

# TEST REPORT

Test Report No.: 1-4254/12-02-04-D



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**Accredited Test Laboratory:**  
 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 Electromagnetic Fields
RSS-102 Issue 4	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>AAL-8880001-CV</b>
S/N serial number:	CB5A1JE2QH / CB5A1JE2KL (WLAN)
FCC-ID:	PY7A8880001
IC:	4170B-A8880001
IMEI-Number:	00440214-355173-1 / 00440214-355137-6 (WLAN)
Hardware status:	AP2
Software status:	6.0.C.0.257/ ETS
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:**

*Thomas Vogler*

2012-05-25 Thomas Vogler  
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**Test performed:**

*Oleksandr Hnatovskiy*

2012-05-25 Oleksandr Hnatovskiy  
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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:	2012-01-06
Date of receipt of test item:	2012-01-05
Start of test:	2012-01-06
End of test:	2012-05-25
Person(s) present during the test:	

### 2.3 Statement of compliance

The SAR values found for the AAL-8880001-CV 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 C95.1:1992, 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 multislots 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	10	no	975	37	124	--
<input type="checkbox"/>	GSM	DCS	1710.2	1784.8	1805.2	1879.8	GMSK 8-PSK	1 E2	0	B	10	no	512	698	885	--
<input checked="" type="checkbox"/>	GSM	cellular	824.2	848.8	869.2	893.8	GMSK 8-PSK	4 E2	5	B	10	no	128	190	251	33.7
<input checked="" type="checkbox"/>	GSM	PCS	1850.2	1909.8	1930.2	1989.8	GMSK 8-PSK	1 E2	0	B	10	no	512	661	810	30.5
<input type="checkbox"/>	UMTS	FDD I	1922.4	1977.6	2112.4	2167.6	QPSK	3	max	--	--	--	9612	9750	9888	--
<input checked="" type="checkbox"/>	UMTS	FDD II	1852.4	1907.6	1982.4	1987.6	QPSK	3	max	--	--	--	9262	9400	9538	23.8
<input checked="" type="checkbox"/>	UMTS	FDD IV	1712.4	1752.6	1807.4	1877.6	QPSK	3	max	--	--	--	1312	1412	1513	24.7
<input checked="" type="checkbox"/>	UMTS	FDD V	826.4	846.6	871.4	891.6	QPSK	3	max	--	--	--	4132	4182	4233	25.2
<input checked="" type="checkbox"/>	LTE	FDD 4	1710	1755	2110	2155	OFDM QPSK 16QAM	3	max	--	--	--	19957 20050	20175	20393 20300	23.94
<input checked="" type="checkbox"/>	LTE	FDD 17	704	716	734	746	OFDM QPSK 16QAM	3	max	--	--	--	23780	23790	23800	23.88
<input type="checkbox"/>	WLAN	ISM	2412	2472	2412	2472	CCK OFDM	--	max	--	--	--	1	7	13	---
<input checked="" type="checkbox"/>	WLAN US	ISM	2412	2462	2412	2462	CCK OFDM	--	max	--	--	--	1	6	11	15.7
<input type="checkbox"/>	BT	ISM	2402	2480	2402	2480	GFSK	3	max	--	--	--	0	39	78	6

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

### 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 body mounted 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 KDBs:

FCC OET SAR Measurement Procedures for 802.11 a/b/g Transmitters, May, 2007.

FCC OET SAR Evaluation Considerations for Handsets with Multiple Transmitters & Antennas, September, 2008.

FCC OET SAR Test Reduction Procedure for GSM/GPRS/EDGE, December, 2008.

FCC OET SAR Probe Calibration and System Verification Considerations for Measurements at 150 MHz – 3 GHz, January, 2007.

FCC OET RF Exposure Procedures for Mobile and Portable Devices, and Equipment Authorization Policies, November, 2009.

FCC OET SAR Measurements Procedures for 3G Devices, October, 2007.

Dipole Requirements for SAR System Validation and Verification, November, 2009.

FCC OET SAR Considerations for LTE Handsets and Data Modems, December, 2010

### 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 1: 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

Extrapolated SAR values of the highest measured SAR				
Frequency band	conducted output power (dBm)		SAR <sub>1g</sub> maximum results(W/kg)	
	Max. (from tune-up info)*	Measured	Measured	Extrapolated
GSM 850 head	34.0	33.7	0.636	0.681
GSM 850 body	31.5	31.3	0.956	1.001
GSM 1900 head	31.0	30.5	0.614	0.689
GSM 1900 body	28.5	28.0	0.862	0.967
WCDMA FDD II head	23.8	23.8	1.050	1.050
WCDMA FDD II body*	21.8	22.3	0.891	0.794
WCDMA FDD IV head	24.7	24.7	1.220	1.220
WCDMA FDD IV body*	22.7	22.9	1.090	1.045
WCDMA FDD V head	25.0	25.2	0.732	0.699
WCDMA FDD V body	25.0	25.2	0.772	0.737
LTE FDD 17 head	24.0	23.9	0.294	0.302
LTE FDD 17 body	24.0	23.9	0.491	0.505
LTE FDD 4 head	24.0	23.7	0.947	1.015
LTE FDD 4 body*	23.5	23.2	1.240	1.329

Table 2: Extrapolated SAR values of the highest measured SAR

\* - power back off was applied at WCDMA FDD II / FDD IV and LTE FDD 4 bands when hotspot mode was active.

#### 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

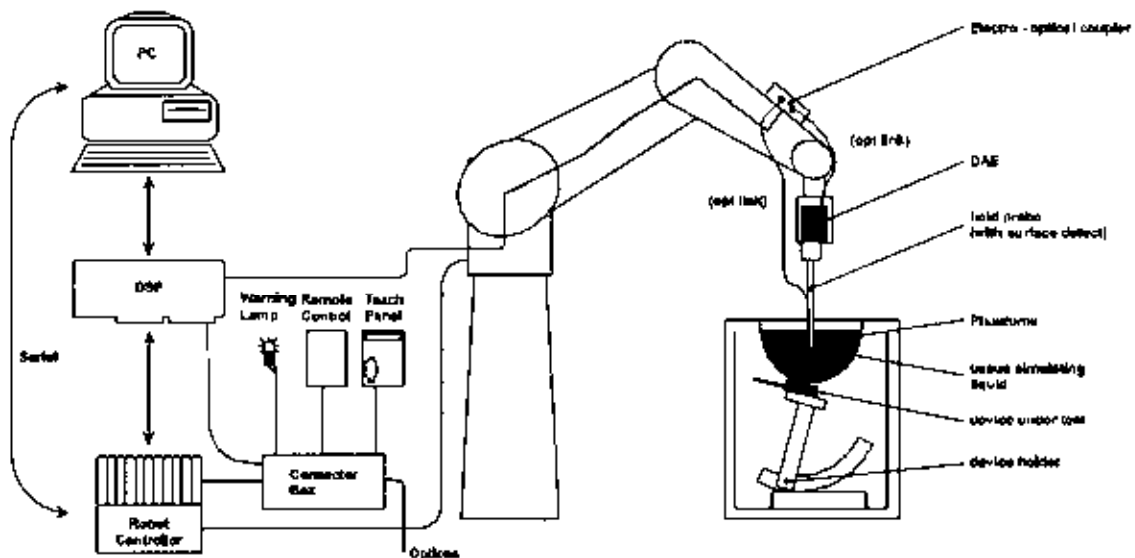
Exact temperature values for each test are shown in the table(s) under 2.5. and/or on the measurement plots.



## 6 Test Set-up

### 6.1 Measurement system

#### 6.1.1 System Description



- The DAS4 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 DAS4 measurement server.
- The DAS4 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.
- DAS4 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 validation dipoles allowing to validate the proper functioning of the system.

### 6.1.2 Test environment

The DASY4 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

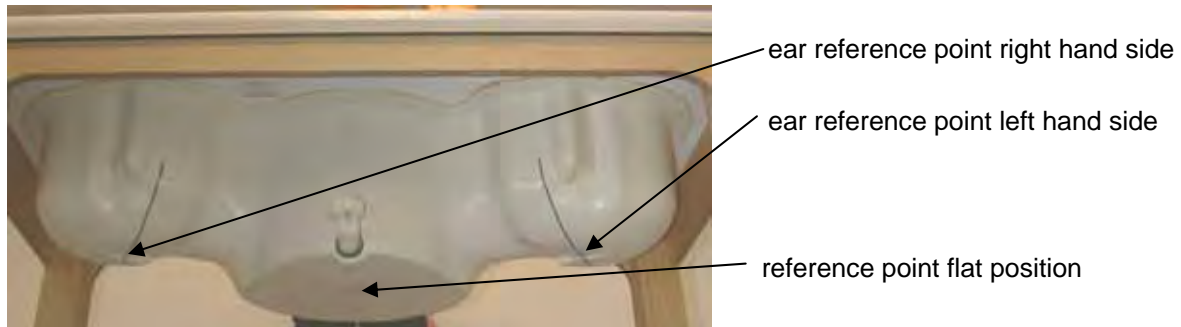
Isotropic E-Field Probe ET3DV6 for Dosimetric Measurements

Technical data according to manufacturer information	
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., glycoether)
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 $\pm 9.5\%$ ; k=2) Calibration for other liquids and frequencies upon request
Frequency	10 MHz to 3 GHz (dosimetry); Linearity: $\pm 0.2$ dB (30 MHz to 3 GHz)
Directivity	$\pm 0.2$ dB in HSL (rotation around probe axis) $\pm 0.4$ dB in HSL (rotation normal to probe axis)
Dynamic range	5 $\mu$ W/g to > 100 mW/g; Linearity: $\pm 0.2$ dB
Optical Surface Detection	$\pm 0.2$ 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 DASY4 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 pair 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 DASY4 installation includes predefined files with recommended procedures for measurements and validation. They are read-only document files and destined as fully defined but unmeasured masks. All test positions (head or body-worn) are tested with the same configuration of test steps differing only in the grid definition for the different test positions.
- The „reference“ and „drift“ measurements are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure. The indicated drift is mainly the variation of the DUT's output power and should vary max. +/- 5 %.
- The „surface check“ measurement tests the optical surface detection system of the DASY4 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. DASY4 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 x 7 x 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 neighboring volumes are evaluated until no neighboring 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 (20x20x20) are interpolated to calculate the average.

#### Advanced Extrapolation

DASY4 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 DASY4 software stores the acquired data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension ".DA4". The software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of incorrect parameter settings. For example, if a measurement has been performed with a wrong crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be re-evaluated.

The measured data can be visualized or exported in different units or formats, depending on the selected probe type ([V/m], [A/m], [°C], [mW/g], [mW/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	$\text{Norm}_i, a_{i0}, a_{i1}, a_{i2}$
	- Conversion factor	$\text{ConvF}_i$
	- Diode compression point	$D_{\text{cpi}}$
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 DASY4 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)					
	☒ 750	☒ 835	☐ 900	☒ 1800	☒ 1900	☒ 2450
frequency band	☒ 750	☒ 835	☐ 900	☒ 1800	☒ 1900	☒ 2450
Tissue Type	Head	Head	Head	Head	Head	Head
Water	41.1	41.45	40.92	52.64	54.9	62.7
Salt (NaCl)	1.4	1.45	1.48	0.36	0.18	0.5
Sugar	57.0	56.0	56.5	0.0	0.0	0.0
HEC	0.2	1.0	1.0	0.0	0.0	0.0
Bactericide	0.2	0.1	0.1	0.0	0.0	0.0
Triton X-100	0.0	0.0	0.0	0.0	0.0	36.8
DGBE	0.0	0.0	0.0	47.0	44.92	0.0

Table 3: Head tissue dielectric properties

Ingredients (% of weight)	Frequency (MHz)					
	☒ 750	☒ 835	☐ 900	☒ 1800	☒ 1900	☒ 2450
frequency band	☒ 750	☒ 835	☐ 900	☒ 1800	☒ 1900	☒ 2450
Tissue Type	Body	Body	Body	Body	Body	Body
Water	51.7	52.4	56.0	69.91	69.91	73.2
Salt (NaCl)	0.9	1.40	0.76	0.13	0.13	0.04
Sugar	47.2	45.0	41.76	0.0	0.0	0.0
HEC	0.0	1.0	1.21	0.0	0.0	0.0
Bactericide	0.1	0.1	0.27	0.0	0.0	0.0
Triton X-100	0.0	0.0	0.0	0.0	0.0	0.0
DGBE	0.0	0.0	0.0	29.96	29.96	26.7

Table 4: Body tissue dielectric properties

Salt: 99+% Pure Sodium Chloride

Sugar: 98+% Pure Sucrose

Water: De-ionized, 16MΩ+ resistivity

HEC: Hydroxyethyl Cellulose

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

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

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	Frequency (MHz)	Target head tissue		Measurement head tissue		Measurement date
		Permittivity	Conductivity[S/m]	Permittivity	Conductivity[S/m]	
HSL 750	709	41.9	0.89	42.0	0.86	2012-01-16
	710	41.9	0.89	42.0	0.86	2012-01-16
	711	41.9	0.89	42.0	0.86	2012-01-16
	750	41.9	0.89	41.4	0.89	2012-01-16
HSL 750	709	41.9	0.89	42.8	0.87	2012-05-22
	750	41.9	0.89	42.2	0.91	2012-05-22
HSL 850/900	824	41.5	0.90	41.4	0.88	2012-01-07
	837	41.5	0.90	41.3	0.90	2012-01-07
	849	41.5	0.90	41.1	0.91	2012-01-07
	900	41.5	0.97	40.4	0.96	2012-01-07
HSL 1800	1712	40.0	1.40	39.5	1.36	2012-01-08
	1732	40.0	1.40	39.4	1.38	2012-01-08
	1753	40.0	1.40	39.3	1.41	2012-01-08
	1800	40.0	1.40	39.1	1.45	2012-01-08
HSL 1800	1710	40.0	1.40	39.5	1.36	2012-01-18
	1720	40.0	1.40	39.4	1.37	2012-01-18
	1733	40.0	1.40	39.4	1.38	2012-01-18
	1745	40.0	1.40	39.3	1.40	2012-01-18
	1754	40.0	1.40	39.3	1.41	2012-01-18
	1800	40.0	1.40	39.1	1.45	2012-01-18
HSL 1800	1732	40.0	1.40	39.5	1.36	2012-05-22
	1754	40.0	1.40	39.5	1.39	2012-05-22
	1800	40.0	1.40	39.2	1.43	2012-05-22
HSL 1900	1850	40.0	1.40	39.7	1.35	2012-01-13
	1880	40.0	1.40	39.6	1.38	2012-01-13
	1900	40.0	1.40	39.5	1.40	2012-01-13
	1910	40.0	1.40	39.5	1.40	2012-01-13
HSL 2450	2412	39.2	1.80	39.1	1.83	2012-01-10
	2437	39.2	1.80	39.0	1.85	2012-01-10
	2450	39.2	1.80	39.0	1.86	2012-01-10
	2462	39.2	1.80	39.0	1.87	2012-01-10

Table 5: Parameter of the head tissue simulating liquid

Liquid	Frequency (MHz)	Target body tissue		Measurement body tissue		Measurement date
		Permittivity	Conductivity[S/m]	Permittivity	Conductivity[S/m]	
M 750	709	55.5	0.96	57.4	0.94	2012-01-17
	710	55.5	0.96	57.4	0.94	2012-01-17
	711	55.5	0.96	57.4	0.94	2012-01-17
	750	55.5	0.96	56.9	0.98	2012-01-17
M 750	711	55.5	0.96	57.0	0.94	2012-05-22
	750	55.5	0.96	56.5	0.98	2012-05-22
M 850/900	824	55.2	0.97	55.1	0.96	2012-01-06
	837	55.2	0.97	55.0	0.98	2012-01-06
	849	55.2	0.97	54.8	0.99	2012-01-06
	900	55.0	1.05	54.3	1.04	2012-01-06
M 1800	1710	53.3	1.52	52.3	1.45	2012-01-20
	1720	53.3	1.52	52.3	1.46	2012-01-20
	1733	53.3	1.52	52.2	1.47	2012-01-20
	1745	53.3	1.52	52.2	1.49	2012-01-20
	1754	53.3	1.52	52.2	1.50	2012-01-20
	1800	53.3	1.52	52.0	1.55	2012-01-20
M 1800	1712	53.3	1.52	53.0	1.44	2012-02-29
	1732	53.3	1.52	52.9	1.46	2012-02-29
	1753	53.3	1.52	52.8	1.49	2012-02-29
	1800	53.3	1.52	52.6	1.54	2012-02-29
M 1800	1712	53.3	1.52	53.5	1.45	2012-05-23
	1732	53.3	1.52	53.4	1.47	2012-05-23
	1753	53.3	1.52	53.4	1.50	2012-05-23
	1800	53.3	1.52	53.2	1.55	2012-05-23
M 1900	1850	53.3	1.52	52.5	1.49	2012-01-12
	1880	53.3	1.52	52.4	1.49	2012-01-12
	1900	53.3	1.52	52.3	1.51	2012-01-12
	1910	53.3	1.52	52.3	1.52	2012-01-12
M 2450	2412	52.7	1.95	52.2	1.94	2012-01-11
	2437	52.7	1.95	52.1	1.98	2012-01-11
	2450	52.7	1.95	52.1	1.99	2012-01-11
	2462	52.7	1.95	52.0	2.00	2012-01-11

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

The overall combined measurement uncertainty of the measurement system is  $\pm 11.5\%$  ( $K=1$ ).

The expanded uncertainty ( $k=2$ ) is assessed to be  $\pm 23.0\%$

This measurement uncertainty budget is suggested by IEEE 1528-2003 and determined by Schmid & Partner Engineering AG. The breakdown of the individual uncertainties is as follows:

Error Sources	Uncertainty Value	Probability Distribution	Divisor	$c_i$ 1g	$c_i$ 10g	Standard Uncertainty 1g	Standard Uncertainty 10g	$v_i^2$ or $v_{eff}$
<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	$\pm 9.6\%$	Rectangular	$\sqrt{3}$	0.7	0.7	$\pm 3.9\%$	$\pm 3.9\%$	$\infty$
Spatial resolution	$\pm 0.0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.0\%$	$\pm 0.0\%$	$\infty$
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	$\pm 1.0\%$	Normal	1	1	1	$\pm 1.0\%$	$\pm 1.0\%$	$\infty$
Response time	$\pm 0.8\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.5\%$	$\pm 0.5\%$	$\infty$
Integration time	$\pm 2.6\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 1.5\%$	$\pm 1.5\%$	$\infty$
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>								
Device positioning	$\pm 2.9\%$	Normal	1	1	1	$\pm 2.9\%$	$\pm 2.9\%$	145
Device holder uncertainty	$\pm 3.6\%$	Normal	1	1	1	$\pm 3.6\%$	$\pm 3.6\%$	5
Power drift	$\pm 5.0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 2.9\%$	$\pm 2.9\%$	$\infty$
<b>Phantom and Set-up</b>								
Phantom uncertainty	$\pm 4.0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 2.3\%$	$\pm 2.3\%$	$\infty$
Liquid conductivity (target)	$\pm 5.0\%$	Rectangular	$\sqrt{3}$	0.64	0.43	$\pm 1.8\%$	$\pm 1.2\%$	$\infty$
Liquid conductivity (meas.)	$\pm 2.5\%$	Normal	1	0.64	0.43	$\pm 1.6\%$	$\pm 1.1\%$	$\infty$
Liquid permittivity (target)	$\pm 5.0\%$	Rectangular	$\sqrt{3}$	0.6	0.49	$\pm 1.7\%$	$\pm 1.4\%$	$\infty$
Liquid permittivity (meas.)	$\pm 2.5\%$	Normal	1	0.6	0.49	$\pm 1.5\%$	$\pm 1.2\%$	$\infty$
<b>Combined Uncertainty</b>						$\pm 11.5\%$	$\pm 11.2\%$	330
<b>Expanded Std. Uncertainty</b>						$\pm 23.0\%$	$\pm 22.5\%$	

Table 7: Measurement uncertainties

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

### 6.1.12 Measurement uncertainty evaluation for system check

The overall combined measurement uncertainty of the measurement system is  $\pm 9.6\%$  ( $K=1$ ).  
 The expanded uncertainty ( $k=2$ ) is assessed to be  $\pm 19.2\%$   
 This measurement uncertainty budget is suggested by IEEE 1528-2003 and determined by Schmid & Partner Engineering AG. The breakdown of the individual uncertainties is as follows:

Error Sources	Uncertainty Value	Probability Distribution	Divisor	$c_i$ 1g	$c_i$ 10g	Standard Uncertainty 1g	Standard Uncertainty 10g	$v_i^2$ or $v_{eff}$
<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	$\pm 0.0\%$	$\pm 3.9\%$	$\infty$
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	$\pm 1.0\%$	Normal	1	1	1	$\pm 1.0\%$	$\pm 1.0\%$	$\infty$
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>								
Dipole axis to liquid distance	$\pm 2.0\%$	Normal	1	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	$\pm 2.3\%$	$\pm 2.3\%$	$\infty$
Liquid conductivity (target)	$\pm 5.0\%$	Rectangular	$\sqrt{3}$	0.64	0.43	$\pm 1.8\%$	$\pm 1.2\%$	$\infty$
Liquid conductivity (meas.)	$\pm 2.5\%$	Normal	1	0.64	0.43	$\pm 1.6\%$	$\pm 1.1\%$	$\infty$
Liquid permittivity (target)	$\pm 5.0\%$	Rectangular	$\sqrt{3}$	0.6	0.49	$\pm 1.7\%$	$\pm 1.4\%$	$\infty$
Liquid permittivity (meas.)	$\pm 2.5\%$	Normal	1	0.6	0.49	$\pm 1.5\%$	$\pm 1.2\%$	$\infty$
<b>Combined Uncertainty</b>						<b><math>\pm 9.6\%</math></b>	<b><math>\pm 9.3\%</math></b>	
<b>Expanded Std. Uncertainty</b>						<b><math>\pm 19.2\%</math></b>	<b><math>\pm 18.6\%</math></b>	

Table 8: Measurement uncertainties

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).

Validation Kit	Frequency	Target Peak SAR (1000 mW) (+/- 10%)	Target SAR <sub>1g</sub> (1000 mW) (+/- 10%)	Measured Peak SAR (1000 mW)	Measured SAR <sub>1g</sub> (1000 mW)	Measured date
D750V3 S/N: 1041	750 MHz head	13.1 mW/g	8.44 mW/g	12.2 mW/g	8.40 mW/g	2012-01-16
D750V3 S/N: 1041	750 MHz head	13.1 mW/g	8.44 mW/g	12.5 mW/g	8.59 mW/g	2012-01-17
D750V3 S/N: 1041	750 MHz head	13.1 mW/g	8.44 mW/g	12.5 mW/g	8.57 mW/g	2012-05-22
D750V3 S/N: 1041	750 MHz body	13.1 mW/g	8.80 mW/g	12.4 mW/g	8.74 mW/g	2012-01-17
D750V3 S/N: 1041	750 MHz body	13.1 mW/g	8.80 mW/g	12.4 mW/g	8.78 mW/g	2012-05-22
D750V3 S/N: 1041	750 MHz body	13.1 mW/g	8.80 mW/g	12.0 mW/g	8.53 mW/g	2012-05-25
D900V2 S/N: 102	900 MHz head	16.0 mW/g	10.9 mW/g	16.9 mW/g	11.2 mW/g	2012-01-07
D900V2 S/N: 102	900 MHz head	16.0 mW/g	10.9 mW/g	17.2 mW/g	11.3 mW/g	2012-01-08
D900V2 S/N: 102	900 MHz body	17.3 mW/g	11.2 mW/g	15.7 mW/g	11.1 mW/g	2012-01-06
D900V2 S/N: 102	900 MHz body	17.3 mW/g	11.2 mW/g	16.0 mW/g	11.0 mW/g	2012-01-07
D1800V2 S/N: 287	1800 MHz head	66.2 mW/g	37.5 mW/g	72.3 mW/g	40.5 mW/g	2012-01-08
D1800V2 S/N: 287	1800 MHz head	66.2 mW/g	37.5 mW/g	68.8 mW/g	38.6 mW/g	2012-01-09
D1800V2 S/N: 287	1800 MHz head	66.2 mW/g	37.5 mW/g	72.4 mW/g	40.0 mW/g	2012-01-18
D1800V2 S/N: 287	1800 MHz head	66.2 mW/g	37.5 mW/g	70.8 mW/g	38.8 mW/g	2012-01-19
D1800V2 S/N: 287	1800 MHz head	66.2 mW/g	37.5 mW/g	71.1 mW/g	39.3 mW/g	2012-01-20
D1800V2 S/N: 287	1800 MHz head	66.2 mW/g	37.5 mW/g	65.9 mW/g	38.5 mW/g	2012-05-22
D1800V2 S/N: 287	1800 MHz head	66.2 mW/g	37.5 mW/g	62.9 mW/g	37.3 mW/g	2012-05-23
D1800V2 S/N: 287	1800 MHz body	67.8 mW/g	38.7 mW/g	66.4 mW/g	39.0 mW/g	2012-01-20
D1800V2 S/N: 287	1800 MHz body	67.8 mW/g	38.7 mW/g	70.7 mW/g	41.1 mW/g	2012-01-21
D1800V2 S/N: 287	1800 MHz body	67.8 mW/g	38.7 mW/g	63.2 mW/g	38.2 mW/g	2012-02-29
D1800V2 S/N: 287	1800 MHz body	67.8 mW/g	38.7 mW/g	63.5 mW/g	38.0 mW/g	2012-03-01
D1800V2 S/N: 287	1800 MHz body	67.8 mW/g	38.7 mW/g	68.7 mW/g	40.1 mW/g	2012-05-23
D1800V2 S/N: 287	1800 MHz body	67.8 mW/g	38.7 mW/g	67.0 mW/g	39.3 mW/g	2012-05-24

Validation Kit	Frequency	Target Peak SAR (1000 mW) (+/- 10%)	Target SAR <sub>1g</sub> (1000 mW) (+/- 10%)	Measured Peak SAR (1000 mW)	Measured SAR <sub>1g</sub> (1000 mW)	Measured date
D1900V2 S/N: 5d009	1900 MHz head	73.6 mW/g	40.0 mW/g	69.6 mW/g	39.0 mW/g	2012-01-13
D1900V2 S/N: 5d009	1900 MHz head	73.6 mW/g	40.0 mW/g	69.9 mW/g	39.2 mW/g	2012-01-14
D1900V2 S/N: 5d009	1900 MHz body	73.8 mW/g	40.9 mW/g	68.3 mW/g	39.7 mW/g	2012-01-12
D1900V2 S/N: 5d009	1900 MHz body	73.8 mW/g	40.9 mW/g	71.9 mW/g	41.3 mW/g	2012-01-13
D2450V2 S/N: 710	2450 MHz head	102.4 mW/g	54.2 mW/g	109 mW/g	56.0 mW/g	2012-01-10
D2450V2 S/N: 710	2450 MHz body	108.0 mW/g	51.7 mW/g	115 mW/g	54.5 mW/g	2012-01-11
D2450V2 S/N: 710	2450 MHz body	108.0 mW/g	51.7 mW/g	113 mW/g	54.2 mW/g	2012-01-12

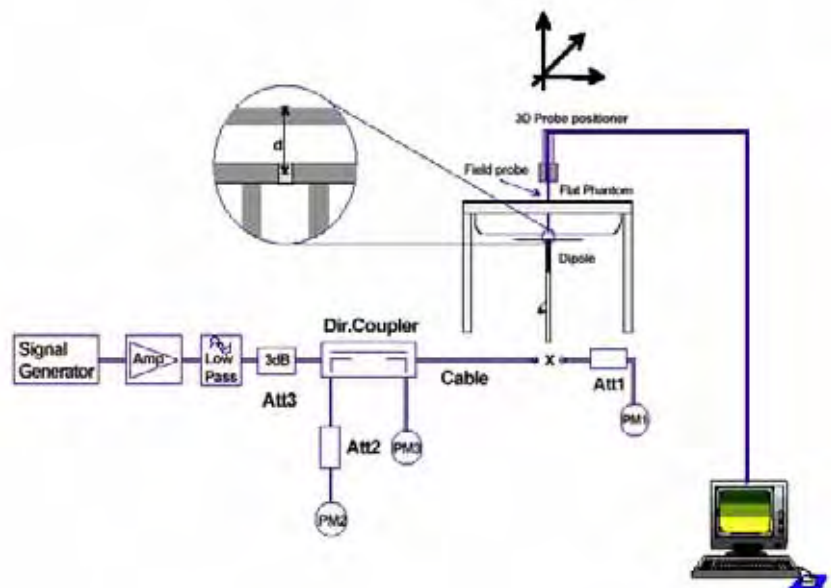
Table 9: Results system validation

Note: 900 MHz probe/dipole calibration is valid +/-100 MHz and fully covers the 850 MHz band.

### 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. 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 timebased average power is relevant. The difference inbetween depends on the duty cycle of the TDMA signal :

<b>No. of timeslots</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
Duty Cycle	1 : 8	1: 4	1 : 2.66	1 : 2
timebased avg. power compared to slotted avg. power	- 9 dB	- 6 dB	- 4.25 dB	- 3 dB

The signalling modes differ as follows :

<b>mode</b>	<b>coding scheme</b>	<b>modulation</b>
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	33.6 dBm	24.6 dBm
190 / 836.6 MHz	GMSK	1	33.7 dBm	24.7 dBm
251 / 848.0 MHz	GMSK	1	33.7 dBm	24.7 dBm
128 / 824.2 MHz	GMSK	2	31.2 dBm	<b>25.2 dBm</b>
190 / 836.6 MHz	GMSK	2	31.3 dBm	<b>25.3 dBm</b>
251 / 848.0 MHz	GMSK	2	31.3 dBm	<b>25.3 dBm</b>
128 / 824.2 MHz	8PSK	1	27.3 dBm	18.3 dBm
190 / 836.6 MHz	8PSK	1	27.4 dBm	18.4 dBm
251 / 848.0 MHz	8PSK	1	27.5 dBm	18.5 dBm
128 / 824.2 MHz	8PSK	2	25.4 dBm	19.4 dBm
190 / 836.6 MHz	8PSK	2	25.4 dBm	19.4 dBm
251 / 848.0 MHz	8PSK	2	25.4 dBm	19.4 dBm

Table 10: 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	30.4 dBm	21.4 dBm
661 / 1880.0 MHz	GMSK	1	30.5 dBm	21.5 dBm
810 / 1909.8 MHz	GMSK	1	30.5 dBm	21.5 dBm
512 / 1850.2 MHz	GMSK	2	28.0 dBm	<b>22.0 dBm</b>
661 / 1880.0 MHz	GMSK	2	28.0 dBm	<b>22.0 dBm</b>
810 / 1909.8 MHz	GMSK	2	28.0 dBm	<b>22.0 dBm</b>
512 / 1850.2 MHz	8PSK	1	26.3 dBm	17.3 dBm
661 / 1880.0 MHz	8PSK	1	26.4 dBm	17.3 dBm
810 / 1909.8 MHz	8PSK	1	26.4 dBm	17.3 dBm
512 / 1850.2 MHz	8PSK	2	24.4 dBm	18.4 dBm
661 / 1880.0 MHz	8PSK	2	24.4 dBm	18.4 dBm
810 / 1909.8 MHz	8PSK	2	24.4 dBm	18.4 dBm

Table 11: 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 2 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 WCDMA FDD V (850 MHz)

Max. RMS output power 850 MHz (FDD V) / dBm			
mode	Channel / frequency		
	4132 / 826.4 MHz	4182 / 836.6 MHz	4233 / 846.6 MHz
<b>RMC 12.2 kbit/s</b>	<b>25.1</b>	<b>25.2</b>	<b>25.0</b>
RMC 64 kbit/s	25.1	25.2	25.0
RMC 144 kbit/s	25.1	25.2	25.0
RMC 384 kbit/s	25.1	25.2	25.0
AMR 4.75 kbit/s	25.1	25.2	25.0
AMR 5.15 kbit/s	25.1	25.2	25.0
AMR 5.9 kbit/s	25.1	25.2	25.0
AMR 6.7 kbit/s	25.1	25.2	25.0
AMR 7.4 kbit/s	25.1	25.2	25.0
AMR 7.95 kbit/s	25.1	25.2	25.0
AMR 10.2 kbit/s	25.1	25.2	25.0
AMR 12.2 kbit/s	25.1	25.2	25.0
<b>HSDPA Sub test 1</b>	<b>24.6</b>	<b>24.7</b>	<b>24.6</b>
HSDPA Sub test 2	23.2	23.3	23.2
HSDPA Sub test 3	21.8	21.9	21.8
HSDPA Sub test 4	21.6	21.6	21.7
HSUPA Sub test 1	24.7	24.9	24.6
HSUPA Sub test 2	22.3	22.4	22.4
HSUPA Sub test 3	23.7	23.8	23.7
HSUPA Sub test 4	22.9	22.8	23.0
<b>HSUPA Sub test 5</b>	<b>24.7</b>	<b>24.7</b>	<b>24.4</b>

Table 12: Test results conducted power measurement WCDMA 850

**7.1.5 Conducted power measurements WCDMA FDD IV (1700 MHz)**

Max. RMS output power FDD IV (1700MHz) / dBm			
mode	Channel / frequency		
	1312 / 1712.4 MHz	1412 / 1732.4 MHz	1513 / 1752.6 MHz
<b>RMC 12.2 kbit/s</b>	<b>24.6</b>	<b>24.7</b>	<b>24.7</b>
RMC 64 kbit/s	24.4	24.5	24.7
RMC 144 kbit/s	24.4	24.5	24.7
RMC 384 kbit/s	24.4	24.6	24.6
AMR 4.75 kbit/s	24.4	24.6	24.7
AMR 5.15 kbit/s	24.4	24.6	24.6
AMR 5.9 kbit/s	24.4	24.6	24.7
AMR 6.7 kbit/s	24.4	24.6	24.7
AMR 7.4 kbit/s	24.4	24.6	24.6
AMR 7.95 kbit/s	24.4	24.6	24.6
AMR 10.2 kbit/s	24.4	24.6	24.6
AMR 12.2 kbit/s	24.4	24.6	24.7
<b>HSDPA Sub test 1</b>	<b>24.1</b>	<b>24.1</b>	<b>24.3</b>
HSDPA Sub test 2	22.6	22.6	22.8
HSDPA Sub test 3	21.0	21.2	21.4
HSDPA Sub test 4	21.0	21.2	21.4
HSUPA Sub test 1	24.5	24.8	24.4
HSUPA Sub test 2	22.2	22.4	22.2
HSUPA Sub test 3	23.5	23.3	23.6
HSUPA Sub test 4	22.0	22.6	22.1
<b>HSUPA Sub test 5</b>	<b>24.6</b>	<b>24.5</b>	<b>24.5</b>

Table 13: Test results conducted power measurement WCDMA FDD IV 1700MHz

Max. RMS output power FDD IV (1700MHz) / dBm with power back off			
mode	Channel / frequency		
	1312 / 1712.4 MHz	1412 / 1732.4 MHz	1513 / 1752.6 MHz
<b>RMC 12.2 kbit/s</b>	<b>22.6</b>	<b>22.9</b>	<b>22.9</b>
RMC 64 kbit/s	22.4	22.8	22.9
RMC 144 kbit/s	22.5	22.7	22.9
RMC 384 kbit/s	22.4	22.7	22.8
AMR 4.75 kbit/s	22.5	22.8	22.9
AMR 5.15 kbit/s	22.5	22.8	22.9
AMR 5.9 kbit/s	22.4	22.7	22.9
AMR 6.7 kbit/s	22.4	22.7	22.9
AMR 7.4 kbit/s	22.4	22.7	22.8
AMR 7.95 kbit/s	22.4	22.6	22.8
AMR 10.2 kbit/s	22.4	22.7	22.9
AMR 12.2 kbit/s	22.4	22.7	24.7
<b>HSDPA Sub test 1</b>	<b>22.1</b>	<b>22.2</b>	<b>22.5</b>
HSDPA Sub test 2	20.6	20.8	20.9
HSDPA Sub test 3	19.0	19.5	19.6
HSDPA Sub test 4	19.0	19.5	19.7
HSUPA Sub test 1	22.5	22.9	22.6
HSUPA Sub test 2	20.2	20.4	20.5
HSUPA Sub test 3	21.5	21.7	21.7
HSUPA Sub test 4	20.1	20.7	20.3
<b>HSUPA Sub test 5</b>	<b>22.6</b>	<b>22.7</b>	<b>24.7</b>

Table 14: Test results conducted power measurement WCDMA FDD IV 1700MHz with power back off

### 7.1.6 Conducted power measurements WCDMA FDD II (1900 MHz)

Max. RMS output power 1900 MHz (FDD II) / dBm			
mode	Channel / frequency		
	9262 / 1852.4 MHz	9400 / 1880.0 MHz	9538 / 1907.6 MHz
<b>RMC 12.2 kbit/s</b>	<b>23.6 (22.1*)</b>	<b>23.8 (22.2*)</b>	<b>23.6 (22.3*)</b>
RMC 64 kbit/s	23.6	23.7	23.6
RMC 144 kbit/s	23.6	23.7	23.6
RMC 384 kbit/s	23.6	23.8	23.6
AMR 4.75 kbit/s	23.6	23.8	23.6
AMR 5.15 kbit/s	23.6	23.7	23.6
AMR 5.9 kbit/s	23.6	23.8	23.6
AMR 6.7 kbit/s	23.6	23.7	23.6
AMR 7.4 kbit/s	23.6	23.7	23.6
AMR 7.95 kbit/s	23.6	23.7	23.6
AMR 10.2 kbit/s	23.6	23.8	23.6
AMR 12.2 kbit/s	23.6	23.7	23.6
<b>HSDPA Sub test 1</b>	<b>23.1</b>	<b>23.3</b>	<b>23.2</b>
HSDPA Sub test 2	21.6	21.7	21.8
HSDPA Sub test 3	20.0	20.0	20.3
HSDPA Sub test 4	20.0	20.0	20.3
HSUPA Sub test 1	23.7	23.6	23.5
HSUPA Sub test 2	21.8	21.5	21.6
HSUPA Sub test 3	22.5	22.5	22.5
HSUPA Sub test 4	21.9	21.9	21.8
<b>HSUPA Sub test 5</b>	<b>23.7</b>	<b>23.6</b>	<b>23.6</b>

Table 15: Test results conducted power measurement WCDMA 1900

Max. RMS output power 1900 MHz (FDD II) / dBm with power back off			
mode	Channel / frequency		
	9262 / 1852.4 MHz	9400 / 1880.0 MHz	9538 / 1907.6 MHz
<b>RMC 12.2 kbit/s</b>	<b>22.1</b>	<b>22.2</b>	<b>22.3</b>
RMC 64 kbit/s	22.1	22.2	22.3
RMC 144 kbit/s	22.1	22.2	22.3
RMC 384 kbit/s	22.1	22.1	22.2
AMR 4.75 kbit/s	22.1	22.1	22.2
AMR 5.15 kbit/s	22.1	22.2	22.3
AMR 5.9 kbit/s	22.1	22.2	22.3
AMR 6.7 kbit/s	22.1	22.2	22.3
AMR 7.4 kbit/s	22.1	22.2	22.3
AMR 7.95 kbit/s	22.1	22.2	22.3
AMR 10.2 kbit/s	22.1	22.1	22.2
AMR 12.2 kbit/s	22.1	22.1	22.3
<b>HSDPA Sub test 1</b>	<b>21.7</b>	<b>21.8</b>	<b>21.9</b>
HSDPA Sub test 2	20.2	20.2	20.3
HSDPA Sub test 3	18.5	18.6	18.7
HSDPA Sub test 4	18.5	18.6	18.6
HSUPA Sub test 1	22.1	22.0	22.1
HSUPA Sub test 2	20.2	20.2	20.3
HSUPA Sub test 3	21.0	21.1	21.1
HSUPA Sub test 4	20.4	20.4	20.4
<b>HSUPA Sub test 5</b>	<b>22.1</b>	<b>22.1</b>	<b>22.2</b>

Table 16: Test results conducted power measurement WCDMA 1900

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.

Power backoff was active during WLAN hotspot testing in FDD II and FDD IV bands.

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

#### a) 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 :

<b>Bit rate</b>	<b>12.2 kbit/s</b>	<b>64 kbit/s</b>	<b>144 kbit/s</b>	<b>384 kbit/s</b>
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:

<b>Sub-test</b>	$\beta_c$	$\beta_d$	$\beta_d$ (SF)	$\beta_c/\beta_d$	$\beta_{hs}^{(1)}$	<b>CM(dB)<sup>(2)</sup></b>
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 17: 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 18: 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 19: 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)

<b>Sub-test</b>	$\beta_c$	$\beta_d$	$\Delta_{ACK}, \Delta_{NACK}, \Delta_{CQI}$	$\Delta E-DPCCH$ )*
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 LTE FDD 4 1700 MHz**

	Channel / frequency	BW	RB Size	RB Offset	Modulation	Conducted Power / dBm	C.P. with backoff/ dBm
Low Channel	19957 / 1710.7MHz	1.4	1	0	QPSK	23.73	23.21
			1	5	QPSK	23.77	23.25
			3	2	QPSK	23.61	23.13
			6	0	QPSK	22.60	22.62
			1	0	16-QAM	22.89	22.88
			1	5	16-QAM	22.78	22.76
			3	2	16-QAM	22.41	22.40
			6	0	16-QAM	21.79	21.75
	19965 / 1711.5MHz	3	1	0	QPSK	23.70	23.18
			1	14	QPSK	23.74	23.20
			8	4	QPSK	22.56	22.55
			15	0	QPSK	22.60	22.61
			1	0	16-QAM	22.35	22.37
			1	14	16-QAM	22.48	22.52
			8	4	16-QAM	21.67	21.62
			15	0	16-QAM	21.53	21.46
	19975 / 1712.5MHz	5	1	0	QPSK	23.81	23.25
			1	24	QPSK	23.89	23.34
			12	6	QPSK	22.64	22.55
			25	0	QPSK	22.69	22.60
			1	0	16-QAM	22.13	22.19
			1	24	16-QAM	22.03	22.08
			12	6	16-QAM	21.35	21.45
			25	0	16-QAM	21.93	21.97
	20000 / 1715MHz	10	1	0	QPSK	23.72	23.21
			1	49	QPSK	23.80	23.27
			25	12	QPSK	22.51	22.40
			50	0	QPSK	22.52	22.42
			1	0	16-QAM	22.34	22.38
			1	49	16-QAM	22.32	22.35
			25	12	16-QAM	21.68	21.73
			50	0	16-QAM	21.76	21.80
	20025 / 1717.5MHz	15	1	0	QPSK	23.85	23.31
			1	74	QPSK	23.80	23.29
			36	18	QPSK	22.70	22.65
			75	0	QPSK	22.63	22.57
			1	0	16-QAM	22.70	22.80
			1	74	16-QAM	22.59	22.68
			36	18	16-QAM	21.68	21.78
			75	0	16-QAM	21.62	21.71
	20050 1720MHz	20	1	0	QPSK	23.57	23.09
			1	99	QPSK	23.47	23.01
50			25	QPSK	22.73	22.79	
100			0	QPSK	22.85	22.90	
1			0	16-QAM	22.79	22.88	
1			99	16-QAM	22.71	22.79	
50			25	16-QAM	21.60	21.70	
100			0	16-QAM	21.95	22.03	



	Channel / frequency	BW	RB Size	RB Offset	Modulation	Conducted Power / dBm	C.P. with backoff/ dBm
Middle Channel	20175 / 1732.5MHz	1.4	1	0	QPSK	23.72	23.21
			1	5	QPSK	23.73	23.24
			3	2	QPSK	23.62	23.09
			6	0	QPSK	22.57	22.61
			1	0	16-QAM	22.11	22.08
			1	5	16-QAM	22.21	22.15
			3	2	16-QAM	23.03	23.06
			6	0	16-QAM	21.86	21.80
		3	1	0	QPSK	23.55	23.02
			1	14	QPSK	23.57	23.01
			8	4	QPSK	22.56	22.59
			15	0	QPSK	22.47	22.53
			1	0	16-QAM	22.07	22.14
			1	14	16-QAM	22.20	22.27
			8	4	16-QAM	21.85	21.89
			15	0	16-QAM	21.62	21.67
		5	1	0	QPSK	23.71	23.15
			1	24	QPSK	23.78	23.24
			12	6	QPSK	22.49	22.56
			25	0	QPSK	22.48	22.54
			1	0	16-QAM	22.49	22.55
			1	24	16-QAM	22.33	22.38
			12	6	16-QAM	21.46	21.49
			25	0	16-QAM	21.78	21.82
		10	1	0	QPSK	23.65	23.15
			1	49	QPSK	23.56	23.03
			25	12	QPSK	22.48	22.49
			50	0	QPSK	22.42	22.44
			1	0	16-QAM	22.22	22.25
			1	49	16-QAM	22.11	22.15
			25	12	16-QAM	21.82	21.84
			50	0	16-QAM	21.85	21.80
		15	1	0	QPSK	23.88	23.31
			1	74	QPSK	23.92	23.39
			36	18	QPSK	22.54	22.60
			75	0	QPSK	22.59	22.65
			1	0	16-QAM	22.69	22.62
			1	74	16-QAM	22.65	22.60
			36	18	16-QAM	21.58	21.59
			75	0	16-QAM	21.62	21.66
20	1	0	QPSK	<b>23.78</b>	<b>23.30</b>		
	1	99	QPSK	<b>23.79</b>	<b>23.28</b>		
	50	25	QPSK	22.63	22.62		
	100	0	QPSK	22.70	22.65		
	1	0	16-QAM	22.98	22.95		
	1	99	16-QAM	23.05	23.00		
	50	25	16-QAM	21.77	21.80		
	100	0	16-QAM	21.88	21.87		

	Channel / frequency	BW	RB Size	RB Offset	Modulation	Conducted Power / dBm	C.P. with backoff/ dBm
High Channel	20393 / 1754.3MHz	1.4	1	0	QPSK	<b>23.82</b>	<b>23.32</b>
			1	5	QPSK	<b>23.93</b>	<b>23.41</b>
			3	2	QPSK	23.69	23.25
			6	0	QPSK	22.62	22.60
			1	0	16-QAM	22.66	22.65
			1	5	16-QAM	22.69	22.75
			3	2	16-QAM	23.03	23.05
			6	0	16-QAM	21.74	21.78
	20385 / 1753.5MHz	3	1	0	QPSK	23.74	23.25
			1	14	QPSK	23.68	23.21
			8	4	QPSK	22.50	22.56
			15	0	QPSK	22.56	22.60
			1	0	16-QAM	22.32	22.35
			1	14	16-QAM	22.52	22.59
			8	4	16-QAM	21.83	21.90
			15	0	16-QAM	21.54	21.63
	20375 / 1752.5MHz	5	1	0	QPSK	23.74	23.26
			1	24	QPSK	23.90	23.38
			12	6	QPSK	22.52	22.55
			25	0	QPSK	22.42	22.49
			1	0	16-QAM	22.88	22.90
			1	24	16-QAM	22.89	22.95
			12	6	16-QAM	21.58	21.66
			25	0	16-QAM	21.26	21.35
	20350 / 1750MHz	10	1	0	QPSK	23.75	23.19
			1	49	QPSK	23.78	23.23
			25	12	QPSK	22.59	22.52
			50	0	QPSK	22.59	22.64
			1	0	16-QAM	22.69	22.78
			1	49	16-QAM	22.59	22.66
			25	12	16-QAM	21.63	21.57
			50	0	16-QAM	21.70	21.66
	20325 / 1747.5MHz	15	1	0	QPSK	23.94	23.41
			1	74	QPSK	23.77	23.31
			36	18	QPSK	22.61	22.55
			75	0	QPSK	22.68	22.78
			1	0	16-QAM	22.33	22.39
			1	74	16-QAM	22.28	22.35
			36	18	16-QAM	21.93	22.01
			75	0	16-QAM	21.62	21.73
	20300 / 1745MHz	20	1	0	QPSK	23.76	23.23
			1	99	QPSK	23.62	23.17
50			25	QPSK	22.70	22.79	
100			0	QPSK	22.71	22.85	
1			0	16-QAM	22.56	22.59	
1			99	16-QAM	22.79	22.77	
50			25	16-QAM	21.70	21.75	
100			0	16-QAM	21.81	21.89	

Table 20: Test results conducted power measurement LTE FDD 4 1700 MHz.

**Note: For WLAN hotspot mode an additional power back off of 0.5 dB in FDD 4 band was applied for all channel bandwidth and resource block configurations without permanently applied MPR (all configurations with QPSK modulation and RB size 1 or 3).**

**7.1.9 Conducted power measurements LTE FDD 17 700 MHz**

	Channel / frequency	BW	RB Size	RB Offset	Modulation	Conducted Power / dBm
Low Channel	23755/706.5MHz	5	1	0	QPSK	23.76
			1	24	QPSK	23.86
			12	6	QPSK	22.63
			25	0	QPSK	22.53
			1	0	16-QAM	22.72
			1	24	16-QAM	23.05
			12	6	16-QAM	21.70
			25	0	16-QAM	21.28
	23780/709.0MHz	10	1	0	QPSK	<b>23.88</b>
			1	49	QPSK	23.72
			25	12	QPSK	22.10
			50	0	QPSK	21.80
			1	0	16-QAM	22.24
			1	49	16-QAM	21.93
25			12	16-QAM	21.78	
50			0	16-QAM	21.50	
Middle Channel	23790/710.0MHz	5	1	0	QPSK	23.84
			1	24	QPSK	23.73
			12	6	QPSK	22.61
			25	0	QPSK	22.64
			1	0	16-QAM	22.16
			1	24	16-QAM	22.25
			12	6	16-QAM	21.43
		10	25	0	16-QAM	21.98
			1	0	QPSK	23.75
			1	49	QPSK	23.62
			25	12	QPSK	22.60
			50	0	QPSK	22.73
			1	0	16-QAM	22.30
			1	49	16-QAM	22.28
High Channel	23825/713.5MHz	5	1	0	QPSK	23.21
			1	24	QPSK	23.29
			12	6	QPSK	22.45
			25	0	QPSK	22.50
			1	0	16-QAM	22.61
			1	24	16-QAM	22.49
			12	6	16-QAM	21.47
	23800/711.0MHz	10	25	0	16-QAM	21.21
			1	0	QPSK	<b>23.88</b>
			1	49	QPSK	23.74
			25	12	QPSK	22.88
			50	0	QPSK	22.72
			1	0	16-QAM	22.73
			1	49	16-QAM	22.36
25	12	16-QAM	22.33			
50	0	16-QAM	21.72			

Table 21: Test results conducted power measurement LTE FDD 17 700 MHz.

### 7.1.10 Justification of SAR measurements in LTE mode

According to Chapter 'Typical head and body SAR test considerations for LTE data mode only without simultaneous transmission' of FCC KDB Publication 941225 D05 the following test configurations described in that KDB had to be taken into consideration:

- 3) A), QPSK with 50% RB is required for the highest bandwidth.

Note: Generally high, middle and low channels are tested in this configuration on customer request.

- 3) B), QPSK with 1 RB for both channel edges is required for the highest bandwidth on the highest SAR channel of 3) A).

footnote 6: QPSK 1 RB allocation SAR tests are performed on the highest output power channel instead of the highest SAR channel for the RB allocation if the average output power of the 1 RB allocation is > 0.5 dB higher than the 50% RB allocation for QPSK.

- 4) A), 16QAM with 50% RB is required for the highest bandwidth on the channel with the highest measured SAR for QPSK with 50% RB allocation.

- 4) B) and footnote 9: 16QAM with 1RB for both channel edges are required for the highest bandwidth on the highest output power channel instead of the highest SAR channel for the RB allocation if the average output power of the 1 RB allocation is >0.5 dB higher than the 50% allocation for 16 QAM.

- None of the SAR results is > 1.45 W/kg. Therefore 3) A) I), 3) B) I), 4) A) I), 4) B) I) and 5) B) I) were not considered.

- 5) C) The maximum average conducted output power for 1.4 MHz bandwidth in LTE band 4 is > ½ dB higher than that measured for the largest channel bandwidth. Therefore the test procedures described above are also applied for this bandwidth.

### 7.1.11 MPR information in LTE mode

There is a permanently applied MPR implemented by the manufacturer. MPR is enabled for this device according to 3GPP TS36.101.

Modulation	Channel bandwidth / resource block configuration						Target MPR	3 GPP MPR
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz		
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	1	≤ 1
16QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	1	≤ 1
16QAM	> 5	> 4	> 8	> 12	> 16	> 18	2	≤ 2

Therefore there is no power reduction at 1.4 MHz bandwidth with 50% RB allocation (3 RBs).

Additional differences in conducted power are not caused by implemented MPR but depend on measurement uncertainty and allowable tolerances per 3GPP or tune-up. A-MPR was disabled for all SAR tests.

**Note: For WLAN hotspot mode an additional power back off of 0.5 dB in FDD 4 band was applied for all channel bandwidth and resource block configurations without permanently applied MPR.**

### 7.1.12 Conducted power measurements WLAN 2.4 GHz

The following worst case output power values for IEEE 802.11b, g and n modes have been measured:

Channel / frequency	modulation	bit rate	timebased avg. power
1 / 2412 MHz	CCK	1 MBit/s	15.3dBm
6 / 2437 MHz	CCK	1 MBit/s	15.7dBm
11 / 2462 MHz	CCK	1 MBit/s	15.6dBm
1 / 2412 MHz	OFDM	6 MBit/s	12.8dBm
6 / 2437 MHz	OFDM	6 MBit/s	12.9dBm
11 / 2462 MHz	OFDM	6 MBit/s	13.2dBm
1 / 2412 MHz	OFDM	6.5 MBit/s	11.3dBm
6 / 2437 MHz	OFDM	6.5 MBit/s	11.3dBm
11 / 2462 MHz	OFDM	6.5 MBit/s	11.7dBm

Table 22: Test results conducted power measurement WLAN 2.4 GHz

### 7.1.13 Multiple Transmitter Information

The following tables list information which is relevant for the decision if a simultaneous transmit evaluation is necessary according to KDB 648474.

Minimum antenna separation distance between main antenna and WLAN – **112.3 mm**

a) head position

Tx No.	Communication system and frequency band	P <sub>avg</sub> (mW)	single SAR (W/kg)(see ch. 7.2)		remarks
			left hand	right hand	
1a	GSM 850 MHz	250	<b>0.602</b>	0.636	routine evaluation
1b	GSM 1900 MHz	125	<b>0.614</b>	0.338	routine evaluation
1c	FDD V 850 MHz	250	<b>0.558</b>	0.732	routine evaluation
1d	FDD IV 1750 MHz	250	<b>1.220</b>	0.636	routine evaluation
1e	FDD II 1900 MHz	250	<b>1.050</b>	0.537	routine evaluation
1f	LTE FDD 17 750 MHz	250	<b>0.294</b>	0.189	routine evaluation
1g	LTE FDD 4 1750 MHz	250	<b>0.947</b>	0.475	routine evaluation
2a	WLAN 2450 MHz	50	<b>0.470</b>	0.202	routine evaluation
2b	Bluetooth 2450 MHz	4.5	:=0		P <sub>2</sub> < P <sub>ref</sub> (P <sub>ref</sub> : 12 mW at 2.4 GHz)
Sum of all 1g-SAR values			n/a		

Table 23: Communication systems and SAR values in head position

antenna pair (x,y)	peak-locations spacing L <sub>xy</sub> (cm)	Σ 1g-SAR (W/kg)	SPLSR <sub>xy</sub>	sim.-Tx SAR	remarks
(1a,2a)	4.68	1.072	0.23	N	SPLSR <sub>xy</sub> < 0.3 and ΣSAR < 1.6 W/kg
(1b,2a)	6.77	1.084	0.16	N	SPLSR <sub>xy</sub> < 0.3 and ΣSAR < 1.6 W/kg
(1c,2a)	4.53	1.028	0.23	N	SPLSR <sub>xy</sub> < 0.3 and ΣSAR < 1.6 W/kg
(1d,2a)	6.87	1.690)*	0.25	N	ΣSAR > 1.6 W/kg but SPLSR <sub>xy</sub> < 0.3
(1e,2a)	6.77	1.520)*	0.22	N	SPLSR <sub>xy</sub> < 0.3 and ΣSAR < 1.6 W/kg
(1f,2a)	5.57	0.764	0.14	N	SPLSR <sub>xy</sub> < 0.3 and ΣSAR < 1.6 W/kg
(1g,2a)	6.91	1.417	0.20	N	SPLSR <sub>xy</sub> < 0.3 and ΣSAR < 1.6 W/kg

Table 24: Antenna distances and SPLSR evaluation in head position

SPLSR<sub>xy</sub> = SAR-to-(peak-locations spacing) ratio = (SAR<sub>x</sub>+SAR<sub>y</sub>)/L<sub>xy</sub>

Σ 1g-SAR: sum of the highest SAR of Tx No. 1 and the SAR of Tx No. 2 at the same DUT position or orientation as the highest value of Tx No. 1 i.e. not necessarily the sum of the highest SAR values of both transmitters.

)\*: for those results a refined XYZ evaluation from zoom scan has been added at the end of this section

b) body position

Tx No.	Communication system and frequency band	P <sub>avg</sub> (mW)	single SAR (W/kg)(see ch. 7.2)		remarks
			front	rear	
1a	GSM 850 MHz	500	0.845	<b>0.956</b>	routine evaluation
1b	GSM 1900 MHz	250	0.554	<b>0.862</b>	routine evaluation
1c	FDD V 850 MHz	250	0.683	<b>0.772</b>	routine evaluation
1d	FDD IV 1750 MHz	250	0.847	<b>1.000</b>	routine evaluation
1e	FDD II 1900 MHz	250	0.671	<b>0.891</b>	routine evaluation
1f	LTE FDD 17 750 MHz	250	0.197	<b>0.491</b>	routine evaluation
1g	LTE FDD 4 1750 MHz	250	0.879	<b>1.240</b>	routine evaluation
2a	WLAN 2450 MHz	50	0.092	<b>0.083</b>	routine evaluation
2b	Bluetooth 2450 MHz	4.5	:=0		P <sub>2</sub> < P <sub>ref</sub> (P <sub>ref</sub> : 12 mW at 2.4 GHz)
Sum of all 1g-SAR values			n/a		

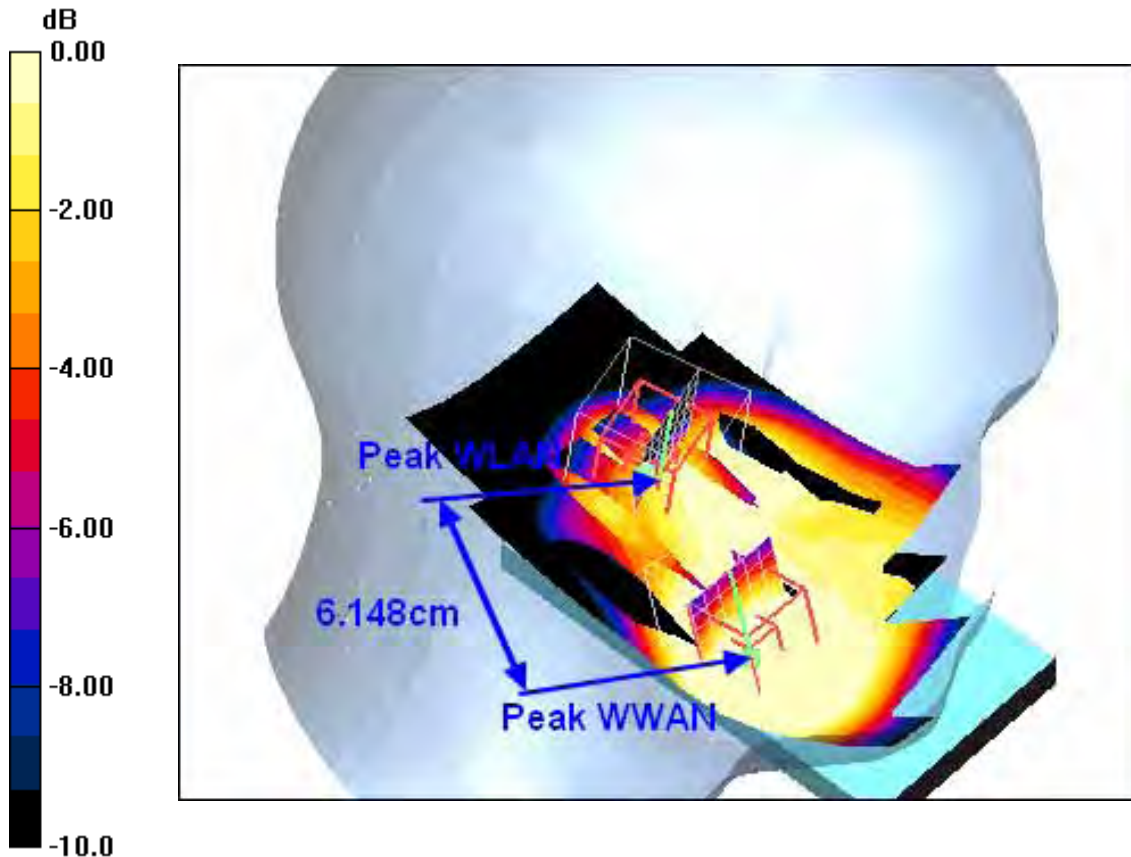
Table 25: Communication systems and SAR values in body position

antenna pair (x,y)	peak-locations spacing L <sub>xy</sub> (cm)	Σ 1g-SAR (W/kg)	SPLSR <sub>xy</sub>	sim.-Tx SAR	remarks
(1a,2a)	7.47	1.039	0.14	N	SPLSR <sub>xy</sub> < 0.3 and ΣSAR < 1.6 W/kg
(1b,2a)	8.76	0.945	0.11	N	SPLSR <sub>xy</sub> < 0.3 and ΣSAR < 1.6 W/kg
(1c,2a)	7.82	0.855	0.11	N	SPLSR <sub>xy</sub> < 0.3 and ΣSAR < 1.6 W/kg
(1d,2a)	9.17	1.083	0.12	N	SPLSR <sub>xy</sub> < 0.3 and ΣSAR < 1.6 W/kg
(1e,2a)	8.44	0.974	0.12	N	SPLSR <sub>xy</sub> < 0.3 and ΣSAR < 1.6 W/kg
(1f,2a)	7.75	0.574	0.07	N	SPLSR <sub>xy</sub> < 0.3 and ΣSAR < 1.6 W/kg
(1g,2a)	8.86	1.323	0.15	N	SPLSR <sub>xy</sub> < 0.3 and ΣSAR < 1.6 W/kg

Table 26: Antenna distances and SPLSR evaluation in body position  
 SPLSR<sub>xy</sub> = SAR-to-(peak-locations spacing) ratio = (SAR<sub>x</sub>+SAR<sub>y</sub>)/L<sub>xy</sub>

IEEE1528-LeftHandSide-WCDMA FDD IV + WLAN2.4

DUT: Sony Ericsson; Type: AAL-8880001-BV; Serial: CB5A1JE2QHSerail: CB5A1JE2KL



0 dB = 0.506mW/g

Peak Co-ordinates (mm)						peak-locations spacing Lxyz (cm)	WCDMA FDD IV SAR max. (W/kg)	WLAN 2.4 SAR max. (W/kg)	ΣSAR (W/kg)	SPLSRxyz <0.3
WCDMA FDD IV Ch9400			WLAN 2.4 Ch11							
x	y	z	x	y	z					
61	250	-173	31.6	304	-173	6.148	1.220	0.470	<b>1.690</b>	<b>0.27</b>

$$L_{xyz} = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2 + (z_1 - z_2)^2}$$

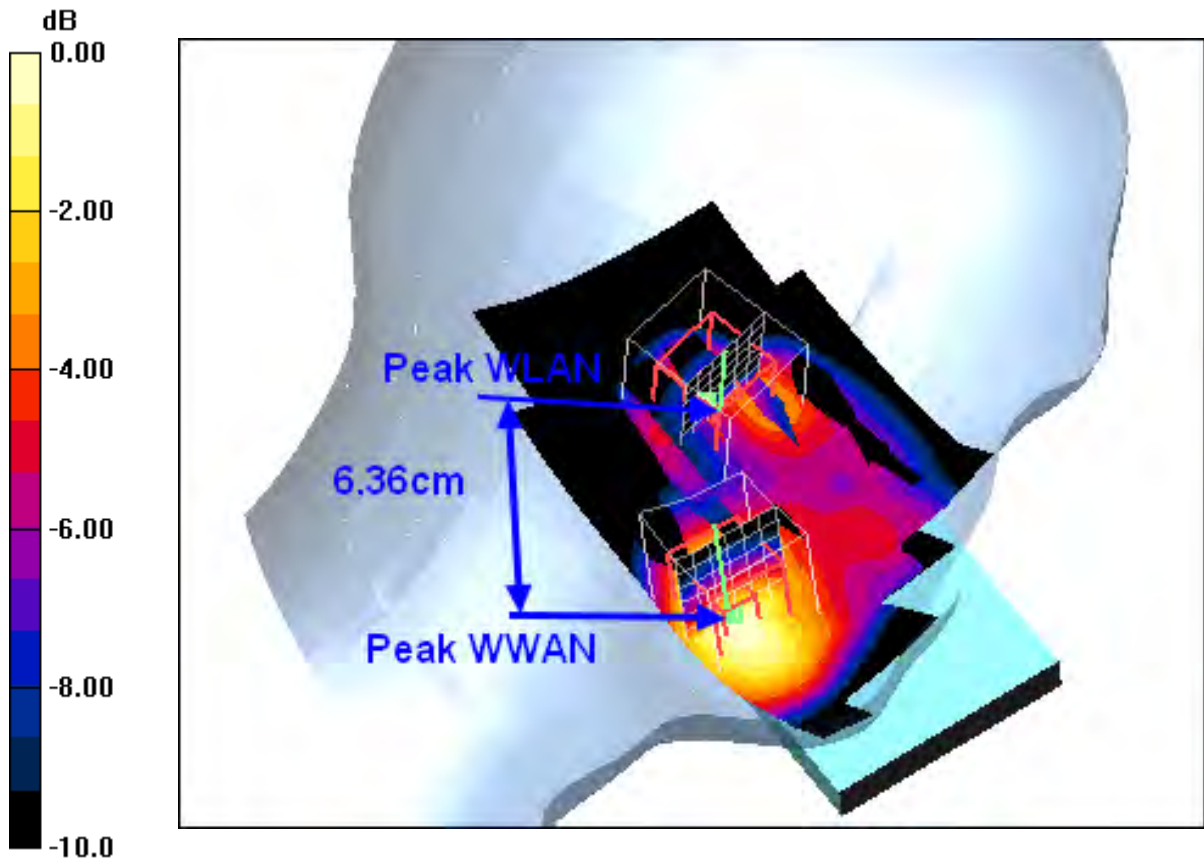
**Conclusion:**

SAR-to-(peak-locations spacing) ratio (SPLSR<sub>xyz</sub>) is less than 0.3 therefore simultaneous transmission SAR with Volume Scans is not required.



IEEE1528-LeftHandSide- FDD II + WLAN

DUT: Sony Ericsson; Type: AAL-8880001-BV; Serial: CB5A1JE2QH Serial: CB5A1JE2KL



0 dB = 1.12mW/g

Peak Co-ordinates (mm)						peak-locations spacing Lxyz (cm)	WCDMA FDD II SAR max. (W/kg)	WLAN 2.4 SAR max. (W/kg)	ΣSAR (W/kg)	SPLSR <sub>xyz</sub> <0.3
WCDMA FDD II Ch9400			WLAN 2.4 Ch11							
x	y	z	x	y	z					
68.2	252	-172	31.6	304	-173	6.360	1.050	0.470	<b>1.520</b>	<b>0.24</b>

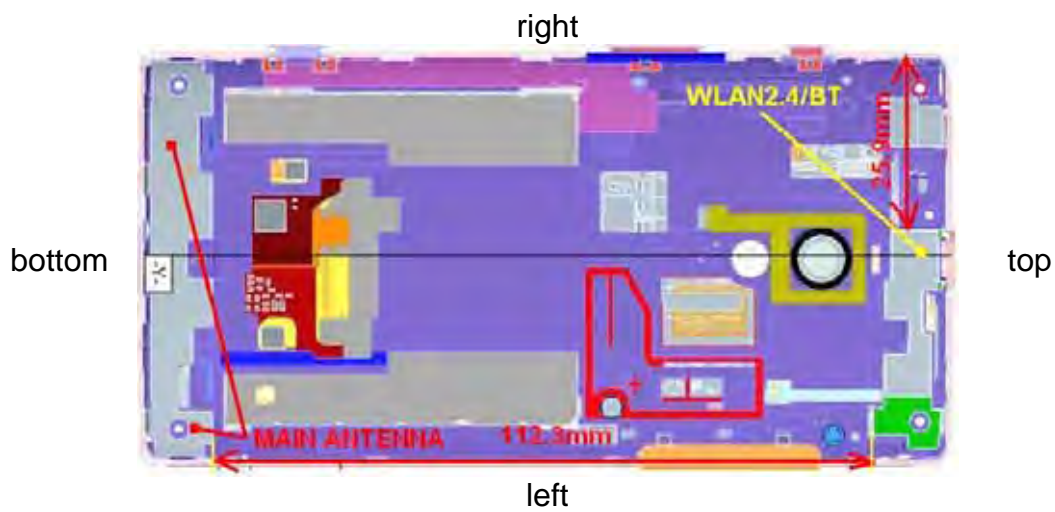
$$L_{xyz} = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2 + (z_1 - z_2)^2}$$

**Conclusion:**

SAR-to-(peak-locations spacing) ratio (SPLSR<sub>xyz</sub>) is less than 0.3 therefore simultaneous transmission SAR with Volume Scans is not required.

### 7.1.14 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 1750	yes	yes	yes	yes	no	yes
WCDMA FDD II 1900	yes	yes	yes	yes	no	yes
LTE FDD 17 750	yes	yes	yes	yes	no	yes
LTE FDD 4 1750	yes	yes	yes	yes	no	yes
WLAN 2450	yes	yes	yes	no	yes	no



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

## 7.2 SAR test results

### 7.2.1 Results overview

Note: At body test position the device was tested at 10 mm distance to cover WiFi Hotspot conditions. Body worn operation with personal handsfree (headset) was additionally covered by testing at worst case position (rear) determined during WiFi Hotspot measurements, with a distance of 15 mm and without any power reduction.

Head SAR GSM 850 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Left hand test result	Right hand test result	Limit	Liquid temperature left	Liquid temperature right
128 / 824.2 MHz	cheek	0.375 W/kg	0.385 W/kg	1.6 W/kg	22.5 °C	22.7 °C
190 / 836.6 MHz	cheek	0.543 W/kg	0.578 W/kg	1.6 W/kg	22.5 °C	22.5 °C
251 / 848.8 MHz	cheek	0.602 W/kg	<b>0.636 W/kg</b>	1.6 W/kg	22.5 °C	22.5 °C
128 / 824.2 MHz	tilted 15°	0.203 W/kg	0.214 W/kg	1.6 W/kg	22.5 °C	22.5 °C
190 / 836.6 MHz	tilted 15°	0.297 W/kg	0.304 W/kg	1.6 W/kg	22.5 °C	22.5 °C
251 / 848.8 MHz	tilted 15°	0.343 W/kg	0.340 W/kg	1.6 W/kg	22.5 °C	22.5 °C

Table 27: Test results head SAR GSM 850 MHz

Body SAR GSM 850 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	WiFi hotspot test result	Limit	Liquid temperature
128 / 824.2 MHz	front	10 mm	2 time slots	0.630 W/kg	1.6 W/kg	20.5 °C
190 / 836.6 MHz	front	10 mm	2 time slots	0.779 W/kg	1.6 W/kg	20.5 °C
251 / 848.8 MHz	front	10 mm	2 time slots	0.845 W/kg	1.6 W/kg	20.5 °C
128 / 824.2 MHz	rear	10 mm	2 time slots	0.716 W/kg	1.6 W/kg	20.5 °C
190 / 836.6 MHz	rear	10 mm	2 time slots	0.930 W/kg	1.6 W/kg	20.5 °C
251 / 848.8 MHz	rear	10 mm	2 time slots	<b>0.956 W/kg</b>	1.6 W/kg	20.5 °C
190 / 836.6 MHz	left	10 mm	2 time slots	0.309 W/kg	1.6 W/kg	20.5 °C
190 / 836.6 MHz	right	10 mm	2 time slots	0.446 W/kg	1.6 W/kg	20.5 °C
190 / 836.6 MHz	bottom	10 mm	2 time slots	0.179 W/kg	1.6 W/kg	20.5 °C
Body SAR GSM 850 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	Body worn test result	Limit	Liquid temperature
251 / 848.8 MHz	rear	15 mm	1 time slot	0.565 W/kg	1.6 W/kg	20.5 °C

Table 28: Test results body SAR GSM 850 MHz

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

Head SAR GSM 1900 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Left hand test result	Right hand test result	Limit	Liquid temperature left	Liquid temperature right
512 / 1850.2 MHz	cheek	0.607 W/kg	0.338 W/kg	1.6 W/kg	22.6 °C	22.6 °C
661 / 1880.0 MHz	cheek	<b>0.614 W/kg</b>	0.304 W/kg	1.6 W/kg	22.6 °C	22.6 °C
810 / 1909.8 MHz	cheek	0.547 W/kg	0.318 W/kg	1.6 W/kg	22.6 °C	22.6 °C
512 / 1850.2 MHz	tilted 15°	0.251 W/kg	0.178 W/kg	1.6 W/kg	22.6 °C	22.6 °C
661 / 1880.0 MHz	tilted 15°	0.247 W/kg	0.170 W/kg	1.6 W/kg	22.6 °C	22.6 °C
810 / 1909.8 MHz	tilted 15°	0.222 W/kg	0.160 W/kg	1.6 W/kg	22.6 °C	22.6 °C

Table 29: Test results head SAR GSM 1900 MHz

Body SAR GSM 1900 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	WiFi hotspot test result	Limit	Liquid temperature
512 / 1850.2 MHz	front	10 mm	2 time slots	0.550 W/kg	1.6 W/kg	22.3 °C
661 / 1880.0 MHz	front	10 mm	2 time slots	0.533 W/kg	1.6 W/kg	22.3 °C
810 / 1909.8 MHz	front	10 mm	2 time slots	0.554 W/kg	1.6 W/kg	22.3 °C
512 / 1850.2 MHz	rear	10 mm	2 time slots	<b>0.862 W/kg</b>	1.6 W/kg	22.3 °C
661 / 1880.0 MHz	rear	10 mm	2 time slots	0.803 W/kg	1.6 W/kg	22.3 °C
810 / 1909.8 MHz	rear	10 mm	2 time slots	0.749 W/kg	1.6 W/kg	22.3 °C
661 / 1880.0 MHz	left	10 mm	2 time slots	0.594 W/kg	1.6 W/kg	22.3 °C
661 / 1880.0 MHz	right	10 mm	2 time slots	0.172 W/kg	1.6 W/kg	22.3 °C
661 / 1880.0 MHz	bottom	10 mm	2 time slots	0.175 W/kg	1.6 W/kg	22.3 °C
Body SAR GSM 1900 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	Body worn test result	Limit	Liquid temperature
512 / 1850.2 MHz	rear	15 mm	1 time slot	0.410 W/kg	1.6 W/kg	22.3 °C

Table 30: Test results body SAR GSM 1900 MHz

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

Head SAR UMTS FDD II 1900 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Left hand test result	Right hand test result	Limit	Liquid temperature	
					left	right
9262 / 1852.4 MHz	cheek	1.040 W/kg	0.537 W/kg	1.6 W/kg	22.0 °C	22.0 °C
9400 / 1880.0 MHz	cheek	<b>1.050 W/kg</b>	0.528 W/kg	1.6 W/kg	22.0 °C	22.0 °C
9538 / 1907.6 MHz	cheek	0.961 W/kg	0.531 W/kg	1.6 W/kg	22.0 °C	22.0 °C
9262 / 1852.4 MHz	tilted 15°	0.444 W/kg	0.345 W/kg	1.6 W/kg	22.0 °C	22.0 °C
9400 / 1880.0 MHz	tilted 15°	0.304 W/kg	0.257 W/kg	1.6 W/kg	22.0 °C	22.0 °C
9538 / 1907.6 MHz	tilted 15°	0.295 W/kg	0.291 W/kg	1.6 W/kg	22.0 °C	22.0 °C

Table 31: Test results head SAR UMTS FDD II 1900 MHz

Body SAR UMTS FDD II 1900 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	WiFi hotspot test result	Limit	Liquid temperature
						temperature
9262 / 1852.4 MHz	front	10 mm	12.2kbit/s	0.626 W/kg	1.6 W/kg	22.2 °C
9400 / 1880.0 MHz	front	10 mm	12.2kbit/s	0.645 W/kg	1.6 W/kg	22.2 °C
9538 / 1907.6 MHz	front	10 mm	12.2kbit/s	0.671 W/kg	1.6 W/kg	22.2 °C
9262 / 1852.4 MHz	rear	10 mm	12.2kbit/s	0.744 W/kg	1.6 W/kg	22.2 °C
9400 / 1880.0 MHz	rear	10 mm	12.2kbit/s	0.746 W/kg	1.6 W/kg	22.2 °C
9538 / 1907.6 MHz	rear	10 mm	12.2kbit/s	<b>0.891 W/kg</b>	1.6 W/kg	22.2 °C
9400 / 1880.0 MHz	left	10 mm	12.2kbit/s	0.615 W/kg	1.6 W/kg	22.2 °C
9400 / 1880.0 MHz	right	10 mm	12.2kbit/s	0.156 W/kg	1.6 W/kg	22.2 °C
9400 / 1880.0 MHz	bottom	10 mm	12.2kbit/s	0.245 W/kg	1.6 W/kg	22.2 °C
Body SAR UMTS FDD II 1900 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	Body worn test result	Limit	Liquid temperature
						temperature
9538 / 1907.6 MHz	rear	15 mm	12.2kbit/s	0.509 W/kg	1.6 W/kg	22.2 °C

Table 32: Test results body SAR UMTS FDD II 1900 MHz

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

Head SAR UMTS FDD IV 1750 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Left hand test result	Right hand test result	Limit	Liquid temperature	
					left	right
1312 / 1712.4 MHz	cheek	0.981 W/kg	0.531 W/kg	1.6 W/kg	23.0 °C	23.2 °C
1412 / 1732.4 MHz	cheek	1.140 W/kg	0.636 W/kg	1.6 W/kg	23.0 °C	23.2 °C
1513 / 1752.6 MHz	cheek	<b>1.220 W/kg</b>	0.572 W/kg	1.6 W/kg	23.0 °C	23.2 °C
1312 / 1712.4 MHz	tilted 15°	0.373 W/kg	0.281 W/kg	1.6 W/kg	23.2 °C	23.2 °C
1412 / 1732.4 MHz	tilted 15°	0.451 W/kg	0.359 W/kg	1.6 W/kg	23.2 °C	23.2 °C
1513 / 1752.6 MHz	tilted 15°	0.476 W/kg	0.393 W/kg	1.6 W/kg	23.2 °C	23.2 °C

Table 33: Test results head SAR UMTS FDD IV 1750 MHz

Body SAR UMTS FDD IV 1750 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	WiFi hotspot test result	Limit	Liquid temperature
						temperature
1312 / 1712.4 MHz	front	10 mm	12.2kbit/s	0.760 W/kg	1.6 W/kg	20.4 °C
1412 / 1732.4 MHz	front	10 mm	12.2kbit/s	0.814 W/kg	1.6 W/kg	20.4 °C
1513 / 1752.6 MHz	front	10 mm	12.2kbit/s	0.847 W/kg	1.6 W/kg	20.4 °C
1312 / 1712.4 MHz	rear	10 mm	12.2kbit/s	0.834 W/kg	1.6 W/kg	20.4 °C
1412 / 1732.4 MHz	rear	10 mm	12.2kbit/s	0.947 W/kg	1.6 W/kg	20.4 °C
1513 / 1752.6 MHz	rear	10 mm	12.2kbit/s	<b>1.000 W/kg</b>	1.6 W/kg	20.4 °C
1412 / 1732.4 MHz	left	10 mm	12.2kbit/s	0.866 W/kg	1.6 W/kg	20.4 °C
1412 / 1732.4 MHz	right	10 mm	12.2kbit/s	0.095 W/kg	1.6 W/kg	20.4 °C
1412 / 1732.4 MHz	bottom	10 mm	12.2kbit/s	0.253 W/kg	1.6 W/kg	20.4 °C
Body SAR UMTS FDD IV 1750 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	Body worn test result	Limit	Liquid temperature
						temperature
1312 / 1712.4 MHz	rear	15 mm	12.2kbit/s	0.911 W/kg	1.6 W/kg	20.4 °C
1412 / 1732.4 MHz	rear	15 mm	12.2kbit/s	1.040 W/kg	1.6 W/kg	20.4 °C
1513 / 1752.6 MHz	rear	15 mm	12.2kbit/s	<b>1.090 W/kg</b>	1.6 W/kg	20.4 °C

Table 34: Test results body SAR UMTS FDD IV 1750 MHz

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

Head SAR UMTS FDD V 850 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Left hand test result	Right hand test result	Limit	Liquid temperature	
					left	right
4132 / 826.4 MHz	cheek	0.428 W/kg	0.530 W/kg	1.6 W/kg	22.7 °C	22.7 °C
4182 / 836.4 MHz	cheek	0.530 W/kg	0.685 W/kg	1.6 W/kg	22.7 °C	22.7 °C
4233 / 846.6 MHz	cheek	0.558 W/kg	<b>0.732 W/kg</b>	1.6 W/kg	22.7 °C	22.7 °C
4132 / 826.4 MHz	tilted 15°	0.251 W/kg	0.286 W/kg	1.6 W/kg	22.7 °C	22.7 °C
4182 / 836.4 MHz	tilted 15°	0.294 W/kg	0.359 W/kg	1.6 W/kg	22.7 °C	22.7 °C
4233 / 846.6 MHz	tilted 15°	0.330 W/kg	0.380 W/kg	1.6 W/kg	22.7 °C	22.7 °C

Table 35: Test results head SAR UMTS FDD V 850 MHz

Body SAR UMTS FDD V 850 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	WiFi hotspot test result	Limit	Liquid temperature
						temperature
4132 / 826.4 MHz	front	10 mm	12.2kbit/s	0.581 W/kg	1.6 W/kg	21.7 °C
4182 / 836.4 MHz	front	10 mm	12.2kbit/s	0.625 W/kg	1.6 W/kg	21.7 °C
4233 / 846.6 MHz	front	10 mm	12.2kbit/s	0.683 W/kg	1.6 W/kg	21.7 °C
4132 / 826.4 MHz	rear	10 mm	12.2kbit/s	0.626 W/kg	1.6 W/kg	20.5 °C
4182 / 836.4 MHz	rear	10 mm	12.2kbit/s	0.702 W/kg	1.6 W/kg	20.5 °C
4233 / 846.6 MHz	rear	10 mm	12.2kbit/s	<b>0.772 W/kg</b>	1.6 W/kg	20.5 °C
4182 / 836.4 MHz	left	10 mm	12.2kbit/s	0.691 W/kg	1.6 W/kg	20.5 °C
4182 / 836.4 MHz	right	10 mm	12.2kbit/s	0.606 W/kg	1.6 W/kg	20.5 °C
4182 / 836.4 MHz	bottom	10 mm	12.2kbit/s	0.432 W/kg	1.6 W/kg	20.5 °C
Body SAR UMTS FDD V 850 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	Body worn test result	Limit	Liquid temperature
						temperature
4233 / 846.6 MHz	rear	15 mm	12.2kbit/s	0.524 W/kg	1.6 W/kg	21.7 °C

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

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

Head SAR LTE FDD 4 1750MHz 20MHz bandwidth(averaged over 1g tissue volume)							
Channel / frequency	Modulation	RB	RB offset	Position	Left hand test result	Limit	Liquid temperature
20050/1720MHz	QPSK	50	25	cheek	0.538 W/kg	1.6 W/kg	22.2 °C
20175/1732.5MHz	QPSK	50	25	cheek	0.602 W/kg	1.6 W/kg	22.2 °C
20300/1745MHz	QPSK	50	25	cheek	0.595 W/kg	1.6 W/kg	22.2 °C
20050/1720MHz	QPSK	50	25	tilted 15°	0.231 W/kg	1.6 W/kg	22.2 °C
20175/1732.5MHz	QPSK	50	25	tilted 15°	0.209 W/kg	1.6 W/kg	22.2 °C
20300/1745MHz	QPSK	50	25	tilted 15°	0.210 W/kg	1.6 W/kg	22.2 °C
20175/1732.5MHz	QPSK	1	99	cheek	<b>0.947 W/kg</b>	1.6 W/kg	22.2 °C
20175/1732.5MHz	QPSK	1	0	cheek	0.919 W/kg	1.6 W/kg	22.2 °C
20175/1732.5MHz	16QAM	50	25	cheek	0.415 W/kg	1.6 W/kg	22.2 °C
20175/1732.5MHz	16QAM	1	99	cheek	0.601 W/kg	1.6 W/kg	22.2 °C
20175/1732.5MHz	16QAM	1	0	cheek	0.757 W/kg	1.6 W/kg	22.2 °C
20175/1732.5MHz	QPSK	1	99	tilted 15°	0.290 W/kg	1.6 W/kg	22.2 °C
20175/1732.5MHz	QPSK	1	0	tilted 15°	0.279 W/kg	1.6 W/kg	22.2 °C
20175/1732.5MHz	16QAM	50	25	tilted 15°	0.191 W/kg	1.6 W/kg	22.2 °C
20175/1732.5MHz	16QAM	1	99	tilted 15°	0.276 W/kg	1.6 W/kg	22.2 °C
20175/1732.5MHz	16QAM	1	0	tilted 15°	0.222 W/kg	1.6 W/kg	22.2 °C
Channel / frequency	BW (MHz)	RB	RB offset	Position	Right hand test result	Limit	Liquid temperature
20050/1720MHz	QPSK	50	25	cheek	0.345 W/kg	1.6 W/kg	22.2 °C
20175/1732.5MHz	QPSK	50	25	cheek	0.377 W/kg	1.6 W/kg	22.2 °C
20300/1745MHz	QPSK	50	25	cheek	0.379 W/kg	1.6 W/kg	22.2 °C
20050/1720MHz	QPSK	50	25	tilted 15°	0.241 W/kg	1.6 W/kg	22.2 °C
20175/1732.5MHz	QPSK	50	25	tilted 15°	0.209 W/kg	1.6 W/kg	22.2 °C
20300/1745MHz	QPSK	50	25	tilted 15°	0.208 W/kg	1.6 W/kg	22.2 °C
20175/1732.5MHz	QPSK	1	99	cheek	0.421 W/kg	1.6 W/kg	22.5 °C
20175/1732.5MHz	QPSK	1	0	cheek	0.428 W/kg	1.6 W/kg	22.5 °C
20175/1732.5MHz	16QAM	50	25	cheek	0.283 W/kg	1.6 W/kg	22.5 °C
20175/1732.5MHz	16QAM	1	99	cheek	0.468 W/kg	1.6 W/kg	22.5 °C
20175/1732.5MHz	16QAM	1	0	cheek	0.419 W/kg	1.6 W/kg	22.5 °C
20175/1732.5MHz	QPSK	1	99	tilted 15°	0.250 W/kg	1.6 W/kg	22.5 °C
20175/1732.5MHz	QPSK	1	0	tilted 15°	0.260 W/kg	1.6 W/kg	22.5 °C
20175/1732.5MHz	16QAM	50	25	tilted 15°	0.123 W/kg	1.6 W/kg	22.5 °C
20175/1732.5MHz	16QAM	1	99	tilted 15°	0.166 W/kg	1.6 W/kg	22.5 °C
20175/1732.5MHz	16QAM	1	0	tilted 15°	0.162 W/kg	1.6 W/kg	22.5 °C

Table 37: Test results head SAR LTE FDD 4 1750 MHz 20MHz bandwidth



Head SAR LTE FDD 4 1750MHz 1.4MHz bandwidth(averaged over 1g tissue volume)							
Channel / frequency	BW (MHz)	RB	RB offset	Position	Left hand test result	Limit	Liquid temperature
19957/1710.7MHz	QPSK	3	2	cheek	0.750 W/kg	1.6 W/kg	22.2 °C
20175/1732.5MHz	QPSK	3	2	cheek	0.870 W/kg	1.6 W/kg	22.2 °C
20393/1754.3MHz	QPSK	3	2	cheek	0.891 W/kg	1.6 W/kg	22.2 °C
19957/1710.7MHz	QPSK	3	2	tilted 15°	0.232 W/kg	1.6 W/kg	22.2 °C
20175/1732.5MHz	QPSK	3	2	tilted 15°	0.285 W/kg	1.6 W/kg	22.2 °C
20393/1754.3MHz	QPSK	3	2	tilted 15°	0.281 W/kg	1.6 W/kg	22.2 °C
20393/1754.3MHz	QPSK	1	5	cheek	0.931 W/kg	1.6 W/kg	22.2 °C
20393/1754.3MHz	QPSK	1	0	cheek	<b>0.939 W/kg</b>	1.6 W/kg	22.2 °C
20393/1754.3MHz	16QAM	3	2	cheek	0.782 W/kg	1.6 W/kg	22.2 °C
20393/1754.3MHz	16QAM	1	5	cheek	0.773 W/kg	1.6 W/kg	22.2 °C
20393/1754.3MHz	16QAM	1	0	cheek	0.789 W/kg	1.6 W/kg	22.2 °C
20393/1754.3MHz	QPSK	1	5	tilted 15°	0.265 W/kg	1.6 W/kg	22.2 °C
20393/1754.3MHz	QPSK	1	0	tilted 15°	0.265 W/kg	1.6 W/kg	22.2 °C
20393/1754.3MHz	16QAM	3	2	tilted 15°	0.252 W/kg	1.6 W/kg	22.2 °C
20393/1754.3MHz	16QAM	1	5	tilted 15°	0.240 W/kg	1.6 W/kg	22.2 °C
20393/1754.3MHz	16QAM	1	0	tilted 15°	0.208 W/kg	1.6 W/kg	22.2 °C
Channel / frequency	BW (MHz)	RB	RB offset	Position	Right hand test result	Limit	Liquid temperature
19957/1710.7MHz	QPSK	3	2	cheek	0.439 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	QPSK	3	2	cheek	0.475 W/kg	1.6 W/kg	22.1 °C
20393/1754.3MHz	QPSK	3	2	cheek	0.472 W/kg	1.6 W/kg	22.1 °C
19957/1710.7MHz	QPSK	3	2	tilted 15°	0.244 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	QPSK	3	2	tilted 15°	0.274 W/kg	1.6 W/kg	22.1 °C
20393/1754.3MHz	QPSK	3	2	tilted 15°	0.281 W/kg	1.6 W/kg	22.1 °C
20393/1754.3MHz	QPSK	1	5	cheek	0.411 W/kg	1.6 W/kg	23.4 °C
20393/1754.3MHz	QPSK	1	0	cheek	0.501 W/kg	1.6 W/kg	23.4 °C
20393/1754.3MHz	16QAM	3	2	cheek	0.326 W/kg	1.6 W/kg	23.4 °C
20393/1754.3MHz	16QAM	1	5	cheek	0.312 W/kg	1.6 W/kg	23.4 °C
20393/1754.3MHz	16QAM	1	0	cheek	0.309 W/kg	1.6 W/kg	23.4 °C
20393/1754.3MHz	QPSK	1	5	tilted 15°	0.249 W/kg	1.6 W/kg	23.4 °C
20393/1754.3MHz	QPSK	1	0	tilted 15°	0.248 W/kg	1.6 W/kg	23.4 °C
20393/1754.3MHz	16QAM	3	2	tilted 15°	0.160 W/kg	1.6 W/kg	23.4 °C
20393/1754.3MHz	16QAM	1	5	tilted 15°	0.210 W/kg	1.6 W/kg	23.4 °C
20393/1754.3MHz	16QAM	1	0	tilted 15°	0.176 W/kg	1.6 W/kg	23.4 °C

Table 38: Test results head SAR LTE FDD 4 1750 MHz 1.4MHz bandwidth

Body SAR LTE FDD 4 1750MHz 20MHz bandwidth(averaged over 1g tissue volume)							
Channel / frequency	Modulation	RB	RB offset	Position	WiFi hotspot test result	Limit	Liquid temperature
20050/1720MHz	QPSK	50	25	front	0.707 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	QPSK	50	25	front	0.746 W/kg	1.6 W/kg	22.1 °C
20300/1745MHz	QPSK	50	25	front	0.746 W/kg	1.6 W/kg	22.1 °C
20050/1720MHz	QPSK	50	25	rear	1.070 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	QPSK	50	25	rear	1.090 W/kg	1.6 W/kg	22.1 °C
20300/1745MHz	QPSK	50	25	rear	1.070 W/kg	1.6 W/kg	22.1 °C
20050/1720MHz	QPSK	50	25	left	0.914 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	QPSK	50	25	left	0.941 W/kg	1.6 W/kg	22.1 °C
20300/1745MHz	QPSK	50	25	left	0.883 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	QPSK	50	25	right	0.099 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	QPSK	50	25	bottom	0.262 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	QPSK	1	99	rear	1.230 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	QPSK	1	0	rear	<b>1.240 W/kg</b>	1.6 W/kg	22.1 °C
20175/1732.5MHz	16QAM	50	25	rear	0.837 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	16QAM	1	99	rear	1.110 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	16QAM	1	0	rear	1.170 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	QPSK	1	99	front	0.910 W/kg	1.6 W/kg	22.4 °C
20175/1732.5MHz	QPSK	1	0	front	0.920 W/kg	1.6 W/kg	22.4 °C
20175/1732.5MHz	16QAM	50	25	front	0.643 W/kg	1.6 W/kg	22.4 °C
20175/1732.5MHz	16QAM	1	99	front	0.846 W/kg	1.6 W/kg	22.4 °C
20175/1732.5MHz	16QAM	1	0	front	0.853 W/kg	1.6 W/kg	22.4 °C
20175/1732.5MHz	QPSK	1	99	left	0.738 W/kg	1.6 W/kg	22.4 °C
20175/1732.5MHz	QPSK	1	0	left	0.782 W/kg	1.6 W/kg	22.4 °C
20175/1732.5MHz	16QAM	50	25	left	0.447 W/kg	1.6 W/kg	22.4 °C
20175/1732.5MHz	16QAM	1	99	left	0.600 W/kg	1.6 W/kg	22.4 °C
20175/1732.5MHz	16QAM	1	0	left	0.632 W/kg	1.6 W/kg	22.4 °C
20175/1732.5MHz	QPSK	1	99	right	0.126 W/kg	1.6 W/kg	22.4 °C
20175/1732.5MHz	QPSK	1	0	right	0.127 W/kg	1.6 W/kg	22.4 °C
20175/1732.5MHz	16QAM	50	25	right	0.063 W/kg	1.6 W/kg	22.4 °C
20175/1732.5MHz	16QAM	1	99	right	0.092 W/kg	1.6 W/kg	22.4 °C
20175/1732.5MHz	16QAM	1	0	right	0.088 W/kg	1.6 W/kg	22.4 °C
20175/1732.5MHz	QPSK	1	99	bottom	0.310 W/kg	1.6 W/kg	22.4 °C
20175/1732.5MHz	QPSK	1	0	bottom	0.348 W/kg	1.6 W/kg	22.4 °C
20175/1732.5MHz	16QAM	50	25	bottom	0.213 W/kg	1.6 W/kg	22.4 °C
20175/1732.5MHz	16QAM	1	99	bottom	0.261 W/kg	1.6 W/kg	22.4 °C
20175/1732.5MHz	16QAM	1	0	bottom	0.295 W/kg	1.6 W/kg	22.4 °C

Table 39: Test results body SAR LTE FDD 4 1750 MHz 20MHz bandwidth 10 mm distance

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

Body SAR LTE FDD 4 1750MHz 20MHz bandwidth(averaged over 1g tissue volume)							
Channel / frequency	Modulation	RB	RB offset	Position	Body worn test result	Limit	Liquid temperature
20175/1732.5MHz	QPSK	50	25	rear	0.419 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	QPSK	1	99	rear	0.499 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	QPSK	1	0	rear	0.605 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	16QAM	50	25	rear	0.328 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	16QAM	1	99	rear	0.418 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	16QAM	1	0	rear	0.357 W/kg	1.6 W/kg	22.1 °C

Table 40: Test results body SAR LTE FDD 4 1750 MHz 20MHz bandwidth 15 mm distance with headset

Body SAR LTE FDD 4 1750MHz 1.4MHz bandwidth(averaged over 1g tissue volume)							
Channel / frequency	BW (MHz)	RB	RB offset	Position	WiFi hotspot test result	Limit	Liquid temperature
19957/1710.7MHz	QPSK	3	2	front	0.796 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	QPSK	3	2	front	0.879 W/kg	1.6 W/kg	22.1 °C
20393/1754.3MHz	QPSK	3	2	front	0.846 W/kg	1.6 W/kg	22.1 °C
19957/1710.7MHz	QPSK	3	2	rear	1.070 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	QPSK	3	2	rear	1.130 W/kg	1.6 W/kg	22.1 °C
20393/1754.3MHz	QPSK	3	2	rear	<b>1.180 W/kg</b>	1.6 W/kg	22.1 °C
19957/1710.7MHz	QPSK	3	2	left	0.726 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	QPSK	3	2	left	0.843 W/kg	1.6 W/kg	22.1 °C
20393/1754.3MHz	QPSK	3	2	left	0.914 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	QPSK	3	2	right	0.100 W/kg	1.6 W/kg	22.1 °C
20175/1732.5MHz	QPSK	3	2	bottom	0.452 W/kg	1.6 W/kg	22.1 °C
20393/1754.3MHz	QPSK	1	5	rear	1.170 W/kg	1.6 W/kg	22.1 °C
20393/1754.3MHz	QPSK	1	0	rear	1.080 W/kg	1.6 W/kg	22.1 °C
20393/1754.3MHz	16QAM	3	2	rear	1.000 W/kg	1.6 W/kg	22.1 °C
20393/1754.3MHz	16QAM	1	5	rear	1.040 W/kg	1.6 W/kg	22.1 °C
20393/1754.3MHz	16QAM	1	0	rear	1.050 W/kg	1.6 W/kg	22.1 °C
20393/1754.3MHz	QPSK	1	5	front	0.937 W/kg	1.6 W/kg	22.3 °C
20393/1754.3MHz	QPSK	1	0	front	0.918 W/kg	1.6 W/kg	22.3 °C
20393/1754.3MHz	16QAM	3	2	front	0.806 W/kg	1.6 W/kg	22.3 °C
20393/1754.3MHz	16QAM	1	5	front	0.780 W/kg	1.6 W/kg	22.3 °C
20393/1754.3MHz	16QAM	1	0	front	0.847 W/kg	1.6 W/kg	22.3 °C
20393/1754.3MHz	QPSK	1	5	left	0.919 W/kg	1.6 W/kg	22.3 °C
20393/1754.3MHz	QPSK	1	0	left	0.900 W/kg	1.6 W/kg	22.3 °C
20393/1754.3MHz	16QAM	3	2	left	0.795 W/kg	1.6 W/kg	22.3 °C
20393/1754.3MHz	16QAM	1	5	left	0.763 W/kg	1.6 W/kg	22.3 °C
20393/1754.3MHz	16QAM	1	0	left	0.747 W/kg	1.6 W/kg	22.3 °C
20393/1754.3MHz	QPSK	1	5	right	0.109 W/kg	1.6 W/kg	22.3 °C
20393/1754.3MHz	QPSK	1	0	right	0.110 W/kg	1.6 W/kg	22.3 °C
20393/1754.3MHz	16QAM	3	2	right	0.095 W/kg	1.6 W/kg	22.3 °C
20393/1754.3MHz	16QAM	1	5	right	0.098 W/kg	1.6 W/kg	22.3 °C
20393/1754.3MHz	16QAM	1	0	right	0.104 W/kg	1.6 W/kg	22.3 °C
20393/1754.3MHz	QPSK	1	5	bottom	0.249 W/kg	1.6 W/kg	22.3 °C
20393/1754.3MHz	QPSK	1	0	bottom	0.245 W/kg	1.6 W/kg	22.3 °C
20393/1754.3MHz	16QAM	3	2	bottom	0.227 W/kg	1.6 W/kg	22.3 °C
20393/1754.3MHz	16QAM	1	5	bottom	0.233 W/kg	1.6 W/kg	22.3 °C
20393/1754.3MHz	16QAM	1	0	bottom	0.219 W/kg	1.6 W/kg	22.3 °C

Table 41: Test results body SAR LTE FDD 4 1750 MHz 1.4MHz bandwidth 10 mm distance

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

Body SAR LTE FDD 4 1750MHz 1.4MHz bandwidth(averaged over 1g tissue volume)							
Channel / frequency	BW (MHz)	RB	RB offset	Position	Body worn test result	Limit	Liquid temperature
20393/1754.3MHz	QPSK	3	2	rear	0.659 W/kg	1.6 W/kg	22.1 °C
20393/1754.3MHz	QPSK	1	5	rear	0.683 W/kg	1.6 W/kg	22.1 °C
20393/1754.3MHz	QPSK	1	0	rear	0.402 W/kg	1.6 W/kg	22.1 °C
20393/1754.3MHz	16QAM	3	2	rear	0.328 W/kg	1.6 W/kg	22.1 °C
20393/1754.3MHz	16QAM	1	5	rear	0.354 W/kg	1.6 W/kg	22.1 °C
20393/1754.3MHz	16QAM	1	0	rear	0.409 W/kg	1.6 W/kg	22.1 °C

Table 42: Test results body SAR LTE FDD 4 1750 MHz 1.4MHz bandwidth 10 mm distance

Head SAR LTE FDD 17 750MHz 10MHz bandwidth(averaged over 1g tissue volume)							
Channel / frequency	Modulation	RB	RB offset	Position	Left hand test result	Limit	Liquid temperature
23780/709MHz	QPSK	25	12	cheek	0.209 W/kg	1.6 W/kg	21.0 °C
23790/710MHz	QPSK	25	12	cheek	0.186 W/kg	1.6 W/kg	21.0 °C
23800/711MHz	QPSK	25	12	cheek	0.164 W/kg	1.6 W/kg	21.0 °C
23780/709MHz	QPSK	25	12	tilted 15°	0.076 W/kg	1.6 W/kg	21.0 °C
23790/710MHz	QPSK	25	12	tilted 15°	0.080 W/kg	1.6 W/kg	21.0 °C
23800/711MHz	QPSK	25	12	tilted 15°	0.127 W/kg	1.6 W/kg	21.0 °C
23780/709MHz	QPSK	1	49	cheek	0.282 W/kg	1.6 W/kg	21.0 °C
23780/709MHz	QPSK	1	0	cheek	0.294 W/kg	1.6 W/kg	21.0 °C
23780/709MHz	16QAM	25	12	cheek	0.200 W/kg	1.6 W/kg	21.0 °C
23780/709MHz	16QAM	1	49	cheek	0.219 W/kg	1.6 W/kg	21.0 °C
23780/709MHz	16QAM	1	0	cheek	0.226 W/kg	1.6 W/kg	21.0 °C
23780/709MHz	QPSK	1	49	tilted 15°	0.146 W/kg	1.6 W/kg	22.8 °C
23780/709MHz	QPSK	1	0	tilted 15°	0.143 W/kg	1.6 W/kg	22.8 °C
23780/709MHz	16QAM	25	12	tilted 15°	0.097 W/kg	1.6 W/kg	22.8 °C
23780/709MHz	16QAM	1	49	tilted 15°	0.108 W/kg	1.6 W/kg	22.8 °C
23780/709MHz	16QAM	1	0	tilted 15°	0.108 W/kg	1.6 W/kg	22.8 °C
Channel / frequency	BW (MHz)	RB	RB offset	Position	Right hand test result	Limit	Liquid temperature
23780/709MHz	QPSK	25	12	cheek	0.189 W/kg	1.6 W/kg	21.0 °C
23790/710MHz	QPSK	25	12	cheek	0.159 W/kg	1.6 W/kg	21.0 °C
23800/711MHz	QPSK	25	12	cheek	0.086 W/kg	1.6 W/kg	21.0 °C
23780/709MHz	QPSK	25	12	tilted 15°	0.034 W/kg	1.6 W/kg	21.0 °C
23790/710MHz	QPSK	25	12	tilted 15°	0.038 W/kg	1.6 W/kg	21.0 °C
23800/711MHz	QPSK	25	12	tilted 15°	0.055 W/kg	1.6 W/kg	21.0 °C
23780/709MHz	QPSK	1	49	cheek	0.271 W/kg	1.6 W/kg	23.0 °C
23780/709MHz	QPSK	1	0	cheek	<b>0.301 W/kg</b>	1.6 W/kg	23.0 °C
23780/709MHz	16QAM	25	12	cheek	0.175 W/kg	1.6 W/kg	23.0 °C
23780/709MHz	16QAM	1	49	cheek	0.221 W/kg	1.6 W/kg	23.0 °C
23780/709MHz	16QAM	1	0	cheek	0.238 W/kg	1.6 W/kg	23.0 °C
23780/709MHz	QPSK	1	49	tilted 15°	0.134 W/kg	1.6 W/kg	23.0 °C
23780/709MHz	QPSK	1	0	tilted 15°	0.140 W/kg	1.6 W/kg	23.0 °C
23780/709MHz	16QAM	25	12	tilted 15°	0.087 W/kg	1.6 W/kg	23.0 °C
23780/709MHz	16QAM	1	49	tilted 15°	0.104 W/kg	1.6 W/kg	23.0 °C
23780/709MHz	16QAM	1	0	tilted 15°	0.116 W/kg	1.6 W/kg	23.0 °C

Table 43: Test results head SAR LTE FDD 17 750 MHz

Body SAR LTE FDD 17 750MHz 10MHz bandwidth(averaged over 1g tissue volume)							
Channel / frequency	Modulation	RB	RB offset	Position	WiFi hotspot test result	Limit	Liquid temperature
23780/709MHz	QPSK	25	12	front	0.175 W/kg	1.6 W/kg	20.3 °C
23790/710MHz	QPSK	25	12	front	0.190 W/kg	1.6 W/kg	20.3 °C
23800/711MHz	QPSK	25	12	front	0.197 W/kg	1.6 W/kg	20.3 °C
23780/709MHz	QPSK	25	12	rear	0.375 W/kg	1.6 W/kg	20.3 °C
23790/710MHz	QPSK	25	12	rear	0.346 W/kg	1.6 W/kg	20.3 °C
23800/711MHz	QPSK	25	12	rear	0.409 W/kg	1.6 W/kg	20.3 °C
23790/710MHz	QPSK	25	12	left	0.103 W/kg	1.6 W/kg	20.3 °C
23790/710MHz	QPSK	25	12	right	0.089 W/kg	1.6 W/kg	20.3 °C
23790/710MHz	QPSK	25	12	bottom	0.067 W/kg	1.6 W/kg	20.3 °C
23800/711MHz	QPSK	1	49	rear	0.396 W/kg	1.6 W/kg	20.3 °C
23800/711MHz	QPSK	1	0	rear	<b>0.491 W/kg</b>	1.6 W/kg	20.3 °C
23800/711MHz	16QAM	25	12	rear	0.194 W/kg	1.6 W/kg	20.3 °C
23800/711MHz	16QAM	1	49	rear	0.218 W/kg	1.6 W/kg	20.3 °C
23800/711MHz	16QAM	1	0	rear	0.227 W/kg	1.6 W/kg	20.3 °C
23800/711MHz	QPSK	1	49	front	0.314 W/kg	1.6 W/kg	22.9 °C
23800/711MHz	QPSK	1	0	front	0.354 W/kg	1.6 W/kg	22.9 °C
23800/711MHz	16QAM	25	12	front	0.229 W/kg	1.6 W/kg	22.9 °C
23800/711MHz	16QAM	1	49	front	0.250 W/kg	1.6 W/kg	22.9 °C
23800/711MHz	16QAM	1	0	front	0.292 W/kg	1.6 W/kg	22.9 °C
23800/711MHz	QPSK	1	49	left	0.166 W/kg	1.6 W/kg	22.9 °C
23800/711MHz	QPSK	1	0	left	0.207 W/kg	1.6 W/kg	22.9 °C
23800/711MHz	16QAM	25	12	left	0.148 W/kg	1.6 W/kg	22.9 °C
23800/711MHz	16QAM	1	49	left	0.132 W/kg	1.6 W/kg	22.9 °C
23800/711MHz	16QAM	1	0	left	0.166 W/kg	1.6 W/kg	22.9 °C
23800/711MHz	QPSK	1	49	right	0.207 W/kg	1.6 W/kg	22.9 °C
23800/711MHz	QPSK	1	0	right	0.212 W/kg	1.6 W/kg	22.9 °C
23800/711MHz	16QAM	25	12	right	0.148 W/kg	1.6 W/kg	22.9 °C
23800/711MHz	16QAM	1	49	right	0.175 W/kg	1.6 W/kg	22.9 °C
23800/711MHz	16QAM	1	0	right	0.169 W/kg	1.6 W/kg	22.9 °C
23800/711MHz	QPSK	1	49	bottom	0.109 W/kg	1.6 W/kg	22.9 °C
23800/711MHz	QPSK	1	0	bottom	0.125 W/kg	1.6 W/kg	22.9 °C
23800/711MHz	16QAM	25	12	bottom	0.080 W/kg	1.6 W/kg	22.9 °C
23800/711MHz	16QAM	1	49	bottom	0.094 W/kg	1.6 W/kg	22.9 °C
23800/711MHz	16QAM	1	0	bottom	0.107 W/kg	1.6 W/kg	22.9 °C

Table 44: Test results body SAR LTE FDD 17 750 MHz 10 mm distance

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

Body SAR LTE FDD 17 750MHz 10MHz bandwidth(averaged over 1g tissue volume)							
Channel / frequency	Modulation	RB	RB offset	Position	Body worn test result	Limit	Liquid temperature
23800/711MHz	QPSK	25	12	rear	0.189 W/kg	1.6 W/kg	22.8 °C
23800/711MHz	QPSK	1	49	rear	0.185 W/kg	1.6 W/kg	22.8 °C
23800/711MHz	QPSK	1	0	rear	0.230 W/kg	1.6 W/kg	22.8 °C
23800/711MHz	16QAM	25	12	rear	0.147 W/kg	1.6 W/kg	22.8 °C
23800/711MHz	16QAM	1	49	rear	0.130 W/kg	1.6 W/kg	22.8 °C
23800/711MHz	16QAM	1	0	rear	0.174 W/kg	1.6 W/kg	22.8 °C

Table 45: Test results body SAR LTE FDD 17 750 MHz 15 mm distance

Head SAR WLAN 2450 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Left hand test result	Right hand test result	Limit	Liquid temperature	
					left	right
1 / 2412 MHz	cheek	0.326 W/kg	0.202 W/kg	1.6 W/kg	22.4 °C	22.4 °C
6 / 2437 MHz	cheek	0.412 W/kg	0.191 W/kg	1.6 W/kg	22.4 °C	22.4 °C
11 / 2462 MHz	cheek	<b>0.470 W/kg</b>	0.122 W/kg	1.6 W/kg	22.4 °C	22.4 °C
1 / 2412 MHz	tilted 15°	0.277 W/kg	0.223 W/kg	1.6 W/kg	22.4 °C	22.4 °C
6 / 2437 MHz	tilted 15°	0.177 W/kg	0.138 W/kg	1.6 W/kg	22.4 °C	22.4 °C
11 / 2462 MHz	tilted 15°	0.409 W/kg	0.293 W/kg	1.6 W/kg	22.4 °C	22.4 °C
11 / 2462 MHz	cheek	0.241 W/kg	OFDM 6 Mbps	1.6 W/kg	22.3 °C	-- °C
11 / 2462 MHz	cheek	0.248 W/kg	OFDM 6.5 Mbps	1.6 W/kg	22.3 °C	-- °C

Table 46: Test results head SAR WLAN 2450 MHz

Body SAR WLAN 2450 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	Wifi hotspot test result	Limit	Liquid temperature
1 / 2412 MHz	front	10 mm	CCK 1 Mbit/s	0.071 W/kg	1.6 W/kg	22.0 °C
6 / 2437 MHz	front	10 mm	CCK 1 Mbit/s	0.090 W/kg	1.6 W/kg	22.0 °C
11 / 2462 MHz	front	10 mm	CCK 1 Mbit/s	0.092 W/kg	1.6 W/kg	22.0 °C
1 / 2412 MHz	rear	10 mm	CCK 1 Mbit/s	0.065 W/kg	1.6 W/kg	22.0 °C
6 / 2437 MHz	rear	10 mm	CCK 1 Mbit/s	0.077 W/kg	1.6 W/kg	22.0 °C
11 / 2462 MHz	rear	10 mm	CCK 1 Mbit/s	0.083 W/kg	1.6 W/kg	22.0 °C
6 / 2437 MHz	left	10 mm	CCK 1 Mbit/s	0.028 W/kg	1.6 W/kg	22.0 °C
6 / 2437 MHz	top edge	10 mm	CCK 1 Mbit/s	<b>0.125 W/kg</b>	1.6 W/kg	22.0 °C
6 / 2437 MHz	top edge	10 mm	OFDM 6Mbit/s	0.070 W/kg	1.6 W/kg	22.0 °C
6 / 2437 MHz	top edge	10 mm	OFDM 6.5Mbit/s	0.045 W/kg	1.6 W/kg	22.0 °C
Body SAR WLAN 2450 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	Body worn test result	Limit	Liquid temperature
11 / 2462 MHz	front	15 mm	CCK 1 Mbit/s	0.041 W/kg	1.6 W/kg	22.0 °C

Table 47: Test results body SAR WLAN 2450 MHz

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

## 7.2.2 General description of test procedures

The DUT is tested using CMU 200 and CMW 500 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.

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 with the delta measurements in 802.11g and 802.11n modes on worst case position.

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 ( $< 0.8 \text{ W/kg}$ ), testing at the high and low channels is optional.

Per 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.

The output power was reduced at WCDMA FDD II / FDD IV and LTE FDD 4 bands when hotspot mode was active.

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 Ericsson 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.

No	used	Equipment	Type	Manufacturer	Serial No.	Last Calibration	Frequency (months)
1	<input checked="" type="checkbox"/>	Dosimetric E-Field Probe	ET3DV6	Schmid & Partner Engineering AG	1559	January 18, 2012	12
2	<input checked="" type="checkbox"/>	Dosimetric E-Field Probe	ET3DV6	Schmid & Partner Engineering AG	1558	August 23, 2011	12
3	<input checked="" type="checkbox"/>	750 MHz System Validation Dipole	D750V3	Schmid & Partner Engineering AG	1041	August 10, 2011	12
4	<input checked="" type="checkbox"/>	900 MHz System Validation Dipole	D900V2	Schmid & Partner Engineering AG	102	August 15, 2011	12
5	<input checked="" type="checkbox"/>	1800 MHz System Validation Dipole	D1800V2	Schmid & Partner Engineering AG	287	August 17, 2011	12
6	<input checked="" type="checkbox"/>	1900 MHz System Validation Dipole	D1900V2	Schmid & Partner Engineering AG	5d009	August 17, 2011	12
7	<input checked="" type="checkbox"/>	2450 MHz System Validation Dipole	D2450V2	Schmid & Partner Engineering AG	710	August 19, 2011	12
8	<input checked="" type="checkbox"/>	Data acquisition electronics	DAE3V1	Schmid & Partner Engineering AG	413	January 12, 2012	12
9	<input checked="" type="checkbox"/>	Data acquisition electronics	DAE3V1	Schmid & Partner Engineering AG	477	May 06, 2011	12
10	<input checked="" type="checkbox"/>	Data acquisition electronics	DAE3V1	Schmid & Partner Engineering AG	477	May 09, 2012	12
11	<input checked="" type="checkbox"/>	Software	DASY 4 V4.5	Schmid & Partner Engineering AG	---	N/A	--
12	<input checked="" type="checkbox"/>	Phantom	SAM	Schmid & Partner Engineering AG	---	N/A	--
13	<input checked="" type="checkbox"/>	Universal Radio Communication Tester	CMU 200	Rohde & Schwarz	106826	March 06, 2012	24
14	<input checked="" type="checkbox"/>	Universal Radio Communication Tester	CMW500	Rohde & Schwarz	102375	January 4, 2011	24
15	<input checked="" type="checkbox"/>	Universal Radio Communication Tester	CMW500	Rohde & Schwarz	116854	January 16, 2012	24
16	<input checked="" type="checkbox"/>	Network Analyser 300 kHz to 6 GHz	8753ES	Hewlett Packard)*	US39174436	February 24, 2012	12
17	<input checked="" type="checkbox"/>	Dielectric Probe Kit	85070C	Hewlett Packard	US99360146	N/A	12
18	<input checked="" type="checkbox"/>	Signal Generator	8665A	Hewlett Packard	2833A00112	January 4, 2012	12
19	<input checked="" type="checkbox"/>	Amplifier	25S1G4 (25 Watt)	Amplifier Reasearch	20452	N/A	--
20	<input checked="" type="checkbox"/>	Power Meter	NRP	Rohde & Schwarz	101367	January 6, 2011	24
21	<input checked="" type="checkbox"/>	Power Meter Sensor	NRP Z22	Rohde & Schwarz	100227	January 9, 2012	12
22	<input checked="" type="checkbox"/>	Power Meter Sensor	NRP Z22	Rohde & Schwarz	100234	January 9 2012	12
23	<input checked="" type="checkbox"/>	Directional Coupler	778D	Hewlett Packard	19171	January 4, 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 verification

Date/Time: 16.01.2012 09:15:47 Date/Time: 16.01.2012 09:19:20

### System Performance Check-D750 head 2012-01-16

DUT: Dipole 750 MHz; Type: D750V3; Serial: 1041

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

Medium: HSL750 Medium parameters used:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.4$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.22, 6.22, 6.22); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 8.88 mW/g

**d=15mm, Pin=1000mW/Zoom Scan (7x7x7) (7x8x7)/Cube 0:** Measurement grid:

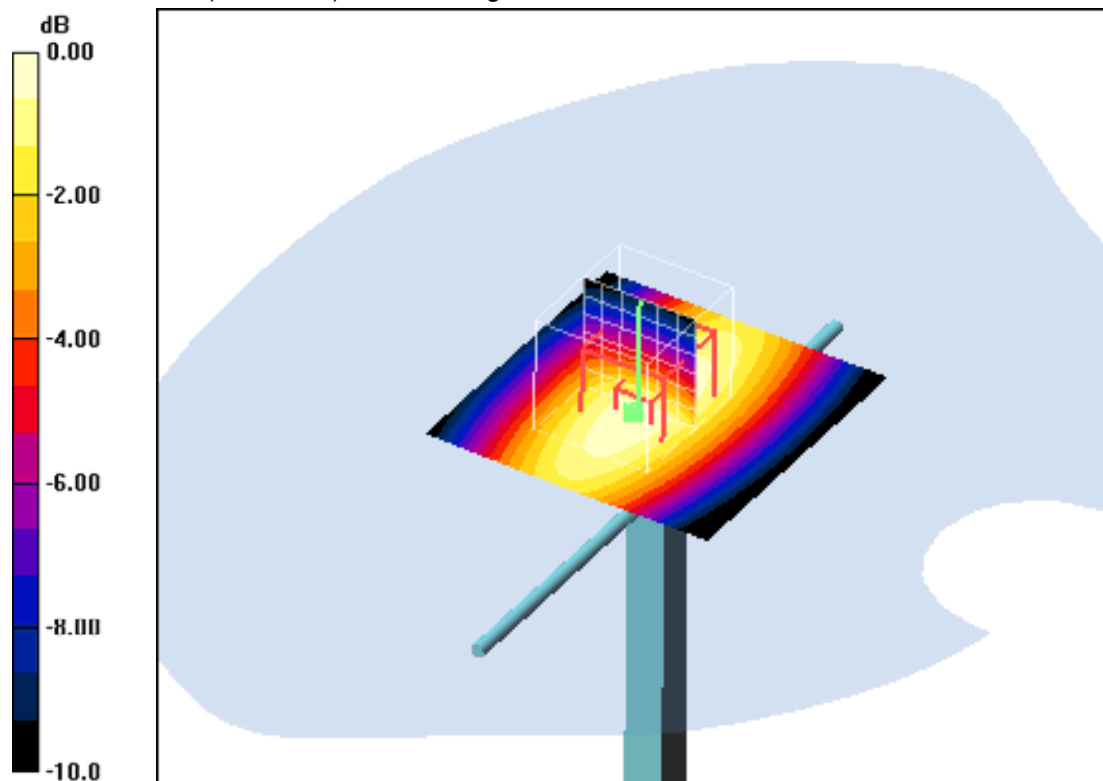
 $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$ 

Reference Value = 106.6 V/m; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 12.2 W/kg

**SAR(1 g) = 8.4 mW/g; SAR(10 g) = 5.53 mW/g**

Maximum value of SAR (measured) = 9.08 mW/g



0 dB = 9.08mW/g

#### Additional information:

ambient temperature: 21.9°C; liquid temperature: 21.0°C

Date/Time: 17.01.2012 09:17:13 Date/Time: 17.01.2012 09:20:45

### System Performance Check-D750 head 2012-01-17

**DUT: Dipole 750 MHz; Type: D750V3; Serial: 1041**

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

Medium: HSL750 Medium parameters used:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.4$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.22, 6.22, 6.22); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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) = 8.97 mW/g

**d=15mm, Pin=1000mW/Zoom Scan (7x7x7) (7x8x7)/Cube 0:** Measurement grid:

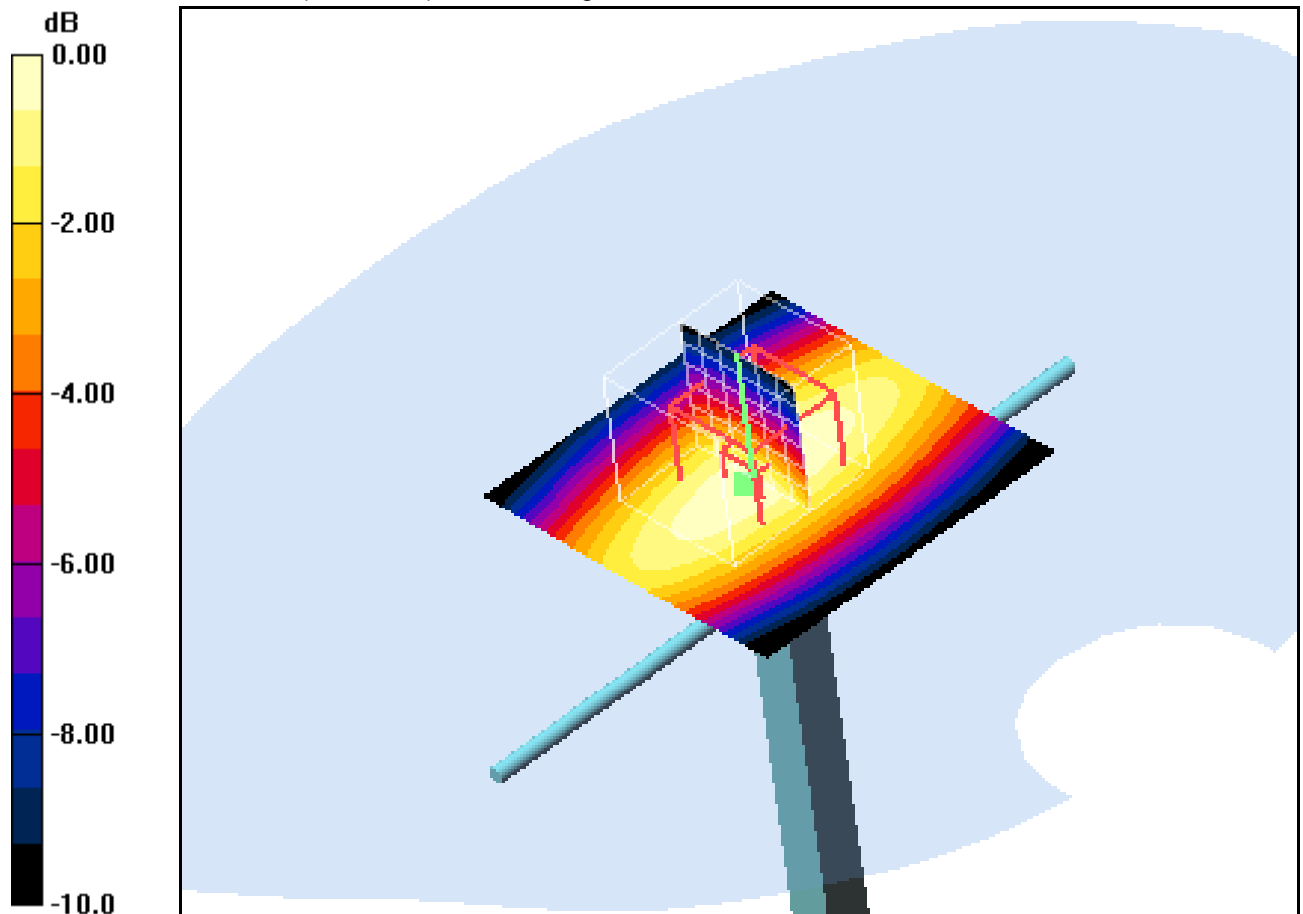
dx=5mm, dy=5mm, dz=5mm

Reference Value = 107.6 V/m; Power Drift = -0.138 dB

Peak SAR (extrapolated) = 12.5 W/kg

**SAR(1 g) = 8.59 mW/g; SAR(10 g) = 5.66 mW/g**

Maximum value of SAR (measured) = 9.31 mW/g



0 dB = 9.31mW/g

**Additional information:**

ambient temperature: 21.9°C; liquid temperature: 21.0°C

Date/Time: 22.05.2012 09:12:50 Date/Time: 22.05.2012 09:16:24

### System Performance Check-D750 head 2012-05-22

**DUT: Dipole 750 MHz; Type: D750V3; Serial: 1041**

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

Medium: HSL750 Medium parameters used:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.91 \text{ mho/m}$ ;  $\epsilon_r = 42.2$ ;  $\rho = 1000 \text{ kg/m}^3$

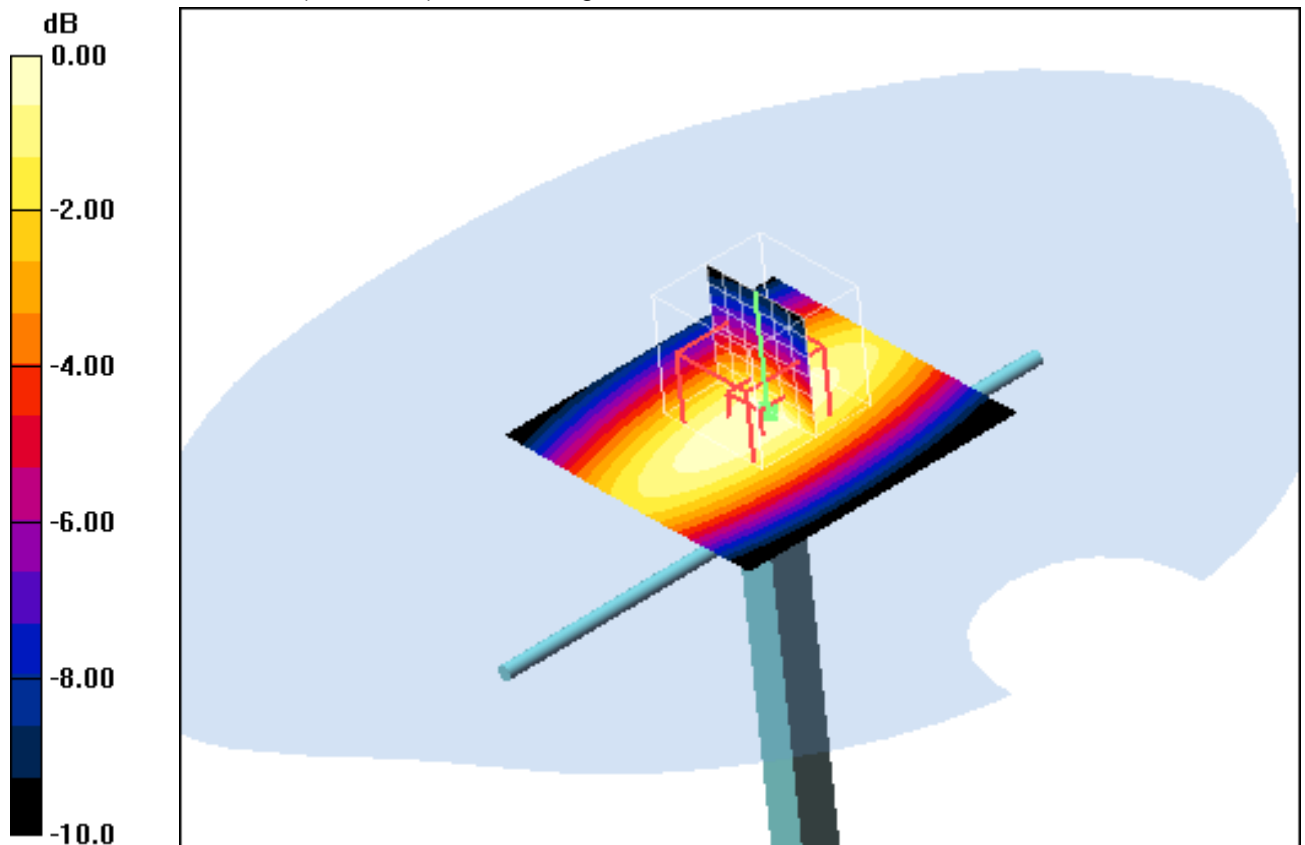
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.22, 6.22, 6.22); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical 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) = 9.11 mW/g

**d=15mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 104.5 V/m; Power Drift = 0.00 dB  
 Peak SAR (extrapolated) = 12.5 W/kg  
**SAR(1 g) = 8.57 mW/g; SAR(10 g) = 5.63 mW/g**  
 Maximum value of SAR (measured) = 9.27 mW/g



0 dB = 9.27mW/g

**Additional information:**

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

Date/Time: 17.01.2012 15:50:48 Date/Time: 17.01.2012 15:55:43

### System Performance Check-D750 body 2012-01-17

**DUT: Dipole 750 MHz; Type: D750V3; Serial: 1041**

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

Medium: M750 Medium parameters used:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.98 \text{ mho/m}$ ;  $\epsilon_r = 56.9$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.97, 5.97, 5.97); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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) = 9.51 mW/g

**d=15mm, Pin=1000mW/Zoom Scan (7x7x7) (7x8x7)/Cube 0:** Measurement grid:

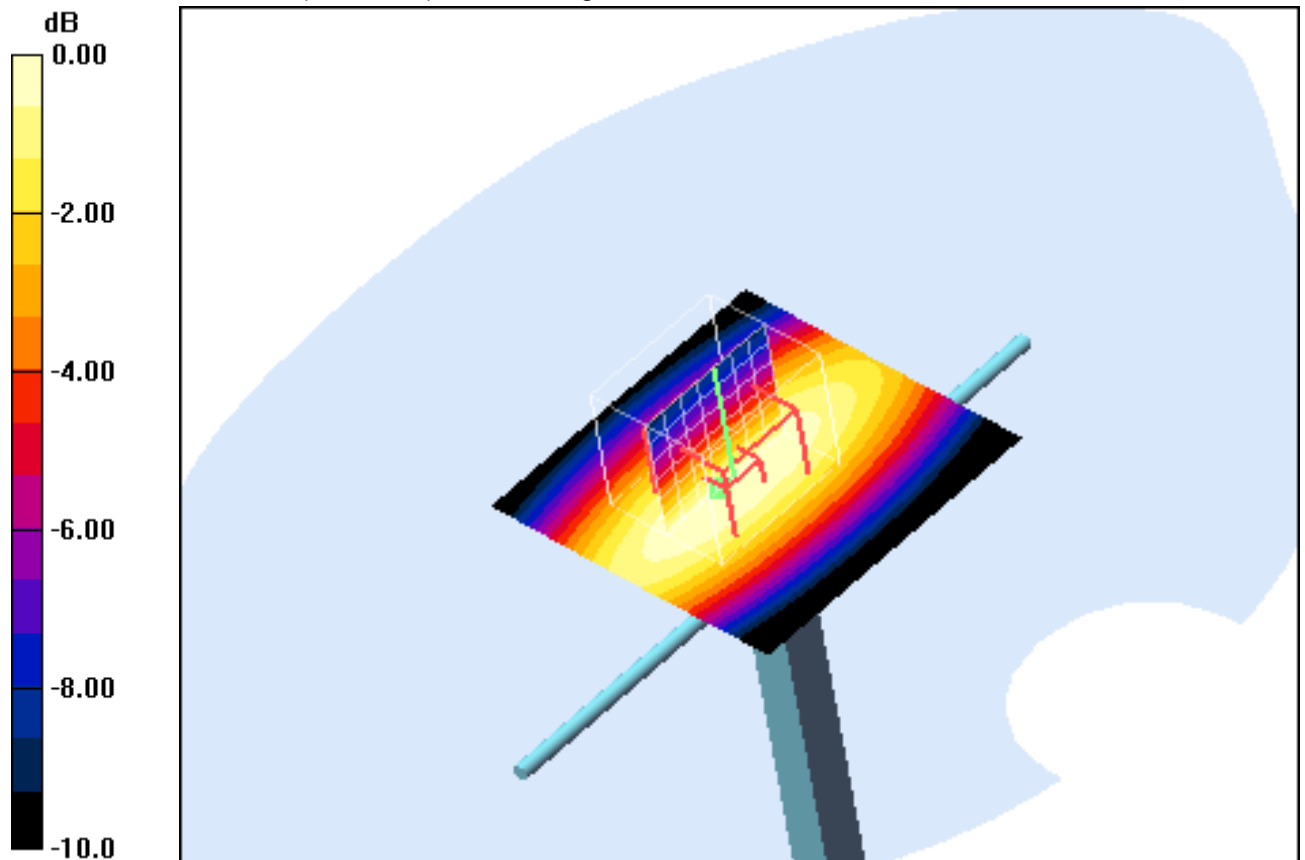
dx=5mm, dy=5mm, dz=5mm

Reference Value = 102.4 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 12.4 W/kg

**SAR(1 g) = 8.74 mW/g; SAR(10 g) = 5.84 mW/g**

Maximum value of SAR (measured) = 9.46 mW/g



0 dB = 9.46mW/g

**Additional information:**

ambient temperature: 22.7°C; liquid temperature: 20.3°C

Date/Time: 22.05.2012 14:15:55 Date/Time: 22.05.2012 14:19:32

### System Performance Check-D750 body 2012-05-22

**DUT: Dipole 750 MHz; Type: D750V3; Serial: 1041**

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

Medium: M750 Medium parameters used:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.98 \text{ mho/m}$ ;  $\epsilon_r = 56.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.97, 5.97, 5.97); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection) 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) = 9.40 mW/g

**d=15mm, Pin=1000mW/Zoom Scan (7x7x7) (7x8x7)/Cube 0:** Measurement grid:

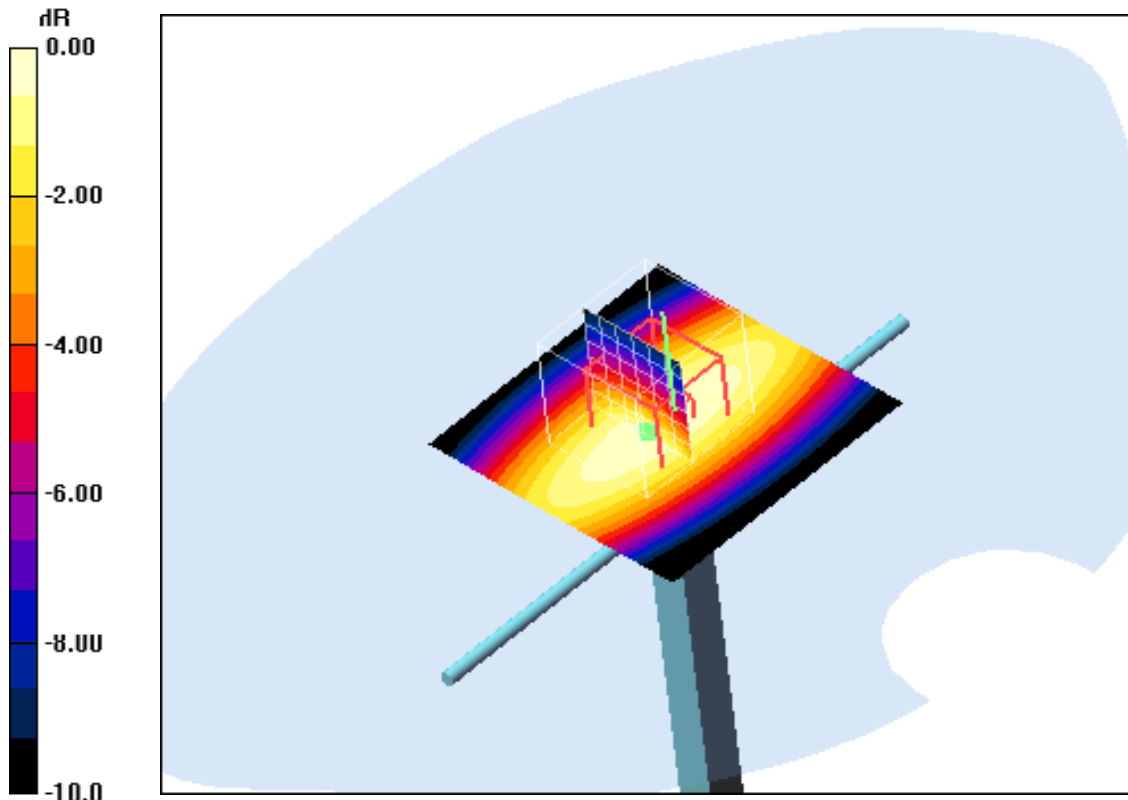
dx=5mm, dy=5mm, dz=5mm

Reference Value = 102.7 V/m; Power Drift = -0.123 dB

Peak SAR (extrapolated) = 12.4 W/kg

**SAR(1 g) = 8.78 mW/g; SAR(10 g) = 5.85 mW/g**

Maximum value of SAR (measured) = 9.51 mW/g



0 dB = 9.51mW/g

**Additional information:**

ambient temperature: 22.2°C; liquid temperature: 23.0°C

Date/Time: 25.05.2012 10:21:15 Date/Time: 25.05.2012 10:24:53

### System Performance Check-D750 body 2012-05-25

DUT: Dipole 750 MHz; Type: D750V3; Serial: 1041

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

Medium: M750 Medium parameters used:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.98 \text{ mho/m}$ ;  $\epsilon_r = 56.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.97, 5.97, 5.97); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection) 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) = 8.95 mW/g

**d=15mm, Pin=1000mW/Zoom Scan (7x7x7) (7x8x7)/Cube 0:** Measurement grid:

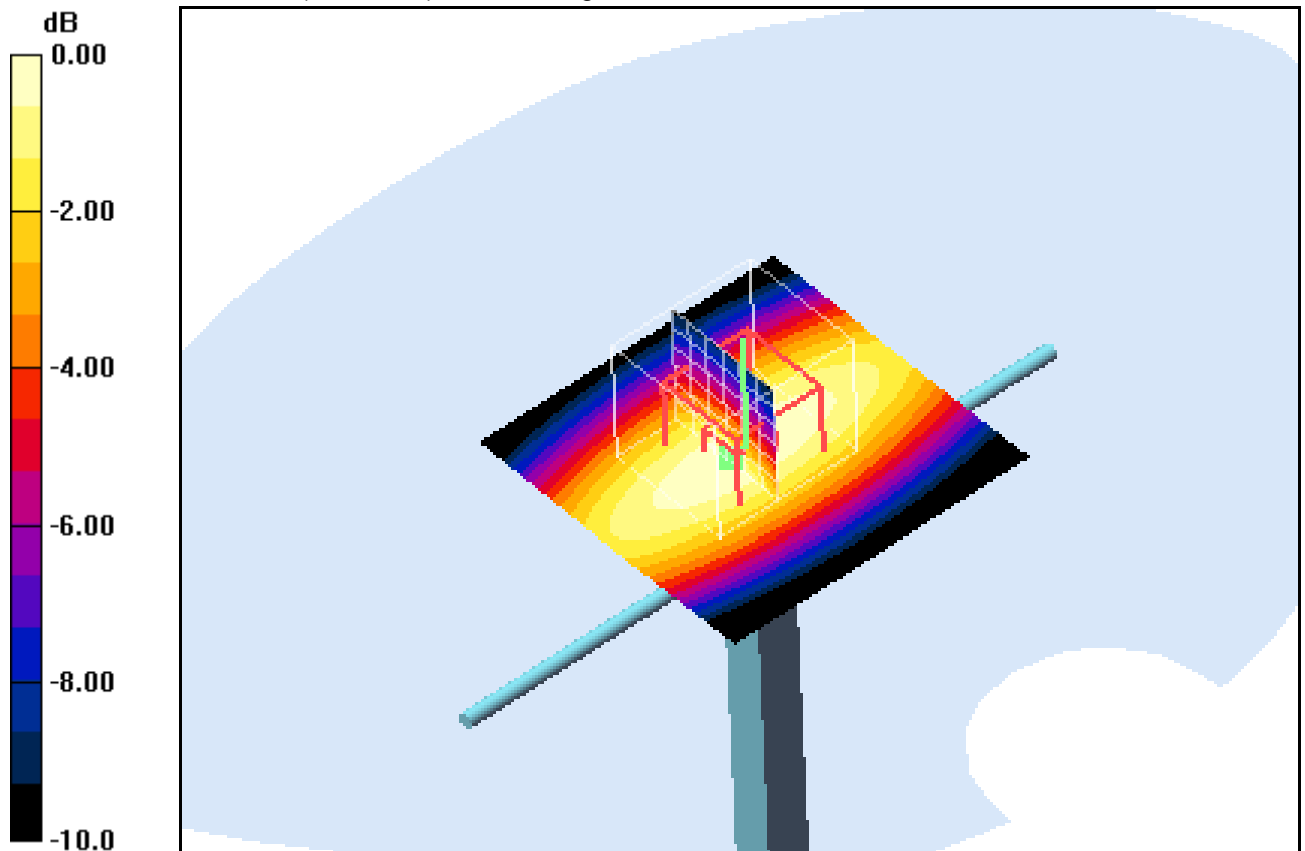
dx=5mm, dy=5mm, dz=5mm

Reference Value = 100.5 V/m; Power Drift = -0.041 dB

Peak SAR (extrapolated) = 12.0 W/kg

**SAR(1 g) = 8.53 mW/g; SAR(10 g) = 5.69 mW/g**

Maximum value of SAR (measured) = 9.24 mW/g



0 dB = 9.24mW/g

**Additional information:**

ambient temperature: 23.0°C; liquid temperature: 22.8°C

Date/Time: 07.01.2012 16:32:47 Date/Time: 07.01.2012 16:36:28

### System Performance Check-D900 head 2012-01-07

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

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

Medium: HSL850 Medium parameters used:  $f = 900 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 40.4$ ;  $\rho = 1000 \text{ kg/m}^3$

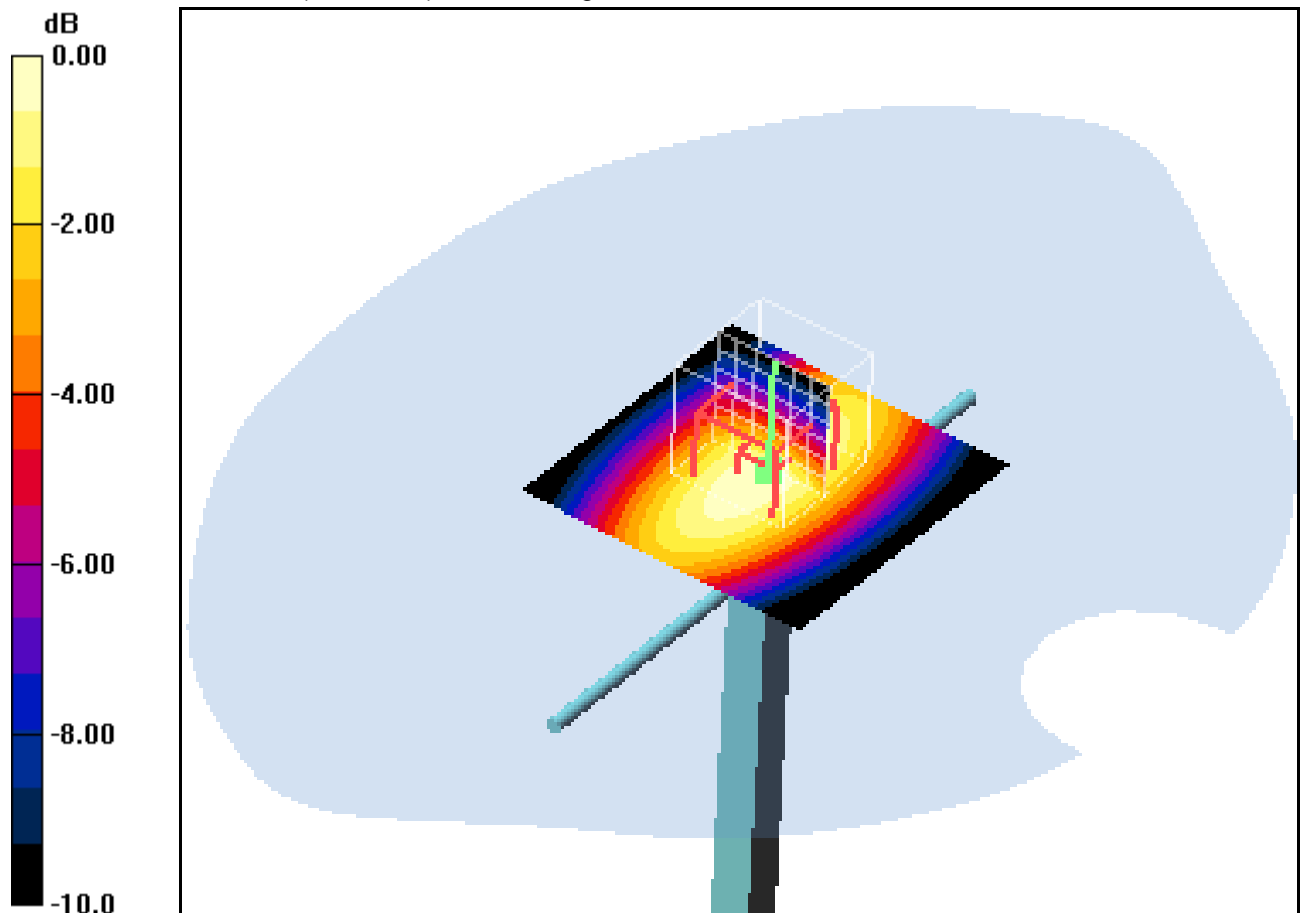
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.8, 5.8, 5.8); Calibrated: 11.08.2010
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 = 117.3 V/m; Power Drift = -0.00 dB  
 Peak SAR (extrapolated) = 16.9 W/kg  
**SAR(1 g) = 11.2 mW/g; SAR(10 g) = 7.19 mW/g**  
 Maximum value of SAR (measured) = 12.2 mW/g



0 dB = 12.2mW/g

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.5°C

Date/Time: 08.01.2012 11:22:18 Date/Time: 08.01.2012 11:25:58

### System Performance Check-D900 head 2012-01-08

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

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

Medium: HSL850 Medium parameters used:  $f = 900 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 40.4$ ;  $\rho = 1000 \text{ kg/m}^3$

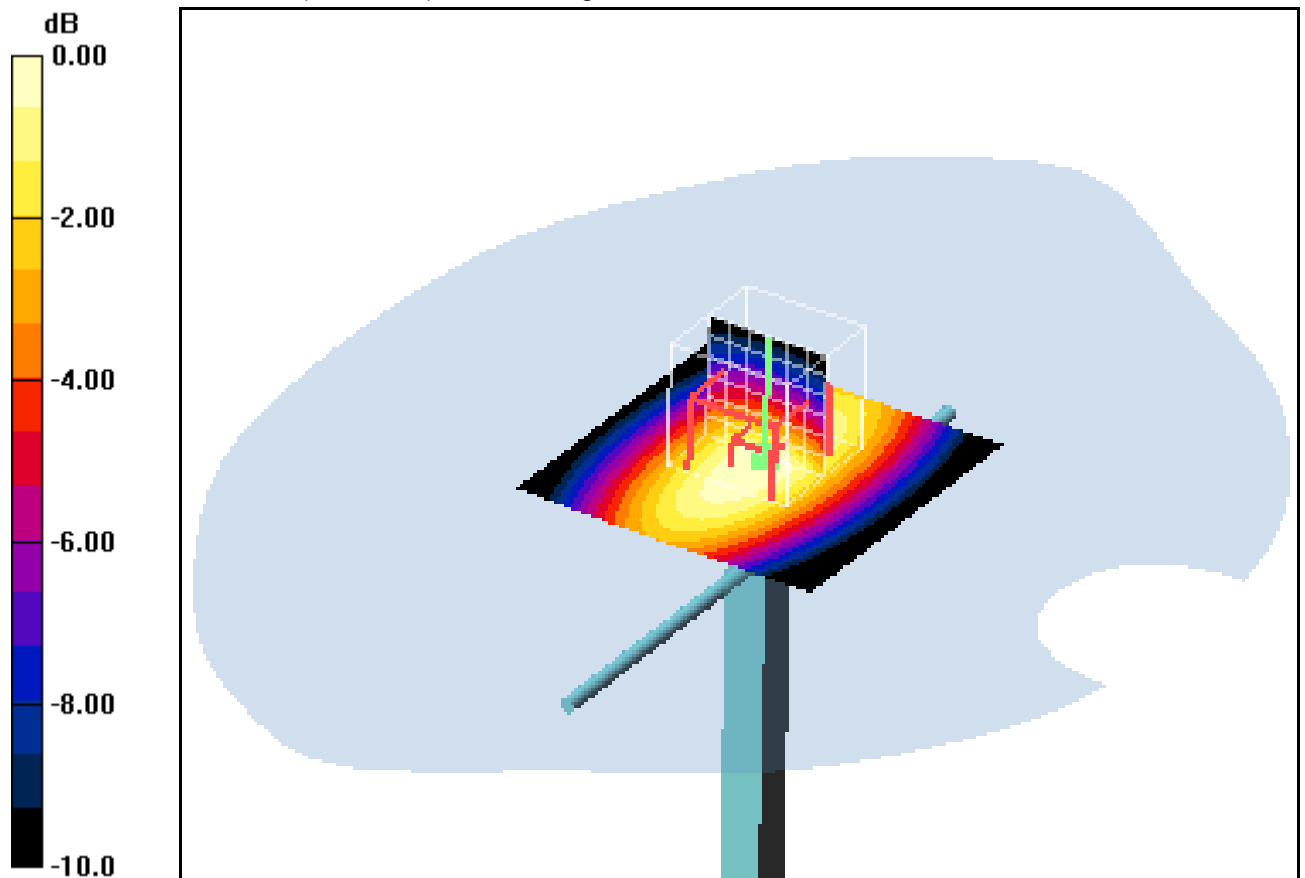
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.8, 5.8, 5.8); Calibrated: 11.08.2010
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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) = 12.1 mW/g

**d=15mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 117.8 V/m; Power Drift = -0.026 dB  
 Peak SAR (extrapolated) = 17.2 W/kg  
**SAR(1 g) = 11.3 mW/g; SAR(10 g) = 7.26 mW/g**  
 Maximum value of SAR (measured) = 12.3 mW/g



0 dB = 12.3mW/g

**Additional information:**

ambient temperature: 23.0°C; liquid temperature: 22.7°C



Date/Time: 06.01.2012 08:53:58 Date/Time: 06.01.2012 08:57:38

### System Performance Check-D900 body 2012-01-06

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

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

Medium: M850 Medium parameters used:  $f = 900 \text{ MHz}$ ;  $\sigma = 1.04 \text{ mho/m}$ ;  $\epsilon_r = 54.3$ ;  $\rho = 1000 \text{ kg/m}^3$

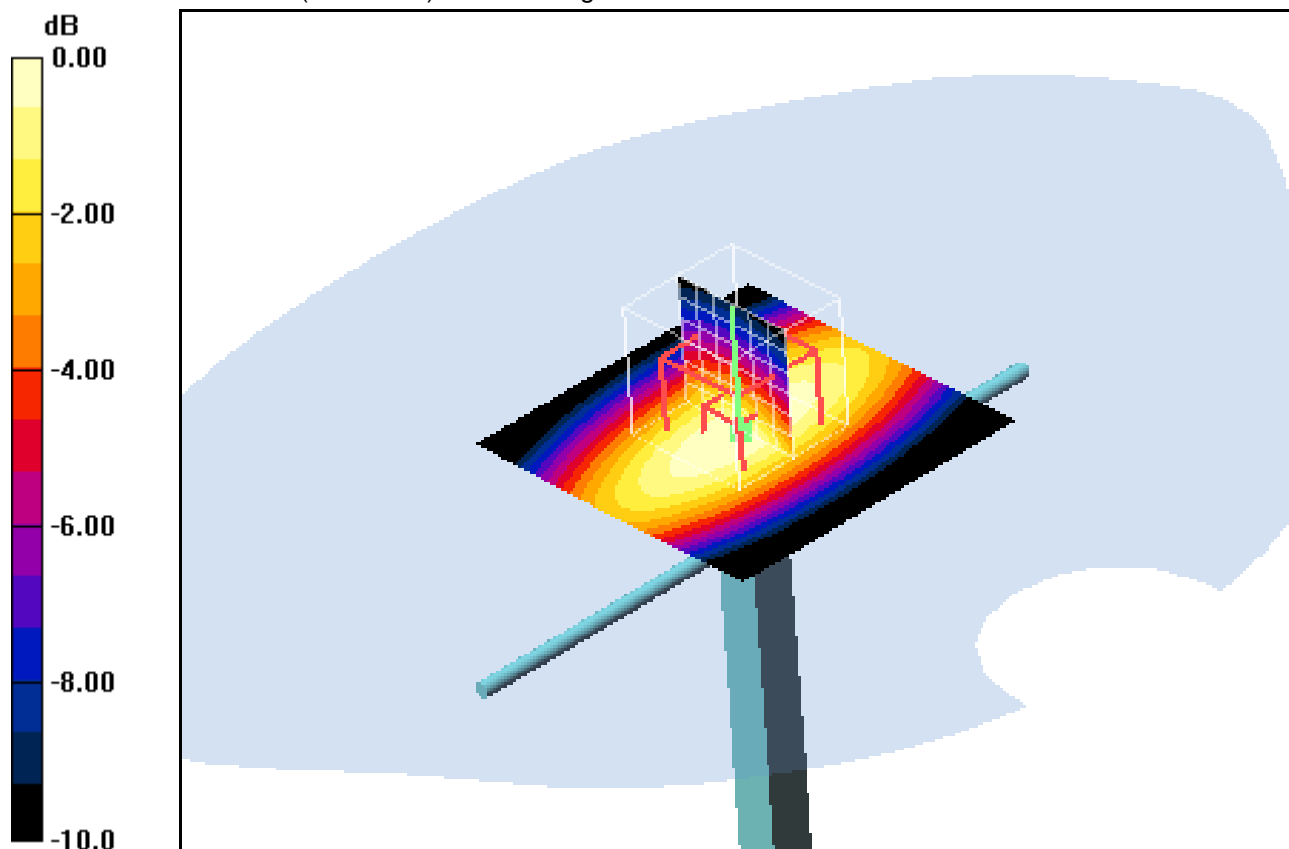
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.77, 5.77, 5.77); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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) = 11.9 mW/g

**d=15mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 113.1 V/m; Power Drift = -0.078 dB  
 Peak SAR (extrapolated) = 15.7 W/kg  
**SAR(1 g) = 11.1 mW/g; SAR(10 g) = 7.21 mW/g**  
 Maximum value of SAR (measured) = 12.0 mW/g



0 dB = 12.0mW/g

**Additional information:**

ambient temperature: 20.8°C; liquid temperature: 20.5°C

Date/Time: 07.01.2012 15:24:41 Date/Time: 07.01.2012 15:28:19

### System Performance Check-D900 body 2012-01-07

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

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

Medium: M850 Medium parameters used:  $f = 900 \text{ MHz}$ ;  $\sigma = 1.04 \text{ mho/m}$ ;  $\epsilon_r = 54.3$ ;  $\rho = 1000 \text{ kg/m}^3$

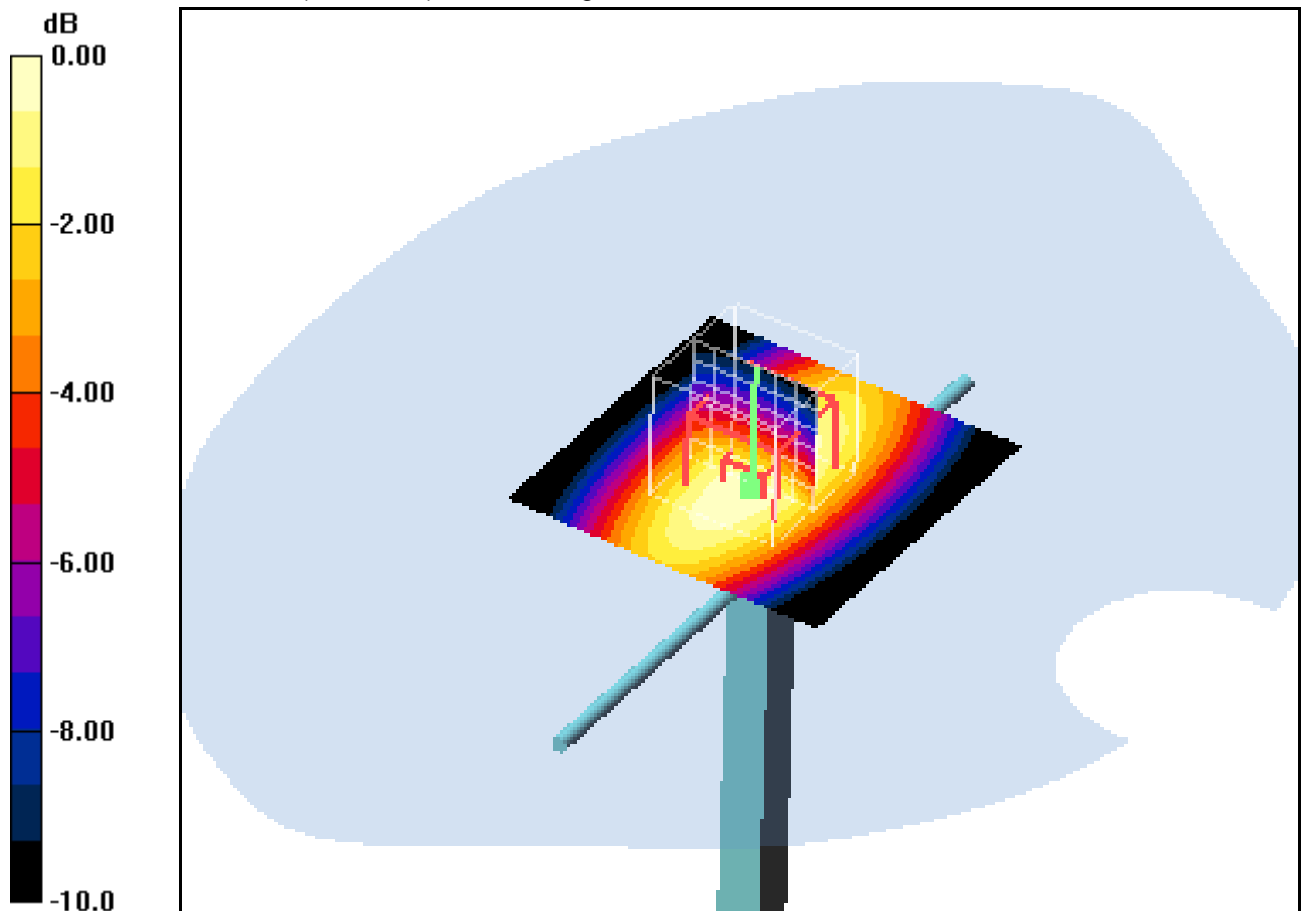
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.77, 5.77, 5.77); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 = 112.8 V/m; Power Drift = -0.091 dB  
 Peak SAR (extrapolated) = 16.0 W/kg  
**SAR(1 g) = 11 mW/g; SAR(10 g) = 7.09 mW/g**  
 Maximum value of SAR (measured) = 11.9 mW/g



0 dB = 11.9mW/g

**Additional information:**

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

Date/Time: 08.01.2012 18:13:02 Date/Time: 08.01.2012 18:16:39

### System Performance Check-D1800 head 2012-01-08

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

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

Medium: HSL1800 Medium parameters used:  $f = 1800 \text{ MHz}$ ;  $\sigma = 1.45 \text{ mho/m}$ ;  $\epsilon_r = 39.1$ ;  $\rho = 1000 \text{ kg/m}^3$

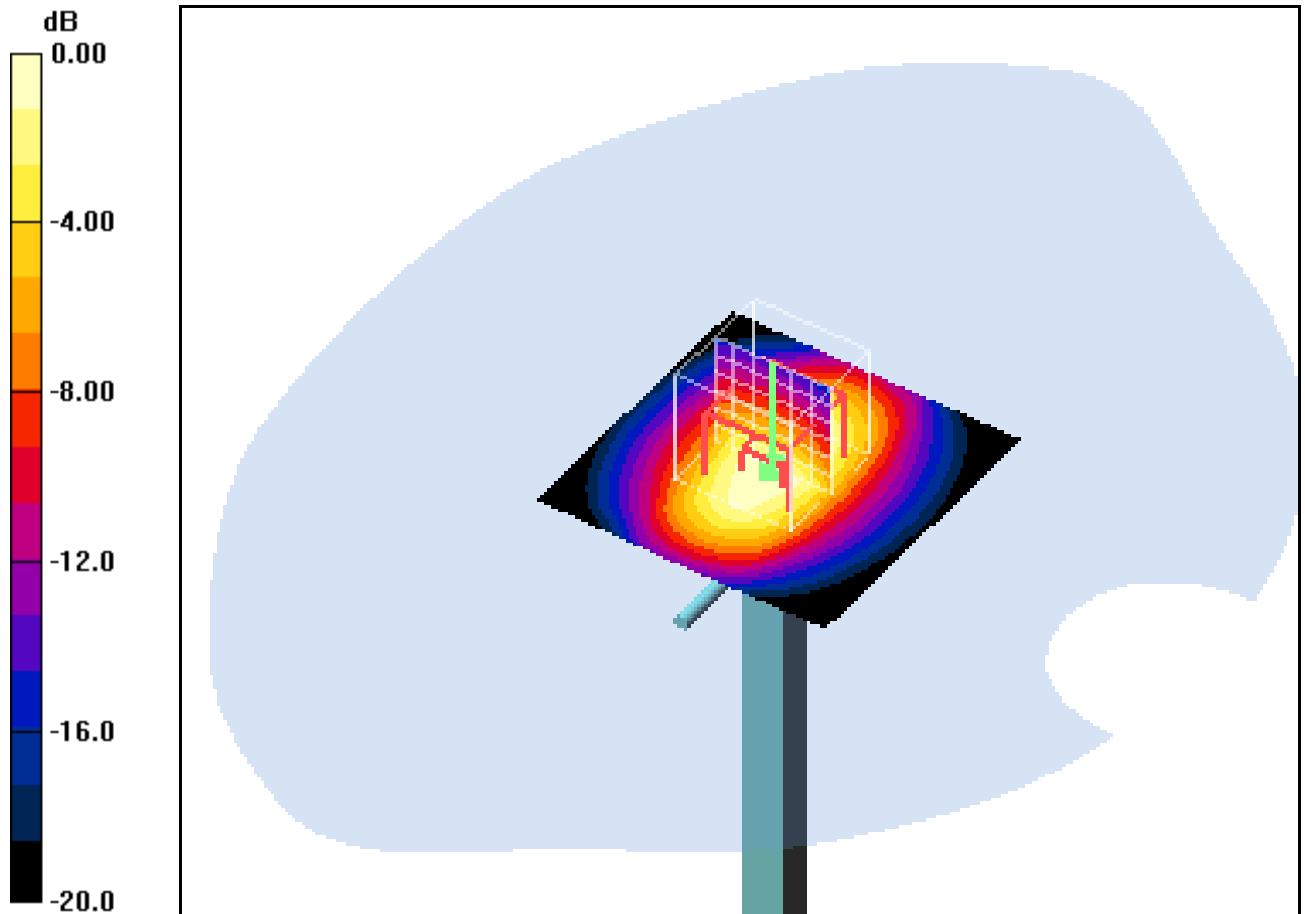
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.09, 5.09, 5.09); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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) = 52.6 mW/g

**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 184.6 V/m; Power Drift = 0.037 dB  
 Peak SAR (extrapolated) = 72.3 W/kg  
**SAR(1 g) = 40.5 mW/g; SAR(10 g) = 21.1 mW/g**  
 Maximum value of SAR (measured) = 46.0 mW/g



0 dB = 46.0mW/g

**Additional information:**

ambient temperature: 23.6°C; liquid temperature: 23.0°C

Date/Time: 09.01.2012 10:03:14 Date/Time: 09.01.2012 10:06:54

### System Performance Check-D1800 head 2012-01-09

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

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

Medium: HSL1800 Medium parameters used:  $f = 1800 \text{ MHz}$ ;  $\sigma = 1.45 \text{ mho/m}$ ;  $\epsilon_r = 39.1$ ;  $\rho = 1000 \text{ kg/m}^3$

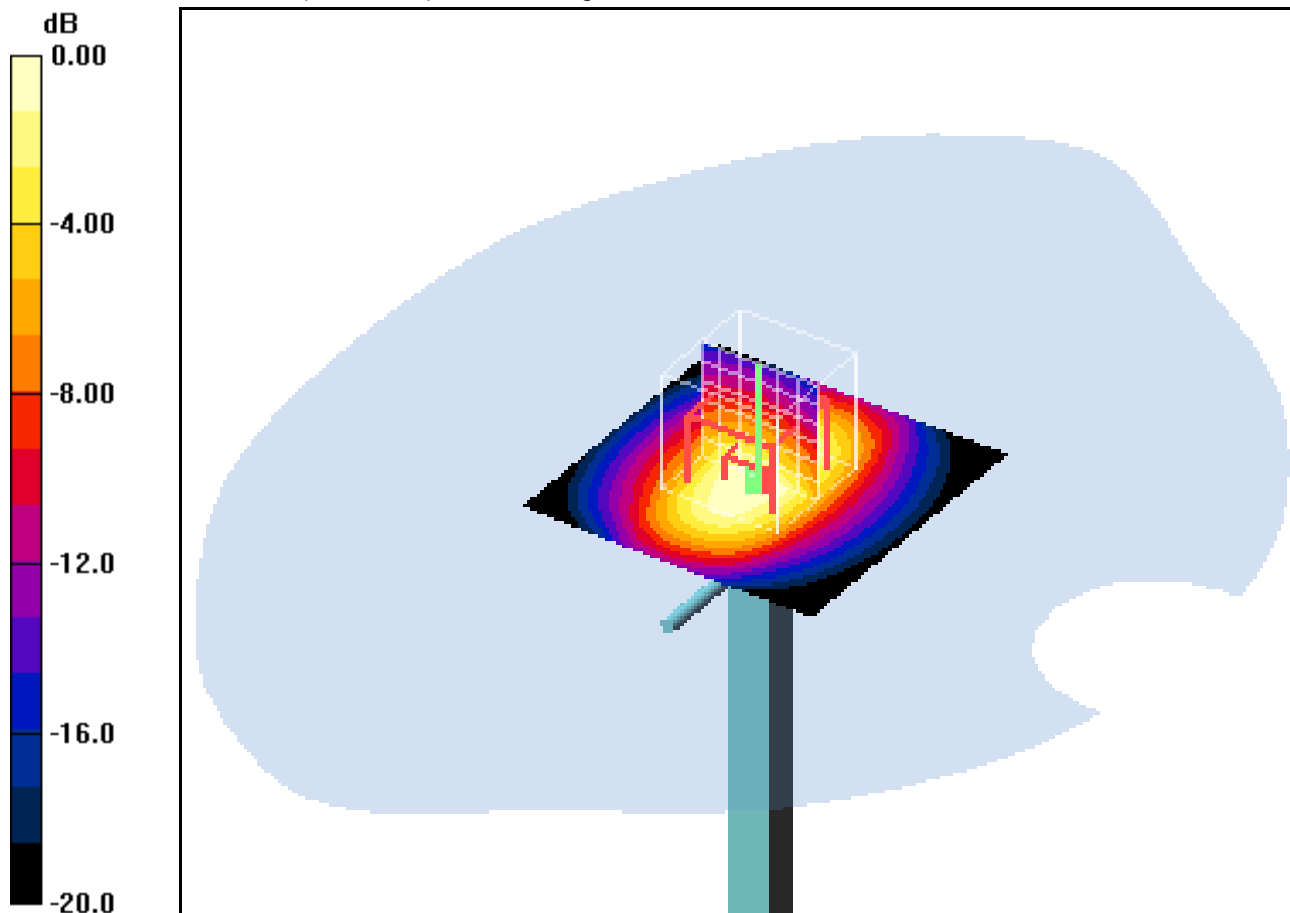
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.09, 5.09, 5.09); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 = 181.1 V/m; Power Drift = -0.027 dB  
 Peak SAR (extrapolated) = 68.8 W/kg  
**SAR(1 g) = 38.6 mW/g; SAR(10 g) = 20.3 mW/g**  
 Maximum value of SAR (measured) = 43.4 mW/g



**Additional information:**  
 ambient temperature: 23.5°C; liquid temperature: 23.2°C

Date/Time: 18.01.2012 11:45:28 Date/Time: 18.01.2012 11:49:09

### System Performance Check-D1800 head 2012-01-18

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

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

Medium: HSL1800 Medium parameters used:  $f = 1800 \text{ MHz}$ ;  $\sigma = 1.45 \text{ mho/m}$ ;  $\epsilon_r = 39.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.09, 5.09, 5.09); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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) = 52.8 mW/g

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

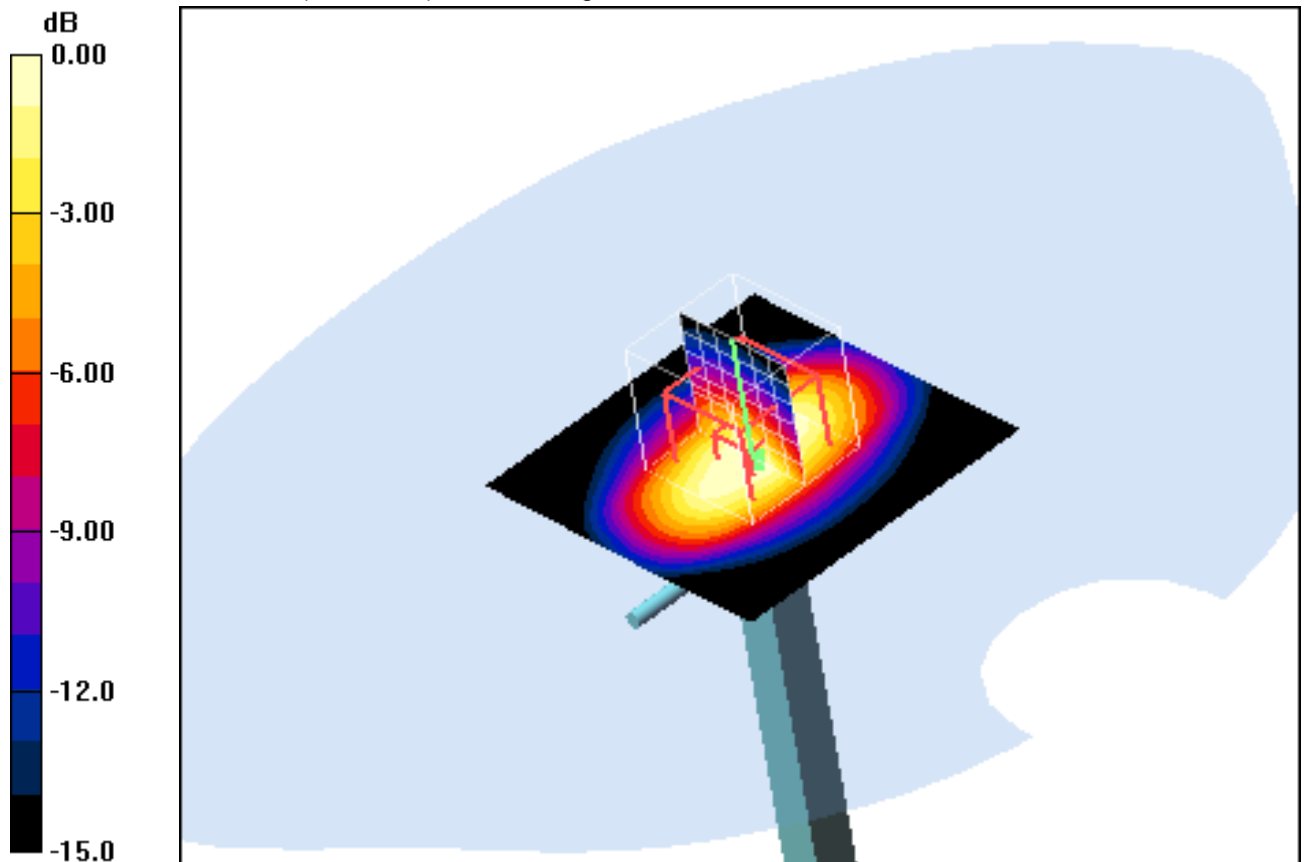
dx=5mm, dy=5mm, dz=5mm

Reference Value = 185.9 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 72.4 W/kg

**SAR(1 g) = 40 mW/g; SAR(10 g) = 20.8 mW/g**

Maximum value of SAR (measured) = 45.2 mW/g



0 dB = 45.2mW/g

**Additional information:**

ambient temperature: 23.3°C; liquid temperature: 22.3°C

Date/Time: 19.01.2012 13:47:56 Date/Time: 19.01.2012 13:51:36

### System Performance Check-D1800 head 2012-01-19

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

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

Medium: HSL1800 Medium parameters used:  $f = 1800 \text{ MHz}$ ;  $\sigma = 1.45 \text{ mho/m}$ ;  $\epsilon_r = 39.1$ ;  $\rho = 1000 \text{ kg/m}^3$

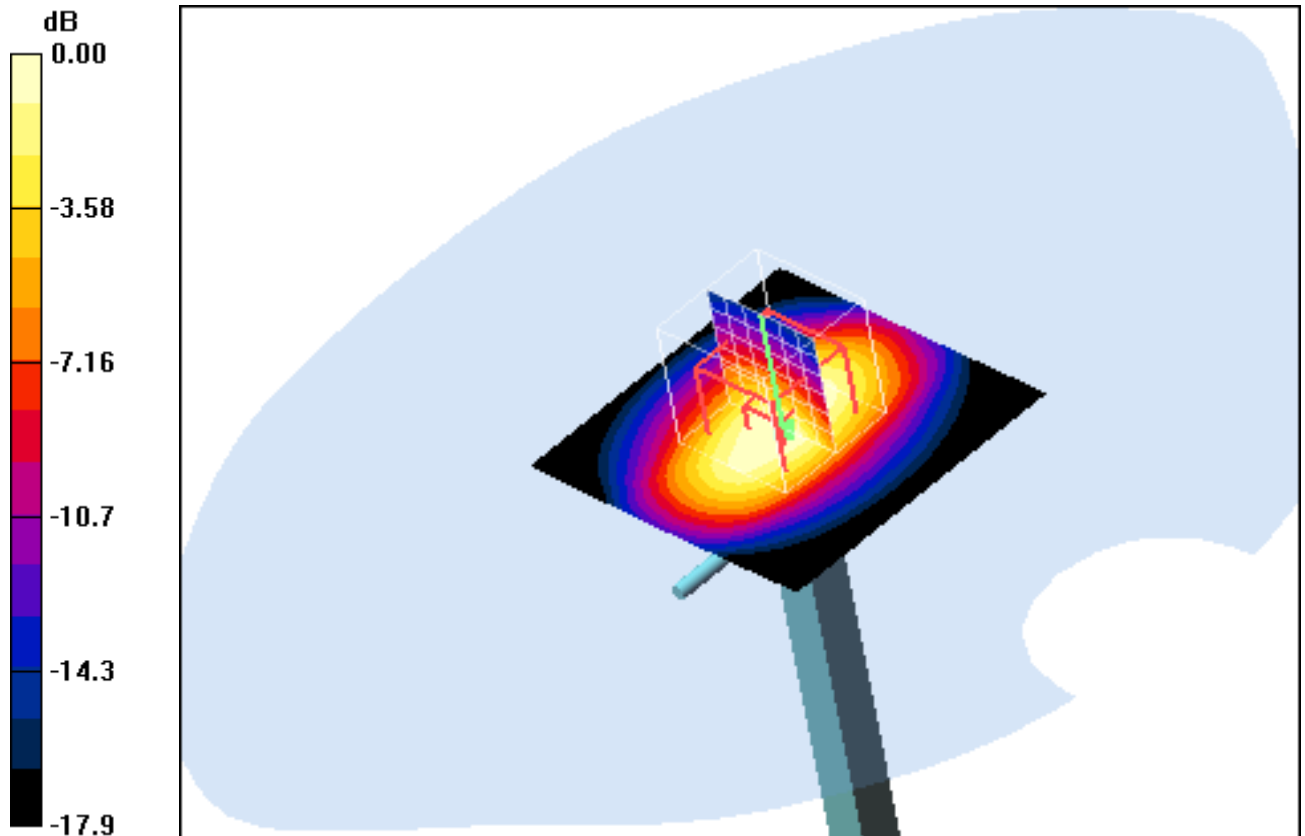
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.09, 5.09, 5.09); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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) = 50.4 mW/g

**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 182.4 V/m; Power Drift = -0.095 dB  
 Peak SAR (extrapolated) = 70.8 W/kg  
**SAR(1 g) = 38.8 mW/g; SAR(10 g) = 20.2 mW/g**  
 Maximum value of SAR (measured) = 43.8 mW/g



0 dB = 43.8mW/g

**Additional information:**

ambient temperature: 22.3°C; liquid temperature: 22.2°C

Date/Time: 20.01.2012 10:50:40 Date/Time: 20.01.2012 10:54:19

### System Performance Check-D1800 head 2012-01-20

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

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

Medium: HSL1800 Medium parameters used:  $f = 1800 \text{ MHz}$ ;  $\sigma = 1.45 \text{ mho/m}$ ;  $\epsilon_r = 39.1$ ;  $\rho = 1000 \text{ kg/m}^3$

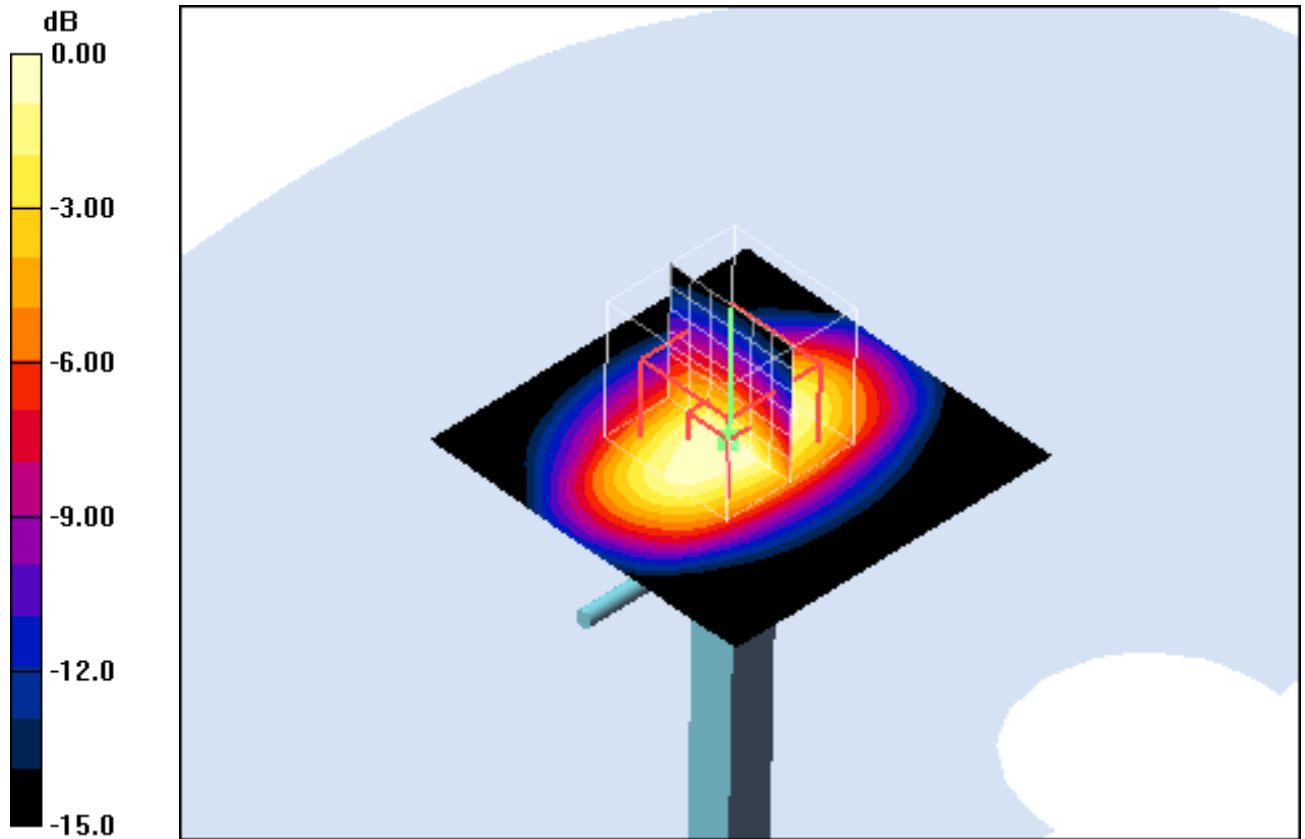
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.09, 5.09, 5.09); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 = 181.4 V/m; Power Drift = 0.015 dB  
 Peak SAR (extrapolated) = 71.1 W/kg  
**SAR(1 g) = 39.3 mW/g; SAR(10 g) = 20.5 mW/g**  
 Maximum value of SAR (measured) = 44.5 mW/g



0 dB = 44.5mW/g

**Additional information:**

ambient temperature: 22.2°C; liquid temperature: 22.1°C

Date/Time: 22.05.2012 18:18:41 Date/Time: 22.05.2012 18:22:08

### System Performance Check-D1800 head 2012-05-22

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

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

Medium: HSL1800 Medium parameters used:  $f = 1800 \text{ MHz}$ ;  $\sigma = 1.43 \text{ mho/m}$ ;  $\epsilon_r = 39.2$ ;  $\rho = 1000 \text{ kg/m}^3$

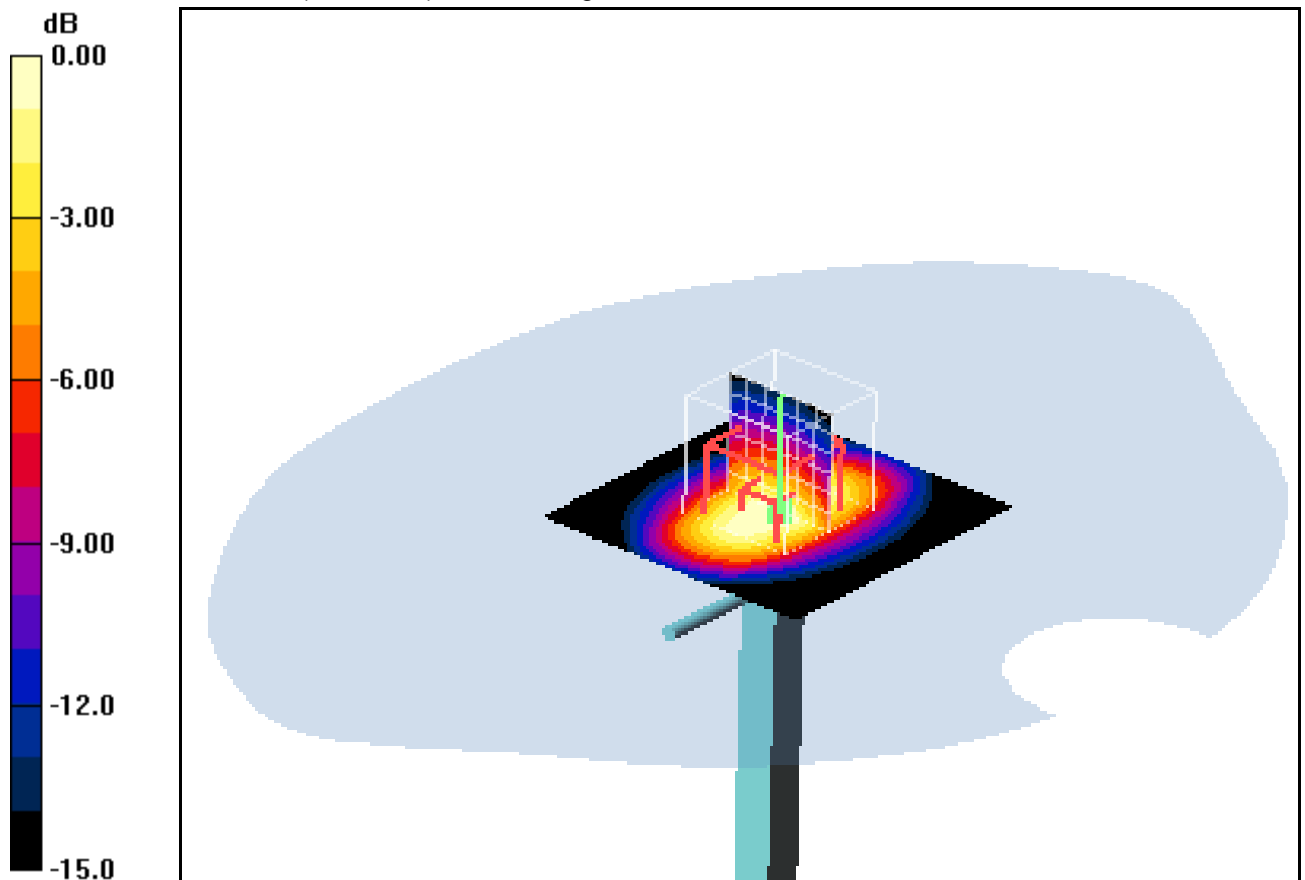
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.28, 5.28, 5.28); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; 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) = 50.7 mW/g

**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 184.0 V/m; Power Drift = 0.051 dB  
 Peak SAR (extrapolated) = 65.9 W/kg  
**SAR(1 g) = 38.5 mW/g; SAR(10 g) = 20.5 mW/g**  
 Maximum value of SAR (measured) = 43.5 mW/g



0 dB = 43.5mW/g

**Additional information:**

ambient temperature: 22.0°C; liquid temperature: 22.5°C



Date/Time: 23.05.2012 07:00:09 Date/Time: 23.05.2012 07:03:26

### System Performance Check-D1800 head 2012-05-23

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

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

Medium: HSL1800 Medium parameters used:  $f = 1800 \text{ MHz}$ ;  $\sigma = 1.43 \text{ mho/m}$ ;  $\epsilon_r = 39.2$ ;  $\rho = 1000 \text{ kg/m}^3$

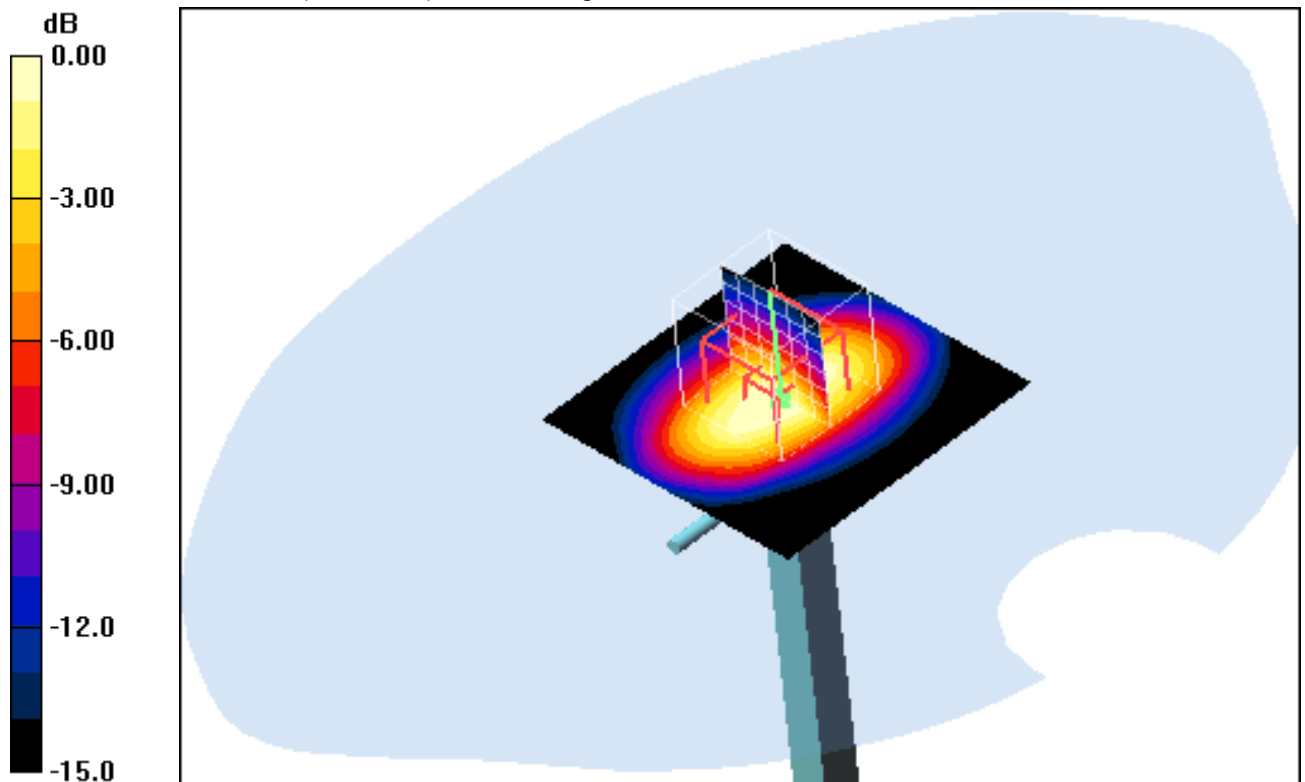
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(5.28, 5.28, 5.28); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; 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) = 48.3 mW/g

**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 179.3 V/m; Power Drift = 0.167 dB  
 Peak SAR (extrapolated) = 62.9 W/kg  
**SAR(1 g) = 37.3 mW/g; SAR(10 g) = 20 mW/g**  
 Maximum value of SAR (measured) = 41.9 mW/g



0 dB = 41.9mW/g

**Additional information:**

ambient temperature: 22.5°C; liquid temperature: 23.0°C

Date/Time: 20.01.2012 11:29:44 Date/Time: 20.01.2012 11:33:24

### System Performance Check-D1800 body 2012-01-20

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

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

Medium: M1800 Medium parameters used:  $f = 1800 \text{ MHz}$ ;  $\sigma = 1.55 \text{ mho/m}$ ;  $\epsilon_r = 52$ ;  $\rho = 1000 \text{ kg/m}^3$

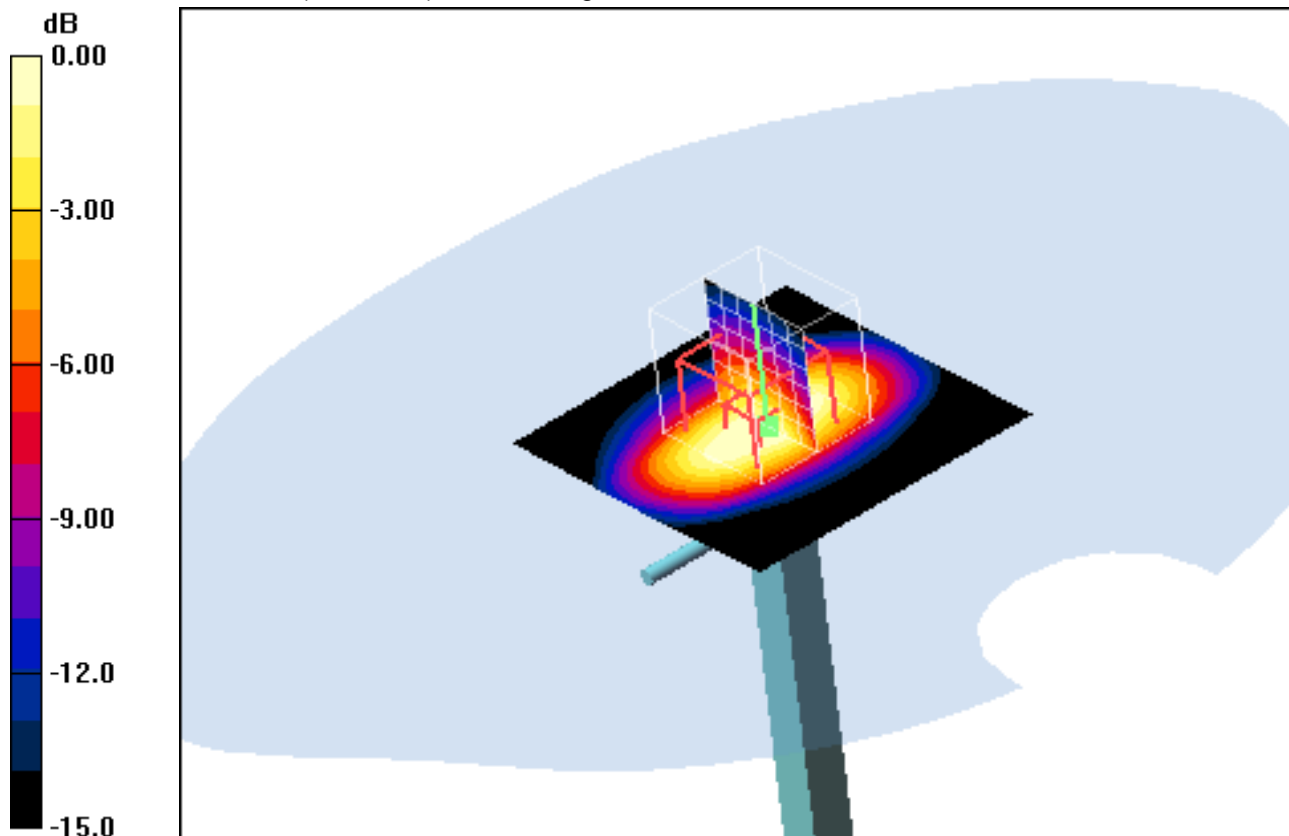
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.52, 4.52, 4.52); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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) = 53.2 mW/g

**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 179.3 V/m; Power Drift = -0.038 dB  
 Peak SAR (extrapolated) = 66.4 W/kg  
**SAR(1 g) = 39 mW/g; SAR(10 g) = 20.8 mW/g**  
 Maximum value of SAR (measured) = 44.1 mW/g



0 dB = 44.1mW/g

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.4°C

Date/Time: 21.01.2012 11:57:38 Date/Time: 21.01.2012 12:01:15

### System Performance Check-D1800 body 2012-01-21

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

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

Medium: M1800 Medium parameters used:  $f = 1800 \text{ MHz}$ ;  $\sigma = 1.55 \text{ mho/m}$ ;  $\epsilon_r = 52$ ;  $\rho = 1000 \text{ kg/m}^3$

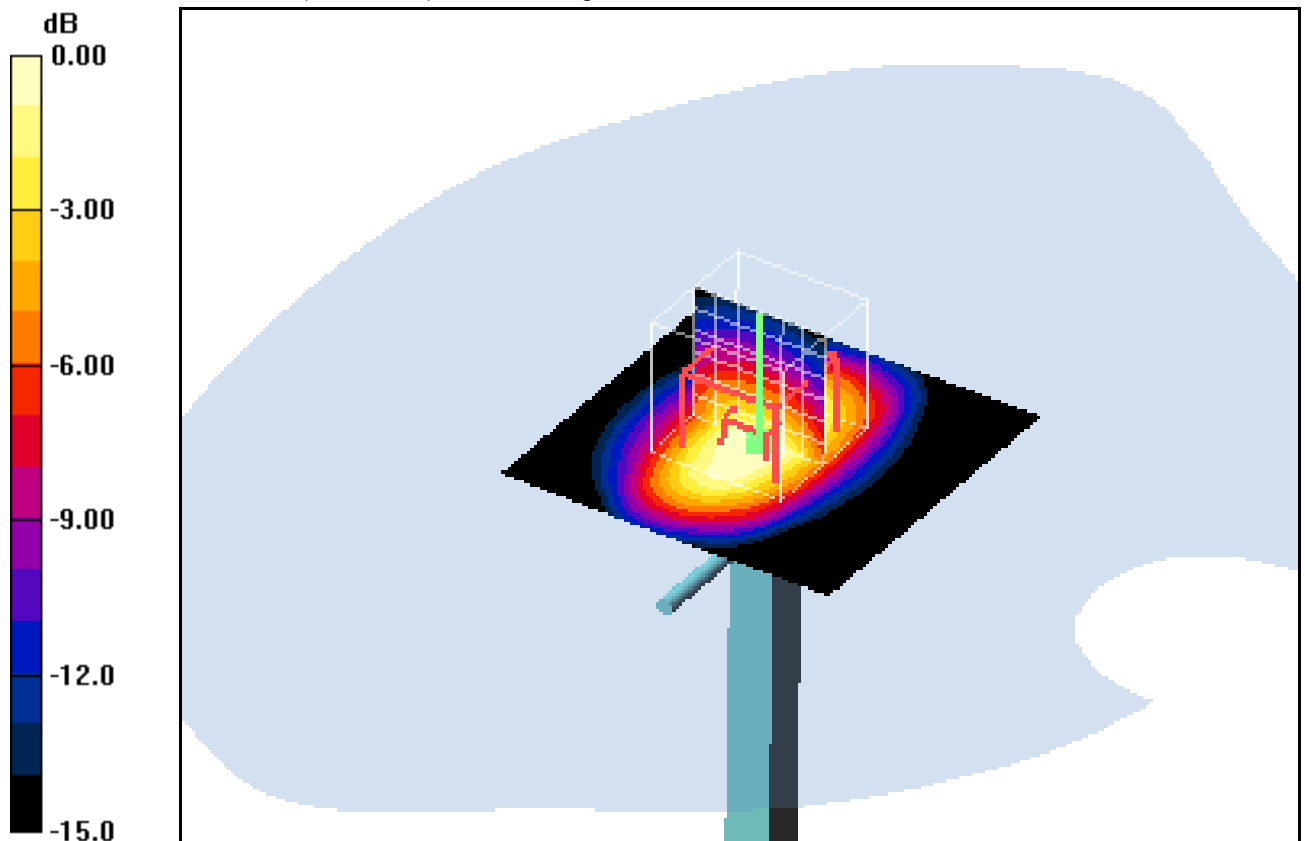
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.52, 4.52, 4.52); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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) = 55.5 mW/g

**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 182.0 V/m; Power Drift = -0.027 dB  
 Peak SAR (extrapolated) = 70.7 W/kg  
**SAR(1 g) = 41.1 mW/g; SAR(10 g) = 21.8 mW/g**  
 Maximum value of SAR (measured) = 46.9 mW/g



0 dB = 46.9mW/g

**Additional information:**

ambient temperature: 22.9°C; liquid temperature: 22.1°C

Date/Time: 29.02.2012 09:22:27 Date/Time: 29.02.2012 09:26:29

**System Performance Check-D1800 body 2012-02-29**

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

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

Medium: M1800 Medium parameters used:  $f = 1800 \text{ MHz}$ ;  $\sigma = 1.54 \text{ mho/m}$ ;  $\epsilon_r = 52.6$ ;  $\rho = 1000 \text{ kg/m}^3$

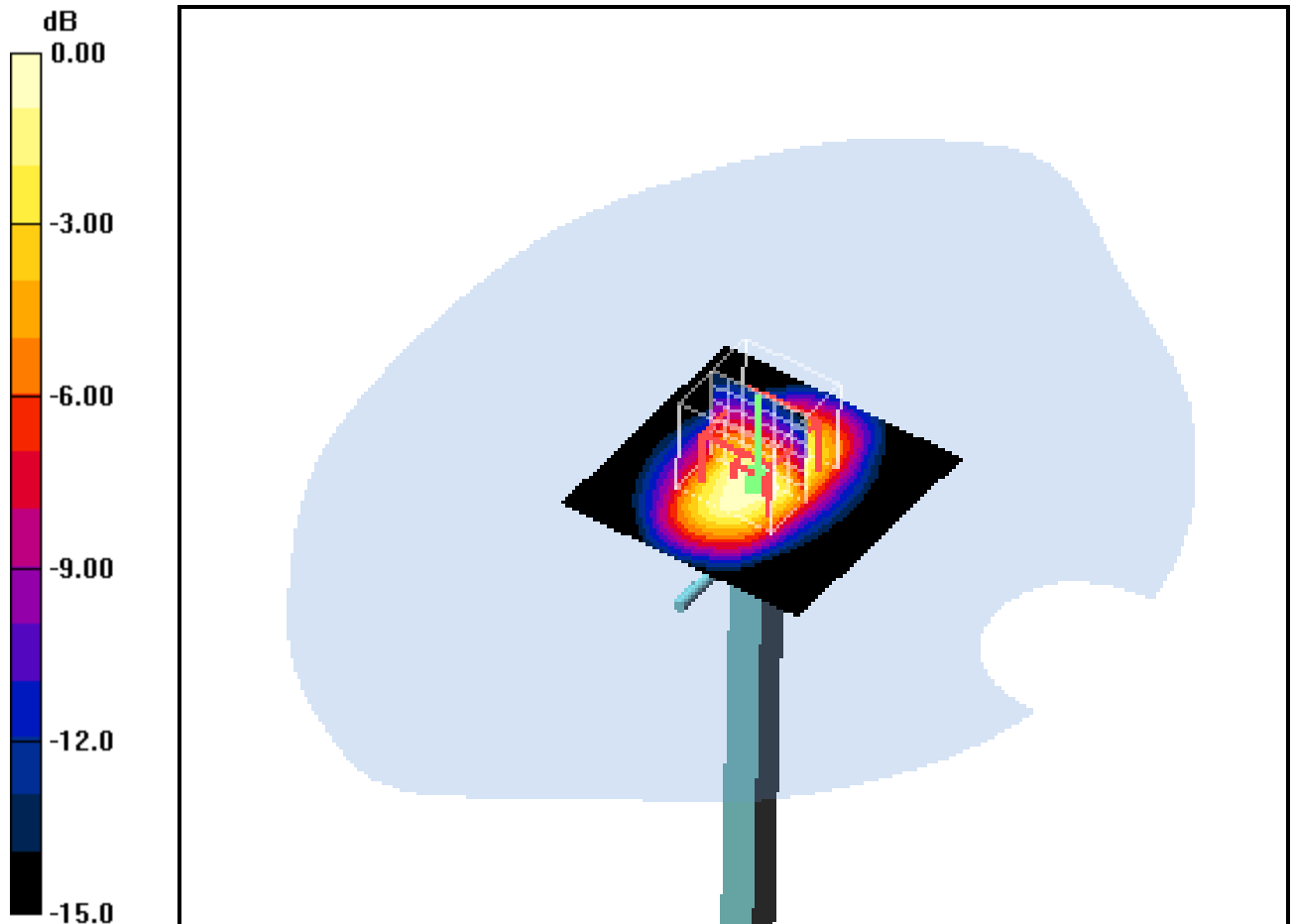
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.65, 4.65, 4.65); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; 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) = 53.9 mW/g

**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 181.1 V/m; Power Drift = 0.01 dB  
 Peak SAR (extrapolated) = 63.2 W/kg  
**SAR(1 g) = 38.2 mW/g; SAR(10 g) = 20.7 mW/g**  
 Maximum value of SAR (measured) = 43.5 mW/g



0 dB = 43.5mW/g

**Additional information:**

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

Date/Time: 01.03.2012 12:50:49 Date/Time: 01.03.2012 12:56:11

**System Performance Check-D1800 body 2012-03-01**

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

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

Medium: M1800 Medium parameters used:  $f = 1800 \text{ MHz}$ ;  $\sigma = 1.54 \text{ mho/m}$ ;  $\epsilon_r = 52.6$ ;  $\rho = 1000 \text{ kg/m}^3$

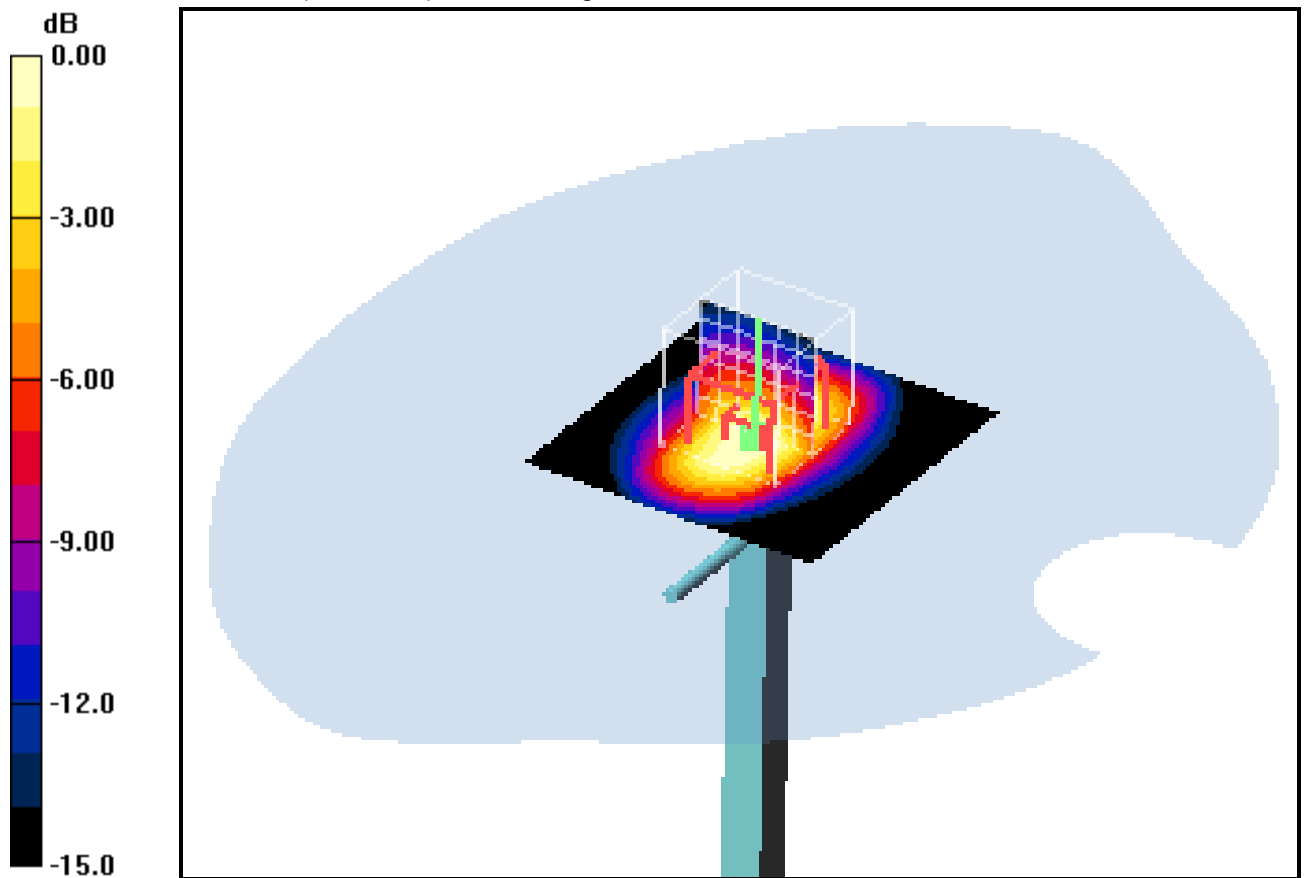
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.65, 4.65, 4.65); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; 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) = 52.9 mW/g

**d=15mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 178.6 V/m; Power Drift = 0.068 dB  
 Peak SAR (extrapolated) = 63.5 W/kg  
**SAR(1 g) = 38 mW/g; SAR(10 g) = 20.5 mW/g**  
 Maximum value of SAR (measured) = 43.8 mW/g



0 dB = 43.8mW/g

**Additional information:**

ambient temperature: 22.5°C; liquid temperature: 21.1°C

Date/Time: 23.05.2012 11:12:07 Date/Time: 23.05.2012 11:15:44

**System Performance Check-D1800 body 2012-05-23**

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

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

Medium: M1800 Medium parameters used:  $f = 1800 \text{ MHz}$ ;  $\sigma = 1.55 \text{ mho/m}$ ;  $\epsilon_r = 53.2$ ;  $\rho = 1000 \text{ kg/m}^3$

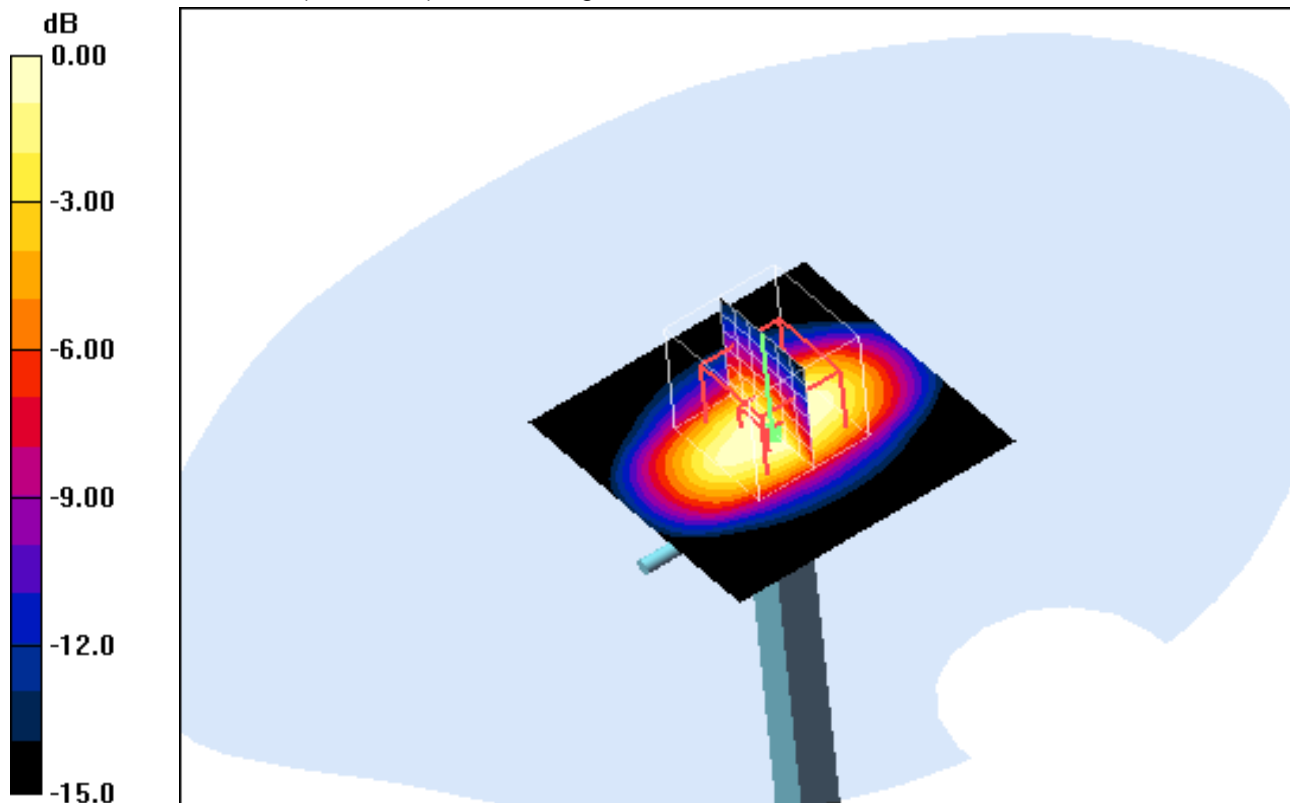
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.52, 4.52, 4.52); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical 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:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 56.6 mW/g

**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 182.4 V/m; Power Drift = -0.00 dB  
 Peak SAR (extrapolated) = 68.7 W/kg  
**SAR(1 g) = 40.1 mW/g; SAR(10 g) = 21.3 mW/g**  
 Maximum value of SAR (measured) = 45.6 mW/g



0 dB = 45.6mW/g

**Additional information:**

ambient temperature: 22.1°C; liquid temperature: 21.8°C

Date/Time: 24.05.2012 21:36:22 Date/Time: 24.05.2012 21:40:01

### System Performance Check-D1800 body 2012-05-24

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

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

Medium: M1800 Medium parameters used:  $f = 1800 \text{ MHz}$ ;  $\sigma = 1.55 \text{ mho/m}$ ;  $\epsilon_r = 53.2$ ;  $\rho = 1000 \text{ kg/m}^3$

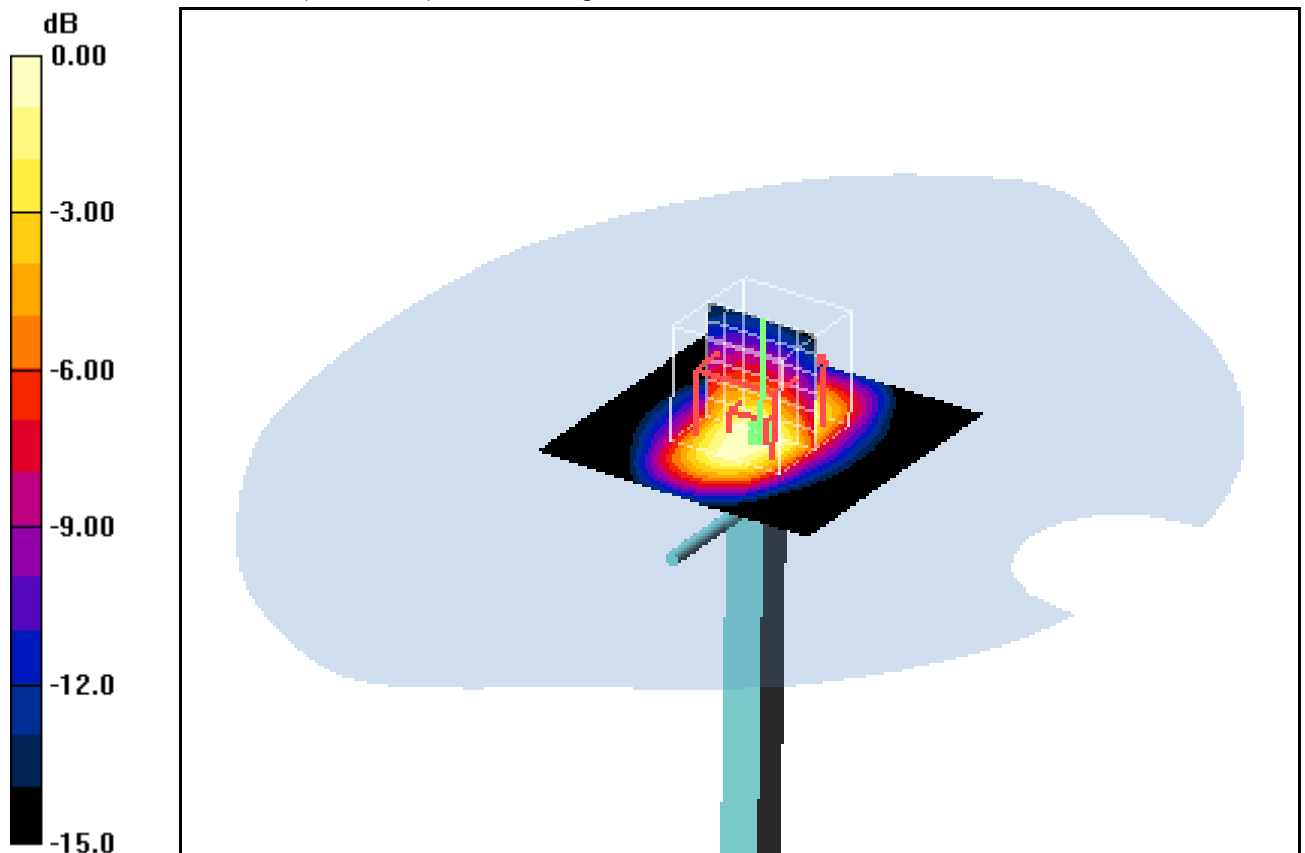
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.52, 4.52, 4.52); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical 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) = 55.5 mW/g

**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 182.0 V/m; Power Drift = -0.028 dB  
 Peak SAR (extrapolated) = 67.0 W/kg  
**SAR(1 g) = 39.3 mW/g; SAR(10 g) = 21 mW/g**  
 Maximum value of SAR (measured) = 44.7 mW/g



0 dB = 44.7mW/g

**Additional information:**

ambient temperature: 23.0°C; liquid temperature: 22.6°C

Date/Time: 13.01.2012 13:33:22 Date/Time: 13.01.2012 13:37:01

**System Performance Check-D1900 head 2012-01-13**

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

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

Medium: HSL1900 Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.4 \text{ mho/m}$ ;  $\epsilon_r = 39.5$ ;  $\rho = 1000 \text{ kg/m}^3$

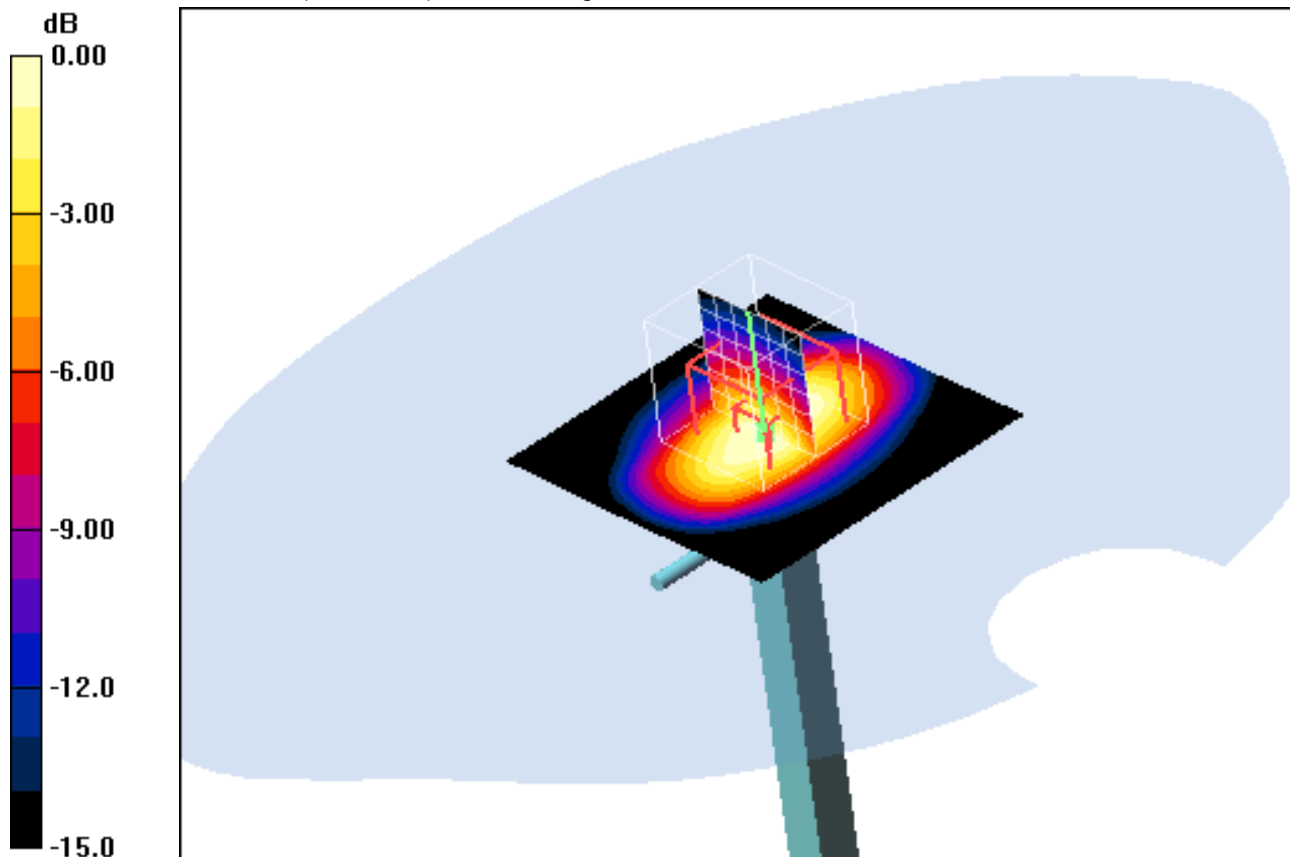
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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) = 51.4 mW/g

**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 184.8 V/m; Power Drift = 0.017 dB  
 Peak SAR (extrapolated) = 69.6 W/kg  
**SAR(1 g) = 39 mW/g; SAR(10 g) = 20.5 mW/g**  
 Maximum value of SAR (measured) = 44.1 mW/g



0 dB = 44.1mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.6°C



Date/Time: 14.01.2012 13:40:58 Date/Time: 14.01.2012 13:44:39

## System Performance Check-D1900 head 2012-01-14

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

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

Medium: HSL1900 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.4$  mho/m;  $\epsilon_r = 39.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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) = 52.9 mW/g

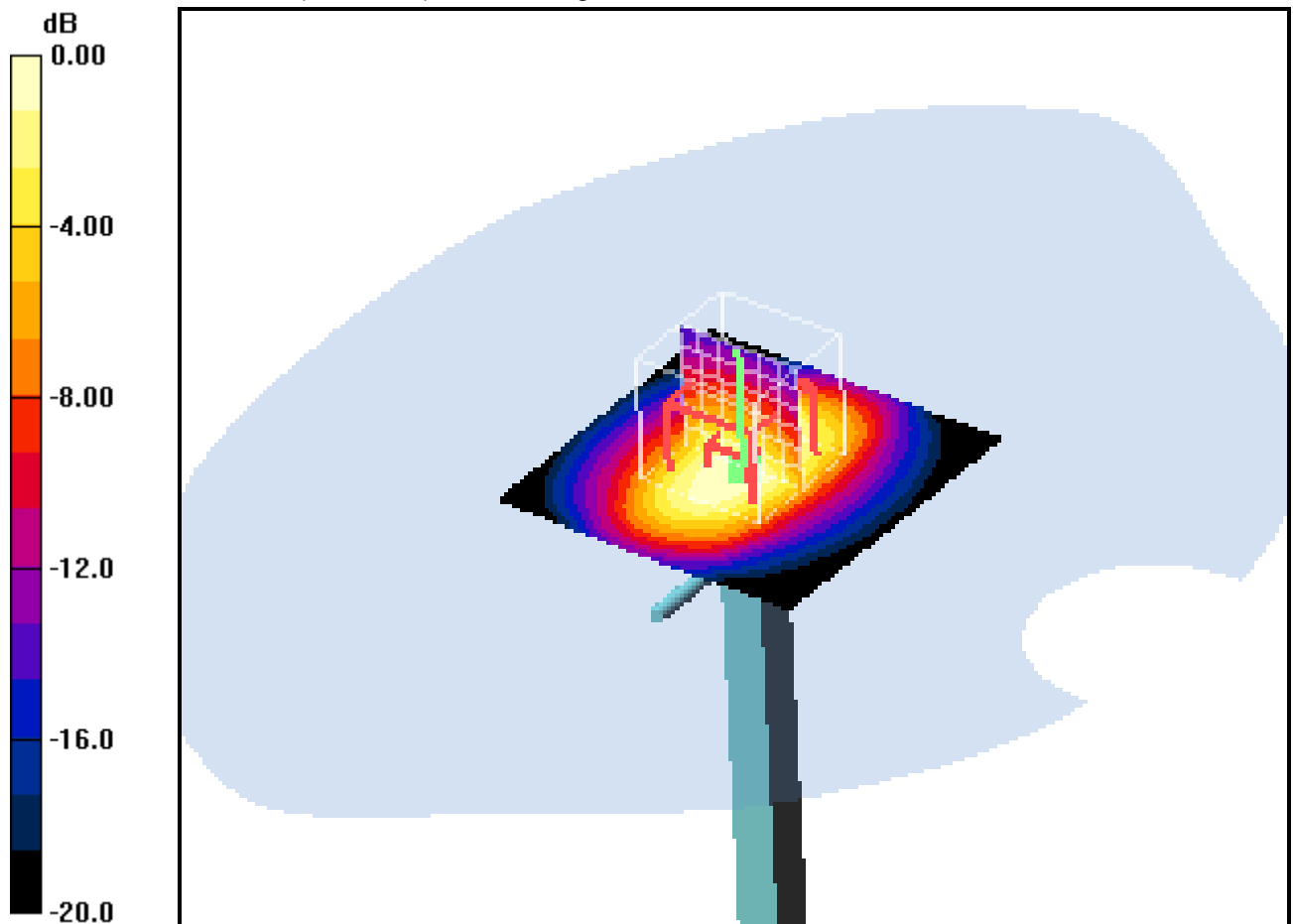
**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
dx=5mm, dy=5mm, dz=5mm

Reference Value = 185.7 V/m; Power Drift = -0.038 dB

Peak SAR (extrapolated) = 69.9 W/kg

**SAR(1 g) = 39.2 mW/g; SAR(10 g) = 20.6 mW/g**

Maximum value of SAR (measured) = 44.2 mW/g



0 dB = 44.2mW/g

### Additional information:

ambient temperature: 22.6°C; liquid temperature: 22.0°C

Date/Time: 12.01.2012 14:34:02 Date/Time: 12.01.2012 14:37:43

### System Performance Check-D1900 body 2012-01-12

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

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

Medium: M1900 Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.51 \text{ mho/m}$ ;  $\epsilon_r = 52.3$ ;  $\rho = 1000 \text{ kg/m}^3$

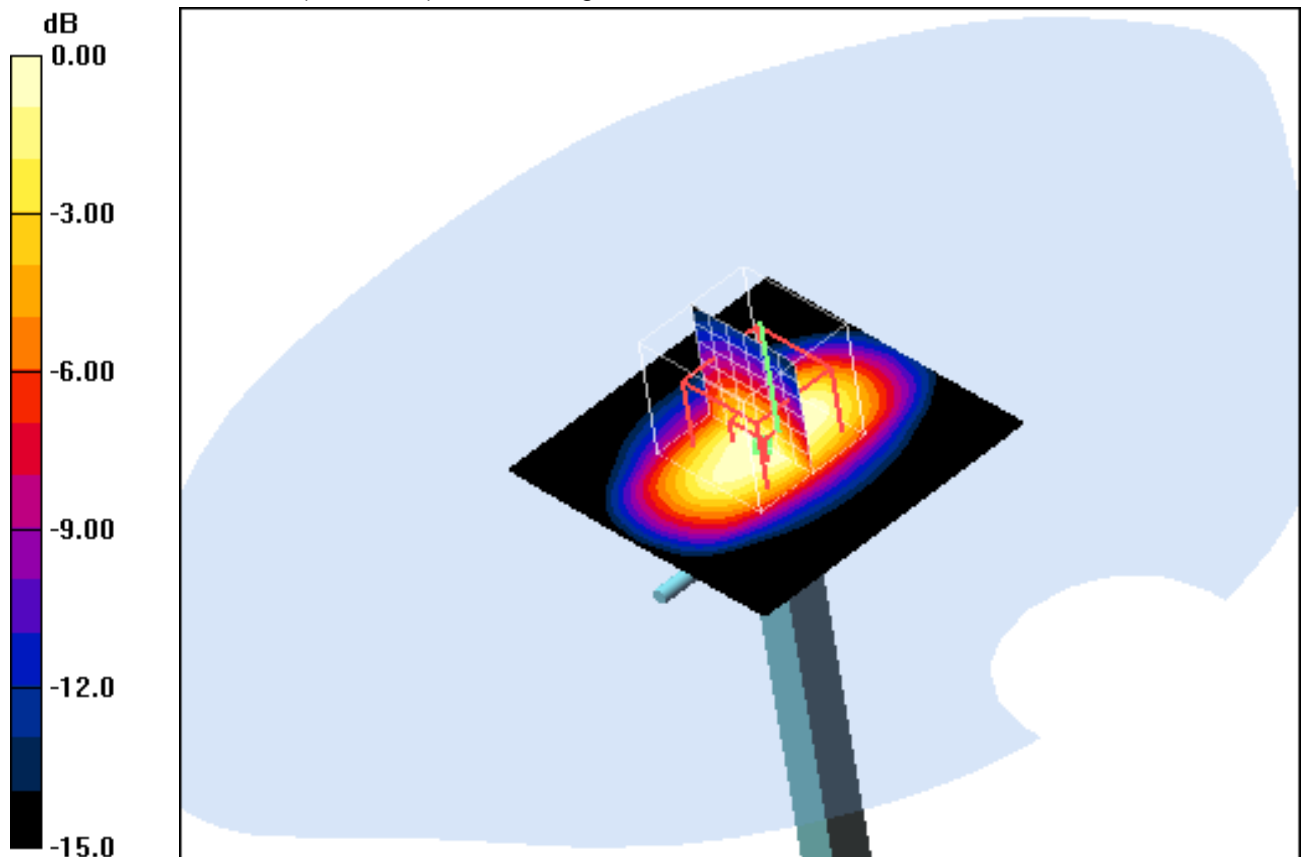
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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) = 55.8 mW/g

**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 184.2 V/m; Power Drift = -0.038 dB  
 Peak SAR (extrapolated) = 68.3 W/kg  
**SAR(1 g) = 39.7 mW/g; SAR(10 g) = 21.2 mW/g**  
 Maximum value of SAR (measured) = 44.8 mW/g



0 dB = 44.8mW/g

**Additional information:**

ambient temperature: 23.7°C; liquid temperature: 23.1°C

Date/Time: 13.01.2012 11:45:01 Date/Time: 13.01.2012 11:48:42

### System Performance Check-D1900 body 2012-01-13

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

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

Medium: M1900 Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.51 \text{ mho/m}$ ;  $\epsilon_r = 52.3$ ;  $\rho = 1000 \text{ kg/m}^3$

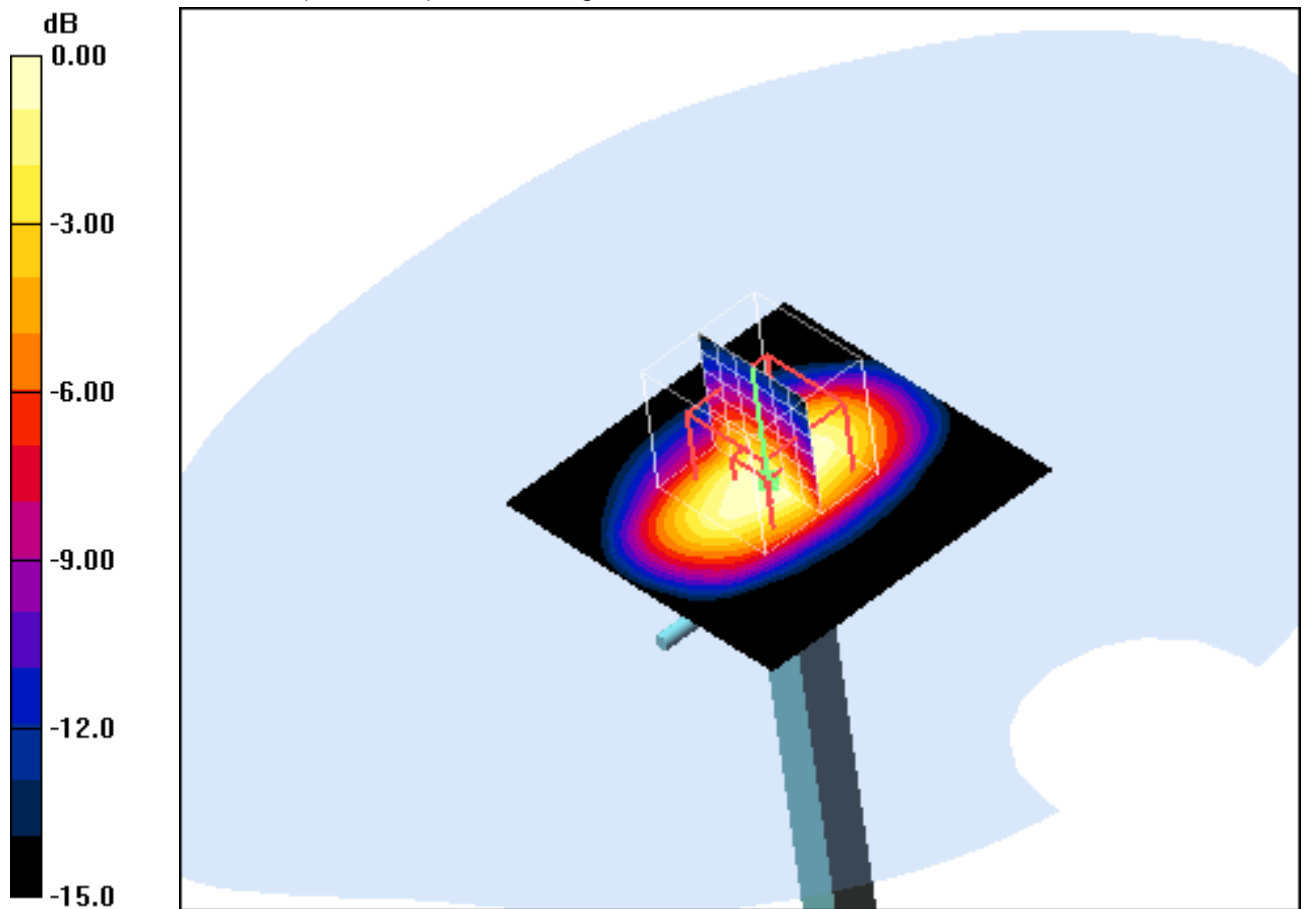
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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) = 55.4 mW/g

**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 182.5 V/m; Power Drift = -0.00 dB  
 Peak SAR (extrapolated) = 71.9 W/kg  
**SAR(1 g) = 41.3 mW/g; SAR(10 g) = 21.8 mW/g**  
 Maximum value of SAR (measured) = 46.9 mW/g



0 dB = 46.9mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.3°C

Date/Time: 10.01.2012 14:11:51 Date/Time: 10.01.2012 14:15:18

### System Performance Check-D2450 head 2012-01-10

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

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

Medium: HSL2450 Medium parameters used:  $f = 2450 \text{ MHz}$ ;  $\sigma = 1.86 \text{ mho/m}$ ;  $\epsilon_r = 39$ ;  $\rho = 1000 \text{ kg/m}^3$

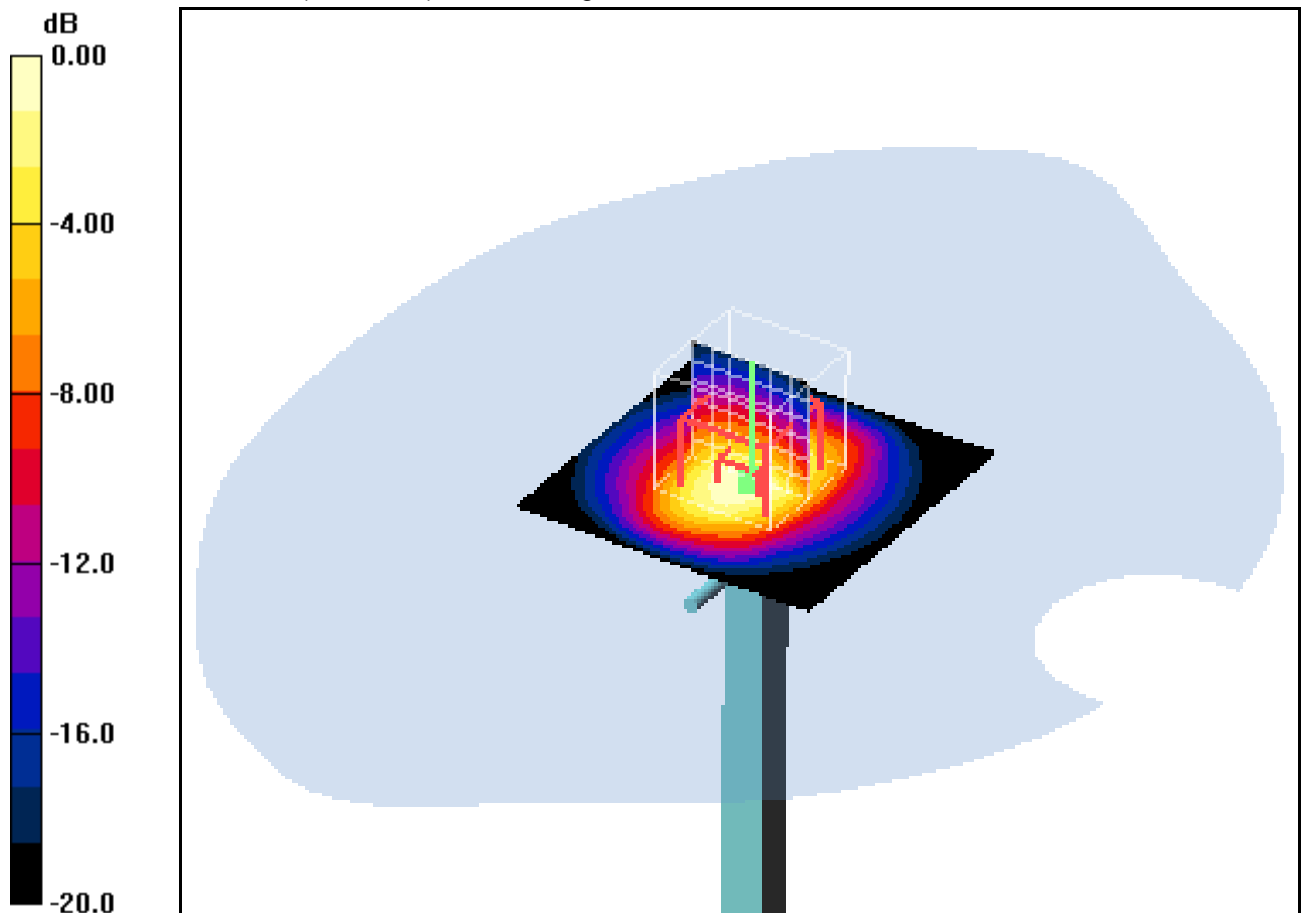
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.15, 4.15, 4.15); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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/Area Scan (51x51x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 7.73 mW/g

**d=10mm, Pin=100mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 58.4 V/m; Power Drift = 0.057 dB  
 Peak SAR (extrapolated) = 10.9 W/kg  
**SAR(1 g) = 5.6 mW/g; SAR(10 g) = 2.58 mW/g**  
 Maximum value of SAR (measured) = 6.30 mW/g



0 dB = 6.30mW/g

**Additional information:**

ambient temperature: 23.0°C; liquid temperature: 22.4°C

Date/Time: 11.01.2012 15:28:18 Date/Time: 11.01.2012 15:31:44

### System Performance Check-D2450 body 2012-01-11

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

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

Medium: M2450 Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.99$  mho/m;  $\epsilon_r = 52.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

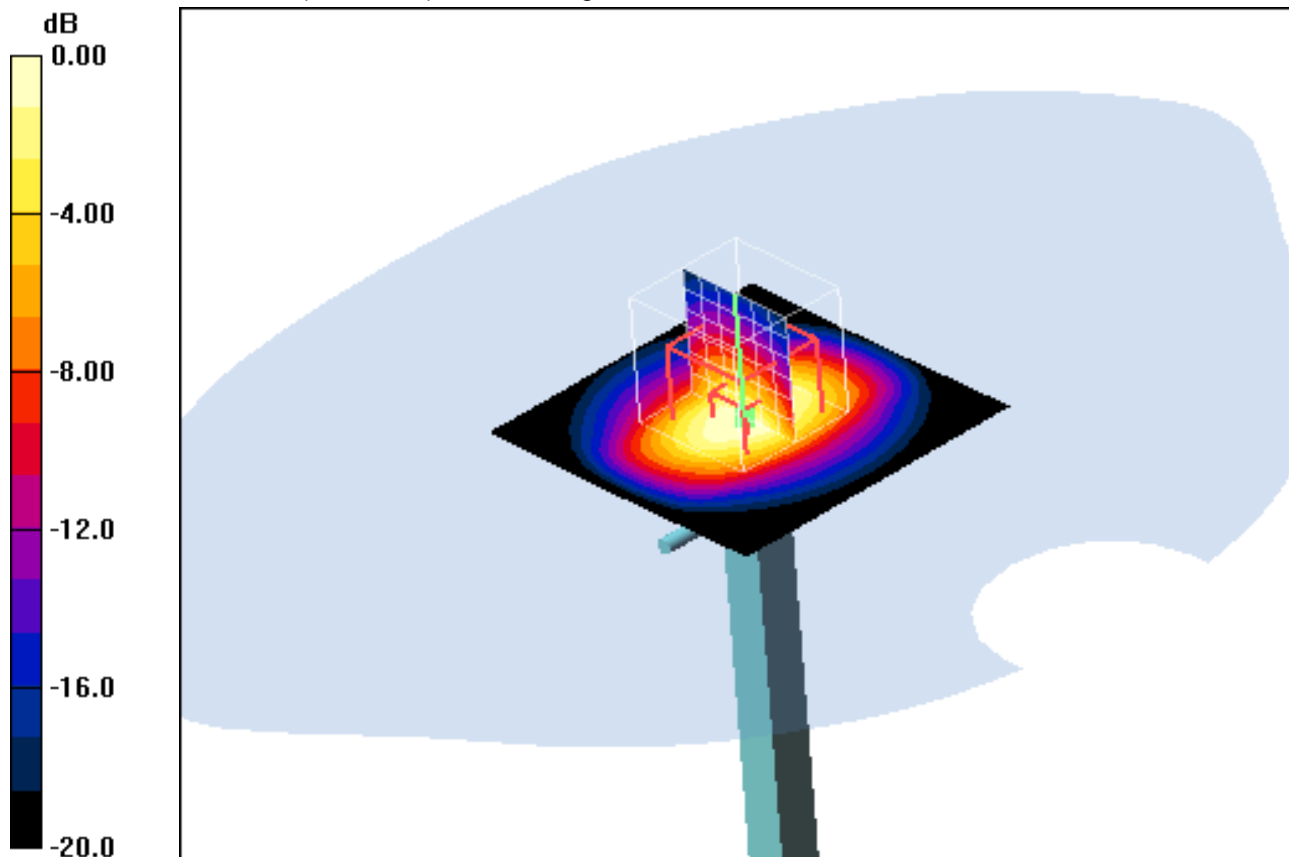
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(3.9, 3.9, 3.9); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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/Area Scan (51x51x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 7.54 mW/g

**d=10mm, Pin=100mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 55.6 V/m; Power Drift = -0.023 dB  
 Peak SAR (extrapolated) = 11.5 W/kg  
**SAR(1 g) = 5.45 mW/g; SAR(10 g) = 2.49 mW/g**  
 Maximum value of SAR (measured) = 5.97 mW/g



0 dB = 5.97mW/g

**Additional information:**

ambient temperature: 22.9°C; liquid temperature: 22.0°C

Date/Time: 12.01.2012 11:32:15 Date/Time: 12.01.2012 11:35:41

### System Performance Check-D2450 body 2012-01-12

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

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

Medium: M2450 Medium parameters used:  $f = 2450 \text{ MHz}$ ;  $\sigma = 1.99 \text{ mho/m}$ ;  $\epsilon_r = 52.1$ ;  $\rho = 1000 \text{ kg/m}^3$

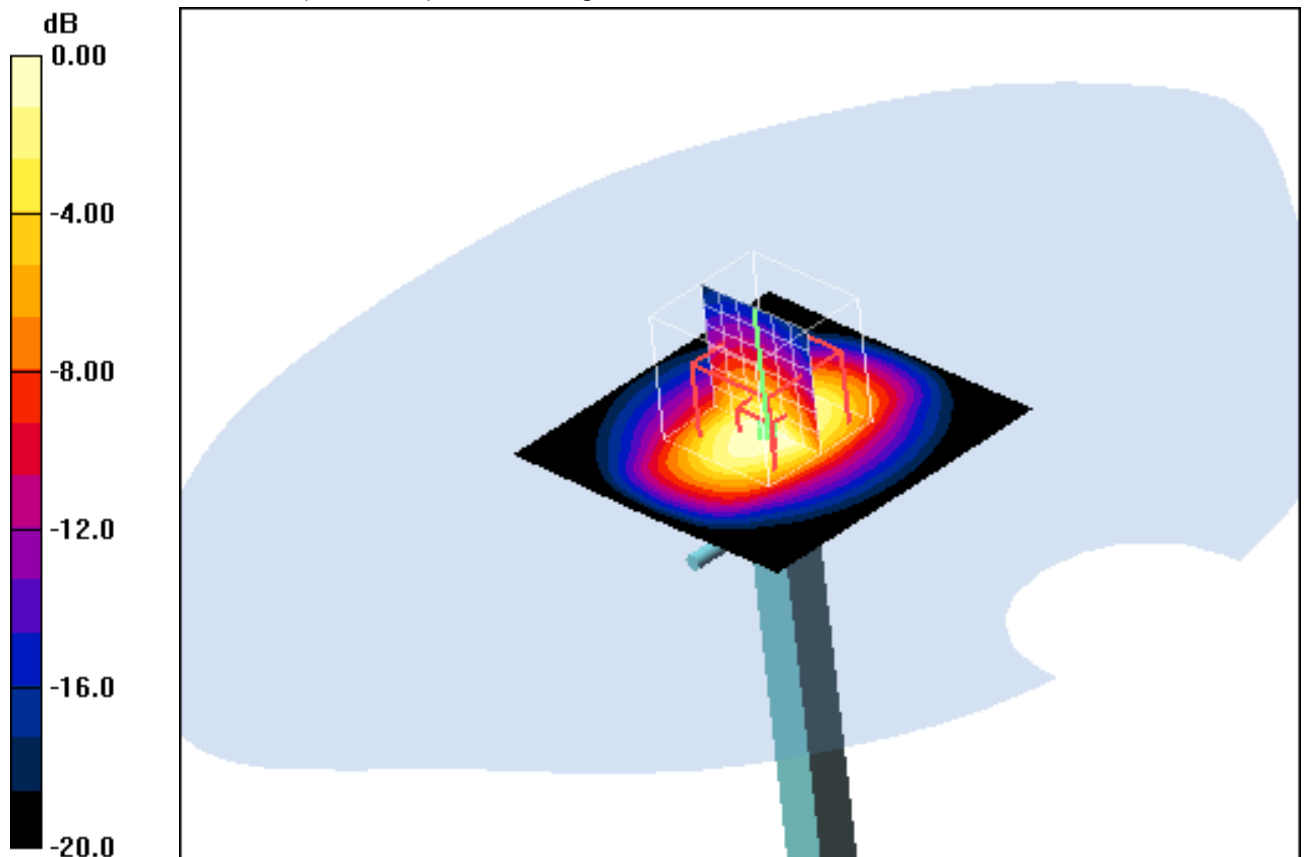
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(3.9, 3.9, 3.9); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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/Area Scan (51x51x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 7.65 mW/g

**d=10mm, Pin=100mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 55.6 V/m; Power Drift = -0.013 dB  
 Peak SAR (extrapolated) = 11.3 W/kg  
**SAR(1 g) = 5.42 mW/g; SAR(10 g) = 2.49 mW/g**  
 Maximum value of SAR (measured) = 5.95 mW/g



0 dB = 5.95mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.7°C

**Annex B: DASY4 measurement results**

**Annex B.1: GSM 850MHz head**

Date/Time: 07.01.2012 17:22:06 Date/Time: 07.01.2012 17:31:24

**IEEE1528\_OET65-LeftHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8

Medium: HSL850 Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.88 \text{ mho/m}$ ;  $\epsilon_r = 41.4$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011

- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

- Electronics: DAE3 Sn477; Calibrated: 04.05.2011

- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.394 mW/g

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

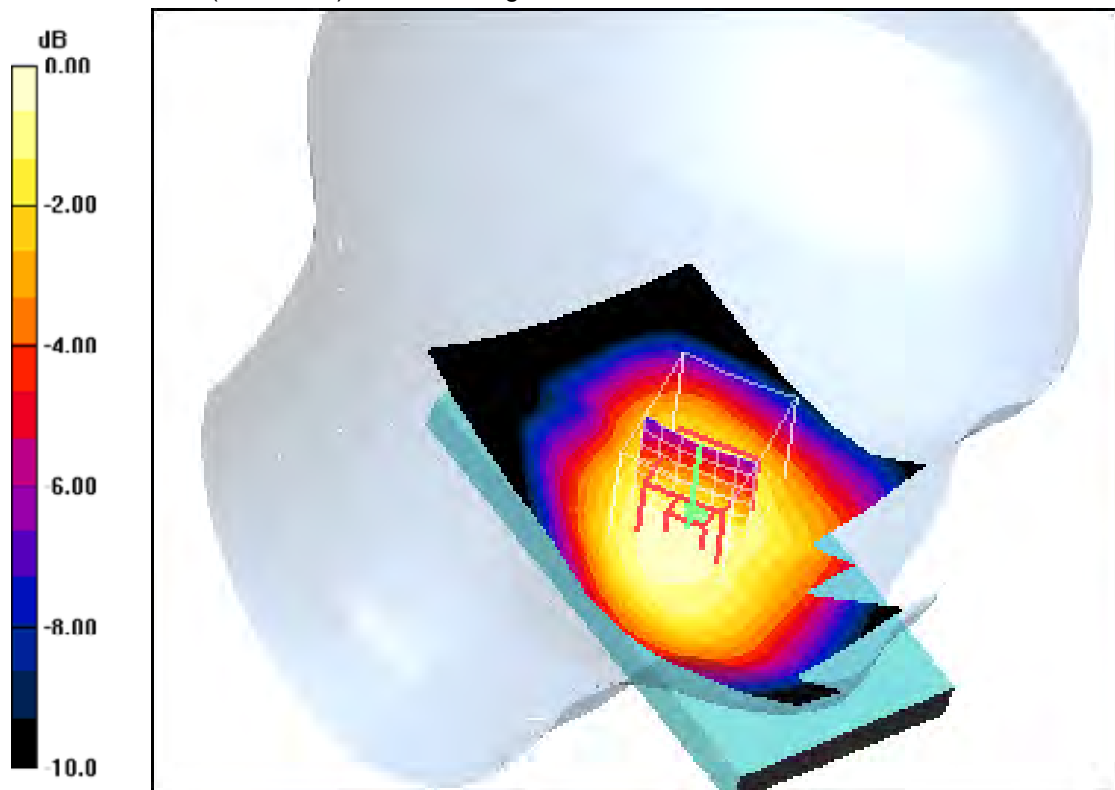
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 22.0 V/m; Power Drift = -0.092 dB

Peak SAR (extrapolated) = 0.461 W/kg

**SAR(1 g) = 0.375 mW/g; SAR(10 g) = 0.290 mW/g**

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



0 dB = 0.398mW/g

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.5°C

Date/Time: 07.01.2012 17:49:13 Date/Time: 07.01.2012 17:58:00

**IEEE1528\_OET65-LeftHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: HSL850 Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.9 \text{ mho/m}$ ;  $\epsilon_r = 41.3$ ;  $\rho = 1000 \text{ kg/m}^3$

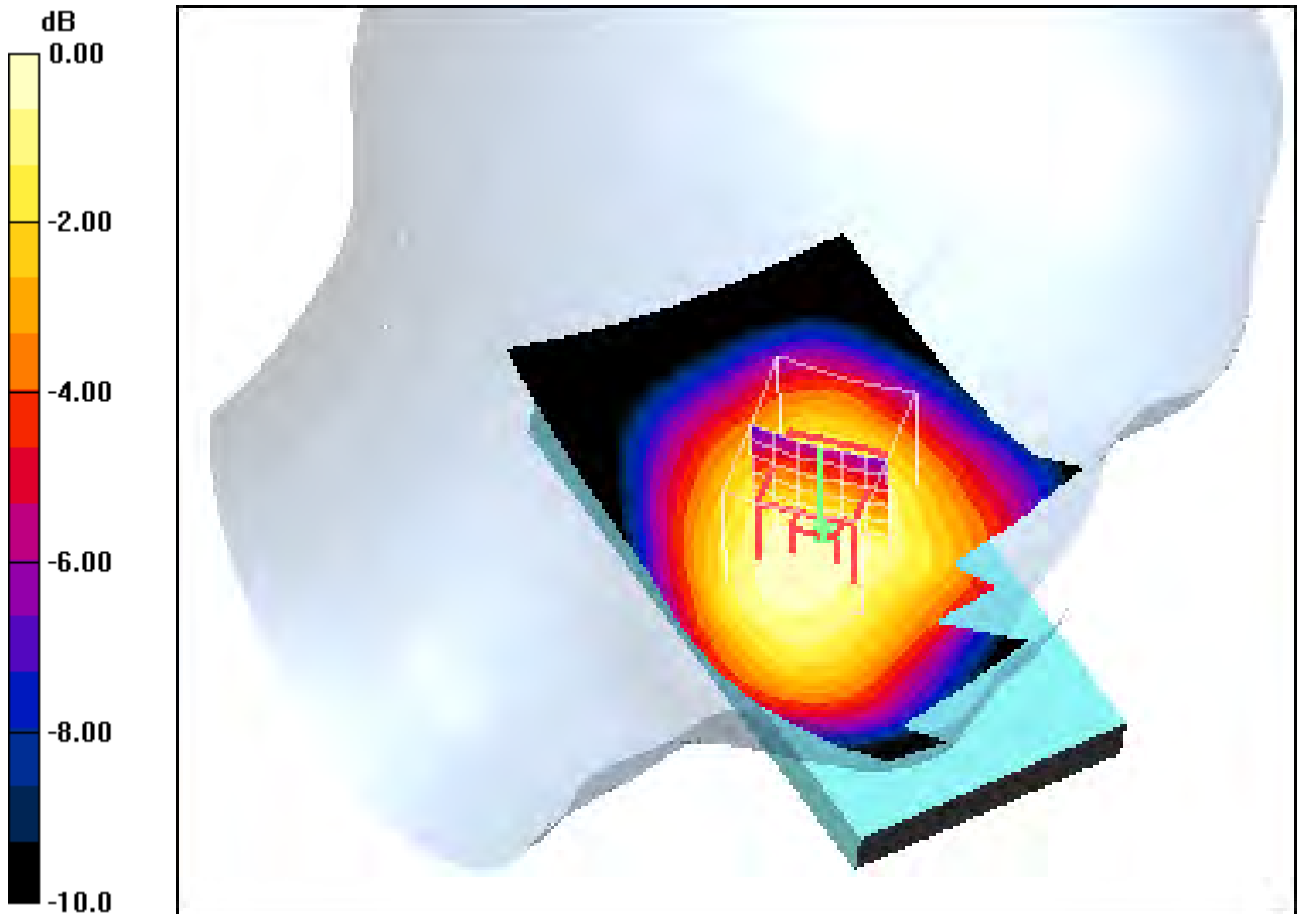
Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 0.563 mW/g

**Touch position - Middle/Zoom Scan (7x7x7) (7x9x7)/Cube 0:** Measurement grid:  
 $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 25.8 V/m; Power Drift = 0.01 dB  
 Peak SAR (extrapolated) = 0.662 W/kg  
**SAR(1 g) = 0.543 mW/g; SAR(10 g) = 0.421 mW/g**  
 Maximum value of SAR (measured) = 0.574 mW/g



0 dB = 0.574mW/g

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.5°C



Date/Time: 07.01.2012 18:17:23 Date/Time: 07.01.2012 18:25:42

**IEEE1528\_OET65-LeftHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8

Medium: HSL850 Medium parameters used:  $f = 848.8 \text{ MHz}$ ;  $\sigma = 0.91 \text{ mho/m}$ ;  $\epsilon_r = 41.1$ ;  $\rho = 1000 \text{ kg/m}^3$

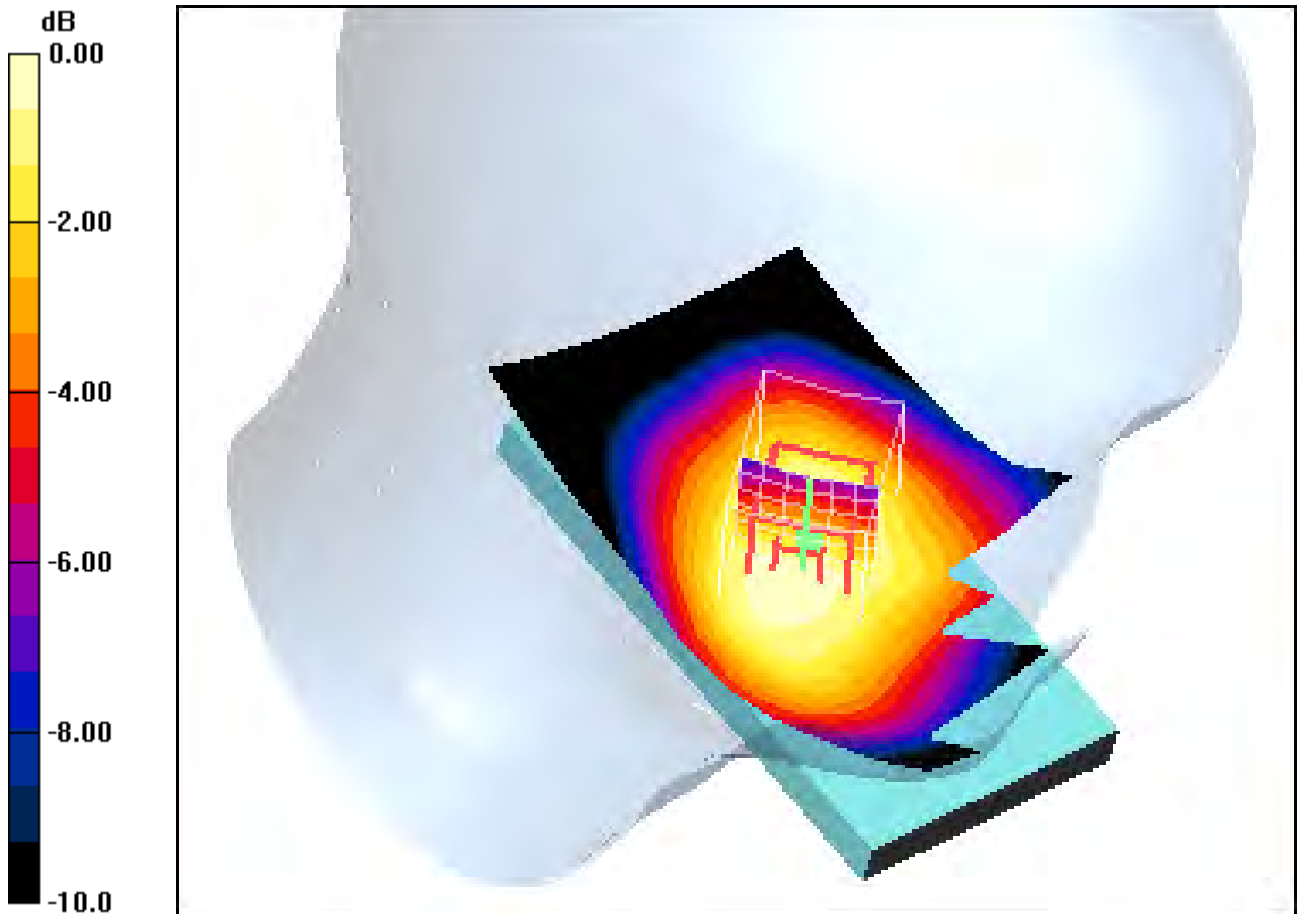
Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 0.624 mW/g

**Touch position - High/Zoom Scan (7x7x7) (7x9x7)/Cube 0:** Measurement grid:  
 $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 27.1 V/m; Power Drift = -0.036 dB  
 Peak SAR (extrapolated) = 0.741 W/kg  
**SAR(1 g) = 0.602 mW/g; SAR(10 g) = 0.465 mW/g**  
 Maximum value of SAR (measured) = 0.633 mW/g



0 dB = 0.633mW/g

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.5°C

Date/Time: 07.01.2012 19:30:00 Date/Time: 07.01.2012 19:38:58

**IEEE1528\_OET65-LeftHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8

Medium: HSL850 Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.88 \text{ mho/m}$ ;  $\epsilon_r = 41.4$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.217 mW/g

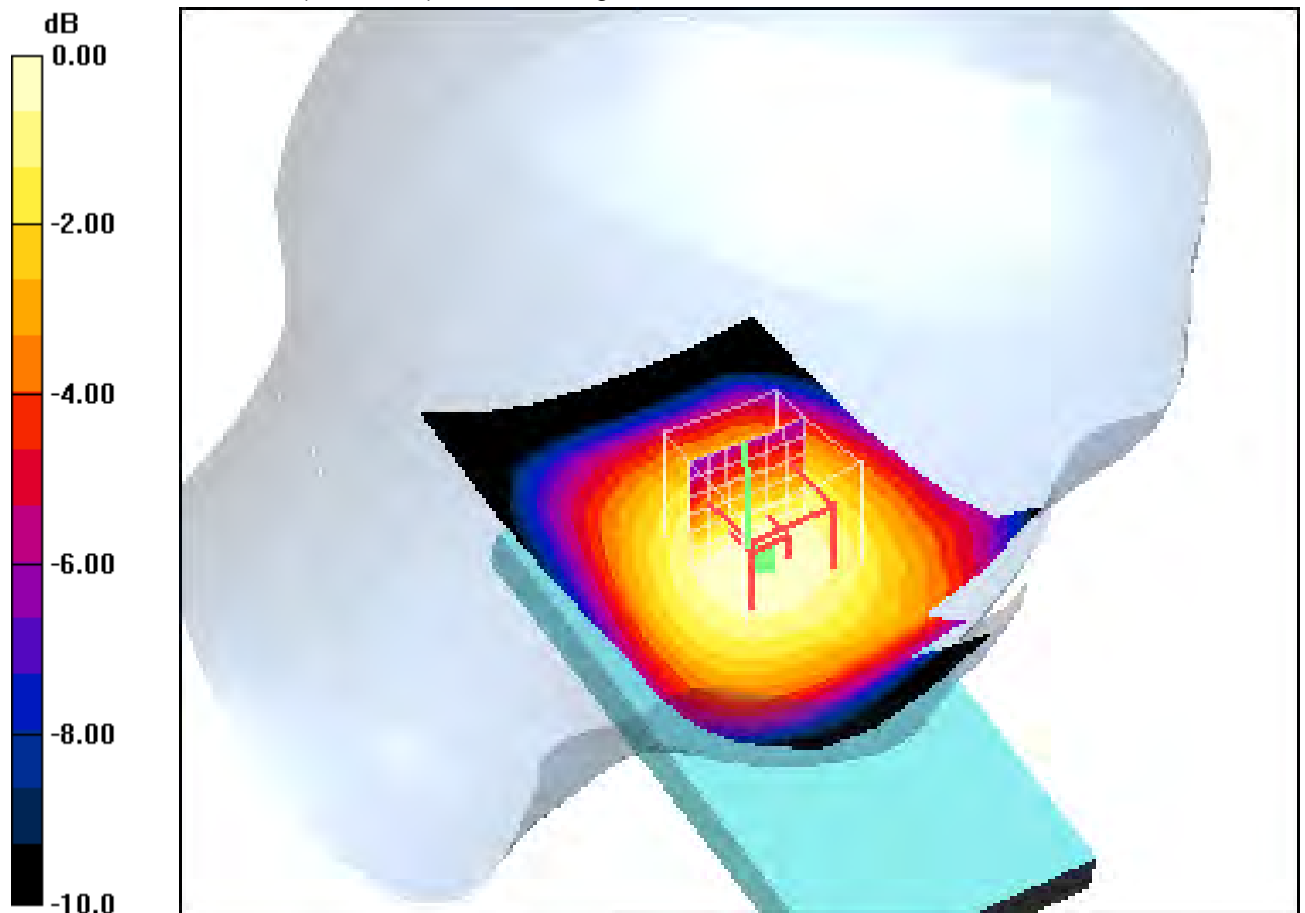
**Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 16.3 V/m; Power Drift = -0.013 dB

Peak SAR (extrapolated) = 0.235 W/kg

**SAR(1 g) = 0.203 mW/g; SAR(10 g) = 0.159 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: 22.5°C

Date/Time: 07.01.2012 19:07:55 Date/Time: 07.01.2012 19:16:45

**IEEE1528\_OET65-LeftHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: HSL850 Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.9 \text{ mho/m}$ ;  $\epsilon_r = 41.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.317 mW/g

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

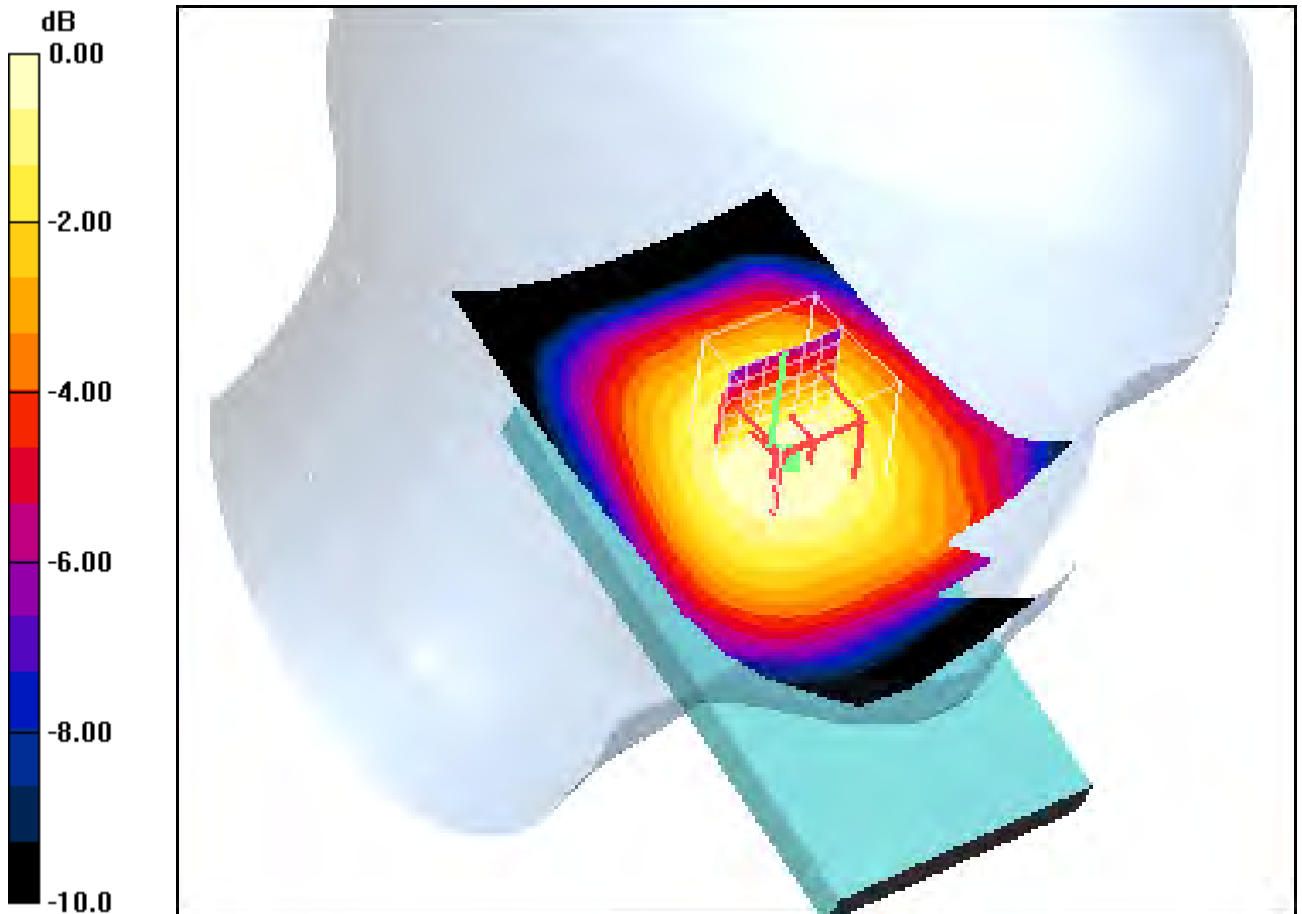
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 19.5 V/m; Power Drift = -0.063 dB

Peak SAR (extrapolated) = 0.348 W/kg

**SAR(1 g) = 0.297 mW/g; SAR(10 g) = 0.232 mW/g**

Maximum value of SAR (measured) = 0.311 mW/g



0 dB = 0.311mW/g

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.5°C

Date/Time: 07.01.2012 18:45:38 Date/Time: 07.01.2012 18:54:27

**IEEE1528\_OET65-LeftHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8

Medium: HSL850 Medium parameters used:  $f = 848.8 \text{ MHz}$ ;  $\sigma = 0.91 \text{ mho/m}$ ;  $\epsilon_r = 41.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.366 mW/g

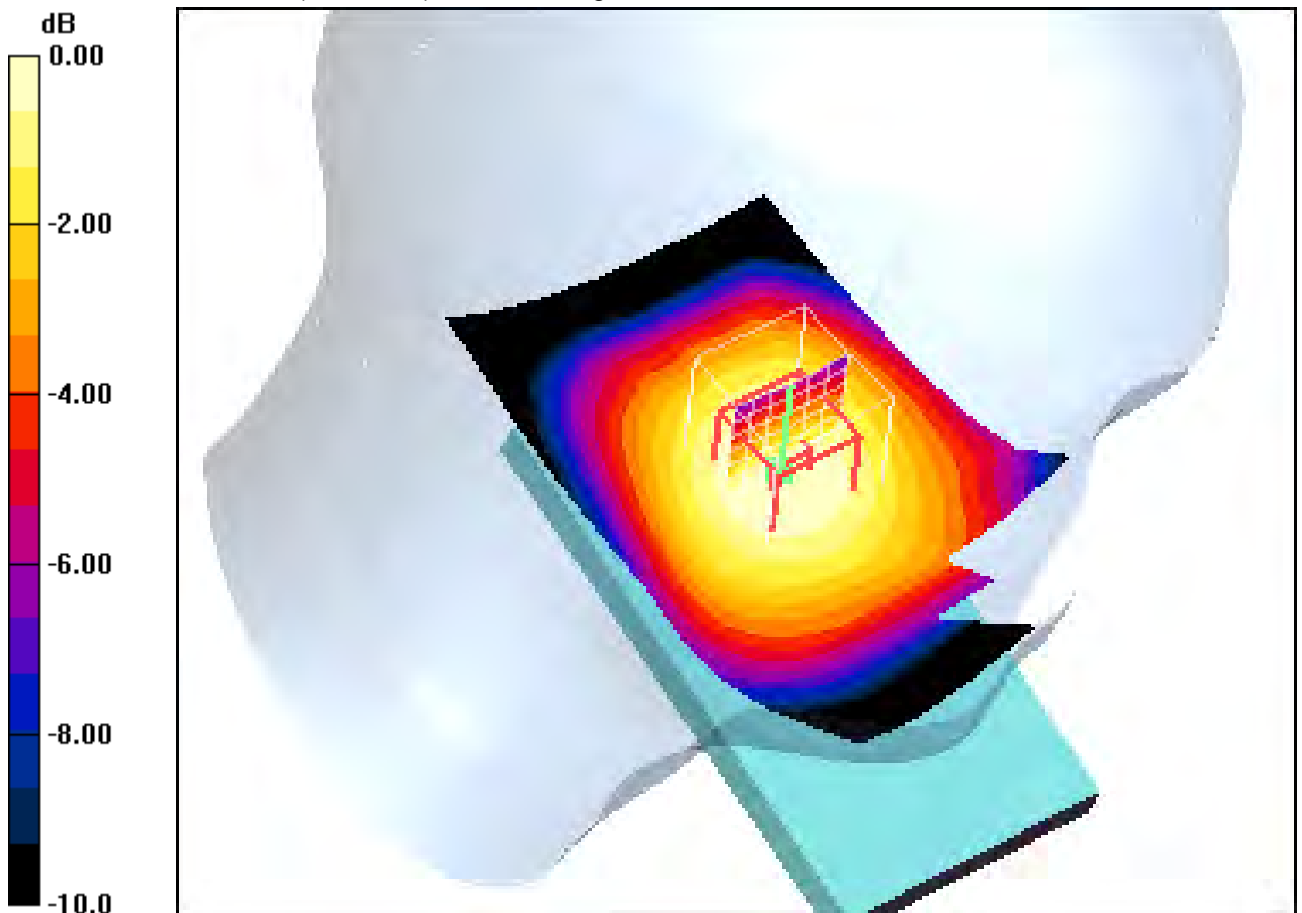
**Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 20.8 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 0.402 W/kg

**SAR(1 g) = 0.343 mW/g; SAR(10 g) = 0.266 mW/g**

Maximum value of SAR (measured) = 0.357 mW/g



0 dB = 0.357mW/g

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.5°C

Date/Time: 08.01.2012 10:56:20 Date/Time: 08.01.2012 11:05:19

**IEEE1528\_OET65-RightHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8

Medium: HSL850 Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.88 \text{ mho/m}$ ;  $\epsilon_r = 41.4$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

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

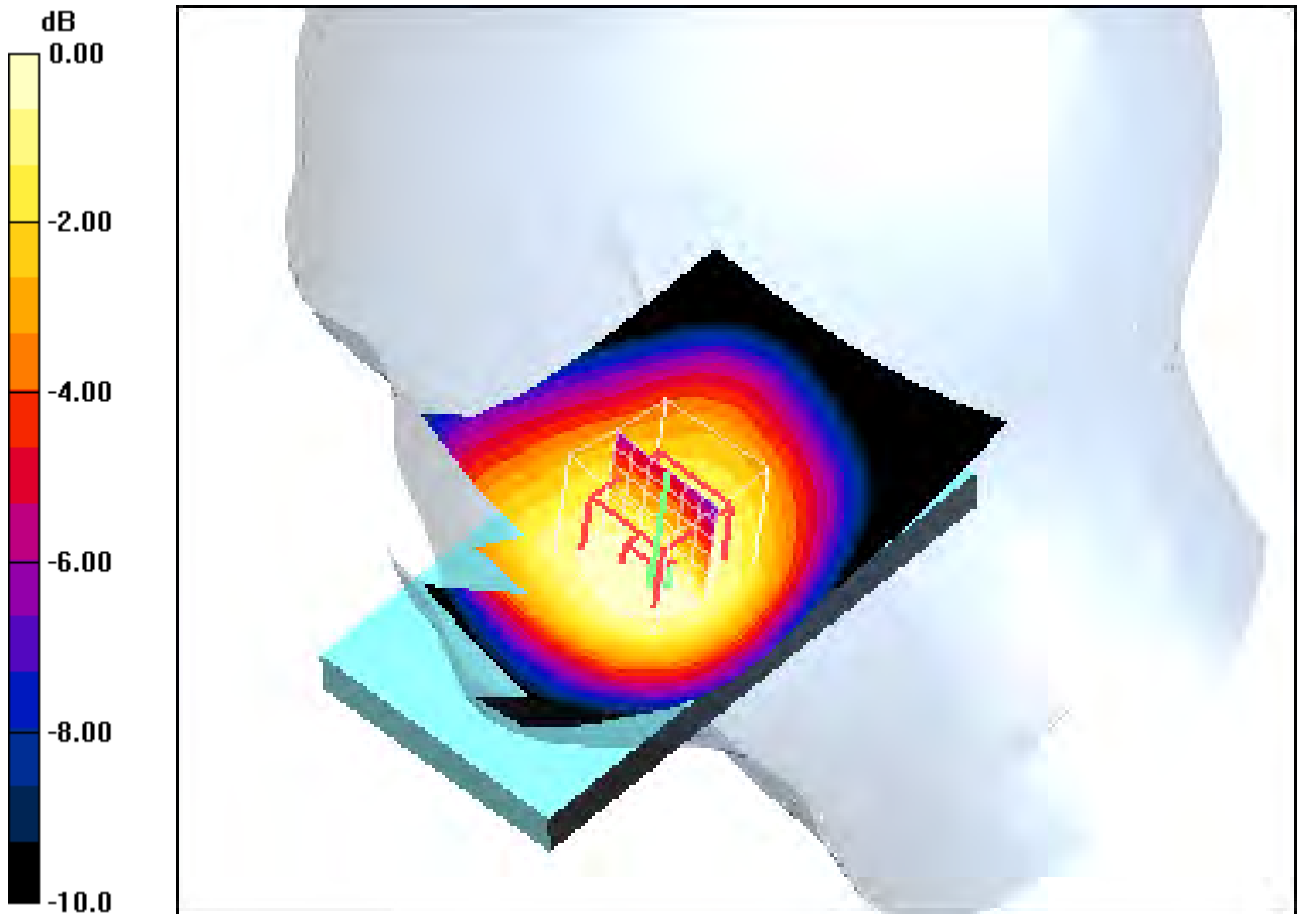
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 22.0 V/m; Power Drift = -0.066 dB

Peak SAR (extrapolated) = 0.452 W/kg

**SAR(1 g) = 0.385 mW/g; SAR(10 g) = 0.305 mW/g**

Maximum value of SAR (measured) = 0.405 mW/g



0 dB = 0.405mW/g

**Additional information:**

ambient temperature: 23.0°C; liquid temperature: 22.7°C

Date/Time: 07.01.2012 21:27:27 Date/Time: 07.01.2012 21:35:36

**IEEE1528\_OET65-RightHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: HSL850 Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.9 \text{ mho/m}$ ;  $\epsilon_r = 41.3$ ;  $\rho = 1000 \text{ kg/m}^3$

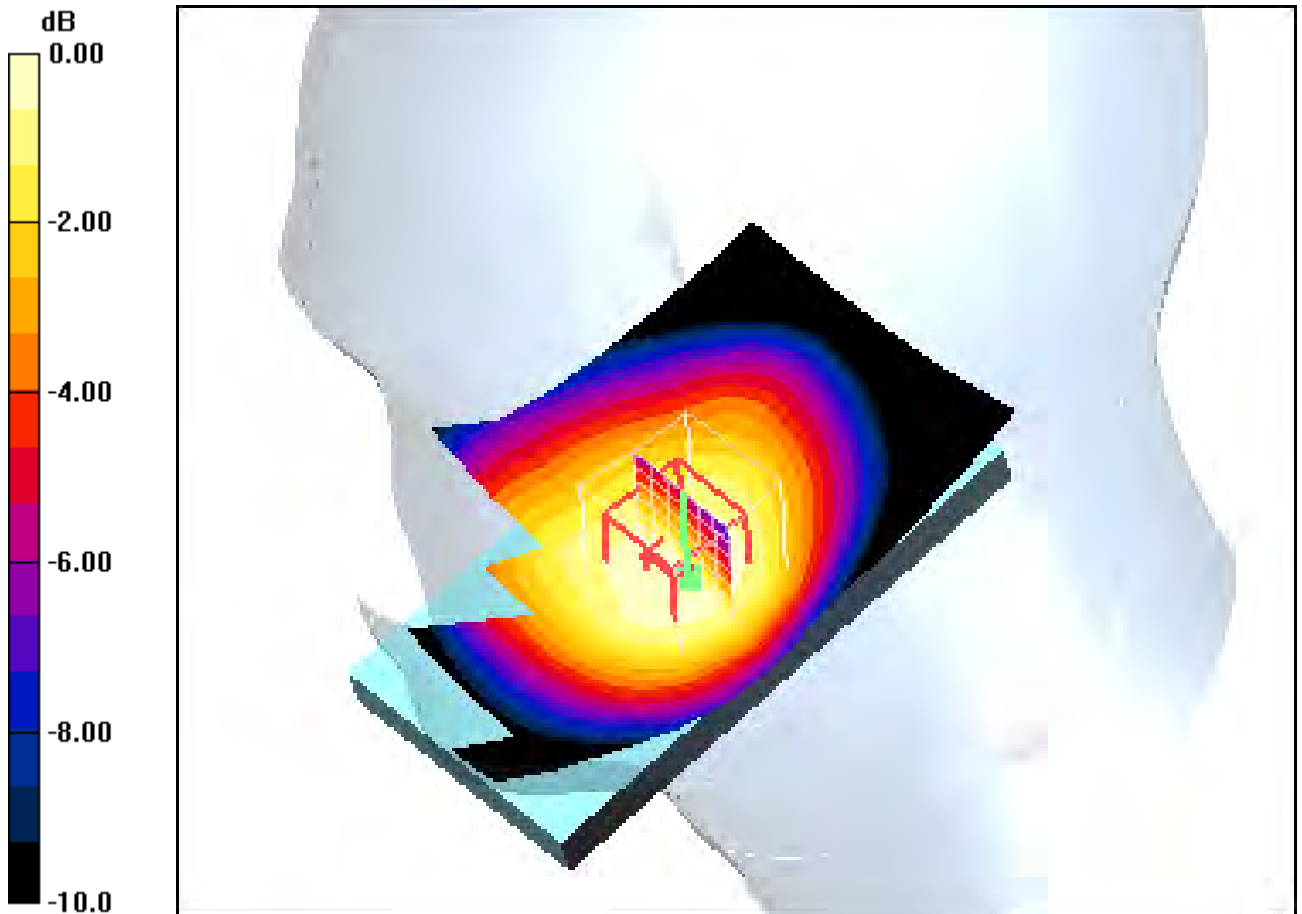
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 0.611 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 = 26.8 V/m; Power Drift = -0.047 dB  
 Peak SAR (extrapolated) = 0.684 W/kg  
**SAR(1 g) = 0.578 mW/g; SAR(10 g) = 0.455 mW/g**  
 Maximum value of SAR (measured) = 0.607 mW/g



0 dB = 0.607mW/g

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.5°C

Date/Time: 07.01.2012 21:04:08 Date/Time: 07.01.2012 21:12:31

**IEEE1528\_OET65-RightHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8

Medium: HSL850 Medium parameters used:  $f = 848.8 \text{ MHz}$ ;  $\sigma = 0.91 \text{ mho/m}$ ;  $\epsilon_r = 41.1$ ;  $\rho = 1000 \text{ kg/m}^3$

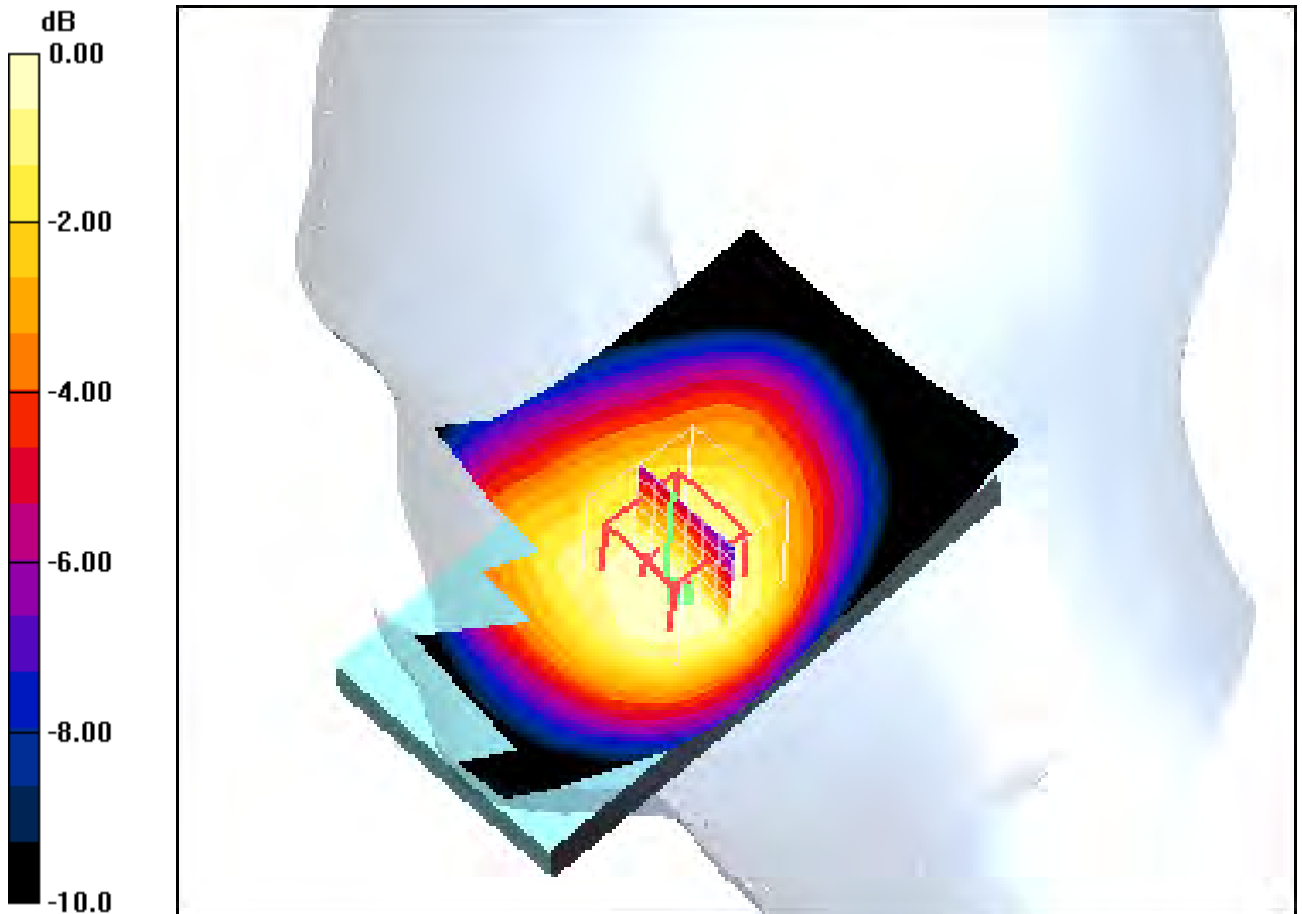
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 0.670 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 = 27.9 V/m; Power Drift = -0.00 dB  
 Peak SAR (extrapolated) = 0.769 W/kg  
**SAR(1 g) = 0.636 mW/g; SAR(10 g) = 0.500 mW/g**  
 Maximum value of SAR (measured) = 0.662 mW/g



0 dB = 0.662mW/g

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.5°C

Date/Time: 07.01.2012 19:57:10 Date/Time: 07.01.2012 20:07:09

**IEEE1528\_OET65-RightHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8

Medium: HSL850 Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.88 \text{ mho/m}$ ;  $\epsilon_r = 41.4$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.227 mW/g

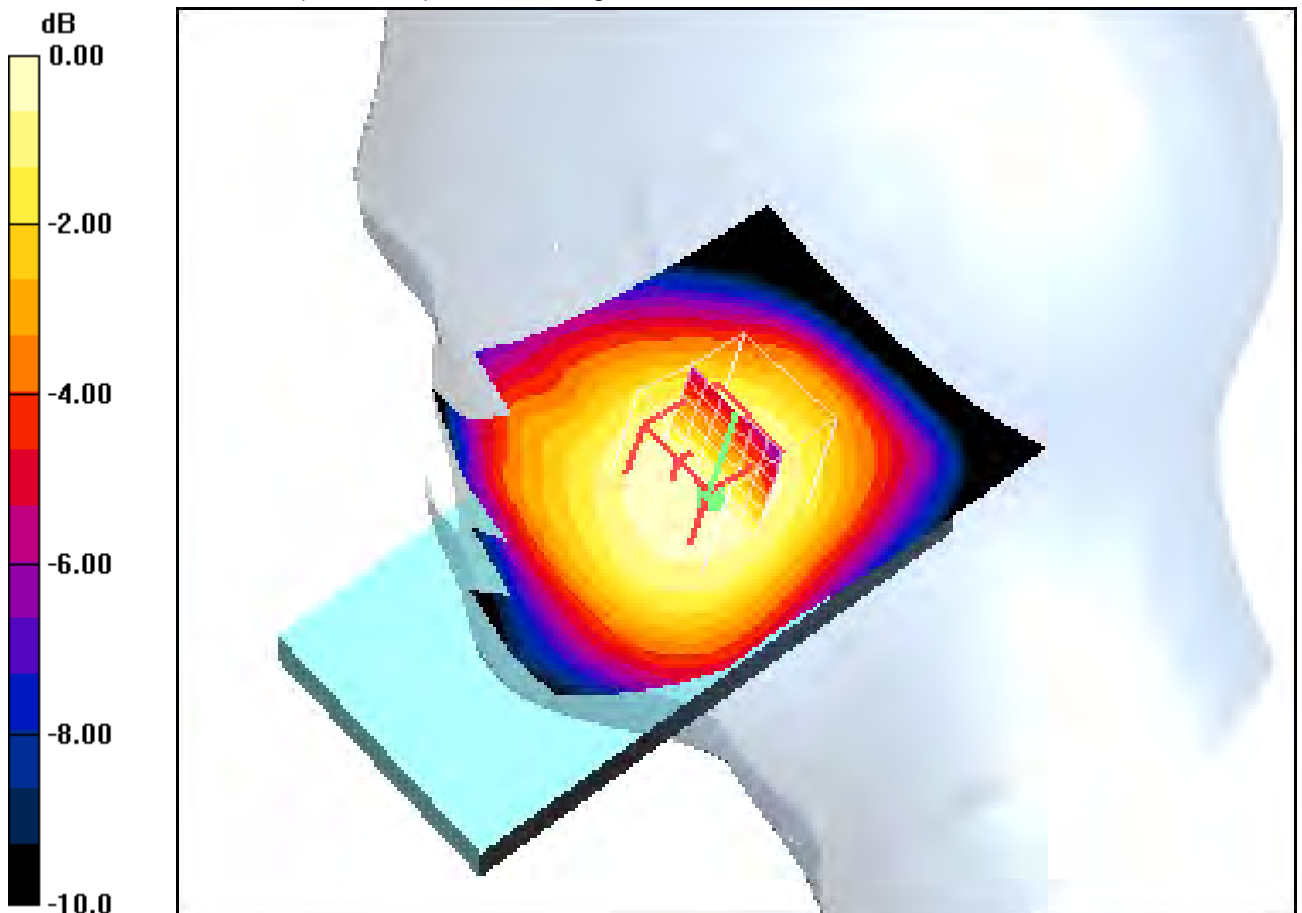
**Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 16.5 V/m; Power Drift = -0.022 dB

Peak SAR (extrapolated) = 0.248 W/kg

**SAR(1 g) = 0.214 mW/g; SAR(10 g) = 0.171 mW/g**

Maximum value of SAR (measured) = 0.224 mW/g



0 dB = 0.224mW/g

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.5°C



Date/Time: 07.01.2012 20:20:32 Date/Time: 07.01.2012 20:29:00

**IEEE1528\_OET65-RightHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: HSL850 Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.9 \text{ mho/m}$ ;  $\epsilon_r = 41.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

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

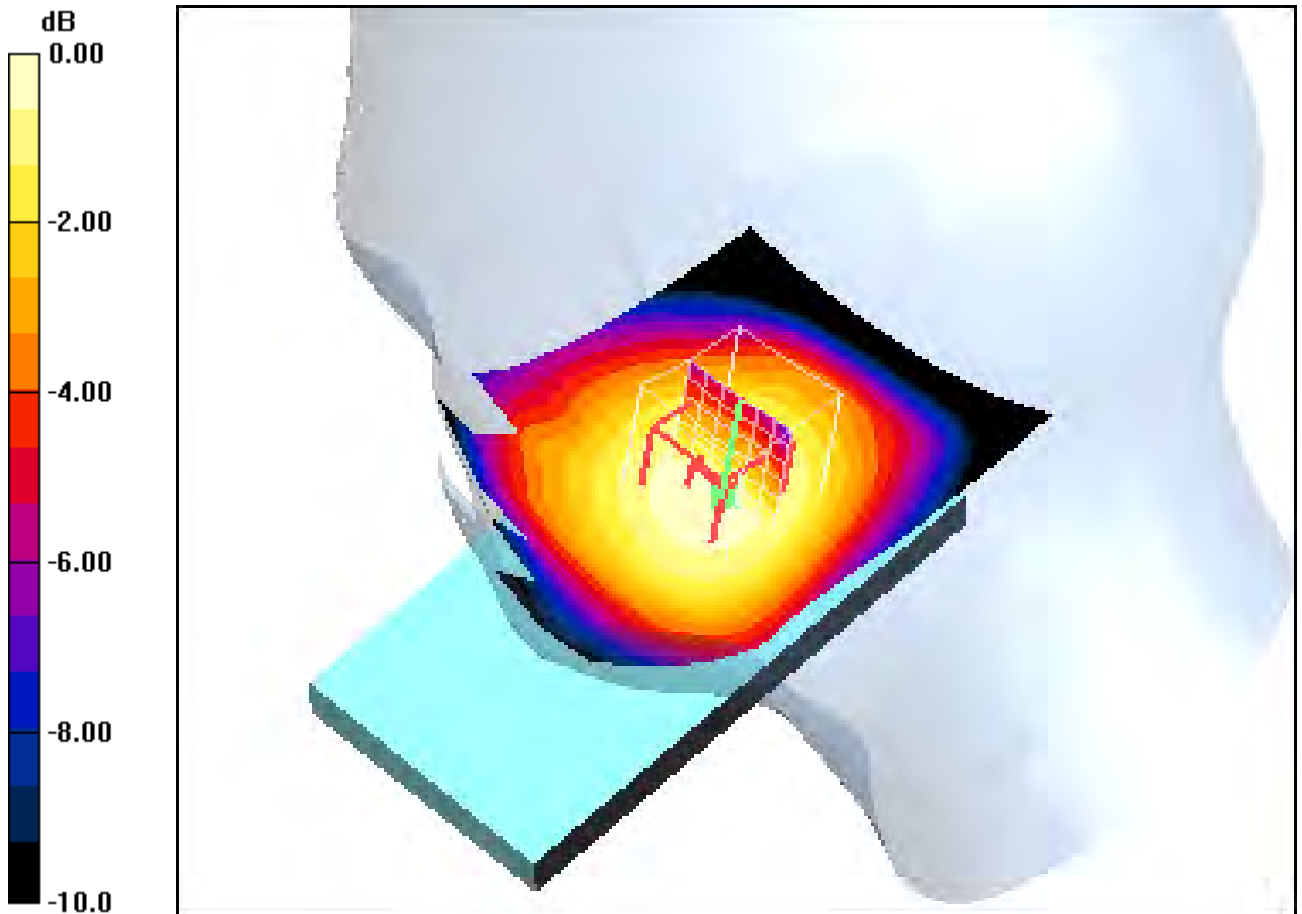
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 19.4 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.354 W/kg

**SAR(1 g) = 0.304 mW/g; SAR(10 g) = 0.240 mW/g**

Maximum value of SAR (measured) = 0.320 mW/g



0 dB = 0.320mW/g

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.5°C

Date/Time: 07.01.2012 20:42:24 Date/Time: 07.01.2012 20:50:38

**IEEE1528\_OET65-RightHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8

Medium: HSL850 Medium parameters used:  $f = 848.8 \text{ MHz}$ ;  $\sigma = 0.91 \text{ mho/m}$ ;  $\epsilon_r = 41.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

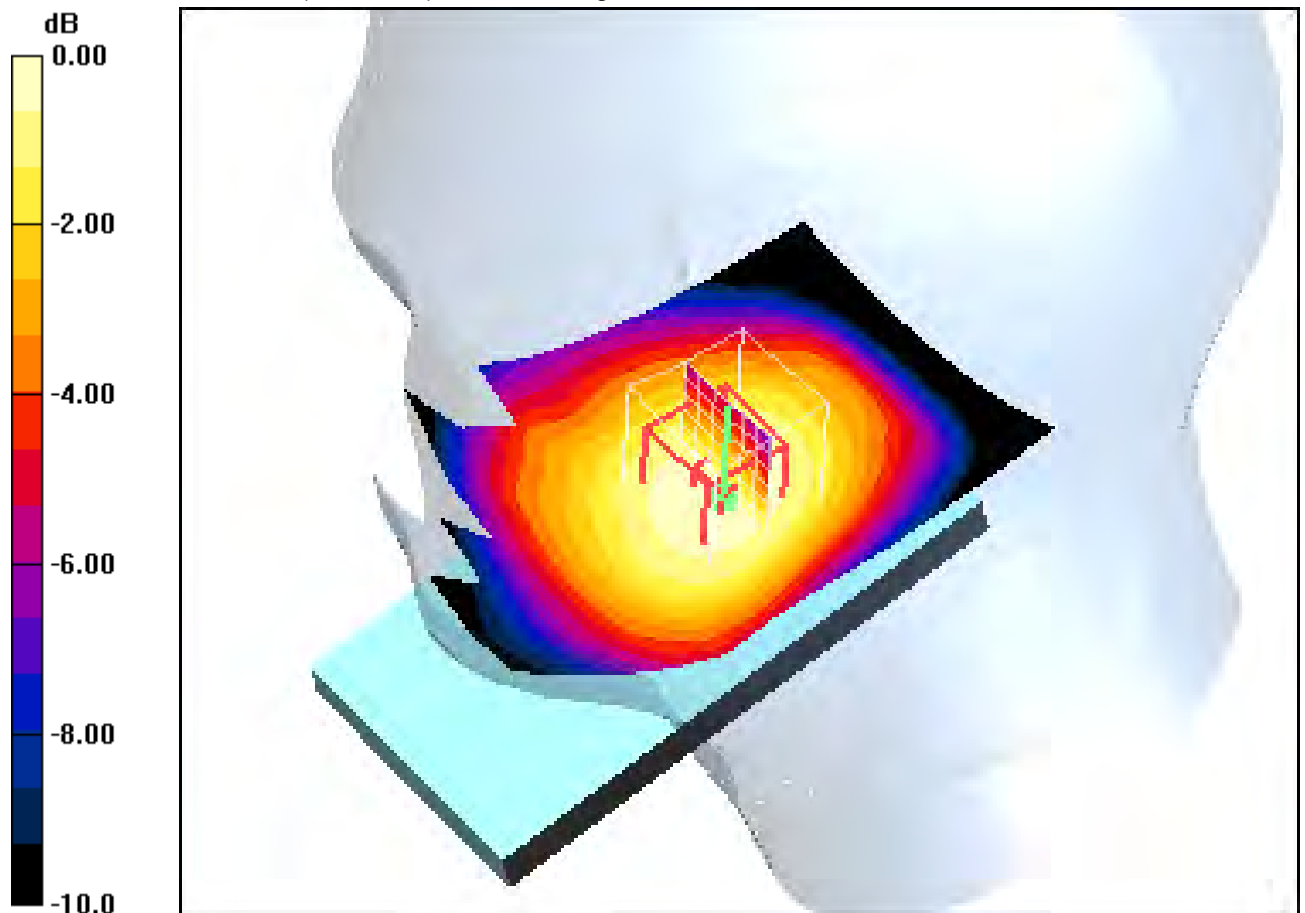
**Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 20.4 V/m; Power Drift = 0.018 dB

Peak SAR (extrapolated) = 0.397 W/kg

**SAR(1 g) = 0.340 mW/g; SAR(10 g) = 0.267 mW/g**

Maximum value of SAR (measured) = 0.357 mW/g



0 dB = 0.357mW/g

**Additional information:**

ambient temperature: 23.4°C; liquid temperature: 22.5°C

**Annex B.2: GSM 850MHz body**

Date/Time: 06.01.2012 09:25:16 Date/Time: 06.01.2012 09:34:09

**IEEE1528\_OET65-Body-GSM850 GPRS 2TS**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: M850 Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 55.1$ ;  $\rho = 1000 \text{ kg/m}^3$

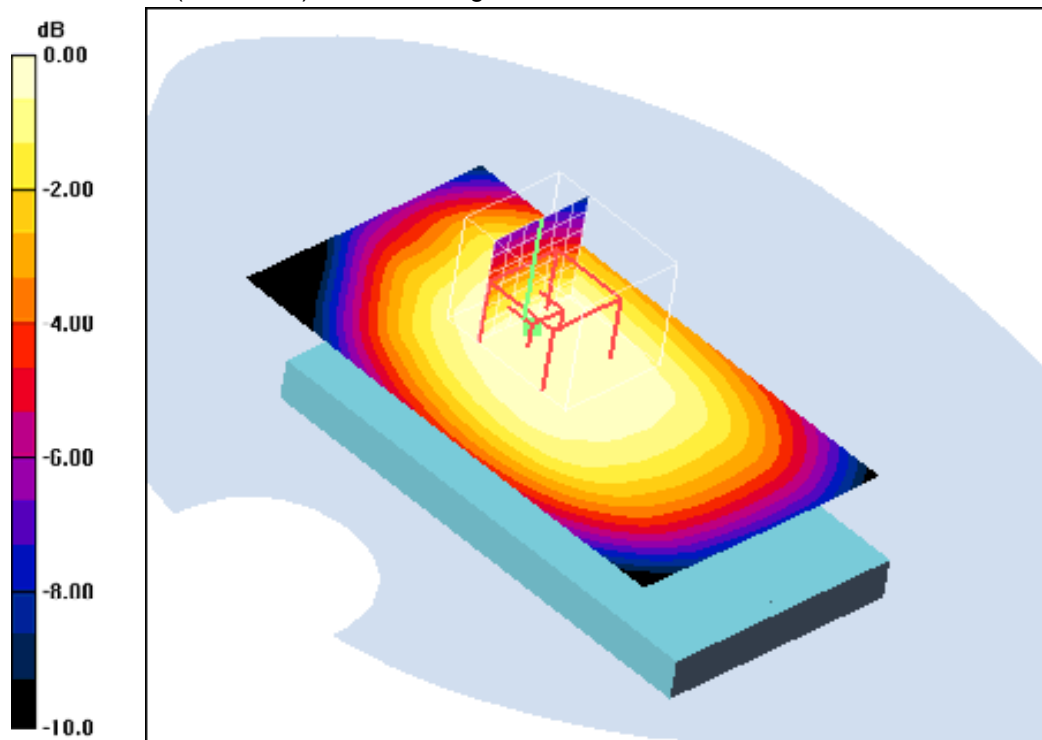
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 0.693 mW/g

**Front position - Low/Zoom Scan (7x7x7) (7x9x7)/Cube 0:** Measurement grid:  
 $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 27.7 V/m; Power Drift = -0.144 dB  
 Peak SAR (extrapolated) = 0.771 W/kg  
**SAR(1 g) = 0.630 mW/g; SAR(10 g) = 0.495 mW/g**  
 Maximum value of SAR (measured) = 0.663 mW/g



0 dB = 0.663mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm  
 ambient temperature: 20.8°C; liquid temperature: 20.5°C

Date/Time: 06.01.2012 09:51:42 Date/Time: 06.01.2012 09:59:11

**IEEE1528\_OET65-Body-GSM850 GPRS 2TS**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: M850 Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.98 \text{ mho/m}$ ;  $\epsilon_r = 55$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.833 mW/g

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

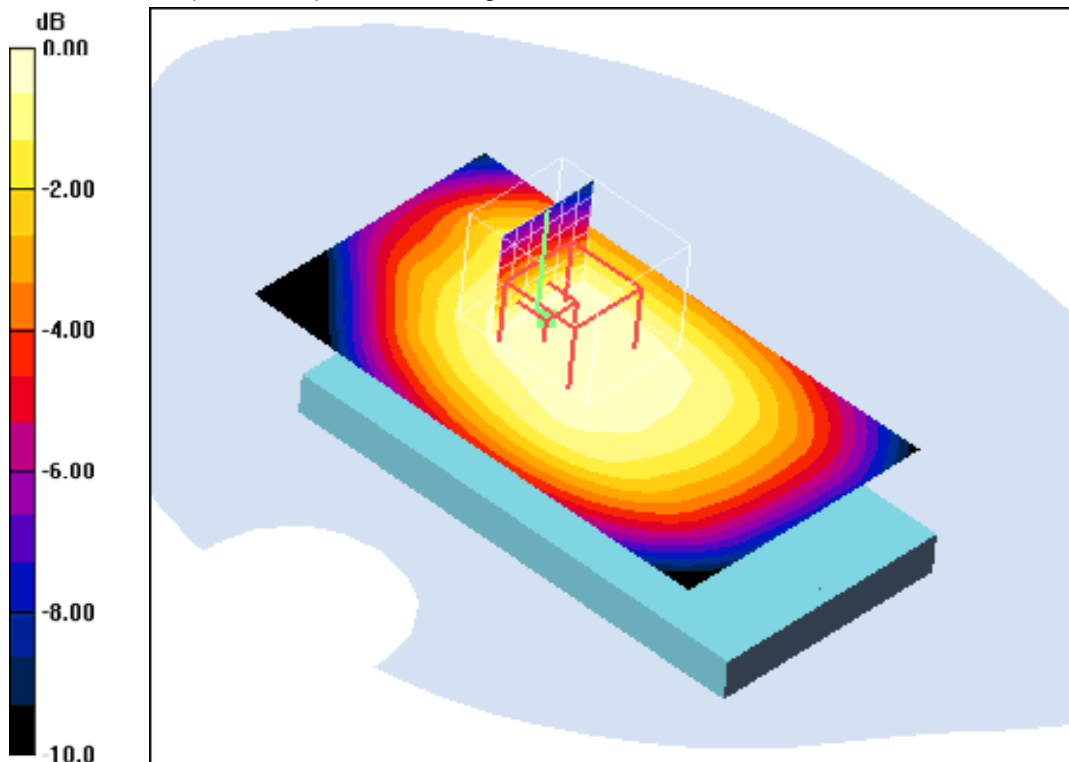
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 30.3 V/m; Power Drift = 0.013 dB

Peak SAR (extrapolated) = 0.964 W/kg

**SAR(1 g) = 0.779 mW/g; SAR(10 g) = 0.607 mW/g**

Maximum value of SAR (measured) = 0.817 mW/g



0 dB = 0.817mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 20.8°C; liquid temperature: 20.5°C

Date/Time: 06.01.2012 10:16:39 Date/Time: 06.01.2012 10:25:00

**IEEE1528\_OET65-Body-GSM850 GPRS 2TS**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: M850 Medium parameters used:  $f = 848.8 \text{ MHz}$ ;  $\sigma = 0.99 \text{ mho/m}$ ;  $\epsilon_r = 54.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.892 mW/g

**Front position - High/Zoom Scan (7x7x7) (7x10x7)/Cube 0:** Measurement grid:

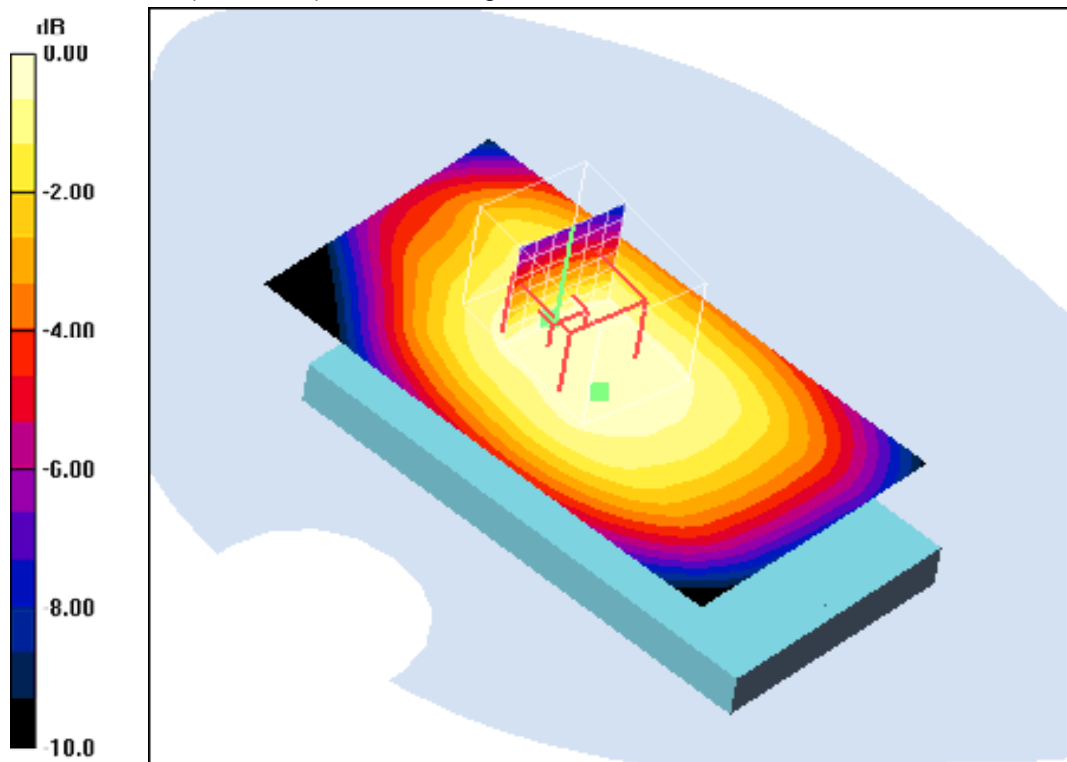
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 31.2 V/m; Power Drift = 0.012 dB

Peak SAR (extrapolated) = 1.04 W/kg

**SAR(1 g) = 0.845 mW/g; SAR(10 g) = 0.655 mW/g**

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



0 dB = 0.891mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 20.8°C; liquid temperature: 20.5°C

Date/Time: 06.01.2012 12:39:38 Date/Time: 06.01.2012 13:01:27

## IEEE1528\_OET65-Body-GSM850 GPRS 2TS

DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH

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

Medium: M850 Medium parameters used:  $f = 824.2$  MHz;  $\sigma = 0.96$  mho/m;  $\epsilon_r = 55.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (51x101x1):** Measurement grid: dx=15mm, dy=15mm

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

**Rear position - Low/Zoom Scan (7x7x7) (7x13x7)/Cube 0:** Measurement grid:

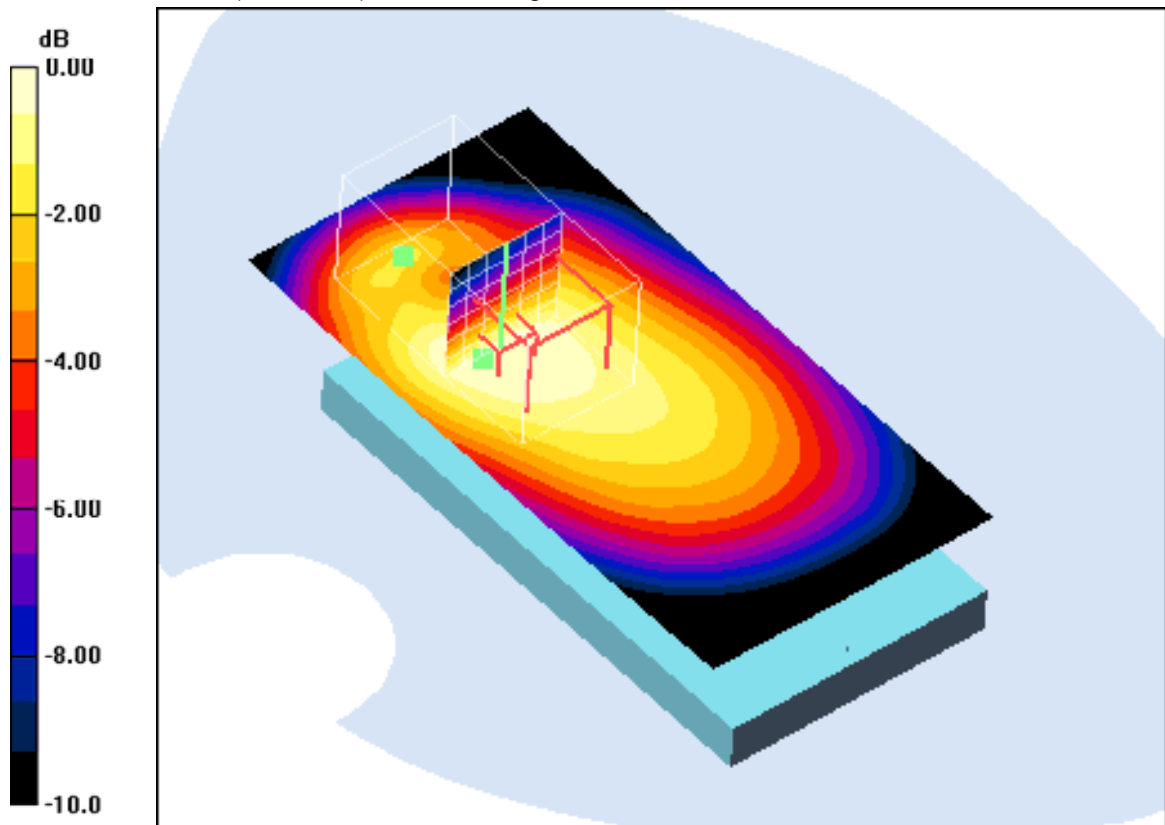
dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.5 V/m; Power Drift = 0.017 dB

Peak SAR (extrapolated) = 1.03 W/kg

**SAR(1 g) = 0.716 mW/g; SAR(10 g) = 0.509 mW/g**

Maximum value of SAR (measured) = 0.759 mW/g



0 dB = 0.759mW/g

### Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 20.8°C; liquid temperature: 20.5°C

Date/Time: 06.01.2012 11:53:26 Date/Time: 06.01.2012 12:16:34

**IEEE1528\_OET65-Body-GSM850 GPRS 2TS**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: M850 Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.98 \text{ mho/m}$ ;  $\epsilon_r = 55$ ;  $\rho = 1000 \text{ kg/m}^3$

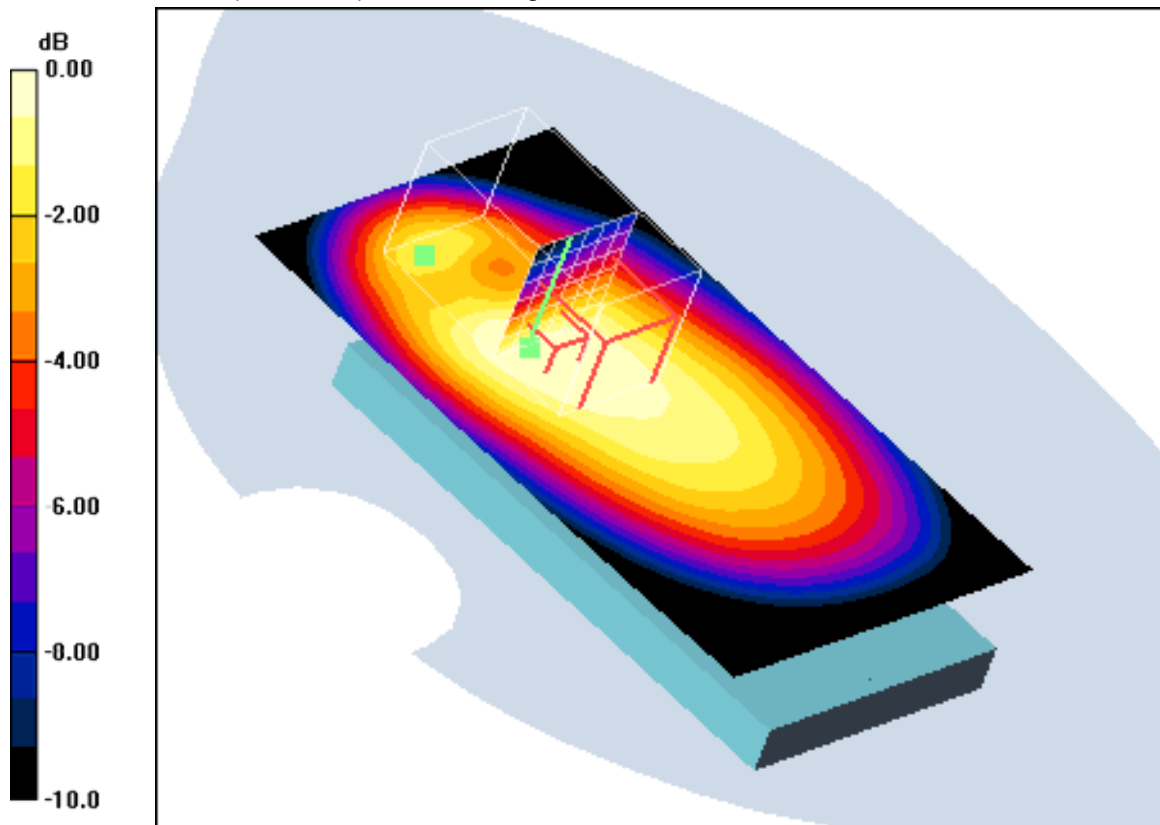
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 1.04 mW/g

**Rear position - Mid/Zoom Scan (7x7x7) (7x12x7)/Cube 0:** Measurement grid:  
 $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 32.7 V/m; Power Drift = -0.187 dB  
 Peak SAR (extrapolated) = 1.31 W/kg  
**SAR(1 g) = 0.930 mW/g; SAR(10 g) = 0.667 mW/g**  
 Maximum value of SAR (measured) = 0.995 mW/g



0 dB = 0.995mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 20.8°C; liquid temperature: 20.5°C

Date/Time: 06.01.2012 13:24:55 Date/Time: 06.01.2012 13:34:14

**IEEE1528\_OET65-Body-GSM850 GPRS 2TS**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: M850 Medium parameters used:  $f = 848.8 \text{ MHz}$ ;  $\sigma = 0.99 \text{ mho/m}$ ;  $\epsilon_r = 54.8$ ;  $\rho = 1000 \text{ kg/m}^3$

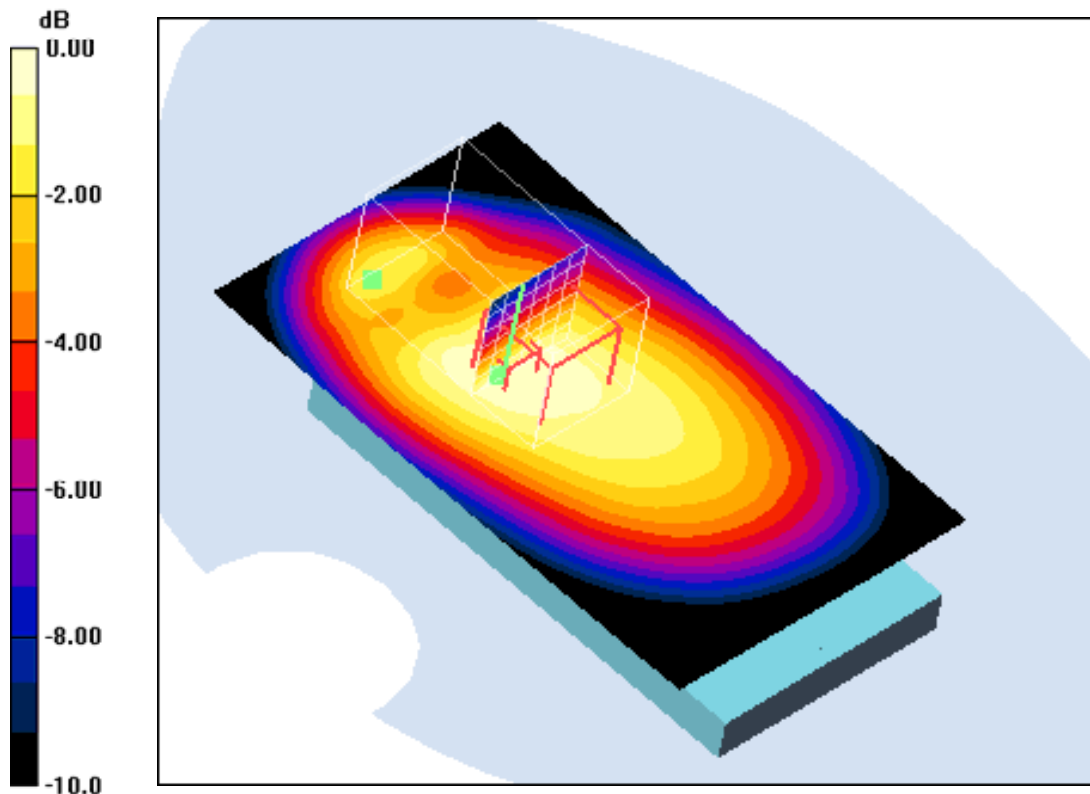
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 0.993 mW/g

**Rear position - High/Zoom Scan (7x7x7) (7x13x7)/Cube 0:** Measurement grid:  
 $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 32.7 V/m; Power Drift = 0.024 dB  
 Peak SAR (extrapolated) = 1.35 W/kg  
**SAR(1 g) = 0.956 mW/g; SAR(10 g) = 0.695 mW/g**  
 Maximum value of SAR (measured) = 1.02 mW/g



0 dB = 1.02mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 20.8°C; liquid temperature: 20.5°C



Date/Time: 06.01.2012 11:29:13 Date/Time: 06.01.2012 11:36:30

**IEEE1528\_OET65-Body-GSM850 GPRS 2TS**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: M850 Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.98 \text{ mho/m}$ ;  $\epsilon_r = 55$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.331 mW/g

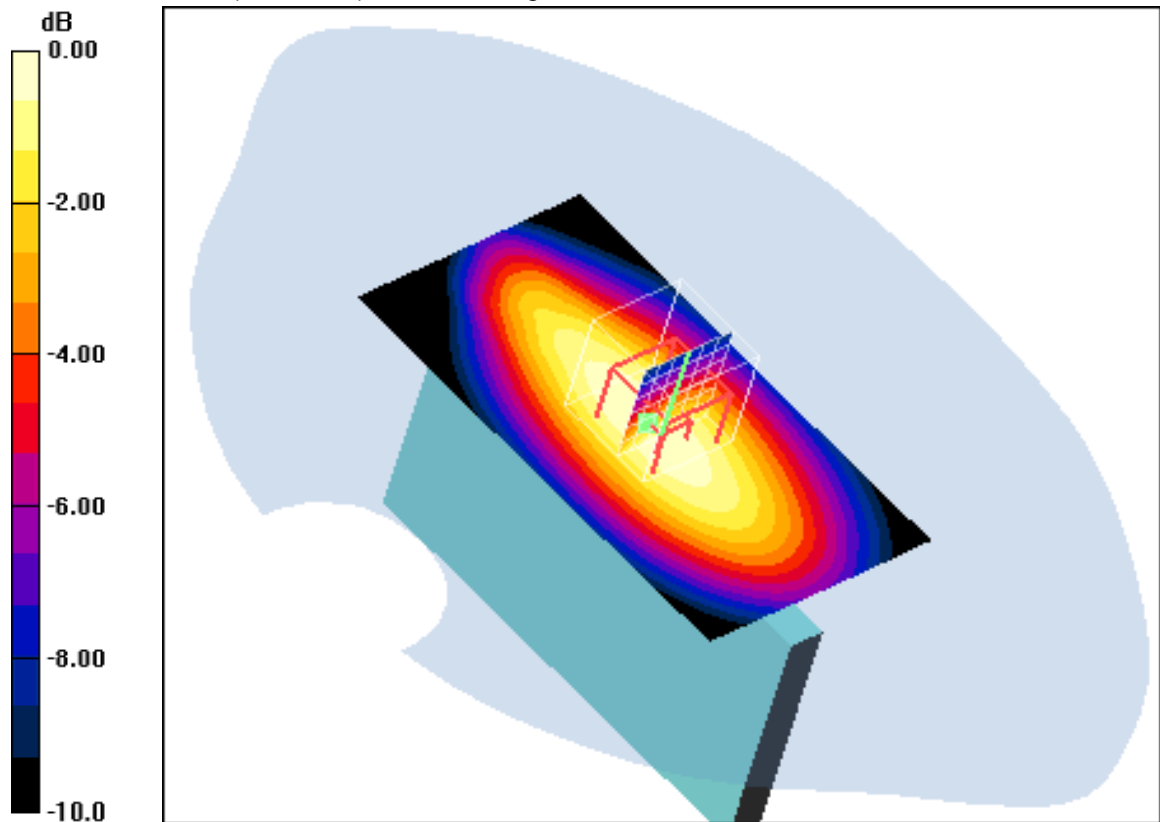
**Edge left position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 18.2 V/m; Power Drift = 0.041 dB

Peak SAR (extrapolated) = 0.430 W/kg

**SAR(1 g) = 0.309 mW/g; SAR(10 g) = 0.212 mW/g**

Maximum value of SAR (measured) = 0.332 mW/g



0 dB = 0.332mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 20.8°C; liquid temperature: 20.5°C

Date/Time: 06.01.2012 11:08:06 Date/Time: 06.01.2012 11:15:11

**IEEE1528\_OET65-Body-GSM850 GPRS 2TS**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: M850 Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.98 \text{ mho/m}$ ;  $\epsilon_r = 55$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.489 mW/g

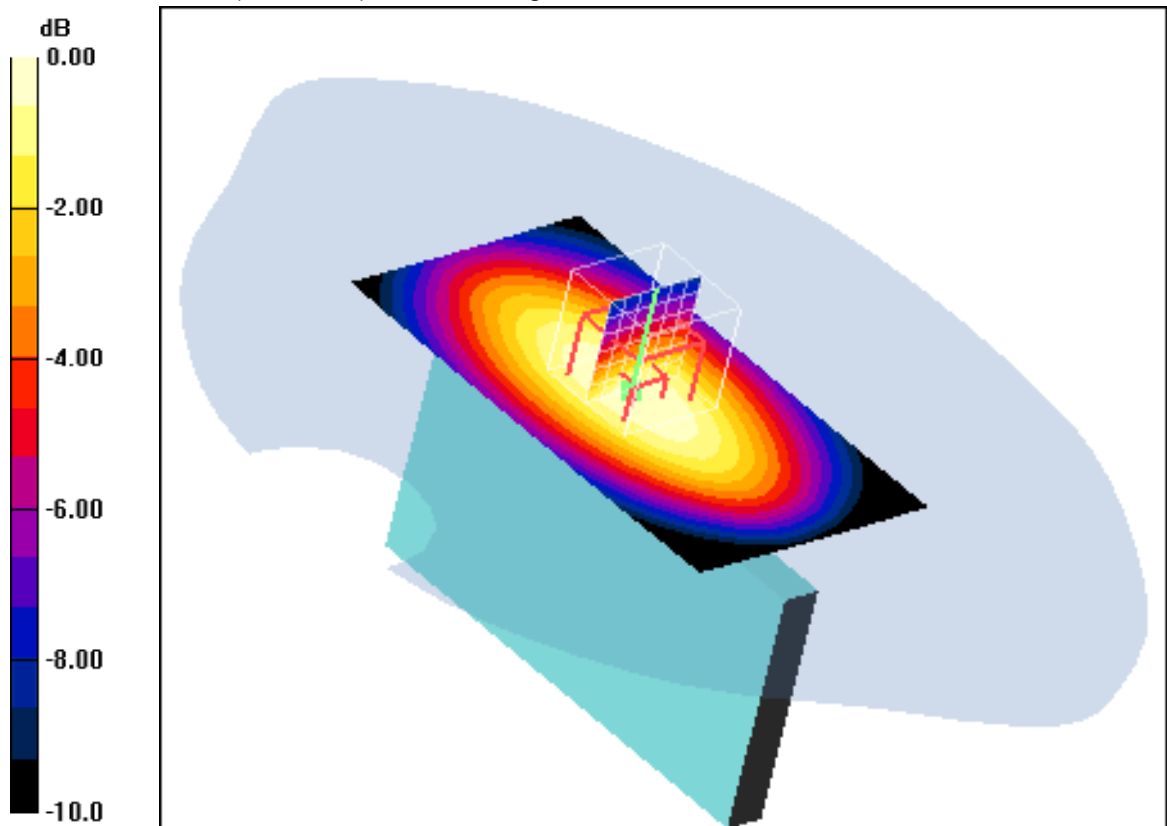
**Edge right position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 22.0 V/m; Power Drift = -0.026 dB

Peak SAR (extrapolated) = 0.606 W/kg

**SAR(1 g) = 0.446 mW/g; SAR(10 g) = 0.313 mW/g**

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



0 dB = 0.477mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 20.8°C; liquid temperature: 20.5°C

Date/Time: 06.01.2012 10:47:52 Date/Time: 06.01.2012 10:53:54

**IEEE1528\_OET65-Body-GSM850 GPRS 2TS**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: M850 Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.98 \text{ mho/m}$ ;  $\epsilon_r = 55$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.162 mW/g

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

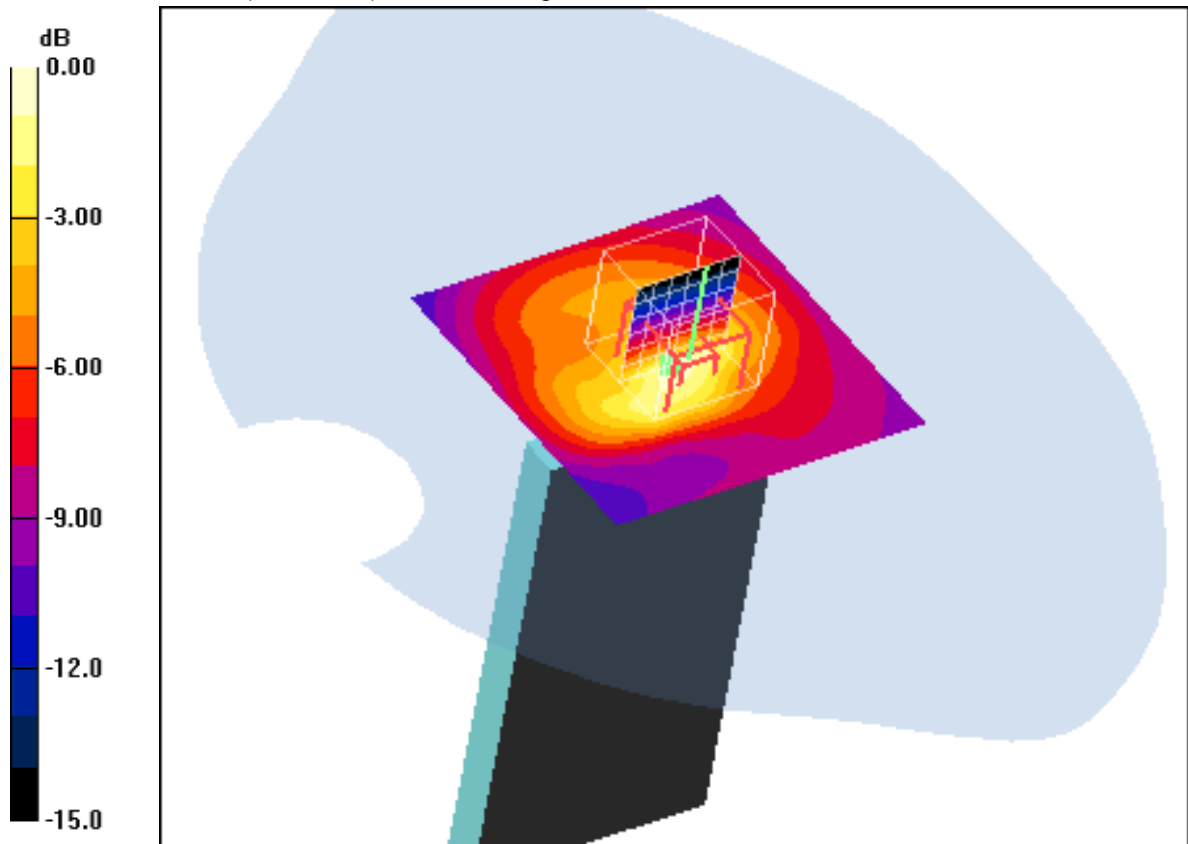
Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 13.4 V/m; Power Drift = -0.067 dB

Peak SAR (extrapolated) = 0.586 W/kg

**SAR(1 g) = 0.179 mW/g; SAR(10 g) = 0.081 mW/g**

Maximum value of SAR (measured) = 0.188 mW/g



0 dB = 0.188mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 20.8°C; liquid temperature: 20.5°C

Date/Time: 06.01.2012 14:03:36 Date/Time: 06.01.2012 14:12:48

**IEEE1528\_OET65-Body-GSM850 1TS**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8

Medium: M850 Medium parameters used:  $f = 848.8 \text{ MHz}$ ;  $\sigma = 0.99 \text{ mho/m}$ ;  $\epsilon_r = 54.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

**Rear position - High/Zoom Scan (7x7x7) (7x13x7)/Cube 0:** Measurement grid:

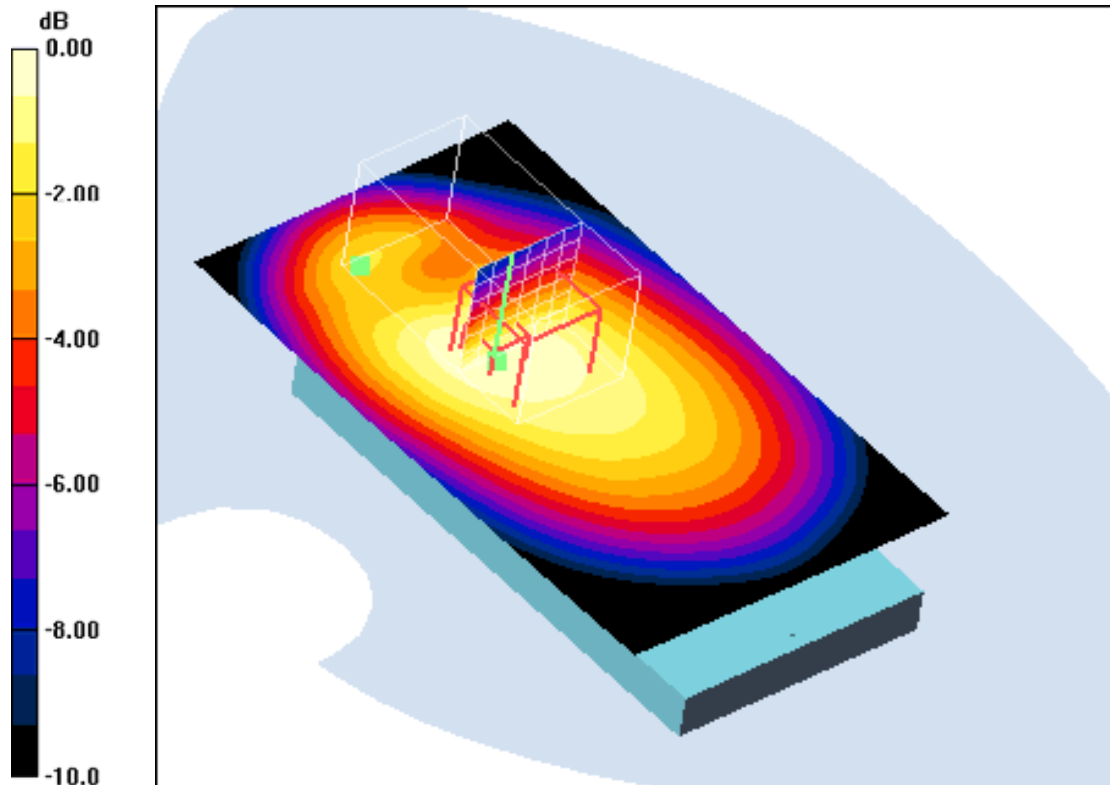
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 25.4 V/m; Power Drift = -0.032 dB

Peak SAR (extrapolated) = 0.760 W/kg

**SAR(1 g) = 0.565 mW/g; SAR(10 g) = 0.410 mW/g**

Maximum value of SAR (measured) = 0.599 mW/g



0 dB = 0.599mW/g

**Additional information:**

position or distance of DUT to SAM: 15mm with headset

ambient temperature: 20.8°C; liquid temperature: 20.5°C

**Annex B.3: GSM 1900MHz head**

Date/Time: 13.01.2012 13:58:13 Date/Time: 13.01.2012 14:06:28

**IEEE1528\_OET65-LeftHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: HSL1900 Medium parameters used:  $f = 1850.2 \text{ MHz}$ ;  $\sigma = 1.35 \text{ mho/m}$ ;  $\epsilon_r = 39.7$ ;  $\rho = 1000 \text{ kg/m}^3$

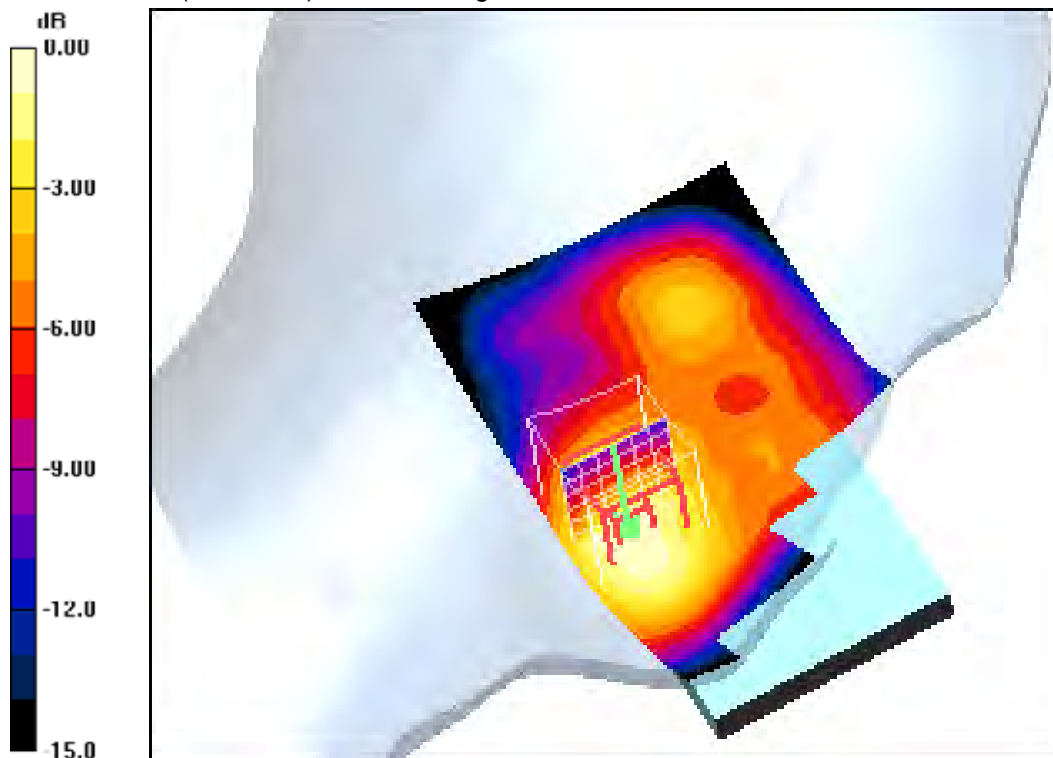
Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 0.668 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 = 22.7 V/m; Power Drift = -0.038 dB  
 Peak SAR (extrapolated) = 0.942 W/kg  
**SAR(1 g) = 0.607 mW/g; SAR(10 g) = 0.378 mW/g**  
 Maximum value of SAR (measured) = 0.648 mW/g



0 dB = 0.648mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.6°C

Date/Time: 13.01.2012 14:23:08 Date/Time: 13.01.2012 14:32:17

**IEEE1528\_OET65-LeftHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: HSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.38 \text{ mho/m}$ ;  $\epsilon_r = 39.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x111x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.666 mW/g

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

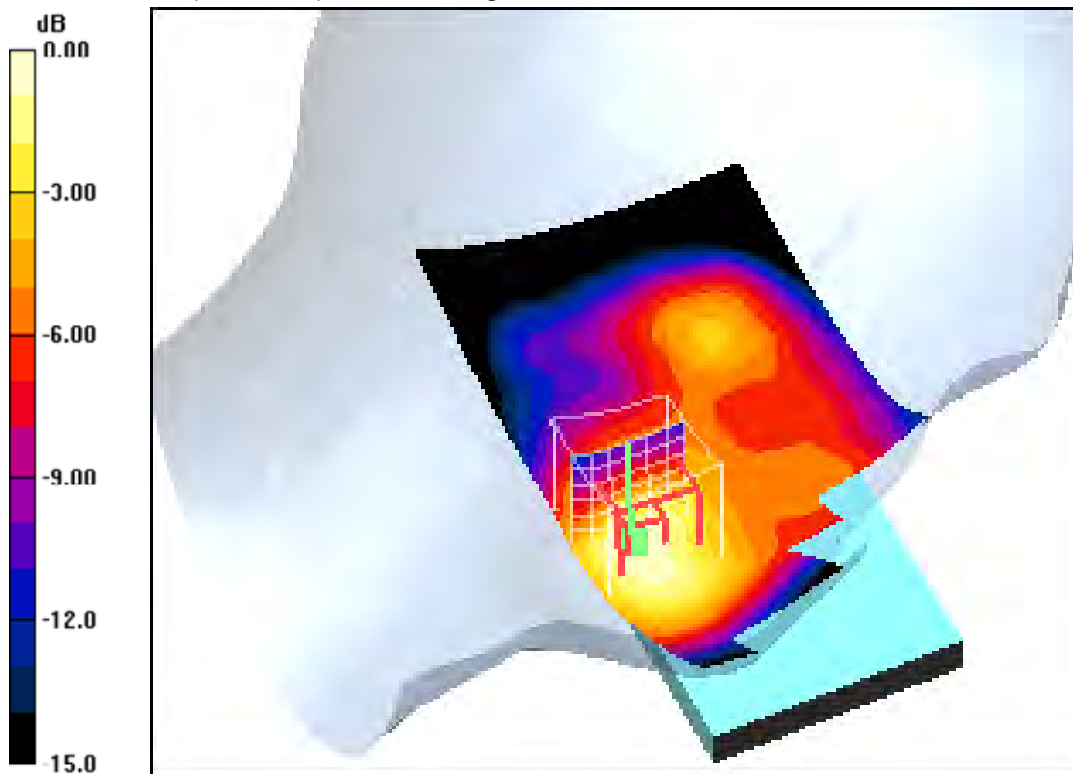
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 22.8 V/m; Power Drift = 0.051 dB

Peak SAR (extrapolated) = 0.973 W/kg

**SAR(1 g) = 0.614 mW/g; SAR(10 g) = 0.374 mW/g**

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



0 dB = 0.662mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.6°C

Date/Time: 13.01.2012 15:10:37 Date/Time: 13.01.2012 15:20:59

**IEEE1528\_OET65-LeftHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: HSL1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.4 \text{ mho/m}$ ;  $\epsilon_r = 39.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x111x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

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

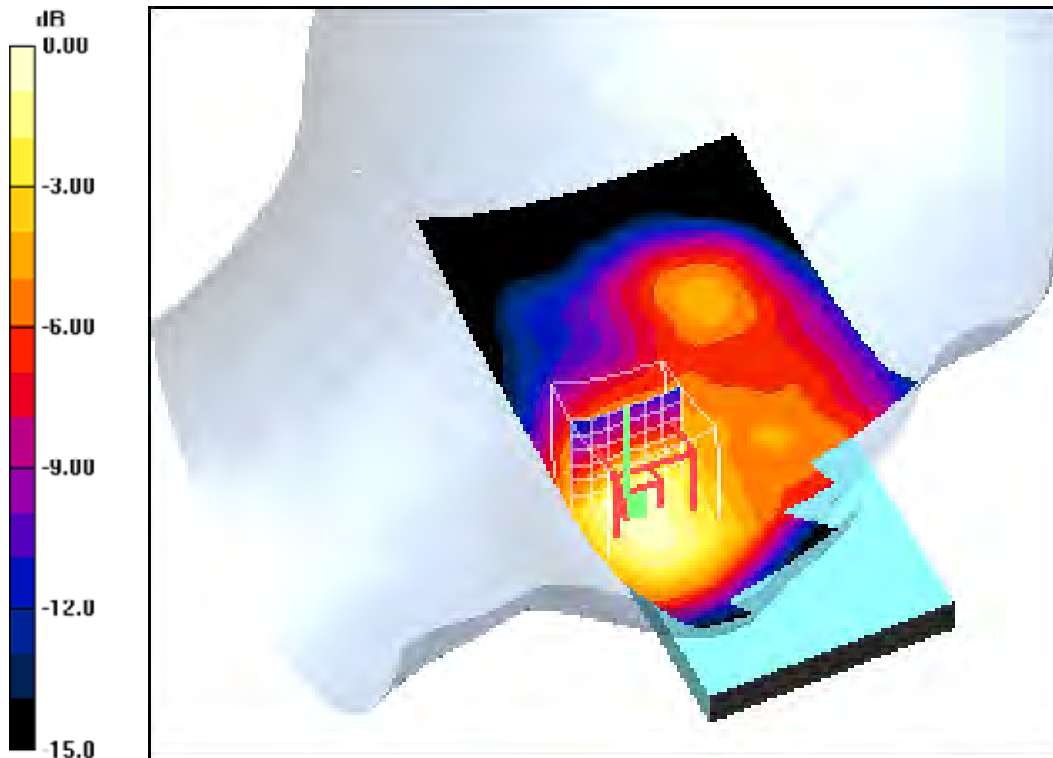
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 21.6 V/m; Power Drift = -0.013 dB

Peak SAR (extrapolated) = 0.877 W/kg

**SAR(1 g) = 0.547 mW/g; SAR(10 g) = 0.333 mW/g**

Maximum value of SAR (measured) = 0.591 mW/g



0 dB = 0.591mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.6°C

Date/Time: 13.01.2012 15:36:14 Date/Time: 13.01.2012 15:45:14

**IEEE1528\_OET65-LeftHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: HSL1900 Medium parameters used:  $f = 1850.2 \text{ MHz}$ ;  $\sigma = 1.35 \text{ mho/m}$ ;  $\epsilon_r = 39.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.285 mW/g

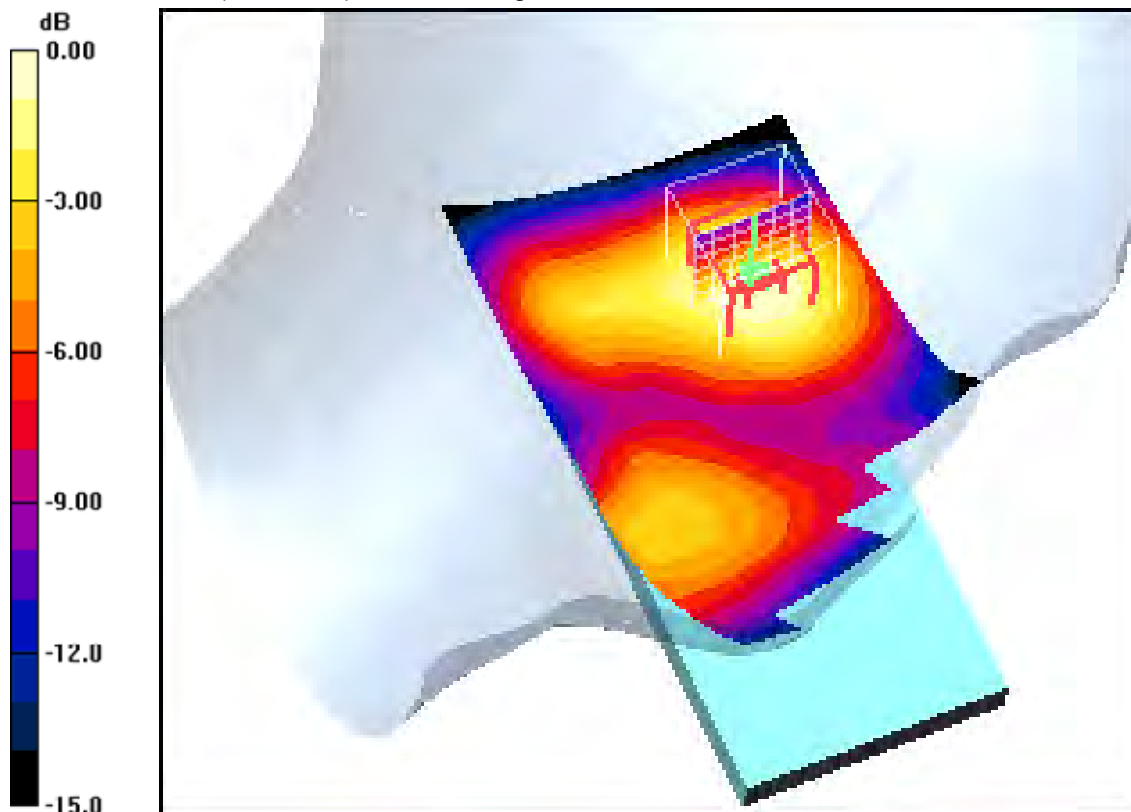
**Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.2 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.347 W/kg

**SAR(1 g) = 0.251 mW/g; SAR(10 g) = 0.159 mW/g**

Maximum value of SAR (measured) = 0.273 mW/g



0 dB = 0.273mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.6°C



Date/Time: 13.01.2012 15:59:19 Date/Time: 13.01.2012 16:09:21

**IEEE1528\_OET65-LeftHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: HSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.38 \text{ mho/m}$ ;  $\epsilon_r = 39.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x111x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

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

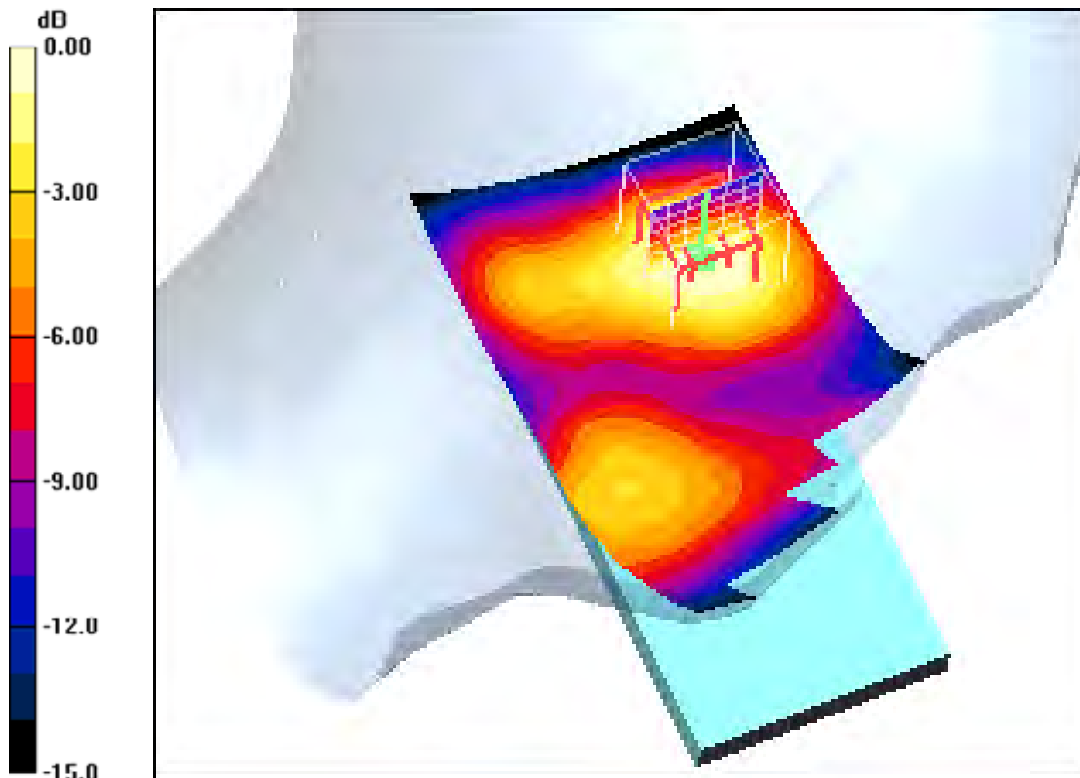
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 14.0 V/m; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 0.346 W/kg

**SAR(1 g) = 0.247 mW/g; SAR(10 g) = 0.155 mW/g**

Maximum value of SAR (measured) = 0.268 mW/g



0 dB = 0.268mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.6°C

Date/Time: 13.01.2012 16:22:58 Date/Time: 13.01.2012 16:32:00

**IEEE1528\_OET65-LeftHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: HSL1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.4 \text{ mho/m}$ ;  $\epsilon_r = 39.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x111x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.262 mW/g

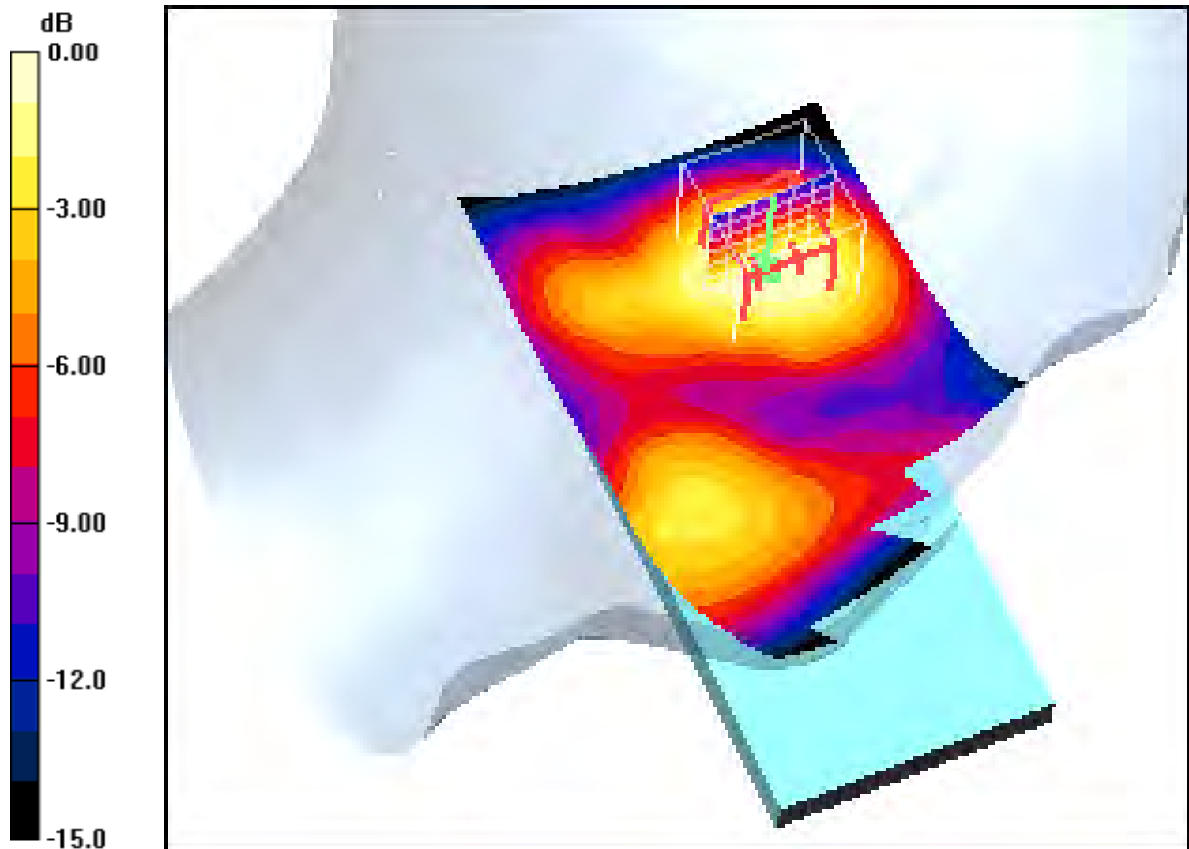
**Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 13.6 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.326 W/kg

**SAR(1 g) = 0.222 mW/g; SAR(10 g) = 0.138 mW/g**

Maximum value of SAR (measured) = 0.238 mW/g



0 dB = 0.238mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.6°C

Date/Time: 14.01.2012 13:02:19 Date/Time: 14.01.2012 13:10:35 Date/Time: 14.01.2012 13:22:36

**IEEE1528\_OET65-RightHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: HSL1900 Medium parameters used:  $f = 1850.2 \text{ MHz}$ ;  $\sigma = 1.35 \text{ mho/m}$ ;  $\epsilon_r = 39.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

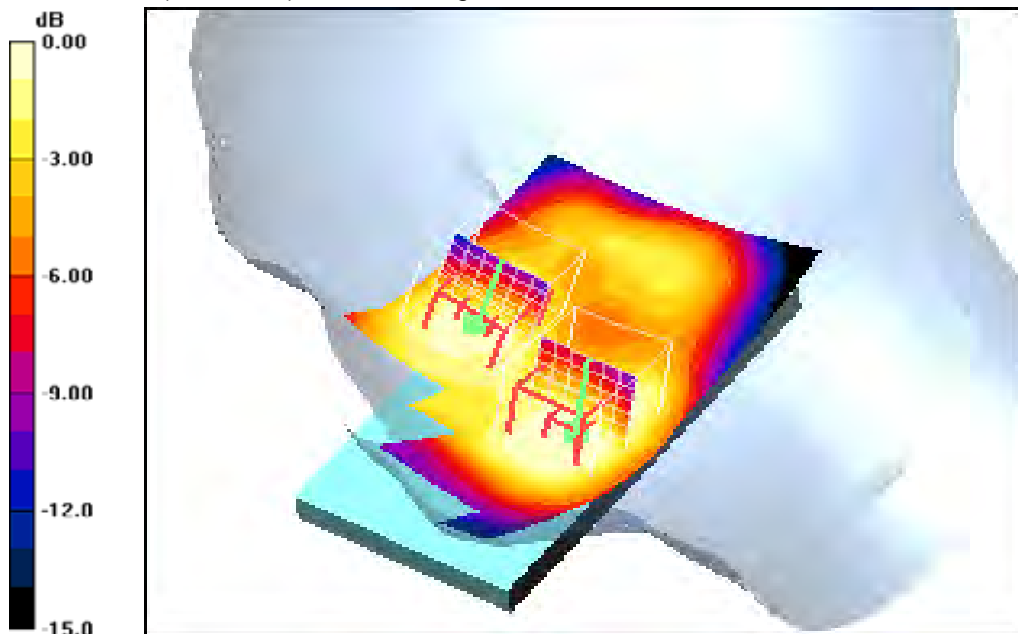
DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 0.357 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 = 16.3 V/m; Power Drift = -0.028 dB  
 Peak SAR (extrapolated) = 0.472 W/kg  
**SAR(1 g) = 0.338 mW/g; SAR(10 g) = 0.218 mW/g**  
 Maximum value of SAR (measured) = 0.368 mW/g

**Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid:  
 $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 16.3 V/m; Power Drift = -0.028 dB  
 Peak SAR (extrapolated) = 0.409 W/kg  
**SAR(1 g) = 0.269 mW/g; SAR(10 g) = 0.171 mW/g**  
 Maximum value of SAR (measured) = 0.293 mW/g



0 dB = 0.293mW/g

**Additional information:**

ambient temperature: 22.6°C; liquid temperature: 22.0°C

Date/Time: 13.01.2012 19:03:43 Date/Time: 13.01.2012 19:12:50 Date/Time: 13.01.2012 19:24:52

**IEEE1528\_OET65-RightHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: HSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.38 \text{ mho/m}$ ;  $\epsilon_r = 39.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

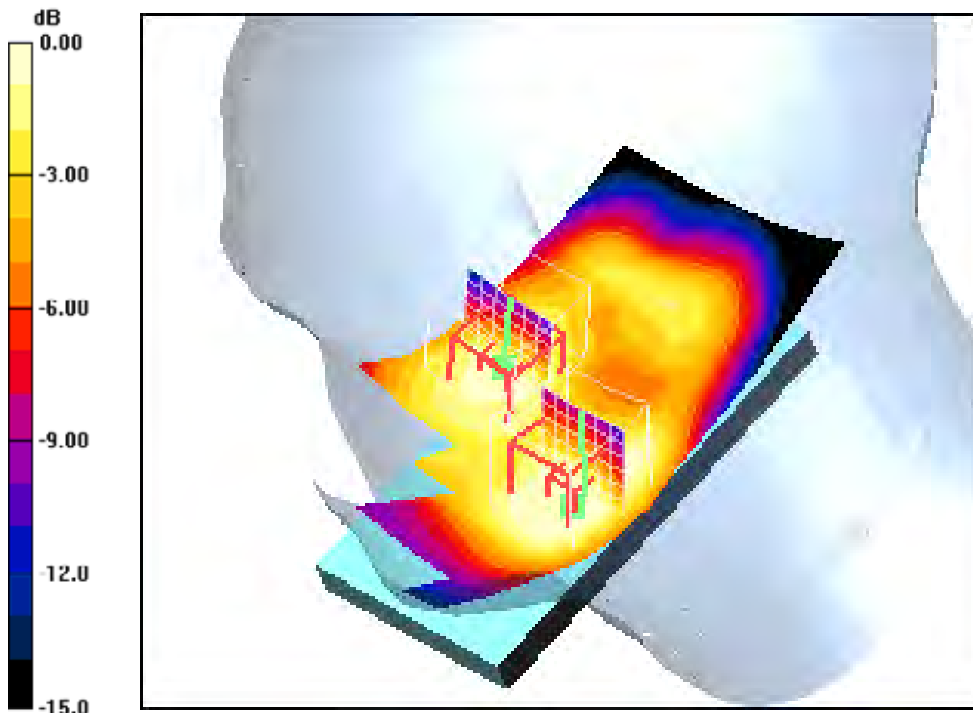
DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x111x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 0.315 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 = 14.8 V/m; Power Drift = -0.026 dB  
 Peak SAR (extrapolated) = 0.436 W/kg  
**SAR(1 g) = 0.304 mW/g; SAR(10 g) = 0.192 mW/g**  
 Maximum value of SAR (measured) = 0.328 mW/g

**Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid:  
 $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 14.8 V/m; Power Drift = -0.026 dB  
 Peak SAR (extrapolated) = 0.378 W/kg  
**SAR(1 g) = 0.241 mW/g; SAR(10 g) = 0.151 mW/g**  
 Maximum value of SAR (measured) = 0.263 mW/g



0 dB = 0.263mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.6°C

Date/Time: 13.01.2012 18:27:44 Date/Time: 13.01.2012 18:36:54 Date/Time: 13.01.2012 18:48:54

**IEEE1528\_OET65-RightHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: HSL1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.4 \text{ mho/m}$ ;  $\epsilon_r = 39.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 0.329 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 = 15.1 V/m; Power Drift = -0.085 dB

Peak SAR (extrapolated) = 0.476 W/kg

**SAR(1 g) = 0.318 mW/g; SAR(10 g) = 0.196 mW/g**

Maximum value of SAR (measured) = 0.351 mW/g

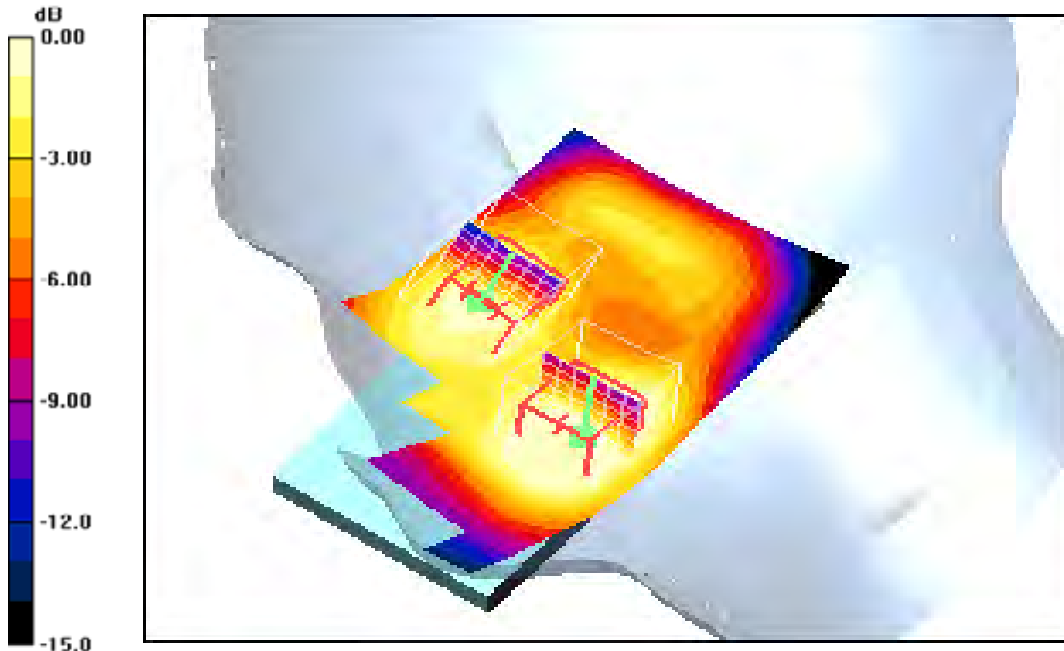
**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid:  
 $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 15.1 V/m; Power Drift = -0.085 dB

Peak SAR (extrapolated) = 0.355 W/kg

**SAR(1 g) = 0.220 mW/g; SAR(10 g) = 0.134 mW/g**

Maximum value of SAR (measured) = 0.240 mW/g



0 dB = 0.240mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.6°C

Date/Time: 13.01.2012 16:50:20 Date/Time: 13.01.2012 17:01:48

**IEEE1528\_OET65-RightHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: HSL1900 Medium parameters used:  $f = 1850.2 \text{ MHz}$ ;  $\sigma = 1.35 \text{ mho/m}$ ;  $\epsilon_r = 39.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x111x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.221 mW/g

**Tilt position - Low/Zoom Scan (7x7x7) (12x7x7)/Cube 0:** Measurement grid:

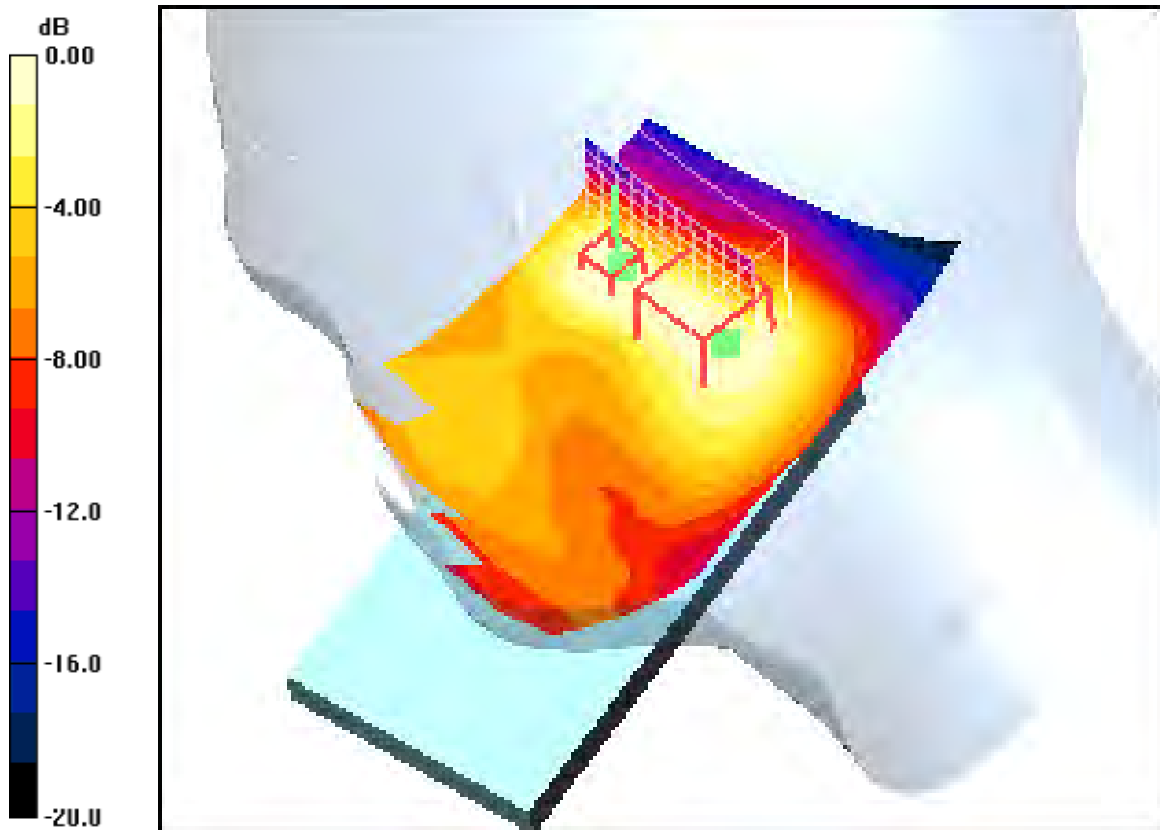
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 11.9 V/m; Power Drift = -0.048 dB

Peak SAR (extrapolated) = 0.318 W/kg

**SAR(1 g) = 0.178 mW/g; SAR(10 g) = 0.106 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: 22.6°C

Date/Time: 13.01.2012 17:24:01 Date/Time: 13.01.2012 17:33:54

**IEEE1528\_OET65-RightHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: HSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.38 \text{ mho/m}$ ;  $\epsilon_r = 39.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x111x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.200 mW/g

**Tilt position - Middle/Zoom Scan (7x7x7) (12x7x7)/Cube 0:** Measurement grid:

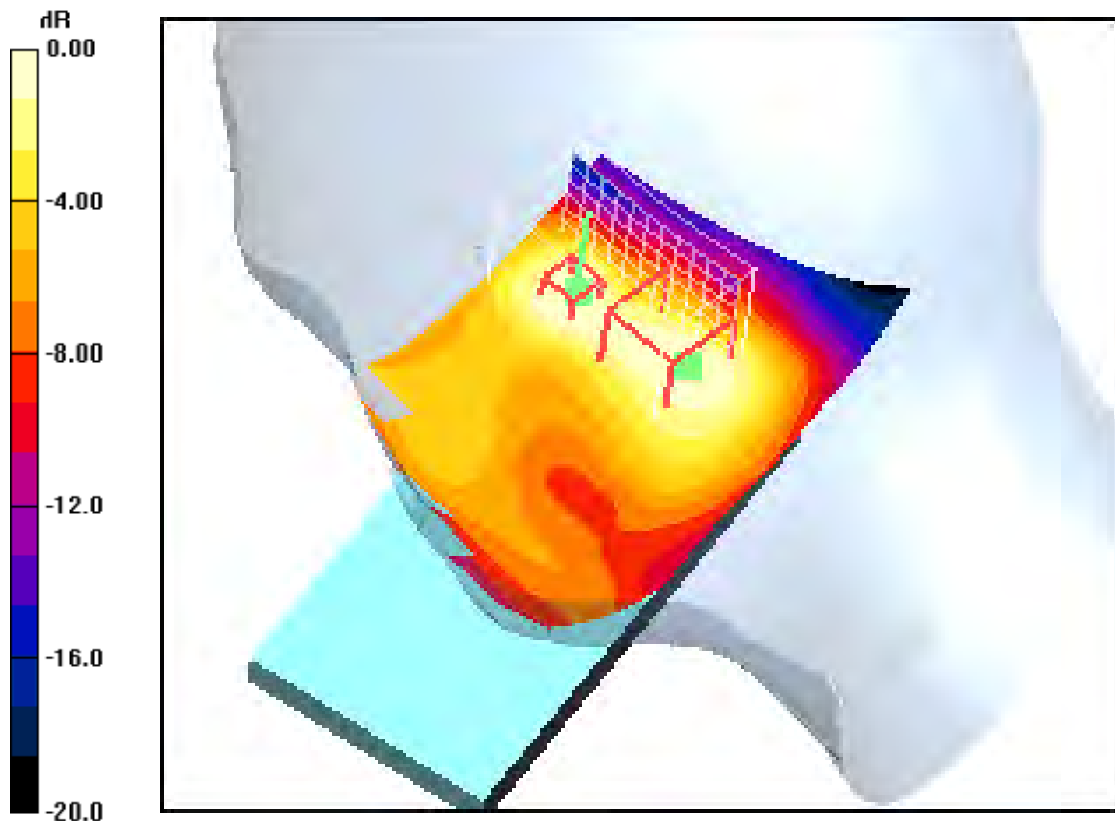
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 11.3 V/m; Power Drift = 0.057 dB

Peak SAR (extrapolated) = 0.292 W/kg

**SAR(1 g) = 0.170 mW/g; SAR(10 g) = 0.101 mW/g**

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



0 dB = 0.186mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.6°C

Date/Time: 13.01.2012 17:55:57 Date/Time: 13.01.2012 18:05:47

**IEEE1528\_OET65-RightHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: HSL1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.4 \text{ mho/m}$ ;  $\epsilon_r = 39.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x111x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.187 mW/g

**Tilt position - High/Zoom Scan (7x7x7) (12x7x7)/Cube 0:** Measurement grid:

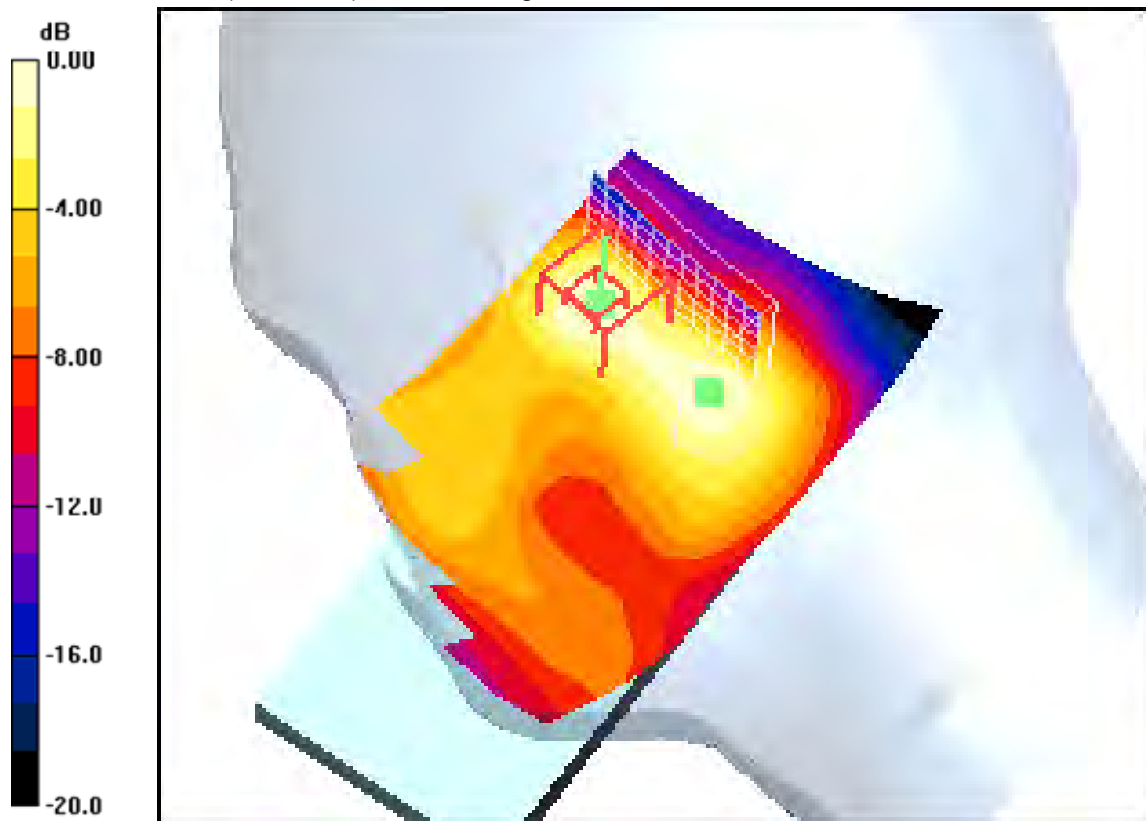
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 10.7 V/m; Power Drift = -0.032 dB

Peak SAR (extrapolated) = 0.277 W/kg

**SAR(1 g) = 0.160 mW/g; SAR(10 g) = 0.087 mW/g**

Maximum value of SAR (measured) = 0.176 mW/g



0 dB = 0.176mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.6°C



**Annex B.4: GSM 1900MHz body**

Date/Time: 13.01.2012 08:38:27 Date/Time: 13.01.2012 08:48:46

**IEEE1528\_OET65-Body-GSM1900 GPRS 2TS**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: GSM 1900 GPRS 2TS; Frequency: 1850.2 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used:  $f = 1850.2 \text{ MHz}$ ;  $\sigma = 1.49 \text{ mho/m}$ ;  $\epsilon_r = 52.5$ ;  $\rho = 1000 \text{ kg/m}^3$

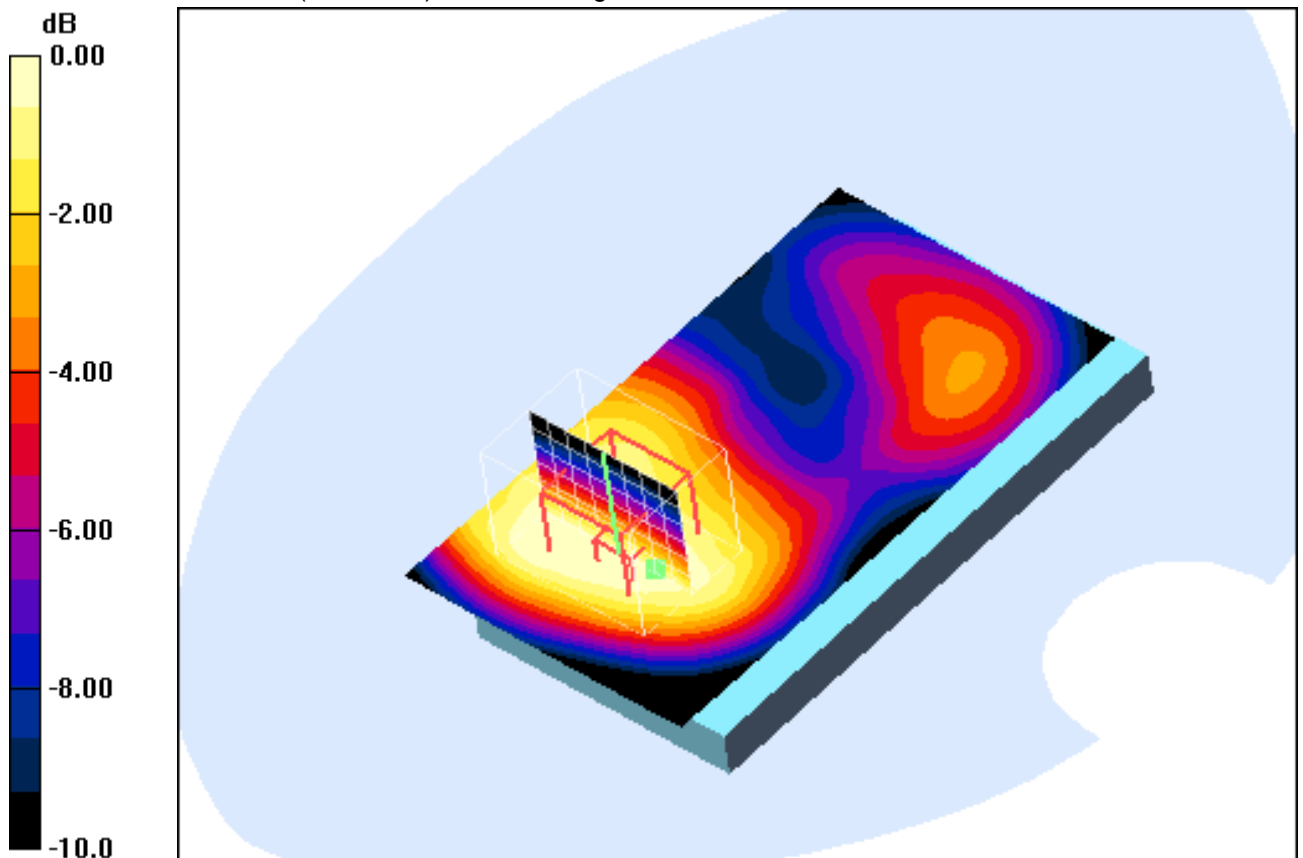
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 0.604 mW/g

**Front position - Low/Zoom Scan (7x7x7) (9x7x7)/Cube 0:** Measurement grid:  
 $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 21.1 V/m; Power Drift = -0.019 dB  
 Peak SAR (extrapolated) = 0.820 W/kg  
**SAR(1 g) = 0.550 mW/g; SAR(10 g) = 0.366 mW/g**  
 Maximum value of SAR (measured) = 0.589 mW/g



0 dB = 0.589mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.2°C; liquid temperature: 22.3°C

Date/Time: 13.01.2012 09:06:24 Date/Time: 13.01.2012 09:15:06

**IEEE1528\_OET65-Body-GSM1900 GPRS 2TS****DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: GSM 1900 GPRS 2TS; Frequency: 1880 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 52.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.595 mW/g

**Front position - Middle/Zoom Scan (7x7x7) (9x7x7)/Cube 0:** Measurement grid:

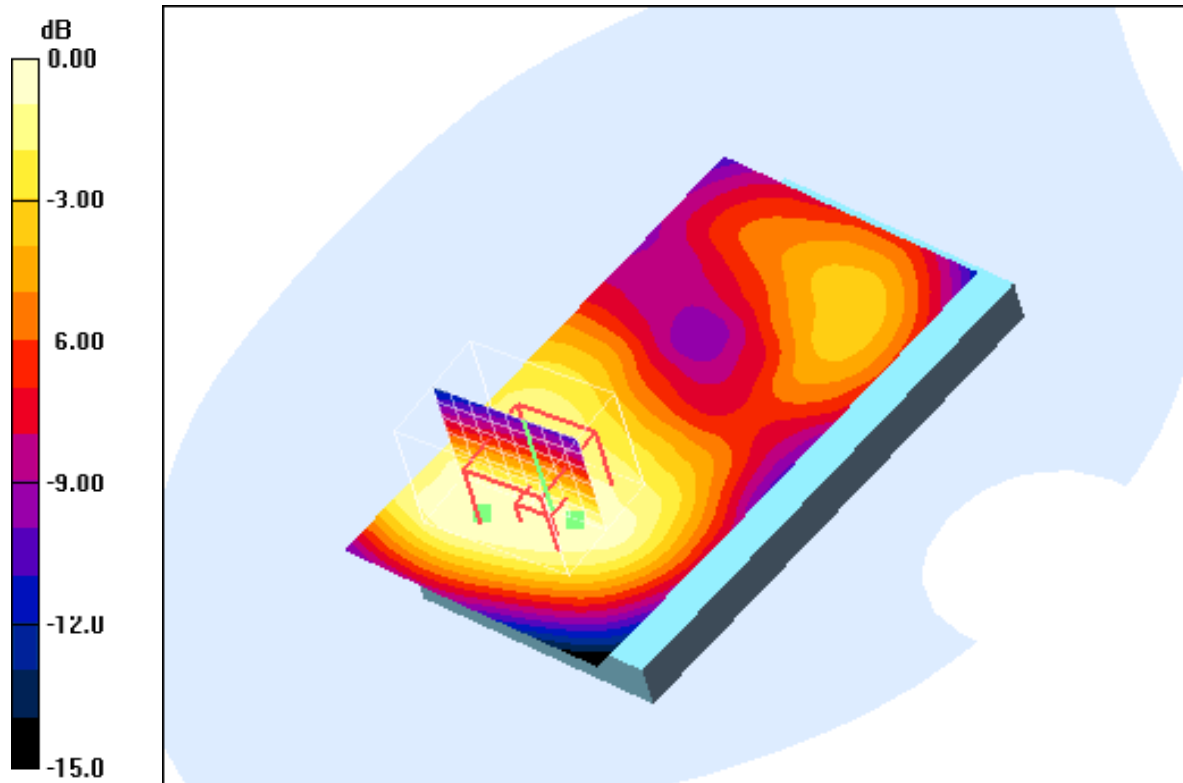
dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.6 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.870 W/kg

**SAR(1 g) = 0.533 mW/g; SAR(10 g) = 0.351 mW/g**

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



0 dB = 0.567mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.2°C; liquid temperature: 22.3°C

Date/Time: 13.01.2012 09:32:03 Date/Time: 13.01.2012 09:40:12

**IEEE1528\_OET65-Body-GSM1900 GPRS 2TS**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: GSM 1900 GPRS 2TS; Frequency: 1909.8 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.52 \text{ mho/m}$ ;  $\epsilon_r = 52.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.610 mW/g

**Front position - High/Zoom Scan (7x7x7) (9x7x7)/Cube 0:** Measurement grid:

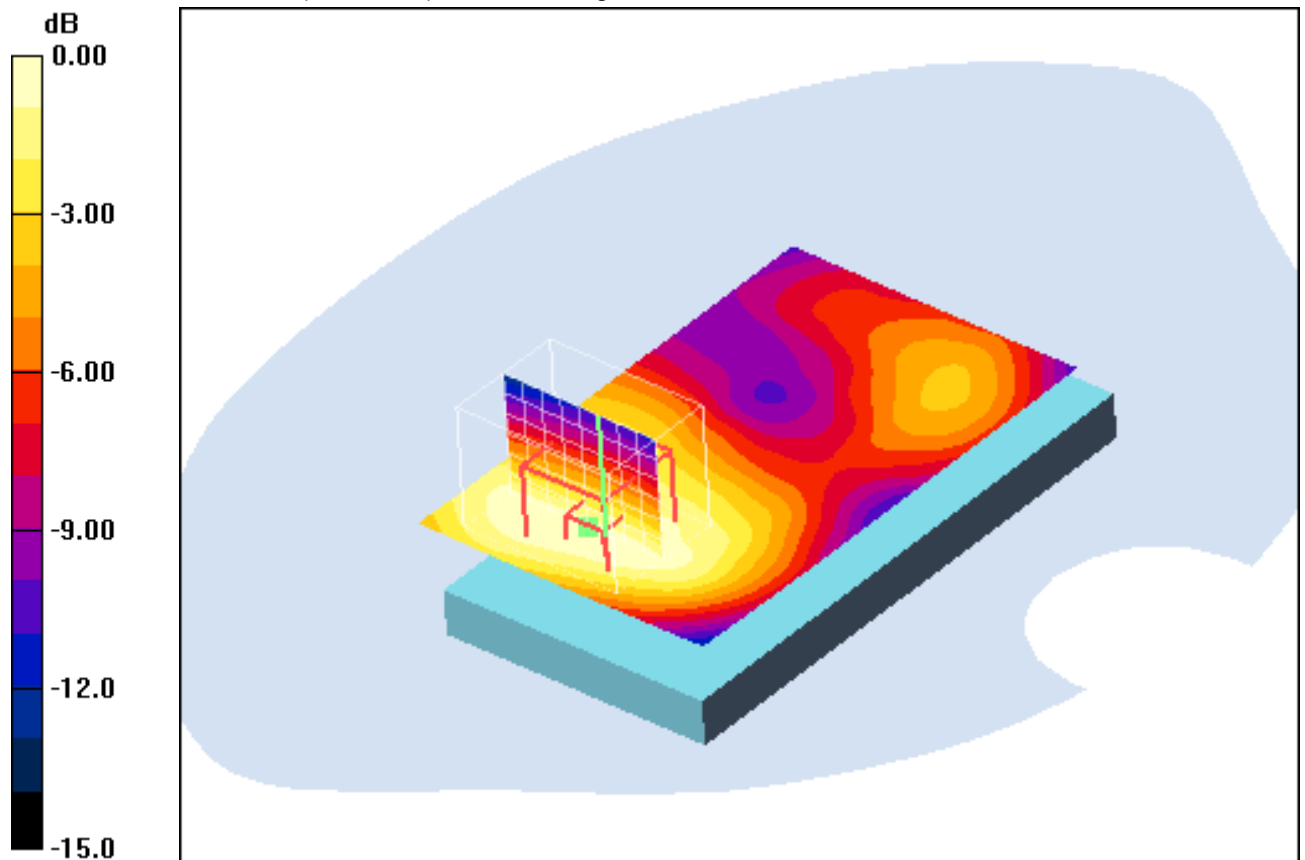
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 20.9 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 0.910 W/kg

**SAR(1 g) = 0.554 mW/g; SAR(10 g) = 0.358 mW/g**

Maximum value of SAR (measured) = 0.598 mW/g



0 dB = 0.598mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.2°C; liquid temperature: 22.3°C

Date/Time: 12.01.2012 20:54:22 Date/Time: 12.01.2012 21:02:22

**IEEE1528\_OET65-Body-GSM1900 GPRS 2TS**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: GSM 1900 GPRS 2TS; Frequency: 1850.2 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used:  $f = 1850.2 \text{ MHz}$ ;  $\sigma = 1.49 \text{ mho/m}$ ;  $\epsilon_r = 52.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.947 mW/g

**Rear position - Low/Zoom Scan (7x7x7) (9x7x7)/Cube 0:** Measurement grid:

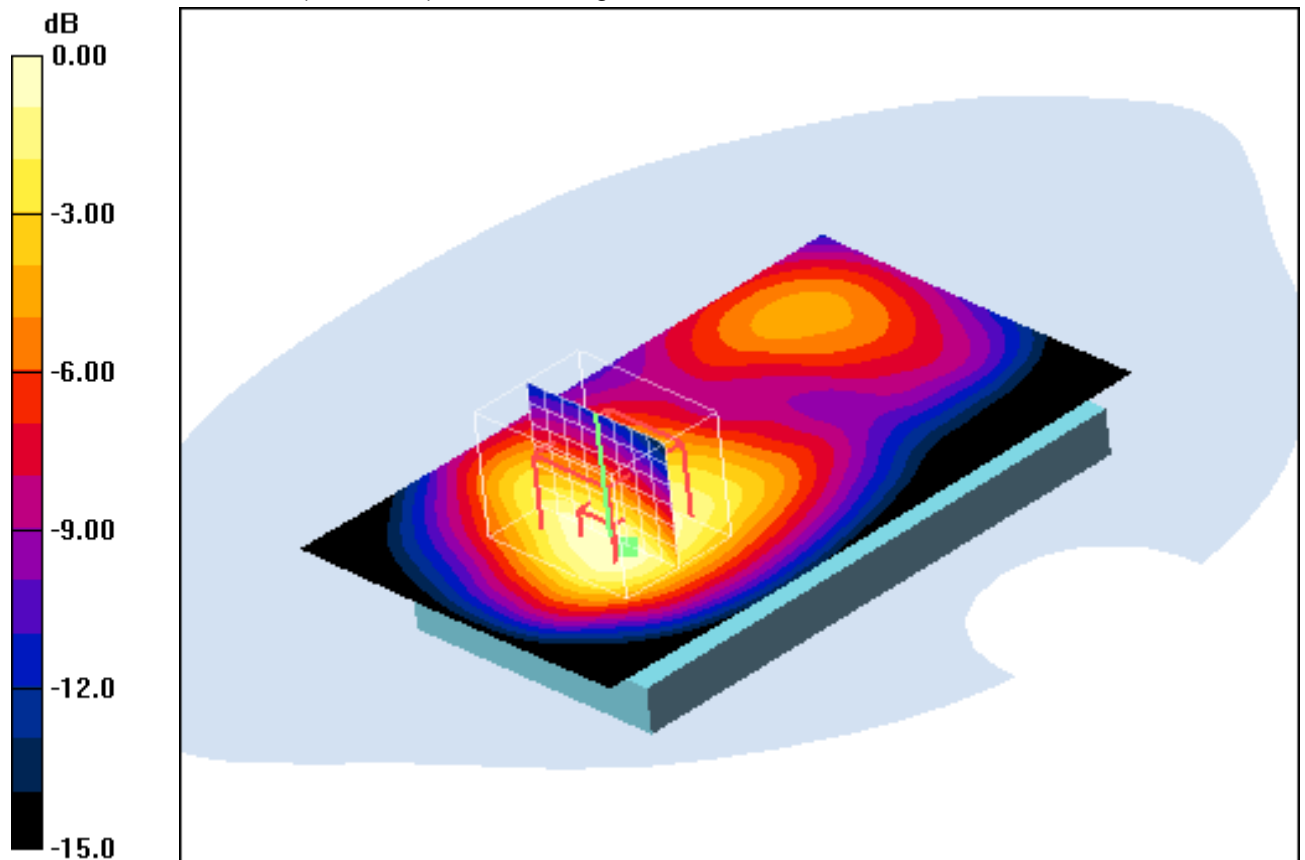
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 26.7 V/m; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 1.30 W/kg

**SAR(1 g) = 0.862 mW/g; SAR(10 g) = 0.554 mW/g**

Maximum value of SAR (measured) = 0.935 mW/g



0 dB = 0.935mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.2°C; liquid temperature: 22.3°C

Date/Time: 12.01.2012 21:19:50 Date/Time: 12.01.2012 21:29:46

**IEEE1528\_OET65-Body-GSM1900 GPRS 2TS**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: GSM 1900 GPRS 2TS; Frequency: 1880 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.49 \text{ mho/m}$ ;  $\epsilon_r = 52.4$ ;  $\rho = 1000 \text{ kg/m}^3$

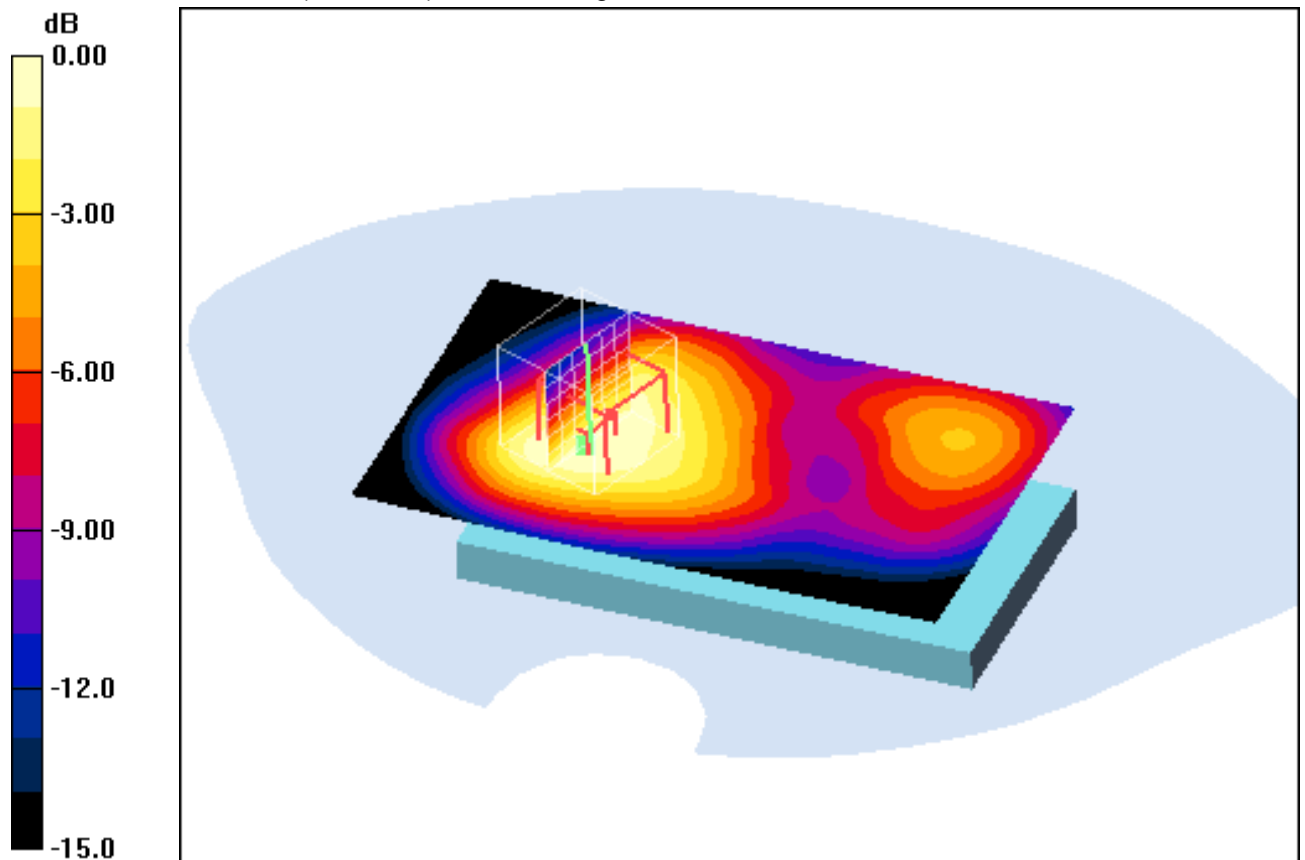
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 0.904 mW/g

**Rear position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 25.4 V/m; Power Drift = 0.043 dB  
 Peak SAR (extrapolated) = 1.26 W/kg  
**SAR(1 g) = 0.803 mW/g; SAR(10 g) = 0.514 mW/g**  
 Maximum value of SAR (measured) = 0.852 mW/g



0 dB = 0.852mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.2°C; liquid temperature: 22.3°C

Date/Time: 12.01.2012 21:44:09 Date/Time: 12.01.2012 21:53:23

**IEEE1528\_OET65-Body-GSM1900 GPRS 2TS**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: GSM 1900 GPRS 2TS; Frequency: 1909.8 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.52 \text{ mho/m}$ ;  $\epsilon_r = 52.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.831 mW/g

**Rear position - High/Zoom Scan (7x7x7) (8x7x7)/Cube 0:** Measurement grid:

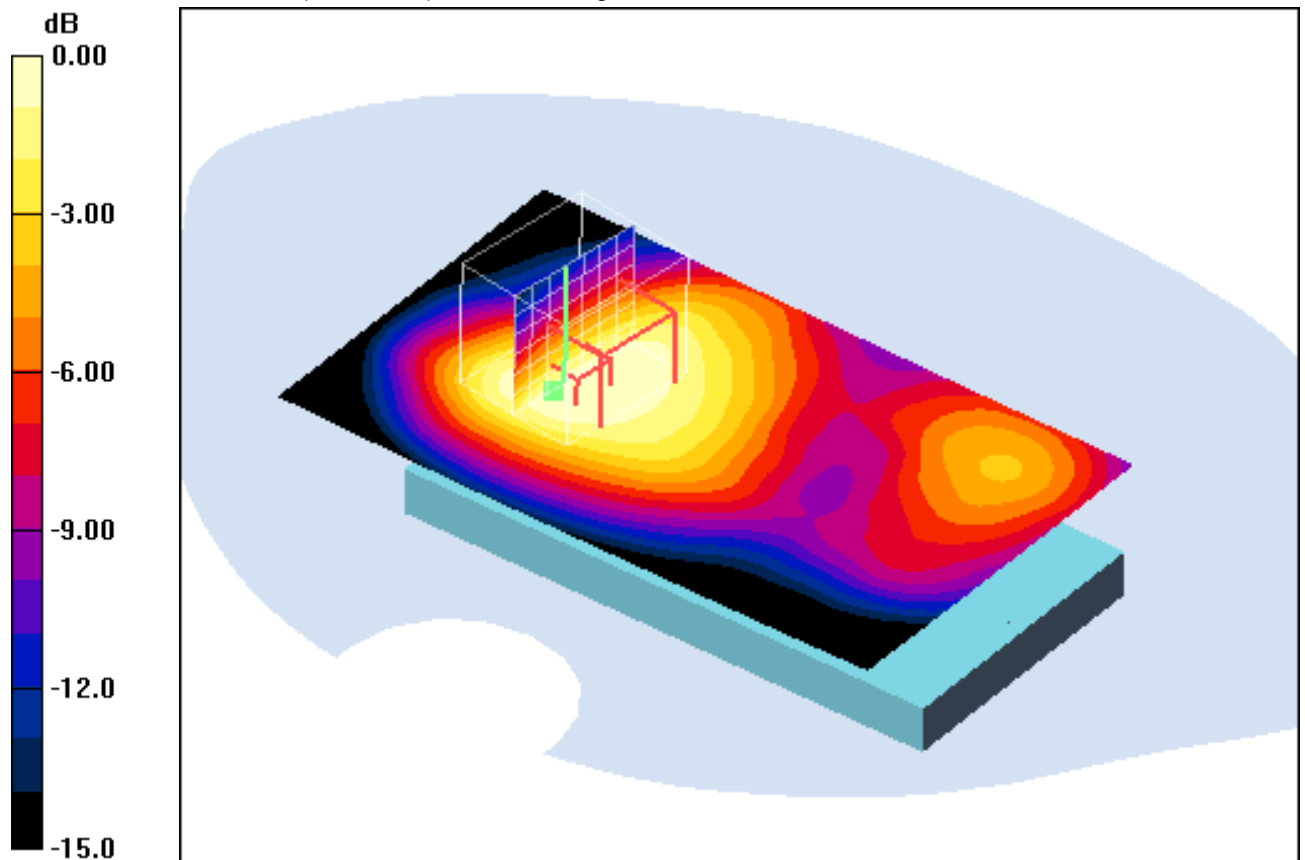
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 24.5 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 1.19 W/kg

**SAR(1 g) = 0.749 mW/g; SAR(10 g) = 0.479 mW/g**

Maximum value of SAR (measured) = 0.808 mW/g



0 dB = 0.808mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.2°C; liquid temperature: 22.3°C

Date/Time: 13.01.2012 10:34:20 Date/Time: 13.01.2012 10:51:25

**IEEE1528\_OET65-Body-GSM1900 GPRS 2TS**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: GSM 1900 GPRS 2TS; Frequency: 1880 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.49 \text{ mho/m}$ ;  $\epsilon_r = 52.4$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.705 mW/g

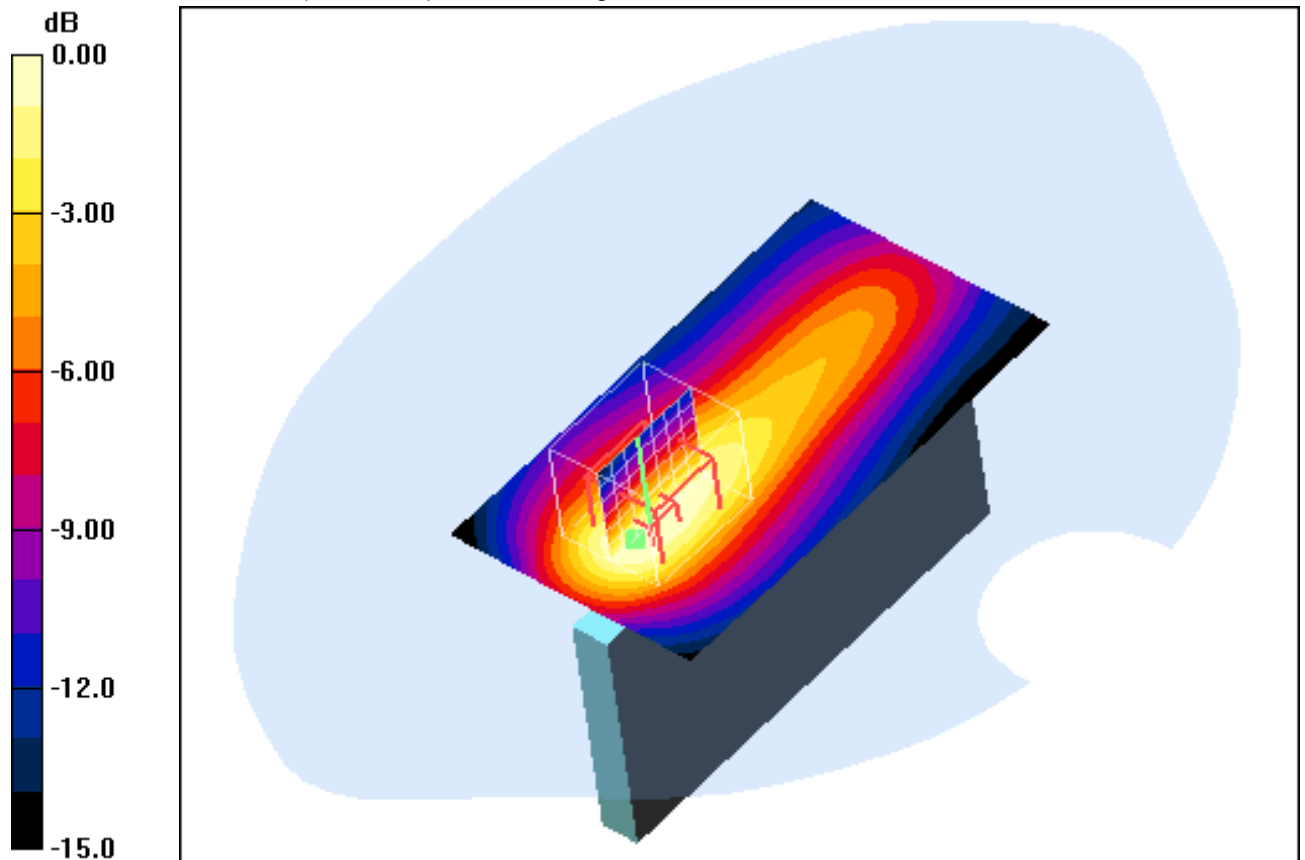
**Edge left position - Middle/Zoom Scan (7x7x7) (7x8x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 20.2 V/m; Power Drift = -0.050 dB

Peak SAR (extrapolated) = 1.00 W/kg

**SAR(1 g) = 0.594 mW/g; SAR(10 g) = 0.350 mW/g**

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



0 dB = 0.654mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.2°C; liquid temperature: 22.3°C

Date/Time: 13.01.2012 09:59:31 Date/Time: 13.01.2012 10:07:26 Date/Time: 13.01.2012 10:18:58

**IEEE1528\_OET65-Body-GSM1900 GPRS 2TS**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: GSM 1900 GPRS 2TS; Frequency: 1880 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.49 \text{ mho/m}$ ;  $\epsilon_r = 52.4$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

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

Reference Value = 11.2 V/m; Power Drift = -0.109 dB

Peak SAR (extrapolated) = 0.277 W/kg

**SAR(1 g) = 0.172 mW/g; SAR(10 g) = 0.104 mW/g**

Maximum value of SAR (measured) = 0.187 mW/g

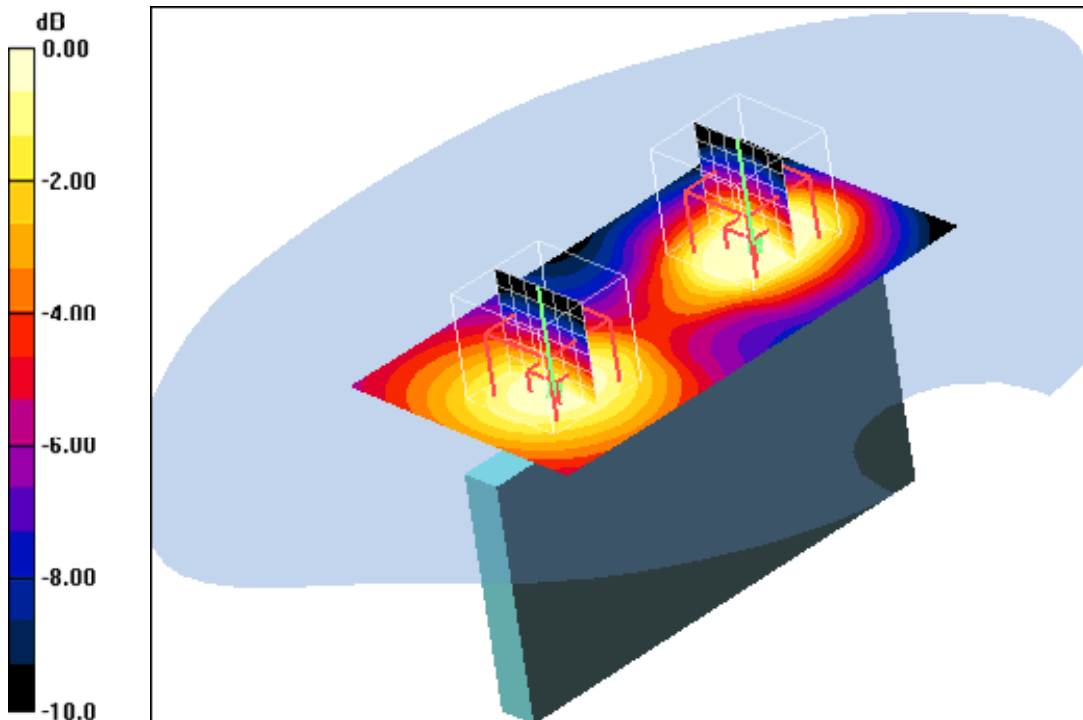
**Edge right position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 11.2 V/m; Power Drift = -0.109 dB

Peak SAR (extrapolated) = 0.228 W/kg

**SAR(1 g) = 0.145 mW/g; SAR(10 g) = 0.091 mW/g**

Maximum value of SAR (measured) = 0.155 mW/g



0 dB = 0.155mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.2°C; liquid temperature: 22.3°C



Date/Time: 13.01.2012 11:07:38 Date/Time: 13.01.2012 11:14:17

**IEEE1528\_OET65-Body-GSM1900 GPRS 2TS**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: GSM 1900 GPRS 2TS; Frequency: 1880 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.49 \text{ mho/m}$ ;  $\epsilon_r = 52.4$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.190 mW/g

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

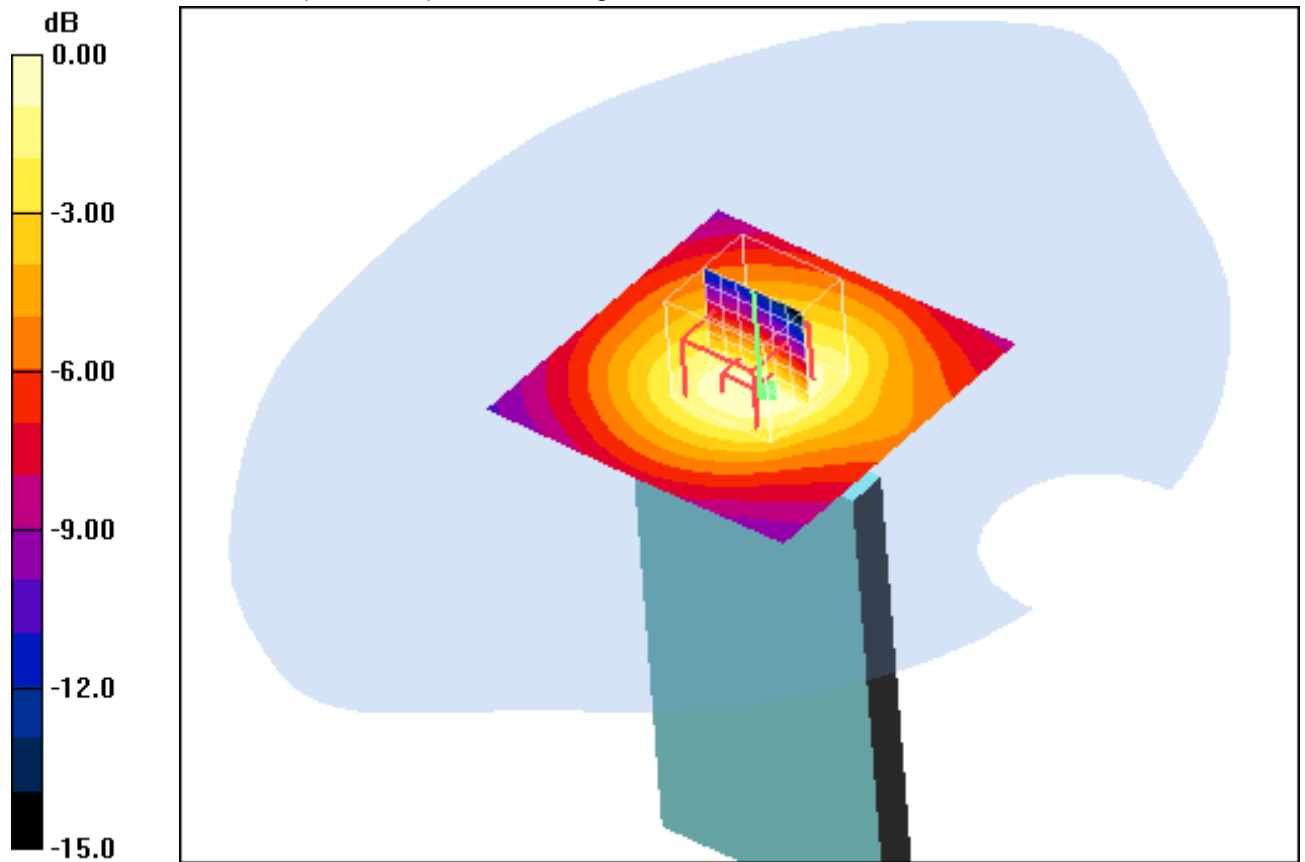
Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 11.8 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 0.284 W/kg

**SAR(1 g) = 0.175 mW/g; SAR(10 g) = 0.107 mW/g**

Maximum value of SAR (measured) = 0.189 mW/g



0 dB = 0.189mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.2°C; liquid temperature: 22.3°C

Date/Time: 13.01.2012 12:29:26 Date/Time: 13.01.2012 12:38:59

**IEEE1528\_OET65-Body-GSM1900 1TS**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

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

Medium: M1900 Medium parameters used:  $f = 1850.2 \text{ MHz}$ ;  $\sigma = 1.49 \text{ mho/m}$ ;  $\epsilon_r = 52.5$ ;  $\rho = 1000 \text{ kg/m}^3$

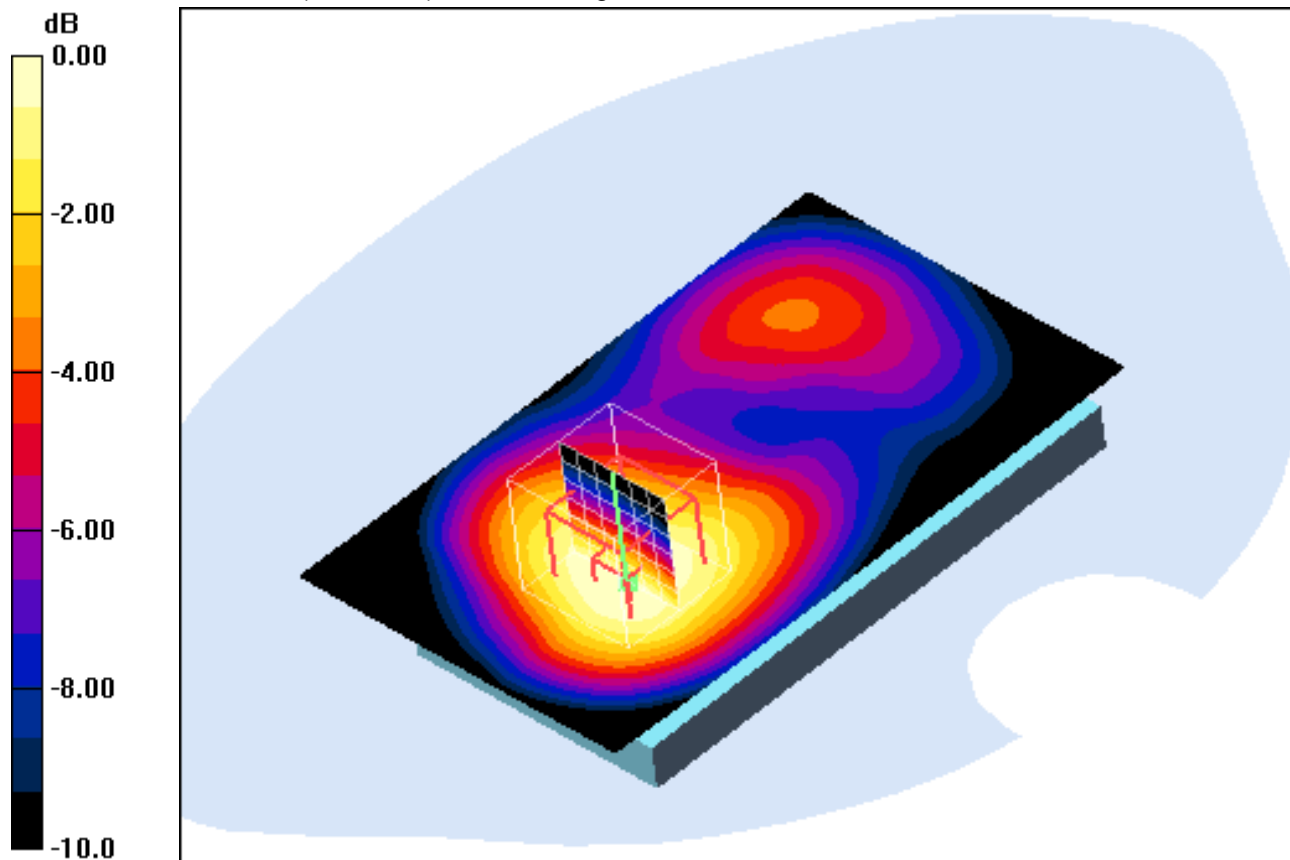
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 0.452 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 = 17.7 V/m; Power Drift = 0.016 dB  
 Peak SAR (extrapolated) = 0.613 W/kg  
**SAR(1 g) = 0.410 mW/g; SAR(10 g) = 0.268 mW/g**  
 Maximum value of SAR (measured) = 0.439 mW/g



0 dB = 0.439mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.2°C; liquid temperature: 22.3°C

**Annex B.5: UMTS WCDMA FDD II 1900MHz head**

Date/Time: 14.01.2012 19:02:00 Date/Time: 14.01.2012 19:10:39

**IEEE1528\_OET65-LeftHandSide-WCDMA FDD II**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1852.5 \text{ MHz}$ ;  $\sigma = 1.35 \text{ mho/m}$ ;  $\epsilon_r = 39.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.14 mW/g

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

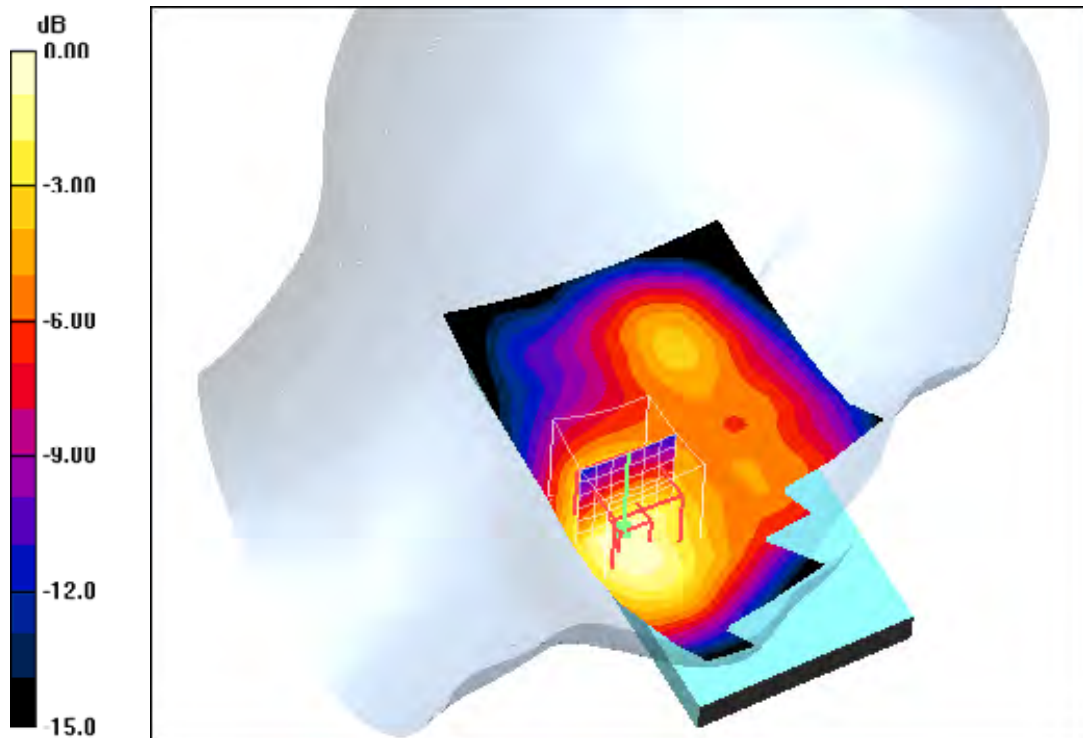
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 29.9 V/m; Power Drift = 0.041 dB

Peak SAR (extrapolated) = 1.62 W/kg

**SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.644 mW/g**

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



0 dB = 1.11mW/g

**Additional information:**

ambient temperature: 22.6°C; liquid temperature: 22.0°C

Date/Time: 14.01.2012 19:25:41 Date/Time: 14.01.2012 19:34:46

**IEEE1528\_OET65-LeftHandSide-WCDMA FDD II**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.38 \text{ mho/m}$ ;  $\epsilon_r = 39.6$ ;  $\rho = 1000 \text{ kg/m}^3$

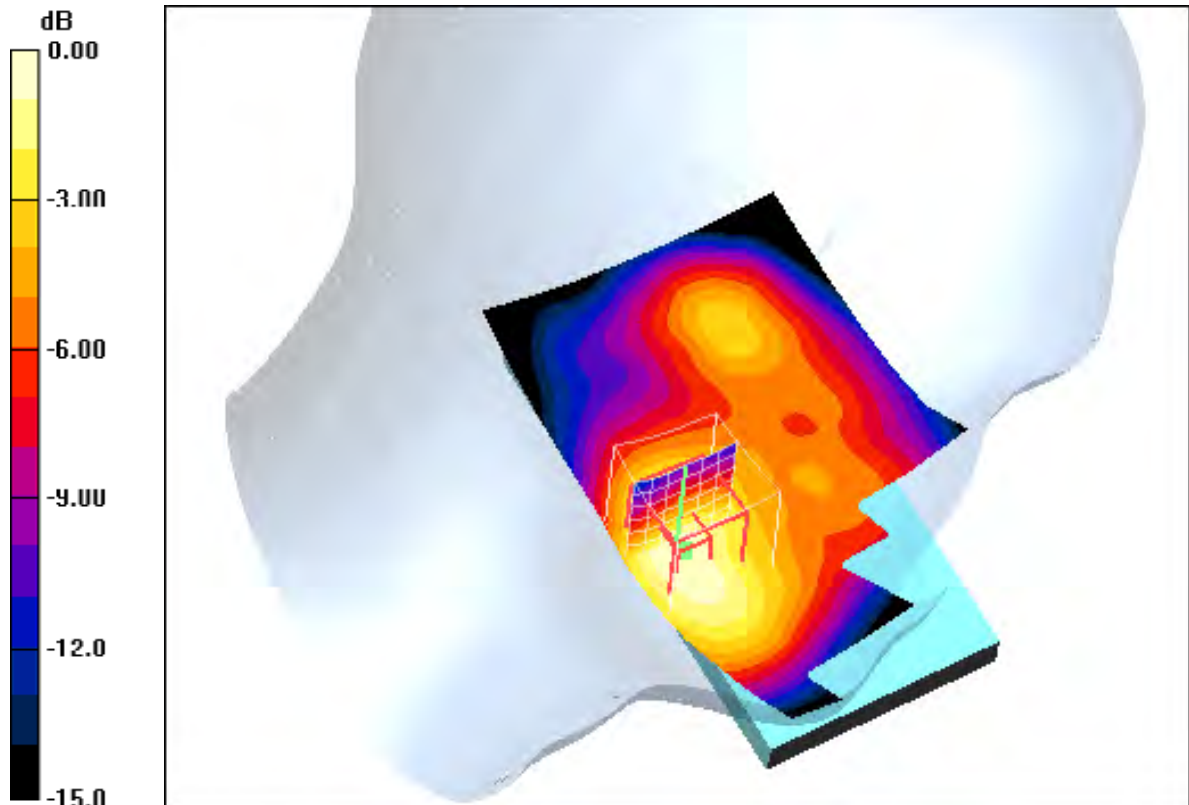
Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 1.13 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 = 29.9 V/m; Power Drift = 0.073 dB  
 Peak SAR (extrapolated) = 1.66 W/kg  
**SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.643 mW/g**  
 Maximum value of SAR (measured) = 1.12 mW/g



0 dB = 1.12mW/g

**Additional information:**

ambient temperature: 22.6°C; liquid temperature: 22.0°C

Date/Time: 14.01.2012 19:49:46 Date/Time: 14.01.2012 19:58:56

**IEEE1528\_OET65-LeftHandSide-WCDMA FDD II**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1907.6 \text{ MHz}$ ;  $\sigma = 1.4 \text{ mho/m}$ ;  $\epsilon_r = 39.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.08 mW/g

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

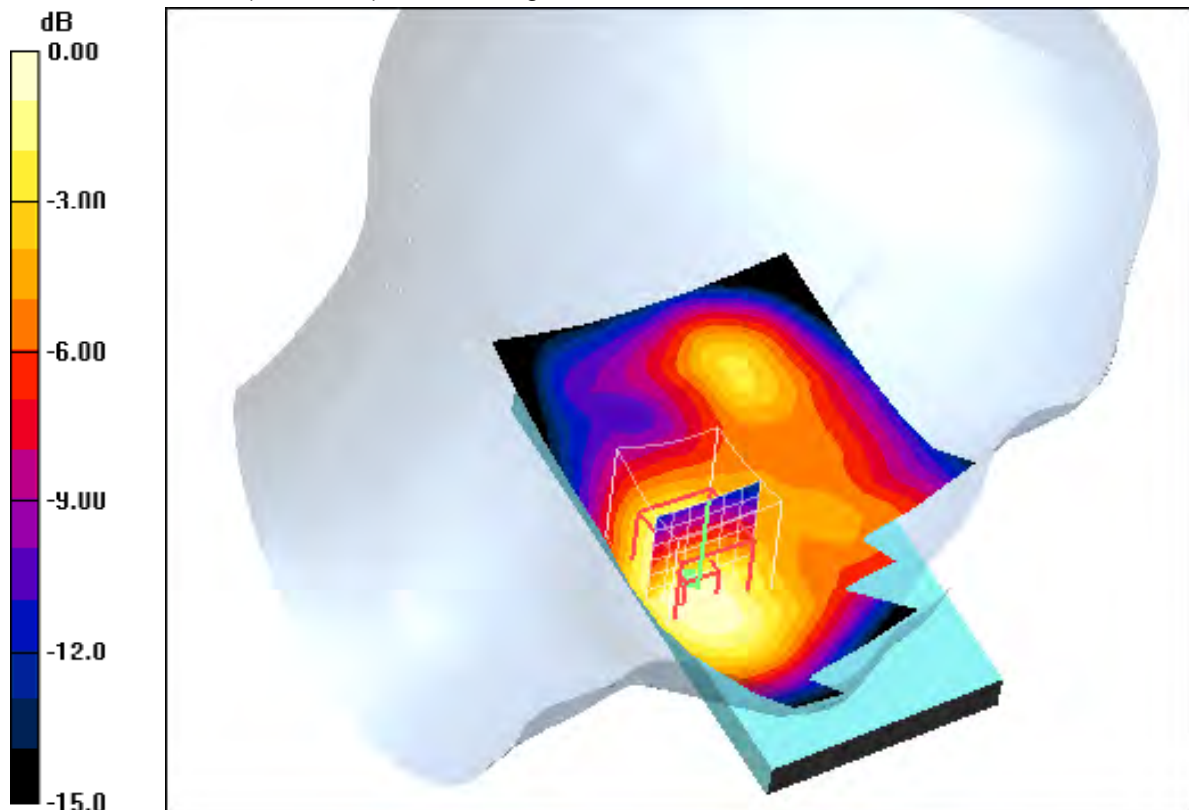
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 28.3 V/m; Power Drift = -0.043 dB

Peak SAR (extrapolated) = 1.50 W/kg

**SAR(1 g) = 0.961 mW/g; SAR(10 g) = 0.589 mW/g**

Maximum value of SAR (measured) = 1.01 mW/g



0 dB = 1.01mW/g

**Additional information:**

ambient temperature: 22.6°C; liquid temperature: 22.0°C

Date/Time: 14.01.2012 18:39:04 Date/Time: 14.01.2012 18:48:18

**IEEE1528\_OET65-LeftHandSide-WCDMA FDD II**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1852.5 \text{ MHz}$ ;  $\sigma = 1.35 \text{ mho/m}$ ;  $\epsilon_r = 39.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.512 mW/g

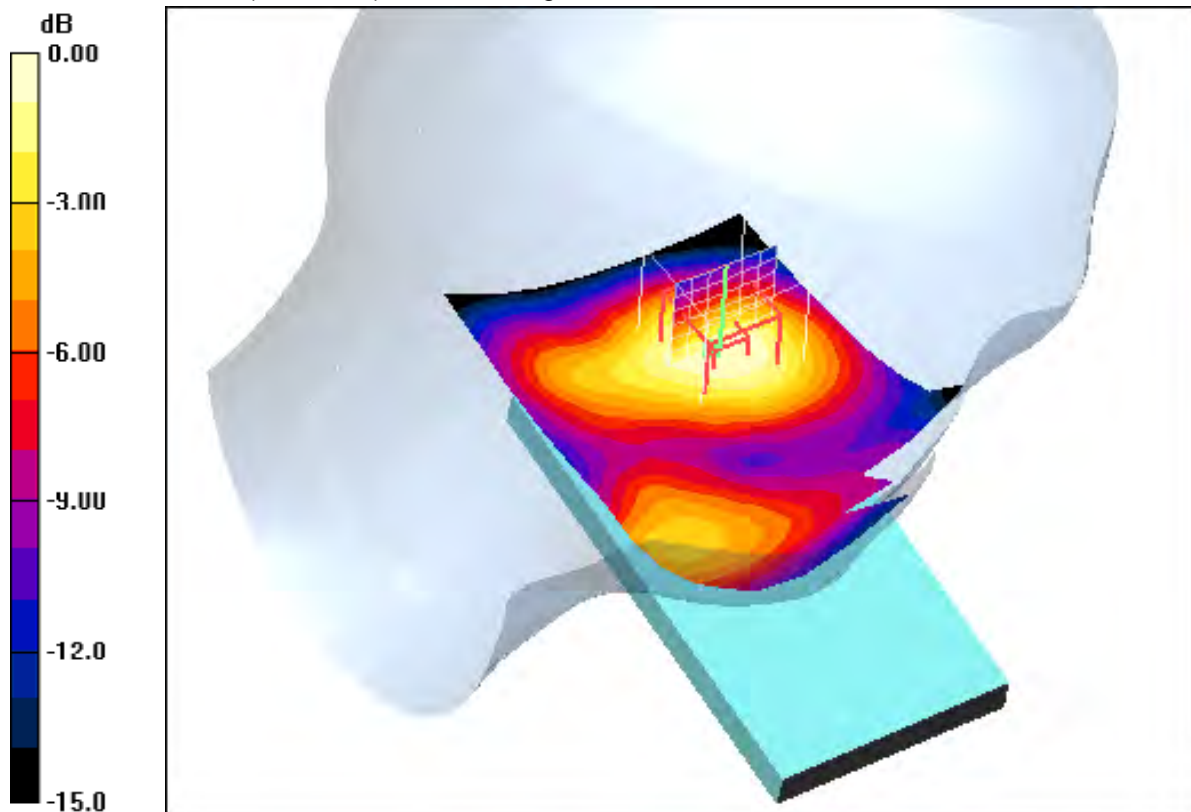
**Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.5 V/m; Power Drift = 0.119 dB

Peak SAR (extrapolated) = 0.644 W/kg

**SAR(1 g) = 0.444 mW/g; SAR(10 g) = 0.277 mW/g**

Maximum value of SAR (measured) = 0.481 mW/g



0 dB = 0.481mW/g

**Additional information:**

ambient temperature: 22.6°C; liquid temperature: 22.0°C

Date/Time: 14.01.2012 18:12:45 Date/Time: 14.01.2012 18:22:07

**IEEE1528\_OET65-LeftHandSide-WCDMA FDD II**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.38 \text{ mho/m}$ ;  $\epsilon_r = 39.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

**Tilt position - Middle/Zoom Scan (7x7x7) (8x7x7)/Cube 0:** Measurement grid:

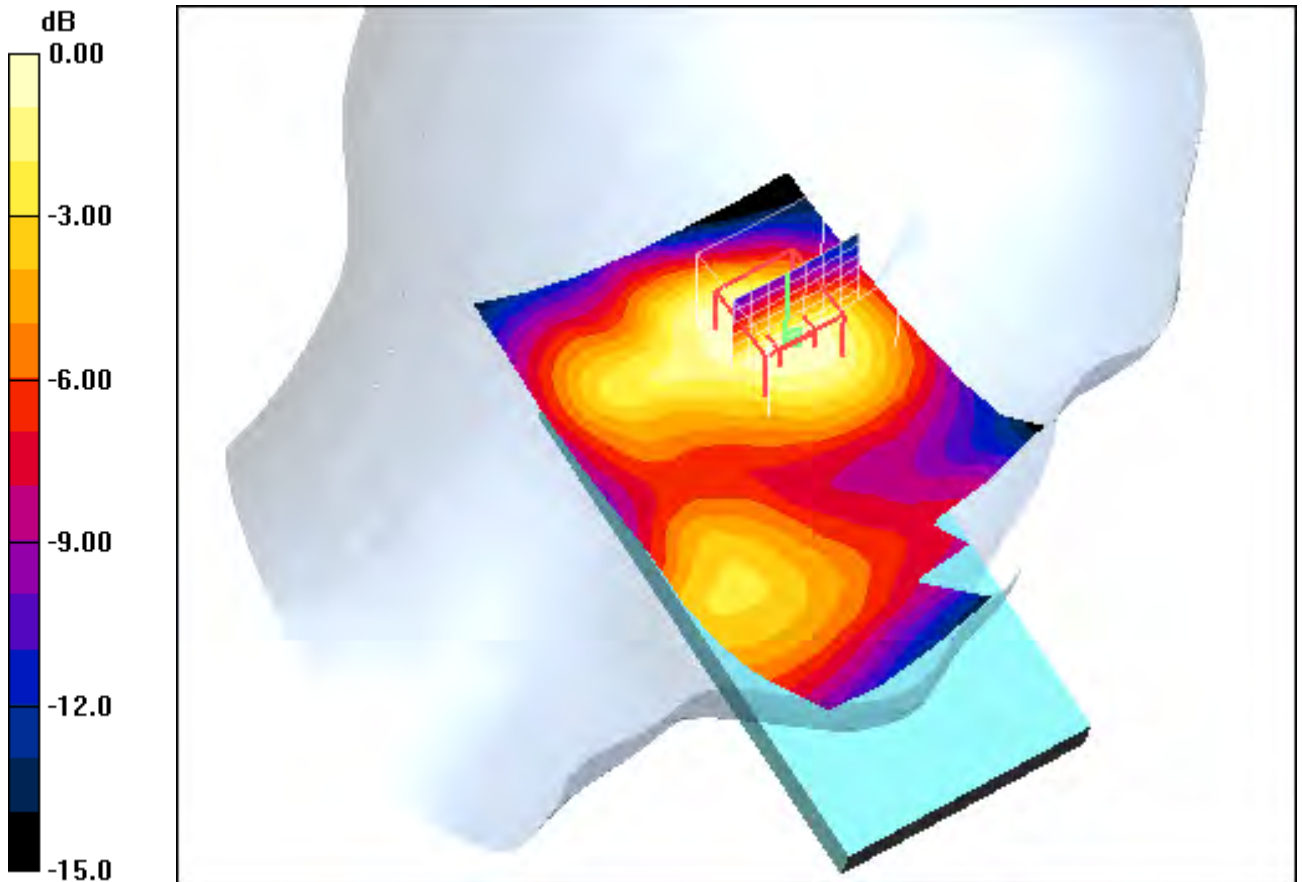
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 15.2 V/m; Power Drift = 0.040 dB

Peak SAR (extrapolated) = 0.437 W/kg

**SAR(1 g) = 0.304 mW/g; SAR(10 g) = 0.191 mW/g**

Maximum value of SAR (measured) = 0.327 mW/g



0 dB = 0.327mW/g

**Additional information:**

ambient temperature: 22.6°C; liquid temperature: 22.0°C

Date/Time: 14.01.2012 17:49:53 Date/Time: 14.01.2012 17:59:16

**IEEE1528\_OET65-LeftHandSide-WCDMA FDD II**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1907.6 \text{ MHz}$ ;  $\sigma = 1.4 \text{ mho/m}$ ;  $\epsilon_r = 39.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid: dx=15mm, dy=15mm

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

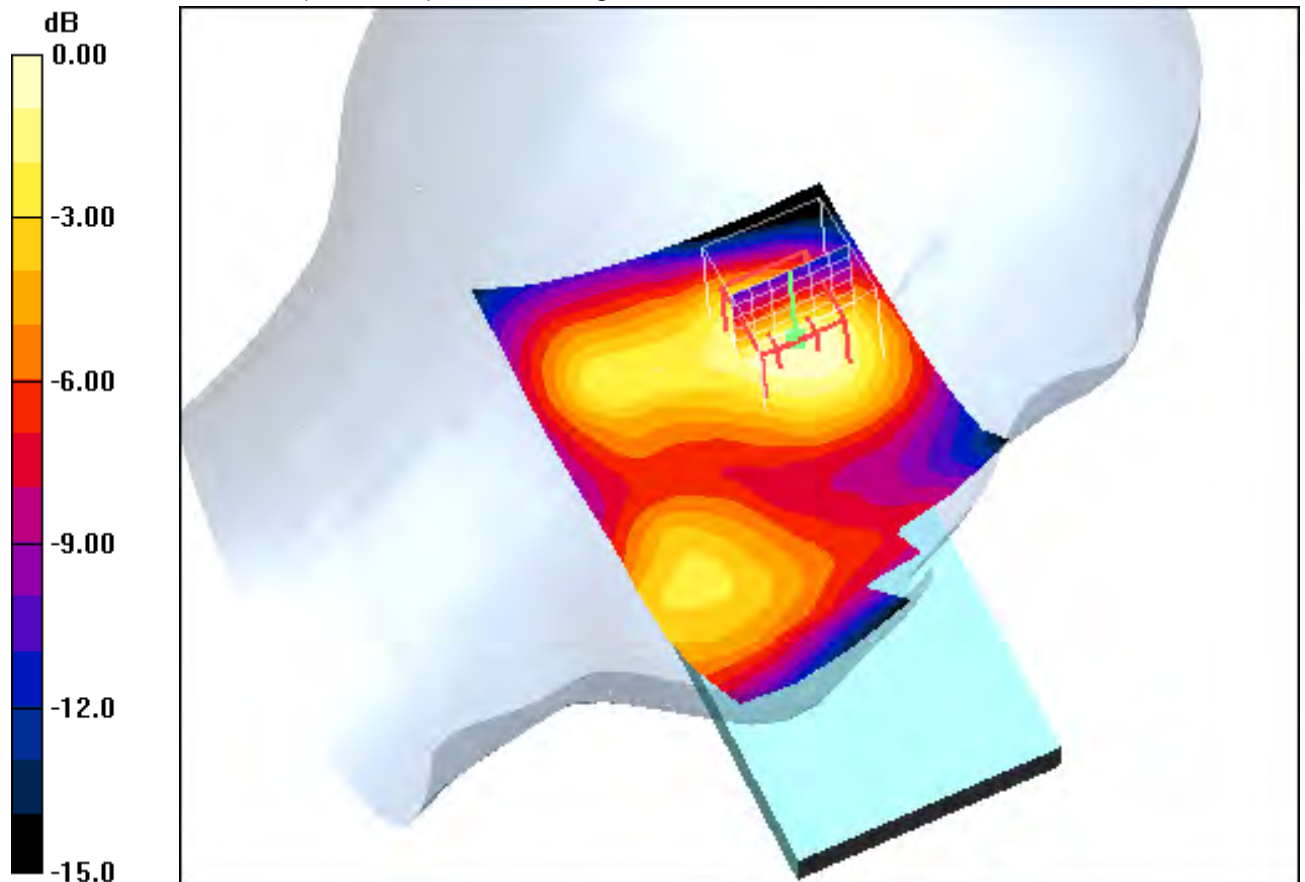
**Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.0 V/m; Power Drift = 0.172 dB

Peak SAR (extrapolated) = 0.434 W/kg

**SAR(1 g) = 0.295 mW/g; SAR(10 g) = 0.181 mW/g**

Maximum value of SAR (measured) = 0.317 mW/g



0 dB = 0.317mW/g

**Additional information:**

ambient temperature: 22.6°C; liquid temperature: 22.0°C



Date/Time: 14.01.2012 14:00:57 Date/Time: 14.01.2012 14:08:46 Date/Time: 14.01.2012 14:20:42

**IEEE1528\_OET65-RightHandSide-WCDMA FDD II**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1852.5 \text{ MHz}$ ;  $\sigma = 1.35 \text{ mho/m}$ ;  $\epsilon_r = 39.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 0.596 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 = 20.4 V/m; Power Drift = -0.012 dB

Peak SAR (extrapolated) = 0.765 W/kg

**SAR(1 g) = 0.537 mW/g; SAR(10 g) = 0.347 mW/g**

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

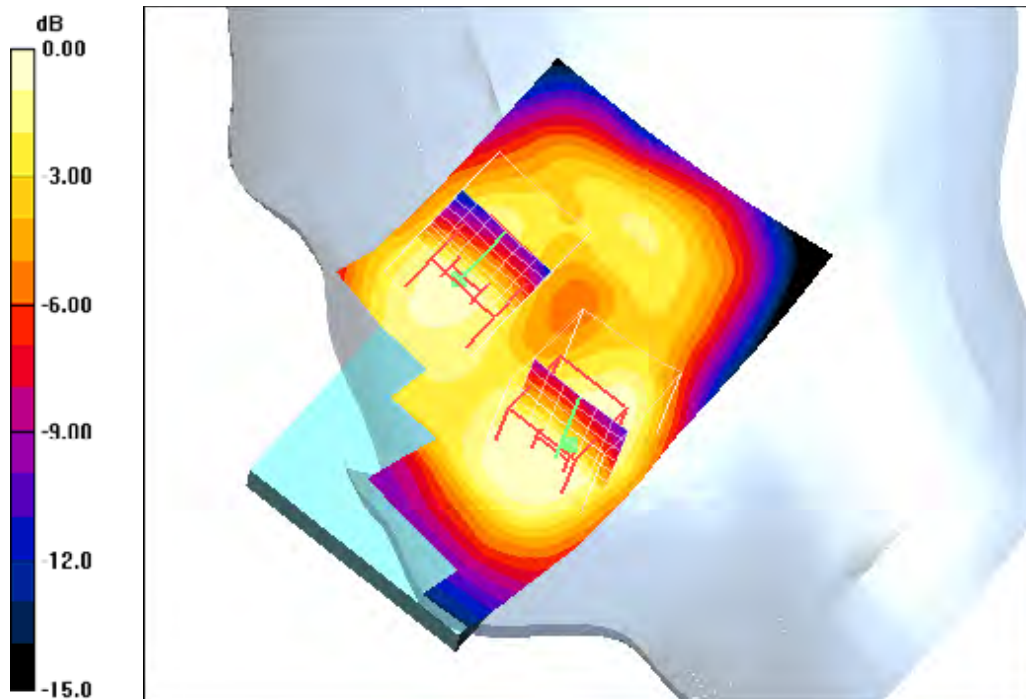
**Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid:  
 $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 20.4 V/m; Power Drift = -0.012 dB

Peak SAR (extrapolated) = 0.656 W/kg

**SAR(1 g) = 0.426 mW/g; SAR(10 g) = 0.267 mW/g**

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



0 dB = 0.465mW/g

**Additional information:**

ambient temperature: 22.6°C; liquid temperature: 22.0°C

Date/Time: 14.01.2012 14:35:12 Date/Time: 14.01.2012 14:43:16 Date/Time: 14.01.2012 14:55:14

**IEEE1528\_OET65-RightHandSide-WCDMA FDD II**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.38 \text{ mho/m}$ ;  $\epsilon_r = 39.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

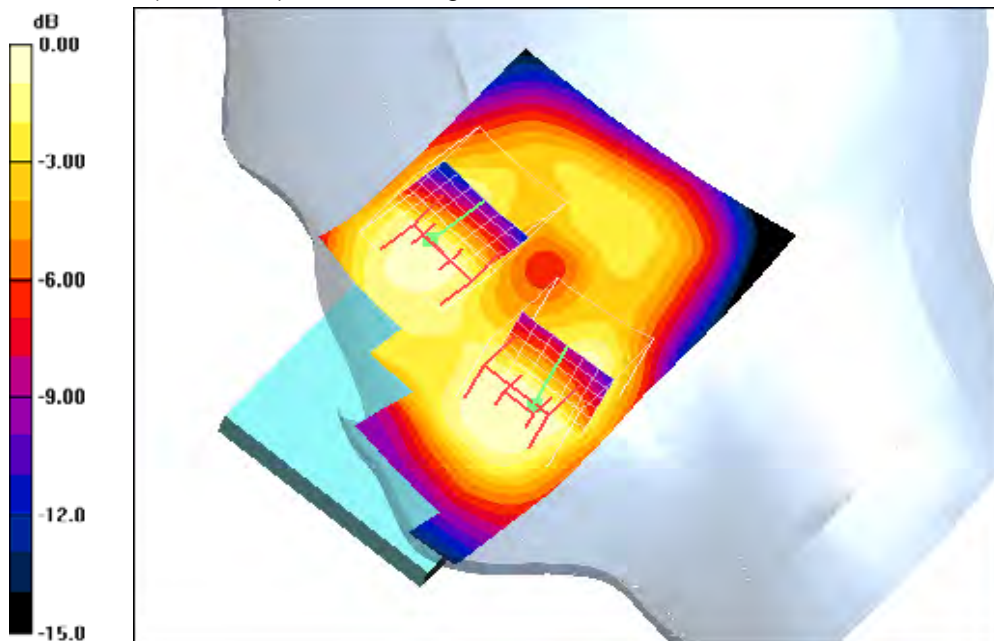
DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 0.571 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 = 20.0 V/m; Power Drift = 0.013 dB  
 Peak SAR (extrapolated) = 0.752 W/kg  
**SAR(1 g) = 0.528 mW/g; SAR(10 g) = 0.339 mW/g**  
 Maximum value of SAR (measured) = 0.565 mW/g

**Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid:  
 $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 20.0 V/m; Power Drift = 0.013 dB  
 Peak SAR (extrapolated) = 0.698 W/kg  
**SAR(1 g) = 0.446 mW/g; SAR(10 g) = 0.276 mW/g**  
 Maximum value of SAR (measured) = 0.487 mW/g



0 dB = 0.487mW/g

**Additional information:**

ambient temperature: 22.6°C; liquid temperature: 22.0°C

Date/Time: 14.01.2012 15:09:45 Date/Time: 14.01.2012 15:18:22 Date/Time: 14.01.2012 15:31:31

**IEEE1528\_OET65-RightHandSide-WCDMA FDD II**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1907.6 \text{ MHz}$ ;  $\sigma = 1.4 \text{ mho/m}$ ;  $\epsilon_r = 39.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 0.557 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 = 19.9 V/m; Power Drift = -0.113 dB

Peak SAR (extrapolated) = 0.799 W/kg

**SAR(1 g) = 0.531 mW/g; SAR(10 g) = 0.333 mW/g**

Maximum value of SAR (measured) = 0.589 mW/g

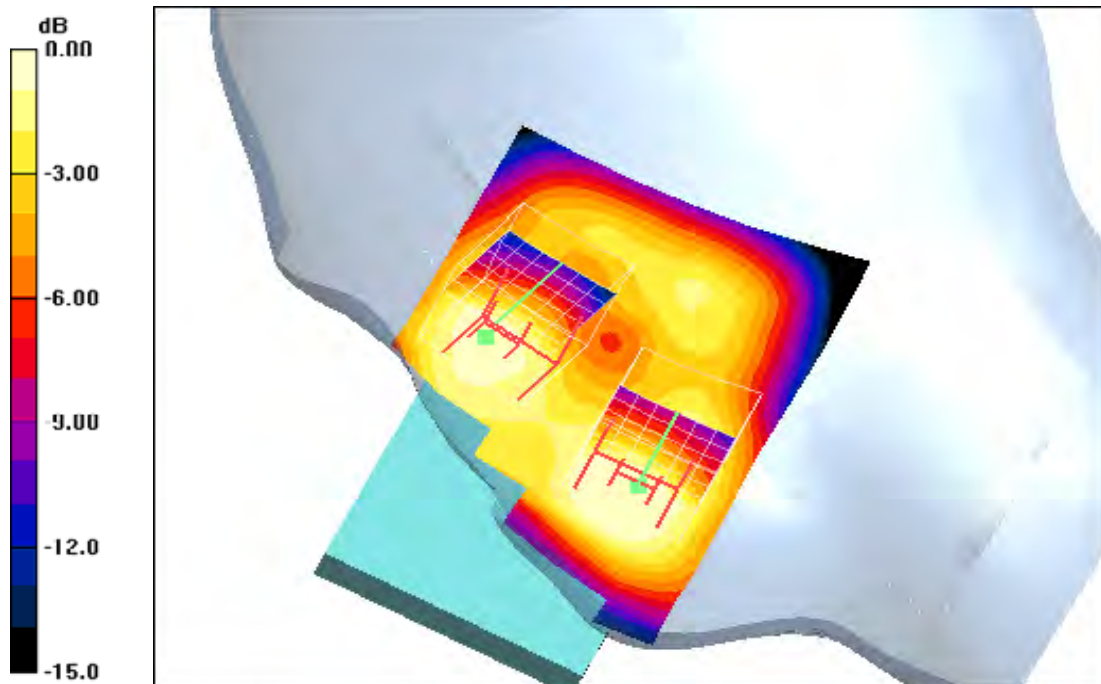
**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid:  
 $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 19.9 V/m; Power Drift = -0.113 dB

Peak SAR (extrapolated) = 0.666 W/kg

**SAR(1 g) = 0.418 mW/g; SAR(10 g) = 0.259 mW/g**

Maximum value of SAR (measured) = 0.451 mW/g



0 dB = 0.451mW/g

**Additional information:**

ambient temperature: 22.6°C; liquid temperature: 22.0°C

Date/Time: 14.01.2012 15:54:00 Date/Time: 14.01.2012 16:16:04

**IEEE1528\_OET65-RightHandSide-WCDMA FDD II**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1852.5 \text{ MHz}$ ;  $\sigma = 1.35 \text{ mho/m}$ ;  $\epsilon_r = 39.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.406 mW/g

**Tilt position - Low/Zoom Scan (7x7x7) (11x7x7)/Cube 0:** Measurement grid:

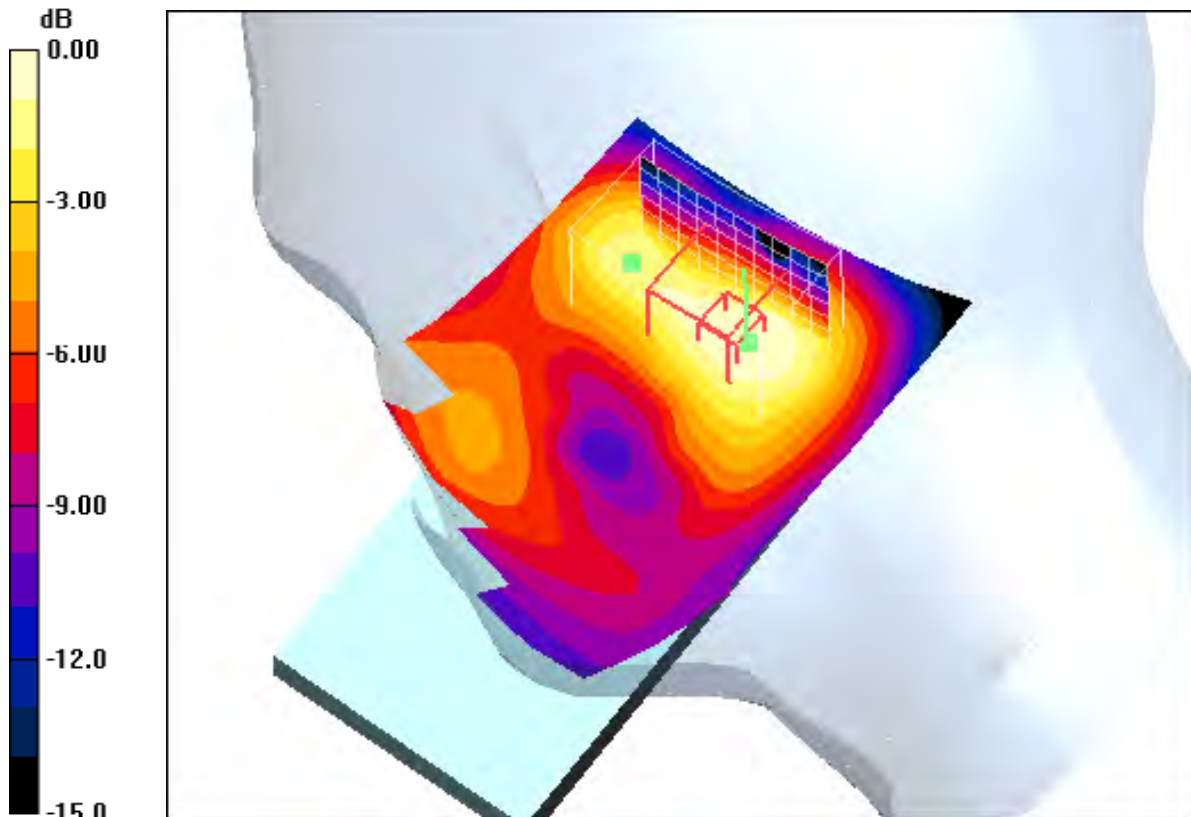
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 17.1 V/m; Power Drift = -0.168 dB

Peak SAR (extrapolated) = 0.553 W/kg

**SAR(1 g) = 0.345 mW/g; SAR(10 g) = 0.207 mW/g**

Maximum value of SAR (measured) = 0.385 mW/g



0 dB = 0.385mW/g

**Additional information:**

ambient temperature: 22.6°C; liquid temperature: 22.0°C

Date/Time: 14.01.2012 16:39:07 Date/Time: 14.01.2012 16:48:52

**IEEE1528\_OET65-RightHandSide-WCDMA FDD II**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.38 \text{ mho/m}$ ;  $\epsilon_r = 39.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.279 mW/g

**Tilt position - Middle/Zoom Scan (7x7x7) (11x7x7)/Cube 0:** Measurement grid:

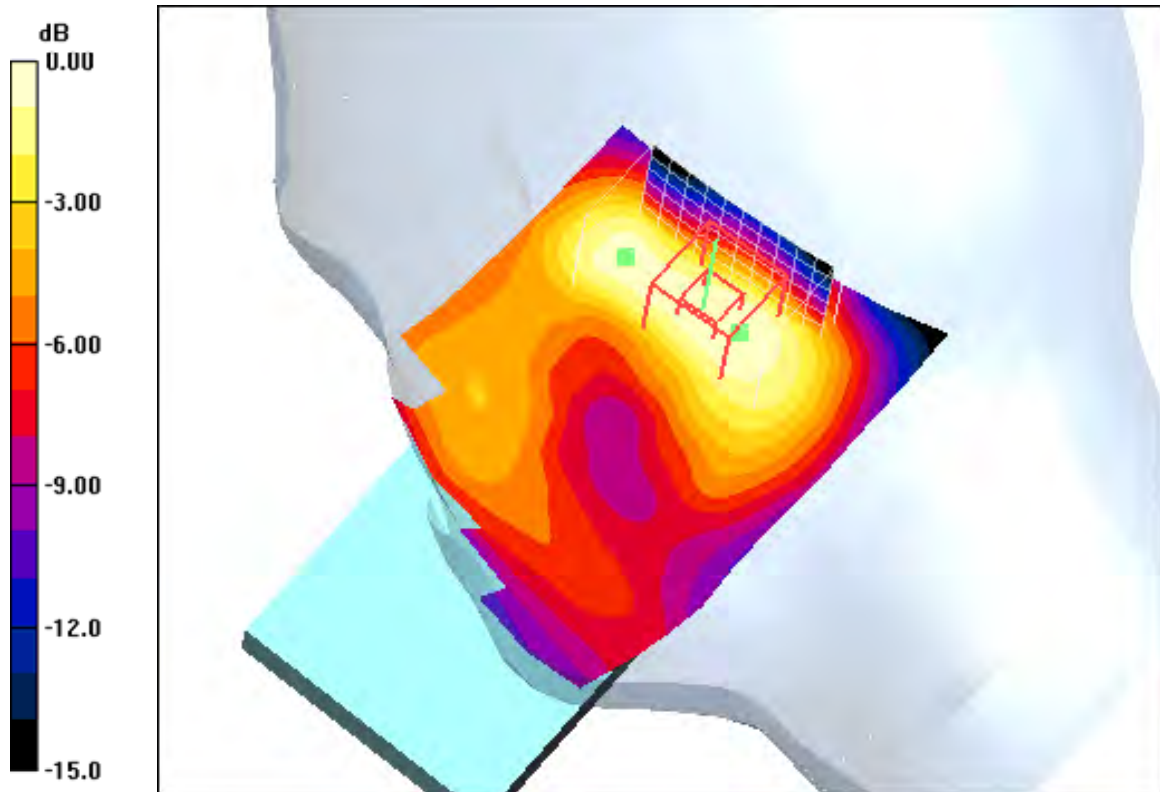
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 14.0 V/m; Power Drift = 0.055 dB

Peak SAR (extrapolated) = 0.417 W/kg

**SAR(1 g) = 0.257 mW/g; SAR(10 g) = 0.159 mW/g**

Maximum value of SAR (measured) = 0.281 mW/g



0 dB = 0.281mW/g

**Additional information:**

ambient temperature: 22.6°C; liquid temperature: 22.0°C

Date/Time: 14.01.2012 17:08:32 Date/Time: 14.01.2012 17:25:44

**IEEE1528\_OET65-RightHandSide-WCDMA FDD II**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1907.6 \text{ MHz}$ ;  $\sigma = 1.4 \text{ mho/m}$ ;  $\epsilon_r = 39.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.302 mW/g

**Tilt position - High/Zoom Scan (7x7x7) (11x7x7)/Cube 0:** Measurement grid:

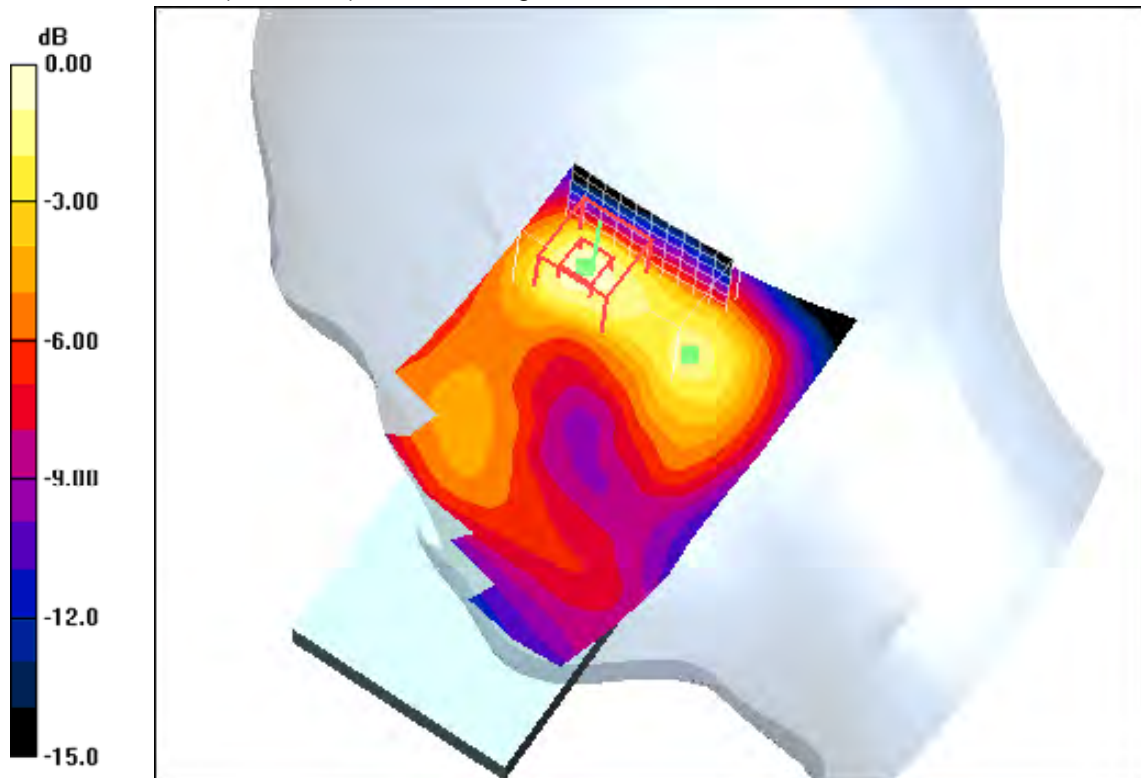
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 14.1 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.533 W/kg

**SAR(1 g) = 0.291 mW/g; SAR(10 g) = 0.155 mW/g**

Maximum value of SAR (measured) = 0.321 mW/g



0 dB = 0.321mW/g

**Additional information:**

ambient temperature: 22.6°C; liquid temperature: 22.0°C

**Annex B.6: UMTS WCDMA FDD II 1900MHz body**

Date/Time: 12.01.2012 15:16:25 Date/Time: 12.01.2012 15:25:02

**IEEE1528\_OET65-Body-WCDMA FDD II**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated):  $f = 1852.5$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.709 mW/g

**Front position - Low/Zoom Scan (7x7x7) (9x7x7)/Cube 0:** Measurement grid:

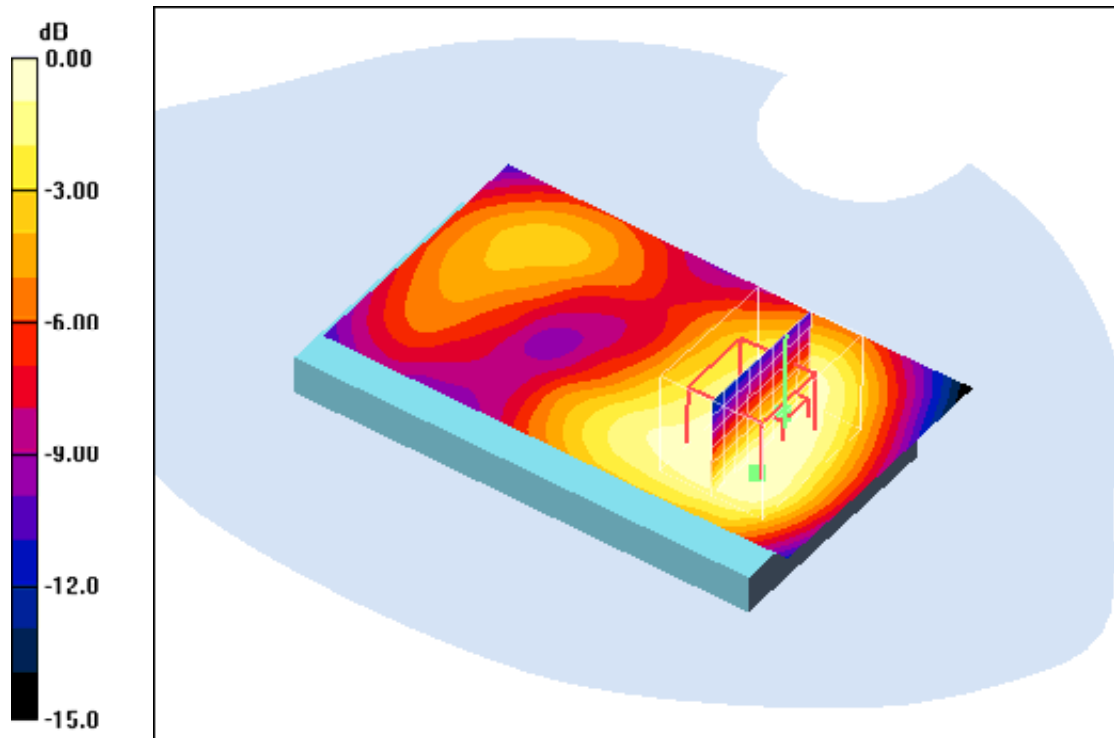
dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.5 V/m; Power Drift = -0.025 dB

Peak SAR (extrapolated) = 0.982 W/kg

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

Maximum value of SAR (measured) = 0.674 mW/g



0 dB = 0.674mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.7°C; liquid temperature: 22.2°C

Date/Time: 12.01.2012 15:42:33 Date/Time: 12.01.2012 15:51:41

### IEEE1528\_OET65-Body-WCDMA FDD II

DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.49 \text{ mho/m}$ ;  $\epsilon_r = 52.4$ ;  $\rho = 1000 \text{ kg/m}^3$

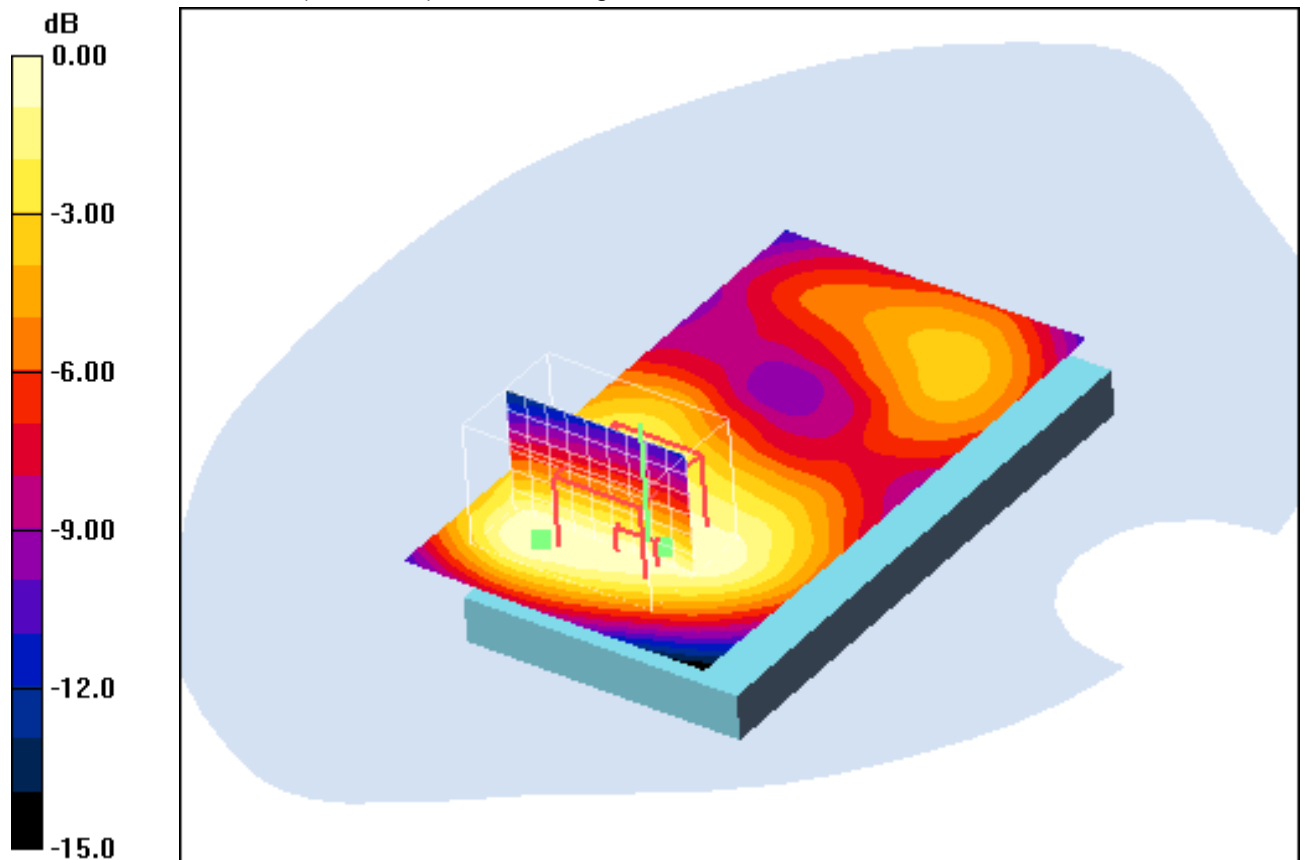
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 0.743 mW/g

**Front position - Middle/Zoom Scan (7x7x7) (10x7x7)/Cube 0:** Measurement grid:  
 $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 22.9 V/m; Power Drift = -0.01 dB  
 Peak SAR (extrapolated) = 1.08 W/kg  
**SAR(1 g) = 0.645 mW/g; SAR(10 g) = 0.426 mW/g**  
 Maximum value of SAR (measured) = 0.688 mW/g



0 dB = 0.688mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.7°C; liquid temperature: 22.2°C



Date/Time: 12.01.2012 16:10:27 Date/Time: 12.01.2012 16:17:13

**IEEE1528\_OET65-Body-WCDMA FDD II**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated):  $f = 1907.6 \text{ MHz}$ ;  $\sigma = 1.52 \text{ mho/m}$ ;  $\epsilon_r = 52.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.808 mW/g

**Front position - High/Zoom Scan (7x7x7) (10x7x7)/Cube 0:** Measurement grid:

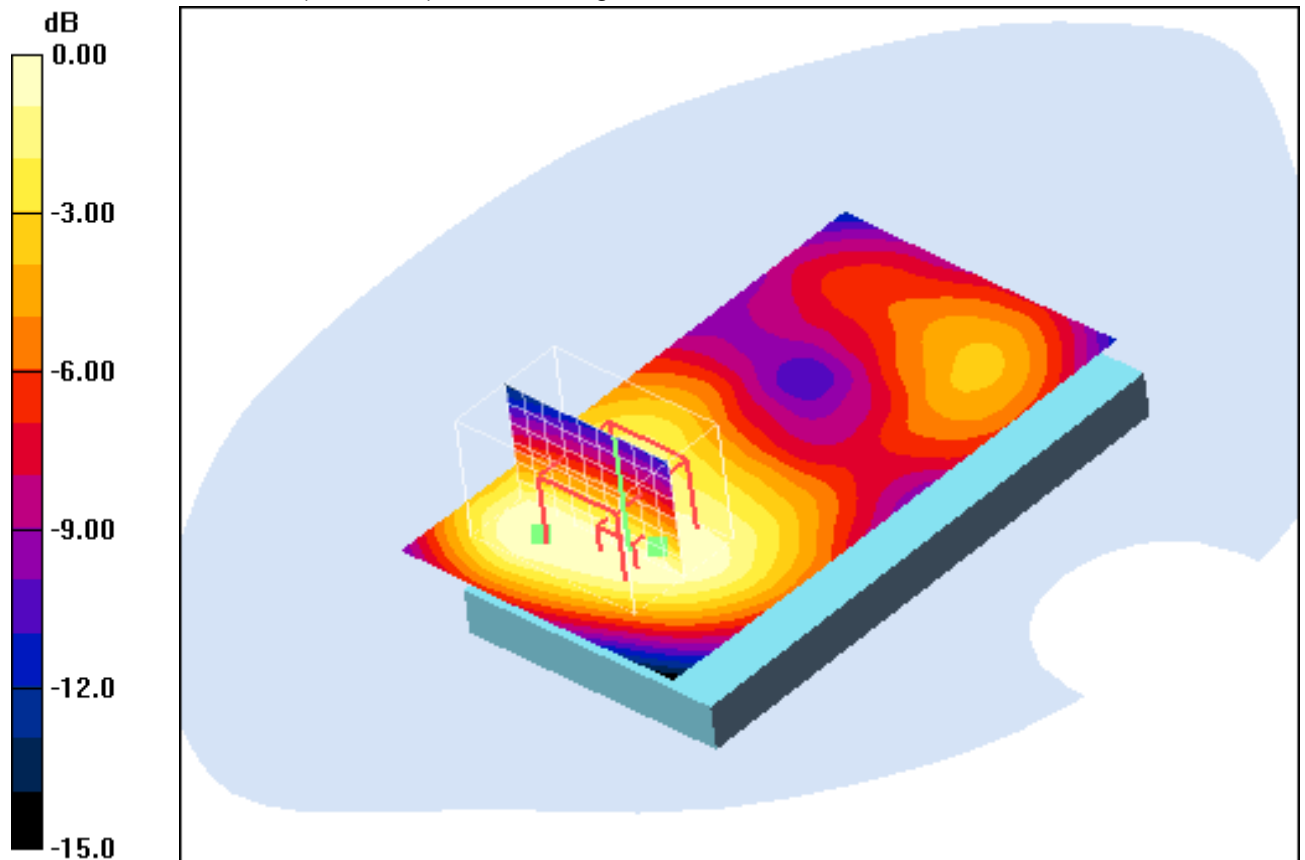
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 23.0 V/m; Power Drift = -0.028 dB

Peak SAR (extrapolated) = 1.13 W/kg

**SAR(1 g) = 0.671 mW/g; SAR(10 g) = 0.438 mW/g**

Maximum value of SAR (measured) = 0.714 mW/g



0 dB = 0.714mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.7°C; liquid temperature: 22.2°C

Date/Time: 12.01.2012 17:37:02 Date/Time: 12.01.2012 17:44:00

### IEEE1528\_OET65-Body-WCDMA FDD II

DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated):  $f = 1852.5 \text{ MHz}$ ;  $\sigma = 1.49 \text{ mho/m}$ ;  $\epsilon_r = 52.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (51x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.814 mW/g

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

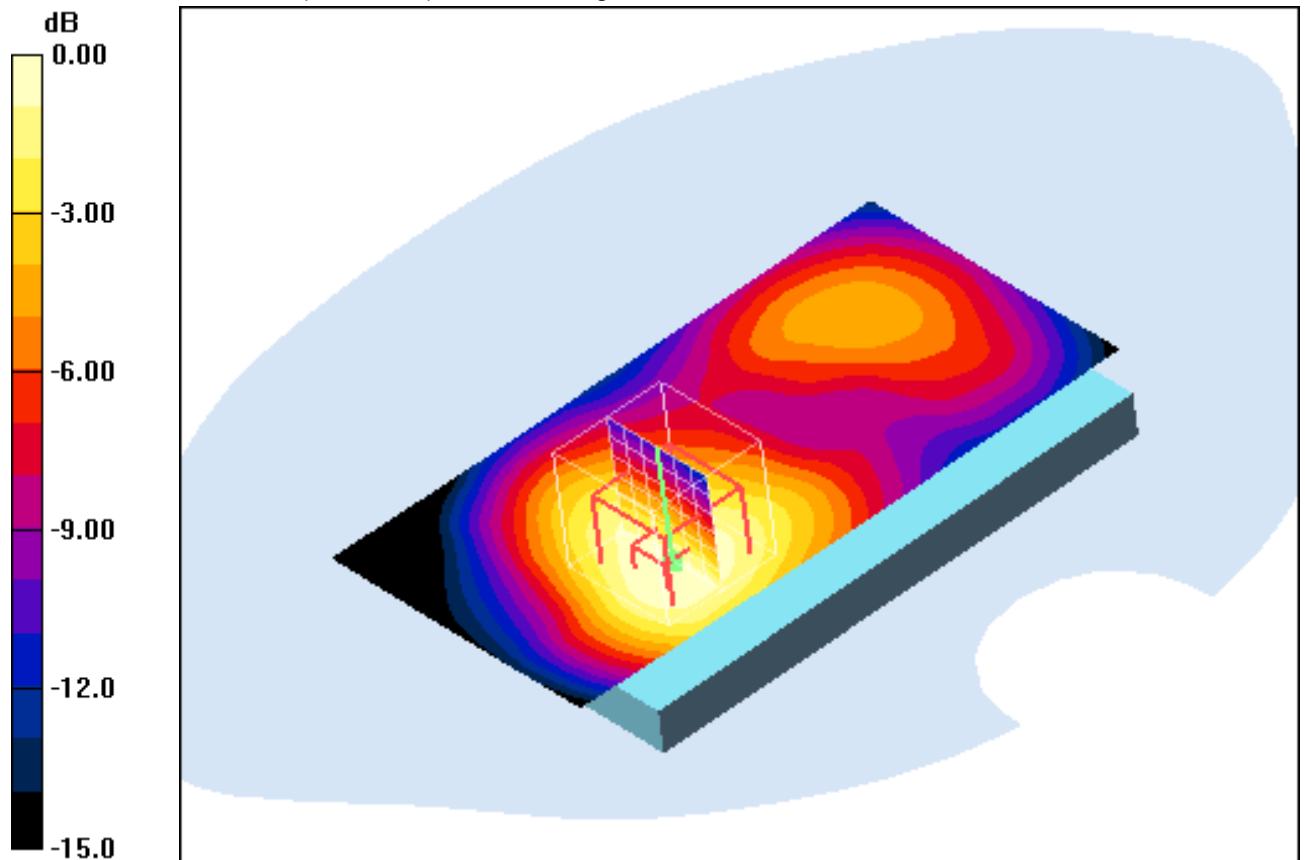
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 24.5 V/m; Power Drift = 0.042 dB

Peak SAR (extrapolated) = 1.12 W/kg

**SAR(1 g) = 0.744 mW/g; SAR(10 g) = 0.479 mW/g**

Maximum value of SAR (measured) = 0.802 mW/g



0 dB = 0.802mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.7°C; liquid temperature: 22.2°C

Date/Time: 12.01.2012 17:10:52 Date/Time: 12.01.2012 17:18:18

### IEEE1528\_OET65-Body-WCDMA FDD II

DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH

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;  $\epsilon_r = 52.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

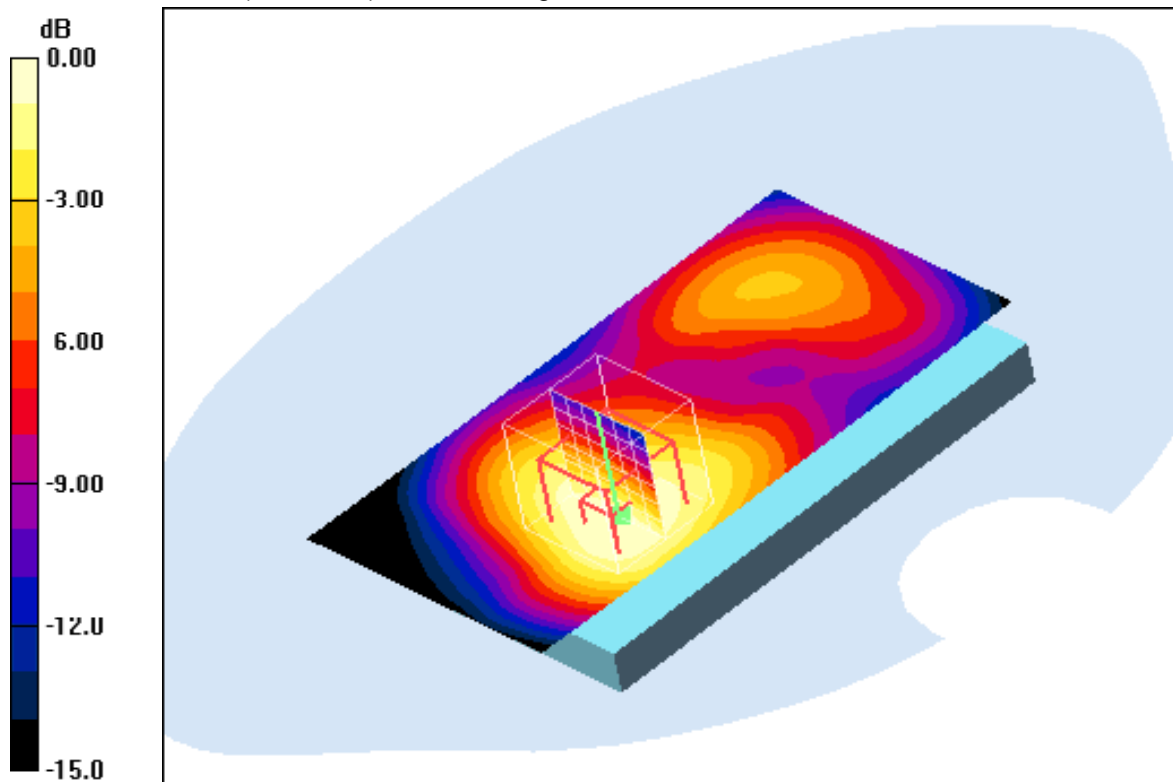
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (51x101x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 0.836 mW/g

**Rear position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 dx=5mm, dy=5mm, dz=5mm  
 Reference Value = 24.2 V/m; Power Drift = 0.044 dB  
 Peak SAR (extrapolated) = 1.15 W/kg  
**SAR(1 g) = 0.746 mW/g; SAR(10 g) = 0.481 mW/g**  
 Maximum value of SAR (measured) = 0.800 mW/g



0 dB = 0.800mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm  
 ambient temperature: 22.7°C; liquid temperature: 22.2°C

Date/Time: 12.01.2012 16:36:25 Date/Time: 12.01.2012 16:44:27

### IEEE1528\_OET65-Body-WCDMA FDD II

DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated):  $f = 1907.6$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 52.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011

- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

- Electronics: DAE3 Sn477; Calibrated: 04.05.2011

- 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 (51x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.969 mW/g

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

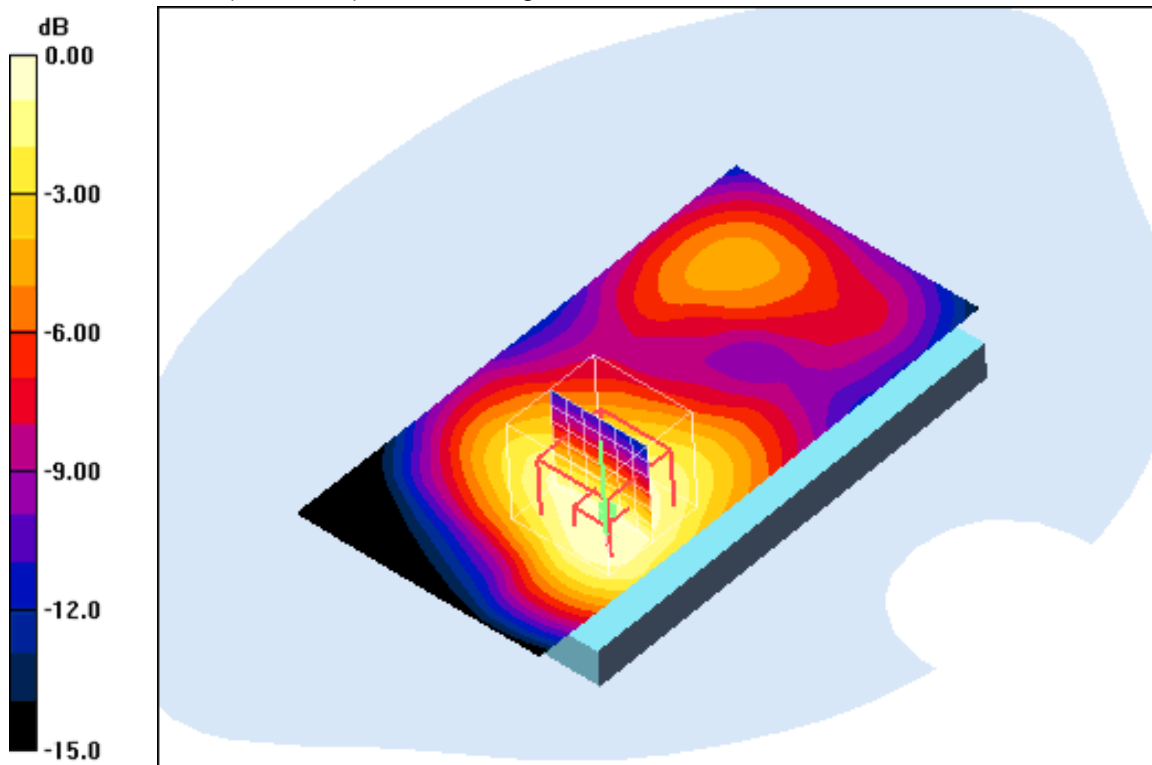
dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.3 V/m; Power Drift = -0.043 dB

Peak SAR (extrapolated) = 1.42 W/kg

**SAR(1 g) = 0.891 mW/g; SAR(10 g) = 0.569 mW/g**

Maximum value of SAR (measured) = 0.956 mW/g



0 dB = 0.956mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.7°C; liquid temperature: 22.2°C

Date/Time: 12.01.2012 18:23:03 Date/Time: 12.01.2012 18:29:31

### IEEE1528\_OET65-Body-WCDMA FDD II

DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH

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;  $\epsilon_r = 52.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.730 mW/g

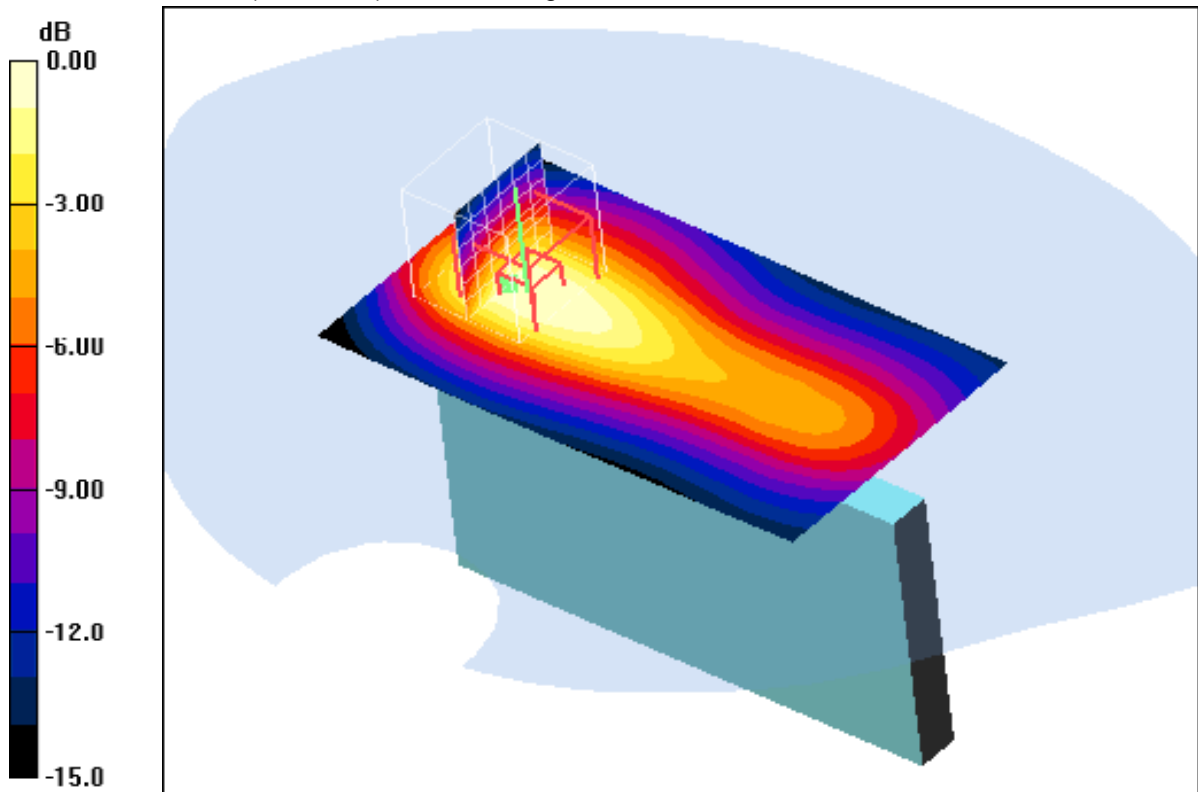
**Edge left position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.7 V/m; Power Drift = -0.022 dB

Peak SAR (extrapolated) = 1.02 W/kg

**SAR(1 g) = 0.615 mW/g; SAR(10 g) = 0.359 mW/g**

Maximum value of SAR (measured) = 0.673 mW/g



0 dB = 0.673mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.7°C; liquid temperature: 22.2°C

Date/Time: 12.01.2012 18:45:37 Date/Time: 12.01.2012 18:52:52 Date/Time: 12.01.2012 19:04:18

**IEEE1528\_OET65-Body-WCDMA FDD II**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.49 \text{ mho/m}$ ;  $\epsilon_r = 52.4$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.177 mW/g

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

Reference Value = 11.1 V/m; Power Drift = 0.039 dB

Peak SAR (extrapolated) = 0.247 W/kg

**SAR(1 g) = 0.156 mW/g; SAR(10 g) = 0.094 mW/g**

Maximum value of SAR (measured) = 0.168 mW/g

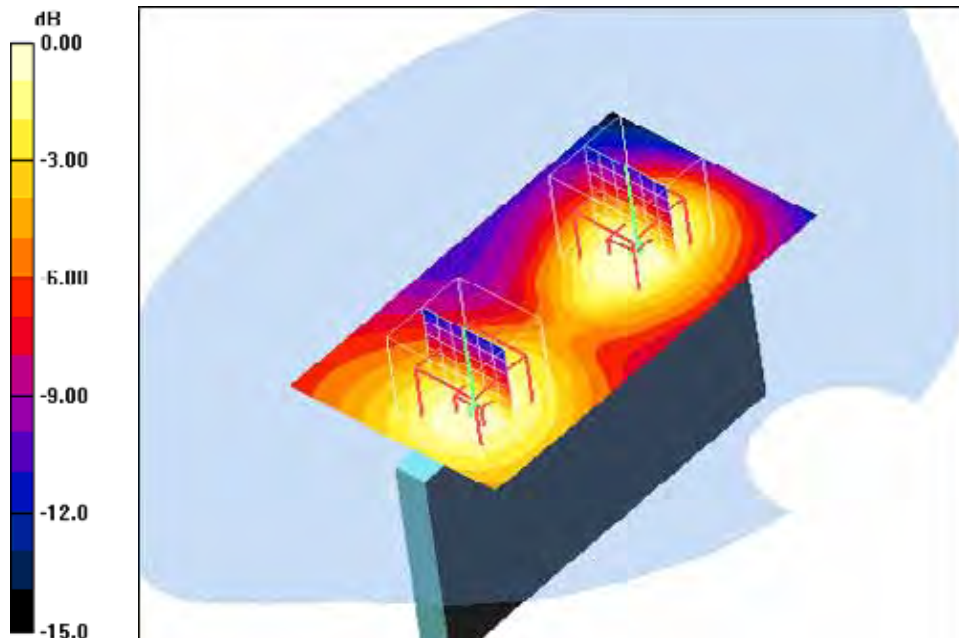
**Edge right position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 11.1 V/m; Power Drift = 0.039 dB

Peak SAR (extrapolated) = 0.234 W/kg

**SAR(1 g) = 0.145 mW/g; SAR(10 g) = 0.089 mW/g**

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



0 dB = 0.158mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.7°C; liquid temperature: 22.2°C

Date/Time: 12.01.2012 19:19:38 Date/Time: 12.01.2012 19:26:43

### IEEE1528\_OET65-Body-WCDMA FDD II

DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH

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;  $\epsilon_r = 52.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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) = 0.257 mW/g

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

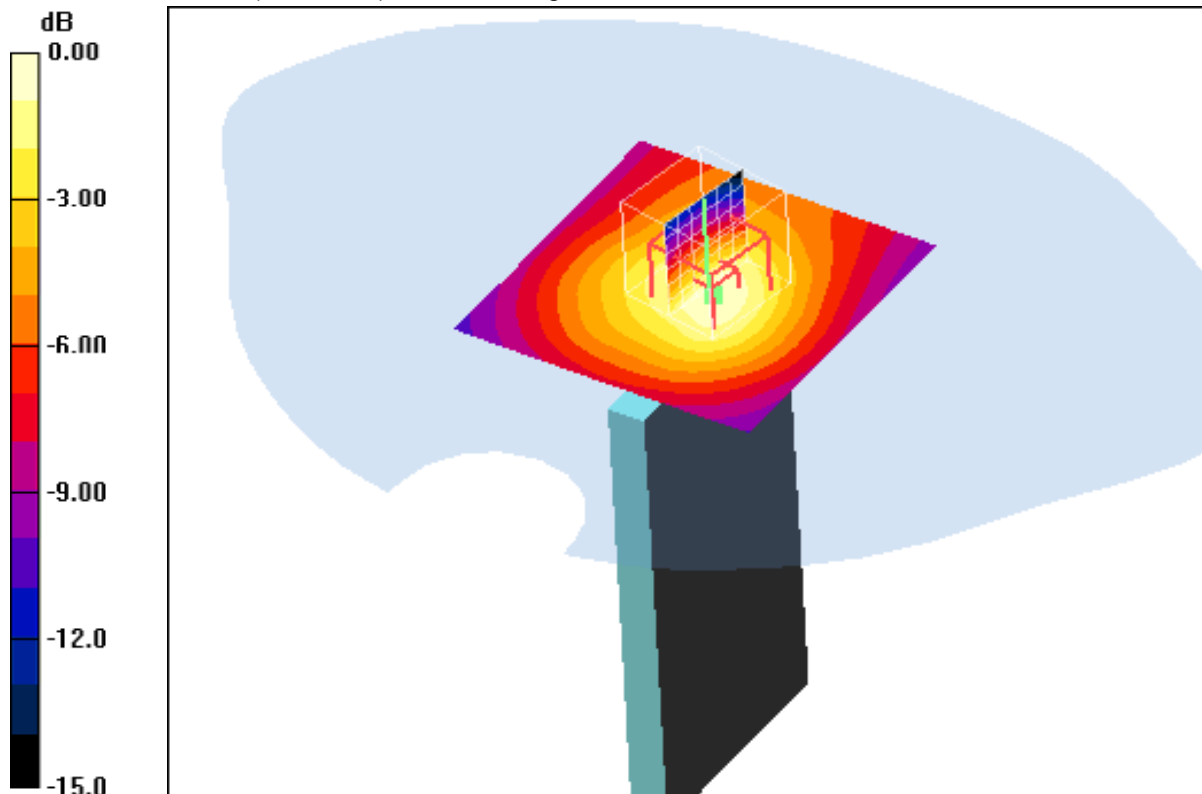
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.8 V/m; Power Drift = -0.022 dB

Peak SAR (extrapolated) = 0.399 W/kg

**SAR(1 g) = 0.245 mW/g; SAR(10 g) = 0.147 mW/g**

Maximum value of SAR (measured) = 0.264 mW/g



0 dB = 0.264mW/g

#### Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.7°C; liquid temperature: 22.2°C

Date/Time: 12.01.2012 19:42:49 Date/Time: 12.01.2012 19:50:50

### IEEE1528\_OET65-Body-WCDMA FDD II

DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated):  $f = 1907.6$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 52.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011

- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

- Electronics: DAE3 Sn477; Calibrated: 04.05.2011

- Phantom: SAM 12; Type: SAM; Serial: 1043

- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - High 15 mm/Area Scan (51x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.560 mW/g

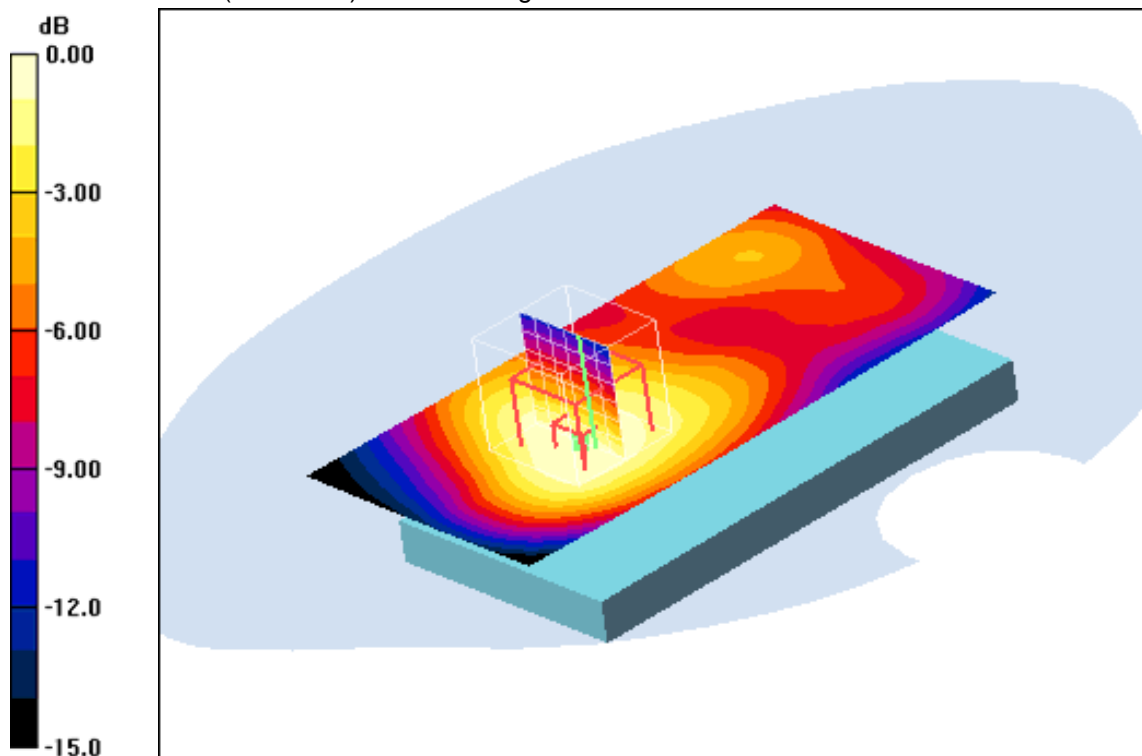
**Rear position - High 15 mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.1 V/m; Power Drift = 0.039 dB

Peak SAR (extrapolated) = 0.783 W/kg

**SAR(1 g) = 0.509 mW/g; SAR(10 g) = 0.331 mW/g**

Maximum value of SAR (measured) = 0.546 mW/g



0 dB = 0.546mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 22.7°C; liquid temperature: 22.2°C



**Annex B.7: UMTS WCDMA FDD IV 1750MHz head**

Date/Time: 08.01.2012 18:37:05 Date/Time: 08.01.2012 18:46:16

**IEEE1528\_OET65-LeftHandSide-WCDMA FDD IV**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA 1700; Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1712.4 \text{ MHz}$ ;  $\sigma = 1.36 \text{ mho/m}$ ;  $\epsilon_r = 39.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.09, 5.09, 5.09); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.01 mW/g

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

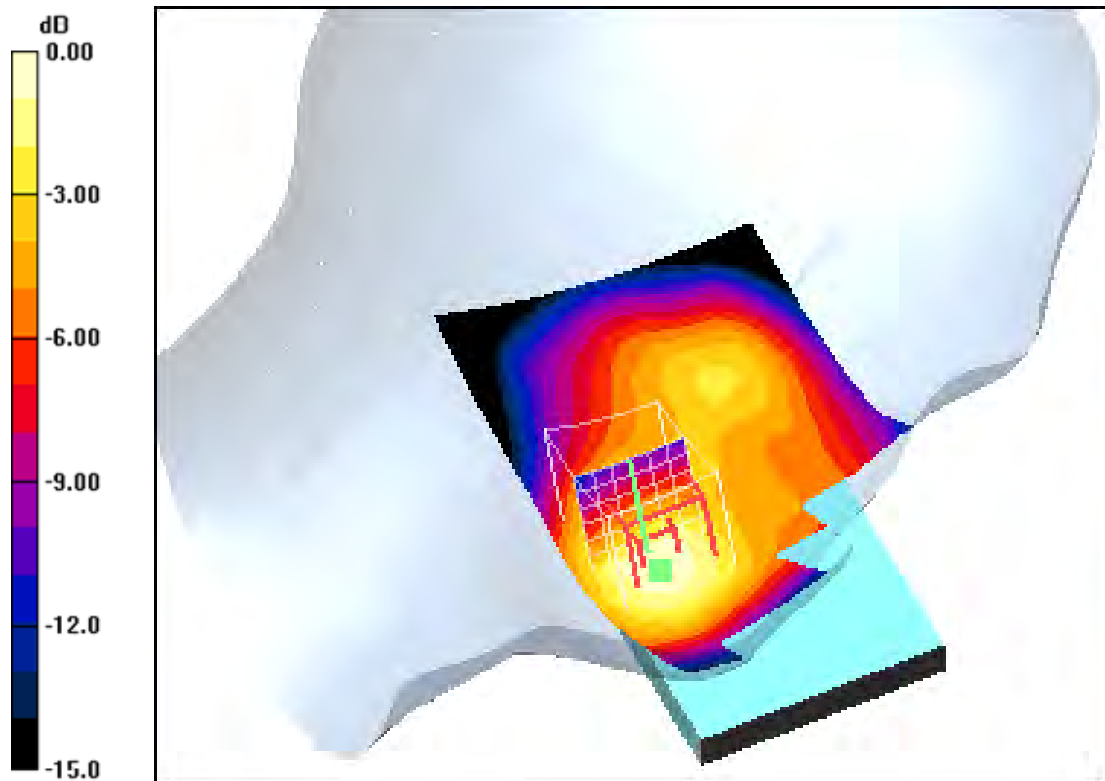
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 27.3 V/m; Power Drift = -0.105 dB

Peak SAR (extrapolated) = 1.48 W/kg

**SAR(1 g) = 0.981 mW/g; SAR(10 g) = 0.616 mW/g**

Maximum value of SAR (measured) = 1.06 mW/g



**Additional information:**

ambient temperature: 23.6°C; liquid temperature: 23.0°C

Date/Time: 08.01.2012 19:02:39 Date/Time: 08.01.2012 19:12:05

**IEEE1528\_OET65-LeftHandSide-WCDMA FDD IV**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA 1700; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1732.4 \text{ MHz}$ ;  $\sigma = 1.38 \text{ mho/m}$ ;  $\epsilon_r = 39.4$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.09, 5.09, 5.09); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid: dx=15mm, dy=15mm

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

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

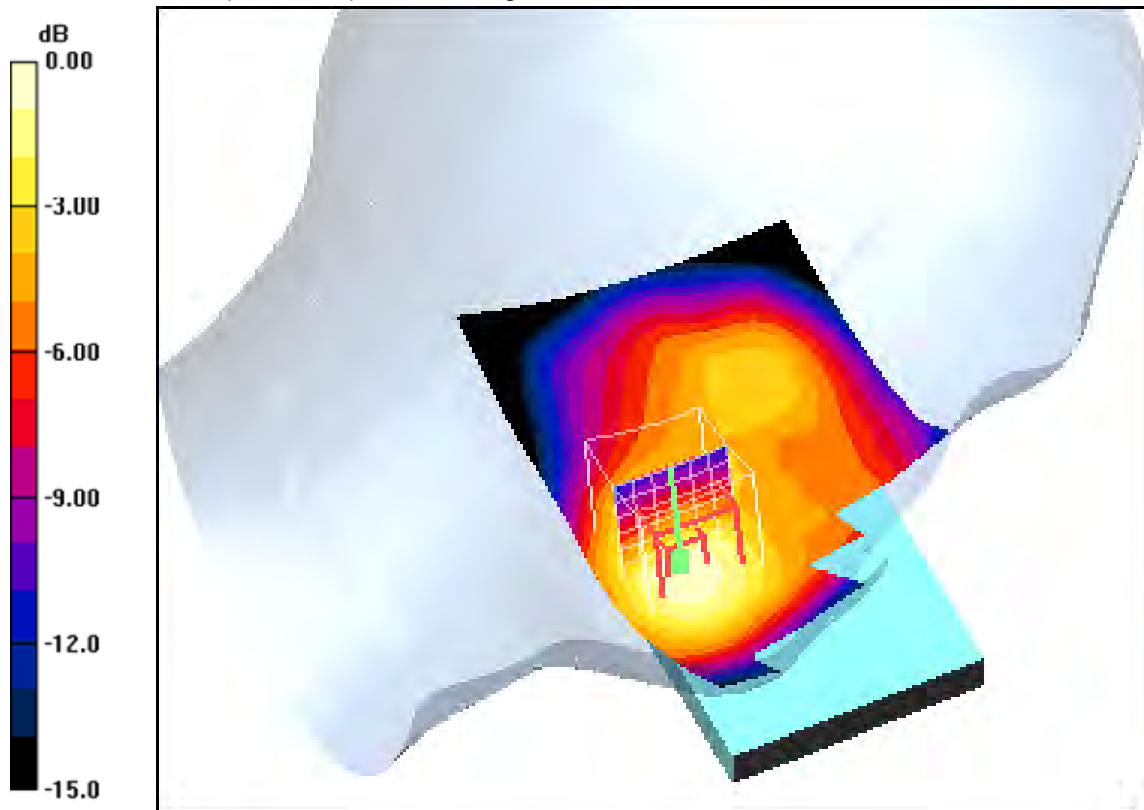
dx=5mm, dy=5mm, dz=5mm

Reference Value = 29.0 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 1.72 W/kg

**SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.709 mW/g**

Maximum value of SAR (measured) = 1.24 mW/g



0 dB = 1.24mW/g

**Additional information:**

ambient temperature: 23.6°C; liquid temperature: 23.0°C

Date/Time: 08.01.2012 19:26:54 Date/Time: 08.01.2012 19:35:45

**IEEE1528\_OET65-LeftHandSide-WCDMA FDD IV**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA 1700; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1752.6 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 39.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.09, 5.09, 5.09); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.22 mW/g

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

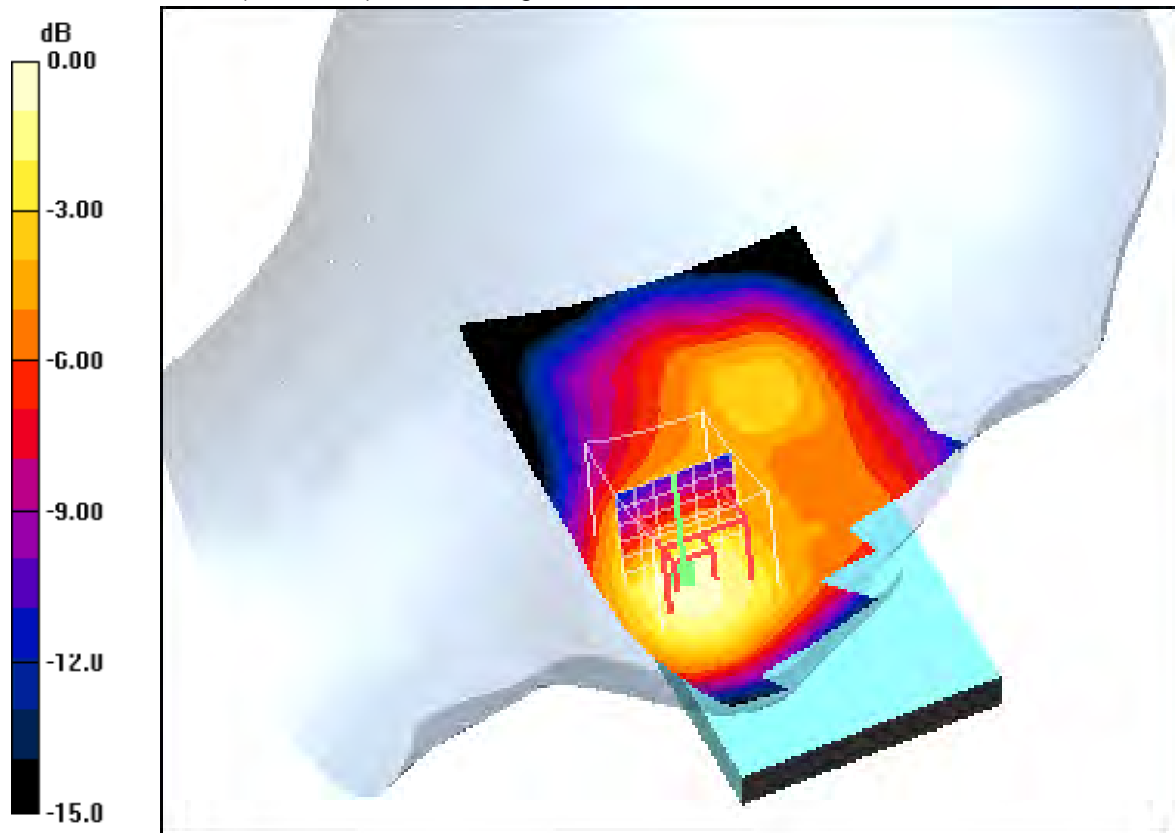
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 29.6 V/m; Power Drift = 0.066 dB

Peak SAR (extrapolated) = 1.87 W/kg

**SAR(1 g) = 1.22 mW/g; SAR(10 g) = 0.754 mW/g**

Maximum value of SAR (measured) = 1.33 mW/g



0 dB = 1.33mW/g

**Additional information:**

ambient temperature: 23.6°C; liquid temperature: 23.0°C

Date/Time: 09.01.2012 08:49:46 Date/Time: 09.01.2012 08:59:08

**IEEE1528\_OET65-LeftHandSide-WCDMA FDD IV**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA 1700; Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1712.4$  MHz;  $\sigma = 1.36$  mho/m;  $\epsilon_r = 39.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.09, 5.09, 5.09); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid: dx=15mm, dy=15mm

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

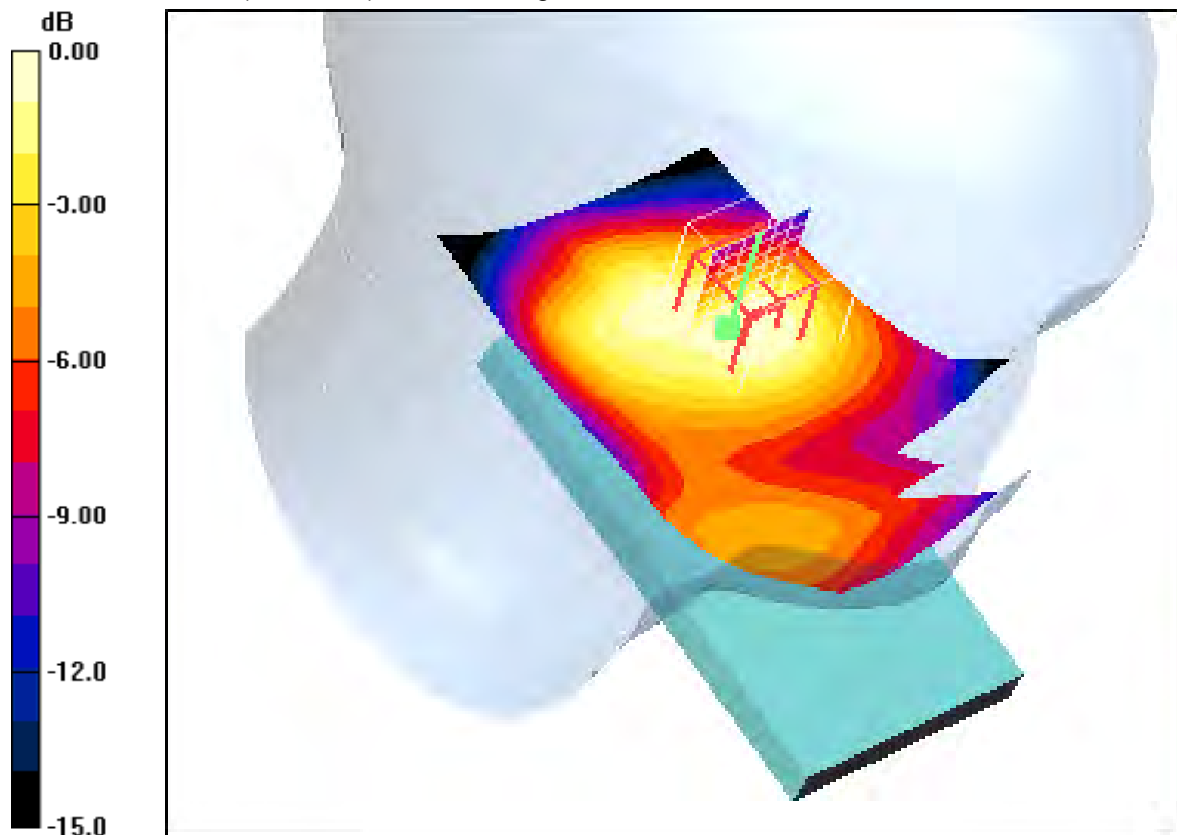
**Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.9 V/m; Power Drift = -0.043 dB

Peak SAR (extrapolated) = 0.503 W/kg

**SAR(1 g) = 0.373 mW/g; SAR(10 g) = 0.250 mW/g**

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



0 dB = 0.398mW/g

**Additional information:**

ambient temperature: 23.5°C; liquid temperature: 23.2°C

Date/Time: 09.01.2012 09:16:56 Date/Time: 09.01.2012 09:25:54

**IEEE1528\_OET65-LeftHandSide-WCDMA FDD IV**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA 1700; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.38$  mho/m;  $\epsilon_r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.09, 5.09, 5.09); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.482 mW/g

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

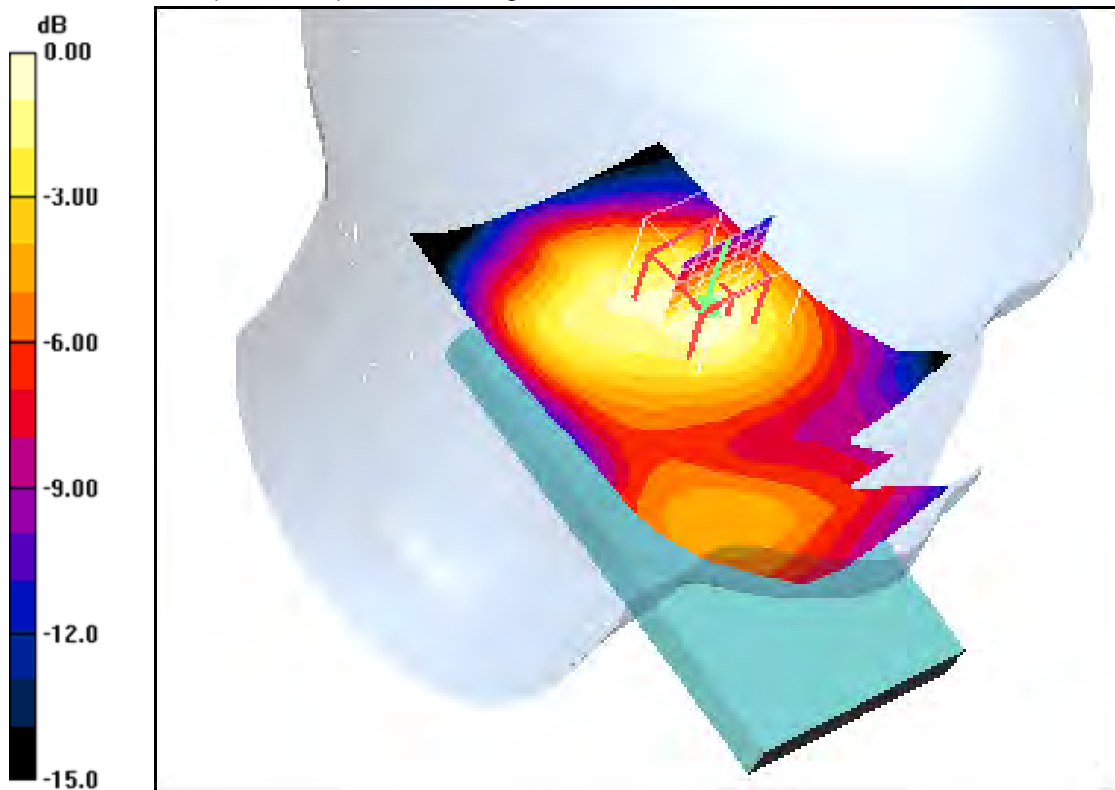
dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.5 V/m; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 0.619 W/kg

**SAR(1 g) = 0.451 mW/g; SAR(10 g) = 0.297 mW/g**

Maximum value of SAR (measured) = 0.490 mW/g



0 dB = 0.490mW/g

**Additional information:**

ambient temperature: 23.5°C; liquid temperature: 23.2°C

Date/Time: 09.01.2012 09:39:28 Date/Time: 09.01.2012 09:48:00

**IEEE1528\_OET65-LeftHandSide-WCDMA FDD IV**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA 1700; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1752.6 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 39.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.09, 5.09, 5.09); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

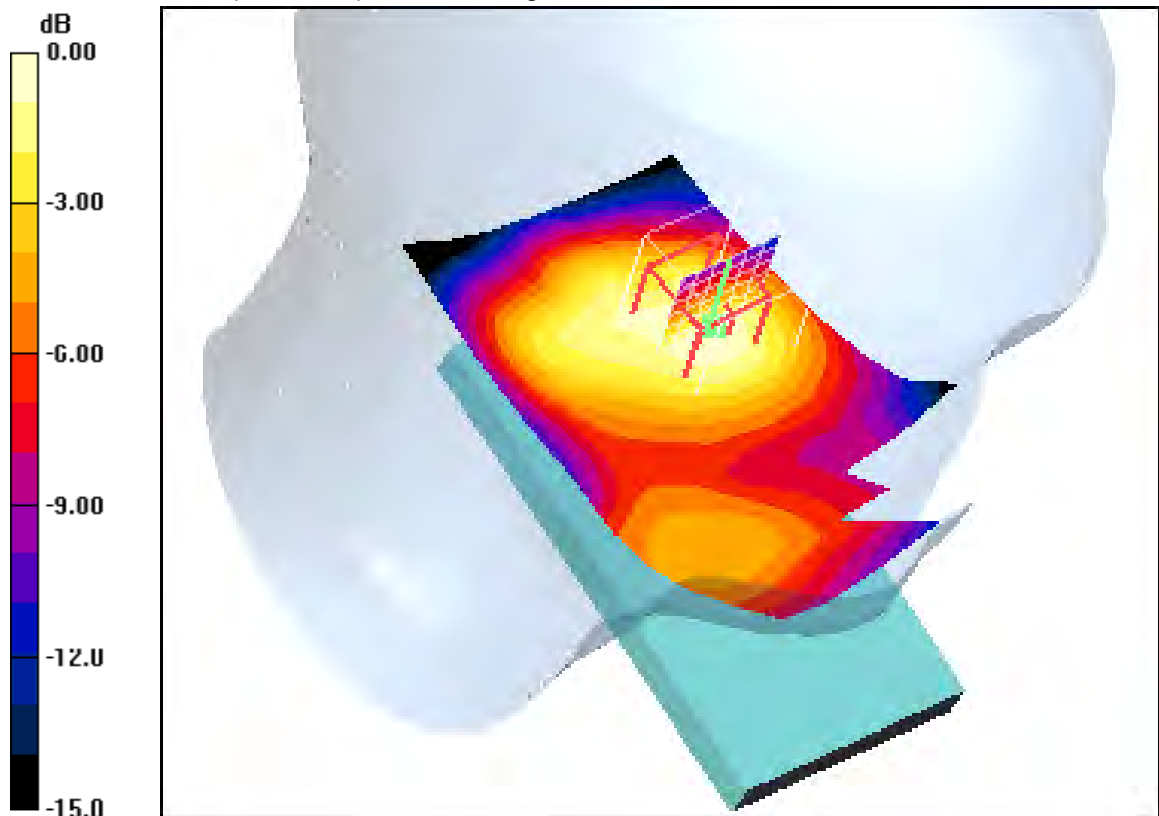
**Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 19.8 V/m; Power Drift = 0.134 dB

Peak SAR (extrapolated) = 0.651 W/kg

**SAR(1 g) = 0.476 mW/g; SAR(10 g) = 0.310 mW/g**

Maximum value of SAR (measured) = 0.514 mW/g



0 dB = 0.514mW/g

**Additional information:**

ambient temperature: 23.5°C; liquid temperature: 23.2°C

Date/Time: 09.01.2012 12:53:08 Date/Time: 09.01.2012 13:06:35

**IEEE1528\_OET65-RightHandSide-WCDMA FDD IV**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA 1700; Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1712.4 \text{ MHz}$ ;  $\sigma = 1.36 \text{ mho/m}$ ;  $\epsilon_r = 39.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.09, 5.09, 5.09); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

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

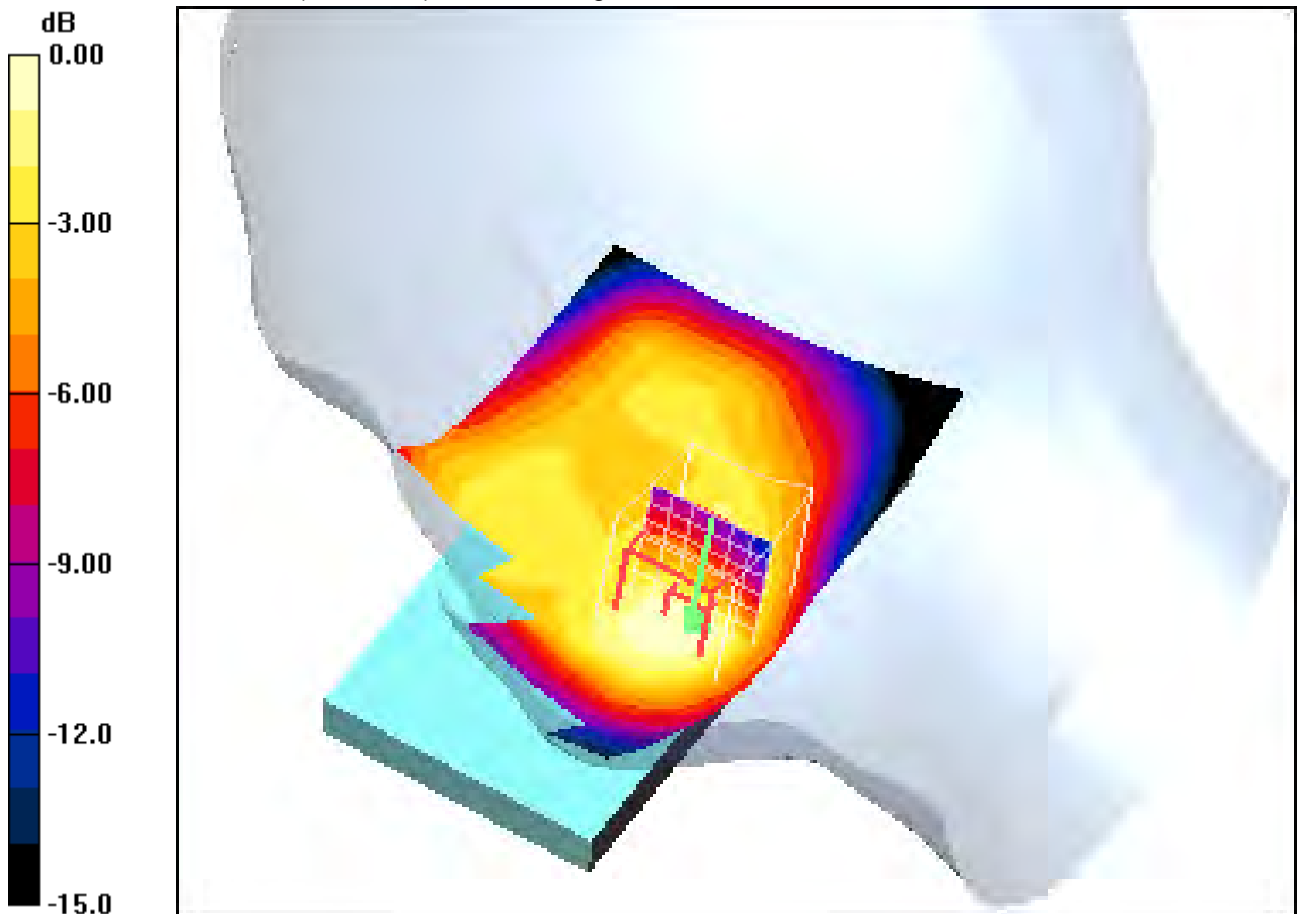
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 19.8 V/m; Power Drift = -0.016 dB

Peak SAR (extrapolated) = 0.784 W/kg

**SAR(1 g) = 0.531 mW/g; SAR(10 g) = 0.342 mW/g**

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



0 dB = 0.578mW/g

**Additional information:**

ambient temperature: 23.5°C; liquid temperature: 23.2°C

Date/Time: 09.01.2012 13:21:59 Date/Time: 09.01.2012 13:30:41

**IEEE1528\_OET65-RightHandSide-WCDMA FDD IV**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA 1700; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1732.4 \text{ MHz}$ ;  $\sigma = 1.38 \text{ mho/m}$ ;  $\epsilon_r = 39.4$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.09, 5.09, 5.09); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.697 mW/g

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

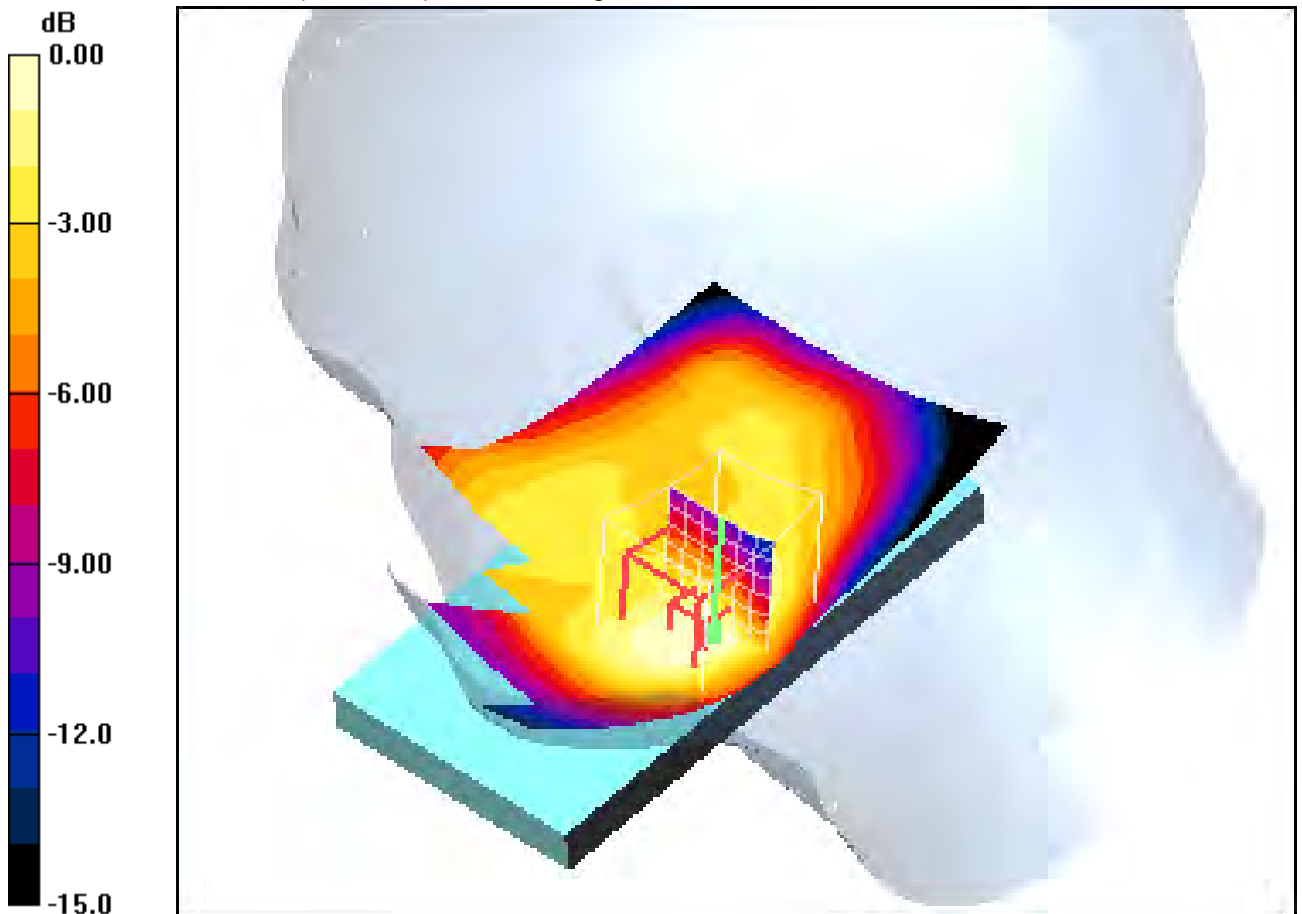
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 21.5 V/m; Power Drift = -0.019 dB

Peak SAR (extrapolated) = 0.926 W/kg

**SAR(1 g) = 0.636 mW/g; SAR(10 g) = 0.407 mW/g**

Maximum value of SAR (measured) = 0.683 mW/g



0 dB = 0.683mW/g

**Additional information:**

ambient temperature: 23.5°C; liquid temperature: 23.2°C



Date/Time: 09.01.2012 12:03:32 Date/Time: 09.01.2012 12:12:47 Date/Time: 09.01.2012

**IEEE1528\_OET65-RightHandSide-WCDMA FDD IV**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA 1700; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1752.6 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 39.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.09, 5.09, 5.09); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.645 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 = 20.9 V/m; Power Drift = 0.053 dB

Peak SAR (extrapolated) = 0.820 W/kg

**SAR(1 g) = 0.572 mW/g; SAR(10 g) = 0.367 mW/g**

Maximum value of SAR (measured) = 0.618 mW/g

**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid:

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

Reference Value = 20.9 V/m; Power Drift = 0.053 dB

Peak SAR (extrapolated) = 0.652 W/kg

**SAR(1 g) = 0.425 mW/g; SAR(10 g) = 0.279 mW/g**

Maximum value of SAR (measured) = 0.460 mW/g

**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 2:** Measurement grid:

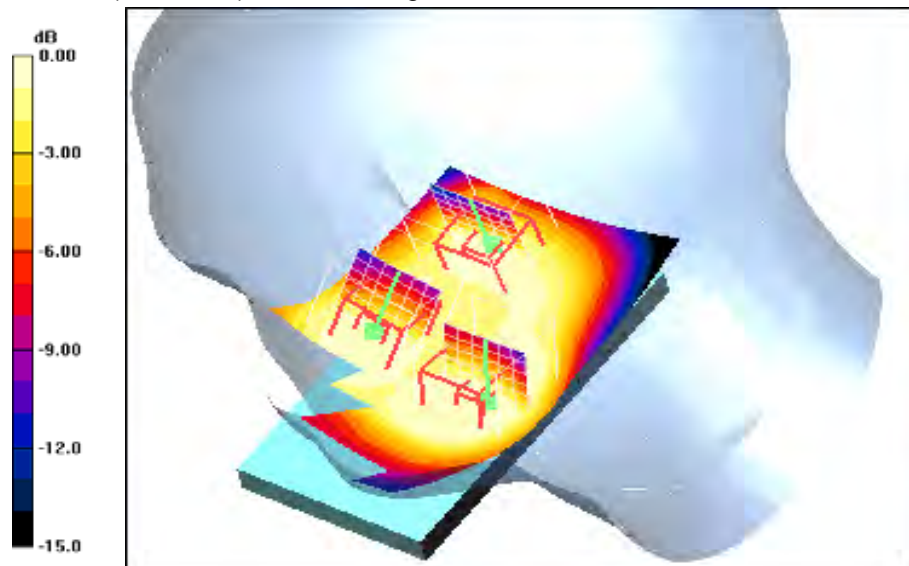
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 20.9 V/m; Power Drift = 0.053 dB

Peak SAR (extrapolated) = 0.574 W/kg

**SAR(1 g) = 0.392 mW/g; SAR(10 g) = 0.261 mW/g**

Maximum value of SAR (measured) = 0.423 mW/g



0 dB = 0.423mW/g

**Additional information:**

ambient temperature: 23.5°C; liquid temperature: 23.2°C

Date/Time: 09.01.2012 10:26:14 Date/Time: 09.01.2012 10:36:33

**IEEE1528\_OET65-RightHandSide-WCDMA FDD IV**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA 1700; Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1712.4 \text{ MHz}$ ;  $\sigma = 1.36 \text{ mho/m}$ ;  $\epsilon_r = 39.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.09, 5.09, 5.09); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

**Tilt position - Low/Zoom Scan (7x7x7) (7x11x7)/Cube 0:** Measurement grid:

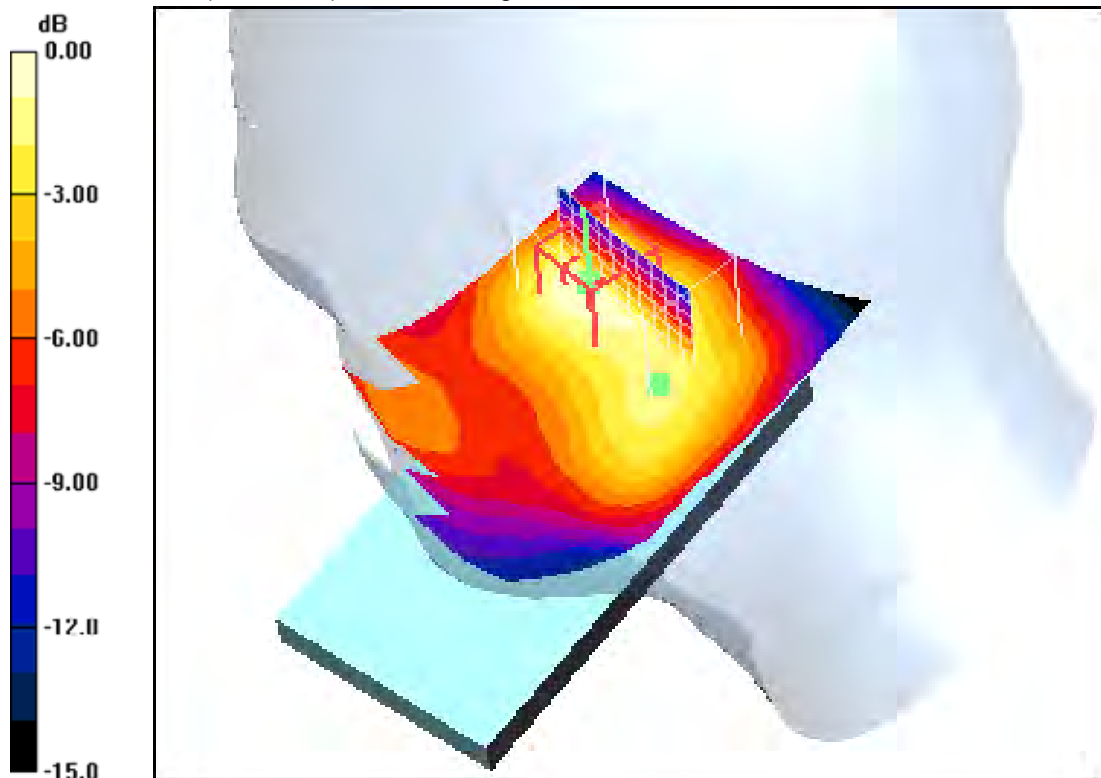
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 15.3 V/m; Power Drift = -0.058 dB

Peak SAR (extrapolated) = 0.426 W/kg

**SAR(1 g) = 0.281 mW/g; SAR(10 g) = 0.175 mW/g**

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



0 dB = 0.306mW/g

**Additional information:**

ambient temperature: 23.5°C; liquid temperature: 23.2°C

Date/Time: 09.01.2012 10:58:38 Date/Time: 09.01.2012 11:21:01

**IEEE1528\_OET65-RightHandSide-WCDMA FDD IV**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA 1700; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.38$  mho/m;  $\epsilon_r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.09, 5.09, 5.09); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.405 mW/g

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

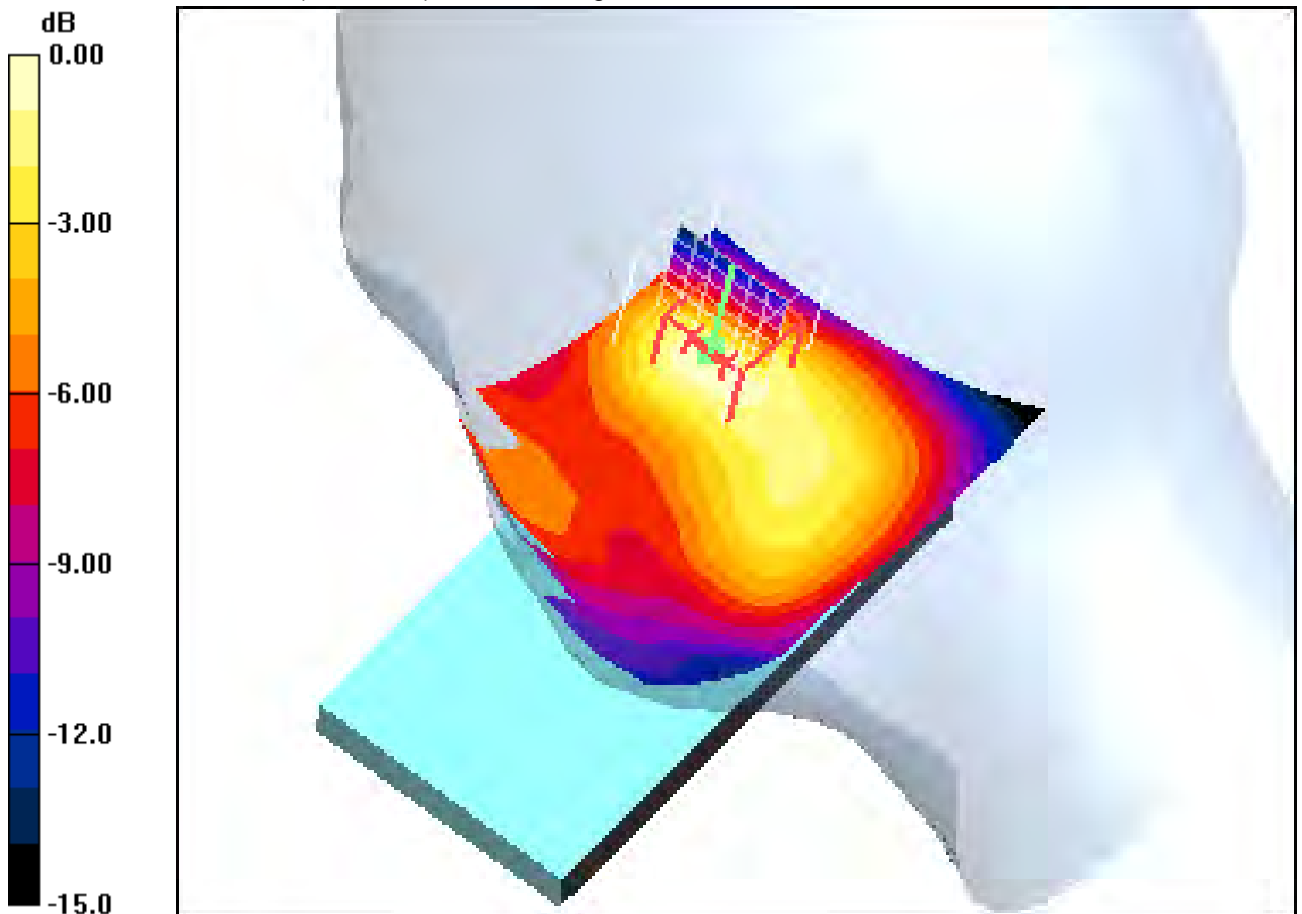
dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.0 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.569 W/kg

**SAR(1 g) = 0.359 mW/g; SAR(10 g) = 0.216 mW/g**

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



0 dB = 0.396mW/g

**Additional information:**

ambient temperature: 23.5°C; liquid temperature: 23.2°C

Date/Time: 09.01.2012 11:35:18 Date/Time: 09.01.2012 11:45:00

**IEEE1528\_OET65-RightHandSide-WCDMA FDD IV**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA 1700; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: HSL1800 Medium parameters used (interpolated):  $f = 1752.6 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 39.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.09, 5.09, 5.09); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.454 mW/g

**Tilt position - High/Zoom Scan (7x7x7) 2 (7x10x7)/Cube 0:** Measurement grid:

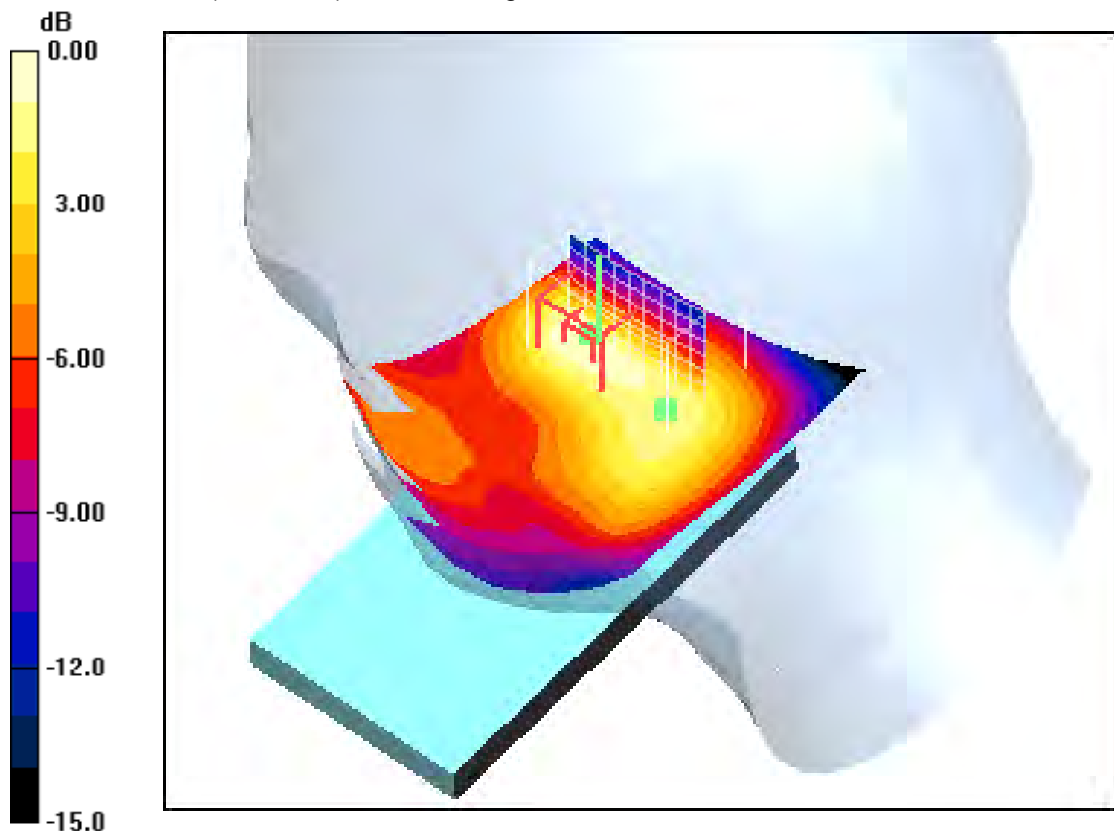
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 17.7 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.641 W/kg

**SAR(1 g) = 0.393 mW/g; SAR(10 g) = 0.235 mW/g**

Maximum value of SAR (measured) = 0.420 mW/g



0 dB = 0.420mW/g

**Additional information:**

ambient temperature: 23.5°C; liquid temperature: 23.2°C

**Annex B.8: UMTS WCDMA FDD IV 1750MHz body**

Date/Time: 29.02.2012 15:40:04 Date/Time: 29.02.2012 15:50:16

**IEEE1528\_OET65-Body-WCDMA FDD IV**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD IV; Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1712.4 \text{ MHz}$ ;  $\sigma = 1.44 \text{ mho/m}$ ;  $\epsilon_r = 53$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.65, 4.65, 4.65); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - Low/Area Scan (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.882 mW/g

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

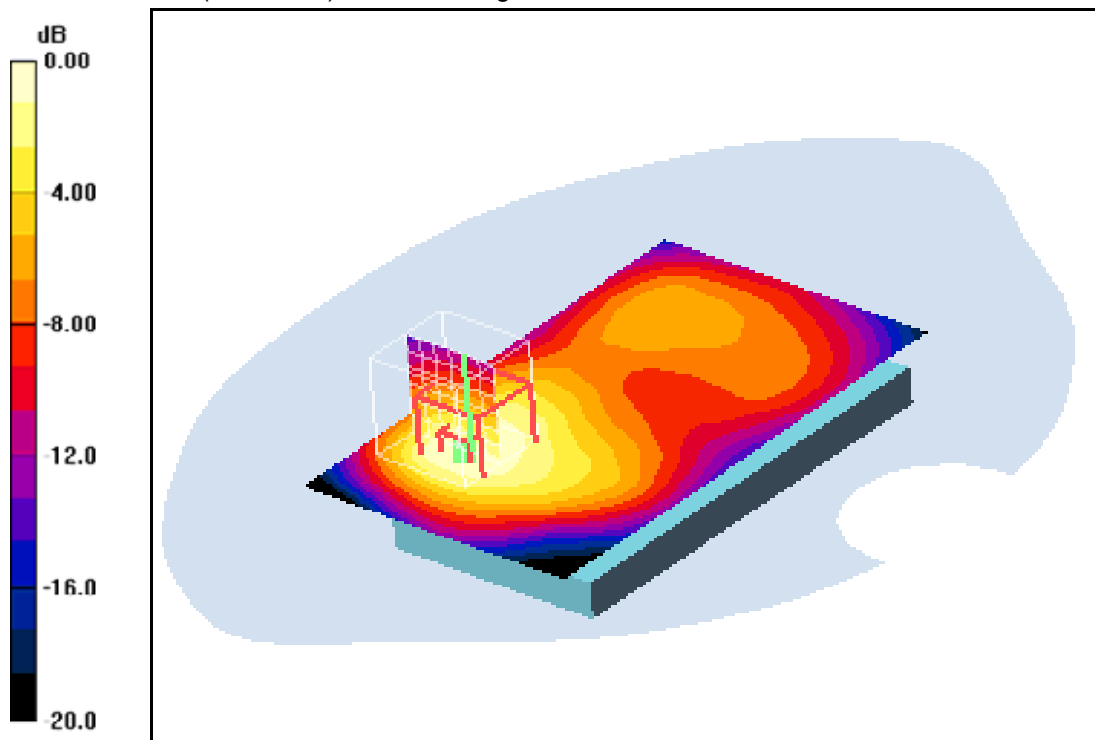
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 24.5 V/m; Power Drift = -0.046 dB

Peak SAR (extrapolated) = 1.12 W/kg

**SAR(1 g) = 0.760 mW/g; SAR(10 g) = 0.470 mW/g**

Maximum value of SAR (measured) = 0.823 mW/g



0 dB = 0.823mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 22.0°C; liquid temperature: 20.4°C

Date/Time: 29.02.2012 15:14:41 Date/Time: 29.02.2012 15:23:41

### IEEE1528\_OET65-Body-WCDMA FDD IV

DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH

Communication System: WCDMA FDD IV; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 52.9$ ;  $\rho = 1000$  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 And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - Middle/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.951 mW/g

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

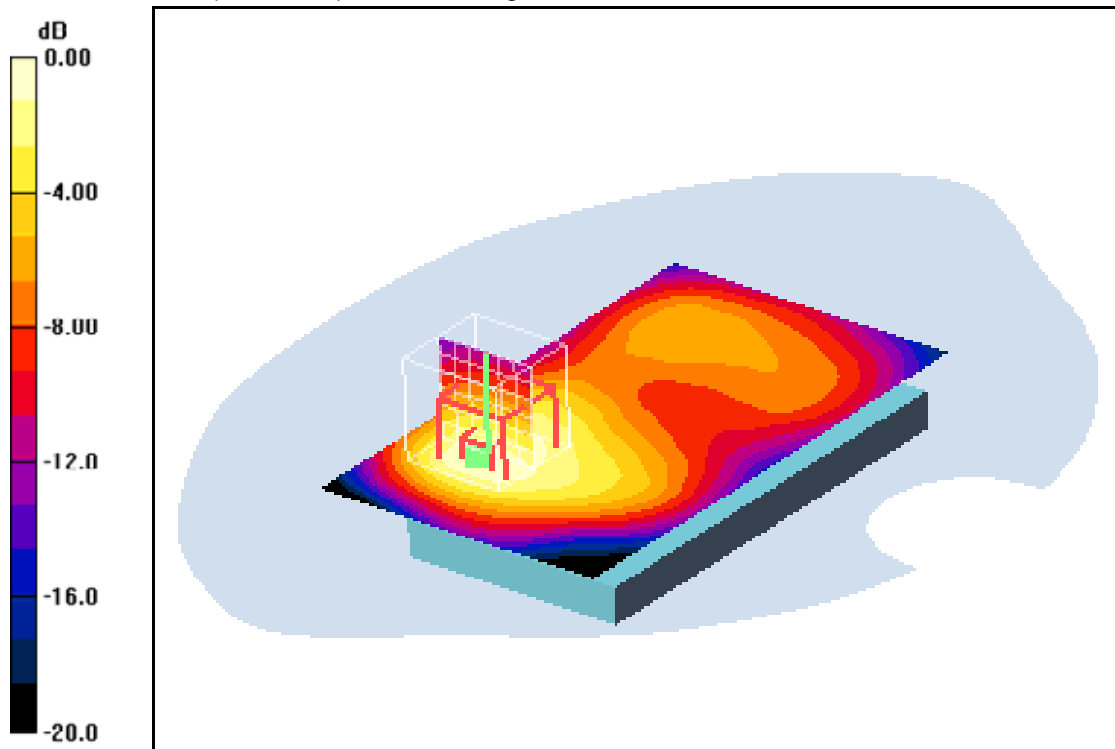
dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.5 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 1.19 W/kg

**SAR(1 g) = 0.814 mW/g; SAR(10 g) = 0.507 mW/g**

Maximum value of SAR (measured) = 0.892 mW/g



0 dB = 0.892mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 22.0°C; liquid temperature: 20.4°C

Date/Time: 29.02.2012 14:44:53 Date/Time: 29.02.2012 15:00:22

**IEEE1528\_OET65-Body-WCDMA FDD IV**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD IV; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1752.6 \text{ MHz}$ ;  $\sigma = 1.49 \text{ mho/m}$ ;  $\epsilon_r = 52.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.65, 4.65, 4.65); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - High/Area Scan (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 1.00 mW/g

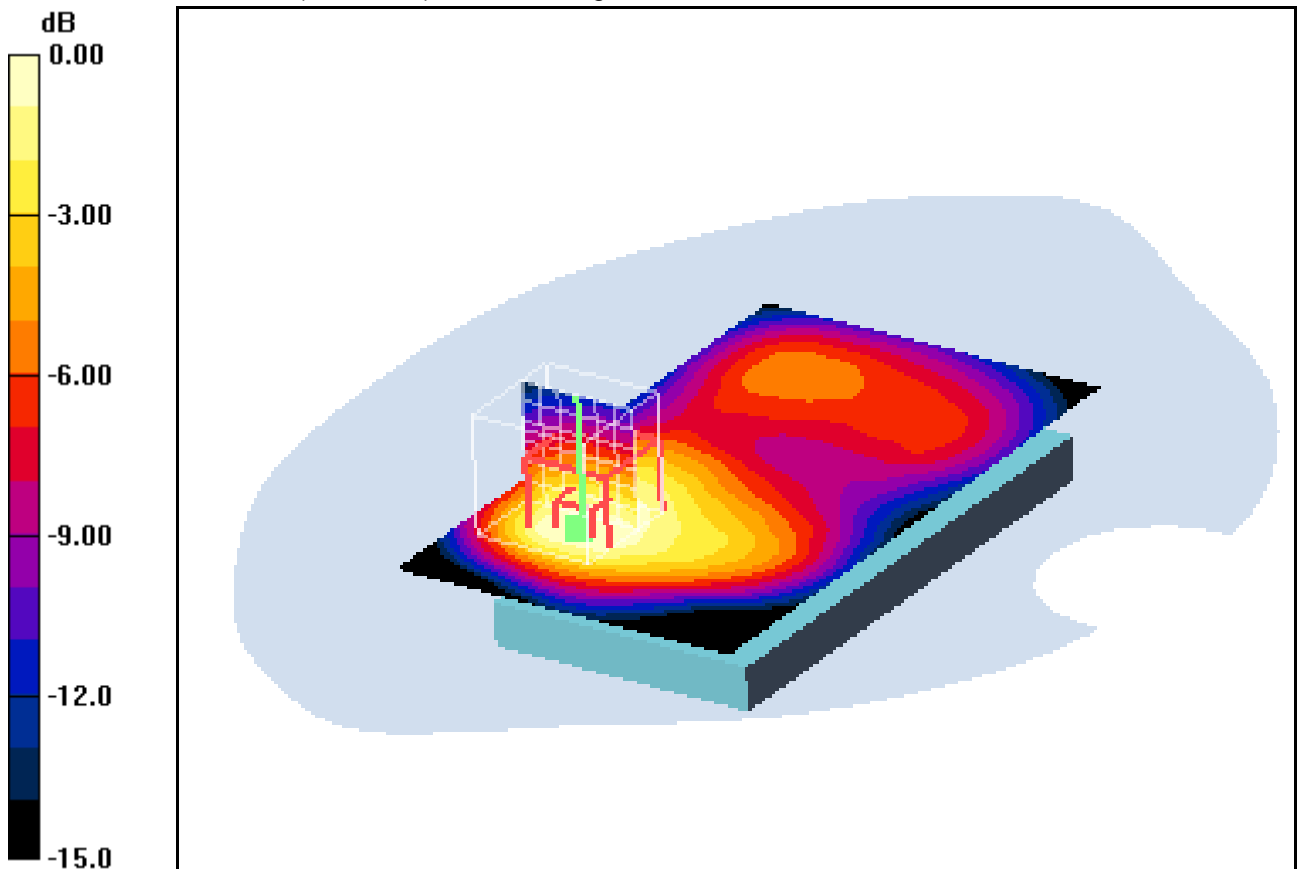
**Front position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  
 $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 26.0 V/m; Power Drift = -0.085 dB

Peak SAR (extrapolated) = 1.24 W/kg

**SAR(1 g) = 0.847 mW/g; SAR(10 g) = 0.528 mW/g**

Maximum value of SAR (measured) = 0.919 mW/g



0 dB = 0.919mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 22.0°C; liquid temperature: 20.4°C

Date/Time: 29.02.2012 18:04:22 Date/Time: 29.02.2012 18:14:04

### IEEE1528\_OET65-Body-WCDMA FDD IV

DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH

Communication System: WCDMA FDD IV; Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1712.4$  MHz;  $\sigma = 1.44$  mho/m;  $\epsilon_r = 53$ ;  $\rho = 1000$  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 And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - Low/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.930 mW/g

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

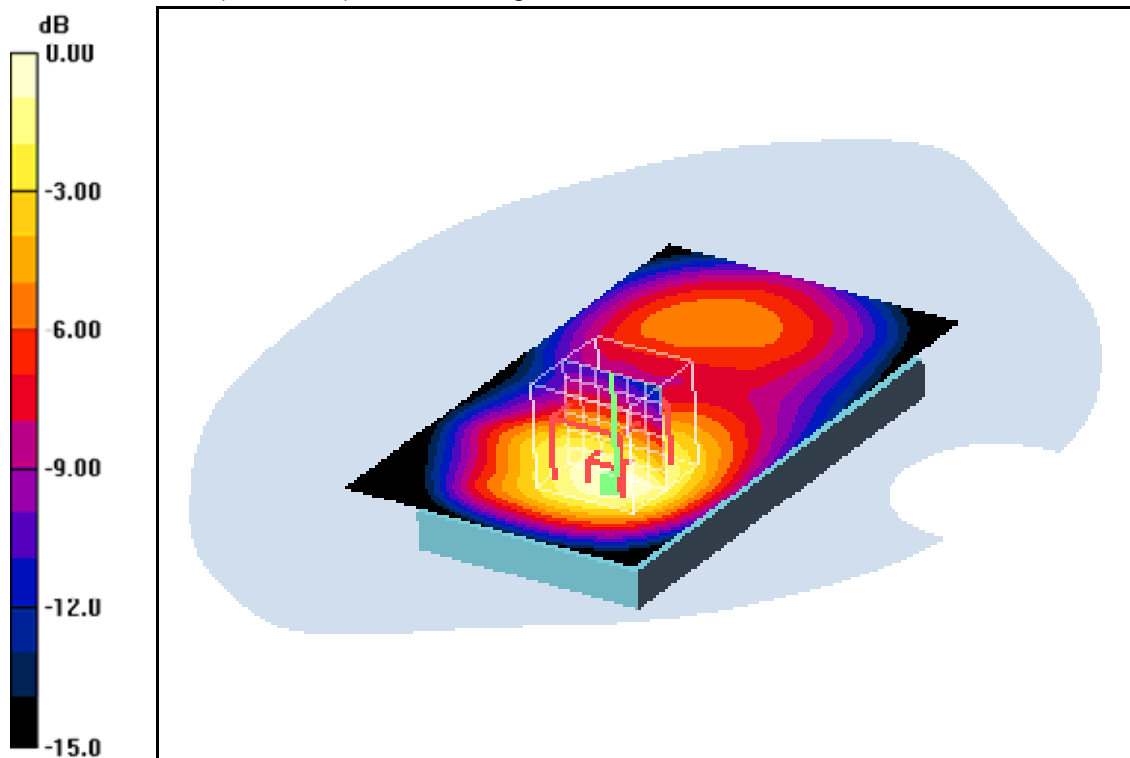
dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.2 V/m; Power Drift = -0.053 dB

Peak SAR (extrapolated) = 1.15 W/kg

**SAR(1 g) = 0.834 mW/g; SAR(10 g) = 0.534 mW/g**

Maximum value of SAR (measured) = 0.909 mW/g



0 dB = 0.909mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 22.0°C; liquid temperature: 20.4°C



Date/Time: 29.02.2012 17:39:26 Date/Time: 29.02.2012 17:50:23

### IEEE1528\_OET65-Body-WCDMA FDD IV

DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH

Communication System: WCDMA FDD IV; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 52.9$ ;  $\rho = 1000$  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 And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - Middle/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.05 mW/g

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

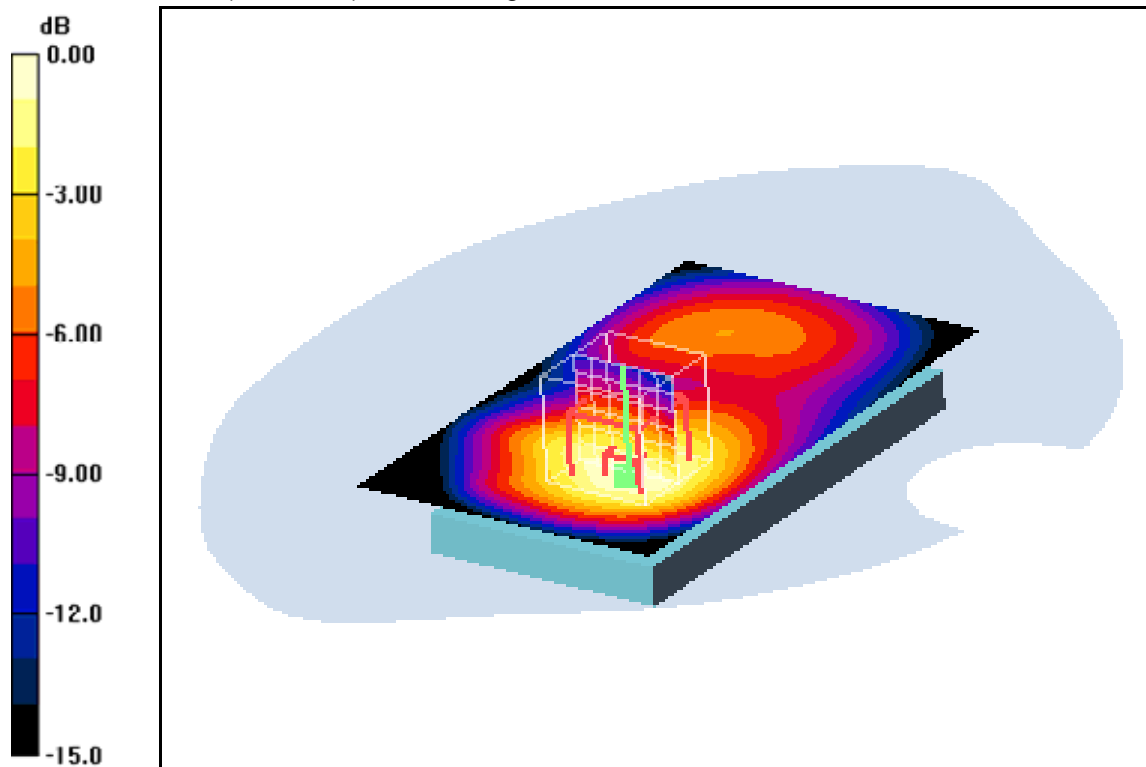
dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.9 V/m; Power Drift = -0.028 dB

Peak SAR (extrapolated) = 1.34 W/kg

**SAR(1 g) = 0.947 mW/g; SAR(10 g) = 0.606 mW/g**

Maximum value of SAR (measured) = 1.02 mW/g



0 dB = 1.02mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 22.0°C; liquid temperature: 20.4°C

Date/Time: 29.02.2012 18:31:01 Date/Time: 29.02.2012 18:40:57

### IEEE1528\_OET65-Body-WCDMA FDD IV

DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH

Communication System: WCDMA FDD IV; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1752.6$  MHz;  $\sigma = 1.49$  mho/m;  $\epsilon_r = 52.8$ ;  $\rho = 1000$  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 And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

**Rear position - High/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.09 mW/g

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

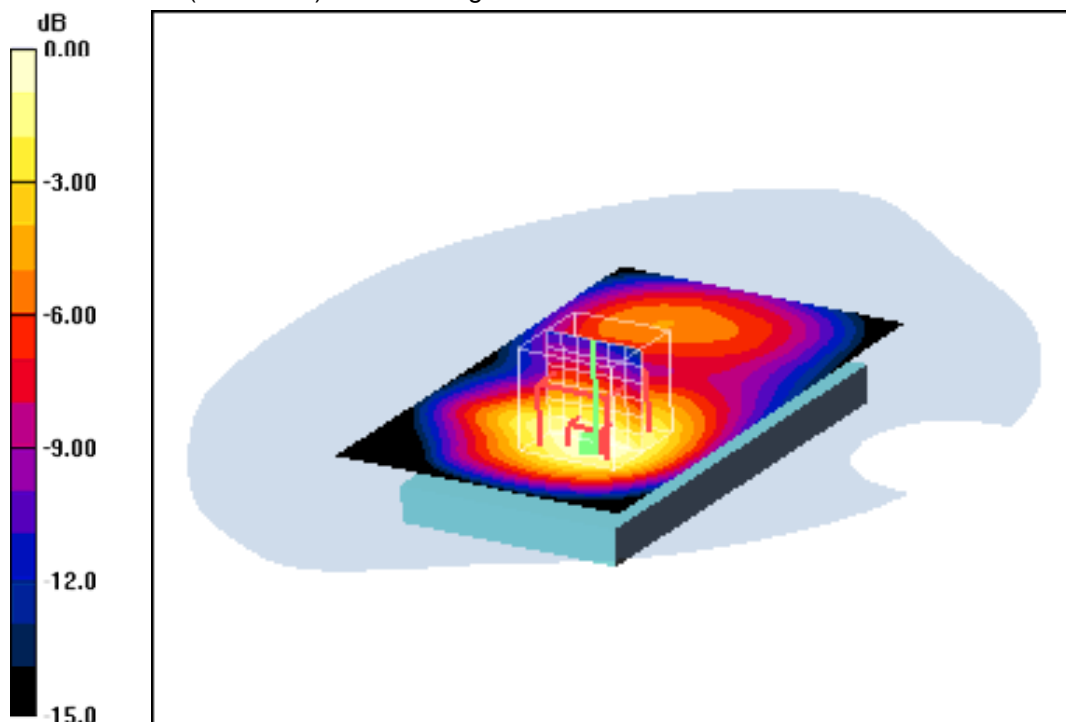
dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.5 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.40 W/kg

**SAR(1 g) = 1.000 mW/g; SAR(10 g) = 0.641 mW/g**

Maximum value of SAR (measured) = 1.09 mW/g



0 dB = 1.09mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 22.0°C; liquid temperature: 20.4°C

Date/Time: 29.02.2012 16:33:58 Date/Time: 29.02.2012 16:46:47

### IEEE1528\_OET65-Body-WCDMA FDD IV

DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH

Communication System: WCDMA FDD IV; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 52.9$ ;  $\rho = 1000$  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 And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

**Edge left position - Middle/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

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

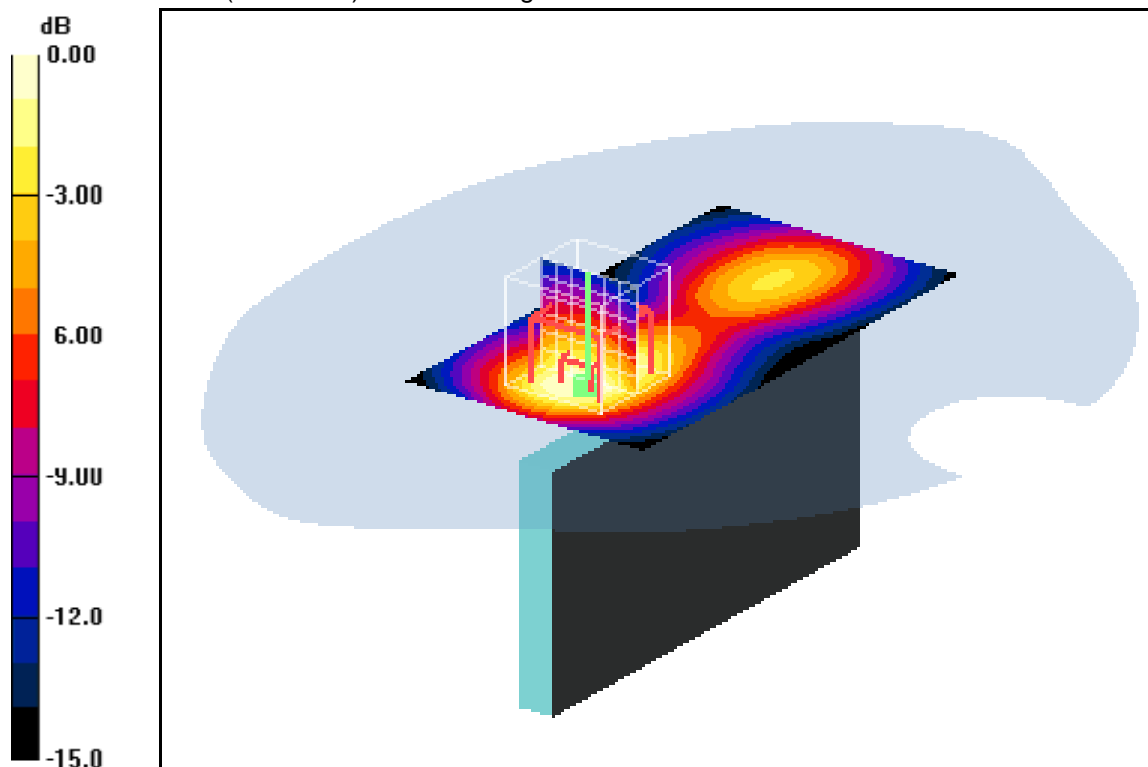
**Edge left position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.8 V/m; Power Drift = -0.069 dB

Peak SAR (extrapolated) = 1.29 W/kg

**SAR(1 g) = 0.866 mW/g; SAR(10 g) = 0.513 mW/g**

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



0 dB = 0.966mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 22.0°C; liquid temperature: 20.4°C

Date/Time: 29.02.2012 17:02:16 Date/Time: 29.02.2012 17:08:40

### IEEE1528\_OET65-Body-WCDMA FDD IV

DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH

Communication System: WCDMA FDD IV; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 52.9$ ;  $\rho = 1000$  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 And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

**Edge right position - Middle/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.105 mW/g

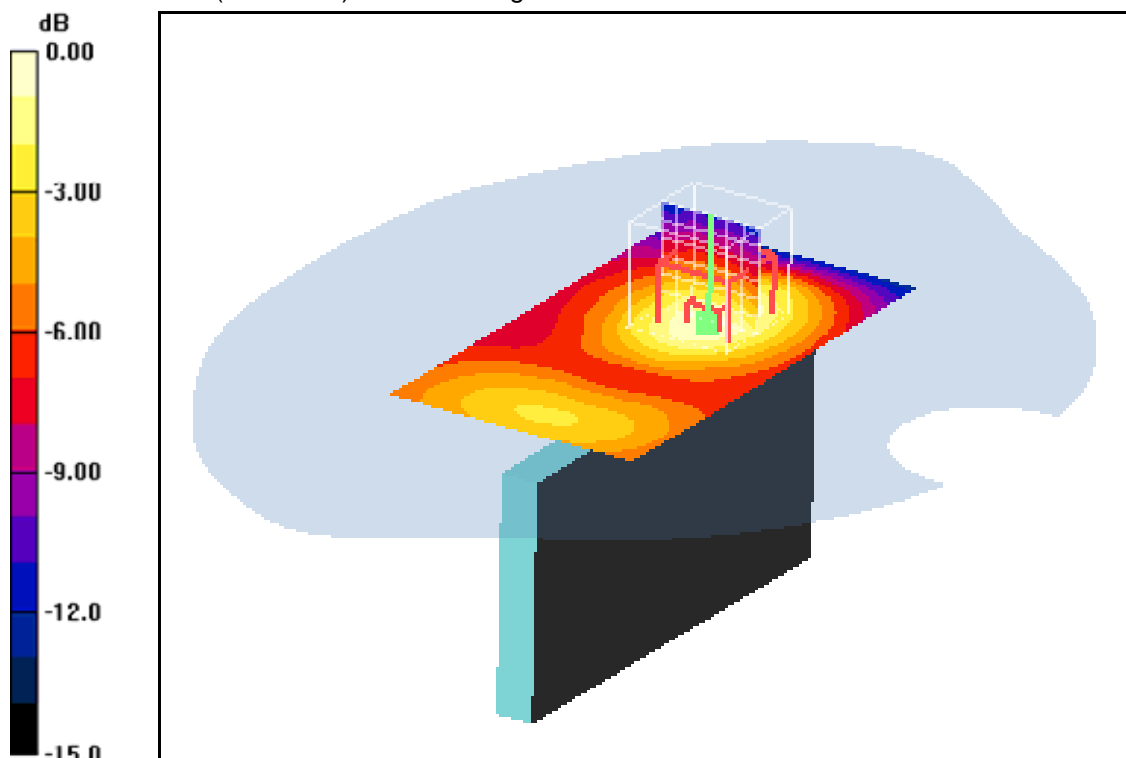
**Edge right position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.66 V/m; Power Drift = -0.029 dB

Peak SAR (extrapolated) = 0.133 W/kg

**SAR(1 g) = 0.095 mW/g; SAR(10 g) = 0.060 mW/g**

Maximum value of SAR (measured) = 0.103 mW/g



0 dB = 0.103mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 22.0°C; liquid temperature: 20.4°C

Date/Time: 29.02.2012 16:12:22 Date/Time: 29.02.2012 16:19:11

### IEEE1528\_OET65-Body-WCDMA FDD IV

DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH

Communication System: WCDMA FDD IV; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 52.9$ ;  $\rho = 1000$  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 And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; 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) = 0.293 mW/g

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

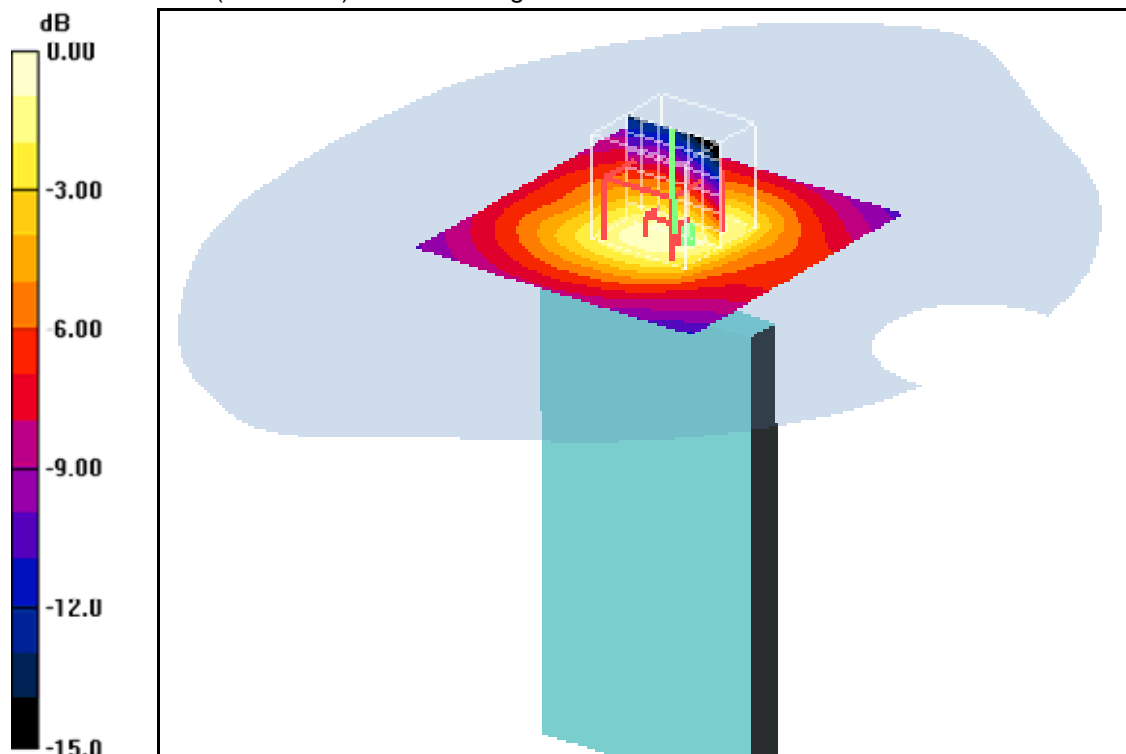
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.8 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.391 W/kg

**SAR(1 g) = 0.253 mW/g; SAR(10 g) = 0.152 mW/g**

Maximum value of SAR (measured) = 0.276 mW/g



0 dB = 0.276mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 22.0°C; liquid temperature: 20.4°C

Date/Time: 25.05.2012 02:03:22 Date/Time: 25.05.2012 02:11:00

### IEEE1528\_OET65-Body-WCDMA FDD IV

DUT: Sony Ericsson; Type: AAL-8880001-BV; Serial: CB5A1JE2QH

Communication System: WCDMA FDD IV; Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1712.4$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.52, 4.52, 4.52); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical 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 15 mm w/ Headset /Area Scan (61x101x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.02 mW/g

### Rear position - Low 15 mm w/ Headset /Zoom Scan (7x7x7) (7x7x7)/Cube 0:

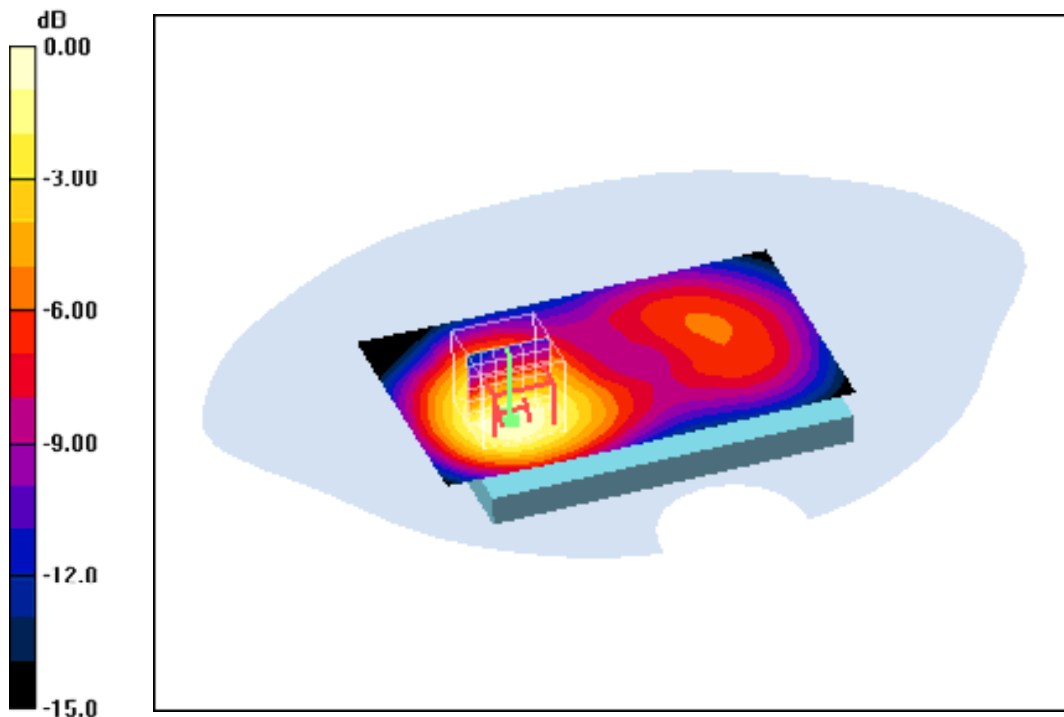
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.3 V/m; Power Drift = 0.103 dB

Peak SAR (extrapolated) = 1.32 W/kg

**SAR(1 g) = 0.911 mW/g; SAR(10 g) = 0.582 mW/g**

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



0 dB = 0.983mW/g

#### Additional information:

position or distance of DUT to SAM: 15mm with headset.

ambient temperature: 22.5°C; liquid temperature: 22.2°C

Date/Time: 25.05.2012 01:43:15 Date/Time: 25.05.2012 01:50:50

**IEEE1528\_OET65-Body-WCDMA FDD IV**

**DUT: Sony Ericsson; Type: AAL-8880001-BV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD IV; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1732.4$  MHz;  $\sigma = 1.47$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.52, 4.52, 4.52); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical 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 15 mm w/ Headset /Area Scan (61x101x1):** Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.19 mW/g

**Rear position - Middle 15 mm w/ Headset /Zoom Scan (7x7x7) (7x7x7)/Cube**

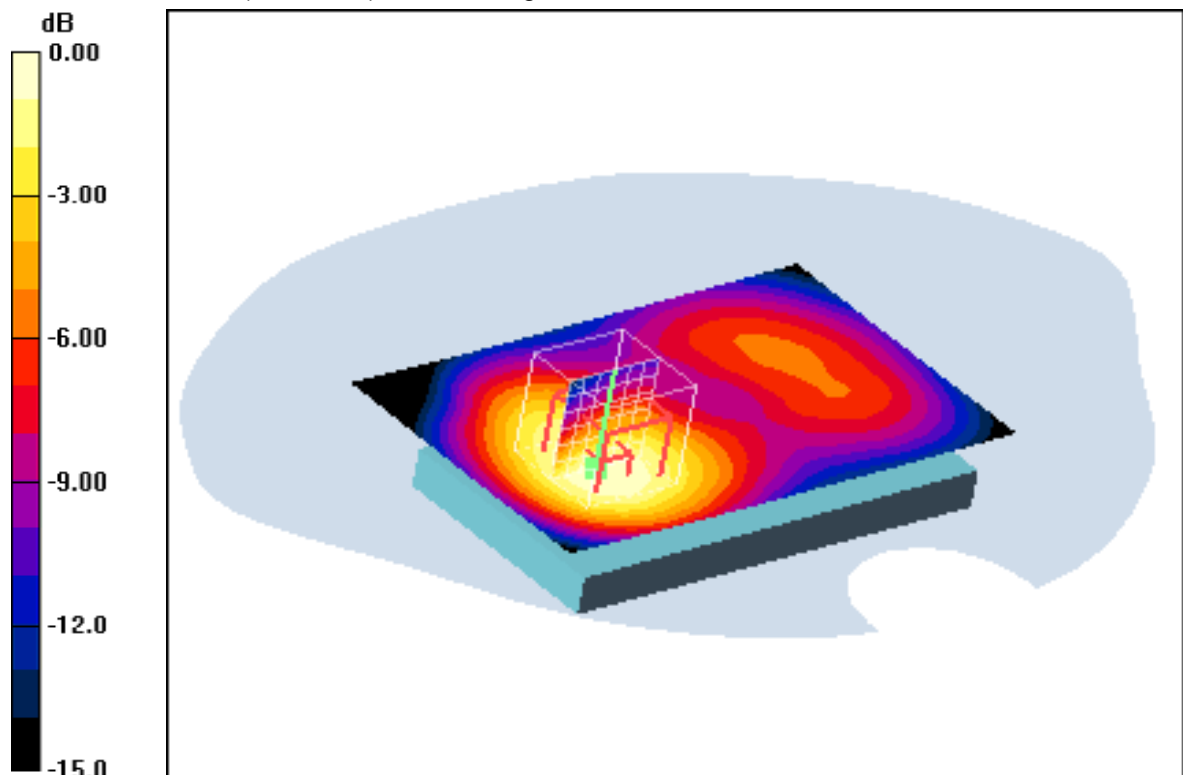
**0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.4 V/m; Power Drift = -0.071 dB

Peak SAR (extrapolated) = 1.55 W/kg

**SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.662 mW/g**

Maximum value of SAR (measured) = 1.13 mW/g



0 dB = 1.13mW/g

**Additional information:**

position or distance of DUT to SAM: 15mm with headset.

ambient temperature: 22.5°C; liquid temperature: 22.2°C

Date/Time: 25.05.2012 01:22:30 Date/Time: 25.05.2012 01:30:04

### IEEE1528\_OET65-Body-WCDMA FDD IV

DUT: Sony Ericsson; Type: AAL-8880001-BV; Serial: CB5A1JE2QH

Communication System: WCDMA FDD IV; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: M1800 Medium parameters used (interpolated):  $f = 1752.6$  MHz;  $\sigma = 1.5$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.52, 4.52, 4.52); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical 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 15 mm w/ Headset/Area Scan (61x101x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.15 mW/g

### Rear position - High 15 mm w/ Headset/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

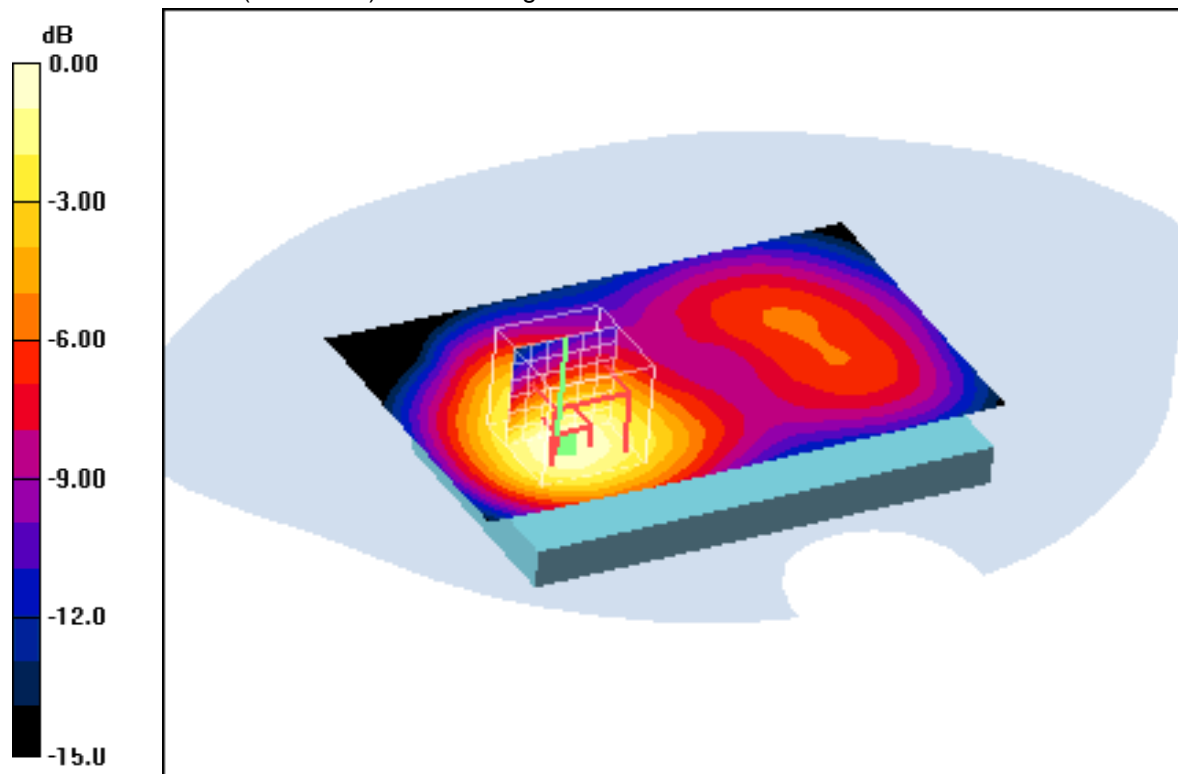
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.8 V/m; Power Drift = 0.074 dB

Peak SAR (extrapolated) = 1.58 W/kg

**SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.695 mW/g**

Maximum value of SAR (measured) = 1.18 mW/g



0 dB = 1.18mW/g

#### Additional information:

position or distance of DUT to SAM: 15mm with headset.

ambient temperature: 22.5°C; liquid temperature: 22.2°C



**Annex B.9: UMTS WCDMA FDD V 850MHz head**

Date/Time: 08.01.2012 16:19:03 Date/Time: 08.01.2012 16:27:37

**IEEE1528\_OET65-LeftHandSide-WCDMA FDD V**

DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH

Communication System: WCDMA FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 826.4$  MHz;  $\sigma = 0.884$  mho/m;  $\epsilon_r = 41.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid: dx=15mm, dy=15mm

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

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

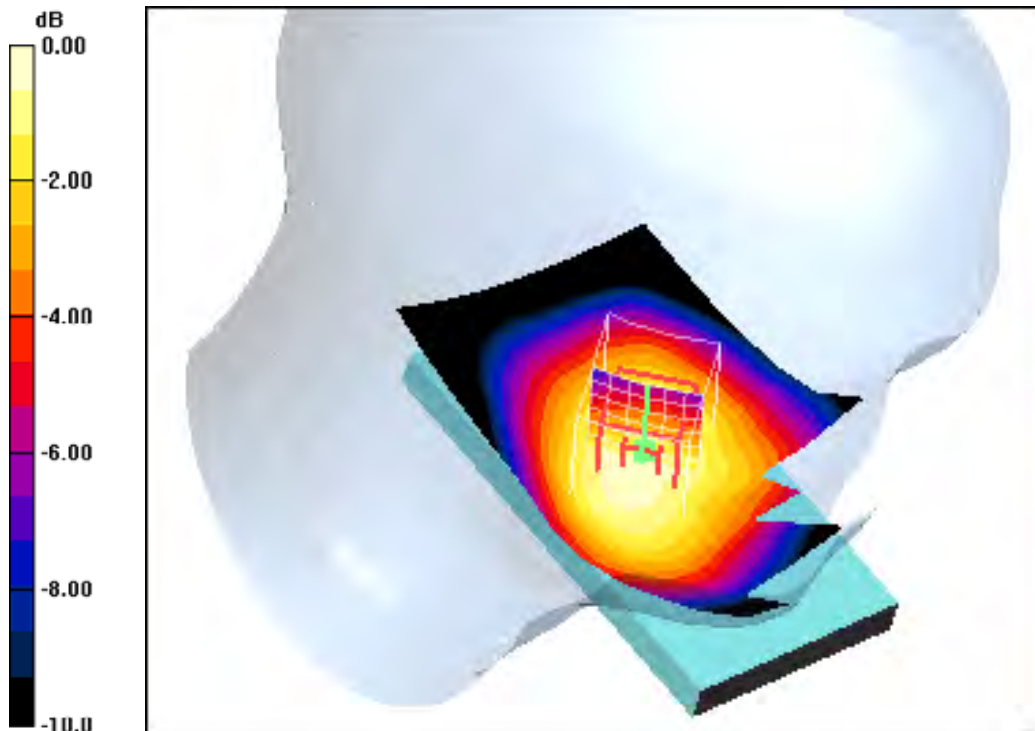
dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.1 V/m; Power Drift = 0.044 dB

Peak SAR (extrapolated) = 0.528 W/kg

**SAR(1 g) = 0.428 mW/g; SAR(10 g) = 0.325 mW/g**

Maximum value of SAR (measured) = 0.455 mW/g



0 dB = 0.455mW/g

**Additional information:**

ambient temperature: 23.0°C; liquid temperature: 22.7°C

Date/Time: 08.01.2012 15:49:29 Date/Time: 08.01.2012 15:58:53

**IEEE1528\_OET65-LeftHandSide-WCDMA FDD V**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 836.4 \text{ MHz}$ ;  $\sigma = 0.9 \text{ mho/m}$ ;  $\epsilon_r = 41.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

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

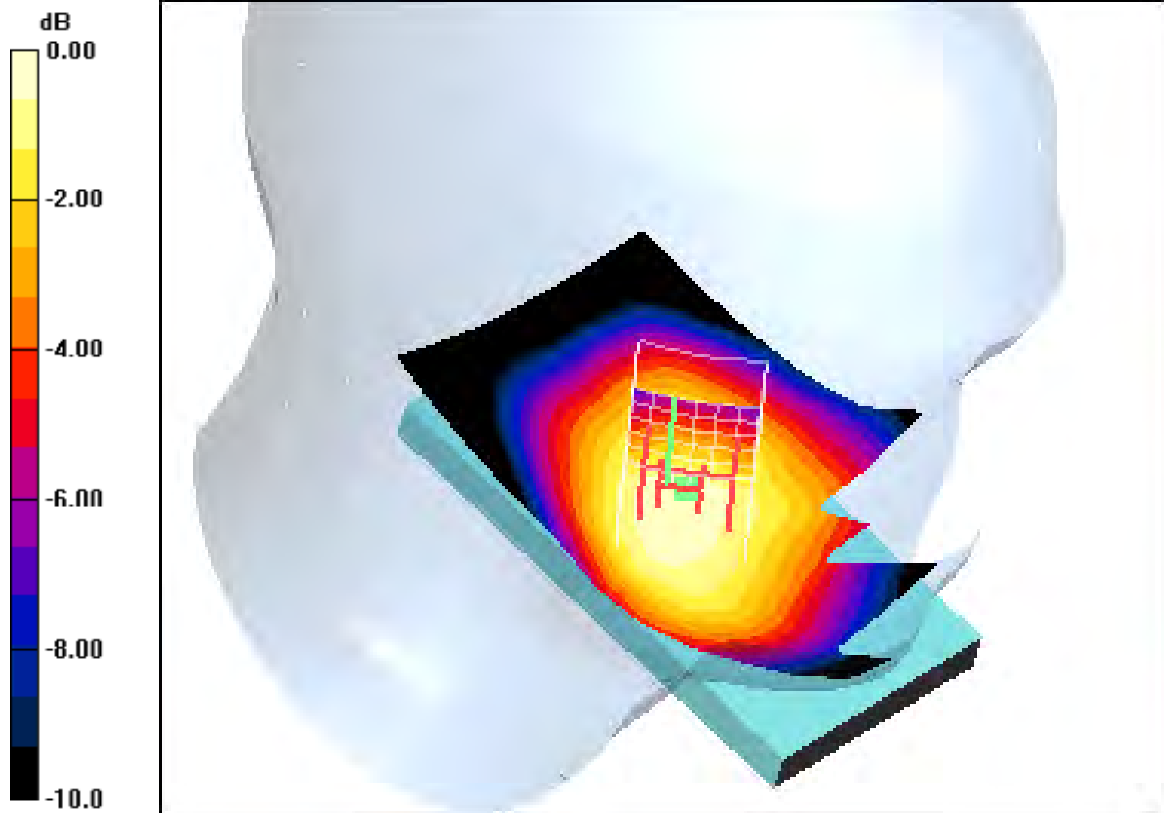
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 25.7 V/m; Power Drift = -0.055 dB

Peak SAR (extrapolated) = 0.654 W/kg

**SAR(1 g) = 0.530 mW/g; SAR(10 g) = 0.403 mW/g**

Maximum value of SAR (measured) = 0.550 mW/g



0 dB = 0.550mW/g

**Additional information:**

ambient temperature: 23.0°C; liquid temperature: 22.7°C

Date/Time: 08.01.2012 15:23:27 Date/Time: 08.01.2012 15:31:47

**IEEE1528\_OET65-LeftHandSide-WCDMA FDD V**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 846.6 \text{ MHz}$ ;  $\sigma = 0.908 \text{ mho/m}$ ;  $\epsilon_r = 41.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.577 mW/g

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

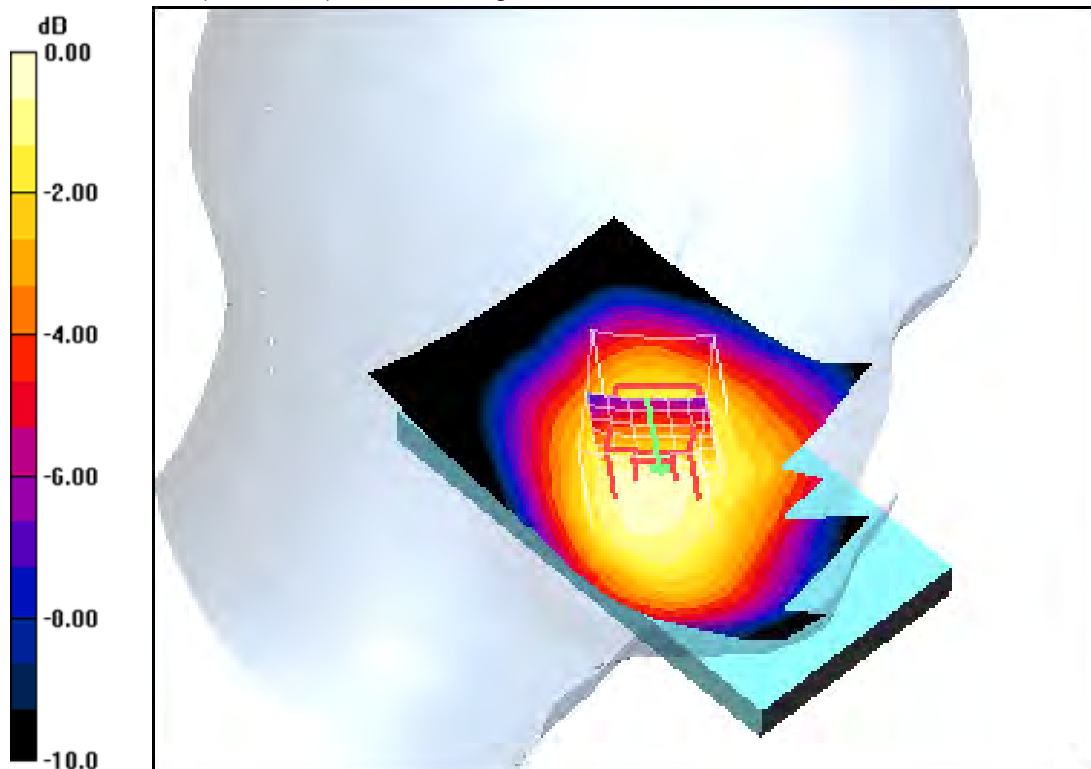
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 26.2 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.688 W/kg

**SAR(1 g) = 0.558 mW/g; SAR(10 g) = 0.426 mW/g**

Maximum value of SAR (measured) = 0.584 mW/g



0 dB = 0.584mW/g

**Additional information:**

ambient temperature: 23.0°C; liquid temperature: 22.7°C

Date/Time: 08.01.2012 14:10:56 Date/Time: 08.01.2012 14:19:59

**IEEE1528\_OET65-LeftHandSide-WCDMA FDD V**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 826.4 \text{ MHz}$ ;  $\sigma = 0.884 \text{ mho/m}$ ;  $\epsilon_r = 41.4$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.264 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 = 17.9 V/m; Power Drift = -0.027 dB

Peak SAR (extrapolated) = 0.290 W/kg

**SAR(1 g) = 0.251 mW/g; SAR(10 g) = 0.197 mW/g**

Maximum value of SAR (measured) = 0.262 mW/g



0 dB = 0.262mW/g

**Additional information:**

ambient temperature: 23.0°C; liquid temperature: 22.7°C

Date/Time: 08.01.2012 14:34:33 Date/Time: 08.01.2012 14:44:39

**IEEE1528\_OET65-LeftHandSide-WCDMA FDD V**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 836.4$  MHz;  $\sigma = 0.9$  mho/m;  $\epsilon_r = 41.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.309 mW/g

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

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

Reference Value = 19.3 V/m; Power Drift = 0.097 dB

Peak SAR (extrapolated) = 0.345 W/kg

**SAR(1 g) = 0.294 mW/g; SAR(10 g) = 0.229 mW/g**

Maximum value of SAR (measured) = 0.307 mW/g



0 dB = 0.307mW/g

**Additional information:**

ambient temperature: 23.0°C; liquid temperature: 22.7°C

Date/Time: 08.01.2012 14:59:52 Date/Time: 08.01.2012 15:08:34

**IEEE1528\_OET65-LeftHandSide-WCDMA FDD V**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 846.6 \text{ MHz}$ ;  $\sigma = 0.908 \text{ mho/m}$ ;  $\epsilon_r = 41.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.353 mW/g

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

Reference Value = 20.4 V/m; Power Drift = -0.022 dB

Peak SAR (extrapolated) = 0.391 W/kg

**SAR(1 g) = 0.330 mW/g; SAR(10 g) = 0.255 mW/g**

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



0 dB = 0.345mW/g

**Additional information:**

ambient temperature: 23.0°C; liquid temperature: 22.7°C

Date/Time: 08.01.2012 11:48:33 Date/Time: 08.01.2012 11:56:39

**IEEE1528\_OET65-RightHandSide-WCDMA FDD V**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 826.4$  MHz;  $\sigma = 0.884$  mho/m;  $\epsilon_r = 41.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.566 mW/g

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

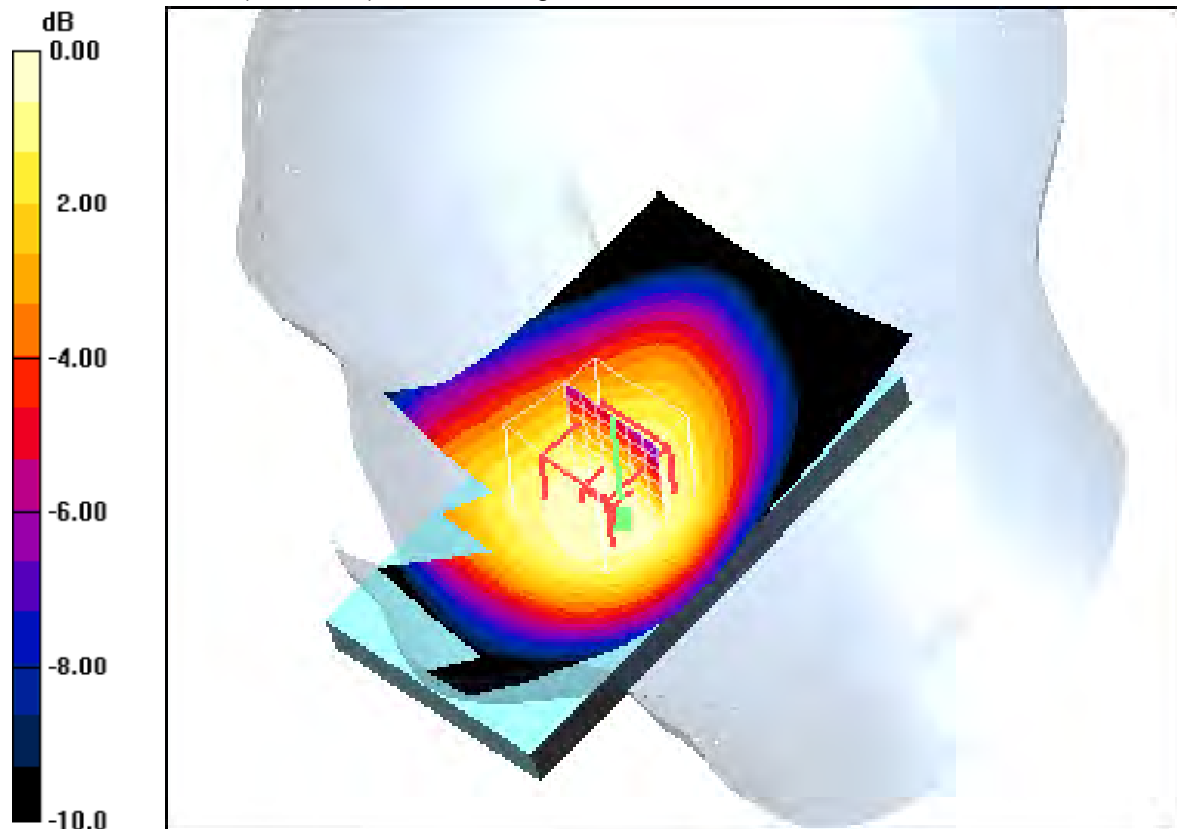
dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.7 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 0.618 W/kg

**SAR(1 g) = 0.530 mW/g; SAR(10 g) = 0.418 mW/g**

Maximum value of SAR (measured) = 0.553 mW/g



0 dB = 0.553mW/g

**Additional information:**

ambient temperature: 23.0°C; liquid temperature: 22.7°C

Date/Time: 08.01.2012 12:11:05 Date/Time: 08.01.2012 12:19:51

**IEEE1528\_OET65-RightHandSide-WCDMA FDD V**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 836.4 \text{ MHz}$ ;  $\sigma = 0.9 \text{ mho/m}$ ;  $\epsilon_r = 41.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.723 mW/g

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

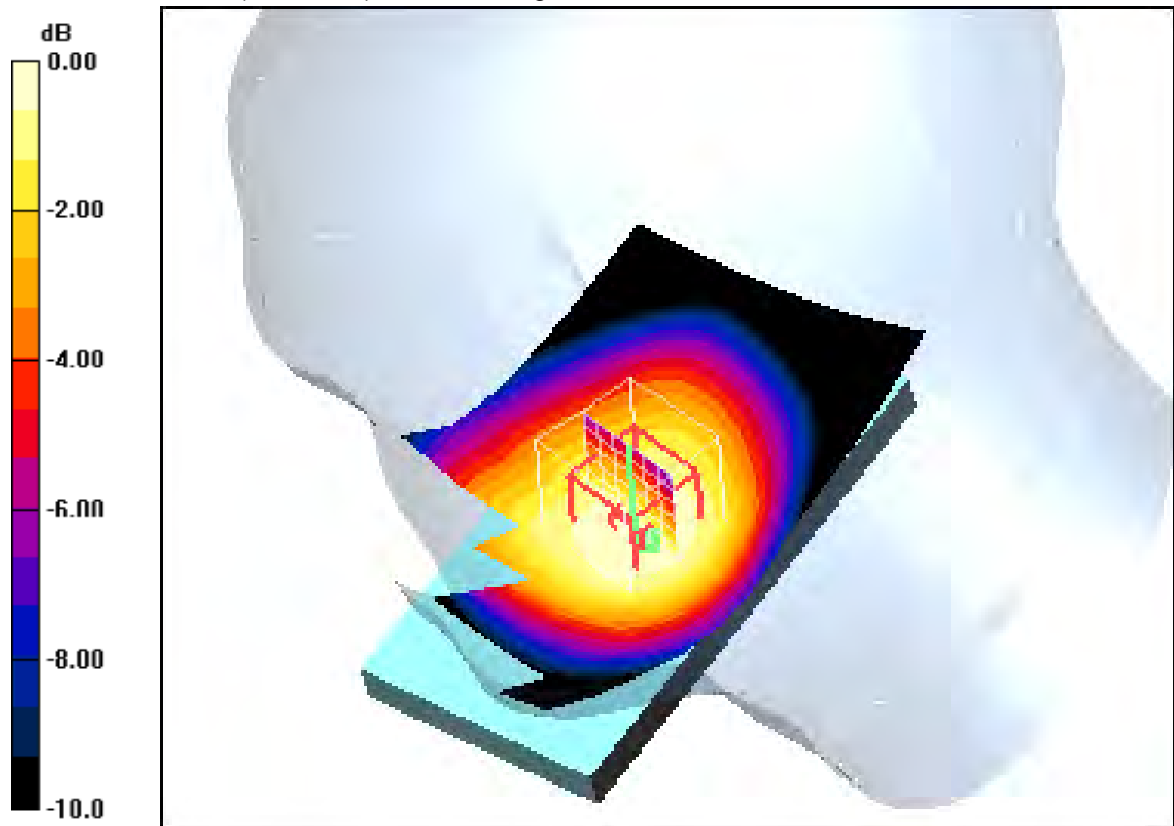
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 29.1 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.809 W/kg

**SAR(1 g) = 0.685 mW/g; SAR(10 g) = 0.536 mW/g**

Maximum value of SAR (measured) = 0.716 mW/g



0 dB = 0.716mW/g

**Additional information:**

ambient temperature: 23.0°C; liquid temperature: 22.7°C



Date/Time: 08.01.2012 12:34:11 Date/Time: 08.01.2012 12:42:41

**IEEE1528\_OET65-RightHandSide-WCDMA FDD V**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 846.6 \text{ MHz}$ ;  $\sigma = 0.908 \text{ mho/m}$ ;  $\epsilon_r = 41.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.760 mW/g

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

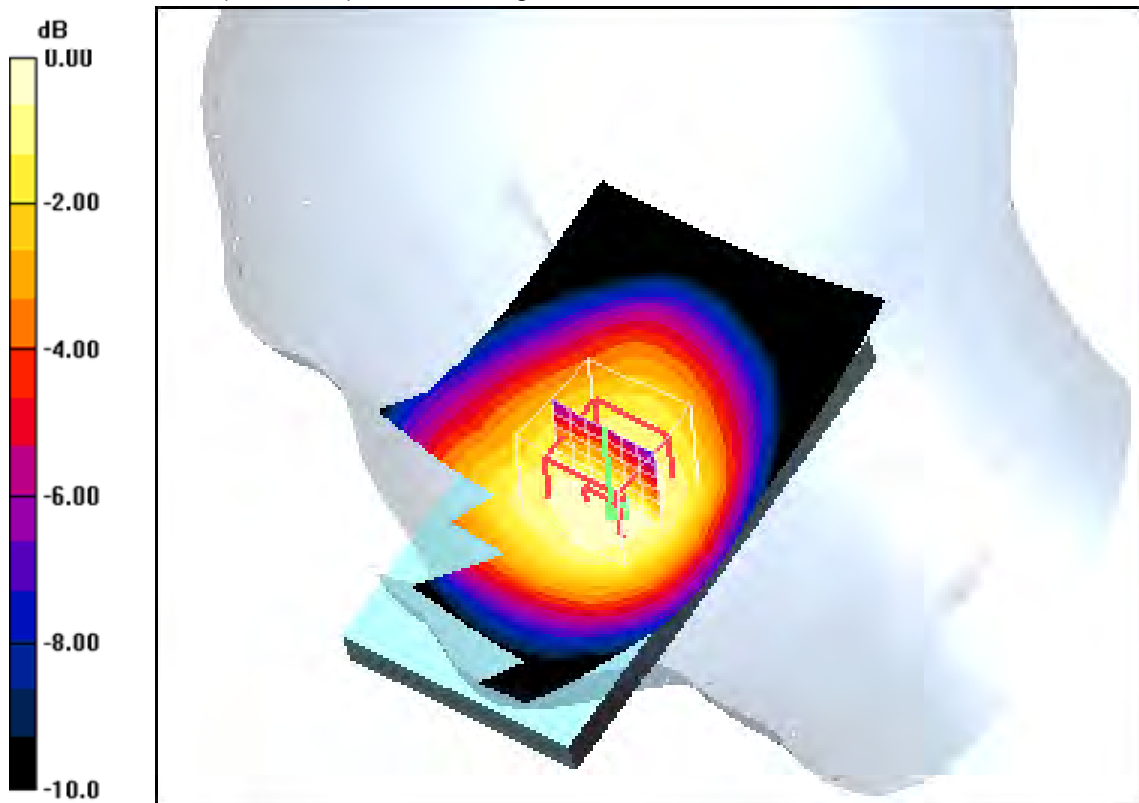
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 29.9 V/m; Power Drift = 0.027 dB

Peak SAR (extrapolated) = 0.868 W/kg

**SAR(1 g) = 0.732 mW/g; SAR(10 g) = 0.571 mW/g**

Maximum value of SAR (measured) = 0.763 mW/g



0 dB = 0.763mW/g

**Additional information:**

ambient temperature: 23.0°C; liquid temperature: 22.7°C

Date/Time: 08.01.2012 13:44:13 Date/Time: 08.01.2012 13:53:46

**IEEE1528\_OET65-RightHandSide-WCDMA FDD V**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 826.4 \text{ MHz}$ ;  $\sigma = 0.884 \text{ mho/m}$ ;  $\epsilon_r = 41.4$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.292 mW/g

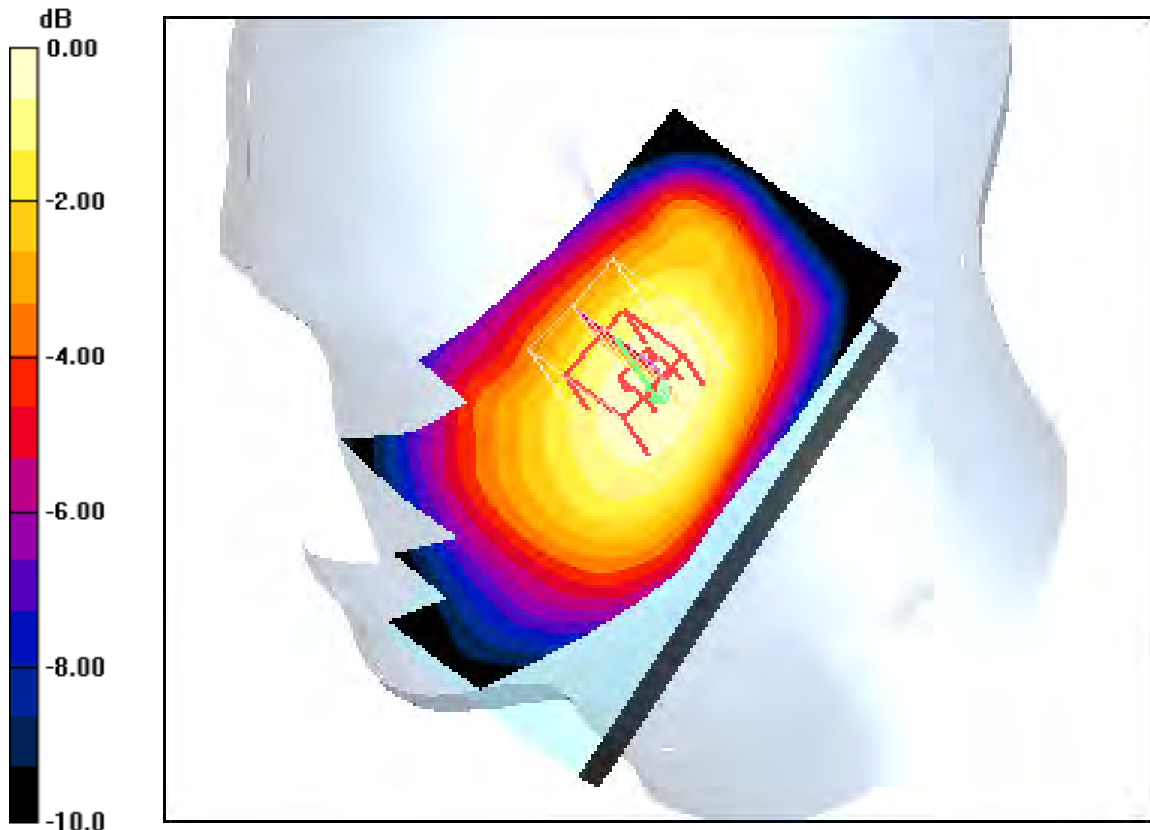
**Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 19.2 V/m; Power Drift = -0.042 dB

Peak SAR (extrapolated) = 0.335 W/kg

**SAR(1 g) = 0.286 mW/g; SAR(10 g) = 0.225 mW/g**

Maximum value of SAR (measured) = 0.300 mW/g



0 dB = 0.300mW/g

**Additional information:**

position or distance of DUT to SAM (if not standard head positions) :

ambient temperature: °C; liquid temperature: °C

Date/Time: 08.01.2012 13:20:58 Date/Time: 08.01.2012 13:30:16

**IEEE1528\_OET65-RightHandSide-WCDMA FDD V**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 836.4 \text{ MHz}$ ;  $\sigma = 0.9 \text{ mho/m}$ ;  $\epsilon_r = 41.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.374 mW/g

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

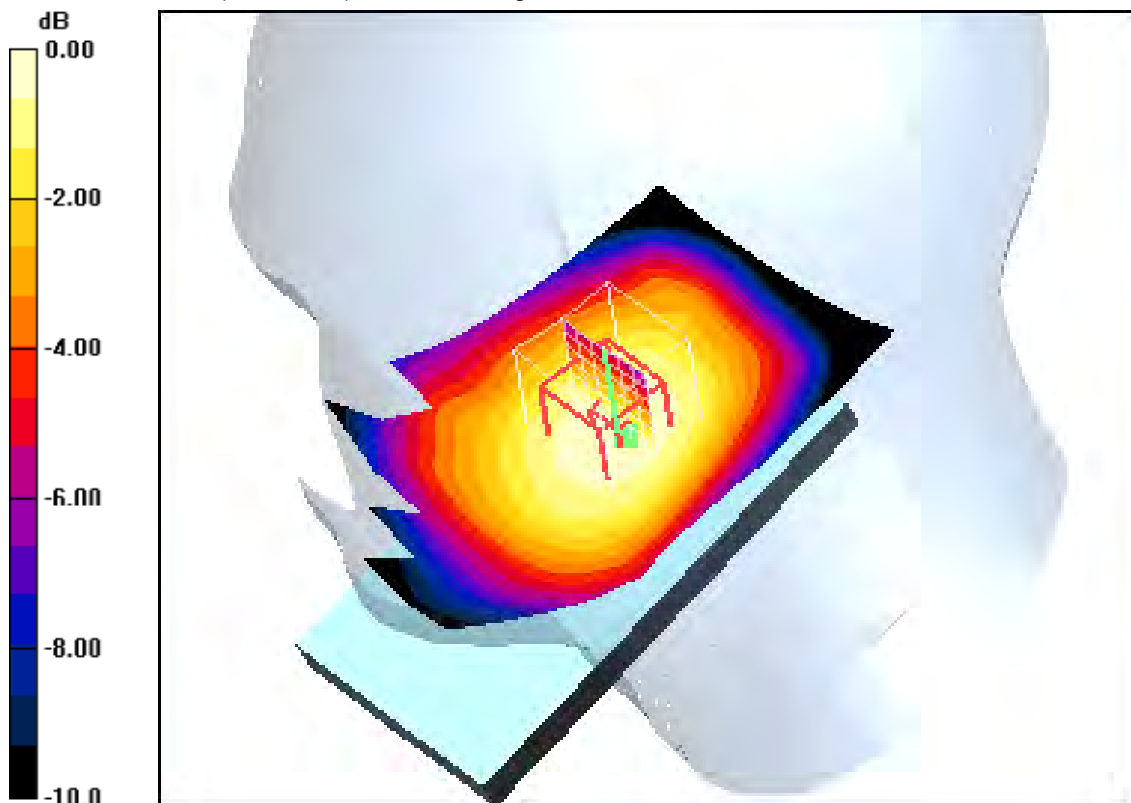
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 21.2 V/m; Power Drift = -0.038 dB

Peak SAR (extrapolated) = 0.420 W/kg

**SAR(1 g) = 0.359 mW/g; SAR(10 g) = 0.283 mW/g**

Maximum value of SAR (measured) = 0.376 mW/g



0 dB = 0.376mW/g

**Additional information:**

ambient temperature: 23.0°C; liquid temperature: 22.7°C

Date/Time: 08.01.2012 12:57:30 Date/Time: 08.01.2012 13:06:57

**IEEE1528\_OET65-RightHandSide-WCDMA FDD V**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 846.6$  MHz;  $\sigma = 0.908$  mho/m;  $\epsilon_r = 41.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.395 mW/g

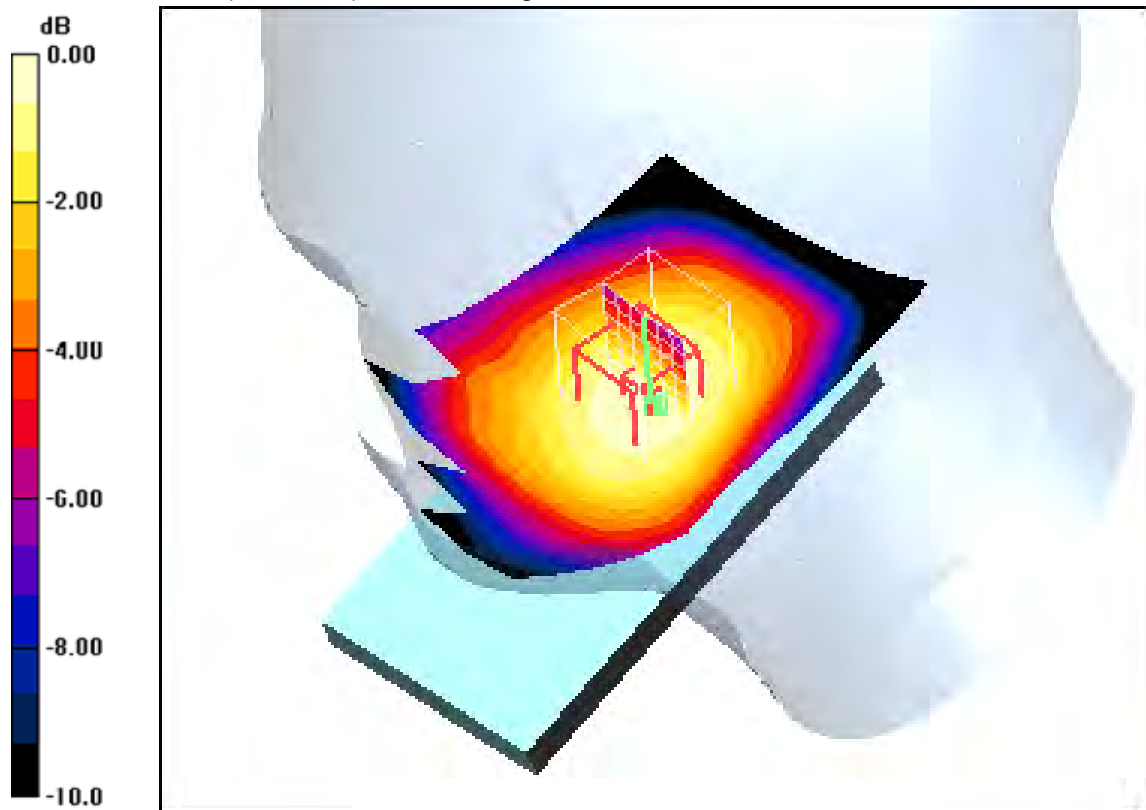
**Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.6 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.443 W/kg

**SAR(1 g) = 0.380 mW/g; SAR(10 g) = 0.299 mW/g**

Maximum value of SAR (measured) = 0.400 mW/g



0 dB = 0.400mW/g

**Additional information:**

ambient temperature: 23.0°C; liquid temperature: 22.7°C

**Annex B.10: UMTS WCDMA FDD V 850MHz body**

Date/Time: 07.01.2012 14:51:24 Date/Time: 07.01.2012 15:01:46

**IEEE1528\_OET65-Body-WCDMA FDD V**

DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH

Communication System: WCDMA FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated):  $f = 826.4$  MHz;  $\sigma = 0.964$  mho/m;  $\epsilon_r = 55.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid: dx=15mm, dy=15mm

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

**Front position - Low/Zoom Scan (7x7x7) (7x10x7)/Cube 0:** Measurement grid:

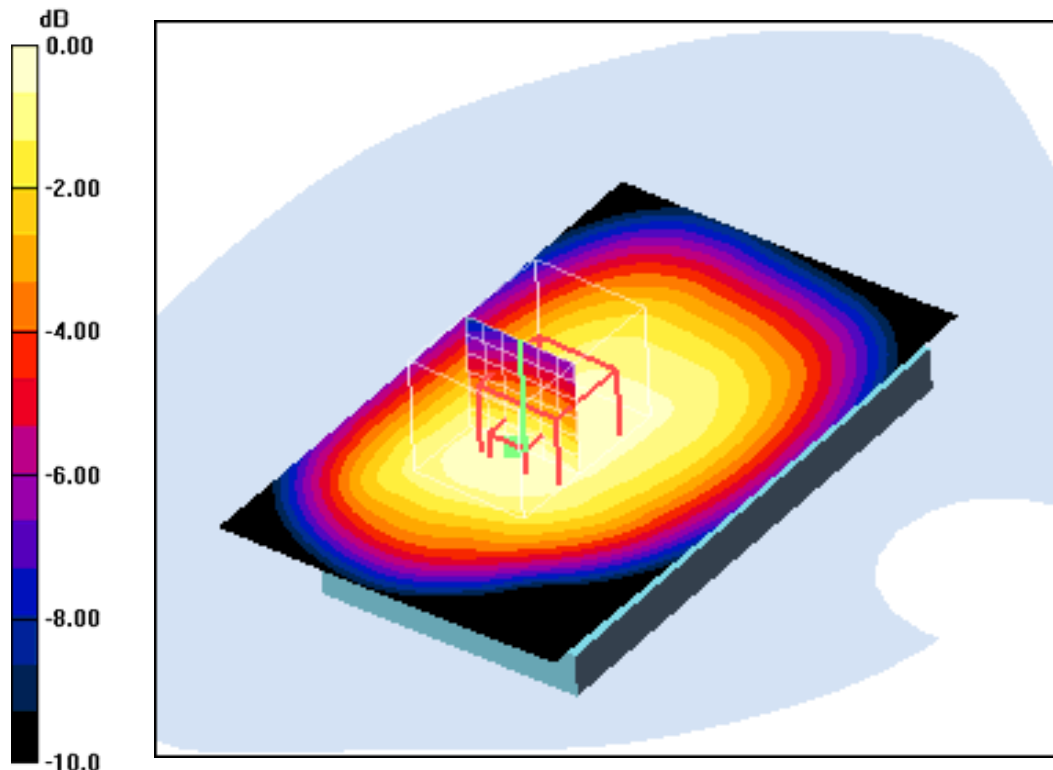
dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.8 V/m; Power Drift = 0.117 dB

Peak SAR (extrapolated) = 0.731 W/kg

**SAR(1 g) = 0.581 mW/g; SAR(10 g) = 0.448 mW/g**

Maximum value of SAR (measured) = 0.613 mW/g



0 dB = 0.613mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

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

Date/Time: 07.01.2012 14:23:01 Date/Time: 07.01.2012 14:33:17

**IEEE1528\_OET65-Body-WCDMA FDD V**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated):  $f = 836.4 \text{ MHz}$ ;  $\sigma = 0.98 \text{ mho/m}$ ;  $\epsilon_r = 55$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.655 mW/g

**Front position - Middle/Zoom Scan (7x7x7) (7x10x7)/Cube 0:** Measurement grid:

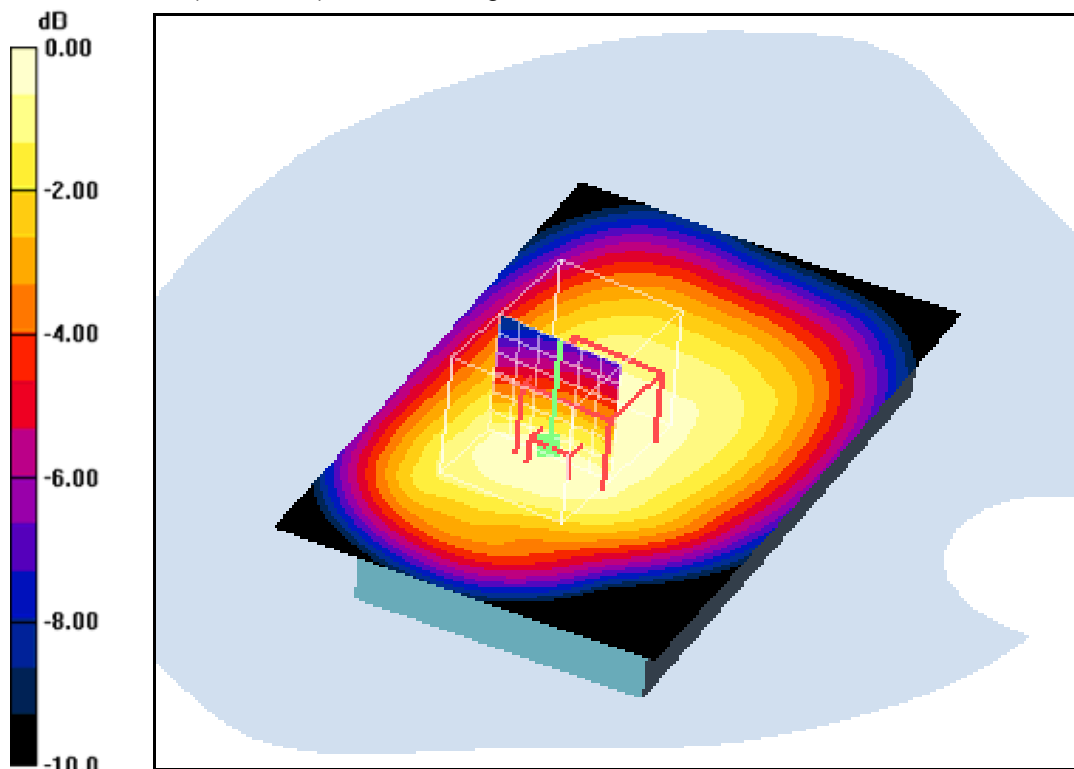
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 26.9 V/m; Power Drift = 0.028 dB

Peak SAR (extrapolated) = 0.785 W/kg

**SAR(1 g) = 0.625 mW/g; SAR(10 g) = 0.479 mW/g**

Maximum value of SAR (measured) = 0.655 mW/g



0 dB = 0.655mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

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

Date/Time: 07.01.2012 13:56:59 Date/Time: 07.01.2012 14:06:45

**IEEE1528\_OET65-Body-WCDMA FDD V**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated):  $f = 846.6 \text{ MHz}$ ;  $\sigma = 0.988 \text{ mho/m}$ ;  $\epsilon_r = 54.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.722 mW/g

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

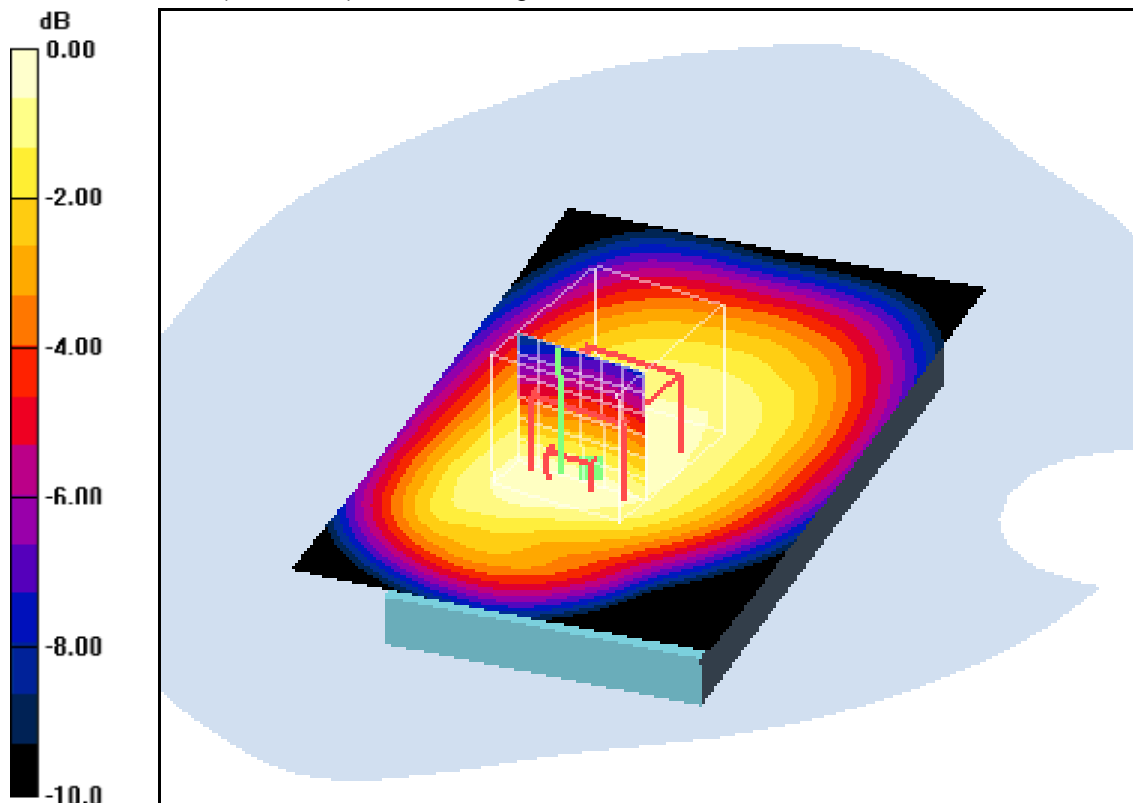
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 28.2 V/m; Power Drift = -0.031 dB

Peak SAR (extrapolated) = 0.858 W/kg

**SAR(1 g) = 0.683 mW/g; SAR(10 g) = 0.519 mW/g**

Maximum value of SAR (measured) = 0.720 mW/g



0 dB = 0.720mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

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

Date/Time: 06.01.2012 18:05:45 Date/Time: 06.01.2012 18:15:50

**IEEE1528\_OET65-Body-WCDMA FDD V**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated):  $f = 826.4 \text{ MHz}$ ;  $\sigma = 0.964 \text{ mho/m}$ ;  $\epsilon_r = 55.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.671 mW/g

**Rear position - Low/Zoom Scan (7x7x7) (7x11x7)/Cube 0:** Measurement grid:

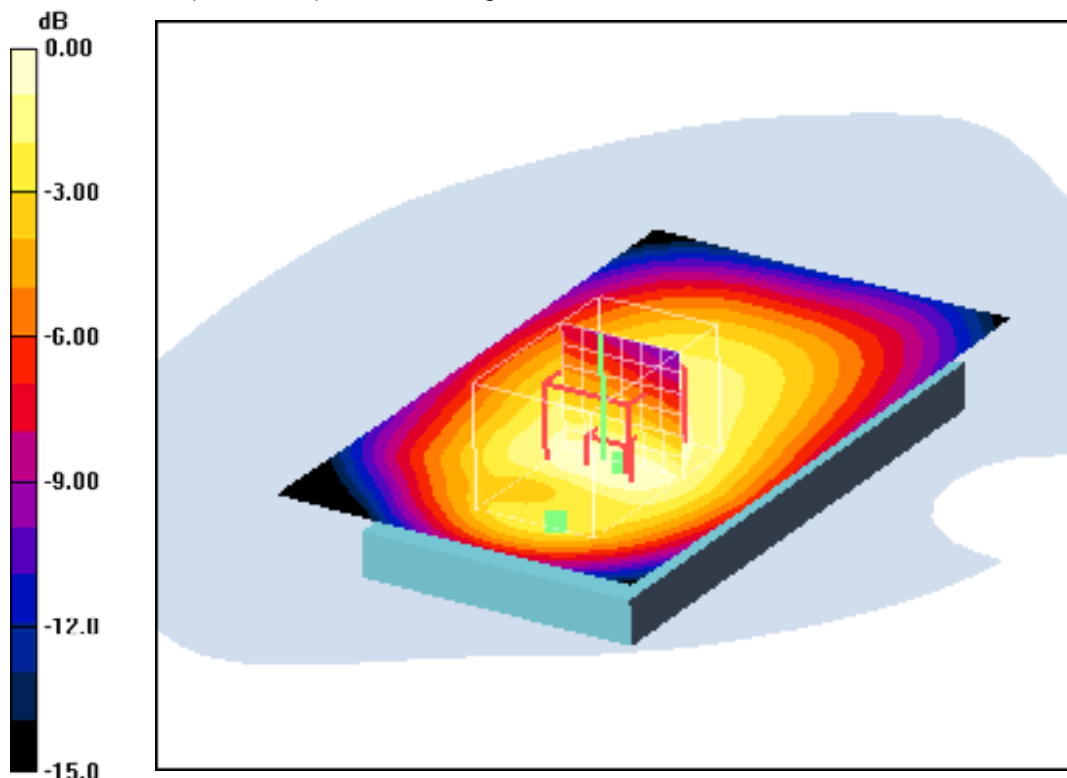
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 26.7 V/m; Power Drift = -0.030 dB

Peak SAR (extrapolated) = 0.884 W/kg

**SAR(1 g) = 0.626 mW/g; SAR(10 g) = 0.447 mW/g**

Maximum value of SAR (measured) = 0.665 mW/g



0 dB = 0.665mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 20.8°C; liquid temperature: 20.5°C



Date/Time: 06.01.2012 17:33:12 Date/Time: 06.01.2012 17:43:59

**IEEE1528\_OET65-Body-WCDMA FDD V**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated):  $f = 836.4 \text{ MHz}$ ;  $\sigma = 0.98 \text{ mho/m}$ ;  $\epsilon_r = 55$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.763 mW/g

**Rear position - Middle/Zoom Scan (7x7x7) (7x12x7)/Cube 0:** Measurement grid:

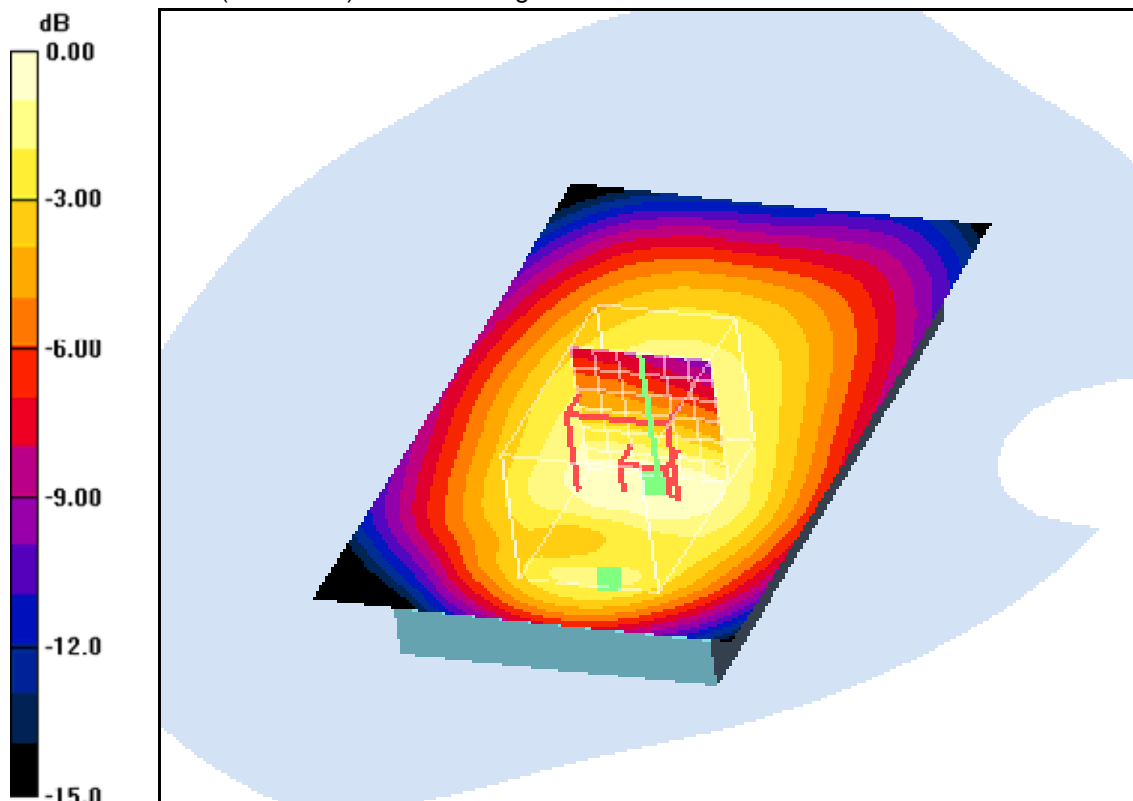
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 28.0 V/m; Power Drift = -0.090 dB

Peak SAR (extrapolated) = 0.996 W/kg

**SAR(1 g) = 0.702 mW/g; SAR(10 g) = 0.502 mW/g**

Maximum value of SAR (measured) = 0.748 mW/g



0 dB = 0.748mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 20.8°C; liquid temperature: 20.5°C

Date/Time: 06.01.2012 18:36:14 Date/Time: 06.01.2012 18:47:42

**IEEE1528\_OET65-Body-WCDMA FDD V**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated):  $f = 846.6 \text{ MHz}$ ;  $\sigma = 0.988 \text{ mho/m}$ ;  $\epsilon_r = 54.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (61x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.810 mW/g

**Rear position - High/Zoom Scan (7x7x7) (7x12x7)/Cube 0:** Measurement grid:

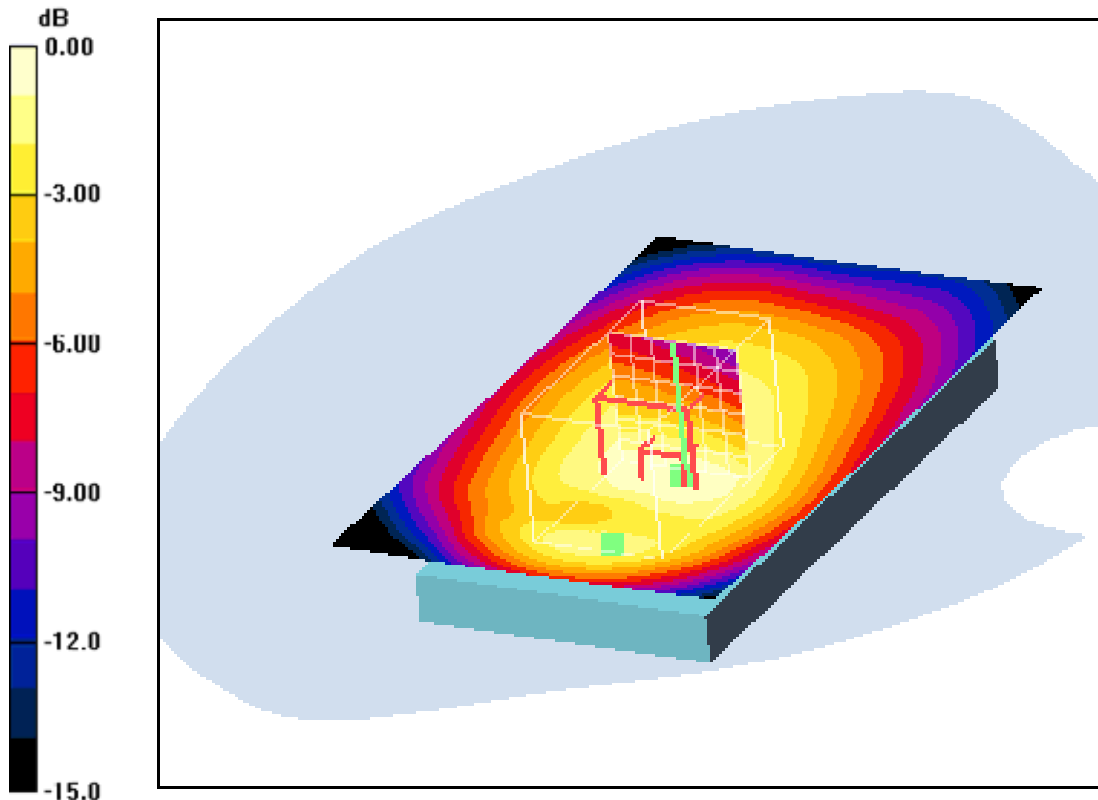
$dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 29.1 V/m; Power Drift = 0.012 dB

Peak SAR (extrapolated) = 1.08 W/kg

**SAR(1 g) = 0.772 mW/g; SAR(10 g) = 0.548 mW/g**

Maximum value of SAR (measured) = 0.819 mW/g



0 dB = 0.819mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 20.8°C; liquid temperature: 20.5°C

Date/Time: 06.01.2012 16:39:38 Date/Time: 06.01.2012 16:46:51

**IEEE1528\_OET65-Body-WCDMA FDD V**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated):  $f = 836.4 \text{ MHz}$ ;  $\sigma = 0.98 \text{ mho/m}$ ;  $\epsilon_r = 55$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

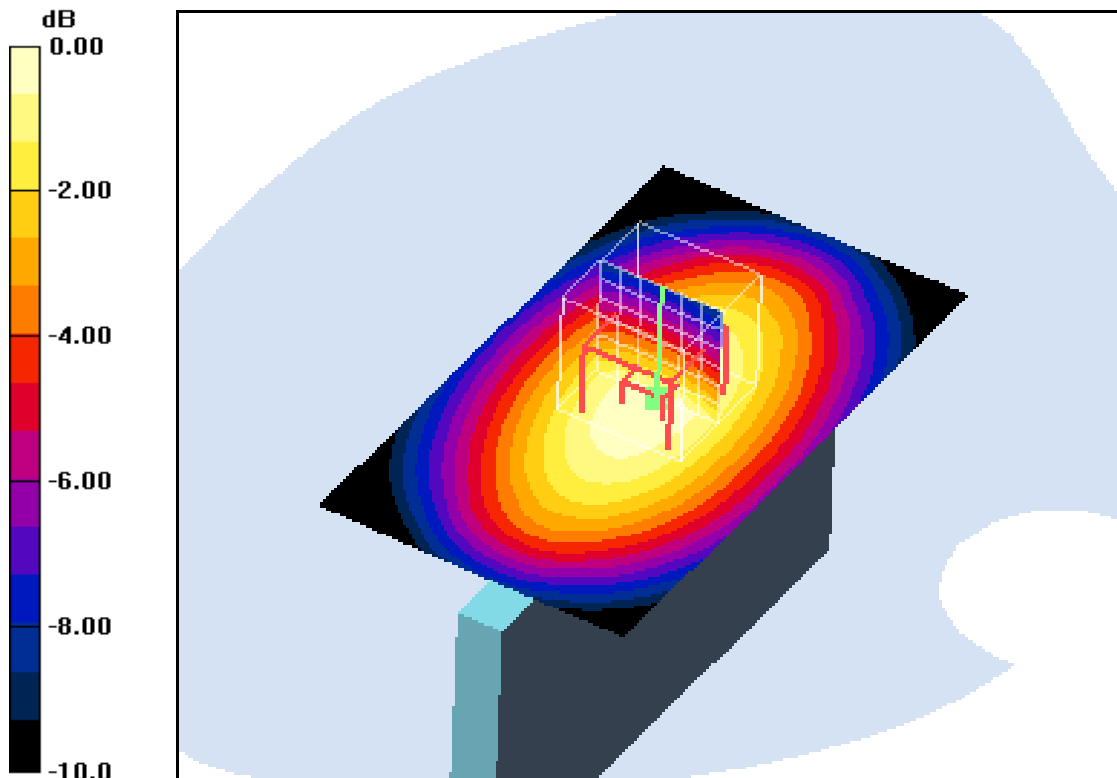
**Edge left position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 27.6 V/m; Power Drift = 0.017 dB

Peak SAR (extrapolated) = 0.940 W/kg

**SAR(1 g) = 0.691 mW/g; SAR(10 g) = 0.481 mW/g**

Maximum value of SAR (measured) = 0.738 mW/g



0 dB = 0.738mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 20.8°C; liquid temperature: 20.5°C

Date/Time: 06.01.2012 17:01:18 Date/Time: 06.01.2012 17:08:23

## IEEE1528\_OET65-Body-WCDMA FDD V

DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH

Communication System: WCDMA FDD V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated):  $f = 836.4$  MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 55$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (51x91x1):** Measurement grid: dx=15mm, dy=15mm

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

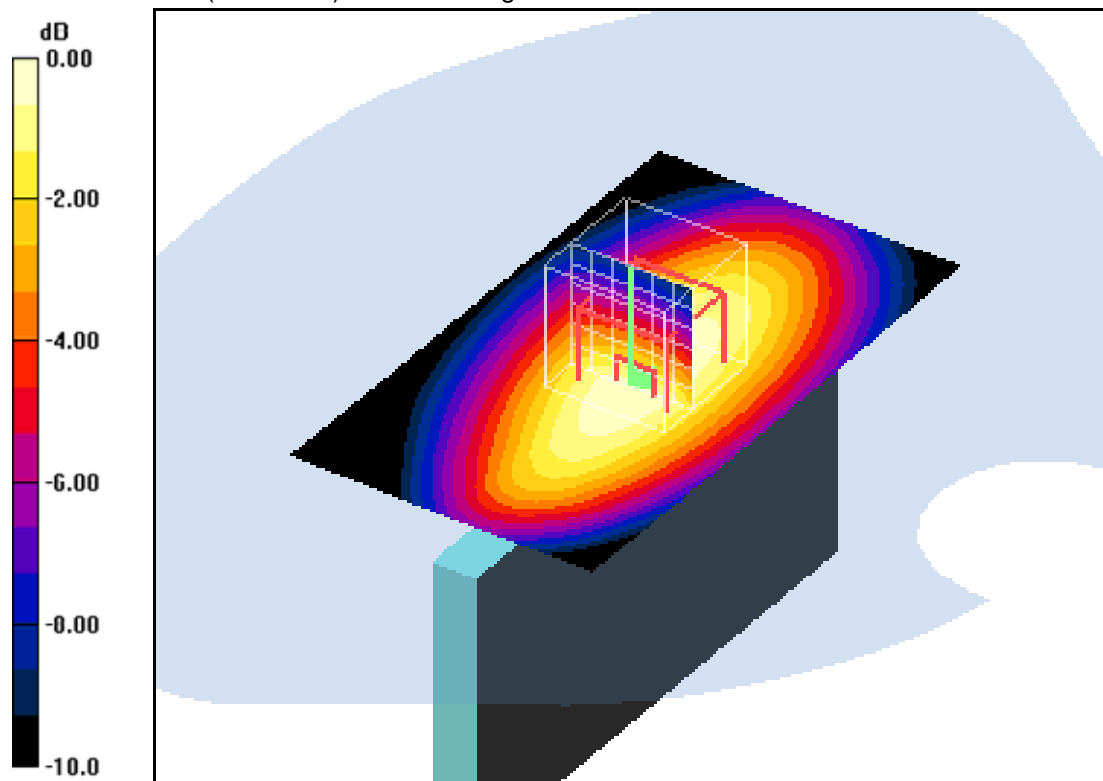
**Edge right position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.7 V/m; Power Drift = 0.037 dB

Peak SAR (extrapolated) = 0.835 W/kg

**SAR(1 g) = 0.606 mW/g; SAR(10 g) = 0.417 mW/g**

Maximum value of SAR (measured) = 0.651 mW/g



0 dB = 0.651mW/g

### Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 20.8°C; liquid temperature: 20.5°C

Date/Time: 06.01.2012 16:18:07 Date/Time: 06.01.2012 16:25:14

**IEEE1528\_OET65-Body-WCDMA FDD V**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated):  $f = 836.4$  MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 55$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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) = 0.438 mW/g

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

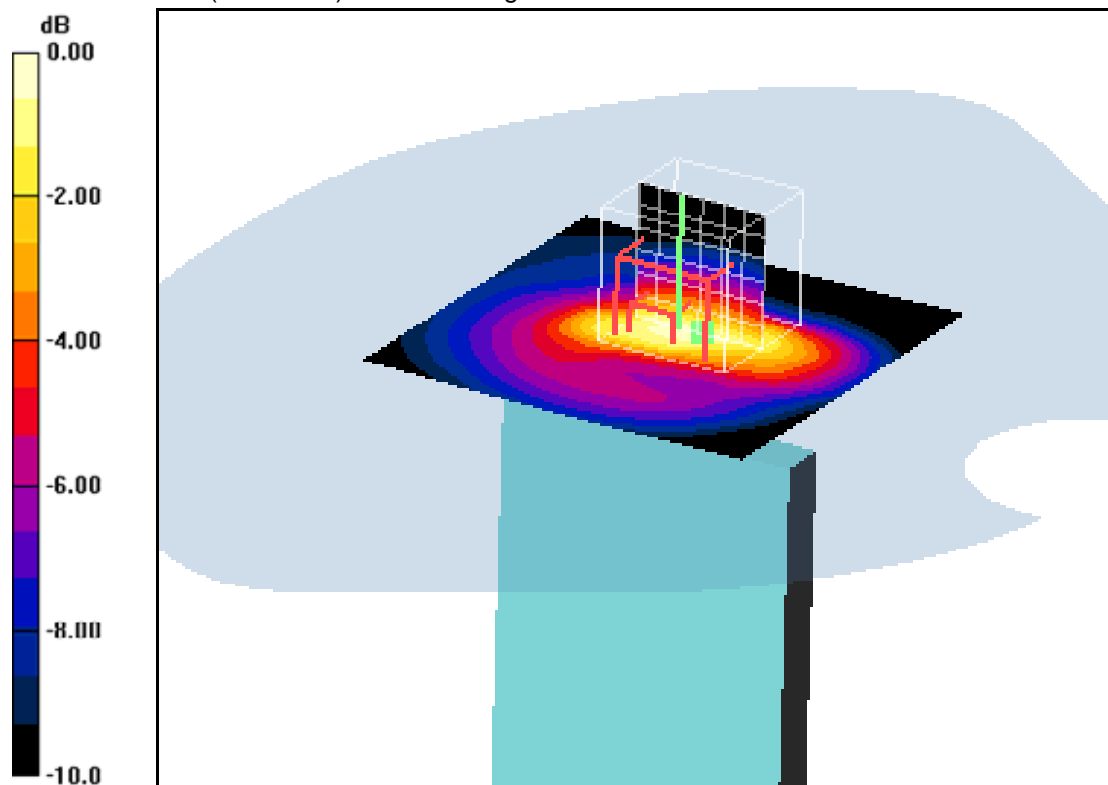
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.6 V/m; Power Drift = -0.010 dB

Peak SAR (extrapolated) = 1.19 W/kg

**SAR(1 g) = 0.432 mW/g; SAR(10 g) = 0.215 mW/g**

Maximum value of SAR (measured) = 0.455 mW/g



0 dB = 0.455mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 20.8°C; liquid temperature: 20.5°C

Date/Time: 07.01.2012 12:57:22 Date/Time: 07.01.2012 13:08:35

**IEEE1528\_OET65-Body-WCDMA FDD V**

**DUT: Sony Ericsson; Type: AAL-8880001-CV; Serial: CB5A1JE2QH**

Communication System: WCDMA FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated):  $f = 846.6$  MHz;  $\sigma = 0.988$  mho/m;  $\epsilon_r = 54.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 04.05.2011
- 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 (sample#)/Area Scan (61x101x1):** Measurement grid:

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

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

**Rear position - High 15mm (sample#)/Zoom Scan (7x7x7) (7x12x7)/Cube 0:**

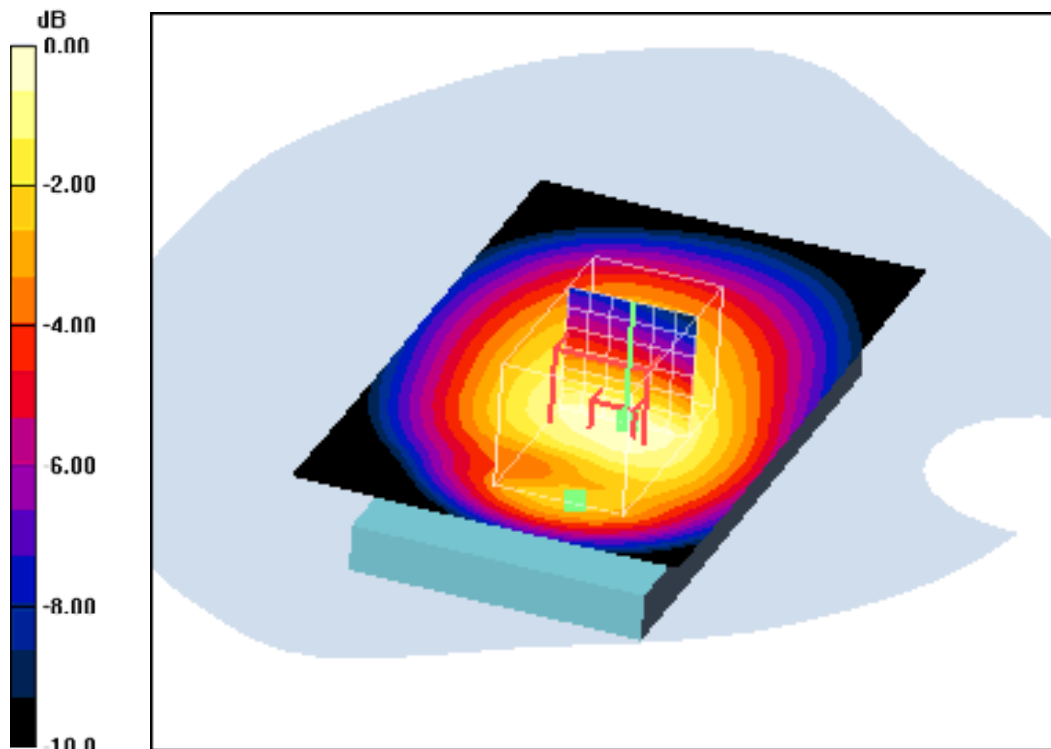
Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 24.2 V/m; Power Drift = 0.040 dB

Peak SAR (extrapolated) = 0.715 W/kg

**SAR(1 g) = 0.524 mW/g; SAR(10 g) = 0.375 mW/g**

Maximum value of SAR (measured) = 0.556 mW/g



0 dB = 0.556mW/g

**Additional information:**

position or distance of DUT to SAM: 15mm with headset

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