

TEST REPORT

Test Report No.: 1-4254/12-34-02-B



Testing Laboratory

CETECOM ICT Services GmbH
 Untertürkheimer Straße 6 – 10
 66117 Saarbrücken/Germany
 Phone: + 49 681 5 98 - 0
 Fax: + 49 681 5 98 - 9075
 Internet: <http://www.cetecom.com>
 e-mail: ict@cetecom.com

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Applicant

Sony Mobile Communications AB
 Nya Vattentornet
 22188 Lund/SWEDEN

Phone: +46 46 19 30 00

Contact: Håkan Sjöberg
 e-mail: hakan.sjoberg@sonymobile.com
 Phone: +46 46 19 35 59
 Fax: +46 46 19 32 95

Manufacturer

Sony Mobile Communications AB
 Nya Vattentornet
 22188 Lund/SWEDEN

Test Standard/s

IEEE 1528-2003	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
OET Bulletin 65 Supplement C	Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields
RSS-102 Issue 4	Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)

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

Test Item

Kind of test item:	Mobile Phone
Device type:	portable device
Model name:	PM-0210-BV
S/N serial number:	CB511Z196S / CB511Z442J
FCC-ID:	PY7PM-0210
IC:	4170B-PM0210
IMEI-Number:	00440214-582535-6 / 00440214-582867-3 (for WLAN)
Hardware status:	AP3
Software status:	6.1.A.0.440 / s_atp_hikari_0_0_53_2_b
Frequency:	see technical details
Antenna:	integrated antenna
Battery option:	Integrated battery
Accessories:	Stereo headset
Test sample status:	identical prototype
Exposure category:	general population / uncontrolled environment

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Test Report authorised:

Test performed:

2012-06-27 Thomas Vogler
 Senior Testing Manager

2012-06-27 Oleksandr Hnatovskiy
 Testing Manager

1	Table of contents	
1	Table of contents.....	2
2	General information	4
2.1	Notes and disclaimer	4
2.2	Application details	4
2.3	Statement of compliance.....	4
2.4	Technical details.....	5
3	Test standards/ procedures references.....	6
3.1	RF exposure limits	7
4	Summary of Measurement Results	8
5	Test Environment	8
6	Test Set-up.....	9
6.1	Measurement system.....	9
6.1.1	System Description.....	9
6.1.2	Test environment.....	10
6.1.3	Probe description.....	10
6.1.4	Phantom description.....	11
6.1.5	Device holder description	11
6.1.6	Scanning procedure	12
6.1.7	Spatial Peak SAR Evaluation	13
6.1.8	Data Storage and Evaluation.....	14
6.1.9	Tissue simulating liquids: dielectric properties	16
6.1.10	Tissue simulating liquids: parameters	17
6.1.11	Measurement uncertainty evaluation for system check	18
6.1.12	Measurement uncertainty evaluation for system validation	19
6.1.13	System check	20
6.1.14	System check procedure	21
7	Detailed Test Results	22
7.1	Conducted power measurements.....	22
7.1.1	Conducted power measurements GSM 850 MHz.....	23
7.1.2	Conducted power measurements GSM 1900 MHz.....	24
7.1.3	Justification of SAR measurements in GSM mode	24
7.1.4	Conducted power measurements WCDMA FDD V (850 MHz).....	25
7.1.5	Conducted power measurements WCDMA FDD II (1900 MHz)	26
7.1.6	Test-set-up information for WCDMA / HSPDA / HSUPA	27
7.1.7	Conducted power measurements WLAN 2.4 GHz.....	31
7.1.8	Multiple Transmitter Information	32
7.1.9	Mobile hotspot SAR measurement positions	34
7.2	SAR test results.....	35
7.2.1	Results overview	35
7.2.2	General description of test procedures	40
8	Test equipment and ancillaries used for tests.....	41
9	Observations	41
Annex A:	System performance verification	42
Annex B:	DASY4 measurement results.....	52
Annex B.1:	GSM 850MHz head	52

Annex B.2: GSM 850MHz body (hotspot).....	65
Annex B.3: GSM 850MHz body worn.....	75
Annex B.4: GSM 1900MHz head	77
Annex B.5: GSM 1900MHz body (hotspot).....	89
Annex B.6: GSM 1900MHz body worn.....	99
Annex B.7: UMTS WCDMA FDD V 850MHz head	101
Annex B.8: UMTS WCDMA FDD V 850MHz body (hotspot)	113
Annex B.9: UMTS WCDMA FDD V 850MHz body worn	123
Annex B.10: UMTS WCDMA FDD II 1900MHz head.....	124
Annex B.11: UMTS WCDMA FDD II 1900MHz body (hotspot).....	137
Annex B.12: UMTS WCDMA FDD II 1900MHz body worn	147
Annex B.13: WLAN 2450MHz head.....	148
Annex B.14: WLAN 2450MHz body (hotspot).....	160
Annex B.15: WLAN 2450MHz body worn	169
Annex B.16: Z-axis scan	170
Annex B.17: Liquid depth	173
Annex C: Photo documentation	176
Annex D: RF Technical Brief Cover Sheet acc. to RSS-102 Annex A	177
Annex D.18: Declaration of RF Exposure Compliance.....	177
Annex E: Calibration parameters.....	178
Annex F: Document History	178
Annex G: Further Information	178

2 General information

2.1 Notes and disclaimer

The test results of this test report relate exclusively to the test item specified in this test report. 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 CETECOM ICT Services GmbH.

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2.2 Application details

Date of receipt of order:	2012-05-31
Date of receipt of test item:	2012-05-31
Start of test:	2012-06-01
End of test:	2012-06-20
Person(s) present during the test:	

2.3 Statement of compliance

The SAR values found for the PM-0210-BV Mobile Phone are below the maximum recommended levels of 1.6 W/Kg as averaged over any 1 g tissue according to the FCC rule §2.1093, the ANSI/IEEE C 95.1:1992, the NCRP Report Number 86 for uncontrolled environment, according to the Health Canada's Safety Code 6 and the Industry Canada Radio Standards Specification RSS-102 for General Population/Uncontrolled exposure.

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

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

2.4 Technical details

Band tested for this test report	Technology	Frequency band	Lowest transmit frequency/MHz	Highest transmit frequency/MHz	Lowest receive Frequency/MHz	Highest receive Frequency/MHz	Kind of modulation	Power Class	Tested power control level	GPRS/EGPRS mobile station class	GPRS/EGPRS multislots class	(E)GPRS voice mode or DTM	Test channel low	Test channel middle	Test channel high	Maximum output power/dBm) *
<input type="checkbox"/>	GSM	GSM	880.2	914.8	925.2	959.8	GMSK 8-PSK	4 E2	5	B	12	no	975	37	124	33.1
<input type="checkbox"/>	GSM	DCS	1710.2	1784.8	1805.2	1879.8	GMSK 8-PSK	1 E2	0	B	12	no	512	698	885	30.1
<input checked="" type="checkbox"/>	GSM	cellular	824.2	848.8	869.2	893.8	GMSK 8-PSK	4 E2	5	B	12	no	128	190	251	33.2
<input checked="" type="checkbox"/>	GSM	PCS	1850.2	1909.8	1930.2	1989.8	GMSK 8-PSK	1 E2	0	B	12	no	512	661	810	30.7
<input type="checkbox"/>	UMTS	FDD I	1922.4	1977.6	2112.4	2167.6	QPSK	3	max	--	--	--	9612	9750	9888	24.2
<input checked="" type="checkbox"/>	UMTS	FDD II	1852.4	1907.6	1982.4	1987.6	QPSK	3	max	--	--	--	9262	9400	9538	22.7
<input checked="" type="checkbox"/>	UMTS	FDD V	826.4	846.6	871.4	891.6	QPSK	3	max	--	--	--	4132	4182	4233	24.9
<input type="checkbox"/>	UMTS	FDD VIII	882.4	912.6	927.4	957.6	QPSK	3	max	--	--	--	2712	2787	2863	24.4
<input type="checkbox"/>	WLAN	ISM	2412	2472	2412	2472	CCK OFDM	--	max	--	--	--	1	7	13	14.6
<input checked="" type="checkbox"/>	WLAN US	ISM	2412	2462	2412	2462	CCK OFDM	--	max	--	--	--	1	6	11	14.4
<input type="checkbox"/>	BT	ISM	2402	2480	2402	2480	GFSK	3	max	--	--	--	0	39	78	8.5

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

3 Test standards/ procedures references

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

FCC KDBs:

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

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

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

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

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

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

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

FCC OET 865664 SAR measurement 100 MHz to 6 GHz DR01
RF Exposure Compliance Reporting and Documentation Considerations, April 20, 2012

3.1 RF exposure limits

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

Table 1: RF exposure limits

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

Notes:

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

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

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

4 Summary of Measurement Results

<input checked="" type="checkbox"/>	No deviations from the technical specifications ascertained
<input type="checkbox"/>	Deviations from the technical specifications ascertained

Extrapolated SAR values of the highest measured SAR				
Frequency band	conducted output power (dBm)		SAR _{1g} maximum results(W/kg)	
	Max. (from tune-up info)	Measured	Measured	Extrapolated
GSM 850 head	33.2	33.2	1.050	1.050
GSM 850 body hotspot	30.6	30.6	1.050	1.050
GSM 850 body worn	30.6	30.6	0.829	0.829
GSM 1900 head	30.7	30.7	0.744	0.744
GSM 1900 body hotspot	25.5	25.3	1.010	1.058
GSM 1900 body worn	25.5	25.3	0.487	0.510
WCDMA FDD V head	24.9	24.9	1.020	1.020
WCDMA FDD V body hotspot	24.9	24.9	1.040	1.040
WCDMA FDD V body worn	24.9	24.9	0.800	0.800
WCDMA FDD II head	22.8	22.7	0.960	0.982
WCDMA FDD II body hotspot	22.8	22.7	1.140	1.167
WCDMA FDD II body worn	22.8	22.7	0.640	0.655

Table 2: Extrapolated SAR values of the highest measured SAR

5 Test Environment

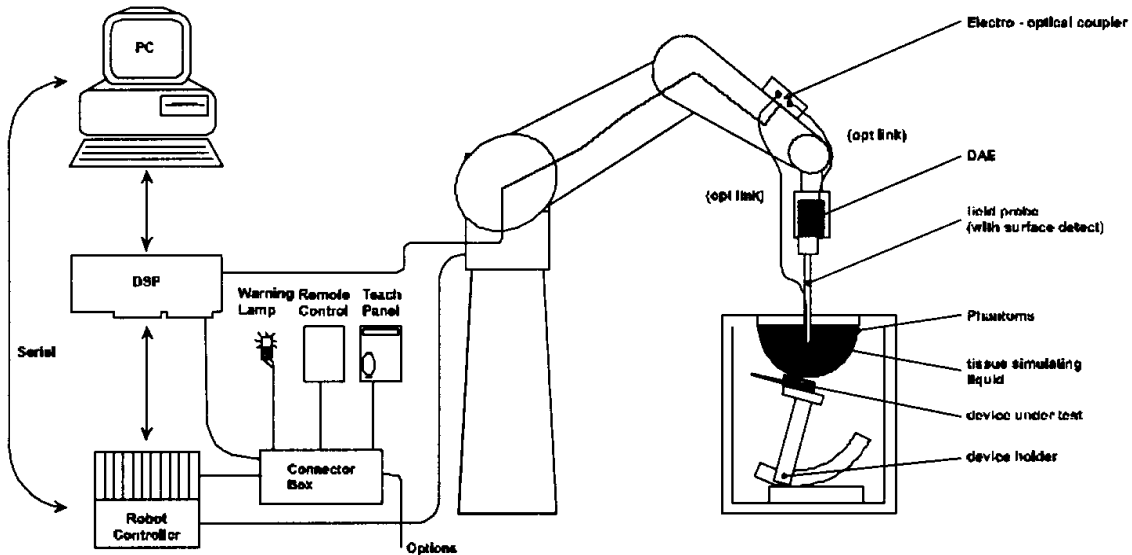
Ambient temperature:	20 – 24 °C
Tissue Simulating liquid:	20 – 24 °C
Relative humidity content:	40 – 50 %
Air pressure:	not relevant for this kind of testing
Power supply:	230 V / 50 Hz

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

6 Test Set-up

6.1 Measurement system

6.1.1 System Description



- The DAS4 system for performing compliance tests consists of the following items:
- A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
- A dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
- A data acquisition electronic (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- A unit to operate the optical surface detector which is connected to the EOC.
- The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DAS4 measurement server.
- The DAS4 measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation. A computer operating Windows XP.
- DAS4 software and SEMCAD data evaluation software.
- Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
- The generic twin phantom enabling the testing of left-hand and right-hand usage.
- The device holder for handheld mobile phones.
- Tissue simulating liquid mixed according to the given recipes.
- System validation dipoles allowing to validate the proper functioning of the system.

6.1.2 Test environment

The DASY4 measurement system is placed at the head end of a room with dimensions: 5 x 2.5 x 3 m³, 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 m² array of pyramid absorbers is installed to reduce reflections from the ceiling.

Picture 1 of the photo documentation shows a complete view of the test environment.

The system allows the measurement of SAR values larger than 0.005 mW/g.

6.1.3 Probe description

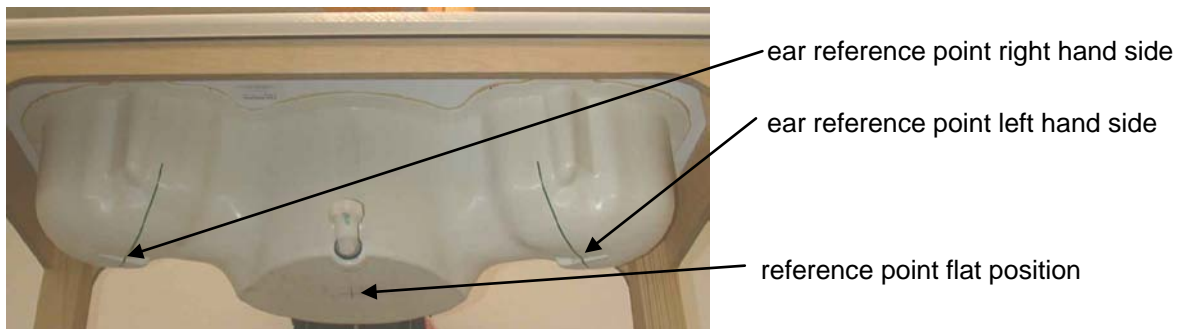
Isotropic E-Field Probe ET3DV6 for Dosimetric Measurements

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

6.1.4 Phantom description

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

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



6.1.5 Device holder description

The DASY4 device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65°. The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. This device holder is used for standard mobile phones or PDA's only. If necessary an additional support of polystyrene material is used.



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

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

6.1.6 Scanning procedure

- The DASY4 installation includes predefined files with recommended procedures for measurements and validation. They are read-only document files and destined as fully defined but unmeasured masks. All test positions (head or body-worn) are tested with the same configuration of test steps differing only in the grid definition for the different test positions.
- The „reference“ and „drift“ measurements are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure. The indicated drift is mainly the variation of the DUT's output power and should vary max. +/- 5 %.
- The „surface check“ measurement tests the optical surface detection system of the DASY4 system by repeatedly detecting the surface with the optical and mechanical surface detector and comparing the results. The output gives the detecting heights of both systems, the difference between the two systems and the standard deviation of the detection repeatability. Air bubbles or refraction in the liquid due to separation of the sugar-water mixture gives poor repeatability (above $\pm 0.1\text{mm}$). To prevent wrong results tests are only executed when the liquid is free of air bubbles. The difference between the optical surface detection and the actual surface depends on the probe and is specified with each probe. (It does not depend on the surface reflectivity or the probe angle to the surface within $\pm 30^\circ$.)
- The „area scan“ measures the SAR above the DUT or verification dipole on a parallel plane to the surface. It is used to locate the approximate location of the peak SAR with 2D spline interpolation. The robot performs a stepped movement along one grid axis while the local electrical field strength is measured by the probe. The probe is touching the surface of the SAM during acquisition of measurement values. The standard scan uses large grid spacing for faster measurement. Standard grid spacing for head measurements is 15 mm in x- and y- dimension. If a finer resolution is needed, the grid spacing can be reduced. Grid spacing and orientation have no influence on the SAR result. For special applications where the standard scan method does not find the peak SAR within the grid, e.g. mobile phones with flip cover, the grid can be adapted in orientation. Results of this coarse scan are shown in annex 2.
- A „7x7x7 zoom scan“ measures the field in a volume around the 2D peak SAR value acquired in the previous „coarse“ scan. This is a fine 7x7 grid where the robot additionally moves the probe in 7 steps along the z-axis away from the bottom of the Phantom. Grid spacing for the cube measurement is 5 mm in x and y-direction and 5 mm in z-direction. DASY4 is also able to perform repeated zoom scans if more than 1 peak is found during area scan. In this document, the evaluated peak 1g and 10g averaged SAR values are shown in the 2D-graphics in annex 2. Test results relevant for the specified standard (see section 3) are shown in table form in section 7.
- A Z-axis scan measures the total SAR value at the x-and y-position of the maximum SAR value found during the cube 7x7x7 scan. The probe is moved away in z-direction from the bottom of the SAM phantom in 2mm steps. This measurement shows the continuity of the liquid and can - depending in the field strength – also show the liquid depth. A z-axis scan of the measurement with maximum SAR value is shown in annex 2.

6.1.7 Spatial Peak SAR Evaluation

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

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

Extrapolation

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

Interpolation

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

Volume Averaging

At First the size of the cube is calculated. Then the volume is integrated with the trapezoidal algorithm. 8000 points (20x20x20) are interpolated to calculate the average.

Advanced Extrapolation

DASY4 uses the advanced extrapolation option which is able to compensate boundary effects on E-field probes.

6.1.8 Data Storage and Evaluation

Data Storage

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

The measured data can be visualized or exported in different units or formats, depending on the selected probe type ([V/m], [A/m], [°C], [mW/g], [mW/cm²], [dBrel], etc.). Some of these units are not available in certain situations or show meaningless results, e.g., a SAR output in a lossless media will always be zero. Raw data can also be exported to perform the evaluation with other software packages.

Data Evaluation by SEMCAD

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

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

These parameters must be set correctly in the software. They can be found in the component documents or they can be imported into the software from the configuration files issued for the DASY4 components. In the direct measuring mode of the multimeter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

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

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

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

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

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

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

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

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

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

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

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

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

with SAR = local specific absorption rate in mW/g
 E_{tot} = total field strength in V/m
 σ = conductivity in [mho/m] or [Siemens/m]
 ρ = equivalent tissue density in g/cm³

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

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

with P_{pwe} = equivalent power density of a plane wave in mW/cm²
 E_{tot} = total electric field strength in V/m
 H_{tot} = total magnetic field strength in A/m

6.1.9 Tissue simulating liquids: dielectric properties

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

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

Ingredients (% of weight)	Frequency (MHz)					
	<input type="checkbox"/> 450	<input 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 3: 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 4: Body tissue dielectric properties

Salt: 99+% Pure Sodium Chloride

Sugar: 98+% Pure Sucrose

Water: De-ionized, 16MΩ+ resistivity

HEC: Hydroxyethyl Cellulose

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

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

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

6.1.10 Tissue simulating liquids: parameters

Liquid	Frequency (MHz)	Target head tissue		Measurement head tissue		Measurement date
		Permittivity	Conductivity[S/m]	Permittivity	Conductivity[S/m]	
HSL 850/900	824	41.5	0.90	42.0	0.89	2012-06-13
	837	41.5	0.90	41.9	0.90	2012-06-13
	849	41.5	0.90	41.7	0.91	2012-06-13
	900	41.5	0.97	41.1	0.96	2012-06-13
HSL 1900	1850	40.0	1.40	40.0	1.34	2012-06-08
	1880	40.0	1.40	39.9	1.37	2012-06-08
	1900	40.0	1.40	39.8	1.39	2012-06-08
	1910	40.0	1.40	39.8	1.40	2012-06-08
HSL 2450	2412	39.2	1.80	39.5	1.82	2012-06-18
	2437	39.2	1.80	39.5	1.83	2012-06-18
	2450	39.2	1.80	39.5	1.85	2012-06-18
	2462	39.2	1.80	39.5	1.86	2012-06-18

Table 5: Parameter of the head tissue simulating liquid

Liquid	Frequency (MHz)	Target body tissue		Measurement body tissue		Measurement date
		Permittivity	Conductivity[S/m]	Permittivity	Conductivity[S/m]	
M 850/900	824	55.2	0.97	55.3	0.97	2012-06-01
	824	55.2	0.97	55.2	0.97	2012-07-05
	837	55.2	0.97	55.2	0.99	2012-06-01
	849	55.2	0.97	55.1	1.00	2012-06-01
	900	55.0	1.05	54.5	1.05	2012-06-01
	900	55.0	1.05	54.5	1.05	2012-07-05
M 1900	1850	53.3	1.52	52.9	1.46	2012-06-05
	1850	53.3	1.52	53.0	1.46	2012-07-05
	1880	53.3	1.52	52.9	1.49	2012-06-05
	1900	53.3	1.52	52.8	1.51	2012-06-05
	1900	53.3	1.52	52.9	1.51	2012-07-05
	1910	53.3	1.52	52.7	1.53	2012-06-05
M 2450	2412	52.7	1.95	52.3	1.88	2012-06-20
	2437	52.7	1.95	52.3	1.91	2012-06-20
	2450	52.7	1.95	52.2	1.93	2012-06-20
	2462	52.7	1.95	52.2	1.94	2012-06-20

Table 6: Parameter of the body tissue simulating liquid

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

6.1.11 Measurement uncertainty evaluation for system check

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

Error Sources	Uncertainty Value	Probability Distribution	Divisor	c_i 1g	c_i 10g	Standard Uncertainty 1g	Standard Uncertainty 10g	v_i^2 or v_{eff}
Measurement System								
Probe calibration	$\pm 6.0\%$	Normal	1	1	1	$\pm 6.0\%$	$\pm 6.0\%$	∞
Axial isotropy	$\pm 4.7\%$	Rectangular	$\sqrt{3}$	0.7	0.7	$\pm 1.9\%$	$\pm 1.9\%$	∞
Hemispherical isotropy	$\pm 9.6\%$	Rectangular	$\sqrt{3}$	0.7	0.7	$\pm 3.9\%$	$\pm 3.9\%$	∞
Spatial resolution	$\pm 0.0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.0\%$	$\pm 0.0\%$	∞
Boundary effects	$\pm 1.0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.6\%$	$\pm 0.6\%$	∞
Probe linearity	$\pm 4.7\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 2.7\%$	$\pm 2.7\%$	∞
System detection limits	$\pm 1.0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.6\%$	$\pm 0.6\%$	∞
Readout electronics	$\pm 1.0\%$	Normal	1	1	1	$\pm 1.0\%$	$\pm 1.0\%$	∞
Response time	$\pm 0.8\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.5\%$	$\pm 0.5\%$	∞
Integration time	$\pm 2.6\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 1.5\%$	$\pm 1.5\%$	∞
RF ambient conditions	$\pm 3.0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 1.7\%$	$\pm 1.7\%$	∞
Probe positioner	$\pm 0.4\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.2\%$	$\pm 0.2\%$	∞
Probe positioning	$\pm 2.9\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 1.7\%$	$\pm 1.7\%$	∞
Max. SAR evaluation	$\pm 1.0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.6\%$	$\pm 0.6\%$	∞
Test Sample Related								
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	$\pm 2.9\%$	$\pm 2.9\%$	∞
Phantom and Set-up								
Phantom uncertainty	$\pm 4.0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 2.3\%$	$\pm 2.3\%$	∞
Liquid conductivity (target)	$\pm 5.0\%$	Rectangular	$\sqrt{3}$	0.64	0.43	$\pm 1.8\%$	$\pm 1.2\%$	∞
Liquid conductivity (meas.)	$\pm 2.5\%$	Normal	1	0.64	0.43	$\pm 1.6\%$	$\pm 1.1\%$	∞
Liquid permittivity (target)	$\pm 5.0\%$	Rectangular	$\sqrt{3}$	0.6	0.49	$\pm 1.7\%$	$\pm 1.4\%$	∞
Liquid permittivity (meas.)	$\pm 2.5\%$	Normal	1	0.6	0.49	$\pm 1.5\%$	$\pm 1.2\%$	∞
Combined Uncertainty						$\pm 11.5\%$	$\pm 11.2\%$	330
Expanded Std. Uncertainty						$\pm 23.0\%$	$\pm 22.5\%$	

Table 7: Measurement uncertainties

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

6.1.12 Measurement uncertainty evaluation for system validation

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

Error Sources	Uncertainty Value	Probability Distribution	Divisor	c_i 1g	c_i 10g	Standard Uncertainty 1g	Standard Uncertainty 10g	v_i^2 or v_{eff}
Measurement System								
Probe calibration	$\pm 6.0\%$	Normal	1	1	1	$\pm 6.0\%$	$\pm 6.0\%$	∞
Axial isotropy	$\pm 4.7\%$	Rectangular	$\sqrt{3}$	0.7	0.7	$\pm 1.9\%$	$\pm 1.9\%$	∞
Hemispherical isotropy	$\pm 0.0\%$	Rectangular	$\sqrt{3}$	0.7	0.7	$\pm 0.0\%$	$\pm 3.9\%$	∞
Boundary effects	$\pm 1.0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.6\%$	$\pm 0.6\%$	∞
Probe linearity	$\pm 4.7\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 2.7\%$	$\pm 2.7\%$	∞
System detection limits	$\pm 1.0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.6\%$	$\pm 0.6\%$	∞
Readout electronics	$\pm 1.0\%$	Normal	1	1	1	$\pm 1.0\%$	$\pm 1.0\%$	∞
Response time	$\pm 0.0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.0\%$	$\pm 0.0\%$	∞
Integration time	$\pm 0.0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.0\%$	$\pm 0.0\%$	∞
RF ambient conditions	$\pm 3.0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 1.7\%$	$\pm 1.7\%$	∞
Probe positioner	$\pm 0.4\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.2\%$	$\pm 0.2\%$	∞
Probe positioning	$\pm 2.9\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 1.7\%$	$\pm 1.7\%$	∞
Max. SAR evaluation	$\pm 1.0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 0.6\%$	$\pm 0.6\%$	∞
Test Sample Related								
Dipole axis to liquid distance	$\pm 2.0\%$	Normal	1	1	1	$\pm 1.2\%$	$\pm 1.2\%$	∞
Power drift	$\pm 4.7\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 2.7\%$	$\pm 2.7\%$	∞
Phantom and Set-up								
Phantom uncertainty	$\pm 4.0\%$	Rectangular	$\sqrt{3}$	1	1	$\pm 2.3\%$	$\pm 2.3\%$	∞
Liquid conductivity (target)	$\pm 5.0\%$	Rectangular	$\sqrt{3}$	0.64	0.43	$\pm 1.8\%$	$\pm 1.2\%$	∞
Liquid conductivity (meas.)	$\pm 2.5\%$	Normal	1	0.64	0.43	$\pm 1.6\%$	$\pm 1.1\%$	∞
Liquid permittivity (target)	$\pm 5.0\%$	Rectangular	$\sqrt{3}$	0.6	0.49	$\pm 1.7\%$	$\pm 1.4\%$	∞
Liquid permittivity (meas.)	$\pm 2.5\%$	Normal	1	0.6	0.49	$\pm 1.5\%$	$\pm 1.2\%$	∞
Combined Uncertainty						$\pm 9.6\%$	$\pm 9.3\%$	
Expanded Std. Uncertainty						$\pm 19.2\%$	$\pm 18.6\%$	

Table 8: Measurement uncertainties

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

6.1.13 System check

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

Validation Kit	Frequency	Target Peak SAR (1000 mW) (+/- 10%)	Target SAR _{1g} (1000 mW) (+/- 10%)	Measured Peak SAR (1000 mW)	Measured SAR _{1g} (1000 mW)	Measured date
D900V2 S/N: 102	900 MHz head	16.0 mW/g	10.9 mW/g	16.4 mW/g	11.1 mW/g	2012-06-13
D900V2 S/N: 102	900 MHz head	16.0 mW/g	10.9 mW/g	16.3 mW/g	11.0 mW/g	2012-06-14
D900V2 S/N: 102	900 MHz body	17.3 mW/g	11.2 mW/g	15.7 mW/g	10.8 mW/g	2012-06-01
D900V2 S/N: 102	900 MHz body	17.3 mW/g	11.2 mW/g	15.9 mW/g	11.1 mW/g	2012-06-04
D900V2 S/N: 102	900 MHz body	17.3 mW/g	11.2 mW/g	15.7 mW/g	10.7 mW/g	2012-07-05
D1900V2 S/N: 5d009	1900 MHz head	73.6 mW/g	40.0 mW/g	70.9 mW/g	39.8 mW/g	2012-06-08
D1900V2 S/N: 5d009	1900 MHz body	73.8 mW/g	40.9 mW/g	70.7 mW/g	40.5 mW/g	2012-06-05
D1900V2 S/N: 5d009	1900 MHz body	73.8 mW/g	40.9 mW/g	68.1 mW/g	38.5 mW/g	2012-07-05
D2450V2 S/N: 710	2450 MHz head	102.4 mW/g	54.2 mW/g	104 mW/g	59.1 mW/g	2012-06-18
D2450V2 S/N: 710	2450 MHz body	108.0 mW/g	51.7 mW/g	112 mW/g	53.5 mW/g	2012-06-20

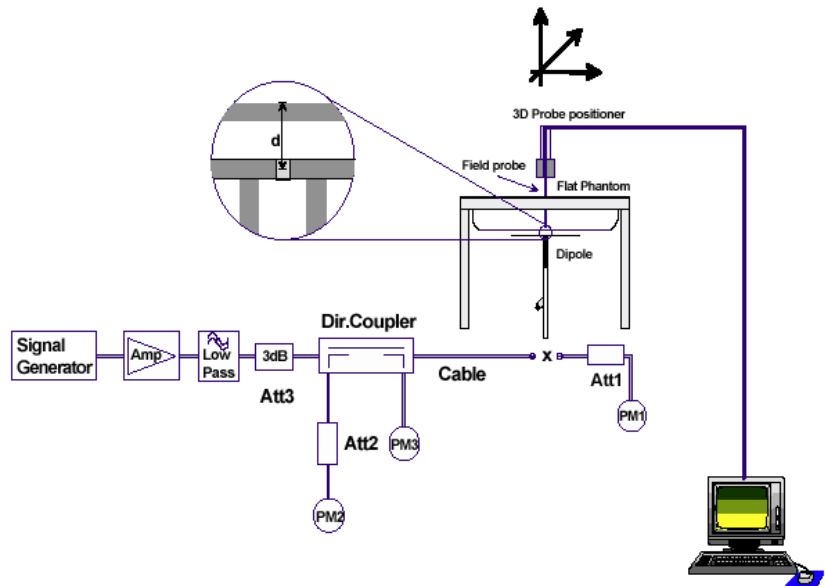
Table 9: Results system validation

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

6.1.14 System check procedure

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

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



7 Detailed Test Results

7.1 Conducted power measurements

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

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

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

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

The signalling modes differ as follows :

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

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

7.1.1 Conducted power measurements GSM 850 MHz

Channel / frequency	modulation	timeslots	slotted avg. power	time based avg. Power (calculated)
128 / 824.2 MHz	GMSK	1	33.0 dBm	24.0 dBm
190 / 836.6 MHz	GMSK	1	33.0 dBm	24.0 dBm
251 / 848.0 MHz	GMSK	1	33.2 dBm	24.2 dBm
128 / 824.2 MHz	GMSK	2	30.6 dBm	24.6 dBm
190 / 836.6 MHz	GMSK	2	30.6 dBm	24.6 dBm
251 / 848.0 MHz	GMSK	2	30.6 dBm	24.6 dBm
128 / 824.2 MHz	GMSK	3	28.7 dBm	24.45 dBm
190 / 836.6 MHz	GMSK	3	28.7 dBm	24.45 dBm
251 / 848.0 MHz	GMSK	3	28.7 dBm	24.45 dBm
128 / 824.2 MHz	GMSK	4	27.6 dBm	24.6 dBm
190 / 836.6 MHz	GMSK	4	27.6 dBm	24.6 dBm
251 / 848.0 MHz	GMSK	4	27.4 dBm	24.4 dBm
128 / 824.2 MHz	8PSK	1	26.8 dBm	17.8 dBm
190 / 836.6 MHz	8PSK	1	26.8 dBm	17.8 dBm
251 / 848.0 MHz	8PSK	1	26.8 dBm	17.8 dBm
128 / 824.2 MHz	8PSK	2	24.8 dBm	18.8 dBm
190 / 836.6 MHz	8PSK	2	24.9 dBm	18.9 dBm
251 / 848.0 MHz	8PSK	2	24.9 dBm	18.9 dBm
128 / 824.2 MHz	8PSK	3	23.7 dBm	19.45 dBm
190 / 836.6 MHz	8PSK	3	23.7 dBm	19.45 dBm
251 / 848.0 MHz	8PSK	3	23.7 dBm	19.45 dBm
128 / 824.2 MHz	8PSK	4	22.0 dBm	19.0 dBm
190 / 836.6 MHz	8PSK	4	21.8 dBm	18.8 dBm
251 / 848.0 MHz	8PSK	4	21.8 dBm	18.8 dBm

Table 10: Test results conducted power measurement GSM 850 MHz

7.1.2 Conducted power measurements GSM 1900 MHz

Channel / frequency	modulation	timeslots	slotted avg. power	time based avg. Power (calculated)
512 / 1850.2 MHz	GMSK	1	30.6 dBm	21.6 dBm
661 / 1880.0 MHz	GMSK	1	30.7 dBm	21.7 dBm
810 / 1909.8 MHz	GMSK	1	30.6 dBm	21.6 dBm
512 / 1850.2 MHz	GMSK	2	27.6 dBm	21.6 dBm
661 / 1880.0 MHz	GMSK	2	27.7 dBm	21.7 dBm
810 / 1909.8 MHz	GMSK	2	27.2 dBm	21.2 dBm
512 / 1850.2 MHz	GMSK	3	26.3 dBm	22.05 dBm
661 / 1880.0 MHz	GMSK	3	26.4 dBm	22.15 dBm
810 / 1909.8 MHz	GMSK	3	26.2 dBm	21.95 dBm
512 / 1850.2 MHz	GMSK	4	25.3 dBm	22.3 dBm
661 / 1880.0 MHz	GMSK	4	25.3 dBm	22.3 dBm
810 / 1909.8 MHz	GMSK	4	25.0 dBm	22.0 dBm
512 / 1850.2 MHz	8PSK	1	25.8 dBm	16.8 dBm
661 / 1880.0 MHz	8PSK	1	25.6 dBm	16.6 dBm
810 / 1909.8 MHz	8PSK	1	25.5 dBm	16.5 dBm
512 / 1850.2 MHz	8PSK	2	23.6 dBm	17.6 dBm
661 / 1880.0 MHz	8PSK	2	23.5 dBm	17.5 dBm
810 / 1909.8 MHz	8PSK	2	23.5 dBm	17.5 dBm
512 / 1850.2 MHz	8PSK	3	22.5 dBm	18.25 dBm
661 / 1880.0 MHz	8PSK	3	22.4 dBm	18.15 dBm
810 / 1909.8 MHz	8PSK	3	22.2 dBm	17.95 dBm
512 / 1850.2 MHz	8PSK	4	21.3 dBm	18.3 dBm
661 / 1880.0 MHz	8PSK	4	21.2 dBm	18.2 dBm
810 / 1909.8 MHz	8PSK	4	21.1 dBm	18.1 dBm

Table 11: Test results conducted power measurement GSM 1900 MHz

7.1.3 Justification of SAR measurements in GSM mode

SAR measurements were performed in GPRS mode with 2 active timeslots at GSM 850 and with 4 active timeslots at GSM 1900 because highest time based averaged output power was calculated for these configuration.

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

7.1.4 Conducted power measurements WCDMA FDD V (850 MHz)

Max. RMS output power 850 MHz (FDD V) / dBm			
mode	Channel / frequency		
	4132 / 826.4 MHz	4182 / 836.6 MHz	4233 / 846.6 MHz
RMC 12.2 kbit/s	24.8	24.9	24.8
RMC 64 kbit/s	24.6	24.7	24.6
RMC 144 kbit/s	24.6	24.7	24.7
RMC 384 kbit/s	24.6	24.8	24.7
AMR 4.75 kbit/s	24.7	24.7	24.7
AMR 5.15 kbit/s	24.7	24.7	24.7
AMR 5.9 kbit/s	24.6	24.7	24.7
AMR 6.7 kbit/s	24.6	24.7	24.7
AMR 7.4 kbit/s	24.6	24.7	24.7
AMR 7.95 kbit/s	24.7	24.7	24.7
AMR 10.2 kbit/s	24.7	24.7	24.7
AMR 12.2 kbit/s	24.7	24.7	24.6
HSDPA Sub test 1	24.3	24.4	24.4
HSDPA Sub test 2	22.7	22.6	22.5
HSDPA Sub test 3	21.8	21.6	21.5
HSDPA Sub test 4	21.5	21.4	21.3
HSUPA Sub test 1	24.3	24.2	23.9
HSUPA Sub test 2	22.7	22.7	22.8
HSUPA Sub test 3	23.6	23.3	23.2
HSUPA Sub test 4	22.5	22.6	22.4
HSUPA Sub test 5	24.7	24.5	24.3

Table 12: Test results conducted power measurement WCDMA FDD V 850MHz

7.1.5 Conducted power measurements WCDMA FDD II (1900 MHz)

Max. RMS output power 1900 MHz (FDD II) / dBm			
mode	Channel / frequency		
	9262 / 1852.4 MHz	9400 / 1880.0 MHz	9538 / 1907.6 MHz
RMC 12.2 kbit/s	22.7	22.7	22.6
RMC 64 kbit/s	22.8	22.7	22.6
RMC 144 kbit/s	22.8	22.7	22.6
RMC 384 kbit/s	22.8	22.7	22.6
AMR 4.75 kbit/s	23.0	22.7	22.5
AMR 5.15 kbit/s	22.9	22.7	22.5
AMR 5.9 kbit/s	23.0	22.7	22.5
AMR 6.7 kbit/s	22.9	22.6	22.5
AMR 7.4 kbit/s	22.9	22.6	22.4
AMR 7.95 kbit/s	22.8	22.5	22.3
AMR 10.2 kbit/s	22.8	22.5	22.5
AMR 12.2 kbit/s	22.9	22.7	22.8
HSDPA Sub test 1	22.4	22.3	22.1
HSDPA Sub test 2	20.8	20.8	20.6
HSDPA Sub test 3	19.7	19.9	19.8
HSDPA Sub test 4	19.6	20.0	19.5
HSUPA Sub test 1	22.1	22.0	22.0
HSUPA Sub test 2	20.0	20.1	20.1
HSUPA Sub test 3	21.3	21.3	20.8
HSUPA Sub test 4	20.1	20.1	20.1
HSUPA Sub test 5	22.3	22.2	22.2

Table 13: Test results conducted power measurement WCDMA FDD II 1900MHz

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

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

7.1.6 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	β_c	β_d	β_d (SF)	β_c/β_d	$\beta_{hs}^{(1)}$	CM(dB) ⁽²⁾
1	2/15	15/15	64	2/15	4/15	0.0
2	12/15 ⁽³⁾	15/15 ⁽³⁾	64	12/15 ⁽³⁾	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 β_c/β_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 14: Sub-tests for UMTS Release 5 HSDPA

The β_c and β_d gain factors for DPCCH and DPDCH were set according to the values in the above table, β_{hs} for HS-DPCCH is set automatically to the correct value when $\Delta_{ACK}, \Delta_{NACK}, \Delta_{CQI} = 8$. The variation of the β_c/β_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 15: 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	β_c	β_d	β_d (SF)	β_c/β_d	$\beta_{hs}^{(1)}$	β_{ec}	β_{ed}	β_{ec} (SF)	β_{ed} (code)	CM ⁽²⁾ (dB)	MPR (dB)	AG ⁽⁴⁾ Index	E-TFCI
1	11/15 ⁽³⁾	15/15 ⁽³⁾	64	11/15 ⁽³⁾	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	$\beta_{ed1}:47/15$ $\beta_{ed2}:47/15$	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 ⁽⁴⁾	15/15 ⁽⁴⁾	64	15/15 ⁽⁴⁾	30/15	24/15	134/15	4	1	1.0	0.0	21	81

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

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

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

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

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

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

Table 16: 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	β_c	β_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

)* : β_{ec} and β_{ed} ratios (relative to β_c and β_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.

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	β_c	β_d	β_{hs}	β_{ec}	β_{ed}
5	15	15	30	24	134

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

7.1.7 Conducted power measurements WLAN 2.4 GHz

Channel / frequency	modulation	bit rate	time based avg. power
1 / 2412 MHz	CCK	1 MBit/s	14.2 dBm
6 / 2437 MHz	CCK	1 MBit/s	14.3 dBm
11 / 2462 MHz	CCK	1 MBit/s	14.4 dBm
13 / 2472 MHz	CCK	1 MBit/s	14.6 dBm
1 / 2412 MHz	OFDM	6 MBit/s	12.6 dBm
6 / 2437 MHz	OFDM	6 MBit/s	12.6 dBm
11 / 2462 MHz	OFDM	6 MBit/s	12.8 dBm
13 / 2472 MHz	OFDM	6 MBit/s	12.9 dBm
1 / 2412 MHz	OFDM	6.5 MBit/s	10.6 dBm
6 / 2437 MHz	OFDM	6.5 MBit/s	10.7 dBm
11 / 2462 MHz	OFDM	6.5 MBit/s	10.7 dBm
13 / 2472 MHz	OFDM	6.5 MBit/s	10.9 dBm

Table 17: Test results conducted power measurement WLAN 2.4 GHz

7.1.8 Multiple Transmitter Information

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

Minimum antenna separation distance between main antenna and WLAN – **93.5 mm**

a) Head position

Tx No.	Communication system and frequency band	P _{avg} (mW)	single SAR (W/kg)(see ch. 7.2)		remarks
			left hand	right hand	
1a	GSM 850 MHz	263	1.030	1.050	routine evaluation
1b	GSM 1900 MHz	148	0.744	0.535	routine evaluation
1c	FDD V 850 MHz	309	0.984	1.020	routine evaluation
1d	FDD II 1900 MHz	186	0.960	0.734	routine evaluation
2a	WLAN 2450 MHz	28	0.289	0.452	routine evaluation
2b	Bluetooth 2450 MHz	7	:=0		P ₂ < P _{ref} (P _{ref} : 12 mW at 2.4 GHz)
Sum of all 1g-SAR values			n/a		

Table 18: Communication systems and SAR values in head position

antenna pair (x,y)	peak-locations spacing L _{xyz} (cm)	Σ 1g-SAR (W/kg)	SPLSR _{xy}	sim.-Tx SAR	remarks
(1a,2a)	6.28	1.502	0.24	N	SPLSR _{xy} < 0.3 and ΣSAR < 1.6 W/kg
(1b,2a)	7.41	1.033	0.14	N	SPLSR _{xy} < 0.3 and ΣSAR < 1.6 W/kg
(1c,2a)	5.59	1.472	0.26	N	SPLSR _{xy} < 0.3 and ΣSAR < 1.6 W/kg
(1d,2a)	7.41	1.249	0.17	N	SPLSR _{xy} < 0.3 and ΣSAR < 1.6 W/kg

Table 19: Antenna distances and SPLSR evaluation in head position

SPLSR_{xy} = SAR-to-(peak-locations spacing) ratio = (SAR_x+SAR_y)/L_{xyz}

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

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

b) Body position

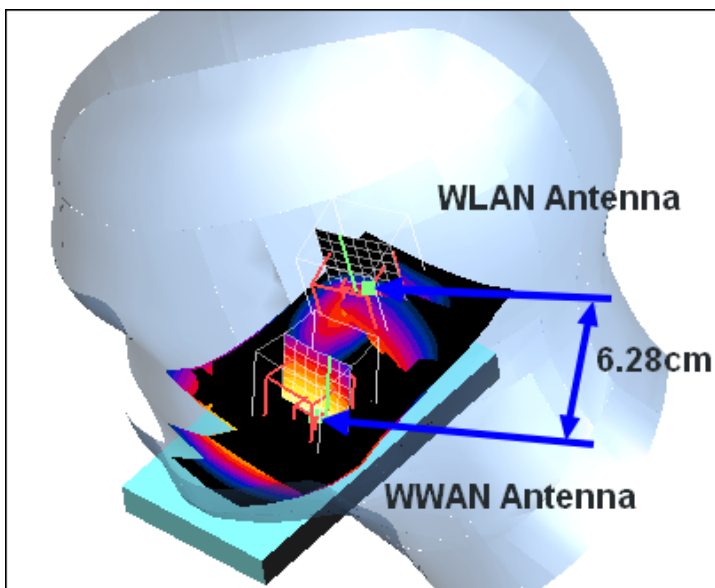
Tx No.	Communication system and frequency band	P _{avg} (mW)	single SAR (W/kg)(see ch. 7.2)		remarks
			front	rear	
1a	GSM 850 MHz	288	1.030	1.050	routine evaluation
1b	GSM 1900 MHz	170	0.722	1.010	routine evaluation
1c	FDD V 850 MHz	309	1.040	1.020	routine evaluation
1d	FDD II 1900 MHz	186	0.827	1.140	routine evaluation
2a	WLAN 2450 MHz	28	0.103	0.066	routine evaluation
2b	Bluetooth 2450 MHz	7	:=0		P ₂ < P _{ref} (P _{ref} : 12 mW at 2.4 GHz)
Sum of all 1g-SAR values			n/a		

Table 20: Communication systems and SAR values in body position

antenna pair (x,y)	peak-locations spacing L _{xyz} (cm)	Σ 1g-SAR (W/kg)	SPLSR _{xy}	sim.-Tx SAR	remarks
(1a,2a)	6.49	1.153	0.18	N	SPLSR _{xy} < 0.3 and ΣSAR < 1.6 W/kg
(1b,2a)	10.04	1.076	0.11	N	SPLSR _{xy} < 0.3 and ΣSAR < 1.6 W/kg
(1c,2a)	6.33	1.143	0.18	N	SPLSR _{xy} < 0.3 and ΣSAR < 1.6 W/kg
(1d,2a)	10.54	1.206	0.11	N	SPLSR _{xy} < 0.3 and ΣSAR < 1.6 W/kg

Table 21: Antenna distances and SPLSR evaluation in body position
 SPLSR_{xy} = SAR-to-(peak-locations spacing) ratio = (SAR_x+SAR_y)/L_{xyz}

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



Peak Co-ordinates (mm)						peak-locations spacing L _{xyz} (cm)	GSM850 SAR max. (W/kg)	WLAN 2.4GHz SAR max. (W/kg)	ΣSAR (W/kg)	SPLSR _{xyz} <0.3
GSM850 Ch128			WLAN 2.4GHz Ch11							
x	y	z	x	y	z					
58.7	-270	-173	28.7	-325	-169	6.278	1.050	0.452	1.502	0.24

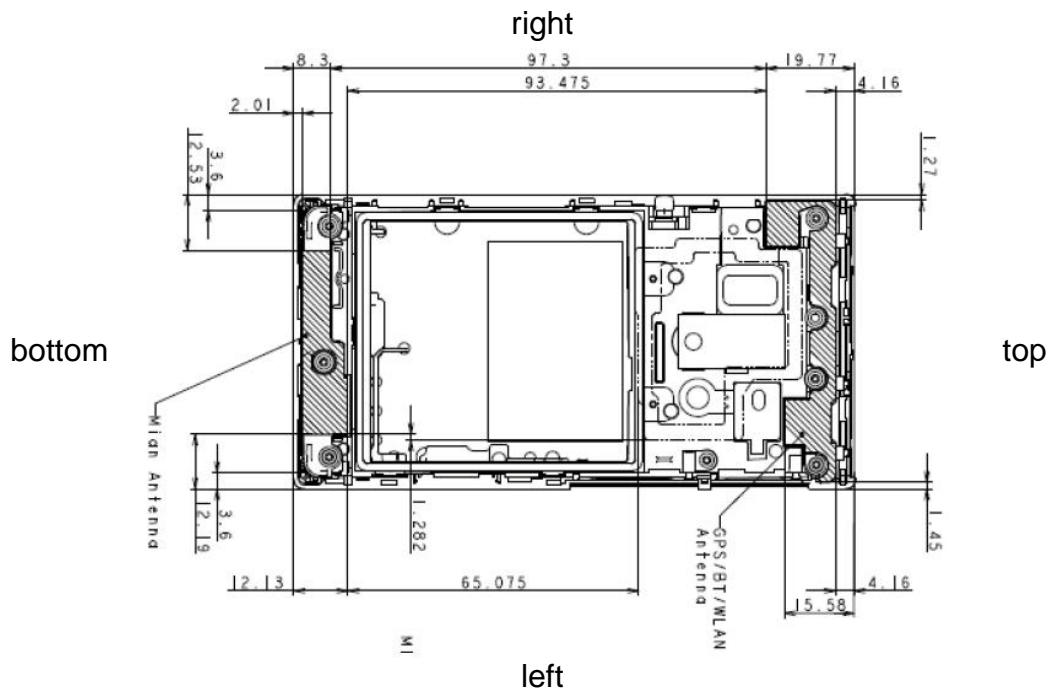
$$L_{xyz} = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2 + (z_1 - z_2)^2}$$

Conclusion:

ΣSAR < 1.6 W/kg and SAR-to-(peak-locations spacing) ratio (SPLSR_{xy}) is less than 0.3 therefore simultaneous transmission SAR with Volume Scans is not required.

7.1.9 Mobile hotspot SAR measurement positions

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



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

7.2 SAR test results

7.2.1 Results overview

Head SAR GSM 850 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Left hand test result	Right hand test result	Limit	Liquid temperature	
					left	right
128 / 824.2 MHz	cheek	1.030 W/kg	1.050 W/kg	1.6 W/kg	22.8 °C	22.8 °C
190 / 836.6 MHz	cheek	0.999 W/kg	0.978 W/kg	1.6 W/kg	22.8 °C	22.8 °C
251 / 848.8 MHz	cheek	0.937 W/kg	0.911 W/kg	1.6 W/kg	22.8 °C	22.8 °C
128 / 824.2 MHz	tilted 15°	0.630 W/kg	0.626 W/kg	1.6 W/kg	22.8 °C	22.8 °C
190 / 836.6 MHz	tilted 15°	0.663 W/kg	0.631 W/kg	1.6 W/kg	22.8 °C	22.8 °C
251 / 848.8 MHz	tilted 15°	0.634 W/kg	0.639 W/kg	1.6 W/kg	22.8 °C	22.8 °C
128 / 824.2 MHz	cheek*	--- W/kg	1.020 W/kg	1.6 W/kg	--- °C	22.8 °C

Table 22: Test results head SAR GSM 850 MHz

Body (hotspot) SAR GSM 850 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	Body hotspot test result	Limit	Liquid temperature
128 / 824.2 MHz	front	10 mm	2 time slots	1.050 W/kg	1.6 W/kg	22.3 °C
190 / 836.6 MHz	front	10 mm	2 time slots	0.967 W/kg	1.6 W/kg	22.3 °C
251 / 848.8 MHz	front	10 mm	2 time slots	0.923 W/kg	1.6 W/kg	22.3 °C
128 / 824.2 MHz	rear	10 mm	2 time slots	0.930 W/kg	1.6 W/kg	22.3 °C
190 / 836.6 MHz	rear	10 mm	2 time slots	0.876 W/kg	1.6 W/kg	22.3 °C
251 / 848.8 MHz	rear	10 mm	2 time slots	0.776 W/kg	1.6 W/kg	22.3 °C
190 / 836.6 MHz	left	10 mm	2 time slots	0.792 W/kg	1.6 W/kg	22.3 °C
190 / 836.6 MHz	right	10 mm	2 time slots	0.709 W/kg	1.6 W/kg	22.3 °C
190 / 836.6 MHz	bottom	10 mm	2 time slots	0.147 W/kg	1.6 W/kg	22.3 °C
128 / 824.2 MHz	front*	10 mm	2 time slots	1.020 W/kg	1.6 W/kg	22.3 °C
Body worn SAR GSM 850 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	Body worn test result	Limit	Liquid temperature
128 / 824.2 MHz	front	15 mm	1 time slot	0.470 W/kg	1.6 W/kg	22.3 °C
128 / 824.2 MHz	front	15 mm	2 time slots	0.829 W/kg	1.6 W/kg	23.5 °C

Table 23: Test results body SAR GSM 850 MHz

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

Head SAR GSM 1900 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Left hand test result	Right hand test result	Limit	Liquid temperature	
					left	right
512 / 1850.2 MHz	cheek	0.692 W/kg	0.504 W/kg	1.6 W/kg	22.4 °C	22.4 °C
661 / 1880.0 MHz	cheek	0.719 W/kg	0.520 W/kg	1.6 W/kg	22.4 °C	22.4 °C
810 / 1909.8 MHz	cheek	0.744 W/kg	0.535 W/kg	1.6 W/kg	22.4 °C	22.4 °C
512 / 1850.2 MHz	tilted 15°	0.300 W/kg	0.166 W/kg	1.6 W/kg	22.4 °C	22.4 °C
661 / 1880.0 MHz	tilted 15°	0.306 W/kg	0.146 W/kg	1.6 W/kg	22.4 °C	22.4 °C
810 / 1909.8 MHz	tilted 15°	0.323 W/kg	0.146 W/kg	1.6 W/kg	22.4 °C	22.4 °C

Table 24: Test results head SAR GSM 1900 MHz

Body (hotspot) SAR GSM 1900 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	Body hotspot test result	Limit	Liquid temperature
						temperature
512 / 1850.2 MHz	front	10 mm	4 time slots	0.722 W/kg	1.6 W/kg	21.7 °C
661 / 1880.0 MHz	front	10 mm	4 time slots	0.636 W/kg	1.6 W/kg	21.7 °C
810 / 1909.8 MHz	front	10 mm	4 time slots	0.634 W/kg	1.6 W/kg	21.7 °C
512 / 1850.2 MHz	rear	10 mm	4 time slots	1.010 W/kg	1.6 W/kg	21.7 °C
661 / 1880.0 MHz	rear	10 mm	4 time slots	0.867 W/kg	1.6 W/kg	21.7 °C
810 / 1909.8 MHz	rear	10 mm	4 time slots	0.842 W/kg	1.6 W/kg	21.7 °C
661 / 1880.0 MHz	left	10 mm	4 time slots	0.430 W/kg	1.6 W/kg	21.7 °C
661 / 1880.0 MHz	right	10 mm	4 time slots	0.166 W/kg	1.6 W/kg	21.7 °C
661 / 1880.0 MHz	bottom	10 mm	4 time slots	0.270 W/kg	1.6 W/kg	21.7 °C
512 / 1850.2 MHz	rear*	10 mm	4 time slots	0.824 W/kg	1.6 W/kg	21.7 °C
Body worn SAR GSM 1900 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	Body worn test result	Limit	Liquid temperature
						temperature
512 / 1850.2 MHz	rear	15 mm	1 time slot	0.474 W/kg	1.6 W/kg	21.7 °C
512 / 1850.2 MHz	rear	15 mm	2 time slots	0.487 W/kg	1.6 W/kg	23.5 °C

Table 25: Test results body SAR GSM 1900 MHz

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

Head SAR UMTS FDD V 850 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Left hand test result	Right hand test result	Limit	Liquid temperature	
					left	right
4132 / 826.4 MHz	cheek	0.984 W/kg	0.958 W/kg	1.6 W/kg	22.6 °C	22.9 °C
4182 / 836.4 MHz	cheek	0.982 W/kg	1.020 W/kg	1.6 W/kg	22.6 °C	22.9 °C
4233 / 846.6 MHz	cheek	0.948 W/kg	0.951 W/kg	1.6 W/kg	22.6 °C	22.9 °C
4132 / 826.4 MHz	tilted 15°	0.692 W/kg	0.626 W/kg	1.6 W/kg	22.6 °C	22.9 °C
4182 / 836.4 MHz	tilted 15°	0.616 W/kg	0.593 W/kg	1.6 W/kg	22.6 °C	22.9 °C
4233 / 846.6 MHz	tilted 15°	0.628 W/kg	0.617 W/kg	1.6 W/kg	22.6 °C	22.9 °C

Table 26: Test results head SAR UMTS FDD V 850 MHz

Body (hotspot) SAR UMTS FDD V 850 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	Body hotspot test result	Limit	Liquid temperature
						temperature
4132 / 826.4 MHz	front	10 mm	12.2kbit/s	0.992 W/kg	1.6 W/kg	22.2 °C
4182 / 836.4 MHz	front	10 mm	12.2kbit/s	1.040 W/kg	1.6 W/kg	22.2 °C
4233 / 846.6 MHz	front	10 mm	12.2kbit/s	0.924 W/kg	1.6 W/kg	22.2 °C
4132 / 826.4 MHz	rear	10 mm	12.2kbit/s	1.020 W/kg	1.6 W/kg	22.2 °C
4182 / 836.4 MHz	rear	10 mm	12.2kbit/s	0.989 W/kg	1.6 W/kg	22.2 °C
4233 / 846.6 MHz	rear	10 mm	12.2kbit/s	0.878 W/kg	1.6 W/kg	22.2 °C
4182 / 836.4 MHz	left	10 mm	12.2kbit/s	0.599 W/kg	1.6 W/kg	22.2 °C
4182 / 836.4 MHz	right	10 mm	12.2kbit/s	0.602 W/kg	1.6 W/kg	22.2 °C
4182 / 836.4 MHz	bottom	10 mm	12.2kbit/s	0.145 W/kg	1.6 W/kg	22.2 °C
4182 / 836.4 MHz	front*	10 mm	12.2kbit/s	1.010 W/kg	1.6 W/kg	22.2 °C
Body worn SAR UMTS FDD V 850 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	Body worn test result	Limit	Liquid temperature
						temperature
4182 / 836.4 MHz	front	15 mm	12.2kbit/s	0.800 W/kg	1.6 W/kg	22.2 °C

Table 27: Test results body SAR UMTS FDD V 850 MHz

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

Head SAR UMTS FDD II 1900 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Left hand test result	Right hand test result	Limit	Liquid temperature	
					left	right
9262 / 1852.4 MHz	cheek	0.846 W/kg	0.658 W/kg	1.6 W/kg	22.7 °C	22.7 °C
9400 / 1880.0 MHz	cheek	0.891 W/kg	0.724 W/kg	1.6 W/kg	22.7 °C	22.7 °C
9538 / 1907.6 MHz	cheek	0.931 W/kg	0.734 W/kg	1.6 W/kg	22.7 °C	22.7 °C
9262 / 1852.4 MHz	tilted 15°	0.384 W/kg	0.231 W/kg	1.6 W/kg	22.7 °C	22.7 °C
9400 / 1880.0 MHz	tilted 15°	0.411 W/kg	0.251 W/kg	1.6 W/kg	22.7 °C	22.7 °C
9538 / 1907.6 MHz	tilted 15°	0.405 W/kg	0.266 W/kg	1.6 W/kg	22.7 °C	22.7 °C
9538 / 1907.6 MHz	cheek*	0.960 W/kg	--- W/kg	1.6 W/kg	22.7 °C	--- °C

Table 28: Test results head SAR UMTS FDD II 1900 MHz

Body (hotspot) SAR UMTS FDD II 1900 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	Body hotspot test result	Limit	Liquid temperature
						temperature
9262 / 1852.4 MHz	front	10 mm	12.2kbit/s	0.827 W/kg	1.6 W/kg	21.7 °C
9400 / 1880.0 MHz	front	10 mm	12.2kbit/s	0.801 W/kg	1.6 W/kg	21.7 °C
9538 / 1907.6 MHz	front	10 mm	12.2kbit/s	0.815 W/kg	1.6 W/kg	21.7 °C
9262 / 1852.4 MHz	rear	10 mm	12.2kbit/s	1.140 W/kg	1.6 W/kg	21.7 °C
9400 / 1880.0 MHz	rear	10 mm	12.2kbit/s	1.100 W/kg	1.6 W/kg	21.7 °C
9538 / 1907.6 MHz	rear	10 mm	12.2kbit/s	1.020 W/kg	1.6 W/kg	21.7 °C
9400 / 1880.0 MHz	left	10 mm	12.2kbit/s	0.570 W/kg	1.6 W/kg	21.7 °C
9400 / 1880.0 MHz	right	10 mm	12.2kbit/s	0.242 W/kg	1.6 W/kg	21.7 °C
9400 / 1880.0 MHz	bottom	10 mm	12.2kbit/s	0.305 W/kg	1.6 W/kg	21.7 °C
9262 / 1852.4 MHz	rear*	10 mm	12.2kbit/s	0.902 W/kg	1.6 W/kg	21.7 °C
Body worn SAR UMTS FDD II 1900 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	Body worn test result	Limit	Liquid temperature
						temperature
9262 / 1852.4 MHz	rear	15 mm	12.2kbit/s	0.640 W/kg	1.6 W/kg	21.7 °C

Table 29: Test results body SAR UMTS FDD II 1900 MHz

Head SAR WLAN 2450 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Left hand test result	Right hand test result	Limit	Liquid temperature	
					left	right
1 / 2412 MHz	cheek	0.211 W/kg	0.278 W/kg	1.6 W/kg	22.8 °C	22.8 °C
6 / 2437 MHz	cheek	0.204 W/kg	0.320 W/kg	1.6 W/kg	22.8 °C	22.8 °C
11 / 2462 MHz	cheek	0.289 W/kg	0.452 W/kg	1.6 W/kg	22.8 °C	22.8 °C
1 / 2412 MHz	tilted 15°	0.162 W/kg	0.190 W/kg	1.6 W/kg	22.8 °C	22.8 °C
6 / 2437 MHz	tilted 15°	0.166 W/kg	0.197 W/kg	1.6 W/kg	22.8 °C	22.8 °C
11 / 2462 MHz	tilted 15°	0.231 W/kg	0.264 W/kg	1.6 W/kg	22.8 °C	22.8 °C

Table 30: Test results head SAR WLAN 2450 MHz

Body hotspot SAR WLAN 2450 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	Body hotspot test result	Limit	Liquid temperature
						temperature
1 / 2412 MHz	front	10 mm	CCK 1 Mbit/s	0.089 W/kg	1.6 W/kg	23.2 °C
6 / 2437 MHz	front	10 mm	CCK 1 Mbit/s	0.098 W/kg	1.6 W/kg	23.2 °C
11 / 2462 MHz	front	10 mm	CCK 1 Mbit/s	0.103 W/kg	1.6 W/kg	23.2 °C
1 / 2412 MHz	rear	10 mm	CCK 1 Mbit/s	0.057 W/kg	1.6 W/kg	23.2 °C
6 / 2437 MHz	rear	10 mm	CCK 1 Mbit/s	0.063 W/kg	1.6 W/kg	23.2 °C
11 / 2462 MHz	rear	10 mm	CCK 1 Mbit/s	0.066 W/kg	1.6 W/kg	23.2 °C
6 / 2437 MHz	left	10 mm	CCK 1 Mbit/s	0.071 W/kg	1.6 W/kg	23.2 °C
6 / 2437 MHz	right	10 mm	CCK 1 Mbit/s	0.011 W/kg	1.6 W/kg	23.2 °C
6 / 2437 MHz	top edge	10 mm	CCK 1 Mbit/s	0.061 W/kg	1.6 W/kg	23.2 °C
Body worn SAR WLAN 2450 MHz (averaged over 1g tissue volume)						
Channel / frequency	Position	Distance	test condition	Body worn test result	Limit	Liquid temperature
						temperature
11 / 2462 MHz	front	15 mm	CCK 1 Mbit/s	0.062 W/kg	1.6 W/kg	23.2 °C

Table 31: Test results body SAR WLAN 2450 MHz

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

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

7.2.2 General description of test procedures

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

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

Tests in body position were performed in that configuration, which generates the highest time based averaged output power (see conducted power results).

Tests in head position with GSM were performed in voice mode with 1 timeslot unless GPRS/EGPRS/DTM function allows parallel voice and data traffic on 2 or more timeslots (see section 2.4 for details).

UMTS was tested in RMC mode with 12.2 kbit/s and TPC bits set to 'all 1'.

WLAN was tested in 802.11b mode with 1 MBit/s. According to KDB 248227 the SAR testing for 802.11g/n is not required since the maximum power of 802.11g/n is less ¼ dB higher than maximum power of 802.11b.

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.

Per KDB pub 941225 D06 the edges with antennas within 2.5 cm are required to be evaluated for SAR to cover WLAN hot spot function.

Tests in body position were performed with 10 mm air gap between DUT and SAM, with additional delta measurements at 15 mm distance to cover voice call operation with headset.

8 Test equipment and ancillaries used for tests

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

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

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

9 Observations

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

Annex A: System performance verification

Date/Time: 13.06.2012 14:38:52 Date/Time: 13.06.2012 14:42:30

System Performance Check-D900 head 2012-06-13

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

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

Medium: HSL900 Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 0.96 \text{ mho/m}$; $\epsilon_r = 41.1$; $\rho = 1000 \text{ kg/m}^3$

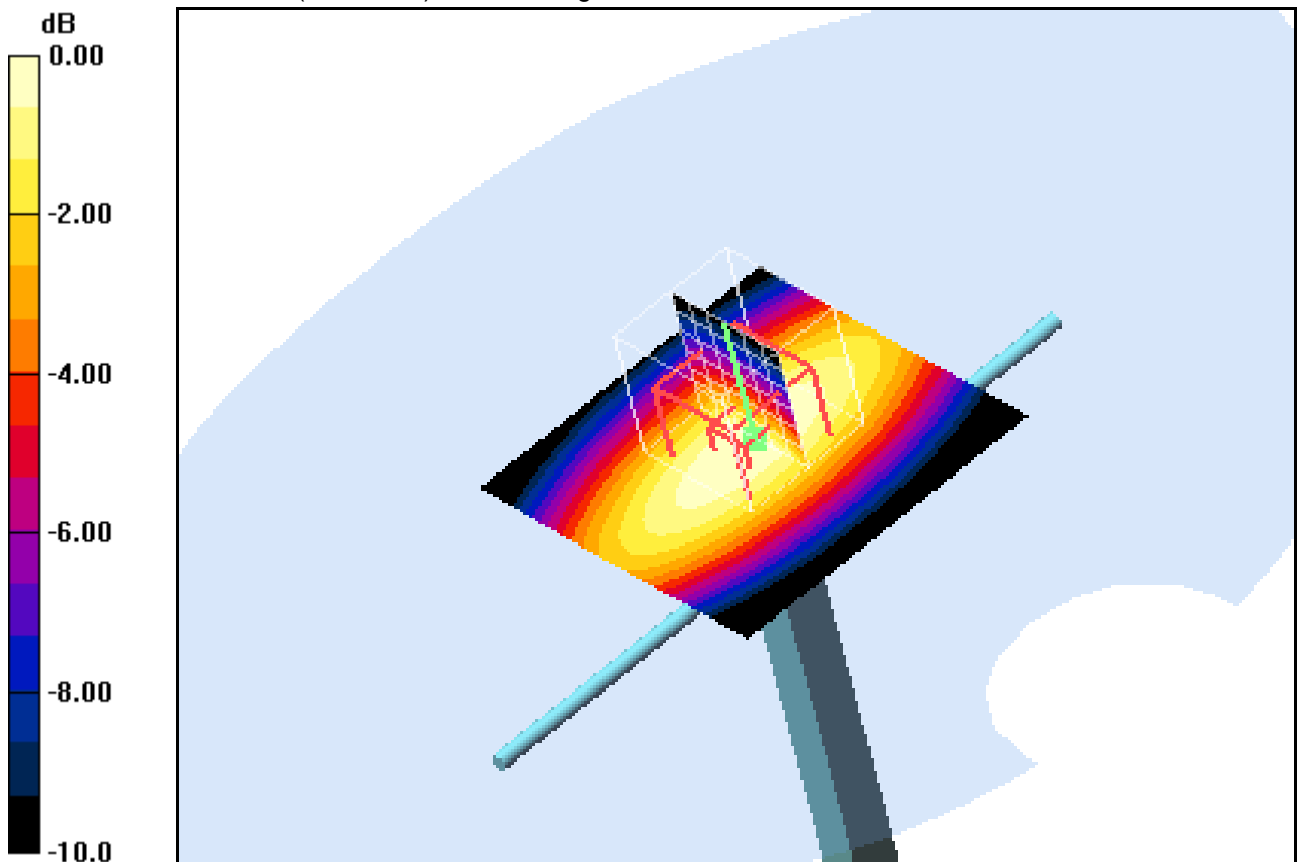
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.87, 5.87, 5.87); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

d=15mm, Pin=1000mW/Area Scan (51x51x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 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 = 116.0 V/m; Power Drift = -0.013 dB
 Peak SAR (extrapolated) = 16.4 W/kg
SAR(1 g) = 11.1 mW/g; SAR(10 g) = 7.13 mW/g
 Maximum value of SAR (measured) = 12.0 mW/g



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

Date/Time: 14.06.2012 11:00:49 Date/Time: 14.06.2012 11:04:29

System Performance Check-D900 head 2012-06-14

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

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

Medium: HSL900 Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 0.96 \text{ mho/m}$; $\epsilon_r = 41.1$; $\rho = 1000 \text{ kg/m}^3$

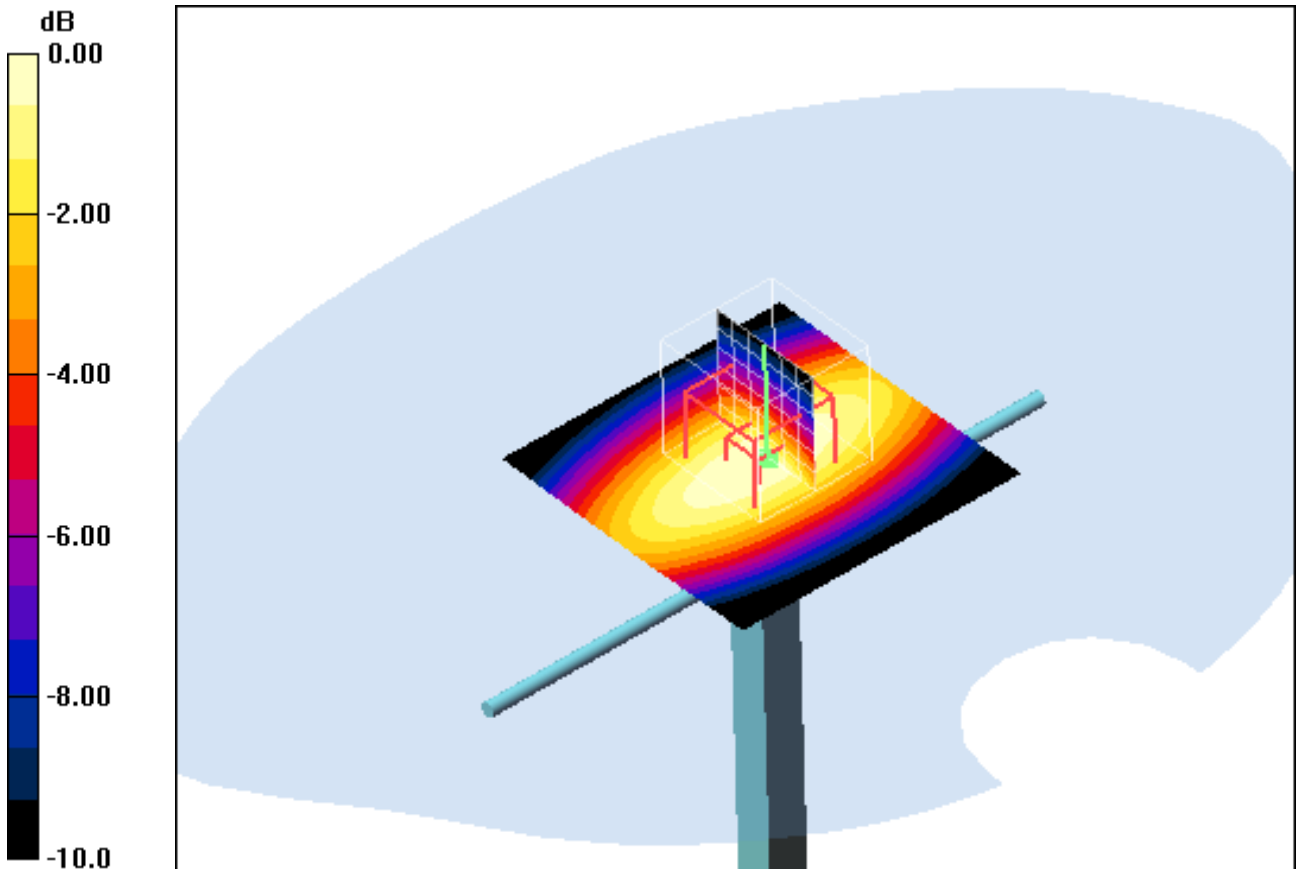
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.87, 5.87, 5.87); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

d=15mm, Pin=1000mW/Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 11.7 mW/g

d=15mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 dx=5mm, dy=5mm, dz=5mm
 Reference Value = 115.6 V/m; Power Drift = 0.044 dB
 Peak SAR (extrapolated) = 16.3 W/kg
SAR(1 g) = 11 mW/g; SAR(10 g) = 7.12 mW/g
 Maximum value of SAR (measured) = 11.9 mW/g



0 dB = 11.9mW/g

Additional information:

ambient temperature: 22.3°C; liquid temperature: 22.9°C

Date/Time: 01.06.2012 14:27:05 Date/Time: 01.06.2012 14:30:44

System Performance Check-D900 body 2012-06-01

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

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

Medium: M900 Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 1.05 \text{ mho/m}$; $\epsilon_r = 54.5$; $\rho = 1000 \text{ kg/m}^3$

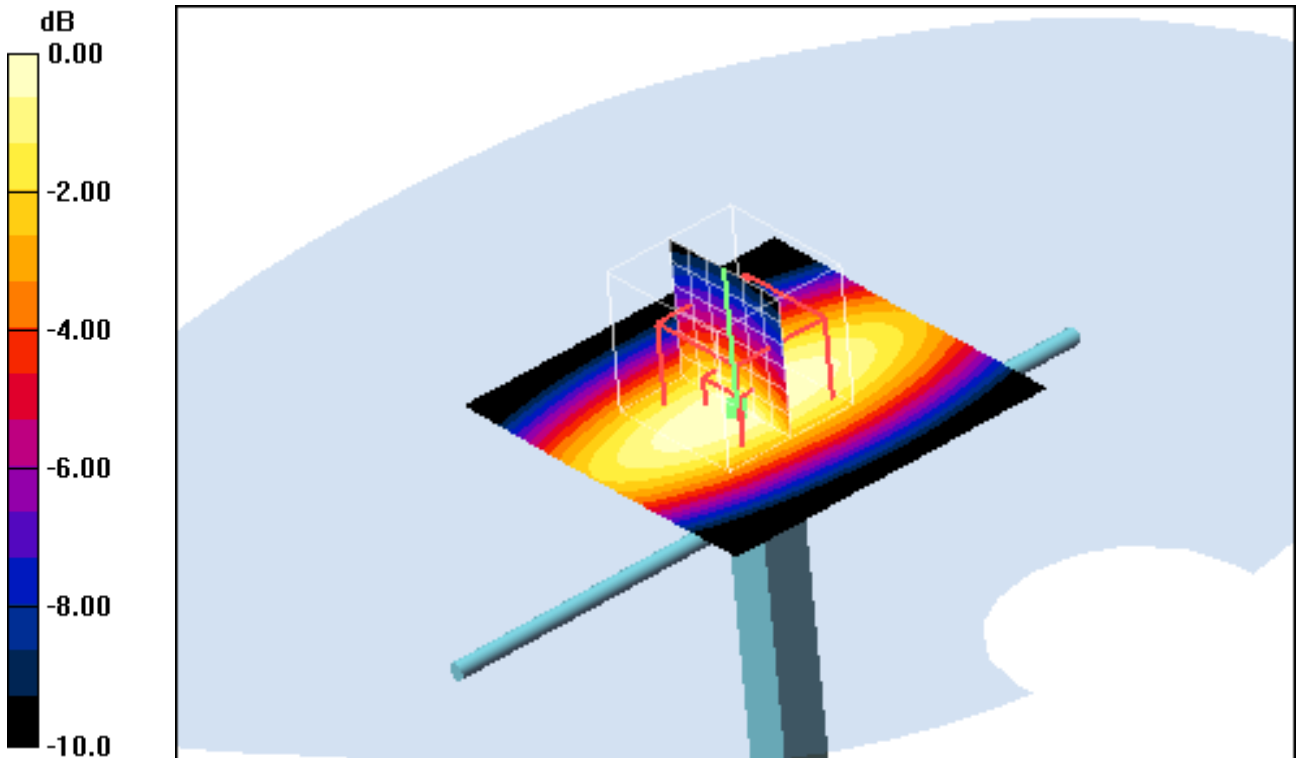
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.77, 5.77, 5.77); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

d=15mm, Pin=1000mW/Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 11.6 mW/g

d=15mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 dx=5mm, dy=5mm, dz=5mm
 Reference Value = 110.6 V/m; Power Drift = 0.021 dB
 Peak SAR (extrapolated) = 15.7 W/kg
SAR(1 g) = 10.8 mW/g; SAR(10 g) = 7.04 mW/g
 Maximum value of SAR (measured) = 11.7 mW/g



0 dB = 11.7mW/g

Additional information:

ambient temperature: 22.8°C; liquid temperature: 22.2°C

Date/Time: 04.06.2012 09:57:24 Date/Time: 04.06.2012 10:01:09

System Performance Check-D900 body 2012-06-04

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

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

Medium: M900 Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 1.05 \text{ mho/m}$; $\epsilon_r = 54.5$; $\rho = 1000 \text{ kg/m}^3$

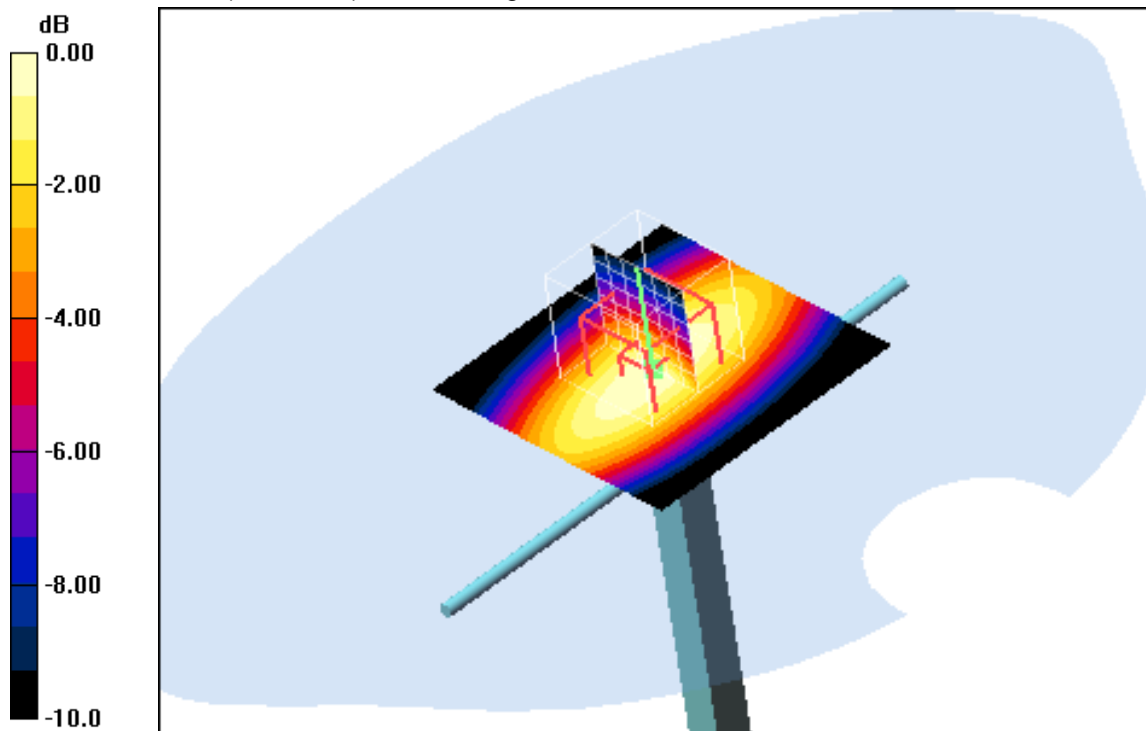
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.77, 5.77, 5.77); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

d=15mm, Pin=1000mW/Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 11.8 mW/g

d=15mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 dx=5mm, dy=5mm, dz=5mm
 Reference Value = 111.6 V/m; Power Drift = -0.01 dB
 Peak SAR (extrapolated) = 15.9 W/kg
SAR(1 g) = 11.1 mW/g; SAR(10 g) = 7.22 mW/g
 Maximum value of SAR (measured) = 12.1 mW/g



0 dB = 12.1mW/g

Additional information:

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

Date/Time: 05.07.2012 14:39:17

SystemPerformanceCheck-D900 body 2012-07-05

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

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

Medium: M900 Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 1.05 \text{ mho/m}$; $\epsilon_r = 54.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

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

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

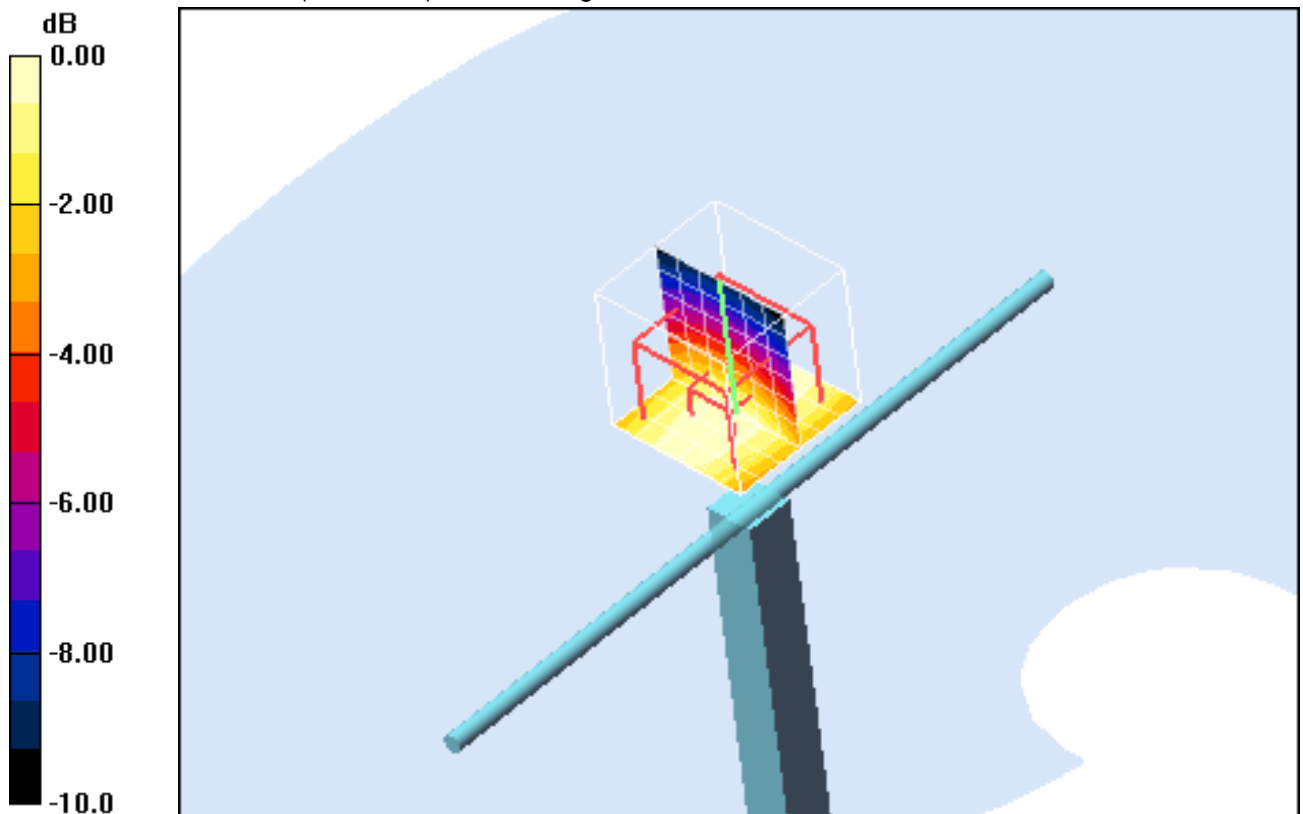
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 109.8 V/m; Power Drift = -0.048 dB

Peak SAR (extrapolated) = 15.7 W/kg

SAR(1 g) = 10.7 mW/g; SAR(10 g) = 7.1 mW/g

Maximum value of SAR (measured) = 11.6 mW/g



0 dB = 11.6mW/g

Additional information:

ambient temperature: 23.8°C; liquid temperature: 23.5°C

Date/Time: 08.06.2012 09:04:06 Date/Time: 08.06.2012 09:07:43

System Performance Check-D1900 head 2012-06-08

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

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

Medium: HSL1900 Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.39 \text{ mho/m}$; $\epsilon_r = 39.8$; $\rho = 1000 \text{ kg/m}^3$

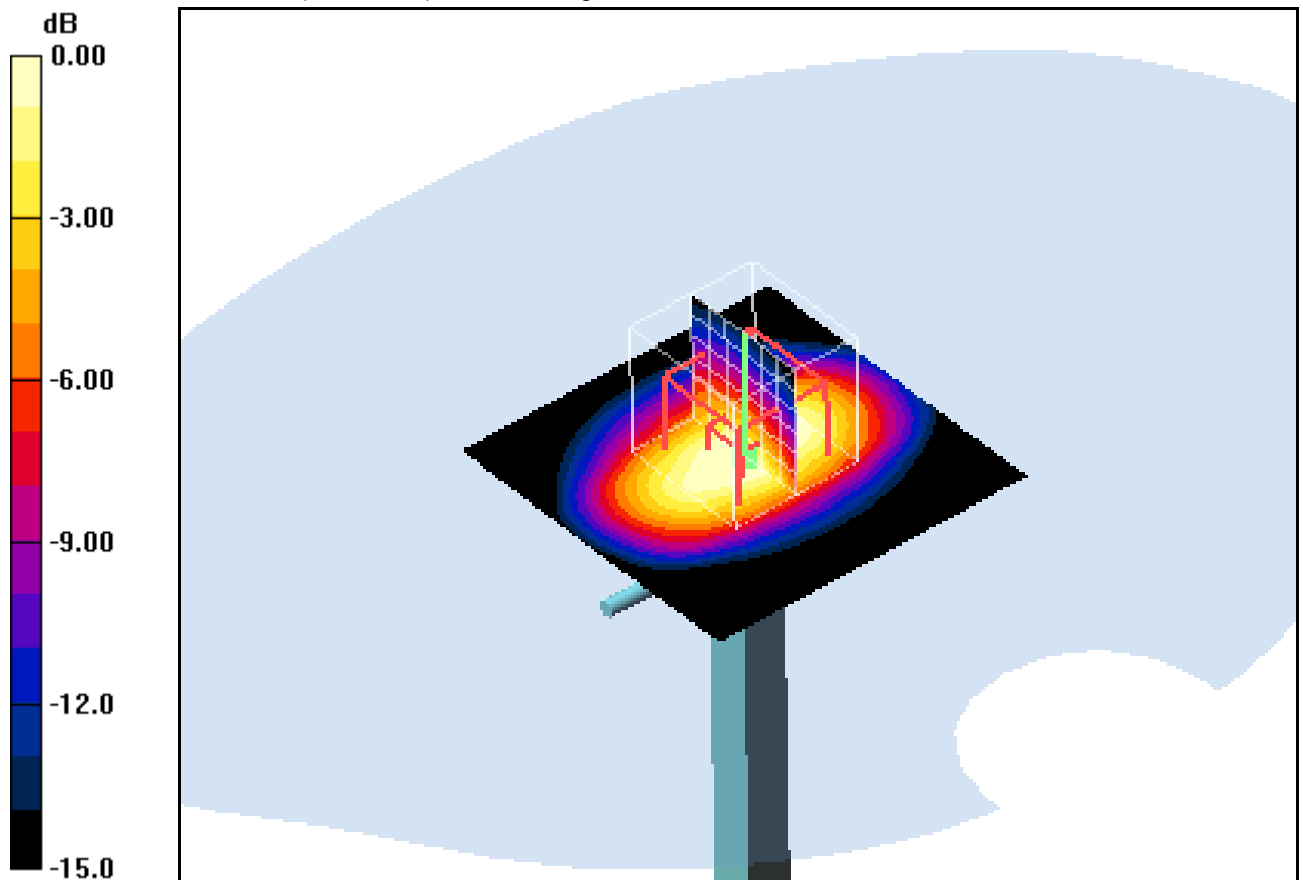
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

d=10mm, Pin=1000mW/Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 52.9 mW/g

d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 dx=5mm, dy=5mm, dz=5mm
 Reference Value = 187.8 V/m; Power Drift = 0.016 dB
 Peak SAR (extrapolated) = 70.9 W/kg
SAR(1 g) = 39.8 mW/g; SAR(10 g) = 21 mW/g
 Maximum value of SAR (measured) = 44.8 mW/g



0 dB = 44.8mW/g

Additional information:

ambient temperature: 22.7°C; liquid temperature: 22.8°C

Date/Time: 05.06.2012 12:19:18 Date/Time: 05.06.2012 12:22:56

System Performance Check-D1900 body 2012-06-05

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

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

Medium: M1900 Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.51 \text{ mho/m}$; $\epsilon_r = 52.8$; $\rho = 1000 \text{ kg/m}^3$

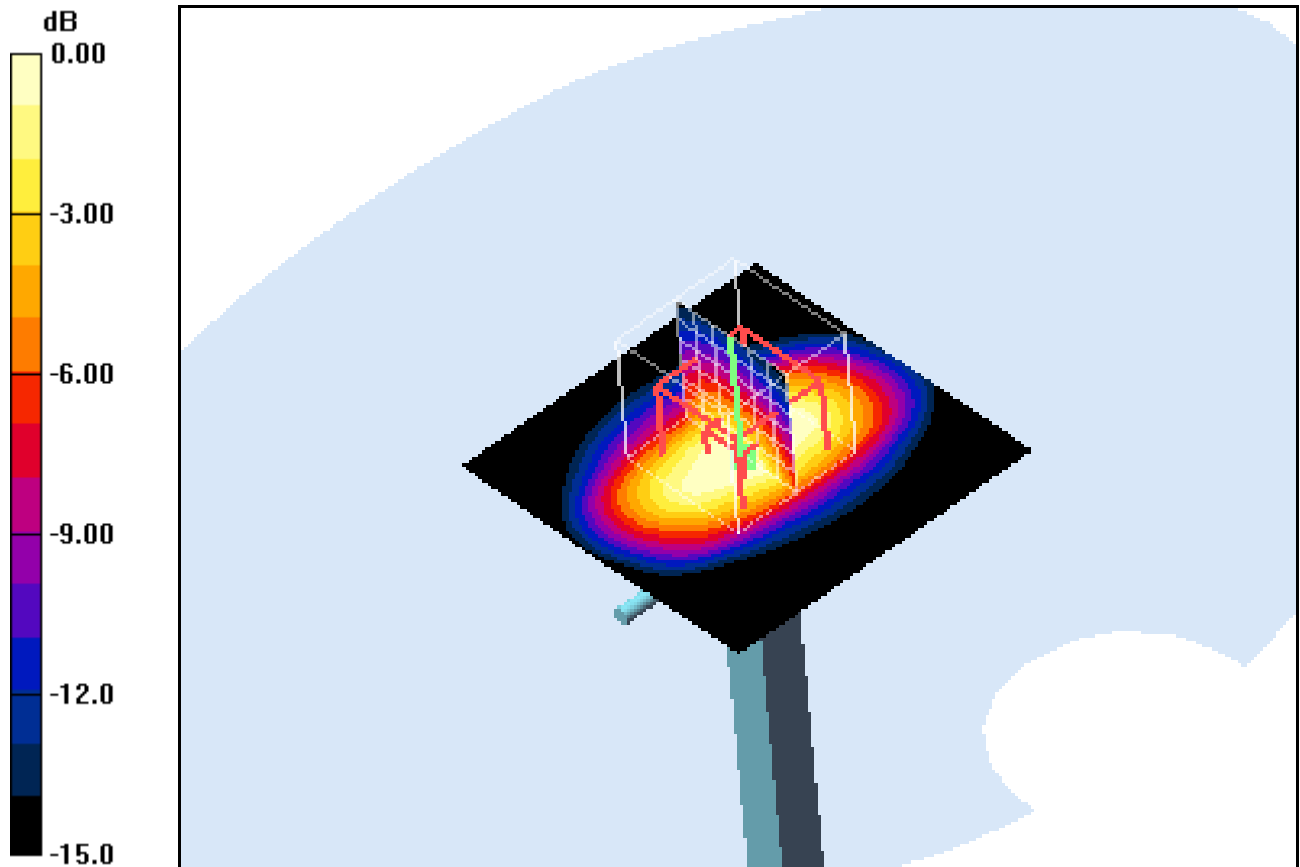
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

d=10mm, Pin=1000mW/Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 57.5 mW/g

d=10mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 dx=5mm, dy=5mm, dz=5mm
 Reference Value = 184.8 V/m; Power Drift = -0.032 dB
 Peak SAR (extrapolated) = 70.7 W/kg
SAR(1 g) = 40.5 mW/g; SAR(10 g) = 21.4 mW/g
 Maximum value of SAR (measured) = 45.9 mW/g



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

Date/Time: 05.07.2012 15:43:03

SystemPerformanceCheck-D1900 body 2012-07-05

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

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

Medium: M1900 Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.51 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

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

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

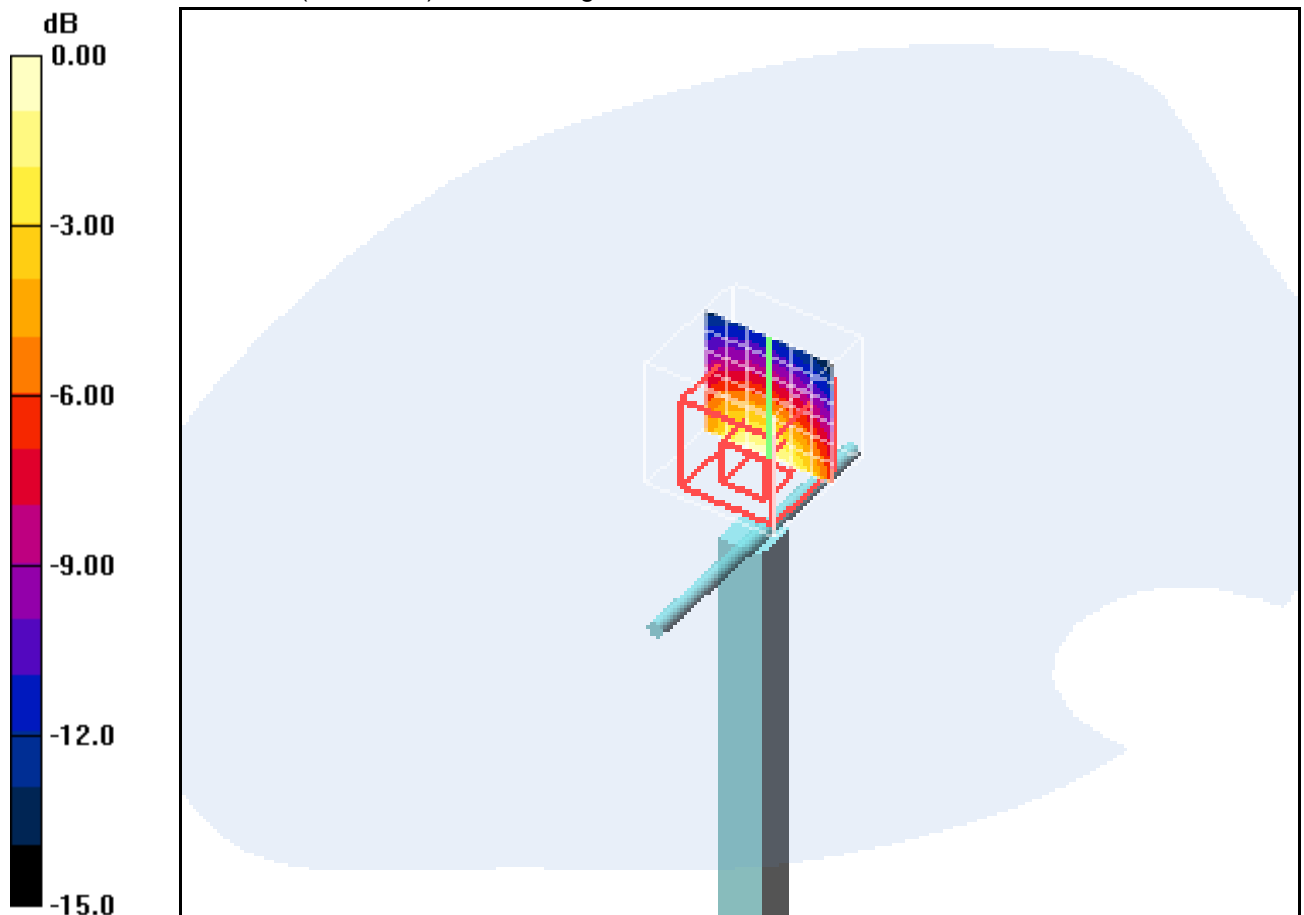
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 186.2 V/m; Power Drift = -0.029 dB

Peak SAR (extrapolated) = 68.1 W/kg

SAR(1 g) = 38.5 mW/g; SAR(10 g) = 21.3 mW/g

Maximum value of SAR (measured) = 43.2 mW/g



0 dB = 43.2mW/g

Additional information:

ambient temperature: 23.8°C; liquid temperature: 23.5°C

Date/Time: 18.06.2012 14:35:40 Date/Time: 18.06.2012 14:39:27

System Performance Check-D2450 head 2012-06-18

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

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

Medium: HSL2450 Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.85 \text{ mho/m}$; $\epsilon_r = 39.5$; $\rho = 1000 \text{ kg/m}^3$

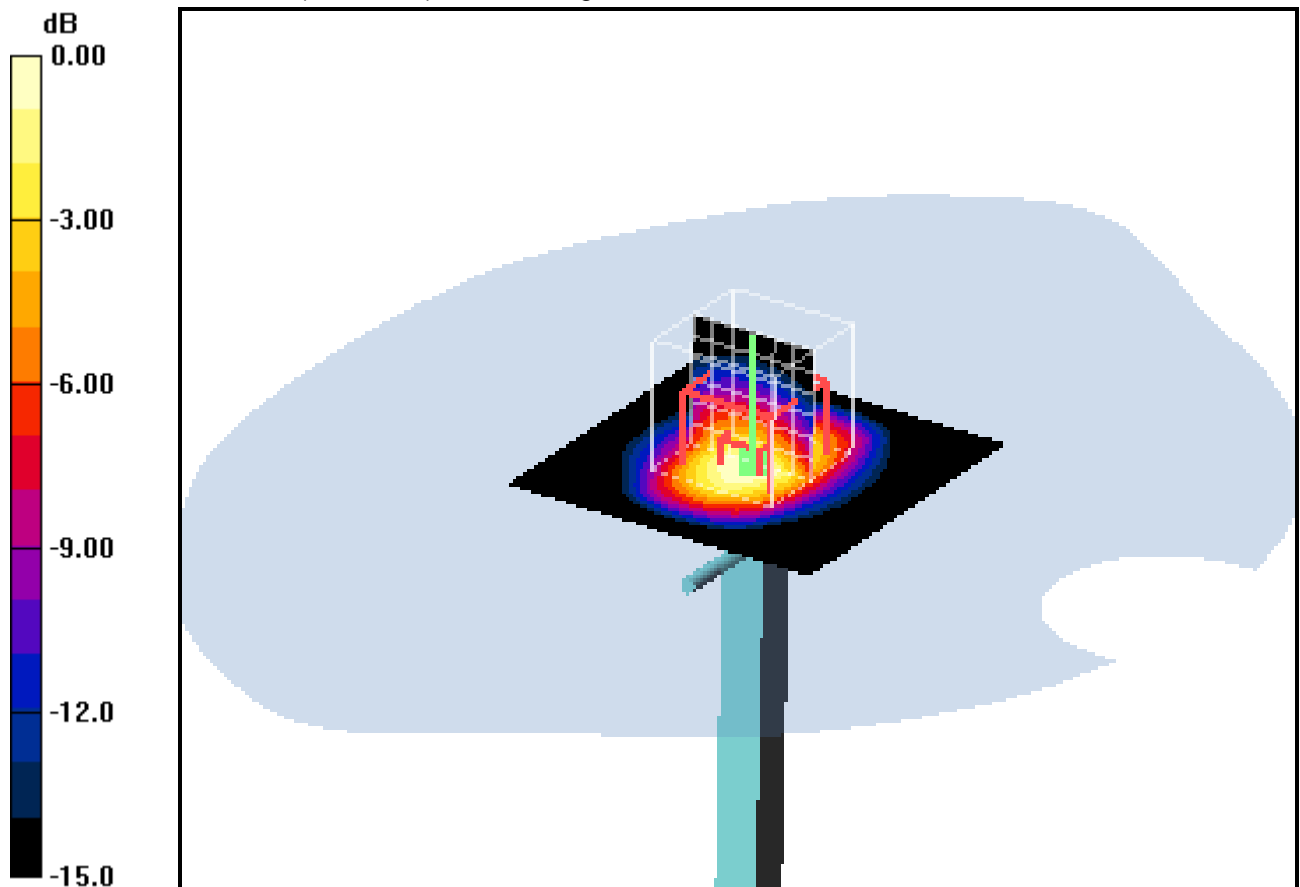
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.15, 4.15, 4.15); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

d=10mm, Pin=100mW/Area Scan (51x51x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (interpolated) = 8.49 mW/g

d=10mm, Pin=100mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
 Reference Value = 61.0 V/m; Power Drift = 0.024 dB
 Peak SAR (extrapolated) = 10.4 W/kg
SAR(1 g) = 5.91 mW/g; SAR(10 g) = 2.73 mW/g
 Maximum value of SAR (measured) = 6.58 mW/g



0 dB = 6.58mW/g

Additional information:

ambient temperature: 23.2°C; liquid temperature: 22.9°C

Date/Time: 20.06.2012 07:42:45 Date/Time: 20.06.2012 07:46:25

System Performance Check-D2450 body 2012-06-20

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

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

Medium: M2450 Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.93 \text{ mho/m}$; $\epsilon_r = 52.2$; $\rho = 1000 \text{ kg/m}^3$

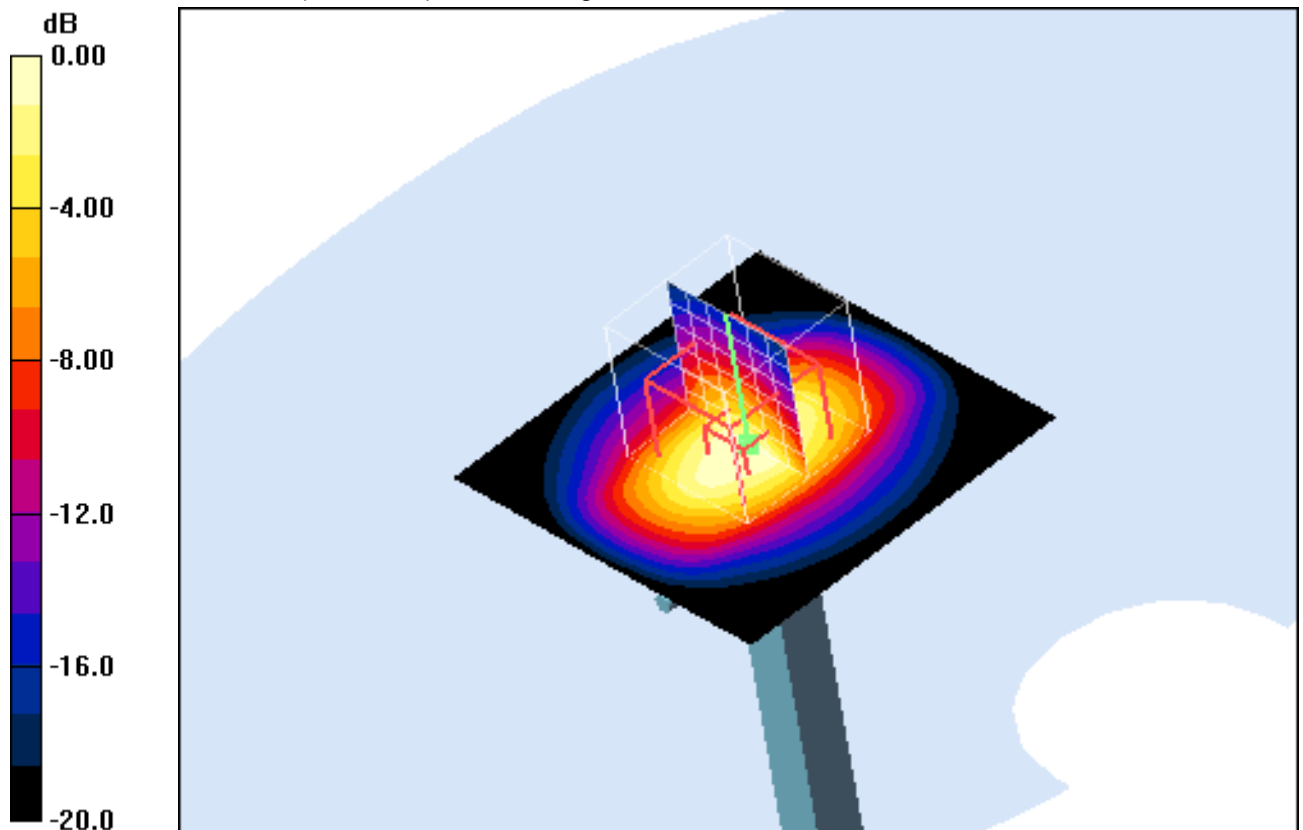
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(3.9, 3.9, 3.9); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

d=10mm, Pin=100mW/Area Scan (51x51x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (interpolated) = 7.41 mW/g

d=10mm, Pin=100mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
 Reference Value = 55.9 V/m; Power Drift = 0.021 dB
 Peak SAR (extrapolated) = 11.2 W/kg
SAR(1 g) = 5.35 mW/g; SAR(10 g) = 2.45 mW/g
 Maximum value of SAR (measured) = 5.96 mW/g



0 dB = 5.96mW/g

Additional information:

ambient temperature: 23.5°C; liquid temperature: 23.1°C

Annex B: DASY4 measurement results

Annex B.1: GSM 850MHz head

Date/Time: 14.06.2012 14:39:36 Date/Time: 14.06.2012 14:47:16

IEEE1528-LeftHandSide-GSM850

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used: $f = 824.2 \text{ MHz}$; $\sigma = 0.89 \text{ mho/m}$; $\epsilon_r = 42$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Low/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.09 mW/g

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

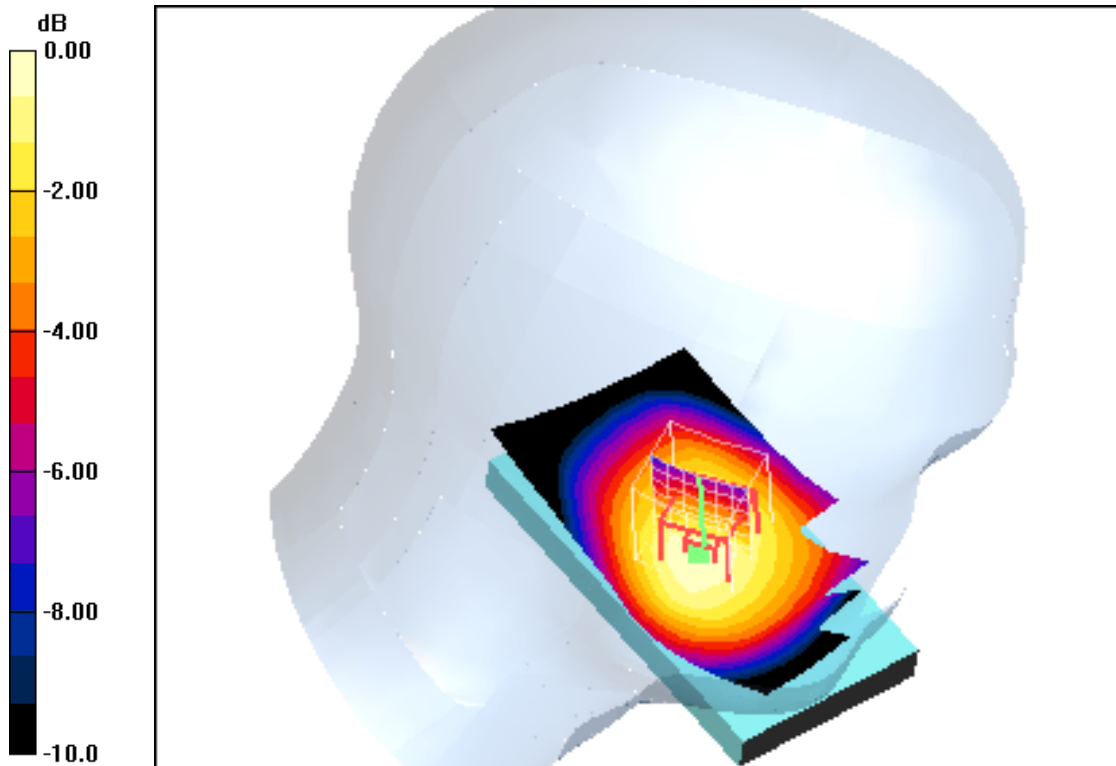
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 35.3 V/m; Power Drift = 0.040 dB

Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.771 mW/g

Maximum value of SAR (measured) = 1.08 mW/g



0 dB = 1.08mW/g

Additional information:

ambient temperature: 23.6°C; liquid temperature: 22.8°C

Date/Time: 14.06.2012 15:01:55 Date/Time: 14.06.2012 15:11:12

IEEE1528-LeftHandSide-GSM850

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.9 \text{ mho/m}$; $\epsilon_r = 41.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.06 mW/g

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

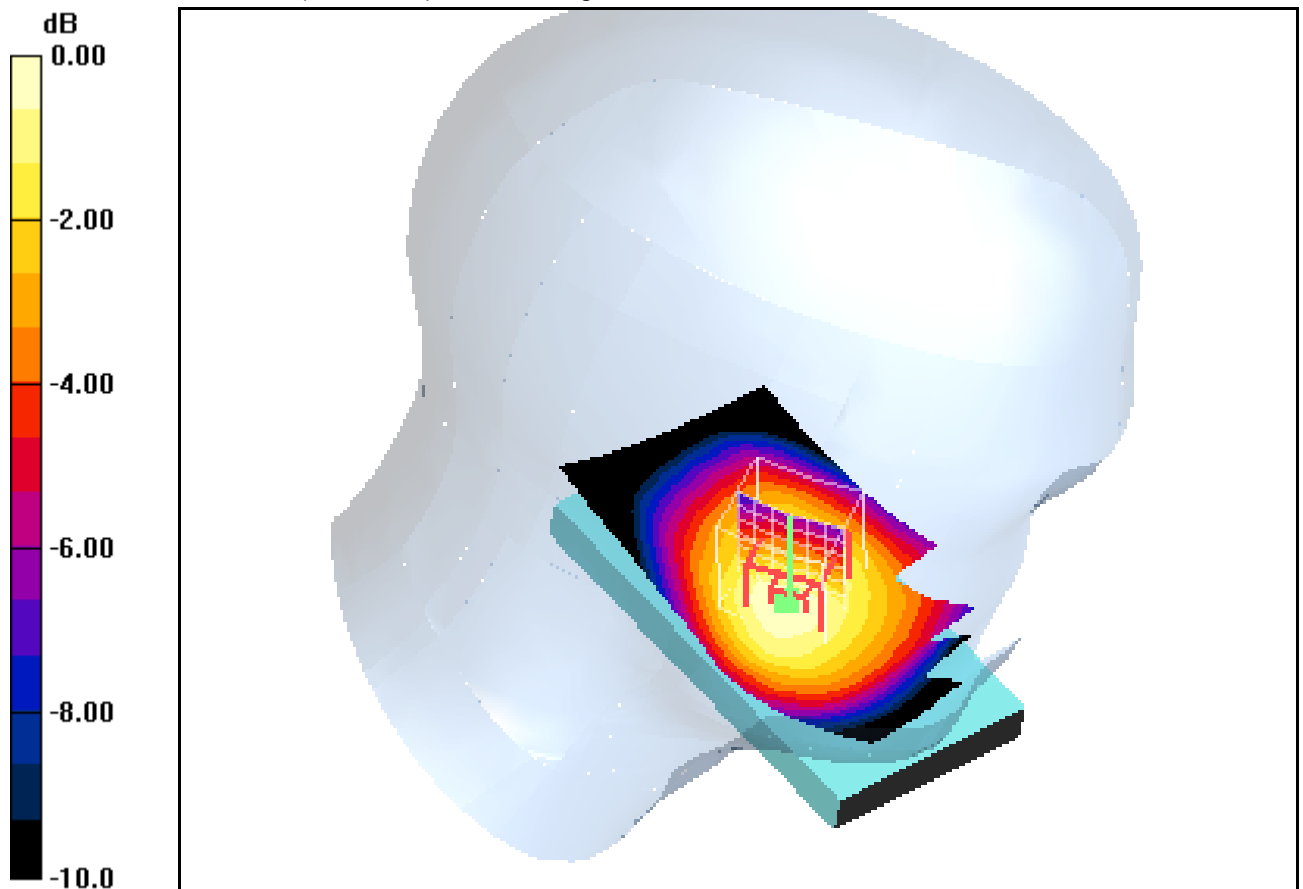
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 34.6 V/m; Power Drift = 0.013 dB

Peak SAR (extrapolated) = 1.24 W/kg

SAR(1 g) = 0.999 mW/g; SAR(10 g) = 0.743 mW/g

Maximum value of SAR (measured) = 1.05 mW/g



0 dB = 1.05mW/g

Additional information:

ambient temperature: 23.6°C; liquid temperature: 22.8°C

Date/Time: 14.06.2012 15:25:36 Date/Time: 14.06.2012 15:33:39

IEEE1528-LeftHandSide-GSM850

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 0.91 \text{ mho/m}$; $\epsilon_r = 41.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - High/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.01 mW/g

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

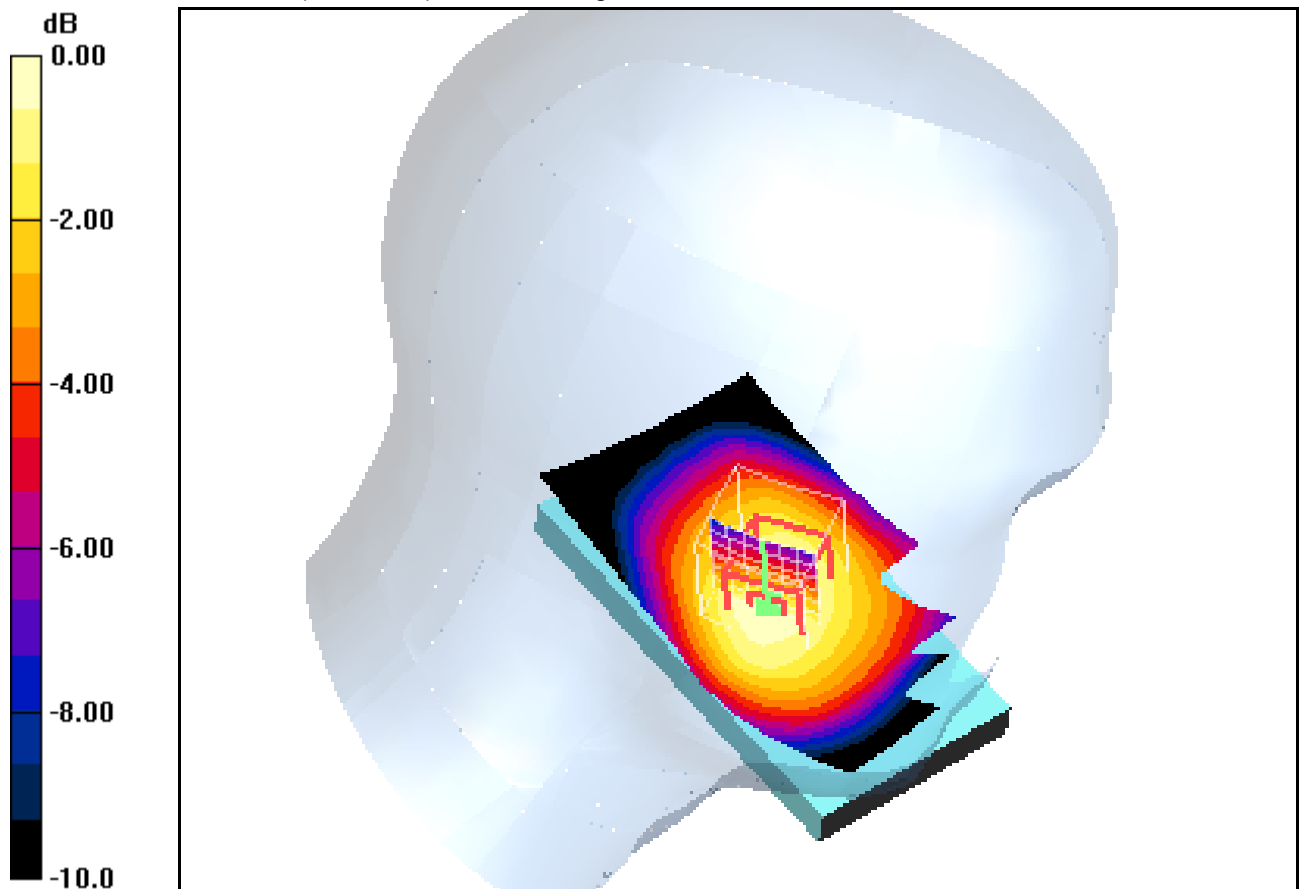
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 33.5 V/m; Power Drift = -0.030 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.937 mW/g; SAR(10 g) = 0.693 mW/g

Maximum value of SAR (measured) = 0.984 mW/g



0 dB = 0.984mW/g

Additional information:

ambient temperature: 23.6°C; liquid temperature: 22.8°C

Date/Time: 14.06.2012 14:18:15 Date/Time: 14.06.2012 14:25:44

IEEE1528-LeftHandSide-GSM850

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used: $f = 824.2 \text{ MHz}$; $\sigma = 0.89 \text{ mho/m}$; $\epsilon_r = 42$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Low/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

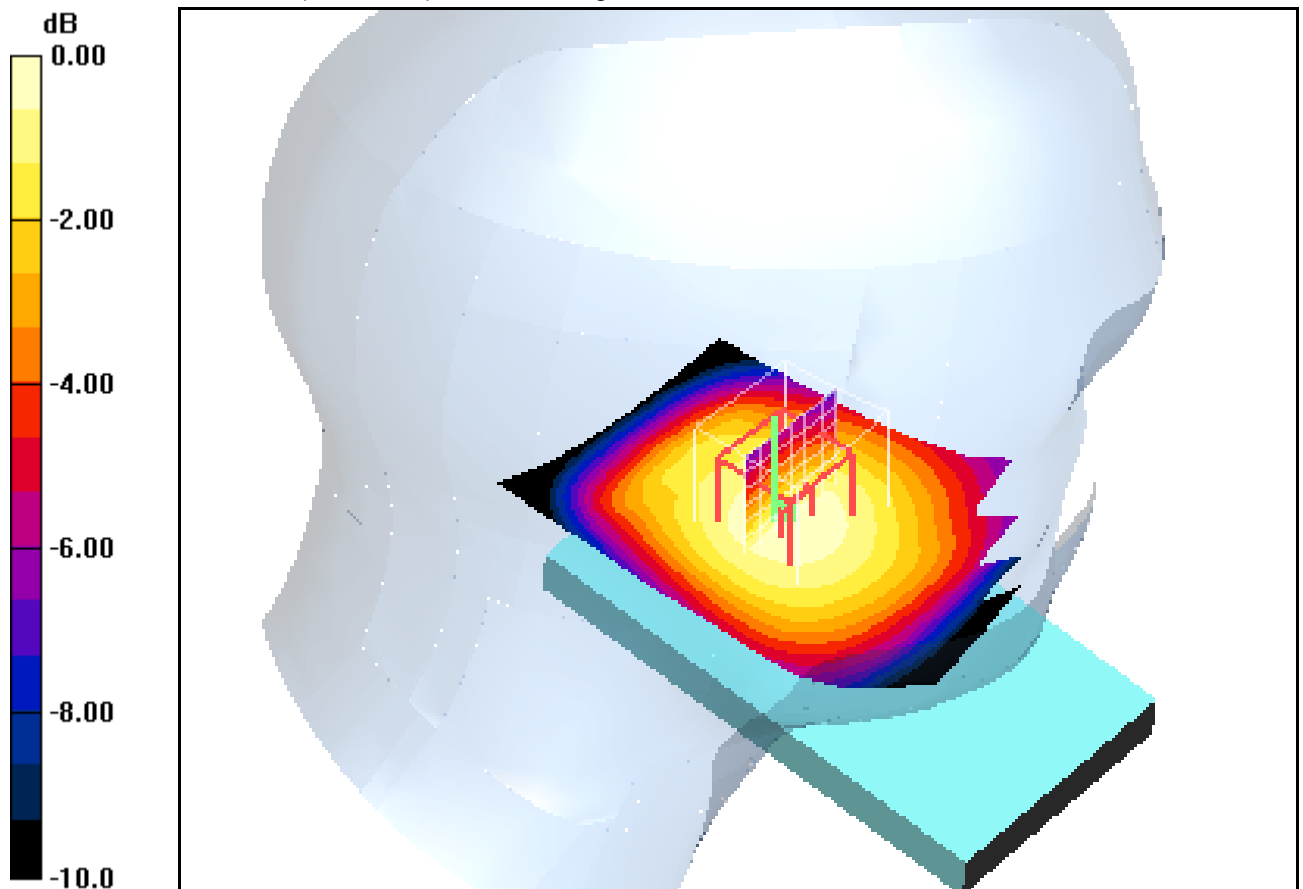
Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 28.1 V/m; Power Drift = -0.024 dB

Peak SAR (extrapolated) = 0.760 W/kg

SAR(1 g) = 0.630 mW/g; SAR(10 g) = 0.479 mW/g

Maximum value of SAR (measured) = 0.658 mW/g



0 dB = 0.658mW/g

Additional information:

ambient temperature: 23.6°C; liquid temperature: 22.8°C

Date/Time: 14.06.2012 13:35:39 Date/Time: 14.06.2012 13:42:41

IEEE1528-LeftHandSide-GSM850

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.9 \text{ mho/m}$; $\epsilon_r = 41.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

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

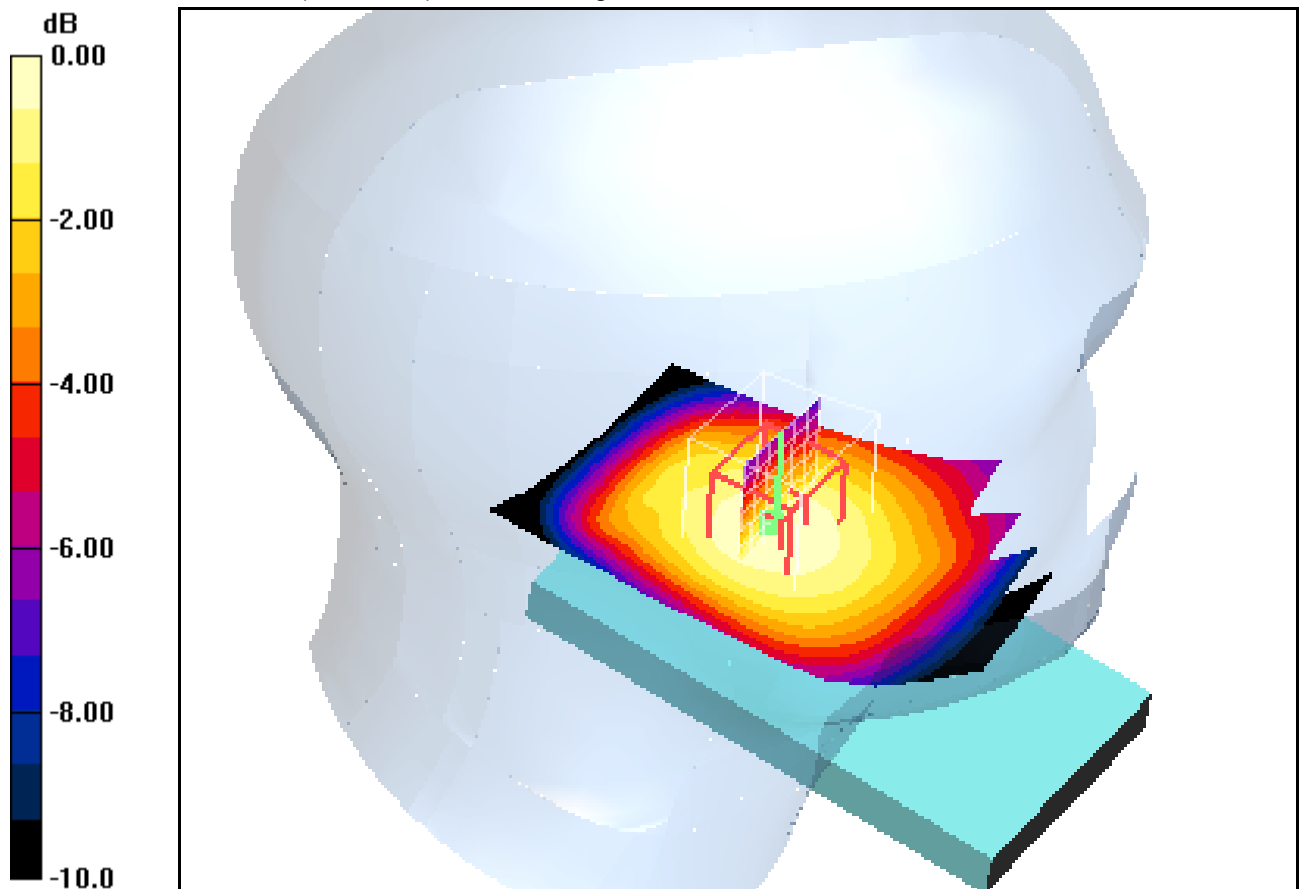
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 28.8 V/m; Power Drift = -0.126 dB

Peak SAR (extrapolated) = 0.799 W/kg

SAR(1 g) = 0.663 mW/g; SAR(10 g) = 0.501 mW/g

Maximum value of SAR (measured) = 0.697 mW/g



0 dB = 0.697mW/g

Additional information:

ambient temperature: 23.6°C; liquid temperature: 22.8°C

Date/Time: 14.06.2012 13:57:03 Date/Time: 14.06.2012 14:04:43

IEEE1528-LeftHandSide-GSM850

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 0.91 \text{ mho/m}$; $\epsilon_r = 41.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - High/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.665 mW/g

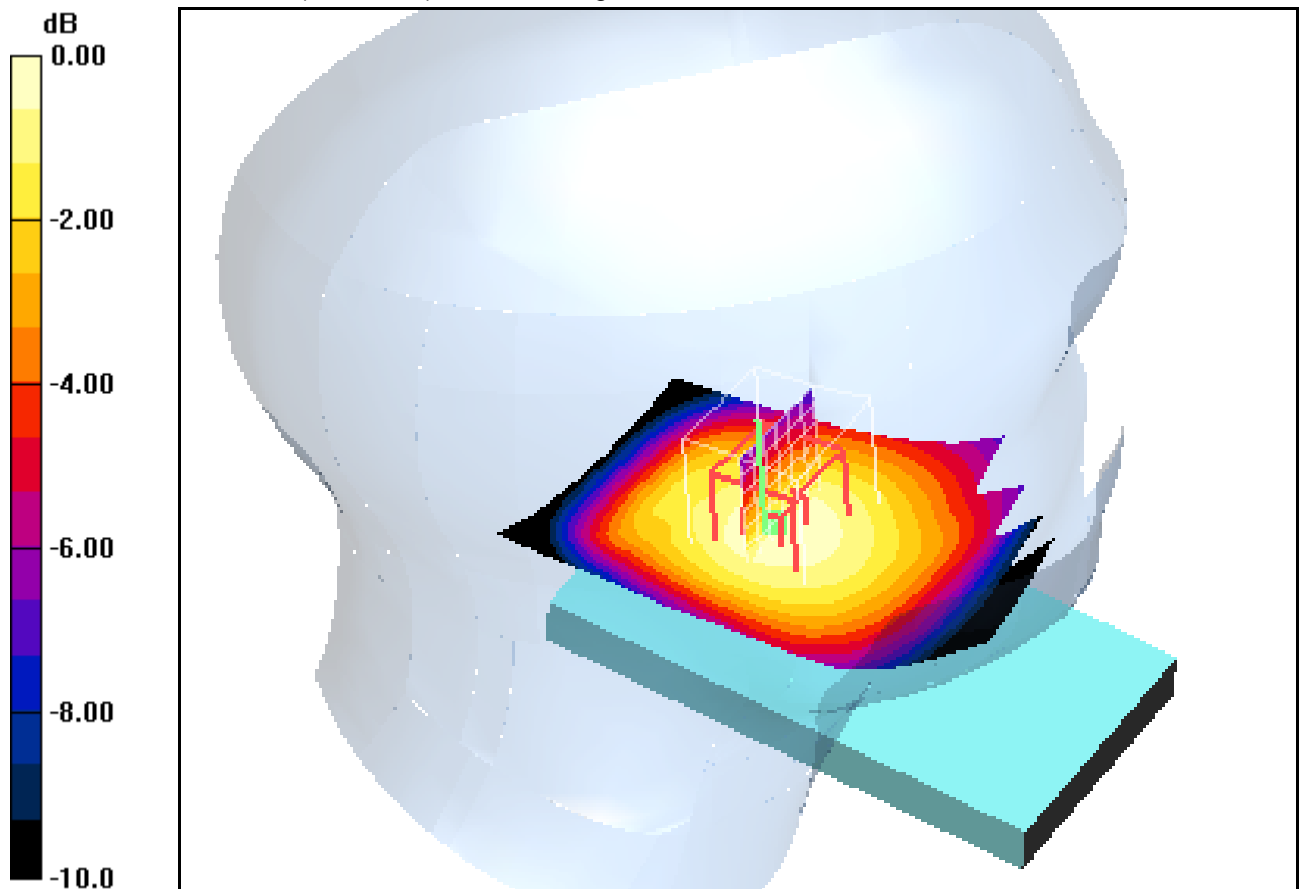
Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 28.0 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 0.773 W/kg

SAR(1 g) = 0.634 mW/g; SAR(10 g) = 0.479 mW/g

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



0 dB = 0.666mW/g

Additional information:

ambient temperature: 23.6°C; liquid temperature: 22.8°C

Date/Time: 14.06.2012 10:37:55 Date/Time: 14.06.2012 10:46:08

IEEE1528-RightHandSide-GSM850

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used: $f = 824.2 \text{ MHz}$; $\sigma = 0.89 \text{ mho/m}$; $\epsilon_r = 42$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Low/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

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

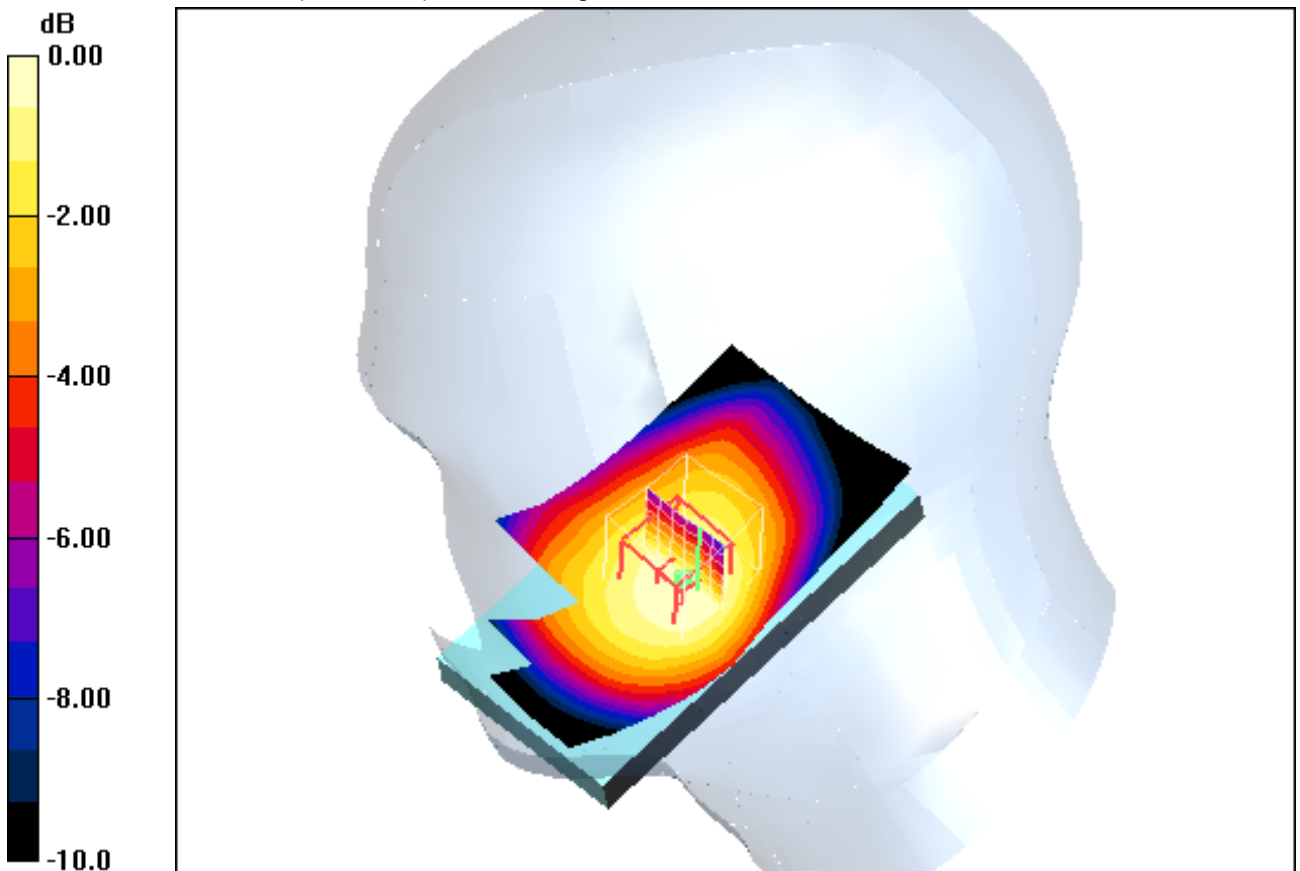
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 37.6 V/m; Power Drift = -0.131 dB

Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.795 mW/g

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



0 dB = 1.11mW/g

Additional information:

ambient temperature: 23.6°C; liquid temperature: 22.8°C

Date/Time: 14.06.2012 11:21:11 Date/Time: 14.06.2012 11:27:15

IEEE1528-RightHandSide-GSM850

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.9 \text{ mho/m}$; $\epsilon_r = 41.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.07 mW/g

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

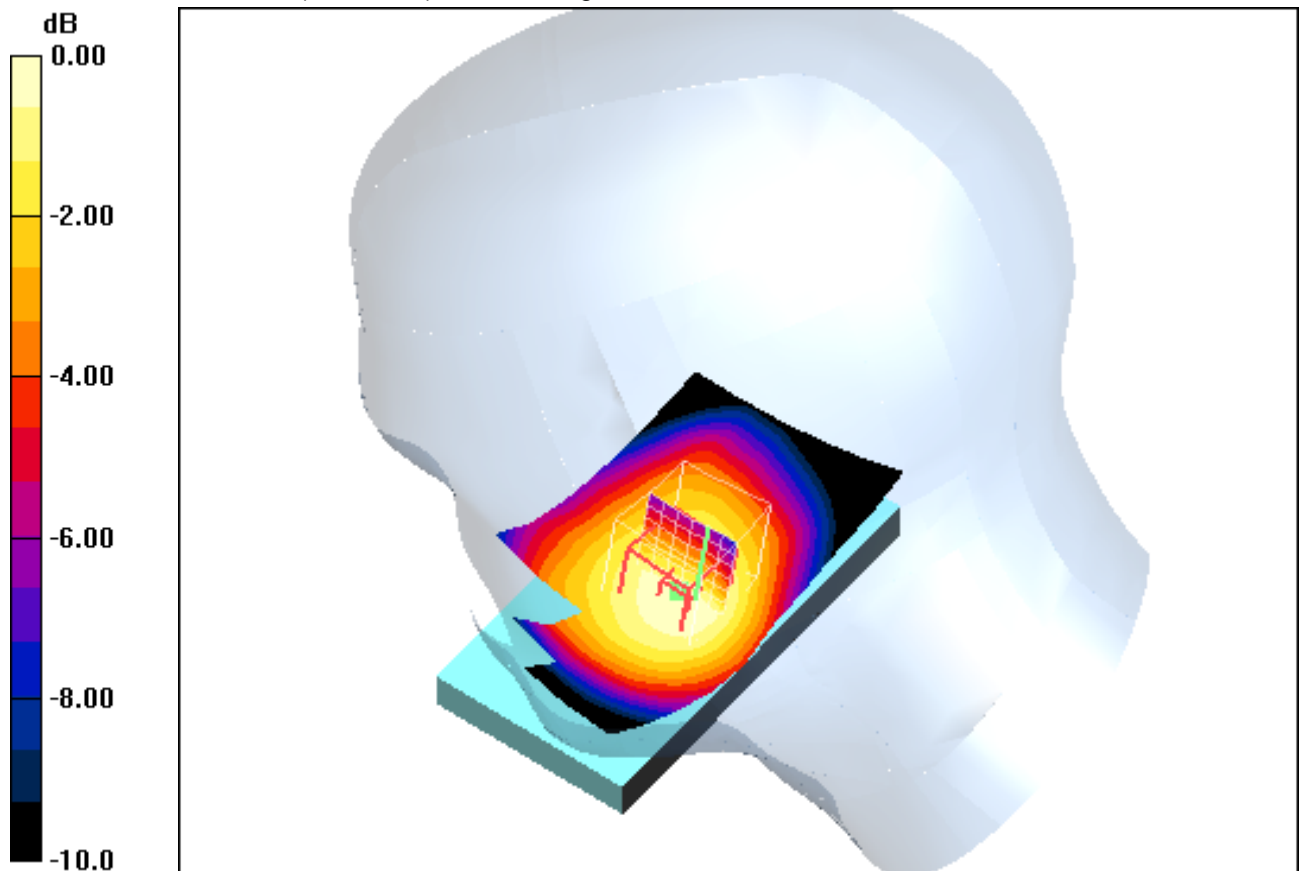
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 35.9 V/m; Power Drift = -0.117 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.978 mW/g; SAR(10 g) = 0.740 mW/g

Maximum value of SAR (measured) = 1.04 mW/g



0 dB = 1.04mW/g

Additional information:

ambient temperature: 23.6°C; liquid temperature: 22.8°C

Date/Time: 14.06.2012 11:41:38 Date/Time: 14.06.2012 11:47:43

IEEE1528-RightHandSide-GSM850

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 0.91 \text{ mho/m}$; $\epsilon_r = 41.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - High/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.00 mW/g

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

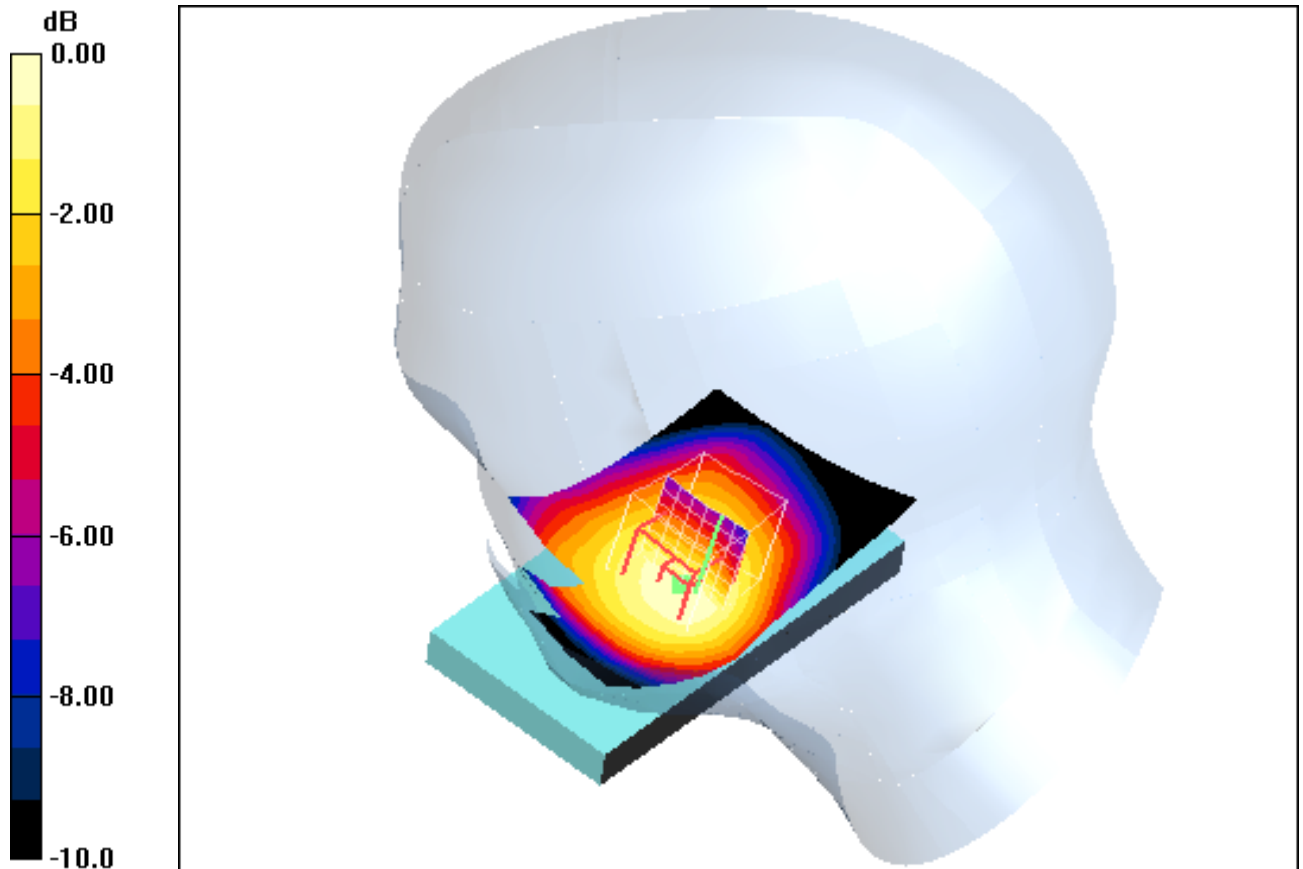
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 34.3 V/m; Power Drift = -0.023 dB

Peak SAR (extrapolated) = 1.16 W/kg

SAR(1 g) = 0.911 mW/g; SAR(10 g) = 0.686 mW/g

Maximum value of SAR (measured) = 0.971 mW/g



0 dB = 0.971mW/g

Additional information:

ambient temperature: 23.6°C; liquid temperature: 22.8°C

Date/Time: 14.06.2012 13:07:11 Date/Time: 14.06.2012 13:14:12

IEEE1528-RightHandSide-GSM850

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used: $f = 824.2 \text{ MHz}$; $\sigma = 0.89 \text{ mho/m}$; $\epsilon_r = 42$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Low/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.655 mW/g

Tilt position - Low/Zoom Scan (7x7x7) (7x10x7)/Cube 0: Measurement grid:

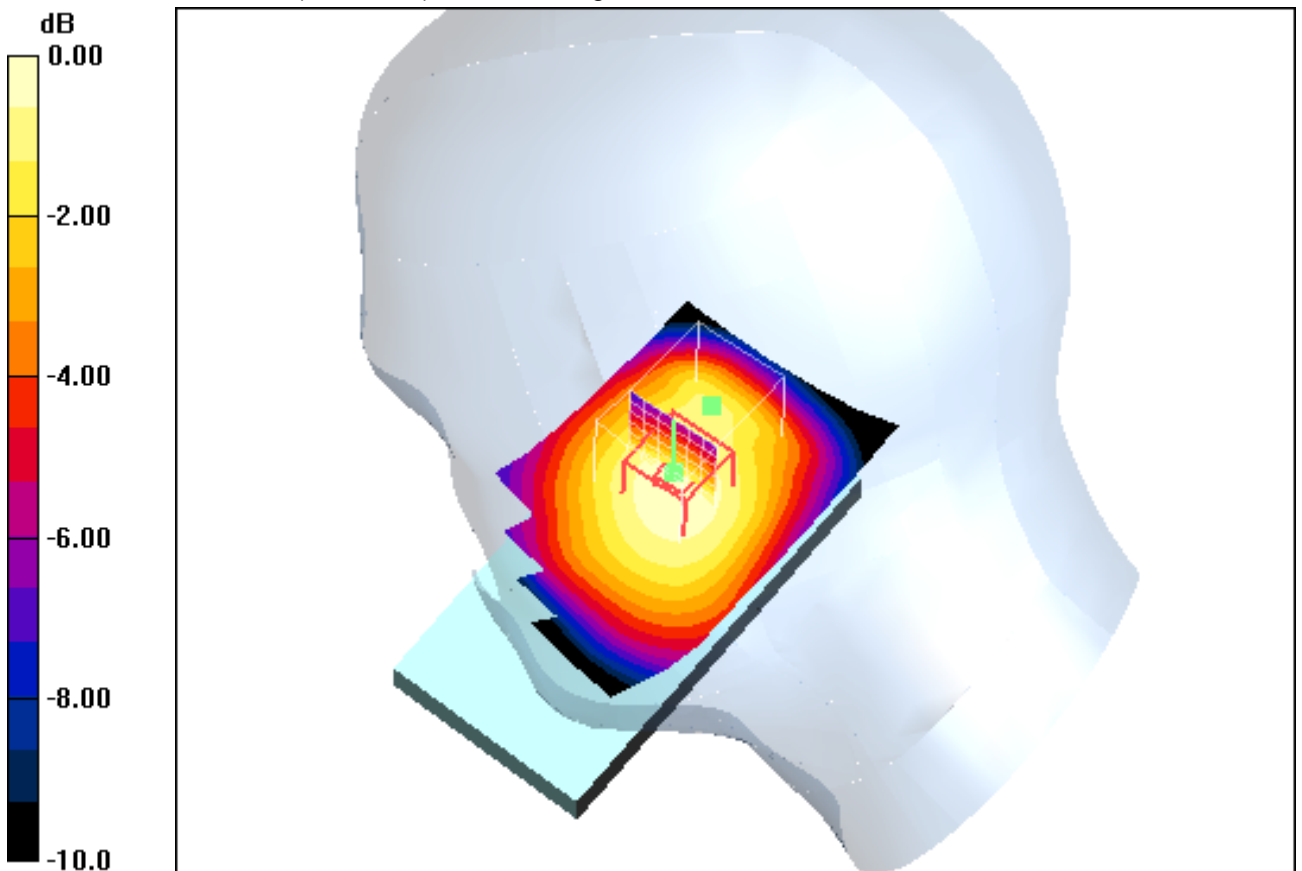
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 28.0 V/m; Power Drift = -0.024 dB

Peak SAR (extrapolated) = 0.766 W/kg

SAR(1 g) = 0.626 mW/g; SAR(10 g) = 0.477 mW/g

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



0 dB = 0.661mW/g

Additional information:

ambient temperature: 23.6°C; liquid temperature: 22.8°C

Date/Time: 14.06.2012 12:41:36 Date/Time: 14.06.2012 12:48:58

IEEE1528-RightHandSide-GSM850

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.9 \text{ mho/m}$; $\epsilon_r = 41.9$; $\rho = 1000 \text{ kg/m}^3$

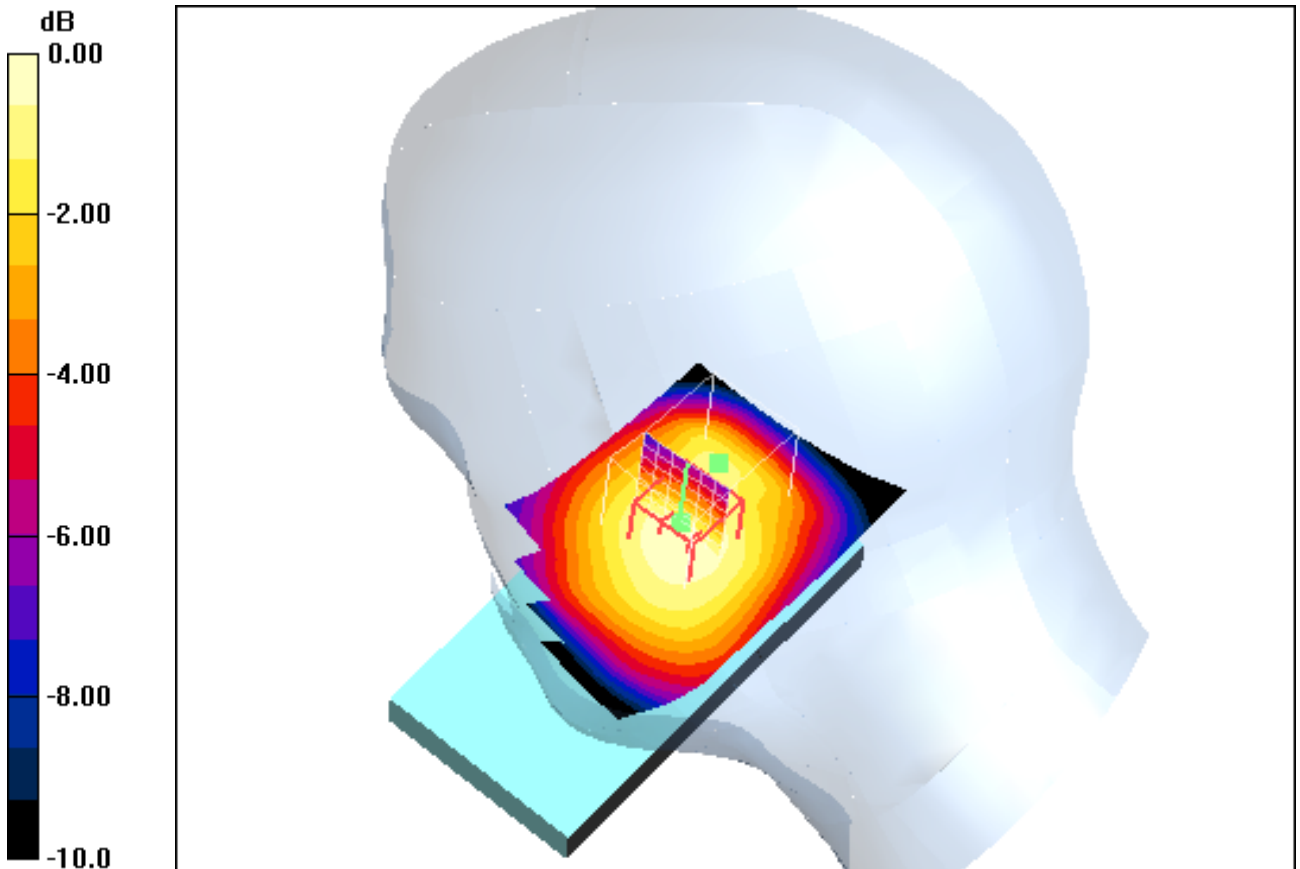
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (interpolated) = 0.655 mW/g

Tilt position - Middle/Zoom Scan (7x7x7) (7x10x7)/Cube 0: Measurement grid:
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
 Reference Value = 28.1 V/m; Power Drift = -0.024 dB
 Peak SAR (extrapolated) = 0.768 W/kg
SAR(1 g) = 0.631 mW/g; SAR(10 g) = 0.478 mW/g
 Maximum value of SAR (measured) = 0.667 mW/g



0 dB = 0.667mW/g

Additional information:

ambient temperature: 23.6°C; liquid temperature: 22.8°C

Date/Time: 14.06.2012 12:16:13 Date/Time: 14.06.2012 12:23:12

IEEE1528-RightHandSide-GSM850

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 0.91 \text{ mho/m}$; $\epsilon_r = 41.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - High/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.667 mW/g

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

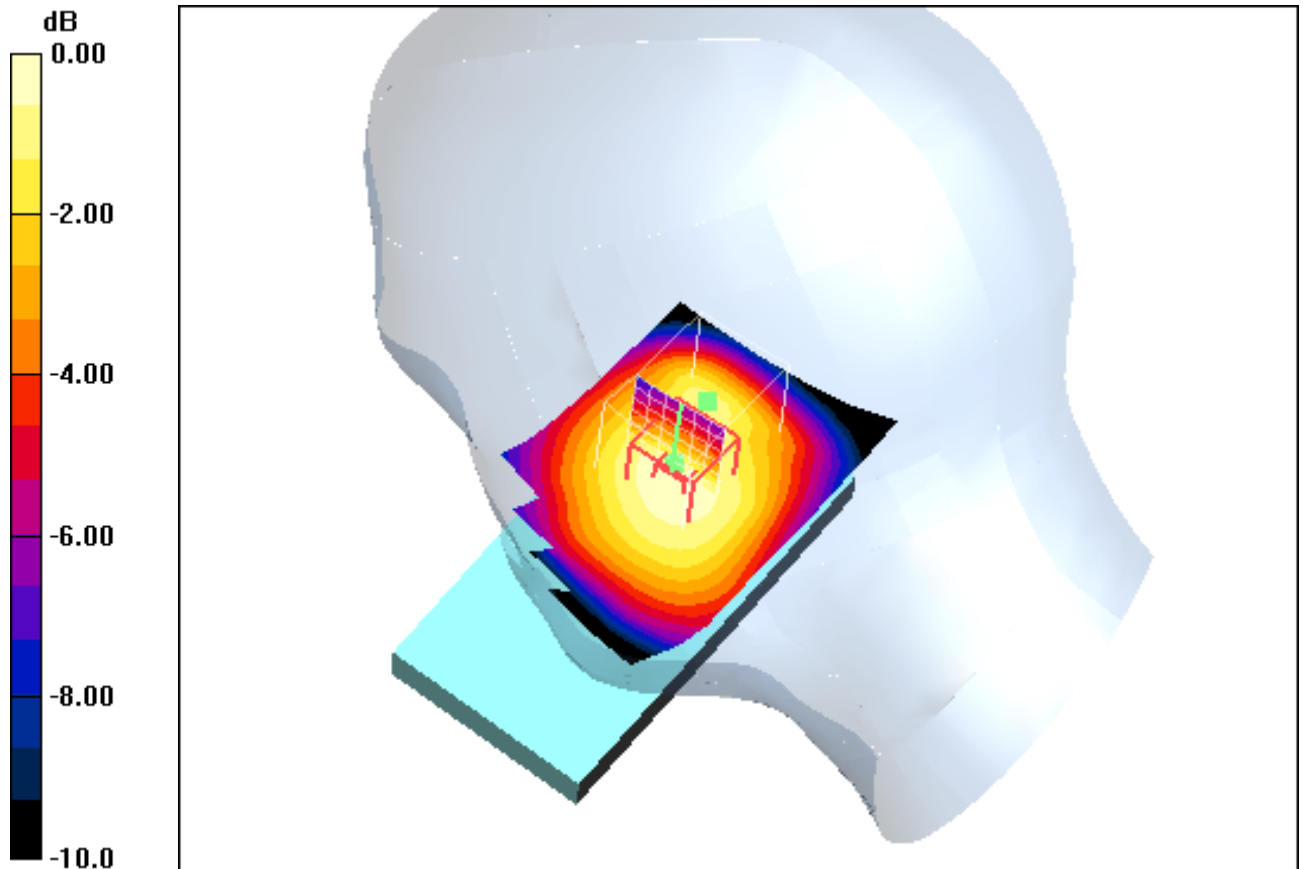
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 28.1 V/m; Power Drift = -0.029 dB

Peak SAR (extrapolated) = 0.787 W/kg

SAR(1 g) = 0.639 mW/g; SAR(10 g) = 0.481 mW/g

Maximum value of SAR (measured) = 0.671 mW/g



0 dB = 0.671mW/g

Additional information:

ambient temperature: 23.6°C; liquid temperature: 22.8°C

Date/Time: 14.06.2012 15:50:43 Date/Time: 14.06.2012 15:57:33

IEEE1528-RightHandSide-GSM850

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used: $f = 824.2 \text{ MHz}$; $\sigma = 0.89 \text{ mho/m}$; $\epsilon_r = 42$; $\rho = 1000 \text{ kg/m}^3$

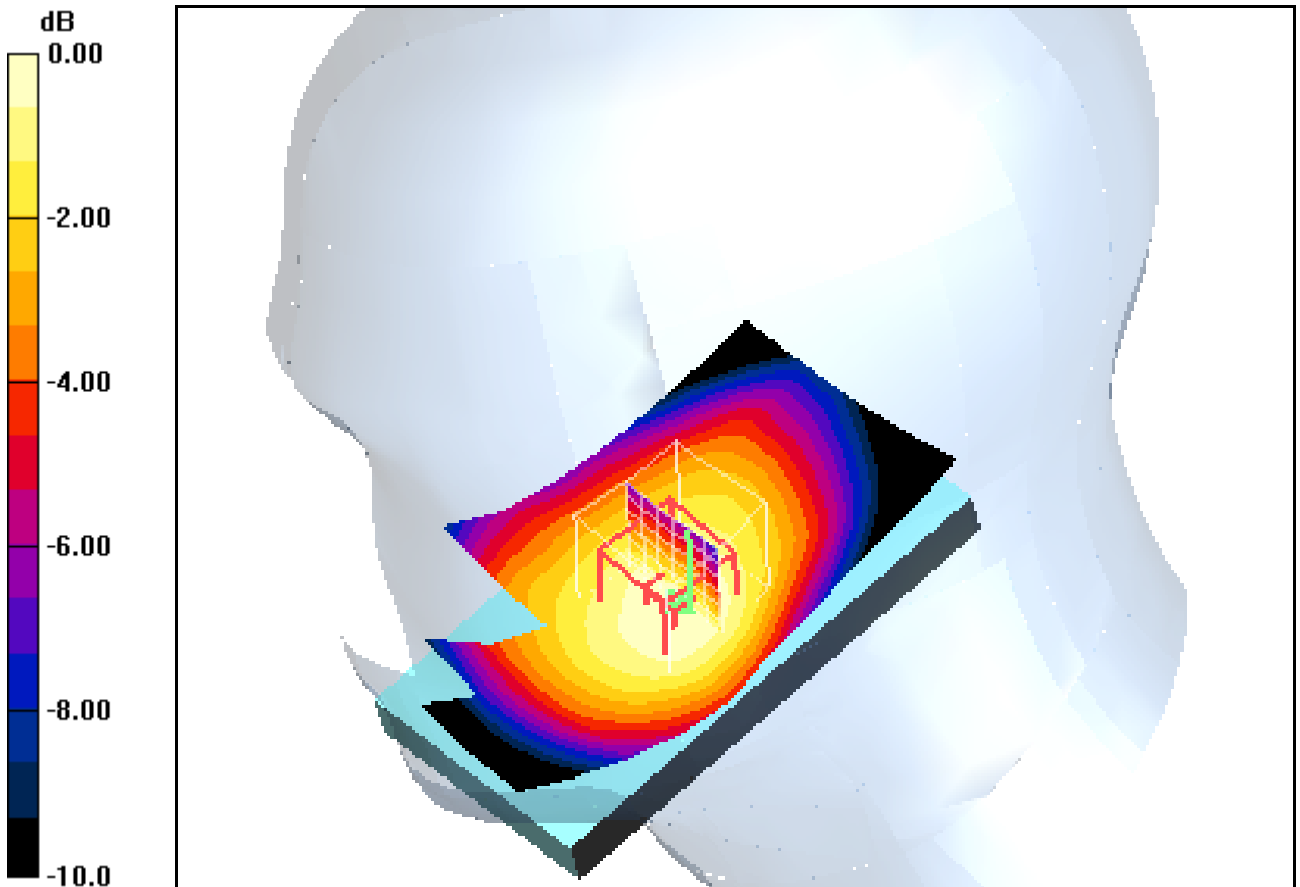
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Low 2/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (interpolated) = 1.12 mW/g

Touch position - Low 2/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
 Reference Value = 37.1 V/m; Power Drift = -0.077 dB
 Peak SAR (extrapolated) = 1.30 W/kg
SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.774 mW/g
 Maximum value of SAR (measured) = 1.08 mW/g



0 dB = 1.08mW/g

Additional information:

ambient temperature: 23.6°C; liquid temperature: 22.8°C

Annex B.2: GSM 850MHz body (hotspot)

Date/Time: 04.06.2012 13:32:30 Date/Time: 04.06.2012 13:40:00

OET65-Body-GSM850 GPRS 2TS

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 55.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.14 mW/g

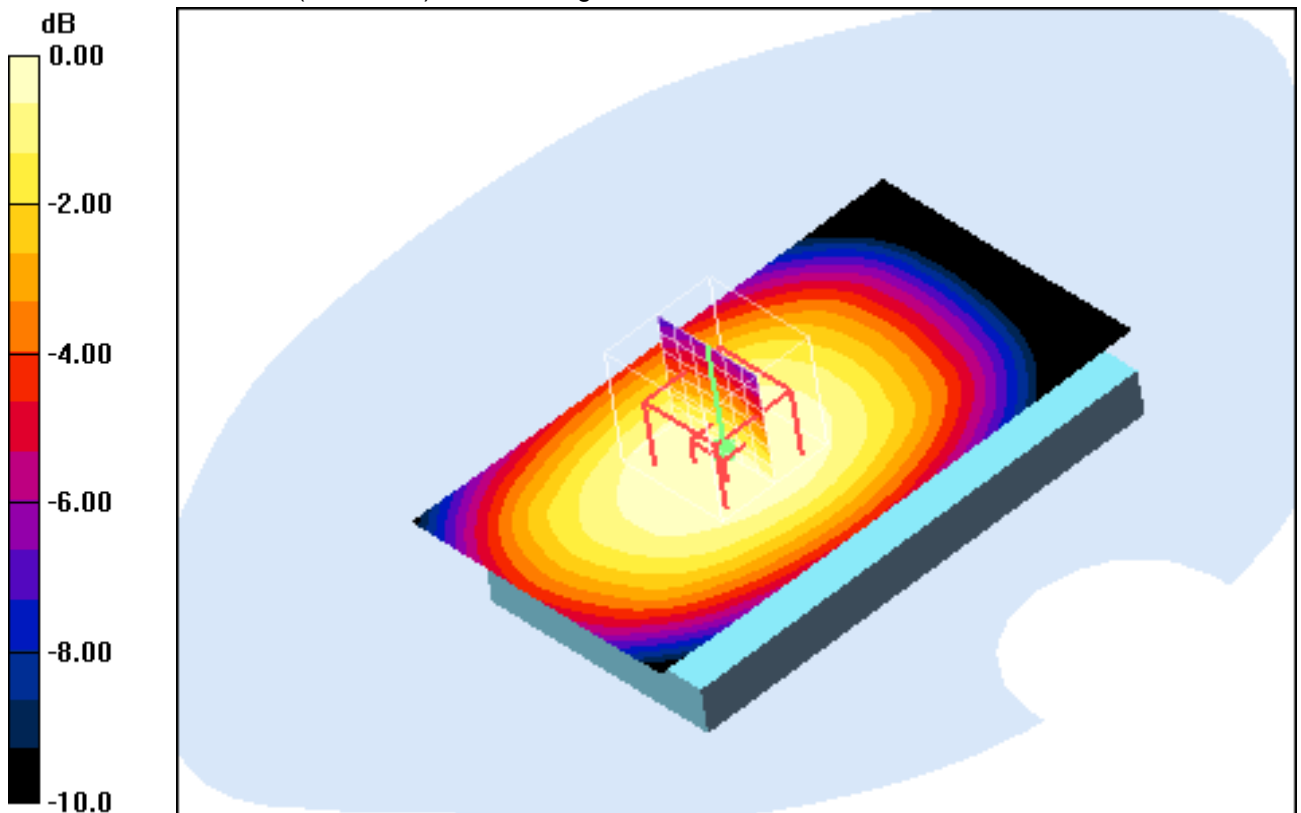
Front position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.1 V/m; Power Drift = -0.140 dB

Peak SAR (extrapolated) = 1.24 W/kg

SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.813 mW/g

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



0 dB = 1.10mW/g

Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.1°C; liquid temperature: 22.3°C

Date/Time: 04.06.2012 13:54:25 Date/Time: 04.06.2012 14:02:03

OET65-Body-GSM850 GPRS 2TS

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.99 \text{ mho/m}$; $\epsilon_r = 55.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.02 mW/g

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

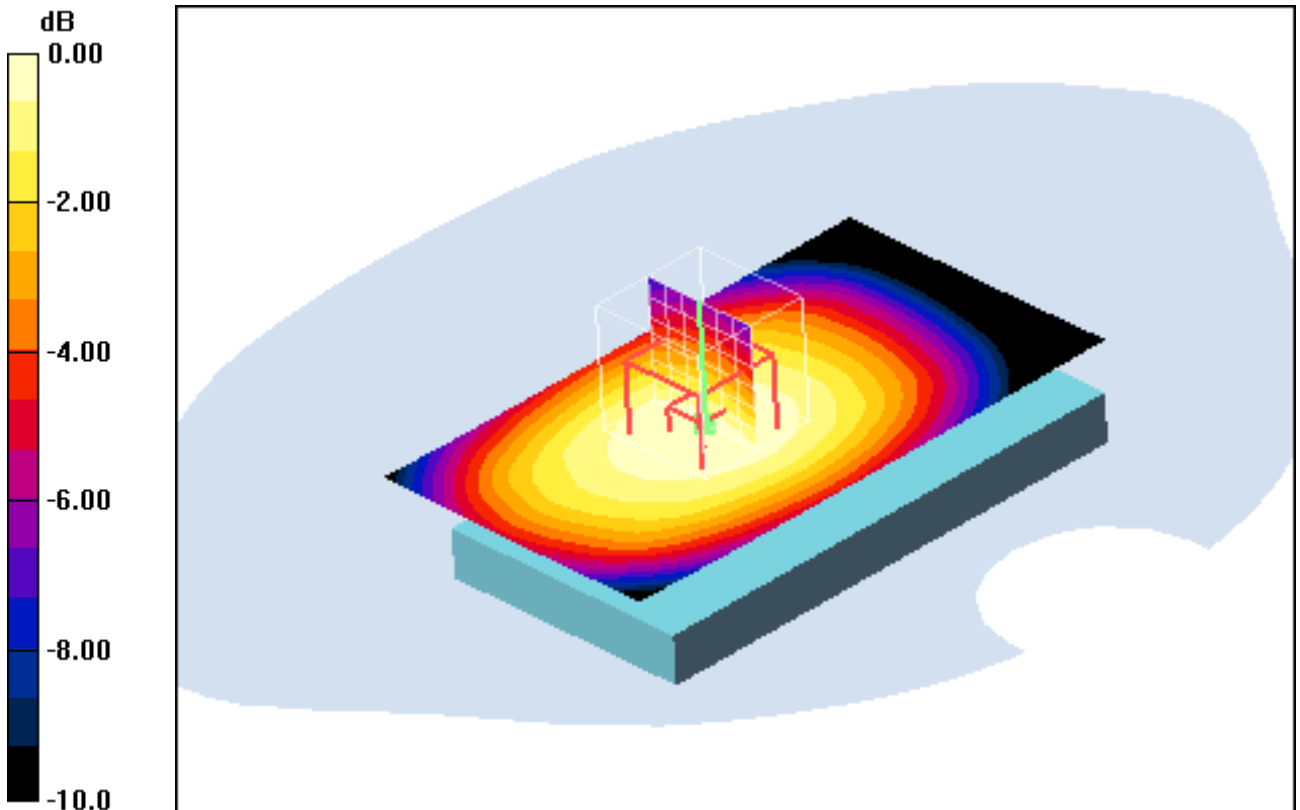
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 33.2 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 1.15 W/kg

SAR(1 g) = 0.967 mW/g; SAR(10 g) = 0.747 mW/g

Maximum value of SAR (measured) = 1.02 mW/g



0 dB = 1.02mW/g

Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.1°C; liquid temperature: 22.3°C

Date/Time: 04.06.2012 14:14:16 Date/Time: 04.06.2012 14:48:50

OET65-Body-GSM850 GPRS 2TS

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 1 \text{ mho/m}$; $\epsilon_r = 55.1$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - High/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.968 mW/g

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

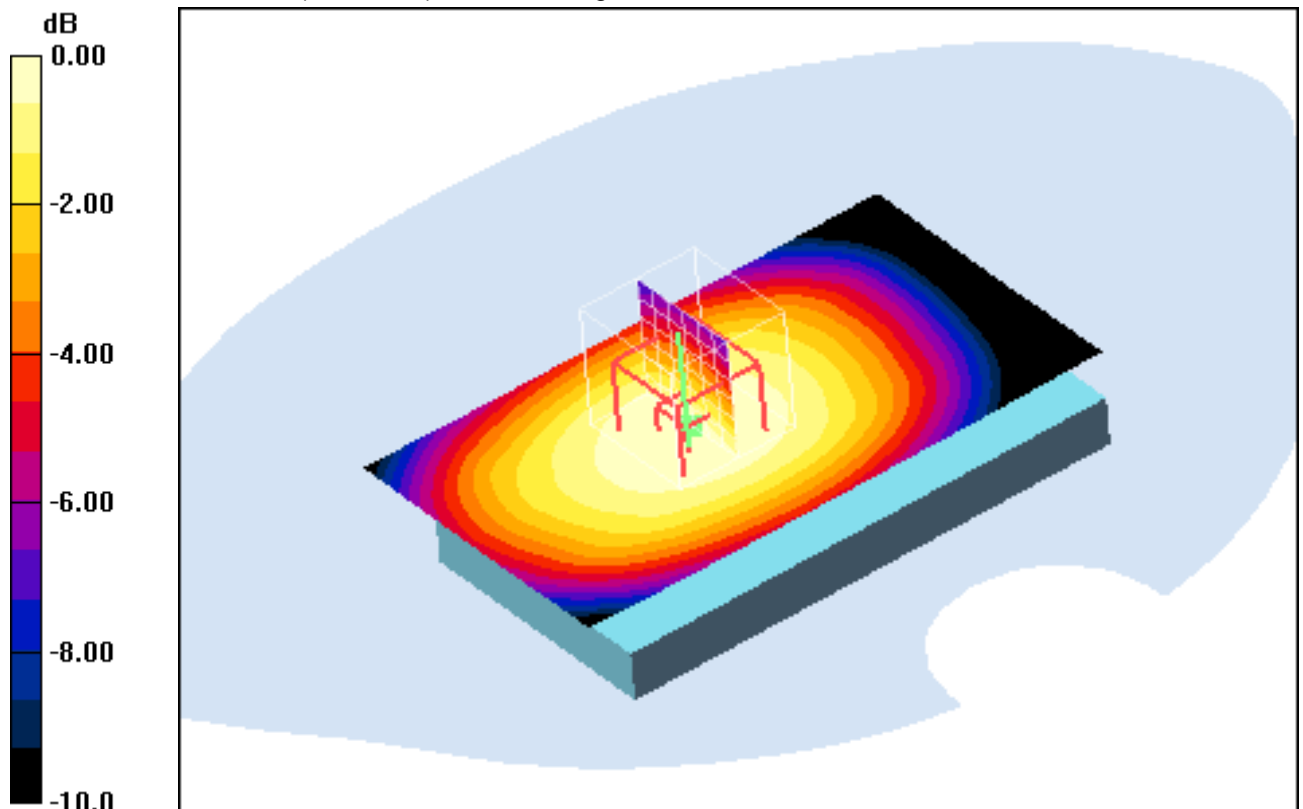
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 32.3 V/m; Power Drift = -0.053 dB

Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.923 mW/g; SAR(10 g) = 0.711 mW/g

Maximum value of SAR (measured) = 0.964 mW/g



0 dB = 0.964mW/g

Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.1°C; liquid temperature: 22.3°C

Date/Time: 04.06.2012 10:36:17 Date/Time: 04.06.2012 10:43:16

OET65-Body-GSM850 GPRS 2TS

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used: $f = 824.2 \text{ MHz}$; $\sigma = 0.97 \text{ mho/m}$; $\epsilon_r = 55.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Low/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.02 mW/g

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

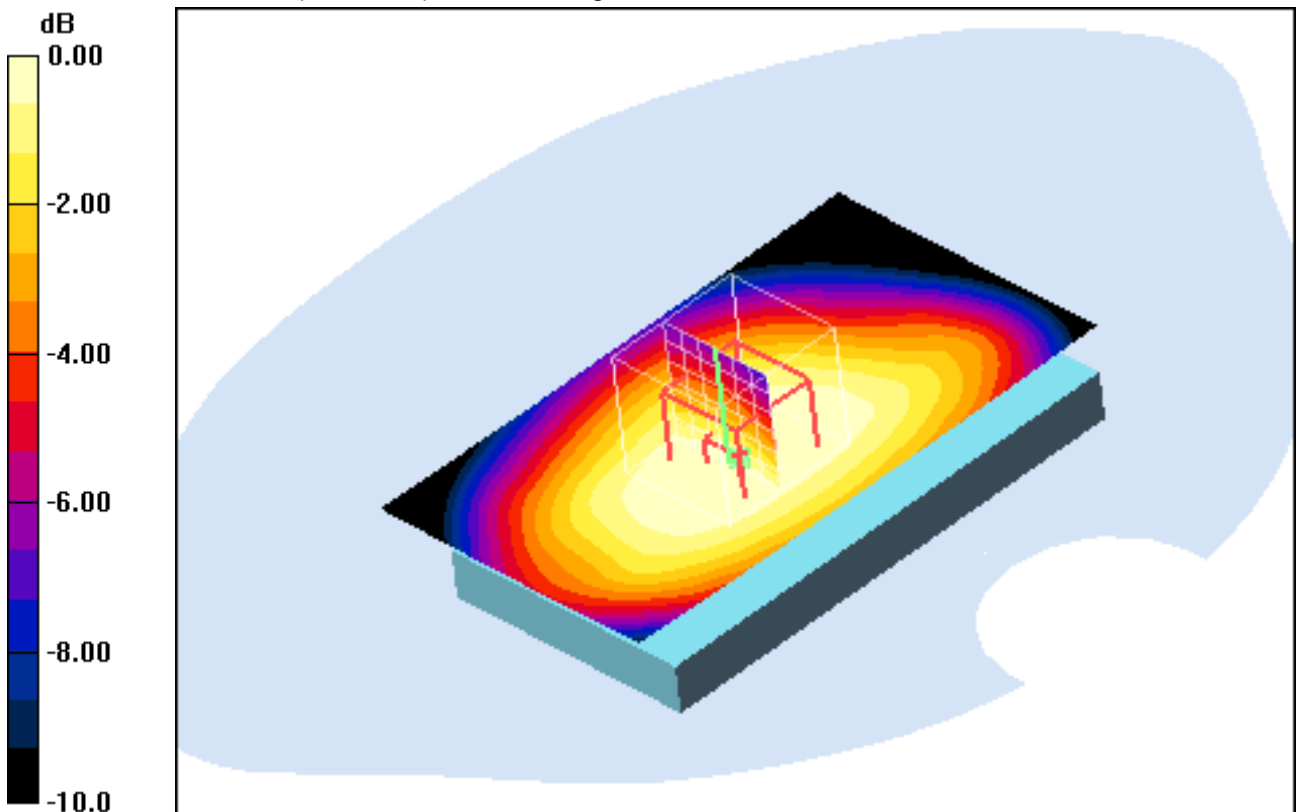
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 33.6 V/m; Power Drift = -0.156 dB

Peak SAR (extrapolated) = 1.14 W/kg

SAR(1 g) = 0.930 mW/g; SAR(10 g) = 0.714 mW/g

Maximum value of SAR (measured) = 0.976 mW/g



0 dB = 0.976mW/g

Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.1°C; liquid temperature: 22.3°C

Date/Time: 04.06.2012 10:58:29 Date/Time: 04.06.2012 11:06:13

OET65-Body-GSM850 GPRS 2TS

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.99 \text{ mho/m}$; $\epsilon_r = 55.2$; $\rho = 1000 \text{ kg/m}^3$

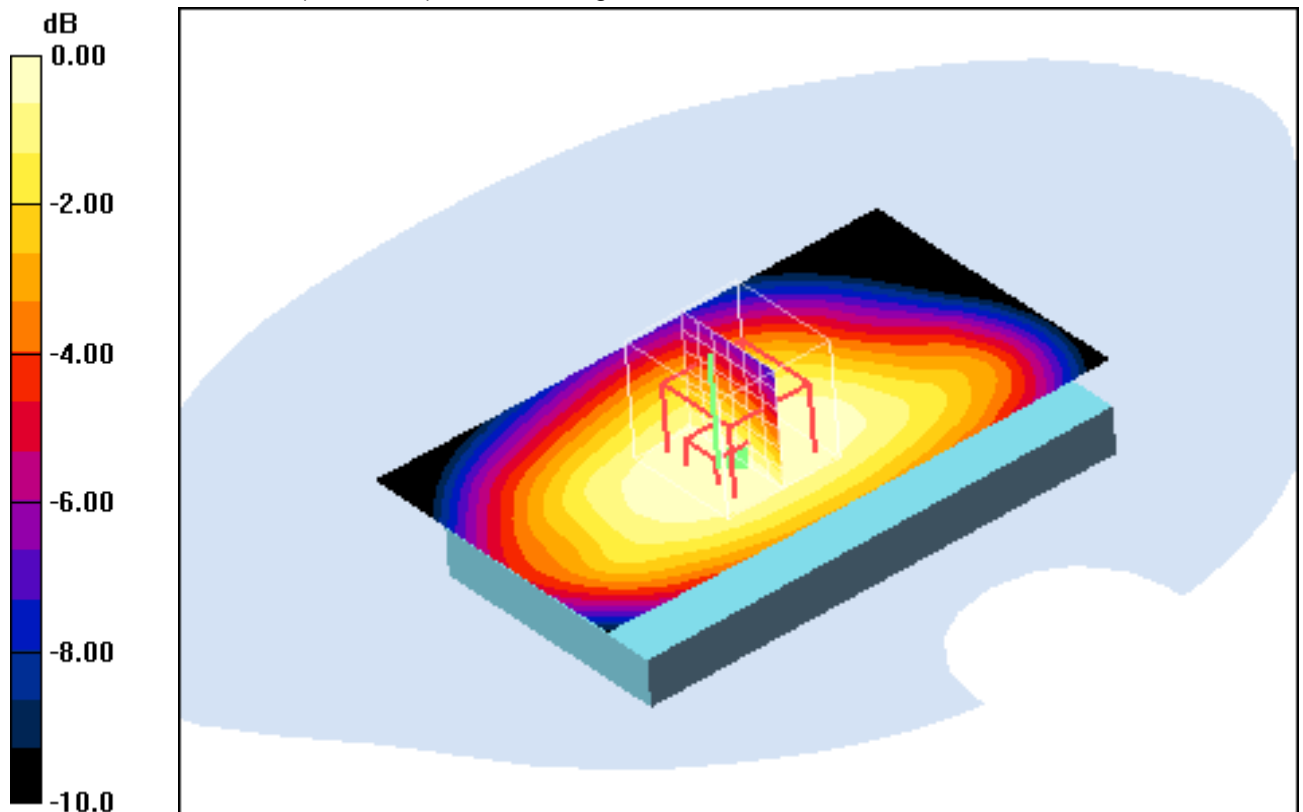
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (interpolated) = 0.929 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 = 32.0 V/m; Power Drift = 0.01 dB
 Peak SAR (extrapolated) = 1.08 W/kg
SAR(1 g) = 0.876 mW/g; SAR(10 g) = 0.674 mW/g
 Maximum value of SAR (measured) = 0.921 mW/g



0 dB = 0.921mW/g

Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.1°C; liquid temperature: 22.3°C

Date/Time: 04.06.2012 11:19:24 Date/Time: 04.06.2012 11:27:37

OET65-Body-GSM850 GPRS 2TS

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 1 \text{ mho/m}$; $\epsilon_r = 55.1$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - High/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.813 mW/g

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

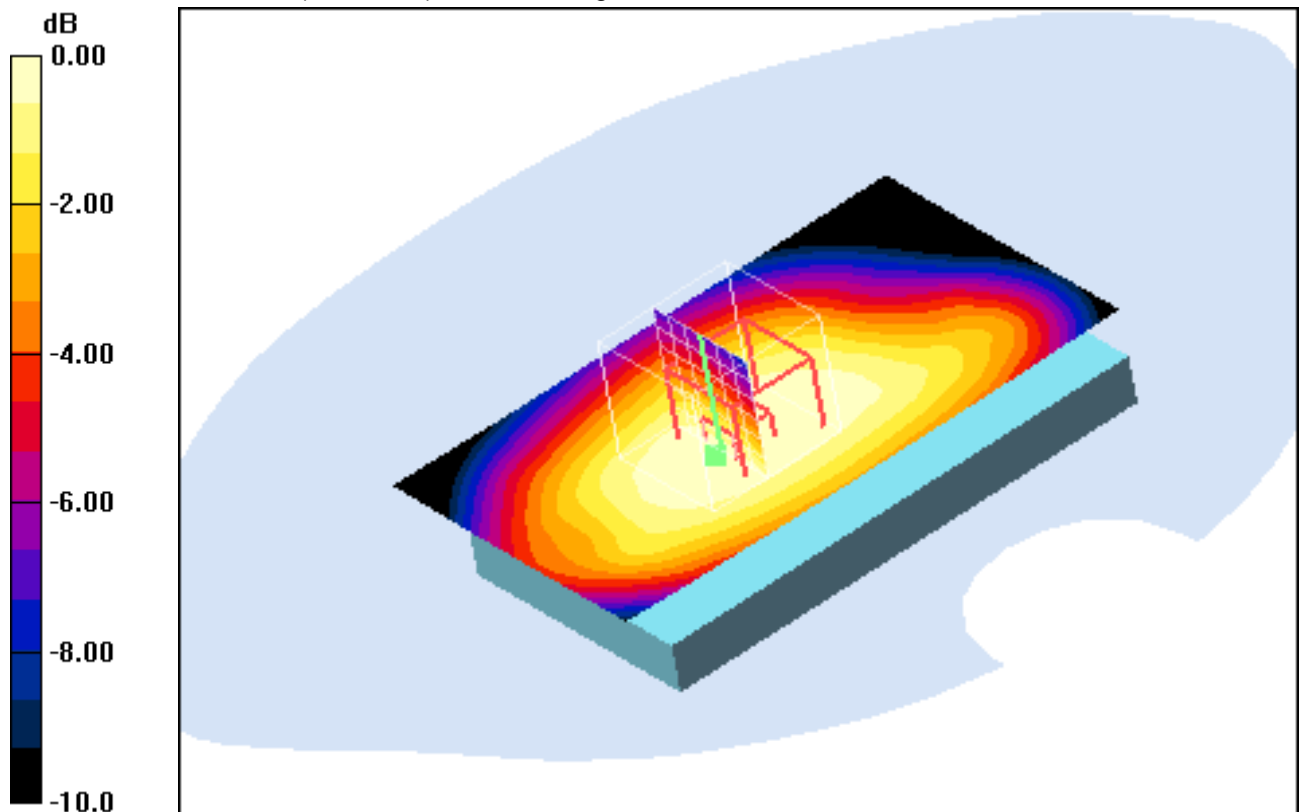
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 29.6 V/m; Power Drift = 0.059 dB

Peak SAR (extrapolated) = 0.952 W/kg

SAR(1 g) = 0.776 mW/g; SAR(10 g) = 0.595 mW/g

Maximum value of SAR (measured) = 0.814 mW/g



0 dB = 0.814mW/g

Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.1°C; liquid temperature: 22.3°C

Date/Time: 04.06.2012 12:19:50 Date/Time: 04.06.2012 12:26:14

OET65-Body-GSM850 GPRS 2TS

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.99 \text{ mho/m}$; $\epsilon_r = 55.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Edge left position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.854 mW/g

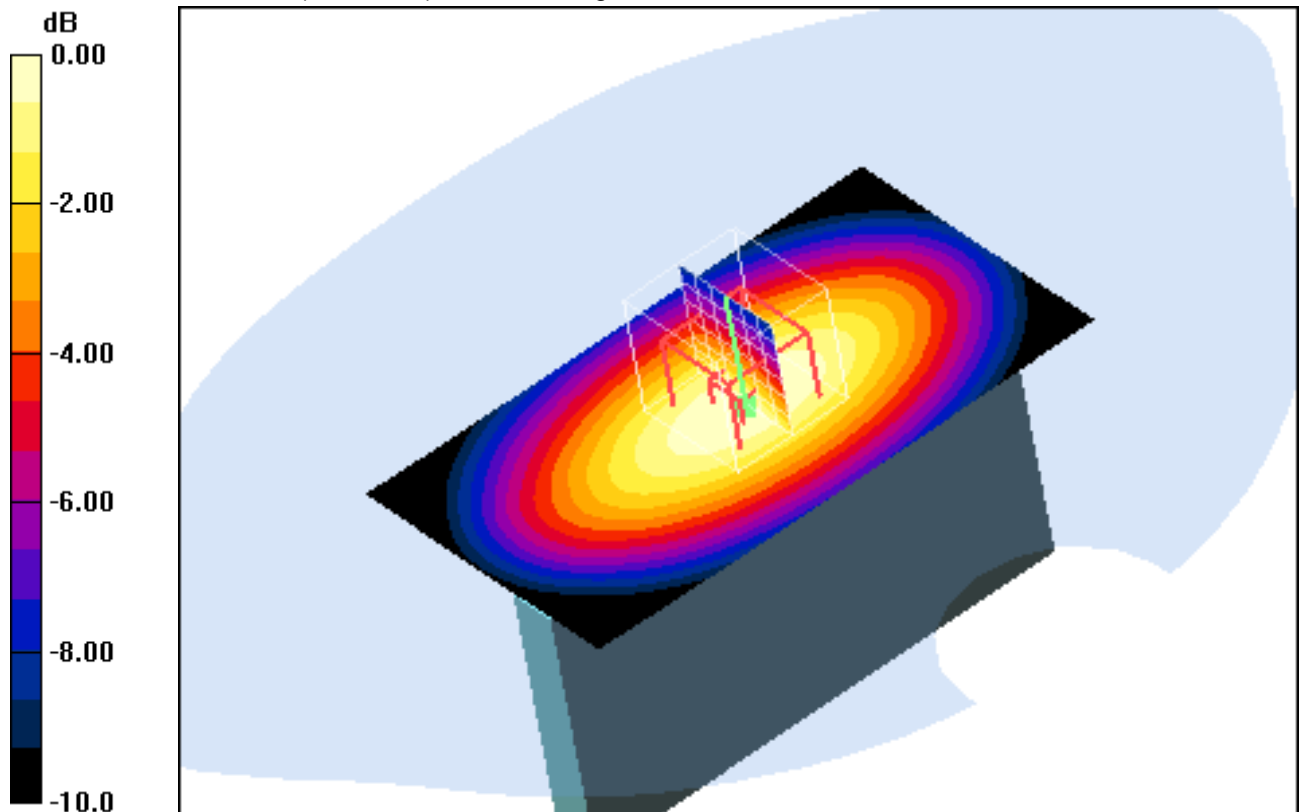
Edge left position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 29.6 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.06 W/kg

SAR(1 g) = 0.792 mW/g; SAR(10 g) = 0.556 mW/g

Maximum value of SAR (measured) = 0.851 mW/g



0 dB = 0.851mW/g

Additional information:

position or distance of DUT to SAM (if not standard head positions) :

ambient temperature: °C; liquid temperature: °C

Date/Time: 04.06.2012 12:41:32 Date/Time: 04.06.2012 12:48:42

OET65-Body-GSM850 GPRS 2TS

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.99 \text{ mho/m}$; $\epsilon_r = 55.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Edge right position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.760 mW/g

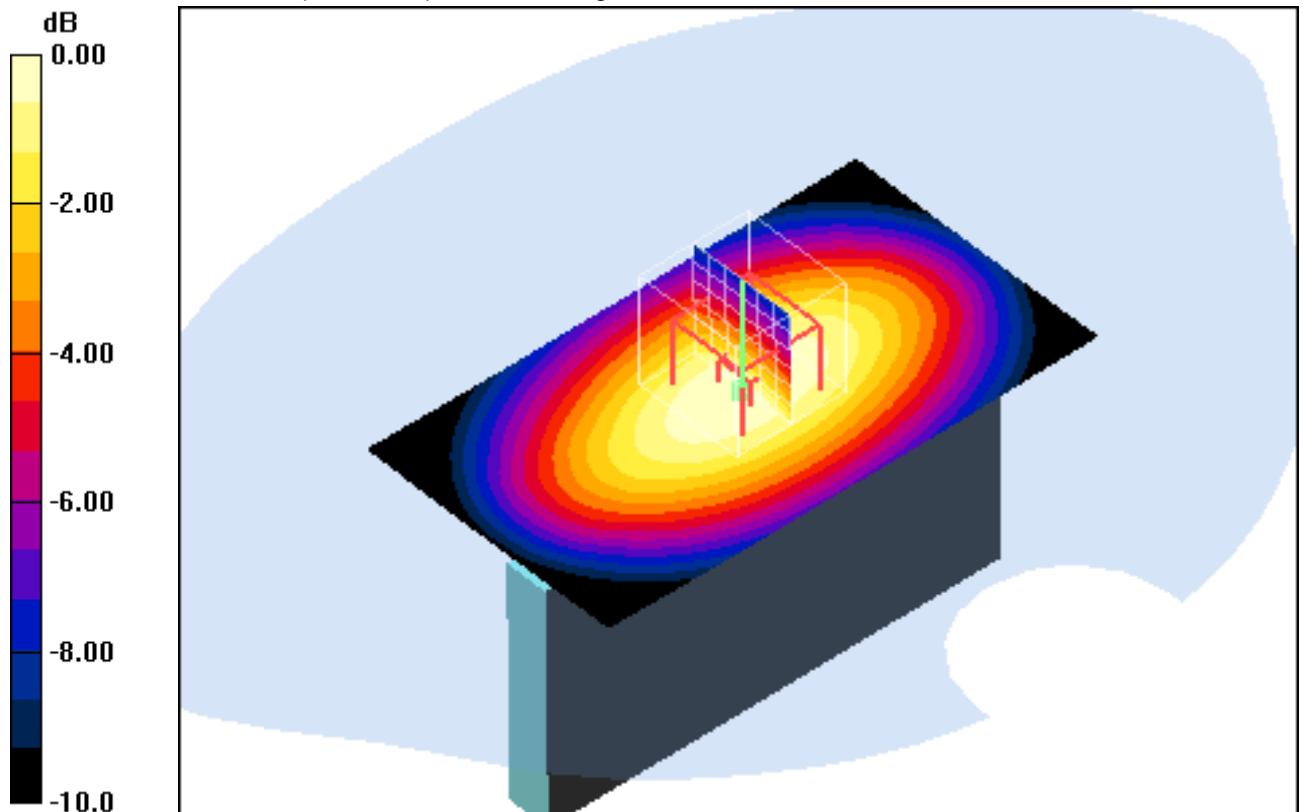
Edge right position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 27.7 V/m; Power Drift = 0.014 dB

Peak SAR (extrapolated) = 0.935 W/kg

SAR(1 g) = 0.709 mW/g; SAR(10 g) = 0.502 mW/g

Maximum value of SAR (measured) = 0.752 mW/g



0 dB = 0.752mW/g

Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.1°C; liquid temperature: 22.3°C

Date/Time: 04.06.2012 13:07:58 Date/Time: 04.06.2012 13:14:14

OET65-Body-GSM850 GPRS 2TS

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.99 \text{ mho/m}$; $\epsilon_r = 55.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Edge bottom position - Middle/Area Scan (61x61x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.153 mW/g

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

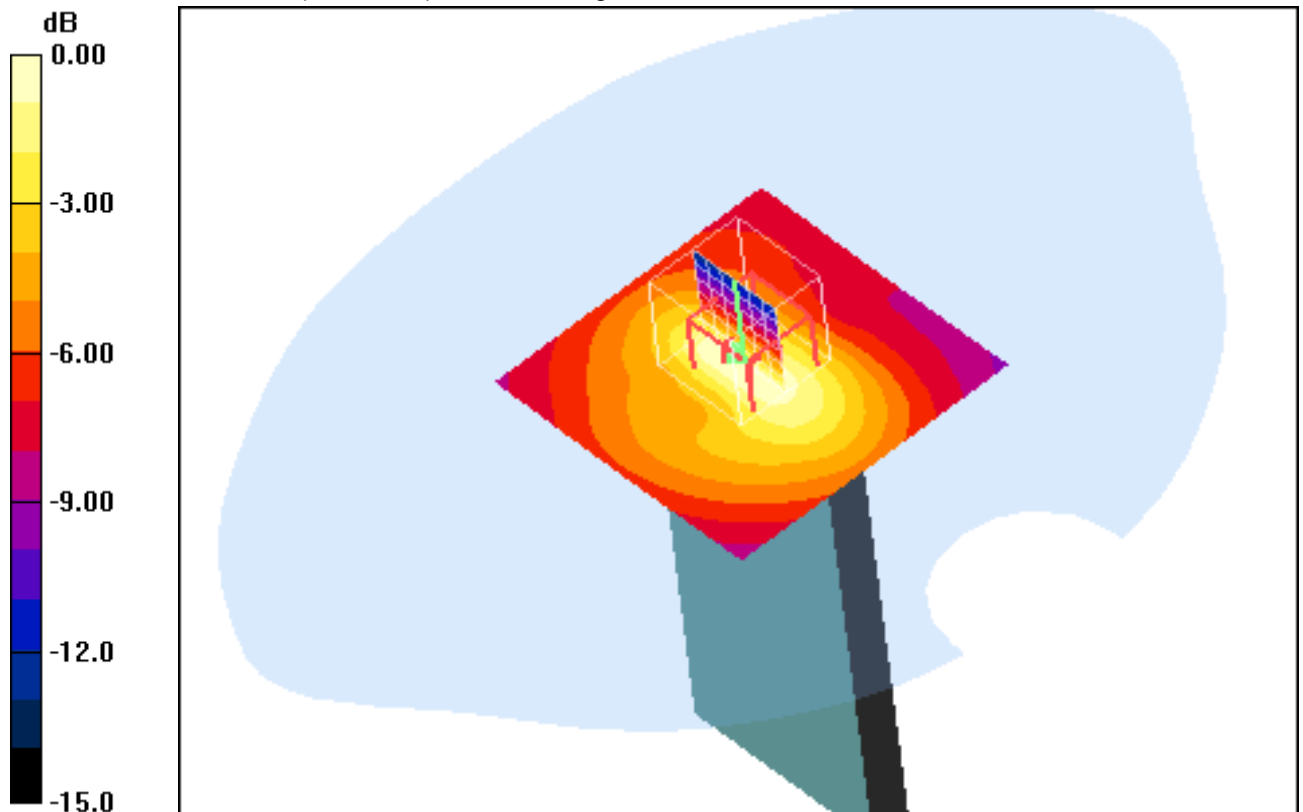
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.9 V/m; Power Drift = -0.050 dB

Peak SAR (extrapolated) = 0.342 W/kg

SAR(1 g) = 0.147 mW/g; SAR(10 g) = 0.078 mW/g

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



0 dB = 0.158mW/g

Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.1°C; liquid temperature: 22.3°C

Date/Time: 04.06.2012 18:21:27 Date/Time: 04.06.2012 18:42:33

OET65-Body-GSM850 GPRS 2TS CMWC

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used: $f = 824.2 \text{ MHz}$; $\sigma = 0.97 \text{ mho/m}$; $\epsilon_r = 55.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Low CMWC/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.08 mW/g

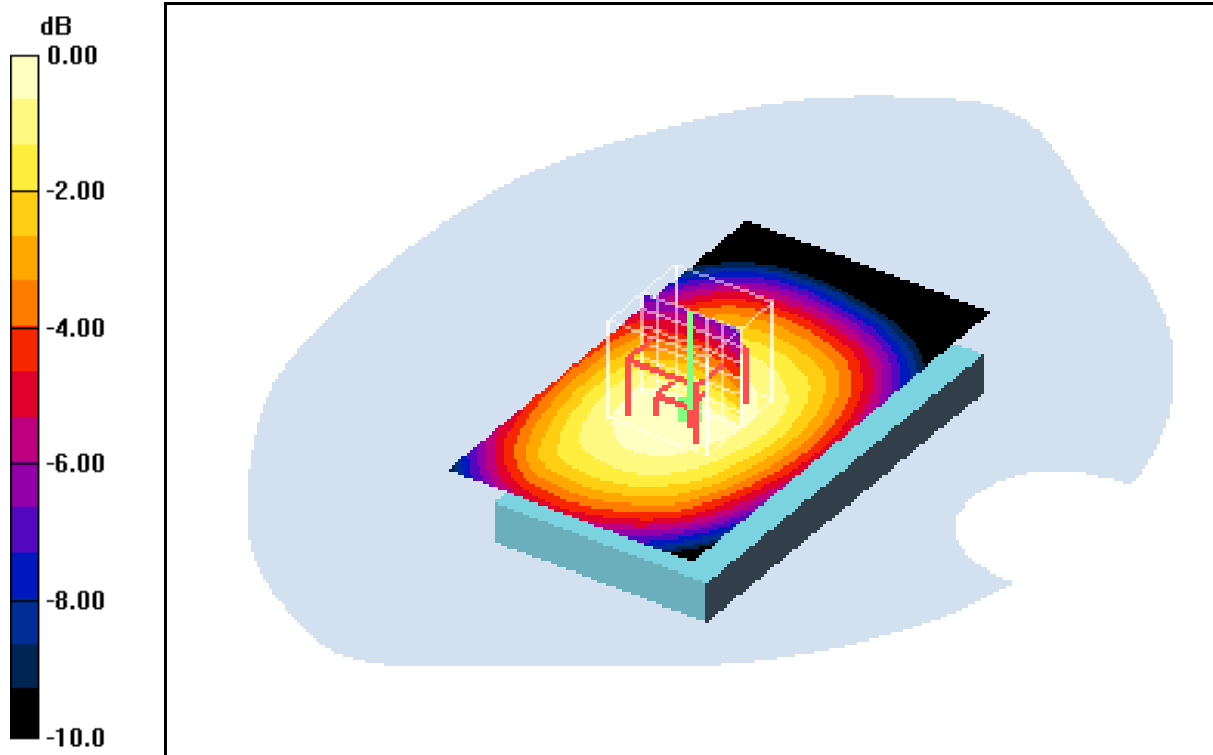
Front position - Low CMWC/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 34.1 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.22 W/kg

SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.784 mW/g

Maximum value of SAR (measured) = 1.08 mW/g



0 dB = 1.08mW/g

Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 22.1°C; liquid temperature: 22.3°C

Annex B.3: GSM 850MHz body worn

Date/Time: 04.06.2012 15:03:42 Date/Time: 04.06.2012 15:11:14

OET65-Body-GSM850 1TS

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 55.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.494 mW/g

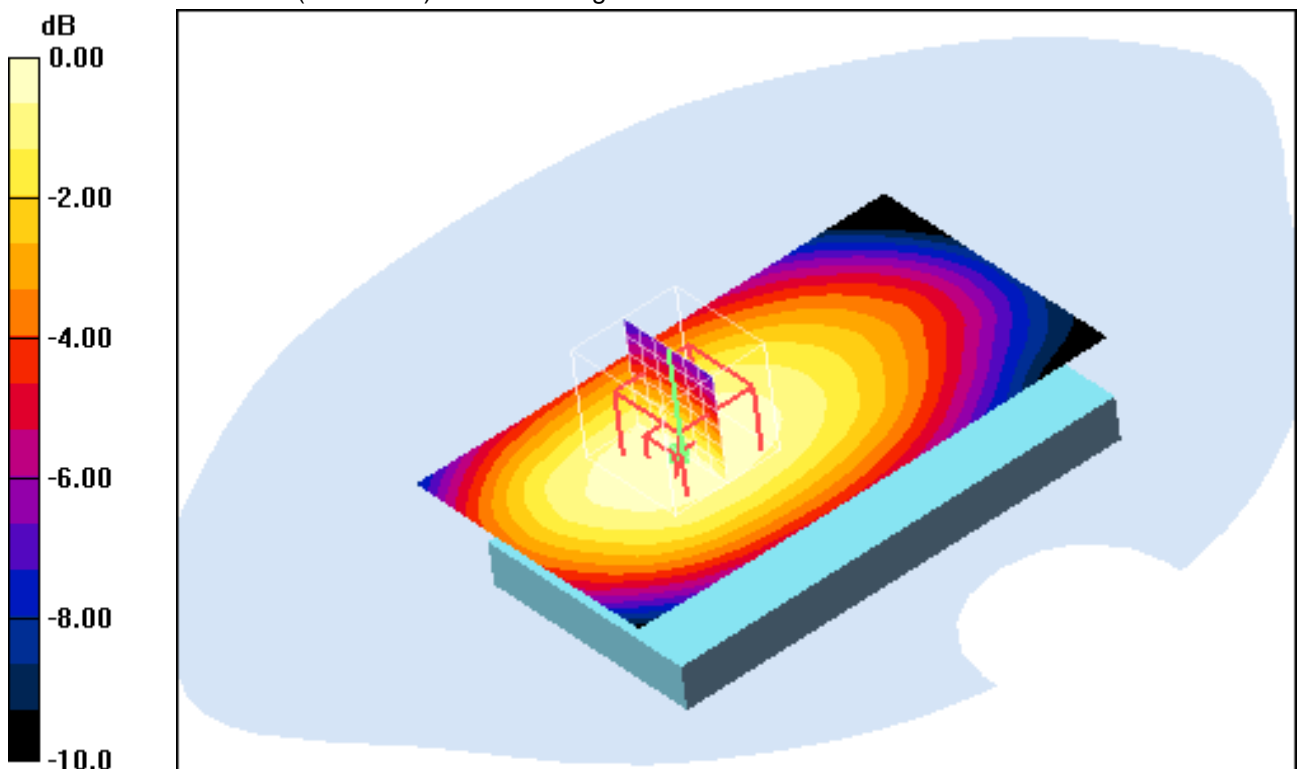
Front position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.3 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 0.577 W/kg

SAR(1 g) = 0.470 mW/g; SAR(10 g) = 0.358 mW/g

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



0 dB = 0.497mW/g

Additional information:

position or distance of DUT to SAM: 15 mm

ambient temperature: 22.1°C; liquid temperature: 22.3°C

Date/Time: 05.07.2012 14:06:50 Date/Time: 05.07.2012 14:24:32

OET65-Body-GSM850 GPRS 2TS 15mm

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used: $f = 824.2 \text{ MHz}$; $\sigma = 0.97 \text{ mho/m}$; $\epsilon_r = 55.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

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

Front position - Low 15mm/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.925 mW/g

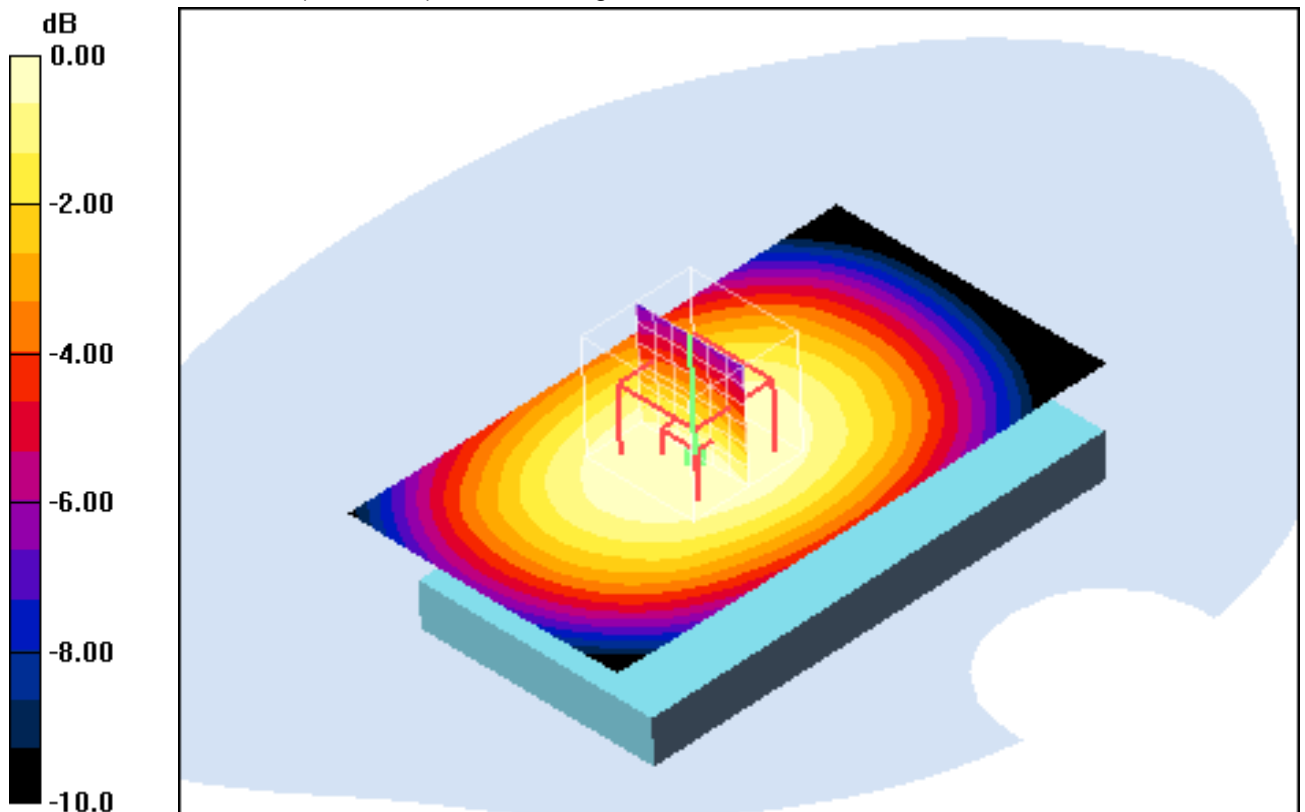
Front position - Low 15mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 31.4 V/m; Power Drift = -0.108 dB

Peak SAR (extrapolated) = 0.950 W/kg

SAR(1 g) = 0.829 mW/g; SAR(10 g) = 0.646 mW/g

Maximum value of SAR (measured) = 0.872 mW/g



0 dB = 0.872mW/g

Additional information:

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.8°C; liquid temperature: 23.5°C

Annex B.4: GSM 1900MHz head

Date/Time: 08.06.2012 15:01:49 Date/Time: 08.06.2012 15:09:08

IEEE1528-LeftHandSide-GSM1900

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL1900 Medium parameters used: $f = 1850.2 \text{ MHz}$; $\sigma = 1.34 \text{ mho/m}$; $\epsilon_r = 40$; $\rho = 1000 \text{ kg/m}^3$

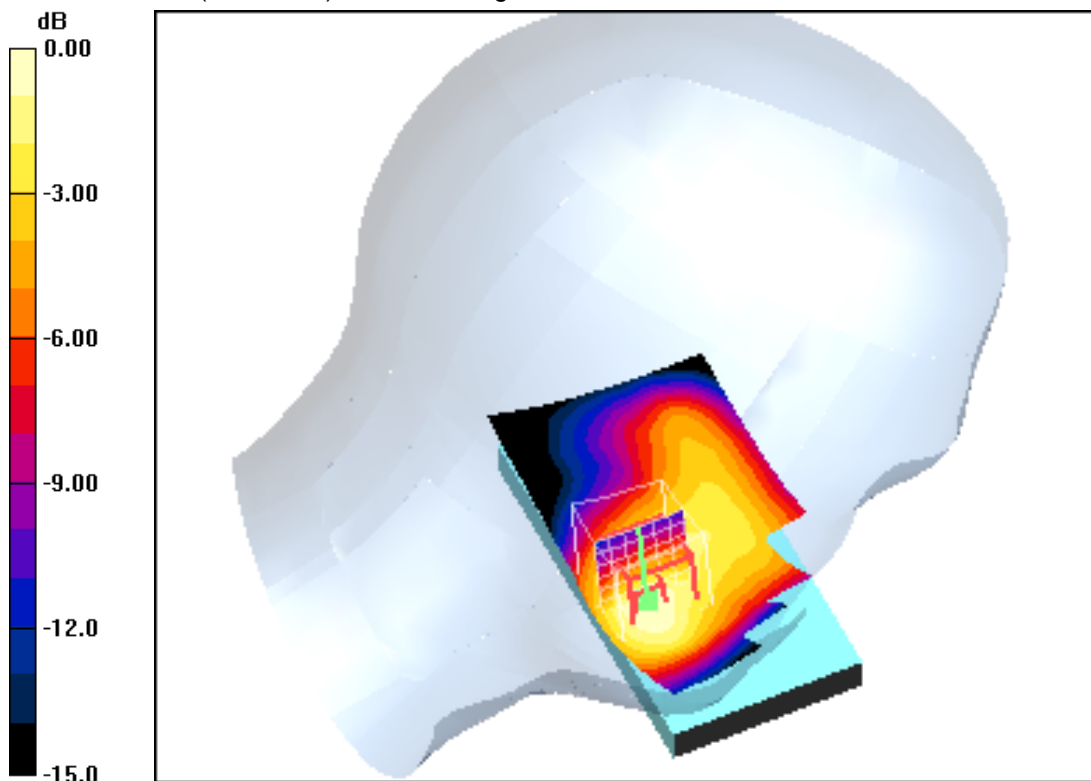
Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Low/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (interpolated) = 0.769 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 = 24.3 V/m; Power Drift = 0.050 dB
 Peak SAR (extrapolated) = 1.05 W/kg
SAR(1 g) = 0.692 mW/g; SAR(10 g) = 0.435 mW/g
 Maximum value of SAR (measured) = 0.741 mW/g



0 dB = 0.741mW/g

Additional information:

ambient temperature: 22.0°C; liquid temperature: 22.4°C

Date/Time: 08.06.2012 15:24:32 Date/Time: 08.06.2012 15:30:37

IEEE1528-LeftHandSide-GSM1900

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.37 \text{ mho/m}$; $\epsilon_r = 39.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

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

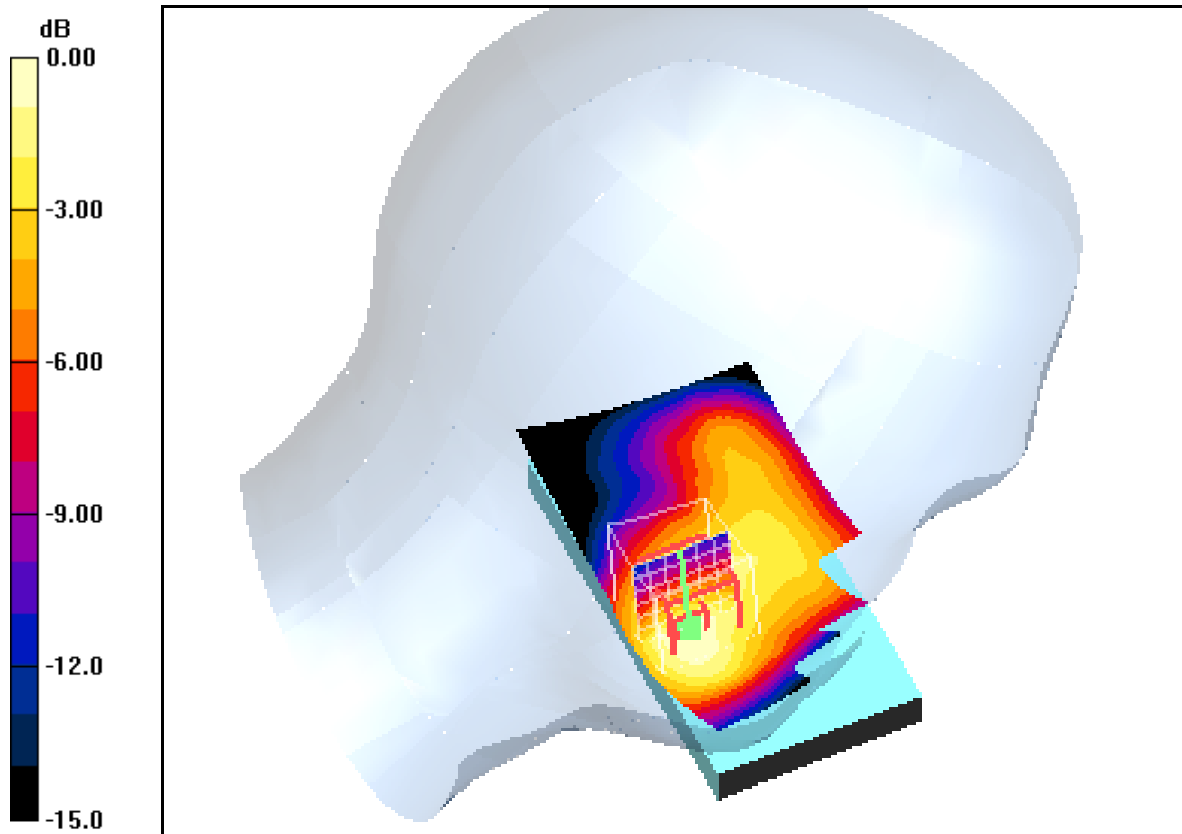
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 24.6 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.13 W/kg

SAR(1 g) = 0.719 mW/g; SAR(10 g) = 0.444 mW/g

Maximum value of SAR (measured) = 0.781 mW/g



0 dB = 0.781mW/g

Additional information:

ambient temperature: 22.0°C; liquid temperature: 22.4°C

Date/Time: 08.06.2012 16:08:58 Date/Time: 08.06.2012 16:15:03

IEEE1528-LeftHandSide-GSM1900

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.4 \text{ mho/m}$; $\epsilon_r = 39.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - High/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.834 mW/g

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

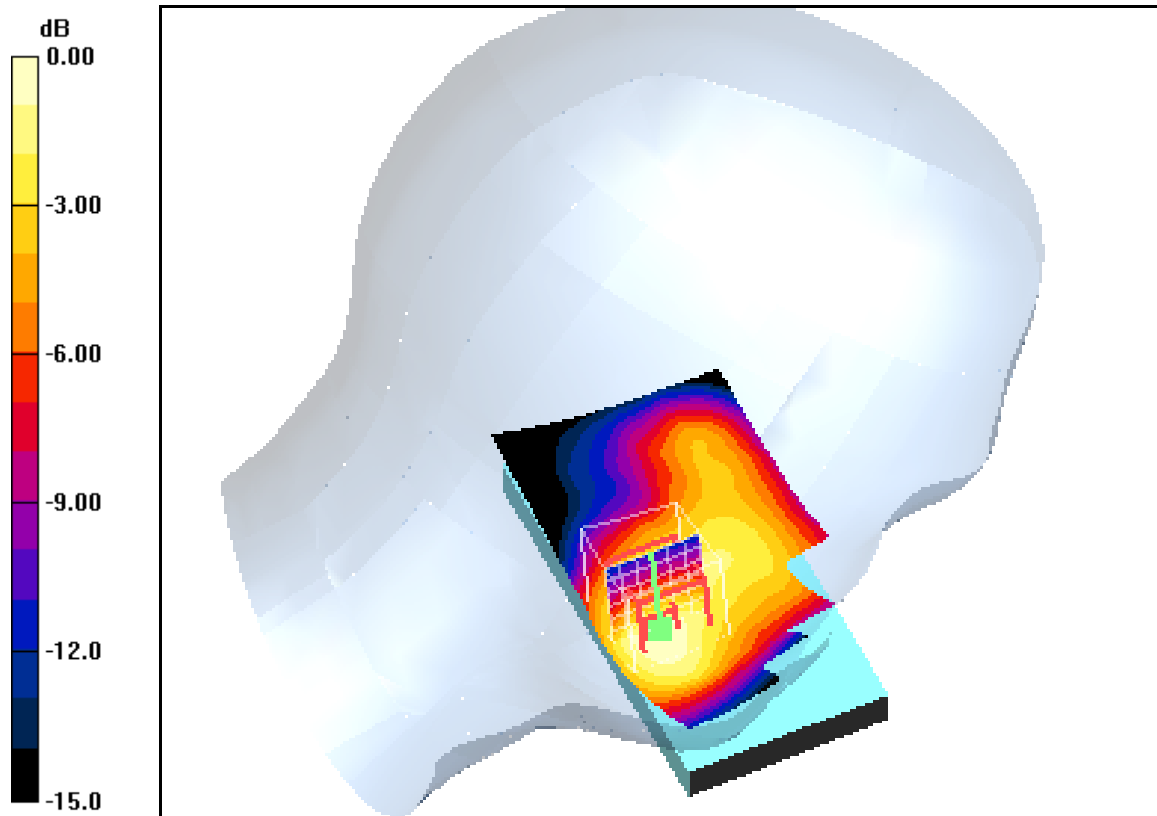
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 25.0 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.744 mW/g; SAR(10 g) = 0.456 mW/g

Maximum value of SAR (measured) = 0.805 mW/g



0 dB = 0.805mW/g

Additional information:

ambient temperature: 22.0°C; liquid temperature: 22.4°C

Date/Time: 08.06.2012 16:30:59 Date/Time: 08.06.2012 16:37:12

IEEE1528-LeftHandSide-GSM1900

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL1900 Medium parameters used: $f = 1850.2 \text{ MHz}$; $\sigma = 1.34 \text{ mho/m}$; $\epsilon_r = 40$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Low/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.358 mW/g

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

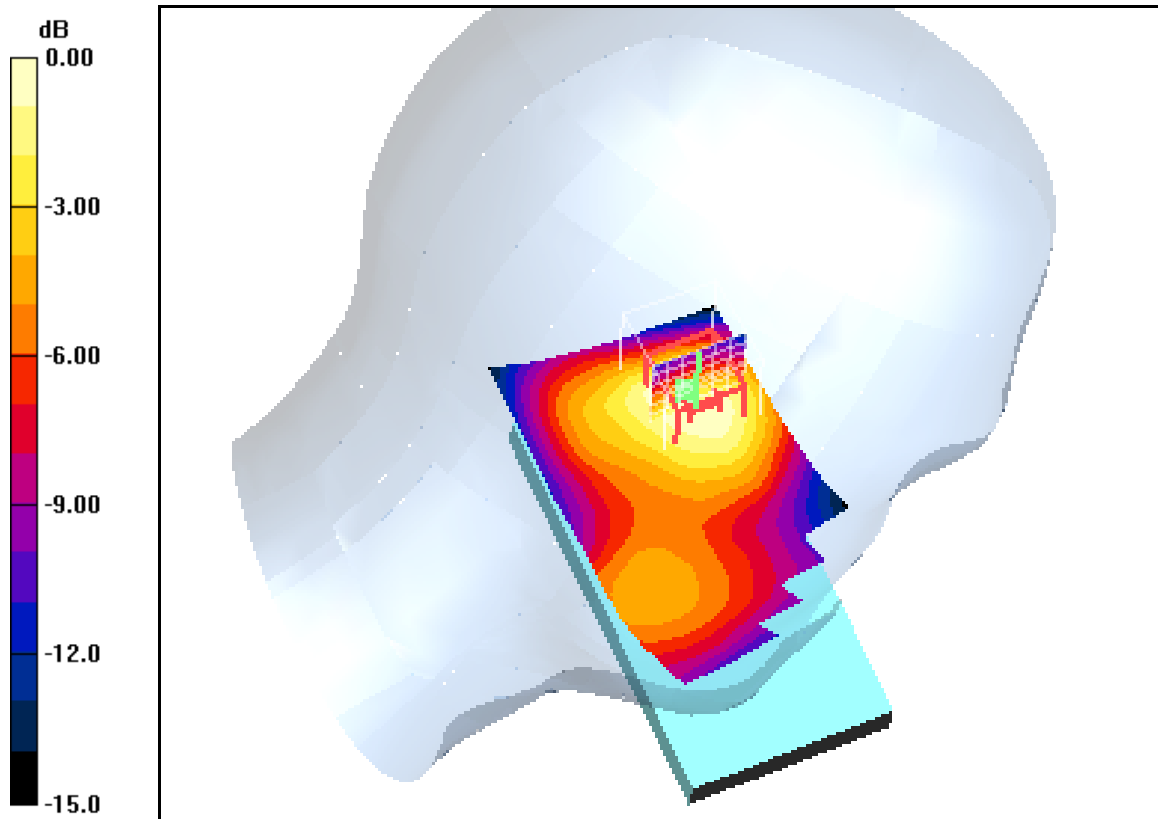
$dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.8 V/m; Power Drift = 0.075 dB

Peak SAR (extrapolated) = 0.434 W/kg

SAR(1 g) = 0.300 mW/g; SAR(10 g) = 0.188 mW/g

Maximum value of SAR (measured) = 0.323 mW/g



0 dB = 0.323mW/g

Additional information:

ambient temperature: 22.0°C; liquid temperature: 22.4°C

Date/Time: 08.06.2012 16:55:52 Date/Time: 08.06.2012 17:02:05

IEEE1528-LeftHandSide-GSM1900

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.37 \text{ mho/m}$; $\epsilon_r = 39.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Middle/Area Scan (51x91x1): 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:

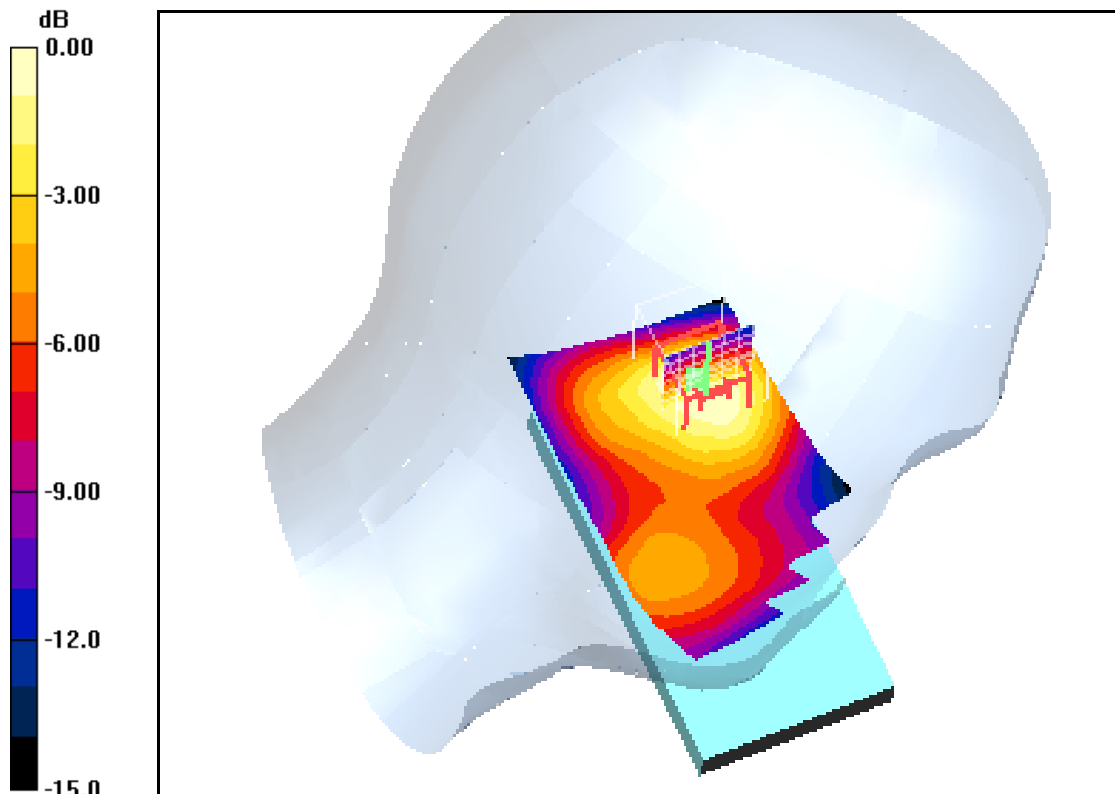
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.8 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.443 W/kg

SAR(1 g) = 0.306 mW/g; SAR(10 g) = 0.190 mW/g

Maximum value of SAR (measured) = 0.330 mW/g



Additional information:

ambient temperature: 22.0°C; liquid temperature: 22.4°C

Date/Time: 08.06.2012 17:15:41 Date/Time: 08.06.2012 17:21:55

IEEE1528-LeftHandSide-GSM1900

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.4 \text{ mho/m}$; $\epsilon_r = 39.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

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

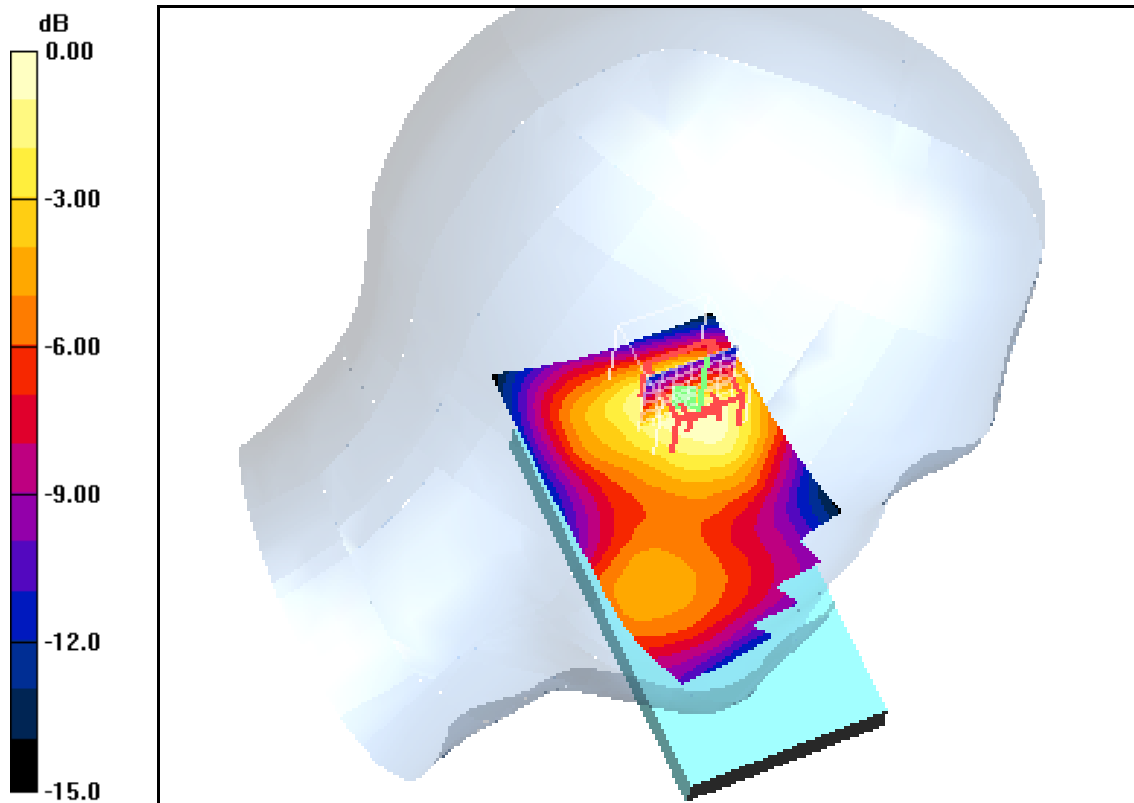
Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.1 V/m; Power Drift = 0.037 dB

Peak SAR (extrapolated) = 0.484 W/kg

SAR(1 g) = 0.323 mW/g; SAR(10 g) = 0.200 mW/g

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



0 dB = 0.351mW/g

Additional information:

ambient temperature: 22.0°C; liquid temperature: 22.4°C

Date/Time: 08.06.2012 19:54:04 Date/Time: 08.06.2012 20:05:49

IEEE1528-RightHandSide-GSM1900

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL1900 Medium parameters used: $f = 1850.2 \text{ MHz}$; $\sigma = 1.34 \text{ mho/m}$; $\epsilon_r = 40$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.547 mW/g

Touch position - Low/Zoom Scan (7x7x7) (10x7x7)/Cube 0: Measurement grid:

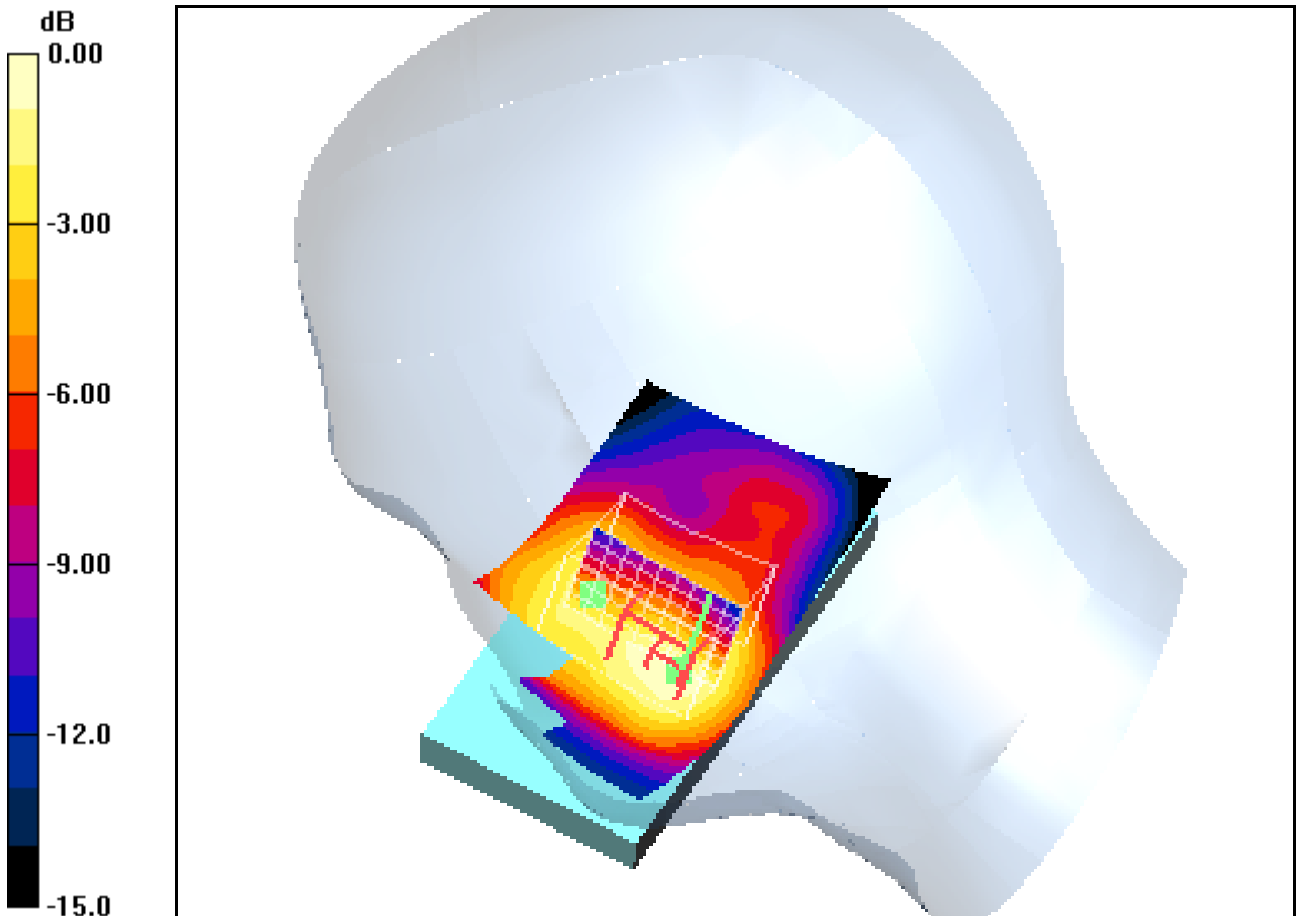
dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.2 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.689 W/kg

SAR(1 g) = 0.504 mW/g; SAR(10 g) = 0.329 mW/g

Maximum value of SAR (measured) = 0.541 mW/g



0 dB = 0.541mW/g

Additional information:

ambient temperature: 22.0°C; liquid temperature: 22.4°C

Date/Time: 08.06.2012 19:09:34 Date/Time: 08.06.2012 19:33:28

IEEE1528-RightHandSide-GSM1900

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.37 \text{ mho/m}$; $\epsilon_r = 39.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Touch position - Middle/Zoom Scan (7x7x7) (10x7x7)/Cube 0: Measurement grid:

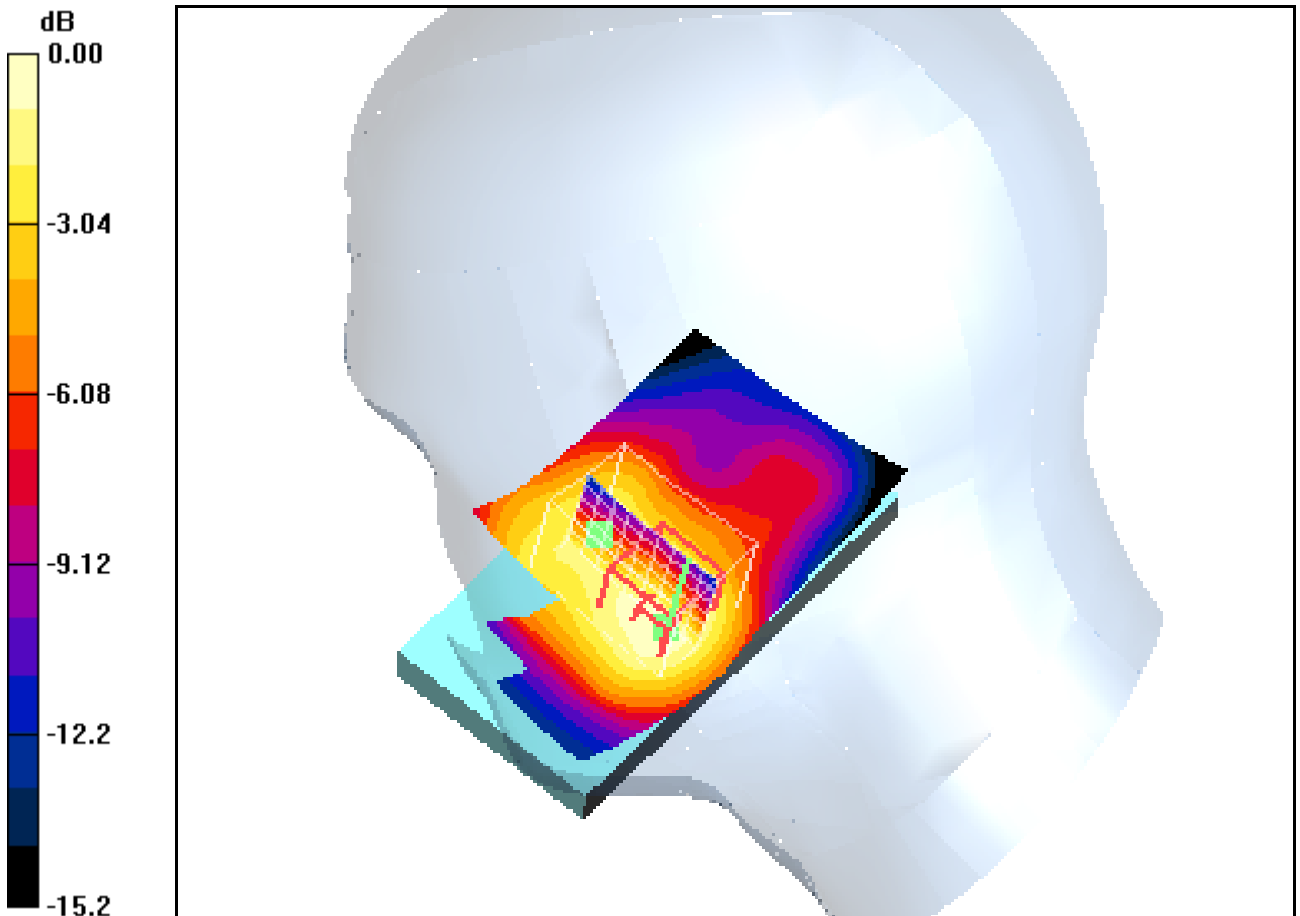
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 20.1 V/m; Power Drift = 0.026 dB

Peak SAR (extrapolated) = 0.720 W/kg

SAR(1 g) = 0.520 mW/g; SAR(10 g) = 0.336 mW/g

Maximum value of SAR (measured) = 0.564 mW/g



0 dB = 0.564mW/g

Additional information:

ambient temperature: 22.0°C; liquid temperature: 22.4°C

Date/Time: 08.06.2012 18:44:32 Date/Time: 08.06.2012 18:54:47

IEEE1528-RightHandSide-GSM1900

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.4 \text{ mho/m}$; $\epsilon_r = 39.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - High/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.576 mW/g

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

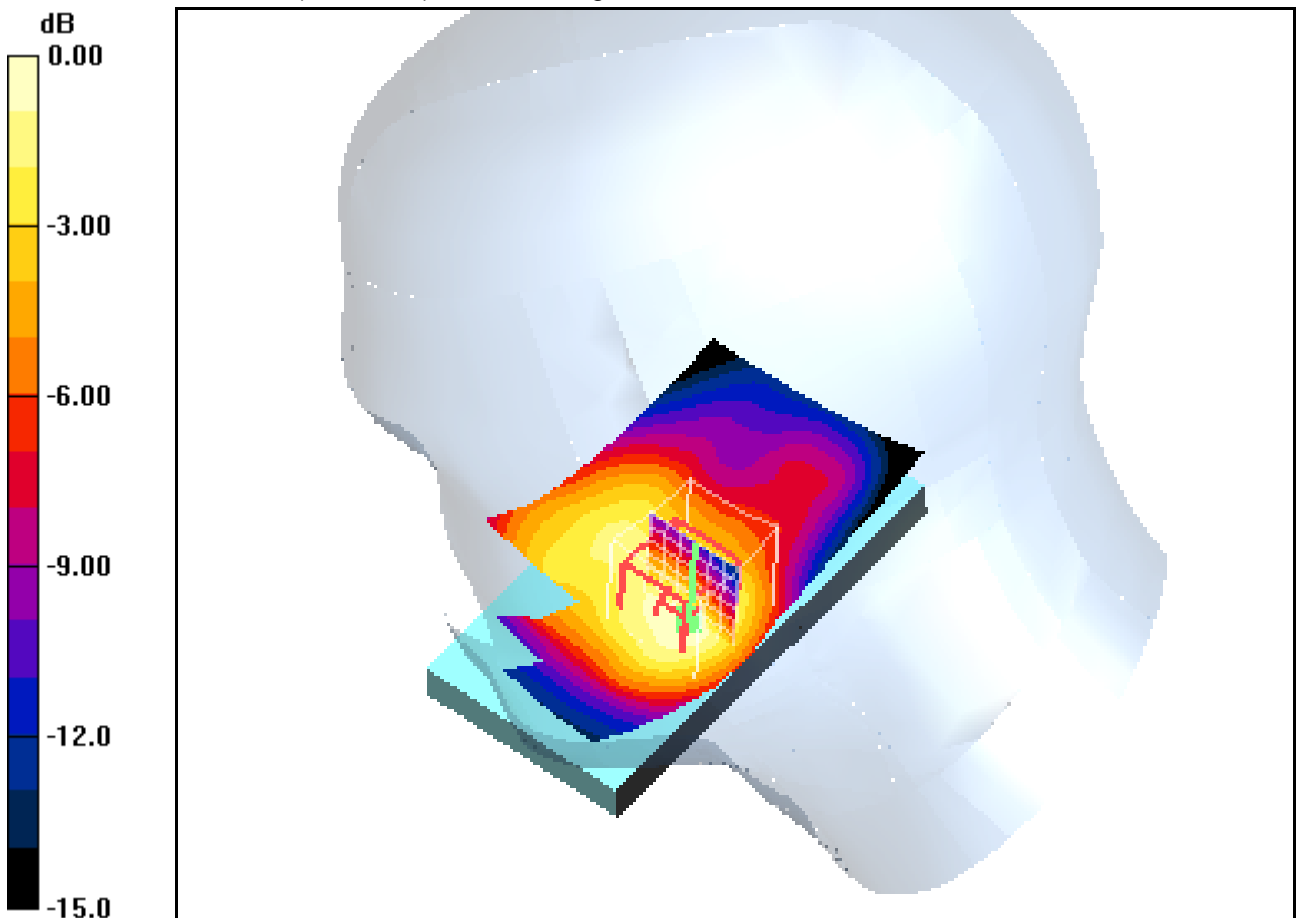
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 19.9 V/m; Power Drift = 0.045 dB

Peak SAR (extrapolated) = 0.754 W/kg

SAR(1 g) = 0.535 mW/g; SAR(10 g) = 0.340 mW/g

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



0 dB = 0.579mW/g

Additional information:

ambient temperature: 22.0°C; liquid temperature: 22.4°C

Date/Time: 08.06.2012 17:40:32 Date/Time: 08.06.2012 17:46:40

IEEE1528-RightHandSide-GSM1900

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL1900 Medium parameters used: $f = 1850.2 \text{ MHz}$; $\sigma = 1.34 \text{ mho/m}$; $\epsilon_r = 40$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Low/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.199 mW/g

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

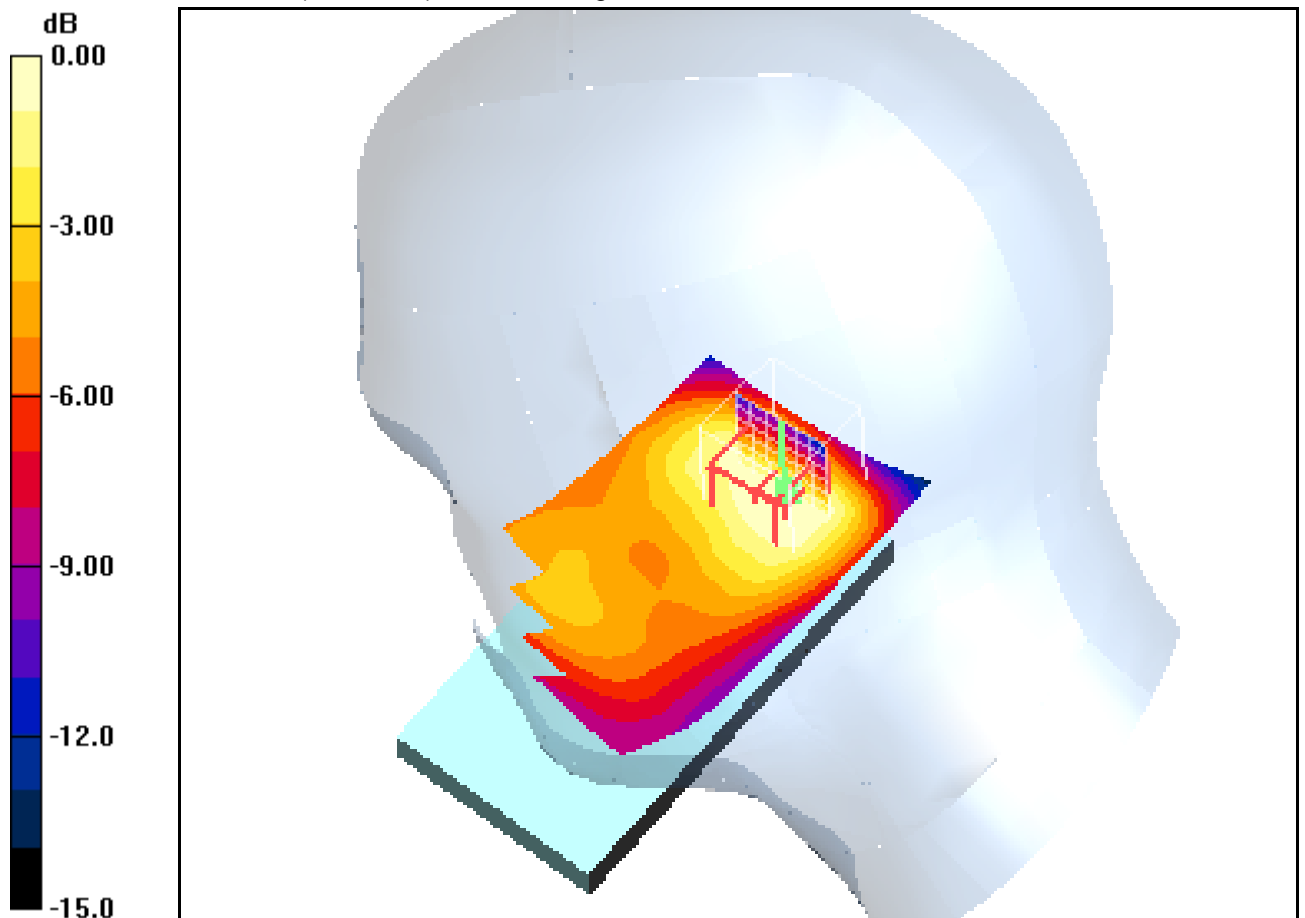
$dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.7 V/m; Power Drift = -0.059 dB

Peak SAR (extrapolated) = 0.240 W/kg

SAR(1 g) = 0.166 mW/g; SAR(10 g) = 0.107 mW/g

Maximum value of SAR (measured) = 0.177 mW/g



Additional information:

ambient temperature: 22.0°C; liquid temperature: 22.4°C

Date/Time: 08.06.2012 18:05:11 Date/Time: 08.06.2012 18:11:22

IEEE1528-RightHandSide-GSM1900

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.37 \text{ mho/m}$; $\epsilon_r = 39.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.169 mW/g

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

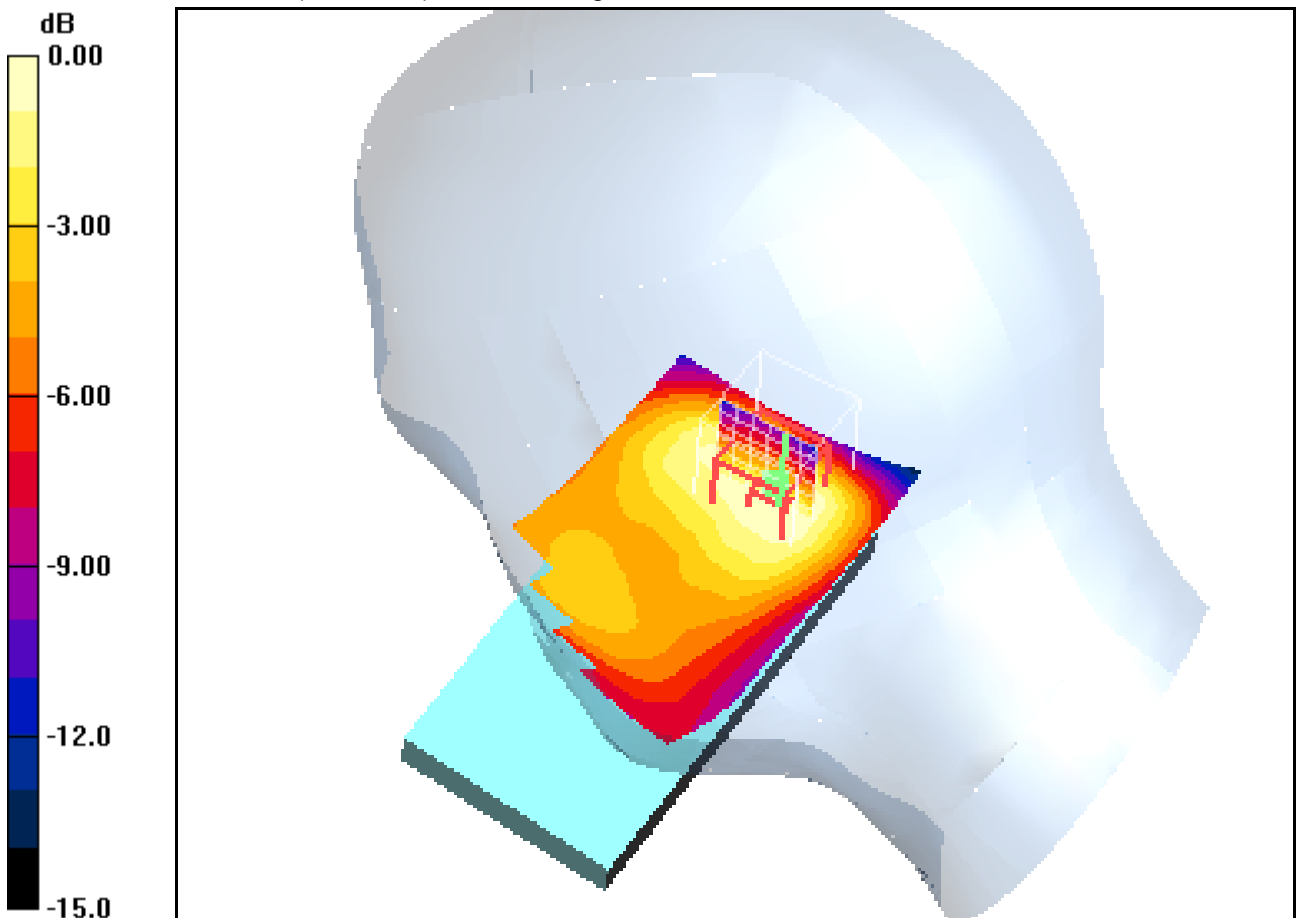
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.0 V/m; Power Drift = -0.043 dB

Peak SAR (extrapolated) = 0.214 W/kg

SAR(1 g) = 0.146 mW/g; SAR(10 g) = 0.093 mW/g

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



0 dB = 0.158mW/g

Additional information:

ambient temperature: 22.0°C; liquid temperature: 22.4°C

Date/Time: 08.06.2012 18:24:01 Date/Time: 08.06.2012 18:30:10

IEEE1528-RightHandSide-GSM1900

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.4 \text{ mho/m}$; $\epsilon_r = 39.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - High/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.170 mW/g

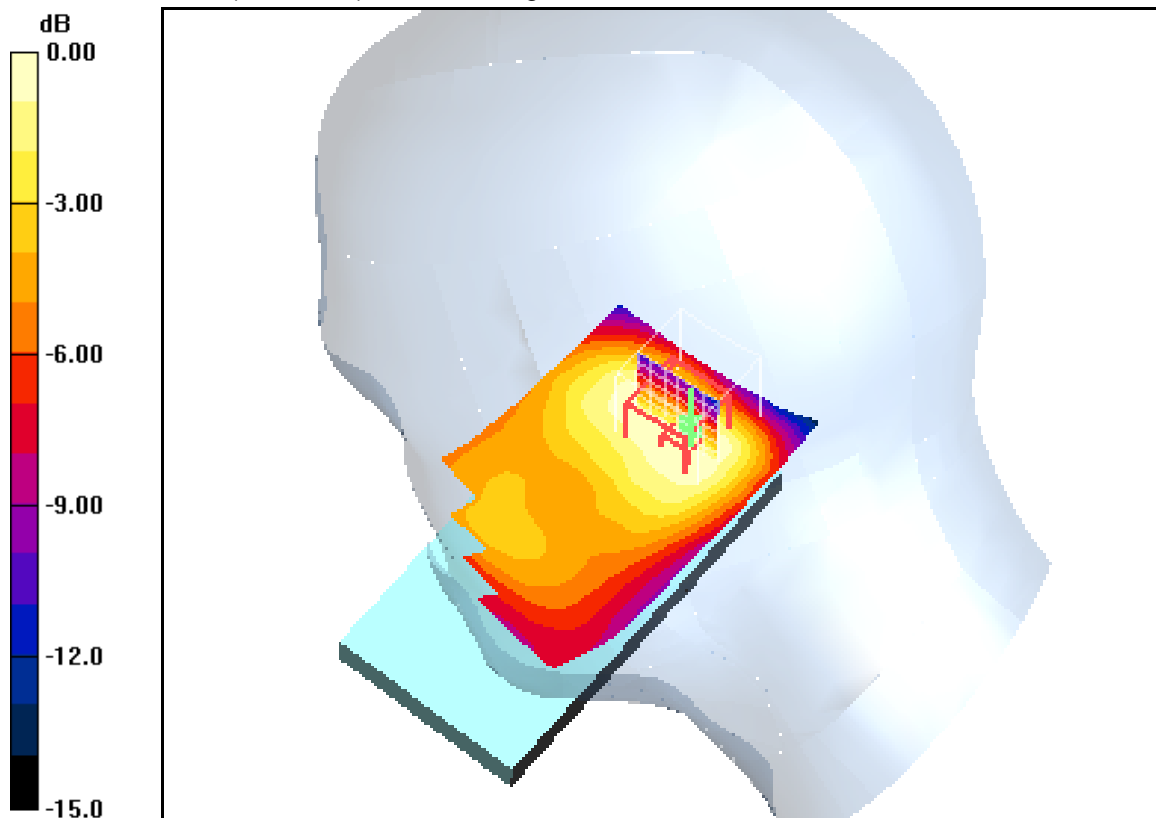
Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.9 V/m; Power Drift = 0.050 dB

Peak SAR (extrapolated) = 0.216 W/kg

SAR(1 g) = 0.146 mW/g; SAR(10 g) = 0.094 mW/g

Maximum value of SAR (measured) = 0.157 mW/g



0 dB = 0.157mW/g

Additional information:

ambient temperature: 22.0°C; liquid temperature: 22.4°C

Annex B.5: GSM 1900MHz body (hotspot)

Date/Time: 05.06.2012 16:44:01 Date/Time: 05.06.2012 16:53:05

OET65-Body-GSM1900 GPRS 4TS

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M1900 Medium parameters used: $f = 1850.2 \text{ MHz}$; $\sigma = 1.46 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

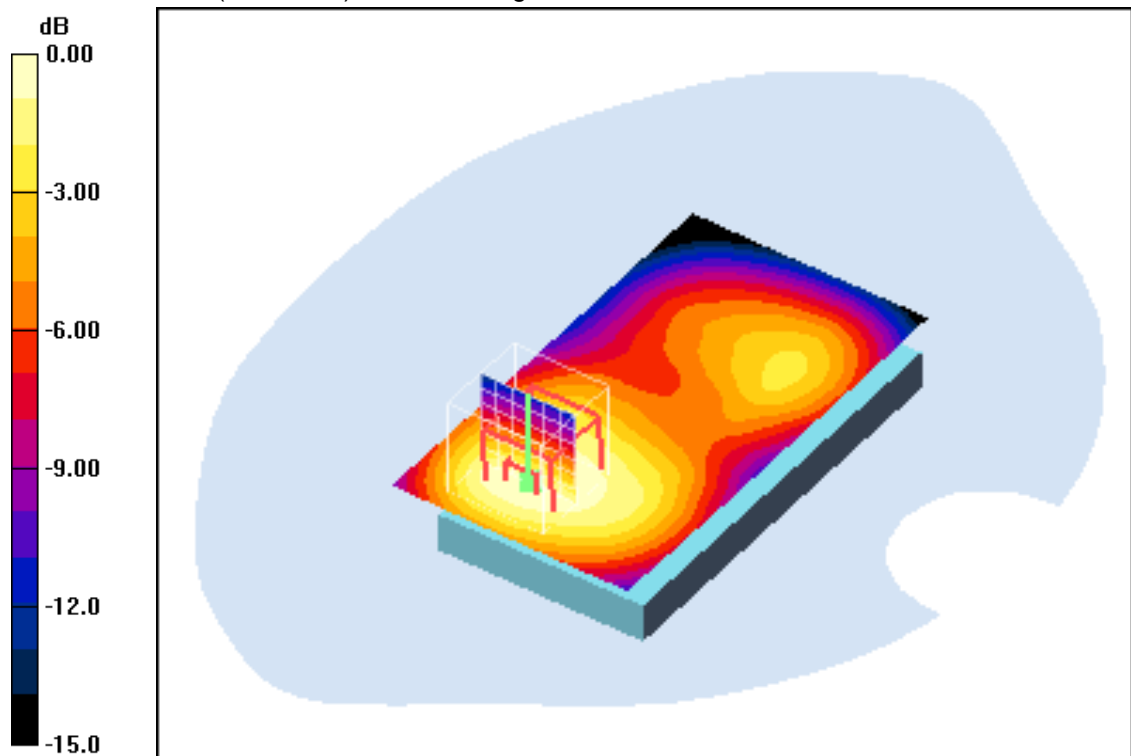
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Low/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (interpolated) = 0.791 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 = 23.9 V/m; Power Drift = -0.033 dB
 Peak SAR (extrapolated) = 1.12 W/kg
SAR(1 g) = 0.722 mW/g; SAR(10 g) = 0.463 mW/g
 Maximum value of SAR (measured) = 0.768 mW/g



0 dB = 0.768mW/g

Additional information:

position or distance of DUT to SAM: 10mm

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

Date/Time: 05.06.2012 17:13:49 Date/Time: 05.06.2012 17:20:52

OET65-Body-GSM1900 GPRS 4TS

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.49 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.683 mW/g

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

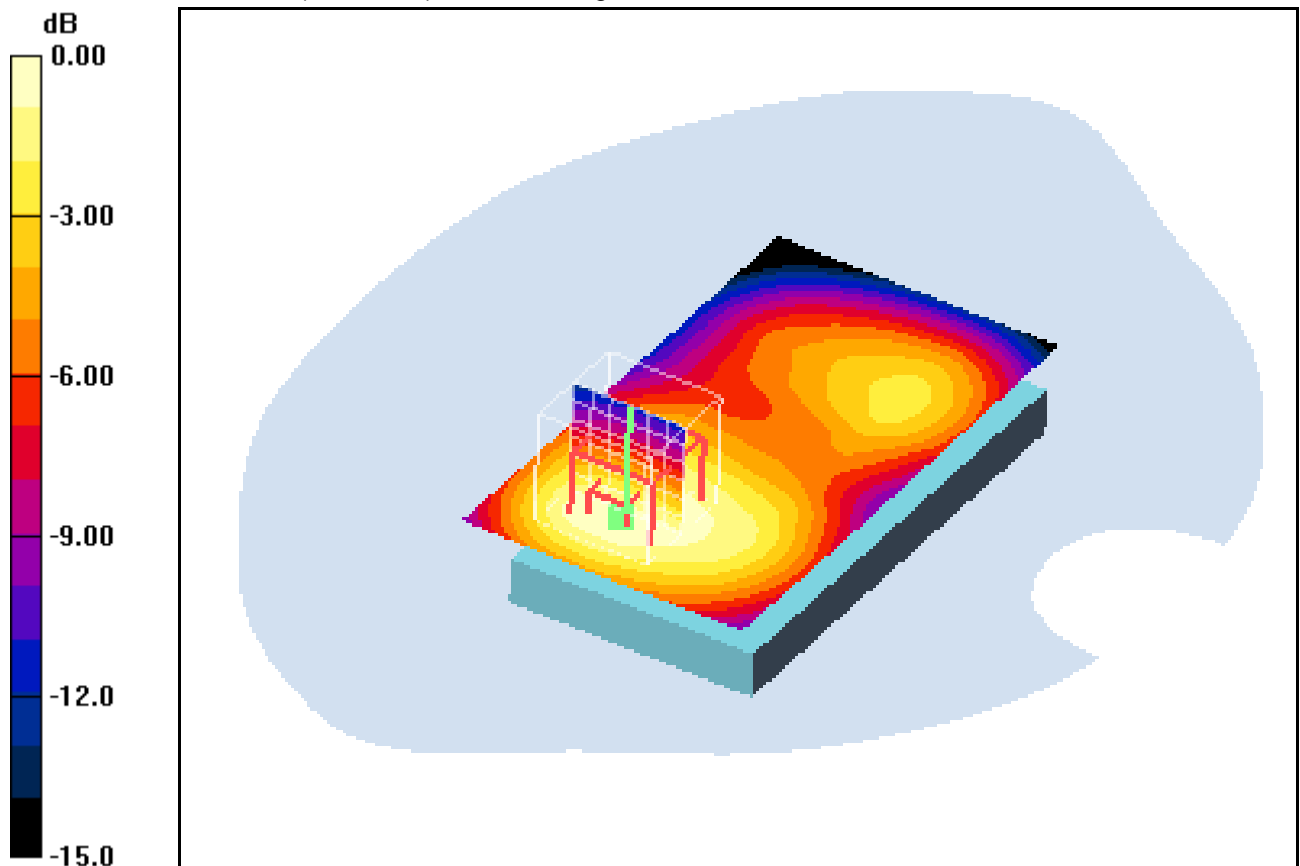
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 22.4 V/m; Power Drift = -0.017 dB

Peak SAR (extrapolated) = 0.993 W/kg

SAR(1 g) = 0.636 mW/g; SAR(10 g) = 0.407 mW/g

Maximum value of SAR (measured) = 0.676 mW/g



0 dB = 0.676mW/g

Additional information:

position or distance of DUT to SAM: 10mm

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

Date/Time: 05.06.2012 17:36:21 Date/Time: 05.06.2012 17:44:22

OET65-Body-GSM1900 GPRS 4TS

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.53 \text{ mho/m}$; $\epsilon_r = 52.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - High/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.683 mW/g

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

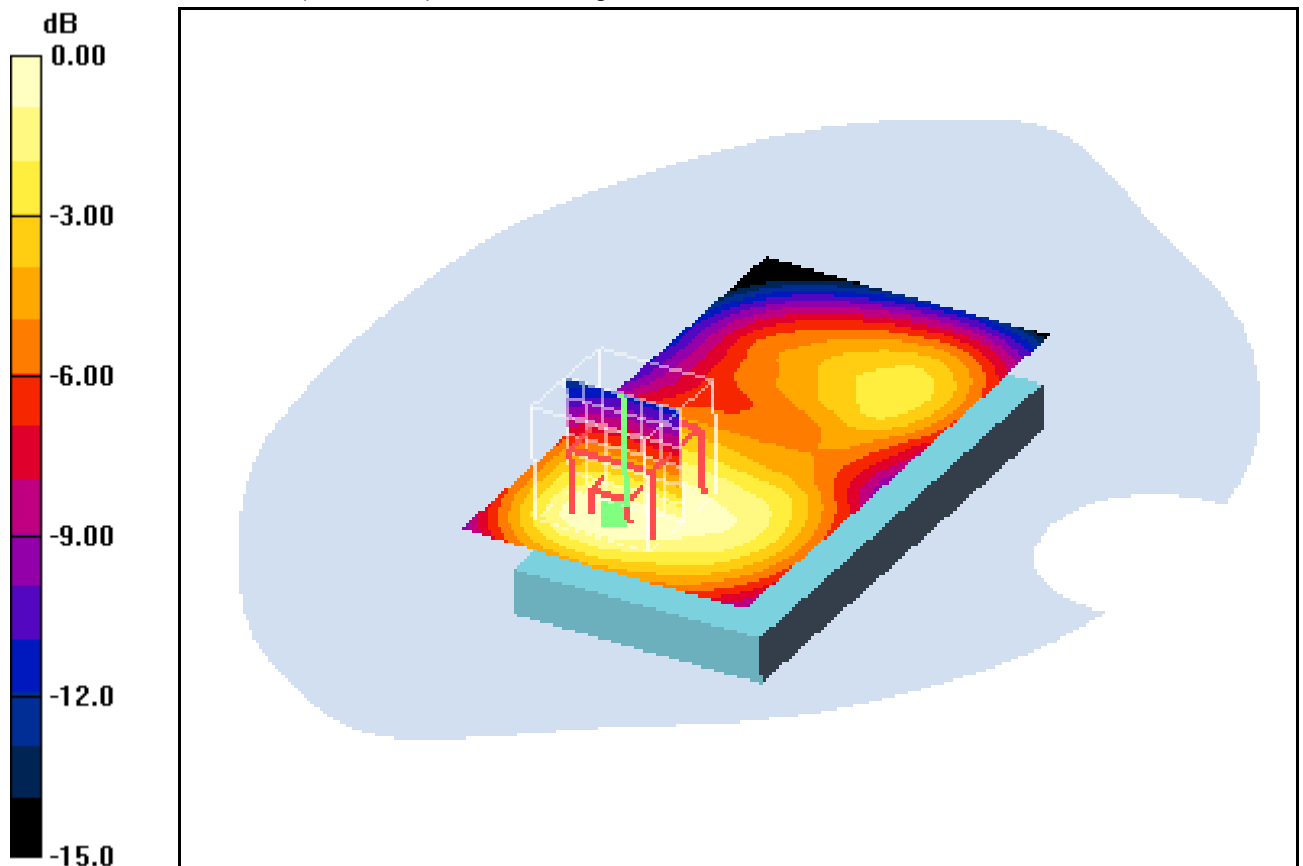
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 22.2 V/m; Power Drift = -0.021 dB

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.634 mW/g; SAR(10 g) = 0.405 mW/g

Maximum value of SAR (measured) = 0.673 mW/g



0 dB = 0.673mW/g

Additional information:

position or distance of DUT to SAM: 10mm

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

Date/Time: 05.06.2012 18:05:38 Date/Time: 05.06.2012 18:13:36

OET65-Body-GSM1900 GPRS 4TS

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M1900 Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 52.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

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

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

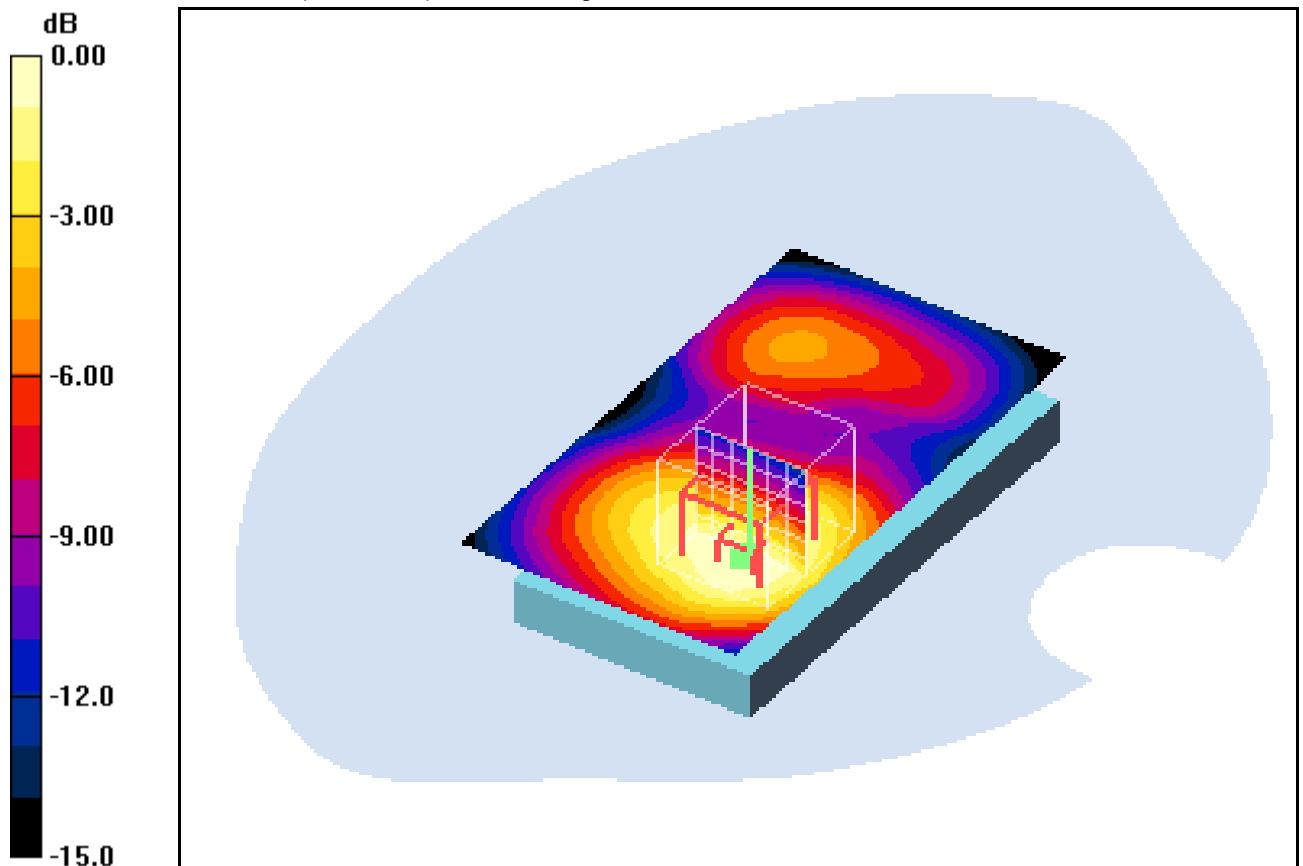
dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.6 V/m; Power Drift = -0.064 dB

Peak SAR (extrapolated) = 1.56 W/kg

SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.632 mW/g

Maximum value of SAR (measured) = 1.09 mW/g



0 dB = 1.09mW/g

Additional information:

position or distance of DUT to SAM: 10mm

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

Date/Time: 05.06.2012 18:28:35 Date/Time: 05.06.2012 18:38:38

OET65-Body-GSM1900 GPRS 4TS

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.49 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

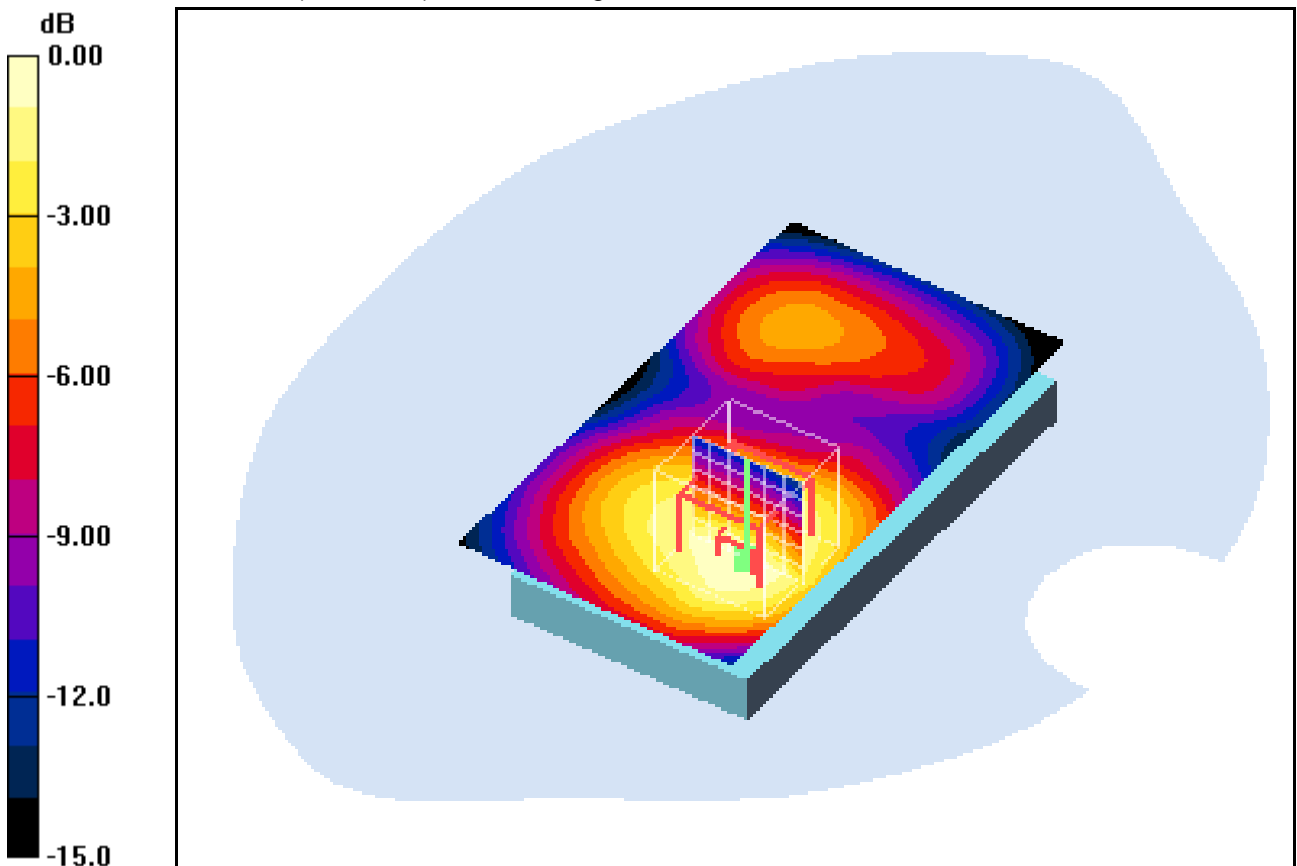
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (interpolated) = 1.01 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 = 26.3 V/m; Power Drift = -0.029 dB
 Peak SAR (extrapolated) = 1.33 W/kg
SAR(1 g) = 0.867 mW/g; SAR(10 g) = 0.545 mW/g
 Maximum value of SAR (measured) = 0.937 mW/g



0 dB = 0.937mW/g

Additional information:

position or distance of DUT to SAM: 10mm

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

Date/Time: 05.06.2012 18:56:13 Date/Time: 05.06.2012 19:03:34

OET65-Body-GSM1900 GPRS 4TS

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.53 \text{ mho/m}$; $\epsilon_r = 52.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - High/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.952 mW/g

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

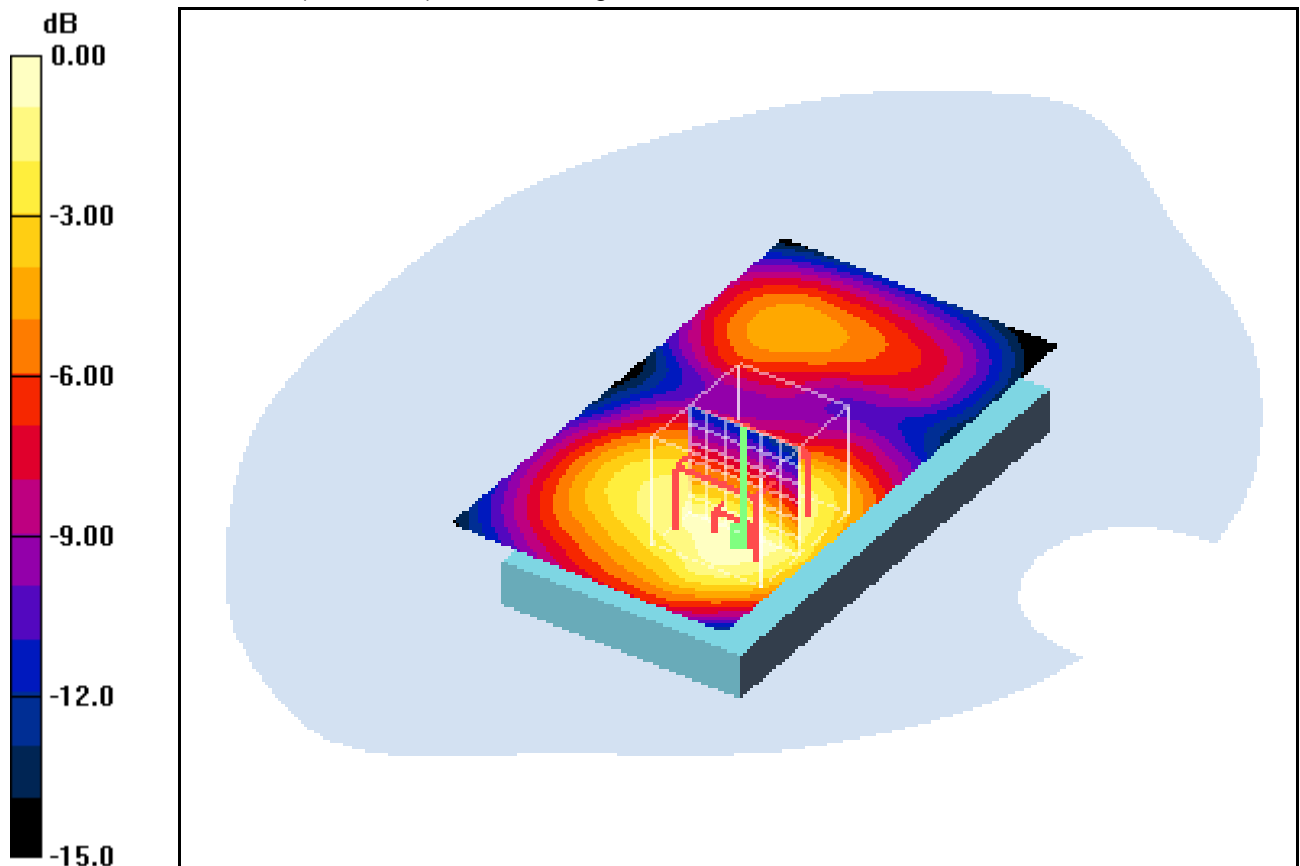
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 25.6 V/m; Power Drift = -0.029 dB

Peak SAR (extrapolated) = 1.30 W/kg

SAR(1 g) = 0.842 mW/g; SAR(10 g) = 0.532 mW/g

Maximum value of SAR (measured) = 0.912 mW/g



0 dB = 0.912mW/g

Additional information:

position or distance of DUT to SAM: 10mm

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

Date/Time: 05.06.2012 13:43:03 Date/Time: 05.06.2012 13:50:44

OET65-Body-GSM1900 GPRS 4TS

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.49 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Edge left position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.490 mW/g

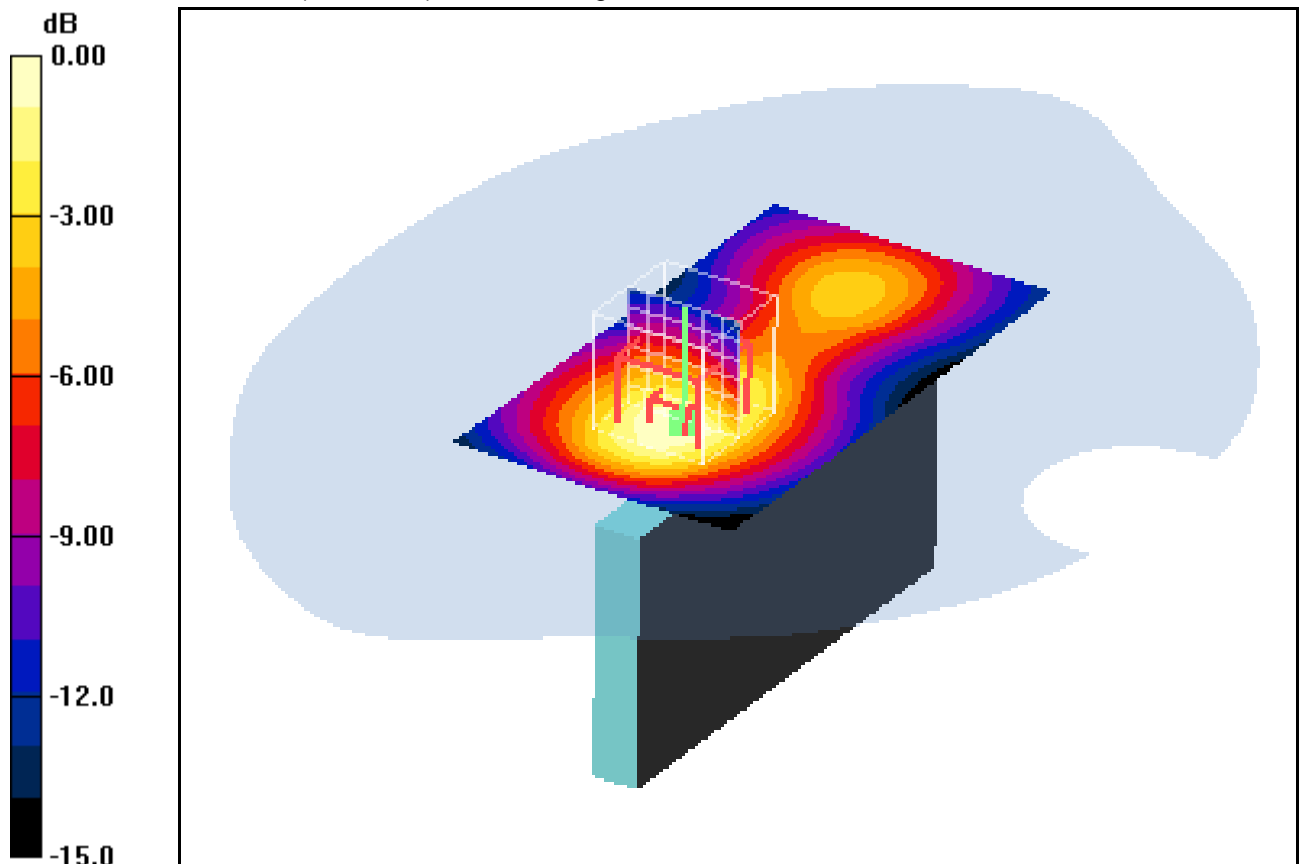
Edge left position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 17.3 V/m; Power Drift = 0.028 dB

Peak SAR (extrapolated) = 0.679 W/kg

SAR(1 g) = 0.430 mW/g; SAR(10 g) = 0.261 mW/g

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



0 dB = 0.467mW/g

Additional information:

position or distance of DUT to SAM: 10mm

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

Date/Time: 05.06.2012 13:03:53 Date/Time: 05.06.2012 13:12:31 Date/Time: 05.06.2012 13:24:08

OET65-Body-GSM1900 GPRS 4TS

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.49 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Edge right position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.197 mW/g

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

Reference Value = 11.6 V/m; Power Drift = -0.135 dB

Peak SAR (extrapolated) = 0.262 W/kg

SAR(1 g) = 0.166 mW/g; SAR(10 g) = 0.101 mW/g

Maximum value of SAR (measured) = 0.180 mW/g

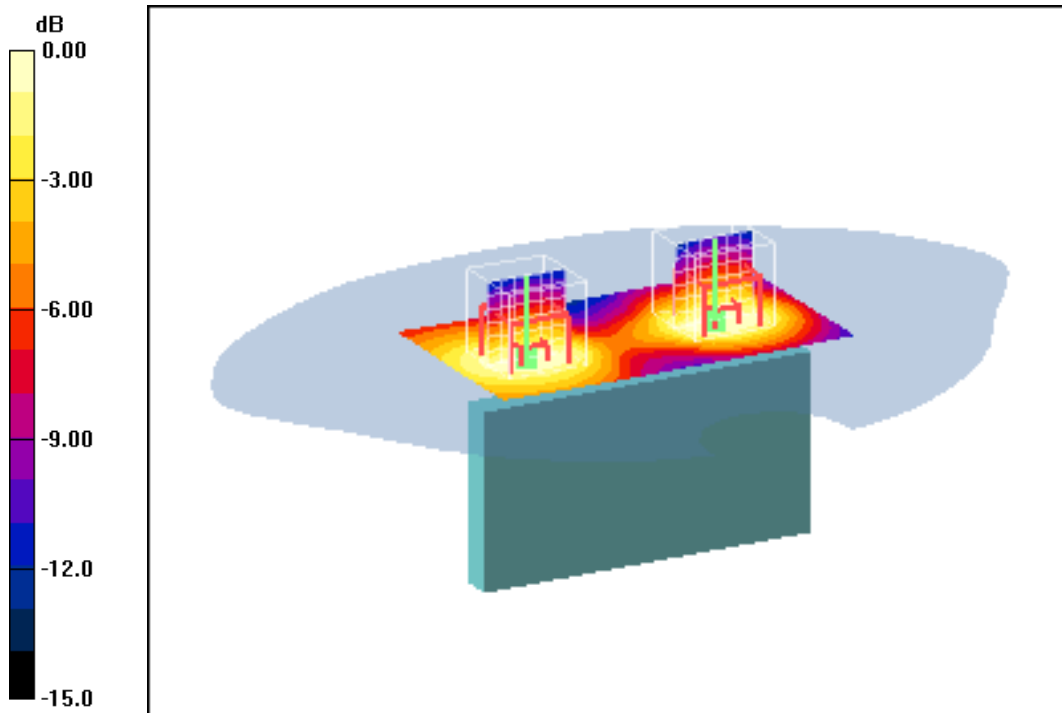
Edge right position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.6 V/m; Power Drift = -0.135 dB

Peak SAR (extrapolated) = 0.259 W/kg

SAR(1 g) = 0.163 mW/g; SAR(10 g) = 0.101 mW/g

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



0 dB = 0.176mW/g

Additional information:

position or distance of DUT to SAM: 10mm

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

Date/Time: 05.06.2012 12:42:19 Date/Time: 05.06.2012 12:48:27

OET65-Body-GSM1900 GPRS 4TS

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.49 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Edge bottom position - Middle/Area Scan (61x61x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.315 mW/g

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

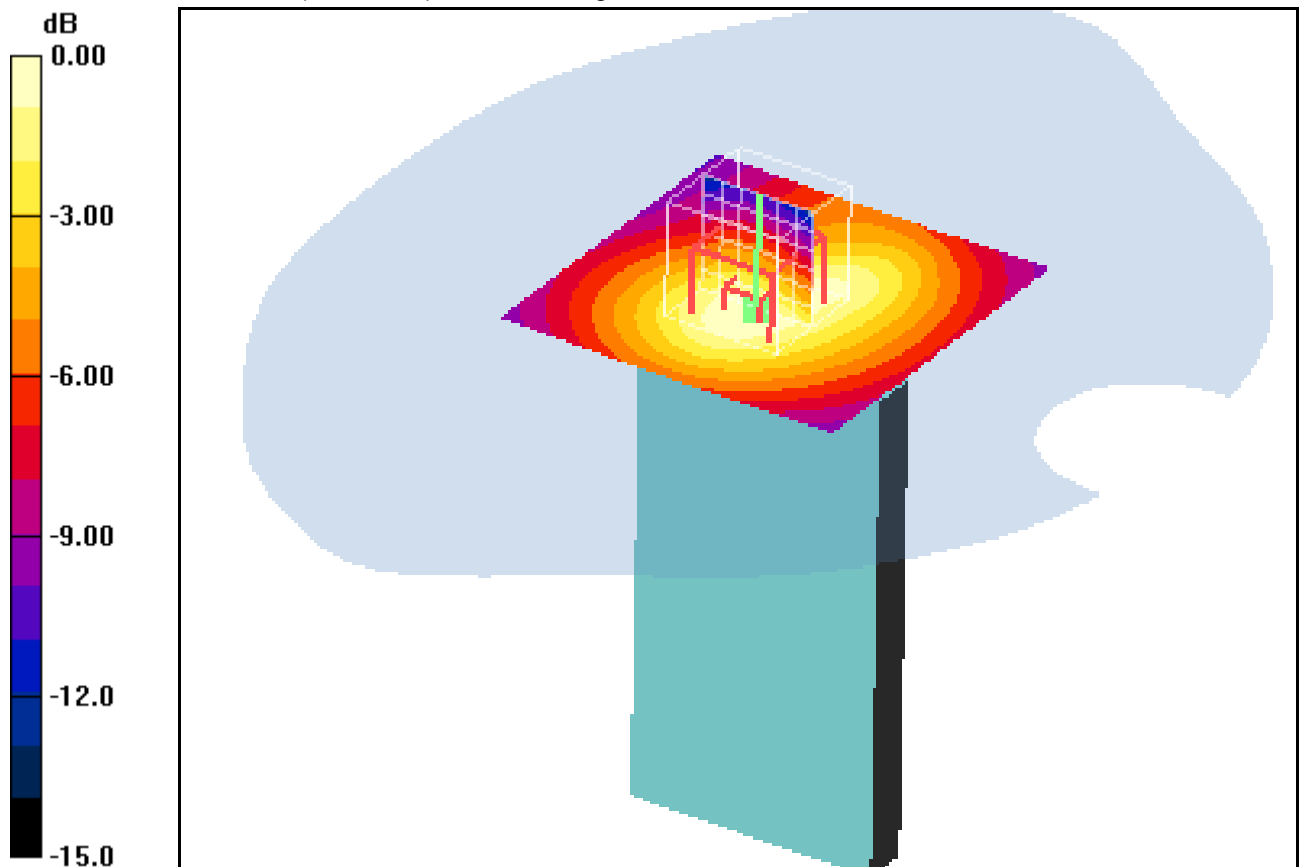
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 14.8 V/m; Power Drift = -0.107 dB

Peak SAR (extrapolated) = 0.422 W/kg

SAR(1 g) = 0.270 mW/g; SAR(10 g) = 0.166 mW/g

Maximum value of SAR (measured) = 0.294 mW/g



0 dB = 0.294mW/g

Additional information:

position or distance of DUT to SAM: 10mm

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

Date/Time: 05.06.2012 22:09:25 Date/Time: 05.06.2012 22:16:25

OET65-Body-GSM1900 GPRS 4TS CMWC

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M1900 Medium parameters used: $f = 1850.2 \text{ MHz}$; $\sigma = 1.46 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Low CMWC/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.958 mW/g

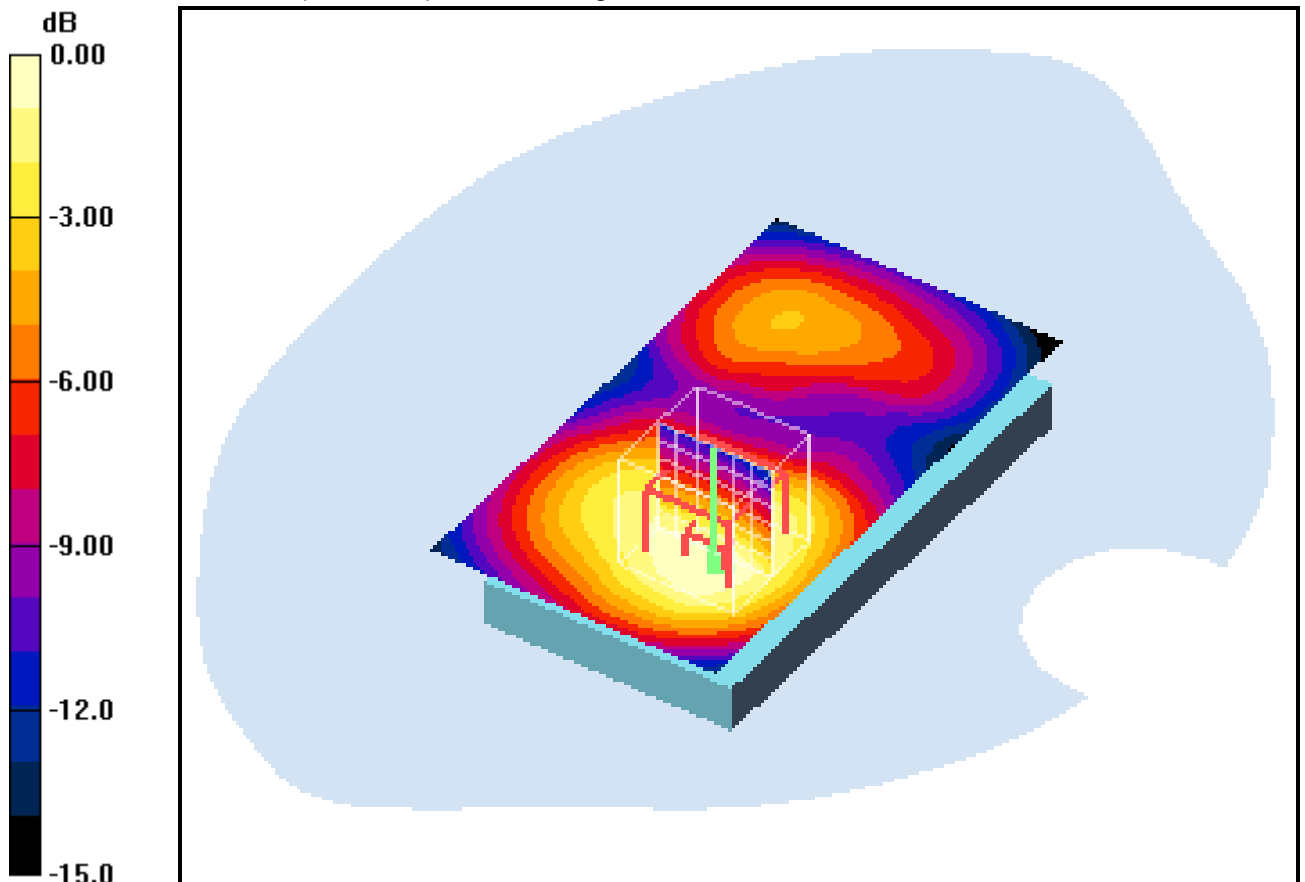
Rear position - Low CMWC/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.6 V/m; Power Drift = -0.044 dB

Peak SAR (extrapolated) = 1.16 W/kg

SAR(1 g) = 0.824 mW/g; SAR(10 g) = 0.529 mW/g

Maximum value of SAR (measured) = 0.894 mW/g



0 dB = 0.894mW/g

Additional information:

position or distance of DUT to SAM: 10mm

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

Annex B.6: GSM 1900MHz body worn

Date/Time: 05.06.2012 21:28:03 Date/Time: 05.06.2012 21:35:31

OET65-Body-GSM1900 GPRS 1TS

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M1900 Medium parameters used: $f = 1850.2 \text{ MHz}$; $\sigma = 1.46 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Low 15mm/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

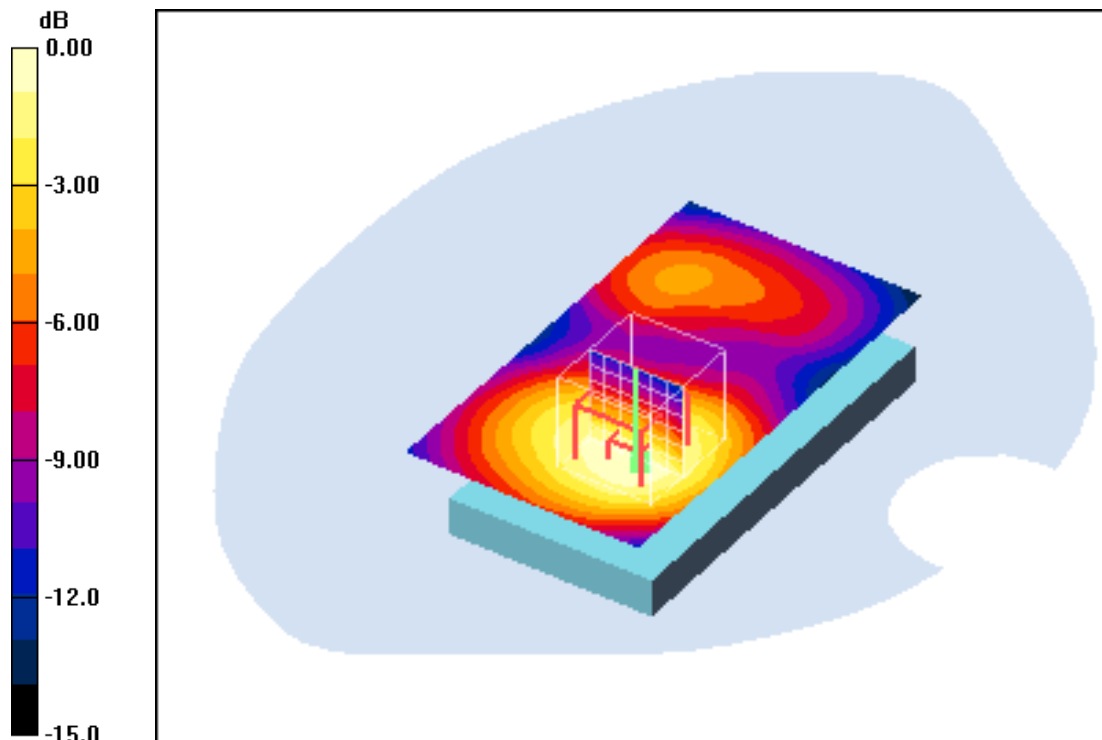
Rear position - Low 15mm/Zoom Scan (7x7x7) (7x8x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 19.4 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 0.718 W/kg

SAR(1 g) = 0.474 mW/g; SAR(10 g) = 0.302 mW/g

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



0 dB = 0.511mW/g

Additional information:

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

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

Date/Time: 05.07.2012 16:11:52 Date/Time: 05.07.2012 16:19:55

OET65-Body-GSM1900 GPRS 4TS 15mm

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M1900 Medium parameters used: $f = 1850.2 \text{ MHz}$; $\sigma = 1.46 \text{ mho/m}$; $\epsilon_r = 53$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

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

Rear position - Low 15mm/Area Scan (61x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

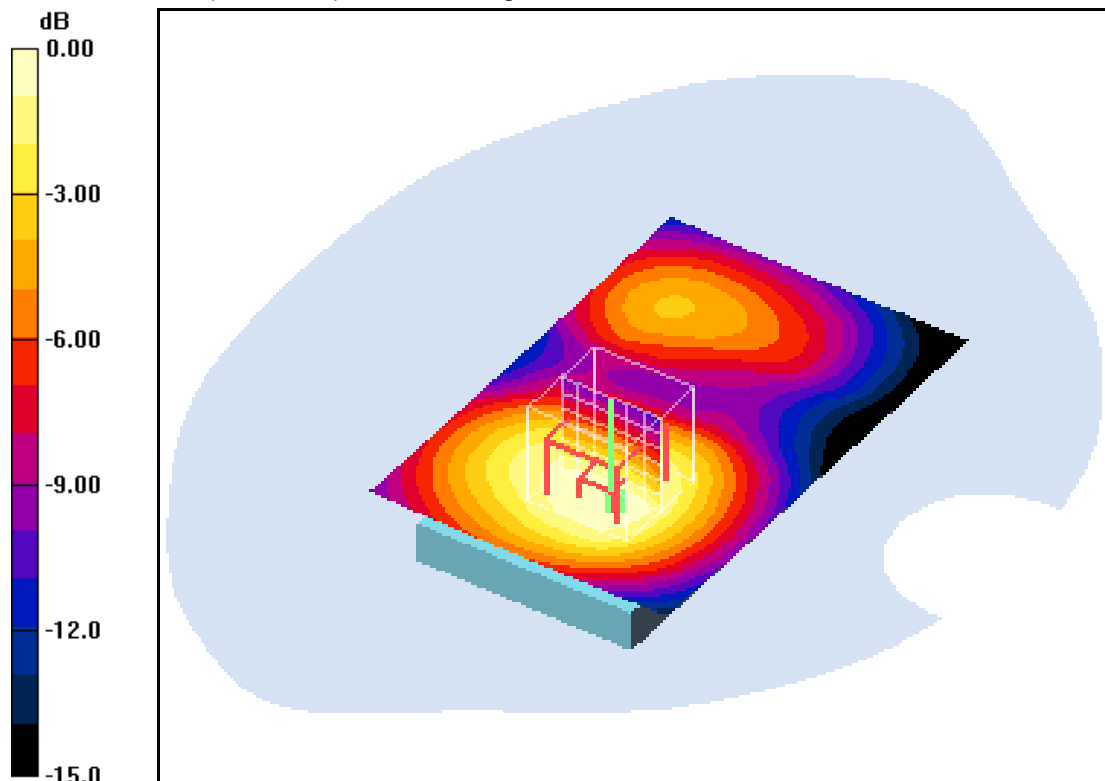
Rear position - Low 15mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 20.3 V/m; Power Drift = -0.082 dB

Peak SAR (extrapolated) = 0.654 W/kg

SAR(1 g) = 0.487 mW/g; SAR(10 g) = 0.324 mW/g

Maximum value of SAR (measured) = 0.523 mW/g



0 dB = 0.523mW/g

Additional information:

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.8°C; liquid temperature: 23.5°C

Annex B.7: UMTS WCDMA FDD V 850MHz head

Date/Time: 13.06.2012 12:24:12 Date/Time: 13.06.2012 12:31:44

IEEE1528-LeftHandSide-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.892$ mho/m; $\epsilon_r = 42$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.07 mW/g

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

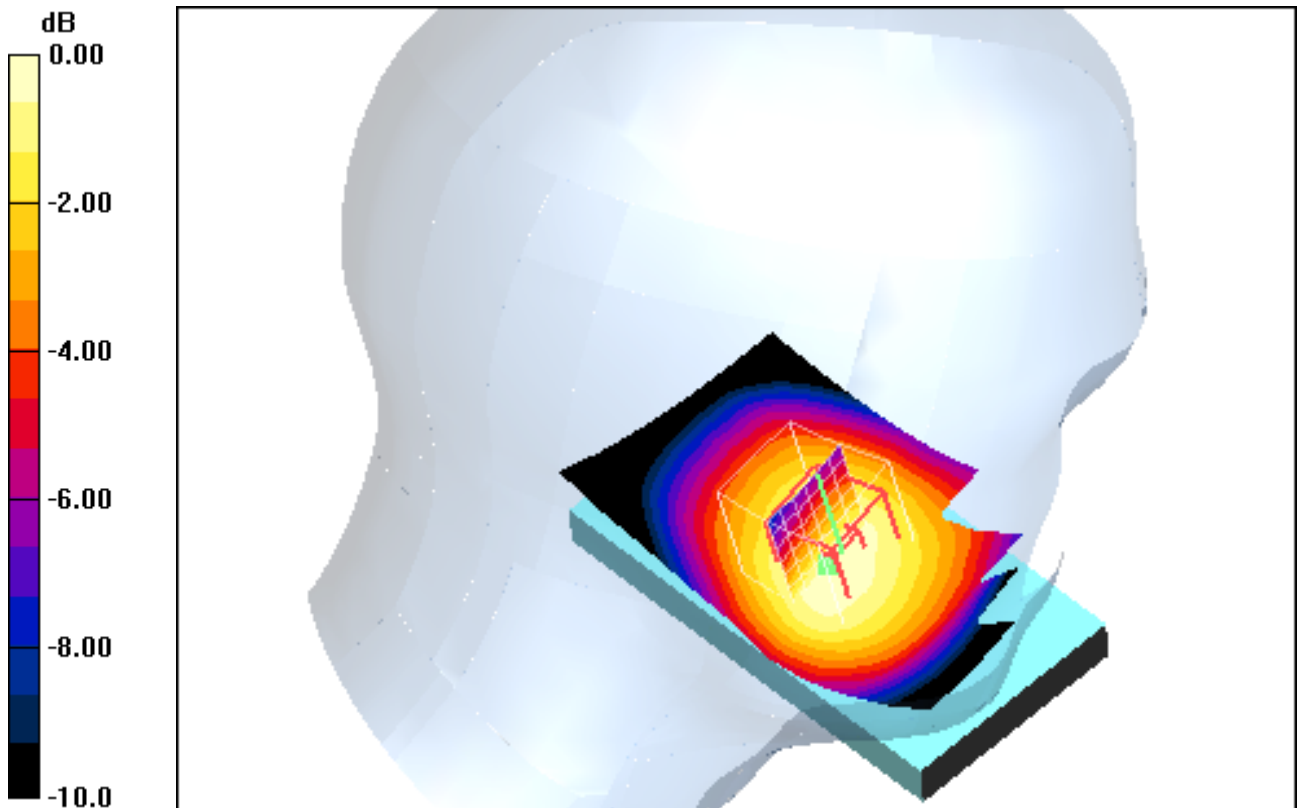
dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.6 V/m; Power Drift = -0.061 dB

Peak SAR (extrapolated) = 1.23 W/kg

SAR(1 g) = 0.984 mW/g; SAR(10 g) = 0.732 mW/g

Maximum value of SAR (measured) = 1.04 mW/g



0 dB = 1.04mW/g

Additional information:

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

Date/Time: 13.06.2012 12:46:32 Date/Time: 13.06.2012 12:53:38

IEEE1528-LeftHandSide-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.9$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.03 mW/g

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

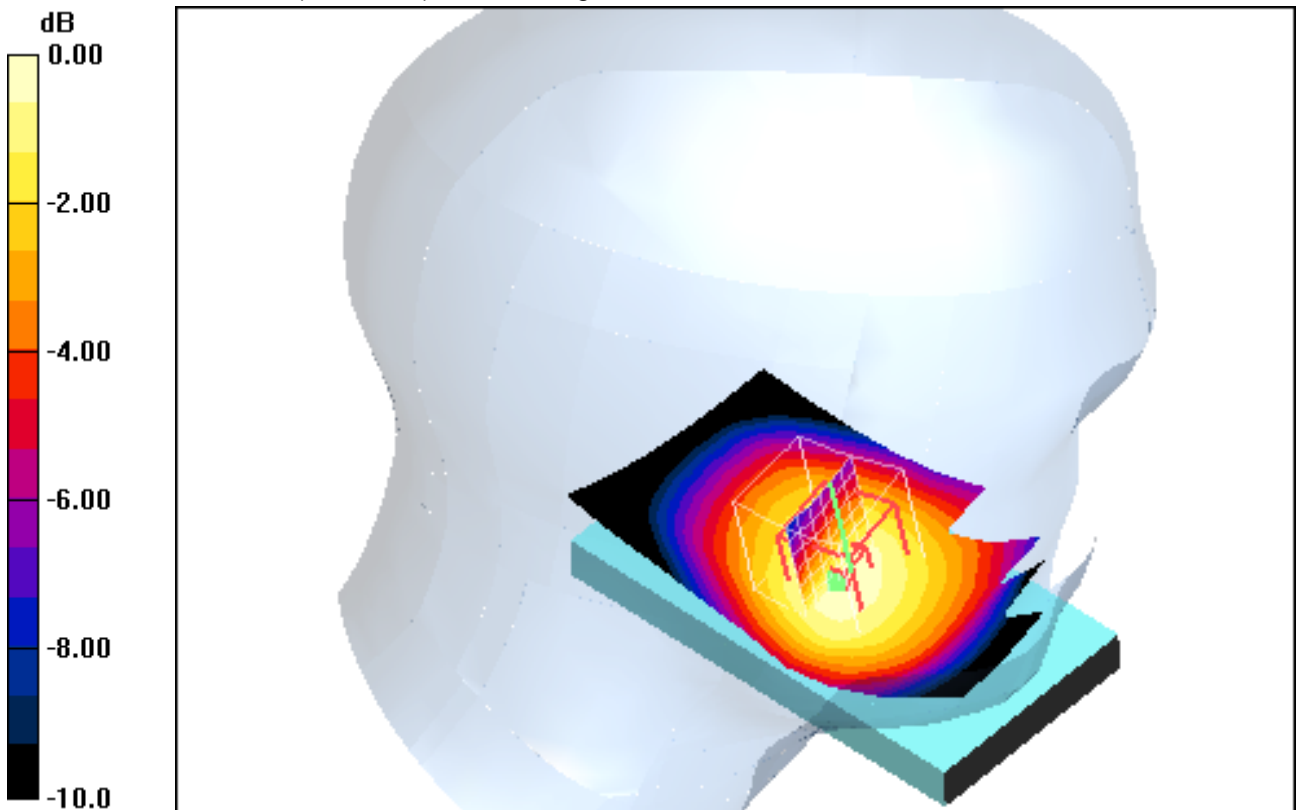
dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.1 V/m; Power Drift = 0.026 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.982 mW/g; SAR(10 g) = 0.727 mW/g

Maximum value of SAR (measured) = 1.03 mW/g



0 dB = 1.03mW/g

Additional information:

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

Date/Time: 13.06.2012 13:14:50 Date/Time: 13.06.2012 13:20:53

IEEE1528-LeftHandSide-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.908$ mho/m; $\epsilon_r = 41.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.988 mW/g

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

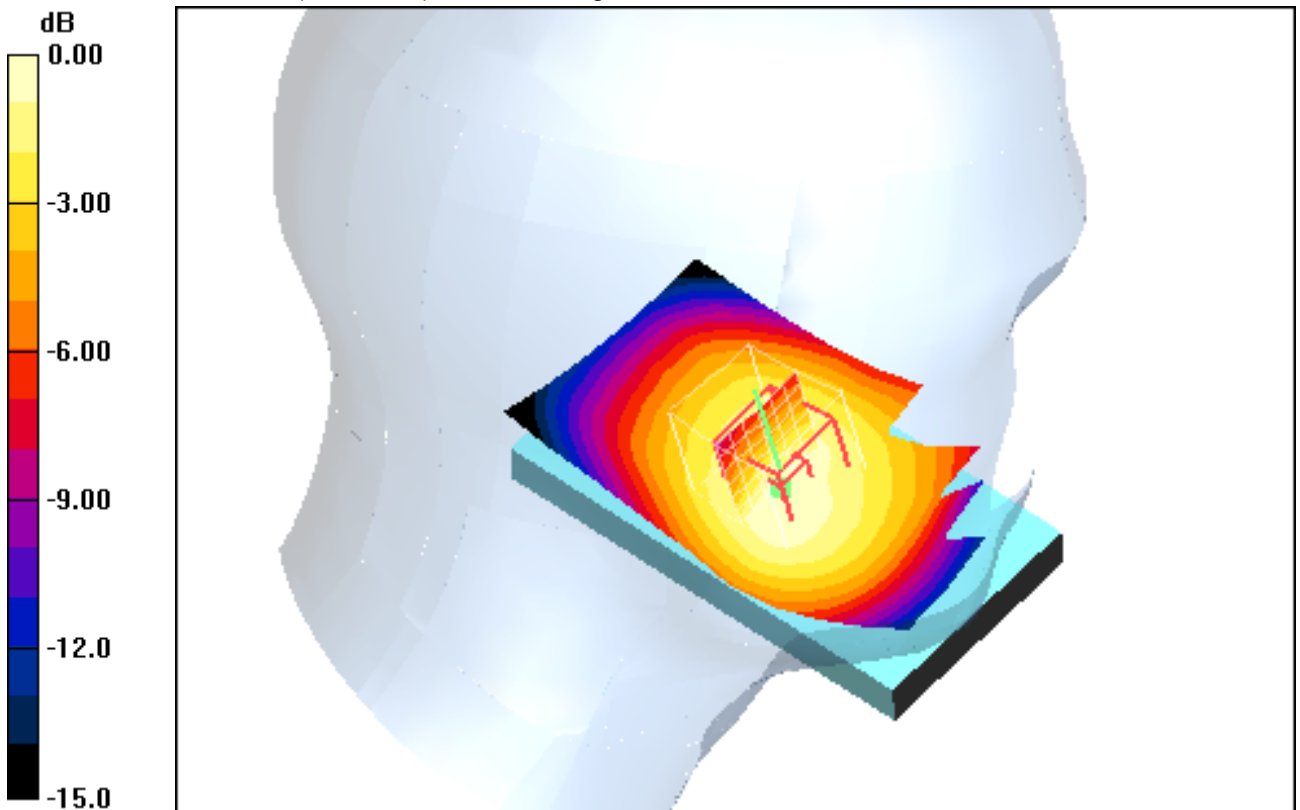
dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.6 V/m; Power Drift = -0.111 dB

Peak SAR (extrapolated) = 1.21 W/kg

SAR(1 g) = 0.948 mW/g; SAR(10 g) = 0.699 mW/g

Maximum value of SAR (measured) = 0.997 mW/g



0 dB = 0.997mW/g

Additional information:

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

Date/Time: 13.06.2012 14:16:56 Date/Time: 13.06.2012 14:24:04

IEEE1528-LeftHandSide-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.892$ mho/m; $\epsilon_r = 42$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

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

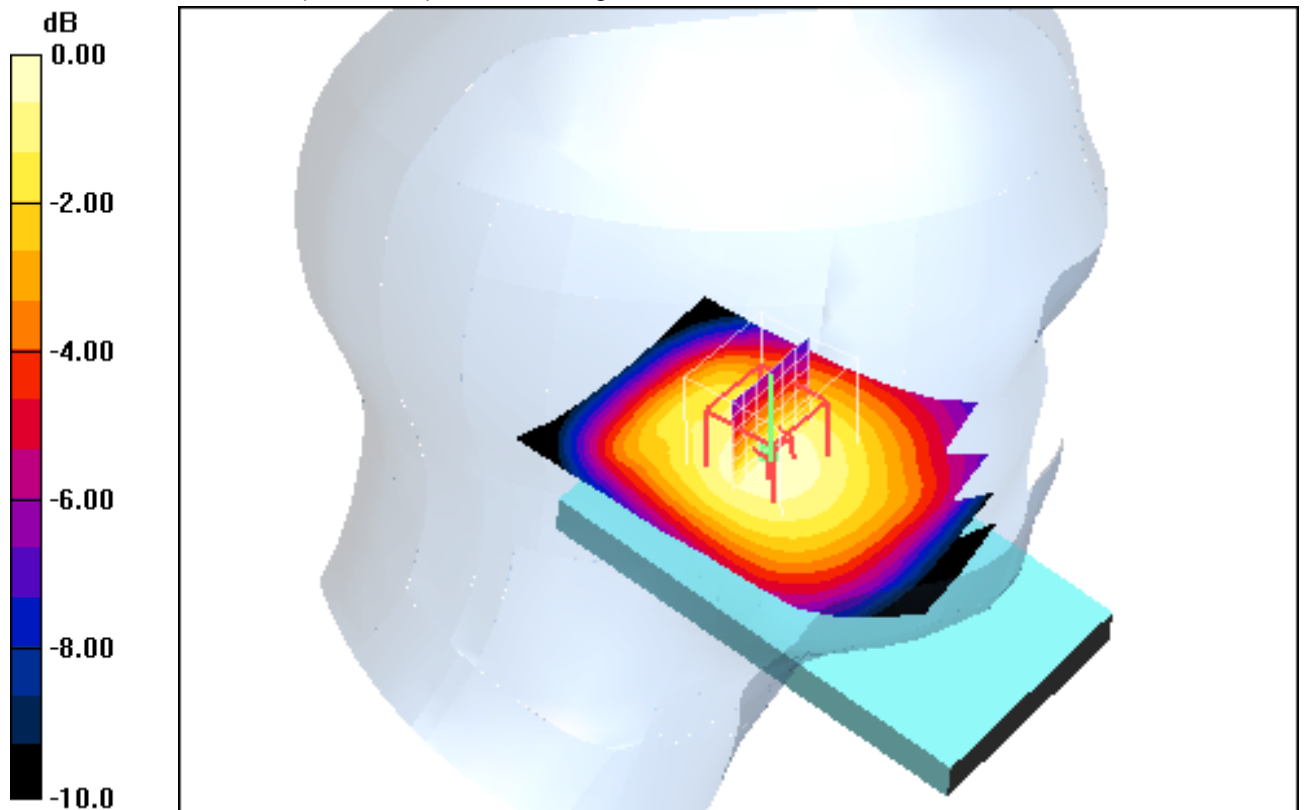
Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 29.1 V/m; Power Drift = 0.092 dB

Peak SAR (extrapolated) = 0.859 W/kg

SAR(1 g) = 0.692 mW/g; SAR(10 g) = 0.518 mW/g

Maximum value of SAR (measured) = 0.721 mW/g



0 dB = 0.721mW/g

Additional information:

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

Date/Time: 13.06.2012 13:55:43 Date/Time: 13.06.2012 14:03:52

IEEE1528-LeftHandSide-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.9$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

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

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

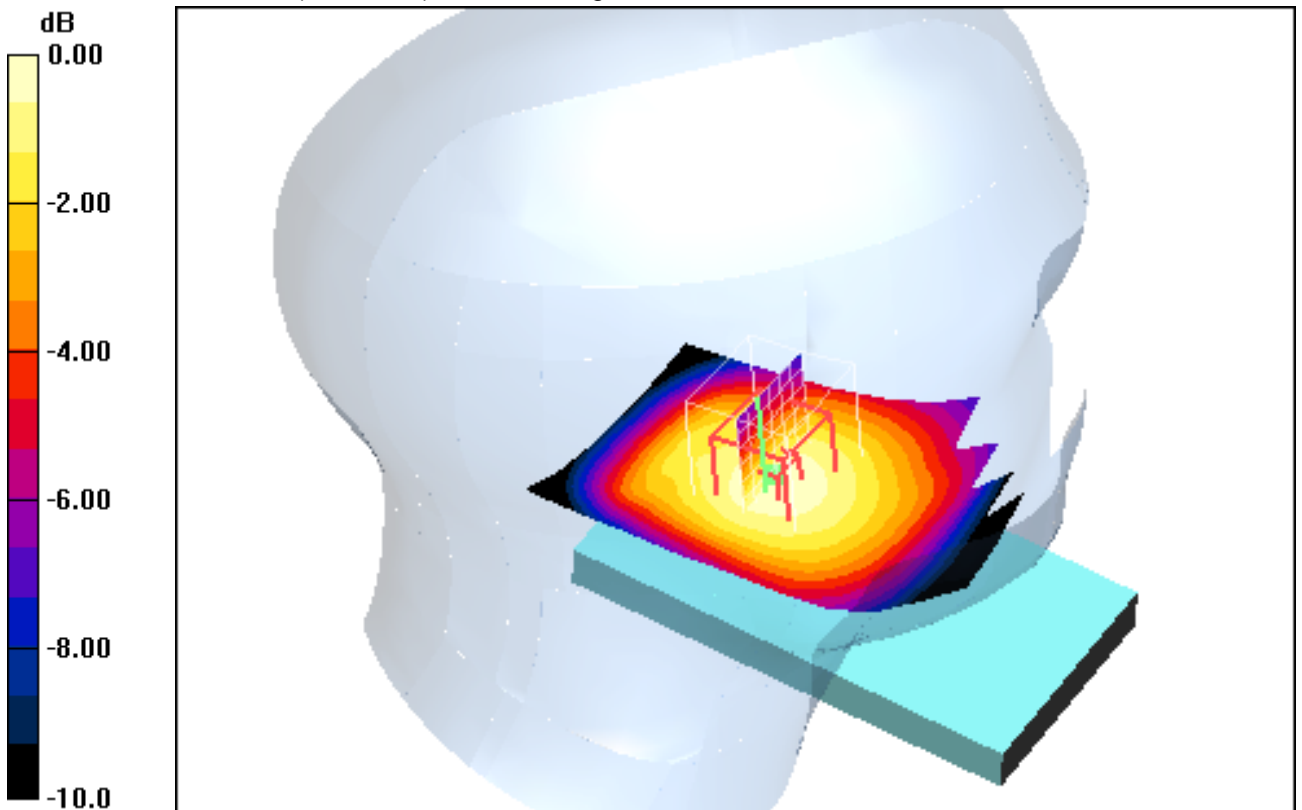
dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.8 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.741 W/kg

SAR(1 g) = 0.616 mW/g; SAR(10 g) = 0.465 mW/g

Maximum value of SAR (measured) = 0.648 mW/g



0 dB = 0.648mW/g

Additional information:

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

Date/Time: 13.06.2012 13:35:36 Date/Time: 13.06.2012 13:42:45

IEEE1528-LeftHandSide-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used (interpolated): $f = 846.6 \text{ MHz}$; $\sigma = 0.908 \text{ mho/m}$; $\epsilon_r = 41.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - High/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.651 mW/g

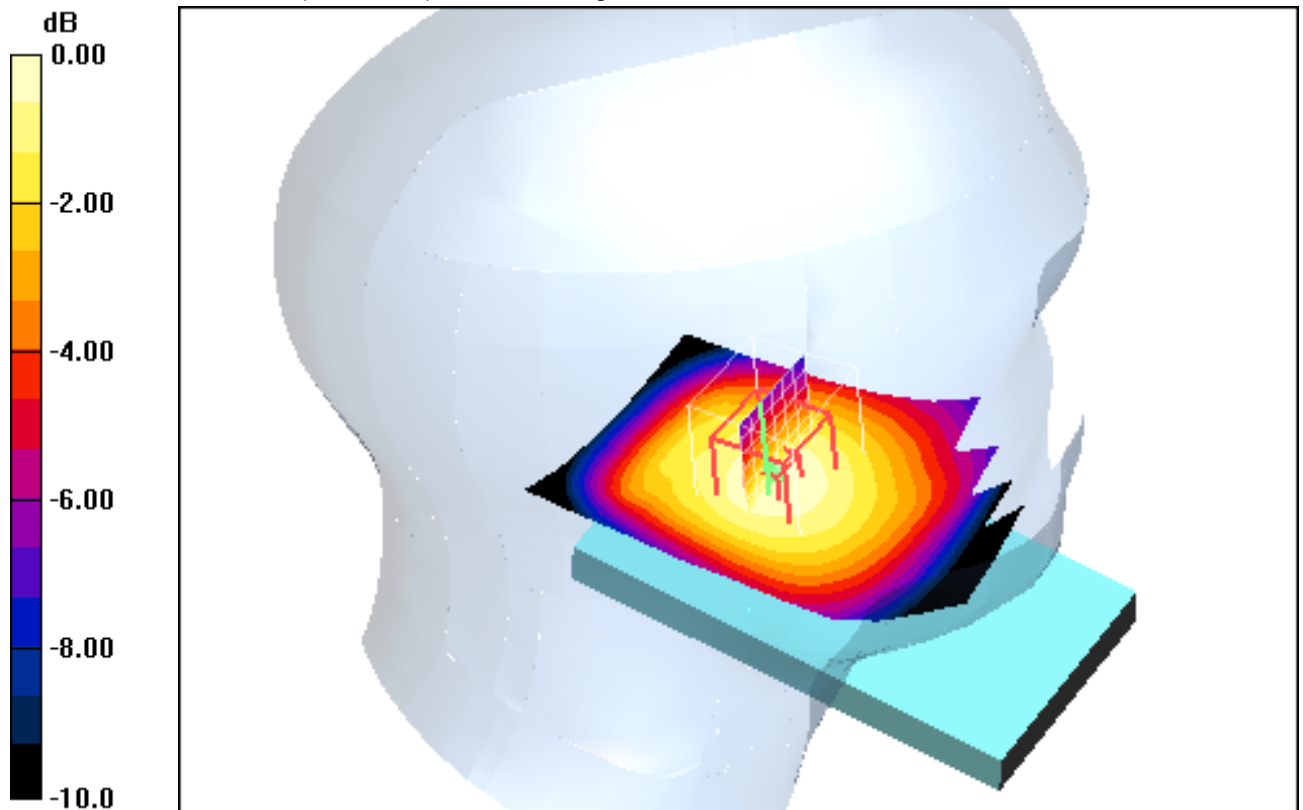
Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 27.8 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.759 W/kg

SAR(1 g) = 0.628 mW/g; SAR(10 g) = 0.473 mW/g

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



0 dB = 0.662mW/g

Additional information:

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

Date/Time: 14.06.2012 08:18:28 Date/Time: 14.06.2012 08:26:02

IEEE1528-RightHandSide-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.892$ mho/m; $\epsilon_r = 42$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.07 mW/g

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

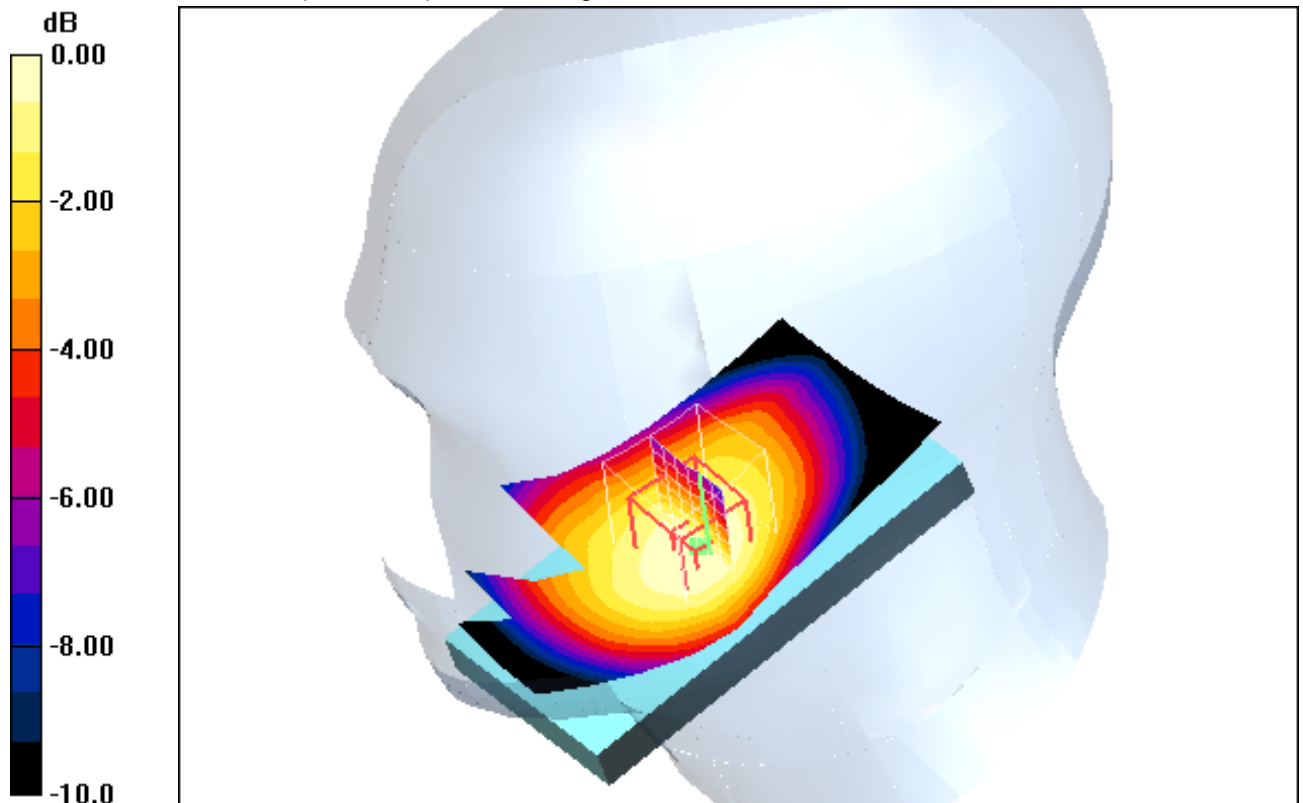
dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.4 V/m; Power Drift = 0.018 dB

Peak SAR (extrapolated) = 1.17 W/kg

SAR(1 g) = 0.958 mW/g; SAR(10 g) = 0.729 mW/g

Maximum value of SAR (measured) = 1.01 mW/g



0 dB = 1.01mW/g

Additional information:

ambient temperature: 22.3°C; liquid temperature: 22.9°C

Date/Time: 14.06.2012 08:40:28 Date/Time: 14.06.2012 08:46:32

IEEE1528-RightHandSide-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.9$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.09 mW/g

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

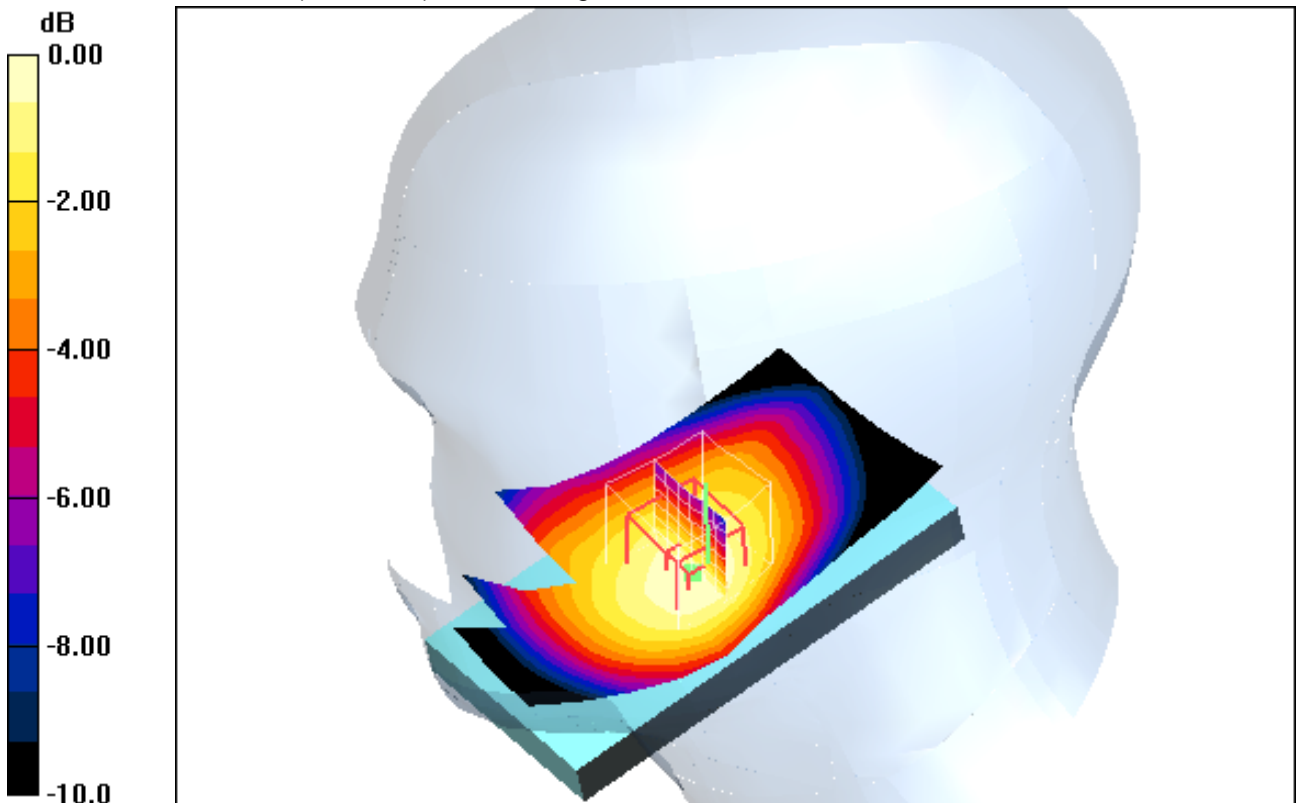
dx=5mm, dy=5mm, dz=5mm

Reference Value = 36.2 V/m; Power Drift = -0.033 dB

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.770 mW/g

Maximum value of SAR (measured) = 1.08 mW/g



0 dB = 1.08mW/g

Additional information:

ambient temperature: 22.3°C; liquid temperature: 22.9°C

Date/Time: 14.06.2012 09:00:41 Date/Time: 14.06.2012 09:06:46

IEEE1528-RightHandSide-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.908$ mho/m; $\epsilon_r = 41.7$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.03 mW/g

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

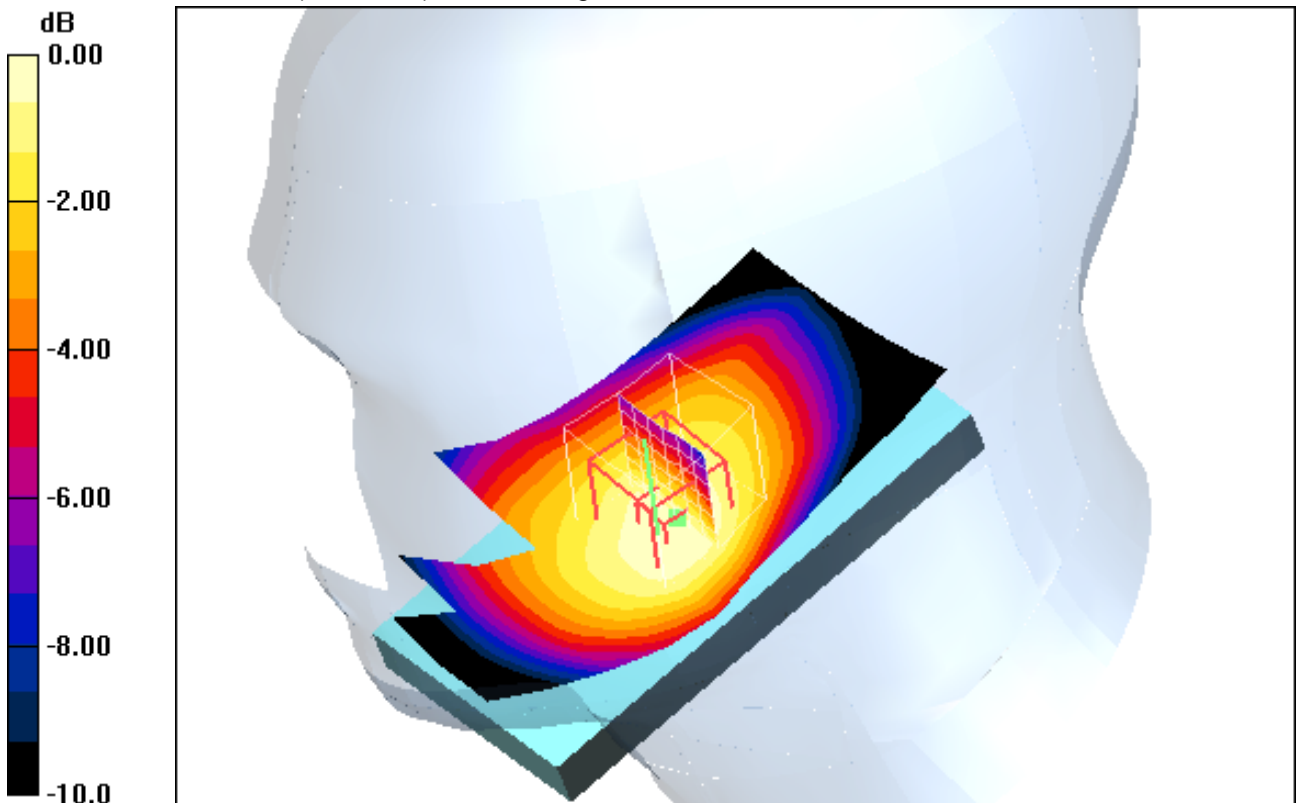
dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.1 V/m; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.951 mW/g; SAR(10 g) = 0.717 mW/g

Maximum value of SAR (measured) = 1.00 mW/g



0 dB = 1.00mW/g

Additional information:

ambient temperature: 22.3°C; liquid temperature: 22.9°C

Date/Time: 14.06.2012 10:11:57 Date/Time: 14.06.2012 10:18:59

IEEE1528-RightHandSide-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.892$ mho/m; $\epsilon_r = 42$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.664 mW/g

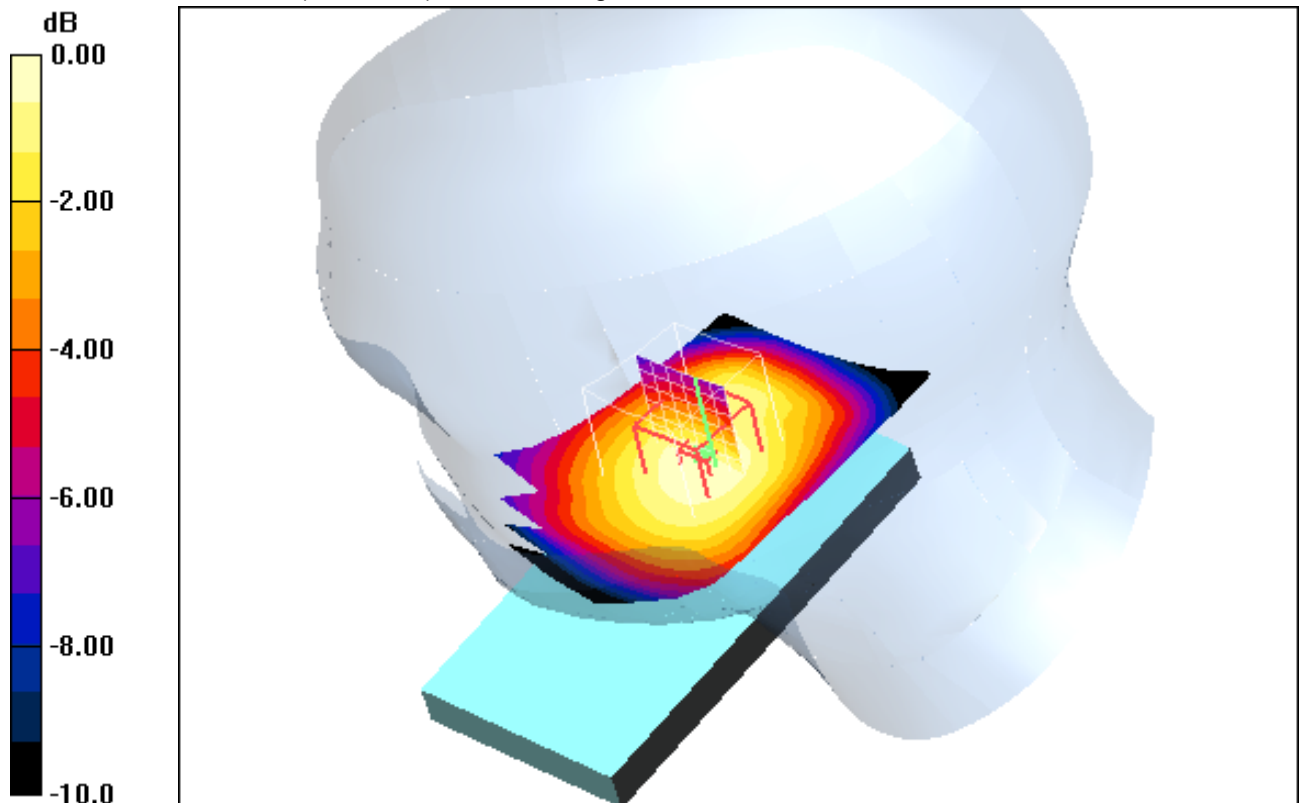
Tilt position - Low/Zoom Scan (7x7x7) (7x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.1 V/m; Power Drift = -0.053 dB

Peak SAR (extrapolated) = 0.766 W/kg

SAR(1 g) = 0.626 mW/g; SAR(10 g) = 0.473 mW/g

Maximum value of SAR (measured) = 0.664 mW/g



0 dB = 0.664mW/g

Additional information:

ambient temperature: 22.3°C; liquid temperature: 22.9°C

Date/Time: 14.06.2012 09:47:47 Date/Time: 14.06.2012 09:56:36

IEEE1528-RightHandSide-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.9$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

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

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

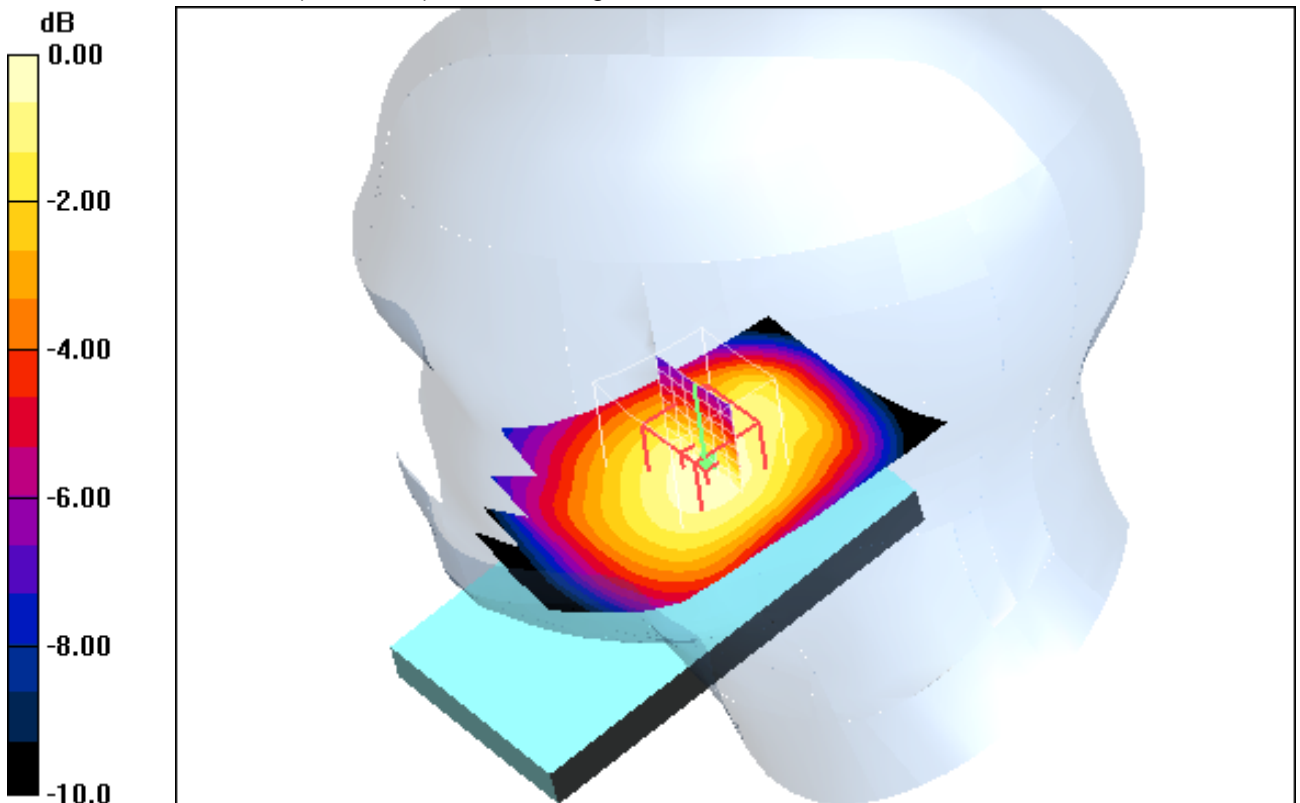
dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.3 V/m; Power Drift = -0.032 dB

Peak SAR (extrapolated) = 0.728 W/kg

SAR(1 g) = 0.593 mW/g; SAR(10 g) = 0.448 mW/g

Maximum value of SAR (measured) = 0.629 mW/g



0 dB = 0.629mW/g

Additional information:

ambient temperature: 22.3°C; liquid temperature: 22.9°C

Date/Time: 14.06.2012 09:22:00 Date/Time: 14.06.2012 09:29:36

IEEE1528-RightHandSide-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: HSL900 Medium parameters used (interpolated): $f = 846.6 \text{ MHz}$; $\sigma = 0.908 \text{ mho/m}$; $\epsilon_r = 41.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.95, 5.95, 5.95); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - High/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

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

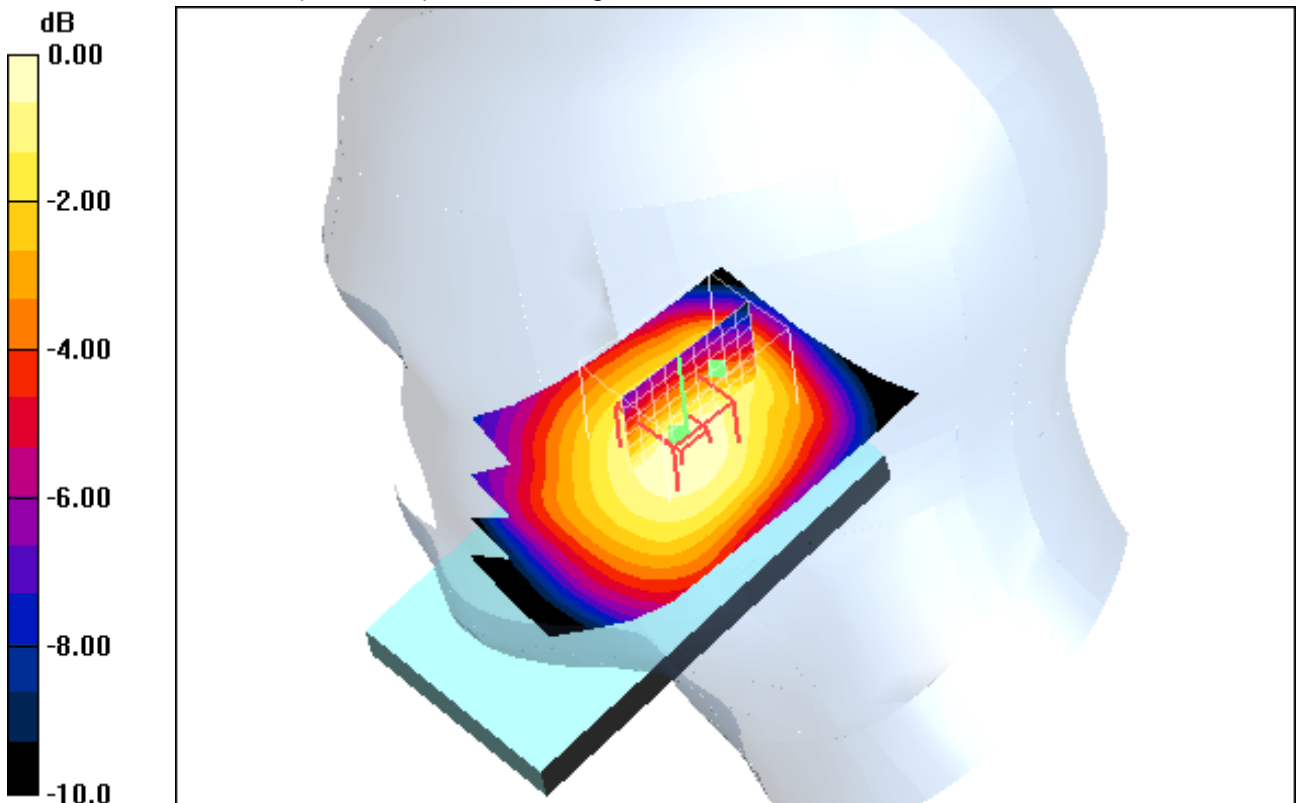
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 27.8 V/m; Power Drift = -0.053 dB

Peak SAR (extrapolated) = 0.748 W/kg

SAR(1 g) = 0.617 mW/g; SAR(10 g) = 0.465 mW/g

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



0 dB = 0.647mW/g

Additional information:

ambient temperature: 22.3°C; liquid temperature: 22.9°C

Annex B.8: UMTS WCDMA FDD V 850MHz body (hotspot)

Date/Time: 01.06.2012 11:52:21 Date/Time: 01.06.2012 11:59:55

OET65-Body-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used (interpolated): $f = 826.4 \text{ MHz}$; $\sigma = 0.974 \text{ mho/m}$; $\epsilon_r = 55.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Low/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.06 mW/g

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

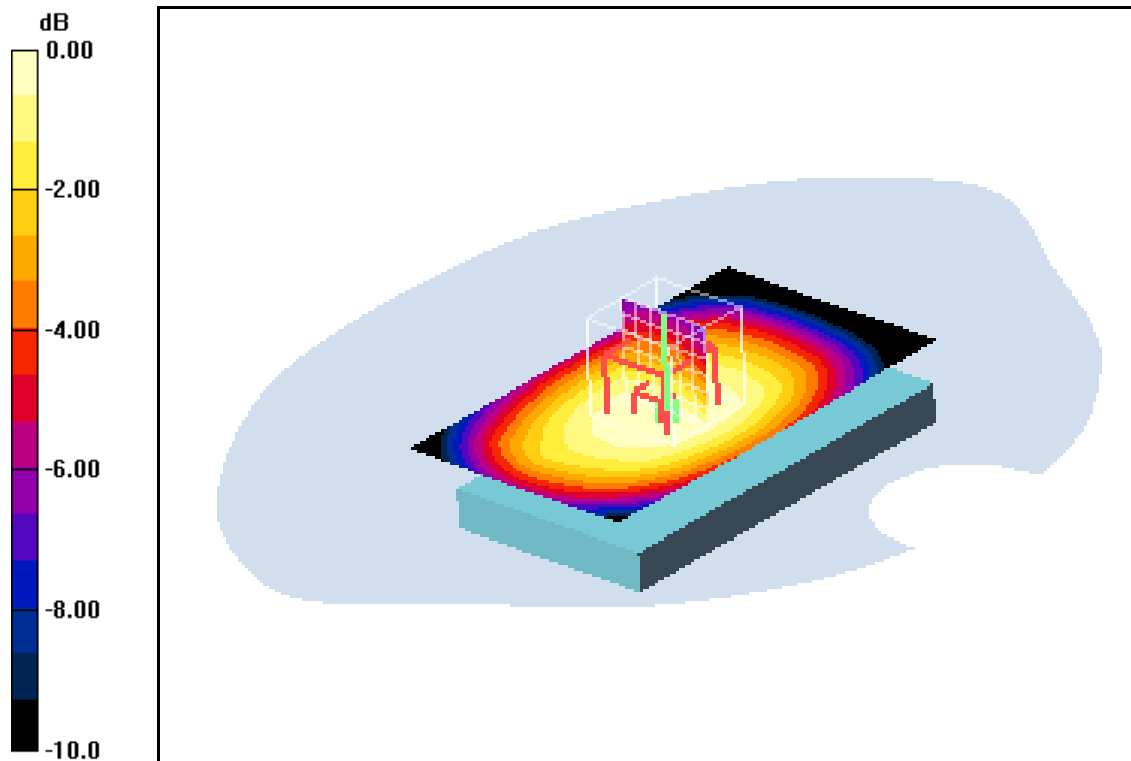
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 34.1 V/m; Power Drift = -0.013 dB

Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 0.992 mW/g; SAR(10 g) = 0.769 mW/g

Maximum value of SAR (measured) = 1.04 mW/g



0 dB = 1.04mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 22.8°C; liquid temperature: 22.2°C

Date/Time: 01.06.2012 12:14:10 Date/Time: 01.06.2012 12:20:34

OET65-Body-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 55.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.08 mW/g

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

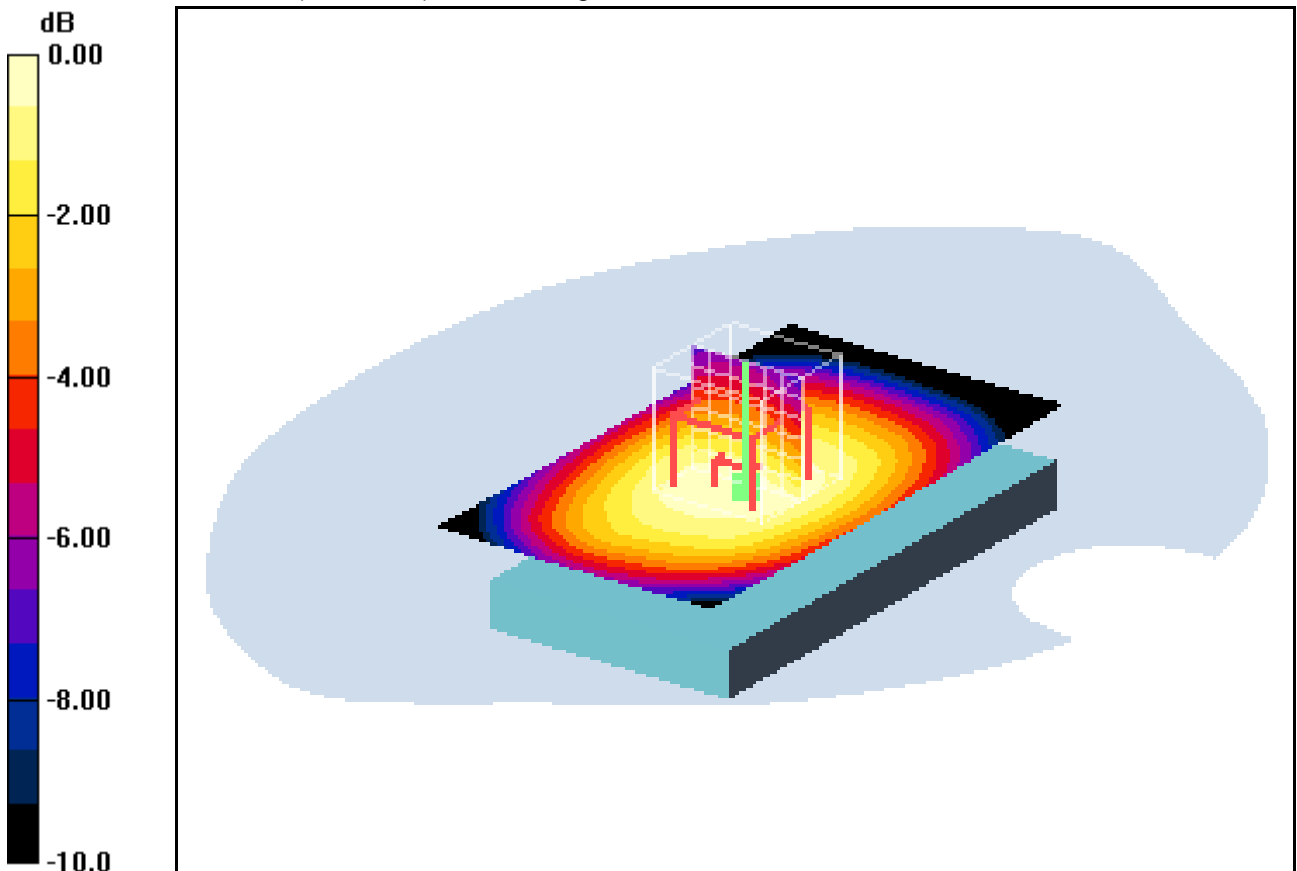
dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.6 V/m; Power Drift = 0.012 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.800 mW/g

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



0 dB = 1.10mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 22.8°C; liquid temperature: 22.2°C

Date/Time: 01.06.2012 12:33:57 Date/Time: 01.06.2012 12:40:17

OET65-Body-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.998$ mho/m; $\epsilon_r = 55.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.954 mW/g

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

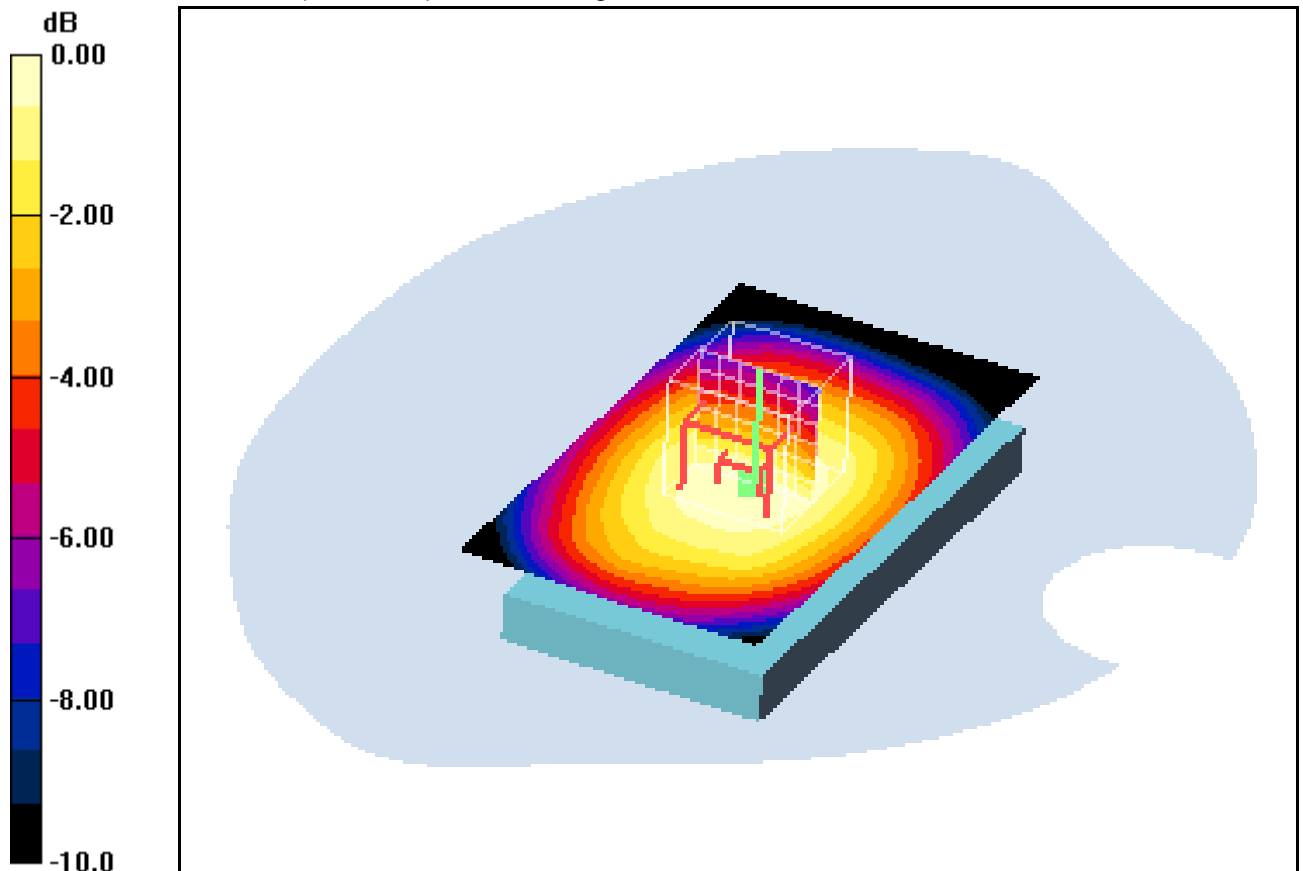
dx=5mm, dy=5mm, dz=5mm

Reference Value = 32.2 V/m; Power Drift = 0.140 dB

Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.924 mW/g; SAR(10 g) = 0.710 mW/g

Maximum value of SAR (measured) = 0.975 mW/g



0 dB = 0.975mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 22.8°C; liquid temperature: 22.2°C

Date/Time: 01.06.2012 13:58:43 Date/Time: 01.06.2012 14:06:21

OET65-Body-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used (interpolated): $f = 826.4 \text{ MHz}$; $\sigma = 0.974 \text{ mho/m}$; $\epsilon_r = 55.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Low/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.06 mW/g

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

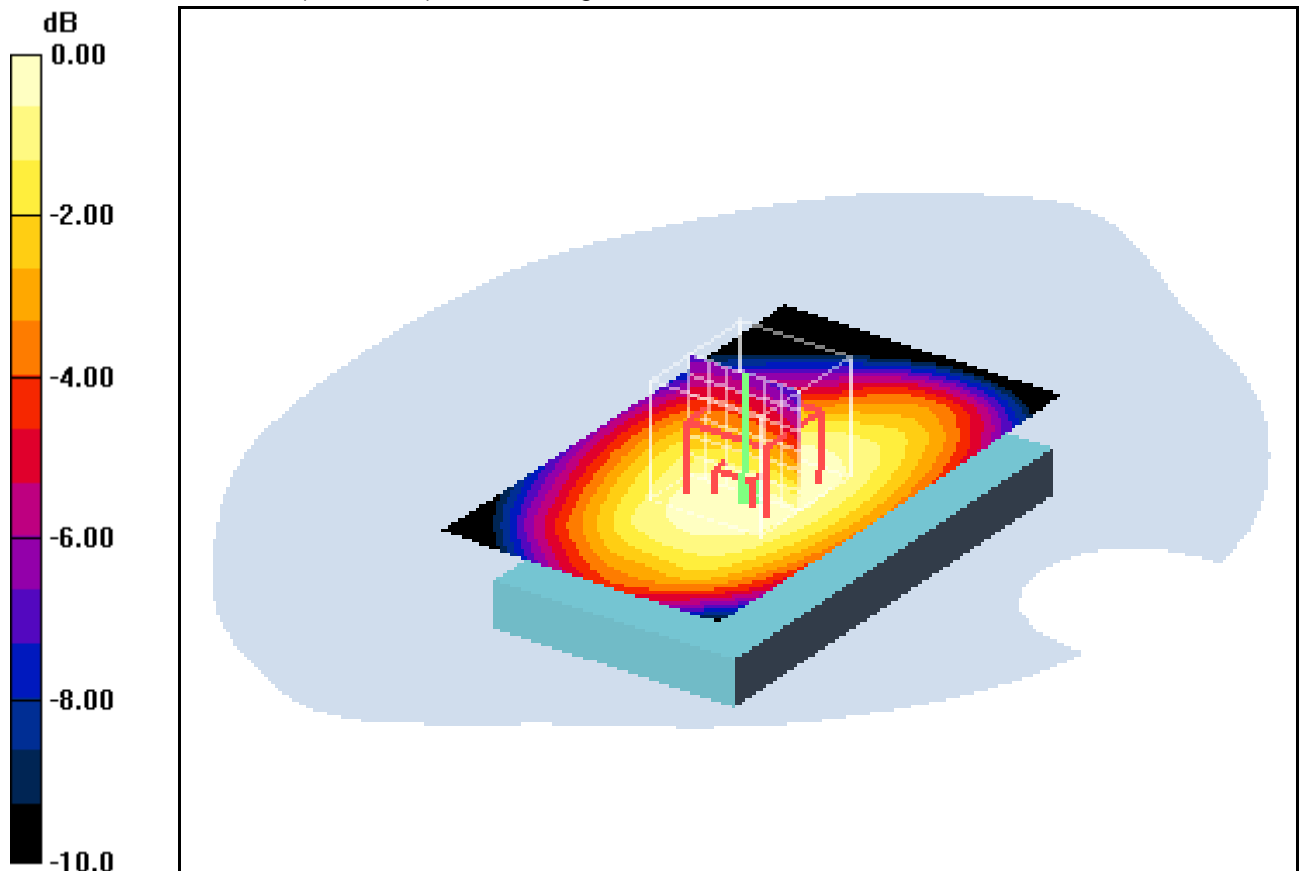
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 34.7 V/m; Power Drift = -0.061 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.778 mW/g

Maximum value of SAR (measured) = 1.07 mW/g



0 dB = 1.07mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 22.8°C; liquid temperature: 22.2°C

Date/Time: 01.06.2012 13:20:16 Date/Time: 01.06.2012 13:43:53

OET65-Body-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used (interpolated): $f = 836.4 \text{ MHz}$; $\sigma = 0.99 \text{ mho/m}$; $\epsilon_r = 55.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.04 mW/g

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

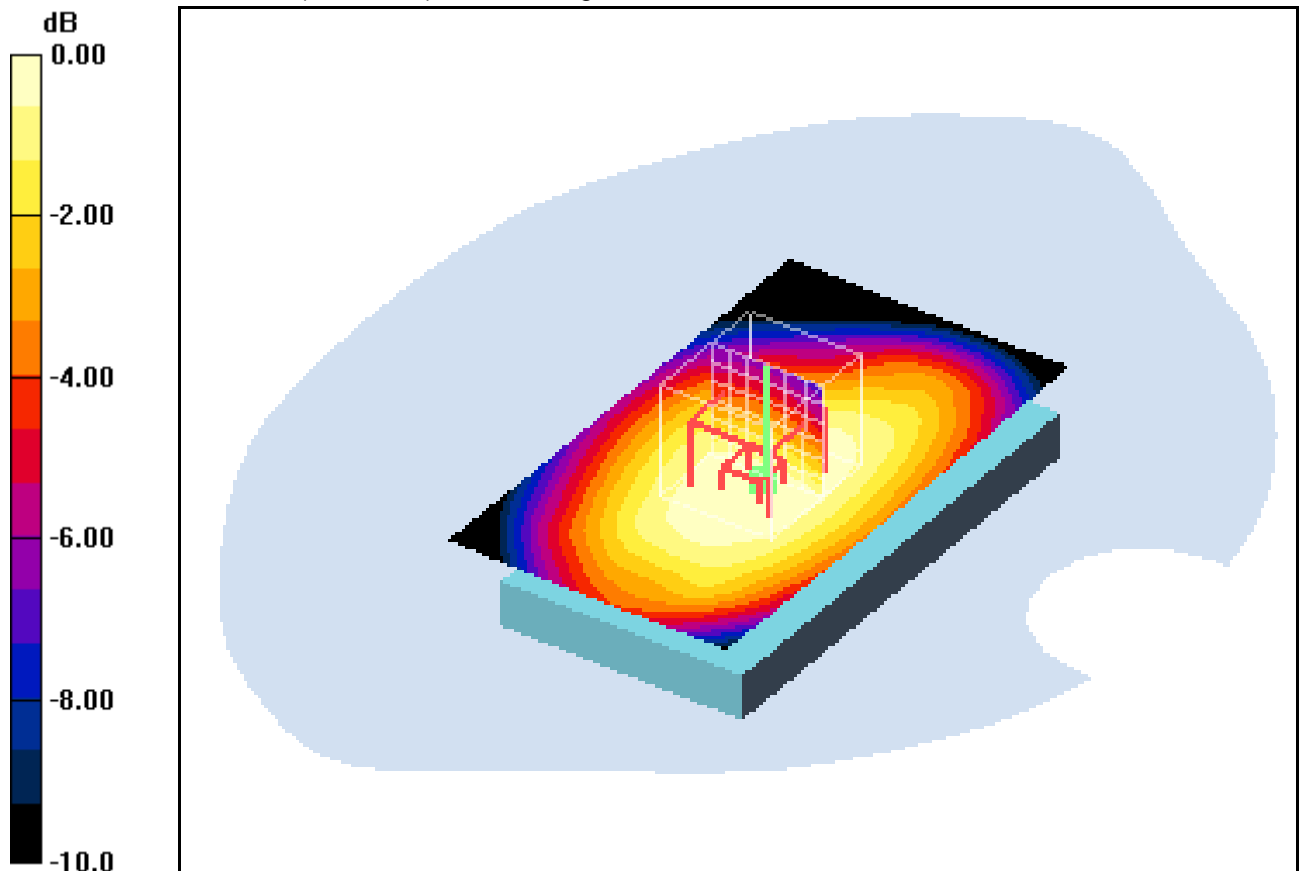
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 33.8 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.22 W/kg

SAR(1 g) = 0.989 mW/g; SAR(10 g) = 0.760 mW/g

Maximum value of SAR (measured) = 1.04 mW/g



0 dB = 1.04mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 22.8°C; liquid temperature: 22.2°C

Date/Time: 01.06.2012 12:54:50 Date/Time: 01.06.2012 13:02:54

OET65-Body-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used (interpolated): $f = 846.6 \text{ MHz}$; $\sigma = 0.998 \text{ mho/m}$; $\epsilon_r = 55.1$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - High/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.921 mW/g

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

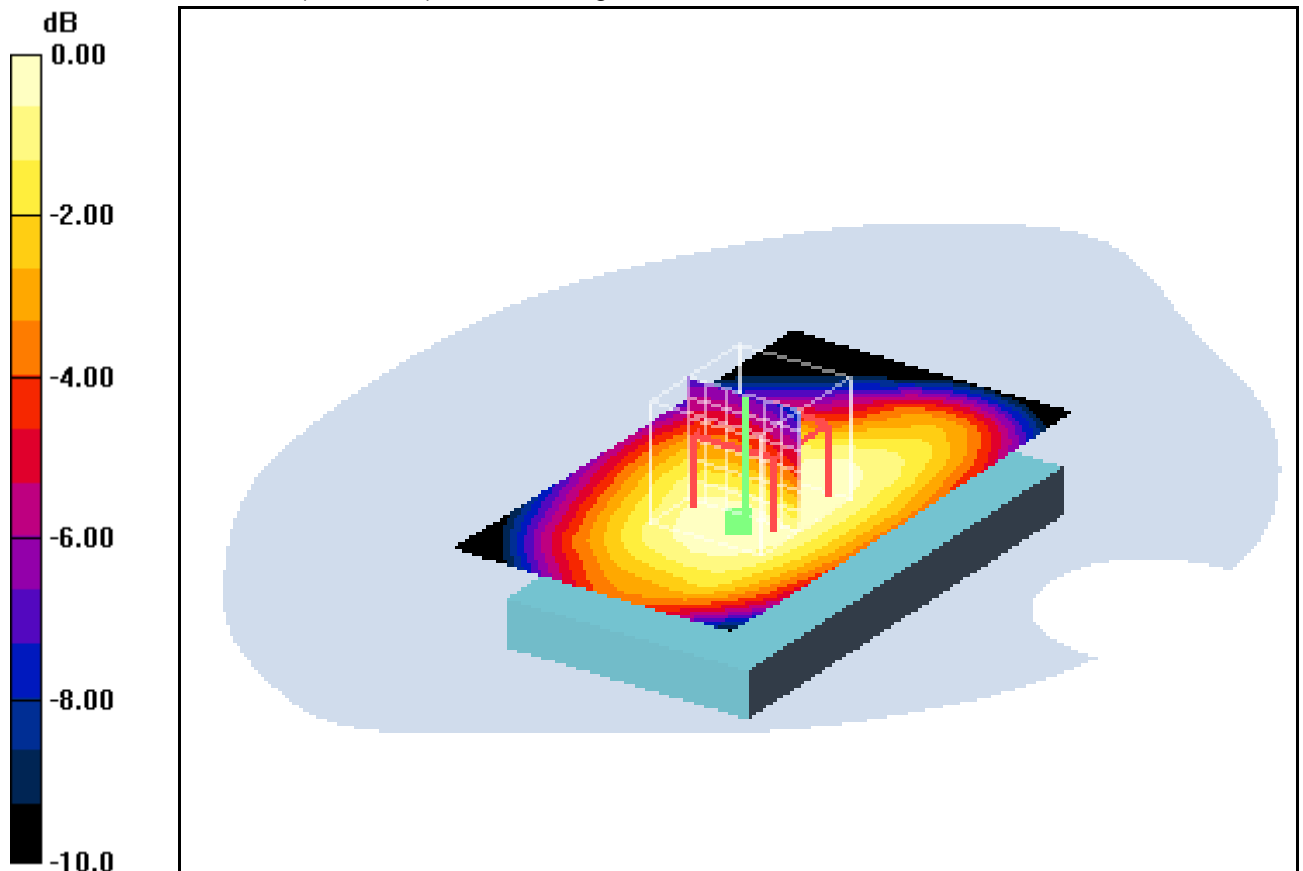
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 31.4 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 1.08 W/kg

SAR(1 g) = 0.878 mW/g; SAR(10 g) = 0.673 mW/g

Maximum value of SAR (measured) = 0.926 mW/g



0 dB = 0.926mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 22.8°C; liquid temperature: 22.2°C

Date/Time: 01.06.2012 14:48:32 Date/Time: 01.06.2012 14:55:22

OET65-Body-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used (interpolated): $f = 836.4 \text{ MHz}$; $\sigma = 0.99 \text{ mho/m}$; $\epsilon_r = 55.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Edge left position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.640 mW/g

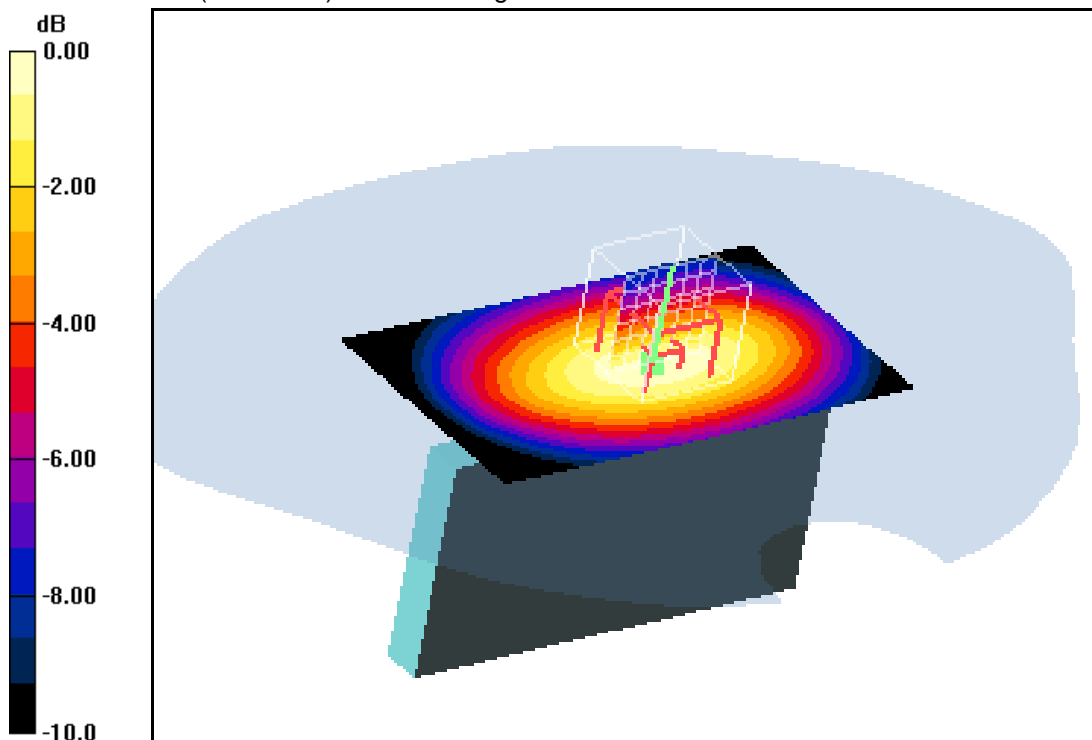
Edge left position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 26.0 V/m; Power Drift = -0.094 dB

Peak SAR (extrapolated) = 0.793 W/kg

SAR(1 g) = 0.599 mW/g; SAR(10 g) = 0.420 mW/g

Maximum value of SAR (measured) = 0.645 mW/g



0 dB = 0.645mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 22.8°C; liquid temperature: 22.2°C

Date/Time: 01.06.2012 15:09:33 Date/Time: 01.06.2012 15:16:39

OET65-Body-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 55.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Edge right position - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.650 mW/g

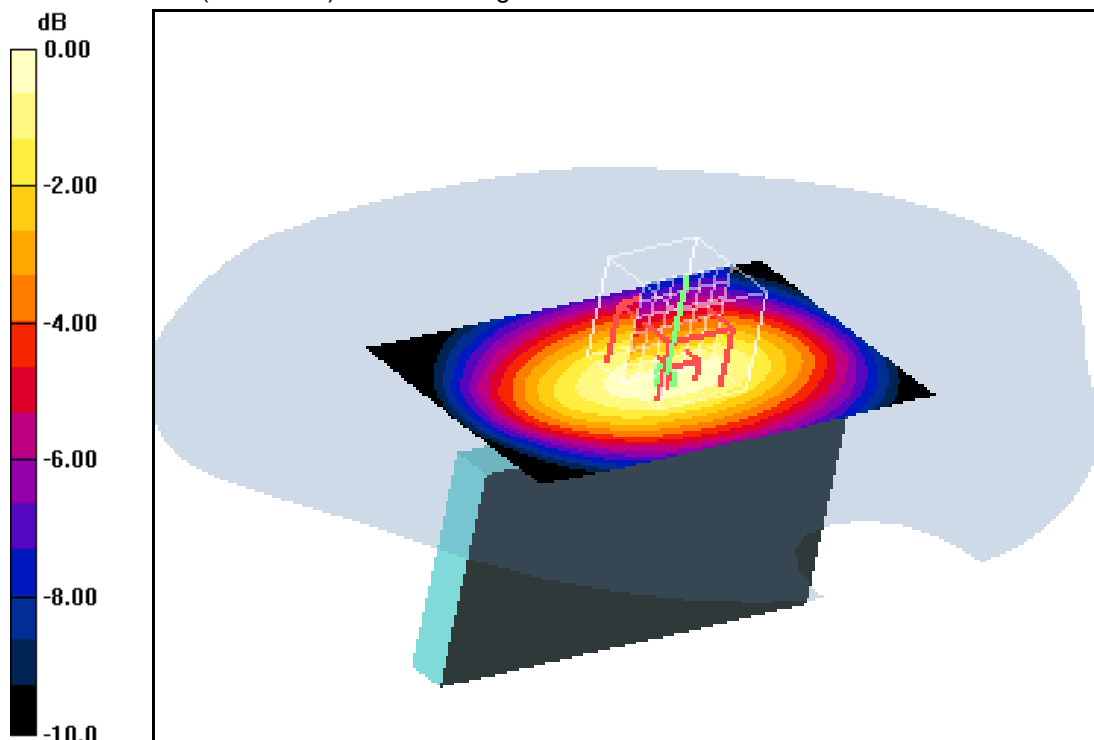
Edge right position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.1 V/m; Power Drift = 0.017 dB

Peak SAR (extrapolated) = 0.801 W/kg

SAR(1 g) = 0.602 mW/g; SAR(10 g) = 0.425 mW/g

Maximum value of SAR (measured) = 0.642 mW/g



0 dB = 0.642mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 22.8°C; liquid temperature: 22.2°C

Date/Time: 01.06.2012 15:30:32 Date/Time: 01.06.2012 15:44:58

OET65-Body-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 55.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

Maximum value of SAR (interpolated) = 0.150 mW/g

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

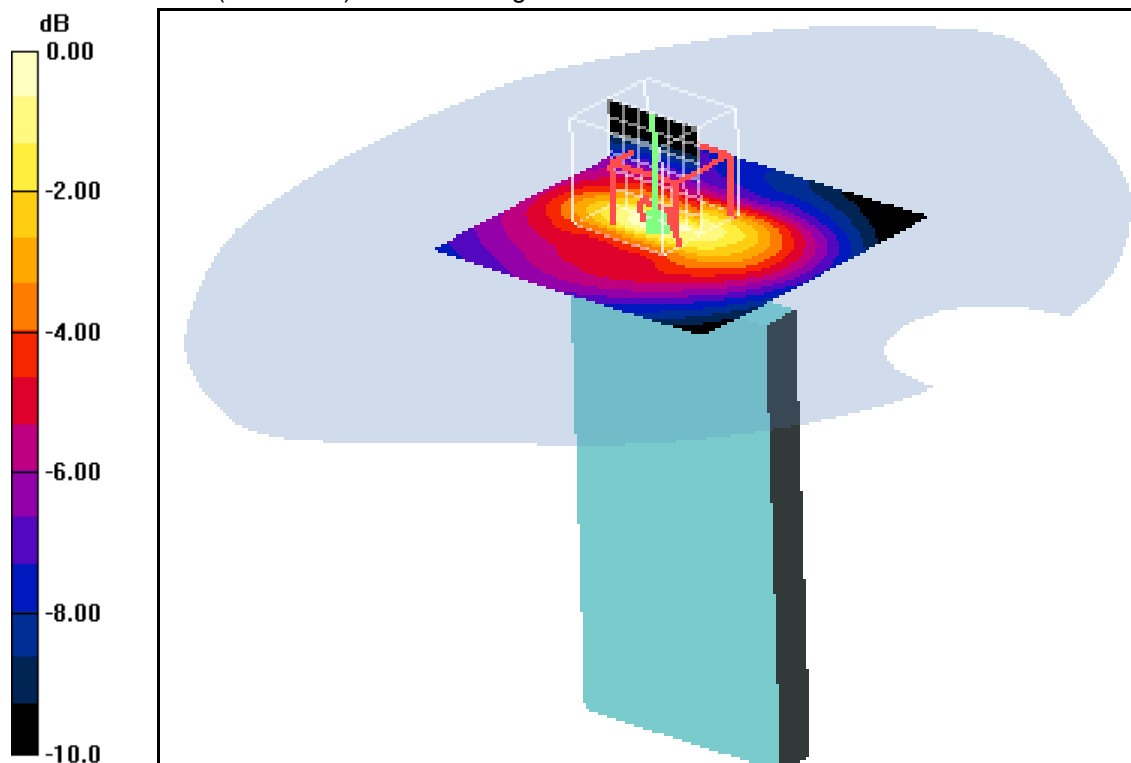
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.3 V/m; Power Drift = -0.035 dB

Peak SAR (extrapolated) = 0.330 W/kg

SAR(1 g) = 0.145 mW/g; SAR(10 g) = 0.077 mW/g

Maximum value of SAR (measured) = 0.154 mW/g



0 dB = 0.154mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 22.8°C; liquid temperature: 22.2°C

Date/Time: 01.06.2012 17:20:16 Date/Time: 01.06.2012 17:29:00

OET65-Body-WCDMA FDD V CMWC

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 55.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Middle CMWC/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.06 mW/g

Front position - Middle CMWC/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

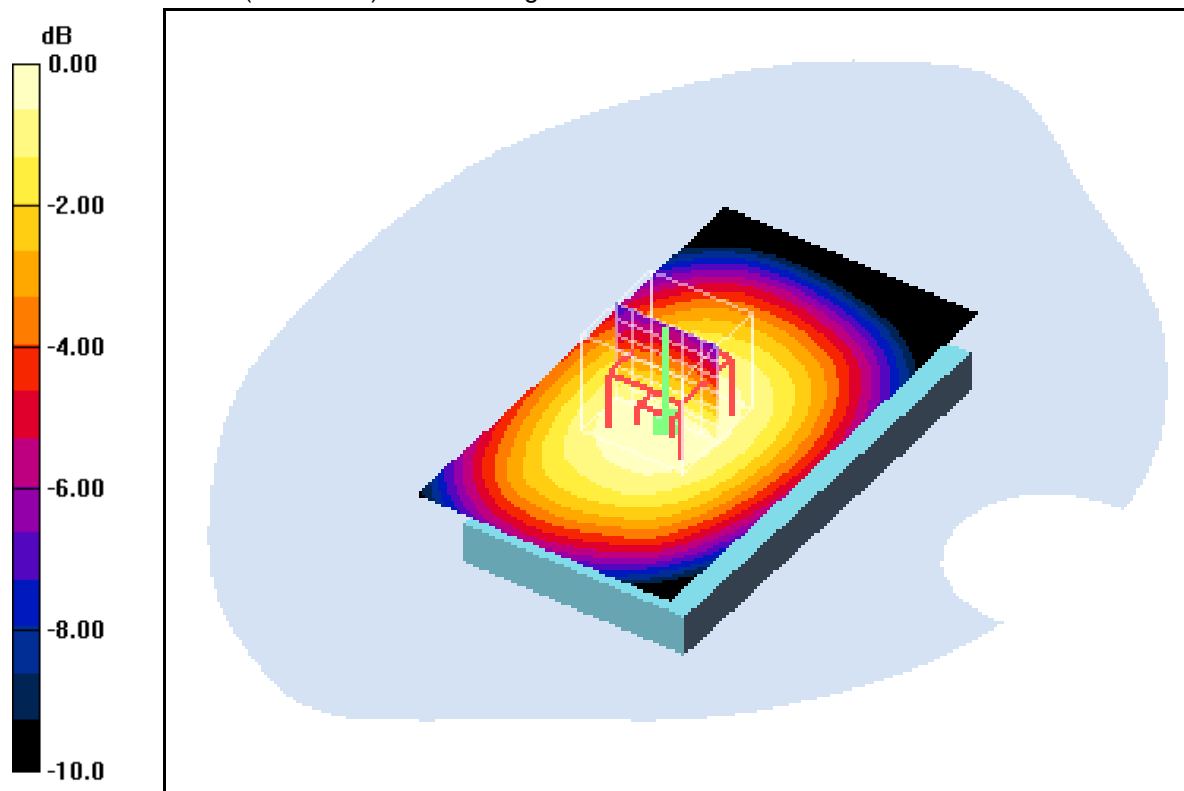
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 33.8 V/m; Power Drift = -0.056 dB

Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.784 mW/g

Maximum value of SAR (measured) = 1.06 mW/g



0 dB = 1.06mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 22.8°C; liquid temperature: 22.2°C

Annex B.9: UMTS WCDMA FDD V 850MHz body worn

Date/Time: 01.06.2012 16:52:20 Date/Time: 01.06.2012 16:59:50

OET65-Body-WCDMA FDD V

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

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

Medium: M900 Medium parameters used (interpolated): $f = 836.4 \text{ MHz}$; $\sigma = 0.99 \text{ mho/m}$; $\epsilon_r = 55.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.85, 5.85, 5.85); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Low 15mm/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.847 mW/g

Front position - Low 15mm/Zoom Scan (7x7x7) (7x8x7)/Cube 0: Measurement

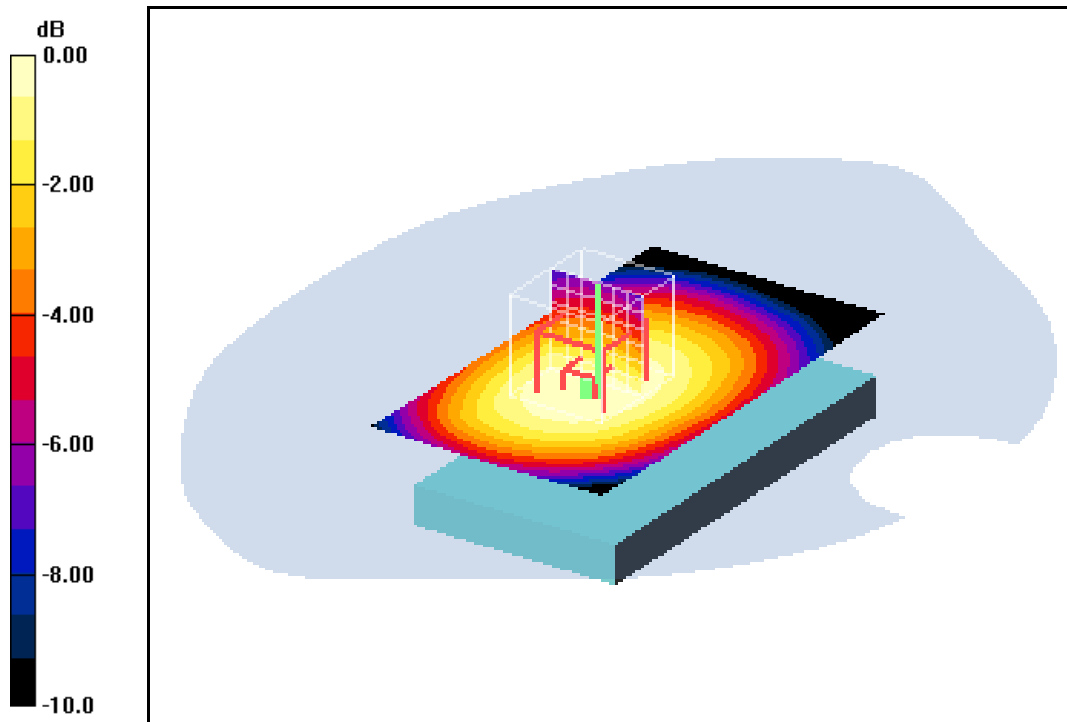
grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 30.5 V/m; Power Drift = -0.064 dB

Peak SAR (extrapolated) = 0.965 W/kg

SAR(1 g) = 0.800 mW/g; SAR(10 g) = 0.610 mW/g

Maximum value of SAR (measured) = 0.840 mW/g



0 dB = 0.840mW/g

Additional information:

position or distance of DUT to SAM: 15mm with headset.
 ambient temperature: 22.8°C; liquid temperature: 22.2°C

Annex B.10: UMTS WCDMA FDD II 1900MHz head

Date/Time: 08.06.2012 09:24:09 Date/Time: 08.06.2012 09:31:16

IEEE1528-LeftHandSide-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated): $f = 1852.5$ MHz; $\sigma = 1.34$ mho/m; $\epsilon_r = 40$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

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

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

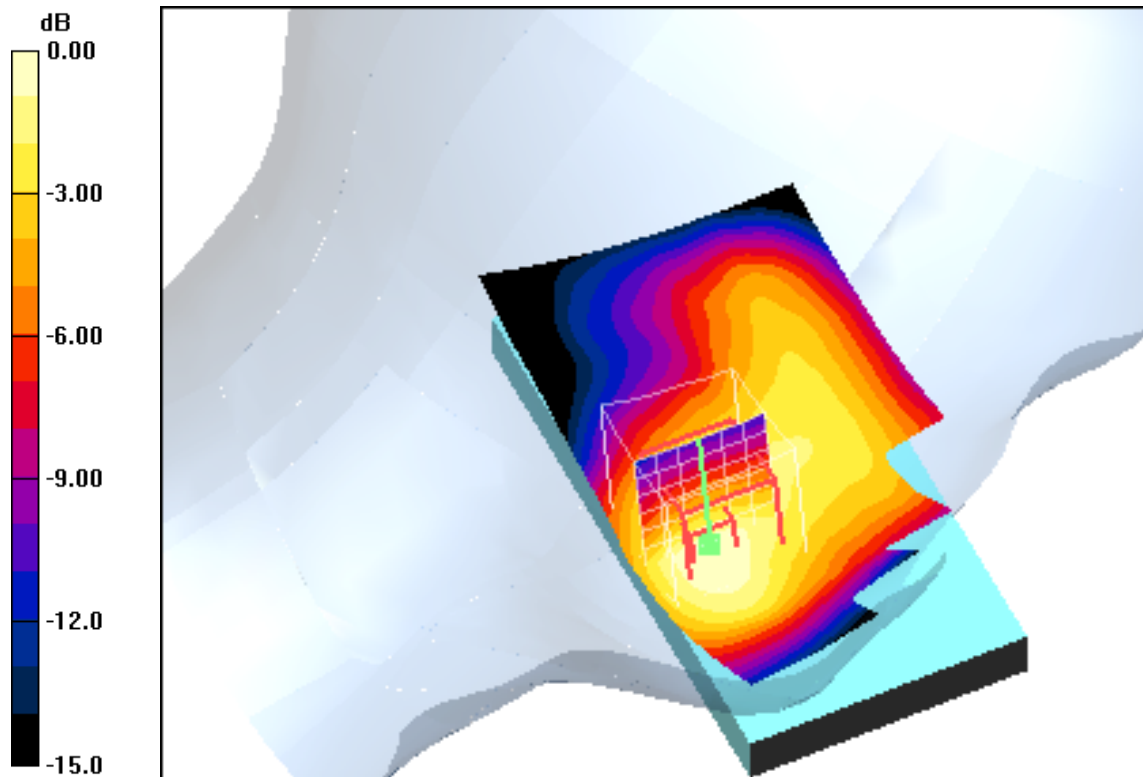
dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.2 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.846 mW/g; SAR(10 g) = 0.534 mW/g

Maximum value of SAR (measured) = 0.912 mW/g



0 dB = 0.912mW/g

Additional information:

ambient temperature: 21.7°C; liquid temperature: 22.7°C

Date/Time: 08.06.2012 09:46:57 Date/Time: 08.06.2012 09:57:58

IEEE1528-LeftHandSide-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.37 \text{ mho/m}$; $\epsilon_r = 39.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.00 mW/g

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

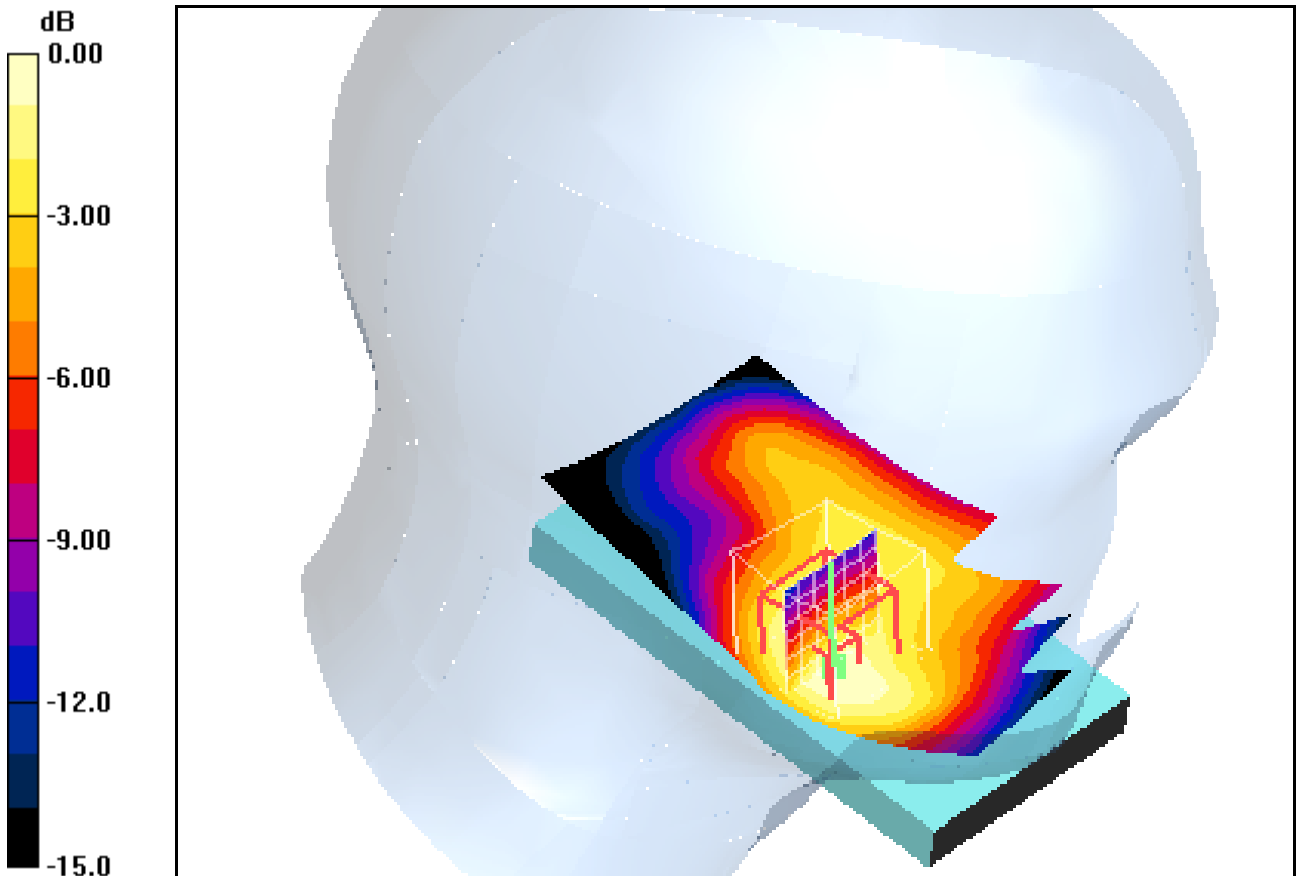
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 27.6 V/m; Power Drift = -0.031 dB

Peak SAR (extrapolated) = 1.37 W/kg

SAR(1 g) = 0.891 mW/g; SAR(10 g) = 0.556 mW/g

Maximum value of SAR (measured) = 0.958 mW/g



0 dB = 0.958mW/g

Additional information:

ambient temperature: 21.7°C; liquid temperature: 22.7°C

Date/Time: 08.06.2012 10:14:37 Date/Time: 08.06.2012 10:22:38

IEEE1528-LeftHandSide-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated): $f = 1907.6 \text{ MHz}$; $\sigma = 1.4 \text{ mho/m}$; $\epsilon_r = 39.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - High/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.06 mW/g

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

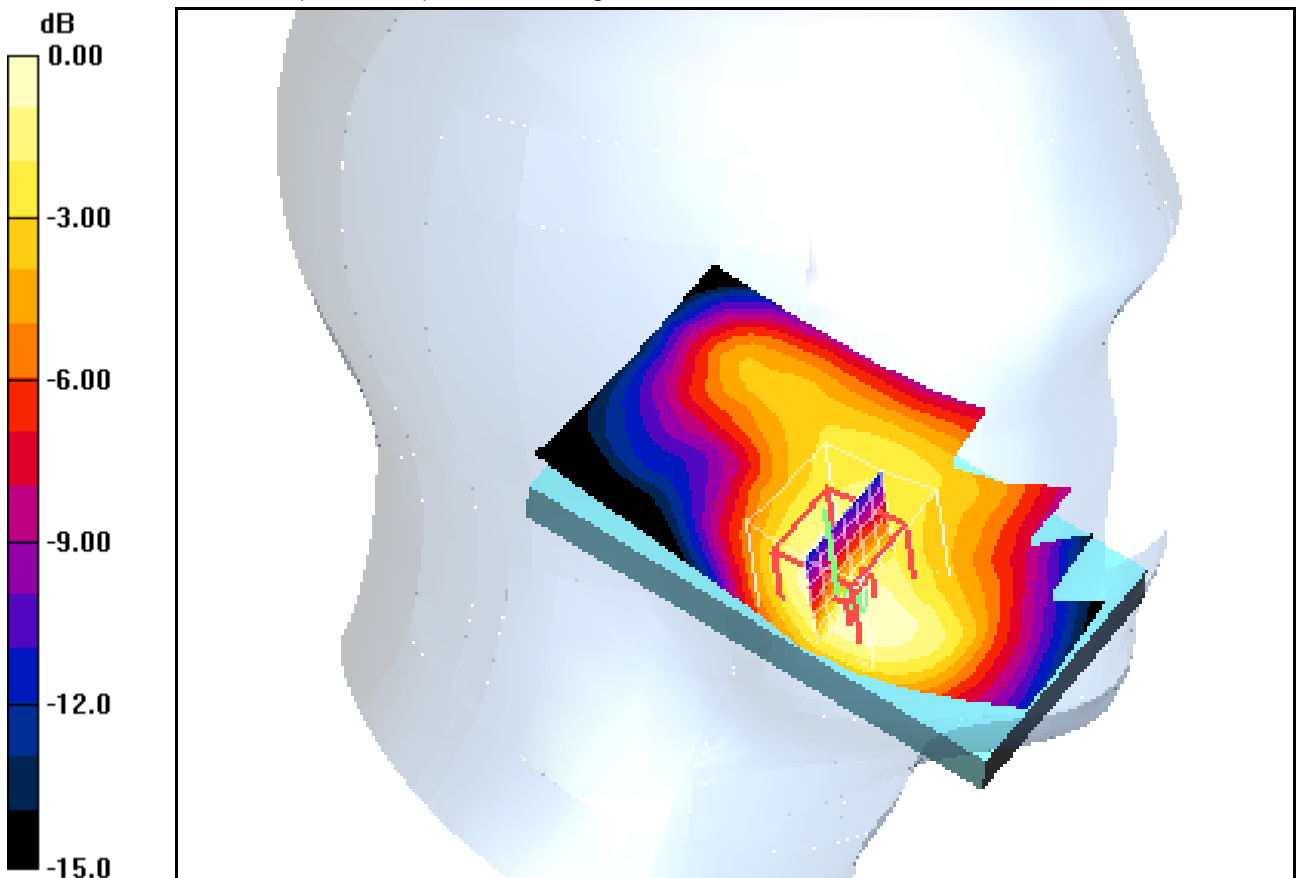
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 28.1 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 0.931 mW/g; SAR(10 g) = 0.575 mW/g

Maximum value of SAR (measured) = 0.999 mW/g



Additional information:

ambient temperature: 21.7°C; liquid temperature: 22.7°C

Date/Time: 08.06.2012 11:24:13 Date/Time: 08.06.2012 11:33:24

IEEE1528-LeftHandSide-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated): $f = 1852.5 \text{ MHz}$; $\sigma = 1.34 \text{ mho/m}$; $\epsilon_r = 40$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

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

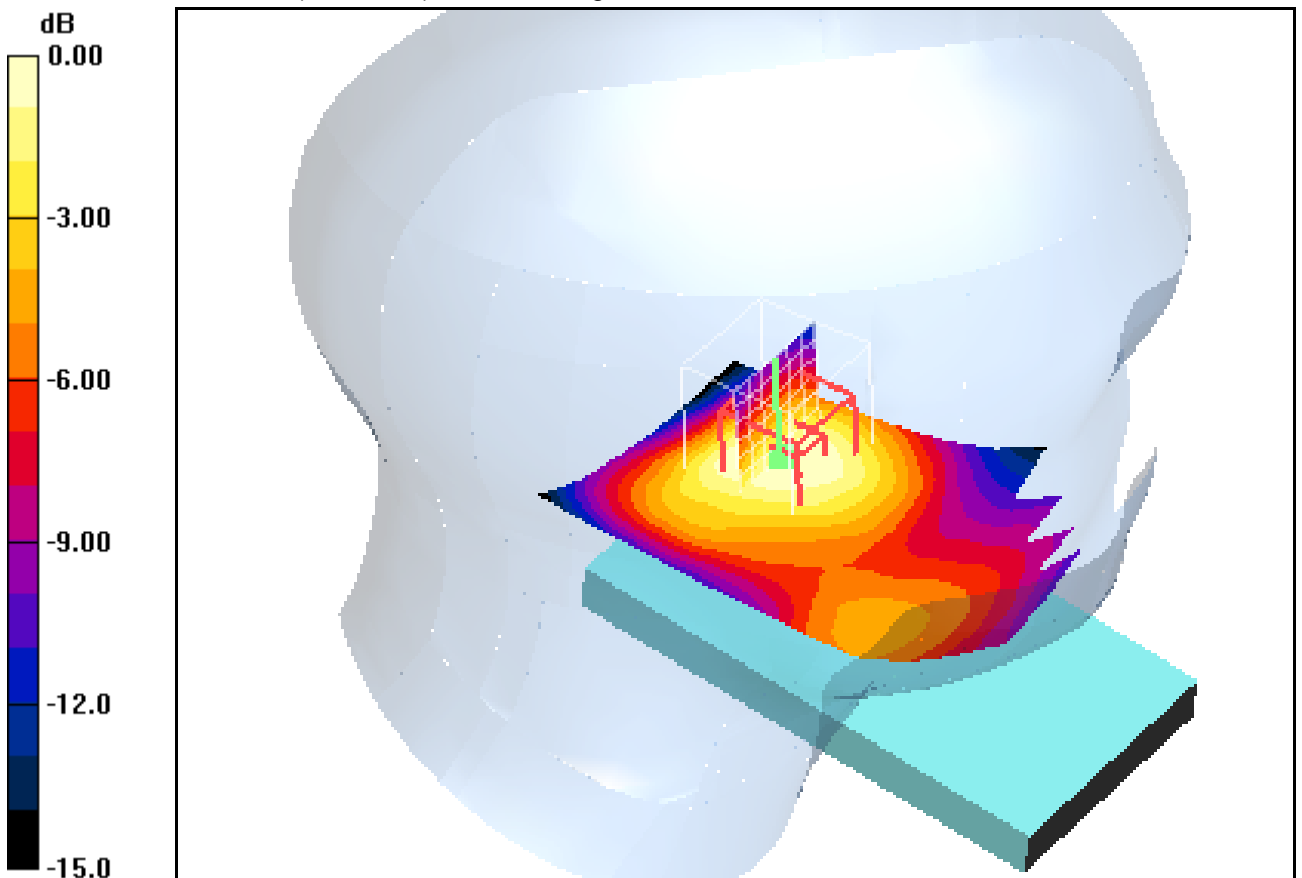
Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.6 V/m; Power Drift = -0.054 dB

Peak SAR (extrapolated) = 0.564 W/kg

SAR(1 g) = 0.384 mW/g; SAR(10 g) = 0.242 mW/g

Maximum value of SAR (measured) = 0.409 mW/g



0 dB = 0.409mW/g

Additional information:

ambient temperature: 21.7°C; liquid temperature: 22.7°C

Date/Time: 08.06.2012 11:04:43 Date/Time: 08.06.2012 11:12:00

IEEE1528-LeftHandSide-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.37 \text{ mho/m}$; $\epsilon_r = 39.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.480 mW/g

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

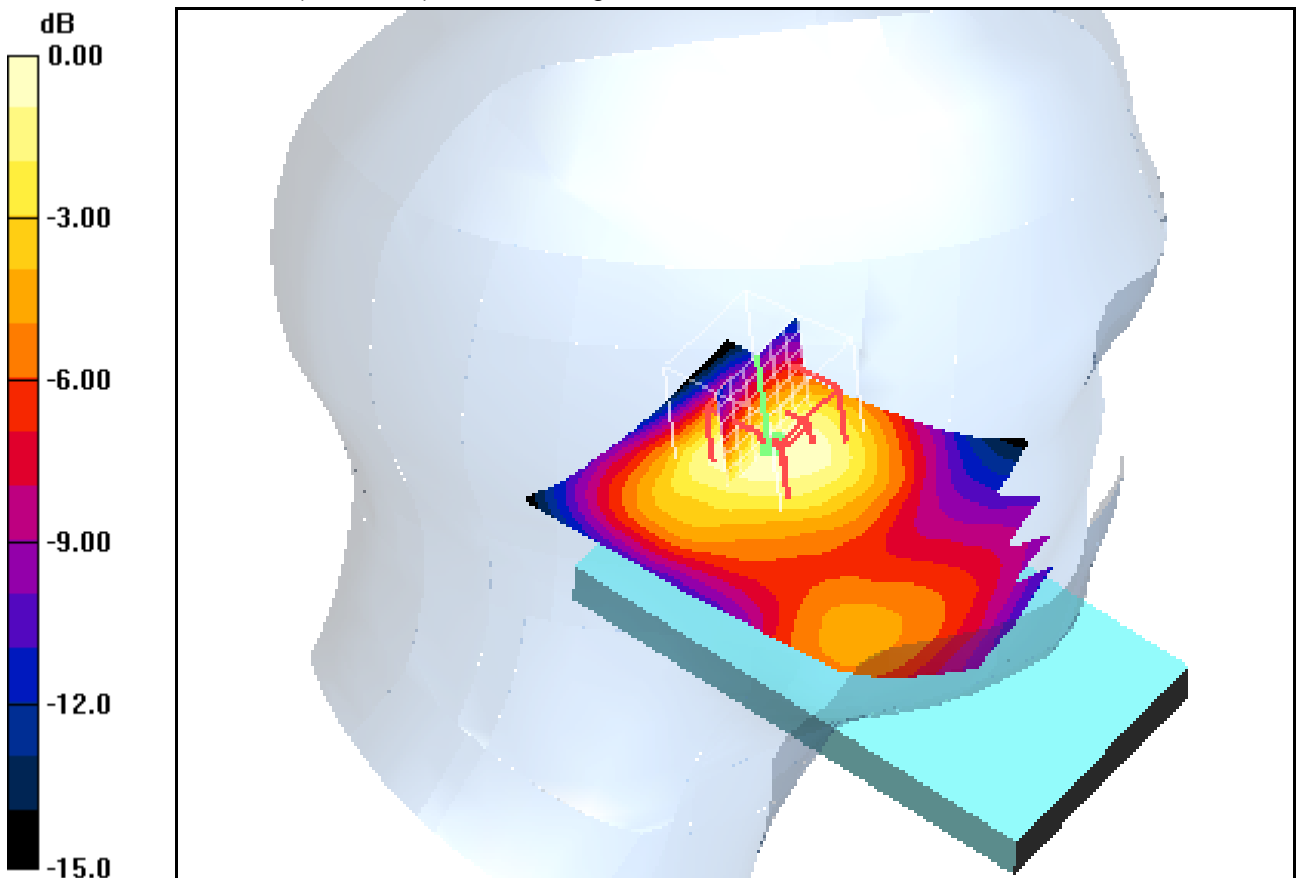
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 18.0 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.597 W/kg

SAR(1 g) = 0.411 mW/g; SAR(10 g) = 0.257 mW/g

Maximum value of SAR (measured) = 0.440 mW/g



0 dB = 0.440mW/g

Additional information:

ambient temperature: 21.7°C; liquid temperature: 22.7°C

Date/Time: 08.06.2012 10:38:21 Date/Time: 08.06.2012 10:49:21

IEEE1528-LeftHandSide-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated): $f = 1907.6 \text{ MHz}$; $\sigma = 1.4 \text{ mho/m}$; $\epsilon_r = 39.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - High/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.487 mW/g

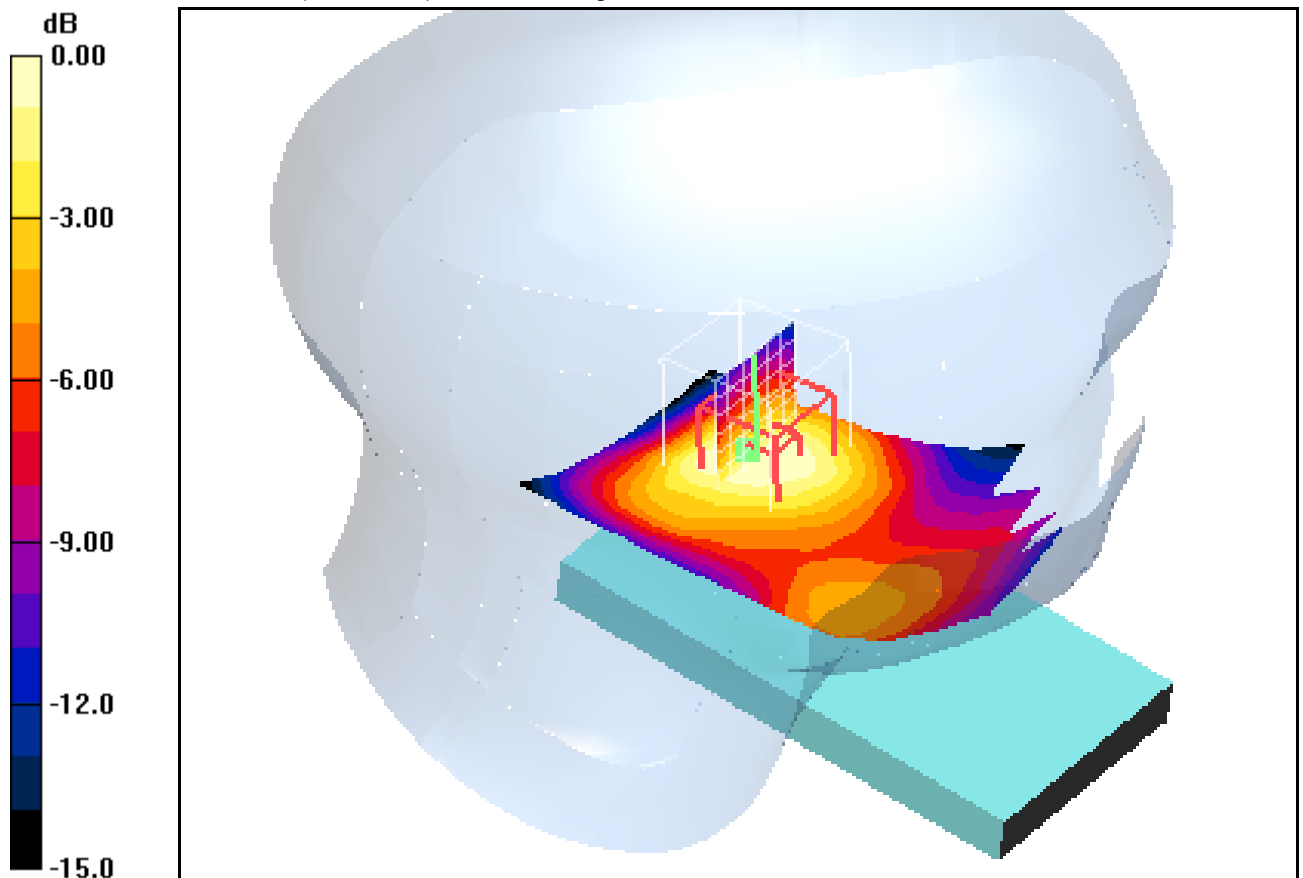
Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 17.7 V/m; Power Drift = 0.076 dB

Peak SAR (extrapolated) = 0.597 W/kg

SAR(1 g) = 0.405 mW/g; SAR(10 g) = 0.252 mW/g

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



0 dB = 0.436mW/g

Additional information:

ambient temperature: 21.7°C; liquid temperature: 22.7°C

Date/Time: 08.06.2012 14:34:39 Date/Time: 08.06.2012 14:42:34

IEEE1528-LeftHandSide-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated): $f = 1907.6 \text{ MHz}$; $\sigma = 1.4 \text{ mho/m}$; $\epsilon_r = 39.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - High 2/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.05 mW/g

Touch position - High 2/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

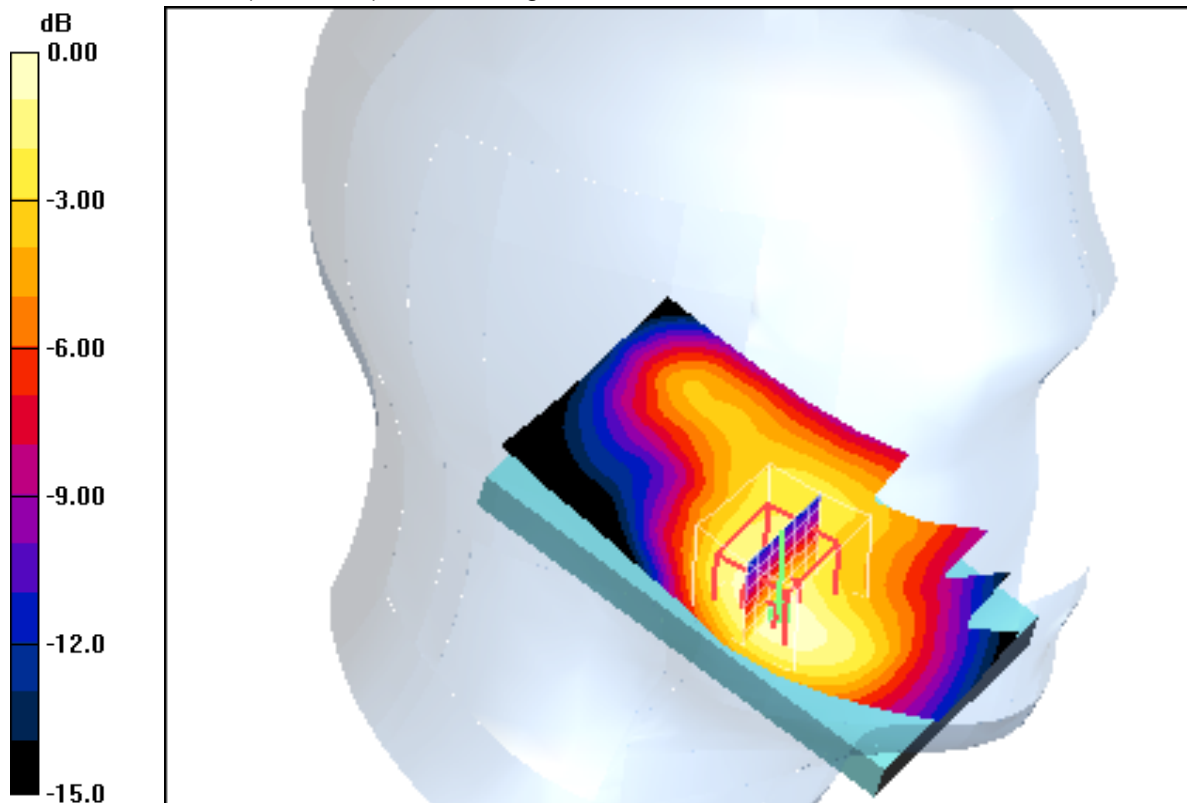
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 28.0 V/m; Power Drift = 0.100 dB

Peak SAR (extrapolated) = 1.51 W/kg

SAR(1 g) = 0.960 mW/g; SAR(10 g) = 0.588 mW/g

Maximum value of SAR (measured) = 1.04 mW/g



0 dB = 1.04mW/g

Additional information:

ambient temperature: 21.7°C; liquid temperature: 22.7°C

Date/Time: 08.06.2012 14:04:02 Date/Time: 08.06.2012 14:10:46

IEEE1528-RightHandSide-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated): $f = 1852.5 \text{ MHz}$; $\sigma = 1.34 \text{ mho/m}$; $\epsilon_r = 40$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Low/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.728 mW/g

Touch position - Low/Zoom Scan (7x7x7) (10x7x7)/Cube 0: Measurement grid:

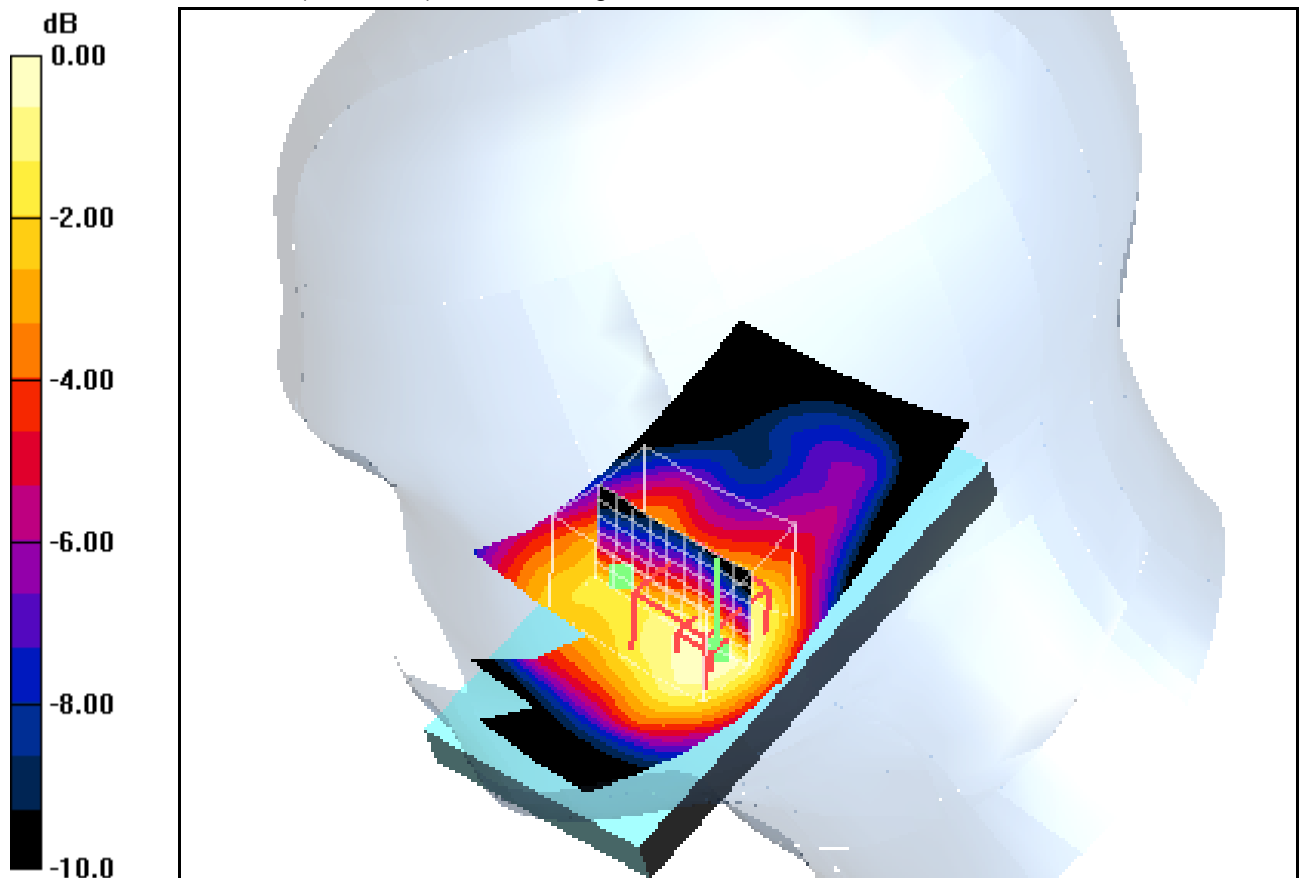
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 23.3 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.900 W/kg

SAR(1 g) = 0.658 mW/g; SAR(10 g) = 0.433 mW/g

Maximum value of SAR (measured) = 0.709 mW/g



0 dB = 0.709mW/g

Additional information:

ambient temperature: 21.7°C; liquid temperature: 22.7°C

Date/Time: 08.06.2012 13:36:56 Date/Time: 08.06.2012 13:44:12

IEEE1528-RightHandSide-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.37 \text{ mho/m}$; $\epsilon_r = 39.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.806 mW/g

Touch position - Middle/Zoom Scan (7x7x7) (10x7x7)/Cube 0: Measurement grid:

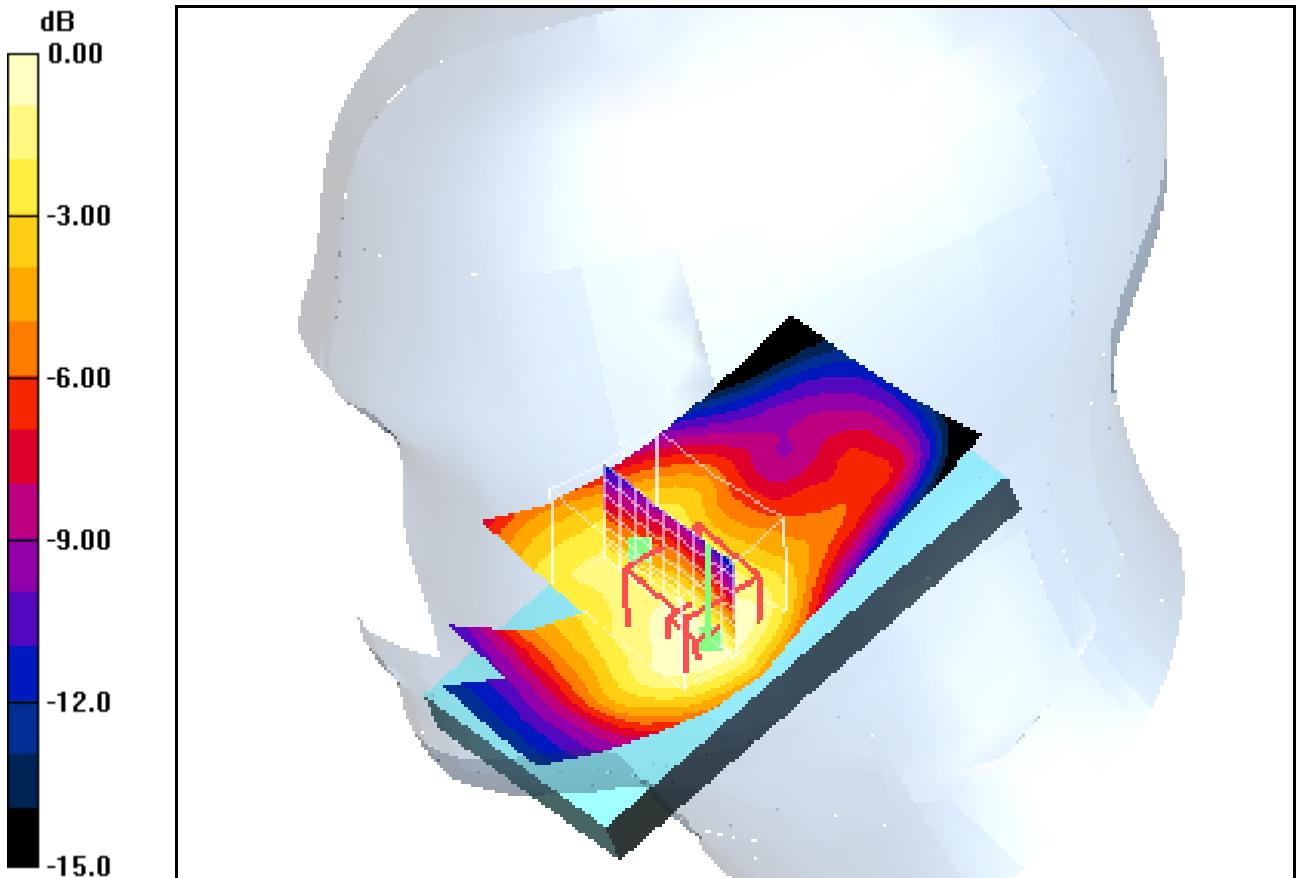
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 24.2 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.990 W/kg

SAR(1 g) = 0.724 mW/g; SAR(10 g) = 0.475 mW/g

Maximum value of SAR (measured) = 0.785 mW/g



0 dB = 0.785mW/g

Additional information:

ambient temperature: 21.7°C; liquid temperature: 22.7°C

Date/Time: 08.06.2012 13:00:06 Date/Time: 08.06.2012 13:16:57

IEEE1528-RightHandSide-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated): $f = 1907.6 \text{ MHz}$; $\sigma = 1.4 \text{ mho/m}$; $\epsilon_r = 39.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - High/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.802 mW/g

Touch position - High/Zoom Scan (7x7x7) (10x7x7)/Cube 0: Measurement grid:

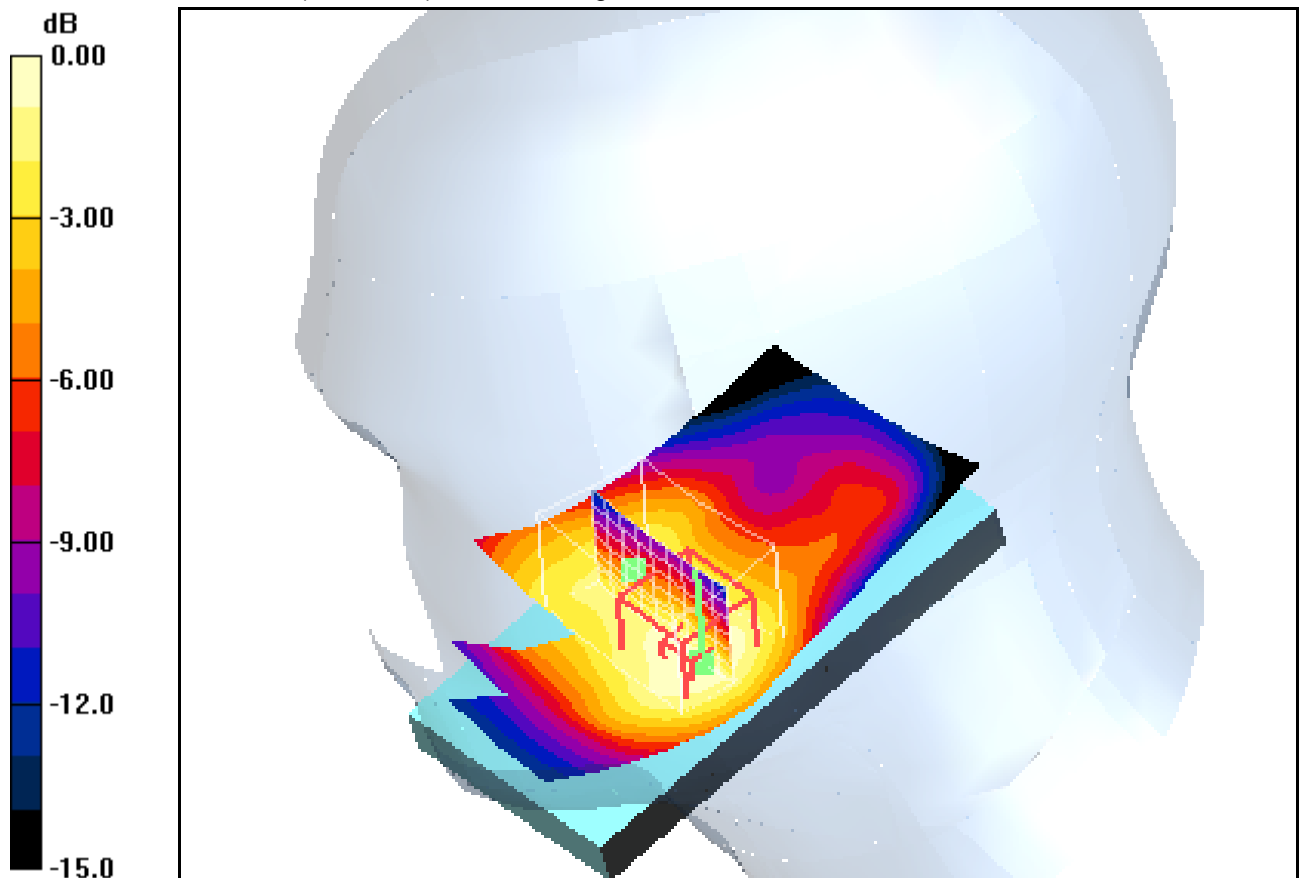
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 23.4 V/m; Power Drift = 0.042 dB

Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.734 mW/g; SAR(10 g) = 0.474 mW/g

Maximum value of SAR (measured) = 0.789 mW/g



0 dB = 0.789mW/g

Additional information:

ambient temperature: 21.7°C; liquid temperature: 22.7°C

Date/Time: 08.06.2012 11:53:08 Date/Time: 08.06.2012 12:00:45

IEEE1528-RightHandSide-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated): $f = 1852.5 \text{ MHz}$; $\sigma = 1.34 \text{ mho/m}$; $\epsilon_r = 40$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Low/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.241 mW/g

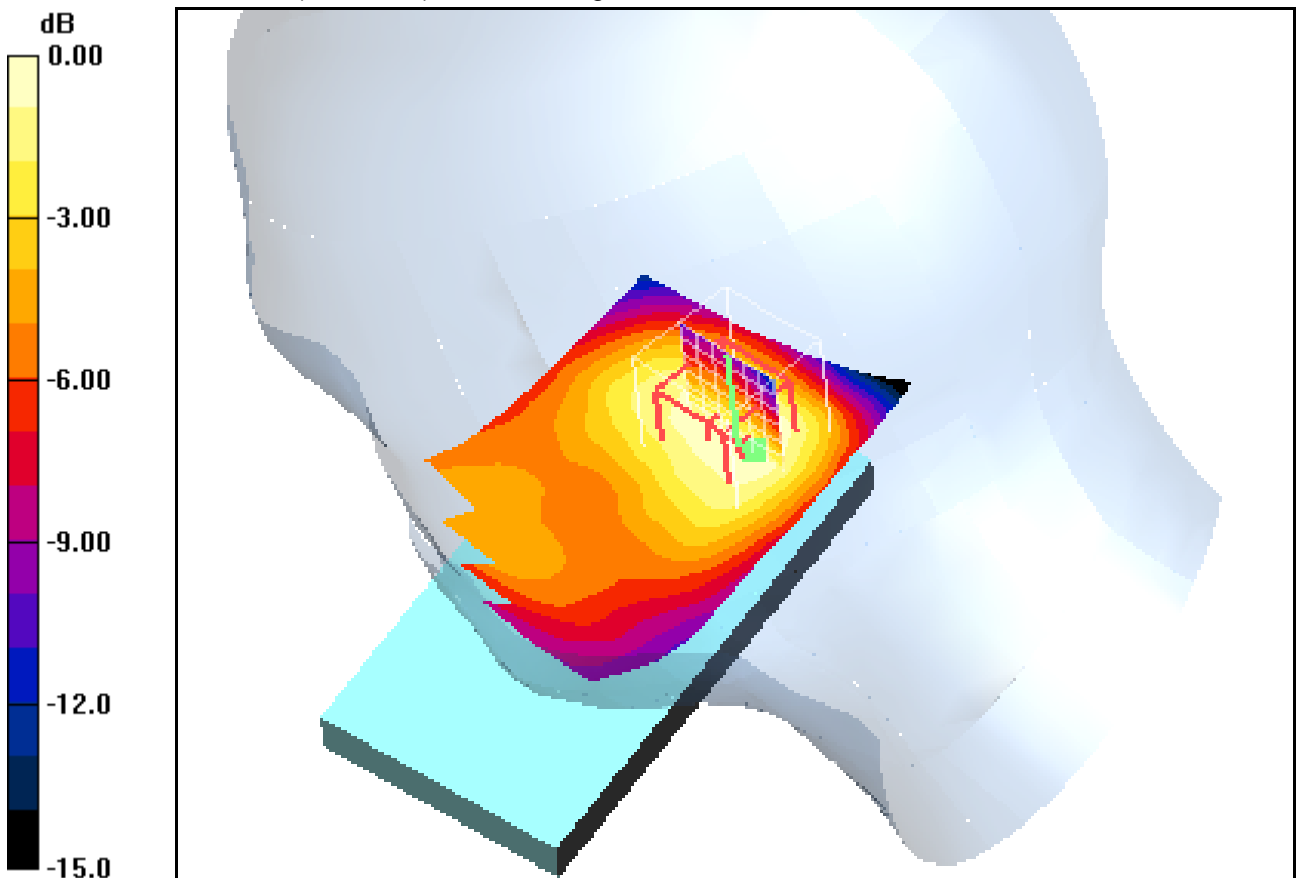
Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.9 V/m; Power Drift = 0.143 dB

Peak SAR (extrapolated) = 0.325 W/kg

SAR(1 g) = 0.231 mW/g; SAR(10 g) = 0.153 mW/g

Maximum value of SAR (measured) = 0.245 mW/g



0 dB = 0.245mW/g

Additional information:

ambient temperature: 21.7°C; liquid temperature: 22.7°C

Date/Time: 08.06.2012 12:14:34 Date/Time: 08.06.2012 12:22:39

IEEE1528-RightHandSide-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.37 \text{ mho/m}$; $\epsilon_r = 39.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.279 mW/g

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

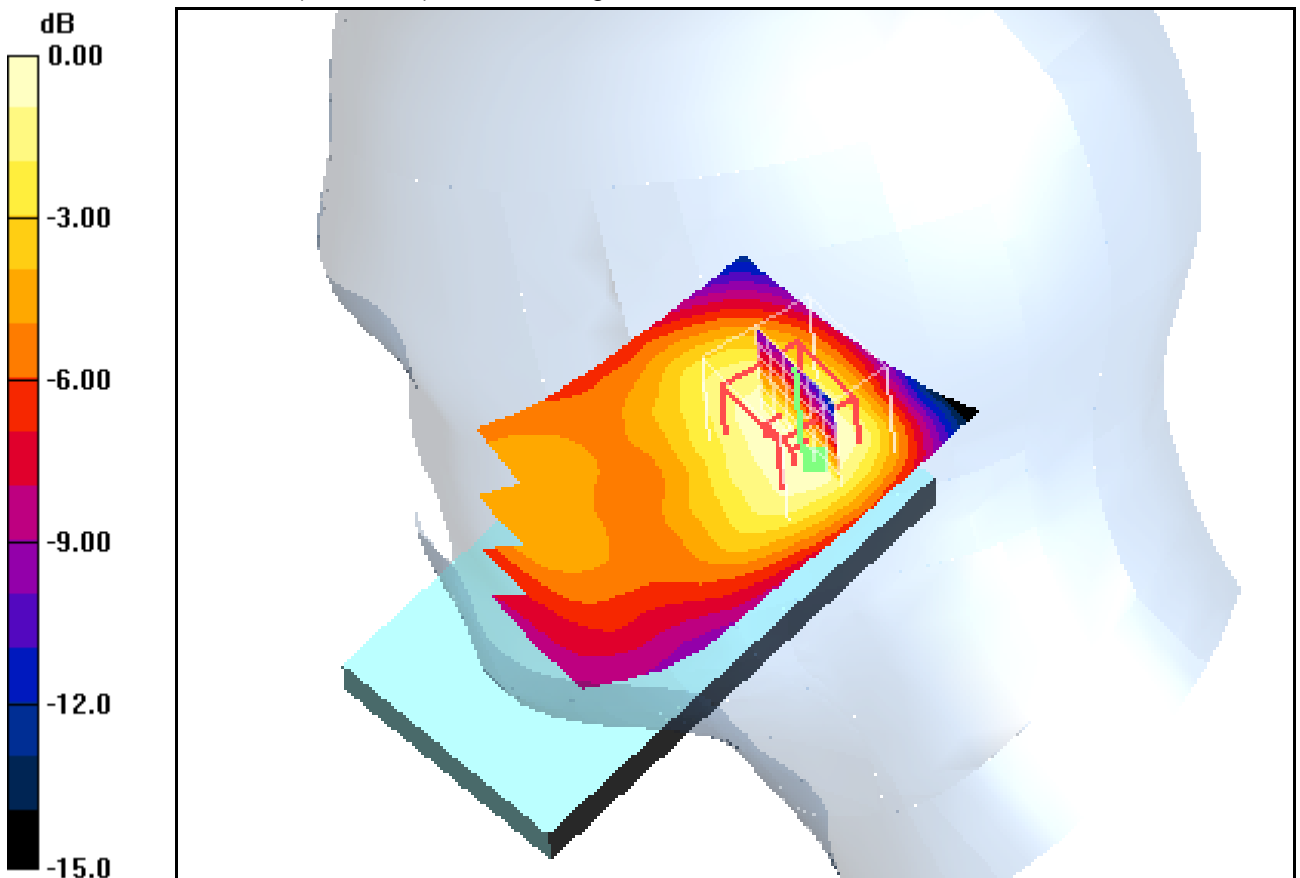
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 14.8 V/m; Power Drift = 0.027 dB

Peak SAR (extrapolated) = 0.354 W/kg

SAR(1 g) = 0.251 mW/g; SAR(10 g) = 0.166 mW/g

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



0 dB = 0.269mW/g

Additional information:

ambient temperature: 21.7°C; liquid temperature: 22.7°C

Date/Time: 08.06.2012 12:38:43 Date/Time: 08.06.2012 12:45:54

IEEE1528-RightHandSide-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used (interpolated): $f = 1907.6$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 39.8$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.86, 4.86, 4.86); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.299 mW/g

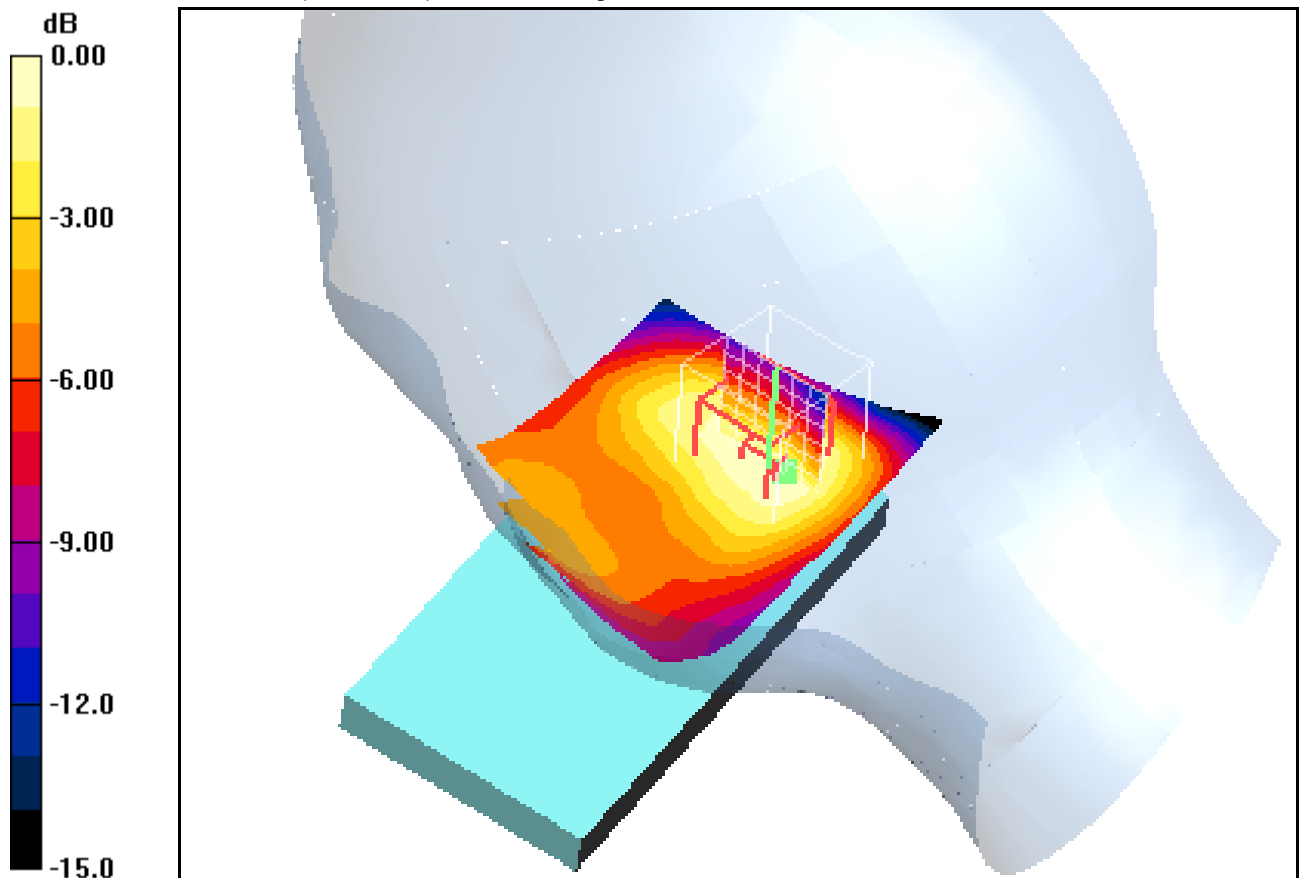
Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.9 V/m; Power Drift = -0.023 dB

Peak SAR (extrapolated) = 0.385 W/kg

SAR(1 g) = 0.266 mW/g; SAR(10 g) = 0.172 mW/g

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



0 dB = 0.285mW/g

Additional information:

ambient temperature: 21.7°C; liquid temperature: 22.7°C

Annex B.11: UMTS WCDMA FDD II 1900MHz body (hotspot)

Date/Time: 05.06.2012 15:25:42 Date/Time: 05.06.2012 15:32:57

OET65-Body-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated): $f = 1852.5 \text{ MHz}$; $\sigma = 1.46 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Low/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.850 mW/g

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

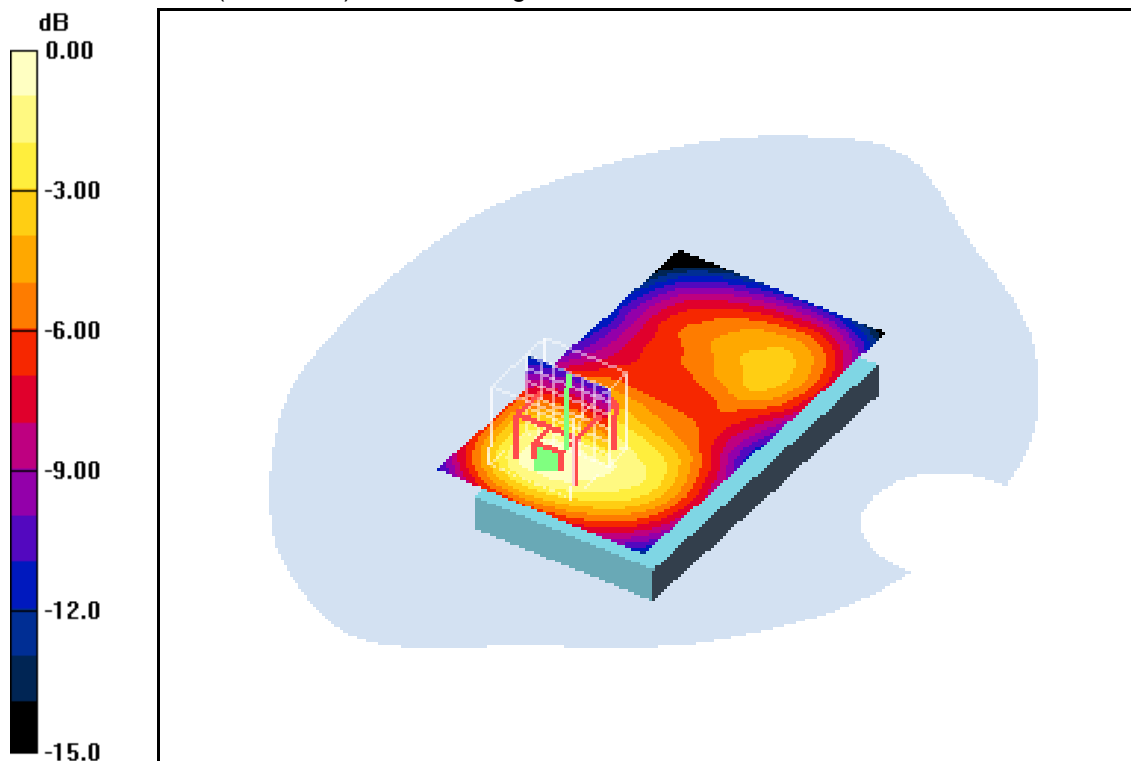
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 25.6 V/m; Power Drift = 0.134 dB

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.827 mW/g; SAR(10 g) = 0.524 mW/g

Maximum value of SAR (measured) = 0.887 mW/g



0 dB = 0.887mW/g

Additional information:

position or distance of DUT to SAM: 10mm

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

Date/Time: 05.06.2012 15:49:38 Date/Time: 05.06.2012 15:57:04

OET65-Body-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.49 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.855 mW/g

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

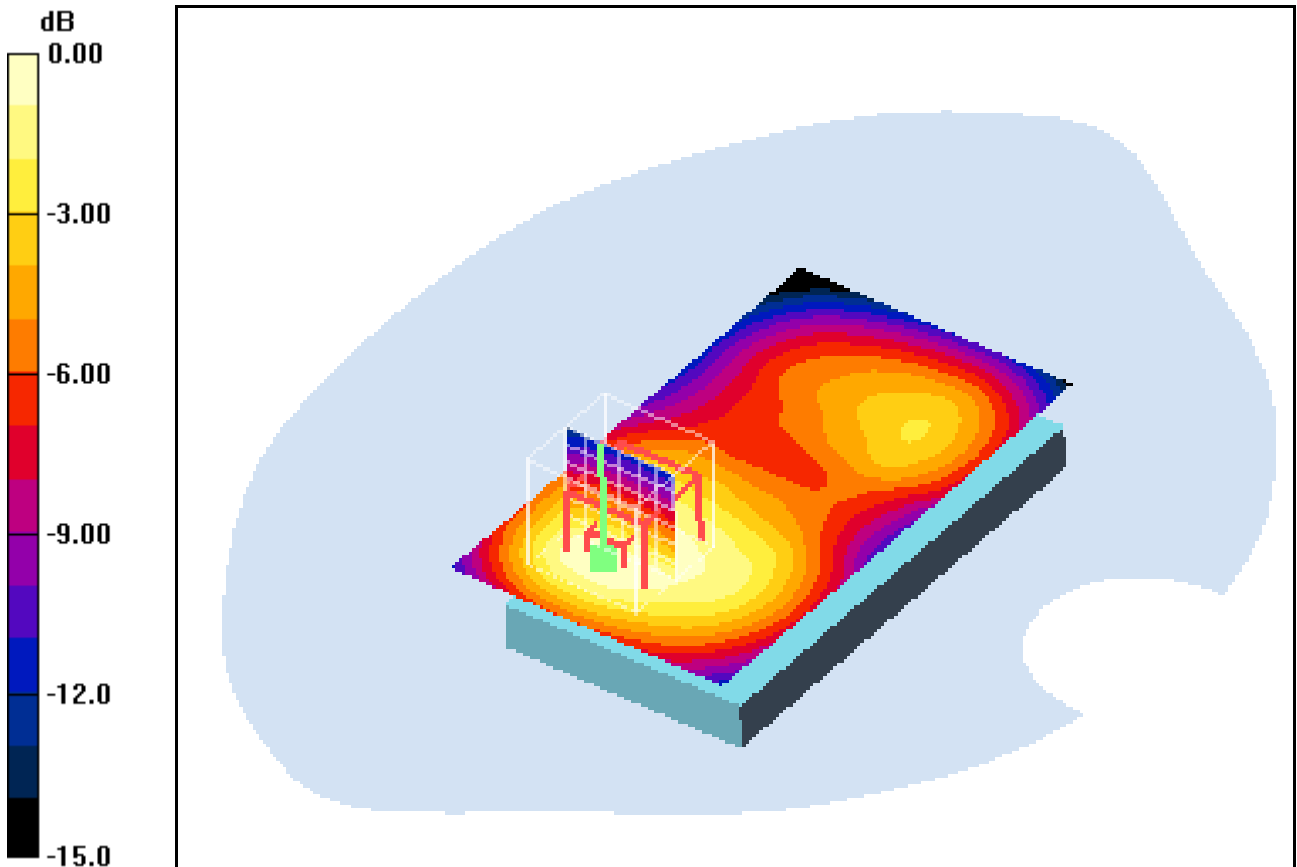
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 25.5 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.801 mW/g; SAR(10 g) = 0.509 mW/g

Maximum value of SAR (measured) = 0.860 mW/g



0 dB = 0.860mW/g

Additional information:

position or distance of DUT to SAM: 10mm

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

Date/Time: 05.06.2012 16:10:39 Date/Time: 05.06.2012 16:17:52

OET65-Body-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated): $f = 1907.6 \text{ MHz}$; $\sigma = 1.53 \text{ mho/m}$; $\epsilon_r = 52.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - High/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.879 mW/g

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

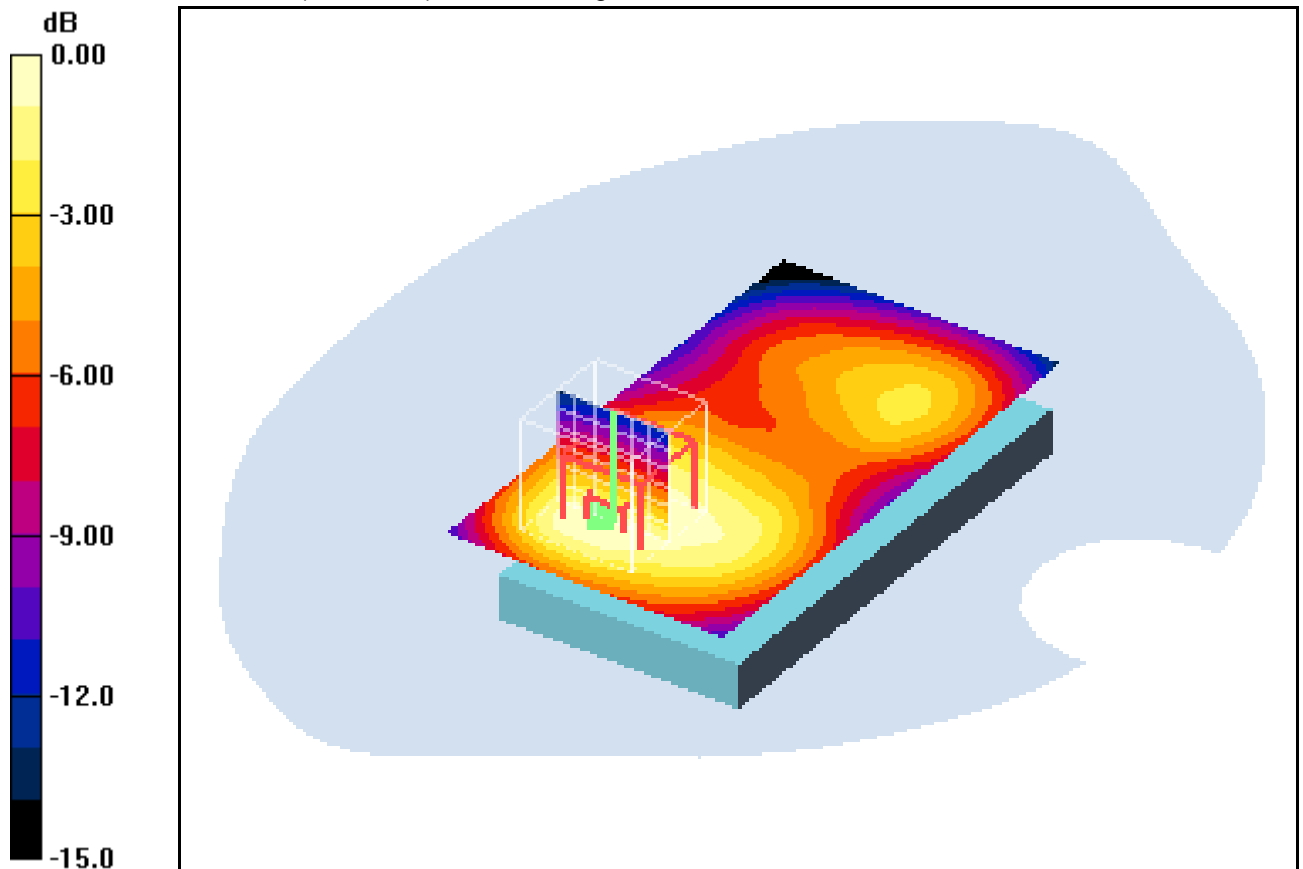
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 25.5 V/m; Power Drift = -0.037 dB

Peak SAR (extrapolated) = 1.30 W/kg

SAR(1 g) = 0.815 mW/g; SAR(10 g) = 0.519 mW/g

Maximum value of SAR (measured) = 0.869 mW/g



0 dB = 0.869mW/g

Additional information:

position or distance of DUT to SAM: 10mm

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

Date/Time: 05.06.2012 20:16:51 Date/Time: 05.06.2012 20:24:45

OET65-Body-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated): $f = 1852.5 \text{ MHz}$; $\sigma = 1.46 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Low/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.31 mW/g

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

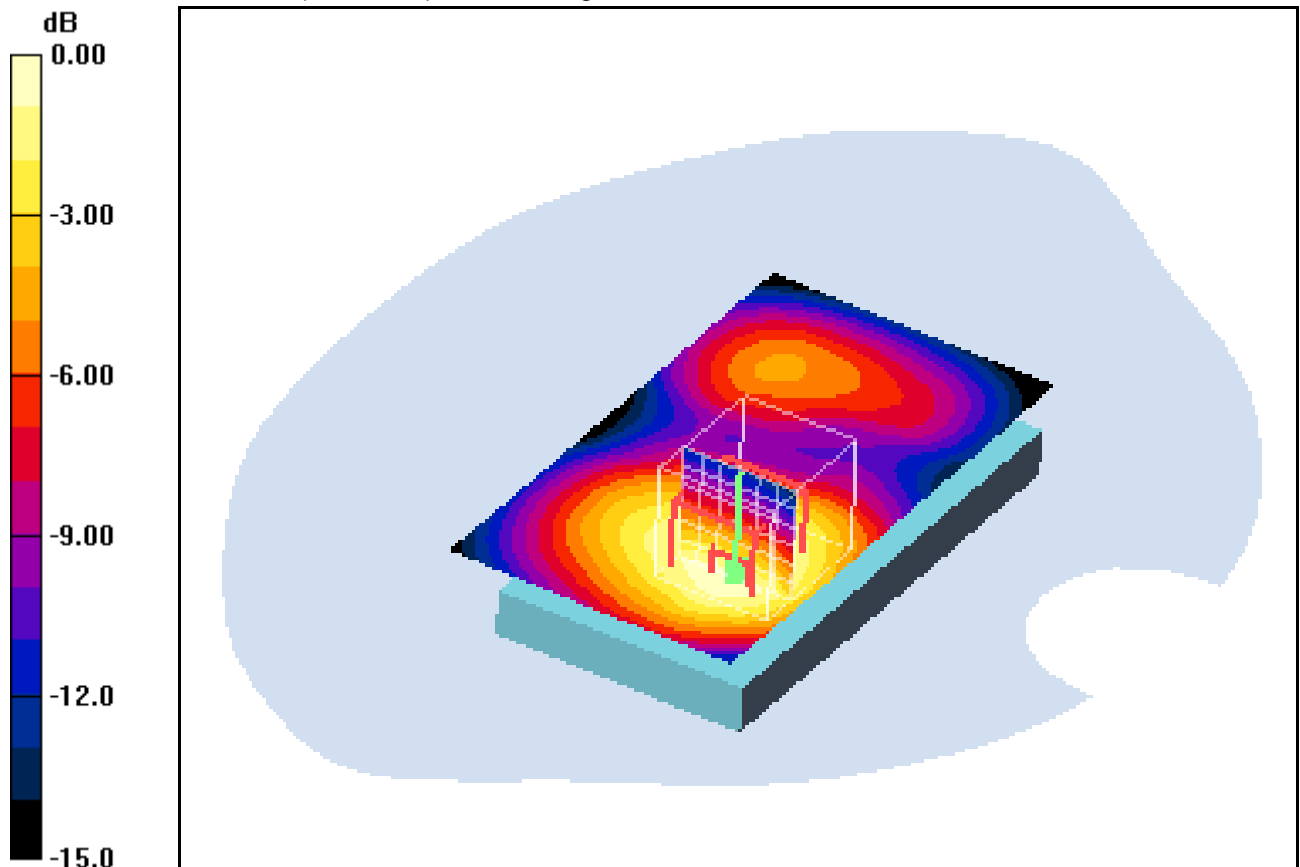
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 30.8 V/m; Power Drift = -0.115 dB

Peak SAR (extrapolated) = 1.81 W/kg

SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.708 mW/g

Maximum value of SAR (measured) = 1.22 mW/g



0 dB = 1.22mW/g

Additional information:

position or distance of DUT to SAM: 10mm

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

Date/Time: 05.06.2012 19:56:11 Date/Time: 05.06.2012 20:03:59

OET65-Body-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.49 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

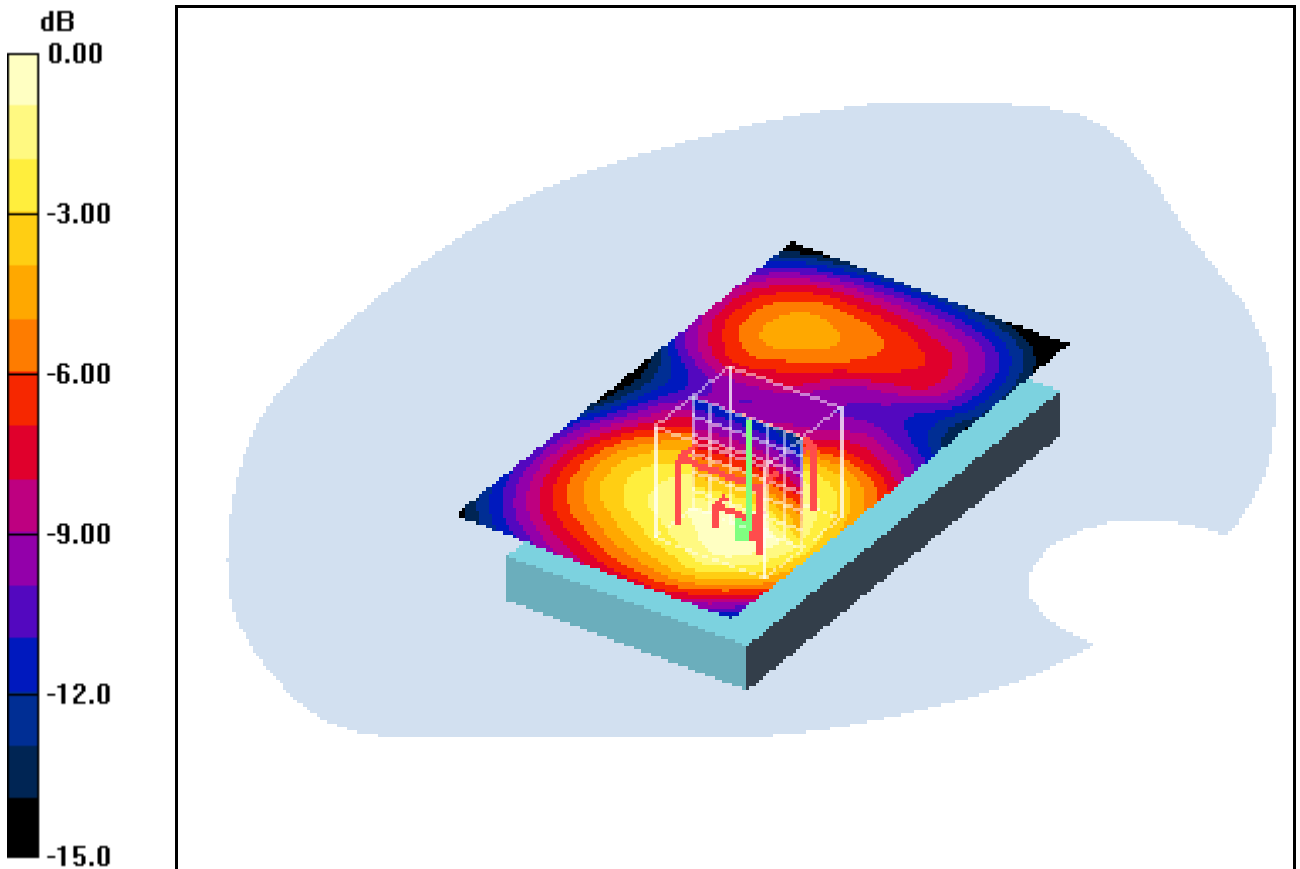
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (interpolated) = 1.25 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 = 29.6 V/m; Power Drift = 0.01 dB
 Peak SAR (extrapolated) = 1.72 W/kg
SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.690 mW/g
 Maximum value of SAR (measured) = 1.19 mW/g



0 dB = 1.19mW/g

Additional information:

position or distance of DUT to SAM: 10mm
 ambient temperature: 21.7°C; liquid temperature: 21.7°C

Date/Time: 05.06.2012 19:26:28 Date/Time: 05.06.2012 19:40:40

OET65-Body-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated): $f = 1907.6 \text{ MHz}$; $\sigma = 1.53 \text{ mho/m}$; $\epsilon_r = 52.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - High/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.12 mW/g

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

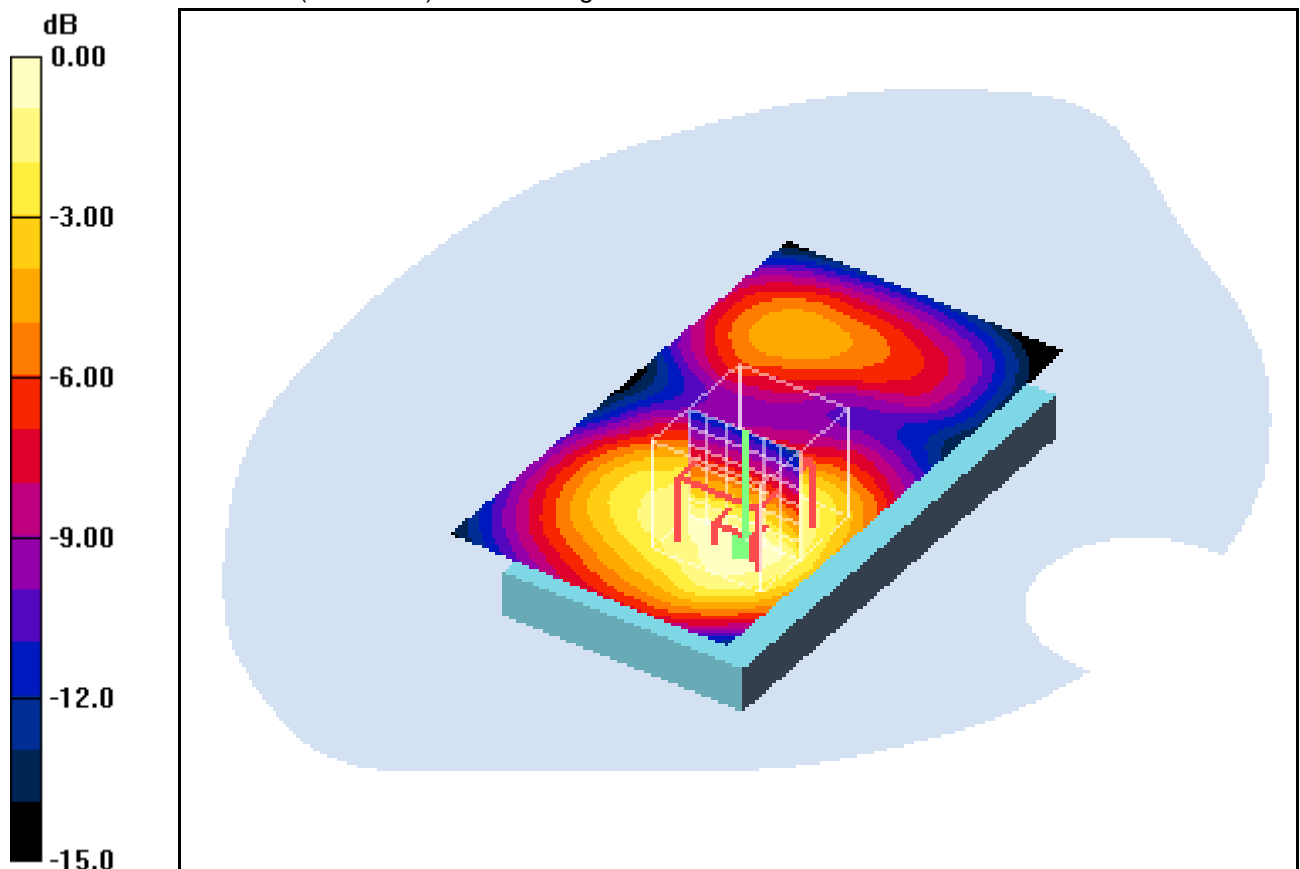
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 28.3 V/m; Power Drift = -0.061 dB

Peak SAR (extrapolated) = 1.61 W/kg

SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.645 mW/g

Maximum value of SAR (measured) = 1.09 mW/g



0 dB = 1.09mW/g

Additional information:

position or distance of DUT to SAM: 10mm

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

Date/Time: 05.06.2012 14:05:23 Date/Time: 05.06.2012 14:12:15

OET65-Body-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.49 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Edge left position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.636 mW/g

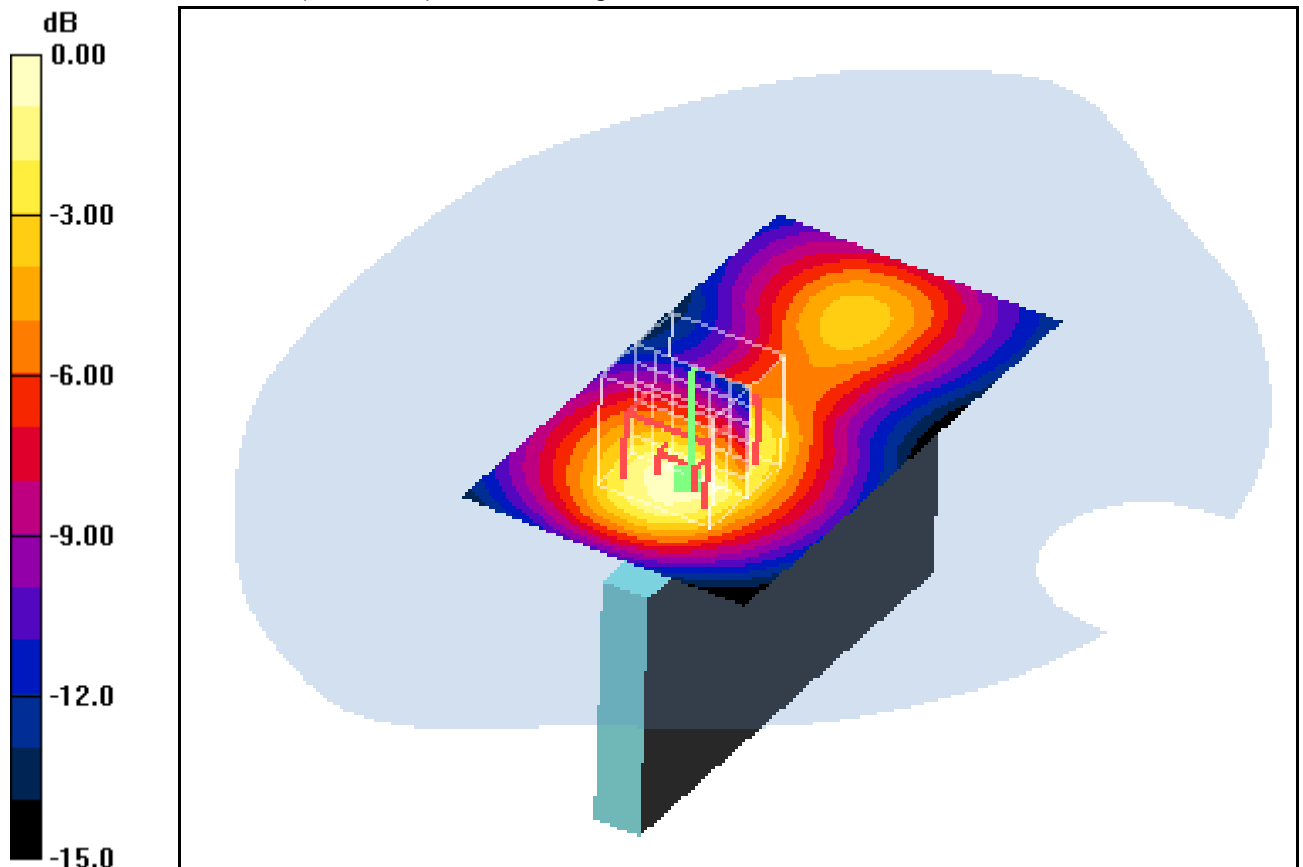
Edge left position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 20.1 V/m; Power Drift = -0.119 dB

Peak SAR (extrapolated) = 0.910 W/kg

SAR(1 g) = 0.570 mW/g; SAR(10 g) = 0.346 mW/g

Maximum value of SAR (measured) = 0.619 mW/g



0 dB = 0.619mW/g

Additional information:

position or distance of DUT to SAM: 10mm

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

Date/Time: 05.06.2012 14:27:55 Date/Time: 05.06.2012 14:34:48 Date/Time: 05.06.2012 14:46:21

OET65-Body-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.49 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Edge right position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.277 mW/g

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

Reference Value = 13.2 V/m; Power Drift = 0.028 dB

Peak SAR (extrapolated) = 0.386 W/kg

SAR(1 g) = 0.242 mW/g; SAR(10 g) = 0.146 mW/g

Maximum value of SAR (measured) = 0.265 mW/g

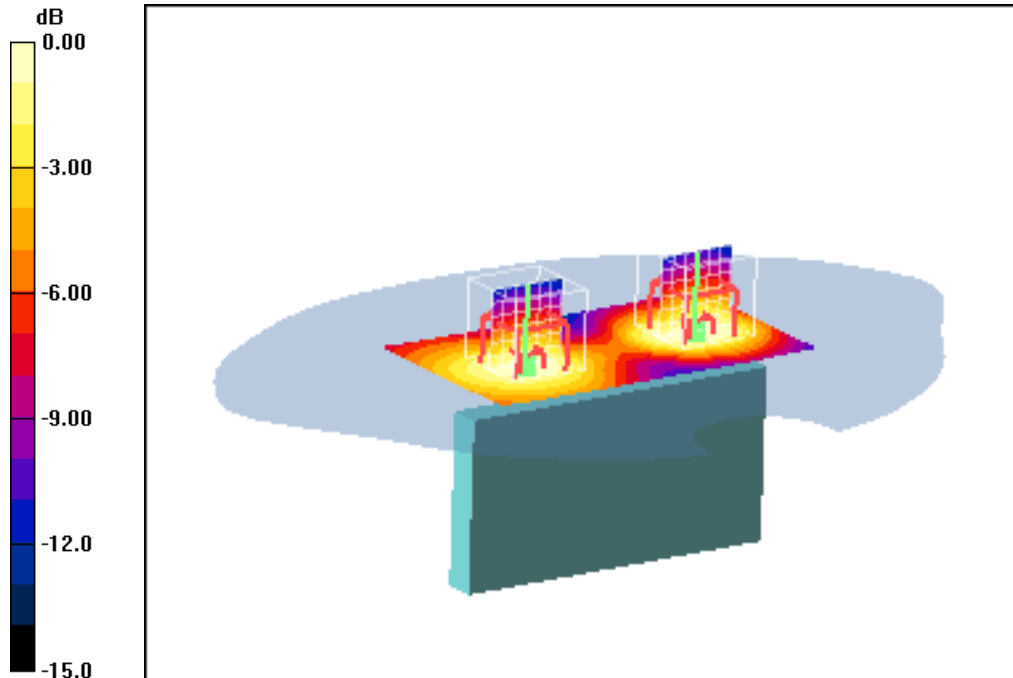
Edge right position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.2 V/m; Power Drift = 0.028 dB

Peak SAR (extrapolated) = 0.352 W/kg

SAR(1 g) = 0.221 mW/g; SAR(10 g) = 0.137 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: 10mm

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

Date/Time: 05.06.2012 15:03:07 Date/Time: 05.06.2012 15:08:20

OET65-Body-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.49 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Edge bottom position - Middle/Area Scan (61x61x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.337 mW/g

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

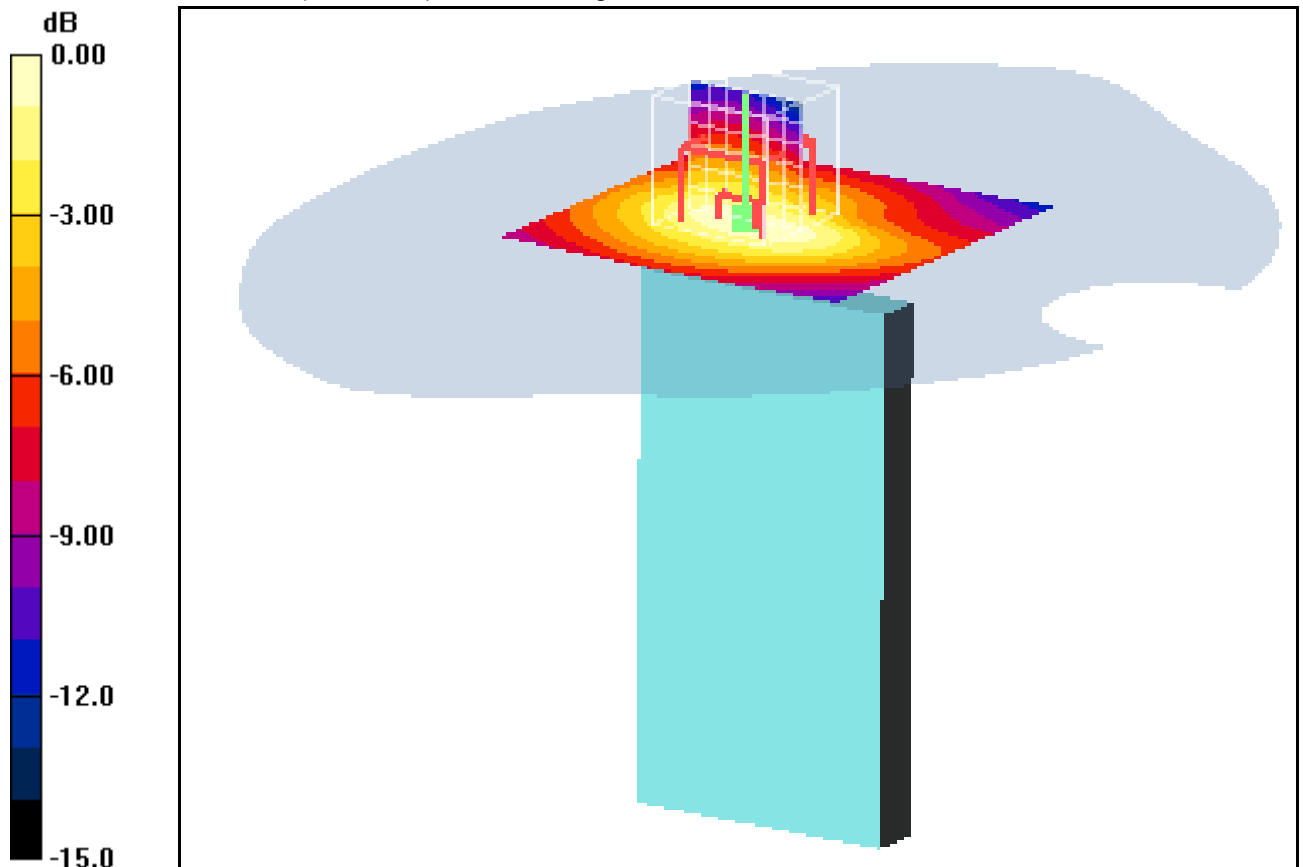
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.5 V/m; Power Drift = -0.021 dB

Peak SAR (extrapolated) = 0.471 W/kg

SAR(1 g) = 0.305 mW/g; SAR(10 g) = 0.190 mW/g

Maximum value of SAR (measured) = 0.325 mW/g



0 dB = 0.325mW/g

Additional information:

position or distance of DUT to SAM: 10mm

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

Date/Time: 05.06.2012 21:32:54 Date/Time: 05.06.2012 21:45:16

OET65-Body-WCDMA FDD II CMWC

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated): $f = 1852.5 \text{ MHz}$; $\sigma = 1.46 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.46, 4.46, 4.46); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Low CMWC/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.02 mW/g

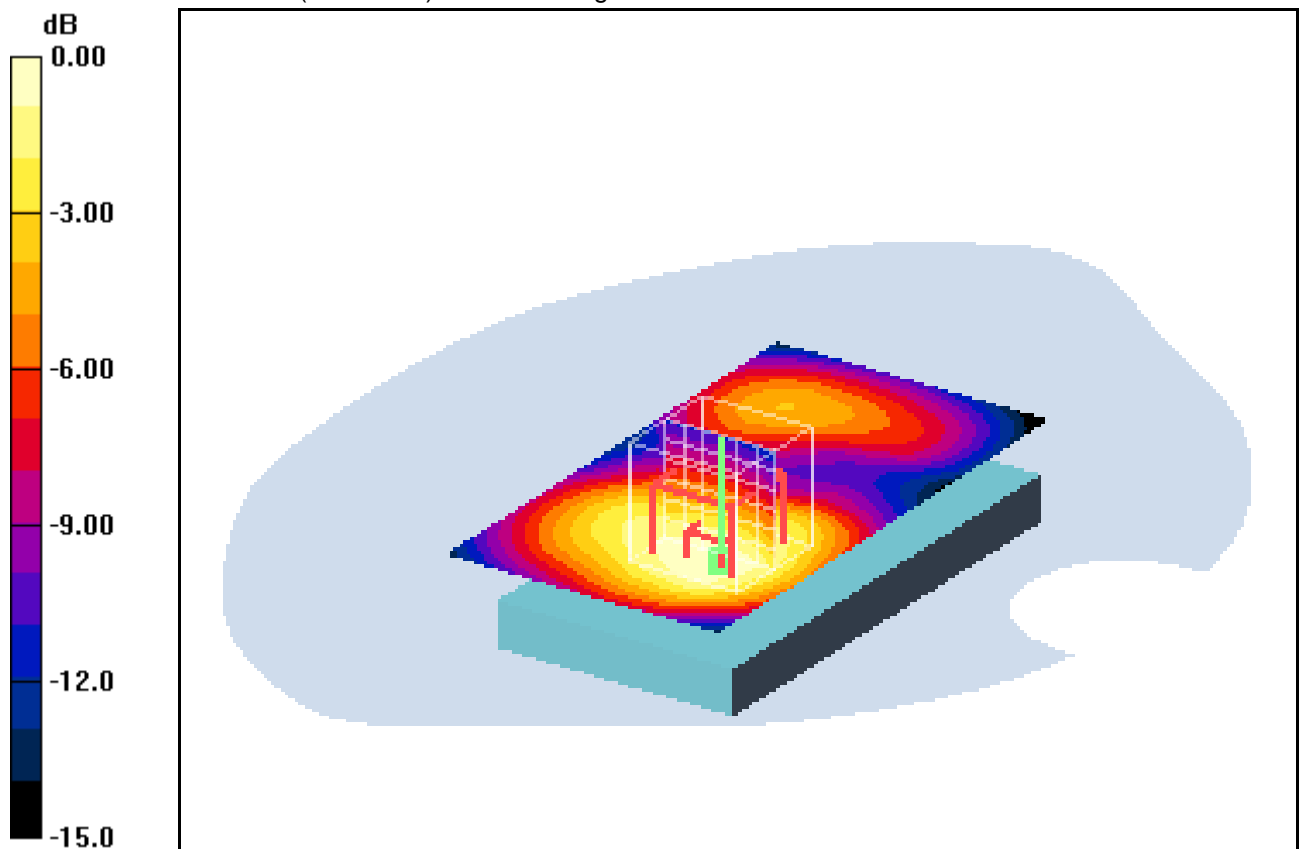
Rear position - Low CMWC/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 26.8 V/m; Power Drift = -0.013 dB

Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.902 mW/g; SAR(10 g) = 0.583 mW/g

Maximum value of SAR (measured) = 0.980 mW/g



0 dB = 0.980mW/g

Additional information:

position or distance of DUT to SAM: 10mm

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

Annex B.12: UMTS WCDMA FDD II 1900MHz body worn

Date/Time: 05.06.2012 20:43:53 Date/Time: 05.06.2012 20:51:46

OET65-Body-WCDMA FDD II

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z196S

Communication System: WCDMA FDD II; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated): $f = 1852.5 \text{ MHz}$; $\sigma = 1.46 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.3, 4.3, 4.3); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Low 15mm/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$,

$dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.718 mW/g

Rear position - Low 15mm/Zoom Scan (7x7x7) (7x8x7)/Cube 0: Measurement

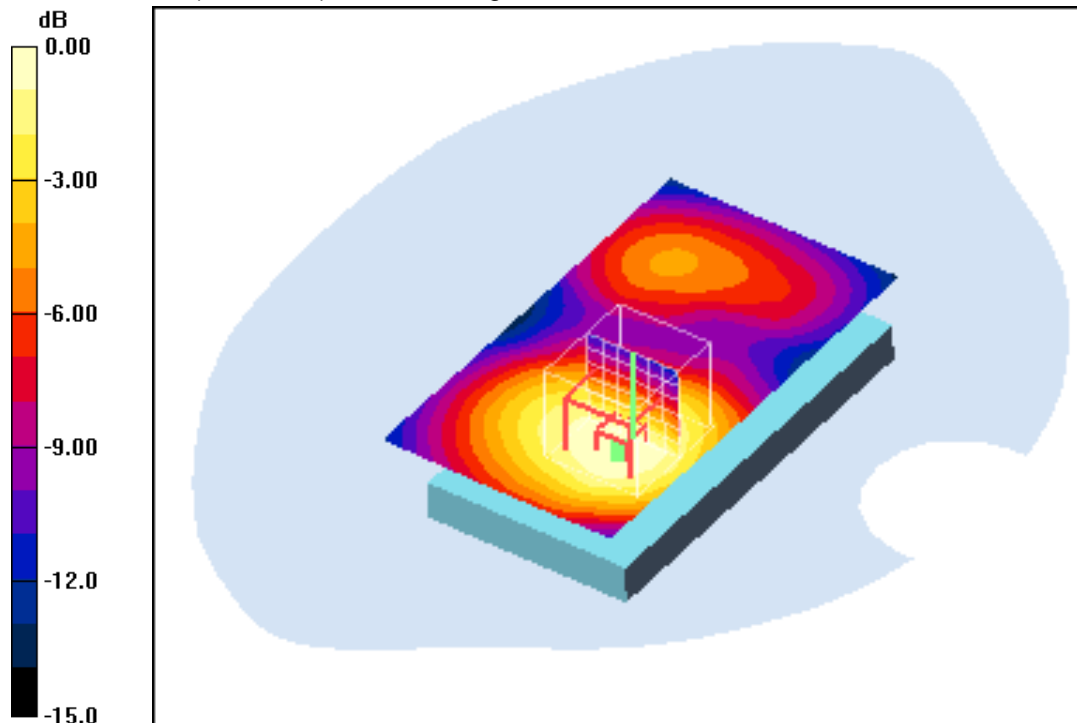
grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 22.8 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.968 W/kg

SAR(1 g) = 0.640 mW/g; SAR(10 g) = 0.412 mW/g

Maximum value of SAR (measured) = 0.684 mW/g



0 dB = 0.684mW/g

Additional information:

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

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

Annex B.13: WLAN 2450MHz head

Date/Time: 18.06.2012 11:12:40 Date/Time: 18.06.2012 11:21:01

IEEE1528-LeftHandSide-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.82 \text{ mho/m}$; $\epsilon_r = 39.5$; $\rho = 1000 \text{ kg/m}^3$

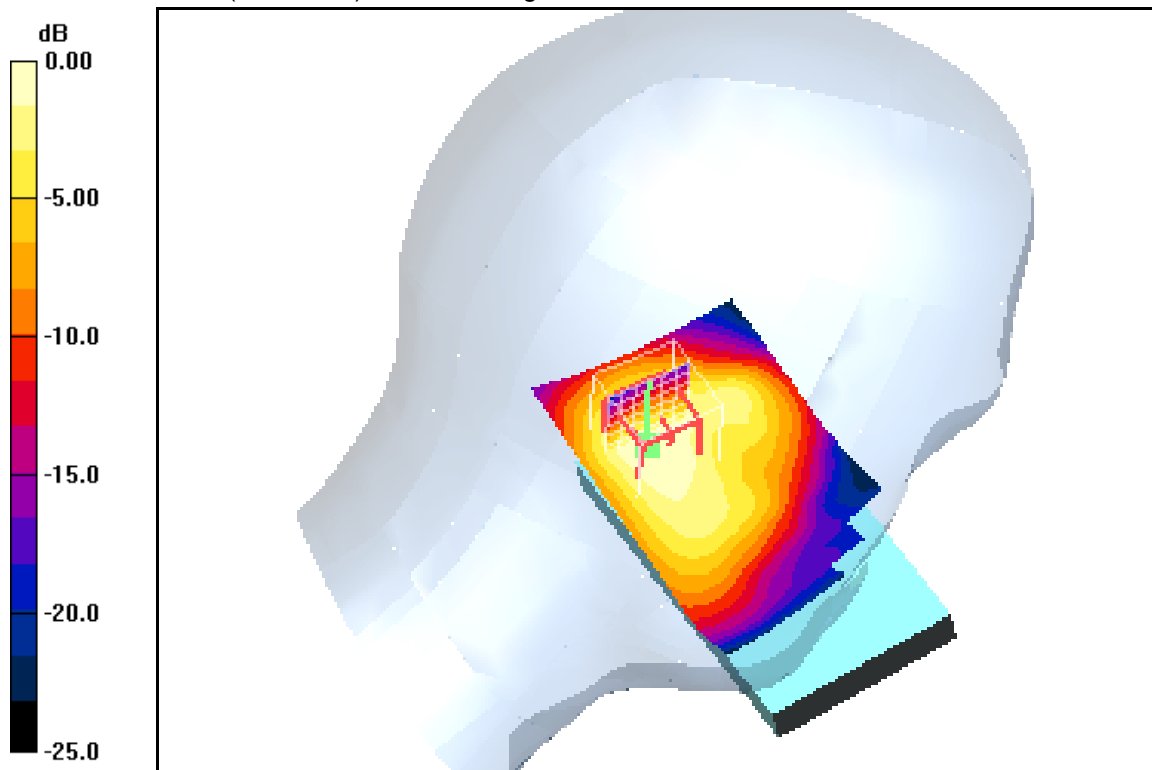
Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.15, 4.15, 4.15); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; 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) = 0.245 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 = 11.3 V/m; Power Drift = 0.016 dB
 Peak SAR (extrapolated) = 0.374 W/kg
SAR(1 g) = 0.211 mW/g; SAR(10 g) = 0.117 mW/g
 Maximum value of SAR (measured) = 0.229 mW/g



0 dB = 0.229mW/g

Additional information:

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

Date/Time: 18.06.2012 14:02:10 Date/Time: 18.06.2012 14:10:03

IEEE1528-LeftHandSide-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.83 \text{ mho/m}$; $\epsilon_r = 39.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.15, 4.15, 4.15); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; 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) = 0.223 mW/g

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

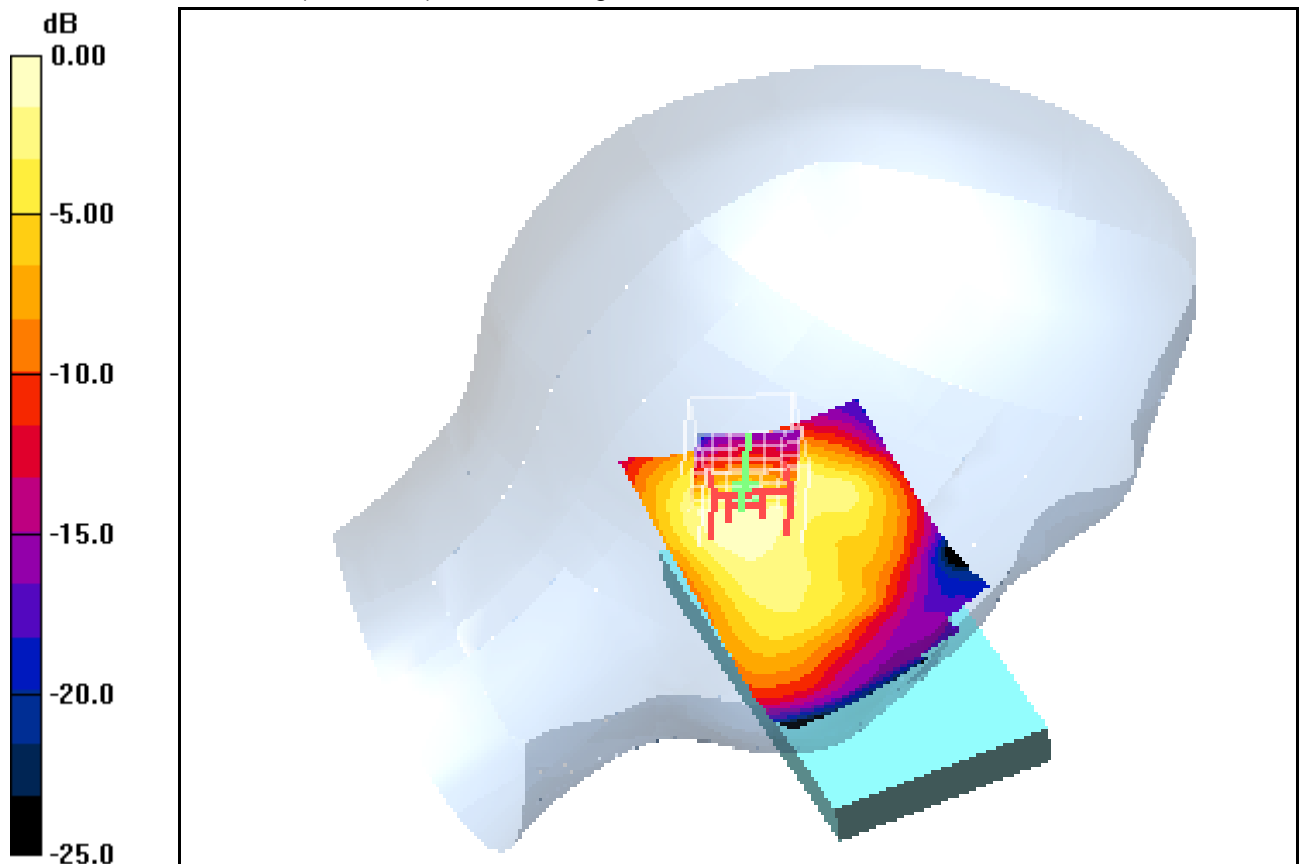
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.0 V/m; Power Drift = 0.059 dB

Peak SAR (extrapolated) = 0.387 W/kg

SAR(1 g) = 0.204 mW/g; SAR(10 g) = 0.111 mW/g

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



0 dB = 0.224mW/g

Additional information:

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

Date/Time: 18.06.2012 15:12:01 Date/Time: 18.06.2012 15:20:42

IEEE1528-LeftHandSide-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.86 \text{ mho/m}$; $\epsilon_r = 39.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.15, 4.15, 4.15); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; 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) = 0.314 mW/g

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

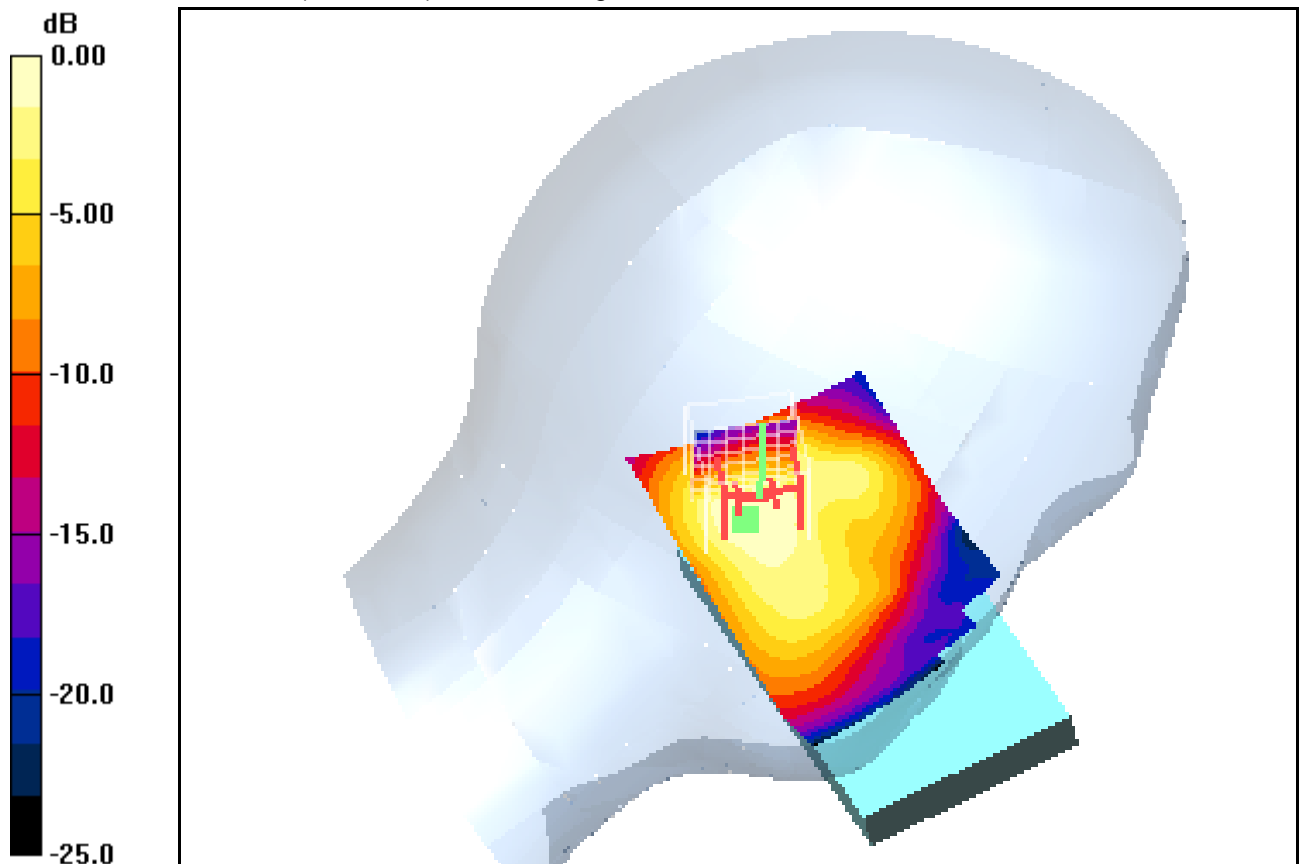
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.1 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.549 W/kg

SAR(1 g) = 0.289 mW/g; SAR(10 g) = 0.159 mW/g

Maximum value of SAR (measured) = 0.315 mW/g



0 dB = 0.315mW/g

Additional information:

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

Date/Time: 18.06.2012 11:35:49 Date/Time: 18.06.2012 11:44:19

IEEE1528-LeftHandSide-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.82 \text{ mho/m}$; $\epsilon_r = 39.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.15, 4.15, 4.15); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; 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) = 0.174 mW/g

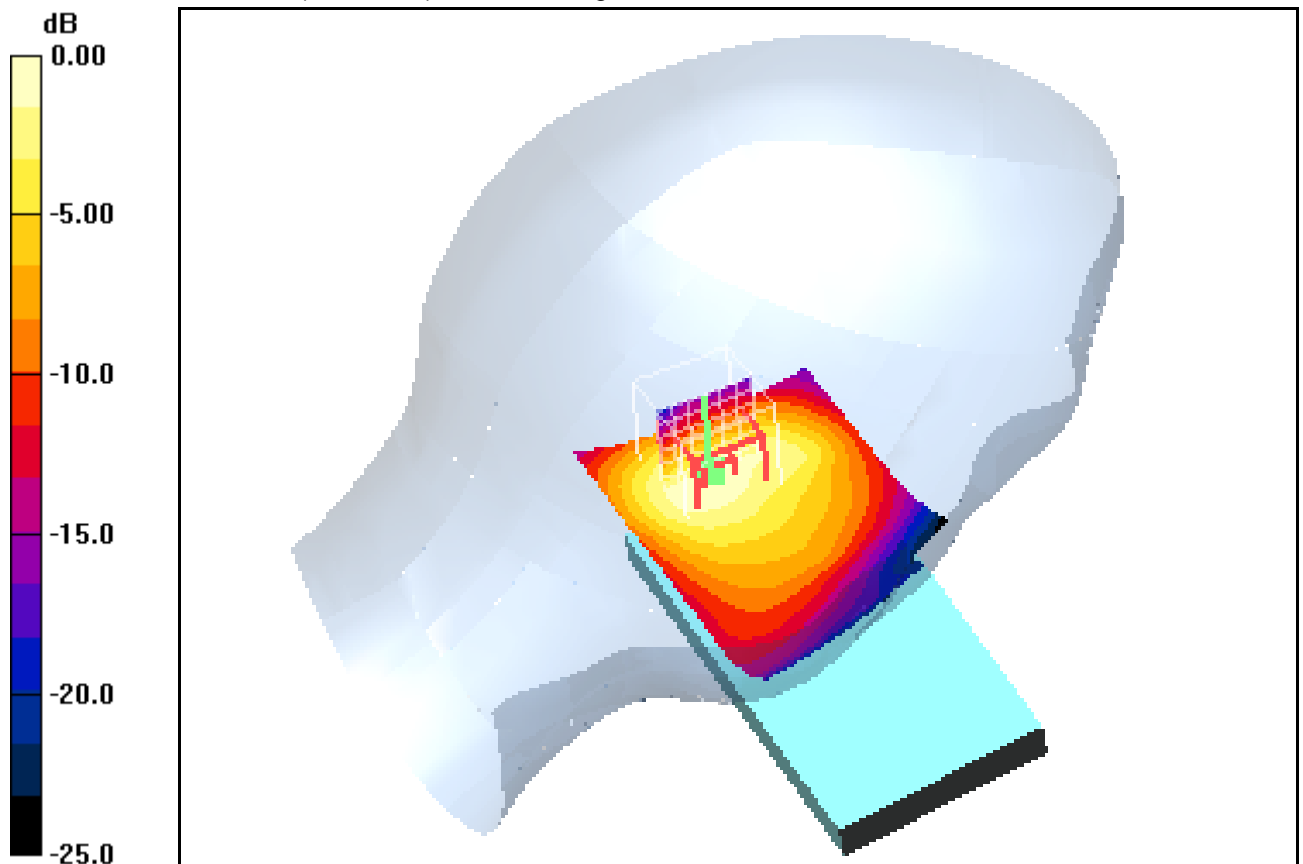
Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.43 V/m; Power Drift = 0.017 dB

Peak SAR (extrapolated) = 0.303 W/kg

SAR(1 g) = 0.162 mW/g; SAR(10 g) = 0.087 mW/g

Maximum value of SAR (measured) = 0.175 mW/g



0 dB = 0.175mW/g

Additional information:

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

Date/Time: 18.06.2012 13:38:42 Date/Time: 18.06.2012 13:47:52

IEEE1528-LeftHandSide-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.83 \text{ mho/m}$; $\epsilon_r = 39.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.15, 4.15, 4.15); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; 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) = 0.177 mW/g

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

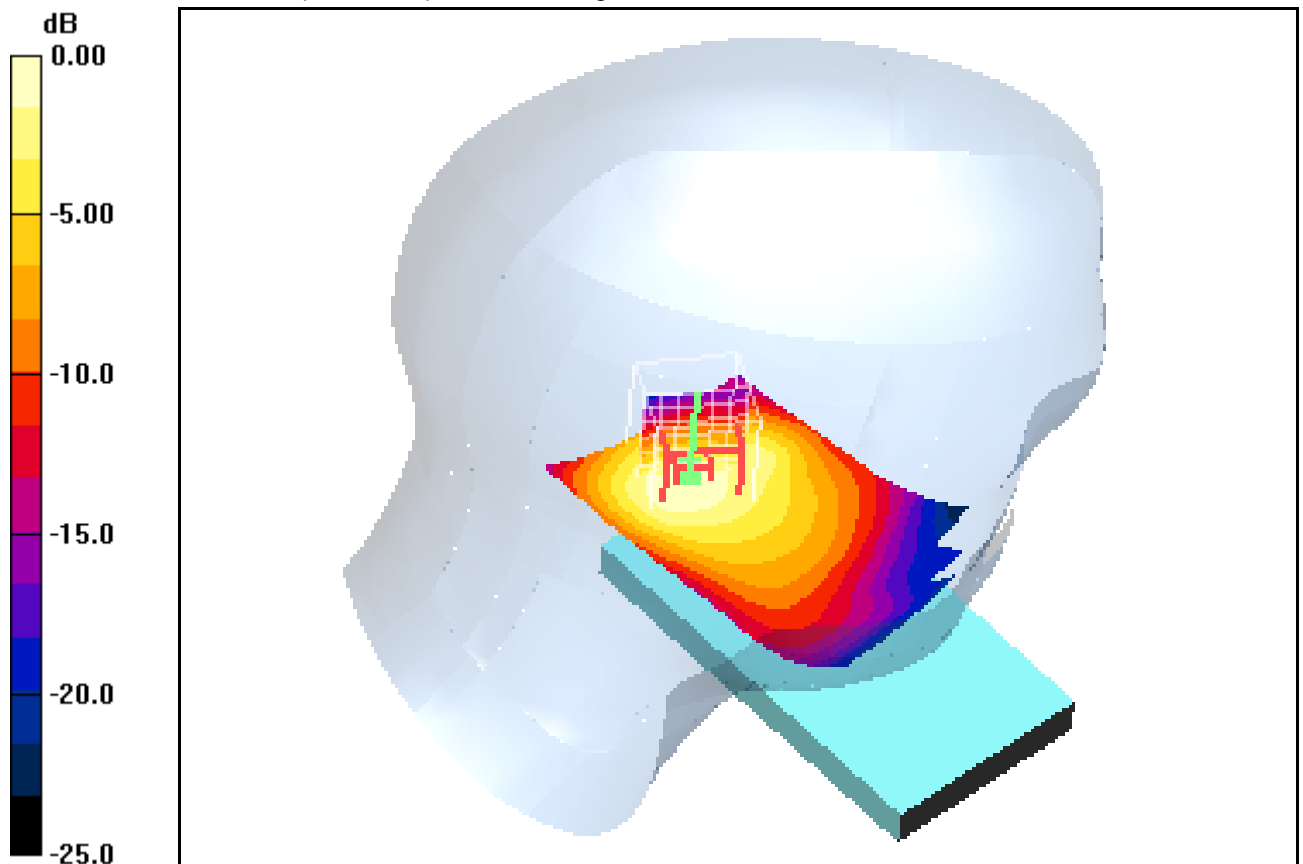
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.47 V/m; Power Drift = 0.031 dB

Peak SAR (extrapolated) = 0.310 W/kg

SAR(1 g) = 0.166 mW/g; SAR(10 g) = 0.090 mW/g

Maximum value of SAR (measured) = 0.182 mW/g



0 dB = 0.182mW/g

Additional information:

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

Date/Time: 18.06.2012 15:35:17 Date/Time: 18.06.2012 15:44:15

IEEE1528-LeftHandSide-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.86 \text{ mho/m}$; $\epsilon_r = 39.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.15, 4.15, 4.15); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; 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) = 0.244 mW/g

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

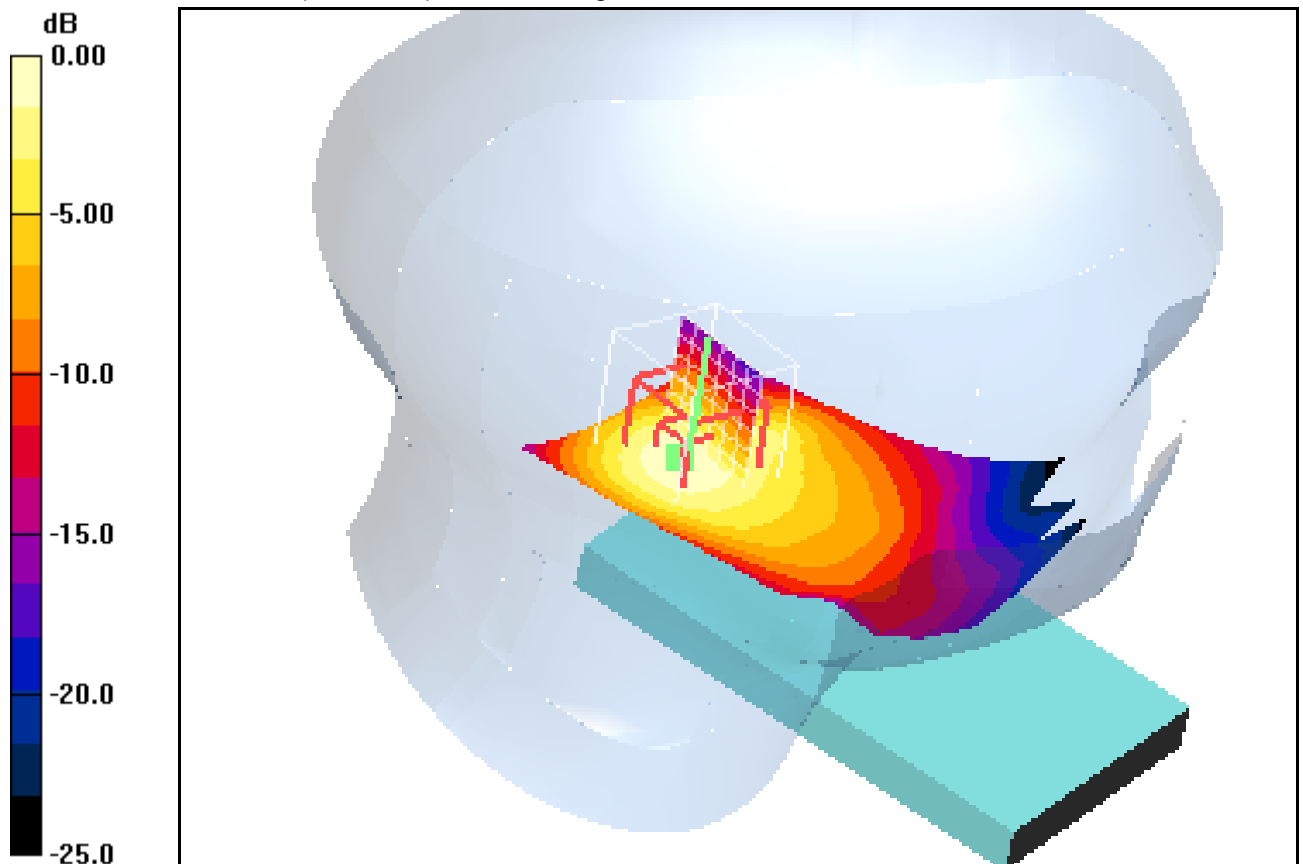
$dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.0 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.452 W/kg

SAR(1 g) = 0.231 mW/g; SAR(10 g) = 0.124 mW/g

Maximum value of SAR (measured) = 0.258 mW/g



0 dB = 0.258mW/g

Additional information:

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

Date/Time: 18.06.2012 12:26:51 Date/Time: 18.06.2012 12:34:34

IEEE1528-RightHandSide-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2412$ MHz; $\sigma = 1.82$ mho/m; $\epsilon_r = 39.5$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.15, 4.15, 4.15); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Low/Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.342 mW/g

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

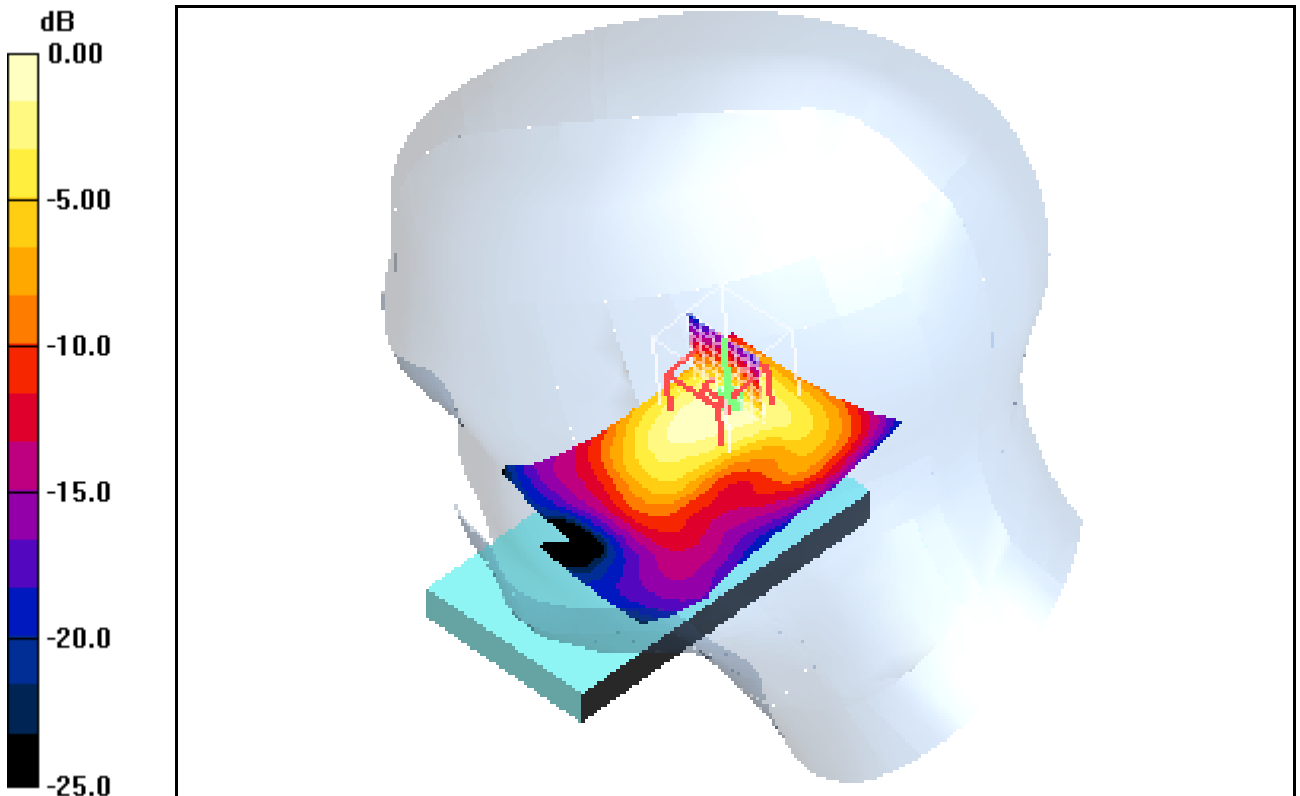
dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.5 V/m; Power Drift = 0.031 dB

Peak SAR (extrapolated) = 0.653 W/kg

SAR(1 g) = 0.278 mW/g; SAR(10 g) = 0.145 mW/g

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



0 dB = 0.296mW/g

Additional information:

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

Date/Time: 18.06.2012 12:51:50 Date/Time: 18.06.2012 13:00:22

IEEE1528-RightHandSide-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.83 \text{ mho/m}$; $\epsilon_r = 39.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.15, 4.15, 4.15); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; 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) = 0.400 mW/g

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

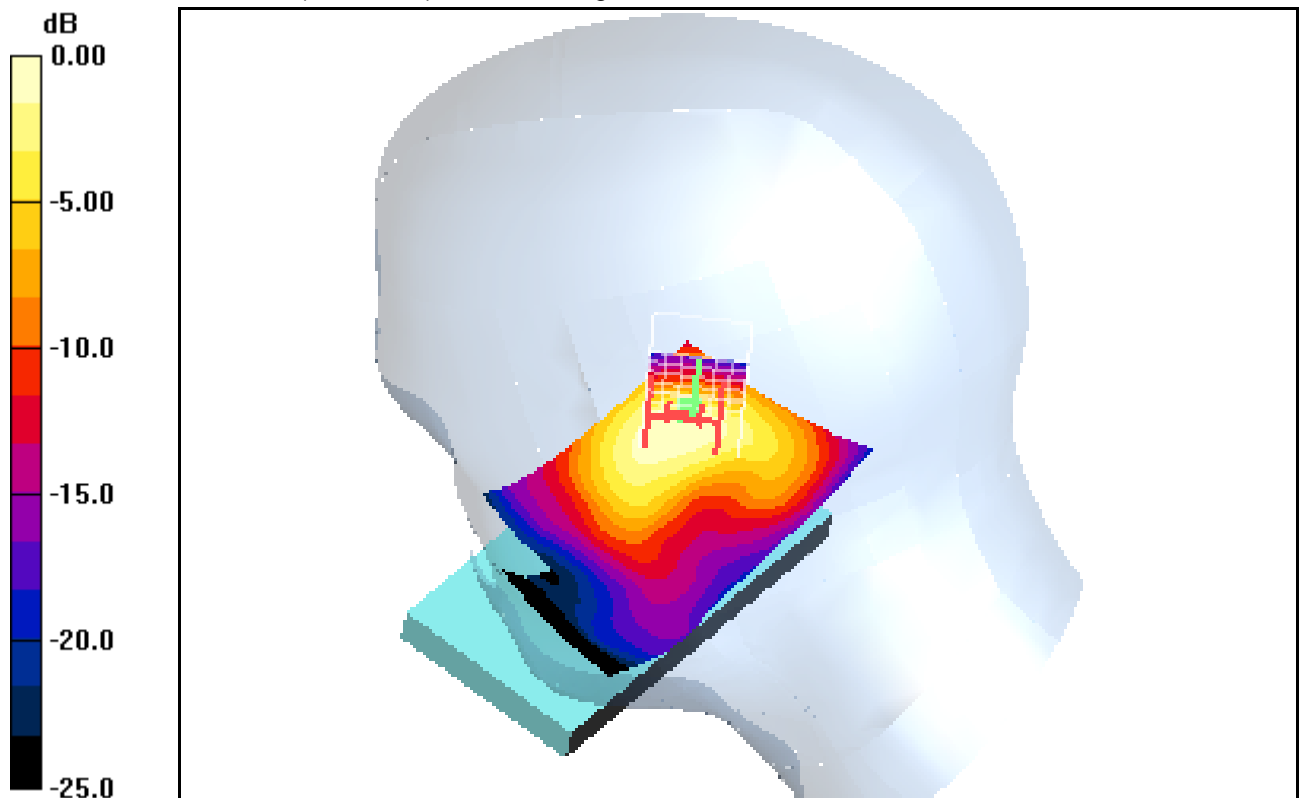
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.5 V/m; Power Drift = 0.033 dB

Peak SAR (extrapolated) = 0.759 W/kg

SAR(1 g) = 0.320 mW/g; SAR(10 g) = 0.166 mW/g

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



0 dB = 0.336mW/g

Additional information:

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

Date/Time: 18.06.2012 16:26:33 Date/Time: 18.06.2012 16:35:42

IEEE1528-RightHandSide-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.86 \text{ mho/m}$; $\epsilon_r = 39.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.15, 4.15, 4.15); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; 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) = 0.554 mW/g

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

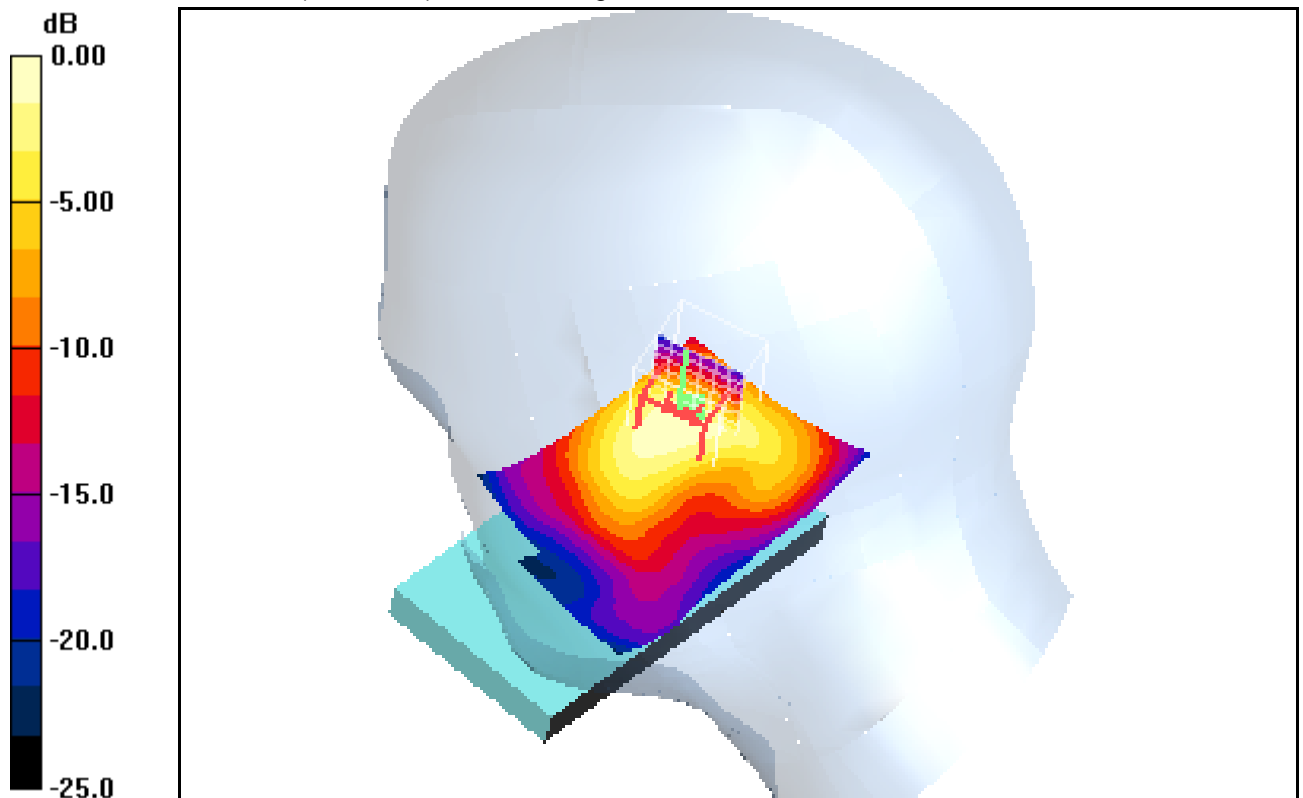
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.7 V/m; Power Drift = 0.034 dB

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.452 mW/g; SAR(10 g) = 0.233 mW/g

Maximum value of SAR (measured) = 0.476 mW/g



0 dB = 0.476mW/g

Additional information:

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

Date/Time: 18.06.2012 12:03:05 Date/Time: 18.06.2012 12:12:18

IEEE1528-RightHandSide-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.82 \text{ mho/m}$; $\epsilon_r = 39.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.15, 4.15, 4.15); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; 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) = 0.219 mW/g

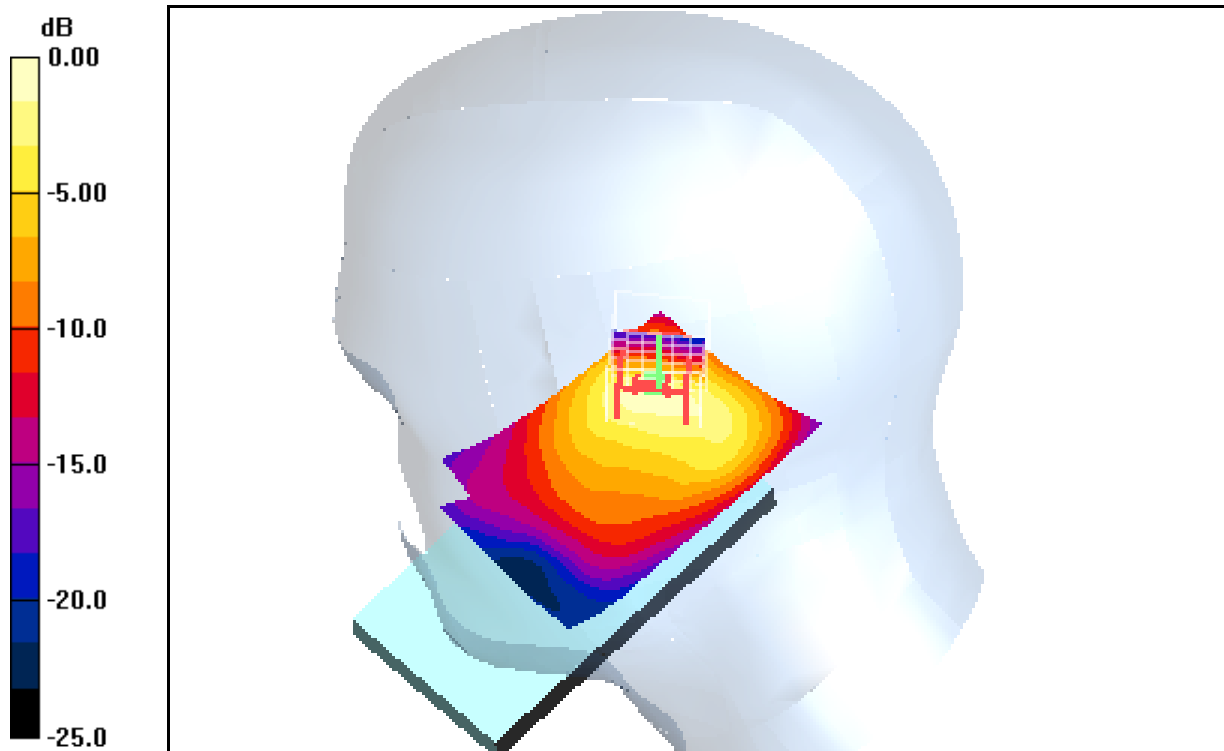
Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.54 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 0.462 W/kg

SAR(1 g) = 0.190 mW/g; SAR(10 g) = 0.093 mW/g

Maximum value of SAR (measured) = 0.208 mW/g



0 dB = 0.208mW/g

Additional information:

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

Date/Time: 18.06.2012 13:15:18 Date/Time: 18.06.2012 13:22:42

IEEE1528-RightHandSide-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.83 \text{ mho/m}$; $\epsilon_r = 39.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.15, 4.15, 4.15); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; 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) = 0.213 mW/g

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

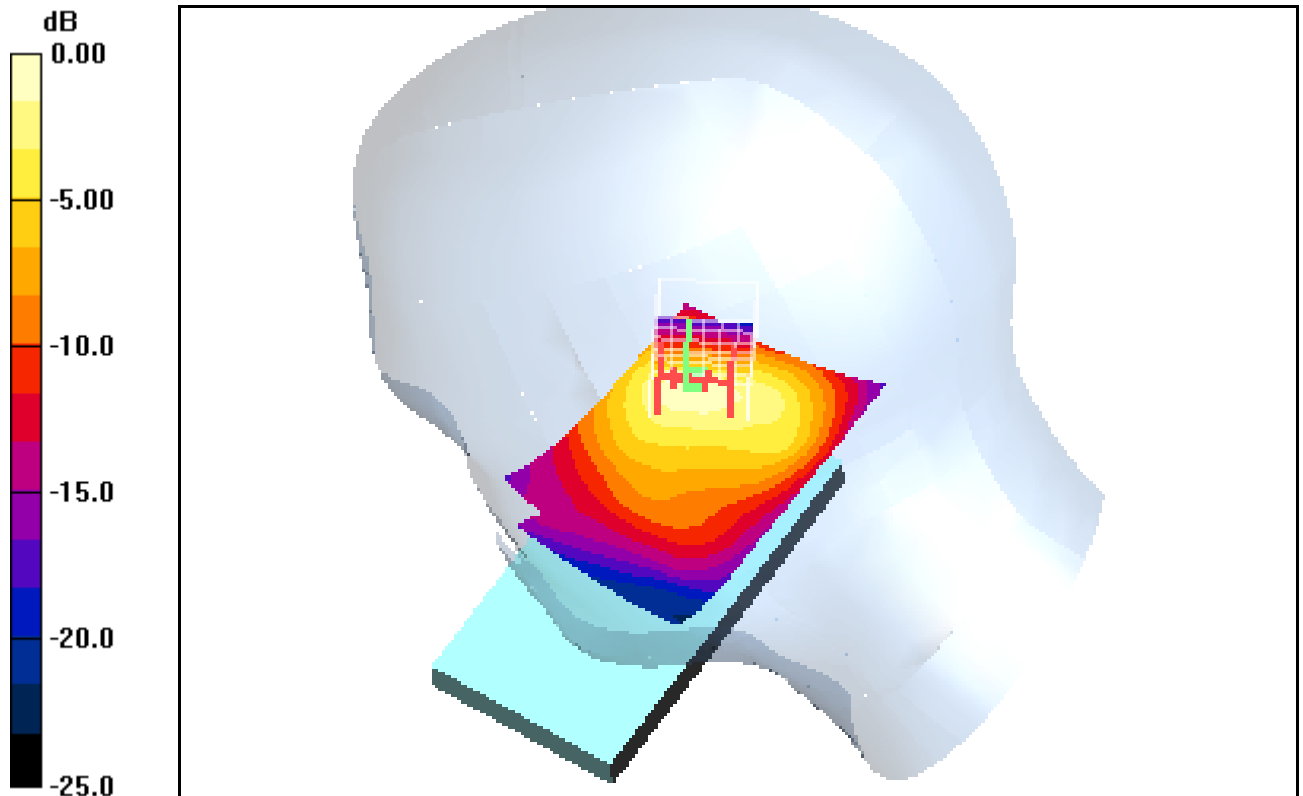
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.2 V/m; Power Drift = 0.029 dB

Peak SAR (extrapolated) = 0.507 W/kg

SAR(1 g) = 0.197 mW/g; SAR(10 g) = 0.096 mW/g

Maximum value of SAR (measured) = 0.215 mW/g



0 dB = 0.215mW/g

Additional information:

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

Date/Time: 18.06.2012 16:00:33 Date/Time: 18.06.2012 16:09:26

IEEE1528-RightHandSide-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.86 \text{ mho/m}$; $\epsilon_r = 39.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.15, 4.15, 4.15); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; 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) = 0.327 mW/g

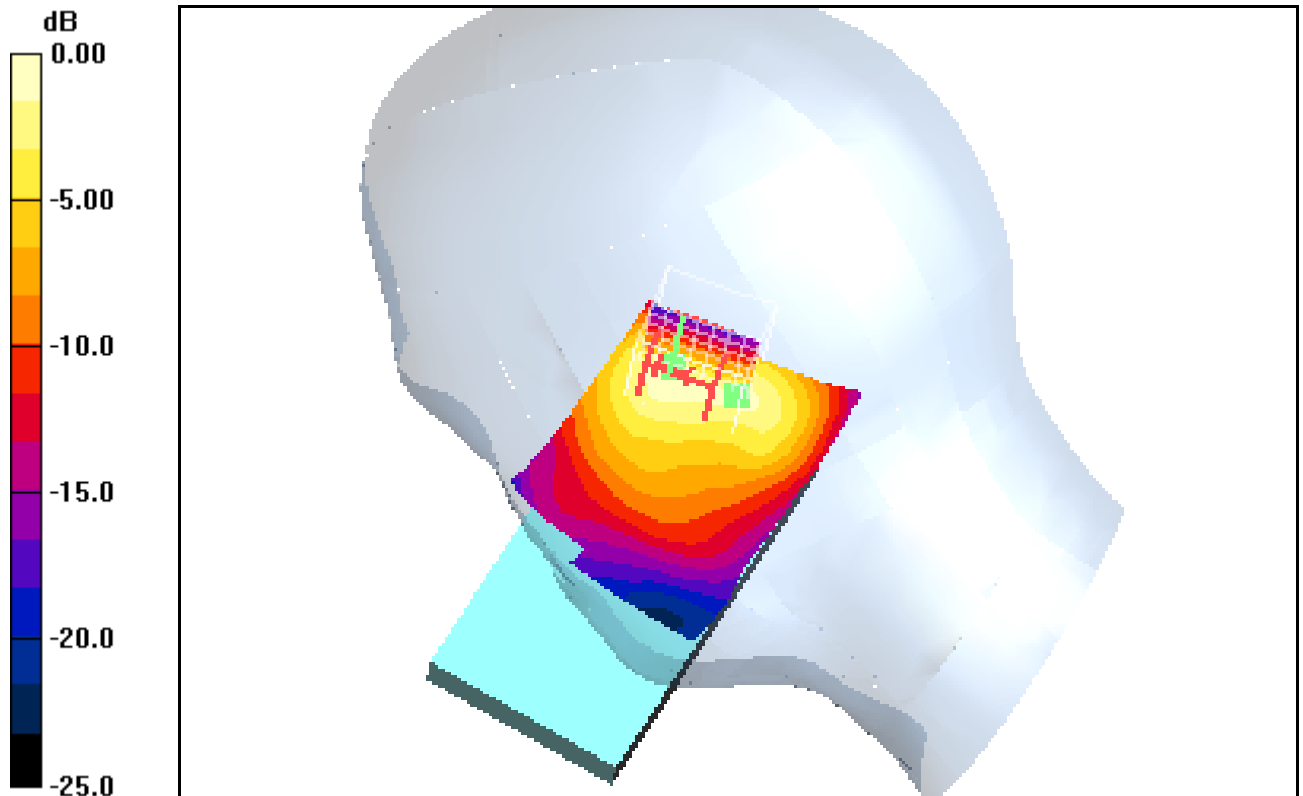
Tilt position - High/Zoom Scan (7x7x7) (8x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.3 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.652 W/kg

SAR(1 g) = 0.264 mW/g; SAR(10 g) = 0.131 mW/g

Maximum value of SAR (measured) = 0.289 mW/g



0 dB = 0.289mW/g

Additional information:

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

Annex B.14: WLAN 2450MHz body (hotspot)

Date/Time: 20.06.2012 15:27:00 Date/Time: 20.06.2012 15:41:13

OET65-Body-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: M2450 Medium parameters used: $f = 2412$ MHz; $\sigma = 1.88$ mho/m; $\epsilon_r = 52.3$; $\rho = 1000$ kg/m³

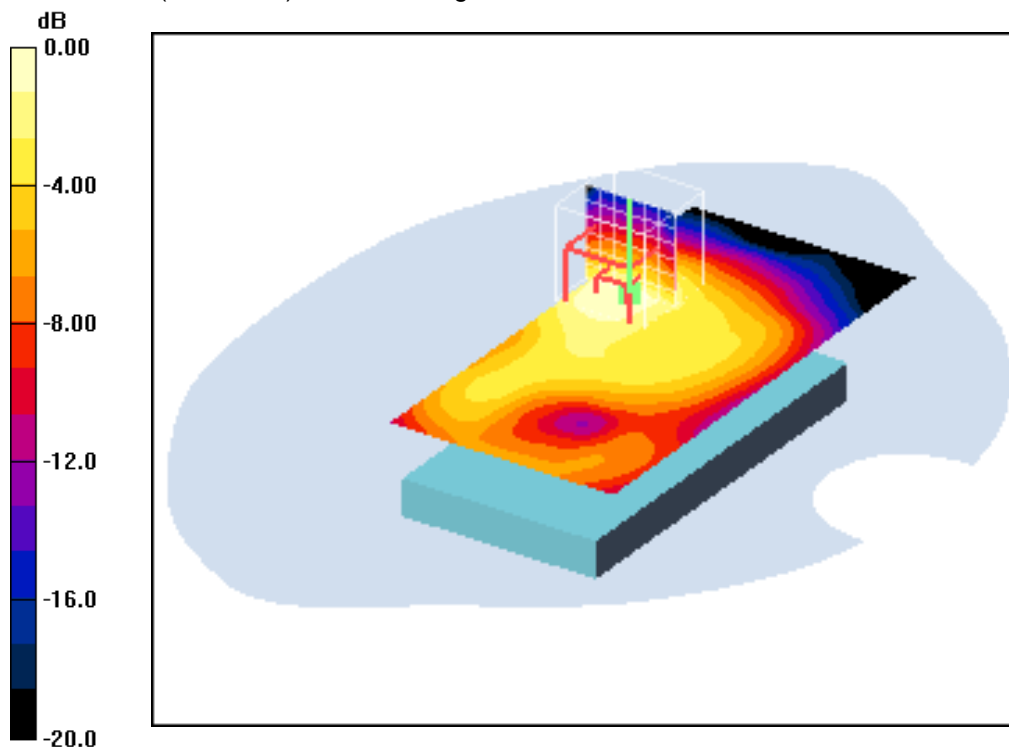
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(3.9, 3.9, 3.9); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Low/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.097 mW/g

Front position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 dx=5mm, dy=5mm, dz=5mm
 Reference Value = 6.79 V/m; Power Drift = -0.017 dB
 Peak SAR (extrapolated) = 0.195 W/kg
SAR(1 g) = 0.089 mW/g; SAR(10 g) = 0.048 mW/g
 Maximum value of SAR (measured) = 0.093 mW/g



0 dB = 0.093mW/g

Additional information:

position or distance of DUT to SAM: 10mm
 ambient temperature: 23.0°C; liquid temperature: 23.2°C

Date/Time: 20.06.2012 10:45:11 Date/Time: 20.06.2012 10:53:41

OET65-Body-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: M2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.91 \text{ mho/m}$; $\epsilon_r = 52.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(3.9, 3.9, 3.9); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.109 mW/g

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

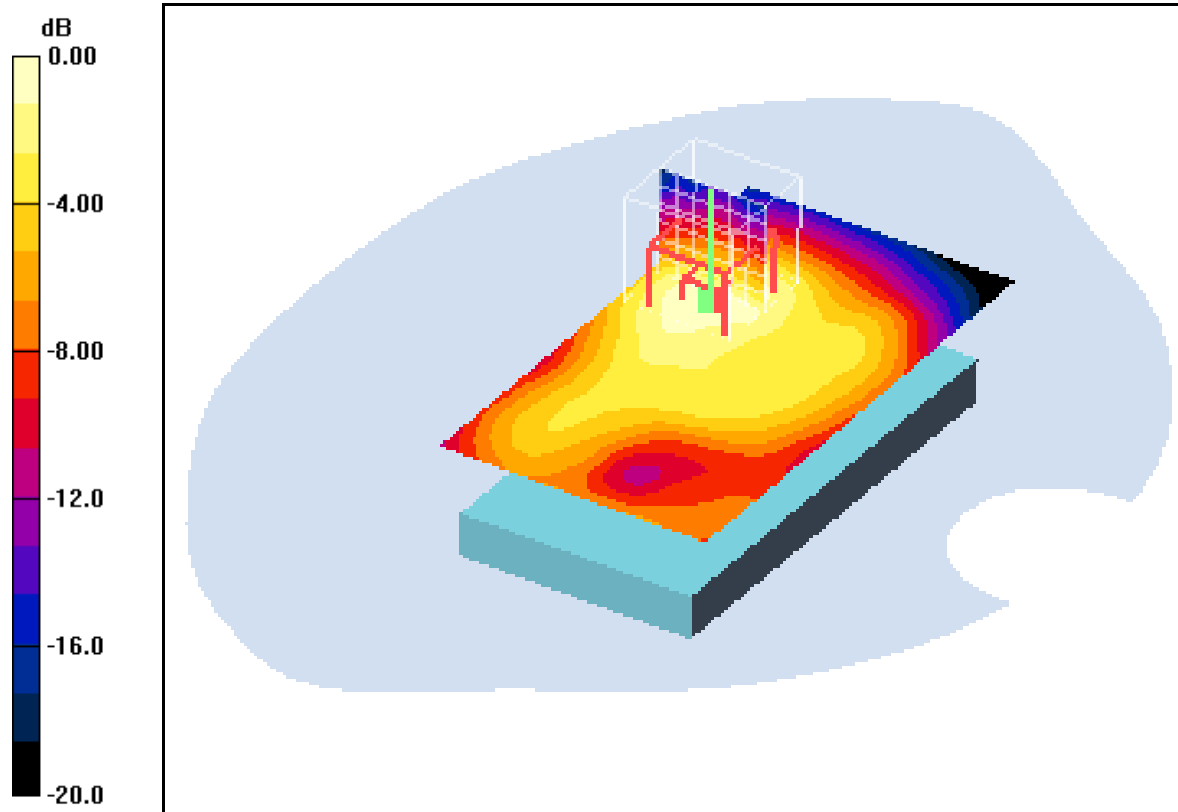
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.37 V/m; Power Drift = -0.021 dB

Peak SAR (extrapolated) = 0.219 W/kg

SAR(1 g) = 0.098 mW/g; SAR(10 g) = 0.053 mW/g

Maximum value of SAR (measured) = 0.104 mW/g



0 dB = 0.104mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.0°C; liquid temperature: 23.2°C

Date/Time: 20.06.2012 08:09:46 Date/Time: 20.06.2012 08:17:05

OET65-Body-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: M2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.94 \text{ mho/m}$; $\epsilon_r = 52.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(3.9, 3.9, 3.9); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - High/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

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

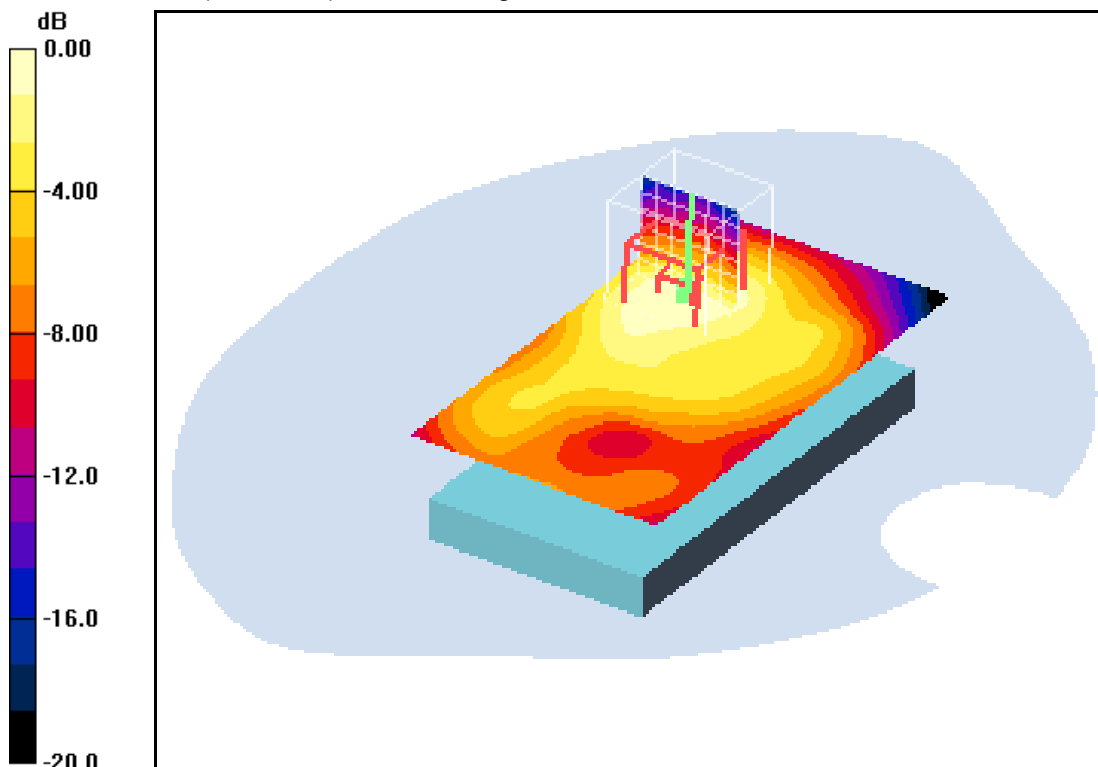
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.42 V/m; Power Drift = -0.031 dB

Peak SAR (extrapolated) = 0.230 W/kg

SAR(1 g) = 0.103 mW/g; SAR(10 g) = 0.057 mW/g

Maximum value of SAR (measured) = 0.107 mW/g



0 dB = 0.107mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.0°C; liquid temperature: 23.2°C

Date/Time: 20.06.2012 15:55:52 Date/Time: 20.06.2012 16:04:39

OET65-Body-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: M2450 Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.88 \text{ mho/m}$; $\epsilon_r = 52.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(3.9, 3.9, 3.9); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Low/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

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

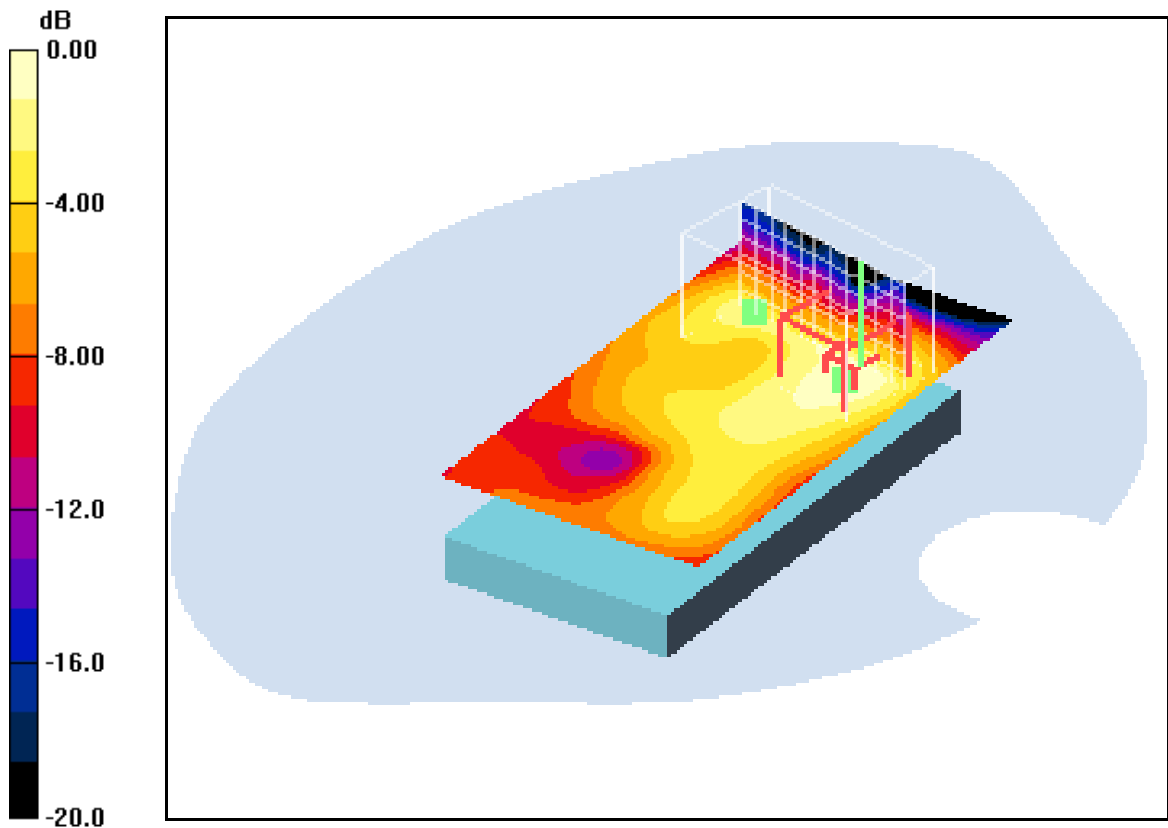
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.57 V/m; Power Drift = -0.081 dB

Peak SAR (extrapolated) = 0.148 W/kg

SAR(1 g) = 0.057 mW/g; SAR(10 g) = 0.029 mW/g

Maximum value of SAR (measured) = 0.058 mW/g



0 dB = 0.058mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.0°C; liquid temperature: 23.2°C

Date/Time: 20.06.2012 11:08:27 Date/Time: 20.06.2012 11:17:03

OET65-Body-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: M2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.91 \text{ mho/m}$; $\epsilon_r = 52.3$; $\rho = 1000 \text{ kg/m}^3$

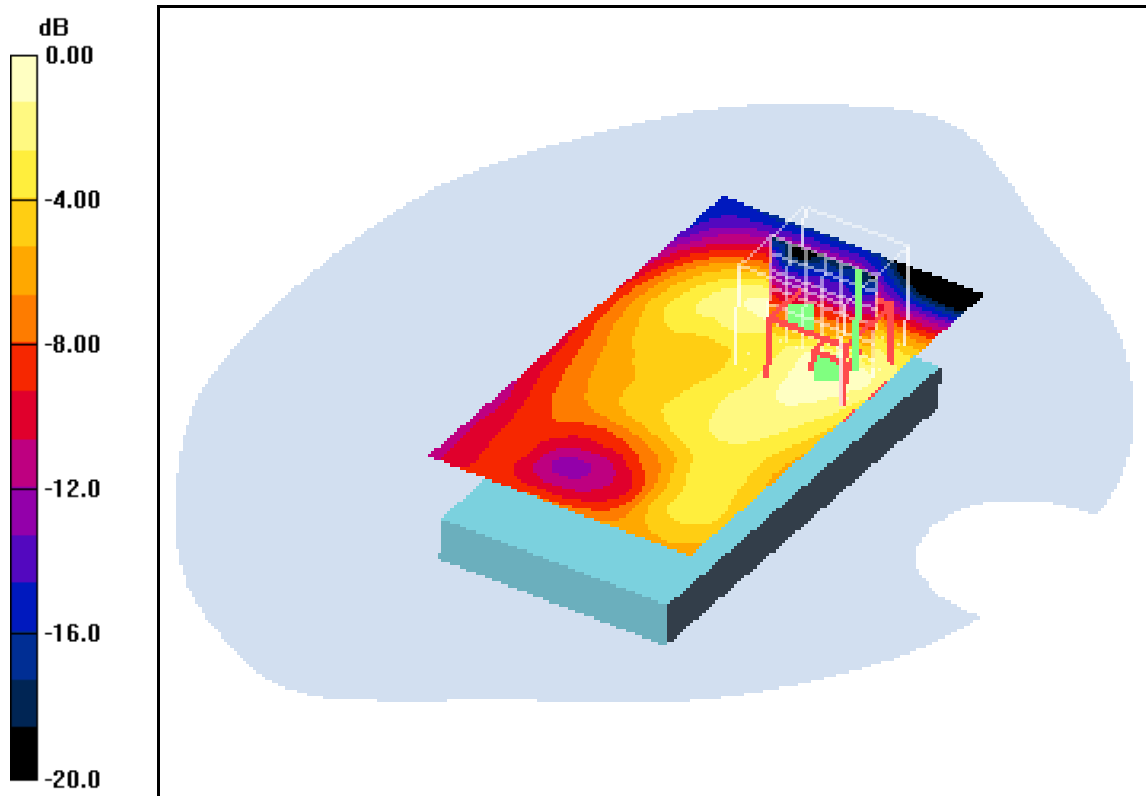
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(3.9, 3.9, 3.9); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (interpolated) = 0.066 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 = 5.89 V/m; Power Drift = 0.00 dB
 Peak SAR (extrapolated) = 0.164 W/kg
SAR(1 g) = 0.063 mW/g; SAR(10 g) = 0.032 mW/g
 Maximum value of SAR (measured) = 0.065 mW/g



0 dB = 0.065mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.0°C; liquid temperature: 23.2°C

Date/Time: 20.06.2012 08:31:19 Date/Time: 20.06.2012 08:39:56

OET65-Body-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: M2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.94 \text{ mho/m}$; $\epsilon_r = 52.2$; $\rho = 1000 \text{ kg/m}^3$

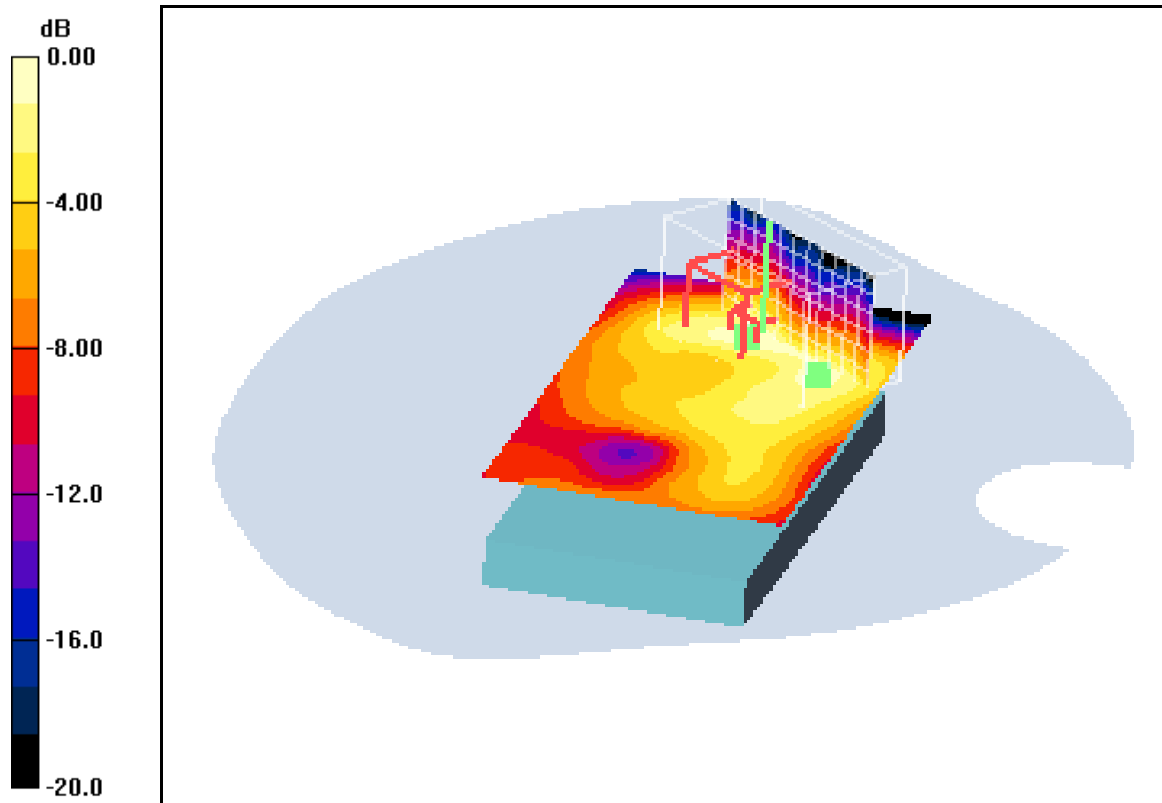
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(3.9, 3.9, 3.9); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - High/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (interpolated) = 0.061 mW/g

Rear position - High/Zoom Scan (7x7x7) (12x7x7)/Cube 0: Measurement grid:
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
 Reference Value = 5.59 V/m; Power Drift = 0.019 dB
 Peak SAR (extrapolated) = 0.154 W/kg
SAR(1 g) = 0.066 mW/g; SAR(10 g) = 0.032 mW/g
 Maximum value of SAR (measured) = 0.073 mW/g



0 dB = 0.073mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.0°C; liquid temperature: 23.2°C

Date/Time: 20.06.2012 12:27:06 Date/Time: 20.06.2012 12:45:59 Date/Time: 20.06.2012 12:57:28

OET65-Body-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: M2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.91 \text{ mho/m}$; $\epsilon_r = 52.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(3.9, 3.9, 3.9); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

Edge left position - Middle/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.077 mW/g

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

Reference Value = 5.86 V/m; Power Drift = 0.019 dB

Peak SAR (extrapolated) = 0.164 W/kg

SAR(1 g) = 0.071 mW/g; SAR(10 g) = 0.037 mW/g

Maximum value of SAR (measured) = 0.074 mW/g

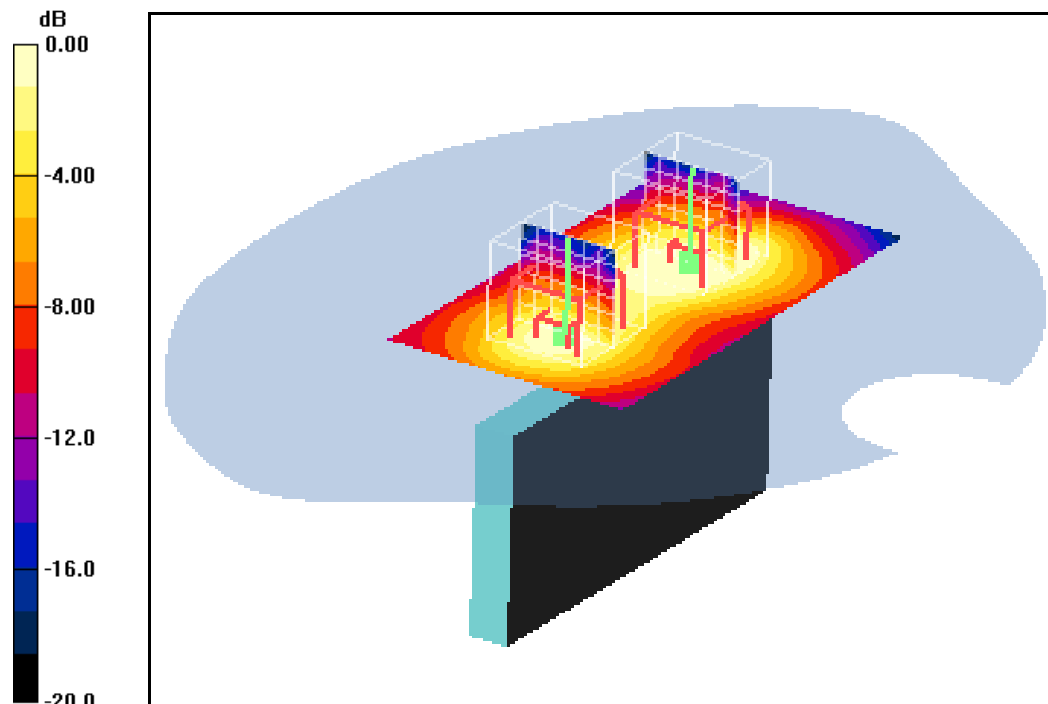
Edge left position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.86 V/m; Power Drift = 0.019 dB

Peak SAR (extrapolated) = 0.116 W/kg

SAR(1 g) = 0.050 mW/g; SAR(10 g) = 0.027 mW/g

Maximum value of SAR (measured) = 0.053 mW/g



Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.0°C; liquid temperature: 23.2°C

Date/Time: 20.06.2012 11:34:43 Date/Time: 20.06.2012 11:58:06 Date/Time: 20.06.2012 12:11:10

OET65-Body-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: M2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.91$ mho/m; $\epsilon_r = 52.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(3.9, 3.9, 3.9); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

Edge right position - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.011 mW/g

Edge right position - Middle/Zoom Scan (7x7x7) (8x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.55 V/m; Power Drift = -0.102 dB

Peak SAR (extrapolated) = 0.024 W/kg

SAR(1 g) = 0.011 mW/g; SAR(10 g) = 0.00617 mW/g

Maximum value of SAR (measured) = 0.012 mW/g

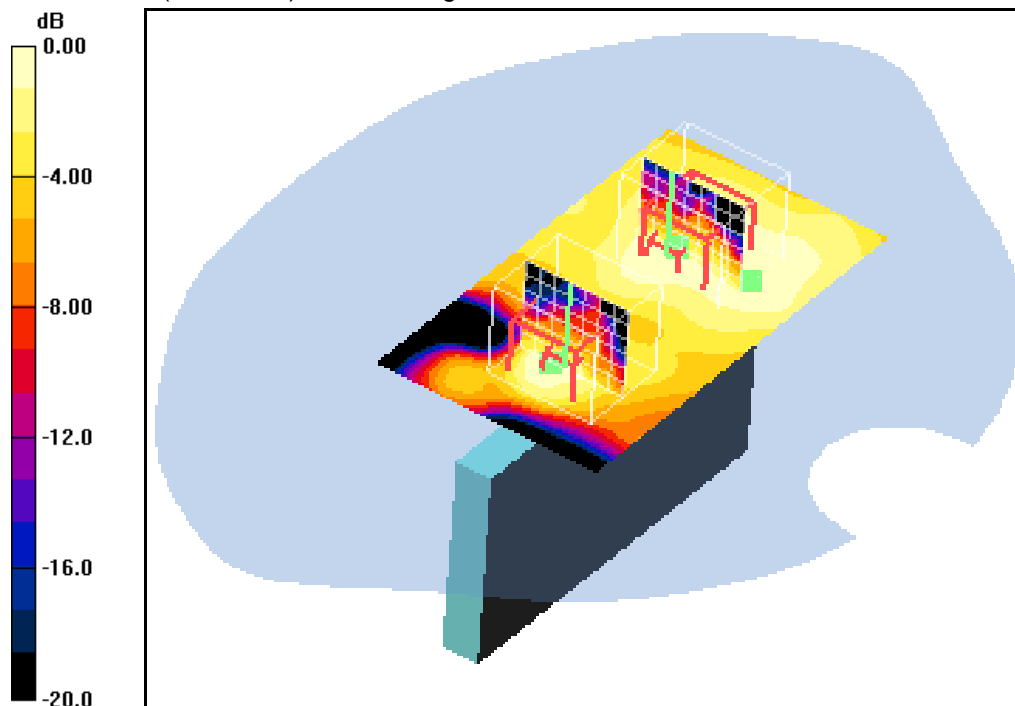
Edge right position - Middle/Zoom Scan (7x7x7) (8x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.55 V/m; Power Drift = -0.102 dB

Peak SAR (extrapolated) = 0.017 W/kg

SAR(1 g) = 0.00788 mW/g; SAR(10 g) = 0.00367 mW/g

Maximum value of SAR (measured) = 0.01 mW/g



0 dB = 0.010mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.0°C; liquid temperature: 23.2°C

Date/Time: 20.06.2012 13:13:26 Date/Time: 20.06.2012 13:20:09

OET65-Body-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: M2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.91$ mho/m; $\epsilon_r = 52.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(3.9, 3.9, 3.9); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

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

Maximum value of SAR (interpolated) = 0.067 mW/g

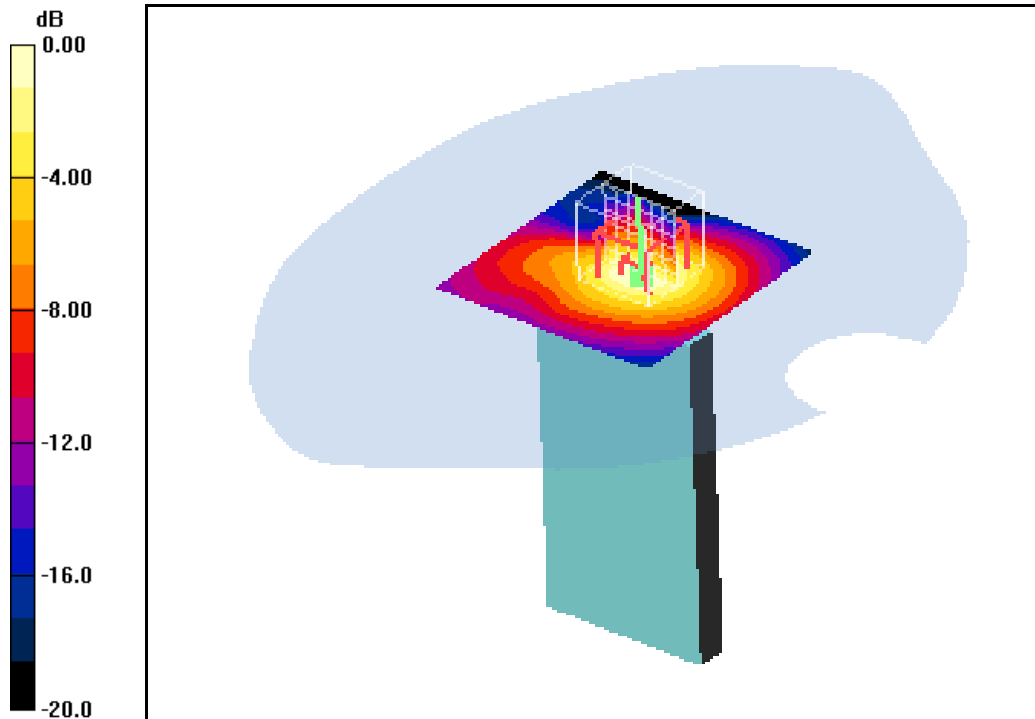
Edge top position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.69 V/m; Power Drift = 0.062 dB

Peak SAR (extrapolated) = 0.136 W/kg

SAR(1 g) = 0.061 mW/g; SAR(10 g) = 0.031 mW/g

Maximum value of SAR (measured) = 0.065 mW/g



0 dB = 0.065mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.0°C; liquid temperature: 23.2°C

Annex B.15: WLAN 2450MHz body worn

Date/Time: 20.06.2012 14:07:05 Date/Time: 20.06.2012 14:31:59

OET65-Body-WLAN

DUT: Sony; Type: PM-0210-BV; Serial: CB511Z442J

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: M2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.94 \text{ mho/m}$; $\epsilon_r = 52.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(3.9, 3.9, 3.9); Calibrated: 23.08.2011
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM left; Type: SAM; Serial: 1041
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - High 15mm/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.068 mW/g

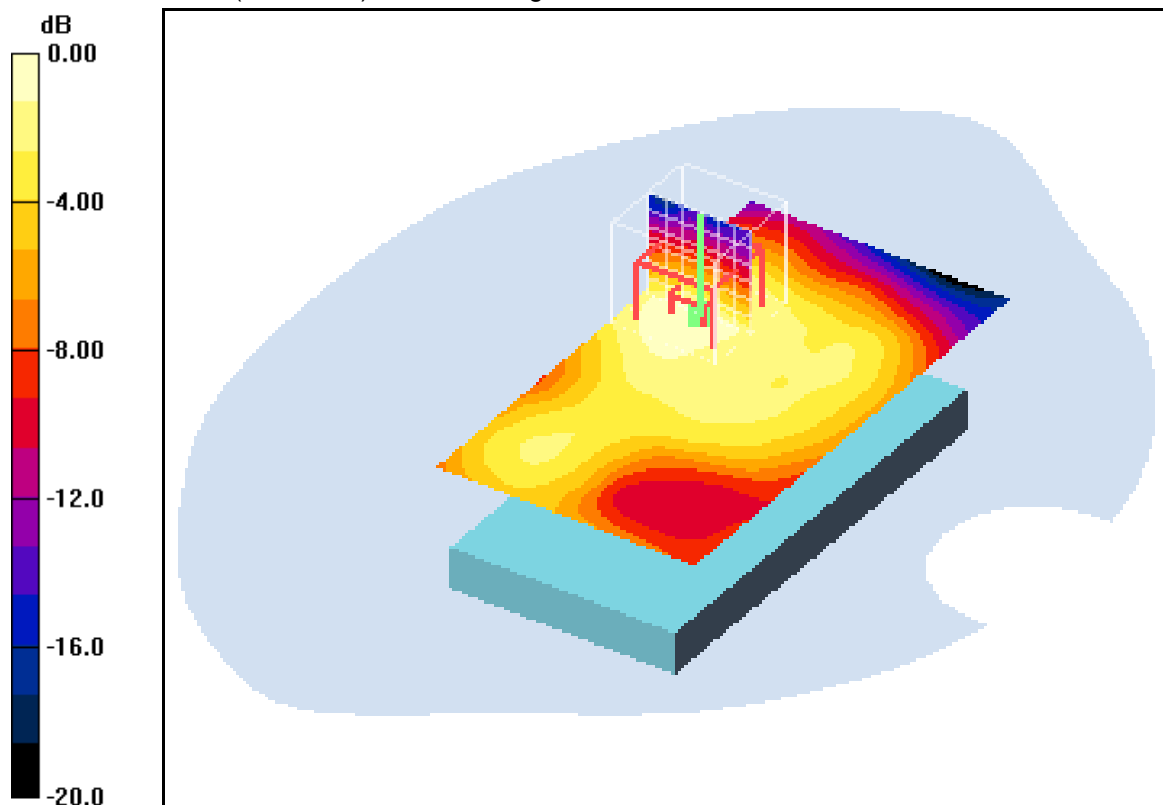
Front position - High 15mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.90 V/m; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 0.137 W/kg

SAR(1 g) = 0.062 mW/g; SAR(10 g) = 0.035 mW/g

Maximum value of SAR (measured) = 0.065 mW/g



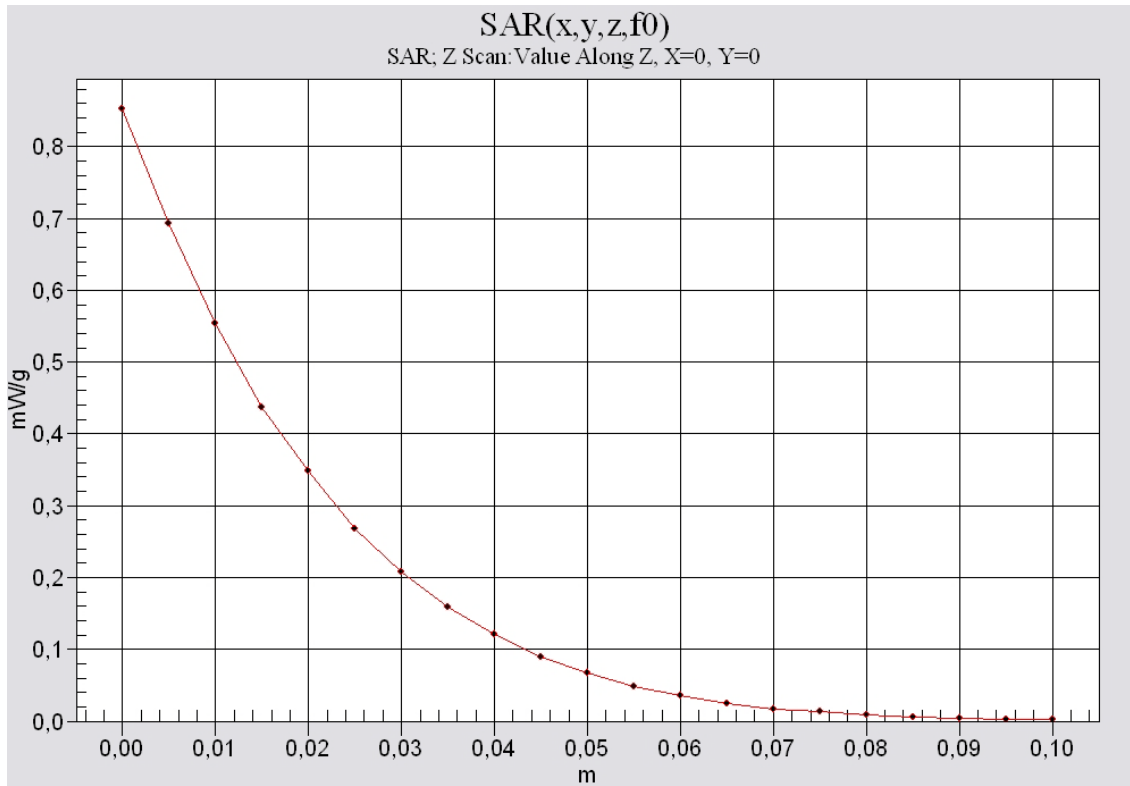
0 dB = 0.065mW/g

Additional information:

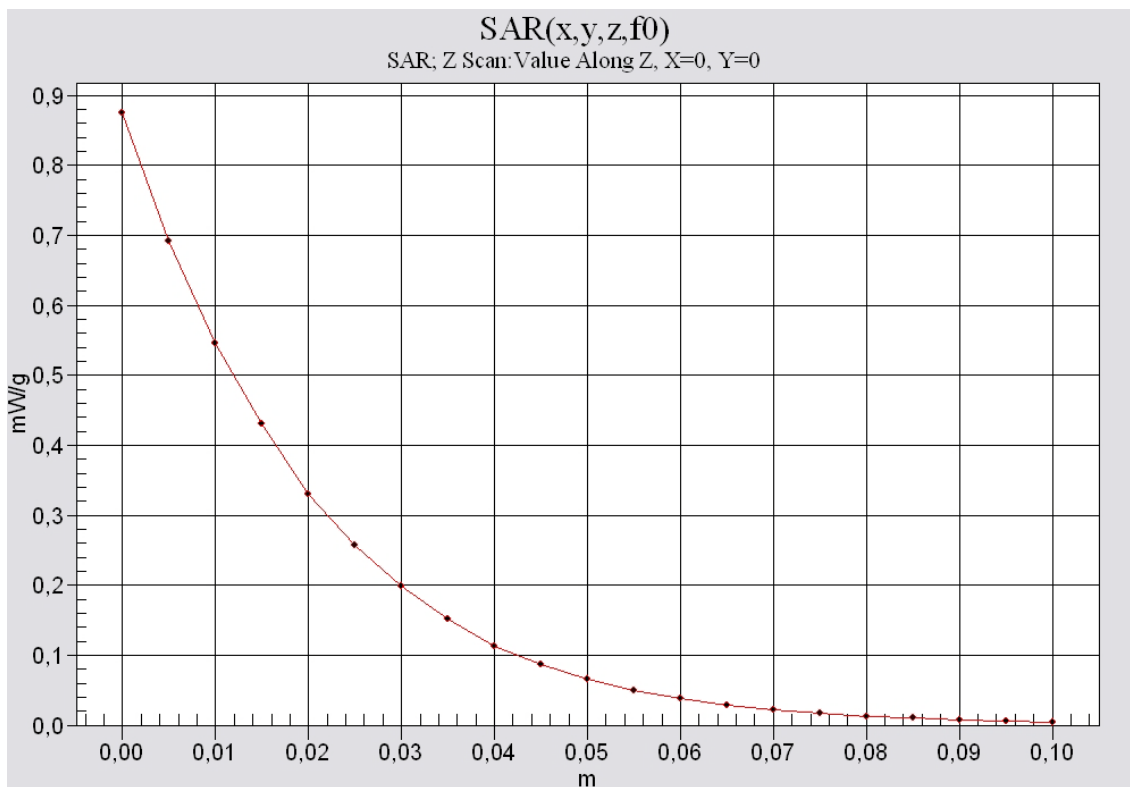
position or distance of DUT to SAM: 15 mm

ambient temperature: 23.0°C; liquid temperature: 23.2°C

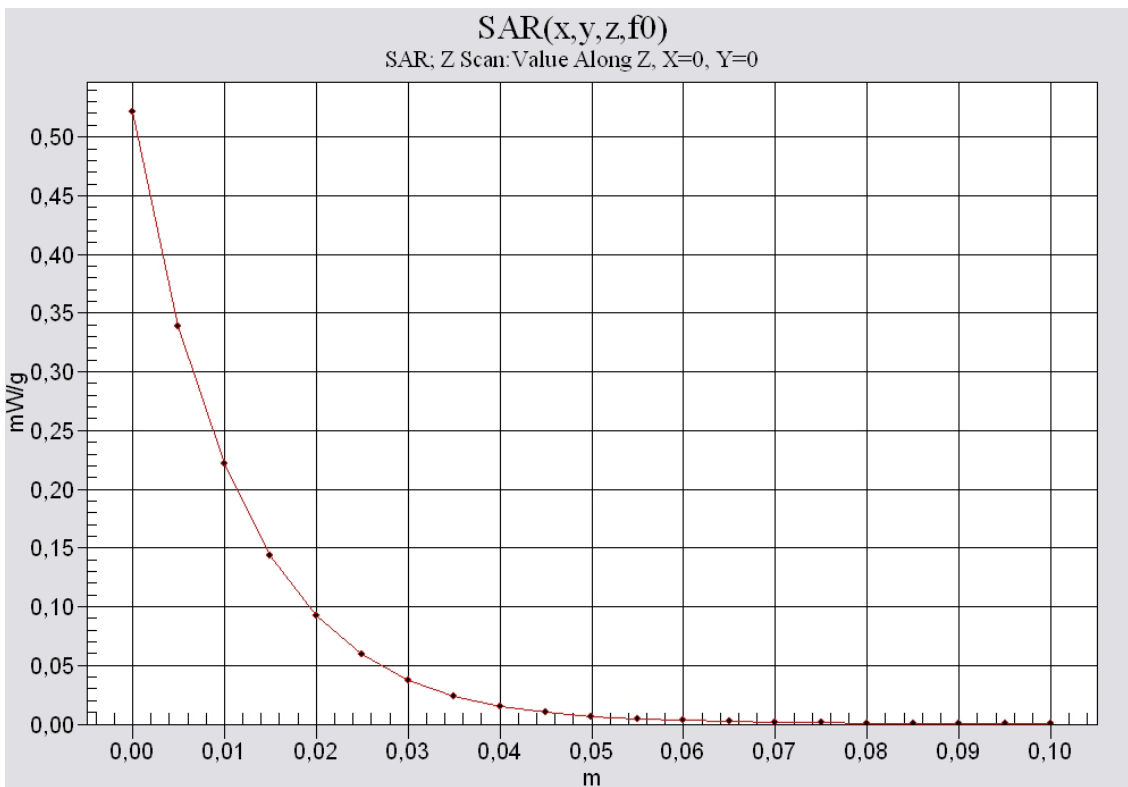
Annex B.16: Z-axis scan



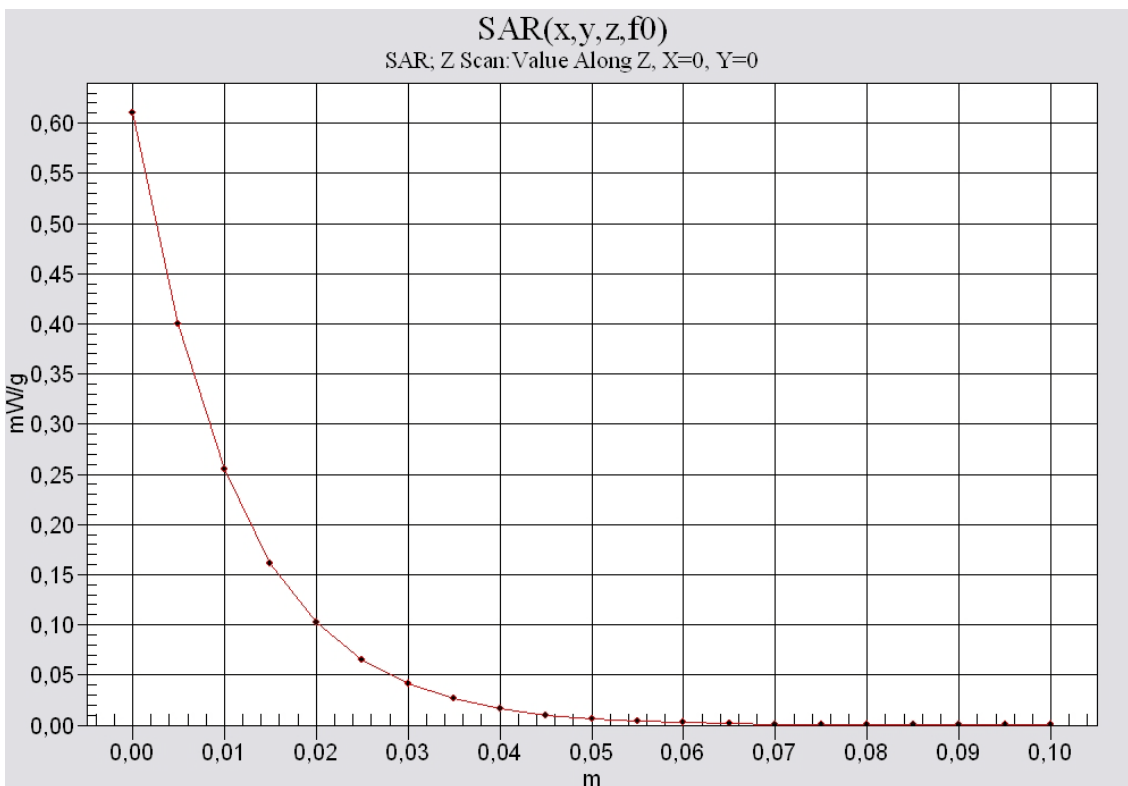
850 head



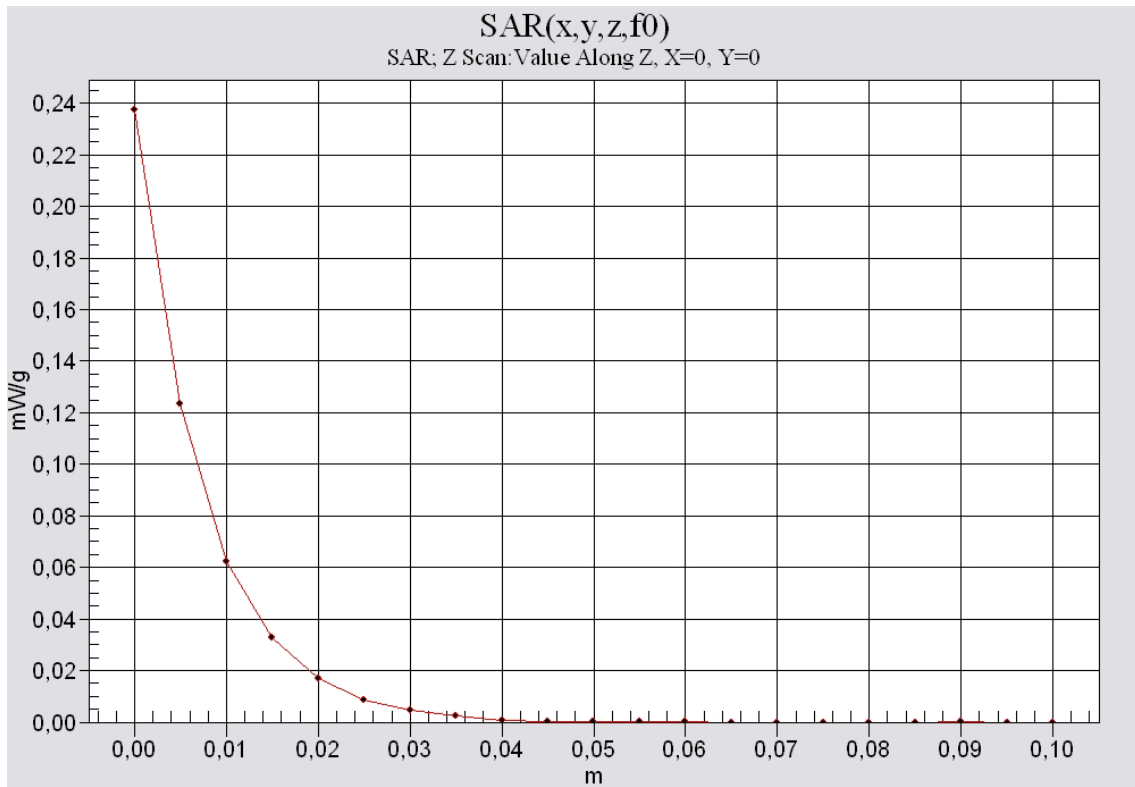
850 body



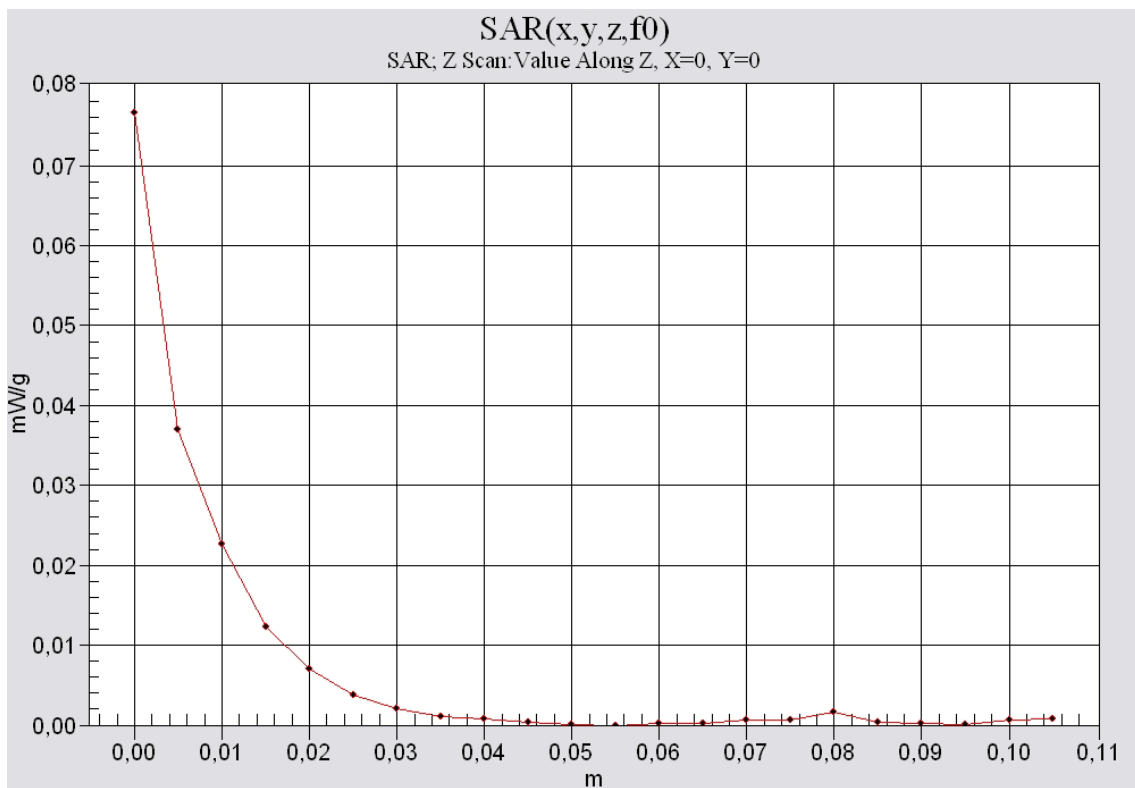
1900 head



1900 body



2450 head



2450 body

Annex B.17: Liquid depth

Photo 1: Liquid depth 850 MHz head simulating liquid

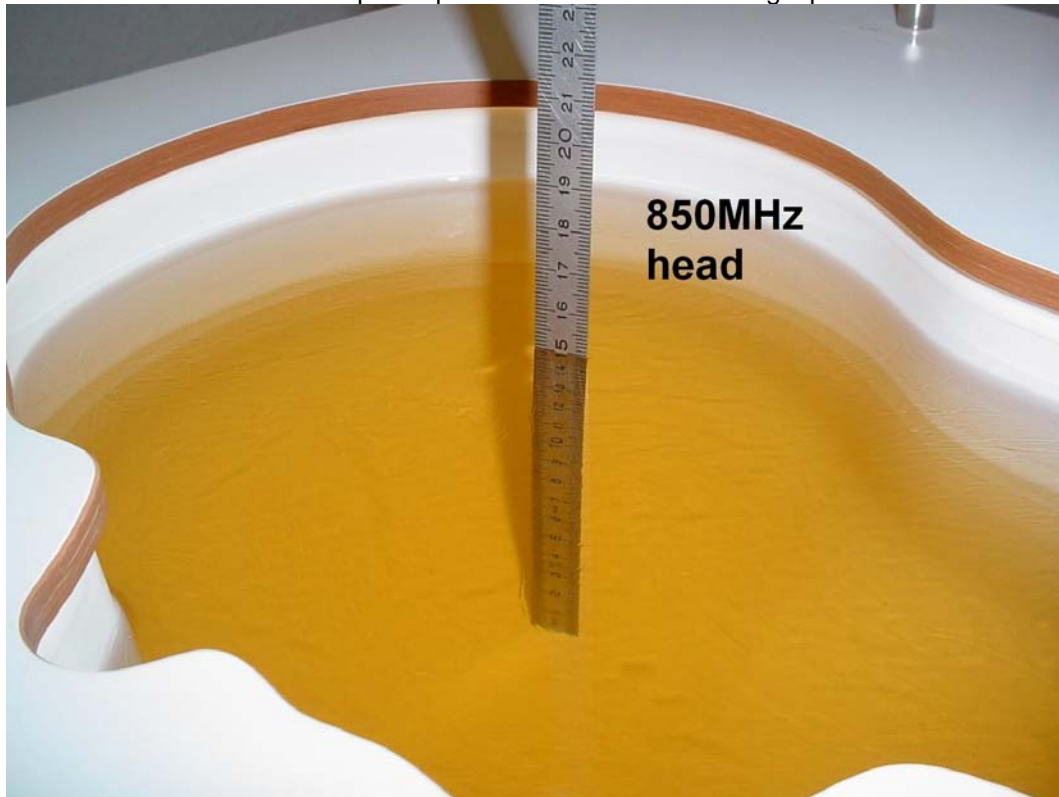


Photo 2: Liquid depth 850 MHz body simulating liquid



Photo 3: Liquid depth 1900MHz head simulating liquid

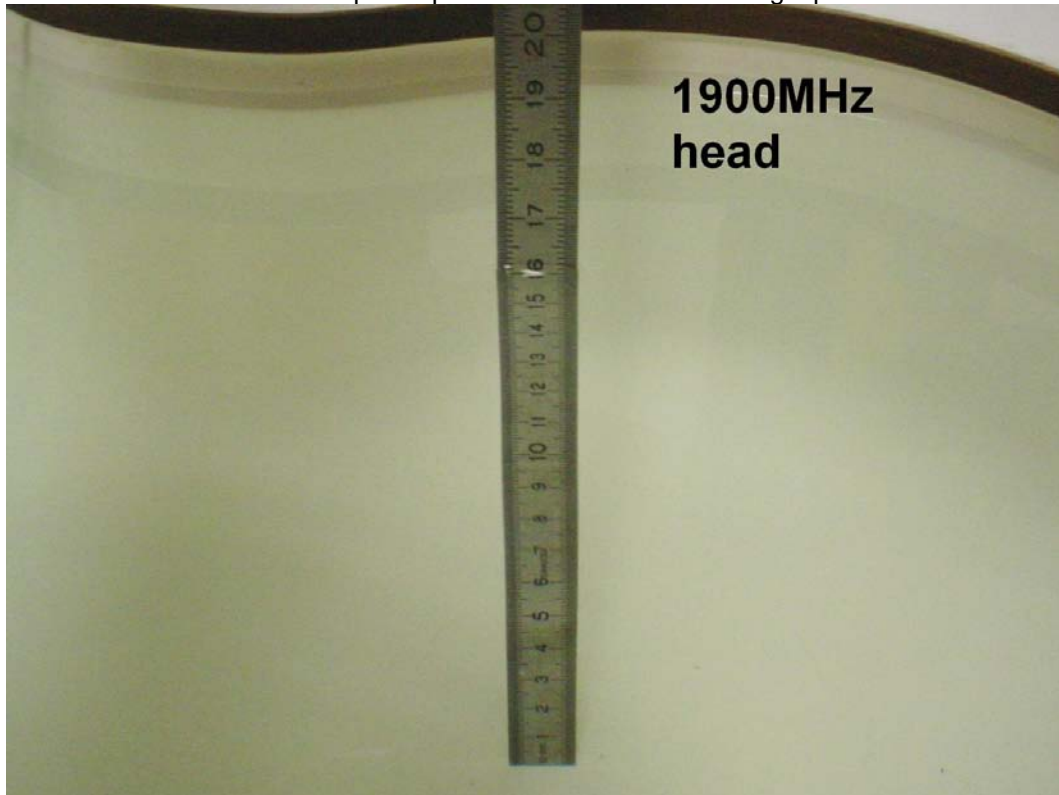


Photo 4: Liquid depth 1900 MHz body simulating liquid

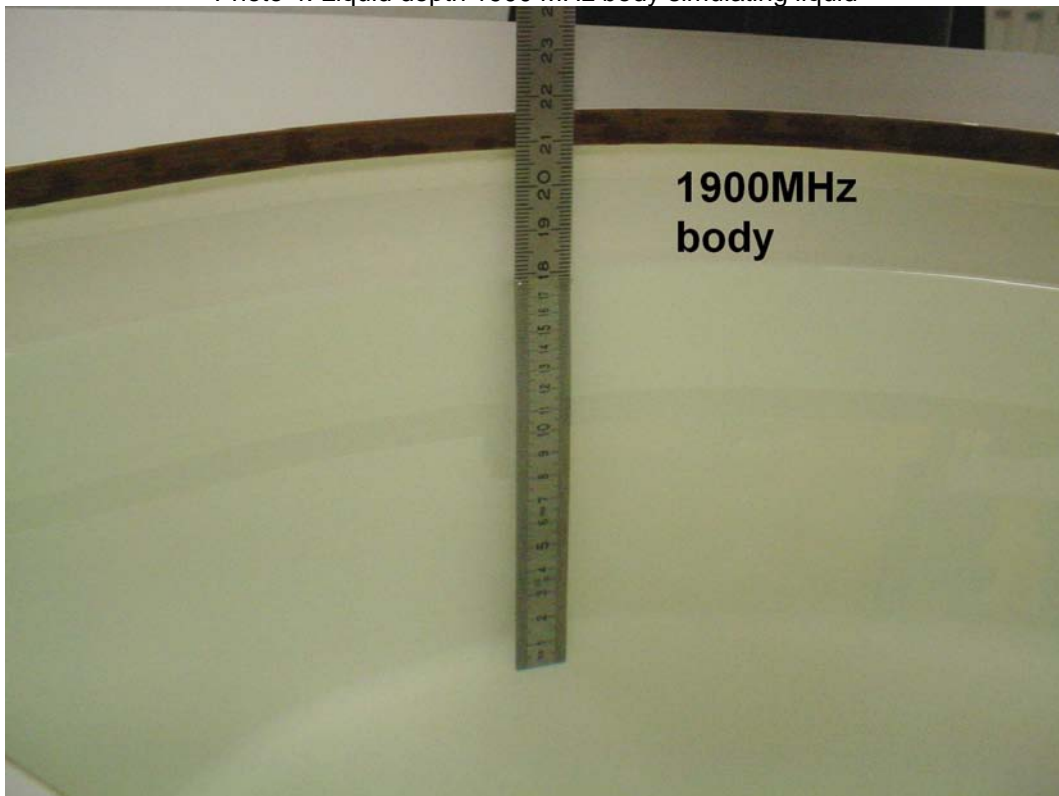


Photo 5: Liquid depth 2450MHz head simulating liquid

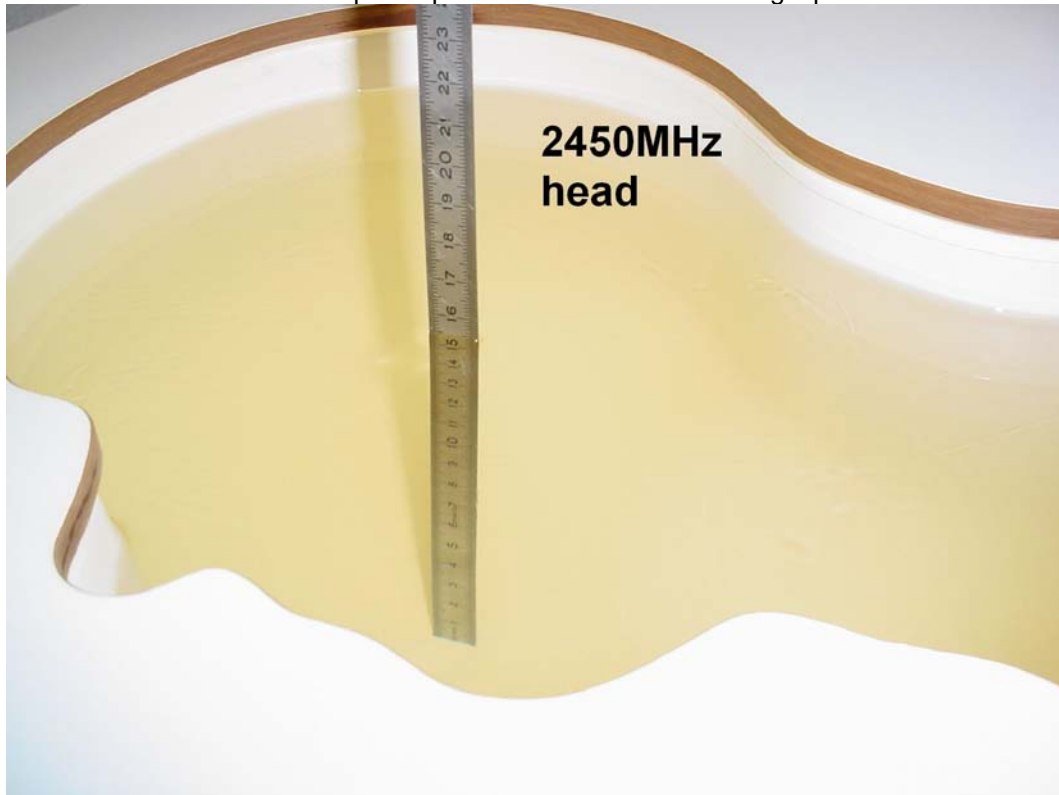
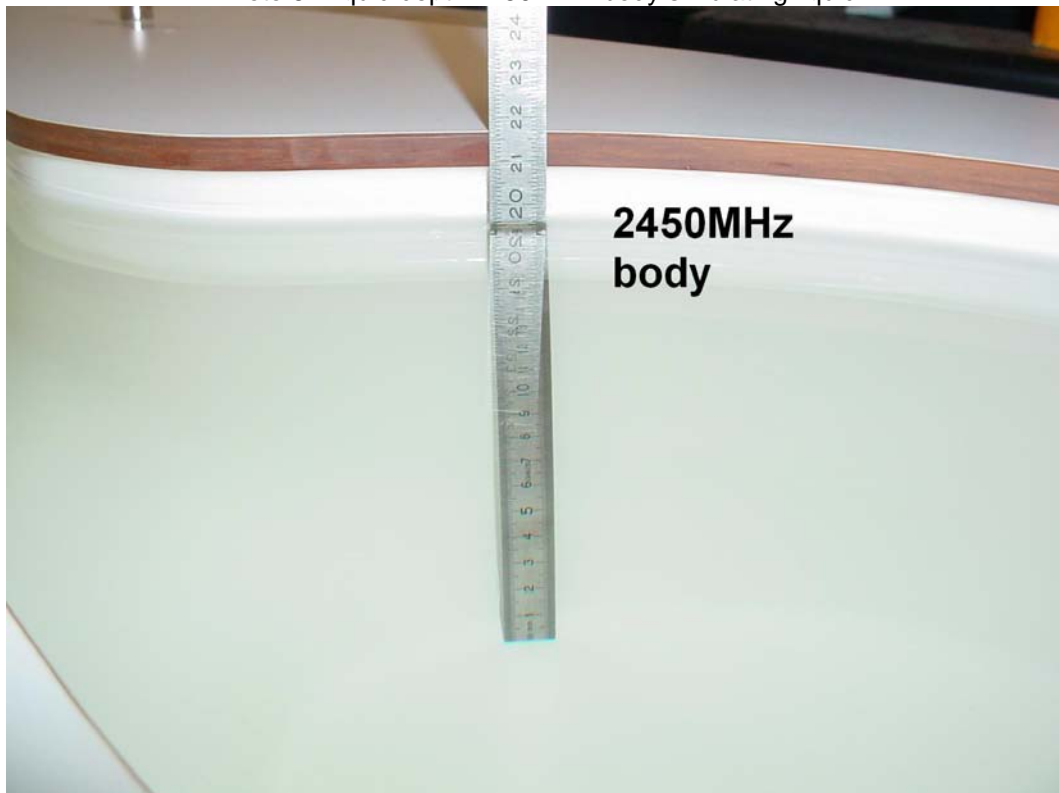


Photo 6: Liquid depth 2450 MHz body simulating liquid



Annex C: Photo documentation

Photo documentation is described in the additional document:

Appendix to test report no. 1-4254/12-34-02-B Photo documentation

Annex D: RF Technical Brief Cover Sheet acc. to RSS-102 Annex A1. COMPANY NUMBER: **4170B**2. MODEL NUMBER: **PM0210**3. MANUFACTURER: **Sony Mobile Communications AB**

4. TYPE OF EVALUATION:

(a) SAR Evaluation: Device used in the Vicinity of the Human Head

- Multiple transmitters: Yes No
- Evaluated against exposure limits: General Public Use Controlled Use
- Duty cycle used in evaluation: 12.5 %
- Standard used for evaluation: RSS-102 Issue 4 (2010-03)
- SAR value: **1.050 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 4 (2010-03)
- SAR value: **0.829 W/kg.** Measured Computed Calculated

Annex D.18: Declaration of RF Exposure Compliance

ATTESTATION: I attest that the information provided in Annex D: is correct; that a Technical Brief was prepared and the information it contains is correct; that the device evaluation was performed or supervised by me; that applicable measurement methods and evaluation methodologies have been followed and that the device meets the SAR and/or RF exposure limits of RSS-102.

Signature:



Date: 2012-07-06

NAME : **Thomas Vogler**

TITLE : Dipl.-Ing. (FH)

COMPANY : CETECOM ICT Services GmbH

Annex E: Calibration parameters

Calibration parameters are described in the additional document:

Appendix to test report no. 1-4254/12-34-02-B Calibration data, Phantom certificate and detail information of the DASY4 System

Annex F: Document History

Version	Applied Changes	Date of Release
	Initial Release	2012-06-29
-A	Corrected max. output power (from tune-up info) for FDD V and FDD II table 2 (page 8)	2012-07-03
-B	Corrected max. output power from tune-up info table 2 (page 8) Added 2 SAR tests for GPRS at body-worn distance of 15mm at GSM 850 and GSM 1900	2012-07-06

Annex G: Further Information

Glossary

BW	-	Bandwidth
DUT	-	Device under Test
EUT	-	Equipment under Test
FCC	-	Federal Communication Commission
FCC ID	-	Company Identifier at FCC
HW	-	Hardware
IC	-	Industry Canada
Inv. No.	-	Inventory number
LTE	-	Long Term Evolution
N/A	-	not applicable
OET	-	Office of Engineering and Technology
RB	-	resource block(s)
SAR	-	Specific Absorption Rate
S/N	-	Serial Number
SW	-	Software