

TEST REPORT

Test Report No.: 1-5831/13-04-02-B



Testing Laboratory

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Accredited Test Laboratory:

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Test Standard/s

IEEE 1528-2003

OET Bulletin 65
Supplement C

RSS-102 Issue 4

Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields
Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)

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

Test Item

Kind of test item: Mobile Phone
Device type: portable device
Model name: **C5503**
S/N serial number: CB5A1NNJM0 / CB5A1NYFFZ
FCC-ID: PY7PM-0330
IC: 4170B-PM0330
IMEI-Number: 00440245-085781-2
Hardware status: AP1
Software status: 10.2.A.1.51
Frequency: see technical details
Antenna: integrated antenna
Battery option: Li-ion battery BA950 3.7V / 2300mAh
Accessories: Stereo headset MH-EX300AP SN: 1238SSP00000735
Test sample status: identical prototype
Exposure category: general population / uncontrolled environment

Test Report authorised:

2013-05-31 Thomas Vogler
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Test performed:

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2 General information

2.1 Notes and disclaimer

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2.2 Application details

Date of receipt of order:	2013-01-10
Date of receipt of test item:	2013-02-25
Start of test:	2013-02-27
End of test:	2013-03-28
Person(s) present during the test:	

2.3 Statement of compliance

The SAR values found for the C5503 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	Lowest transmit frequency/MHz	Highest transmit frequency/MHz	Lowest receive Frequency/MHz	Highest receive Frequency/MHz	Kind of modulation	Power Class	Tested power control level	GPRS/EGPRS mobile station class	GPRS/EGPRS multislot class	(E)GPRS voice mode or DTM	Test channel low	Test channel middle	Test channel high	Maximum output power/dBm)*
☐	GSM	880.2	914.8	925.2	959.8	GMSK 8-PSK	4 E2	5	B	33	no	975	37	124	33.4
☐	GSM DCS	1710.2	1784.8	1805.2	1879.8	GMSK 8-PSK	1 E2	0	B	33	no	512	698	885	30.3
☒	GSM cellular	824.2	848.8	869.2	893.8	GMSK 8-PSK	4 E2	5	B	33	no	128	190	251	33.3
☒	GSM PCS	1850.2	1909.8	1930.2	1989.8	GMSK 8-PSK	1 E2	0	B	33	no	512	661	810	30.0
☐	UMTS FDD I	1922.4	1977.6	2112.4	2167.6	QPSK	3	max	--	--	--	9612	9750	9888	24.2
☒	UMTS FDD V	826.4	846.6	871.4	891.6	QPSK	3	max	--	--	--	4132	4182	4233	24.4
☐	UMTS FDD VIII	882.4	912.6	927.4	957.6	QPSK	3	max	--	--	--	2712	2787	2863	24.3
☐	LTE FDD 1	1920	1980	2110	2170	OFDM QPSK 16QAM	3	max	--	--	--	18100	18300	18500	23.4
☐	LTE FDD 3	1710	1785	1805	1880		3	max	--	--	--	19300	19575	19850	23.5
☒	LTE FDD 5	824	849	869	894		3	max	--	--	--	20450	20525	20600	23.5
☐	LTE FDD 7	2500	2570	2620	2690		3	max	--	--	--	20850	21100	21350	23.4
☐	LTE FDD 8	880	915	925	960		3	max	--	--	--	21500	21625	21750	23.4
☐	LTE FDD 20	832	862	791	821		3	max	--	--	--	24250	24300	24350	23.6
☐	WLAN	2412	2472	2412	2472	CCK OFDM	--	max	--	--	--	1	7	13	13.9
☒	WLAN US	2412	2462	2412	2462		--	max	--	--	--	1	6	11	13.9
☒	WLAN	5180	5240	5180	5240	OFDM	--	max	--	--	--	--	40	--	9.0
☒	WLAN	5260	5320	5260	5320	OFDM	--	max	--	--	--	--	60	--	9.4
☒	WLAN	5500	5700	5500	5700	OFDM	--	max	--	--	--	108	--	--	9.7
☒	WLAN	5745	5825	5745	5825	OFDM	--	max	--	--	--	153	--	--	9.9
☐	BT	2402	2480	2402	2480	GFSK	3	max	--	--	--	0	39	78	9.5

supported UMTS features	category	remarks
Release 8 HSDPA	24	QPSK, 16QAM, 64-QAM Dual-Cell 42.2 Mbit/s
Release 6 HSUPA	6	no 16QAM , no MIMO, 5.76 Mbit/s

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

2.5 Transmitter and Antenna Operating Configurations

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

Table 1: Simultaneous transmission conditions

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

3 Test standards/ procedures references

Test Standard	Version	Test Standard Description
IEEE 1528-2003	2003-04	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
OET Bulletin 65 Supplement C	1997-01 2001-01	Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields
RSS-102 Issue 4	2010-03	Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)
Canada's Safety Code No. 6	99-EHD-237	Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz
IEEE Std. C95-3	2002	IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields – RF and Microwave
IEEE Std. C95-1	1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
IEC 62209-2	2010	Human exposure to radio frequency fields from hand-held and bodymounted wireless communication devices. Human models, instrumentation, and procedures. Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)
FCC KDBs:		
KDB 865664D01v01	October 24, 2012	FCC OET SAR measurement requirements 100 MHz to 6 GHz
KDB 865664D02v01	October 24, 2012	RF Exposure Compliance Reporting and Documentation Considerations
KDB 447498D01v05	October 24, 2012	Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies
KDB 648474D04v01	October 24, 2012	SAR Evaluation Considerations for Handsets with Multiple Transmitters & Antennas
KDB 941225D01v02	April 10, 2007	SAR Measurements Procedures for 3G Devices
KDB 941225D02v01	December 14, 2009	3GPP R6 HSPA and R7 HSPA+ SAR Guidance
KDB 941225D03v01	December, 2008	SAR Test Reduction Procedure for GSM/GPRS/EDGE
KDB 941225D06v01	April 4, 2011	SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities
KDB 248227D01v01	May, 2007	SAR Measurement Procedures for 802.11 a/b/g Transmitters
KDB 450824D01v01	January, 2007	SAR Probe Calibration and System Verification considerations for measurements from 150 MHz to 3 GHz
KDB 450824D01v01	March 4, 2012	Dipole Requirements for SAR System Validation and Verification
KDB 616217D03v01	November 13, 2009	SAR Evaluation Considerations for Laptop Computers with Antennas Built-in on Display Screens
KDB 941225D05v02	October 24, 2012	SAR for LTE Devices

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 2: RF exposure limits

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

Notes:

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

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

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

4 Summary of Measurement Results

☒	No deviations from the technical specifications ascertained			
☐	Deviations from the technical specifications ascertained			
Maximum SAR value reported for 1g (W/kg)				
		PCE	DTS	UNII
head		0.764	0.580	0.380
body worn 15 mm distance		1.055	0.061	---
hotspot operation 10 mm distance		1.250	0.134	---
collocated situations	ΣSAR evaluation	1.627		
	SPLSR _i ≤ 0.040	0.022		

4.1 SAR measurement variability and measurement uncertainty analysis

This analysis is required for worst case results larger than 0.8 W/kg.

frequency band	highest measurement result at worst case position (W/kg)	second measurement result at worst case position (W/kg)	ratio <1.2
GSM 835	1.140	1.100	1.04
GSM 1900	0.949	0.878	1.08
UMTS FDD V	0.853	0.868	1.02
LTE FDD 5	0.753	0.739	1.02
WLAN 2.4 GHz	0.426	0.430	1.01
WLAN 5 GHz	0.265		

5 Test Environment

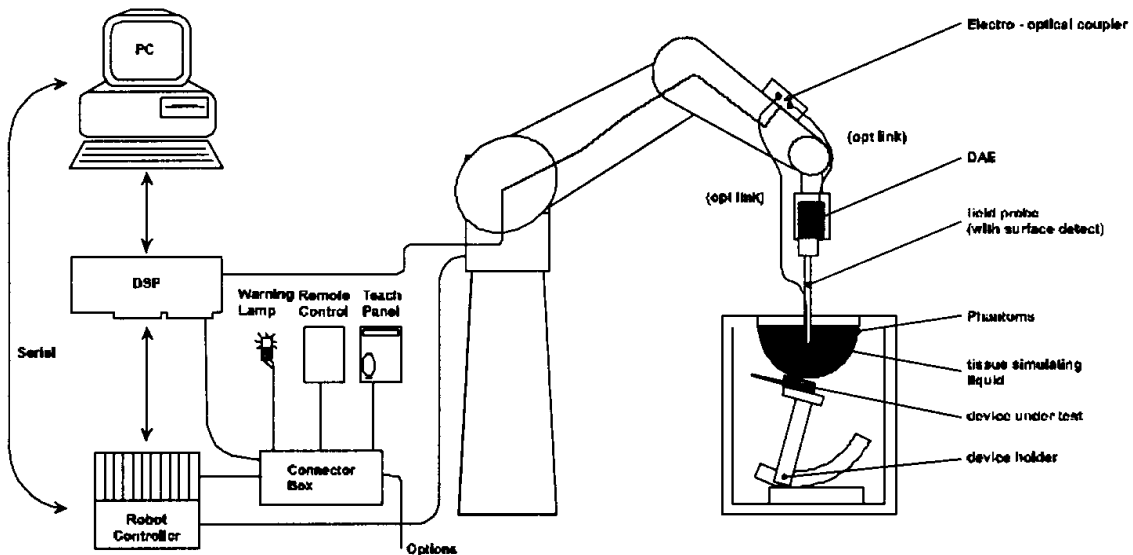
Ambient temperature:	20 – 24 °C
Tissue Simulating liquid:	20 – 24 °C
Relative humidity content:	40 – 50 %
Air pressure:	not relevant for this kind of testing
Power supply:	230 V / 50 Hz

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

6 Test Set-up

6.1 Measurement system

6.1.1 System Description



- The DASY system for performing compliance tests consists of the following items:
- A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
- A dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
- A data acquisition electronic (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- A unit to operate the optical surface detector which is connected to the EOC.
- The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DASY measurement server.
- The DASY measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation. A computer operating Windows XP or Windows 7.
- DASY software and SEMCAD data evaluation software.
- Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
- The generic twin phantom enabling the testing of left-hand and right-hand usage.
- The device holder for handheld mobile phones.
- Tissue simulating liquid mixed according to the given recipes.
- System check dipoles allowing to validate the proper functioning of the system.

6.1.2 Test environment

The DASY measurement system is placed at the head end of a room with dimensions: 5 x 2.5 x 3 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

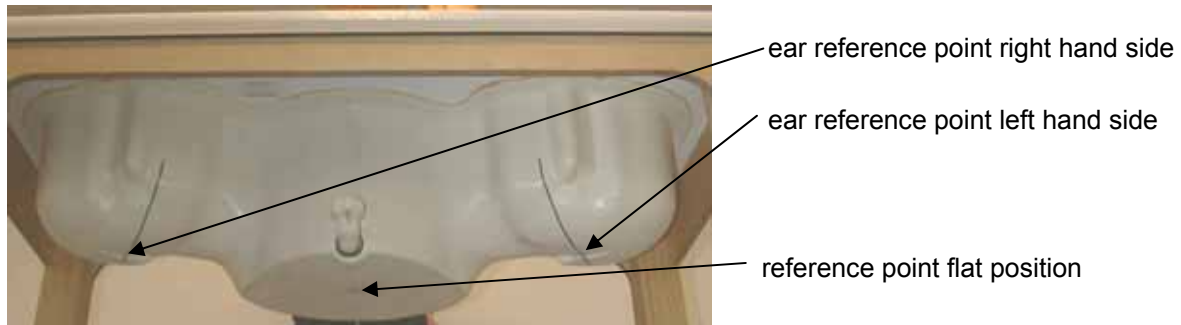
Isotropic E-Field Probe ET3DV6 for Dosimetric Measurements

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., glycolether)
Calibration	In air from 10 MHz to 2.5 GHz In head tissue simulating liquid (HSL) at 900 (800-1000) MHz and 1.8 GHz (1700-1910 MHz) (accuracy $\pm 9.5\%$; $k=2$) 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 DASY device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65°. The bottom plate contains three 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 DASY installation includes predefined files with recommended procedures for measurements and system check. They are read-only document files and destined as fully defined but unmeasured masks. All test positions (head or body-worn) are tested with the same configuration of test steps differing only in the grid definition for the different test positions.
- The „reference“ and „drift“ measurements are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure. The indicated drift is mainly the variation of the DUT's output power and should vary max. +/- 5 %.
- The „surface check“ measurement tests the optical surface detection system of the DASY system by repeatedly detecting the surface with the optical and mechanical surface detector and comparing the results. The output gives the detecting heights of both systems, the difference between the two systems and the standard deviation of the detection repeatability. Air bubbles or refraction in the liquid due to separation of the sugar-water mixture gives poor repeatability (above $\pm 0.1\text{mm}$). To prevent wrong results tests are only executed when the liquid is free of air bubbles. The difference between the optical surface detection and the actual surface depends on the probe and is specified with each probe. (It does not depend on the surface reflectivity or the probe angle to the surface within $\pm 30^\circ$.)
- The „area scan“ measures the SAR above the DUT or verification dipole on a parallel plane to the surface. It is used to locate the approximate location of the peak SAR with 2D spline interpolation. The robot performs a stepped movement along one grid axis while the local electrical field strength is measured by the probe. The probe is touching the surface of the SAM during acquisition of measurement values. The standard scan uses large grid spacing for faster measurement. Standard grid spacing for head measurements is 15 mm in x- and y- dimension. If a finer resolution is needed, the grid spacing can be reduced. Grid spacing and orientation have no influence on the SAR result. For special applications where the standard scan method does not find the peak SAR within the grid, e.g. mobile phones with flip cover, the grid can be adapted in orientation. Results of this coarse scan are shown in annex 2.
- A „7x7x7 zoom scan“ measures the field in a volume around the 2D peak SAR value acquired in the previous „coarse“ scan. This is a fine 7x7 grid where the robot additionally moves the probe in 7 steps along the z-axis away from the bottom of the Phantom. Grid spacing for the cube measurement is 5 mm / 4 mm in x and y-direction and 5 mm / 2 mm in z-direction. DASY is also able to perform repeated zoom scans if more than 1 peak is found during area scan. In this document, the evaluated peak 1g and 10g averaged SAR values are shown in the 2D-graphics in annex 2. Test results relevant for the specified standard (see section 3) are shown in table form in section 7.
- A Z-axis scan measures the total SAR value at the x-and y-position of the maximum SAR value found during the cube 7x7x7 scan. The probe is moved away in z-direction from the bottom of the SAM phantom in 2mm steps. This measurement shows the continuity of the liquid and can - depending in the field strength – also show the liquid depth. A z-axis scan of the measurement with maximum SAR value is shown in annex 2.

6.1.7 Spatial Peak SAR Evaluation

The spatial peak SAR - value for 1 and 10 g is evaluated after the Cube measurements have been done. The basis of the evaluation are the SAR values measured at the points of the fine cube grid consisting of 7 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 neighbouring volumes are evaluated until no neighbouring volume with a higher average value is found.

Extrapolation

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

Interpolation

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

Volume Averaging

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

Advanced Extrapolation

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

6.1.8 Data Storage and Evaluation

Data Storage

The DASY software stores the acquired data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension ".DA4", ".DA5x". The software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of incorrect parameter settings. For example, if a measurement has been performed with a wrong crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be re-evaluated.

The measured data can be visualized or exported in different units or formats, depending on the selected probe type ([V/m], [A/m], [°C], [mW/g], [mW/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	$\text{Norm}_i, a_{i0}, a_{i1}, a_{i2}$
	- 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 DASY components. In the direct measuring mode of the multimeter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

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

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

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

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

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

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

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

with V_i = compensated signal of channel i (i = x, y, z)
 $Norm_i$ = sensor sensitivity of channel i (i = x, y, z)
[mV/(V/m)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)								
	☐ 450	☐ 750	☒ 835	☐ 900	☐ 1450	☐ 1800	☒ 1900	☒ 2450	☒ 5000
frequency band									
Tissue Type	Head	Head	Head	Head	Head	Head	Head	Head	Head
Water	38.56	41.1	41.45	40.92	52.64	52.64	54.9	62.7	64 - 78
Salt (NaCl)	3.95	1.4	1.45	1.48	0.61	0.36	0.18	0.5	2 - 3
Sugar	56.32	57.0	56.0	56.5	0.0	0.0	0.0	0.0	0.0
HEC	0.98	0.2	1.0	1.0	0.0	0.0	0.0	0.0	0.0
Bactericide	0.19	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Triton X-100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.8	0.0
DGBE	0.0	0.0	0.0	0.0	46.75	47.0	44.92	0.0	0.0
Emulsifiers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 - 15
Mineral Oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11 - 18

Table 3: Head tissue dielectric properties

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

Table 4: Body tissue dielectric properties

Salt: 99+% Pure Sodium Chloride

Water: De-ionized, 16MΩ+ resistivity

Sugar: 98+% Pure Sucrose

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 HSL	Freq. (MHz)	Target head tissue		Measurement head tissue				Measurement date
		Permittivity	Conductivity [S/m]	Permittivity	Dev. %	Conductivity [S/m]	Dev. %	
850/900	824	41.5	0.90	41.3	-0.5%	0.88	-2.2%	2013-02-27
	837	41.5	0.90	41.1	-1.0%	0.89	-1.1%	2013-02-27
	849	41.5	0.90	40.9	-1.4%	0.90	0.0%	2013-02-27
	900	41.5	0.97	40.3	-2.9%	0.95	-2.1%	2013-02-27
	824	41.5	0.90	42.8	3.1%	0.89	-1.1%	2013-03-28
	837	41.5	0.90	42.6	2.7%	0.91	1.1%	2013-03-28
	849	41.5	0.90	42.4	2.2%	0.92	2.2%	2013-03-28
	900	41.5	0.97	41.8	0.7%	0.97	0.0%	2013-03-28
1900	1850	40.0	1.40	39.2	-2.0%	1.34	-4.3%	2013-03-21
	1880	40.0	1.40	39.1	-2.3%	1.37	-2.1%	2013-03-21
	1900	40.0	1.40	39.0	-2.5%	1.38	-1.4%	2013-03-21
	1910	40.0	1.40	38.9	-2.8%	1.39	-0.7%	2013-03-21
2450	2412	39.2	1.80	38.7	-1.3%	1.80	0.0%	2013-03-12
	2437	39.2	1.80	38.7	-1.3%	1.82	1.1%	2013-03-12
	2450	39.2	1.80	38.7	-1.3%	1.84	2.2%	2013-03-12
	2462	39.2	1.80	38.6	-1.5%	1.85	2.8%	2013-03-12
5GHz	5200	36.0	4.66	36.6	1.7%	4.52	-3.0%	2013-03-25
	5300	35.9	4.71	36.4	1.4%	4.62	-1.9%	2013-03-25
	5500	35.6	4.96	36.1	1.4%	4.82	-2.8%	2013-03-25
	5540	35.6	4.96	36.0	1.1%	4.86	-2.0%	2013-03-25
	5765	35.3	5.27	35.7	1.1%	5.09	-3.4%	2013-03-25
	5800	35.3	5.27	35.6	0.8%	5.12	-2.8%	2013-03-25

Table 5: Parameter of the head tissue simulating liquid

Liquid MSL	Freq. (MHz)	Target body tissue		Measurement body tissue				Measurement date
		Permittivity	Conductivity [S/m]	Permittivity	Dev. %	Conductivity [S/m]	Dev. %	
850/900	824	55.2	0.97	55.1	-0.2%	0.96	-1.0%	2013-03-07
	837	55.2	0.97	54.9	-0.5%	0.97	0.0%	2013-03-07
	849	55.2	0.97	54.8	-0.7%	0.99	2.1%	2013-03-07
	900	55.0	1.05	54.4	-1.1%	1.04	-1.0%	2013-03-07
1900	1850	53.3	1.52	52.6	-1.3%	1.48	-2.6%	2013-03-27
	1880	53.3	1.52	52.6	-1.3%	1.51	-0.7%	2013-03-27
	1900	53.3	1.52	52.5	-1.5%	1.54	1.3%	2013-03-27
	1910	53.3	1.52	52.5	-1.5%	1.55	2.0%	2013-03-27
2450	2412	52.7	1.95	52.2	-0.9%	1.96	0.5%	2013-03-18
	2437	52.7	1.95	52.1	-1.1%	1.99	2.1%	2013-03-18
	2450	52.7	1.95	52.1	-1.1%	2.00	2.6%	2013-03-18
	2462	52.7	1.95	52.0	-1.3%	2.00	2.6%	2013-03-18

Table 6: Parameter of the body tissue simulating liquid

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

6.1.11 Measurement uncertainty evaluation for SAR test

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

Table 7: Measurement uncertainties

Relative DASY4 Uncertainty Budget for SAR Tests According to IEEE 1528/2003 and IEC62209 (3-6GHz range)								
Error Description	Uncertainty Value	Probability Distribution	Divisor	c _i	c _i	Standard Uncertainty		v _i ² or v _{eff}
				(1g)	(10g)	± %, (1g)	± %, (10g)	
Measurement System								
Probe calibration	± 6.6 %	Normal	1	1	1	± 6.6 %	± 6.6 %	∞
Axial isotropy	± 4.7 %	Rectangular	√ 3	0.7	0.7	± 1.9 %	± 1.9 %	∞
Hemispherical isotropy	± 9.6 %	Rectangular	√ 3	0.7	0.7	± 3.9 %	± 3.9 %	∞
Boundary effects	± 2.0 %	Rectangular	√ 3	1	1	± 1.2 %	± 1.2 %	∞
Probe linearity	± 4.7 %	Rectangular	√ 3	1	1	± 2.7 %	± 2.7 %	∞
System detection limits	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
Readout electronics	± 1.0 %	Normal	1	1	1	± 1.0 %	± 1.0 %	∞
Response time	± 0.8 %	Rectangular	√ 3	1	1	± 0.5 %	± 0.5 %	∞
Integration time	± 2.6 %	Rectangular	√ 3	1	1	± 1.5 %	± 1.5 %	∞
RF ambient reflections	± 3.0 %	Rectangular	√ 3	1	1	± 1.7 %	± 1.7 %	∞
Probe positioner	± 0.8 %	Rectangular	√ 3	1	1	± 0.5 %	± 0.5 %	∞
Probe positioning	± 5.8 %	Rectangular	√ 3	1	1	± 3.3 %	± 3.3 %	∞
Max. SAR evaluation	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
Test Sample Related								
Device positioning	± 2.9 %	Normal	1	1	1	± 2.9 %	± 2.9 %	145
Device holder uncertainty	± 3.6 %	Normal	1	1	1	± 3.6 %	± 3.6 %	5
Power drift	± 5.0 %	Rectangular	√ 3	1	1	± 2.9 %	± 2.9 %	∞
Phantom and Set-up								
Phantom uncertainty	± 4.0 %	Rectangular	√ 3	1	1	± 2.3 %	± 2.3 %	∞
Liquid conductivity (target)	± 5.0 %	Rectangular	√ 3	0.64	0.43	± 1.8 %	± 1.2 %	∞
Liquid conductivity (meas.)	± 5.0 %	Normal	1	0.64	0.43	± 3.2 %	± 2.2 %	∞
Liquid permittivity (target)	± 5.0 %	Rectangular	√ 3	0.6	0.49	± 1.7 %	± 1.4 %	∞
Liquid permittivity (meas.)	± 5.0 %	Normal	1	0.6	0.49	± 3.0 %	± 2.5 %	∞
Combined Uncertainty						± 12.3 %	± 11.8 %	330
Expanded Std. Uncertainty						± 24.5 %	± 23.6 %	

Table 8: Measurement uncertainties

Relative DASY5 Uncertainty Budget for SAR Tests								
According to IEEE 1528/2011 and IEC62209-1/2011 (0.3-3GHz range)								
Error Description	Uncertainty Value	Probability Distribution	Divisor	c _i	c _i	Standard Uncertainty		v _i ² or v _{eff}
				(1g)	(10g)	± %, (1g)	± %, (10g)	
Measurement System								
Probe calibration	± 6.0 %	Normal	1	1	1	± 6.0 %	± 6.0 %	∞
Axial isotropy	± 4.7 %	Rectangular	√ 3	0.7	0.7	± 1.9 %	± 1.9 %	∞
Hemispherical isotropy	± 9.6 %	Rectangular	√ 3	0.7	0.7	± 3.9 %	± 3.9 %	∞
Boundary effects	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
Probe linearity	± 4.7 %	Rectangular	√ 3	1	1	± 2.7 %	± 2.7 %	∞
System detection limits	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
Modulation Response	± 2.4 %	Rectangular	√ 3	1	1	± 1.4 %	± 1.4 %	∞
Readout electronics	± 0.3 %	Normal	1	1	1	± 0.3 %	± 0.3 %	∞
Response time	± 0.8 %	Rectangular	√ 3	1	1	± 0.5 %	± 0.5 %	∞
Integration time	± 2.6 %	Rectangular	√ 3	1	1	± 1.5 %	± 1.5 %	∞
RF ambient noise	± 3.0 %	Rectangular	√ 3	1	1	± 1.7 %	± 1.7 %	∞
RF ambient reflections	± 3.0 %	Rectangular	√ 3	1	1	± 1.7 %	± 1.7 %	∞
Probe positioner	± 0.4 %	Rectangular	√ 3	1	1	± 0.2 %	± 0.2 %	∞
Probe positioning	± 2.9 %	Rectangular	√ 3	1	1	± 1.7 %	± 1.7 %	∞
Max. SAR evaluation	± 2.0 %	Rectangular	√ 3	1	1	± 1.2 %	± 1.2 %	∞
Test Sample Related								
Device positioning	± 2.9 %	Normal	1	1	1	± 2.9 %	± 2.9 %	145
Device holder uncertainty	± 3.6 %	Normal	1	1	1	± 3.6 %	± 3.6 %	5
Power drift	± 5.0 %	Rectangular	√ 3	1	1	± 2.9 %	± 2.9 %	∞
Phantom and Set-up								
Phantom uncertainty	± 6.1 %	Rectangular	√ 3	1	1	± 3.5 %	± 3.5 %	∞
SAR correction	± 1.9 %	Rectangular	√ 3	1	0.84	± 1.1 %	± 0.9 %	∞
Liquid conductivity (meas.)	± 5.0 %	Rectangular	√ 3	0.78	0.71	± 2.3 %	± 2.0 %	∞
Liquid permittivity (meas.)	± 5.0 %	Rectangular	√ 3	0.26	0.26	± 0.8 %	± 0.8 %	∞
Temp. Unc. - Conductivity	± 3.4 %	Rectangular	√ 3	0.78	0.71	± 1.5 %	± 1.4 %	∞
Temp. Unc. - Permittivity	± 0.4 %	Rectangular	√ 3	0.23	0.26	± 0.1 %	± 0.1 %	∞
Combined Uncertainty						± 11.3 %	± 11.3 %	330
Expanded Std. Uncertainty						± 22.7 %	± 22.5 %	

Table 9: Measurement uncertainties

Worst-Case uncertainty budget for DASY5 assessed according to IEEE 1528/2011 and IEC 62209-1/2011 draft standards. The budget is valid for the frequency range 300MHz -3 GHz and represents a worst-case analysis. For specific tests and configurations, the uncertainty could be considerable smaller.

Relative DASY5 Uncertainty Budget for SAR Tests								
According to IEC62209-2/2010 (30 MHz - 6 GHz range)								
Error Description	Uncertainty Value	Probability Distribution	Divisor	c _i	c _i	Standard Uncertainty		v _i ² or v _{eff}
				(1g)	(10g)	± %, (1g)	± %, (10g)	
Measurement System								
Probe calibration	± 6.6 %	Normal	1	1	1	± 6.6 %	± 6.6 %	∞
Axial isotropy	± 4.7 %	Rectangular	√ 3	0.7	0.7	± 1.9 %	± 1.9 %	∞
Hemispherical isotropy	± 9.6 %	Rectangular	√ 3	0.7	0.7	± 3.9 %	± 3.9 %	∞
Boundary effects	± 2.0 %	Rectangular	√ 3	1	1	± 1.2 %	± 1.2 %	∞
Probe linearity	± 4.7 %	Rectangular	√ 3	1	1	± 2.7 %	± 2.7 %	∞
System detection limits	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
Modulation Response	± 2.4 %	Rectangular	√ 3	1	1	± 1.4 %	± 1.4 %	∞
Readout electronics	± 0.3 %	Normal	1	1	1	± 0.3 %	± 0.3 %	∞
Response time	± 0.8 %	Rectangular	√ 3	1	1	± 0.5 %	± 0.5 %	∞
Integration time	± 2.6 %	Rectangular	√ 3	1	1	± 1.5 %	± 1.5 %	∞
RF ambient noise	± 3.0 %	Rectangular	√ 3	1	1	± 1.7 %	± 1.7 %	∞
RF ambient reflections	± 3.0 %	Rectangular	√ 3	1	1	± 1.7 %	± 1.7 %	∞
Probe positioner	± 0.8 %	Rectangular	√ 3	1	1	± 0.5 %	± 0.5 %	∞
Probe positioning	± 6.7 %	Rectangular	√ 3	1	1	± 3.9 %	± 3.9 %	∞
Post-processing	± 4.0 %	Rectangular	√ 3	1	1	± 2.3 %	± 2.3 %	∞
Test Sample Related								
Device positioning	± 2.9 %	Normal	1	1	1	± 2.9 %	± 2.9 %	145
Device holder uncertainty	± 3.6 %	Normal	1	1	1	± 3.6 %	± 3.6 %	5
Power drift	± 5.0 %	Rectangular	√ 3	1	1	± 2.9 %	± 2.9 %	∞
Phantom and Set-up								
Phantom uncertainty	± 7.9 %	Rectangular	√ 3	1	1	± 4.6 %	± 4.6 %	∞
SAR correction	± 1.9 %	Rectangular	√ 3	1	0.84	± 1.1 %	± 0.9 %	∞
Liquid conductivity (meas.)	± 5.0 %	Rectangular	√ 3	0.78	0.71	± 2.3 %	± 2.0 %	∞
Liquid permittivity (meas.)	± 5.0 %	Rectangular	√ 3	0.26	0.26	± 0.8 %	± 0.8 %	∞
Temp. Unc. - Conductivity	± 3.4 %	Rectangular	√ 3	0.78	0.71	± 1.5 %	± 1.4 %	∞
Temp. Unc. - Permittivity	± 0.4 %	Rectangular	√ 3	0.23	0.26	± 0.1 %	± 0.1 %	∞
Combined Uncertainty						± 12.7 %	± 12.6 %	330
Expanded Std. Uncertainty						± 25.4 %	± 25.3 %	

Table 10: Measurement uncertainties. Worst-Case uncertainty budget for DASY5 assessed according to according to IEC 62209-2/2010 standard. The budget is valid for the frequency range 30MHz - 6 GHz and represents a worst-case analysis. For specific tests and configurations, the uncertainty could be considerable smaller.

Relative DASY5 Uncertainty Budget for SAR Tests								
According to IEEE 1528-2003, IEC 62209-1 for the 3-6 GHz range								
Error Description	Uncertainty Value	Probability Distribution	Divisor	c _i	c _i	Standard Uncertainty		v _i ² or v _{eff}
				(1g)	(10g)	± %, (1g)	± %, (10g)	
Measurement System								
Probe calibration	± 6.6 %	Normal	1	1	1	± 6.6 %	± 6.6 %	∞
Axial isotropy	± 4.7 %	Rectangular	√ 3	0.7	0.7	± 1.9 %	± 1.9 %	∞
Hemispherical isotropy	± 9.6 %	Rectangular	√ 3	0.7	0.7	± 3.9 %	± 3.9 %	∞
Boundary effects	± 2.0 %	Rectangular	√ 3	1	1	± 1.2 %	± 1.2 %	∞
Probe linearity	± 4.7 %	Rectangular	√ 3	1	1	± 2.7 %	± 2.7 %	∞
System detection limits	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
Readout electronics	± 0.3 %	Normal	1	1	1	± 0.3 %	± 0.3 %	∞
Response time	± 0.8 %	Rectangular	√ 3	1	1	± 0.5 %	± 0.5 %	∞
Integration time	± 2.6 %	Rectangular	√ 3	1	1	± 1.5 %	± 1.5 %	∞
RF ambient noise	± 3.0 %	Rectangular	√ 3	1	1	± 1.7 %	± 1.7 %	∞
RF ambient reflections	± 3.0 %	Rectangular	√ 3	1	1	± 1.7 %	± 1.7 %	∞
Probe positioner	± 0.8 %	Rectangular	√ 3	1	1	± 0.5 %	± 0.5 %	∞
Probe positioning	± 6.7 %	Rectangular	√ 3	1	1	± 3.9 %	± 3.9 %	∞
Max. SAR evaluation	± 4.0 %	Rectangular	√ 3	1	1	± 2.3 %	± 2.3 %	∞
Test Sample Related								
Device positioning	± 2.9 %	Normal	1	1	1	± 2.9 %	± 2.9 %	145
Device holder uncertainty	± 3.6 %	Normal	1	1	1	± 3.6 %	± 3.6 %	5
Power drift	± 5.0 %	Rectangular	√ 3	1	1	± 2.9 %	± 2.9 %	∞
Phantom and Set-up								
Phantom uncertainty	± 4.0 %	Rectangular	√ 3	1	1	± 2.3 %	± 2.3 %	∞
Liquid conductivity (target)	± 5.0 %	Rectangular	√ 3	0.64	0.43	± 1.8 %	± 1.2 %	∞
Liquid conductivity (meas.)	± 5.0 %	Rectangular	√ 3	0.64	0.43	± 1.8 %	± 1.2 %	∞
Liquid permittivity (target)	± 5.0 %	Rectangular	√ 3	0.6	0.49	± 1.7 %	± 1.4 %	∞
Liquid permittivity (meas.)	± 5.0 %	Rectangular	√ 3	0.6	0.49	± 1.7 %	± 1.4 %	∞
Combined Uncertainty						± 12.1 %	± 11.9 %	330
Expanded Std. Uncertainty						± 24.3 %	± 23.8 %	

Table 11: Measurement uncertainties

Worst-Case uncertainty budget for DASY5 valid for 3G communication signals and frequency range 3 - 6 GHz. Probe calibration error reflects uncertainty of the EX3D probe. For specific tests and configurations, the uncertainty could be considerable smaller.

Relative DASY5 Uncertainty Budget for SAR Tests								
According to IEEE 1528/2011 and IEC62209-1/2011 (3-6GHz range)								
Error Description	Uncertainty Value	Probability Distribution	Divisor	c _i	c _i	Standard Uncertainty		v _i ² or v _{eff}
				(1g)	(10g)	± %, (1g)	± %, (10g)	
Measurement System								
Probe calibration	± 6.6 %	Normal	1	1	1	± 6.6 %	± 6.6 %	∞
Axial isotropy	± 4.7 %	Rectangular	√ 3	0.7	0.7	± 1.9 %	± 1.9 %	∞
Hemispherical isotropy	± 9.6 %	Rectangular	√ 3	0.7	0.7	± 3.9 %	± 3.9 %	∞
Boundary effects	± 2.0 %	Rectangular	√ 3	1	1	± 1.2 %	± 1.2 %	∞
Probe linearity	± 4.7 %	Rectangular	√ 3	1	1	± 2.7 %	± 2.7 %	∞
System detection limits	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
Modulation Response	± 2.4 %	Rectangular	√ 3	1	1	± 1.4 %	± 1.4 %	∞
Readout electronics	± 0.3 %	Normal	1	1	1	± 0.3 %	± 0.3 %	∞
Response time	± 0.8 %	Rectangular	√ 3	1	1	± 0.5 %	± 0.5 %	∞
Integration time	± 2.6 %	Rectangular	√ 3	1	1	± 1.5 %	± 1.5 %	∞
RF ambient noise	± 3.0 %	Rectangular	√ 3	1	1	± 1.7 %	± 1.7 %	∞
RF ambient reflections	± 3.0 %	Rectangular	√ 3	1	1	± 1.7 %	± 1.7 %	∞
Probe positioner	± 0.8 %	Rectangular	√ 3	1	1	± 0.5 %	± 0.5 %	∞
Probe positioning	± 6.7 %	Rectangular	√ 3	1	1	± 3.9 %	± 3.9 %	∞
Max. SAR evaluation	± 4.0 %	Rectangular	√ 3	1	1	± 2.3 %	± 2.3 %	∞
Test Sample Related								
Device positioning	± 2.9 %	Normal	1	1	1	± 2.9 %	± 2.9 %	145
Device holder uncertainty	± 3.6 %	Normal	1	1	1	± 3.6 %	± 3.6 %	5
Power drift	± 5.0 %	Rectangular	√ 3	1	1	± 2.9 %	± 2.9 %	∞
Phantom and Set-up								
Phantom uncertainty	± 6.6 %	Rectangular	√ 3	1	1	± 3.8 %	± 3.8 %	∞
SAR correction	± 1.9 %	Rectangular	√ 3	1	0.84	± 1.1 %	± 0.9 %	∞
Liquid conductivity (meas.)	± 5.0 %	Rectangular	√ 3	0.78	0.71	± 2.3 %	± 2.0 %	∞
Liquid permittivity (meas.)	± 5.0 %	Rectangular	√ 3	0.26	0.26	± 0.8 %	± 0.8 %	∞
Temp. Unc. - Conductivity	± 3.4 %	Rectangular	√ 3	0.78	0.71	± 1.5 %	± 1.4 %	∞
Temp. Unc. - Permittivity	± 0.4 %	Rectangular	√ 3	0.23	0.26	± 0.1 %	± 0.1 %	∞
Combined Uncertainty						± 12.4 %	± 12.4 %	330
Expanded Std. Uncertainty						± 24.9 %	± 24.8 %	

Table 12: Measurement uncertainties

Worst-Case uncertainty budget for DASY5 assessed according to IEEE 1528/2011 and IEC 62209-1/2011 draft standards. The budget is valid for the frequency range 3GHz -6GHz and represents a worst-case analysis. For specific tests and configurations, the uncertainty could be considerable smaller.

6.1.12 Measurement uncertainty evaluation for System Check

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

Table 13: Measurement uncertainties of a System Check with DASY4 (0.3-3GHz)

Uncertainty of a System Performance Check with DASY4 System According to IEEE 1528/2003 and IEC62209 (3-6GHz range)								
Source of uncertainty	Uncertainty Value	Probability Distribution	Divisor	c _i	c _i	Standard Uncertainty		v _i ² or
				(1g)	(10g)	± %, (1g)	± %, (10g)	v _{eff}
Measurement System								
Probe calibration	± 6.6 %	Normal	1	1	1	± 6.6 %	± 6.6 %	∞
Axial isotropy	± 4.7 %	Rectangular	√ 3	0.7	0.7	± 1.9 %	± 1.9 %	∞
Hemispherical isotropy	± 0.0 %	Rectangular	√ 3	0.7	0.7	± 0.0 %	± 0.0 %	∞
Boundary effects	± 2.0 %	Rectangular	√ 3	1	1	± 1.2 %	± 1.2 %	∞
Probe linearity	± 4.7 %	Rectangular	√ 3	1	1	± 2.7 %	± 2.7 %	∞
System detection limits	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
Readout electronics	± 1.0 %	Normal	1	1	1	± 1.0 %	± 1.0 %	∞
Response time	± 0.0 %	Rectangular	√ 3	1	1	± 0.0 %	± 0.0 %	∞
Integration time	± 0.0 %	Rectangular	√ 3	1	1	± 0.0 %	± 0.0 %	∞
RF ambient conditions	± 3.0 %	Rectangular	√ 3	1	1	± 1.7 %	± 1.7 %	∞
Probe positioner	± 0.8 %	Rectangular	√ 3	1	1	± 0.5 %	± 0.5 %	∞
Probe positioning	± 5.8 %	Rectangular	√ 3	1	1	± 3.3 %	± 3.3 %	∞
Max. SAR evaluation	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
Test Sample Related								
Source to liquid distance	± 2.0 %	Normal	1	1	1	± 2.0 %	± 2.0 %	∞
Power drift	± 4.7 %	Rectangular	√ 3	1	1	± 2.7 %	± 2.7 %	∞
Phantom and Set-up								
Phantom uncertainty	± 4.0 %	Rectangular	√ 3	1	1	± 2.3 %	± 2.3 %	∞
Liquid conductivity (target)	± 5.0 %	Rectangular	√ 3	0.64	0.43	± 1.8 %	± 1.2 %	∞
Liquid conductivity (meas.)	± 5.0 %	Normal	1	0.64	0.43	± 3.2 %	± 2.2 %	∞
Liquid permittivity (target)	± 5.0 %	Rectangular	√ 3	0.6	0.49	± 1.7 %	± 1.4 %	∞
Liquid permittivity (meas.)	± 5.0 %	Normal	1	0.6	0.49	± 3.0 %	± 2.5 %	∞
Combined Uncertainty						± 10.7 %	± 10.1 %	∞
Expanded Std. Uncertainty						± 21.3 %	± 20.2 %	

Table 14: Measurement uncertainties of a System Check with DASY4 (3-6GHz)

Uncertainty of a System Performance Check with DASY5 System for the 0.3 - 3 GHz range								
Source of uncertainty	Uncertainty Value	Probability Distribution	Divisor	c _i	c _i	Standard Uncertainty		v _i ² or
				(1g)	(10g)	± %, (1g)	± %, (10g)	v _{eff}
Measurement System								
Probe calibration	± 6.0 %	Normal	1	1	1	± 6.0 %	± 6.0 %	∞
Axial isotropy	± 4.7 %	Rectangular	√ 3	0.7	0.7	± 1.9 %	± 1.9 %	∞
Hemispherical isotropy	± 0.0 %	Rectangular	√ 3	0.7	0.7	± 0.0 %	± 0.0 %	∞
Boundary effects	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
Probe linearity	± 4.7 %	Rectangular	√ 3	1	1	± 2.7 %	± 2.7 %	∞
System detection limits	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
Readout electronics	± 0.3 %	Normal	1	1	1	± 0.3 %	± 0.3 %	∞
Response time	± 0.0 %	Rectangular	√ 3	1	1	± 0.0 %	± 0.0 %	∞
Integration time	± 0.0 %	Rectangular	√ 3	1	1	± 0.0 %	± 0.0 %	∞
RF ambient conditions	± 3.0 %	Rectangular	√ 3	1	1	± 1.7 %	± 1.7 %	∞
Probe positioner	± 0.4 %	Rectangular	√ 3	1	1	± 0.2 %	± 0.2 %	∞
Probe positioning	± 2.9 %	Rectangular	√ 3	1	1	± 1.7 %	± 1.7 %	∞
Max. SAR evaluation	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
Test Sample Related								
Dev. of experimental dipole	± 0.0 %	Rectangular	√ 3	1	1	± 0.0 %	± 0.0 %	∞
Source to liquid distance	± 2.0 %	Rectangular	√ 3	1	1	± 1.2 %	± 1.2 %	∞
Power drift	± 3.4 %	Rectangular	√ 3	1	1	± 2.0 %	± 2.0 %	∞
Phantom and Set-up								
Phantom uncertainty	± 4.0 %	Rectangular	√ 3	1	1	± 2.3 %	± 2.3 %	∞
SAR correction	± 1.9 %	Rectangular	√ 3	1	0.84	± 1.1 %	± 0.9 %	∞
Liquid conductivity (meas.)	± 5.0 %	Normal	1	0.78	0.71	± 3.9 %	± 3.6 %	∞
Liquid permittivity (meas.)	± 5.0 %	Normal	1	0.26	0.26	± 1.3 %	± 1.3 %	∞
Temp. unc. - Conductivity	± 1.7 %	Rectangular	√ 3	0.78	0.71	± 0.8 %	± 0.7 %	∞
Temp. unc. - Permittivity	± 0.3 %	Rectangular	√ 3	0.23	0.26	± 0.0 %	± 0.0 %	∞
Combined Uncertainty						± 9.1 %	± 8.9 %	330
Expanded Std. Uncertainty						± 18.2 %	± 17.9 %	

Table 15: Measurement uncertainties of the System Check with DASY5 (0.3-3GHz)

Uncertainty of a System Performance Check with DASY5 System for the 3 - 6 GHz range								
Source of uncertainty	Uncertainty Value	Probability Distribution	Divisor	c _i	c _i	Standard Uncertainty		v _i ² or
				(1g)	(10g)	± %, (1g)	± %, (10g)	v _{eff}
Measurement System								
Probe calibration	± 6.6 %	Normal	1	1	1	± 6.6 %	± 6.6 %	∞
Axial isotropy	± 4.7 %	Rectangular	√ 3	0.7	0.7	± 1.9 %	± 1.9 %	∞
Hemispherical isotropy	± 0.0 %	Rectangular	√ 3	0.7	0.7	± 0.0 %	± 0.0 %	∞
Boundary effects	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
Probe linearity	± 4.7 %	Rectangular	√ 3	1	1	± 2.7 %	± 2.7 %	∞
System detection limits	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
Readout electronics	± 0.3 %	Normal	1	1	1	± 0.3 %	± 0.3 %	∞
Response time	± 0.0 %	Rectangular	√ 3	1	1	± 0.0 %	± 0.0 %	∞
Integration time	± 0.0 %	Rectangular	√ 3	1	1	± 0.0 %	± 0.0 %	∞
RF ambient conditions	± 3.0 %	Rectangular	√ 3	1	1	± 1.7 %	± 1.7 %	∞
Probe positioner	± 0.8 %	Rectangular	√ 3	1	1	± 0.5 %	± 0.5 %	∞
Probe positioning	± 6.7 %	Rectangular	√ 3	1	1	± 3.9 %	± 3.9 %	∞
Max. SAR evaluation	± 1.0 %	Rectangular	√ 3	1	1	± 0.6 %	± 0.6 %	∞
Test Sample Related								
Dev. of experimental dipole	± 0.0 %	Rectangular	√ 3	1	1	± 0.0 %	± 0.0 %	∞
Source to liquid distance	± 2.0 %	Rectangular	√ 3	1	1	± 1.2 %	± 1.2 %	∞
Power drift	± 3.4 %	Rectangular	√ 3	1	1	± 2.0 %	± 2.0 %	∞
Phantom and Set-up								
Phantom uncertainty	± 4.0 %	Rectangular	√ 3	1	1	± 2.3 %	± 2.3 %	∞
SAR correction	± 1.9 %	Rectangular	√ 3	1	0.84	± 1.1 %	± 0.9 %	∞
Liquid conductivity (meas.)	± 5.0 %	Normal	1	0.78	0.71	± 3.9 %	± 3.6 %	∞
Liquid permittivity (meas.)	± 5.0 %	Normal	1	0.26	0.26	± 1.3 %	± 1.3 %	∞
Temp. unc. - Conductivity	± 1.7 %	Rectangular	√ 3	0.78	0.71	± 0.8 %	± 0.7 %	∞
Temp. unc. - Permittivity	± 0.3 %	Rectangular	√ 3	0.23	0.26	± 0.0 %	± 0.0 %	∞
Combined Uncertainty						± 10.1 %	± 10.0 %	330
Expanded Std. Uncertainty						± 20.2 %	± 19.9 %	

Table 16: Measurement uncertainties of the System Check with DASY5 (3-6GHz)

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

6.1.13 System check

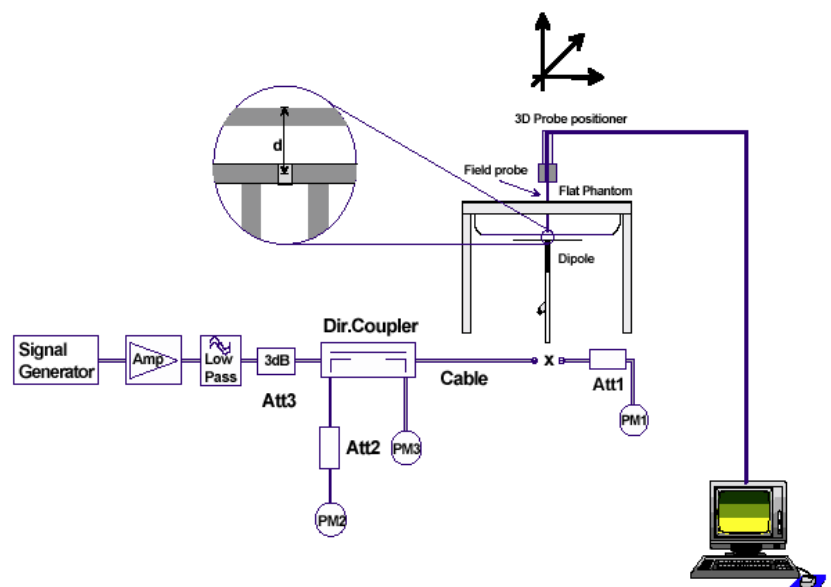
The system check is performed for verifying the accuracy of the complete measurement system and performance of the software. The system check is performed with tissue equivalent material according to IEEE 1528. The following table shows system check results for all frequency bands and tissue liquids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

System performance check (1000 mW)								
System validation Kit	Frequency	Target SAR _{1g} (+/- 10%)	Target SAR _{10g} (+/- 10%)	Measured SAR _{1g} mW/g	SAR _{1g} dev. %	Measured SAR _{10g} mW/g	SAR _{10g} dev. %	Measured date
D900V2 S/N: 102	900 MHz head	10.9	7.0	10.9	0.0%	7.04	1.0%	2013-02-27
D900V2 S/N: 102	900 MHz head	10.9	7.0	11.1	1.8%	7.15	2.6%	2013-02-28
D900V2 S/N: 102	900 MHz head	10.9	7.0	10.7	-1.8%	6.96	-0.1%	2013-03-28
D900V2 S/N: 102	900 MHz body	11.2	7.2	10.9	-2.7%	7.13	-1.5%	2013-03-07
D900V2 S/N: 102	900 MHz body	11.2	7.2	10.7	-4.5%	6.98	-3.6%	2013-03-08
D900V2 S/N: 102	900 MHz body	11.2	7.2	11.4	1.8%	7.46	3.0%	2013-03-11
D900V2 S/N: 102	900 MHz body	11.2	7.2	11.0	-1.8%	7.22	-0.3%	2013-03-12
D1900V2 S/N: 5d009	1900 MHz head	40.0	20.9	37.7	-5.7%	20.20	-3.3%	2013-03-21
D1900V2 S/N: 5d009	1900 MHz body	40.9	21.5	38.4	-6.1%	20.90	-2.8%	2013-03-27
D2450V2 S/N: 710	2450 MHz head	51.5	24.0	52.5	1.9%	24.70	2.9%	2013-03-12
D2450V2 S/N: 710	2450 MHz body	51.2	23.9	54.5	6.4%	24.90	4.2%	2013-03-19
D5GHzV2 S/N: 1055	5200 MHz head	77.3	22.0	73.8	-4.5%	20.80	-5.5%	2013-03-25
D5GHzV2 S/N: 1055	5500 MHz head	81.1	23.0	80.1	-1.2%	22.30	-3.0%	2013-03-25
D5GHzV2 S/N: 1055	5800 MHz head	75.4	21.3	81.1	7.6%	22.60	6.1%	2013-03-25

Table 17: Results system check

6.1.14 System check procedure

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



7 Detailed Test Results

7.1 Conducted power measurements

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

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

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

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

The signalling modes differ as follows :

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

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

7.1.1 Conducted power measurements GSM 850 MHz

Channel / frequency	modulation	timeslots	slotted avg. power	time based avg. Power (calculated)
128 / 824.2 MHz	GMSK	1	33.3 dBm	24.3 dBm
190 / 836.6 MHz	GMSK	1	33.0 dBm	24.0 dBm
251 / 848.0 MHz	GMSK	1	33.0 dBm	24.0 dBm
128 / 824.2 MHz	GMSK	2	30.3 dBm	24.3 dBm
190 / 836.6 MHz	GMSK	2	30.2 dBm	24.2 dBm
251 / 848.0 MHz	GMSK	2	30.3 dBm	24.3 dBm
128 / 824.2 MHz	GMSK	3	28.6 dBm	24.35 dBm
190 / 836.6 MHz	GMSK	3	29.0 dBm	24.75 dBm
251 / 848.0 MHz	GMSK	3	28.6 dBm	24.35 dBm
128 / 824.2 MHz	GMSK	4	27.2 dBm	24.2 dBm
190 / 836.6 MHz	GMSK	4	27.4 dBm	24.4 dBm
251 / 848.0 MHz	GMSK	4	27.4 dBm	24.4 dBm
128 / 824.2 MHz	8PSK	1	27.6 dBm	18.6 dBm
190 / 836.6 MHz	8PSK	1	27.4 dBm	18.4 dBm
251 / 848.0 MHz	8PSK	1	27.4 dBm	18.4 dBm
128 / 824.2 MHz	8PSK	2	25.5 dBm	19.5 dBm
190 / 836.6 MHz	8PSK	2	25.4 dBm	19.4 dBm
251 / 848.0 MHz	8PSK	2	25.4 dBm	19.4 dBm
128 / 824.2 MHz	8PSK	3	24.4 dBm	20.15 dBm
190 / 836.6 MHz	8PSK	3	24.3 dBm	20.05 dBm
251 / 848.0 MHz	8PSK	3	24.3 dBm	20.05 dBm
128 / 824.2 MHz	8PSK	4	23.7 dBm	20.7 dBm
190 / 836.6 MHz	8PSK	4	23.6 dBm	20.6 dBm
251 / 848.0 MHz	8PSK	4	23.6 dBm	20.6 dBm

Table 18: 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	29.9 dBm	20.9 dBm
661 / 1880.0 MHz	GMSK	1	30.0 dBm	21.0 dBm
810 / 1909.8 MHz	GMSK	1	30.0 dBm	21.0 dBm
512 / 1850.2 MHz	GMSK	2	28.0 dBm	22.0 dBm
661 / 1880.0 MHz	GMSK	2	28.1 dBm	22.1 dBm
810 / 1909.8 MHz	GMSK	2	28.0 dBm	22.0 dBm
512 / 1850.2 MHz	GMSK	3	26.1 dBm	21.85 dBm
661 / 1880.0 MHz	GMSK	3	26.1 dBm	21.85 dBm
810 / 1909.8 MHz	GMSK	3	26.0 dBm	21.75 dBm
512 / 1850.2 MHz	GMSK	4	25.0 dBm	22.0 dBm
661 / 1880.0 MHz	GMSK	4	25.0 dBm	22.0 dBm
810 / 1909.8 MHz	GMSK	4	24.9 dBm	21.9 dBm
512 / 1850.2 MHz	8PSK	1	26.2 dBm	17.2 dBm
661 / 1880.0 MHz	8PSK	1	26.2 dBm	17.2 dBm
810 / 1909.8 MHz	8PSK	1	26.2 dBm	17.2 dBm
512 / 1850.2 MHz	8PSK	2	24.5 dBm	18.5 dBm
661 / 1880.0 MHz	8PSK	2	24.4 dBm	18.4 dBm
810 / 1909.8 MHz	8PSK	2	24.5 dBm	18.5 dBm
512 / 1850.2 MHz	8PSK	3	23.5 dBm	19.25 dBm
661 / 1880.0 MHz	8PSK	3	23.5 dBm	19.25 dBm
810 / 1909.8 MHz	8PSK	3	23.5 dBm	19.25 dBm
512 / 1850.2 MHz	8PSK	4	22.5 dBm	19.5 dBm
661 / 1880.0 MHz	8PSK	4	22.6 dBm	19.6 dBm
810 / 1909.8 MHz	8PSK	4	22.6 dBm	19.6 dBm

Table 19: Test results conducted power measurement GSM 1900 MHz

7.1.3 Justification of SAR measurements in GSM mode

SAR measurements were performed in the configuration with highest calculated time based averaged output power.

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)

mode	Max. RMS output power 850 MHz (FDD V) / dBm		
	Channel / frequency		
	4132 / 826.4 MHz	4182 / 836.6 MHz	4233 / 846.6 MHz
RMC 12.2 kbit/s	24.5	24.5	24.5
RMC 64 kbit/s	24.5	24.4	24.5
RMC 144 kbit/s	24.5	24.3	24.5
RMC 384 kbit/s	24.5	24.4	24.4
AMR 4.75 kbit/s	24.3	24.2	24.2
AMR 5.15 kbit/s	24.3	24.2	24.2
AMR 5.9 kbit/s	24.3	24.2	24.3
AMR 6.7 kbit/s	24.3	24.2	24.3
AMR 7.4 kbit/s	24.4	24.2	24.3
AMR 7.95 kbit/s	24.3	24.2	24.3
AMR 10.2 kbit/s	24.3	24.2	24.4
AMR 12.2 kbit/s	24.5	24.2	24.2
HSDPA Sub test 1	24.4	24.1	24.3
HSDPA Sub test 2	22.9	22.7	22.9
HSDPA Sub test 3	21.7	21.5	21.6
HSDPA Sub test 4	21.4	21.4	21.3
DC-HSDPA Sub test 1	24.4	24.5	24.3
DC-HSDPA Sub test 2	24.4	24.3	24.2
DC-HSDPA Sub test 3	24.0	24.0	23.9
DC-HSDPA Sub test 4	23.9	23.9	23.9
HSUPA Sub test 1	23.9	23.7	23.6
HSUPA Sub test 2	21.7	21.6	21.9
HSUPA Sub test 3	23.1	23.0	23.0
HSUPA Sub test 4	21.9	21.8	21.7
HSUPA Sub test 5	23.9	24.1	23.8

Table 20: Test results conducted power measurement UMTS FDD V 850MHz

7.1.5 Test-set-up information for WCDMA / HSPDA / HSUPA

a) WCDMA RMC

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

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

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

b) HSDPA

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

Sub-test	c	d	d (SF)	c/d	$_{hs}^{(1)}$	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: $_{ACK}, _{ACK}, CQI = 8$ $A_{hs} = _{hs}/_c = 30/15$ $_{hs} = 30/15 * _c$
Note 2: CM = 1 for $c/d = 12/15$, $_{hs}/_c = 24/15$
Note 3: For subtest 2 the c/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 $_c = 11/15$ and $_d = 15/15$

Table 21: Sub-tests for UMTS Release 5 HSDPA

The $_c$ and $_d$ gain factors for DPCCH and DPDCH were set according to the values in the above table, for HS-DPCCH is set automatically to the correct value when $_{ACK}, _{ACK}, CQI = 8$. The variation of the c/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 22: settings of required H-Set 1 QPSK acc. to 3GPP 34.121

c) DC-HSDPA (3GPP Release 8)

Dual Cell – HSDPA has been signalized using the following settings for connection setup:

Parameter During Connection Setup	Value
P-CPICH_Ec/Ior	-10 dB
P-CCPCH	-12
SCH_Ec/Ior	-12
PICH_Ec/Ior	-15
HS-PDSCH	off
HS-SCCH_1	off
DPCH_Ec/Ior	-5
OCNS_Ec/Ior	-3.1

Table 23: Downlink Physical Channels according to 3GPP 34.121 Table E.5.0

The fixed reference channel has been set to H-set 12 according to 3GPP TS 34.121 Table C.8.1.12:

Parameter	Unit	Value
Nominal Average Inf. Bit Rate	kbit/s	60
Inter-TTI Distance	TTI's	1
Information Bit Payload (N_{INF})	Bits	120
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	960
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Process	SML's	3200
Coding Rate		0.15
Number of Physical Channel Codecs	Codecs	1
Modulation		QPSK
Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table.		
Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.		

Table 24: H-Set 12 QPSK configuration

The same Sub-test settings as for Release 5 HSDPA were used for the tests.

d) 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	c	d	d (SF)	d / d	hs ⁽¹⁾	ec	ed	ec (SF)	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	ed1:47/15 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 : $A_{hs} = \frac{hs}{c} = 30/15$ $hs = 30/15 * c$
Note 2 : CM = 1 for $d = 12/15$, $hs/c = 24/15$. 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 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 $c = 10/15$ and $d = 15/15$
Note 4 : For subtest 5 the 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 $c = 14/15$ and $d = 15/15$
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 : ed can not be set directly; it is set by Absolute Grant Value

Table 25: 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	c	d	ACK, ACK, CQI	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

)* : ec and ed ratios (relative to c and d) are set by 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 (Ior)

- Output Channel Power (Ior) : -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	c	d	hs	ec	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.

7.1.6 Conducted power measurements LTE FDD 5 850 MHz

	Channel / frequency	BW	RB Size	RB Offset	Modulation	Conducted Power / dBm
Low Channel	20407 / 824.7MHz	1.4	1	0	QPSK	23.3
			1	3	QPSK	23.3
			1	5	QPSK	23.3
			3	0	QPSK	23.3
			3	2	QPSK	23.3
			3	3	QPSK	23.3
			6	0	QPSK	22.4
			1	0	16-QAM	22.2
			1	3	16-QAM	22.2
			1	5	16-QAM	22.2
			3	0	16-QAM	22.2
			3	2	16-QAM	22.2
			3	3	16-QAM	22.2
			6	0	16-QAM	21.5
	20415 / 825.5MHz	3	1	0	QPSK	23.2
			1	7	QPSK	23.1
			1	14	QPSK	23.2
			8	0	QPSK	22.2
			8	4	QPSK	22.2
			8	8	QPSK	22.2
			15	0	QPSK	22.2
			1	0	16-QAM	21.5
			1	7	16-QAM	21.6
			1	14	16-QAM	21.6
			8	0	16-QAM	21.3
			8	4	16-QAM	21.4
			8	8	16-QAM	21.3
			15	0	16-QAM	21.3
	20425 / 826.5MHz	5	1	0	QPSK	23.2
			1	12	QPSK	23.4
			1	24	QPSK	23.3
			12	0	QPSK	22.1
			12	6	QPSK	22.2
			12	12	QPSK	22.2
			25	0	QPSK	22.2
			1	0	16-QAM	21.7
			1	12	16-QAM	21.7
			1	24	16-QAM	21.6
			12	0	16-QAM	21.3
			12	6	16-QAM	21.3
			12	12	16-QAM	21.2
			25	0	16-QAM	21.0
	20450 / 829MHz	10	1	0	QPSK	23.2
			1	25	QPSK	23.2
			1	49	QPSK	23.2
			25	0	QPSK	22.3
			25	12	QPSK	22.3
			25	25	QPSK	22.3
			50	0	QPSK	22.0
			1	0	16-QAM	21.5
			1	25	16-QAM	21.5
			1	49	16-QAM	21.4
			25	0	16-QAM	21.0
			25	12	16-QAM	21.1
			25	25	16-QAM	21.1
			50	0	16-QAM	21.0

	Channel / frequency	BW	RB Size	RB Offset	Modulation	Conducted Power / dBm
Middle Channel	20525 / 836.5MHz	1.4	1	0	QPSK	23.0
			1	3	QPSK	23.0
			1	5	QPSK	23.1
			3	0	QPSK	23.2
			3	2	QPSK	23.3
			3	3	QPSK	23.3
			6	0	QPSK	22.3
			1	0	16-QAM	21.8
			1	3	16-QAM	21.7
			1	5	16-QAM	21.8
			3	0	16-QAM	22.4
			3	2	16-QAM	22.5
			3	3	16-QAM	22.3
			6	0	16-QAM	21.2
		3	1	0	QPSK	23.1
			1	7	QPSK	23.2
			1	14	QPSK	23.2
			8	0	QPSK	22.3
			8	4	QPSK	22.3
			8	8	QPSK	22.3
			15	0	QPSK	22.3
			1	0	16-QAM	21.5
			1	7	16-QAM	21.6
			1	14	16-QAM	21.6
			8	0	16-QAM	21.2
			8	4	16-QAM	21.3
			8	8	16-QAM	21.3
			15	0	16-QAM	21.3
		5	1	0	QPSK	23.3
			1	12	QPSK	23.4
			1	24	QPSK	23.5
			12	0	QPSK	22.3
			12	6	QPSK	22.3
			12	12	QPSK	22.1
			25	0	QPSK	22.1
			1	0	16-QAM	21.9
			1	12	16-QAM	22.0
			1	24	16-QAM	22.1
			12	0	16-QAM	21.2
			12	6	16-QAM	21.3
			12	12	16-QAM	21.3
		10	25	0	16-QAM	21.1
			1	0	QPSK	23.0
			1	25	QPSK	23.2
			1	49	QPSK	23.4
			25	0	QPSK	22.3
			25	12	QPSK	22.3
			25	25	QPSK	22.3
			50	0	QPSK	22.1
			1	0	16-QAM	21.5
			1	25	16-QAM	21.3
			1	49	16-QAM	21.8
			25	0	16-QAM	21.2
			25	12	16-QAM	21.2
			25	25	16-QAM	21.1
			50	0	16-QAM	21.1

	Channel / frequency	BW	RB Size	RB Offset	Modulation	Conducted Power / dBm
High Channel	20643 / 848.3MHz	1.4	1	0	QPSK	23.3
			1	3	QPSK	23.3
			1	5	QPSK	23.2
			3	0	QPSK	23.3
			3	2	QPSK	23.3
			3	3	QPSK	23.2
			6	0	QPSK	21.3
			1	0	16-QAM	21.6
			1	3	16-QAM	21.6
			1	5	16-QAM	21.5
			3	0	16-QAM	22.3
			3	2	16-QAM	22.5
			3	3	16-QAM	22.4
			6	0	16-QAM	21.3
	20635 / 847.5MHz	3	1	0	QPSK	23.2
			1	7	QPSK	23.3
			1	14	QPSK	23.3
			8	0	QPSK	22.3
			8	4	QPSK	22.3
			8	8	QPSK	22.3
			15	0	QPSK	22.2
			1	0	16-QAM	21.8
			1	7	16-QAM	21.9
			1	14	16-QAM	21.8
			8	0	16-QAM	21.4
			8	4	16-QAM	21.4
			8	8	16-QAM	21.3
			15	0	16-QAM	21.3
	20625 / 846.5MHz	5	1	0	QPSK	23.4
			1	12	QPSK	23.2
			1	24	QPSK	23.2
			12	0	QPSK	22.1
			12	6	QPSK	22.2
			12	12	QPSK	22.2
			25	0	QPSK	22.2
			1	0	16-QAM	21.8
			1	12	16-QAM	21.7
			1	24	16-QAM	21.6
			12	0	16-QAM	21.1
			12	6	16-QAM	21.2
			12	12	16-QAM	21.2
			25	0	16-QAM	21.1
	20600 / 844MHz	10	1	0	QPSK	23.5
			1	25	QPSK	23.2
			1	49	QPSK	23.3
			25	0	QPSK	22.0
			25	12	QPSK	22.1
			25	25	QPSK	22.1
			50	0	QPSK	22.1
			1	0	16-QAM	22.2
			1	25	16-QAM	22.0
			1	49	16-QAM	22.1
			25	0	16-QAM	21.2
			25	12	16-QAM	21.2
			25	25	16-QAM	21.2
			50	0	16-QAM	21.1

Table 26: Test results conducted power measurement LTE FDD 5 850 MHz.

7.1.7 Justification of SAR measurements in LTE mode

According to Chapter 5 'SAR test procedures for LTE devices of FCC KDB Publication 941225 D05 the following test configurations for standalone measurements of the largest channel bandwidth (chapter 5.2) had to be taken into consideration:

5.2.1. QPSK with 1 RB allocation

Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and *required test channel* combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each *required test channel*. When the *reported SAR* is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and *required test channels* is not required for 1 RB allocation; otherwise, SAR is required for the remaining *required test channels* and only for the RB offset configuration with the highest output power for that channel.⁶ When the *reported SAR* of a *required test channel* is > 1.45 W/kg, SAR is required for all three RB offset configurations for that *required test channel*.

5.2.2. QPSK with 50% RB allocation

The procedures required for 1 RB allocation in 5.2.1 are applied to measure the SAR for QPSK with 50% RB allocation.

5.2.3. QPSK with 100% RB allocation

For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest *reported SAR* for 1 RB and 50% RB allocation in 5.2.1 and 5.2.2 are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel and if the *reported SAR* is > 1.45 W/kg, the remaining *required test channels* must also be tested.

5.2.4. Higher order modulations

For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in sections 5.2.1, 5.2.2 and 5.2.3 to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is $> \frac{1}{2}$ dB higher than the same configuration in QPSK or when the *reported SAR* for the QPSK configuration is > 1.45 W/kg.

Testing of other channel bandwidths was not necessary because the output power of equivalent channel configurations was less than $\frac{1}{2}$ dB larger compared to the largest channel bandwidth and reported SAR was < 1.45 W/kg

7.1.8 MPR information in LTE mode

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

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

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

Additional differences in conducted power are not caused by implemented MPR but depend on measurement uncertainty and allowable tolerances per 3GPP or tune-up.

A-MPR was disabled for all SAR tests.

7.1.9 Conducted power measurements WLAN 2.4 GHz

Channel / frequency	modulation	bit rate	time based avg. power
1 / 2412 MHz	CCK	1 MBit/s	13.8dBm
6 / 2437 MHz	CCK	1 MBit/s	13.9dBm
11 / 2462 MHz	CCK	1 MBit/s	13.7dBm
13 / 2472 MHz	CCK	1 MBit/s	13.7dBm
1 / 2412 MHz	OFDM	6 MBit/s	9.8dBm
6 / 2437 MHz	OFDM	6 MBit/s	10.3dBm
11 / 2462 MHz	OFDM	6 MBit/s	9.8dBm
13 / 2472 MHz	OFDM	6 MBit/s	10.1dBm
1 / 2412 MHz	OFDM	6.5 MBit/s	8.9dBm
6 / 2437 MHz	OFDM	6.5 MBit/s	9.4dBm
11 / 2462 MHz	OFDM	6.5 MBit/s	8.8dBm
13 / 2472 MHz	OFDM	6.5 MBit/s	9.1dBm

Table 27: Test results conducted power measurement WLAN 2.4 GHz

7.1.10 Conducted power measurements WLAN 5 GHz

Conducted time based avg. power measurement WLAN 5 GHz (dBm)					
Channel	Frequency (MHz)	modulation	6 MBit/s	6.5 MBit/s	13.5 MBit/s
36	5180	OFDM	8.7	8.0	7.5
40	5200	OFDM	9.0	7.9	
44	5220	OFDM	8.8	7.8	
48	5240	OFDM	8.8	7.7	7.8
52	5260	OFDM	9.1	7.5	
56	5280	OFDM	9.2	7.5	
60	5300	OFDM	9.4	7.9	7.9
64	5320	OFDM	9.3	7.9	
100	5500	OFDM	9.1	7.7	
104	5520	OFDM	9.3	7.8	7.7
108	5540	OFDM	9.7	8.4	
112	5560	OFDM	9.0	8.6	
116	5580	OFDM	9.5	8.8	8.2
120	5600	OFDM	9.3	9.3	
124	5620	OFDM	9.2	8.8	
128	5640	OFDM	9.6	8.3	7.9
132	5660	OFDM	9.6	8.5	
136	5680	OFDM	9.5	8.1	
140	5700	OFDM	9.5	8.0	---
149	5745	OFDM	9.1	8.4	
153	5765	OFDM	9.9	8.3	
157	5785	OFDM	9.2	8.3	7.8
161	5805	OFDM	9.3	7.8	
165	5825	OFDM	9.2	8.2	

Table 28: Test results conducted time based avg. power measurement WLAN 5 GHz

7.1.11 Standalone SAR Test Exclusion

a) Head position

Standalone SAR test exclusion considerations					
Communication system	freq. (MHz)	P _{avg} [*] (dBm)	P _{avg} [*] (mW)	threshold _{1-g} comparison value	SAR test exclusion
GSM 850	835	24.5	281.8	51.5	no
GSM 1900	1900	21.5	141.3	38.9	no
FDD V 850	835	24.5	281.8	51.5	no
LTE FDD 5	835	24.0	251.2	45.9	no
WLAN 2450	2450	15.0	31.6	9.9	no
WLAN 5.2 GHz	5200	10.7	11.7	5.4	no
WLAN 5.3 GHz	5300	10.7	11.7	5.4	no
WLAN 5.6 GHz	5600	10.7	11.7	5.6	no
WLAN 5.8 GHz	5800	10.7	11.7	5.7	no
Bluetooth 2450	2450	9.5	8.9	2.8	yes

Table 29: Standalone SAR test exclusion considerations in head position

b) Body position

Standalone SAR test exclusion considerations						
Communication system	freq. (MHz)	distance (mm)	P _{avg} (dBm)	P _{avg} (mW)	threshold _{1-g} comparison value	SAR test exclusion
GSM 850	835	10	24.8	298.5	27.3	no
GSM 1900	1900	10	22.5	177.8	24.5	no
UMTS FDD V	835	10	24.5	281.8	25.8	no
LTE FDD 5	835	10	24.0	251.2	23.0	no
LTE FDD 7	2535	10	24.0	251.2	40.0	no
WLAN 2450	2450	10	15.0	31.6	4.9	no
WLAN 5.2 GHz	5200	10	10.7	11.7	2.7	yes
WLAN 5.3 GHz	5300	10	10.7	11.7	2.7	yes
WLAN 5.6 GHz	5600	10	10.7	11.7	2.8	yes
WLAN 5.8 GHz	5800	10	10.7	11.7	2.8	yes
Bluetooth 2450	2450	10	9.5	8.9	1.4	yes

Table 30: Standalone SAR test exclusion considerations in body position

P_{avg}^{*} - maximum possible output power declared by manufacturer

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

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

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

7.1.12 Multiple Transmitter Information

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

reported SAR WWAN and WLAN 2450MHz, Σ SAR evaluation, SPLSRi				
Frequency band	Position	SAR _{max} /W/kg		Σ SAR
		WWAN	WLAN	<1.6W/kg
GSM 850	left cheek	0.709	0.580	1.289
GSM 850	right cheek	0.764	0.260	1.024
GSM 850	front	1.250	0.129	1.379
GSM 850	rear	1.028	0.134	1.162
GSM 1900	left cheek	0.274	0.580	0.854
GSM 1900	right cheek	0.210	0.260	0.470
GSM 1900	front	0.745	0.129	0.874
GSM 1900	rear	0.747	0.134	0.881
WCDMA FDD V	left cheek	0.721	0.580	1.301
WCDMA FDD V	right cheek	0.702	0.260	0.962
WCDMA FDD V	front	0.865	0.129	0.994
WCDMA FDD V	rear	0.780	0.134	0.914
LTE FDD 5	left cheek	0.683	0.580	1.263
LTE FDD 5	right cheek	0.661	0.260	0.921
LTE FDD 5	front	0.845	0.129	0.974
LTE FDD 5	rear	0.758	0.134	0.892

Table 31: SAR_{max} WWAN and **WLAN 2.4GHz**, Σ SAR evaluation

reported SAR WWAN and WLAN 5GHz , ΣSAR evaluation, SPLSR_i						
Frequency band	Position	SAR _{max} /W/kg		ΣSAR <1.6W/kg	distance R _i , mm	ratio ≤ 0.040
		WWAN	WLAN			
GSM 850	left cheek	0.709	0.380	1.089	93.5	0.012
GSM 850	right cheek	0.764	0.248	1.012	93.5	0.011
GSM 850	front	1.250	0.377	1.627	93.5	0.022
GSM 850	rear	1.028	0.377	1.405	93.5	0.018
GSM 1900	left cheek	0.274	0.380	0.654	93.5	0.006
GSM 1900	right cheek	0.210	0.248	0.458	93.5	0.003
GSM 1900	front	0.745	0.377	1.122	93.5	0.013
GSM 1900	rear	0.747	0.377	1.124	93.5	0.013
WCDMA FDD V	left cheek	0.721	0.380	1.101	93.5	0.012
WCDMA FDD V	right cheek	0.702	0.248	0.950	93.5	0.010
WCDMA FDD V	front	0.865	0.377	1.242	93.5	0.015
WCDMA FDD V	rear	0.780	0.377	1.157	93.5	0.013
LTE FDD 5	left cheek	0.683	0.380	1.063	93.5	0.012
LTE FDD 5	right cheek	0.661	0.248	0.909	93.5	0.009
LTE FDD 5	front	0.845	0.377	1.222	93.5	0.014
LTE FDD 5	rear	0.758	0.377	1.135	93.5	0.013

Table 32: SAR_{max} WWAN and **WLAN 5GHz**, ΣSAR evaluation, **SPLSR_i**

Note: Minimum antenna separation distance between MAIN antenna and WLAN antenna – **93.45 mm**
 This distance has generally been used because of estimated WLAN SAR values for body position.

SAR Exclusion Threshold for standalone SAR test exclusion.					
Communication system	freq. (GHz)	distance (mm)	P _{avg} (dBm)	P _{avg} (mW)	estimated _{1-g} (W/kg)
WLAN 5.2GHz body	5.2	10	10.7	11.7	0.357
WLAN 5.3GHz body	5.3	10	10.7	11.7	0.361
WLAN 5.6GHz body	5.6	10	10.7	11.7	0.371
WLAN 5.8GHz body	5.8	10	10.7	11.7	0.377

Table 33: Estimated stand alone SAR for **WLAN 5GHz** body

P_{avg} - maximum possible output power declared by manufacturer

Note: The maximum calculated SAR value 0.377 W/kg has been used in table 32 for simultaneous transmission evaluation in body position.

reported SAR WWAN and Bluetooth 2450MHz, Σ SAR evaluation, SPLSRi				
Frequency band	Position	SAR _{max} /W/kg		Σ SAR
		WWAN	Bluetooth	<1.6W/kg
GSM 850	left cheek	0.709	0.372	1.081
GSM 850	right cheek	0.764	0.372	1.136
GSM 850	front	1.250	0.186	1.436
GSM 850	rear	1.028	0.186	1.214
GSM 1900	left cheek	0.274	0.372	0.646
GSM 1900	right cheek	0.210	0.372	0.582
GSM 1900	front	0.745	0.186	0.931
GSM 1900	rear	0.747	0.186	0.933
WCDMA FDD V	left cheek	0.721	0.372	1.093
WCDMA FDD V	right cheek	0.702	0.372	1.074
WCDMA FDD V	front	0.865	0.186	1.051
WCDMA FDD V	rear	0.780	0.186	0.966
LTE FDD 5	left cheek	0.683	0.372	1.055
LTE FDD 5	right cheek	0.661	0.372	1.033
LTE FDD 5	front	0.845	0.186	1.031
LTE FDD 5	rear	0.758	0.186	0.944

Table 34: SAR_{max} WWAN and **Bluetooth 2450MHz**, Σ SAR evaluation

SAR Exclusion Threshold for standalone SAR test exclusion.					
Communication system	freq. (GHz)	distance (mm)	P _{avg} (dBm)	P _{avg} (mW)	estimated _{1-g} (W/kg)
Bluetooth 2450 head	2.45	5	9.5	8.9	0.372
Bluetooth 2450 body	2.45	10	9.5	8.9	0.186

Table 35: Estimated stand alone SAR for **Bluetooth 2450MHz** head and body

P_{avg} - maximum possible output power declared by manufacturer

Note: The maximum calculated SAR value 0.372 W/kg in head position and 0.186 W/kg in body position has been used in table 34 for simultaneous transmission evaluation.

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

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

where x = 7.5 for 1-g SAR.

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

Conclusion:

Σ SAR > 1.6 W/kg, but SAR-to-(peak-locations spacing) **ratio** (SPLSR_i) is less than **0.04** therefore simultaneous transmissions SAR with Volume Scans is **not** required.

7.1.13 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
LTE FDD 5	yes	yes	yes	yes	no	yes
WLAN 2450	yes	yes	no	yes	yes	no
WLAN 5200	yes	yes	no	yes	yes	no
WLAN 5300	yes	yes	no	yes	yes	no
WLAN 5600	yes	yes	no	yes	yes	no
WLAN 5800	yes	yes	no	yes	yes	no

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

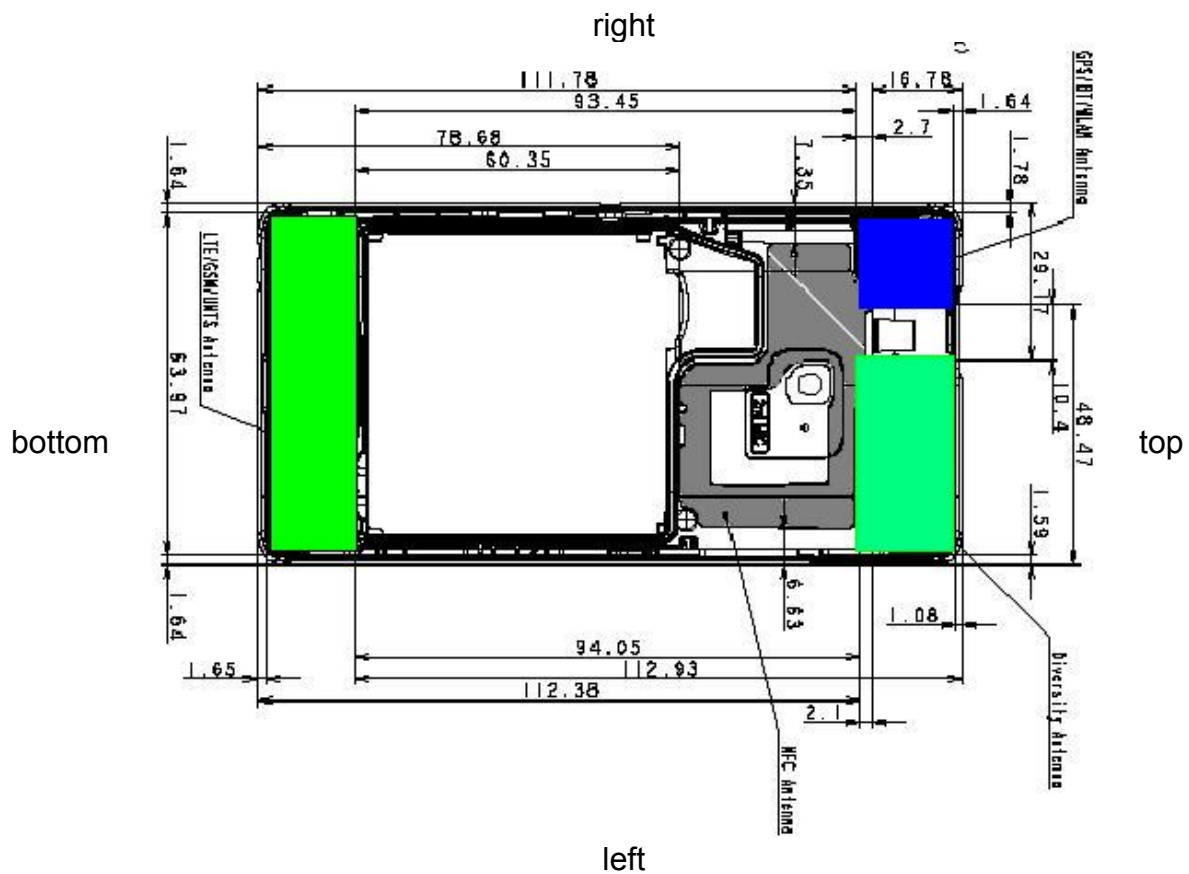


Table 36: Antenna distances and SPLSR evaluation in head position

7.2 SAR test results

7.2.1 Results overview

measured / extrapolated SAR numbers - Head - GSM 850 MHz							
Channel	Frequency (MHz)	Position	cond. output power (dBm)		SAR _{1g} max. results(W/kg)		liquid temp. (°C)
			declared**	measured	Measured	Extrapolated	
128	824.2	left cheek	33.5	33.3	0.615	0.644	21.0
190	836.6	left cheek	33.5	33.0	0.632	0.709	21.0
251	848.8	left cheek	33.5	33.0	0.600	0.673	21.0
128	824.2	left tilted 15°	33.5	33.3	0.341	0.357	21.0
190	836.6	left tilted 15°	33.5	33.0	0.342	0.384	21.0
251	848.8	left tilted 15°	33.5	33.0	0.320	0.359	21.0
128	824.2	right cheek	33.5	33.3	0.669	0.701	21.0
190	836.6	right cheek	33.5	33.0	0.681	0.764	21.0
251	848.8	right cheek	33.5	33.0	0.663	0.744	21.0
128	824.2	right tilted 15°	33.5	33.3	0.337	0.353	21.0
190	836.6	right tilted 15°	33.5	33.0	0.371	0.416	21.0
251	848.8	right tilted 15°	33.5	33.0	0.379	0.425	21.0

Table 37: Test results head SAR GSM 850 MHz

measured / extrapolated SAR numbers - Body - GSM 850 MHz									
Ch.	freq. (MHz)	time slots	distance (mm)	Position	cond. output power (dBm)		SAR _{1g} results(W/kg)		liquid temp. (°C)
					declared**	measured	measured	extrapolated	
128	824.2	3	10	front	29.0	28.6	1.030	1.129	22.3
190	836.6	3	10	front	29.0	29.0	1.120	1.120	22.3
251	848.8	3	10	front	29.0	28.6	1.140	1.250	22.3
128	824.2	3	10	rear	29.0	28.6	0.911	0.999	22.3
190	836.6	3	10	rear	29.0	29.0	1.020	1.020	22.3
251	848.8	3	10	rear	29.0	28.6	0.938	1.028	22.3
190	824.2	3	10	left edge	29.0	29.0	0.648	0.648	22.3
190	836.6	3	10	right dege	29.0	29.0	0.567	0.567	22.3
190	848.8	3	10	bottom edge	29.0	29.0	0.172	0.172	22.3
251	848.8	3	10	front*	29.0	28.6	1.100	1.206	22.3
128	824.2	3	15	front	29.0	28.6	0.870	0.954	22.3
190	836.6	3	15	front	29.0	29.0	0.931	0.931	22.3
251	848.8	3	15	front	29.0	28.6	0.962	1.055	22.3
251	848.8	1	15	front	33.5	33.0	0.420	0.471	22.3
251	848.8	3	15	front*	29.0	28.6	0.863	0.946	22.3

Table 38: Test results body SAR GSM 850 MHz

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

** - maximum possible output power declared by manufacturer

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

measured / extrapolated SAR numbers - Head - GSM 1900 MHz							
Ch.	frequency (MHz)	Position	cond. output power (dBm)		SAR _{1g} results(W/kg)		liquid temp. (°C)
			declared**	measured	measured	extrapolated	
512	1850.2	left cheek	30.5	29.9	0.213	0.245	21.8
661	1880.0	left cheek	30.5	30.0	0.220	0.247	21.8
810	1909.8	left cheek	30.5	30.0	0.244	0.274	21.8
512	1850.2	left tilted 15°	30.5	29.9	0.036	0.041	21.8
661	1880.0	left tilted 15°	30.5	30.0	0.036	0.040	21.8
810	1909.8	left tilted 15°	30.5	30.0	0.041	0.045	21.8
512	1850.2	right cheek	30.5	29.9	0.183	0.210	21.8
661	1880.0	right cheek	30.5	30.0	0.182	0.204	21.8
810	1909.8	right cheek	30.5	30.0	0.187	0.210	21.8
512	1850.2	right tilted 15°	30.5	29.9	0.037	0.042	21.8
661	1880.0	right tilted 15°	30.5	30.0	0.038	0.043	21.8
810	1909.8	right tilted 15°	30.5	30.0	0.044	0.049	21.8

Table 39: Test results head SAR GSM 1900 MHz

measured / extrapolated SAR numbers - Body - GSM 1900 MHz									
Ch.	freq. (MHz)	time slots	distance (mm)	Position	cond. output power (dBm)		SAR _{1g} results(W/kg)		liquid temp. (°C)
					declared**	measured	measured	extrapolated	
512	1850.2	2	10	front	28.5	28.0	0.661	0.742	22.5
661	1880.0	2	10	front	28.5	28.1	0.644	0.706	22.5
810	1909.8	2	10	front	28.5	28.0	0.664	0.745	22.5
512	1850.2	2	10	rear	28.5	28.0	0.638	0.716	22.5
661	1880.0	2	10	rear	28.5	28.1	0.639	0.701	22.5
810	1909.8	2	10	rear	28.5	28.0	0.666	0.747	22.5
661	1880.0	2	10	left edge	28.5	28.1	0.094	0.103	22.5
661	1880.0	2	10	right dege	28.5	28.1	0.069	0.076	22.5
512	1850.2	2	10	bottom edge	28.5	28.0	0.797	0.894	22.5
661	1880.0	2	10	bottom edge	28.5	28.1	0.887	0.973	22.5
810	1909.8	2	10	bottom edge	28.5	28.0	0.949	1.065	22.5
810	1909.8	2	10	bottom edge*	28.5	28.0	0.878	0.985	22.5
810	1909.8	2	15	front	28.5	28.0	0.352	0.395	22.5
810	1909.8	2	15	rear	28.5	28.0	0.340	0.381	22.5
810	1909.8	1	15	rear	30.5	30.0	0.329	0.369	22.5

Table 40: Test results body SAR GSM 1900 MHz

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

** - maximum possible output power declared by manufacturer

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

measured / extrapolated SAR numbers - Head - WCDMA FDD V 850 MHz							
Ch.	frequency (MHz)	Position	cond. output power (dBm)		SAR _{1g} results(W/kg)		liquid temp. (°C)
			declared**	measured	measured	extrapolated	
4132	826.4	left cheek	24.5	24.5	0.555	0.555	21.0
4182	836.4	left cheek	24.5	24.5	0.721	0.721	21.0
4233	846.6	left cheek	24.5	24.5	0.605	0.605	21.0
4132	826.4	left tilted 15°	24.5	24.5	0.274	0.274	21.0
4182	836.4	left tilted 15°	24.5	24.5	0.351	0.351	21.0
4233	846.6	left tilted 15°	24.5	24.5	0.312	0.312	21.0
4132	826.4	right cheek	24.5	24.5	0.523	0.523	21.0
4182	836.4	right cheek	24.5	24.5	0.702	0.702	21.0
4233	846.6	right cheek	24.5	24.5	0.587	0.587	21.0
4132	826.4	right tilted 15°	24.5	24.5	0.251	0.251	21.0
4182	836.4	right tilted 15°	24.5	24.5	0.336	0.336	21.0
4233	846.6	right tilted 15°	24.5	24.5	0.299	0.299	21.0

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

measured / extrapolated SAR numbers - Body - WCDMA FDD V 850 MHz									
Ch.	freq. (MHz)	test condition	distance (mm)	Position	cond. output power (dBm)		SAR _{1g} results(W/kg)		liquid temp. (°C)
					declared**	measured	measured	extrapolated	
4132	826.4	RMC	10	front	24.5	24.5	0.665	0.665	22.5
4182	836.4	RMC	10	front	24.5	24.5	0.853	0.853	22.5
4233	846.6	RMC	10	front	24.5	24.5	0.717	0.717	22.5
4132	826.4	RMC	10	rear	24.5	24.5	0.620	0.620	22.5
4182	836.4	RMC	10	rear	24.5	24.5	0.780	0.780	22.5
4233	846.6	RMC	10	rear	24.5	24.5	0.646	0.646	22.5
4182	836.4	RMC	10	left edge	24.5	24.5	0.484	0.484	22.5
4182	836.4	RMC	10	right dege	24.5	24.5	0.400	0.400	22.5
4182	836.4	RMC	10	bottom edge	24.5	24.5	0.115	0.115	22.5
4182	836.4	RMC	10	front*	24.5	24.5	0.865	0.865	22.5
4182	836.4	RMC	15	front	24.5	24.5	0.724	0.724	22.5

Table 42: Test results body SAR UMTS FDD V 850 MHz

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

** - maximum possible output power declared by manufacturer

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

measured / extrapolated SAR numbers - Head - LTE FDD 5 850 MHz							
Ch.	frequency (MHz)	Position	cond. output power (dBm)		SAR _{1g} results(W/kg)		liquid temp. (°C)
			declared**	measured	measured	extrapolated	
10MHz BW/1RB/49RB offset/QPSK							
20450	829	left cheek	24.0	23.2	0.452	0.543	22.1
20525	836.5	left cheek	24.0	23.4	0.583	0.669	22.1
20600	844	left cheek	24.0	23.5	0.506	0.568	22.1
20450	829	left tilted 15°	24.0	23.2	0.248	0.298	22.1
20525	836.5	left tilted 15°	24.0	23.4	0.316	0.363	22.1
20600	844	left tilted 15°	24.0	23.5	0.269	0.302	22.1
20450	829	right cheek	24.0	23.2	0.412	0.495	22.1
20525	836.5	right cheek	24.0	23.4	0.527	0.605	22.1
20600	844	right cheek	24.0	23.5	0.589	0.661	22.1
20450	829	right tilted 15°	24.0	23.2	0.214	0.257	22.1
20525	836.5	right tilted 15°	24.0	23.4	0.283	0.325	22.1
20600	844	right tilted 15°	24.0	23.5	0.301	0.338	22.1
10MHz BW/25RB/25RB offset/QPSK							
20525	836.5	left cheek	24.0	22.3	0.462	0.683	22.1
20525	836.5	left tilted 15°	24.0	22.3	0.251	0.371	22.1
20525	836.5	right cheek	24.0	22.3	0.431	0.637	22.1
20525	836.5	right tilted 15°	24.0	22.3	0.223	0.330	22.1

Table 43: Test results head SAR LTE FDD 5 850 MHz

measured / extrapolated SAR numbers - Body - LTE FDD 5 850 MHz									
Ch.	freq. (MHz)	RB offset	distance (mm)	Position	cond. output power (dBm)		SAR _{1g} results(W/kg)		liquid temp. (°C)
					declared**	measured	measured	extrapolated	
10MHz BW/1RB/49RB offset/QPSK									
20450	829	49	10	front	24.0	23.2	0.609	0.732	22.5
20525	836.5	49	10	front	24.0	23.4	0.671	0.770	22.5
20600	844	0	10	front	24.0	23.5	0.753	0.845	22.5
20450	829	49	10	rear	24.0	23.2	0.541	0.650	22.5
20525	836.5	49	10	rear	24.0	23.4	0.607	0.697	22.5
20600	844	0	10	rear	24.0	23.5	0.676	0.758	22.5
20525	836.5	49	10	left edge	24.0	23.4	0.467	0.536	22.5
20525	836.5	49	10	right dege	24.0	23.4	0.361	0.414	22.5
20525	836.5	49	10	bottom edge	24.0	23.4	0.099	0.114	22.5
20600	844	0	10	front*	24.0	23.5	0.739	0.829	22.5
20600	844	0	15	front	24.0	23.5	0.519	0.582	22.5
10MHz BW/25RB/25RB offset/QPSK									
20525	836.5	25	10	front	24.0	22.3	0.551	0.815	22.5
20525	836.5	25	10	rear	24.0	22.3	0.495	0.732	22.5
20525	836.5	25	10	left edge	24.0	22.3	0.346	0.512	22.5
20525	836.5	25	10	right dege	24.0	22.3	0.230	0.340	22.5
20525	836.5	25	10	bottom edge	24.0	22.3	0.082	0.121	22.5
10MHz BW/50RB/0RB offset/QPSK									
20600	844	0	10	front	24.0	22.1	0.502	0.778	22.5

Table 44: Test results body SAR LTE FDD 5 850 MHz

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

** - maximum possible output power declared by manufacturer

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

measured / extrapolated SAR numbers - Head - WLAN 2450 MHz							
Ch.	frequency (MHz)	Position	cond. output power (dBm)		SAR _{1g} results(W/kg)		liquid temp. (°C)
			declared**	measured	measured	extrapolated	
1	2412	left cheek	15.0	13.8	0.071	0.094	22.9
6	2437	left cheek	15.0	13.9	0.106	0.137	22.9
11	2462	left cheek	15.0	13.7	0.426	0.575	22.9
1	2412	left tilted 15°	15.0	13.8	0.043	0.057	22.9
6	2437	left tilted 15°	15.0	13.9	0.045	0.058	22.9
11	2462	left tilted 15°	15.0	13.7	0.327	0.441	22.9
11*	2462	left cheek*	15.0	13.7	0.430	0.580	22.9
1	2412	right cheek	15.0	13.8	0.035	0.046	22.9
6	2437	right cheek	15.0	13.9	0.202	0.260	22.9
11	2462	right cheek	15.0	13.7	0.191	0.258	22.9
1	2412	right tilted 15°	15.0	13.8	0.031	0.041	22.9
6	2437	right tilted 15°	15.0	13.9	0.032	0.041	22.9
11	2462	right tilted 15°	15.0	13.7	0.133	0.179	22.9

Table 45: Test results head SAR WLAN 2450 MHz

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

** - maximum possible output power declared by manufacturer

measured / extrapolated SAR numbers - Body - WLAN 2450 MHz									
Ch.	freq. (MHz)	Test condition	distance (mm)	Position	cond. output power (dBm)		SAR _{1g} results(W/kg)		liquid temp.(°C)
					declared**	measured	measured	extrapolated	
1	2412	1Mbit/s	10	front	15.0	13.8	0.056	0.074	21.9
6	2437	1Mbit/s	10	front	15.0	13.9	0.079	0.101	21.9
11	2462	1Mbit/s	10	front	15.0	13.7	0.095	0.129	21.9
1	2412	1Mbit/s	10	rear	15.0	13.8	0.087	0.115	21.9
6	2437	1Mbit/s	10	rear	15.0	13.9	0.097	0.125	21.9
11	2462	1Mbit/s	10	rear	15.0	13.7	0.099	0.134	21.9
6	2437	1Mbit/s	10	right dege	15.0	13.9	0.044	0.057	21.9
6	2437	1Mbit/s	10	top edge	15.0	13.9	0.031	0.040	21.9
11	2462	1Mbit/s	15	rear	15.0	13.7	0.045	0.061	21.9

Table 46: Test results body SAR WLAN 2450 MHz

** - maximum possible output power declared by manufacturer

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

measured / extrapolated SAR numbers - Head - WLAN 5GHz							
Ch.	frequency (MHz)	Position	cond. output power (dBm)		SAR _{1g} results(W/kg)		liquid temp. (°C)
			declared**	measured	measured	extrapolated	
40	5200	left cheek	10.7	9.0	0.257	0.380	20.2
60	5300	left cheek	10.7	9.4	0.218	0.294	20.2
108	5540	left cheek	10.7	9.7	0.183	0.230	20.2
153	5765	left cheek	10.7	9.9	0.229	0.275	20.2
40	5200	left tilted 15°	10.7	9.0	0.265	0.392	20.2
60	5300	left tilted 15°	10.7	9.4	0.208	0.281	20.2
108	5540	left tilted 15°	10.7	9.7	0.132	0.166	20.2
153	5765	left tilted 15°	10.7	9.9	0.141	0.170	20.2
40	5200	right cheek	10.7	9.0	0.168	0.248	20.2
60	5300	right cheek	10.7	9.4	0.100	0.135	20.2
108	5540	right cheek	10.7	9.7	0.061	0.076	20.2
153	5765	right cheek	10.7	9.9	0.087	0.105	20.2
40	5200	right tilted 15°	10.7	9.0	0.185	0.274	20.2
60	5300	right tilted 15°	10.7	9.4	0.109	0.147	20.2
108	5540	right tilted 15°	10.7	9.7	0.067	0.084	20.2
153	5765	right tilted 15°	10.7	9.9	0.077	0.093	20.2

Table 47: Test results head SAR WLAN 5GHz

** - maximum possible output power declared by manufacturer

Estimated SAR					
Communication system	freq. (GHz)	distance (mm)	P _{avg} * (dBm)	P _{avg} * (mW)	estimated _{1-g} (W/kg)
WLAN 5200	5.2	10	10.7	11.7	0.357
WLAN 5300	5.3	10	10.7	11.7	0.361
WLAN 5600	5.6	10	10.7	11.7	0.371
WLAN 5800	5.8	10	10.7	11.7	0.377

Table 48: Calculated SAR_{max} for WLAN 5GHz bodyP_{avg}* - maximum possible output power declared by manufacturer

Estimated SAR					
Communication system	freq. (GHz)	distance (mm)	P _{avg} * (dBm)	P _{avg} * (mW)	estimated _{1-g} (W/kg)
Bluetooth 2450 head	2.45	5	9.5	8.9	0.372
Bluetooth 2450 body	2.45	10	9.5	8.9	0.186

Table 49: Calculated SAR_{max} for Bluetooth 2450MHz head and bodyP_{avg}* - maximum possible output power declared by manufacturer

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

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

where x = 7.5 for 1-g SAR.

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

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 and in 802.11a mode with 6 MBit/s. According to KDB 248227 the SAR testing for 802.11g/n is not required since the maximum power of 802.11g/n is less ¼ dB higher than maximum power of 802.11a/b.
- Required WLAN test channels were selected according to KDB 248227
- Per FCC KDB pub 941225 D06 the edges with antennas within 2.5 cm are required to be evaluated for SAR to cover WLAN hot spot function.
- Tests in body position were performed with 10 mm air gap between DUT and SAM, with additional delta measurements at 15 mm distance to cover voice call operation with headset.
- Additional body worn tests were performed at worst case with 1 time slot in uplink for GSM or in speech mode for UMTS and 15 mm distance from DUT to the phantom in accordance with Sony requirements.
- According to IEEE 1528 the SAR test shall be performed at middle channel. Testing of top and bottom channel is optional.
- According to KDB 447498 D01 testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
 - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
 - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

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.

Equipment	Type	Manufacturer	Serial No.	Last Calibration	Frequency (months)
Dosimetric E-Field Probe	ET3DV6	Schmid & Partner Engineering AG	1558	August 24, 2012	12
Dosimetric E-Field Probe	ET3DV6	Schmid & Partner Engineering AG	1559	January 16, 2013	12
Dosimetric E-Field Probe	EX3DV4	Schmid & Partner Engineering AG	3566	August 23, 2012	12
900 MHz System Validation Dipole	D900V2	Schmid & Partner Engineering AG	102	August 15, 2011	24
1900 MHz System Validation Dipole	D1900V2	Schmid & Partner Engineering AG	5d009	August 17, 2011	24
2450 MHz System Validation Dipole	D2450V2	Schmid & Partner Engineering AG	710	August 13, 2012	24
5 GHz System Validation Dipole	D5GHzV2	Schmid & Partner Engineering AG	1055	August 22, 2011	24
Data acquisition electronics	DAE3V1	Schmid & Partner Engineering AG	413	January 11, 2013	12
Data acquisition electronics	DAE3V1	Schmid & Partner Engineering AG	477	May 09, 2012	12
Software	DASY 4 V4.5	Schmid & Partner Engineering AG	---	N/A	--
Software	DASY52 52.8.5	Schmid & Partner Engineering AG	---	N/A	--
Phantom	SAM	Schmid & Partner Engineering AG	---	N/A	--
Universal Radio Communication Tester	CMU 200	Rohde & Schwarz	106826	January 16, 2013	24
Universal Radio Communication Tester	CMW500	Rohde & Schwarz	102375	January 16, 2013	24
Network Analyser 300 kHz to 6 GHz	8753ES	Hewlett Packard)*	US39174436	February 24, 2012	24
Dielectric Probe Kit	85070C	Hewlett Packard	US99360146	N/A	12
Signal Generator	8671B	Hewlett Packard	2823A00656	January 15, 2013	24
Amplifier	25S1G4 (25 Watt)	Amplifier Reasearch	20452	N/A	--
Power Meter	NRP	Rohde & Schwarz	101367	January 15, 2013	24
Power Meter Sensor	NRP Z22	Rohde & Schwarz	100227	January 14, 2013	12
Power Meter Sensor	NRP Z22	Rohde & Schwarz	100234	January 14, 2013	12
Directional Coupler	778D	Hewlett Packard	19171	January 14, 2013	12

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

9 Observations

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

Annex A: System performance check

Date/Time: 27.02.2013 09:01:41

SystemPerformanceCheck-D900 head 2013-02-27

DUT: Dipole 900 MHz; Type: D900V2; Serial: 102Communication System: CW; Communication System Band: D900 (900.0 MHz); Frequency: 900 MHz;
Communication System PAR: 0 dB; PMF: 1Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 0.95 \text{ S/m}$; $\epsilon_r = 40.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5

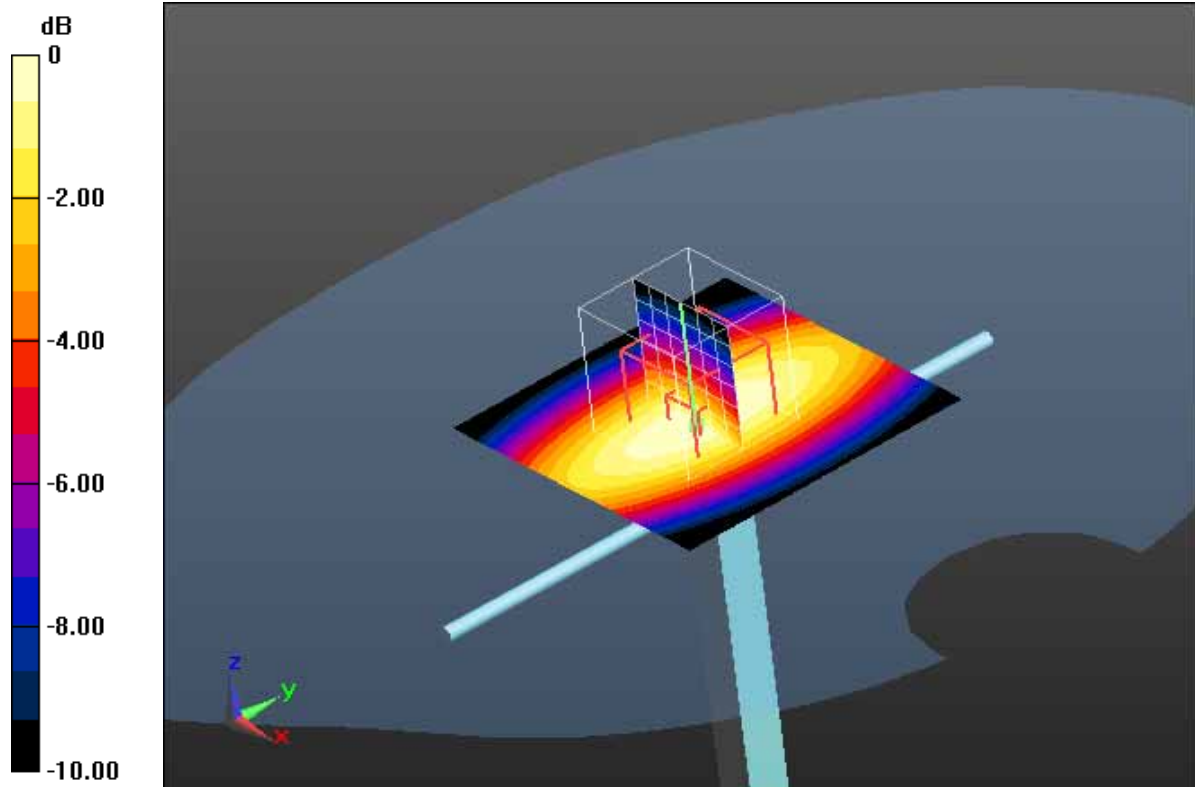
DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.98, 5.98, 5.98); Calibrated: 24.08.2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 2.7, 32.7$
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

System Performance Check/d=10mm, Pin=1000 mW, dist=4.0mm/Area

Scan (51x51x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$ Maximum value of SAR (interpolated) = 11.6 W/kg

System Performance Check/d=10mm, Pin=1000 mW, dist=4.0mm/Zoom

Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$ Reference Value = 115.9 V/m ; Power Drift = -0.00 dB Peak SAR (extrapolated) = 16.3 W/kg **SAR(1 g) = 10.9 W/kg ; SAR(10 g) = 7.04 W/kg** Maximum value of SAR (measured) = 11.8 W/kg 0 dB = 11.8 W/kg = 10.72 dBW/kg

Additional information:

ambient temperature: 22.0°C ; liquid temperature: 21.9°C

Date/Time: 28.02.2013 09:01:42

SystemPerformanceCheck-D900 head 2013-02-28

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

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

Communication System PAR: 0 dB; PMF: 1

Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 0.95 \text{ S/m}$; $\epsilon_r = 40.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.98, 5.98, 5.98); Calibrated: 24.08.2012;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 2.7, 32.7$
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

System Performance Check/d=10mm, Pin=1000 mW, dist=4.0mm/Area

Scan (51x51x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

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

System Performance Check/d=10mm, Pin=1000 mW, dist=4.0mm/Zoom

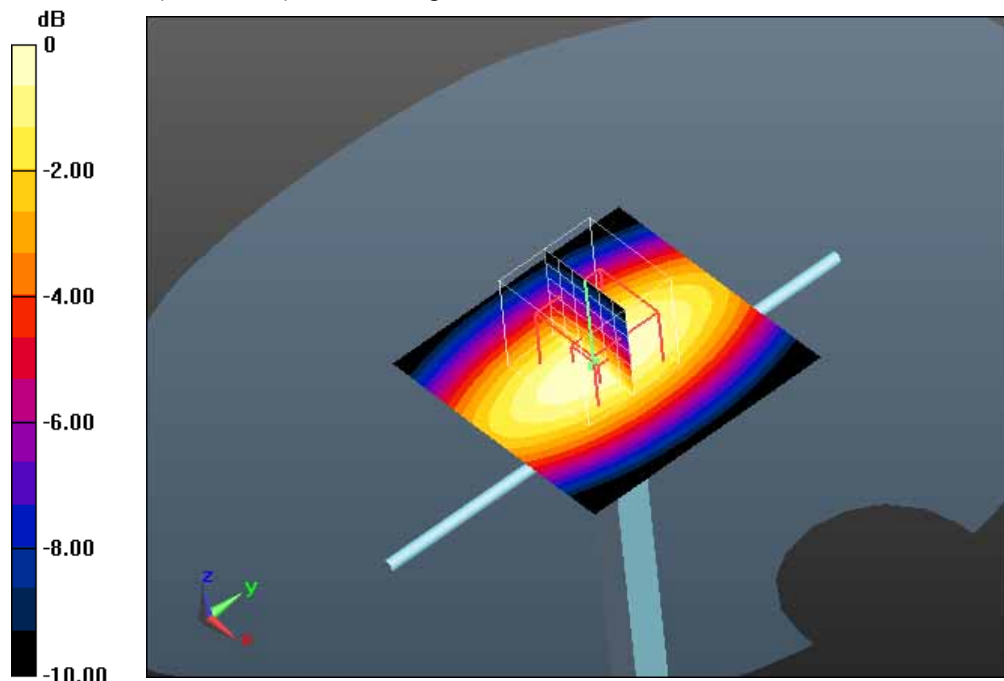
Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 116.5 V/m ; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 16.5 W/kg

SAR(1 g) = 11.1 W/kg ; SAR(10 g) = 7.15 W/kg

Maximum value of SAR (measured) = 12.0 W/kg



0 dB = 12.0 W/kg = 10.79 dBW/kg

Additional information:

ambient temperature: 22.3°C ; liquid temperature: 21.9°C

Date/Time: 28.03.2013 12:09:35 Date/Time: 28.03.2013 12:12:55

System Performance Check-D900 head 2013-03-28**DUT: Dipole 900 MHz; Type: D900V2; Serial: 102**

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

Medium: HSL900 Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 0.97 \text{ mho/m}$; $\epsilon_r = 41.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.32, 6.32, 6.32); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

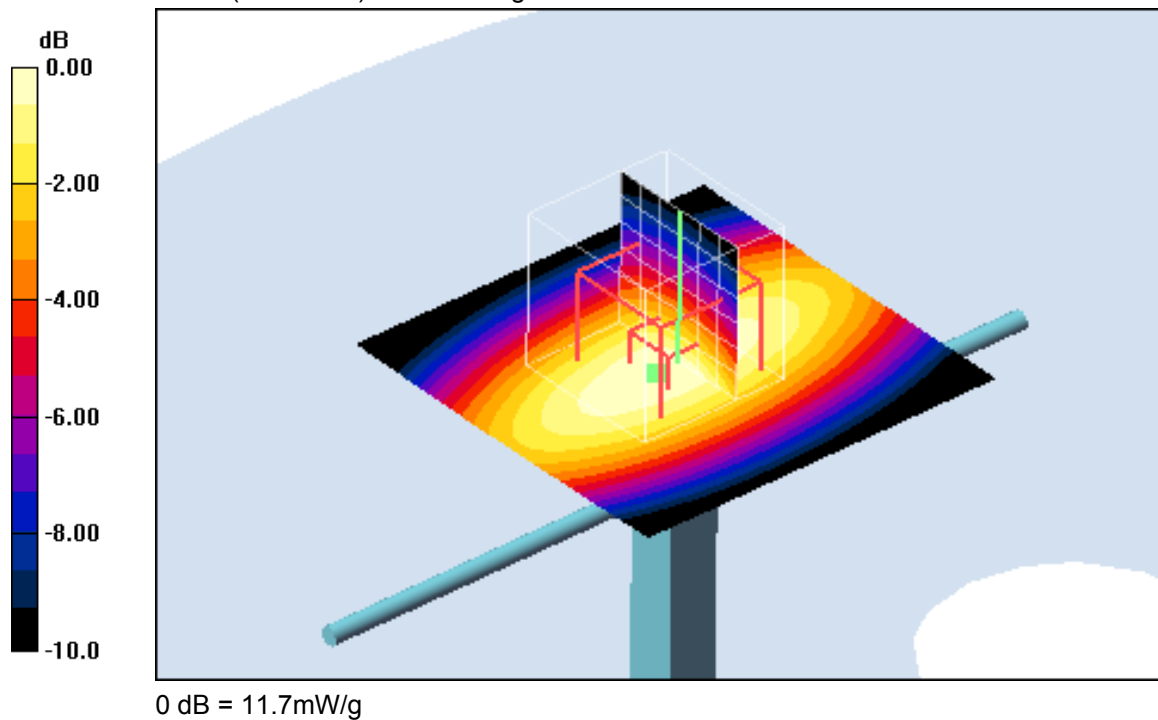
d=15mm, Pin=1000mW/Area Scan (51x51x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 11.4 mW/g**d=15mm, Pin=1000mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$,
 $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 113.7 V/m; Power Drift = -0.013 dB

Peak SAR (extrapolated) = 15.7 W/kg

SAR(1 g) = 10.7 mW/g; SAR(10 g) = 6.96 mW/g

Maximum value of SAR (measured) = 11.7 mW/g

**Additional information:**

ambient temperature: 23.3°C; liquid temperature: 22.1°C

Date/Time: 07.03.2013 07:30:54 Date/Time: 07.03.2013 07:47:34

System Performance Check-D900 body 2013-03-07**DUT: Dipole 900 MHz; Type: D900V2; Serial: 102**

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

Medium: M900 Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 1.04 \text{ mho/m}$; $\epsilon_r = 54.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.19, 6.19, 6.19); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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) = 11.4 mW/g

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

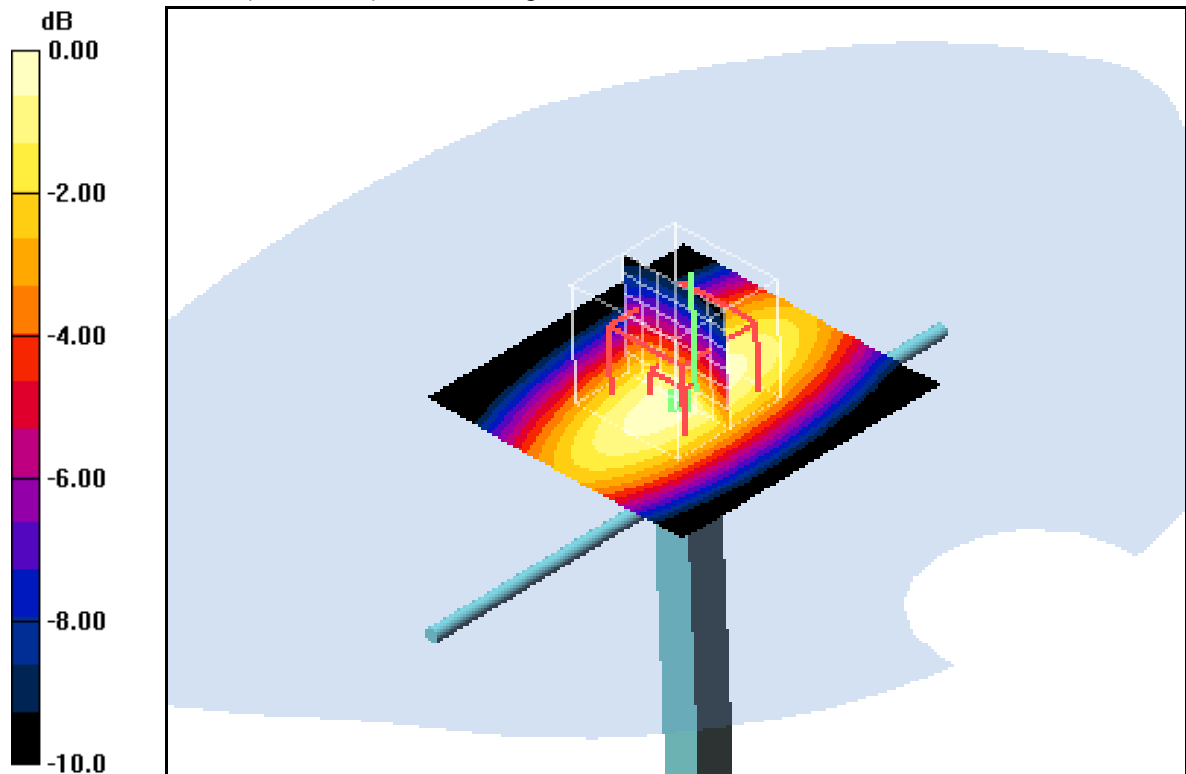
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 109.0 V/m; Power Drift = 0.130 dB

Peak SAR (extrapolated) = 15.6 W/kg

SAR(1 g) = 10.9 mW/g; SAR(10 g) = 7.13 mW/g

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



0 dB = 11.9mW/g

Additional information:

ambient temperature: 21.9°C; liquid temperature: 21.3°C

Date/Time: 08.03.2013 09:30:54 Date/Time: 08.03.2013 09:34:19

System Performance Check-D900 body 2013-03-08

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

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

Medium: M900 Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 1.04 \text{ mho/m}$; $\epsilon_r = 54.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.19, 6.19, 6.19); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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) = 11.4 mW/g

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

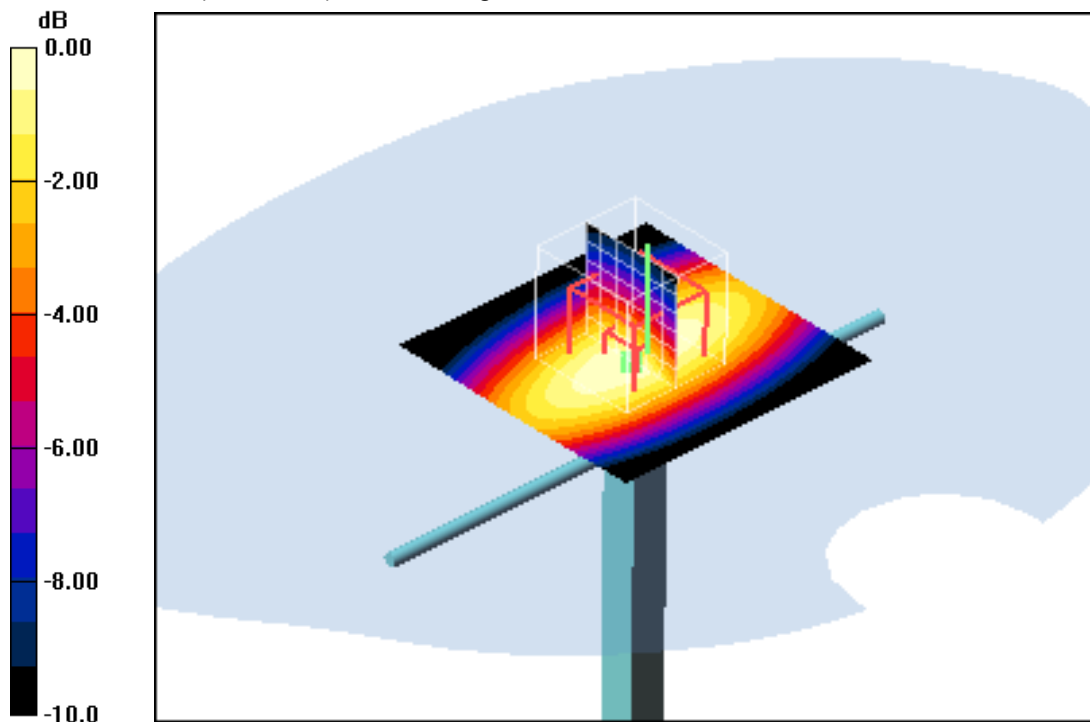
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 109.0 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 15.3 W/kg

SAR(1 g) = 10.7 mW/g; SAR(10 g) = 6.98 mW/g

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



0 dB = 11.6mW/g

Additional information:

ambient temperature: 23.1°C; liquid temperature: 22.5°C

Date/Time: 11.03.2013 08:13:02 Date/Time: 11.03.2013 08:16:21

System Performance Check-D900 body 2013-03-11**DUT: Dipole 900 MHz; Type: D900V2; Serial: 102**

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

Medium: M900 Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 1.04 \text{ mho/m}$; $\epsilon_r = 54.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.19, 6.19, 6.19); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

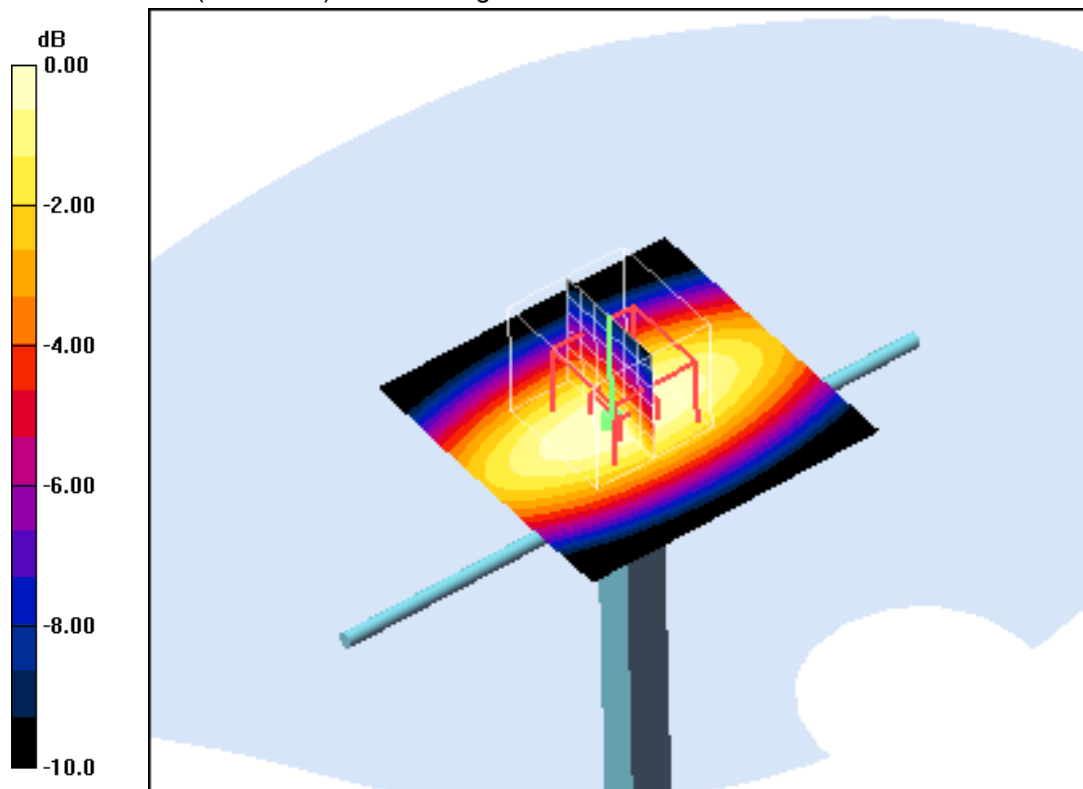
d=15mm, Pin=1000mW/Area Scan (51x51x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 12.3 mW/g**d=15mm, Pin=1000mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$,
 $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 114.0 V/m; Power Drift = -0.060 dB

Peak SAR (extrapolated) = 16.3 W/kg

SAR(1 g) = 11.4 mW/g; SAR(10 g) = 7.46 mW/g

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



0 dB = 12.3mW/g

Additional information:

ambient temperature: 22.5°C; liquid temperature: 22.3°C

Date/Time: 12.03.2013 10:56:40 Date/Time: 12.03.2013 10:59:59

System Performance Check-D900 body 2013-03-12**DUT: Dipole 900 MHz; Type: D900V2; Serial: 102**

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

Medium: M900 Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 1.04 \text{ mho/m}$; $\epsilon_r = 54.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.19, 6.19, 6.19); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

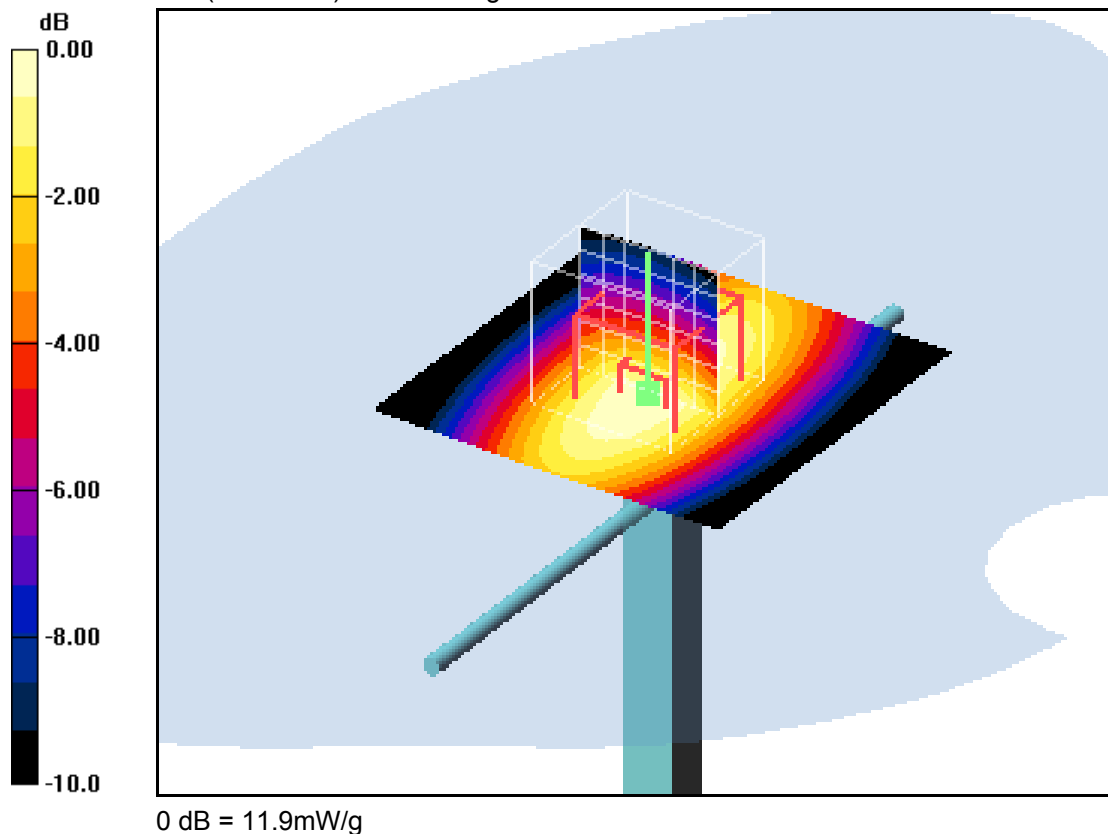
d=15mm, Pin=1000mW/Area Scan (51x51x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 11.8 mW/g**d=15mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 111.4 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 15.7 W/kg

SAR(1 g) = 11 mW/g; SAR(10 g) = 7.22 mW/g

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

**Additional information:**

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 21.03.2013 08:52:59 Date/Time: 21.03.2013 08:56:17

System Performance Check-D1900 2013-03-21 head**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d009**

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

Medium: HSL1900 Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.38 \text{ mho/m}$; $\epsilon_r = 39$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.92, 4.92, 4.92); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

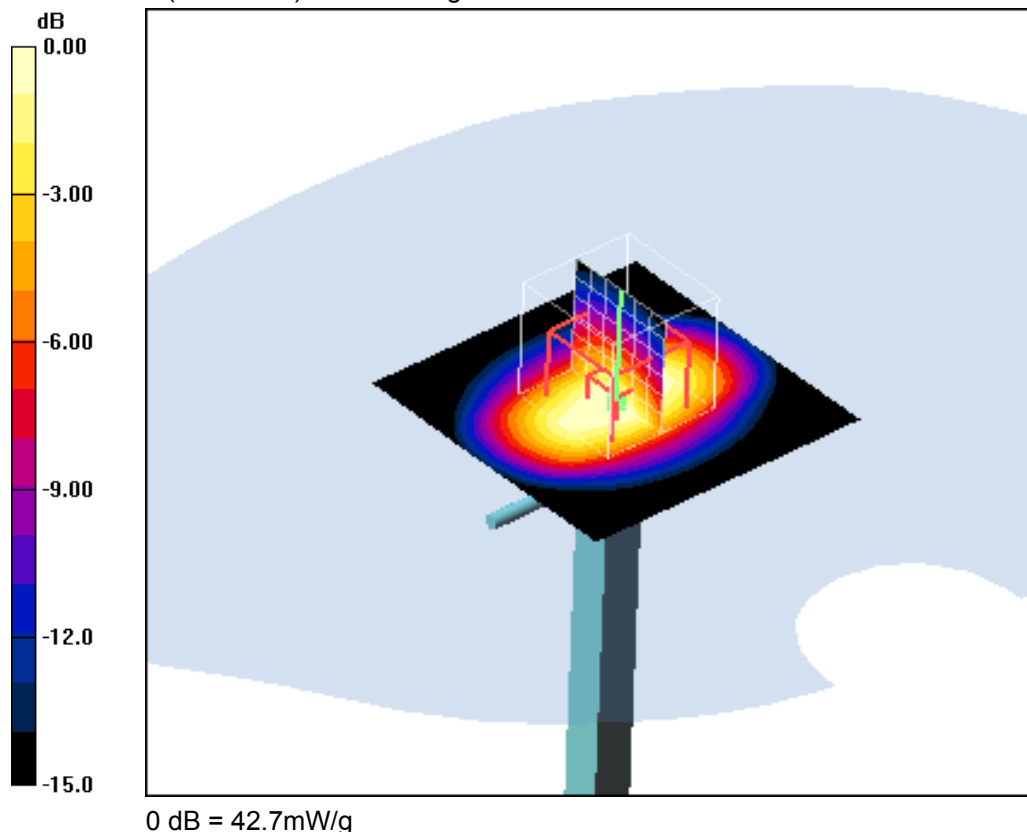
d=10mm, Pin=1000mW/Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 52.0 mW/g**d=10mm, Pin=1000mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 185.4 V/m; Power Drift = 0.034 dB

Peak SAR (extrapolated) = 63.4 W/kg

SAR(1 g) = 37.7 mW/g; SAR(10 g) = 20.2 mW/g

Maximum value of SAR (measured) = 42.7 mW/g

**Additional information:**

ambient temperature: 22.0°C; liquid temperature: 21.8°C

Date/Time: 27.03.2013 15:00:26 Date/Time: 27.03.2013 15:03:41

System Performance Check-D1900 2013-03-27 body**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d009**

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

Medium: M1900 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.49, 4.49, 4.49); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

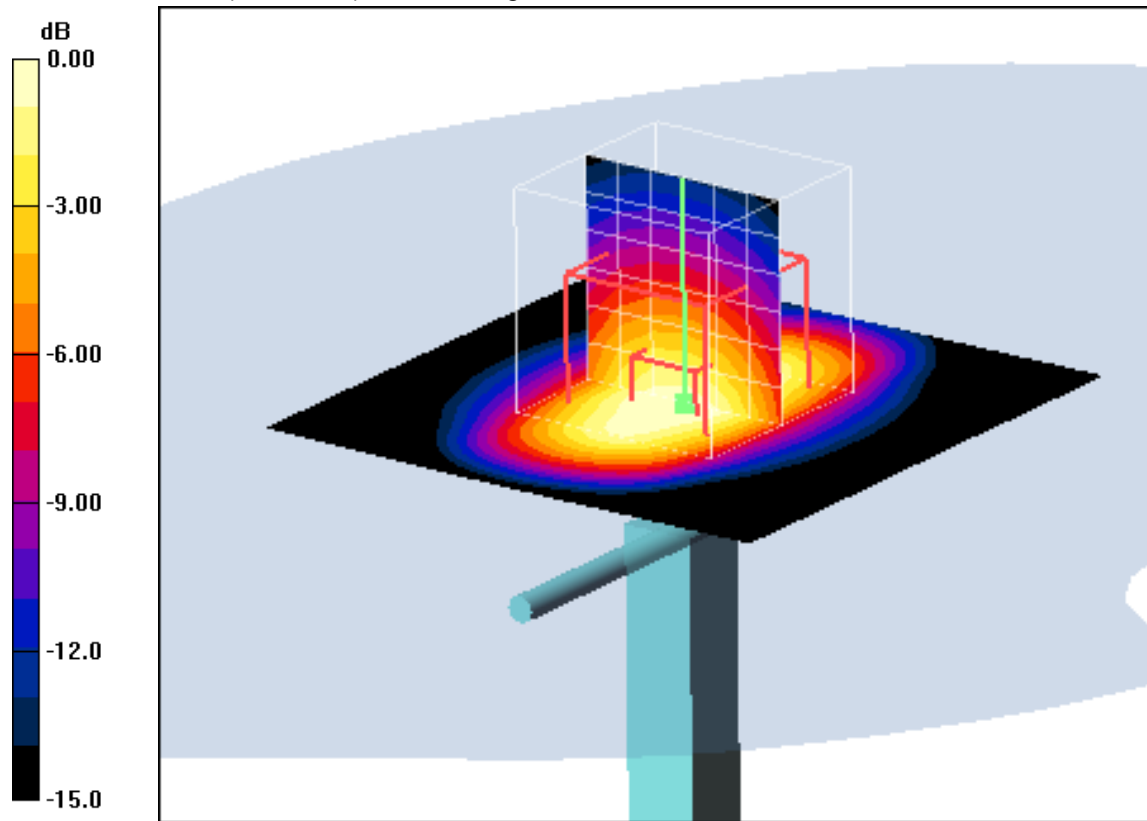
d=10mm, Pin=1000mW/Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 55.5 mW/g**d=10mm, Pin=1000mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 182.0 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 60.8 W/kg

SAR(1 g) = 38.4 mW/g; SAR(10 g) = 20.9 mW/g

Maximum value of SAR (measured) = 43.5 mW/g



0 dB = 43.5mW/g

Additional information:

ambient temperature: 23.1°C; liquid temperature: 22.5°C

Date/Time: 12.03.2013 12:17:31 Date/Time: 12.03.2013 12:20:49

System Performance Check-D2450 head 2013-03-12**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 710**

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

Medium: HSL2450 Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.84 \text{ mho/m}$; $\epsilon_r = 38.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.25, 4.25, 4.25); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

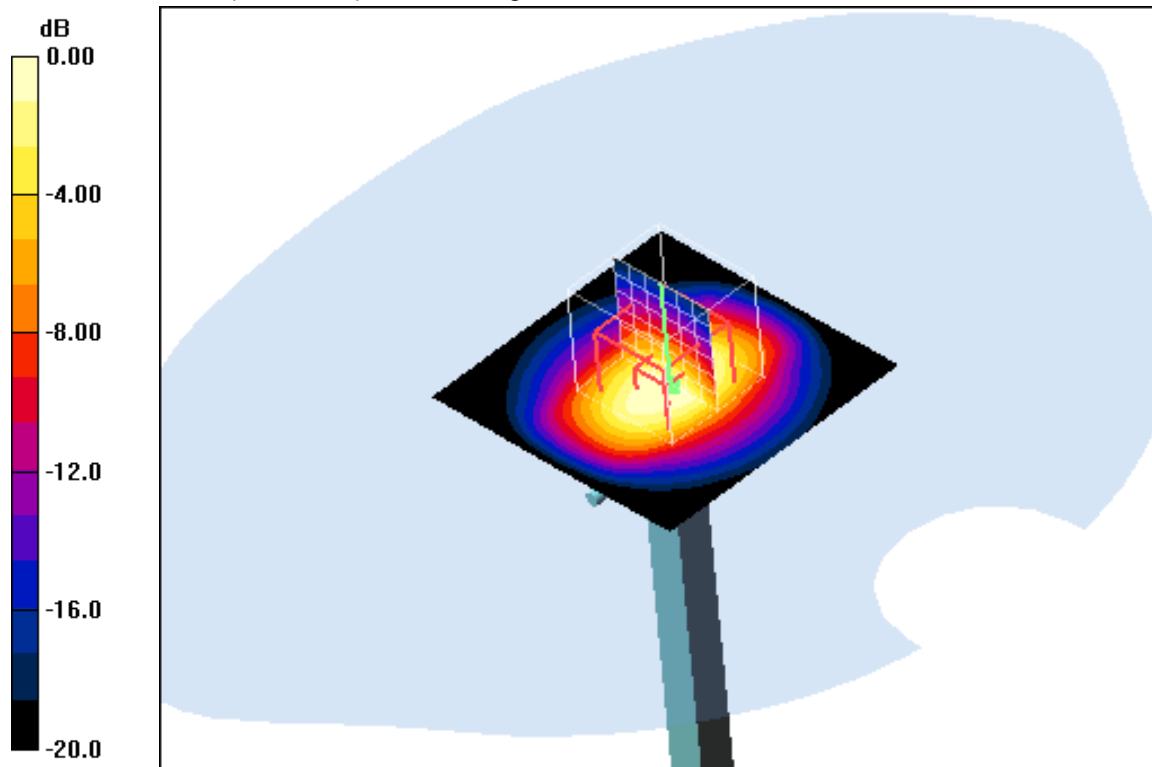
d=10mm, Pin=1000mW/Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 77.8 mW/g**d=10mm, Pin=1000mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 191.2 V/m; Power Drift = -0.190 dB

Peak SAR (extrapolated) = 109.1 W/kg

SAR(1 g) = 52.5 mW/g; SAR(10 g) = 24.7 mW/g

Maximum value of SAR (measured) = 59.7 mW/g

**Additional information:**

ambient temperature: 23.1°C; liquid temperature: 22.9°C

Date/Time: 20.03.2013 09:02:06 Date/Time: 20.03.2013 09:05:24

System Performance Check-D2450 body 2013-03-19

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

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

Medium: MSL2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2$ mho/m; $\epsilon_r = 52.1$; $\rho = 1000$ kg/m³

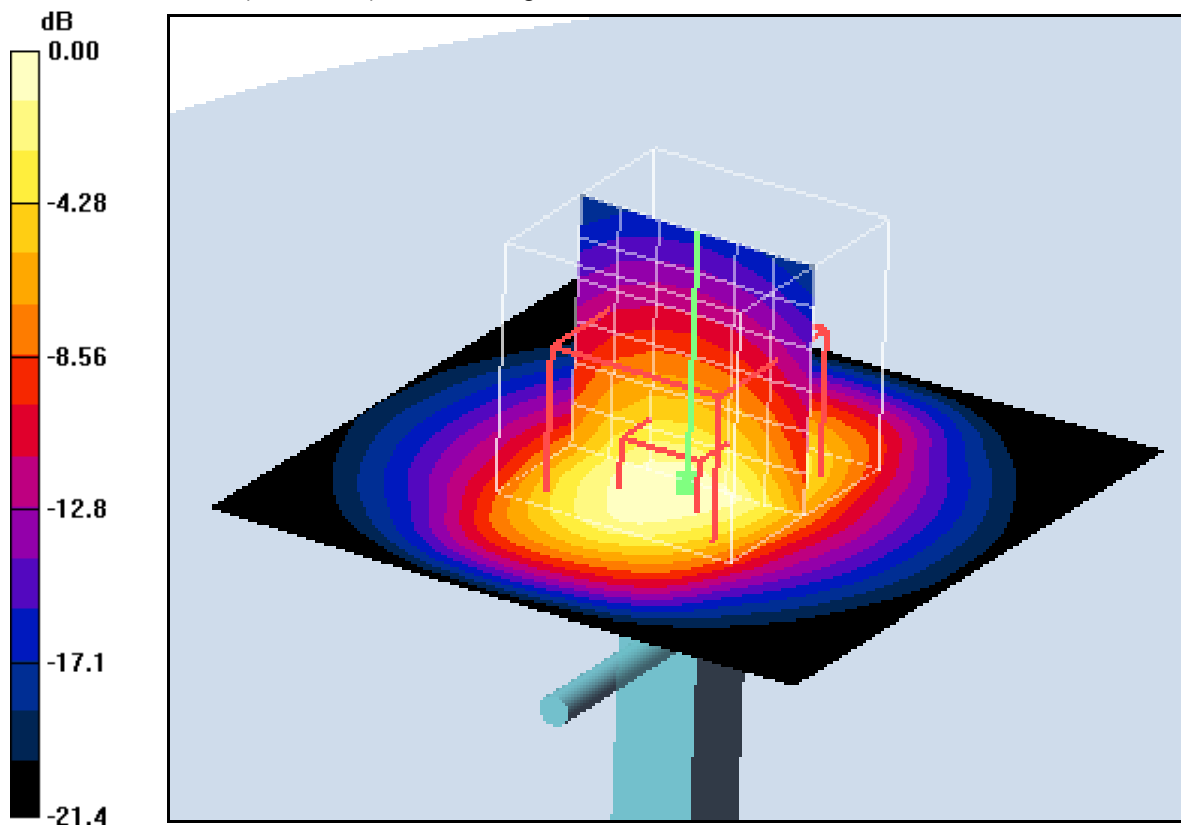
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.02, 4.02, 4.02); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

d=10mm, Pin=100mW/Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 8.09 mW/g

d=10mm, Pin=100mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 dx=5mm, dy=5mm, dz=5mm
 Reference Value = 56.1 V/m; Power Drift = 0.020 dB
 Peak SAR (extrapolated) = 13.1 W/kg
SAR(1 g) = 5.45 mW/g; SAR(10 g) = 2.49 mW/g
 Maximum value of SAR (measured) = 6.04 mW/g



0 dB = 6.04mW/g

Additional information:

ambient temperature: 22.8°C; liquid temperature: 21.9°C

Date/Time: 25.03.2013 18:14:09

SystemPerformanceCheck-D5GHz-head**DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1055**

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

Medium: HSL5GHz Medium parameters used: $f = 5200 \text{ MHz}$; $\sigma = 4.52 \text{ mho/m}$; $\epsilon_r = 36.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(4.24, 4.24, 4.24); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

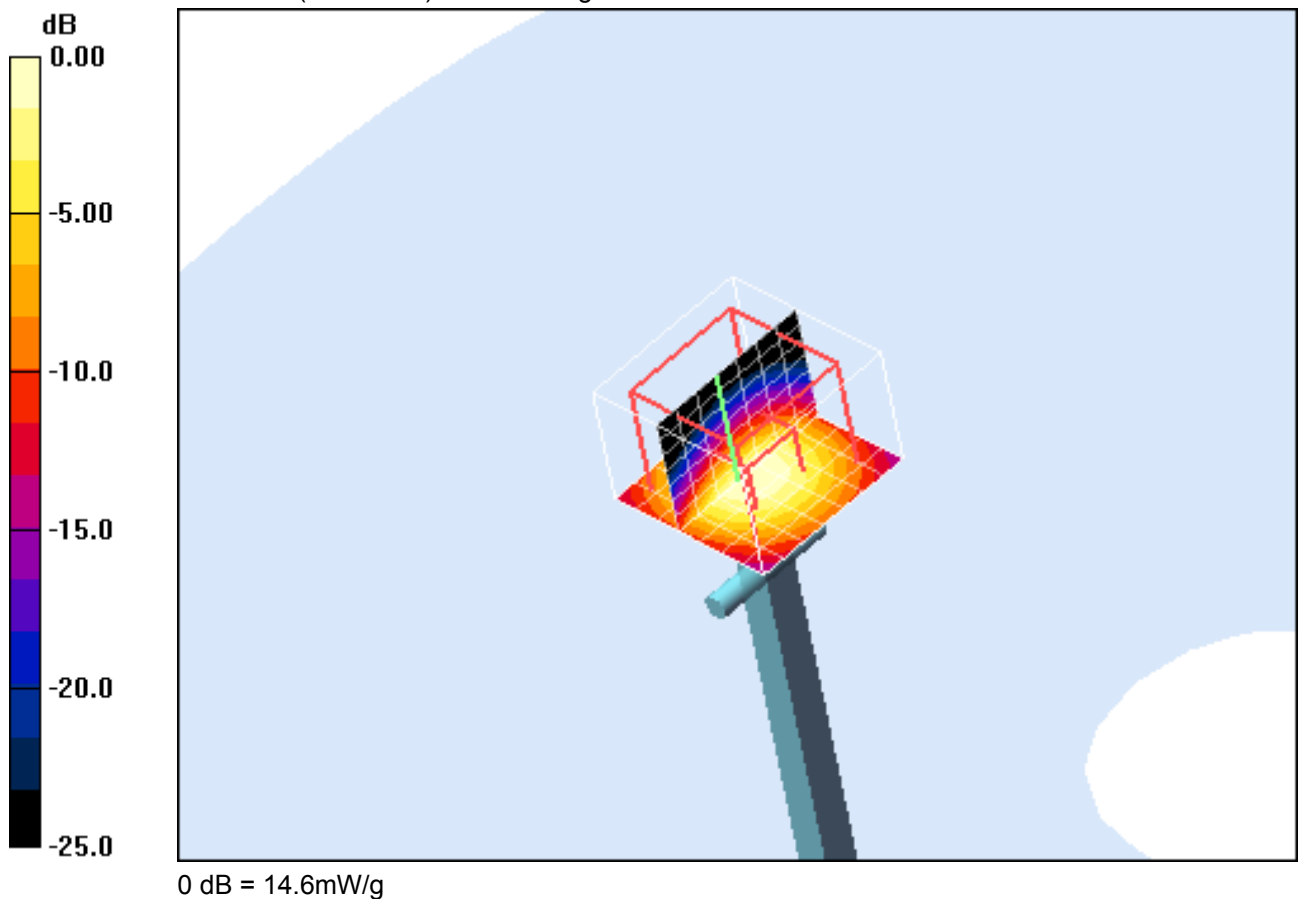
dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 62.5 V/m; Power Drift = 0.018 dB

Peak SAR (extrapolated) = 29.8 W/kg

SAR(1 g) = 7.38 mW/g; SAR(10 g) = 2.08 mW/g

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

**Additional information:**

ambient temperature: 21.6°C; liquid temperature: 20.2°C

Date/Time: 25.03.2013 19:22:28

SystemPerformanceCheck-D5GHz-head**DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1055**

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

Medium: HSL5GHz Medium parameters used: $f = 5500 \text{ MHz}$; $\sigma = 4.82 \text{ mho/m}$; $\epsilon_r = 36.1$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(3.72, 3.72, 3.72); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

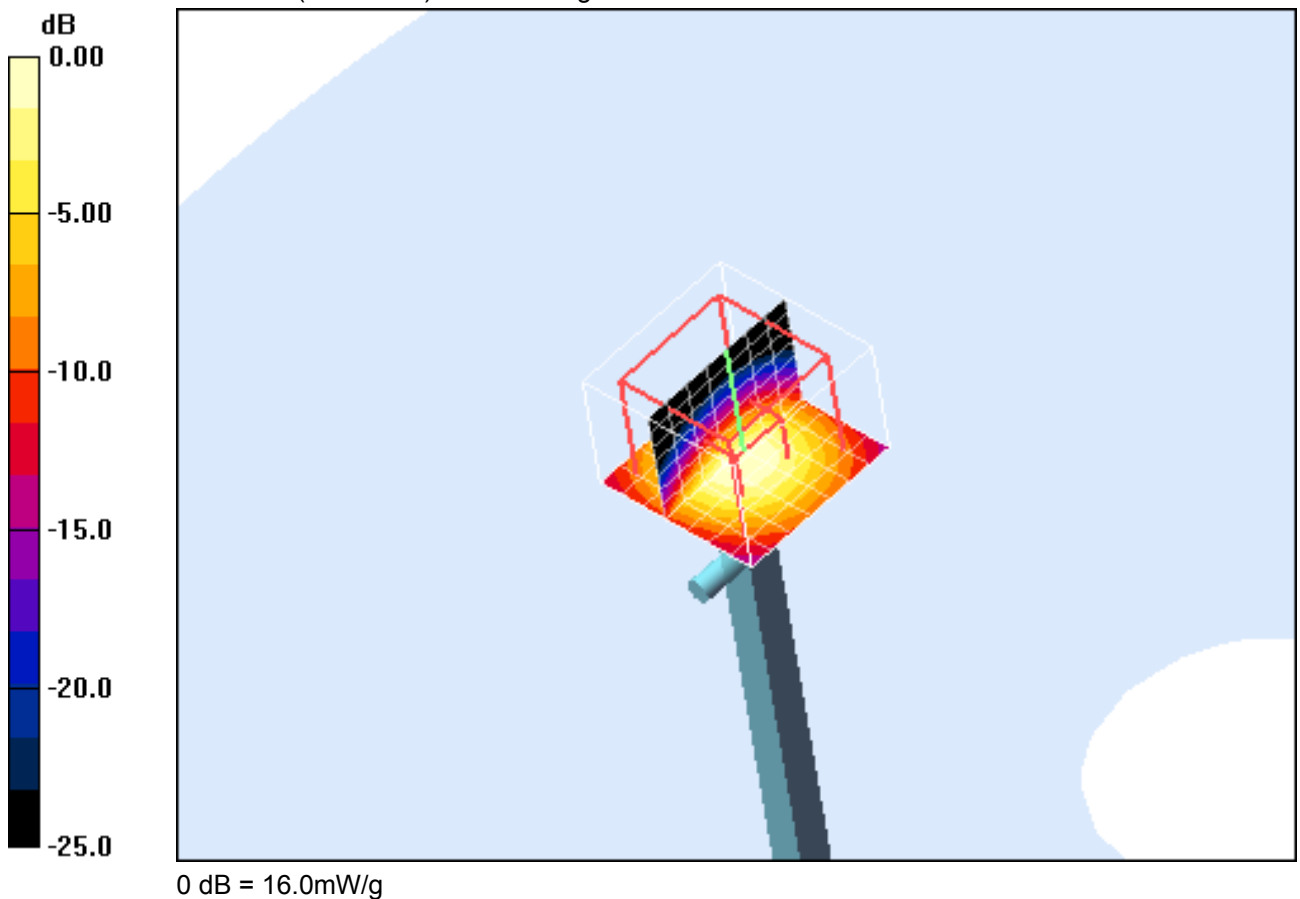
dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 65.8 V/m; Power Drift = -0.038 dB

Peak SAR (extrapolated) = 33.4 W/kg

SAR(1 g) = 8.01 mW/g; SAR(10 g) = 2.23 mW/g

Maximum value of SAR (measured) = 16.0 mW/g

**Additional information:**

ambient temperature: 21.6°C; liquid temperature: 20.2°C

Date/Time: 25.03.2013 19:39:07

SystemPerformanceCheck-D5GHz-head**DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1055**

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

Medium: HSL5GHz Medium parameters used: $f = 5800 \text{ MHz}$; $\sigma = 5.12 \text{ mho/m}$; $\epsilon_r = 35.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(3.65, 3.65, 3.65); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

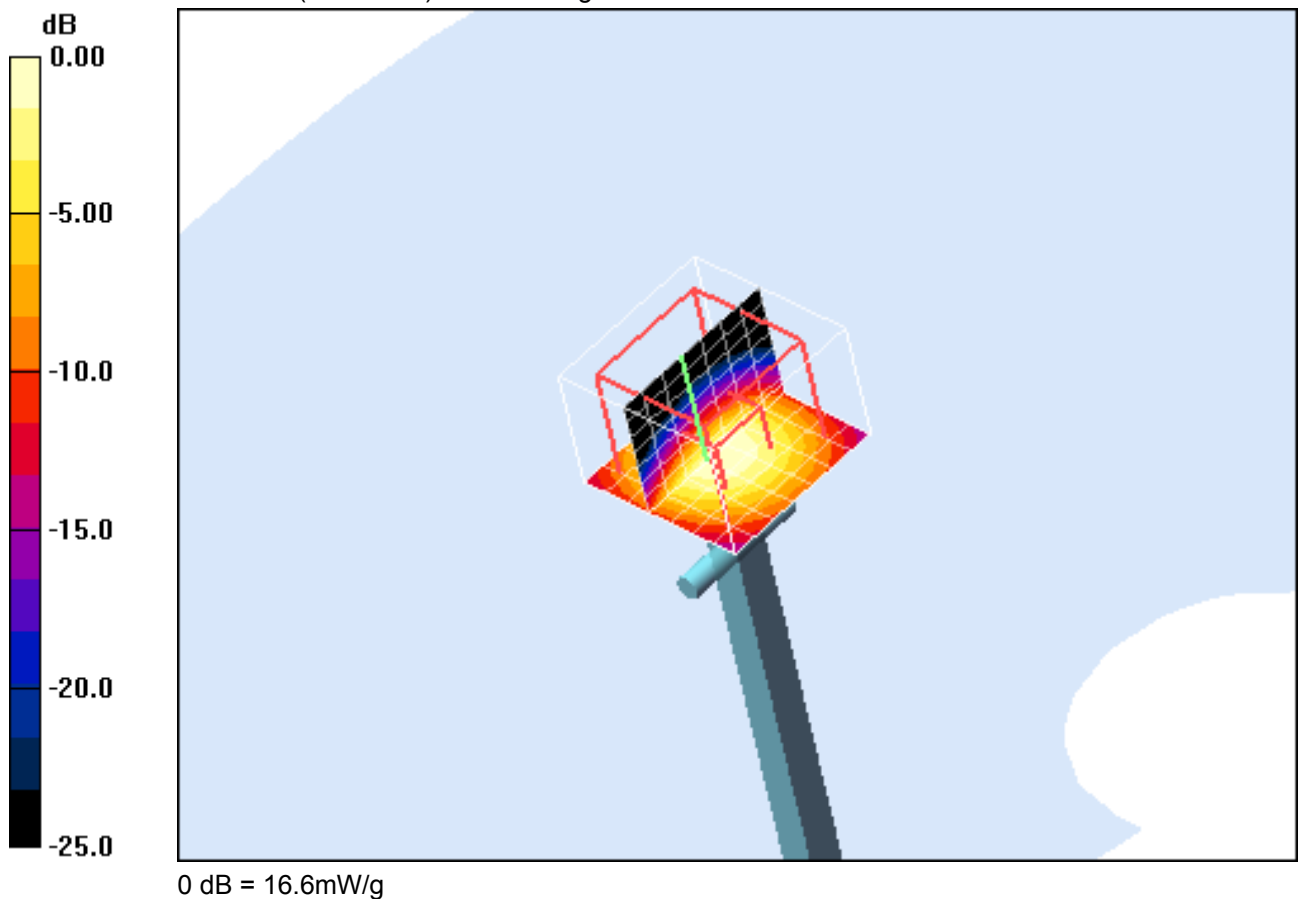
dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 63.1 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 35.3 W/kg

SAR(1 g) = 8.11 mW/g; SAR(10 g) = 2.26 mW/g

Maximum value of SAR (measured) = 16.6 mW/g

**Additional information:**

ambient temperature: 21.6°C; liquid temperature: 20.2°C

Annex B: DASY measurement results

Annex B.1: GSM 850MHz

Date/Time: 27.02.2013 17:24:57

IEEE1528-GSM850 head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

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

Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.88$ S/m; $\epsilon_r = 41.3$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6 dB, b=99.9 dB $\sqrt{\mu}$ V, c=28.7, d=9.4 dB / Y: a=16.2 dB, b=98.3 dB $\sqrt{\mu}$ V, c=28.5, d=9.4 dB / Z: a=18.2 dB, b=99.4 dB $\sqrt{\mu}$ V, c=28.9, d=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

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

grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.688 W/kg

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

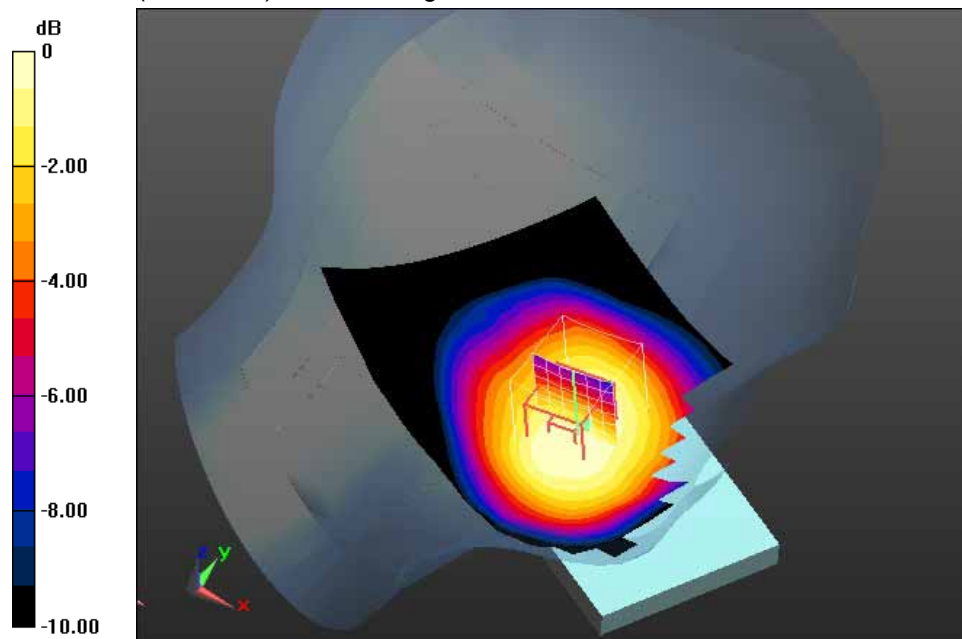
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 29.149 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.795 W/kg

SAR(1 g) = 0.615 W/kg; SAR(10 g) = 0.459 W/kg

Maximum value of SAR (measured) = 0.642 W/kg



0 dB = 0.642 W/kg = -1.92 dBW/kg

Additional information:

ambient temperature: 22.3°C; liquid temperature: 21.0°C

Date/Time: 27.02.2013 17:55:40

IEEE1528-GSM850 head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

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

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.89$ S/m; $\epsilon_r = 41.1$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6 dB, b=99.9 dB $\sqrt{\mu}$ V, c=28.7, d=9.4 dB / Y: a=16.2 dB, b=98.3 dB $\sqrt{\mu}$ V, c=28.5, d=9.4 dB / Z: a=18.2 dB, b=99.4 dB $\sqrt{\mu}$ V, c=28.9, d=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

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

grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.692 W/kg

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

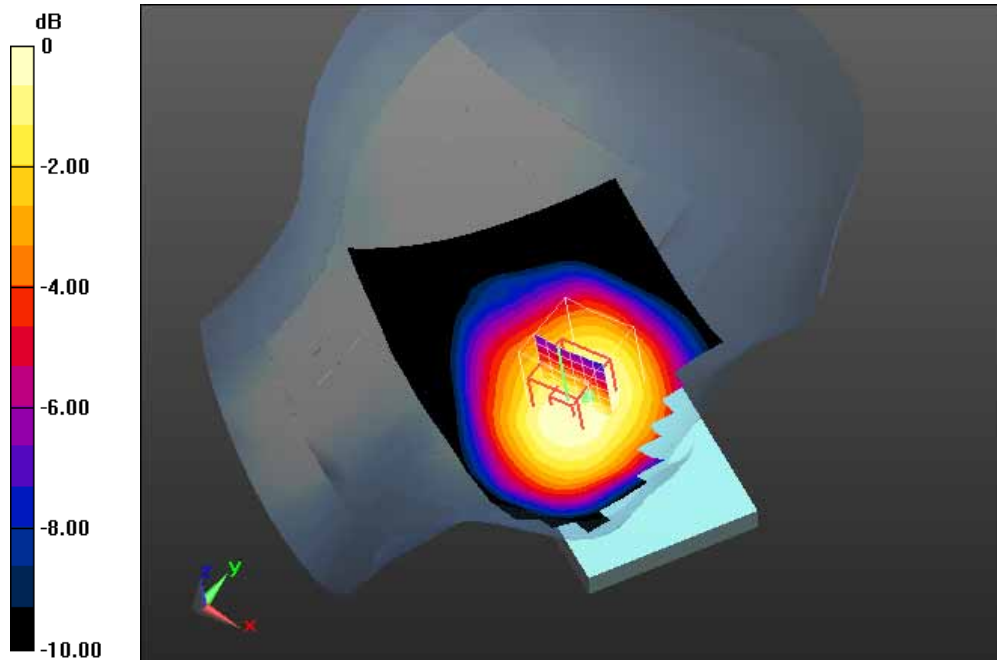
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.967 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.816 W/kg

SAR(1 g) = 0.632 W/kg; SAR(10 g) = 0.470 W/kg

Maximum value of SAR (measured) = 0.661 W/kg



0 dB = 0.661 W/kg = -1.80 dBW/kg

Additional information:

ambient temperature: 22.3°C; liquid temperature: 21.0°C

Date/Time: 27.02.2013 18:23:28

IEEE1528-GSM850 head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

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

Medium parameters used: $f = 848.8$ MHz; $\sigma = 0.9$ S/m; $\epsilon_r = 40.9$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6 dB, b=99.9 dB $\sqrt{\mu}$ V, c=28.7, d=9.4 dB / Y: a=16.2 dB, b=98.3 dB $\sqrt{\mu}$ V, c=28.5, d=9.4 dB / Z: a=18.2 dB, b=99.4 dB $\sqrt{\mu}$ V, c=28.9, d=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

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

grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.659 W/kg

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

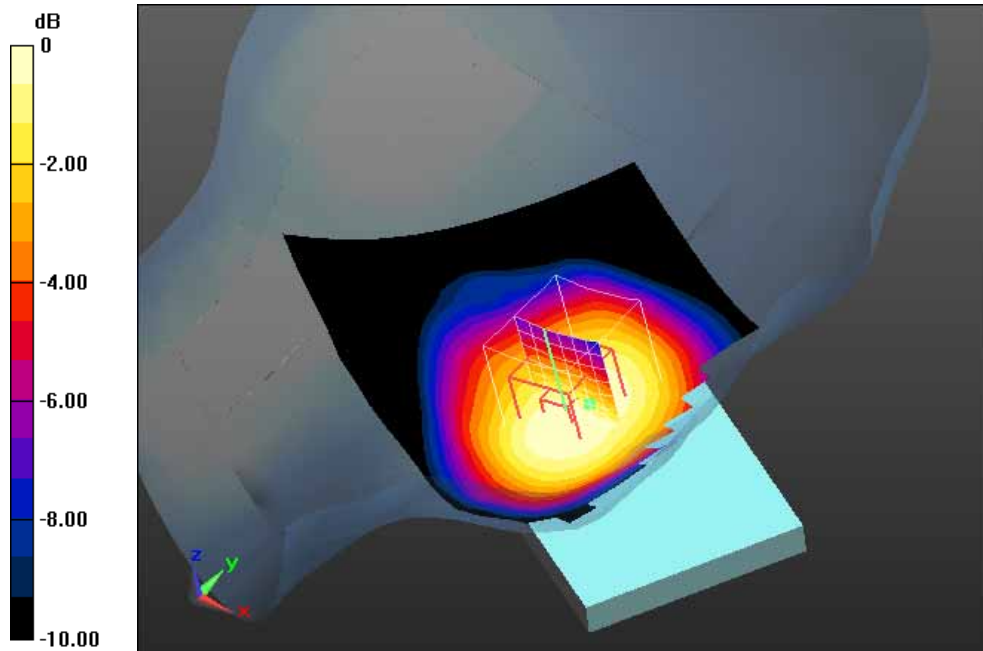
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.190 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.772 W/kg

SAR(1 g) = 0.600 W/kg; SAR(10 g) = 0.447 W/kg

Maximum value of SAR (measured) = 0.627 W/kg



0 dB = 0.627 W/kg = -2.03 dBW/kg

Additional information:

ambient temperature: 22.3°C; liquid temperature: 21.0°C

Date/Time: 28.02.2013 08:05:53

IEEE1528-GSM850 head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

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

Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.88$ S/m; $\epsilon_r = 41.3$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6 dB, b=99.9 dB $\sqrt{\mu}$ V, c=28.7, d=9.4 dB / Y: a=16.2 dB, b=98.3 dB $\sqrt{\mu}$ V, c=28.5, d=9.4 dB / Z: a=18.2 dB, b=99.4 dB $\sqrt{\mu}$ V, c=28.9, d=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

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

dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.368 W/kg

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

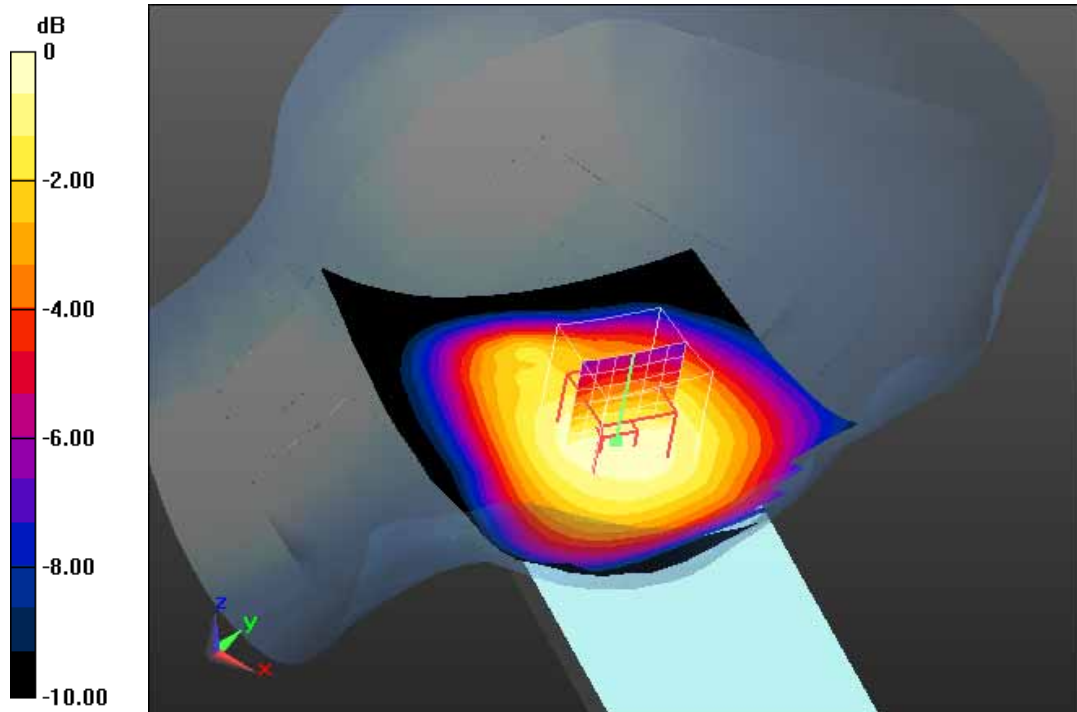
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.221 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.433 W/kg

SAR(1 g) = 0.341 W/kg; SAR(10 g) = 0.260 W/kg

Maximum value of SAR (measured) = 0.360 W/kg



0 dB = 0.360 W/kg = -4.44 dBW/kg

Additional information:

ambient temperature: 22.3°C; liquid temperature: 21.0°C

Date/Time: 28.02.2013 08:36:09

IEEE1528-GSM850 head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

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

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.89$ S/m; $\epsilon_r = 41.1$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6 dB, b=99.9 dB $\sqrt{\mu}$ V, c=28.7, d=9.4 dB / Y: a=16.2 dB, b=98.3 dB $\sqrt{\mu}$ V, c=28.5, d=9.4 dB / Z: a=18.2 dB, b=99.4 dB $\sqrt{\mu}$ V, c=28.9, d=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

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

dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.361 W/kg

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

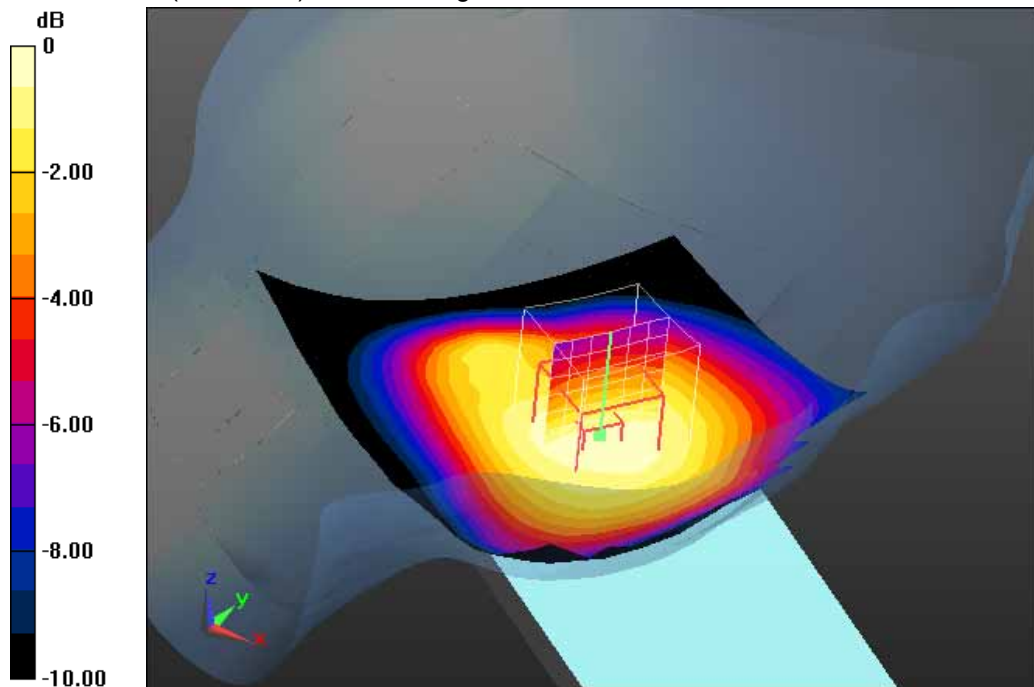
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.071 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.429 W/kg

SAR(1 g) = 0.342 W/kg; SAR(10 g) = 0.259 W/kg

Maximum value of SAR (measured) = 0.360 W/kg



0 dB = 0.360 W/kg = -4.44 dBW/kg

Additional information:

ambient temperature: 22.3°C; liquid temperature: 21.0°C

Date/Time: 27.02.2013 18:56:18

IEEE1528-GSM850 head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

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

Medium parameters used: $f = 848.8$ MHz; $\sigma = 0.9$ S/m; $\epsilon_r = 40.9$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6 dB, b=99.9 dB $\sqrt{\mu}$ V, c=28.7, d=9.4 dB / Y: a=16.2 dB, b=98.3 dB $\sqrt{\mu}$ V, c=28.5, d=9.4 dB / Z: a=18.2 dB, b=99.4 dB $\sqrt{\mu}$ V, c=28.9, d=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

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

dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.329 W/kg

Left-Hand-Side HSL/Tilt Position - Hi/Zoom Scan (8x7x7)/Cube 0: Measurement

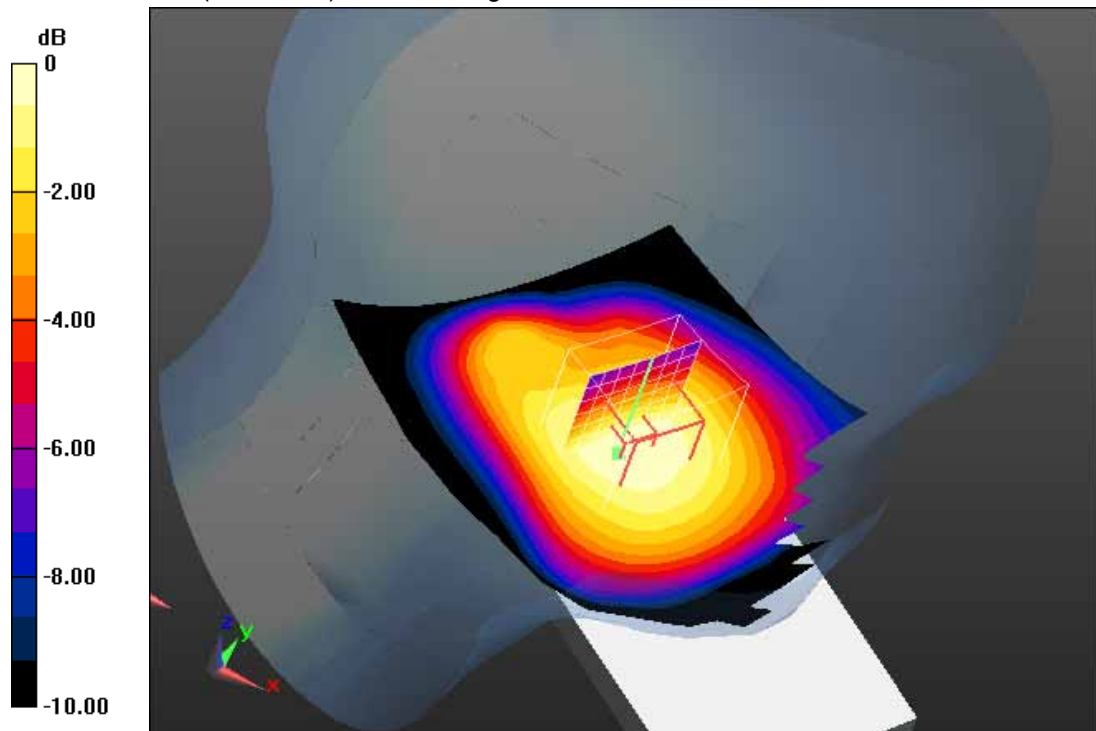
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.338 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.400 W/kg

SAR(1 g) = 0.320 W/kg; SAR(10 g) = 0.244 W/kg

Maximum value of SAR (measured) = 0.337 W/kg



0 dB = 0.337 W/kg = -4.72 dBW/kg

Additional information:

ambient temperature: 22.3°C; liquid temperature: 21.0°C

Date/Time: 27.02.2013 14:39:43

IEEE1528-GSM850 head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

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

Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.88$ S/m; $\epsilon_r = 41.3$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6 dB, b=99.9 dB $\sqrt{\mu}$ V, c=28.7, d=9.4 dB / Y: a=16.2 dB, b=98.3 dB $\sqrt{\mu}$ V, c=28.5, d=9.4 dB / Z: a=18.2 dB, b=99.4 dB $\sqrt{\mu}$ V, c=28.9, d=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

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

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

Maximum value of SAR (interpolated) = 0.721 W/kg

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

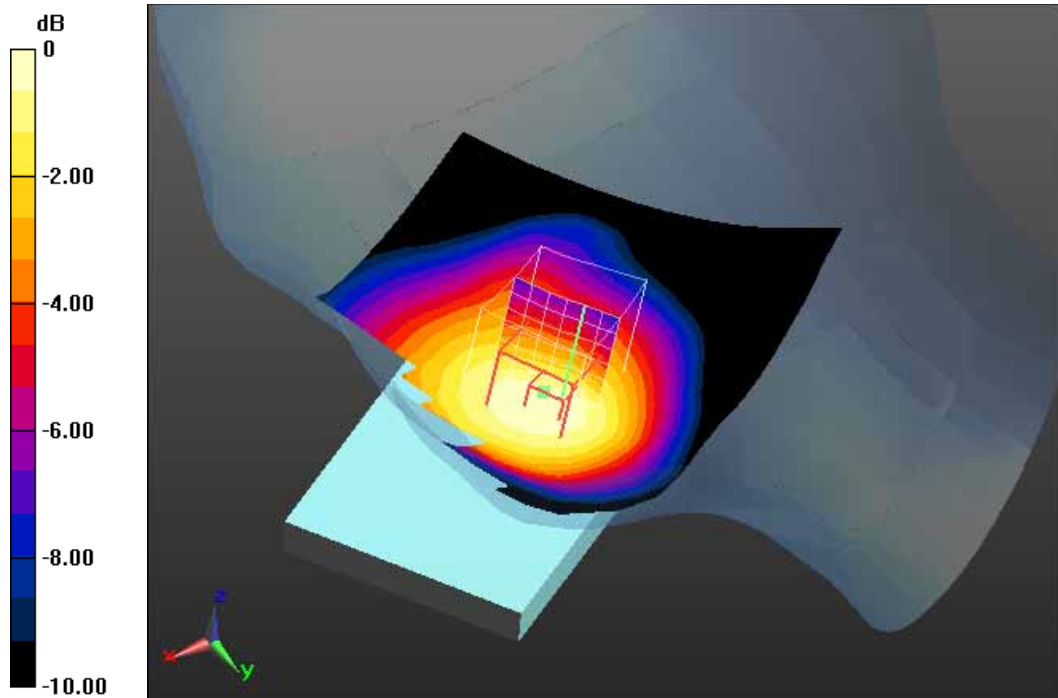
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 29.149 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.866 W/kg

SAR(1 g) = 0.669 W/kg; SAR(10 g) = 0.498 W/kg

Maximum value of SAR (measured) = 0.711 W/kg



0 dB = 0.711 W/kg = -1.48 dBW/kg

Additional information:

ambient temperature: 22.3°C; liquid temperature: 21.0°C

Date/Time: 27.02.2013 15:08:09

IEEE1528-GSM850 head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

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

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.89$ S/m; $\epsilon_r = 41.1$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6 dB, b=99.9 dB $\sqrt{\mu}$ V, c=28.7, d=9.4 dB / Y: a=16.2 dB, b=98.3 dB $\sqrt{\mu}$ V, c=28.5, d=9.4 dB / Z: a=18.2 dB, b=99.4 dB $\sqrt{\mu}$ V, c=28.9, d=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

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

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

Maximum value of SAR (interpolated) = 0.739 W/kg

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

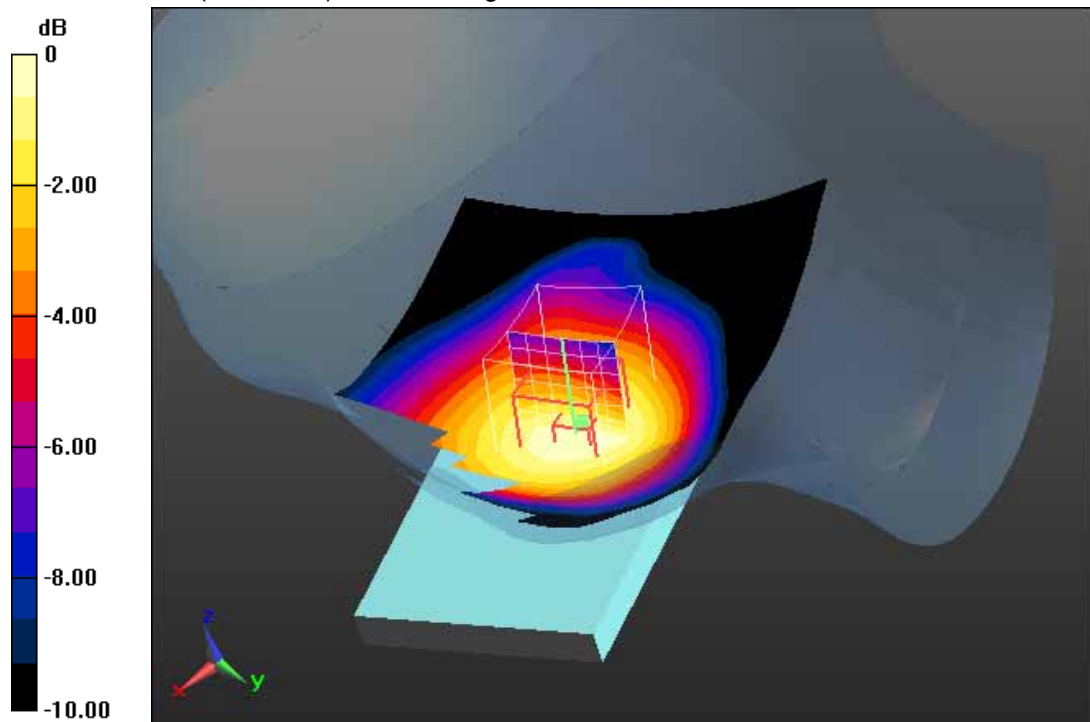
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 29.532 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.880 W/kg

SAR(1 g) = 0.681 W/kg; SAR(10 g) = 0.506 W/kg

Maximum value of SAR (measured) = 0.729 W/kg



0 dB = 0.729 W/kg = -1.37 dBW/kg

Additional information:

ambient temperature: 22.3°C; liquid temperature: 21.0°C

Date/Time: 27.02.2013 15:29:09

IEEE1528-GSM850 head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

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

Medium parameters used: $f = 848.8$ MHz; $\sigma = 0.9$ S/m; $\epsilon_r = 40.9$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6 dB, b=99.9 dB $\sqrt{\mu}$ V, c=28.7, d=9.4 dB / Y: a=16.2 dB, b=98.3 dB $\sqrt{\mu}$ V, c=28.5, d=9.4 dB / Z: a=18.2 dB, b=99.4 dB $\sqrt{\mu}$ V, c=28.9, d=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

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

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

Maximum value of SAR (interpolated) = 0.723 W/kg

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

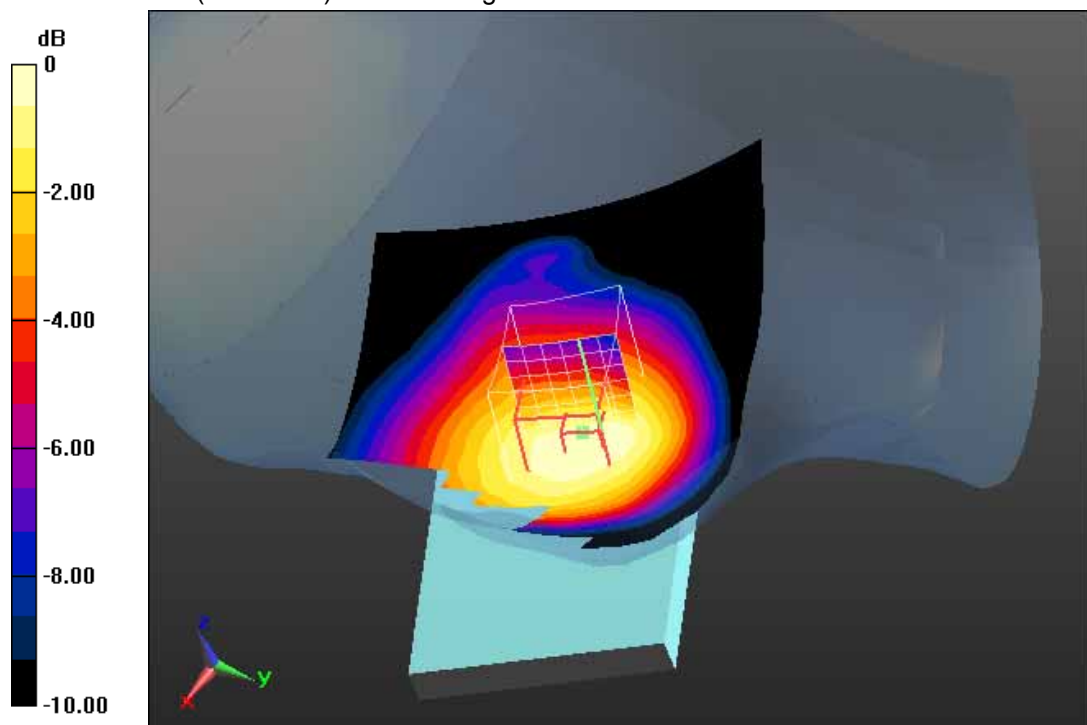
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.733 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.892 W/kg

SAR(1 g) = 0.663 W/kg; SAR(10 g) = 0.493 W/kg

Maximum value of SAR (measured) = 0.701 W/kg



0 dB = 0.701 W/kg = -1.54 dBW/kg

Additional information:

ambient temperature: 22.3°C; liquid temperature: 21.0°C

Date/Time: 27.02.2013 16:59:18

IEEE1528-GSM850 head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

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

Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.88$ S/m; $\epsilon_r = 41.3$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6 dB, b=99.9 dB $\sqrt{\mu}$ V, c=28.7, d=9.4 dB / Y: a=16.2 dB, b=98.3 dB $\sqrt{\mu}$ V, c=28.5, d=9.4 dB / Z: a=18.2 dB, b=99.4 dB $\sqrt{\mu}$ V, c=28.9, d=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

Right-Hand-Side HSL/Tilt Position - Low/Area Scan (111x161x1): Interpolated

grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.360 W/kg

Right-Hand-Side HSL/Tilt Position - Low/Zoom Scan (7x7x7)/Cube 0:

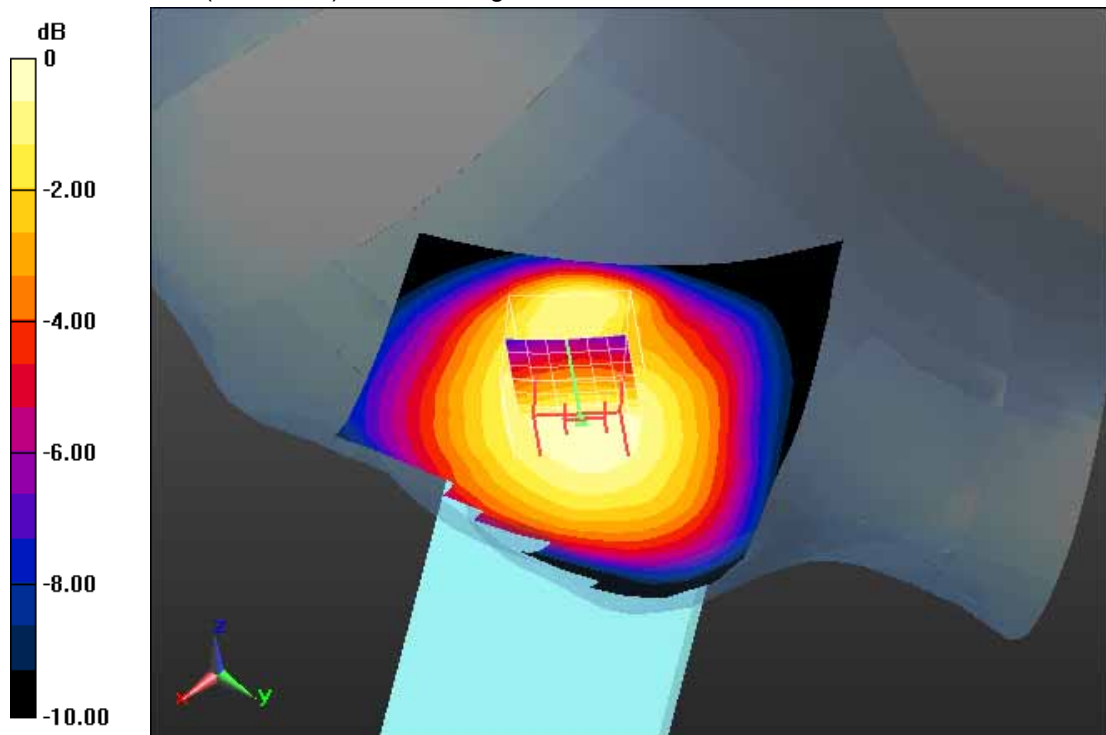
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.384 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.427 W/kg

SAR(1 g) = 0.337 W/kg; SAR(10 g) = 0.255 W/kg

Maximum value of SAR (measured) = 0.358 W/kg



0 dB = 0.358 W/kg = -4.46 dBW/kg

Additional information:

ambient temperature: 22.3°C; liquid temperature: 21.0°C

Date/Time: 27.02.2013 16:14:58

IEEE1528-GSM850 head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

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

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.89$ S/m; $\epsilon_r = 41.1$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6 dB, b=99.9 dB $\sqrt{\mu}$ V, c=28.7, d=9.4 dB / Y: a=16.2 dB, b=98.3 dB $\sqrt{\mu}$ V, c=28.5, d=9.4 dB / Z: a=18.2 dB, b=99.4 dB $\sqrt{\mu}$ V, c=28.9, d=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

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

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

Maximum value of SAR (interpolated) = 0.414 W/kg

Right-Hand-Side HSL/Tilt Position - Middle/Zoom Scan (9x15x7)/Cube 0:

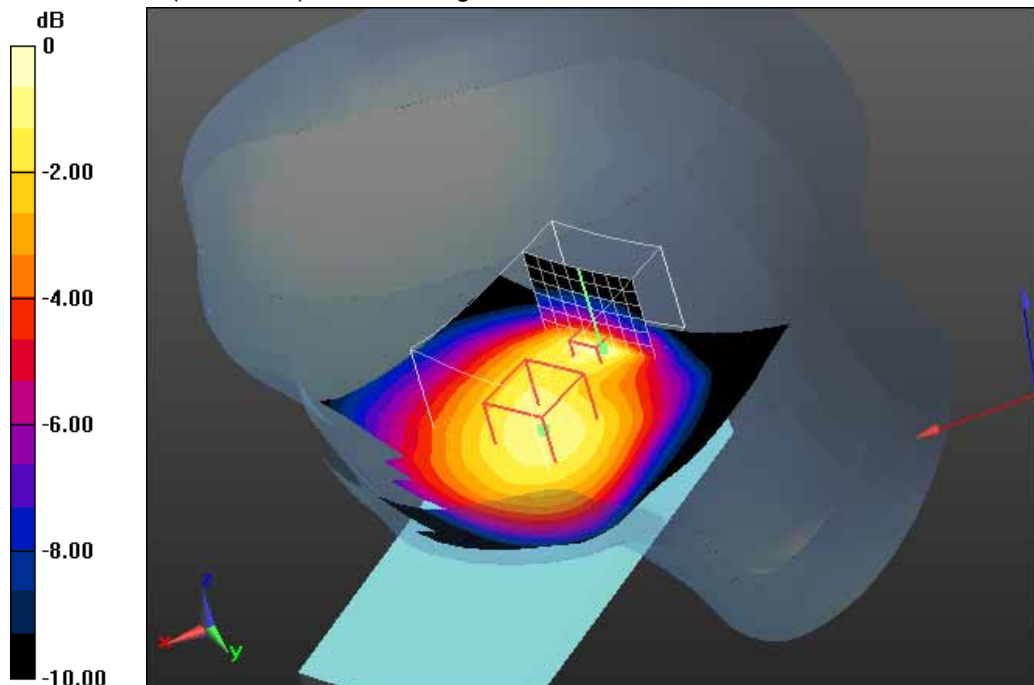
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.637 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.00 W/kg

SAR(1 g) = 0.371 W/kg; SAR(10 g) = 0.254 W/kg

Maximum value of SAR (measured) = 0.428 W/kg



0 dB = 0.428 W/kg = -3.69 dBW/kg

Additional information:

ambient temperature: 22.3°C; liquid temperature: 21.0°C

Date/Time: 27.02.2013 15:51:41

IEEE1528-GSM850 head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

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

Medium parameters used: $f = 848.8$ MHz; $\sigma = 0.9$ S/m; $\epsilon_r = 40.9$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6 dB, b=99.9 dB $\sqrt{\mu}$ V, c=28.7, d=9.4 dB / Y: a=16.2 dB, b=98.3 dB $\sqrt{\mu}$ V, c=28.5, d=9.4 dB / Z: a=18.2 dB, b=99.4 dB $\sqrt{\mu}$ V, c=28.9, d=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

Right-Hand-Side HSL/Tilt Position - High/Area Scan (111x161x1): Interpolated

grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.421 W/kg

Right-Hand-Side HSL/Tilt Position - High/Zoom Scan (8x8x7)/Cube 0:

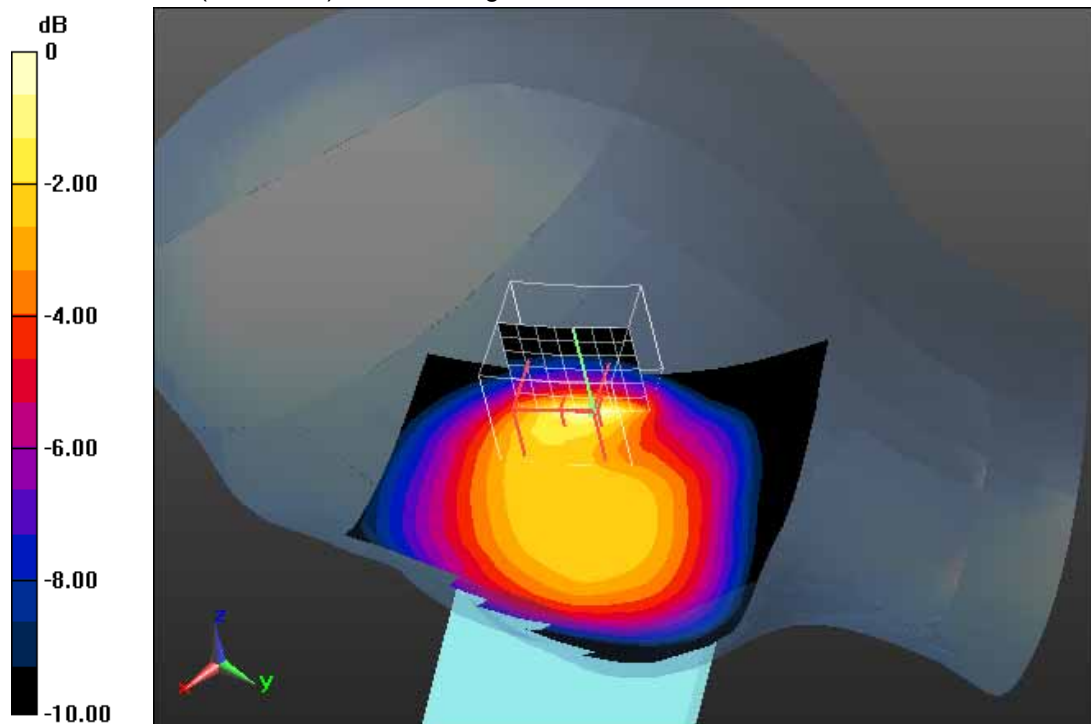
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.028 V/m; Power Drift = 0.25 dB

Peak SAR (extrapolated) = 1.08 W/kg

SAR(1 g) = 0.379 W/kg; SAR(10 g) = 0.198 W/kg

Maximum value of SAR (measured) = 0.434 W/kg



0 dB = 0.434 W/kg = -3.63 dBW/kg

Additional information:

ambient temperature: 22.3°C; liquid temperature: 21.0°C

Date/Time: 07.03.2013 13:16:24 Date/Time: 07.03.2013 13:25:51

OET65-Body-GSM850 GPRS 3TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: PCS 850 GPRS 3TS; Frequency: 824.2 MHz; Duty Cycle: 1:2.7

Medium: M900 Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.96$ mho/m; $\epsilon_r = 55.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

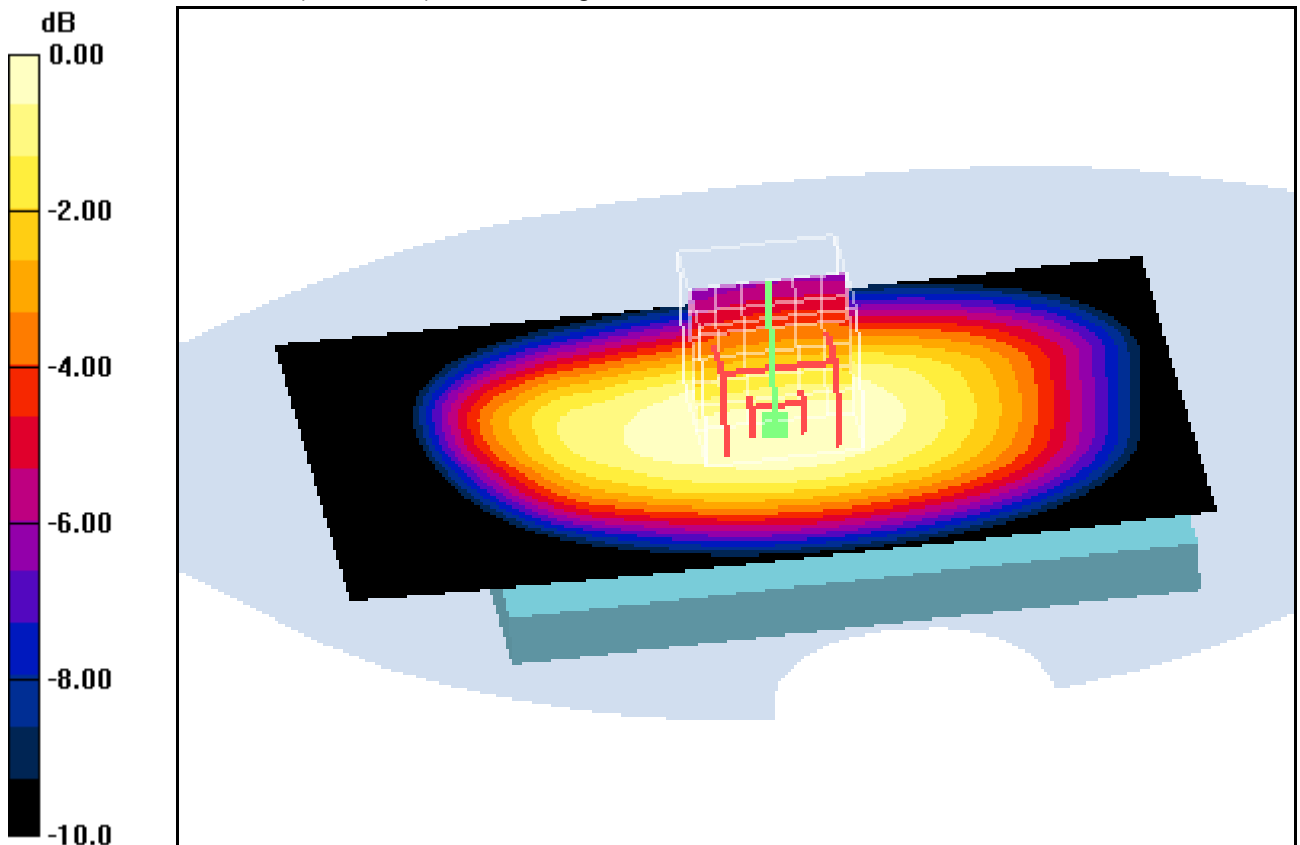
Front position - Low/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.11 mW/g**Front position - Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.1 V/m; Power Drift = -0.127 dB

Peak SAR (extrapolated) = 1.23 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.805 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: 10mm

ambient temperature: 23.7°C; liquid temperature: 22.3°C

Date/Time: 07.03.2013 13:38:47 Date/Time: 07.03.2013 13:49:22

OET65-Body-GSM850 GPRS 3TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: PCS 850 GPRS 3TS; Frequency: 836.6 MHz; Duty Cycle: 1:2.7

Medium: M900 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.97 \text{ mho/m}$; $\epsilon_r = 54.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

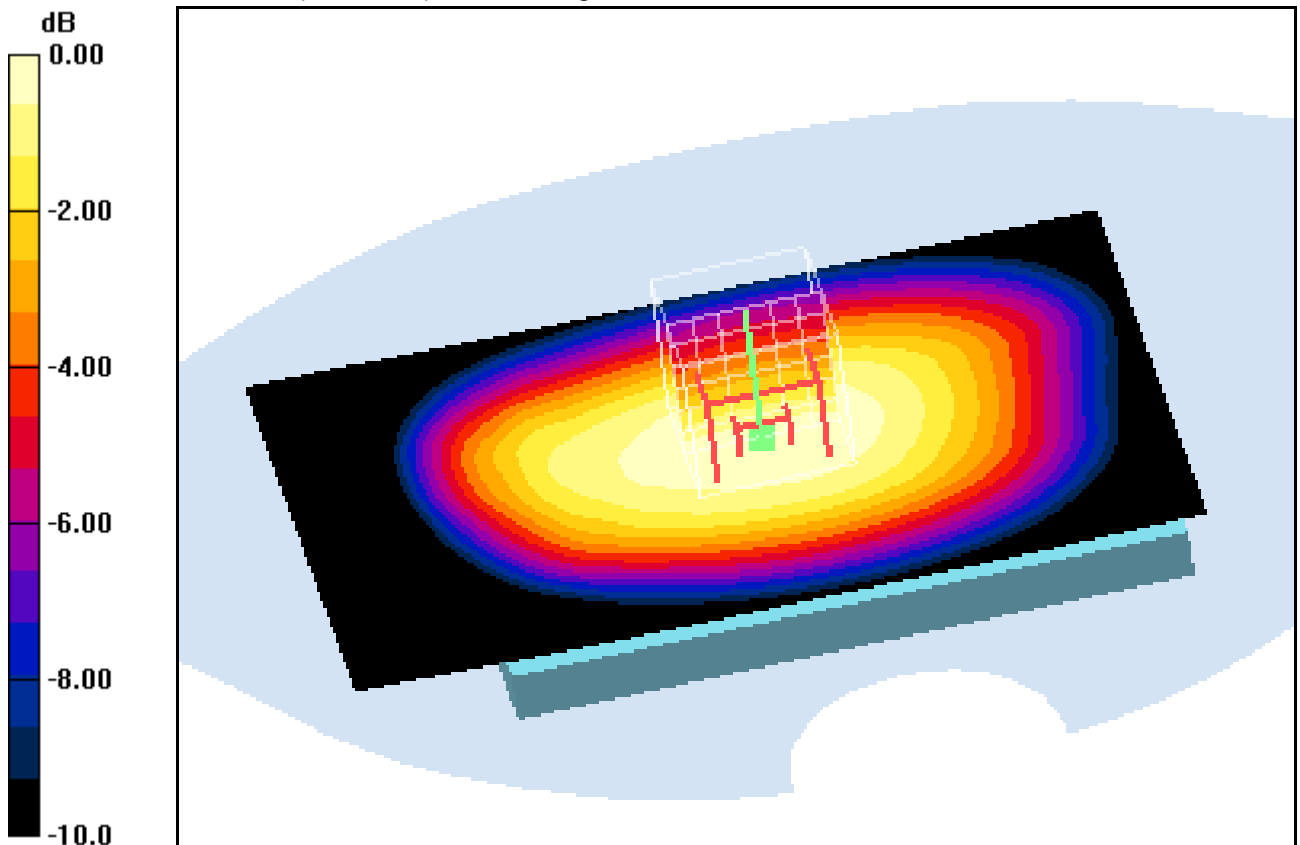
Front position - Middle/Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 1.18 mW/g**Front position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 35.8 V/m; Power Drift = 0.039 dB

Peak SAR (extrapolated) = 1.33 W/kg

SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.867 mW/g

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



0 dB = 1.17mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.7°C; liquid temperature: 22.3°C

Date/Time: 07.03.2013 14:02:32 Date/Time: 07.03.2013 14:11:59

OET65-Body-GSM850 GPRS 3TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: PCS 850 GPRS 3TS; Frequency: 848.8 MHz; Duty Cycle: 1:2.7

Medium: M900 Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 0.99 \text{ mho/m}$; $\epsilon_r = 54.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

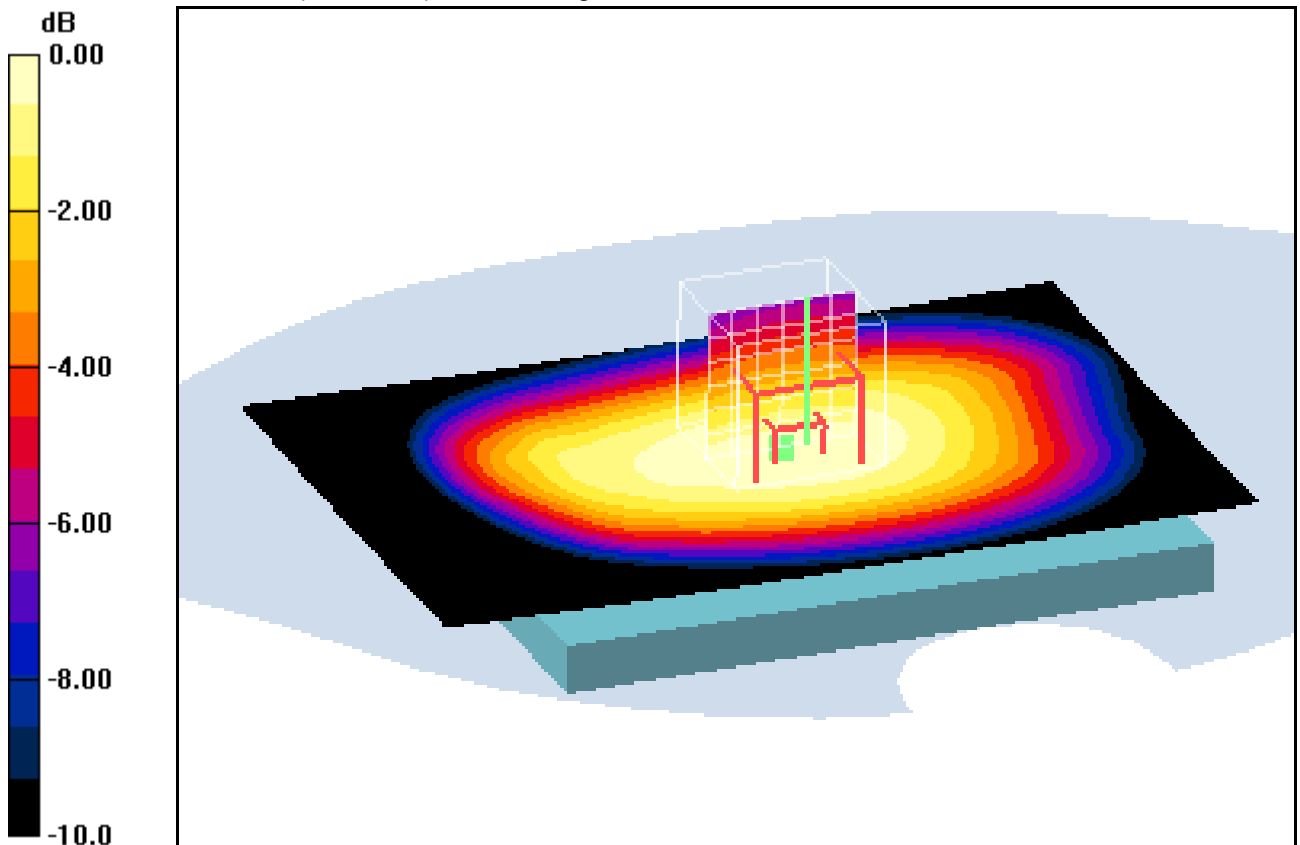
Front position - High/Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 1.21 mW/g**Front position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 36.1 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.36 W/kg

SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.887 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: 23.7°C; liquid temperature: 22.3°C

Date/Time: 07.03.2013 14:25:17 Date/Time: 07.03.2013 14:35:11

OET65-Body-GSM850 GPRS 3TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: PCS 850 GPRS 3TS; Frequency: 824.2 MHz; Duty Cycle: 1:2.7

Medium: M900 Medium parameters used: $f = 824.2 \text{ MHz}$; $\sigma = 0.96 \text{ mho/m}$; $\epsilon_r = 55.1$; $\rho = 1000 \text{ kg/m}^3$

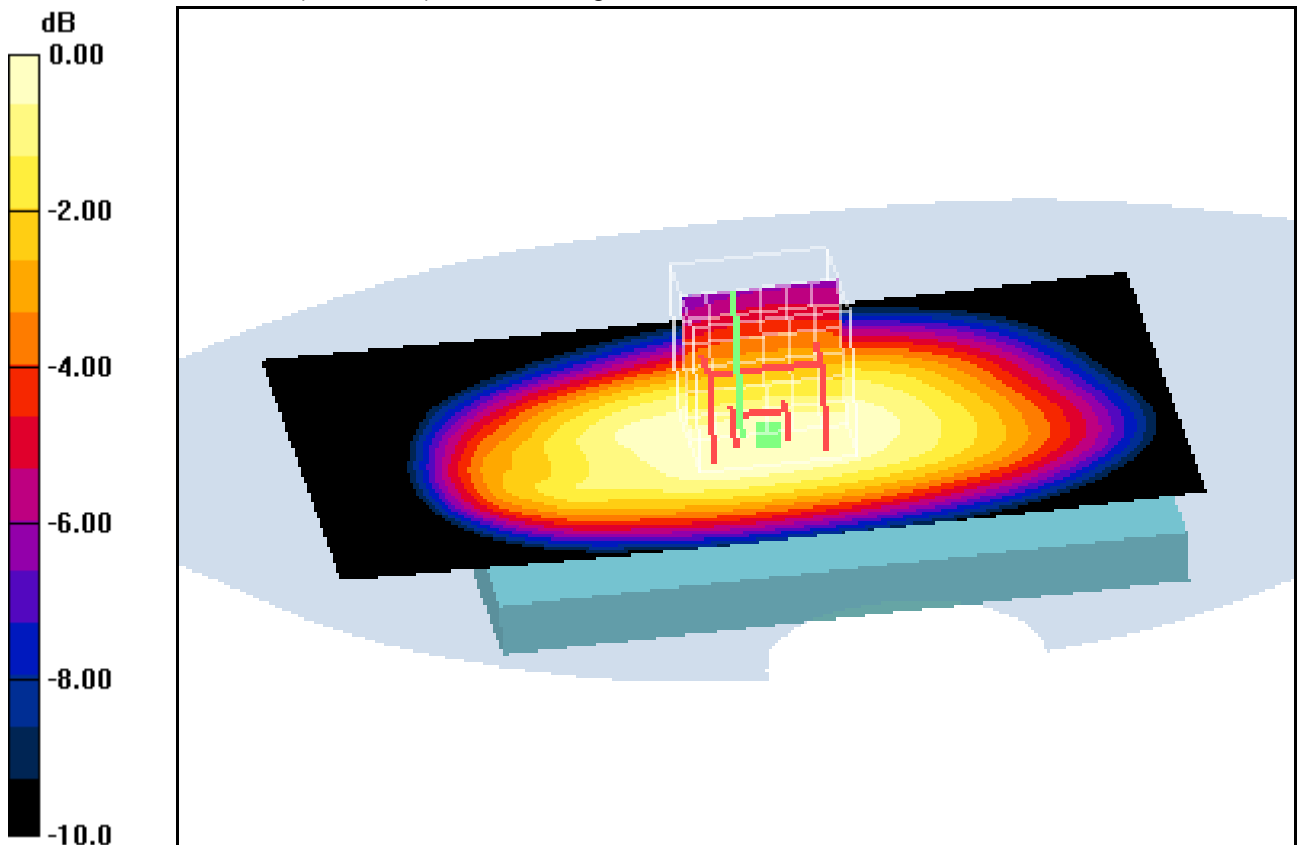
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Low/Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (interpolated) = 0.960 mW/g

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

 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$ Reference Value = 32.6 V/m ; Power Drift = 0.01 dB Peak SAR (extrapolated) = 1.10 W/kg **SAR(1 g) = 0.911 mW/g ; SAR(10 g) = 0.712 mW/g** Maximum value of SAR (measured) = 0.956 mW/g 0 dB = 0.956 mW/g **Additional information:**position or distance of DUT to SAM: 10mm ambient temperature: 23.7°C ; liquid temperature: 22.3°C

Date/Time: 07.03.2013 14:47:11 Date/Time: 07.03.2013 15:01:09

OET65-Body-GSM850 GPRS 3TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: PCS 850 GPRS 3TS; Frequency: 836.6 MHz; Duty Cycle: 1:2.7

Medium: M900 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.97 \text{ mho/m}$; $\epsilon_r = 54.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Middle/Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (interpolated) = 1.01 mW/g

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

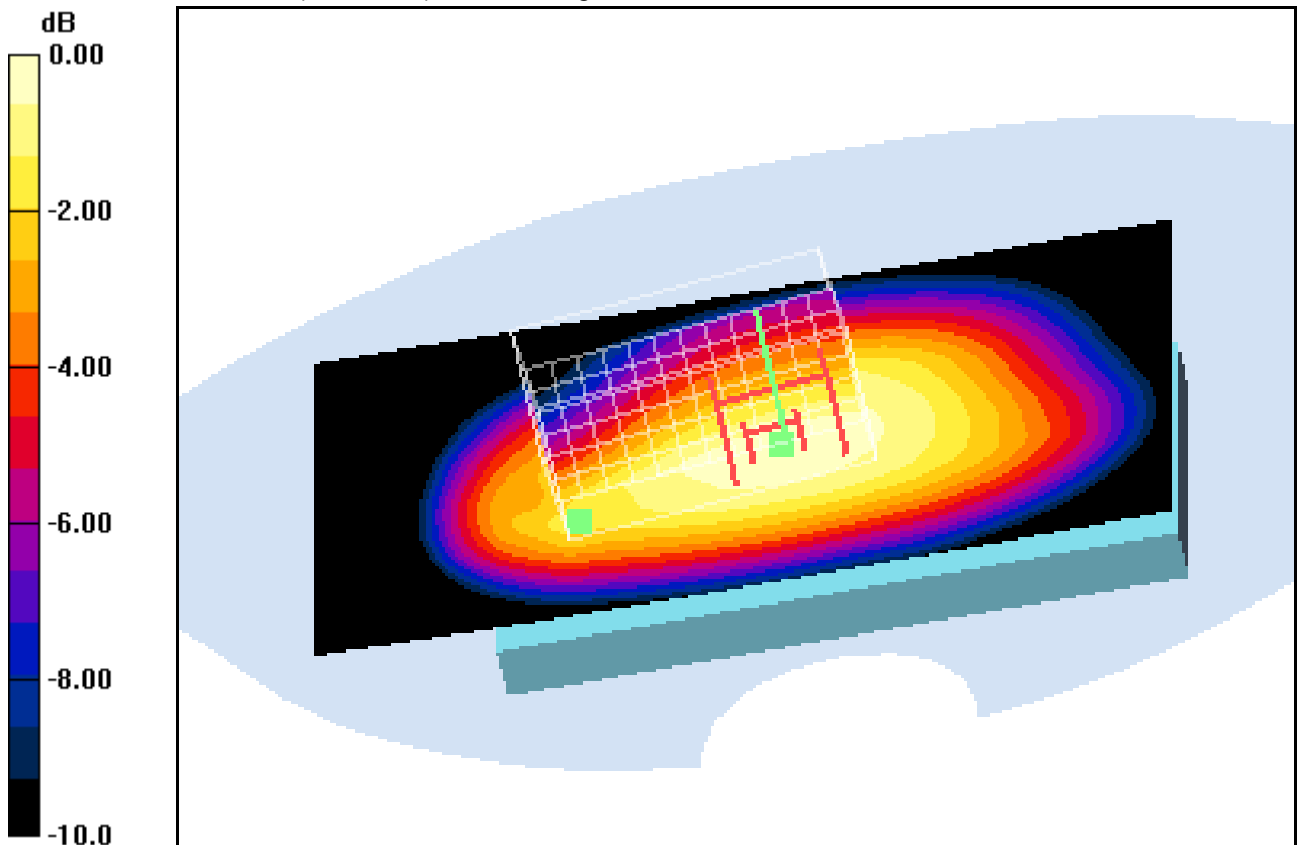
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 33.3 V/m; Power Drift = 0.021 dB

Peak SAR (extrapolated) = 1.21 W/kg

SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.796 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: 23.7°C; liquid temperature: 22.3°C

Date/Time: 07.03.2013 15:30:38 Date/Time: 07.03.2013 15:43:26

OET65-Body-GSM850 GPRS 3TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: PCS 850 GPRS 3TS; Frequency: 848.8 MHz; Duty Cycle: 1:2.7

Medium: M900 Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 0.99 \text{ mho/m}$; $\epsilon_r = 54.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

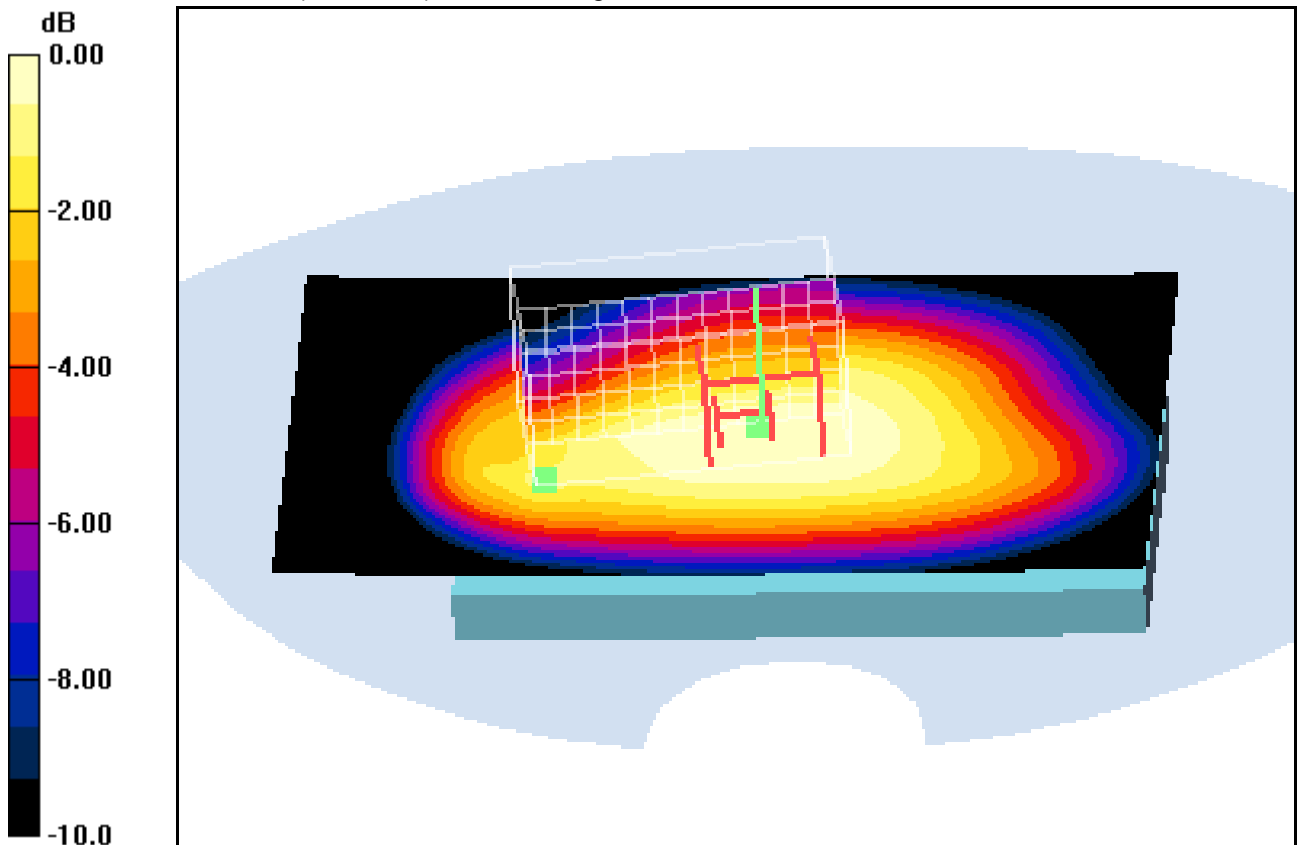
Rear position - High/Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 0.988 mW/g**Rear position - High/Zoom Scan (7x7x7) (7x13x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 32.4 V/m; Power Drift = 0.020 dB

Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.938 mW/g; SAR(10 g) = 0.731 mW/g

Maximum value of SAR (measured) = 0.981 mW/g



0 dB = 0.981 mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.7°C; liquid temperature: 22.3°C

Date/Time: 07.03.2013 16:10:35 Date/Time: 07.03.2013 16:19:04

OET65-Body-GSM850 GPRS 3TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: PCS 850 GPRS 3TS; Frequency: 836.6 MHz; Duty Cycle: 1:2.7

Medium: M900 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.97 \text{ mho/m}$; $\epsilon_r = 54.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Edge left position - Middle/Area Scan (61x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.698 mW/g

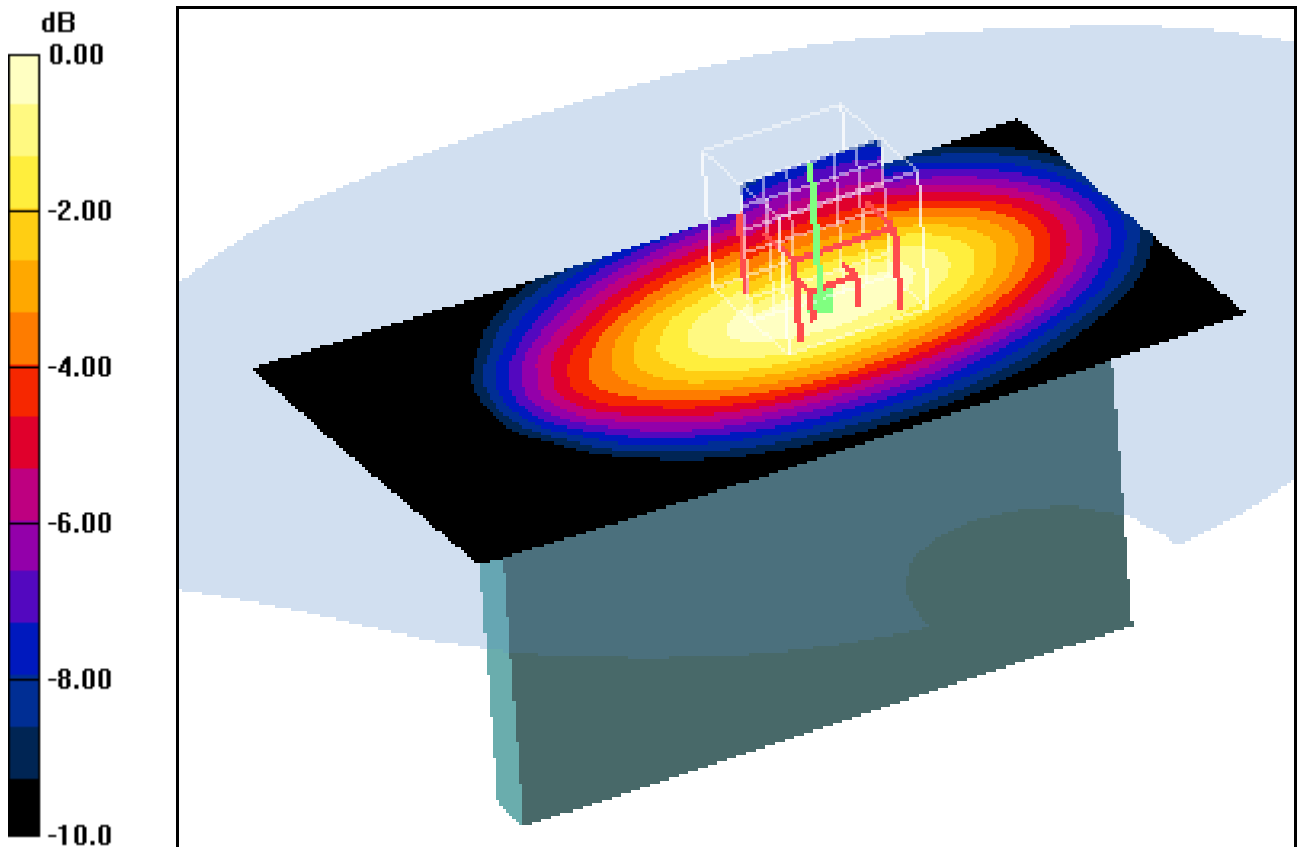
Edge left position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 26.6 V/m; Power Drift = -0.017 dB

Peak SAR (extrapolated) = 0.858 W/kg

SAR(1 g) = 0.648 mW/g; SAR(10 g) = 0.456 mW/g

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



0 dB = 0.697mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.7°C; liquid temperature: 22.3°C

Date/Time: 07.03.2013 16:32:35 Date/Time: 07.03.2013 16:41:07

OET65-Body-GSM850 GPRS 3TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: PCS 850 GPRS 3TS; Frequency: 836.6 MHz; Duty Cycle: 1:2.7

Medium: M900 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.97 \text{ mho/m}$; $\epsilon_r = 54.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Edge right position - Middle/Area Scan (61x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.615 mW/g

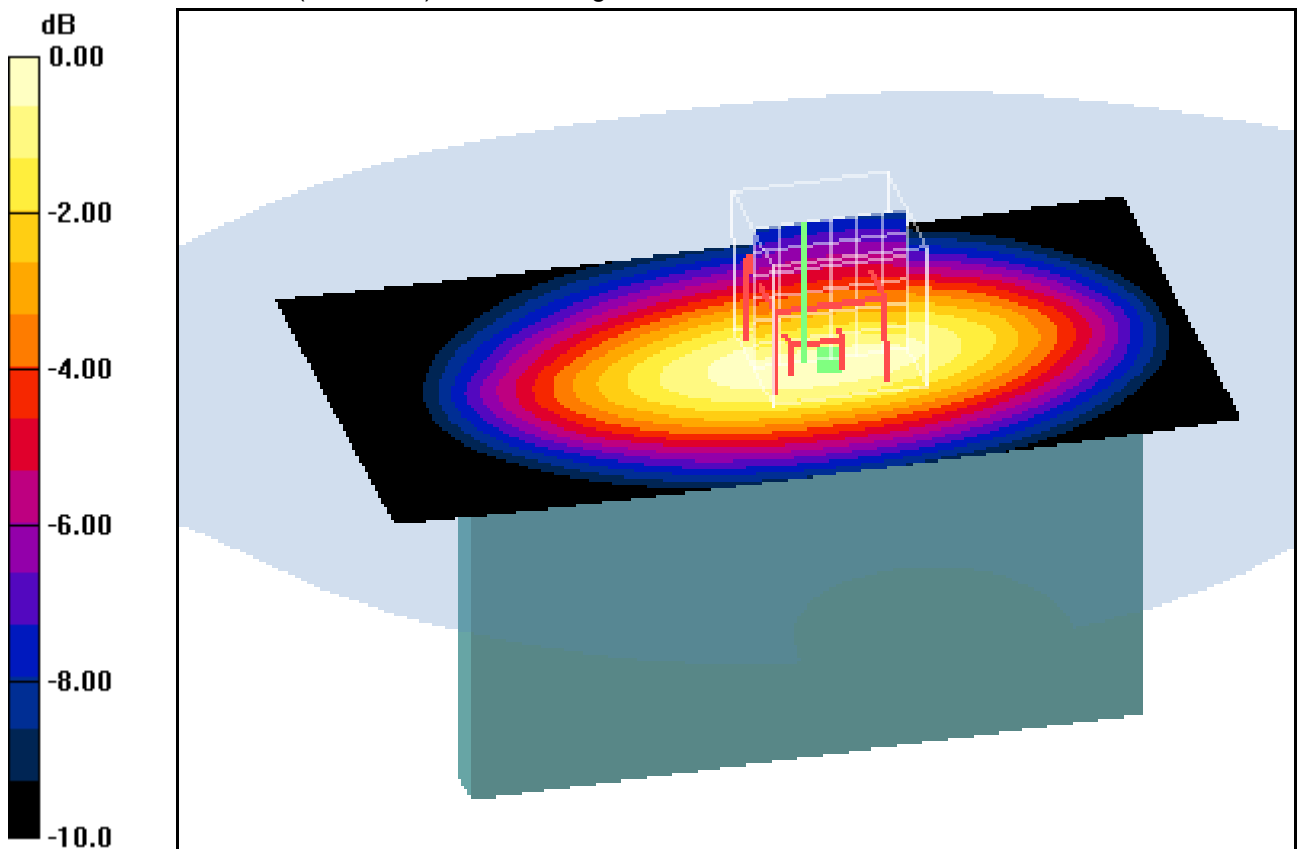
Edge right position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 25.4 V/m; Power Drift = -0.023 dB

Peak SAR (extrapolated) = 0.760 W/kg

SAR(1 g) = 0.567 mW/g; SAR(10 g) = 0.398 mW/g

Maximum value of SAR (measured) = 0.609 mW/g



0 dB = 0.609mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.7°C; liquid temperature: 22.3°C

Date/Time: 07.03.2013 16:54:53 Date/Time: 07.03.2013 17:00:12

OET65-Body-GSM850 GPRS 3TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: PCS 850 GPRS 3TS; Frequency: 836.6 MHz; Duty Cycle: 1:2.7

Medium: M900 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.97 \text{ mho/m}$; $\epsilon_r = 54.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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) = 0.193 mW/g

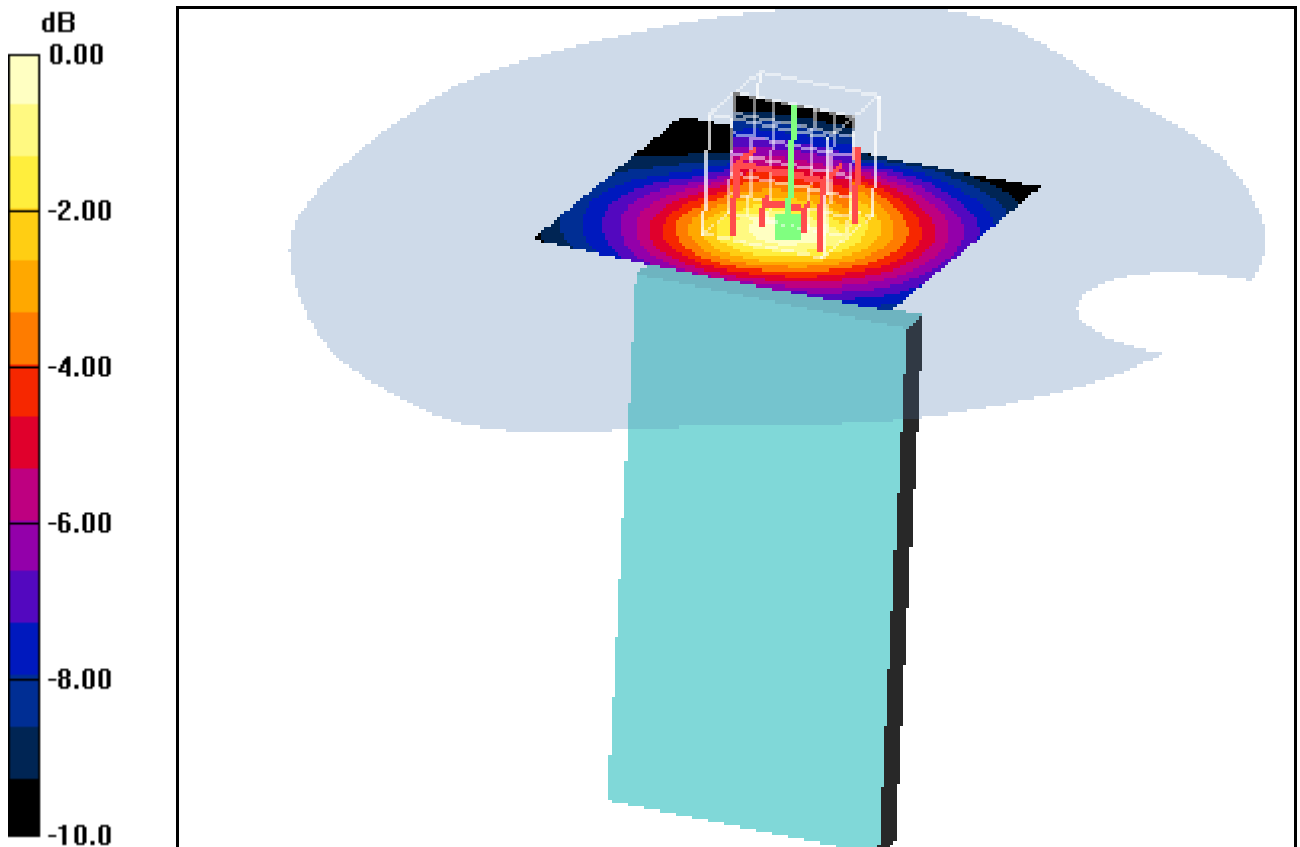
Edge bottom position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 14.1 V/m; Power Drift = -0.031 dB

Peak SAR (extrapolated) = 0.300 W/kg

SAR(1 g) = 0.172 mW/g; SAR(10 g) = 0.109 mW/g

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



0 dB = 0.186mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.7°C; liquid temperature: 22.3°C

Date/Time: 08.03.2013 08:56:57 Date/Time: 08.03.2013 09:06:14

OET65-Body-GSM850 GPRS 3TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: PCS 850 GPRS 3TS; Frequency: 848.8 MHz; Duty Cycle: 1:2.7

Medium: M900 Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 0.99 \text{ mho/m}$; $\epsilon_r = 54.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

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

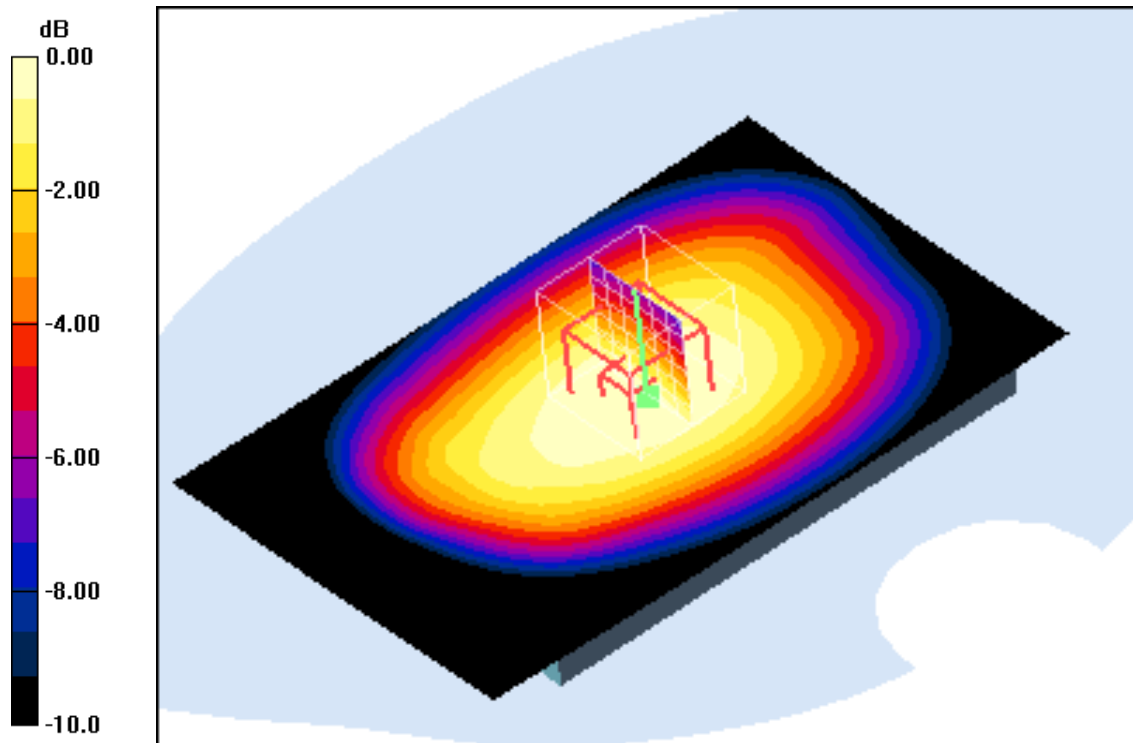
Front position - High WC/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 35.3 V/m; Power Drift = -0.022 dB

Peak SAR (extrapolated) = 1.31 W/kg

SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.850 mW/g

Maximum value of SAR (measured) = 1.15 mW/g



0 dB = 1.15mW/g

Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.7°C; liquid temperature: 22.3°C

Date/Time: 08.03.2013 08:10:29 Date/Time: 08.03.2013 08:19:46

OET65-Body-GSM850 GPRS 3TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: PCS 850 GPRS 3TS; Frequency: 824.2 MHz; Duty Cycle: 1:2.7

Medium: M900 Medium parameters used: $f = 824.2 \text{ MHz}$; $\sigma = 0.96 \text{ mho/m}$; $\epsilon_r = 55.1$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.931 mW/g

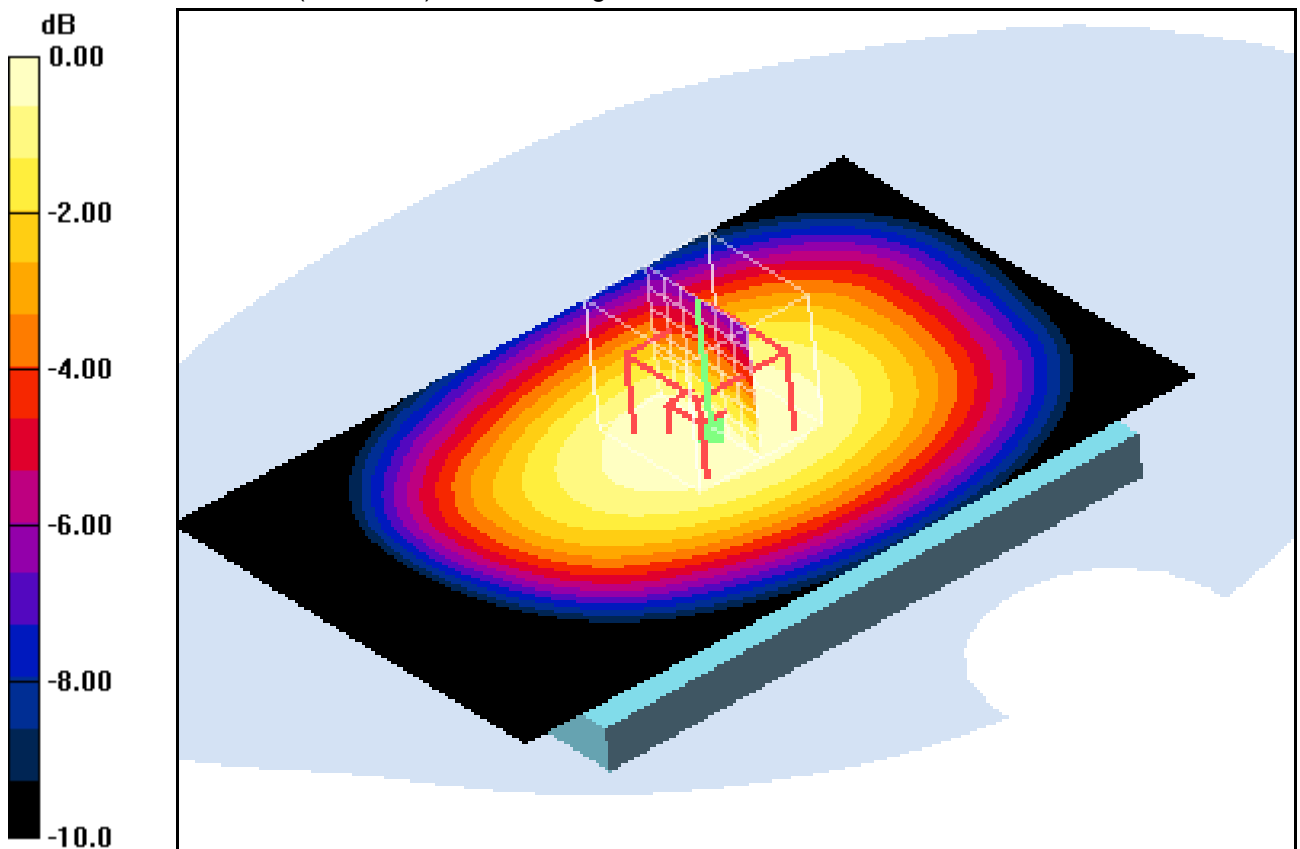
Front position - Low 15mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 32.0 V/m; Power Drift = -0.047 dB

Peak SAR (extrapolated) = 1.04 W/kg

SAR(1 g) = 0.870 mW/g; SAR(10 g) = 0.670 mW/g

Maximum value of SAR (measured) = 0.919 mW/g



0 dB = 0.919mW/g

Additional information:

position or distance of DUT to SAM: 15mm

ambient temperature: 23.7°C; liquid temperature: 22.3°C

Date/Time: 08.03.2013 08:32:20 Date/Time: 08.03.2013 08:41:37

OET65-Body-GSM850 GPRS 3TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: PCS 850 GPRS 3TS; Frequency: 836.6 MHz; Duty Cycle: 1:2.7

Medium: M900 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.97 \text{ mho/m}$; $\epsilon_r = 54.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

Maximum value of SAR (interpolated) = 0.972 mW/g

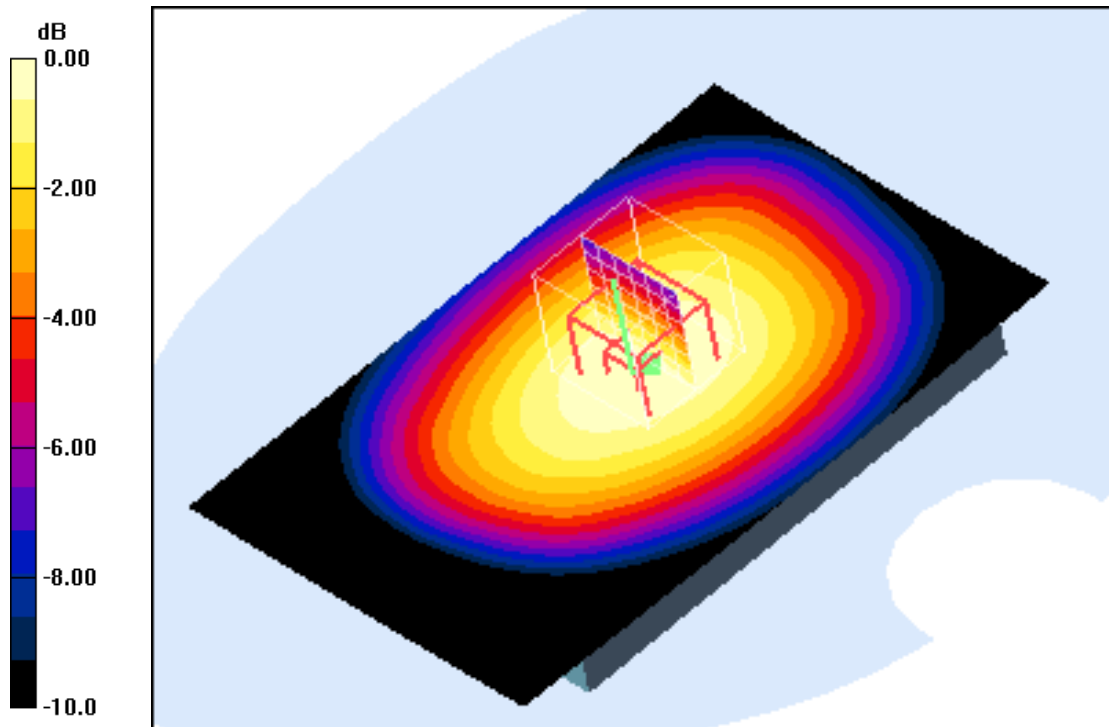
Front position - Middle 15mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0:Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 32.9 V/m; Power Drift = 0.021 dB

Peak SAR (extrapolated) = 1.13 W/kg

SAR(1 g) = 0.931 mW/g; SAR(10 g) = 0.715 mW/g

Maximum value of SAR (measured) = 0.977 mW/g



0 dB = 0.977mW/g

Additional information:

position or distance of DUT to SAM: 15mm

ambient temperature: 23.7°C; liquid temperature: 22.3°C

Date/Time: 07.03.2013 17:19:55 Date/Time: 07.03.2013 17:29:33

OET65-Body-GSM850 GPRS 3TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: PCS 850 GPRS 3TS; Frequency: 848.8 MHz; Duty Cycle: 1:2.7

Medium: M900 Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 0.99 \text{ mho/m}$; $\epsilon_r = 54.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

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

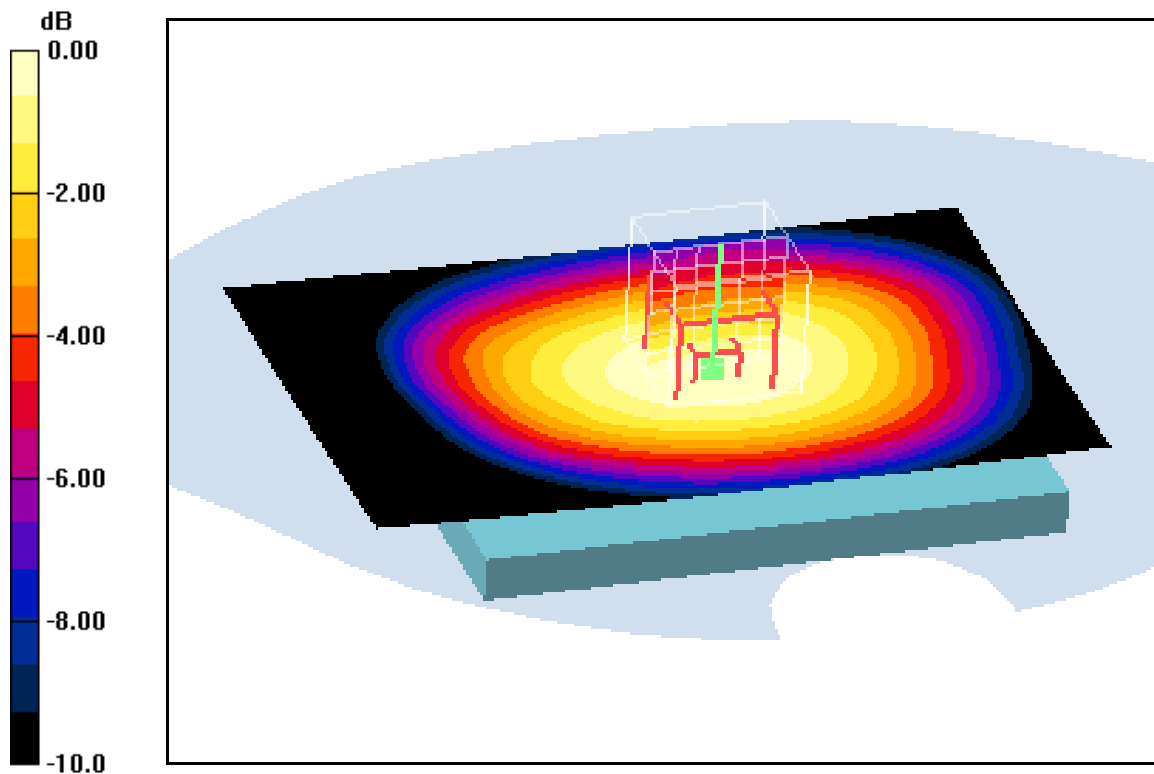
Front position - High 15mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 32.8 V/m; Power Drift = -0.062 dB

Peak SAR (extrapolated) = 1.15 W/kg

SAR(1 g) = 0.962 mW/g; SAR(10 g) = 0.739 mW/g

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



0 dB = 1.01mW/g

Additional information:

position or distance of DUT to SAM: 15mm

ambient temperature: 23.7°C; liquid temperature: 22.3°C

Date/Time: 07.03.2013 17:45:29 Date/Time: 07.03.2013 18:00:27

OET65-Body-GSM850 GPRS 1TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M900 Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 0.99 \text{ mho/m}$; $\epsilon_r = 54.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

Maximum value of SAR (interpolated) = 0.442 mW/g

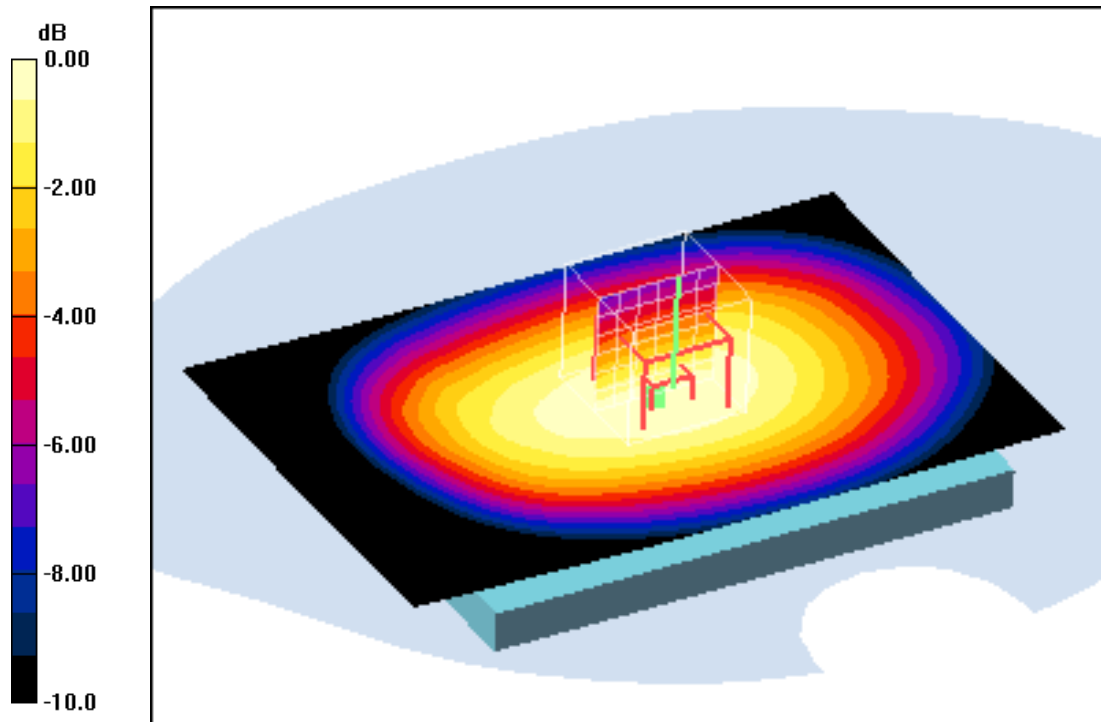
Front position - High 15mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 21.7 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.508 W/kg

SAR(1 g) = 0.420 mW/g; SAR(10 g) = 0.323 mW/g

Maximum value of SAR (measured) = 0.442 mW/g



0 dB = 0.442mW/g

Additional information:

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

ambient temperature: 23.7°C; liquid temperature: 22.3°C

Date/Time: 07.03.2013 18:13:59 Date/Time: 07.03.2013 18:23:12

OET65-Body-GSM850 GPRS 3TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: PCS 850 GPRS 3TS; Frequency: 848.8 MHz; Duty Cycle: 1:2.7

Medium: M900 Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 0.99 \text{ mho/m}$; $\epsilon_r = 54.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

WC Front position - High 15mm/Area Scan (71x111x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.934 mW/g

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

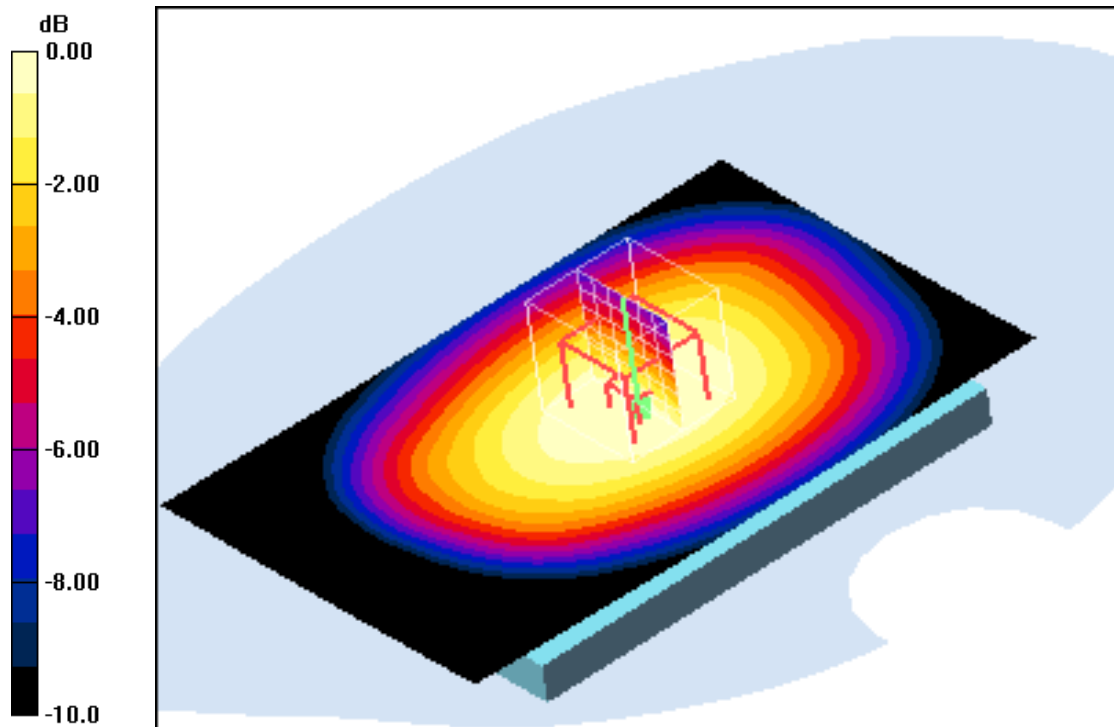
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 31.0 V/m; Power Drift = -0.122 dB

Peak SAR (extrapolated) = 1.04 W/kg

SAR(1 g) = 0.863 mW/g; SAR(10 g) = 0.660 mW/g

Maximum value of SAR (measured) = 0.910 mW/g



0 dB = 0.910mW/g

Additional information:

position or distance of DUT to SAM: 15mm

ambient temperature: 23.7°C; liquid temperature: 22.3°C

Annex B.2: GSM 1900MHz

Date/Time: 21.03.2013 13:55:22 Date/Time: 21.03.2013 14:03:47

IEEE1528_OET65-LeftHandSide-GSM1900**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: HSL1900 Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.34$ mho/m; $\epsilon_r = 39.2$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.92, 4.92, 4.92); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: dx=15mm, dy=15mm

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

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

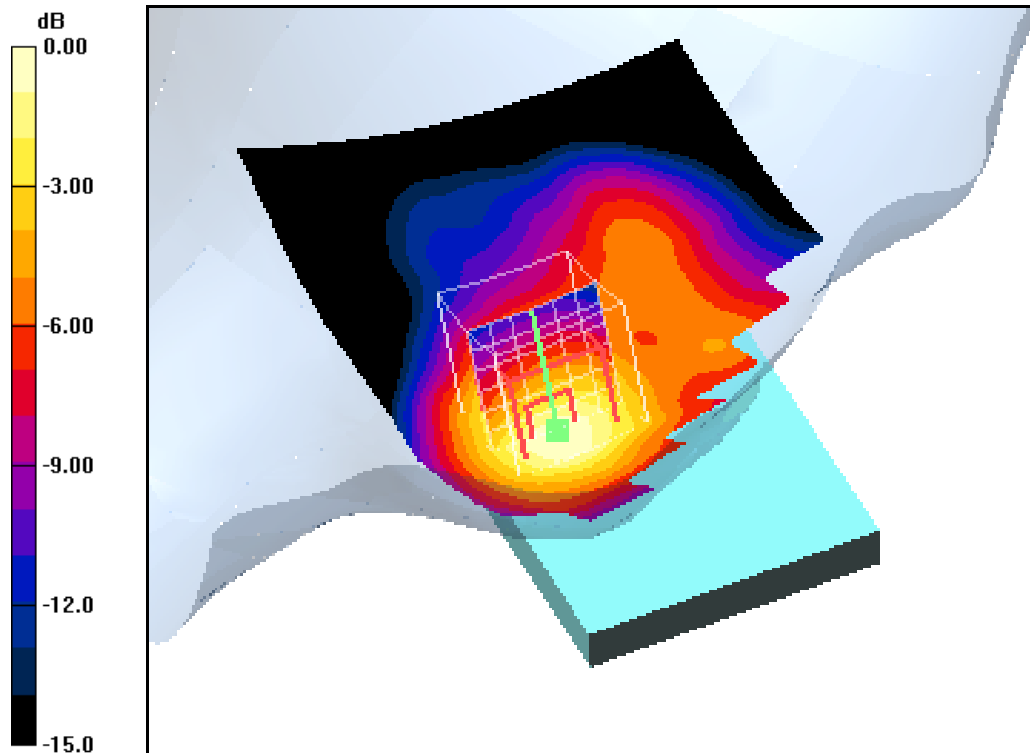
dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.6 V/m; Power Drift = -0.016 dB

Peak SAR (extrapolated) = 0.302 W/kg

SAR(1 g) = 0.213 mW/g; SAR(10 g) = 0.134 mW/g

Maximum value of SAR (measured) = 0.231 mW/g

**Additional information:**

ambient temperature: 22.0°C; liquid temperature: 21.8°C

Date/Time: 21.03.2013 13:33:37 Date/Time: 21.03.2013 13:42:09

IEEE1528_OET65-LeftHandSide-GSM1900**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: HSL1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.92, 4.92, 4.92); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.246 mW/g

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

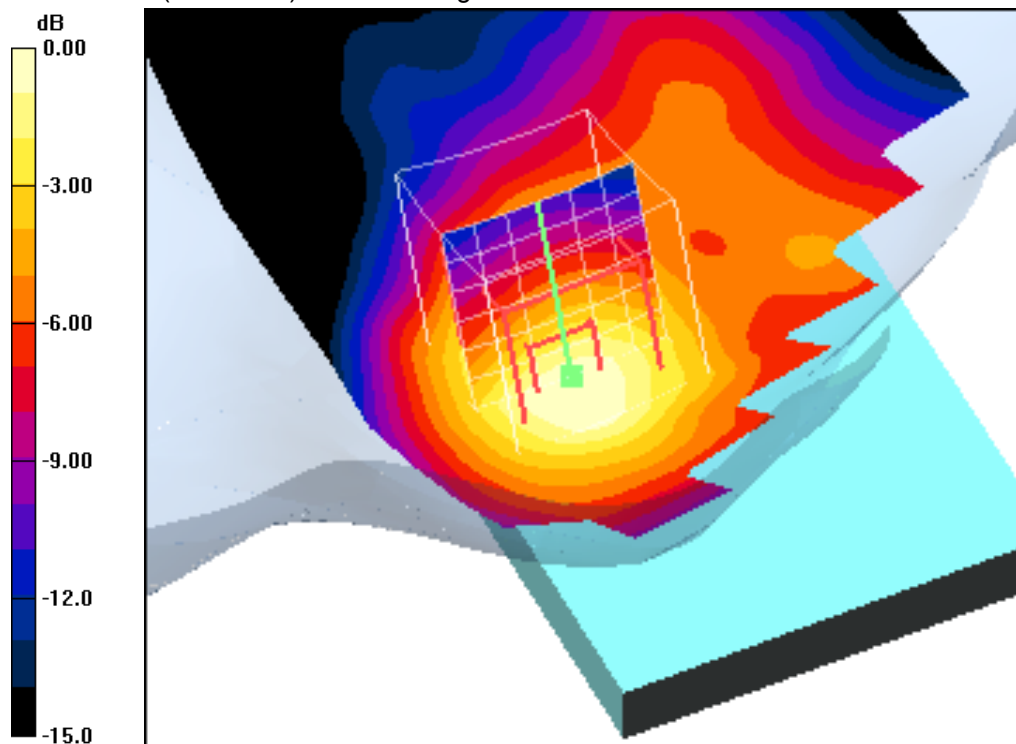
dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.7 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 0.320 W/kg

SAR(1 g) = 0.220 mW/g; SAR(10 g) = 0.136 mW/g

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



0 dB = 0.238mW/g

Additional information:

ambient temperature: 22.0°C; liquid temperature: 21.8°C

Date/Time: 21.03.2013 13:12:11 Date/Time: 21.03.2013 13:21:21

IEEE1528_OET65-LeftHandSide-GSM1900**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: HSL1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.39 \text{ mho/m}$; $\epsilon_r = 38.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.92, 4.92, 4.92); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

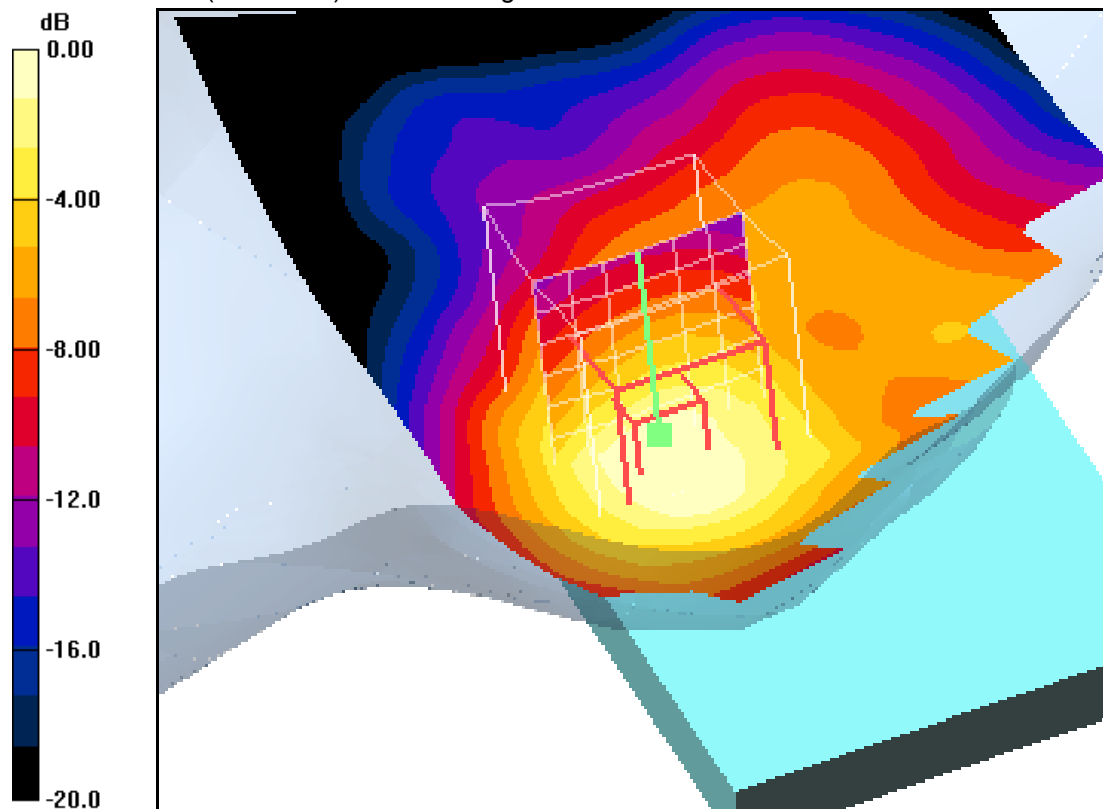
Touch position - High/Area Scan (71x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 0.270 mW/g**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 14.4 V/m; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 0.363 W/kg

SAR(1 g) = 0.244 mW/g; SAR(10 g) = 0.148 mW/g

Maximum value of SAR (measured) = 0.267 mW/g



0 dB = 0.267mW/g

Additional information:

ambient temperature: 22.0°C; liquid temperature: 21.8°C

Date/Time: 21.03.2013 11:30:06 Date/Time: 21.03.2013 11:41:36 Date/Time: 21.03.2013 12:27:21

IEEE1528_OET65-LeftHandSide-GSM1900**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: HSL1900 Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.34$ mho/m; $\epsilon_r = 39.2$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.92, 4.92, 4.92); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.041 mW/g

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

Reference Value = 5.62 V/m; Power Drift = -0.012 dB

Peak SAR (extrapolated) = 0.050 W/kg

SAR(1 g) = 0.036 mW/g; SAR(10 g) = 0.023 mW/g

Maximum value of SAR (measured) = 0.039 mW/g

Tilt position - Low/Zoom Scan (7x7x7) 2 (7x7x7)/Cube 0: Measurement grid:

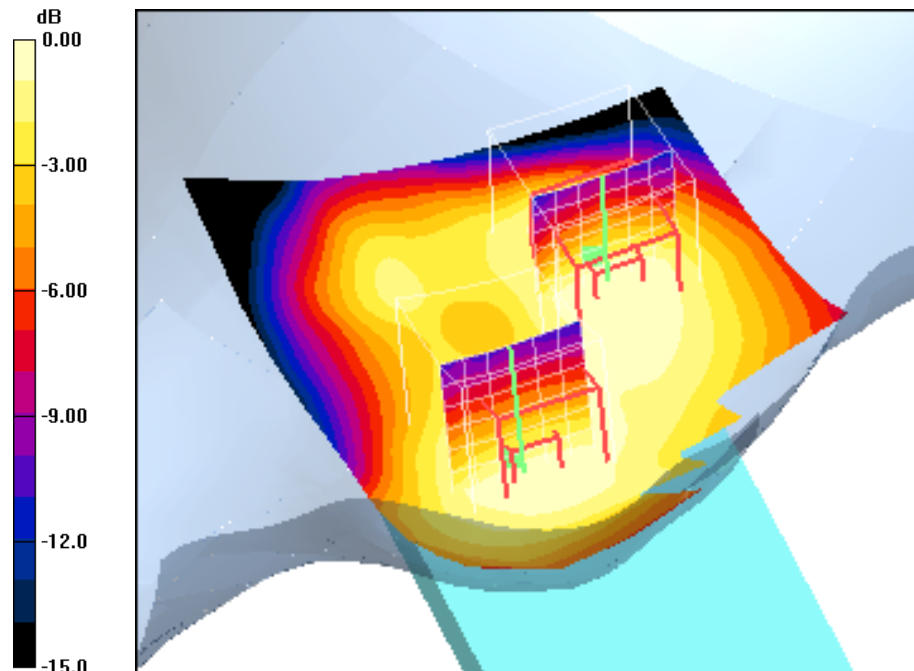
dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.62 V/m; Power Drift = -0.012 dB

Peak SAR (extrapolated) = 0.046 W/kg

SAR(1 g) = 0.032 mW/g; SAR(10 g) = 0.022 mW/g

Maximum value of SAR (measured) = 0.034 mW/g



0 dB = 0.034mW/g

Additional information:

ambient temperature: 22.0°C; liquid temperature: 21.8°C

Date/Time: 21.03.2013 11:53:23 Date/Time: 21.03.2013 12:02:42 Date/Time: 21.03.2013 12:14:41

IEEE1528_OET65-LeftHandSide-GSM1900**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: HSL1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.92, 4.92, 4.92); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.038 mW/g

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

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

Reference Value = 5.59 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 0.050 W/kg

SAR(1 g) = 0.036 mW/g; SAR(10 g) = 0.024 mW/g

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

Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid:

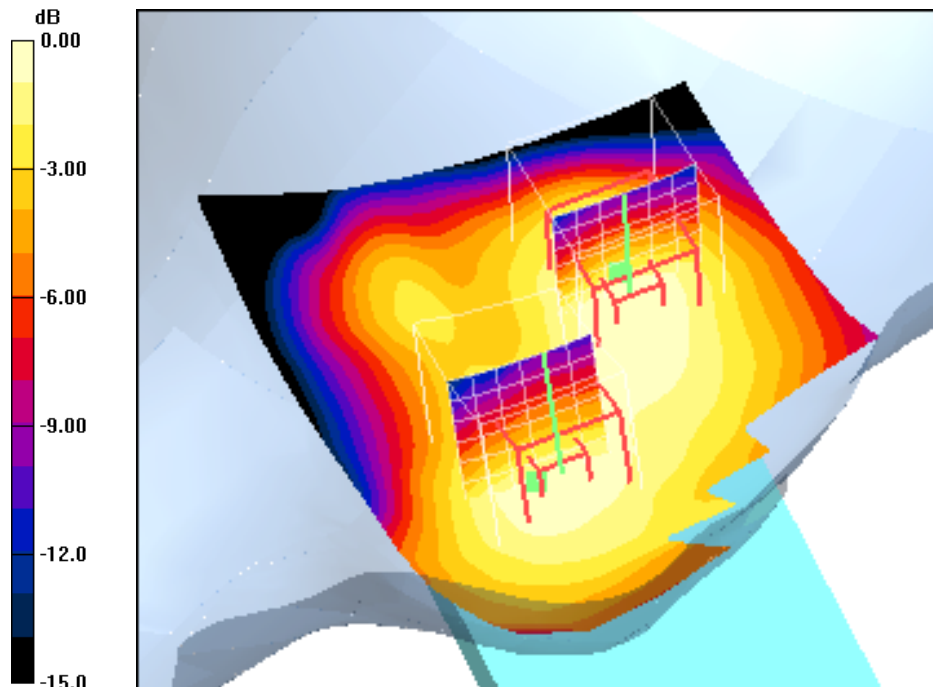
dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.59 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 0.049 W/kg

SAR(1 g) = 0.034 mW/g; SAR(10 g) = 0.023 mW/g

Maximum value of SAR (measured) = 0.037 mW/g



0 dB = 0.037mW/g

Additional information:

ambient temperature: 22.0°C; liquid temperature: 21.8°C

Date/Time: 21.03.2013 12:39:20 Date/Time: 21.03.2013 12:48:06 Date/Time: 21.03.2013 12:59:04

IEEE1528_OET65-LeftHandSide-GSM1900**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

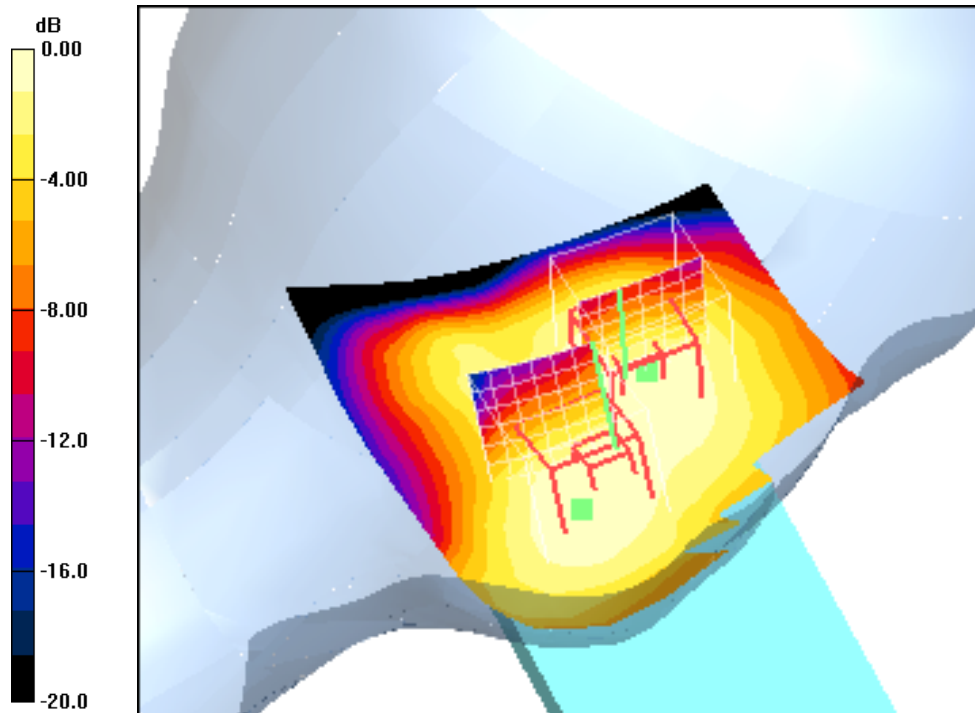
Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8

Medium: HSL1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.39 \text{ mho/m}$; $\epsilon_r = 38.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.92, 4.92, 4.92); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$ Maximum value of SAR (interpolated) = 0.043 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 = 5.73 V/m ; Power Drift = 0.014 dB Peak SAR (extrapolated) = 0.054 W/kg **SAR(1 g) = 0.041 mW/g ; SAR(10 g) = 0.028 mW/g** Maximum value of SAR (measured) = 0.043 mW/g **Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$ Reference Value = 5.73 V/m ; Power Drift = 0.014 dB Peak SAR (extrapolated) = 0.052 W/kg **SAR(1 g) = 0.037 mW/g ; SAR(10 g) = 0.025 mW/g** Maximum value of SAR (measured) = 0.040 mW/g 0 dB = 0.040 mW/g **Additional information:**ambient temperature: 22.0°C ; liquid temperature: 21.8°C

Date/Time: 21.03.2013 20:28:37 Date/Time: 21.03.2013 20:39:06

IEEE1528_OET65-RightHandSide-GSM1900**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: HSL1900 Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.34$ mho/m; $\epsilon_r = 39.2$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.92, 4.92, 4.92); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.187 mW/g**Touch position - Low/Zoom Scan (7x7x7) (14x7x7)/Cube 0:** Measurement grid:

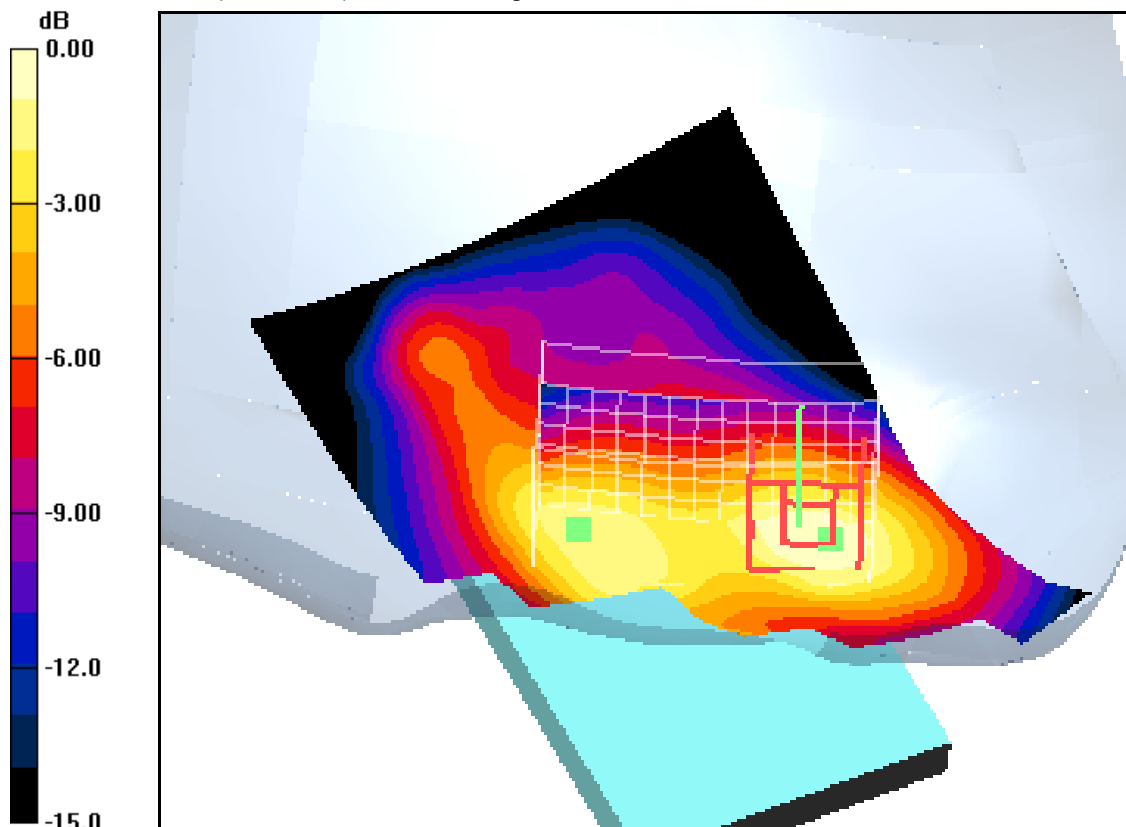
dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.4 V/m; Power Drift = -0.016 dB

Peak SAR (extrapolated) = 0.245 W/kg

SAR(1 g) = 0.183 mW/g; SAR(10 g) = 0.113 mW/g

Maximum value of SAR (measured) = 0.195 mW/g



0 dB = 0.195mW/g

Additional information:

ambient temperature: 22.0°C; liquid temperature: 21.8°C

Date/Time: 21.03.2013 21:03:17 Date/Time: 21.03.2013 21:13:20

IEEE1528_OET65-RightHandSide-GSM1900**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: HSL1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.92, 4.92, 4.92); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.195 mW/g**Touch position - Middle/Zoom Scan (7x7x7) (7x14x7)/Cube 0:** Measurement grid:

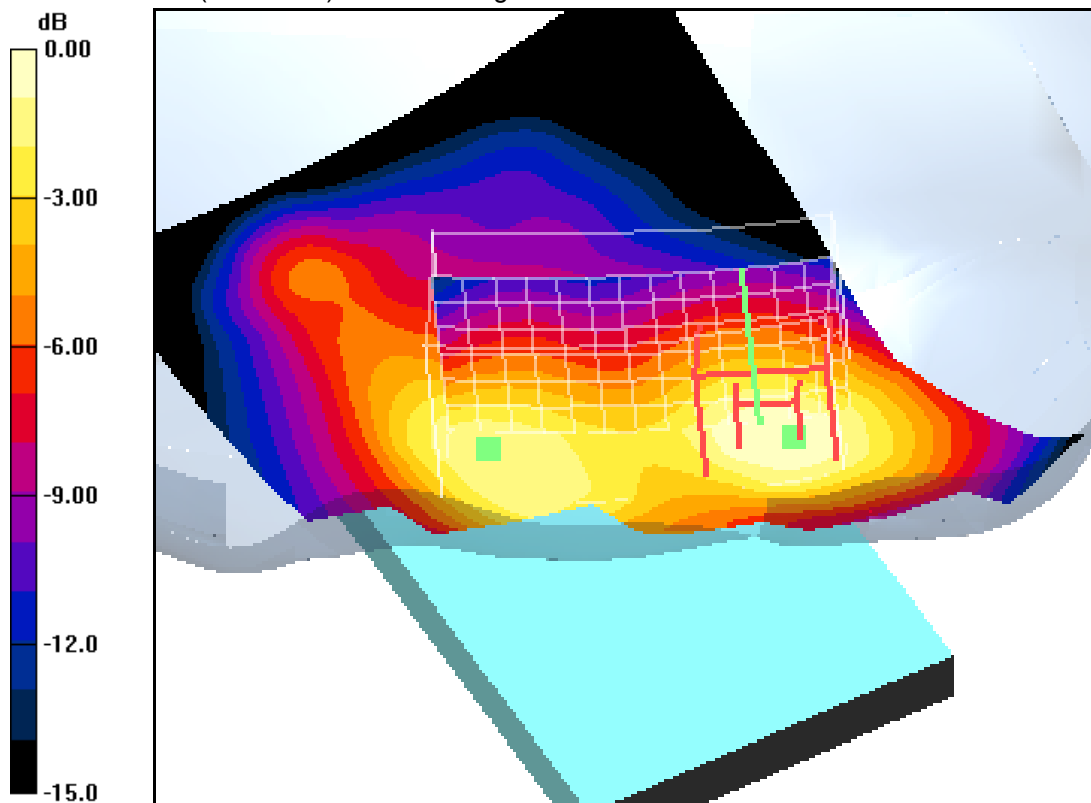
dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.2 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 0.255 W/kg

SAR(1 g) = 0.182 mW/g; SAR(10 g) = 0.114 mW/g

Maximum value of SAR (measured) = 0.196 mW/g



0 dB = 0.196mW/g

Additional information:

ambient temperature: 22.0°C; liquid temperature: 21.8°C

Date/Time: 21.03.2013 08:39:54 Date/Time: 21.03.2013 09:20:47 Date/Time: 21.03.2013 09:32:07

IEEE1528_OET65-RightHandSide-GSM1900**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: HSL1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.39 \text{ mho/m}$; $\epsilon_r = 38.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.92, 4.92, 4.92); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.214 mW/g

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

Reference Value = 12.8 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 0.270 W/kg

SAR(1 g) = 0.187 mW/g; SAR(10 g) = 0.113 mW/g

Maximum value of SAR (measured) = 0.205 mW/g

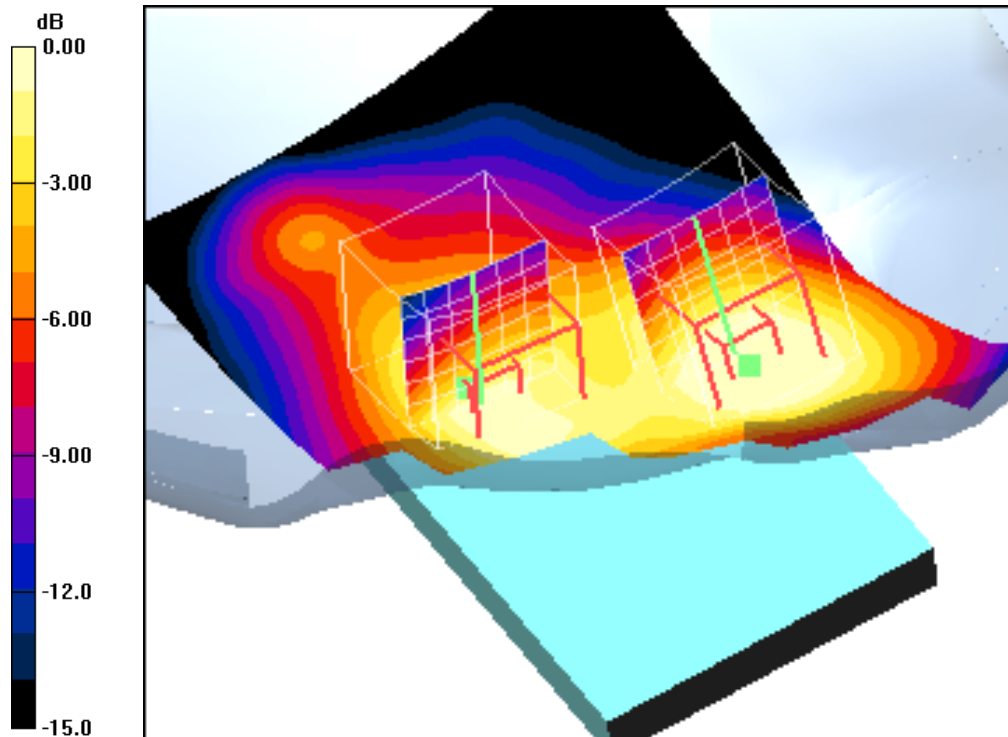
Touch position - High/Zoom Scan(7x7x7)/Cube 1: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.8 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 0.186 W/kg

SAR(1 g) = 0.129 mW/g; SAR(10 g) = 0.082 mW/g

Maximum value of SAR (measured) = 0.139 mW/g



0 dB = 0.139mW/g

Additional information:

ambient temperature: 22.0°C; liquid temperature: 21.8°C

Date/Time: 21.03.2013 10:57:16 Date/Time: 21.03.2013 11:07:25

IEEE1528_OET65-RightHandSide-GSM1900**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: HSL1900 Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.34$ mho/m; $\epsilon_r = 39.2$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.92, 4.92, 4.92); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.042 mW/g

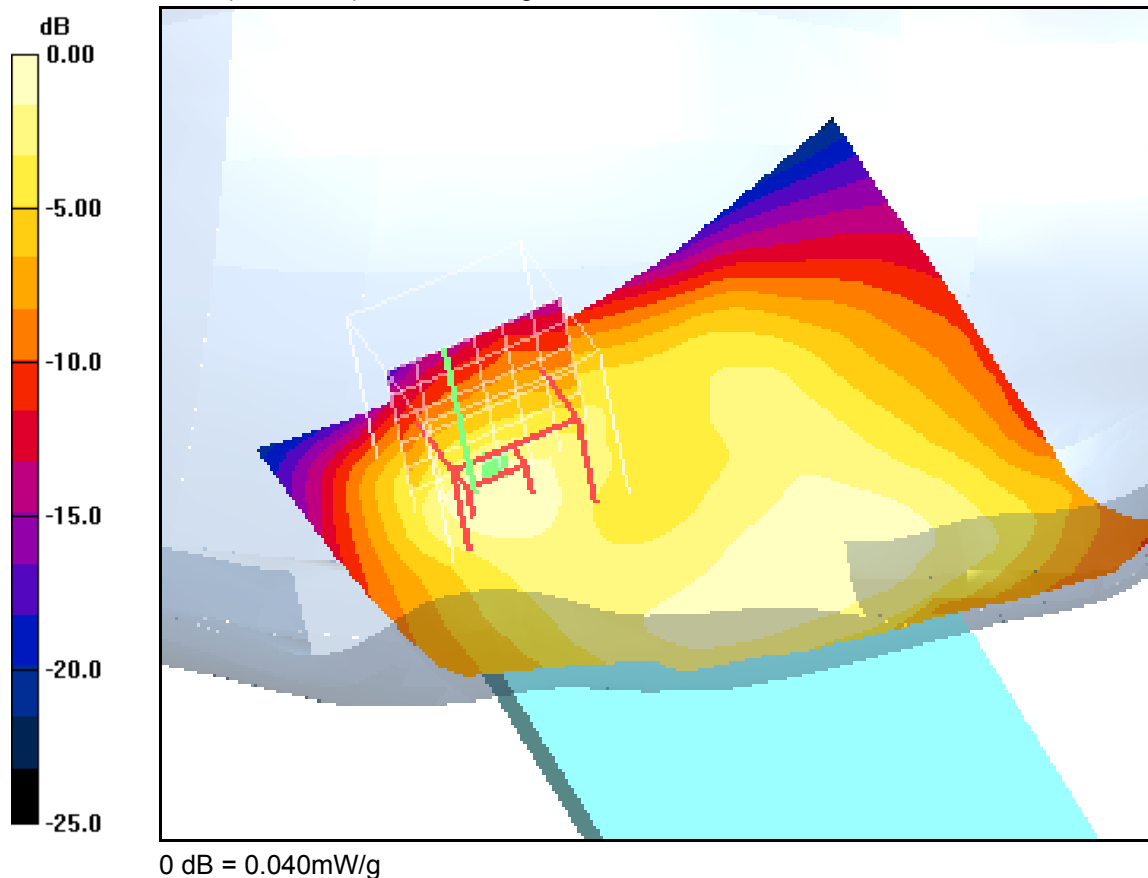
Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.71 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 0.061 W/kg

SAR(1 g) = 0.037 mW/g; SAR(10 g) = 0.020 mW/g

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

**Additional information:**

ambient temperature: 22.0°C; liquid temperature: 21.8°C

Date/Time: 21.03.2013 10:24:22 Date/Time: 21.03.2013 10:44:56

IEEE1528_OET65-RightHandSide-GSM1900**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: HSL1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.92, 4.92, 4.92); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.043 mW/g**Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

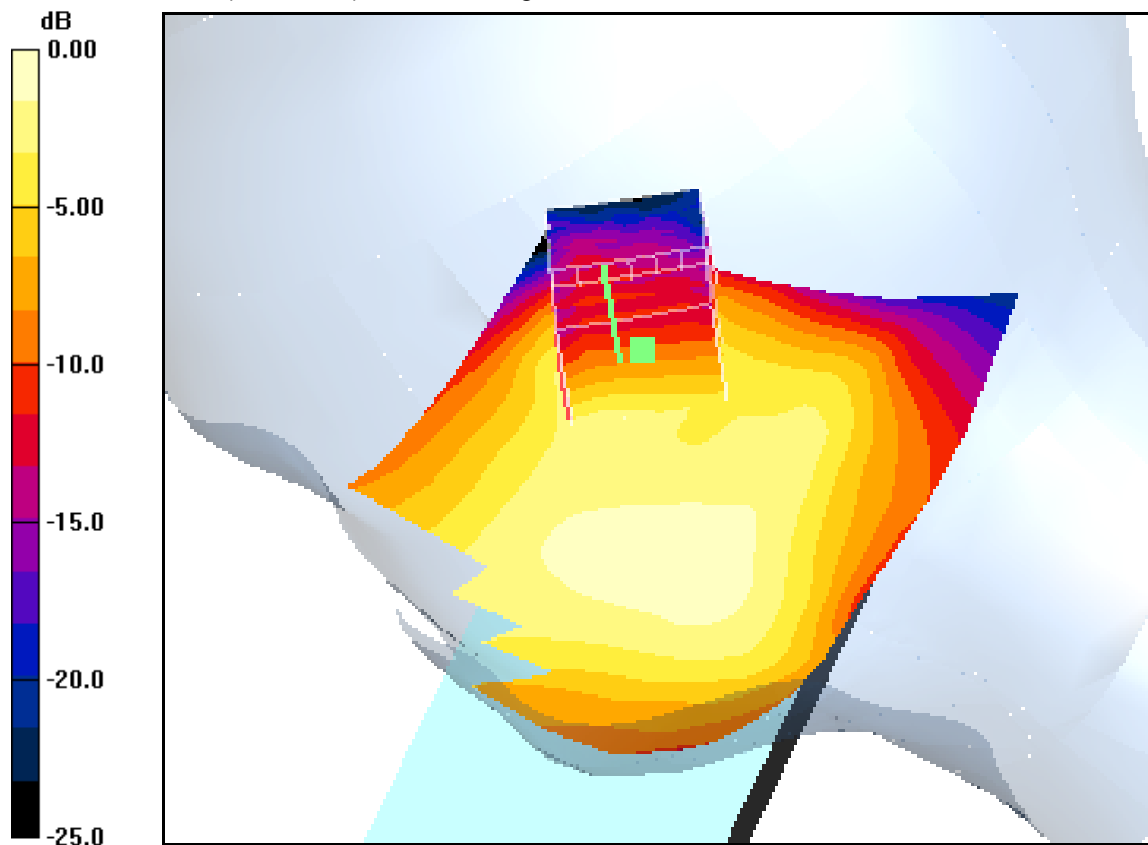
dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.68 V/m; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 0.063 W/kg

SAR(1 g) = 0.038 mW/g; SAR(10 g) = 0.020 mW/g

Maximum value of SAR (measured) = 0.043 mW/g



0 dB = 0.043mW/g

Additional information:

ambient temperature: 22.0°C; liquid temperature: 21.8°C

Date/Time: 21.03.2013 09:47:15 Date/Time: 21.03.2013 10:11:15

IEEE1528_OET65-RightHandSide-GSM1900**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: HSL1900 Medium parameters used: $f = 1909.8$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 38.9$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.92, 4.92, 4.92); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.057 mW/g

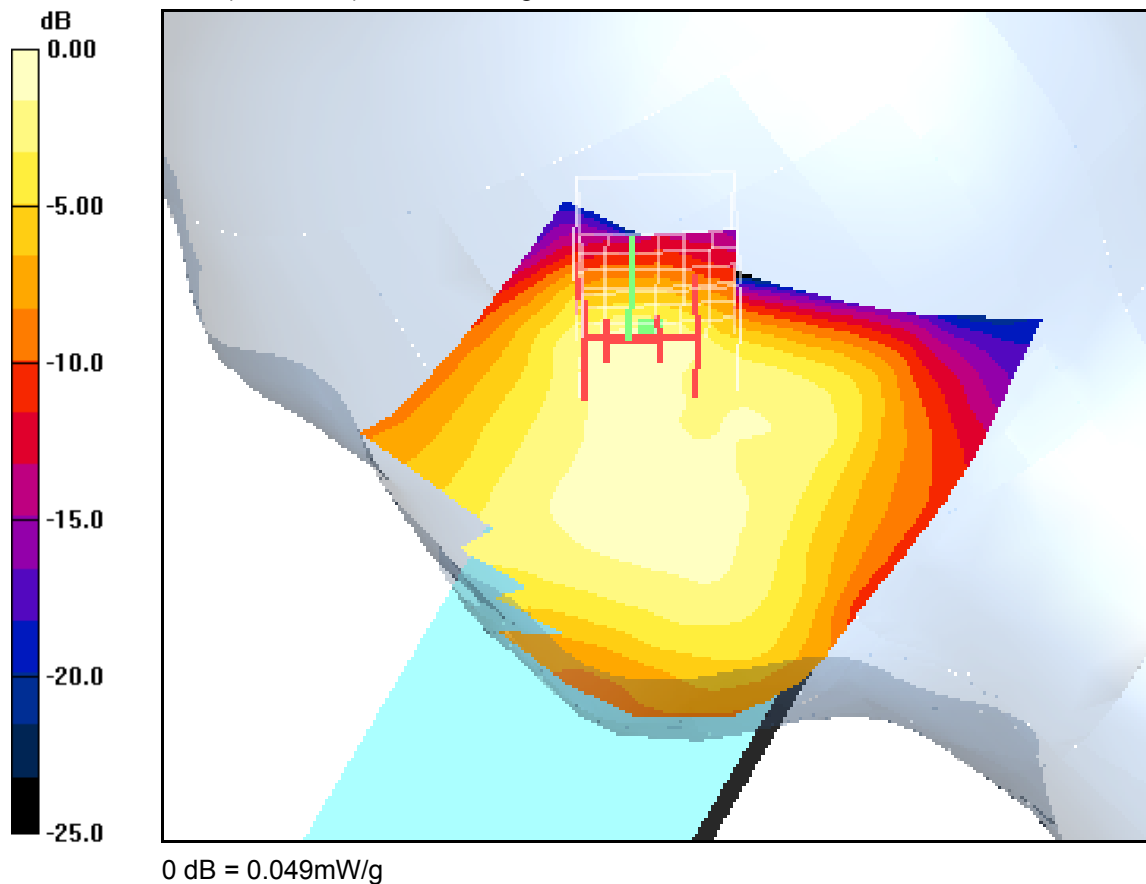
Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.13 V/m; Power Drift = 0.017 dB

Peak SAR (extrapolated) = 0.074 W/kg

SAR(1 g) = 0.044 mW/g; SAR(10 g) = 0.025 mW/g

Maximum value of SAR (measured) = 0.049 mW/g

**Additional information:**

ambient temperature: 22.0°C; liquid temperature: 21.8°C

Date/Time: 27.03.2013 09:53:09 Date/Time: 27.03.2013 10:02:12

OET65-Body-GSM1900 GPRS 2TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M1900 Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 52.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.49, 4.49, 4.49); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Low/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.687 mW/g**Front position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

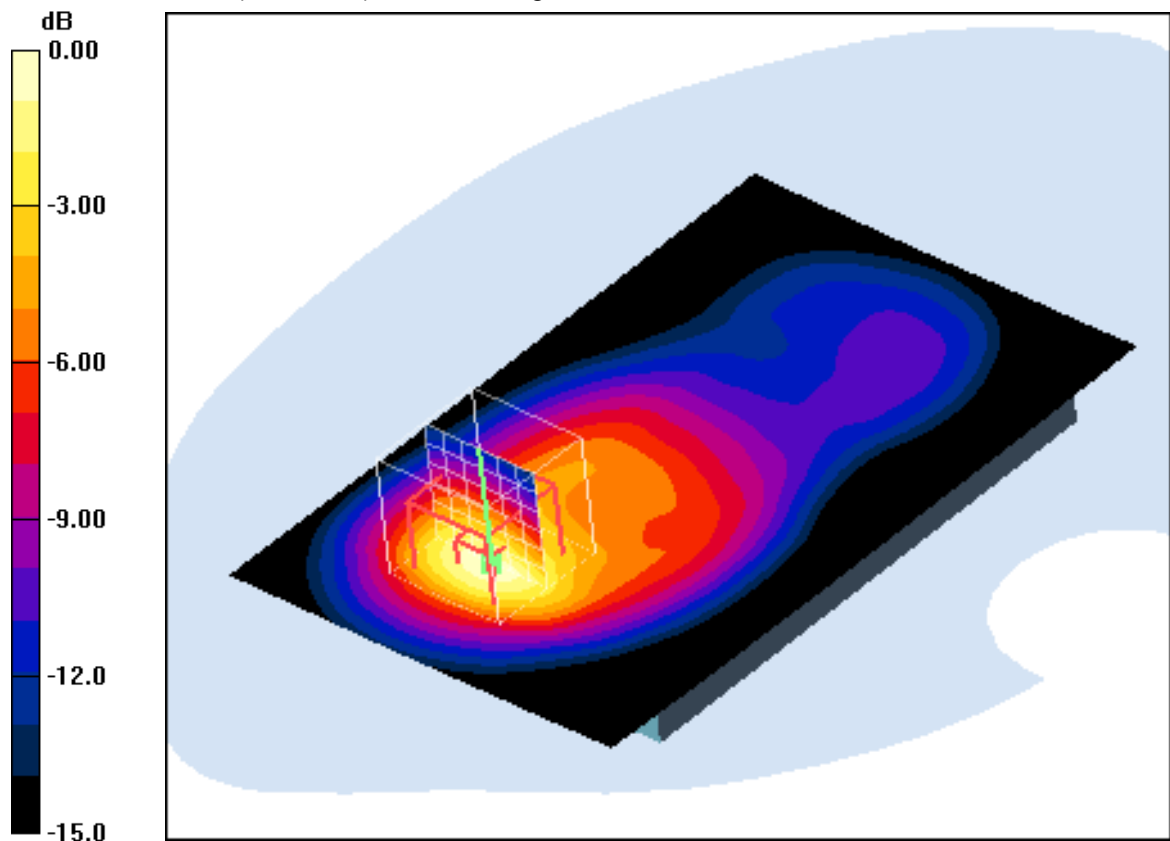
dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.1 V/m; Power Drift = 0.098 dB

Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.661 mW/g; SAR(10 g) = 0.363 mW/g

Maximum value of SAR (measured) = 0.749 mW/g



0 dB = 0.749mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.1°C; liquid temperature: 22.5°C

Date/Time: 27.03.2013 08:53:01 Date/Time: 27.03.2013 10:17:23

OET65-Body-GSM1900 GPRS 2TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.51 \text{ mho/m}$; $\epsilon_r = 52.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.49, 4.49, 4.49); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

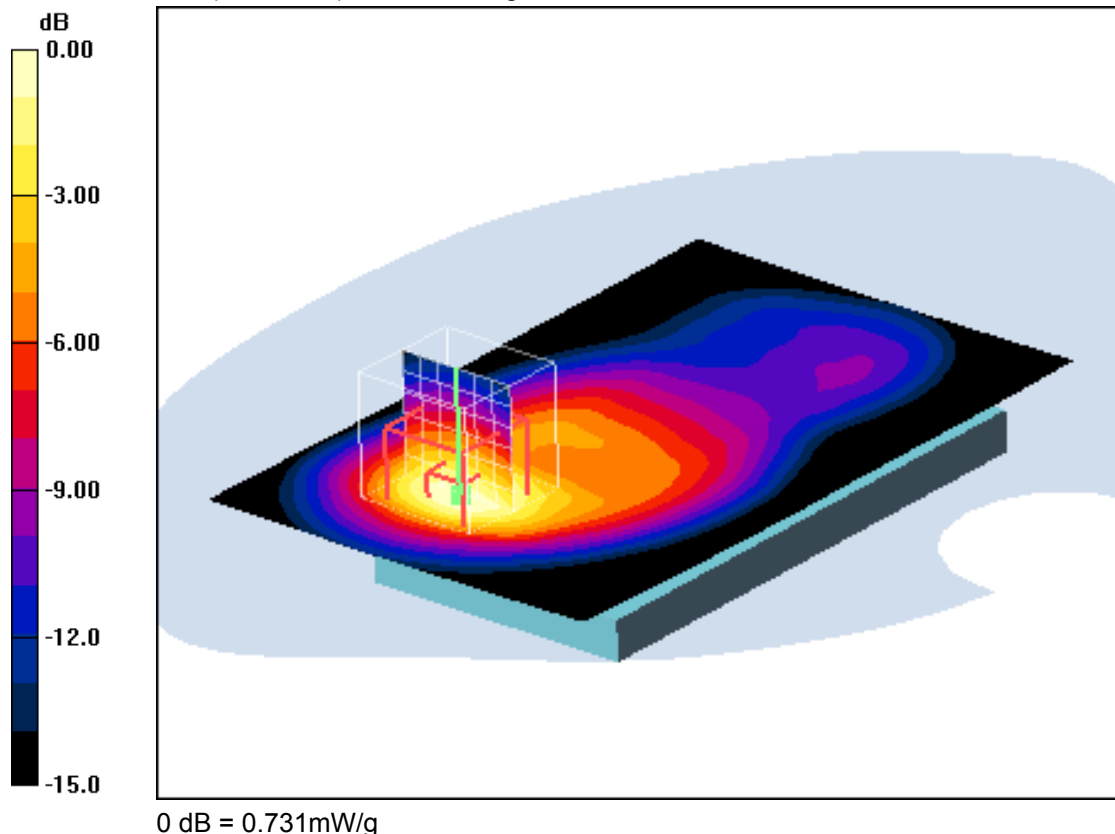
Front position - Middle/Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 0.765 mW/g**Front position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 21.7 V/m; Power Drift = 0.015 dB

Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.644 mW/g; SAR(10 g) = 0.350 mW/g

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

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 23.1°C; liquid temperature: 22.5°C

Date/Time: 27.03.2013 08:09:48 Date/Time: 27.03.2013 10:29:38

OET65-Body-GSM1900 GPRS 2TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 52.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.49, 4.49, 4.49); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

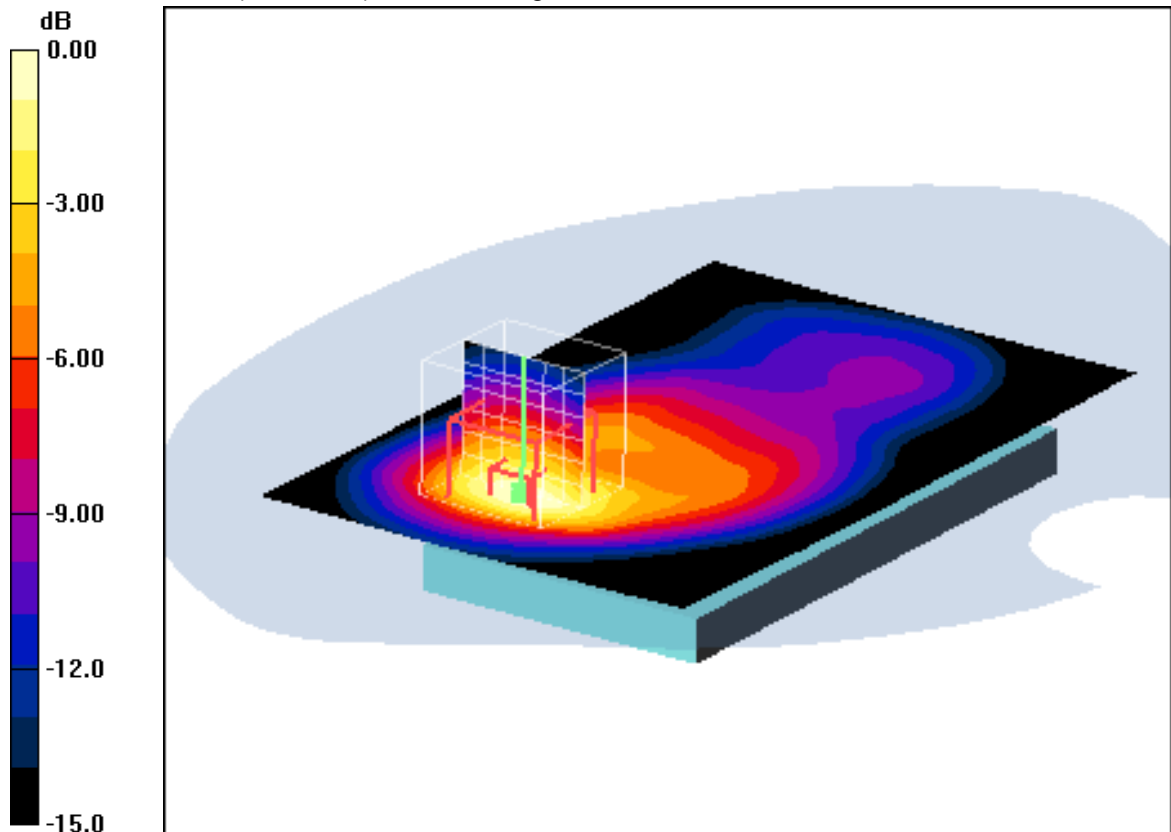
Front position - High/Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 0.782 mW/g**Front position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 21.7 V/m; Power Drift = 0.049 dB

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.664 mW/g; SAR(10 g) = 0.354 mW/g

Maximum value of SAR (measured) = 0.751 mW/g



0 dB = 0.751 mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.1°C; liquid temperature: 22.5°C

Date/Time: 27.03.2013 07:25:40 Date/Time: 27.03.2013 11:10:04

OET65-Body-GSM1900 GPRS 2TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M1900 Medium parameters used: $f = 1850.2 \text{ MHz}$; $\sigma = 1.48 \text{ mho/m}$; $\epsilon_r = 52.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.49, 4.49, 4.49); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Low/Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (interpolated) = 0.799 mW/g

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

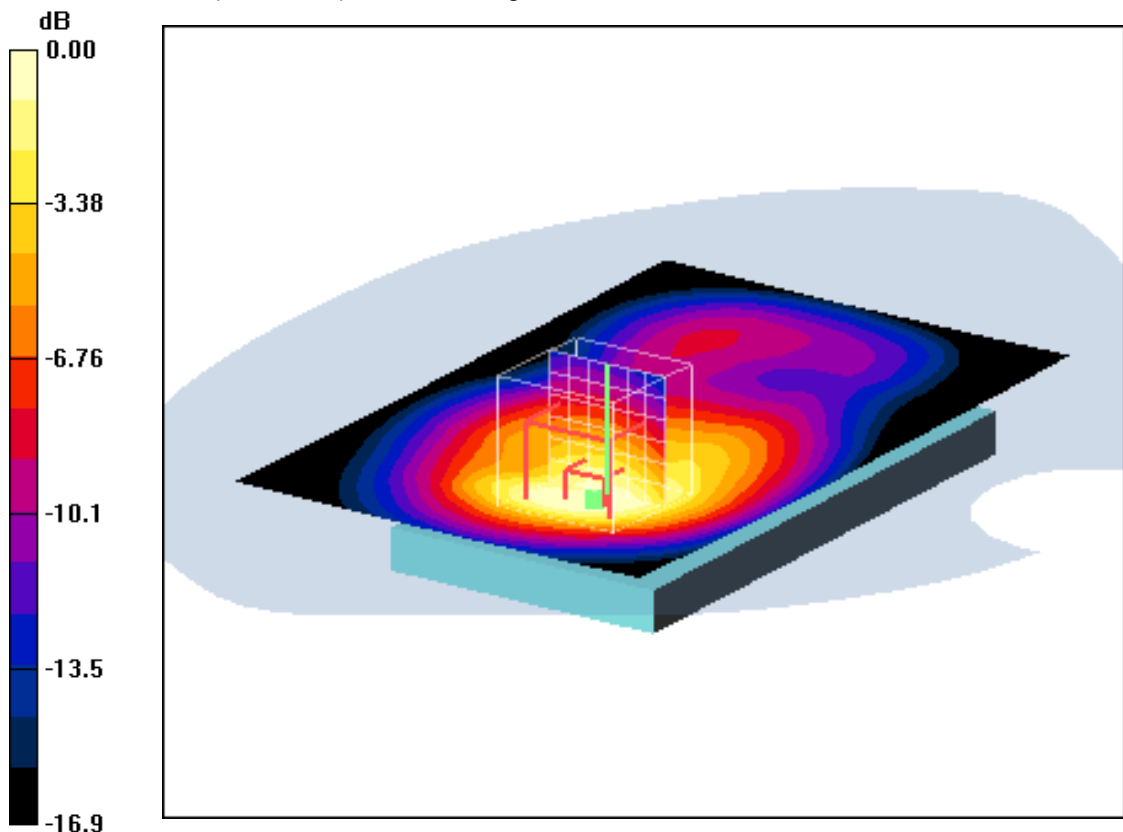
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 21.9 V/m; Power Drift = 0.062 dB

Peak SAR (extrapolated) = 0.985 W/kg

SAR(1 g) = 0.638 mW/g; SAR(10 g) = 0.364 mW/g

Maximum value of SAR (measured) = 0.714 mW/g



0 dB = 0.714mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.1°C; liquid temperature: 22.5°C

Date/Time: 27.03.2013 07:04:07 Date/Time: 27.03.2013 10:58:19

OET65-Body-GSM1900 GPRS 2TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.51 \text{ mho/m}$; $\epsilon_r = 52.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.49, 4.49, 4.49); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

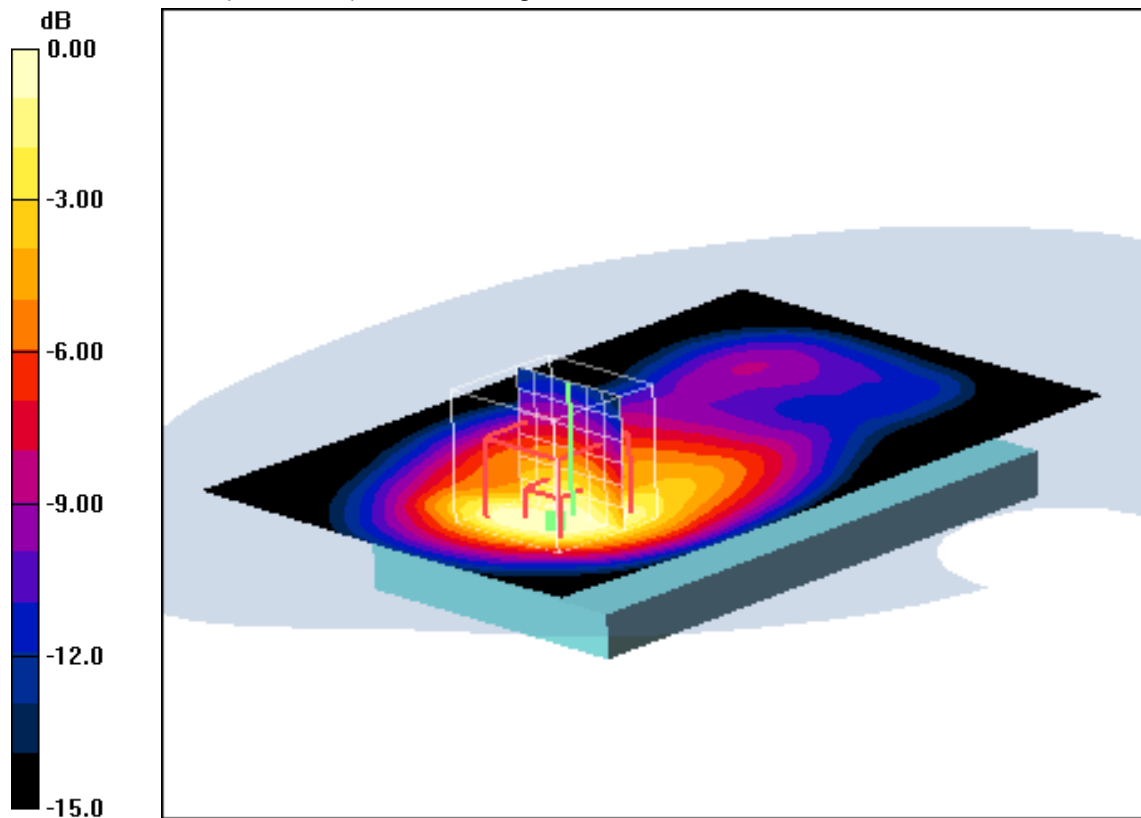
Rear position - Middle/Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 0.818 mW/g**Rear position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 21.4 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.994 W/kg

SAR(1 g) = 0.639 mW/g; SAR(10 g) = 0.358 mW/g

Maximum value of SAR (measured) = 0.706 mW/g



0 dB = 0.706mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.1°C; liquid temperature: 22.5°C

Date/Time: 27.03.2013 07:46:21 Date/Time: 27.03.2013 10:45:44

OET65-Body-GSM1900 GPRS 2TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M1900 Medium parameters used: $f = 1909.8$ MHz; $\sigma = 1.55$ mho/m; $\epsilon_r = 52.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.49, 4.49, 4.49); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - High/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.829 mW/g**Rear position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

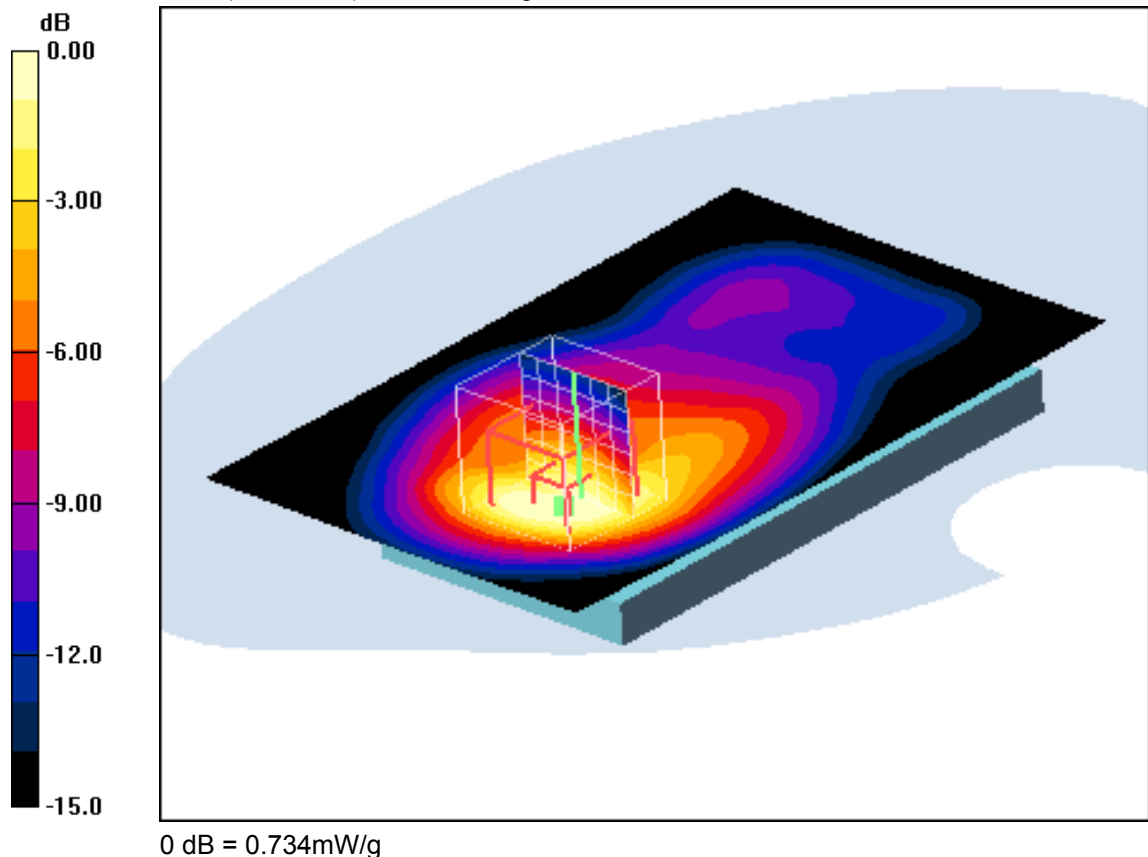
dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.4 V/m; Power Drift = -0.030 dB

Peak SAR (extrapolated) = 1.04 W/kg

SAR(1 g) = 0.666 mW/g; SAR(10 g) = 0.370 mW/g

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

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 23.1°C; liquid temperature: 22.5°C

Date/Time: 27.03.2013 11:48:53 Date/Time: 27.03.2013 12:00:12 Date/Time: 27.03.2013 12:10:54

OET65-Body-GSM1900 GPRS 2TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.51 \text{ mho/m}$; $\epsilon_r = 52.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.49, 4.49, 4.49); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (61x121x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.103 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 = 8.70 V/m; Power Drift = 0.048 dB

Peak SAR (extrapolated) = 0.140 W/kg

SAR(1 g) = 0.094 mW/g; SAR(10 g) = 0.056 mW/g

Maximum value of SAR (measured) = 0.104 mW/g

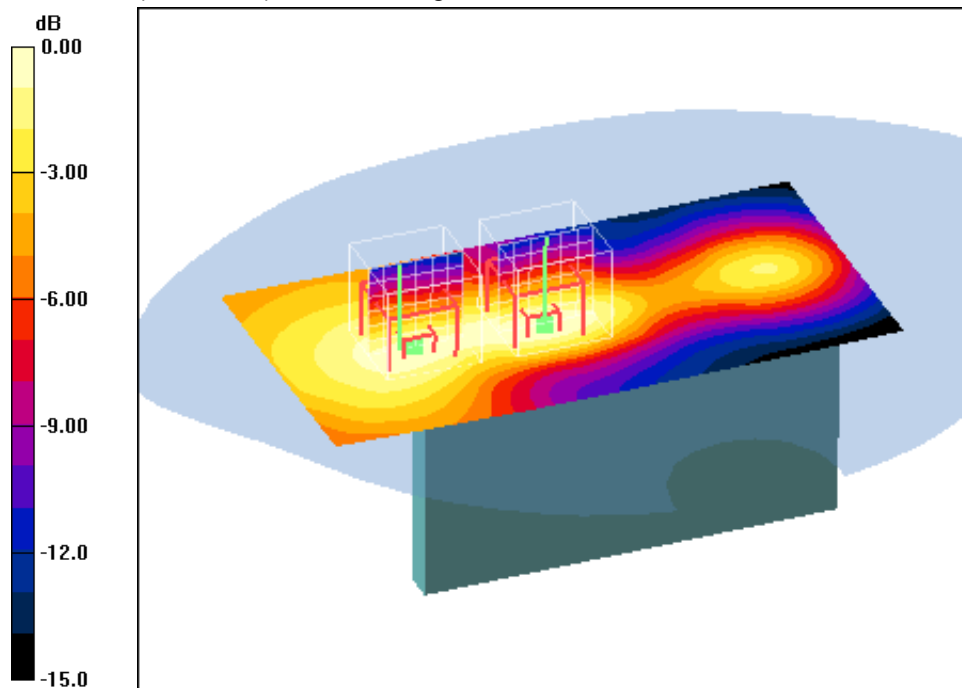
Edge left position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 8.70 V/m; Power Drift = 0.048 dB

Peak SAR (extrapolated) = 0.124 W/kg

SAR(1 g) = 0.087 mW/g; SAR(10 g) = 0.056 mW/g

Maximum value of SAR (measured) = 0.094 mW/g



0 dB = 0.094mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.1°C; liquid temperature: 22.5°C

Date/Time: 27.03.2013 12:24:02 Date/Time: 27.03.2013 12:32:41

OET65-Body-GSM1900 GPRS 2TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.51 \text{ mho/m}$; $\epsilon_r = 52.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.49, 4.49, 4.49); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (61x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.077 mW/g

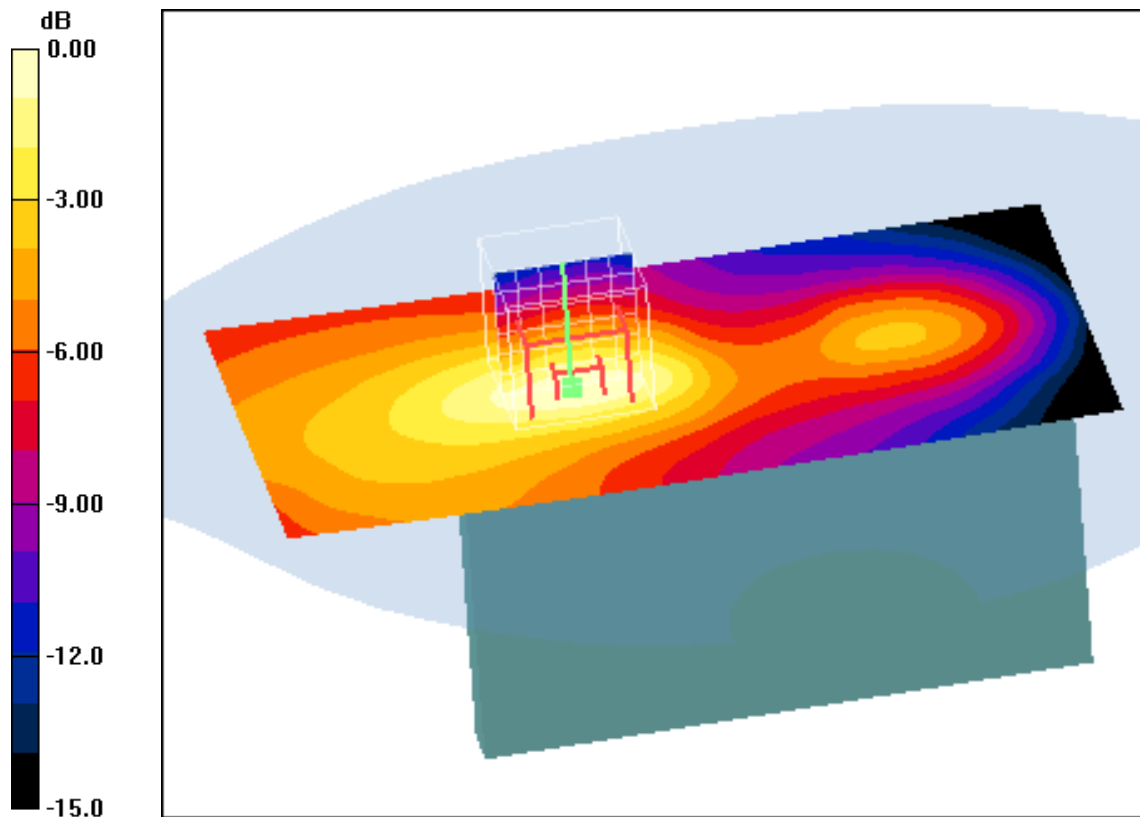
Edge right position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.60 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.100 W/kg

SAR(1 g) = 0.069 mW/g; SAR(10 g) = 0.043 mW/g

Maximum value of SAR (measured) = 0.075 mW/g



0 dB = 0.075mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.1°C; liquid temperature: 22.5°C

Date/Time: 27.03.2013 13:02:38 Date/Time: 27.03.2013 13:07:34

OET65-Body-GSM1900 GPRS 2TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M1900 Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 52.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.49, 4.49, 4.49); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

Maximum value of SAR (interpolated) = 0.977 mW/g

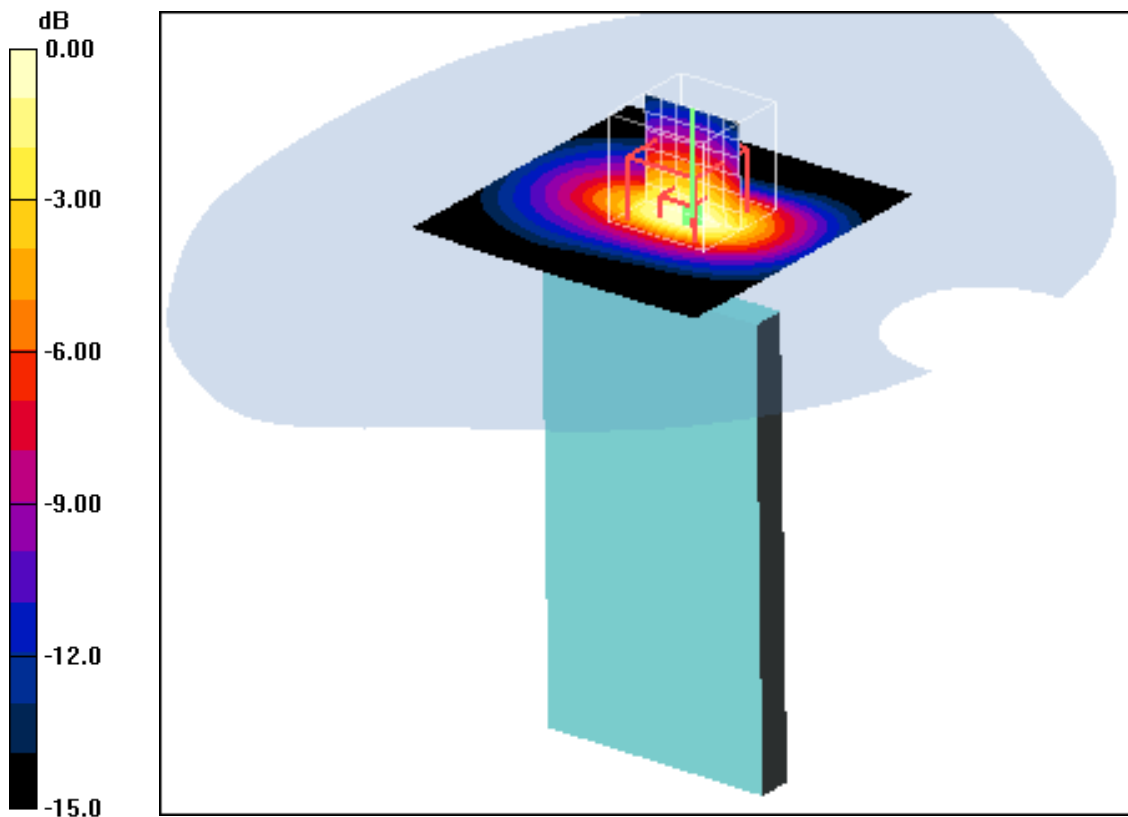
Edge bottom position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.2 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.797 mW/g; SAR(10 g) = 0.422 mW/g

Maximum value of SAR (measured) = 0.913 mW/g



0 dB = 0.913mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.1°C; liquid temperature: 22.5°C

Date/Time: 27.03.2013 12:45:48 Date/Time: 27.03.2013 12:50:44

OET65-Body-GSM1900 GPRS 2TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.51 \text{ mho/m}$; $\epsilon_r = 52.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.49, 4.49, 4.49); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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) = 1.09 mW/g

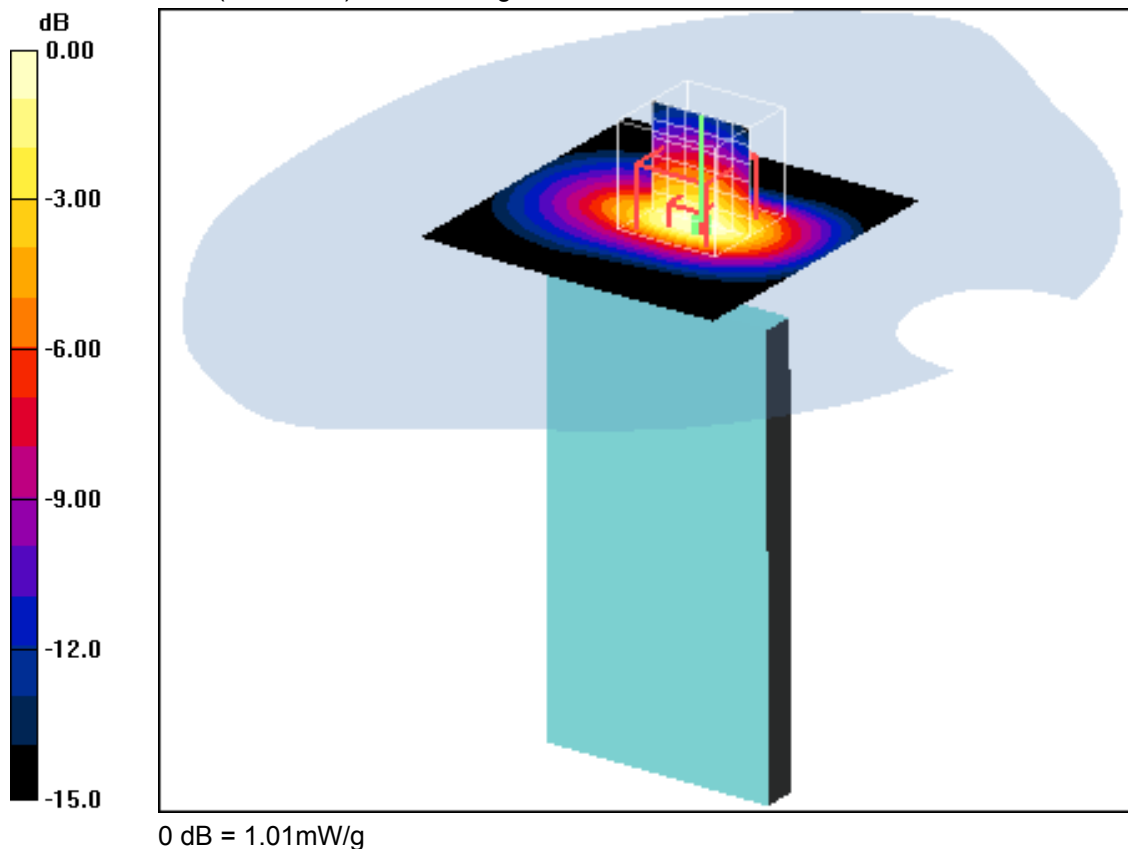
Edge bottom position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 26.4 V/m; Power Drift = -0.136 dB

Peak SAR (extrapolated) = 1.45 W/kg

SAR(1 g) = 0.887 mW/g; SAR(10 g) = 0.466 mW/g

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

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 23.1°C; liquid temperature: 22.5°C

Date/Time: 27.03.2013 13:19:42 Date/Time: 27.03.2013 13:25:20

OET65-Body-GSM1900 GPRS 2TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 52.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.49, 4.49, 4.49); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

Maximum value of SAR (interpolated) = 1.15 mW/g

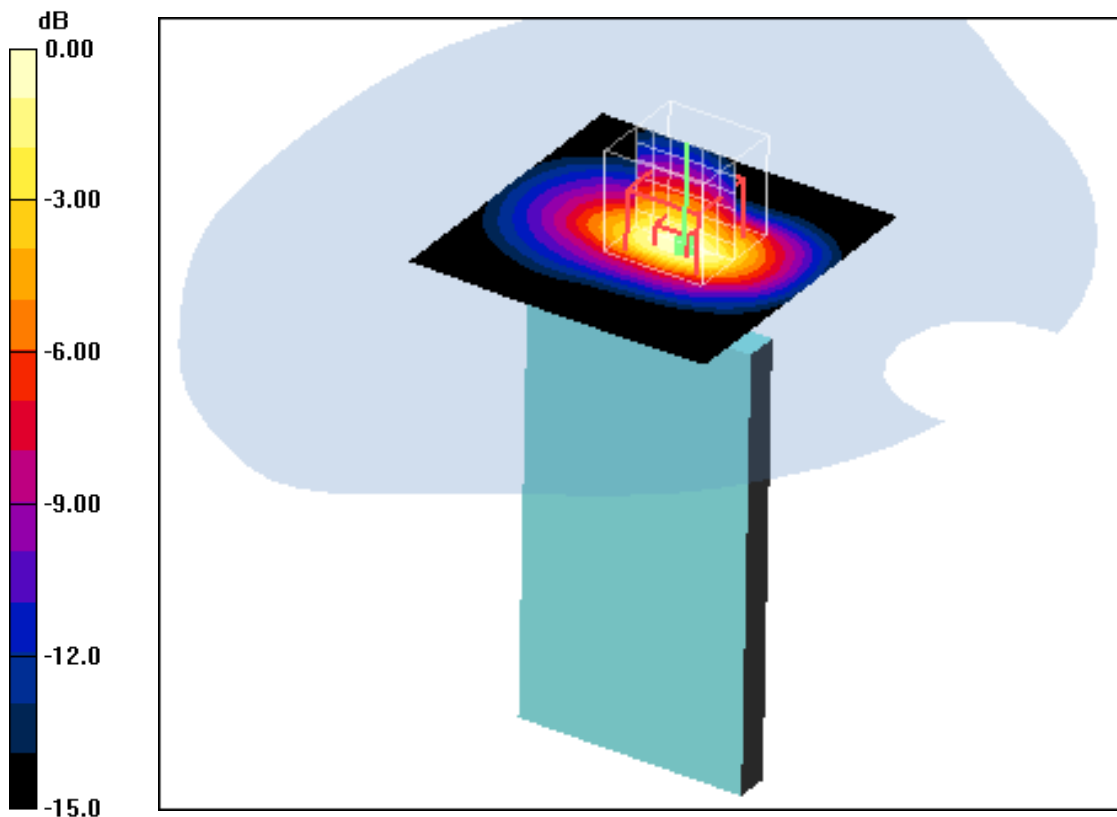
Edge bottom position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 26.5 V/m; Power Drift = -0.060 dB

Peak SAR (extrapolated) = 1.58 W/kg

SAR(1 g) = 0.949 mW/g; SAR(10 g) = 0.493 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: 23.1°C; liquid temperature: 22.5°C

Date/Time: 27.03.2013 13:46:22 Date/Time: 27.03.2013 13:51:21

OET65-Body-GSM1900 GPRS 2TS WC**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 52.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.49, 4.49, 4.49); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

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

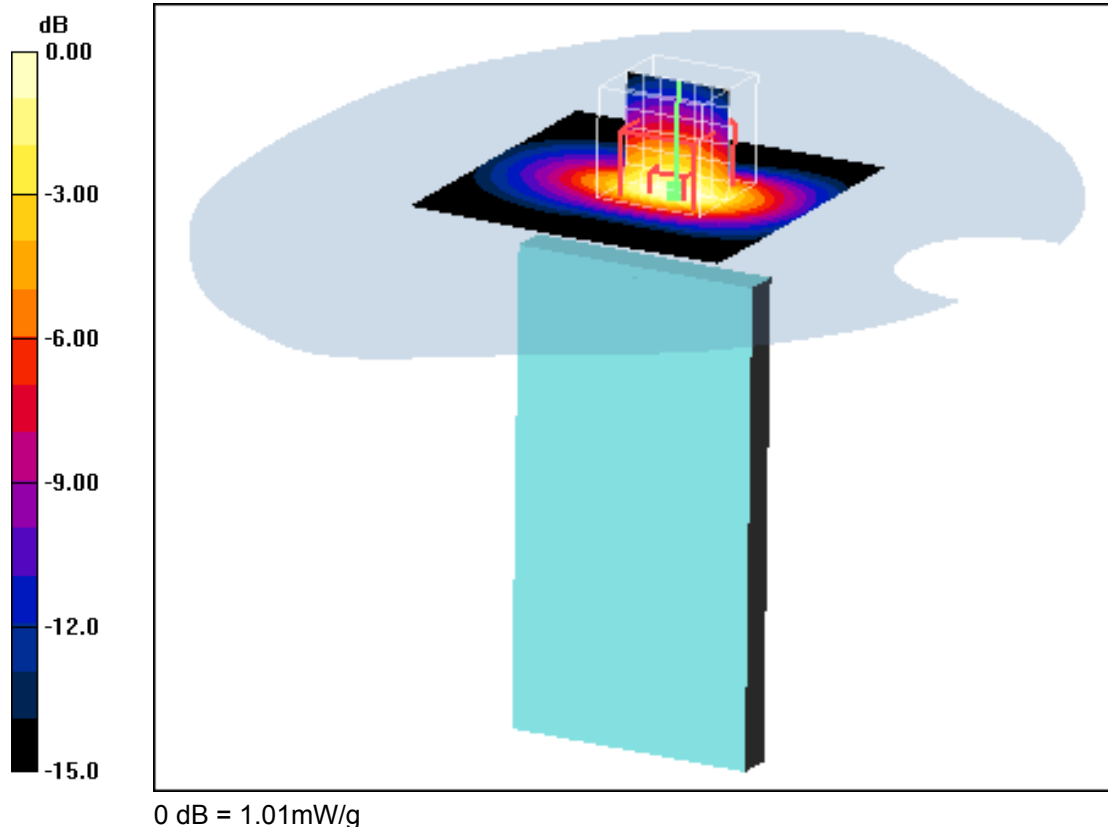
Edge bottom position - High wc/Zoom Scan (7x7x7) (7x7x7)/Cube 0:Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 25.9 V/m; Power Drift = -0.070 dB

Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 0.878 mW/g; SAR(10 g) = 0.459 mW/g

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

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 23.1°C; liquid temperature: 22.5°C

Date/Time: 27.03.2013 09:17:30 Date/Time: 27.03.2013 09:38:58

OET65-Body-GSM1900 GPRS 2TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 52.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.49, 4.49, 4.49); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

Maximum value of SAR (interpolated) = 0.346 mW/g

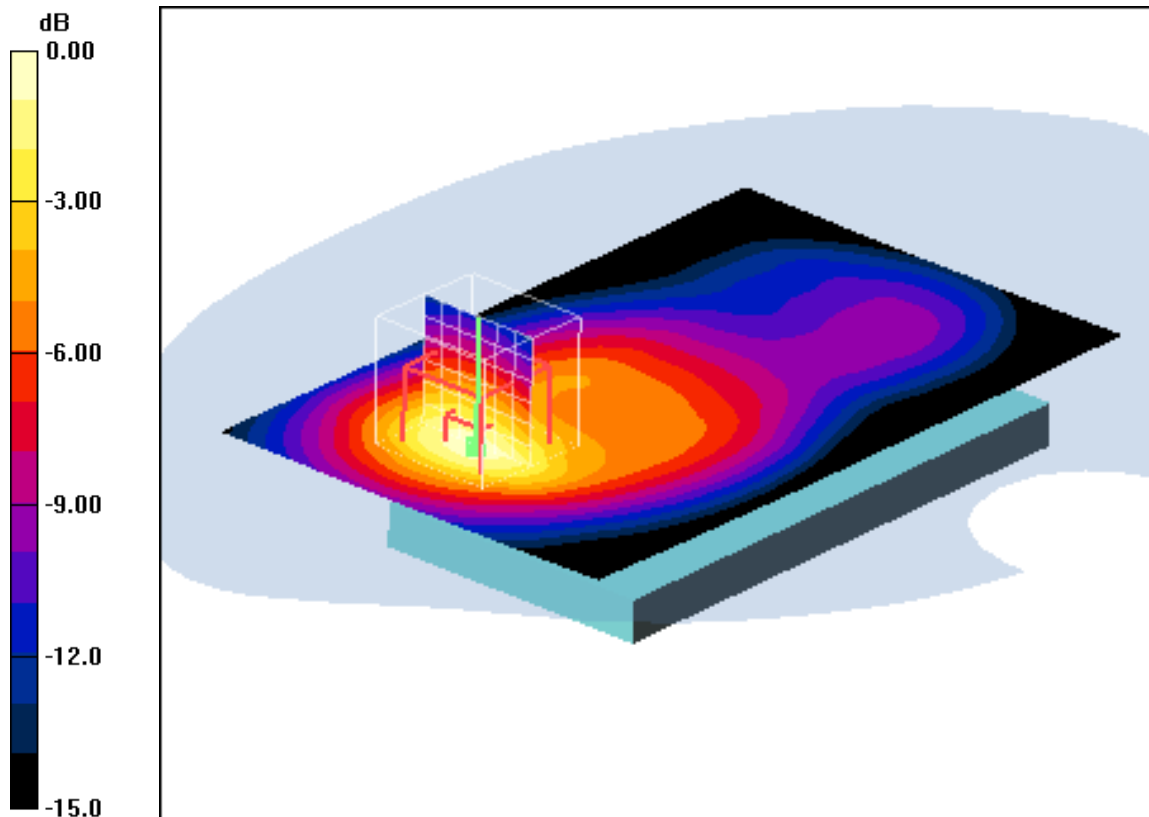
Front position - High 15mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 16.3 V/m; Power Drift = 0.063 dB

Peak SAR (extrapolated) = 0.528 W/kg

SAR(1 g) = 0.352 mW/g; SAR(10 g) = 0.208 mW/g

Maximum value of SAR (measured) = 0.386 mW/g



0 dB = 0.386mW/g

Additional information:

position or distance of DUT to SAM: 15mm

ambient temperature: 23.1°C; liquid temperature: 22.5°C

Date/Time: 27.03.2013 11:22:25 Date/Time: 27.03.2013 11:31:28

OET65-Body-GSM1900 GPRS 2TS**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 52.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.49, 4.49, 4.49); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

Maximum value of SAR (interpolated) = 0.369 mW/g

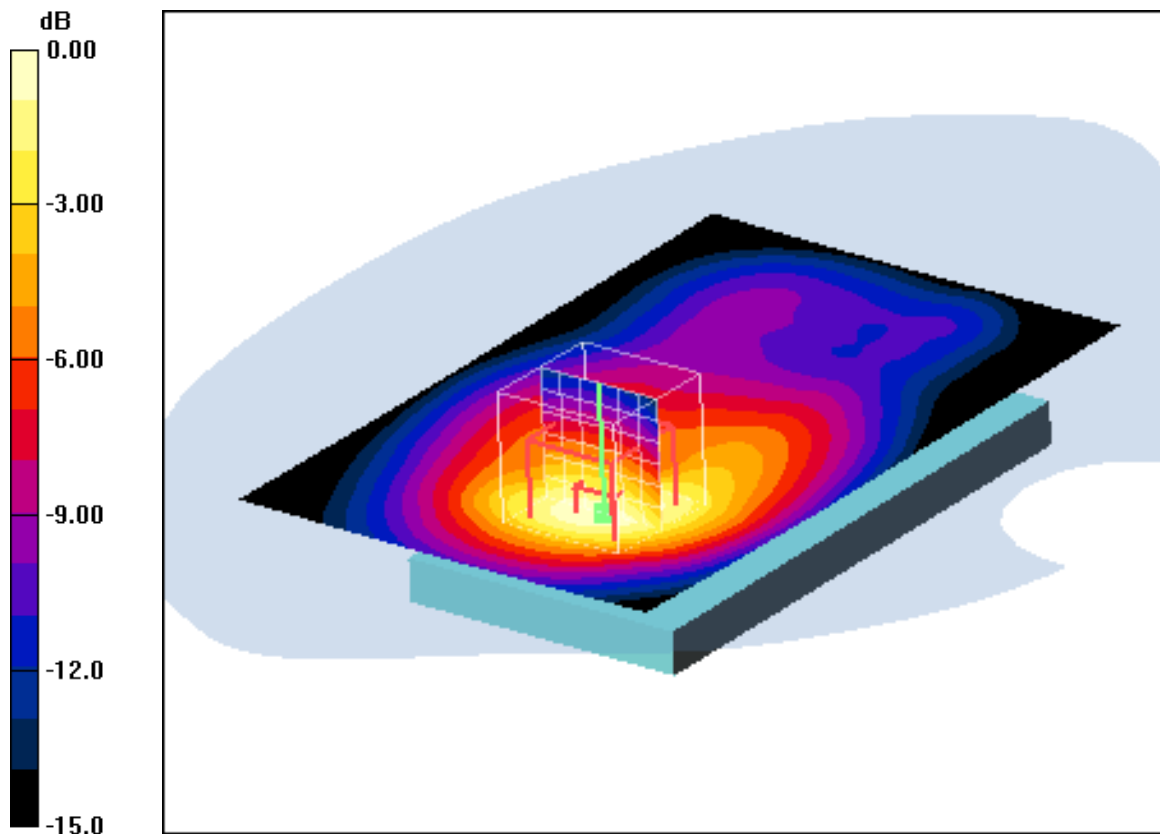
Rear position - High 15mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.3 V/m; Power Drift = -0.045 dB

Peak SAR (extrapolated) = 0.518 W/kg

SAR(1 g) = 0.340 mW/g; SAR(10 g) = 0.200 mW/g

Maximum value of SAR (measured) = 0.375 mW/g



0 dB = 0.375mW/g

Additional information:

position or distance of DUT to SAM: 15mm

ambient temperature: 23.1°C; liquid temperature: 22.5°C

Date/Time: 27.03.2013 14:07:31 Date/Time: 27.03.2013 14:19:27

OET65-Body-GSM1900**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 52.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.49, 4.49, 4.49); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

Maximum value of SAR (interpolated) = 0.362 mW/g

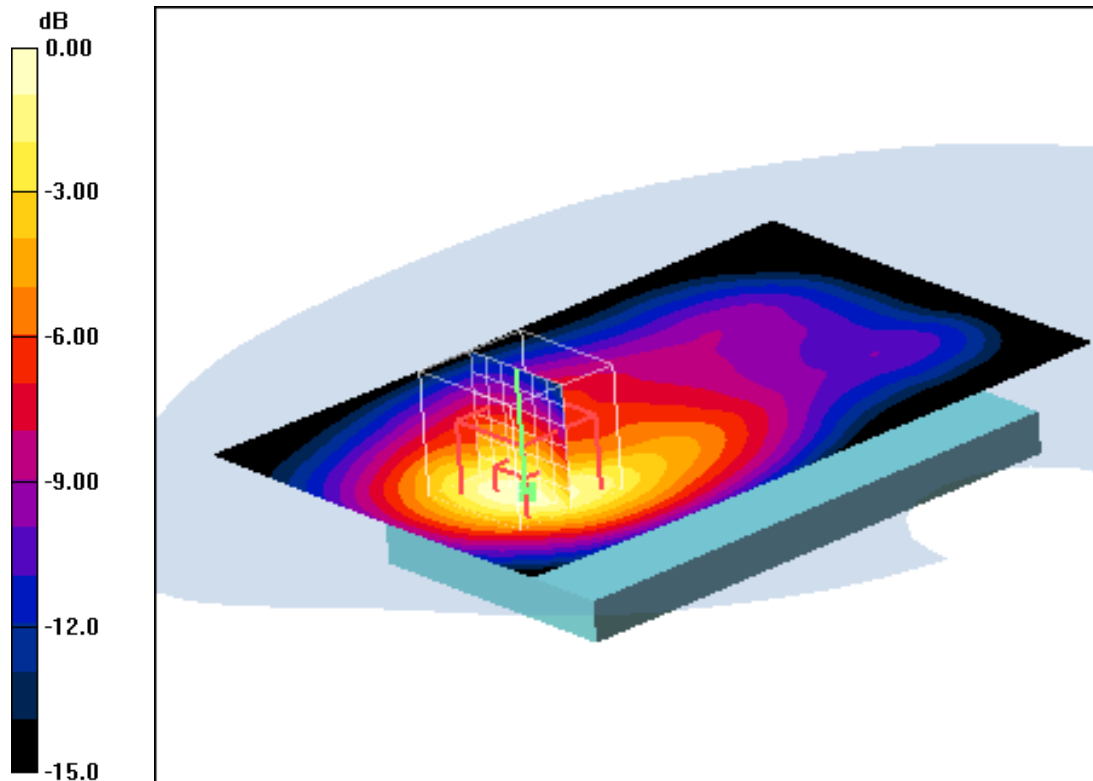
Rear position - High 15mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.9 V/m; Power Drift = -0.042 dB

Peak SAR (extrapolated) = 0.497 W/kg

SAR(1 g) = 0.329 mW/g; SAR(10 g) = 0.194 mW/g

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



0 dB = 0.366mW/g

Additional information:

position or distance of DUT to SAM: 15mm

ambient temperature: 23.1°C; liquid temperature: 22.5°C

Annex B.3: UMTS FDD V

Date/Time: 28.02.2013 09:31:58

IEEE1528-UMTS FDD V head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 826.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.882$ S/m; $\epsilon_r = 41.265$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22 dB, b=66.3 dB $\sqrt{\mu}$ V, c=18.5, d=2.9 dB / Y: a=3.10 dB, b=65.6 dB $\sqrt{\mu}$ V, c=18.0, d=2.9 dB / Z: a=3.31 dB, b=66.5 dB $\sqrt{\mu}$ V, c=18.4, d=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

Left-Hand-Side HSL/Touch Position - Low/Area Scan (111x161x1): Interpolated
grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.607 W/kg

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

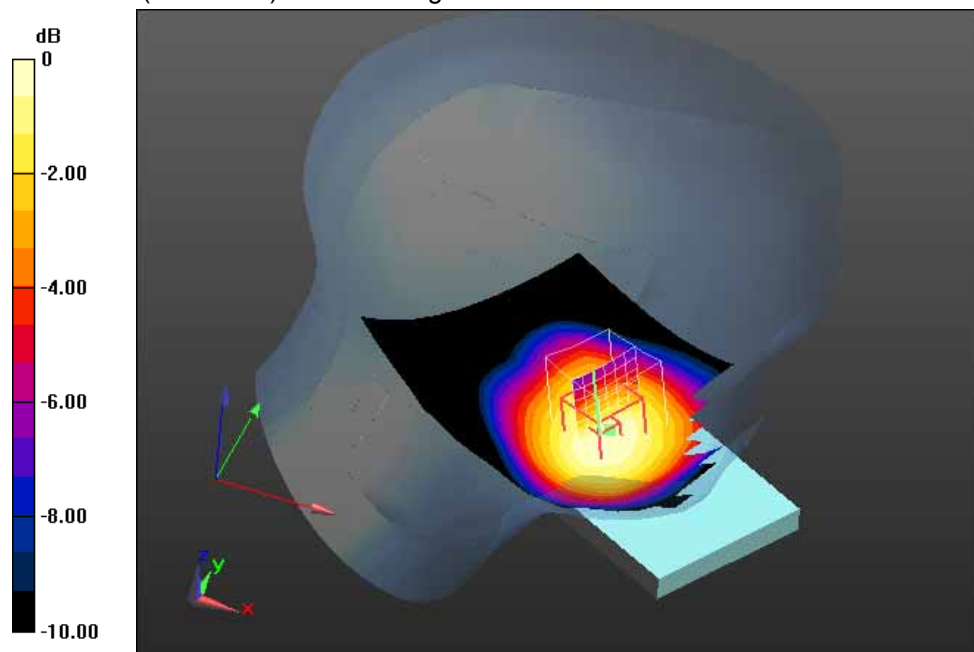
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.730 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.693 W/kg

SAR(1 g) = 0.555 W/kg; SAR(10 g) = 0.418 W/kg

Maximum value of SAR (measured) = 0.588 W/kg



0 dB = 0.588 W/kg = -2.31 dBW/kg

Additional information:

ambient temperature: 22.7°C; liquid temperature: 21.0°C

Date/Time: 28.02.2013 10:20:18

IEEE1528-UMTS FDD V head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 836.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.89$ S/m; $\epsilon_r = 41.1$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22 dB, b=66.3 dB $\sqrt{\mu}$ V, c=18.5, d=2.9 dB / Y: a=3.10 dB, b=65.6 dB $\sqrt{\mu}$ V, c=18.0, d=2.9 dB / Z: a=3.31 dB, b=66.5 dB $\sqrt{\mu}$ V, c=18.4, d=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

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

grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.739 W/kg

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

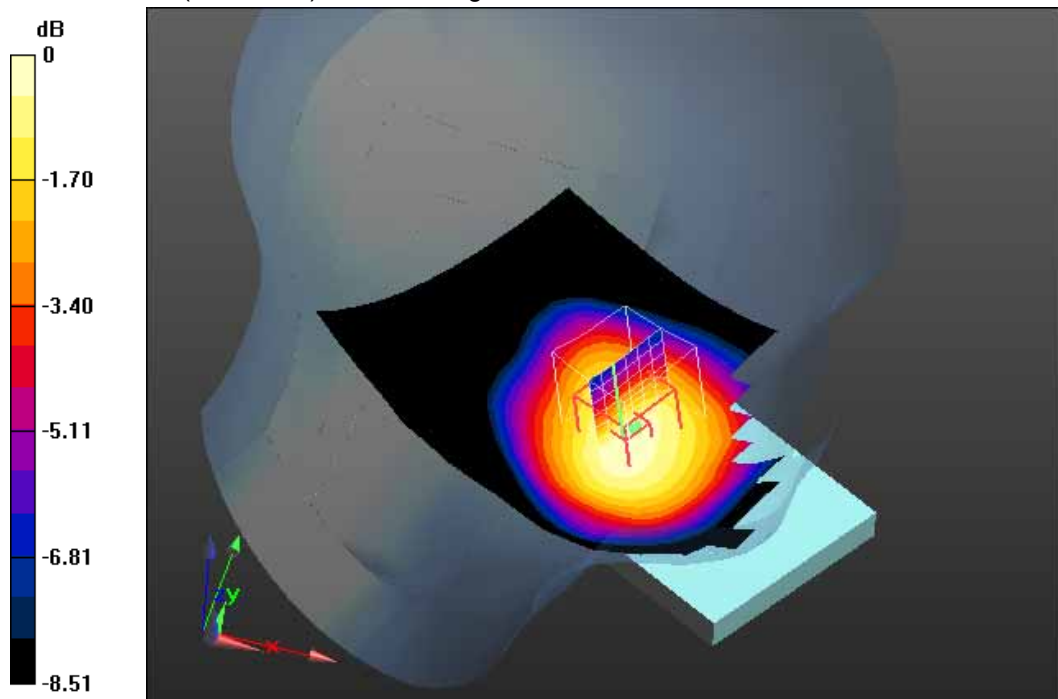
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 29.342 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.927 W/kg

SAR(1 g) = 0.721 W/kg; SAR(10 g) = 0.542 W/kg

Maximum value of SAR (measured) = 0.769 W/kg



0 dB = 0.769 W/kg = -1.14 dBW/kg

Additional information:

ambient temperature: 22.7°C; liquid temperature: 21.0°C

Date/Time: 28.02.2013 10:42:21

IEEE1528-UMTS FDD V head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 846.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.898$ S/m; $\epsilon_r = 40.936$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22 dB, b=66.3 dB $\sqrt{\mu}$ V, c=18.5, d=2.9 dB / Y: a=3.10 dB, b=65.6 dB $\sqrt{\mu}$ V, c=18.0, d=2.9 dB / Z: a=3.31 dB, b=66.5 dB $\sqrt{\mu}$ V, c=18.4, d=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

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

grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.628 W/kg

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

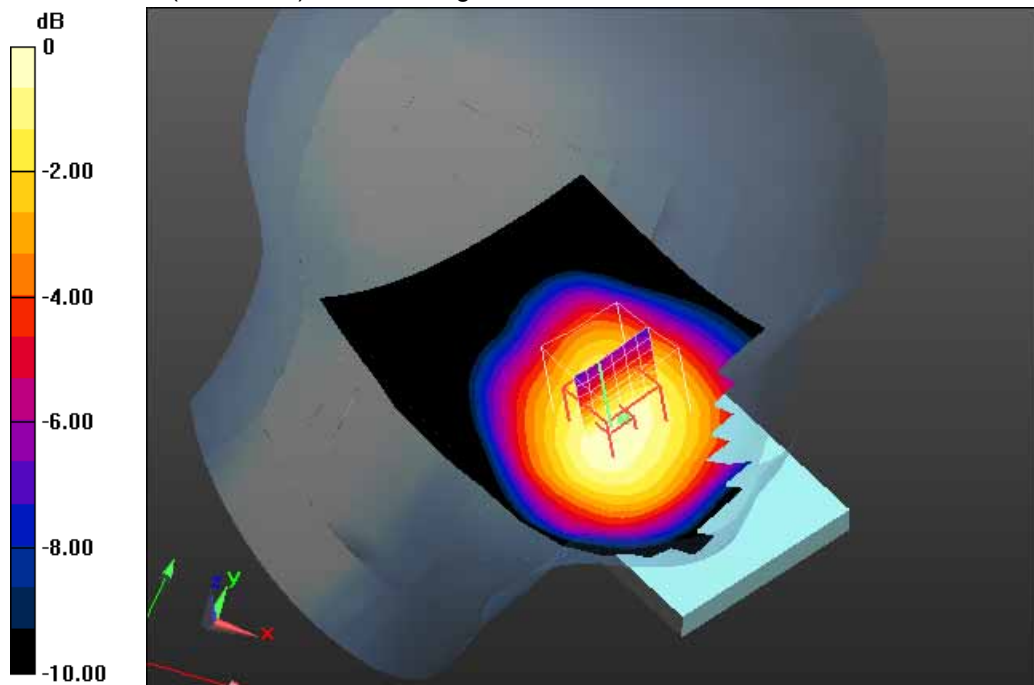
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.846 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.783 W/kg

SAR(1 g) = 0.605 W/kg; SAR(10 g) = 0.454 W/kg

Maximum value of SAR (measured) = 0.646 W/kg



0 dB = 0.646 W/kg = -1.90 dBW/kg

Additional information:

ambient temperature: 22.7°C; liquid temperature: 21.0°C

Date/Time: 28.02.2013 11:47:44

IEEE1528-UMTS FDD V head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 826.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.882$ S/m; $\epsilon_r = 41.265$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22 dB, b=66.3 dB $\sqrt{\mu}$ V, c=18.5, d=2.9 dB / Y: a=3.10 dB, b=65.6 dB $\sqrt{\mu}$ V, c=18.0, d=2.9 dB / Z: a=3.31 dB, b=66.5 dB $\sqrt{\mu}$ V, c=18.4, d=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

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

dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.288 W/kg

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

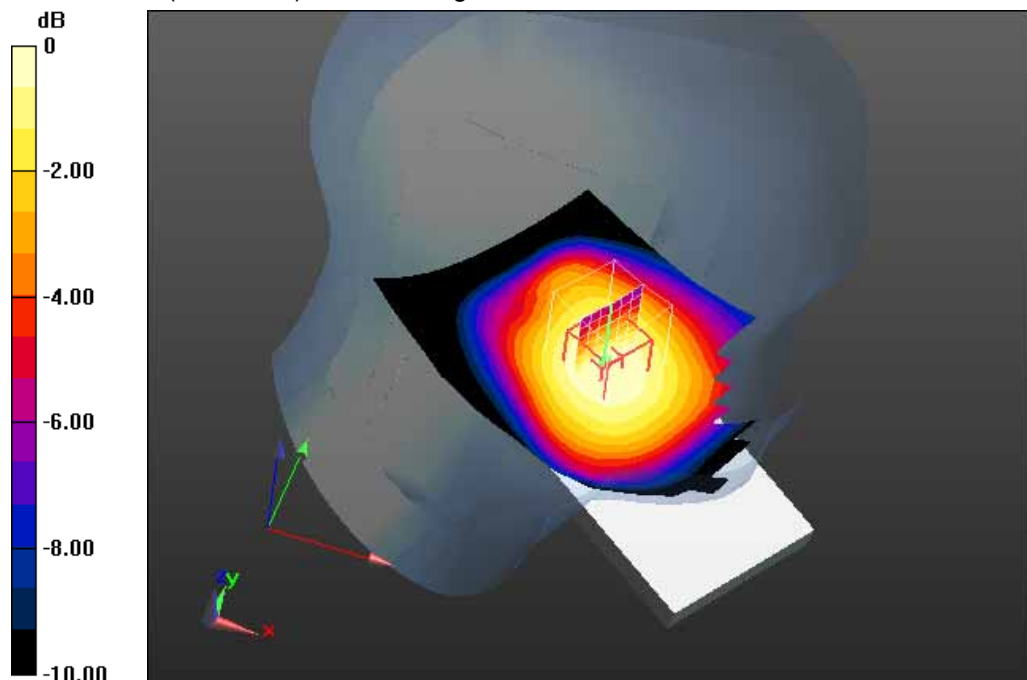
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.308 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.329 W/kg

SAR(1 g) = 0.274 W/kg; SAR(10 g) = 0.213 W/kg

Maximum value of SAR (measured) = 0.286 W/kg



0 dB = 0.286 W/kg = -5.44 dBW/kg

Additional information:

ambient temperature: 22.7°C; liquid temperature: 21.0°C

Date/Time: 28.02.2013 11:27:44

IEEE1528-UMTS FDD V head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 836.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.89$ S/m; $\epsilon_r = 41.1$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22 dB, b=66.3 dB $\sqrt{\mu}$ V, c=18.5, d=2.9 dB / Y: a=3.10 dB, b=65.6 dB $\sqrt{\mu}$ V, c=18.0, d=2.9 dB / Z: a=3.31 dB, b=66.5 dB $\sqrt{\mu}$ V, c=18.4, d=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

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

dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.371 W/kg

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

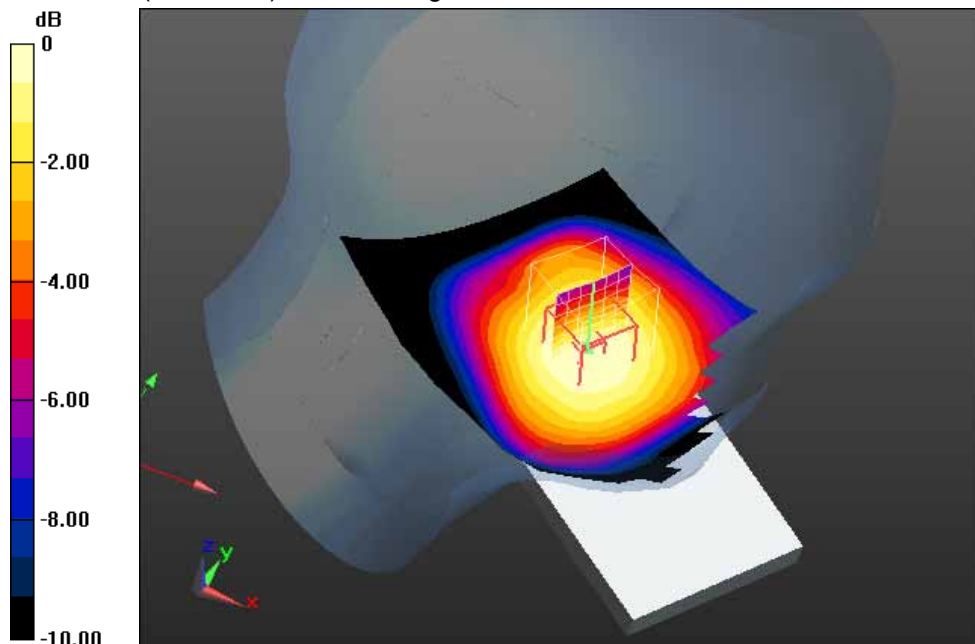
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.447 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.424 W/kg

SAR(1 g) = 0.351 W/kg; SAR(10 g) = 0.272 W/kg

Maximum value of SAR (measured) = 0.366 W/kg



0 dB = 0.366 W/kg = -4.37 dBW/kg

Additional information:

ambient temperature: 22.7°C; liquid temperature: 21.0°C

Date/Time: 28.02.2013 11:05:35

IEEE1528-UMTS FDD V head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 846.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.898$ S/m; $\epsilon_r = 40.936$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22 dB, b=66.3 dB $\sqrt{\mu}$ V, c=18.5, d=2.9 dB / Y: a=3.10 dB, b=65.6 dB $\sqrt{\mu}$ V, c=18.0, d=2.9 dB / Z: a=3.31 dB, b=66.5 dB $\sqrt{\mu}$ V, c=18.4, d=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

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

dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.323 W/kg

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

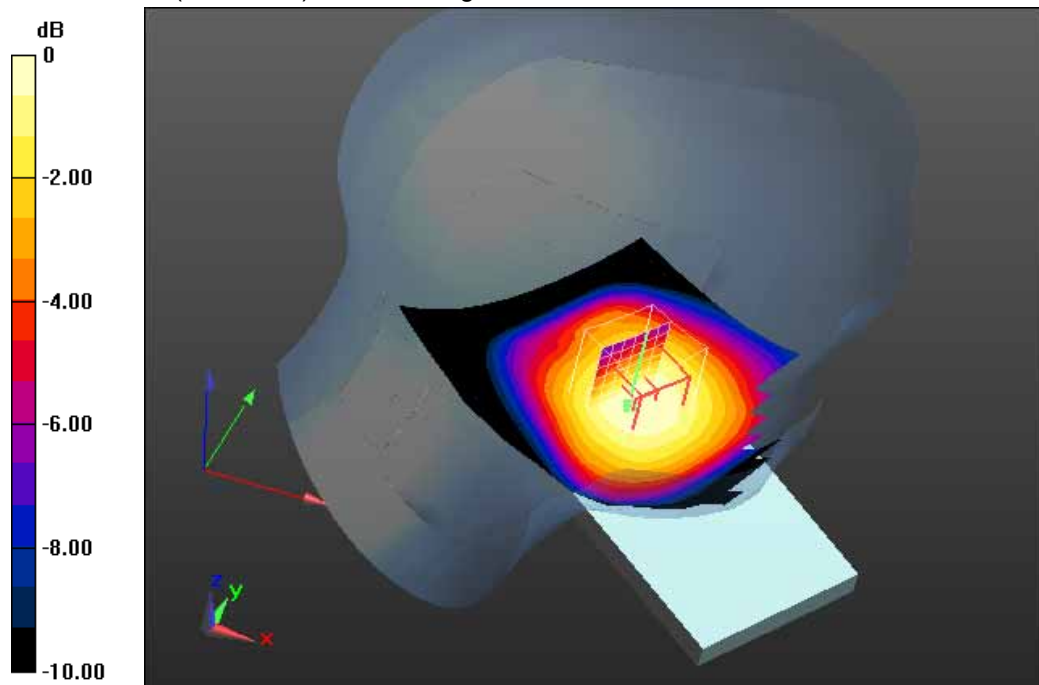
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.315 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.380 W/kg

SAR(1 g) = 0.312 W/kg; SAR(10 g) = 0.242 W/kg

Maximum value of SAR (measured) = 0.327 W/kg



0 dB = 0.327 W/kg = -4.85 dBW/kg

Additional information:

ambient temperature: 22.7°C; liquid temperature: 21.0°C

Date/Time: 28.02.2013 12:21:00

IEEE1528-UMTS FDD V head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 826.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.882$ S/m; $\epsilon_r = 41.265$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22 dB, b=66.3 dB $\sqrt{\mu}$ V, c=18.5, d=2.9 dB / Y: a=3.10 dB, b=65.6 dB $\sqrt{\mu}$ V, c=18.0, d=2.9 dB / Z: a=3.31 dB, b=66.5 dB $\sqrt{\mu}$ V, c=18.4, d=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

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

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

Maximum value of SAR (interpolated) = 0.555 W/kg

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

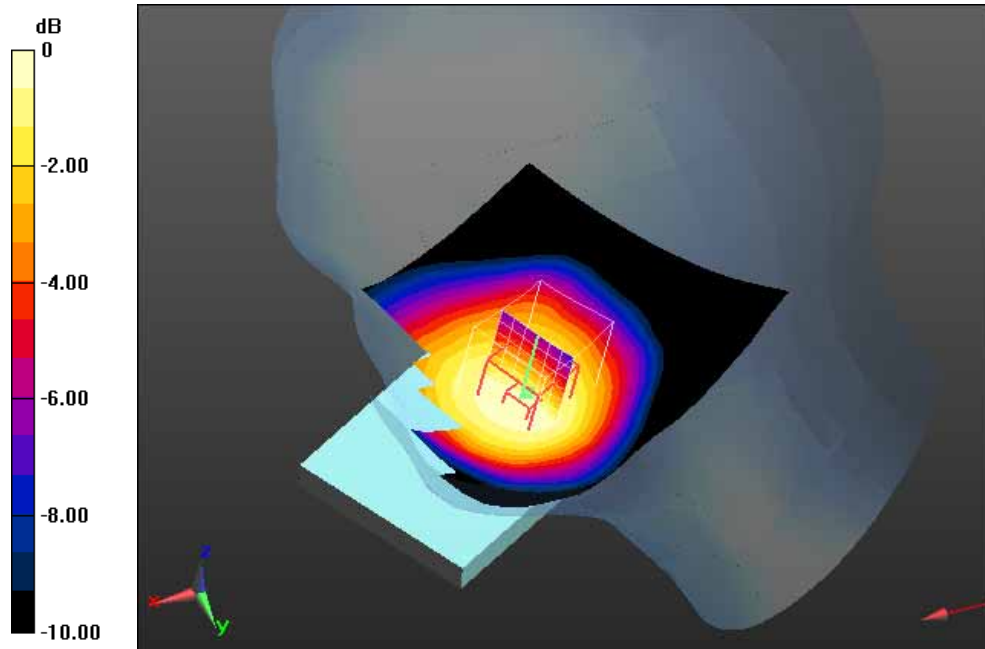
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.874 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.655 W/kg

SAR(1 g) = 0.523 W/kg; SAR(10 g) = 0.396 W/kg

Maximum value of SAR (measured) = 0.551 W/kg



0 dB = 0.551 W/kg = -2.59 dBW/kg

Additional information:

ambient temperature: 22.7°C; liquid temperature: 21.0°C

Date/Time: 28.02.2013 12:49:56

IEEE1528-UMTS FDD V head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 836.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.89$ S/m; $\epsilon_r = 41.1$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22 dB, b=66.3 dB $\sqrt{\mu}$ V, c=18.5, d=2.9 dB / Y: a=3.10 dB, b=65.6 dB $\sqrt{\mu}$ V, c=18.0, d=2.9 dB / Z: a=3.31 dB, b=66.5 dB $\sqrt{\mu}$ V, c=18.4, d=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

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

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

Maximum value of SAR (interpolated) = 0.761 W/kg

Right-Hand-Side HSL/Touch Position - Middle/Zoom Scan (7x7x7)/Cube 0:

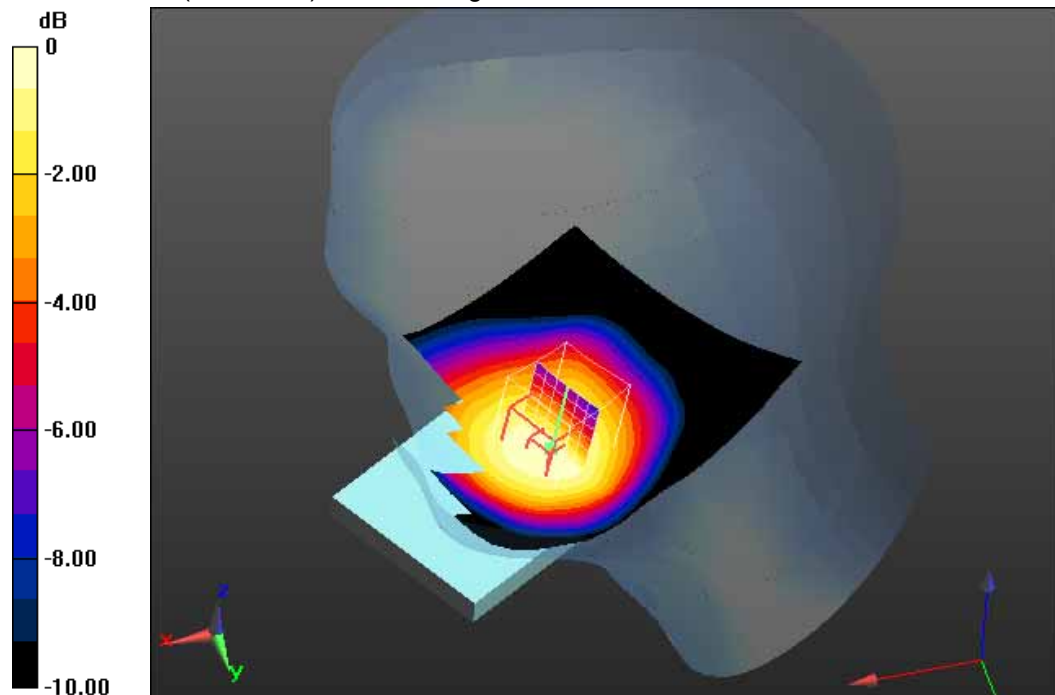
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 29.782 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.876 W/kg

SAR(1 g) = 0.702 W/kg; SAR(10 g) = 0.530 W/kg

Maximum value of SAR (measured) = 0.741 W/kg



0 dB = 0.741 W/kg = -1.30 dBW/kg

Additional information:

ambient temperature: 22.7°C; liquid temperature: 21.0°C

Date/Time: 28.02.2013 13:19:25

IEEE1528-UMTS FDD V head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 846.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.898$ S/m; $\epsilon_r = 40.936$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22 dB, b=66.3 dB $\sqrt{\mu}$ V, c=18.5, d=2.9 dB / Y: a=3.10 dB, b=65.6 dB $\sqrt{\mu}$ V, c=18.0, d=2.9 dB / Z: a=3.31 dB, b=66.5 dB $\sqrt{\mu}$ V, c=18.4, d=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

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

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

Maximum value of SAR (interpolated) = 0.631 W/kg

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

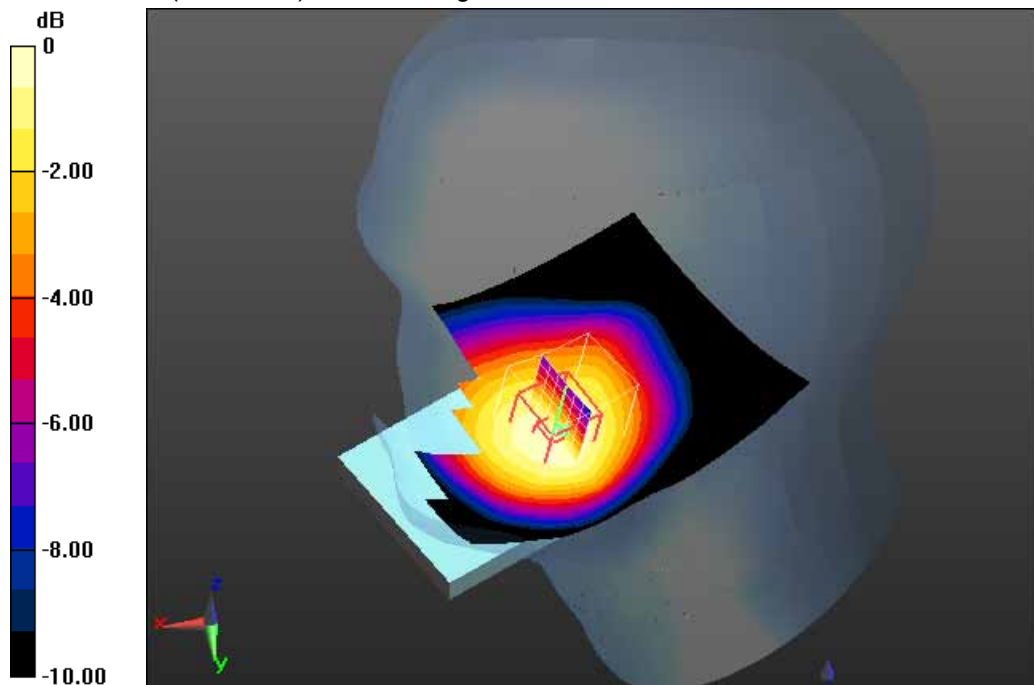
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.245 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.739 W/kg

SAR(1 g) = 0.587 W/kg; SAR(10 g) = 0.443 W/kg

Maximum value of SAR (measured) = 0.625 W/kg



0 dB = 0.625 W/kg = -2.04 dBW/kg

Additional information:

ambient temperature: 22.7°C; liquid temperature: 21.0°C

Date/Time: 28.02.2013 14:49:51

IEEE1528-UMTS FDD V head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 826.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.882$ S/m; $\epsilon_r = 41.265$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22 dB, b=66.3 dB $\sqrt{\mu}$ V, c=18.5, d=2.9 dB / Y: a=3.10 dB, b=65.6 dB $\sqrt{\mu}$ V, c=18.0, d=2.9 dB / Z: a=3.31 dB, b=66.5 dB $\sqrt{\mu}$ V, c=18.4, d=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

Right-Hand-Side HSL/Tilt Position - Low/Area Scan (111x161x1): Interpolated

grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.262 W/kg

Right-Hand-Side HSL/Tilt Position - Low/Zoom Scan (7x7x7)/Cube 0:

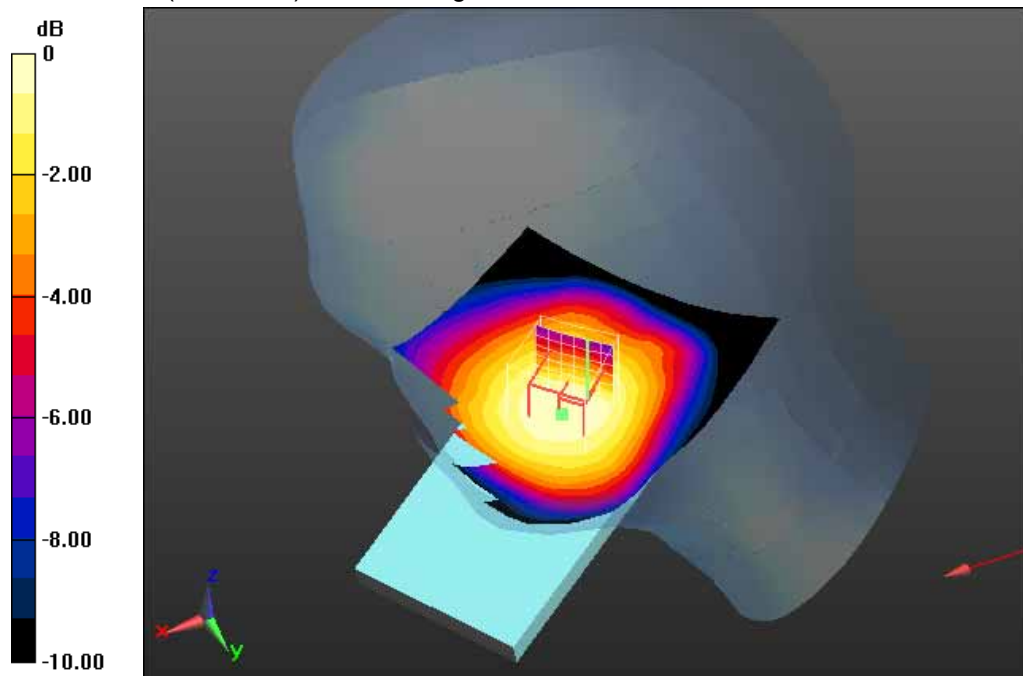
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.479 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.307 W/kg

SAR(1 g) = 0.251 W/kg; SAR(10 g) = 0.195 W/kg

Maximum value of SAR (measured) = 0.262 W/kg



0 dB = 0.262 W/kg = -5.82 dBW/kg

Additional information:

ambient temperature: 22.7°C; liquid temperature: 21.0°C

Date/Time: 28.02.2013 14:09:57

IEEE1528-UMTS FDD V head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 836.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.89$ S/m; $\epsilon_r = 41.1$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22 dB, b=66.3 dB $\sqrt{\mu}$ V, c=18.5, d=2.9 dB / Y: a=3.10 dB, b=65.6 dB $\sqrt{\mu}$ V, c=18.0, d=2.9 dB / Z: a=3.31 dB, b=66.5 dB $\sqrt{\mu}$ V, c=18.4, d=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

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

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

Maximum value of SAR (interpolated) = 0.355 W/kg

Right-Hand-Side HSL/Tilt Position - Middle/Zoom Scan (8x8x7)/Cube 0:

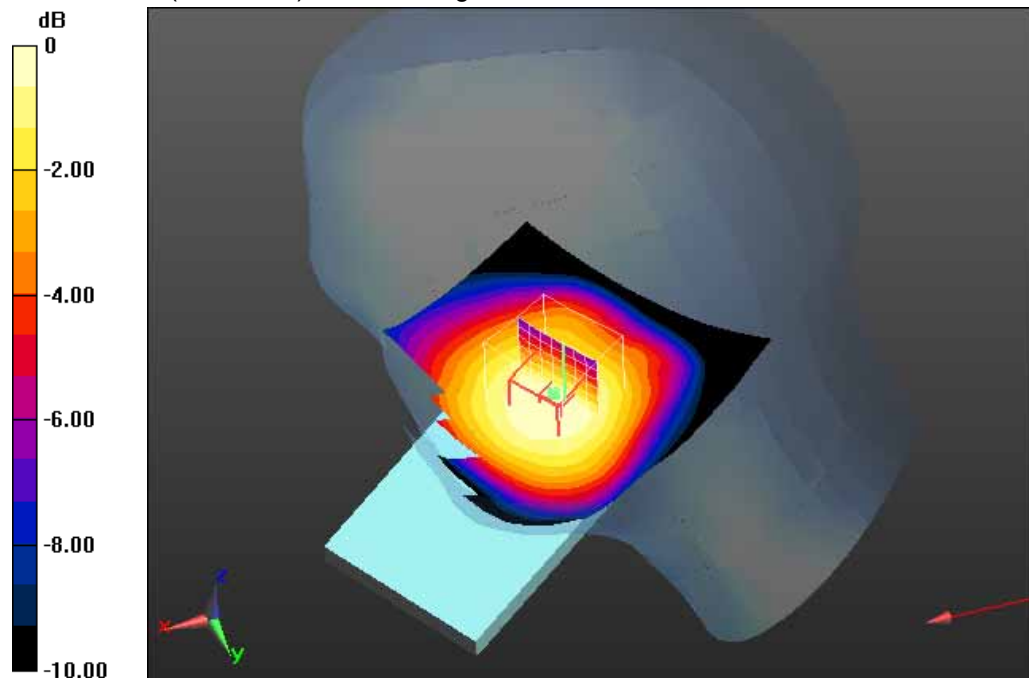
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.348 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.412 W/kg

SAR(1 g) = 0.336 W/kg; SAR(10 g) = 0.260 W/kg

Maximum value of SAR (measured) = 0.354 W/kg



0 dB = 0.354 W/kg = -4.51 dBW/kg

Additional information:

ambient temperature: 22.7°C; liquid temperature: 21.0°C

Date/Time: 28.02.2013 13:42:26

IEEE1528-UMTS FDD V head

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 846.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.898$ S/m; $\epsilon_r = 40.936$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22 dB, b=66.3 dB $\sqrt{\mu}$ V, c=18.5, d=2.9 dB / Y: a=3.10 dB, b=65.6 dB $\sqrt{\mu}$ V, c=18.0, d=2.9 dB / Z: a=3.31 dB, b=66.5 dB $\sqrt{\mu}$ V, c=18.4, d=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.5(1059); SEMCAD X 14.6.8(7028)

Right-Hand-Side HSL/Tilt Position - High/Area Scan (111x161x1): Interpolated

grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.310 W/kg

Right-Hand-Side HSL/Tilt Position - High/Zoom Scan (8x8x7)/Cube 0:

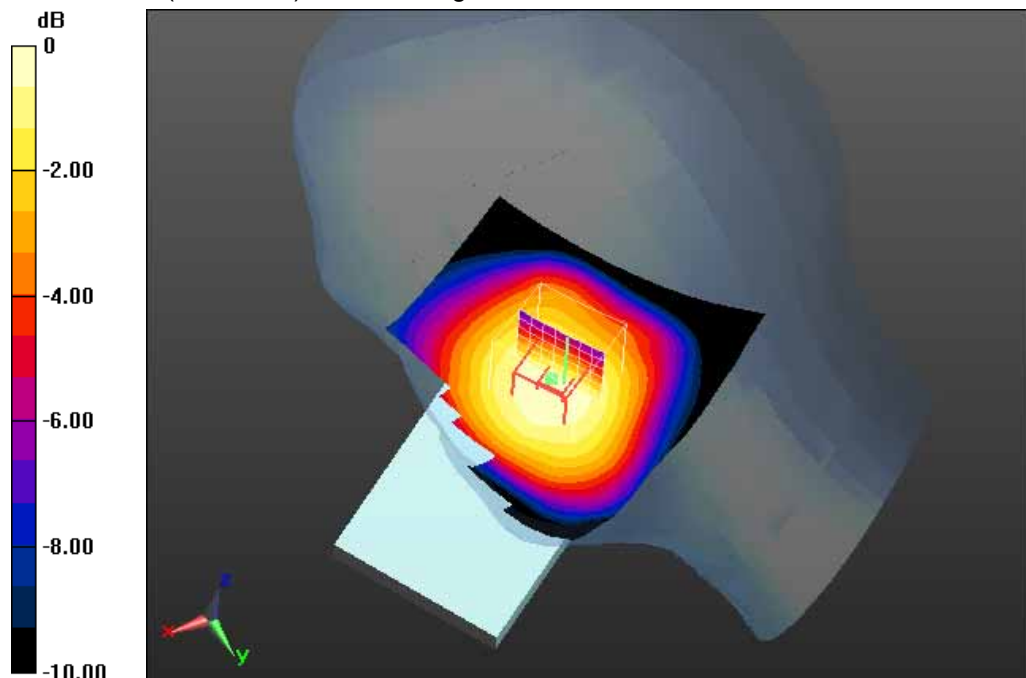
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.313 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.367 W/kg

SAR(1 g) = 0.299 W/kg; SAR(10 g) = 0.229 W/kg

Maximum value of SAR (measured) = 0.314 W/kg



0 dB = 0.314 W/kg = -5.03 dBW/kg

Additional information:

ambient temperature: 22.7°C; liquid temperature: 21.0°C

Date/Time: 08.03.2013 12:47:19 Date/Time: 08.03.2013 12:56:54

OET65-Body-WCDMA FDD V**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M900 Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.962$ mho/m; $\epsilon_r = 55.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

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

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

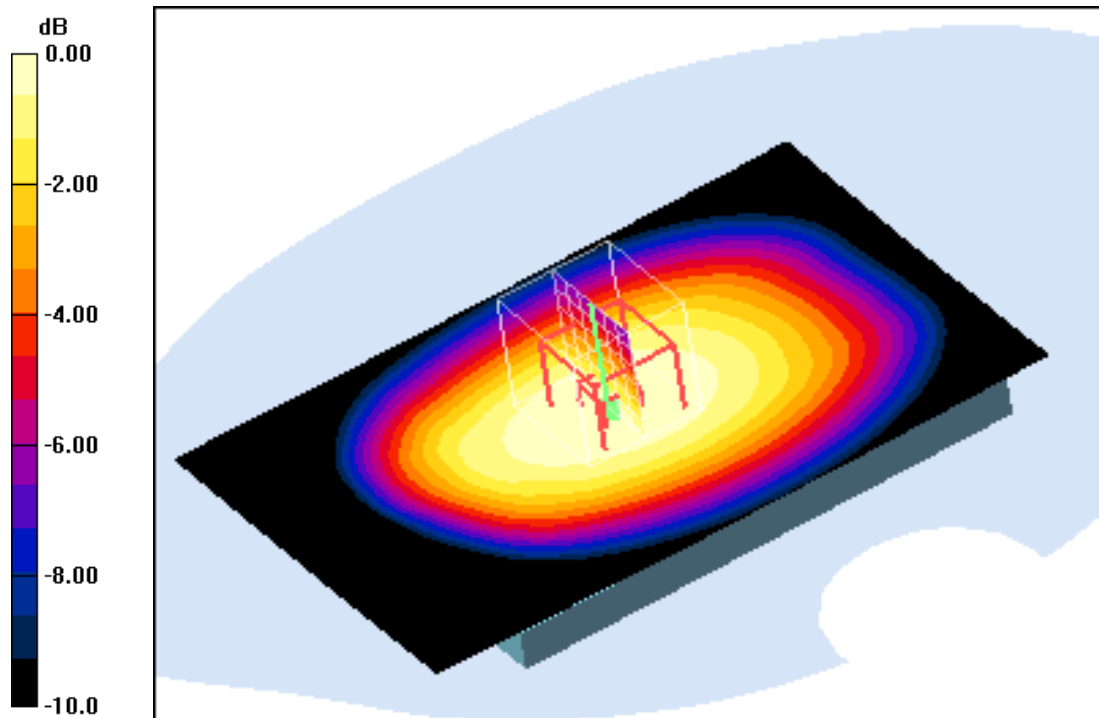
dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.6 V/m; Power Drift = -0.025 dB

Peak SAR (extrapolated) = 0.788 W/kg

SAR(1 g) = 0.665 mW/g; SAR(10 g) = 0.515 mW/g

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



0 dB = 0.696mW/g

Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 08.03.2013 13:09:09 Date/Time: 08.03.2013 13:18:11

OET65-Body-WCDMA FDD V**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M900 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 54.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

Maximum value of SAR (interpolated) = 0.917 mW/g

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

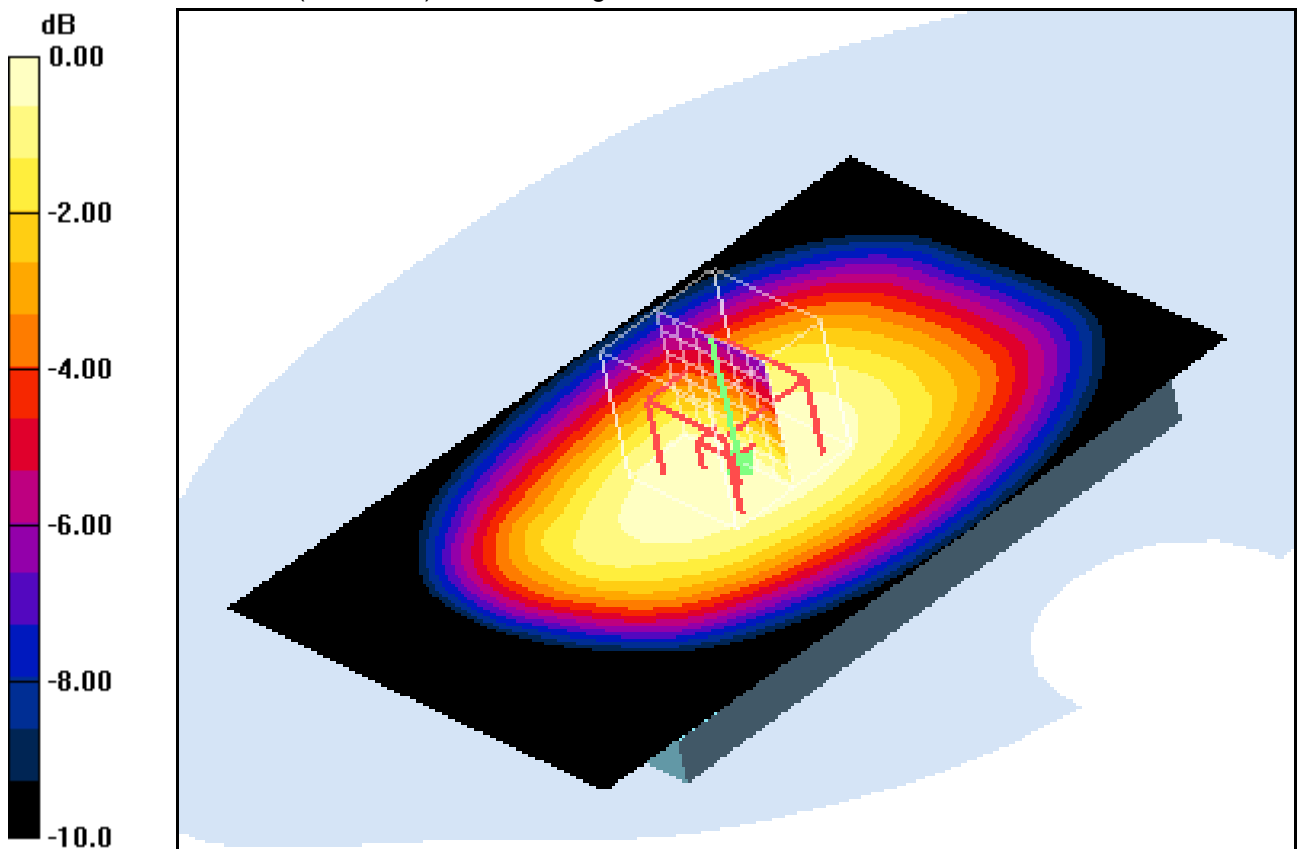
dx=5mm, dy=5mm, dz=5mm

Reference Value = 31.2 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.853 mW/g; SAR(10 g) = 0.659 mW/g

Maximum value of SAR (measured) = 0.896 mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 08.03.2013 13:30:41 Date/Time: 08.03.2013 13:40:27

OET65-Body-WCDMA FDD V**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M900 Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.986$ mho/m; $\epsilon_r = 54.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

Maximum value of SAR (interpolated) = 0.757 mW/g

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

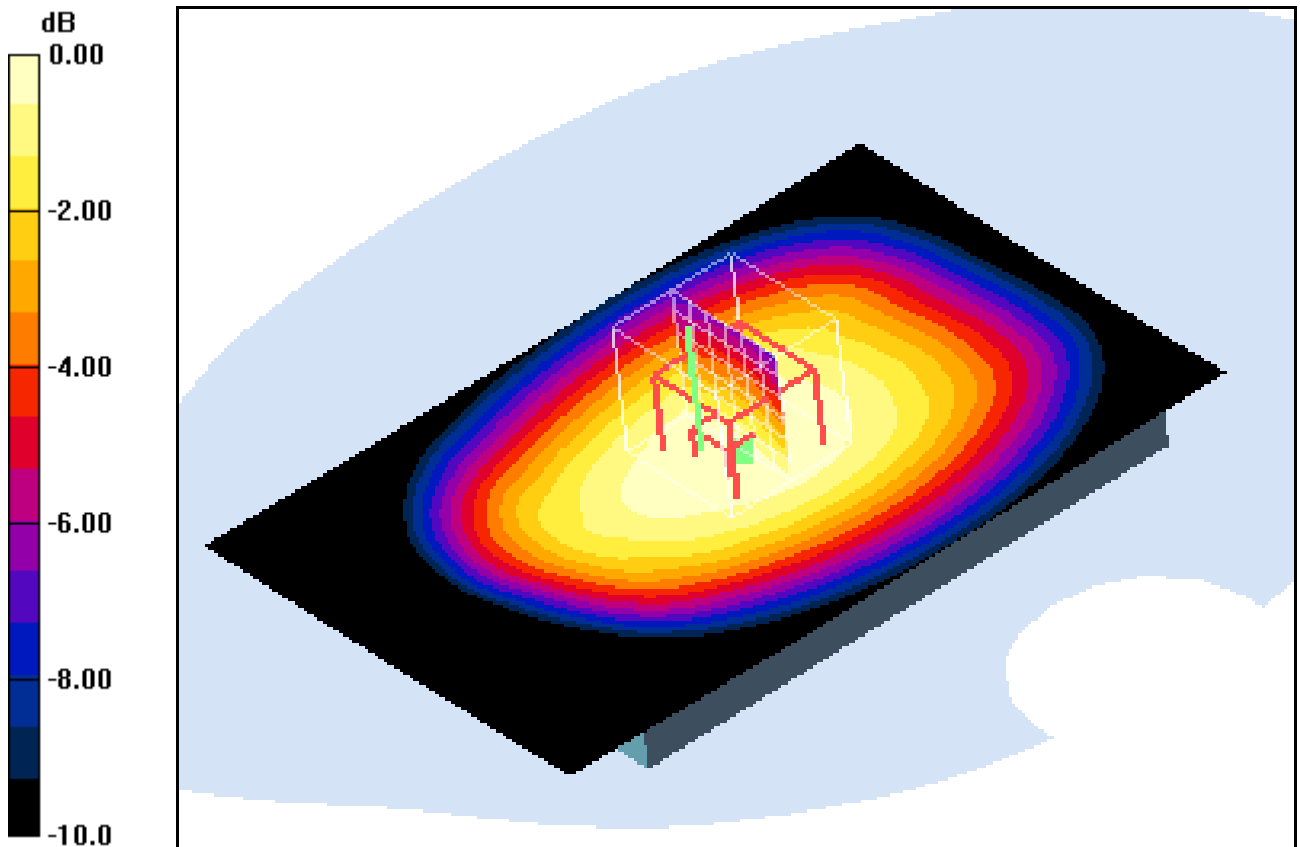
dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.6 V/m; Power Drift = -0.115 dB

Peak SAR (extrapolated) = 0.853 W/kg

SAR(1 g) = 0.717 mW/g; SAR(10 g) = 0.555 mW/g

Maximum value of SAR (measured) = 0.754 mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 08.03.2013 10:31:12 Date/Time: 08.03.2013 10:40:47

OET65-Body-WCDMA FDD V**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M900 Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.962$ mho/m; $\epsilon_r = 55.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.641 mW/g

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

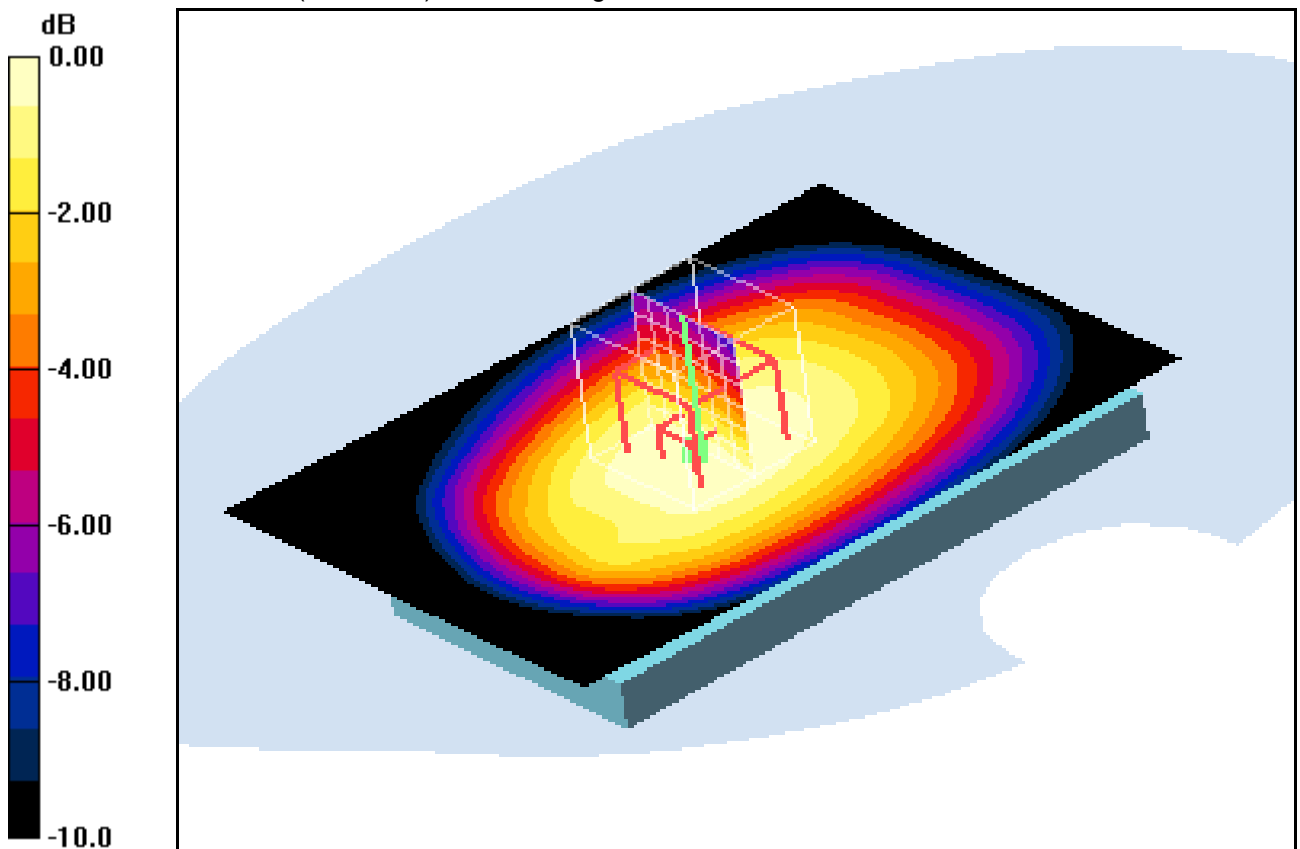
dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.8 V/m; Power Drift = -0.096 dB

Peak SAR (extrapolated) = 0.743 W/kg

SAR(1 g) = 0.620 mW/g; SAR(10 g) = 0.479 mW/g

Maximum value of SAR (measured) = 0.651 mW/g



0 dB = 0.651mW/g

Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 08.03.2013 10:53:52 Date/Time: 08.03.2013 11:02:51

OET65-Body-WCDMA FDD V**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M900 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 54.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

Maximum value of SAR (interpolated) = 0.830 mW/g

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

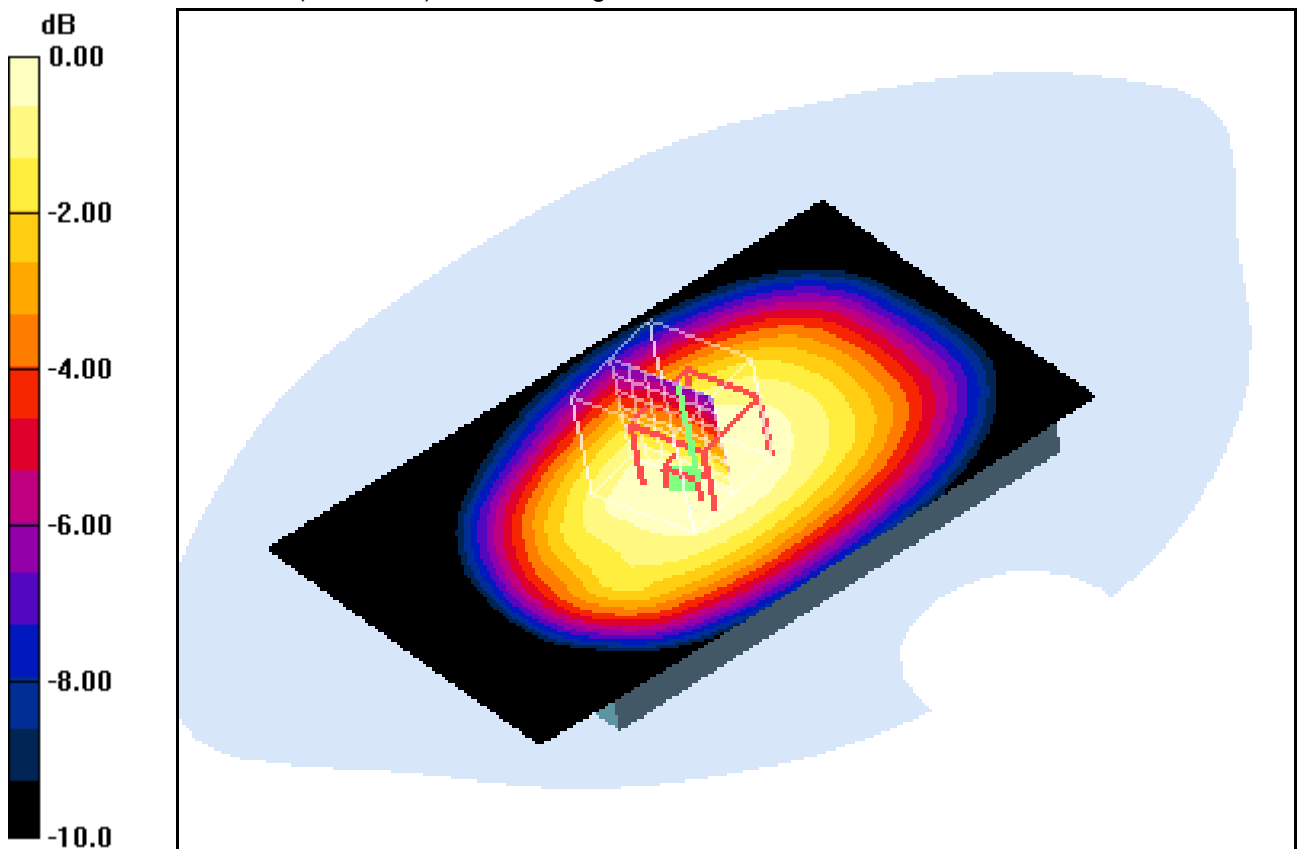
dx=5mm, dy=5mm, dz=5mm

Reference Value = 30.0 V/m; Power Drift = -0.107 dB

Peak SAR (extrapolated) = 0.935 W/kg

SAR(1 g) = 0.780 mW/g; SAR(10 g) = 0.604 mW/g

Maximum value of SAR (measured) = 0.825 mW/g



0 dB = 0.825mW/g

Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 08.03.2013 11:15:07 Date/Time: 08.03.2013 11:25:49

OET65-Body-WCDMA FDD V**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M900 Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.986$ mho/m; $\epsilon_r = 54.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

Maximum value of SAR (interpolated) = 0.687 mW/g

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

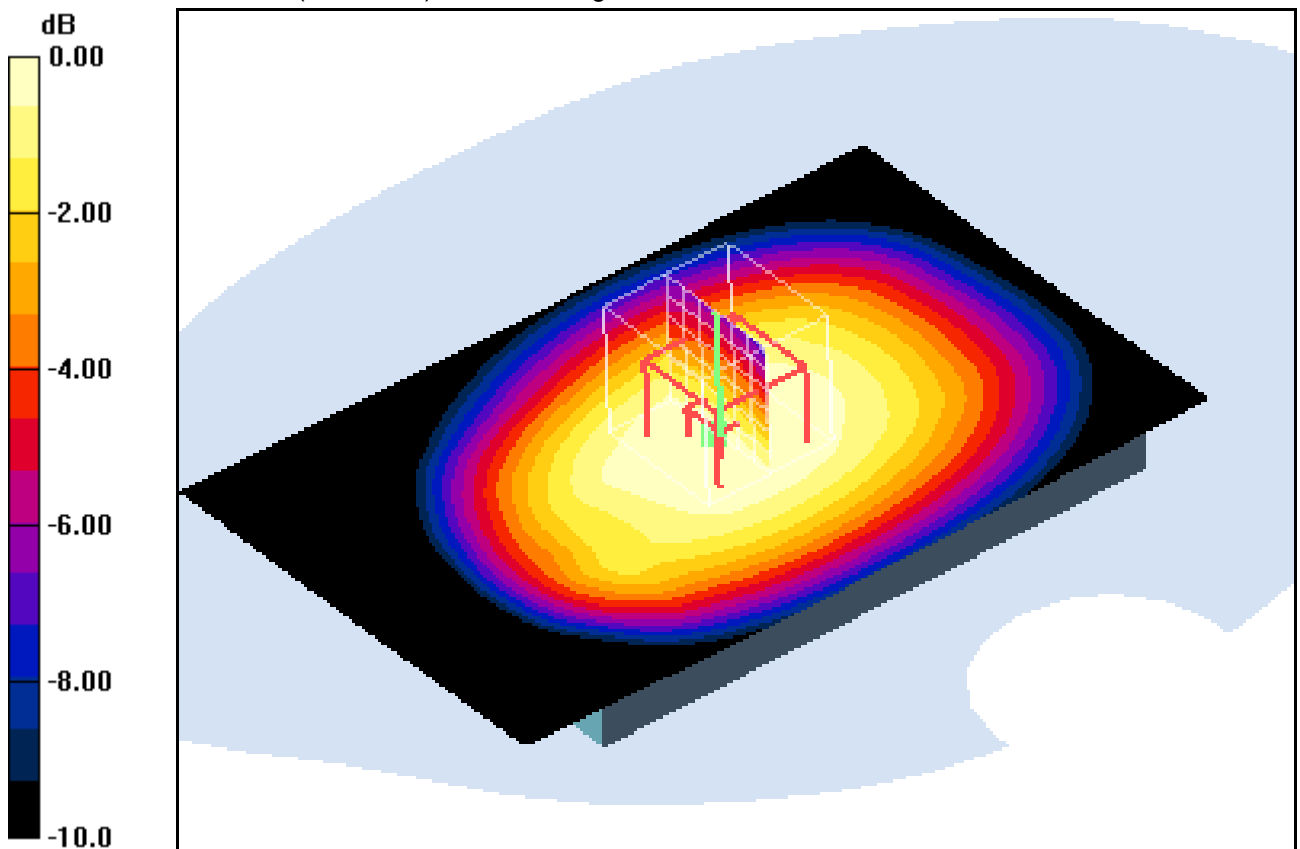
dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.9 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 0.773 W/kg

SAR(1 g) = 0.646 mW/g; SAR(10 g) = 0.501 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: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 08.03.2013 12:24:53 Date/Time: 08.03.2013 12:32:51

OET65-Body-WCDMA FDD V**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M900 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 54.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

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

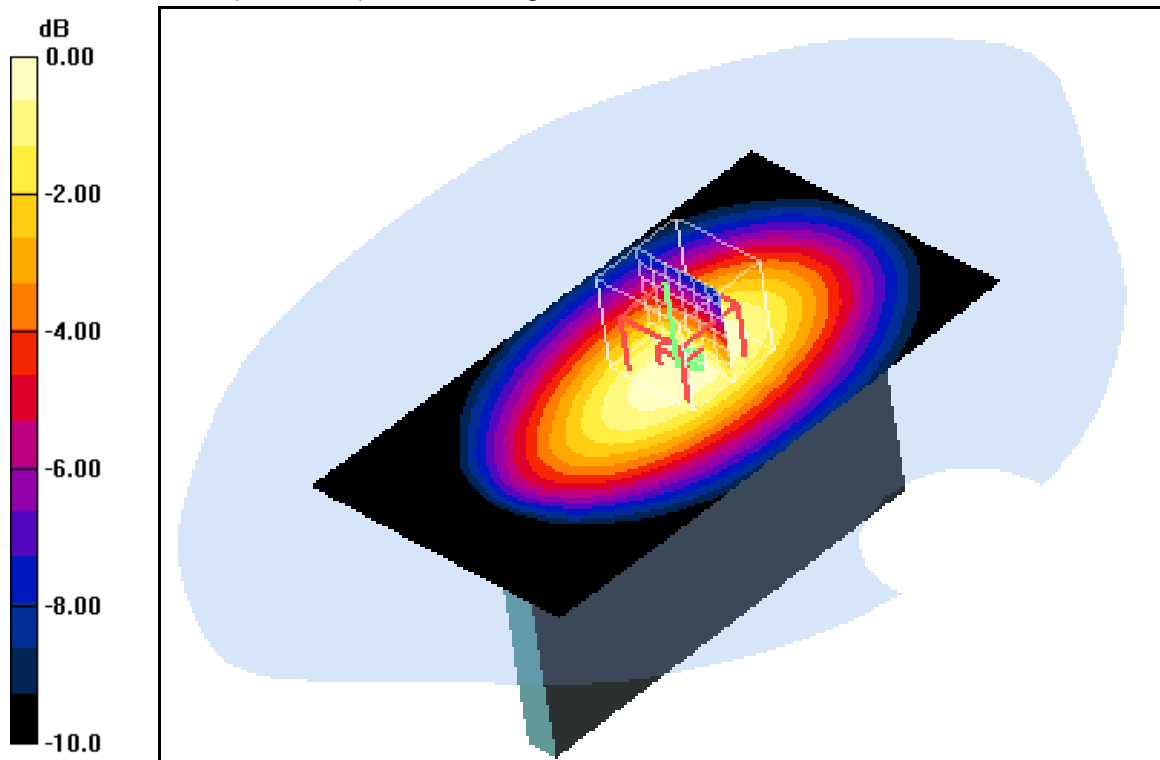
Edge left position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.0 V/m; Power Drift = -0.026 dB

Peak SAR (extrapolated) = 0.643 W/kg

SAR(1 g) = 0.484 mW/g; SAR(10 g) = 0.341 mW/g

Maximum value of SAR (measured) = 0.519 mW/g



0 dB = 0.519mW/g

Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 08.03.2013 12:03:07 Date/Time: 08.03.2013 12:11:46

OET65-Body-WCDMA FDD V**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M900 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 54.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

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

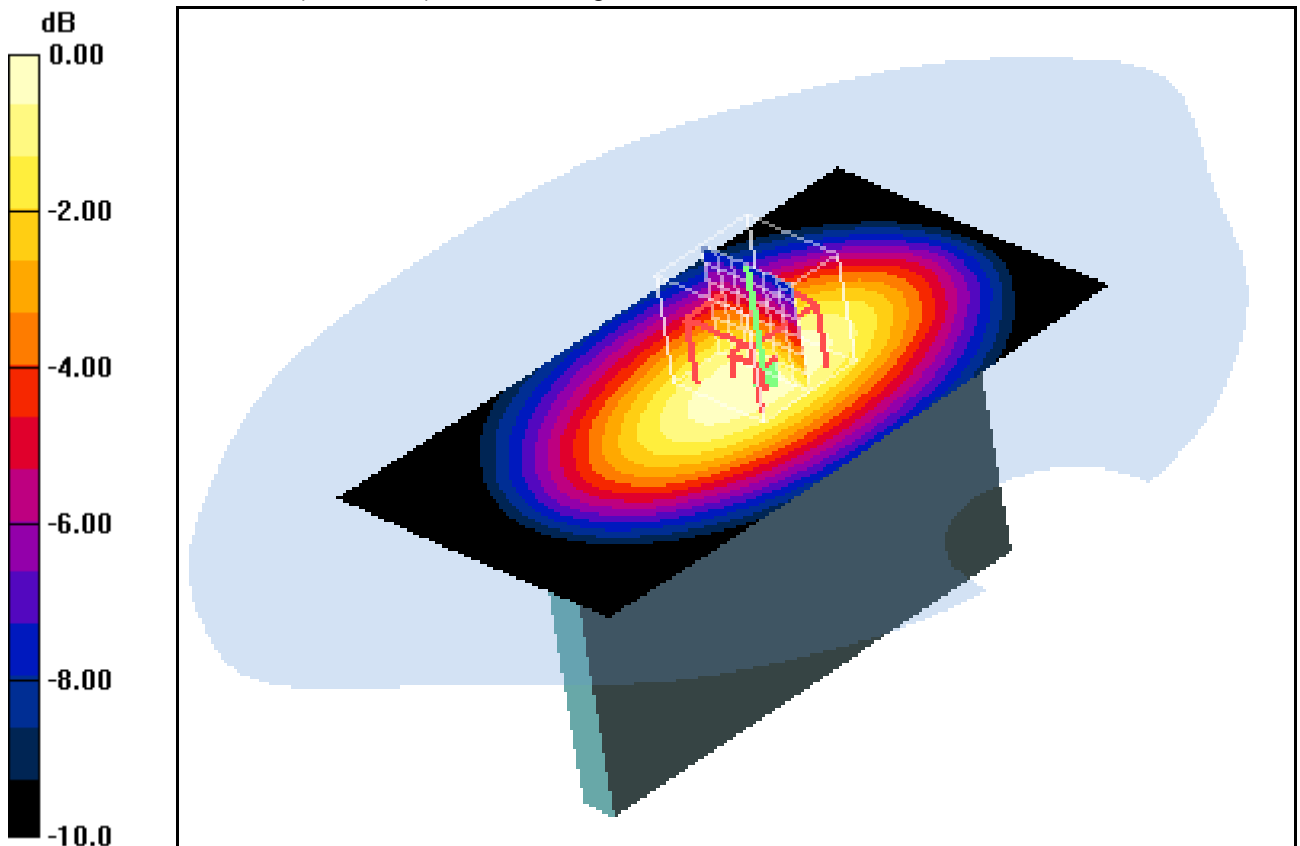
Edge right position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.9 V/m; Power Drift = -0.028 dB

Peak SAR (extrapolated) = 0.524 W/kg

SAR(1 g) = 0.400 mW/g; SAR(10 g) = 0.285 mW/g

Maximum value of SAR (measured) = 0.427 mW/g



0 dB = 0.427mW/g

Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 08.03.2013 11:39:57 Date/Time: 08.03.2013 11:44:44

OET65-Body-WCDMA FDD V**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M900 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 54.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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) = 0.130 mW/g

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

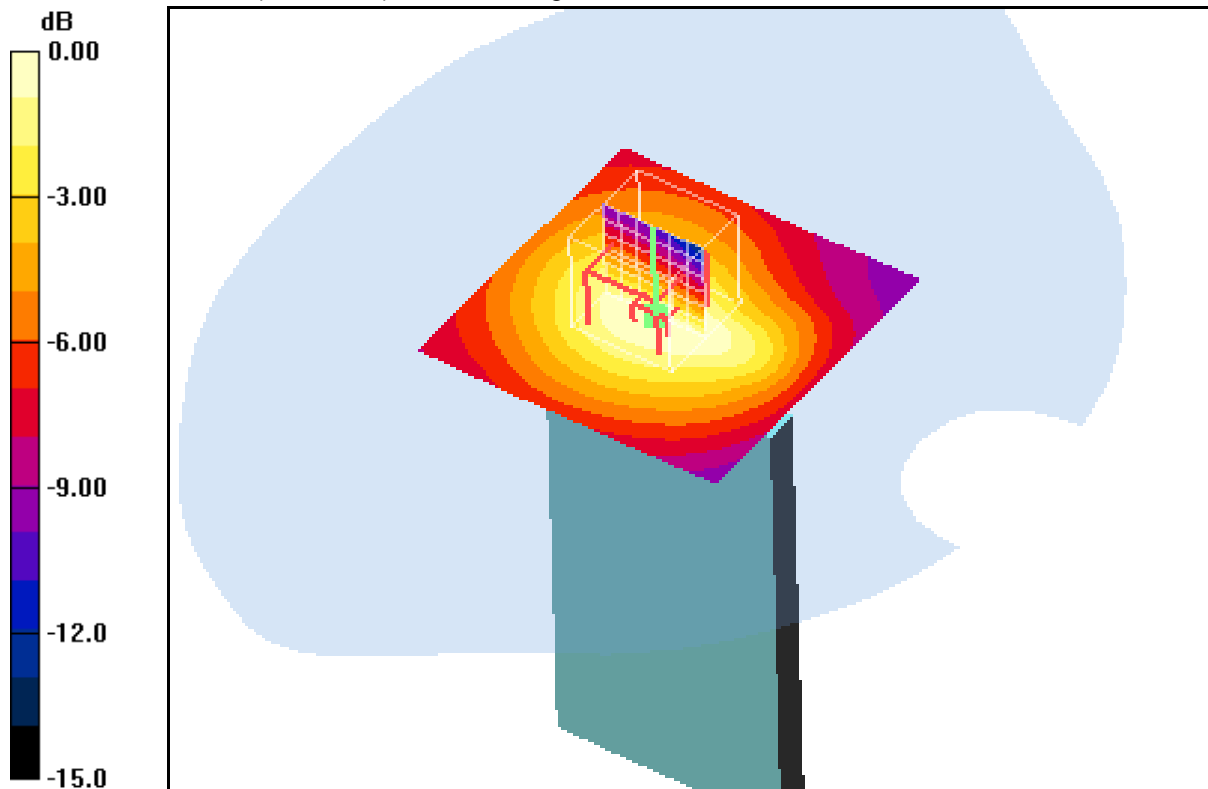
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.9 V/m; Power Drift = -0.068 dB

Peak SAR (extrapolated) = 0.230 W/kg

SAR(1 g) = 0.115 mW/g; SAR(10 g) = 0.072 mW/g

Maximum value of SAR (measured) = 0.126 mW/g



0 dB = 0.126mW/g

Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 08.03.2013 14:52:45 Date/Time: 08.03.2013 15:02:14

OET65-Body-WCDMA FDD V**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M900 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 54.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Middle WC/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.910 mW/g

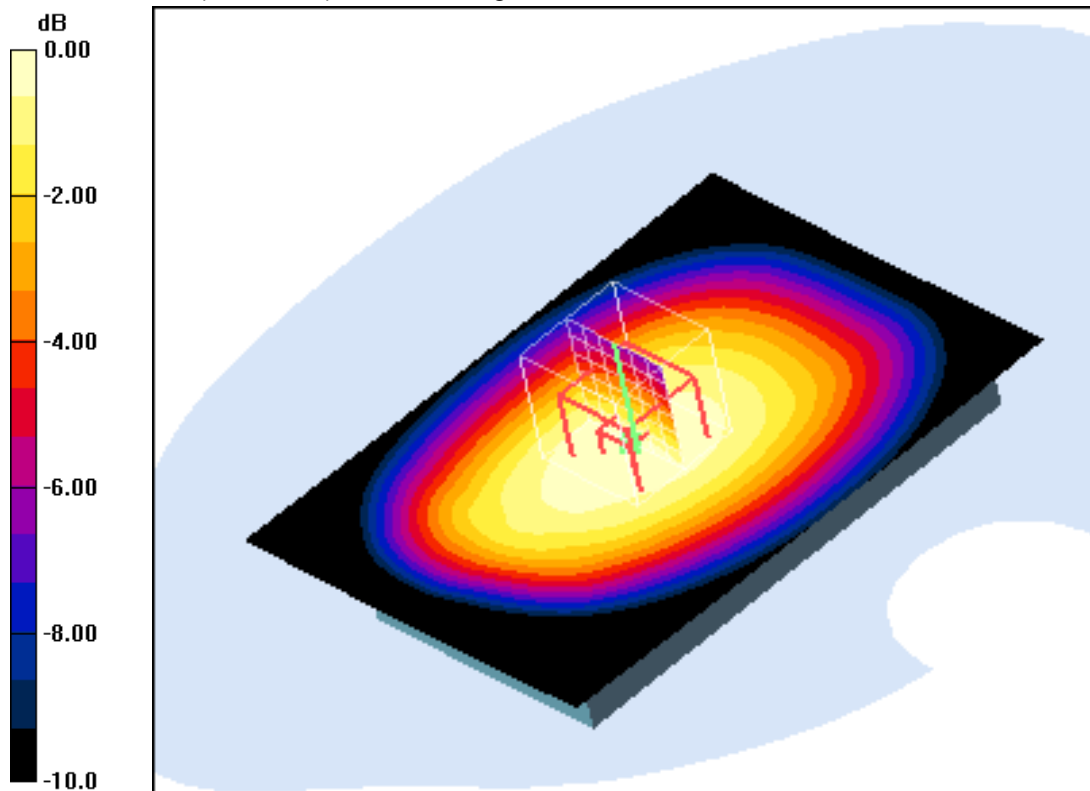
Front position - Middle WC/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 31.0 V/m; Power Drift = 0.049 dB

Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.865 mW/g; SAR(10 g) = 0.668 mW/g

Maximum value of SAR (measured) = 0.909 mW/g



0 dB = 0.909mW/g

Additional information:

position or distance of DUT to SAM: 10 mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 08.03.2013 13:55:58 Date/Time: 08.03.2013 14:05:02

OET65-Body-WCDMA FDD V**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

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

Medium: M900 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 54.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

Maximum value of SAR (interpolated) = 0.769 mW/g

Front position - Middle 15mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

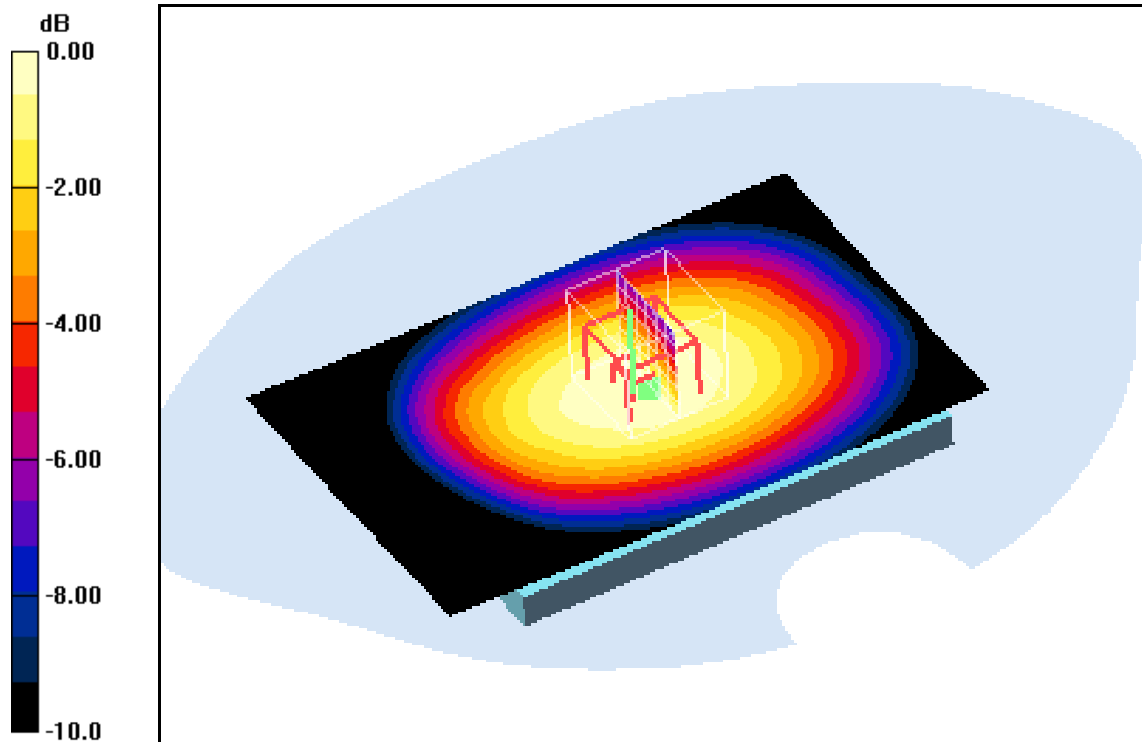
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.4 V/m; Power Drift = 0.035 dB

Peak SAR (extrapolated) = 0.867 W/kg

SAR(1 g) = 0.724 mW/g; SAR(10 g) = 0.555 mW/g

Maximum value of SAR (measured) = 0.757 mW/g



0 dB = 0.757mW/g

Additional information:

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Annex B.4: LTE FDD 5

Date/Time: 28.03.2013 18:32:48 Date/Time: 28.03.2013 18:40:39

IEEE1528-LeftHandSide-LTE 5

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

Communication System: LTE FDD 5; Frequency: 829 MHz; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used (interpolated): $f = 829 \text{ MHz}$; $\sigma = 0.898 \text{ mho/m}$; $\epsilon_r = 42.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.44, 6.44, 6.44); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

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

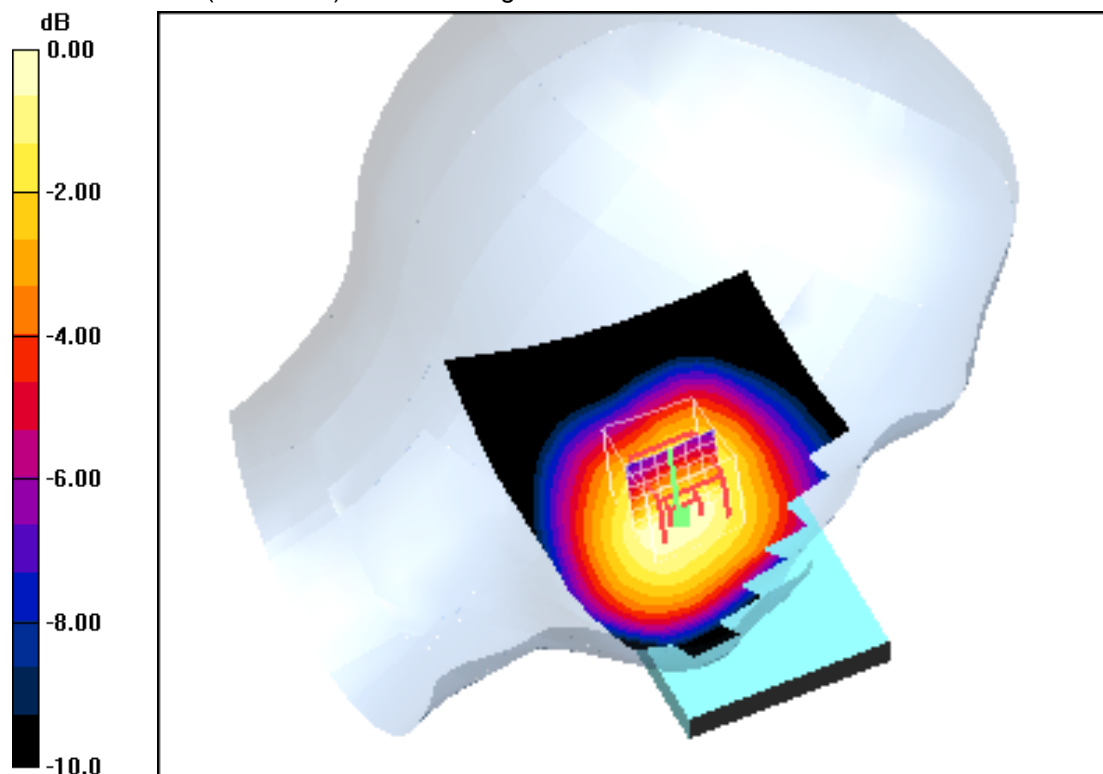
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 23.8 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.552 W/kg

SAR(1 g) = 0.452 mW/g; SAR(10 g) = 0.340 mW/g

Maximum value of SAR (measured) = 0.478 mW/g



0 dB = 0.478mW/g

Additional information:

ambient temperature: 23.3°C; liquid temperature: 22.1°C

Date/Time: 28.03.2013 17:36:32 Date/Time: 28.03.2013 17:45:38

IEEE1528-LeftHandSide-LTE 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.91$ mho/m; $\epsilon_r = 42.6$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.44, 6.44, 6.44); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.625 mW/g

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

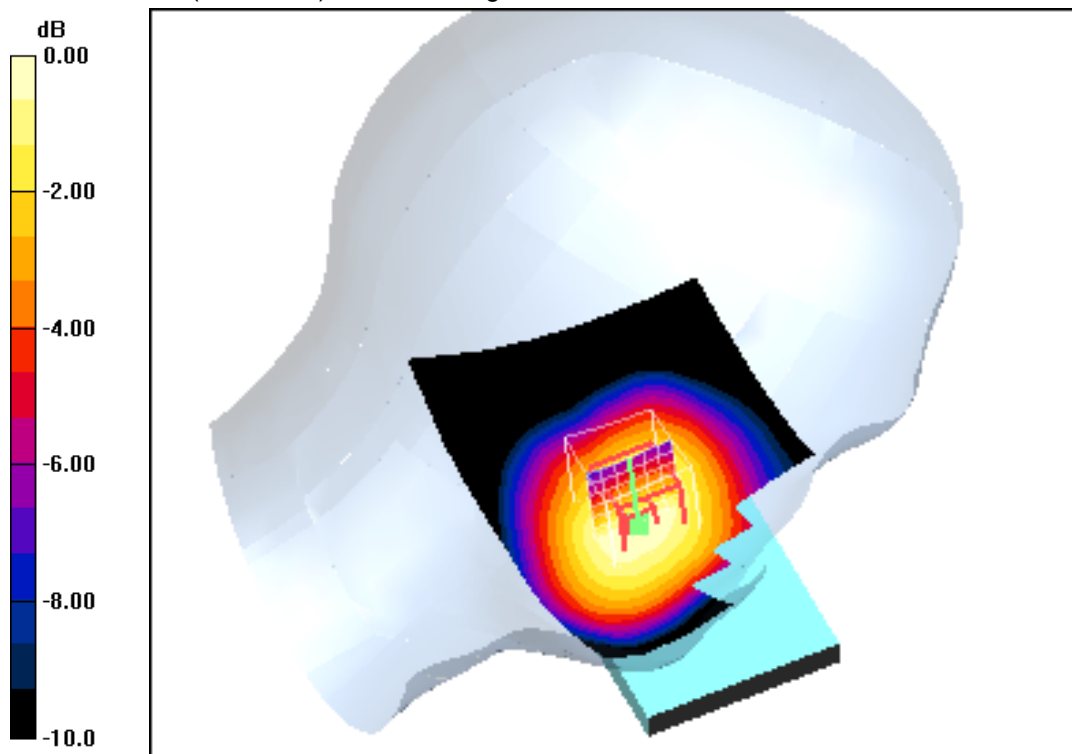
dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.8 V/m; Power Drift = -0.019 dB

Peak SAR (extrapolated) = 0.710 W/kg

SAR(1 g) = 0.583 mW/g; SAR(10 g) = 0.438 mW/g

Maximum value of SAR (measured) = 0.613 mW/g

**Additional information:**

ambient temperature: 23.3°C; liquid temperature: 22.1°C

Date/Time: 28.03.2013 17:14:49 Date/Time: 28.03.2013 17:23:22

IEEE1528-LeftHandSide-LTE 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 844 MHz; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used (interpolated): $f = 844 \text{ MHz}$; $\sigma = 0.916 \text{ mho/m}$; $\epsilon_r = 42.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.44, 6.44, 6.44); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

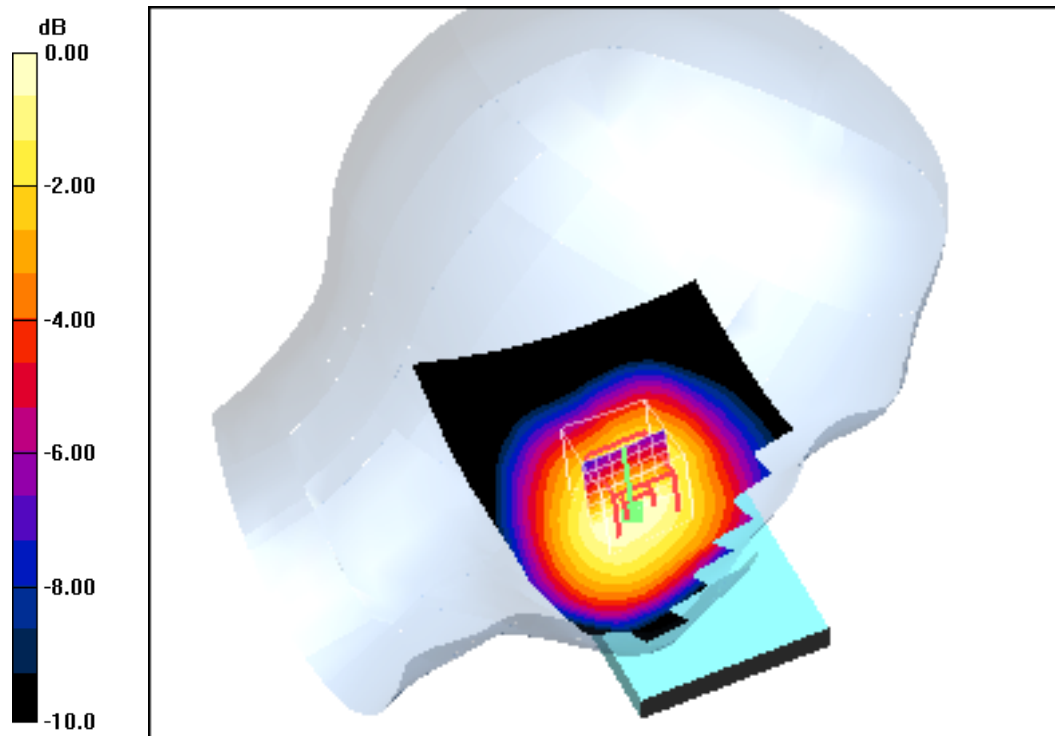
Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 25.1 V/m; Power Drift = -0.014 dB

Peak SAR (extrapolated) = 0.622 W/kg

SAR(1 g) = 0.506 mW/g; SAR(10 g) = 0.381 mW/g

Maximum value of SAR (measured) = 0.535 mW/g



0 dB = 0.535mW/g

Additional information:

ambient temperature: 23.3°C; liquid temperature: 22.1°C

Date/Time: 28.03.2013 16:31:31 Date/Time: 28.03.2013 16:39:23

IEEE1528-LeftHandSide-LTE 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 829 MHz; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used (interpolated): $f = 829 \text{ MHz}$; $\sigma = 0.898 \text{ mho/m}$; $\epsilon_r = 42.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.44, 6.44, 6.44); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

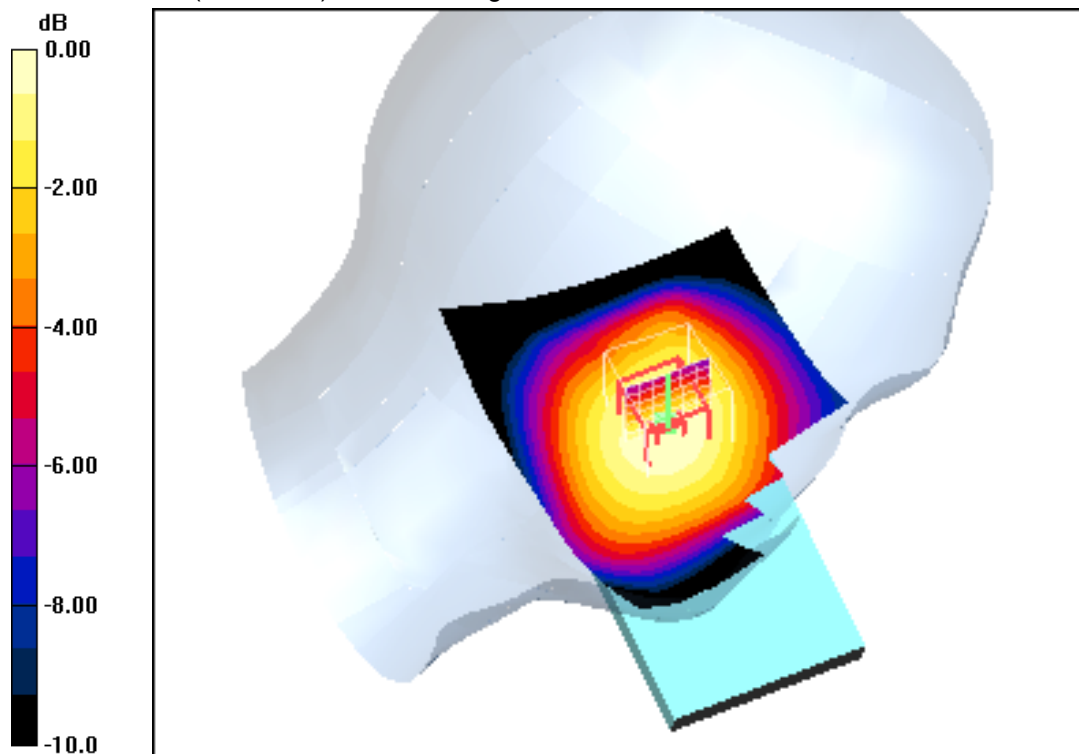
Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 17.3 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.290 W/kg

SAR(1 g) = 0.248 mW/g; SAR(10 g) = 0.194 mW/g

Maximum value of SAR (measured) = 0.260 mW/g



0 dB = 0.260mW/g

Additional information:

ambient temperature: 23.3°C; liquid temperature: 22.1°C

Date/Time: 28.03.2013 15:56:52 Date/Time: 28.03.2013 16:04:37

IEEE1528-LeftHandSide-LTE 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.91$ mho/m; $\epsilon_r = 42.6$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.44, 6.44, 6.44); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilted position - Middle/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

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

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

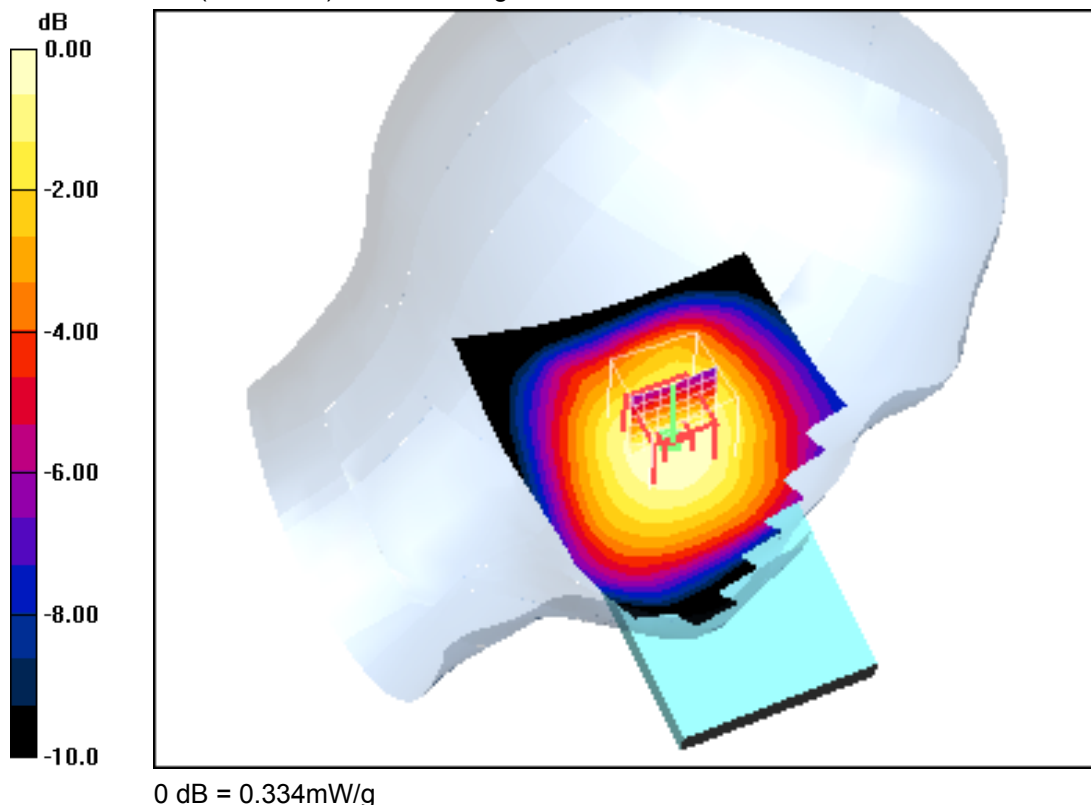
dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.4 V/m; Power Drift = 0.056 dB

Peak SAR (extrapolated) = 0.368 W/kg

SAR(1 g) = 0.316 mW/g; SAR(10 g) = 0.245 mW/g

Maximum value of SAR (measured) = 0.334 mW/g

**Additional information:**

ambient temperature: 23.3°C; liquid temperature: 22.1°C

Date/Time: 28.03.2013 16:52:16 Date/Time: 28.03.2013 17:02:18

IEEE1528-LeftHandSide-LTE 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 844 MHz; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used (interpolated): $f = 844$ MHz; $\sigma = 0.916$ mho/m; $\epsilon_r = 42.5$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.44, 6.44, 6.44); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.281 mW/g

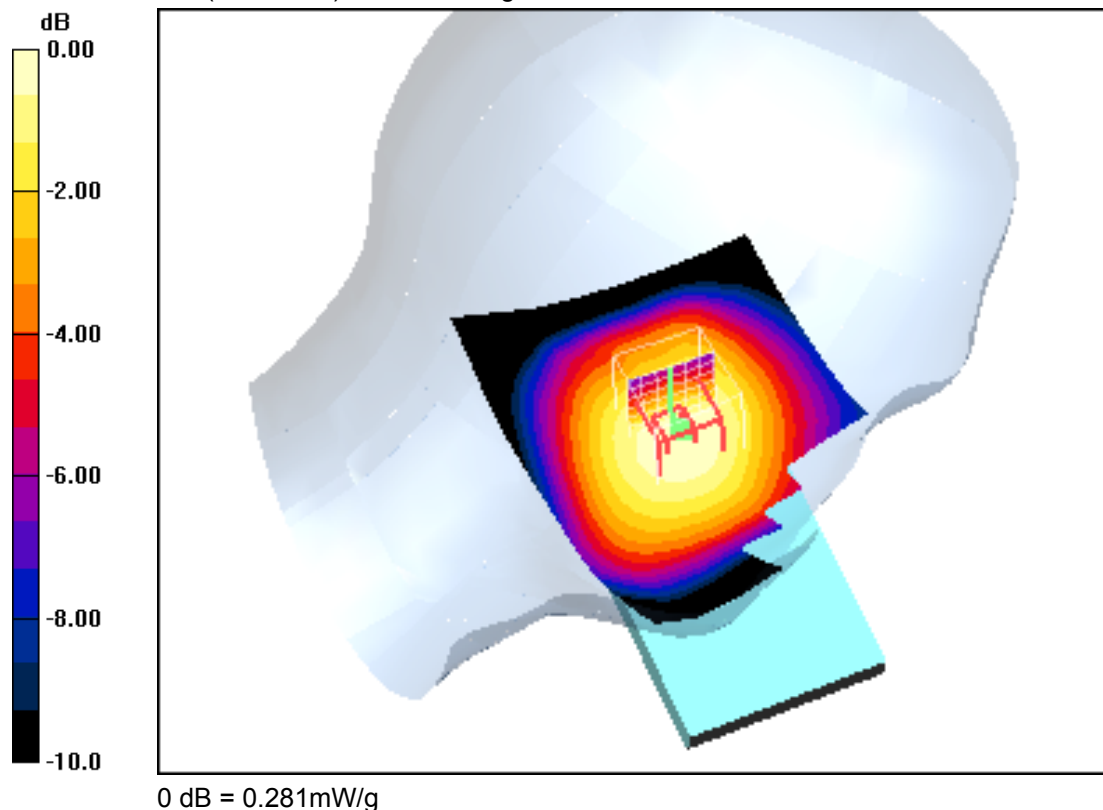
Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.8 V/m; Power Drift = 0.018 dB

Peak SAR (extrapolated) = 0.316 W/kg

SAR(1 g) = 0.269 mW/g; SAR(10 g) = 0.208 mW/g

Maximum value of SAR (measured) = 0.281 mW/g

**Additional information:**

ambient temperature: 23.3°C; liquid temperature: 22.1°C

Date/Time: 28.03.2013 17:58:24 Date/Time: 28.03.2013 18:07:01

IEEE1528-LeftHandSide-LTE 5_25RB**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.91$ mho/m; $\epsilon_r = 42.6$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.44, 6.44, 6.44); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

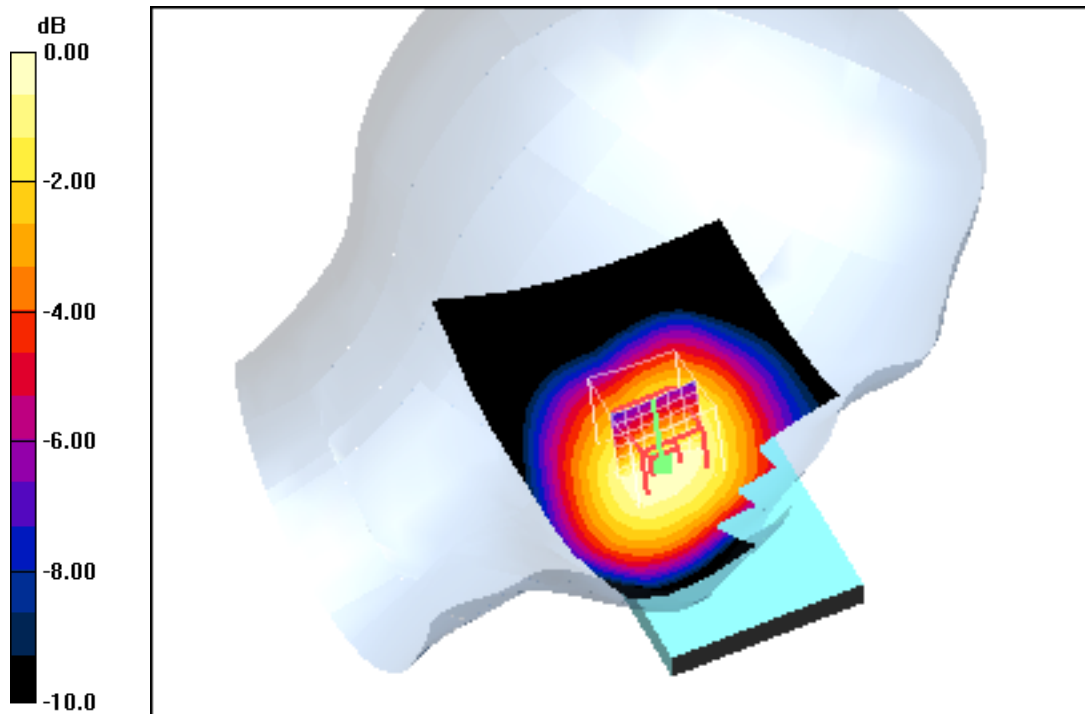
Touch position - Middle/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.507 mW/g**Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:
dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.8 V/m; Power Drift = 0.031 dB

Peak SAR (extrapolated) = 0.564 W/kg

SAR(1 g) = 0.462 mW/g; SAR(10 g) = 0.346 mW/g

Maximum value of SAR (measured) = 0.486 mW/g



0 dB = 0.486mW/g

Additional information:

ambient temperature: 23.3°C; liquid temperature: 22.1°C

Date/Time: 28.03.2013 15:56:52 Date/Time: 28.03.2013 16:17:03

IEEE1528-LeftHandSide-LTE 5_25RB**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.91$ mho/m; $\epsilon_r = 42.6$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.44, 6.44, 6.44); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilted position - Middle/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

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

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

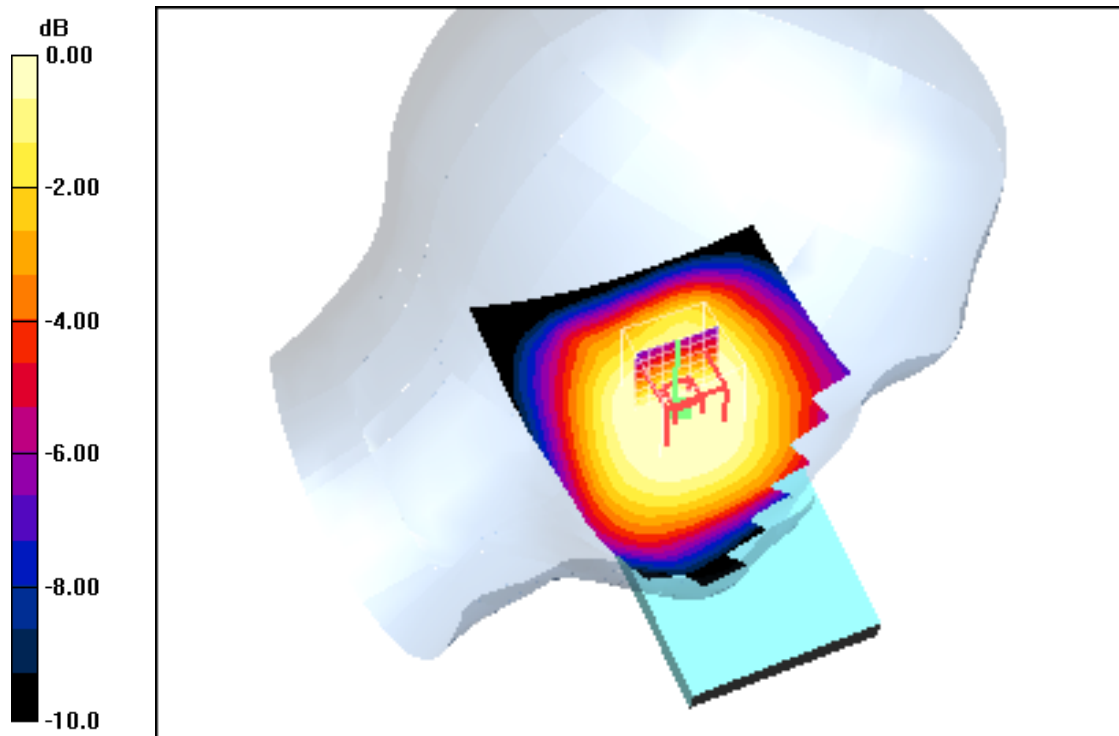
dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.2 V/m; Power Drift = 0.034 dB

Peak SAR (extrapolated) = 0.295 W/kg

SAR(1 g) = 0.251 mW/g; SAR(10 g) = 0.195 mW/g

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



0 dB = 0.262mW/g

Additional information:

ambient temperature: 23.3°C; liquid temperature: 22.1°C

Date/Time: 28.03.2013 12:49:06 Date/Time: 28.03.2013 12:57:33

IEEE1528-RightHandSide-LTE 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 829 MHz; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used (interpolated): $f = 829 \text{ MHz}$; $\sigma = 0.898 \text{ mho/m}$; $\epsilon_r = 42.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.44, 6.44, 6.44); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.438 mW/g

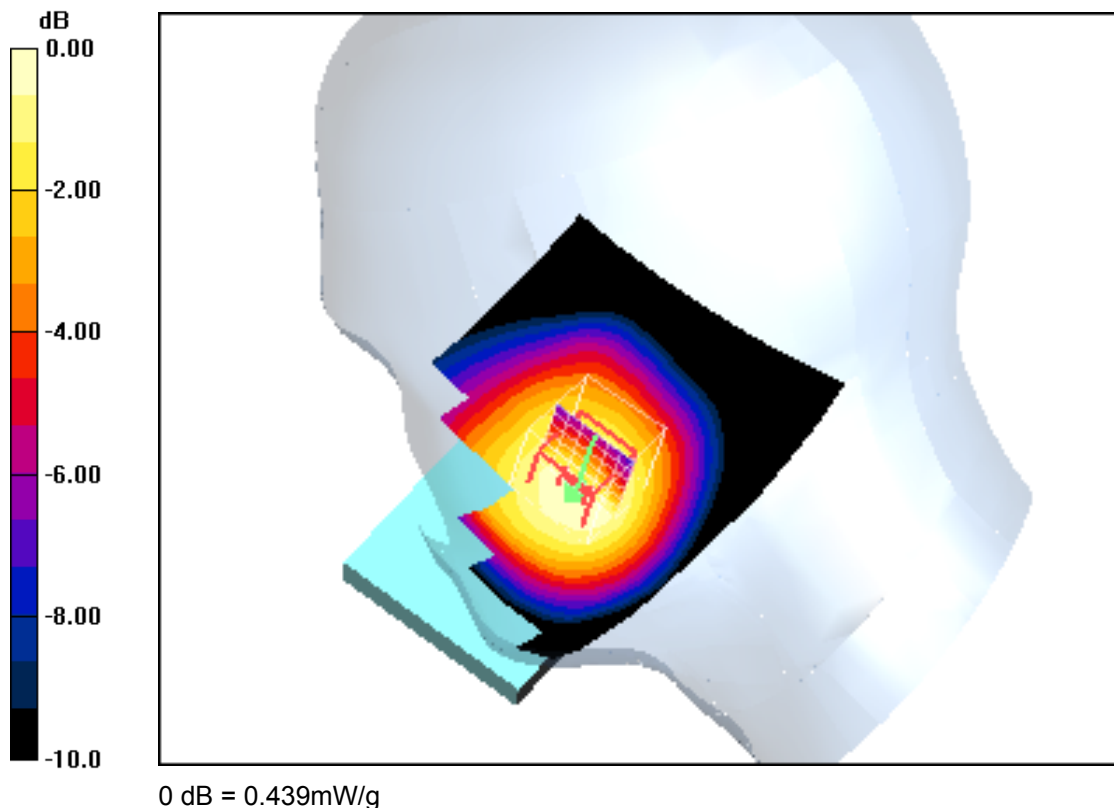
Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 22.8 V/m; Power Drift = 0.050 dB

Peak SAR (extrapolated) = 0.497 W/kg

SAR(1 g) = 0.412 mW/g; SAR(10 g) = 0.314 mW/g

Maximum value of SAR (measured) = 0.439 mW/g

**Additional information:**

ambient temperature: 23.3°C; liquid temperature: 22.1°C

Date/Time: 28.03.2013 13:10:52 Date/Time: 28.03.2013 13:18:40

IEEE1528-RightHandSide-LTE 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.91$ mho/m; $\epsilon_r = 42.6$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.44, 6.44, 6.44); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.563 mW/g

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

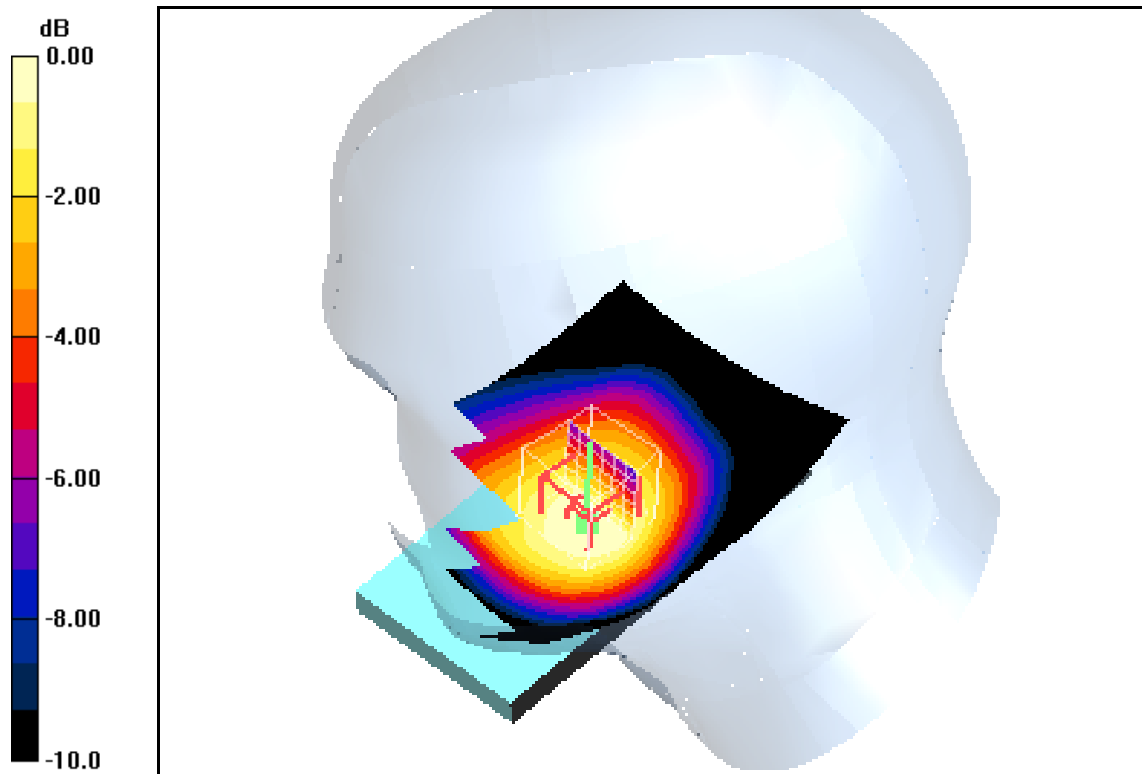
dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.7 V/m; Power Drift = 0.059 dB

Peak SAR (extrapolated) = 0.629 W/kg

SAR(1 g) = 0.527 mW/g; SAR(10 g) = 0.401 mW/g

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



0 dB = 0.555mW/g

Additional information:

ambient temperature: 23.3°C; liquid temperature: 22.1°C

Date/Time: 28.03.2013 13:57:50 Date/Time: 28.03.2013 14:05:38

IEEE1528-RightHandSide-LTE 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 844 MHz; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used (interpolated): $f = 844$ MHz; $\sigma = 0.916$ mho/m; $\epsilon_r = 42.5$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.44, 6.44, 6.44); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.606 mW/g

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

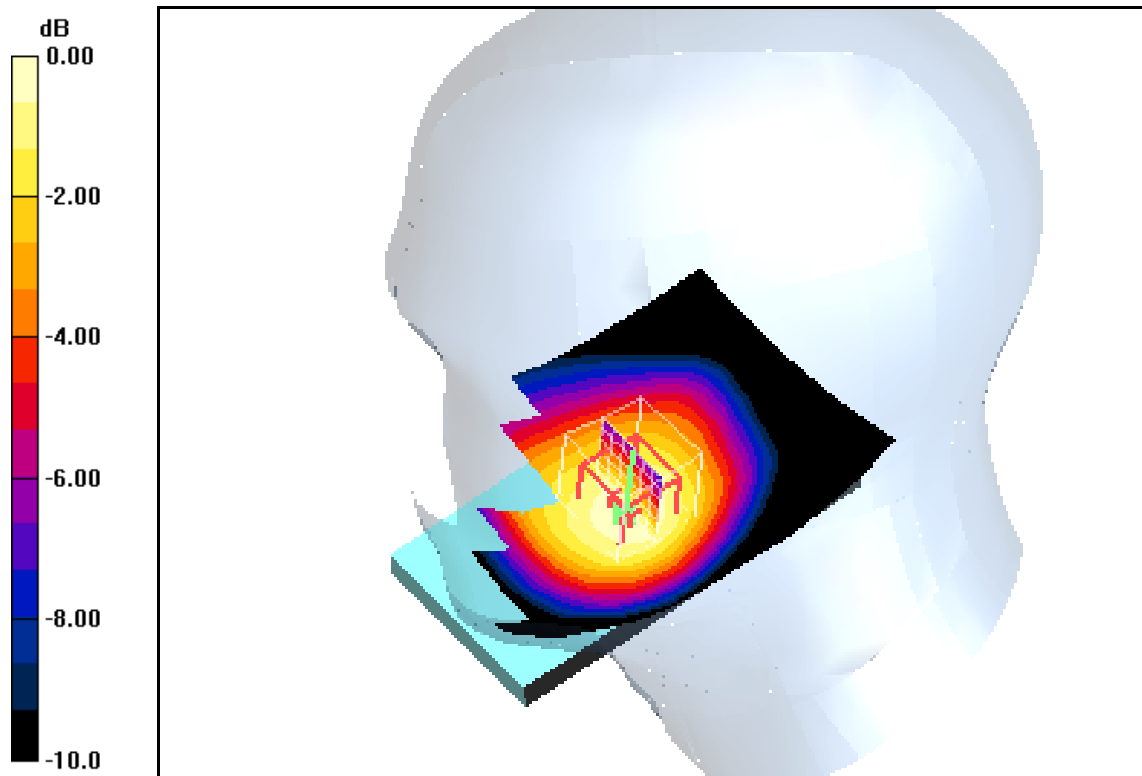
dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.9 V/m; Power Drift = 0.050 dB

Peak SAR (extrapolated) = 0.712 W/kg

SAR(1 g) = 0.589 mW/g; SAR(10 g) = 0.448 mW/g

Maximum value of SAR (measured) = 0.621 mW/g



0 dB = 0.621 mW/g

Additional information:

ambient temperature: 23.3°C; liquid temperature: 22.1°C

Date/Time: 28.03.2013 14:40:58 Date/Time: 28.03.2013 14:49:26

IEEE1528-RightHandSide-LTE 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 829 MHz; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used (interpolated): $f = 829 \text{ MHz}$; $\sigma = 0.898 \text{ mho/m}$; $\epsilon_r = 42.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.44, 6.44, 6.44); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.225 mW/g

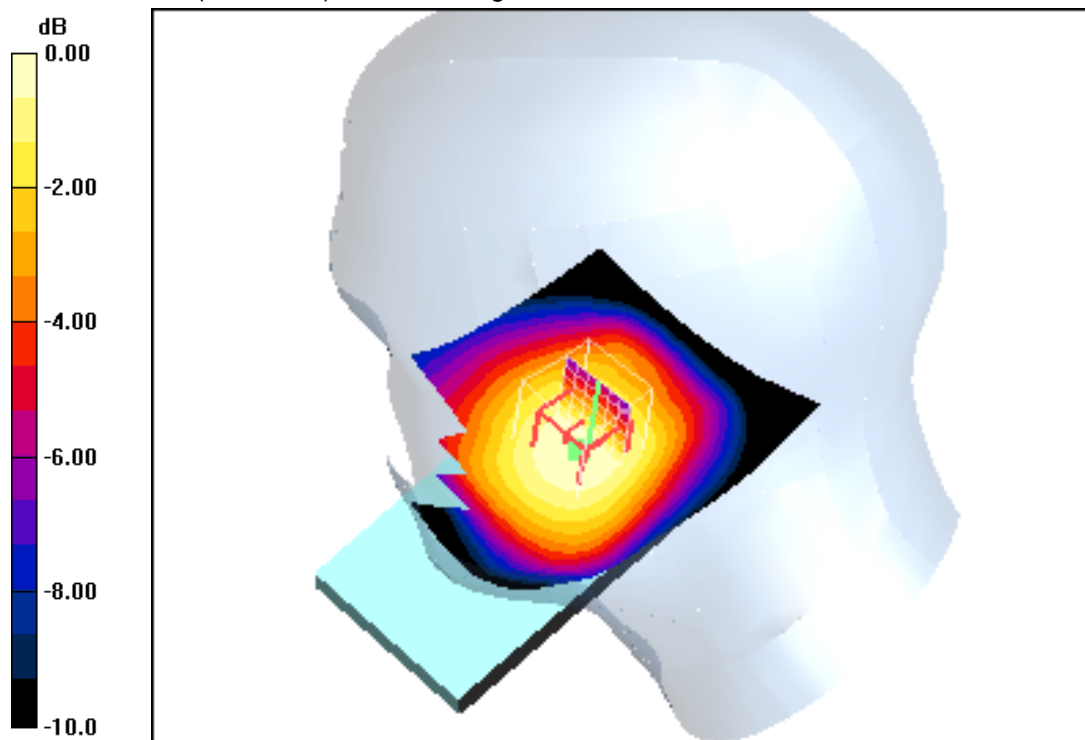
Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 16.3 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.256 W/kg

SAR(1 g) = 0.214 mW/g; SAR(10 g) = 0.167 mW/g

Maximum value of SAR (measured) = 0.225 mW/g



0 dB = 0.225mW/g

Additional information:

ambient temperature: 23.3°C; liquid temperature: 22.1°C

Date/Time: 28.03.2013 15:02:06 Date/Time: 28.03.2013 15:10:35

IEEE1528-RightHandSide-LTE 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.91$ mho/m; $\epsilon_r = 42.6$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.44, 6.44, 6.44); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.297 mW/g

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

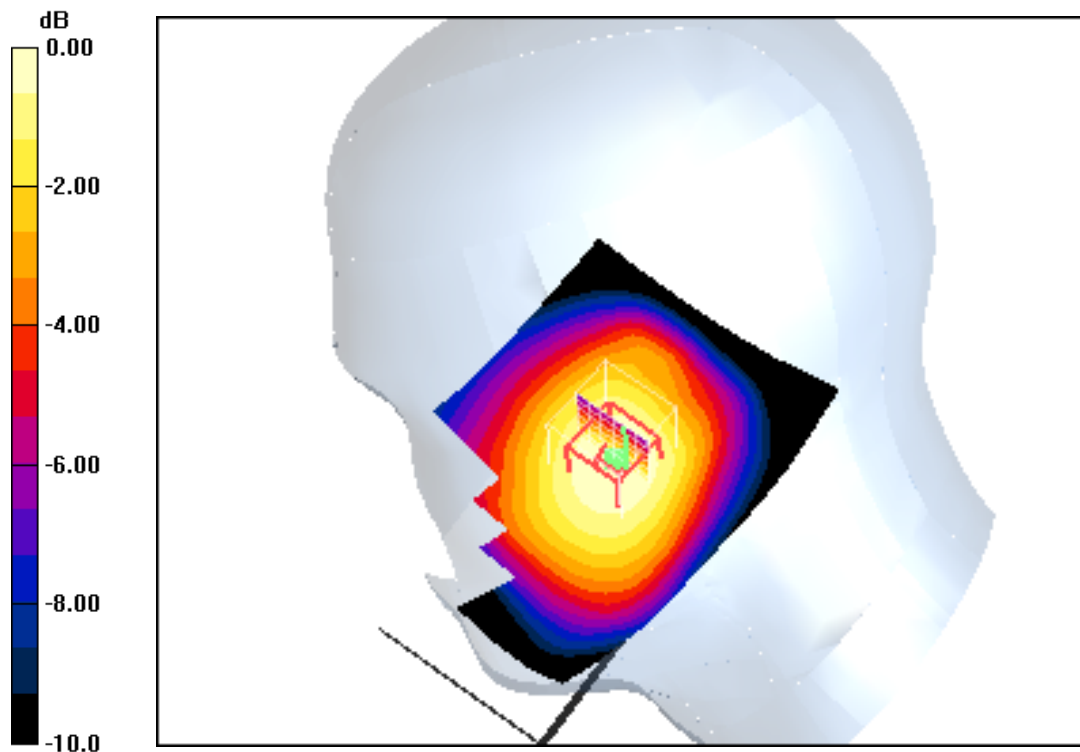
dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.6 V/m; Power Drift = -0.016 dB

Peak SAR (extrapolated) = 0.336 W/kg

SAR(1 g) = 0.283 mW/g; SAR(10 g) = 0.218 mW/g

Maximum value of SAR (measured) = 0.299 mW/g



0 dB = 0.299mW/g

Additional information:

ambient temperature: 23.3°C; liquid temperature: 22.1°C

Date/Time: 28.03.2013 14:19:24 Date/Time: 28.03.2013 14:28:37

IEEE1528-RightHandSide-LTE 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 844 MHz; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used (interpolated): $f = 844$ MHz; $\sigma = 0.916$ mho/m; $\epsilon_r = 42.5$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.44, 6.44, 6.44); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: dx=15mm, dy=15mm

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

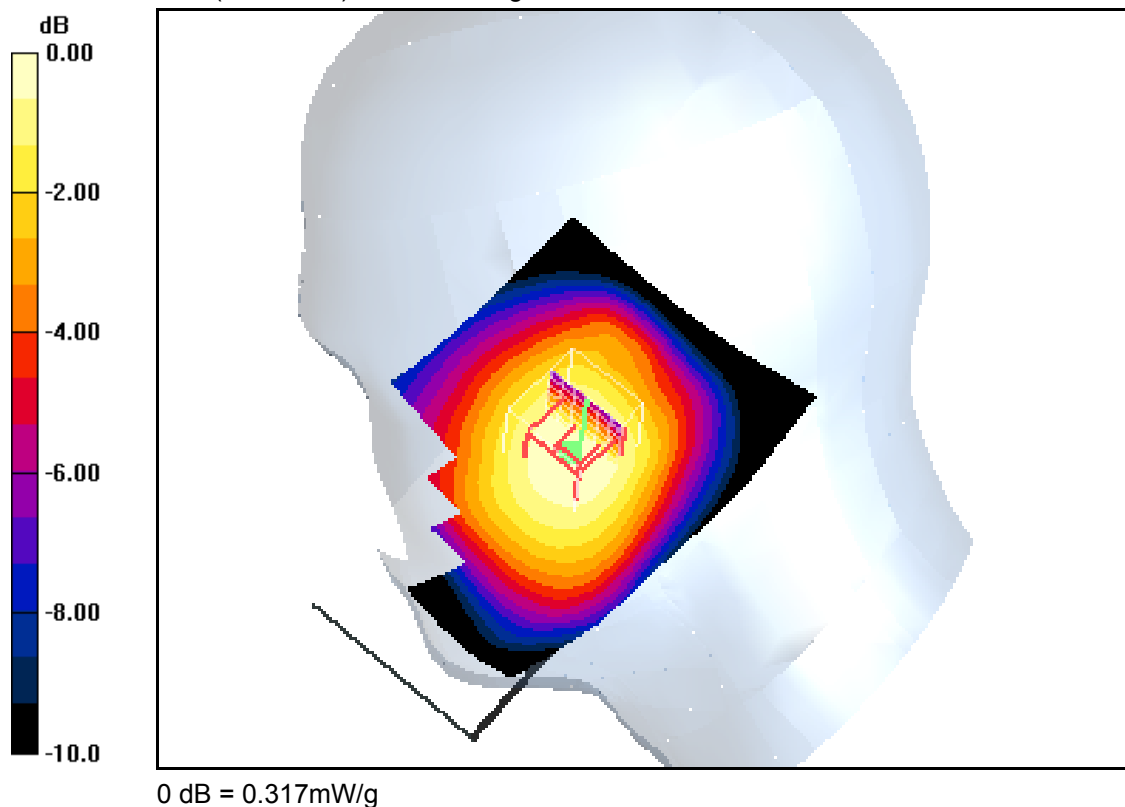
Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.1 V/m; Power Drift = 0.051 dB

Peak SAR (extrapolated) = 0.357 W/kg

SAR(1 g) = 0.301 mW/g; SAR(10 g) = 0.234 mW/g

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

**Additional information:**

ambient temperature: 23.3°C; liquid temperature: 22.1°C

Date/Time: 28.03.2013 13:35:51 Date/Time: 28.03.2013 13:44:21

IEEE1528-RightHandSide-LTE 5_25RB**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.91$ mho/m; $\epsilon_r = 42.6$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.44, 6.44, 6.44); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Middle 25 RB 25 Offset QPSK/Area Scan (71x101x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.450 mW/g

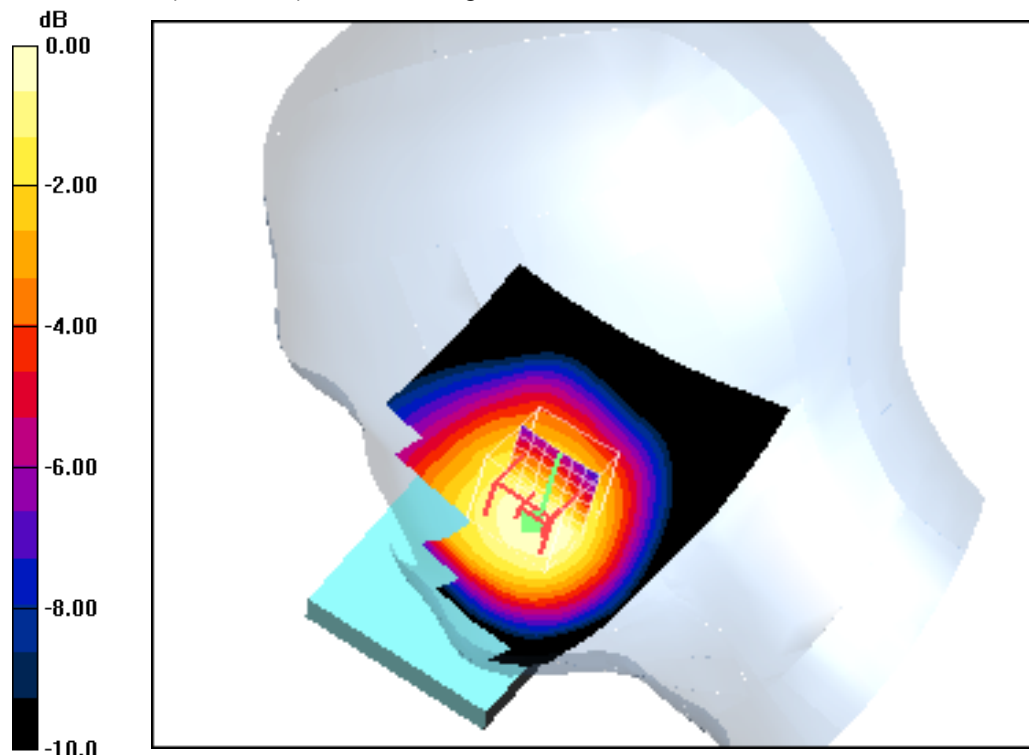
Touch position - Middle 25 RB 25 Offset QPSK/Zoom Scan (7x7x7)**(7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.1 V/m; Power Drift = 0.013 dB

Peak SAR (extrapolated) = 0.530 W/kg

SAR(1 g) = 0.431 mW/g; SAR(10 g) = 0.327 mW/g

Maximum value of SAR (measured) = 0.453 mW/g



0 dB = 0.453mW/g

Additional information:

ambient temperature: 23.3°C; liquid temperature: 22.1°C

Date/Time: 28.03.2013 15:23:17 Date/Time: 28.03.2013 15:31:43

IEEE1528-RightHandSide-LTE 5_25RB**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.91$ mho/m; $\epsilon_r = 42.6$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.44, 6.44, 6.44); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (71x101x1): Measurement grid: dx=15mm, dy=15mm

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

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

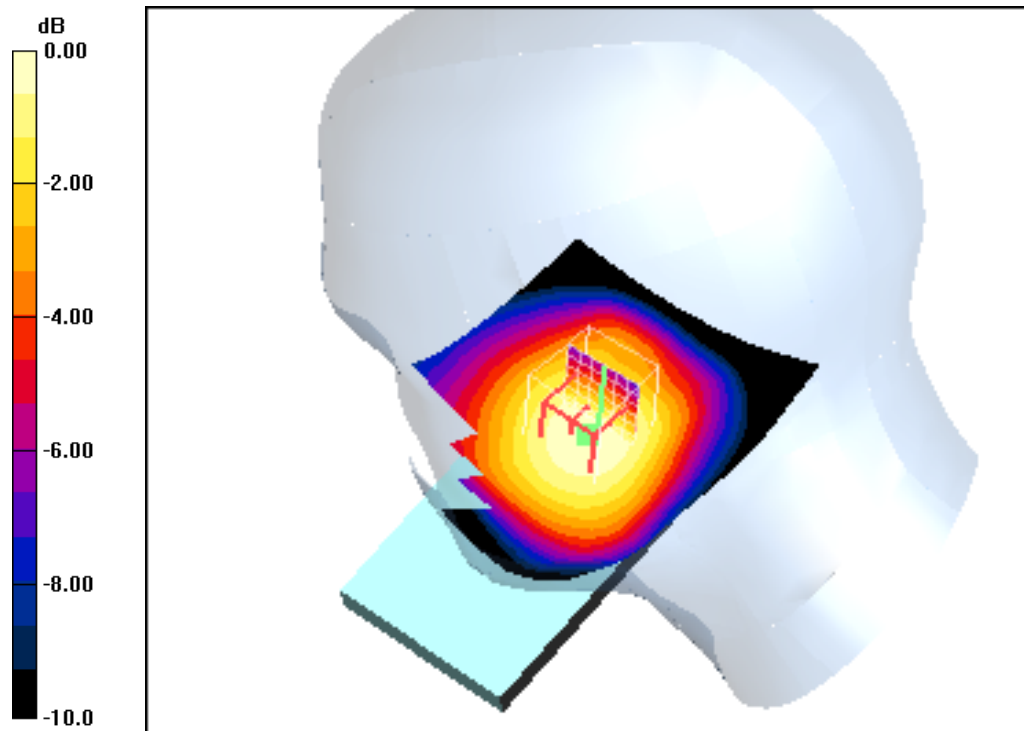
dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.5 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.265 W/kg

SAR(1 g) = 0.223 mW/g; SAR(10 g) = 0.173 mW/g

Maximum value of SAR (measured) = 0.235 mW/g



0 dB = 0.235mW/g

Additional information:

ambient temperature: 23.3°C; liquid temperature: 22.1°C

Date/Time: 12.03.2013 09:16:48 Date/Time: 12.03.2013 09:25:10

OET65-Body-LTE FDD 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 829 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated): $f = 829 \text{ MHz}$; $\sigma = 0.964 \text{ mho/m}$; $\epsilon_r = 55$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Low 1RB Offset 49/Area Scan (71x101x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.622 mW/g

Front position - Low 1RB Offset 49/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

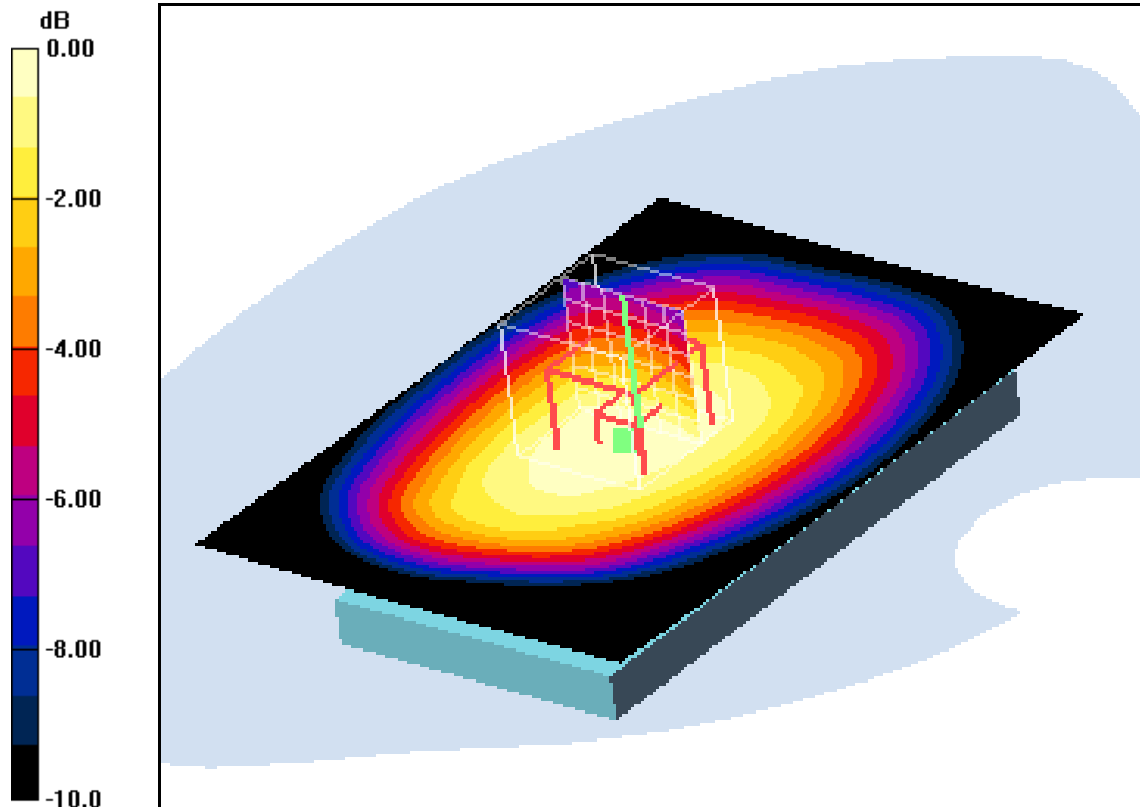
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.3 V/m; Power Drift = 0.064 dB

Peak SAR (extrapolated) = 0.718 W/kg

SAR(1 g) = 0.609 mW/g; SAR(10 g) = 0.471 mW/g

Maximum value of SAR (measured) = 0.637 mW/g



0 dB = 0.637mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 11.03.2013 18:56:13 Date/Time: 11.03.2013 19:05:54

OET65-Body-LTE FDD 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 54.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Middle 1RB Offset49/Area Scan (71x111x1): Measurement grid:

dx=15mm, dy=15mm

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

Front position - Middle 1RB Offset49/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

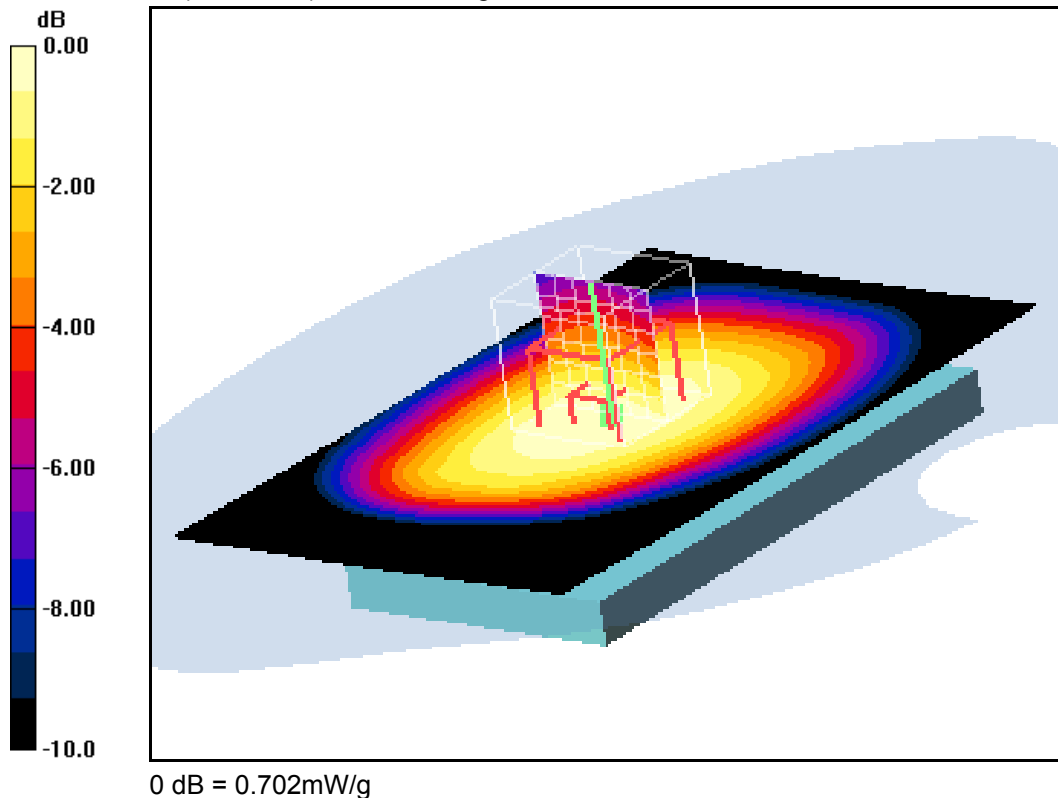
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.7 V/m; Power Drift = 0.036 dB

Peak SAR (extrapolated) = 0.794 W/kg

SAR(1 g) = 0.671 mW/g; SAR(10 g) = 0.519 mW/g

Maximum value of SAR (measured) = 0.702 mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 12.03.2013 09:40:40 Date/Time: 12.03.2013 09:49:01

OET65-Body-LTE FDD 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 844 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated): $f = 844 \text{ MHz}$; $\sigma = 0.982 \text{ mho/m}$; $\epsilon_r = 54.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - High 1RB Offset 0/Area Scan (71x101x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.792 mW/g

Front position - High 1RB Offset 0/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

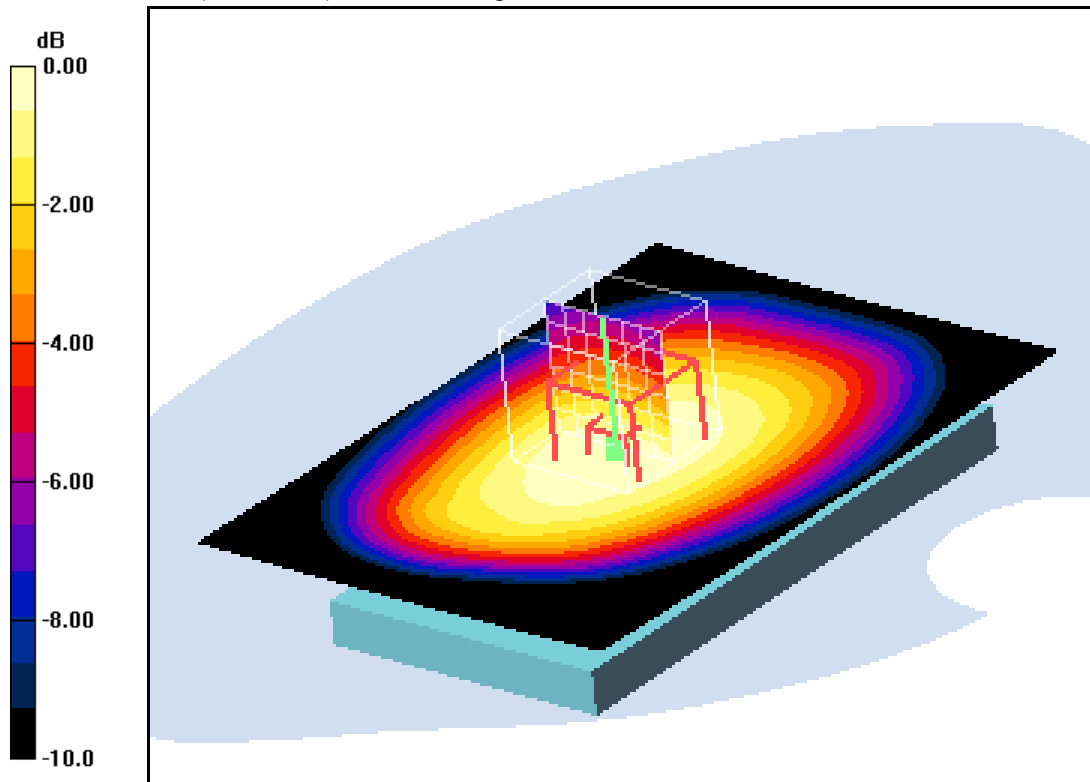
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 29.2 V/m; Power Drift = -0.030 dB

Peak SAR (extrapolated) = 0.894 W/kg

SAR(1 g) = 0.753 mW/g; SAR(10 g) = 0.583 mW/g

Maximum value of SAR (measured) = 0.787 mW/g



0 dB = 0.787mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 12.03.2013 06:45:40 Date/Time: 12.03.2013 06:53:59

OET65-Body-LTE FDD 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 829 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated): $f = 829 \text{ MHz}$; $\sigma = 0.964 \text{ mho/m}$; $\epsilon_r = 55$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Low 1RB Offset 49/Area Scan (71x101x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.563 mW/g

Rear position - Low 1RB Offset 49/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

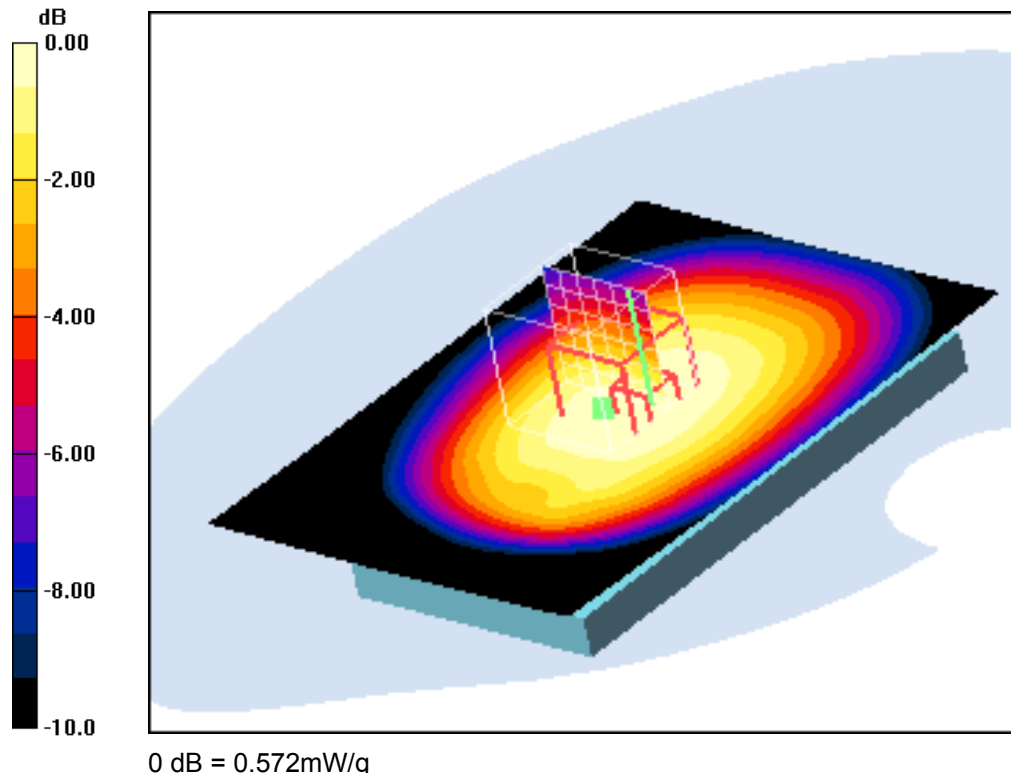
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.0 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 0.659 W/kg

SAR(1 g) = 0.541 mW/g; SAR(10 g) = 0.417 mW/g

Maximum value of SAR (measured) = 0.572 mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 12.03.2013 06:23:28 Date/Time: 12.03.2013 06:33:02

OET65-Body-LTE FDD 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 54.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Middle 1RB Offset 49/Area Scan (71x111x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.632 mW/g

Rear position - Middle 1RB Offset 49/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

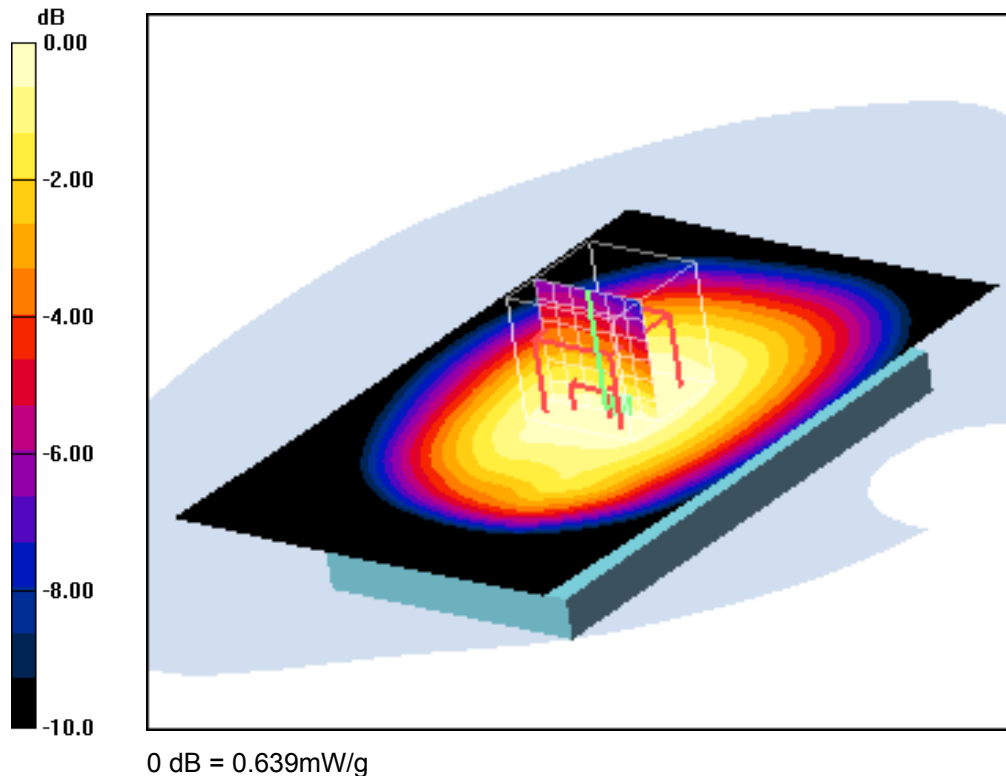
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.6 V/m; Power Drift = 0.072 dB

Peak SAR (extrapolated) = 0.726 W/kg

SAR(1 g) = 0.607 mW/g; SAR(10 g) = 0.470 mW/g

Maximum value of SAR (measured) = 0.639 mW/g

**Additional information:**

position or distance of DUT to SAM: 10mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 12.03.2013 07:07:10 Date/Time: 12.03.2013 07:17:17

OET65-Body-LTE FDD 5

DUT: Sony; Type: C5503; Serial: CB5A1NNJM0

Communication System: LTE FDD 5; Frequency: 844 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated): $f = 844 \text{ MHz}$; $\sigma = 0.982 \text{ mho/m}$; $\epsilon_r = 54.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - High 1RB Offset 0/Area Scan (71x111x1): Measurement grid:

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

Maximum value of SAR (interpolated) = 0.693 mW/g

Rear position - High 1RB Offset 0/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

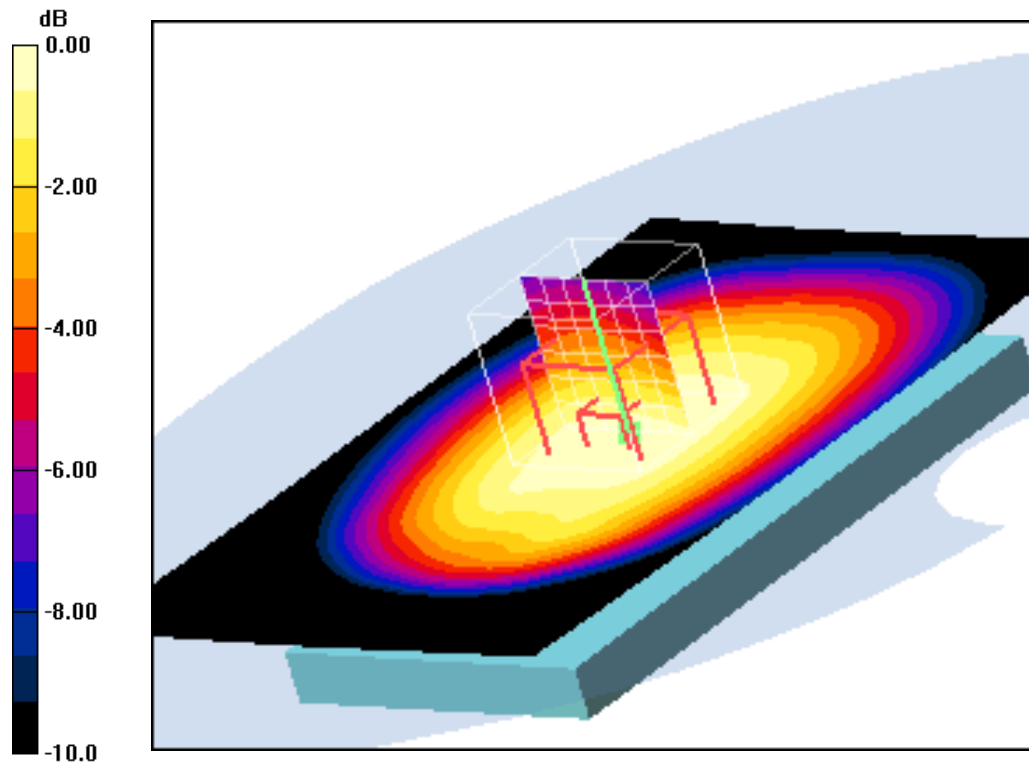
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 27.8 V/m; Power Drift = -0.014 dB

Peak SAR (extrapolated) = 0.824 W/kg

SAR(1 g) = 0.676 mW/g; SAR(10 g) = 0.521 mW/g

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



0 dB = 0.708mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 11.03.2013 17:49:00Date/Time: 11.03.2013 17:58:10

OET65-Body-LTE FDD 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 54.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 1RB Offset49/Area Scan (61x111x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.500 mW/g

Edge left position - Middle 1RB Offset49/Zoom Scan (7x7x7)/Cube 0:

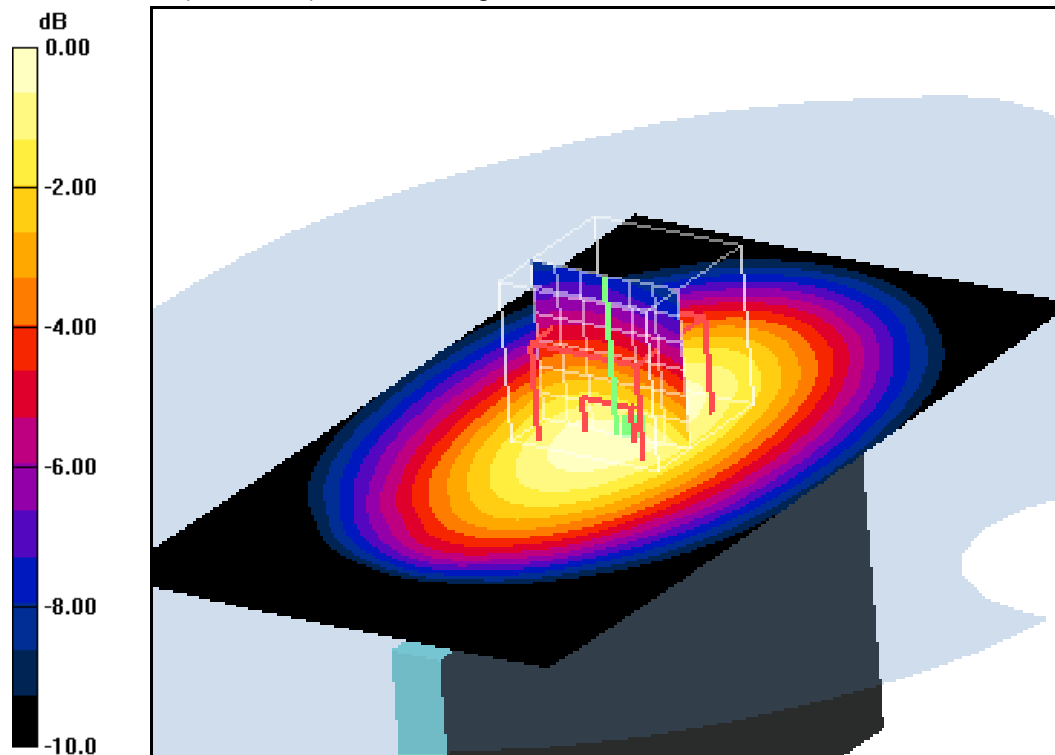
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.5 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 0.629 W/kg

SAR(1 g) = 0.467 mW/g; SAR(10 g) = 0.328 mW/g

Maximum value of SAR (measured) = 0.498 mW/g



0 dB = 0.498mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 11.03.2013 18:12:09 Date/Time: 11.03.2013 18:21:15

OET65-Body-LTE FDD 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 54.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 1RB Offset49/Area Scan (61x111x1): Measurement

grid: dx=15mm, dy=15mm

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

Edge right position - Middle 1RB Offset49/Zoom Scan(7x7x7)/Cube 0:

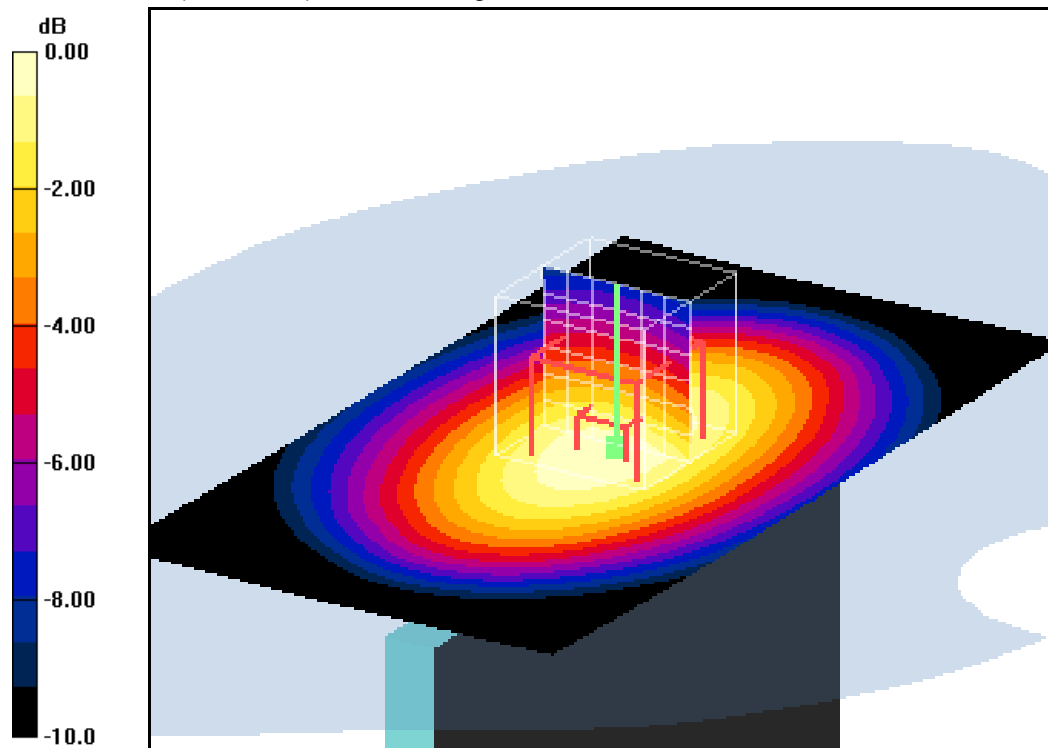
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.5 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 0.473 W/kg

SAR(1 g) = 0.361 mW/g; SAR(10 g) = 0.256 mW/g

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



0 dB = 0.385mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 11.03.2013 18:36:12 Date/Time: 11.03.2013 18:41:49

OET65-Body-LTE FDD 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 54.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 1RB Offset49/Area Scan (61x61x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.111 mW/g

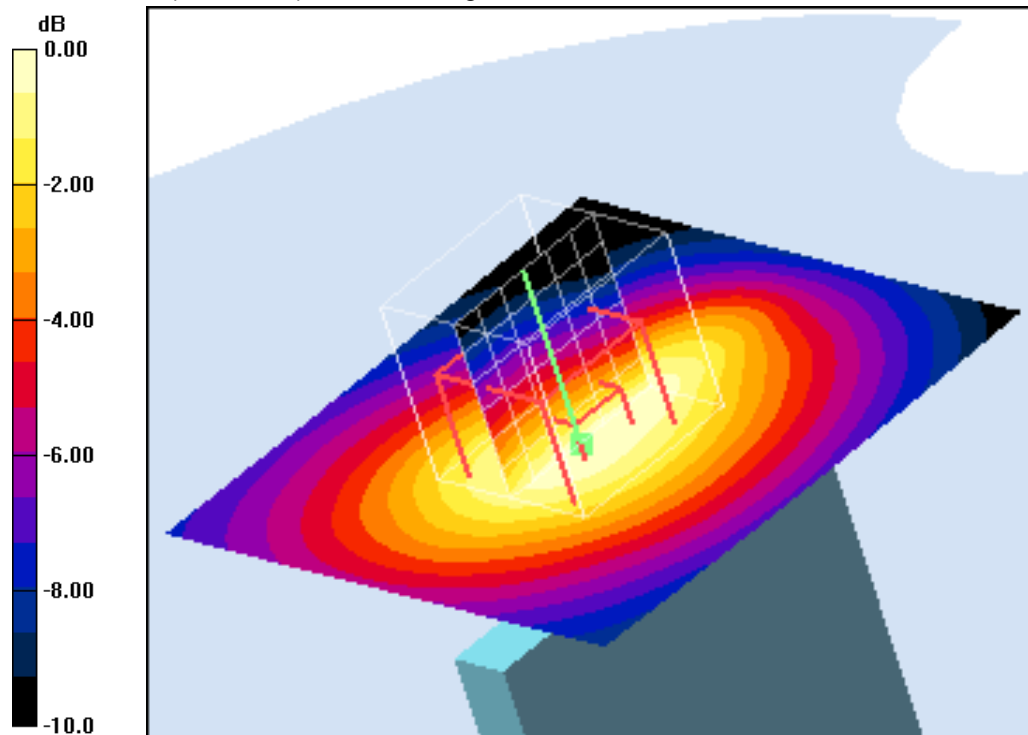
Edge bottom position - Middle 1RB Offset49/Zoom Scan (7x7x7)**(7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.0 V/m; Power Drift = 0.018 dB

Peak SAR (extrapolated) = 0.194 W/kg

SAR(1 g) = 0.099 mW/g; SAR(10 g) = 0.062 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: 23.5°C; liquid temperature: 22.5°C

Date/Time: 12.03.2013 10:07:52 Date/Time: 12.03.2013 10:16:15

OET65-Body-LTE FDD 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 844 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated): $f = 844 \text{ MHz}$; $\sigma = 0.982 \text{ mho/m}$; $\epsilon_r = 54.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position WC - High 1RB Offset 0/Area Scan (71x101x1): Measurement grid:

dx=15mm, dy=15mm

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

Front position WC - High 1RB Offset 0/Zoom Scan (7x7x7)/Cube 0:

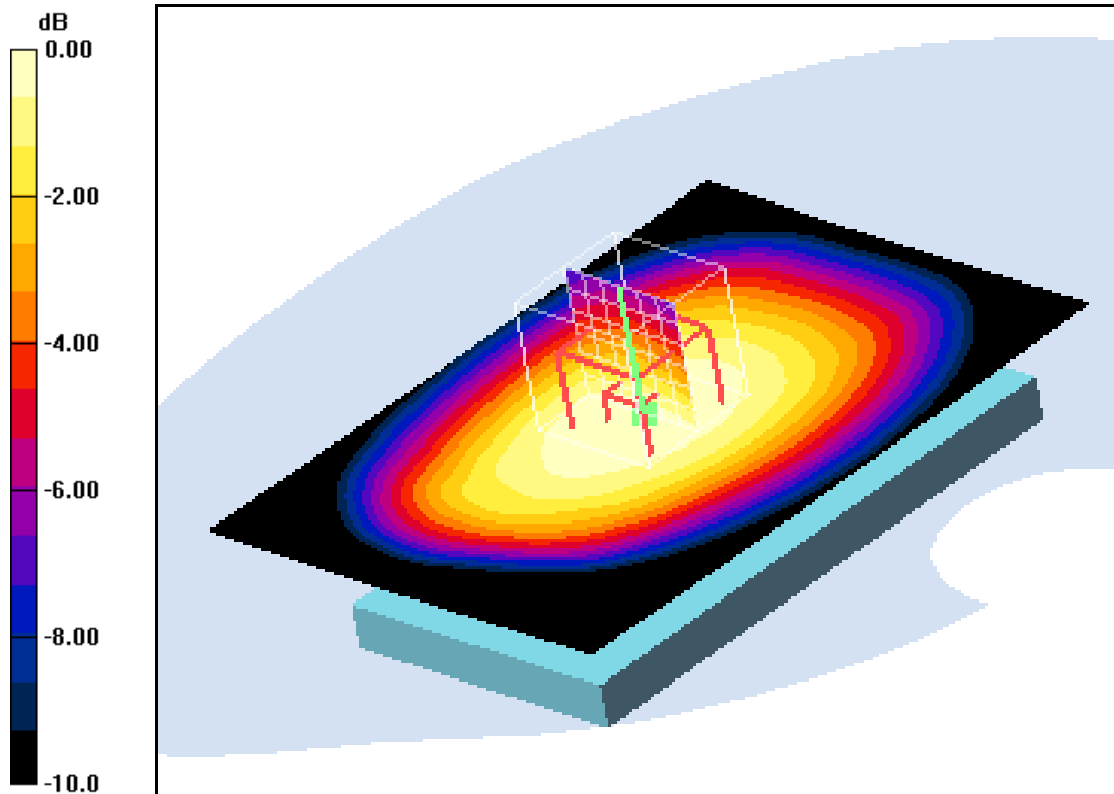
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 29.1 V/m; Power Drift = -0.026 dB

Peak SAR (extrapolated) = 0.889 W/kg

SAR(1 g) = 0.739 mW/g; SAR(10 g) = 0.569 mW/g

Maximum value of SAR (measured) = 0.777 mW/g



0 dB = 0.777mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 12.03.2013 10:33:08 Date/Time: 12.03.2013 10:41:34

OET65-Body-LTE FDD 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 844 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated): $f = 844 \text{ MHz}$; $\sigma = 0.982 \text{ mho/m}$; $\epsilon_r = 54.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position WC - High 50RB/Area Scan (71x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.524 mW/g

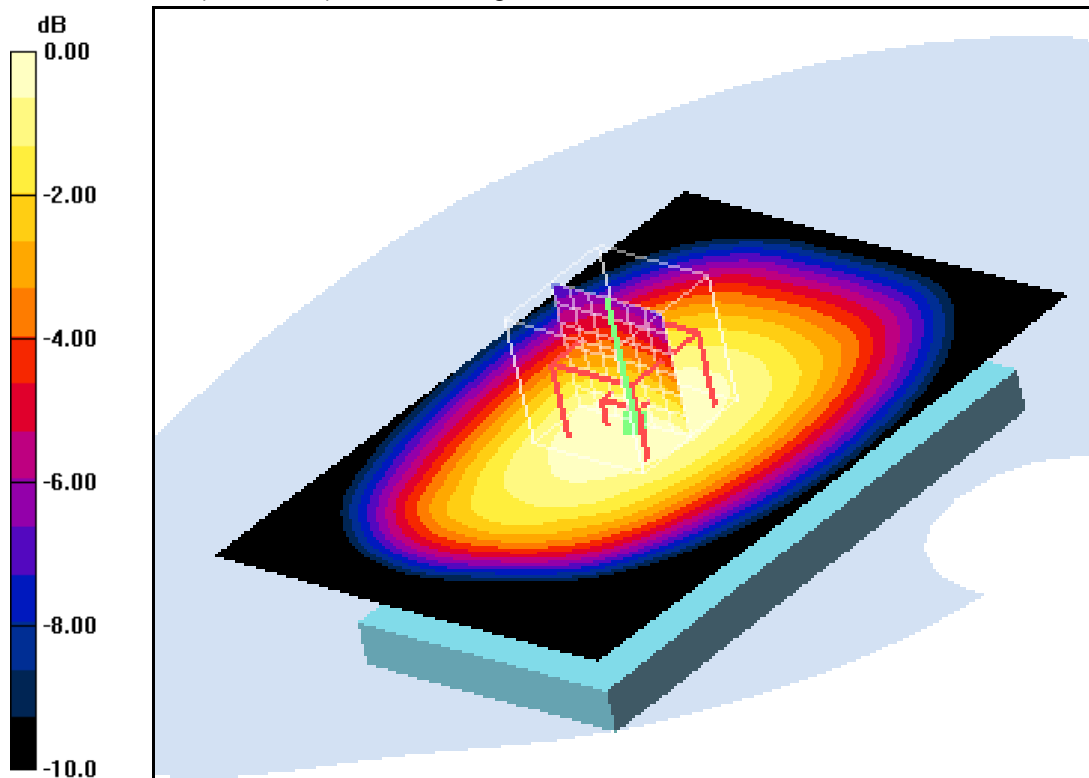
Front position WC - High 50RB/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 23.8 V/m; Power Drift = 0.064 dB

Peak SAR (extrapolated) = 0.612 W/kg

SAR(1 g) = 0.502 mW/g; SAR(10 g) = 0.386 mW/g

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



0 dB = 0.528mW/g

Additional information:

position or distance of DUT to SAM: 10mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 19.04.2013 11:40:59 Date/Time: 19.04.2013 11:51:02

OET65-Body-LTE FDD 5**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 844 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated): $f = 844 \text{ MHz}$; $\sigma = 0.982 \text{ mho/m}$; $\epsilon_r = 54.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position WC - High 1RB Offset 0/Area Scan (71x101x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.581 mW/g

Front position WC - High 1RB Offset 0/Zoom Scan (7x7x7)/Cube 0:

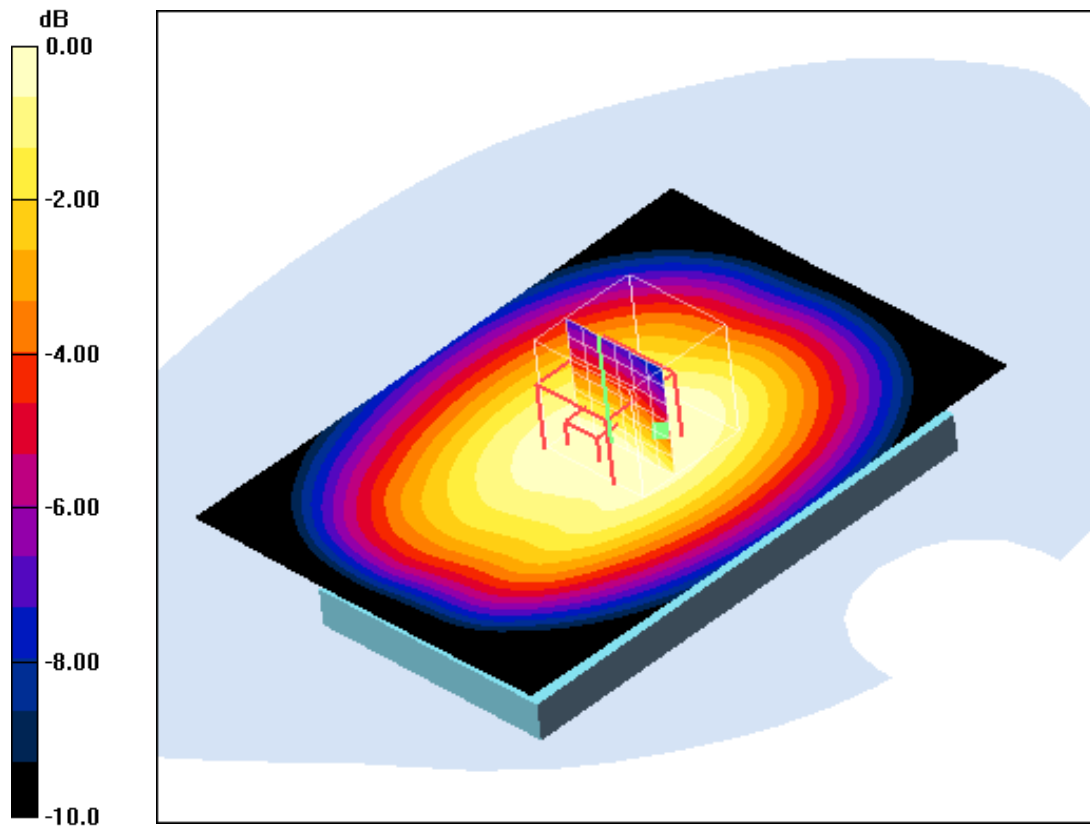
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.1 V/m; Power Drift = -0.022 dB

Peak SAR (extrapolated) = 0.639 W/kg

SAR(1 g) = 0.519 mW/g; SAR(10 g) = 0.389 mW/g

Maximum value of SAR (measured) = 0.545 mW/g



0 dB = 0.545mW/g

Additional information:

position or distance of DUT to SAM: 15 mm

ambient temperature: 23.5°C; liquid temperature: 22.5°C

Date/Time: 12.03.2013 08:55:37 Date/Time: 12.03.2013 09:03:54

OET65-Body-LTE FDD 5 25RB**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 54.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Middle 25RB/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

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

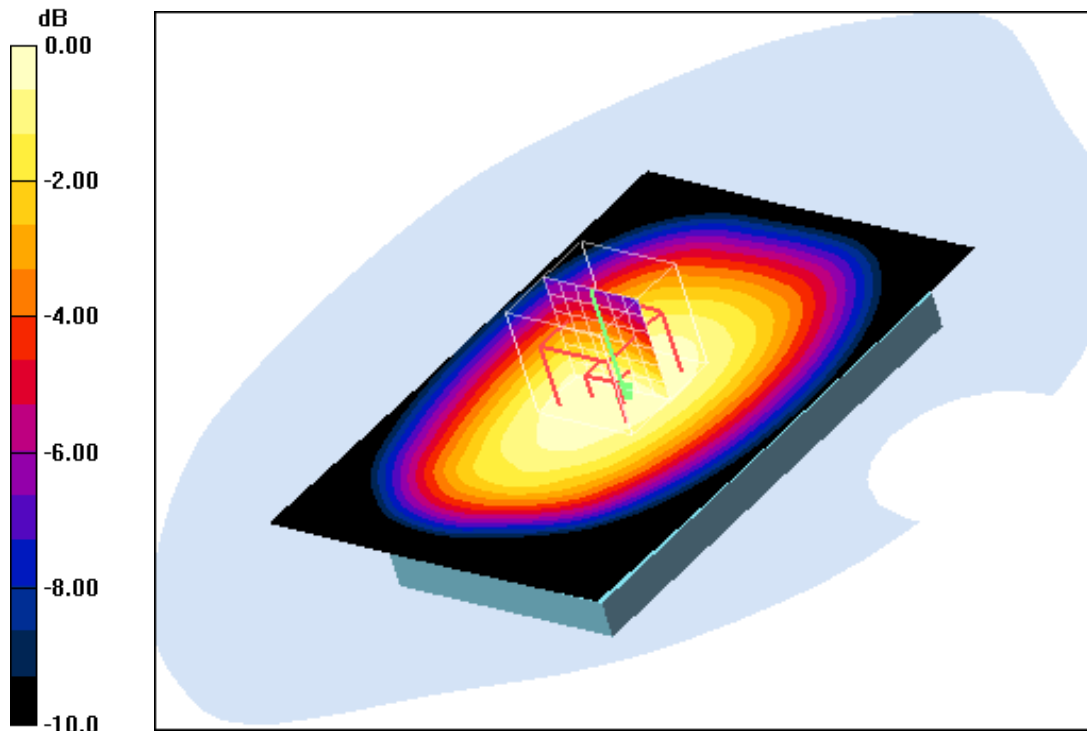
Front position - Middle 25RB/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.1 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.657 W/kg

SAR(1 g) = 0.551 mW/g; SAR(10 g) = 0.426 mW/g

Maximum value of SAR (measured) = 0.577 mW/g



0 dB = 0.577mW/g

Additional information:

position or distance of DUT to SAM: 10 mm

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

Date/Time: 12.03.2013 07:30:56 Date/Time: 12.03.2013 07:39:12

OET65-Body-LTE FDD 5 25RB**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 54.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Middle 25RB/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.518 mW/g

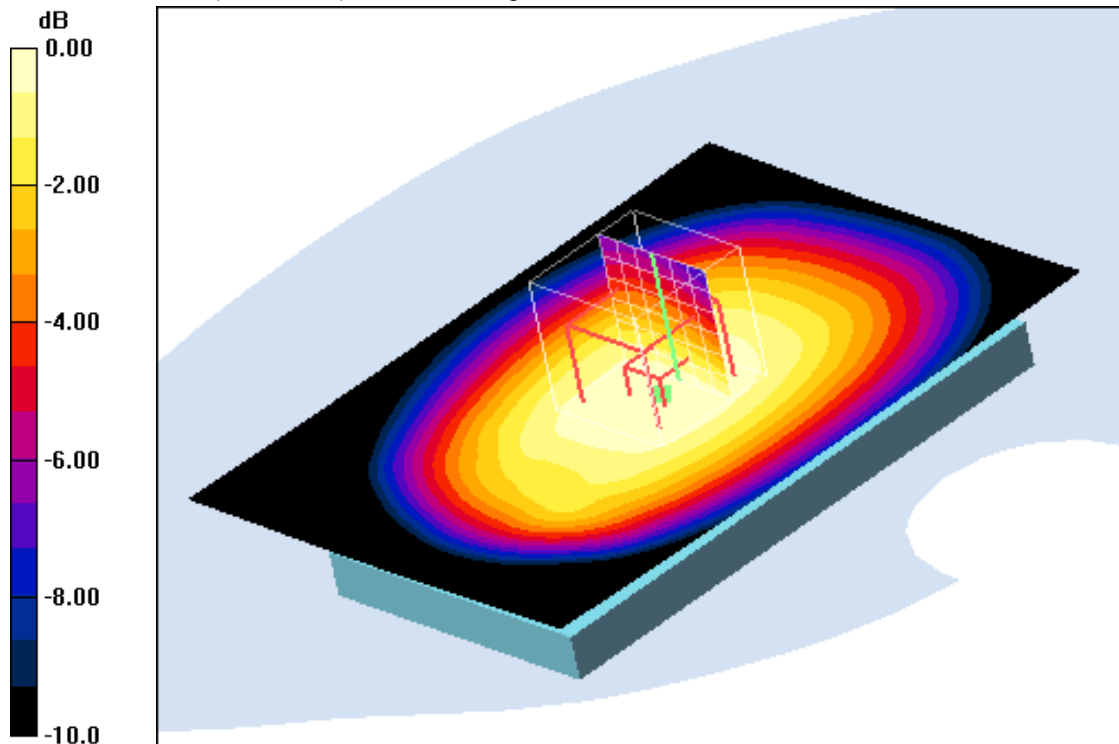
Rear position - Middle 25RB/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.9 V/m; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 0.607 W/kg

SAR(1 g) = 0.495 mW/g; SAR(10 g) = 0.382 mW/g

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



0 dB = 0.528mW/g

Additional information:

position or distance of DUT to SAM: 10 mm

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

Date/Time: 12.03.2013 07:54:12 Date/Time: 12.03.2013 08:02:05

OET65-Body-LTE FDD 5 25RB**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 54.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 25RB/Area Scan (61x111x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.371 mW/g

Edge left position - Middle 25RB/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

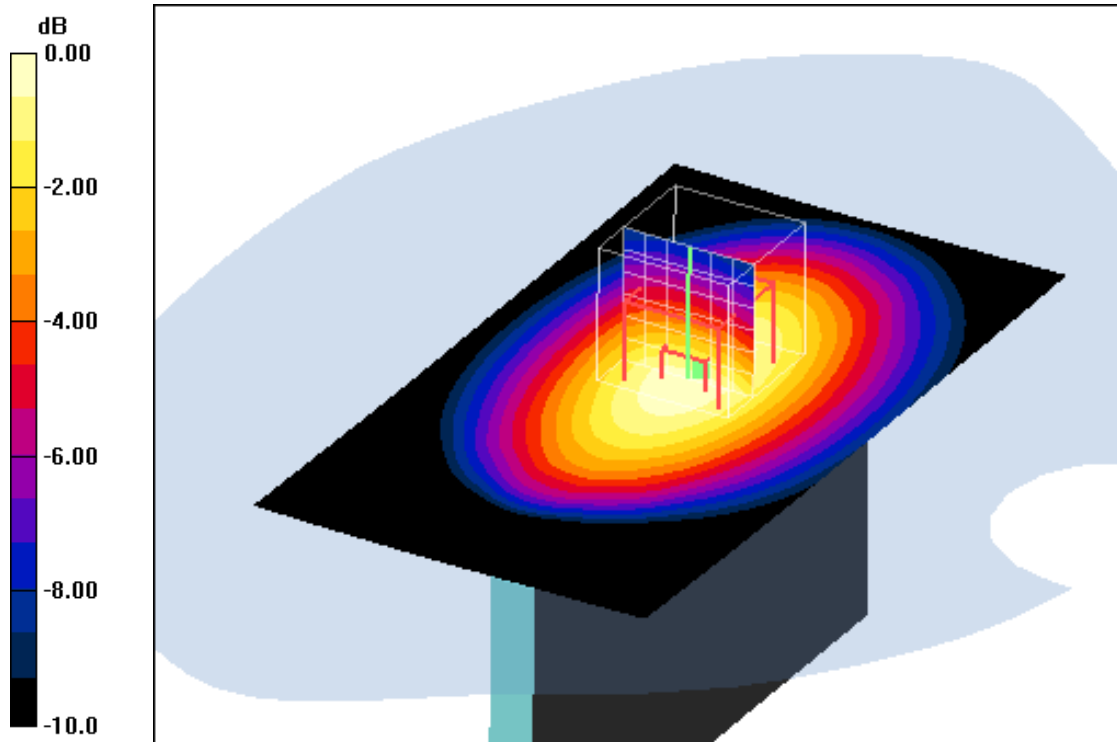
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.0 V/m; Power Drift = 0.036 dB

Peak SAR (extrapolated) = 0.462 W/kg

SAR(1 g) = 0.346 mW/g; SAR(10 g) = 0.242 mW/g

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



0 dB = 0.373mW/g

Additional information:

position or distance of DUT to SAM: 10 mm

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

Date/Time: 12.03.2013 08:14:20 Date/Time: 12.03.2013 08:22:13

OET65-Body-LTE FDD 5 25RB**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 54.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 25RB/Area Scan (61x111x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.248 mW/g

Edge right position - Middle 25RB/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

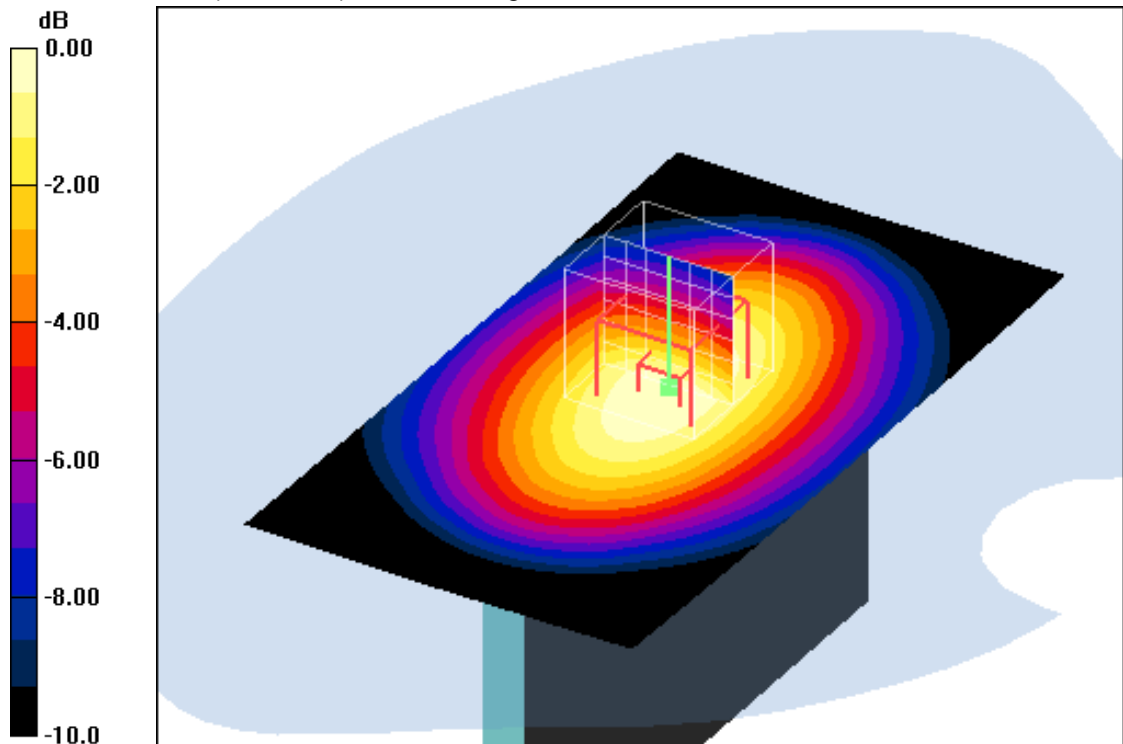
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.6 V/m; Power Drift = -0.024 dB

Peak SAR (extrapolated) = 0.306 W/kg

SAR(1 g) = 0.230 mW/g; SAR(10 g) = 0.162 mW/g

Maximum value of SAR (measured) = 0.245 mW/g



0 dB = 0.245mW/g

Additional information:

position or distance of DUT to SAM: 10 mm

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

Date/Time: 12.03.2013 08:36:36 Date/Time: 12.03.2013 08:41:26

OET65-Body-LTE FDD 5 25RB**DUT: Sony; Type: C5503; Serial: CB5A1NNJM0**

Communication System: LTE FDD 5; Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: M900 Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 54.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(6.26, 6.26, 6.26); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 25RB/Area Scan (61x61x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.090 mW/g

Edge bottom position - Middle 25RB/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

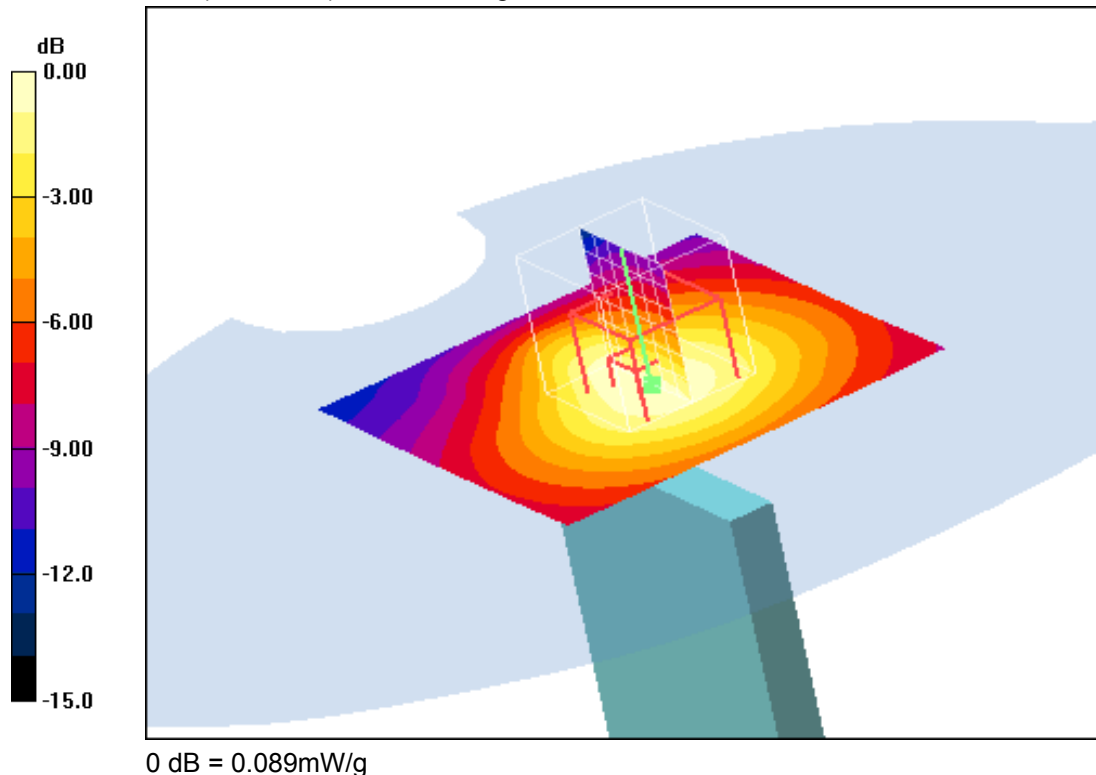
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.86 V/m; Power Drift = 0.027 dB

Peak SAR (extrapolated) = 0.146 W/kg

SAR(1 g) = 0.082 mW/g; SAR(10 g) = 0.052 mW/g

Maximum value of SAR (measured) = 0.089 mW/g

**Additional information:**

position or distance of DUT to SAM: 10 mm

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

Annex B.5: WLAN 2450MHz

Date/Time: 12.03.2013 14:57:41 Date/Time: 12.03.2013 15:15:26

IEEE1528-LeftHandSide-WLAN

DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.8 \text{ mho/m}$; $\epsilon_r = 38.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.25, 4.25, 4.25); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Low/Area Scan (111x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.080 mW/g

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

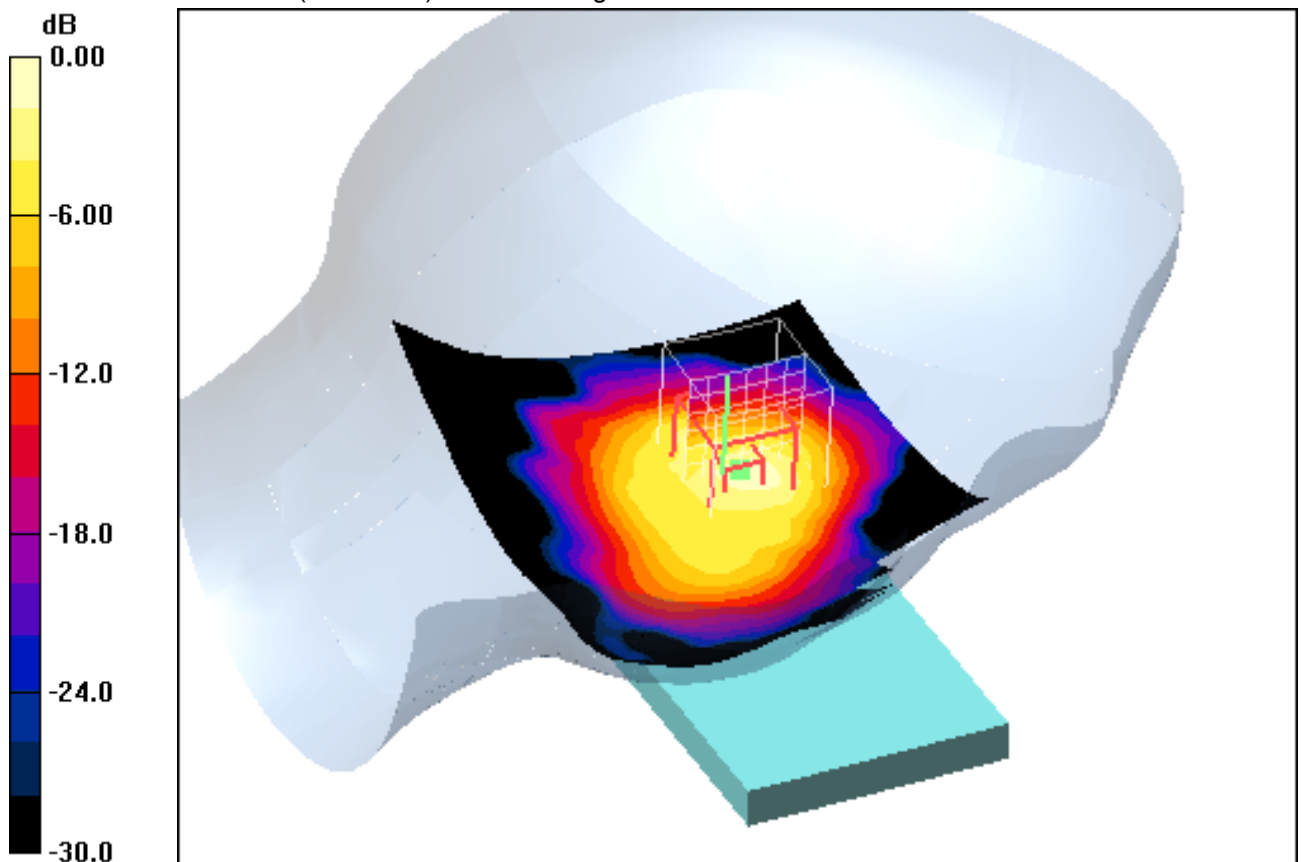
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.03 V/m; Power Drift = 0.049 dB

Peak SAR (extrapolated) = 0.223 W/kg

SAR(1 g) = 0.071 mW/g; SAR(10 g) = 0.033 mW/g

Maximum value of SAR (measured) = 0.082 mW/g



0 dB = 0.082mW/g

Additional information:

ambient temperature: 23.1°C; liquid temperature: 22.9°C

Date/Time: 12.03.2013 15:39:43 Date/Time: 12.03.2013 15:59:12

IEEE1528-LeftHandSide-WLAN**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.82$ mho/m; $\epsilon_r = 38.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.25, 4.25, 4.25); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Middle/Area Scan (111x151x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.116 mW/g

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

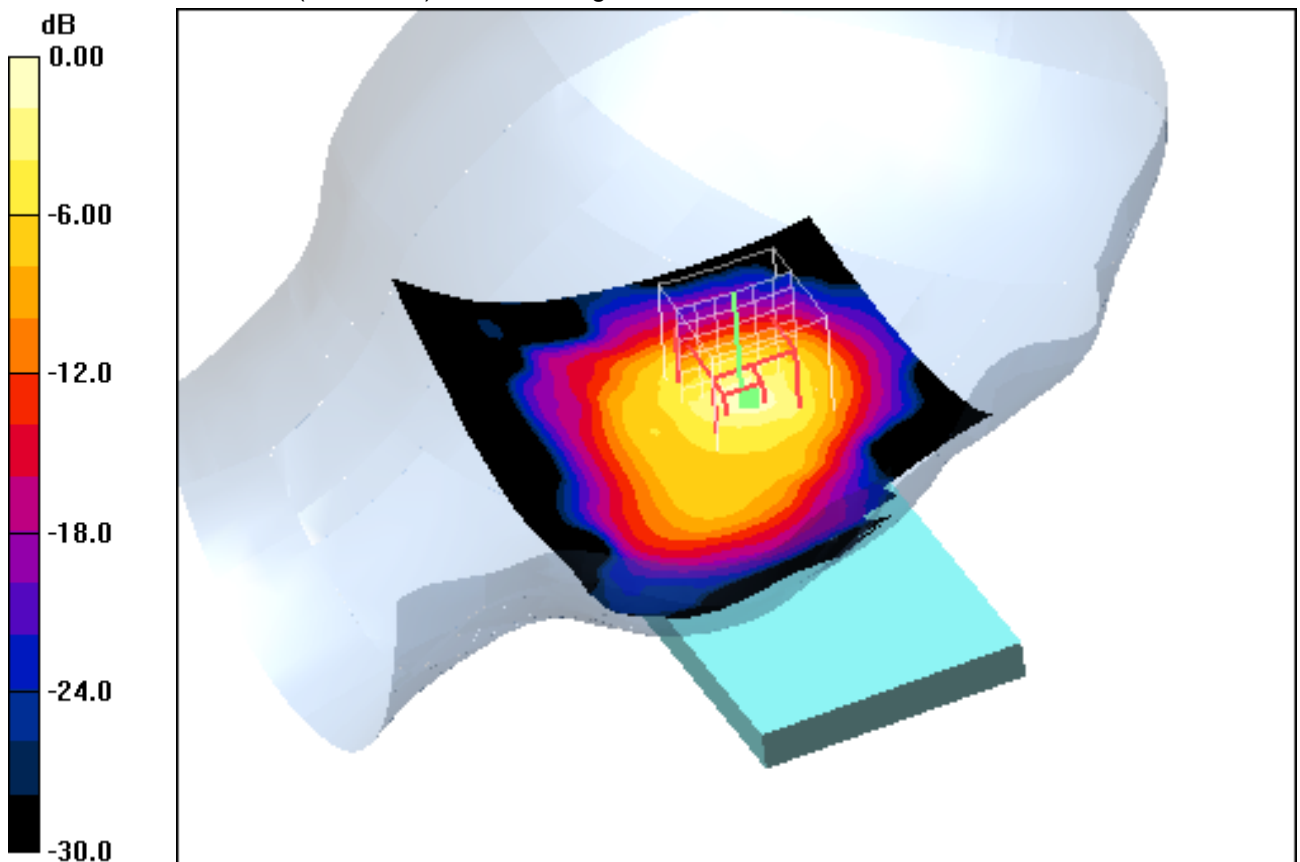
dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.02 V/m; Power Drift = -0.030 dB

Peak SAR (extrapolated) = 0.548 W/kg

SAR(1 g) = 0.106 mW/g; SAR(10 g) = 0.041 mW/g

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



0 dB = 0.115mW/g

Additional information:

ambient temperature: 23.1°C; liquid temperature: 22.9°C

Date/Time: 12.03.2013 20:09:17 Date/Time: 12.03.2013 20:34:59

IEEE1528-LeftHandSide-WLAN**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.85 \text{ mho/m}$; $\epsilon_r = 38.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.25, 4.25, 4.25); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - High/Area Scan (111x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
 Maximum value of SAR (interpolated) = 0.472 mW/g

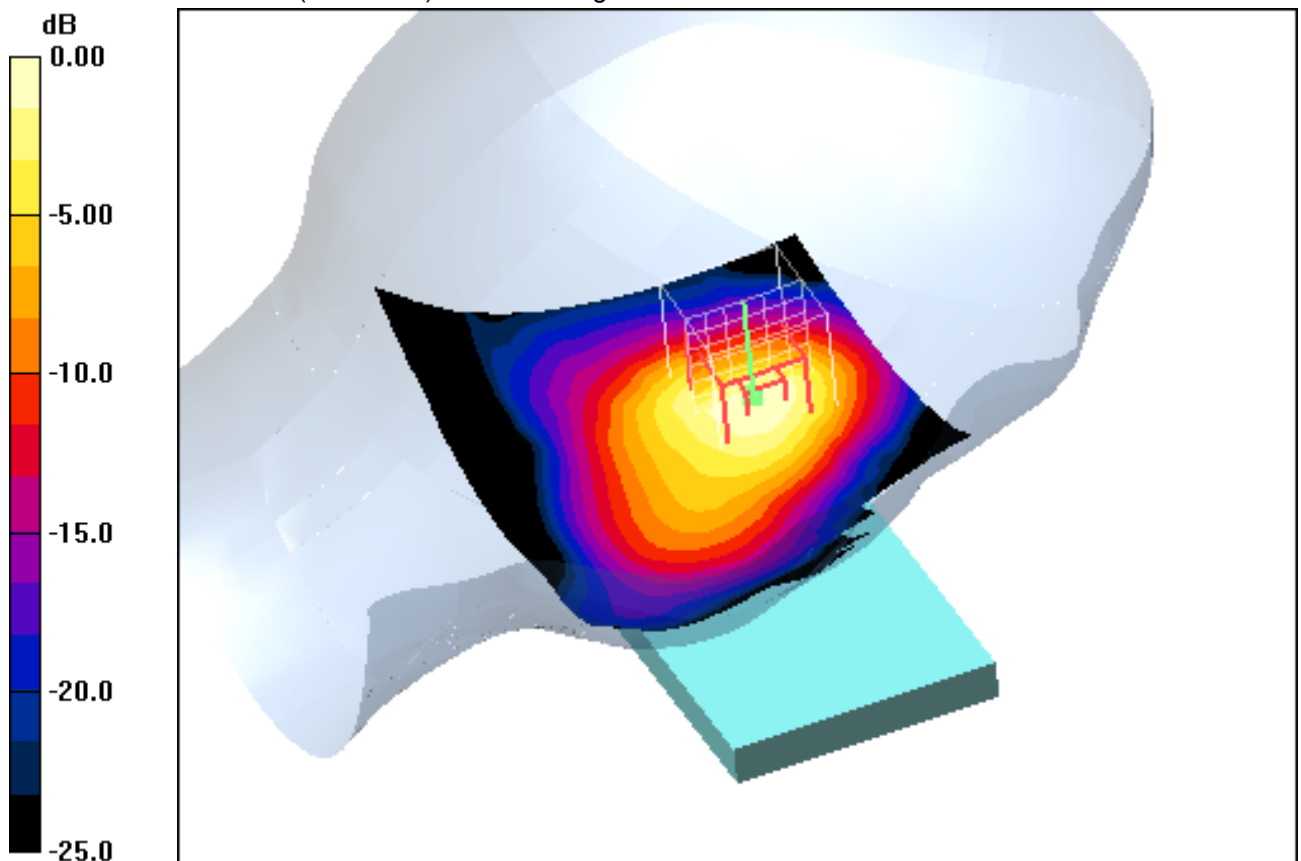
Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.99 V/m; Power Drift = 0.021 dB

Peak SAR (extrapolated) = 0.870 W/kg

SAR(1 g) = 0.426 mW/g; SAR(10 g) = 0.217 mW/g

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



0 dB = 0.464mW/g

Additional information:

ambient temperature: 23.1°C; liquid temperature: 22.9°C

Date/Time: 12.03.2013 14:26:31 Date/Time: 12.03.2013 14:44:15

IEEE1528-LeftHandSide-WLAN**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.8 \text{ mho/m}$; $\epsilon_r = 38.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.25, 4.25, 4.25); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Low/Area Scan (111x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.054 mW/g

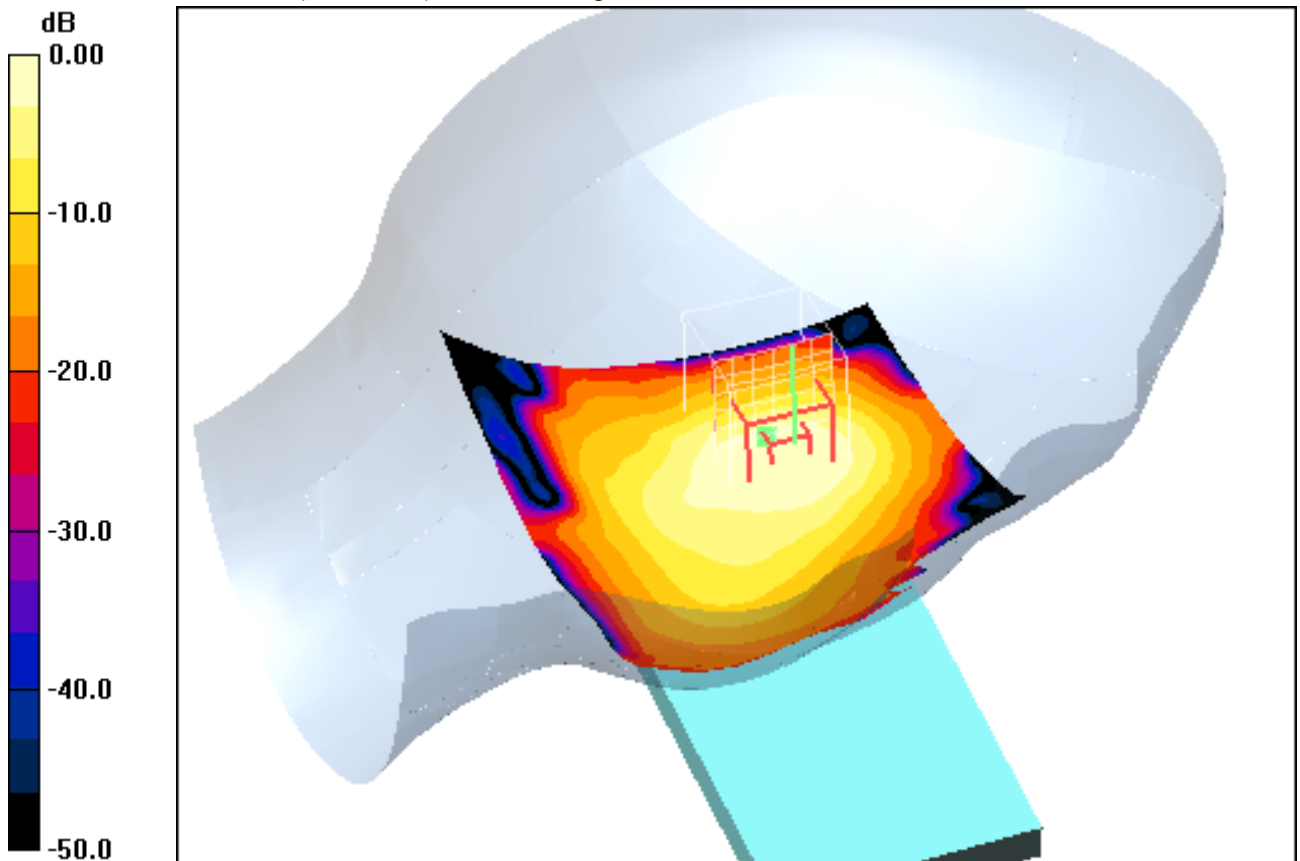
Tilt position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.38 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.065 W/kg

SAR(1 g) = 0.043 mW/g; SAR(10 g) = 0.023 mW/g

Maximum value of SAR (measured) = 0.048 mW/g



0 dB = 0.048mW/g

Additional information:

ambient temperature: 23.1°C; liquid temperature: 22.9°C

Date/Time: 12.03.2013 16:12:54 Date/Time: 12.03.2013 16:34:09

IEEE1528-LeftHandSide-WLAN**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.82$ mho/m; $\epsilon_r = 38.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.25, 4.25, 4.25); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Middle/Area Scan (111x151x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.056 mW/g**Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:

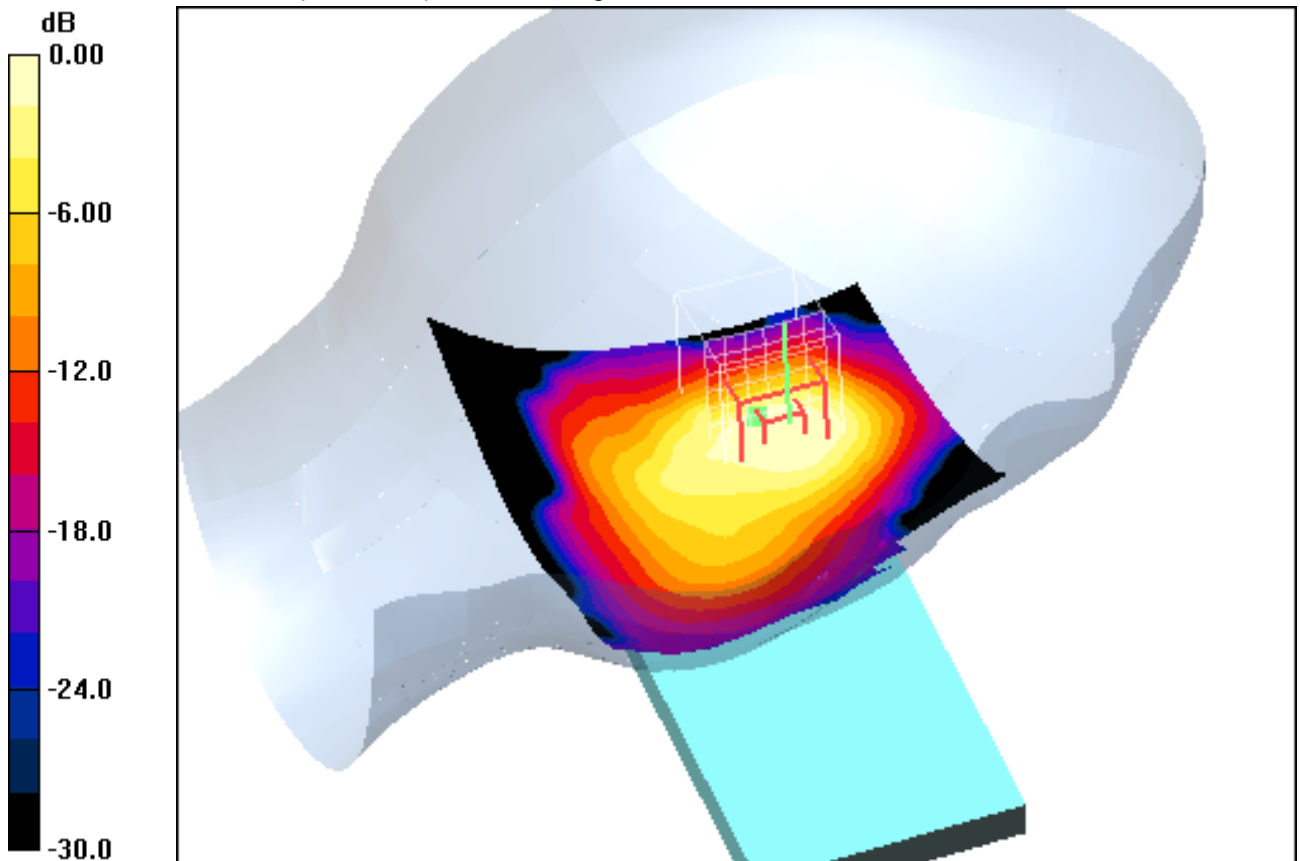
dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.45 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 0.063 W/kg

SAR(1 g) = 0.045 mW/g; SAR(10 g) = 0.025 mW/g

Maximum value of SAR (measured) = 0.050 mW/g



0 dB = 0.050mW/g

Additional information:

ambient temperature: 23.1°C; liquid temperature: 22.9°C

Date/Time: 12.03.2013 19:38:05 Date/Time: 12.03.2013 19:55:55

IEEE1528-LeftHandSide-WLAN**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.85 \text{ mho/m}$; $\epsilon_r = 38.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.25, 4.25, 4.25); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - High/Area Scan (111x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.369 mW/g

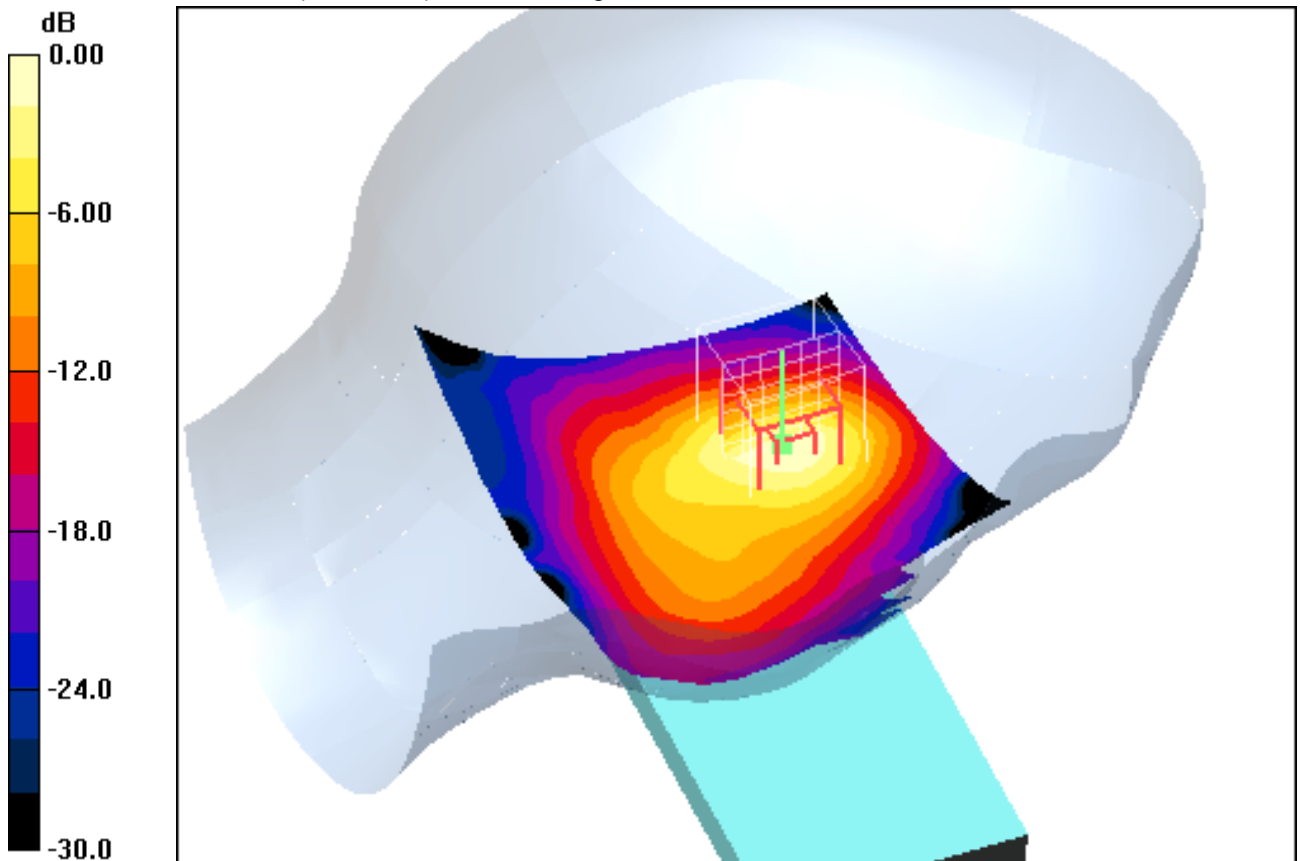
Tilt position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 14.2 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 0.705 W/kg

SAR(1 g) = 0.327 mW/g; SAR(10 g) = 0.154 mW/g

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



0 dB = 0.367mW/g

Additional information:

ambient temperature: 23.1°C; liquid temperature: 22.9°C

Date/Time: 12.03.2013 20:48:39 Date/Time: 12.03.2013 21:06:43

IEEE1528-LeftHandSide-WLAN**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.85 \text{ mho/m}$; $\epsilon_r = 38.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.25, 4.25, 4.25); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - High WC/Area Scan (111x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.479 mW/g

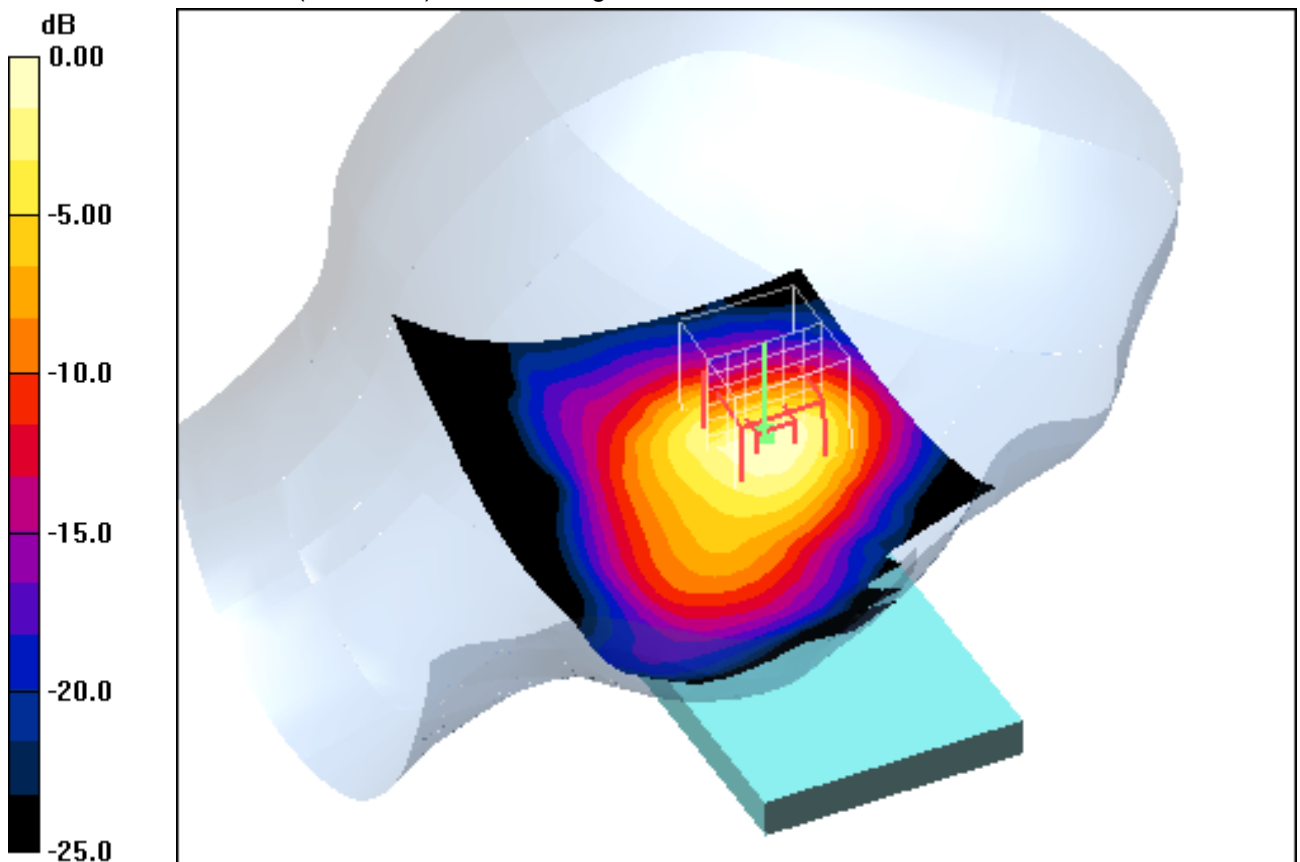
Touch position - High WC/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 16.5 V/m; Power Drift = 0.018 dB

Peak SAR (extrapolated) = 0.865 W/kg

SAR(1 g) = 0.430 mW/g; SAR(10 g) = 0.218 mW/g

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



0 dB = 0.467mW/g

Additional information:

ambient temperature: 23.1°C; liquid temperature: 22.9°C

Date/Time: 12.03.2013 12:51:50 Date/Time: 12.03.2013 13:26:10

IEEE1528-RightHandSide-WLAN**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2412$ MHz; $\sigma = 1.8$ mho/m; $\epsilon_r = 38.7$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.25, 4.25, 4.25); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Low/Area Scan (111x151x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.041 mW/g**Touch position - Low/Zoom Scan (7x7x7) (8x7x7)/Cube 0:** Measurement grid:

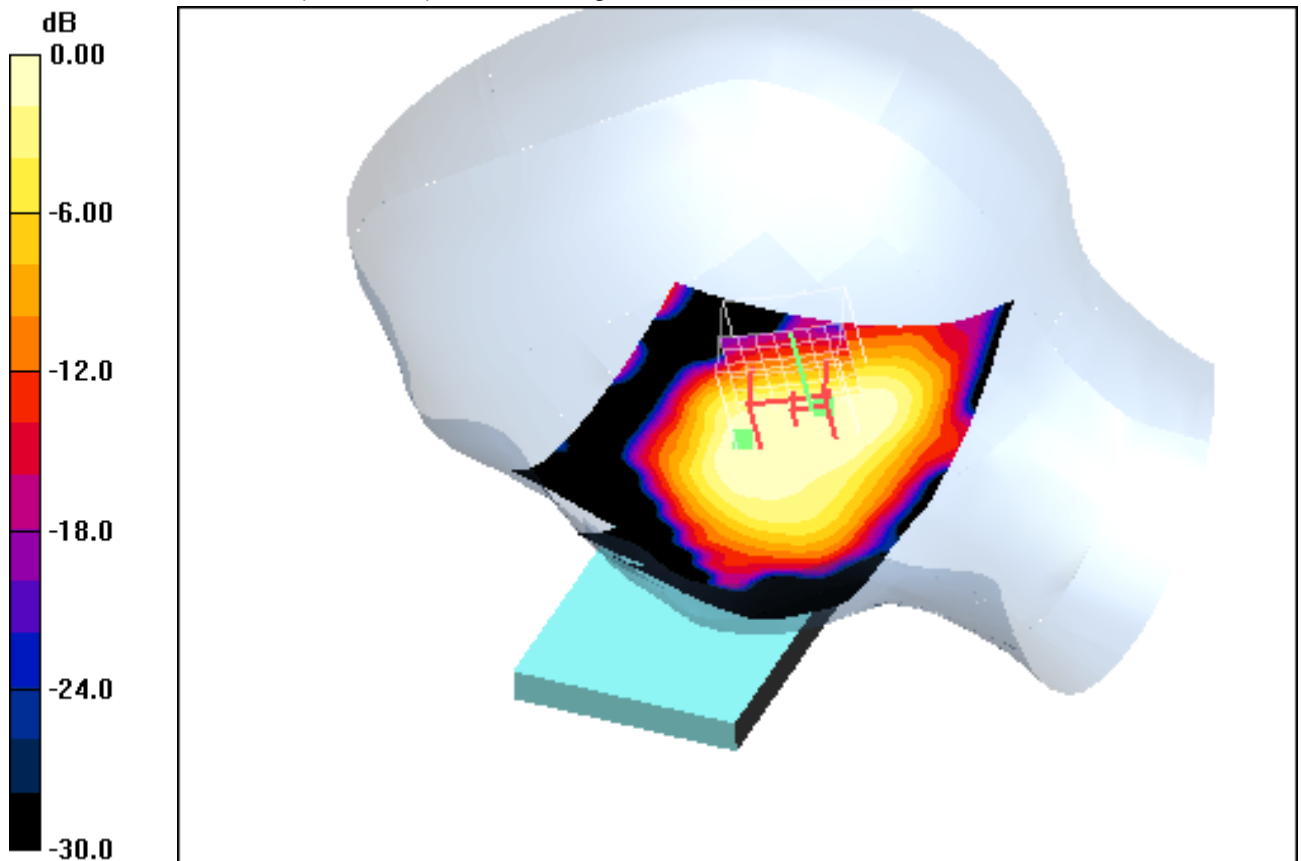
dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.78 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 0.062 W/kg

SAR(1 g) = 0.035 mW/g; SAR(10 g) = 0.021 mW/g

Maximum value of SAR (measured) = 0.038 mW/g



0 dB = 0.038mW/g

Additional information:

ambient temperature: 23.1°C; liquid temperature: 22.9°C

Date/Time: 12.03.2013 17:24:55 Date/Time: 12.03.2013 18:13:45

IEEE1528-RightHandSide-WLAN**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.82 \text{ mho/m}$; $\epsilon_r = 38.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.25, 4.25, 4.25); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

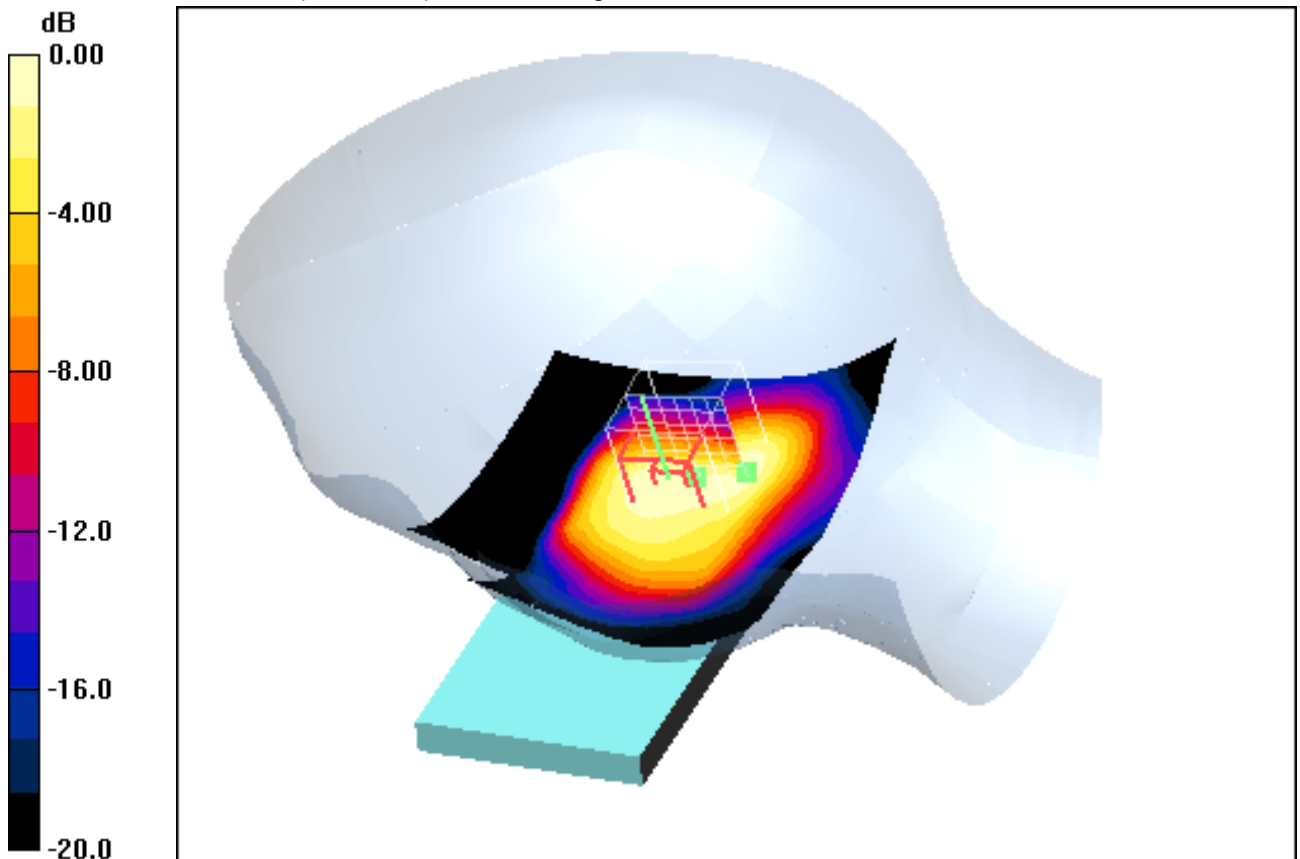
Touch position - Mid/Area Scan (111x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 0.219 mW/g**Touch position - Mid/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.3 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.366 W/kg

SAR(1 g) = 0.202 mW/g; SAR(10 g) = 0.116 mW/g

Maximum value of SAR (measured) = 0.218 mW/g



0 dB = 0.218mW/g

Additional information:

ambient temperature: 23.1°C; liquid temperature: 22.9°C

Date/Time: 12.03.2013 18:28:48 Date/Time: 12.03.2013 18:46:52

IEEE1528-RightHandSide-WLAN**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.85 \text{ mho/m}$; $\epsilon_r = 38.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.25, 4.25, 4.25); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

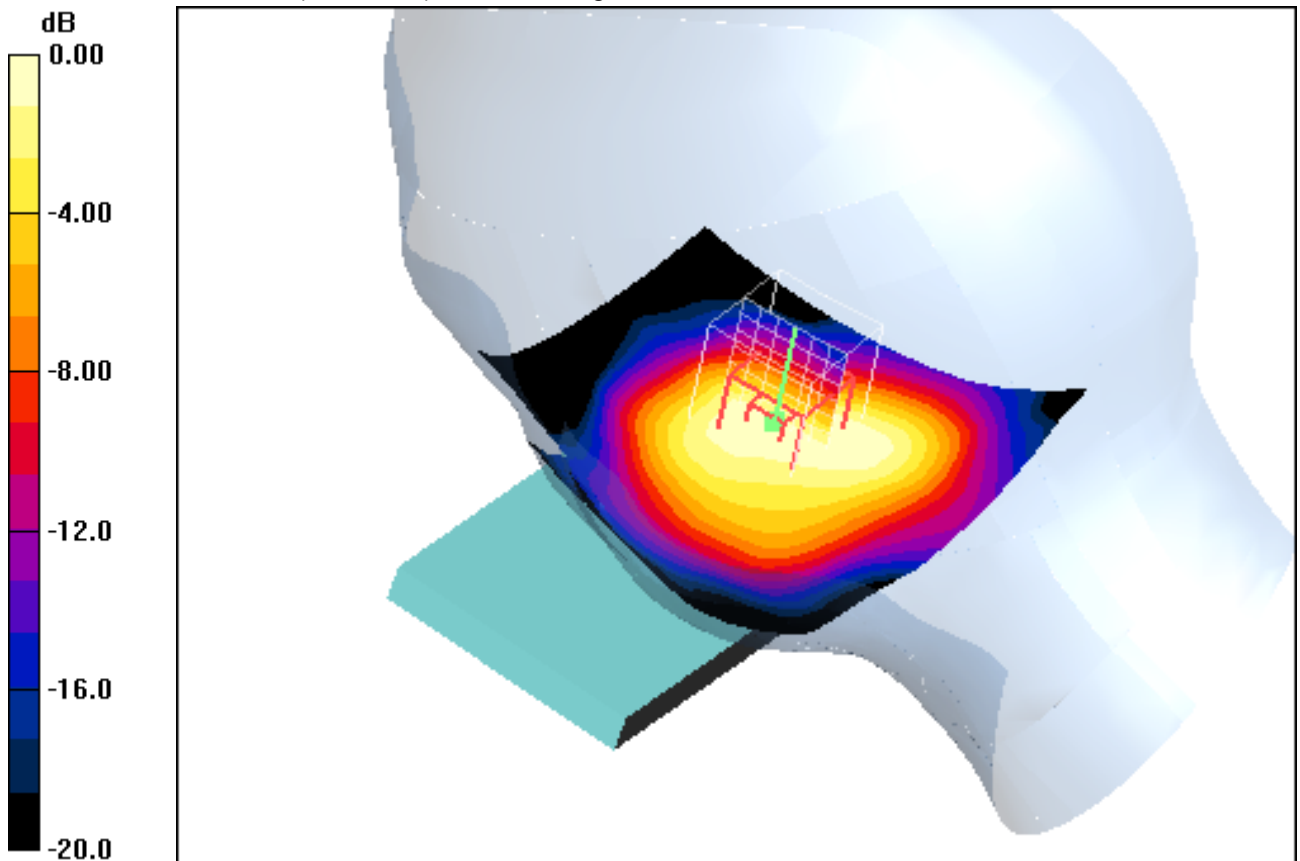
Touch position - High/Area Scan (111x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 0.216 mW/g**Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.2 V/m; Power Drift = -0.011 dB

Peak SAR (extrapolated) = 0.344 W/kg

SAR(1 g) = 0.191 mW/g; SAR(10 g) = 0.109 mW/g

Maximum value of SAR (measured) = 0.209 mW/g



0 dB = 0.209mW/g

Additional information:

ambient temperature: 23.1°C; liquid temperature: 22.9°C

Date/Time: 12.03.2013 13:42:51 Date/Time: 12.03.2013 14:07:43

IEEE1528-RightHandSide-WLAN**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.8 \text{ mho/m}$; $\epsilon_r = 38.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.25, 4.25, 4.25); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Low/Area Scan (111x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
 Maximum value of SAR (interpolated) = 0.034 mW/g

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

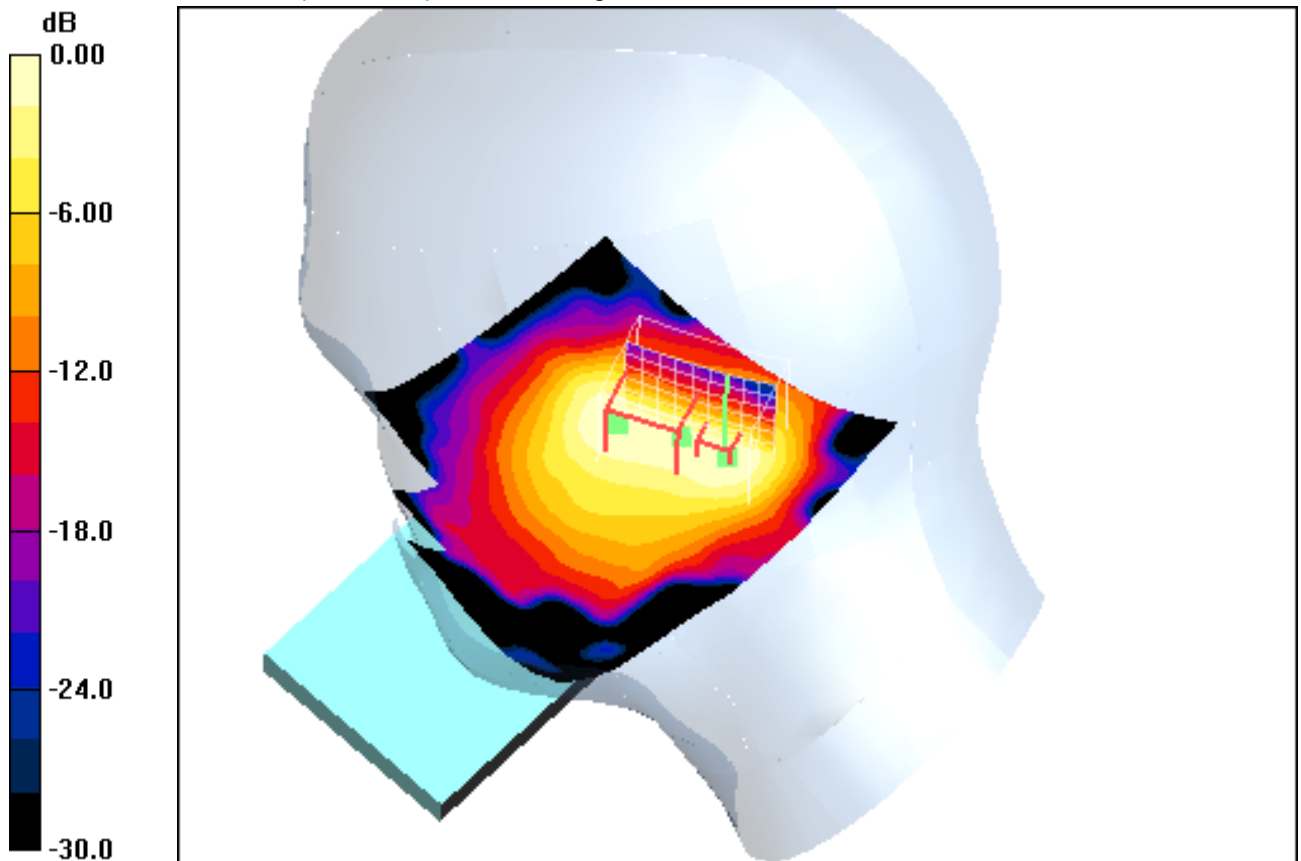
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 4.42 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.070 W/kg

SAR(1 g) = 0.031 mW/g; SAR(10 g) = 0.016 mW/g

Maximum value of SAR (measured) = 0.032 mW/g



0 dB = 0.032mW/g

Additional information:

ambient temperature: 23.1°C; liquid temperature: 22.9°C

Date/Time: 12.03.2013 16:47:52 Date/Time: 12.03.2013 17:09:16

IEEE1528-RightHandSide-WLAN**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.82 \text{ mho/m}$; $\epsilon_r = 38.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.25, 4.25, 4.25); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Mid/Area Scan (111x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.039 mW/g

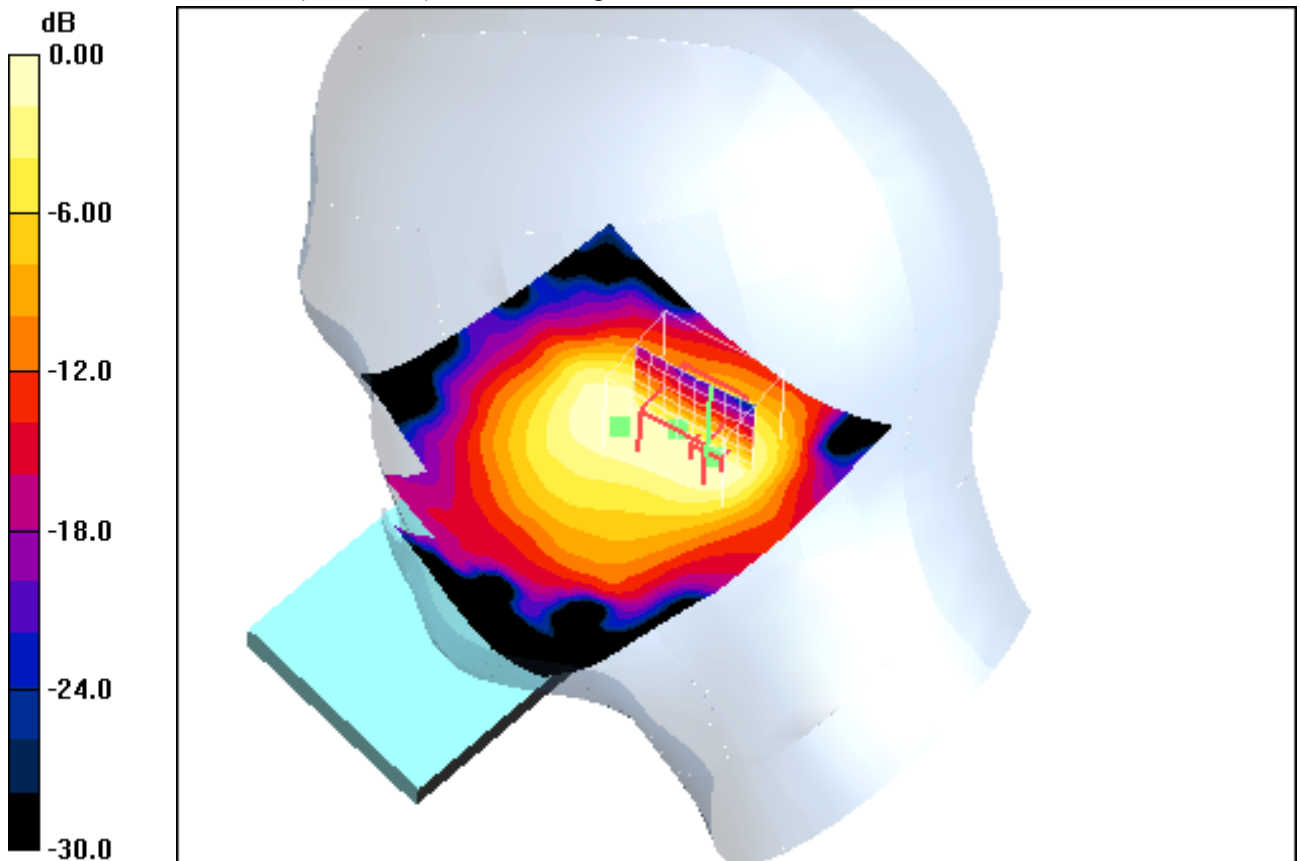
Tilt position - Mid/Zoom Scan (7x7x7) (9x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 4.40 V/m; Power Drift = 0.017 dB

Peak SAR (extrapolated) = 0.071 W/kg

SAR(1 g) = 0.032 mW/g; SAR(10 g) = 0.017 mW/g

Maximum value of SAR (measured) = 0.034 mW/g



0 dB = 0.034mW/g

Additional information:

ambient temperature: 23.1°C; liquid temperature: 22.9°C

Date/Time: 12.03.2013 19:00:29 Date/Time: 12.03.2013 19:19:07

IEEE1528-RightHandSide-WLAN**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.85 \text{ mho/m}$; $\epsilon_r = 38.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.25, 4.25, 4.25); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

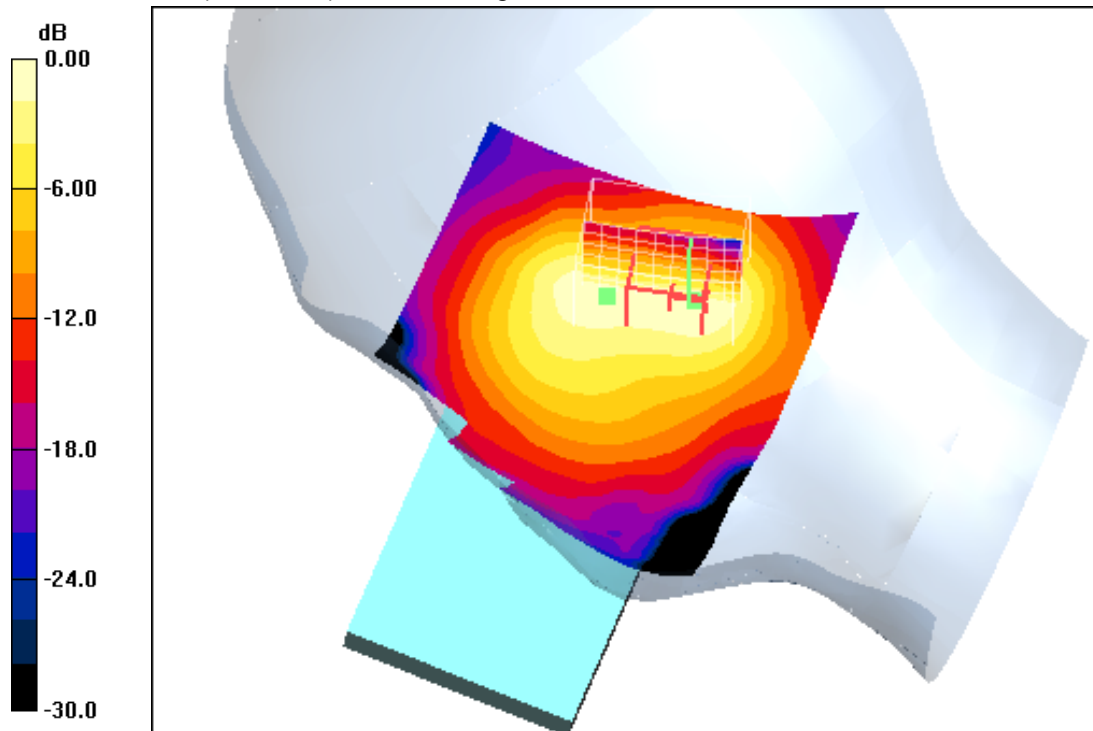
Tilt position - High/Area Scan (111x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 0.146 mW/g**Tilt position - High/Zoom Scan (7x7x7) (10x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.31 V/m; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 0.267 W/kg

SAR(1 g) = 0.133 mW/g; SAR(10 g) = 0.071 mW/g

Maximum value of SAR (measured) = 0.145 mW/g



0 dB = 0.145mW/g

Additional information:

ambient temperature: 23.1°C; liquid temperature: 22.9°C

Date/Time: 19.03.2013 11:19:14 Date/Time: 19.03.2013 11:37:38 Date/Time: 19.03.2013 11:48:20

OET65-Body-WLAN**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.96 \text{ mho/m}$; $\epsilon_r = 52.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.02, 4.02, 4.02); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Low/Area Scan (111x161x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.060 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 = 5.58 V/m; Power Drift = -0.021 dB

Peak SAR (extrapolated) = 0.118 W/kg

SAR(1 g) = 0.056 mW/g; SAR(10 g) = 0.031 mW/g

Maximum value of SAR (measured) = 0.059 mW/g

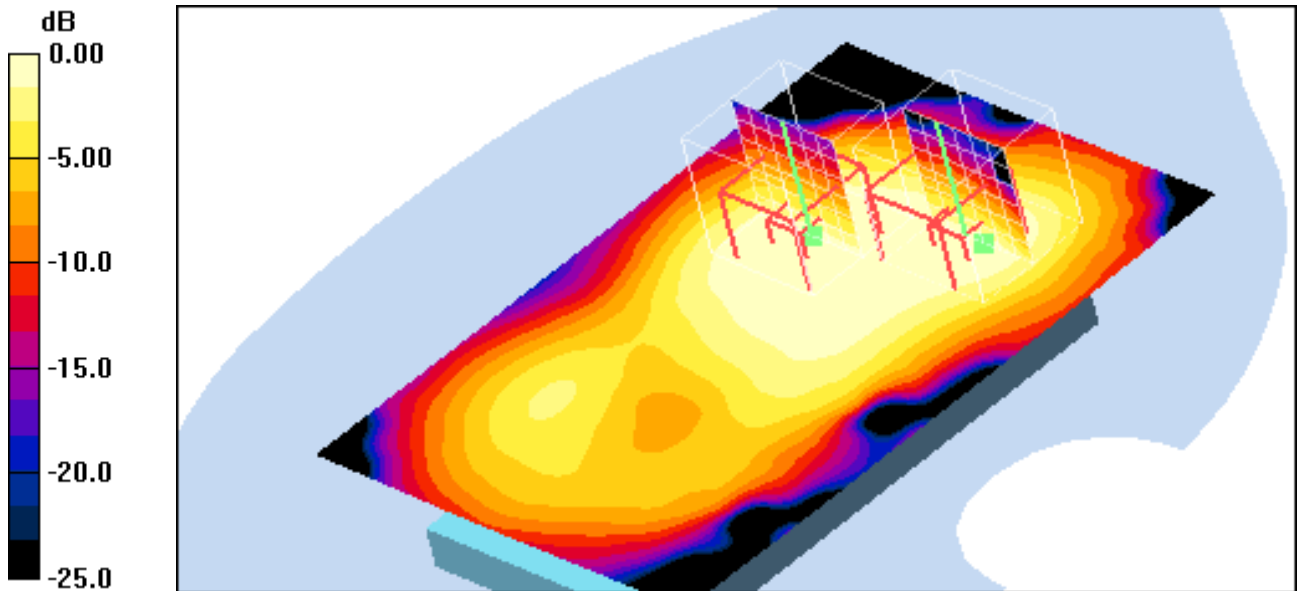
Front position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.58 V/m; Power Drift = -0.021 dB

Peak SAR (extrapolated) = 0.108 W/kg

SAR(1 g) = 0.056 mW/g; SAR(10 g) = 0.031 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: 22.8°C; liquid temperature: 21.9°C

Date/Time: 19.03.2013 12:39:20 Date/Time: 19.03.2013 13:01:10

OET65-Body-WLAN**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.99 \text{ mho/m}$; $\epsilon_r = 52.1$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.02, 4.02, 4.02); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

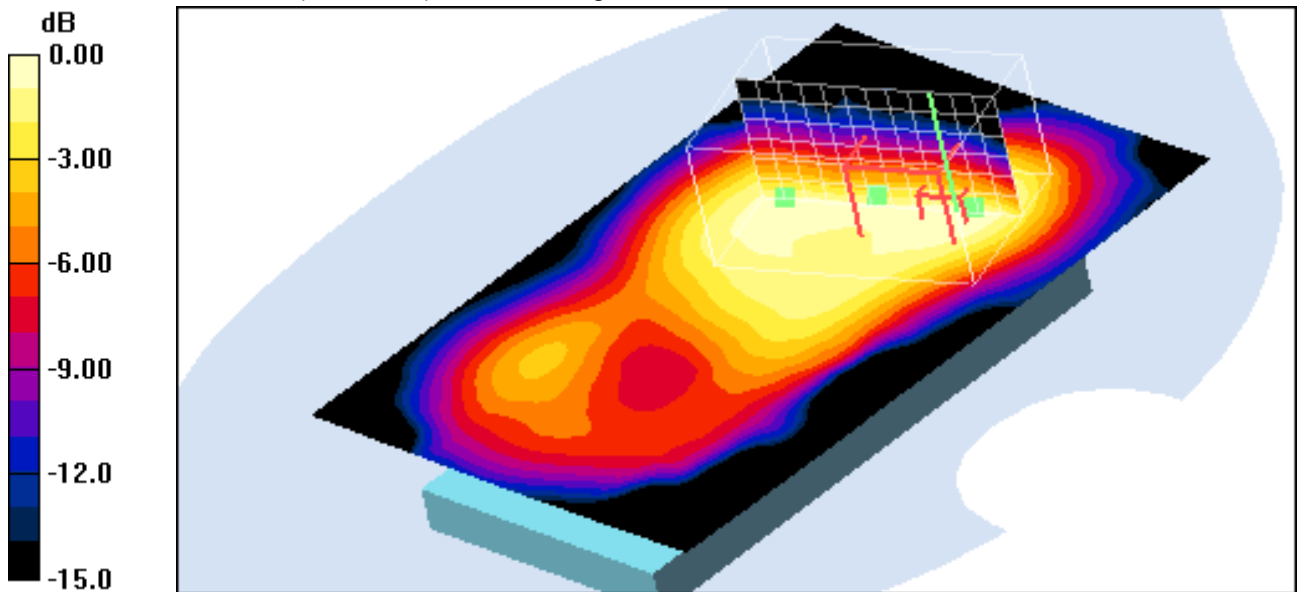
Front position - Mid/Area Scan (111x161x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 0.083 mW/g**Front position - Mid/Zoom Scan (7x7x7) (13x9x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 6.53 V/m; Power Drift = -0.010 dB

Peak SAR (extrapolated) = 0.171 W/kg

SAR(1 g) = 0.079 mW/g; SAR(10 g) = 0.043 mW/g

Maximum value of SAR (measured) = 0.082 mW/g



0 dB = 0.082mW/g

Additional information:

position or distance of DUT to SAM : 10mm

ambient temperature: 22.8°C; liquid temperature: 21.9°C

Date/Time: 19.03.2013 15:46:32 Date/Time: 19.03.2013 16:07:52

OET65-Body-WLAN**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 2 \text{ mho/m}$; $\epsilon_r = 52$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.02, 4.02, 4.02); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

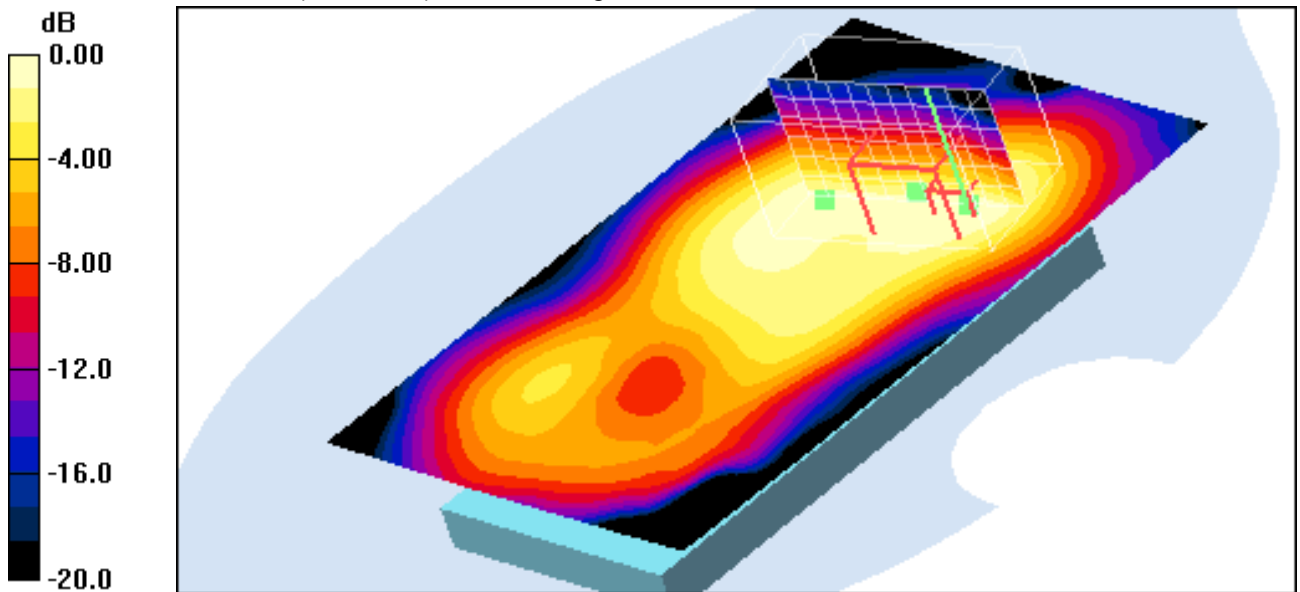
Front position - High/Area Scan (111x161x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 0.103 mW/g**Front position - High/Zoom Scan (7x7x7) (12x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.10 V/m; Power Drift = -0.013 dB

Peak SAR (extrapolated) = 0.206 W/kg

SAR(1 g) = 0.095 mW/g; SAR(10 g) = 0.053 mW/g

Maximum value of SAR (measured) = 0.100 mW/g



0 dB = 0.100mW/g

Additional information:

position or distance of DUT to SAM : 10mm

ambient temperature: 22.8°C; liquid temperature: 21.9°C

Date/Time: 19.03.2013 12:01:24 Date/Time: 19.03.2013 12:20:07

OET65-Body-WLAN**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.96 \text{ mho/m}$; $\epsilon_r = 52.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.02, 4.02, 4.02); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

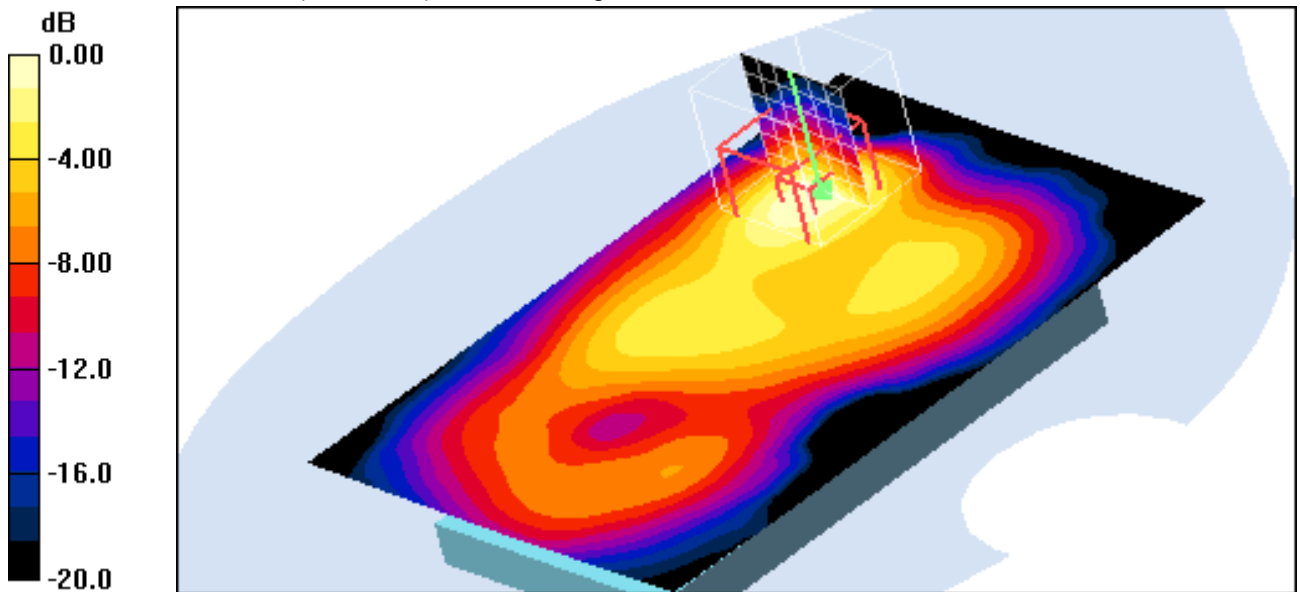
Rear position - Low/Area Scan (111x161x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 0.097 mW/g**Rear position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 6.80 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.237 W/kg

SAR(1 g) = 0.087 mW/g; SAR(10 g) = 0.040 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: 22.8°C; liquid temperature: 21.9°C

Date/Time: 19.03.2013 13:40:45 Date/Time: 19.03.2013 14:14:35

OET65-Body-WLAN**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.99 \text{ mho/m}$; $\epsilon_r = 52.1$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.02, 4.02, 4.02); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

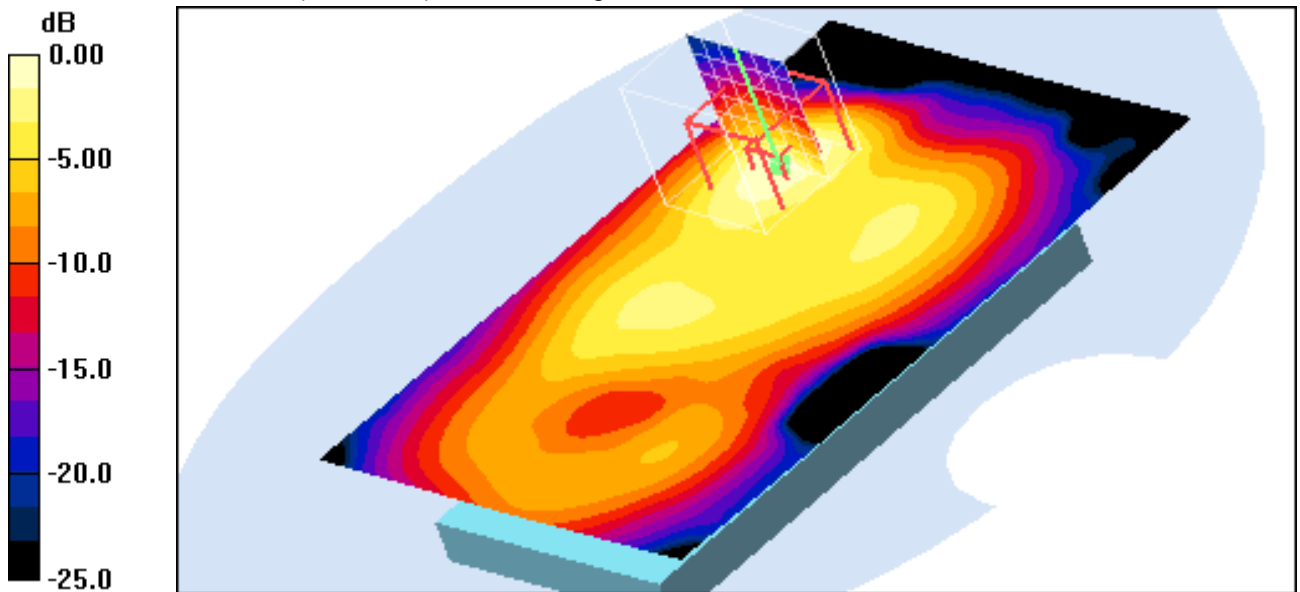
Rear position - Mid/Area Scan (111x161x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 0.108 mW/g**Rear position - Mid/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.19 V/m; Power Drift = 0.057 dB

Peak SAR (extrapolated) = 0.264 W/kg

SAR(1 g) = 0.097 mW/g; SAR(10 g) = 0.044 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: 22.8°C; liquid temperature: 21.9°C

Date/Time: 19.03.2013 16:29:28 Date/Time: 19.03.2013 16:49:29

OET65-Body-WLAN

DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 2 \text{ mho/m}$; $\epsilon_r = 52$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.02, 4.02, 4.02); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - High/Area Scan (111x161x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 0.115 mW/g

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

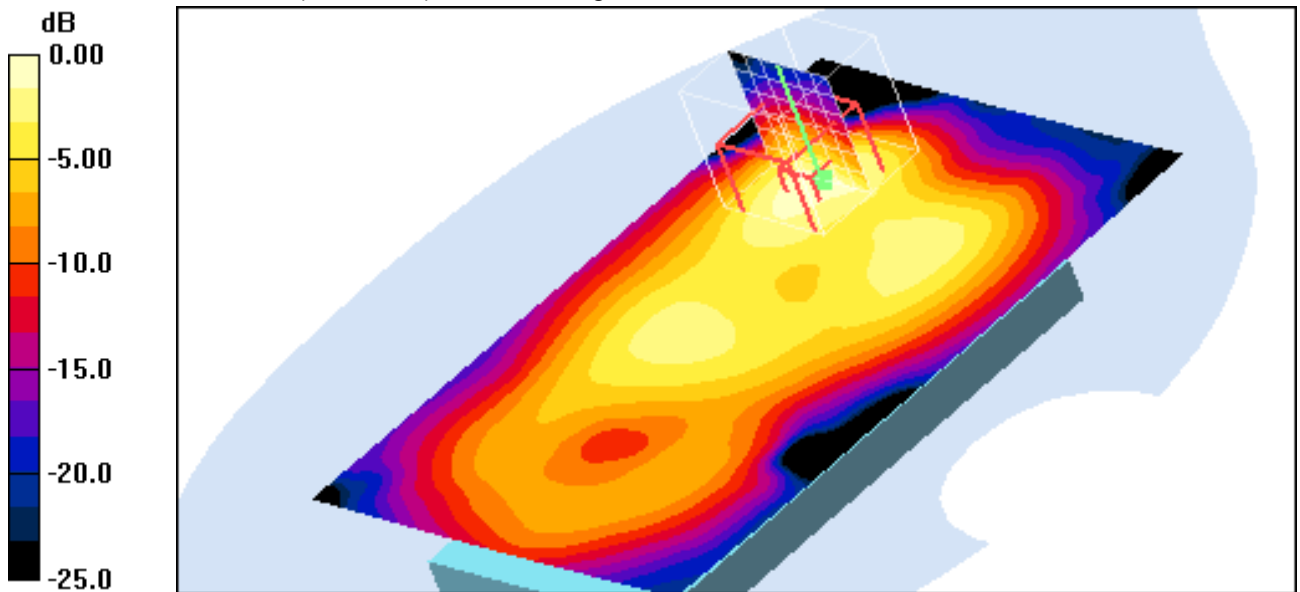
$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 6.40 V/m; Power Drift = -0,023 dB

Peak SAR (extrapolated) = 0.269 W/kg

SAR(1 g) = 0.099 mW/g; SAR(10 g) = 0.044 mW/g

Maximum value of SAR (measured) = 0.109 mW/g



0 dB = 0.109mW/g

Additional information:

position or distance of DUT to SAM : 10mm

ambient temperature: 22.8°C; liquid temperature: 21.9°C

Date/Time: 19.03.2013 15:06:46 Date/Time: 19.03.2013 15:22:23

OET65-Body-WLAN**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.99 \text{ mho/m}$; $\epsilon_r = 52.1$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.02, 4.02, 4.02); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- 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 (81x161x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.048 mW/g

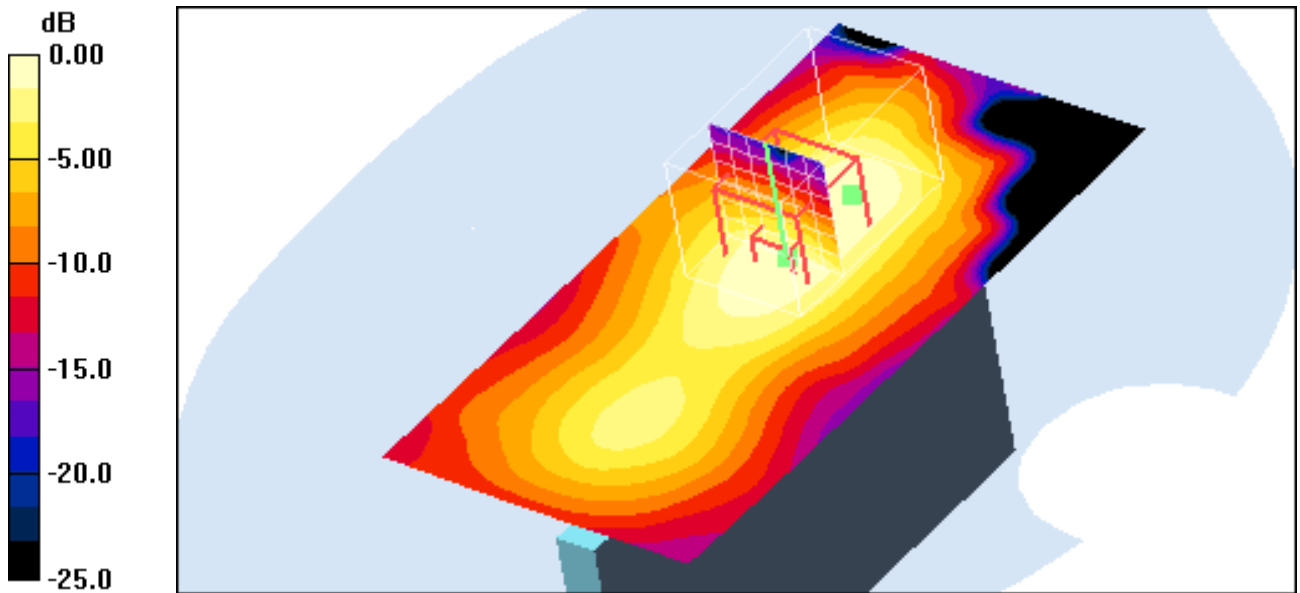
Edge right position - Middle/Zoom Scan (7x7x7) (7x11x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 4.84 V/m; Power Drift = -0.099 dB

Peak SAR (extrapolated) = 0.095 W/kg

SAR(1 g) = 0.044 mW/g; SAR(10 g) = 0.024 mW/g

Maximum value of SAR (measured) = 0.047 mW/g



0 dB = 0.047mW/g

Additional information:

position or distance of DUT to SAM : 10mm

ambient temperature: 22.8°C; liquid temperature: 21.9°C

Date/Time: 19.03.2013 14:29:55 Date/Time: 19.03.2013 14:41:59 Date/Time: 19.03.2013 14:52:40

OET65-Body-WLAN**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 52.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.02, 4.02, 4.02); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Edge top position - Middle/Area Scan (101x91x1): Measurement grid: dx=10mm, dy=10mm

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

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

Reference Value = 4.02 V/m; Power Drift = 0.133 dB

Peak SAR (extrapolated) = 0.074 W/kg

SAR(1 g) = 0.030 mW/g; SAR(10 g) = 0.014 mW/g

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

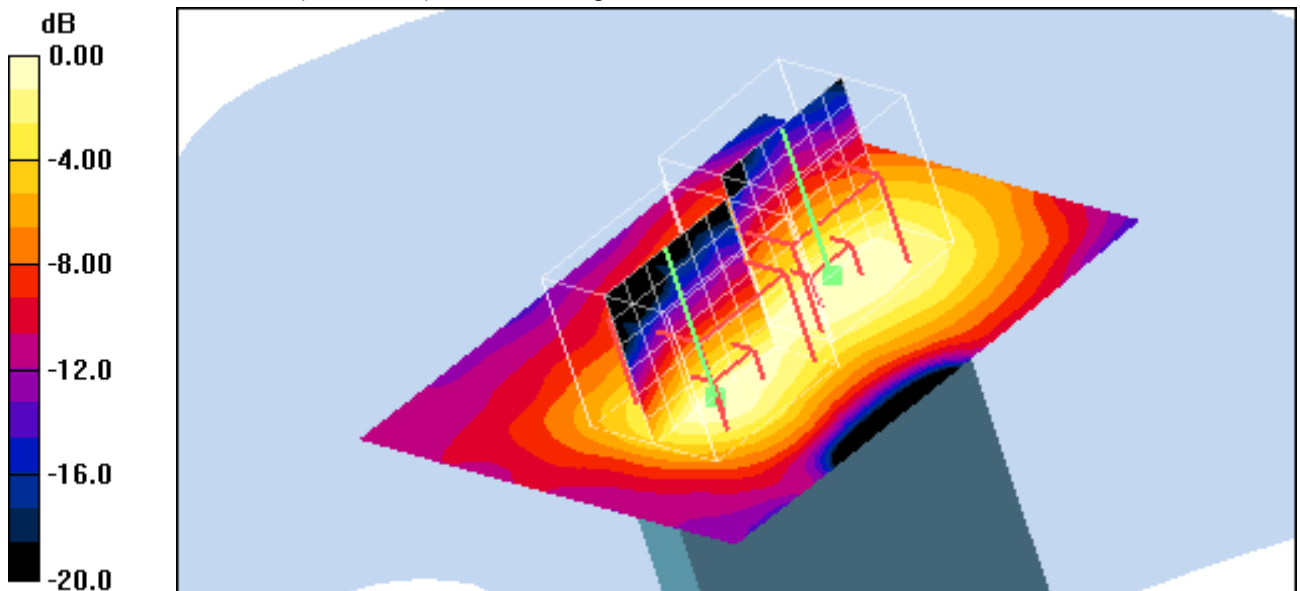
Edge top position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.02 V/m; Power Drift = 0.133 dB

Peak SAR (extrapolated) = 0.068 W/kg

SAR(1 g) = 0.031 mW/g; SAR(10 g) = 0.017 mW/g

Maximum value of SAR (measured) = 0.032 mW/g



0 dB = 0.032mW/g

Additional information:

position or distance of DUT to SAM : 10mm

ambient temperature: 22.8°C; liquid temperature: 21.9°C

Date/Time: 19.03.2013 17:06:12 Date/Time: 19.03.2013 17:35:12

OET65-Body-WLAN**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 2 \text{ mho/m}$; $\epsilon_r = 52$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1559; ConvF(4.02, 4.02, 4.02); Calibrated: 16.01.2013
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - High 15mm/Area Scan (111x161x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.049 mW/g

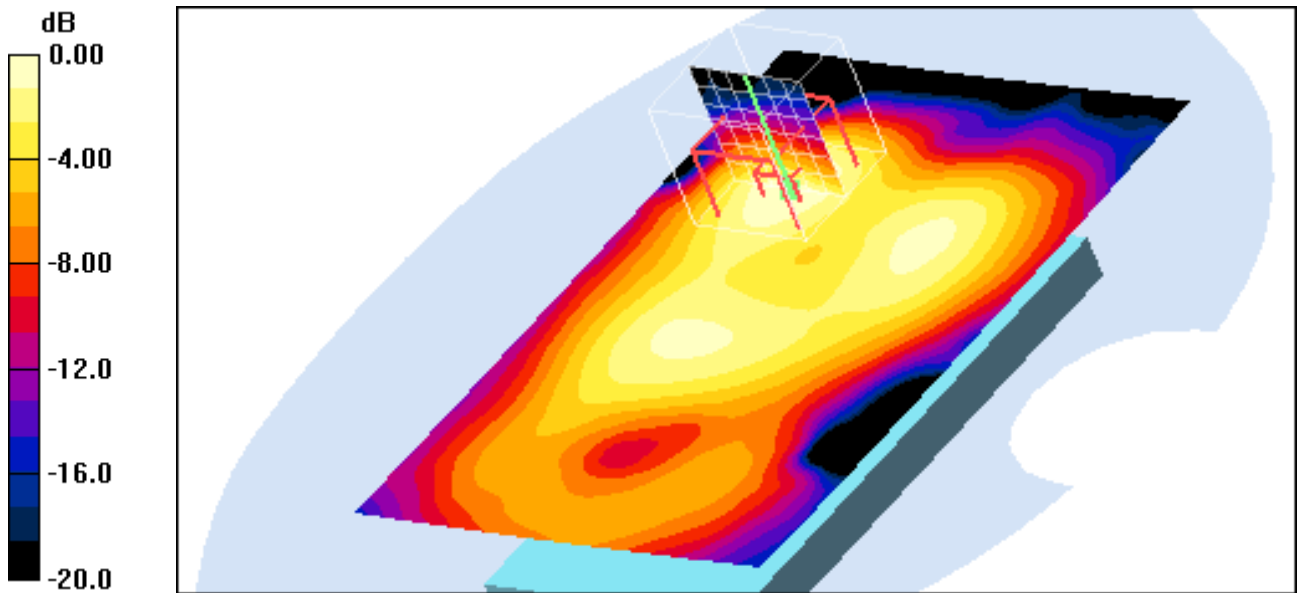
Rear position - High 15mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 4.97 V/m; Power Drift = -0.076 dB

Peak SAR (extrapolated) = 0.120 W/kg

SAR(1 g) = 0.045 mW/g; SAR(10 g) = 0.021 mW/g

Maximum value of SAR (measured) = 0.047 mW/g



0 dB = 0.047mW/g

Additional information:

position or distance of DUT to SAM : 15mm

ambient temperature: 22.8°C; liquid temperature: 21.9°C

Annex B.6: WLAN 5GHz

Date/Time: 25.03.2013 07:23:10 Date/Time: 25.03.2013 07:42:02

IEEE1528_EN62209-LeftHandSide-WLAN5GHz

DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ

Communication System: WLAN 5GHz; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used: $f = 5200 \text{ MHz}$; $\sigma = 4.52 \text{ mho/m}$; $\epsilon_r = 36.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(4.24, 4.24, 4.24); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Channel 40/Area Scan (111x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

Touch position - Channel 40/Zoom Scan (8x8x12)/Cube 0: Measurement grid:

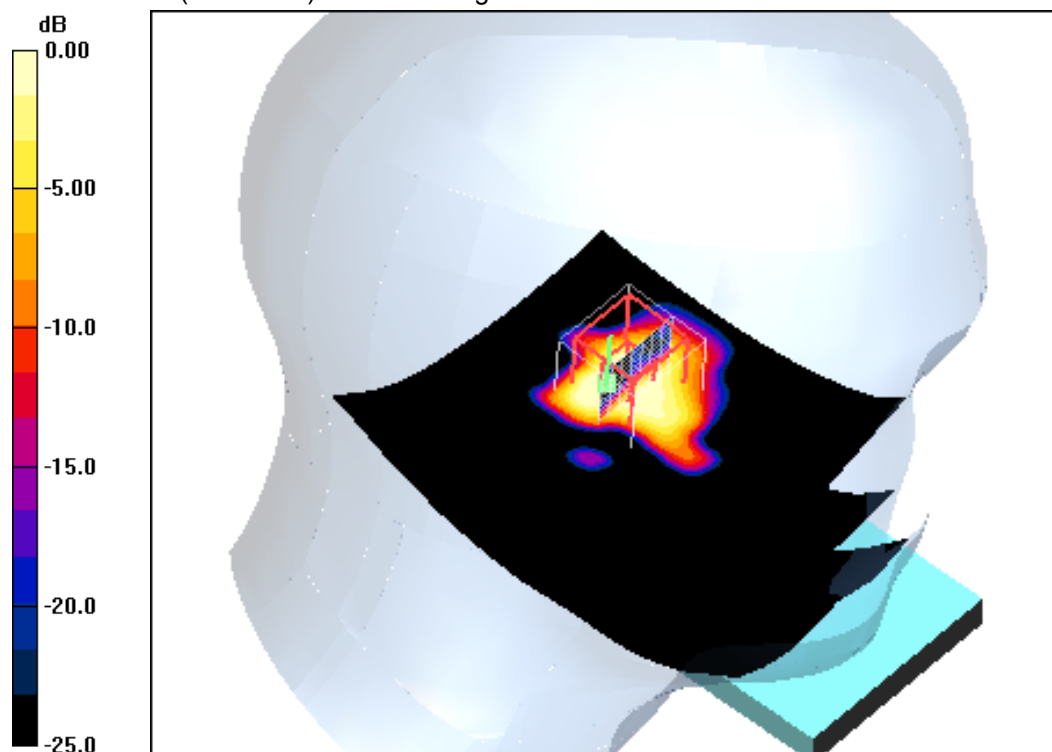
 $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 10.9 V/m; Power Drift = 0.024 dB

Peak SAR (extrapolated) = 1.57 W/kg

SAR(1 g) = 0.257 mW/g; SAR(10 g) = 0.094 mW/g

Maximum value of SAR (measured) = 0.470 mW/g



0 dB = 0.470mW/g

Additional information:

ambient temperature: 21.6°C; liquid temperature: 20.2°C

Date/Time: 25.03.2013 08:12:58 Date/Time: 25.03.2013 08:29:07

IEEE1528_EN62209-LeftHandSide-WLAN5GHz**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 5GHz; Frequency: 5300 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used: $f = 5300 \text{ MHz}$; $\sigma = 4.62 \text{ mho/m}$; $\epsilon_r = 36.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(4.05, 4.05, 4.05); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Channel 60/Area Scan (101x141x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.615 mW/g

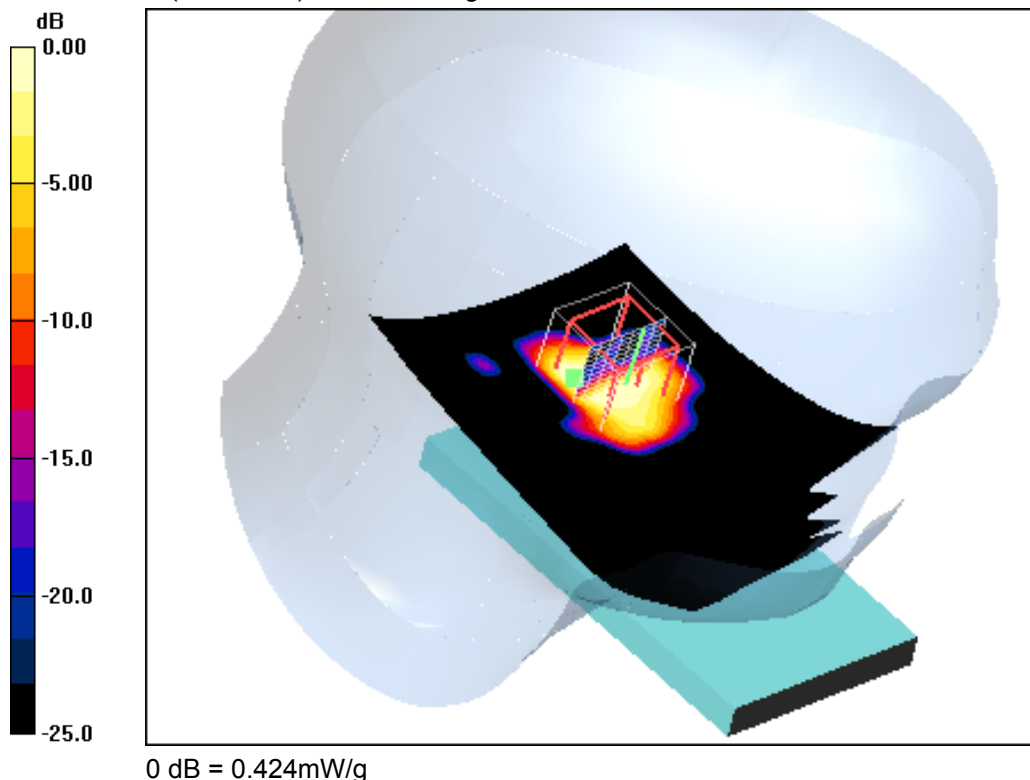
Touch position - Channel 60/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 9.81 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 1.97 W/kg

SAR(1 g) = 0.218 mW/g; SAR(10 g) = 0.078 mW/g

Maximum value of SAR (measured) = 0.424 mW/g

**Additional information:**

ambient temperature: 21.6°C; liquid temperature: 20.2°C

Date/Time: 25.03.2013 12:57:26 Date/Time: 25.03.2013 13:13:30

IEEE1528_EN62209-LeftHandSide-WLAN5GHz**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 5GHz; Frequency: 5540 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used (interpolated): $f = 5540 \text{ MHz}$; $\sigma = 4.86 \text{ mho/m}$; $\epsilon_r = 36$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(3.72, 3.72, 3.72); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Channel 108/Area Scan (101x121x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.770 mW/g

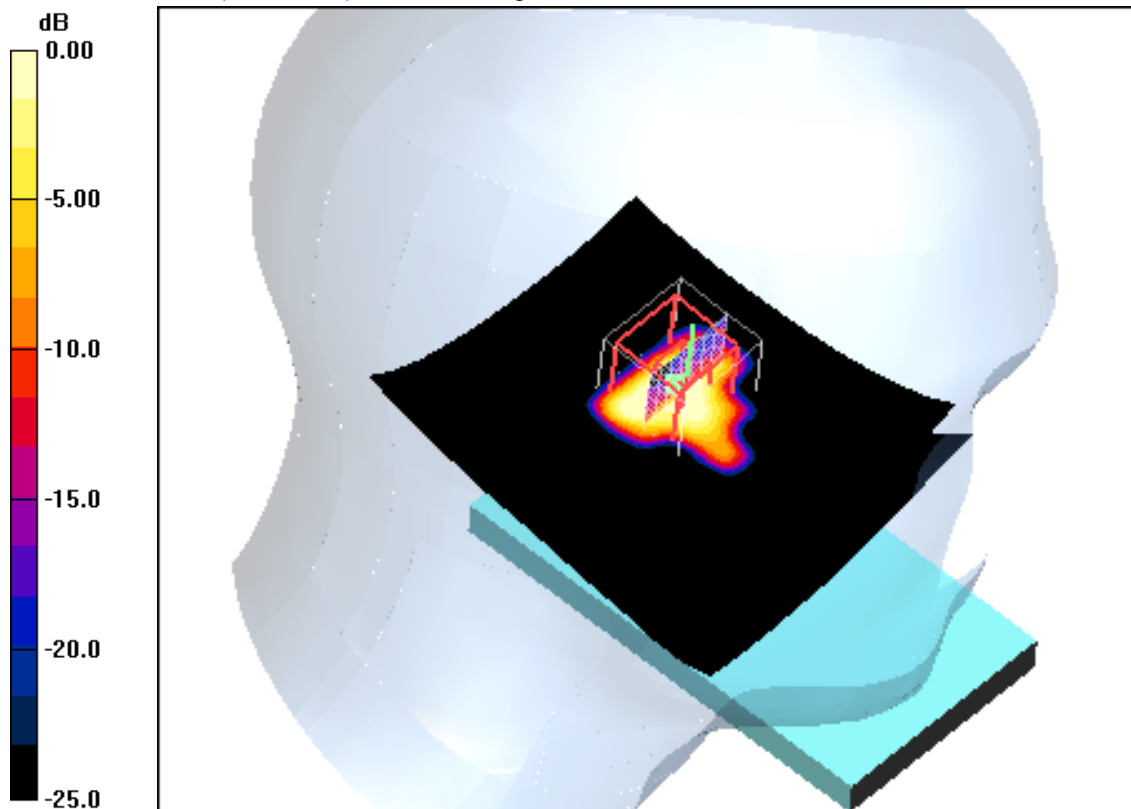
Touch position - Channel 108/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 8.66 V/m; Power Drift = 0.090 dB

Peak SAR (extrapolated) = 0.734 W/kg

SAR(1 g) = 0.183 mW/g; SAR(10 g) = 0.061 mW/g

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



0 dB = 0.381mW/g

Additional information:

ambient temperature: 21.6°C; liquid temperature: 20.2°C

Date/Time: 25.03.2013 13:40:54 Date/Time: 25.03.2013 13:57:00

IEEE1528_EN62209-LeftHandSide-WLAN5GHz**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 5GHz; Frequency: 5765 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used (interpolated): $f = 5765 \text{ MHz}$; $\sigma = 5.09 \text{ mho/m}$; $\epsilon_r = 35.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(3.65, 3.65, 3.65); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Channel 153/Area Scan (101x121x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.766 mW/g

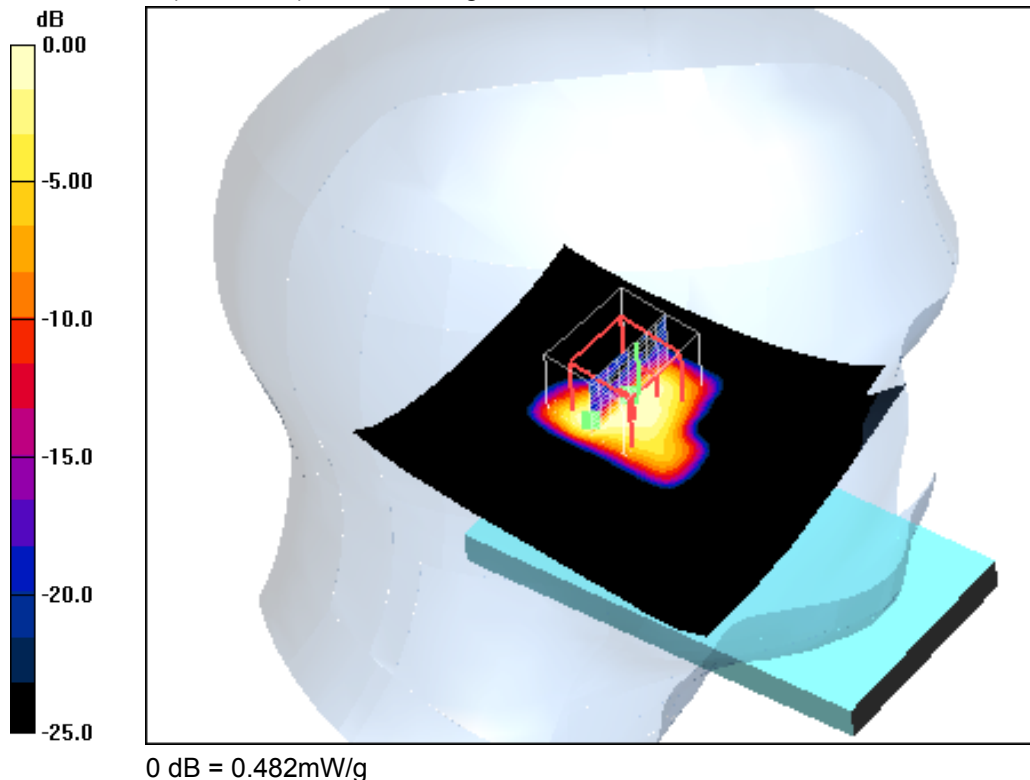
Touch position - Channel 153/Zoom Scan (9x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 9.20 V/m; Power Drift = 0.086 dB

Peak SAR (extrapolated) = 0.939 W/kg

SAR(1 g) = 0.229 mW/g; SAR(10 g) = 0.077 mW/g

Maximum value of SAR (measured) = 0.482 mW/g

**Additional information:**

ambient temperature: 21.6°C; liquid temperature: 20.2°C

Date/Time: 25.03.2013 06:41:46 Date/Time: 25.03.2013 06:59:35

IEEE1528_EN62209-LeftHandSide-WLAN5GHz**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 5GHz; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used: $f = 5200 \text{ MHz}$; $\sigma = 4.52 \text{ mho/m}$; $\epsilon_r = 36.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(4.24, 4.24, 4.24); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Channel 40/Area Scan (111x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

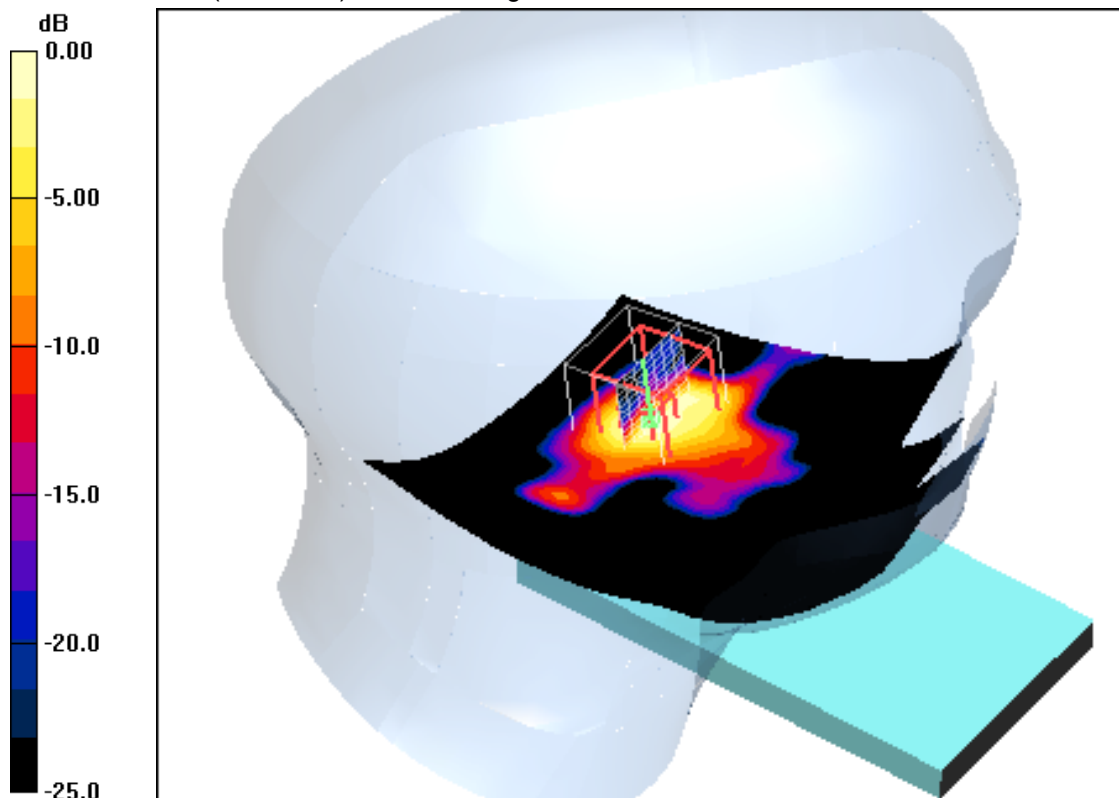
Tilt position - Channel 40/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 10.5 V/m; Power Drift = 0.122 dB

Peak SAR (extrapolated) = 0.985 W/kg

SAR(1 g) = 0.265 mW/g; SAR(10 g) = 0.081 mW/g

Maximum value of SAR (measured) = 0.518 mW/g



0 dB = 0.518mW/g

Additional information:

ambient temperature: 21.6°C; liquid temperature: 20.2°C

Date/Time: 25.03.2013 08:52:09 Date/Time: 25.03.2013 09:08:08

IEEE1528_EN62209-LeftHandSide-WLAN5GHz**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 5GHz; Frequency: 5300 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used: $f = 5300 \text{ MHz}$; $\sigma = 4.62 \text{ mho/m}$; $\epsilon_r = 36.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(4.05, 4.05, 4.05); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Channel 60/Area Scan (101x141x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.493 mW/g

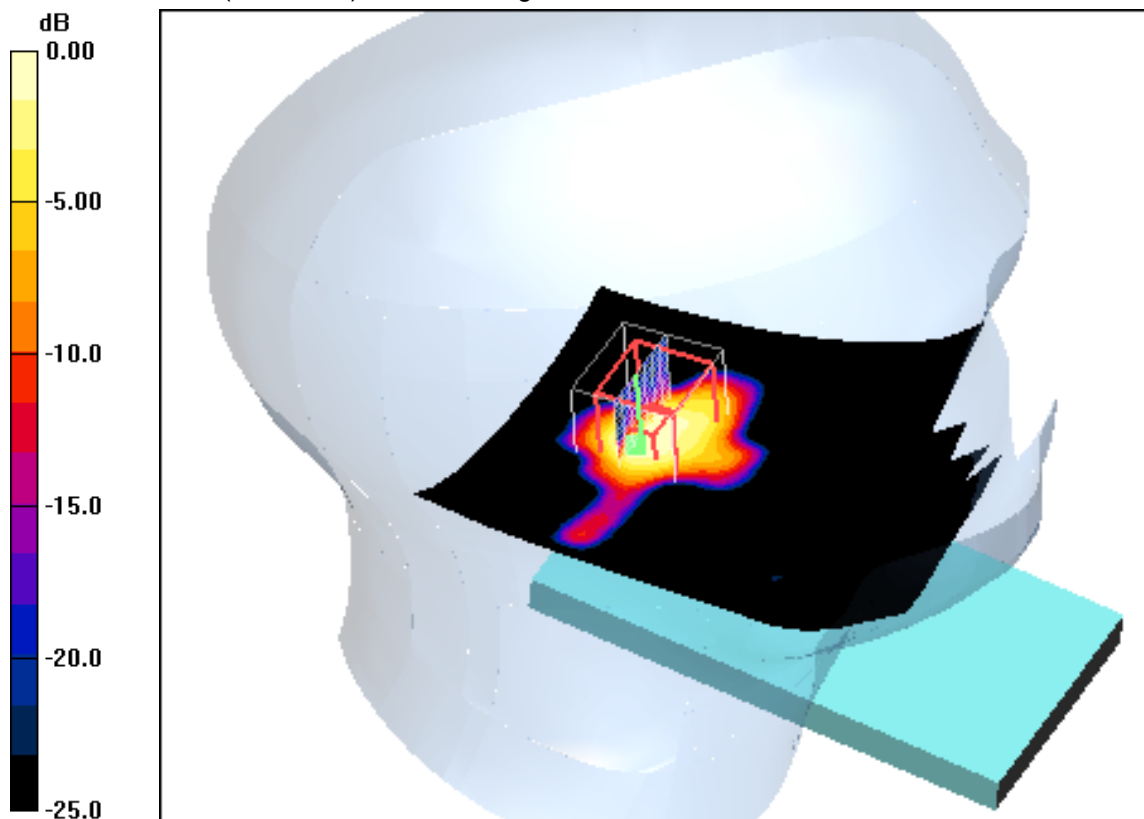
Tilt position - Channel 60/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 8.46 V/m; Power Drift = 0.096 dB

Peak SAR (extrapolated) = 0.771 W/kg

SAR(1 g) = 0.208 mW/g; SAR(10 g) = 0.061 mW/g

Maximum value of SAR (measured) = 0.423 mW/g



0 dB = 0.423mW/g

Additional information:

ambient temperature: 21.6°C; liquid temperature: 20.2°C

Date/Time: 25.03.2013 12:18:18 Date/Time: 25.03.2013 12:33:42

IEEE1528_EN62209-LeftHandSide-WLAN5GHz**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 5GHz; Frequency: 5540 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used (interpolated): $f = 5540 \text{ MHz}$; $\sigma = 4.86 \text{ mho/m}$; $\epsilon_r = 36$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(3.72, 3.72, 3.72); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Channel 108/Area Scan (101x121x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.682 mW/g

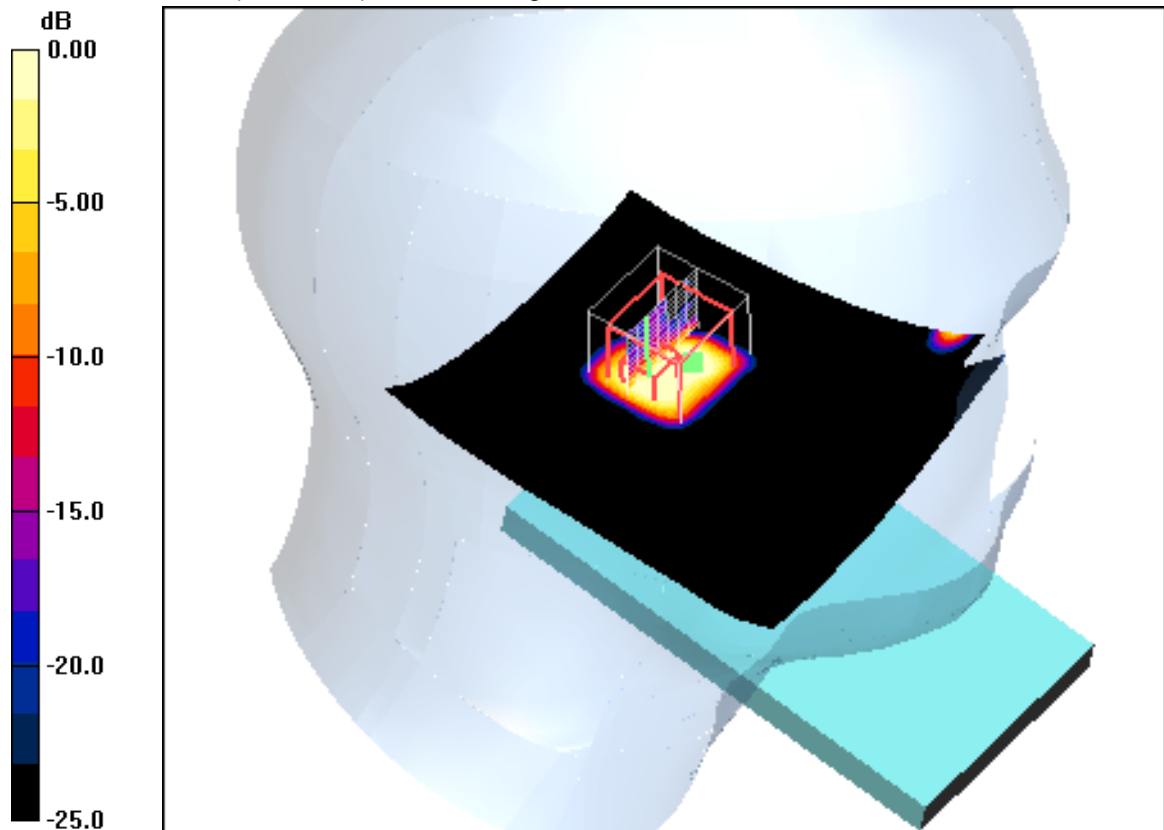
Tilt position - Channel 108/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 7.59 V/m; Power Drift = 0.133 dB

Peak SAR (extrapolated) = 0.647 W/kg

SAR(1 g) = 0.132 mW/g; SAR(10 g) = 0.039 mW/g

Maximum value of SAR (measured) = 0.305 mW/g

**Additional information:**

ambient temperature: 21.6°C; liquid temperature: 20.2°C

Date/Time: 25.03.2013 14:27:04 Date/Time: 25.03.2013 14:43:56

IEEE1528_EN62209-LeftHandSide-WLAN5GHz**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 5GHz; Frequency: 5765 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used (interpolated): $f = 5765 \text{ MHz}$; $\sigma = 5.09 \text{ mho/m}$; $\epsilon_r = 35.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(3.65, 3.65, 3.65); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Channel 153/Area Scan (101x121x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

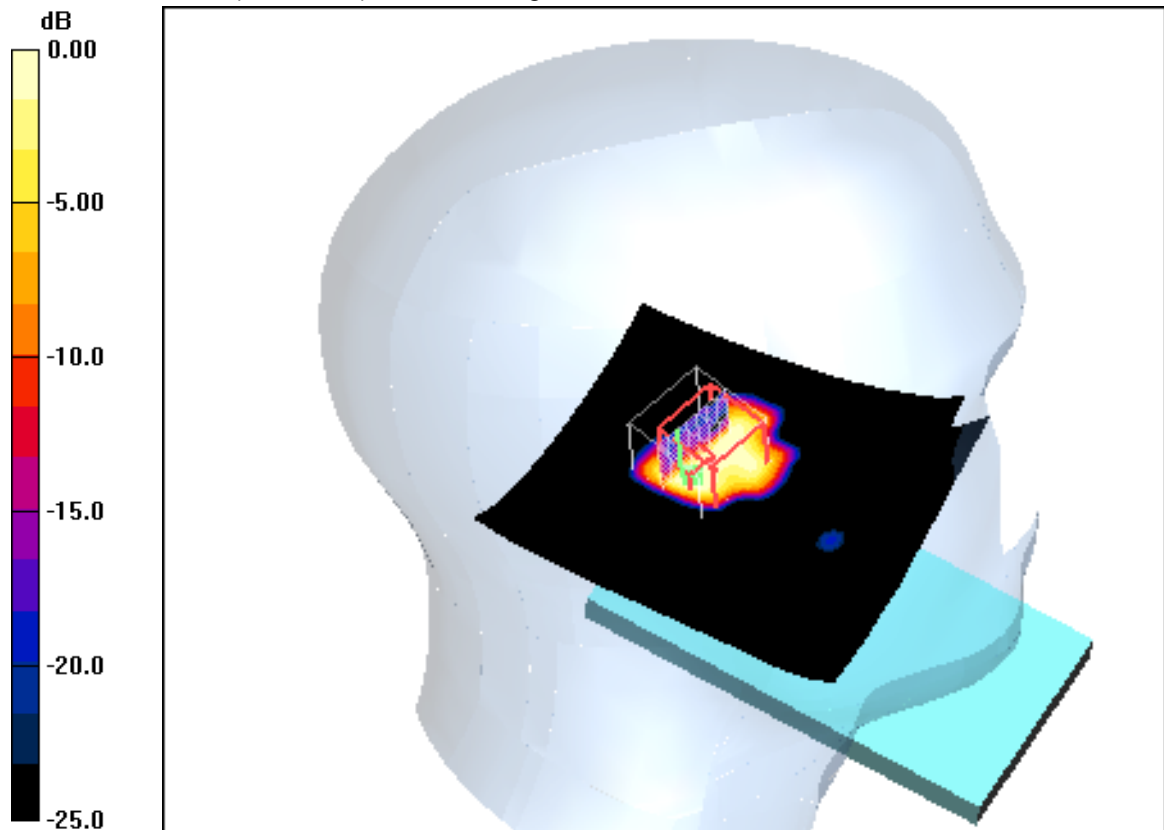
Tilt position - Channel 153/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 8.20 V/m; Power Drift = 0.098 dB

Peak SAR (extrapolated) = 0.605 W/kg

SAR(1 g) = 0.141 mW/g; SAR(10 g) = 0.043 mW/g

Maximum value of SAR (measured) = 0.316 mW/g



0 dB = 0.316mW/g

Additional information:

ambient temperature: 21.6°C; liquid temperature: 20.2°C

Date/Time: 25.03.2013 20:29:34 Date/Time: 25.03.2013 20:50:07

IEEE1528_EN62209-RightHandSide-WLAN5GHz**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 5GHz; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used: $f = 5200$ MHz; $\sigma = 4.52$ mho/m; $\epsilon_r = 36.6$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(4.24, 4.24, 4.24); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touchilt position - Channel 40/Area Scan (111x161x1): Measurement grid:

dx=10mm, dy=10mm

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

Touchilt position - Channel 40/Zoom Scan (9x8x12)/Cube 0: Measurement grid:

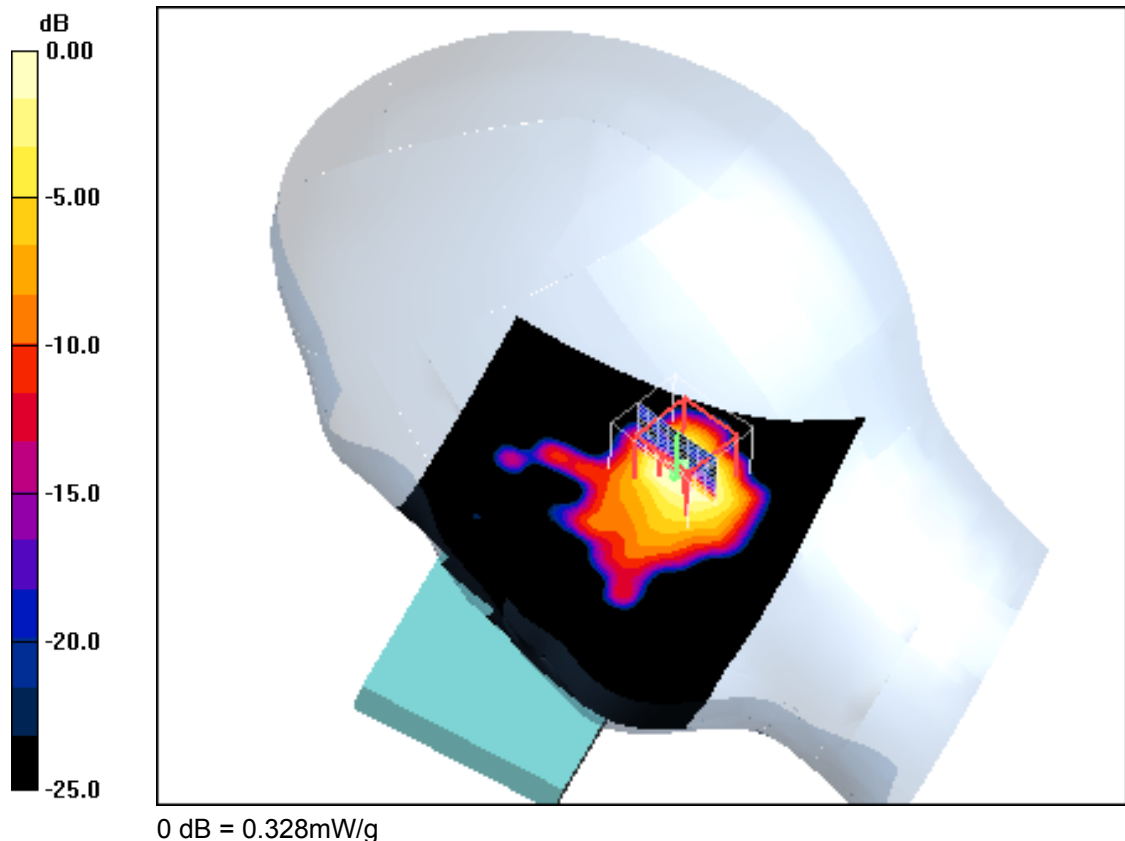
dx=4mm, dy=4mm, dz=2mm

Reference Value = 9.28 V/m; Power Drift = 0.060 dB

Peak SAR (extrapolated) = 0.592 W/kg

SAR(1 g) = 0.168 mW/g; SAR(10 g) = 0.054 mW/g

Maximum value of SAR (measured) = 0.328 mW/g

**Additional information:**

ambient temperature: 21.6°C; liquid temperature: 20.2°C

Date/Time: 25.03.2013 10:16:51 Date/Time: 25.03.2013 10:32:11

IEEE1528_EN62209-RightHandSide-WLAN5GHz**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 5GHz; Frequency: 5300 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used: $f = 5300 \text{ MHz}$; $\sigma = 4.62 \text{ mho/m}$; $\epsilon_r = 36.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(4.05, 4.05, 4.05); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Channel 60/Area Scan (101x121x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.438 mW/g

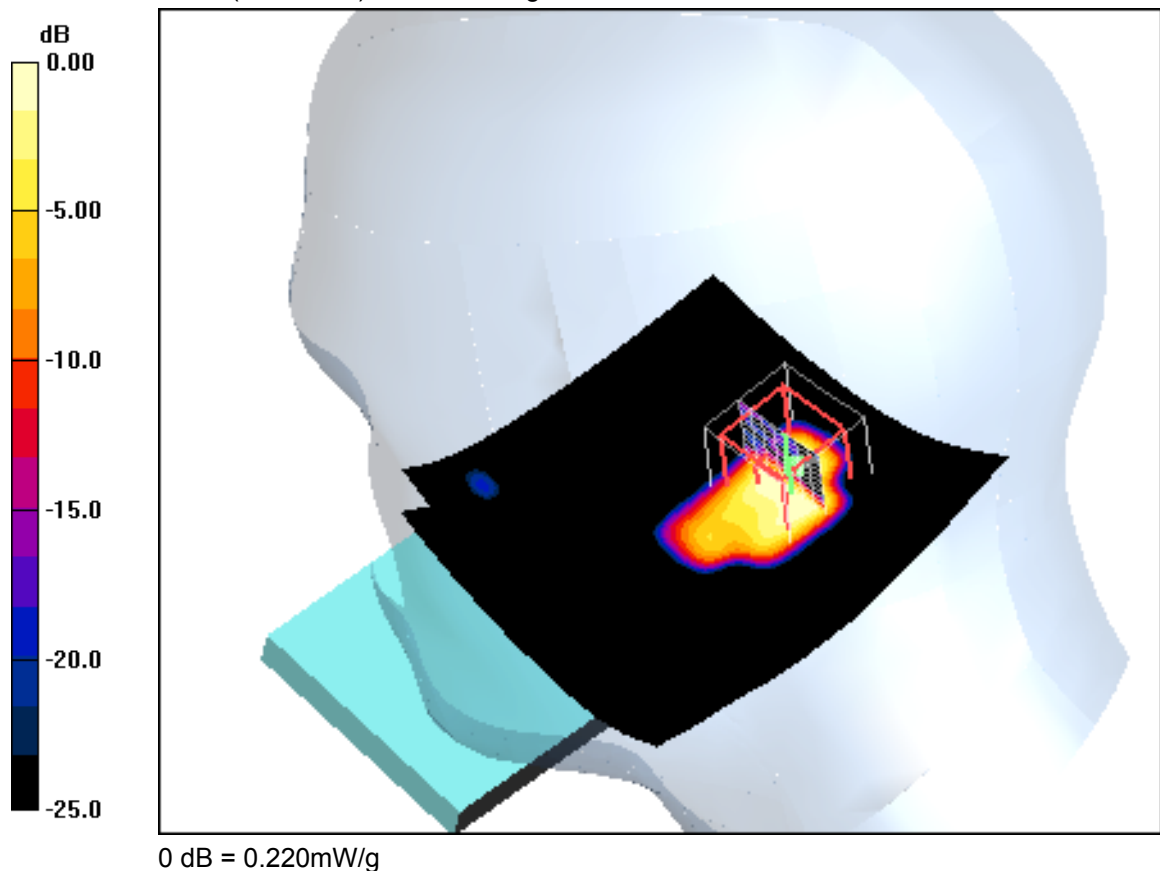
Touch position - Channel 60/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 7.38 V/m; Power Drift = 0.137 dB

Peak SAR (extrapolated) = 0.482 W/kg

SAR(1 g) = 0.100 mW/g; SAR(10 g) = 0.031 mW/g

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

**Additional information:**

ambient temperature: 21.6°C; liquid temperature: 20.2°C

Date/Time: 25.03.2013 11:01:00Date/Time: 25.03.2013 11:17:34

IEEE1528_EN62209-RightHandSide-WLAN5GHz**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 5GHz; Frequency: 5540 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used (interpolated): $f = 5540$ MHz; $\sigma = 4.86$ mho/m; $\epsilon_r = 36$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(3.72, 3.72, 3.72); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Channel 108/Area Scan (101x121x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.391 mW/g

Touch position - Channel 108/Zoom Scan (8x8x12)/Cube 0: Measurement grid:

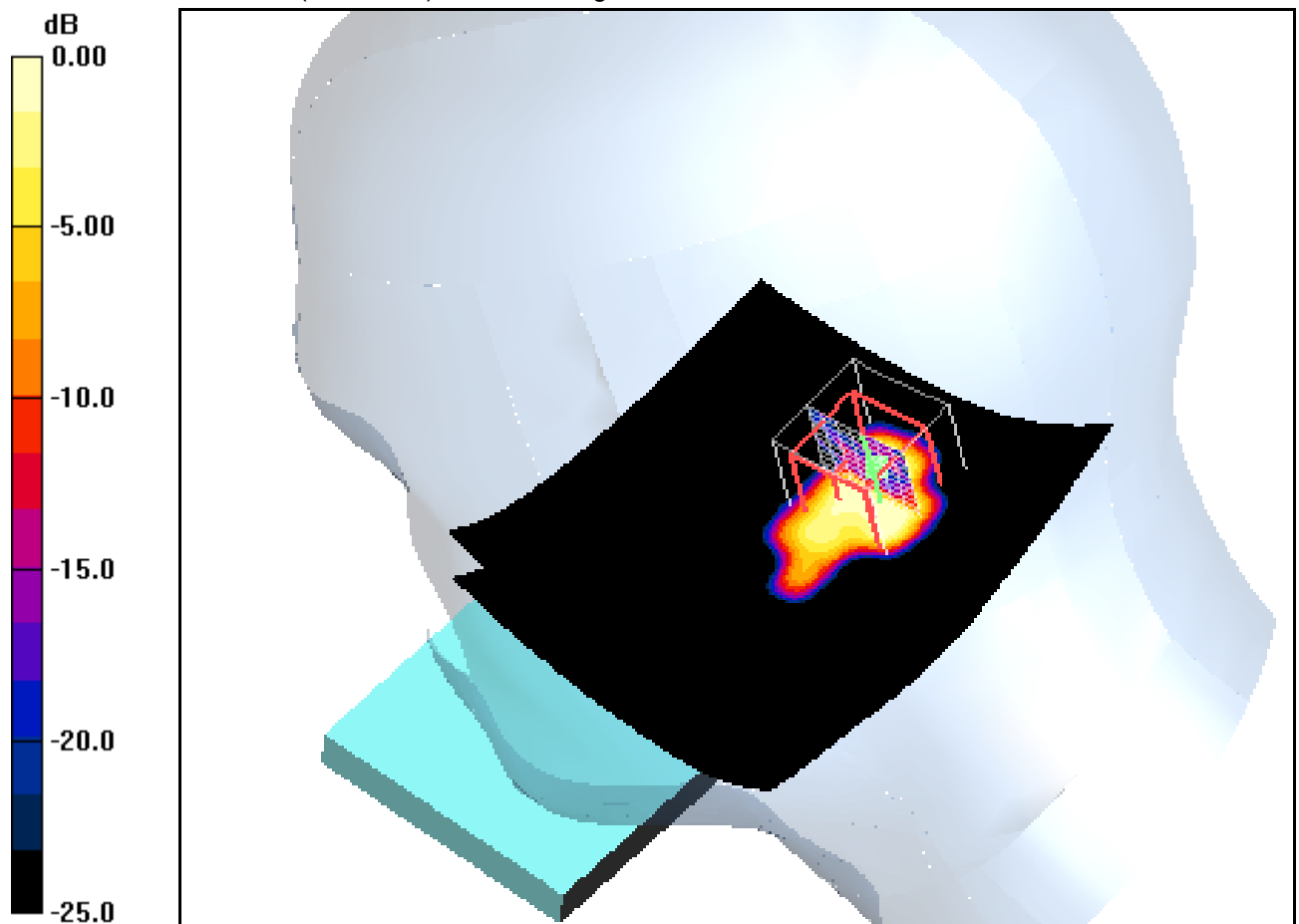
dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.79 V/m; Power Drift = 0.075 dB

Peak SAR (extrapolated) = 0.554 W/kg

SAR(1 g) = 0.061 mW/g; SAR(10 g) = 0.023 mW/g

Maximum value of SAR (measured) = 0.148 mW/g



0 dB = 0.148mW/g

Additional information:

ambient temperature: 21.6°C; liquid temperature: 20.2°C

Date/Time: 25.03.2013 15:56:24 Date/Time: 25.03.2013 16:13:08

IEEE1528_EN62209-RightHandSide-WLAN5GHz**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 5GHz; Frequency: 5765 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used (interpolated): $f = 5765$ MHz; $\sigma = 5.09$ mho/m; $\epsilon_r = 35.7$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(3.65, 3.65, 3.65); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Channel 153/Area Scan (101x121x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.441 mW/g

Touch position - Channel 153/Zoom Scan (8x8x12)/Cube 0: Measurement grid:

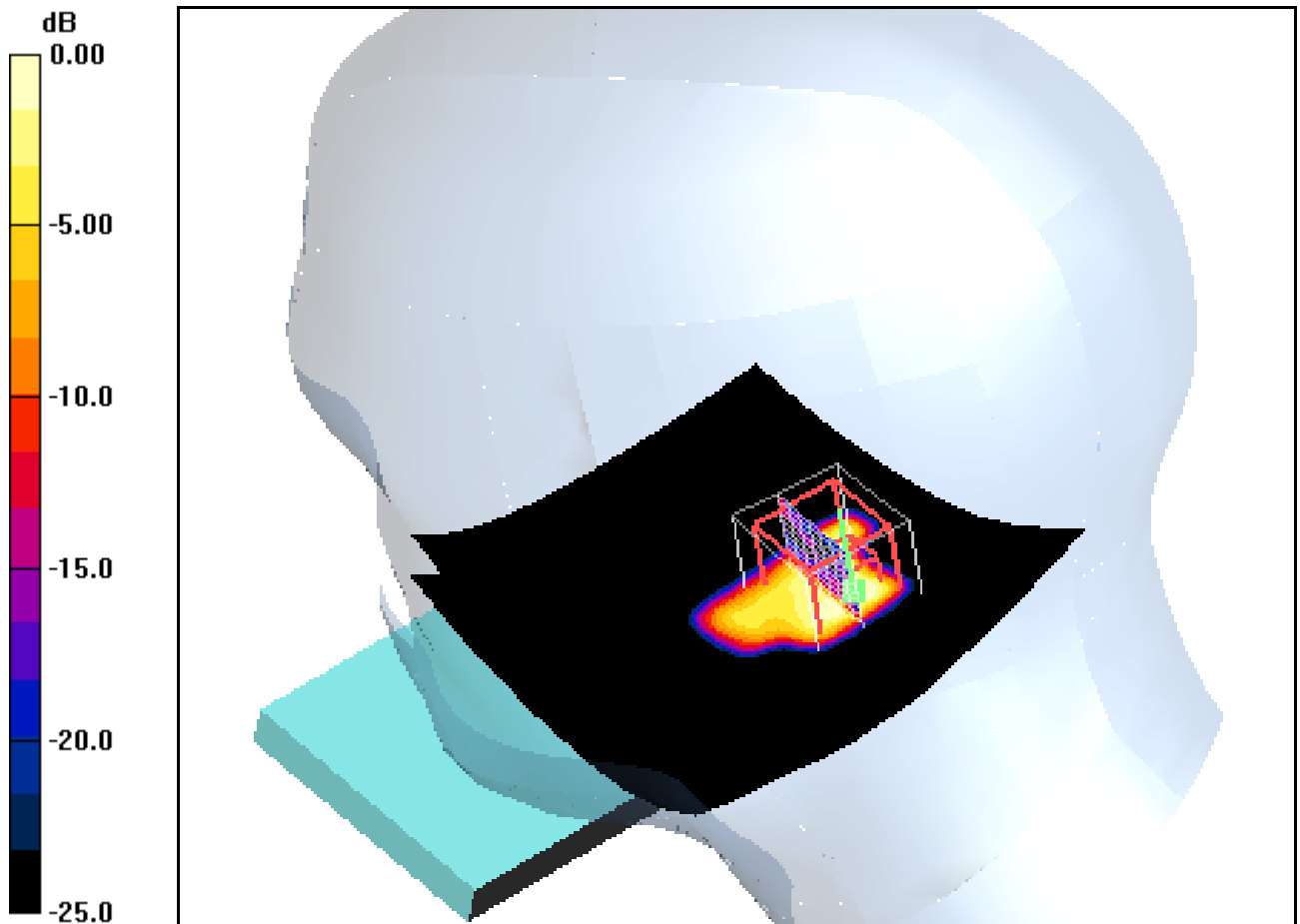
dx=4mm, dy=4mm, dz=2mm

Reference Value = 6.47 V/m; Power Drift = 0.167 dB

Peak SAR (extrapolated) = 0.693 W/kg

SAR(1 g) = 0.087 mW/g; SAR(10 g) = 0.031 mW/g

Maximum value of SAR (measured) = 0.213 mW/g



0 dB = 0.213mW/g

Additional information:

ambient temperature: 21.6°C; liquid temperature: 20.2°C

Date/Time: 25.03.2013 21:16:26 Date/Time: 25.03.2013 21:40:16

IEEE1528_EN62209-RightHandSide-WLAN5GHz**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 5GHz; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used: $f = 5200$ MHz; $\sigma = 4.52$ mho/m; $\epsilon_r = 36.6$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(4.24, 4.24, 4.24); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Channel 40/Area Scan (111x161x1): Measurement grid: dx=10mm, dy=10mm

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

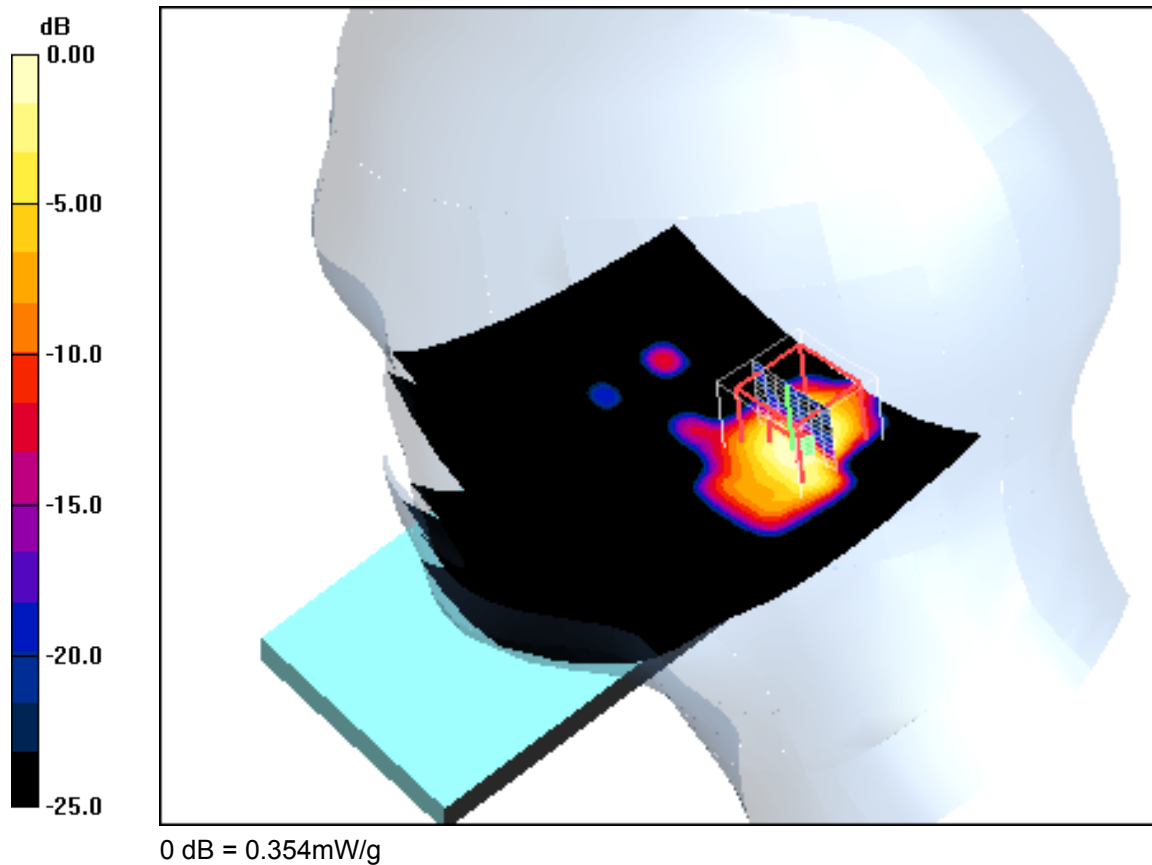
Tilt position - Channel 40/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 8.57 V/m; Power Drift = 0.093 dB

Peak SAR (extrapolated) = 1.70 W/kg

SAR(1 g) = 0.185 mW/g; SAR(10 g) = 0.056 mW/g

Maximum value of SAR (measured) = 0.354 mW/g

**Additional information:**

ambient temperature: 21.6°C; liquid temperature: 20.2°C

Date/Time: 25.03.2013 09:34:57 Date/Time: 25.03.2013 09:54:05

IEEE1528_EN62209-RightHandSide-WLAN5GHz**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 5GHz; Frequency: 5300 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used: $f = 5300$ MHz; $\sigma = 4.62$ mho/m; $\epsilon_r = 36.4$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(4.05, 4.05, 4.05); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Channel 60/Area Scan (101x141x1): Measurement grid: dx=10mm, dy=10mm

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

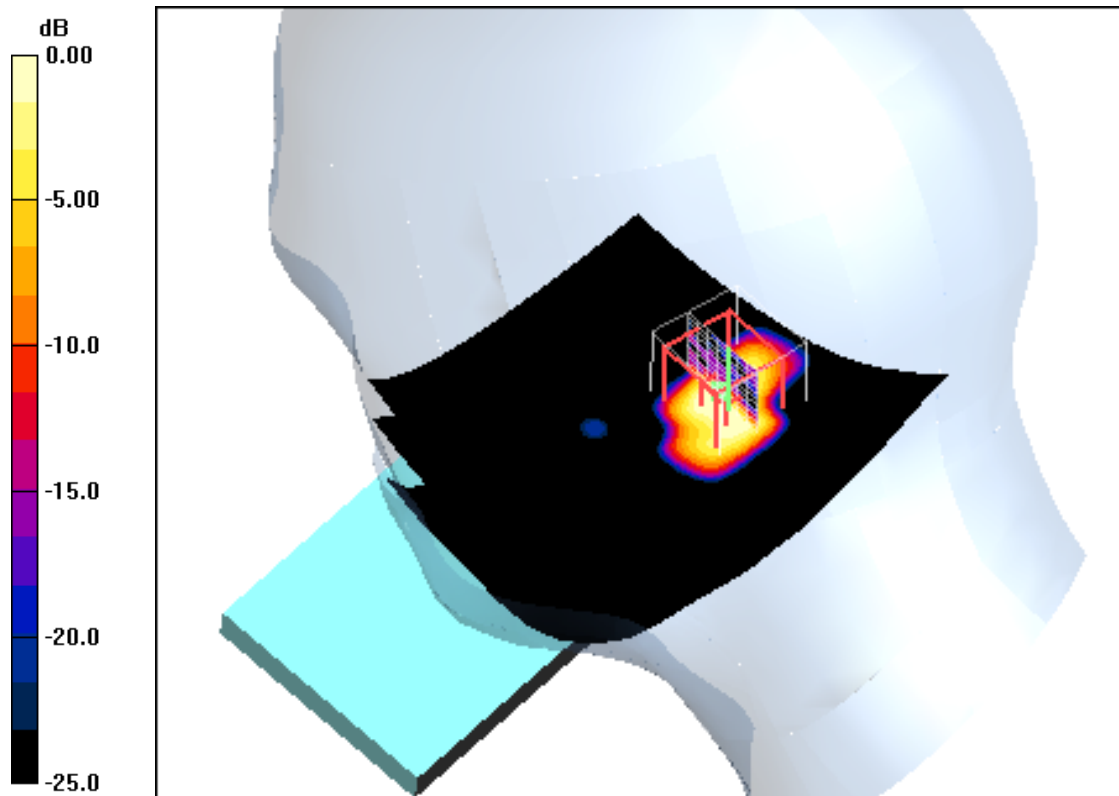
Tilt position - Channel 60/Zoom Scan (8x8x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 7.47 V/m; Power Drift = -0.017 dB

Peak SAR (extrapolated) = 0.423 W/kg

SAR(1 g) = 0.109 mW/g; SAR(10 g) = 0.032 mW/g

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



0 dB = 0.234mW/g

Additional information:

ambient temperature: 21.6°C; liquid temperature: 20.2°C

Date/Time: 25.03.2013 11:39:46 Date/Time: 25.03.2013 11:54:35

IEEE1528_EN62209-RightHandSide-WLAN5GHz**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 5GHz; Frequency: 5540 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used (interpolated): $f = 5540 \text{ MHz}$; $\sigma = 4.86 \text{ mho/m}$; $\epsilon_r = 36$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(3.72, 3.72, 3.72); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Channel 108/Area Scan (101x121x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

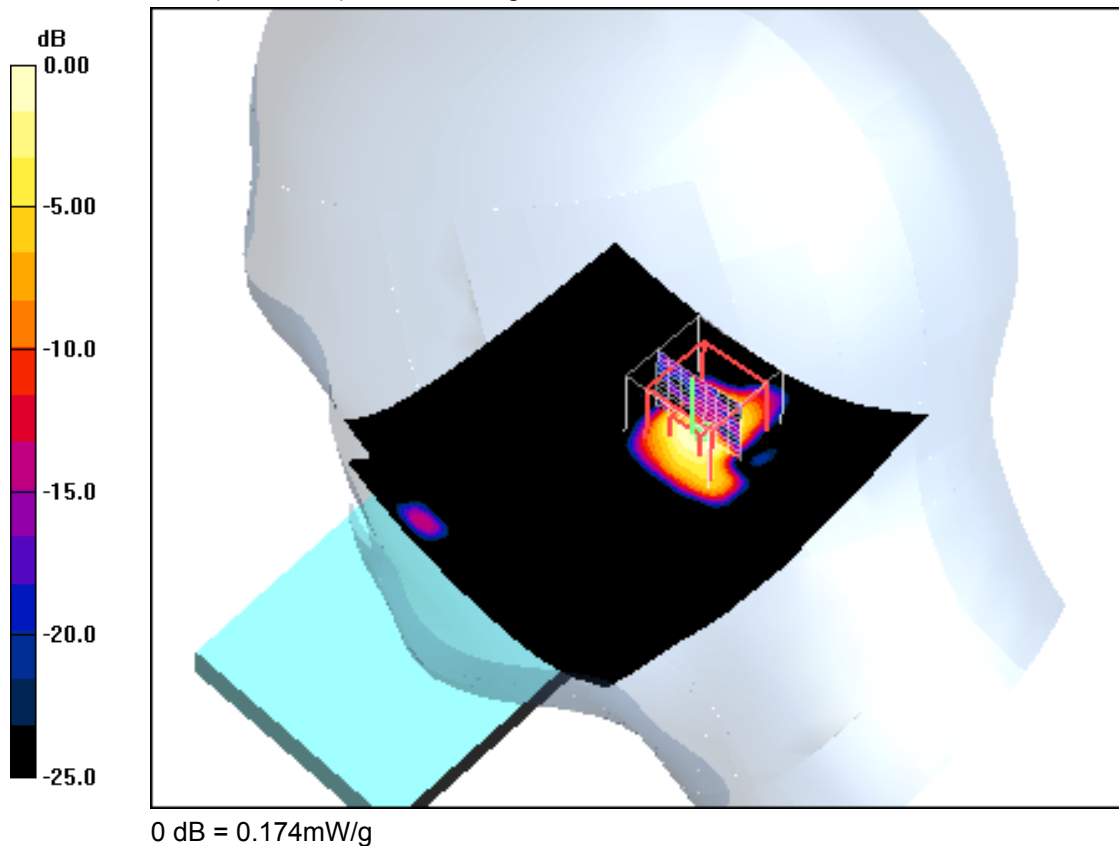
Tilt position - Channel 108/Zoom Scan (8x8x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 6.04 V/m; Power Drift = 0.111 dB

Peak SAR (extrapolated) = 0.477 W/kg

SAR(1 g) = 0.067 mW/g; SAR(10 g) = 0.021 mW/g

Maximum value of SAR (measured) = 0.174 mW/g

**Additional information:**

ambient temperature: 21.6°C; liquid temperature: 20.2°C

Date/Time: 25.03.2013 15:11:21 Date/Time: 25.03.2013 16:35:27

IEEE1528_EN62209-RightHandSide-WLAN5GHz**DUT: Sony; Type: C5503; Serial: CB5A1NYFFZ**

Communication System: WLAN 5GHz; Frequency: 5765 MHz; Duty Cycle: 1:1

Medium: HSL5GHz Medium parameters used (interpolated): $f = 5765 \text{ MHz}$; $\sigma = 5.09 \text{ mho/m}$; $\epsilon_r = 35.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3566; ConvF(3.65, 3.65, 3.65); Calibrated: 23.08.2012
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 11.01.2013
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Channel 153/Area Scan (101x121x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.430 mW/g

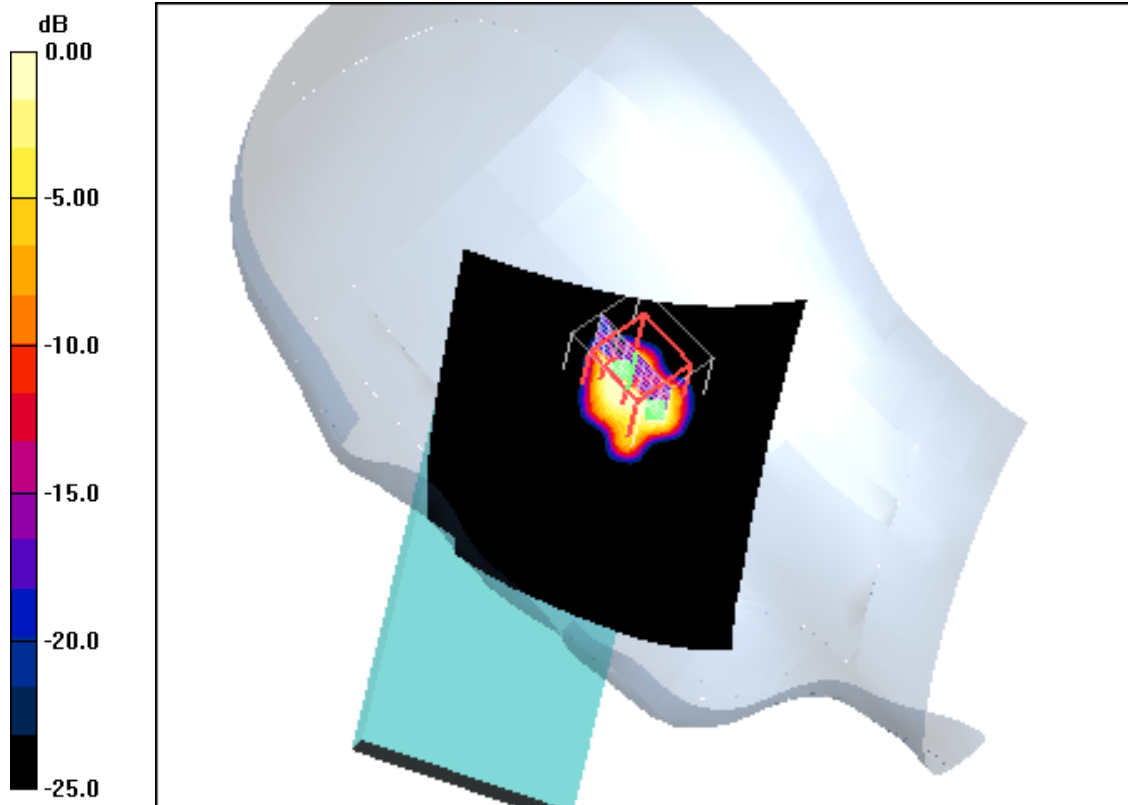
Tilt position - Channel 153/Zoom Scan(8x9x12)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2\text{mm}$

Reference Value = 5.79 V/m; Power Drift = 0.072 dB

Peak SAR (extrapolated) = 0.523 W/kg

SAR(1 g) = 0.077 mW/g; SAR(10 g) = 0.027 mW/g

Maximum value of SAR (measured) = 0.196 mW/g

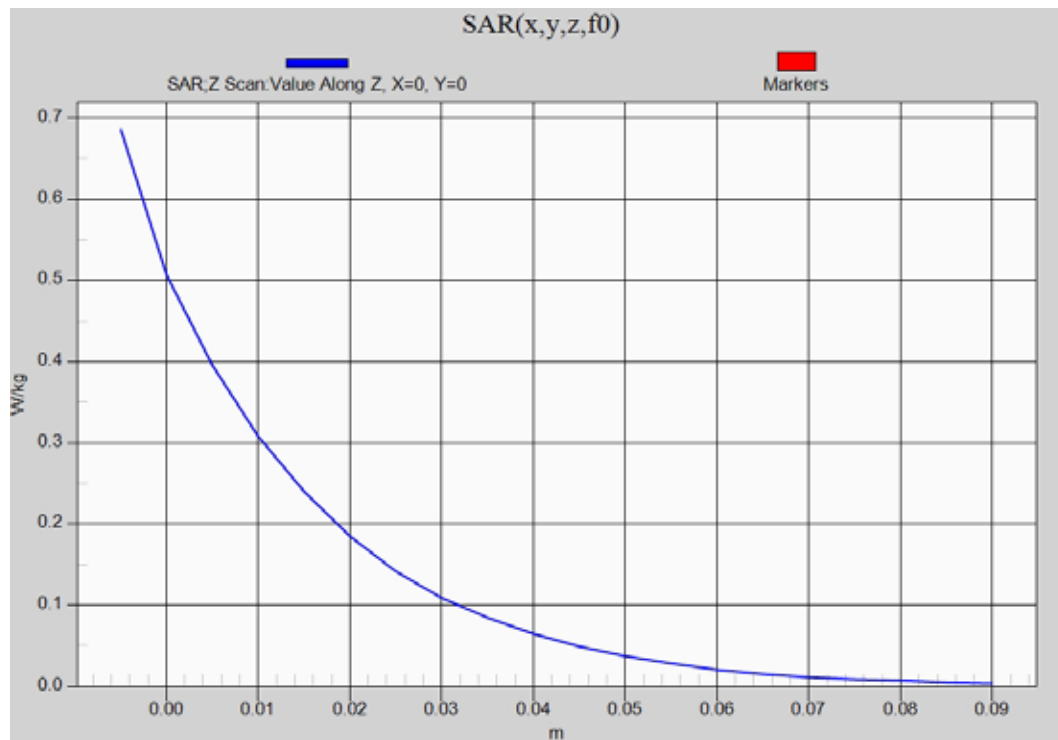


0 dB = 0.196mW/g

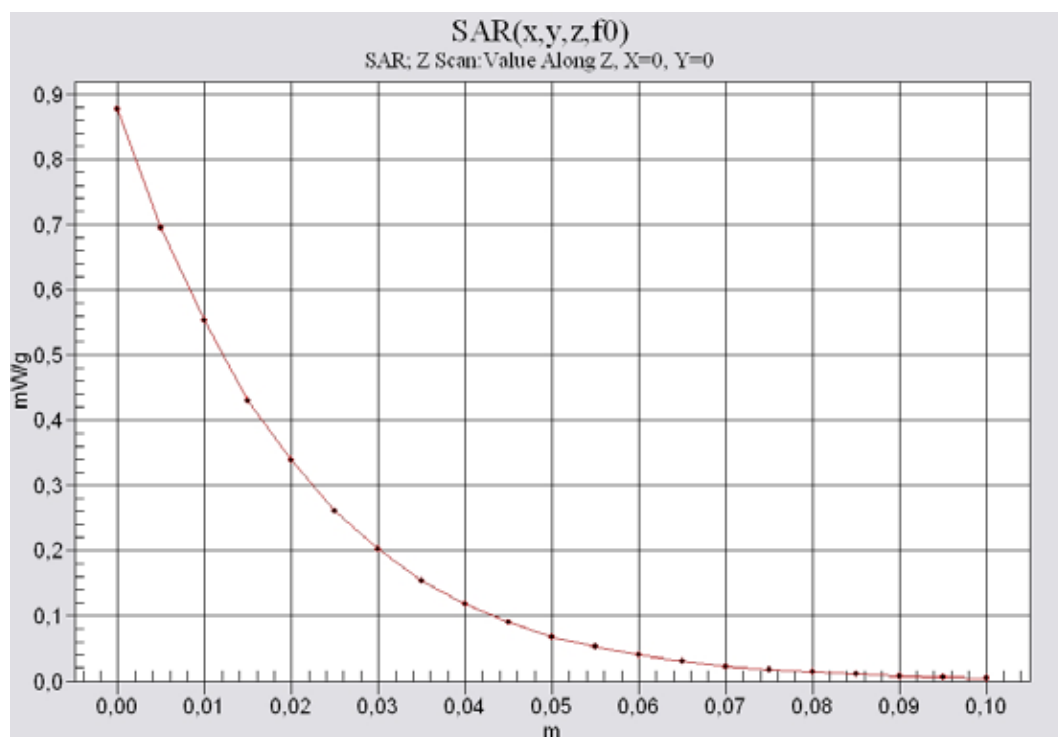
Additional information:

ambient temperature: 21.6°C; liquid temperature: 20.2°C

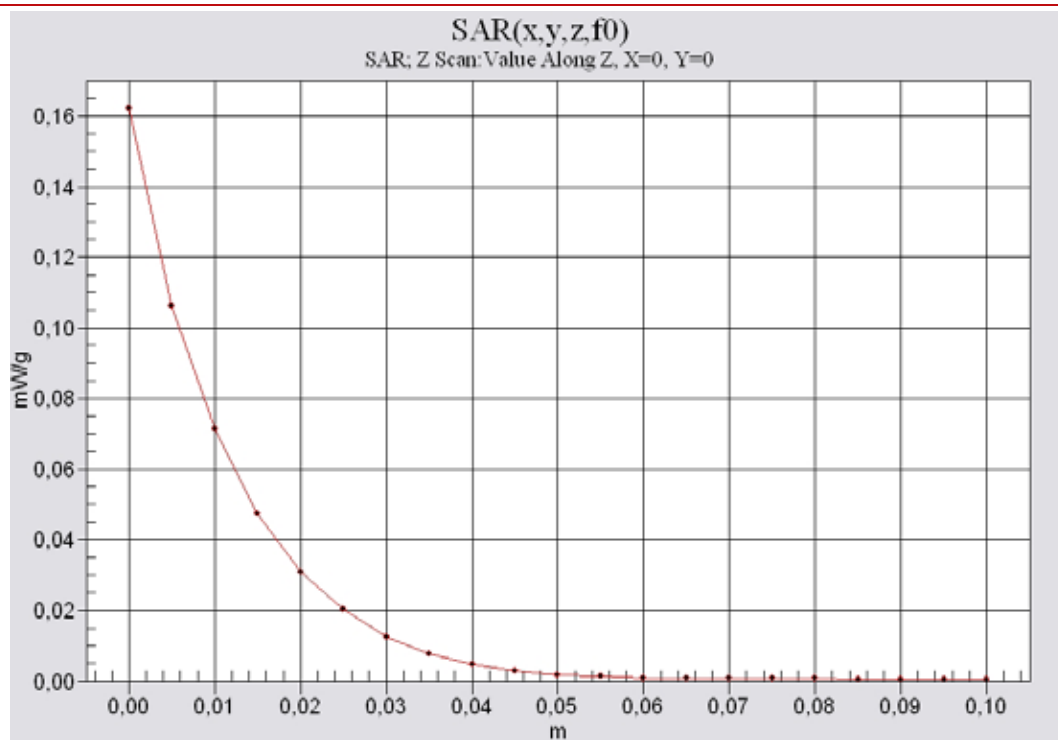
Annex B.7: Z-axis scan



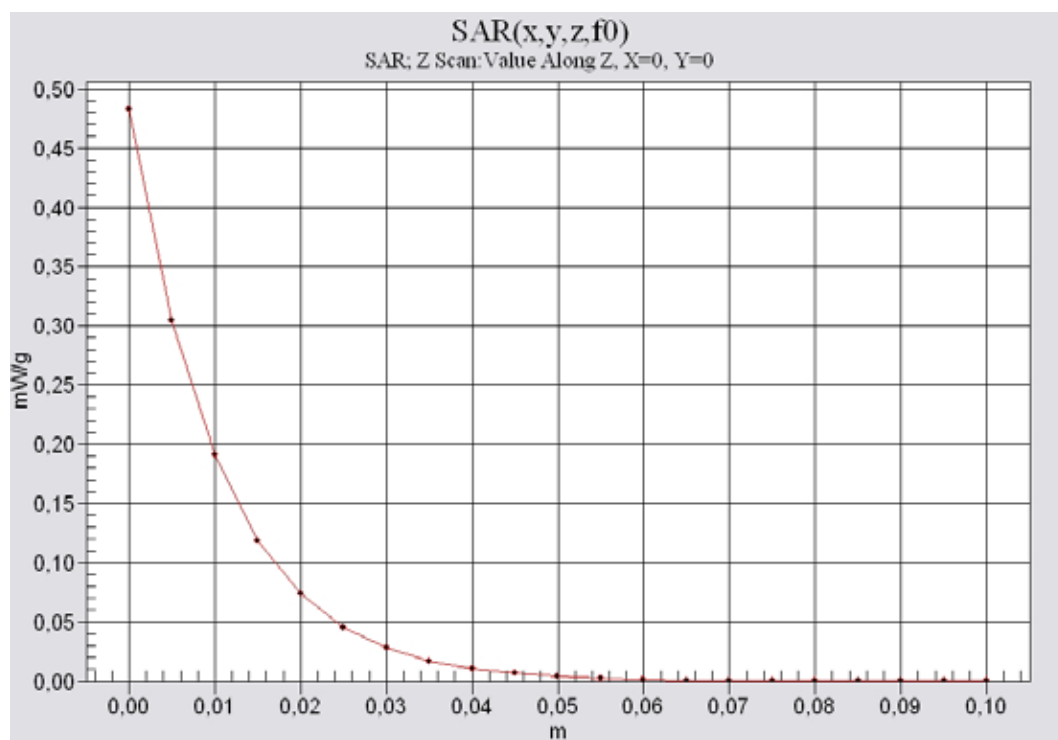
850 head



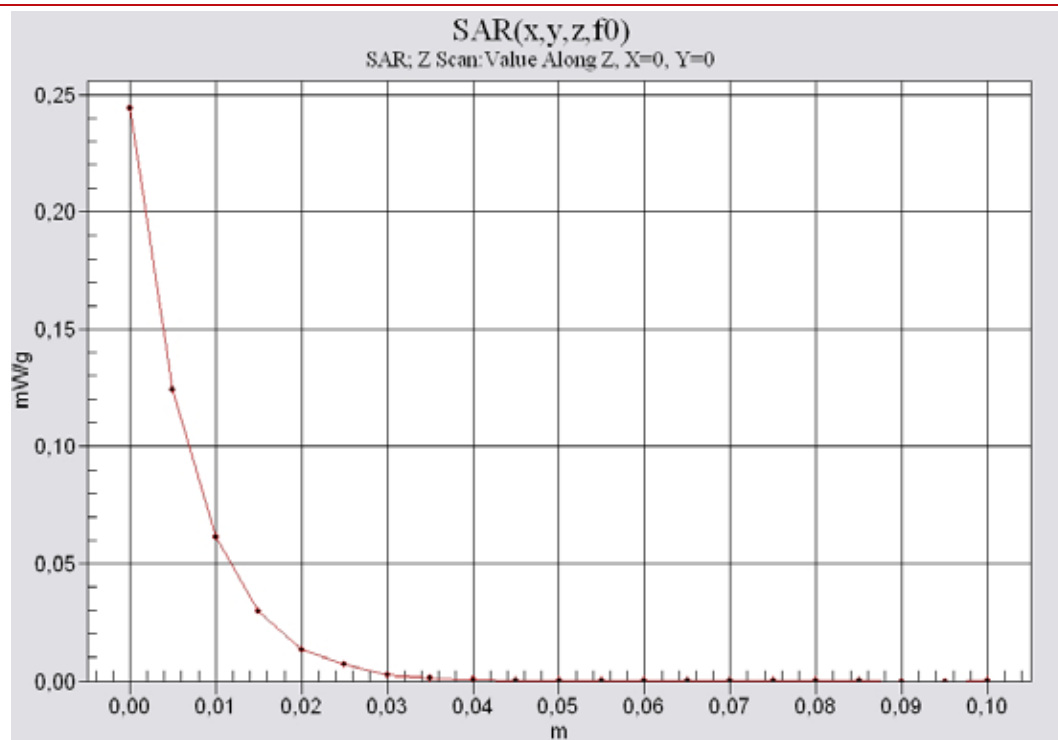
850 body



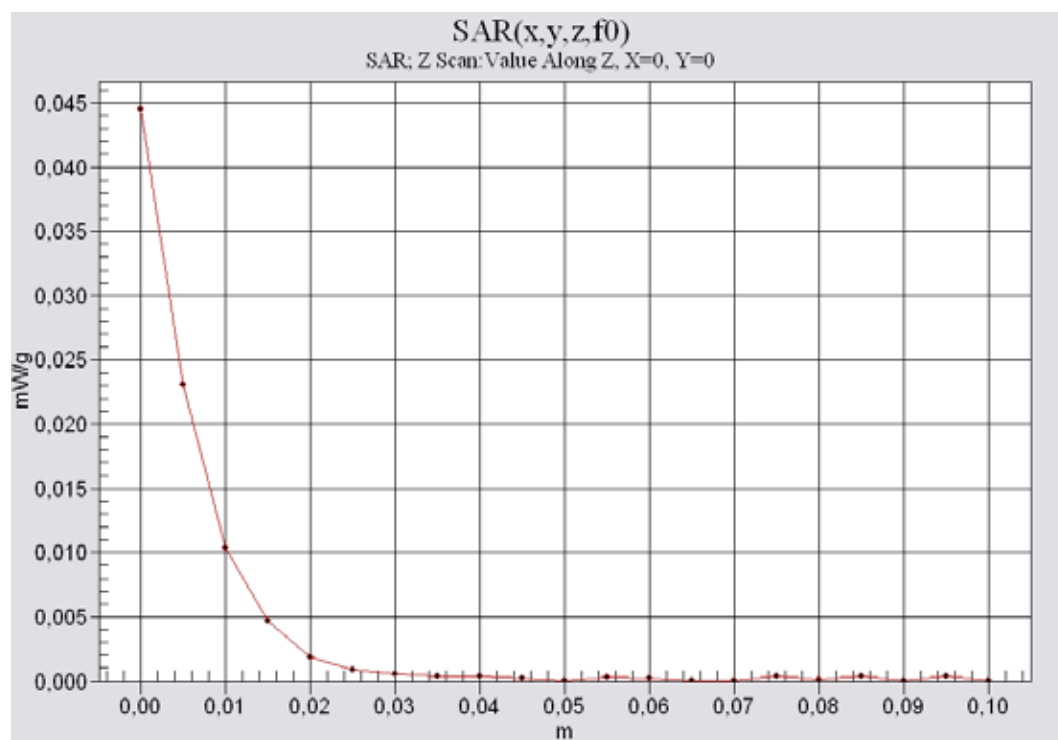
1900 head



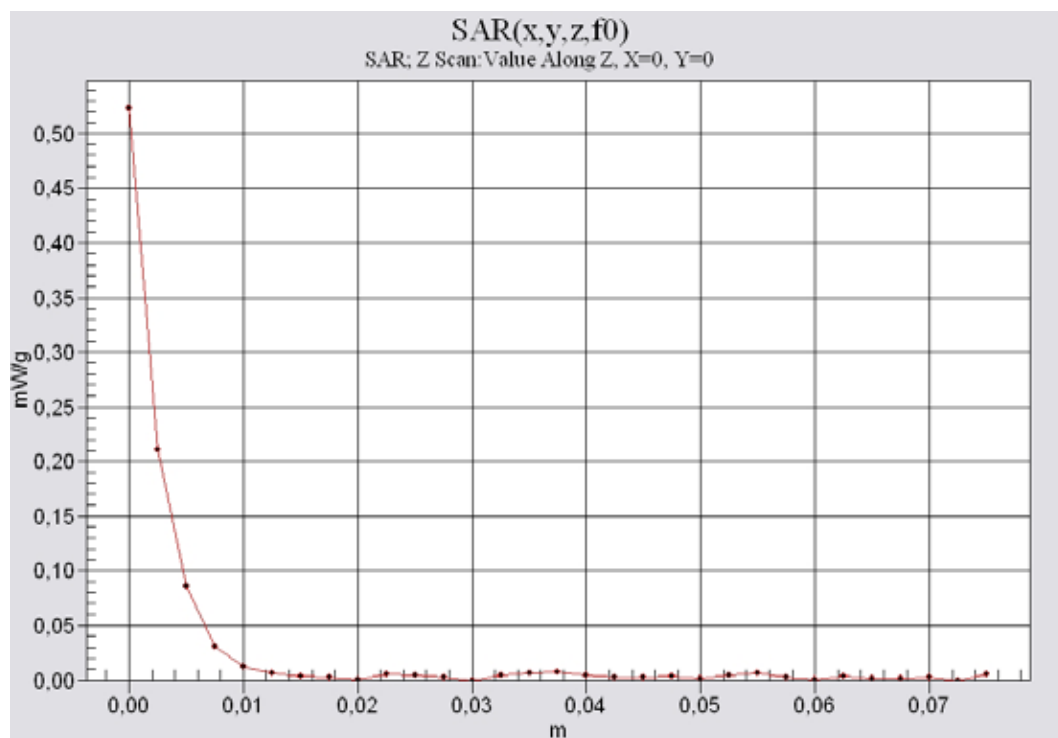
1900 body



2450 head



2450 body



5 GHz head

Annex B.8: Liquid depth

Photo 1: Liquid depth 850 MHz head simulating liquid

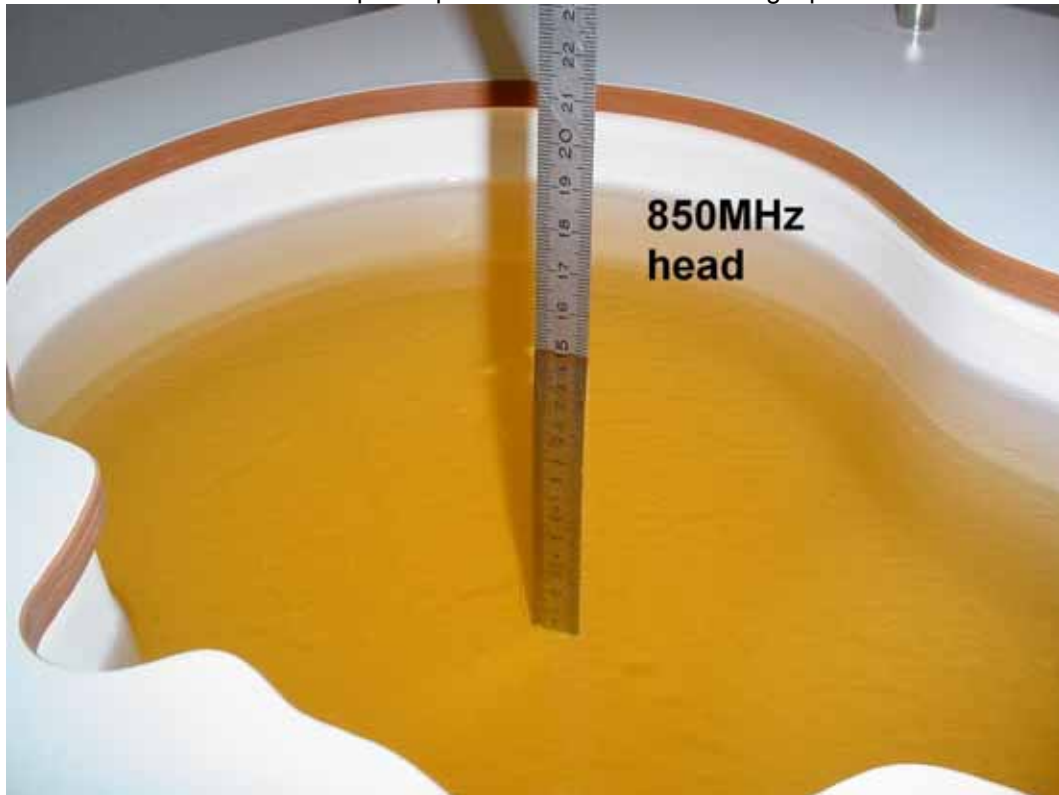


Photo 2: Liquid depth 850 MHz body simulating liquid



Photo 3: Liquid depth 1900MHz head simulating liquid

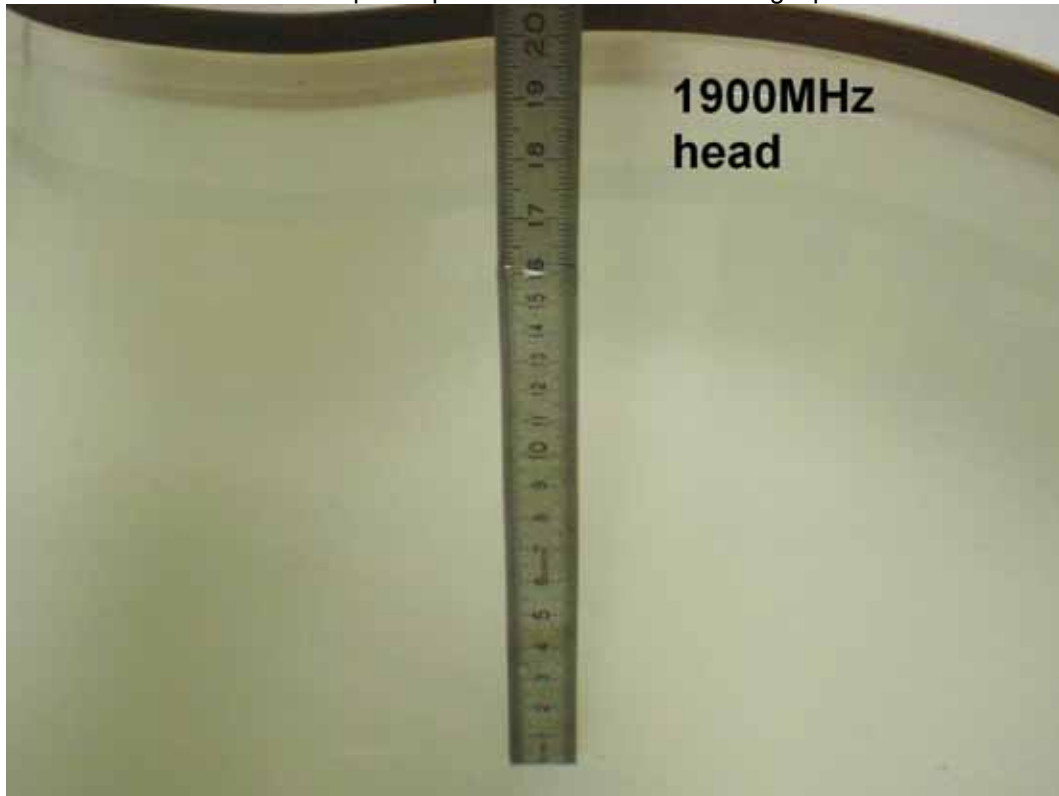


Photo 4: Liquid depth 1900 MHz body simulating liquid

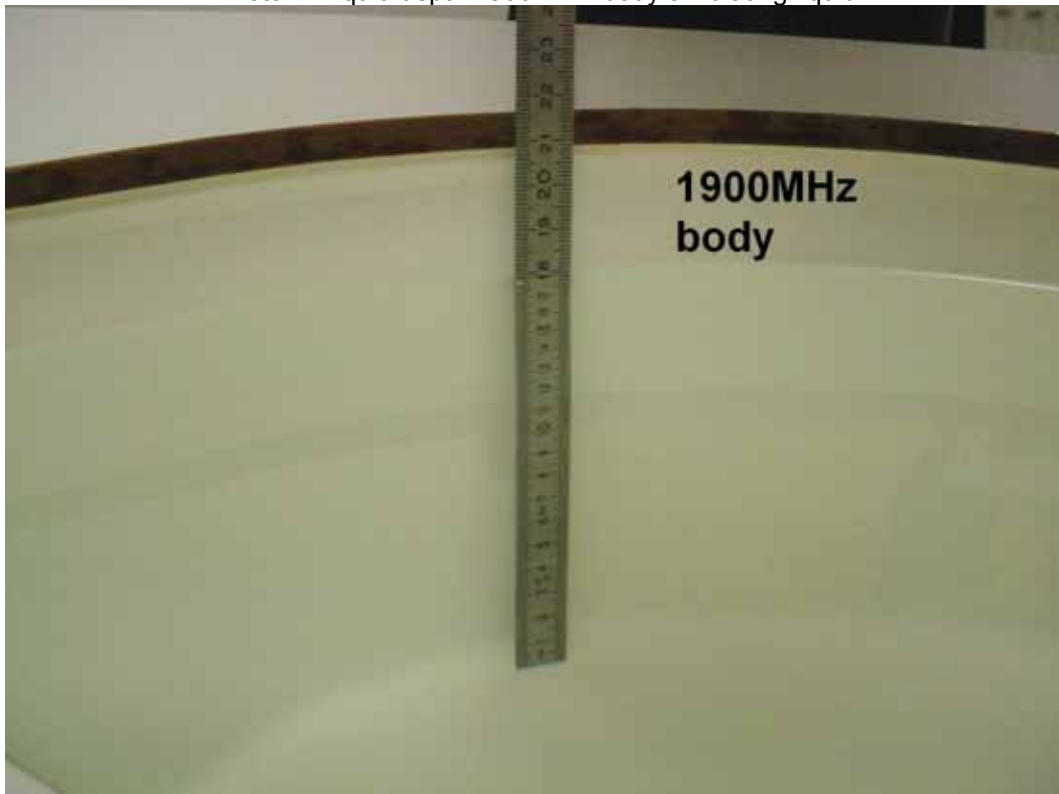


Photo 5: Liquid depth 2450MHz head simulating liquid

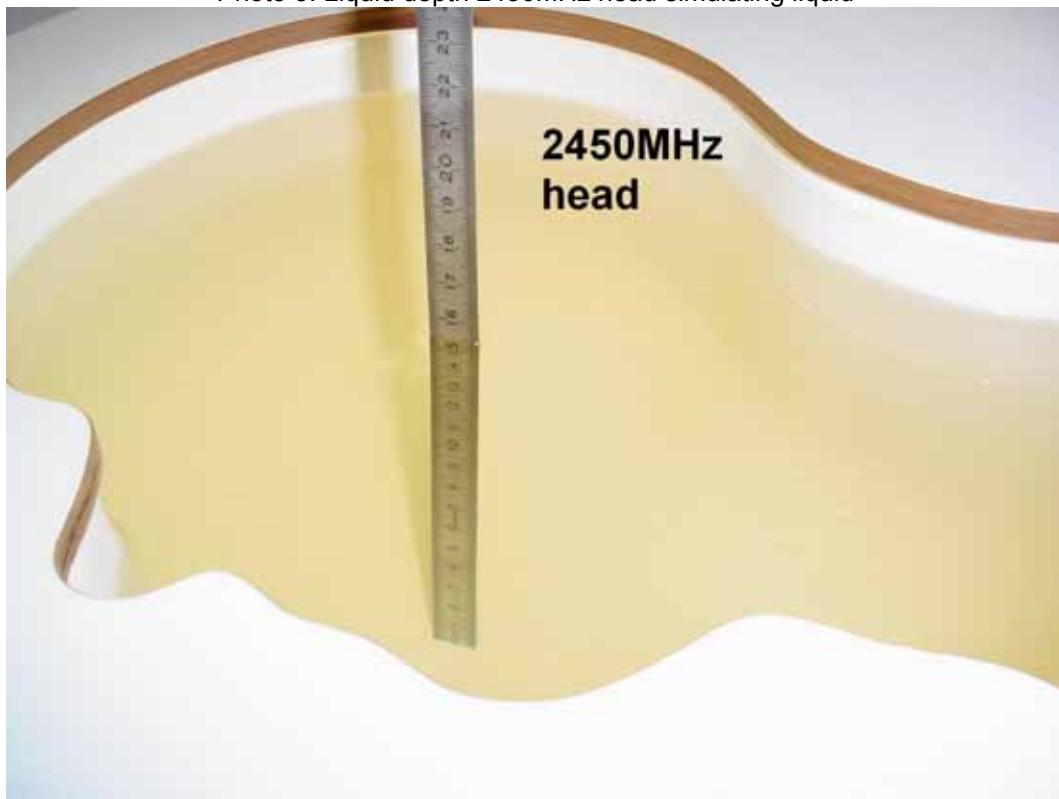


Photo 6: Liquid depth 2450 MHz body simulating liquid

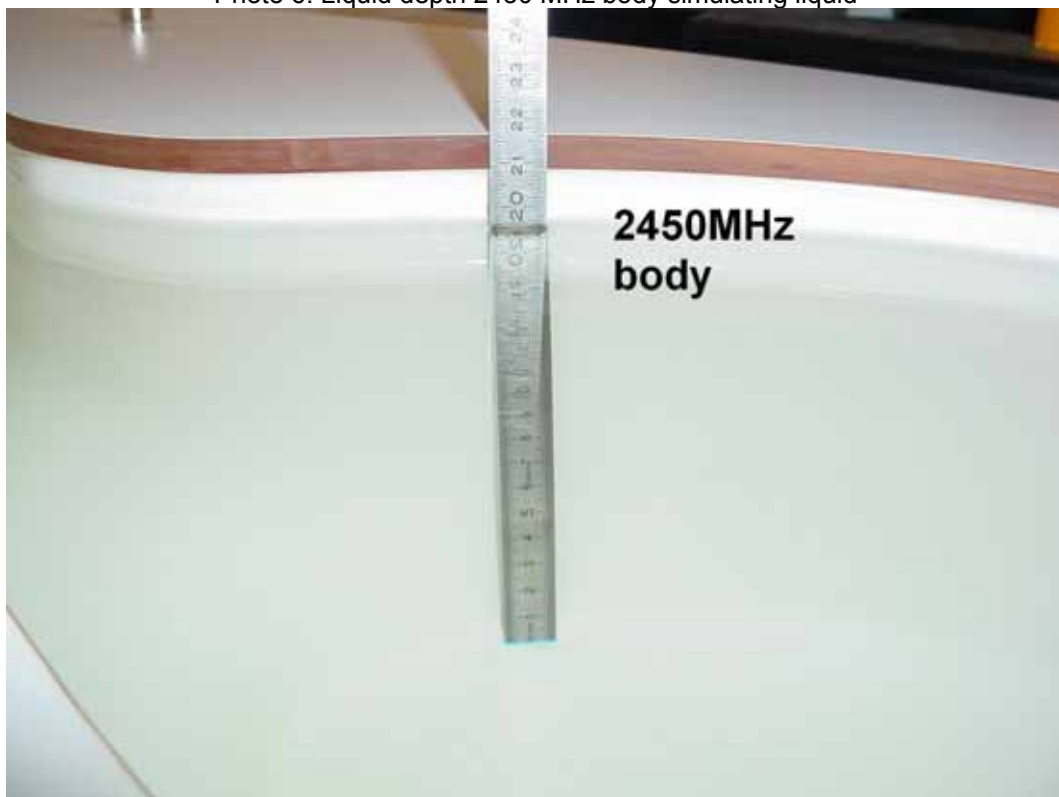


Photo 7: Liquid depth 5 GHz head simulating liquid



Annex C: Photo documentation

Photo documentation is described in the additional document:

Appendix to test report no. 1-5831/13-04-02-B Photo documentation

Annex D: RF Technical Brief Cover Sheet acc. to RSS-102 Annex A

1. COMPANY NUMBER: **4170B**

2. MODEL NUMBER: **C5503**

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: **0.764 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: 37.5 %
- Standard used for evaluation: RSS-102 Issue 4 (2010-03)
- SAR value: **1.250 W/kg.** Measured ☒ Computed ☐ Calculated ☐

Annex D.1: Declaration of RF Exposure Compliance

ATTESTATION: I attest that the information provided in Annex D: is correct; that a Technical Brief was prepared and the information it contains is correct; that the device evaluation was performed or supervised by me; that applicable measurement methods and evaluation methodologies have been followed and that the device meets the SAR and/or RF exposure limits of RSS-102.

Signature:



Date: **2013-05-31**

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. 1-5831/13-04-02-B Calibration data, Phantom certificate and detail information of the DASY System

Annex F: Document History

Version	Applied Changes	Date of Release
	Initial Release	2013-04-23
-A	Corrected GPRS / EGPRS multislot class in Chapter 2.4 Technical details	2013-05-24
-B	Additional explanations of simultaneous transmission calculation tables	2013-05-31

Annex G: Further Information

Glossary

BW	-	Bandwidth
DTS	-	Distributed Transmission System
DUT	-	Device under Test
EUT	-	Equipment under Test
FCC	-	Federal Communication Commission
FCC ID	-	Company Identifier at FCC
HW	-	Hardware
IC	-	Industry Canada
Inv. No.	-	Inventory number
LTE	-	Long Term Evolution
N/A	-	not applicable
PCE	-	Personal Consumption Expenditure
OET	-	Office of Engineering and Technology
RB	-	resource block(s)
SAR	-	Specific Absorption Rate
S/N	-	Serial Number
SPLSR _i	-	SAR-to-(peak-locations spacing) ratio
SW	-	Software
UNII	-	Unlicensed National Information Infrastructure