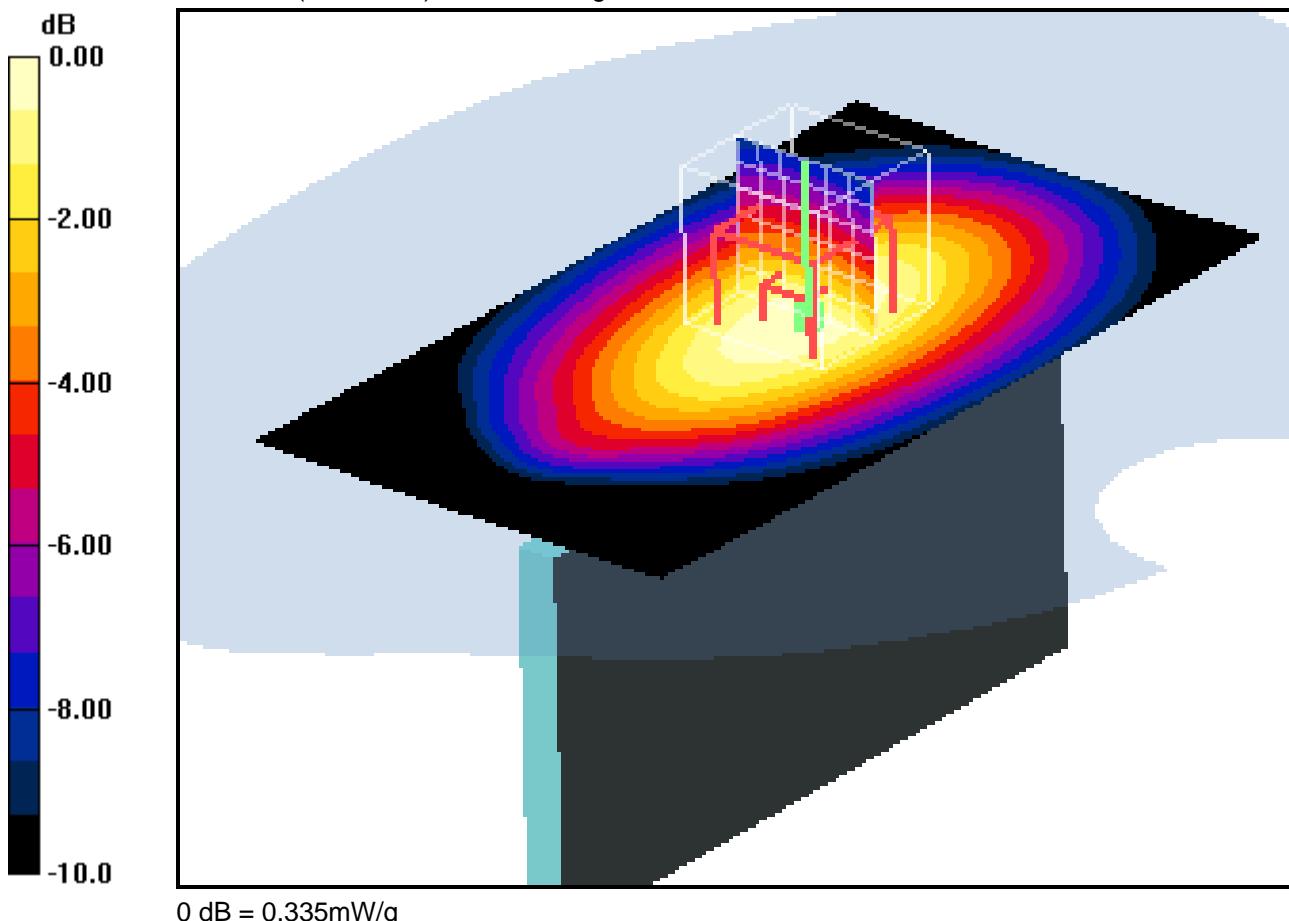
**Edge left position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.0 V/m; Power Drift = -0.069 dB

Peak SAR (extrapolated) = 0.422 W/kg

**SAR(1 g) = 0.311 mW/g; SAR(10 g) = 0.218 mW/g**

Maximum value of SAR (measured) = 0.335 mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 22.6°C; liquid temperature: 21.6°C

Date/Time: 11.12.2012 14:59:20 Date/Time: 11.12.2012 15:08:06

**OET65-Body-GSM850 GPRS 4TS****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: PCS 850 GPRS 4TS; Frequency: 836.6 MHz; Duty Cycle: 1:2

Medium: M900 Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Edge right position - Middle/Area Scan (61x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.308 mW/g

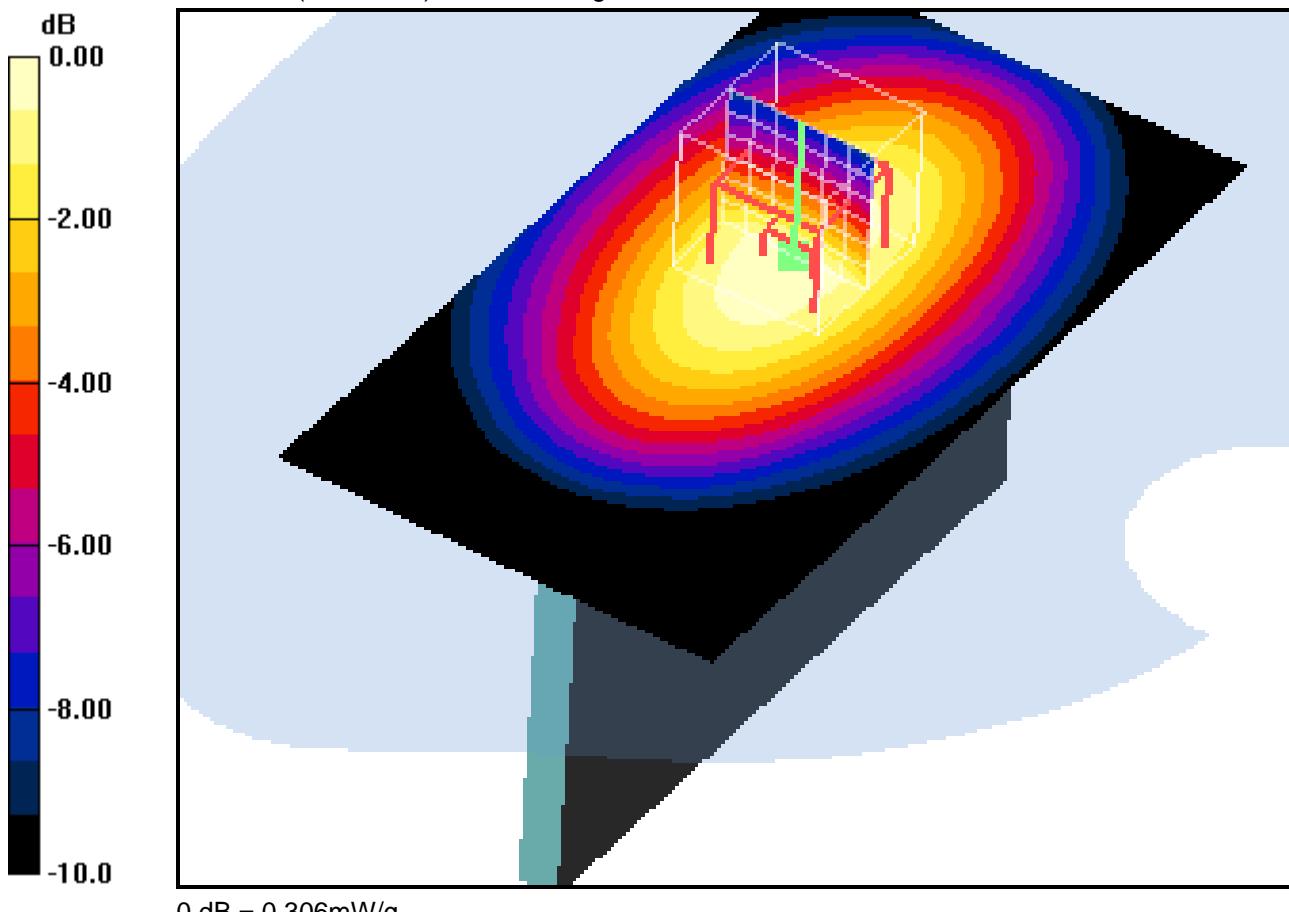
**Edge right position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.9 V/m; Power Drift = -0.053 dB

Peak SAR (extrapolated) = 0.383 W/kg

**SAR(1 g) = 0.285 mW/g; SAR(10 g) = 0.201 mW/g**

Maximum value of SAR (measured) = 0.306 mW/g



0 dB = 0.306mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 22.6°C; liquid temperature: 21.6°C

Date/Time: 11.12.2012 14:12:47 Date/Time: 11.12.2012 14:23:32

## OET65-Body-GSM850 GPRS 4TS

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: PCS 850 GPRS 4TS; Frequency: 836.6 MHz; Duty Cycle: 1:2

Medium: M900 Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Edge bottom position - Middle/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.156 mW/g

## Edge bottom position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

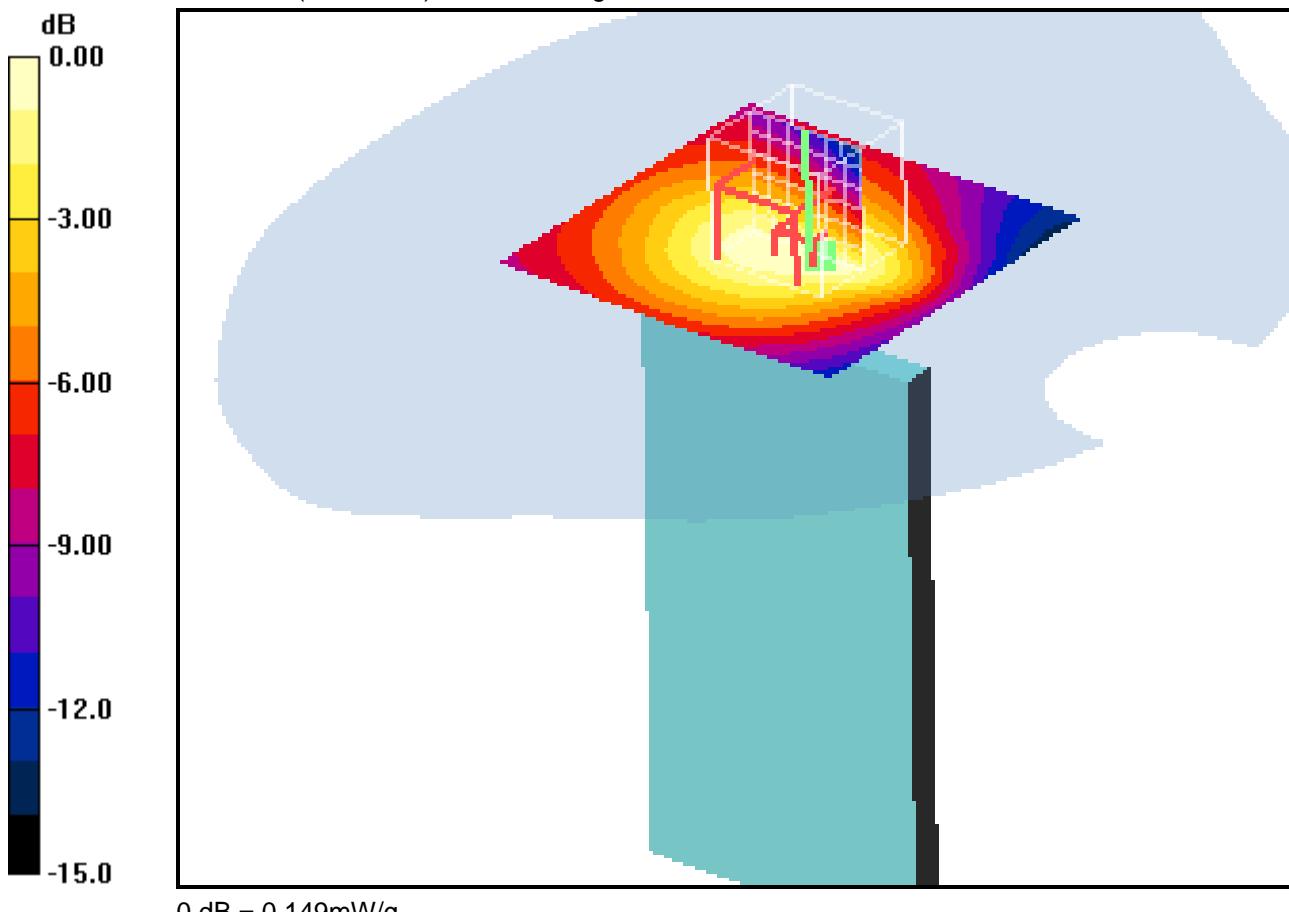
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.4 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.289 W/kg

**SAR(1 g) = 0.137 mW/g; SAR(10 g) = 0.085 mW/g**

Maximum value of SAR (measured) = 0.149 mW/g



### Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 22.6°C; liquid temperature: 21.6°C

Date/Time: 12.12.2012 09:08:12 Date/Time: 12.12.2012 09:18:44

## OET65-Body-GSM850 GPRS 4TS

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: PCS 850 GPRS 4TS; Frequency: 848.8 MHz; Duty Cycle: 1:2

Medium: M900 Medium parameters used:  $f = 848.8$  MHz;  $\sigma = 0.99$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - High 15mm/Area Scan (71x111x1):** Measurement grid: dx=15mm,

dy=15mm

Maximum value of SAR (interpolated) = 0.611 mW/g

**Front position - High 15mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement

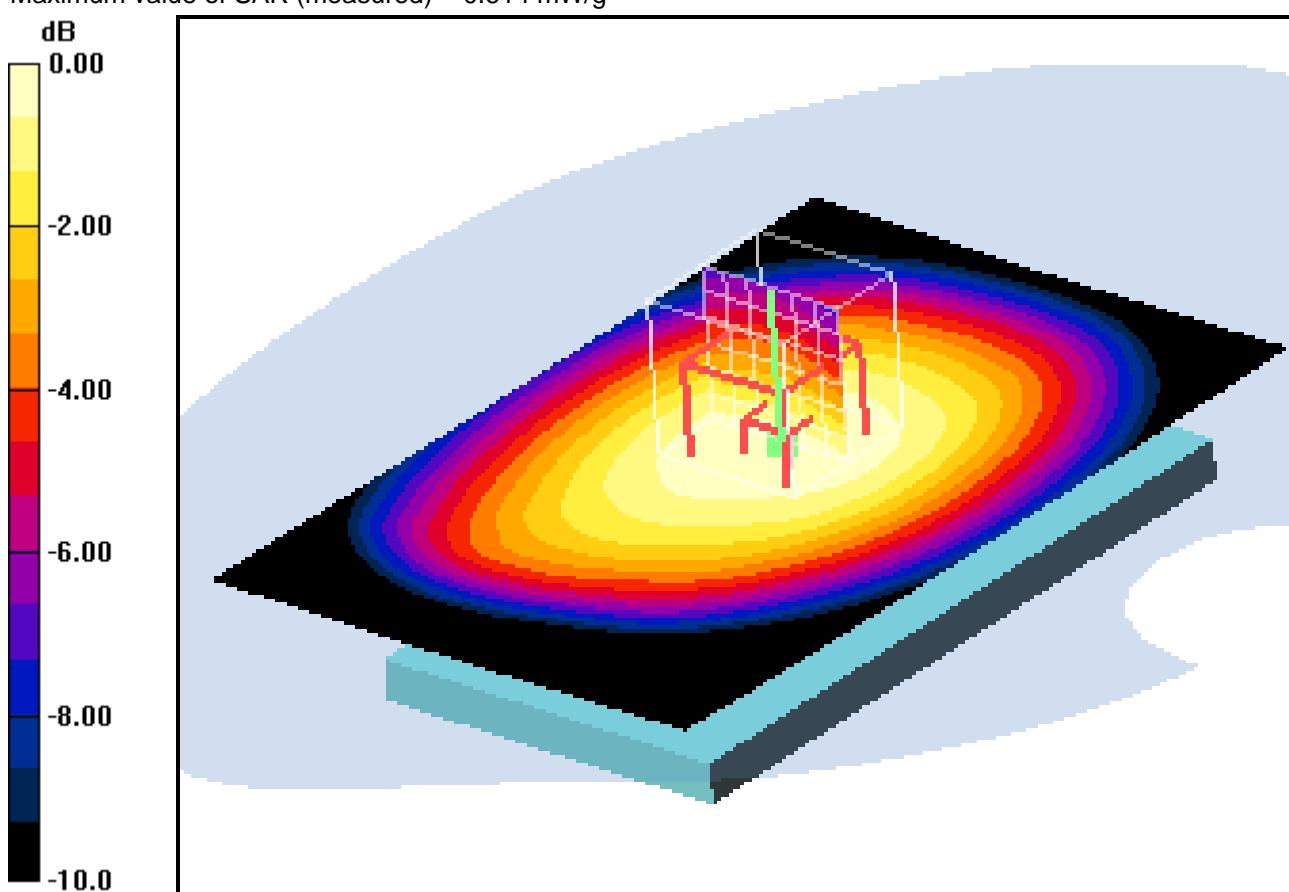
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.5 V/m; Power Drift = 0.071 dB

Peak SAR (extrapolated) = 0.722 W/kg

**SAR(1 g) = 0.585 mW/g; SAR(10 g) = 0.447 mW/g**

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



### Additional information:

position or distance of DUT to SAM: 15mm

ambient temperature: 23.7°C; liquid temperature: 21.5°C

Date/Time: 12.12.2012 09:31:42 Date/Time: 12.12.2012 09:42:12

## OET65-Body-GSM850 GPRS 1TS

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: PCS 850 EGPRS; Frequency: 836.6 MHz; Duty Cycle: 1:8

Medium: M900 Medium parameters used:  $f = 836.6$  MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - High 15mm/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.408 mW/g

**Rear position - High 15mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement

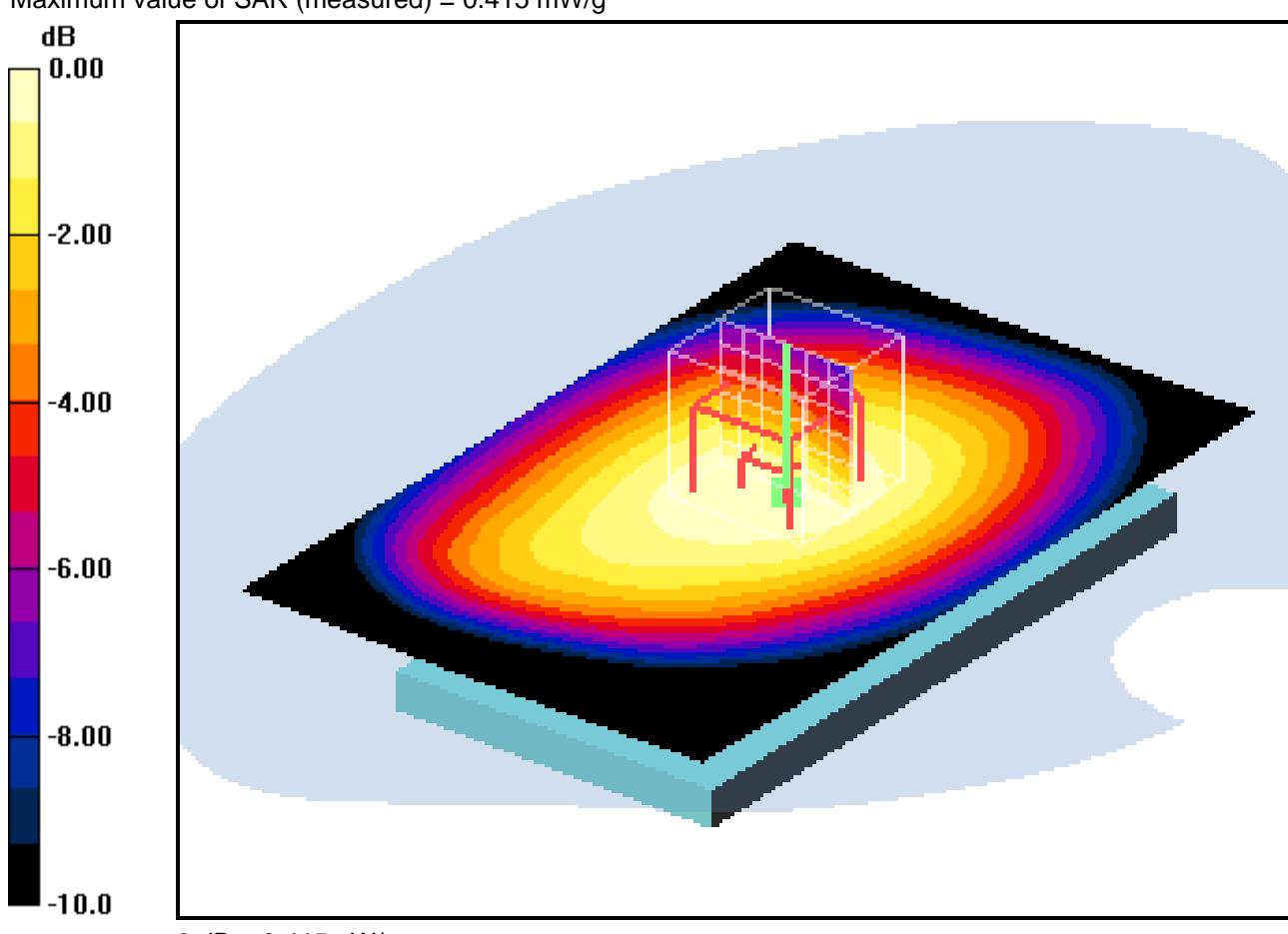
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.0 V/m; Power Drift = 0.065 dB

Peak SAR (extrapolated) = 0.486 W/kg

**SAR(1 g) = 0.396 mW/g; SAR(10 g) = 0.304 mW/g**

Maximum value of SAR (measured) = 0.415 mW/g



**Additional information:**

position or distance of DUT to SAM: 15mm

ambient temperature: 23.7°C; liquid temperature: 21.5°C

## Annex B.2: GSM 1900MHz

Date/Time: 12.12.2012 17:33:37 Date/Time: 12.12.2012 17:47:50

### IEEE1528\_OET65-LeftHandSide-GSM1900

DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8

Medium: HSL1900 Medium parameters used:  $f = 1850.2 \text{ MHz}$ ;  $\sigma = 1.34 \text{ mho/m}$ ;  $\epsilon_r = 40.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.135 mW/g

**Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

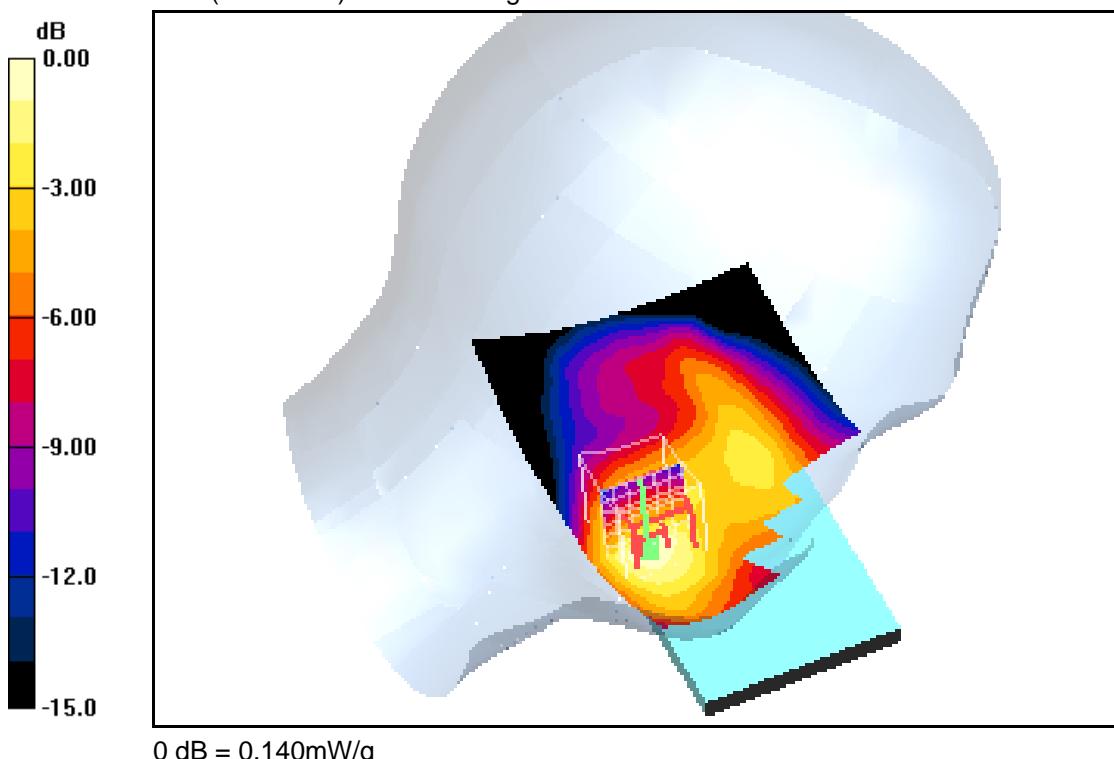
dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.3 V/m; Power Drift = -0.025 dB

Peak SAR (extrapolated) = 0.187 W/kg

**SAR(1 g) = 0.127 mW/g; SAR(10 g) = 0.080 mW/g**

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



#### Additional information:

ambient temperature: 23.6°C; liquid temperature: 21.4°C

Date/Time: 12.12.2012 17:08:28 Date/Time: 12.12.2012 17:20:13

**IEEE1528\_OET65-LeftHandSide-GSM1900****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: HSL1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 40$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.115 mW/g

**Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

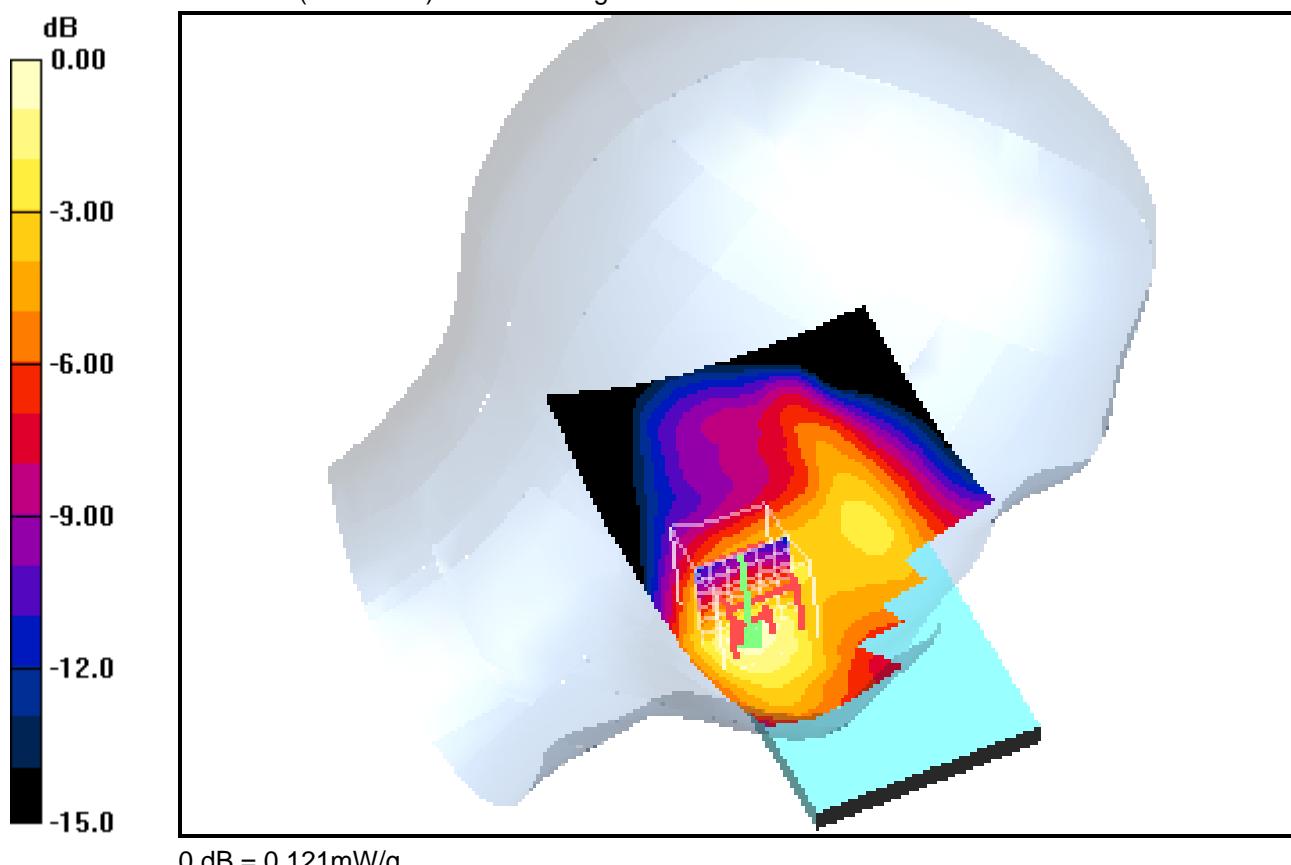
dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.13 V/m; Power Drift = 0.125 dB

Peak SAR (extrapolated) = 0.164 W/kg

**SAR(1 g) = 0.109 mW/g; SAR(10 g) = 0.067 mW/g**

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

**Additional information:**

ambient temperature: 23.6°C; liquid temperature: 21.4°C

Date/Time: 12.12.2012 16:45:40 Date/Time: 12.12.2012 16:55:20

**IEEE1528\_OET65-LeftHandSide-GSM1900****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8

Medium: HSL1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.4 \text{ mho/m}$ ;  $\epsilon_r = 39.9$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - High/Area Scan (71x111x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$ 

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

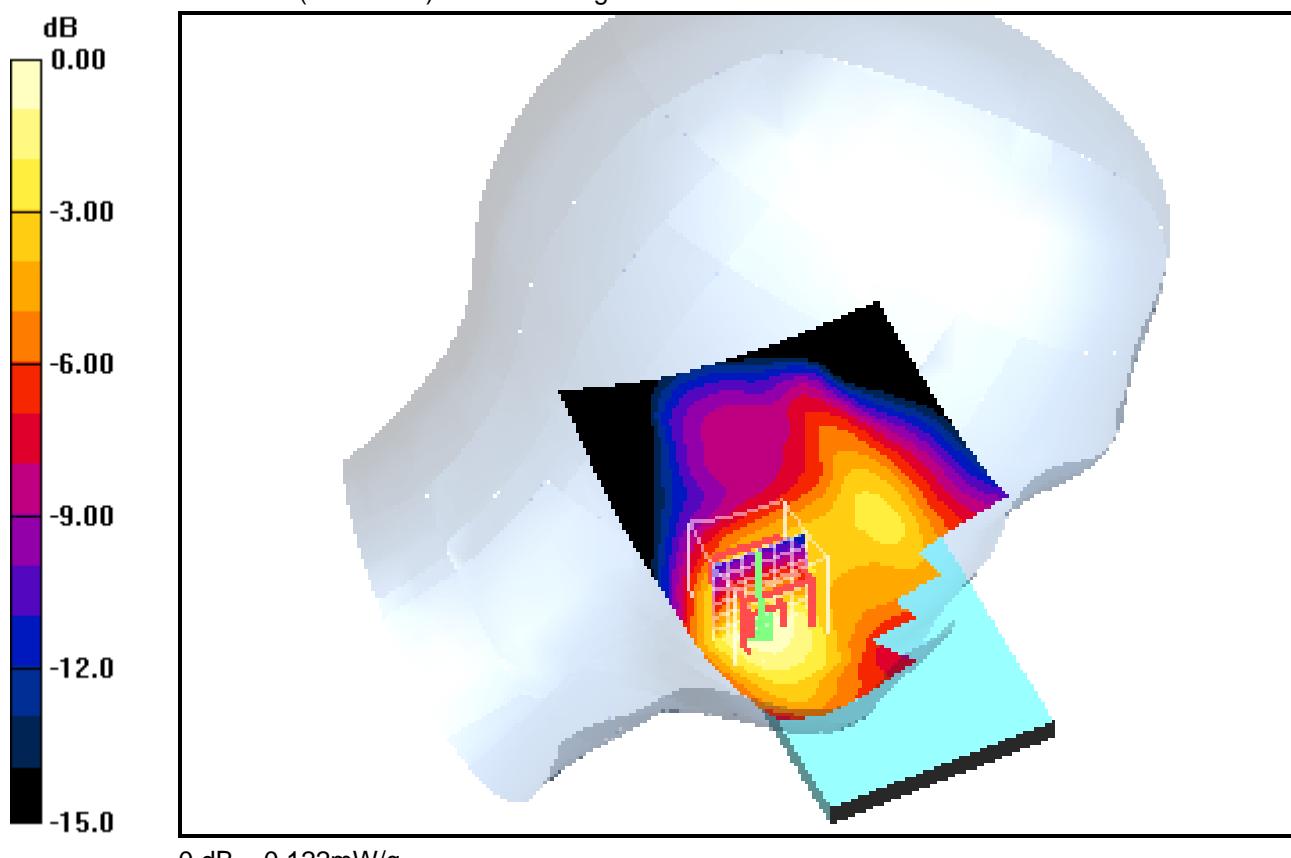
**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$ 

Reference Value = 9.24 V/m; Power Drift = 0.015 dB

Peak SAR (extrapolated) = 0.169 W/kg

**SAR(1 g) = 0.113 mW/g; SAR(10 g) = 0.070 mW/g**

Maximum value of SAR (measured) = 0.122 mW/g

**Additional information:**

ambient temperature: 23.6°C; liquid temperature: 21.4°C

Date/Time: 12.12.2012 15:29:21 Date/Time: 12.12.2012 15:46:24

**IEEE1528\_OET65-LeftHandSide-GSM1900****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8

Medium: HSL1900 Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.34$  mho/m;  $\epsilon_r = 40.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.051 mW/g

**Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm,

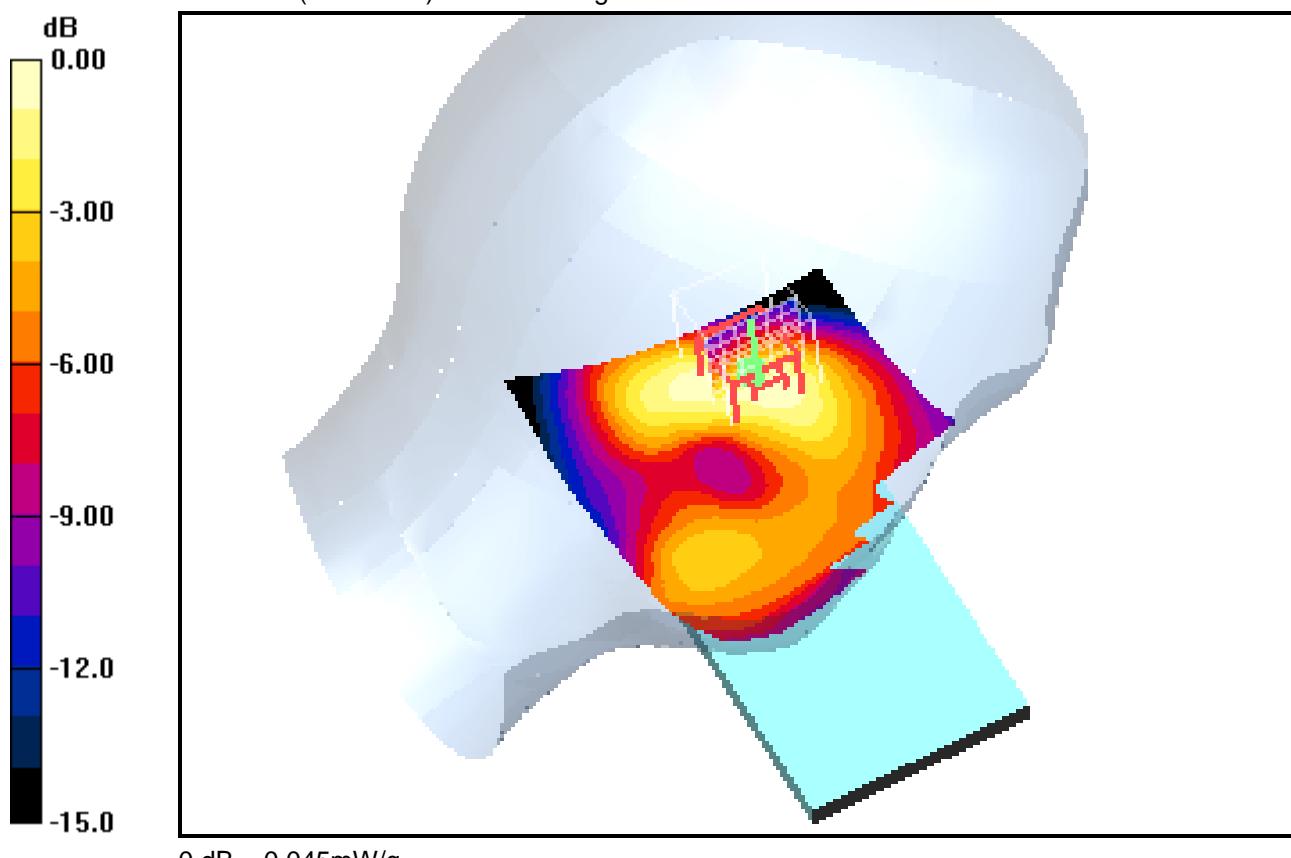
dy=5mm, dz=5mm

Reference Value = 5.96 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.057 W/kg

**SAR(1 g) = 0.041 mW/g; SAR(10 g) = 0.026 mW/g**

Maximum value of SAR (measured) = 0.045 mW/g



0 dB = 0.045mW/g

**Additional information:**

ambient temperature: 23.6°C; liquid temperature: 21.4°C

Date/Time: 12.12.2012 15:58:17 Date/Time: 12.12.2012 16:06:10

**IEEE1528\_OET65-LeftHandSide-GSM1900****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: HSL1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 40$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.040 mW/g

**Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

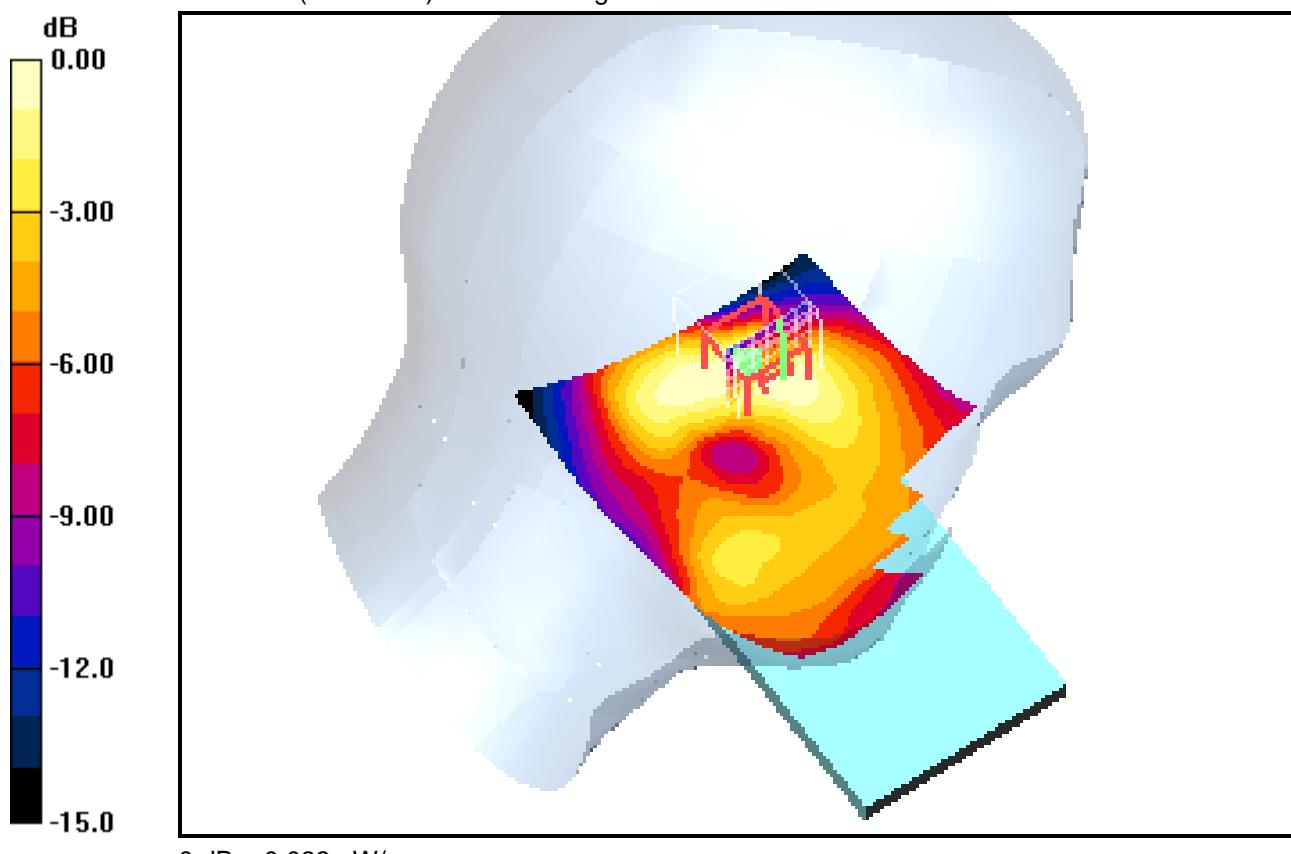
dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.17 V/m; Power Drift = -0.095 dB

Peak SAR (extrapolated) = 0.046 W/kg

**SAR(1 g) = 0.030 mW/g; SAR(10 g) = 0.019 mW/g**

Maximum value of SAR (measured) = 0.033 mW/g



0 dB = 0.033mW/g

**Additional information:**

ambient temperature: 23.6°C; liquid temperature: 21.4°C

Date/Time: 12.12.2012 16:19:10 Date/Time: 12.12.2012 16:29:01

**IEEE1528\_OET65-LeftHandSide-GSM1900****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8

Medium: HSL1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.4 \text{ mho/m}$ ;  $\epsilon_r = 39.9$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - High/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.035 mW/g

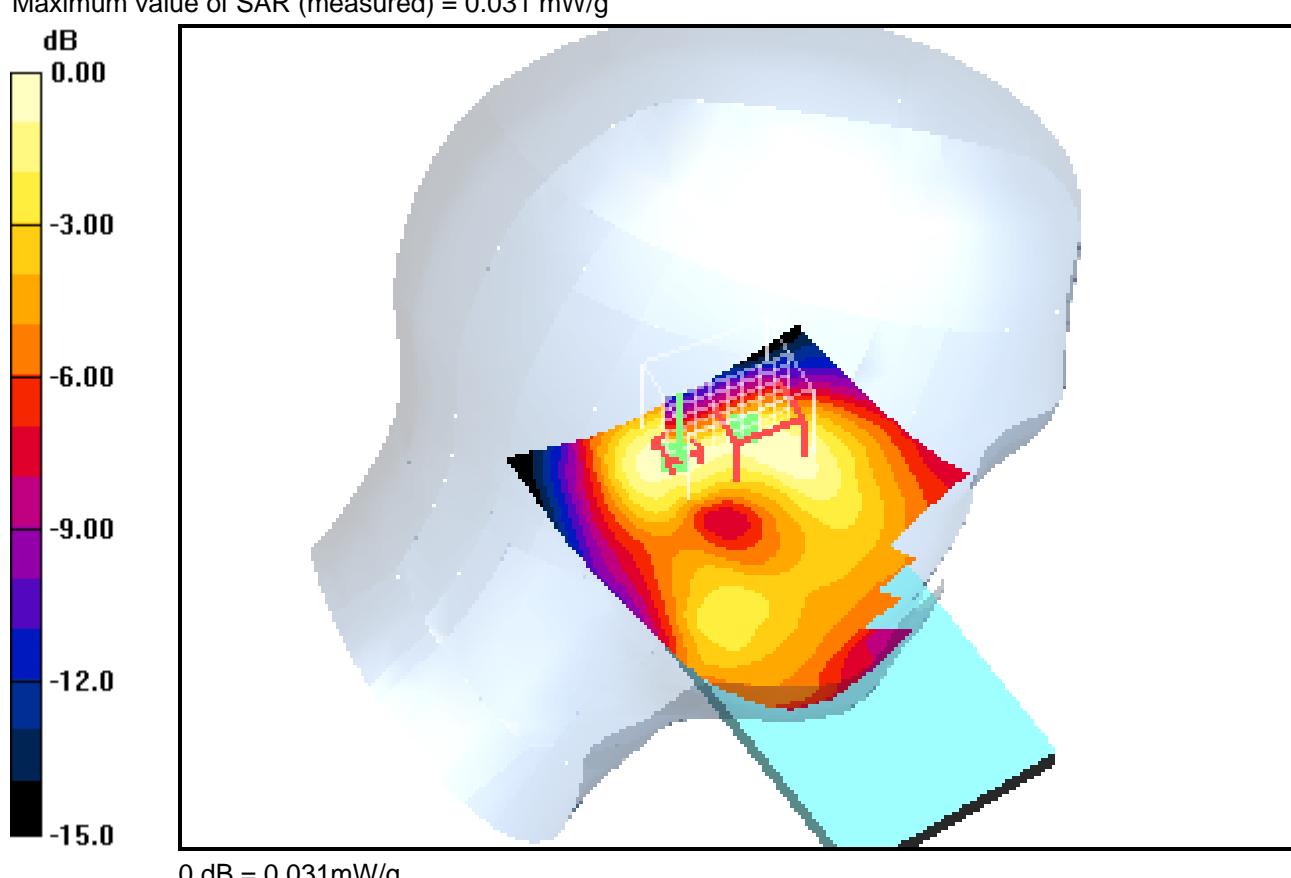
**Tilt position - High/Zoom Scan (7x7x7) (9x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.84 V/m; Power Drift = -0.037 dB

Peak SAR (extrapolated) = 0.047 W/kg

**SAR(1 g) = 0.028 mW/g; SAR(10 g) = 0.017 mW/g**

Maximum value of SAR (measured) = 0.031 mW/g

**Additional information:**

ambient temperature: 23.6°C; liquid temperature: 21.4°C

Date/Time: 12.12.2012 13:12:45 Date/Time: 12.12.2012 13:22:25

**IEEE1528\_OET65-RightHandSide-GSM1900****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8

Medium: HSL1900 Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.34$  mho/m;  $\epsilon_r = 40.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.138 mW/g

**Touch position - Low/Zoom Scan (7x7x7) (7x8x7)/Cube 0:** Measurement grid:

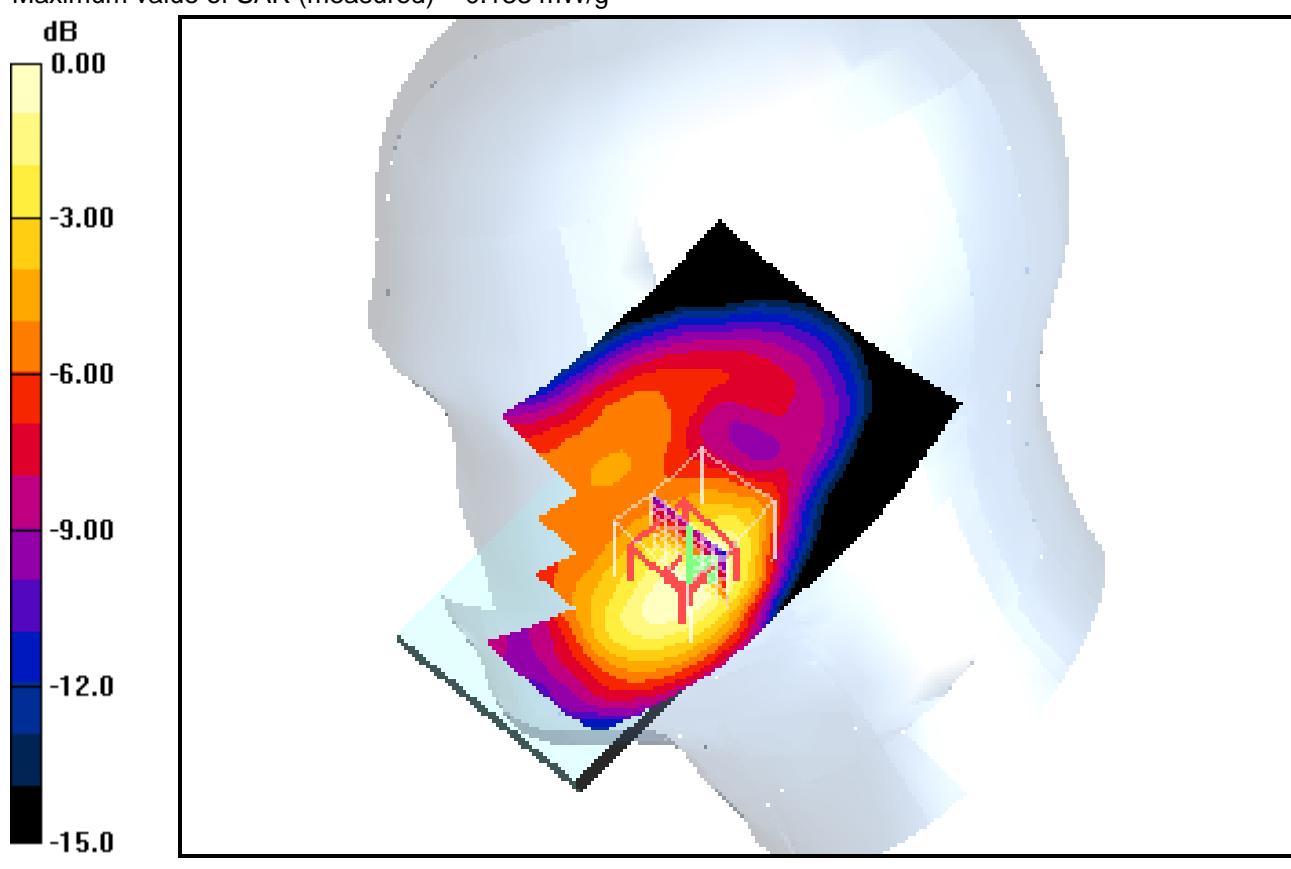
dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.8 V/m; Power Drift = -0.143 dB

Peak SAR (extrapolated) = 0.167 W/kg

**SAR(1 g) = 0.122 mW/g; SAR(10 g) = 0.079 mW/g**

Maximum value of SAR (measured) = 0.133 mW/g



0 dB = 0.133mW/g

**Additional information:**

ambient temperature: 23.6°C; liquid temperature: 21.4°C

Date/Time: 12.12.2012 13:36:36 Date/Time: 12.12.2012 13:45:24

**IEEE1528\_OET65-RightHandSide-GSM1900****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: HSL1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 40$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.130 mW/g

**Touch position - Middle/Zoom Scan (7x7x7) (7x8x7)/Cube 0:** Measurement grid:

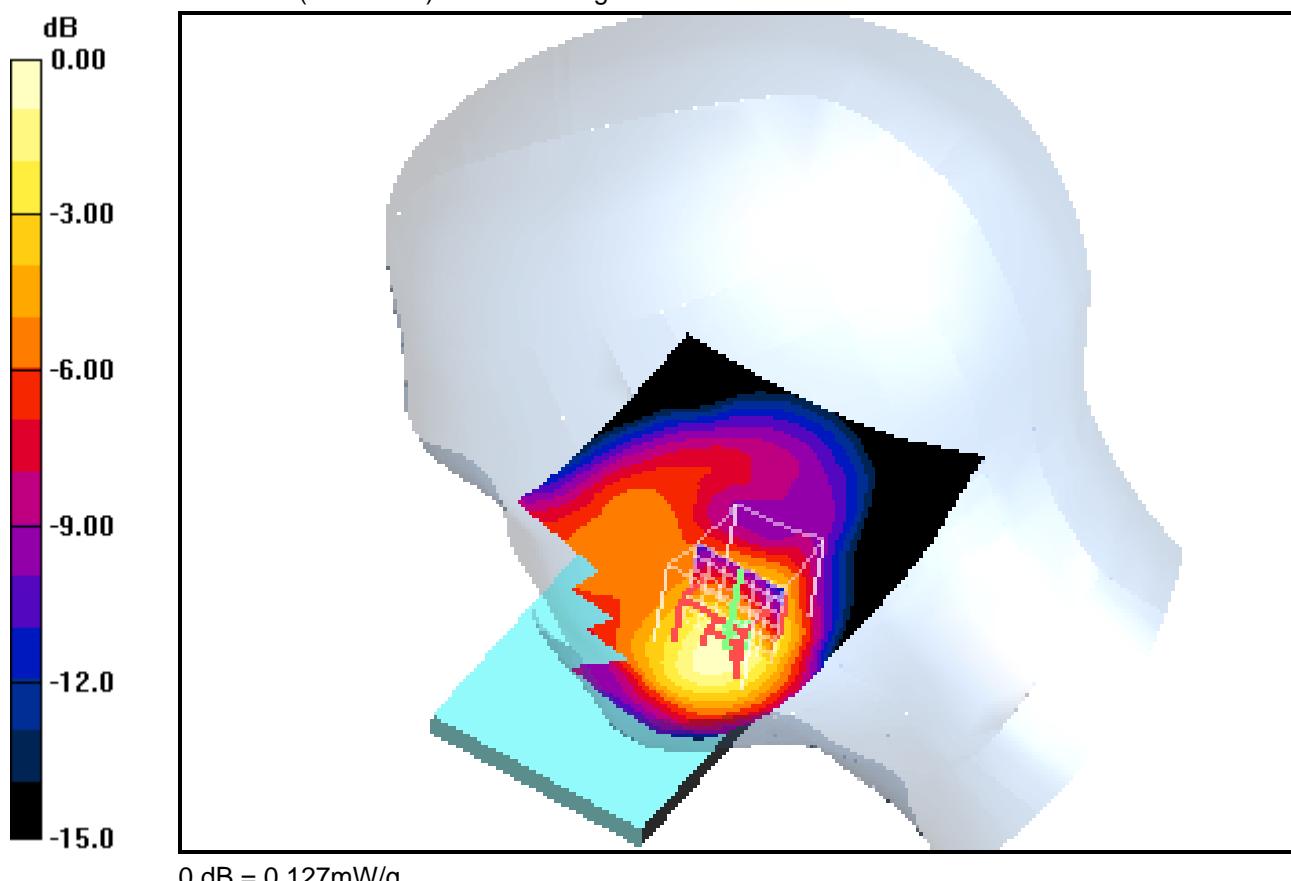
dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.1 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.161 W/kg

**SAR(1 g) = 0.116 mW/g; SAR(10 g) = 0.074 mW/g**

Maximum value of SAR (measured) = 0.127 mW/g

**Additional information:**

ambient temperature: 23.6°C; liquid temperature: 21.4°C

Date/Time: 12.12.2012 13:59:37 Date/Time: 12.12.2012 14:08:54

**IEEE1528\_OET65-RightHandSide-GSM1900****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8

Medium: HSL1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.4 \text{ mho/m}$ ;  $\epsilon_r = 39.9$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - High/Area Scan (71x111x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$ 

Maximum value of SAR (interpolated) = 0.132 mW/g

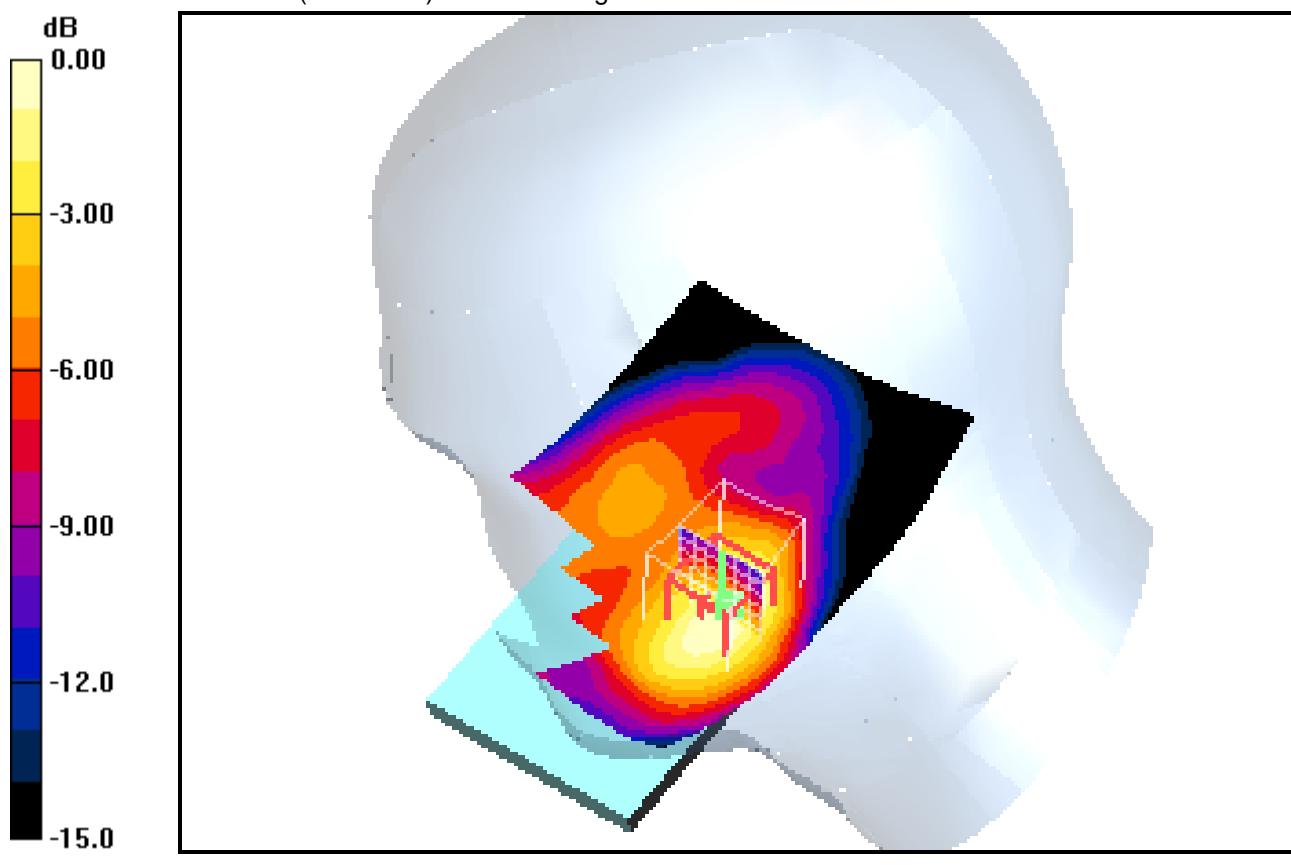
**Touch position - High/Zoom Scan (7x7x7) (7x8x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$ 

Reference Value = 10.1 V/m; Power Drift = -0.042 dB

Peak SAR (extrapolated) = 0.166 W/kg

**SAR(1 g) = 0.117 mW/g; SAR(10 g) = 0.074 mW/g**

Maximum value of SAR (measured) = 0.129 mW/g

**Additional information:**

ambient temperature: 23.6°C; liquid temperature: 21.4°C

Date/Time: 12.12.2012 15:06:21 Date/Time: 12.12.2012 15:14:10

**IEEE1528\_OET65-RightHandSide-GSM1900****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8

Medium: HSL1900 Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.34$  mho/m;  $\epsilon_r = 40.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.042 mW/g

**Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm,

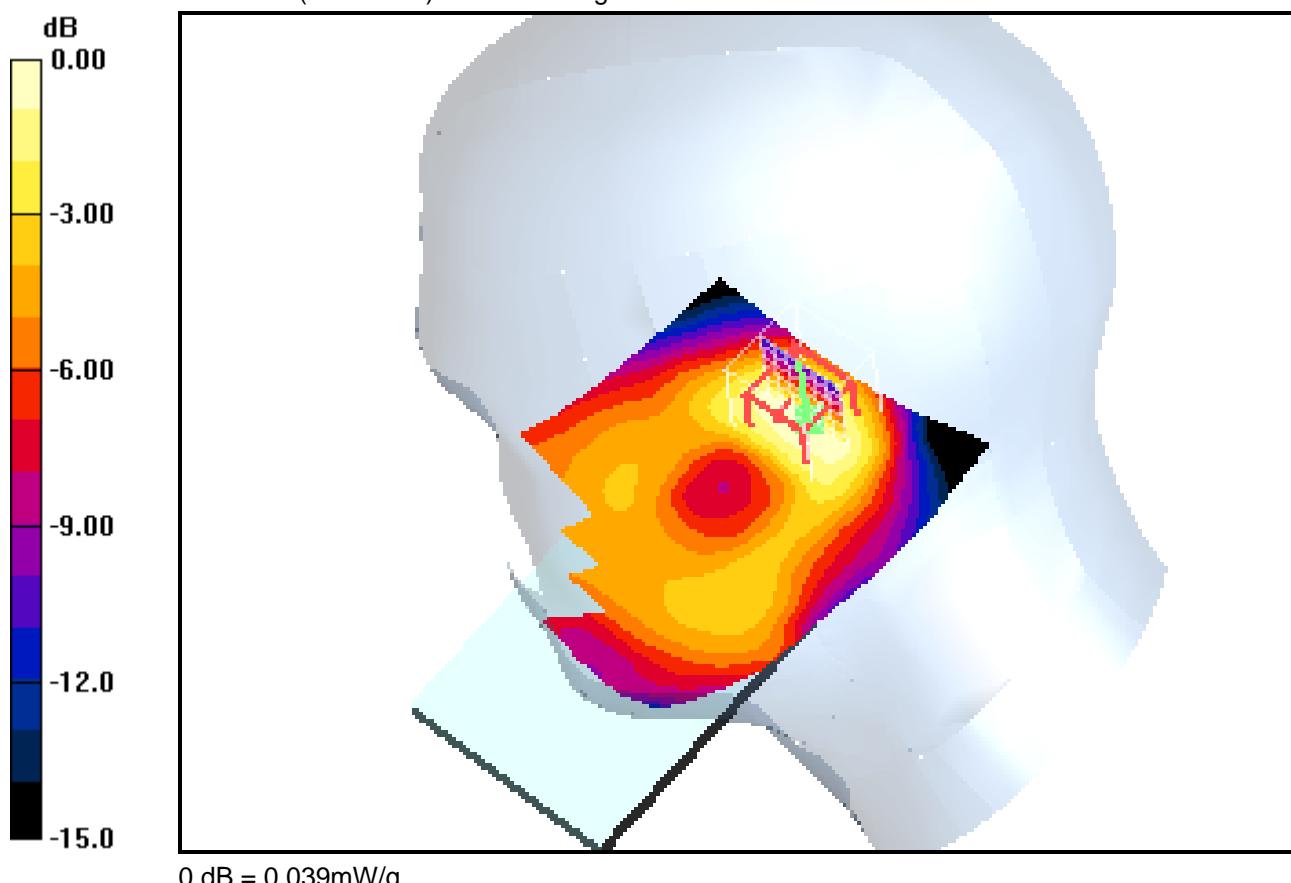
dy=5mm, dz=5mm

Reference Value = 5.38 V/m; Power Drift = -0.095 dB

Peak SAR (extrapolated) = 0.051 W/kg

**SAR(1 g) = 0.036 mW/g; SAR(10 g) = 0.022 mW/g**

Maximum value of SAR (measured) = 0.039 mW/g

**Additional information:**

ambient temperature: 23.6°C; liquid temperature: 21.4°C

Date/Time: 12.12.2012 14:46:50 Date/Time: 12.12.2012 14:54:40

**IEEE1528\_OET65-RightHandSide-GSM1900****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: HSL1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 40$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.032 mW/g

**Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

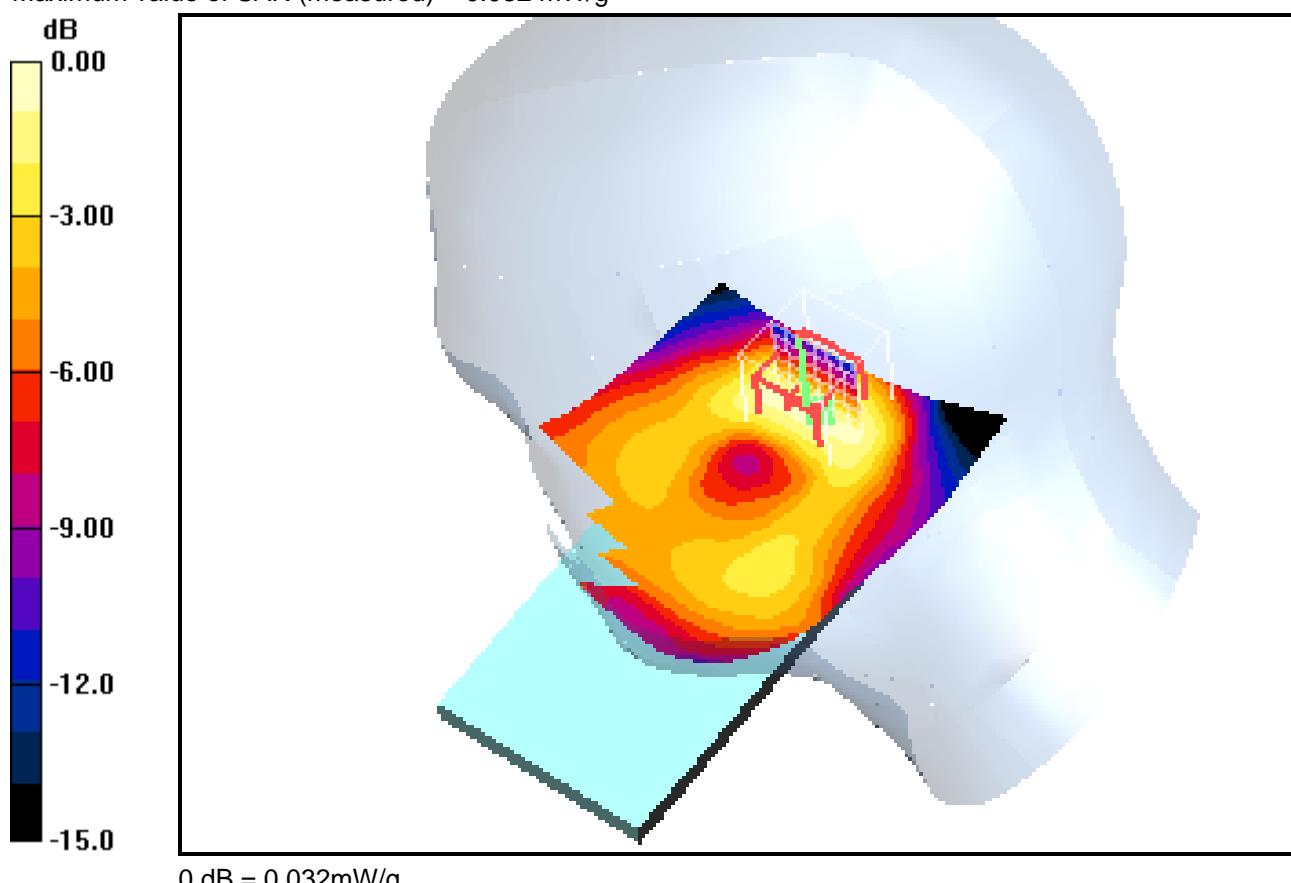
dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.87 V/m; Power Drift = 0.051 dB

Peak SAR (extrapolated) = 0.044 W/kg

**SAR(1 g) = 0.029 mW/g; SAR(10 g) = 0.018 mW/g**

Maximum value of SAR (measured) = 0.032 mW/g

**Additional information:**

ambient temperature: 23.6°C; liquid temperature: 21.4°C

Date/Time: 12.12.2012 14:25:21 Date/Time: 12.12.2012 14:33:54

**IEEE1528\_OET65-RightHandSide-GSM1900****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8

Medium: HSL1900 Medium parameters used:  $f = 1909.8$  MHz;  $\sigma = 1.4$  mho/m;  $\epsilon_r = 39.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - High/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.037 mW/g

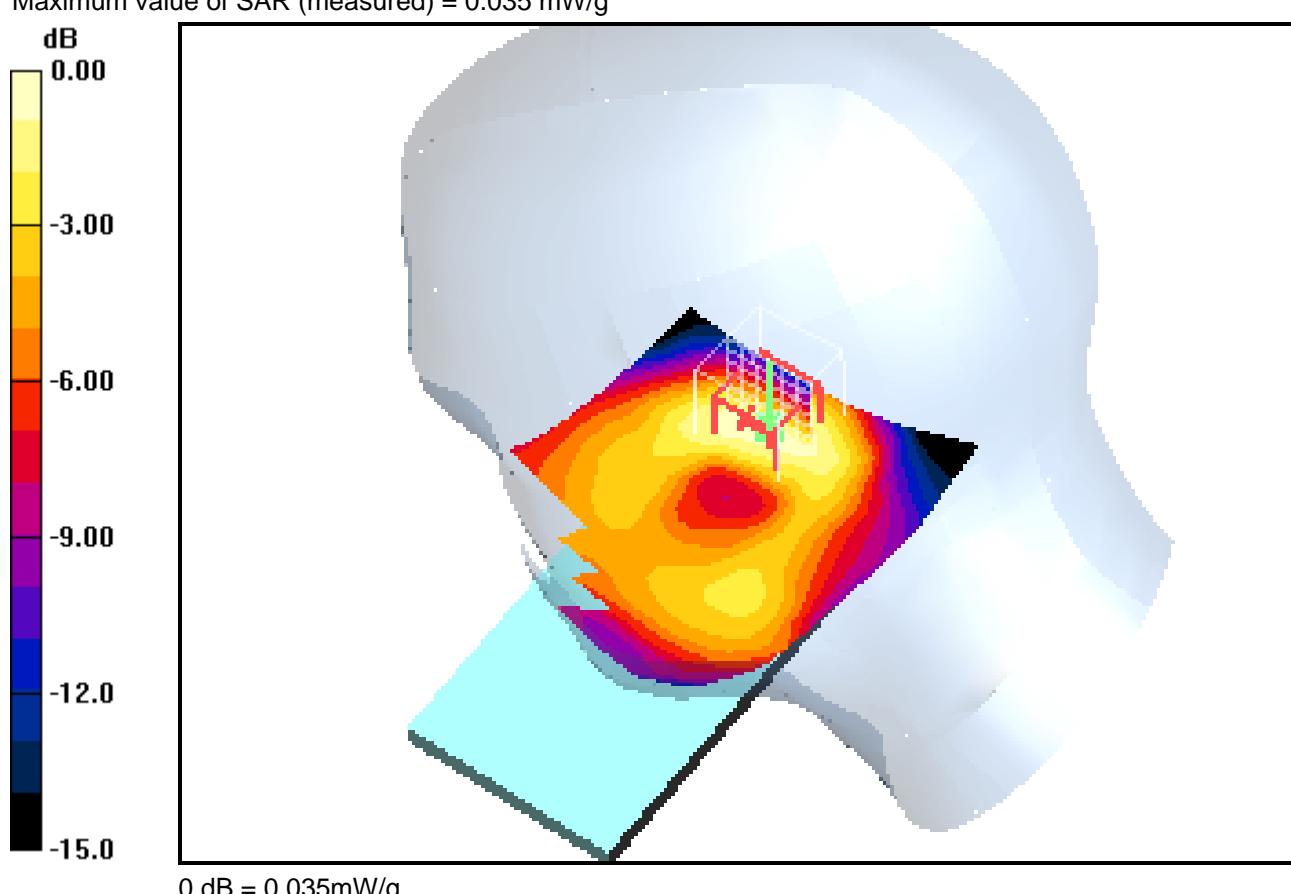
**Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.05 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.047 W/kg

**SAR(1 g) = 0.032 mW/g; SAR(10 g) = 0.019 mW/g**

Maximum value of SAR (measured) = 0.035 mW/g

**Additional information:**

ambient temperature: 23.6°C; liquid temperature: 21.4°C

Date/Time: 06.12.2012 15:52:44 Date/Time: 06.12.2012 16:01:40

**OET65-Body-GSM1900 GPRS 4TS****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: PCS 1900 GPRS 4TS; Frequency: 1850.2 MHz; Duty Cycle: 1:2

Medium: M1900 Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.557 mW/g

**Front position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

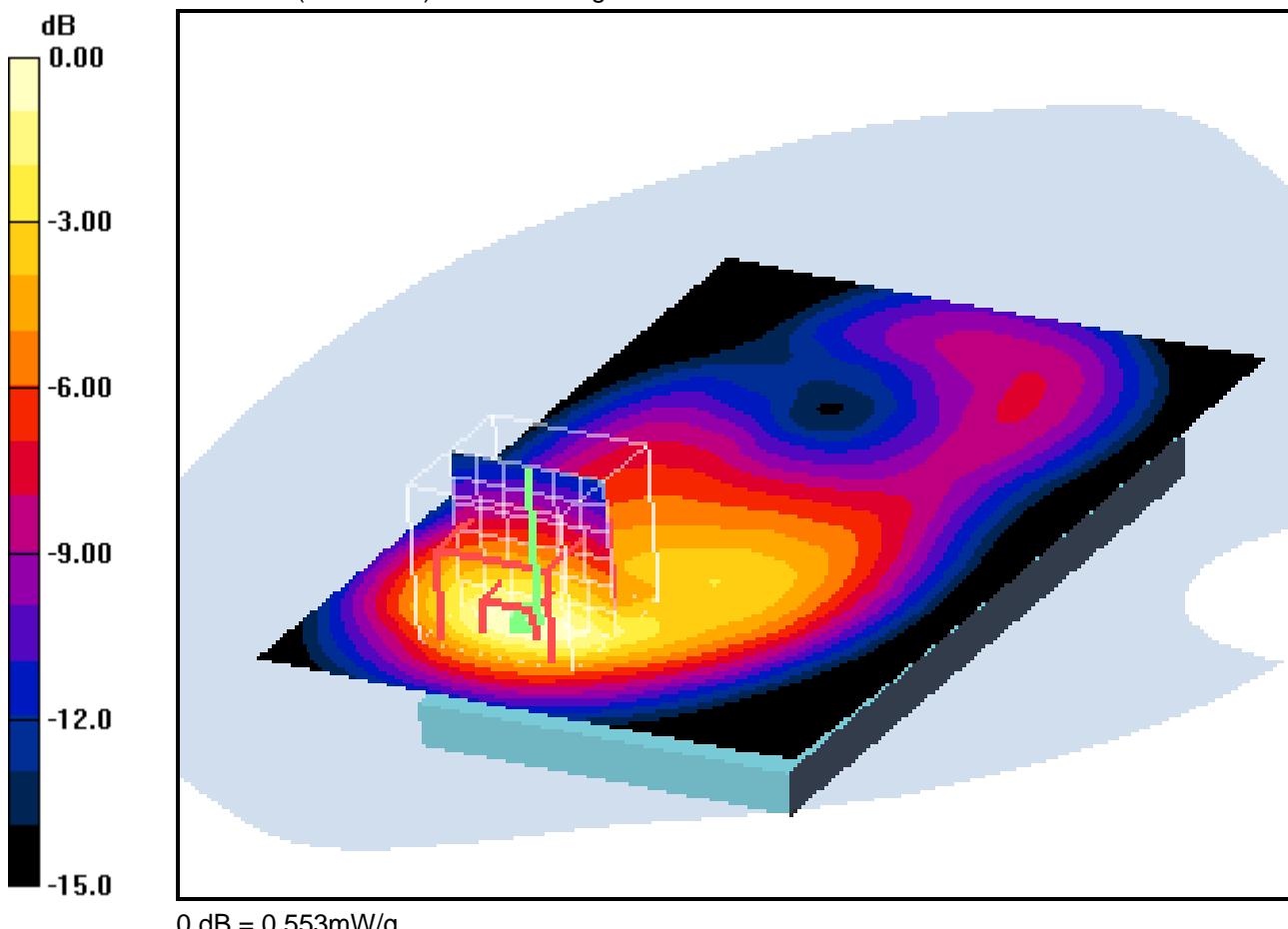
dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.6 V/m; Power Drift = -0.055 dB

Peak SAR (extrapolated) = 0.768 W/kg

**SAR(1 g) = 0.496 mW/g; SAR(10 g) = 0.276 mW/g**

Maximum value of SAR (measured) = 0.553 mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 23.4°C; liquid temperature: 22.1°C

Date/Time: 06.12.2012 15:25:04 Date/Time: 06.12.2012 15:40:19

**OET65-Body-GSM1900 GPRS 4TS****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: PCS 1900 GPRS 4TS; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium: M1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

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

**Front position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

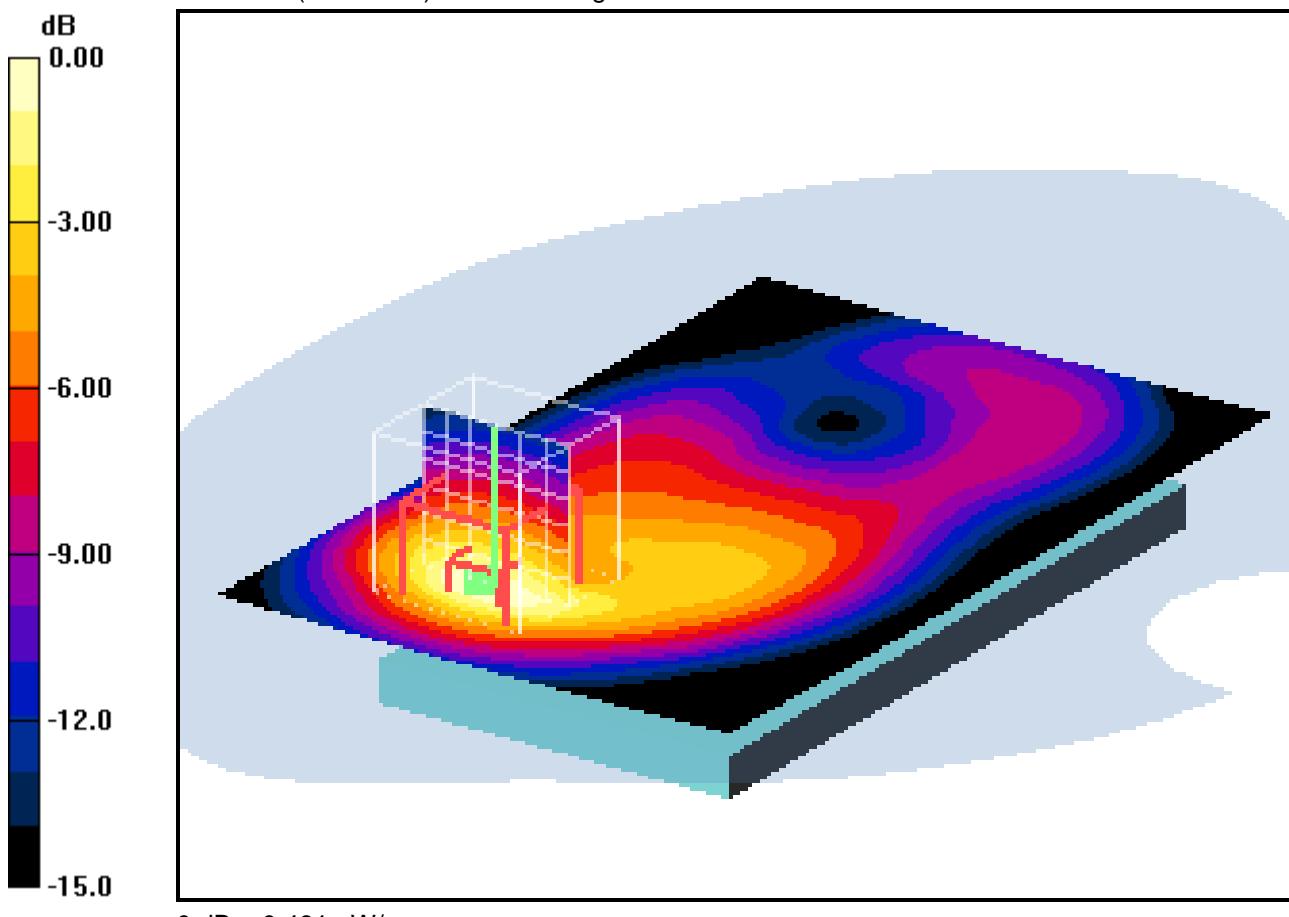
dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.2 V/m; Power Drift = -0.073 dB

Peak SAR (extrapolated) = 0.682 W/kg

**SAR(1 g) = 0.436 mW/g; SAR(10 g) = 0.242 mW/g**

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

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.4°C; liquid temperature: 22.1°C

Date/Time: 06.12.2012 16:13:55 Date/Time: 06.12.2012 16:23:51

**OET65-Body-GSM1900 GPRS 4TS****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: PCS 1900 GPRS 4TS; Frequency: 1909.8 MHz; Duty Cycle: 1:2

Medium: M1900 Medium parameters used:  $f = 1909.8$  MHz;  $\sigma = 1.53$  mho/m;  $\epsilon_r = 53.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - High/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

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

**Front position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

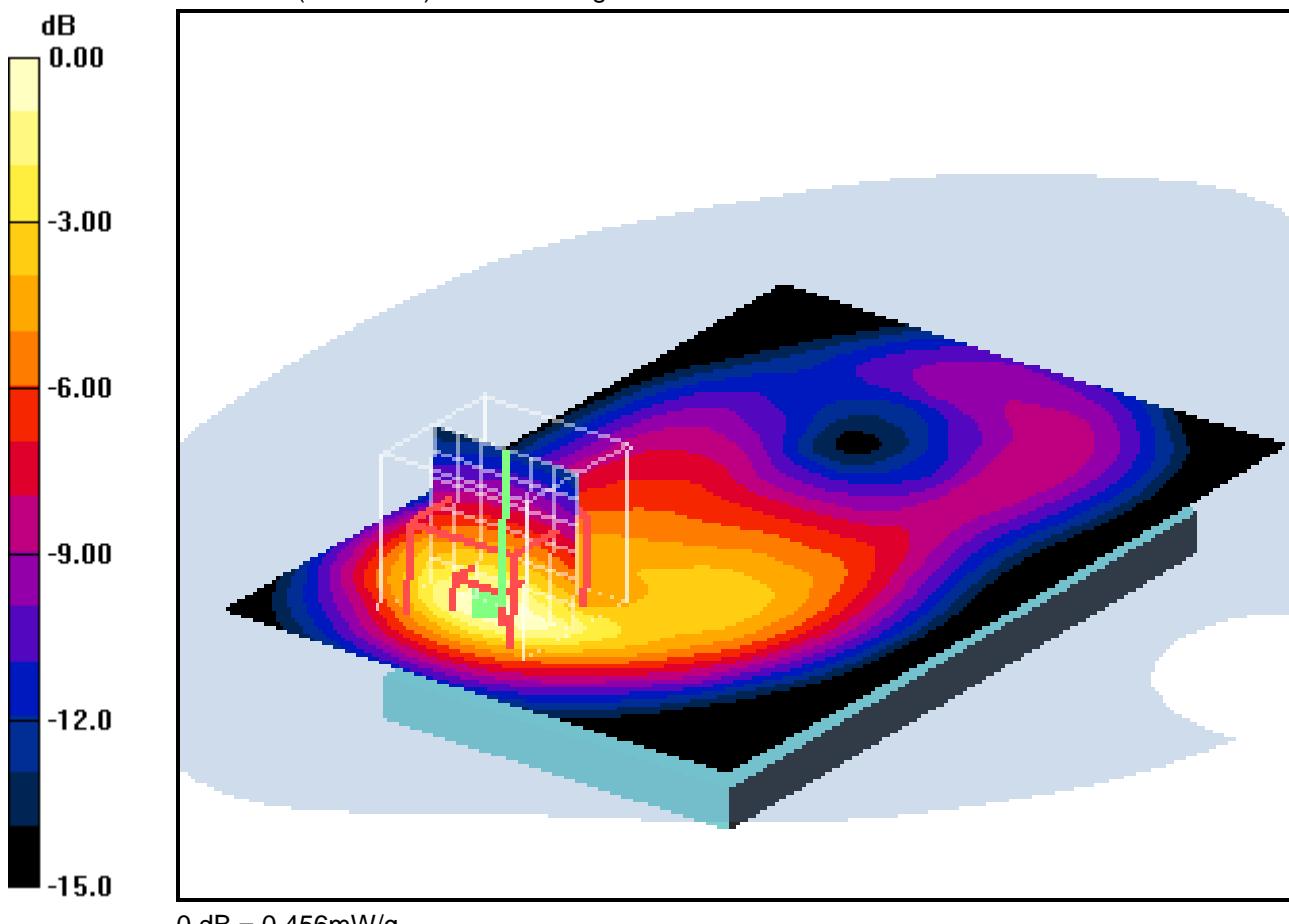
dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.1 V/m; Power Drift = -0.021 dB

Peak SAR (extrapolated) = 0.652 W/kg

**SAR(1 g) = 0.404 mW/g; SAR(10 g) = 0.221 mW/g**

Maximum value of SAR (measured) = 0.456 mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 23.4°C; liquid temperature: 22.1°C

Date/Time: 06.12.2012 17:28:07 Date/Time: 06.12.2012 17:38:44

**OET65-Body-GSM1900 GPRS 4TS****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: PCS 1900 GPRS 4TS; Frequency: 1850.2 MHz; Duty Cycle: 1:2

Medium: M1900 Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.777 mW/g

**Rear position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

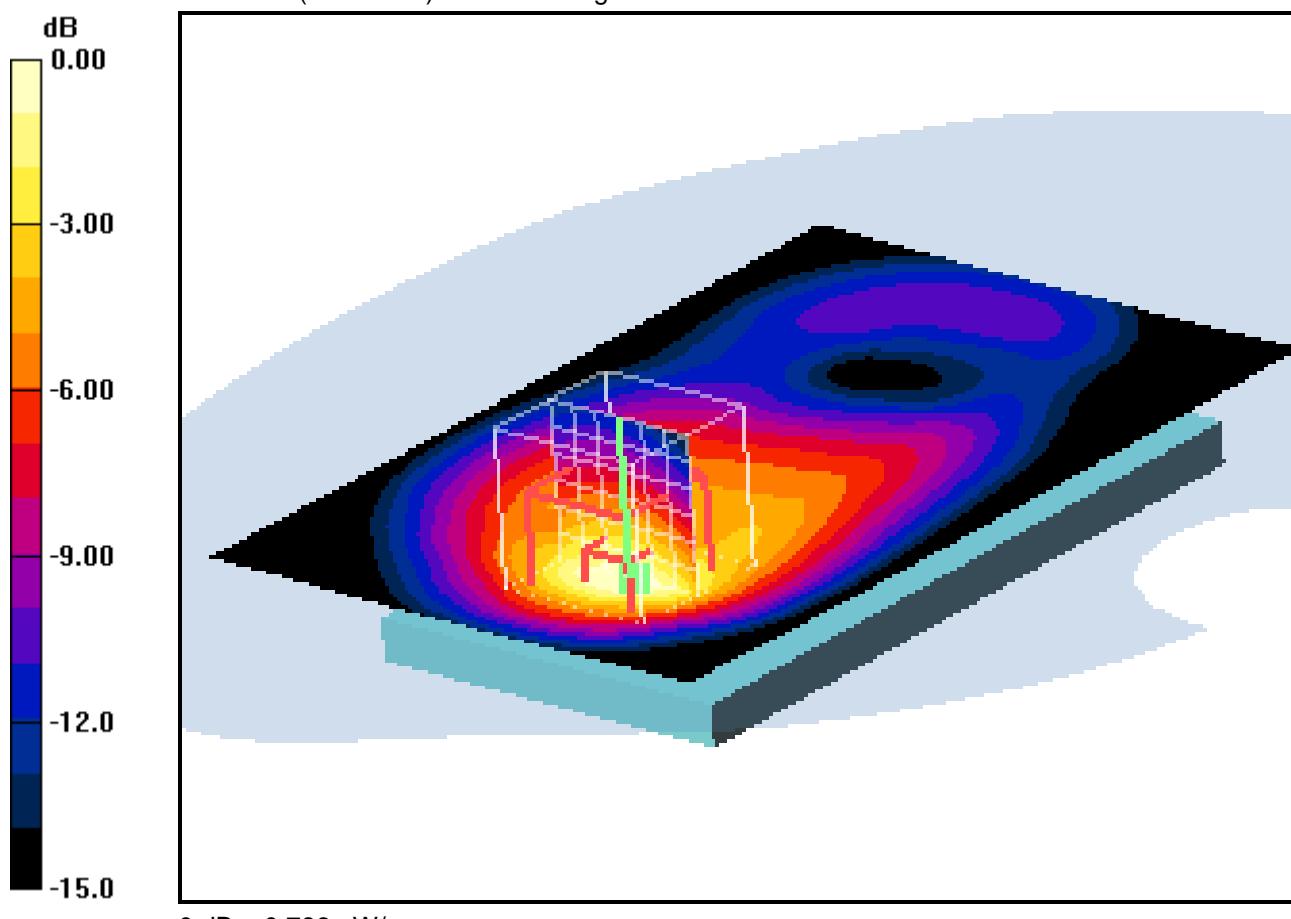
dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.0 V/m; Power Drift = -0.084 dB

Peak SAR (extrapolated) = 1.07 W/kg

**SAR(1 g) = 0.687 mW/g; SAR(10 g) = 0.373 mW/g**

Maximum value of SAR (measured) = 0.786 mW/g



0 dB = 0.786mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 23.4°C; liquid temperature: 22.1°C

Date/Time: 06.12.2012 17:04:58 Date/Time: 06.12.2012 17:15:30

**OET65-Body-GSM1900 GPRS 4TS****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: PCS 1900 GPRS 4TS; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium: M1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.723 mW/g

**Rear position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

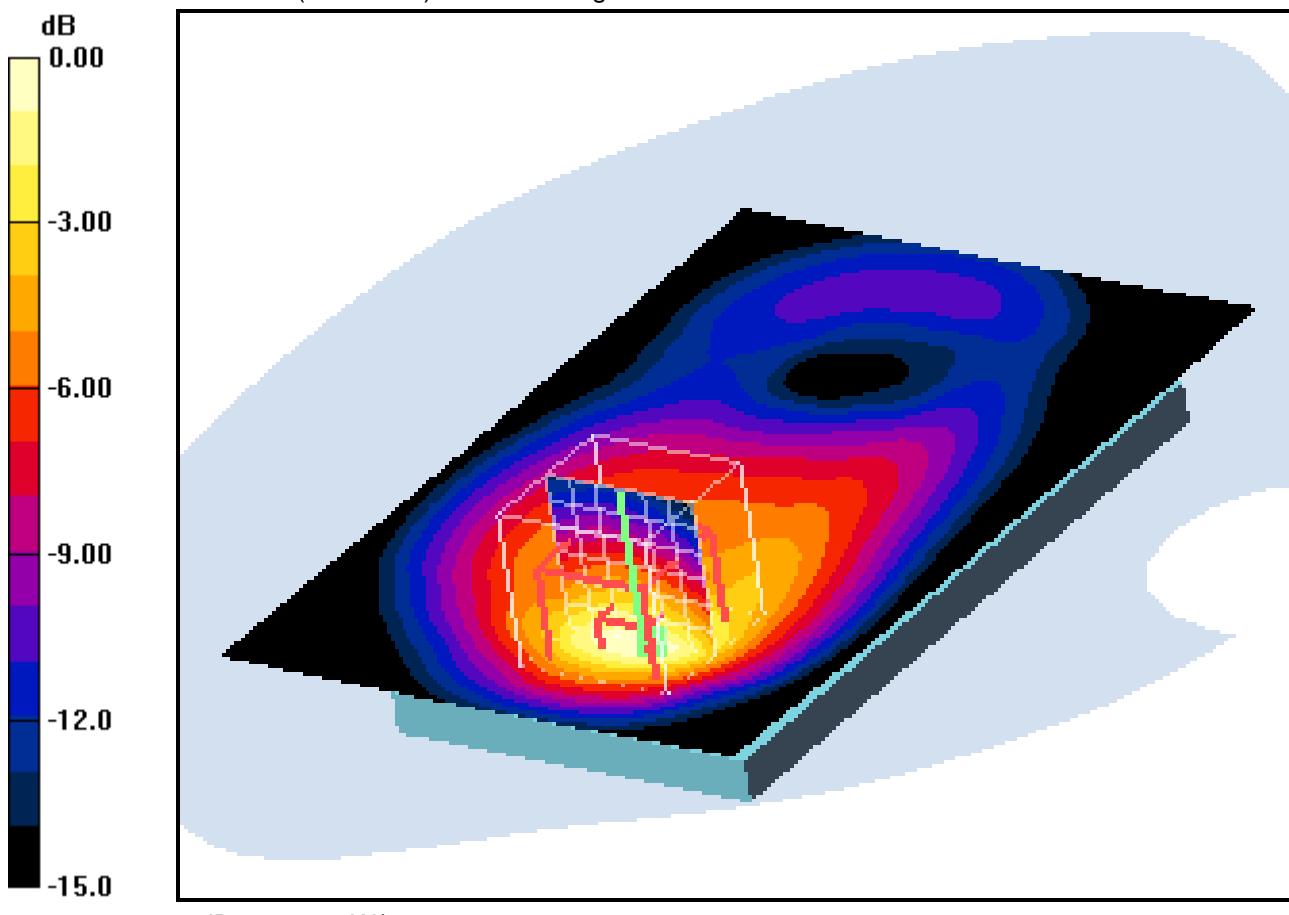
dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.9 V/m; Power Drift = -0.055 dB

Peak SAR (extrapolated) = 1.02 W/kg

**SAR(1 g) = 0.641 mW/g; SAR(10 g) = 0.344 mW/g**

Maximum value of SAR (measured) = 0.739 mW/g



0 dB = 0.739mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 23.4°C; liquid temperature: 22.1°C

Date/Time: 06.12.2012 16:36:40 Date/Time: 06.12.2012 16:52:50

**OET65-Body-GSM1900 GPRS 4TS****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: PCS 1900 GPRS 4TS; Frequency: 1909.8 MHz; Duty Cycle: 1:2

Medium: M1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.53 \text{ mho/m}$ ;  $\epsilon_r = 53.1$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - High/Area Scan (71x111x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$ 

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

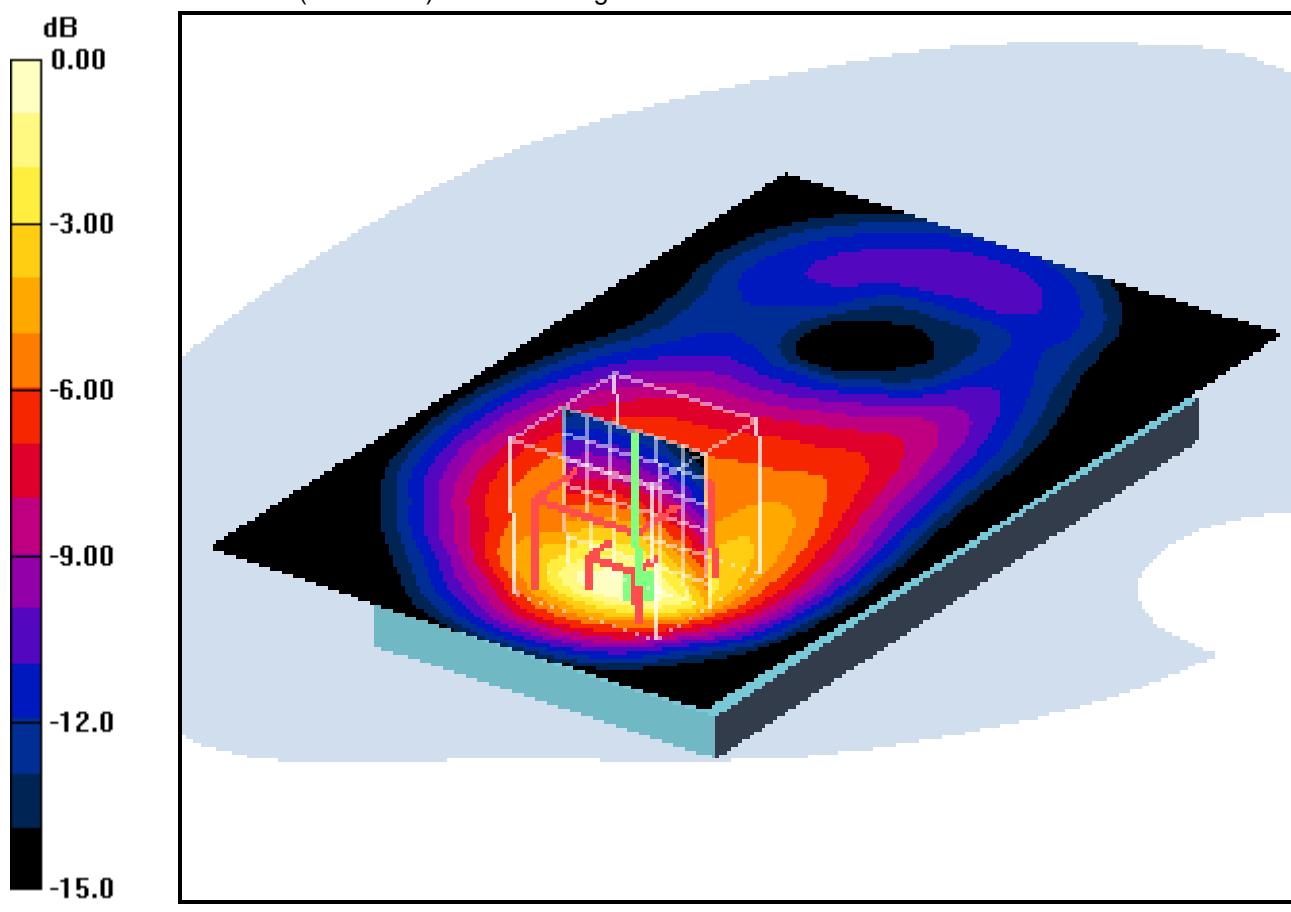
**Rear position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$ 

Reference Value = 22.3 V/m; Power Drift = -0.094 dB

Peak SAR (extrapolated) = 1.02 W/kg

**SAR(1 g) = 0.626 mW/g; SAR(10 g) = 0.331 mW/g**

Maximum value of SAR (measured) = 0.713 mW/g



0 dB = 0.713mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 23.4°C; liquid temperature: 22.1°C

Date/Time: 06.12.2012 14:41:25 Date/Time: 06.12.2012 14:49:44

**OET65-Body-GSM1900 GPRS 4TS****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: PCS 1900 GPRS 4TS; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium: M1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Edge left position - Middle/Area Scan (61x111x1):** Measurement grid: dx=15mm, dy=15mm

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

**Edge left position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement

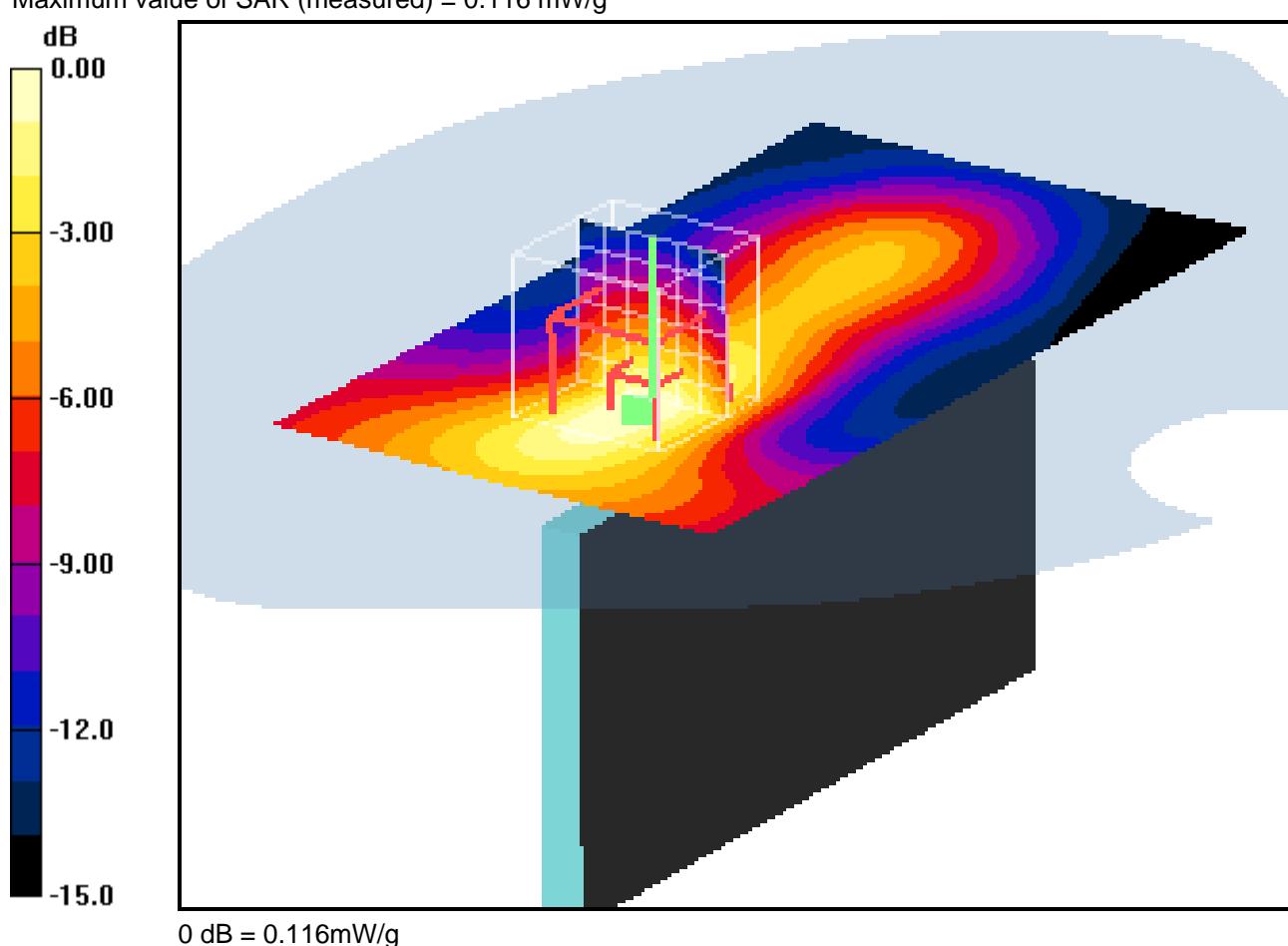
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.49 V/m; Power Drift = -0.081 dB

Peak SAR (extrapolated) = 0.161 W/kg

**SAR(1 g) = 0.105 mW/g; SAR(10 g) = 0.062 mW/g**

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

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 23.4°C; liquid temperature: 22.1°C

Date/Time: 06.12.2012 15:02:31 Date/Time: 06.12.2012 15:10:52

**OET65-Body-GSM1900 GPRS 4TS****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: PCS 1900 GPRS 4TS; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium: M1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Edge right position - Middle/Area Scan (61x111x1):** Measurement grid: dx=15mm,

dy=15mm

Maximum value of SAR (interpolated) = 0.067 mW/g

**Edge right position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement

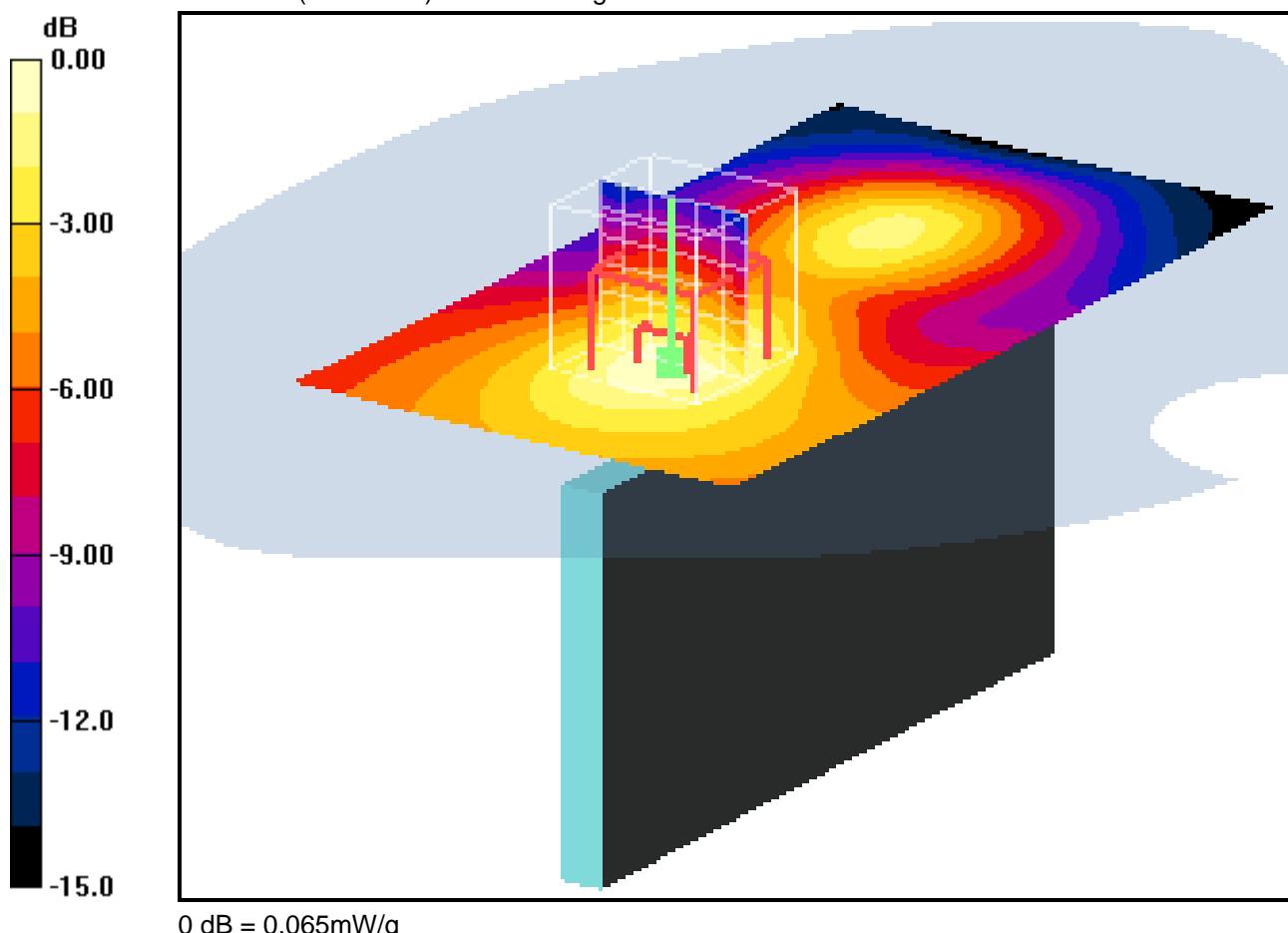
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.17 V/m; Power Drift = -0.139 dB

Peak SAR (extrapolated) = 0.087 W/kg

**SAR(1 g) = 0.060 mW/g; SAR(10 g) = 0.038 mW/g**

Maximum value of SAR (measured) = 0.065 mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 23.4°C; liquid temperature: 22.1°C

Date/Time: 06.12.2012 14:20:09 Date/Time: 06.12.2012 14:25:28

## OET65-Body-GSM1900 GPRS 4TS

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: PCS 1900 GPRS 4TS; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium: M1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Edge bottom position - Middle/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm

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

**Edge bottom position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:**

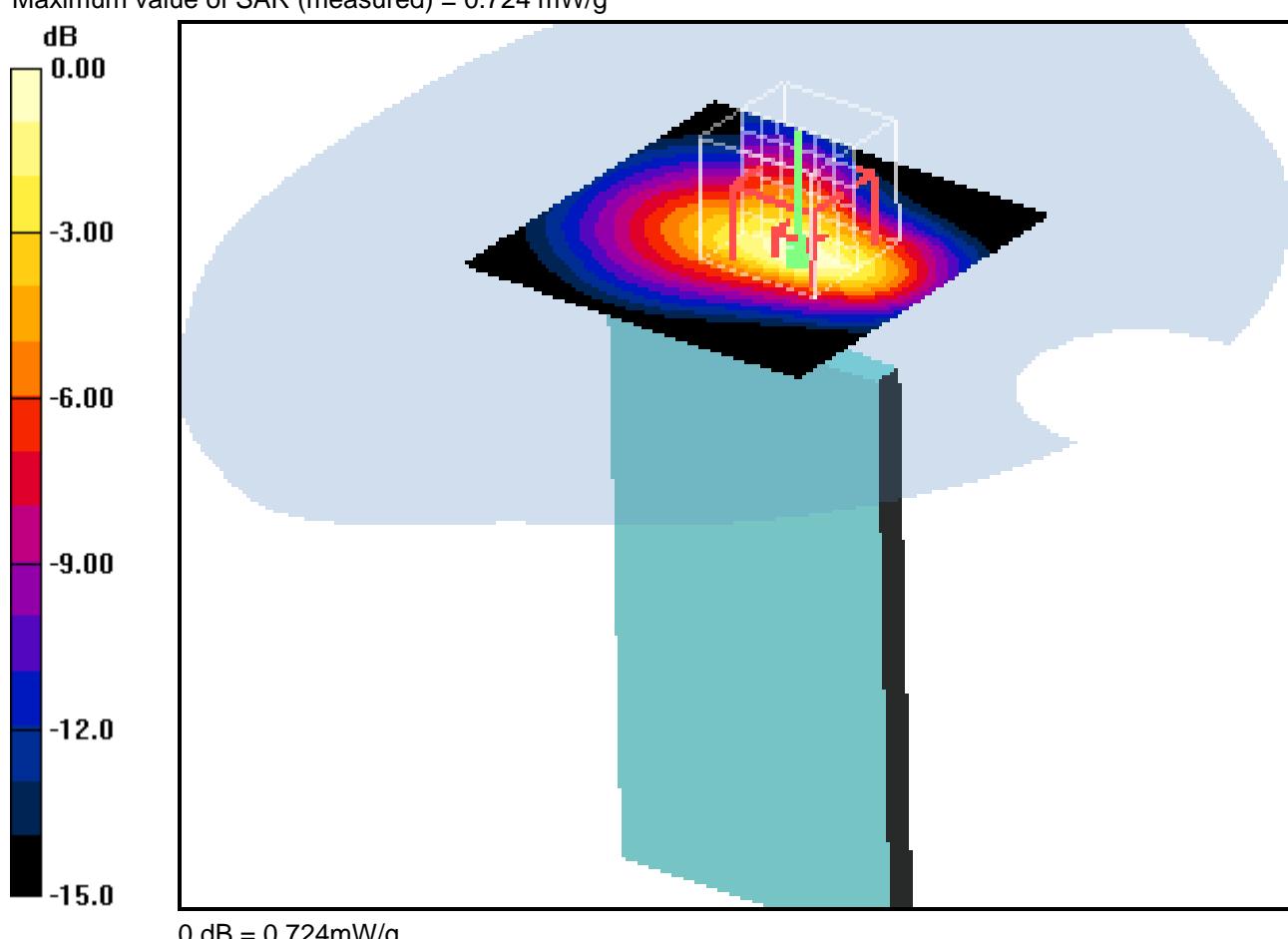
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.8 V/m; Power Drift = -0.083 dB

Peak SAR (extrapolated) = 1.03 W/kg

**SAR(1 g) = 0.642 mW/g; SAR(10 g) = 0.350 mW/g**

Maximum value of SAR (measured) = 0.724 mW/g



### Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.4°C; liquid temperature: 22.1°C

Date/Time: 06.12.2012 17:55:46 Date/Time: 06.12.2012 18:06:32

## OET65-Body-GSM1900 GPRS 4TS

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: PCS 1900 GPRS 4TS; Frequency: 1850.2 MHz; Duty Cycle: 1:2

Medium: M1900 Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - Low 15mm/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.403 mW/g

**Rear position - Low 15mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement

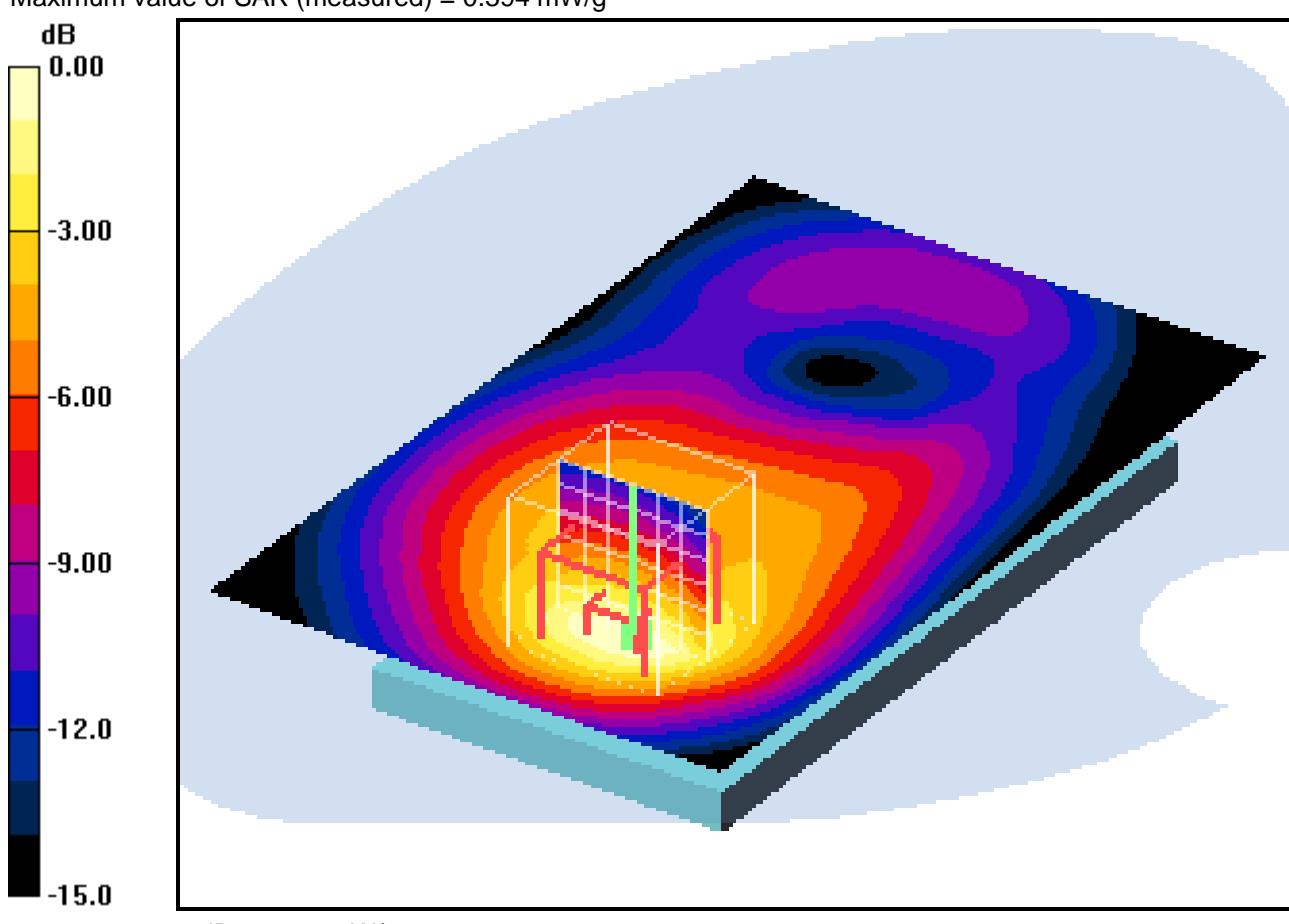
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.4 V/m; Power Drift = -0.106 dB

Peak SAR (extrapolated) = 0.510 W/kg

**SAR(1 g) = 0.354 mW/g; SAR(10 g) = 0.209 mW/g**

Maximum value of SAR (measured) = 0.394 mW/g



### Additional information:

position or distance of DUT to SAM: 15mm

ambient temperature: 23.4°C; liquid temperature: 22.1°C

Date/Time: 06.12.2012 18:23:17 Date/Time: 06.12.2012 18:32:49

## OET65-Body-GSM1900 GPRS 1TS

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: GSM 1900 GPRS 1TS; Frequency: 1850.2 MHz; Duty Cycle: 1:8

Medium: M1900 Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - Low 15mm/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.272 mW/g

**Rear position - Low 15mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement

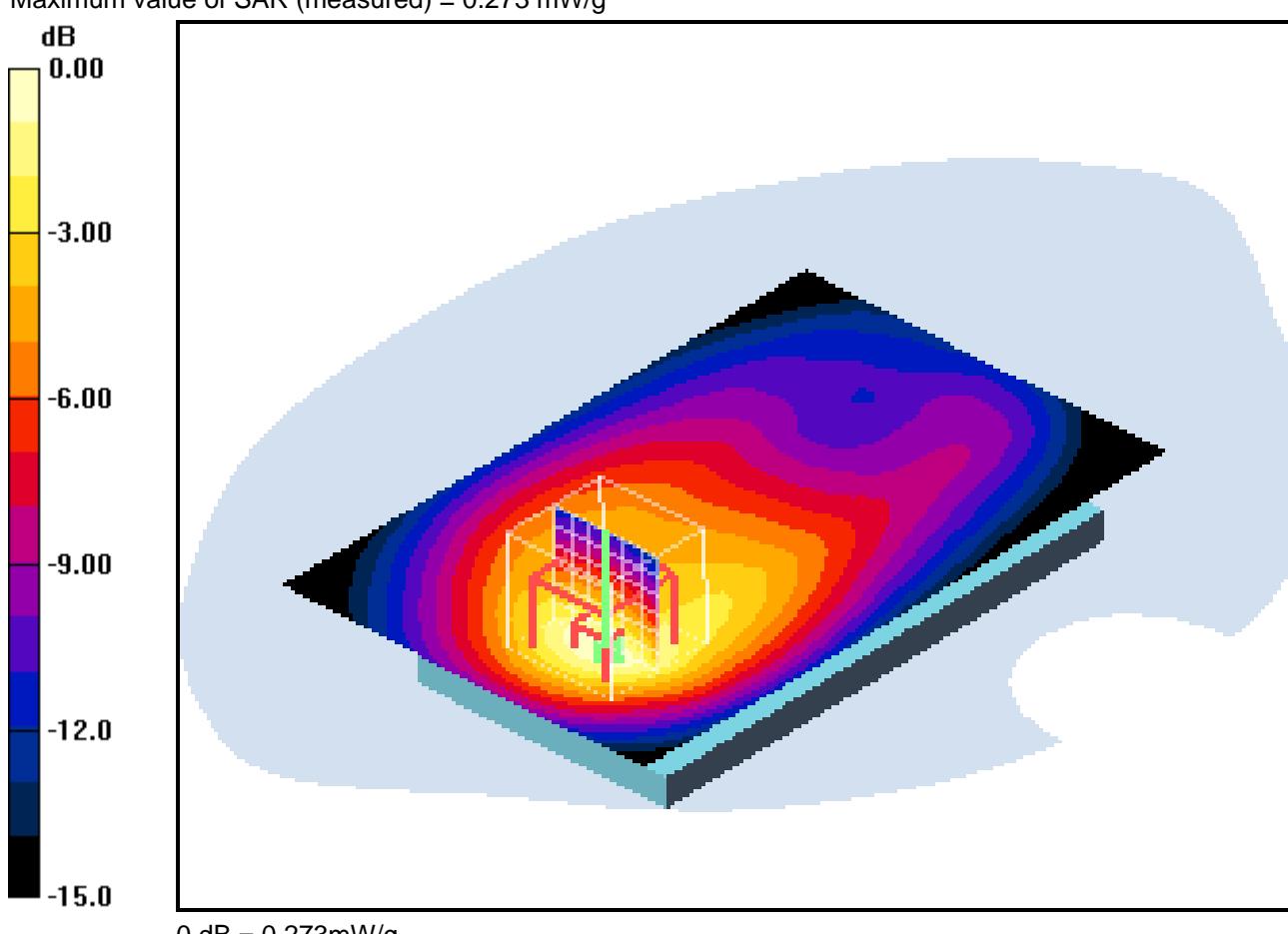
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.3 V/m; Power Drift = -0.039 dB

Peak SAR (extrapolated) = 0.359 W/kg

**SAR(1 g) = 0.245 mW/g; SAR(10 g) = 0.146 mW/g**

Maximum value of SAR (measured) = 0.273 mW/g



### Additional information:

position or distance of DUT to SAM: 15mm

ambient temperature: 23.4°C; liquid temperature: 22.1°C

## Annex B.3: WCDMA FDD V 850MHz

Date/Time: 06.12.2012 09:07:41

### IEEE1528-WCDMA FDDV

DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 826.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used (interpolated):  $f = 826.4 \text{ MHz}$ ;  $\sigma = 0.894 \text{ mho/m}$ ;  $\epsilon_r = 42.682$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

### Left-Hand-Side HSL/Touch Position - Low/Area Scan (71x111x1): Interpolated

grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.434 W/kg

### Left-Hand-Side HSL/Touch Position - Low/Zoom Scan (7x7x7)/Cube 0:

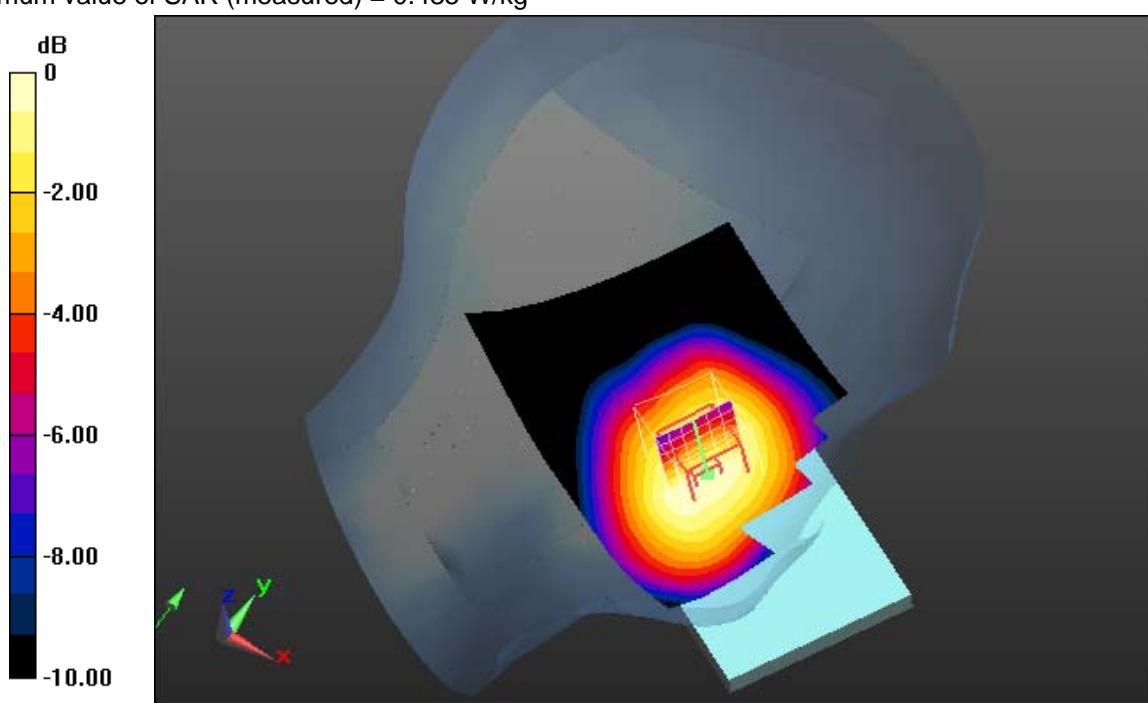
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.584 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.509 mW/g

**SAR(1 g) = 0.412 mW/g; SAR(10 g) = 0.314 mW/g**

Maximum value of SAR (measured) = 0.435 W/kg



#### Additional information:

ambient temperature: 21.7°C; liquid temperature: 21.1°C

Date/Time: 06.12.2012 09:28:30

## IEEE1528-WCDMA FDDV

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 836.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used:  $f = 836.4 \text{ MHz}$ ;  $\sigma = 0.91 \text{ mho/m}$ ;  $\epsilon_r = 42.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X:  $a=3.22$ ,  $b=66.3$ ,  $c=18.5$ , calibrated PAR=2.9 dB / Y:  $a=3.10$ ,  $b=65.6$ ,  $c=18.0$ , calibrated PAR=2.9 dB / Z:  $a=3.31$ ,  $b=66.5$ ,  $c=18.4$ , calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 2.7, 32.7$
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

### Left-Hand-Side HSL/Touch Position - Mid/Area Scan (71x111x1): Interpolated

grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.373 W/kg

### Left-Hand-Side HSL/Touch Position - Mid/Zoom Scan (7x7x7)/Cube 0:

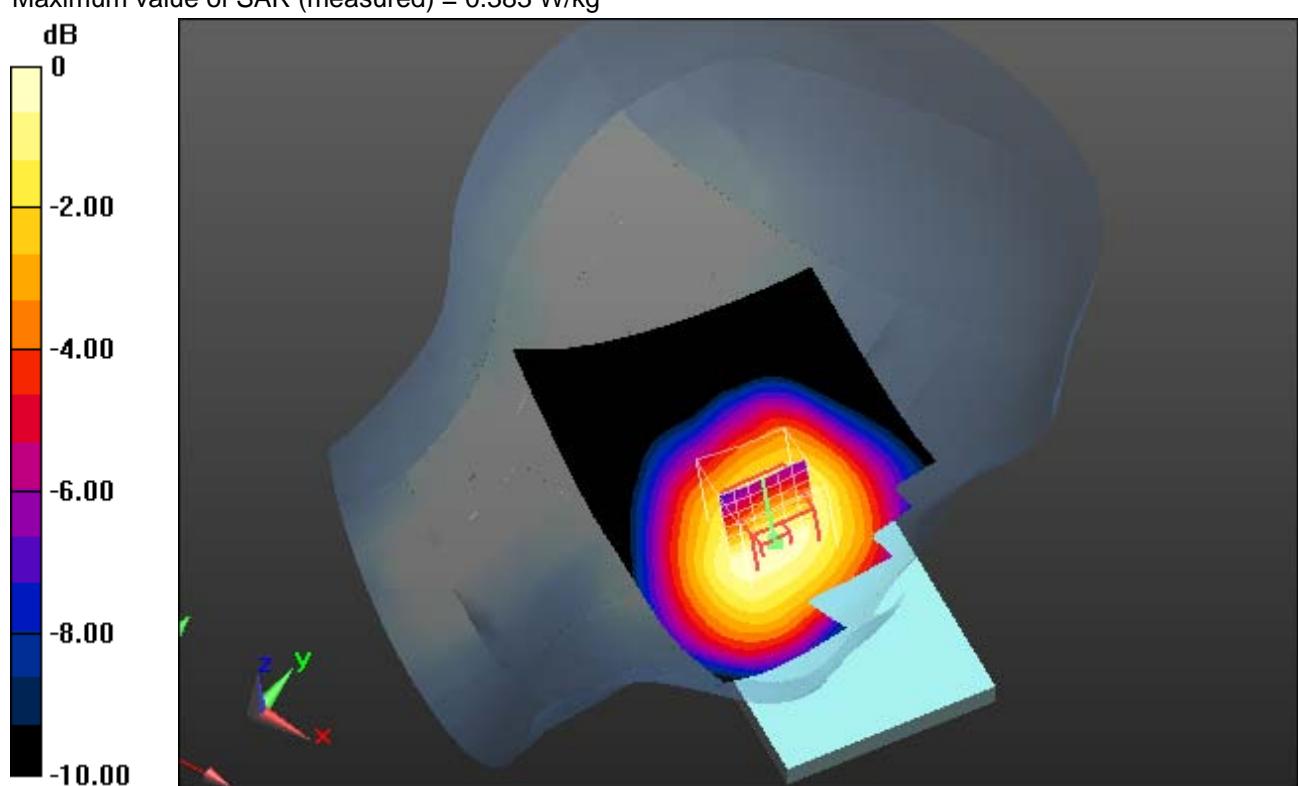
Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 20.770 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.454 mW/g

SAR(1 g) = 0.359 mW/g; SAR(10 g) = 0.273 mW/g

Maximum value of SAR (measured) = 0.383 W/kg



0 dB = 0.383 W/kg = -8.34 dB W/kg

#### Additional information:

ambient temperature: 21.7°C; liquid temperature: 21.1°C

Date/Time: 06.12.2012 09:45:39

## IEEE1528-WCDMA FDDV

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 846.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used (interpolated):  $f = 846.6 \text{ MHz}$ ;  $\sigma = 0.918 \text{ mho/m}$ ;  $\epsilon_r = 42.518$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

**Left-Hand-Side HSL/Touch Position - Hi/Area Scan (71x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 0.501 W/kg

## Left-Hand-Side HSL/Touch Position - Hi/Zoom Scan (7x7x7)/Cube 0:

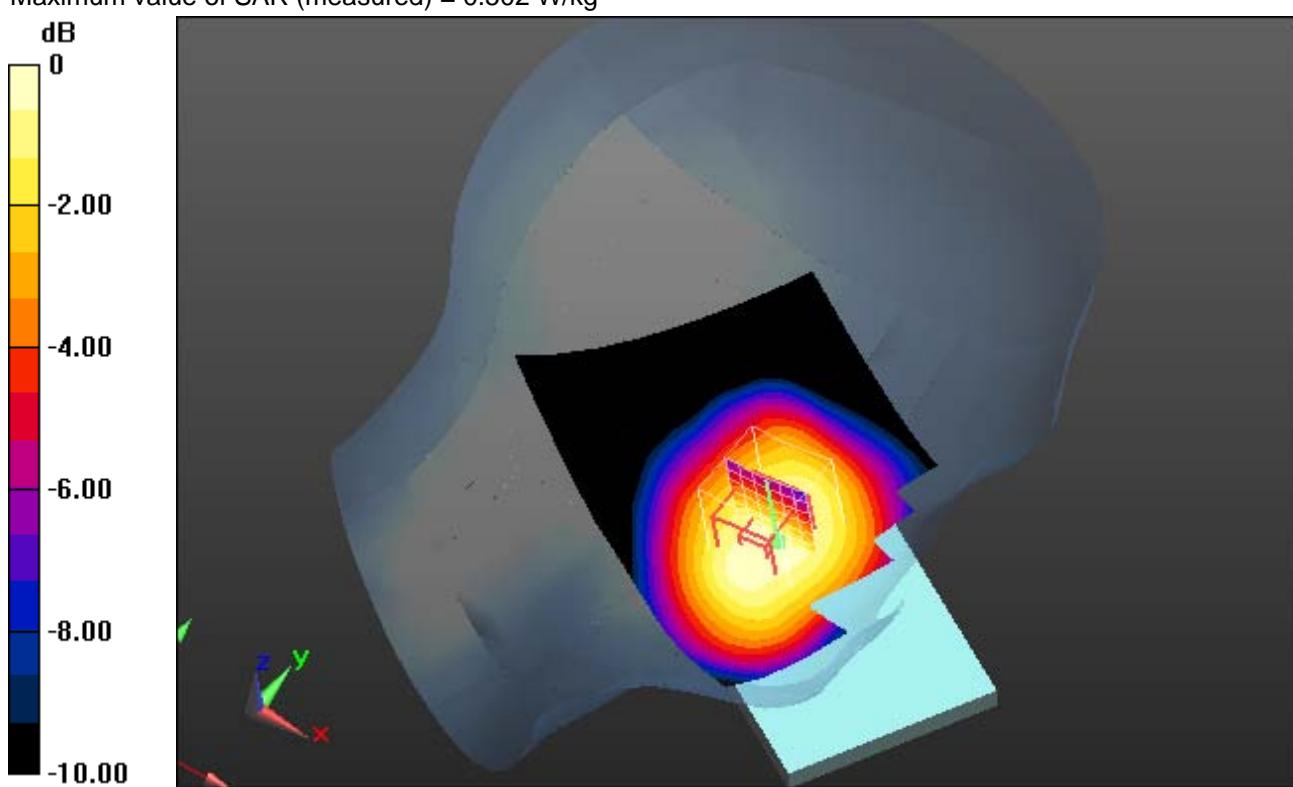
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.214 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.604 mW/g

**SAR(1 g) = 0.481 mW/g; SAR(10 g) = 0.365 mW/g**

Maximum value of SAR (measured) = 0.502 W/kg



0 dB = 0.502 W/kg = -5.99 dB W/kg

### Additional information:

ambient temperature: 21.7°C; liquid temperature: 21.1°C

Date/Time: 06.12.2012 10:37:03

## IEEE1528-WCDMA FDDV

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 826.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used (interpolated):  $f = 826.4 \text{ MHz}$ ;  $\sigma = 0.894 \text{ mho/m}$ ;  $\epsilon_r = 42.682$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

**Left-Hand-Side HSL/Tilt Position - Low/Area Scan (71x111x1):** Interpolated grid:  
 $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$   
Maximum value of SAR (interpolated) = 0.248 W/kg

## Left-Hand-Side HSL/Tilt Position - Low/Zoom Scan (7x7x7)/Cube 0:

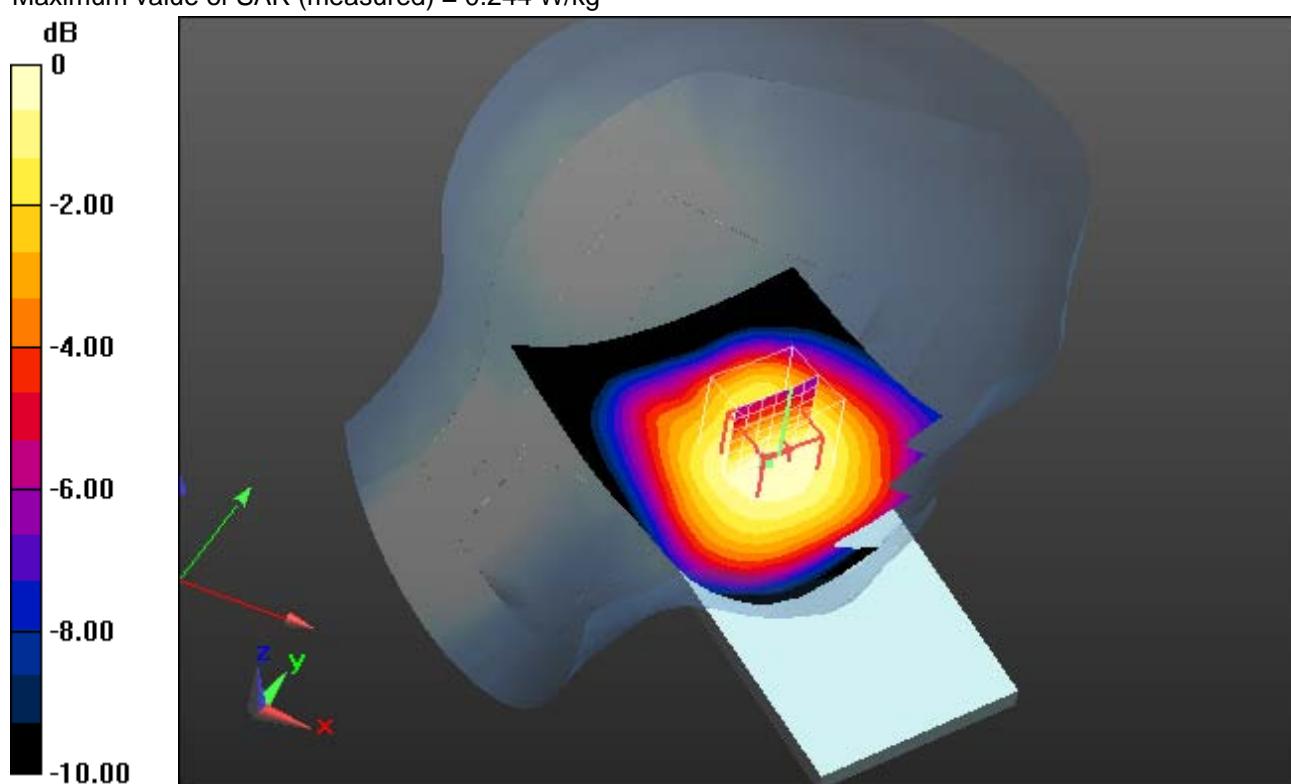
Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 17.073 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.279 mW/g

**SAR(1 g) = 0.234 mW/g; SAR(10 g) = 0.182 mW/g**

Maximum value of SAR (measured) = 0.244 W/kg



0 dB = 0.244 W/kg = -12.25 dB W/kg

### Additional information:

ambient temperature: 21.7°C; liquid temperature: 21.1°C

Date/Time: 06.12.2012 10:20:45

**IEEE1528-WCDMA FDDV****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 836.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used:  $f = 836.4 \text{ MHz}$ ;  $\sigma = 0.91 \text{ mho/m}$ ;  $\epsilon_r = 42.6$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

**Left-Hand-Side HSL/Tilt Position - Mid/Area Scan (71x111x1):** Interpolated grid:

dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.222 W/kg

**Left-Hand-Side HSL/Tilt Position - Mid/Zoom Scan (7x7x7)/Cube 0:**

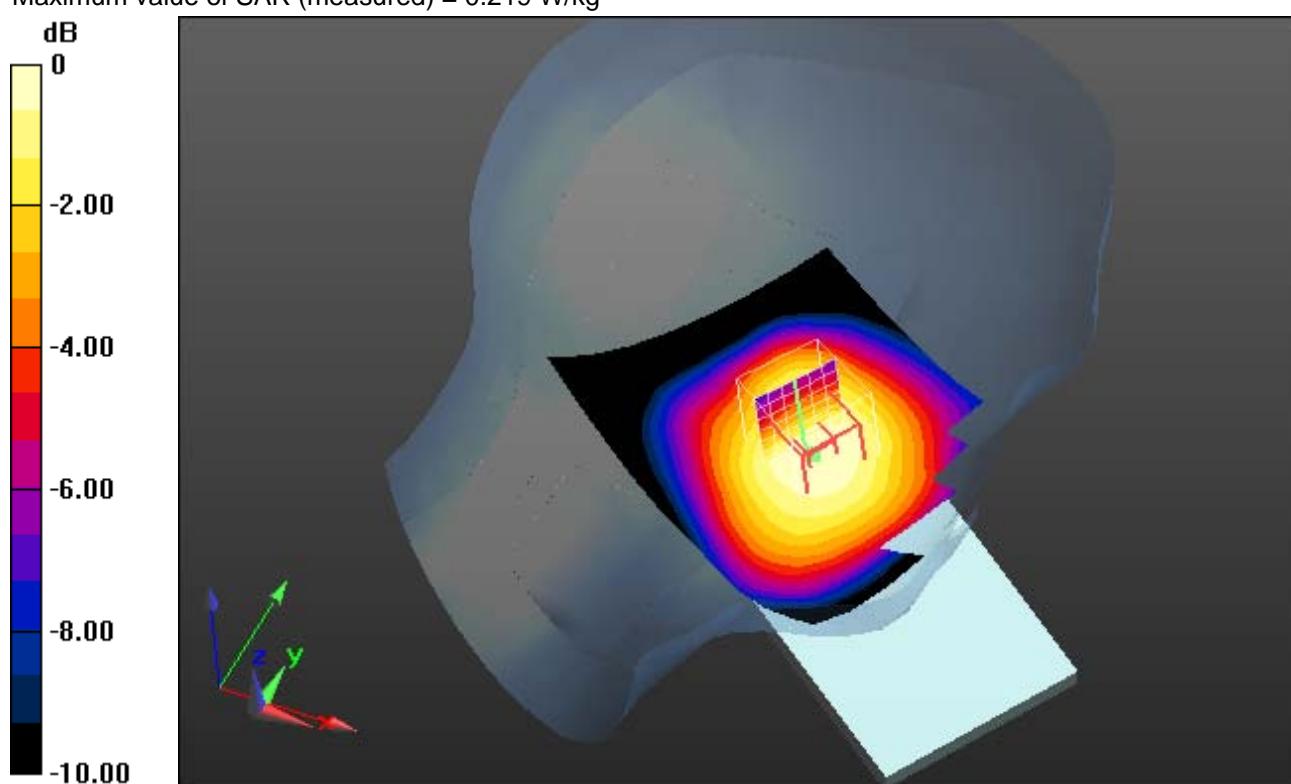
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.897 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.254 mW/g

**SAR(1 g) = 0.209 mW/g; SAR(10 g) = 0.161 mW/g**

Maximum value of SAR (measured) = 0.219 W/kg



0 dB = 0.219 W/kg = -13.19 dB W/kg

**Additional information:**

ambient temperature: 21.7°C; liquid temperature: 21.1°C

Date/Time: 06.12.2012 10:04:21

## IEEE1528-WCDMA FDDV

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 846.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used (interpolated):  $f = 846.6 \text{ MHz}$ ;  $\sigma = 0.918 \text{ mho/m}$ ;  $\epsilon_r = 42.518$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

### Left-Hand-Side HSL/Tilt Position - Hi/Area Scan (71x111x1): Interpolated grid:

$dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.296 W/kg

### Left-Hand-Side HSL/Tilt Position - Hi/Zoom Scan (7x7x7)/Cube 0: Measurement

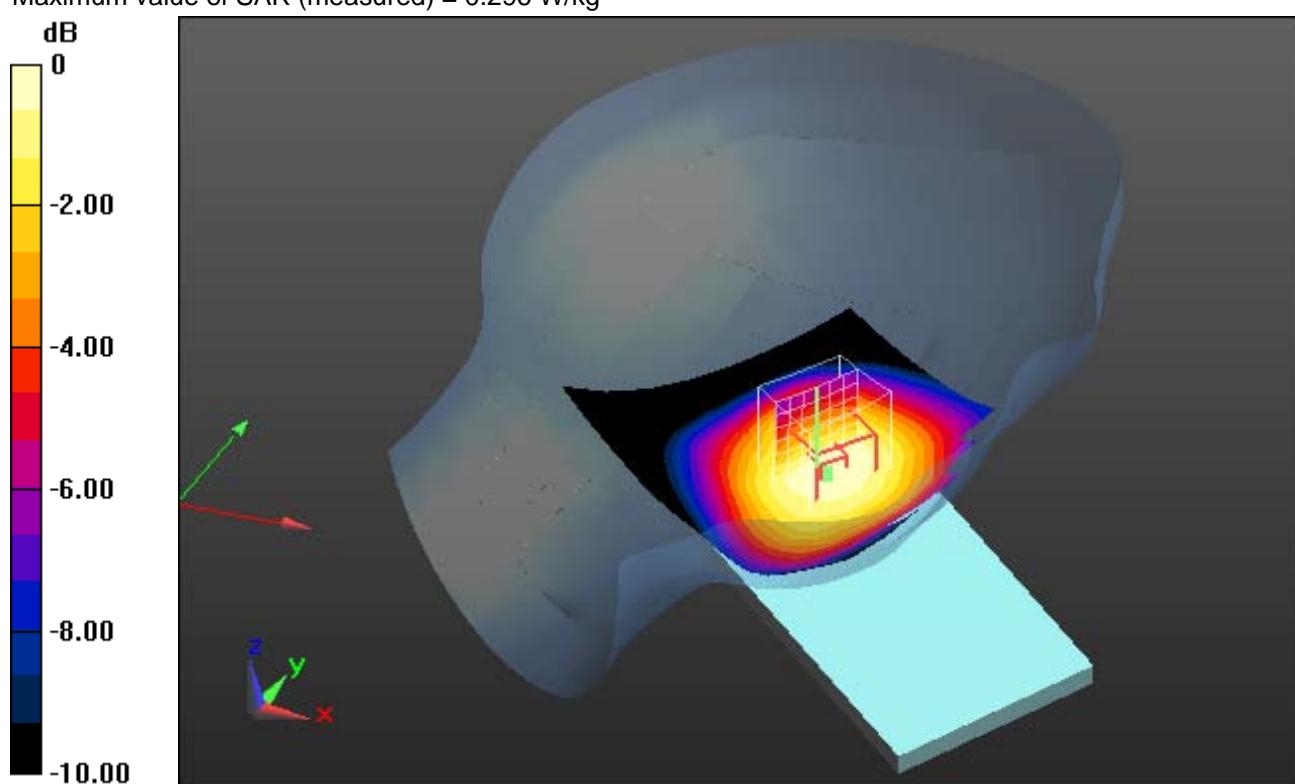
grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 18.596 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.340 mW/g

SAR(1 g) = 0.282 mW/g; SAR(10 g) = 0.217 mW/g

Maximum value of SAR (measured) = 0.296 W/kg



#### Additional information:

ambient temperature: 21.7°C; liquid temperature: 21.1°C

Date/Time: 06.12.2012 10:55:16

## IEEE1528-WCDMA FDDV

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 826.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used (interpolated):  $f = 826.4 \text{ MHz}$ ;  $\sigma = 0.894 \text{ mho/m}$ ;  $\epsilon_r = 42.682$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

**Right-Hand-Side HSL/Touch Position - Low/Area Scan (71x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 0.384 W/kg

## Right-Hand-Side HSL/Touch Position - Low/Zoom Scan (8x7x7)/Cube 0:

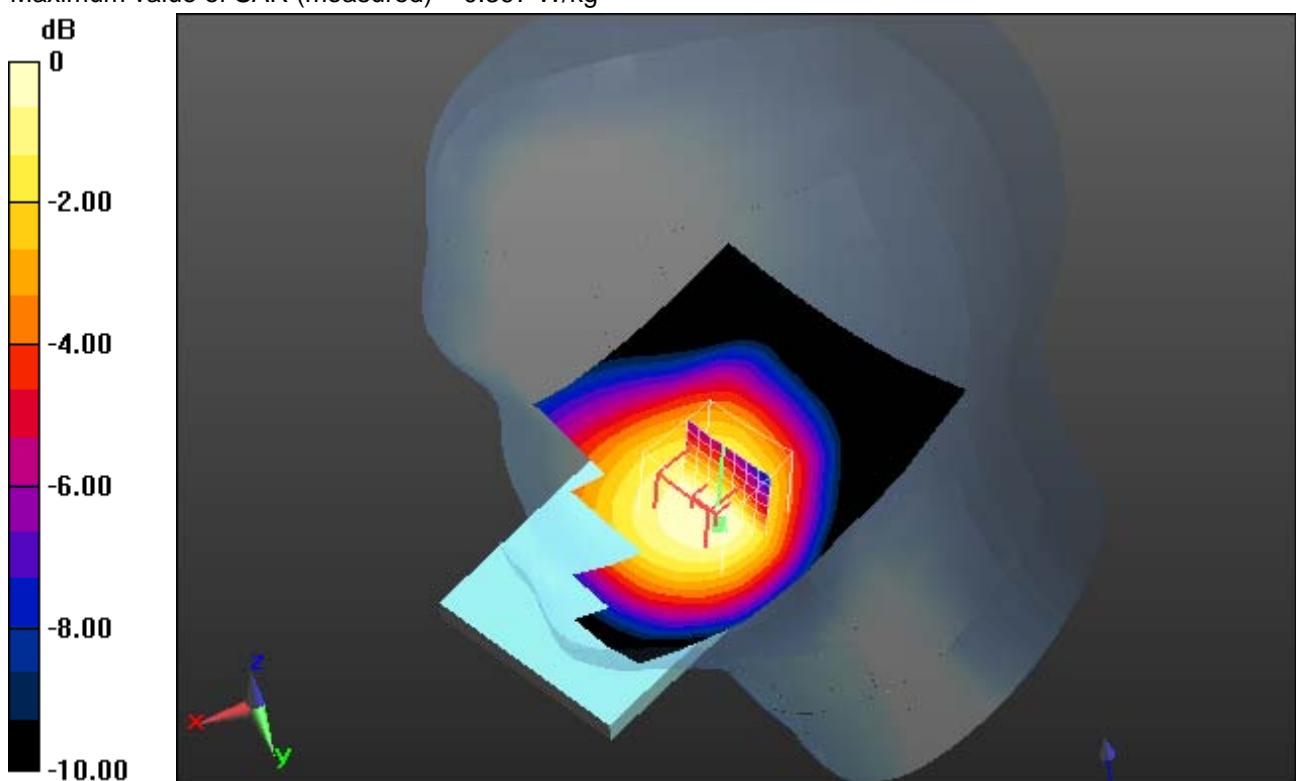
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.606 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.470 mW/g

**SAR(1 g) = 0.374 mW/g; SAR(10 g) = 0.287 mW/g**

Maximum value of SAR (measured) = 0.397 W/kg



0 dB = 0.397 W/kg = -8.02 dB W/kg

### Additional information:

ambient temperature: 21.7°C; liquid temperature: 21.1°C

Date/Time: 06.12.2012 11:16:25

## IEEE1528-WCDMA FDDV

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 836.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used:  $f = 836.4 \text{ MHz}$ ;  $\sigma = 0.91 \text{ mho/m}$ ;  $\epsilon_r = 42.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X:  $a=3.22$ ,  $b=66.3$ ,  $c=18.5$ , calibrated PAR=2.9 dB / Y:  $a=3.10$ ,  $b=65.6$ ,  $c=18.0$ , calibrated PAR=2.9 dB / Z:  $a=3.31$ ,  $b=66.5$ ,  $c=18.4$ , calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 2.7, 32.7$
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

### Right-Hand-Side HSL/Touch Position - Mid/Area Scan (71x111x1): Interpolated

grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.357 W/kg

### Right-Hand-Side HSL/Touch Position - Mid/Zoom Scan (9x7x7)/Cube 0:

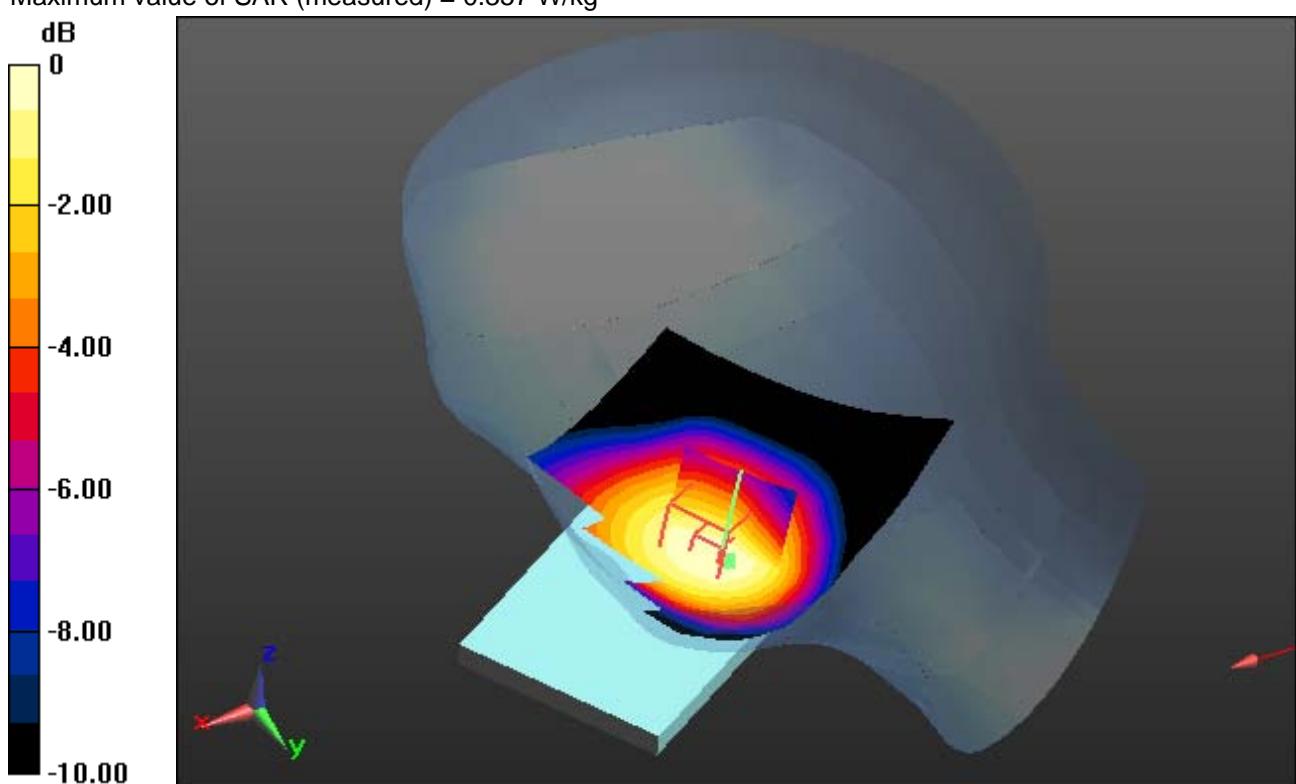
Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 5.057 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.424 mW/g

SAR(1 g) = 0.341 mW/g; SAR(10 g) = 0.263 mW/g

Maximum value of SAR (measured) = 0.357 W/kg



0 dB = 0.357 W/kg = -8.95 dB W/kg

#### Additional information:

ambient temperature: 21.7°C; liquid temperature: 21.1°C

Date/Time: 06.12.2012 11:35:58

## IEEE1528-WCDMA FDDV

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 846.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used (interpolated):  $f = 846.6 \text{ MHz}$ ;  $\sigma = 0.918 \text{ mho/m}$ ;  $\epsilon_r = 42.518$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

**Right-Hand-Side HSL/Touch Position - Hi/Area Scan (71x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
Maximum value of SAR (interpolated) = 0.482 W/kg

## Right-Hand-Side HSL/Touch Position - Hi/Zoom Scan (8x7x7)/Cube 0:

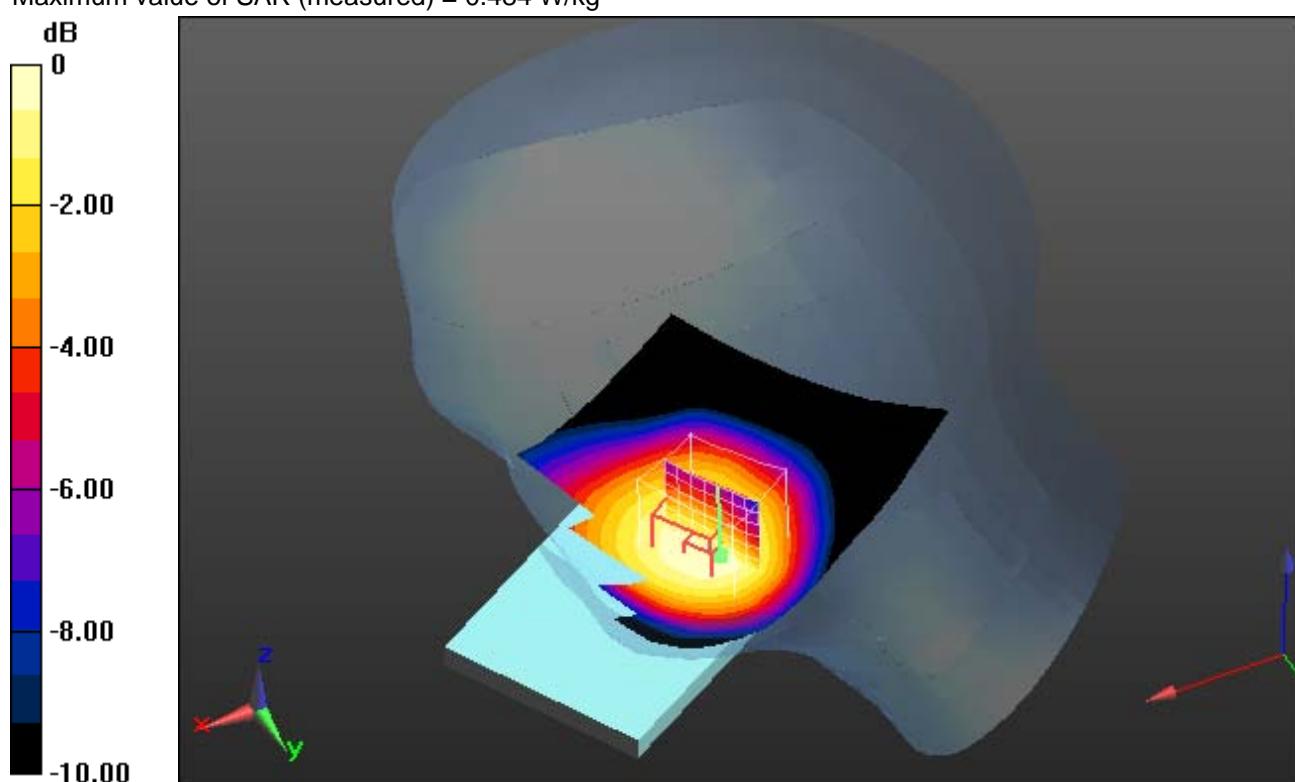
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.753 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.591 mW/g

**SAR(1 g) = 0.455 mW/g; SAR(10 g) = 0.350 mW/g**

Maximum value of SAR (measured) = 0.484 W/kg



0 dB = 0.484 W/kg = -6.30 dB W/kg

### Additional information:

ambient temperature: 21.7°C; liquid temperature: 21.1°C

Date/Time: 06.12.2012 13:01:37

## IEEE1528-WCDMA FDDV

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 826.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used (interpolated):  $f = 826.4 \text{ MHz}$ ;  $\sigma = 0.894 \text{ mho/m}$ ;  $\epsilon_r = 42.682$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X:  $a=3.22$ ,  $b=66.3$ ,  $c=18.5$ , calibrated PAR=2.9 dB / Y:  $a=3.10$ ,  $b=65.6$ ,  $c=18.0$ , calibrated PAR=2.9 dB / Z:  $a=3.31$ ,  $b=66.5$ ,  $c=18.4$ , calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 2.7, 32.7$
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

**Right-Hand-Side HSL/Tilt Position - Low/Area Scan (71x111x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$   
Maximum value of SAR (interpolated) = 0.216 W/kg

## Right-Hand-Side HSL/Tilt Position - Low/Zoom Scan (7x7x7)/Cube 0:

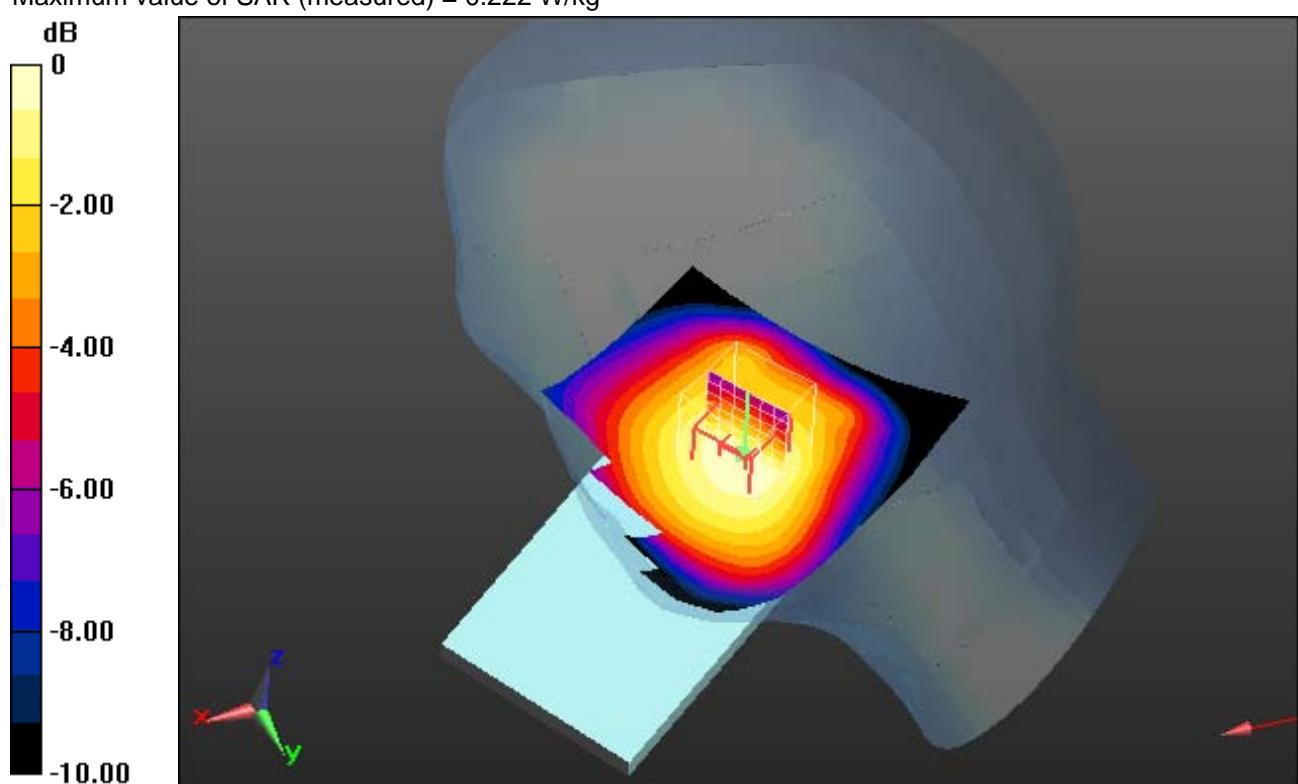
Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 10.040 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.257 mW/g

**SAR(1 g) = 0.210 mW/g; SAR(10 g) = 0.161 mW/g**

Maximum value of SAR (measured) = 0.222 W/kg



0 dB = 0.222 W/kg = -13.07 dB W/kg

### Additional information:

ambient temperature: 21.7°C; liquid temperature: 21.1°C

Date/Time: 06.12.2012 12:27:24

## IEEE1528-WCDMA FDDV

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 836.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used:  $f = 836.4 \text{ MHz}$ ;  $\sigma = 0.91 \text{ mho/m}$ ;  $\epsilon_r = 42.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X:  $a=3.22$ ,  $b=66.3$ ,  $c=18.5$ , calibrated PAR=2.9 dB / Y:  $a=3.10$ ,  $b=65.6$ ,  $c=18.0$ , calibrated PAR=2.9 dB / Z:  $a=3.31$ ,  $b=66.5$ ,  $c=18.4$ , calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection),  $z = 2.7, 32.7$
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

**Right-Hand-Side HSL/Tilt Position - Mid/Area Scan (71x111x1):** Interpolated grid:  $dx=1.500 \text{ mm}$ ,  $dy=1.500 \text{ mm}$   
Maximum value of SAR (interpolated) = 0.184 W/kg

## Right-Hand-Side HSL/Tilt Position - Mid/Zoom Scan (7x8x7)/Cube 0:

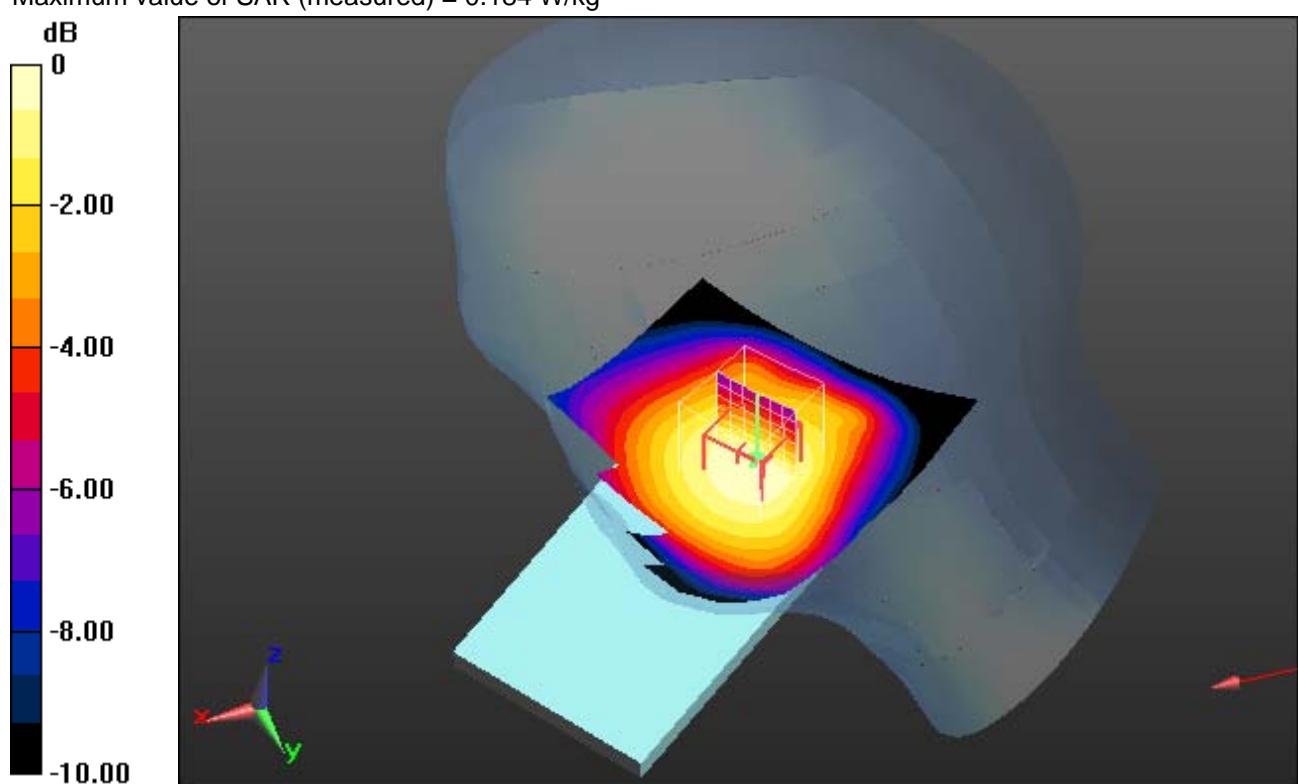
Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 8.851 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.214 mW/g

**SAR(1 g) = 0.174 mW/g; SAR(10 g) = 0.134 mW/g**

Maximum value of SAR (measured) = 0.184 W/kg



0 dB = 0.184 W/kg = -14.70 dB W/kg

### Additional information:

ambient temperature: 21.7°C; liquid temperature: 21.1°C

Date/Time: 06.12.2012 12:08:01

## IEEE1528-WCDMA FDDV

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 846.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used (interpolated):  $f = 846.6$  MHz;  $\sigma = 0.918$  mho/m;  $\epsilon_r = 42.518$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

### Right-Hand-Side HSL/Tilt Position - Hi/Area Scan (71x111x1): Interpolated grid:

dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.245 W/kg

### Right-Hand-Side HSL/Tilt Position - Hi/Zoom Scan (7x8x7)/Cube 0:

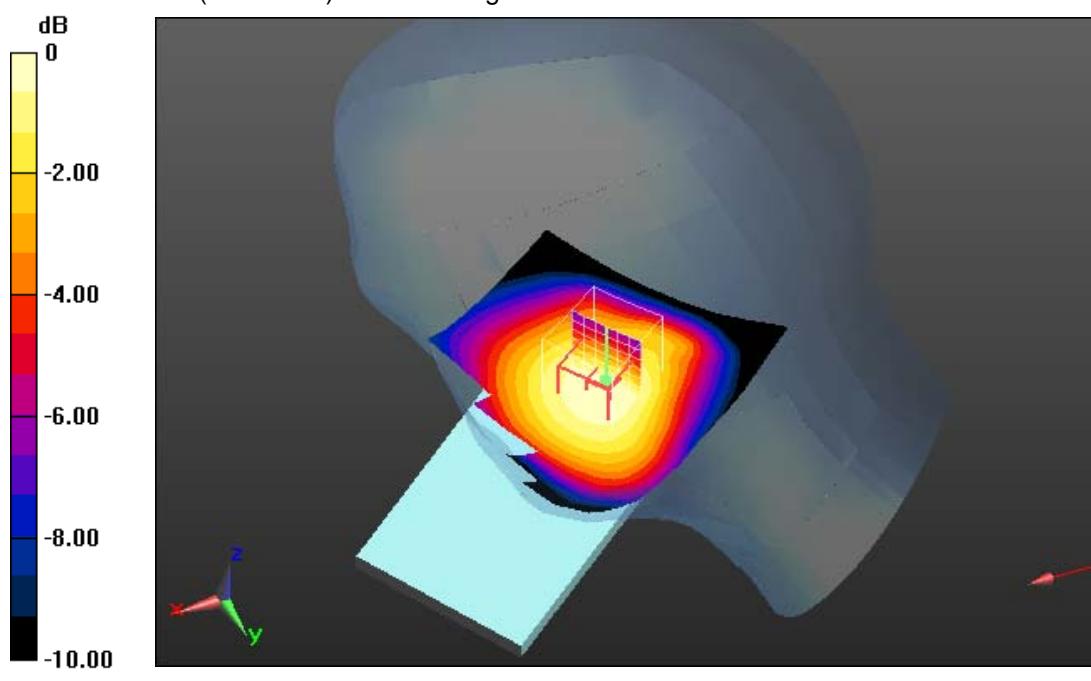
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.221 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.283 mW/g

**SAR(1 g) = 0.232 mW/g; SAR(10 g) = 0.178 mW/g**

Maximum value of SAR (measured) = 0.244 W/kg



#### Additional information:

ambient temperature: 21.7°C; liquid temperature: 21.1°C

Date/Time: 11.12.2012 09:22:29 Date/Time: 11.12.2012 09:32:25

**OET65-Body-WCDMA FDD V****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated):  $f = 826.4$  MHz;  $\sigma = 0.972$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

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

**Front position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

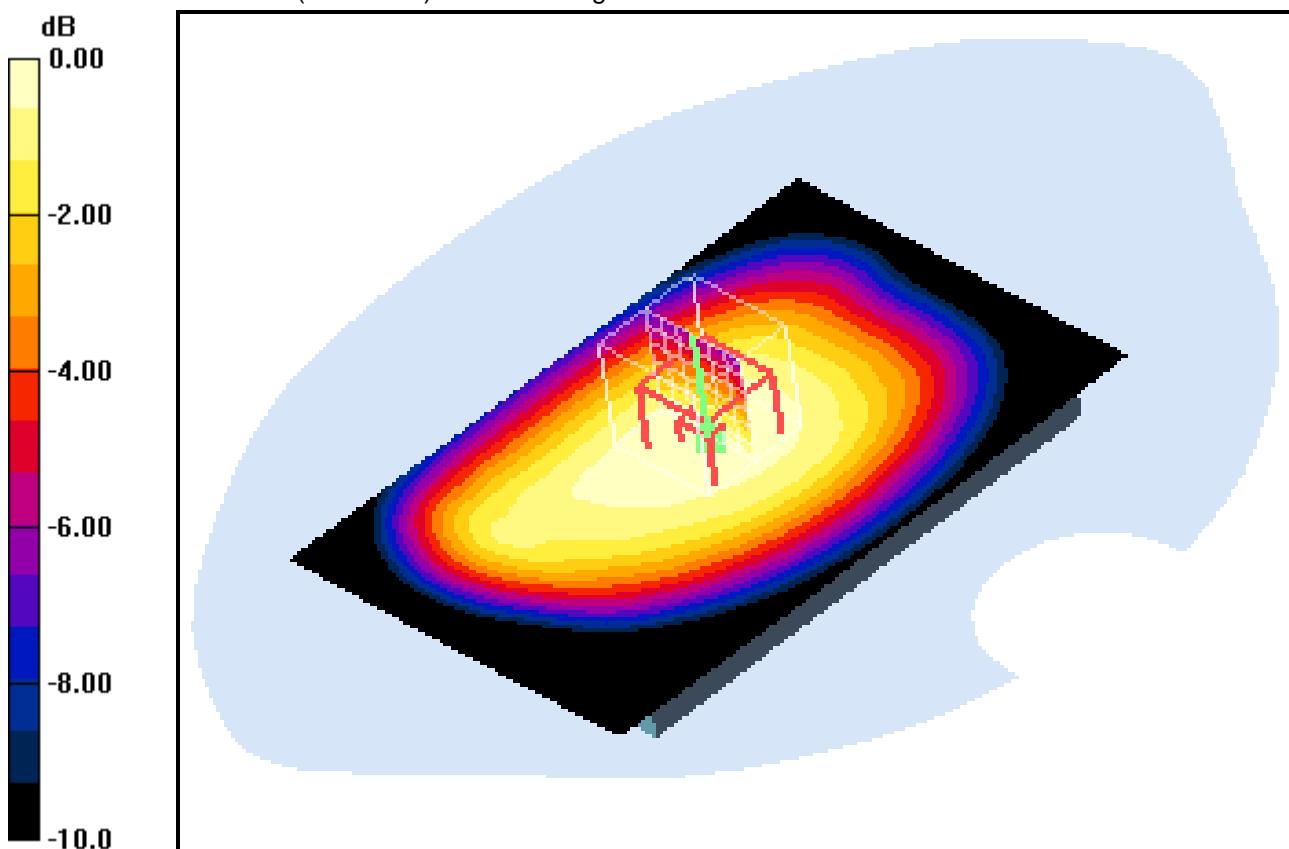
dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.7 V/m; Power Drift = 0.039 dB

Peak SAR (extrapolated) = 0.639 W/kg

**SAR(1 g) = 0.532 mW/g; SAR(10 g) = 0.415 mW/g**

Maximum value of SAR (measured) = 0.557 mW/g



0 dB = 0.557mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.6°C; liquid temperature: 21.6°C

Date/Time: 11.12.2012 11:02:04 Date/Time: 11.12.2012 11:11:01

**OET65-Body-WCDMA FDD V****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated):  $f = 836.4$  MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.464 mW/g

**Front position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

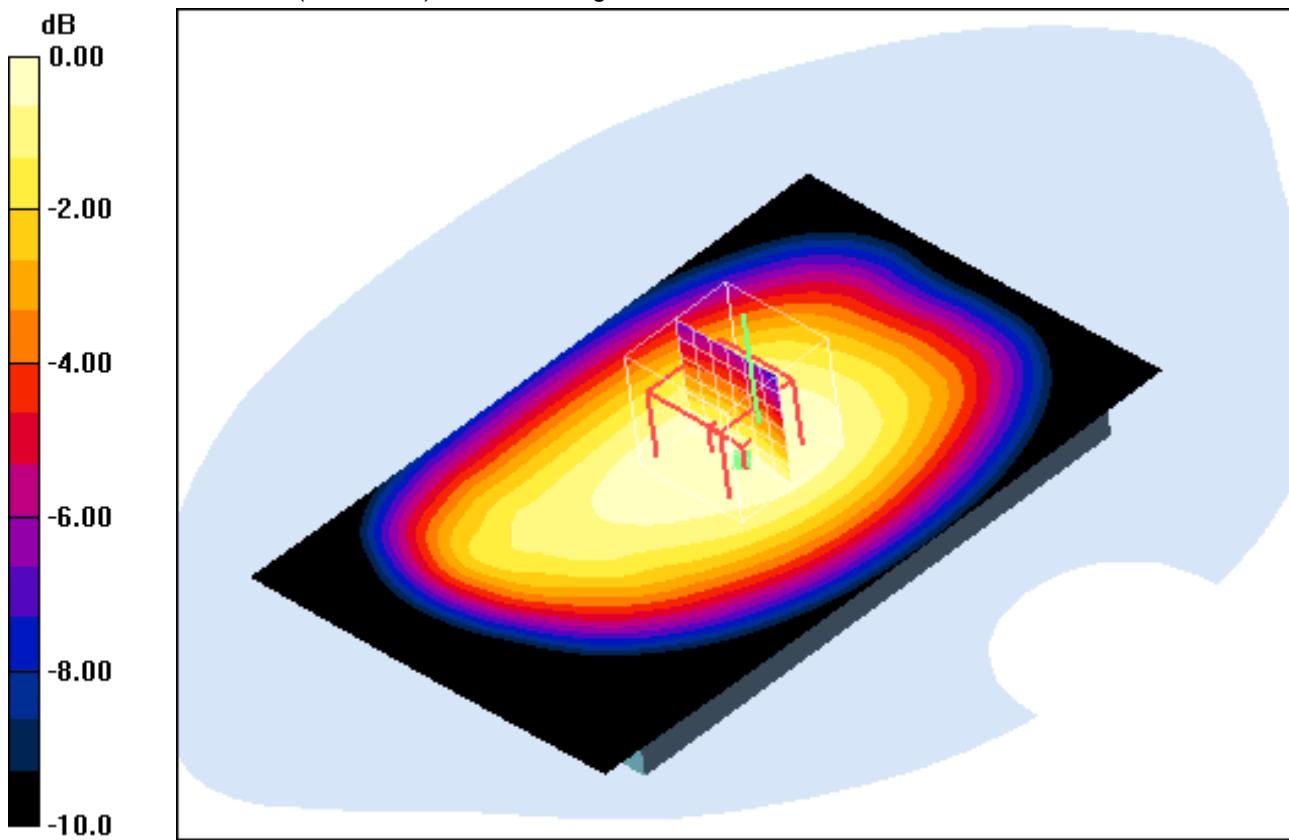
dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.3 V/m; Power Drift = 0.106 dB

Peak SAR (extrapolated) = 0.538 W/kg

**SAR(1 g) = 0.442 mW/g; SAR(10 g) = 0.345 mW/g**

Maximum value of SAR (measured) = 0.463 mW/g



0 dB = 0.463mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.6°C; liquid temperature: 21.6°C

Date/Time: 11.12.2012 11:23:39 Date/Time: 11.12.2012 11:32:34

**OET65-Body-WCDMA FDD V****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated):  $f = 846.6$  MHz;  $\sigma = 0.988$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - High/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

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

**Front position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

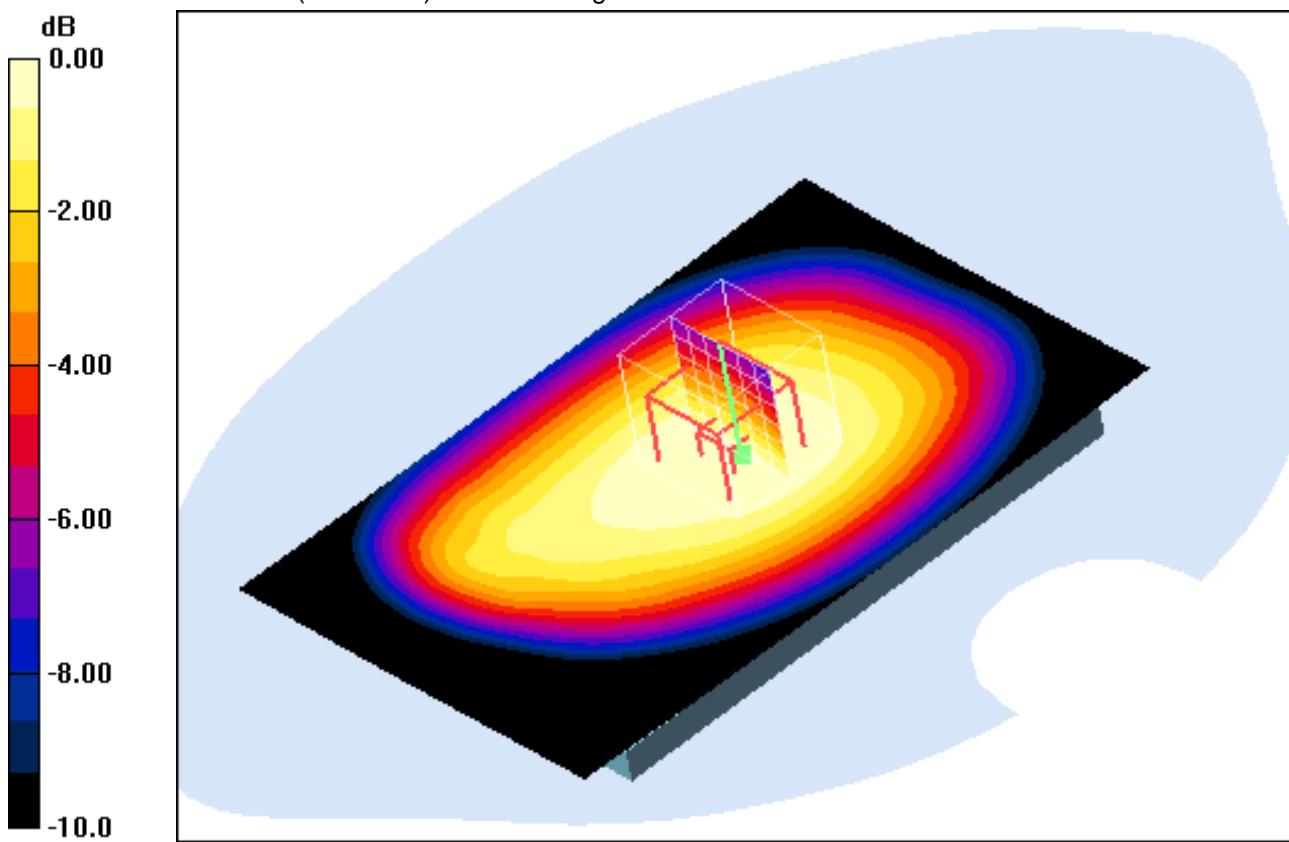
dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.0 V/m; Power Drift = -0.061 dB

Peak SAR (extrapolated) = 0.672 W/kg

**SAR(1 g) = 0.559 mW/g; SAR(10 g) = 0.434 mW/g**

Maximum value of SAR (measured) = 0.586 mW/g



0 dB = 0.586mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.6°C; liquid temperature: 21.6°C

Date/Time: 11.12.2012 12:39:26 Date/Time: 11.12.2012 12:51:28

**OET65-Body-WCDMA FDD V****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated):  $f = 826.4$  MHz;  $\sigma = 0.972$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.518 mW/g

**Rear position - Low/Zoom Scan (7x7x7) (7x8x7)/Cube 0:** Measurement grid:

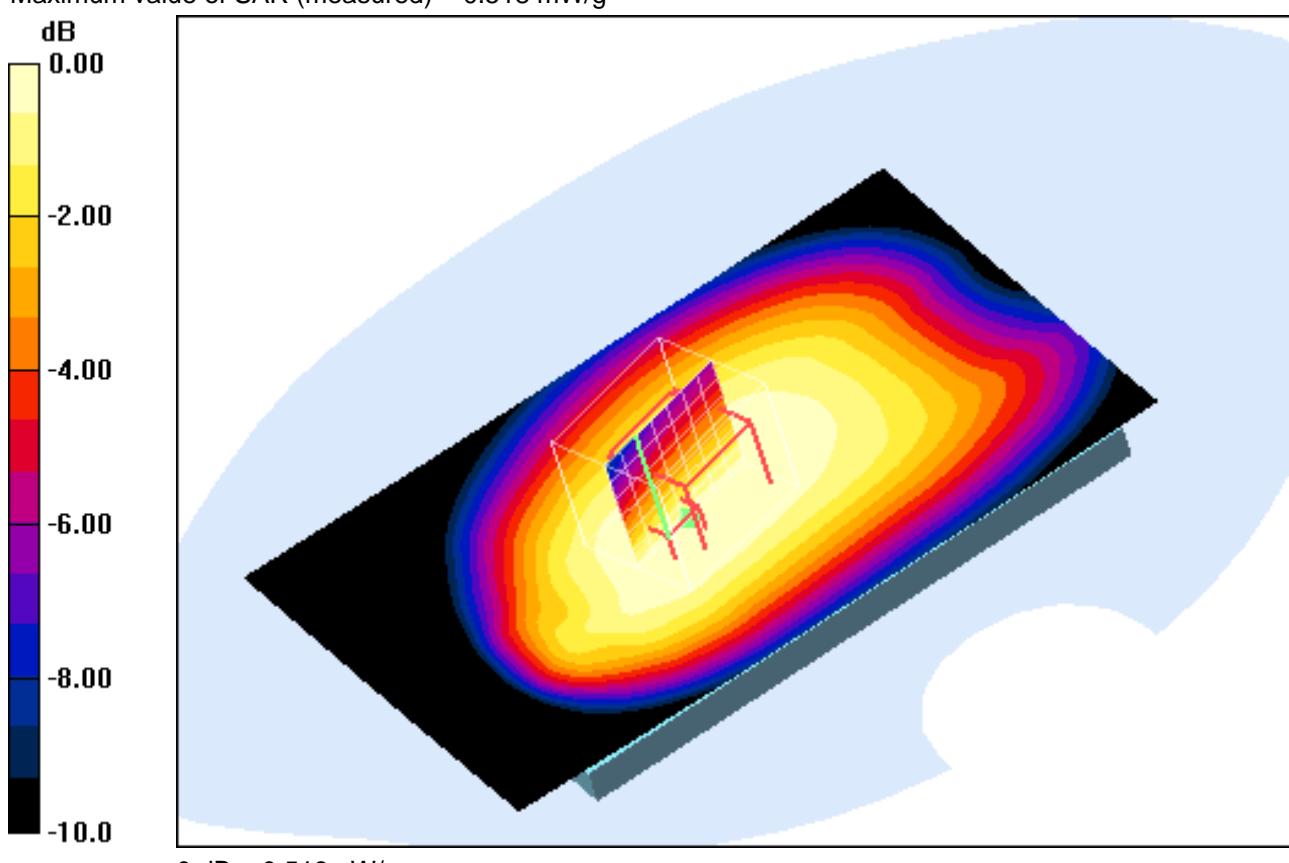
dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.8 V/m; Power Drift = -0.019 dB

Peak SAR (extrapolated) = 0.647 W/kg

**SAR(1 g) = 0.491 mW/g; SAR(10 g) = 0.375 mW/g**

Maximum value of SAR (measured) = 0.518 mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.6°C; liquid temperature: 21.6°C

Date/Time: 11.12.2012 12:14:51 Date/Time: 11.12.2012 12:26:09

**OET65-Body-WCDMA FDD V****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated):  $f = 836.4$  MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.464 mW/g

**Rear position - Middle/Zoom Scan (7x7x7) (7x8x7)/Cube 0:** Measurement grid:

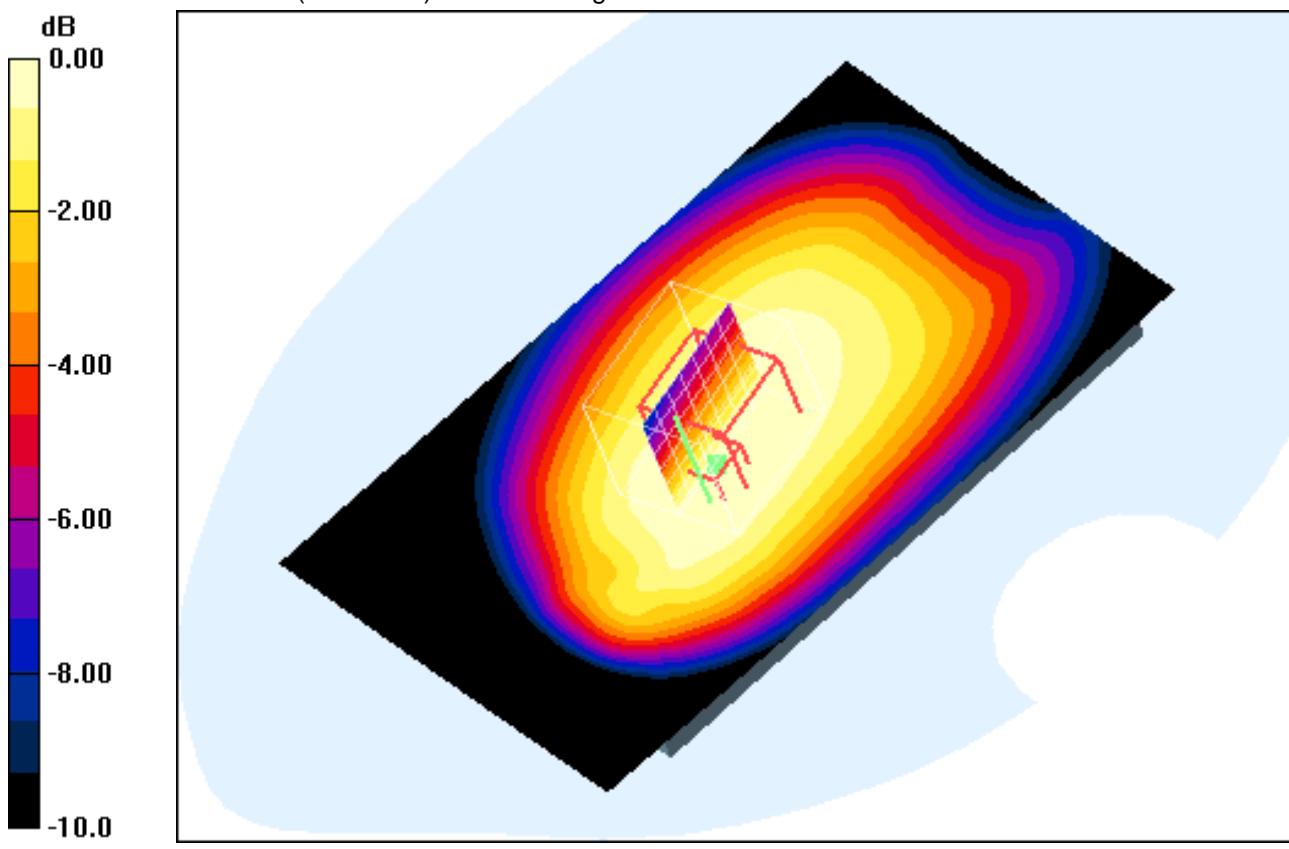
dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.5 V/m; Power Drift = -0.100 dB

Peak SAR (extrapolated) = 0.585 W/kg

**SAR(1 g) = 0.438 mW/g; SAR(10 g) = 0.335 mW/g**

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



0 dB = 0.462mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.6°C; liquid temperature: 21.6°C

Date/Time: 11.12.2012 11:45:22 Date/Time: 11.12.2012 11:56:22

**OET65-Body-WCDMA FDD V****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated):  $f = 846.6$  MHz;  $\sigma = 0.988$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - High/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.550 mW/g

**Rear position - High/Zoom Scan (7x7x7) (7x11x7)/Cube 0:** Measurement grid:

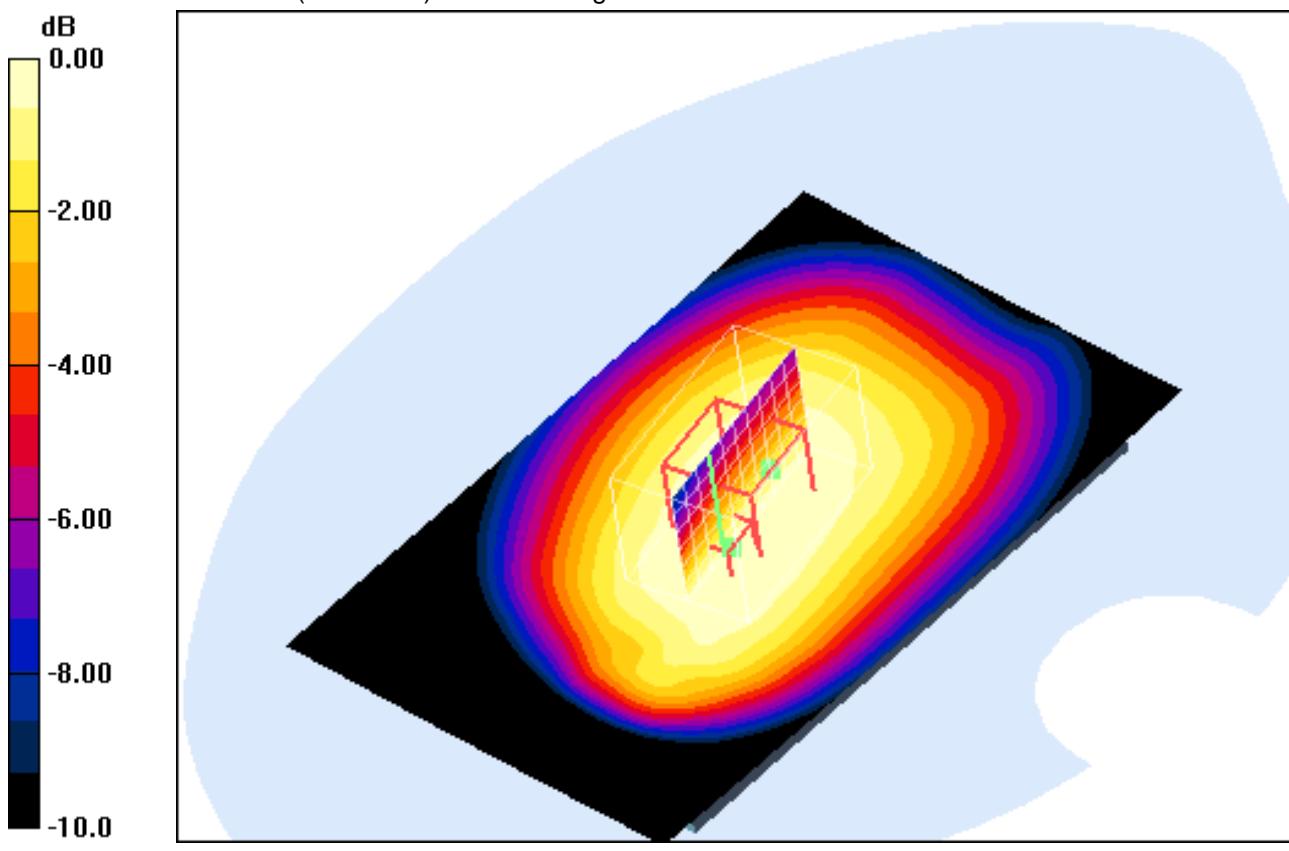
dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.3 V/m; Power Drift = -0.013 dB

Peak SAR (extrapolated) = 0.679 W/kg

**SAR(1 g) = 0.521 mW/g; SAR(10 g) = 0.401 mW/g**

Maximum value of SAR (measured) = 0.547 mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.6°C; liquid temperature: 21.6°C

Date/Time: 11.12.2012 08:36:24 Date/Time: 11.12.2012 08:48:02

**OET65-Body-WCDMA FDD V****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated):  $f = 836.4$  MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Edge left position - Middle/Area Scan (61x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.400 mW/g

**Edge left position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement

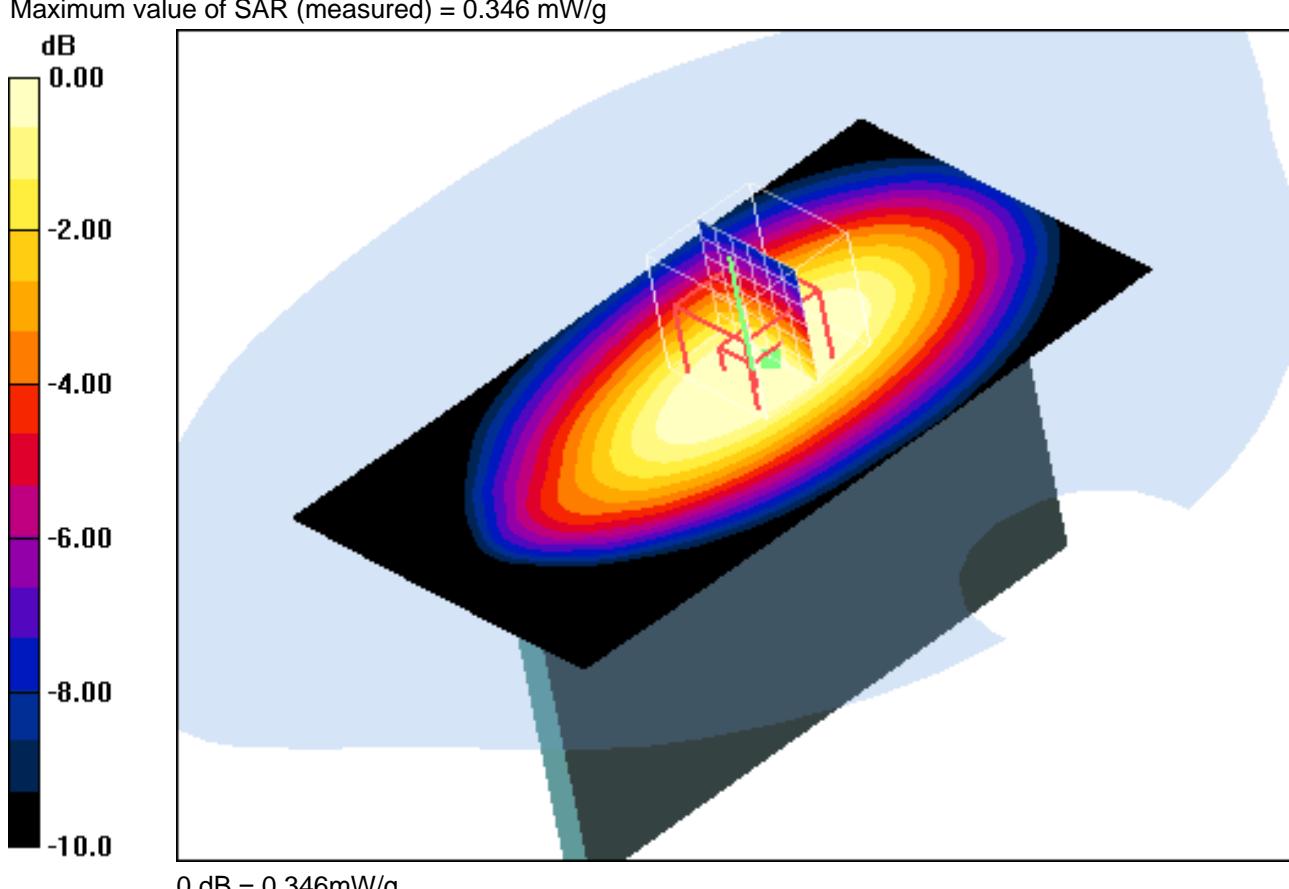
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.5 V/m; Power Drift = -0.036 dB

Peak SAR (extrapolated) = 0.440 W/kg

**SAR(1 g) = 0.323 mW/g; SAR(10 g) = 0.226 mW/g**

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

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.6°C; liquid temperature: 21.6°C

Date/Time: 11.12.2012 09:00:44 Date/Time: 11.12.2012 09:08:38

**OET65-Body-WCDMA FDD V****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated):  $f = 836.4$  MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Edge right position - Middle/Area Scan (61x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.262 mW/g

**Edge right position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement

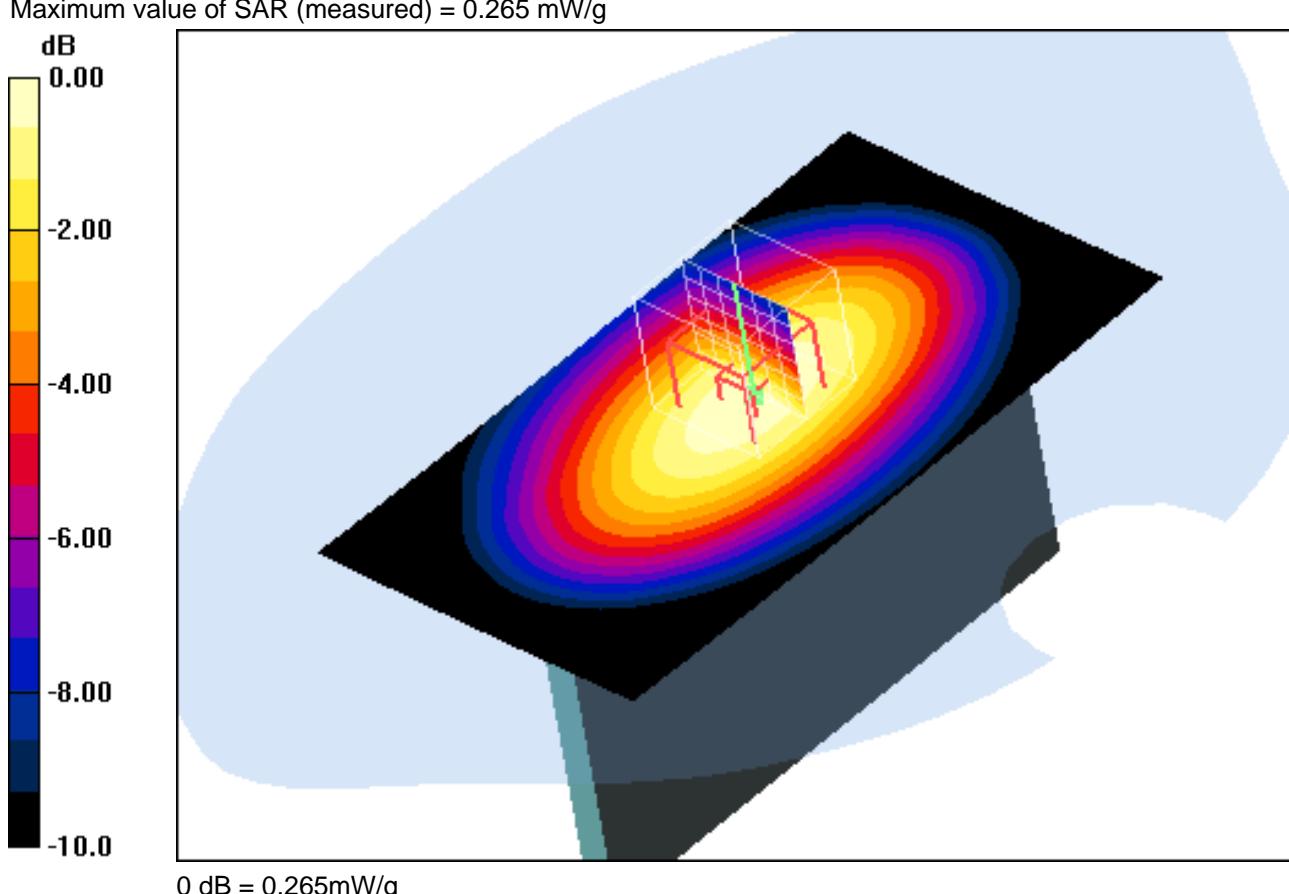
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.1 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.336 W/kg

**SAR(1 g) = 0.249 mW/g; SAR(10 g) = 0.175 mW/g**

Maximum value of SAR (measured) = 0.265 mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.6°C; liquid temperature: 21.6°C

Date/Time: 11.12.2012 08:16:58 Date/Time: 11.12.2012 08:22:50

**OET65-Body-WCDMA FDD V****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated):  $f = 836.4$  MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 55.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Edge bottom position - Middle/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.153 mW/g

**Edge bottom position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:**

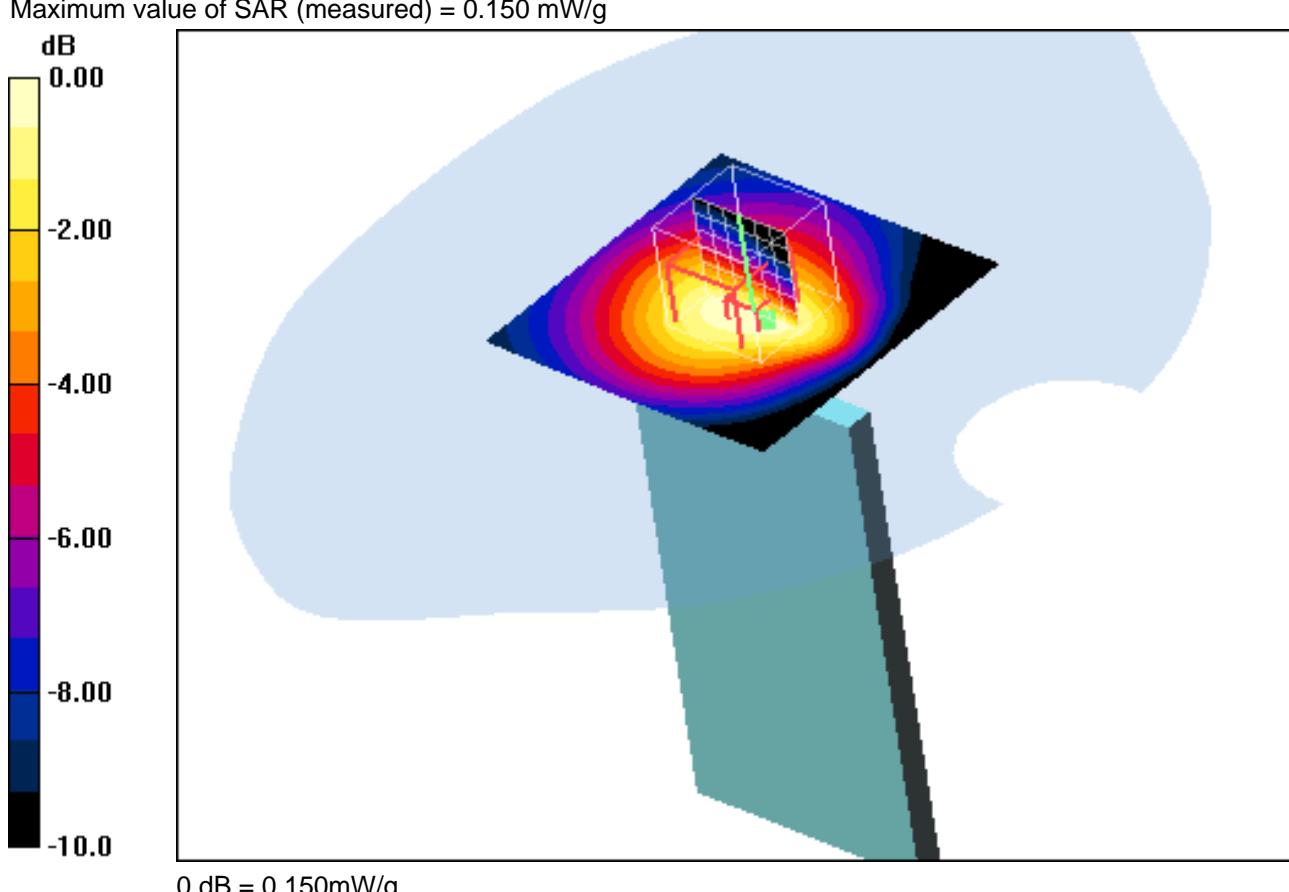
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.3 V/m; Power Drift = 0.048 dB

Peak SAR (extrapolated) = 0.291 W/kg

**SAR(1 g) = 0.139 mW/g; SAR(10 g) = 0.088 mW/g**

Maximum value of SAR (measured) = 0.150 mW/g



0 dB = 0.150mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.6°C; liquid temperature: 21.6°C

Date/Time: 11.12.2012 13:20:15 Date/Time: 11.12.2012 13:29:18

**OET65-Body-WCDMA FDD V****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated):  $f = 846.6$  MHz;  $\sigma = 0.988$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - High 15 mm/Area Scan (71x111x1):** Measurement grid: dx=15mm,

dy=15mm

Maximum value of SAR (interpolated) = 0.545 mW/g

**Front position - High 15 mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement

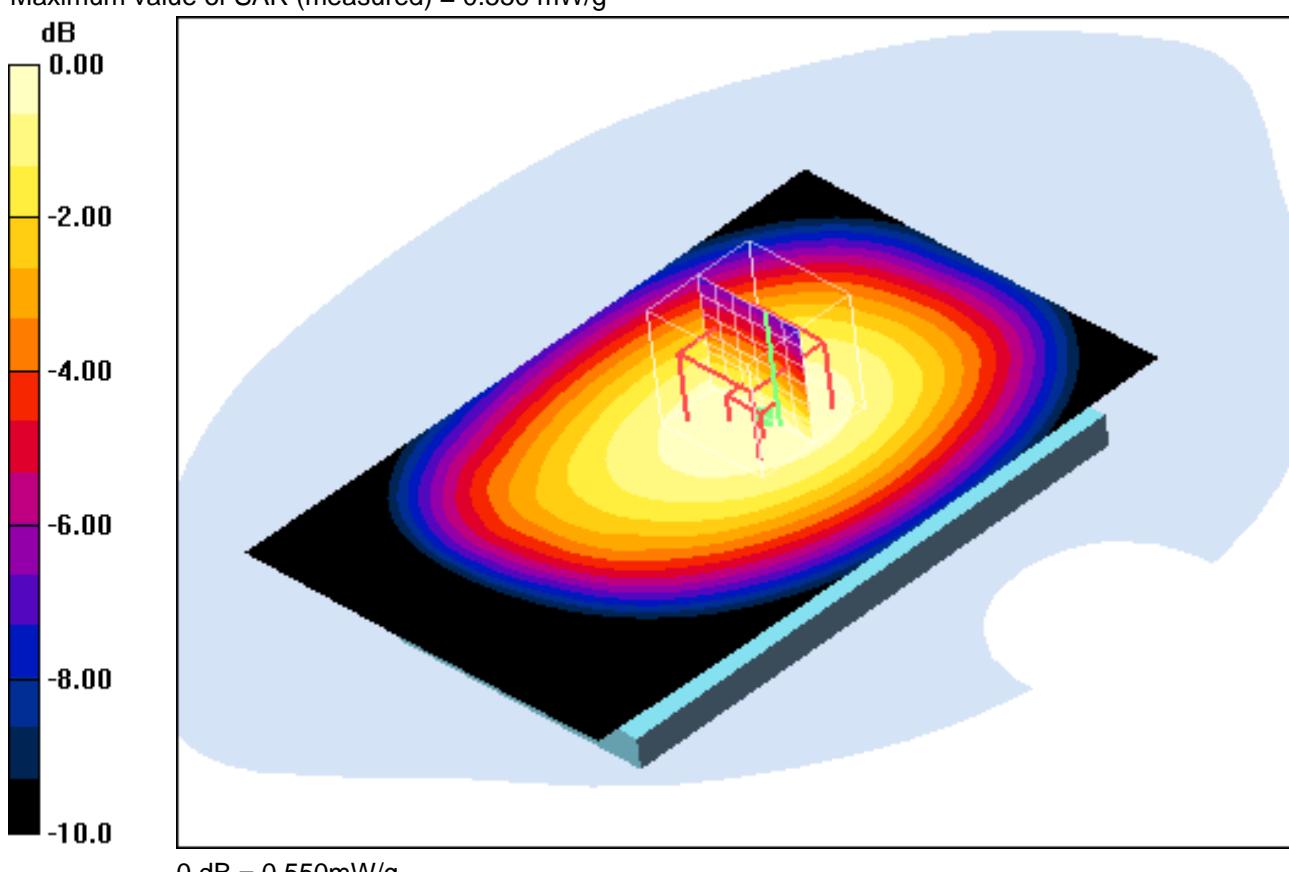
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.9 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 0.639 W/kg

**SAR(1 g) = 0.520 mW/g; SAR(10 g) = 0.398 mW/g**

Maximum value of SAR (measured) = 0.550 mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 22.6°C; liquid temperature: 21.6°C

Date/Time: 11.12.2012 13:44:02 Date/Time: 11.12.2012 13:53:08

**OET65-Body-WCDMA FDD V****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated):  $f = 846.6$  MHz;  $\sigma = 0.988$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - High 15 mm AMR/Area Scan (71x111x1):** Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.386 mW/g

**Front position - High 15 mm AMR/Zoom Scan (7x7x7) (7x7x7)/Cube 0:**

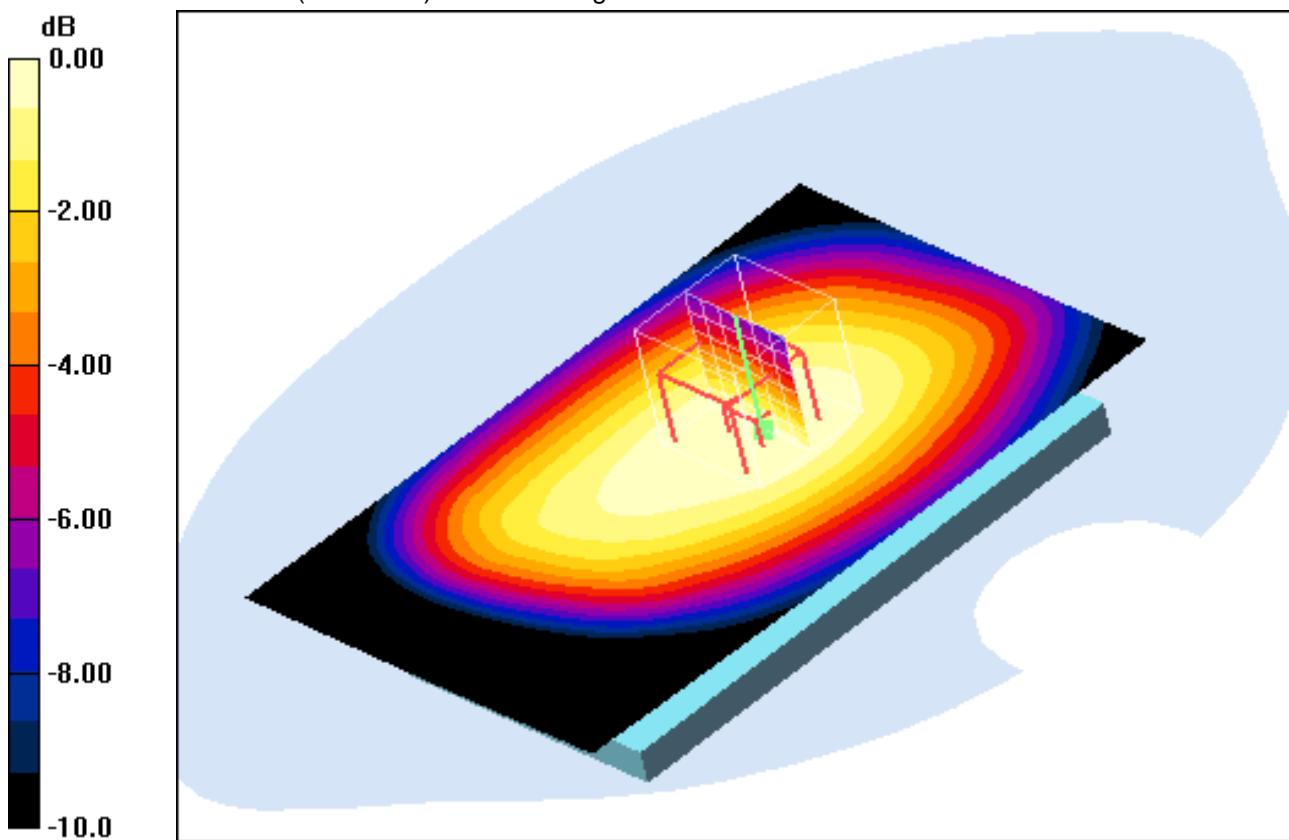
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.9 V/m; Power Drift = -0.028 dB

Peak SAR (extrapolated) = 0.434 W/kg

**SAR(1 g) = 0.356 mW/g; SAR(10 g) = 0.273 mW/g**

Maximum value of SAR (measured) = 0.375 mW/g



0 dB = 0.375mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 22.6°C; liquid temperature: 21.6°C

## Annex B.4: WCDMA FDD IV 1700MHz

Date/Time: 04.12.2012 19:21:47 Date/Time: 04.12.2012 19:29:59

### EN62209-LeftHandSide-WCDMA FDD IV

DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC

Communication System: WCDMA 1700; Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1712.4$  MHz;  $\sigma = 1.35$  mho/m;  $\epsilon_r = 39.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.28, 5.28, 5.28); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.249 mW/g

**Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

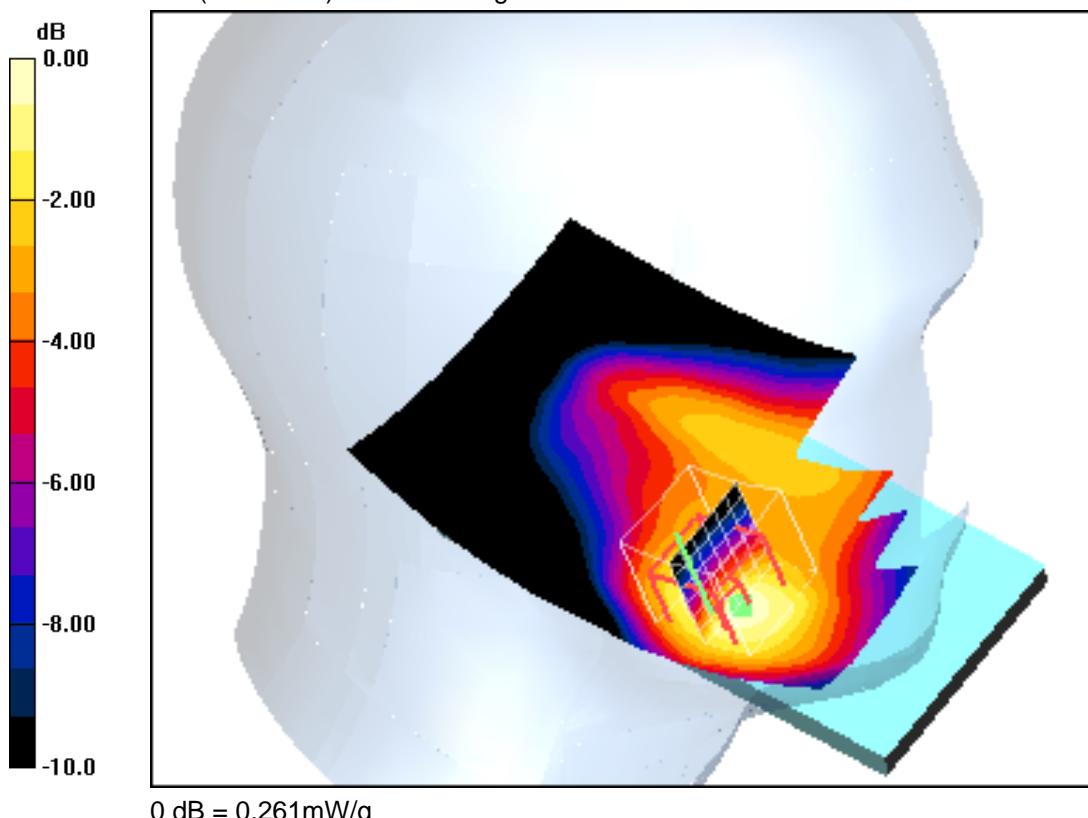
dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.2 V/m; Power Drift = -0.040 dB

Peak SAR (extrapolated) = 0.357 W/kg

**SAR(1 g) = 0.240 mW/g; SAR(10 g) = 0.152 mW/g**

Maximum value of SAR (measured) = 0.261 mW/g



#### Additional information:

ambient temperature: 22.5°C; liquid temperature: 21.3°C

Date/Time: 04.12.2012 19:43:42 Date/Time: 04.12.2012 19:51:55

**EN62209-LeftHandSide-WCDMA FDD IV****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.28, 5.28, 5.28); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.209 mW/g

**Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

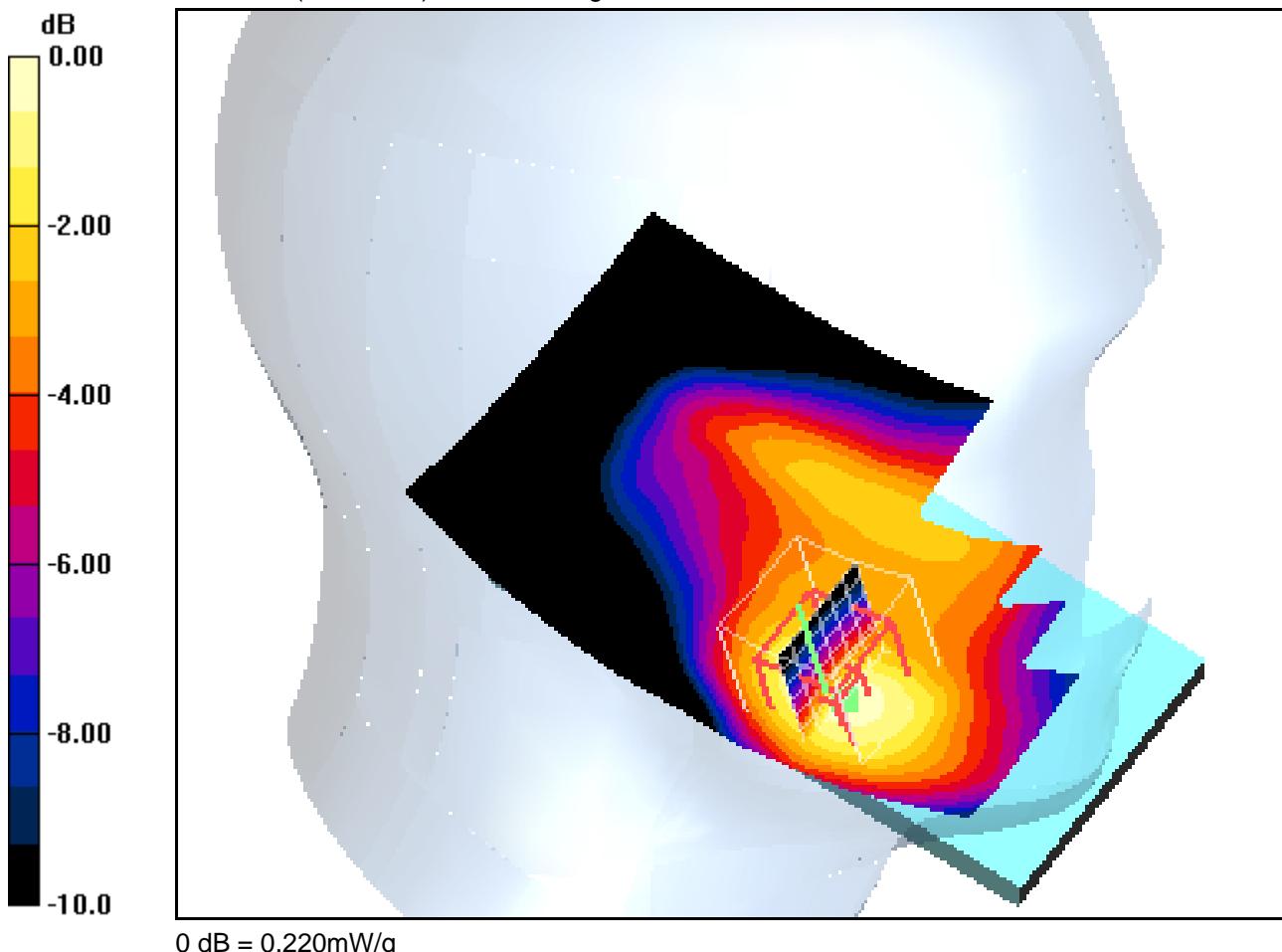
dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.9 V/m; Power Drift = 0.036 dB

Peak SAR (extrapolated) = 0.305 W/kg

**SAR(1 g) = 0.205 mW/g; SAR(10 g) = 0.129 mW/g**

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

**Additional information:**

ambient temperature: 22.5°C; liquid temperature: 21.3°C

Date/Time: 04.12.2012 18:08:55 Date/Time: 04.12.2012 18:18:56

**EN62209-LeftHandSide-WCDMA FDD IV****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1752.6$  MHz;  $\sigma = 1.4$  mho/m;  $\epsilon_r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.28, 5.28, 5.28); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - High/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.271 mW/g

**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

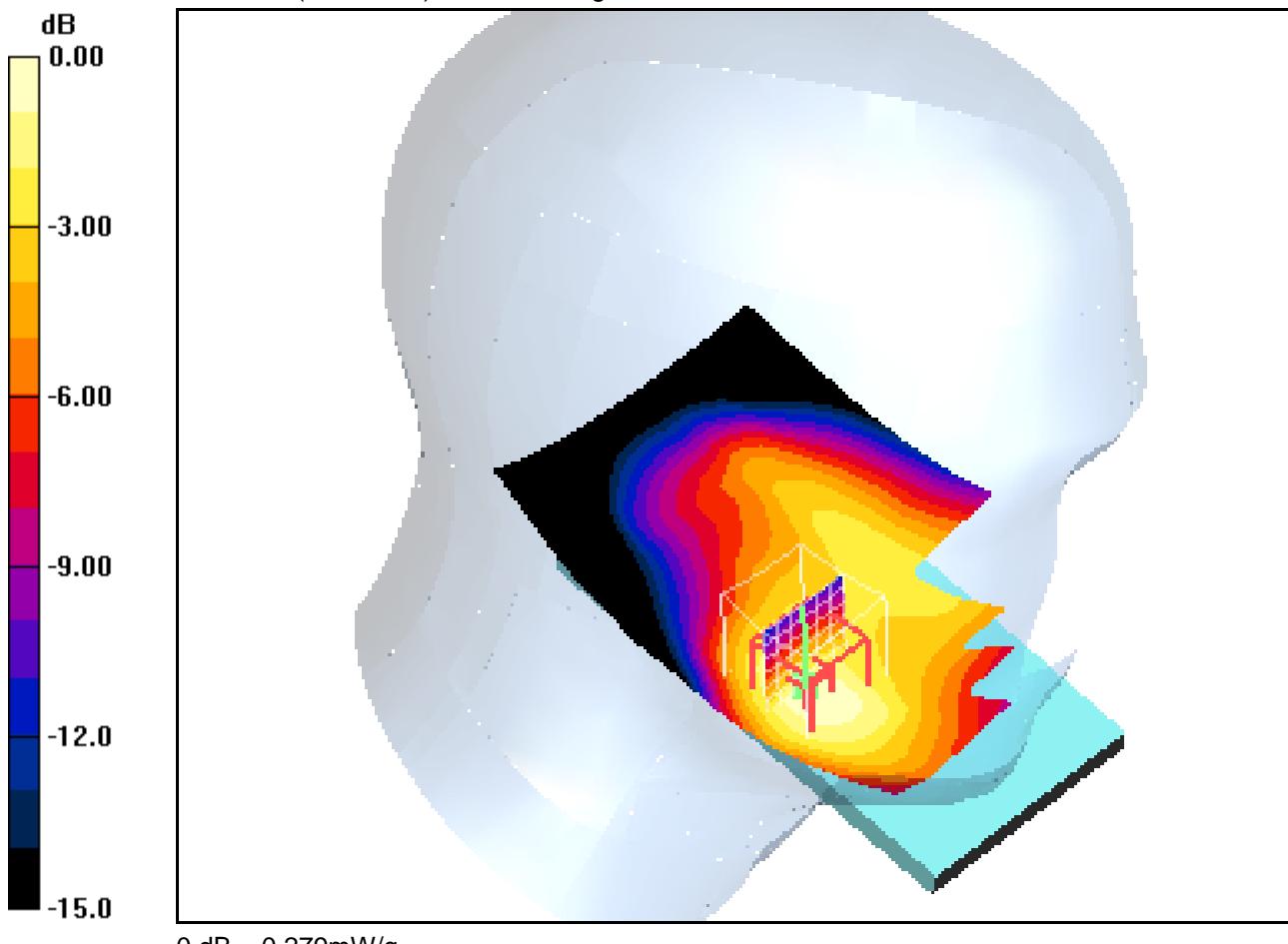
dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.3 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 0.394 W/kg

**SAR(1 g) = 0.259 mW/g; SAR(10 g) = 0.160 mW/g**

Maximum value of SAR (measured) = 0.279 mW/g

**Additional information:**

ambient temperature: 22.5°C; liquid temperature: 21.3°C

Date/Time: 04.12.2012 17:03:51 Date/Time: 04.12.2012 17:13:08

**EN62209-LeftHandSide-WCDMA FDD IV****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1712.4$  MHz;  $\sigma = 1.35$  mho/m;  $\epsilon_r = 39.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.28, 5.28, 5.28); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

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

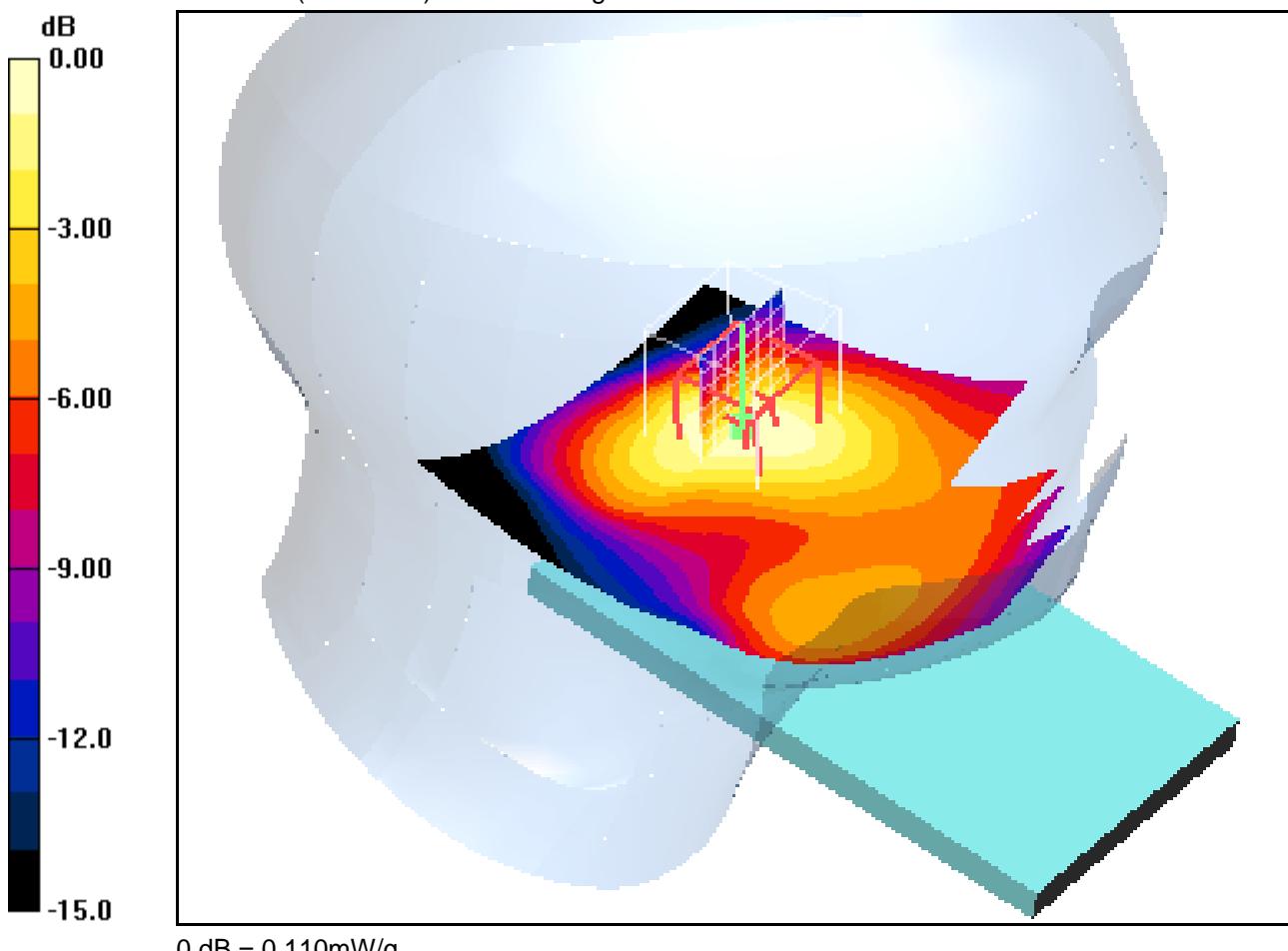
**Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.05 V/m; Power Drift = 0.041 dB

Peak SAR (extrapolated) = 0.141 W/kg

**SAR(1 g) = 0.101 mW/g; SAR(10 g) = 0.064 mW/g**

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

**Additional information:**

ambient temperature: 22.5°C; liquid temperature: 21.3°C

Date/Time: 04.12.2012 17:27:04 Date/Time: 04.12.2012 17:35:10

**EN62209-LeftHandSide-WCDMA FDD IV****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.28, 5.28, 5.28); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.096 mW/g

**Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

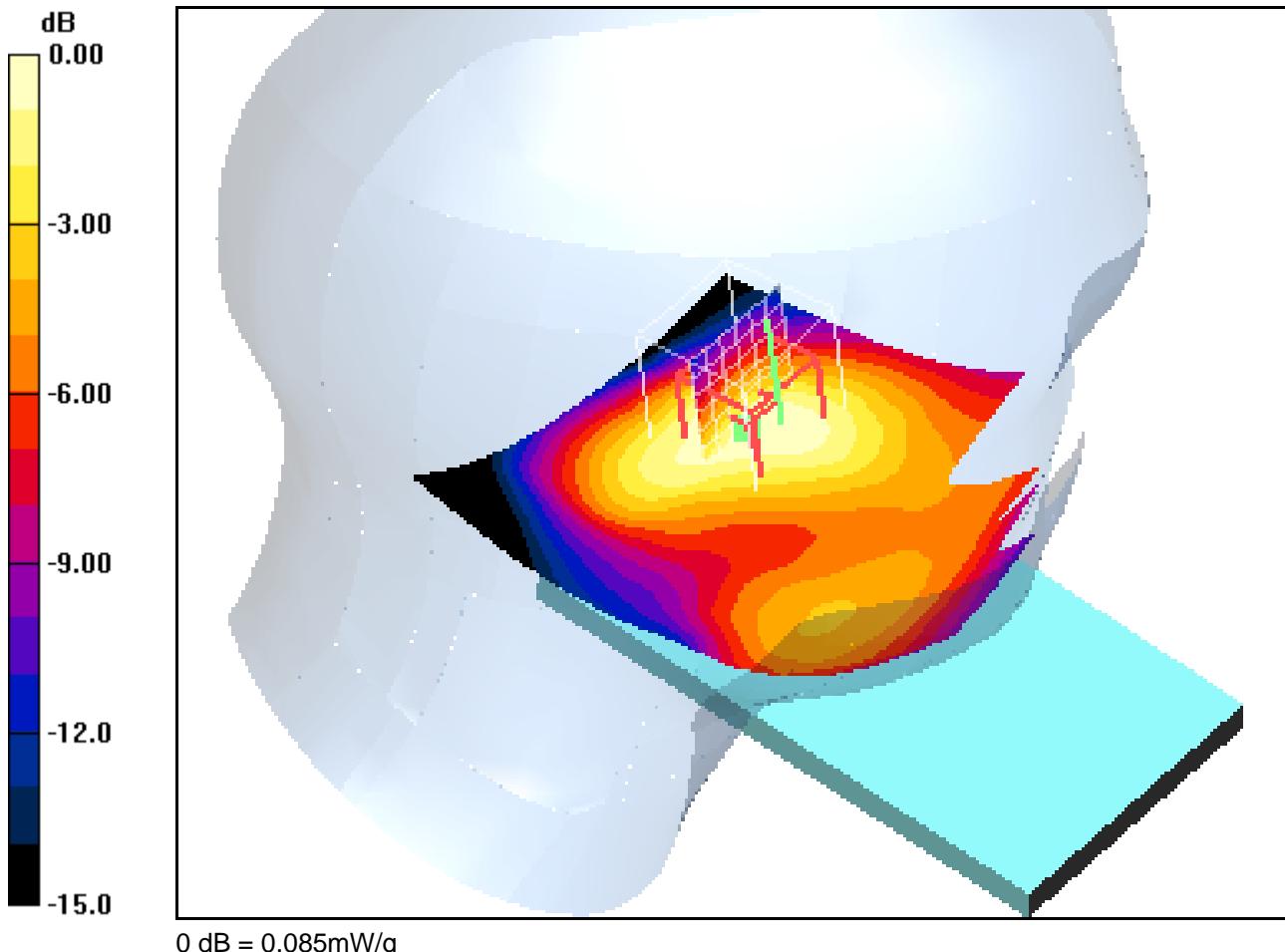
dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.05 V/m; Power Drift = -0.112 dB

Peak SAR (extrapolated) = 0.110 W/kg

**SAR(1 g) = 0.078 mW/g; SAR(10 g) = 0.050 mW/g**

Maximum value of SAR (measured) = 0.085 mW/g

**Additional information:**

ambient temperature: 22.5°C; liquid temperature: 21.3°C

Date/Time: 04.12.2012 17:47:51 Date/Time: 04.12.2012 17:55:56

**EN62209-LeftHandSide-WCDMA FDD IV****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1752.6$  MHz;  $\sigma = 1.4$  mho/m;  $\epsilon_r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.28, 5.28, 5.28); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - High/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

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

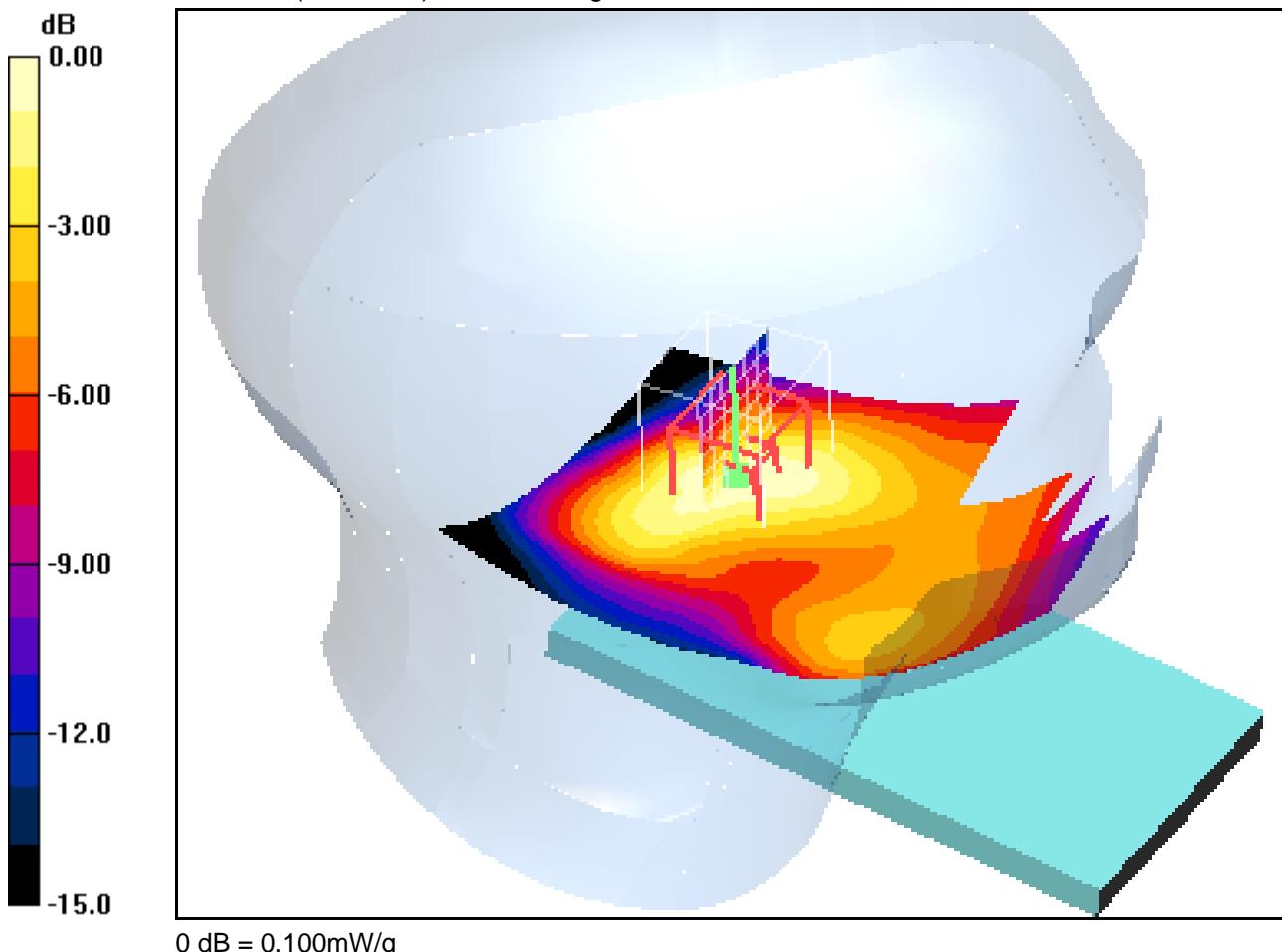
**Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.59 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.129 W/kg

**SAR(1 g) = 0.092 mW/g; SAR(10 g) = 0.058 mW/g**

Maximum value of SAR (measured) = 0.100 mW/g

**Additional information:**

ambient temperature: 22.5°C; liquid temperature: 21.3°C

Date/Time: 04.12.2012 14:58:13 Date/Time: 04.12.2012 15:05:57

**EN62209-RightHandSide-WCDMA FDD IV****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1712.4$  MHz;  $\sigma = 1.35$  mho/m;  $\epsilon_r = 39.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.28, 5.28, 5.28); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.316 mW/g

**Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

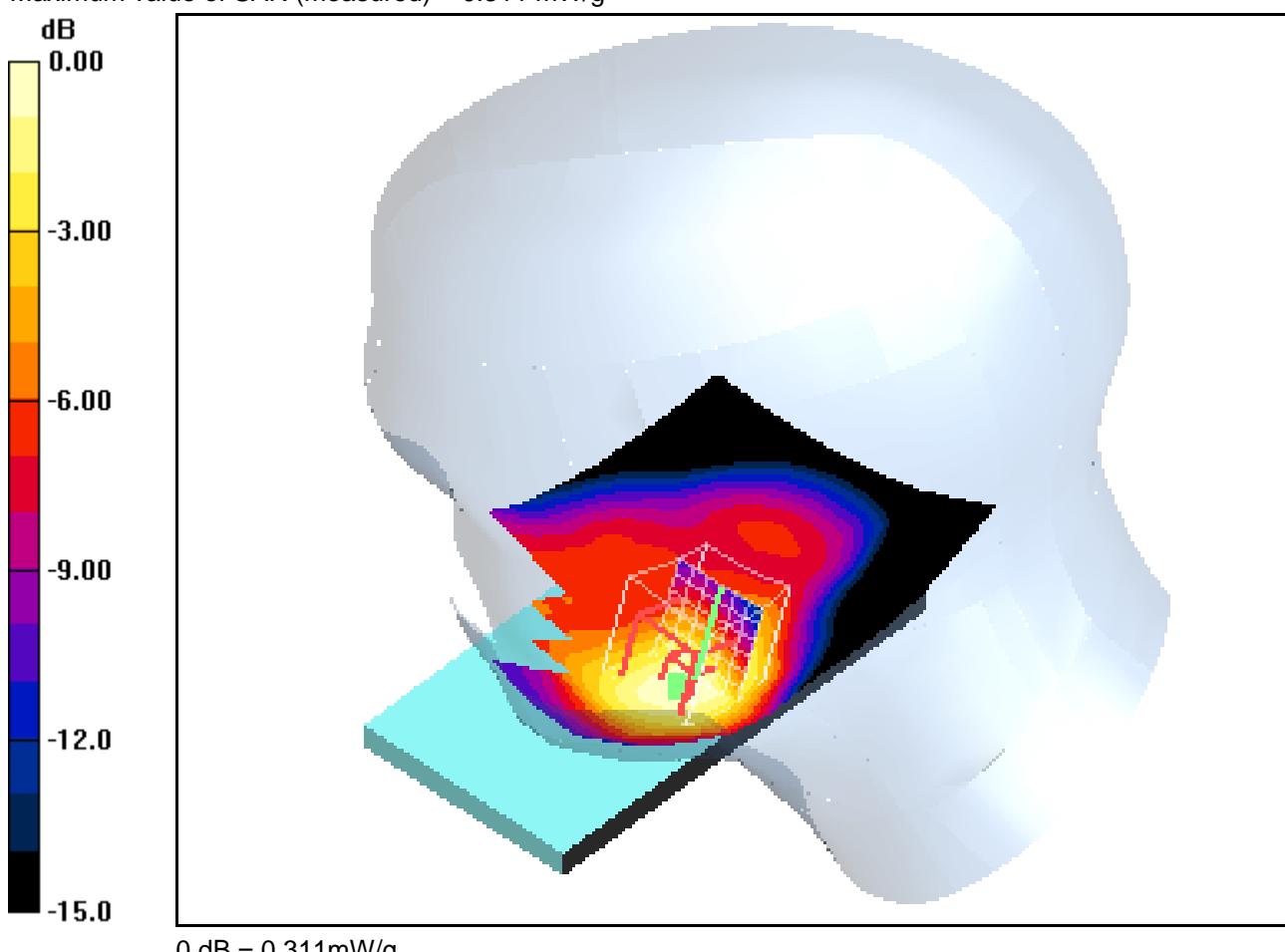
dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.0 V/m; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 0.395 W/kg

**SAR(1 g) = 0.284 mW/g; SAR(10 g) = 0.183 mW/g**

Maximum value of SAR (measured) = 0.311 mW/g

**Additional information:**

ambient temperature: 22.5°C; liquid temperature: 21.3°C

Date/Time: 04.12.2012 15:19:10 Date/Time: 04.12.2012 15:26:55

**EN62209-RightHandSide-WCDMA FDD IV****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.28, 5.28, 5.28); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.260 mW/g

**Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

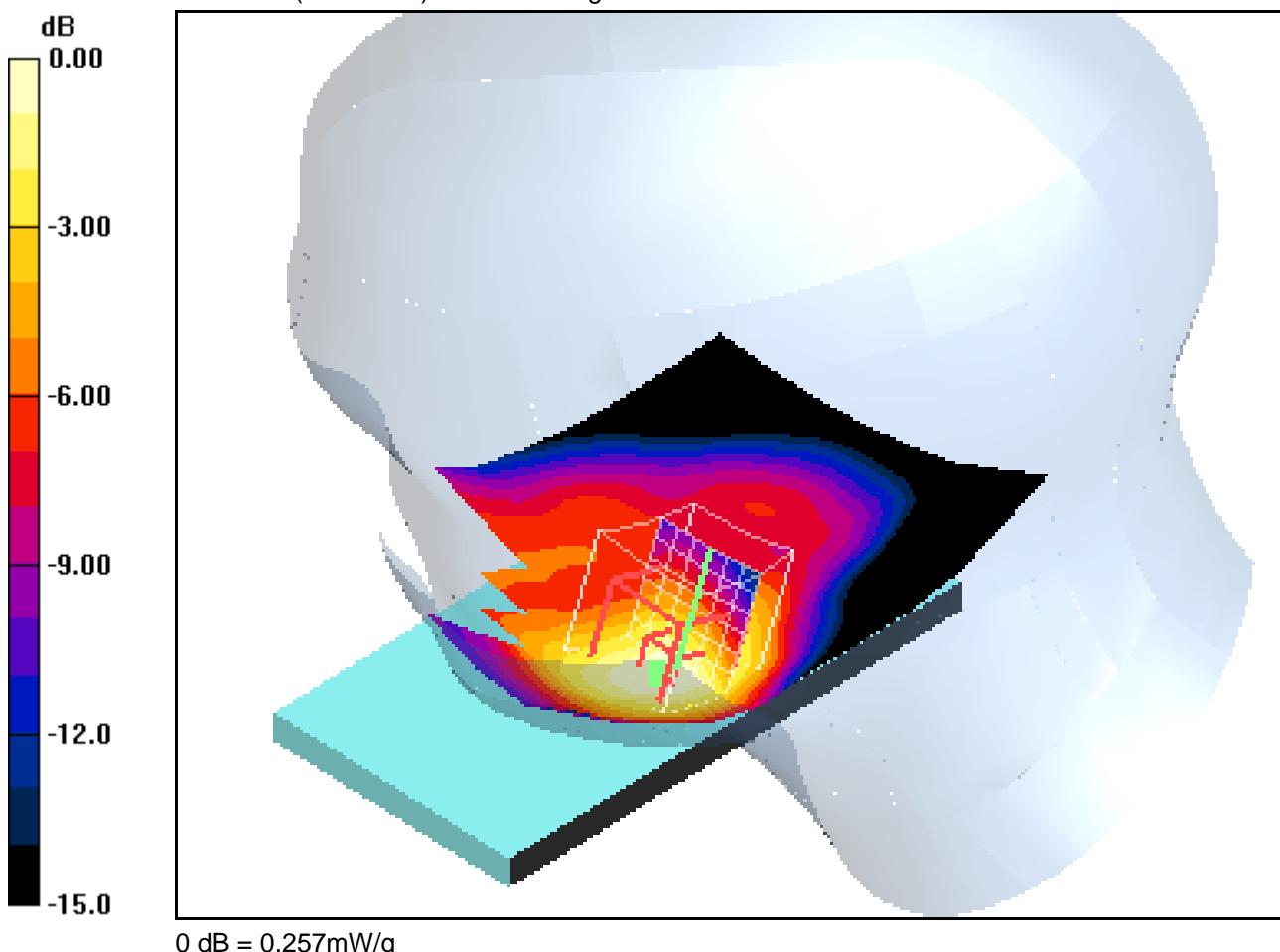
dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.5 V/m; Power Drift = 0.085 dB

Peak SAR (extrapolated) = 0.330 W/kg

**SAR(1 g) = 0.234 mW/g; SAR(10 g) = 0.149 mW/g**

Maximum value of SAR (measured) = 0.257 mW/g

**Additional information:**

ambient temperature: 22.5°C; liquid temperature: 21.3°C

Date/Time: 04.12.2012 15:39:40 Date/Time: 04.12.2012 15:47:25

**EN62209-RightHandSide-WCDMA FDD IV****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1752.6$  MHz;  $\sigma = 1.4$  mho/m;  $\epsilon_r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.28, 5.28, 5.28); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - High/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

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

**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

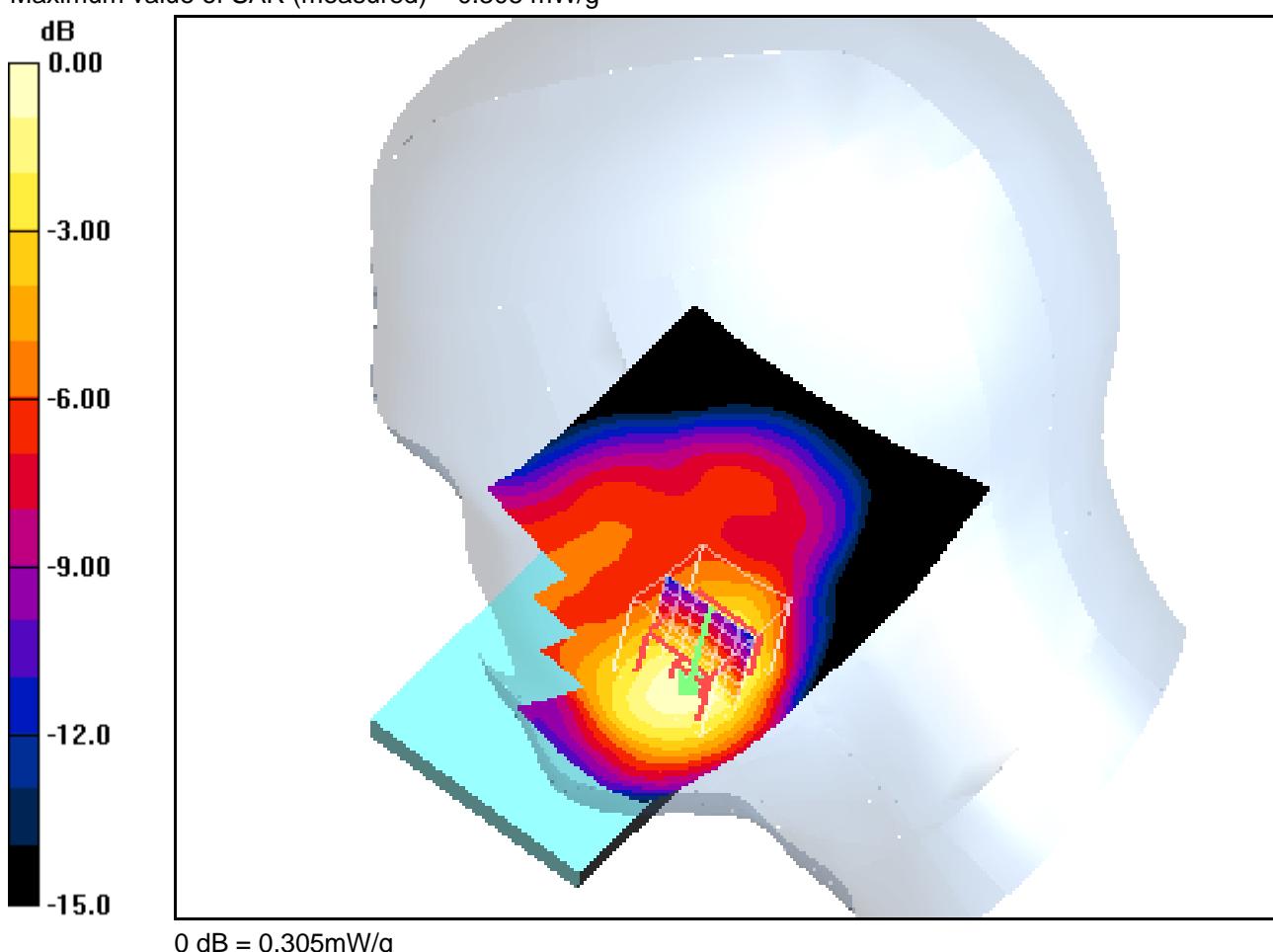
dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.7 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 0.392 W/kg

**SAR(1 g) = 0.276 mW/g; SAR(10 g) = 0.175 mW/g**

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

**Additional information:**

ambient temperature: 22.5°C; liquid temperature: 21.3°C

Date/Time: 04.12.2012 16:42:48 Date/Time: 04.12.2012 16:50:38

**EN62209-RightHandSide-WCDMA FDD IV****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1712.4$  MHz;  $\sigma = 1.35$  mho/m;  $\epsilon_r = 39.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.28, 5.28, 5.28); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.100 mW/g

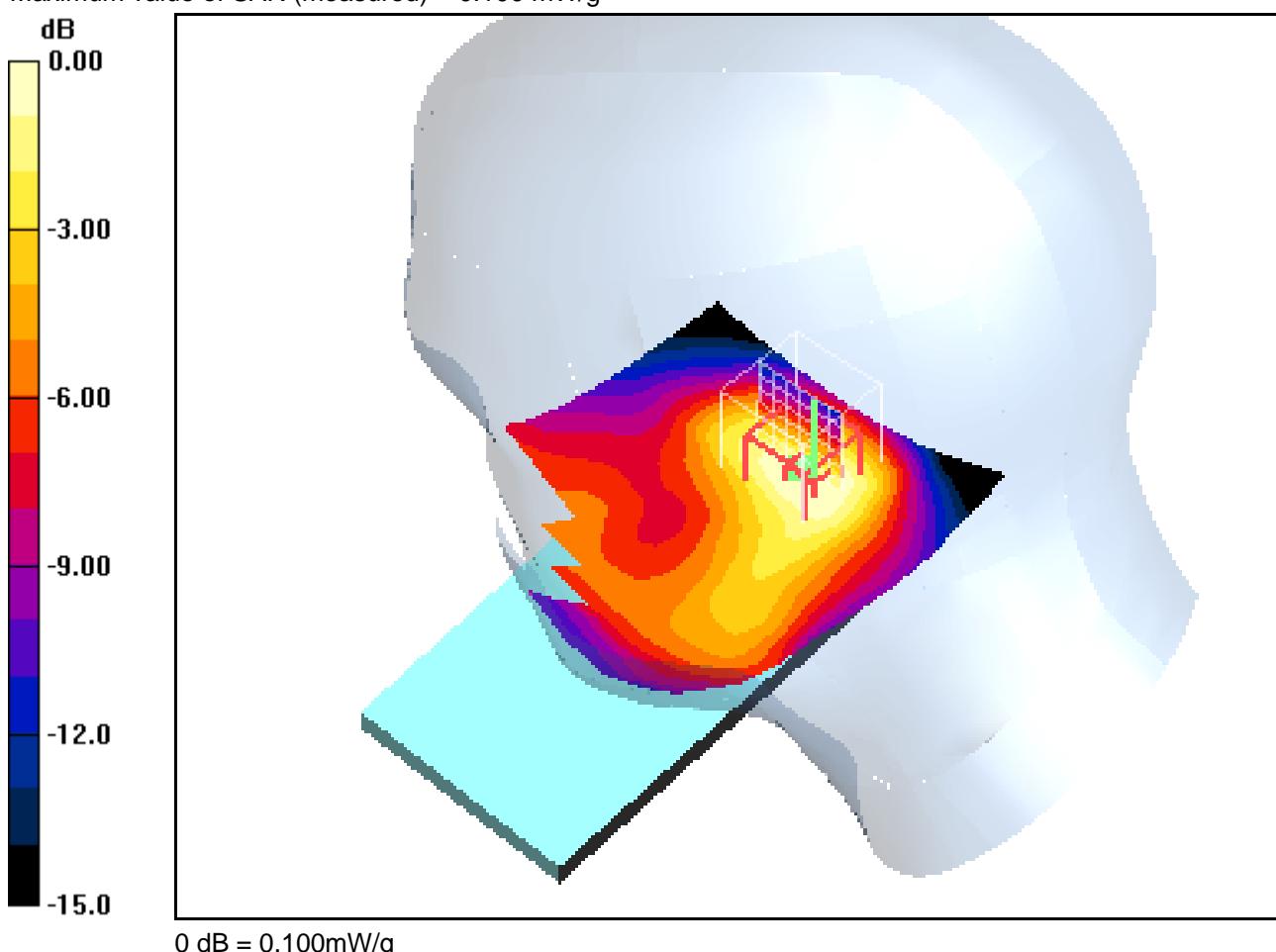
**Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.94 V/m; Power Drift = -0.054 dB

Peak SAR (extrapolated) = 0.129 W/kg

**SAR(1 g) = 0.092 mW/g; SAR(10 g) = 0.057 mW/g**

Maximum value of SAR (measured) = 0.100 mW/g

**Additional information:**

ambient temperature: 22.5°C; liquid temperature: 21.3°C

Date/Time: 04.12.2012 16:22:18 Date/Time: 04.12.2012 16:30:06

**EN62209-RightHandSide-WCDMA FDD IV****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.28, 5.28, 5.28); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.074 mW/g

**Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

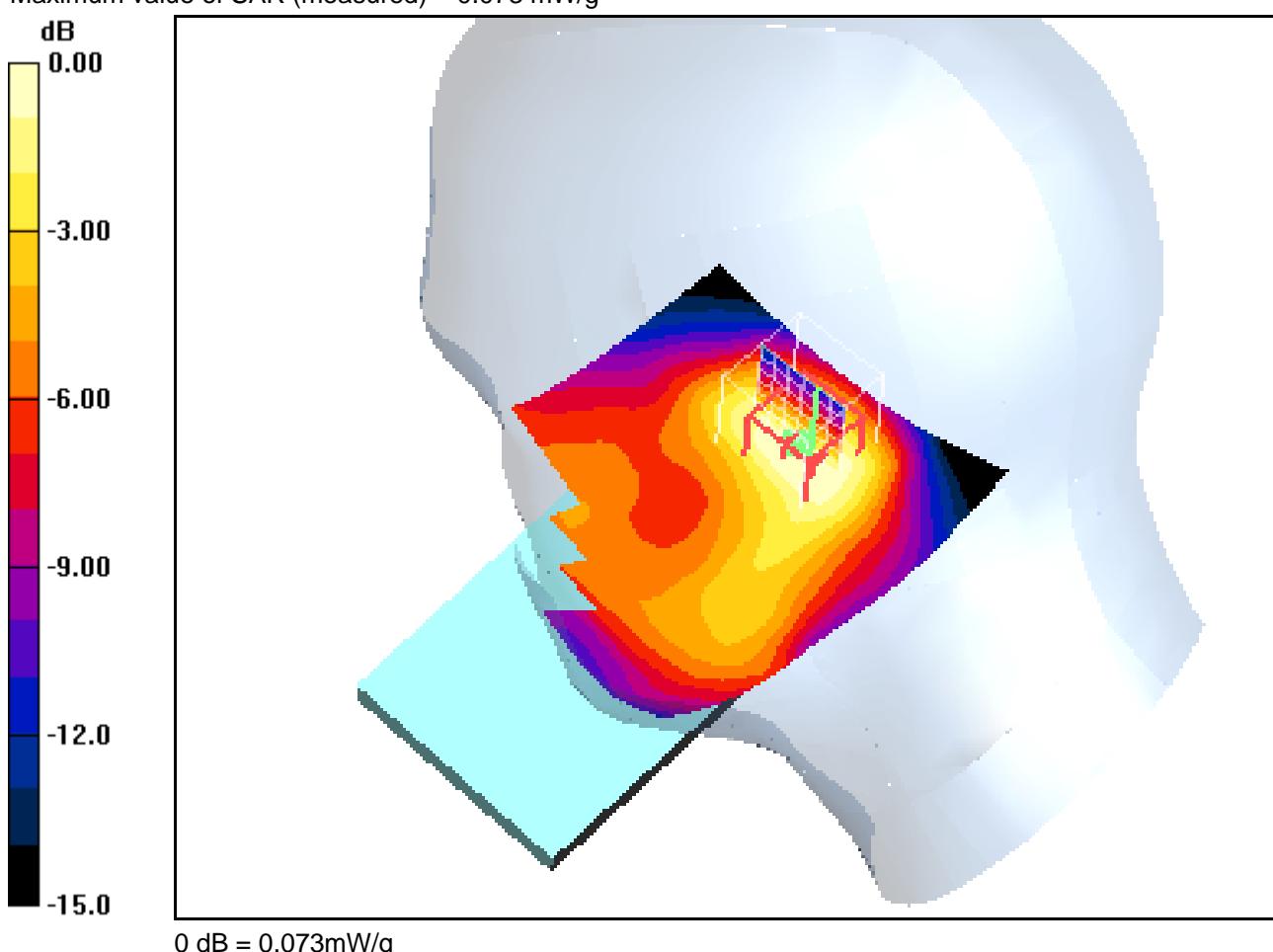
dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.60 V/m; Power Drift = -0.085 dB

Peak SAR (extrapolated) = 0.094 W/kg

**SAR(1 g) = 0.067 mW/g; SAR(10 g) = 0.041 mW/g**

Maximum value of SAR (measured) = 0.073 mW/g

**Additional information:**

ambient temperature: 22.5°C; liquid temperature: 21.3°C

Date/Time: 04.12.2012 16:01:39 Date/Time: 04.12.2012 16:10:00

**EN62209-RightHandSide-WCDMA FDD IV****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1752.6$  MHz;  $\sigma = 1.4$  mho/m;  $\epsilon_r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.28, 5.28, 5.28); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - High/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.114 mW/g

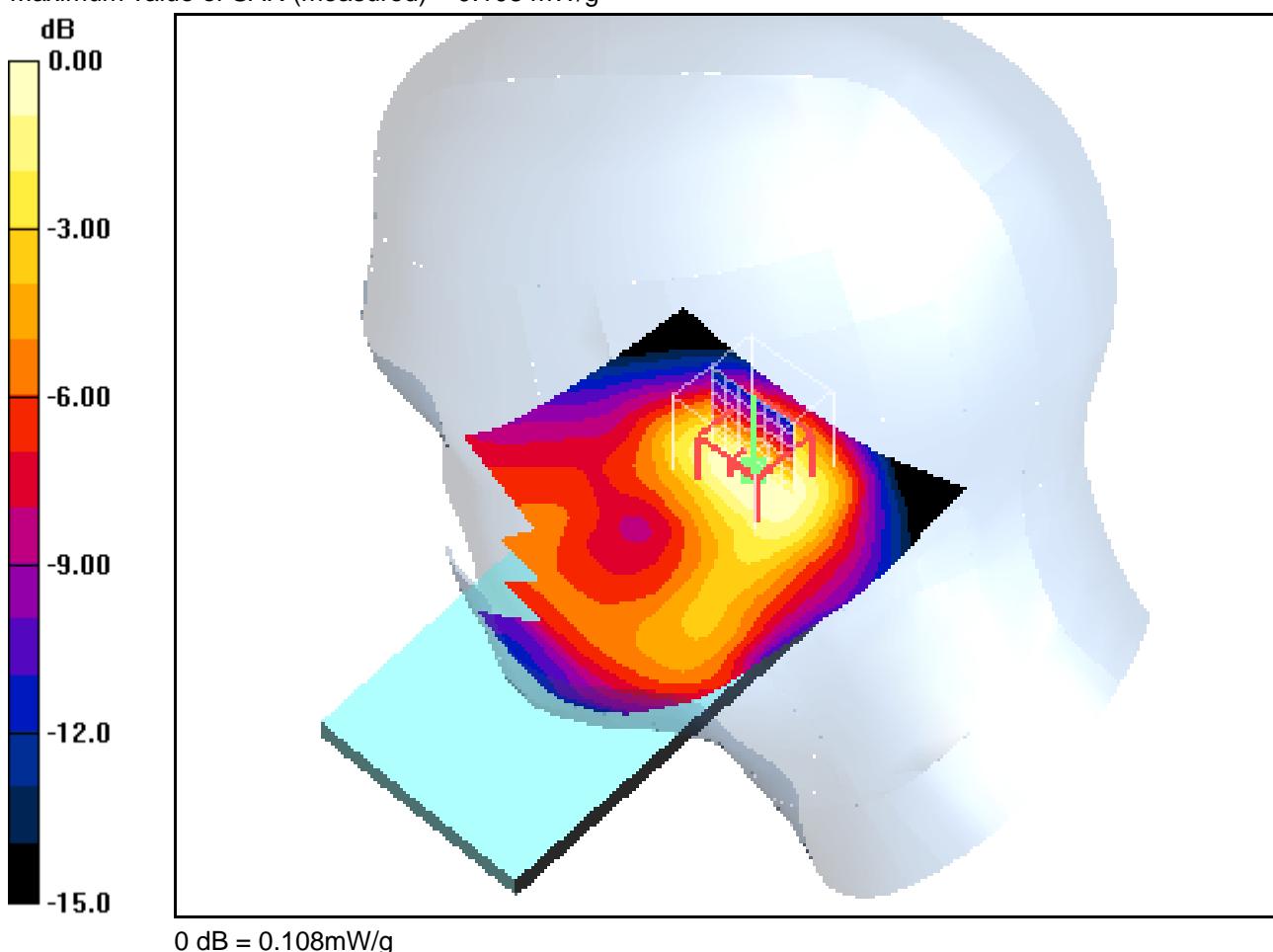
**Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.03 V/m; Power Drift = -0.097 dB

Peak SAR (extrapolated) = 0.143 W/kg

**SAR(1 g) = 0.098 mW/g; SAR(10 g) = 0.060 mW/g**

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

**Additional information:**

ambient temperature: 22.5°C; liquid temperature: 21.3°C

Date/Time: 05.12.2012 10:27:42 Date/Time: 05.12.2012 10:38:09

**OET65-Body-WCDMA FDD IV****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1712.4$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.65, 4.65, 4.65); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.754 mW/g

**Front position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

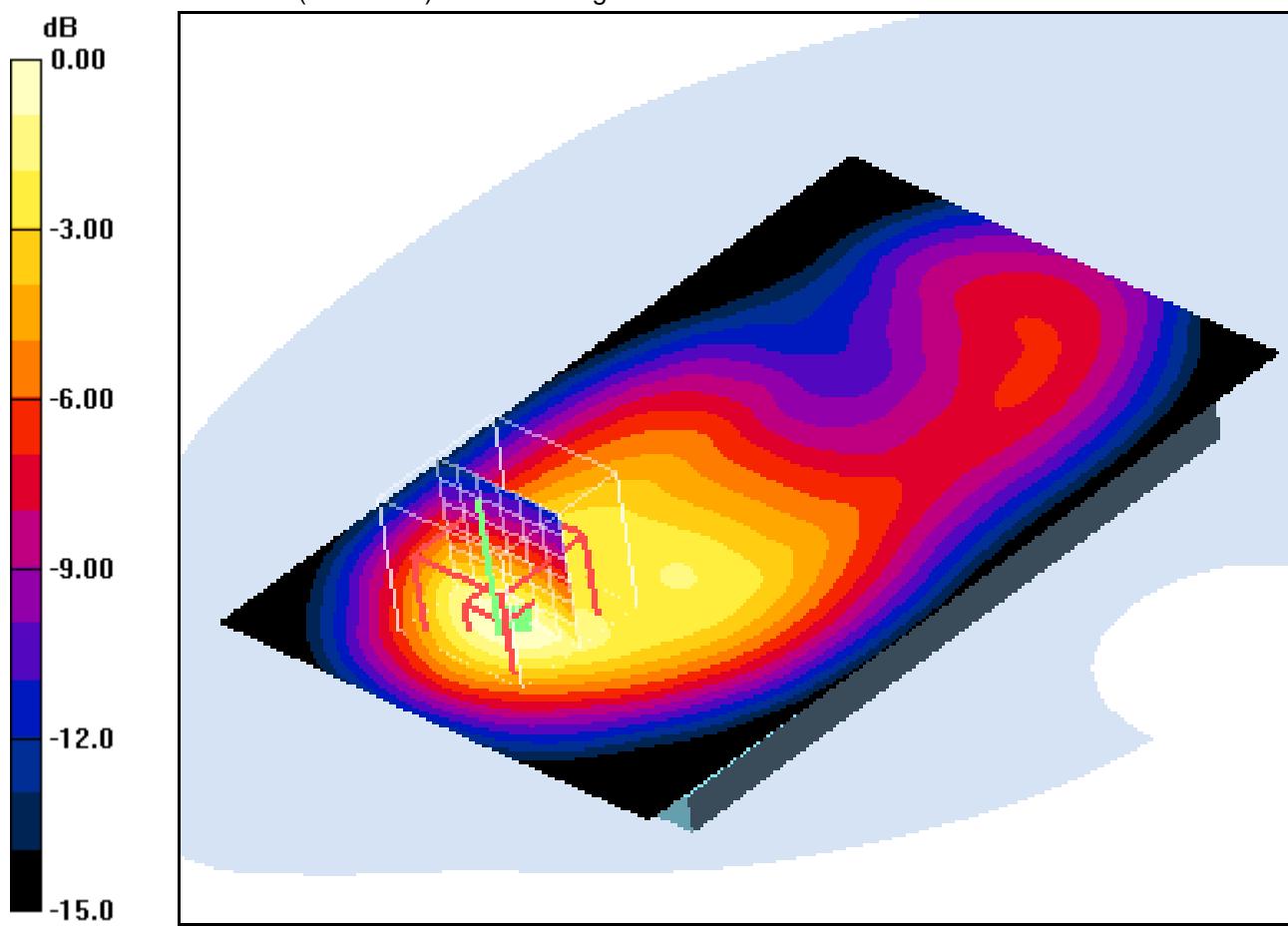
dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.2 V/m; Power Drift = 0.089 dB

Peak SAR (extrapolated) = 0.983 W/kg

**SAR(1 g) = 0.656 mW/g; SAR(10 g) = 0.377 mW/g**

Maximum value of SAR (measured) = 0.723 mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.1°C; liquid temperature: 21.9°C

Date/Time: 05.12.2012 10:50:52 Date/Time: 05.12.2012 10:59:50

**OET65-Body-WCDMA FDD IV****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.65, 4.65, 4.65); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.649 mW/g

**Front position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

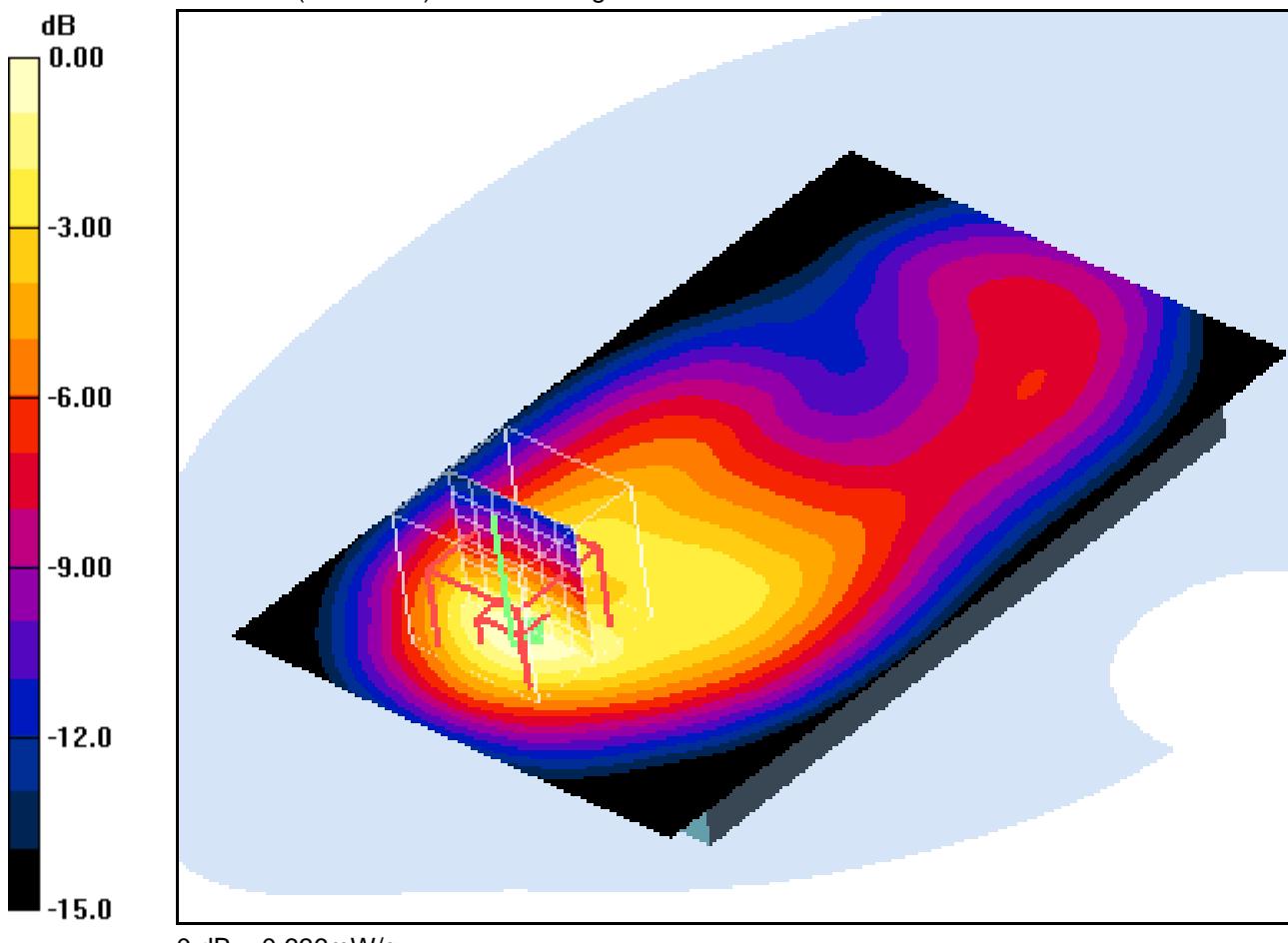
dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.5 V/m; Power Drift = -0.014 dB

Peak SAR (extrapolated) = 0.867 W/kg

**SAR(1 g) = 0.571 mW/g; SAR(10 g) = 0.322 mW/g**

Maximum value of SAR (measured) = 0.636 mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.1°C; liquid temperature: 21.9°C

Date/Time: 05.12.2012 11:11:37 Date/Time: 05.12.2012 11:20:38

## OET65-Body-WCDMA FDD IV

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1752.6$  MHz;  $\sigma = 1.5$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.65, 4.65, 4.65); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - High/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.772 mW/g

**Front position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

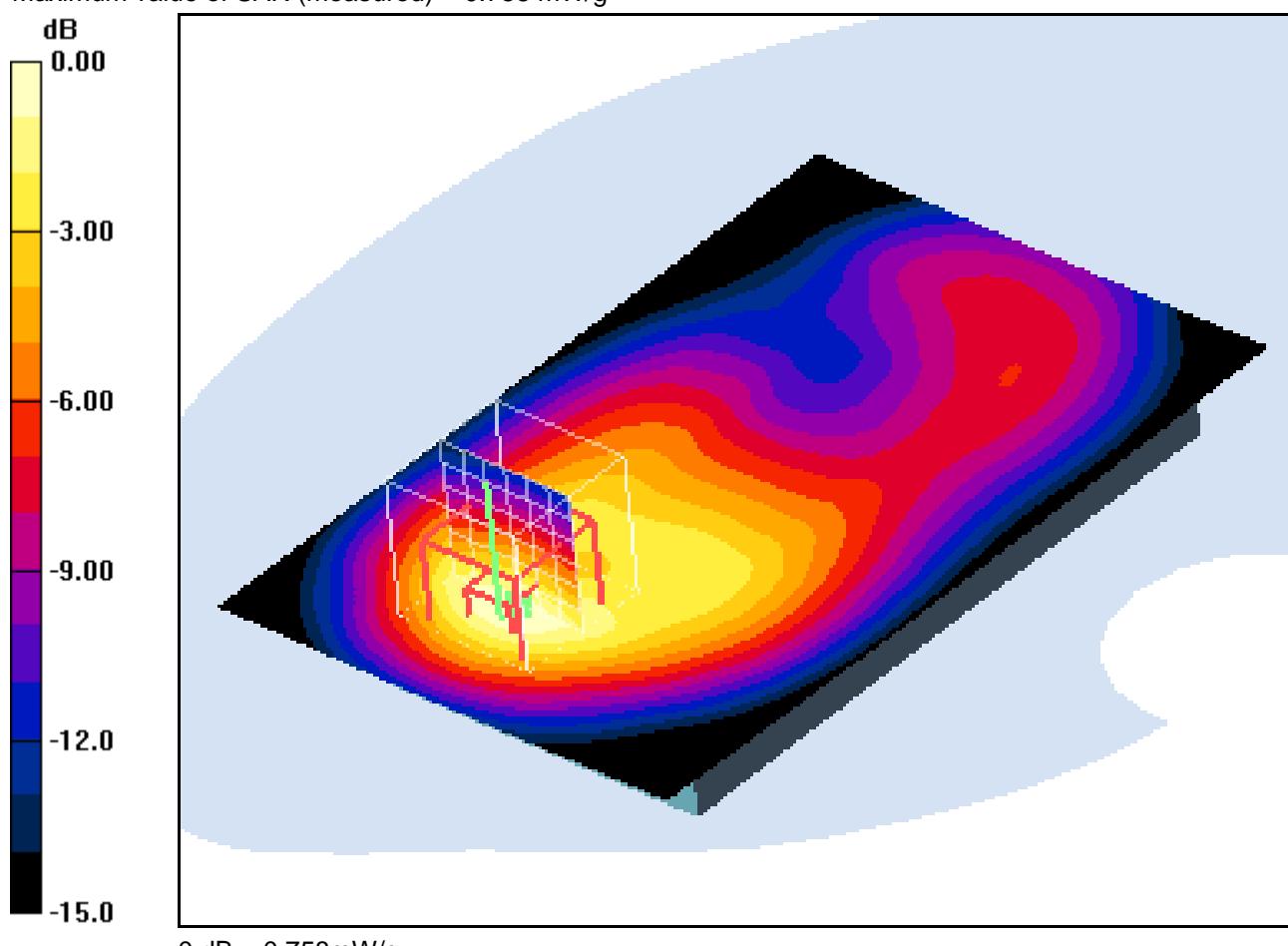
dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.5 V/m; Power Drift = 0.029 dB

Peak SAR (extrapolated) = 1.06 W/kg

**SAR(1 g) = 0.686 mW/g; SAR(10 g) = 0.387 mW/g**

Maximum value of SAR (measured) = 0.758 mW/g



### Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.1°C; liquid temperature: 21.9°C

Date/Time: 05.12.2012 12:18:41 Date/Time: 05.12.2012 12:27:42

## OET65-Body-WCDMA FDD IV

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1712.4$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.65, 4.65, 4.65); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.04 mW/g

**Rear position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

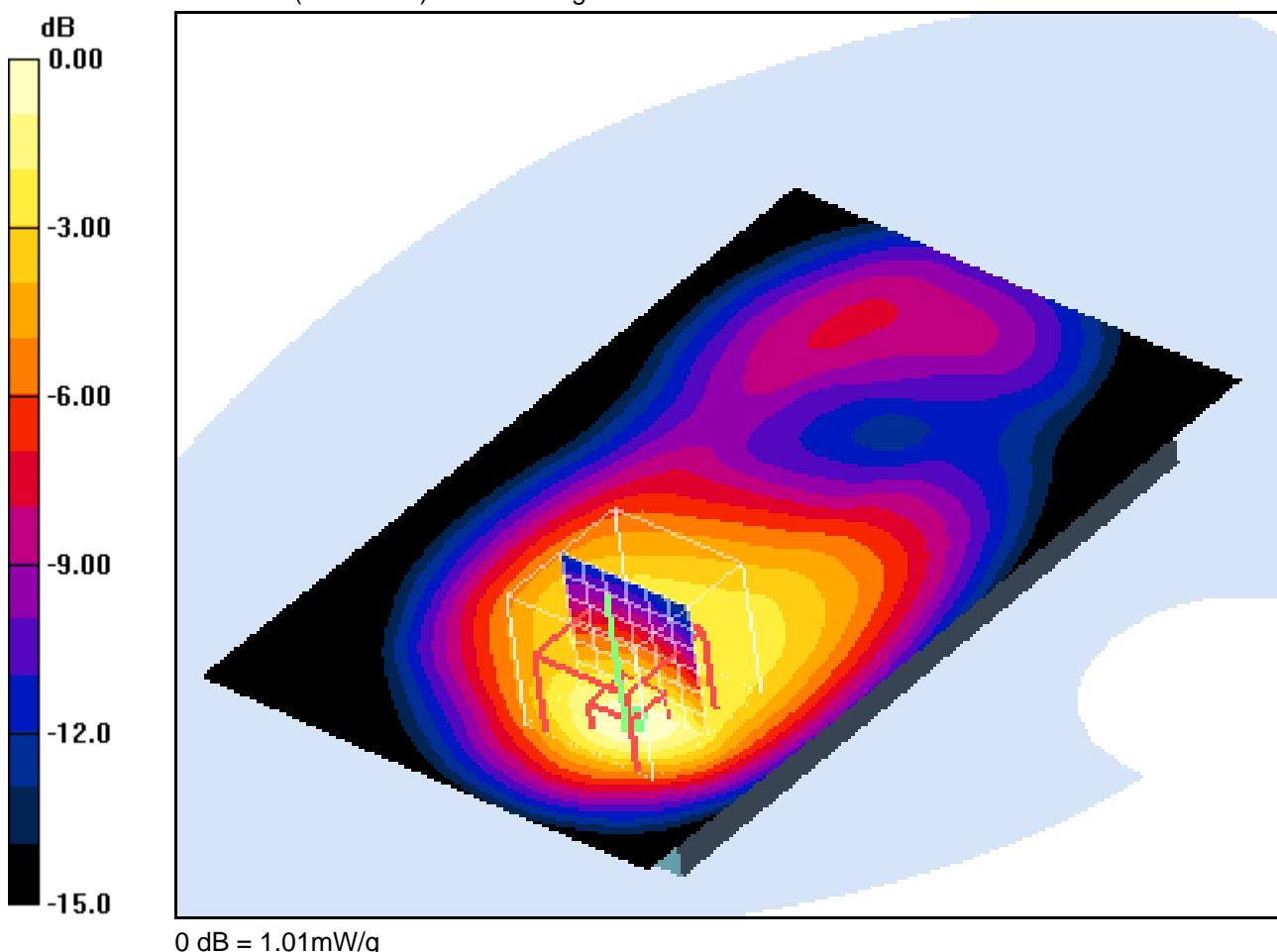
dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.1 V/m; Power Drift = 0.039 dB

Peak SAR (extrapolated) = 1.31 W/kg

**SAR(1 g) = 0.882 mW/g; SAR(10 g) = 0.495 mW/g**

Maximum value of SAR (measured) = 1.01 mW/g



### Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.1°C; liquid temperature: 21.9°C

Date/Time: 05.12.2012 11:58:11 Date/Time: 05.12.2012 12:07:14

**OET65-Body-WCDMA FDD IV****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.65, 4.65, 4.65); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

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

**Rear position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

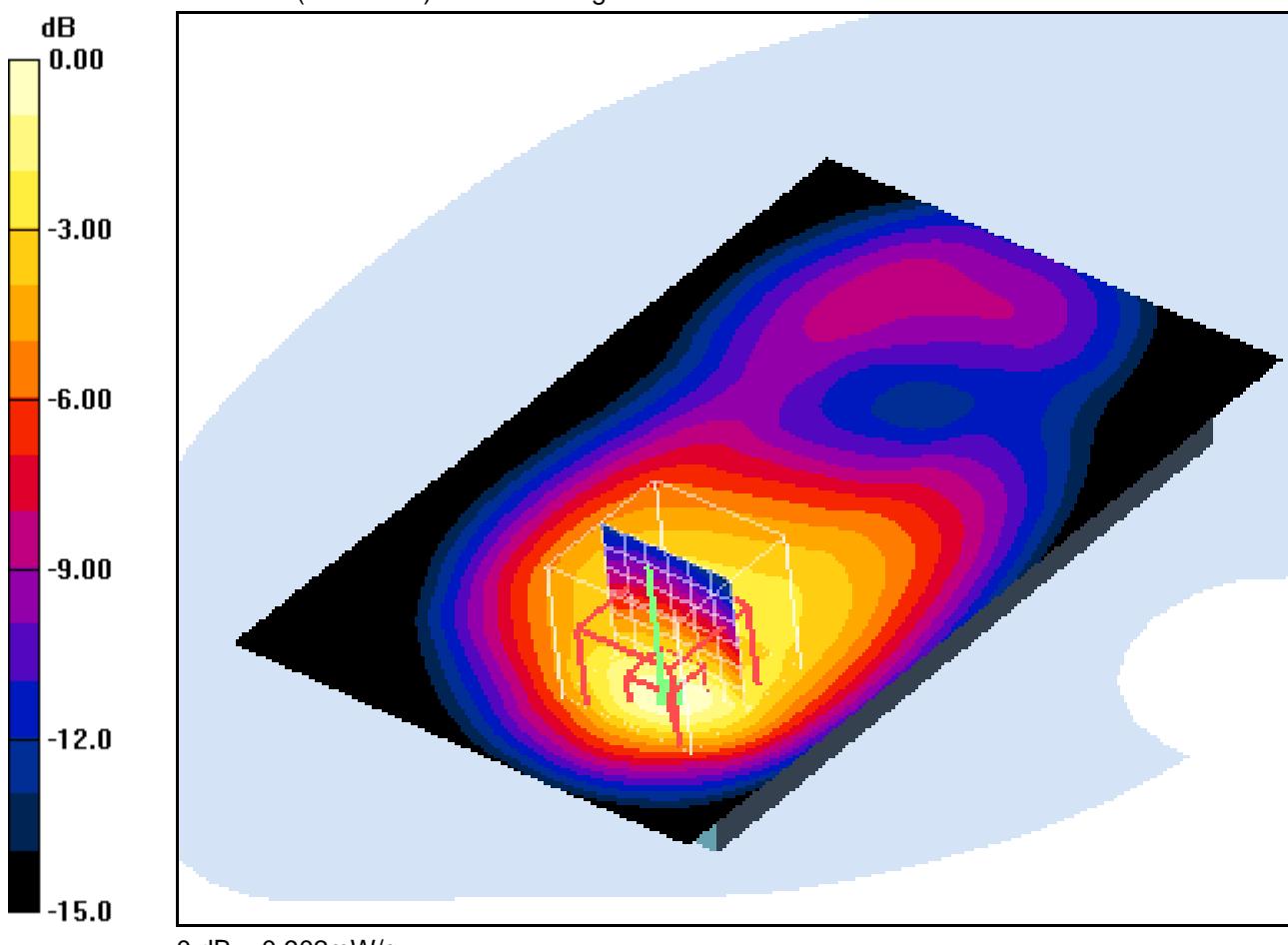
dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.4 V/m; Power Drift = -0.025 dB

Peak SAR (extrapolated) = 1.17 W/kg

**SAR(1 g) = 0.782 mW/g; SAR(10 g) = 0.439 mW/g**

Maximum value of SAR (measured) = 0.902 mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.1°C; liquid temperature: 21.9°C

Date/Time: 05.12.2012 11:34:43 Date/Time: 05.12.2012 11:45:41

**OET65-Body-WCDMA FDD IV****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1752.6$  MHz;  $\sigma = 1.5$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.65, 4.65, 4.65); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - High/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

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

**Rear position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

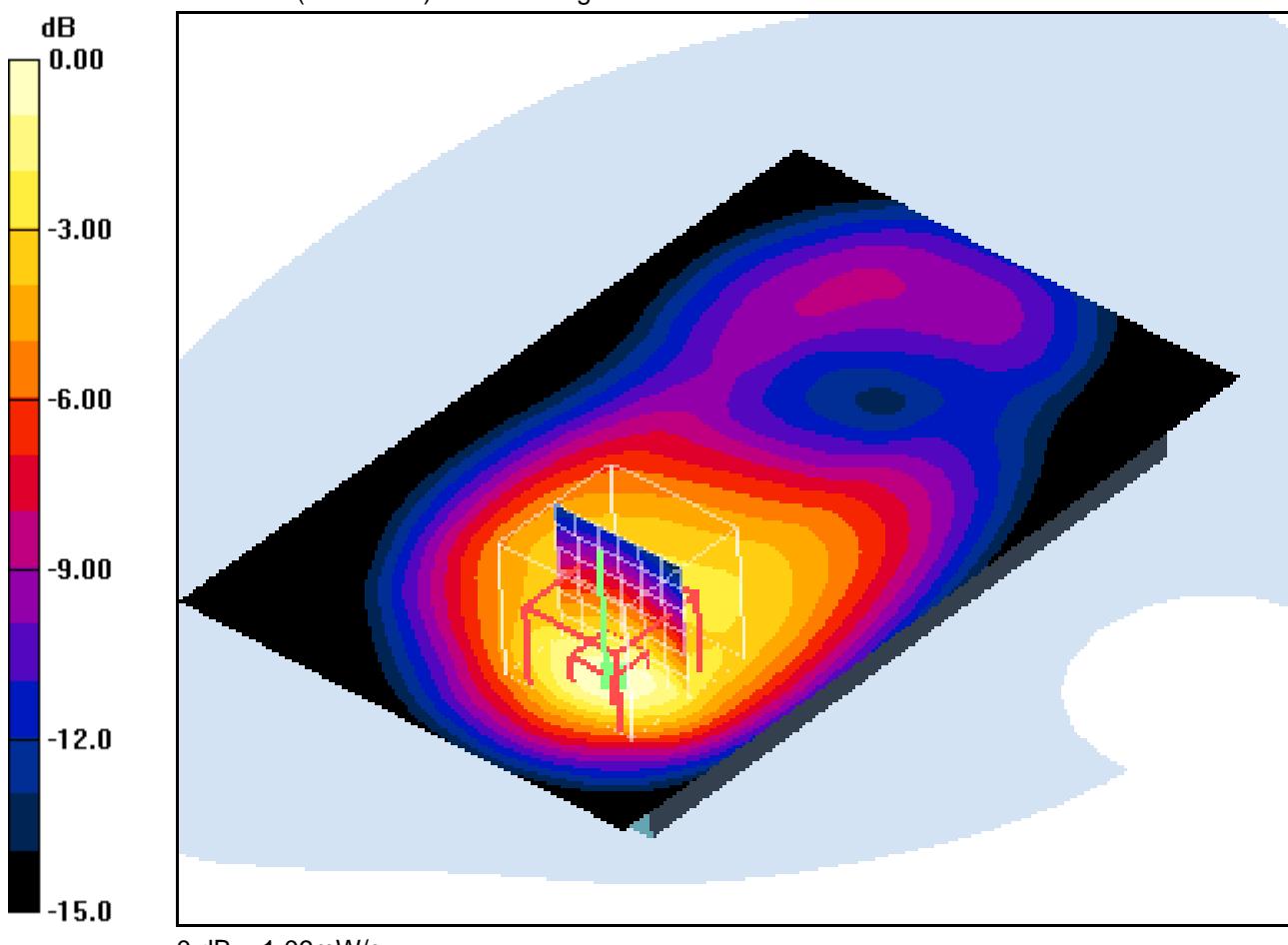
dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.9 V/m; Power Drift = -0.035 dB

Peak SAR (extrapolated) = 1.44 W/kg

**SAR(1 g) = 0.949 mW/g; SAR(10 g) = 0.528 mW/g**

Maximum value of SAR (measured) = 1.09 mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.1°C; liquid temperature: 21.9°C

Date/Time: 05.12.2012 13:10:39 Date/Time: 05.12.2012 13:19:27

## OET65-Body-WCDMA FDD IV

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.65, 4.65, 4.65); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Edge left position - Middle/Area Scan (61x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.141 mW/g

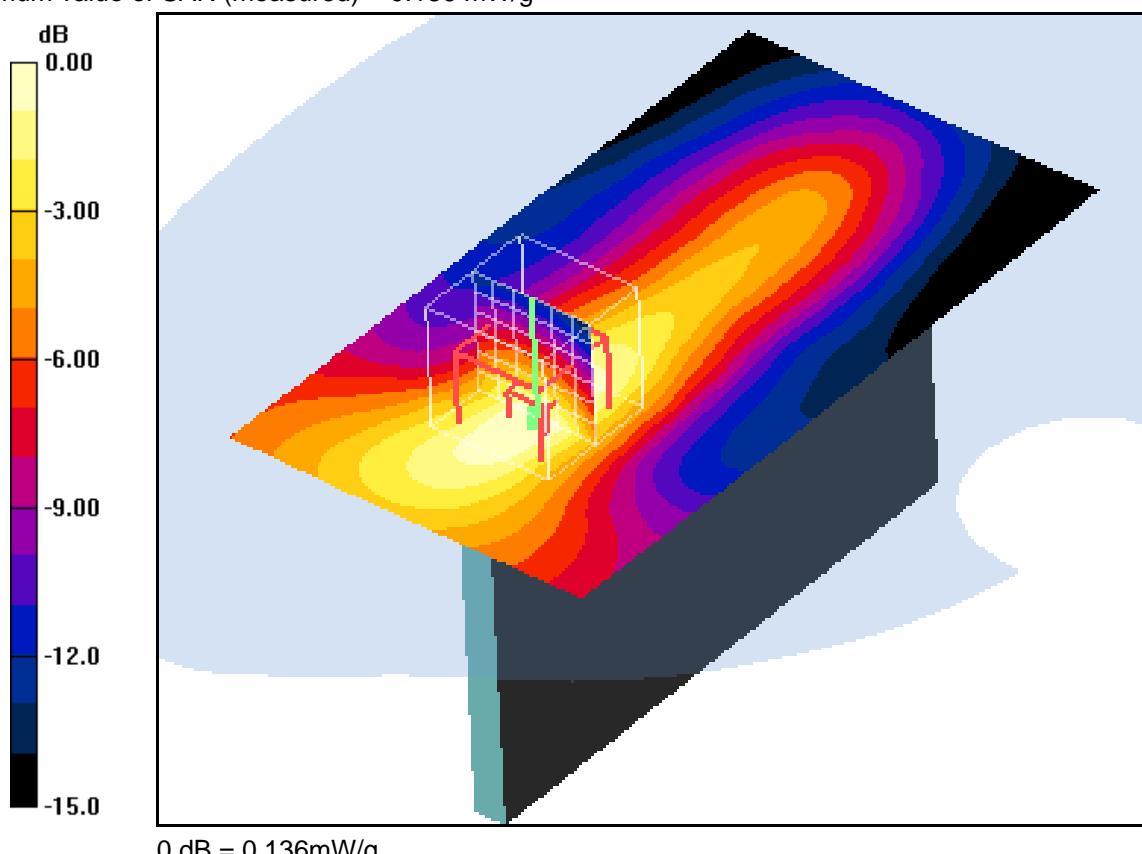
**Edge left position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.5 V/m; Power Drift = -0.022 dB

Peak SAR (extrapolated) = 0.184 W/kg

**SAR(1 g) = 0.122 mW/g; SAR(10 g) = 0.072 mW/g**

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



### Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.1°C; liquid temperature: 21.9°C

Date/Time: 05.12.2012 13:32:04 Date/Time: 05.12.2012 13:41:04

## OET65-Body-WCDMA FDD IV

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.65, 4.65, 4.65); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Edge right position - Middle/Area Scan (61x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.077 mW/g

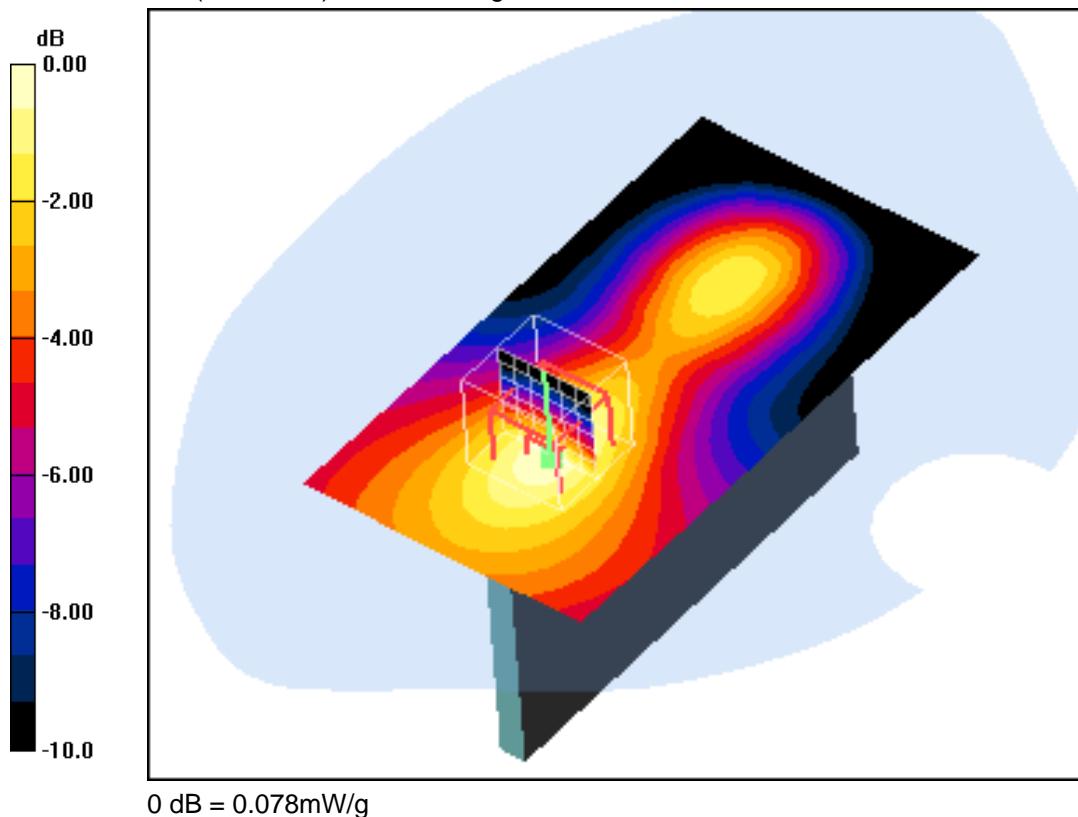
**Edge right position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.80 V/m; Power Drift = 0.071 dB

Peak SAR (extrapolated) = 0.101 W/kg

**SAR(1 g) = 0.072 mW/g; SAR(10 g) = 0.046 mW/g**

Maximum value of SAR (measured) = 0.078 mW/g



### Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.1°C; liquid temperature: 21.9°C

Date/Time: 05.12.2012 12:42:26 Date/Time: 05.12.2012 12:48:18

## OET65-Body-WCDMA FDD IV

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.65, 4.65, 4.65); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Edge bottom position - Middle/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.779 mW/g

## Edge bottom position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

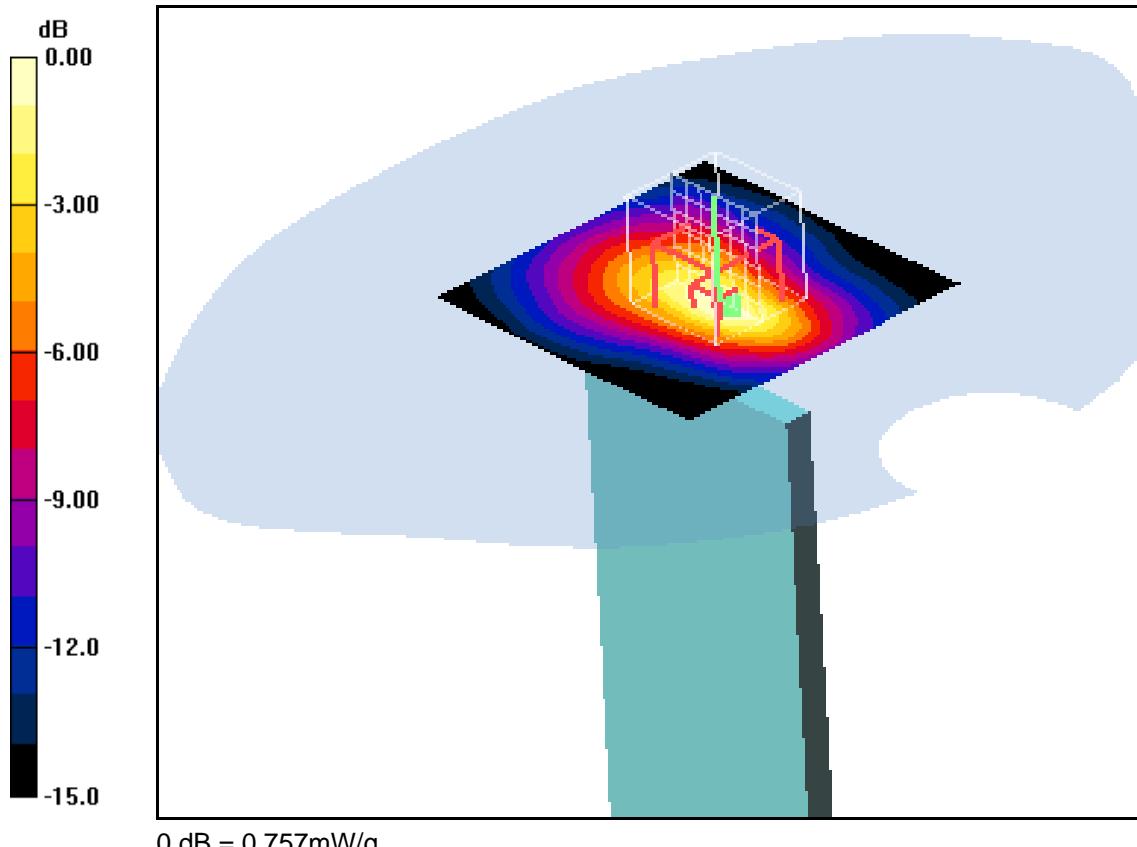
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.9 V/m; Power Drift = -0.084 dB

Peak SAR (extrapolated) = 1.02 W/kg

**SAR(1 g) = 0.666 mW/g; SAR(10 g) = 0.365 mW/g**

Maximum value of SAR (measured) = 0.757 mW/g



### Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.1°C; liquid temperature: 21.9°C

Date/Time: 05.12.2012 14:04:49 Date/Time: 05.12.2012 14:13:56

## OET65-Body-WCDMA FDD IV

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1752.6$  MHz;  $\sigma = 1.5$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.65, 4.65, 4.65); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - High WC/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.06 mW/g

**Rear position - High WC/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

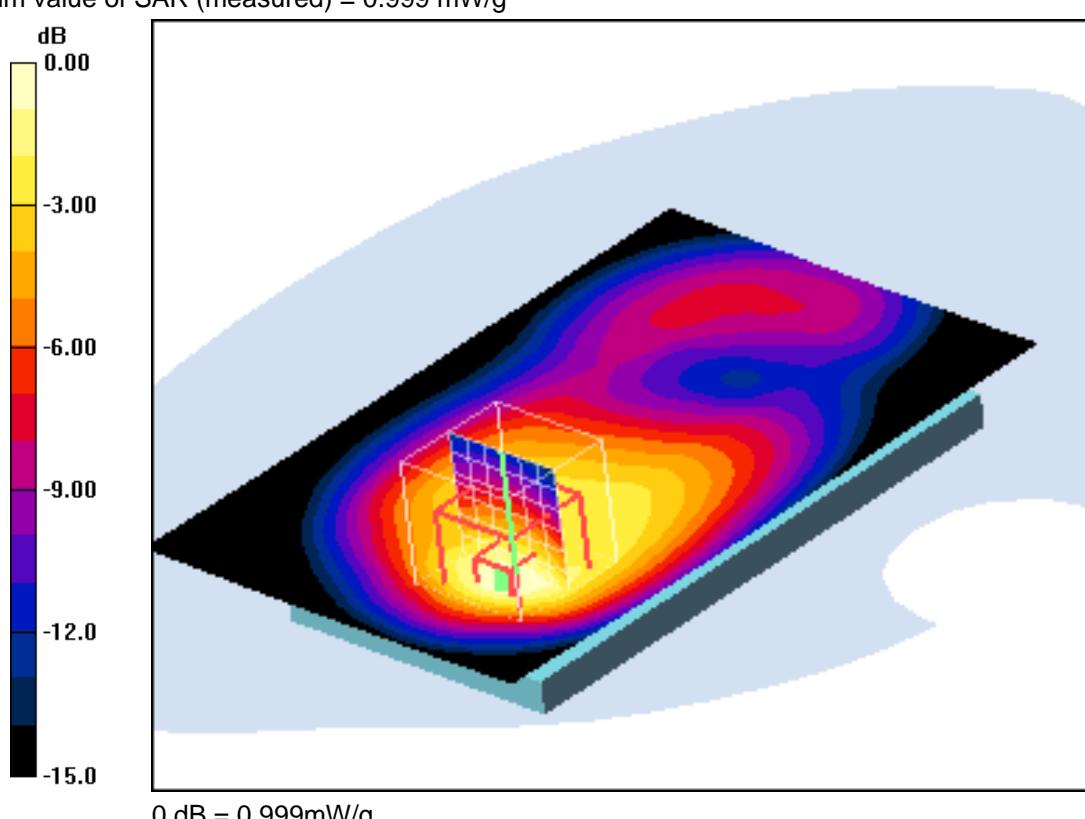
dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.0 V/m; Power Drift = 0.044 dB

Peak SAR (extrapolated) = 1.37 W/kg

**SAR(1 g) = 0.904 mW/g; SAR(10 g) = 0.504 mW/g**

Maximum value of SAR (measured) = 0.999 mW/g



### Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.1°C; liquid temperature: 21.9°C

Date/Time: 05.12.2012 14:28:03 Date/Time: 05.12.2012 14:38:26

**OET65-Body-WCDMA FDD IV****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1752.6$  MHz;  $\sigma = 1.5$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.65, 4.65, 4.65); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - High 15mm/Area Scan (71x111x1):** Measurement grid: dx=15mm,

dy=15mm

Maximum value of SAR (interpolated) = 0.564 mW/g

**Rear position - High 15mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement

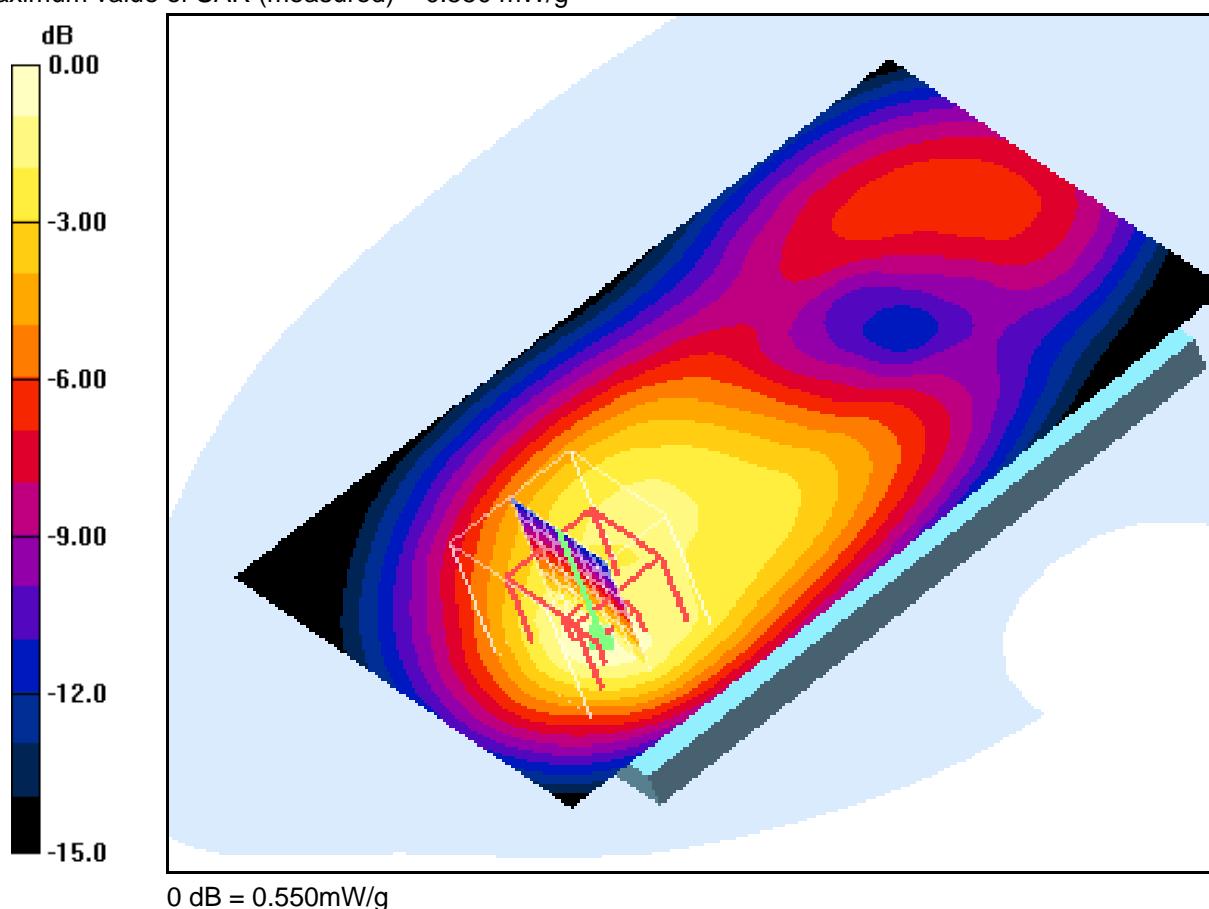
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.3 V/m; Power Drift = -0.034 dB

Peak SAR (extrapolated) = 0.700 W/kg

**SAR(1 g) = 0.496 mW/g; SAR(10 g) = 0.301 mW/g**

Maximum value of SAR (measured) = 0.550 mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.1°C; liquid temperature: 21.9°C

Date/Time: 05.12.2012 14:51:46 Date/Time: 05.12.2012 15:00:54

**OET65-Body-WCDMA FDD IV****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA 1700; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1752.6$  MHz;  $\sigma = 1.5$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.65, 4.65, 4.65); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - High 15mm AMR/Area Scan (71x111x1):** Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.494 mW/g

**Rear position - High 15mm AMR/Zoom Scan (7x7x7) (7x7x7)/Cube 0:**

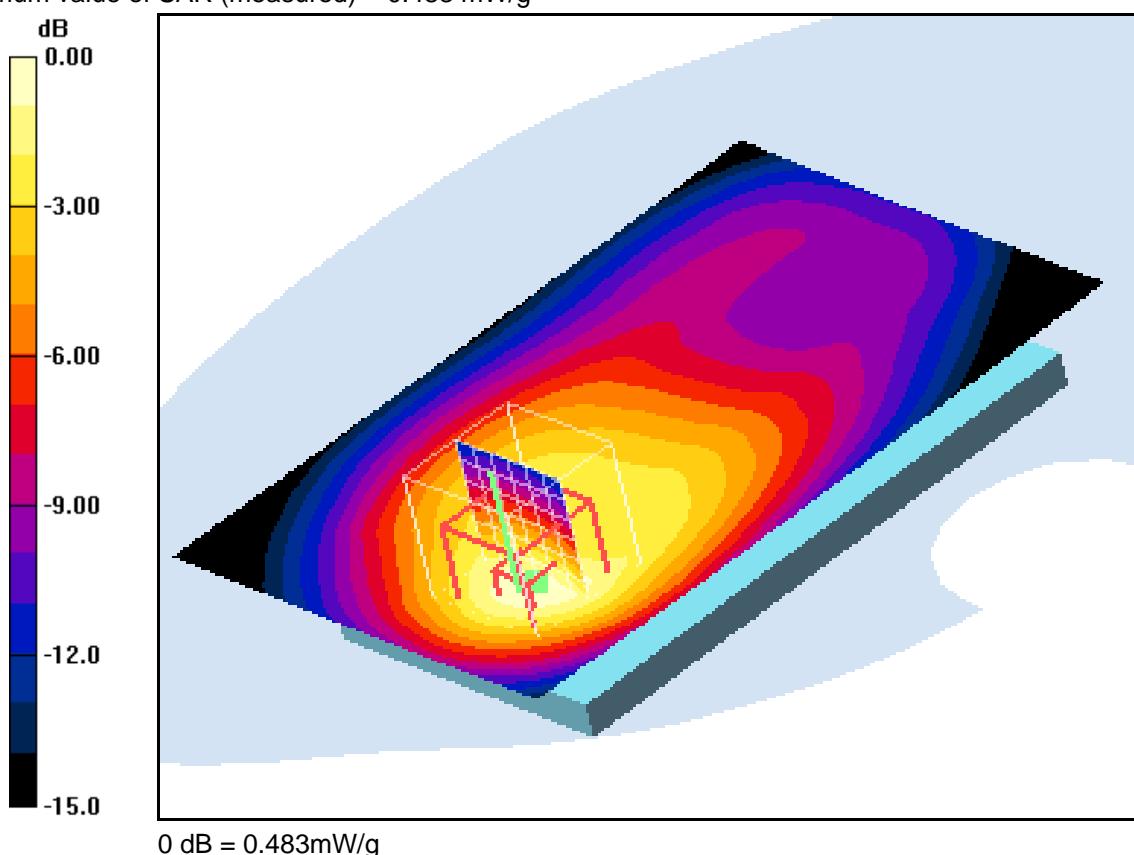
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.6 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.630 W/kg

**SAR(1 g) = 0.440 mW/g; SAR(10 g) = 0.263 mW/g**

Maximum value of SAR (measured) = 0.483 mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.1°C; liquid temperature: 21.9°C

## Annex B.5: WCDMA FDD II 1900MHz

Date/Time: 13.12.2012 08:37:55 Date/Time: 13.12.2012 08:46:37

### IEEE1528-LeftHandSide-WCDMA FDD II

DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1852.5$  MHz;  $\sigma = 1.34$  mho/m;  $\epsilon_r = 40.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.215 mW/g

**Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

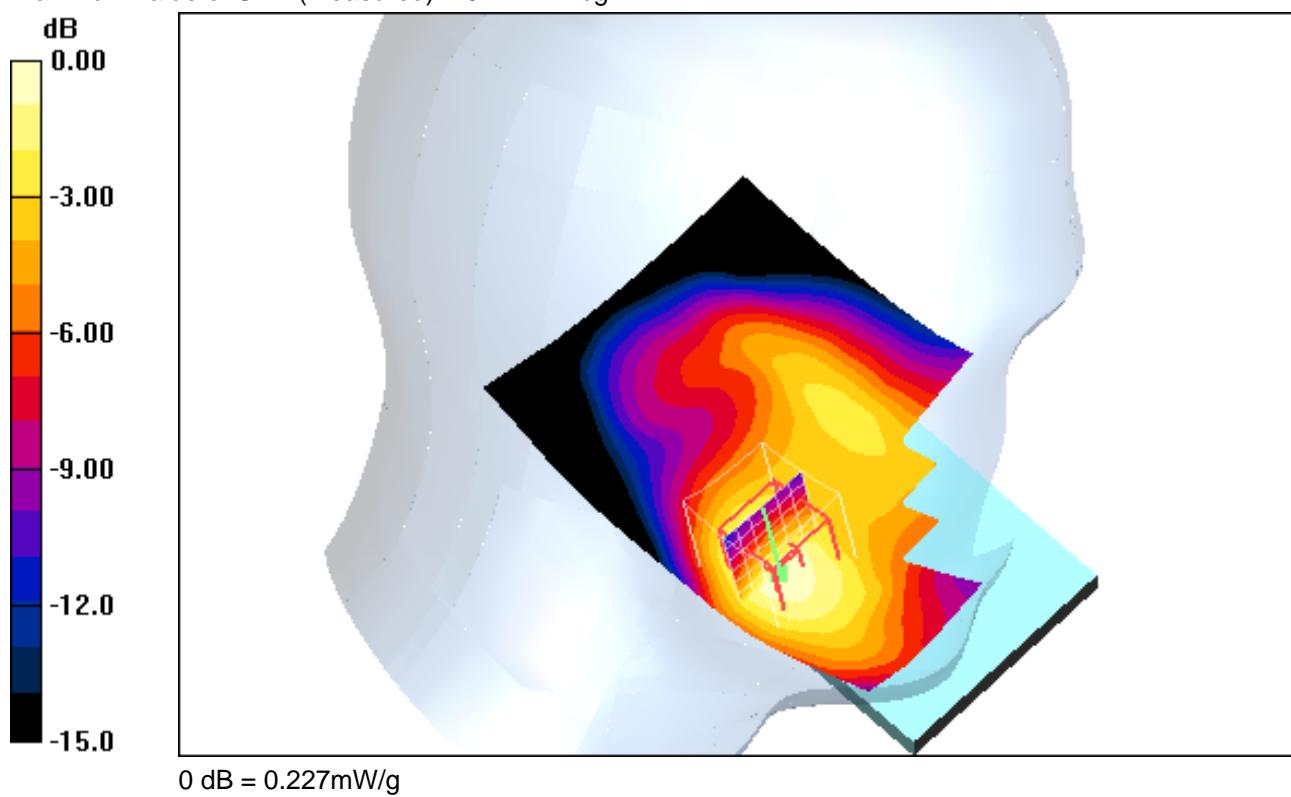
dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.9 V/m; Power Drift = 0.056 dB

Peak SAR (extrapolated) = 0.305 W/kg

**SAR(1 g) = 0.208 mW/g; SAR(10 g) = 0.131 mW/g**

Maximum value of SAR (measured) = 0.227 mW/g



#### Additional information:

ambient temperature: 23.2°C; liquid temperature: 22.7°C

Date/Time: 13.12.2012 09:00:25 Date/Time: 13.12.2012 09:12:13 Date/Time: 13.12.2012 09:23:39

## **IEEE1528-LeftHandSide-WCDMA FDD II**

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 40$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.218 mW/g

**Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.0 V/m; Power Drift = 0.180 dB

Peak SAR (extrapolated) = 0.281 W/kg

**SAR(1 g) = 0.190 mW/g; SAR(10 g) = 0.119 mW/g**

Maximum value of SAR (measured) = 0.206 mW/g

**Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid:

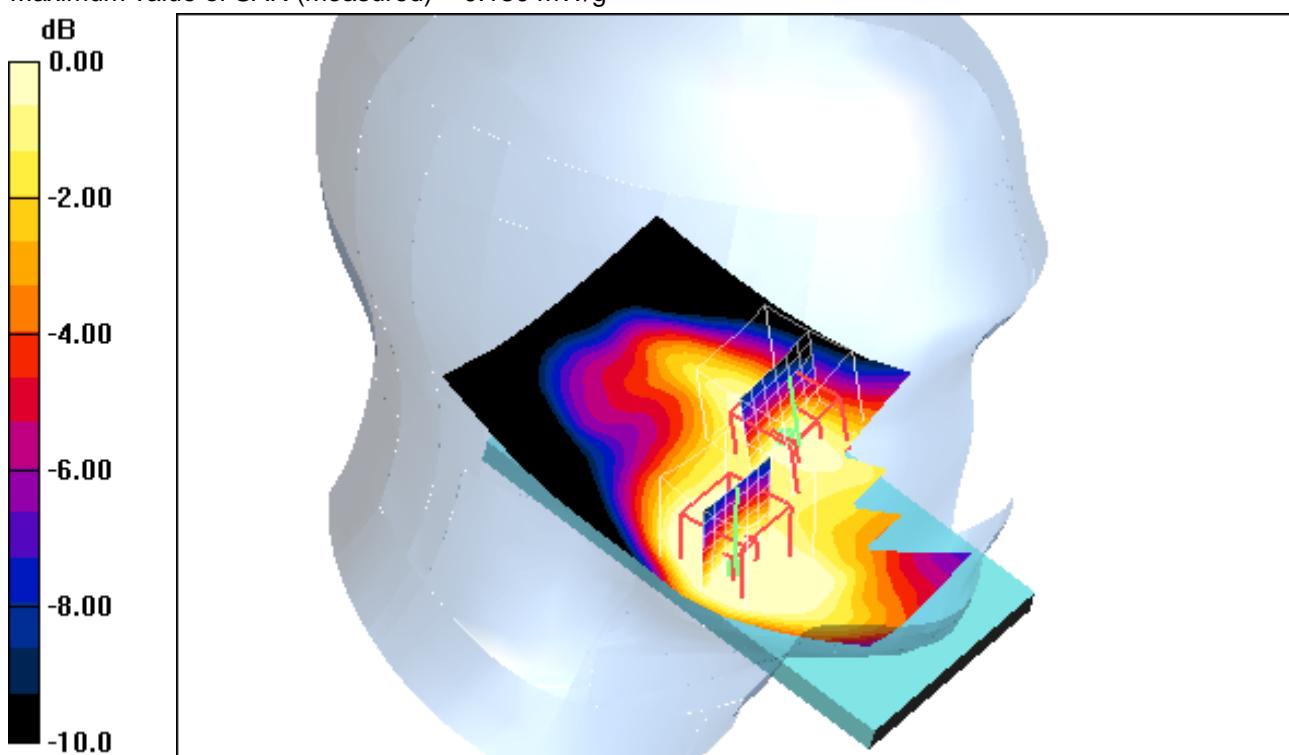
dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.0 V/m; Power Drift = 0.180 dB

Peak SAR (extrapolated) = 0.161 W/kg

**SAR(1 g) = 0.120 mW/g; SAR(10 g) = 0.081 mW/g**

Maximum value of SAR (measured) = 0.130 mW/g



0 dB = 0.130mW/g

### **Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.7°C

Date/Time: 13.12.2012 09:36:22 Date/Time: 13.12.2012 09:45:05

## IEEE1528-LeftHandSide-WCDMA FDD II

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1907.6$  MHz;  $\sigma = 1.4$  mho/m;  $\epsilon_r = 39.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - High/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.193 mW/g

**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

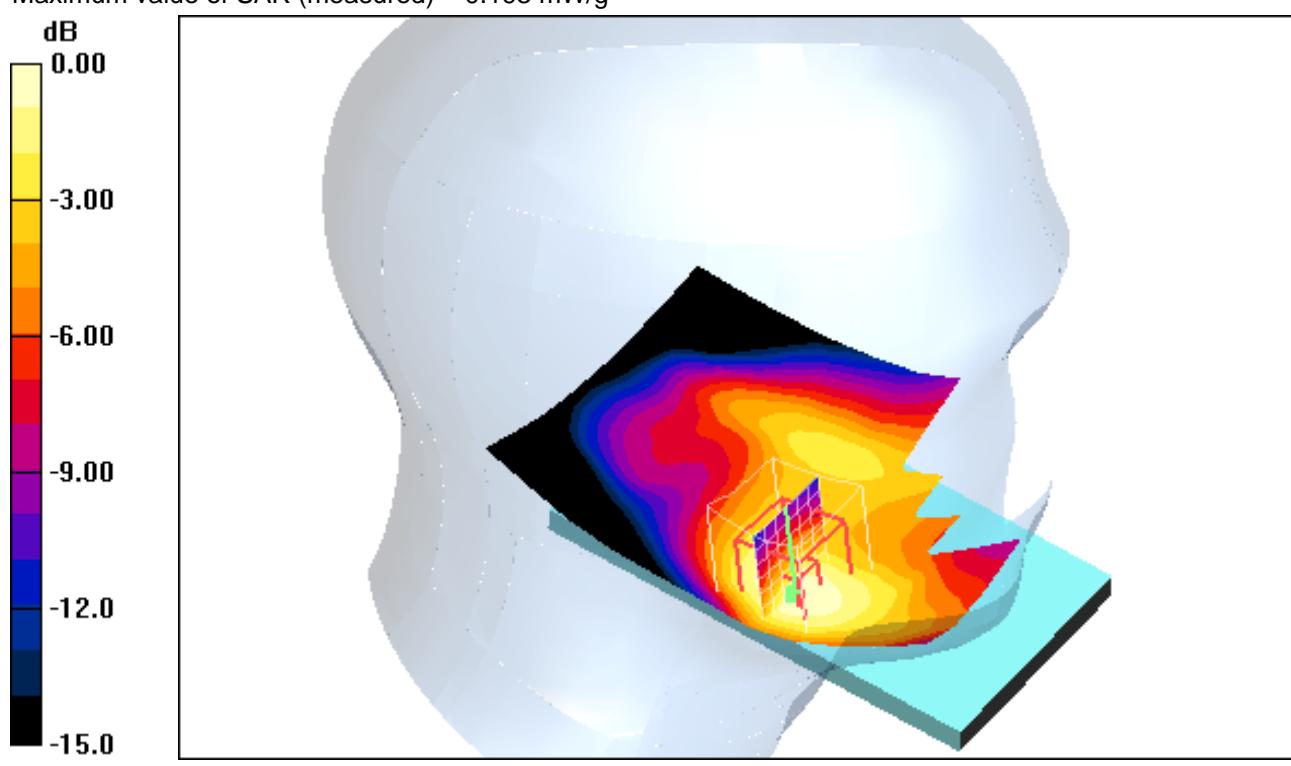
dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.7 V/m; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 0.265 W/kg

**SAR(1 g) = 0.179 mW/g; SAR(10 g) = 0.112 mW/g**

Maximum value of SAR (measured) = 0.193 mW/g



0 dB = 0.193mW/g

### Additional information:

ambient temperature: 23.2°C; liquid temperature: 22.7°C

Date/Time: 13.12.2012 10:42:44 Date/Time: 13.12.2012 10:51:19

**IEEE1528-LeftHandSide-WCDMA FDD II****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1852.5$  MHz;  $\sigma = 1.34$  mho/m;  $\epsilon_r = 40.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.081 mW/g

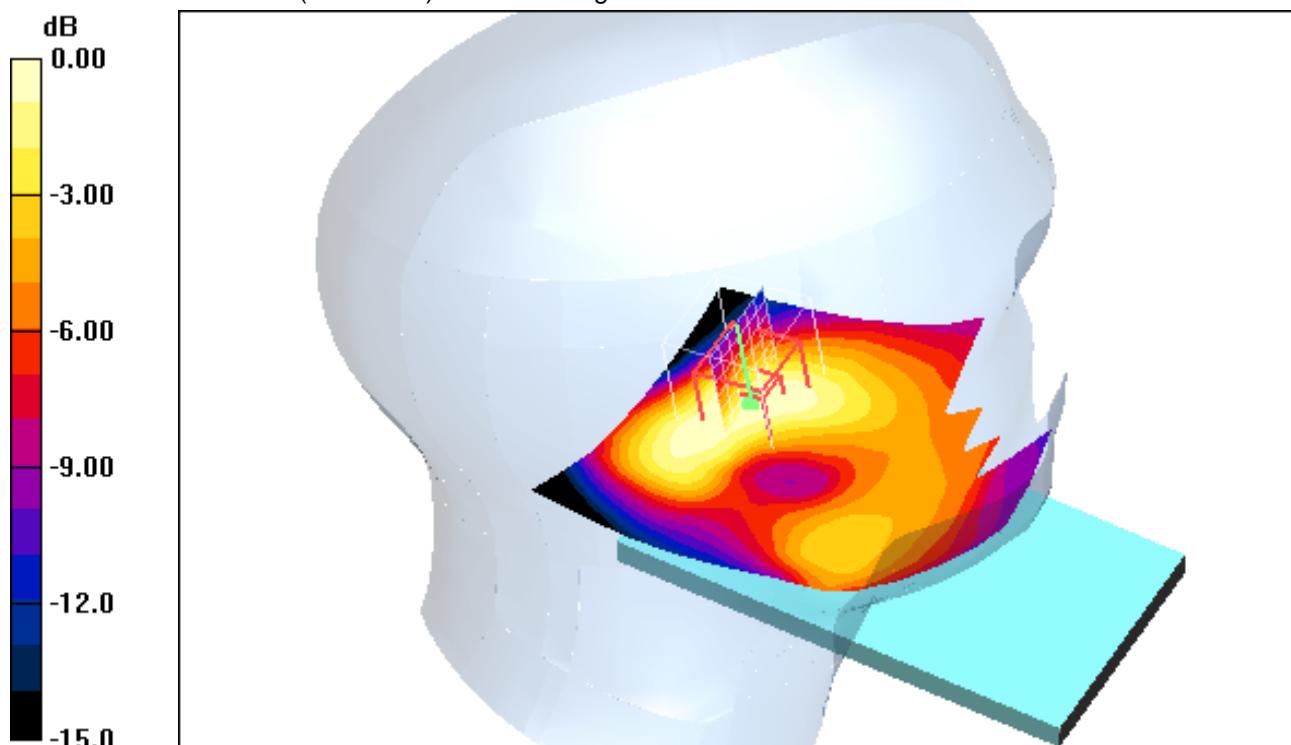
**Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.76 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.100 W/kg

**SAR(1 g) = 0.070 mW/g; SAR(10 g) = 0.045 mW/g**

Maximum value of SAR (measured) = 0.076 mW/g



0 dB = 0.076mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.7°C

Date/Time: 13.12.2012 10:21:49 Date/Time: 13.12.2012 10:30:52

## IEEE1528-LeftHandSide-WCDMA FDD II

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 40$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.076 mW/g

**Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

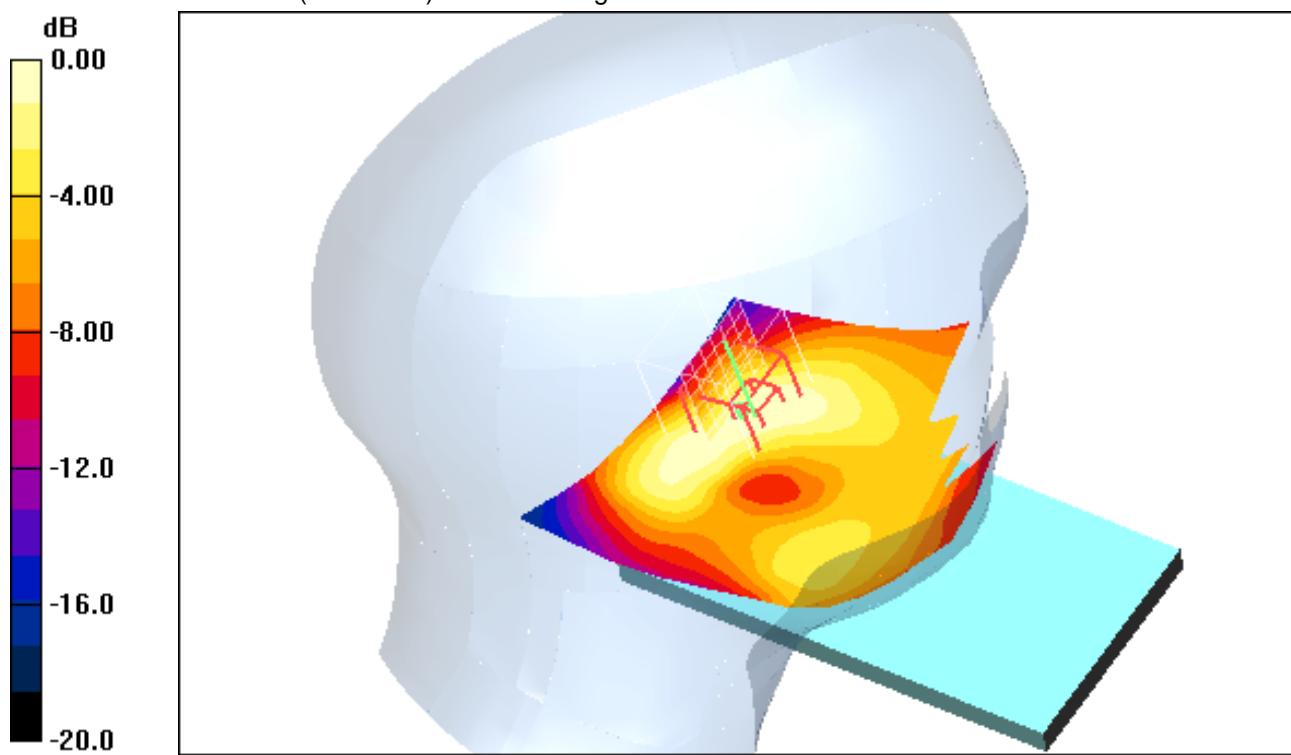
dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.36 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.094 W/kg

**SAR(1 g) = 0.063 mW/g; SAR(10 g) = 0.040 mW/g**

Maximum value of SAR (measured) = 0.070 mW/g



**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.7°C

Date/Time: 13.12.2012 09:58:17 Date/Time: 13.12.2012 10:06:52

## IEEE1528-LeftHandSide-WCDMA FDD II

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1907.6$  MHz;  $\sigma = 1.4$  mho/m;  $\epsilon_r = 39.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - High/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

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

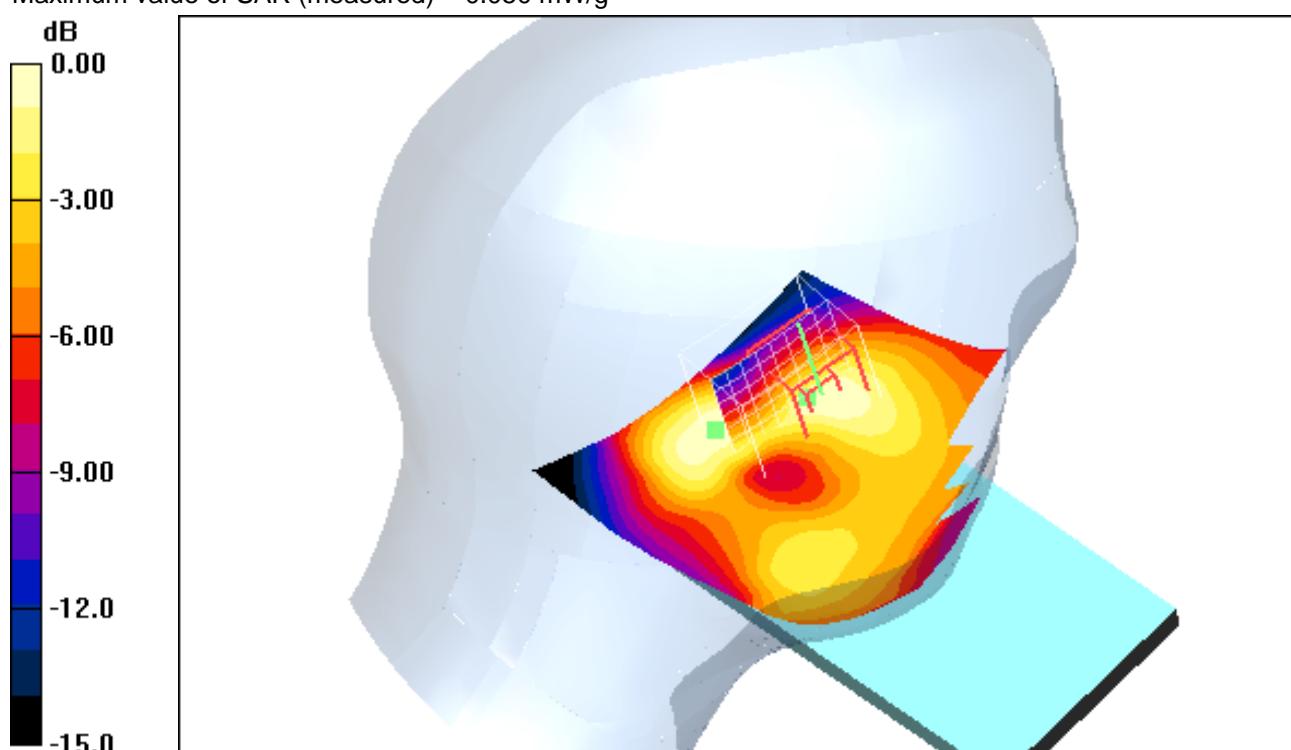
**Tilt position - High/Zoom Scan (7x7x7) (9x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.28 V/m; Power Drift = -0.049 dB

Peak SAR (extrapolated) = 0.072 W/kg

**SAR(1 g) = 0.047 mW/g; SAR(10 g) = 0.029 mW/g**

Maximum value of SAR (measured) = 0.050 mW/g



0 dB = 0.050mW/g

### Additional information:

ambient temperature: 23.2°C; liquid temperature: 22.7°C

Date/Time: 13.12.2012 12:52:11 Date/Time: 13.12.2012 13:16:02

## IEEE1528-RightHandSide-WCDMA FDD II

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1852.5$  MHz;  $\sigma = 1.34$  mho/m;  $\epsilon_r = 40.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.223 mW/g

**Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

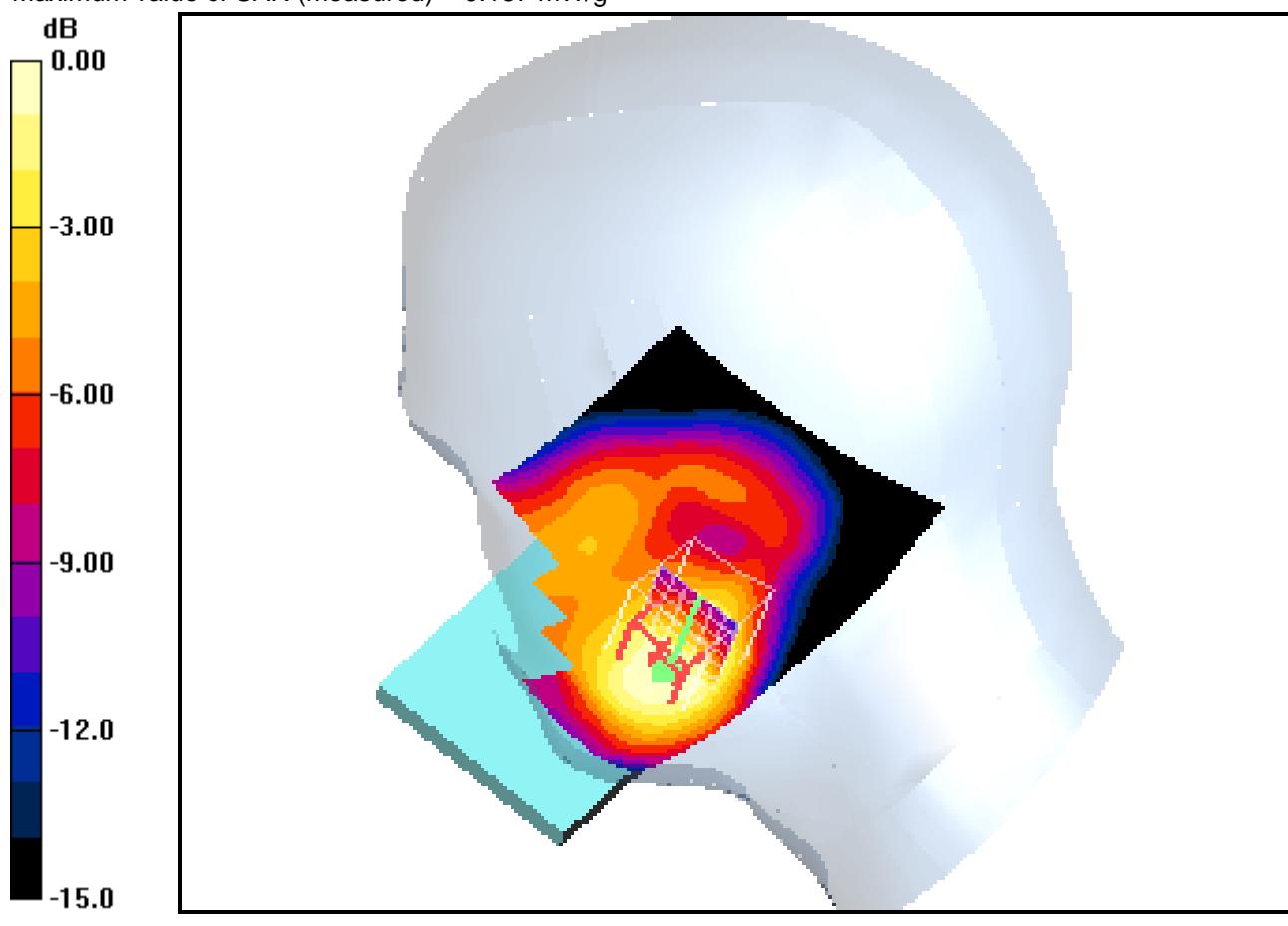
dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.5 V/m; Power Drift = -0.010 dB

Peak SAR (extrapolated) = 0.238 W/kg

**SAR(1 g) = 0.174 mW/g; SAR(10 g) = 0.114 mW/g**

Maximum value of SAR (measured) = 0.187 mW/g



### Additional information:

ambient temperature: 23.2°C; liquid temperature: 22.7°C

Date/Time: 13.12.2012 12:31:46 Date/Time: 13.12.2012 12:40:02

## IEEE1528-RightHandSide-WCDMA FDD II

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 40$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.235 mW/g

**Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

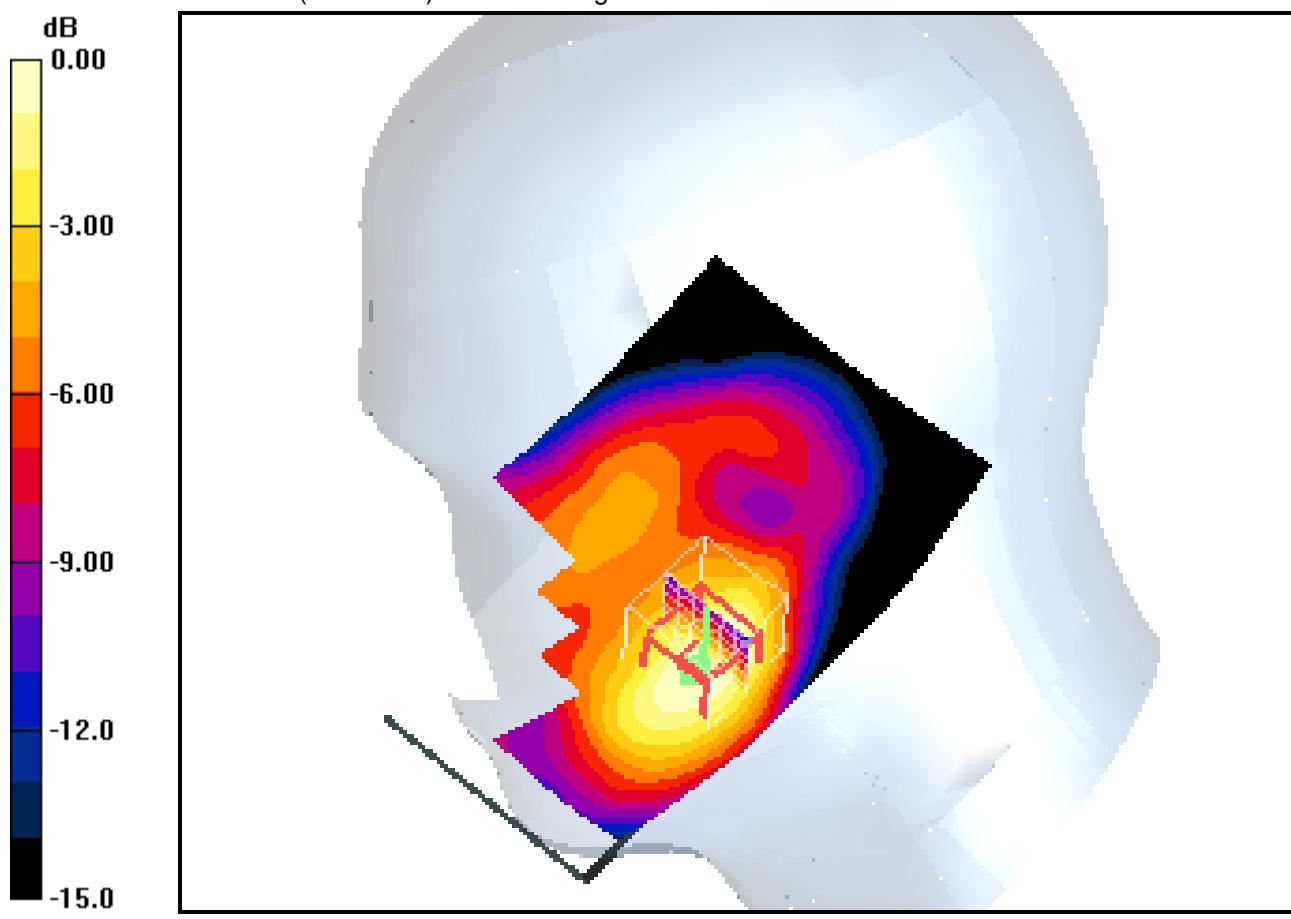
dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.6 V/m; Power Drift = 0.083 dB

Peak SAR (extrapolated) = 0.295 W/kg

**SAR(1 g) = 0.211 mW/g; SAR(10 g) = 0.135 mW/g**

Maximum value of SAR (measured) = 0.230 mW/g



### Additional information:

ambient temperature: 23.2°C; liquid temperature: 22.7°C

Date/Time: 13.12.2012 12:09:38 Date/Time: 13.12.2012 12:18:24

## IEEE1528-RightHandSide-WCDMA FDD II

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1907.6$  MHz;  $\sigma = 1.4$  mho/m;  $\epsilon_r = 39.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - High/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.209 mW/g

**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

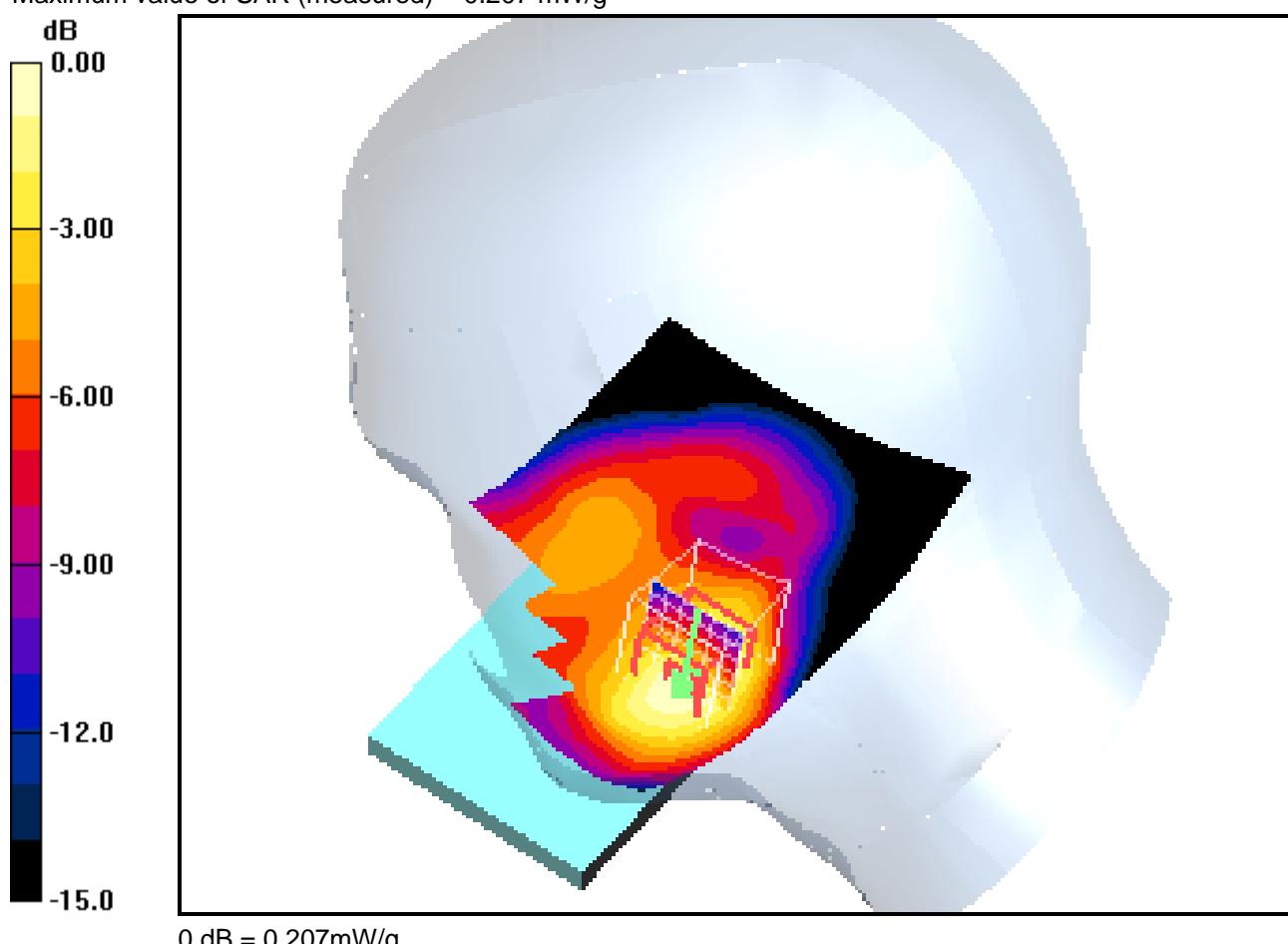
dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.7 V/m; Power Drift = 0.042 dB

Peak SAR (extrapolated) = 0.269 W/kg

**SAR(1 g) = 0.190 mW/g; SAR(10 g) = 0.119 mW/g**

Maximum value of SAR (measured) = 0.207 mW/g



### Additional information:

ambient temperature: 23.2°C; liquid temperature: 22.7°C

Date/Time: 13.12.2012 11:03:42 Date/Time: 13.12.2012 11:12:10

## IEEE1528-RightHandSide-WCDMA FDD II

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1852.5$  MHz;  $\sigma = 1.34$  mho/m;  $\epsilon_r = 40.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.078 mW/g

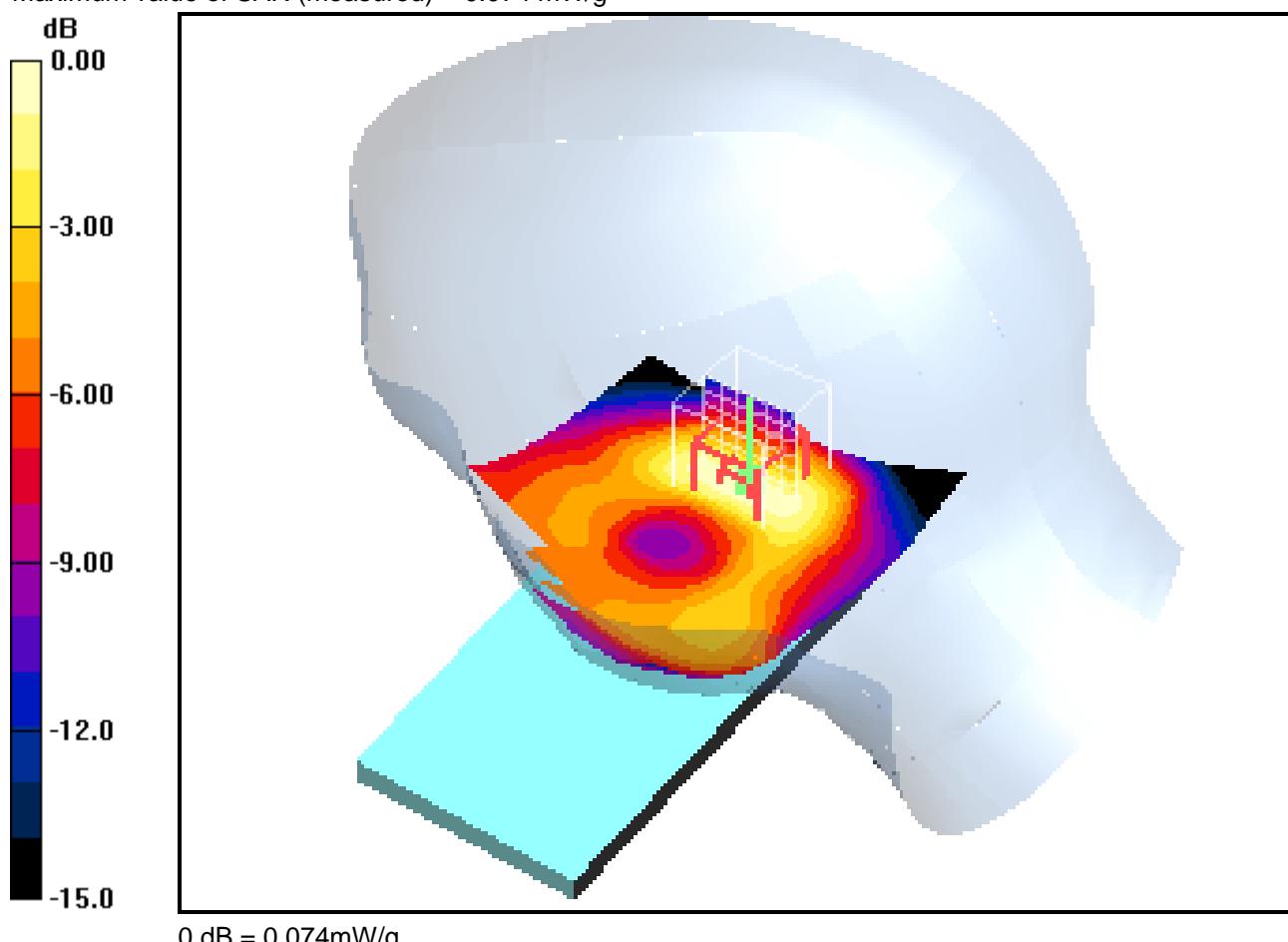
**Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.20 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.095 W/kg

**SAR(1 g) = 0.067 mW/g; SAR(10 g) = 0.041 mW/g**

Maximum value of SAR (measured) = 0.074 mW/g



### Additional information:

ambient temperature: 23.2°C; liquid temperature: 22.7°C

Date/Time: 13.12.2012 11:24:06 Date/Time: 13.12.2012 11:31:49

## IEEE1528-RightHandSide-WCDMA FDD II

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAPXC

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 40$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.069 mW/g

**Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

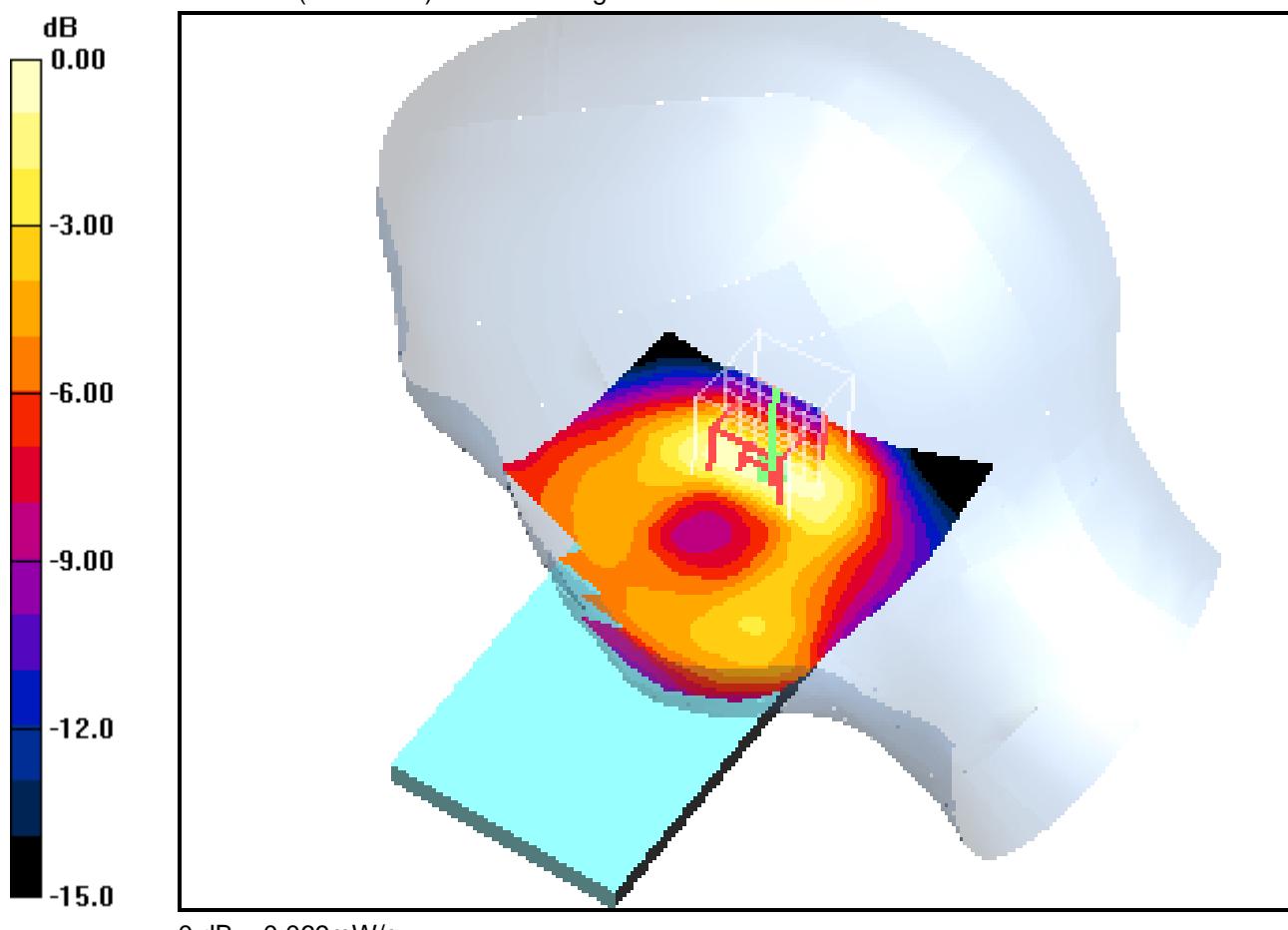
dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.85 V/m; Power Drift = 0.033 dB

Peak SAR (extrapolated) = 0.093 W/kg

**SAR(1 g) = 0.062 mW/g; SAR(10 g) = 0.038 mW/g**

Maximum value of SAR (measured) = 0.069 mW/g



### Additional information:

ambient temperature: 23.2°C; liquid temperature: 22.7°C

Date/Time: 13.12.2012 11:49:49 Date/Time: 13.12.2012 11:57:33

## IEEE1528-RightHandSide-WCDMA FDD II

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1907.6$  MHz;  $\sigma = 1.4$  mho/m;  $\epsilon_r = 39.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.08, 5.08, 5.08); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - High/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.062 mW/g

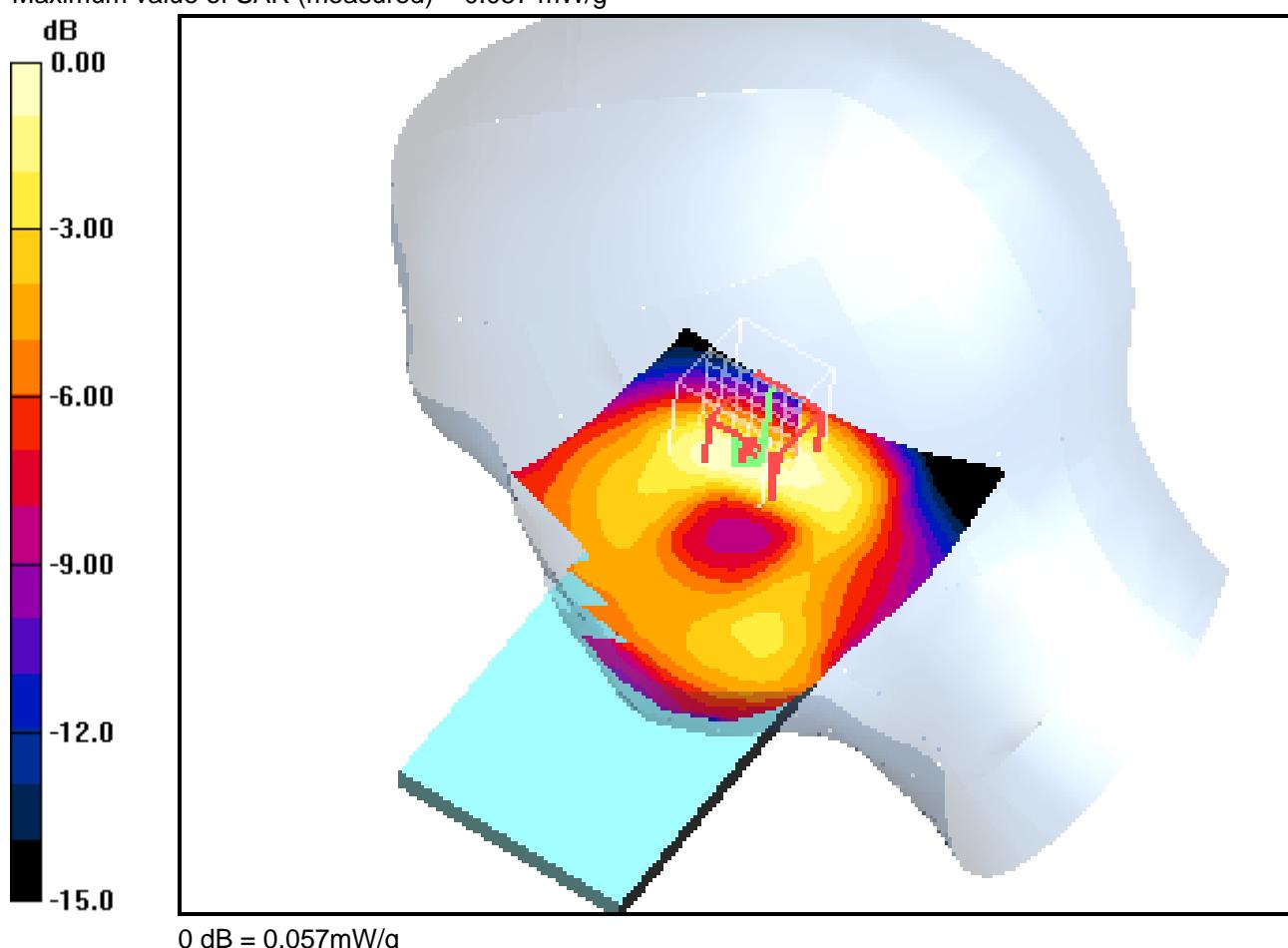
**Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.42 V/m; Power Drift = -0.027 dB

Peak SAR (extrapolated) = 0.078 W/kg

**SAR(1 g) = 0.052 mW/g; SAR(10 g) = 0.031 mW/g**

Maximum value of SAR (measured) = 0.057 mW/g



### Additional information:

ambient temperature: 23.2°C; liquid temperature: 22.7°C

Date/Time: 07.12.2012 15:47:43 Date/Time: 07.12.2012 15:57:11

**OET65-Body-WCDMA FDD II****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated):  $f = 1852.5$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

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

**Front position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

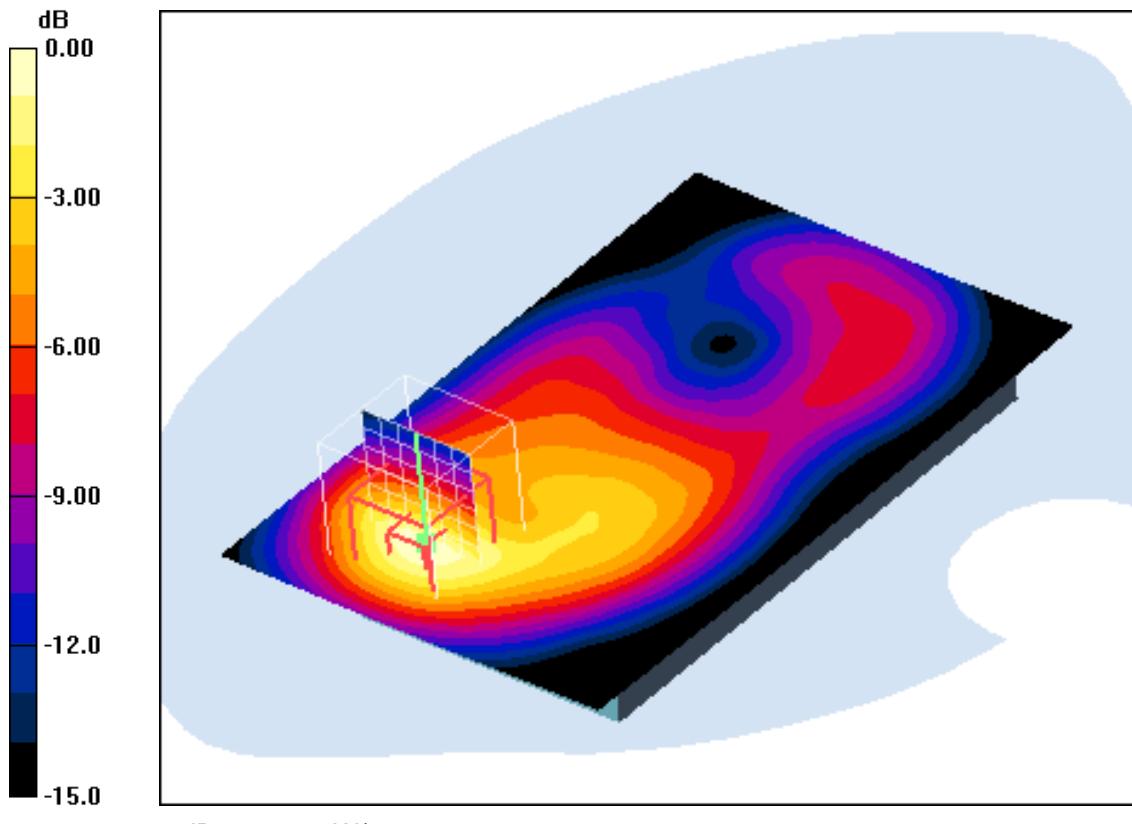
dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.2 V/m; Power Drift = -0.071 dB

Peak SAR (extrapolated) = 0.839 W/kg

**SAR(1 g) = 0.539 mW/g; SAR(10 g) = 0.302 mW/g**

Maximum value of SAR (measured) = 0.595 mW/g



0 dB = 0.595mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.3°C

Date/Time: 07.12.2012 16:09:28 Date/Time: 07.12.2012 16:18:25

**OET65-Body-WCDMA FDD II****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.564 mW/g

**Front position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

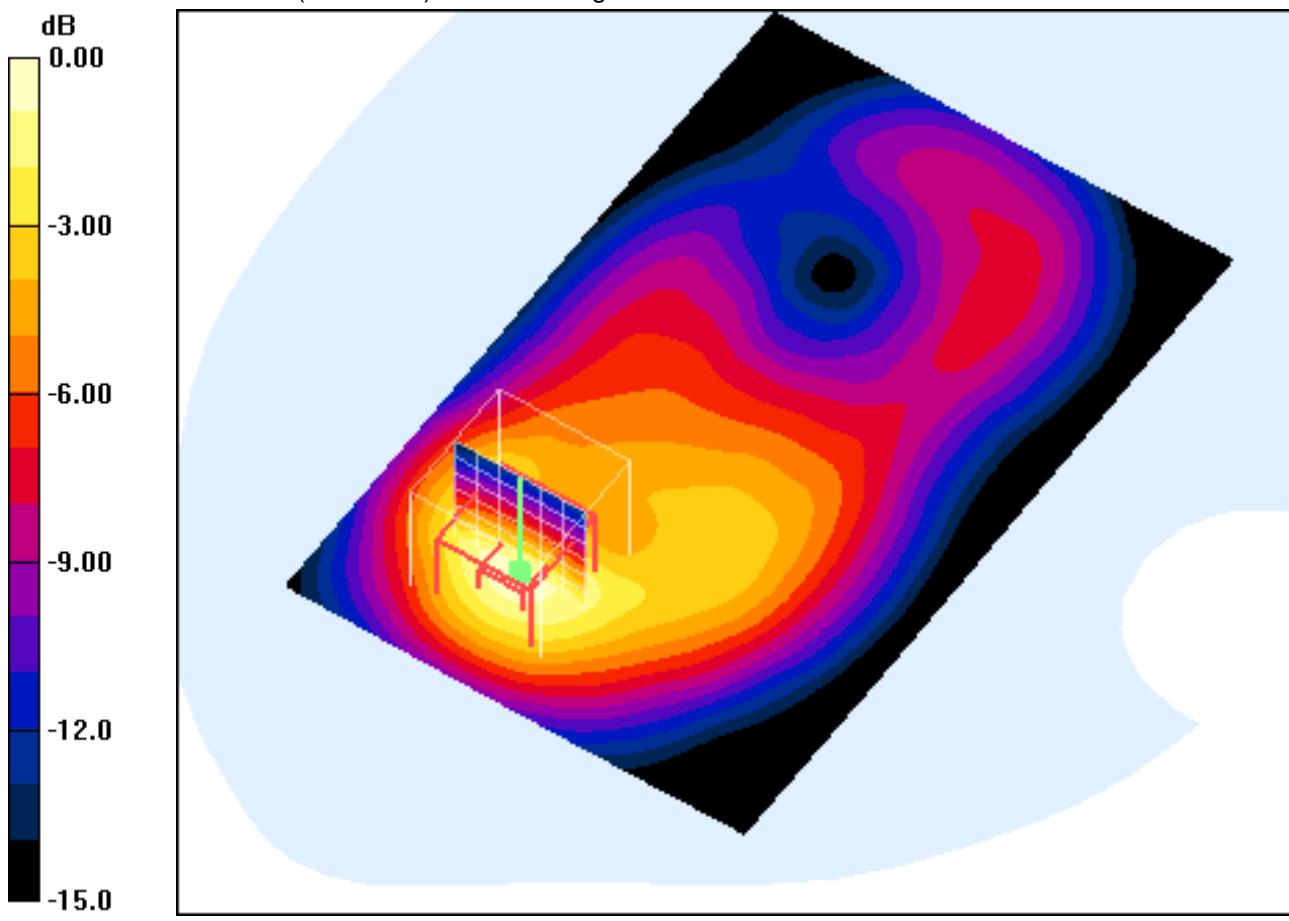
dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.8 V/m; Power Drift = 0.082 dB

Peak SAR (extrapolated) = 0.850 W/kg

**SAR(1 g) = 0.536 mW/g; SAR(10 g) = 0.297 mW/g**

Maximum value of SAR (measured) = 0.592 mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.3°C

Date/Time: 07.12.2012 16:29:58 Date/Time: 07.12.2012 16:38:55

**OET65-Body-WCDMA FDD II****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated):  $f = 1907.6$  MHz;  $\sigma = 1.53$  mho/m;  $\epsilon_r = 53.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - High/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.542 mW/g

**Front position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

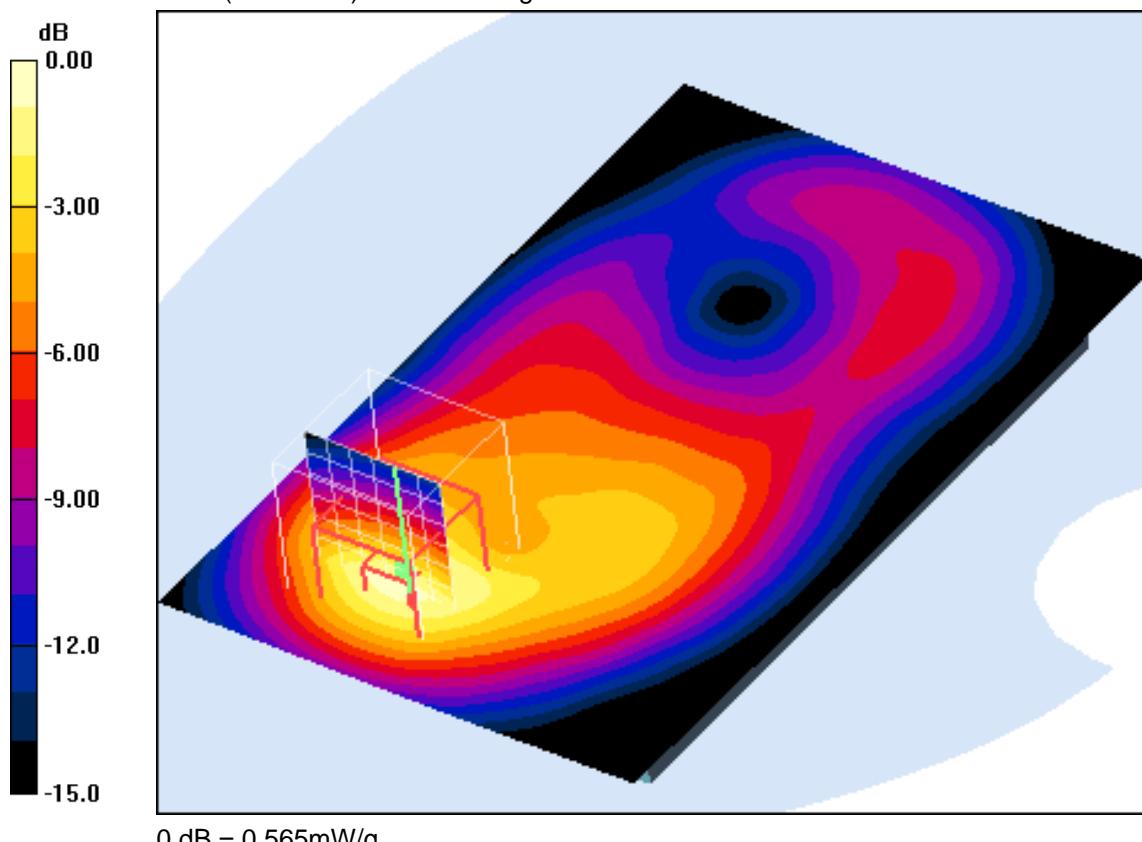
dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.0 V/m; Power Drift = -0.042 dB

Peak SAR (extrapolated) = 0.813 W/kg

**SAR(1 g) = 0.506 mW/g; SAR(10 g) = 0.279 mW/g**

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

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.3°C

Date/Time: 07.12.2012 17:35:48 Date/Time: 07.12.2012 17:44:50

**OET65-Body-WCDMA FDD II****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated):  $f = 1852.5$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - Low/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.13 mW/g

**Rear position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

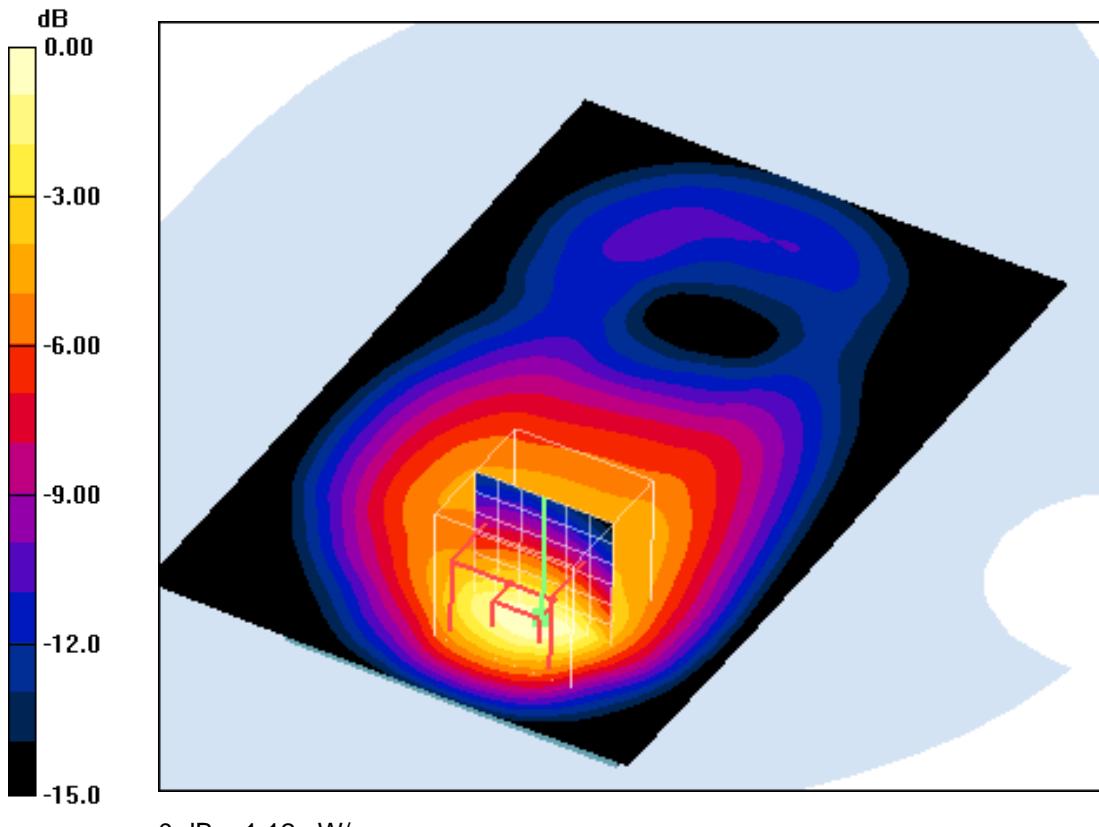
dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.7 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 1.61 W/kg

**SAR(1 g) = 0.993 mW/g; SAR(10 g) = 0.525 mW/g**

Maximum value of SAR (measured) = 1.12 mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.3°C

Date/Time: 07.12.2012 17:15:07 Date/Time: 07.12.2012 17:24:06

**OET65-Body-WCDMA FDD II****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - Middle/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.14 mW/g

**Rear position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

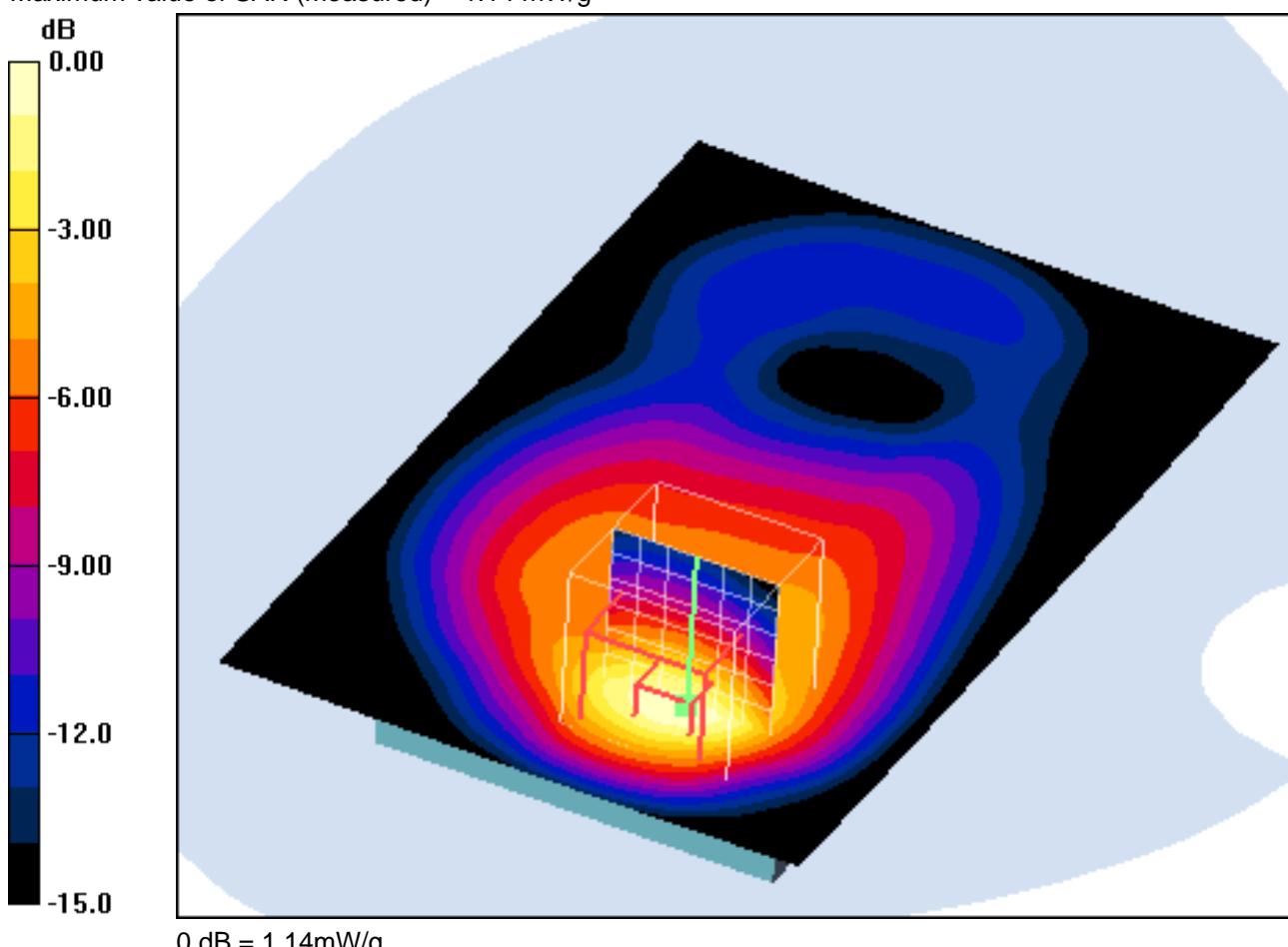
dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.3 V/m; Power Drift = 0.128 dB

Peak SAR (extrapolated) = 1.66 W/kg

**SAR(1 g) = 1 mW/g; SAR(10 g) = 0.520 mW/g**

Maximum value of SAR (measured) = 1.14 mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.3°C

Date/Time: 07.12.2012 16:54:04 Date/Time: 07.12.2012 17:03:04

**OET65-Body-WCDMA FDD II****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated):  $f = 1907.6$  MHz;  $\sigma = 1.53$  mho/m;  $\epsilon_r = 53.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - High/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.07 mW/g

**Rear position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

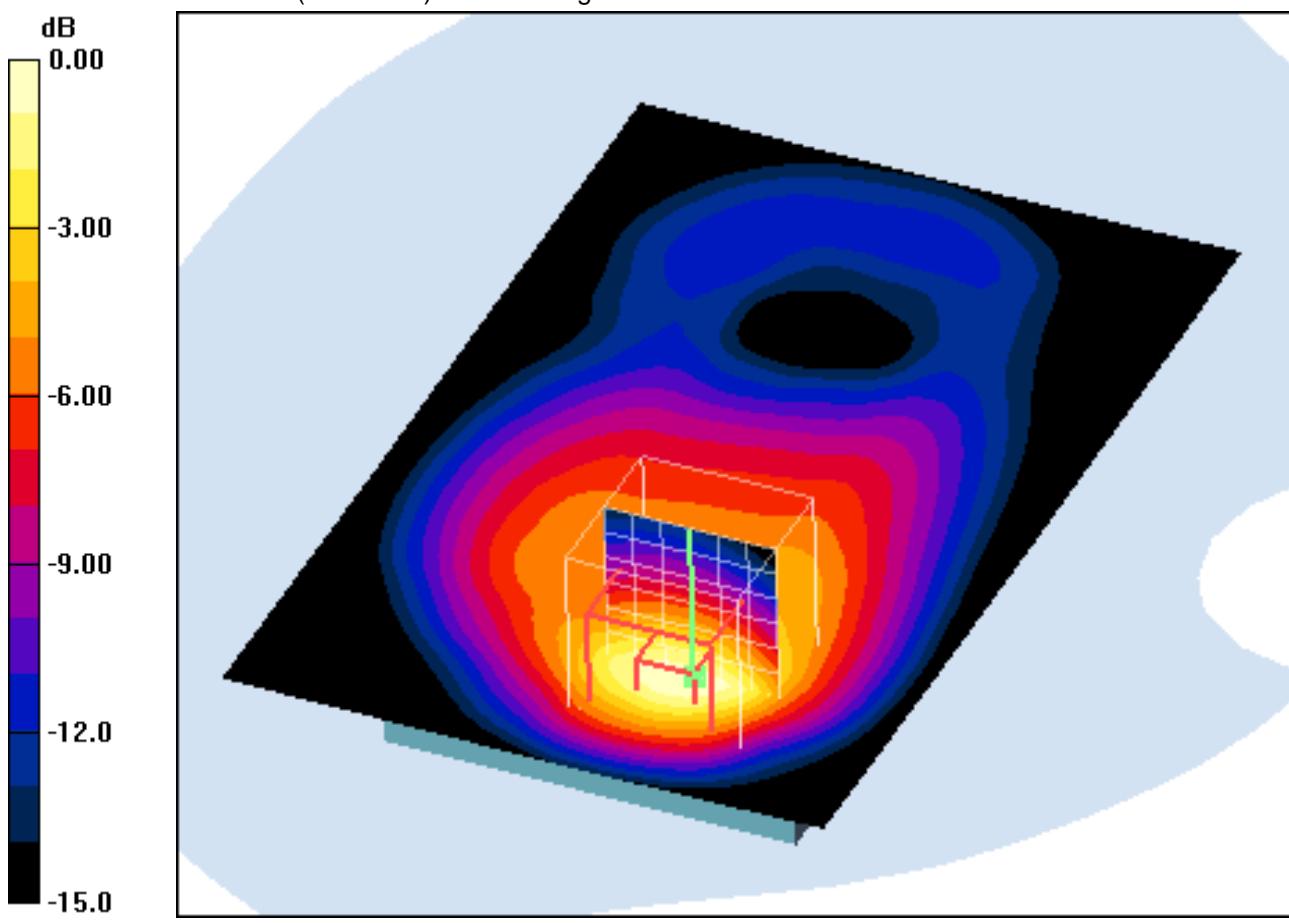
dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.4 V/m; Power Drift = 0.066 dB

Peak SAR (extrapolated) = 1.59 W/kg

**SAR(1 g) = 0.959 mW/g; SAR(10 g) = 0.497 mW/g**

Maximum value of SAR (measured) = 1.08 mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.3°C

Date/Time: 07.12.2012 15:23:12 Date/Time: 07.12.2012 15:32:02

**OET65-Body-WCDMA FDD II****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Edge left position - Middle/Area Scan (61x111x1):** Measurement grid: dx=15mm, dy=15mm

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

**Edge left position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement

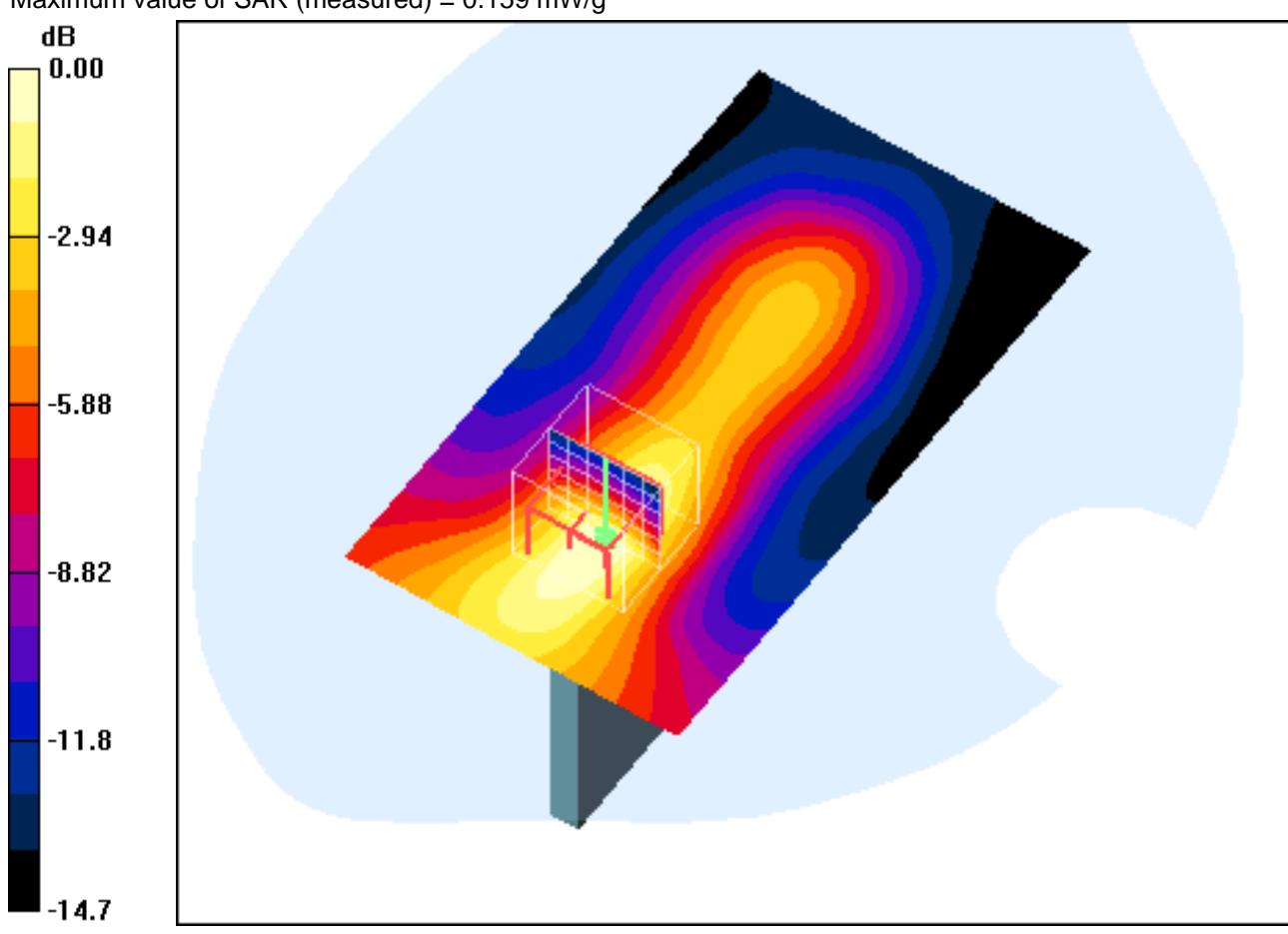
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.0 V/m; Power Drift = 0.060 dB

Peak SAR (extrapolated) = 0.223 W/kg

**SAR(1 g) = 0.144 mW/g; SAR(10 g) = 0.084 mW/g**

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

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.3°C

Date/Time: 07.12.2012 15:00:30 Date/Time: 07.12.2012 15:09:53

**OET65-Body-WCDMA FDD II****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Edge right position - Middle/Area Scan (61x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.089 mW/g

**Edge right position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement

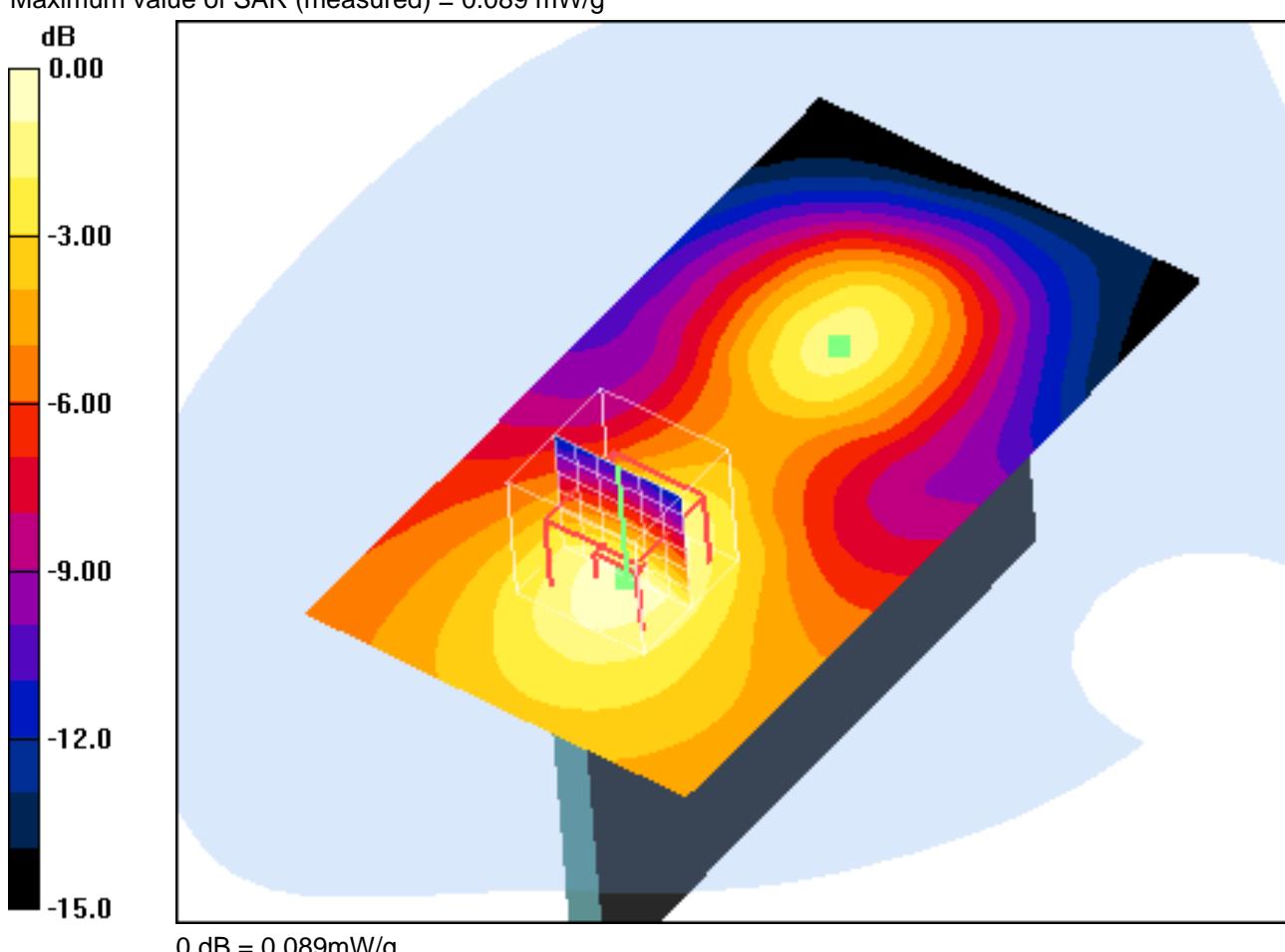
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.37 V/m; Power Drift = -0.016 dB

Peak SAR (extrapolated) = 0.120 W/kg

**SAR(1 g) = 0.082 mW/g; SAR(10 g) = 0.052 mW/g**

Maximum value of SAR (measured) = 0.089 mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.3°C

Date/Time: 07.12.2012 14:42:05 Date/Time: 07.12.2012 14:46:48

**OET65-Body-WCDMA FDD II****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated):  $f = 1852.5$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Edge bottom position - Low/Area Scan (61x61x1):** Measurement grid: dx=15mm,

dy=15mm

Maximum value of SAR (interpolated) = 0.915 mW/g

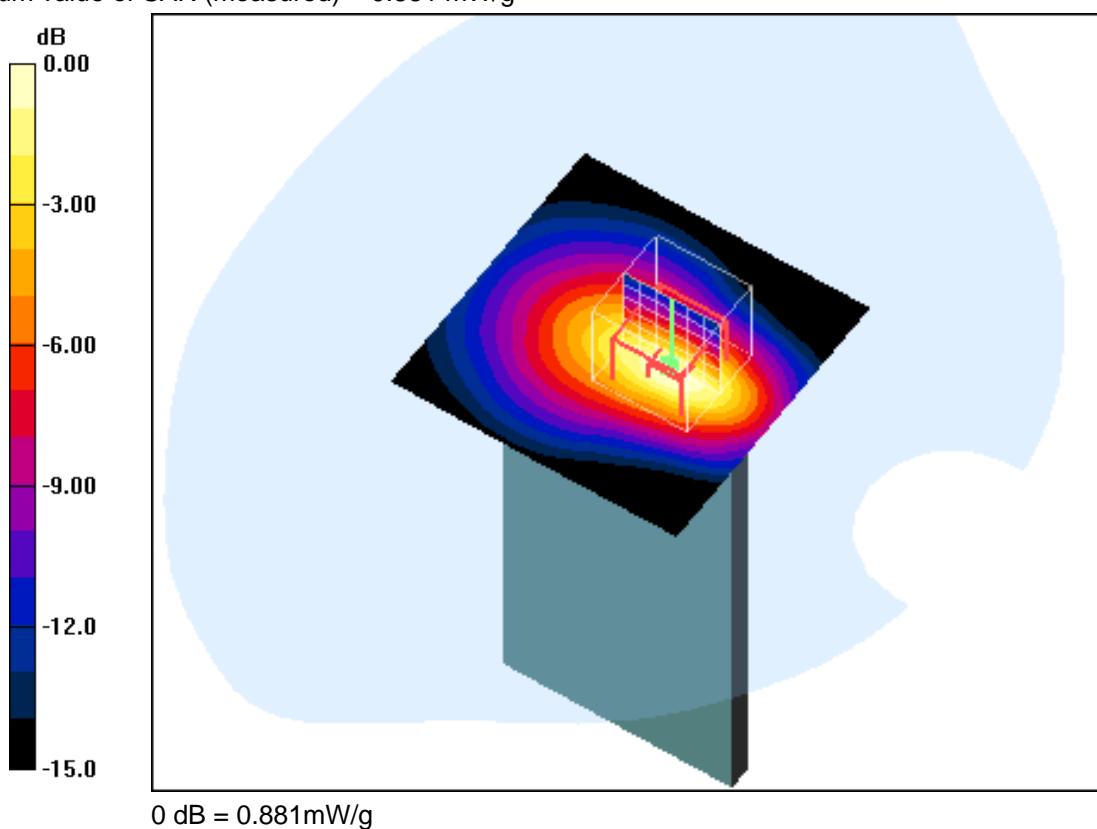
**Edge bottom position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.8 V/m; Power Drift = 0.066 dB

Peak SAR (extrapolated) = 1.22 W/kg

**SAR(1 g) = 0.772 mW/g; SAR(10 g) = 0.419 mW/g**

Maximum value of SAR (measured) = 0.881 mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.3°C

Date/Time: 07.12.2012 14:06:27 Date/Time: 07.12.2012 14:12:28

**OET65-Body-WCDMA FDD II****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Edge bottom position - Middle/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm

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

**Edge bottom position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:**

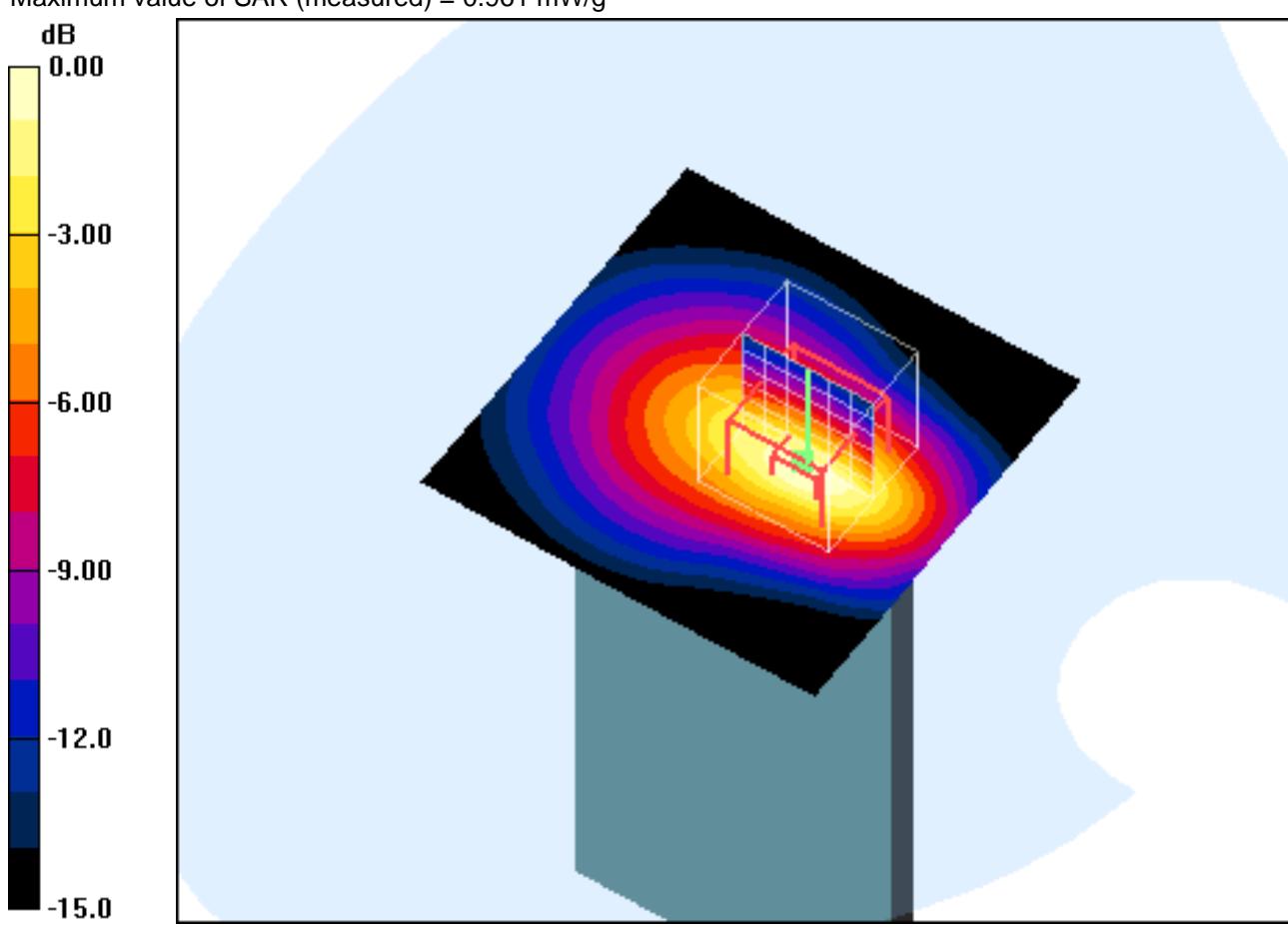
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.4 V/m; Power Drift = 0.102 dB

Peak SAR (extrapolated) = 1.35 W/kg

**SAR(1 g) = 0.836 mW/g; SAR(10 g) = 0.450 mW/g**

Maximum value of SAR (measured) = 0.961 mW/g



0 dB = 0.961mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.3°C

Date/Time: 07.12.2012 14:25:21 Date/Time: 07.12.2012 14:30:04

**OET65-Body-WCDMA FDD II****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated):  $f = 1907.6$  MHz;  $\sigma = 1.53$  mho/m;  $\epsilon_r = 53.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Edge bottom position - High/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.989 mW/g

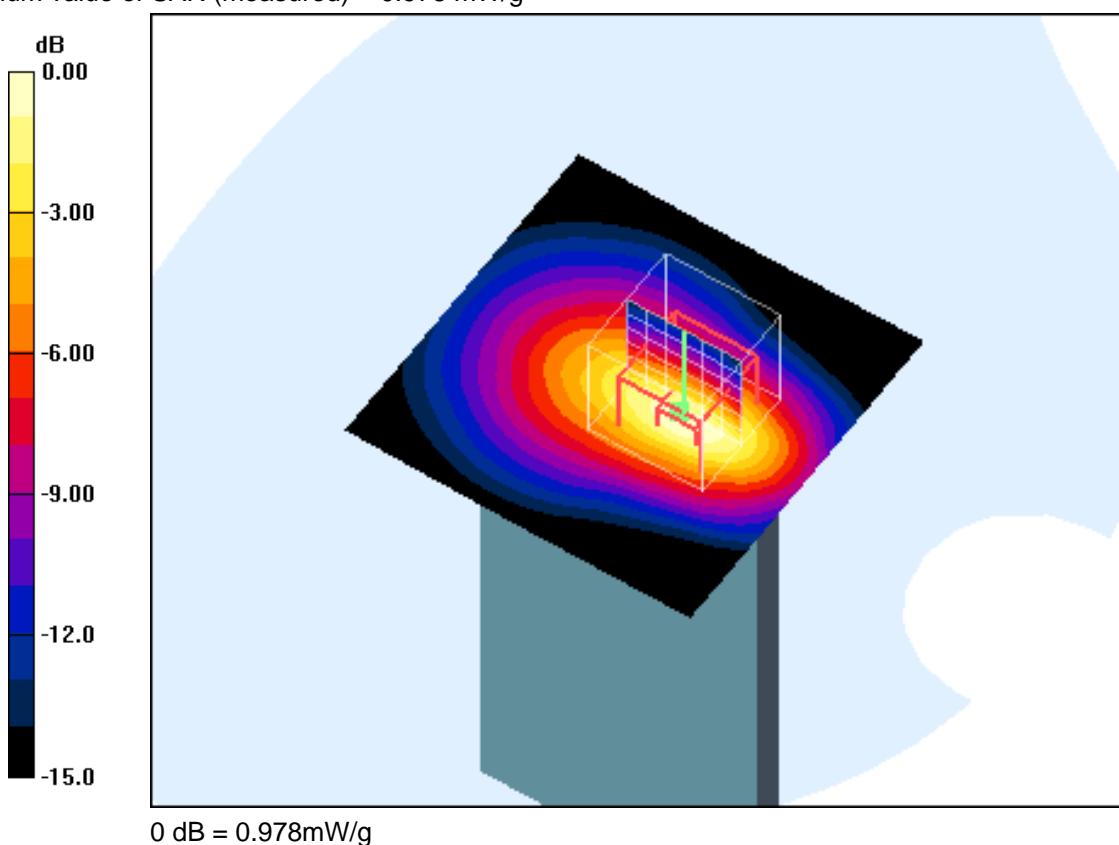
**Edge bottom position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.5 V/m; Power Drift = -0.045 dB

Peak SAR (extrapolated) = 1.41 W/kg

**SAR(1 g) = 0.855 mW/g; SAR(10 g) = 0.455 mW/g**

Maximum value of SAR (measured) = 0.978 mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.3°C

Date/Time: 07.12.2012 18:20:59 Date/Time: 07.12.2012 18:30:03

**OET65-Body-WCDMA FDD II****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - Middle WC/Area Scan (71x111x1):** Measurement grid: dx=15mm,

dy=15mm

Maximum value of SAR (interpolated) = 1.14 mW/g

**Rear position - Middle WC/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement

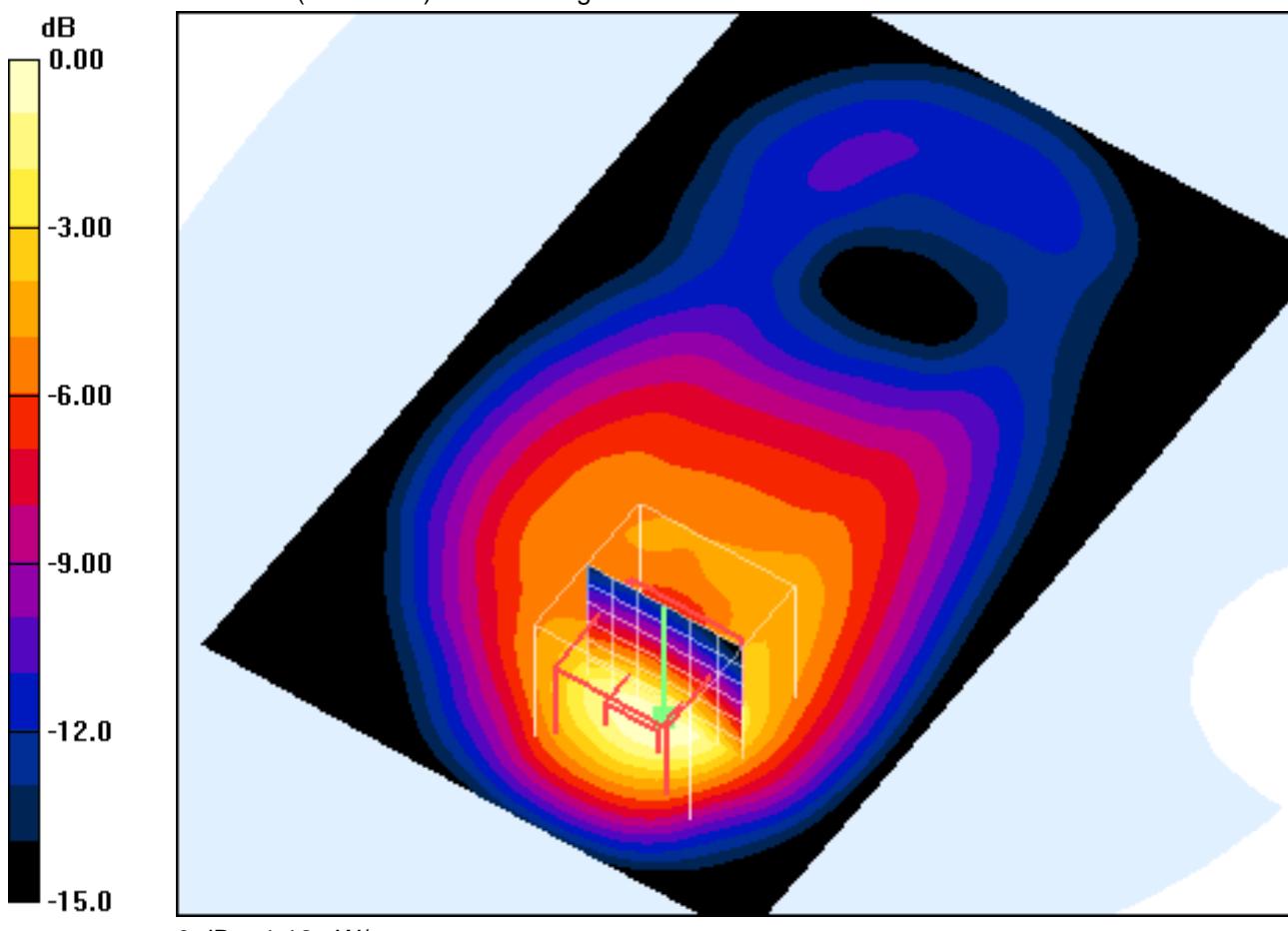
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.5 V/m; Power Drift = 0.045 dB

Peak SAR (extrapolated) = 1.66 W/kg

**SAR(1 g) = 0.999 mW/g; SAR(10 g) = 0.518 mW/g**

Maximum value of SAR (measured) = 1.12 mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.3°C

Date/Time: 07.12.2012 18:13:55 Date/Time: 07.12.2012 18:23:01

**OET65-Body-WCDMA FDD II****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - Middle 15mm/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.410 mW/g

**Rear position - Middle 15mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement

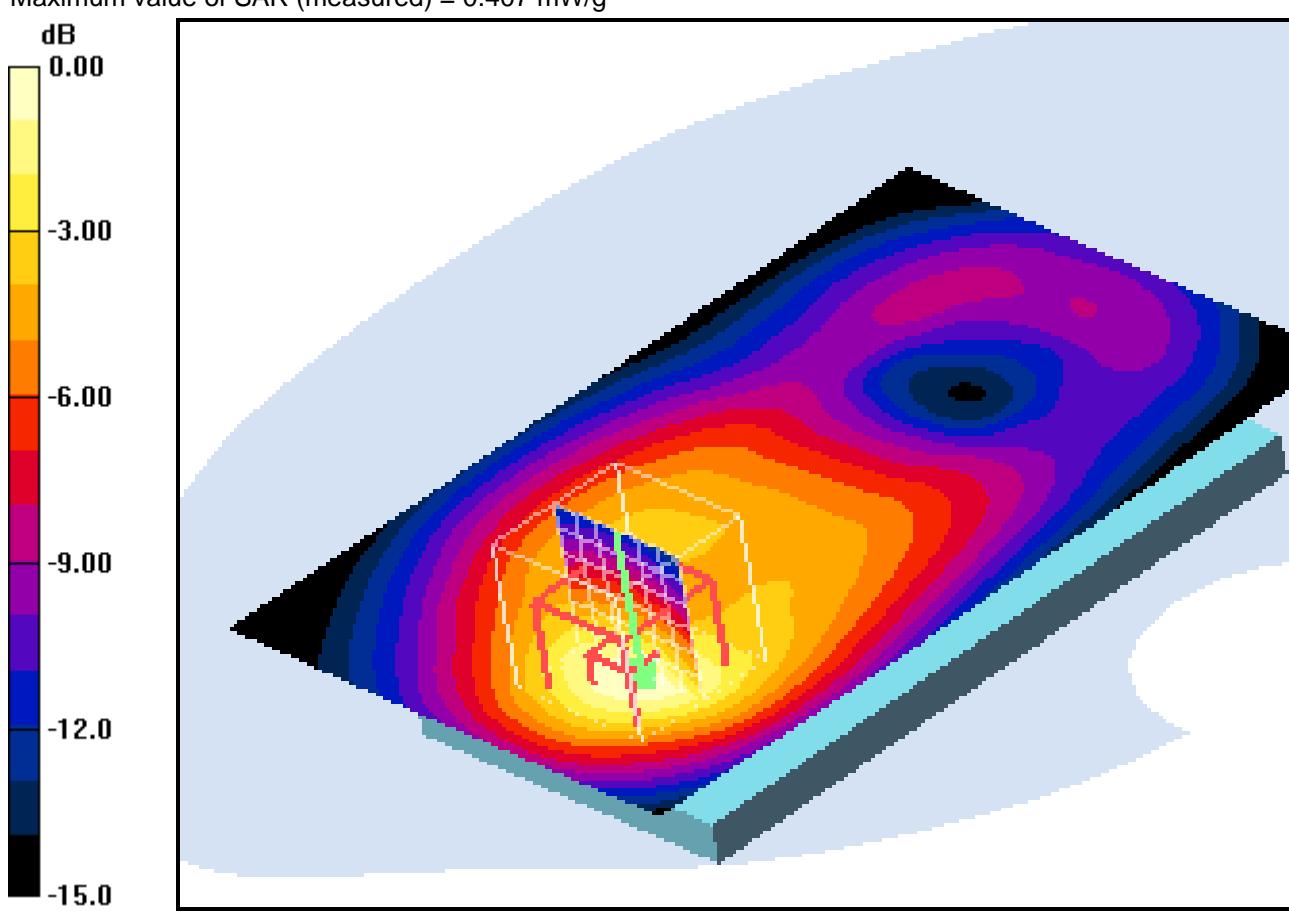
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.6 V/m; Power Drift = -0.023 dB

Peak SAR (extrapolated) = 0.547 W/kg

**SAR(1 g) = 0.366 mW/g; SAR(10 g) = 0.214 mW/g**

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



0 dB = 0.407mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.5°C; liquid temperature: 22.3°C

Date/Time: 07.12.2012 18:37:42 Date/Time: 07.12.2012 18:46:47

**OET65-Body-WCDMA FDD II****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAPXC**

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 53.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - Middle 15mm AMR/Area Scan (71x111x1):** Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.429 mW/g

**Rear position - Middle 15mm AMR/Zoom Scan (7x7x7) (7x7x7)/Cube 0:**

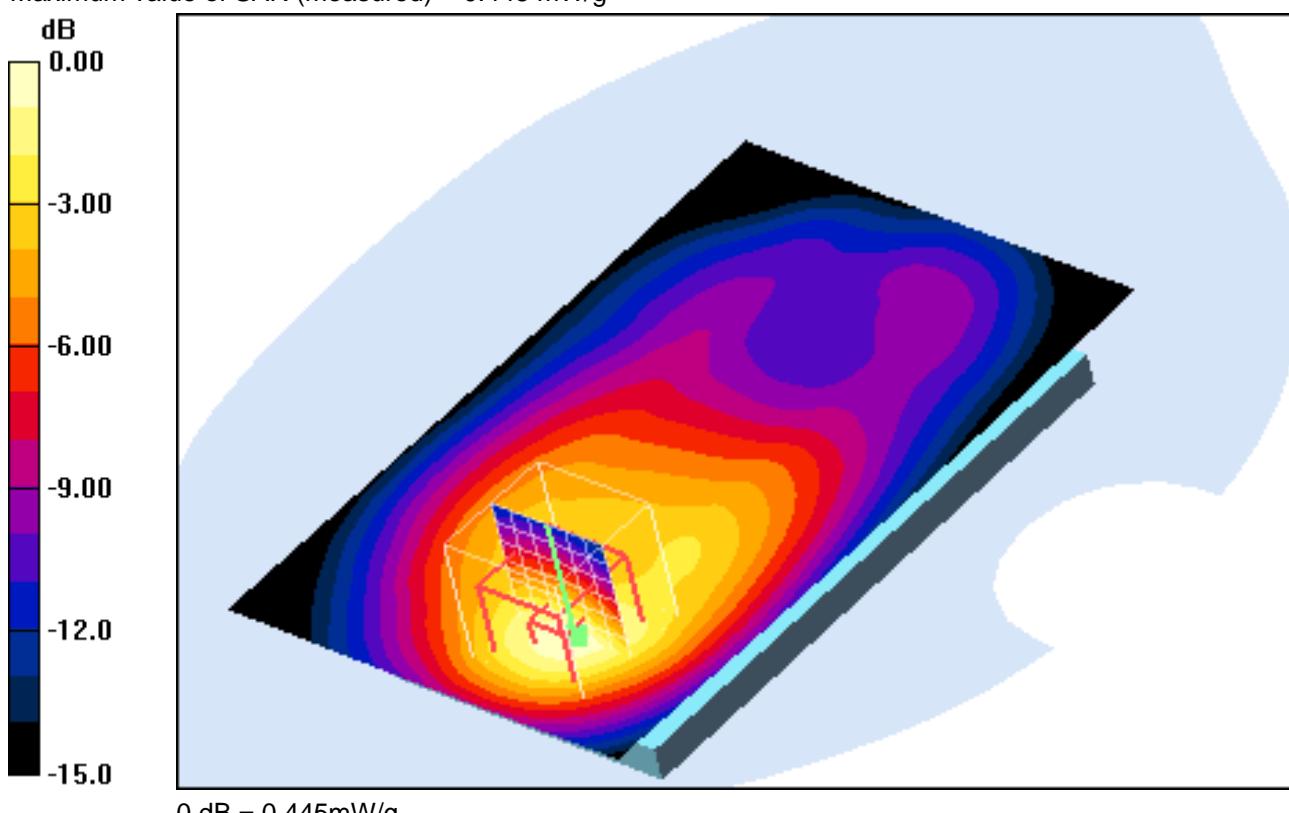
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.0 V/m; Power Drift = -0.068 dB

Peak SAR (extrapolated) = 0.588 W/kg

**SAR(1 g) = 0.401 mW/g; SAR(10 g) = 0.236 mW/g**

Maximum value of SAR (measured) = 0.445 mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.5°C; liquid temperature: 22.3°C

## Annex B.6: WLAN 2450MHz

Date/Time: 19.12.2012 17:28:28 Date/Time: 19.12.2012 17:50:30

### IEEE1528-LeftHandSide-WLAN

DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.78 \text{ mho/m}$ ;  $\epsilon_r = 38.9$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Low/Area Scan (111x151x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.299 mW/g

**Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

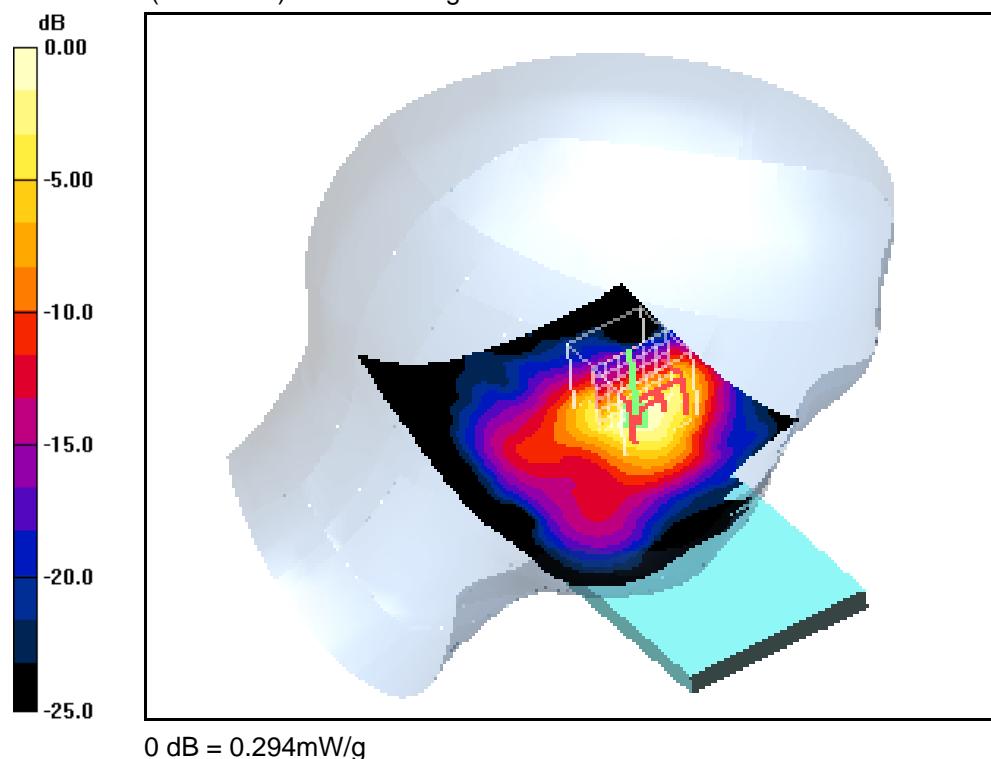
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 12.7 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.674 W/kg

**SAR(1 g) = 0.277 mW/g; SAR(10 g) = 0.126 mW/g**

Maximum value of SAR (measured) = 0.294 mW/g



#### Additional information:

ambient temperature: 23.4°C; liquid temperature: 22.2°C

Date/Time: 19.12.2012 11:51:46 Date/Time: 19.12.2012 12:10:03

**IEEE1528-LeftHandSide-WLAN****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.81 \text{ mho/m}$ ;  $\epsilon_r = 38.8$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Middle/Area Scan (111x151x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

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

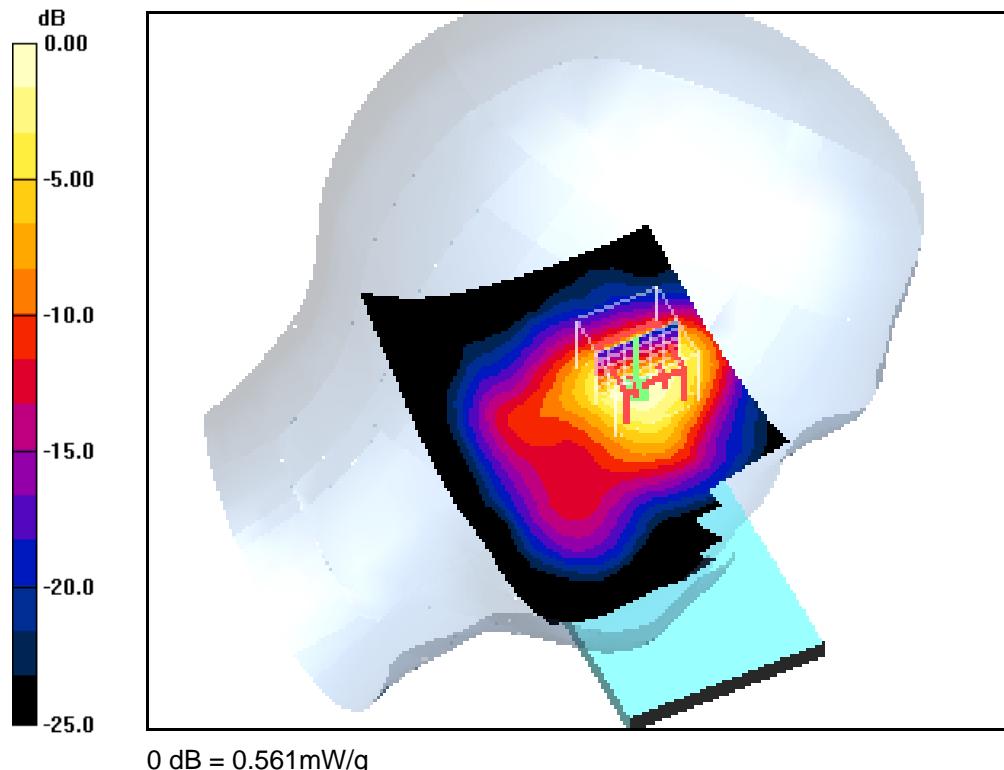
**Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 16.9 V/m; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 1.25 W/kg

**SAR(1 g) = 0.520 mW/g; SAR(10 g) = 0.239 mW/g**

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

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.2°C

Date/Time: 19.12.2012 16:41:40 Date/Time: 19.12.2012 17:01:57

**IEEE1528-LeftHandSide-WLAN****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.83$  mho/m;  $\epsilon_r = 38.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - High/Area Scan (111x151x1):** Measurement grid: dx=10mm, dy=10mm

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

**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

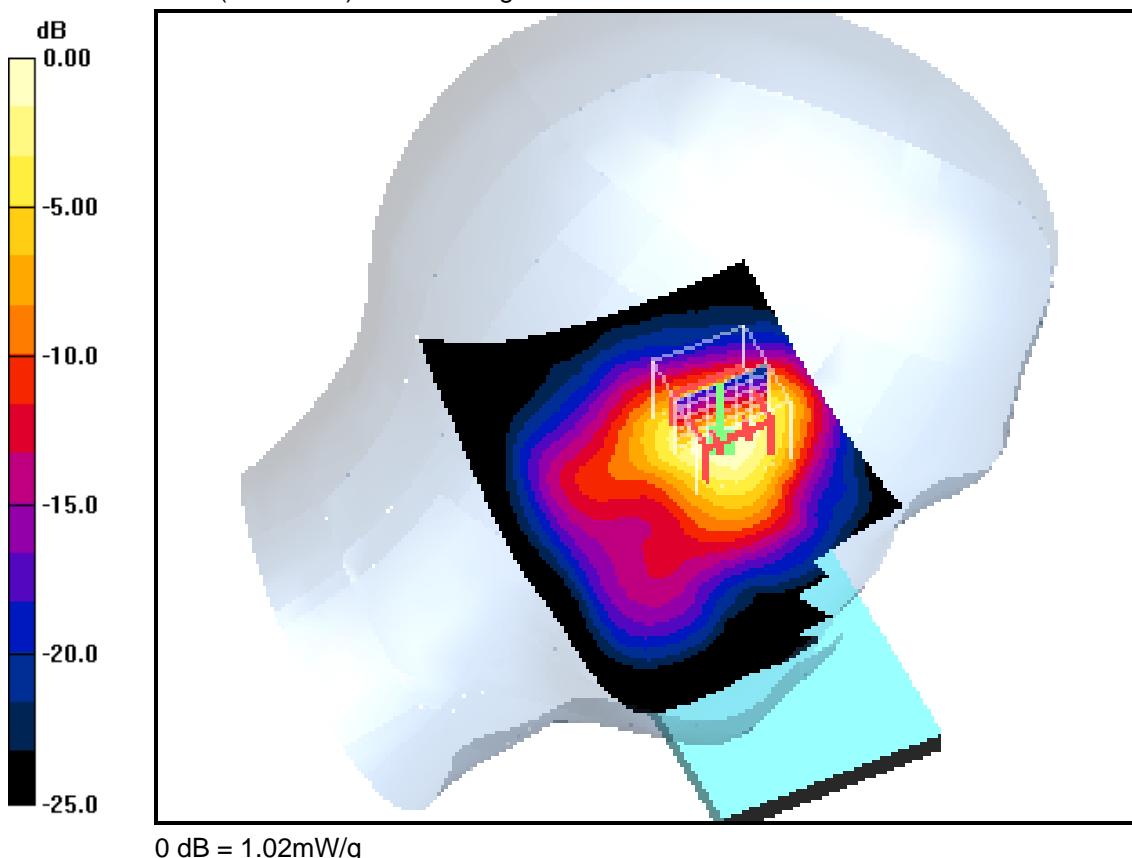
dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.3 V/m; Power Drift = 0.017 dB

Peak SAR (extrapolated) = 2.37 W/kg

**SAR(1 g) = 0.962 mW/g; SAR(10 g) = 0.438 mW/g**

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

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.2°C

Date/Time: 19.12.2012 18:04:18 Date/Time: 19.12.2012 18:22:34

**IEEE1528-LeftHandSide-WLAN****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.78 \text{ mho/m}$ ;  $\epsilon_r = 38.9$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Low/Area Scan (111x151x1):** Measurement grid: dx=10mm, dy=10mm

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

**Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm,

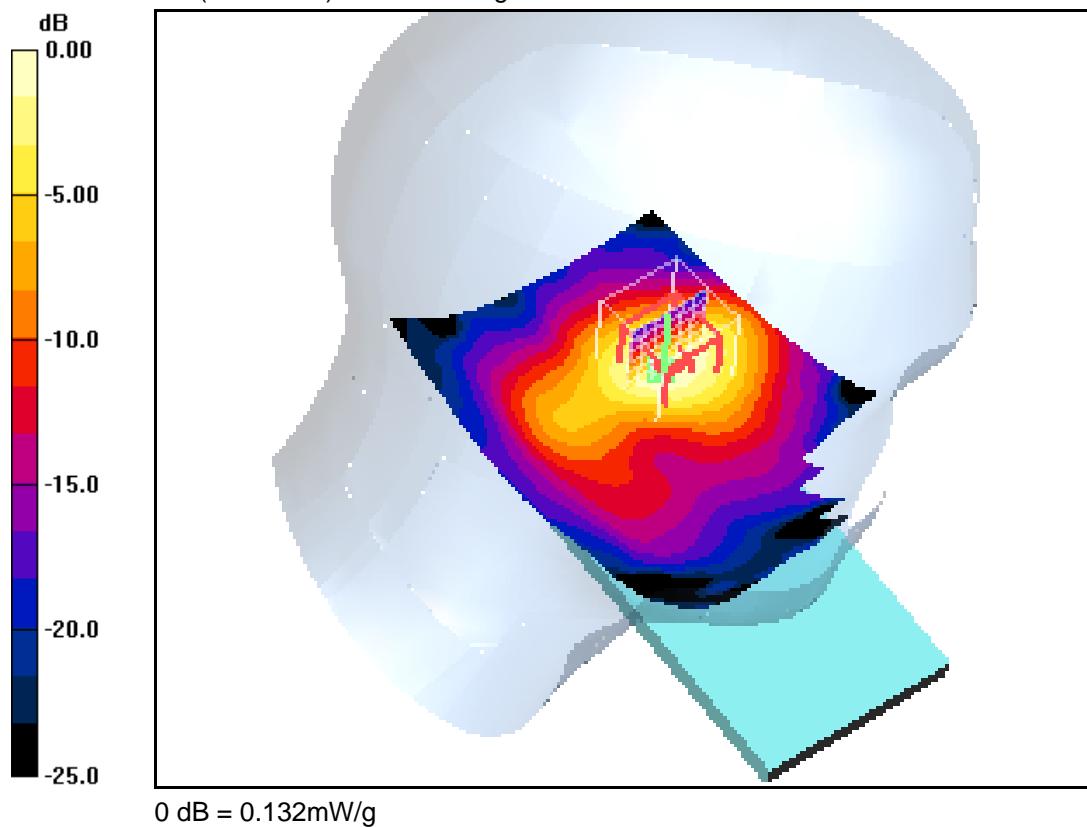
dy=5mm, dz=5mm

Reference Value = 8.57 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 0.261 W/kg

**SAR(1 g) = 0.119 mW/g; SAR(10 g) = 0.058 mW/g**

Maximum value of SAR (measured) = 0.132 mW/g

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.2°C

Date/Time: 19.12.2012 12:23:26 Date/Time: 19.12.2012 12:41:38

**IEEE1528-LeftHandSide-WLAN****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.81 \text{ mho/m}$ ;  $\epsilon_r = 38.8$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Middle/Area Scan (111x151x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$ 

Maximum value of SAR (interpolated) = 0.279 mW/g

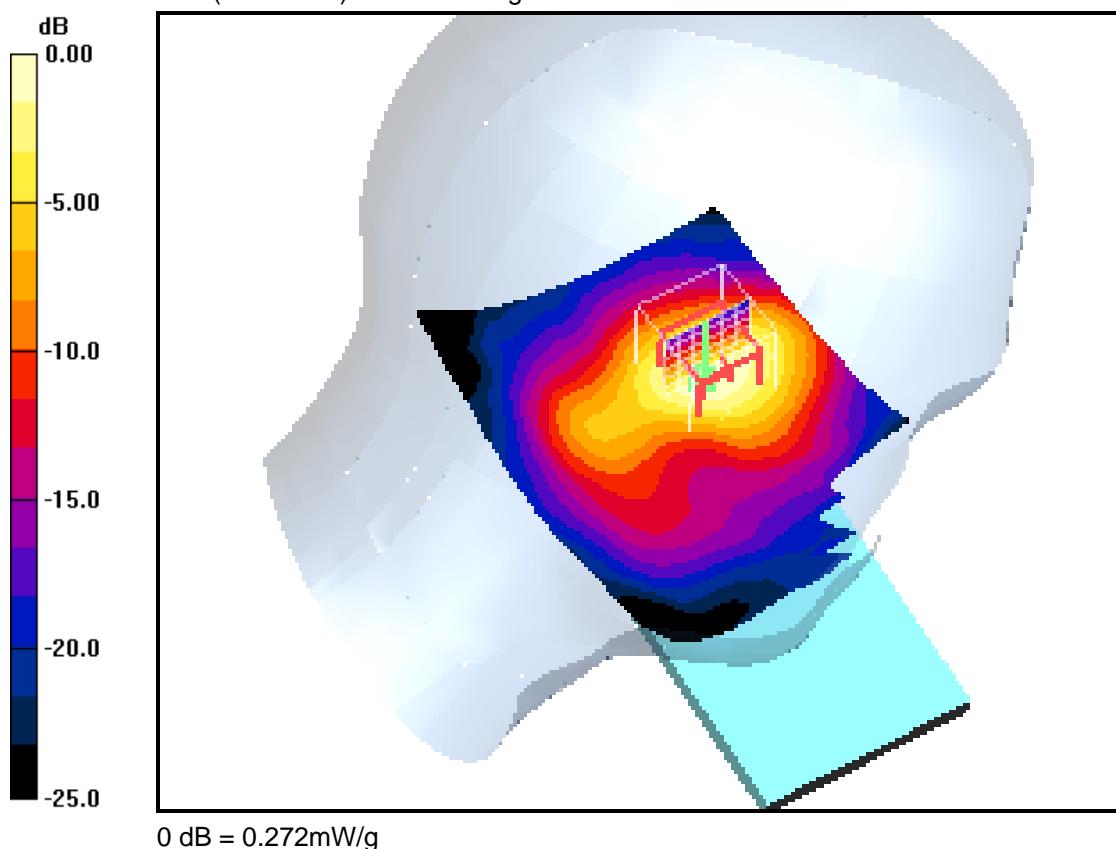
**Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$ 

Reference Value = 12.4 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 0.543 W/kg

**SAR(1 g) = 0.248 mW/g; SAR(10 g) = 0.122 mW/g**

Maximum value of SAR (measured) = 0.272 mW/g

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.2°C

Date/Time: 19.12.2012 15:48:38 Date/Time: 19.12.2012 16:06:40

**IEEE1528-LeftHandSide-WLAN****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.83$  mho/m;  $\epsilon_r = 38.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - High/Area Scan (111x151x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.413 mW/g

**Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm,

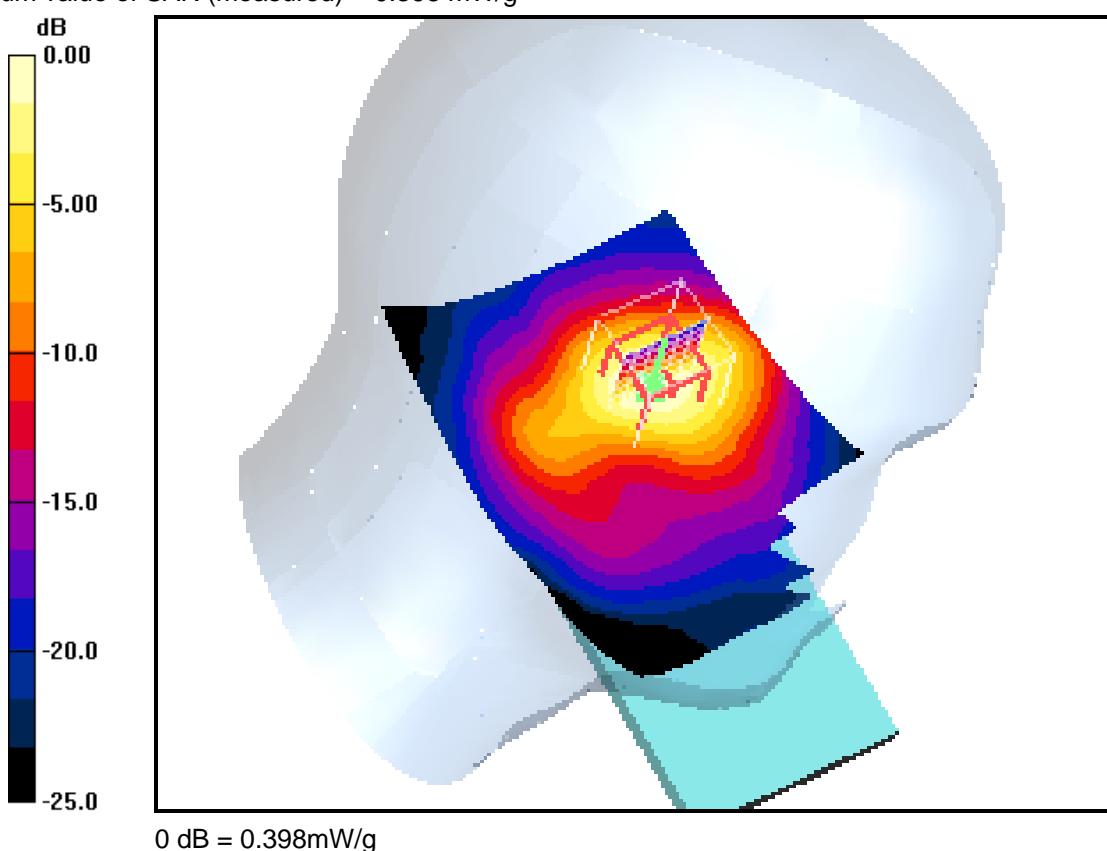
dy=5mm, dz=5mm

Reference Value = 15.2 V/m; Power Drift = 0.021 dB

Peak SAR (extrapolated) = 0.790 W/kg

**SAR(1 g) = 0.366 mW/g; SAR(10 g) = 0.181 mW/g**

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

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.2°C

Date/Time: 19.12.2012 21:18:46 Date/Time: 19.12.2012 21:57:03

**IEEE1528-LeftHandSide-WLAN****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used:  $f = 2462 \text{ MHz}$ ;  $\sigma = 1.83 \text{ mho/m}$ ;  $\epsilon_r = 38.8$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - High WC/Area Scan (111x151x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$ 

Maximum value of SAR (interpolated) = 0.964 mW/g

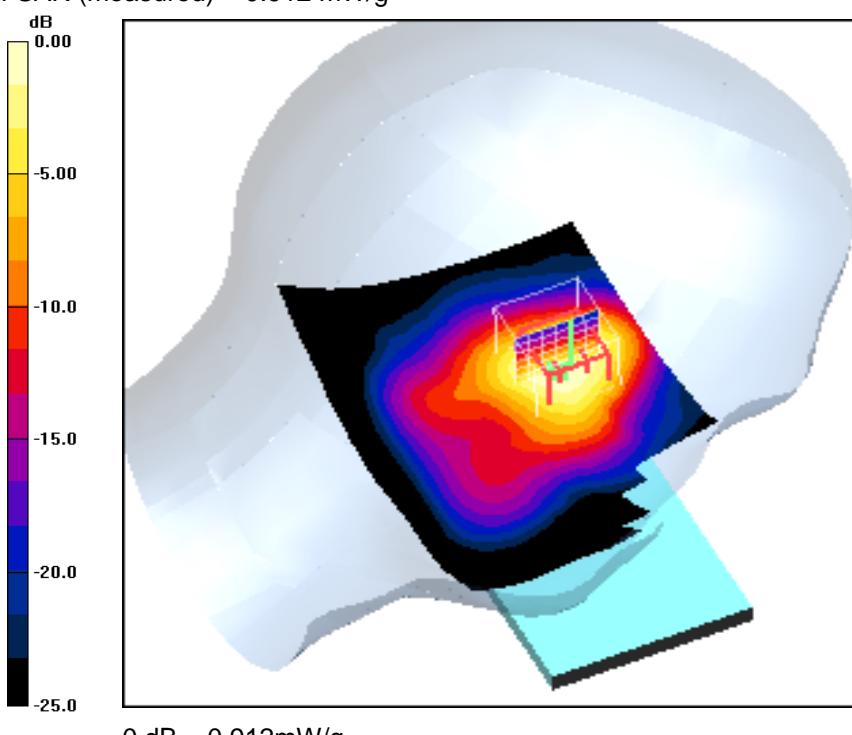
**Touch position - High WC/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$ 

Reference Value = 22.3 V/m; Power Drift = -0.102 dB

Peak SAR (extrapolated) = 2.08 W/kg

**SAR(1 g) = 0.846 mW/g; SAR(10 g) = 0.388 mW/g**

Maximum value of SAR (measured) = 0.912 mW/g



0 dB = 0.912mW/g

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.2°C

Date/Time: 19.12.2012 19:09:16 Date/Time: 19.12.2012 19:28:57

**IEEE1528-RightHandSide-WLAN****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.78 \text{ mho/m}$ ;  $\epsilon_r = 38.9$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Low/Area Scan (111x151x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$ 

Maximum value of SAR (interpolated) = 0.089 mW/g

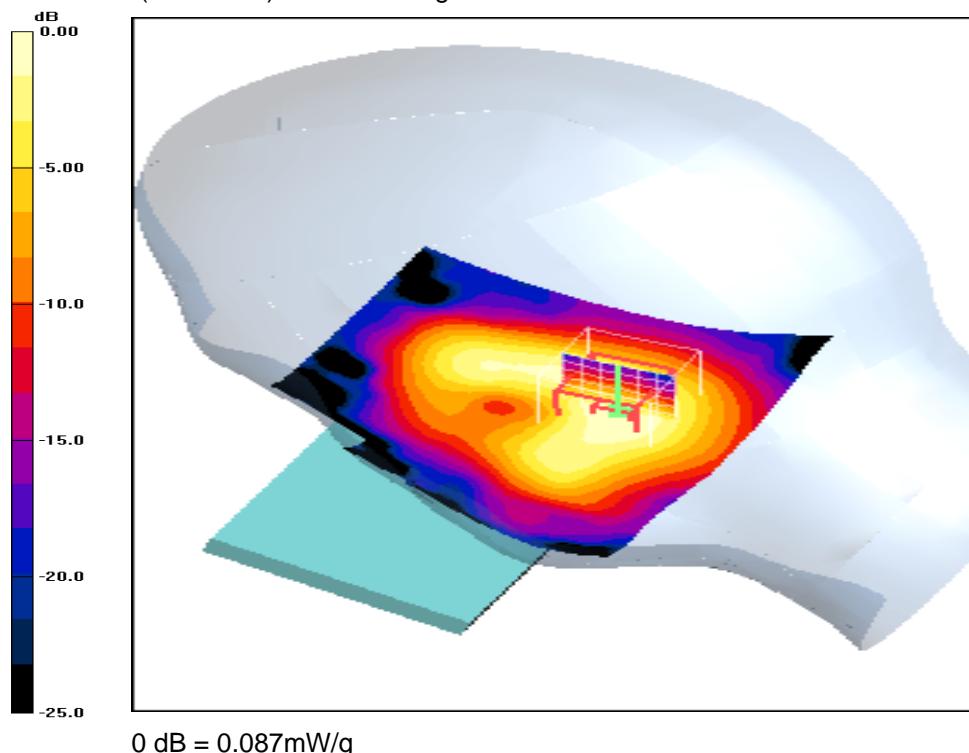
**Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$ 

Reference Value = 7.31 V/m; Power Drift = -0.123 dB

Peak SAR (extrapolated) = 0.176 W/kg

**SAR(1 g) = 0.082 mW/g; SAR(10 g) = 0.042 mW/g**

Maximum value of SAR (measured) = 0.087 mW/g

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.2°C

Date/Time: 19.12.2012 19:48:32 Date/Time: 19.12.2012 20:06:22

**IEEE1528-RightHandSide-WLAN****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.81 \text{ mho/m}$ ;  $\epsilon_r = 38.8$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Mid/Area Scan (111x151x1):** Measurement grid: dx=10mm, dy=10mm

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

**Touch position - Mid/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

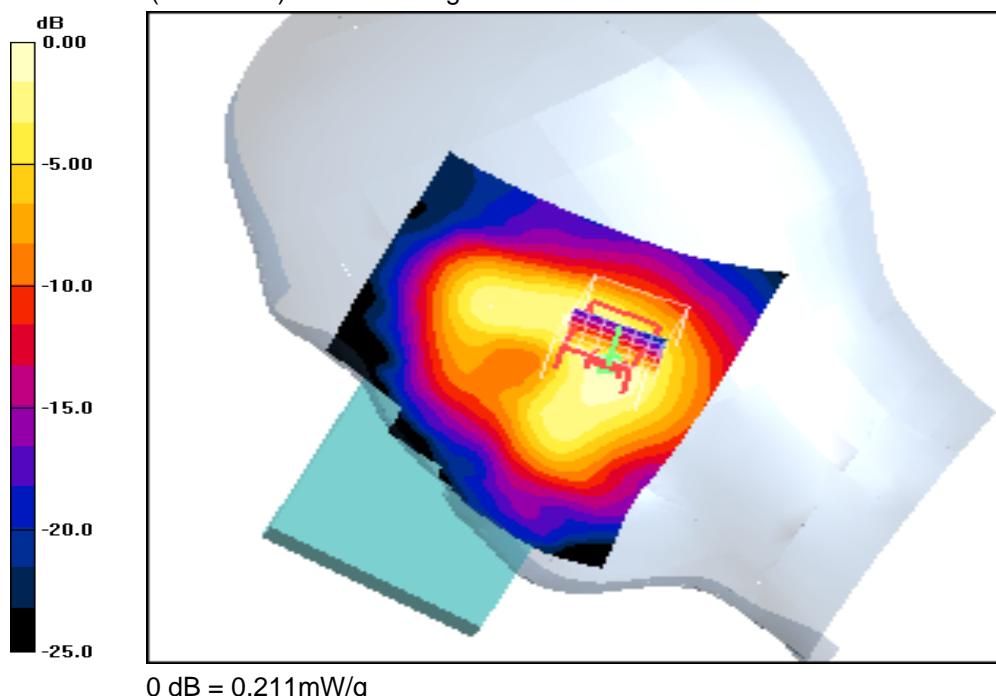
dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.94 V/m; Power Drift = 0.049 dB

Peak SAR (extrapolated) = 0.414 W/kg

**SAR(1 g) = 0.190 mW/g; SAR(10 g) = 0.096 mW/g**

Maximum value of SAR (measured) = 0.211 mW/g



0 dB = 0.211mW/g

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.2°C

Date/Time: 19.12.2012 14:41:09 Date/Time: 19.12.2012 14:59:32

**IEEE1528-RightHandSide-WLAN****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used:  $f = 2462 \text{ MHz}$ ;  $\sigma = 1.83 \text{ mho/m}$ ;  $\epsilon_r = 38.8$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - High/Area Scan (111x151x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.302 mW/g

**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

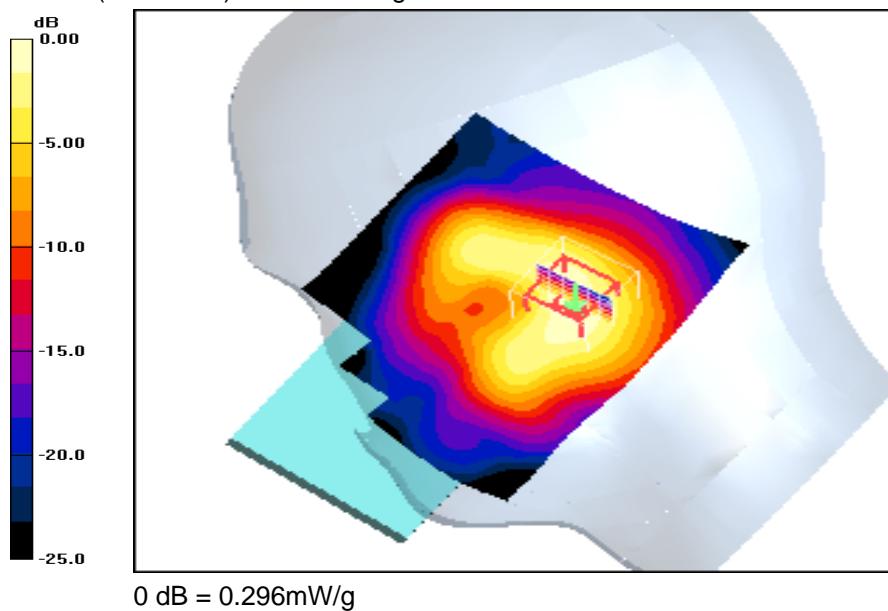
dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.8 V/m; Power Drift = -0.010 dB

Peak SAR (extrapolated) = 0.579 W/kg

**SAR(1 g) = 0.266 mW/g; SAR(10 g) = 0.134 mW/g**

Maximum value of SAR (measured) = 0.296 mW/g



0 dB = 0.296mW/g

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.2°C

Date/Time: 19.12.2012 18:36:49 Date/Time: 19.12.2012 18:57:52

**IEEE1528-RightHandSide-WLAN****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.78 \text{ mho/m}$ ;  $\epsilon_r = 38.9$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Low/Area Scan (111x151x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$ 

Maximum value of SAR (interpolated) = 0.055 mW/g

**Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$ 

Reference Value = 5.69 V/m; Power Drift = -0.108 dB

Peak SAR (extrapolated) = 0.097 W/kg

**SAR(1 g) = 0.049 mW/g; SAR(10 g) = 0.024 mW/g**

Maximum value of SAR (measured) = 0.055 mW/g

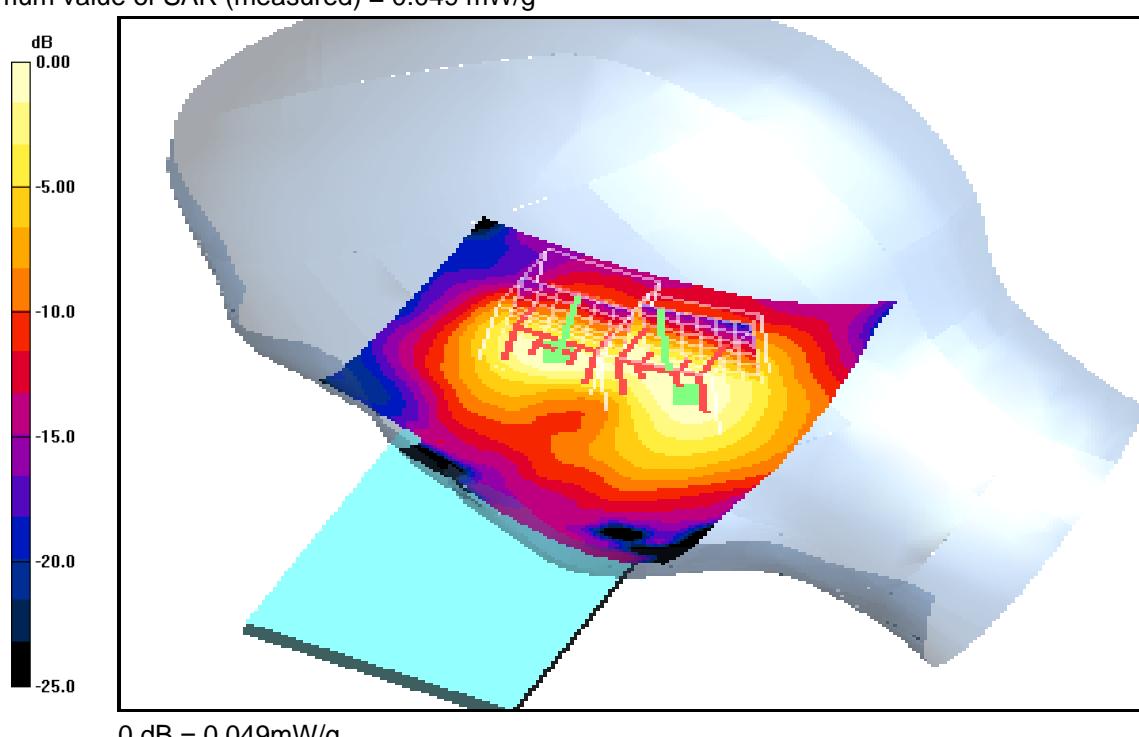
**Tilt position - Low/Zoom Scan (7x7x7) 2 (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$ 

Reference Value = 5.39 V/m; Power Drift = -0.108 dB

Peak SAR (extrapolated) = 0.088 W/kg

**SAR(1 g) = 0.045 mW/g; SAR(10 g) = 0.024 mW/g**

Maximum value of SAR (measured) = 0.049 mW/g

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.2°C

Date/Time: 19.12.2012 12:54:43 Date/Time: 19.12.2012 13:17:29 Date/Time: 19.12.2012 13:28:21

## IEEE1528-RightHandSide-WLAN

**DUT:** Sony; **Type:** PM-0280-BV; **Serial:** CB5A1MAQ0T

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.81 \text{ mho/m}$ ;  $\epsilon_r = 38.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Mid/Area Scan (111x151x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.112 mW/g

**Tilt position - Mid/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,

$dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 7.58 V/m; Power Drift = -0.017 dB

Peak SAR (extrapolated) = 0.209 W/kg

**SAR(1 g) = 0.101 mW/g; SAR(10 g) = 0.050 mW/g**

Maximum value of SAR (measured) = 0.115 mW/g

**Tilt position - Mid/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid:  $dx=5\text{mm}$ ,

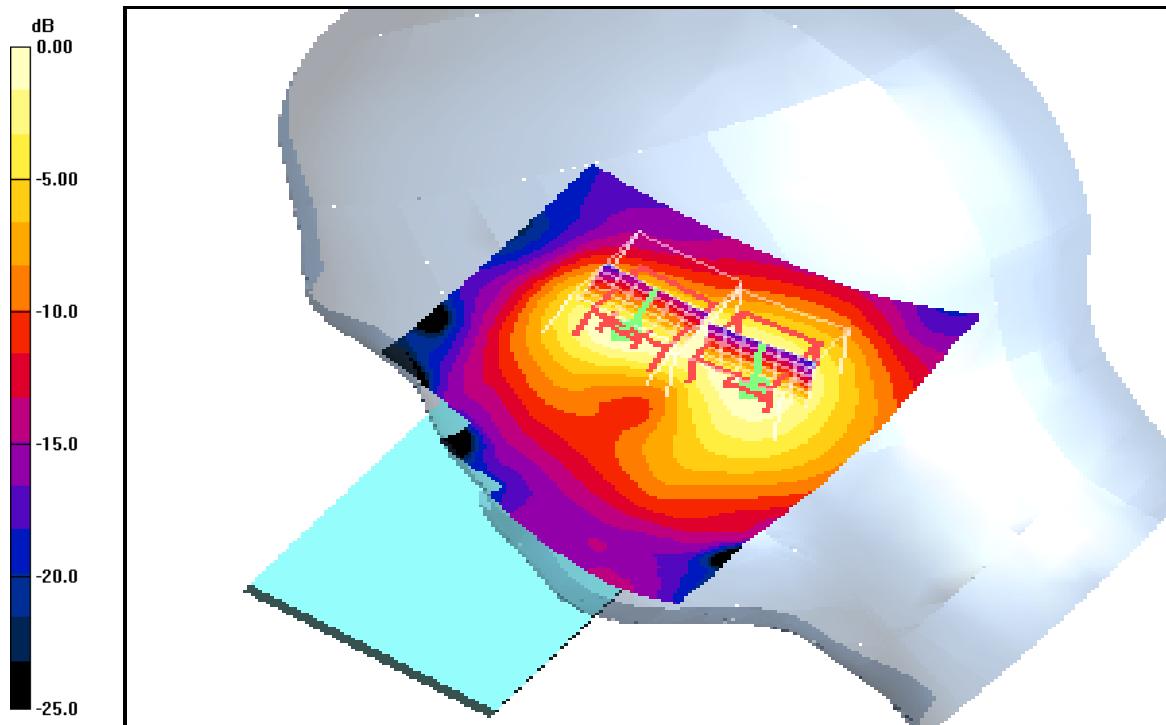
$dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 7.58 V/m; Power Drift = -0.017 dB

Peak SAR (extrapolated) = 0.204 W/kg

**SAR(1 g) = 0.097 mW/g; SAR(10 g) = 0.051 mW/g**

Maximum value of SAR (measured) = 0.104 mW/g



### Additional information:

ambient temperature: 23.4°C; liquid temperature: 22.2°C

Date/Time: 19.12.2012 15:12:45 Date/Time: 19.12.2012 15:31:53

**IEEE1528-RightHandSide-WLAN****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used:  $f = 2462 \text{ MHz}$ ;  $\sigma = 1.83 \text{ mho/m}$ ;  $\epsilon_r = 38.8$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - High/Area Scan (111x151x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$ 

Maximum value of SAR (interpolated) = 0.169 mW/g

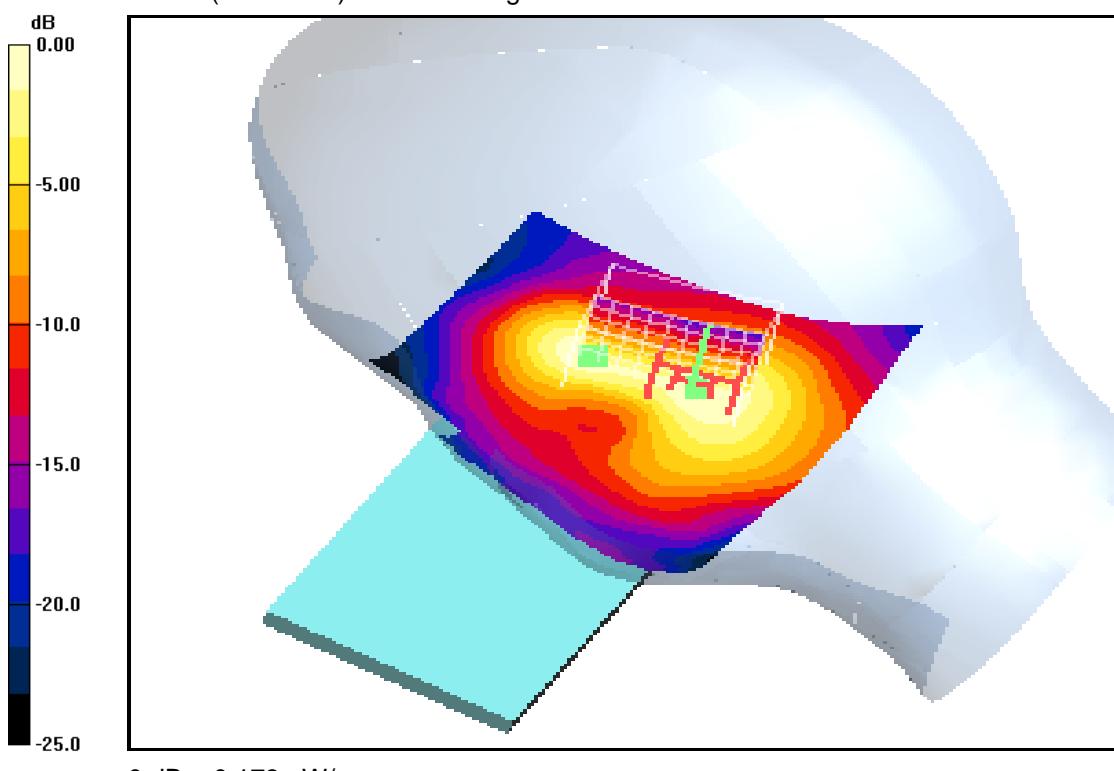
**Tilt position - High/Zoom Scan (7x7x7) (10x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$ 

Reference Value = 9.91 V/m; Power Drift = 0.024 dB

Peak SAR (extrapolated) = 0.319 W/kg

**SAR(1 g) = 0.158 mW/g; SAR(10 g) = 0.083 mW/g**

Maximum value of SAR (measured) = 0.173 mW/g

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.2°C

Date/Time: 20.12.2012 17:20:38 Date/Time: 20.12.2012 17:38:54

## OET65-Body-WLAN

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.96 \text{ mho/m}$ ;  $\epsilon_r = 52.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(3.88, 3.88, 3.88); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - Low/Area Scan (111x161x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.049 mW/g

**Front position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

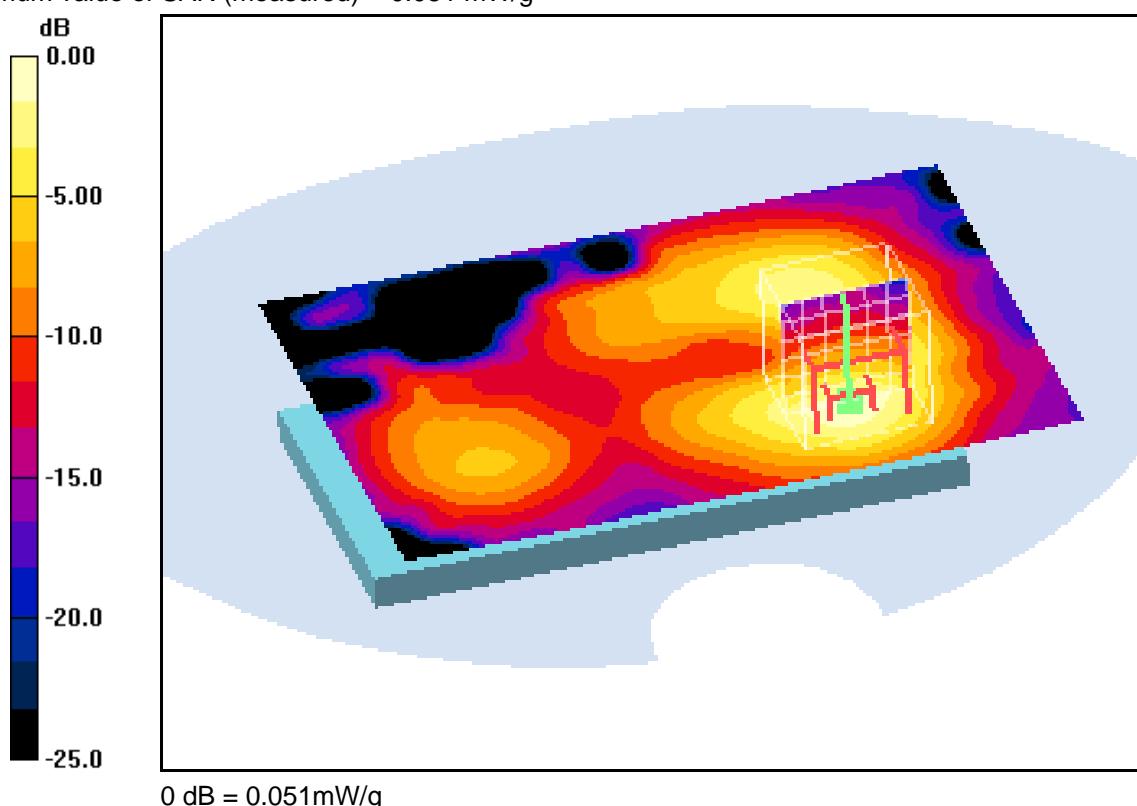
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 4.98 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.119 W/kg

**SAR(1 g) = 0.048 mW/g; SAR(10 g) = 0.023 mW/g**

Maximum value of SAR (measured) = 0.051 mW/g



### Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.5°C; liquid temperature: 21.1°C

Date/Time: 20.12.2012 13:51:13 Date/Time: 20.12.2012 14:10:51

**OET65-Body-WLAN****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.99 \text{ mho/m}$ ;  $\epsilon_r = 52.3$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(3.88, 3.88, 3.88); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - Mid/Area Scan (111x161x1):** Measurement grid: dx=10mm, dy=10mm

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

**Front position - Mid/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

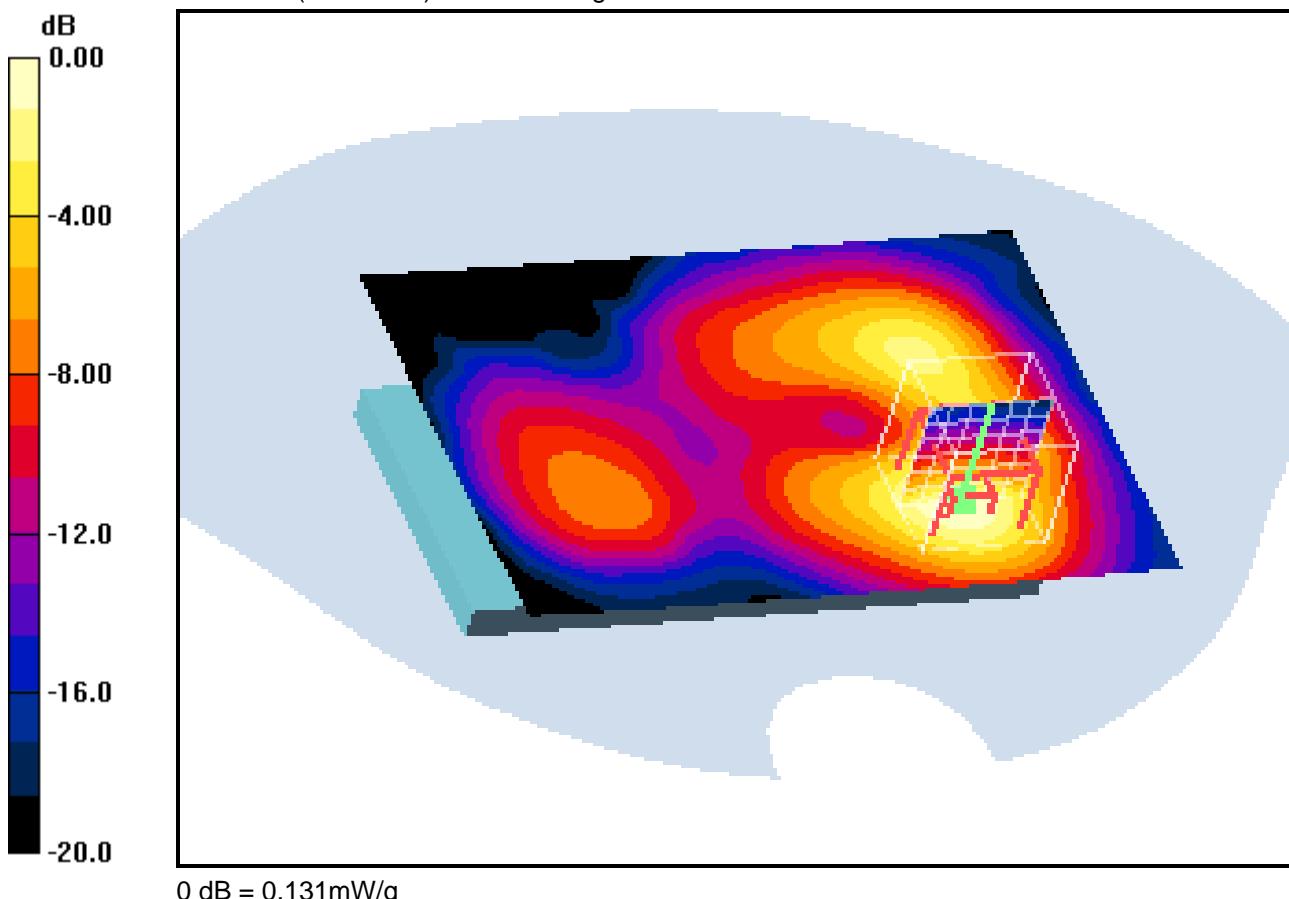
dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.98 V/m; Power Drift = -0.076 dB

Peak SAR (extrapolated) = 0.312 W/kg

**SAR(1 g) = 0.123 mW/g; SAR(10 g) = 0.060 mW/g**

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



0 dB = 0.131mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 23.5°C; liquid temperature: 21.1°C

Date/Time: 20.12.2012 18:27:45 Date/Time: 20.12.2012 18:46:05

## OET65-Body-WLAN

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used:  $f = 2462 \text{ MHz}$ ;  $\sigma = 2.01 \text{ mho/m}$ ;  $\epsilon_r = 52.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(3.88, 3.88, 3.88); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - High/Area Scan (111x161x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.194 mW/g

**Front position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

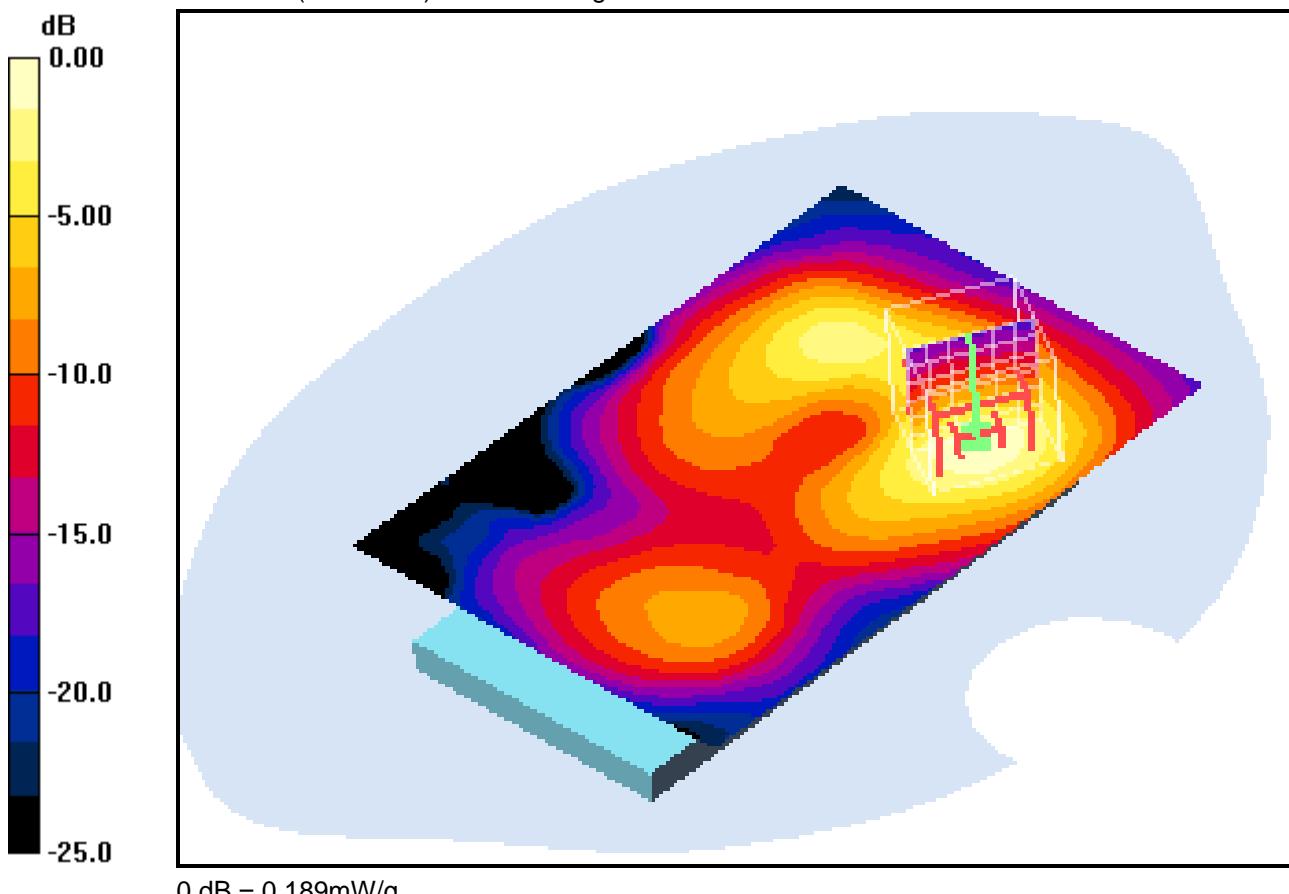
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 9.22 V/m; Power Drift = -0.066 dB

Peak SAR (extrapolated) = 0.456 W/kg

**SAR(1 g) = 0.180 mW/g; SAR(10 g) = 0.089 mW/g**

Maximum value of SAR (measured) = 0.189 mW/g



### Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.5°C; liquid temperature: 21.1°C

Date/Time: 20.12.2012 17:52:01 Date/Time: 20.12.2012 18:10:24

## OET65-Body-WLAN

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.96 \text{ mho/m}$ ;  $\epsilon_r = 52.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(3.88, 3.88, 3.88); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - Low/Area Scan (111x161x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.078 mW/g

**Rear position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

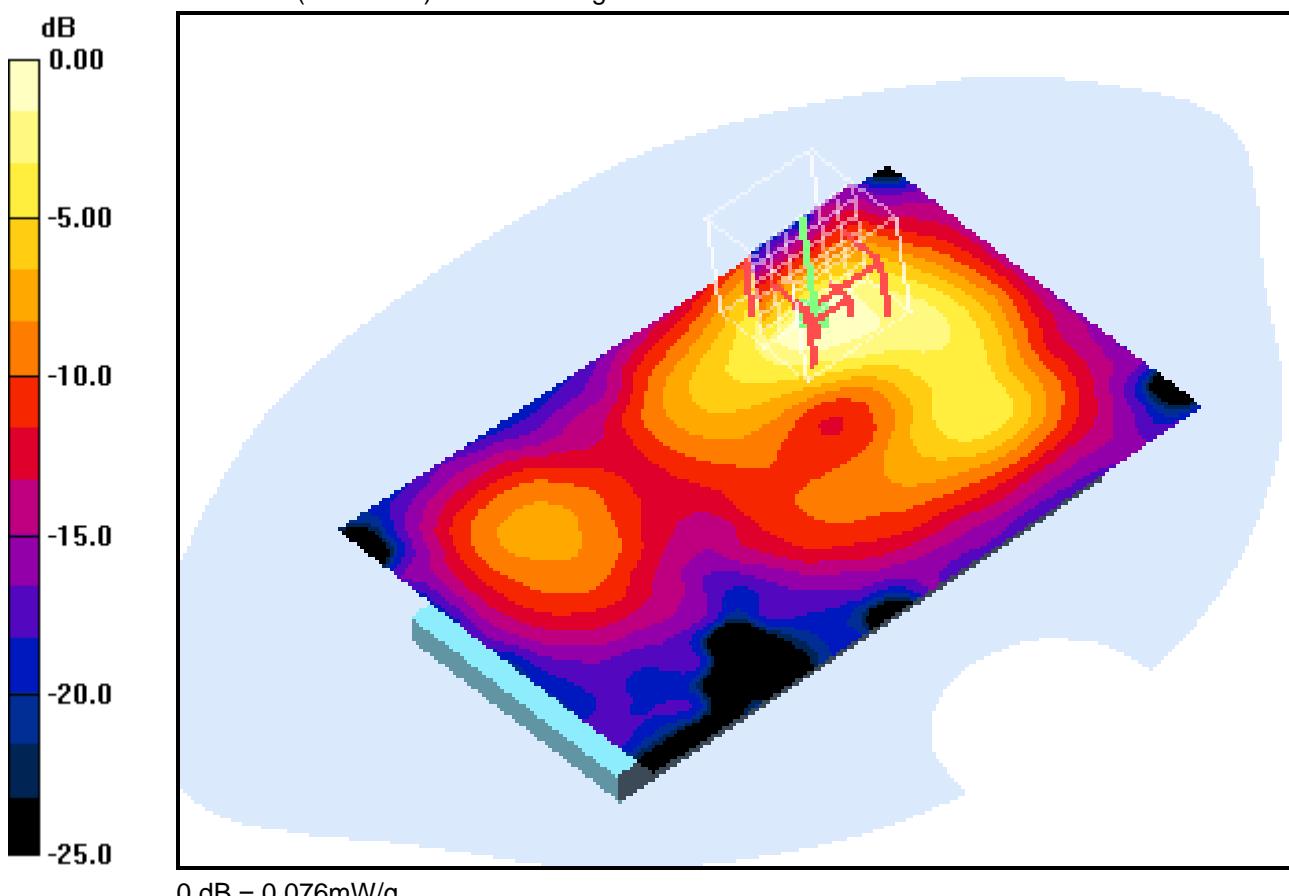
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 6.09 V/m; Power Drift = -0.134 dB

Peak SAR (extrapolated) = 0.169 W/kg

**SAR(1 g) = 0.072 mW/g; SAR(10 g) = 0.035 mW/g**

Maximum value of SAR (measured) = 0.076 mW/g



### Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.5°C; liquid temperature: 21.1°C

Date/Time: 20.12.2012 14:24:10 Date/Time: 20.12.2012 14:44:02

## OET65-Body-WLAN

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.99 \text{ mho/m}$ ;  $\epsilon_r = 52.3$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(3.88, 3.88, 3.88); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - Mid/Area Scan (111x161x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.184 mW/g

**Rear position - Mid/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

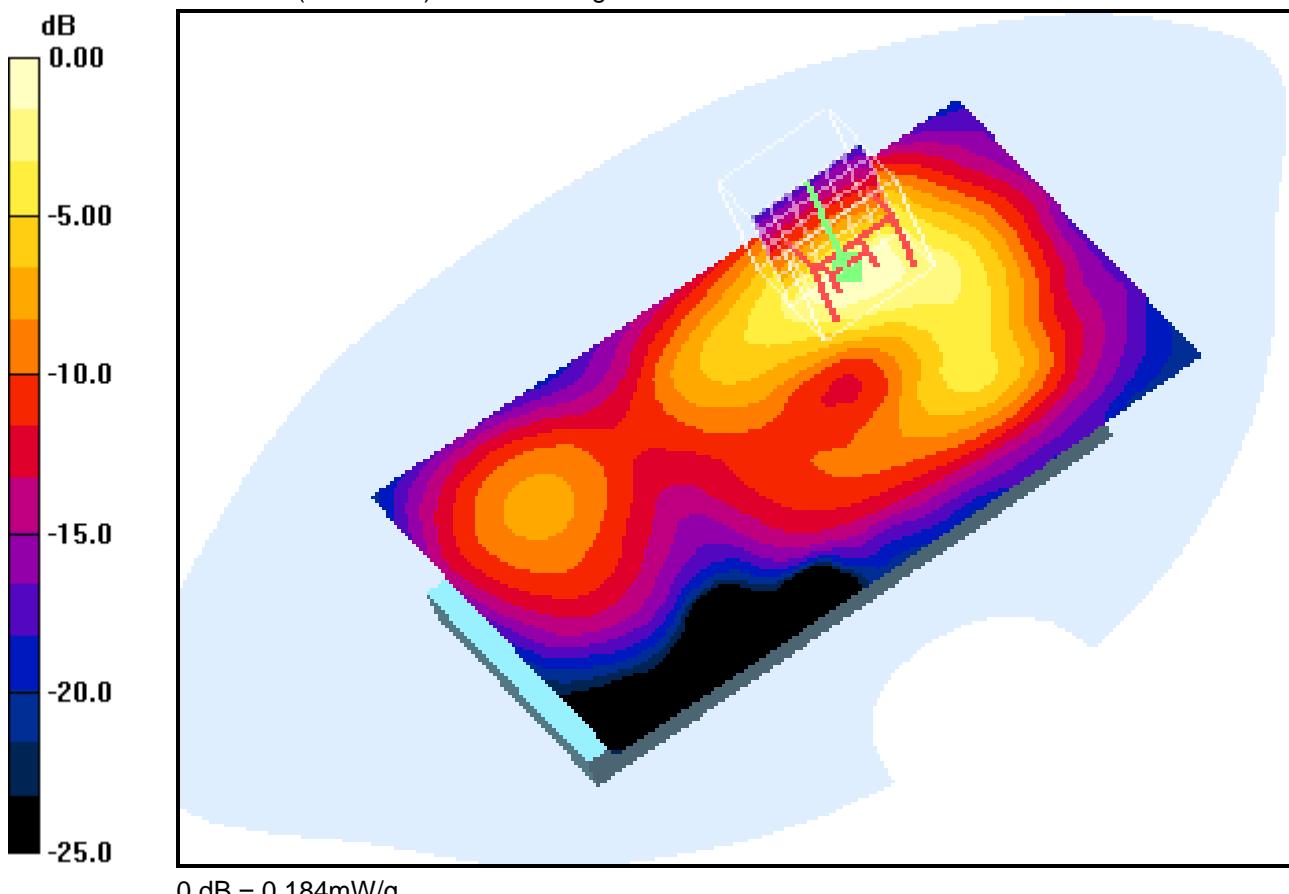
dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.17 V/m; Power Drift = -0.062 dB

Peak SAR (extrapolated) = 0.439 W/kg

**SAR(1 g) = 0.173 mW/g; SAR(10 g) = 0.085 mW/g**

Maximum value of SAR (measured) = 0.184 mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 23.5°C; liquid temperature: 21.1°C

Date/Time: 20.12.2012 19:04:44 Date/Time: 20.12.2012 19:23:07

**OET65-Body-WLAN****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used:  $f = 2462 \text{ MHz}$ ;  $\sigma = 2.01 \text{ mho/m}$ ;  $\epsilon_r = 52.2$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(3.88, 3.88, 3.88); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - High/Area Scan (111x161x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.270 mW/g

**Rear position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

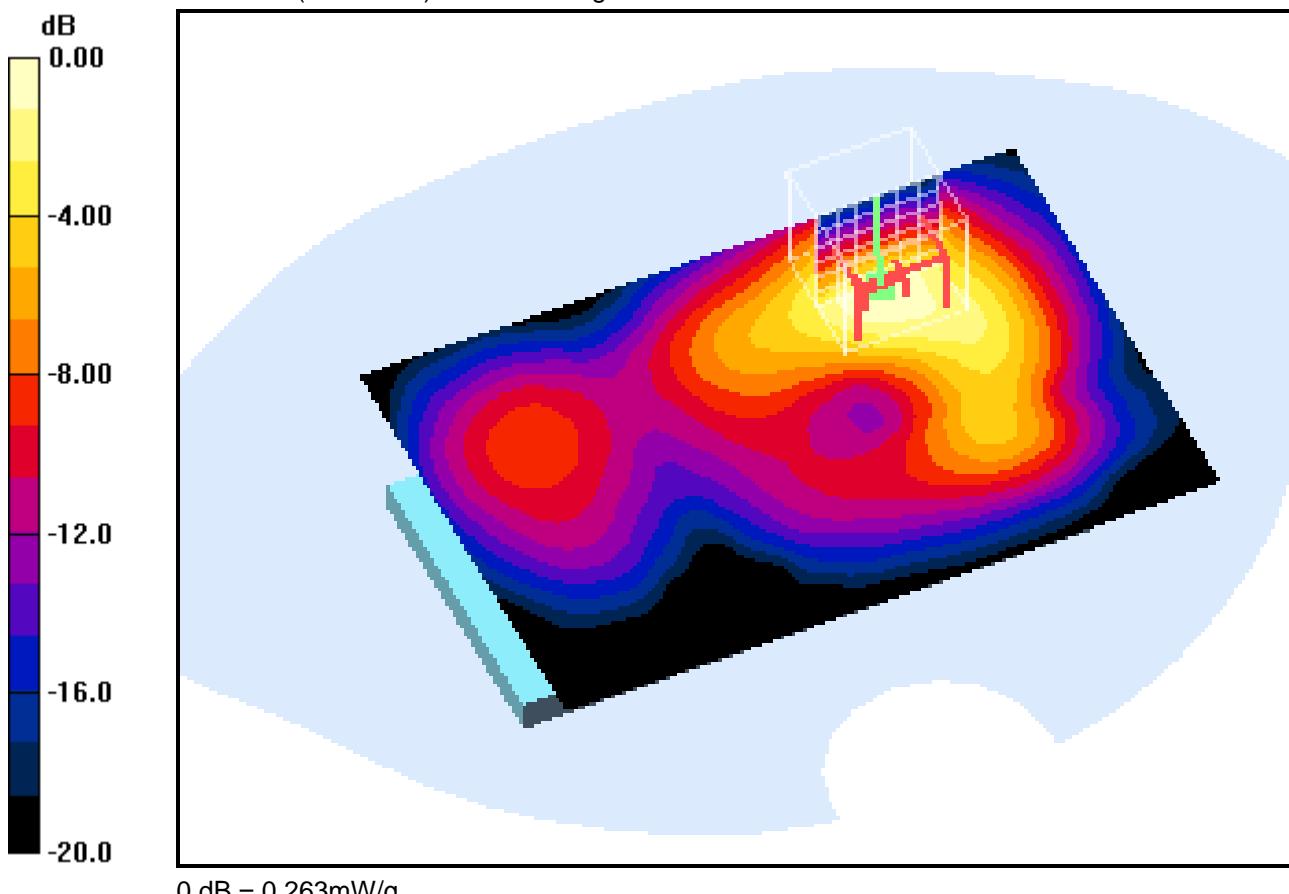
dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.4 V/m; Power Drift = -0.127 dB

Peak SAR (extrapolated) = 0.638 W/kg

**SAR(1 g) = 0.250 mW/g; SAR(10 g) = 0.124 mW/g**

Maximum value of SAR (measured) = 0.263 mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 23.5°C; liquid temperature: 21.1°C

Date/Time: 20.12.2012 15:37:10 Date/Time: 20.12.2012 15:50:47

## OET65-Body-WLAN

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.99 \text{ mho/m}$ ;  $\epsilon_r = 52.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(3.88, 3.88, 3.88); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Edge right position - Middle/Area Scan (71x161x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.060 mW/g

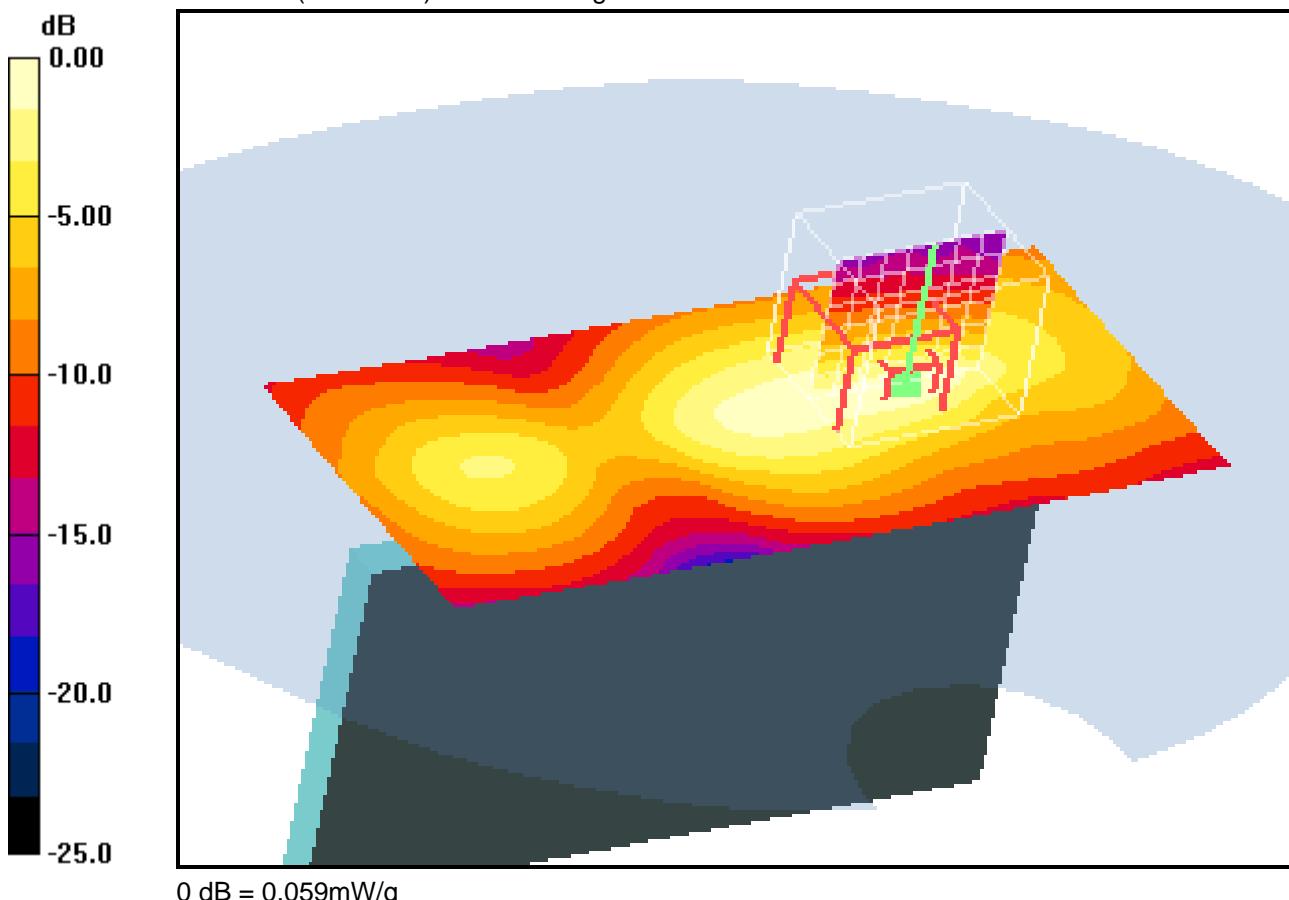
**Edge right position - Middle/Zoom Scan (7x7x7) (7x8x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 5.42 V/m; Power Drift = -0.041 dB

Peak SAR (extrapolated) = 0.149 W/kg

**SAR(1 g) = 0.056 mW/g; SAR(10 g) = 0.027 mW/g**

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



### Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.5°C; liquid temperature: 21.1°C

Date/Time: 20.12.2012 16:04:53 Date/Time: 20.12.2012 16:15:44

## OET65-Body-WLAN

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.99 \text{ mho/m}$ ;  $\epsilon_r = 52.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(3.88, 3.88, 3.88); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Edge top position - Middle/Area Scan (101x91x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.047 mW/g

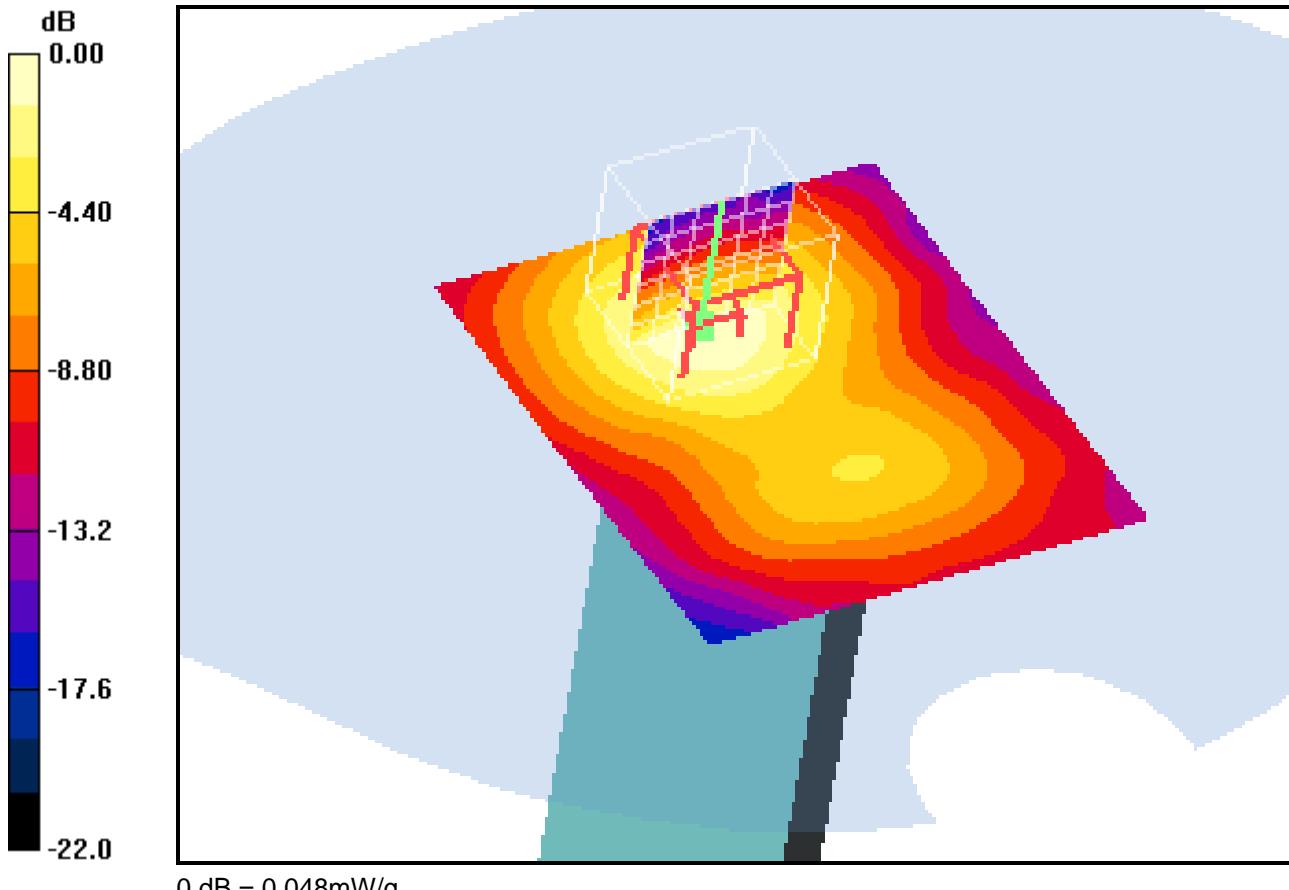
**Edge top position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 4.84 V/m; Power Drift = 0.031 dB

Peak SAR (extrapolated) = 0.107 W/kg

**SAR(1 g) = 0.045 mW/g; SAR(10 g) = 0.024 mW/g**

Maximum value of SAR (measured) = 0.048 mW/g



### Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.5°C; liquid temperature: 21.1°C

Date/Time: 20.12.2012 19:40:35 Date/Time: 20.12.2012 19:59:01

**OET65-Body-WLAN****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used:  $f = 2462 \text{ MHz}$ ;  $\sigma = 2.01 \text{ mho/m}$ ;  $\epsilon_r = 52.2$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(3.88, 3.88, 3.88); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - High 15mm/Area Scan (111x161x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$ 

Maximum value of SAR (interpolated) = 0.127 mW/g

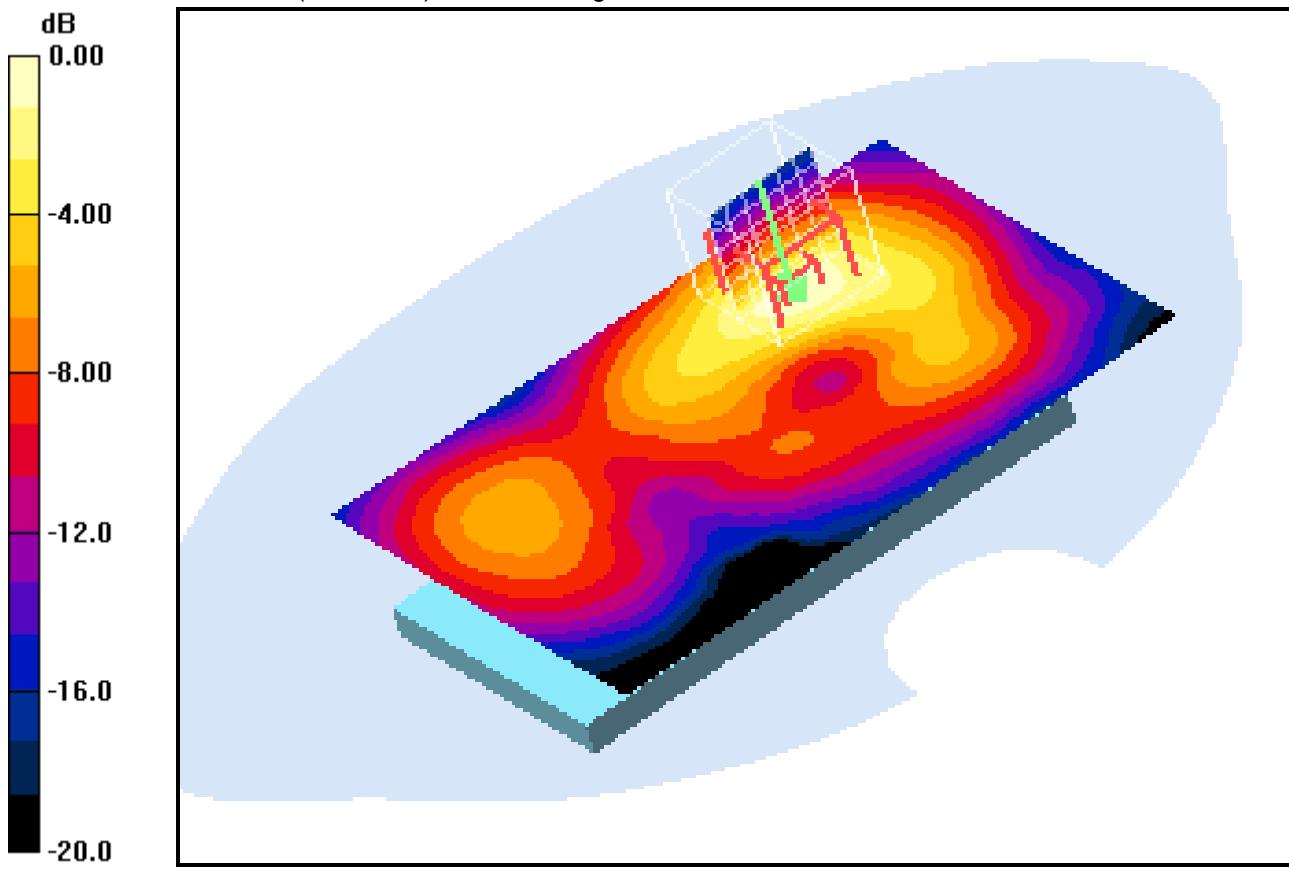
**Rear position - High 15mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$ 

Reference Value = 7.71 V/m; Power Drift = -0.025 dB

Peak SAR (extrapolated) = 0.294 W/kg

**SAR(1 g) = 0.123 mW/g; SAR(10 g) = 0.063 mW/g**

Maximum value of SAR (measured) = 0.128 mW/g

**Additional information:**

position or distance of DUT to SAM: 15mm

ambient temperature: 23.5°C; liquid temperature: 21.1°C

## Annex B.7: WLAN 5GHz

Date/Time: 02.01.2013 08:52:44 Date/Time: 02.01.2013 09:10:05

### **IEEE1528\_EN62209-LeftHandSide-WLAN5GHz**

DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T

Communication System: WLAN 5GHz; Frequency: 5180 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used (interpolated):  $f = 5180 \text{ MHz}$ ;  $\sigma = 4.5 \text{ mho/m}$ ;  $\epsilon_r = 36.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(4.24, 4.24, 4.24); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Channel 36/Area Scan (111x161x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.615 mW/g

**Touch position - Channel 36/Zoom Scan (8x8x12)/Cube 0:** Measurement grid:

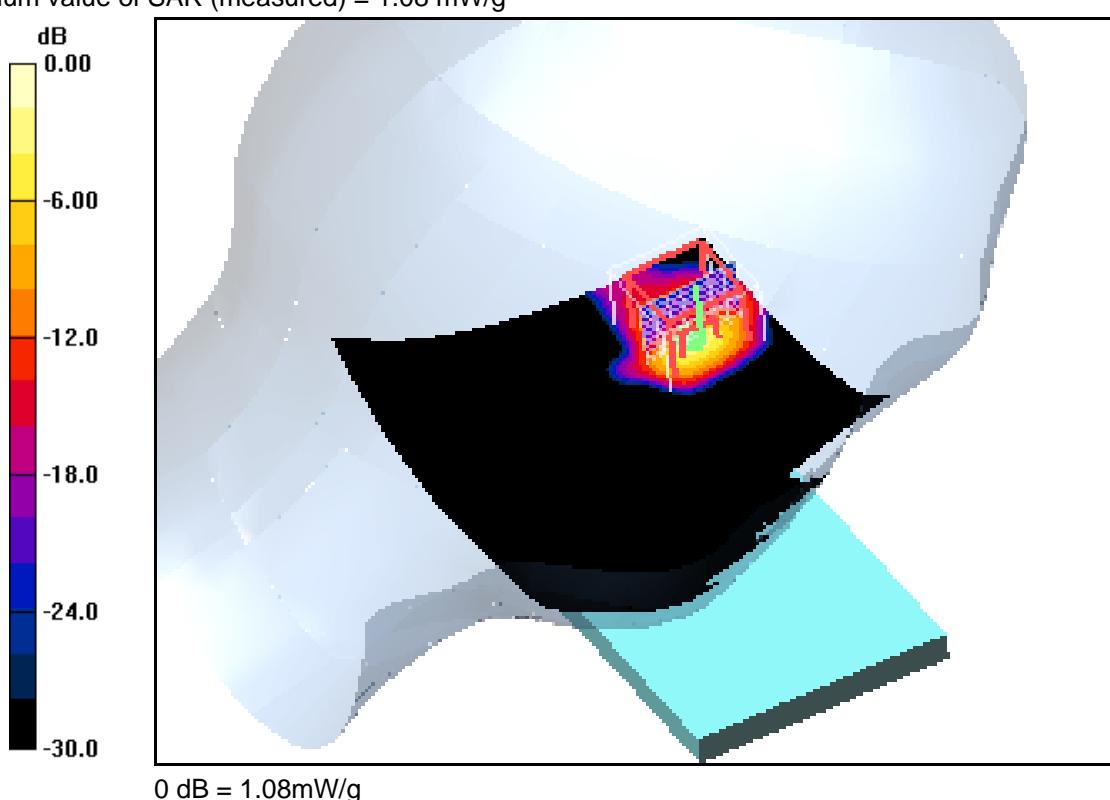
$dx=4\text{mm}$ ,  $dy=4\text{mm}$ ,  $dz=2\text{mm}$

Reference Value = 17.1 V/m; Power Drift = -0.025 dB

Peak SAR (extrapolated) = 2.51 W/kg

**SAR(1 g) = 0.539 mW/g; SAR(10 g) = 0.144 mW/g**

Maximum value of SAR (measured) = 1.08 mW/g



#### **Additional information:**

ambient temperature: 22.3°C; liquid temperature: 20.2°C

Date/Time: 02.01.2013 12:37:26 Date/Time: 02.01.2013 13:02:36

**IEEE1528\_EN62209-LeftHandSide-WLAN5GHz****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 5GHz; Frequency: 5260 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used (interpolated):  $f = 5260$  MHz;  $\sigma = 4.58$  mho/m;  $\epsilon_r = 36.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(4.05, 4.05, 4.05); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Channel 52/Area Scan (111x161x1):** Measurement grid: dx=10mm, dy=10mm

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

**Touch position - Channel 52/Zoom Scan (8x8x12)/Cube 0:** Measurement grid:

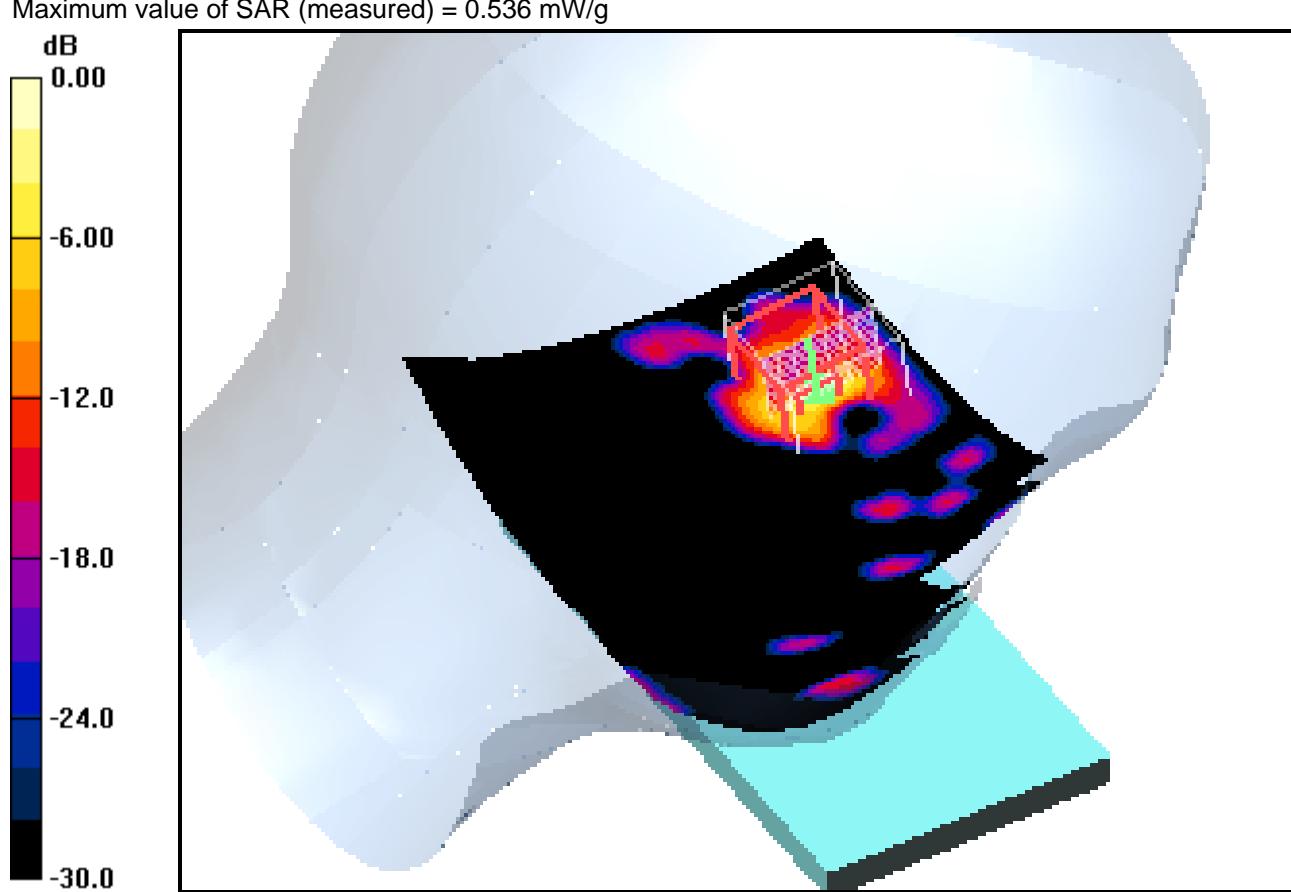
dx=4mm, dy=4mm, dz=2mm

Reference Value = 9.34 V/m; Power Drift = -0.029 dB

Peak SAR (extrapolated) = 1.16 W/kg

**SAR(1 g) = 0.260 mW/g; SAR(10 g) = 0.072 mW/g**

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

**Additional information:**

ambient temperature: 22.3°C; liquid temperature: 20.2°C

Date/Time: 02.01.2013 13:07:56 Date/Time: 02.01.2013 13:32:50

**IEEE1528\_EN62209-LeftHandSide-WLAN5GHz****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 5GHz; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used:  $f = 5600$  MHz;  $\sigma = 4.91$  mho/m;  $\epsilon_r = 35.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(3.72, 3.72, 3.72); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Channel 120/Area Scan (111x161x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.640 mW/g

**Touch position - Channel 120/Zoom Scan (8x8x12)/Cube 0:** Measurement grid:

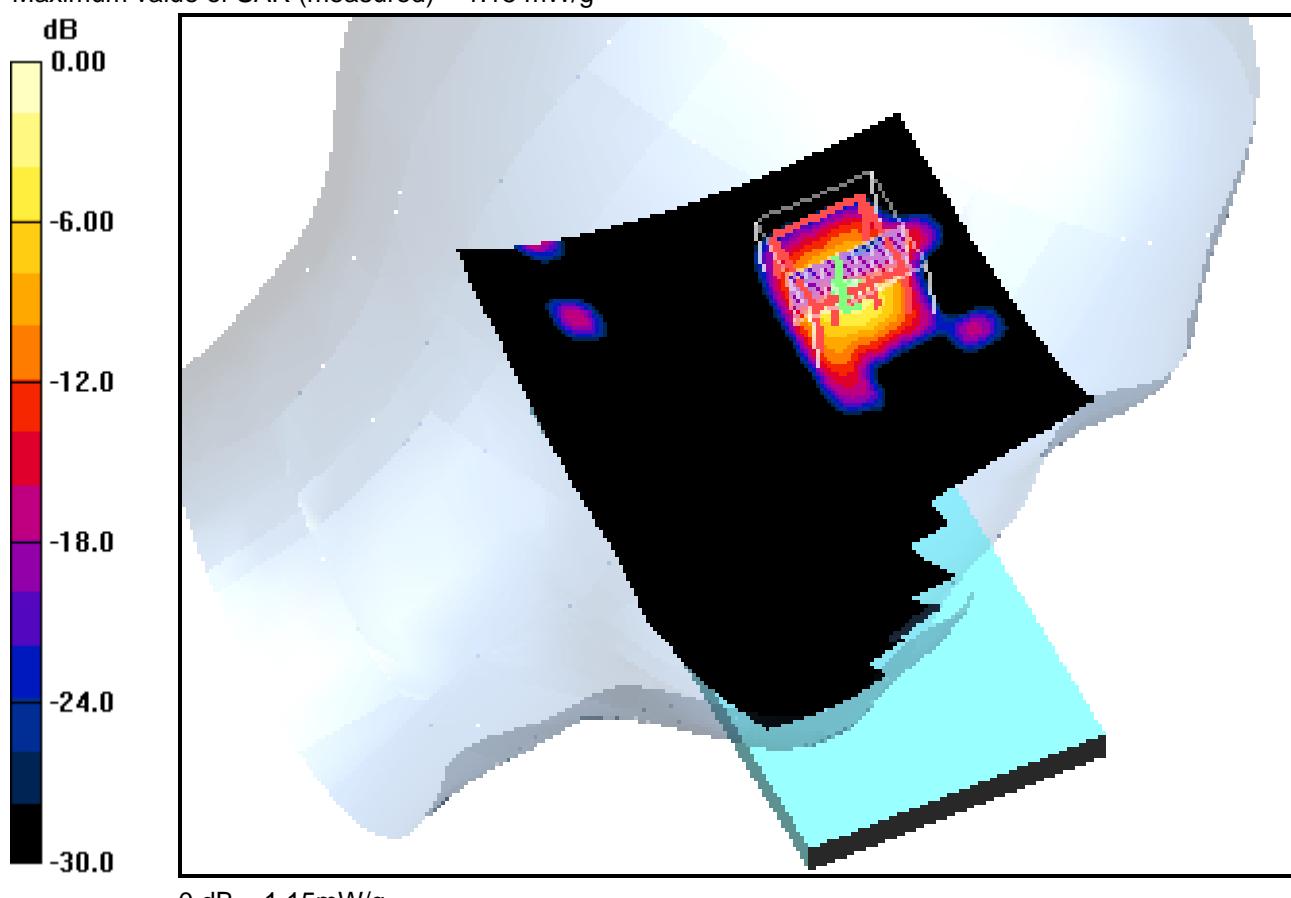
dx=4mm, dy=4mm, dz=2mm

Reference Value = 15.8 V/m; Power Drift = 0.061 dB

Peak SAR (extrapolated) = 2.63 W/kg

**SAR(1 g) = 0.538 mW/g; SAR(10 g) = 0.139 mW/g**

Maximum value of SAR (measured) = 1.15 mW/g

**Additional information:**

ambient temperature: 22.3°C; liquid temperature: 20.2°C

Date/Time: 02.01.2013 17:41:14 Date/Time: 02.01.2013 17:59:06

**IEEE1528\_EN62209-LeftHandSide-WLAN5GHz****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 5GHz; Frequency: 5825 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used (interpolated):  $f = 5825 \text{ MHz}$ ;  $\sigma = 5.14 \text{ mho/m}$ ;  $\epsilon_r = 35.5$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(3.65, 3.65, 3.65); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Channel 165/Area Scan (111x161x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$ 

Maximum value of SAR (interpolated) = 0.090 mW/g

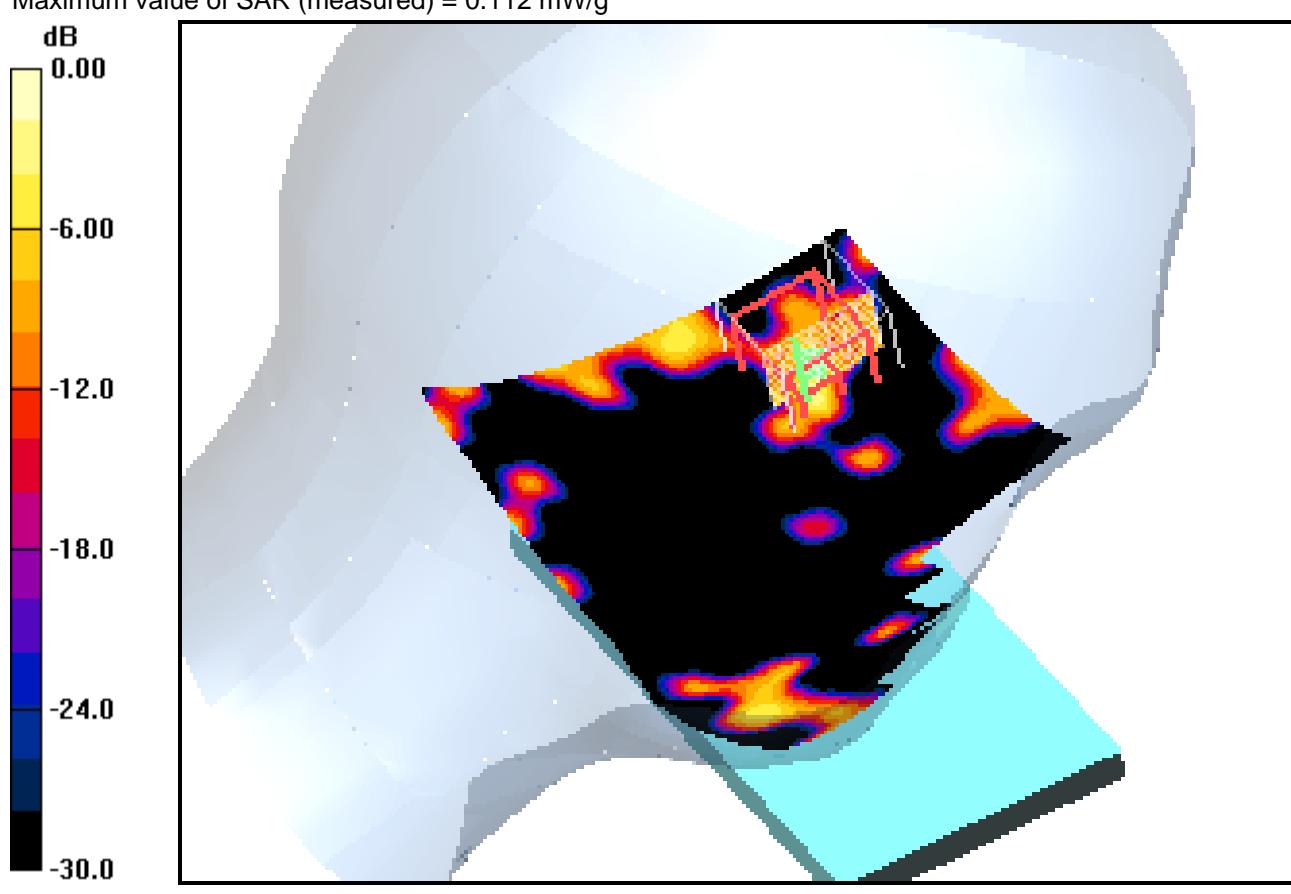
**Touch position - Channel 165/Zoom Scan (8x8x12)/Cube 0:** Measurement grid: $dx=4\text{mm}$ ,  $dy=4\text{mm}$ ,  $dz=2\text{mm}$ 

Reference Value = 4.49 V/m; Power Drift = -0.150 dB

Peak SAR (extrapolated) = 0.211 W/kg

**SAR(1 g) = 0.057 mW/g; SAR(10 g) = 0.021 mW/g**

Maximum value of SAR (measured) = 0.112 mW/g

**Additional information:**

ambient temperature: 22.3°C; liquid temperature: 20.2°C

Date/Time: 02.01.2013 09:34:06 Date/Time: 02.01.2013 09:58:03

**IEEE1528\_EN62209-LeftHandSide-WLAN5GHz****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 5GHz; Frequency: 5180 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used (interpolated):  $f = 5180$  MHz;  $\sigma = 4.5$  mho/m;  $\epsilon_r = 36.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(4.24, 4.24, 4.24); Calibrated: 23.08.2012

- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn413; Calibrated: 12.01.2012

- Phantom: SAM 12; Type: SAM; Serial: 1043

- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Channel 36/Area Scan (111x161x1):** Measurement grid: dx=10mm,

dy=10mm

Maximum value of SAR (interpolated) = 0.249 mW/g

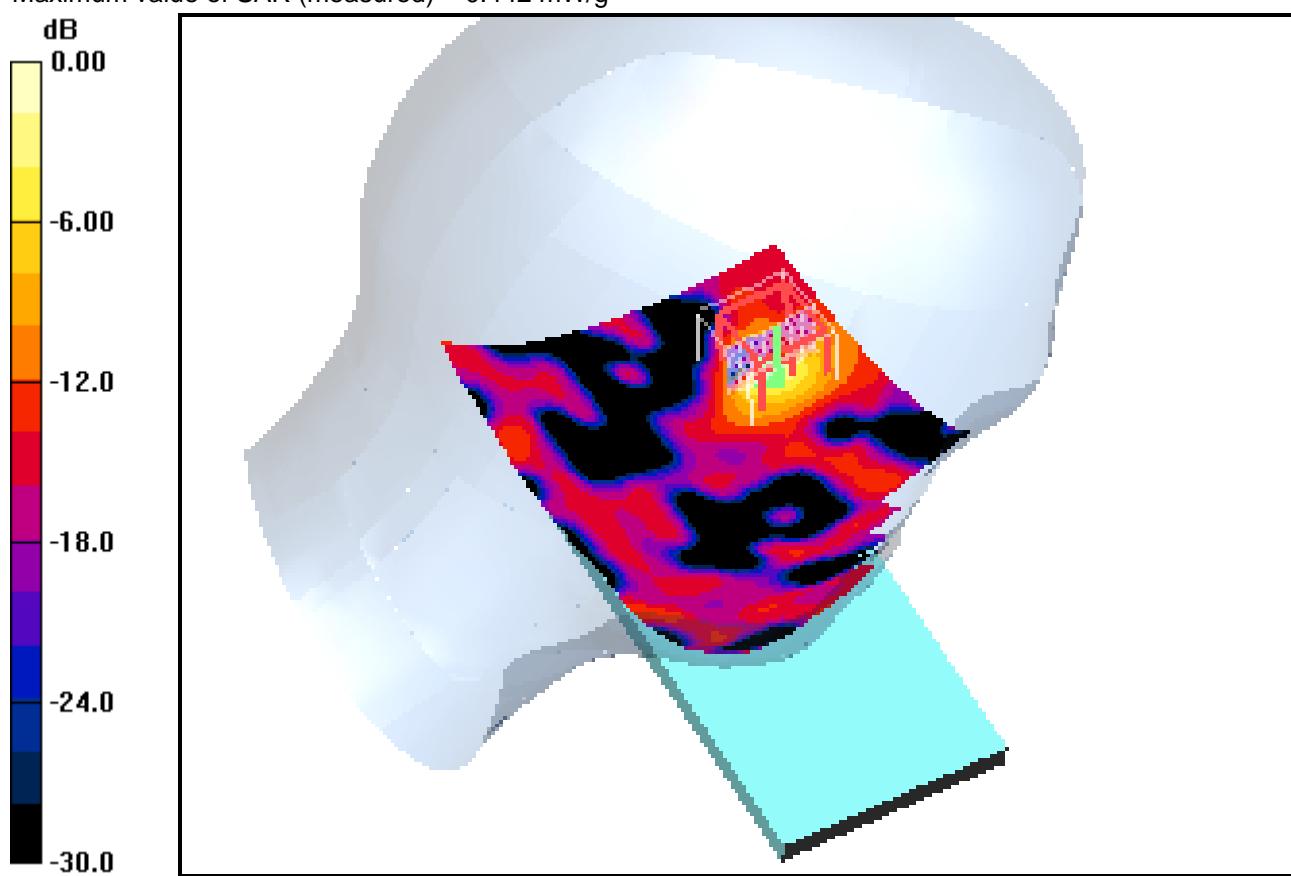
**Tilt position - Channel 36/Zoom Scan (8x8x12)/Cube 0:** Measurement grid: dx=4mm,  
dy=4mm, dz=2mm

Reference Value = 9.24 V/m; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 1.73 W/kg

**SAR(1 g) = 0.231 mW/g; SAR(10 g) = 0.065 mW/g**

Maximum value of SAR (measured) = 0.442 mW/g



0 dB = 0.442mW/g

**Additional information:**

ambient temperature: 22.3°C; liquid temperature: 20.2°C

Date/Time: 02.01.2013 12:15:04 Date/Time: 02.01.2013 12:34:45

**IEEE1528\_EN62209-LeftHandSide-WLAN5GHz****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 5GHz; Frequency: 5260 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used (interpolated):  $f = 5260$  MHz;  $\sigma = 4.58$  mho/m;  $\epsilon_r = 36.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(4.05, 4.05, 4.05); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Channel 52/Area Scan (111x161x1):** Measurement grid: dx=10mm,

dy=10mm

Maximum value of SAR (interpolated) = 0.225 mW/g

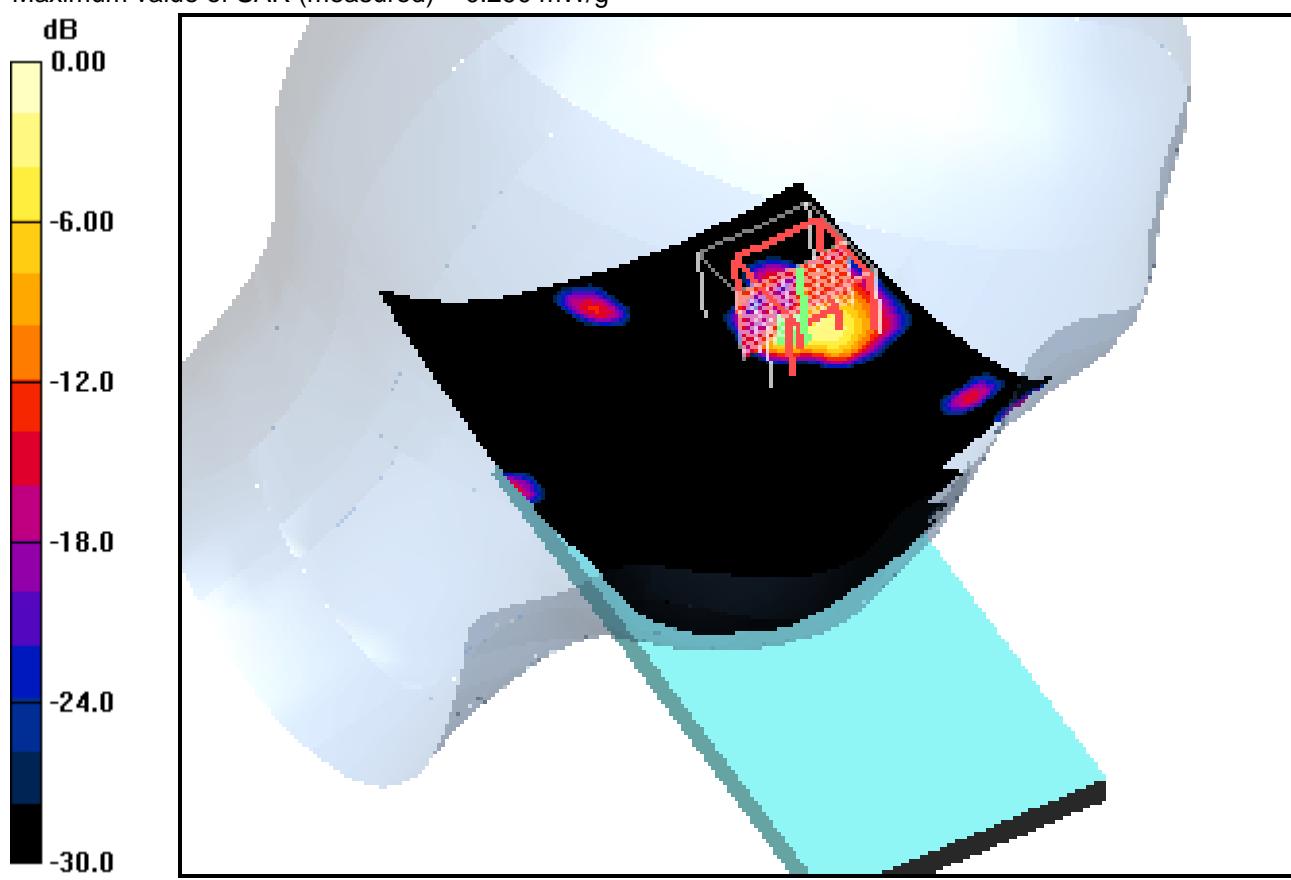
**Tilt position - Channel 52/Zoom Scan (8x8x12)/Cube 0:** Measurement grid: dx=4mm,  
dy=4mm, dz=2mm

Reference Value = 7.75 V/m; Power Drift = 0.100 dB

Peak SAR (extrapolated) = 0.515 W/kg

**SAR(1 g) = 0.134 mW/g; SAR(10 g) = 0.038 mW/g**

Maximum value of SAR (measured) = 0.290 mW/g



0 dB = 0.290mW/g

**Additional information:**

ambient temperature: 22.3°C; liquid temperature: 20.2°C

Date/Time: 02.01.2013 13:36:39 Date/Time: 02.01.2013 13:56:10

**IEEE1528\_EN62209-LeftHandSide-WLAN5GHz****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 5GHz; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used:  $f = 5600$  MHz;  $\sigma = 4.91$  mho/m;  $\epsilon_r = 35.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(3.72, 3.72, 3.72); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Channel 120/Area Scan (111x161x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.440 mW/g

**Tilt position - Channel 120/Zoom Scan (8x8x12)/Cube 0:** Measurement grid:

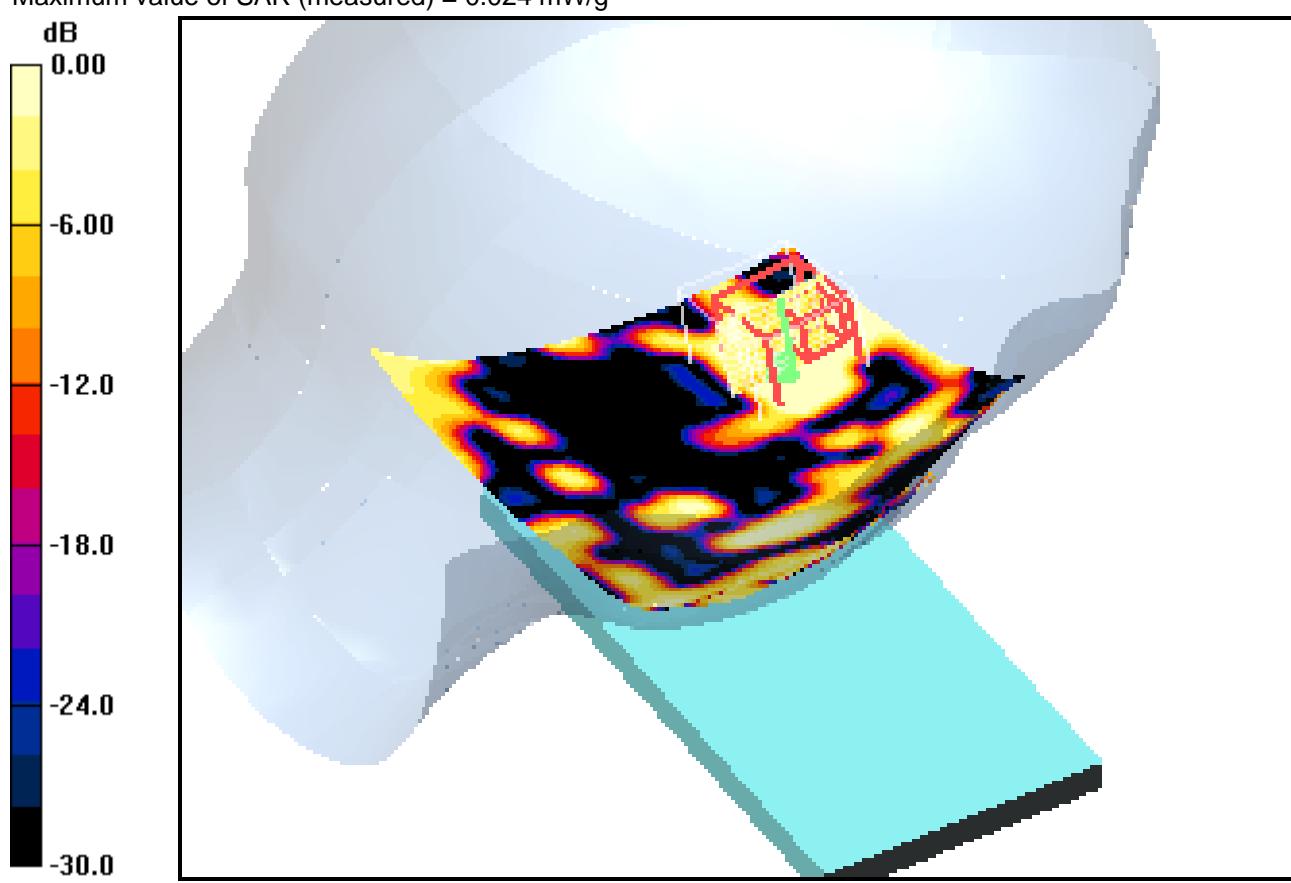
dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.08 V/m; Power Drift = 0.130 dB

Peak SAR (extrapolated) = 0.038 W/kg

**SAR(1 g) = 0.111 mW/g; SAR(10 g) = 0.0571 mW/g**

Maximum value of SAR (measured) = 0.024 mW/g



0 dB = 0.024mW/g

**Additional information:**

ambient temperature: 22.3°C; liquid temperature: 20.2°C

Date/Time: 02.01.2013 17:11:17 Date/Time: 02.01.2013 17:30:00

**IEEE1528\_EN62209-LeftHandSide-WLAN5GHz****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 5GHz; Frequency: 5825 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used (interpolated):  $f = 5825 \text{ MHz}$ ;  $\sigma = 5.14 \text{ mho/m}$ ;  $\epsilon_r = 35.5$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(3.65, 3.65, 3.65); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Channel 165/Area Scan (111x161x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.097 mW/g

**Tilt position - Channel 165/Zoom Scan (8x8x12)/Cube 0:** Measurement grid:

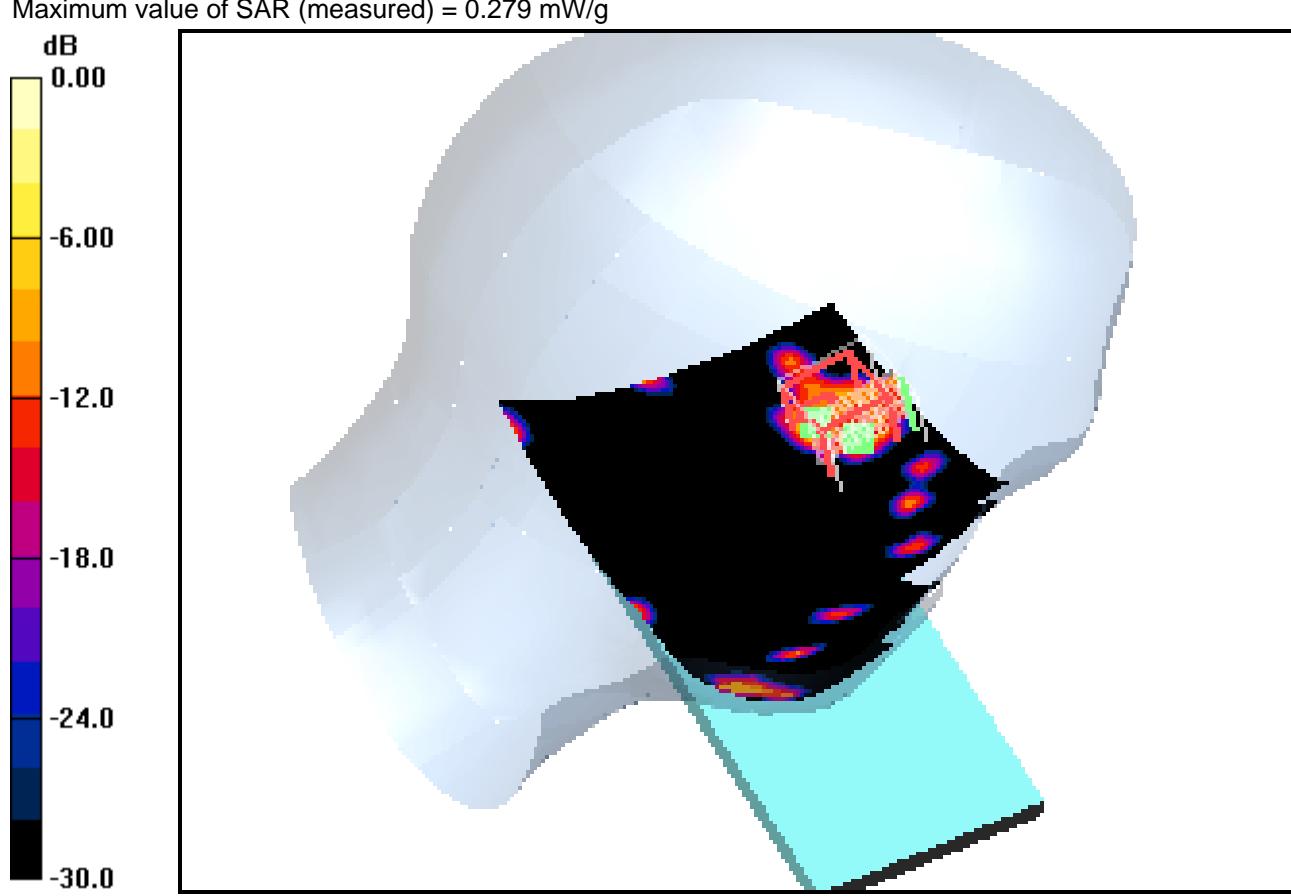
dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.50 V/m; Power Drift = -0.107 dB

Peak SAR (extrapolated) = 0.279 W/kg

**SAR(1 g) = 0.032 mW/g; SAR(10 g) = 0.014 mW/g**

Maximum value of SAR (measured) = 0.279 mW/g

**Additional information:**

ambient temperature: 22.3°C; liquid temperature: 20.2°C

Date/Time: 02.01.2013 10:50:33 Date/Time: 02.01.2013 11:09:21

**IEEE1528\_EN62209-RightHandSide-WLAN5GHz****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 5GHz; Frequency: 5180 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used (interpolated):  $f = 5180$  MHz;  $\sigma = 4.5$  mho/m;  $\epsilon_r = 36.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(4.24, 4.24, 4.24); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touchilt position - Channel 36/Area Scan (111x161x1):** Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.226 mW/g

**Touchilt position - Channel 36/Zoom Scan (8x8x12)/Cube 0:** Measurement grid:

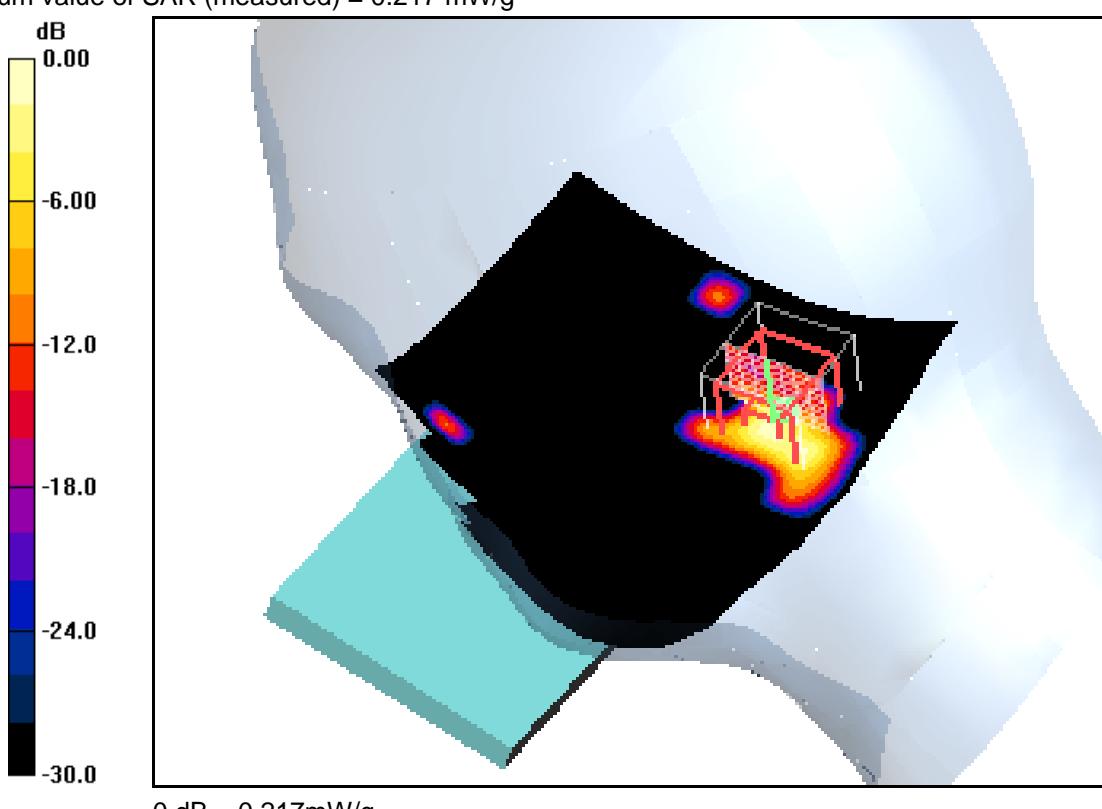
dx=4mm, dy=4mm, dz=2mm

Reference Value = 6.80 V/m; Power Drift = -0.152 dB

Peak SAR (extrapolated) = 0.398 W/kg

**SAR(1 g) = 0.112 mW/g; SAR(10 g) = 0.039 mW/g**

Maximum value of SAR (measured) = 0.217 mW/g

**Additional information:**

ambient temperature: 22.3°C; liquid temperature: 20.2°C

Date/Time: 02.01.2013 11:11:23 Date/Time: 02.01.2013 11:29:30

**IEEE1528\_EN62209-RightHandSide-WLAN5GHz****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 5GHz; Frequency: 5260 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used (interpolated):  $f = 5260$  MHz;  $\sigma = 4.58$  mho/m;  $\epsilon_r = 36.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(4.05, 4.05, 4.05); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Channel 52/Area Scan (111x161x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.171 mW/g

**Touch position - Channel 52/Zoom Scan (8x8x12)/Cube 0:** Measurement grid:

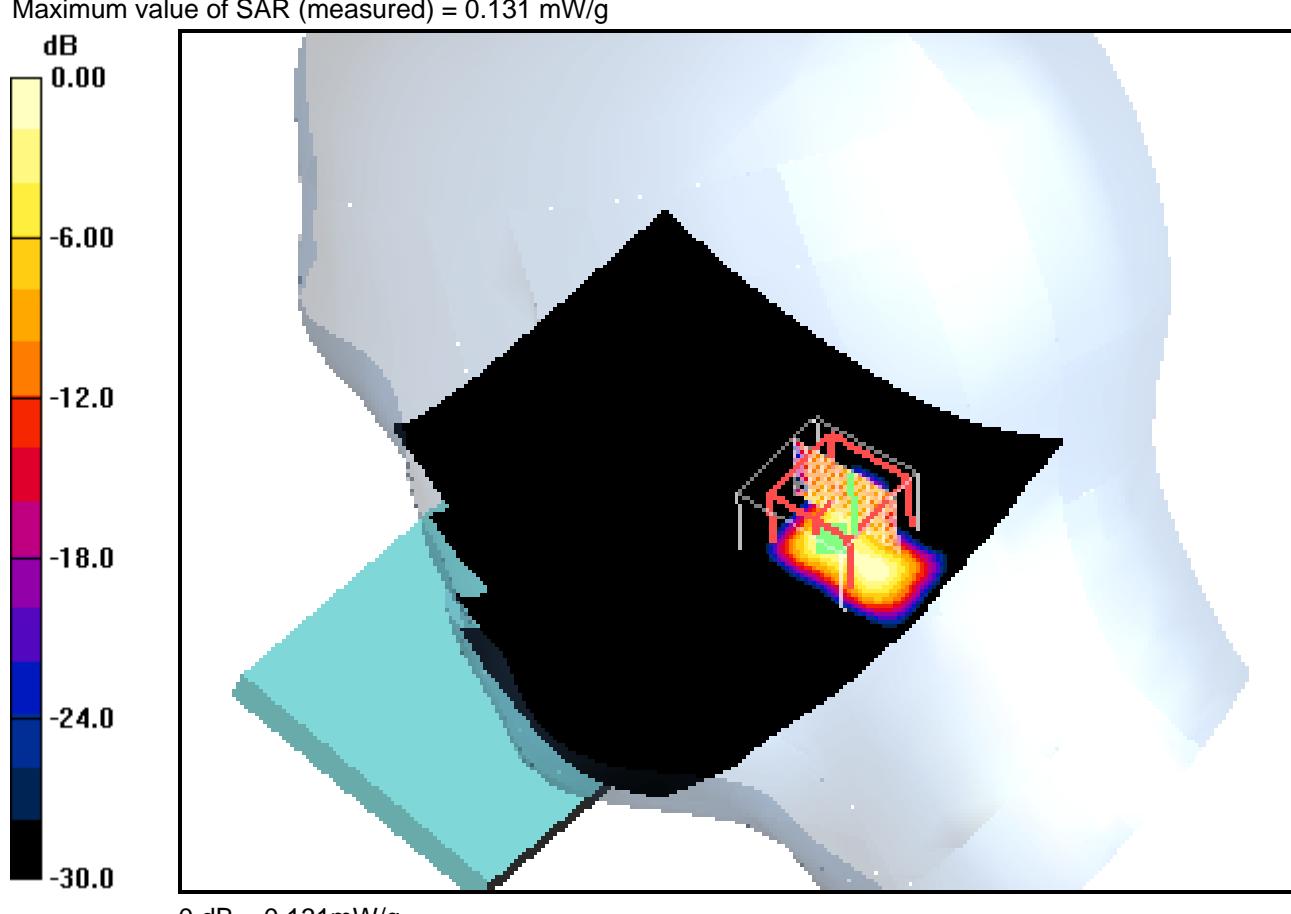
dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.64 V/m; Power Drift = 0.059 dB

Peak SAR (extrapolated) = 0.247 W/kg

**SAR(1 g) = 0.070 mW/g; SAR(10 g) = 0.027 mW/g**

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

**Additional information:**

ambient temperature: 22.3°C; liquid temperature: 20.2°C

Date/Time: 02.01.2013 15:11:00 Date/Time: 02.01.2013 15:28:12

**IEEE1528\_EN62209-RightHandSide-WLAN5GHz****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 5GHz; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used:  $f = 5600$  MHz;  $\sigma = 4.91$  mho/m;  $\epsilon_r = 35.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(3.72, 3.72, 3.72); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Channel 120/Area Scan (111x161x1):** Measurement grid: dx=10mm, dy=10mm

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

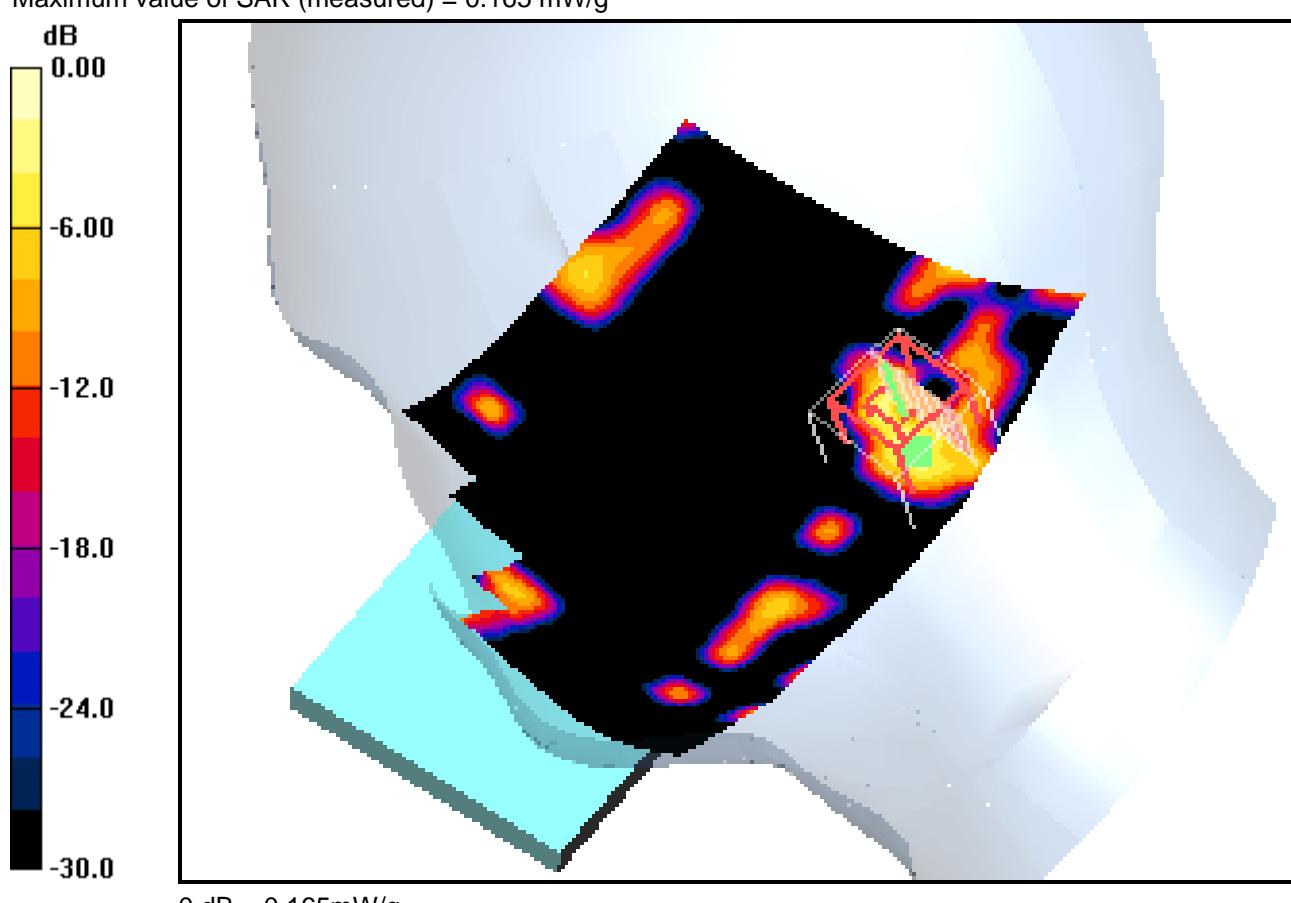
**Touch position - Channel 120/Zoom Scan (8x8x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.48 V/m; Power Drift = 0.152 dB

Peak SAR (extrapolated) = 0.291 W/kg

**SAR(1 g) = 0.084 mW/g; SAR(10 g) = 0.031 mW/g**

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

**Additional information:**

ambient temperature: 22.3°C; liquid temperature: 20.2°C

Date/Time: 02.01.2013 15:46:26 Date/Time: 02.01.2013 16:04:32

**IEEE1528\_EN62209-RightHandSide-WLAN5GHz****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 5GHz; Frequency: 5825 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used (interpolated):  $f = 5825$  MHz;  $\sigma = 5.14$  mho/m;  $\epsilon_r = 35.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(3.65, 3.65, 3.65); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Channel 165/Area Scan (111x161x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.155 mW/g

**Touch position - Channel 165/Zoom Scan (8x8x12)/Cube 0:** Measurement grid:

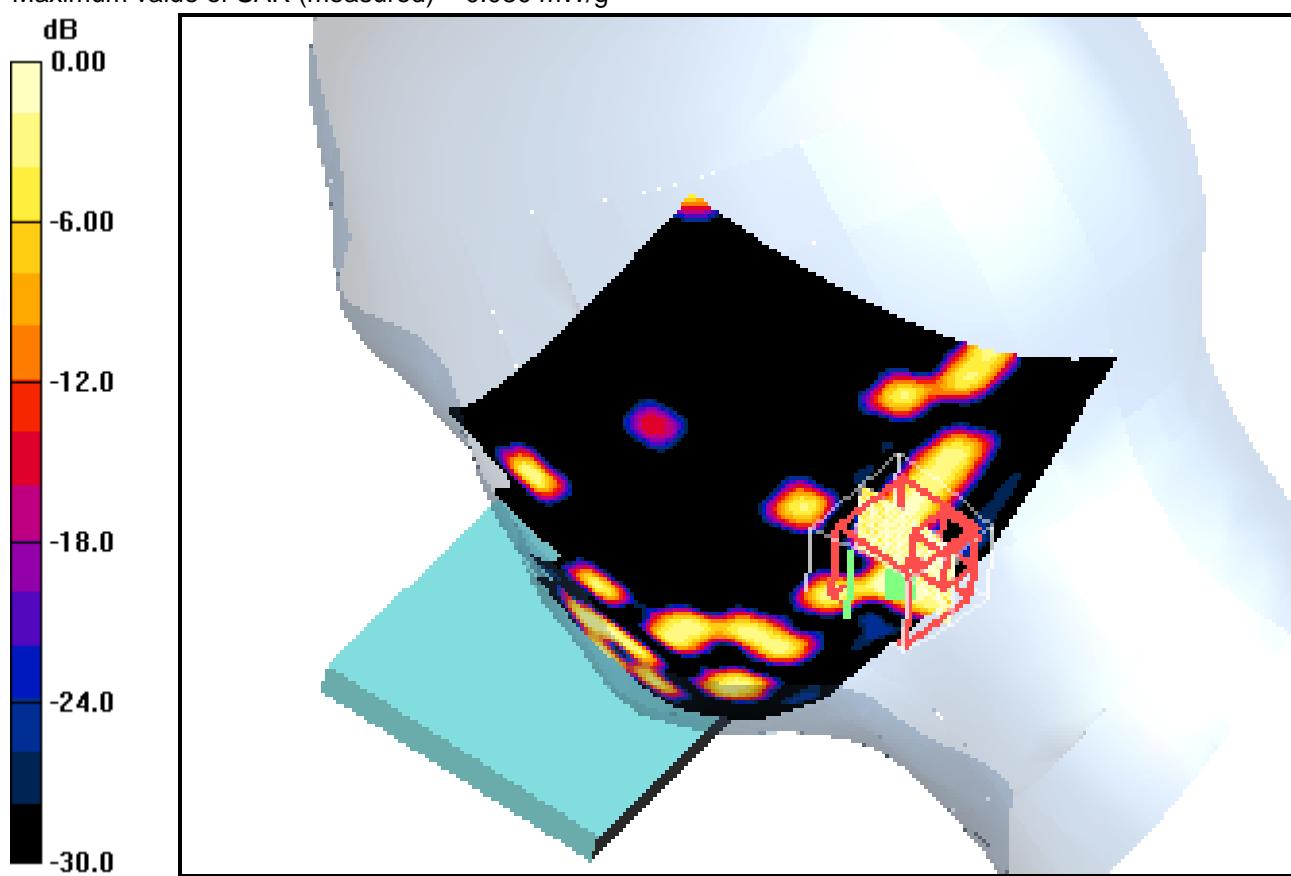
dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.60 V/m; Power Drift = 0.105 dB

Peak SAR (extrapolated) = 0.095 W/kg

**SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.013 mW/g**

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

**Additional information:**

ambient temperature: 22.3°C; liquid temperature: 20.2°C

Date/Time: 02.01.2013 10:02:57 Date/Time: 02.01.2013 10:37:42

**IEEE1528\_EN62209-RightHandSide-WLAN5GHz****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 5GHz; Frequency: 5180 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used (interpolated):  $f = 5180$  MHz;  $\sigma = 4.5$  mho/m;  $\epsilon_r = 36.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(4.24, 4.24, 4.24); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Channel 36/Area Scan (111x161x1):** Measurement grid: dx=10mm,

dy=10mm

Maximum value of SAR (interpolated) = 0.100 mW/g

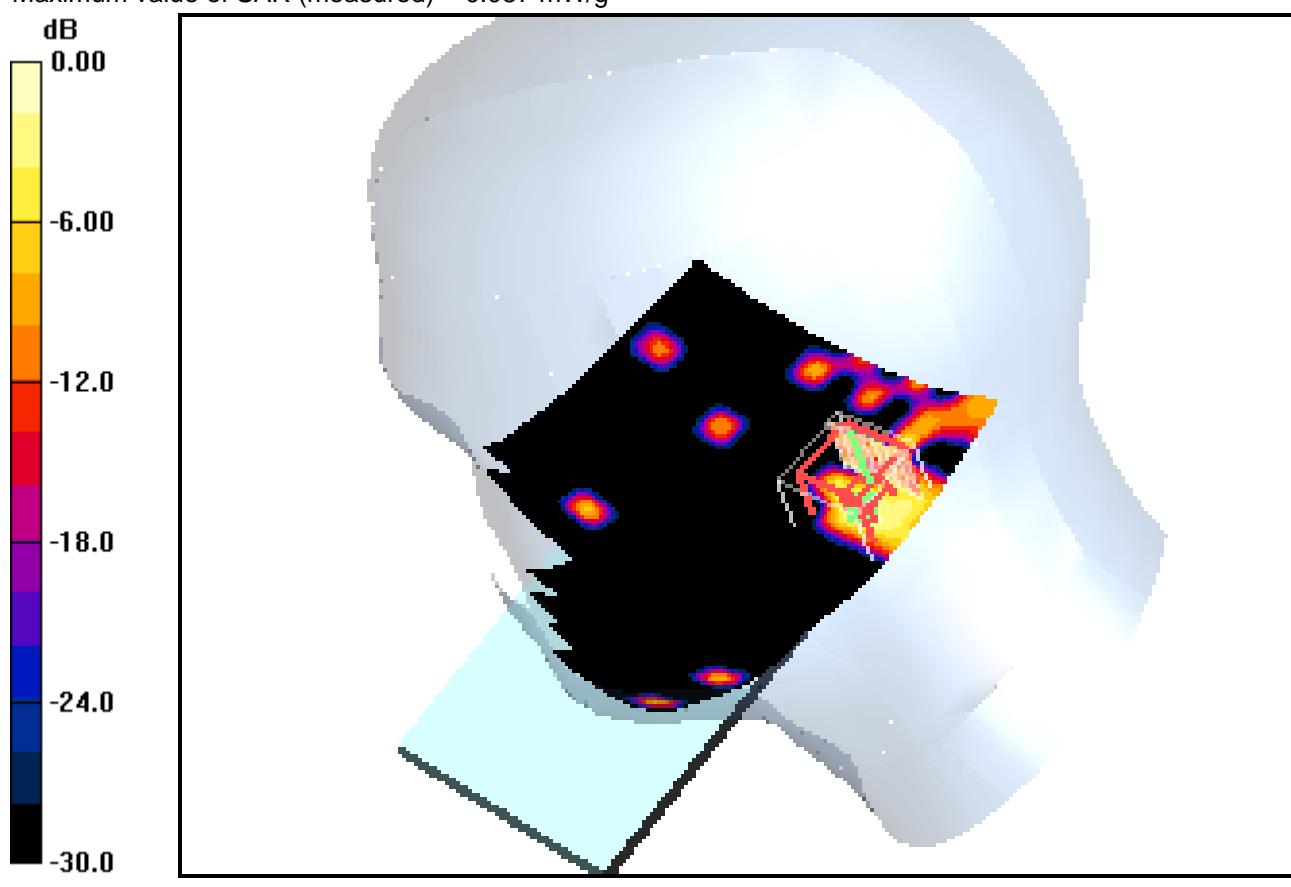
**Tilt position - Channel 36/Zoom Scan (8x8x12)/Cube 0:** Measurement grid: dx=4mm,  
dy=4mm, dz=2mm

Reference Value = 3.94 V/m; Power Drift = -0.101 dB

Peak SAR (extrapolated) = 0.197 W/kg

**SAR(1 g) = 0.037 mW/g; SAR(10 g) = 0.014 mW/g**

Maximum value of SAR (measured) = 0.087 mW/g

**Additional information:**

ambient temperature: 22.3°C; liquid temperature: 20.2°C

Date/Time: 02.01.2013 11:34:07 Date/Time: 02.01.2013 11:53:15

**IEEE1528\_EN62209-RightHandSide-WLAN5GHz****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 5GHz; Frequency: 5260 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used (interpolated):  $f = 5260$  MHz;  $\sigma = 4.58$  mho/m;  $\epsilon_r = 36.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(4.05, 4.05, 4.05); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Channel 52/Area Scan (111x161x1):** Measurement grid: dx=10mm,

dy=10mm

Maximum value of SAR (interpolated) = 0.087 mW/g

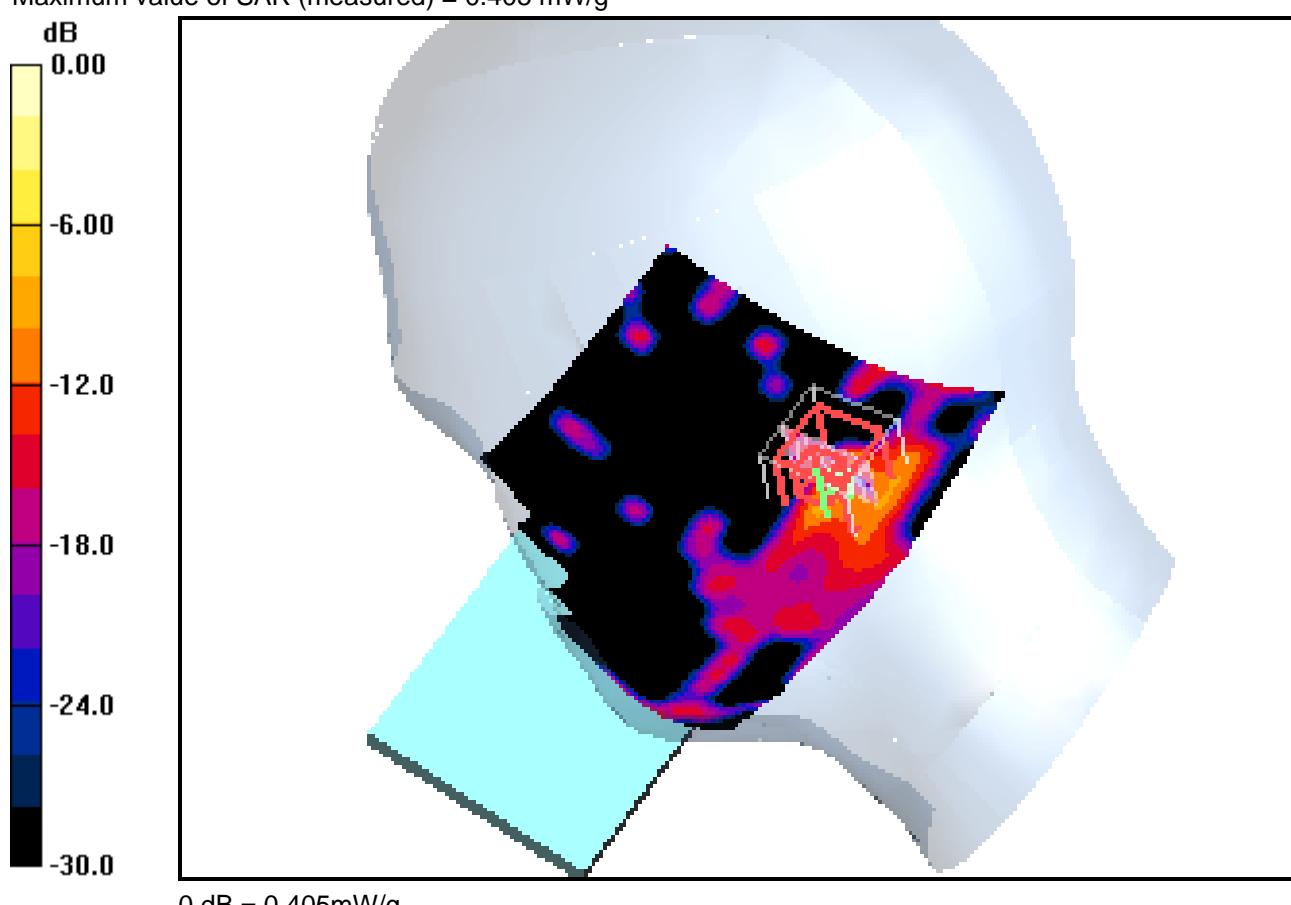
**Tilt position - Channel 52/Zoom Scan (8x8x12)/Cube 0:** Measurement grid: dx=4mm,  
dy=4mm, dz=2mm

Reference Value = 3.81 V/m; Power Drift = -0.133 dB

Peak SAR (extrapolated) = 0.405 W/kg

**SAR(1 g) = 0.00152 mW/g; SAR(10 g) = 0.000153 mW/g**

Maximum value of SAR (measured) = 0.405 mW/g

**Additional information:**

ambient temperature: 22.3°C; liquid temperature: 20.2°C

Date/Time: 02.01.2013 14:19:43 Date/Time: 02.01.2013 14:37:49 Date/Time: 02.01.2013 15:02:15

## **IEEE1528\_EN62209-RightHandSide-WLAN5GHz**

**DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 5GHz; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used:  $f = 5600$  MHz;  $\sigma = 4.91$  mho/m;  $\epsilon_r = 35.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(3.72, 3.72, 3.72); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Channel 120/Area Scan (111x161x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.036 mW/g

**Tilt position - Channel 120/Zoom Scan (8x8x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 3.41 V/m; Power Drift = 0.138 dB

Peak SAR (extrapolated) = 0.162 W/kg

**SAR(1 g) = 0.013 mW/g; SAR(10 g) = 0.00785 mW/g**

Maximum value of SAR (measured) = 0.045 mW/g

**Tilt position - Channel 120/Zoom Scan 2 (8x9x12)/Cube 0:** Measurement grid:

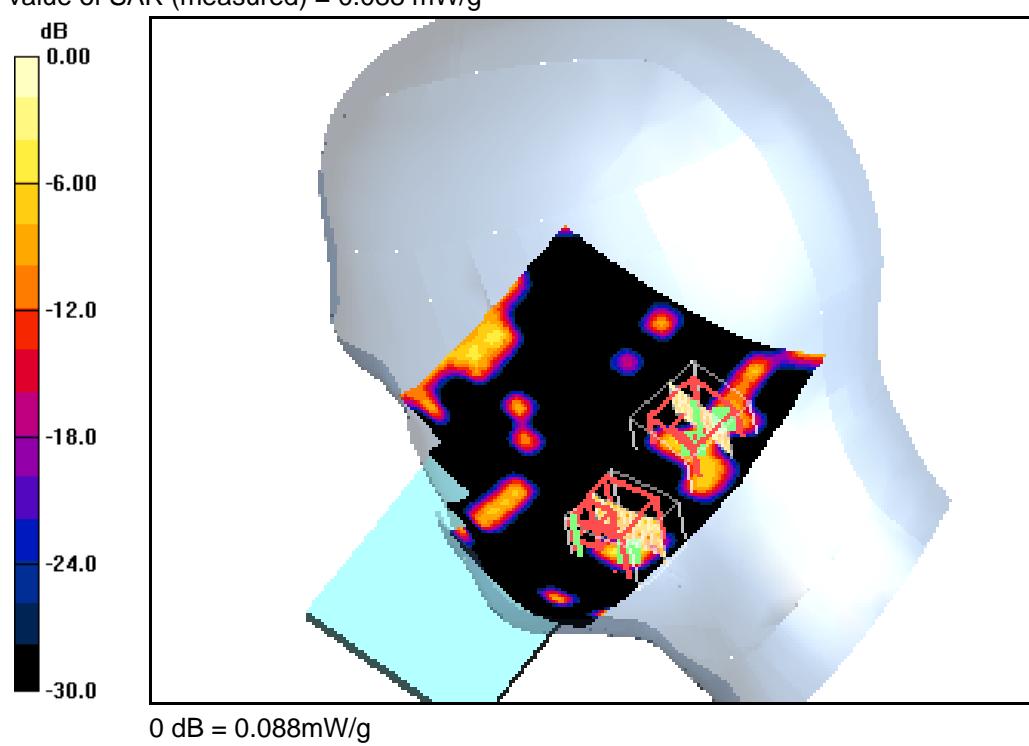
dx=4mm, dy=4mm, dz=2mm

Reference Value = 3.41 V/m; Power Drift = 0.138 dB

Peak SAR (extrapolated) = 0.370 W/kg

**SAR(1 g) = 0.047 mW/g; SAR(10 g) = 0.023 mW/g**

Maximum value of SAR (measured) = 0.088 mW/g



### **Additional information:**

ambient temperature: 22.3°C; liquid temperature: 20.2°C

Date/Time: 02.01.2013 16:27:49 Date/Time: 02.01.2013 16:48:19

**IEEE1528\_EN62209-RightHandSide-WLAN5GHz****DUT: Sony; Type: PM-0280-BV; Serial: CB5A1MAQ0T**

Communication System: WLAN 5GHz; Frequency: 5825 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used (interpolated):  $f = 5825$  MHz;  $\sigma = 5.14$  mho/m;  $\epsilon_r = 35.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(3.65, 3.65, 3.65); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Tilt position - Channel 165/Area Scan (111x161x1):** Measurement grid: dx=10mm,

dy=10mm

Maximum value of SAR (interpolated) = 0.027 mW/g

**Tilt position - Channel 165/Zoom Scan (8x8x12)/Cube 0:** Measurement grid:

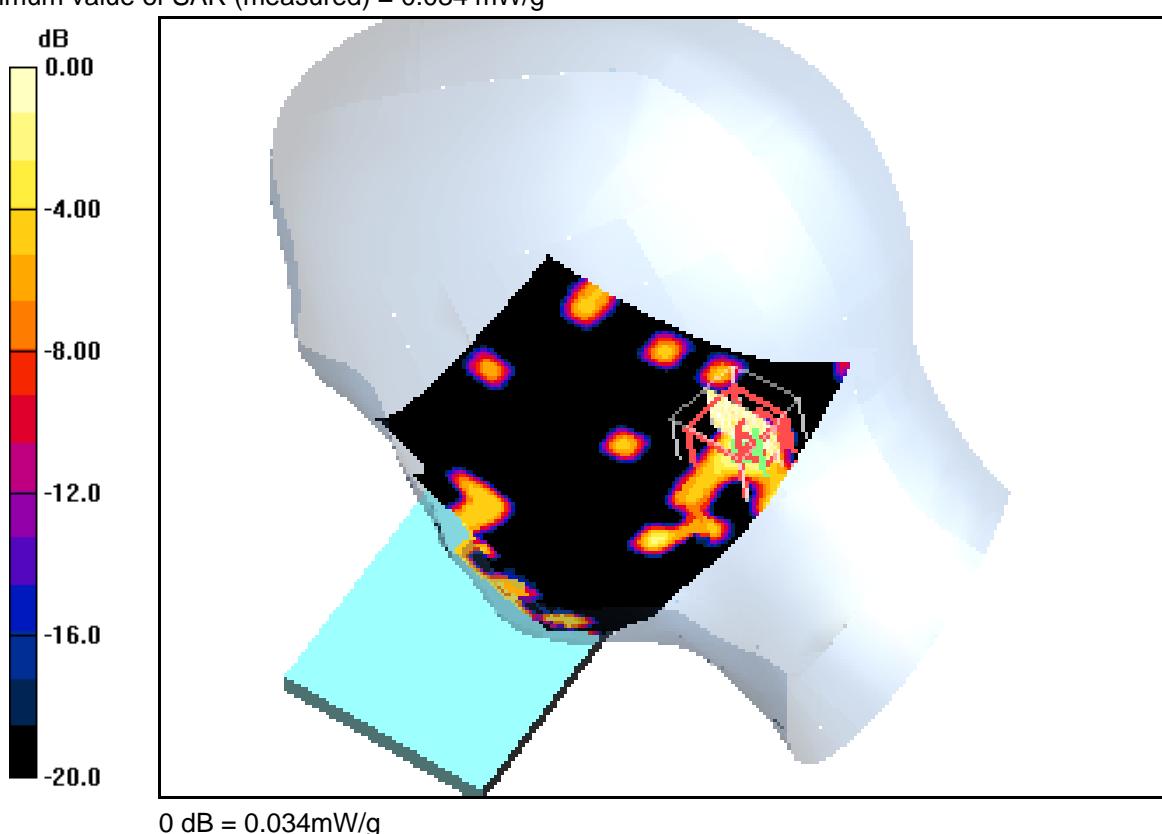
dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.77 V/m; Power Drift = -0.102 dB

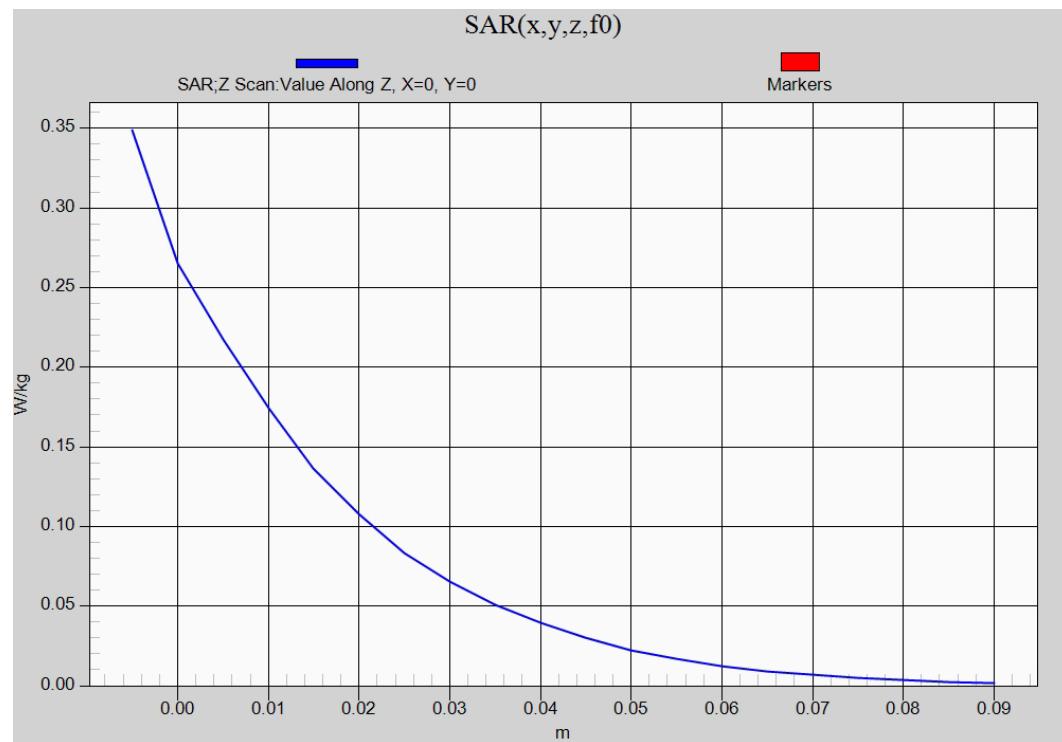
Peak SAR (extrapolated) = 0.053 W/kg

**SAR(1 g) = 0.018 mW/g; SAR(10 g) = 0.016 mW/g**

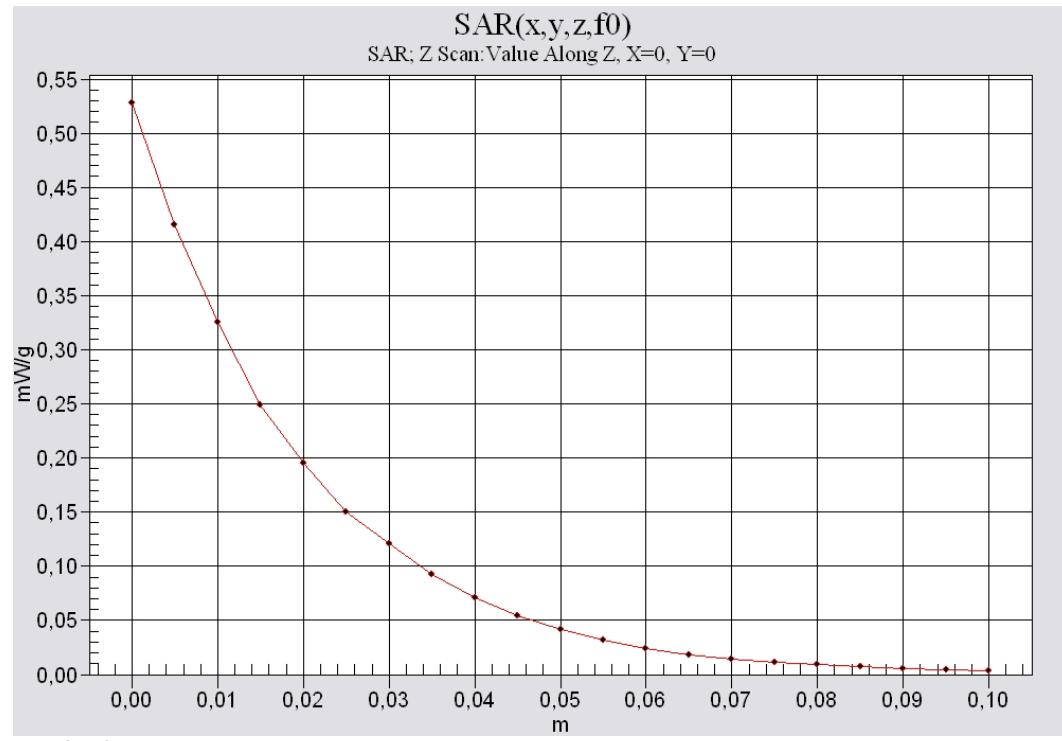
Maximum value of SAR (measured) = 0.034 mW/g

**Additional information:**

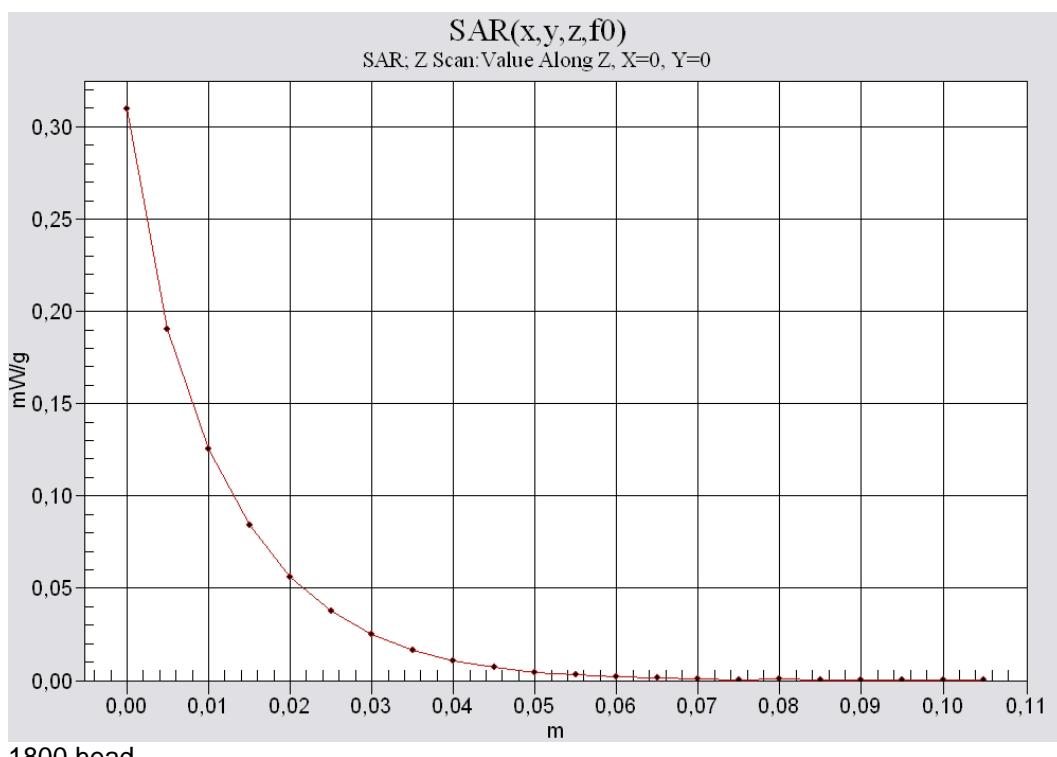
ambient temperature: 22.3°C; liquid temperature: 20.2°C

**Annex B.8: Z-axis scan**

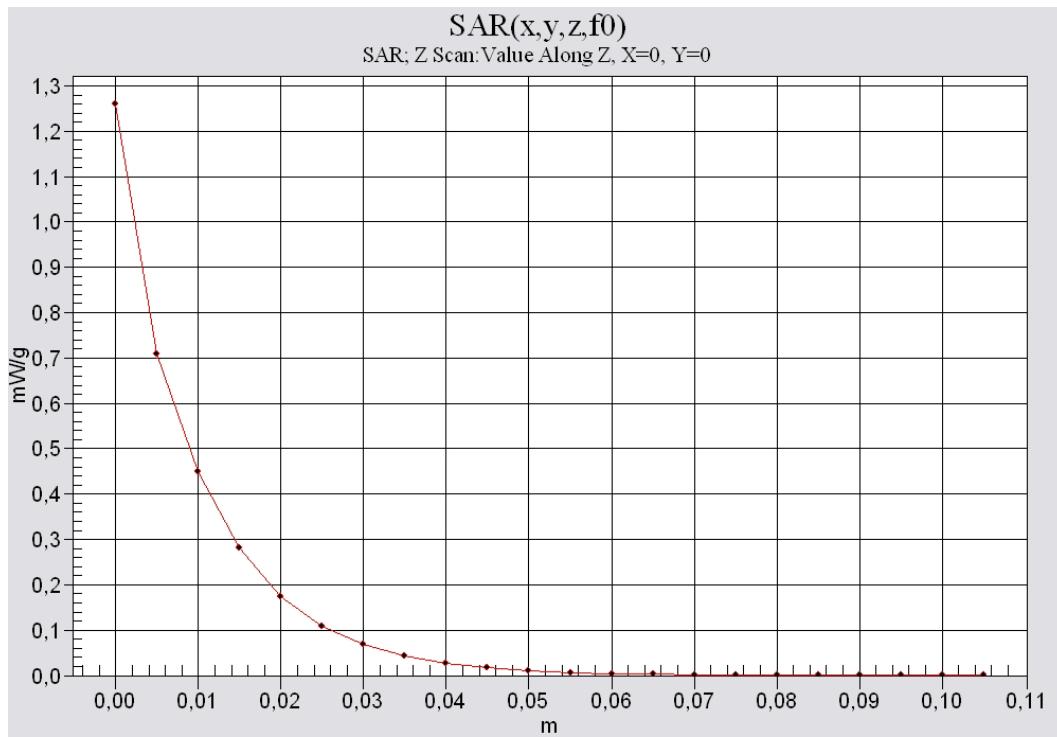
850 head



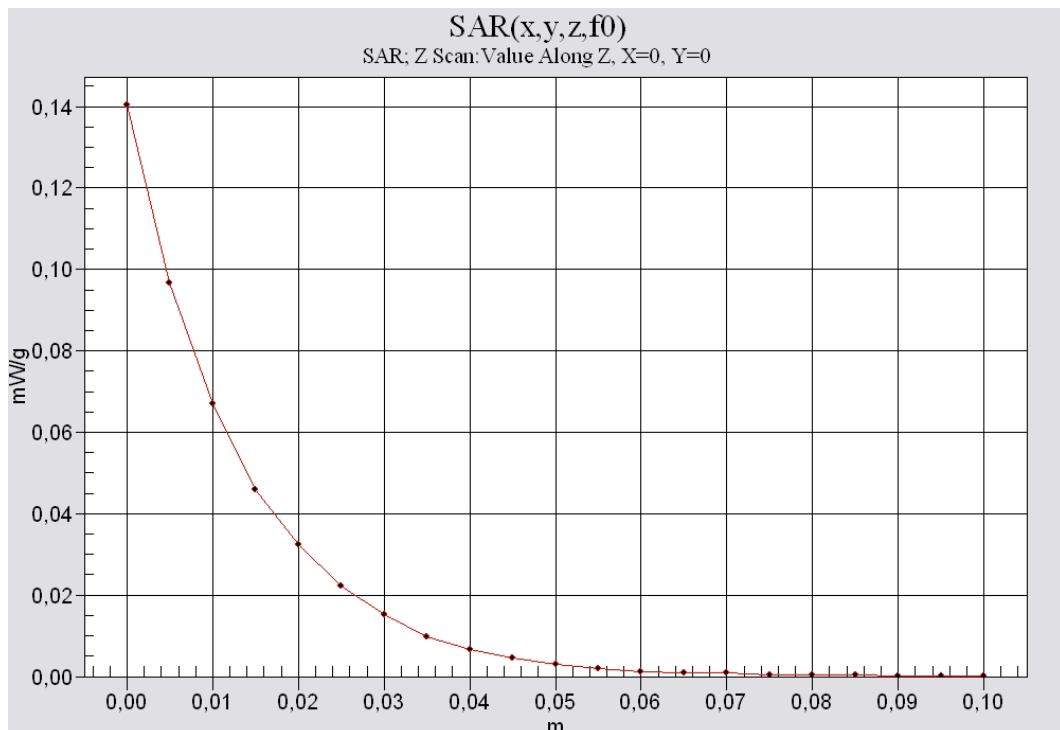
850 body



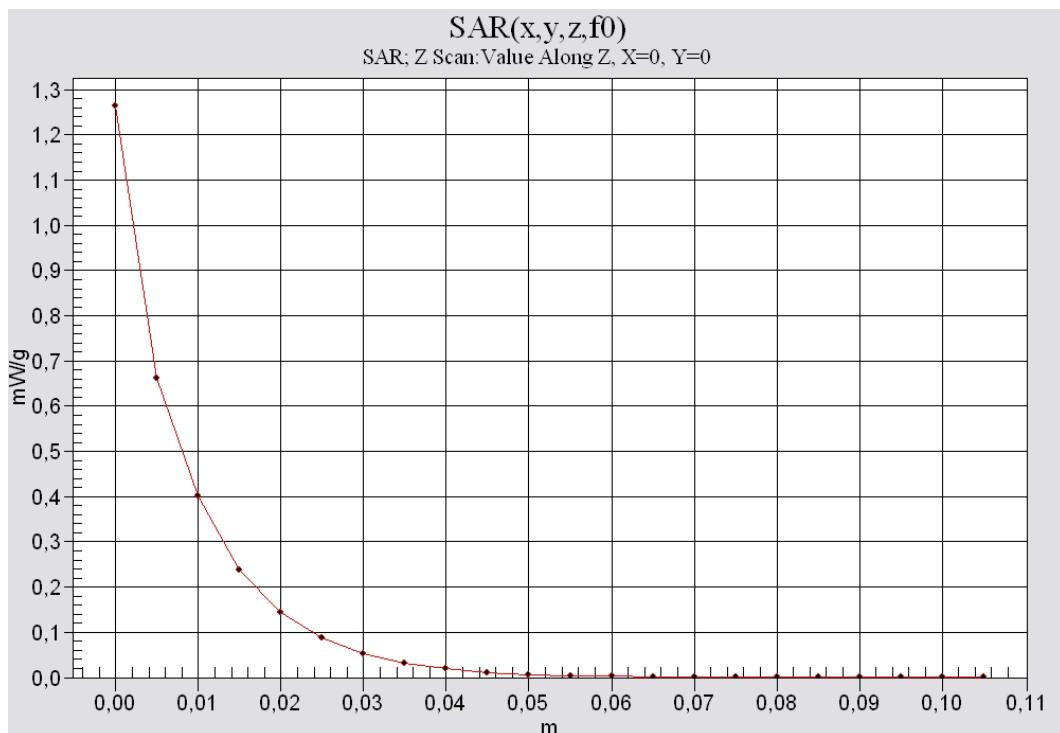
1800 head



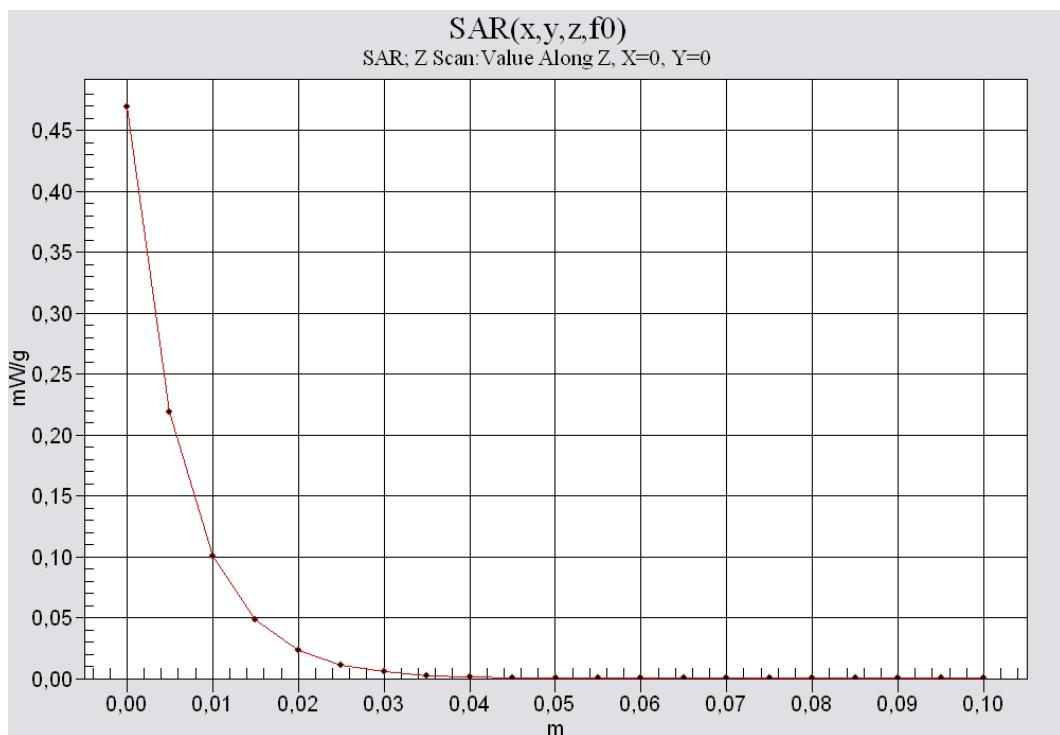
1800 body



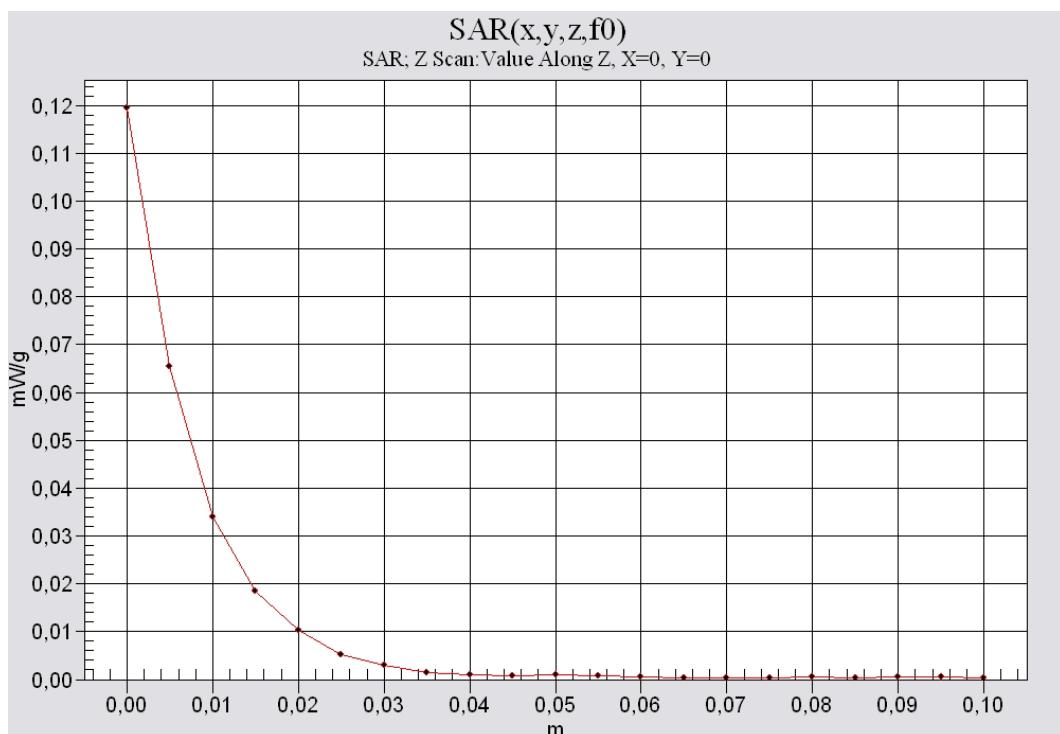
1900 head



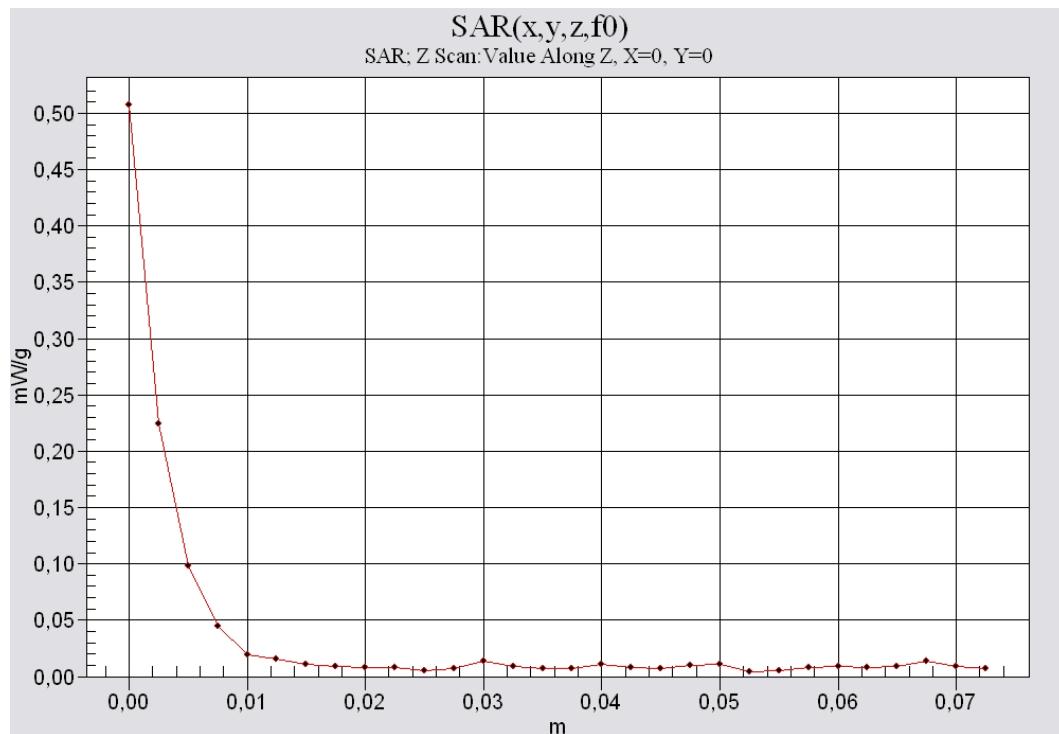
1900 body



2450 head



2450 body



5 GHz head

### Annex B.9: Liquid depth

Photo 1: Liquid depth 850 MHz head simulating liquid



Photo 2: Liquid depth 850 MHz body simulating liquid

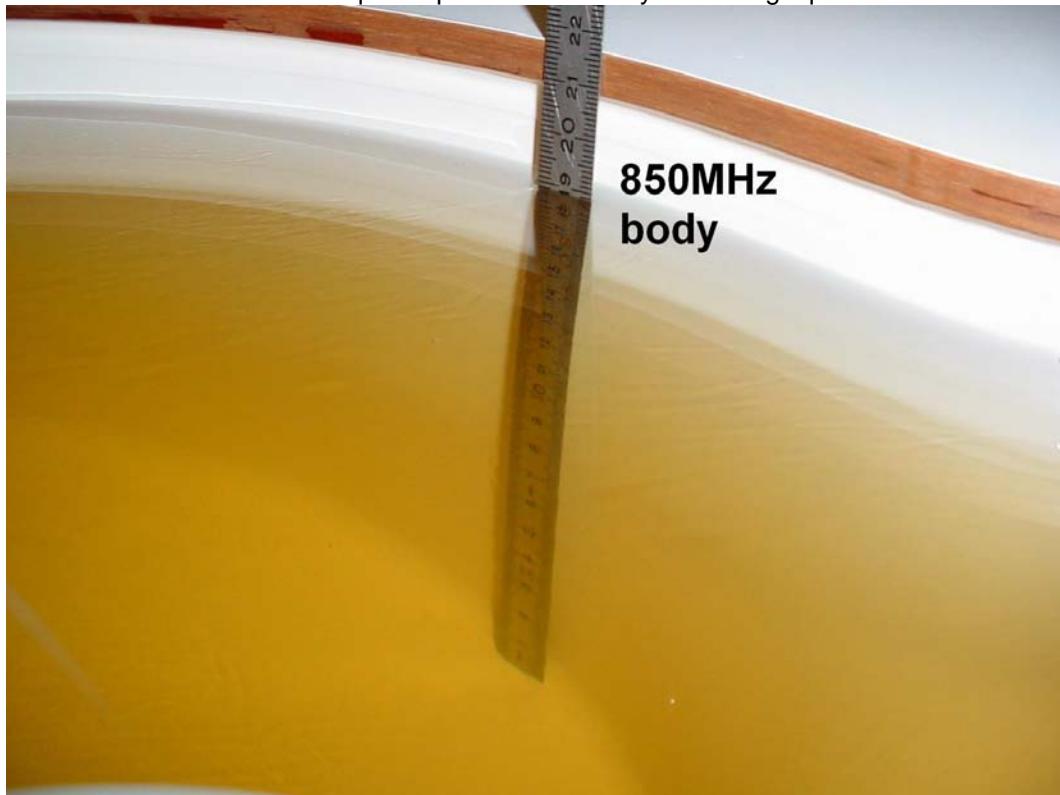


Photo 3: Liquid depth 1800MHz head simulating liquid

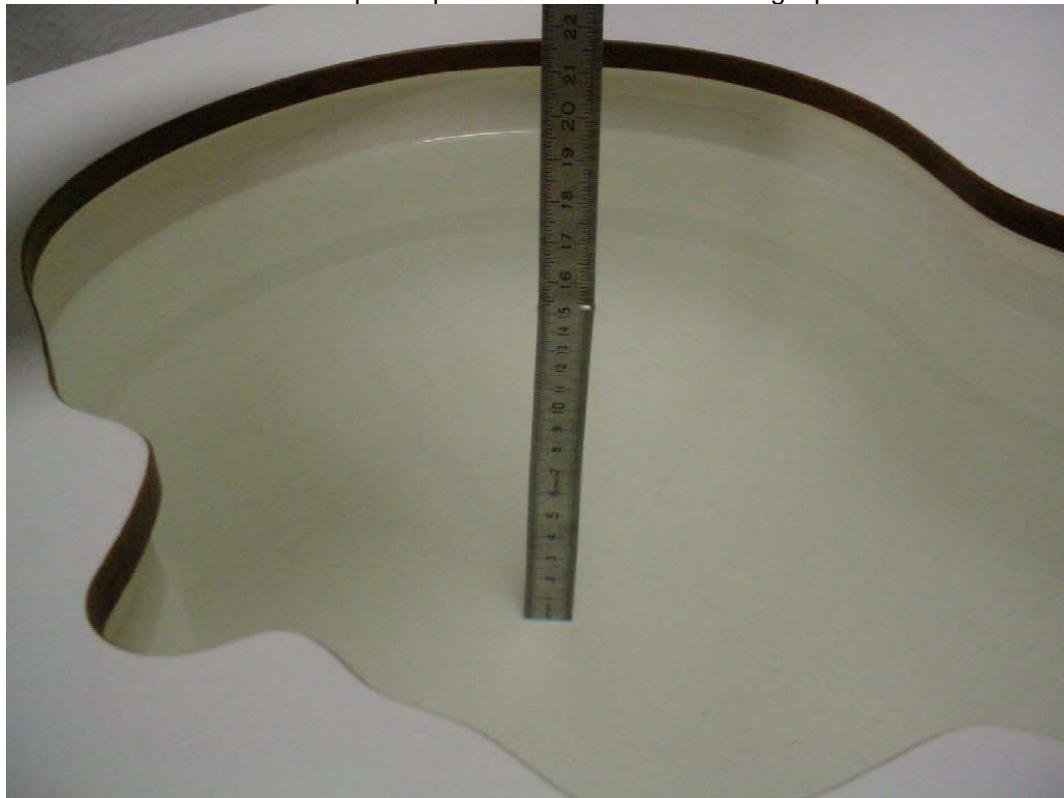


Photo 4: Liquid depth 1800 MHz body simulating liquid



Photo 5: Liquid depth 1900MHz head simulating liquid

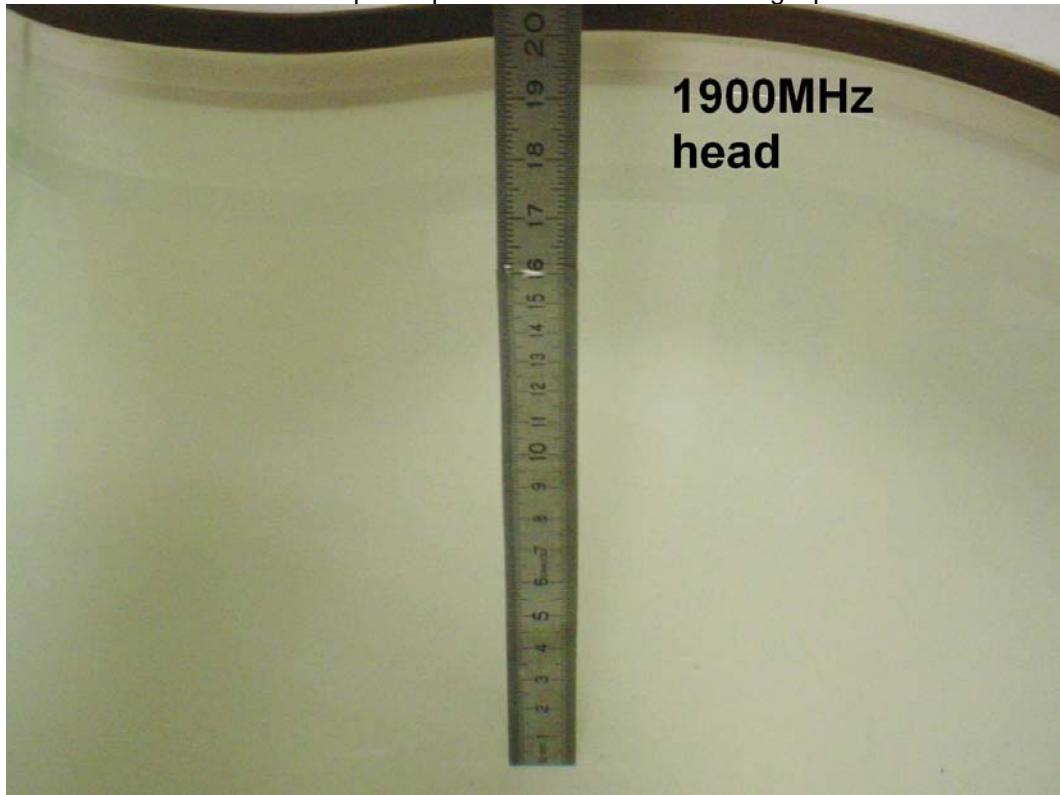


Photo 6: Liquid depth 1900 MHz body simulating liquid

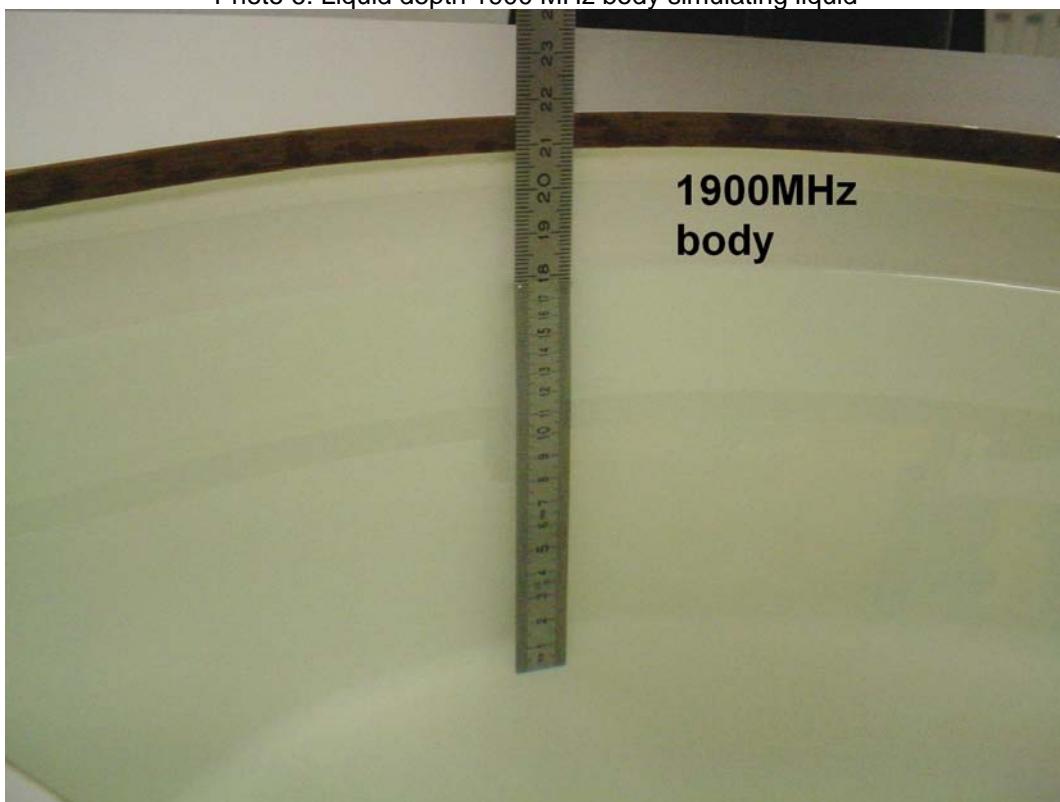


Photo 7: Liquid depth 2450MHz head simulating liquid

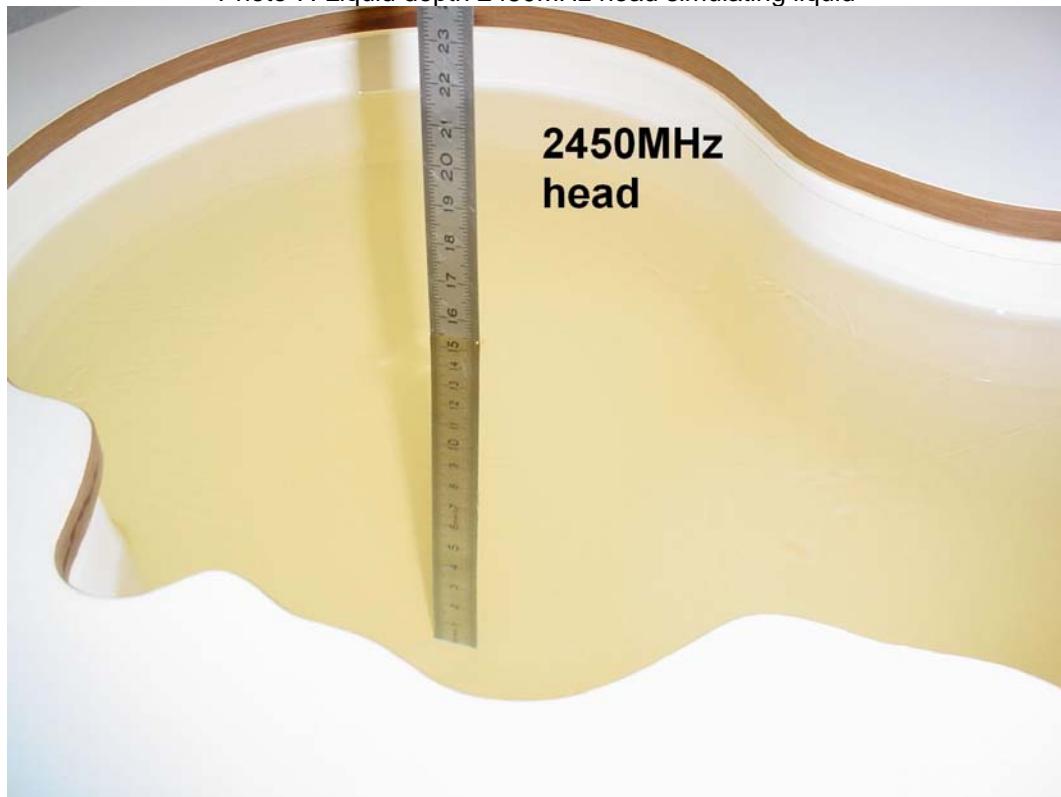


Photo 8: Liquid depth 2450 MHz body simulating liquid

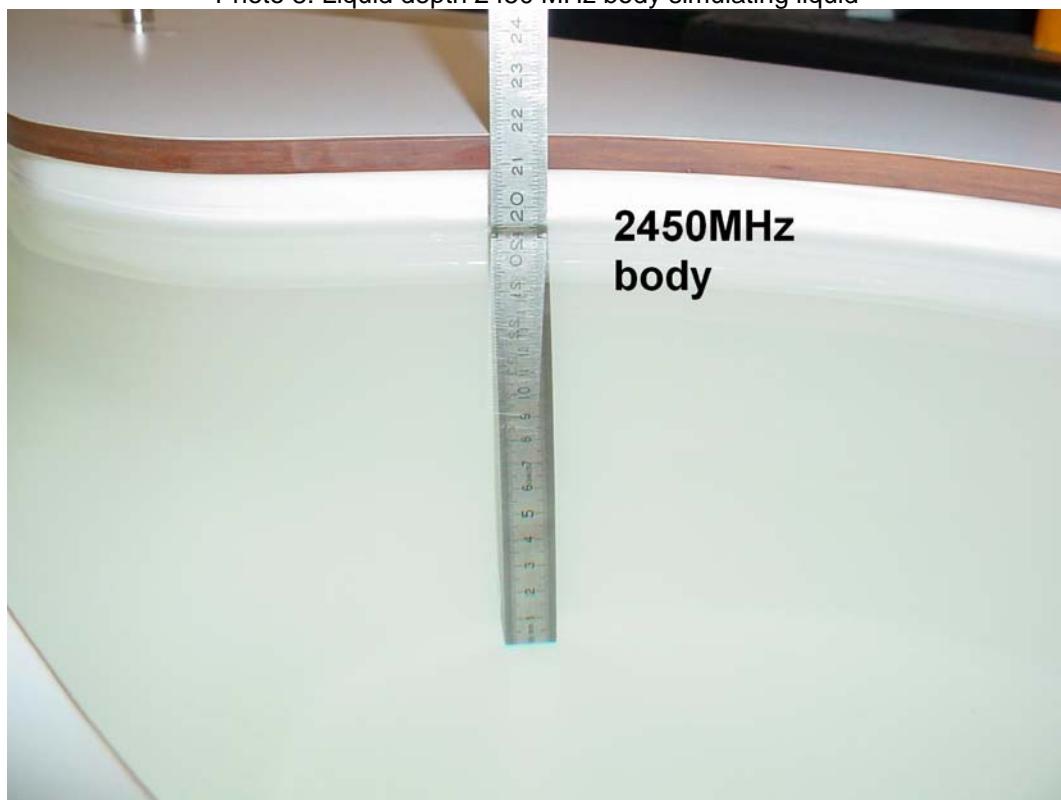


Photo 9: Liquid depth 5 GHz head simulating liquid



### **Annex C: Photo documentation**

Photo documentation is described in the additional document:

### **Appendix to test report no. 1-4254/12-73-02-B Photo documentation**

**Annex D: RF Technical Brief Cover Sheet acc. to RSS-102 Annex A**

1. COMPANY NUMBER: 4170B

2. MODEL NUMBER: PM-0280-BV

3. MANUFACTURER: **Sony Mobile Communications AB**

4. TYPE OF EVALUATION:

(a) SAR Evaluation: Device used in the Vicinity of the Human Head

- Multiple transmitters: Yes  No
- Evaluated against exposure limits: General Public Use  Controlled Use
- Duty cycle used in evaluation: 100 %
- Standard used for evaluation: RSS-102 Issue 4 (2010-03)
- SAR value: **1.055 W/kg.**      Measured  Computed  Calculated

(b) SAR Evaluation: Body-worn Device (10 mm distance)

- Multiple transmitters: Yes  No
- Evaluated against exposure limits: General Public Use  Controlled Use
- Duty cycle used in evaluation: 100 %
- Standard used for evaluation: RSS-102 Issue 4 (2010-03)
- SAR value: **1.096 W/kg.**      Measured  Computed  Calculated

**Annex D.1: Declaration of RF Exposure Compliance**

ATTESTATION: I attest that the information provided in Annex D: is correct; that a Technical Brief was prepared and the information it contains is correct; that the device evaluation was performed or supervised by me; that applicable measurement methods and evaluation methodologies have been followed and that the device meets the SAR and/or RF exposure limits of RSS-102.

Signature:



Date: 2013-01-07

NAME : **Thomas Vogler**

TITLE : Dipl.-Ing. (FH)

COMPANY : CETECOM ICT Services GmbH

## Annex E: Calibration parameters

Calibration parameters are described in the additional document:

### **Appendix to test report no. 1-4254/12-73-02-B Calibration data, Phantom certificate and detail information of the DASY System**

## Annex F: Document History

Version	Applied Changes	Date of Release
	Initial Release	2013-01-04
-A	Corrected channels and frequencies in the table 46 (page 52); inserted deviation from target of permittivity and conductivity in the tables 5 and 6 (pages 18 and 19)	2013-01-14
-B	Corrected in the chapter 7.1.11 Mobile hotspot SAR measurement positions	2013-01-15

## Annex G: Further Information

### Glossary

BW	- Bandwidth
DTS	- Distributed Transmission System
DUT	- Device under Test
EUT	- Equipment under Test
FCC	- Federal Communication Commission
FCC ID	- Company Identifier at FCC
HW	- Hardware
IC	- Industry Canada
Inv. No.	- Inventory number
LTE	- Long Term Evolution
N/A	- not applicable
PCE	- Personal Consumption Expenditure
OET	- Office of Engineering and Technology
RB	- resource block(s)
SAR	- Specific Absorption Rate
S/N	- Serial Number
SW	- Software
UNII	- Unlicensed National Information Infrastructure