



## Accredited testing laboratory

**DAR registration number: DAT-P-176/94-D1**

**Test report no. : 1-1065-64-03/09**  
**Type identification : AAD-3880059-BV**  
**Test specification : IEEE 1528-2003**  
**FCC-ID : PY7A3880059**  
**IC-ID : 4170B-A3880059**

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## 1 General Information

### 1.1 Notes

The test results of this test report relate exclusively to the test item specified in 1.5. The CETECOM ICT Services GmbH does not assume responsibility for any conclusions and generalisations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of the CETECOM ICT Services GmbH.

#### 1.1.1 Statement of Compliance

The SAR values found for the AAD-3880059-BV Mobile Phone are below the maximum recommended levels of 1.6 W/Kg as averaged over any 1 g tissue according to the FCC rule §2.1093, the ANSI/IEEE C 95.1:1999, 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.

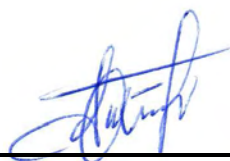
For body worn operation, this device has been tested and meets FCC RF exposure guidelines when used with any accessory that contains no metal and that positions the handset a minimum of 15 mm from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

The measurement together with the test system set-up is described in chapter 2.3 of this test report. A detailed description of the equipment under test can be found in chapter 1.5.

### Test engineer:

2009-12-09

Oleksandr Hnatovskiy



Date

Name

Signature

### Technical responsibility for area of testing:

2009-12-09

Thomas Vogler



Date

Name

Signature

## 1.2 Testing laboratory

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Germany  
Telephone: + 49 681 598 - 0  
Fax: + 49 681 598 - 8475

e-mail: [info@ict.cetecom.de](mailto:info@ict.cetecom.de)  
Internet: <http://www.cetecom-ict.de>

State of accreditation: The Test laboratory (area of testing) is accredited according to DIN EN ISO/IEC 17025. DAR registration number: DAT-P-176/94-D1

Test location, if different from CETECOM ICT Services GmbH

Name: ---  
Street: ---  
Town: ---  
Country: ---  
Phone: ---  
Fax: ---

## 1.3 Details of applicant

Name: Sony Ericsson Mobile Communications AB  
Street: Nya Vattentornet  
Town: 22188 Lund  
Country: Sweden  
Contact: Mr. Peter Lindeborg  
Telephone: +46-10-802-43 68

## 1.4 Application details

Date of receipt of application: 2009-11-10  
Date of receipt of test item: 2009-11-12  
Start/Date of test: 2009-11-12  
End of test: 2009-12-09

Person(s) present during the test: ---

**1.5 Test item**

Description of the test item: Mobile Phone  
 Type identification: AAD-3880059-BV  
 FCC-ID : PY7A3880059  
 IC-ID : 4170B-A3880059  
 Serial number: BX900XH6F8 / BX900XH62E  
 Manufacturer:  
 Name: Sony Ericsson Mobile Communications AB  
 Street: Nya Vattentorget  
 Town: 22188 Lund  
 Country: Sweden

additional information on the DUT:		
device type :	portable device	
IMEI No :	00440107913658-2 / 00440107-913525-3 (for WLAN)	
exposure category:	uncontrolled environment / general population	
test device production information	identical prototype	
device operating configurations :		
operating mode(s)	GSM, DCS, PCS, UMTS/WCDMA, WLAN, Bluetooth	
modulation	GMSK, 8-PSK, QPSK(dl), 2*BPSK/HPSK(ul)	
GPRS mobile station class :	B	
GPRS multislots class :	10	voice mode : ---
EGPRS multislots class	10	voice mode : ---
maximum no. of timeslots in uplink:	2	
operating frequency range(s)	transmitter frequency range	receiver frequency range
PCS 1900 (tested):	1850.2 MHz ~ 1909.8 MHz	1930.2 MHz ~ 1989.8 MHz
PCS 850 (tested):	824.2 MHz ~ 848.8 MHz	869.2 MHz ~ 893.8 MHz
DCS 1800	1710 MHz ~ 1785 MHz	1805 MHz ~ 1880 MHz
GSM 900	880 MHz ~ 915 MHz	925 MHz ~ 960 MHz
FDD I	1922.4 MHz ~ 1977.6 MHz	2112.4 MHz ~ 2167.6 MHz
FDD II (tested)	1852.4 MHz ~ 1907.6 MHz	1932.4 MHz ~ 1987.6 MHz
FDD V (tested)	826.4 MHz ~ 846.6 MHz	871.4 MHz ~ 891.6 MHz
WLAN 2450 (tested)	2402 MHz ~ 2467 MHz	
Power class :	1, tested with power level 0 (1900 MHz band) 4, tested with power level 5 ( 850 MHz band) 3; (FDD II band); (FDD V)	
measured output power (conducted):	850 MHz band: 33.9 dBm (GMSK); 28.3 dBm (8-PSK) 1900 MHz band: 30.2dBm (GMSK); 25.9 dBm (8-PSK) FDD II band: 21.83 dBm; FDD V: 23.9 dBm (average max.)	
test channels (low-mid-high) :	128-190-251 (850 MHz); 512-661-810 (1900 MHz) 9262-9400-9538 (FDD II);4132-4182-4233 (FDD V) 1-6-11 (WLAN 2450)	
hardware version :	AP1	
software version :	R1CA016 / s_atp_0_0_68Cc (for WLAN)	
antenna type :	integrated antenna	
accessories/body-worn configurations:	stereo headset	
battery options :	Li-Polymer 1200mAh / 3.7V	

**1.6 Test specification(s)**

**Supplement C (Edition 01-01) to OET Bulletin 65 (Edition 97-01)**

**IEEE 1528-2003 (April 21, 2003)**

**RSS-102: Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands (Issue 2 of November 2005))**

**Canada’s Safety Code 6: Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz (99-EHD-237)**

**IEEE Std C95.3 – 1991, IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields – RF and Microwave.**

**IEEE Std C95.1 – 1999, IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz – 300 GHz.**

**1.6.1 RF exposure limits**

<b>Human Exposure</b>	<b>Uncontrolled Environment General Population</b>	<b>Controlled Environment Occupational</b>
<b>Spatial Peak SAR*</b> (Brain)	<b>1.60 mW/g</b>	8.00 mW/g
<b>Spatial Average SAR**</b> (Whole Body)	0.08 mW/g	0.40 mW/g
<b>Spatial Peak SAR***</b> (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).

## 2 Technical test

### 2.1 Summary of test results

No deviations from the technical specification(s) were ascertained in the course of the tests performed.	<input checked="" type="checkbox"/>
The deviations as specified in 2.5 were ascertained in the course of the tests performed.	<input type="checkbox"/>

### 2.2 Test environment

General Environment conditions in the test area are as follows:

Ambient temperature: 20°C – 24°C  
 Tissue simulating liquid: 20°C – 24°C  
 Humidity: 40% – 50%

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

### 2.3 Measurement and test set-up

The measurement system is described in chapter 2.4.

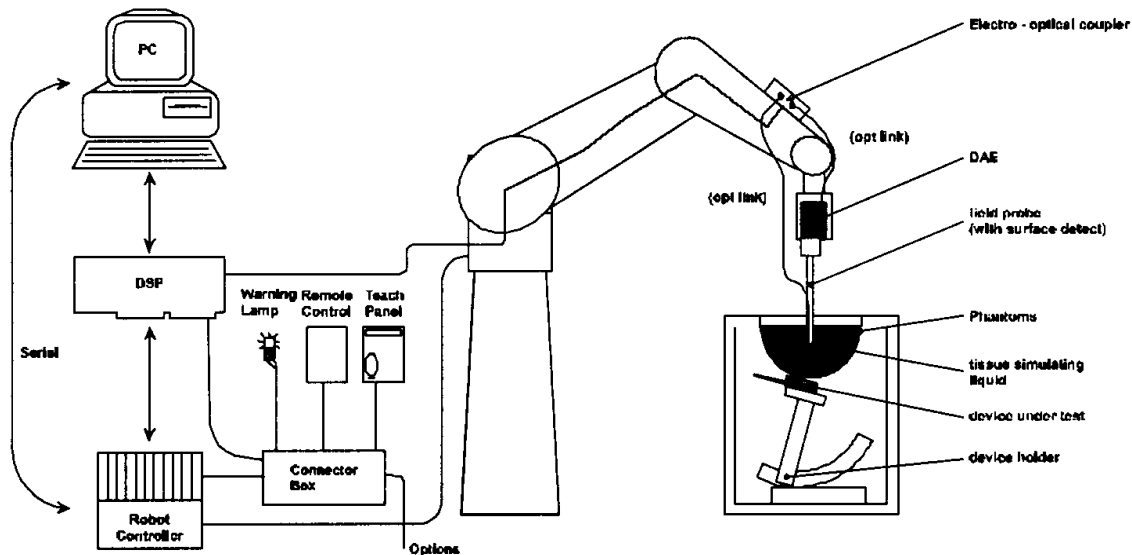
The test setup for the system validation can be found in chapter 2.4.14.

A description of positioning and test signal control can be found in chapter 2.5 together with the test results.



## 2.4 Measurement system

### 2.4.1 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 2000
- 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.

**2.4.2 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.

**2.4.3 Probe description**

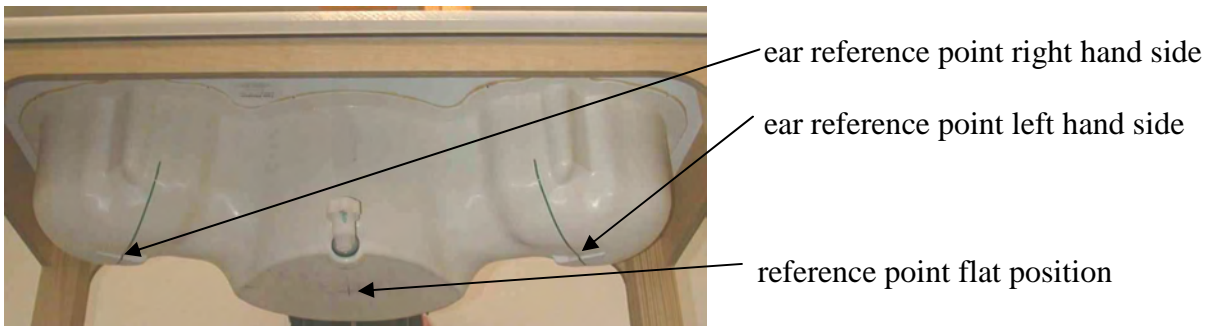
Isotropic E-Field Probe ET3DV6 for Dosimetric Measurements

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

**2.4.4 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.



**2.4.5 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.

#### 2.4.6 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 chapter 1.6.) are shown in table form in chapter 2.5.
- 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.

### 2.4.7 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.

## 2.4.8 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	Norm <sub>i</sub> , a <sub>i0</sub> , a <sub>i1</sub> , a <sub>i2</sub>
	- Conversion factor	ConvF <sub>i</sub>
	- Diode compression point	Dcpi
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<sub>i</sub> = 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

**2.4.9 Test equipment utilized**

This table gives a complete overview of the SAR measurement equipment  
 Devices used during the test described in chapter 2.5. are marked

	Manufacturer	Device	Type	Serial number	Date of last calibration )*
<input checked="" type="checkbox"/>	Schmid & Partner Engineering AG	Dosimetric E-Field Probe	ET3DV6	1558	August 21, 2009
<input type="checkbox"/>	Schmid & Partner Engineering AG	Dosimetric E-Field Probe	ET3DV6	1559	January 14, 2009
<input checked="" type="checkbox"/>	Schmid & Partner Engineering AG	900 MHz System Validation Dipole	D900V2	102	August 17, 2009
<input type="checkbox"/>	Schmid & Partner Engineering AG	1800 MHz System Validation Dipole	D1800V2	287	August 18 2009
<input checked="" type="checkbox"/>	Schmid & Partner Engineering AG	1900 MHz System Validation Dipole	D1900V2	5d009	August 18, 2009
<input checked="" type="checkbox"/>	Schmid & Partner Engineering AG	2450 MHz System Validation Dipole	D2450V2	710	August 17, 2009
<input checked="" type="checkbox"/>	Schmid & Partner Engineering AG	Data acquisition electronics	DAE3V1	413	January 8, 2009
<input type="checkbox"/>	Schmid & Partner Engineering AG	Data acquisition electronics	DAE3V1	477	May 14, 2009
<input checked="" type="checkbox"/>	Schmid & Partner Engineering AG	Software	DASY 4 V4.5	---	N/A
<input checked="" type="checkbox"/>	Schmid & Partner Engineering AG	Phantom	SAM	---	N/A
<input checked="" type="checkbox"/>	Rohde & Schwarz	Universal Radio Communication Tester	CMU 200	106826	January 15, 2009
<input checked="" type="checkbox"/>	Hewlett Packard)*	Network Analyser 300 kHz to 6 GHz	8753C	2937U00269	January 9, 2009
<input checked="" type="checkbox"/>	Hewlett Packard)*	Network Analyser 300 kHz to 6 GHz	85047A	2936A00872	January 9, 2009
<input checked="" type="checkbox"/>	Hewlett Packard	Dielectric Probe Kit	85070C	US99360146	N/A
<input checked="" type="checkbox"/>	Hewlett Packard	Signal Generator	8665A	2833A00112	January 8, 2009
<input checked="" type="checkbox"/>	Amplifier Reasearch	Amplifier	25S1G4 (25 Watt)	20452	N/A
<input checked="" type="checkbox"/>	Rohde & Schwarz	Power Meter	NRP	101367	January 9, 2009
<input checked="" type="checkbox"/>	Rohde & Schwarz	Power Meter Sensor	NRP Z22	100227	January 9, 2009
<input checked="" type="checkbox"/>	Rohde & Schwarz	Power Meter Sensor	NRP Z22	100234	January 9, 2009

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



**2.4.10 Tissue simulating liquids: dielectric properties**

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

(liquids used for tests described in chapter 2.5. are marked with ☒) :

Ingredients (% of weight)	Frequency (MHz)					
	<input type="checkbox"/> 450	<input checked="" type="checkbox"/> 835	<input type="checkbox"/> 900	<input type="checkbox"/> 1800	<input checked="" type="checkbox"/> 1900	<input checked="" type="checkbox"/> 2450
frequency band	<input type="checkbox"/> 450	<input checked="" type="checkbox"/> 835	<input type="checkbox"/> 900	<input type="checkbox"/> 1800	<input checked="" type="checkbox"/> 1900	<input checked="" type="checkbox"/> 2450
Tissue Type	Head	Head	Head	Head	Head	Head
Water	38.56	41.45	40.92	52.64	54.9	62.7
Salt (NaCl)	3.95	1.45	1.48	0.36	0.18	0.5
Sugar	56.32	56.0	56.5	0.0	0.0	0.0
HEC	0.98	1.0	1.0	0.0	0.0	0.0
Bactericide	0.19	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 2: Head tissue dielectric properties

Ingredients (% of weight)	Frequency (MHz)					
	<input type="checkbox"/> 450	<input checked="" type="checkbox"/> 835	<input type="checkbox"/> 900	<input type="checkbox"/> 1800	<input checked="" type="checkbox"/> 1900	<input checked="" type="checkbox"/> 2450
frequency band	<input type="checkbox"/> 450	<input checked="" type="checkbox"/> 835	<input type="checkbox"/> 900	<input type="checkbox"/> 1800	<input checked="" type="checkbox"/> 1900	<input checked="" type="checkbox"/> 2450
Tissue Type	Body	Body	Body	Body	Body	Body
Water	51.16	52.4	56.0	69.91	69.91	73.2
Salt (NaCl)	1.49	1.40	0.76	0.13	0.13	0.04
Sugar	46.78	45.0	41.76	0.0	0.0	0.0
HEC	0.52	1.0	1.21	0.0	0.0	0.0
Bactericide	0.05	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 3: 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.

**2.4.11 Tissue simulating liquids: parameters**

Used Target Frequency [MHz]	Target Head Tissue		Measured Head Tissue		Measured Date
	Permittivity	Conductivity [S/m]	Permittivity	Conductivity [S/m]	
835	41.5	0.90	41.2	0.89	2009-11-12
900	41.5	0.97	40.4	0.95	2009-11-12
1900	40.0	1.40	40.3	1.41	2009-11-13
2450	39.2	1.80	39.1	1.87	2009-12-07

Table 4: Parameter of the head tissue simulating liquid

Used Target Frequency [MHz]	Target Body Tissue		Measured Body Tissue		Measured Date
	Permittivity	Conductivity [S/m]	Permittivity	Conductivity [S/m]	
835	55.2	0.97	54.0	0.96	2009-11-17
900	55.0	1.05	53.3	1.03	2009-11-17
1900	53.3	1.52	52.8	1.54	2009-11-16
2450	52.7	1.95	51.9	1.97	2009-12-08

Table 5: Parameter of the body tissue simulating liquid

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

**2.4.12 Measurement uncertainty evaluation for SAR test**

The overall combined measurement uncertainty of the measurement system is  $\pm 10,3\%$  ( $K=1$ ).

The expanded uncertainty ( $k=2$ ) is assessed to be  $\pm 20.6\%$

This measurement uncertainty budget is suggested by IEEE P1528 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	$\pm 4.8\%$	Normal	1	1	1	$\pm 4.8\%$	$\pm 4.8\%$	$\infty$
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>						$\pm 10.3\%$	$\pm 10.0\%$	330
<b>Expanded Std. Uncertainty</b>						$\pm 20.6\%$	$\pm 20.1\%$	

Table 6: Measurement uncertainties

**2.4.13 Measurement uncertainty evaluation for system validation**

The overall combined measurement uncertainty of the measurement system is  $\pm 8.4\%$  ( $K=1$ ).

The expanded uncertainty ( $k=2$ ) is assessed to be  $\pm 16.8\%$

This measurement uncertainty budget is suggested by IEEE P1528 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	$\pm 4.8\%$	Normal	1	1	1	$\pm 4.8\%$	$\pm 4.8\%$	$\infty$
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 8.4\%</math></b>	<b><math>\pm 8.1\%</math></b>	
<b>Expanded Std. Uncertainty</b>						<b><math>\pm 16.8\%</math></b>	<b><math>\pm 16.2\%</math></b>	

Table 7: Measurement uncertainties

**2.4.14 System validation**

The system validation is performed for verifying the accuracy of the complete measurement system and performance of the software. The system validation is performed with tissue equivalent material according to IEEE P1528 (described above). The following table shows validation results for all frequency bands and tissue liquids used during the tests of the test item described in chapter 1.5. (graphic plot(s) see annex 1).

<b>Validation Kit</b>	<b>Frequency</b>	<b>Target Peak SAR (1000 mW) (+/- 10%)</b>	<b>Target SAR<sub>1g</sub> (1000 mW) (+/- 10%)</b>	<b>Measured Peak SAR (1000 mW)</b>	<b>Measured SAR<sub>1g</sub> (1000 mW)</b>	<b>Measured date</b>
<b>D900V2 S/N: 102</b>	<b>900 MHz head</b>	<b>16.7 mW/g</b>	<b>11.3 mW/g</b>	<b>16.8 mW/g</b>	<b>11.1 mW/g</b>	<b>2009-11-12</b>
<b>D900V2 S/N: 102</b>	<b>900 MHz body</b>	<b>16.8 mW/g</b>	<b>11.3 mW/g</b>	<b>15.9 mW/g</b>	<b>11.1 mW/g</b>	<b>2009-11-17</b>
<b>D1900V2 S/N: 5d009</b>	<b>1900 MHz head</b>	<b>72.4 mW/g</b>	<b>39.7 mW/g</b>	<b>70.2 mW/g</b>	<b>40.1 mW/g</b>	<b>2009-11-13</b>
<b>D1900V2 S/N: 5d009</b>	<b>1900 MHz head</b>	<b>72.4 mW/g</b>	<b>39.7 mW/g</b>	<b>70.2 mW/g</b>	<b>40.5 mW/g</b>	<b>2009-11-15</b>
<b>D1900V2 S/N: 5d009</b>	<b>1900 MHz body</b>	<b>68.1 mW/g</b>	<b>40.1 mW/g</b>	<b>62.4 mW/g</b>	<b>38.2 mW/g</b>	<b>2009-11-16</b>
<b>D2450V2 S/N: 710</b>	<b>2450 MHz head</b>	<b>108.8 mW/g</b>	<b>52.7 mW/g</b>	<b>117.7 mW/g</b>	<b>55.8 mW/g</b>	<b>2009-12-07</b>
<b>D2450V2 S/N: 710</b>	<b>2450 MHz body</b>	<b>109.6 mW/g</b>	<b>51.4 mW/g</b>	<b>118.8 mW/g</b>	<b>53.9 mW/g</b>	<b>2009-12-08</b>

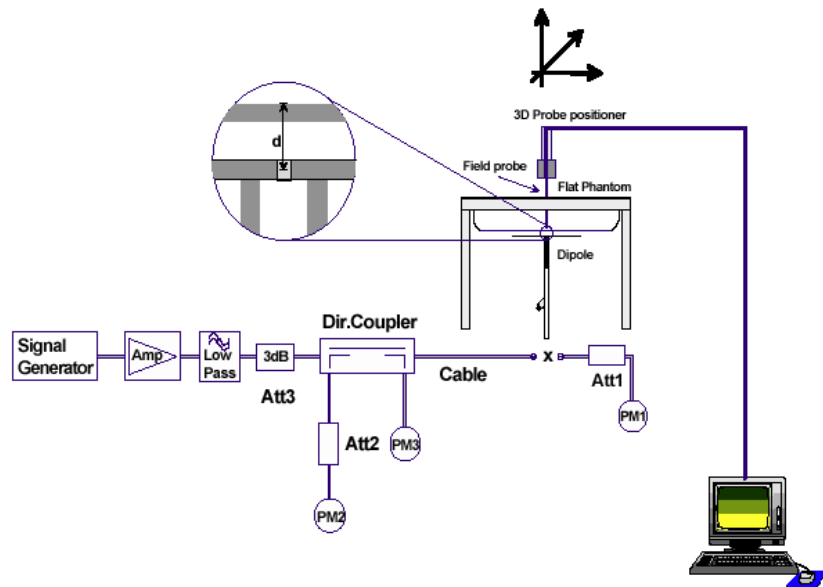
Table 8: Results system validation

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

**2.4.15 Validation procedure**

The validation 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 validation 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).

Validation 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.



**2.5 Test Results**

**2.5.1 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 :

No. of timeslots	1	2	3	4
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 :

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

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

**2.5.2 Conducted power measurements GSM 850 MHz**

Channel / frequency	mode	timeslots	slotted avg. power	timebased avg. power (calculated)
128 / 824.2 MHz	GPRS CS1	2	32.0 dBm	<b>26.0 dBm</b>
190 / 836.6 MHz	GPRS CS1	2	32.0 dBm	<b>26.0 dBm</b>
251 / 848.0 MHz	GPRS CS1	2	32.0 dBm	<b>26.0 dBm</b>
128 / 824.2 MHz	GPRS CS1	1	33.9 dBm	24.9 dBm
190 / 836.6 MHz	GPRS CS1	1	33.7 dBm	24.7 dBm
251 / 848.0 MHz	GPRS CS1	1	33.7 dBm	24.7 dBm
128 / 824.2 MHz	EDGE MCS8	2	28.3 dBm	22.3 dBm
190 / 836.6 MHz	EDGE MCS8	2	28.2 dBm	22.2 dBm
251 / 848.0 MHz	EDGE MCS8	2	28.0 dBm	22.0 dBm

Table 9: Test results conducted power measurement GSM 850 MHz

**2.5.3 Conducted power measurements GSM 1900 MHz**

Channel / frequency	mode	timeslots	slotted avg. power	timebased avg. power (calculated)
512 / 1850.2 MHz	GPRS CS1	2	28.1 dBm	<b>22.1 dBm</b>
661 / 1880.0 MHz	GPRS CS1	2	27.9 dBm	21.9 dBm
810 / 1909.8 MHz	GPRS CS1	2	27.2 dBm	21.2 dBm
512 / 1850.2 MHz	GPRS CS1	1	30.2 dBm	21.2 dBm
661 / 1880.0 MHz	GPRS CS1	1	30.0 dBm	21.0 dBm
810 / 1909.8 MHz	GPRS CS1	1	29.4 dBm	20.4 dBm
512 / 1850.2 MHz	EDGE MCS8	2	25.9 dBm	19.9 dBm
661 / 1880.0 MHz	EDGE MCS8	2	25.4 dBm	19.4 dBm
810 / 1909.8 MHz	EDGE MCS8	2	25.1 dBm	19.1 dBm

Table 10: Test results conducted power measurement GSM 1900 MHz

**2.5.4 Justification of SAR measurements in GSM mode**

SAR measurements were performed in GPRS mode with 2 active timeslots. Power measurements above show a reduction of 2 - 3 dB compared to a configuration with 1 active timeslot so that timebased average power is kept nearly on the same level. Therefore an additional delta measurement was performed with 1 timeslot to clarify this circumstance.



**2.5.5 Conducted power measurements WCDMA FDD V (850 MHz)**

<b>Max. RMS output power 850 MHz (FDD V) / dBm</b>			
mode	Channel / frequency		
	4132 / 826.4 MHz	4182 / 836.6 MHz	4233 / 846.6 MHz
AMR 4.75	24.02	23.87	23.94
AMR 5.15	24.03	23.89	23.93
AMR 5.9	24.05	23.90	23.91
AMR 6.7	24.02	23.88	23.93
AMR 7.4	24.02	23.83	23.87
AMR 7,95	24.01	23.86	23.90
AMR 10.2	24.00	23.80	23.92
AMR 12.2	23.99	23.77	23.89
<b>RMC 12.2 kbit/s</b>	<b>24.10</b>	<b>23.90</b>	<b>24.00</b>
RMC 64 kbit/s	24.06	23.86	23.96
RMC 144 kbit/s	24.04	23.85	23.96
RMC 384 kbit/s	24.05	23.86	23.97
<b>HSDPA Sub test 1</b>	<b>24.06</b>	<b>23.92</b>	<b>24.00</b>
HSDPA Sub test 2	22.03	22.02	22.03
HSDPA Sub test 3	20.35	20.48	20.54
HSDPA Sub test 4	20.30	20.09	20.19
HSUPA Sub test 1	23.65	23.52	23.60
HSUPA Sub test 2	20.94	20.75	20.87
HSUPA Sub test 3	22.57	22.32	22.42
HSUPA Sub test 4	21.69	21.52	21.58
<b>HSUPA Sub test 5</b>	<b>23.71</b>	<b>23.56</b>	<b>23.62</b>

Table 11: Test results conducted power measurement WCDMA 850

**2.5.6 Conducted power measurements WCDMA FDD II (1900 MHz)**

<b>Max. RMS output power 1900 MHz (FDD II) / dBm</b>			
mode	Channel / frequency		
	9262 / 1852.4 MHz	9400 / 1880.0 MHz	9538 / 1907.6 MHz
AMR 4.75	21.96	21.73	21.59
AMR 5.15	21.98	21.75	21.62
AMR 5.9	21.95	21.77	21.61
AMR 6.7	21.97	21.74	21.53
AMR 7.4	21.99	21.81	21.57
AMR 7,95	21.97	21.79	21.59
AMR 10.2	22.01	21.77	21.63
AMR 12.2	21.96	21.79	21.60
<b>RMC 12.2 kbit/s</b>	<b>22.03</b>	<b>21.83</b>	<b>21.77</b>
RMC 64 kbit/s	21.99	21.73	21.64
RMC 144 kbit/s	21.97	21.72	21.62
RMC 384 kbit/s	21.93	21.69	21.58
<b>HSDPA Sub test 1</b>	<b>21.97</b>	<b>21.71</b>	<b>21.61</b>
HSDPA Sub test 2	20.01	19.73	19.88
HSDPA Sub test 3	18.42	18.27	18.45
HSDPA Sub test 4	18.35	18.16	18.14
HSUPA Sub test 1	21.44	21.53	21.48
HSUPA Sub test 2	19.28	19.07	19.02
HSUPA Sub test 3	20.67	20.50	20.43
HSUPA Sub test 4	19.73	19.53	19.55
<b>HSUPA Sub test 5</b>	<b>21.74</b>	<b>21.52</b>	<b>21.44</b>

Table 12: 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.

**2.5.7 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 :

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

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

b) HSDPA

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

Sub-test	$\beta_c$	$\beta_d$	$\beta_d$ (SF)	$\beta_c/\beta_d$	$\beta_{hs}^{(1)}$	CM(dB) <sup>(2)</sup>
1	2/15	15/15	64	2/15	4/15	0.0
2	12/15 <sup>(3)</sup>	15/15 <sup>(3)</sup>	64	12/15 <sup>(3)</sup>	24/15	1.0
3	15/15	8/15	64	15/8	30/15	1.5
4	15/15	4/15	64	15/4	30/15	1.5

Note 1:  $\Delta_{ACK}, \Delta_{NACK}, \Delta_{CQI} = 8 \iff A_{hs} = \beta_{hs}/\beta_c = 30/15 \iff \beta_{hs} = 30/15 * \beta_c$

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

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

Table 13: 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 14: 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	$\beta_c$	$\beta_a$	$\beta_a$ (SF)	$\beta_c/\beta_a$	$\beta_{hs}^{(1)}$	$\beta_{ec}$	$\beta_{ed}$	$\beta_{ec}$ (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  $\beta_c/\beta_a = 12/15, \beta_{hs}/\beta_c = 24/15$ . 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  $\beta_c/\beta_a$  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  $\beta_a = 15/15$   
 Note 4 : For subtest 5 the  $\beta_c/\beta_a$  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  $\beta_a = 15/15$   
 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 15: Subtests for UMTS Release 6 HSUPA

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

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

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

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

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

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

Sub-test	3	
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)

Sub-test	Absolute Grant Value (AG Index)
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.

**2.5.8 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.

**2.5.9 Conducted power measurements WLAN 2450 MHz**

Timebased averaged power	low channel	mid channel	high channel
Conducted power [dBm] (DSSS)	17.6	<b>18.33</b>	18.27
Conducted power [dBm] (OFDM)	13.64	<b>13.86</b>	13.83

Table 16: Test results conducted power measurement WLAN 2450 MHz  
(see also Part 15.247 test report no.: 1-1065-66-6/09)

**2.5.10 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.

important abbreviations :

SPLSR : Antenna pair SAR to Peak Location Separation Ratio  $(SAR_x + SAR_y)/d_{xy}$   
 $P_{ref}$  : 12 mW at 2.4 GHz

a) head position

Tx No	Communcation system and frequency band	$P_{avg}$ (mW)	single SAR (W/kg) (see ch. 2.6)	remarks
1a	GSM 850 MHz	250	0.883	routine evaluation
1b	GSM 1900 MHz	125	1.23	routine evaluation
1c	FDD V 850 MHz	250	0.753	routine evaluation
1d	FDD II 1900 MHz	250	1.46	routine evaluation
2	WLAN 2450 MHz	100	0.990	$P_{2a} > P_{ref}$
3	Bluetooth 2450 MHz	5	$=0$ )**	$P_{2b} < P_{ref}$
Sum of all 1g-SAR values			n/a	

Table 17: Communication systems and SAR values in head position

antenna pair (x,y)	peak SAR distance $d_{xy}$ (cm)	$L_{xy}$ (cm)	SPLSR <sub>xy</sub>	sim.-Tx SAR	remarks
(1a,2)	8.2 cm	n/a	0.228	N	$SPLSR_{1a2} < 0.3$
(1b,2)	8.3 cm	n/a	0.267	N	$SPLSR_{1b2} < 0.3$
(1c,2)	8.2 cm	n/a	0.213	N	$SPLSR_{1c2} < 0.3$
(1d,2)	8.3 cm	n/a	0.295	N	$SPLSR_{1d2} < 0.3$

Table 18: Antenna distances and SPLSR evaluation in head position

a) body position

Tx No	Communcation system and frequency band	$P_{avg}$ (mW)	single SAR (W/kg) (see ch. 2.6)	remarks
1a	GSM 850 MHz	250	0.508	routine evaluation
1b	GSM 1900 MHz	125	0.564	routine evaluation
1c	FDD V 850 MHz	250	0.352	routine evaluation
1d	FDD II 1900 MHz	250	0.458	routine evaluation
2	WLAN 2450 MHz	100	0.123	$P_{2a} > P_{ref}$
3	Bluetooth 2450 MHz	5	$:=0$ )**	$P_{2b} < P_{ref}$
Sum of all 1g-SAR values			n/a	

Table 19: Communication systems and SAR values in body position

antenna pair (x,y)	peak SAR distance $d_{xy}$ (cm)	$L_{xy}$ (cm)	SPLSR <sub>xy</sub>	sim.-Tx SAR	remarks
(1a,2)	8.6 cm	n/a	0.073	N	$SPLSR_{1a2} < 0.3$
(1b,2)	8.7 cm	n/a	0.079	N	$SPLSR_{1b2} < 0.3$
(1c,2)	8.6 cm	n/a	0.055	N	$SPLSR_{1c2} < 0.3$
(1d,2)	8.7 cm	n/a	0.067	N	$SPLSR_{1d2} < 0.3$

Table 20: Antenna distances and SPLSR evaluation in body position



**2.6 Test results (Head and Body SAR)**

The table contains the measured SAR values averaged over a mass of 1 g					
Channel / frequency	Position	Left hand position	Right hand position	Limit	Liquid temperature
128 / 824.2 MHz	cheek	0.533 W/kg	0.542 W/kg	1.6 W/kg	22.5/22.3 °C
190 / 836.6 MHz	cheek	0.749 W/kg	0.766 W/kg	1.6 W/kg	22.5/22.3 °C
251 / 848.8 MHz	cheek	<b>0.883 W/kg</b>	0.871 W/kg	1.6 W/kg	22.5/22.3 °C
128 / 824.2 MHz	tilted 15°	0.247 W/kg	0.238 W/kg	1.6 W/kg	22.5/22.3 °C
190 / 836.6 MHz	tilted 15°	0.342 W/kg	0.352 W/kg	1.6 W/kg	22.5/22.3 °C
251 / 848.8 MHz	tilted 15°	0.413 W/kg	0.419 W/kg	1.6 W/kg	22.5/22.3 °C

Table 21: Test results (Head SAR GSM 850 MHz)

The table contains the measured SAR values averaged over a mass of 1 g				
Channel / frequency	Position	Body worn	Limit	Liquid temperature
128 / 824.2 MHz	front	0.403 W/kg	1.6 W/kg	21.8 °C
190 / 836.6 MHz	front	0.508 W/kg	1.6 W/kg	21.8 °C
251 / 848.8 MHz	front	0.482 W/kg	1.6 W/kg	21.8 °C
128 / 824.2 MHz	rear	0.387 W/kg	1.6 W/kg	21.8 °C
190 / 836.6 MHz	rear	<b>0.508 W/kg</b>	1.6 W/kg	21.8 °C
251 / 848.8 MHz	rear	0.493 W/kg	1.6 W/kg	21.8 °C
190 / 836.6 MHz	rear ITS	0.272 W/kg	1.6 W/kg	21.8 °C

Table 22: Test results (Body SAR GSM 850 MHz)

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

Tests in body position were performed with 15 mm air gap between DUT and SAM to simulate the use of a non-metallic belt-clip or holster.

The addition body test was performed at worst case with 1 time slot in uplink in accordance with Sony Ericsson.

The table contains the measured SAR values averaged over a mass of 1 g

Channel / frequency	Position	Left hand position	Right hand position	Limit	Liquid temperature
512 / 1850.2 MHz	cheek	<b>1.230 W/kg</b>	0.761 W/kg	1.6 W/kg	22.2/22.0 °C
661 / 1880.0 MHz	cheek	1.170 W/kg	0.751 W/kg	1.6 W/kg	22.2/22.0 °C
810 / 1909.8 MHz	cheek	1.070 W/kg	0.637 W/kg	1.6 W/kg	22.2/22.0 °C
512 / 1850.2 MHz	tilted 15°	0.456 W/kg	0.404 W/kg	1.6 W/kg	22.2/22.0 °C
661 / 1880.0 MHz	tilted 15°	0.416 W/kg	0.402 W/kg	1.6 W/kg	22.2/22.0 °C
810 / 1909.8 MHz	tilted 15°	0.402 W/kg	0.370 W/kg	1.6 W/kg	22.2/22.0 °C

Table 23: Test results (Head SAR PCS 1900 MHz)

The table contains the measured SAR values averaged over a mass of 1 g

Channel / frequency	Position	Body worn	Limit	Liquid temperature
512 / 1850.2 MHz	front	0.399 W/kg	1.6 W/kg	21.8 °C
661 / 1880.0 MHz	front	0.421 W/kg	1.6 W/kg	21.8 °C
810 / 1909.8 MHz	front	0.357 W/kg	1.6 W/kg	21.8 °C
512 / 1850.2 MHz	rear	0.512 W/kg	1.6 W/kg	21.8 °C
661 / 1880.0 MHz	rear	<b>0.564 W/kg</b>	1.6 W/kg	21.8 °C
810 / 1909.8 MHz	rear	0.467 W/kg	1.6 W/kg	21.8 °C
661 / 1880.0 MHz	rear 1TS	0.381 W/kg	1.6 W/kg	21.8 °C

Table 24: Test results (Body SAR PCS 1900 MHz)

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

Tests in body position were performed with 15 mm air gap between DUT and SAM to simulate the use of a non-metallic belt-clip or holster.

The addition body test was performed at worst case with 1 time slot in uplink in accordance with Sony Ericsson.

The table contains the measured SAR values averaged over a mass of 1 g

Channel / frequency	Position	Left hand position	Right hand position	Limit	Liquid temperature
4133 / 824.2 MHz	cheek	0.474 W/kg	0.601 W/kg	1.6 W/kg	22.1/22.2 °C
4182 / 836.6 MHz	cheek	0.556 W/kg	0.684 W/kg	1.6 W/kg	22.1/22.2 °C
4233 / 848.8 MHz	cheek	0.719 W/kg	<b>0.753 W/kg</b>	1.6 W/kg	22.1/22.2 °C
4133 / 824.2 MHz	tilted 15°	0.242 W/kg	0.236 W/kg	1.6 W/kg	22.1/22.2 °C
4182 / 836.6 MHz	tilted 15°	0.278 W/kg	0.280 W/kg	1.6 W/kg	22.1/22.2 °C
4233 / 848.8 MHz	tilted 15°	0.334 W/kg	0.365 W/kg	1.6 W/kg	22.1/22.2 °C

Table 25: Test results (Head SAR WCDMA FDD V 850 MHz)

The table contains the measured SAR values averaged over a mass of 1 g

Channel / frequency	Position	Body worn	Limit	Liquid temperature
4133 / 824.2 MHz	front	0.221 W/kg	1.6 W/kg	21.8 °C
4182 / 836.6 MHz	front	0.253 W/kg	1.6 W/kg	21.8 °C
4233 / 848.8 MHz	front	0.315 W/kg	1.6 W/kg	21.8 °C
4133 / 824.2 MHz	rear	0.233 W/kg	1.6 W/kg	21.8 °C
4182 / 836.6 MHz	rear	0.279 W/kg	1.6 W/kg	21.8 °C
4233 / 848.8 MHz	rear	<b>0.352 W/kg</b>	1.6 W/kg	21.8 °C

Table 26: Test results (Body SAR WCDMA FDD V 850 MHz)

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

Tests in body position were performed with 15 mm air gap between DUT and SAM to simulate the use of a non-metallic belt-clip or holster.

The table contains the measured SAR values averaged over a mass of 1 g					
Channel / frequency	Position	Left hand position	Right hand position	Limit	Liquid temperature
9262 / 1850.2 MHz	cheek	<b>1.460 W/kg</b>	0.939 W/kg	1.6 W/kg	22.3/22.2 °C
9400 / 1880.0 MHz	cheek	1.440 W/kg	0.916 W/kg	1.6 W/kg	22.3/22.2 °C
9538 / 1909.8 MHz	cheek	1.400 W/kg	0.857 W/kg	1.6 W/kg	22.3/22.2 °C
9262 / 1850.2 MHz	tilted 15°	0.631 W/kg	0.631 W/kg	1.6 W/kg	22.3/22.2 °C
9400 / 1880.0 MHz	tilted 15°	0.618 W/kg	0.647 W/kg	1.6 W/kg	22.3/22.2 °C
9538 / 1909.8 MHz	tilted 15°	0.631 W/kg	0.663 W/kg	1.6 W/kg	22.3/22.2 °C

Table 27: Test results (Head SAR WCDMA FDD II 1900 MHz)

The table contains the measured SAR values averaged over a mass of 1 g				
Channel / frequency	Position	Body worn	Limit	Liquid temperature
9262 / 1850.2 MHz	front	0.401 W/kg	1.6 W/kg	21.8 °C
9400 / 1880.0 MHz	front	0.392 W/kg	1.6 W/kg	21.8 °C
9538 / 1909.8 MHz	front	0.398 W/kg	1.6 W/kg	21.8 °C
9262 / 1850.2 MHz	rear	<b>0.458 W/kg</b>	1.6 W/kg	21.8 °C
9400 / 1880.0 MHz	rear	0.456 W/kg	1.6 W/kg	21.8 °C
9538 / 1909.8 MHz	rear	0.445 W/kg	1.6 W/kg	21.8 °C

Table 28: Test results (Body SAR WCDMA FDD II 1900 MHz)

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

Tests in body position were performed with 15 mm air gap between DUT and SAM to simulate the use of a non-metallic belt-clip or holster.

The table contains the measured SAR values averaged over a mass of 1 g

Channel / frequency	Position	Left hand position	Right hand position	Limit	Liquid temperature
1 / 2412 MHz	cheek	<b>0.990 W/kg</b>	0.761 W/kg	1.6 W/kg	22.3 °C
6 / 2437 MHz	cheek	0.941 W/kg	0.831 W/kg	1.6 W/kg	22.3 °C
11 / 2462 MHz	cheek	0.924 W/kg	0.908 W/kg	1.6 W/kg	22.3 °C
1 / 2412 MHz	tilted 15°	0.927 W/kg	0.684 W/kg	1.6 W/kg	22.3 °C
6 / 2437 MHz	tilted 15°	0.922 W/kg	0.967 W/kg	1.6 W/kg	22.3 °C
11 / 2462 MHz	tilted 15°	0.988 W/kg	0.972 W/kg	1.6 W/kg	22.3 °C
1 / 2412 MHz	cheek 6Mbps	0.477 W/kg	--- W/kg	1.6 W/kg	22.3 °C

Table 29: Test results (Head SAR WLAN 2450 MHz)

The table contains the measured SAR values averaged over a mass of 1 g

channel / frequency	position	test condition		body worn	limit	liquid temperature
1 / 2412 MHz	front	DSSS	1 Mbps	0.108 W/kg	1.6 W/kg	22.7 °C
6 / 2437 MHz	front	DSSS	1 Mbps	<b>0.123 W/kg</b>	1.6 W/kg	22.7 °C
11 / 2462 MHz	front	DSSS	1 Mbps	0.097 W/kg	1.6 W/kg	22.7 °C
1 / 2412 MHz	rear	DSSS	1 Mbps	0.057 W/kg	1.6 W/kg	22.7 °C
6 / 2437 MHz	rear	DSSS	1 Mbps	0.072 W/kg	1.6 W/kg	22.7 °C
11 / 2462 MHz	rear	DSSS	1 Mbps	0.059 W/kg	1.6 W/kg	22.7 °C
6 / 2437 MHz	front	OFDM	6 Mbps	0.048 W/kg	1.6 W/kg	22.7 °C

Table 30: Test results (Body SAR WLAN 2450 MHz)

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

Tests in body position were performed with 15 mm air gap between DUT and SAM to simulate the use of a non-metallic belt-clip or holster.

### 2.6.1 General description of test procedures

The DUT is tested using a CMU 200 communications tester as controller unit to set test channels and maximum output power to the DUT, as well as for measuring the conducted peak power.

Test positions as described in the tables above are in accordance with the specified test standard.

Tests in body position are performed with the maximum number of timeslots in uplink.

Tests in head position are performed in voice mode with 1 timeslot unless GPRS/EGPRS function allows parallel voice and data traffic on 2 or more timeslots (see chapter 1.5 for details).

UMTS mode was tested with Reference Measurement Channel and power control bits set to 'All 1' to get maximum output power. WLAN was tested in 802.11b mode with 1 MBit/s with one delta measurement in 802.11g mode on worst case position. DUT was in test mode with maximum power and duty cycle.

**Annex 1 System performance verification**

Date/Time: 2009-11-12 09:06:26 Date/Time: 2009-11-12 09:10:06

**System Performance Check-D900-850 head 2009-11-12**

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

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

Medium: HSL850 Medium parameters used:  $f = 900 \text{ MHz}$ ;  $\sigma = 0.95 \text{ mho/m}$ ;  $\epsilon_r = 40.4$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.84, 5.84, 5.84); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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

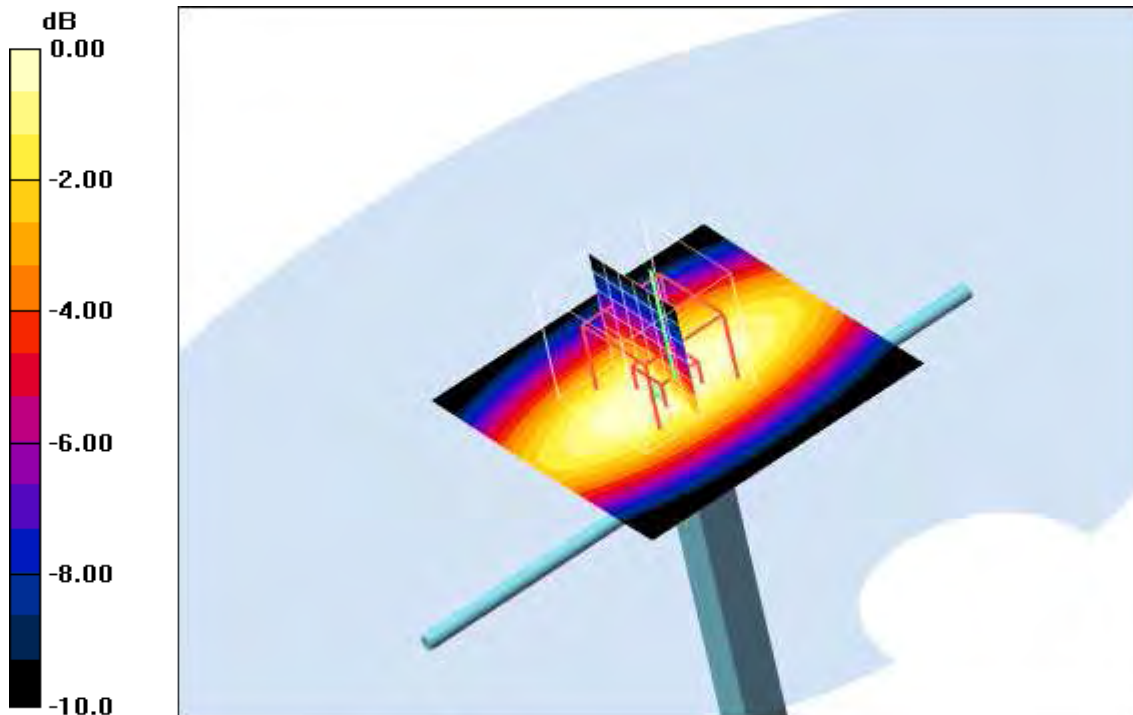
**d=15mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 116.5 V/m; Power Drift = -0.059 dB

Peak SAR (extrapolated) = 16.8 W/kg

**SAR(1 g) = 11.1 mW/g; SAR(10 g) = 7.14 mW/g**

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



0 dB = 12.0mW/g

**Additional information:**

ambient temperature: 22.8°C; liquid temperature: 22.5°C

Date/Time: 2009-11-17 11:59:40 Date/Time: 2009-11-17 12:03:15

**System Performance Check-D900-850 body 2009-11-17**

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

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

Medium: M850 Medium parameters used:  $f = 900 \text{ MHz}$ ;  $\sigma = 1.03 \text{ mho/m}$ ;  $\epsilon_r = 53.3$ ;  $\rho = 1000 \text{ kg/m}^3$

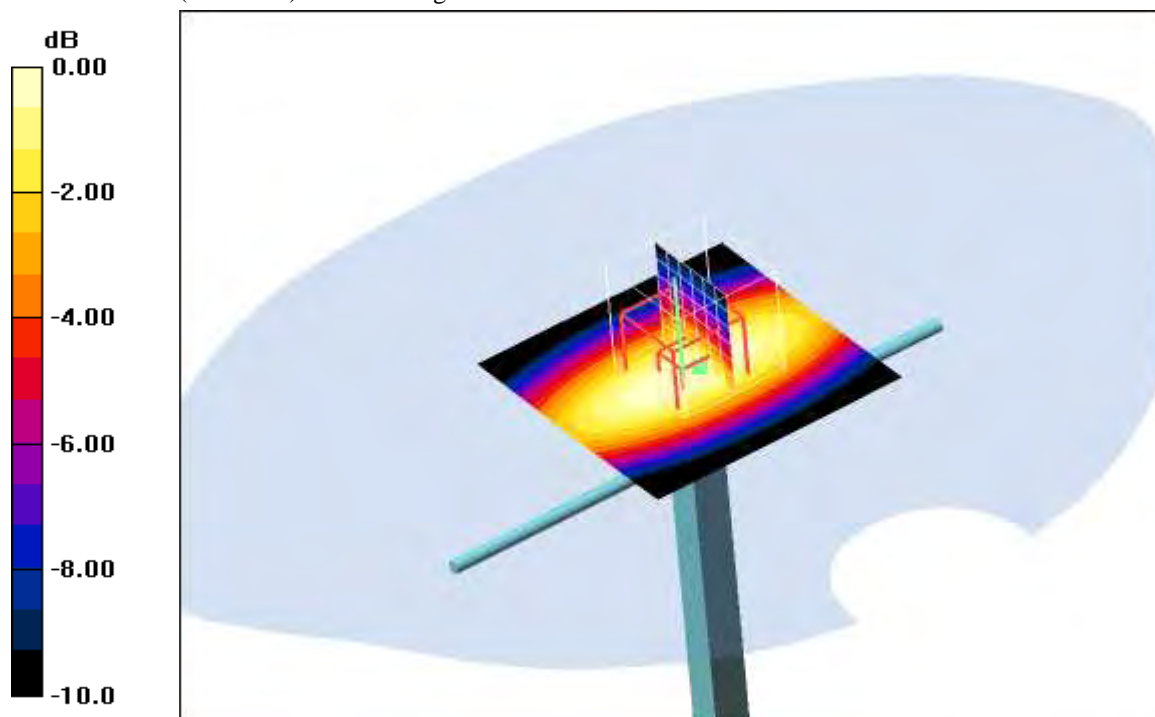
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.63, 5.63, 5.63); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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) = 11.8 mW/g

**d=15mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 117.2 V/m; Power Drift = -0.023 dB  
 Peak SAR (extrapolated) = 15.9 W/kg  
**SAR(1 g) = 11.1 mW/g; SAR(10 g) = 7.28 mW/g**  
 Maximum value of SAR (measured) = 12.1 mW/g



0 dB = 12.1mW/g

**Additional information:**

ambient temperature: 23.3°C; liquid temperature: 21.8°C

Date/Time: 2009-11-13 09:37:20 Date/Time: 2009-11-13 09:41:16

**System Performance Check-D1900 head 2009-11-13**

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

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

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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) = 54.2 mW/g

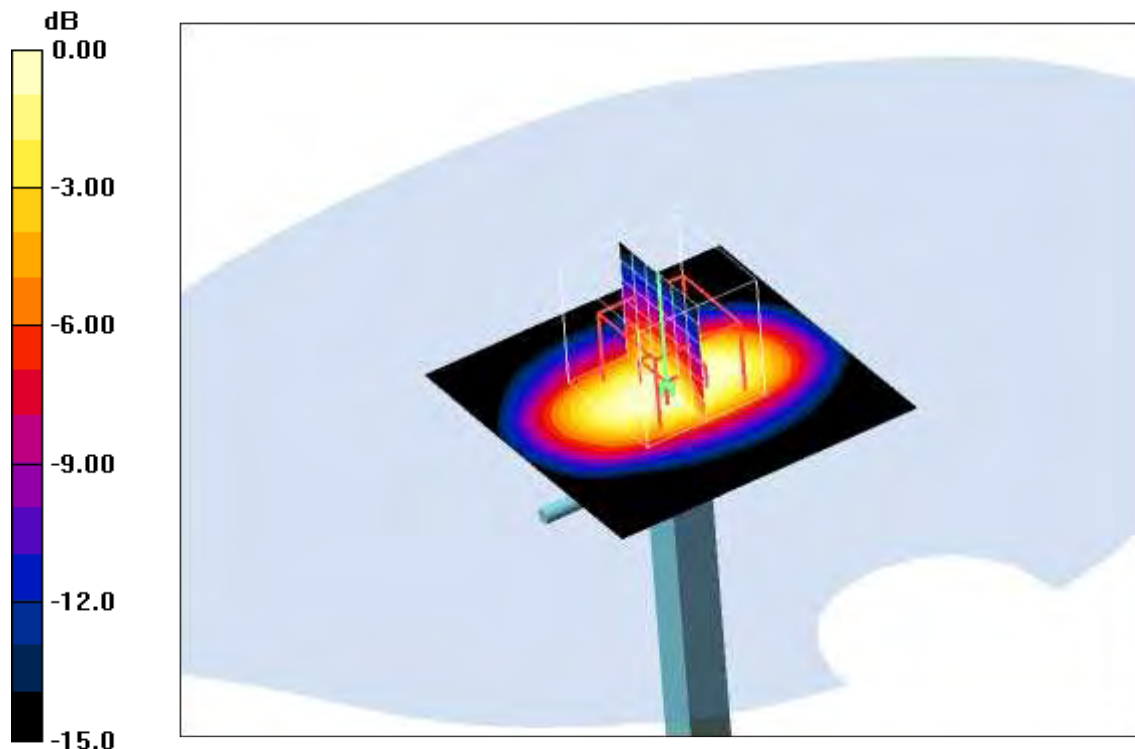
**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 190.8 V/m; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 70.2 W/kg

**SAR(1 g) = 40.1 mW/g; SAR(10 g) = 21.1 mW/g**

Maximum value of SAR (measured) = 45.1 mW/g



0 dB = 45.1mW/g

**Additional information:**

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



Date/Time: 2009-11-15 12:36:20 Date/Time: 2009-11-15 12:39:55

**System Performance Check-D1900 head 2009-11-15**

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

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

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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) = 55.0 mW/g

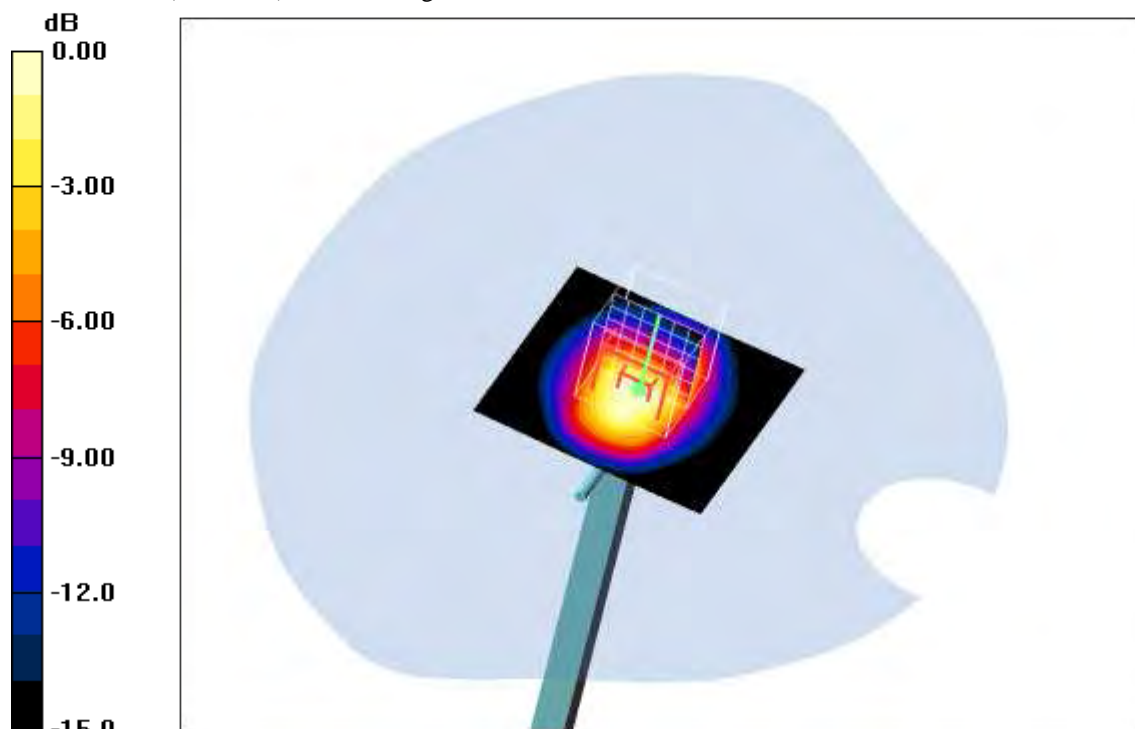
**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 190.5 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 70.2 W/kg

**SAR(1 g) = 40.5 mW/g; SAR(10 g) = 21.4 mW/g**

Maximum value of SAR (measured) = 45.8 mW/g



0 dB = 45.8mW/g

**Additional information:**

ambient temperature: 22.3 °C; liquid temperature: 22.6 °C

Date/Time: 2009-11-16 09:41:37 Date/Time: 2009-11-16 09:45:08

**System Performance Check-D1900 body 2009-11-16**

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

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

Medium: M1900 Medium parameters used (interpolated):  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.54 \text{ mho/m}$ ;  $\epsilon_r = 52.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.31, 4.31, 4.31); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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) = 55.0 mW/g

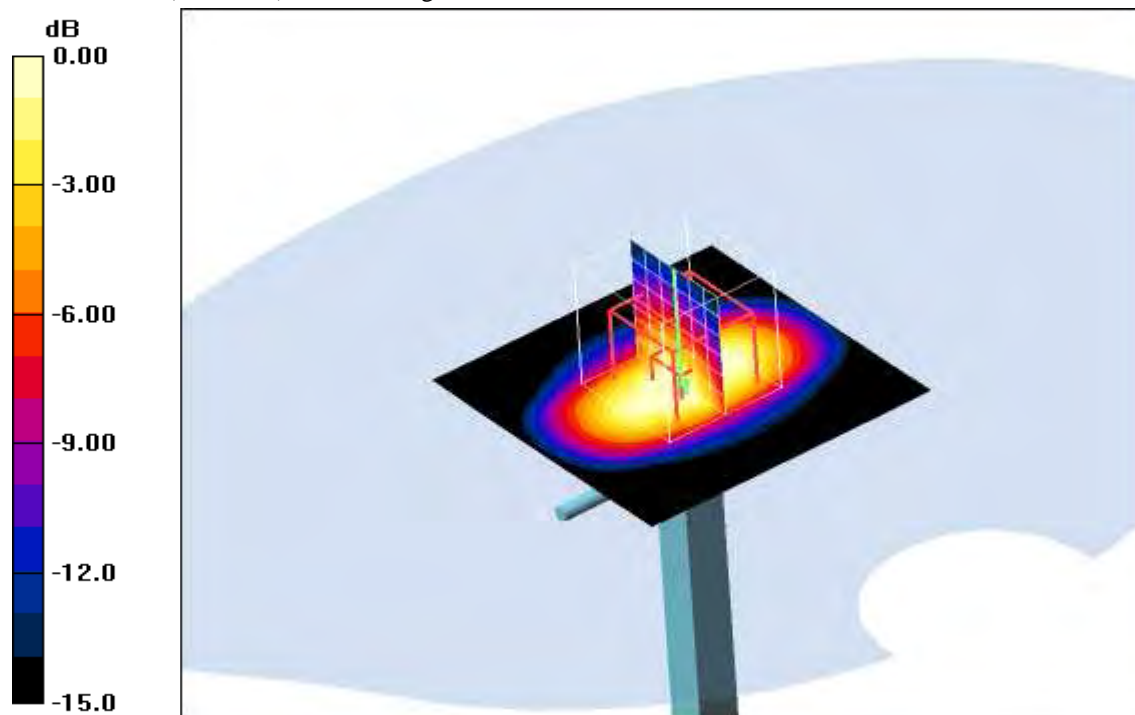
**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 185.6 V/m; Power Drift = -0.016 dB

Peak SAR (extrapolated) = 62.4 W/kg

**SAR(1 g) = 38.2 mW/g; SAR(10 g) = 20.7 mW/g**

Maximum value of SAR (measured) = 43.7 mW/g



0 dB = 43.7mW/g

**Additional information:**

ambient temperature: 22.8°C; liquid temperature: 21.8°C

Date/Time: 2009-12-07 09:18:14 Date/Time: 2009-12-07 09:32:44

**System Performance Check-D2450 head 2009-12-07**

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

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

Medium: HSL2450 Medium parameters used:  $f = 2450 \text{ MHz}$ ;  $\sigma = 1.87 \text{ mho/m}$ ;  $\epsilon_r = 39.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.16, 4.16, 4.16); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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) = 69.6 mW/g

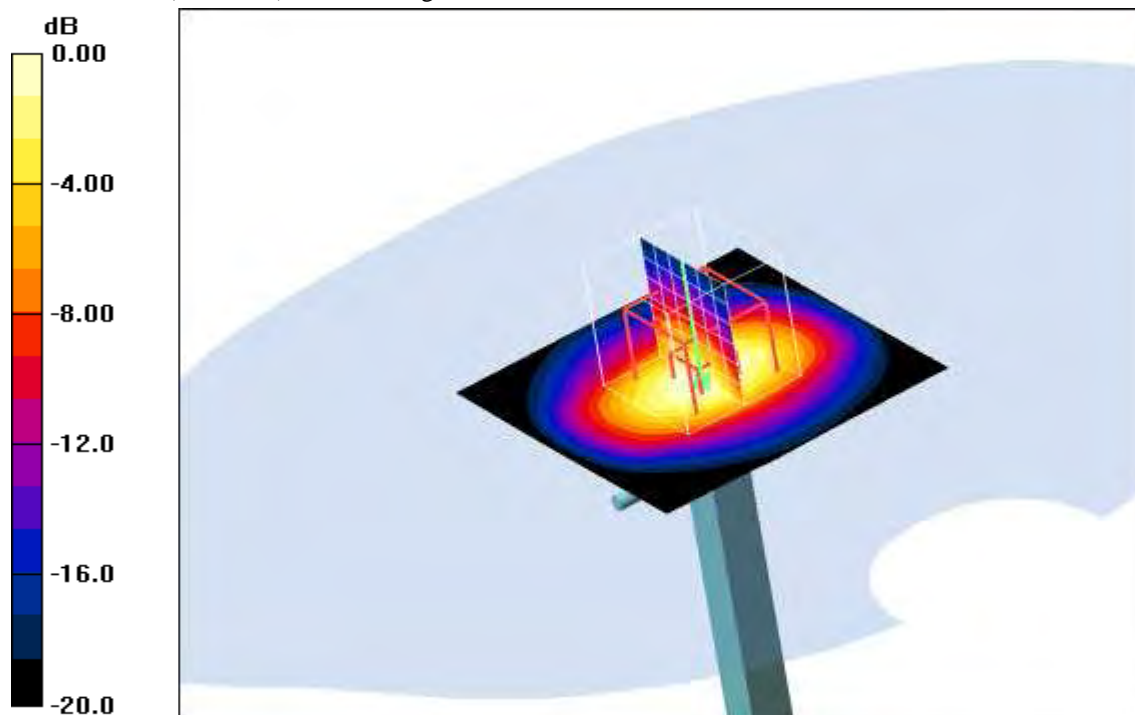
**d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 188.8 V/m; Power Drift = 0.013 dB

Peak SAR (extrapolated) = 117.7 W/kg

**SAR(1 g) = 55.8 mW/g; SAR(10 g) = 25.9 mW/g**

Maximum value of SAR (measured) = 61.7 mW/g



0 dB = 61.7mW/g

**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.3°C

Date/Time: 2009-12-08 12:09:46 Date/Time: 2009-12-08 12:27:19

**System Performance Check-D2450 body 2009-12-08**

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

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

Medium: M2450 Medium parameters used:  $f = 2450 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 51.9$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(3.96, 3.96, 3.96); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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) = 78.7 mW/g

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

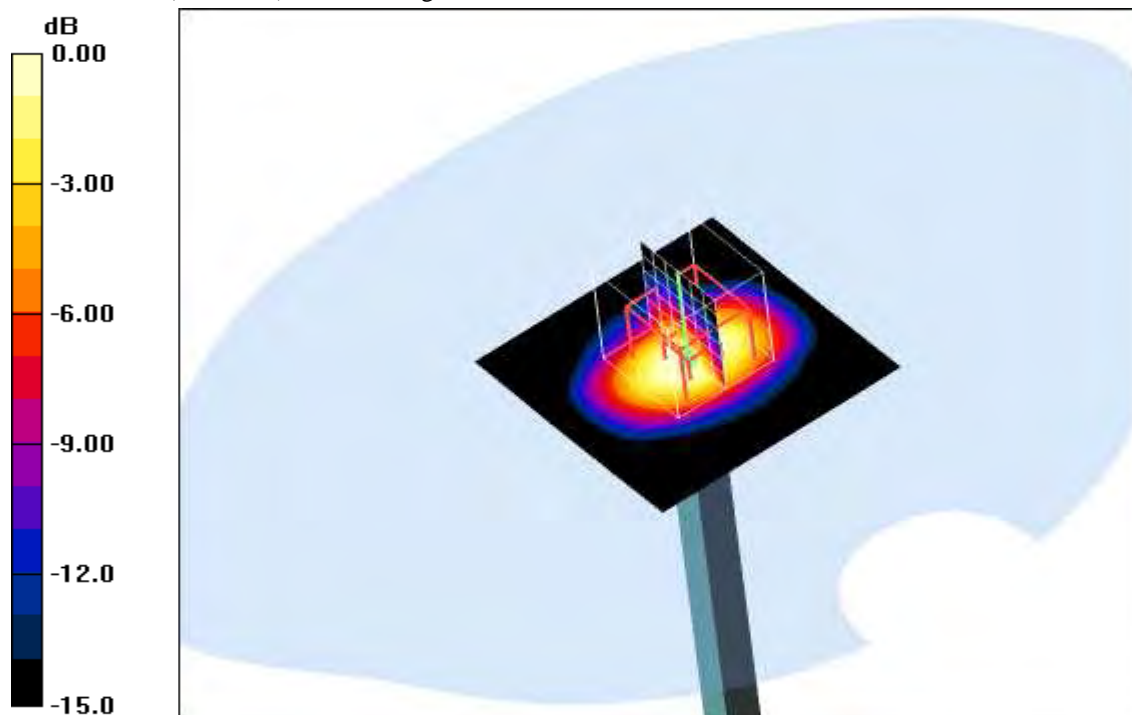
dz=5mm

Reference Value = 182.8 V/m; Power Drift = -0.045 dB

Peak SAR (extrapolated) = 118.8 W/kg

**SAR(1 g) = 53.9 mW/g; SAR(10 g) = 25 mW/g**

Maximum value of SAR (measured) = 60.8 mW/g



0 dB = 60.8mW/g

**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.7°C

**Annex 2 Measurement results (printout from DASY TM)**

**Remark: results of conducted power measurements: see chapter 2.5/2.6 (if applicable)**

**Annex 2.1 GSM 850 MHz head**

Date/Time: 2009-11-12 09:38:00 Date/Time: 2009-11-12 09:44:31

**IEEE1528\_OET65-LeftHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL850 Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

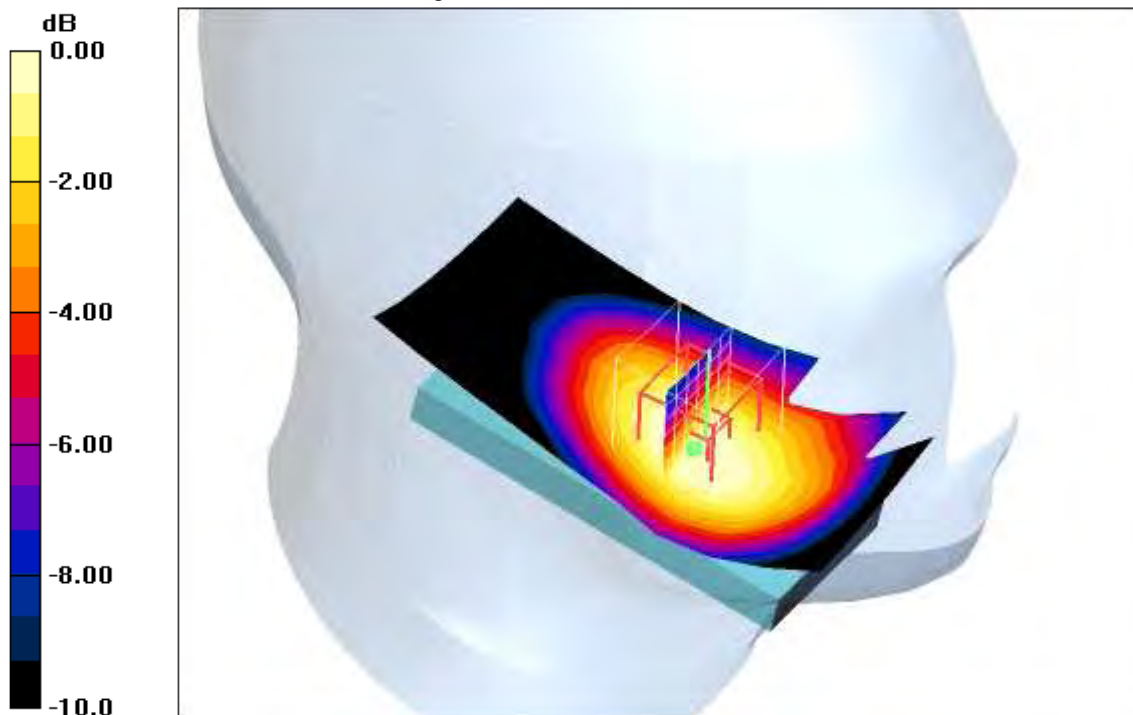
**Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 25.9 V/m; Power Drift = -0.146 dB

Peak SAR (extrapolated) = 0.692 W/kg

**SAR(1 g) = 0.533 mW/g; SAR(10 g) = 0.376 mW/g**

Maximum value of SAR (measured) = 0.569 mW/g



0 dB = 0.569mW/g

**Additional information:**

ambient temperature: 22.9°C; liquid temperature: 22.5°C

Date/Time: 2009-11-12 09:59:29 Date/Time: 2009-11-12 10:05:59

**IEEE1528\_OET65-LeftHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL850 Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.824 mW/g

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

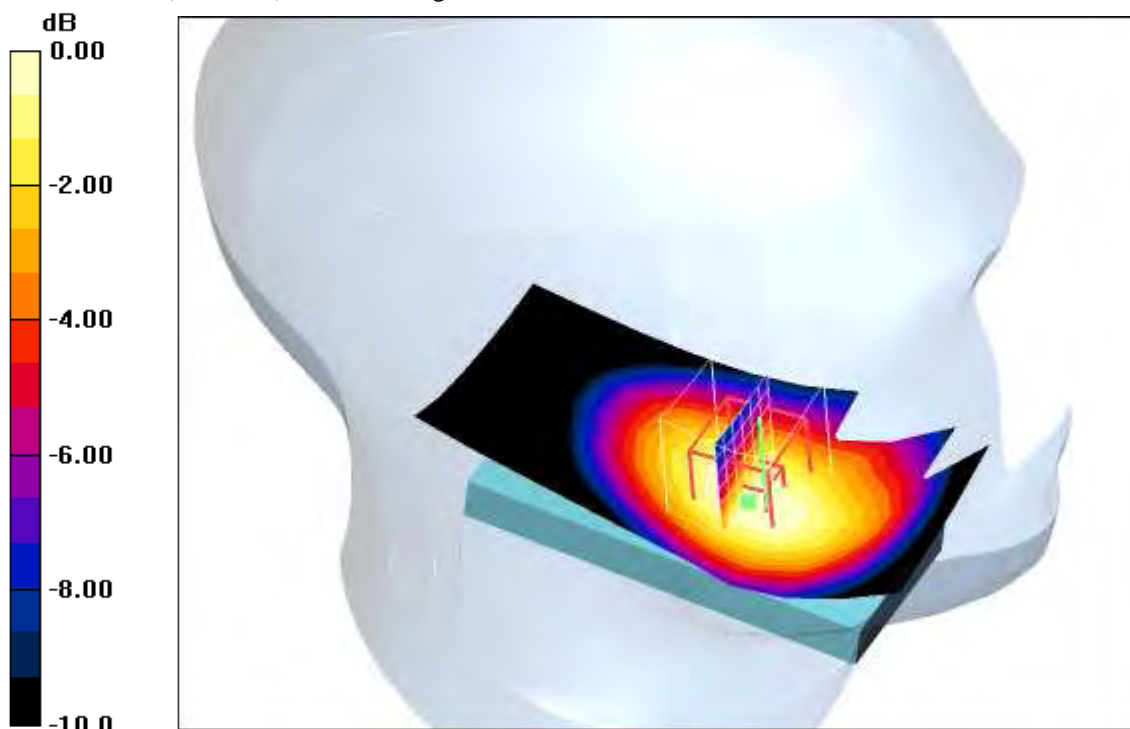
$dz=5\text{mm}$

Reference Value = 29.8 V/m; Power Drift = 0.074 dB

Peak SAR (extrapolated) = 1.03 W/kg

**SAR(1 g) = 0.749 mW/g; SAR(10 g) = 0.533 mW/g**

Maximum value of SAR (measured) = 0.799 mW/g



0 dB = 0.799mW/g

**Additional information:**

ambient temperature: 22.9°C; liquid temperature: 22.5°C

Date/Time: 2009-11-12 10:21:16 Date/Time: 2009-11-12 10:27:46

**IEEE1528\_OET65-LeftHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL850 Medium parameters used:  $f = 848.8 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.935 mW/g

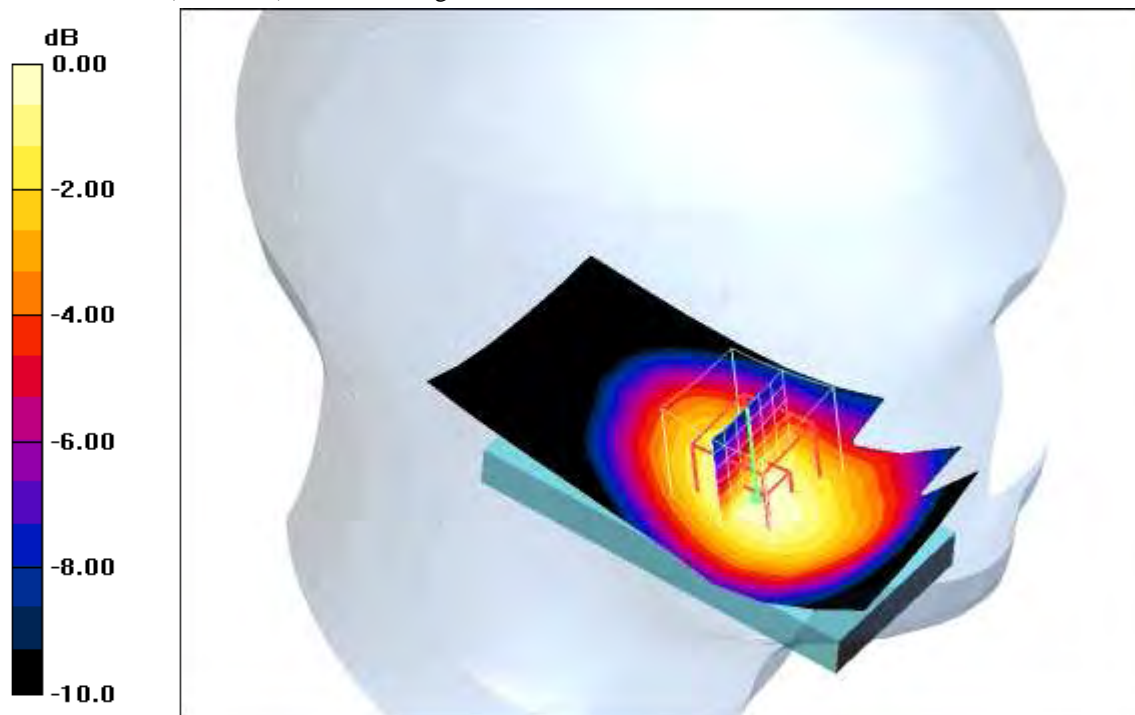
**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 32.7 V/m; Power Drift = -0.145 dB

Peak SAR (extrapolated) = 1.19 W/kg

**SAR(1 g) = 0.883 mW/g; SAR(10 g) = 0.615 mW/g**

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



0 dB = 0.939mW/g

**Additional information:**

ambient temperature: 22.9°C; liquid temperature: 22.5°C

Date/Time: 2009-11-12 11:37:49 Date/Time: 2009-11-12 11:43:56 Date/Time: 2009-11-12 11:55:49

**IEEE1528\_OET65-LeftHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL850 Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.256 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 = 17.2 V/m; Power Drift = 0.026 dB

Peak SAR (extrapolated) = 0.308 W/kg

**SAR(1 g) = 0.247 mW/g; SAR(10 g) = 0.182 mW/g**

Maximum value of SAR (measured) = 0.259 mW/g

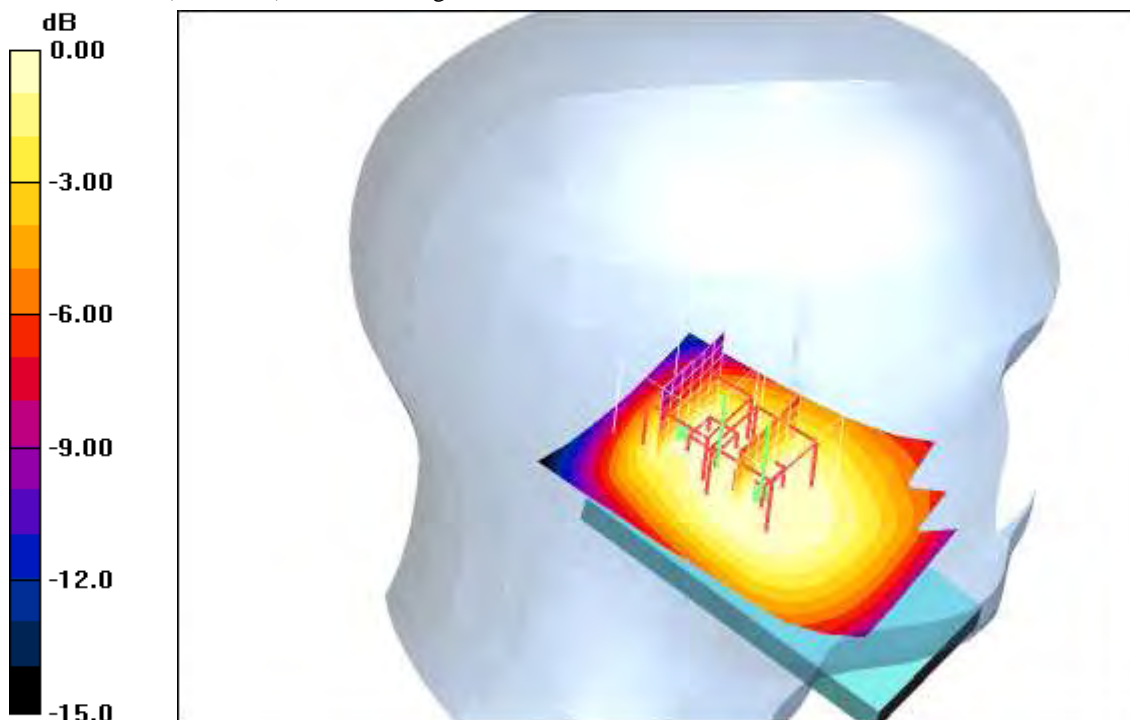
**Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 17.2 V/m; Power Drift = 0.026 dB

Peak SAR (extrapolated) = 0.262 W/kg

**SAR(1 g) = 0.185 mW/g; SAR(10 g) = 0.123 mW/g**

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



0 dB = 0.217mW/g

**Additional information:**

ambient temperature: 22.9°C; liquid temperature: 22.5°C



Date/Time: 2009-11-12 11:03:57 Date/Time: 2009-11-12 11:10:44 Date/Time: 2009-11-12 11:22:48

**IEEE1528\_OET65-LeftHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL850 Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 0.359 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 = 20.7 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 0.429 W/kg

**SAR(1 g) = 0.342 mW/g; SAR(10 g) = 0.251 mW/g**

Maximum value of SAR (measured) = 0.361 mW/g

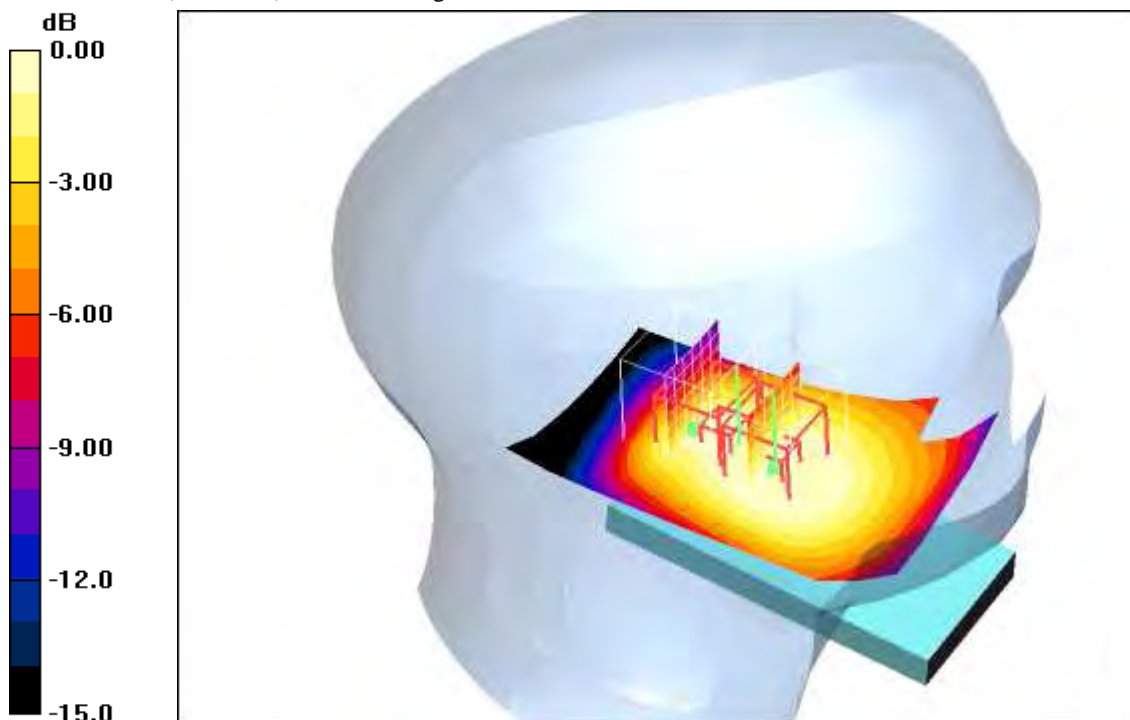
**Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 20.7 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 0.362 W/kg

**SAR(1 g) = 0.255 mW/g; SAR(10 g) = 0.168 mW/g**

Maximum value of SAR (measured) = 0.303 mW/g



0 dB = 0.303mW/g

**Additional information:**

ambient temperature: 22.9°C; liquid temperature: 22.5°C

Date/Time: 2009-11-12 10:43:15 Date/Time: 2009-11-12 10:49:53

**IEEE1528\_OET65-LeftHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL850 Medium parameters used:  $f = 848.8 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.435 mW/g

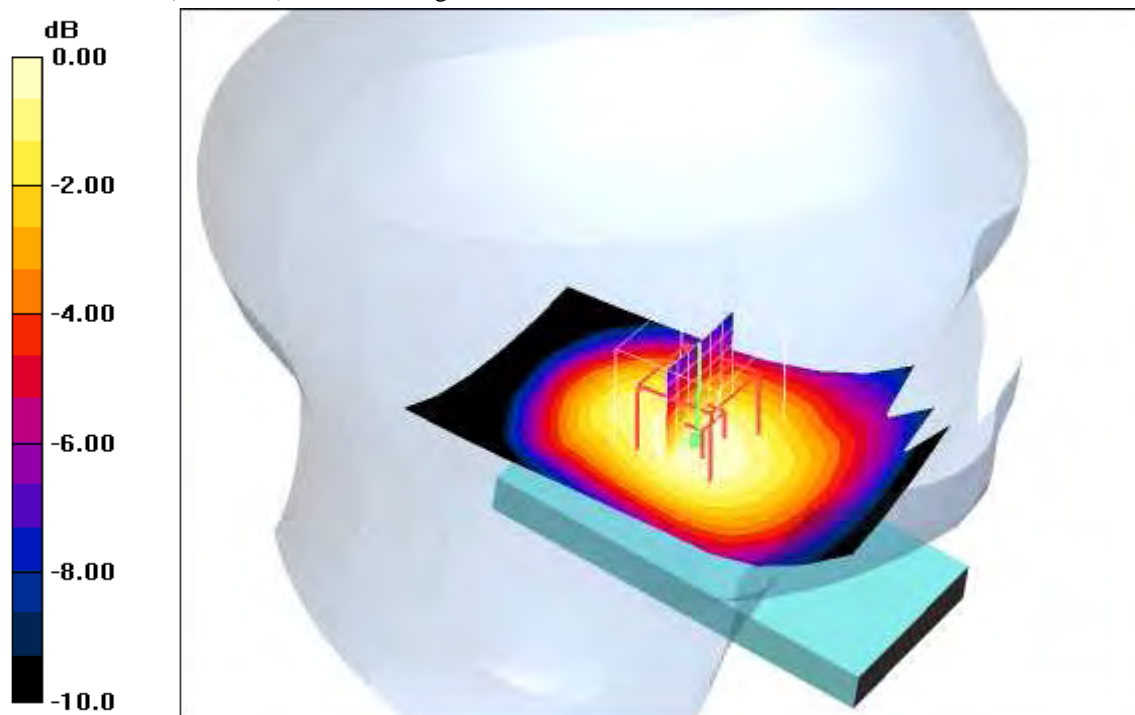
**Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 22.9 V/m; Power Drift = -0.160 dB

Peak SAR (extrapolated) = 0.518 W/kg

**SAR(1 g) = 0.413 mW/g; SAR(10 g) = 0.303 mW/g**

Maximum value of SAR (measured) = 0.433 mW/g



0 dB = 0.433mW/g

**Additional information:**

ambient temperature: 22.9°C; liquid temperature: 22.5°C

Date/Time: 2009-11-12 14:01:48 Date/Time: 2009-11-12 14:07:43

**IEEE1528\_OET65-RightHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL850 Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.587 mW/g

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

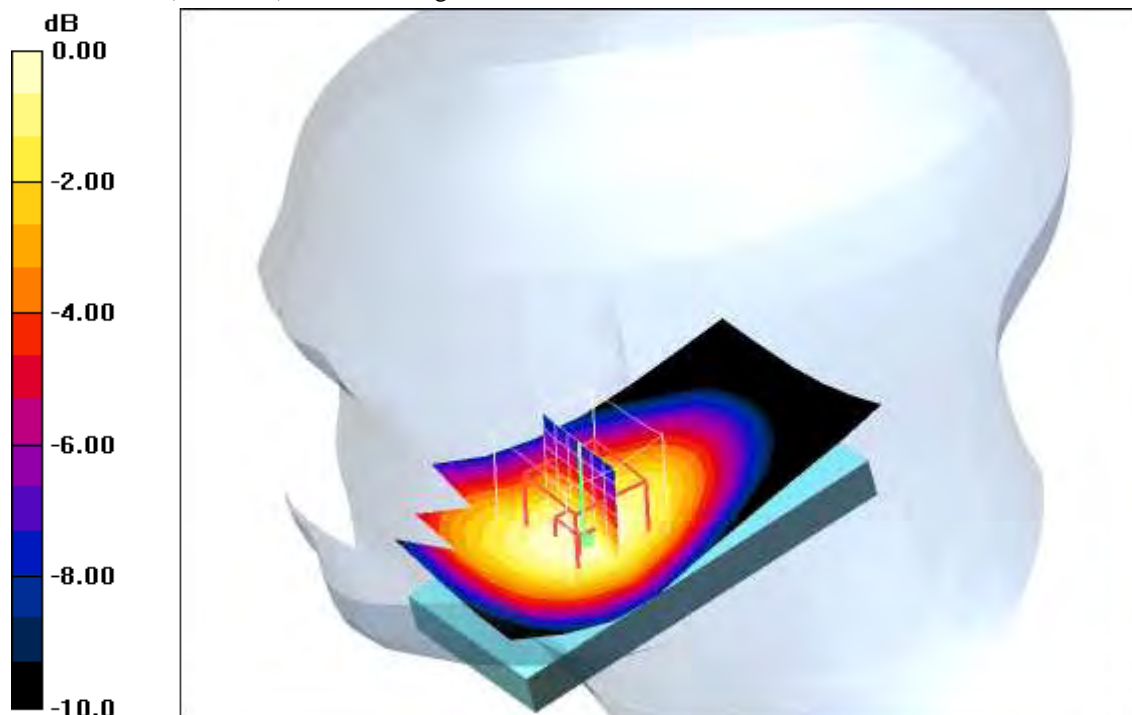
$dz=5\text{mm}$

Reference Value = 25.9 V/m; Power Drift = -0.042 dB

Peak SAR (extrapolated) = 0.697 W/kg

**SAR(1 g) = 0.542 mW/g; SAR(10 g) = 0.389 mW/g**

Maximum value of SAR (measured) = 0.579 mW/g



0 dB = 0.579mW/g

**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.3°C

Date/Time: 2009-11-12 13:40:49 Date/Time: 2009-11-12 13:46:47

**IEEE1528\_OET65-RightHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL850 Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.828 mW/g

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

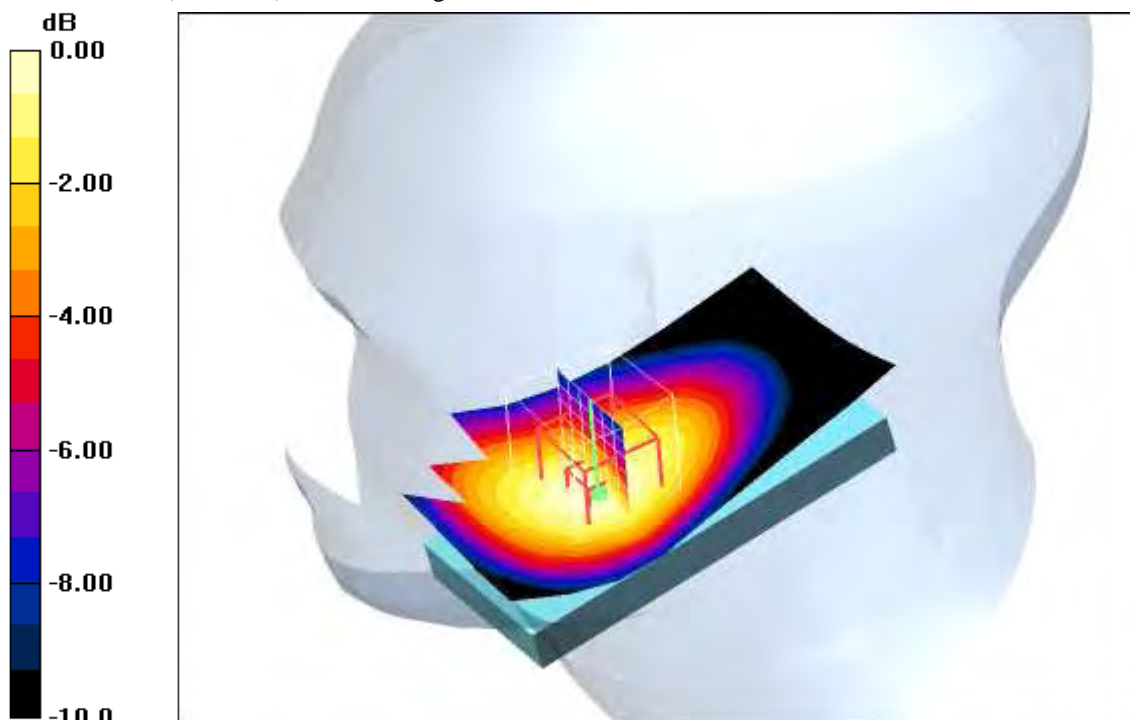
$dz=5\text{mm}$

Reference Value = 30.4 V/m; Power Drift = 0.044 dB

Peak SAR (extrapolated) = 0.993 W/kg

**SAR(1 g) = 0.766 mW/g; SAR(10 g) = 0.549 mW/g**

Maximum value of SAR (measured) = 0.819 mW/g



0 dB = 0.819mW/g

**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.3°C

Date/Time: 2009-11-12 13:19:41 Date/Time: 2009-11-12 13:25:36

**IEEE1528\_OET65-RightHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL850 Medium parameters used:  $f = 848.8 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.956 mW/g

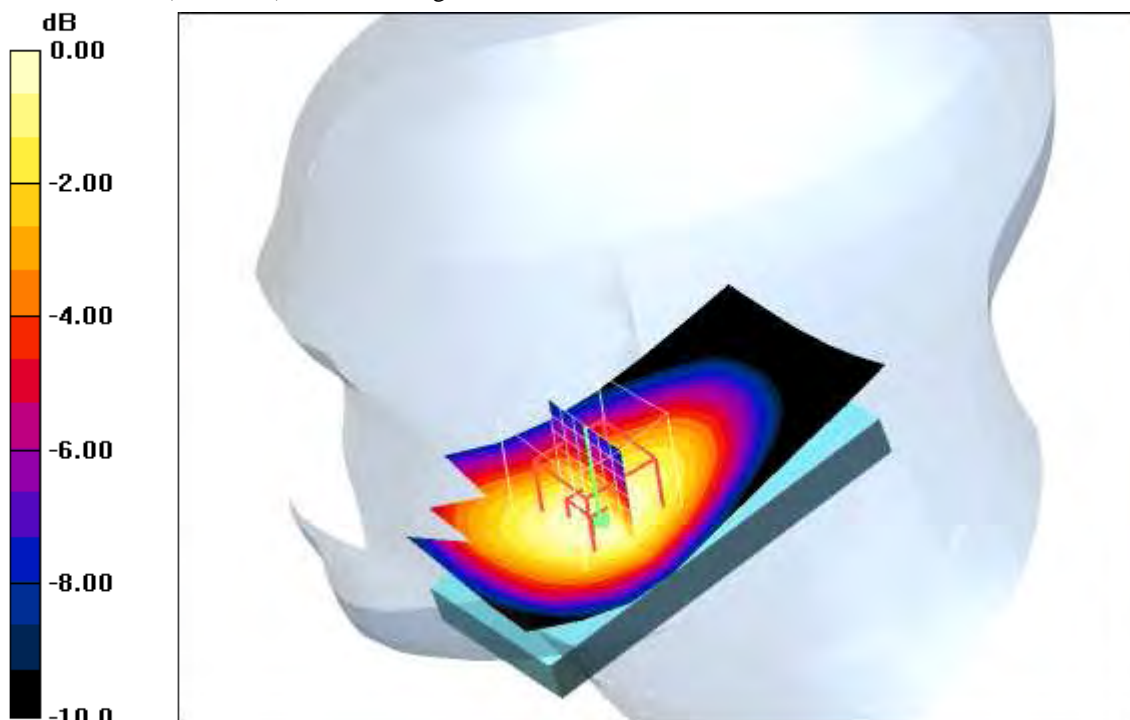
**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 32.6 V/m; Power Drift = 0.046 dB

Peak SAR (extrapolated) = 1.11 W/kg

**SAR(1 g) = 0.871 mW/g; SAR(10 g) = 0.625 mW/g**

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



0 dB = 0.927mW/g

**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.3°C

Date/Time: 2009-11-12 12:18:55 Date/Time: 2009-11-12 12:24:51

**IEEE1528\_OET65-RightHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL850 Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.237 mW/g

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

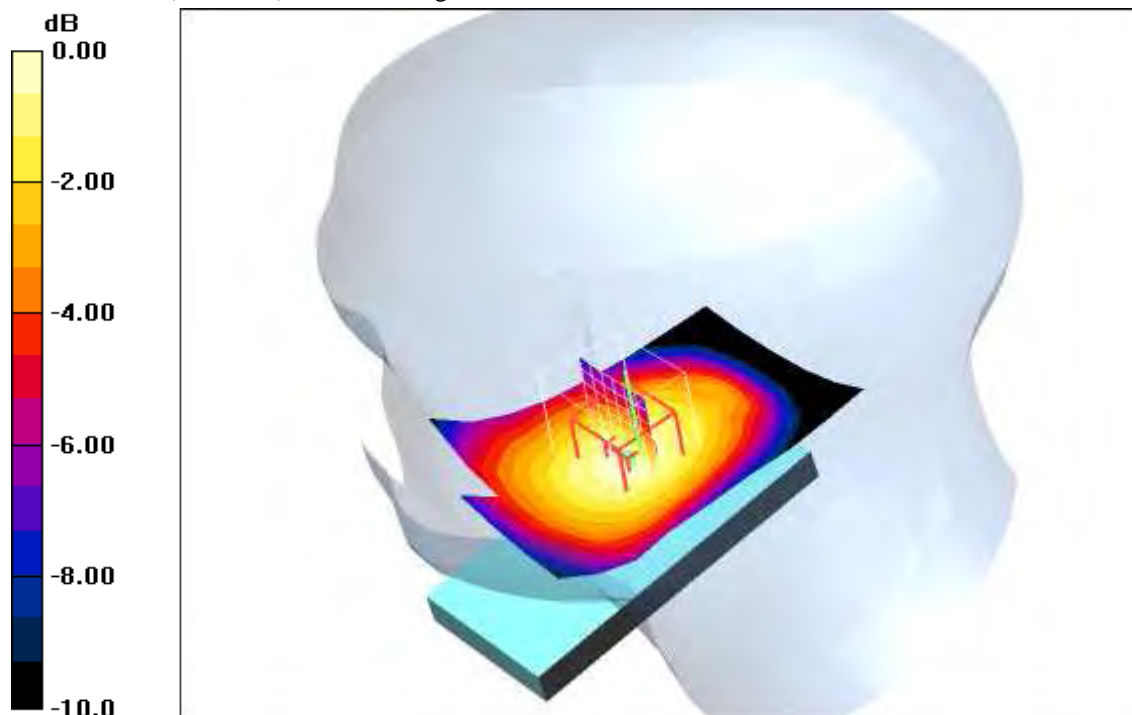
$dz=5\text{mm}$

Reference Value = 17.0 V/m; Power Drift = 0.165 dB

Peak SAR (extrapolated) = 0.299 W/kg

**SAR(1 g) = 0.238 mW/g; SAR(10 g) = 0.176 mW/g**

Maximum value of SAR (measured) = 0.250 mW/g



0 dB = 0.250mW/g

**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.3°C

Date/Time: 2009-11-12 12:39:12 Date/Time: 2009-11-12 12:45:09

**IEEE1528\_OET65-RightHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL850 Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.363 mW/g

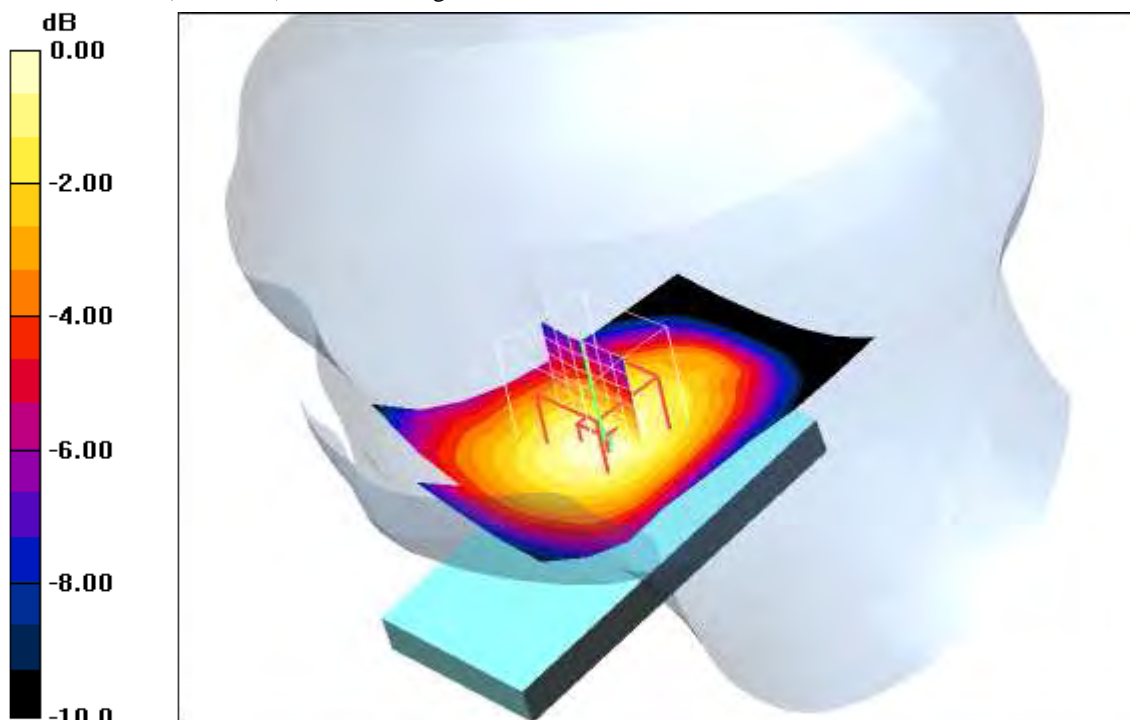
**Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 20.6 V/m; Power Drift = 0.195 dB

Peak SAR (extrapolated) = 0.447 W/kg

**SAR(1 g) = 0.352 mW/g; SAR(10 g) = 0.259 mW/g**

Maximum value of SAR (measured) = 0.373 mW/g



0 dB = 0.373mW/g

**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.3°C

Date/Time: 2009-11-12 12:58:55 Date/Time: 2009-11-12 13:05:53

**IEEE1528\_OET65-RightHandSide-GSM850**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL850 Medium parameters used:  $f = 848.8 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.448 mW/g

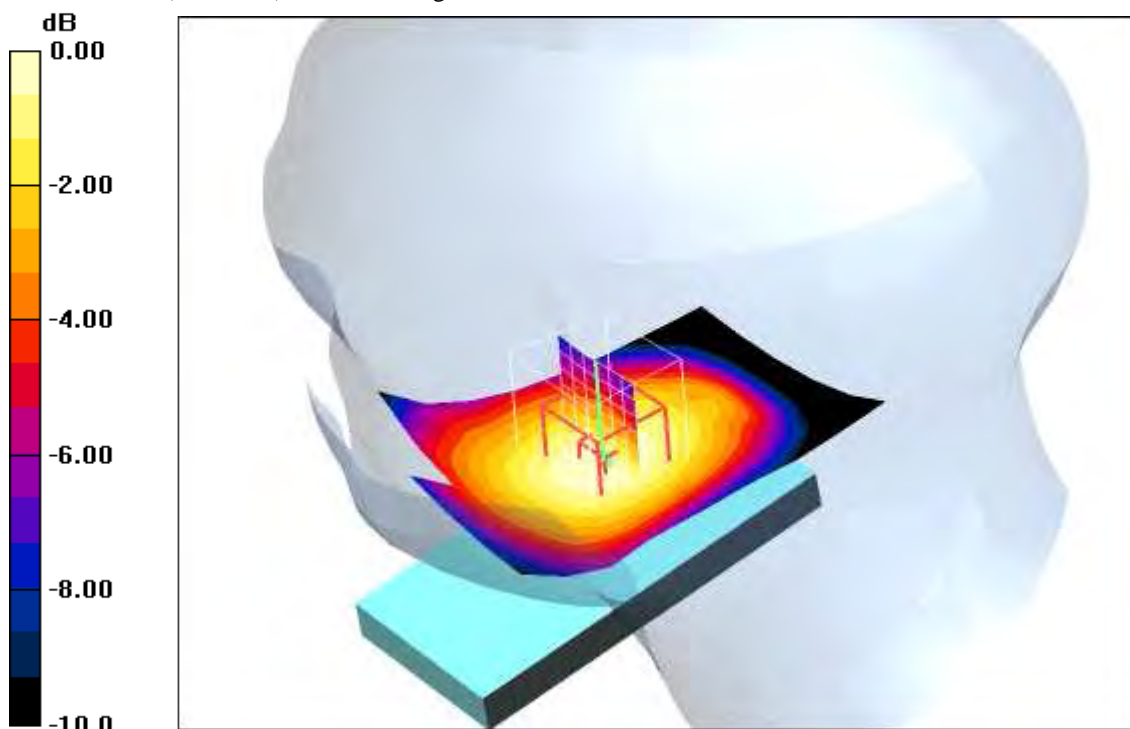
**Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 22.8 V/m; Power Drift = 0.065 dB

Peak SAR (extrapolated) = 0.526 W/kg

**SAR(1 g) = 0.419 mW/g; SAR(10 g) = 0.307 mW/g**

Maximum value of SAR (measured) = 0.445 mW/g



0 dB = 0.445mW/g

**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.3°C



**Annex 2.2 GSM 850 MHz body**

Date/Time: 2009-11-17 15:03:01 Date/Time: 2009-11-17 15:09:04

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

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: M850 Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.78, 5.78, 5.78); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.425 mW/g

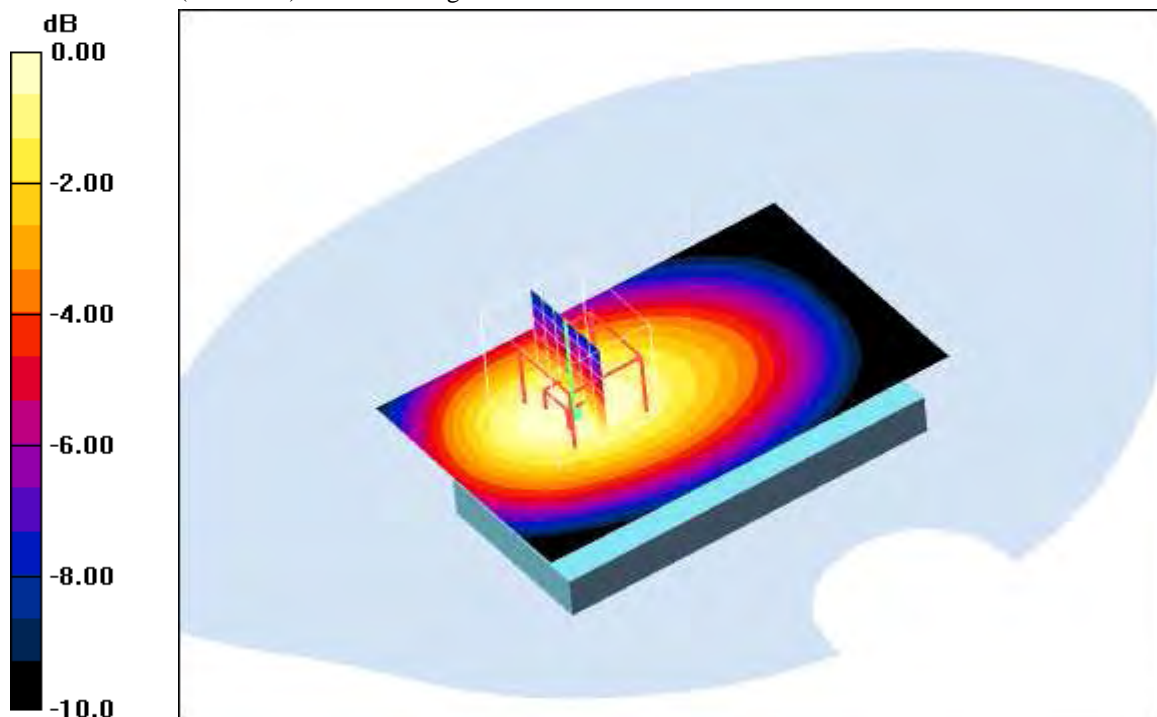
**Front position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 21.6 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 0.541 W/kg

**SAR(1 g) = 0.403 mW/g; SAR(10 g) = 0.285 mW/g**

Maximum value of SAR (measured) = 0.431 mW/g



0 dB = 0.431mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.3°C; liquid temperature: 21.8°C

Date/Time: 2009-11-17 14:41:25 Date/Time: 2009-11-17 14:47:47

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

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: M850 Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.78, 5.78, 5.78); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.542 mW/g

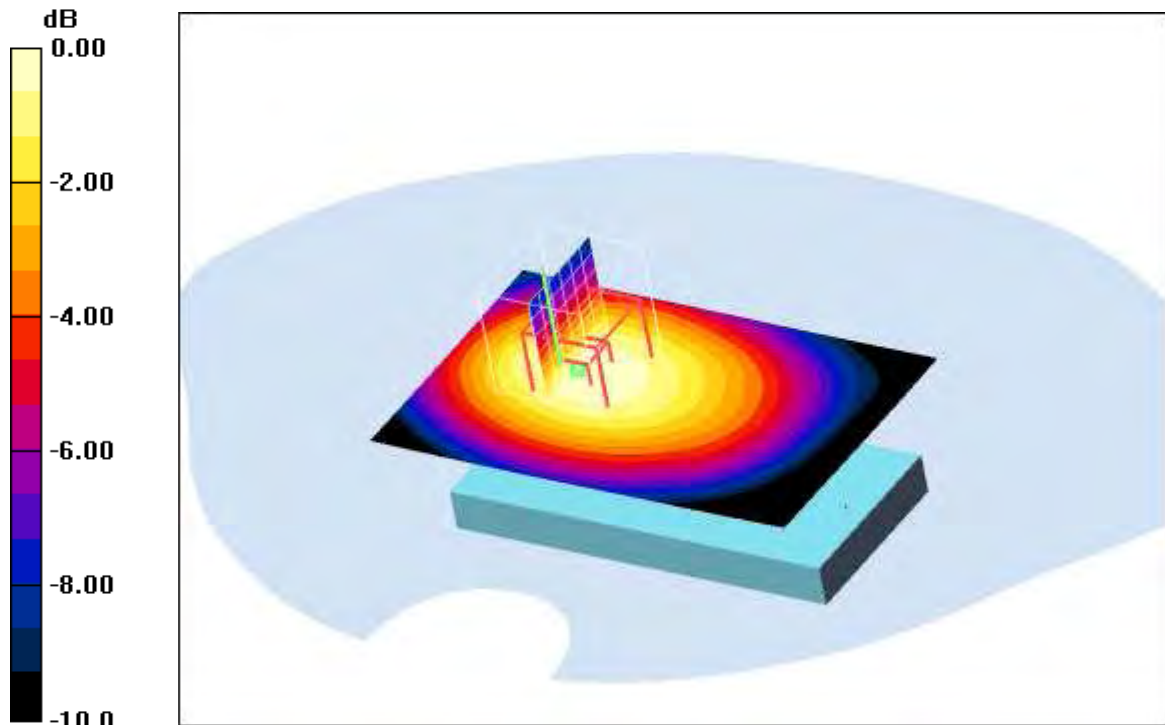
**Front position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 25.0 V/m; Power Drift = -0.108 dB

Peak SAR (extrapolated) = 0.710 W/kg

**SAR(1 g) = 0.508 mW/g; SAR(10 g) = 0.368 mW/g**

Maximum value of SAR (measured) = 0.548 mW/g



0 dB = 0.548mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.3°C; liquid temperature: 21.8°C

Date/Time: 2009-11-17 15:23:54 Date/Time: 2009-11-17 15:29:46

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

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: M850 Medium parameters used:  $f = 848.8 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.78, 5.78, 5.78); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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) = 0.510 mW/g

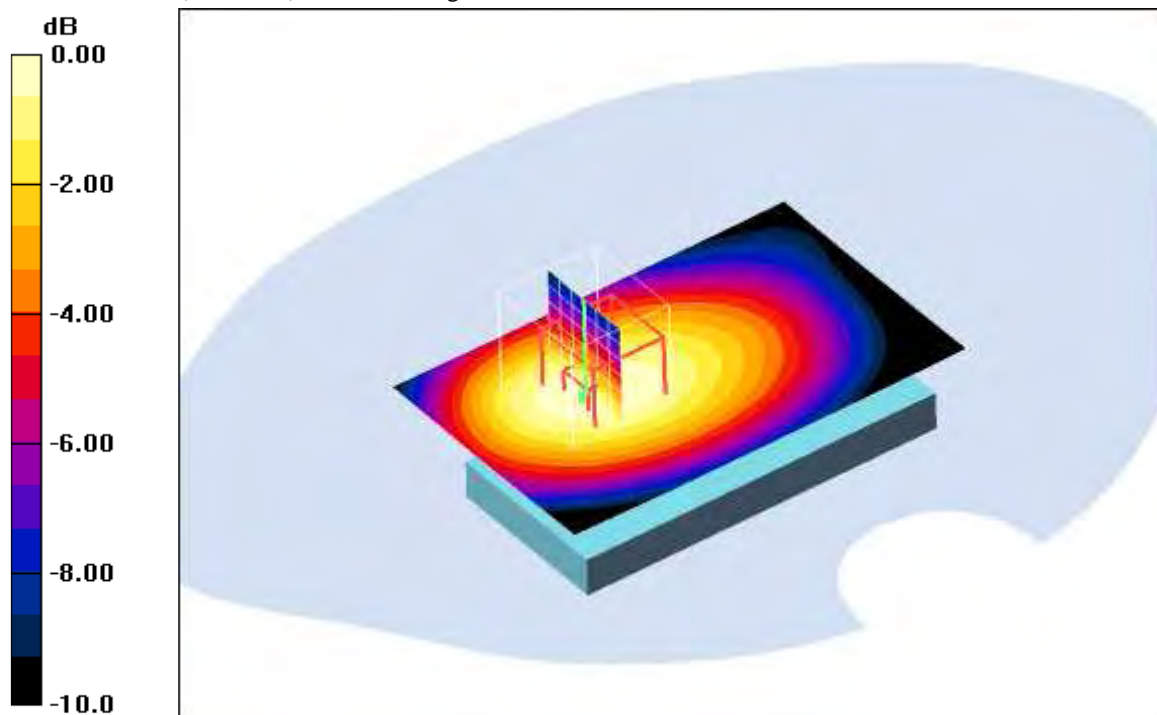
**Front position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 23.7 V/m; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 0.648 W/kg

**SAR(1 g) = 0.482 mW/g; SAR(10 g) = 0.342 mW/g**

Maximum value of SAR (measured) = 0.514 mW/g



0 dB = 0.514mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.3°C; liquid temperature: 21.8°C

Date/Time: 2009-11-17 16:25:14 Date/Time: 2009-11-17 16:31:12

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

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: M850 Medium parameters used:  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.78, 5.78, 5.78); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

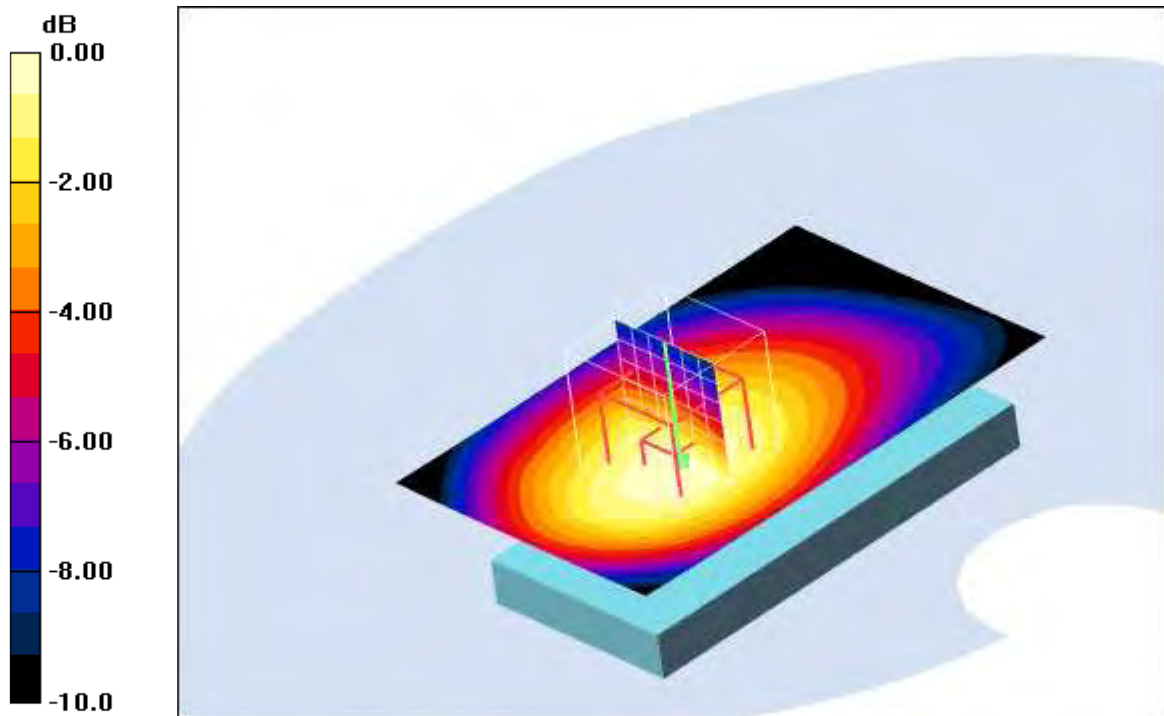
**Rear position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 21.3 V/m; Power Drift = 0.063 dB

Peak SAR (extrapolated) = 0.526 W/kg

**SAR(1 g) = 0.387 mW/g; SAR(10 g) = 0.272 mW/g**

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



0 dB = 0.412mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.3°C; liquid temperature: 21.8°C

Date/Time: 2009-11-17 16:04:36 Date/Time: 2009-11-17 16:10:30

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

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: M850 Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.78, 5.78, 5.78); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.549 mW/g

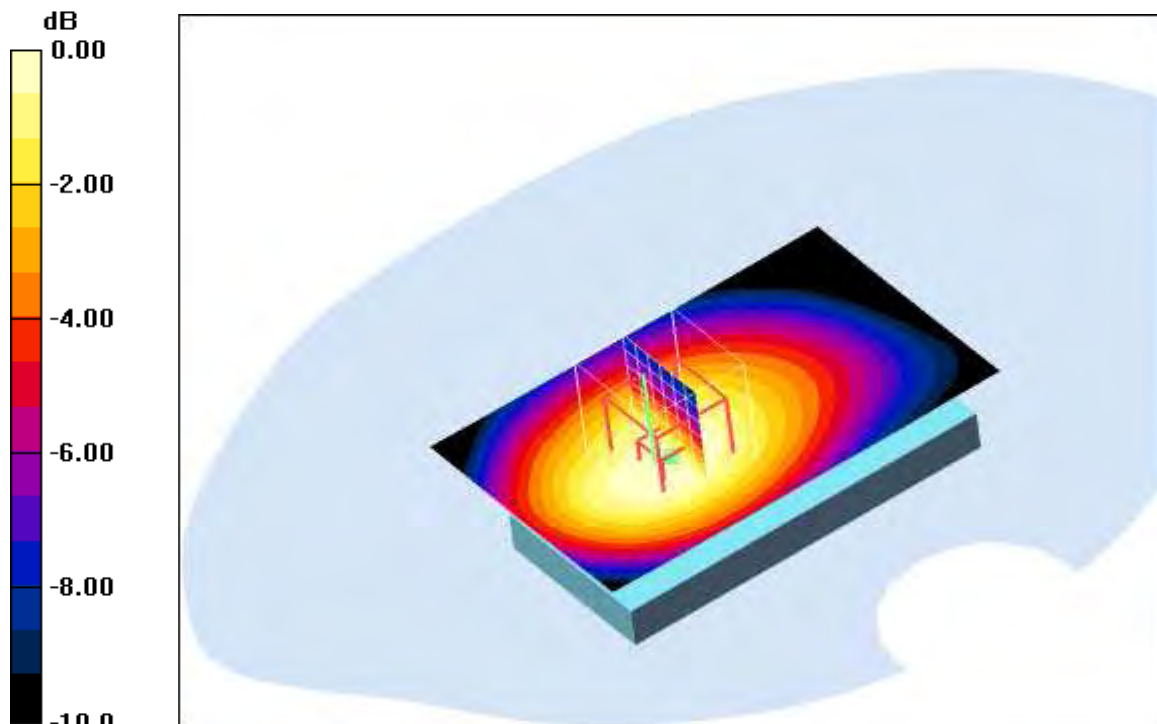
**Rear position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.6 V/m; Power Drift = -0.047 dB

Peak SAR (extrapolated) = 0.704 W/kg

**SAR(1 g) = 0.508 mW/g; SAR(10 g) = 0.353 mW/g**

Maximum value of SAR (measured) = 0.542 mW/g



0 dB = 0.542mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.3°C; liquid temperature: 21.8°C

Date/Time: 2009-11-17 15:43:42 Date/Time: 2009-11-17 15:49:36

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

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: M850 Medium parameters used:  $f = 848.8 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.78, 5.78, 5.78); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid: dx=15mm, dy=15mm

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

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

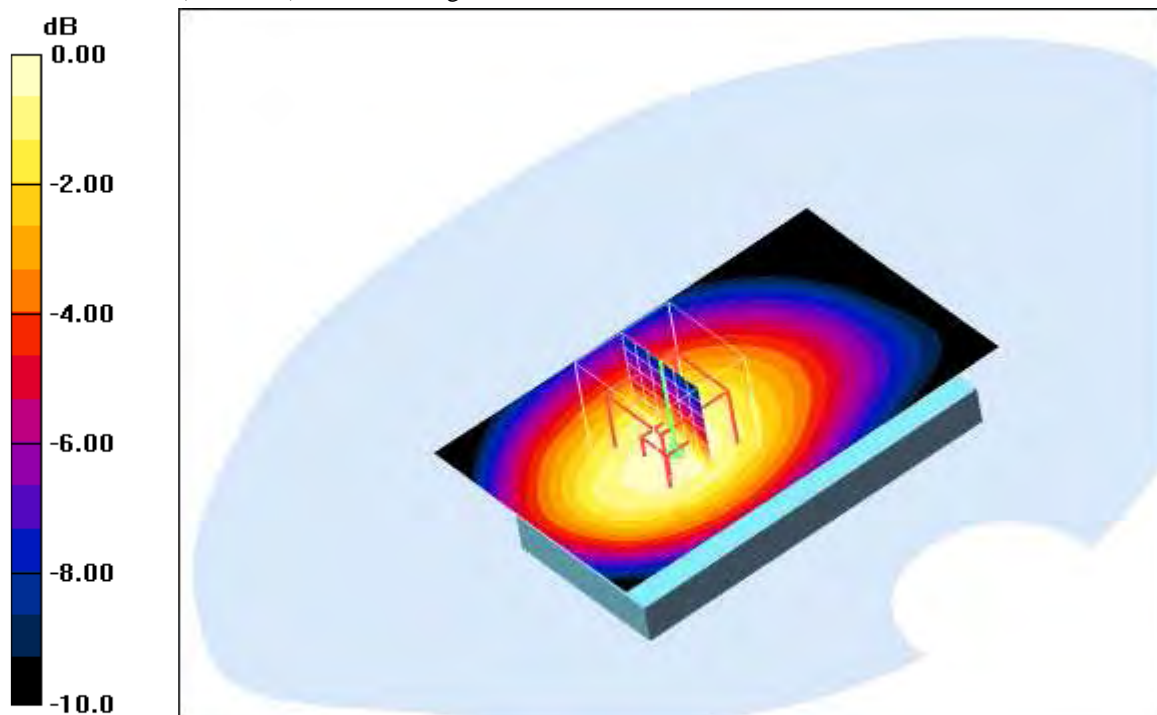
dz=5mm

Reference Value = 24.0 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 0.683 W/kg

**SAR(1 g) = 0.493 mW/g; SAR(10 g) = 0.341 mW/g**

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



0 dB = 0.527mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.3°C; liquid temperature: 21.8°C

Date/Time: 2009-11-17 16:47:41 Date/Time: 2009-11-17 16:53:25

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

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: M850 Medium parameters used:  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.78, 5.78, 5.78); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.287 mW/g

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

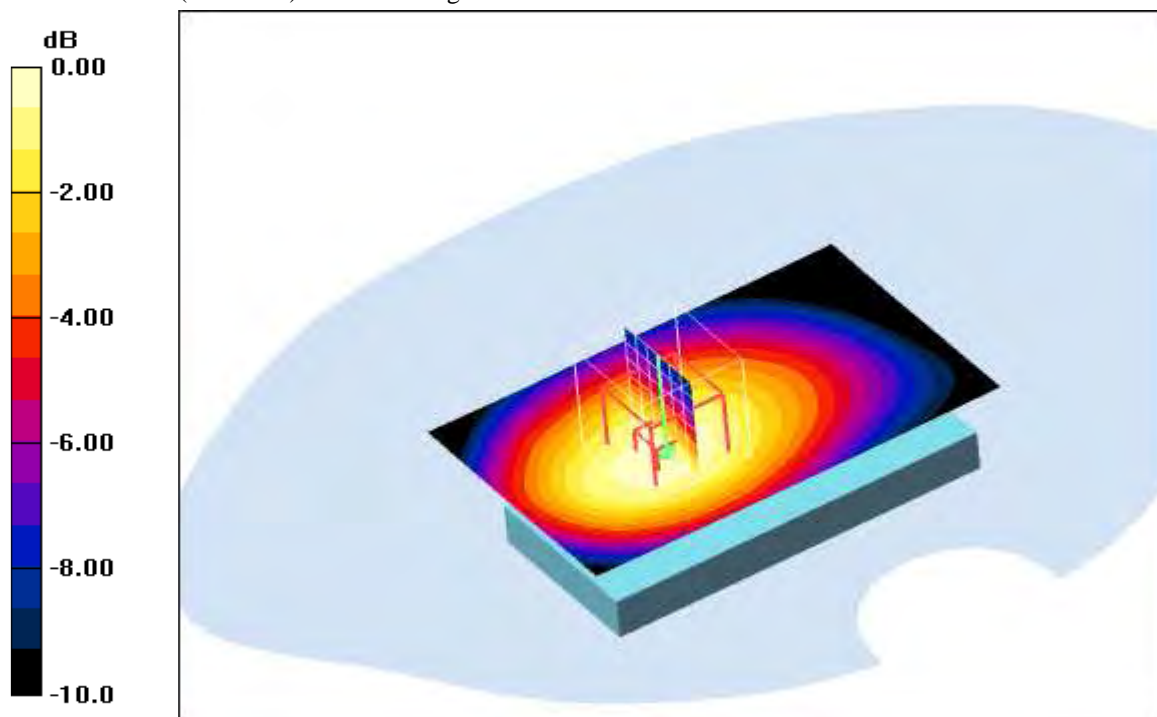
$dz=5\text{mm}$

Reference Value = 17.9 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 0.379 W/kg

**SAR(1 g) = 0.272 mW/g; SAR(10 g) = 0.189 mW/g**

Maximum value of SAR (measured) = 0.290 mW/g



0 dB = 0.290mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.3°C; liquid temperature: 21.8°C

**Annex 2.3 GSM 1900 MHz head**

Date/Time: 2009-11-13 09:58:13 Date/Time: 2009-11-13 10:04:27

**IEEE1528\_OET65-LeftHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL1900 Medium parameters used:  $f = 1850.2 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

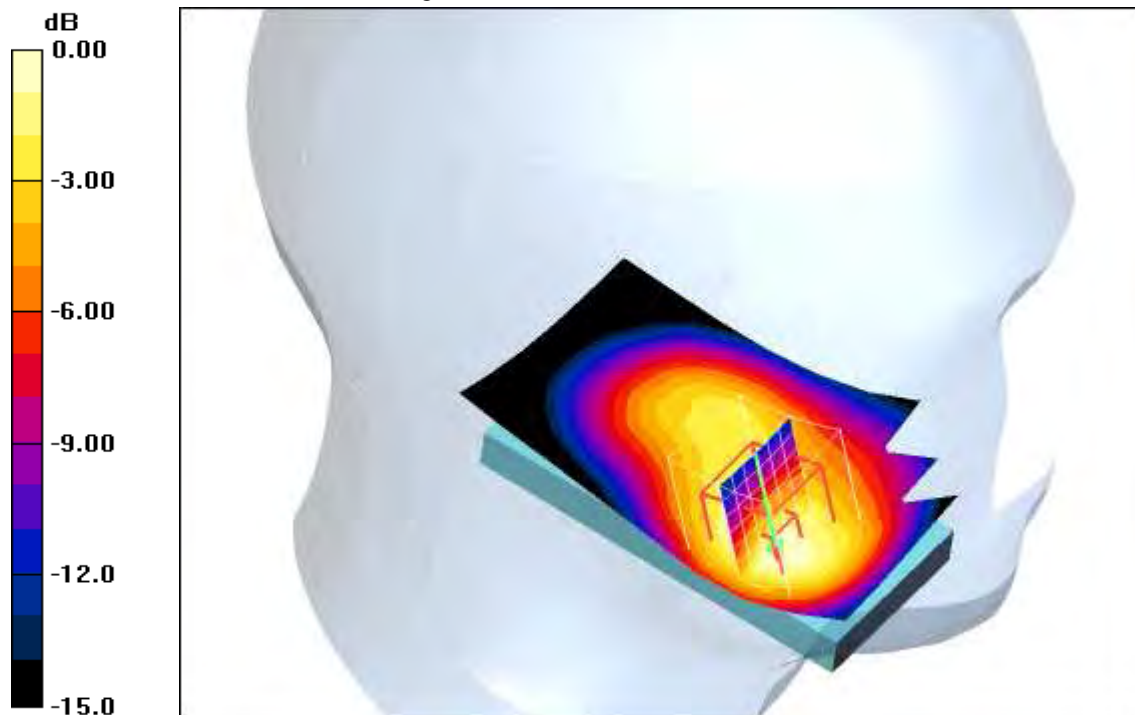
Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 1.32 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 = 29.4 V/m; Power Drift = -0.019 dB  
 Peak SAR (extrapolated) = 1.88 W/kg  
**SAR(1 g) = 1.23 mW/g; SAR(10 g) = 0.722 mW/g**  
 Maximum value of SAR (measured) = 1.35 mW/g



0 dB = 1.35mW/g

**Additional information:**

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



Date/Time: 2009-11-13 10:20:54 Date/Time: 2009-11-13 10:26:54

**IEEE1528\_OET65-LeftHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.23 mW/g

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

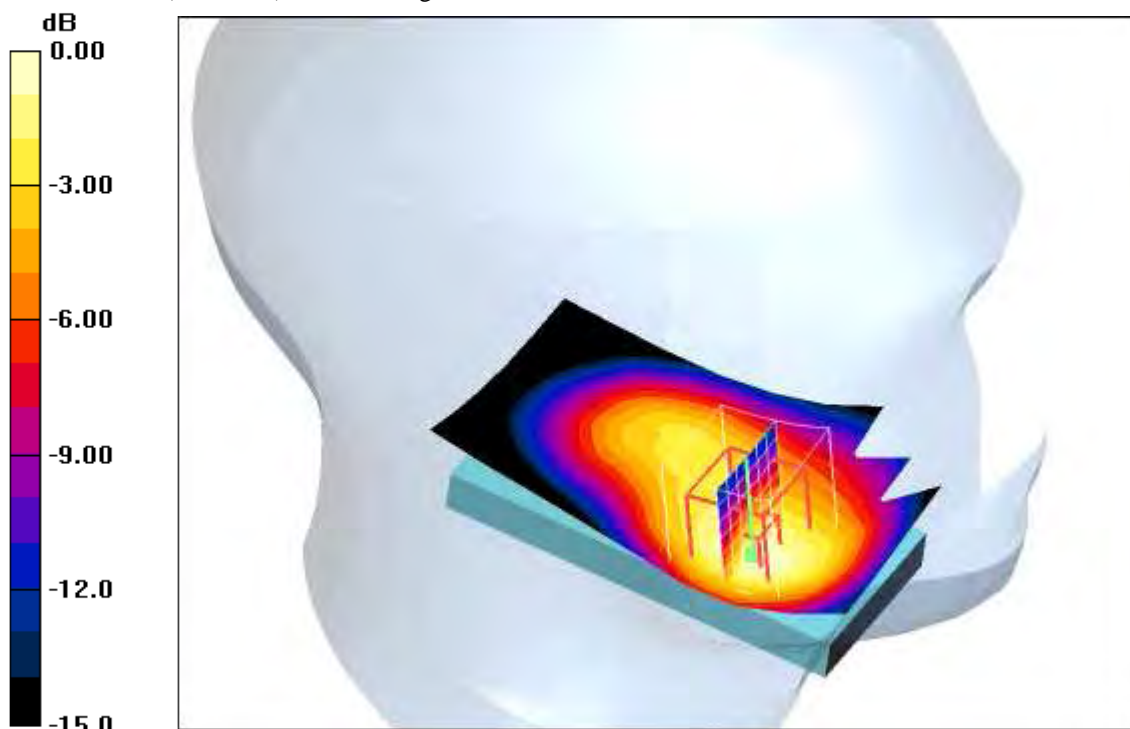
$dz=5\text{mm}$

Reference Value = 28.2 V/m; Power Drift = 0.082 dB

Peak SAR (extrapolated) = 1.80 W/kg

**SAR(1 g) = 1.17 mW/g; SAR(10 g) = 0.679 mW/g**

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



0 dB = 1.29mW/g

**Additional information:**

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

Date/Time: 2009-11-13 10:42:17 Date/Time: 2009-11-13 10:51:47

**IEEE1528\_OET65-LeftHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.24 mW/g

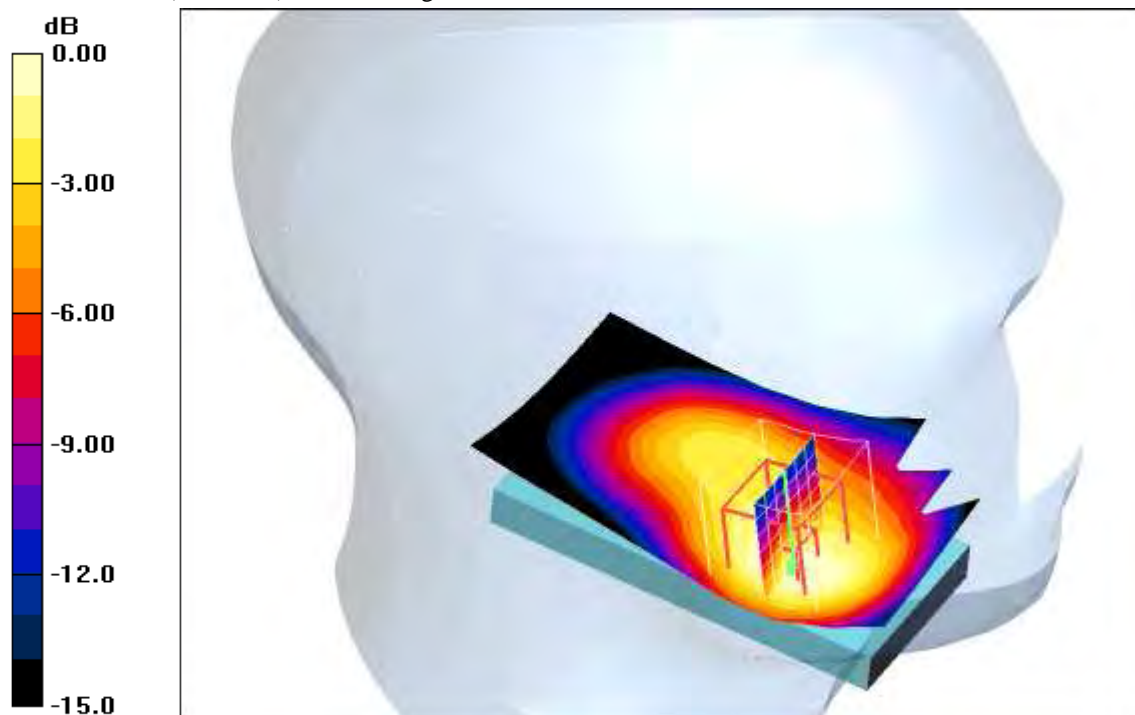
**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 27.1 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.64 W/kg

**SAR(1 g) = 1.07 mW/g; SAR(10 g) = 0.616 mW/g**

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



0 dB = 1.17mW/g

**Additional information:**

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

Date/Time: 2009-11-13 11:50:10 Date/Time: 2009-11-13 13:11:38

**IEEE1528\_OET65-LeftHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL1900 Medium parameters used:  $f = 1850.2 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.471 mW/g

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

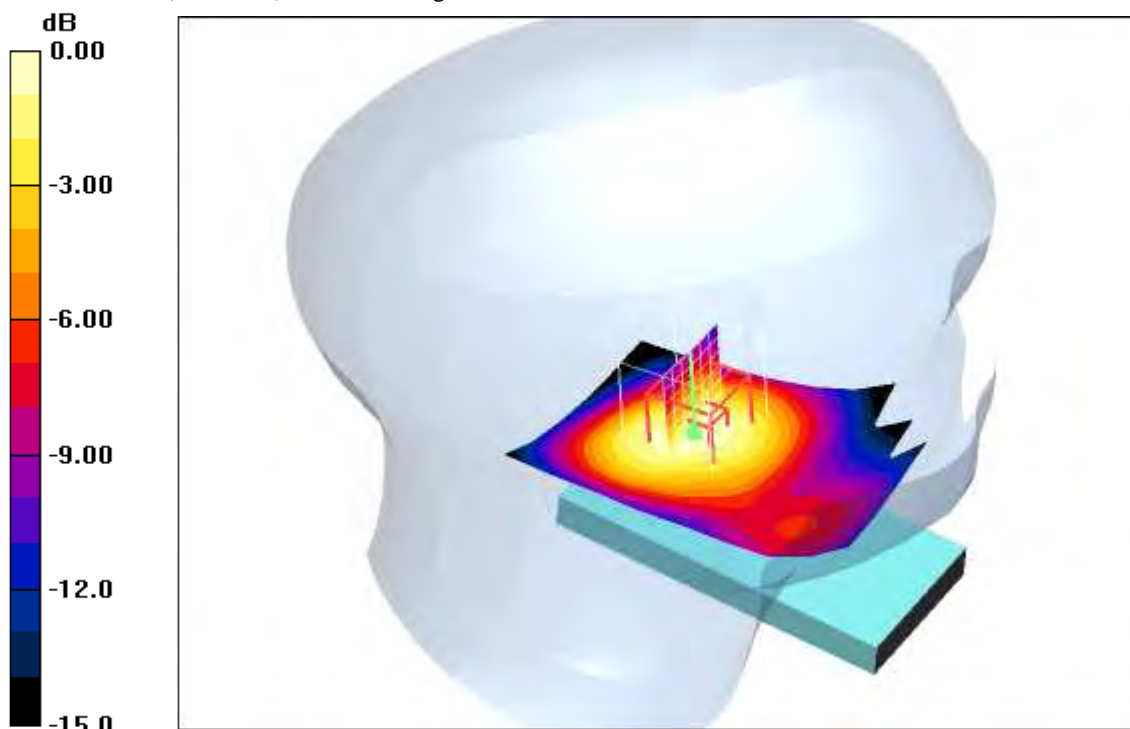
$dz=5\text{mm}$

Reference Value = 18.9 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.635 W/kg

**SAR(1 g) = 0.456 mW/g; SAR(10 g) = 0.299 mW/g**

Maximum value of SAR (measured) = 0.488 mW/g



0 dB = 0.488mW/g

**Additional information:**

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

Date/Time: 2009-11-13 11:30:35 Date/Time: 2009-11-13 11:36:33

**IEEE1528\_OET65-LeftHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

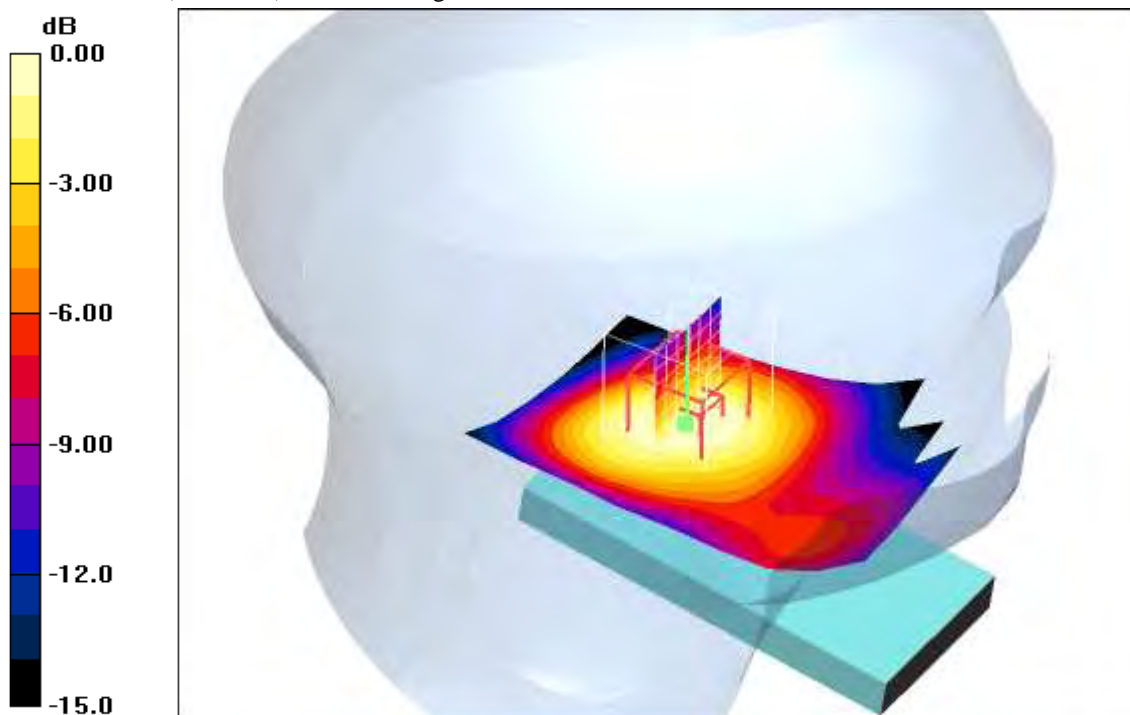
**Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 18.2 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.583 W/kg

**SAR(1 g) = 0.416 mW/g; SAR(10 g) = 0.270 mW/g**

Maximum value of SAR (measured) = 0.446 mW/g



0 dB = 0.446mW/g

**Additional information:**

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

Date/Time: 2009-11-13 11:07:18 Date/Time: 2009-11-13 11:13:13

**IEEE1528\_OET65-LeftHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.463 mW/g

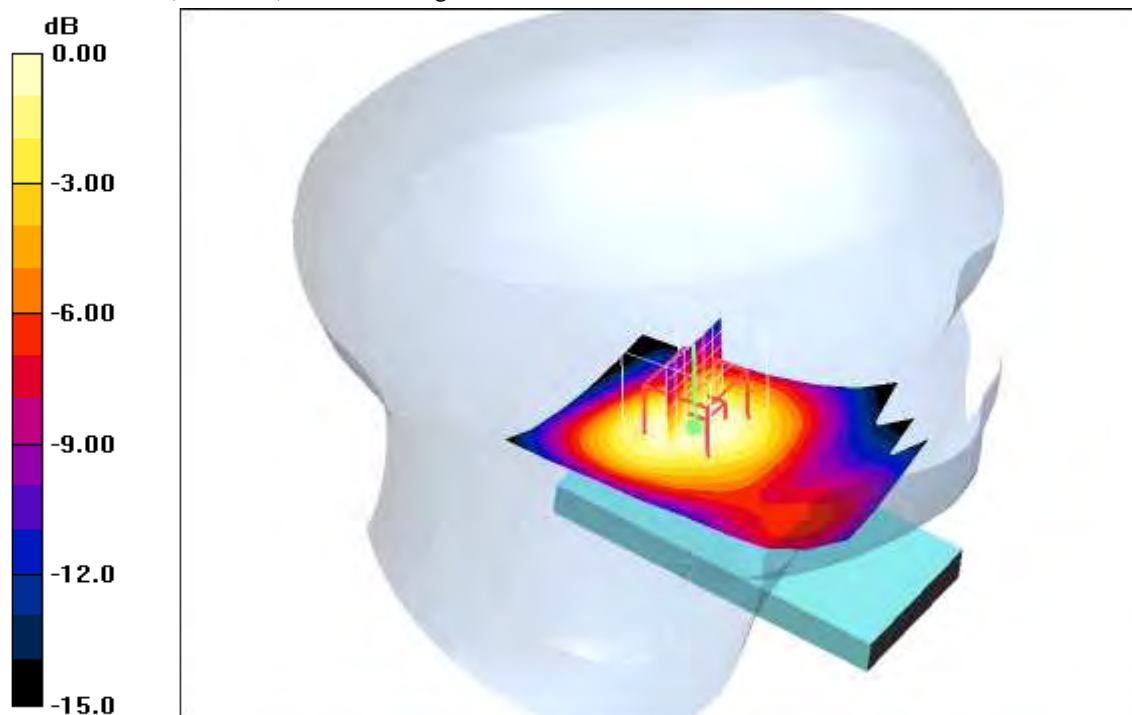
**Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 17.7 V/m; Power Drift = 0.018 dB

Peak SAR (extrapolated) = 0.582 W/kg

**SAR(1 g) = 0.402 mW/g; SAR(10 g) = 0.258 mW/g**

Maximum value of SAR (measured) = 0.432 mW/g



0 dB = 0.432mW/g

**Additional information:**

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

Date/Time: 2009-11-13 13:26:53 Date/Time: 2009-11-13 13:32:49

**IEEE1528\_OET65-RightHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL1900 Medium parameters used:  $f = 1850.2 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.846 mW/g

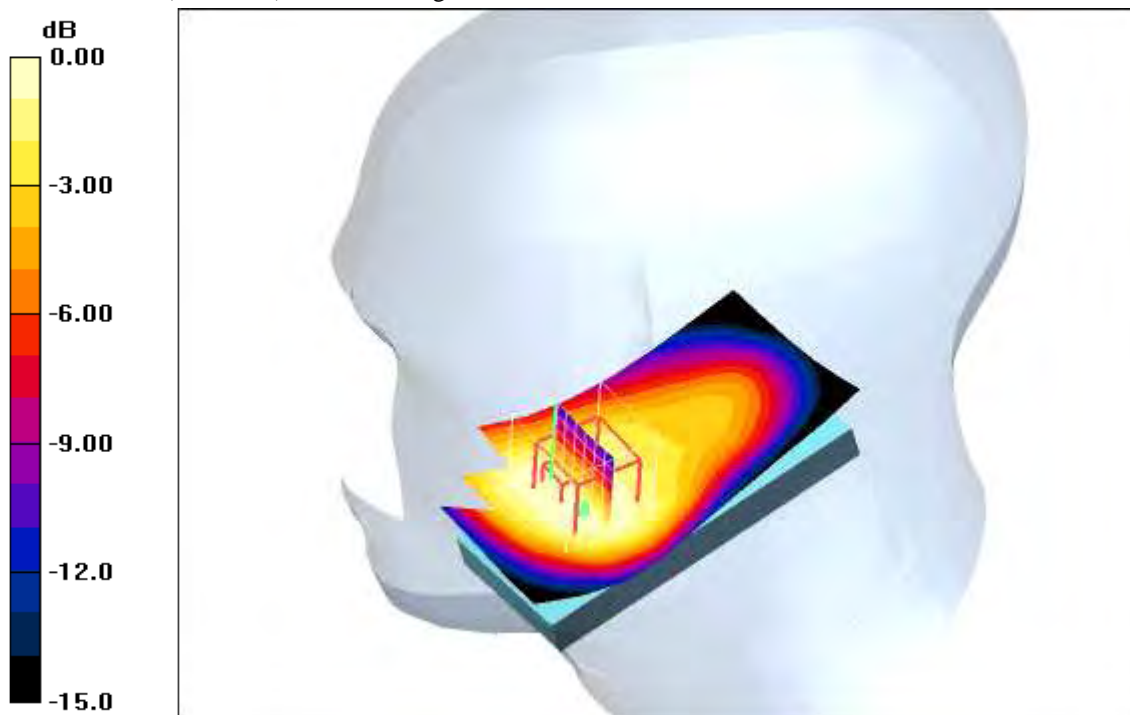
**Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 24.9 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.10 W/kg

**SAR(1 g) = 0.761 mW/g; SAR(10 g) = 0.515 mW/g**

Maximum value of SAR (measured) = 0.831 mW/g



0 dB = 0.831mW/g

**Additional information:**

ambient temperature: 23.3°C; liquid temperature: 22.0°C

Date/Time: 2009-11-13 13:48:00 Date/Time: 2009-11-13 13:53:57

**IEEE1528\_OET65-RightHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.848 mW/g

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

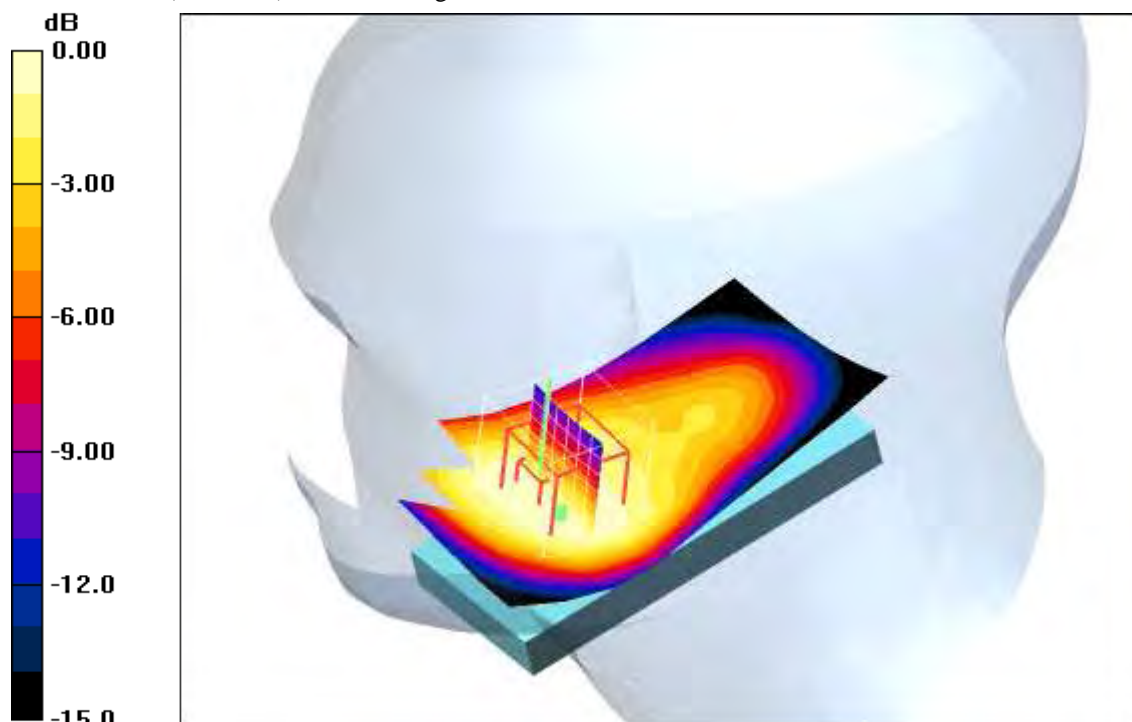
$dz=5\text{mm}$

Reference Value = 24.9 V/m; Power Drift = 0.068 dB

Peak SAR (extrapolated) = 1.07 W/kg

**SAR(1 g) = 0.751 mW/g; SAR(10 g) = 0.503 mW/g**

Maximum value of SAR (measured) = 0.823 mW/g



0 dB = 0.823mW/g

**Additional information:**

ambient temperature: 23.3°C; liquid temperature: 22.0°C

Date/Time: 2009-11-13 14:09:36 Date/Time: 2009-11-13 14:16:58

**IEEE1528\_OET65-RightHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.695 mW/g

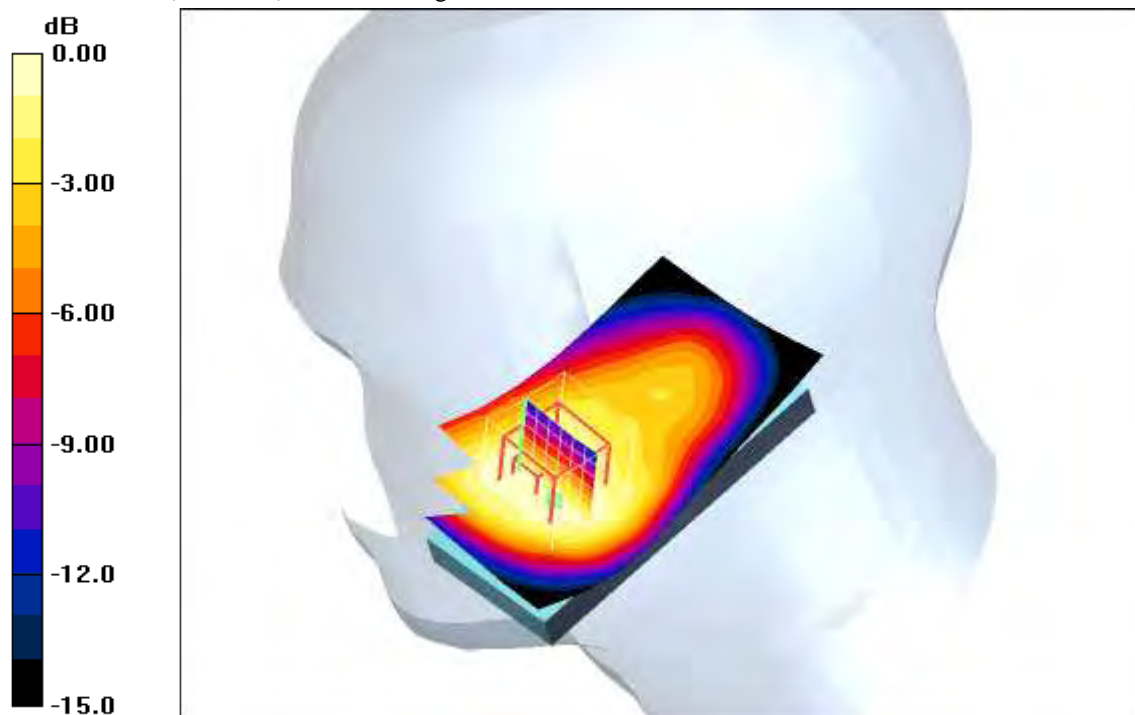
**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 22.9 V/m; Power Drift = -0.036 dB

Peak SAR (extrapolated) = 0.948 W/kg

**SAR(1 g) = 0.637 mW/g; SAR(10 g) = 0.418 mW/g**

Maximum value of SAR (measured) = 0.704 mW/g



0 dB = 0.704mW/g

**Additional information:**

ambient temperature: 23.3°C; liquid temperature: 22.0°C



Date/Time: 2009-11-13 12:30:39 Date/Time: 2009-11-13 12:36:30

**IEEE1528\_OET65-RightHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL1900 Medium parameters used:  $f = 1850.2 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.458 mW/g

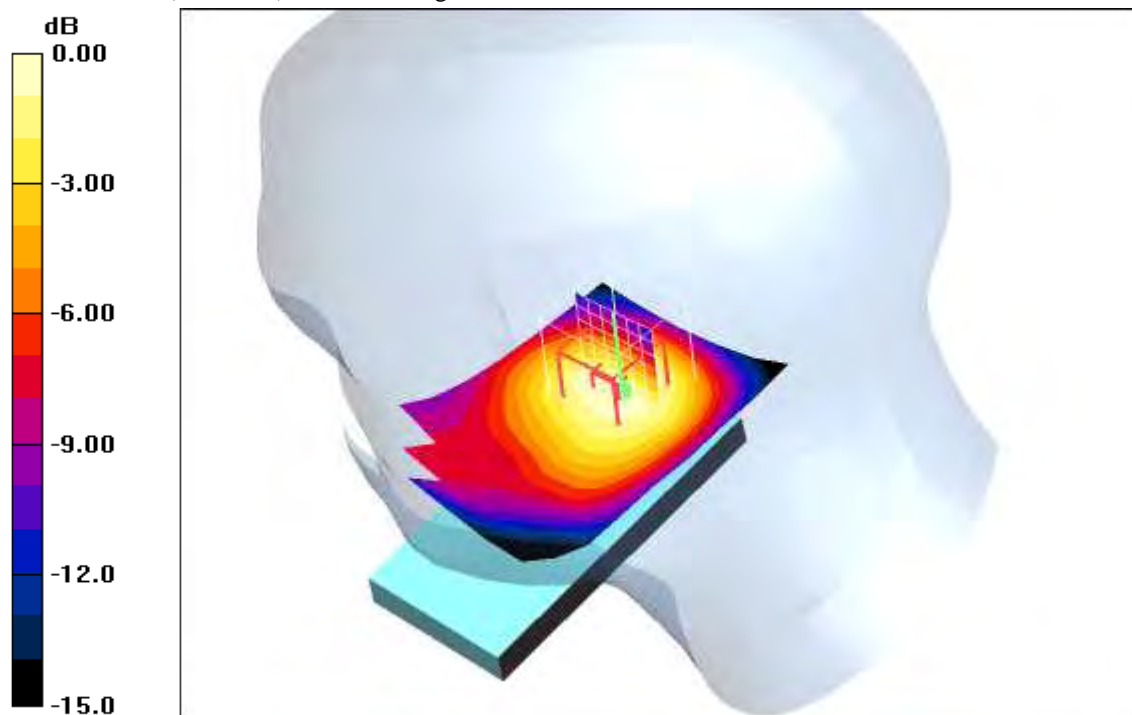
**Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 18.6 V/m; Power Drift = -0.032 dB

Peak SAR (extrapolated) = 0.544 W/kg

**SAR(1 g) = 0.404 mW/g; SAR(10 g) = 0.263 mW/g**

Maximum value of SAR (measured) = 0.435 mW/g



0 dB = 0.435mW/g

**Additional information:**

ambient temperature: 23.3°C; liquid temperature: 22.0°C

Date/Time: 2009-11-13 12:11:34 Date/Time: 2009-11-13 12:17:24

**IEEE1528\_OET65-RightHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

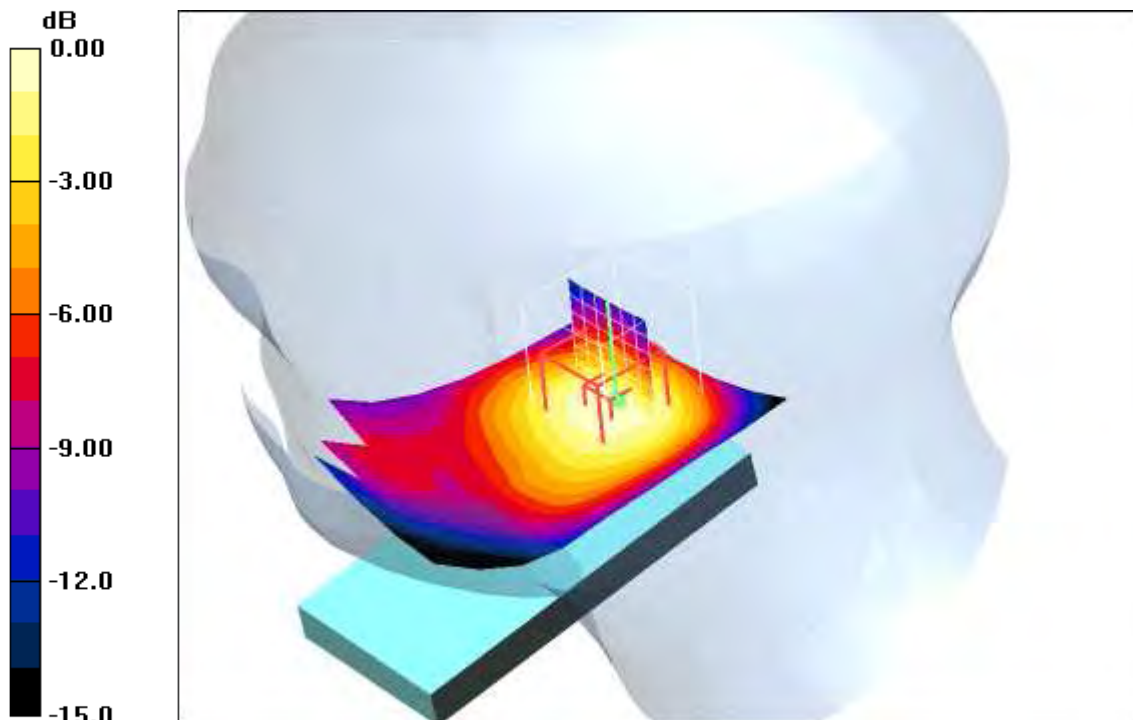
**Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 17.5 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.558 W/kg

**SAR(1 g) = 0.402 mW/g; SAR(10 g) = 0.256 mW/g**

Maximum value of SAR (measured) = 0.436 mW/g



0 dB = 0.436mW/g

**Additional information:**

ambient temperature: 23.3°C; liquid temperature: 22.0°C

Date/Time: 2009-11-13 12:52:41 Date/Time: 2009-11-13 12:58:35

**IEEE1528\_OET65-RightHandSide-GSM1900**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: HSL1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.420 mW/g

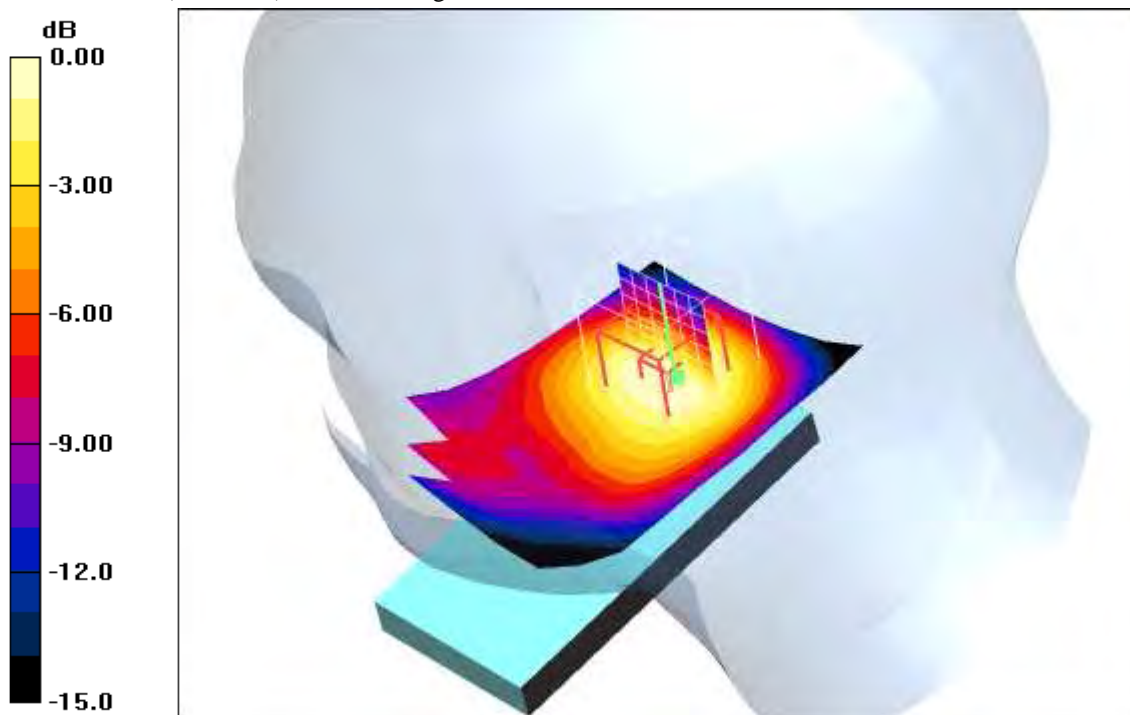
**Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 17.6 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.521 W/kg

**SAR(1 g) = 0.370 mW/g; SAR(10 g) = 0.233 mW/g**

Maximum value of SAR (measured) = 0.401 mW/g



0 dB = 0.401mW/g

**Additional information:**

ambient temperature: 23.3°C; liquid temperature: 22.0°C

**Annex 2.4 GSM 1900 MHz body**

Date/Time: 2009-11-16 15:33:17 Date/Time: 2009-11-16 15:39:11 Date/Time: 2009-11-16 15:50:54

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

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: M1900 Medium parameters used:  $f = 1850.2 \text{ MHz}$ ;  $\sigma = 1.54 \text{ mho/m}$ ;  $\epsilon_r = 52.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.31, 4.31, 4.31); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.434 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 = 18.0 V/m; Power Drift = -0.011 dB

Peak SAR (extrapolated) = 0.576 W/kg

**SAR(1 g) = 0.399 mW/g; SAR(10 g) = 0.240 mW/g**

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

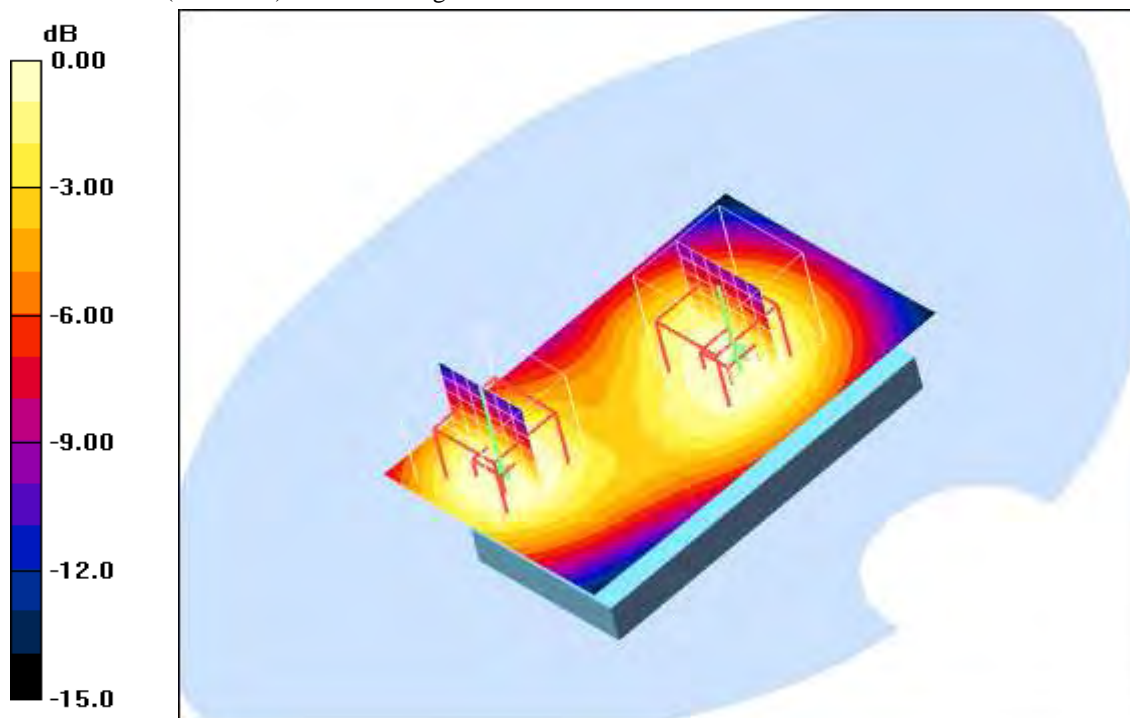
**Front position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 18.0 V/m; Power Drift = -0.011 dB

Peak SAR (extrapolated) = 0.441 W/kg

**SAR(1 g) = 0.341 mW/g; SAR(10 g) = 0.233 mW/g**

Maximum value of SAR (measured) = 0.367 mW/g



0 dB = 0.367mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 22.8°C; liquid temperature: 21.8°C

Date/Time: 2009-11-16 15:00:51 Date/Time: 2009-11-16 15:06:40 Date/Time: 2009-11-16 15:18:24

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

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: M1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.54 \text{ mho/m}$ ;  $\epsilon_r = 52.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

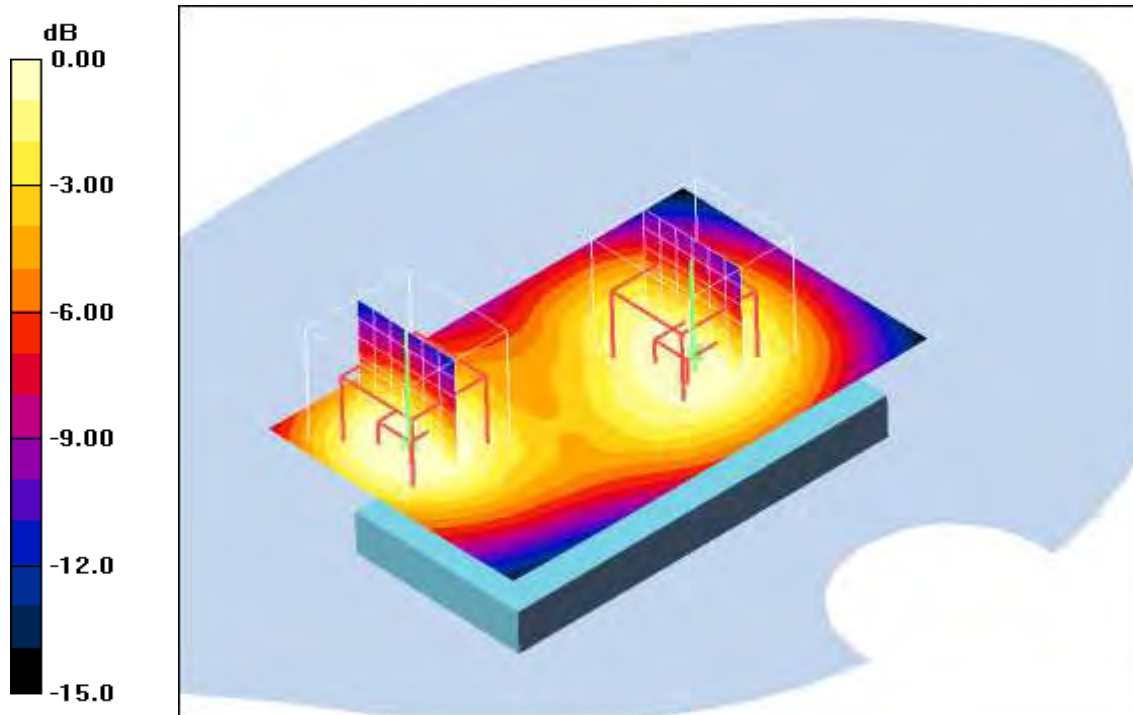
DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.31, 4.31, 4.31); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 0.462 mW/g

**Front position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 18.3 V/m; Power Drift = 0.122 dB  
 Peak SAR (extrapolated) = 0.614 W/kg  
**SAR(1 g) = 0.421 mW/g; SAR(10 g) = 0.251 mW/g**  
 Maximum value of SAR (measured) = 0.467 mW/g

**Front position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 18.3 V/m; Power Drift = 0.122 dB  
 Peak SAR (extrapolated) = 0.456 W/kg  
**SAR(1 g) = 0.354 mW/g; SAR(10 g) = 0.239 mW/g**  
 Maximum value of SAR (measured) = 0.379 mW/g



**Additional information:**

position or distance of DUT to SAM: 15 mm  
 ambient temperature: 22.8°C; liquid temperature: 21.8°C

Date/Time: 2009-11-16 16:05:36 Date/Time: 2009-11-16 16:11:32 Date/Time: 2009-11-16 16:23:06

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

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: M1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.54 \text{ mho/m}$ ;  $\epsilon_r = 52.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.31, 4.31, 4.31); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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) = 0.399 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 = 16.9 V/m; Power Drift = 0.050 dB

Peak SAR (extrapolated) = 0.531 W/kg

**SAR(1 g) = 0.357 mW/g; SAR(10 g) = 0.212 mW/g**

Maximum value of SAR (measured) = 0.393 mW/g

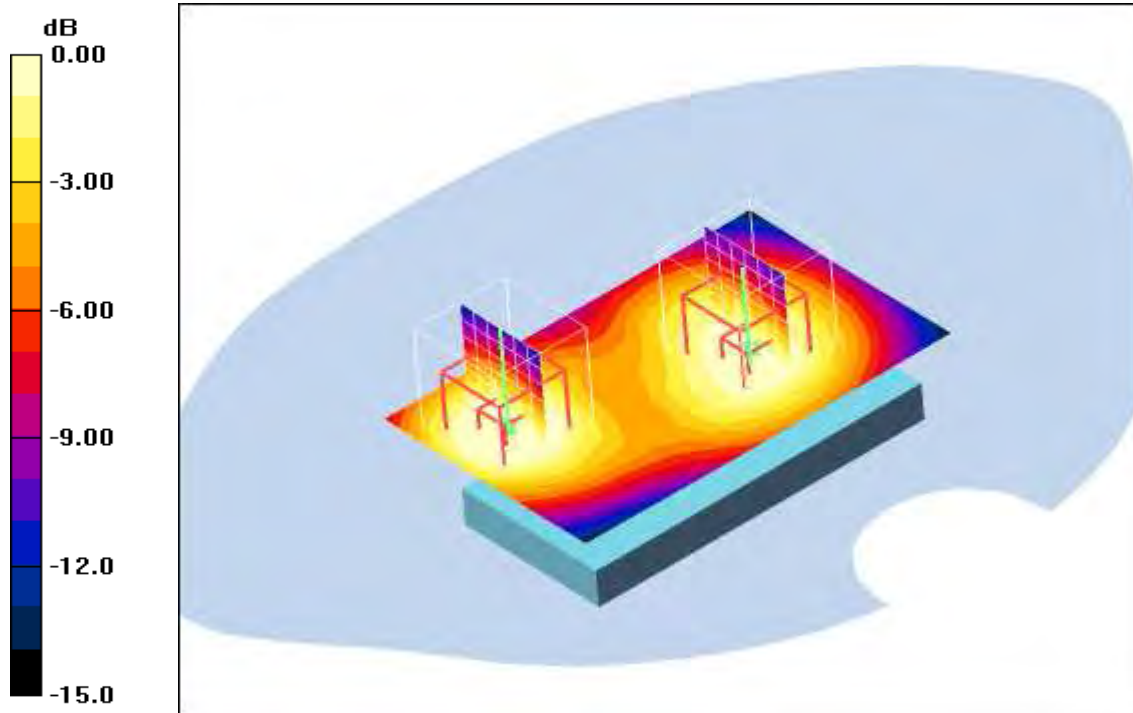
**Front position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 16.9 V/m; Power Drift = 0.050 dB

Peak SAR (extrapolated) = 0.365 W/kg

**SAR(1 g) = 0.278 mW/g; SAR(10 g) = 0.186 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: 15 mm

ambient temperature: 22.8°C; liquid temperature: 21.8°C

Date/Time: 2009-11-16 17:27:44 Date/Time: 2009-11-16 17:33:42

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

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: M1900 Medium parameters used:  $f = 1850.2 \text{ MHz}$ ;  $\sigma = 1.54 \text{ mho/m}$ ;  $\epsilon_r = 52.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.31, 4.31, 4.31); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.582 mW/g

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

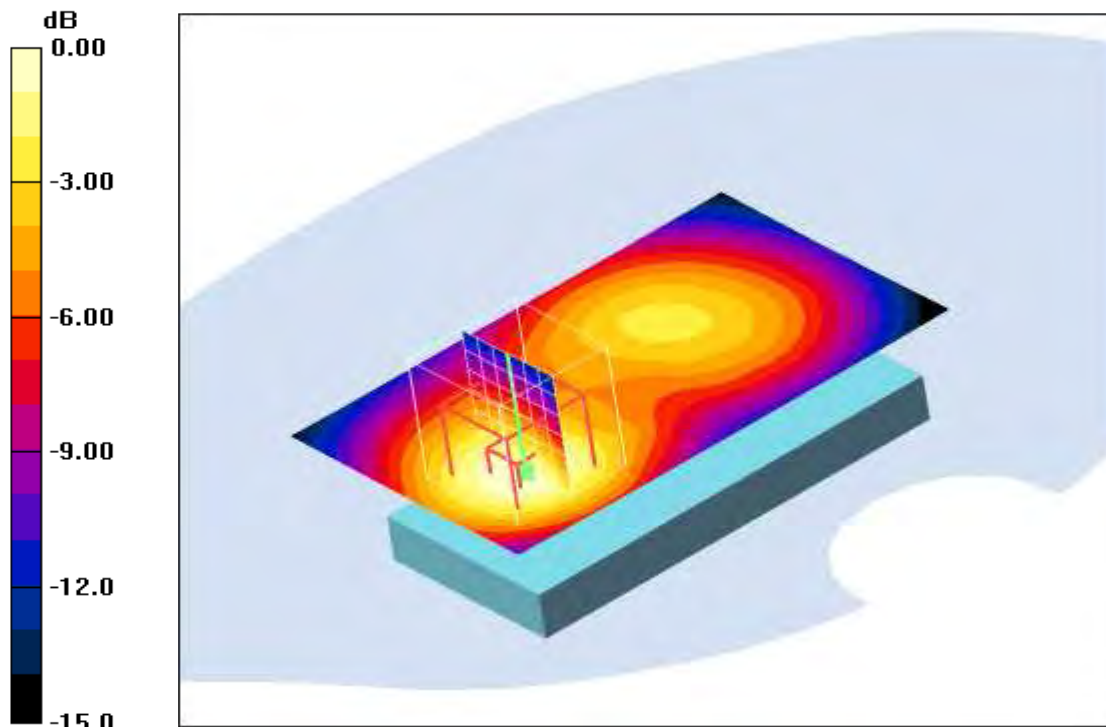
$dz=5\text{mm}$

Reference Value = 19.2 V/m; Power Drift = 0.014 dB

Peak SAR (extrapolated) = 0.718 W/kg

**SAR(1 g) = 0.512 mW/g; SAR(10 g) = 0.310 mW/g**

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



0 dB = 0.565mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 22.8°C; liquid temperature: 21.8°C

Date/Time: 2009-11-16 17:04:55 Date/Time: 2009-11-16 17:12:33

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

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: M1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.54 \text{ mho/m}$ ;  $\epsilon_r = 52.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.31, 4.31, 4.31); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

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

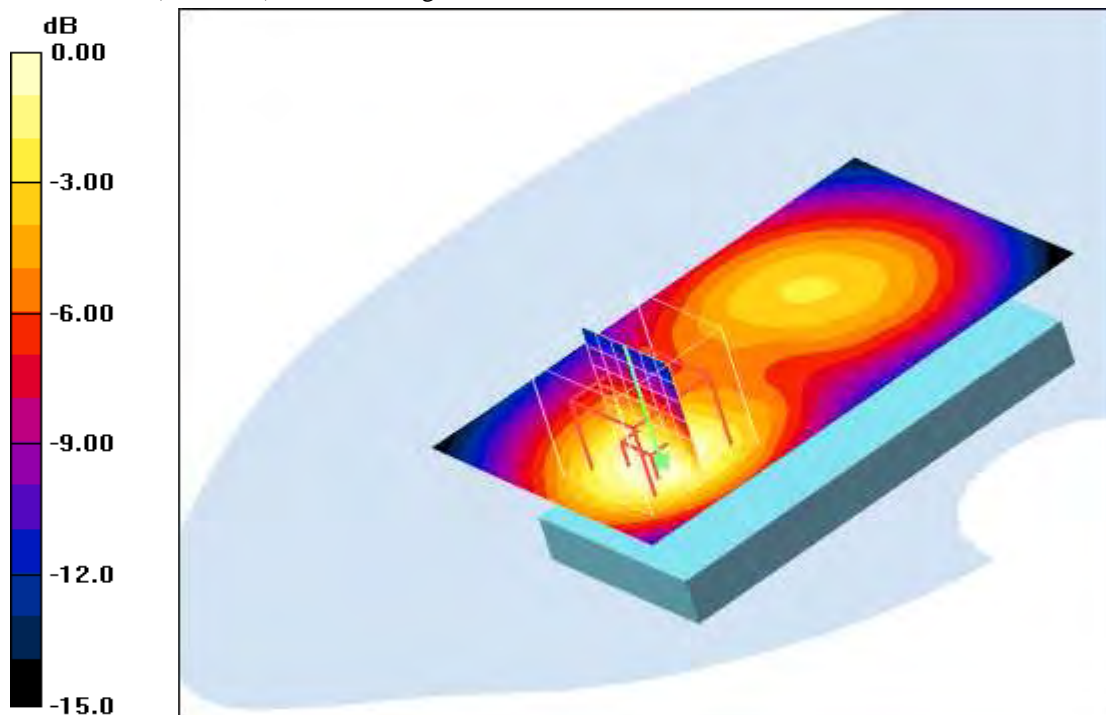
$dz=5\text{mm}$

Reference Value = 20.1 V/m; Power Drift = -0.034 dB

Peak SAR (extrapolated) = 0.807 W/kg

**SAR(1 g) = 0.564 mW/g; SAR(10 g) = 0.338 mW/g**

Maximum value of SAR (measured) = 0.624 mW/g



0 dB = 0.624mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 22.8°C; liquid temperature: 21.8°C



Date/Time: 2009-11-16 16:40:27 Date/Time: 2009-11-16 16:46:28

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

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

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

Medium: M1900 Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.54 \text{ mho/m}$ ;  $\epsilon_r = 52.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.31, 4.31, 4.31); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.538 mW/g

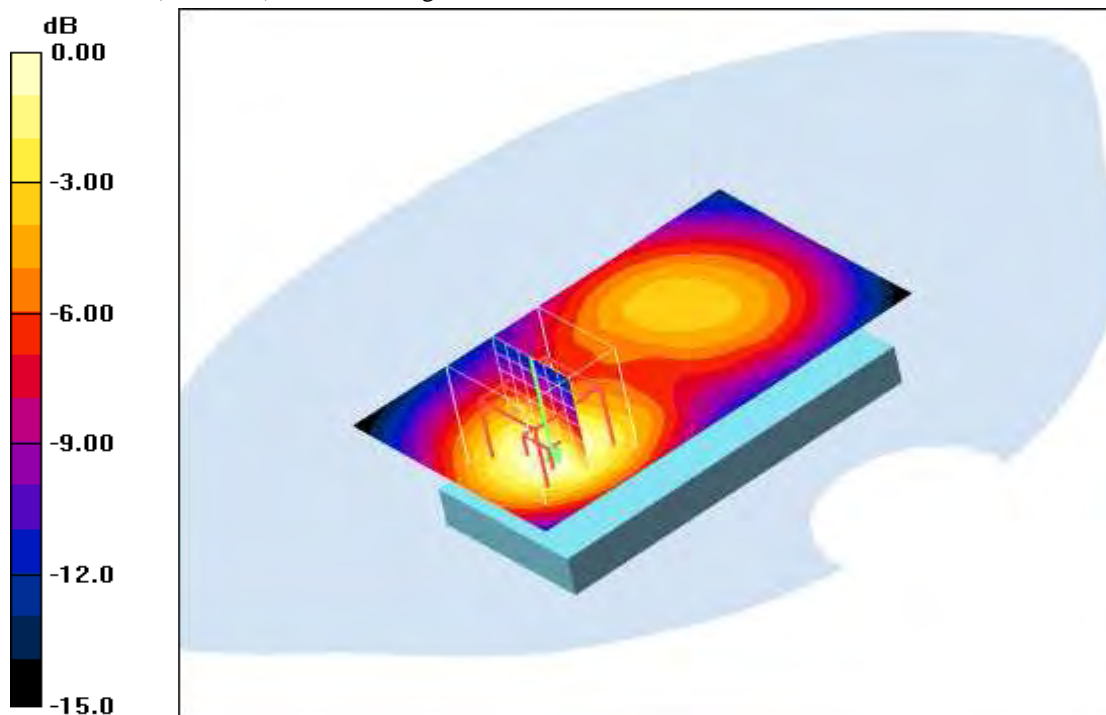
**Rear position -High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 18.4 V/m; Power Drift = -0.069 dB

Peak SAR (extrapolated) = 0.687 W/kg

**SAR(1 g) = 0.467 mW/g; SAR(10 g) = 0.279 mW/g**

Maximum value of SAR (measured) = 0.521 mW/g



0 dB = 0.521mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 22.8°C; liquid temperature: 21.8°C

Date/Time: 2009-11-16 18:08:40 Date/Time: 2009-11-16 18:14:39

**IEEE1528\_OET65-Body-GSM1900 GPRS 1TS**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: PCS 1900 GPRS 1TS; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium: M1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.54 \text{ mho/m}$ ;  $\epsilon_r = 52.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.31, 4.31, 4.31); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.464 mW/g

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

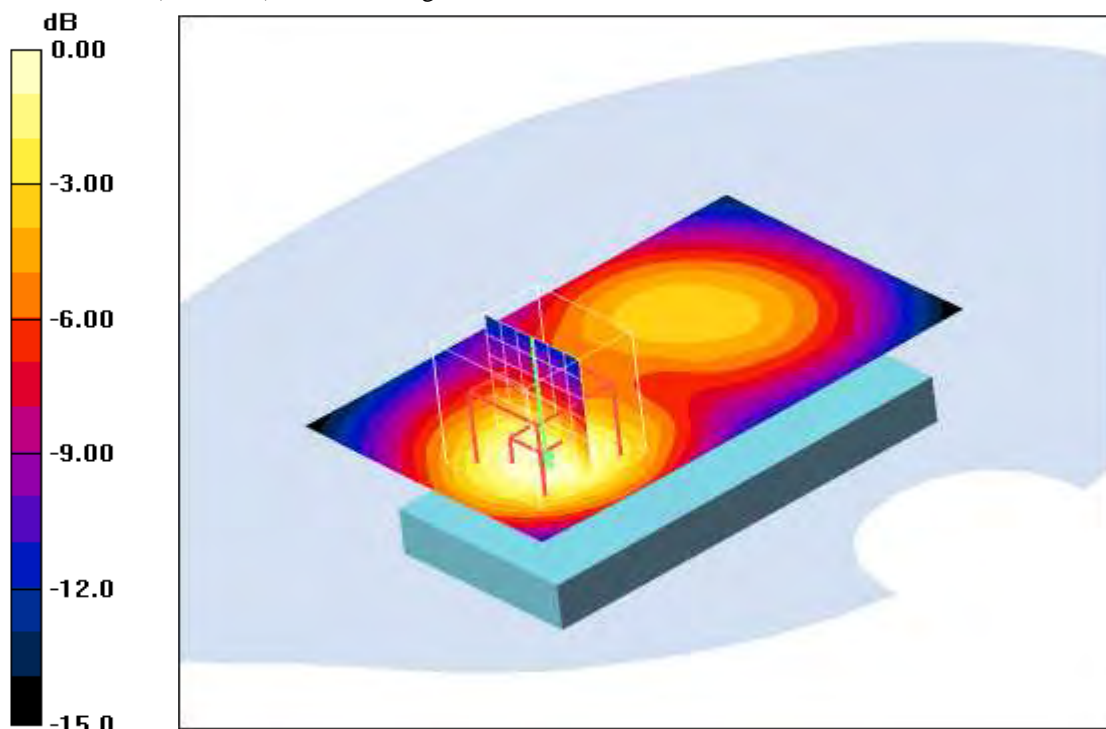
dz=5mm

Reference Value = 16.8 V/m; Power Drift = -0.027 dB

Peak SAR (extrapolated) = 0.557 W/kg

**SAR(1 g) = 0.381 mW/g; SAR(10 g) = 0.230 mW/g**

Maximum value of SAR (measured) = 0.420 mW/g



0 dB = 0.420mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 22.8°C; liquid temperature: 21.8°C

**Annex 2.5 UMTS (WCDMA) FDD V 850 MHz head**

Date/Time: 2009-11-12 16:41:55 Date/Time: 2009-11-12 16:47:46

**IEEE1528\_OET65-LeftHandSide-FDD V**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 826.4$  MHz;  $\sigma = 0.89$  mho/m;  $\epsilon_r = 41.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.485 mW/g

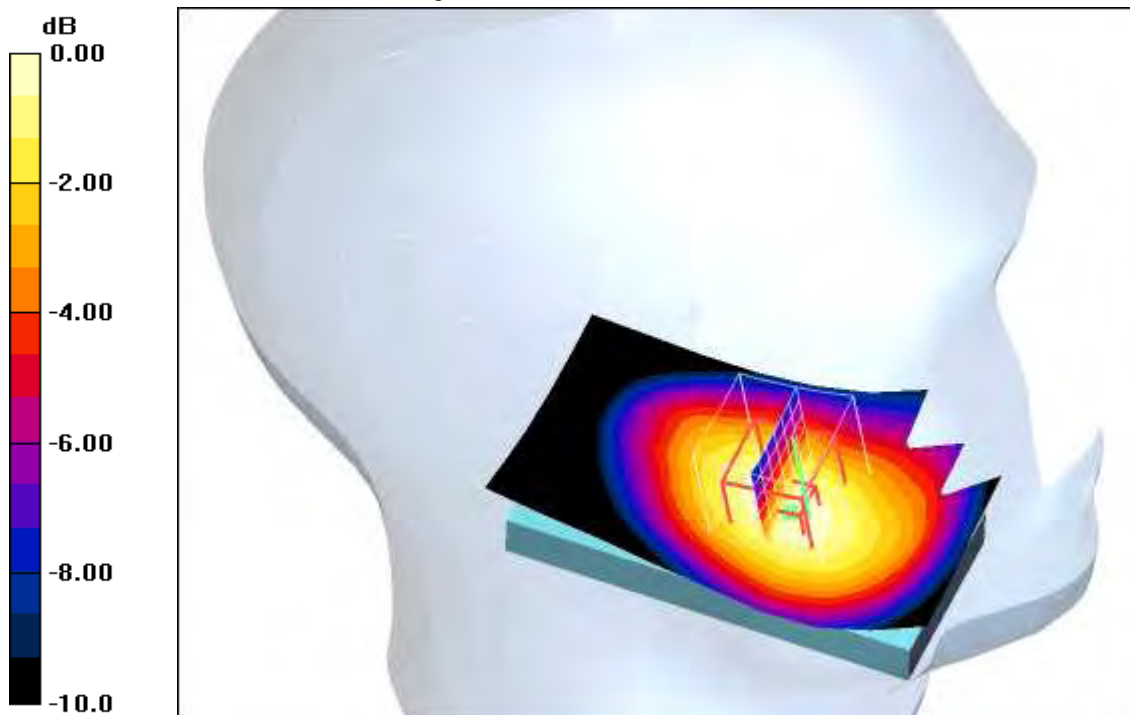
**Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.8 V/m; Power Drift = 0.088 dB

Peak SAR (extrapolated) = 0.620 W/kg

**SAR(1 g) = 0.474 mW/g; SAR(10 g) = 0.337 mW/g**

Maximum value of SAR (measured) = 0.497 mW/g



0 dB = 0.497mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.1°C

Date/Time: 2009-11-12 17:02:29 Date/Time: 2009-11-12 17:09:09

**IEEE1528\_OET65-LeftHandSide-FDD V**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 836.4 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.585 mW/g

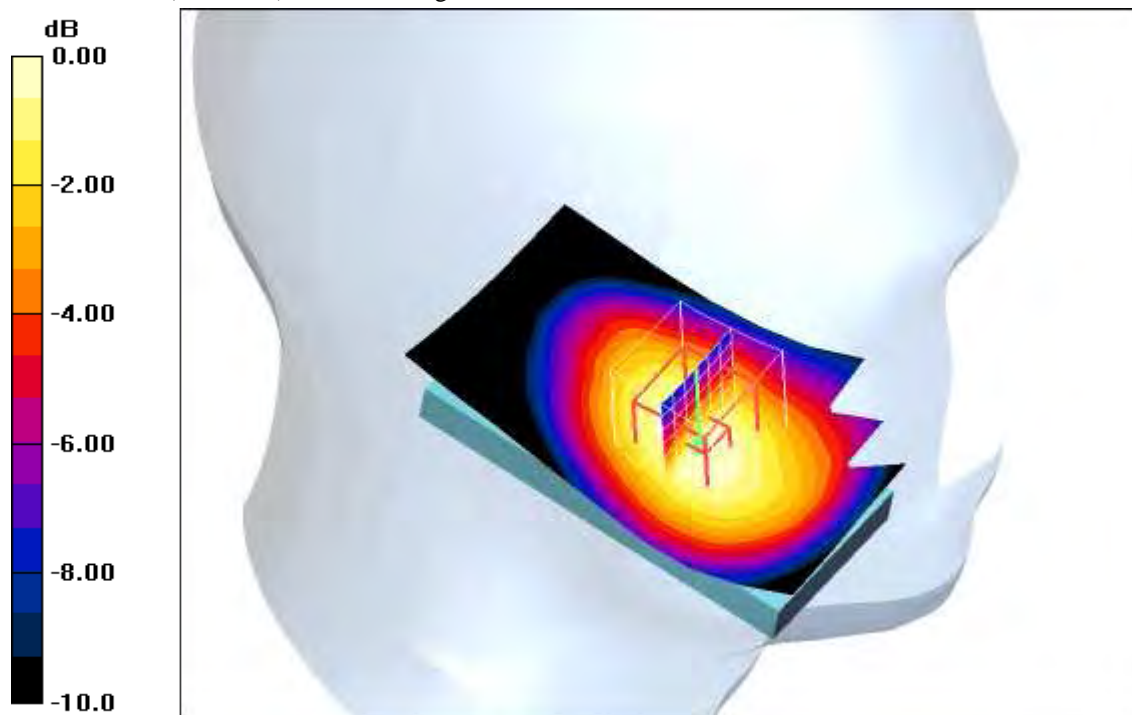
**Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 26.2 V/m; Power Drift = 0.028 dB

Peak SAR (extrapolated) = 0.726 W/kg

**SAR(1 g) = 0.556 mW/g; SAR(10 g) = 0.396 mW/g**

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



0 dB = 0.588mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.1°C

Date/Time: 2009-11-12 17:25:11 Date/Time: 2009-11-12 17:31:06

**IEEE1528\_OET65-LeftHandSide-FDD V**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 846.6 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

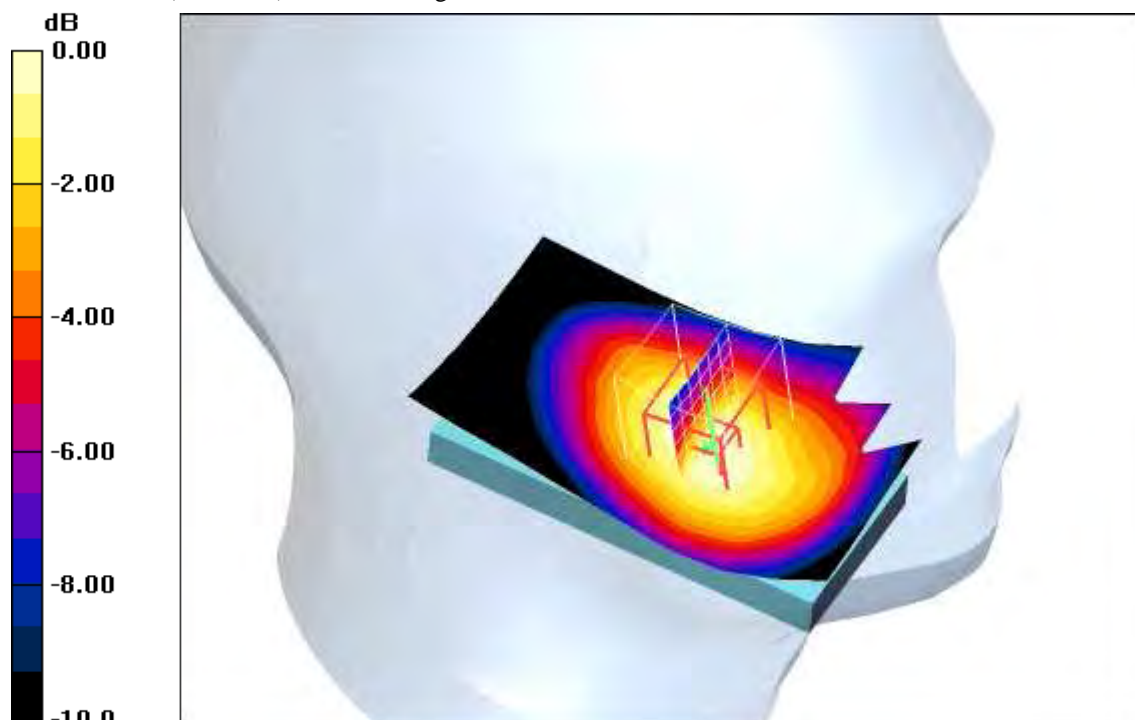
**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 29.8 V/m; Power Drift = 0.013 dB

Peak SAR (extrapolated) = 0.955 W/kg

**SAR(1 g) = 0.719 mW/g; SAR(10 g) = 0.510 mW/g**

Maximum value of SAR (measured) = 0.765 mW/g



0 dB = 0.765mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.1°C

Date/Time: 2009-11-12 17:49:11 Date/Time: 2009-11-12 17:55:18

**IEEE1528\_OET65-LeftHandSide-FDD V**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 826.4 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.250 mW/g

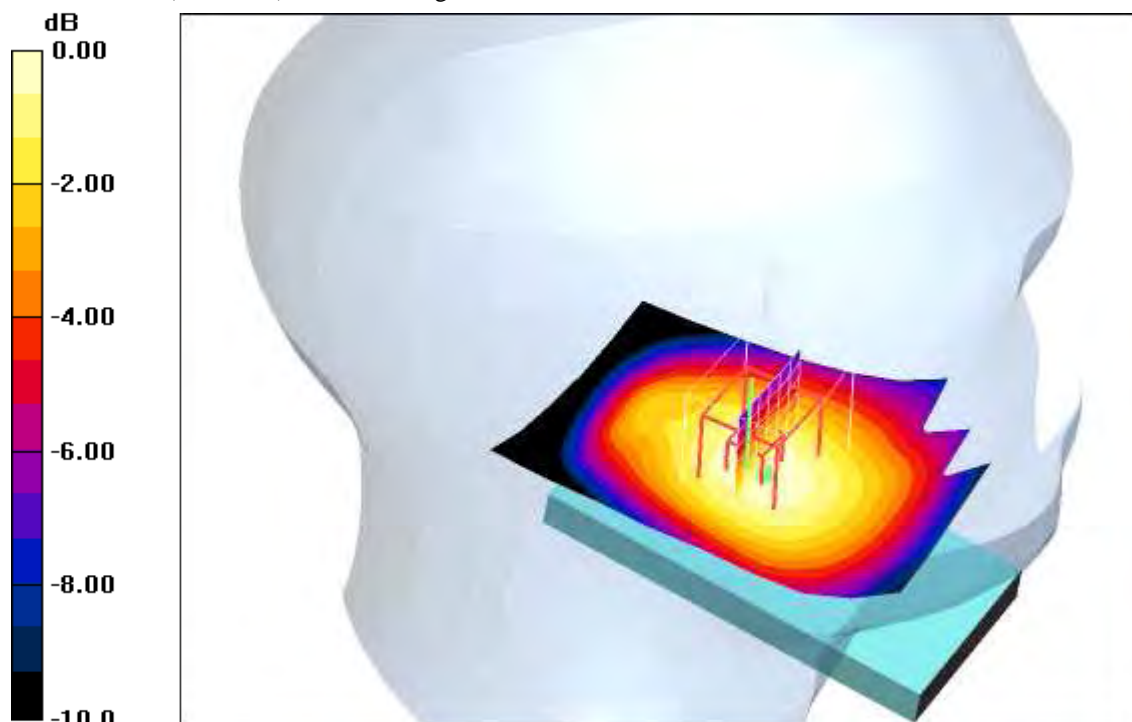
**Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 17.1 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 0.301 W/kg

**SAR(1 g) = 0.242 mW/g; SAR(10 g) = 0.179 mW/g**

Maximum value of SAR (measured) = 0.254 mW/g



0 dB = 0.254mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.1°C

Date/Time: 2009-11-12 18:28:46 Date/Time: 2009-11-12 18:34:57

**IEEE1528\_OET65-LeftHandSide-FDD V**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 836.4 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

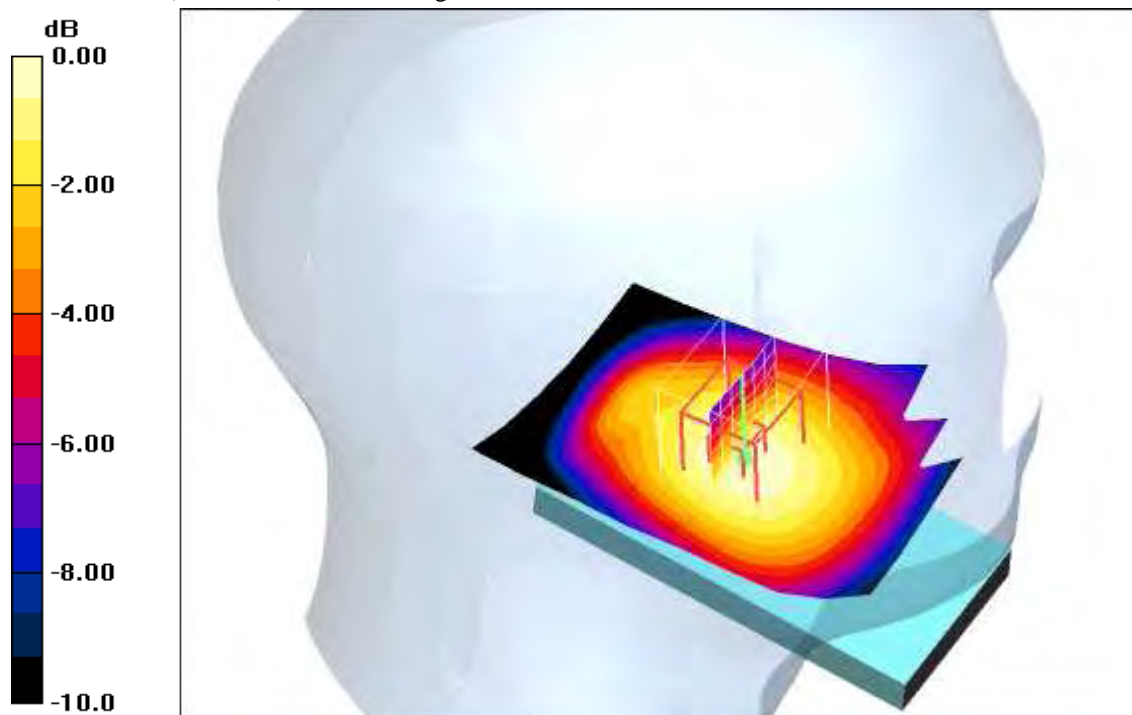
**Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 18.2 V/m; Power Drift = 0.072 dB

Peak SAR (extrapolated) = 0.344 W/kg

**SAR(1 g) = 0.278 mW/g; SAR(10 g) = 0.206 mW/g**

Maximum value of SAR (measured) = 0.291 mW/g



0 dB = 0.291mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.1°C

Date/Time: 2009-11-12 18:04:42 Date/Time: 2009-11-11 18:10:43

**IEEE1528\_OET65-LeftHandSide-FDD V**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 846.6 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

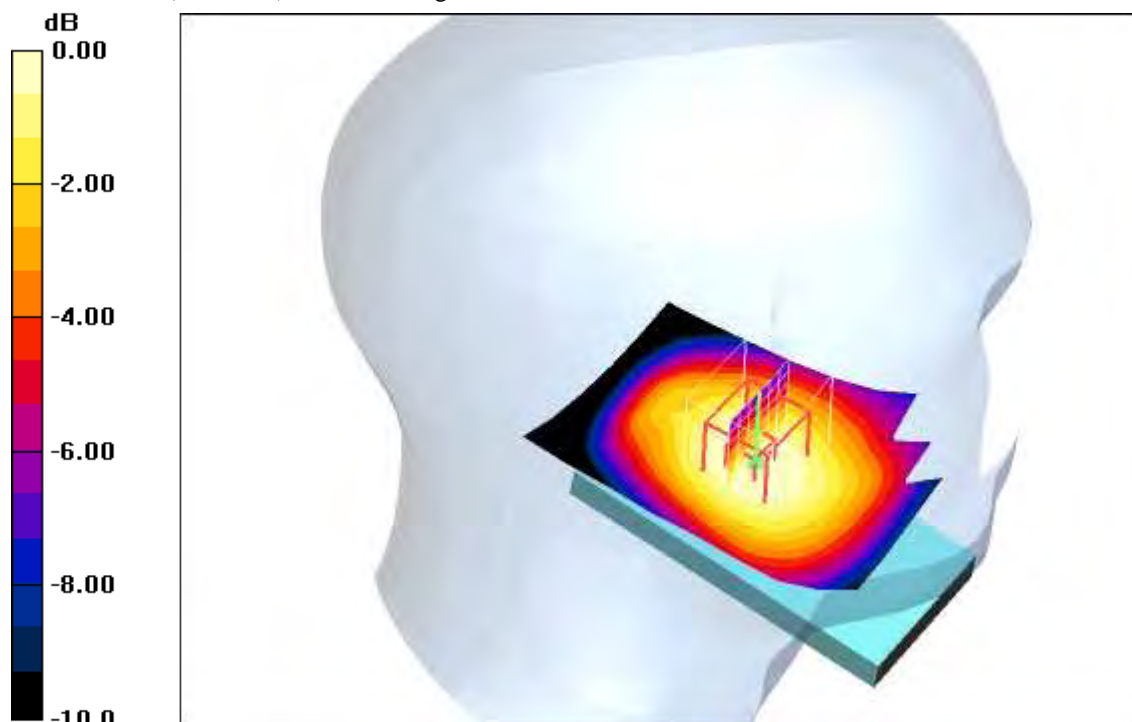
**Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 20.4 V/m; Power Drift = 0.041 dB

Peak SAR (extrapolated) = 0.402 W/kg

**SAR(1 g) = 0.334 mW/g; SAR(10 g) = 0.251 mW/g**

Maximum value of SAR (measured) = 0.350 mW/g



**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.1°C



Date/Time: 2009-11-12 14:46:56 Date/Time: 2009-11-12 14:53:30

**IEEE1528\_OET65-RightHandSide-FDD V**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 826.4 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.649 mW/g

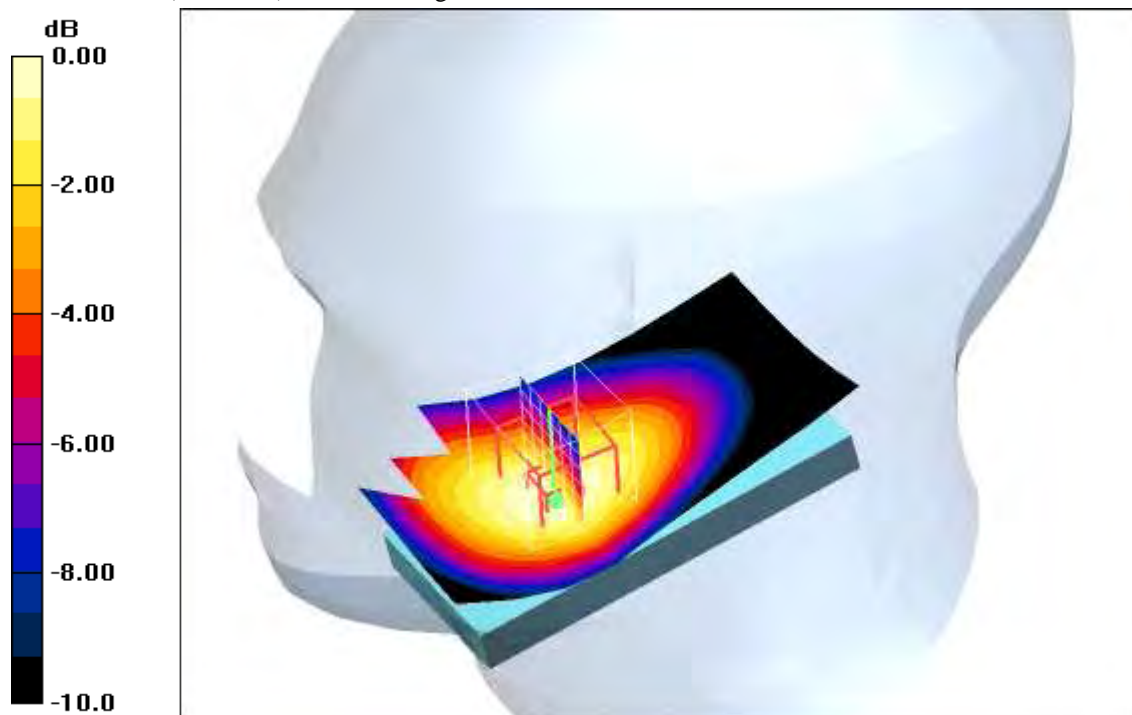
**Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 27.3 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.778 W/kg

**SAR(1 g) = 0.601 mW/g; SAR(10 g) = 0.429 mW/g**

Maximum value of SAR (measured) = 0.644 mW/g



**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.2°C

Date/Time: 2009-11-12 14:25:30 Date/Time: 2009-11-12 14:32:06

**IEEE1528\_OET65-RightHandSide-FDD V**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 836.4 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.733 mW/g

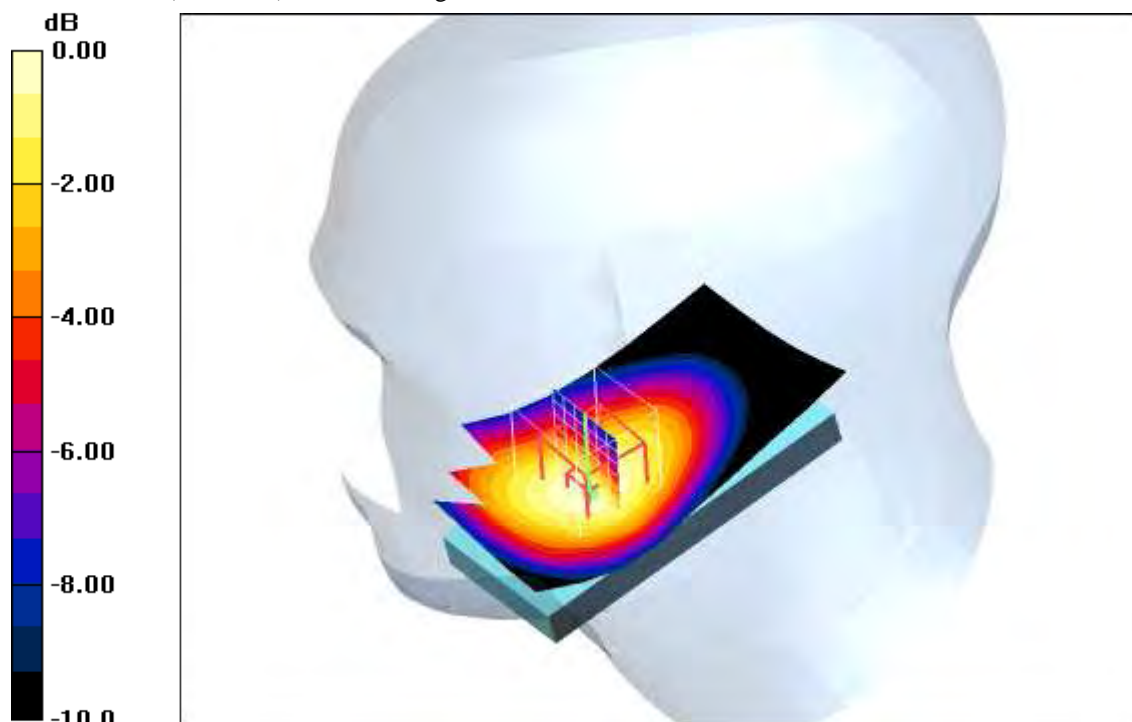
**Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 29.0 V/m; Power Drift = 0.091 dB

Peak SAR (extrapolated) = 0.872 W/kg

**SAR(1 g) = 0.684 mW/g; SAR(10 g) = 0.489 mW/g**

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



0 dB = 0.731mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.2°C

Date/Time: 2009-11-12 15:14:24 Date/Time: 2009-11-12 15:20:19

**IEEE1528\_OET65-RightHandSide-FDD V**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 846.6 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.841 mW/g

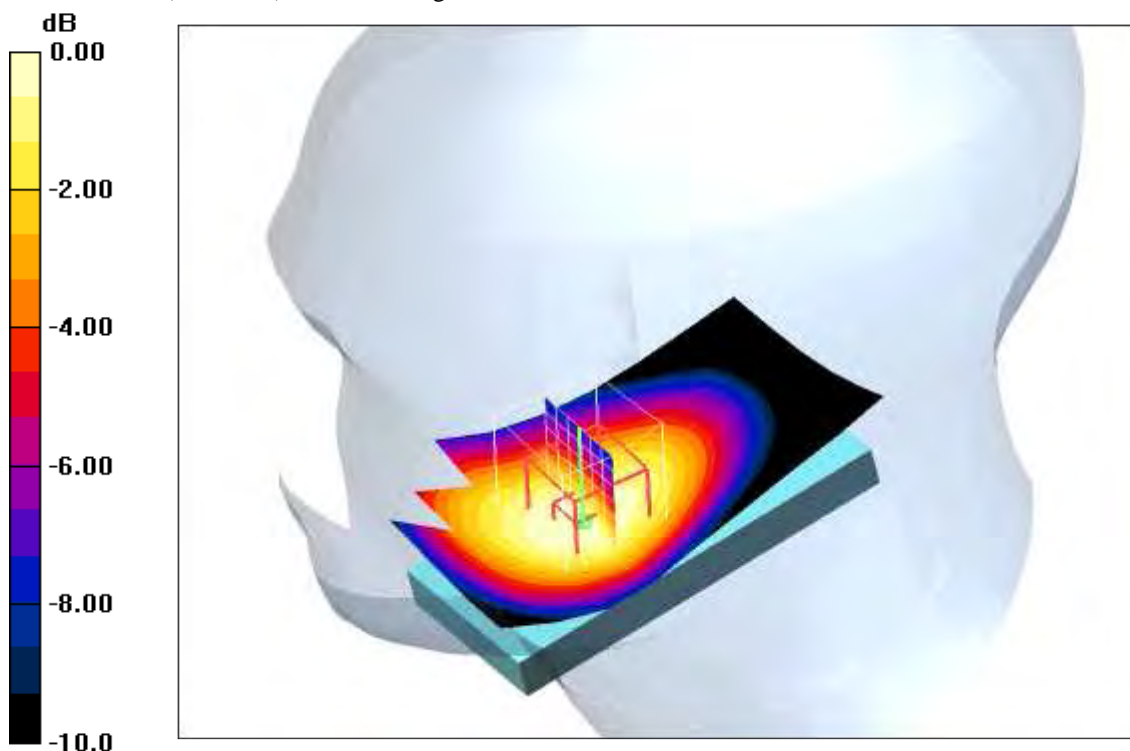
**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 30.5 V/m; Power Drift = 0.055 dB

Peak SAR (extrapolated) = 0.974 W/kg

**SAR(1 g) = 0.753 mW/g; SAR(10 g) = 0.542 mW/g**

Maximum value of SAR (measured) = 0.799 mW/g



0 dB = 0.799mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.2°C

Date/Time: 2009-11-12 16:15:03 Date/Time: 2009-11-12 16:21:04

**IEEE1528\_OET65-RightHandSide-FDD V**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 826.4 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.249 mW/g

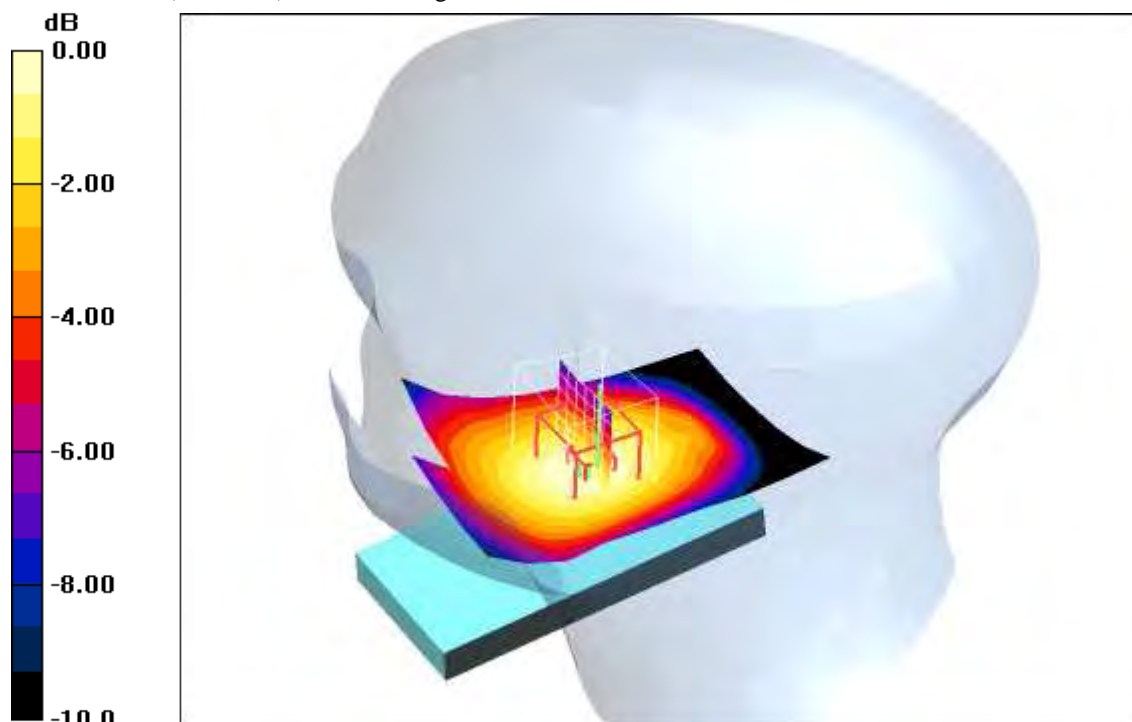
**Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 17.0 V/m; Power Drift = 0.087 dB

Peak SAR (extrapolated) = 0.300 W/kg

**SAR(1 g) = 0.236 mW/g; SAR(10 g) = 0.174 mW/g**

Maximum value of SAR (measured) = 0.250 mW/g



0 dB = 0.250mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.2°C

Date/Time: 2009-11-12 15:56:11 Date/Time: 2009-11-12 16:02:12

**IEEE1528\_OET65-RightHandSide-FDD V**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 836.4 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.291 mW/g

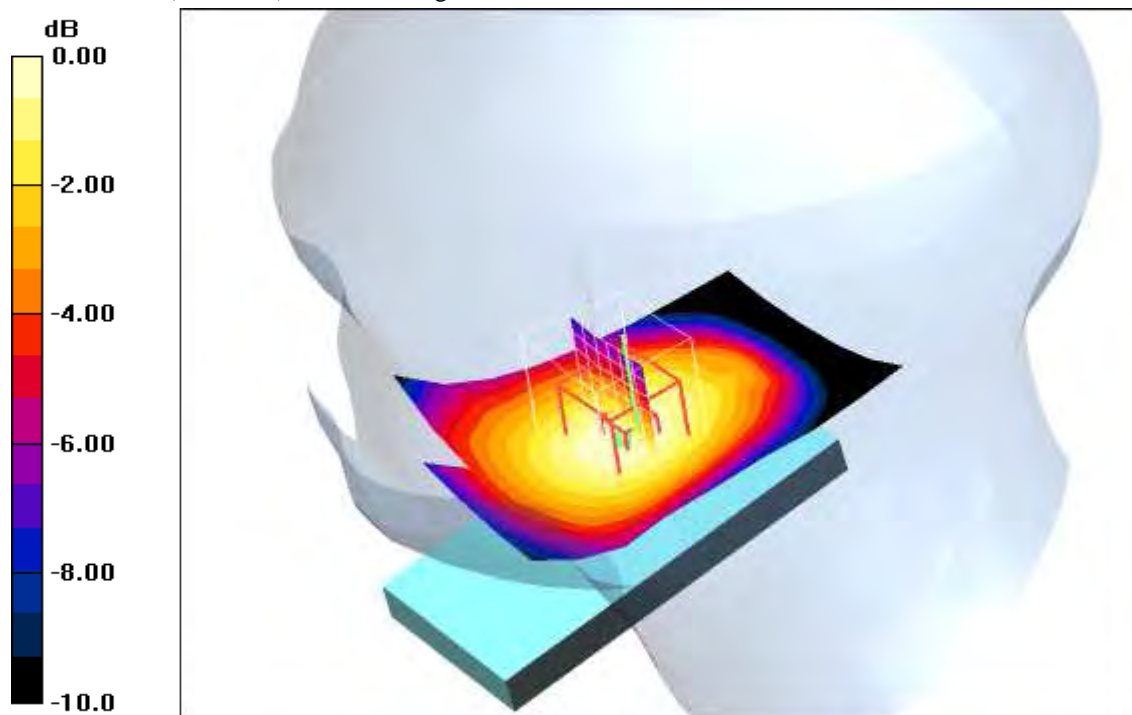
**Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 18.5 V/m; Power Drift = 0.048 dB

Peak SAR (extrapolated) = 0.355 W/kg

**SAR(1 g) = 0.280 mW/g; SAR(10 g) = 0.207 mW/g**

Maximum value of SAR (measured) = 0.296 mW/g



0 dB = 0.296mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.2°C

Date/Time: 2009-11-12 15:35:34 Date/Time: 2009-11-12 15:42:31

**IEEE1528\_OET65-RightHandSide-FDD V**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: HSL850 Medium parameters used (interpolated):  $f = 846.6 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.2$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.02, 6.02, 6.02); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.385 mW/g

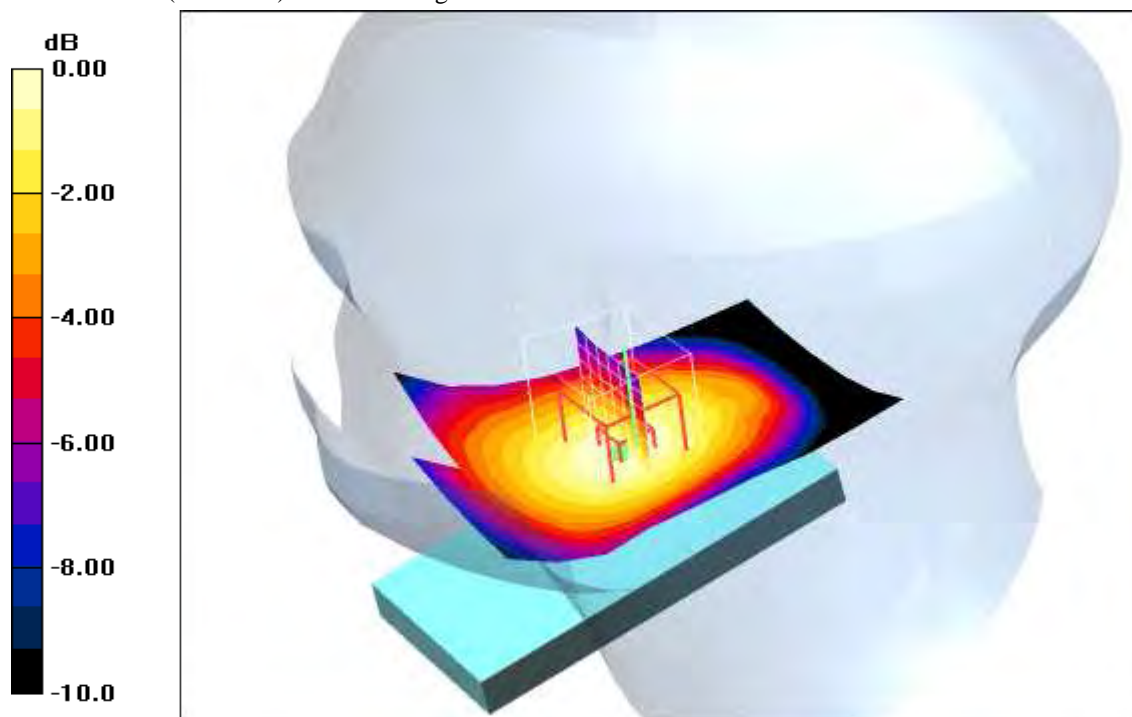
**Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 21.3 V/m; Power Drift = -0.012 dB

Peak SAR (extrapolated) = 0.466 W/kg

**SAR(1 g) = 0.365 mW/g; SAR(10 g) = 0.267 mW/g**

Maximum value of SAR (measured) = 0.388 mW/g



0 dB = 0.388mW/g

**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.2°C

**Annex 2.6 UMTS (WCDMA) FDD V 850 MHz body**

Date/Time: 2009-11-17 12:27:26 Date/Time: 2009-11-17 12:33:42

**IEEE1528\_OET65-Body-UMTS-FDD-V**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated):  $f = 826.4 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.78, 5.78, 5.78); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.234 mW/g

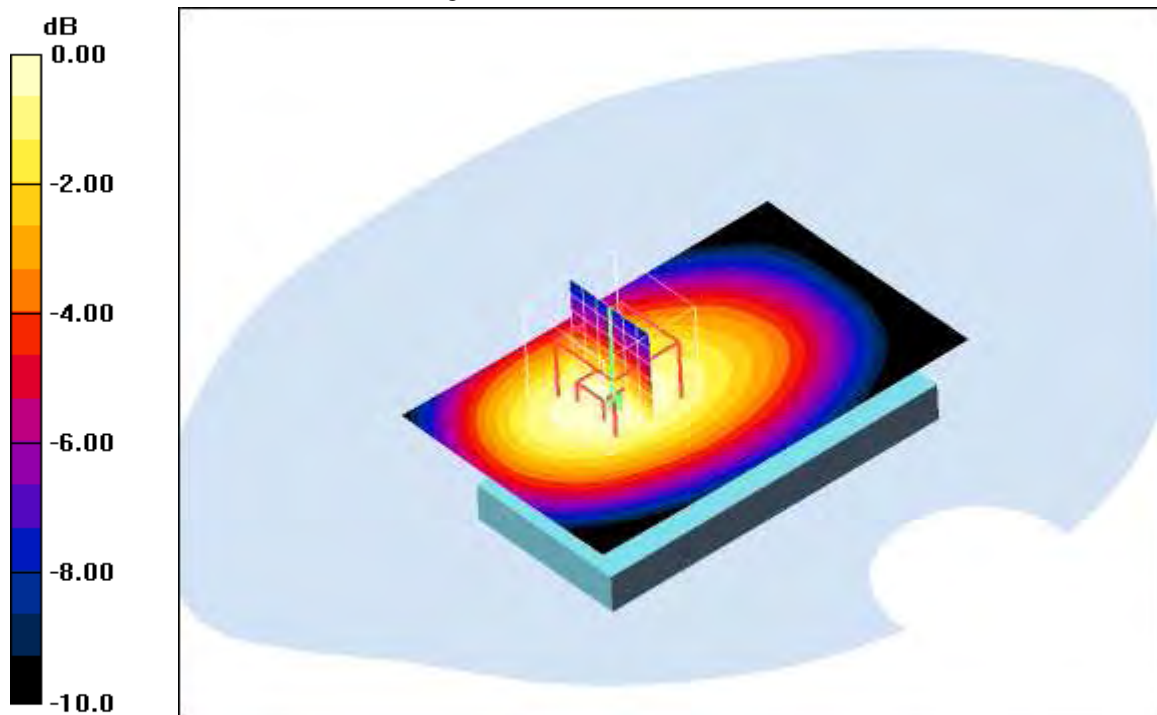
**Front position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 16.1 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.297 W/kg

**SAR(1 g) = 0.221 mW/g; SAR(10 g) = 0.158 mW/g**

Maximum value of SAR (measured) = 0.236 mW/g



0 dB = 0.236mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.3°C; liquid temperature: 21.8°C

Date/Time: 2009-11-17 12:48:02 Date/Time: 2009-11-17 12:53:47

**IEEE1528\_OET65-Body-UMTS-FDD-V**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated):  $f = 836.4 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.78, 5.78, 5.78); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.269 mW/g

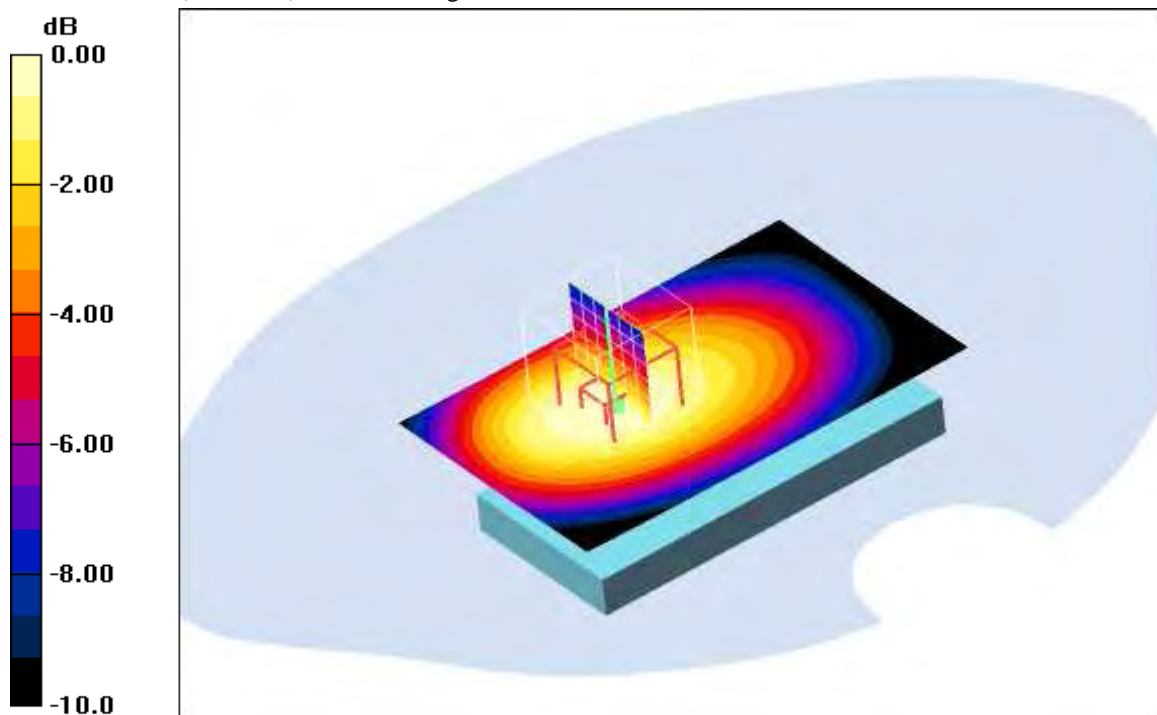
**Front position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 17.4 V/m; Power Drift = 0.028 dB

Peak SAR (extrapolated) = 0.337 W/kg

**SAR(1 g) = 0.253 mW/g; SAR(10 g) = 0.180 mW/g**

Maximum value of SAR (measured) = 0.269 mW/g



0 dB = 0.269mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.3°C; liquid temperature: 21.8°C



**IEEE1528\_OET65-Body-UMTS-FDD-V**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated):  $f = 846.6 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.78, 5.78, 5.78); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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) = 0.347 mW/g

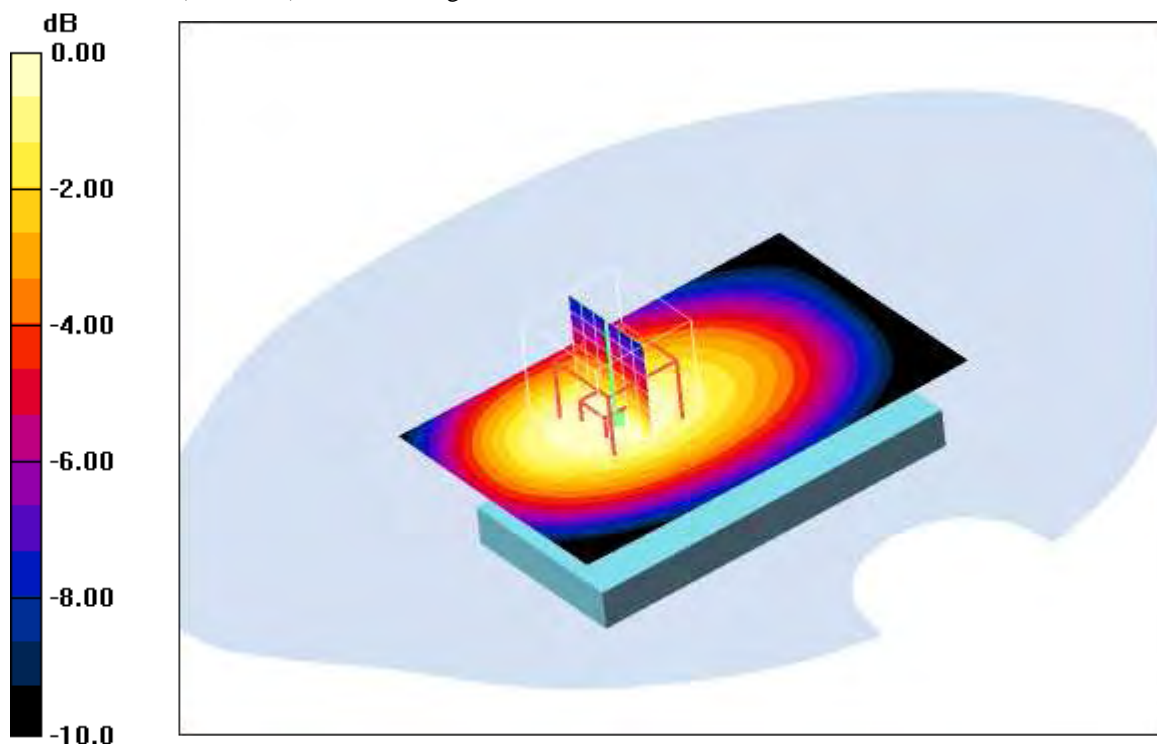
**Front position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 19.6 V/m; Power Drift = -0.145 dB

Peak SAR (extrapolated) = 0.410 W/kg

**SAR(1 g) = 0.315 mW/g; SAR(10 g) = 0.226 mW/g**

Maximum value of SAR (measured) = 0.337 mW/g



0 dB = 0.337mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.3°C; liquid temperature: 21.8°C

Date/Time: 2009-11-17 14:10:53 Date/Time: 2009-11-17 14:16:54

**IEEE1528\_OET65-Body-UMTS-FDD-V**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated):  $f = 826.4 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.78, 5.78, 5.78); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

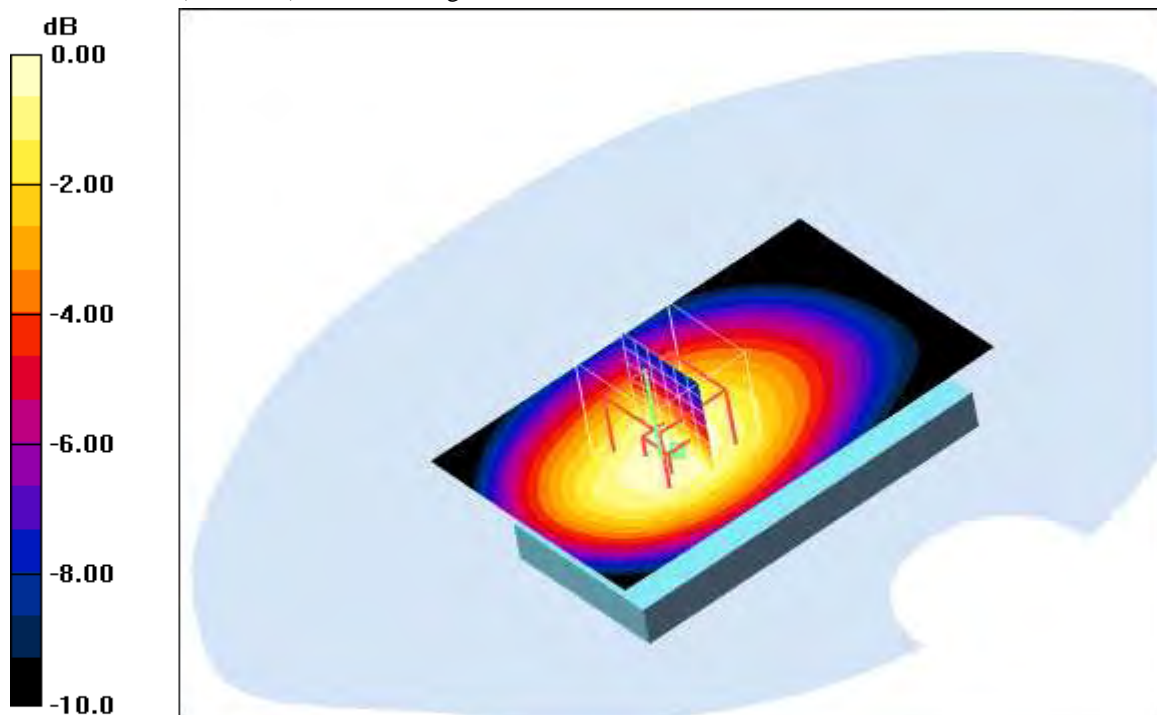
**Rear position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 16.6 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.321 W/kg

**SAR(1 g) = 0.233 mW/g; SAR(10 g) = 0.162 mW/g**

Maximum value of SAR (measured) = 0.249 mW/g



0 dB = 0.249mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.3°C; liquid temperature: 21.8°C

Date/Time: 2009-11-17 13:50:00 Date/Time: 2009-11-17 13:56:00

**IEEE1528\_OET65-Body-UMTS-FDD-V**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated):  $f = 836.4 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.78, 5.78, 5.78); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.294 mW/g

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

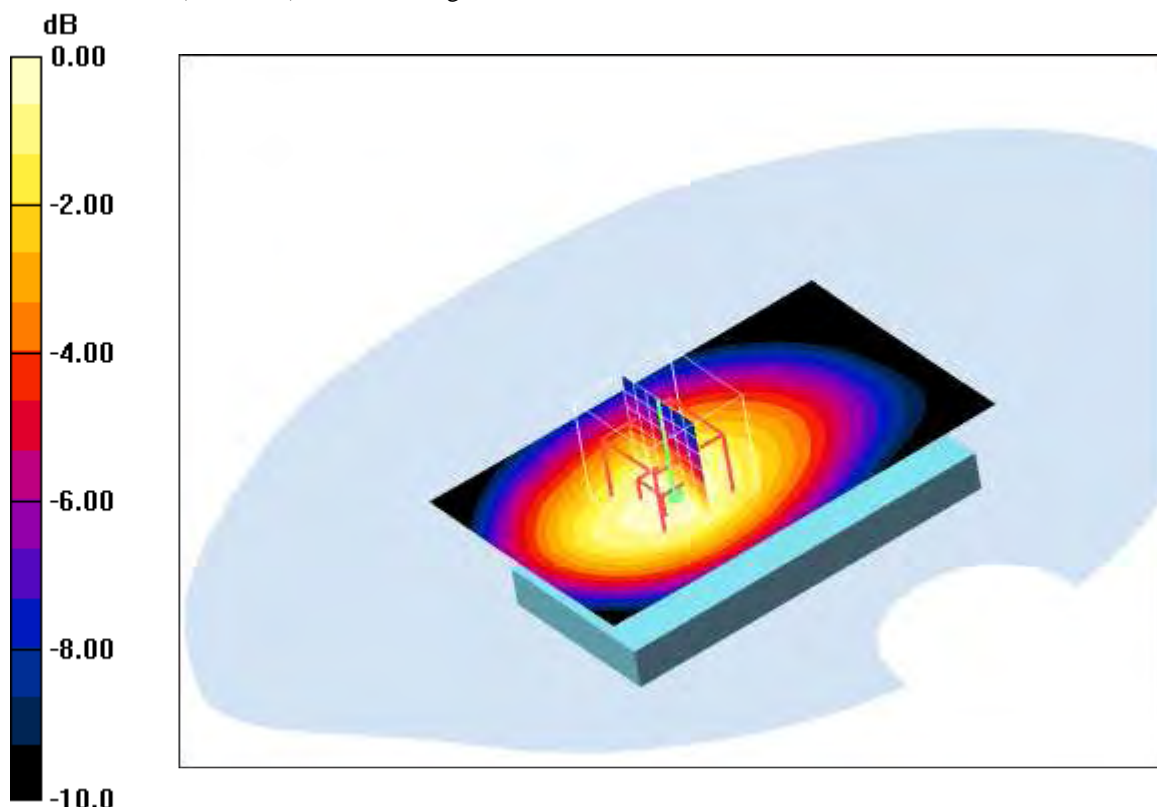
$dz=5\text{mm}$

Reference Value = 18.1 V/m; Power Drift = 0.037 dB

Peak SAR (extrapolated) = 0.388 W/kg

**SAR(1 g) = 0.279 mW/g; SAR(10 g) = 0.194 mW/g**

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



0 dB = 0.297mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.3°C; liquid temperature: 21.8°C

Date/Time: 2009-11-17 13:30:06 Date/Time: 2009-11-17 13:35:51

**IEEE1528\_OET65-Body-UMTS-FDD-V**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD V; Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated):  $f = 846.6$  MHz;  $\sigma = 0.96$  mho/m;  $\epsilon_r = 54$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.78, 5.78, 5.78); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.389 mW/g

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

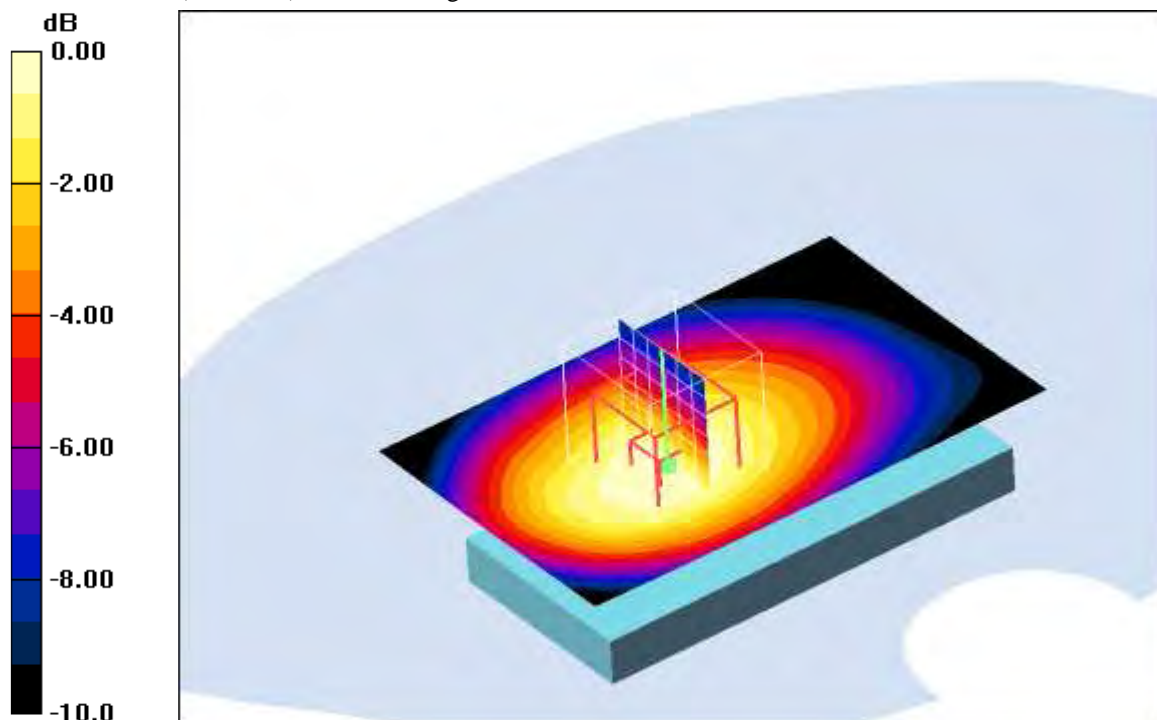
dz=5mm

Reference Value = 20.8 V/m; Power Drift = -0.071 dB

Peak SAR (extrapolated) = 0.478 W/kg

**SAR(1 g) = 0.352 mW/g; SAR(10 g) = 0.246 mW/g**

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



0 dB = 0.379mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.3°C; liquid temperature: 21.8°C

**Annex 2.7 UMTS (WCDMA) FDD II 1900 MHz head**

Date/Time: 2009-11-15 14:35:53 Date/Time: 2009-11-15 14:41:41 Date/Time: 2009-11-15 14:53:48

**IEEE1528\_OET65-LeftHandSide-FDD II**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1852.5$  MHz;  $\sigma = 1.41$  mho/m;  $\epsilon_r = 40.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.55 mW/g

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

Reference Value = 31.7 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 2.16 W/kg

**SAR(1 g) = 1.46 mW/g; SAR(10 g) = 0.874 mW/g**

Maximum value of SAR (measured) = 1.58 mW/g

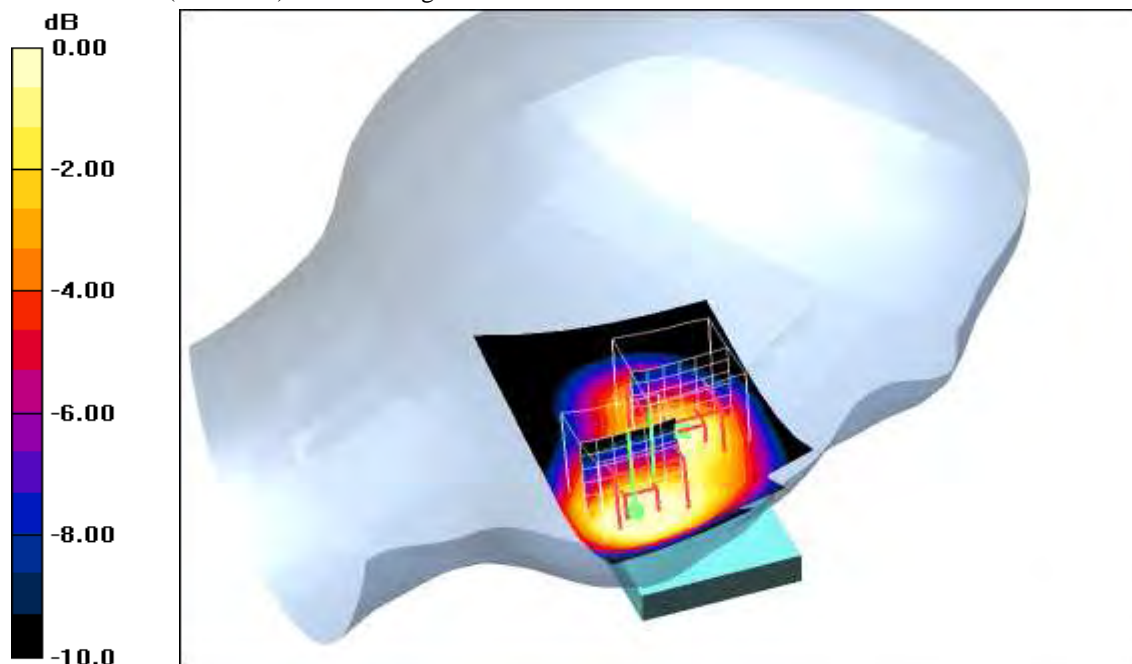
**Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 31.7 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 1.30 W/kg

**SAR(1 g) = 0.942 mW/g; SAR(10 g) = 0.639 mW/g**

Maximum value of SAR (measured) = 1.06 mW/g



0 dB = 1.06mW/g

**Additional information:**

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

Date/Time: 2009-11-15 15:07:36 Date/Time: 2009-11-15 15:13:28

**IEEE1528\_OET65-LeftHandSide-FDD II**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.54 mW/g

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

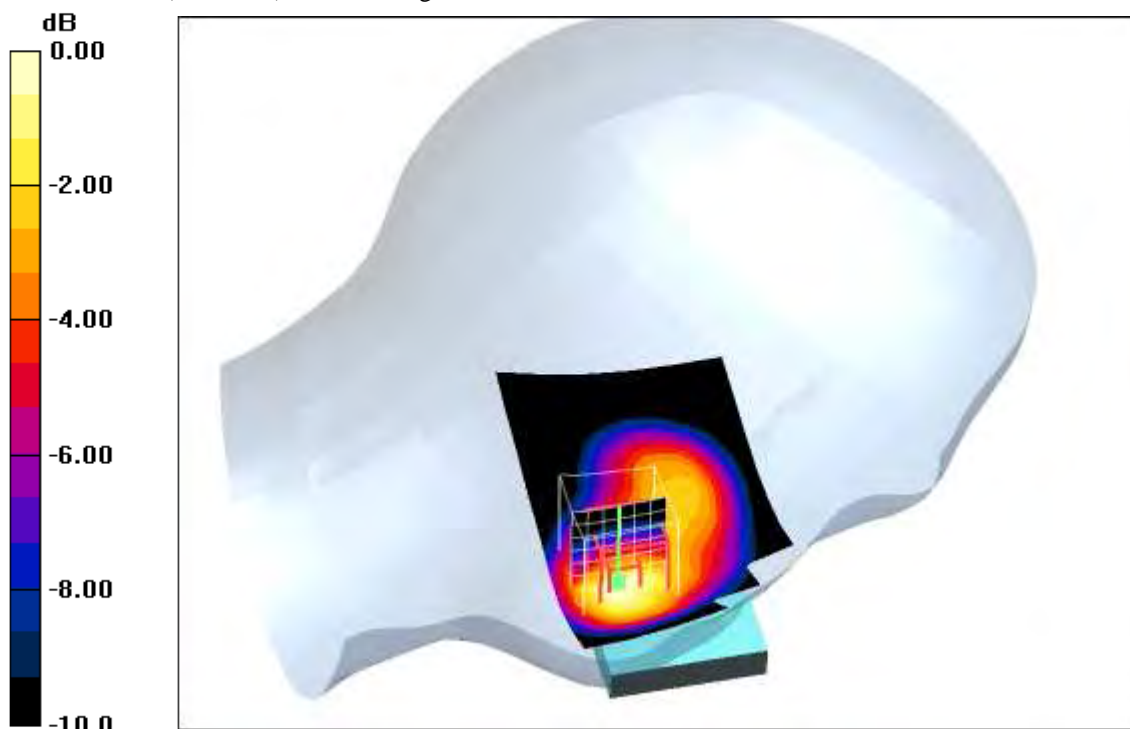
$dz=5\text{mm}$

Reference Value = 31.4 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 2.16 W/kg

**SAR(1 g) = 1.44 mW/g; SAR(10 g) = 0.854 mW/g**

Maximum value of SAR (measured) = 1.57 mW/g



0 dB = 1.57mW/g

**Additional information:**

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

Date/Time: 2009-11-15 15:36:35 Date/Time: 2009-11-15 15:42:34

**IEEE1528\_OET65-LeftHandSide-FDD II**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1907.6 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.49 mW/g

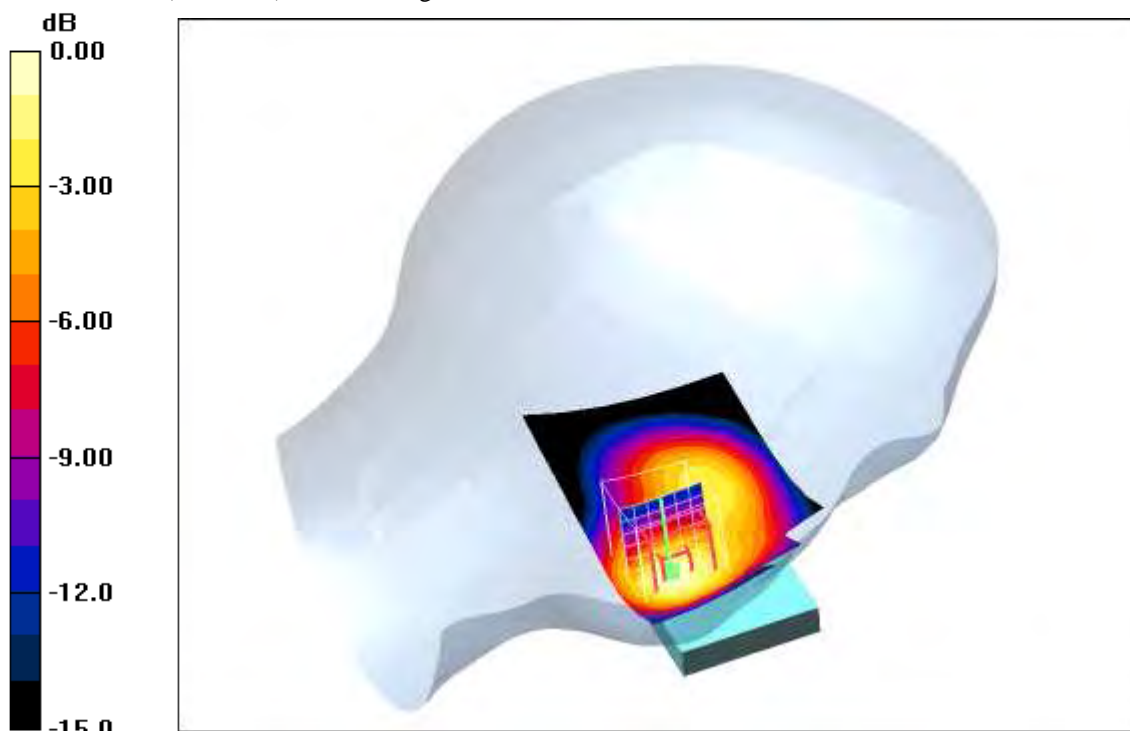
**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 31.0 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 2.13 W/kg

**SAR(1 g) = 1.4 mW/g; SAR(10 g) = 0.823 mW/g**

Maximum value of SAR (measured) = 1.53 mW/g



0 dB = 1.53mW/g

**Additional information:**

ambient temperature: °C; liquid temperature: °C

Date/Time: 2009-11-15 16:02:52 Date/Time: 2009-11-15 16:08:45

**IEEE1528\_OET65-LeftHandSide-FDD II**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1852.5 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

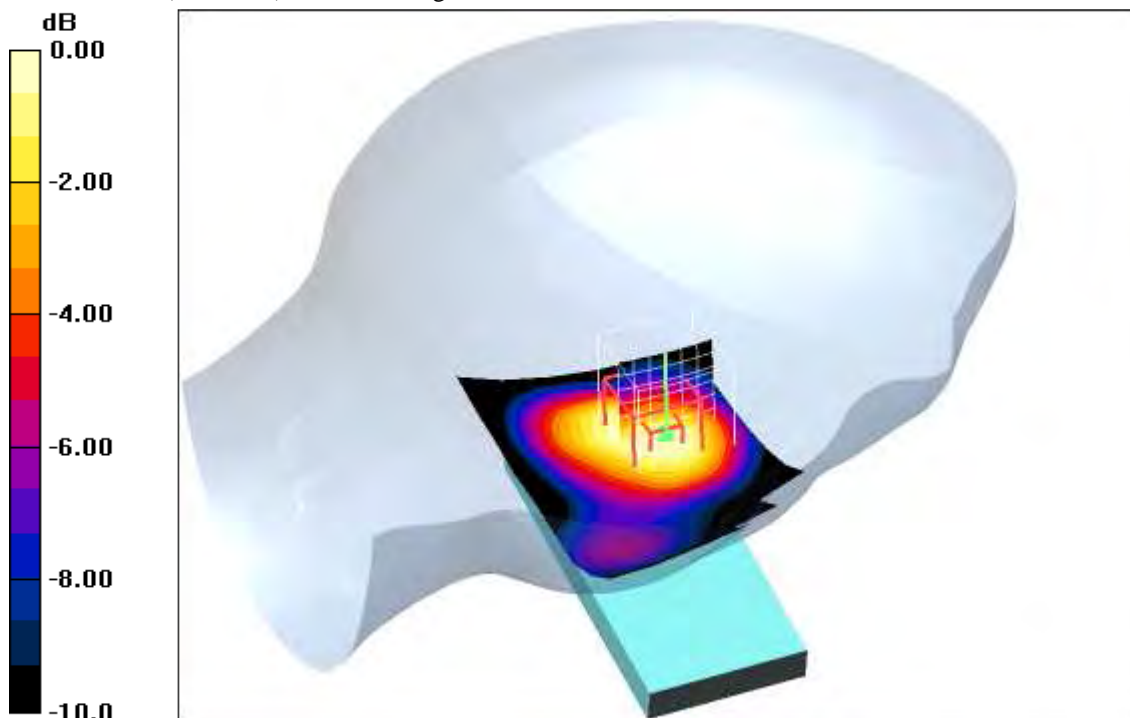
**Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 22.2 V/m; Power Drift = 0.018 dB

Peak SAR (extrapolated) = 0.887 W/kg

**SAR(1 g) = 0.631 mW/g; SAR(10 g) = 0.408 mW/g**

Maximum value of SAR (measured) = 0.681 mW/g



0 dB = 0.681mW/g

**Additional information:**

ambient temperature: 22.4 °C; liquid temperature: 22.3 °C



Date/Time: 2009-11-15 16:22:20 Date/Time: 2009-11-15 16:28:15

**IEEE1528\_OET65-LeftHandSide-FDD II**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.706 mW/g

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

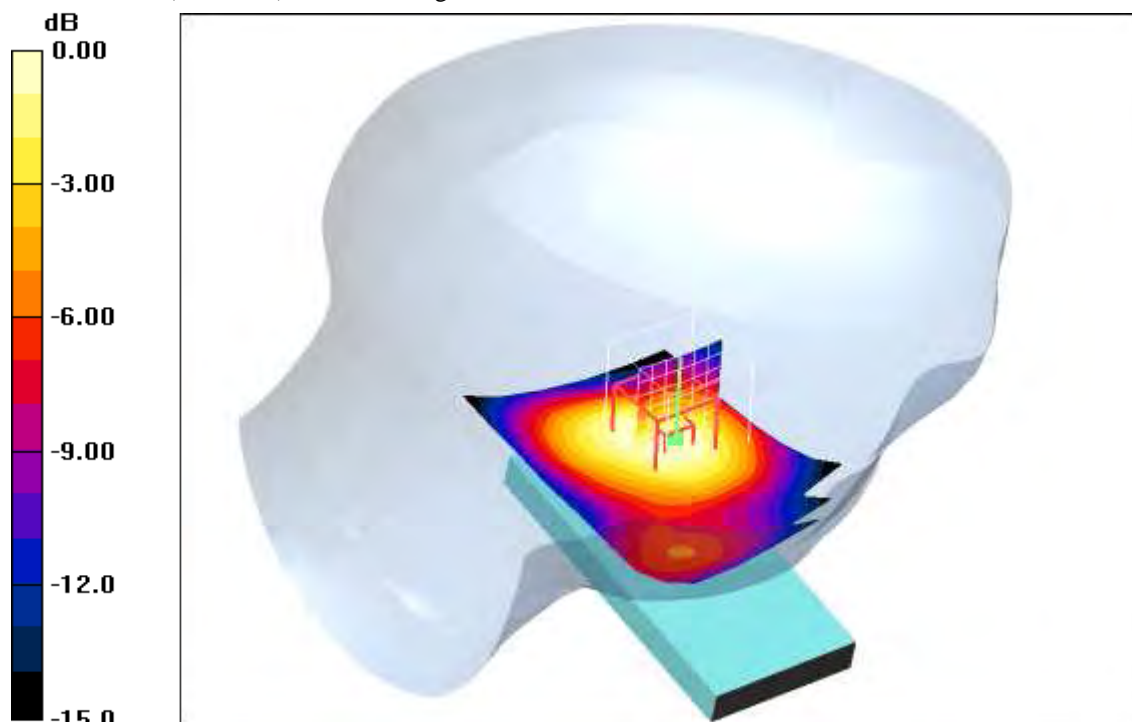
$dz=5\text{mm}$

Reference Value = 22.0 V/m; Power Drift = 0.018 dB

Peak SAR (extrapolated) = 0.884 W/kg

**SAR(1 g) = 0.618 mW/g; SAR(10 g) = 0.394 mW/g**

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



**Additional information:**

ambient temperature: 22.4 °C; liquid temperature: 22.3 °C

Date/Time: 2009-11-15 16:42:12 Date/Time: 2009-11-15 16:48:10

**IEEE1528\_OET65-LeftHandSide-FDD II**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1907.6 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.738 mW/g

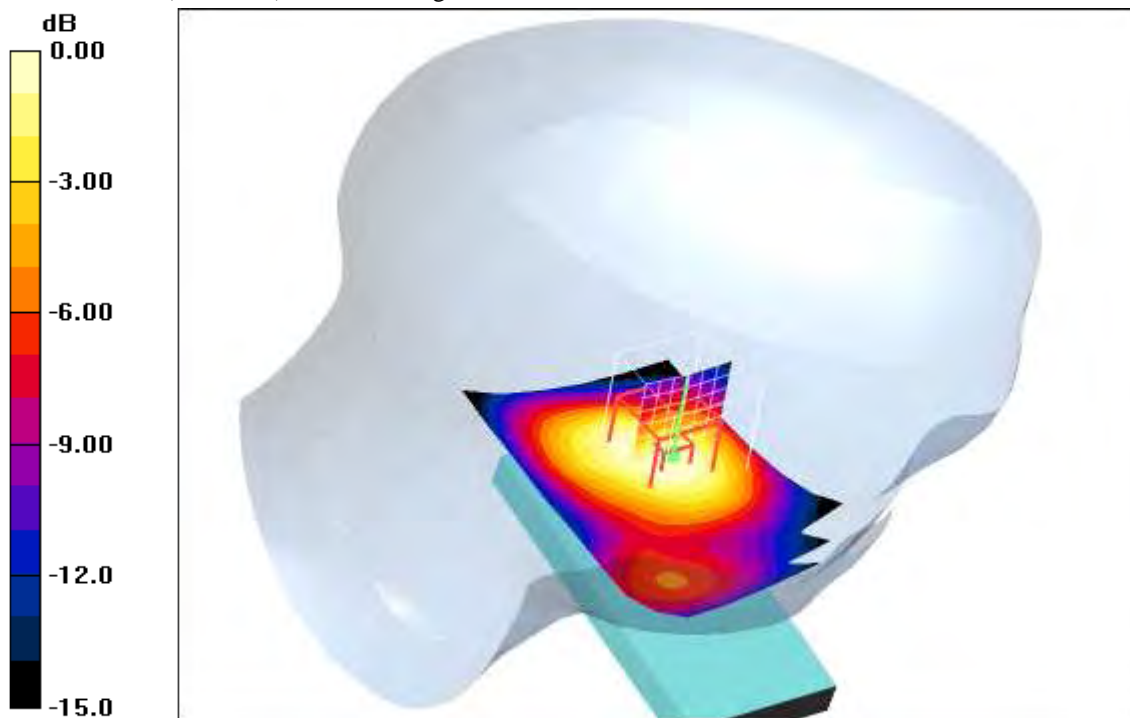
**Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 22.3 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.911 W/kg

**SAR(1 g) = 0.631 mW/g; SAR(10 g) = 0.398 mW/g**

Maximum value of SAR (measured) = 0.682 mW/g



0 dB = 0.682mW/g

**Additional information:**

ambient temperature: 22.4 °C; liquid temperature: 22.3 °C

Date/Time: 2009-11-13 14:58:23 Date/Time: 2009-11-13 15:05:01

**IEEE1528\_OET65-RightHandSide-FDD II**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1852.5 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.07 mW/g

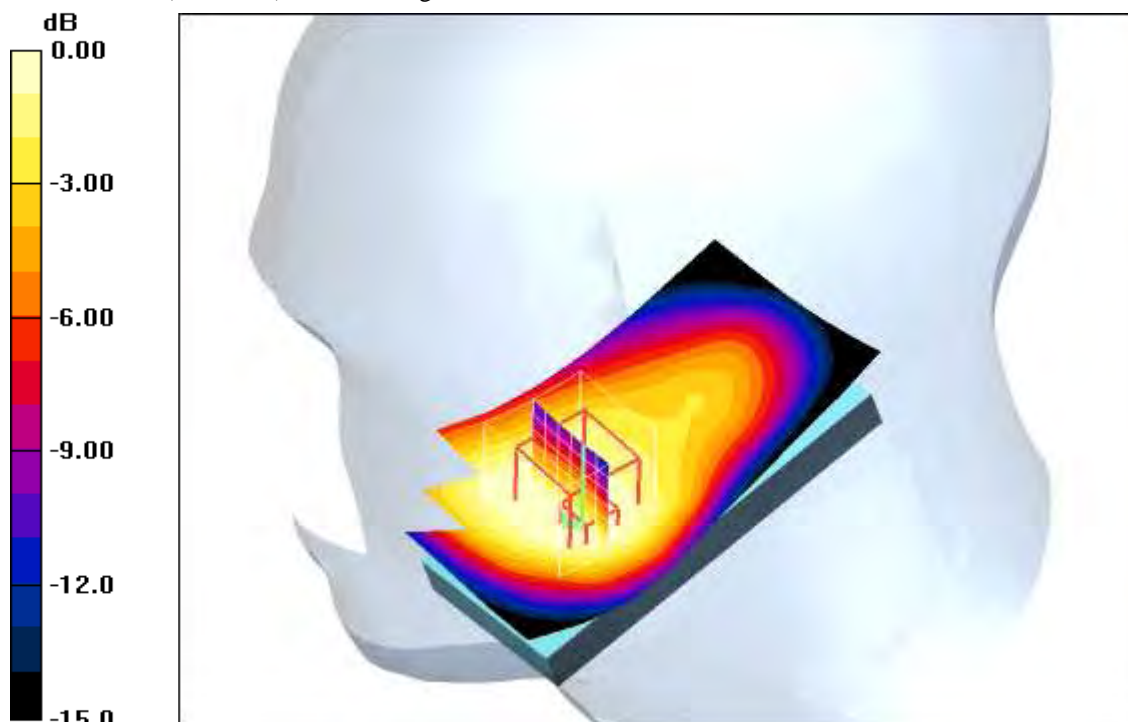
**Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 27.6 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 1.31 W/kg

**SAR(1 g) = 0.939 mW/g; SAR(10 g) = 0.645 mW/g**

Maximum value of SAR (measured) = 1.01 mW/g



0 dB = 1.01mW/g

**Additional information:**

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

Date/Time: 2009-11-13 15:17:56 Date/Time: 2009-11-13 15:23:43

**IEEE1528\_OET65-RightHandSide-FDD II**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.02 mW/g

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

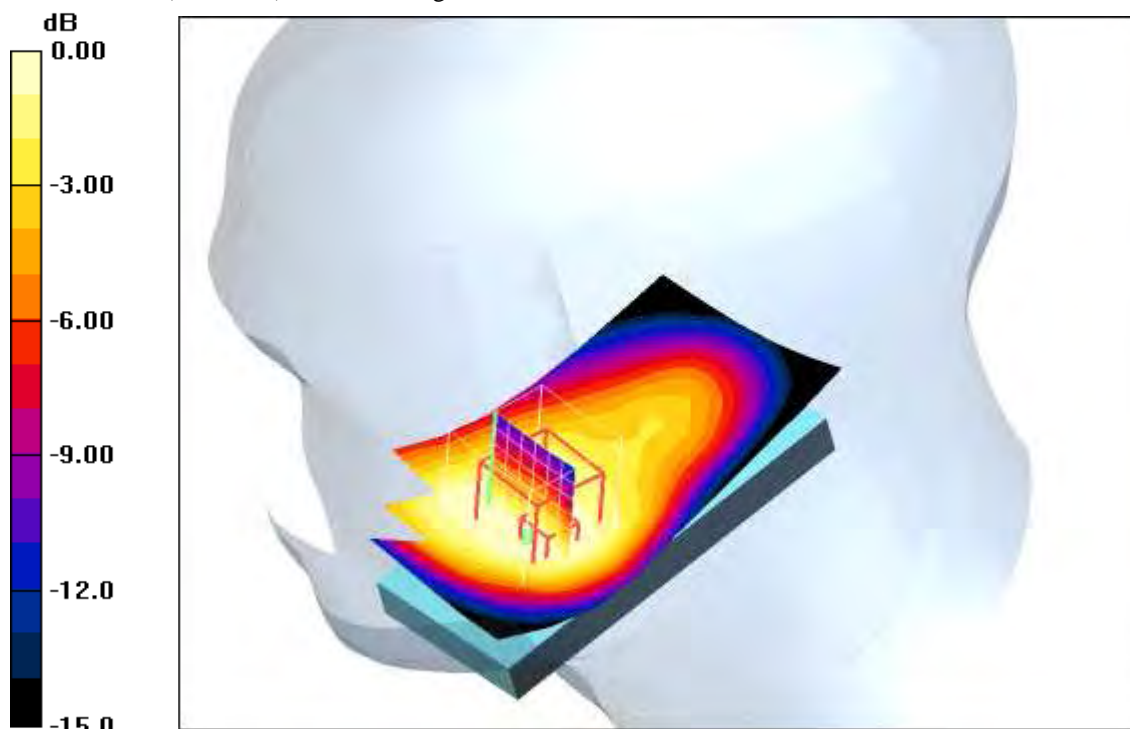
$dz=5\text{mm}$

Reference Value = 27.4 V/m; Power Drift = 0.043 dB

Peak SAR (extrapolated) = 1.31 W/kg

**SAR(1 g) = 0.916 mW/g; SAR(10 g) = 0.623 mW/g**

Maximum value of SAR (measured) = 0.990 mW/g



0 dB = 0.990mW/g

**Additional information:**

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

Date/Time: 2009-11-13 15:38:30 Date/Time: 2009-11-13 15:44:19

**IEEE1528\_OET65-RightHandSide-FDD II**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1907.6 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.965 mW/g

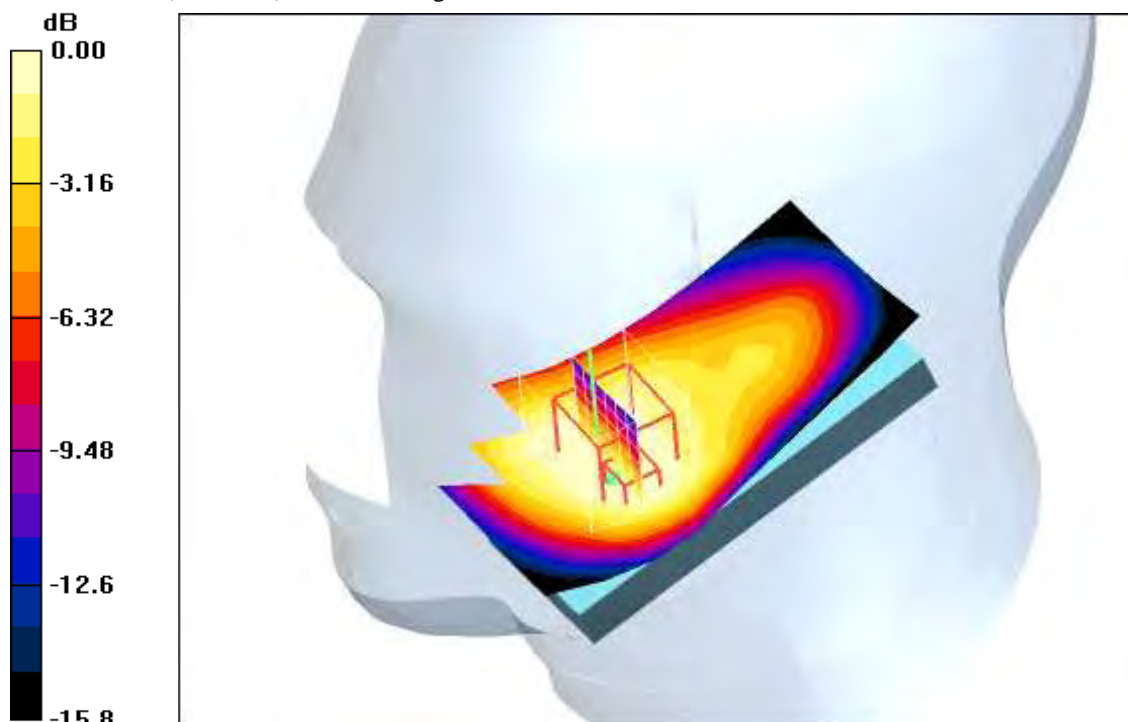
**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 26.8 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.25 W/kg

**SAR(1 g) = 0.857 mW/g; SAR(10 g) = 0.582 mW/g**

Maximum value of SAR (measured) = 0.948 mW/g



**Additional information:**

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

Date/Time: 2009-11-15 12:57:20 Date/Time: 2009-11-15 13:03:19

**IEEE1528\_OET65-RightHandSide-FDD II**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1852.5 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.739 mW/g

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

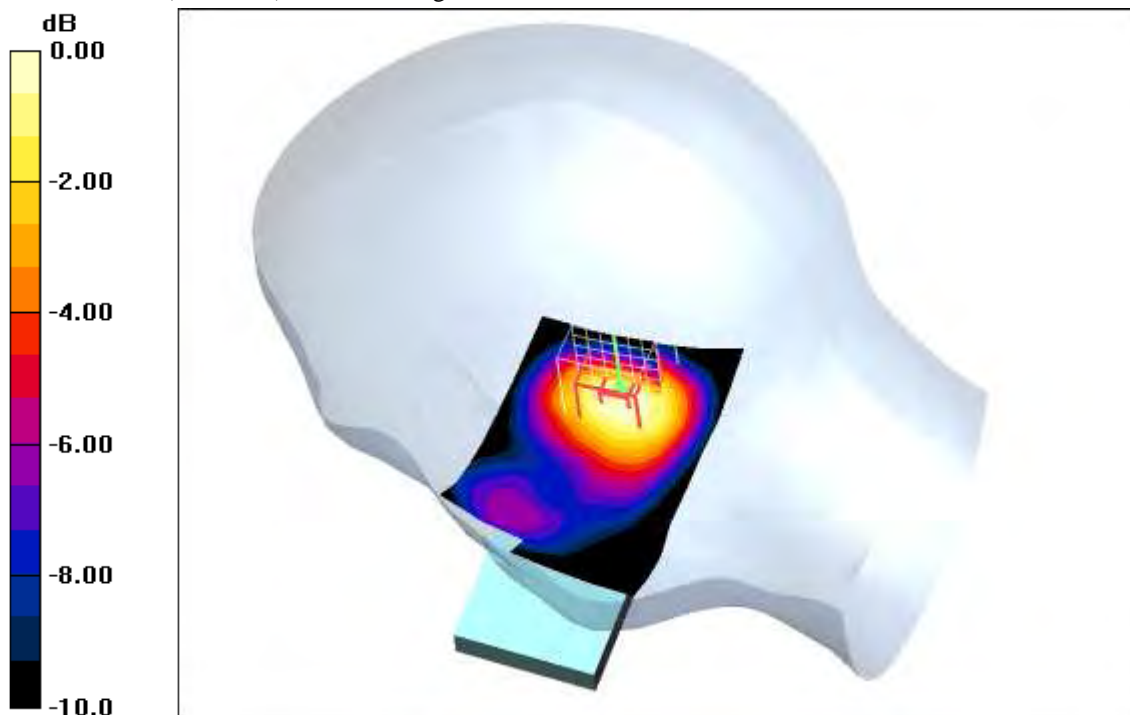
$dz=5\text{mm}$

Reference Value = 22.3 V/m; Power Drift = -0.062 dB

Peak SAR (extrapolated) = 0.851 W/kg

**SAR(1 g) = 0.631 mW/g; SAR(10 g) = 0.402 mW/g**

Maximum value of SAR (measured) = 0.688 mW/g



0 dB = 0.688mW/g

**Additional information:**

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

Date/Time: 2009-11-15 13:17:34 Date/Time: 2009-11-15 13:23:32

**IEEE1528\_OET65-RightHandSide-FDD II**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.748 mW/g

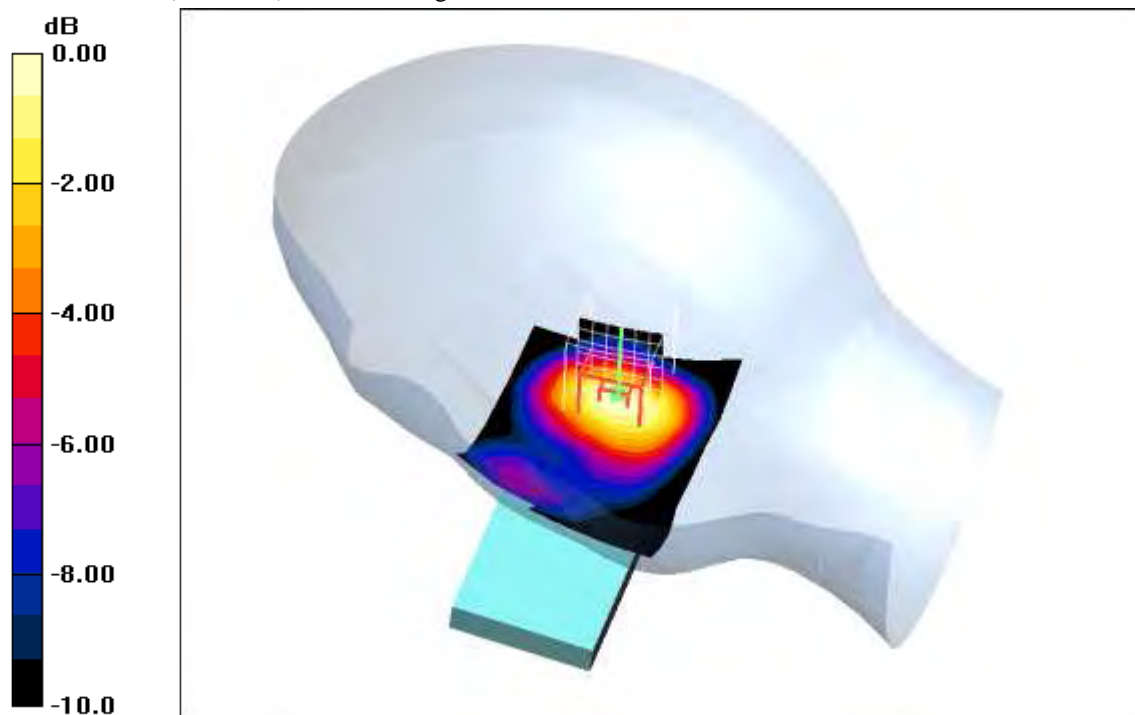
**Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 22.2 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.892 W/kg

**SAR(1 g) = 0.647 mW/g; SAR(10 g) = 0.405 mW/g**

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



0 dB = 0.711mW/g

**Additional information:**

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

Date/Time: 2009-11-15 13:37:09 Date/Time: 2009-11-15 13:43:09

**IEEE1528\_OET65-RightHandSide-FDD II**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated):  $f = 1907.6 \text{ MHz}$ ;  $\sigma = 1.41 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.75, 4.75, 4.75); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

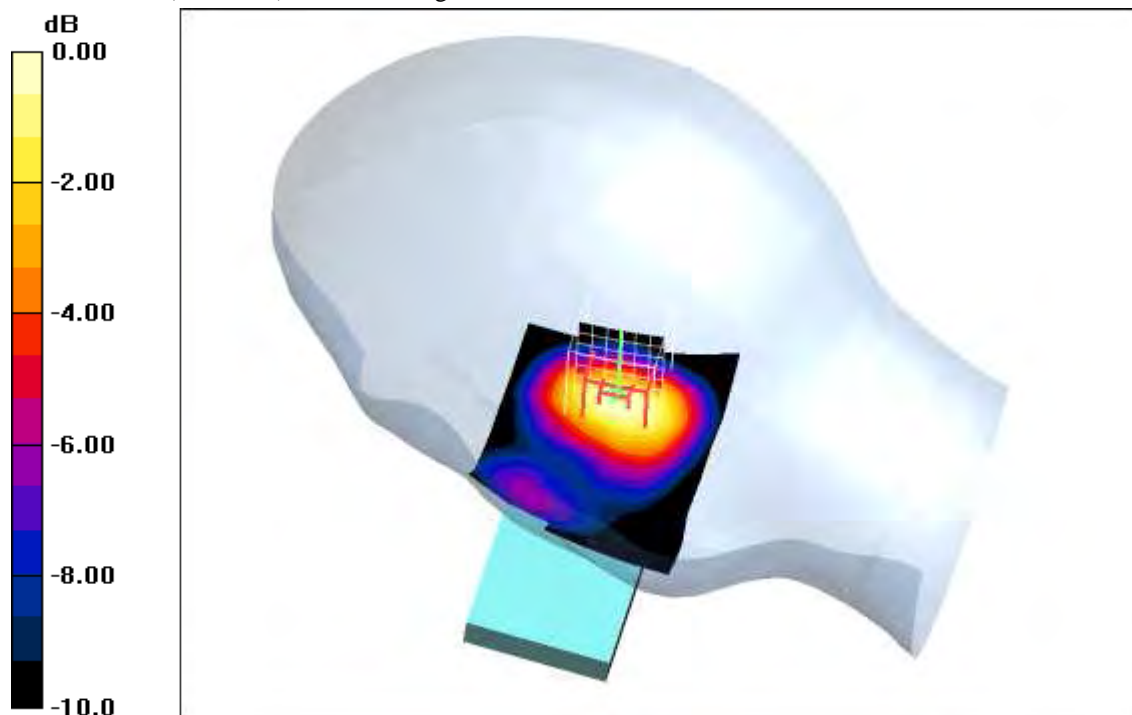
**Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 22.6 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 0.922 W/kg

**SAR(1 g) = 0.663 mW/g; SAR(10 g) = 0.412 mW/g**

Maximum value of SAR (measured) = 0.730 mW/g



0 dB = 0.730mW/g

**Additional information:**

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



**Annex 2.8 UMTS (WCDMA) FDD II 1900 MHz body**

Date/Time: 2009-11-16 13:21:07 Date/Time: 2009-11-16 13:26:56 Date/Time: 2009-11-16 13:38:37

**IEEE1528\_OET65-Body-UMTS-FDD-II**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated):  $f = 1852.5$  MHz;  $\sigma = 1.54$  mho/m;  $\epsilon_r = 52.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.31, 4.31, 4.31); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 17.2 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.579 W/kg

**SAR(1 g) = 0.401 mW/g; SAR(10 g) = 0.243 mW/g**

Maximum value of SAR (measured) = 0.441 mW/g

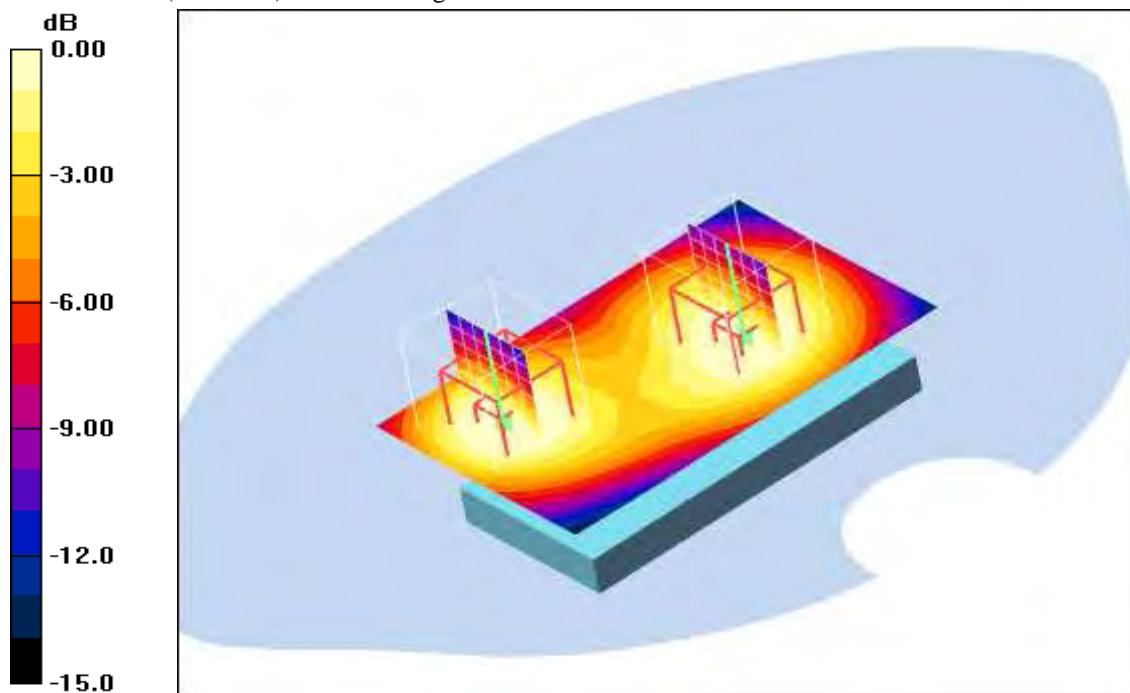
**Front position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.2 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.428 W/kg

**SAR(1 g) = 0.334 mW/g; SAR(10 g) = 0.227 mW/g**

Maximum value of SAR (measured) = 0.358 mW/g



**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 22.8°C; liquid temperature: 21.8°C

Date/Time: 2009-11-16 12:31:34 Date/Time: 2009-11-16 12:37:20 Date/Time: 2009-11-16 12:49:00

**IEEE1528\_OET65-Body-UMTS-FDD-II**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.54 \text{ mho/m}$ ;  $\epsilon_r = 52.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.31, 4.31, 4.31); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

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

Reference Value = 16.8 V/m; Power Drift = 0.028 dB

Peak SAR (extrapolated) = 0.576 W/kg

**SAR(1 g) = 0.392 mW/g; SAR(10 g) = 0.235 mW/g**

Maximum value of SAR (measured) = 0.430 mW/g

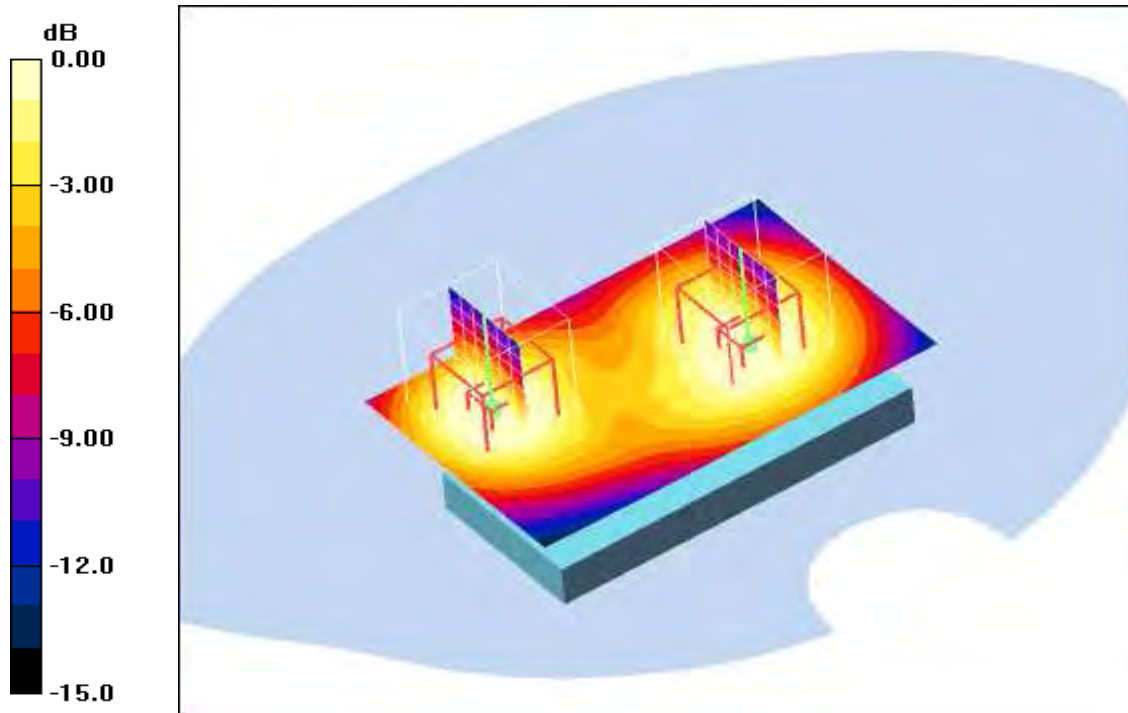
**Front position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 16.8 V/m; Power Drift = 0.028 dB

Peak SAR (extrapolated) = 0.419 W/kg

**SAR(1 g) = 0.326 mW/g; SAR(10 g) = 0.221 mW/g**

Maximum value of SAR (measured) = 0.349 mW/g



0 dB = 0.349mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 22.8°C; liquid temperature: 21.8°C

Date/Time: 2009-11-16 12:00:53 Date/Time: 2009-11-16 12:06:34 Date/Time: 2009-11-16 12:18:07

**IEEE1528\_OET65-Body-UMTS-FDD-II**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated):  $f = 1907.6 \text{ MHz}$ ;  $\sigma = 1.54 \text{ mho/m}$ ;  $\epsilon_r = 52.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.31, 4.31, 4.31); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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) = 0.464 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 = 16.9 V/m; Power Drift = -0.045 dB

Peak SAR (extrapolated) = 0.592 W/kg

**SAR(1 g) = 0.398 mW/g; SAR(10 g) = 0.237 mW/g**

Maximum value of SAR (measured) = 0.441 mW/g

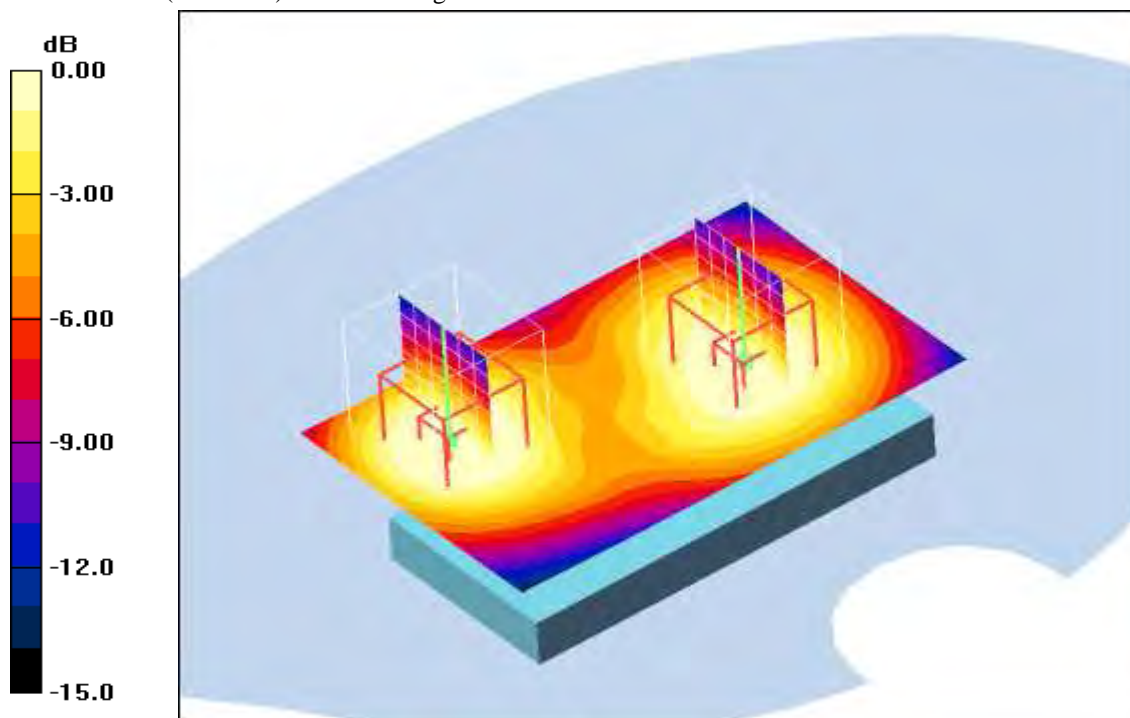
**Front position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 16.9 V/m; Power Drift = -0.045 dB

Peak SAR (extrapolated) = 0.405 W/kg

**SAR(1 g) = 0.310 mW/g; SAR(10 g) = 0.208 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: 15 mm

ambient temperature: 22.8°C; liquid temperature: 21.8°C

Date/Time: 2009-11-16 13:54:24 Date/Time: 2009-11-16 14:00:18

**IEEE1528\_OET65-Body-UMTS-FDD-II**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated):  $f = 1852.5 \text{ MHz}$ ;  $\sigma = 1.54 \text{ mho/m}$ ;  $\epsilon_r = 52.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.31, 4.31, 4.31); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.519 mW/g

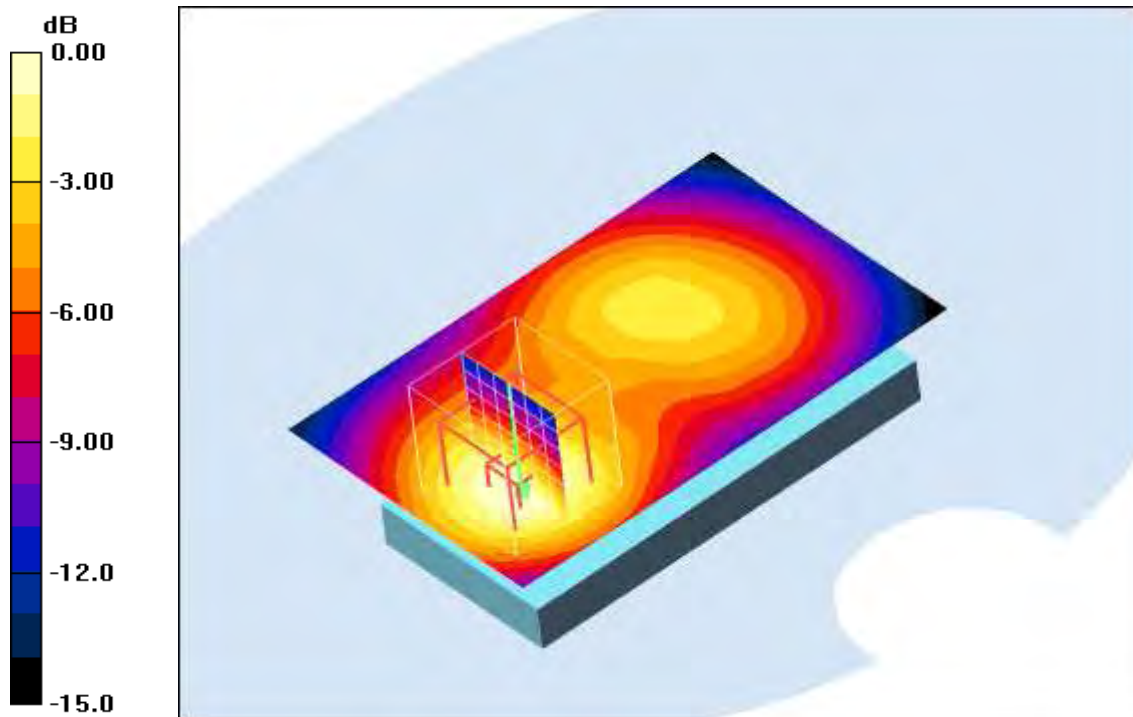
**Rear position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 18.5 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.648 W/kg

**SAR(1 g) = 0.458 mW/g; SAR(10 g) = 0.279 mW/g**

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



0 dB = 0.508mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 22.8°C; liquid temperature: 21.8°C

Date/Time: 2009-11-16 14:15:27 Date/Time: 2009-11-16 14:21:23

**IEEE1528\_OET65-Body-UMTS-FDD-II**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.54 \text{ mho/m}$ ;  $\epsilon_r = 52.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.31, 4.31, 4.31); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

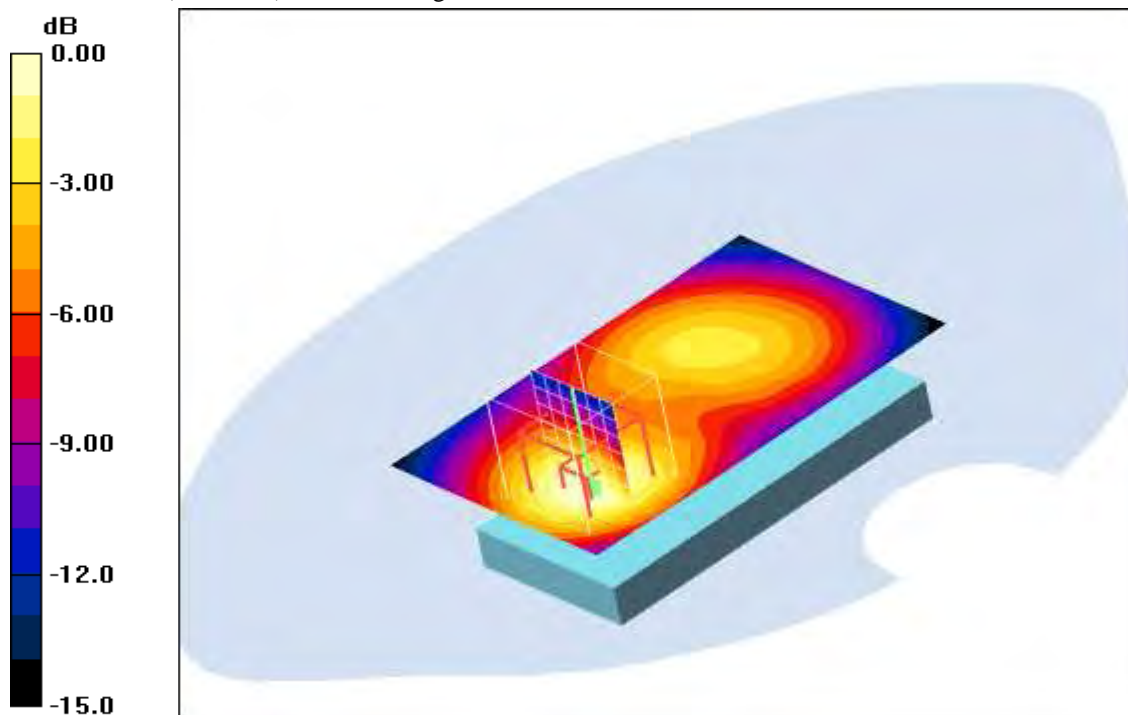
**Rear position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 18.4 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.653 W/kg

**SAR(1 g) = 0.456 mW/g; SAR(10 g) = 0.275 mW/g**

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



0 dB = 0.505mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 22.8°C; liquid temperature: 21.8°C

Date/Time: 2009-11-16 14:36:22 Date/Time: 2009-11-16 14:42:21

**IEEE1528\_OET65-Body-UMTS-FDD-II**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH6F8**

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated):  $f = 1907.6 \text{ MHz}$ ;  $\sigma = 1.54 \text{ mho/m}$ ;  $\epsilon_r = 52.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.31, 4.31, 4.31); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

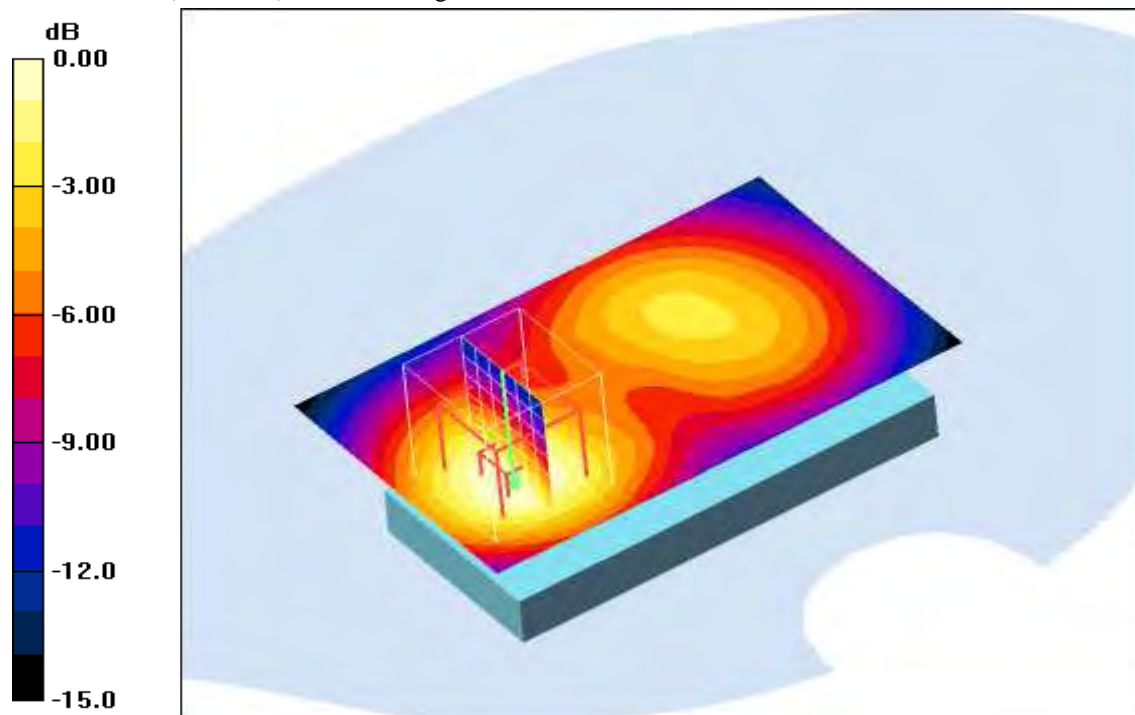
**Rear position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 18.2 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 0.640 W/kg

SAR(1 g) = 0.445 mW/g; SAR(10 g) = 0.267 mW/g

Maximum value of SAR (measured) = 0.493 mW/g



0 dB = 0.493mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 22.8°C; liquid temperature: 21.8°C

**Annex 2.9 WLAN 2450 MHz head**

Date/Time: 2009-12-07 13:59:11 Date/Time: 2009-12-07 14:34:27

**IEEE1528\_OET65-LeftHandSide-WLAN**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH62E**

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used (interpolated):  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.87 \text{ mho/m}$ ;  $\epsilon_r = 39.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.16, 4.16, 4.16); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.18 mW/g

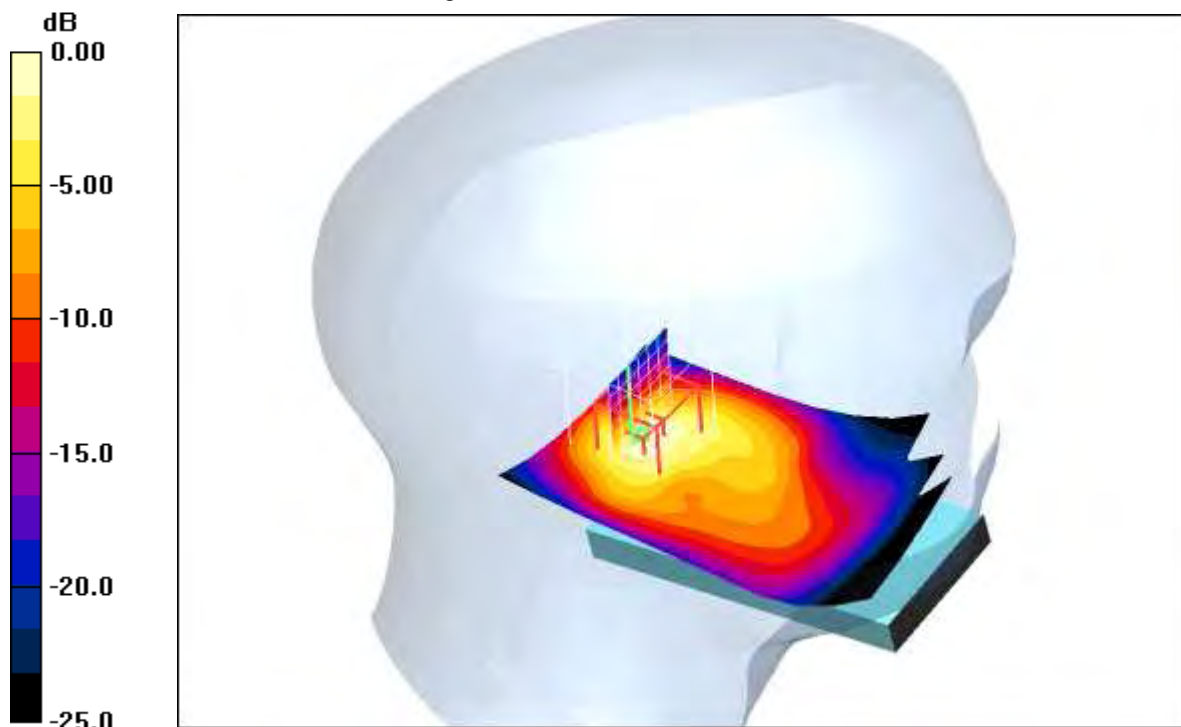
**Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 22.4 V/m; Power Drift = 0.026 dB

Peak SAR (extrapolated) = 2.76 W/kg

**SAR(1 g) = 0.990 mW/g; SAR(10 g) = 0.418 mW/g**

Maximum value of SAR (measured) = 1.09 mW/g



0 dB = 1.09mW/g

**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.3°C

Date/Time: 2009-12-07 14:51:47 Date/Time: 2009-12-07 15:31:32

**IEEE1528\_OET65-LeftHandSide-WLAN**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH62E**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used (interpolated):  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.87 \text{ mho/m}$ ;  $\epsilon_r = 39.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.16, 4.16, 4.16); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.19 mW/g

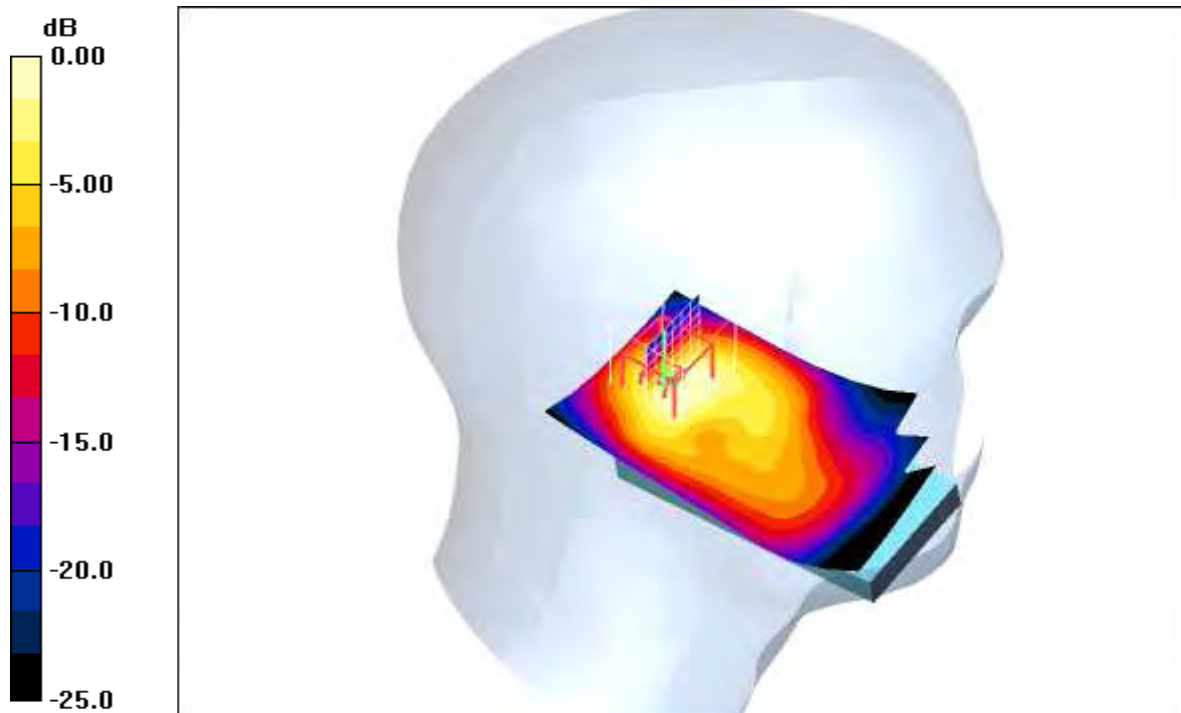
**Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 18.6 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 2.54 W/kg

**SAR(1 g) = 0.941 mW/g; SAR(10 g) = 0.404 mW/g**

Maximum value of SAR (measured) = 1.06 mW/g



0 dB = 1.06mW/g

**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.3°C



Date/Time: 2009-12-07 11:21:06 Date/Time: 2009-12-07 11:43:56

**IEEE1528\_OET65-LeftHandSide-WLAN**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH62E**

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used (interpolated):  $f = 2462 \text{ MHz}$ ;  $\sigma = 1.87 \text{ mho/m}$ ;  $\epsilon_r = 39.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.16, 4.16, 4.16); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.02 mW/g

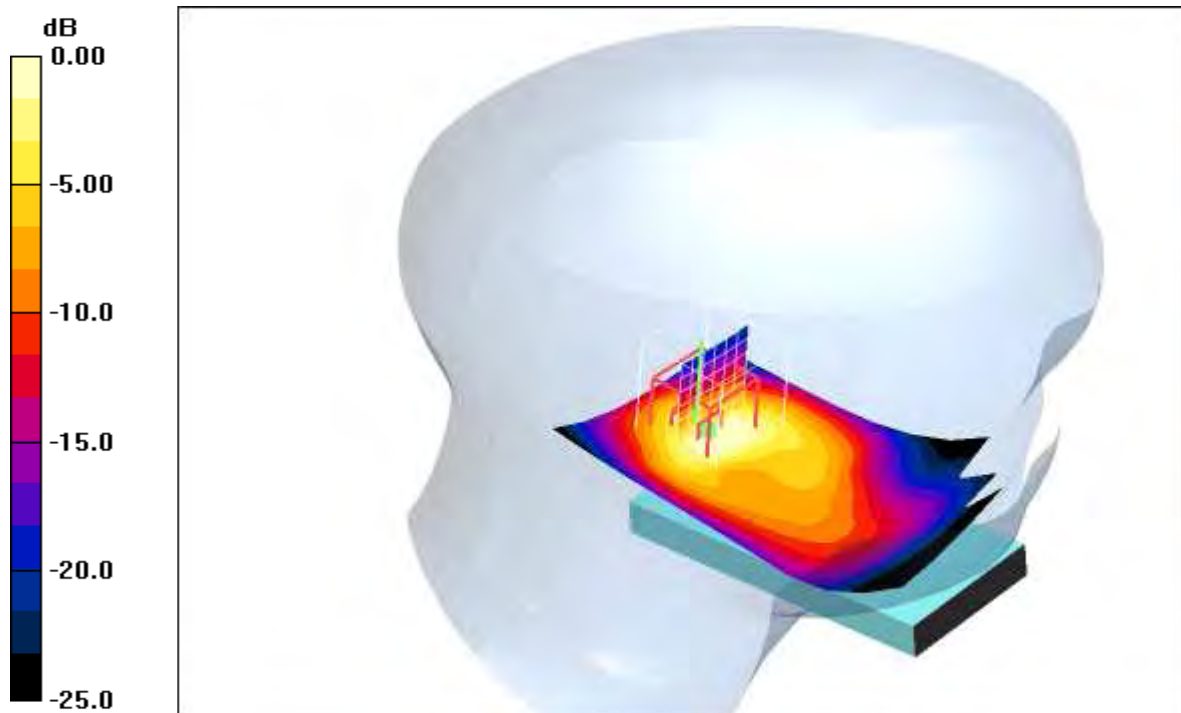
**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 17.7 V/m; Power Drift = -0.043 dB

Peak SAR (extrapolated) = 2.60 W/kg

**SAR(1 g) = 0.924 mW/g; SAR(10 g) = 0.376 mW/g**

Maximum value of SAR (measured) = 1.03 mW/g



0 dB = 1.03mW/g

**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.3°C

Date/Time: 2009-12-08 10:35:08 Date/Time: 2009-12-08 10:54:37

**IEEE1528\_OET65-LeftHandSide-WLAN**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH62E**

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used (interpolated):  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.87 \text{ mho/m}$ ;  $\epsilon_r = 39.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.16, 4.16, 4.16); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.08 mW/g

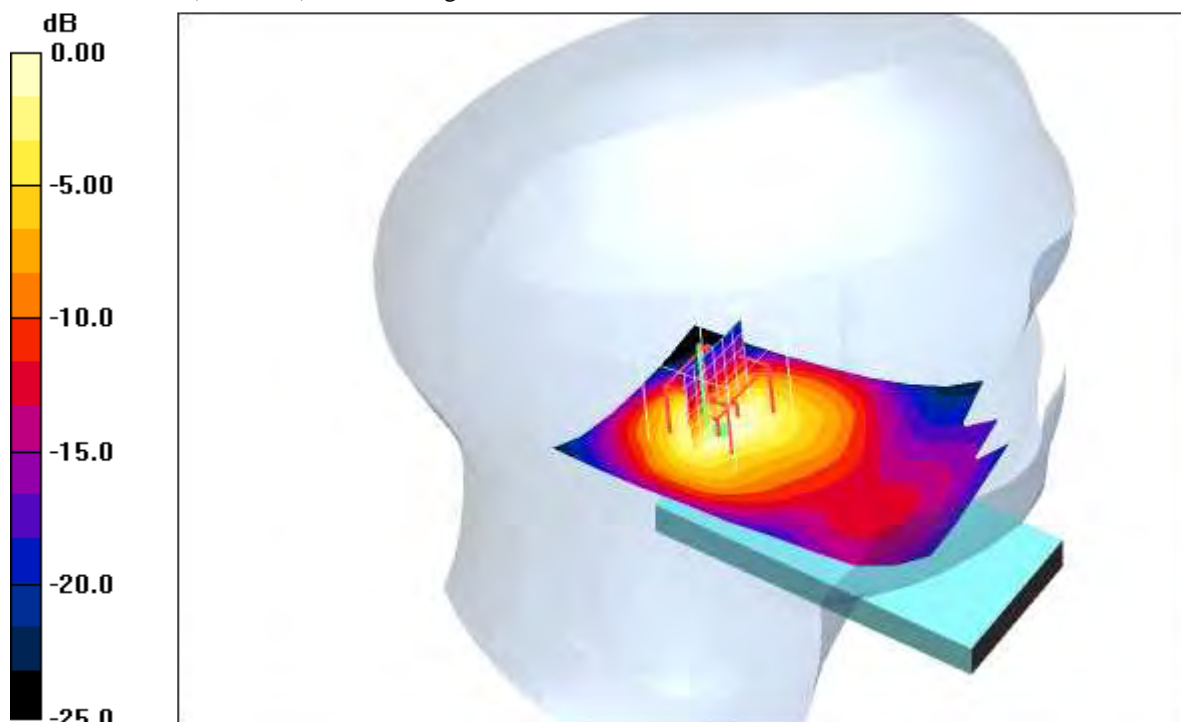
**Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 22.4 V/m; Power Drift = 0.013 dB

Peak SAR (extrapolated) = 2.47 W/kg

**SAR(1 g) = 0.927 mW/g; SAR(10 g) = 0.409 mW/g**

Maximum value of SAR (measured) = 1.02 mW/g



0 dB = 1.02mW/g

**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.3°C

Date/Time: 2009-12-08 09:56:12 Date/Time: 2009-12-08 10:16:53

**IEEE1528\_OET65-LeftHandSide-WLAN**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH62E**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used (interpolated):  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.87 \text{ mho/m}$ ;  $\epsilon_r = 39.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.16, 4.16, 4.16); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.01 mW/g

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

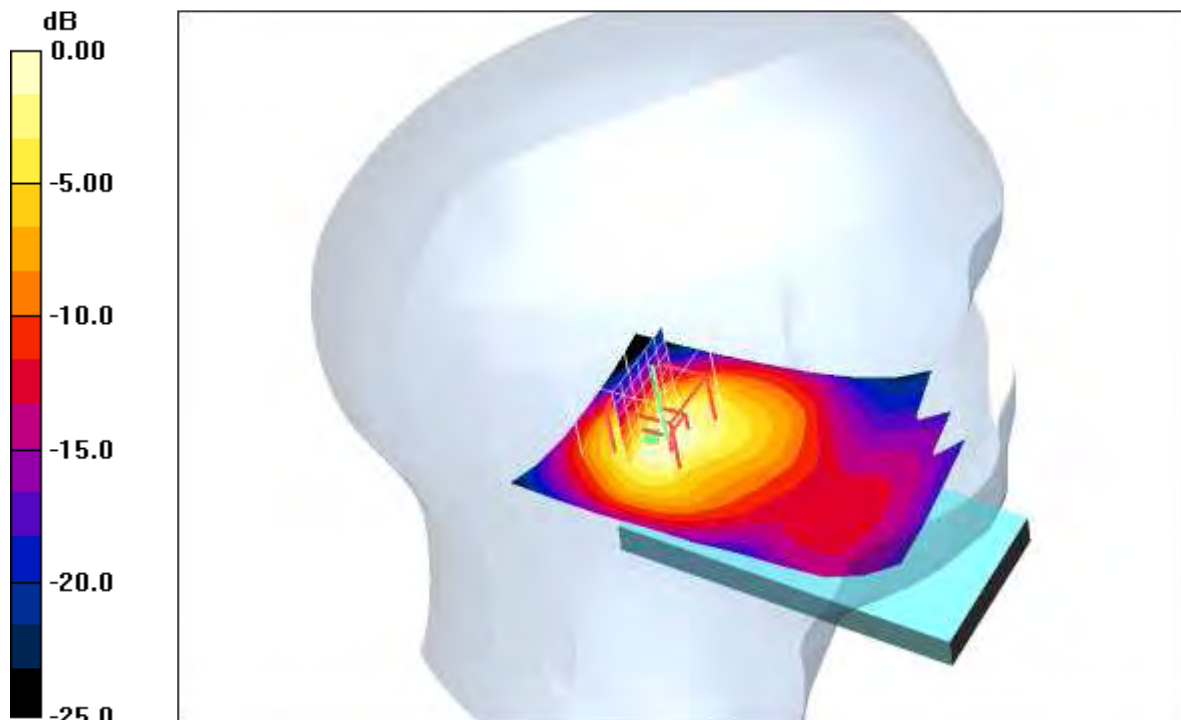
$dz=5\text{mm}$

Reference Value = 22.0 V/m; Power Drift = -0.017 dB

Peak SAR (extrapolated) = 2.40 W/kg

**SAR(1 g) = 0.922 mW/g; SAR(10 g) = 0.405 mW/g**

Maximum value of SAR (measured) = 1.02 mW/g



**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.3°C

Date/Time: 2009-12-08 11:09:37 Date/Time: 2009-12-08 11:28:59

**IEEE1528\_OET65-LeftHandSide-WLAN**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH62E**

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used (interpolated):  $f = 2462 \text{ MHz}$ ;  $\sigma = 1.87 \text{ mho/m}$ ;  $\epsilon_r = 39.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.16, 4.16, 4.16); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.27 mW/g

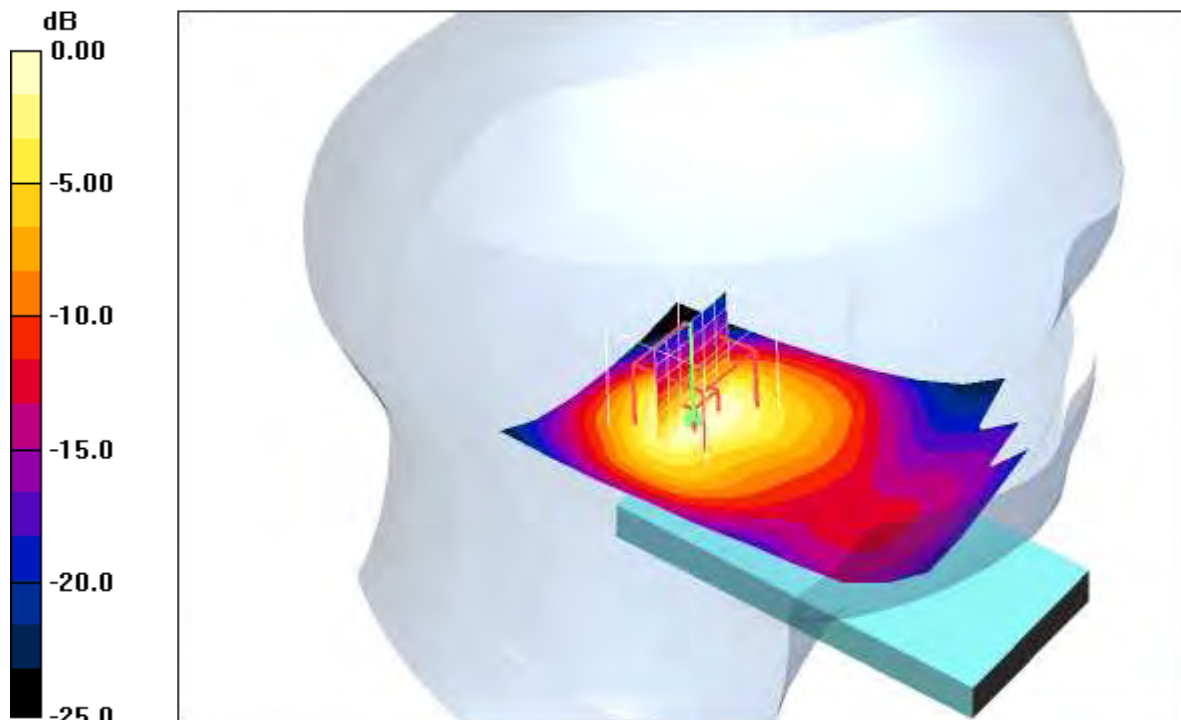
**Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 22.9 V/m; Power Drift = -0.024 dB

Peak SAR (extrapolated) = 2.58 W/kg

**SAR(1 g) = 0.988 mW/g; SAR(10 g) = 0.427 mW/g**

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



**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.3°C

Date/Time: 2009-12-08 11:45:20 Date/Time: 2009-12-08 11:51:57

**IEEE1528\_OET65-LeftHandSide-WLAN**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH62E**

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used (interpolated):  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.87 \text{ mho/m}$ ;  $\epsilon_r = 39.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.16, 4.16, 4.16); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Touch position - Low 6Mbps/Area Scan (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

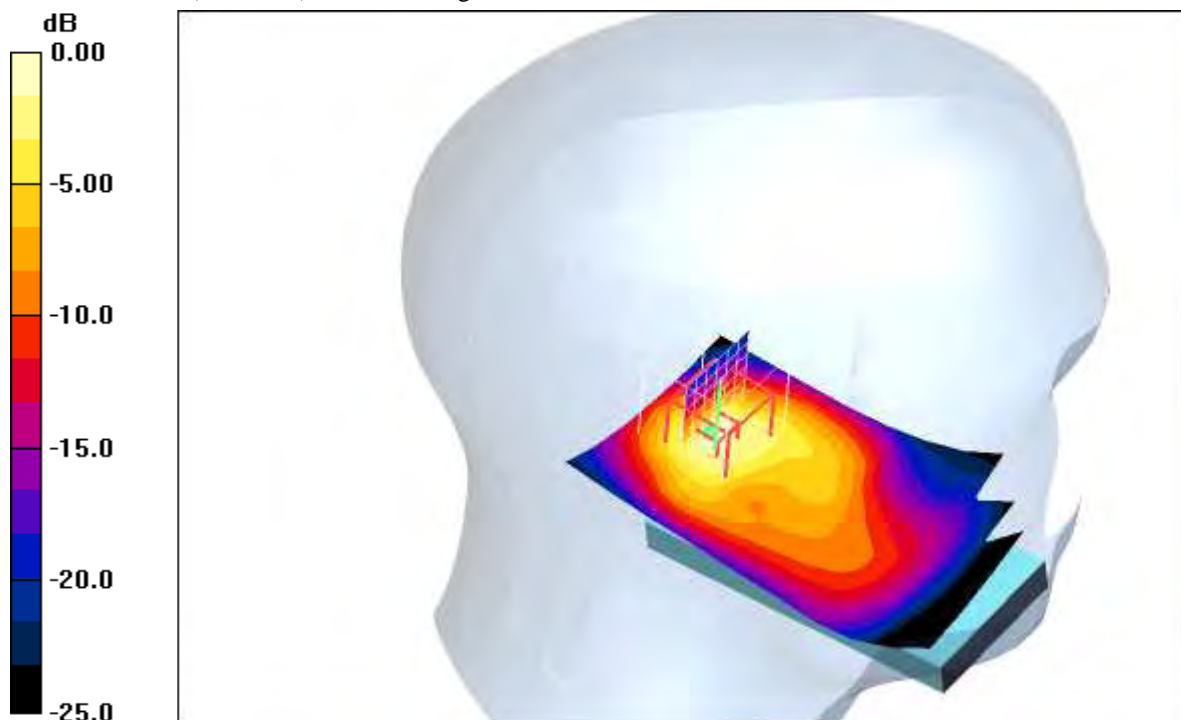
**Touch position - Low 6Mbps/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 14.8 V/m; Power Drift = 0.059 dB

Peak SAR (extrapolated) = 1.30 W/kg

**SAR(1 g) = 0.477 mW/g; SAR(10 g) = 0.201 mW/g**

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



0 dB = 0.522mW/g

**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.3°C

Date/Time: 2009-12-07 16:19:36 Date/Time: 2009-12-07 16:25:53

**IEEE1528\_OET65-RightHandSide-WLAN**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH62E**

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used (interpolated):  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.87 \text{ mho/m}$ ;  $\epsilon_r = 39.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.16, 4.16, 4.16); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$ !

Maximum value of SAR (interpolated) = 0.726 mW/g

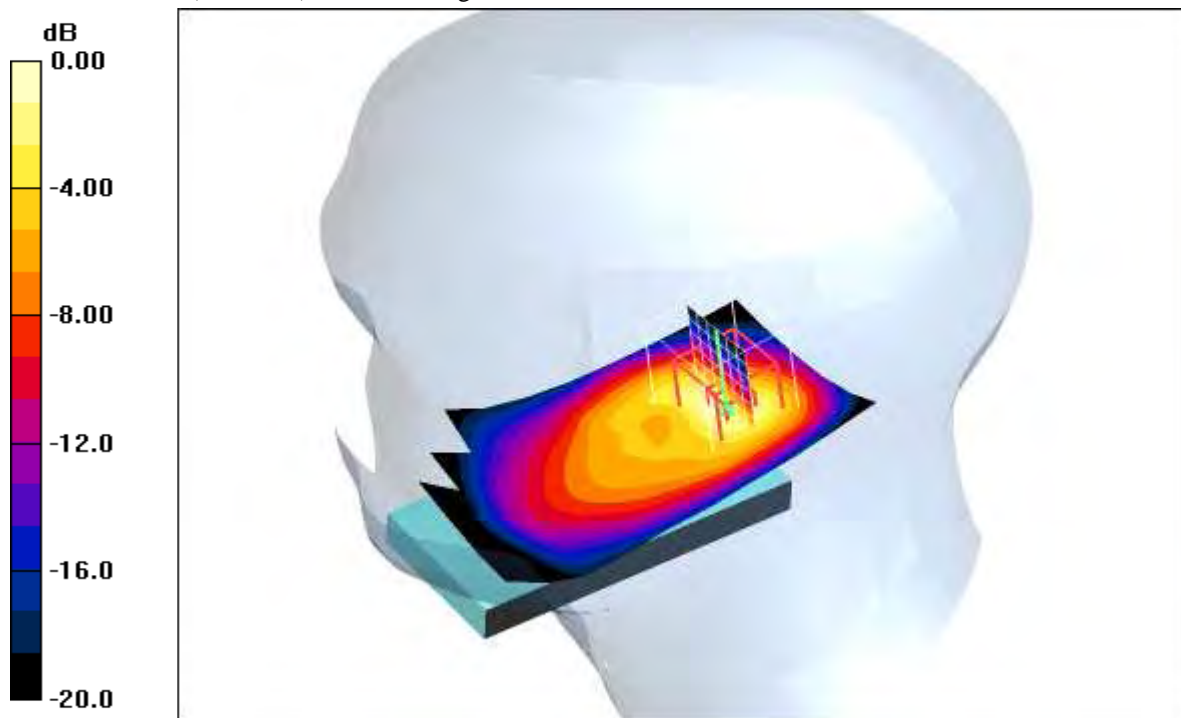
**Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 19.3 V/m; Power Drift = -0.040 dB

Peak SAR (extrapolated) = 1.97 W/kg

**SAR(1 g) = 0.761 mW/g; SAR(10 g) = 0.323 mW/g**

Maximum value of SAR (measured) = 0.872 mW/g



0 dB = 0.872mW/g

**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.3°C

Date/Time: 2009-12-07 16:41:24 Date/Time: 2009-12-07 16:47:44

**IEEE1528\_OET65-RightHandSide-WLAN**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH62E**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.87$  mho/m;  $\epsilon_r = 39.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.16, 4.16, 4.16); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.799 mW/g

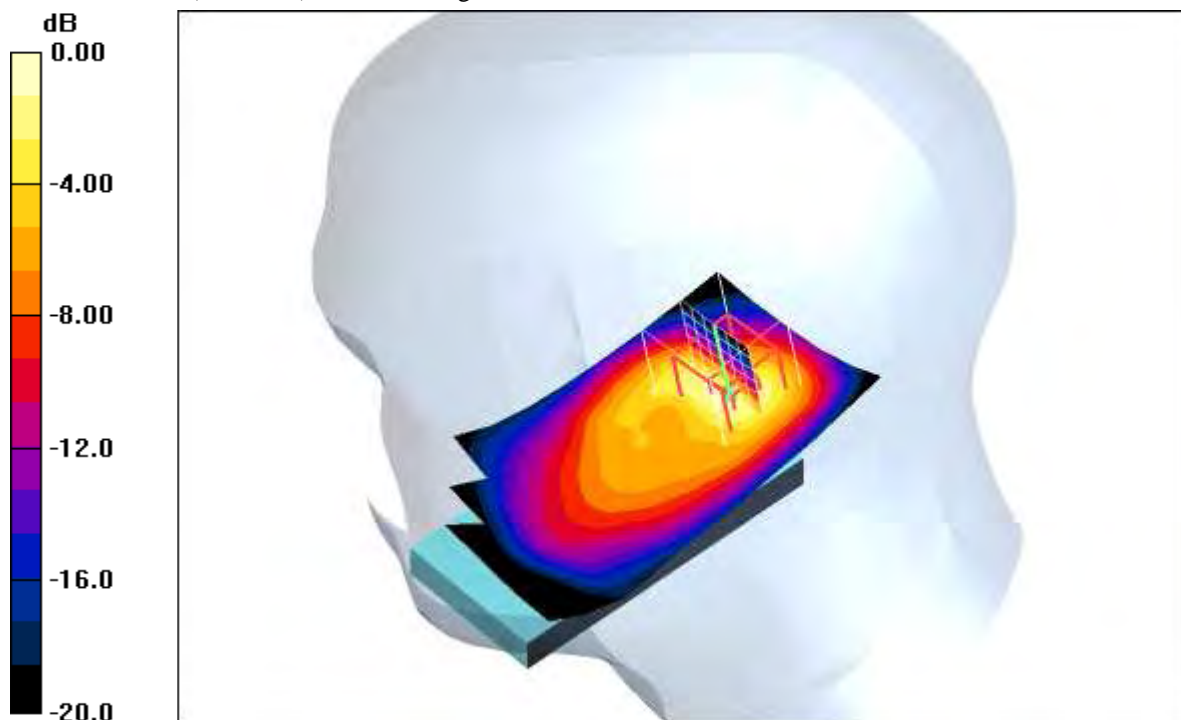
**Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.2 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 2.18 W/kg

**SAR(1 g) = 0.831 mW/g; SAR(10 g) = 0.348 mW/g**

Maximum value of SAR (measured) = 0.959 mW/g



0 dB = 0.959mW/g

**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.3°C

Date/Time: 2009-12-07 17:04:17 Date/Time: 2009-12-07 17:10:41 Date/Time: 2009-12-07 17:21:48

**IEEE1528\_OET65-RightHandSide-WLAN**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH62E**

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used (interpolated):  $f = 2462$  MHz;  $\sigma = 1.87$  mho/m;  $\epsilon_r = 39.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.16, 4.16, 4.16); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.793 mW/g

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

Reference Value = 19.0 V/m; Power Drift = 0.019 dB

Peak SAR (extrapolated) = 2.40 W/kg

**SAR(1 g) = 0.908 mW/g; SAR(10 g) = 0.375 mW/g**

Maximum value of SAR (measured) = 1.02 mW/g

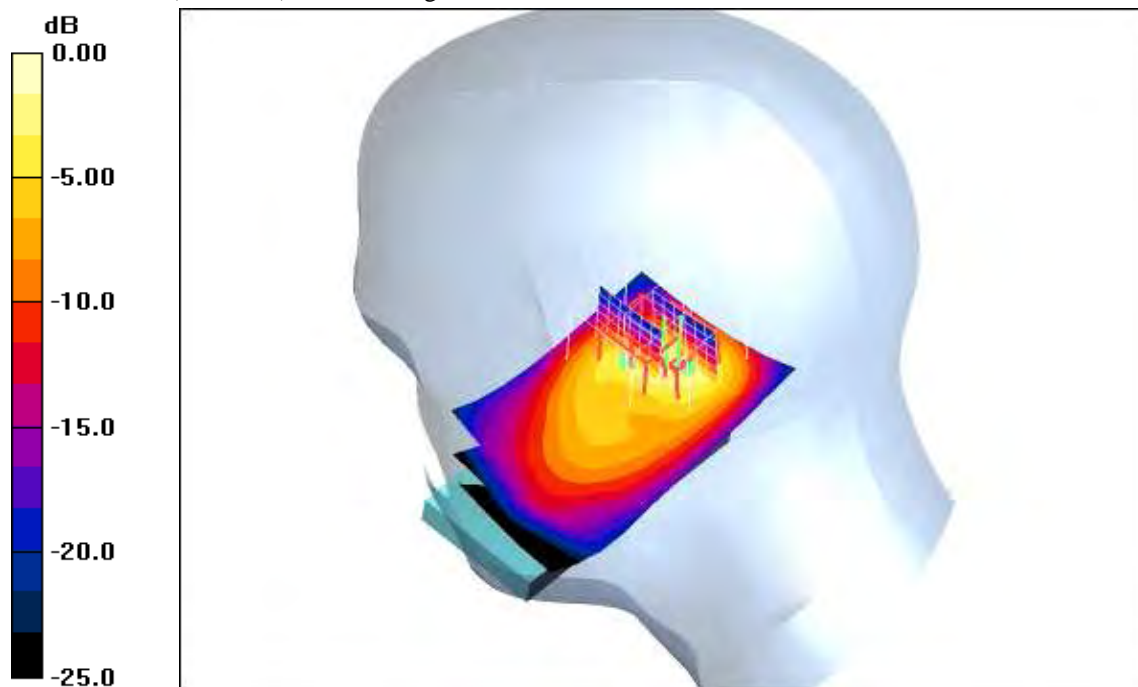
**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.0 V/m; Power Drift = 0.019 dB

Peak SAR (extrapolated) = 2.44 W/kg

**SAR(1 g) = 0.814 mW/g; SAR(10 g) = 0.288 mW/g**

Maximum value of SAR (measured) = 1.07 mW/g



0 dB = 1.07mW/g

**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.3°C



Date/Time: 2009-12-08 08:55:23 Date/Time: 2009-12-08 09:01:57

**IEEE1528\_OET65-RightHandSide-WLAN**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH62E**

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used (interpolated):  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.87 \text{ mho/m}$ ;  $\epsilon_r = 39.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.16, 4.16, 4.16); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.800 mW/g

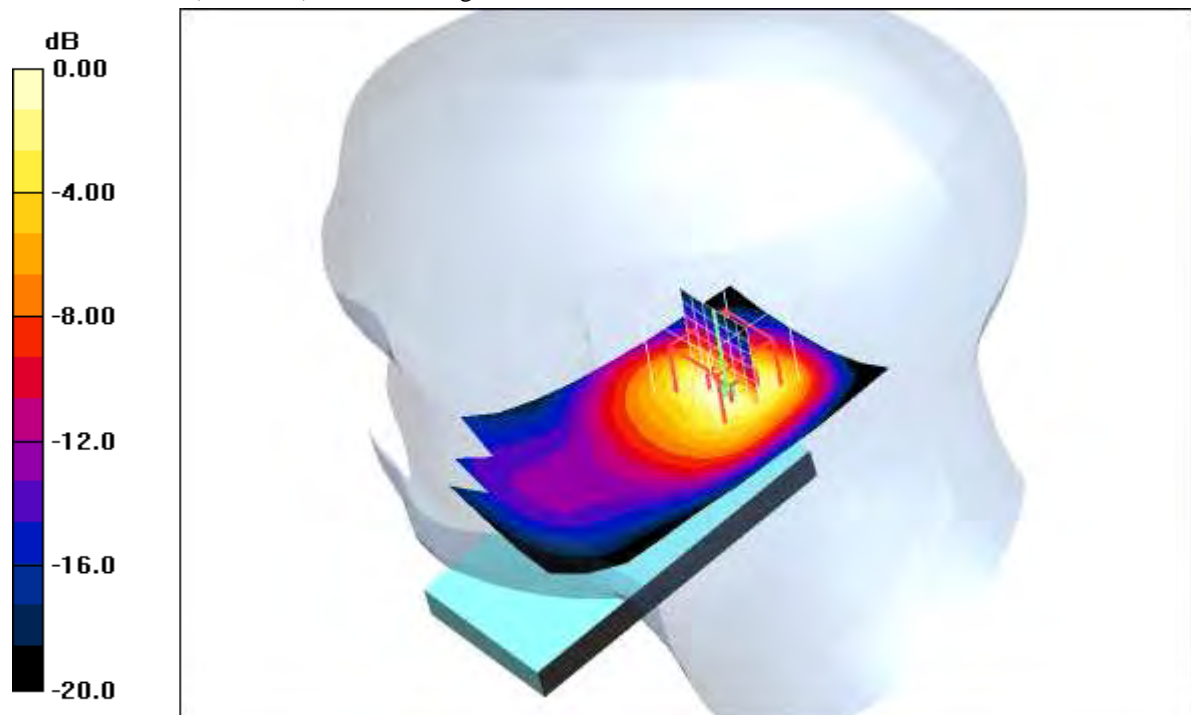
**Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 20.1 V/m; Power Drift = -0.156 dB

Peak SAR (extrapolated) = 1.64 W/kg

**SAR(1 g) = 0.684 mW/g; SAR(10 g) = 0.305 mW/g**

Maximum value of SAR (measured) = 0.784 mW/g



0 dB = 0.784mW/g

**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.3°C

Date/Time: 2009-12-08 09:19:50 Date/Time: 2009-12-08 09:40:12

**IEEE1528\_OET65-RightHandSide-WLAN**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH62E**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.87$  mho/m;  $\epsilon_r = 39.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.16, 4.16, 4.16); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x91x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.07 mW/g

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

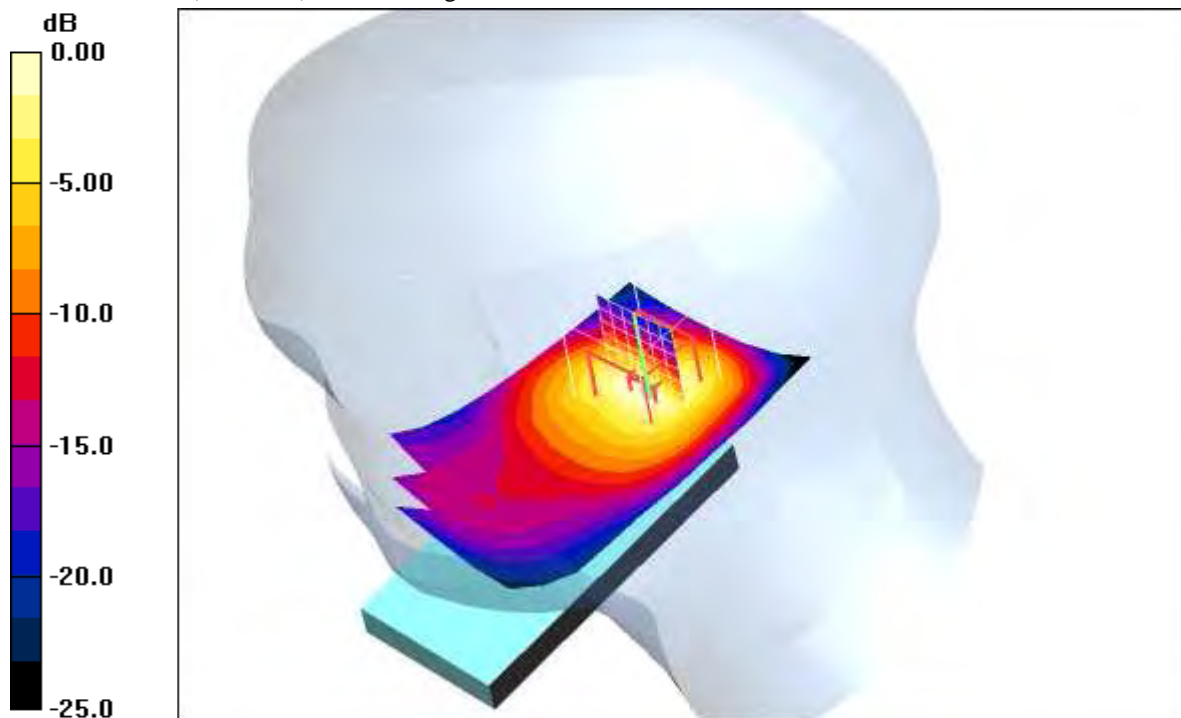
dz=5mm

Reference Value = 22.7 V/m; Power Drift = 0.033 dB

Peak SAR (extrapolated) = 2.43 W/kg

**SAR(1 g) = 0.967 mW/g; SAR(10 g) = 0.422 mW/g!**

Maximum value of SAR (measured) = 1.08 mW/g



0 dB = 1.08mW/g

**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.3°C

Date/Time: 2009-12-07 17:36:27 Date/Time: 2009-12-07 17:55:10

**IEEE1528\_OET65-RightHandSide-WLAN**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH62E**

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used (interpolated):  $f = 2462 \text{ MHz}$ ;  $\sigma = 1.87 \text{ mho/m}$ ;  $\epsilon_r = 39.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.16, 4.16, 4.16); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.994 mW/g

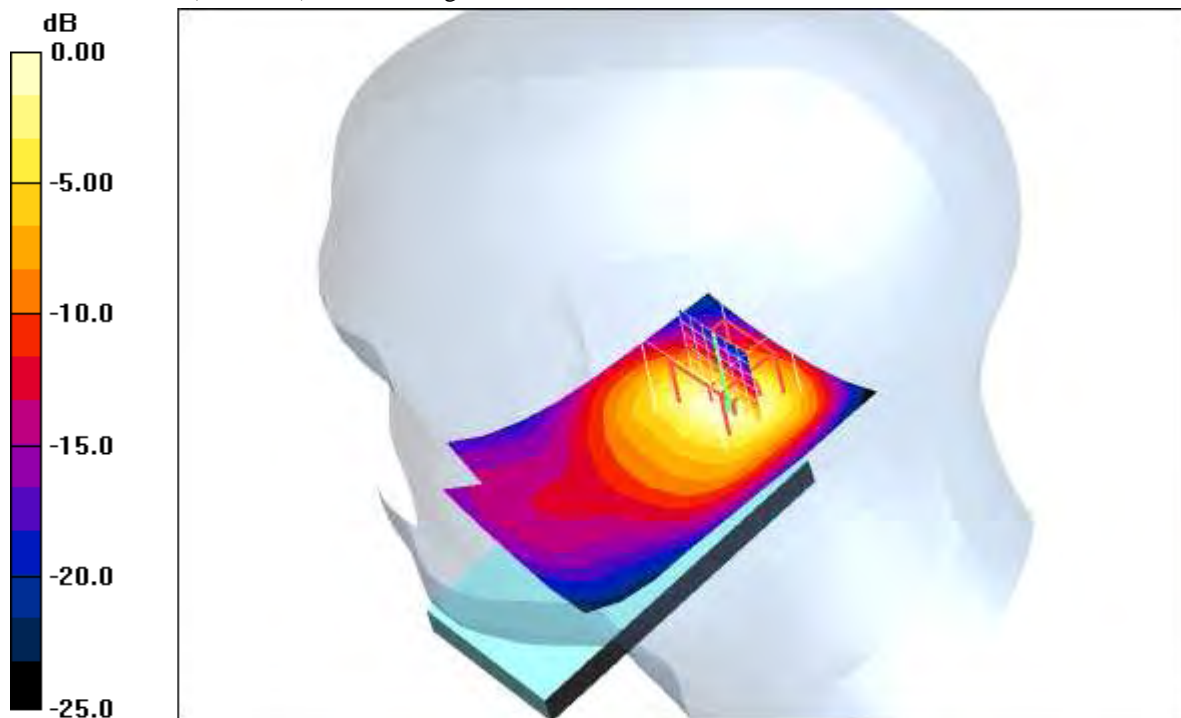
**Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 20.0 V/m; Power Drift = -0.103 dB

Peak SAR (extrapolated) = 2.44 W/kg

**SAR(1 g) = 0.972 mW/g; SAR(10 g) = 0.416 mW/g**

Maximum value of SAR (measured) = 1.07 mW/g



0 dB = 1.07mW/g

**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.3°C

**Annex 2.10 WLAN 2450 MHz body**

Date/Time: 2009-12-08 15:45:40 Date/Time: 2009-12-08 15:52:16 Date/Time: 2009-12-08 16:03:50

**IEEE1528\_OET65-Body-WLAN**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH62E**

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: M2450 Medium parameters used (interpolated):  $f = 2412$  MHz;  $\sigma = 1.97$  mho/m;  $\epsilon_r = 51.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(3.96, 3.96, 3.96); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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) = 0.119 mW/g

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

Reference Value = 8.05 V/m; Power Drift = -0.112 dB

Peak SAR (extrapolated) = 0.211 W/kg

**SAR(1 g) = 0.108 mW/g; SAR(10 g) = 0.064 mW/g**

Maximum value of SAR (measured) = 0.114 mW/g

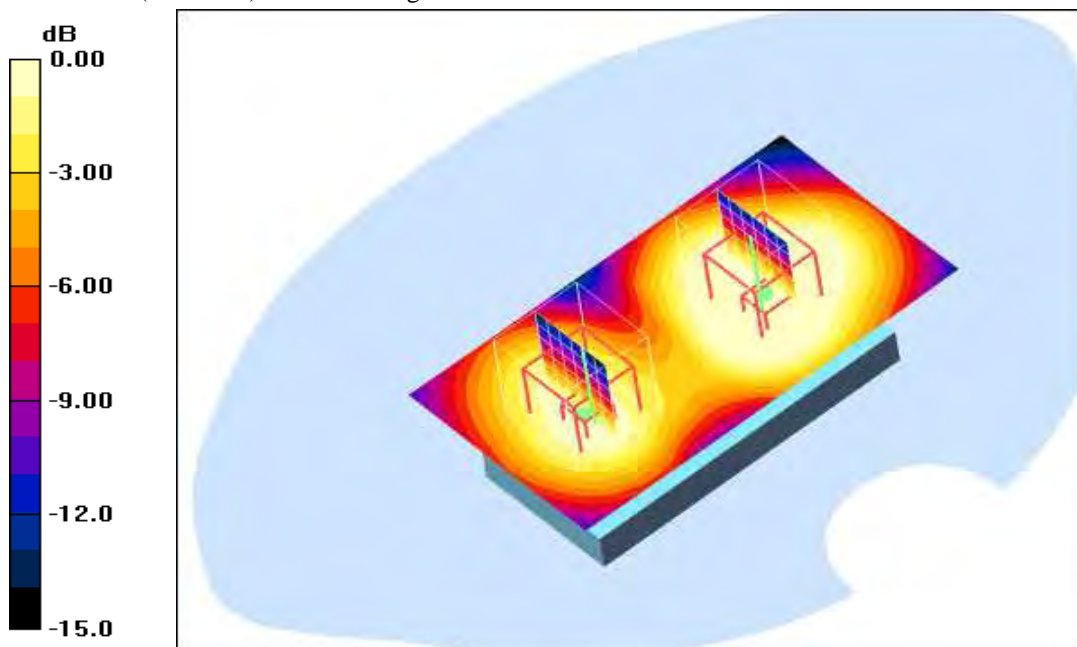
**Front position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.05 V/m; Power Drift = -0.112 dB

Peak SAR (extrapolated) = 0.131 W/kg

**SAR(1 g) = 0.069 mW/g; SAR(10 g) = 0.041 mW/g**

Maximum value of SAR (measured) = 0.074 mW/g



0 dB = 0.074mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.1°C; liquid temperature: 22.7°C

Date/Time: 2009-12-08 16:23:20 Date/Time: 2009-12-08 16:30:38 Date/Time: 2009-12-08 16:42:18

**IEEE1528\_OET65-Body-WLAN**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH62E**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: M2450 Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.97$  mho/m;  $\epsilon_r = 51.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(3.96, 3.96, 3.96); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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) = 0.134 mW/g

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

Reference Value = 8.44 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 0.255 W/kg

**SAR(1 g) = 0.123 mW/g; SAR(10 g) = 0.073 mW/g**

Maximum value of SAR (measured) = 0.129 mW/g

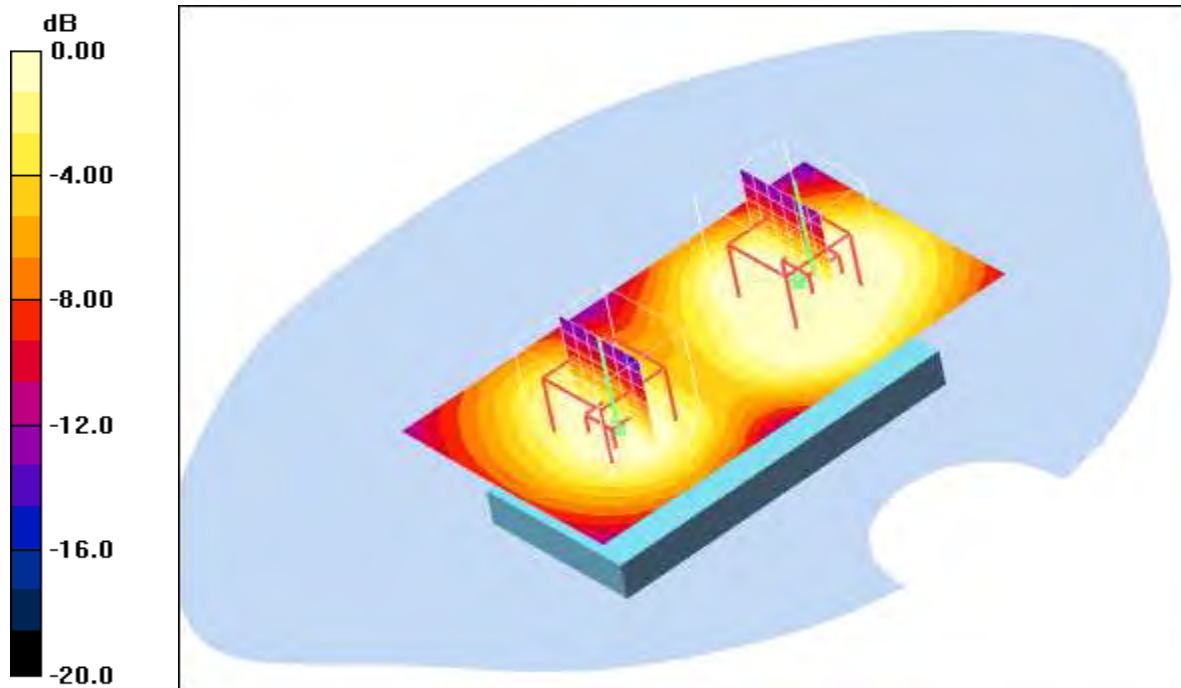
**Front position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.44 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 0.168 W/kg

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

Maximum value of SAR (measured) = 0.093 mW/g



**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.1°C; liquid temperature: 22.7°C

Date/Time: 2009-12-08 14:57:52 Date/Time: 2009-12-08 15:04:23  
 Date/Time: 2009-12-08 15:15:58 Date/Time: 2009-12-08 15:27:30

**IEEE1528\_OET65-Body-WLAN**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH62E**

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: M2450 Medium parameters used (interpolated):  $f = 2462 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 51.9$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(3.96, 3.96, 3.96); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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) = 0.108 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 = 7.62 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 0.193 W/kg

**SAR(1 g) = 0.096 mW/g; SAR(10 g) = 0.057 mW/g**

Maximum value of SAR (measured) = 0.102 mW/g

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

Reference Value = 7.62 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 0.190 W/kg

**SAR(1 g) = 0.097 mW/g; SAR(10 g) = 0.056 mW/g**

Maximum value of SAR (measured) = 0.103 mW/g

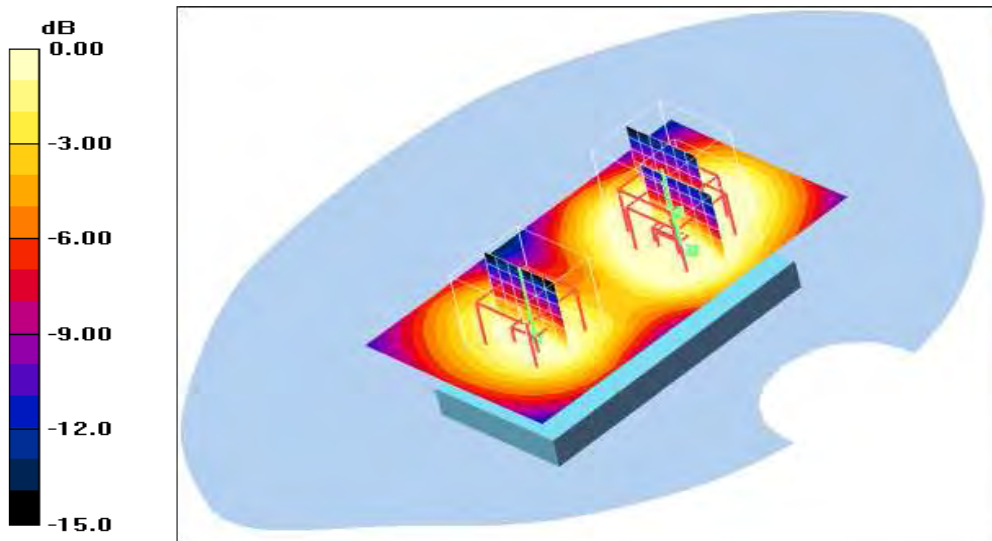
**Front position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 2:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 7.62 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 0.118 W/kg

**SAR(1 g) = 0.063 mW/g; SAR(10 g) = 0.037 mW/g**

Maximum value of SAR (measured) = 0.067 mW/g



0 dB = 0.067mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.1°C; liquid temperature: 22.7°C

Date/Time: 2009-12-08 12:58:04 Date/Time: 2009-12-08 13:04:22 Date/Time: 2009-12-08 13:16:43

**IEEE1528\_OET65-Body-WLAN**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH62E**

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: M2450 Medium parameters used (interpolated):  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 51.9$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(3.96, 3.96, 3.96); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.061 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 = 5.74 V/m; Power Drift = -0.178 dB

Peak SAR (extrapolated) = 0.108 W/kg

**SAR(1 g) = 0.057 mW/g; SAR(10 g) = 0.033 mW/g**

Maximum value of SAR (measured) = 0.060 mW/g

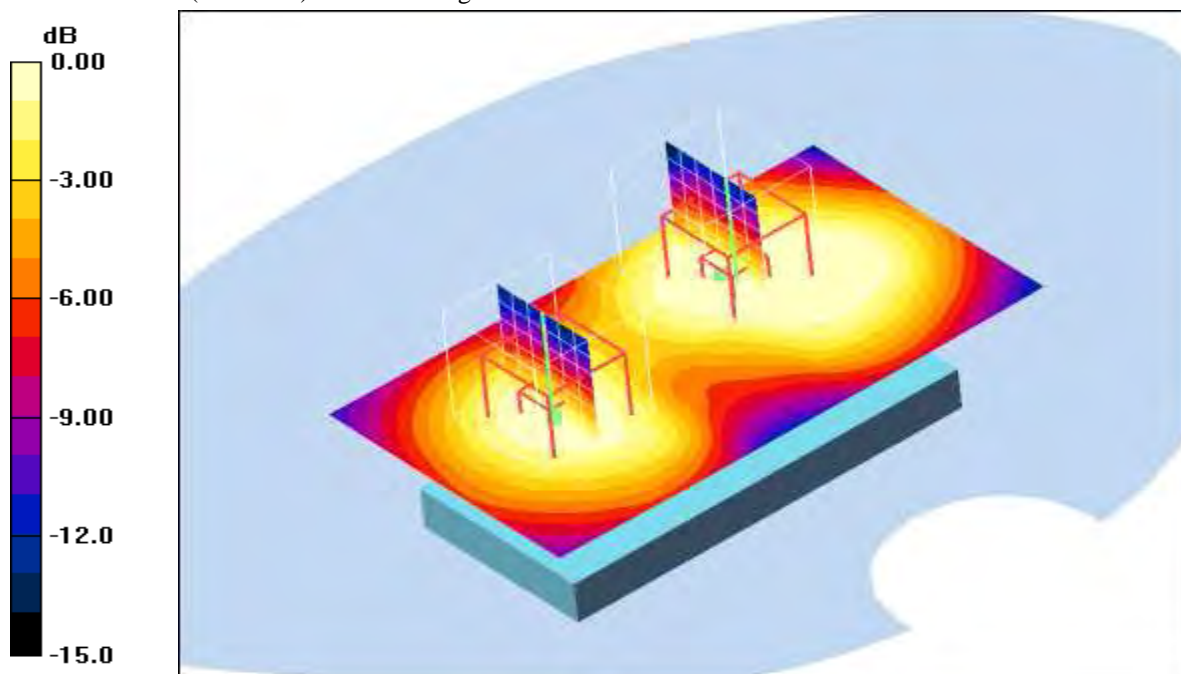
**Rear position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 5.74 V/m; Power Drift = -0.178 dB

Peak SAR (extrapolated) = 0.085 W/kg

**SAR(1 g) = 0.045 mW/g; SAR(10 g) = 0.027 mW/g**

Maximum value of SAR (measured) = 0.048 mW/g



0 dB = 0.048mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.1°C; liquid temperature: 22.7°C

Date/Time: 2009-12-08 13:33:08 Date/Time: 2009-12-08 13:39:25 Date/Time: 2009-12-08 13:51:19

**IEEE1528\_OET65-Body-WLAN**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH62E**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: M2450 Medium parameters used (interpolated):  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 51.9$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(3.96, 3.96, 3.96); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.073 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 = 6.34 V/m; Power Drift = 0.019 dB

Peak SAR (extrapolated) = 0.134 W/kg

**SAR(1 g) = 0.072 mW/g; SAR(10 g) = 0.041 mW/g**

Maximum value of SAR (measured) = 0.077 mW/g

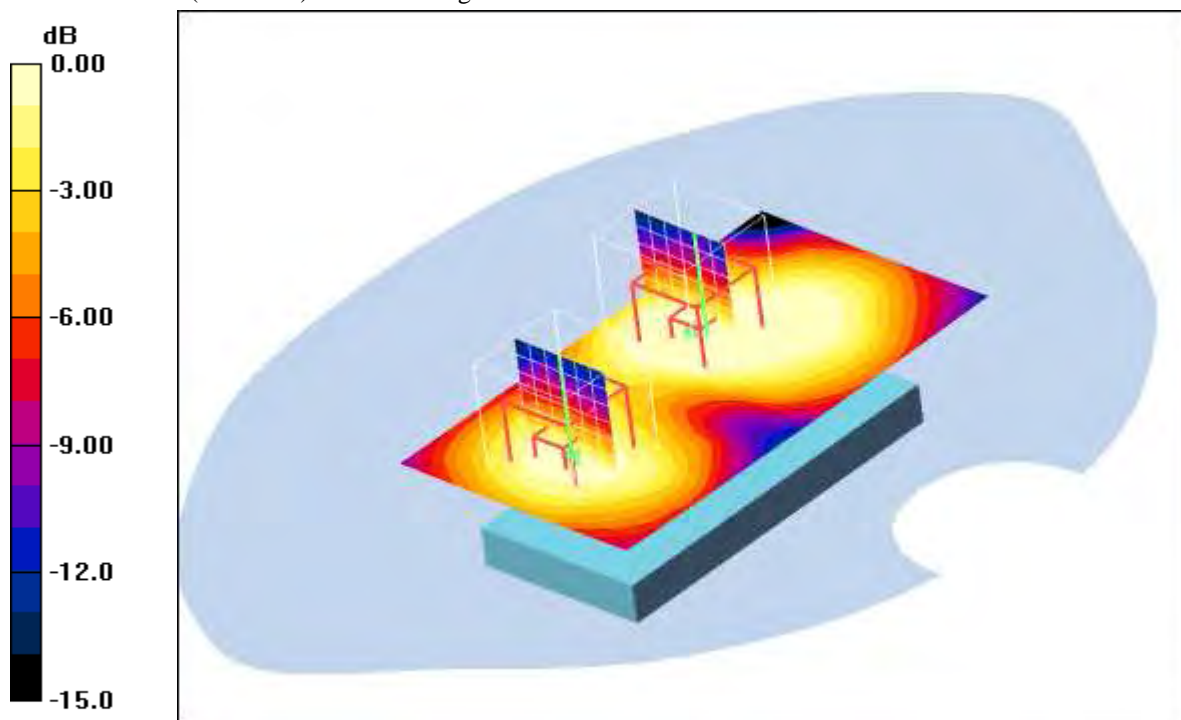
**Rear position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 6.34 V/m; Power Drift = 0.019 dB

Peak SAR (extrapolated) = 0.095 W/kg

**SAR(1 g) = 0.052 mW/g; SAR(10 g) = 0.031 mW/g**

Maximum value of SAR (measured) = 0.055 mW/g



0 dB = 0.055mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.1°C; liquid temperature: 22.7°C



Date/Time: 2009-12-08 14:10:23 Date/Time: 2009-12-08 14:16:50  
 Date/Time: 2009-12-08 14:30:08 Date/Time: 2009-12-08 14:43:51

**IEEE1528\_OET65-Body-WLAN**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH62E**

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: M2450 Medium parameters used (interpolated):  $f = 2462 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 51.9$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(3.96, 3.96, 3.96); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- 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 (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.066 mW/g

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

Reference Value = 5.85 V/m; Power Drift = -0.074 dB

Peak SAR (extrapolated) = 0.109 W/kg

**SAR(1 g) = 0.059 mW/g; SAR(10 g) = 0.034 mW/g**

Maximum value of SAR (measured) = 0.064 mW/g

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

Reference Value = 5.85 V/m; Power Drift = -0.074 dB

Peak SAR (extrapolated) = 0.109 W/kg

**SAR(1 g) = 0.051 mW/g; SAR(10 g) = 0.029 mW/g**

Maximum value of SAR (measured) = 0.055 mW/g

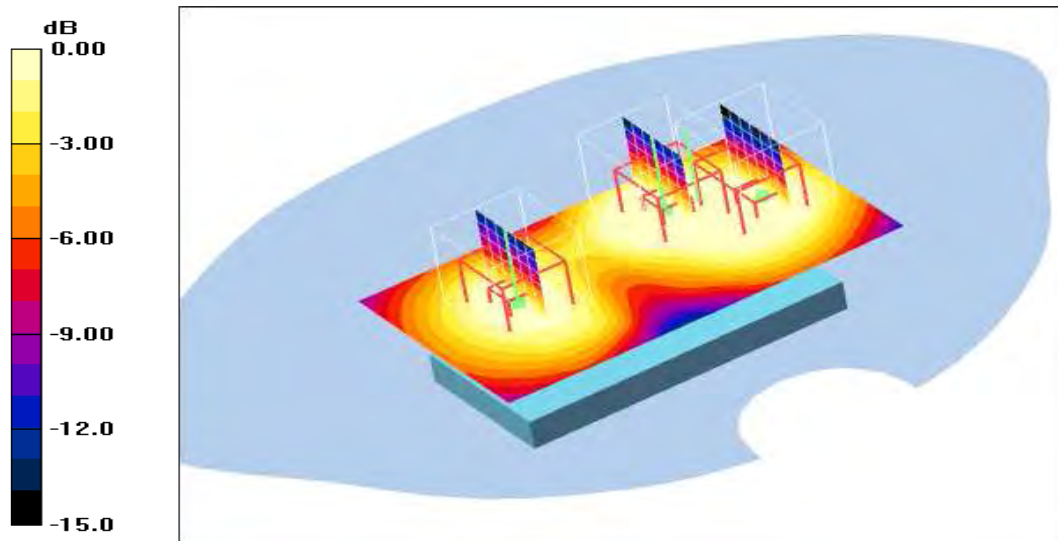
**Rear position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 2:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 5.85 V/m; Power Drift = -0.074 dB

Peak SAR (extrapolated) = 0.079 W/kg

**SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.025 mW/g**

Maximum value of SAR (measured) = 0.044 mW/g



0 dB = 0.044mW/g

**Additional information:**

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.1°C; liquid temperature: 22.7°C

Date/Time: 2009-12-09 09:40:32 Date/Time: 2009-12-09 09:47:34 Date/Time: 2009-12-09 09:59:21

**IEEE1528\_OET65-Body-WLAN**

**DUT: Sony Ericsson; Type: AAD-3880059-BV; Serial: BX900XH62E**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: M2450 Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.97$  mho/m;  $\epsilon_r = 51.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(3.96, 3.96, 3.96); Calibrated: 2009-08-21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2009-01-08
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Front position - Middle 6Mbps/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm

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

**Front position - Middle 6Mbps/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.35 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.095 W/kg

**SAR(1 g) = 0.048 mW/g; SAR(10 g) = 0.028 mW/g**

Maximum value of SAR (measured) = 0.050 mW/g

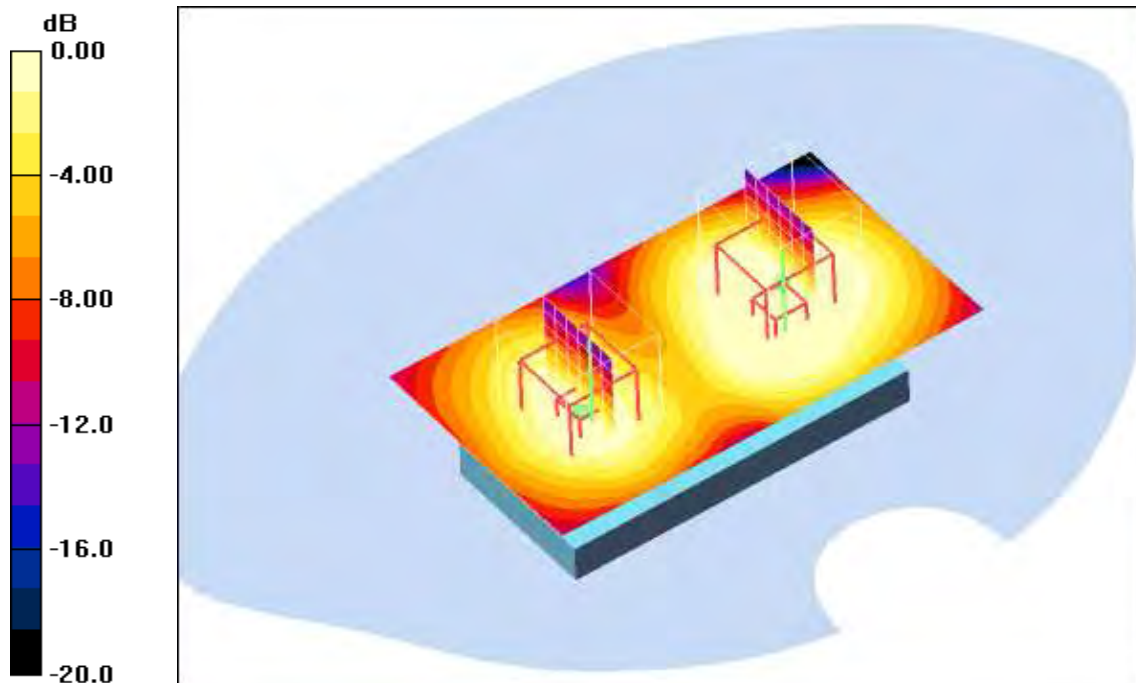
**Front position - Middle 6Mbps/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.35 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.066 W/kg

**SAR(1 g) = 0.034 mW/g; SAR(10 g) = 0.020 mW/g**

Maximum value of SAR (measured) = 0.036 mW/g



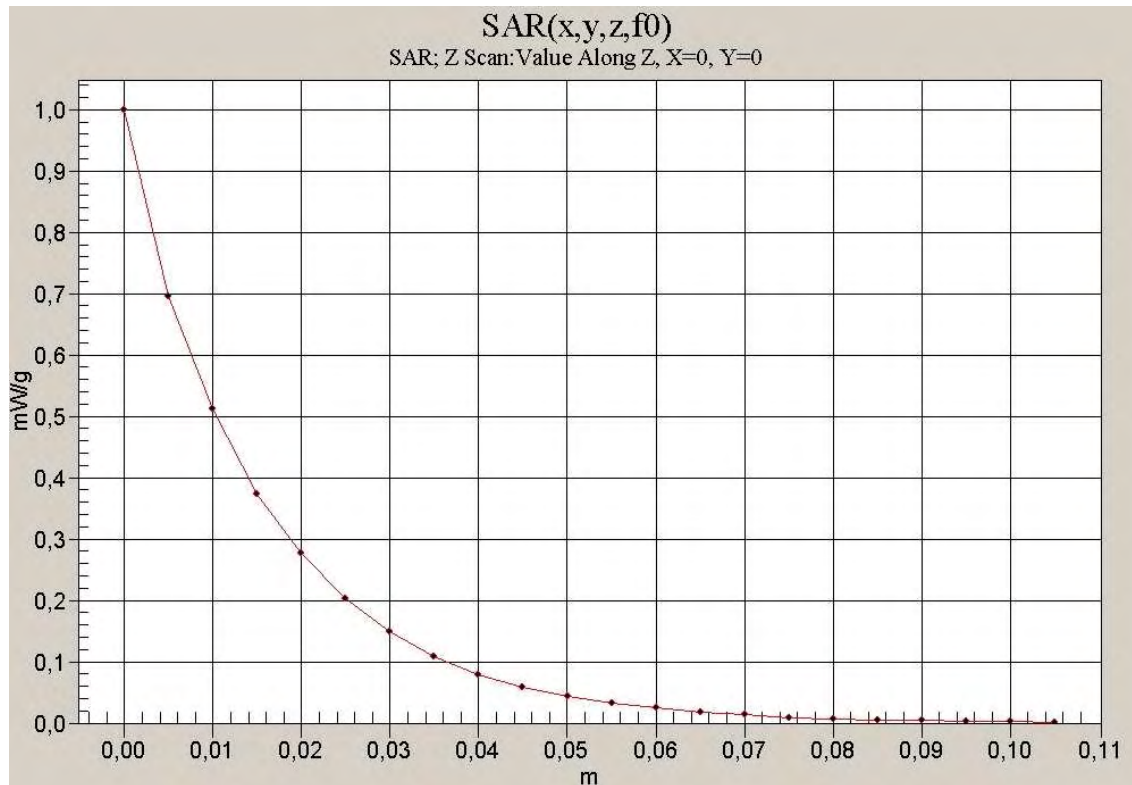
0 dB = 0.036mW/g

**Additional information:**

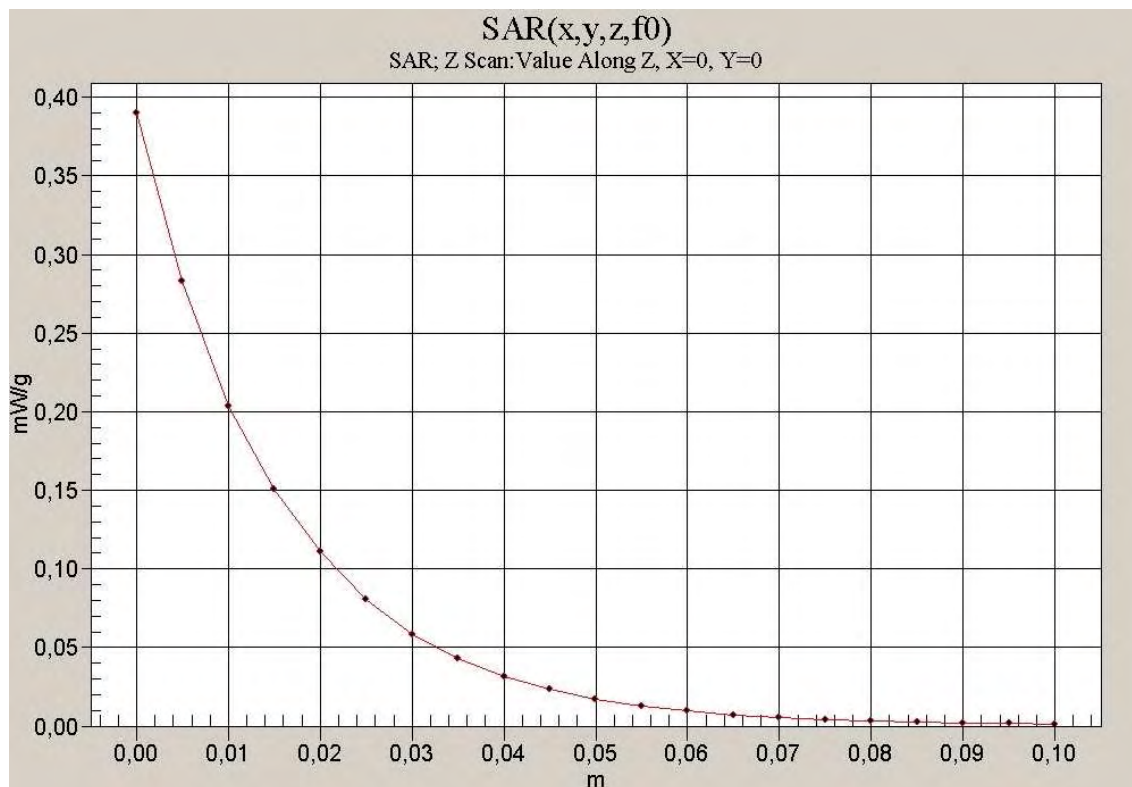
position or distance of DUT to SAM: 15 mm

ambient temperature: 23.1°C; liquid temperature: 22.7°C

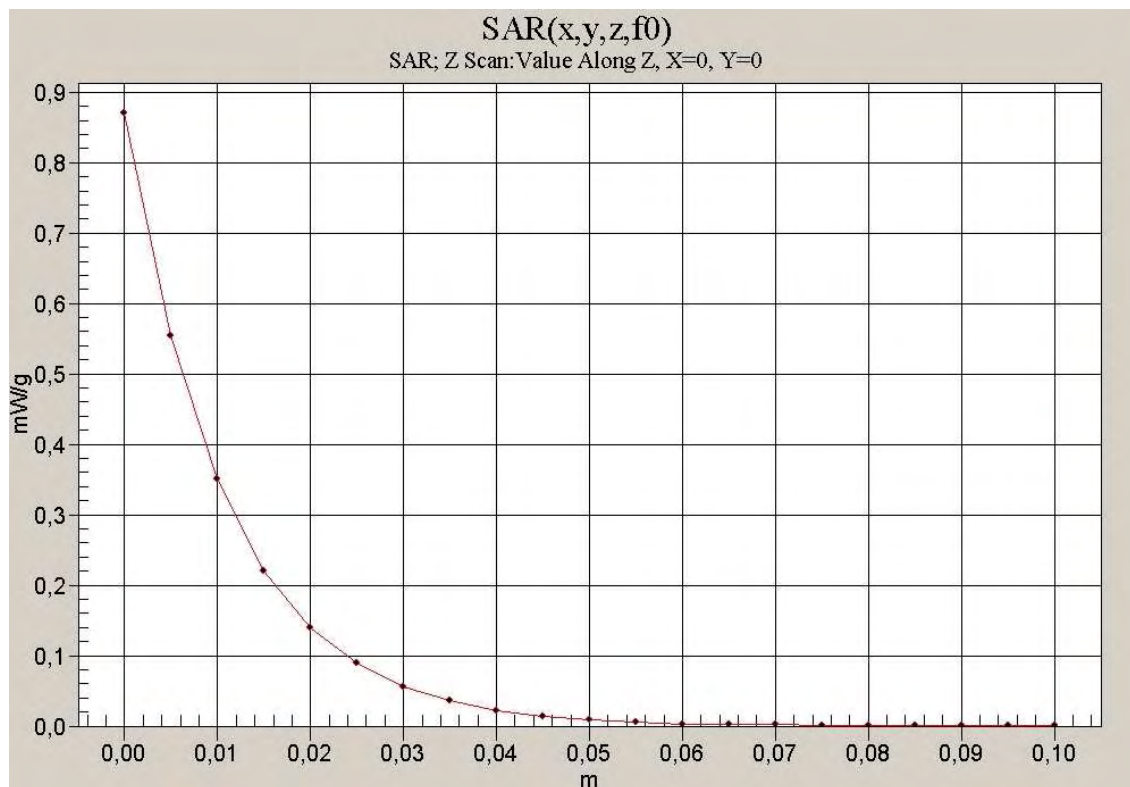
**Annex 2.11 Z-axis scans**



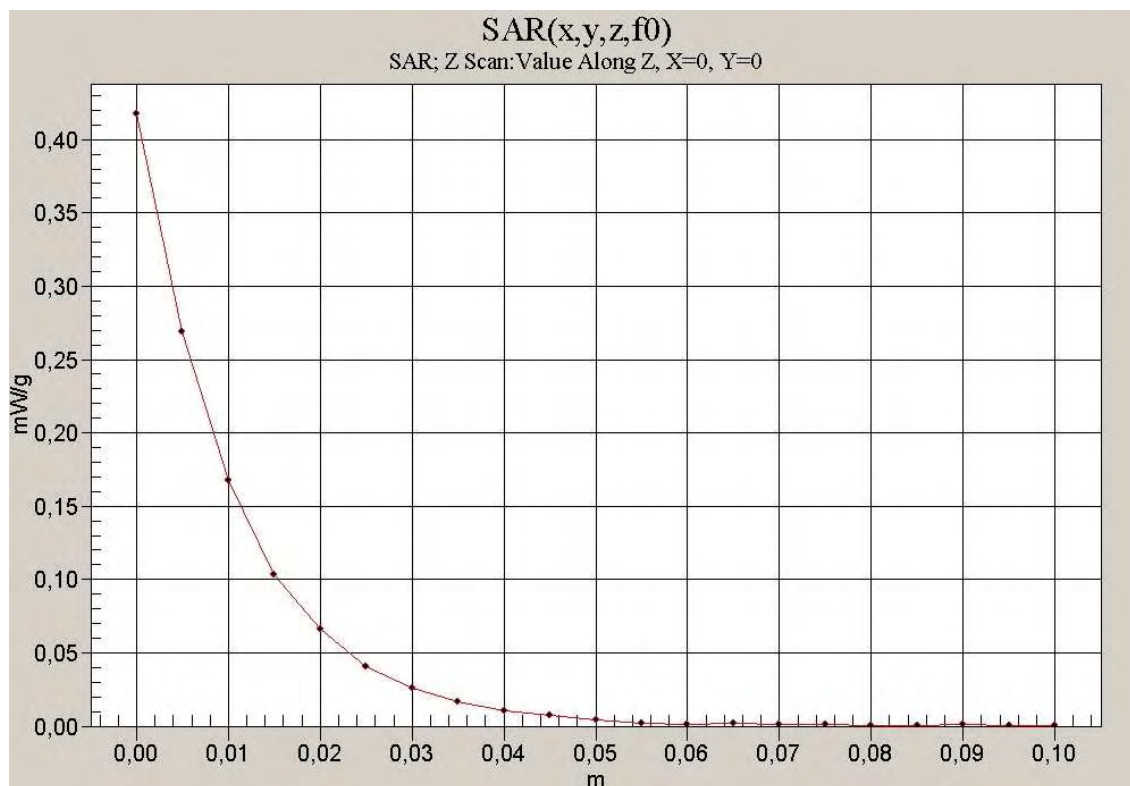
850 head



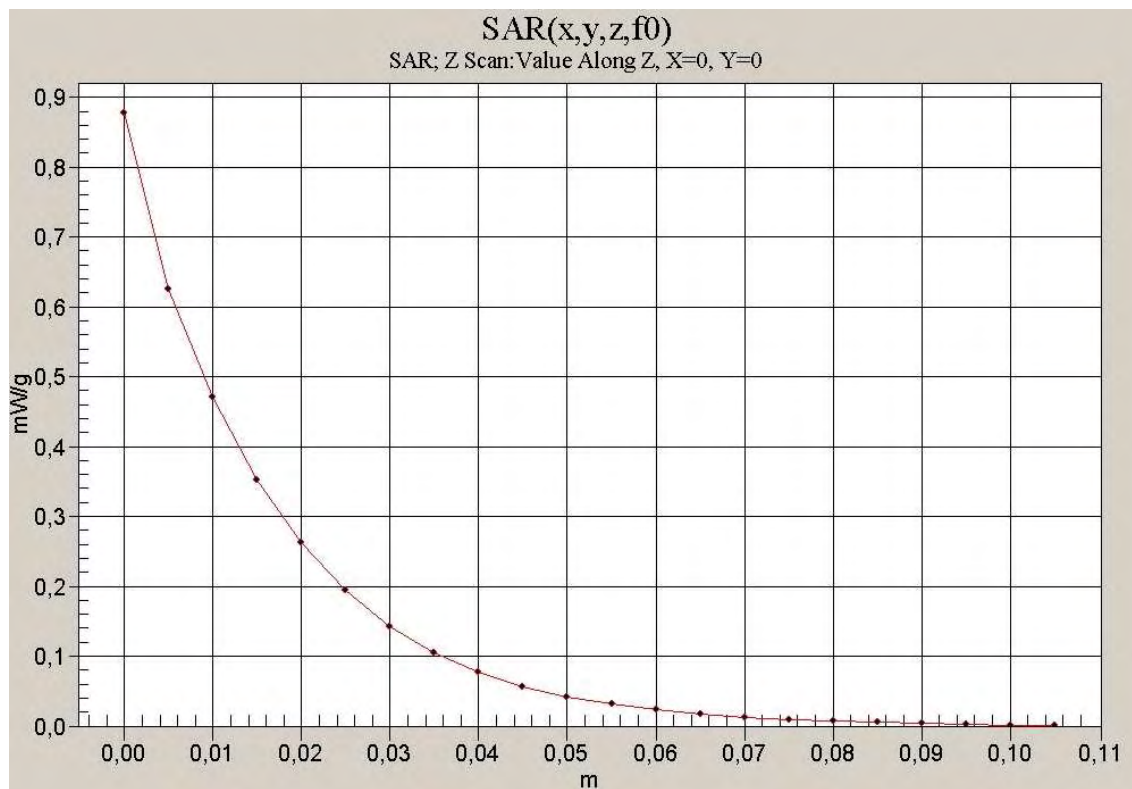
850 body



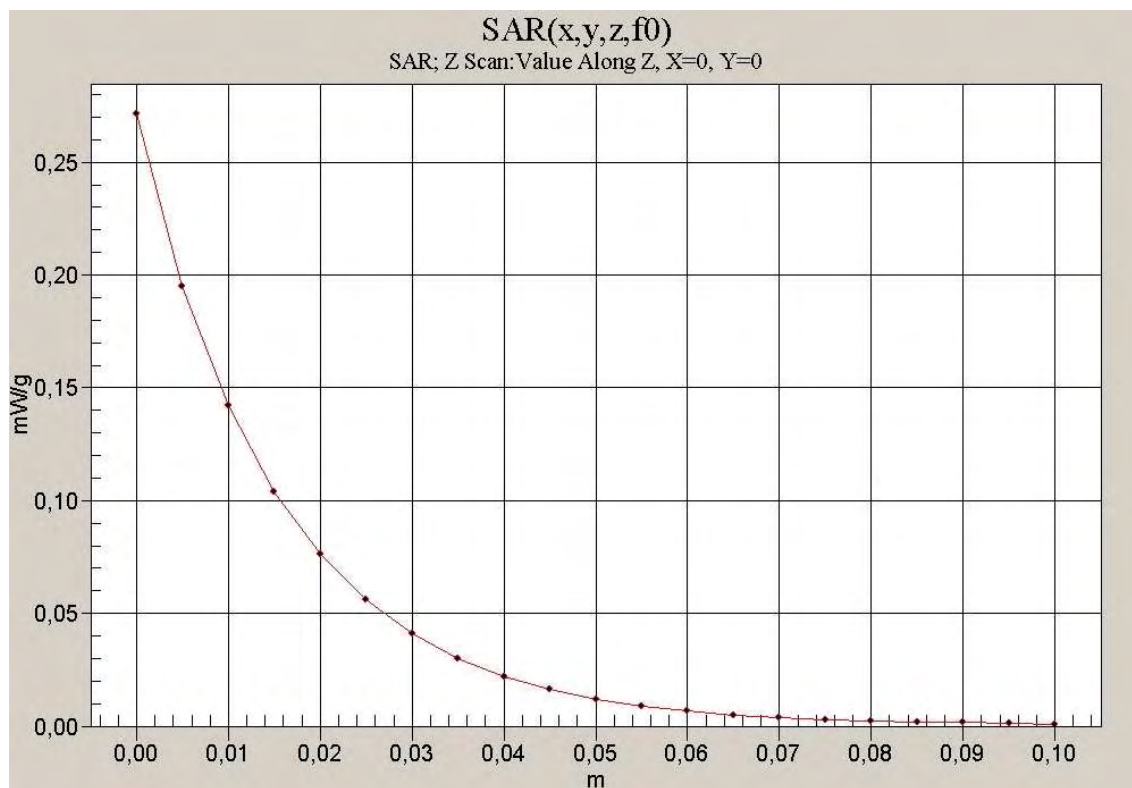
1900 head



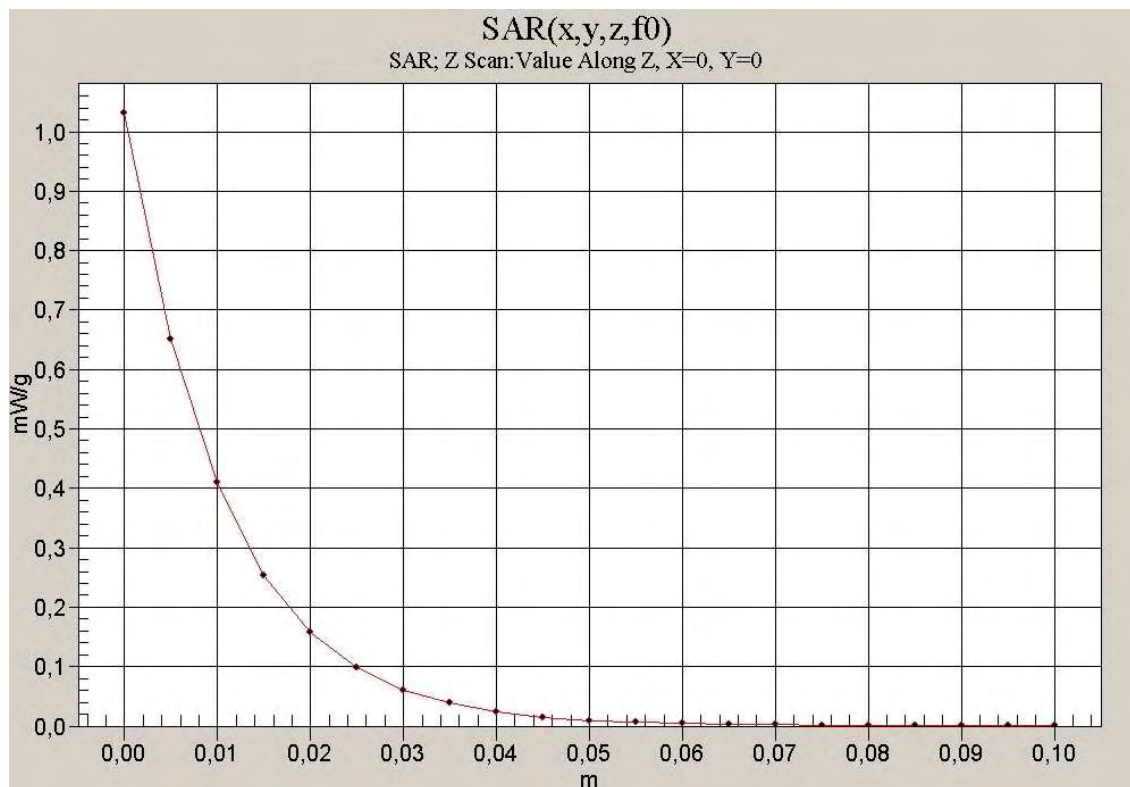
1900 body



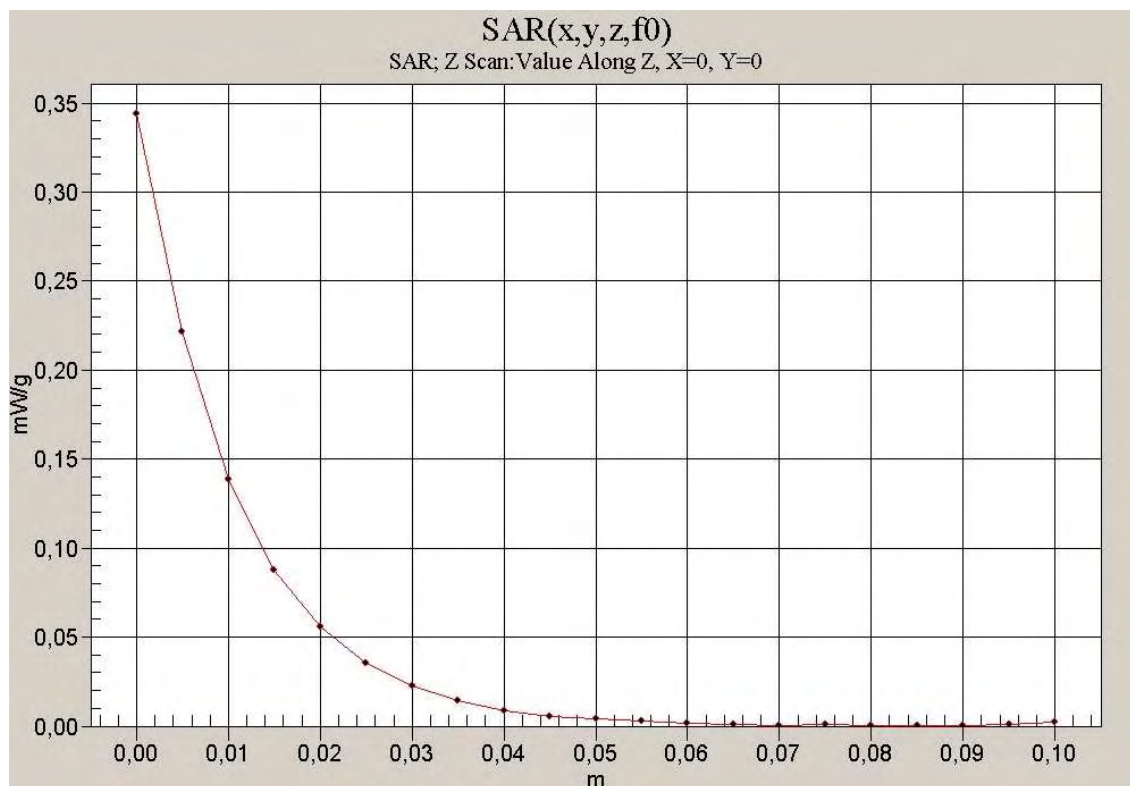
WCDMA FDD V head



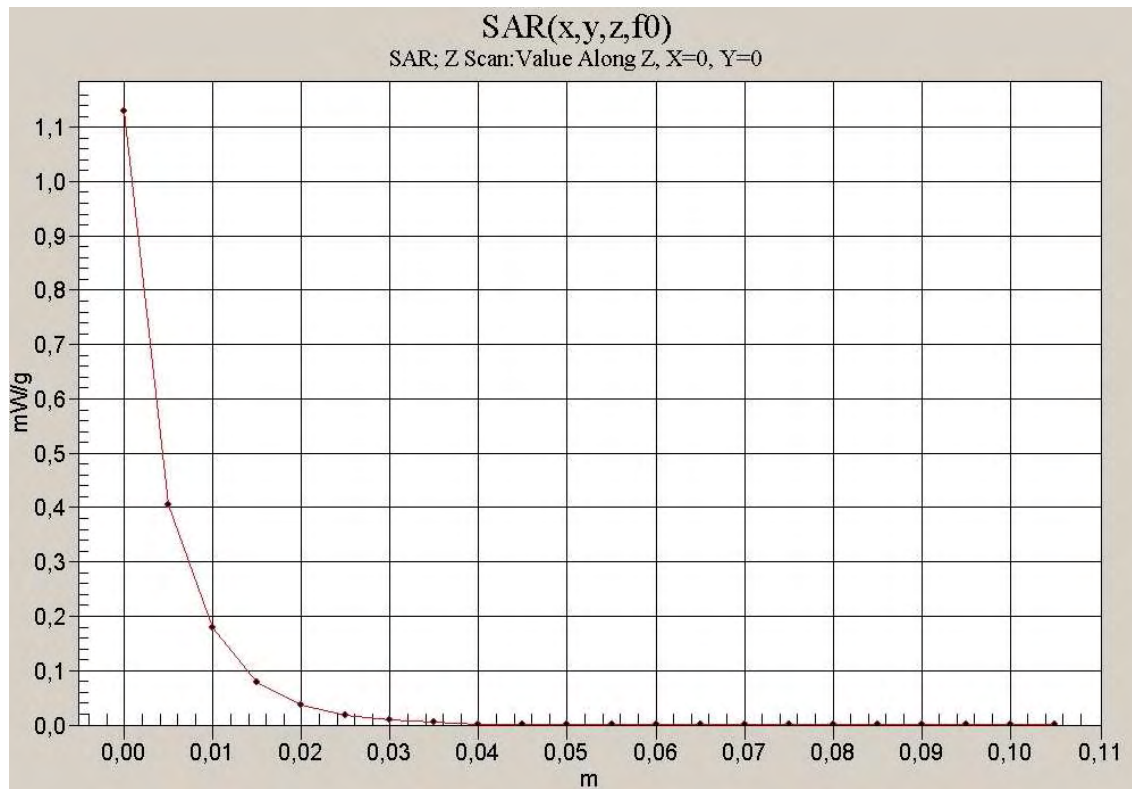
WCDMA FDD V body



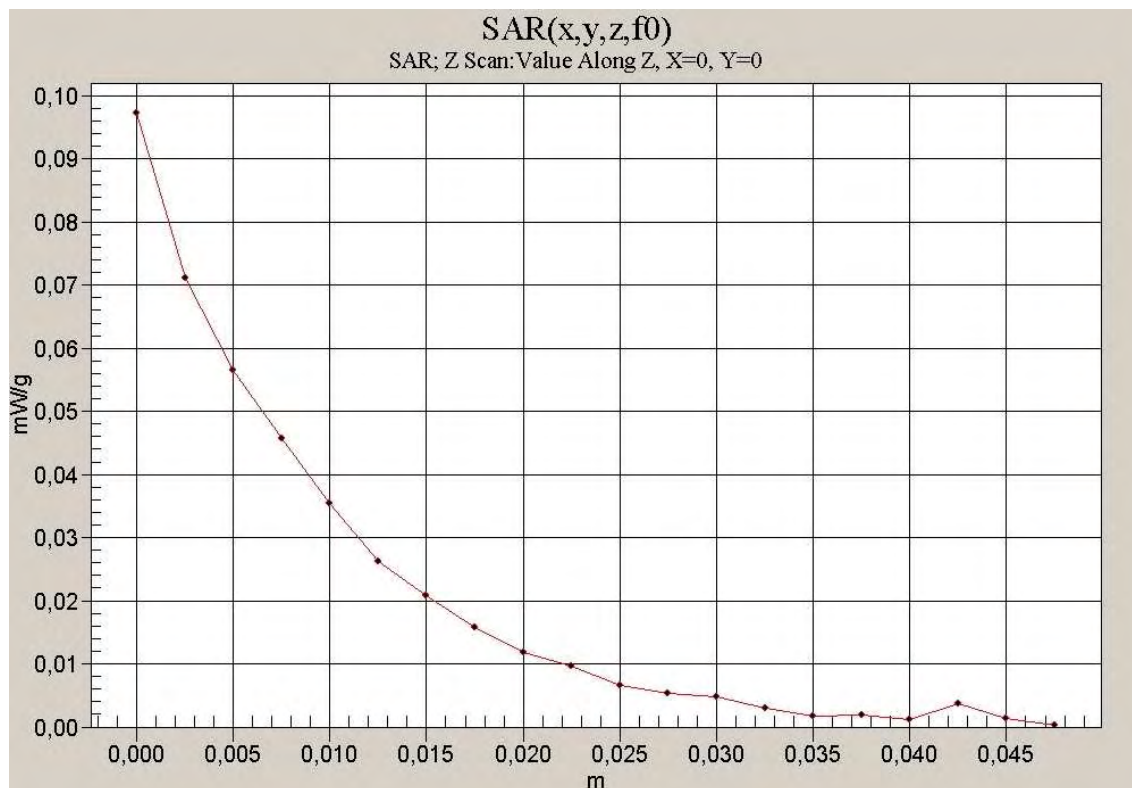
WCDMA FDD II head



WCDMA FDD II body



WLAN 2450 head



WLAN 2450 body

**Annex 3 Photo documentation**

Photo 1: Measurement System DASY 4



Photo 2: DUT - front view

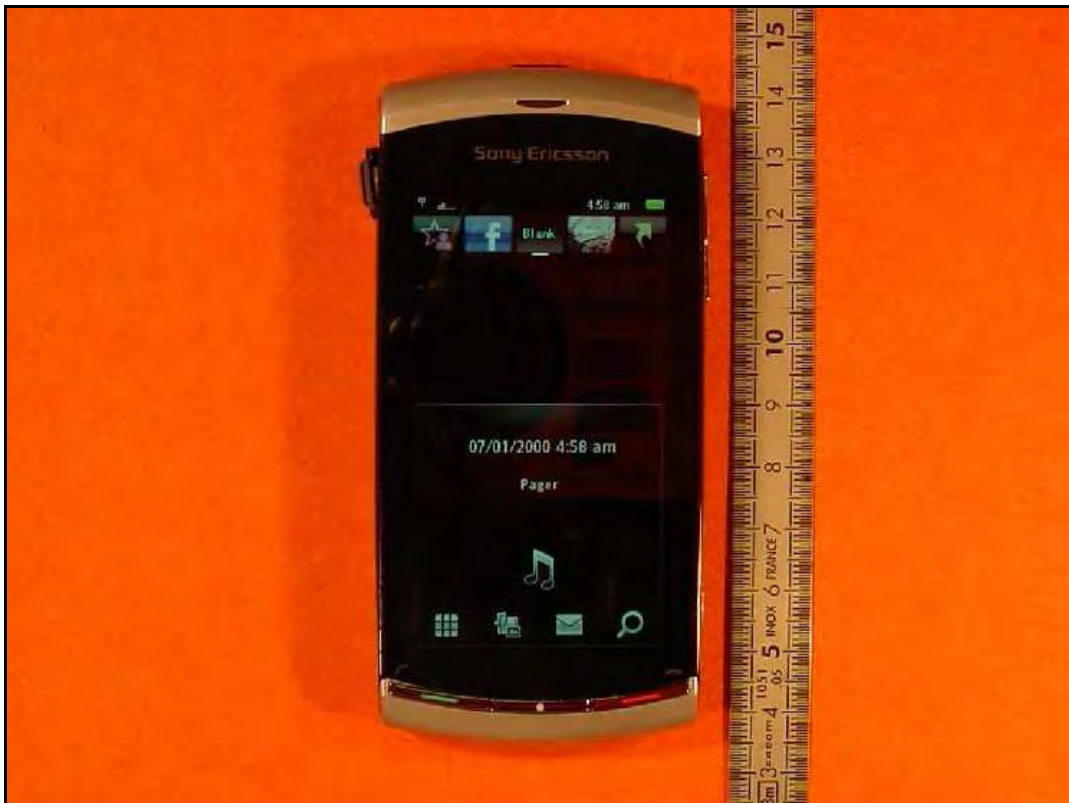




Photo 3: DUT - side view



Photo 4: DUT - rear view



Photo 5: DUT - rear view (open)

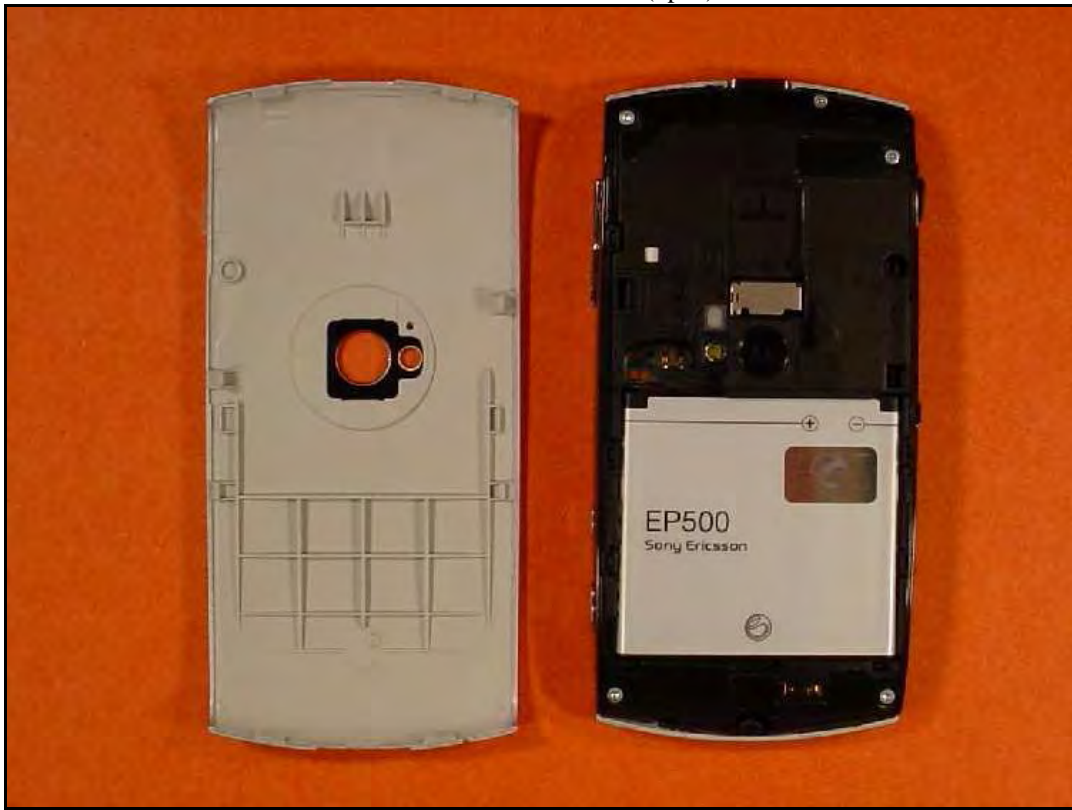


Photo 6: DUT - rear view (open) without battery



Photo 7: DUT - rear view (label)

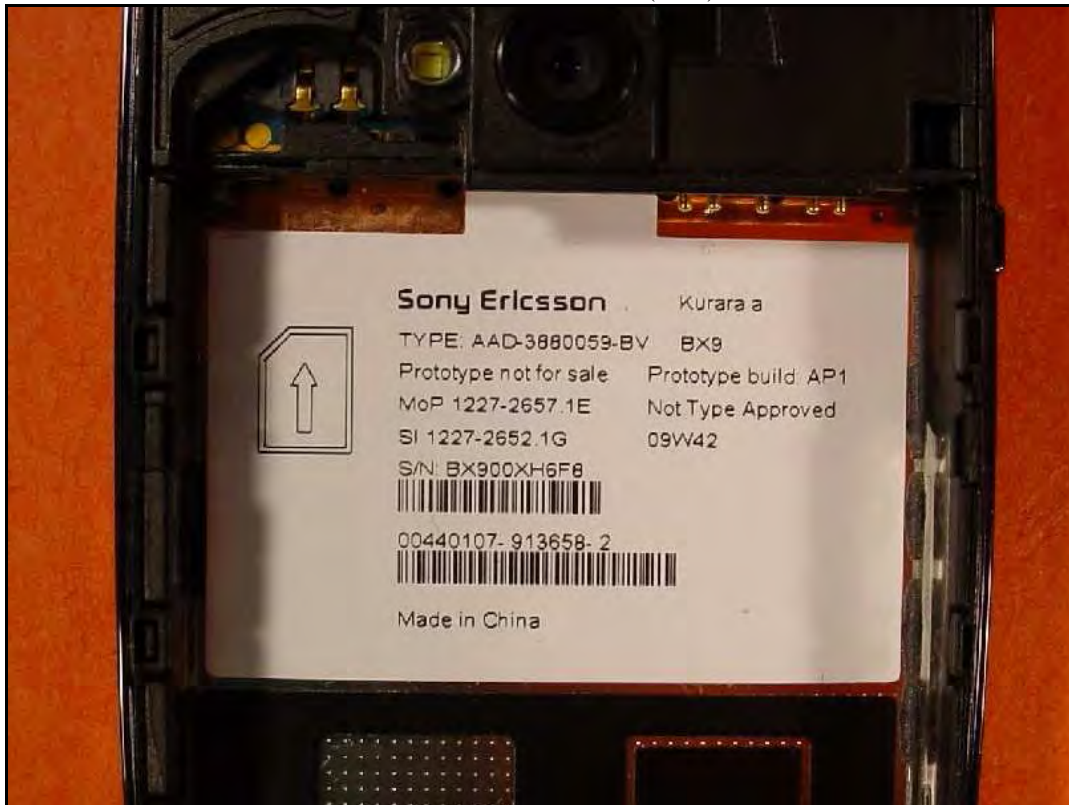


Photo 8: Battery



Photo 9: Test position left hand touched

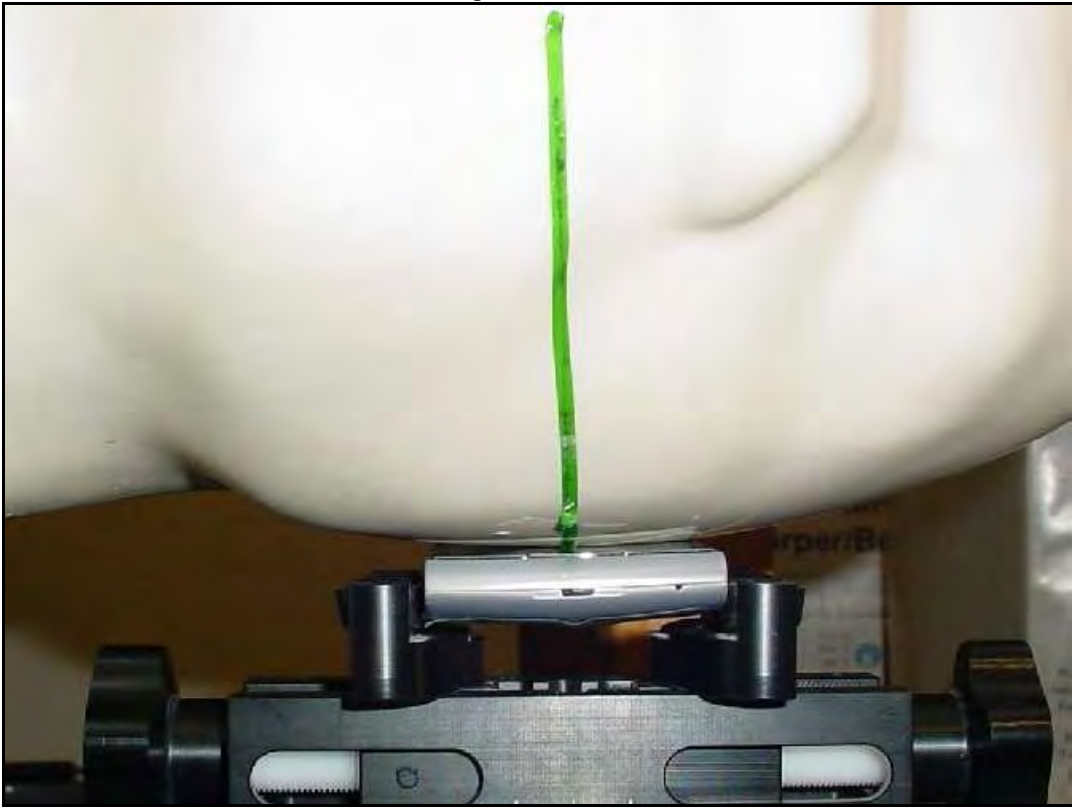


Photo 10: Test position left hand touched



Photo 11: Test position left hand touched



Photo 12: Test position left hand tilted 15°



Photo 13: Test position left hand tilted 15°



Photo 14: Test position right hand touched

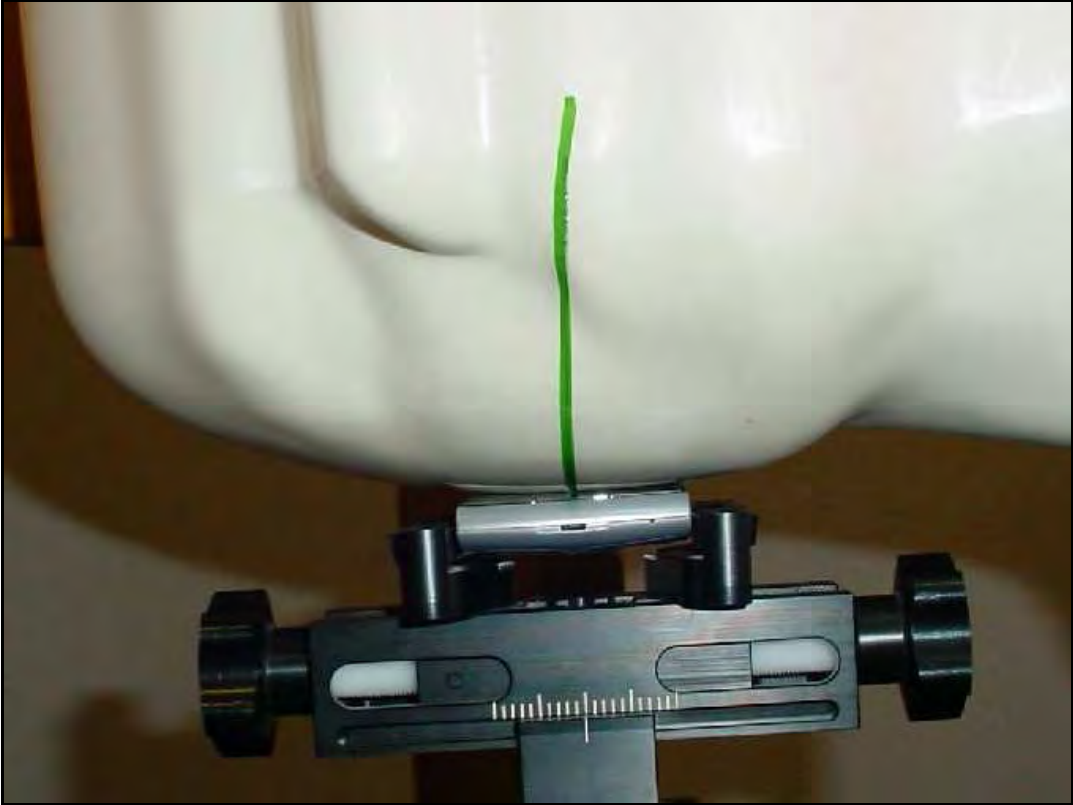


Photo 15: Test position right hand touched



Photo 16: Test position right hand touched



Photo 17: Test position right hand tilted 15°



Photo 18: Test position right hand tilted 15°





Photo 19: Test position body worn front side with 15 mm distance



Photo 20: Test position body worn rear side with 15 mm distance



**Annex 3.1 Liquid depth**

Photo 21: Liquid depth 850 MHz head simulating liquid



Photo 22: Liquid depth 850 MHz body simulating liquid



Photo 23: Liquid depth 1900 MHz head simulating liquid

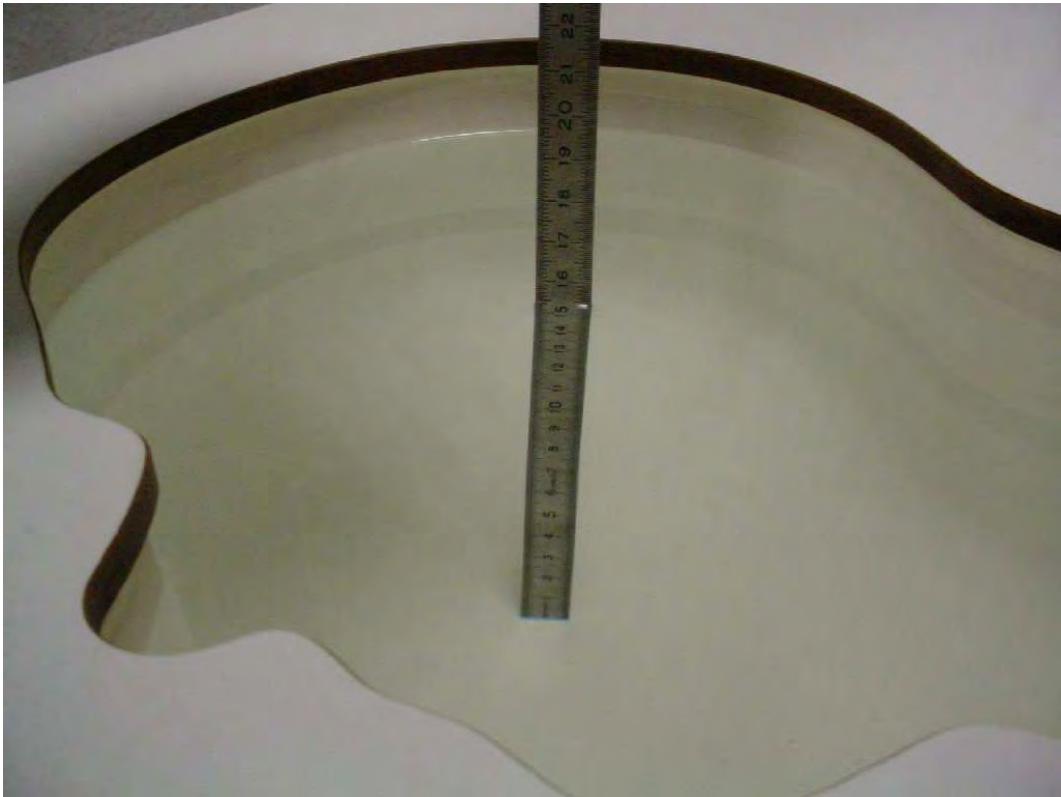


Photo 24: Liquid depth 1900 MHz body simulating liquid

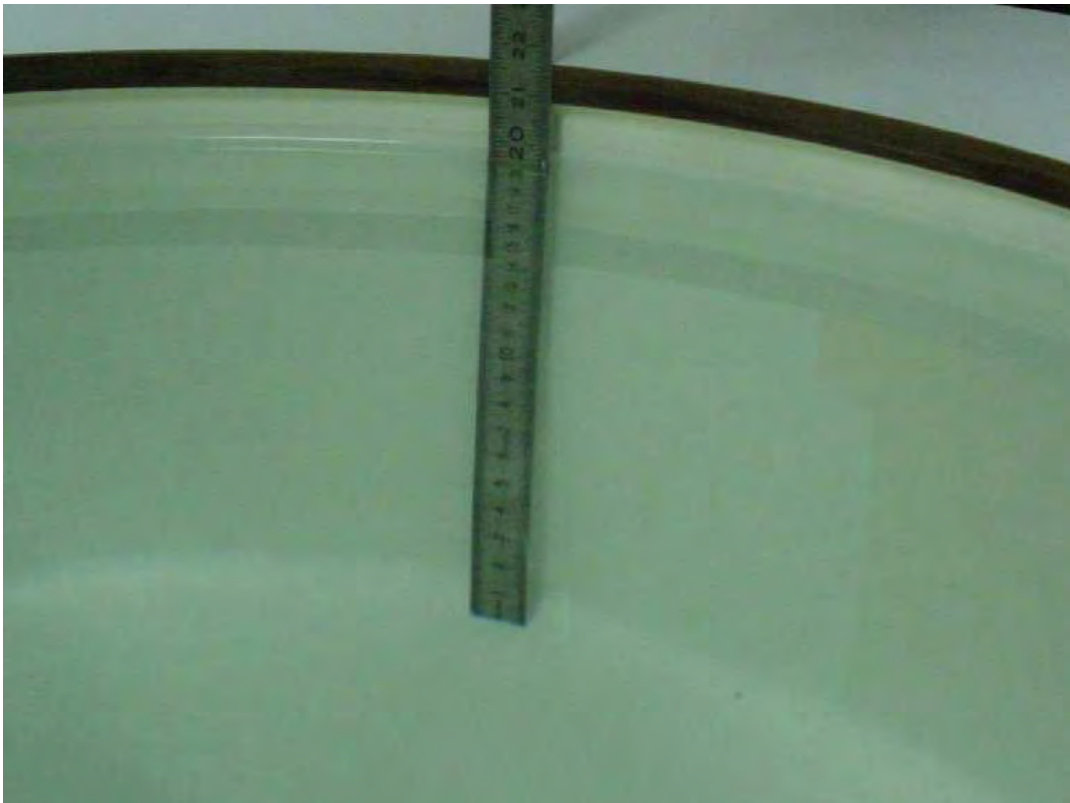


Photo 25: Liquid depth 2450 MHz head simulating liquid

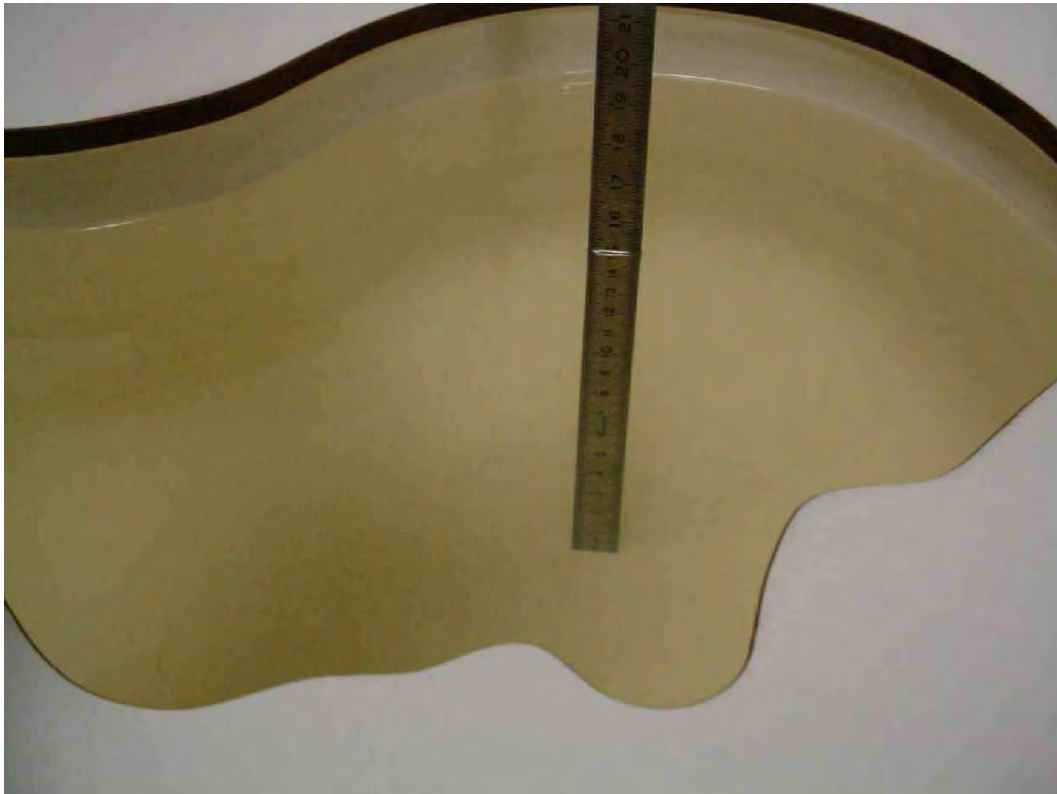


Photo 26: Liquid depth 2450 MHz body simulating liquid



**Annex 4 RF Technical Brief Cover Sheet acc. to RSS-102**

**1. COMPANY NUMBER: 4170B**

**2. MODEL NUMBER: A3880059**

**3. MANUFACTURER: Sony Ericsson Mobile Communications AB**

**4. TYPE OF EVALUATION:**

**(a) SAR Evaluation: Device used in the Vicinity of the Human Head**

- **Multiple transmitters: Yes  No**
- **Evaluated against exposure limits: General Public Use  Controlled Use**
- **Duty cycle used in evaluation: 100 %**
- **Standard used for evaluation: RSS-102 Issue 2 (2005-11)**
- **SAR value: 1.460 W/kg. Measured  Computed  Calculated**

**(b) SAR Evaluation: Body-worn Device**

- **Multiple transmitters: Yes  No**
- **Evaluated against exposure limits: General Public Use  Controlled Use**
- **Duty cycle used in evaluation: 25 %**
- **Standard used for evaluation: RSS-102 Issue 2 (2005-11)**
- **SAR value: 0.564 W/kg. Measured  Computed  Calculated**

**Annex 4.1 Declaration of RF Exposure Compliance**

**ATTESTATION:** I attest that the information provided in Annex 4 is correct; that a Technical Brief was prepared and the information it contains is correct; that the device evaluation was performed or supervised by me; that applicable measurement methods and evaluation methodologies have been followed and that the device meets the SAR and/or RF exposure limits of RSS-102.

**Signature:**



**Date: 2009-12-09**

**NAME : Thomas Vogler**

**TITLE : Dipl.-Ing. (FH)**

**COMPANY : CETECOM ICT Services GmbH**

## **Annex 5 Calibration parameters**

**Calibration parameters are described in the additional document :**

**Appendix to test report no. 1-1065-64-03/09‘  
Calibration data, Phantom certificate  
and detail information of the DASY4 System**