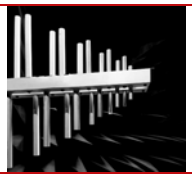
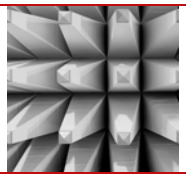




CETECOM™
CETECOM ICT Services
consulting - testing - certification

TEST REPORT

Test Report No.: 1-4254/12-49-02-A

ilac-MRA DAkkS Deutsche Akkreditierungsstelle D-PL-12076-01-01

Testing Laboratory

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

Accredited Test Laboratory:
The testing laboratory (area of testing) is accredited according to DIN EN ISO/IEC 17025 (2005) by the Deutsche Akkreditierungsstelle GmbH (DAkkS)
The accreditation is valid for the scope of testing procedures as stated in the accreditation certificate with the registration number: D-PL-12076-01-01

Applicant

Sony Mobile Communications AB
Nya Vattentornet
22188 Lund/SWEDEN

Phone: +46 46 19 30 00

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

Manufacturer

Sony Mobile Communications AB
Nya Vattentornet
22188 Lund/SWEDEN

Test Standard/s

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

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

Test Item

Kind of test item:	Mobile Phone
Device type:	portable device
Model name:	**PM-0220-BV**
S/N serial number:	CB5A1LN5PA / CB5A1LN5WK (WLAN)CB5A1LYYB4
FCC-ID:	PY7PM-0220
IC:	---
IMEI-Number:	00440254-000016-7 / 00440254-000164-5 (WLAN) 35352505001592-3 (WLAN conducted)
Hardware status:	AP1
Software status:	10.1.D.0.51
Frequency:	see technical details
Antenna:	integrated antennas
Battery option:	Integrated Li-Polymer Battery 3.7V 2330mAh
Accessories:	Stereo headset
Test sample status:	identical prototype
Exposure category:	general population / uncontrolled environment

Test Report authorised:

2012-12-11 Thomas Vogler
Senior Testing Manager

Test performed:

2012-12-11 Oleksandr Hnatovskiy
Testing Manager

1 Table of contents

2 General information

2.1 Notes and disclaimer

The test results of this test report relate exclusively to the test item specified in this test report. CETECOM ICT Services GmbH does not assume responsibility for any conclusions and generalisations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of CETECOM ICT Services GmbH.
This test report is electronically signed and valid without handwriting signature. For verification of the electronic signatures, the public keys can be requested at the testing laboratory.
The testing service provided by CETECOM ICT Services GmbH has been rendered under the current "General Terms and Conditions for CETECOM ICT Services GmbH".
CETECOM ICT Services GmbH will not be liable for any loss or damage resulting from false, inaccurate, inappropriate or incomplete product information provided by the customer.
Under no circumstances does the CETECOM ICT Services GmbH test report include any endorsement or warranty regarding the functionality, quality or performance of any other product or service provided.
Under no circumstances does the CETECOM ICT Services GmbH test report include or imply any product or service warranties from CETECOM ICT Services GmbH, including, without limitation, any implied warranties of merchantability, fitness for purpose, or non-infringement, all of which are expressly disclaimed by CETECOM ICT Services GmbH.
All rights and remedies regarding vendor's products and services for which CETECOM ICT Services GmbH has prepared this test report shall be provided by the party offering such products or services and not by CETECOM ICT Services GmbH.
In no case this test report can be considered as a Letter of Approval.

2.2 Application details

Date of receipt of order:	2012-08-21
Date of receipt of test item:	2012-10-15
Start of test:	2012-10-15
End of test:	2012-12-10
Person(s) present during the test:	

2.3 Statement of compliance

The SAR values found for the PM-0220-BV Mobile Phone are below the maximum recommended levels of 1.6 W/Kg as averaged over any 1 g tissue according to the FCC rule §2.1093, the ANSI/IEEE C 95.1:1992, the NCRP Report Number 86 for uncontrolled environment, according to the Health Canada's Safety Code 6 and the Industry Canada Radio Standards Specification RSS-102 for General Population/Uncontrolled exposure.
For body worn operation, this device has been tested and meets FCC RF exposure guidelines when used with any accessory that contains no metal and that positions the handset a minimum of 15 mm from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.
According to FCC KDB pub 941225 D06 this device has been tested with 10 mm distance to the phantom for operation in WLAN hot spot mode.

2.4 Technical details

Band tested for this test report	Technology	Frequency band	Lowest transmit frequency/MHz	Highest transmit frequency/MHz	Lowest receive Frequency/MHz	Highest receive Frequency/MHz	Kind of modulation	Power Class	Tested power control level	GPRS/EGPRS mobile station class	GPRS/EGPRS multislot class	(E)GPRS voice mode or DTM	Test channel low	Test channel middle	Test channel high	Maximum output power/dBm)*
☐	GSM	GSM	880.2	914.8	925.2	959.8	GMSK 8-PSK	4 E2	5	B	12	no	975	37	124	33.3
☐	GSM	DCS	1710.2	1784.8	1805.2	1879.8	GMSK 8-PSK	1 E2	0	B	12	no	512	698	885	30.5
☒	GSM	cellular	824.2	848.8	869.2	893.8	GMSK 8-PSK	4 E2	5	B	12	no	128	190	251	33.9
☒	GSM	PCS	1850.2	1909.8	1930.2	1989.8	GMSK 8-PSK	1 E2	0	B	12	no	512	661	810	31.0
☐	UMTS	FDD I	1922.4	1977.6	2112.4	2167.6	QPSK	3	max	--	--	--	9612	9750	9888	24.3
☒	UMTS	FDD V	826.4	846.6	871.4	891.6	QPSK	3	max	--	--	--	4132	4182	4233	25.0
☐	UMTS	FDD VI	832.4	837.6	875	885	QPSK	3	max	--	--	--	4162	4175	4188	25.0
☐	UMTS	FDD XIX	832.4	842.6	877.4	887.6	QPSK	3	max	--	--	--	312	335	363	24.9
☐	LTE	FDD 1	1920	1980	2110	2170	QPSK	3	max	--	--	--	18000	18300	18599	24.0
☐	LTE	FDD 19	830	845	875	890	QPSK	3	max	--	--	--	24050	24075	24100	23.7
☐	LTE	FDD 21	1447.9	1462.9	1495.9	1510.9	QPSK	3	max	--	--	--	24500	24525	24550	24.0
☐	WLAN	ISM	2412	2472	2412	2472	CCK OFDM	--	max	--	--	--	1	7	13	16.2
☒	WLAN US	ISM	2412	2462	2412	2462	CCK OFDM	--	max	--	--	--	1	6	11	16.2
☒	WLAN	ISM	5180	5240	5180	5240	OFDM	--	max	--	--	--	--	36	--	9.9
☒	WLAN	ISM	5260	5320	5260	5320	OFDM	--	max	--	--	--	--	52	--	9.8
☒	WLAN	ISM	5500	5700	5500	5700	OFDM	--	max	--	--	--	--	104	--	9.6
☒	WLAN	ISM	5745	5825	5745	5825	OFDM	--	max	--	--	--	--	153	--	9.8
☐	BT	ISM	2402	2480	2402	2480	GFSK	3	max	--	--	--	0	39	78	9.6

supported UMTS features	category	remarks
Release 5 HSPDA	10	QPSK, 16QAM , no MIMO, 14 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, LTE, WLAN and BT.

2.5 Transmitter and Antenna Operating Configurations

Simultaneous transmission conditions		
GSM / GPRS / EDGE	+	BT/BLE
GSM / GPRS / EDGE	+	WLAN 24.4GHz
GSM / GPRS / EDGE	+	WLAN 5GHz
UMTS / HSPA	+	BT/BLE
UMTS / HSPA	+	WLAN 24.4GHz
UMTS / HSPA	+	WLAN 5GHz

Table 1: Simultaneous transmission conditions

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

3 Test standards/ procedures references

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

FCC KDB publications:

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

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

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

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

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

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

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

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

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

3.1 RF exposure limits

Human Exposure	Uncontrolled Environment General Population	Controlled Environment Occupational
Spatial Peak SAR* (Brain and Trunk)	**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	**0.594**	**0.961**	**0.245**
body worn 15 mm distance	**0.825**	**0.130**	---
hotspot operation 10 mm distance	**1.095**	**0.202**	---
collocated situations	**1.555**		

5 Test Environment

Ambient temperature: 20 – 24 °C
Tissue Simulating liquid: 20 – 24 °C

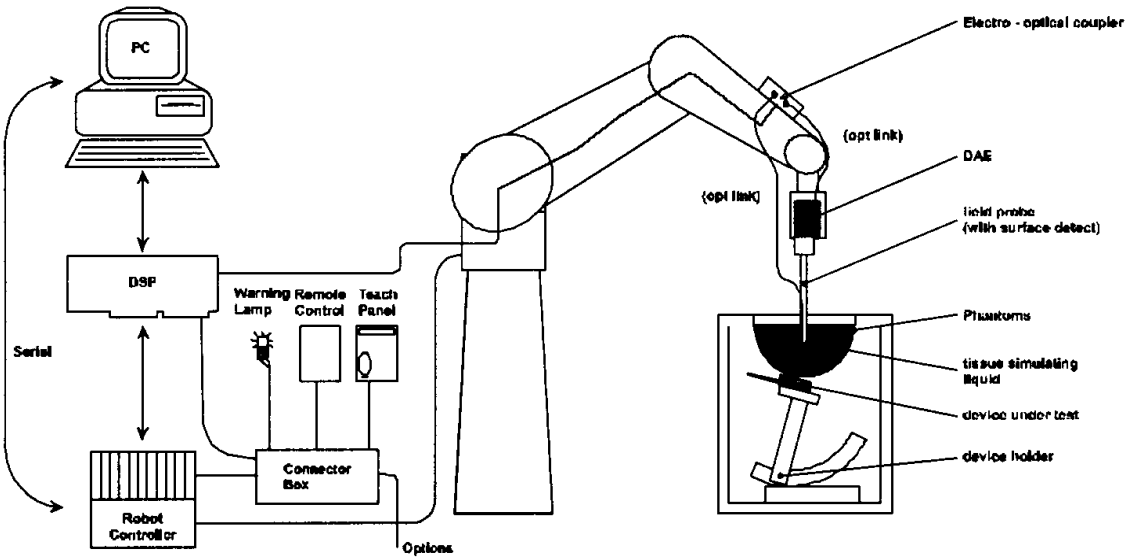
Relative humidity content: 40 – 50 %
Air pressure: not relevant for this kind of testing
Power supply: 230 V / 50 Hz

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.

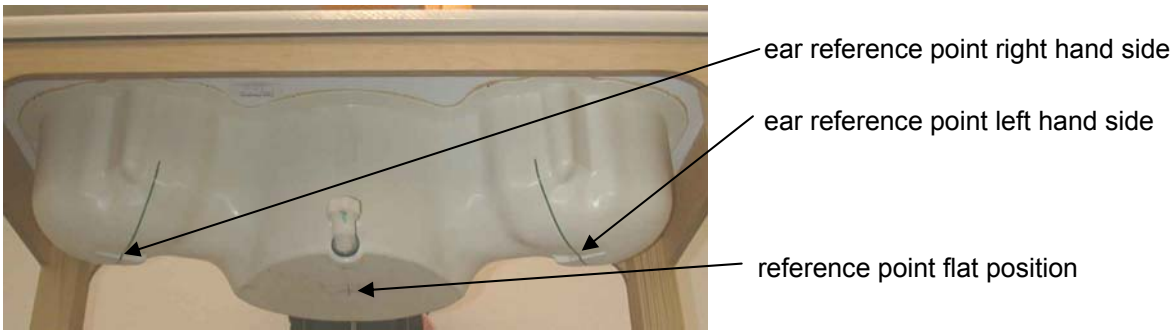
6.1.3 Probe description

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 ± 9.5%; k=2) Calibration for other liquids and frequencies upon request
Frequency	10 MHz to 3 GHz (dosimetry); Linearity: ± 0.2 dB (30 MHz to 3 GHz)
Directivity	± 0.2 dB in HSL (rotation around probe axis) ± 0.4 dB in HSL (rotation normal to probe axis)
Dynamic range	5 µW/g to > 100 mW/g; Linearity: ± 0.2 dB
Optical Surface Detection	± 0.2 mm repeatability in air and clear liquids over diffuse reflecting surfaces (ET3DV6 only)
Dimensions	Overall length: 330 mm Tip length: 16 mm Body diameter: 12 mm Tip diameter: 6.8 mm Distance from probe tip to dipole centers: 2.7 mm
Application	General dosimetry up to 3 GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms (ET3DV6)

6.1.4 Phantom description

The used SAM Phantom meets the requirements specified in Edition 01-01 of Supplement C to OET Bulletin 65 for Specific Absorption Rate (SAR) measurements.
The phantom consists of a fibreglass shell integrated in a wooden table. It allows left-hand and right-hand head as well as body-worn measurements with a maximum liquid depth of 18 cm in head position and 22 cm in planar position (body measurements). The thickness of the Phantom shell is 2 mm +/- 0.1 mm.



6.1.5 Device holder description

The DASY device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65°. The bottom plate contains three 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 ± 0.1mm). 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 ± 30°.)

- 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 strenth 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 SAR measurements is 10 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 „zoom scan” measures the field in a volume around the 2D peak SAR value acquired in the previous „coarse“ scan. This is a fine grid with maximum scan spatial resolution: Δx_{zoom}, Δy_{zoom} ≤ 3GHz - ≤ 5 mm and > 3 GHz – ≤ 4 mm; Δz_{zoom} ≤ 3GHz - ≤ 5 mm and > 3 GHz – ≤ 4 mm where the robot additionally moves the probe along the z-axis away from the bottom of the Phantom. 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 scan. The probe is moved away in z-direction from the bottom of the SAM phantom in 2 mm 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	$Norm_i$, 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 [mV/(V/m)^2] for E-field Probes	(i = x, y, z)
	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/cm^3

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

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

with	P_{pwe}	= equivalent power density of a plane wave in mW/cm^2
	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)**								
frequency band	☐ 450	☐ 750	☒ 835	☐ 900	☐ 1450	☐ 1800	☒ 1900	☒ 2450	☒ 5000
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)**								
frequency band	☐ 450	☐ 750	☒ 835	☐ 900	☐ 1450	☐ 1800	☒ 1900	☒ 2450	☐ 5000
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	Frequency (MHz)	Target head tissue		Measurement head tissue		Measurement date
		Permittivity	Conductivity[S/m]	Permittivity	Conductivity[S/m]	
HSL 850/900	824	41.5	0.90	41.9	0.88	2012-10-18
	837	41.5	0.90	41.8	0.90	2012-10-18
	849	41.5	0.90	41.7	0.91	2012-10-18
	900	41.5	0.97	41.0	0.96	2012-10-18
HSL 1900	1850	40.0	1.40	40.0	1.34	2012-10-16
	1880	40.0	1.40	39.9	1.37	2012-10-16
	1900	40.0	1.40	39.8	1.39	2012-10-16
	1910	40.0	1.40	39.7	1.40	2012-10-16
HSL 2450	2412	39.2	1.80	39.0	1.81	2012-10-24
	2437	39.2	1.80	39.0	1.84	2012-10-24
	2450	39.2	1.80	38.9	1.85	2012-10-24
	2462	39.2	1.80	38.9	1.86	2012-10-24
HSL 5GHz	5200	36.0	4.66	36.60	4.52	2012-10-30
	5280	35.9	4.76	36.44	4.60	2012-10-30
	5500	35.6	4.96	36.10	4.82	2012-10-30
	5700	35.4	5.17	35.80	5.02	2012-10-30
	5745	35.4	5.22	35.71	5.07	2012-10-30
	5800	35.3	5.27	35.60	5.12	2012-10-30

Table 5: Parameter of the head tissue simulating liquid

Liquid	Frequency (MHz)	Target body tissue		Measurement body tissue		Measurement date
		Permittivity	Conductivity[S/m]	Permittivity	Conductivity[S/m]	
M 850/900	824	55.2	0.97	54.5	0.96	2012-10-25
	837	55.2	0.97	54.4	0.97	2012-10-25
	849	55.2	0.97	54.3	0.99	2012-10-25
	900	55.0	1.05	53.8	1.04	2012-10-25
M 850/900	824	55.2	0.97	55.4	0.97	2012-12-10
	837	55.2	0.97	55.4	0.98	2012-12-10
	849	55.2	0.97	55.3	0.99	2012-12-10
	900	55.0	1.05	54.8	1.04	2012-12-10
M 1900	1850	53.3	1.52	53.4	1.46	2012-10-30
	1880	53.3	1.52	53.3	1.50	2012-10-30
	1900	53.3	1.52	53.2	1.52	2012-10-30
	1910	53.3	1.52	53.2	1.53	2012-10-30
M 2450	2412	52.7	1.95	52.0	1.96	2012-10-26
	2437	52.7	1.95	51.9	2.01	2012-10-26
	2450	52.7	1.95	51.9	2.01	2012-10-26
	2462	52.7	1.95	51.8	2.02	2012-10-26

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 Sources	Uncertainty Value	Probability Distribution	Divi-sor	c_i 1g	c_i 10g	Standard Uncertainty 1g	Standard Uncertainty 10g	v_i^2 or 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	± 9.6%	Rectangular	√3	0.7	0.7	± 3.9%	± 3.9%	∞
Spatial resolution	± 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	± 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 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								
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.)	± 2.5%	Normal	1	0.64	0.43	± 1.6%	± 1.1%	∞
Liquid permittivity (target)	± 5.0%	Rectangular	√3	0.6	0.49	± 1.7%	± 1.4%	∞
Liquid permittivity (meas.)	± 2.5%	Normal	1	0.6	0.49	± 1.5%	± 1.2%	∞
Combined Uncertainty						± 11.5%	± 11.2%	330
Expanded Std. Uncertainty						**± 23.0%**	**± 22.5%**	

Table 7: Measurement uncertainties

Relative DASY4 Uncertainty Budget for SAR Tests According to IEEE 1528/2003 and IEC62209 (3-6GHz range)								
Error Sources	Uncertainty Value	Probability Distribution	Divi-sor	c_i 1g	c_i 10g	Standard Uncertainty 1g	Standard Uncertainty 10g	v_i^2 or 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	± 9.6%	Rectangular	√3	0.7	0.7	± 3.9%	± 3.9%	∞
Spatial resolution	± 0.0%	Rectangular	√3	1	1	± 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	± 0.8%	Rectangular	√3	1	1	± 0.5%	± 0.5%	∞
Integration time	± 2.6%	Rectangular	√3	1	1	± 1.5%	± 1.5%	∞
RF ambient conditions	± 3.0%	Rectangular	√3	1	1	± 1.7%	± 1.7%	∞
Probe positioner	± 0.8%	Rectangular	√3	1	1	± 0.4%	± 0.4%	∞
Probe positioning	± 5.8%	Rectangular	√3	1	1	± 3.4%	± 3.4%	∞
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.)	± 2.5%	Normal	1	0.64	0.43	± 1.6%	± 1.1%	∞
Liquid permittivity (target)	± 5.0%	Rectangular	√3	0.6	0.49	± 1.7%	± 1.4%	∞
Liquid permittivity (meas.)	± 2.5%	Normal	1	0.6	0.49	± 1.5%	± 1.2%	∞
Combined Uncertainty						± 11.8%	± 11.5%	330
Expanded Std. Uncertainty						**± 23.6%**	**± 23.0%**	

Table 8: Measurement uncertainties

Relative DASY5 Uncertainty Budget for SAR Tests								
According to IEEE 1528/2011 and IEC62209/2011 (0.3-3GHz range)								
Error Description	Uncertainty Value	Probability Distribution	Divisor	c_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.)	± 2.5 %	Rectangular	√ 3	0.78	0.71	± 1.1 %	± 1.0 %	∞
Liquid permittivity (meas.)	± 2.5 %	Rectangular	√ 3	0.26	0.26	± 0.4 %	± 0.4 %	∞
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						± 11.2 %	± 11.1 %	330
Expanded Std. Uncertainty						± **22.3** %	± **22.2** %	

Table 9: Measurement uncertainties

6.1.12 Measurement uncertainty evaluation for System Check

Uncertainty of a System Performance Check with DASY4 System.								
Source of uncertainty	Uncertainty Value	Probability Distribution	Divisor	c_i (1g)	c_i (10g)	Standard Uncertainty ± %, (1g)	Standard Uncertainty ± %, (10g)	v_i^2 or v_{eff}
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.)	± 2.5 %	Normal	1	0.64	0.43	± 1.6 %	± 1.1 %	∞
Liquid permittivity (target)	± 5.0 %	Rectangular	√ 3	0.6	0.49	± 1.7 %	± 1.4 %	∞
Liquid permittivity (meas.)	± 2.5 %	Normal	1	0.6	0.49	± 1.5 %	± 1.2 %	∞
Combined Uncertainty						± 9.1 %	± 8.8 %	∞
Expanded Std. Uncertainty						± **18.2** %	± **17.7** %	

Table 10: Measurement uncertainties of a System Check with DASY4

Uncertainty of a System Performance Check with DASY4 System According to IEEE 1528/2003 and IEC62209 (3-6GHz range)								
Error Sources	Uncertainty Value	Probability Distribution	Divi-sor	c_i 1g	c_i 10g	Standard Uncertainty 1g	Standard Uncertainty 10g	v_i^2 or 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%	± 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	± 0.0%	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	± 0.4%	± 0.4%	∞
Probe positioning	± 5.8%	Rectangular	√3	1	1	± 3.4%	± 3.4%	∞
Max. SAR evaluation	± 1.0%	Rectangular	√3	1	1	± 0.6%	± 0.6%	∞
Test Sample Related								
Dipole axis to liquid distance	± 2.0%	Normal	1	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.)	± 2.5%	Normal	1	0.64	0.43	± 1.6%	± 1.1%	∞
Liquid permittivity (target)	± 5.0%	Rectangular	√3	0.6	0.49	± 1.7%	± 1.4%	∞
Liquid permittivity (meas.)	± 2.5%	Normal	1	0.6	0.49	± 1.5%	± 1.2%	∞
Combined Uncertainty						**± 10.2%**	**± 9.9%**	
Expanded Std. Uncertainty						**± 20.3%**	**± 19.8%**	

Table 11: Measurement uncertainties of a System Check with DASY4

Uncertainty of a System Performance Check with DASY5 System.								
Source of uncertainty	Uncertainty Value	Probability Distribution	Divisor	c_i (1g)	c_i (10g)	Standard Uncertainty ± %, (1g)	Standard Uncertainty ± %, (10g)	v_i^2 or 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								
Deviation of the	± %	Normal	1	1	1	± 0.0 %	± 0.0 %	∞
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 %	∞
Algorithm for correcting	± 1.9 %	Normal	1	1	0.84	± 1.9 %	± 1.6 %	∞
Liquid conductivity (meas.)	± 2.5 %	Normal	1	0.78	0.71	± 2.0 %	± 1.8 %	∞
Liquid permittivity (meas.)	± 2.5 %	Normal	1	0.23	0.26	± 0.6 %	± 0.7 %	∞
Liquid conductivity -	± 5.0 %	Rectangular	√ 3	0.78	0.71	± 2.3 %	± 2.0 %	∞
Liquid permittivity -	± 5.0 %	Rectangular	√ 3	0.23	0.26	± 0.7 %	± 0.8 %	∞
Combined Uncertainty						± 9.0 %	± 8.9 %	330
Expanded Std. Uncertainty						± **18.0** %	± **17.8** %	

Table 12: Measurement uncertainties of a System Check with DASY5

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

6.1.13 System check

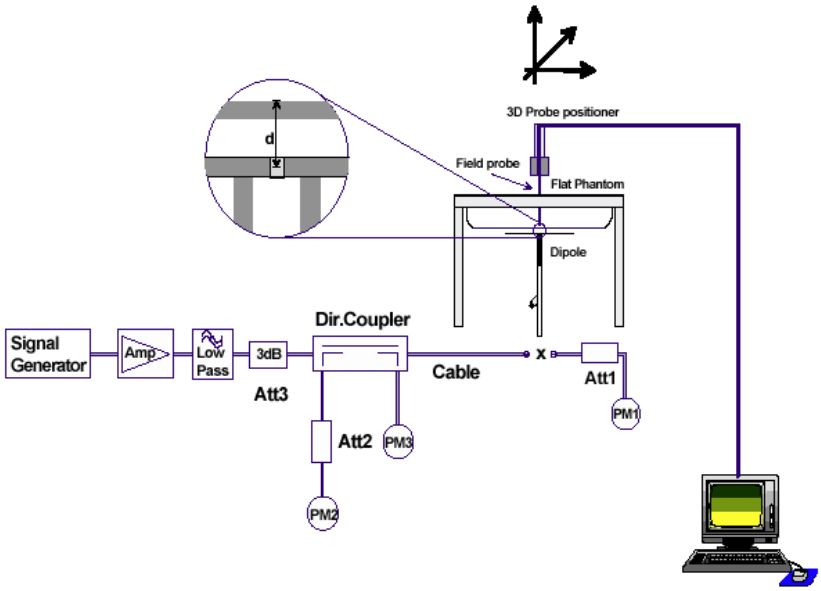
The system check is performed for verifying the accuracy of the complete measurement system and performance of the software. The system check is performed with tissue equivalent material according to IEEE 1528. The following table shows system check results for all frequency bands and tissue liquids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

System validation Kit	Frequency	Target SAR_{1g} (1000 mW) (+/- 10%)	Target SAR_{10g} (1000 mW) (+/- 10%)	Measured SAR_{1g} (1000 mW)	Measured SAR_{10g} (1000 mW)	Measured date
D900V2 S/N: 102	**900 MHz head**	10.9 mW/g	6.97 mW/g	10.9 mW/g	7.03 mW/g	2012-10-18
D900V2 S/N: 102	**900 MHz head**	10.9 mW/g	6.97 mW/g	11.3 mW/g	7.28 mW/g	2012-10-19
D900V2 S/N: 102	**900 MHz body**	11.2 mW/g	7.24 mW/g	10.6 mW/g	6.88 mW/g	2012-10-25
D900V2 S/N: 102	**900 MHz body**	11.2 mW/g	7.24 mW/g	10.7 mW/g	6.93 mW/g	2012-10-26
D900V2 S/N: 102	**900 MHz body**	11.2 mW/g	7.24 mW/g	11.2 mW/g	7.36 mW/g	2012-12-10
D1900V2 S/N: 5d009	**1900 MHz head**	40.0 mW/g	20.9 mW/g	37.3 mW/g	19.7 mW/g	2012-10-16
D1900V2 S/N: 5d009	**1900 MHz body**	40.9 mW/g	21.5 mW/g	39.2 mW/g	20.9 mW/g	2012-10-30
D2450V2 S/N: 710	**2450 MHz head**	51.5 mW/g	24.0 mW/g	53.1 mW/g	24.7 mW/g	2012-10-24
D2450V2 S/N: 710	**2450 MHz head**	51.5 mW/g	24.0 mW/g	53.8 mW/g	25.1 mW/g	2012-10-25
D2450V2 S/N: 710	**2450 MHz body**	51.2 mW/g	23.9 mW/g	55.1 mW/g	25.0 mW/g	2012-10-26
D5GHzV2 S/N: 1055	**5200 MHz head**	77.3 mW/g	22.0 mW/g	82.0 mW/g	23.3 mW/g	2012-10-30
D5GHzV2 S/N: 1055	**5500 MHz head**	81.1 mW/g	23.0 mW/g	78.7 mW/g	22.3 mW/g	2012-10-30
D5GHzV2 S/N: 1055	**5800 MHz head**	75.4 mW/g	21.3 mW/g	76.7 mW/g	21.6 mW/g	2012-10-30

Table 13: Results system check

6.1.14 System check procedure

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



7 Detailed Test Results

7.1 Conducted power measurements

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

Note: CMU200 measures GSM peak and average output power for active timeslots.
For SAR the time based average power is relevant. The difference in-between depends on the duty cycle of the TDMA signal:

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

The signalling modes differ as follows :

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

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

7.1.1 Conducted power measurements GSM 850 MHz

Channel / frequency	modulation	timeslots	slotted avg. power	time based avg. Power (calculated)
128 / 824.2 MHz	GMSK	1	33.9 dBm	24.9 dBm
190 / 836.6 MHz	GMSK	1	33.8 dBm	24.8 dBm
251 / 848.0 MHz	GMSK	1	33.8 dBm	24.8 dBm
128 / 824.2 MHz	GMSK	2	31.5 dBm	25.5 dBm
190 / 836.6 MHz	GMSK	2	31.4 dBm	25.4 dBm
251 / 848.0 MHz	GMSK	2	31.5 dBm	25.5 dBm
128 / 824.2 MHz	GMSK	3	30.8 dBm	26.55 dBm
190 / 836.6 MHz	GMSK	3	30.7 dBm	26.45 dBm
251 / 848.0 MHz	GMSK	3	30.6 dBm	26.35 dBm
128 / 824.2 MHz	GMSK	4	29.6 dBm	**26.6 dBm**
190 / 836.6 MHz	GMSK	4	29.7 dBm	**26.7 dBm**
251 / 848.0 MHz	GMSK	4	29.8 dBm	**26.8 dBm**
128 / 824.2 MHz	8PSK	1	28.5 dBm	19.5 dBm
190 / 836.6 MHz	8PSK	1	28.4 dBm	19.4 dBm
251 / 848.0 MHz	8PSK	1	28.3 dBm	19.3 dBm
128 / 824.2 MHz	8PSK	2	27.2 dBm	21.2 dBm
190 / 836.6 MHz	8PSK	2	27.2 dBm	21.2 dBm
251 / 848.0 MHz	8PSK	2	27.1 dBm	21.1 dBm
128 / 824.2 MHz	8PSK	3	26.3 dBm	22.05 dBm
190 / 836.6 MHz	8PSK	3	26.1 dBm	21.85 dBm
251 / 848.0 MHz	8PSK	3	26.2 dBm	21.95 dBm
128 / 824.2 MHz	8PSK	4	24.3 dBm	21.3 dBm
190 / 836.6 MHz	8PSK	4	24.2 dBm	21.2 dBm
251 / 848.0 MHz	8PSK	4	24.2 dBm	21.2 dBm

Table 14: Test results conducted power measurement GSM 850 MHz

7.1.2 Conducted power measurements GSM 1900 MHz

Channel / frequency	modulation	timeslots	slotted avg. power	time based avg. Power (calculated)
512 / 1850.2 MHz	GMSK	1	31.0 dBm	22.0 dBm
661 / 1880.0 MHz	GMSK	1	30.9 dBm	21.9 dBm
810 / 1909.8 MHz	GMSK	1	30.9 dBm	21.9 dBm
512 / 1850.2 MHz	GMSK	2	28.3 dBm	22.3 dBm
661 / 1880.0 MHz	GMSK	2	28.3 dBm	22.3 dBm
810 / 1909.8 MHz	GMSK	2	28.3 dBm	22.3 dBm
512 / 1850.2 MHz	GMSK	3	26.8 dBm	22.55 dBm
661 / 1880.0 MHz	GMSK	3	26.9 dBm	22.65 dBm
810 / 1909.8 MHz	GMSK	3	26.9 dBm	22.65 dBm
512 / 1850.2 MHz	GMSK	4	25.8 dBm	**22.8 dBm**
661 / 1880.0 MHz	GMSK	4	25.9 dBm	**22.9 dBm**
810 / 1909.8 MHz	GMSK	4	25.9 dBm	**22.9 dBm**
512 / 1850.2 MHz	8PSK	1	27.5 dBm	18.5 dBm
661 / 1880.0 MHz	8PSK	1	27.6 dBm	18.6 dBm
810 / 1909.8 MHz	8PSK	1	27.5 dBm	18.5 dBm
512 / 1850.2 MHz	8PSK	2	26.1 dBm	20.1 dBm
661 / 1880.0 MHz	8PSK	2	26.1 dBm	20.1 dBm
810 / 1909.8 MHz	8PSK	2	26.0 dBm	20.0 dBm
512 / 1850.2 MHz	8PSK	3	25.1 dBm	20.85 dBm
661 / 1880.0 MHz	8PSK	3	25.1 dBm	20.85 dBm
810 / 1909.8 MHz	8PSK	3	25.1 dBm	20.85 dBm
512 / 1850.2 MHz	8PSK	4	23.9 dBm	20.9 dBm
661 / 1880.0 MHz	8PSK	4	24.0 dBm	21.0 dBm
810 / 1909.8 MHz	8PSK	4	23.9 dBm	20.9 dBm

Table 15: Test results conducted power measurement GSM 1900 MHz

7.1.3 Justification of SAR measurements in GSM mode

SAR measurements were performed in GPRS mode with 4 active timeslots because highest time based averaged output power was calculated for that configuration.
For comparison an additional delta measurement was performed with 1 timeslot in speech mode. In EDGE mode no delta measurement was performed.

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

Max. RMS output power 850 MHz (FDD V) / dBm			
	Channel / frequency		
mode	4132 / 826.4 MHz	4182 / 836.6 MHz	4233 / 846.6 MHz
RMC 12.2 kbit/s	**25.0**	**25.0**	**25.0**
RMC 64 kbit/s	25.0	25.0	25.0
RMC 144 kbit/s	25.0	25.0	25.0
RMC 384 kbit/s	25.0	25.0	25.0
AMR 4.75 kbit/s	25.0	25.0	25.0
AMR 5.15 kbit/s	24.9	25.0	25.0
AMR 5.9 kbit/s	25.0	25.0	25.0
AMR 6.7 kbit/s	24.9	25.0	25.0
AMR 7.4 kbit/s	24.9	24.9	25.0
AMR 7.95 kbit/s	24.9	25.0	25.0
AMR 10.2 kbit/s	25.0	25.0	25.0
AMR 12.2 kbit/s	25.0	25.0	25.0
HSDPA Sub test 1	**25.0**	**25.0**	**25.0**
HSDPA Sub test 2	23.8	23.7	23.9
HSDPA Sub test 3	22.5	22.5	22.6
HSDPA Sub test 4	22.1	22.3	22.4
HSUPA Sub test 1	24.3	24.7	24.8
HSUPA Sub test 2	23.3	23.1	23.2
HSUPA Sub test 3	23.6	24.0	24.2
HSUPA Sub test 4	22.5	22.6	22.7
HSUPA Sub test 5	**24.6**	**24.8**	**24.7**

Table 16: Test results conducted power measurement 3GPP UMTS FDD V 850MHz

Remark: None of the HSDPA/HSUPA settings leads to conducted power values exceeding the conducted power in RMC mode by more than 0.25 dB.
Therefore no additional SAR measurements were performed in HSDPA/HSUPA mode.

7.1.5 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	**β_c**	**β_d**	**β_d (SF)**	**β_c/β_d**	**β_{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: Δ_{ACK}, Δ_{NACK}, Δ_{CQI} = 8 $\Longleftrightarrow$ $A_{hs} = \beta_{hs}/\beta_c$ = 30/15 $\Longleftrightarrow$ β_{hs} = 30/15 * β_c Note 2 : CM = 1 for β_c/β_d = 12/15, β_{hs}/β_c = 24/15 Note 3 : For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1,TF1) to β_c = 11/15 and β_d = 15/15						

Table 17: Sub-tests for UMTS Release 5 HSDPA

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

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

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

Table 18: settings of required H-Set 1 QPSK acc. to 3GPP 34.121

c) HSUPA

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

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

Sub-test	**β_c**	**β_d**	**β_d (SF)**	**β_c/β_d**	**β_{hs} (1)**	**β_{ec}**	**β_{ed}**	**β_{ec} (SF)**	**β_{ed} (code)**	**CM (2) (dB)**	**MPR (dB)**	**AG (4) Index**	**E-TFCI**
1	11/15 (3)	15/15 (3)	64	11/15 (3)	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed1}:47/15 β_{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: Δ_{ACK}, Δ_{NACK}, Δ_{CQI} = 8 $\Leftrightarrow$ A_{hs} = β_{hs}/β_c = 30/15 $\Leftrightarrow$ β_{hs} = 30/15 * β_c
Note 2 : CM = 1 for β_c/β_d = 12/15, β_{hs}/β_c = 24/15. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference
Note 3 : For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1,TF1) to β_c = 10/15 and β_d = 15/15
Note 4 : For subtest 5 the β_c/β_d ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1,TF1) to β_c = 14/15 and β_d = 15/15
Note 5 : Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g
Note 6 : β_{ed} can not be set directly; it is set by Absolute Grant Value

Table 19: Subtests for UMTS Release 6 HSUPA

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

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

Sub-test	β_c	β_d	Δ_{ACK}, Δ_{NACK}, Δ_{CQI}	**ΔE–DPCCH)***
1	10	15	8	6
2	6	15	8	8
3	15	9	8	8
4	2	15	8	5
5	14	15	8	7

)* : β_{ec} and β_{ed} ratios (relative to β_c and β_d) are set by ΔE–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	β_c	β_d	β_{hs}	β_{ec}	β_{ed}
5	15	15	30	24	134

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

7.1.6 Conducted power measurements WLAN 2.4 GHz

Channel / frequency	modulation	bit rate	time based avg. power
1 / 2412 MHz	CCK	1 MBit/s	**15.8dBm**
6 / 2437 MHz	CCK	1 MBit/s	**15.9dBm**
11 / 2462 MHz	CCK	1 MBit/s	**16.2dBm**
13 / 2472 MHz	CCK	1 MBit/s	**16.2dBm**
1 / 2412 MHz	OFDM	6 MBit/s	13.6dBm
6 / 2437 MHz	OFDM	6 MBit/s	13.6dBm
11 / 2462 MHz	OFDM	6 MBit/s	13.7dBm
13 / 2472 MHz	OFDM	6 MBit/s	13.6dBm
1 / 2412 MHz	OFDM	6.5 MBit/s	11.7dBm
6 / 2437 MHz	OFDM	6.5 MBit/s	11.4dBm
11 / 2462 MHz	OFDM	6.5 MBit/s	11.6dBm
13 / 2472 MHz	OFDM	6.5 MBit/s	11.5dBm

Table 20: Test results conducted power measurement WLAN 2.4 GHz

7.1.7 Conducted power measurements WLAN 5 GHz

Channel	Frequency (MHz)	modulation	bit rate	time based avg. power
36	5180	OFDM	6 MBit/s	**9.9dBm**
40	5200	OFDM	6 MBit/s	9.7dBm
44	5220	OFDM	6 MBit/s	9.4dBm
48	5240	OFDM	6 MBit/s	8.6dBm
52	5260	OFDM	6 MBit/s	**9.8dBm**
56	5280	OFDM	6 MBit/s	9.2dBm
60	5300	OFDM	6 MBit/s	9.2dBm
64	5320	OFDM	6 MBit/s	9.5dBm
100	5500	OFDM	6 MBit/s	9.3dBm
104	5520	OFDM	6 MBit/s	**9.6dBm**
108	5540	OFDM	6 MBit/s	9.2dBm
112	5560	OFDM	6 MBit/s	9.3dBm
116	5580	OFDM	6 MBit/s	9.2dBm
120	5600	OFDM	6 MBit/s	9.3dBm
124	5620	OFDM	6 MBit/s	9.4dBm
128	5640	OFDM	6 MBit/s	9.3dBm
132	5660	OFDM	6 MBit/s	9.4dBm
136	5680	OFDM	6 MBit/s	9.3dBm
140	5700	OFDM	6 MBit/s	9.3dBm
149	5745	OFDM	6 MBit/s	9.5dBm
153	5765	OFDM	6 MBit/s	**9.8dBm**
157	5785	OFDM	6 MBit/s	9.7dBm
161	5805	OFDM	6 MBit/s	9.6dBm
165	5825	OFDM	6 MBit/s	9.8dBm

Table 21: Test results conducted power measurement WLAN 5 GHz

7.1.8 Multiple Transmitter Information

The following tables list information which is relevant for the decision if a simultaneous transmit evaluation is necessary according to FCC KDB 447498D01 General RF Exposure Guidance v05.
Minimum antenna separation distance between main antenna and WLAN – **93.05 mm**

a) **Head** position

Communication system	freq. (MHz)	P_{avg}* (dBm)	P_{avg}* (mW)	**threshold$_{1\text{-}g}$**	SAR test exclusion
GSM 850	835	25.0	316.2	57.8	no
GSM 1900	1900	22.0	158.5	43.7	no
FDD V 850	835	25.0	316.2	57.8	no
WLAN 2450	2450	16.2	41.7	13.1	no
WLAN 5 GHz	5200	9.9	9.8	4.5	no
Bluetooth 2450	2450	9.6	9.1	2.9	yes

Table 22: Communication systems and SAR values in head position

b) **Body** position

Communication system	freq. (MHz)	distance (mm)	P_{avg}* (dBm)	P_{avg}* (mW)	**threshold$_{1\text{-}g}$**	SAR test exclusion
GSM 850	835	10	26.8	478.6	43.7	no
GSM 1900	1900	10	23	199.5	27.5	no
FDD V 850	835	10	25	316.2	28.9	no
WLAN 2450	2450	10	16.2	41.7	6.5	no
WLAN 5 GHz	5200	10	9.9	9.8	2.2	yes
Bluetooth 2450	2450	10	9.6	9.1	1.4	yes

Table 23: Communication systems and SAR values in body position

The **1-g SAR test exclusion thresholds** for 100 MHz to 6 GHz at *test separation distances* ≤ 50 mm are determined by:
[(*max. power of channel, including tune-up tolerance, mW*)/(*min. test separation distance, mm*)] · [√f(GHz)] ≤ **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

* - maximum possible output power declared by manufacturer

reported SAR **WWAN** and **WLAN 2.4GHz**, **ΣSAR** evaluation				
Frequency band	Position	reported SAR /W/kg		**ΣSAR**
		WWAN	WLAN	<1.6W/kg
GSM 850	left hand	0.561	0.961	1.522
GSM 850	right hand	0.505	0.321	0.826
GSM 850	front	0.836	0.164	1.000
GSM 850	rear	0.765	0.202	0.967
GSM 1900	left hand	0.151	0.961	1.112
GSM 1900	right hand	0.151	0.321	0.472
GSM 1900	rear	0.999	0.202	1.201
WCDMA FDD V	left hand	0.594	0.961	**1.555**
WCDMA FDD V	right hand	0.538	0.321	0.859
WCDMA FDD V	front	0.699	0.164	0.863
WCDMA FDD V	rear	0.628	0.202	0.830

Table 24: SAR_{max} WWAN and **WLAN 2.4GHz**, ΣSAR evaluation

reported SAR **WWAN** and **WLAN 5GHz**, **ΣSAR** evaluation				
Frequency band	Position	reported SAR /W/kg		**ΣSAR**
		WWAN	WLAN	<1,6W/kg
GSM 850	left cheek	0.561	0.152	0.713
GSM 850	left tilted 15°	0.327	0.245	0.572
GSM 850	right cheek	0.505	0.114	0.619
GSM 850	right tilted 15°	0.299	0.079	0.378
GSM 850	front	0.836	0.297	1.133
GSM 850	rear	0.765	0.297	1.062
GSM 1900	left cheek	0.151	0.152	0.303
GSM 1900	left tilted 15°	0.045	0.245	0.290
GSM 1900	right cheek	0.151	0.114	0.265
GSM 1900	right tilted 15°	0.043	0.079	0.122
GSM 1900	rear	0.999	0.297	**1.296**
WCDMA FDD V	left cheek	0.594	0.152	0.746
WCDMA FDD V	left tilted 15°	0.355	0.245	0.600
WCDMA FDD V	right cheek	0.538	0.114	0.652
WCDMA FDD V	right tilted 15°	0.339	0.079	0.418
WCDMA FDD V	front	0.699	0.297	0.996
WCDMA FDD V	rear	0.628	0.297	0.925

Table 25: SAR_{max} WWAN and **WLAN 5GHz**, ΣSAR evaluation

Estimated SAR					
Communication system	freq. (GHz)	distance (mm)	P_{avg}* (dBm)	P_{avg}* (mW)	$threshold_{1-g}$ (W/kg)
WLAN 5GHz body	5.2	10	9.9	9.8	**0.297**

Table 26: Calculated SAR_{max} for **WLAN 5GHz** body

* - maximum possible output power declared by manufacturer

reported SAR **WWAN** and **Bluetooth** 2450MHz, **ΣSAR** evaluation				
Frequency band	Position	reported SAR /W/kg		**ΣSAR**
		WWAN	Bluetooth	<1.6W/kg
850	left hand	0.561	0.381	0.942
850	right hand	0.505	0.381	0.886
850	front	0.836	0.190	1.026
850	rear	0.765	0.190	0.955
1900	left hand	0.151	0.381	0.532
1900	right hand	0.151	0.381	0.532
1900	rear	0.999	0.190	**1.189**
FDD V	left hand	0.594	0.381	0.975
FDD V	right hand	0.538	0.381	0.919
FDD V	front	0.699	0.190	0.889
FDD V	rear	0.628	0.190	0.818

Table 27: SAR_{max} WWAN and **Bluetooth 2450MHz**, ΣSAR evaluation

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	9.6	9.1	0.381
Bluetooth 2450 body	2.45	10	9.6	9.1	0.190

Table 28: Calculated SAR_{max} for **Bluetooth 2450MHz** head and body

* - maximum possible output power declared by manufacturer

When standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:
(*max. power of channel, including* ***tune-up tolerance****, mW*)/(*min. test separation distance, mm*)]·[√f(GHz)/*x*] W/kg for *test separation distances* ≤ 50 mm;
where *x* = 7.5 for 1-g SAR.
When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

Conclusion:

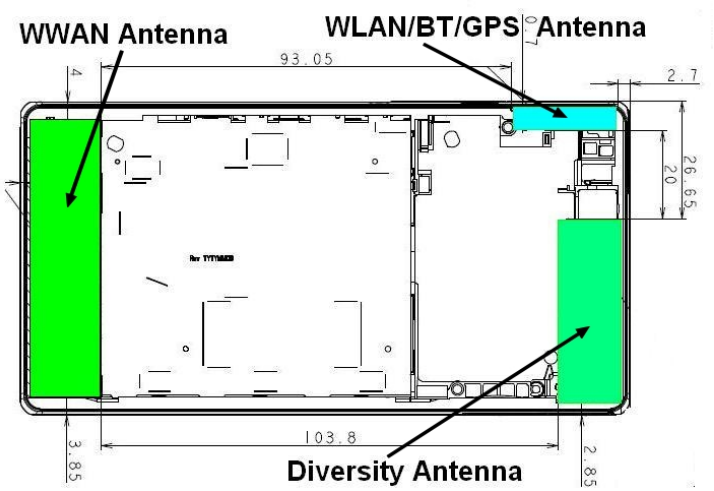
ΣSAR < 1.6 W/kg therefore simultaneous transmission SAR with Volume Scans is **not** required.

7.1.9 Mobile hotspot SAR measurement positions

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

right

bottom



top

left

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

7.2 SAR test results

7.2.1 Results overview

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	34.0	33.9	0.539	0.552	21.6
190	836.6	left cheek	34.0	33.8	0.536	**0.561**	21.6
251	848.8	left cheek	34.0	33.8	0.499	0.523	21.6
128	824.2	left tilted 15°	34.0	33.9	0.311	0.318	21.6
190	836.6	left tilted 15°	34.0	33.8	0.312	0.327	21.6
251	848.8	left tilted 15°	34.0	33.8	0.292	0.306	21.6
128	824.2	right cheek	34.0	33.9	0.489	0.500	21.6
190	836.6	right cheek	34.0	33.8	0.482	0.505	21.6
251	848.8	right cheek	34.0	33.8	0.453	0.474	21.6
128	824.2	right tilted 15°	34.0	33.9	0.292	0.299	21.6
190	836.6	right tilted 15°	34.0	33.8	0.273	0.286	21.6
251	848.8	right tilted 15°	34.0	33.8	0.237	0.248	21.6

Table 29: Test results head SAR GSM 850 MHz

** - maximum possible output power declared by manufacturer

measured / extrapolated SAR numbers - Body - GSM 850 MHz									
channel	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	4	10	front	29.8	29.6	0.798	**0.836**	21.6
190	836.6	4	10	front	29.8	29.7	0.777	0.795	21.6
251	848.8	4	10	front	29.8	29.8	0.657	0.657	21.6
128	824.2	4	10	rear	29.8	29.6	0.731	0.765	21.6
190	836.6	4	10	rear	29.8	29.7	0.696	0.712	21.6
251	848.8	4	10	rear	29.8	29.8	0.597	0.597	21.6
190	836.6	4	10	left edge	29.8	29.7	0.566	0.579	21.6
190	836.6	4	10	right dege	29.8	29.7	0.534	0.546	21.6
190	836.6	4	10	bottom edge	29.8	29.7	0.208	0.213	21.6
128	824.2	4	15	front	29.8	29.6	0.788	0.825	22.0
190	836.6	1	15	front	34.0	33.8	0.395	0.414	21.6

Table 30: Test results body SAR GSM 850 MHz

** - maximum possible output power declared by manufacturer

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

measured / extrapolated SAR numbers - Head - GSM 1900 MHz							
channel	frequency (MHz)	Position	cond. output power (dBm)		SAR_{1g} results(W/kg)		liquid temp. (°C)
			declared**	measured	measured	extrapolated	
512	1850.2	left cheek	31.0	31.0	0.151	**0.151**	21.6
661	1880.0	left cheek	31.0	30.9	0.143	0.146	21.6
810	1909.8	left cheek	31.0	30.9	0.133	0.136	21.6
512	1850.2	left tilted 15°	31.0	31.0	0.045	0.045	21.6
661	1880.0	left tilted 15°	31.0	30.9	0.044	0.045	21.6
810	1909.8	left tilted 15°	31.0	30.9	0.039	0.040	21.6
512	1850.2	right cheek	31.0	31.0	0.151	**0.151**	21.6
661	1880.0	right cheek	31.0	30.9	0.141	0.144	21.6
810	1909.8	right cheek	31.0	30.9	0.125	0.128	21.6
512	1850.2	right tilted 15°	31.0	31.0	0.043	0.043	21.6
661	1880.0	right tilted 15°	31.0	30.9	0.042	0.043	21.6
810	1909.8	right tilted 15°	31.0	30.9	0.039	0.040	21.6

Table 31: Test results head SAR GSM 1900 MHz

** - maximum possible output power declared by manufacturer

measured / extrapolated SAR numbers - Body - GSM 1900 MHz									
channel	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	4	10	front	26.0	25.8	0.480	0.503	21.6
661	1880.0	4	10	front	26.0	25.9	0.502	0.514	21.6
810	1909.8	4	10	front	26.0	25.9	0.580	0.594	21.6
512	1850.2	4	10	rear	26.0	25.8	0.765	0.801	21.6
661	1880.0	4	10	rear	26.0	25.9	0.823	0.842	21.6
810	1909.8	4	10	rear	26.0	25.9	0.968	0.991	21.6
661	1880.0	4	10	left edge	26.0	25.9	0.100	0.102	21.6
661	1880.0	4	10	right dege	26.0	25.9	0.086	0.088	21.6
512	1850.2	4	10	bottom edge	26.0	25.8	0.900	0.942	21.6
661	1880.0	4	10	bottom edge	26.0	25.9	0.857	0.877	21.6
810	1909.8	4	10	bottom edge	26.0	25.9	1.070	**1.095**	21.6
810*	1909.8	4	10	bottom edge	26.0	25.9	1.000	1.023	21.6
810	1909.8	4	15	rear	26.0	25.9	0.419	0.429	21.6
661	1880.0	1	15	rear	31.0	30.9	0.388	0.397	21.6

Table 32: 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							
channel	frequency (MHz)	Position	cond. output power (dBm)		SAR_{1g} results(W/kg)		liquid temp. (°C)
			declared**	measured	measured	extrapolated	
4132	826.4	left cheek	25.0	25.0	0.558	0.558	21.9
4182	836.6	left cheek	25.0	25.0	0.522	0.522	21.9
4233	846.6	left cheek	25.0	25.0	0.594	**0.594**	21.9
4132	826.4	left tilted 15°	25.0	25.0	0.328	0.328	21.9
4182	836.6	left tilted 15°	25.0	25.0	0.315	0.315	21.9
4233	846.6	left tilted 15°	25.0	25.0	0.355	0.355	21.9
4132	826.4	right cheek	25.0	25.0	0.504	0.504	21.9
4182	836.6	right cheek	25.0	25.0	0.487	0.487	21.9
4233	846.6	right cheek	25.0	25.0	0.538	0.538	21.9
4132	826.4	right tilted 15°	25.0	25.0	0.326	0.326	21.9
4182	836.6	right tilted 15°	25.0	25.0	0.305	0.305	21.9
4233	846.6	right tilted 15°	25.0	25.0	0.339	0.339	21.9

Table 33: Test results head SAR UMTS FDD V 850 MHz

** - maximum possible output power declared by manufacturer

measured / extrapolated SAR numbers - Body - WCDMA FDD V 850 MHz									
channe	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	25.0	25.0	0.699	**0.699**	20.7
4182	836.6	RMC	10	front	25.0	25.0	0.632	0.632	20.7
4233	846.6	RMC	10	front	25.0	25.0	0.664	0.664	20.7
4132	826.4	RMC	10	rear	25.0	25.0	0.628	0.628	20.7
4182	836.6	RMC	10	rear	25.0	25.0	0.568	0.568	20.7
4233	846.6	RMC	10	rear	25.0	25.0	0.564	0.564	20.7
4182	836.6	RMC	10	left edge	25.0	25.0	0.469	0.469	20.7
4182	836.6	RMC	10	right dege	25.0	25.0	0.449	0.449	20.7
4182	836.6	RMC	10	bottom edge	25.0	25.0	0.189	0.189	20.7
4132	826.4	RMC	15	front	25.0	25.0	0.709	0.709	22.0
4182	836.6	AMR	15	front	25.0	25.0	0.427	0.427	20.7

Table 34: Test results body SAR UMTS FDD V 850 MHz

** - maximum possible output power declared by manufacturer

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

measured / extrapolated SAR numbers - Head - WLAN 2450 MHz							
channel	frequency (MHz)	Position	cond. output power (dBm)		SAR_{1g} results(W/kg)		liquid temp. (°C)
			declared**	measured	measured	extrapolated	
1	2412	left cheek	16.2	15.8	0.346	0.379	21.3
6	2437	left cheek	16.2	15.9	0.386	0.414	21.3
11	2462	left cheek	16.2	16.2	0.958	**0.958**	21.7
11*	2462	left cheek	16.2	16.2	0.961	**0.961**	21.7
1	2412	left tilted 15°	16.2	15.8	0.161	0.177	21.3
6	2437	left tilted 15°	16.2	15.9	0.146	0.156	21.3
11	2462	left tilted 15°	16.2	16.2	0.357	0.357	21.7
1	2412	right cheek	16.2	15.8	0.111	0.122	21.3
6	2437	right cheek	16.2	15.9	0.158	0.169	21.7
11	2462	right cheek	16.2	16.2	0.321	0.321	21.7
1	2412	right tilted 15°	16.2	15.8	0.076	0.083	21.3
6	2437	right tilted 15°	16.2	15.9	0.079	0.085	21.3
11	2462	right tilted 15°	16.2	16.2	0.172	0.172	21.7

Table 35: 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									
channel	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	16.2	15.8	0.055	0.060	21.7
6	2437	1Mbit/s	10	front	16.2	15.9	0.087	0.093	21.7
11	2462	1Mbit/s	10	front	16.2	16.2	0.164	0.164	21.7
1	2412	1Mbit/s	10	rear	16.2	15.8	0.053	0.058	21.7
6	2437	1Mbit/s	10	rear	16.2	15.9	0.101	0.108	21.7
11	2462	1Mbit/s	10	rear	16.2	16.2	0.202	**0.202**	21.7
6	2437	1Mbit/s	10	right dege	16.2	15.9	0.055	0.059	21.7
6	2437	1Mbit/s	10	top edge	16.2	15.9	0.064	0.069	21.7
11	2462	1Mbit/s	15	rear	16.2	16.2	0.130	0.130	21.7

Table 36: 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							
channel	frequency (MHz)	Position	cond. output power (dBm)		SAR_{1g} results(W/kg)		liquid temp. (°C)
			declared**	measured	measured	extrapolated	
36	5180	left cheek	9.9	9.9	0.114	0.114	20.4
52	5260	left cheek	9.9	9.8	0.149	0.152	20.4
104	5520	left cheek	9.9	9.6	0.079	0.085	20.4
153	5765	left cheek	9.9	9.8	0.058	0.059	20.4
36	5180	left tilted 15°	9.9	9.9	0.050	0.050	20.4
52	5260	left tilted 15°	9.9	9.8	0.239	**0.245**	20.4
104	5520	left tilted 15°	9.9	9.6	0.042	0.045	20.4
153	5765	left tilted 15°	9.9	9.8	0.000	0.000	20.4
36	5180	right cheek	9.9	9.9	0.036	0.036	20.4
52	5260	right cheek	9.9	9.8	0.111	0.114	20.4
104	5520	right cheek	9.9	9.6	0.027	0.029	20.4
153	5765	right cheek	9.9	9.8	0.018	0.018	20.4
36	5180	right tilted 15°	9.9	9.9	0.029	0.029	20.4
52	5260	right tilted 15°	9.9	9.8	0.077	0.079	20.4
104	5520	right tilted 15°	9.9	9.6	0.020	0.021	20.4
153	5765	right tilted 15°	9.9	9.8	0.011	0.011	20.4

Table 37: Test results head SAR WLAN 5GHz

** - maximum possible output power declared by manufacturer

7.2.2 General description of test procedures

- The DUT is tested using a CMU 200 communications tester as controller unit to set test channels and maximum output power to the DUT, as well as for measuring the conducted peak power.
- Test positions as described in the tables above are in accordance with the specified test standard.
- The SAR test shall be performed at the high, middle and low frequency channels of each operating mode. If the SAR measured at mid-band channel for each test configuration is at least 3.0 dB lower than the SAR limit (< 0.8 W/kg), testing at the high and low channels is optional.
- Tests in body position were performed in that configuration, which generates the highest time based averaged output power (see conducted power results).
- Tests in head position with GSM were performed in voice mode with 1 timeslot unless GPRS/EGPRS/DTM function allows parallel voice and data traffic on 2 or more timeslots (see section 2.4 for details).
- UMTS was tested in RMC mode with 12.2 kbit/s and TPC bits set to ‘all 1’.
- WLAN was tested in 802.11b mode with 1 MBit/s and in 802.11a mode with 6 MBit/s. According to KDB 248227 the SAR testing for 802.11g/n is not required since the maximum power of 802.11g/n is less ¼ dB higher than maximum power of 802.11a/b.
- Per FCC KDB pub 941225 D06 the edges with antennas within 2.5 cm are required to be evaluated for SAR to cover WLAN hot spot function.
- Tests in body position were performed with 10 mm air gap between DUT and SAM, with additional delta measurements at 15 mm distance.

8 Test equipment and ancillaries used for tests

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

used	Equipment	Type	Manufacturer	Serial No.	Last Calibration	Frequency (months)
☒	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 18, 2012	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	D5GHzV 2	Schmid & Partner Engineering AG	1055	August 22, 2011	24
☒	Data acquisition electronics	DAE3V1	Schmid & Partner Engineering AG	413	January 12, 2012	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 52.8.1	Schmid & Partner Engineering AG	---	N/A	--
☒	Phantom	SAM	Schmid & Partner Engineering AG	---	N/A	--
☒	Universal Radio Communication Tester	CMU 200	Rohde & Schwarz	106826	March 06, 2012	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	8665A	Hewlett Packard	2833A00112	January 6, 2012	12
☒	Amplifier	25S1G4 (25 Watt)	Amplifier Reasearch	20452	N/A	--
☒	Power Meter	NRP	Rohde & Schwarz	101367	January 6, 2011	24
☒	Power Meter Sensor	NRP Z22	Rohde & Schwarz	100227	January 9, 2012	12
☒	Power Meter Sensor	NRP Z22	Rohde & Schwarz	100234	January 9, 2012	12
☒	Directional Coupler	778D	Hewlett Packard	19171	January 8, 2012	12

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

9 Observations

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

Annex A: System performance check

Date/Time: 18.10.2012 10:02:49

SystemPerformanceCheck-D900 head 2012-10-18

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

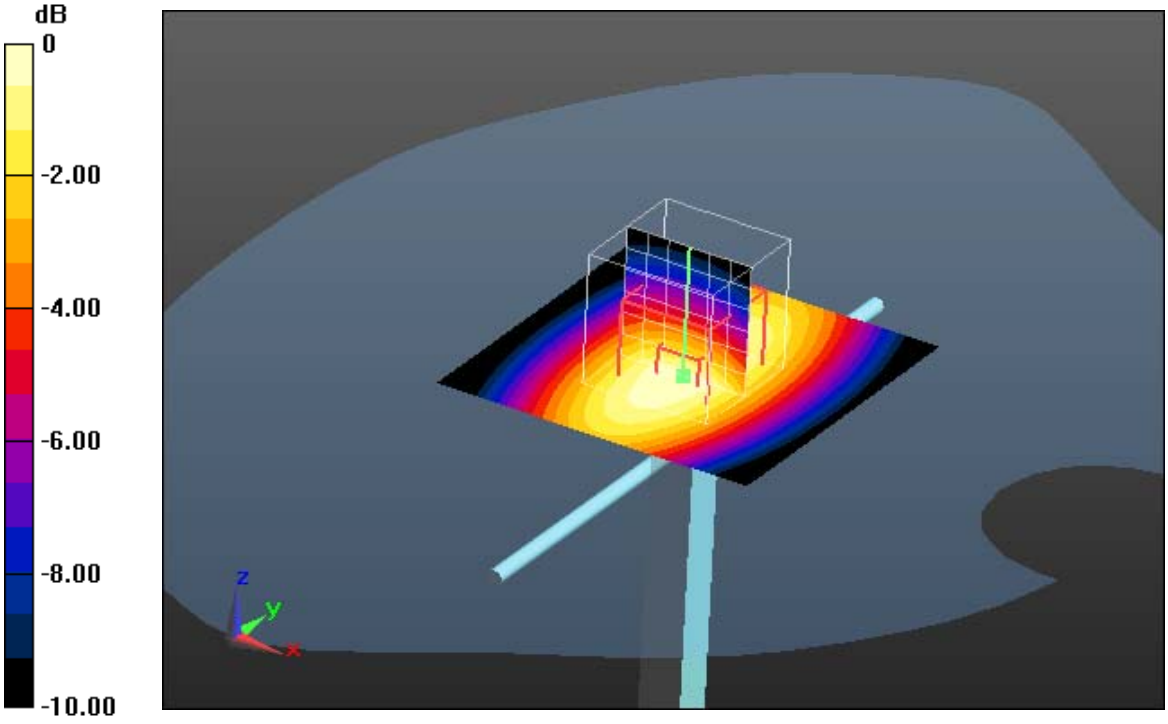
Communication System: CW; Communication System Band: D900 (900.0 MHz); Frequency: 900 MHz;
Communication System PAR: 0 dB; PMF: 1
Medium parameters used: f = 900 MHz; σ = 0.96 mho/m; ε_r = 41; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(5.98, 5.98, 5.98); Calibrated: 24.08.2012;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

System Performance Check/d=10mm, Pin=1000 mW, dist=4.0mm/Area Scan (51x51x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 11.7 W/kg

System Performance Check/d=10mm, Pin=1000 mW, dist=4.0mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 114.8 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 16.344 mW/g
SAR(1 g) = 10.9 mW/g; SAR(10 g) = 7.03 mW/g
Maximum value of SAR (measured) = 11.9 W/kg



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

Additional information:
ambient temperature: 22.1°C; liquid temperature: 21.5°C

Date/Time: 19.10.2012 10:00:15

SystemPerformanceCheck-D900 head 2012-10-19

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

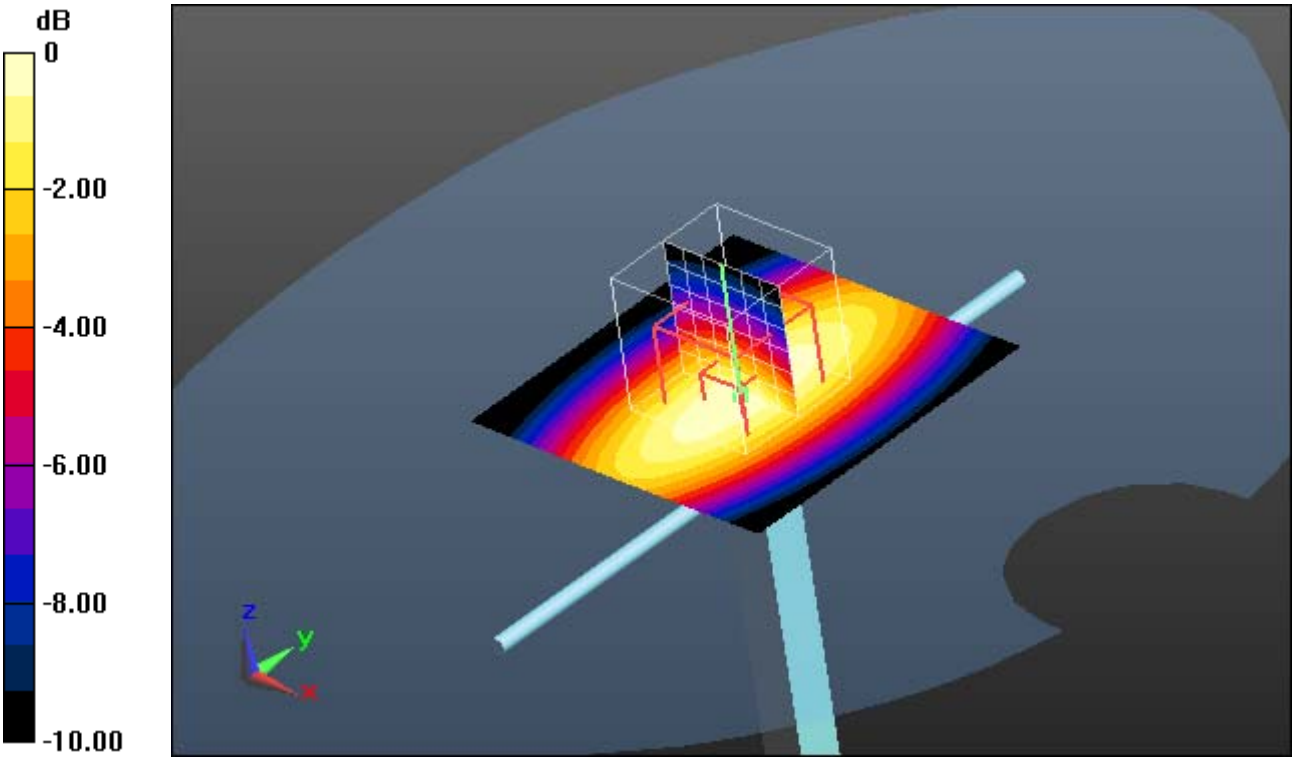
Communication System: CW; Communication System Band: D900 (900.0 MHz); Frequency: 900 MHz;
Communication System PAR: 0 dB; PMF: 1
Medium parameters used: f = 900 MHz; σ = 0.96 mho/m; ε_r = 41; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - 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 52.8.1(838); SEMCAD X 14.6.5(6469)

System Performance Check/d=10mm, Pin=1000 mW, dist=4.0mm/Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

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

System Performance Check/d=10mm, Pin=1000 mW, dist=4.0mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 116.3 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 16.996 mW/g
SAR(1 g) = 11.3 mW/g; SAR(10 g) = 7.28 mW/g
Maximum value of SAR (measured) = 12.3 mW/g



0 dB = 12.3 mW/g = 21.80 dB mW/g

Additional information:
ambient temperature: 20.8°C; liquid temperature: 21.1°C

Date/Time: 25.10.2012 13:49:47

SystemPerformanceCheck-D900 body 2012-10-25

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

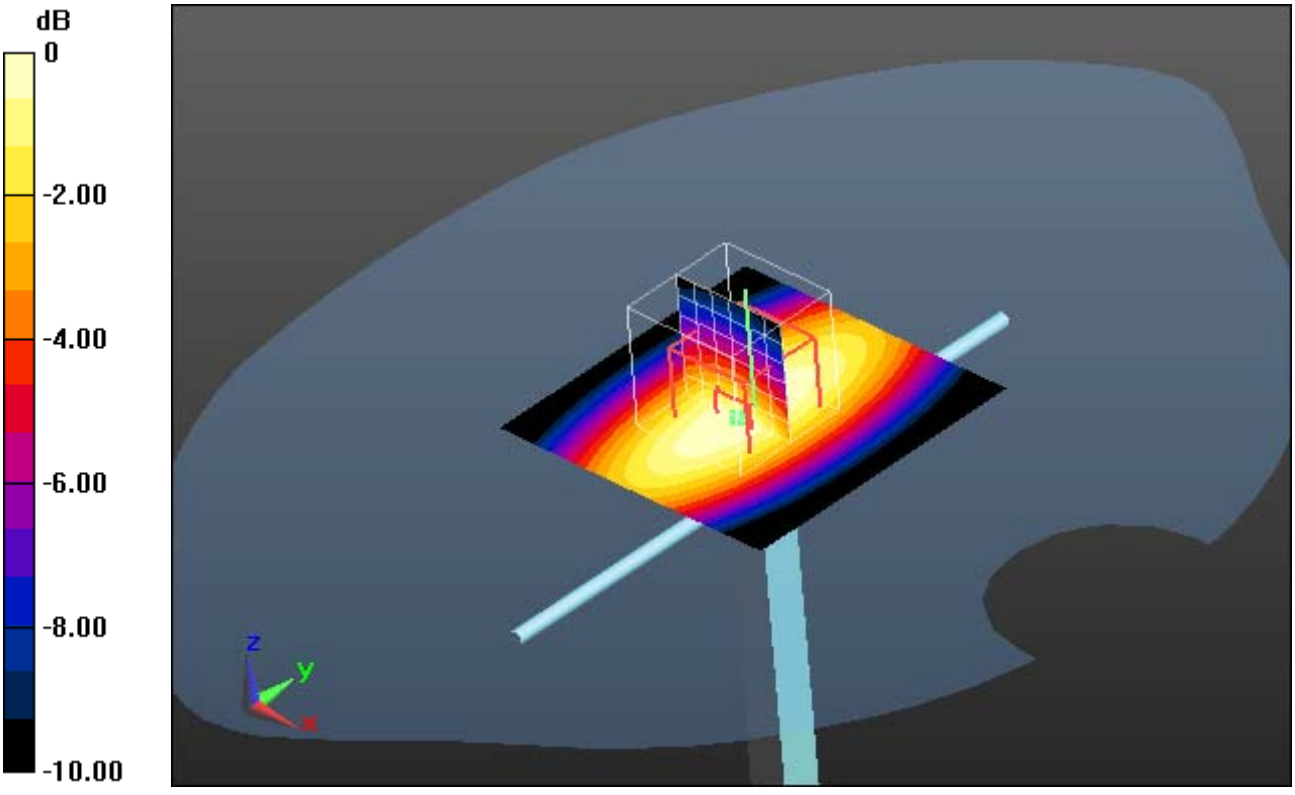
Communication System: CW; Communication System Band: D900 (900.0 MHz); Frequency: 900 MHz;
Communication System PAR: 0 dB; PMF: 1
Medium parameters used: f = 900 MHz; σ = 1.04 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(5.92, 5.92, 5.92); Calibrated: 24.08.2012;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

System Performance Check/d=10mm, Pin=1000 mW, dist=4.0mm/Area Scan (51x51x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 11.3 W/kg

System Performance Check/d=10mm, Pin=1000 mW, dist=4.0mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 108.8 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 15.546 mW/g
SAR(1 g) = 10.6 mW/g; SAR(10 g) = 6.88 mW/g
Maximum value of SAR (measured) = 11.5 W/kg



0 dB = 11.5 W/kg = 21.21 dB W/kg

Additional information:
ambient temperature: 22.3°C; liquid temperature: 20.7°C

Date/Time: 26.10.2012 13:55:40

SystemPerformanceCheck-D900 body 2012-10-26

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

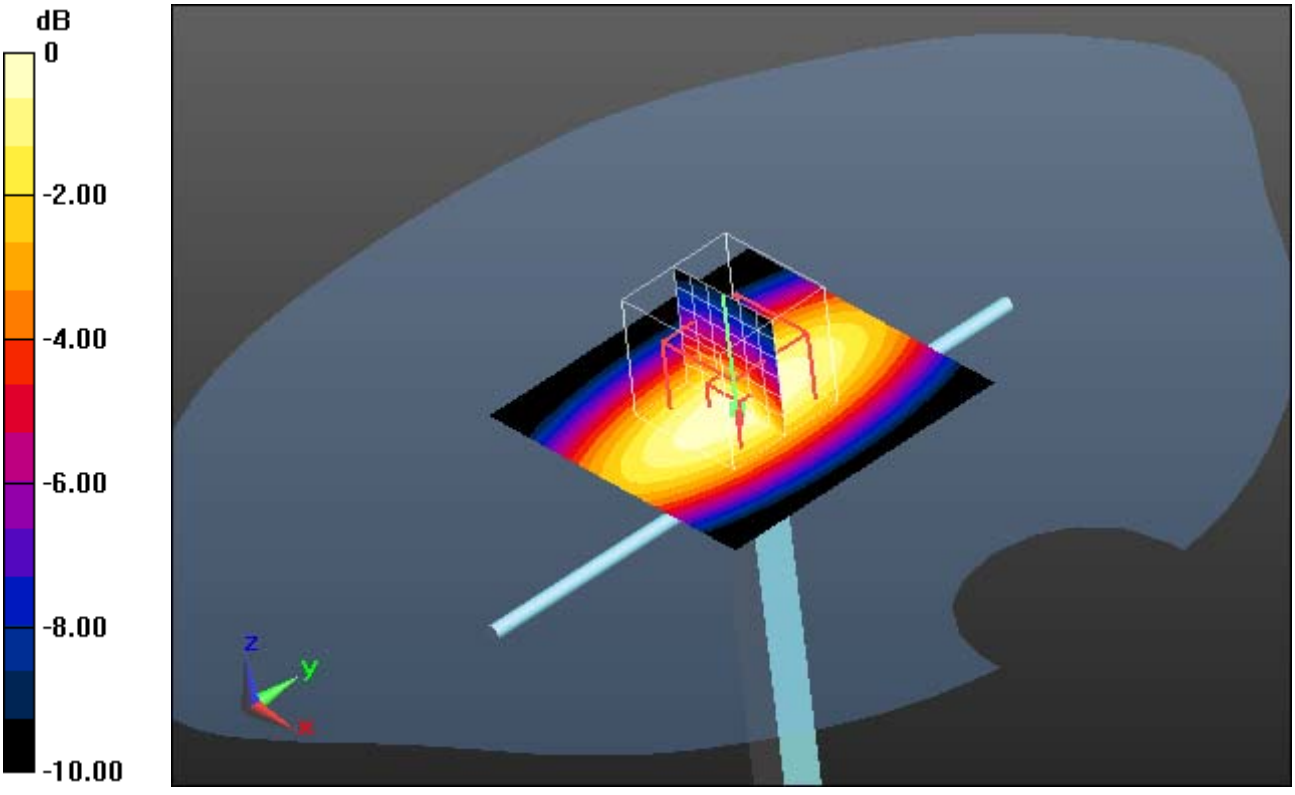
Communication System: CW; Communication System Band: D900 (900.0 MHz); Frequency: 900 MHz;
Communication System PAR: 0 dB; PMF: 1
Medium parameters used: f = 900 MHz; σ = 1.04 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(5.92, 5.92, 5.92); Calibrated: 24.08.2012;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

System Performance Check/d=10mm, Pin=1000 mW, dist=4.0mm/Area Scan (51x51x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 11.3 W/kg

System Performance Check/d=10mm, Pin=1000 mW, dist=4.0mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 109.4 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 15.758 mW/g
SAR(1 g) = 10.7 mW/g; SAR(10 g) = 6.93 mW/g
Maximum value of SAR (measured) = 11.6 W/kg



0 dB = 11.6 W/kg = 21.29 dB W/kg

Additional information:
ambient temperature: 21.1°C; liquid temperature: 20.2°C

Date/Time: 10.12.2012 13:32:29Date/Time: 10.12.2012 13:35:56

SystemPerformanceCheck-D900 body 2012-12-10

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

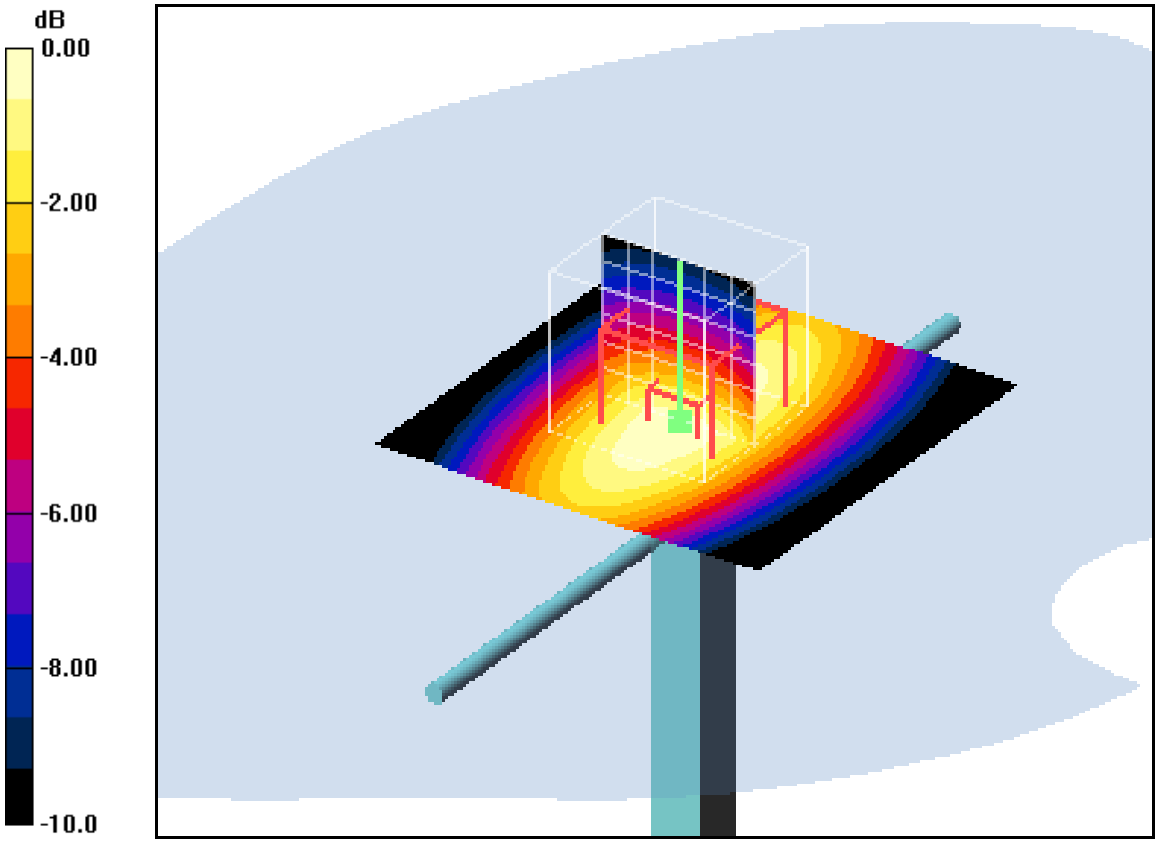
Communication System: CW; Frequency: 900 MHz; Duty Cycle: 1:1
Medium: M900 Medium parameters used: f = 900 MHz; σ = 1.04 mho/m; ε_r = 54.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(6.1, 6.1, 6.1); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

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

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

dx=5mm, dy=5mm, dz=5mm
Reference Value = 113.2 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 16.0 W/kg
SAR(1 g) = 11.2 mW/g; SAR(10 g) = 7.36 mW/g
Maximum value of SAR (measured) = 12.2 mW/g



0 dB = 12.2mW/g

Additional information:
ambient temperature: 23.4°C; liquid temperature: 22.0°C

Date/Time: 16.10.2012 09:31:32

SystemPerformanceCheck-D1900 head 2012-10-16

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

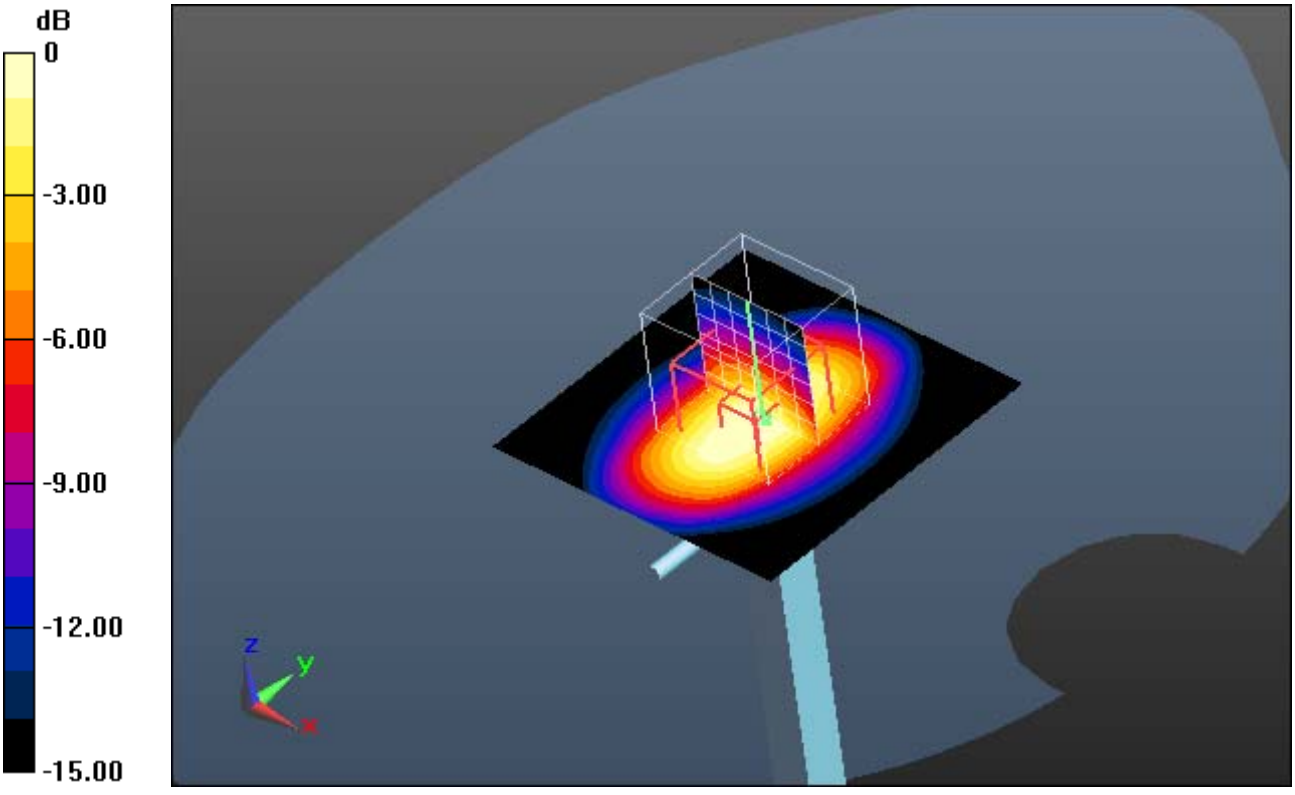
Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz;
Communication System PAR: 0 dB; PMF: 1
Medium parameters used: f = 1900 MHz; σ = 1.39 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(5.05, 5.05, 5.05); Calibrated: 24.08.2012;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

System Performance Check/d=10mm, Pin=1000 mW, dist=4.0mm/Area Scan (51x51x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 50.2 W/kg

System Performance Check/d=10mm, Pin=1000 mW, dist=4.0mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 184.3 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 63.902 mW/g
SAR(1 g) = 37.3 mW/g; SAR(10 g) = 19.7 mW/g
Maximum value of SAR (measured) = 42.2 W/kg



0 dB = 42.2 W/kg = 32.51 dB W/kg

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

Date/Time: 30.10.2012 13:52:49

SystemPerformanceCheck-D1900 body 2012-10-30

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

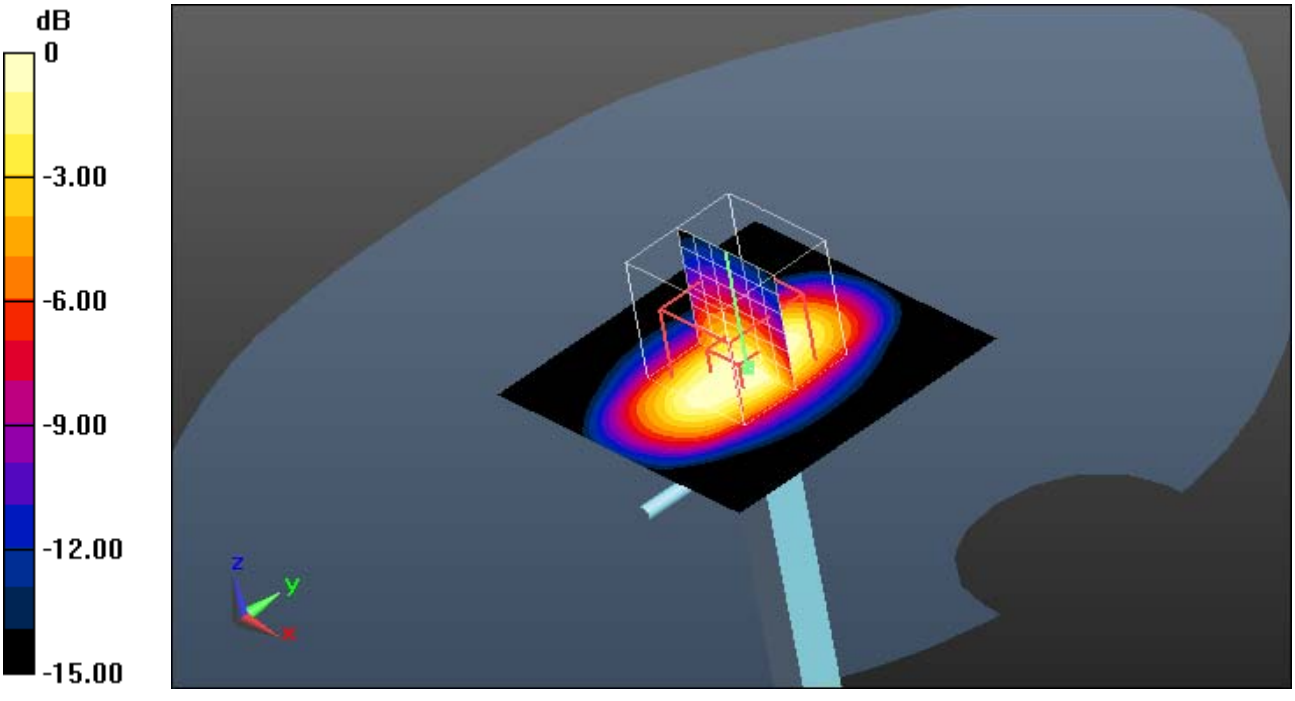
Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz;
Communication System PAR: 0 dB; PMF: 1
Medium parameters used: f = 1900 MHz; σ = 1.52 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.2, 4.2, 4.2); Calibrated: 24.08.2012;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

System Performance Check/d=10mm, Pin=1000 mW, dist=4.0mm/Area Scan (51x51x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 56.9 W/kg

System Performance Check/d=10mm, Pin=1000 mW, dist=4.0mm/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 183.9 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 64.786 mW/g
SAR(1 g) = 39.2 mW/g; SAR(10 g) = 20.9 mW/g
Maximum value of SAR (measured) = 44.5 W/kg



0 dB = 44.5 W/kg = 32.97 dB W/kg

Additional information:
ambient temperature: 21.1°C; liquid temperature: 20.1°C

Date/Time: 24.10.2012 16:54:01Date/Time: 24.10.2012 16:57:34

SystemPerformanceCheck-D2450 head 2012-10-24

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

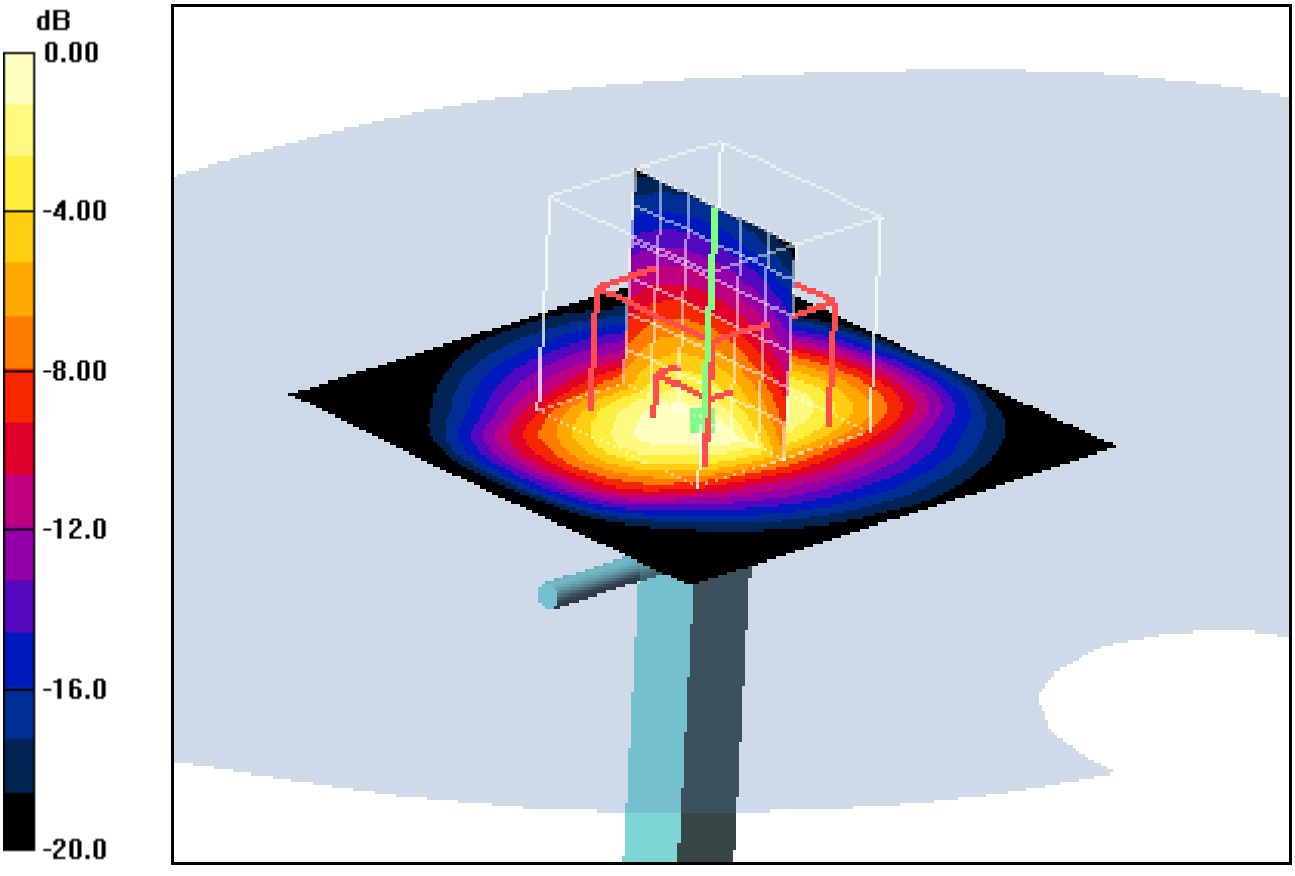
Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2450 MHz; σ = 1.85 mho/m; ε_r = 38.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

d=10mm, Pin=100mW/Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 83.6 mW/g

d=10mm, Pin=100mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 190.0 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 129.0 W/kg
SAR(1 g) = 53.1 mW/g; SAR(10 g) = 24.7 mW/g
Maximum value of SAR (measured) = 63.6 mW/g



0 dB = 63.6mW/g

Additional information:
ambient temperature: 21.5°C; liquid temperature: 21.3°C

Date/Time: 25.10.2012 08:40:42Date/Time: 25.10.2012 08:43:58

SystemPerformanceCheck-D2450 head 2012-10-25

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

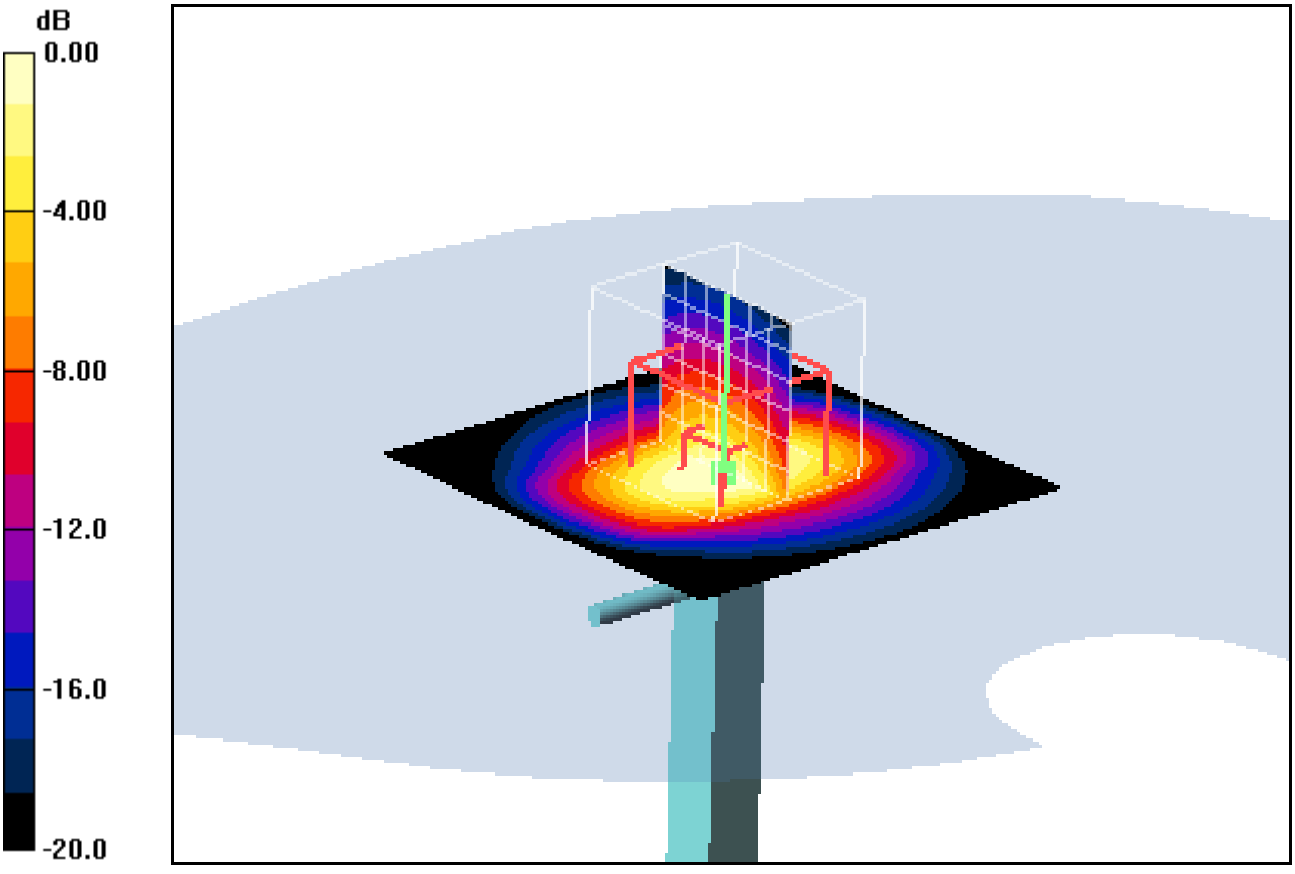
Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2450 MHz; σ = 1.85 mho/m; ε_r = 38.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

d=10mm, Pin=100mW/Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 83.4 mW/g

d=10mm, Pin=100mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 190.4 V/m; Power Drift = 0.035 dB
Peak SAR (extrapolated) = 127.8 W/kg
SAR(1 g) = 53.8 mW/g; SAR(10 g) = 25.1 mW/g
Maximum value of SAR (measured) = 63.6 mW/g



0 dB = 63.6mW/g

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

Date/Time: 26.10.2012 09:35:31Date/Time: 26.10.2012 09:38:46

SystemPerformanceCheck-D2450 body 2012-10-26

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

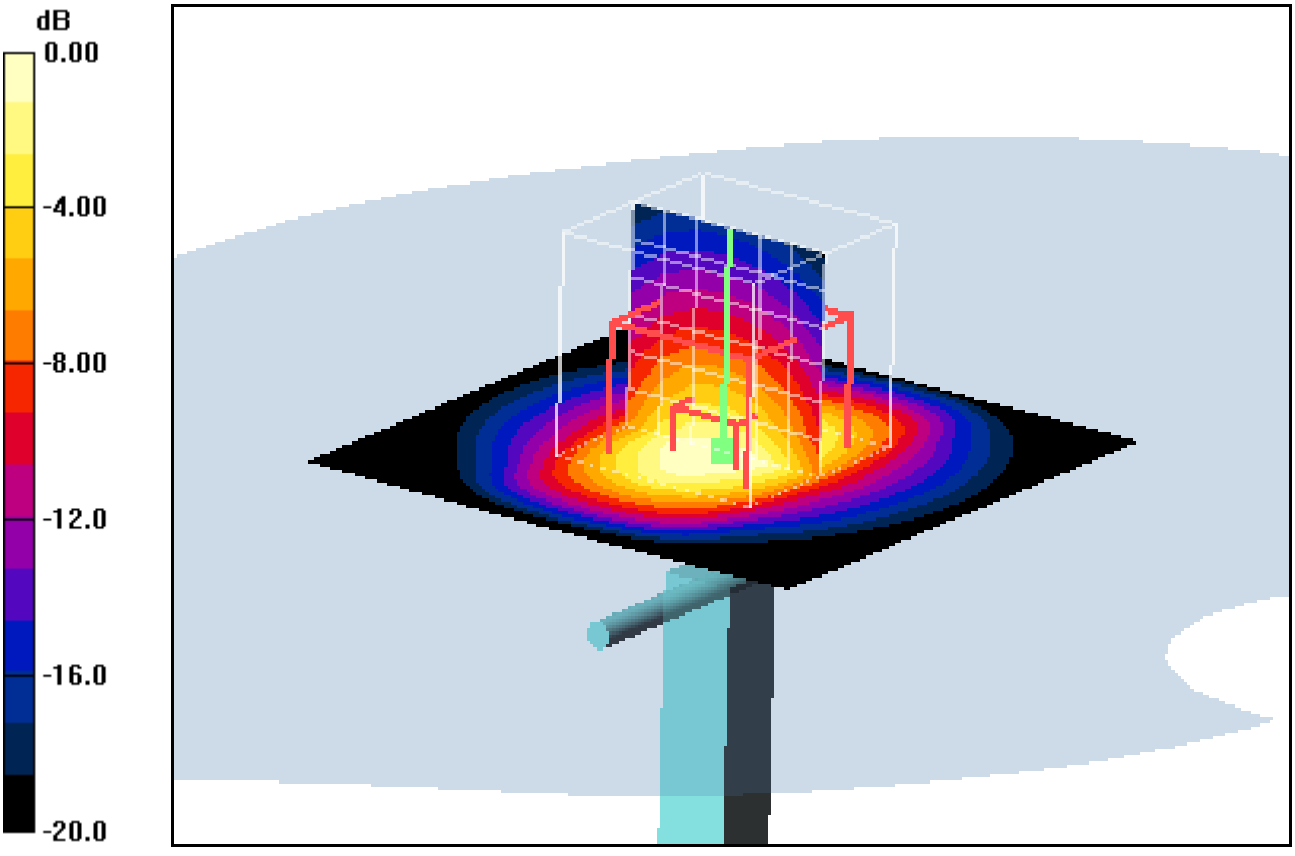
Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: M2450 Medium parameters used: f = 2450 MHz; σ = 2.01 mho/m; ε_r = 51.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(3.88, 3.88, 3.88); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

d=10mm, Pin=100mW/Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 81.5 mW/g

d=10mm, Pin=100mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 173.7 V/m; Power Drift = -0.047 dB
Peak SAR (extrapolated) = 138.8 W/kg
SAR(1 g) = 55.1 mW/g; SAR(10 g) = 25 mW/g
Maximum value of SAR (measured) = 60.4 mW/g



0 dB = 60.4mW/g

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

Date/Time: 30.10.2012 07:12:23

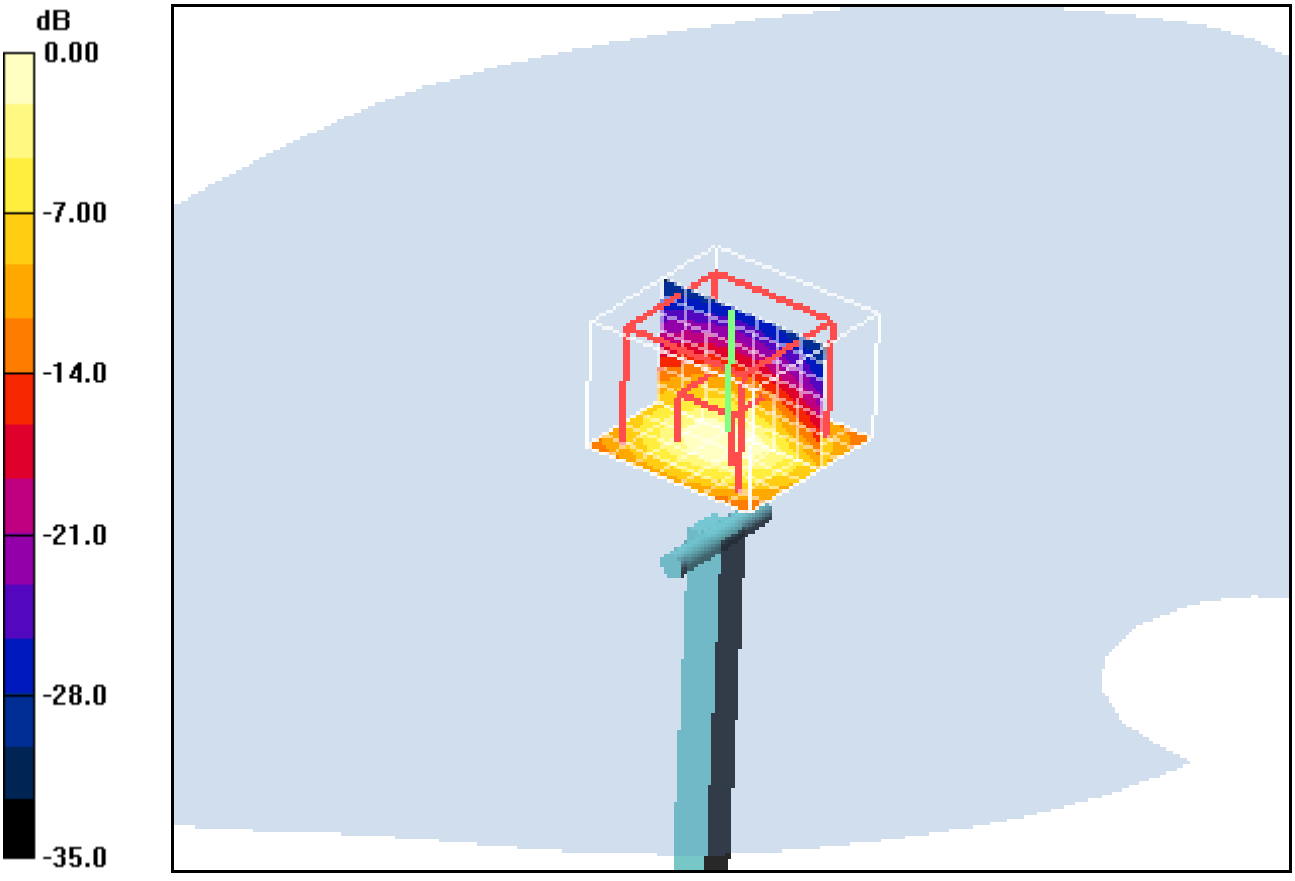
SystemPerformanceCheck-D5GHz-head 2012-10-30

DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1055

Communication System: CW; Frequency: 5200 MHz; Duty Cycle: 1:1
Medium: HSL5GHz Medium parameters used: f = 5200 MHz; σ = 4.52 mho/m; ε_r = 36.6; ρ = 1000 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: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm
Reference Value = 47.1 V/m; Power Drift = -0.042 dB
Peak SAR (extrapolated) = 32.5 W/kg
SAR(1 g) = 8.2 mW/g; SAR(10 g) = 2.33 mW/g
Maximum value of SAR (measured) = 16.1 mW/g



0 dB = 16.1mW/g

Additional information:
ambient temperature: 22.2°C; liquid temperature: 20.4°C

Date/Time: 30.10.2012 07:31:03

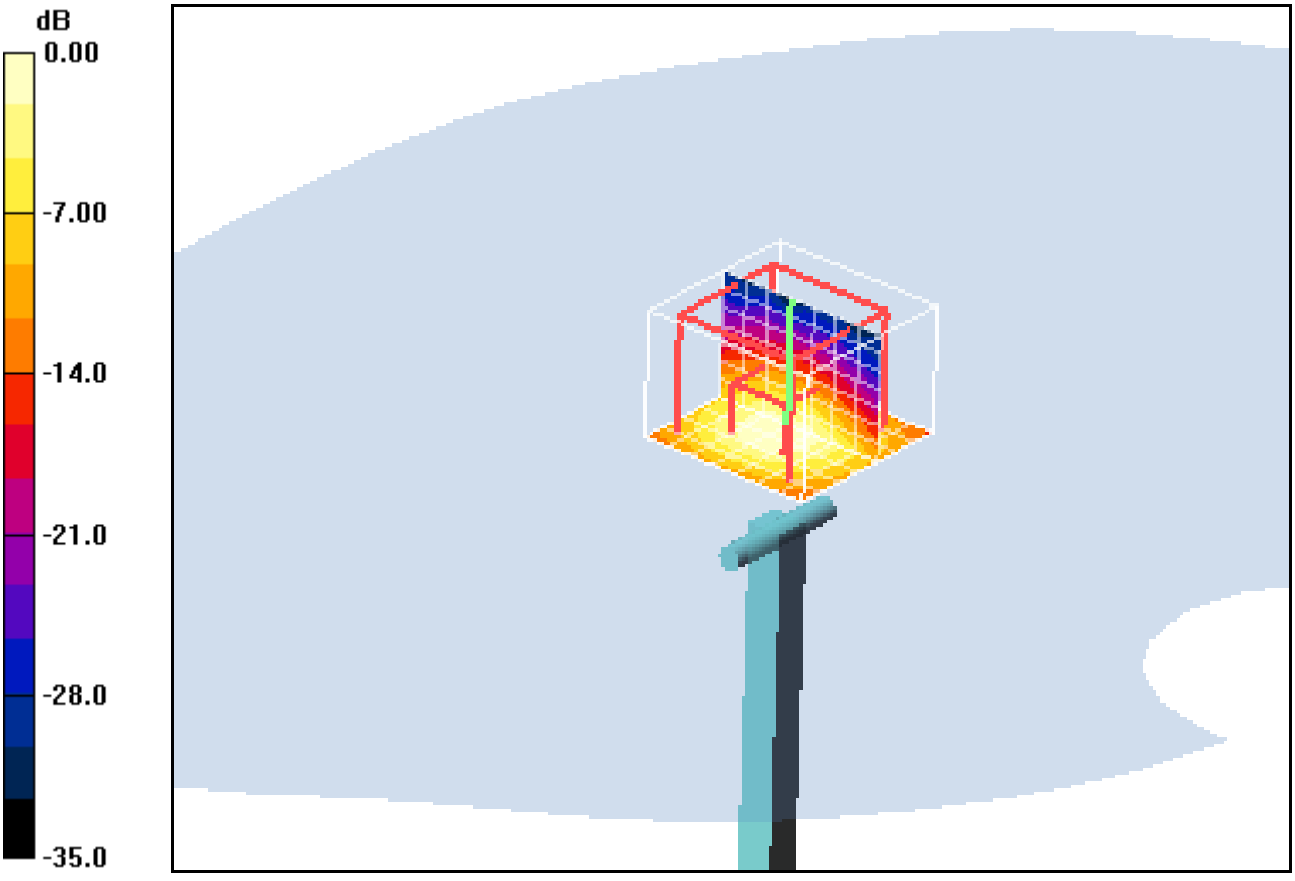
SystemPerformanceCheck-D5GHz-head 2012-10-30

DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1055

Communication System: CW; Frequency: 5500 MHz; Duty Cycle: 1:1
Medium: HSL5GHz Medium parameters used: f = 5500 MHz; σ = 4.82 mho/m; ε_r = 36.1; ρ = 1000 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: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm
Reference Value = 44.2 V/m; Power Drift = -0.015 dB
Peak SAR (extrapolated) = 32.3 W/kg
SAR(1 g) = 7.87 mW/g; SAR(10 g) = 2.23 mW/g
Maximum value of SAR (measured) = 15.8 mW/g



0 dB = 15.8mW/g

Additional information:
ambient temperature: 22.2°C; liquid temperature: 20.4°C

Date/Time: 30.10.2012 07:49:30

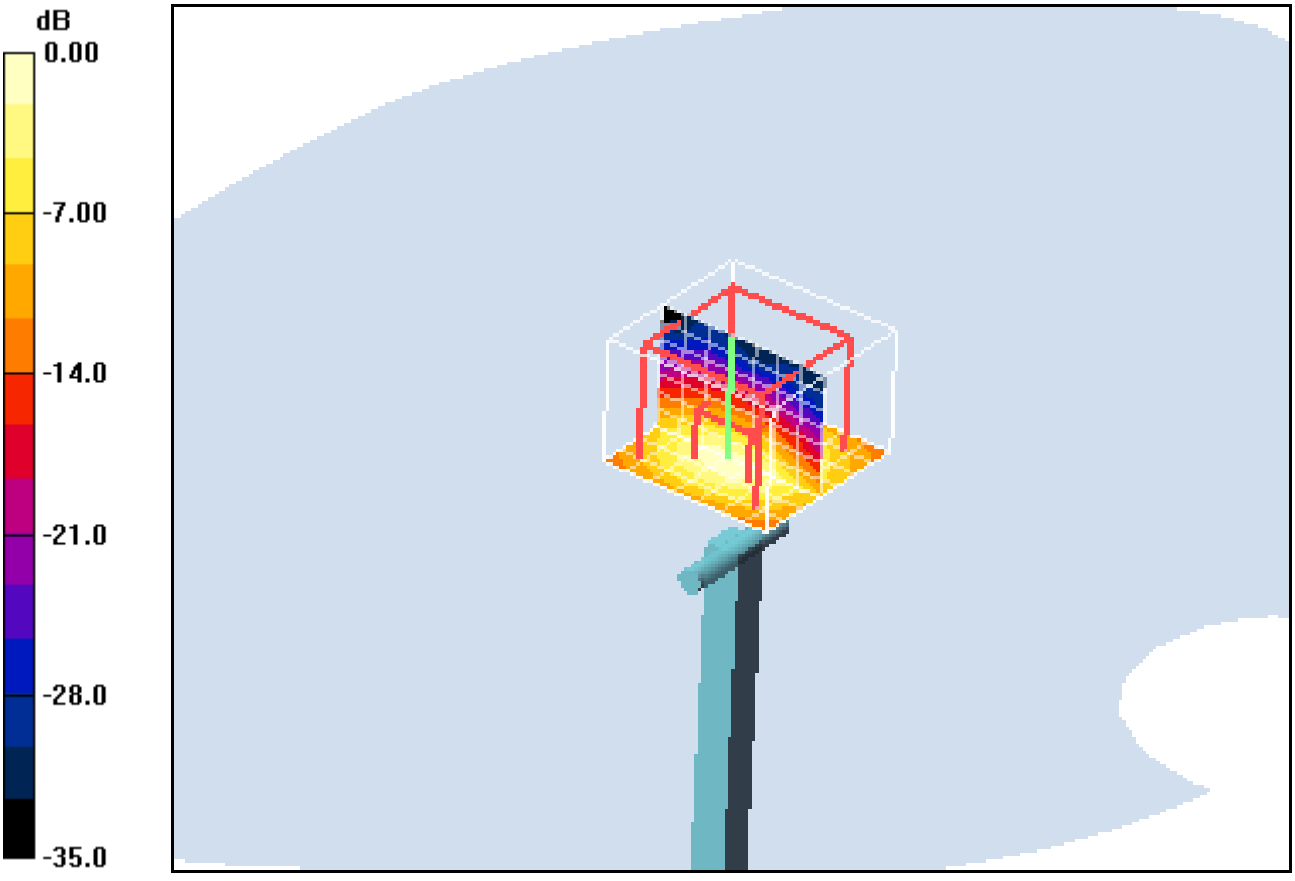
SystemPerformanceCheck-D5GHz-head 2012-10-30

DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1055

Communication System: CW; Frequency: 5800 MHz; Duty Cycle: 1:1
Medium: HSL5GHz Medium parameters used: f = 5800 MHz; σ = 5.12 mho/m; ε_r = 35.6; ρ = 1000 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: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm
Reference Value = 42.7 V/m; Power Drift = -0.050 dB
Peak SAR (extrapolated) = 32.4 W/kg
SAR(1 g) = 7.67 mW/g; SAR(10 g) = 2.16 mW/g
Maximum value of SAR (measured) = 15.3 mW/g



0 dB = 15.3mW/g

Additional information:
ambient temperature: 22.2°C; liquid temperature: 20.4°C

Annex B: DASY measurement results

Annex B.1: GSM 850MHz

Date/Time: 19.10.2012 10:28:43

IEEE1528-GSM850 head

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

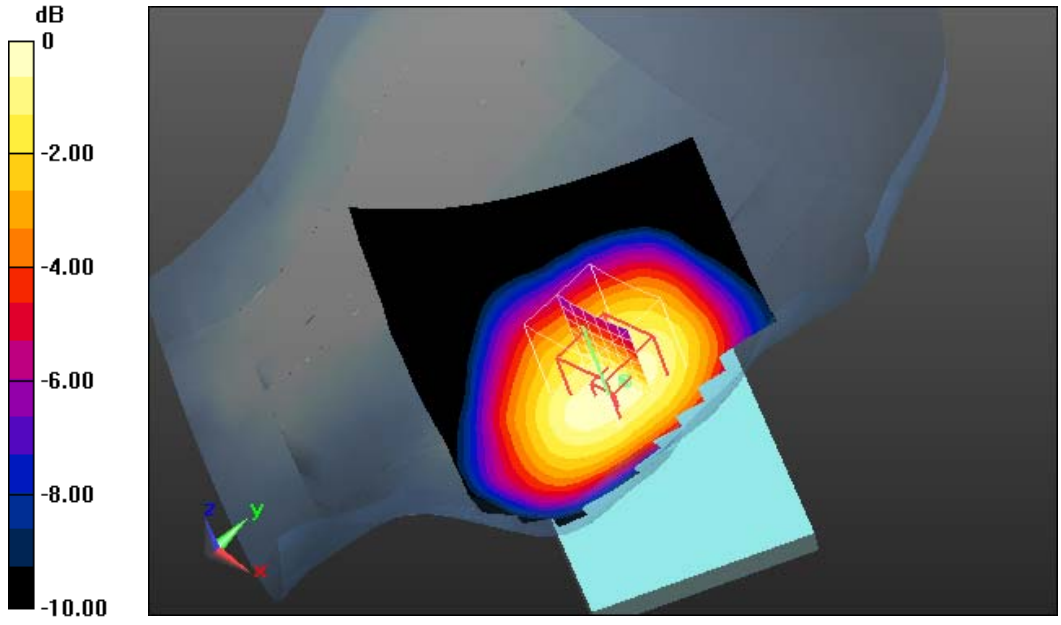
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 824.2 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 824.2 MHz; σ = 0.88 mho/m; ε_r = 41.9; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.1(838); SEMCAD X 14.6.5(6469)

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

Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.561 mW/g

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.454 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.667 mW/g
SAR(1 g) = 0.539 mW/g; SAR(10 g) = 0.413 mW/g
Maximum value of SAR (measured) = 0.572 mW/g



0 dB = 0.572 mW/g = -4.85 dB mW/g

Additional information:
ambient temperature: 23.5°C; liquid temperature: 21.6°C

Date/Time: 19.10.2012 10:58:17

IEEE1528-GSM850 head

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

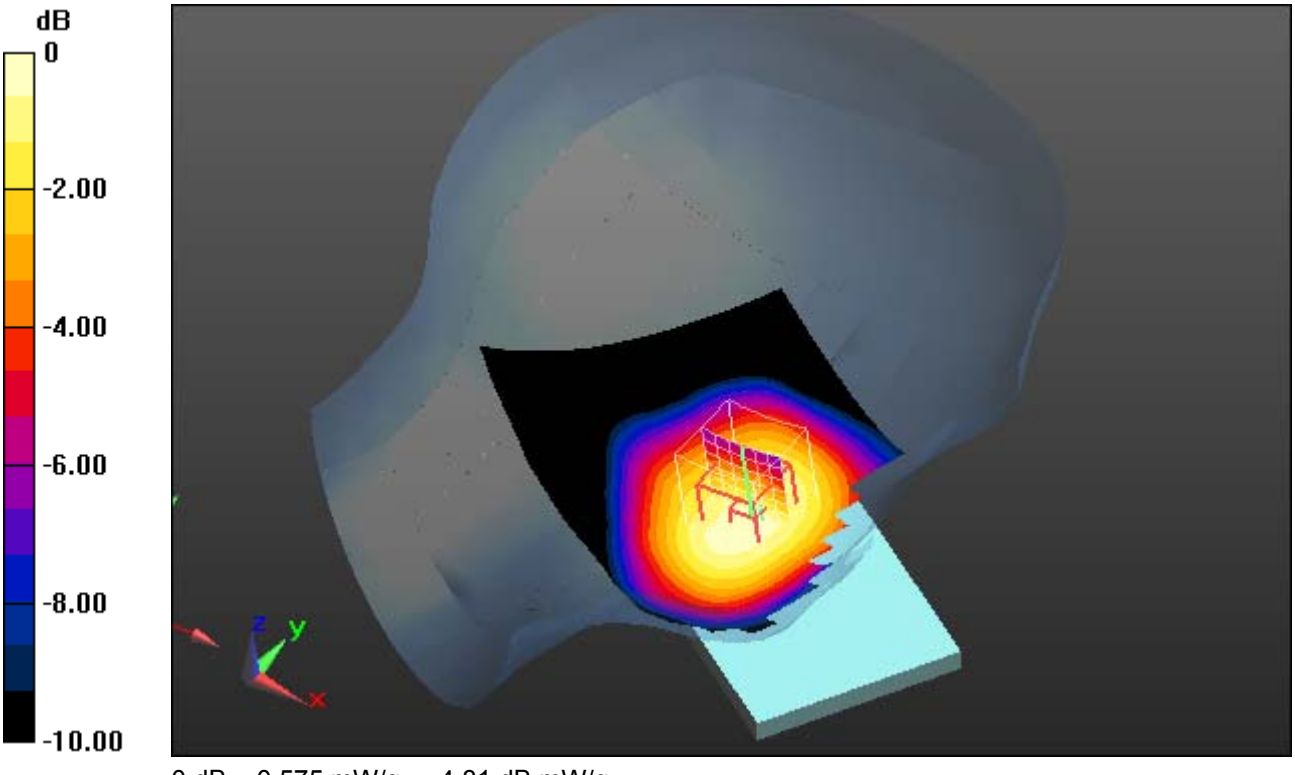
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 836.6 MHz; σ = 0.9 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.1(838); SEMCAD X 14.6.5(6469)

Left-Hand-Side HSL/Touch Position - Mid/Area Scan (111x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.573 mW/g

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.144 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.677 mW/g
SAR(1 g) = 0.536 mW/g; SAR(10 g) = 0.410 mW/g
Maximum value of SAR (measured) = 0.575 mW/g



0 dB = 0.575 mW/g = -4.81 dB mW/g

Additional information:
ambient temperature: 23.5°C; liquid temperature: 21.6°C

Date/Time: 19.10.2012 11:18:10

IEEE1528-GSM850 head

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

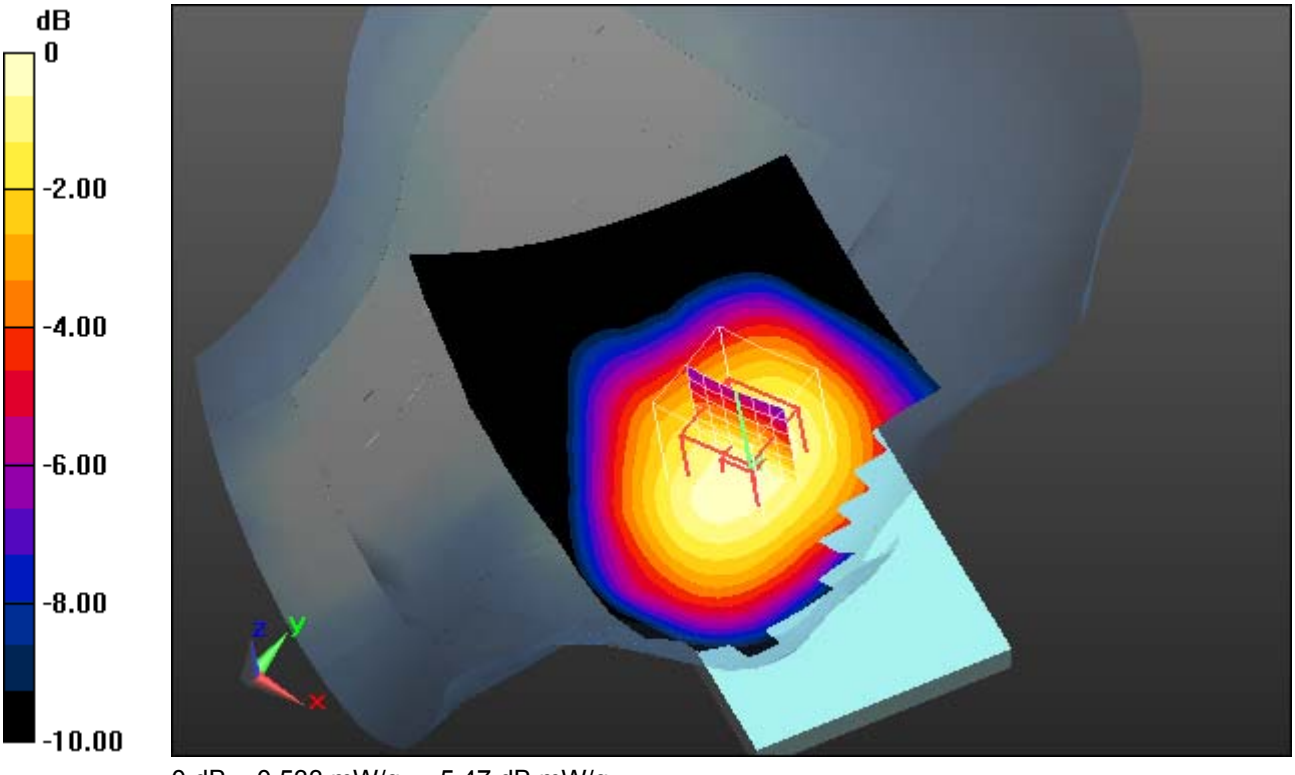
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 848.6 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 848.8 MHz; σ = 0.91 mho/m; ε_r = 41.7; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.1(838); SEMCAD X 14.6.5(6469)

Left-Hand-Side HSL/Touch Position - Hi/Area Scan (111x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.531 mW/g

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 25.069 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.624 mW/g
SAR(1 g) = 0.499 mW/g; SAR(10 g) = 0.381 mW/g
Maximum value of SAR (measured) = 0.533 mW/g



0 dB = 0.533 mW/g = -5.47 dB mW/g

Additional information:
ambient temperature: 23.5°C; liquid temperature: 21.6°C

Date/Time: 19.10.2012 12:24:36

IEEE1528-GSM850 head

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

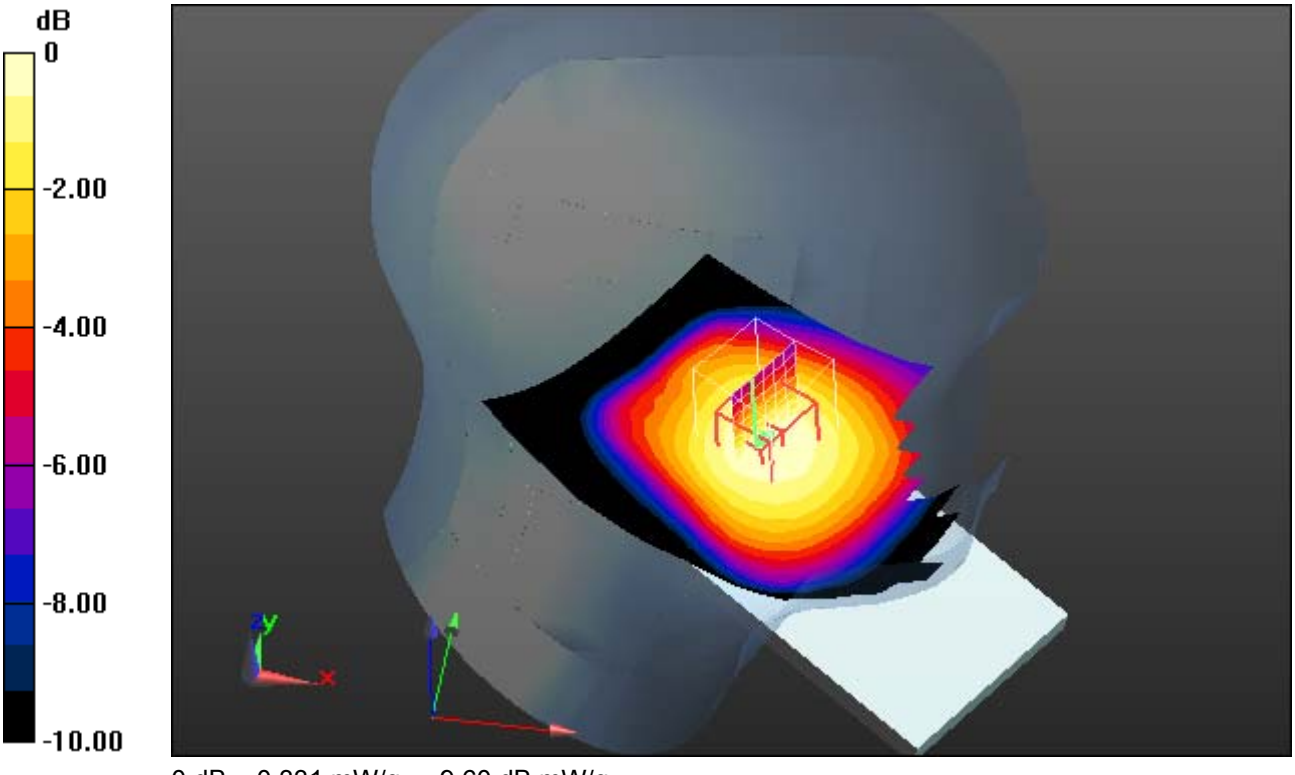
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 824.2 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 824.2 MHz; σ = 0.88 mho/m; ε_r = 41.9; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.1(838); SEMCAD X 14.6.5(6469)

Left-Hand-Side HSL/Tilt Position - Low/Area Scan (111x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.324 mW/g

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.781 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.378 mW/g
SAR(1 g) = 0.311 mW/g; SAR(10 g) = 0.242 mW/g
Maximum value of SAR (measured) = 0.331 mW/g



0 dB = 0.331 mW/g = -9.60 dB mW/g

Additional information:
ambient temperature: 23.5°C; liquid temperature: 21.6°C

Date/Time: 19.10.2012 12:06:06

IEEE1528-GSM850 head

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

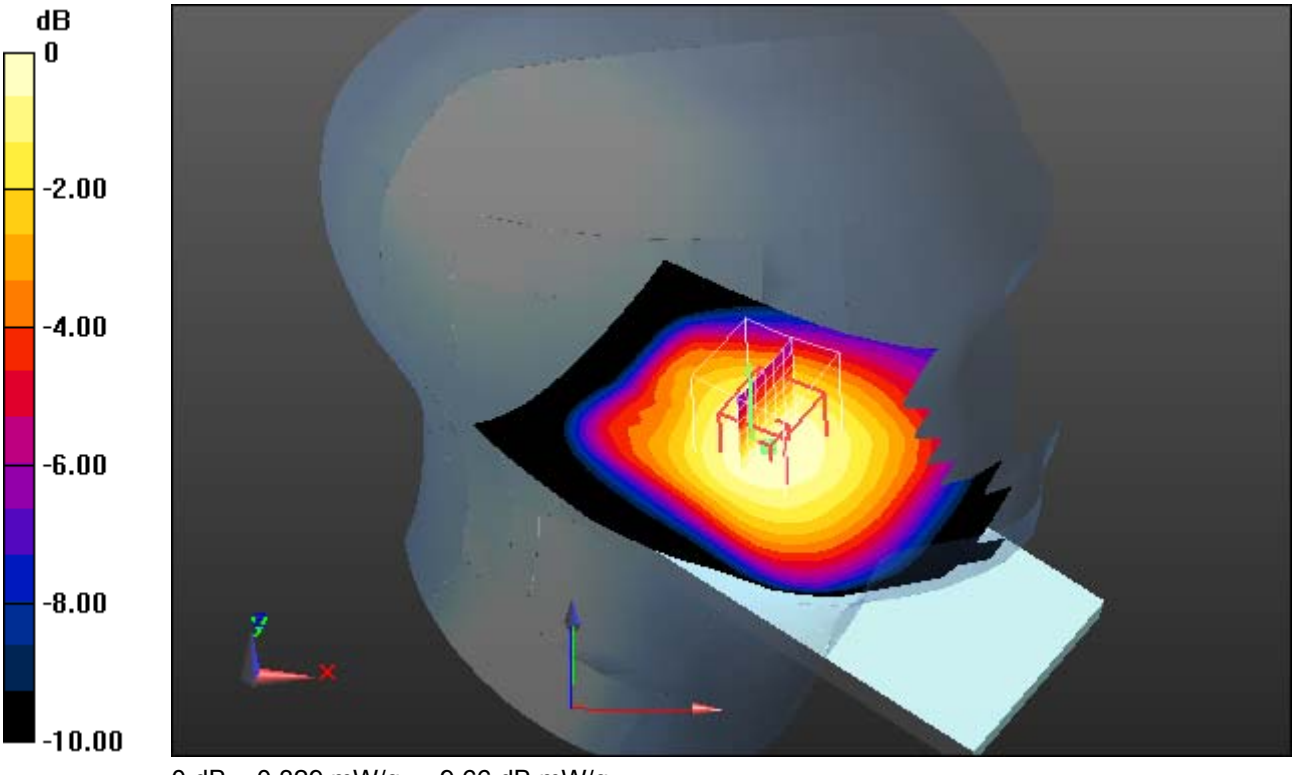
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 836.6 MHz; σ = 0.9 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.1(838); SEMCAD X 14.6.5(6469)

Left-Hand-Side HSL/Tilt Position - Mid/Area Scan (111x161x1): Measurement grid: dx=10mm, dy=10mm

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

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.590 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.386 mW/g
SAR(1 g) = 0.312 mW/g; SAR(10 g) = 0.242 mW/g
Maximum value of SAR (measured) = 0.329 mW/g



0 dB = 0.329 mW/g = -9.66 dB mW/g

Additional information:
ambient temperature: 23.5°C; liquid temperature: 21.6°C

Date/Time: 19.10.2012 11:40:31

IEEE1528-GSM850 head

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

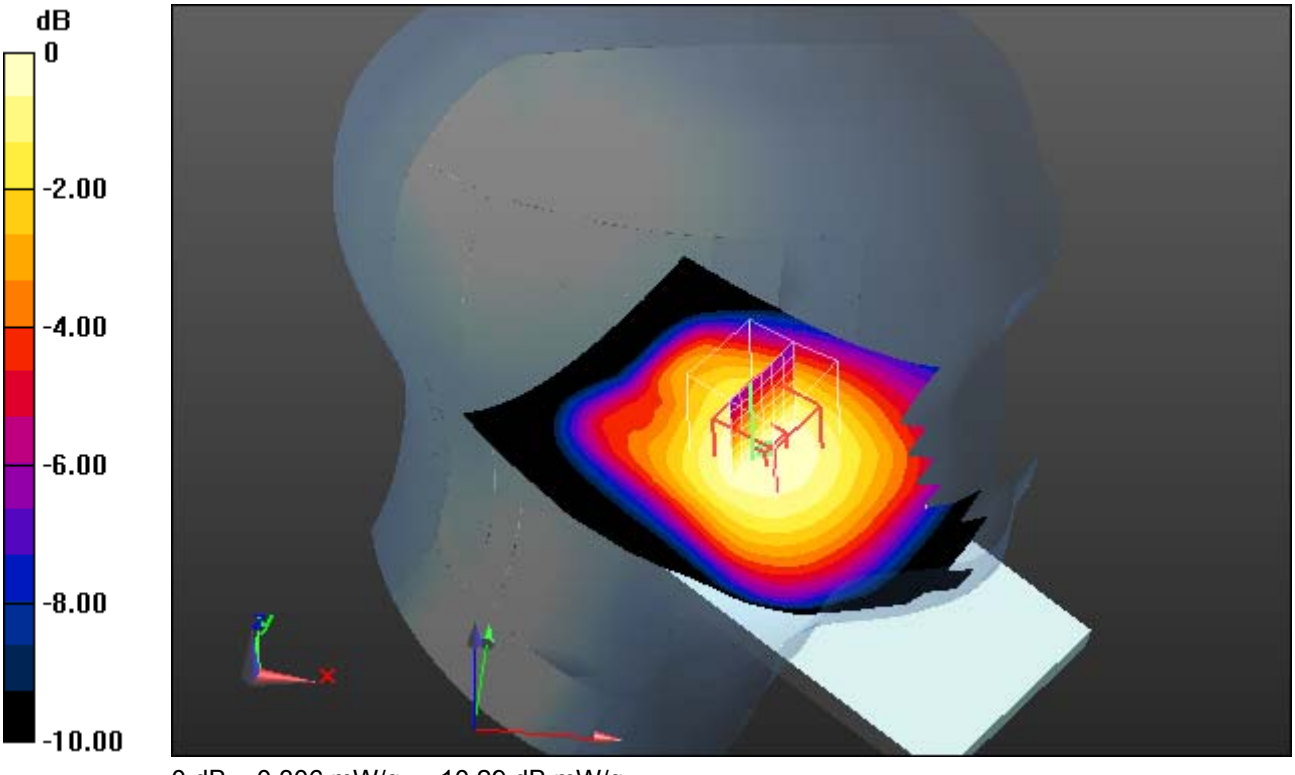
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 848.6 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 848.8 MHz; σ = 0.91 mho/m; ε_r = 41.7; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.1(838); SEMCAD X 14.6.5(6469)

Left-Hand-Side HSL/Tilt Position - Hi/Area Scan (111x161x1): Measurement grid: dx=10mm, dy=10mm

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

Left-Hand-Side HSL/Tilt Position - Hi/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.952 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.357 mW/g
SAR(1 g) = 0.292 mW/g; SAR(10 g) = 0.225 mW/g
Maximum value of SAR (measured) = 0.306 mW/g



0 dB = 0.306 mW/g = -10.29 dB mW/g

Additional information:
ambient temperature: 23.5°C; liquid temperature: 21.6°C

Date/Time: 19.10.2012 12:55:03

IEEE1528-GSM850 head

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

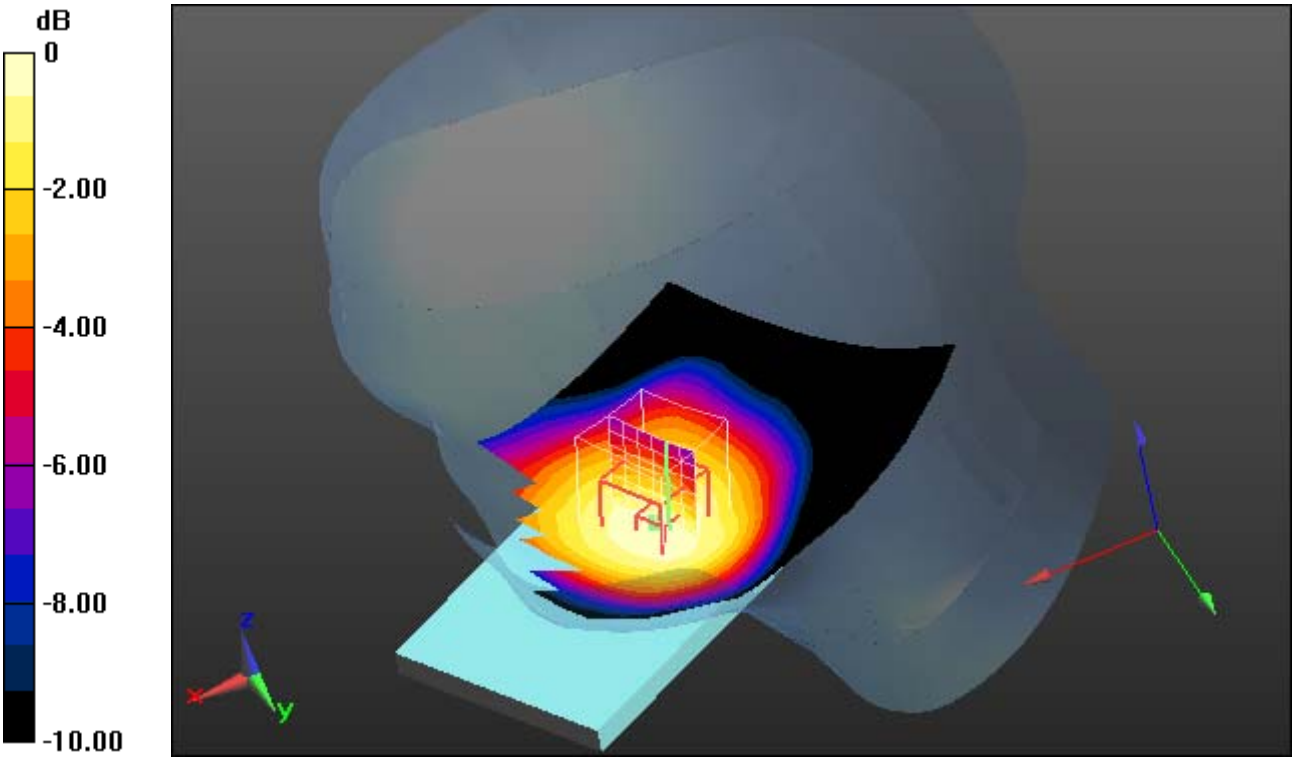
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 824.2 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 824.2 MHz; σ = 0.88 mho/m; ε_r = 41.9; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.1(838); SEMCAD X 14.6.5(6469)

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

Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.508 mW/g

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.514 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.607 mW/g
SAR(1 g) = 0.489 mW/g; SAR(10 g) = 0.376 mW/g
Maximum value of SAR (measured) = 0.516 mW/g



0 dB = 0.516 mW/g = -5.75 dB mW/g

Additional information:
ambient temperature: 23.5°C; liquid temperature: 21.6°C

Date/Time: 19.10.2012 13:24:49

IEEE1528-GSM850 head

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

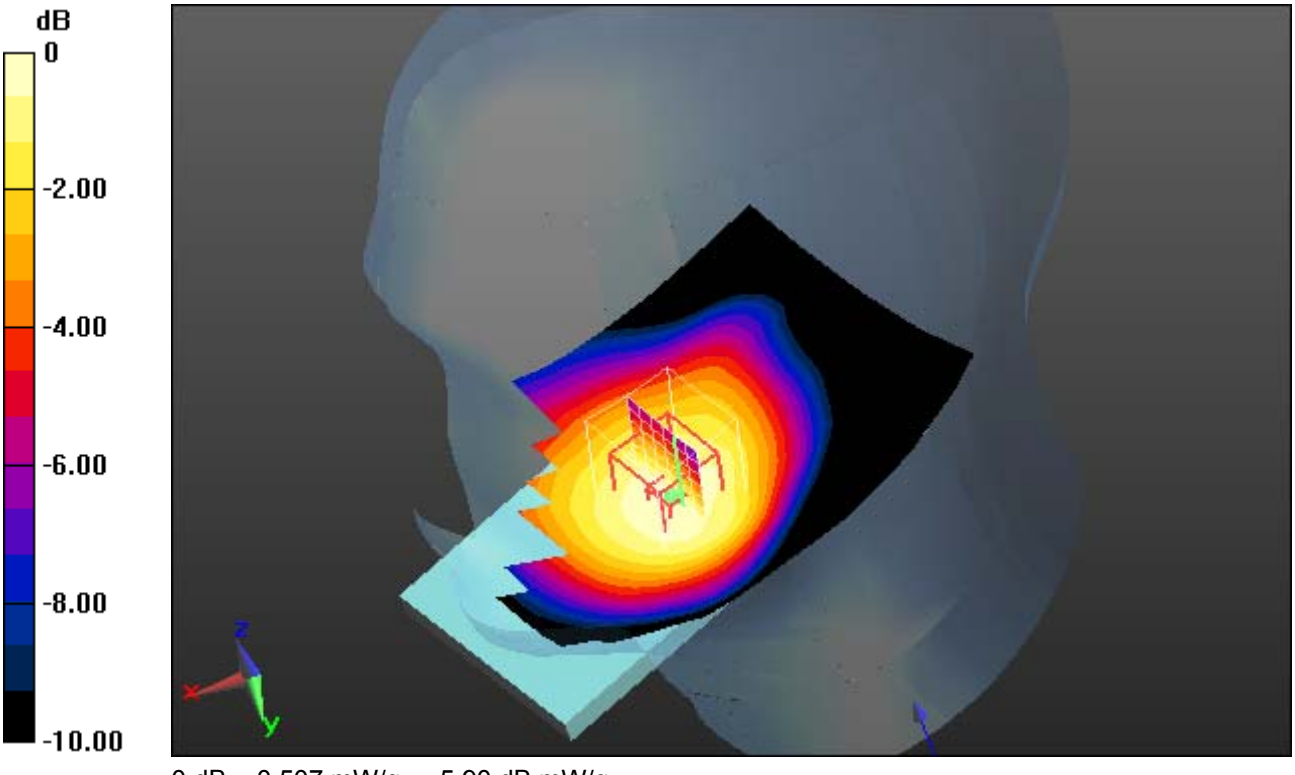
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 836.6 MHz; σ = 0.9 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.1(838); SEMCAD X 14.6.5(6469)

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

Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.506 mW/g

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.490 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.606 mW/g
SAR(1 g) = 0.482 mW/g; SAR(10 g) = 0.371 mW/g
Maximum value of SAR (measured) = 0.507 mW/g



0 dB = 0.507 mW/g = -5.90 dB mW/g

Additional information:
ambient temperature: 23.5°C; liquid temperature: 21.6°C

Date/Time: 19.10.2012 13:44:42

IEEE1528-GSM850 head

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

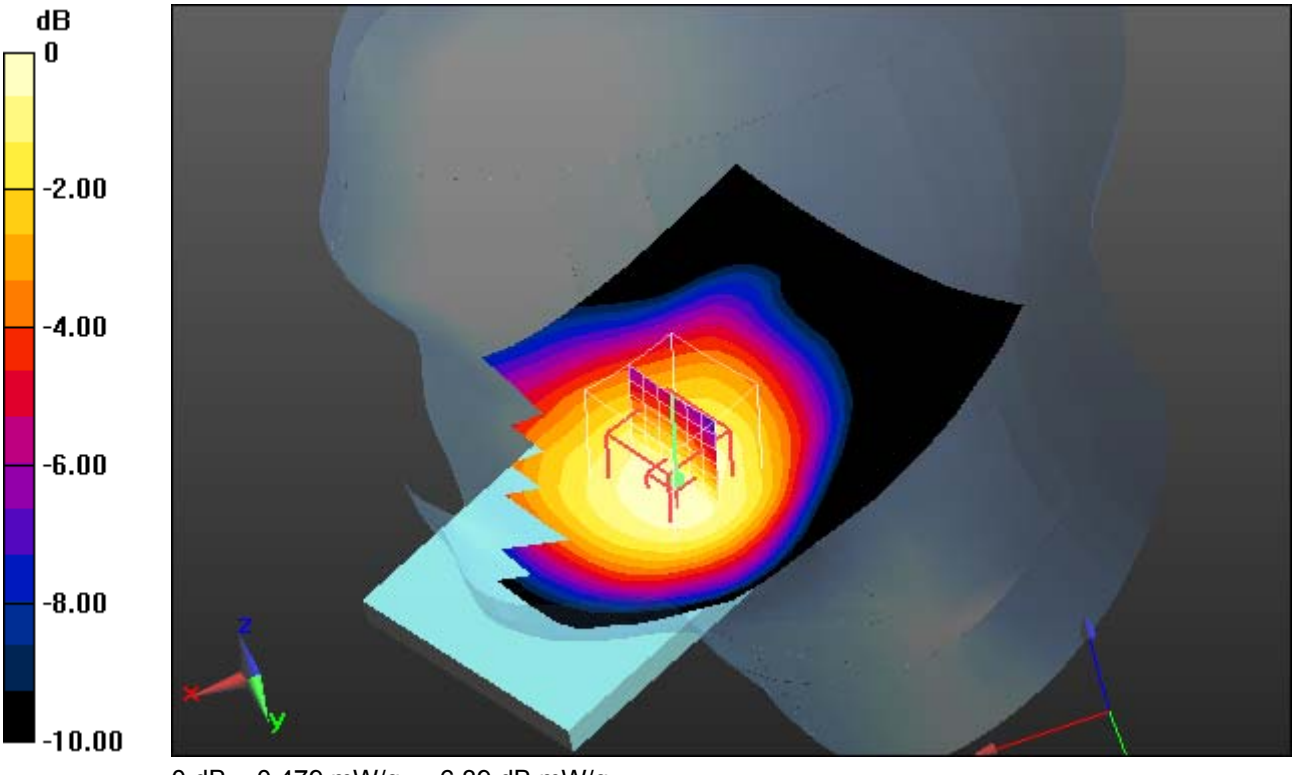
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 848.6 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 848.8 MHz; σ = 0.91 mho/m; ε_r = 41.7; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.1(838); SEMCAD X 14.6.5(6469)

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

Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.474 mW/g

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.594 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.565 mW/g
SAR(1 g) = 0.453 mW/g; SAR(10 g) = 0.348 mW/g
Maximum value of SAR (measured) = 0.479 mW/g



0 dB = 0.479 mW/g = -6.39 dB mW/g

Additional information:
ambient temperature: 23.5°C; liquid temperature: 21.6°C

Date/Time: 19.10.2012 14:08:21

IEEE1528-GSM850 head

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

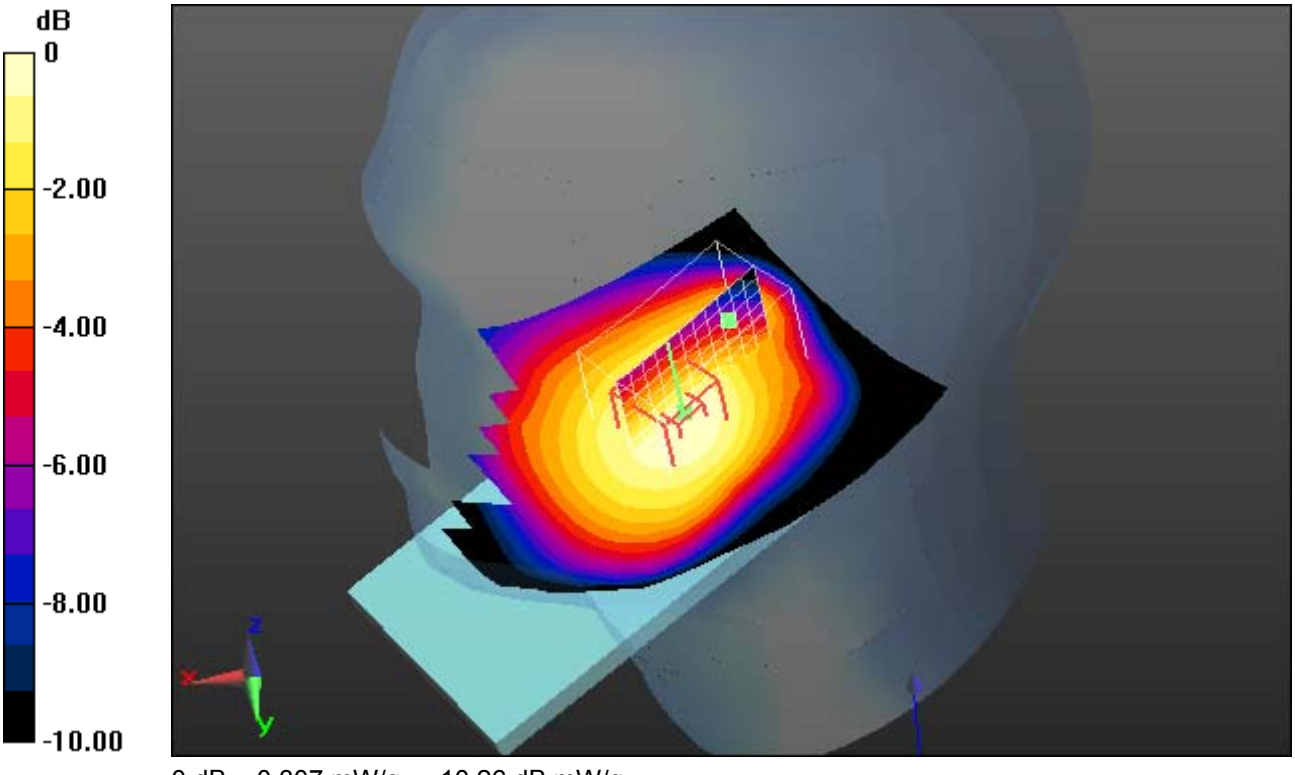
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 824.2 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 824.2 MHz; σ = 0.88 mho/m; ε_r = 41.9; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.1(838); SEMCAD X 14.6.5(6469)

Right-Hand-Side HSL/Tilt Position - Low/Area Scan (111x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.307 mW/g

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.238 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.356 mW/g
SAR(1 g) = 0.292 mW/g; SAR(10 g) = 0.225 mW/g
Maximum value of SAR (measured) = 0.307 mW/g



0 dB = 0.307 mW/g = -10.26 dB mW/g

Additional information:
ambient temperature: 23.5°C; liquid temperature: 21.6°C

Date/Time: 19.10.2012 14:41:01

IEEE1528-GSM850 head

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

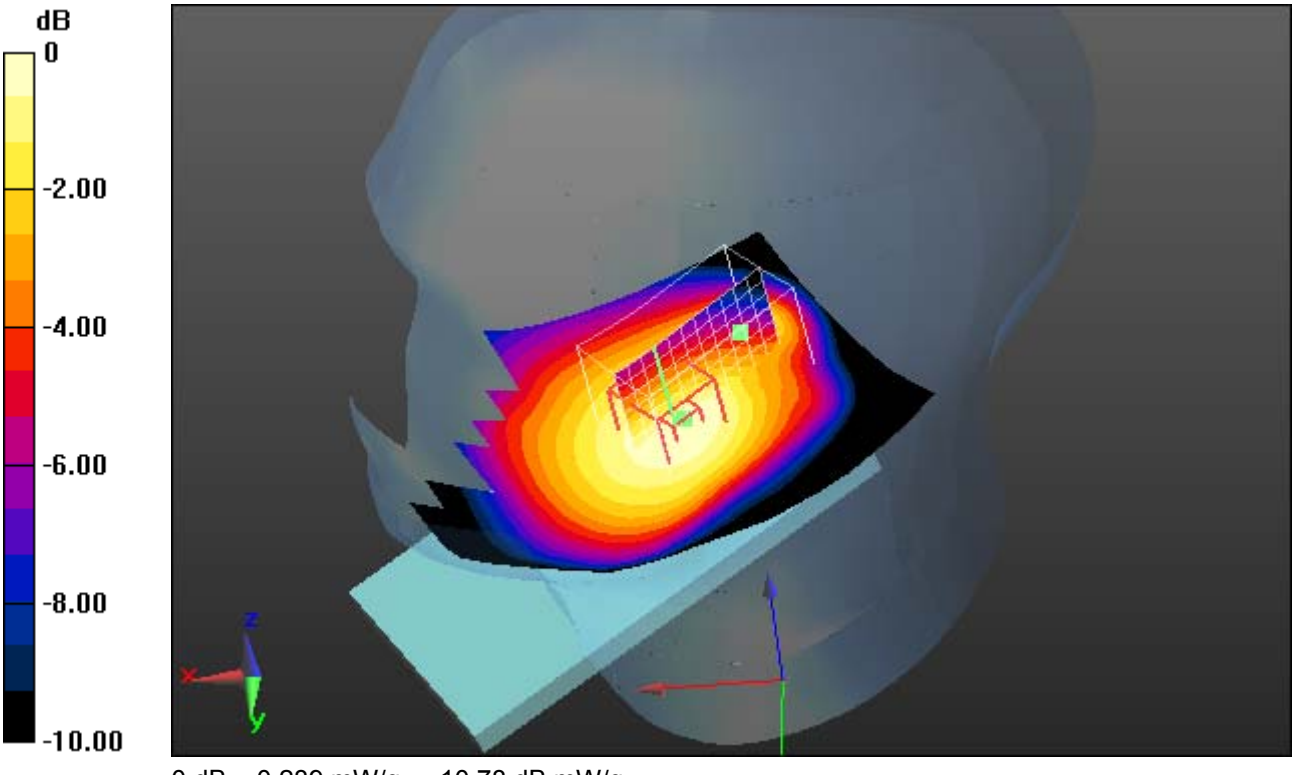
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 836.6 MHz; σ = 0.9 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.1(838); SEMCAD X 14.6.5(6469)

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

Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.288 mW/g

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.411 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.339 mW/g
SAR(1 g) = 0.273 mW/g; SAR(10 g) = 0.209 mW/g
Maximum value of SAR (measured) = 0.289 mW/g



0 dB = 0.289 mW/g = -10.78 dB mW/g

Additional information:
ambient temperature: 23.5°C; liquid temperature: 21.6°C

Date/Time: 19.10.2012 15:10:32

IEEE1528-GSM850 head

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

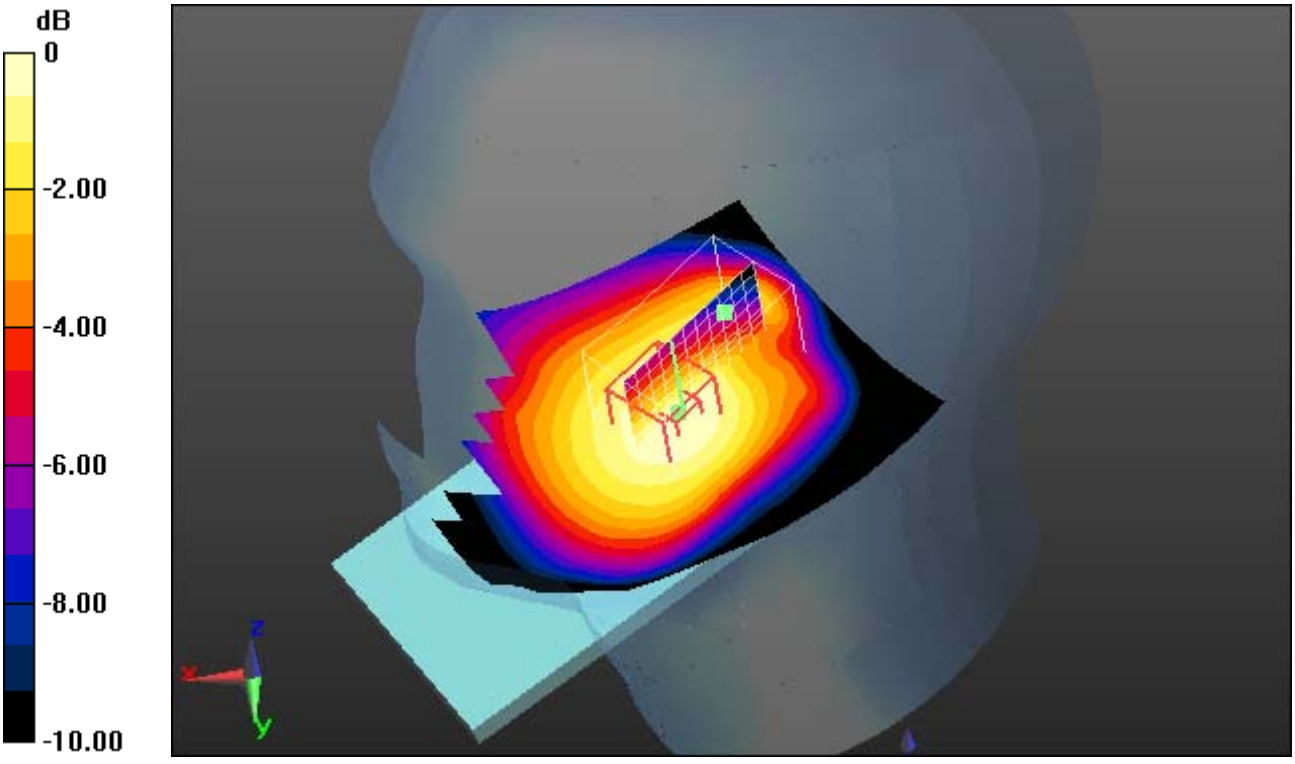
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 848.6 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 848.8 MHz; σ = 0.91 mho/m; ε_r = 41.7; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.1(838); SEMCAD X 14.6.5(6469)

Right-Hand-Side HSL/Tilt Position - High/Area Scan (111x161x1): Measurement grid: dx=10mm, dy=10mm

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

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.067 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 0.296 mW/g
SAR(1 g) = 0.237 mW/g; SAR(10 g) = 0.182 mW/g
Maximum value of SAR (measured) = 0.249 mW/g



0 dB = 0.249 mW/g = -12.08 dB mW/g

Additional information:
ambient temperature: 23.5°C; liquid temperature: 21.6°C

Date/Time: 26.10.2012 09:30:29

OET65_EN62209-2-GSM850 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

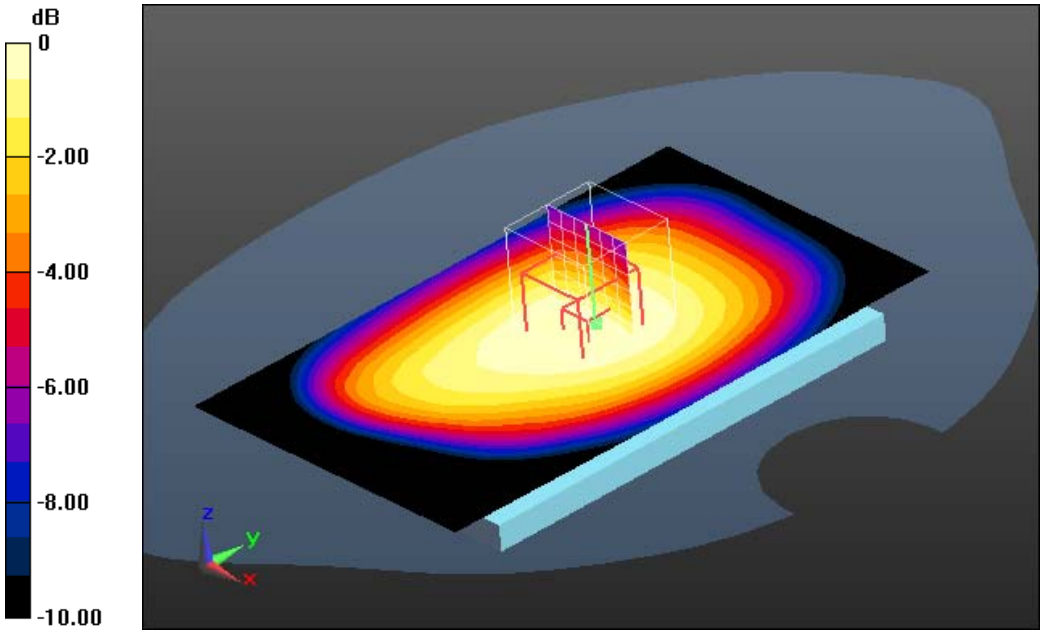
Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 824.2 MHz; Communication System PAR: 3.55 dB; PMF: 1.50487
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.96 mho/m; ε_r = 54.499; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6, 6, 6); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=40.6, b=99.4, c=23.0, calibrated PAR=3.6 dB / Y: a=33.7, b=99.5, c=23.1, calibrated PAR=3.6 dB / Z: a=31.5, b=99.5, c=23.6, calibrated PAR=3.6 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Front Position - Low/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.838 W/kg

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

Reference Value = 30.570 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.973 mW/g
SAR(1 g) = 0.798 mW/g; SAR(10 g) = 0.622 mW/g
Maximum value of SAR (measured) = 0.830 W/kg



0 dB = 0.830 W/kg = -1.62 dB W/kg

Additional information:
position or distance of DUT to SAM: 10 mm
ambient temperature: 21.1°C; liquid temperature: 20.2°C

Date/Time: 26.10.2012 09:51:09

OET65_EN62209-2-GSM850 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

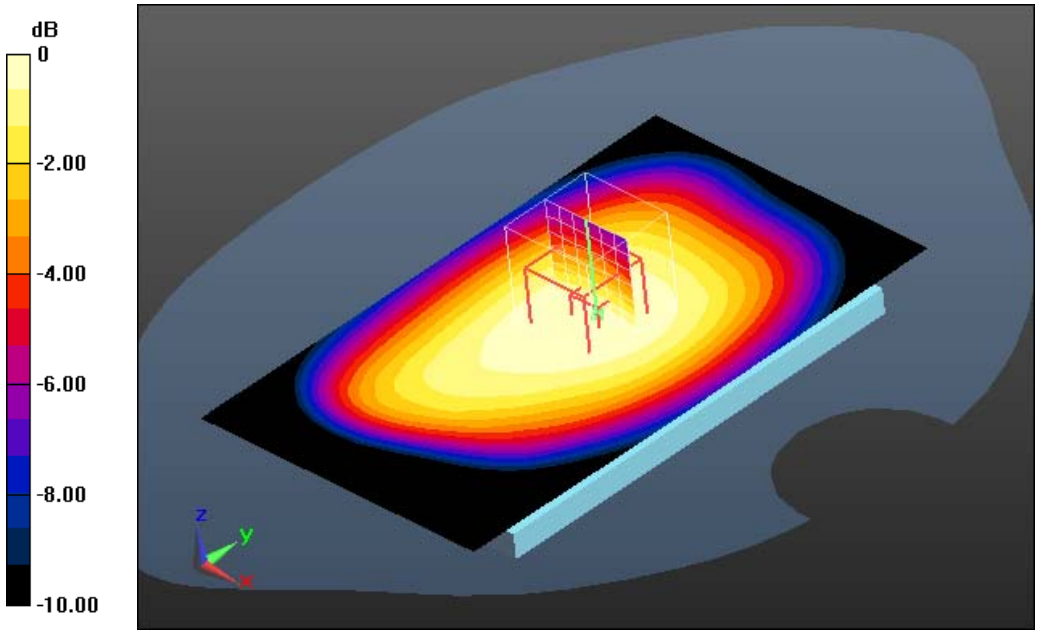
Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 3.55 dB; PMF: 1.50487
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.399; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6, 6, 6); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=40.6, b=99.4, c=23.0, calibrated PAR=3.6 dB / Y: a=33.7, b=99.5, c=23.1, calibrated PAR=3.6 dB / Z: a=31.5, b=99.5, c=23.6, calibrated PAR=3.6 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Front Position - Mid/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.816 W/kg

Body MSL/Front Position - Mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 30.062 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.955 mW/g
SAR(1 g) = 0.777 mW/g; SAR(10 g) = 0.606 mW/g
Maximum value of SAR (measured) = 0.815 W/kg



0 dB = 0.815 W/kg = -1.78 dB W/kg

Additional information:
position or distance of DUT to SAM: 10 mm
ambient temperature: 21.1°C; liquid temperature: 20.2°C

Date/Time: 26.10.2012 10:10:05

OET65_EN62209-2-GSM850 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

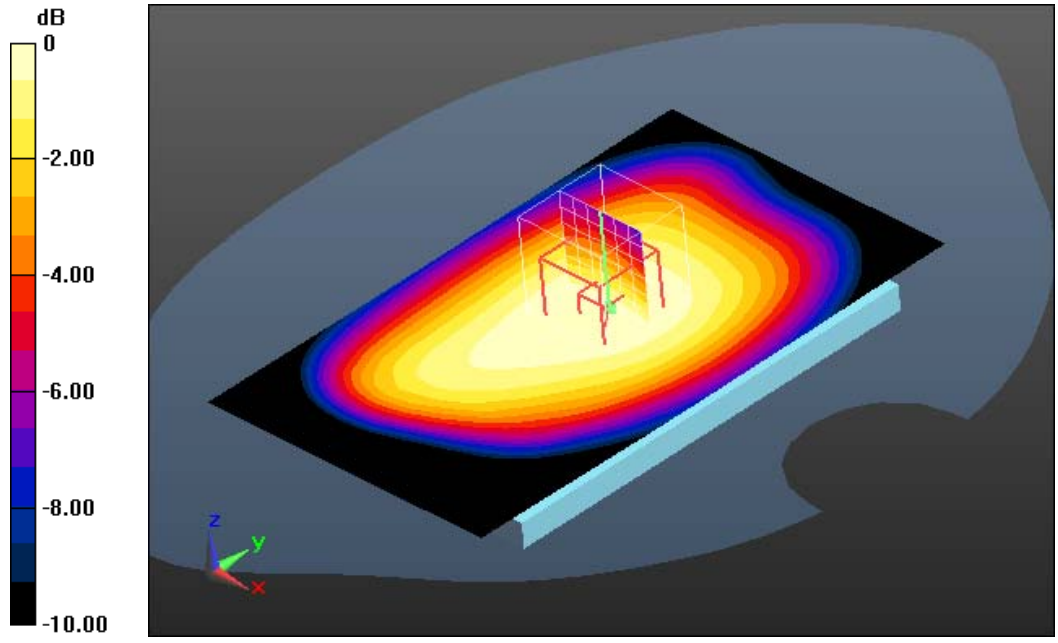
Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 848.6 MHz; Communication System PAR: 3.55 dB; PMF: 1.50487
Medium parameters used (interpolated): f = 848.6 MHz; σ = 0.988 mho/m; ε_r = 54.31; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6, 6, 6); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=40.6, b=99.4, c=23.0, calibrated PAR=3.6 dB / Y: a=33.7, b=99.5, c=23.1, calibrated PAR=3.6 dB / Z: a=31.5, b=99.5, c=23.6, calibrated PAR=3.6 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Front Position - Hi/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.687 W/kg

Body MSL/Front Position - Hi/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.278 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.812 mW/g
SAR(1 g) = 0.657 mW/g; SAR(10 g) = 0.508 mW/g
Maximum value of SAR (measured) = 0.689 W/kg



0 dB = 0.689 W/kg = -3.24 dB W/kg

Additional information:
position or distance of DUT to SAM: 10 mm
ambient temperature: 21.1°C; liquid temperature: 20.2°C

Date/Time: 26.10.2012 11:26:02

OET65_EN62209-2-GSM850 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

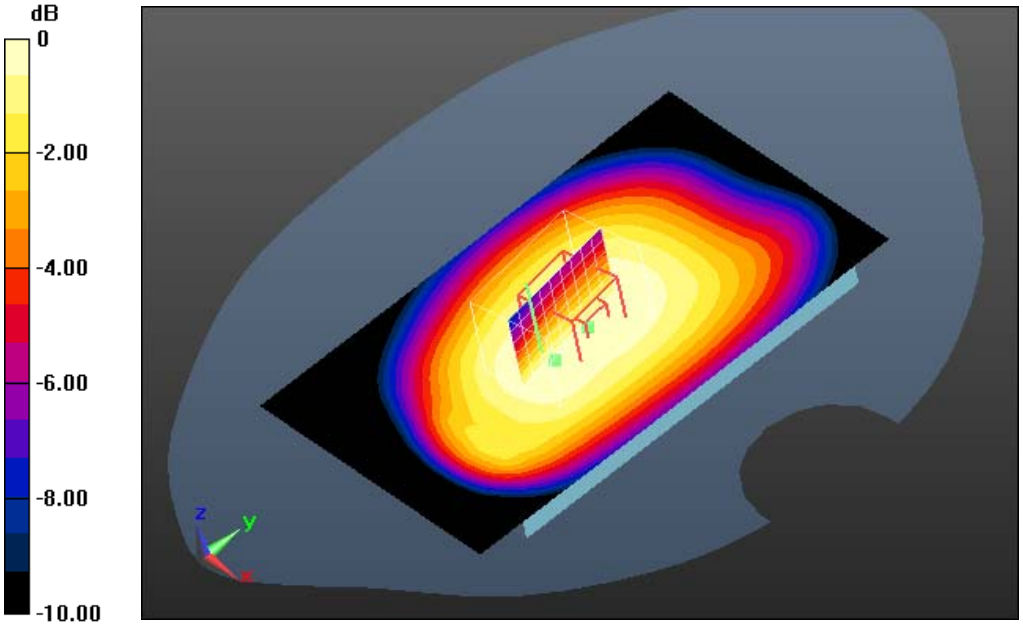
Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 824.2 MHz; Communication System PAR: 3.55 dB; PMF: 1.50487
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.96 mho/m; ε_r = 54.499; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6, 6, 6); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=40.6, b=99.4, c=23.0, calibrated PAR=3.6 dB / Y: a=33.7, b=99.5, c=23.1, calibrated PAR=3.6 dB / Z: a=31.5, b=99.5, c=23.6, calibrated PAR=3.6 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Rear Position - Low/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.777 W/kg

Body MSL/Rear Position - Low/Zoom Scan (7x10x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 29.148 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.940 mW/g
SAR(1 g) = 0.731 mW/g; SAR(10 g) = 0.570 mW/g
Maximum value of SAR (measured) = 0.765 W/kg



0 dB = 0.765 W/kg = -2.33 dB W/kg

Additional information:
position or distance of DUT to SAM: 10 mm
ambient temperature: 21.1°C; liquid temperature: 20.2°C

Date/Time: 26.10.2012 10:58:08

OET65_EN62209-2-GSM850 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

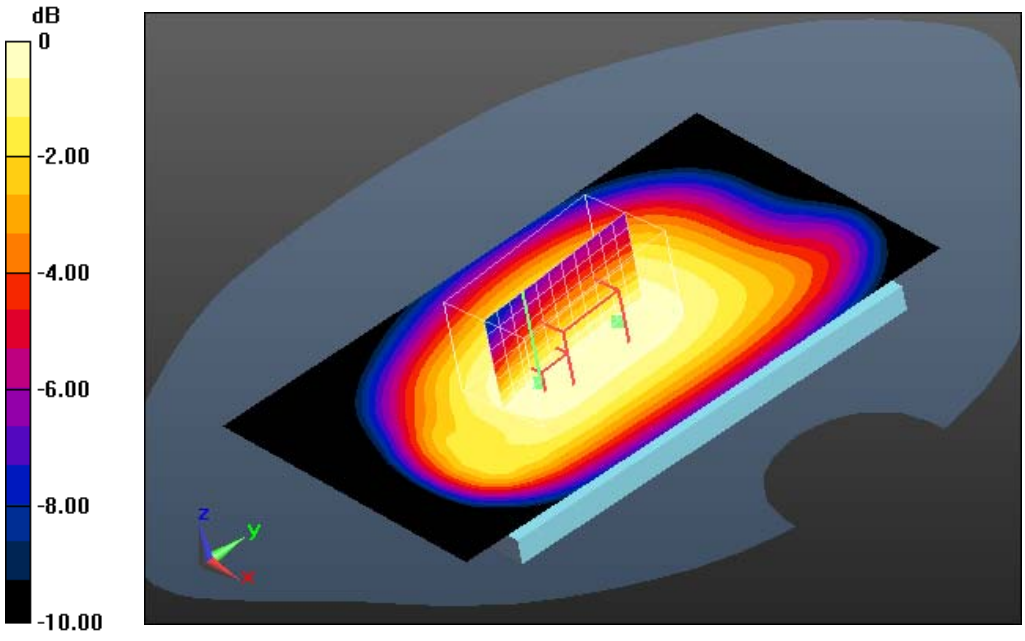
Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 3.55 dB; PMF: 1.50487
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.399; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6, 6, 6); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=40.6, b=99.4, c=23.0, calibrated PAR=3.6 dB / Y: a=33.7, b=99.5, c=23.1, calibrated PAR=3.6 dB / Z: a=31.5, b=99.5, c=23.6, calibrated PAR=3.6 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Rear Position - Mid/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.735 W/kg

Body MSL/Rear Position - Mid/Zoom Scan (7x12x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.350 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.911 mW/g
SAR(1 g) = 0.696 mW/g; SAR(10 g) = 0.534 mW/g
Maximum value of SAR (measured) = 0.730 W/kg



0 dB = 0.730 W/kg = -2.73 dB W/kg

Additional information:
position or distance of DUT to SAM: 10 mm
ambient temperature: 21.1°C; liquid temperature: 20.2°C

Date/Time: 26.10.2012 10:30:15

OET65_EN62209-2-GSM850 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

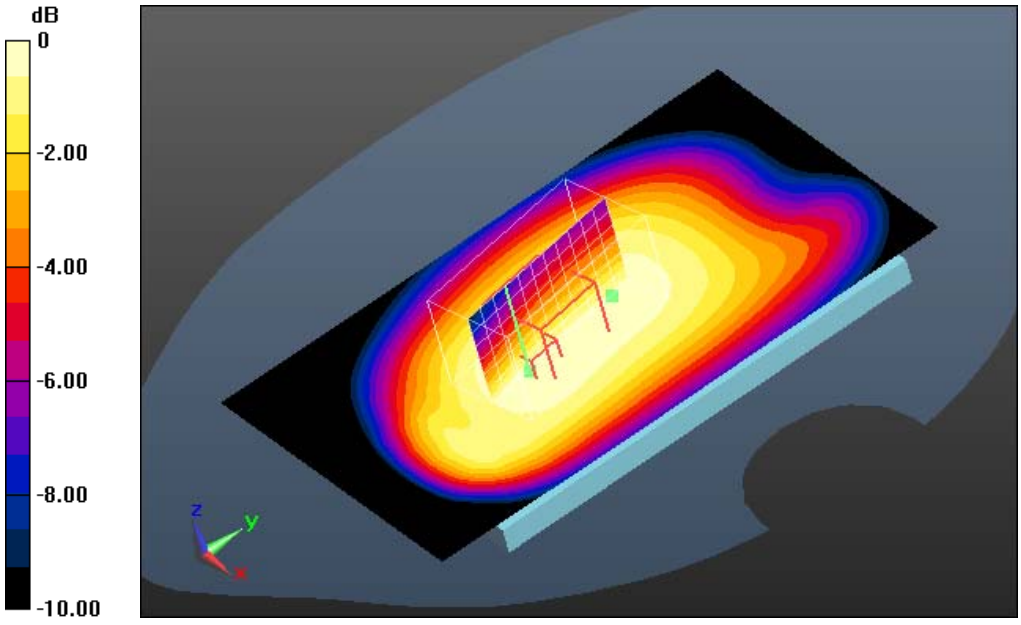
Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 848.6 MHz; Communication System PAR: 3.55 dB; PMF: 1.50487
Medium parameters used (interpolated): f = 848.6 MHz; σ = 0.988 mho/m; ε_r = 54.31; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6, 6, 6); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=40.6, b=99.4, c=23.0, calibrated PAR=3.6 dB / Y: a=33.7, b=99.5, c=23.1, calibrated PAR=3.6 dB / Z: a=31.5, b=99.5, c=23.6, calibrated PAR=3.6 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Rear Position - Hi/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.651 W/kg

Body MSL/Rear Position - Hi/Zoom Scan (7x12x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.184 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.796 mW/g
SAR(1 g) = 0.597 mW/g; SAR(10 g) = 0.449 mW/g
Maximum value of SAR (measured) = 0.626 W/kg



0 dB = 0.626 W/kg = -4.07 dB W/kg

Additional information:
position or distance of DUT to SAM: 10 mm
ambient temperature: 21.1°C; liquid temperature: 20.2°C

Date/Time: 26.10.2012 13:12:43

OET65_EN62209-2-GSM850 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

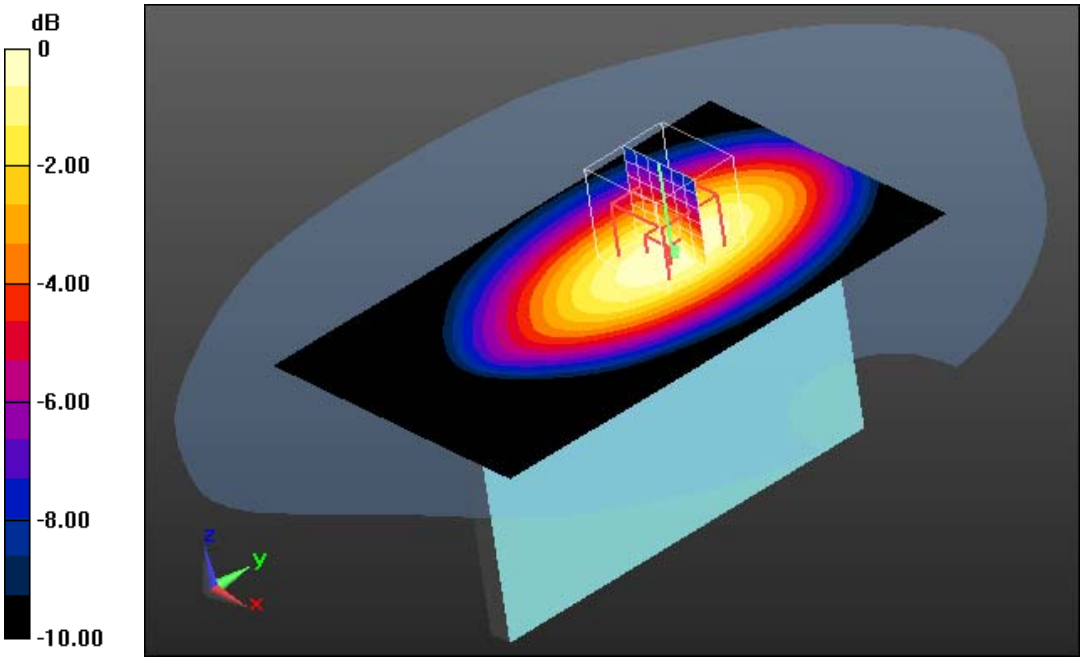
Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 3.55 dB; PMF: 1.50487
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.399; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6, 6, 6); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=40.6, b=99.4, c=23.0, calibrated PAR=3.6 dB / Y: a=33.7, b=99.5, c=23.1, calibrated PAR=3.6 dB / Z: a=31.5, b=99.5, c=23.6, calibrated PAR=3.6 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Left Side Position - Mid/Area Scan (101x171x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.604 W/kg

Body MSL/Left Side Position - Mid/Zoom Scan (7x7x7)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 25.916 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.780 mW/g
SAR(1 g) = 0.566 mW/g; SAR(10 g) = 0.395 mW/g
Maximum value of SAR (measured) = 0.606 W/kg



0 dB = 0.606 W/kg = -4.35 dB W/kg

Additional information:
position or distance of DUT to SAM: 10 mm
ambient temperature: 21.1°C; liquid temperature: 20.2°C

Date/Time: 26.10.2012 13:32:37

OET65_EN62209-2-GSM850 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

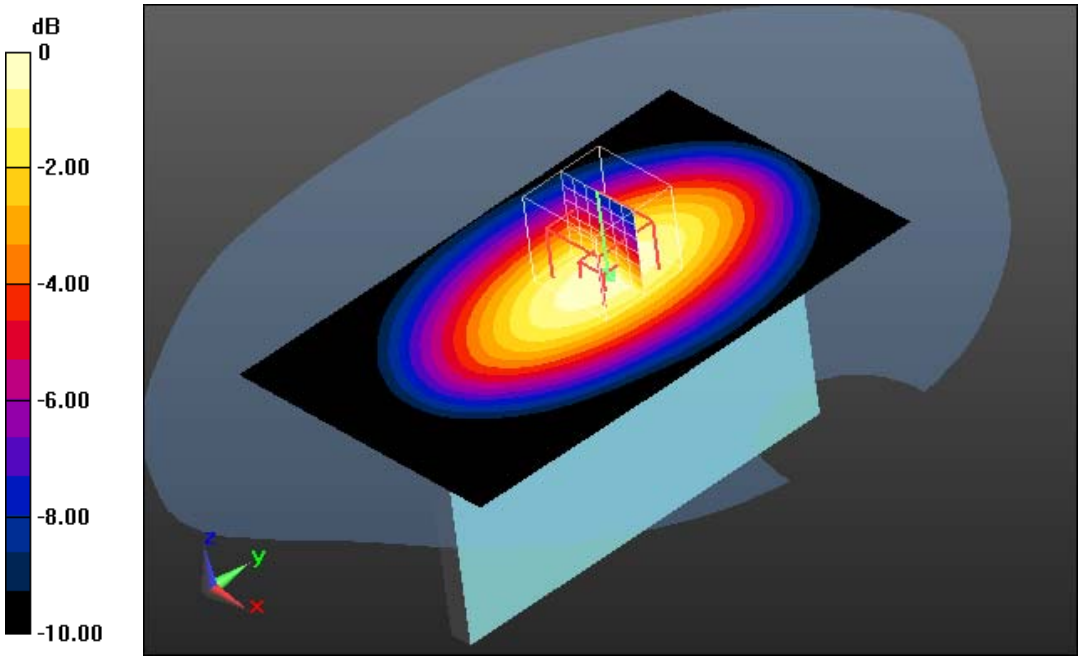
Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 3.55 dB; PMF: 1.50487
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.399; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6, 6, 6); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=40.6, b=99.4, c=23.0, calibrated PAR=3.6 dB / Y: a=33.7, b=99.5, c=23.1, calibrated PAR=3.6 dB / Z: a=31.5, b=99.5, c=23.6, calibrated PAR=3.6 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Right Side Position - Mid/Area Scan (101x171x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.566 W/kg

Body MSL/Right Side Position - Mid/Zoom Scan (7x7x7)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.976 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.736 mW/g
SAR(1 g) = 0.534 mW/g; SAR(10 g) = 0.370 mW/g
Maximum value of SAR (measured) = 0.580 W/kg



0 dB = 0.580 W/kg = -4.73 dB W/kg

Additional information:
position or distance of DUT to SAM: 10 mm
ambient temperature: 21.1°C; liquid temperature: 20.2°C

Date/Time: 26.10.2012 12:47:17

OET65_EN62209-2-GSM850 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

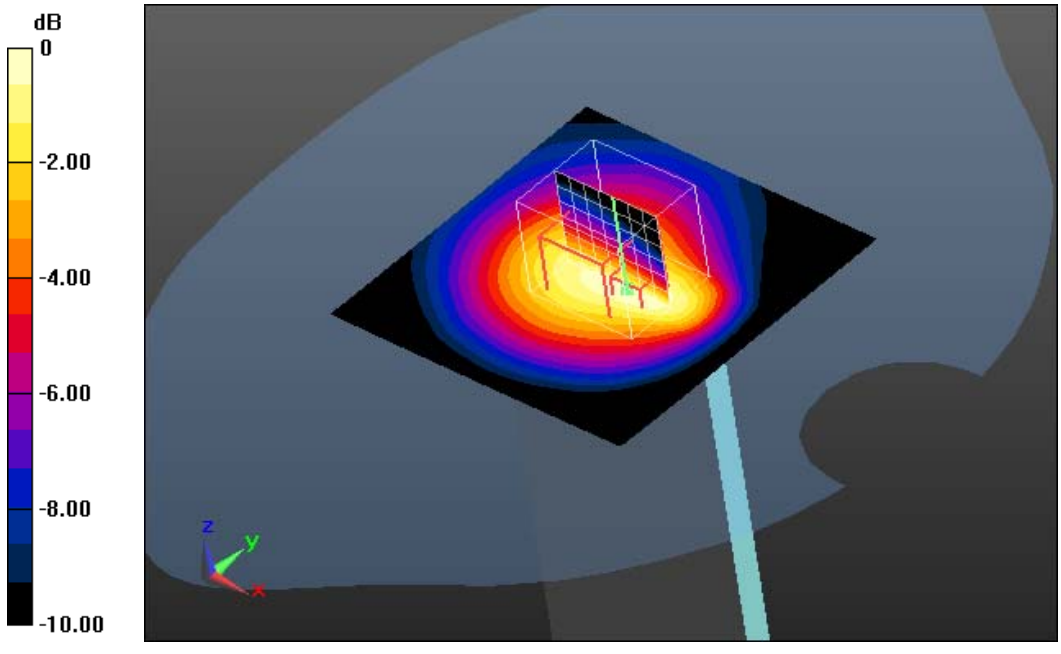
Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 3.55 dB; PMF: 1.50487
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.399; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6, 6, 6); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=40.6, b=99.4, c=23.0, calibrated PAR=3.6 dB / Y: a=33.7, b=99.5, c=23.1, calibrated PAR=3.6 dB / Z: a=31.5, b=99.5, c=23.6, calibrated PAR=3.6 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Bottom Position - Mid/Area Scan (101x101x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.223 W/kg

Body MSL/Bottom Position - Mid/Zoom Scan (8x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.738 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.530 mW/g
SAR(1 g) = 0.208 mW/g; SAR(10 g) = 0.123 mW/g
Maximum value of SAR (measured) = 0.223 W/kg



0 dB = 0.223 W/kg = -13.03 dB W/kg

Additional information:
position or distance of DUT to SAM: 10 mm
ambient temperature: 21.1°C; liquid temperature: 20.2°C

Date/Time: 10.12.2012 12:33:22Date/Time: 10.12.2012 12:43:29

EN62209-2-Body-GSM850 GPRS 4TS

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

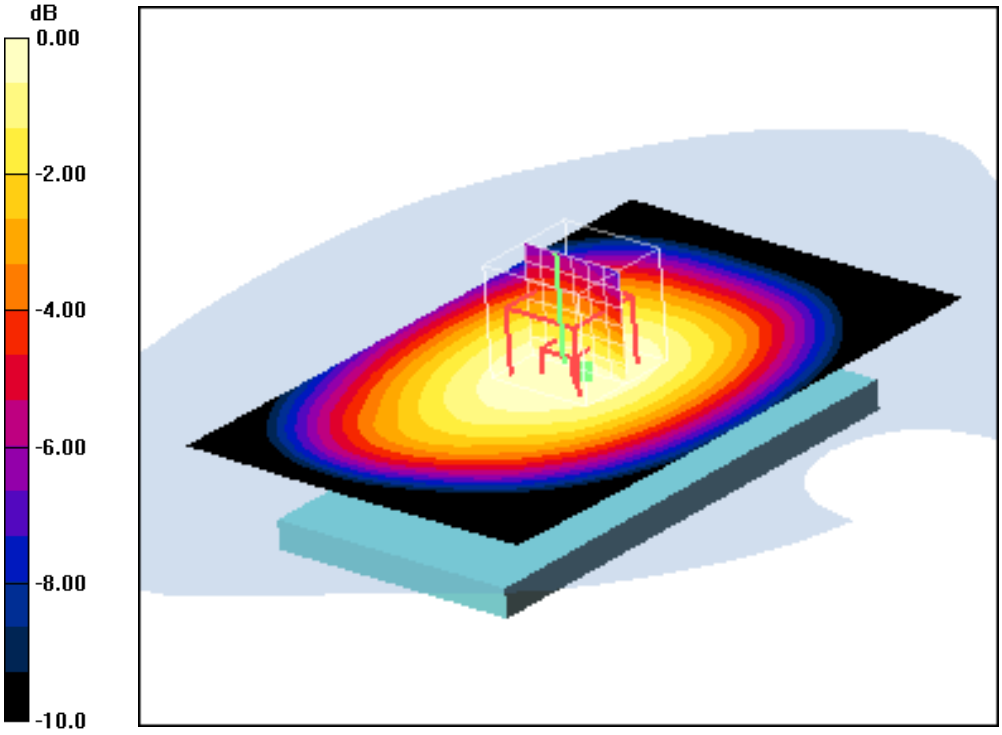
Communication System: PCS 850 GPRS 4TS; Frequency: 824.2 MHz; Duty Cycle: 1:2
Medium: M900 Medium parameters used: f = 824.2 MHz; σ = 0.97 mho/m; ε_r = 55.4; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

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

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

dx=5mm, dy=5mm, dz=5mm
Reference Value = 30.0 V/m; Power Drift = 0.067 dB
Peak SAR (extrapolated) = 0.964 W/kg
SAR(1 g) = 0.788 mW/g; SAR(10 g) = 0.610 mW/g
Maximum value of SAR (measured) = 0.823 mW/g



0 dB = 0.823mW/g

Additional information:
position or distance of DUT to SAM: 15mm
ambient temperature: 23.4°C; liquid temperature: 22.0°C

Date/Time: 26.10.2012 11:57:19

OET65_EN62209-2-GSM850 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

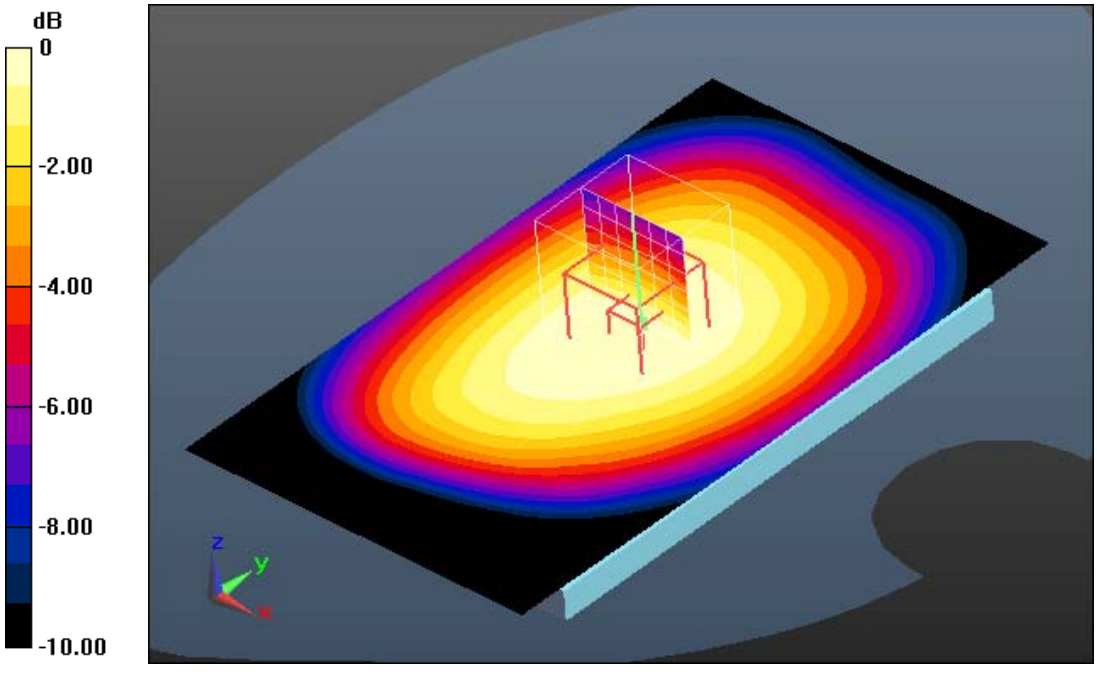
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.399; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6, 6, 6); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Front Position - Mid 15mm/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

Body MSL/Front Position - Mid 15mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.465 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.488 mW/g
SAR(1 g) = 0.395 mW/g; SAR(10 g) = 0.304 mW/g
Maximum value of SAR (measured) = 0.414 W/kg



0 dB = 0.414 W/kg = -7.66 dB W/kg

Additional information:
position or distance of DUT to SAM: 15 mm
ambient temperature: 21.1°C; liquid temperature: 20.2°C

Annex B.2: GSM 1900MHz

Date/Time: 16.10.2012 12:51:19

IEEE1528-GSM1900 head Left Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

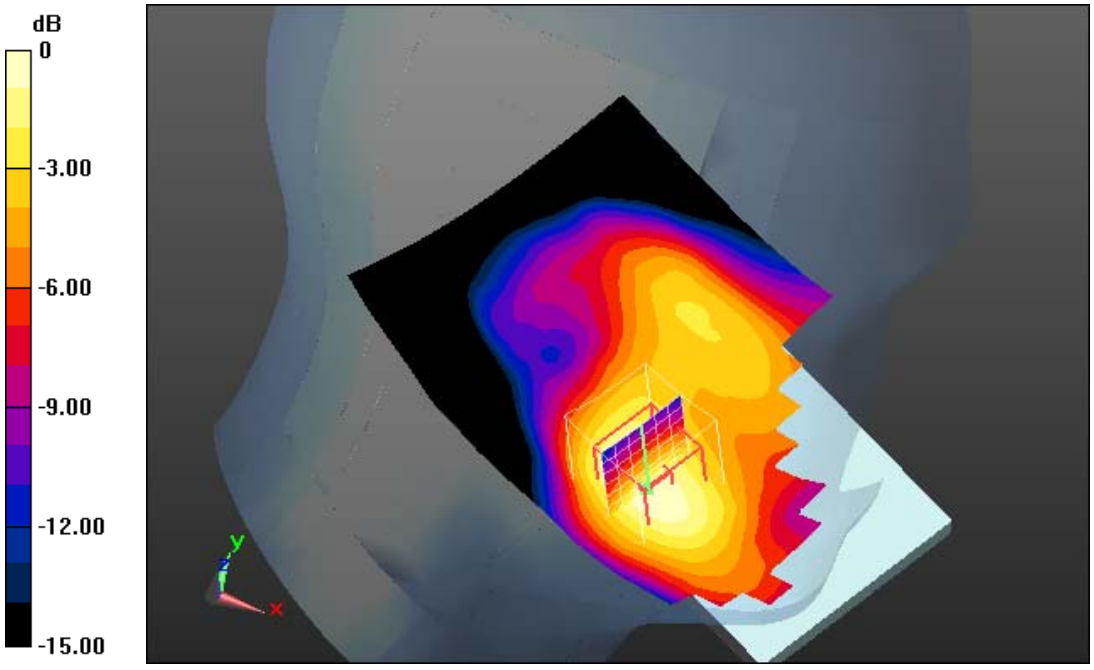
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1850.2 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 1850.2 MHz; σ = 1.34 mho/m; ε_r = 40; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(5.05, 5.05, 5.05); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Left-Hand-Side HSL/Touch Position - Low/Area Scan (111x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.171 W/kg

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.326 V/m; Power Drift = -0.073 dB
Peak SAR (extrapolated) = 0.231 mW/g
SAR(1 g) = 0.151 mW/g; SAR(10 g) = 0.094 mW/g
Maximum value of SAR (measured) = 0.169 W/kg



0 dB = 0.169 W/kg = -15.44 dB W/kg

Additional information:
ambient temperature: 22.3°C; liquid temperature: 20.3°C

Date/Time: 16.10.2012 13:25:59

IEEE1528-GSM1900 head Left Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

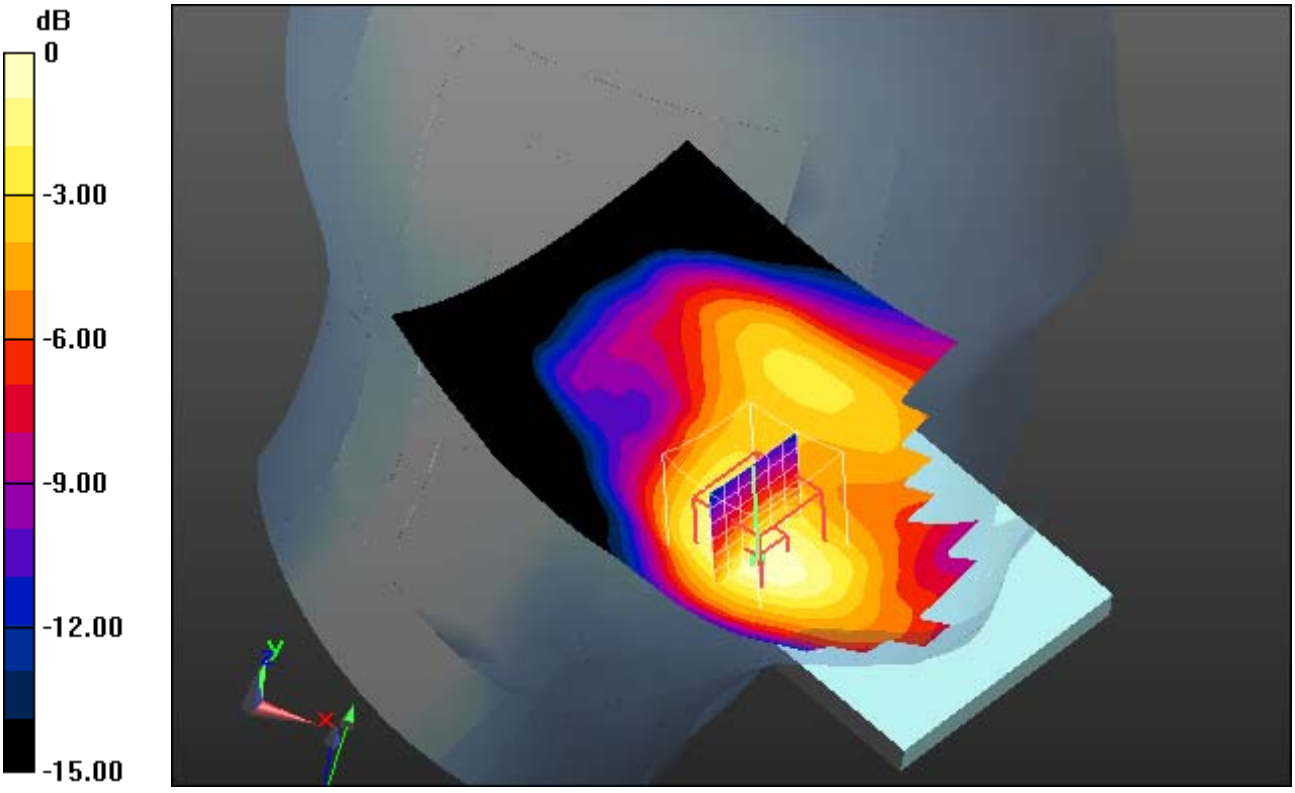
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 1880 MHz; σ = 1.37 mho/m; ε_r = 39.9; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(5.05, 5.05, 5.05); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Left-Hand-Side HSL/Touch Position - Mid/Area Scan (111x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.163 W/kg

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.750 V/m; Power Drift = -0.124 dB
Peak SAR (extrapolated) = 0.223 mW/g
SAR(1 g) = 0.143 mW/g; SAR(10 g) = 0.088 mW/g
Maximum value of SAR (measured) = 0.160 W/kg



0 dB = 0.160 W/kg = -15.92 dB W/kg

Additional information:
ambient temperature: 22.3°C; liquid temperature: 20.3°C

Date/Time: 16.10.2012 13:53:40

IEEE1528-GSM1900 head Left Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

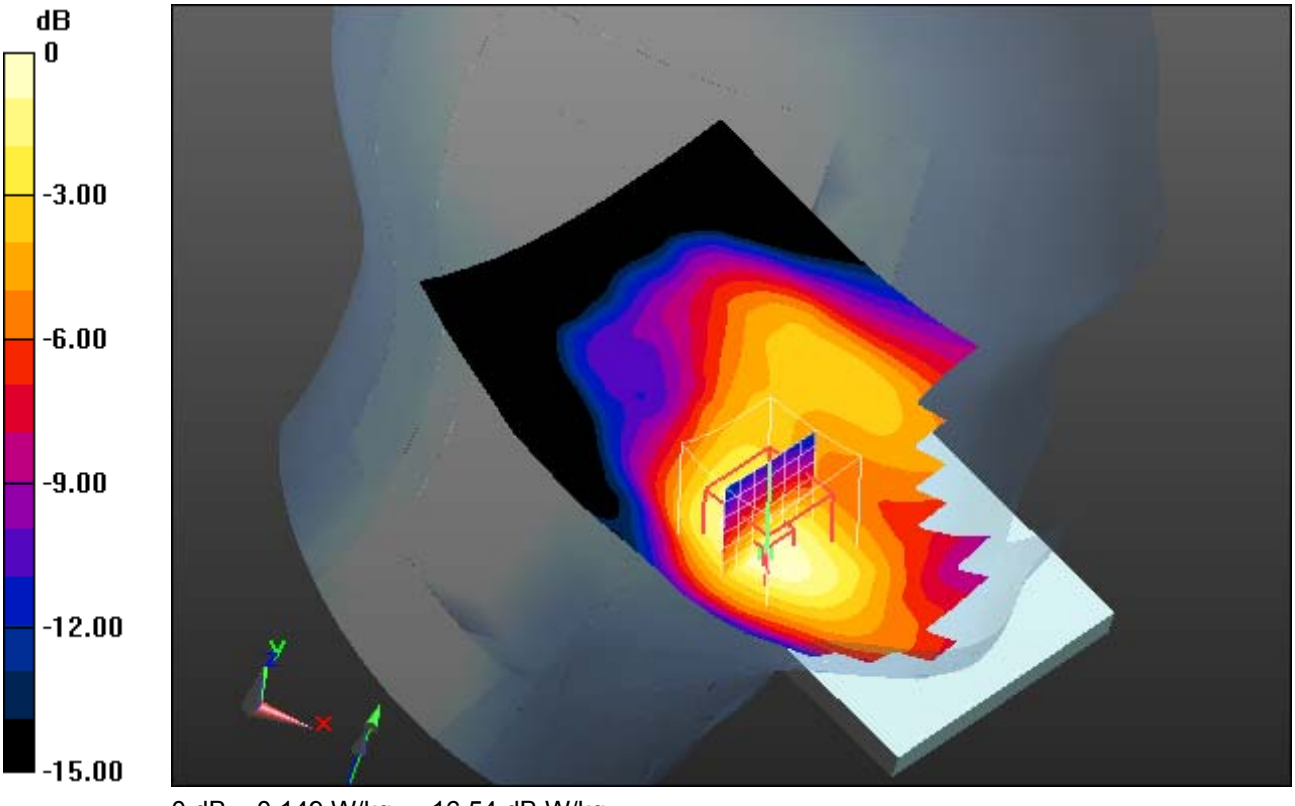
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1909.8 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 1909.8 MHz; σ = 1.4 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(5.05, 5.05, 5.05); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

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

grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.151 W/kg

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.236 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 0.211 mW/g
SAR(1 g) = 0.133 mW/g; SAR(10 g) = 0.080 mW/g
Maximum value of SAR (measured) = 0.149 W/kg



0 dB = 0.149 W/kg = -16.54 dB W/kg

Additional information:
ambient temperature: 22.3°C; liquid temperature: 20.3°C

Date/Time: 16.10.2012 14:25:31

IEEE1528-GSM1900 head Left Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

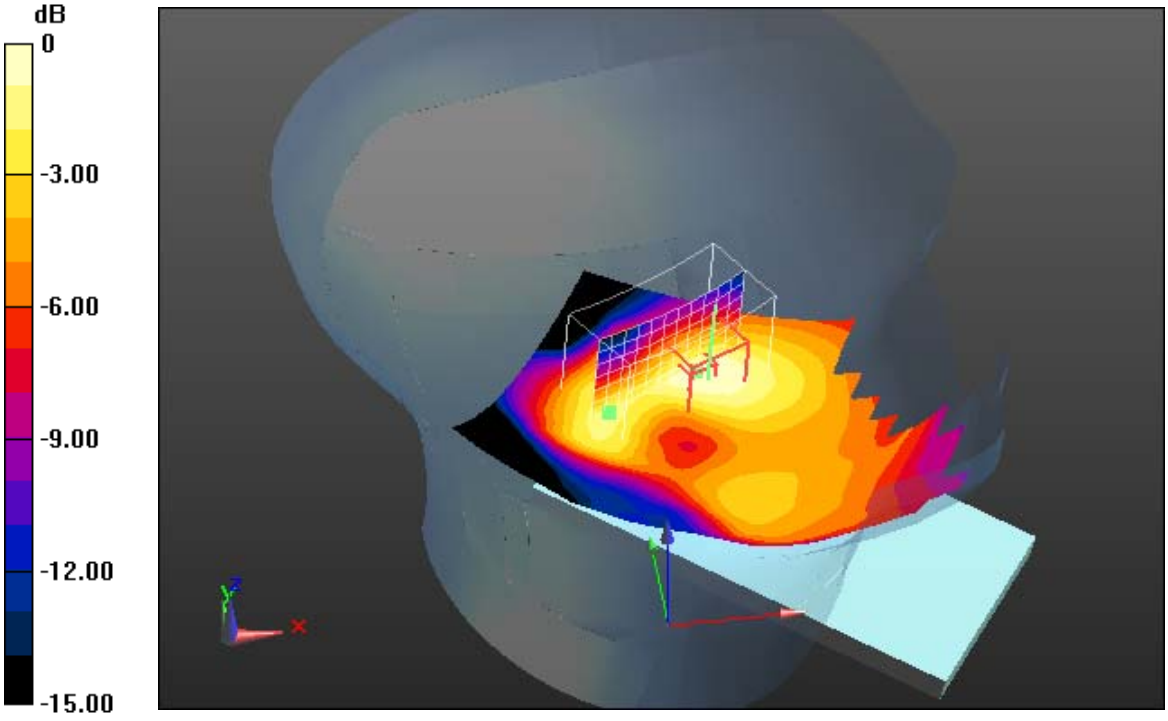
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1850.2 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 1850.2 MHz; σ = 1.34 mho/m; ε_r = 40; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(5.05, 5.05, 5.05); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Left-Hand-Side HSL/Tilt Position - Low/Area Scan (111x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.0500 W/kg

Left-Hand-Side HSL/Tilt Position - Low/Zoom Scan (12x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.332 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.063 mW/g
SAR(1 g) = 0.045 mW/g; SAR(10 g) = 0.029 mW/g
Maximum value of SAR (measured) = 0.0487 W/kg



0 dB = 0.0487 W/kg = -26.25 dB W/kg

Additional information:
ambient temperature: 22.3°C; liquid temperature: 20.3°C

Date/Time: 16.10.2012 14:55:50

IEEE1528-GSM1900 head Left Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

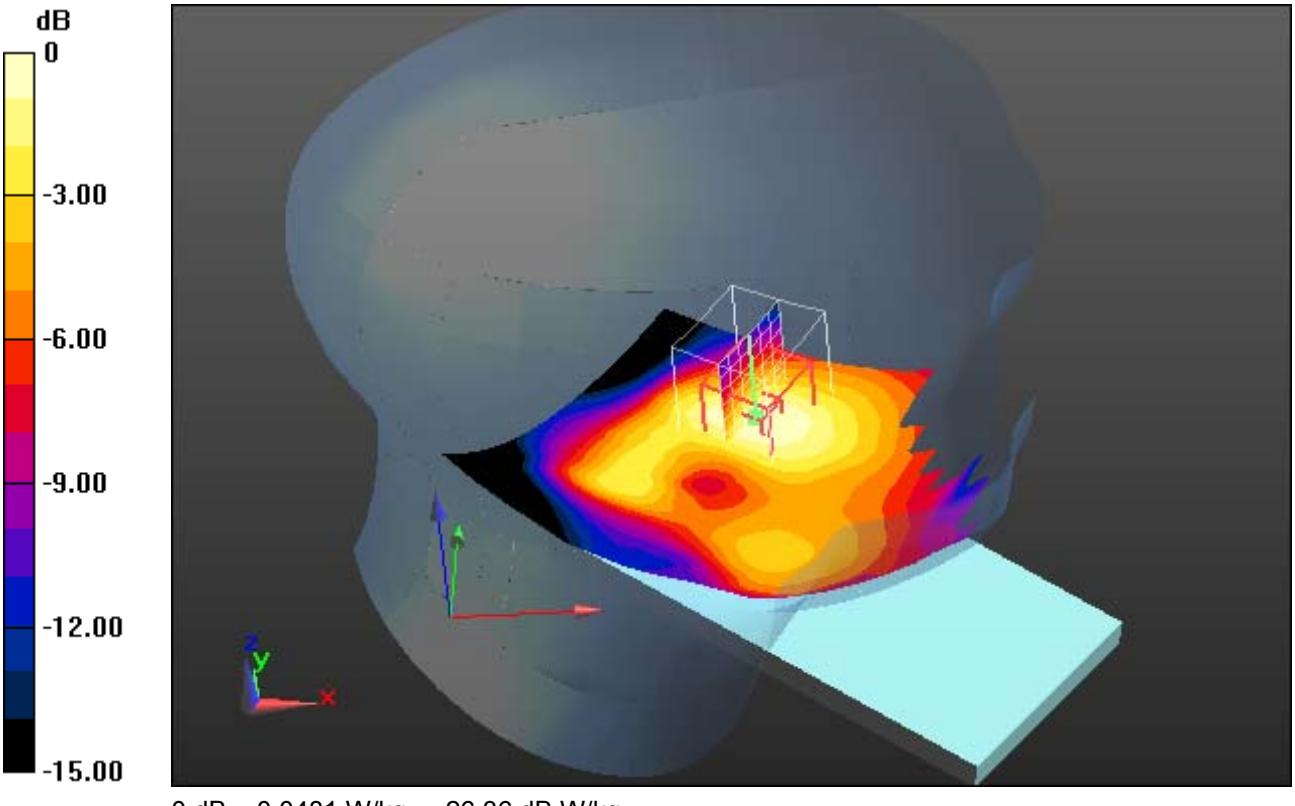
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 1880 MHz; σ = 1.37 mho/m; ε_r = 39.9; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(5.05, 5.05, 5.05); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Left-Hand-Side HSL/Tilt Position - Mid/Area Scan (111x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.0494 W/kg

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.601 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.061 mW/g
SAR(1 g) = 0.044 mW/g; SAR(10 g) = 0.027 mW/g
Maximum value of SAR (measured) = 0.0481 W/kg



0 dB = 0.0481 W/kg = -26.36 dB W/kg

Additional information:
ambient temperature: 22.3°C; liquid temperature: 20.3°C

Date/Time: 16.10.2012 15:17:31

IEEE1528-GSM1900 head Left Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

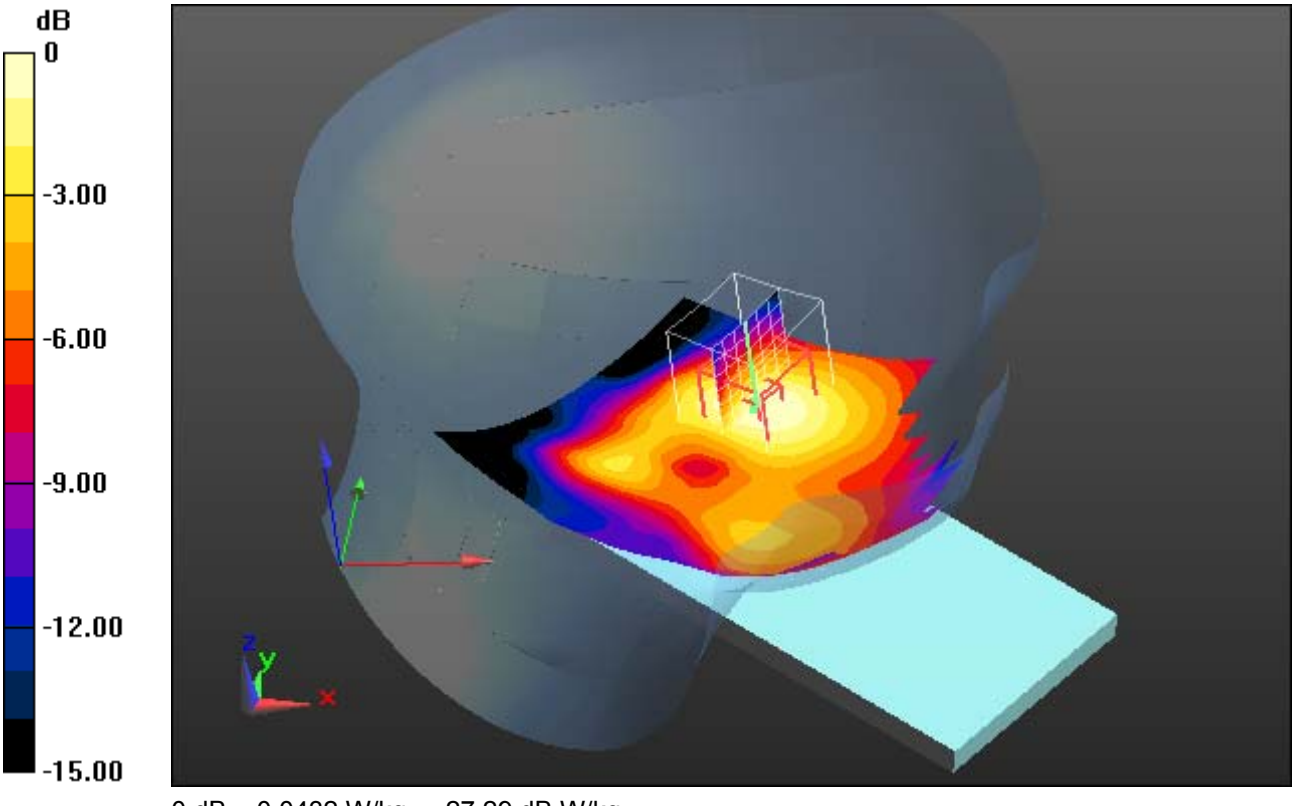
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1909.8 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 1909.8 MHz; σ = 1.4 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(5.05, 5.05, 5.05); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Left-Hand-Side HSL/Tilt Position - Hi/Area Scan (111x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.0445 W/kg

Left-Hand-Side HSL/Tilt Position - Hi/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.893 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.056 mW/g
SAR(1 g) = 0.039 mW/g; SAR(10 g) = 0.024 mW/g
Maximum value of SAR (measured) = 0.0432 W/kg



0 dB = 0.0432 W/kg = -27.29 dB W/kg

Additional information:
ambient temperature: 22.3°C; liquid temperature: 20.3°C

Date/Time: 16.10.2012 10:01:20

IEEE1528-GSM1900 head Right Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

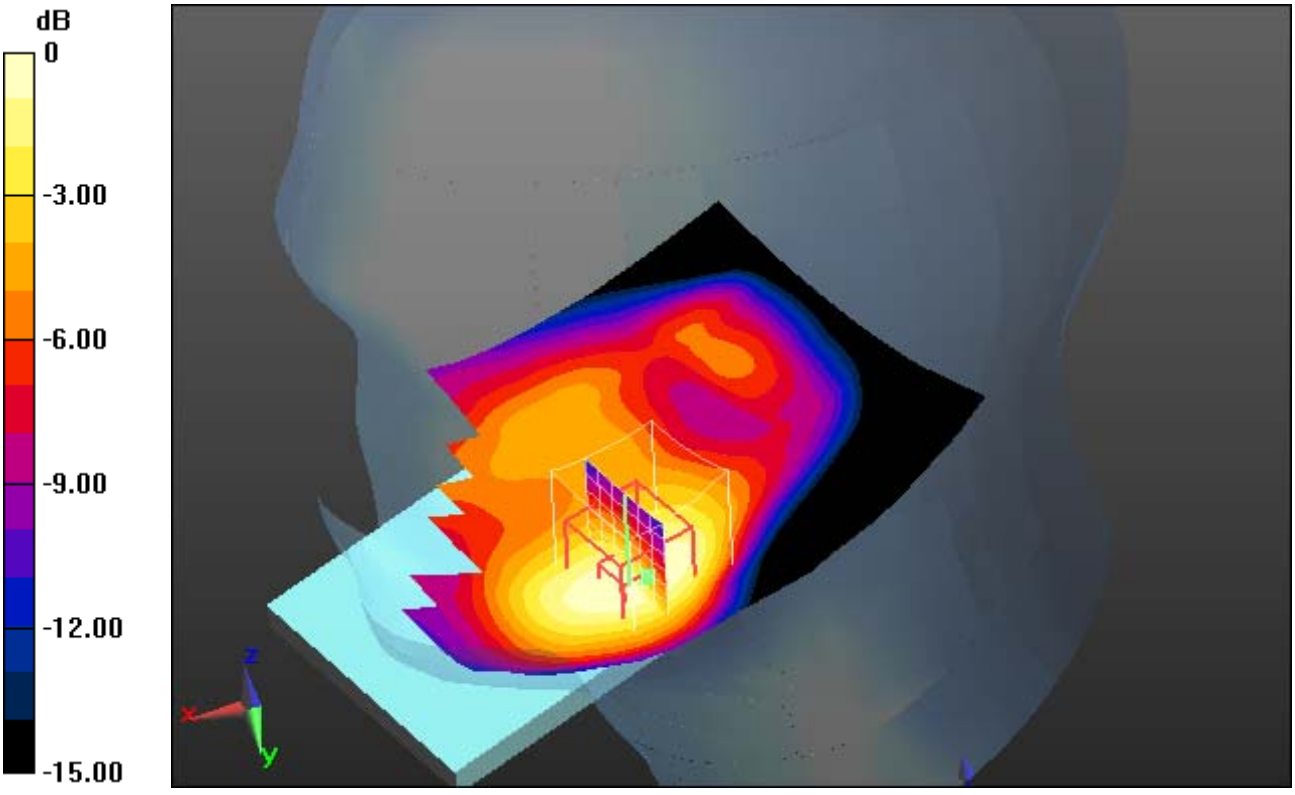
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1850.2 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 1850.2 MHz; σ = 1.34 mho/m; ε_r = 40; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(5.05, 5.05, 5.05); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

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

Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.168 W/kg

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.431 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 0.208 mW/g
SAR(1 g) = 0.151 mW/g; SAR(10 g) = 0.097 mW/g
Maximum value of SAR (measured) = 0.164 W/kg



0 dB = 0.164 W/kg = -15.70 dB W/kg

Additional information:
ambient temperature: 22.3°C; liquid temperature: 20.3°C

Date/Time: 16.10.2012 10:35:02

IEEE1528-GSM1900 head Right Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

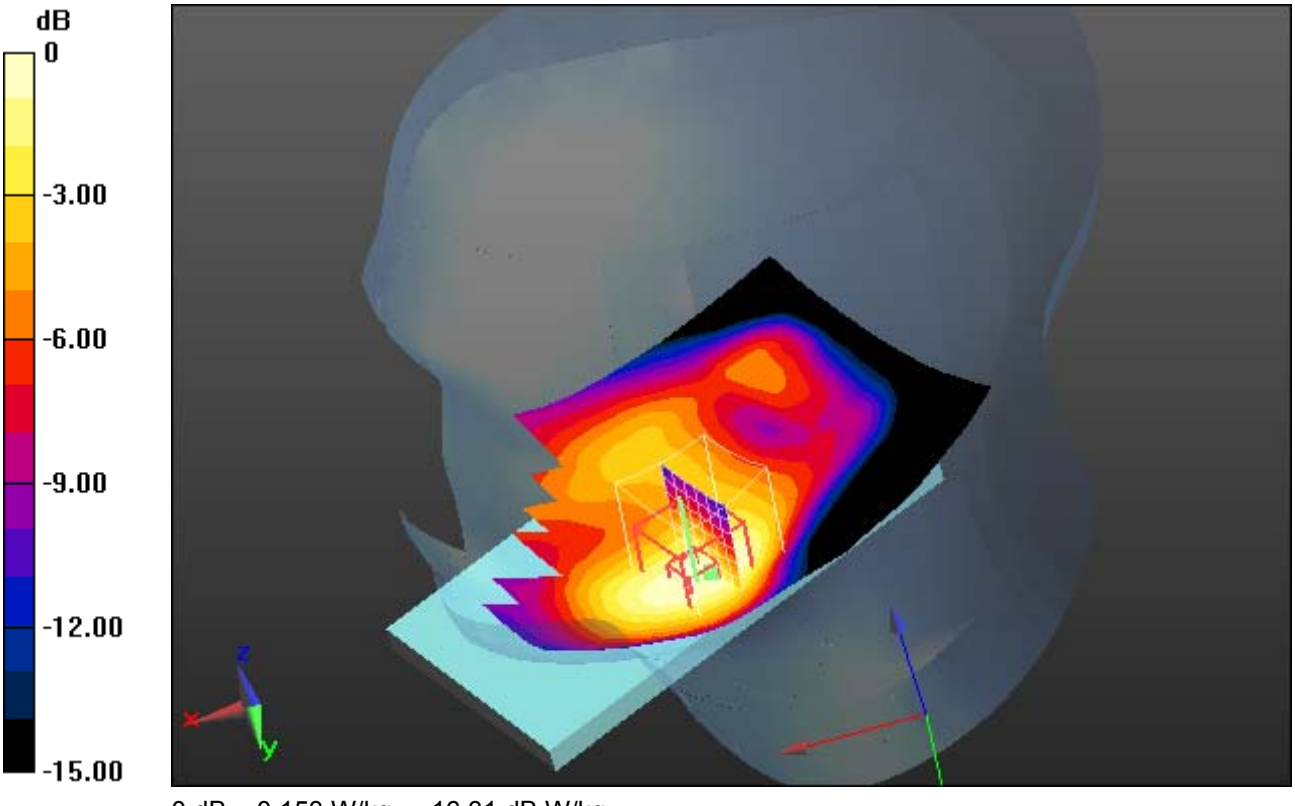
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 1880 MHz; σ = 1.37 mho/m; ε_r = 39.9; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(5.05, 5.05, 5.05); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

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

Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.158 W/kg

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.096 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.195 mW/g
SAR(1 g) = 0.141 mW/g; SAR(10 g) = 0.090 mW/g
Maximum value of SAR (measured) = 0.153 W/kg



0 dB = 0.153 W/kg = -16.31 dB W/kg

Additional information:
ambient temperature: 22.3°C; liquid temperature: 20.3°C

Date/Time: 16.10.2012 10:54:56

IEEE1528-GSM1900 head Right Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

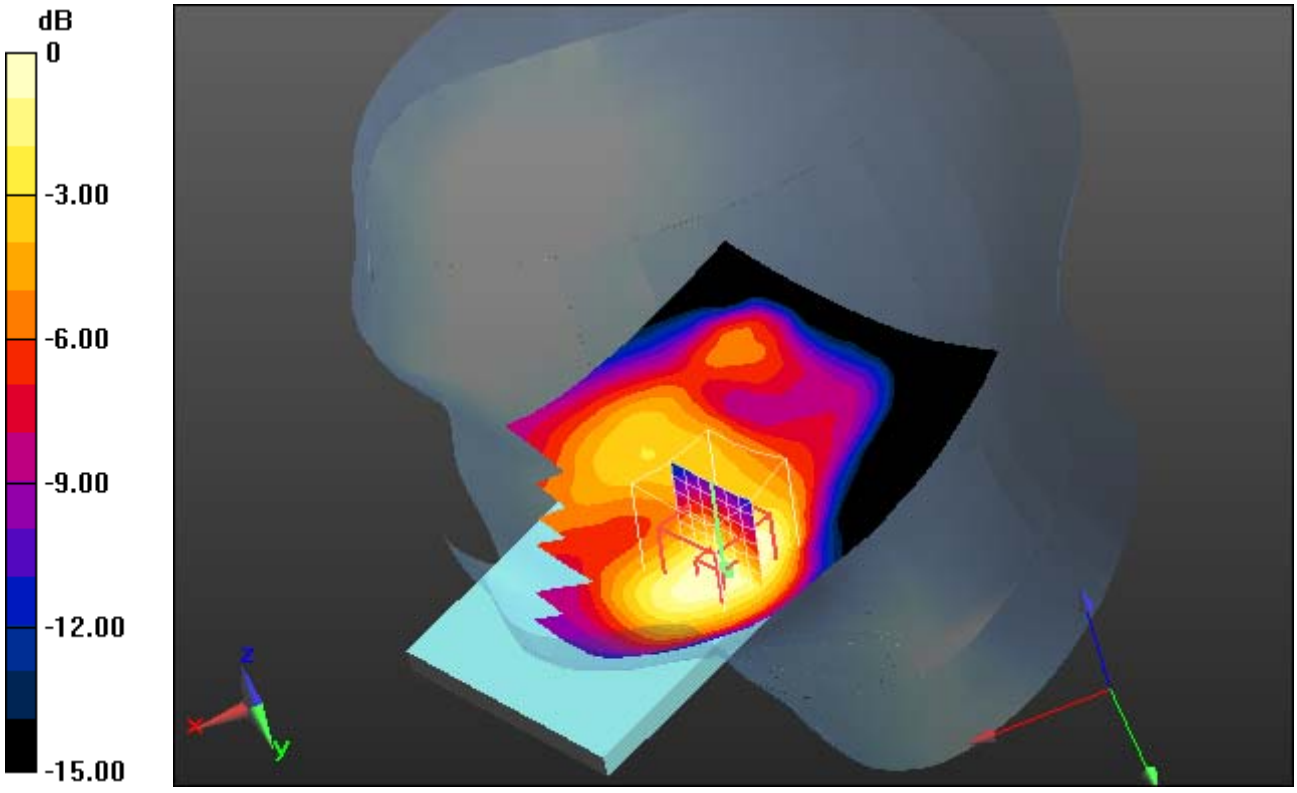
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1909.8 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 1909.8 MHz; σ = 1.4 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(5.05, 5.05, 5.05); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Right-Hand-Side HSL/Touch Position - Hi/Area Scan (111x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.141 W/kg

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.656 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.175 mW/g
SAR(1 g) = 0.125 mW/g; SAR(10 g) = 0.078 mW/g
Maximum value of SAR (measured) = 0.136 W/kg



0 dB = 0.136 W/kg = -17.33 dB W/kg

Additional information:
ambient temperature: 22.3°C; liquid temperature: 20.3°C

Date/Time: 16.10.2012 11:49:43

IEEE1528-GSM1900 head Right Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

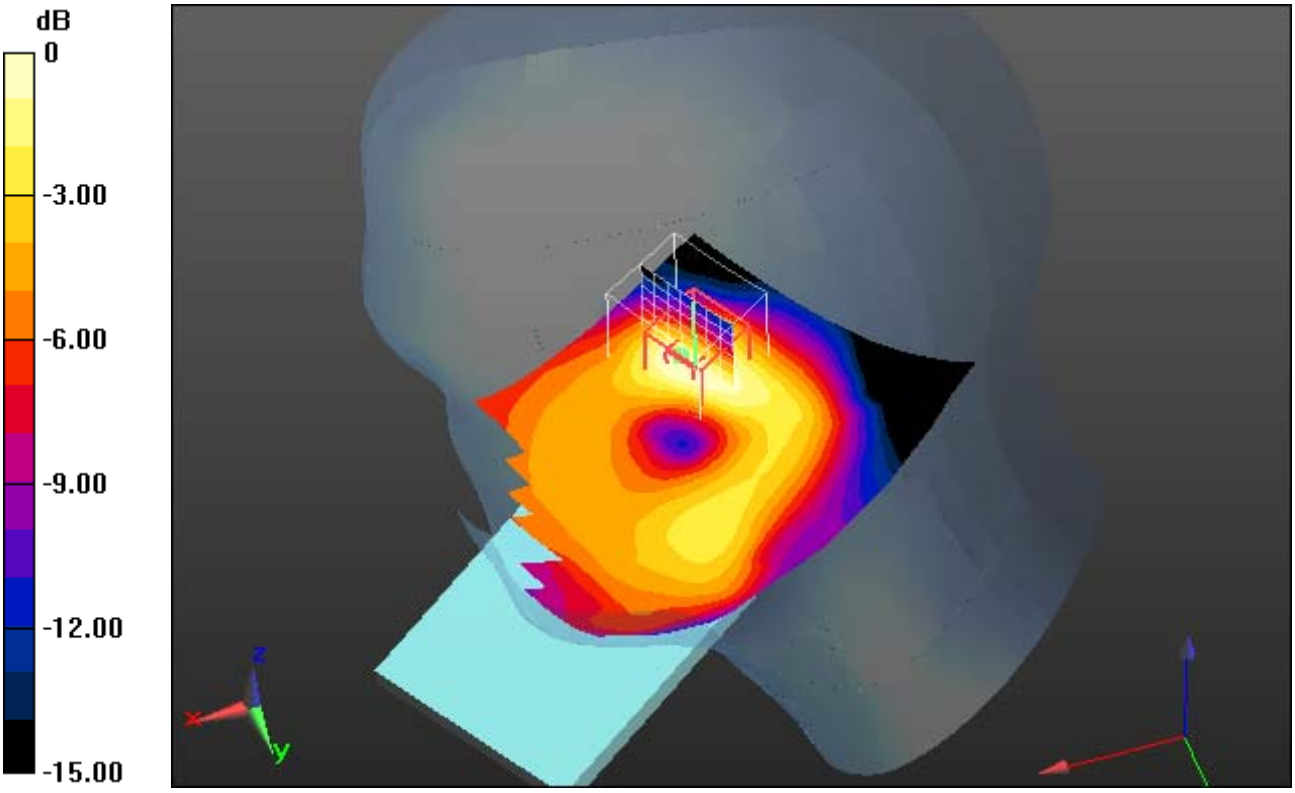
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1850.2 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 1850.2 MHz; σ = 1.34 mho/m; ε_r = 40; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(5.05, 5.05, 5.05); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Right-Hand-Side HSL 2/Tilt Position - Low/Area Scan (111x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.0497 W/kg

Right-Hand-Side HSL 2/Tilt Position - Low/Zoom Scan (8x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.027 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.071 mW/g
SAR(1 g) = 0.043 mW/g; SAR(10 g) = 0.025 mW/g
Maximum value of SAR (measured) = 0.0476 W/kg



0 dB = 0.0476 W/kg = -26.45 dB W/kg

Additional information:
ambient temperature: 22.3°C; liquid temperature: 20.3°C

Date/Time: 16.10.2012 12:23:31

IEEE1528-GSM1900 head Right Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

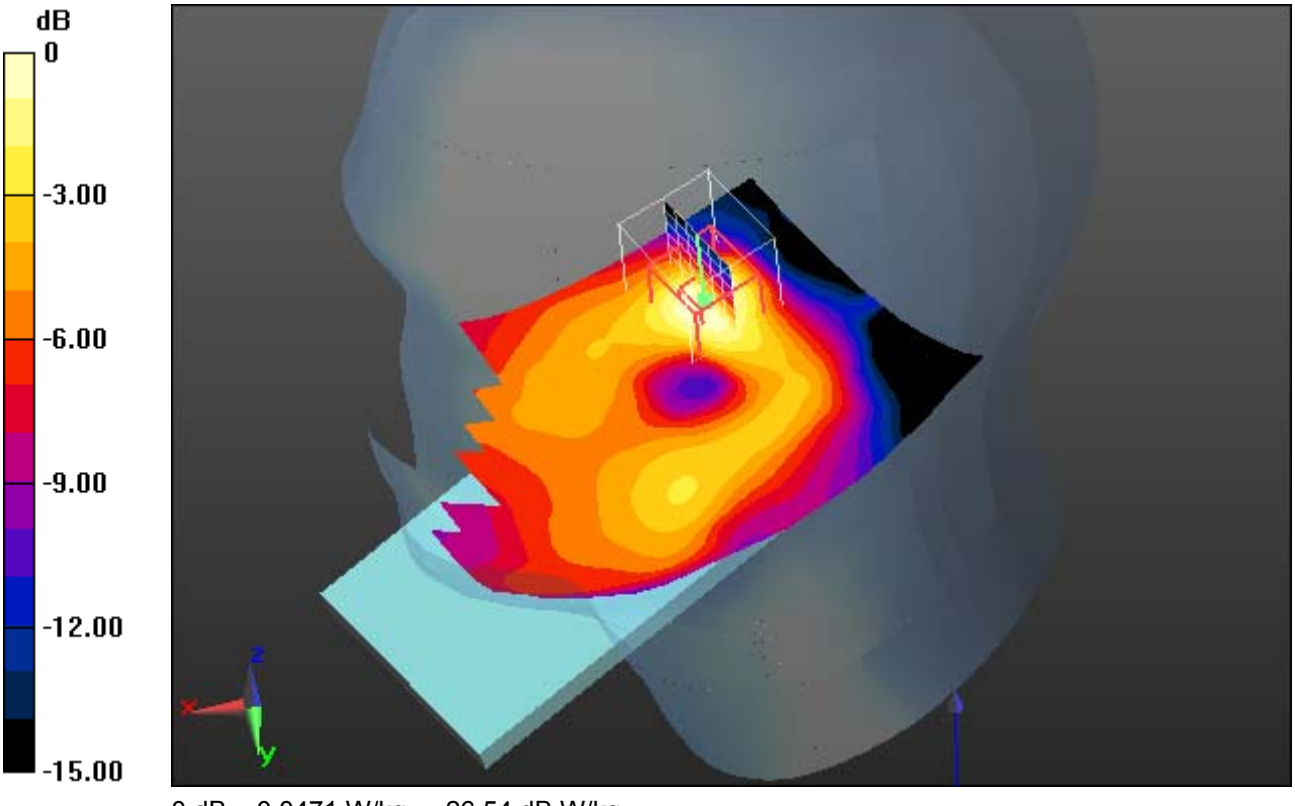
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 1880 MHz; σ = 1.37 mho/m; ε_r = 39.9; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(5.05, 5.05, 5.05); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Right-Hand-Side HSL 2/Tilt Position - Mid/Area Scan (111x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.0502 W/kg

Right-Hand-Side HSL 2/Tilt Position - Mid/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.013 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.076 mW/g
SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.022 mW/g
Maximum value of SAR (measured) = 0.0471 W/kg



0 dB = 0.0471 W/kg = -26.54 dB W/kg

Additional information:
ambient temperature: 22.3°C; liquid temperature: 20.3°C

Date/Time: 16.10.2012 11:17:44

IEEE1528-GSM1900 head Right Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

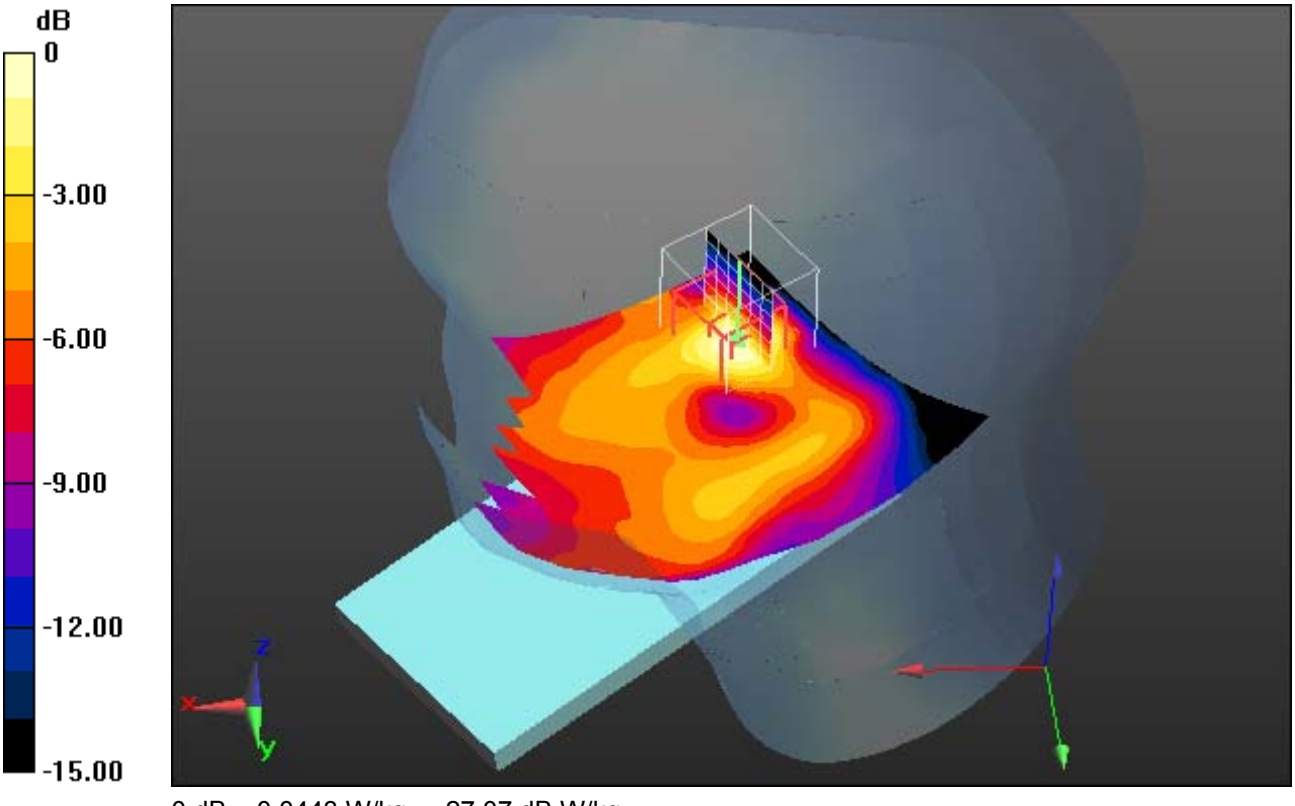
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1909.8 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 1909.8 MHz; σ = 1.4 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(5.05, 5.05, 5.05); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Right-Hand-Side HSL/Tilt Position - Hi/Area Scan (111x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.0473 W/kg

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.686 V/m; Power Drift = -0.140 dB
Peak SAR (extrapolated) = 0.074 mW/g
SAR(1 g) = 0.039 mW/g; SAR(10 g) = 0.019 mW/g
Maximum value of SAR (measured) = 0.0443 W/kg



0 dB = 0.0443 W/kg = -27.07 dB W/kg

Additional information:
ambient temperature: 22.3°C; liquid temperature: 20.3°C

Date/Time: 30.10.2012 09:00:44

OET65_EN62209-2-GSM1900 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

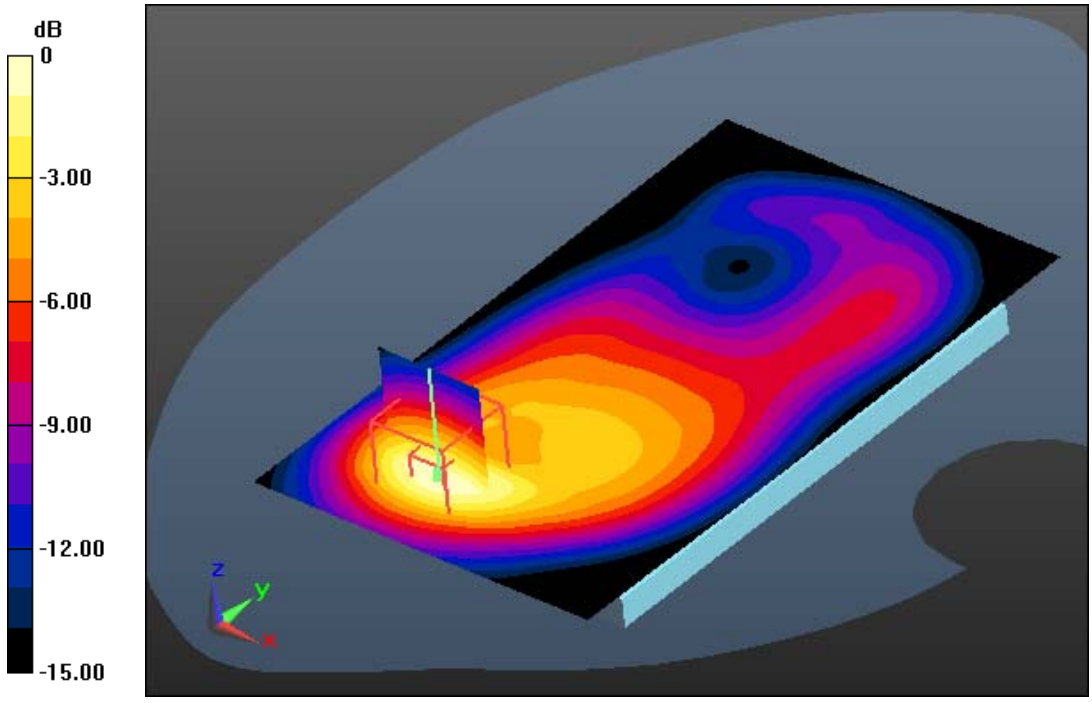
Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1850.2 MHz; Communication System PAR: 3.55 dB; PMF: 1.50487
Medium parameters used: f = 1850.2 MHz; σ = 1.46 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.2, 4.2, 4.2); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=40.6, b=99.4, c=23.0, calibrated PAR=3.6 dB / Y: a=33.7, b=99.5, c=23.1, calibrated PAR=3.6 dB / Z: a=31.5, b=99.5, c=23.6, calibrated PAR=3.6 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Front Position - Low/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.556 W/kg

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

Reference Value = 20.051 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.783 mW/g
SAR(1 g) = 0.480 mW/g; SAR(10 g) = 0.267 mW/g
Maximum value of SAR (measured) = 0.540 W/kg



0 dB = 0.540 W/kg = -5.35 dB W/kg

Additional information:
position or distance of DUT to SAM: 10mm
ambient temperature: 21.1°C; liquid temperature: 20.1°C

Date/Time: 30.10.2012 09:32:34

OET65_EN62209-2-GSM1900 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

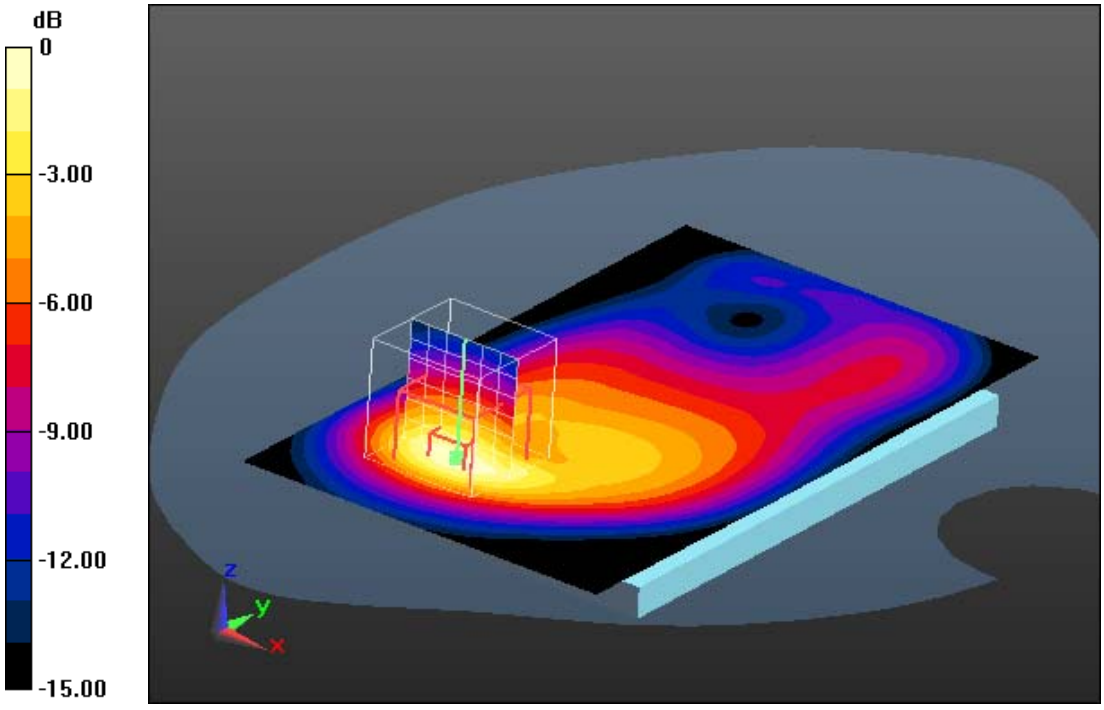
Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 3.55 dB; PMF: 1.50487
Medium parameters used: f = 1880 MHz; σ = 1.5 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.2, 4.2, 4.2); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=40.6, b=99.4, c=23.0, calibrated PAR=3.6 dB / Y: a=33.7, b=99.5, c=23.1, calibrated PAR=3.6 dB / Z: a=31.5, b=99.5, c=23.6, calibrated PAR=3.6 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Front Position - Mid/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.564 W/kg

Body MSL/Front Position - Mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.275 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.828 mW/g
SAR(1 g) = 0.502 mW/g; SAR(10 g) = 0.276 mW/g
Maximum value of SAR (measured) = 0.564 W/kg



0 dB = 0.564 W/kg = -4.97 dB W/kg

Additional information:
position or distance of DUT to SAM: 10mm
ambient temperature: 21.1°C; liquid temperature: 20.1°C

Date/Time: 30.10.2012 10:00:32

OET65_EN62209-2-GSM1900 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

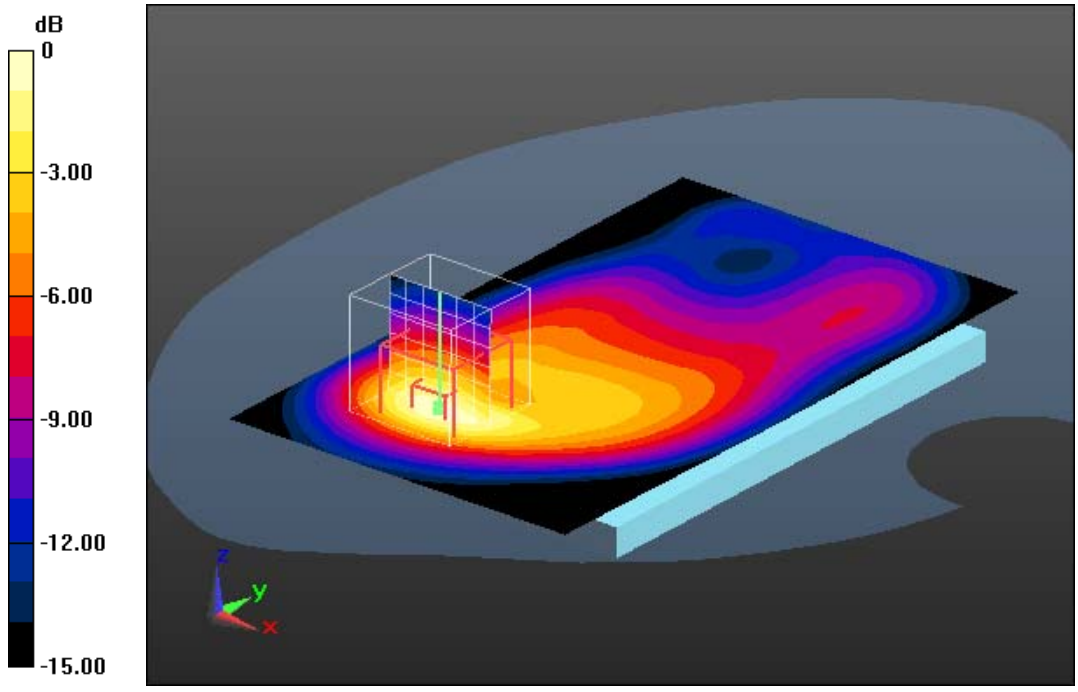
Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1909.8 MHz; Communication System PAR: 3.55 dB; PMF: 1.50487
Medium parameters used: f = 1909.8 MHz; σ = 1.53 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.2, 4.2, 4.2); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=40.6, b=99.4, c=23.0, calibrated PAR=3.6 dB / Y: a=33.7, b=99.5, c=23.1, calibrated PAR=3.6 dB / Z: a=31.5, b=99.5, c=23.6, calibrated PAR=3.6 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Front Position - Hi/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.664 W/kg

Body MSL/Front Position - Hi/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.518 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.966 mW/g
SAR(1 g) = 0.580 mW/g; SAR(10 g) = 0.317 mW/g
Maximum value of SAR (measured) = 0.653 W/kg



0 dB = 0.653 W/kg = -3.70 dB W/kg

Additional information:
position or distance of DUT to SAM: 10mm
ambient temperature: 21.1°C; liquid temperature: 20.1°C

Date/Time: 30.10.2012 11:08:50

OET65_EN62209-2-GSM1900 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

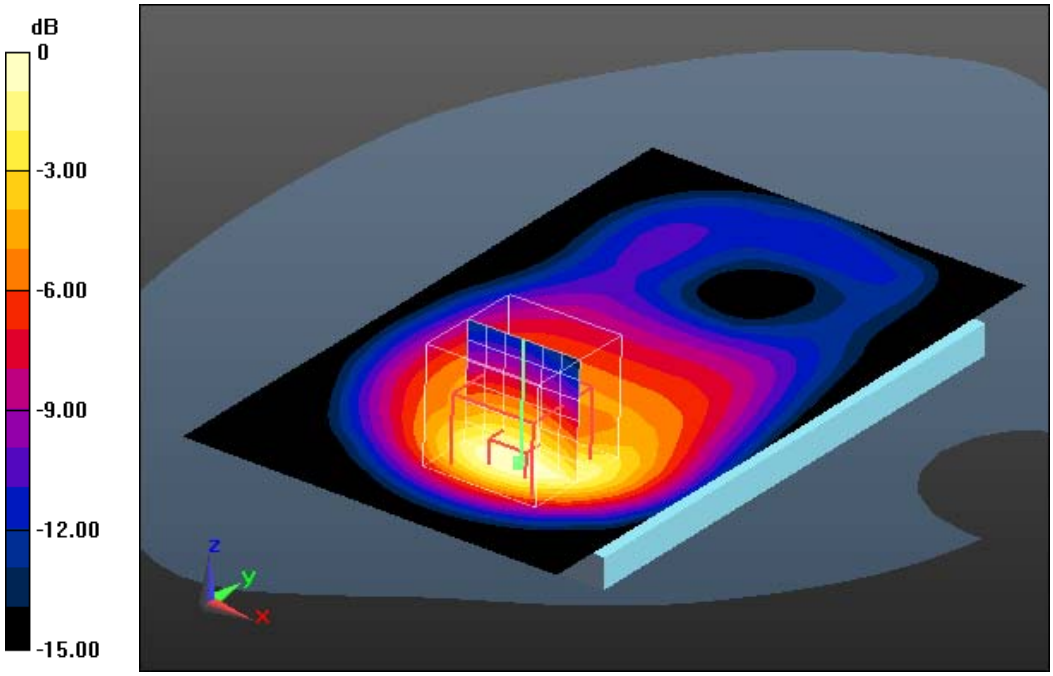
Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1850.2 MHz; Communication System PAR: 3.55 dB; PMF: 1.50487
Medium parameters used: f = 1850.2 MHz; σ = 1.46 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.2, 4.2, 4.2); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=40.6, b=99.4, c=23.0, calibrated PAR=3.6 dB / Y: a=33.7, b=99.5, c=23.1, calibrated PAR=3.6 dB / Z: a=31.5, b=99.5, c=23.6, calibrated PAR=3.6 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Rear Position - Low/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.903 W/kg

Body MSL/Rear Position - Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.753 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 1.237 mW/g
SAR(1 g) = 0.765 mW/g; SAR(10 g) = 0.417 mW/g
Maximum value of SAR (measured) = 0.876 W/kg



0 dB = 0.876 W/kg = -1.15 dB W/kg

Additional information:
position or distance of DUT to SAM: 10mm
ambient temperature: 21.1°C; liquid temperature: 20.1°C

Date/Time: 30.10.2012 10:49:20

OET65_EN62209-2-GSM1900 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

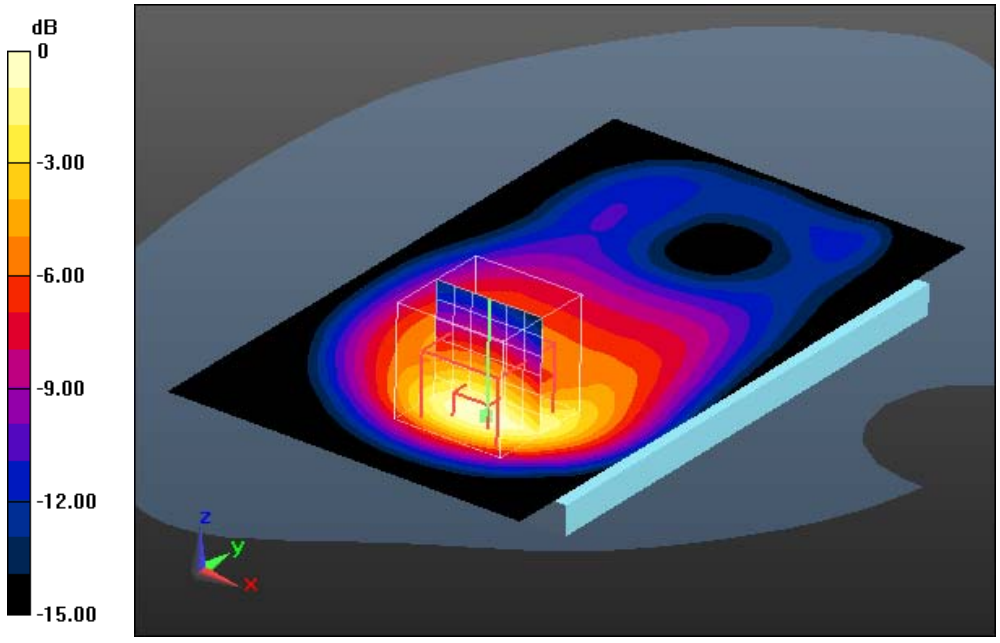
Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 3.55 dB; PMF: 1.50487
Medium parameters used: f = 1880 MHz; σ = 1.5 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.2, 4.2, 4.2); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=40.6, b=99.4, c=23.0, calibrated PAR=3.6 dB / Y: a=33.7, b=99.5, c=23.1, calibrated PAR=3.6 dB / Z: a=31.5, b=99.5, c=23.6, calibrated PAR=3.6 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Rear Position - Mid/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.954 W/kg

Body MSL/Rear Position - Mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.145 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.341 mW/g
SAR(1 g) = 0.823 mW/g; SAR(10 g) = 0.442 mW/g
Maximum value of SAR (measured) = 0.942 W/kg



0 dB = 0.942 W/kg = -0.52 dB W/kg

Additional information:
position or distance of DUT to SAM: 10mm
ambient temperature: 21.1°C; liquid temperature: 20.1°C

Date/Time: 30.10.2012 10:27:42

OET65_EN62209-2-GSM1900 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

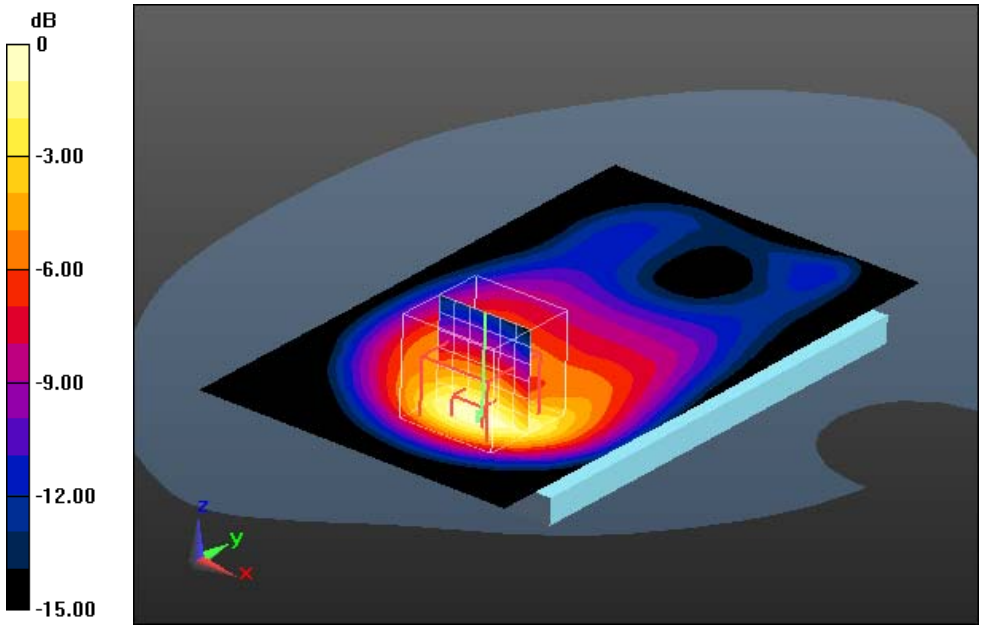
Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1909.8 MHz; Communication System PAR: 3.55 dB; PMF: 1.50487
Medium parameters used: f = 1909.8 MHz; σ = 1.53 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.2, 4.2, 4.2); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=40.6, b=99.4, c=23.0, calibrated PAR=3.6 dB / Y: a=33.7, b=99.5, c=23.1, calibrated PAR=3.6 dB / Z: a=31.5, b=99.5, c=23.6, calibrated PAR=3.6 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Rear Position - Hi/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.12 W/kg

Body MSL/Rear Position - Hi/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.182 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 1.615 mW/g
SAR(1 g) = 0.968 mW/g; SAR(10 g) = 0.515 mW/g
Maximum value of SAR (measured) = 1.13 W/kg



0 dB = 1.13 W/kg = 1.06 dB W/kg

Additional information:
position or distance of DUT to SAM: 10mm
ambient temperature: 21.1°C; liquid temperature: 20.1°C

Date/Time: 30.10.2012 11:54:50

OET65_EN62209-2-GSM1900 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

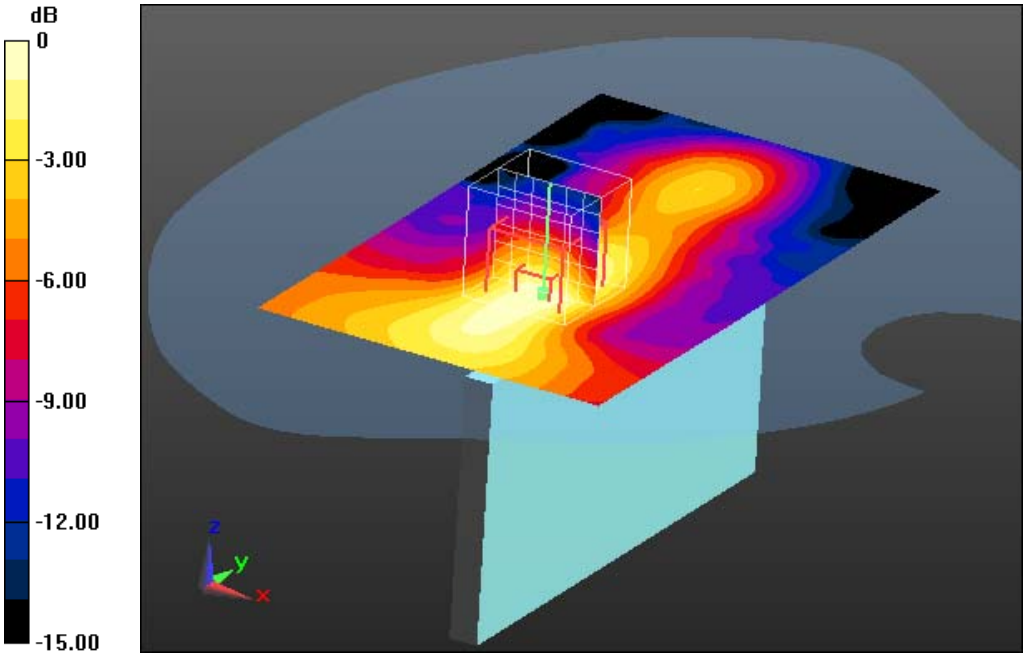
Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 3.55 dB; PMF: 1.50487
Medium parameters used: f = 1880 MHz; σ = 1.5 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.2, 4.2, 4.2); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=40.6, b=99.4, c=23.0, calibrated PAR=3.6 dB / Y: a=33.7, b=99.5, c=23.1, calibrated PAR=3.6 dB / Z: a=31.5, b=99.5, c=23.6, calibrated PAR=3.6 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Left Side Position - Mid/Area Scan (101x171x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.113 W/kg

Body MSL/Left Side Position - Mid/Zoom Scan (7x7x7)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.149 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.169 mW/g
SAR(1 g) = 0.100 mW/g; SAR(10 g) = 0.058 mW/g
Maximum value of SAR (measured) = 0.110 W/kg



0 dB = 0.110 W/kg = -19.17 dB W/kg

Additional information:
position or distance of DUT to SAM: 10mm
ambient temperature: 21.1°C; liquid temperature: 20.1°C

Date/Time: 30.10.2012 12:15:29

OET65_EN62209-2-GSM1900 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

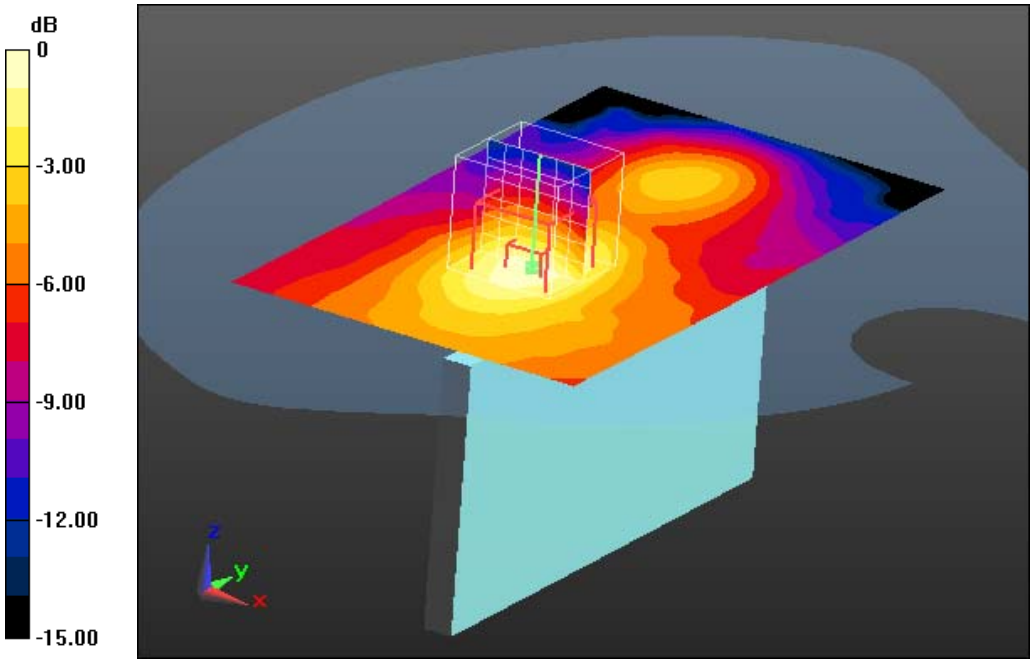
Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 3.55 dB; PMF: 1.50487
Medium parameters used: f = 1880 MHz; σ = 1.5 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.2, 4.2, 4.2); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=40.6, b=99.4, c=23.0, calibrated PAR=3.6 dB / Y: a=33.7, b=99.5, c=23.1, calibrated PAR=3.6 dB / Z: a=31.5, b=99.5, c=23.6, calibrated PAR=3.6 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Right Side Position - Mid/Area Scan (101x171x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.0921 W/kg

Body MSL/Right Side Position - Mid/Zoom Scan (7x7x7)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.527 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.137 mW/g
SAR(1 g) = 0.086 mW/g; SAR(10 g) = 0.053 mW/g
Maximum value of SAR (measured) = 0.0942 W/kg



0 dB = 0.0942 W/kg = -20.52 dB W/kg

Additional information:
position or distance of DUT to SAM: 10mm
ambient temperature: 21.1°C; liquid temperature: 20.1°C

Date/Time: 30.10.2012 12:35:20

OET65_EN62209-2-GSM1900 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

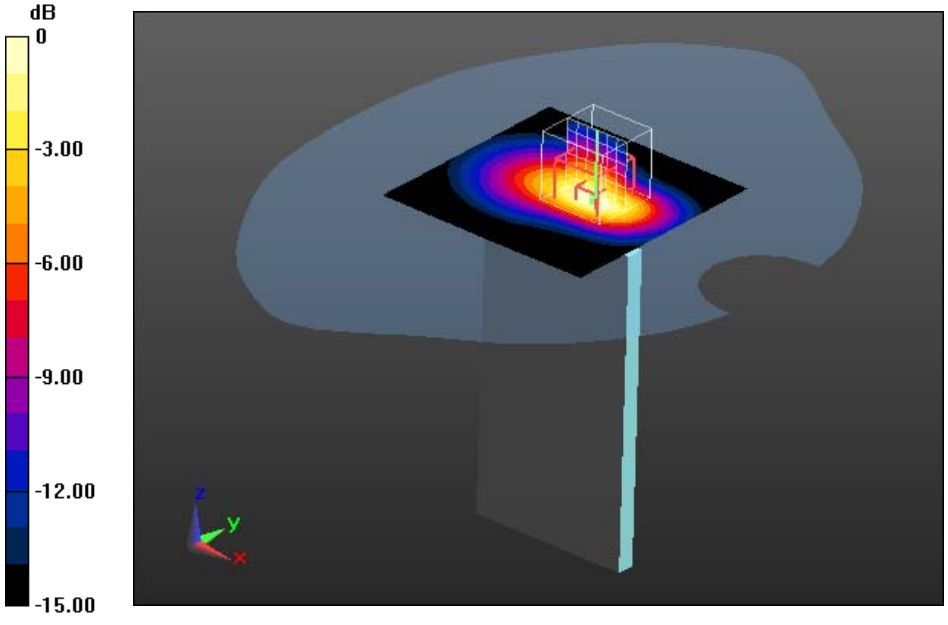
Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 3.55 dB; PMF: 1.50487
Medium parameters used: f = 1880 MHz; σ = 1.5 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.2, 4.2, 4.2); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=40.6, b=99.4, c=23.0, calibrated PAR=3.6 dB / Y: a=33.7, b=99.5, c=23.1, calibrated PAR=3.6 dB / Z: a=31.5, b=99.5, c=23.6, calibrated PAR=3.6 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Bottom Position - Mid/Area Scan (101x101x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.06 W/kg

Body MSL/Bottom Position - Mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 27.091 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.507 mW/g
SAR(1 g) = 0.900 mW/g; SAR(10 g) = 0.474 mW/g
Maximum value of SAR (measured) = 1.03 W/kg



0 dB = 1.03 W/kg = 0.26 dB W/kg

Additional information:
position or distance of DUT to SAM: 10mm
ambient temperature: 21.1°C; liquid temperature: 20.1°C

Date/Time: 30.10.2012 13:00:51

OET65_EN62209-2-GSM1900 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

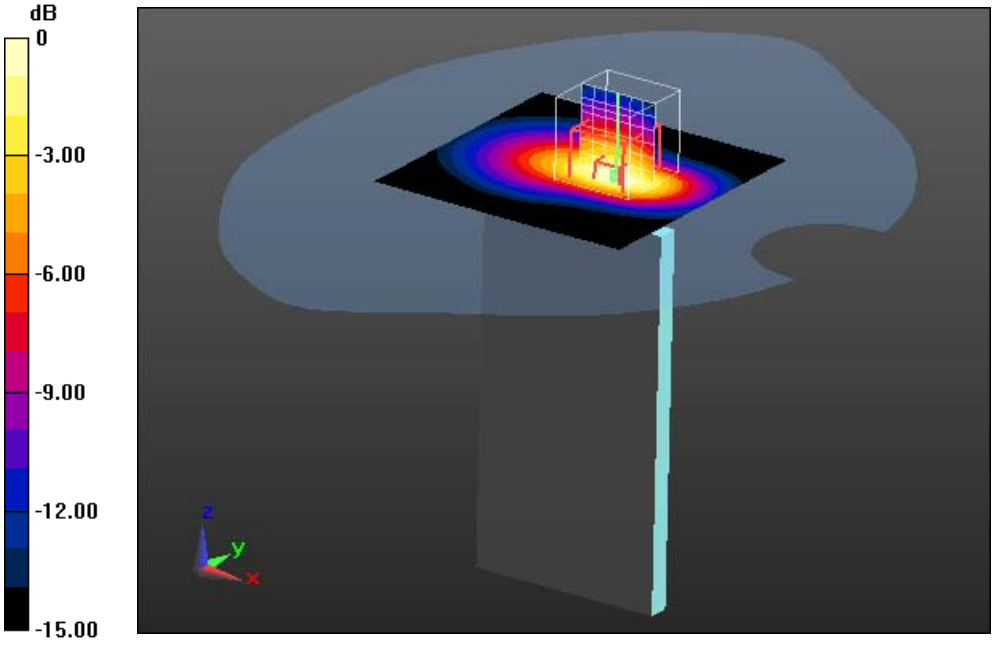
Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1850.2 MHz; Communication System PAR: 3.55 dB; PMF: 1.50487
Medium parameters used: f = 1850.2 MHz; σ = 1.46 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.2, 4.2, 4.2); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=40.6, b=99.4, c=23.0, calibrated PAR=3.6 dB / Y: a=33.7, b=99.5, c=23.1, calibrated PAR=3.6 dB / Z: a=31.5, b=99.5, c=23.6, calibrated PAR=3.6 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Bottom Position - Low/Area Scan (101x101x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.01 W/kg

Body MSL/Bottom Position - Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.804 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 1.439 mW/g
SAR(1 g) = 0.857 mW/g; SAR(10 g) = 0.455 mW/g
Maximum value of SAR (measured) = 0.986 W/kg



0 dB = 0.986 W/kg = -0.12 dB W/kg

Additional information:
position or distance of DUT to SAM: 10mm
ambient temperature: 21.1°C; liquid temperature: 20.1°C

Date/Time: 30.10.2012 13:17:20

OET65_EN62209-2-GSM1900 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

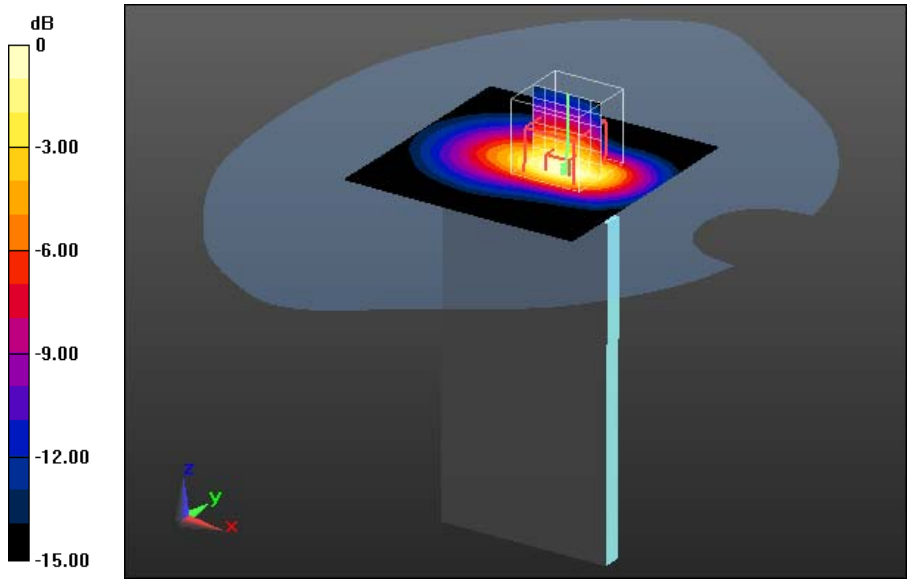
Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1909.8 MHz; Communication System PAR: 3.55 dB; PMF: 1.50487
Medium parameters used: f = 1909.8 MHz; σ = 1.53 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.2, 4.2, 4.2); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=40.6, b=99.4, c=23.0, calibrated PAR=3.6 dB / Y: a=33.7, b=99.5, c=23.1, calibrated PAR=3.6 dB / Z: a=31.5, b=99.5, c=23.6, calibrated PAR=3.6 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Bottom Position - High/Area Scan (101x101x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.27 W/kg

Body MSL/Bottom Position - High/Zoom Scan (7x7x7)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 28.826 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.828 mW/g
SAR(1 g) = 1.07 mW/g; SAR(10 g) = 0.560 mW/g
Maximum value of SAR (measured) = 1.22 W/kg



0 dB = 1.22 W/kg = 1.73 dB W/kg

Additional information:
position or distance of DUT to SAM: 10mm
ambient temperature: 21.1°C; liquid temperature: 20.1°C

Date/Time: 30.10.2012 13:37:20

OET65_EN62209-2-GSM1900 body

DUT: Smartphone; Type: MD98172; Serial: 865820010008444

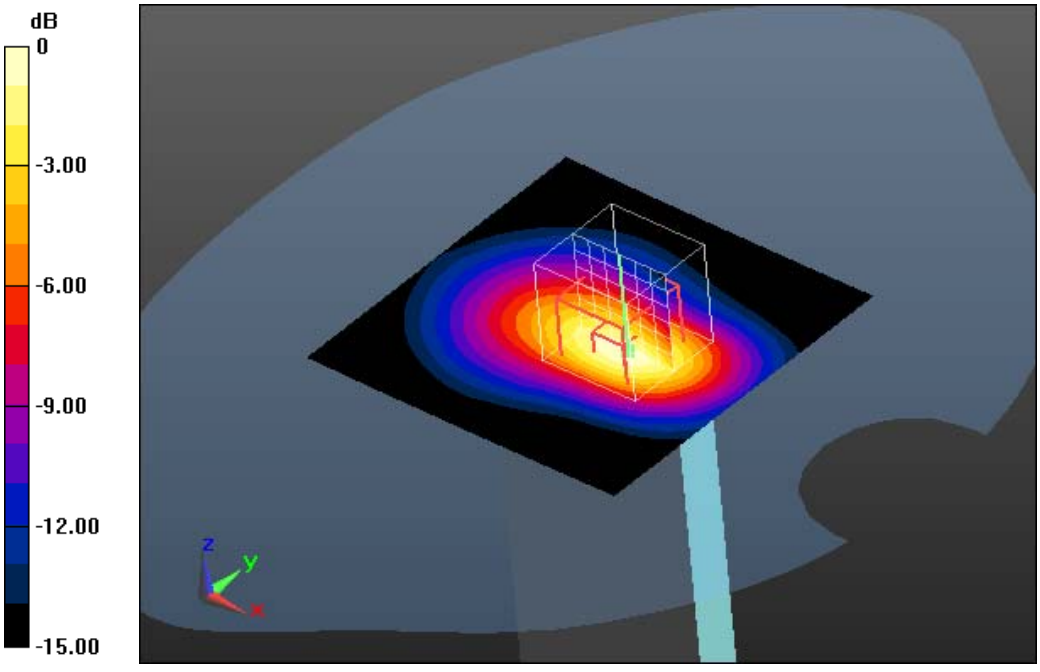
Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1909.8 MHz; Communication System PAR: 3.55 dB; PMF: 1.50487
Medium parameters used: f = 1909.8 MHz; σ = 1.53 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.2, 4.2, 4.2); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=40.6, b=99.4, c=23.0, calibrated PAR=3.6 dB / Y: a=33.7, b=99.5, c=23.1, calibrated PAR=3.6 dB / Z: a=31.5, b=99.5, c=23.6, calibrated PAR=3.6 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 right; Type: QD000P40CC; Serial: TP-1042
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Configuration/Bottom Position - High/Area Scan (101x101x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.12 W/kg

Configuration/Bottom Position - High/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 29.249 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 1.693 mW/g
SAR(1 g) = 1 mW/g; SAR(10 g) = 0.534 mW/g
Maximum value of SAR (measured) = 1.14 W/kg



0 dB = 1.14 W/kg = 1.14 dB W/kg

Additional information:
position or distance of DUT to SAM: 10mm
ambient temperature: 21.1°C; liquid temperature: 20.1°C

Date/Time: 30.10.2012 14:24:07

OET65_EN62209-2-GSM1900 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

Communication System: GPRS-FDD (TDMA, GMSK, TN 0-1-2-3); Frequency: 1909.8 MHz;Duty Cycle: 1:2.26464

Medium parameters used: f = 1909.8 MHz; σ = 1.53 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY5 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.2, 4.2, 4.2); Calibrated: 24.08.2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- Measurement SW: DASY52 52.8.2(969); Postprocessing SW: SEMCAD X 14.6.6(6824)

Body MSL/Rear Position - Hi 15mm/Area Scan (71x111x1): Interpolated grid:

dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.461 W/kg

Body MSL/Rear Position - Hi 15mm/Zoom Scan (7x7x7)/Cube 0: Measurement

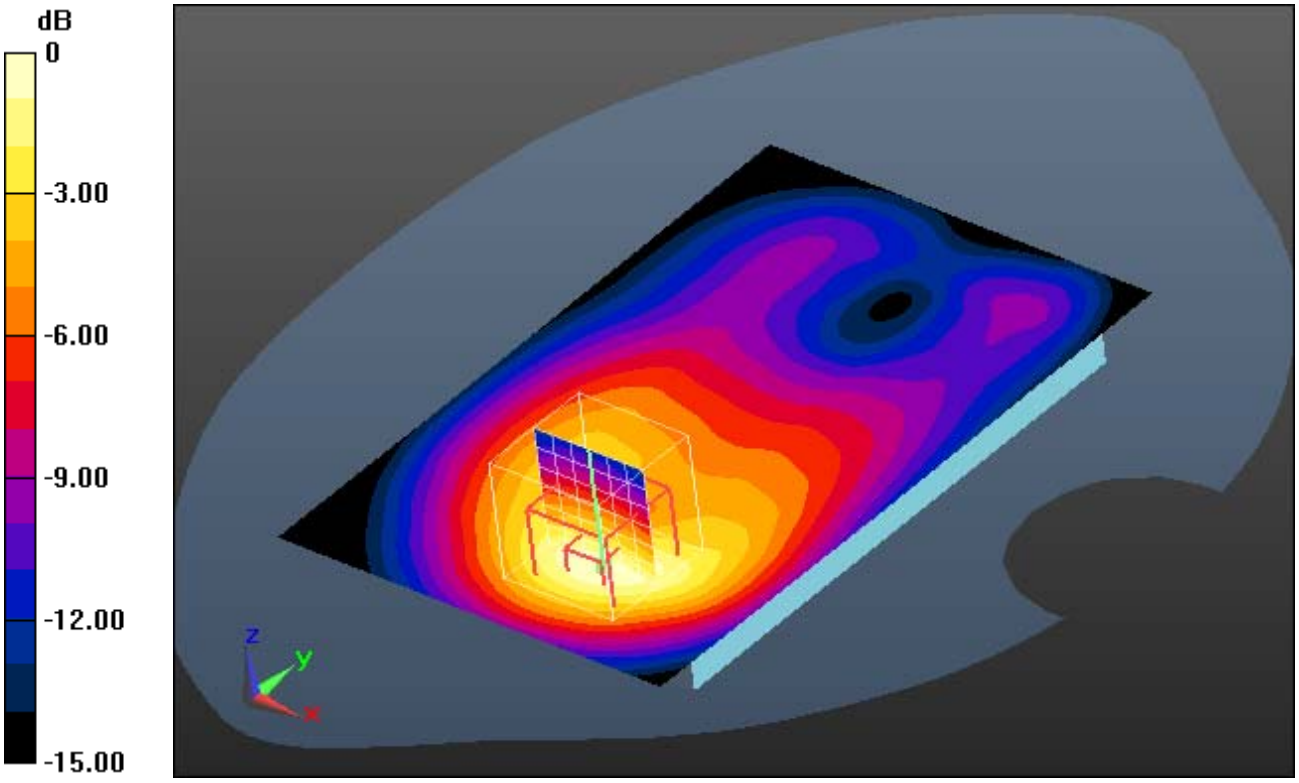
grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.253 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.650 mW/g

SAR(1 g) = 0.419 mW/g; SAR(10 g) = 0.245 mW/g

Maximum value of SAR (measured) = 0.467 W/kg



0 dB = 0.467 W/kg = -6.61 dB W/kg

Additional information:

position or distance of DUT to SAM: 15 mm

ambient temperature: 21.1°C; liquid temperature: 20.1°C

Date/Time: 30.10.2012 11:31:27

OET65_EN62209-2-GSM1900 body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

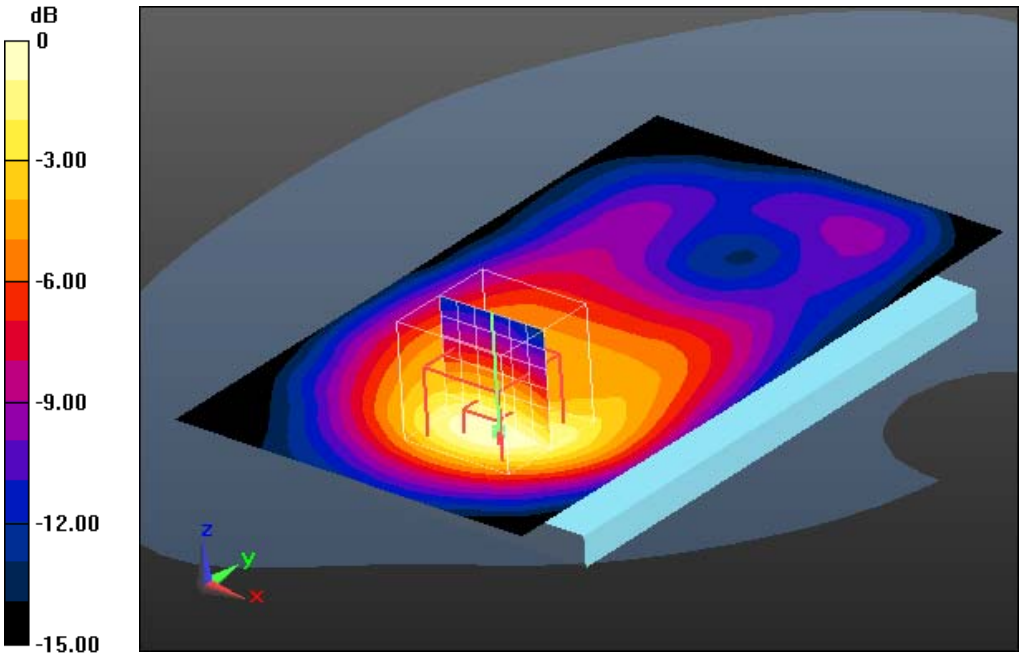
Communication System: GSM-FDD (TDMA, GMSK); Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 9.4 dB; PMF: 2.94781
Medium parameters used: f = 1880 MHz; σ = 1.5 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.2, 4.2, 4.2); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=20.6, b=99.9, c=28.7, calibrated PAR=9.4 dB / Y: a=16.2, b=98.3, c=28.5, calibrated PAR=9.4 dB / Z: a=18.2, b=99.4, c=28.9, calibrated PAR=9.4 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Rear Position - Mid 15mm/Area Scan (101x171x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.428 W/kg

Body MSL/Rear Position - Mid 15mm/Zoom Scan (7x7x7)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.245 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.598 mW/g
SAR(1 g) = 0.388 mW/g; SAR(10 g) = 0.226 mW/g
Maximum value of SAR (measured) = 0.430 W/kg



0 dB = 0.430 W/kg = -7.33 dB W/kg

Additional information:
position or distance of DUT to SAM: 15mm
ambient temperature: 21.1°C; liquid temperature: 20.1°C

Annex B.3: WCDMA FDD V 850MHz

Date/Time: 18.10.2012 13:00:41

IEEE1528-WCDMA FDDV head Left Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

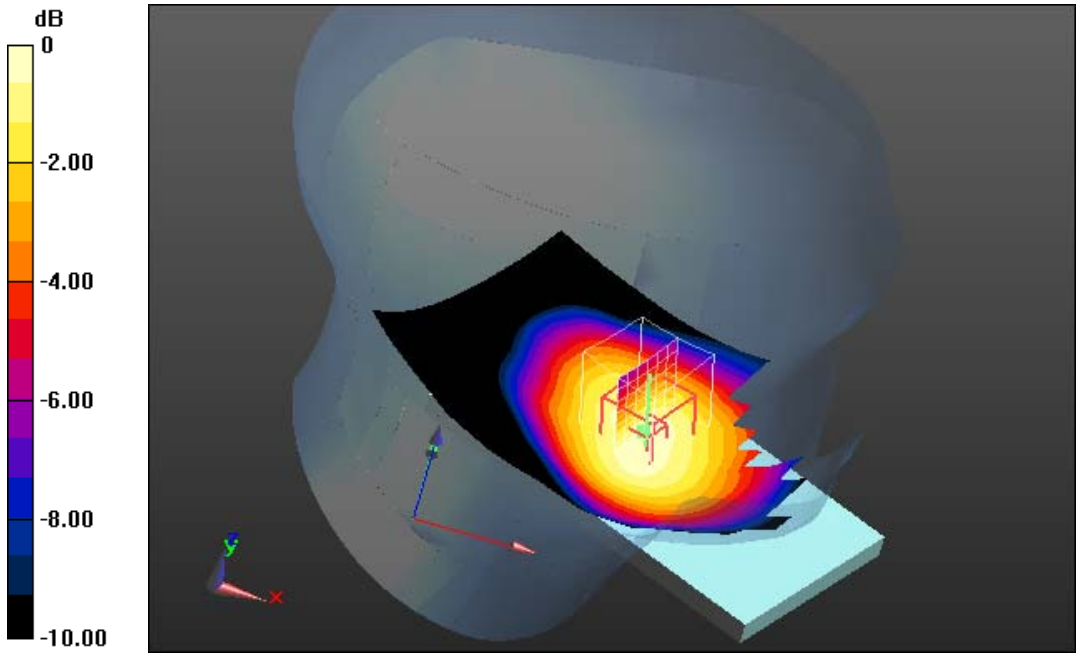
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 826.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.884 mho/m; ε_r = 41.882; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

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

grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.588 W/kg

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.705 V/m; Power Drift = -0.073 dB
Peak SAR (extrapolated) = 0.689 mW/g
SAR(1 g) = 0.558 mW/g; SAR(10 g) = 0.430 mW/g
Maximum value of SAR (measured) = 0.596 W/kg



0 dB = 0.596 W/kg = -4.50 dB W/kg

Additional information:
ambient temperature: 21.9°C; liquid temperature: 22.9°C

Date/Time: 18.10.2012 13:31:54

IEEE1528-WCDMA FDDV head Left Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

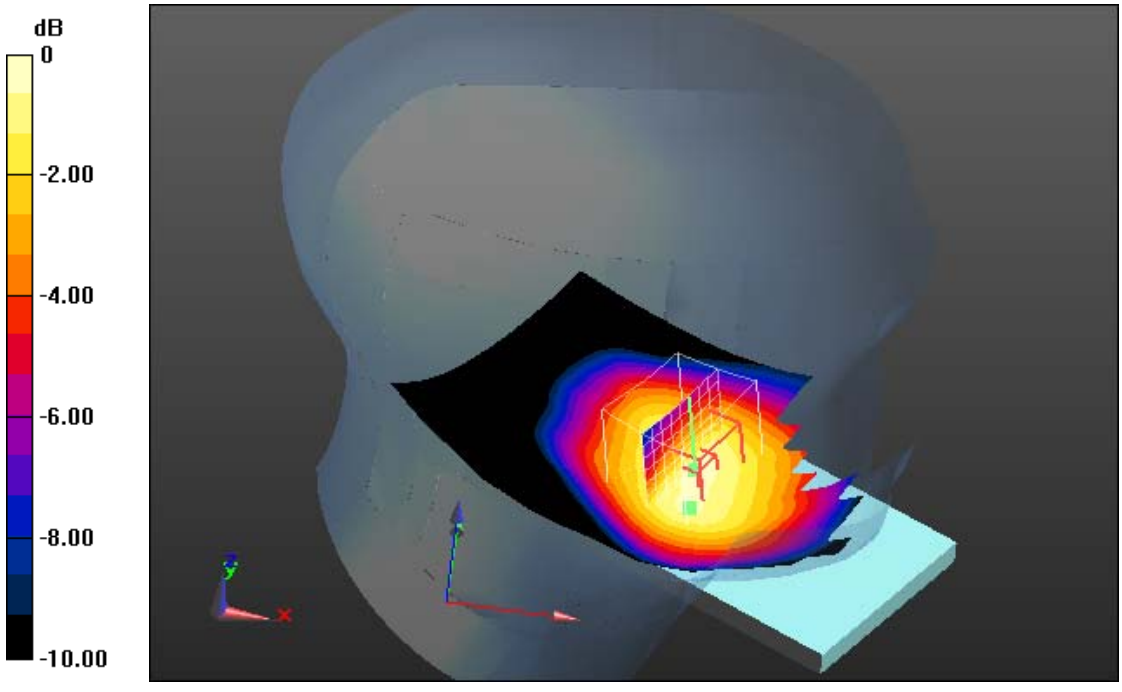
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used: f = 836.6 MHz; σ = 0.9 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Left-Hand-Side HSL/Touch Position - Mid/Area Scan (111x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.527 W/kg

Left-Hand-Side HSL/Touch Position - Mid/Zoom Scan (9x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 25.134 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.669 mW/g
SAR(1 g) = 0.522 mW/g; SAR(10 g) = 0.401 mW/g
Maximum value of SAR (measured) = 0.571 W/kg



0 dB = 0.571 W/kg = -4.87 dB W/kg

Additional information:
ambient temperature: 22.9°C; liquid temperature: 21.9°C

Date/Time: 18.10.2012 14:16:49

IEEE1528-WCDMA FDDV head Left Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

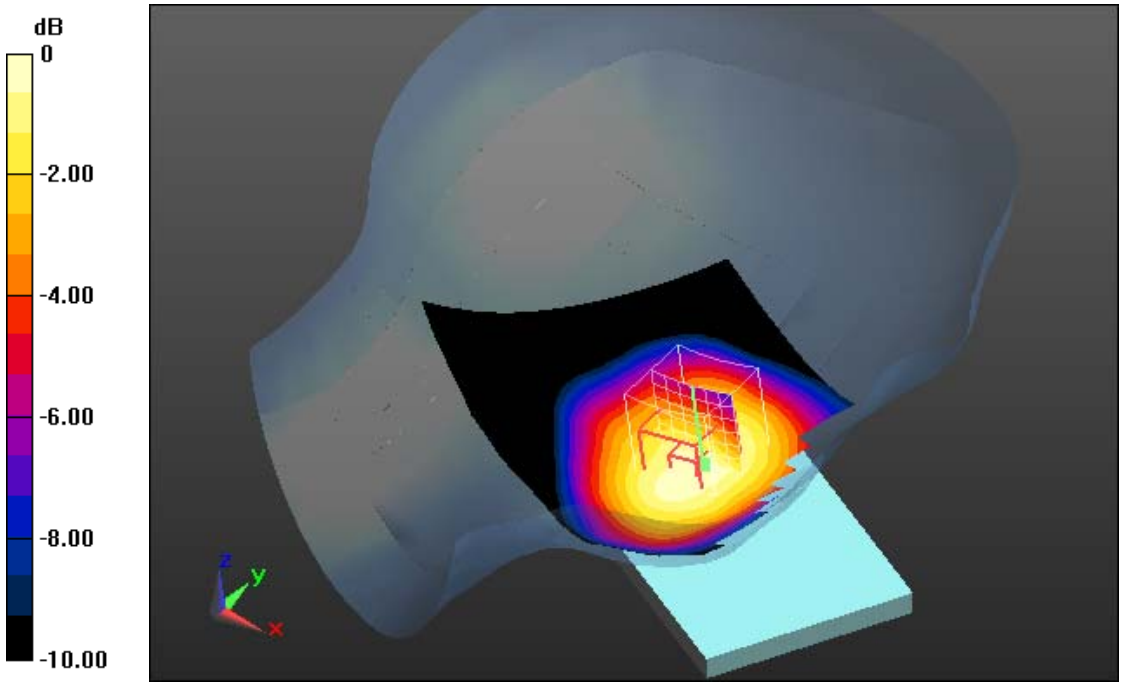
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 846.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used (interpolated): f = 846.6 MHz; σ = 0.908 mho/m; ε_r = 41.718; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

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

grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.631 W/kg

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.840 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 0.749 mW/g
SAR(1 g) = 0.594 mW/g; SAR(10 g) = 0.455 mW/g
Maximum value of SAR (measured) = 0.633 W/kg



0 dB = 0.633 W/kg = -3.97 dB W/kg

Additional information:
ambient temperature: 22.9°C; liquid temperature: 21.9°C

Date/Time: 18.10.2012 14:47:28

IEEE1528-WCDMA FDDV head Left Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

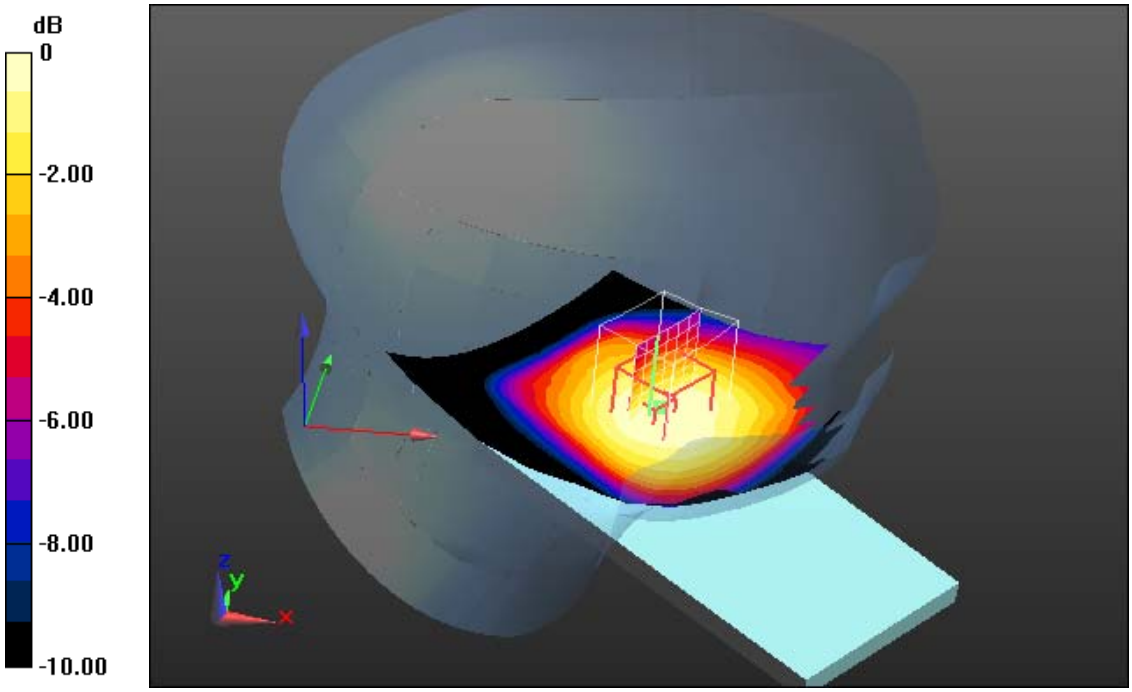
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 826.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.884 mho/m; ε_r = 41.882; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Left-Hand-Side HSL/Tilt Position - Low/Area Scan (111x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.353 W/kg

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.403 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.399 mW/g
SAR(1 g) = 0.328 mW/g; SAR(10 g) = 0.255 mW/g
Maximum value of SAR (measured) = 0.346 W/kg



0 dB = 0.346 W/kg = -9.22 dB W/kg

Additional information:
ambient temperature: 22.9°C; liquid temperature: 21.9°C

Date/Time: 18.10.2012 15:30:06

IEEE1528-WCDMA FDDV head Left Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

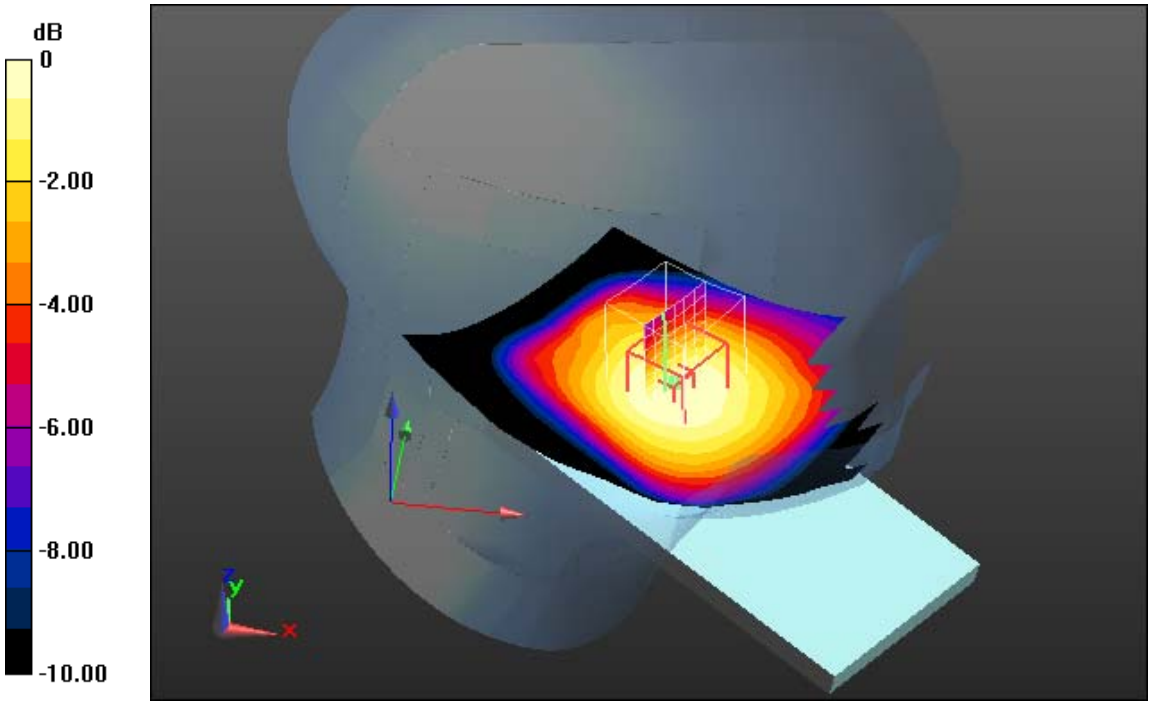
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used: f = 836.6 MHz; σ = 0.9 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Left-Hand-Side HSL/Tilt Position - Mid/Area Scan (111x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.331 W/kg

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.338 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.381 mW/g
SAR(1 g) = 0.315 mW/g; SAR(10 g) = 0.245 mW/g
Maximum value of SAR (measured) = 0.329 W/kg



0 dB = 0.329 W/kg = -9.66 dB W/kg

Additional information:
ambient temperature: 22.9°C; liquid temperature: 21.9°C

Date/Time: 18.10.2012 15:50:22

IEEE1528-WCDMA FDDV head Left Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

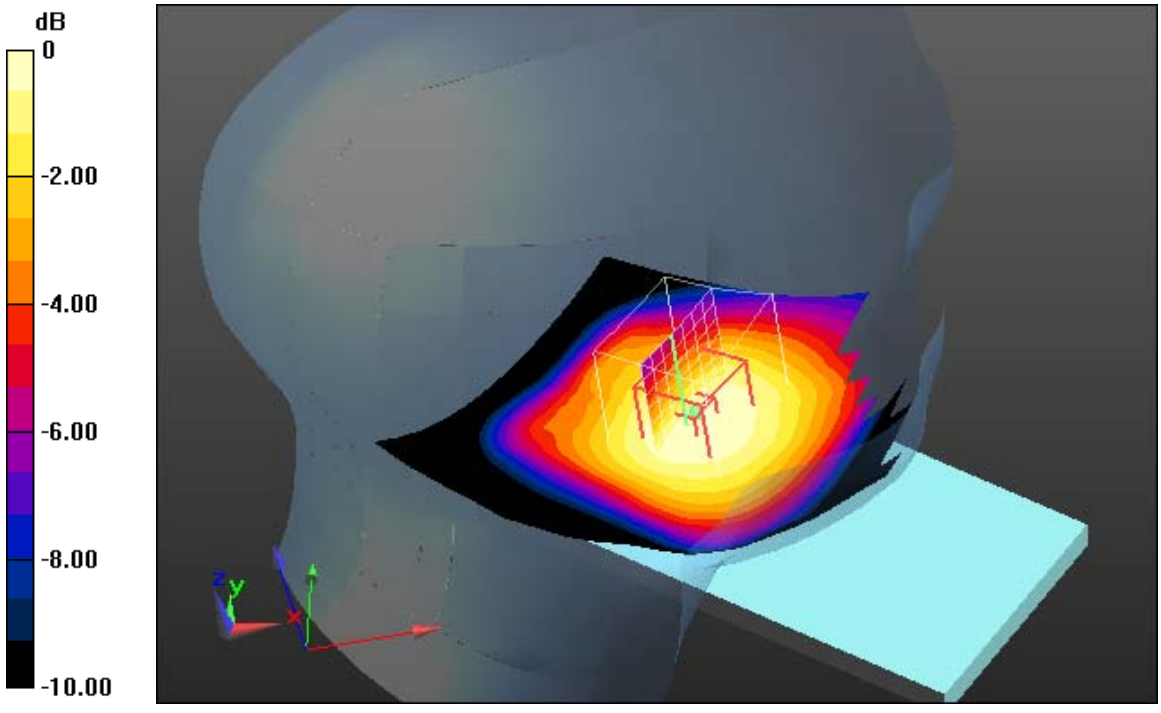
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 846.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used (interpolated): f = 846.6 MHz; σ = 0.908 mho/m; ε_r = 41.718; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Left-Hand-Side HSL/Tilt Position - Hi/Area Scan (111x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.375 W/kg

Left-Hand-Side HSL/Tilt Position - Hi/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.777 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.433 mW/g
SAR(1 g) = 0.355 mW/g; SAR(10 g) = 0.275 mW/g
Maximum value of SAR (measured) = 0.373 W/kg



0 dB = 0.373 W/kg = -8.57 dB W/kg

Additional information:
ambient temperature: 22.9°C; liquid temperature: 21.9°C

Date/Time: 18.10.2012 10:35:21

IEEE1528-WCDMA FDDV head Right Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

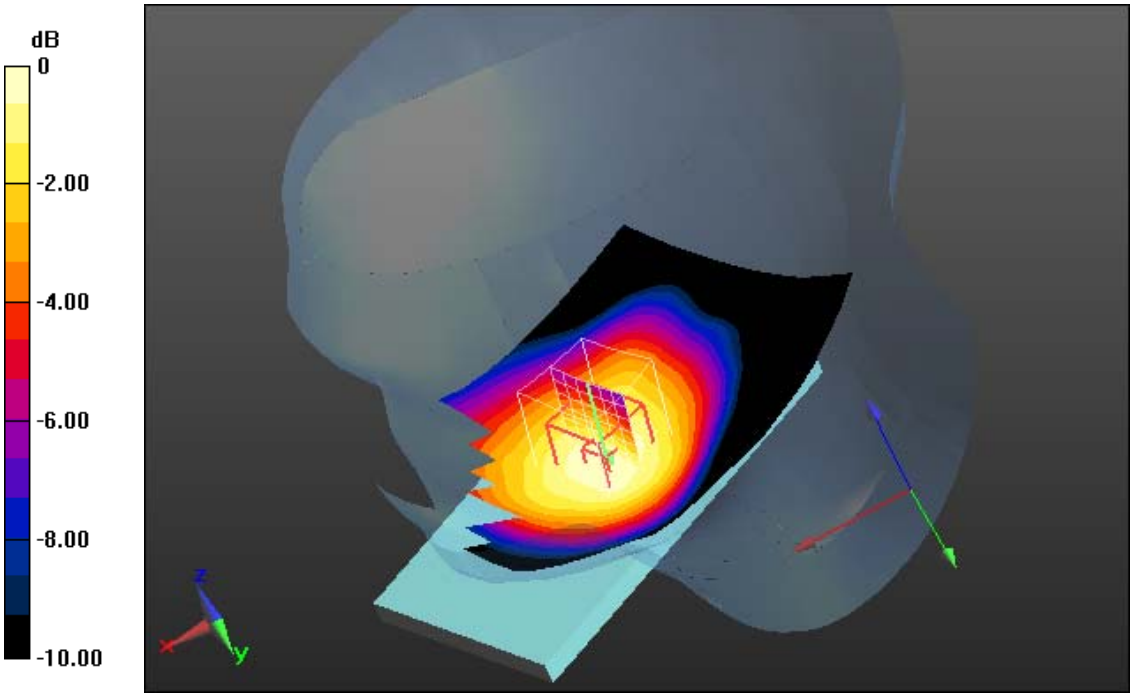
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 826.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.884 mho/m; ε_r = 41.882; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

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

Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.524 W/kg

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.369 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 0.625 mW/g
SAR(1 g) = 0.504 mW/g; SAR(10 g) = 0.388 mW/g
Maximum value of SAR (measured) = 0.538 W/kg



0 dB = 0.538 W/kg = -5.38 dB W/kg

Additional information:
ambient temperature: 22.9°C; liquid temperature: 21.9°C

Date/Time: 18.10.2012 11:02:51

IEEE1528-WCDMA FDDV head Right Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

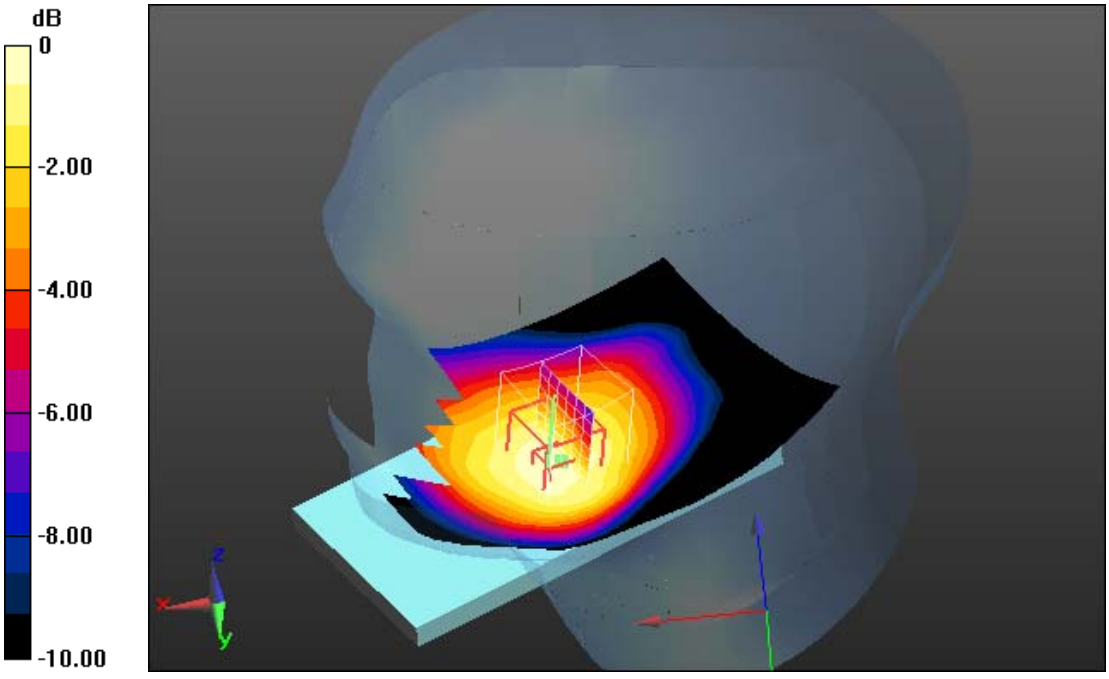
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used: f = 836.6 MHz; σ = 0.9 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

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

Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.513 W/kg

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.977 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.617 mW/g
SAR(1 g) = 0.487 mW/g; SAR(10 g) = 0.372 mW/g
Maximum value of SAR (measured) = 0.516 W/kg



0 dB = 0.516 W/kg = -5.75 dB W/kg

Additional information:
ambient temperature: 22.9°C; liquid temperature: 21.9°C

Date/Time: 18.10.2012 11:23:12

IEEE1528-WCDMA FDDV head Right Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

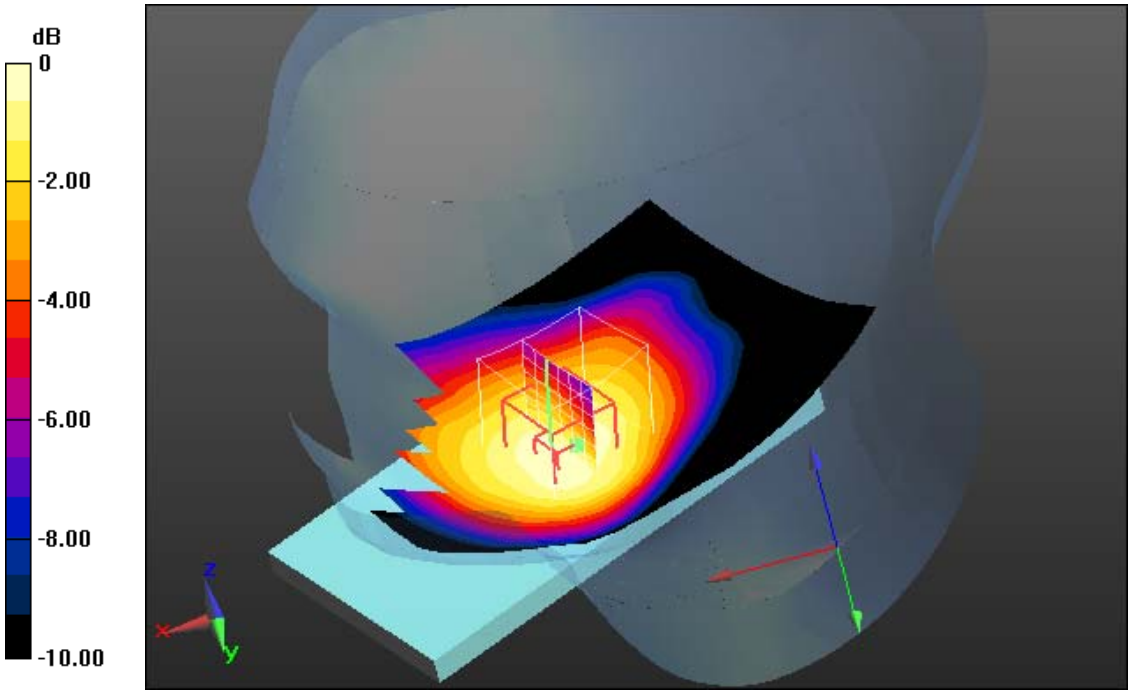
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 846.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used (interpolated): f = 846.6 MHz; σ = 0.908 mho/m; ε_r = 41.718; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Right-Hand-Side HSL/Touch Position - Hi/Area Scan (111x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.567 W/kg

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.552 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.674 mW/g
SAR(1 g) = 0.538 mW/g; SAR(10 g) = 0.413 mW/g
Maximum value of SAR (measured) = 0.569 W/kg



0 dB = 0.569 W/kg = -4.90 dB W/kg

Additional information:
ambient temperature: 22.9°C; liquid temperature: 21.9°C

Date/Time: 18.10.2012 12:37:12

IEEE1528-WCDMA FDDV head Right Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

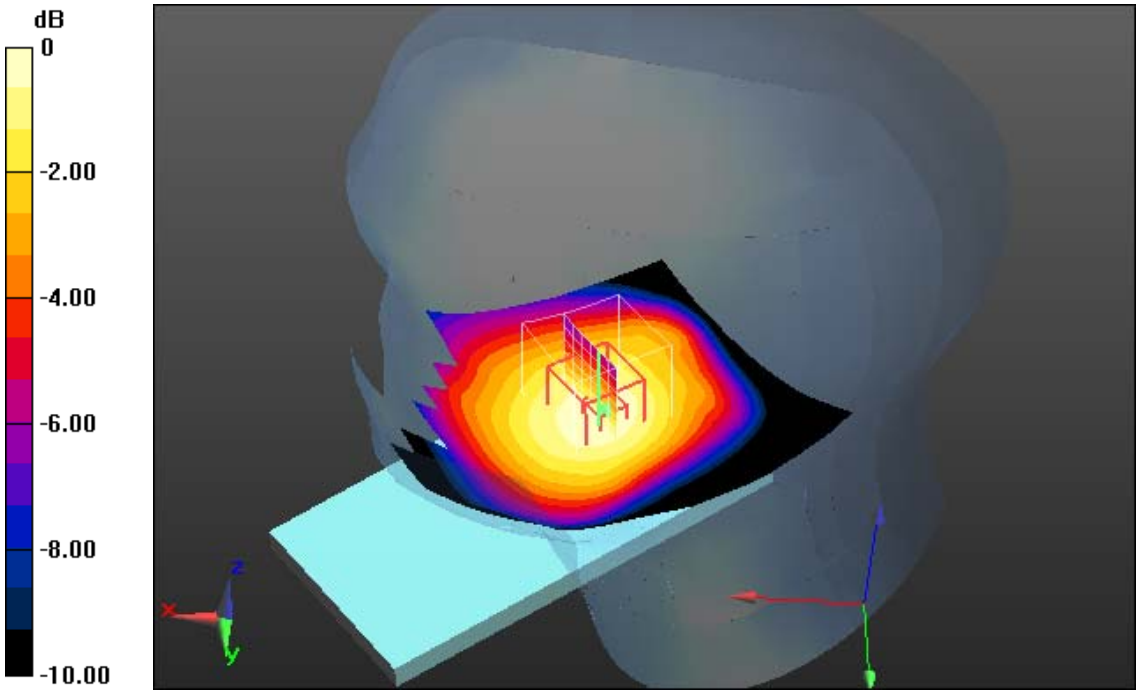
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 826.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.884 mho/m; ε_r = 41.882; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Right-Hand-Side HSL/Tilt Position - Low/Area Scan (111x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.344 W/kg

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.568 V/m; Power Drift = 0.022 dB
Peak SAR (extrapolated) = 0.395 mW/g
SAR(1 g) = 0.326 mW/g; SAR(10 g) = 0.251 mW/g
Maximum value of SAR (measured) = 0.347 W/kg



0 dB = 0.347 W/kg = -9.19 dB W/kg

Additional information:
ambient temperature: 22.9°C; liquid temperature: 21.9°C

Date/Time: 18.10.2012 12:05:53

IEEE1528-WCDMA FDDV head Right Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

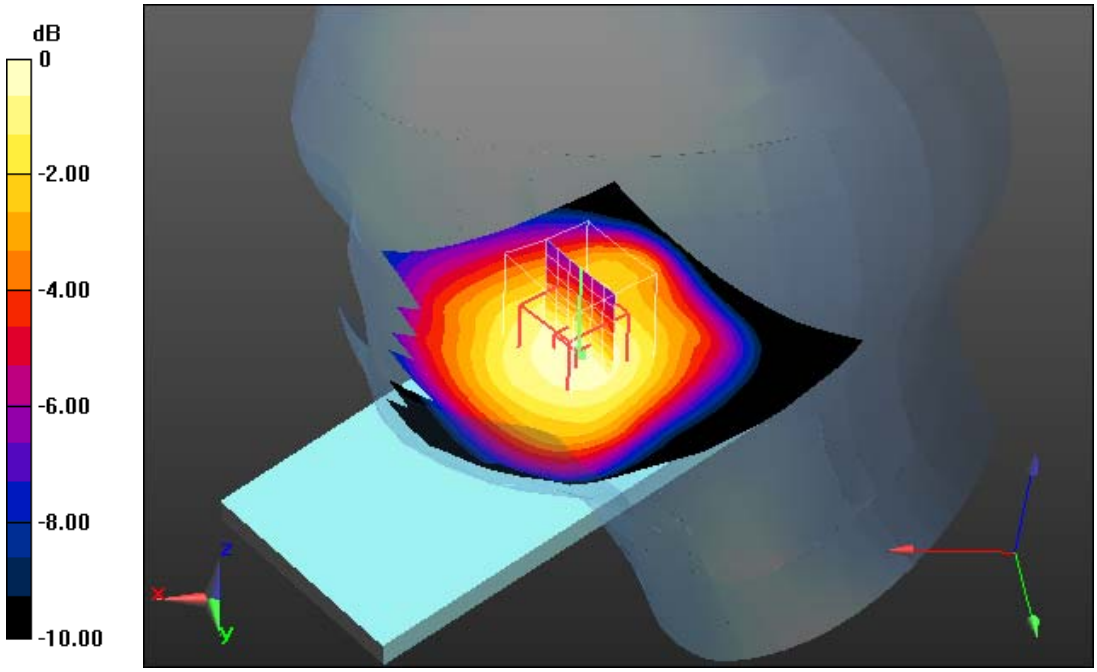
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used: f = 836.6 MHz; σ = 0.9 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Right-Hand-Side HSL/Tilt Position - Mid/Area Scan (111x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.316 W/kg

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.355 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.370 mW/g
SAR(1 g) = 0.305 mW/g; SAR(10 g) = 0.234 mW/g
Maximum value of SAR (measured) = 0.328 W/kg



0 dB = 0.328 W/kg = -9.68 dB W/kg

Additional information:
ambient temperature: 22.9°C; liquid temperature: 21.9°C

Date/Time: 18.10.2012 11:46:20

IEEE1528-WCDMA FDDV head Right Hand

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

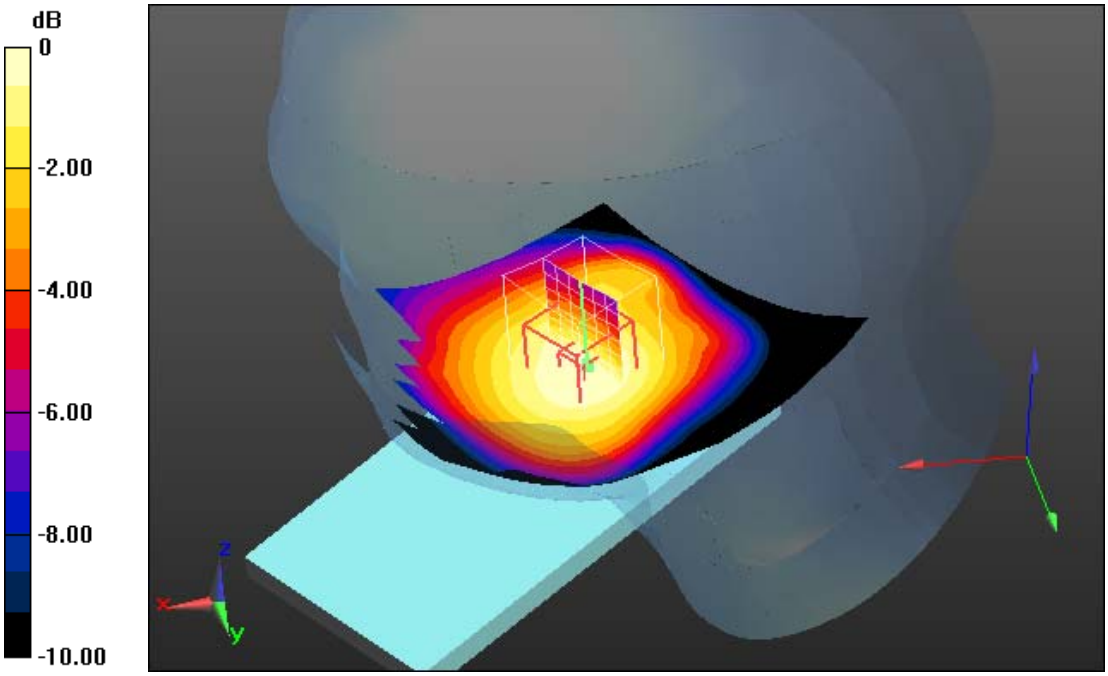
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 846.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used (interpolated): f = 846.6 MHz; σ = 0.908 mho/m; ε_r = 41.718; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.14, 6.14, 6.14); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Right-Hand-Side HSL/Tilt Position - Hi/Area Scan (111x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.364 W/kg

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.760 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.413 mW/g
SAR(1 g) = 0.339 mW/g; SAR(10 g) = 0.259 mW/g
Maximum value of SAR (measured) = 0.356 W/kg



0 dB = 0.356 W/kg = -8.97 dB W/kg

Additional information:
ambient temperature: 22.9°C; liquid temperature: 21.9°C

Date/Time: 25.10.2012 09:02:44

OET65_EN62209-2-WCDMA FDD V body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

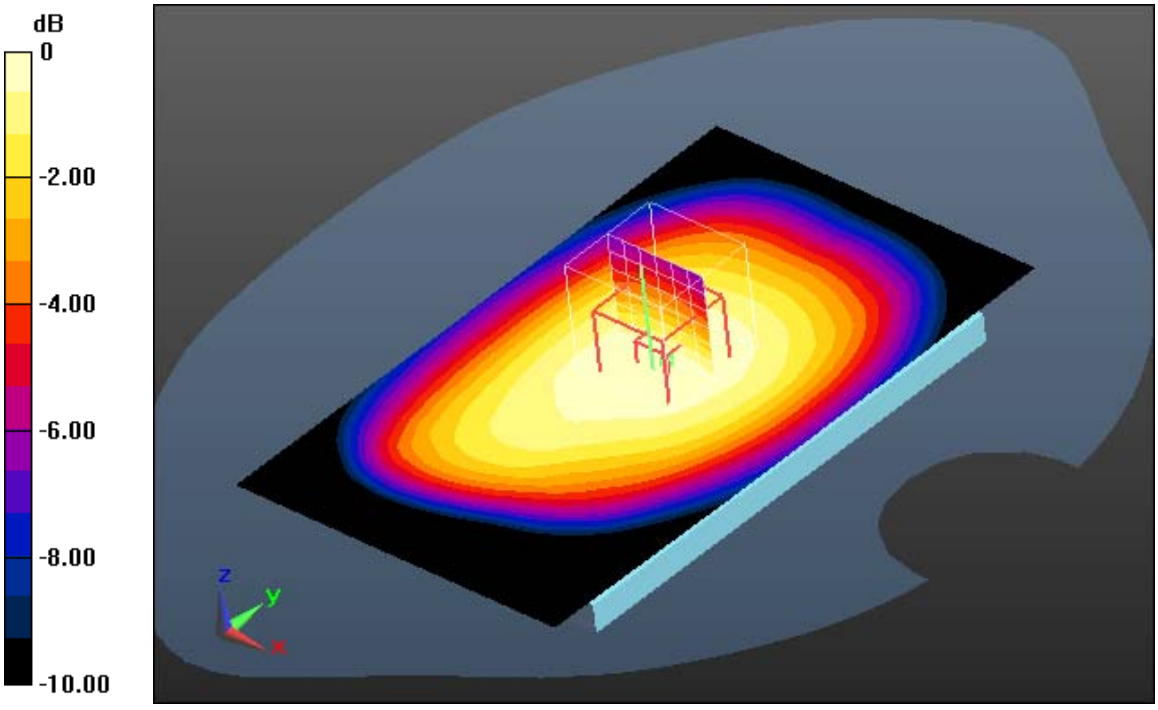
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 826.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.962 mho/m; ε_r = 54.478; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6, 6, 6); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Front Position - Low/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.740 W/kg

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

Reference Value = 28.758 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.848 mW/g
SAR(1 g) = 0.699 mW/g; SAR(10 g) = 0.545 mW/g
Maximum value of SAR (measured) = 0.732 W/kg



0 dB = 0.732 W/kg = -2.71 dB W/kg

Additional information:
position or distance of DUT to SAM: 10 mm
ambient temperature: 22.3°C; liquid temperature: 20.7°C

Date/Time: 25.10.2012 09:31:34

OET65_EN62209-2-WCDMA FDD V body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

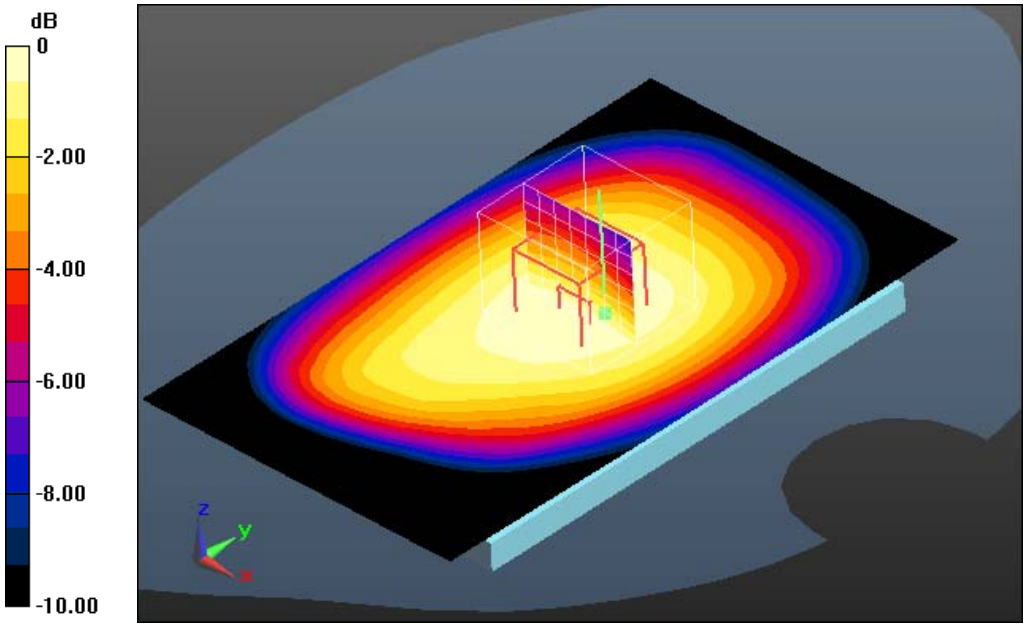
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.399; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6, 6, 6); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Front Position - Mid/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.658 W/kg

Body MSL/Front Position - Mid/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.886 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.782 mW/g
SAR(1 g) = 0.632 mW/g; SAR(10 g) = 0.491 mW/g
Maximum value of SAR (measured) = 0.663 W/kg



0 dB = 0.663 W/kg = -3.57 dB W/kg

Additional information:
position or distance of DUT to SAM: 10 mm
ambient temperature: 22.3°C; liquid temperature: 20.7°C

Date/Time: 25.10.2012 09:54:10

OET65_EN62209-2-WCDMA FDD V body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

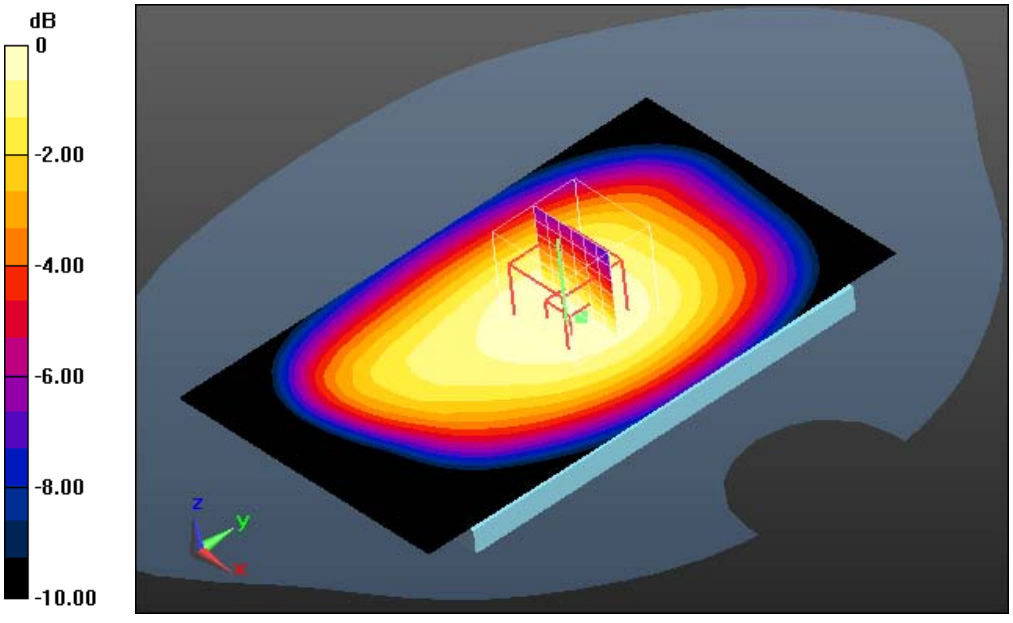
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 846.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used (interpolated): f = 846.6 MHz; σ = 0.985 mho/m; ε_r = 54.325; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6, 6, 6); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Front Position - Hi/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

Body MSL/Front Position - Hi/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.295 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.815 mW/g
SAR(1 g) = 0.664 mW/g; SAR(10 g) = 0.513 mW/g
Maximum value of SAR (measured) = 0.700 W/kg



0 dB = 0.700 W/kg = -3.10 dB W/kg

Additional information:
position or distance of DUT to SAM: 10 mm
ambient temperature: 22.3°C; liquid temperature: 20.7°C

Date/Time: 25.10.2012 11:28:35

OET65_EN62209-2-WCDMA FDD V body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

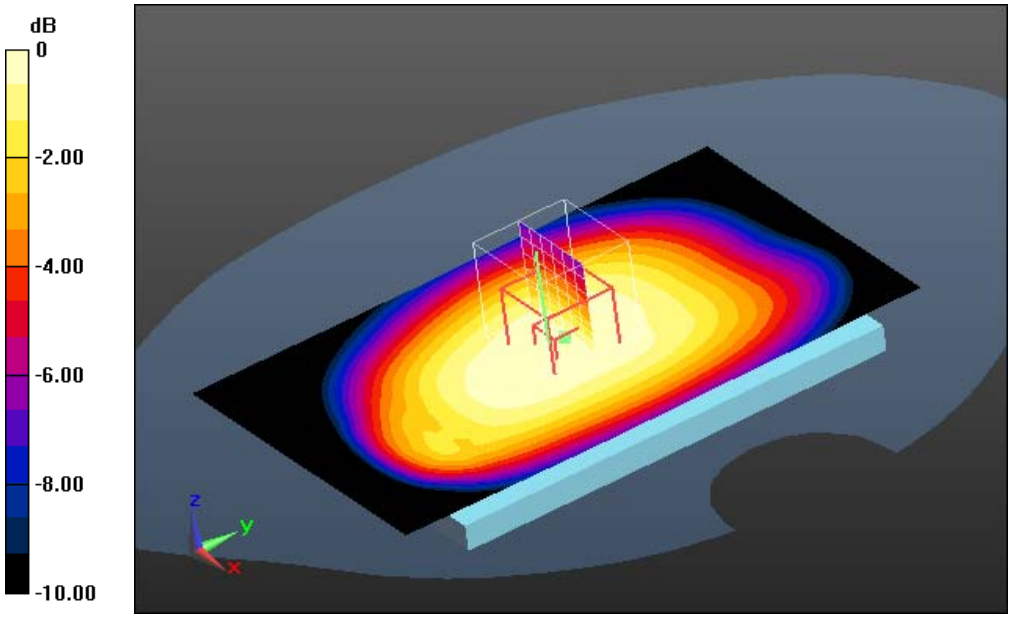
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 826.4 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.962 mho/m; ε_r = 54.478; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6, 6, 6); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Rear Position - Low/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.645 W/kg

Body MSL/Rear Position - Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.041 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.775 mW/g
SAR(1 g) = 0.628 mW/g; SAR(10 g) = 0.486 mW/g
Maximum value of SAR (measured) = 0.664 W/kg



0 dB = 0.664 W/kg = -3.56 dB W/kg

Additional information:
position or distance of DUT to SAM: 10 mm
ambient temperature: 22.3°C; liquid temperature: 20.7°C

Date/Time: 25.10.2012 10:58:17

OET65_EN62209-2-WCDMA FDD V body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

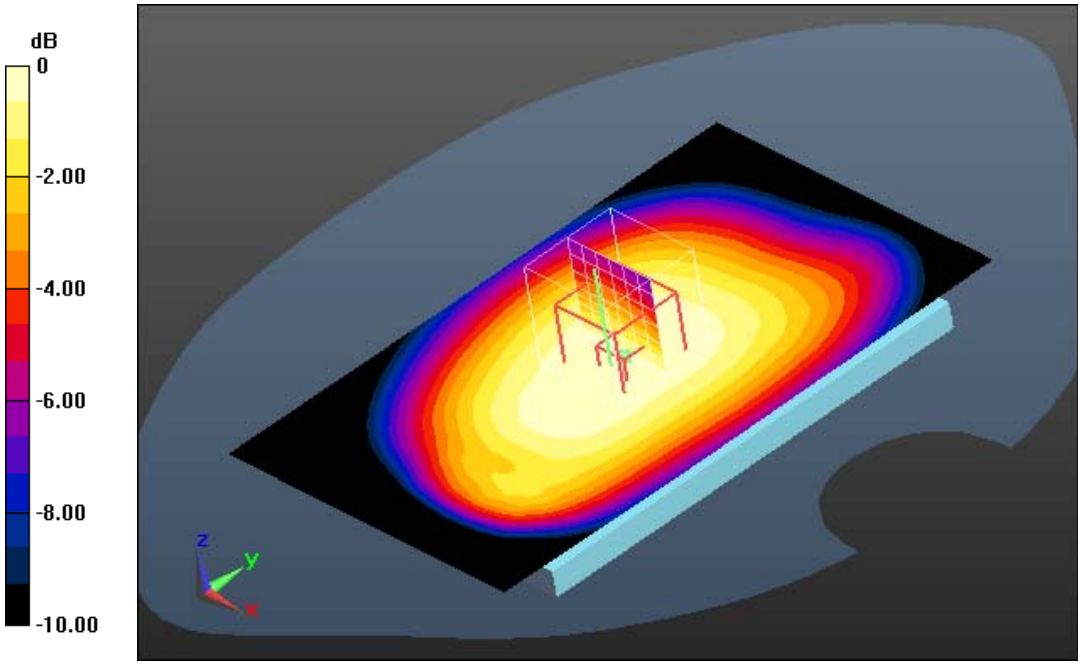
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.399; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6, 6, 6); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Rear Position - Mid/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.599 W/kg

Body MSL/Rear Position - Mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.471 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.710 mW/g
SAR(1 g) = 0.568 mW/g; SAR(10 g) = 0.440 mW/g
Maximum value of SAR (measured) = 0.597 W/kg



0 dB = 0.597 W/kg = -4.48 dB W/kg

Additional information:
position or distance of DUT to SAM: 10 mm
ambient temperature: 22.3°C; liquid temperature: 20.7°C

Date/Time: 25.10.2012 10:16:29

OET65_EN62209-2-WCDMA FDD V body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

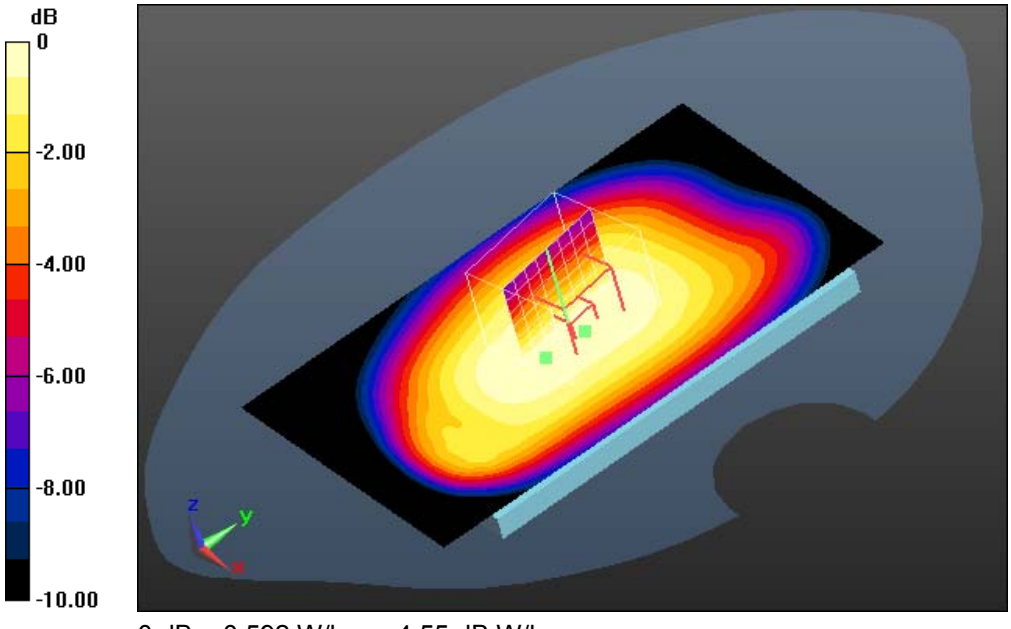
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 846.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used (interpolated): f = 846.6 MHz; σ = 0.985 mho/m; ε_r = 54.325; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6, 6, 6); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Rear Position - Hi/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.592 W/kg

Body MSL/Rear Position - Hi/Zoom Scan (8x9x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.911 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.708 mW/g
SAR(1 g) = 0.564 mW/g; SAR(10 g) = 0.435 mW/g
Maximum value of SAR (measured) = 0.592 W/kg



0 dB = 0.592 W/kg = -4.55 dB W/kg

Additional information:
position or distance of DUT to SAM: 10 mm
ambient temperature: 22.3°C; liquid temperature: 20.7°C

Date/Time: 25.10.2012 11:57:01

OET65_EN62209-2-WCDMA FDD V body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

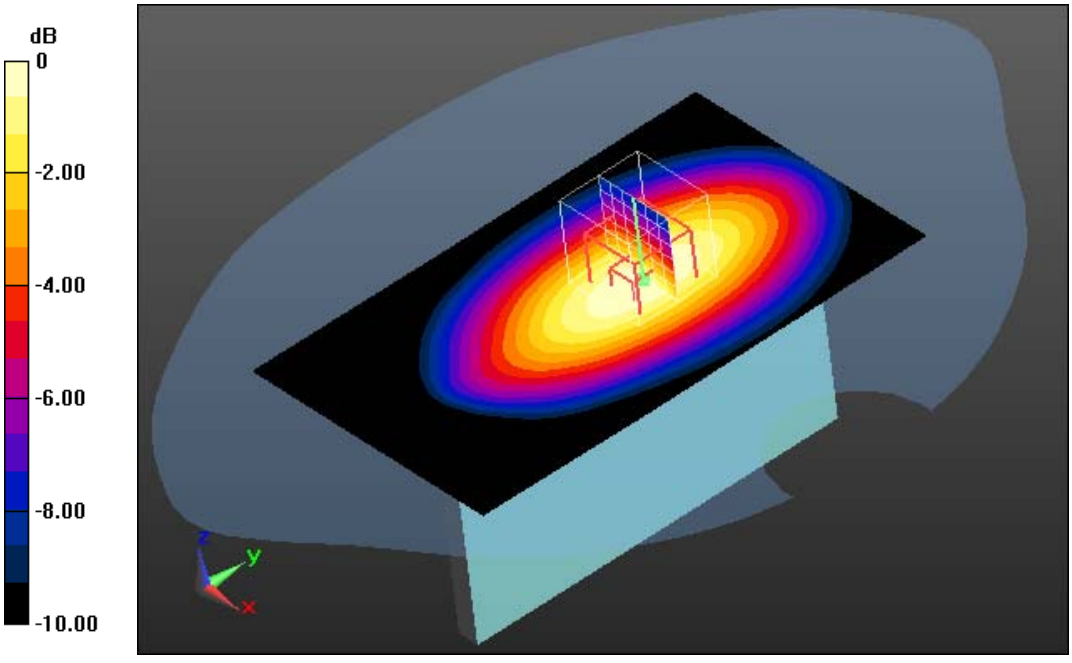
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.399; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6, 6, 6); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Left Side Position - Mid/Area Scan (101x171x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.501 W/kg

Body MSL/Left Side Position - Mid/Zoom Scan (7x7x7)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.388 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.648 mW/g
SAR(1 g) = 0.469 mW/g; SAR(10 g) = 0.325 mW/g
Maximum value of SAR (measured) = 0.504 W/kg



0 dB = 0.504 W/kg = -5.95 dB W/kg

Additional information:
position or distance of DUT to SAM: 10 mm
ambient temperature: 22.3°C; liquid temperature: 20.7°C

Date/Time: 25.10.2012 12:18:56

OET65_EN62209-2-WCDMA FDD V body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

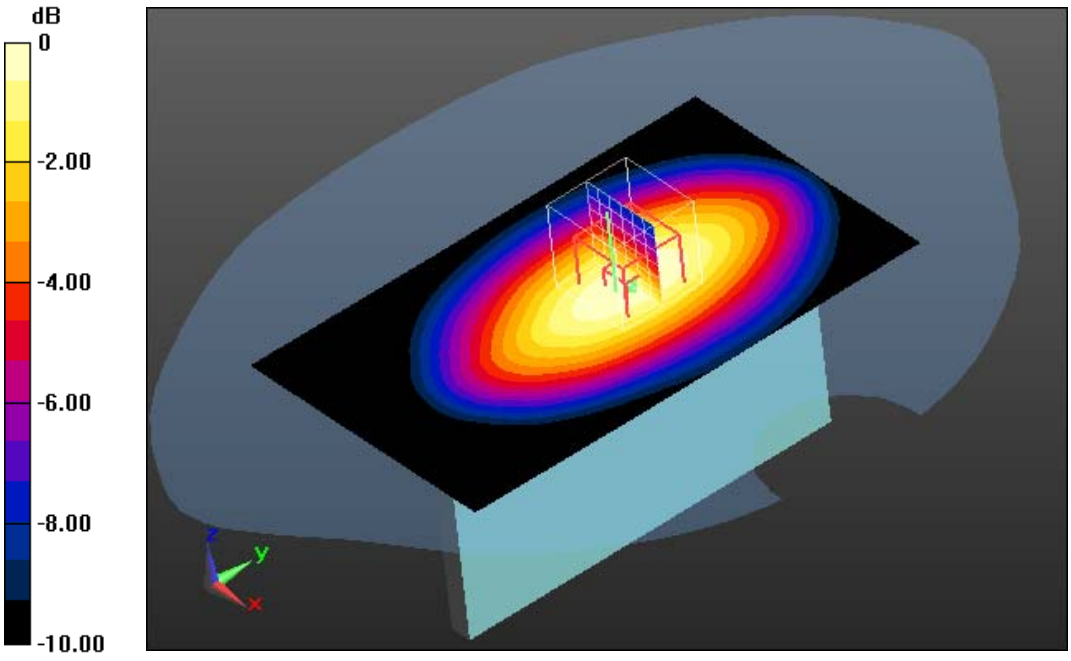
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.399; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6, 6, 6); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Right Side Position - Mid/Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.488 W/kg

Body MSL/Right Side Position - Mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.150 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.625 mW/g
SAR(1 g) = 0.449 mW/g; SAR(10 g) = 0.312 mW/g
Maximum value of SAR (measured) = 0.483 W/kg



0 dB = 0.483 W/kg = -6.32 dB W/kg

Additional information:
position or distance of DUT to SAM: 10 mm
ambient temperature: 22.3°C; liquid temperature: 20.7°C

Date/Time: 25.10.2012 12:43:26

OET65_EN62209-2-WCDMA FDD V body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

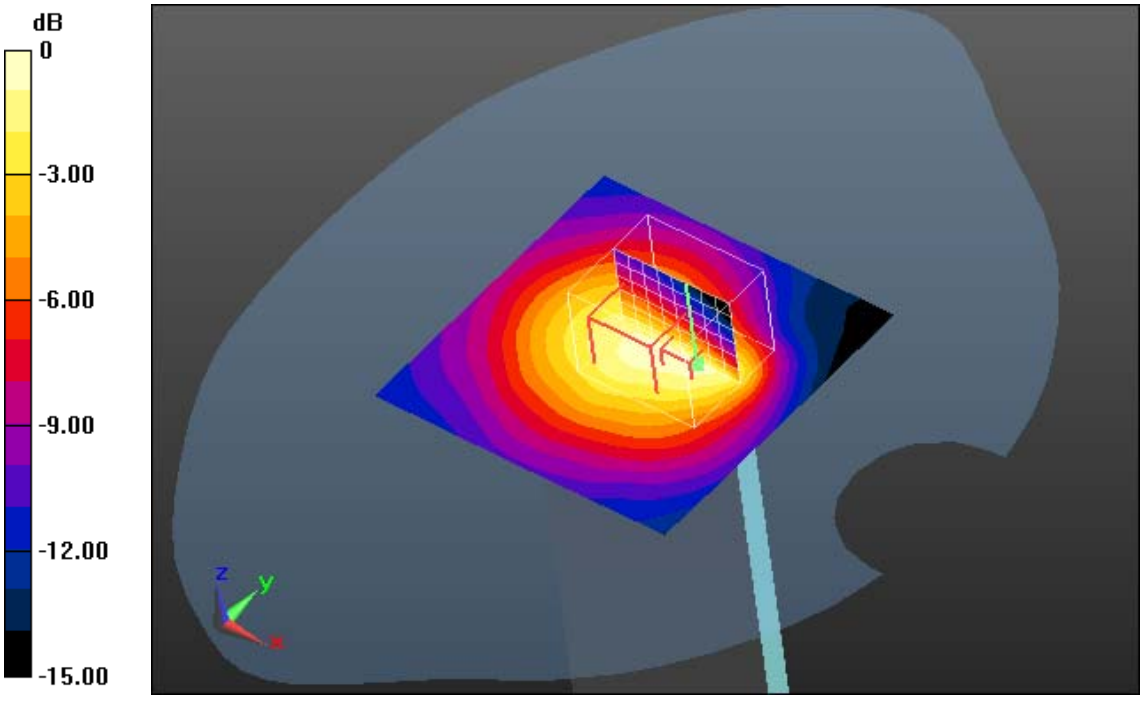
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.399; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6, 6, 6); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Bottom Position - Mid/Area Scan (101x101x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.187 W/kg

Body MSL/Bottom Position - Mid/Zoom Scan (9x8x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.915 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.516 mW/g
SAR(1 g) = 0.189 mW/g; SAR(10 g) = 0.107 mW/g
Maximum value of SAR (measured) = 0.206 W/kg



0 dB = 0.206 W/kg = -13.72 dB W/kg

Additional information:
position or distance of DUT to SAM: 10 mm
ambient temperature: 22.3°C; liquid temperature: 20.7°C

Date/Time: 10.12.2012 13:05:30Date/Time: 10.12.2012 13:15:47

OET65_EN62209-2-WCDMA FDD V body WC

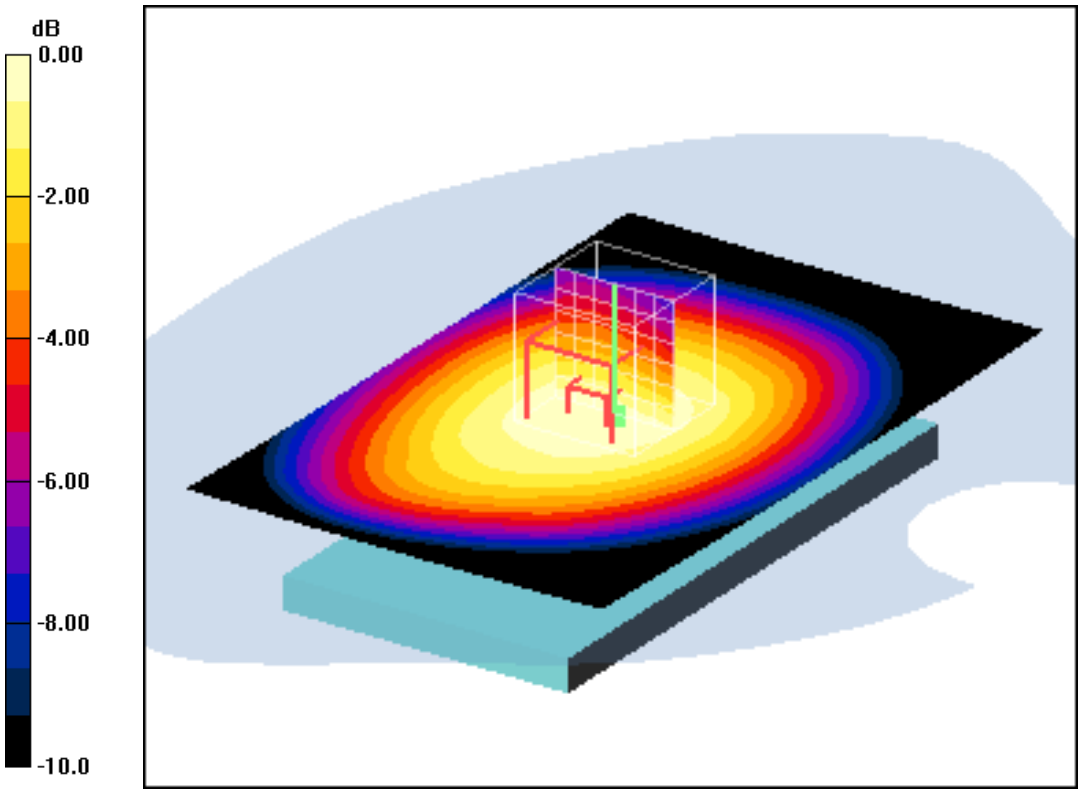
DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA
Communication System: WCDMA FDD V; Frequency: 826.4 MHz; Duty Cycle: 1:1
Medium: M900 Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.972 mho/m; ε_r = 55.4; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(6.18, 6.18, 6.18); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

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

Maximum value of SAR (interpolated) = 0.741 mW/g

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

Reference Value = 28.5 V/m; Power Drift = -0.131 dB
Peak SAR (extrapolated) = 0.856 W/kg
SAR(1 g) = 0.709 mW/g; SAR(10 g) = 0.545 mW/g
Maximum value of SAR (measured) = 0.747 mW/g



0 dB = 0.747mW/g

Additional information:
position or distance of DUT to SAM: 15mm
ambient temperature: 23.4°C; liquid temperature: 22.0°C

Date/Time: 25.10.2012 13:14:44

OET65_EN62209-2-WCDMA FDD V body

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5PA

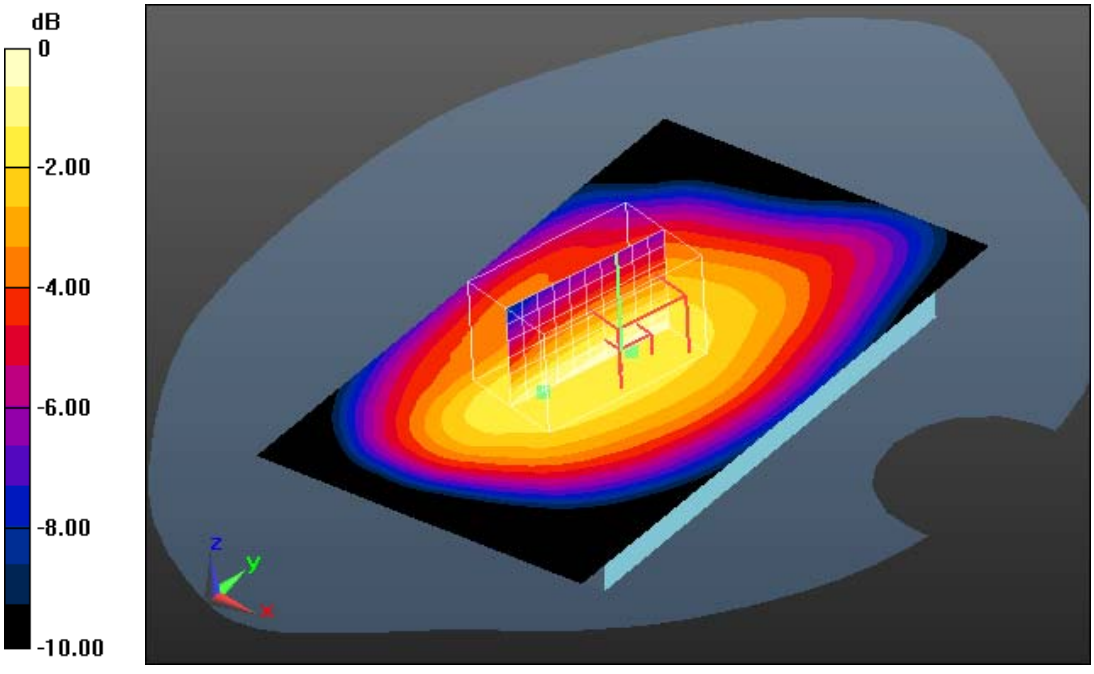
Communication System: UMTS-FDD (WCDMA); Communication System Band: Band 5, UTRA/FDD (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 2.91 dB; PMF: 1.00231
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.399; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5
DASY5 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6, 6, 6); Calibrated: 24.08.2012;
- Modulation Compensation: PMR (X: a=3.22, b=66.3, c=18.5, calibrated PAR=2.9 dB / Y: a=3.10, b=65.6, c=18.0, calibrated PAR=2.9 dB / Z: a=3.31, b=66.5, c=18.4, calibrated PAR=2.9 dB); Calibrated: 24.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 4mm (Mechanical Surface Detection), z = 2.7, 32.7
- Electronics: DAE3 Sn477; Calibrated: 09.05.2012
- Phantom: SAM Left; Type: SAM ; Serial: TP 1041
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Body MSL/Front Position - Mid 15mm/Area Scan (101x171x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.330 W/kg

Body MSL/Front Position - Mid 15mm/Zoom Scan (7x11x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.682 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.534 mW/g
SAR(1 g) = 0.427 mW/g; SAR(10 g) = 0.329 mW/g
Maximum value of SAR (measured) = 0.449 W/kg



0 dB = 0.449 W/kg = -6.96 dB W/kg

Additional information:
position or distance of DUT to SAM: 15 mm
ambient temperature: 22.3°C; liquid temperature: 20.7°C

Annex B.4: WLAN 2450MHz

Date/Time: 24.10.2012 14:03:22Date/Time: 24.10.2012 14:19:57

IEEE1528-LeftHandSide-WLAN

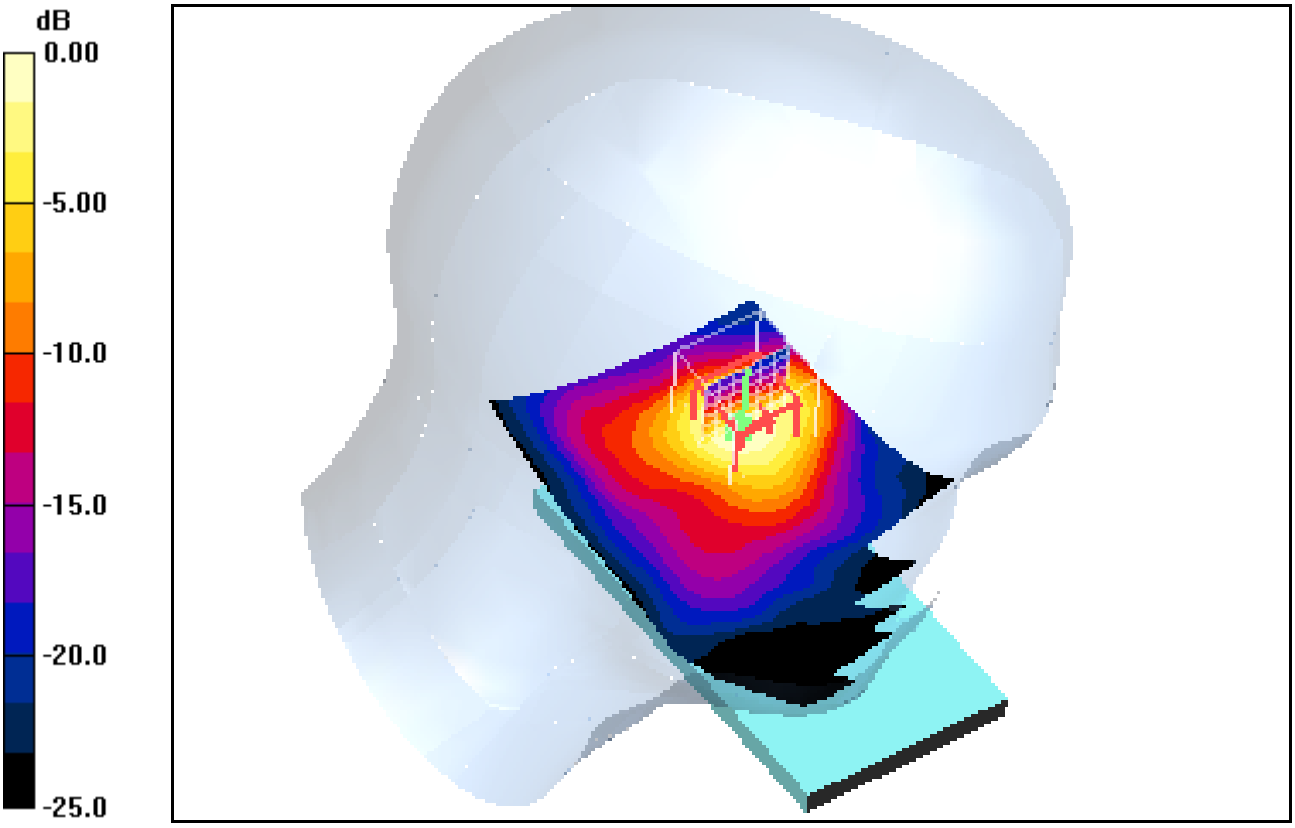
DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK
Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2412 MHz; σ = 1.81 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Left Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Low/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

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

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

dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.6 V/m; Power Drift = -0.111 dB
Peak SAR (extrapolated) = 0.893 W/kg
SAR(1 g) = 0.346 mW/g; SAR(10 g) = 0.157 mW/g
Maximum value of SAR (measured) = 0.369 mW/g



0 dB = 0.369mW/g

Additional information:
ambient temperature: 21.5°C; liquid temperature: 21.3°C

Date/Time: 24.10.2012 14:38:27Date/Time: 24.10.2012 14:54:29

IEEE1528-LeftHandSide-WLAN

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

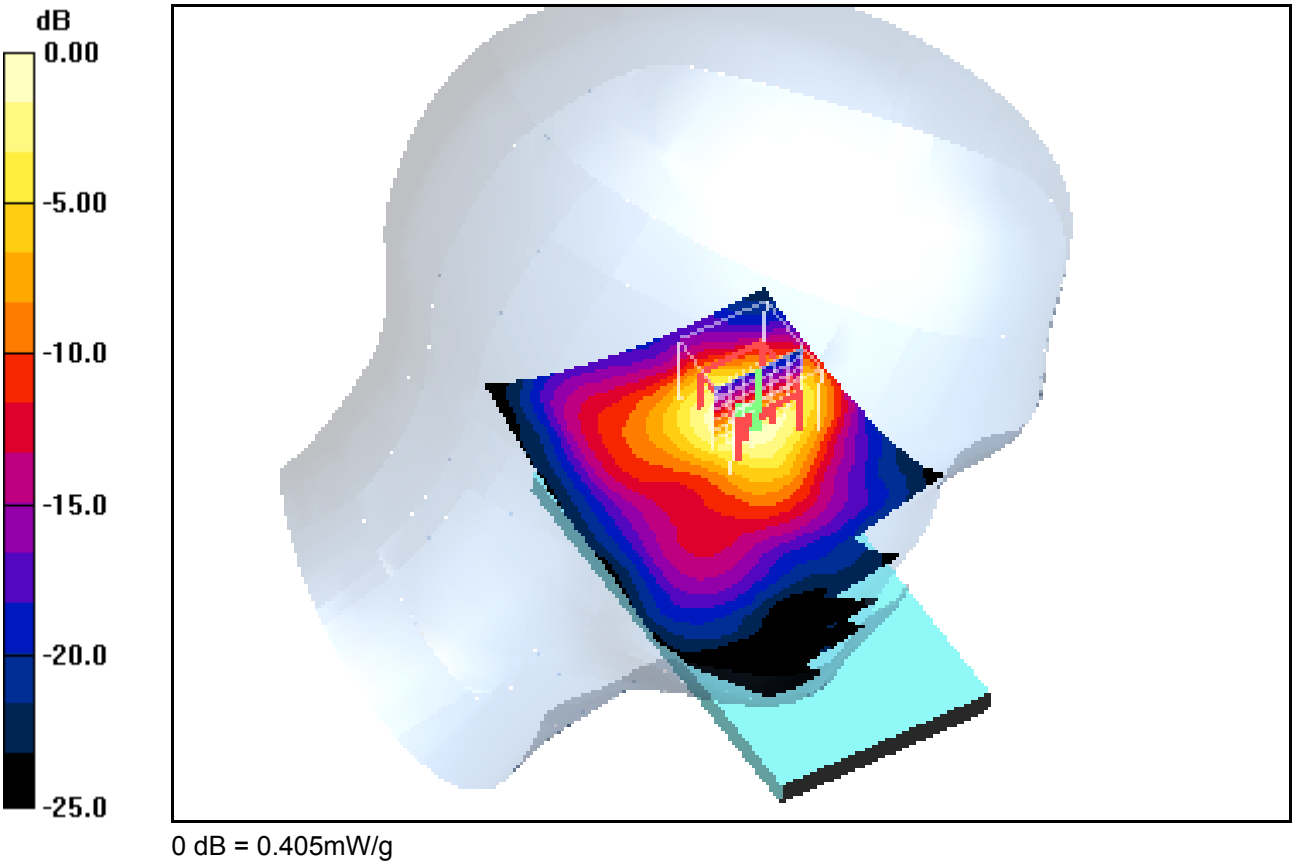
Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2437 MHz; σ = 1.84 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Left Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Mid/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

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

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

dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.7 V/m; Power Drift = -0.133 dB
Peak SAR (extrapolated) = 0.990 W/kg
SAR(1 g) = 0.386 mW/g; SAR(10 g) = 0.176 mW/g
Maximum value of SAR (measured) = 0.405 mW/g



0 dB = 0.405mW/g

Additional information:
ambient temperature: 21.5°C; liquid temperature: 21.3°C

Date/Time: 25.10.2012 12:34:38Date/Time: 25.10.2012 12:50:48

IEEE1528-LeftHandSide-WLAN

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

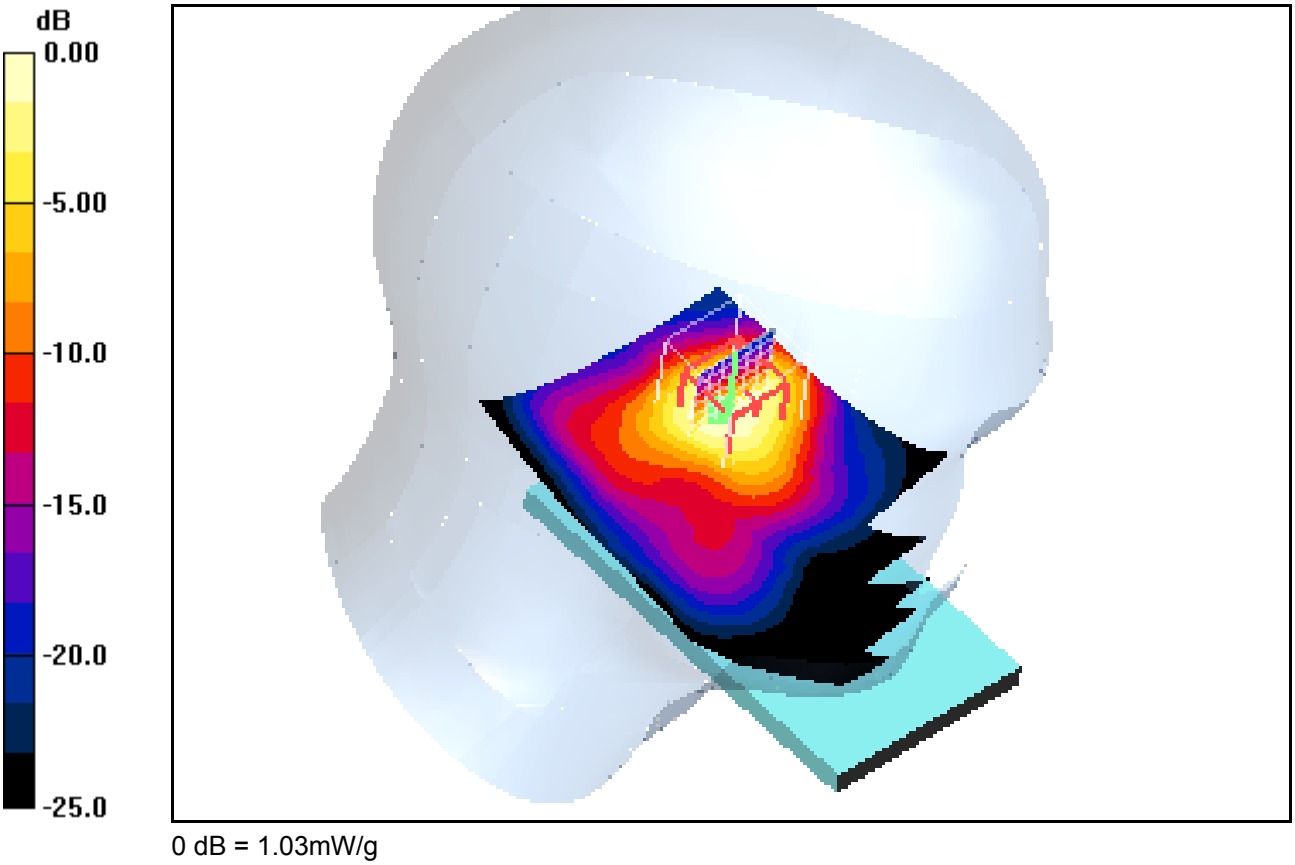
Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2462 MHz; σ = 1.86 mho/m; ε_r = 38.9; ρ = 1000 kg/m^3
Phantom section: Left Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - High/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

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

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

Reference Value = 24.2 V/m; Power Drift = -0.102 dB
Peak SAR (extrapolated) = 2.43 W/kg
SAR(1 g) = 0.958 mW/g; SAR(10 g) = 0.436 mW/g
Maximum value of SAR (measured) = 1.03 mW/g



0 dB = 1.03mW/g

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

Date/Time: 25.10.2012 15:21:27Date/Time: 25.10.2012 15:38:16

IEEE1528-LeftHandSide-WLAN_WC

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

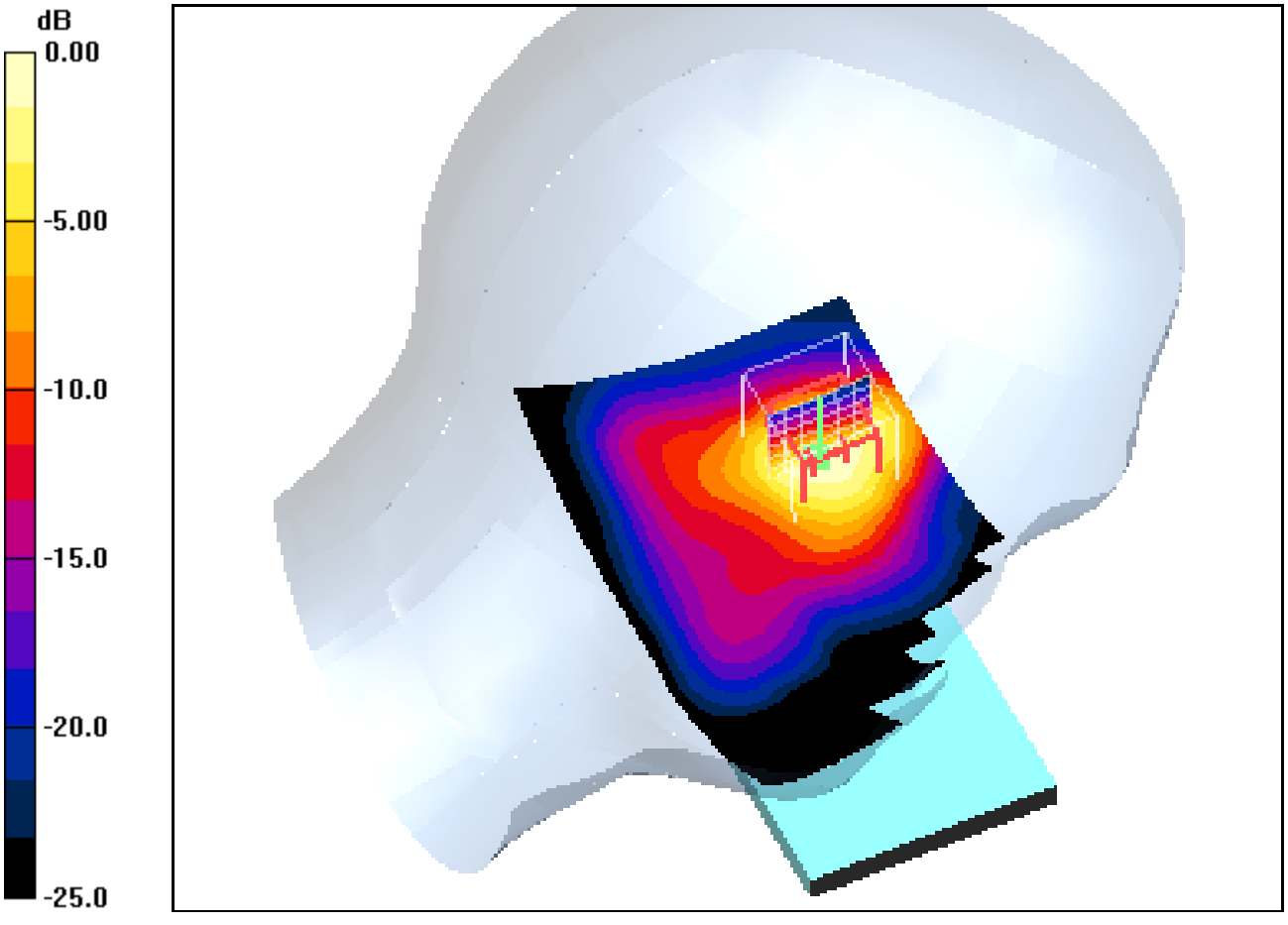
Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2462 MHz; σ = 1.86 mho/m; ε_r = 38.9; ρ = 1000 kg/m^3
Phantom section: Left Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - High/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

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

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

Reference Value = 23.9 V/m; Power Drift = 0.058 dB
Peak SAR (extrapolated) = 2.43 W/kg
SAR(1 g) = 0.961 mW/g; SAR(10 g) = 0.428 mW/g
Maximum value of SAR (measured) = 1.04 mW/g



0 dB = 1.04mW/g

Additional information:
21.9°C; liquid temperature: 21.8°C

Date/Time: 24.10.2012 13:33:09Date/Time: 24.10.2012 13:50:47

IEEE1528-LeftHandSide-WLAN

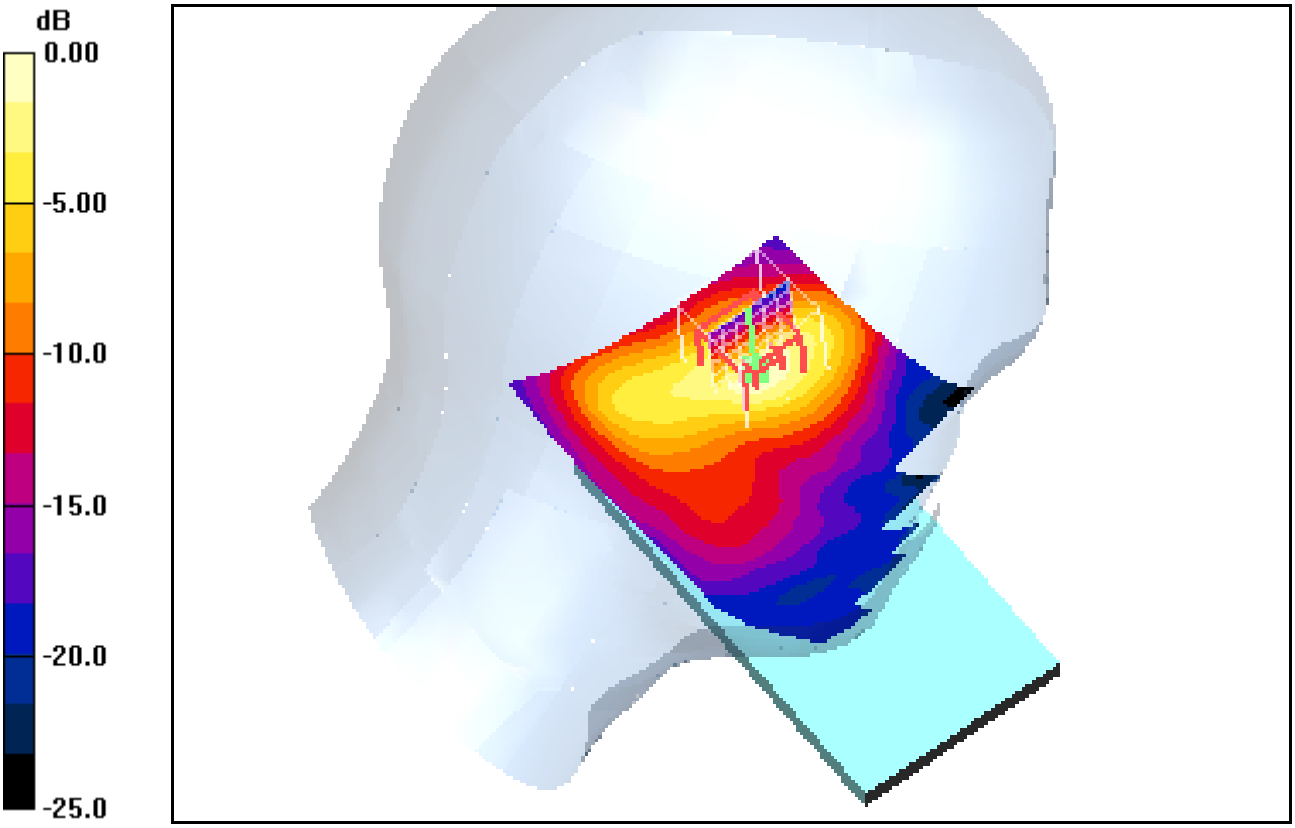
DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK
Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2412 MHz; σ = 1.81 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Left Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Low/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.171 mW/g

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

Reference Value = 9.56 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.374 W/kg
SAR(1 g) = 0.161 mW/g; SAR(10 g) = 0.078 mW/g
Maximum value of SAR (measured) = 0.180 mW/g



0 dB = 0.180mW/g

Additional information:
ambient temperature: 21.5°C; liquid temperature: 21.3°C

Date/Time: 24.10.2012 15:11:03Date/Time: 24.10.2012 15:47:21

IEEE1528-LeftHandSide-WLAN

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

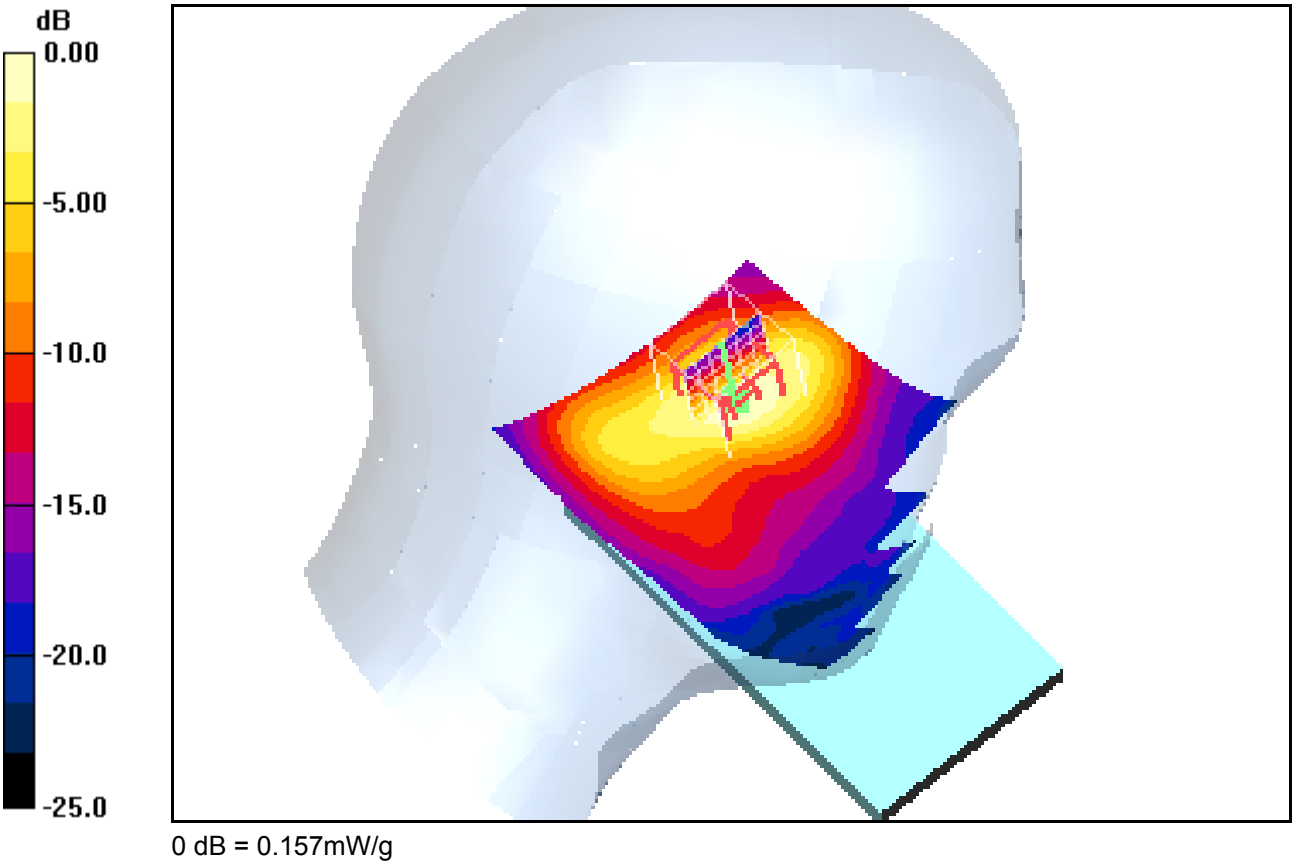
Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2437 MHz; σ = 1.84 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Left Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Mid/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.159 mW/g

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

Reference Value = 8.68 V/m; Power Drift = -0.034 dB
Peak SAR (extrapolated) = 0.333 W/kg
SAR(1 g) = 0.146 mW/g; SAR(10 g) = 0.073 mW/g
Maximum value of SAR (measured) = 0.157 mW/g



0 dB = 0.157mW/g

Additional information:
ambient temperature: 21.5°C; liquid temperature: 21.3°C

Date/Time: 25.10.2012 12:05:48Date/Time: 25.10.2012 12:21:43

IEEE1528-LeftHandSide-WLAN

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

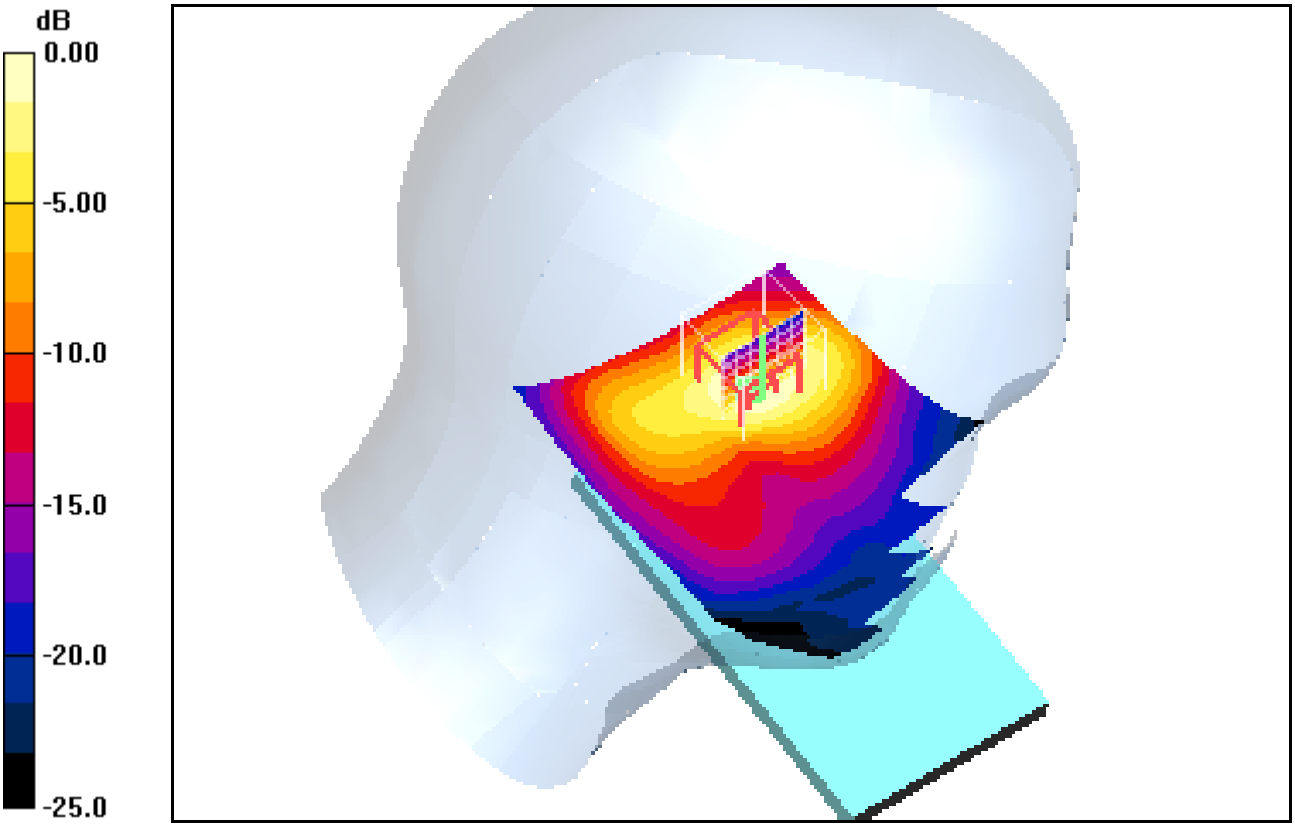
Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2462 MHz; σ = 1.86 mho/m; ε_r = 38.9; ρ = 1000 kg/m^3
Phantom section: Left Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - High/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.397 mW/g

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

Reference Value = 14.0 V/m; Power Drift = -0.022 dB
Peak SAR (extrapolated) = 0.819 W/kg
SAR(1 g) = 0.357 mW/g; SAR(10 g) = 0.176 mW/g
Maximum value of SAR (measured) = 0.382 mW/g



0 dB = 0.382mW/g

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

Date/Time: 24.10.2012 12:27:54Date/Time: 24.10.2012 12:47:09

IEEE1528-RightHandSide-WLAN

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

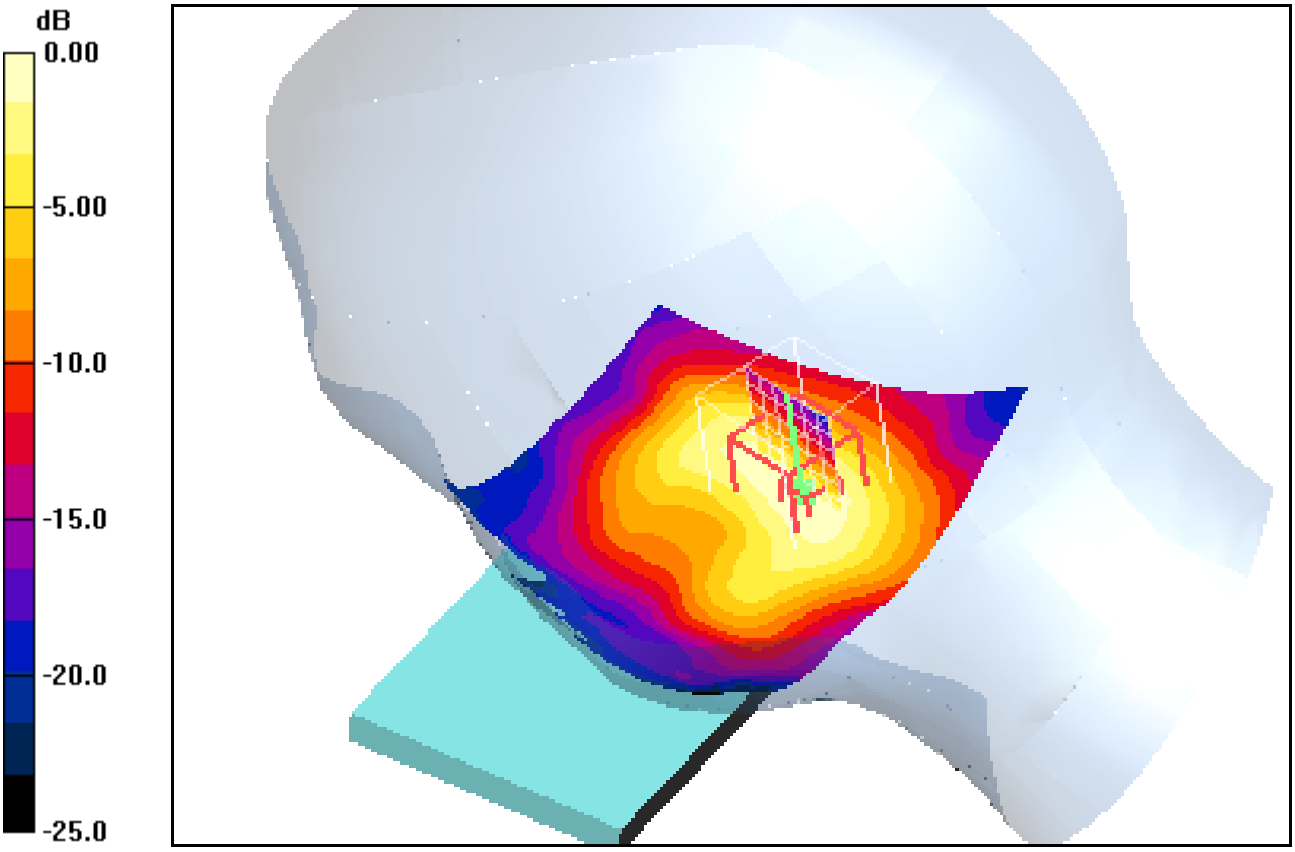
Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2412 MHz; σ = 1.81 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Right Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Low/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.123 mW/g

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

dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.21 V/m; Power Drift = 0.094 dB
Peak SAR (extrapolated) = 0.249 W/kg
SAR(1 g) = 0.111 mW/g; SAR(10 g) = 0.058 mW/g
Maximum value of SAR (measured) = 0.122 mW/g



0 dB = 0.122mW/g

Additional information:
ambient temperature: 21.5°C; liquid temperature: 21.3°C

Date/Time: 25.10.2012 13:11:59Date/Time: 25.10.2012 13:29:41

IEEE1528-RightHandSide-WLAN

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5RX

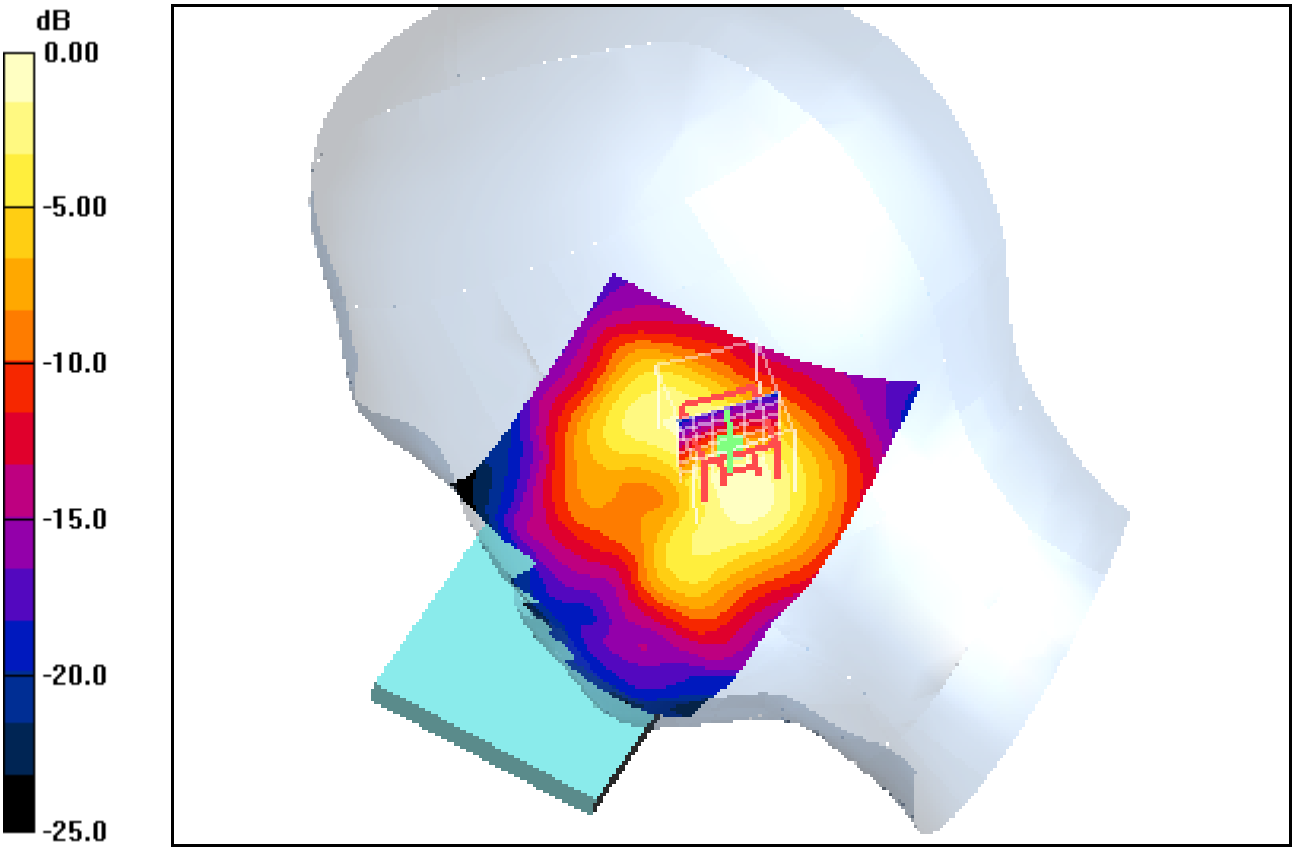
Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2437 MHz; σ = 1.84 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Right Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Mid/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.173 mW/g

Touch position - Mid/Zoom Scan (7x7x7) (8x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.94 V/m; Power Drift = -0.014 dB
Peak SAR (extrapolated) = 0.341 W/kg
SAR(1 g) = 0.158 mW/g; SAR(10 g) = 0.081 mW/g
Maximum value of SAR (measured) = 0.171 mW/g



0 dB = 0.171mW/g

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

Date/Time: 25.10.2012 09:55:02Date/Time: 25.10.2012 11:17:45

IEEE1528-RightHandSide-WLAN

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

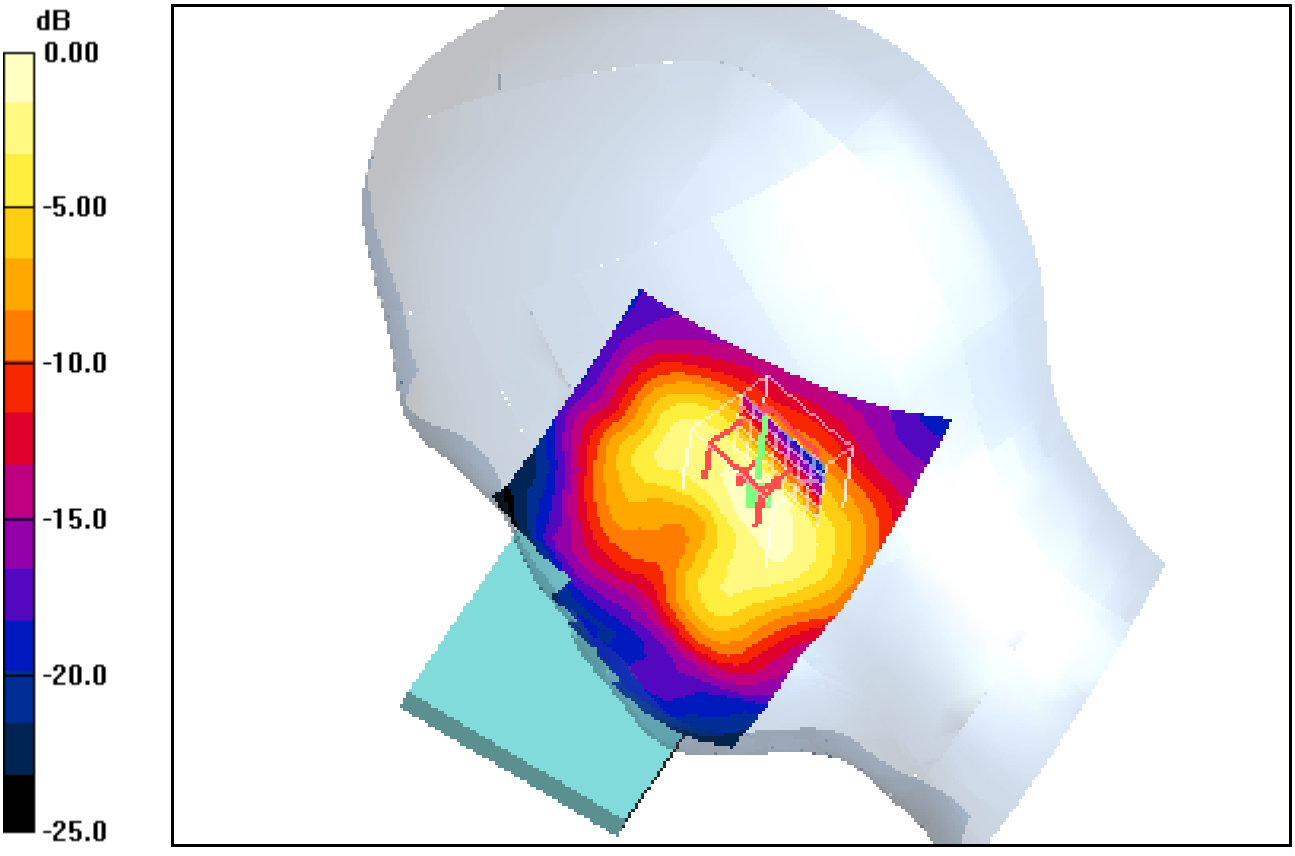
Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2462 MHz; σ = 1.86 mho/m; ε_r = 38.9; ρ = 1000 kg/m^3
Phantom section: Right Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - High/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

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

Touch position - High/Zoom Scan (7x7x7) (8x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.2 V/m; Power Drift = -0.074 dB
Peak SAR (extrapolated) = 0.678 W/kg
SAR(1 g) = 0.321 mW/g; SAR(10 g) = 0.165 mW/g
Maximum value of SAR (measured) = 0.351 mW/g



0 dB = 0.351mW/g

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

Date/Time: 24.10.2012 13:00:11Date/Time: 24.10.2012 13:18:19

IEEE1528-RightHandSide-WLAN

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

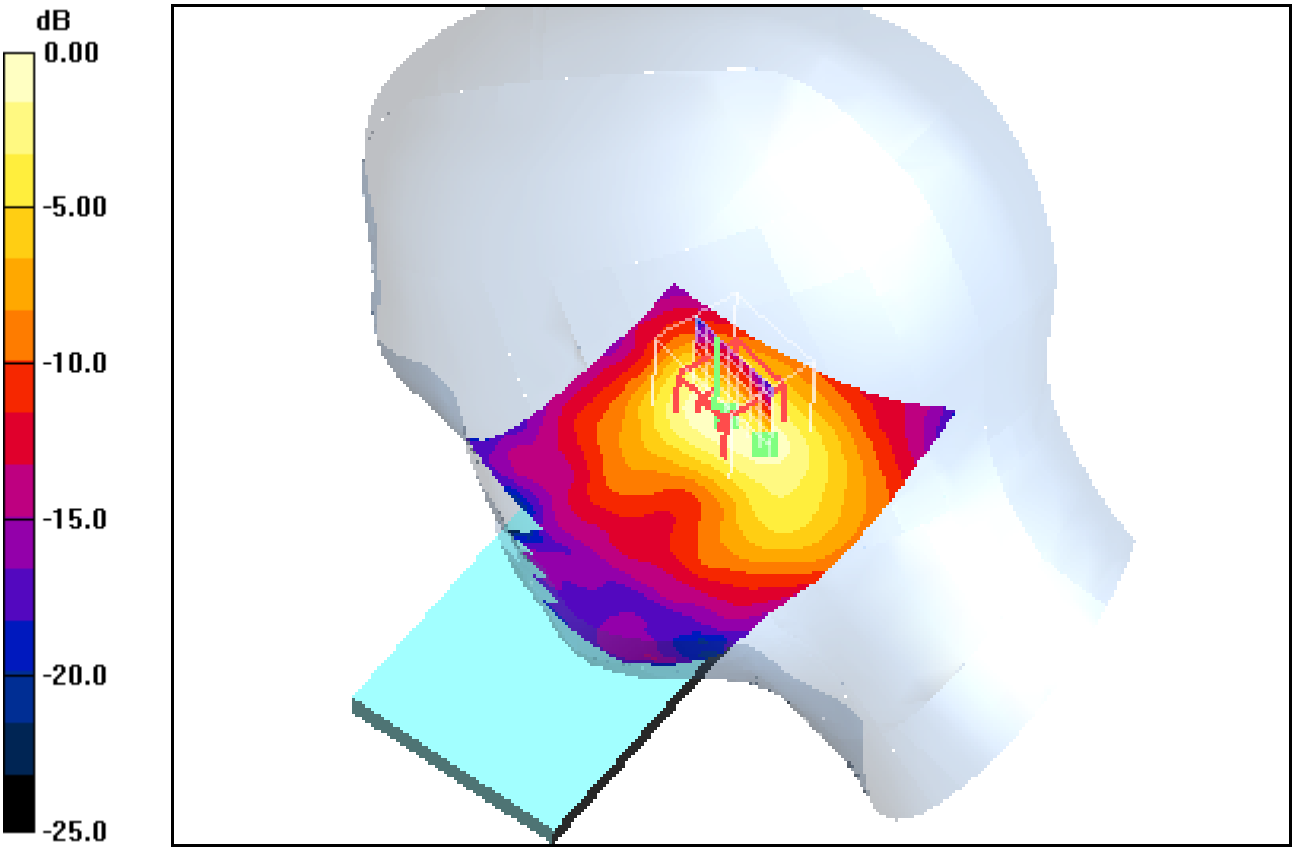
Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2412 MHz; σ = 1.81 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Right Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Low/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.084 mW/g

Tilt position - Low/Zoom Scan (7x7x7) (8x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.00 V/m; Power Drift = -0.068 dB
Peak SAR (extrapolated) = 0.154 W/kg
SAR(1 g) = 0.076 mW/g; SAR(10 g) = 0.042 mW/g
Maximum value of SAR (measured) = 0.083 mW/g



0 dB = 0.083mW/g

Additional information:
ambient temperature: 21.5°C; liquid temperature: 21.3°C

Date/Time: 24.10.2012 16:01:00Date/Time: 24.10.2012 16:18:30

IEEE1528-RightHandSide-WLAN

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

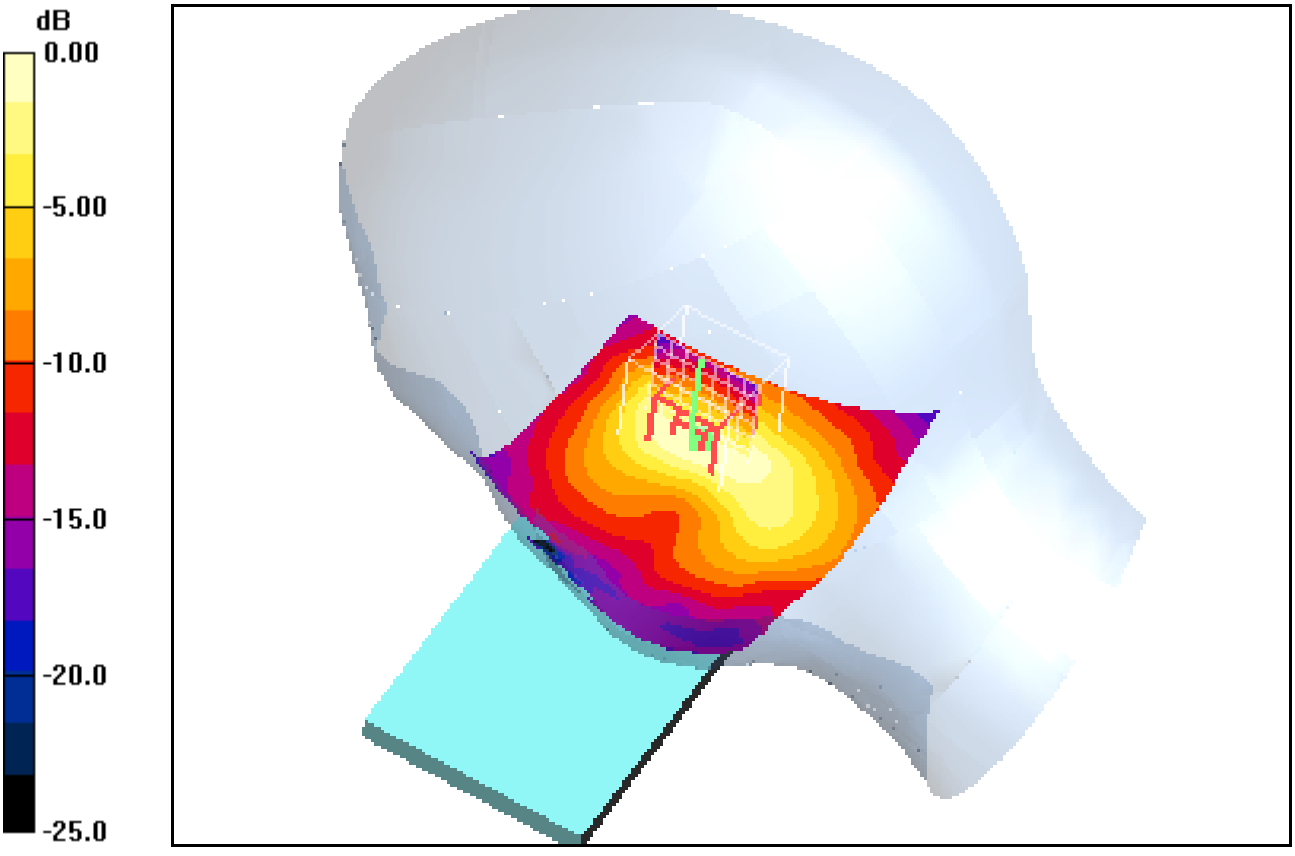
Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2437 MHz; σ = 1.84 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Right Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Mid/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.087 mW/g

Tilt position - Mid/Zoom Scan (7x7x7) (8x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.09 V/m; Power Drift = -0.138 dB
Peak SAR (extrapolated) = 0.151 W/kg
SAR(1 g) = 0.079 mW/g; SAR(10 g) = 0.044 mW/g
Maximum value of SAR (measured) = 0.085 mW/g



0 dB = 0.085mW/g

Additional information:
ambient temperature: 21.5°C; liquid temperature: 21.3°C

Date/Time: 25.10.2012 11:32:12Date/Time: 25.10.2012 11:49:40

IEEE1528-RightHandSide-WLAN

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

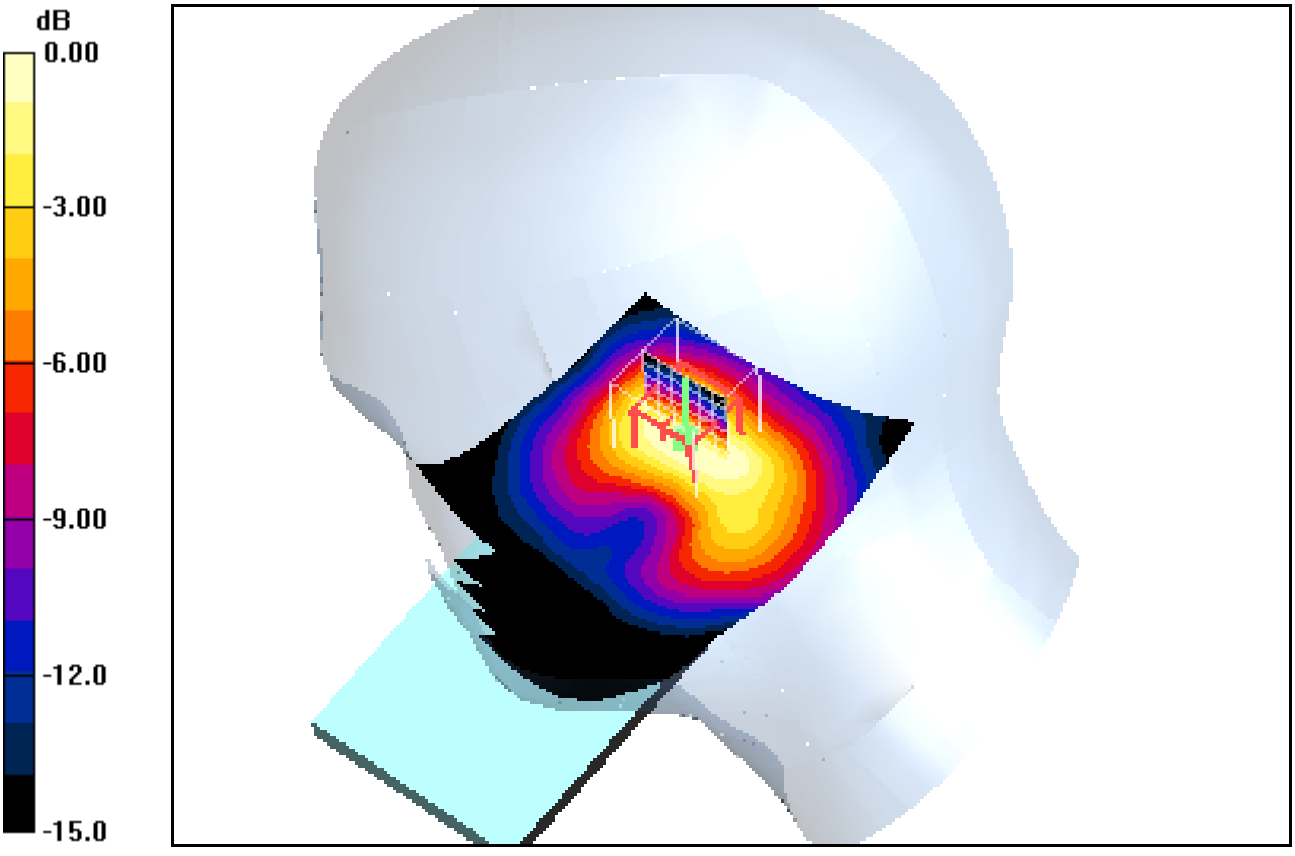
Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1
Medium: HSL2450 Medium parameters used: f = 2462 MHz; σ = 1.86 mho/m; ε_r = 38.9; ρ = 1000 kg/m^3
Phantom section: Right Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(4.3, 4.3, 4.3); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - High/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.190 mW/g

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

Reference Value = 10.1 V/m; Power Drift = 0.074 dB
Peak SAR (extrapolated) = 0.319 W/kg
SAR(1 g) = 0.172 mW/g; SAR(10 g) = 0.096 mW/g
Maximum value of SAR (measured) = 0.183 mW/g



0 dB = 0.183mW/g

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

Date/Time: 26.10.2012 11:28:21Date/Time: 26.10.2012 11:50:44Date/Time: 26.10.2012 12:01:19

OET65-Body-WLAN

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK
Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1
Medium: M2450 Medium parameters used: f = 2412 MHz; σ = 1.96 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(3.88, 3.88, 3.88); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Low/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

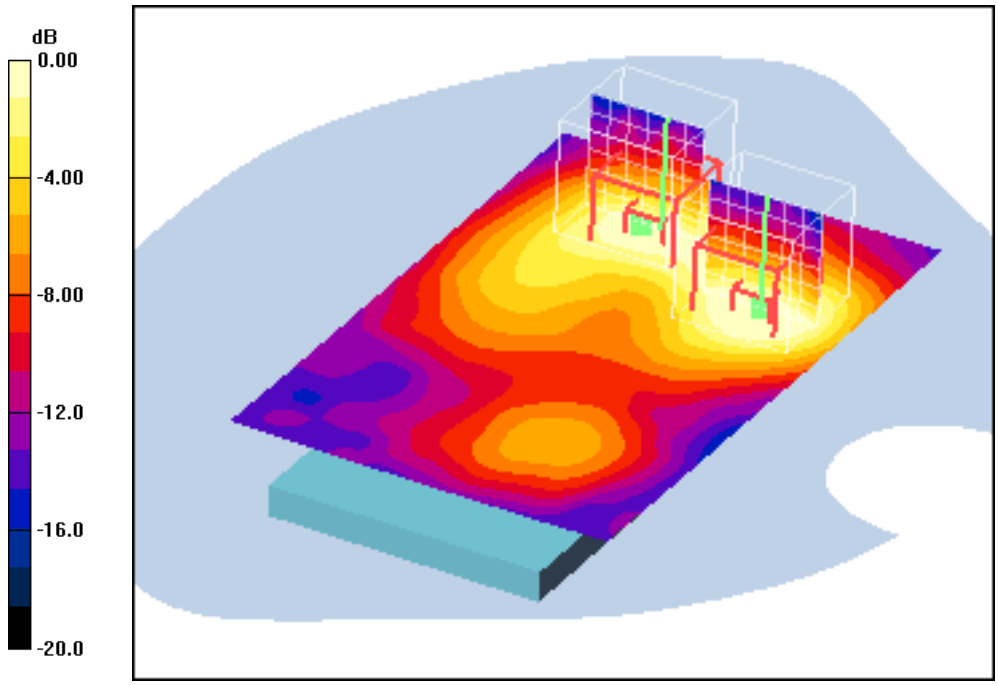
Maximum value of SAR (interpolated) = 0.060 mW/g

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

dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.28 V/m; Power Drift = -0.101 dB
Peak SAR (extrapolated) = 0.138 W/kg
SAR(1 g) = 0.055 mW/g; SAR(10 g) = 0.027 mW/g
Maximum value of SAR (measured) = 0.059 mW/g

Front position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.28 V/m; Power Drift = -0.101 dB
Peak SAR (extrapolated) = 0.088 W/kg
SAR(1 g) = 0.039 mW/g; SAR(10 g) = 0.021 mW/g
Maximum value of SAR (measured) = 0.041 mW/g



0 dB = 0.041mW/g

Additional information:
position or distance of DUT to SAM: 10mm
ambient temperature: 21.7°C; liquid temperature: 21.7°C

Date/Time: 26.10.2012 13:51:41Date/Time: 26.10.2012 14:09:21Date/Time: 26.10.2012 14:19:55

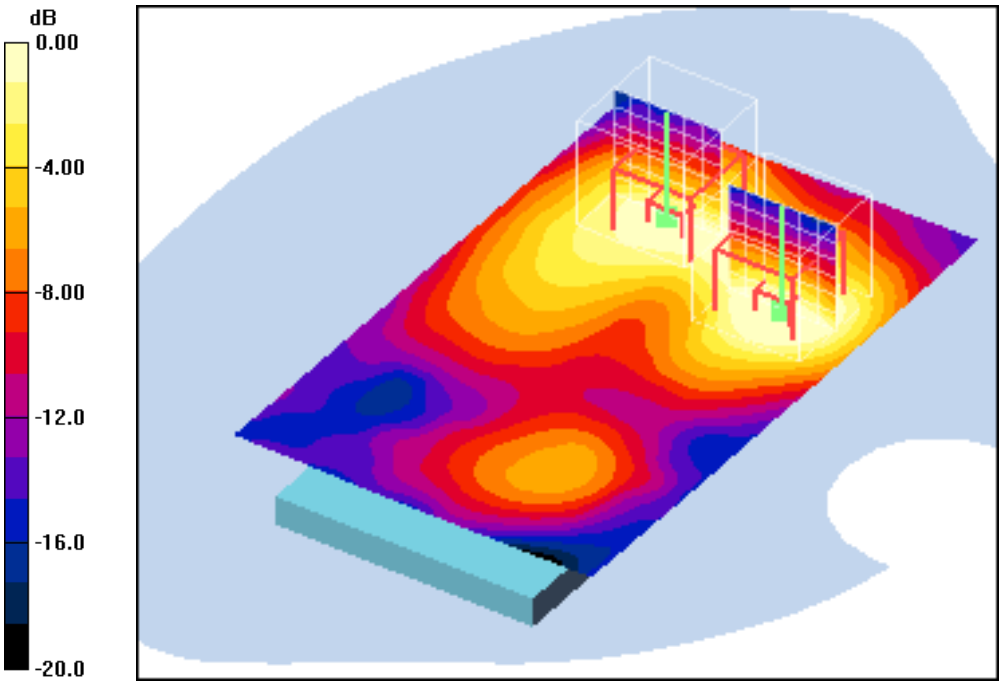
OET65-Body-WLAN

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK
Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1
Medium: M2450 Medium parameters used: f = 2437 MHz; σ = 2.01 mho/m; ε_r = 51.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(3.88, 3.88, 3.88); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - Mid/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.095 mW/g

Front position - Mid/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.69 V/m; Power Drift = -0.142 dB
Peak SAR (extrapolated) = 0.230 W/kg
SAR(1 g) = 0.087 mW/g; SAR(10 g) = 0.043 mW/g
Maximum value of SAR (measured) = 0.092 mW/g

Front position - Mid/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.69 V/m; Power Drift = -0.142 dB
Peak SAR (extrapolated) = 0.131 W/kg
SAR(1 g) = 0.060 mW/g; SAR(10 g) = 0.034 mW/g
Maximum value of SAR (measured) = 0.063 mW/g



0 dB = 0.063mW/g

Additional information:
position or distance of DUT to SAM: 10mm
ambient temperature: 21.7°C; liquid temperature: 21.7°C

Date/Time: 26.10.2012 18:35:21Date/Time: 26.10.2012 18:55:50

OET65-Body-WLAN

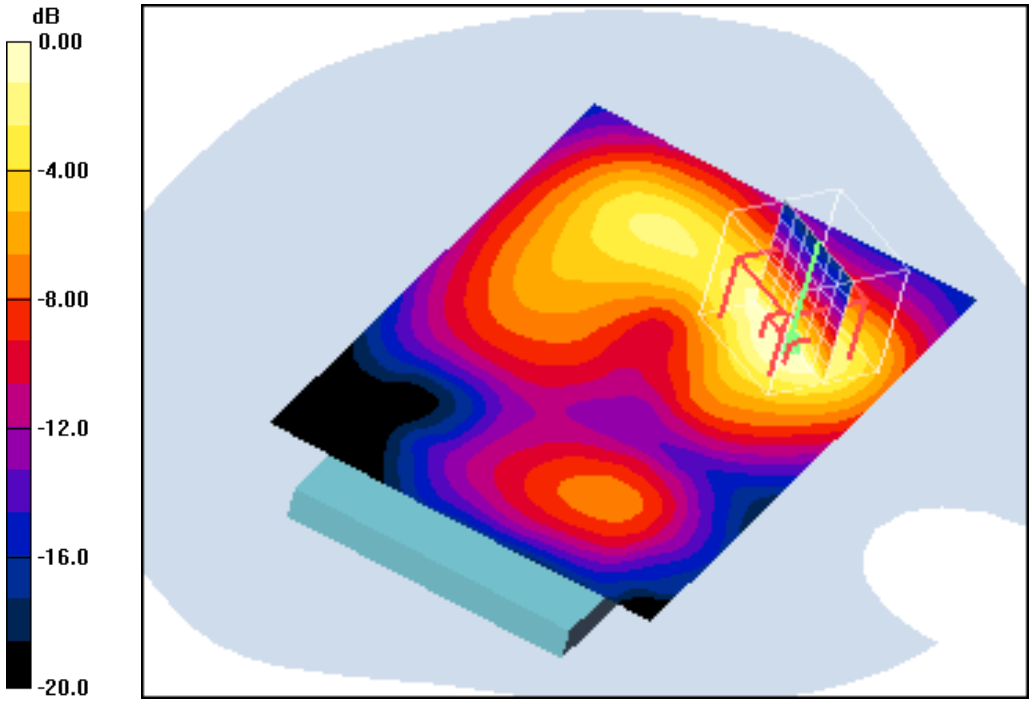
DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK
Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1
Medium: M2450 Medium parameters used: f = 2462 MHz; σ = 2.02 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(3.88, 3.88, 3.88); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Front position - High/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.179 mW/g

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

dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.72 V/m; Power Drift = -0.025 dB
Peak SAR (extrapolated) = 0.436 W/kg
SAR(1 g) = 0.164 mW/g; SAR(10 g) = 0.080 mW/g
Maximum value of SAR (measured) = 0.173 mW/g



0 dB = 0.173mW/g

Additional information:
position or distance of DUT to SAM: 10mm
ambient temperature: 21.7°C; liquid temperature: 21.7°C

Date/Time: 26.10.2012 12:15:51Date/Time: 26.10.2012 12:45:03Date/Time: 26.10.2012 12:55:39

OET65-Body-WLAN

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK
Communication System: WLAN 2450 US; Frequency: 2412 MHz; Duty Cycle: 1:1
Medium: M2450 Medium parameters used: f = 2412 MHz; σ = 1.96 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(3.88, 3.88, 3.88); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Low/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

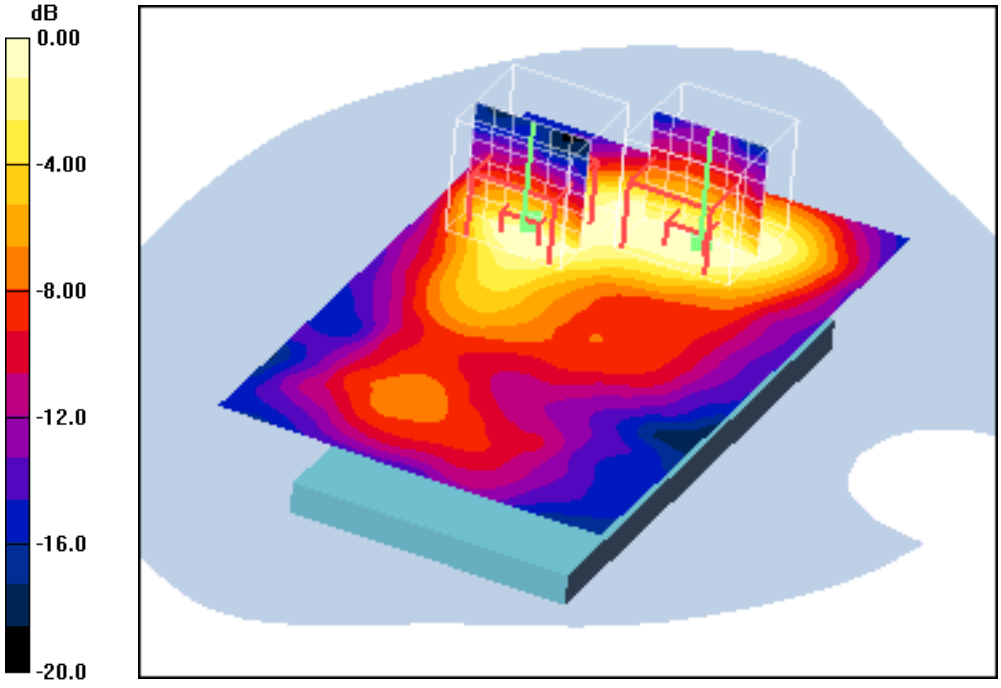
Maximum value of SAR (interpolated) = 0.080 mW/g

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

dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.80 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.144 W/kg
SAR(1 g) = 0.050 mW/g; SAR(10 g) = 0.023 mW/g
Maximum value of SAR (measured) = 0.054 mW/g

Rear position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.80 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.126 W/kg
SAR(1 g) = 0.053 mW/g; SAR(10 g) = 0.028 mW/g
Maximum value of SAR (measured) = 0.055 mW/g



0 dB = 0.055mW/g

Additional information:
position or distance of DUT to SAM: 10mm
ambient temperature: 21.7°C; liquid temperature: 21.7°C

Date/Time: 26.10.2012 13:09:56Date/Time: 26.10.2012 13:27:33Date/Time: 26.10.2012 13:38:09

OET65-Body-WLAN

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK
Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1
Medium: M2450 Medium parameters used: f = 2437 MHz; σ = 2.01 mho/m; ε_r = 51.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(3.88, 3.88, 3.88); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - Mid/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

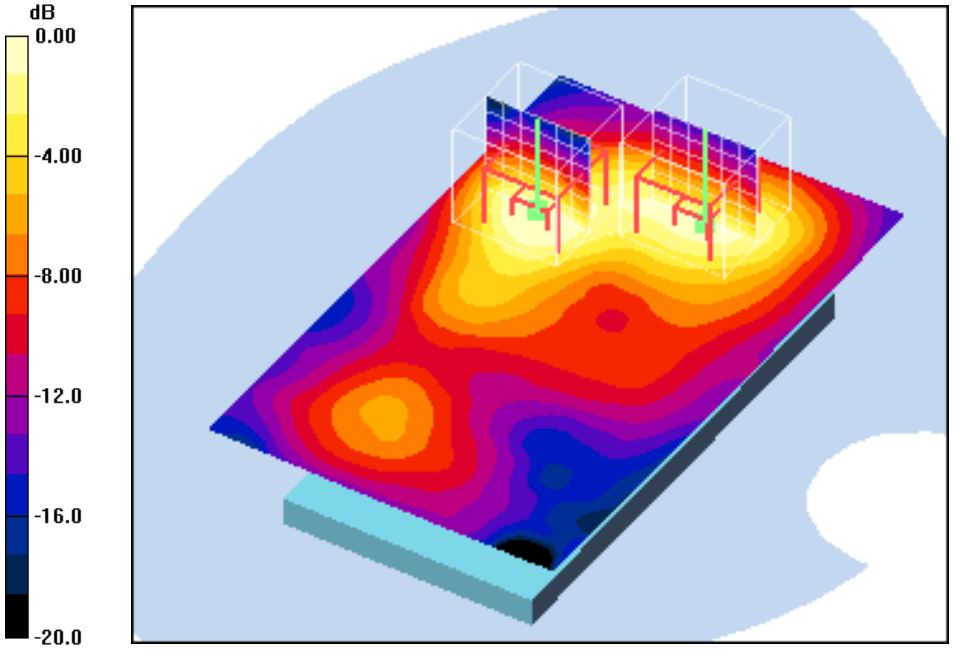
Maximum value of SAR (interpolated) = 0.106 mW/g

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

dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.78 V/m; Power Drift = 0.098 dB
Peak SAR (extrapolated) = 0.265 W/kg
SAR(1 g) = 0.101 mW/g; SAR(10 g) = 0.046 mW/g
Maximum value of SAR (measured) = 0.107 mW/g

Rear position - Mid/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.78 V/m; Power Drift = 0.098 dB
Peak SAR (extrapolated) = 0.181 W/kg
SAR(1 g) = 0.074 mW/g; SAR(10 g) = 0.039 mW/g
Maximum value of SAR (measured) = 0.081 mW/g



0 dB = 0.081mW/g

Additional information:
position or distance of DUT to SAM: 10mm
ambient temperature: 21.7°C; liquid temperature: 21.7°C

Date/Time: 26.10.2012 19:14:02Date/Time: 26.10.2012 19:43:23Date/Time: 26.10.2012 19:53:44

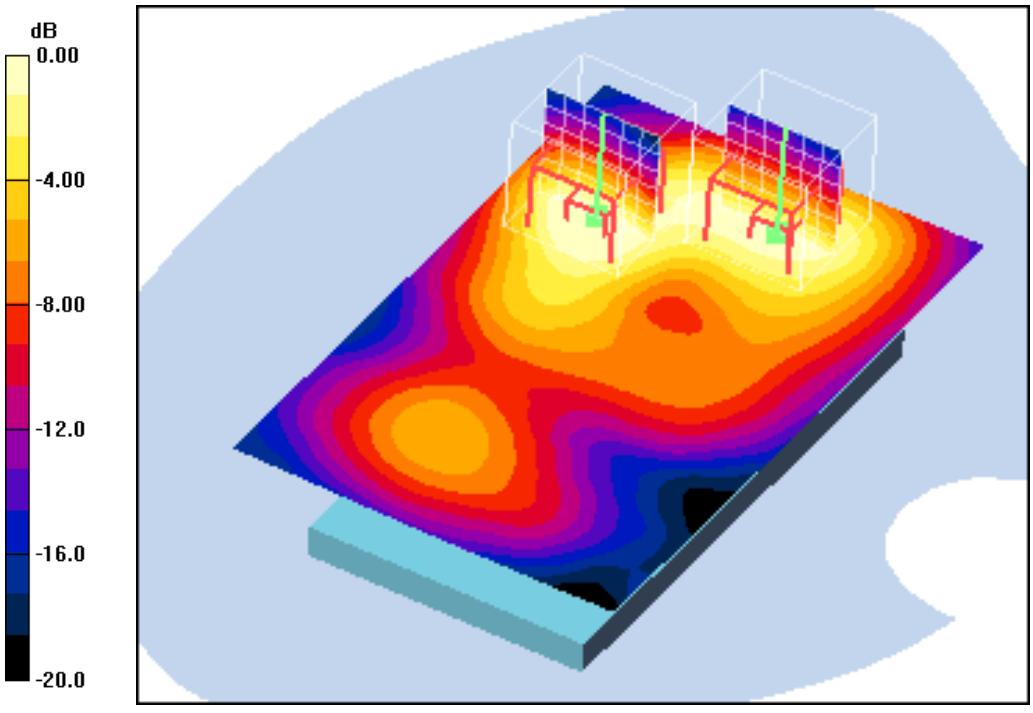
OET65-Body-WLAN

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK
Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1
Medium: M2450 Medium parameters used: f = 2462 MHz; σ = 2.02 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(3.88, 3.88, 3.88); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - High/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.220 mW/g

Rear position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.3 V/m; Power Drift = -0.079 dB
Peak SAR (extrapolated) = 0.542 W/kg
SAR(1 g) = 0.202 mW/g; SAR(10 g) = 0.094 mW/g
Maximum value of SAR (measured) = 0.215 mW/g

Rear position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.3 V/m; Power Drift = -0.079 dB
Peak SAR (extrapolated) = 0.344 W/kg
SAR(1 g) = 0.141 mW/g; SAR(10 g) = 0.074 mW/g
Maximum value of SAR (measured) = 0.148 mW/g



0 dB = 0.148mW/g

Additional information:
position or distance of DUT to SAM: 10mm
ambient temperature: 21.7°C; liquid temperature: 21.7°C

Date/Time: 26.10.2012 15:03:37Date/Time: 26.10.2012 15:37:32

OET65-Body-WLAN

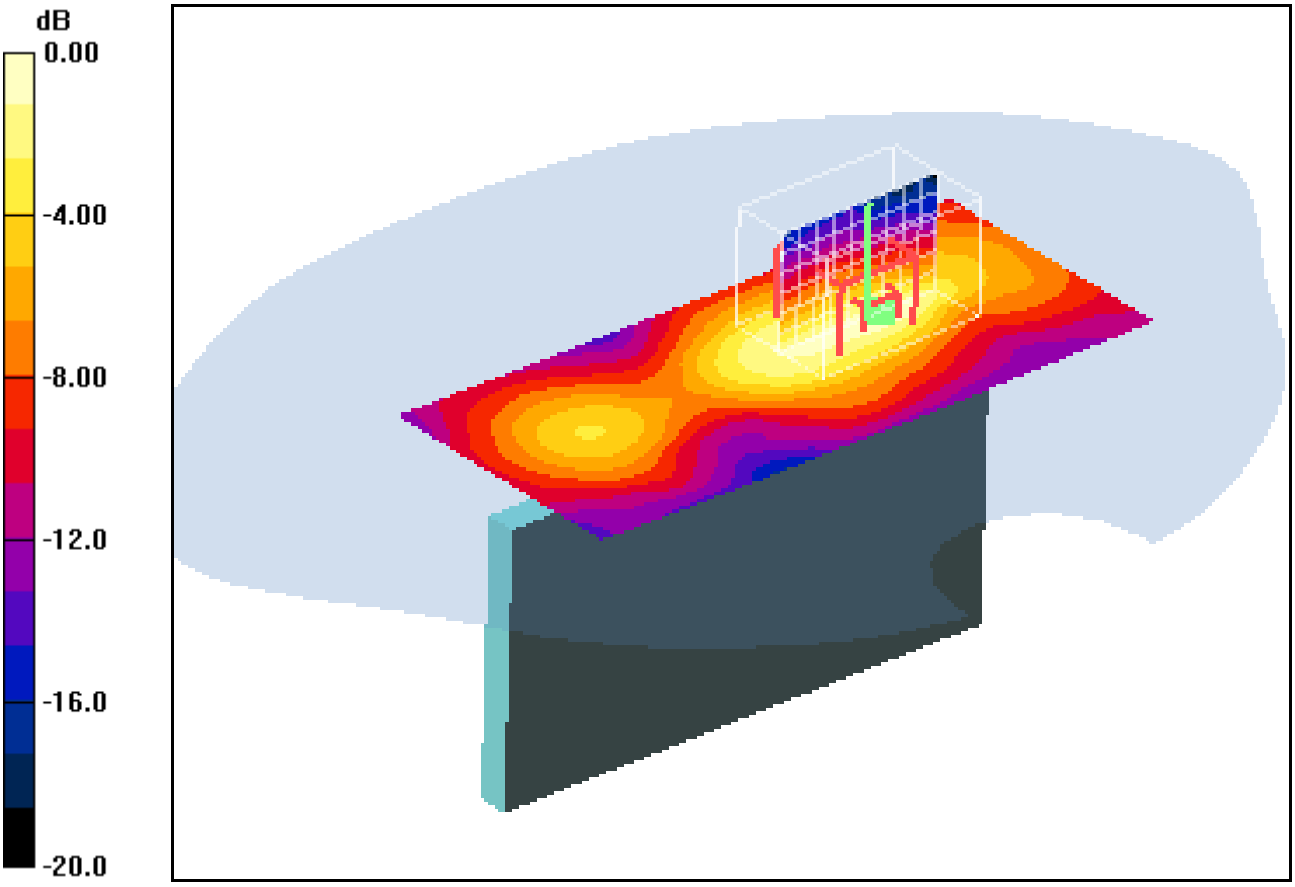
DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK
Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1
Medium: M2450 Medium parameters used: f = 2437 MHz; σ = 2.01 mho/m; ε_r = 51.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(3.88, 3.88, 3.88); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Edge right position - Middle/Area Scan (71x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.058 mW/g

Edge right position - Middle/Zoom Scan (7x7x7) (7x10x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.36 V/m; Power Drift = -0.104 dB
Peak SAR (extrapolated) = 0.144 W/kg
SAR(1 g) = 0.055 mW/g; SAR(10 g) = 0.027 mW/g
Maximum value of SAR (measured) = 0.059 mW/g



0 dB = 0.059mW/g

Additional information:
position or distance of DUT to SAM: 10mm
ambient temperature: 21.7°C; liquid temperature: 21.7°C

Date/Time: 26.10.2012 14:39:52Date/Time: 26.10.2012 14:50:40

OET65-Body-WLAN

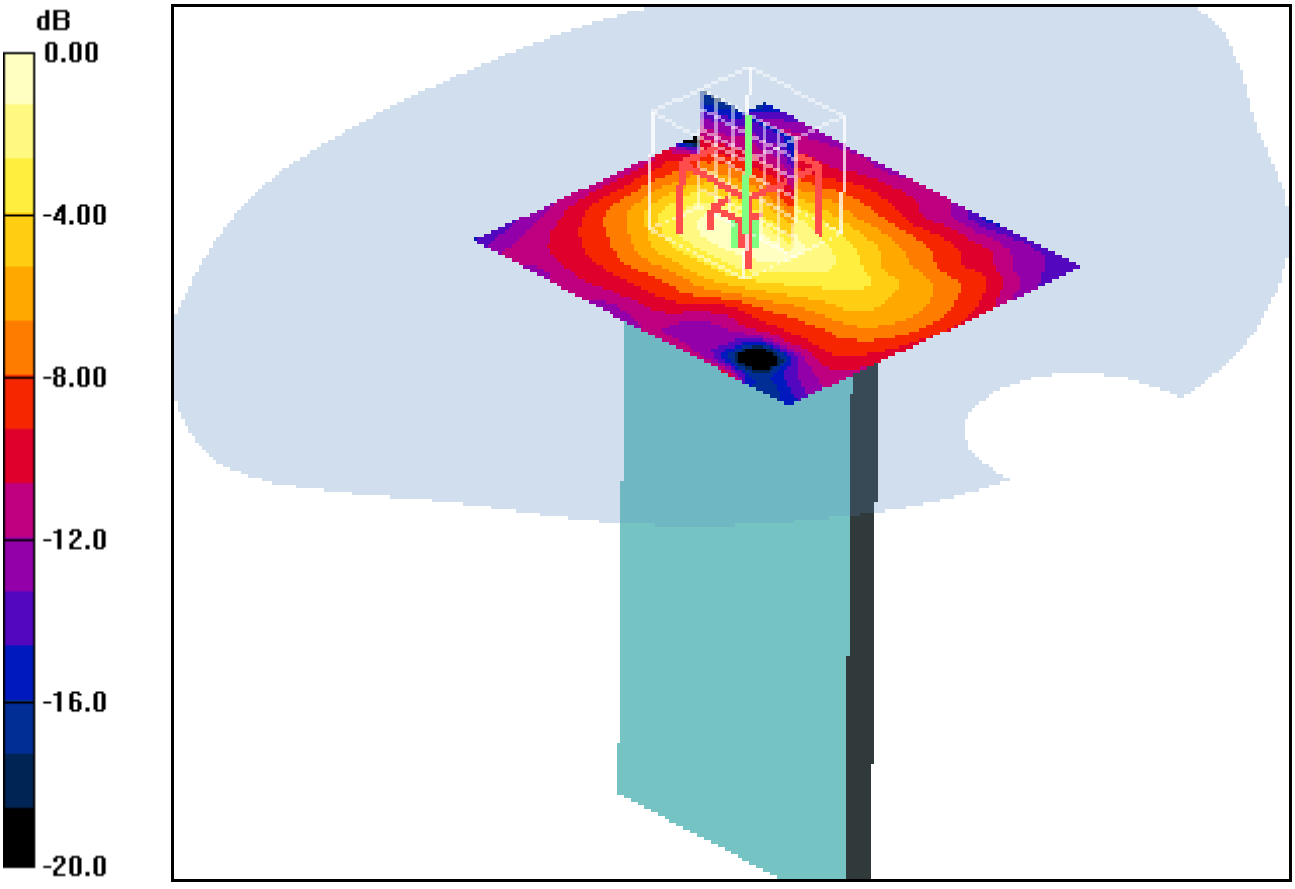
DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK
Communication System: WLAN 2450 US; Frequency: 2437 MHz; Duty Cycle: 1:1
Medium: M2450 Medium parameters used: f = 2437 MHz; σ = 2.01 mho/m; ε_r = 51.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(3.88, 3.88, 3.88); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Edge top position - Middle/Area Scan (101x91x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.066 mW/g

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

Reference Value = 5.69 V/m; Power Drift = -0.104 dB
Peak SAR (extrapolated) = 0.151 W/kg
SAR(1 g) = 0.064 mW/g; SAR(10 g) = 0.033 mW/g
Maximum value of SAR (measured) = 0.067 mW/g



0 dB = 0.067mW/g

Additional information:
position or distance of DUT to SAM: 10mm
ambient temperature: 21.7°C; liquid temperature: 21.7°C

Date/Time: 26.10.2012 21:54:17Date/Time: 26.10.2012 21:12:04

OET65-Body-WLAN

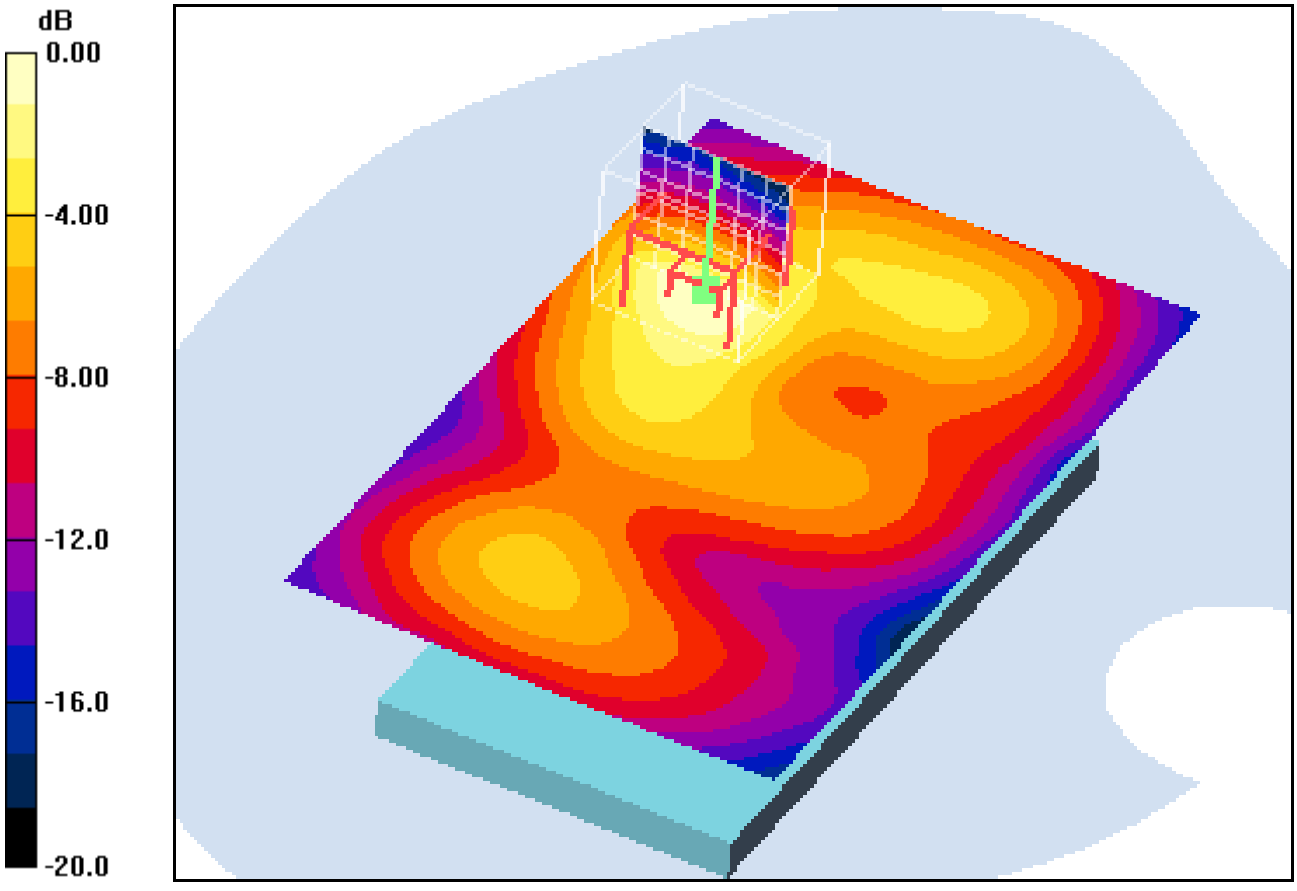
DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK
Communication System: WLAN 2450 US; Frequency: 2462 MHz; Duty Cycle: 1:1
Medium: M2450 Medium parameters used: f = 2462 MHz; σ = 2.02 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1559; ConvF(3.88, 3.88, 3.88); Calibrated: 18.01.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Rear position - High 15mm with headset/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.141 mW/g

Rear position - High 15mm with headset/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.20 V/m; Power Drift = -0.066 dB
Peak SAR (extrapolated) = 0.310 W/kg
SAR(1 g) = 0.130 mW/g; SAR(10 g) = 0.065 mW/g
Maximum value of SAR (measured) = 0.138 mW/g



0 dB = 0.138mW/g

Additional information:
position or distance of DUT to SAM: 15mm with headset
ambient temperature: 21.7°C; liquid temperature: 21.7°C

Annex B.5: WLAN 5GHz

Date/Time: 30.10.2012 08:18:29Date/Time: 30.10.2012 08:35:13

IEEE1528_EN62209-LeftHandSide-WLAN5GHz

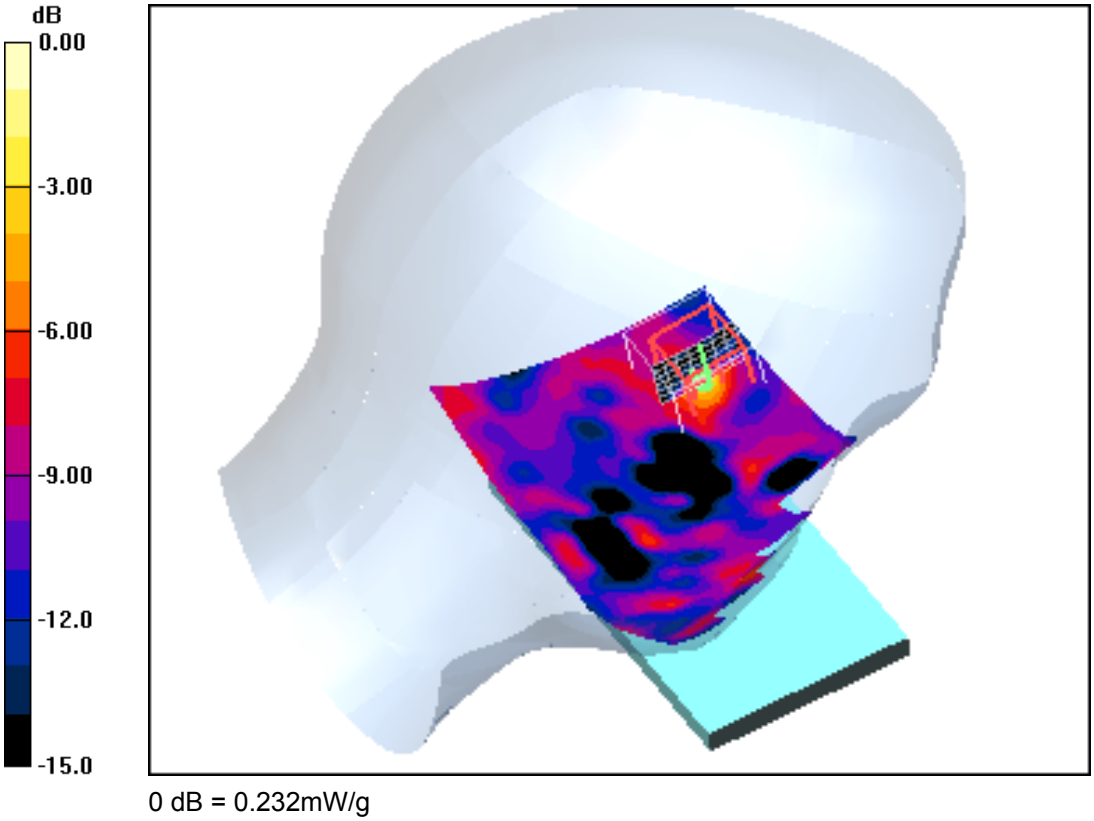
DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK
Communication System: WLAN 5GHz; Frequency: 5180 MHz; Duty Cycle: 1:1
Medium: HSL5GHz Medium parameters used (interpolated): f = 5180 MHz; σ = 4.5 mho/m; ε_r = 36.6; ρ = 1000 kg/m^3
Phantom section: Left Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3566; ConvF(4.24, 4.24, 4.24); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Channel 36/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.147 mW/g

Touch position - Channel 36/Zoom Scan(9x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 8.16 V/m; Power Drift = -0.114 dB
Peak SAR (extrapolated) = 0.421 W/kg
SAR(1 g) = 0.114 mW/g; SAR(10 g) = 0.033 mW/g
Maximum value of SAR (measured) = 0.232 mW/g



0 dB = 0.232mW/g

Additional information:
ambient temperature: 22.2°C; liquid temperature: 20.4°C

Date/Time: 30.10.2012 10:19:47Date/Time: 30.10.2012 10:27:54

IEEE1528_EN62209-LeftHandSide-WLAN5GHz

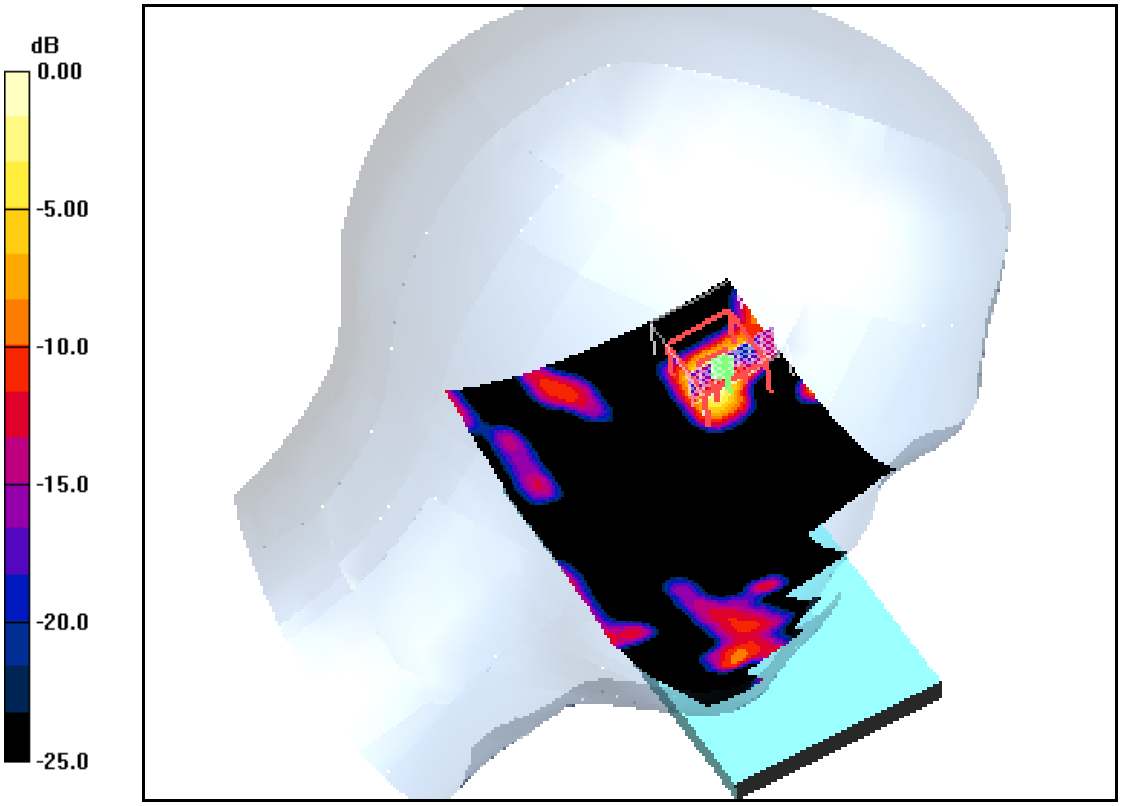
DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK
Communication System: WLAN 5GHz; Frequency: 5260 MHz; Duty Cycle: 1:1
Medium: HSL5GHz Medium parameters used (interpolated): f = 5260 MHz; σ = 4.58 mho/m; ε_r = 36.5; ρ = 1000 kg/m^3
Phantom section: Left Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3566; ConvF(4.05, 4.05, 4.05); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Channel 52/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.297 mW/g

Touch position - Channel 52/Zoom Scan (9x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 9.24 V/m; Power Drift = -0.106 dB
Peak SAR (extrapolated) = 0.613 W/kg
SAR(1 g) = 0.149 mW/g; SAR(10 g) = 0.040 mW/g
Maximum value of SAR (measured) = 0.323 mW/g



0 dB = 0.323mW/g

Additional information:
ambient temperature: 22.2°C; liquid temperature: 20.4°C

Date/Time: 30.10.2012 13:45:57Date/Time: 30.10.2012 13:56:43

IEEE1528_EN62209-LeftHandSide-WLAN5GHz

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

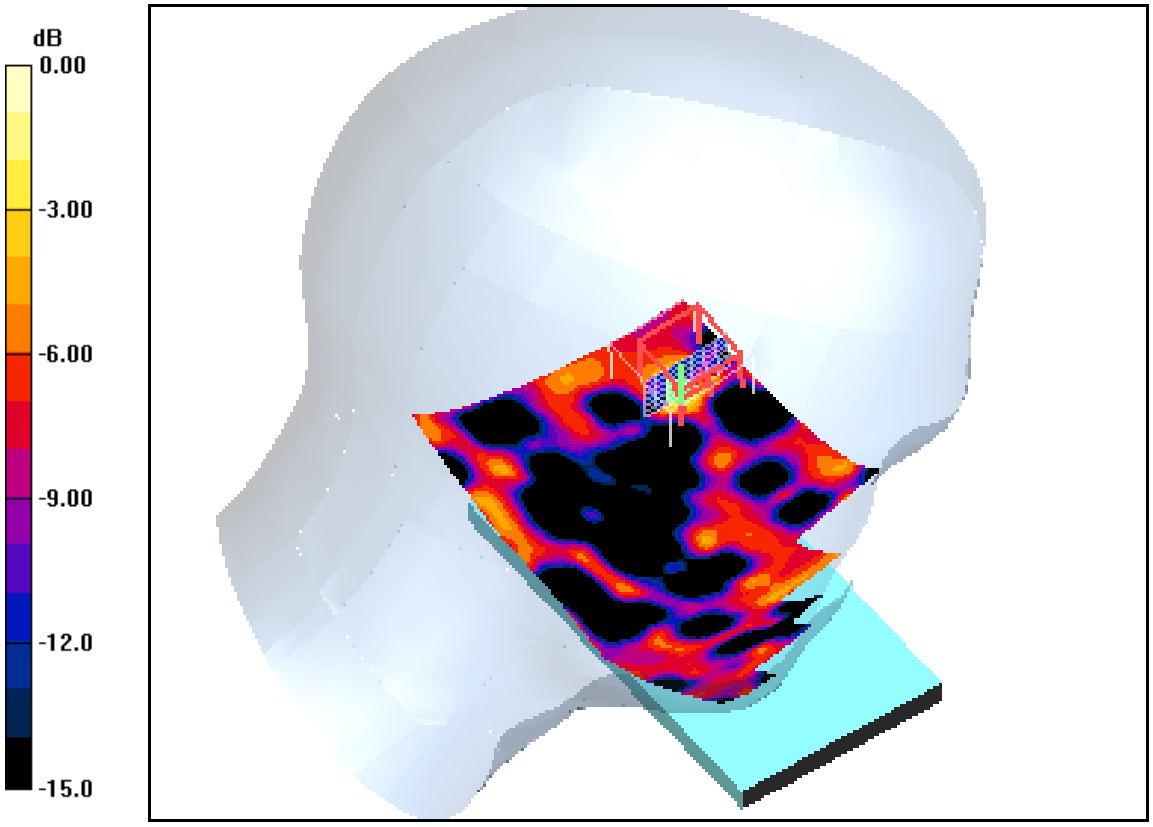
Communication System: WLAN 5GHz; Frequency: 5520 MHz; Duty Cycle: 1:1
Medium: HSL5GHz Medium parameters used (interpolated): f = 5520 MHz; σ = 4.84 mho/m; ε_r = 36.1; ρ = 1000 kg/m^3
Phantom section: Left Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3566; ConvF(3.72, 3.72, 3.72); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Channel 104/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.128 mW/g

Touch position - Channel 104/Zoom Scan (9x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 7.80 V/m; Power Drift = -0.150 dB
Peak SAR (extrapolated) = 0.331 W/kg
SAR(1 g) = 0.079 mW/g; SAR(10 g) = 0.024 mW/g
Maximum value of SAR (measured) = 0.155 mW/g



0 dB = 0.155mW/g

Additional information:
ambient temperature: 22.2°C; liquid temperature: 20.4°C

Date/Time: 30.10.2012 14:14:05Date/Time: 30.10.2012 14:30:44

IEEE1528_EN62209-LeftHandSide-WLAN5GHz

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

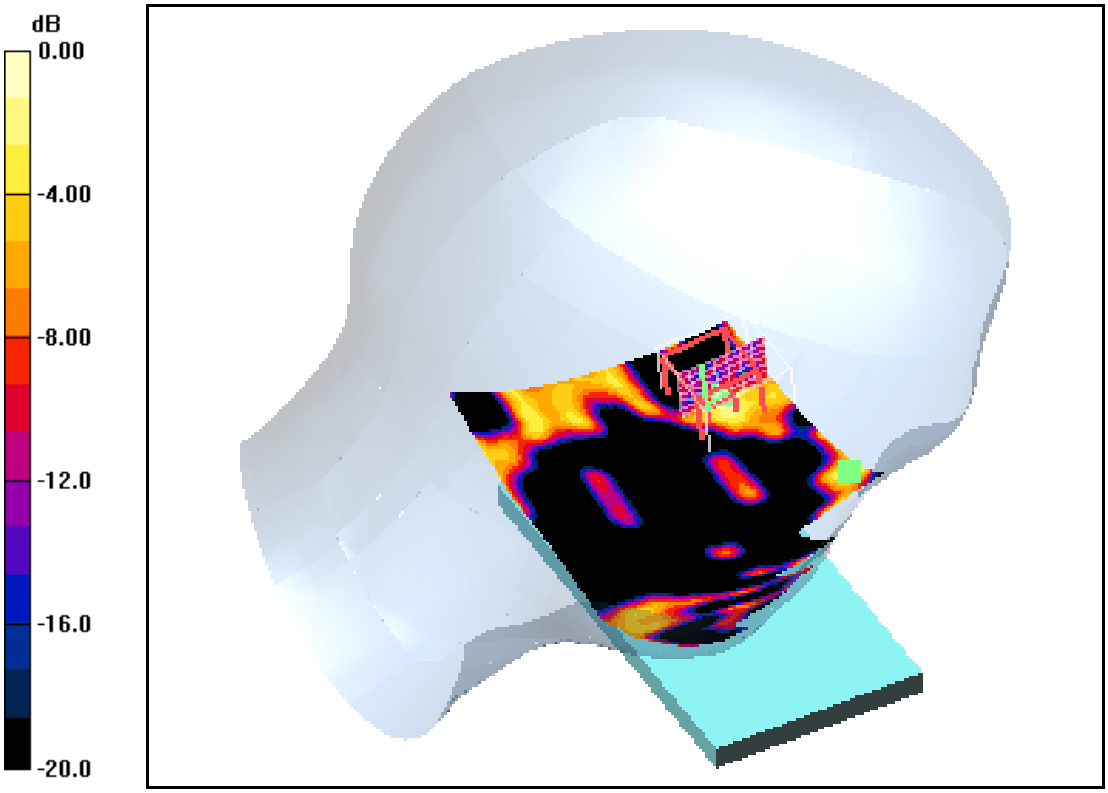
Communication System: WLAN 5GHz; Frequency: 5765 MHz; Duty Cycle: 1:1
Medium: HSL5GHz Medium parameters used (interpolated): f = 5765 MHz; σ = 5.09 mho/m; ε_r = 35.7; ρ = 1000 kg/m^3
Phantom section: Left Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3566; ConvF(3.65, 3.65, 3.65); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Channel 153/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.128 mW/g

Touch position - Channel 153/Zoom Scan (9x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.28 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.229 W/kg
SAR(1 g) = 0.058 mW/g; SAR(10 g) = 0.017 mW/g
Maximum value of SAR (measured) = 0.122 mW/g



0 dB = 0.122mW/g

Additional information:
ambient temperature: 22.2°C; liquid temperature: 20.4°C

Date/Time: 30.10.2012 08:52:57Date/Time: 30.10.2012 09:10:09

IEEE1528_EN62209-LeftHandSide-WLAN5GHz

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

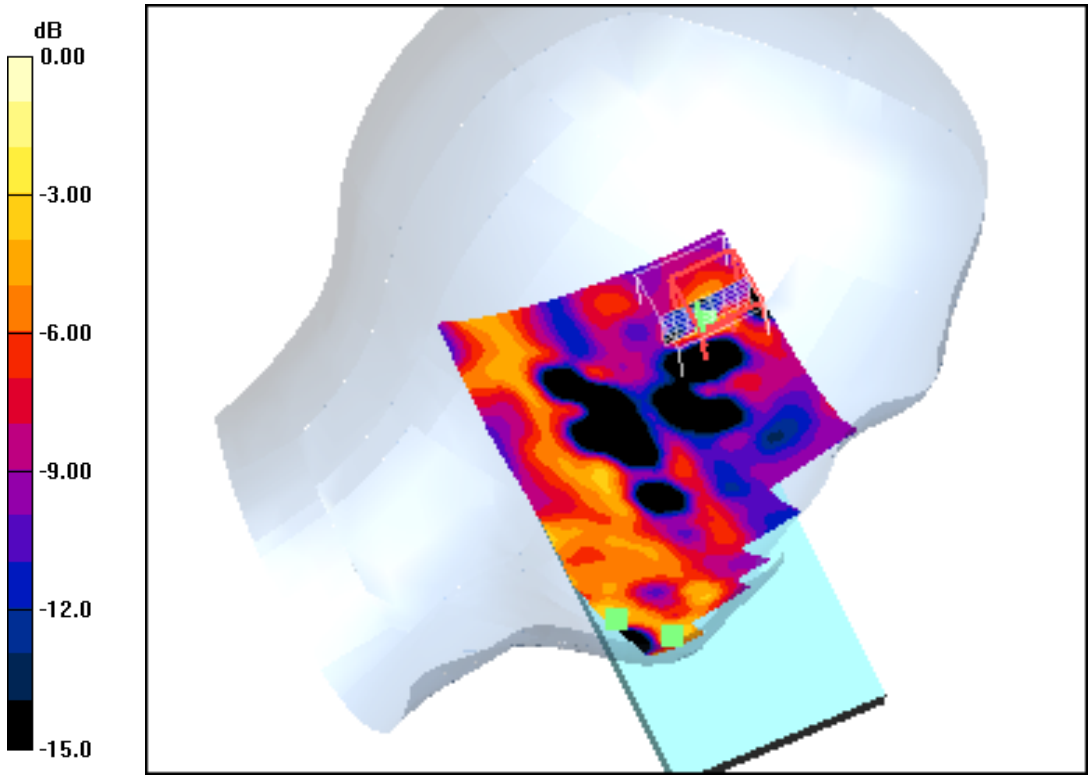
Communication System: WLAN 5GHz; Frequency: 5180 MHz; Duty Cycle: 1:1
Medium: HSL5GHz Medium parameters used (interpolated): f = 5180 MHz; σ = 4.5 mho/m; ε_r = 36.6; ρ = 1000 kg/m^3
Phantom section: Left Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3566; ConvF(4.24, 4.24, 4.24); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Channel 36/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.092 mW/g

Tilt position - Channel 36/Zoom Scan (9x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.39 V/m; Power Drift = -0.149 dB
Peak SAR (extrapolated) = 0.234 W/kg
SAR(1 g) = 0.050 mW/g; SAR(10 g) = 0.017 mW/g
Maximum value of SAR (measured) = 0.104 mW/g



0 dB = 0.104mW/g

Additional information:
ambient temperature: 22.2°C; liquid temperature: 20.4°C

Date/Time: 30.10.2012 11:45:46Date/Time: 30.10.2012 12:05:16

IEEE1528_EN62209-LeftHandSide-WLAN5GHz

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

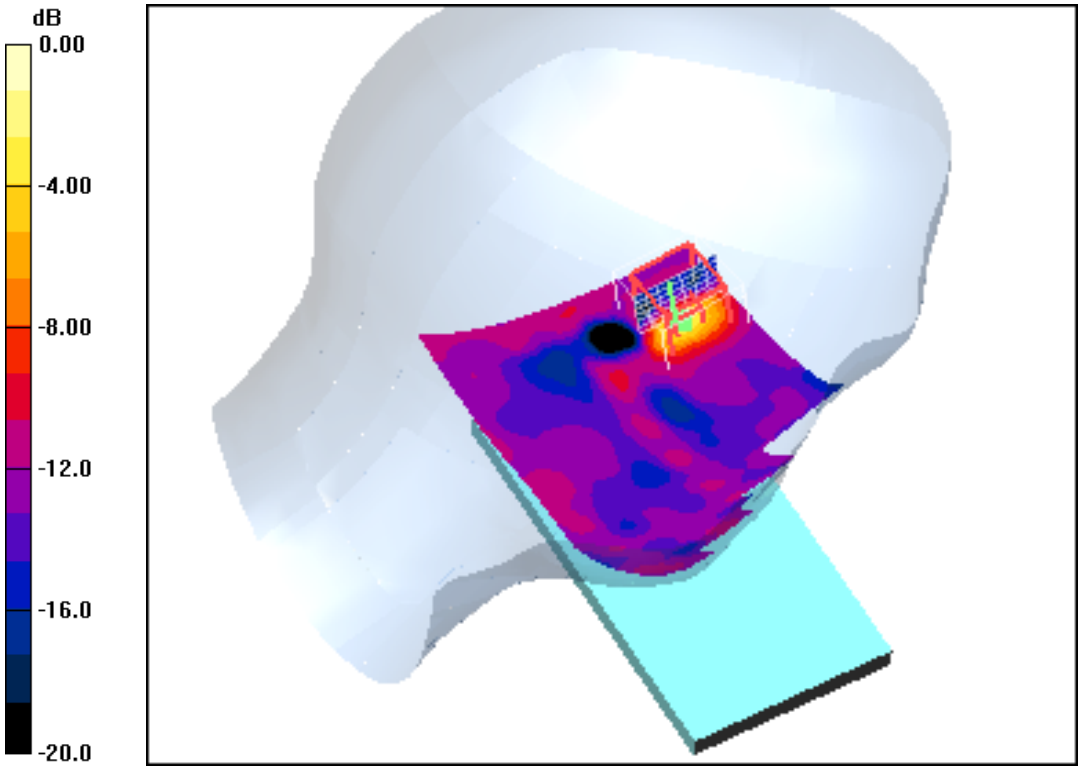
Communication System: WLAN 5GHz; Frequency: 5260 MHz; Duty Cycle: 1:1
Medium: HSL5GHz Medium parameters used (interpolated): f = 5260 MHz; σ = 4.58 mho/m; ε_r = 36.5; ρ = 1000 kg/m^3
Phantom section: Left Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3566; ConvF(4.05, 4.05, 4.05); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Channel 52/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

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

Tilt position - Channel 52/Zoom Scan (9x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 9.39 V/m; Power Drift = -0.011 dB
Peak SAR (extrapolated) = 0.956 W/kg
SAR(1 g) = 0.239 mW/g; SAR(10 g) = 0.074 mW/g
Maximum value of SAR (measured) = 0.463 mW/g



0 dB = 0.463mW/g

Additional information:
ambient temperature: 22.2°C; liquid temperature: 20.4°C

Date/Time: 30.10.2012 14:05:46Date/Time: 30.10.2012 14:34:14

IEEE1528_EN62209-LeftHandSide-WLAN5GHz

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

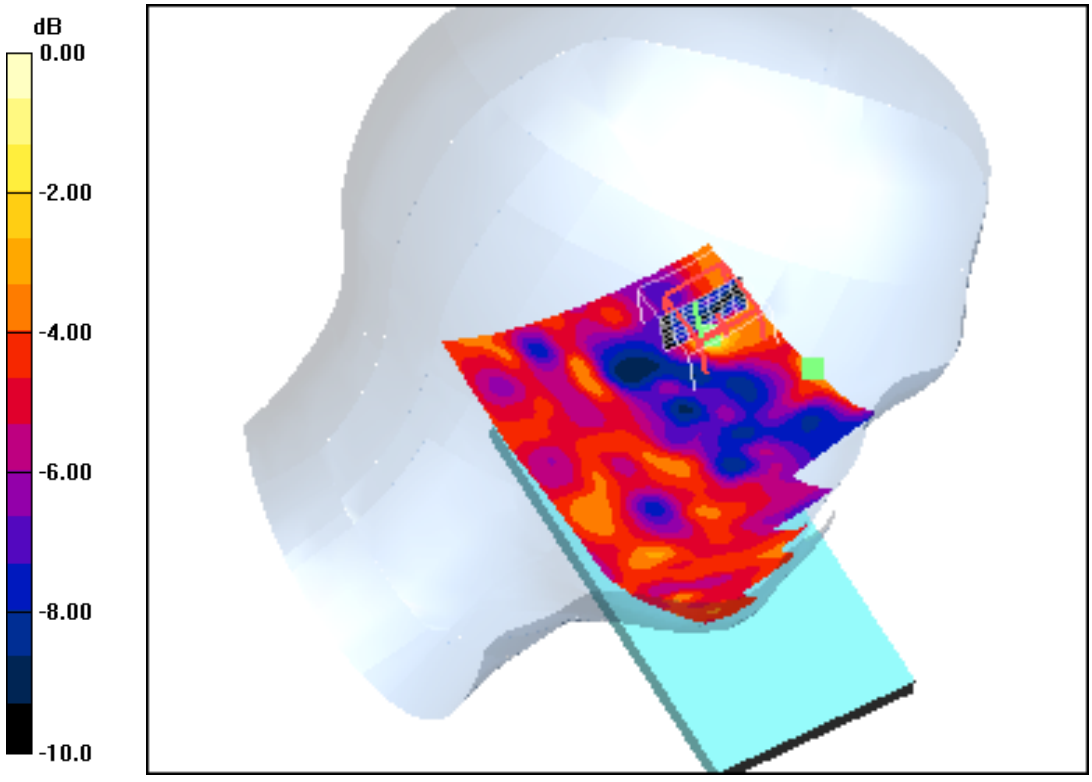
Communication System: WLAN 5GHz; Frequency: 5520 MHz; Duty Cycle: 1:1
Medium: HSL5GHz Medium parameters used (interpolated): f = 5520 MHz; σ = 4.84 mho/m; ε_r = 36.1; ρ = 1000 kg/m^3
Phantom section: Left Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3566; ConvF(3.72, 3.72, 3.72); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Channel 104/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.064 mW/g

Tilt position - Channel 104/Zoom Scan (9x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.03 V/m; Power Drift = -0.106 dB
Peak SAR (extrapolated) = 0.187 W/kg
SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.018 mW/g
Maximum value of SAR (measured) = 0.083 mW/g



0 dB = 0.083mW/g

Additional information:
ambient temperature: 22.2°C; liquid temperature: 20.4°C

Date/Time: 30.10.2012 16:48:49

IEEE1528_EN62209-LeftHandSide-WLAN5GHz

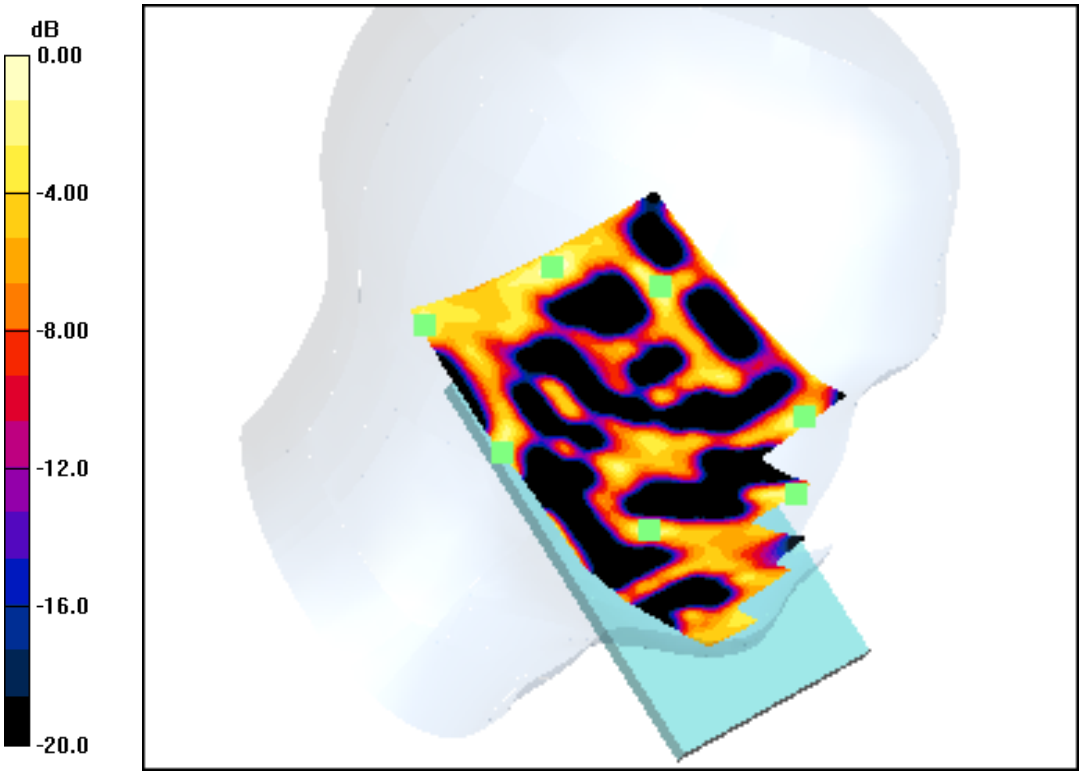
DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

Communication System: WLAN 5GHz; Frequency: 5765 MHz; Duty Cycle: 1:1
Medium: HSL5GHz Medium parameters used (interpolated): f = 5765 MHz; σ = 5.09 mho/m; ε_r = 35.7; ρ = 1000 kg/m^3
Phantom section: Left Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3566; ConvF(3.65, 3.65, 3.65); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Channel 153/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.075 mW/g

Interpolation of Zoom Scan failed, too close to the noise limit.



0 dB = 0.075mW/g

Additional information:
ambient temperature: 22.2°C; liquid temperature: 20.4°C

Date/Time: 30.10.2012 10:18:36Date/Time: 30.10.2012 10:36:59

IEEE1528_EN62209-RightHandSide-WLAN5GHz

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

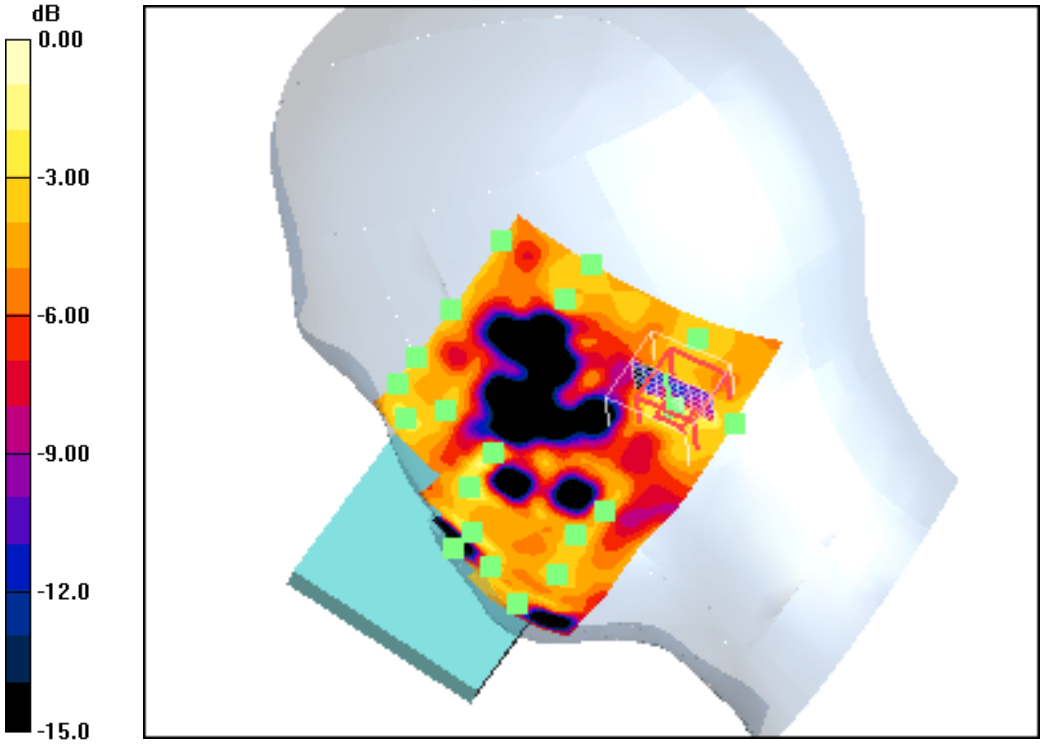
Communication System: WLAN 5GHz; Frequency: 5180 MHz; Duty Cycle: 1:1
Medium: HSL5GHz Medium parameters used (interpolated): f = 5180 MHz; σ = 4.5 mho/m; ε_r = 36.6; ρ = 1000 kg/m^3
Phantom section: Right Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3566; ConvF(4.24, 4.24, 4.24); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touchilt position - Channel 36/Area Scan (101x161x1): Measurement grid:

dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.053 mW/g

Touchilt position - Channel 36/Zoom Scan (9x9x12)/Cube 0: Measurement grid:

dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.64 V/m; Power Drift = -0.122 dB
Peak SAR (extrapolated) = 0.195 W/kg
SAR(1 g) = 0.036 mW/g; SAR(10 g) = 0.014 mW/g
Maximum value of SAR (measured) = 0.072 mW/g



0 dB = 0.072mW/g

Additional information:
ambient temperature: 22.2°C; liquid temperature: 20.4°C

Date/Time: 30.10.2012 12:59:52Date/Time: 30.10.2012 13:23:03

IEEE1528_EN62209-RightHandSide-WLAN5GHz

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

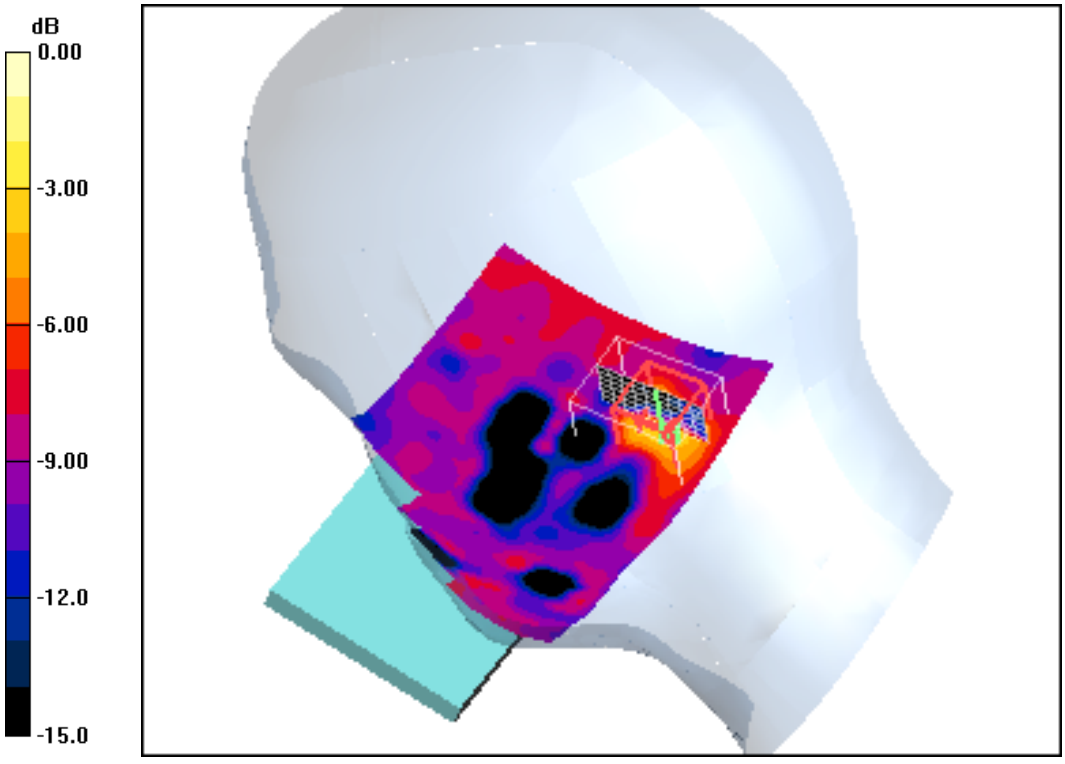
Communication System: WLAN 5GHz; Frequency: 5260 MHz; Duty Cycle: 1:1
Medium: HSL5GHz Medium parameters used (interpolated): f = 5260 MHz; σ = 4.58 mho/m; ε_r = 36.5; ρ = 1000 kg/m^3
Phantom section: Right Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3566; ConvF(4.05, 4.05, 4.05); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Channel 52/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.107 mW/g

Touch position - Channel 52/Zoom Scan (9x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 6.64 V/m; Power Drift = -0.167 dB
Peak SAR (extrapolated) = 0.367 W/kg
SAR(1 g) = 0.111 mW/g; SAR(10 g) = 0.043 mW/g
Maximum value of SAR (measured) = 0.217 mW/g



0 dB = 0.217mW/g

Additional information:
ambient temperature: 22.2°C; liquid temperature: 20.4°C

Date/Time: 30.10.2012 12:40:58Date/Time: 30.10.2012 12:59:56

IEEE1528_EN62209-RightHandSide-WLAN5GHz

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

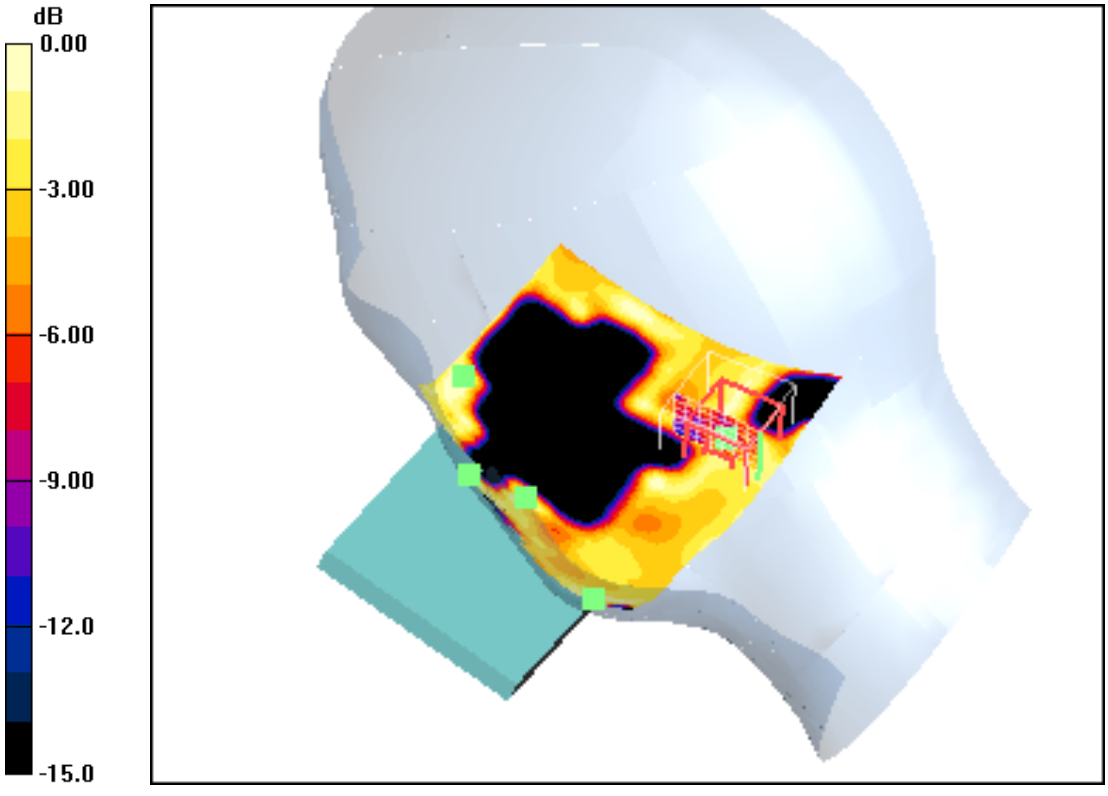
Communication System: WLAN 5GHz; Frequency: 5520 MHz; Duty Cycle: 1:1
Medium: HSL5GHz Medium parameters used (interpolated): f = 5520 MHz; σ = 4.84 mho/m; ε_r = 36.1; ρ = 1000 kg/m^3
Phantom section: Right Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3566; ConvF(3.72, 3.72, 3.72); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Channel 104/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.082 mW/g

Touch position - Channel 104/Zoom Scan (9x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.75 V/m; Power Drift = -0.156dB
Peak SAR (extrapolated) = 0.186 W/kg
SAR(1 g) = 0.027 mW/g; SAR(10 g) = 0.014 mW/g
Maximum value of SAR (measured) = 0.052 mW/g



0 dB = 0.052mW/g

Additional information:
ambient temperature: 22.2°C; liquid temperature: 20.4°C

Date/Time: 30.10.2012 15:07:07Date/Time: 30.10.2012 15:45:56

IEEE1528_EN62209-RightHandSide-WLAN5GHz

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

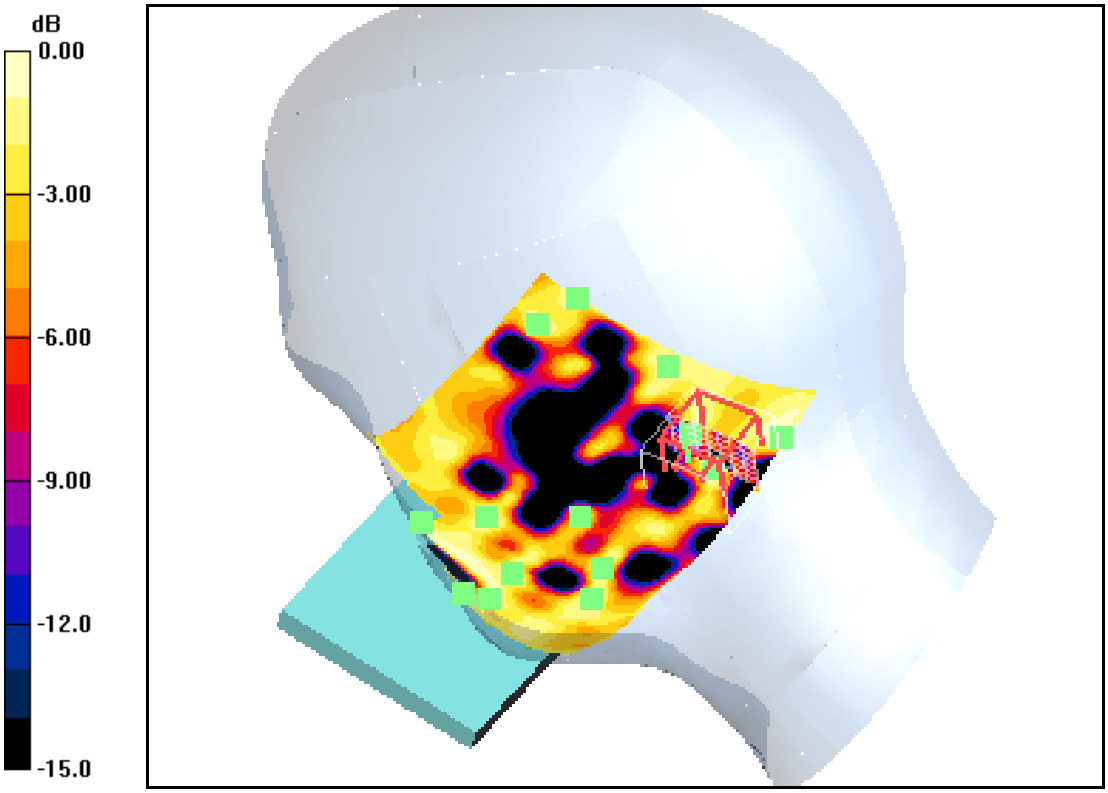
Communication System: WLAN 5GHz; Frequency: 5765 MHz; Duty Cycle: 1:1
Medium: HSL5GHz Medium parameters used (interpolated): f = 5765 MHz; σ = 5.09 mho/m; ε_r = 35.7; ρ = 1000 kg/m^3
Phantom section: Right Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3566; ConvF(3.65, 3.65, 3.65); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Channel 153/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.066 mW/g

Touch position - Channel 153/Zoom Scan (9x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0.00 V/m; Power Drift = 0.150 dB
Peak SAR (extrapolated) = 0.154 W/kg
SAR(1 g) = 0.018 mW/g; SAR(10 g) = 0.0052 mW/g
Maximum value of SAR (measured) = 0.053 mW/g



0 dB = 0.053mW/g

Additional information:
ambient temperature: 22.2°C; liquid temperature: 20.4°C

Date/Time: 30.10.2012 09:32:17Date/Time: 30.10.2012 09:59:05

IEEE1528_EN62209-RightHandSide-WLAN5GHz

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

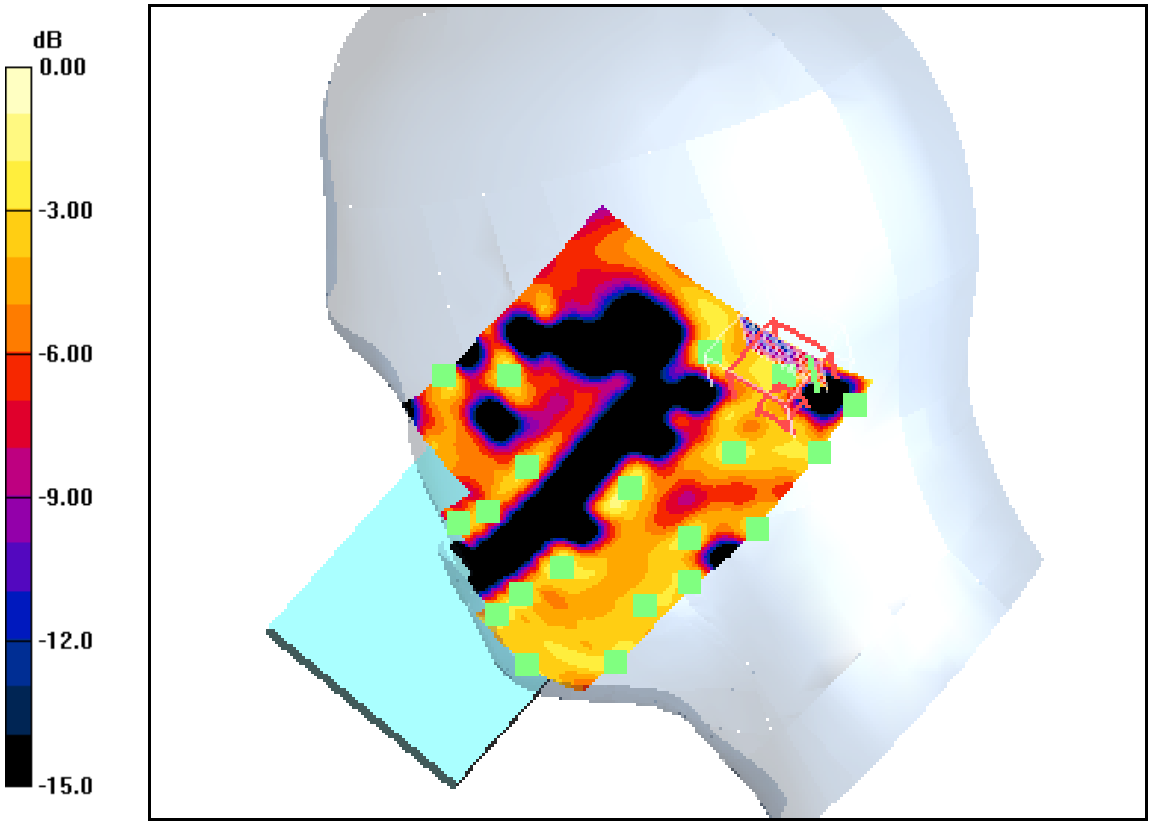
Communication System: WLAN 5GHz; Frequency: 5180 MHz; Duty Cycle: 1:1
Medium: HSL5GHz Medium parameters used (interpolated): f = 5180 MHz; σ = 4.5 mho/m; ε_r = 36.6; ρ = 1000 kg/m^3
Phantom section: Right Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3566; ConvF(4.24, 4.24, 4.24); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Channel 36/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.044 mW/g

Tilt position - Channel 36/Zoom Scan (9x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.11 V/m; Power Drift = -0.120 dB
Peak SAR (extrapolated) = 0.067 W/kg
SAR(1 g) = 0.029 mW/g; SAR(10 g) = 0.011 mW/g
Maximum value of SAR (measured) = 0.056 mW/g



0 dB = 0.056mW/g

Additional information:
ambient temperature: 22.2°C; liquid temperature: 20.4°C

Date/Time: 30.10.2012 12:25:33Date/Time: 30.10.2012 12:53:57

IEEE1528_EN62209-RightHandSide-WLAN5GHz

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

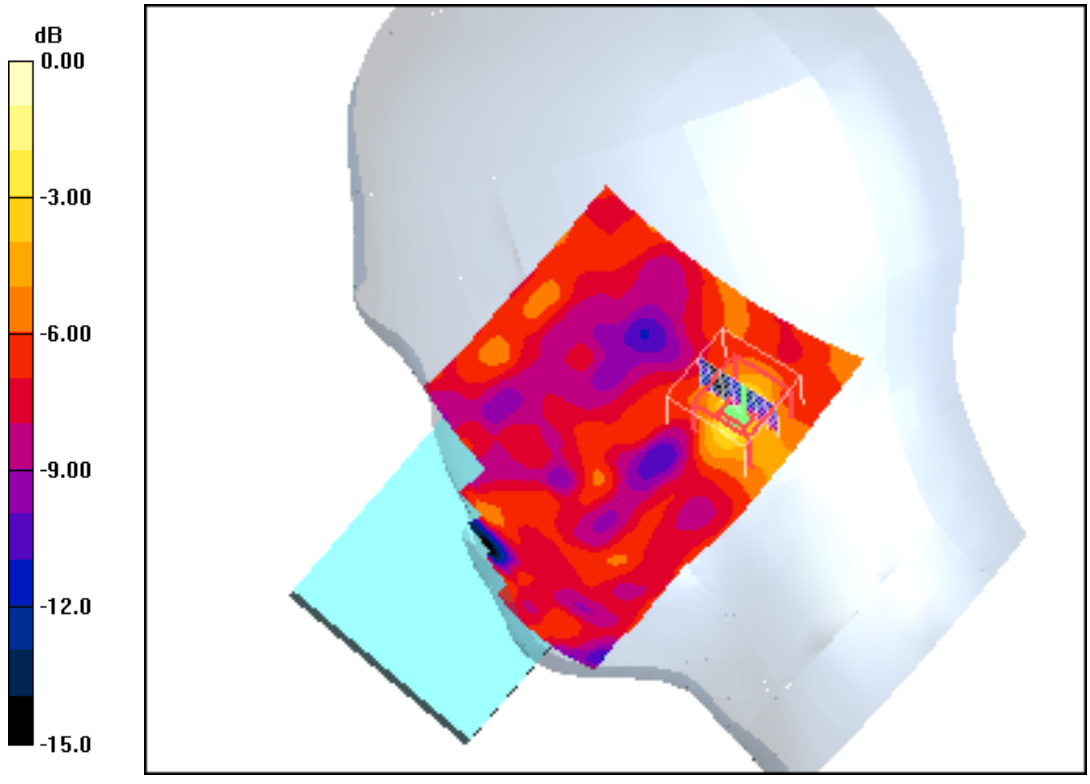
Communication System: WLAN 5GHz; Frequency: 5260 MHz; Duty Cycle: 1:1
Medium: HSL5GHz Medium parameters used (interpolated): f = 5260 MHz; σ = 4.58 mho/m; ε_r = 36.5; ρ = 1000 kg/m^3
Phantom section: Right Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3566; ConvF(4.05, 4.05, 4.05); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Channel 52/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.096 mW/g

Tilt position - Channel 52/Zoom Scan (9x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.09 V/m; Power Drift = -0.128 dB
Peak SAR (extrapolated) = 0.252 W/kg
SAR(1 g) = 0.077 mW/g; SAR(10 g) = 0.031 mW/g
Maximum value of SAR (measured) = 0.148 mW/g



0 dB = 0.148mW/g

Additional information:
ambient temperature: 22.2°C; liquid temperature: 20.4°C

Date/Time: 30.10.2012 14:37:58Date/Time: 30.10.2012 15:01:09

IEEE1528_EN62209-RightHandSide-WLAN5GHz

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

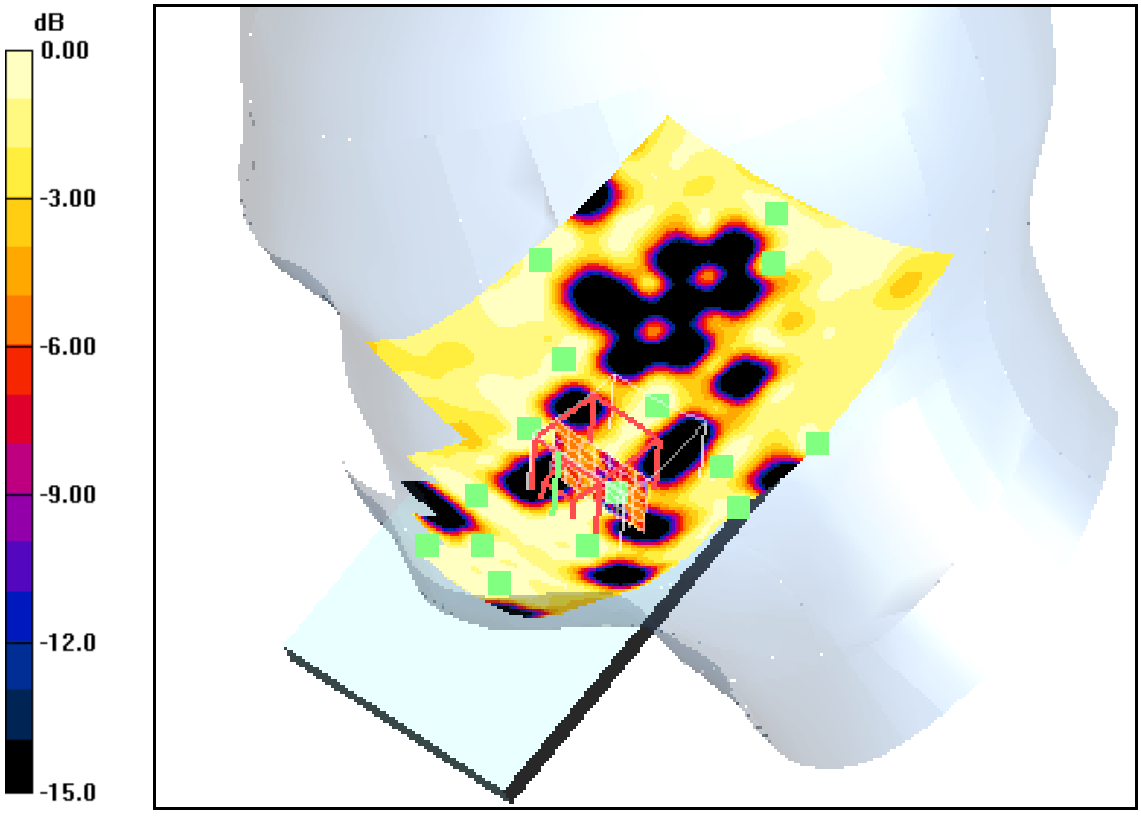
Communication System: WLAN 5GHz; Frequency: 5520 MHz; Duty Cycle: 1:1
Medium: HSL5GHz Medium parameters used (interpolated): f = 5520 MHz; σ = 4.84 mho/m; ε_r = 36.1; ρ = 1000 kg/m^3
Phantom section: Right Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3566; ConvF(3.72, 3.72, 3.72); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Channel 104/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.065 mW/g

Tilt position - Channel 104/Zoom Scan (9x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.29 V/m; Power Drift = -0.180 dB
Peak SAR (extrapolated) = 0.157 W/kg
SAR(1 g) = 0.020 mW/g; SAR(10 g) = 0.00893 mW/g
Maximum value of SAR (measured) = 0.042 mW/g



0 dB = 0.042mW/g

Additional information:
ambient temperature: 22.2°C; liquid temperature: 20.4°C

Date/Time: 30.10.2012 17:32:25Date/Time: 30.10.2012 17:50:11

IEEE1528_EN62209-RightHandSide-WLAN5GHz

DUT: Sony; Type: PM-0220-BV; Serial: CB5A1LN5WK

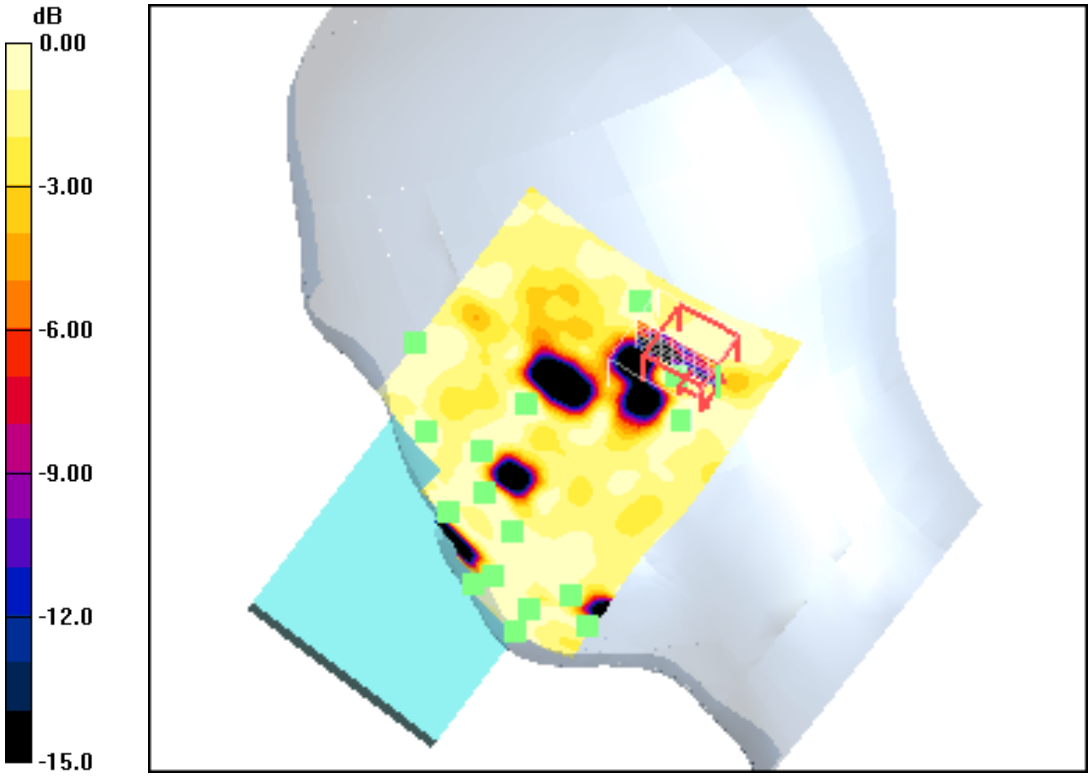
Communication System: WLAN 5GHz; Frequency: 5765 MHz; Duty Cycle: 1:1
Medium: HSL5GHz Medium parameters used (interpolated): f = 5765 MHz; σ = 5.09 mho/m; ε_r = 35.7; ρ = 1000 kg/m^3
Phantom section: Right Section
DASY4 Configuration:
- Probe: EX3DV4 - SN3566; ConvF(3.65, 3.65, 3.65); Calibrated: 23.08.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 12.01.2012
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Channel 153/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.062 mW/g

Tilt position - Channel 153/Zoom Scan (9x9x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.43 V/m; Power Drift = -0.171 dB
Peak SAR (extrapolated) = 0.082 W/kg
SAR(1 g) = 0.011 mW/g; SAR(10 g) = 0.00208 mW/g
Maximum value of SAR (measured) = 0.038 mW/g

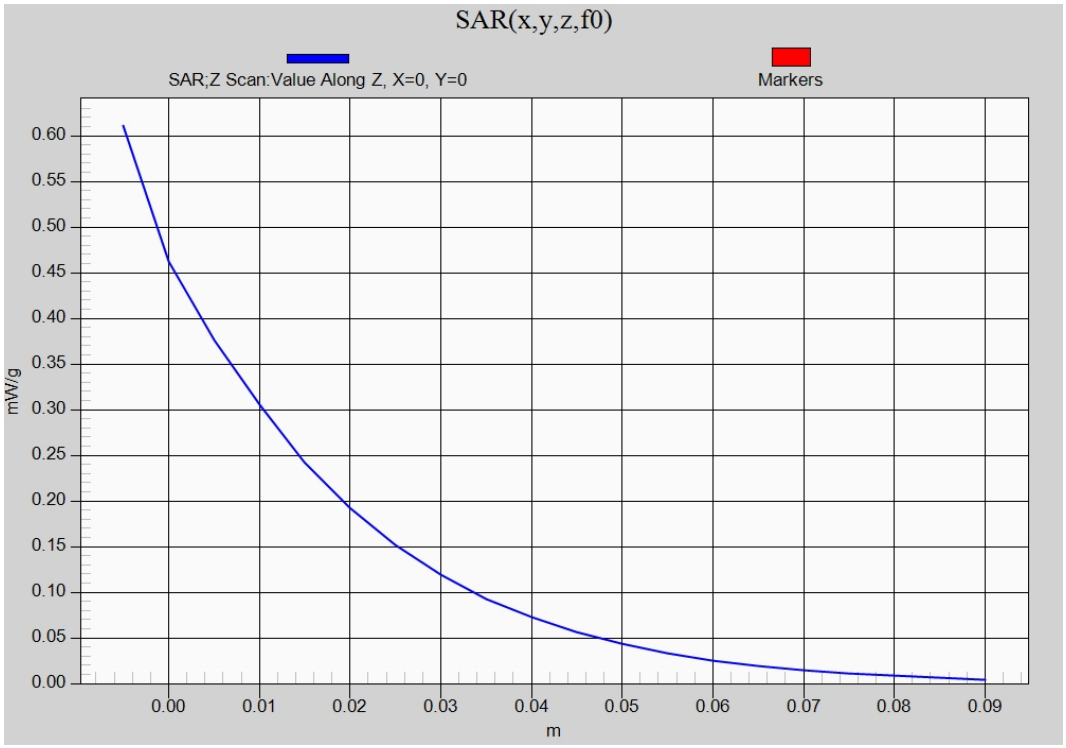


0 dB = 0.038mW/g

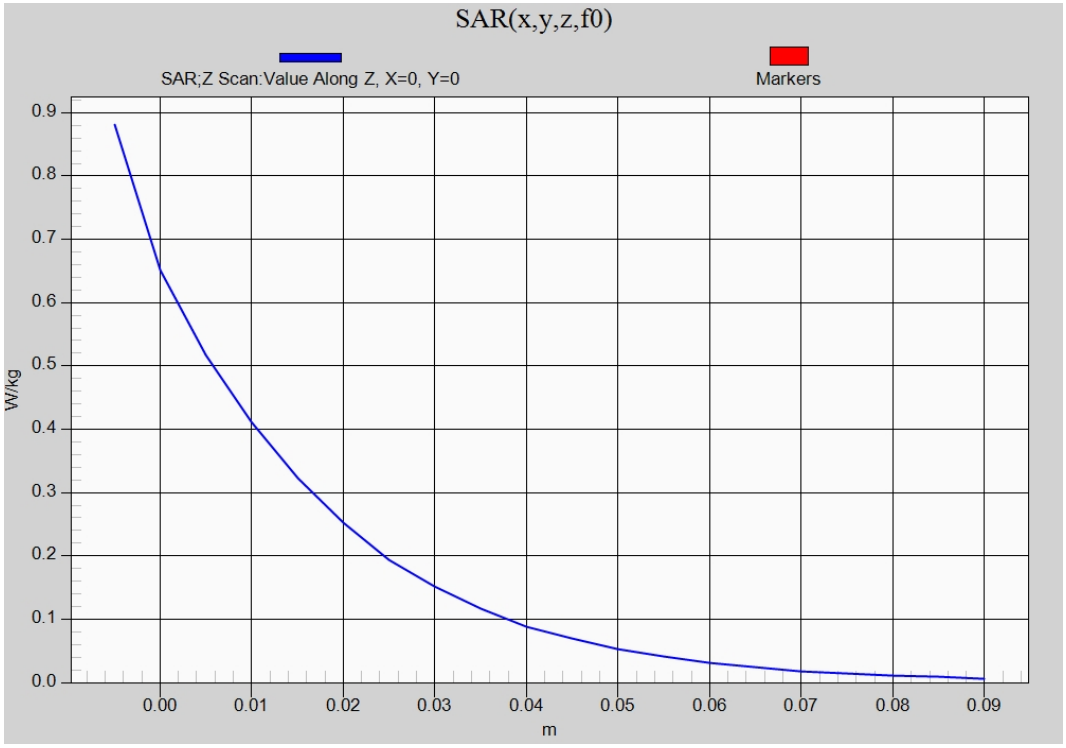
Additional information:
ambient temperature: 22.2°C; liquid temperature: 20.4°C

Note: The measurements were performed close to the noise limit of the measurement system.

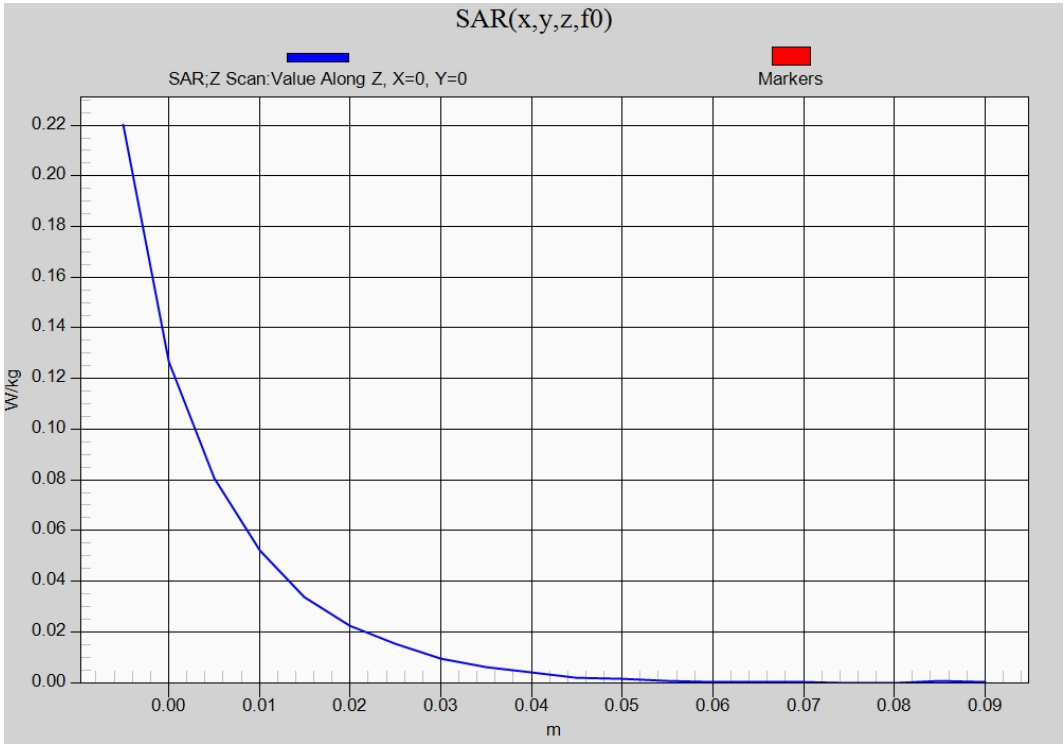
Annex B.6: Z-axis scan



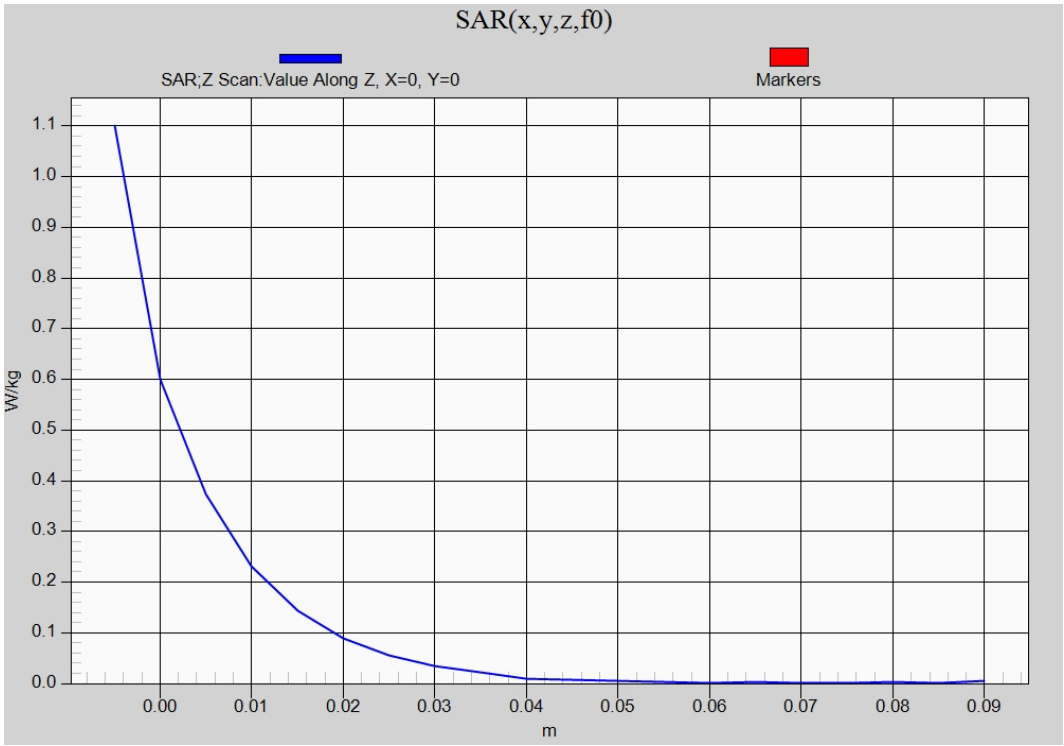
850 head



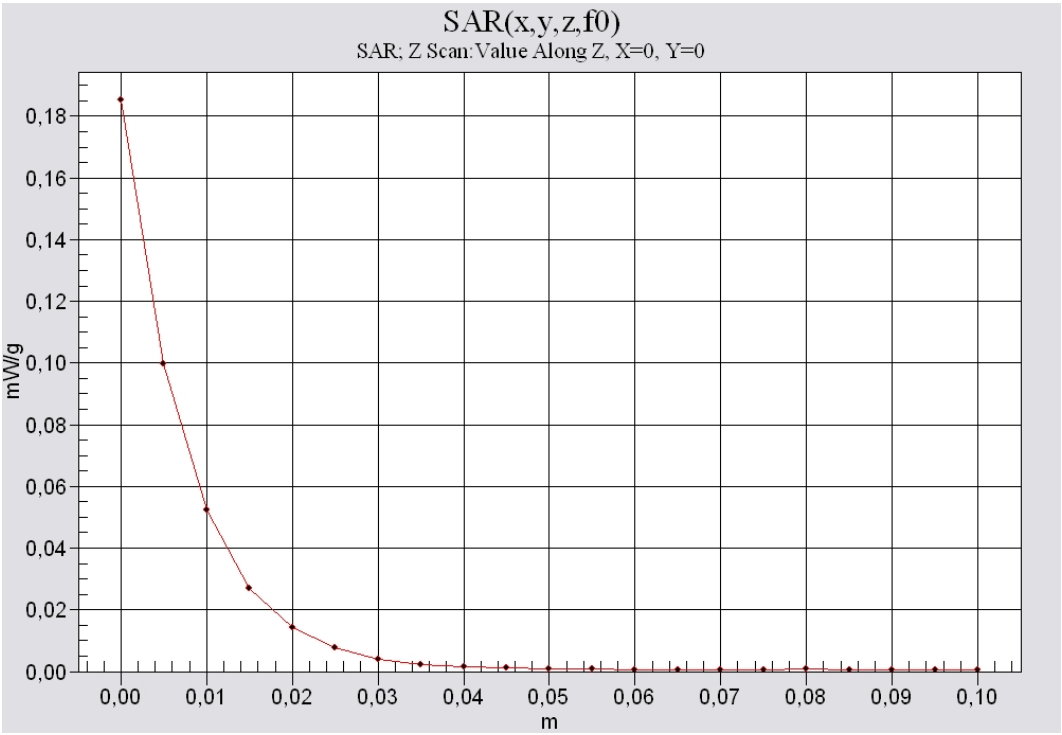
850 body



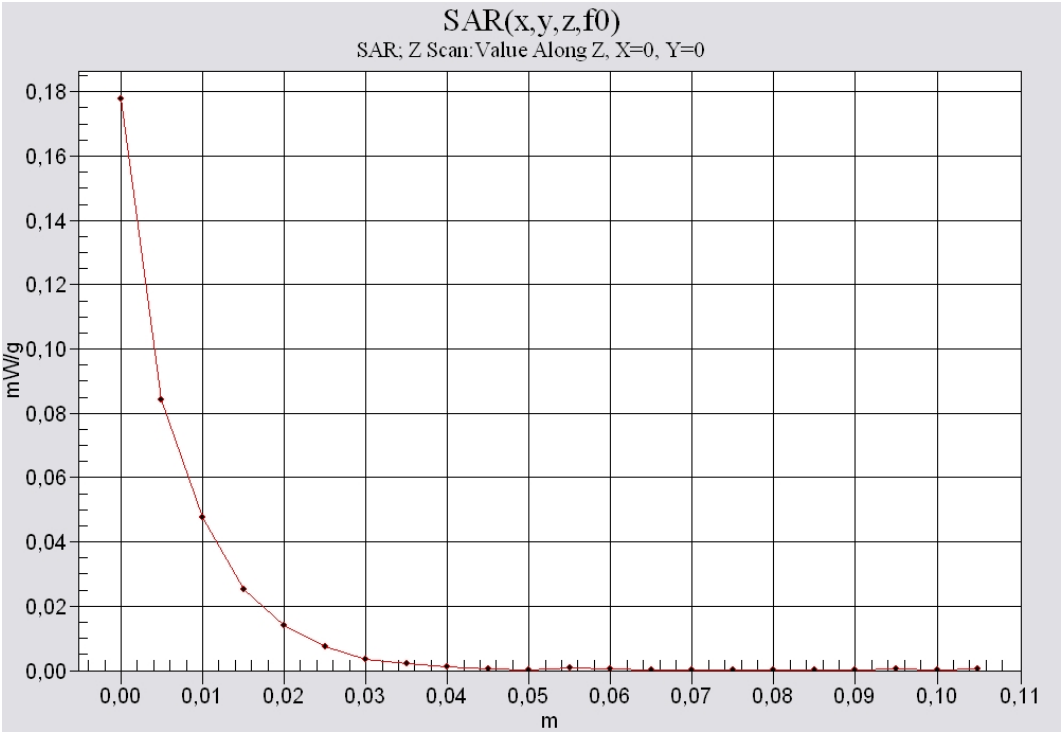
1900 head



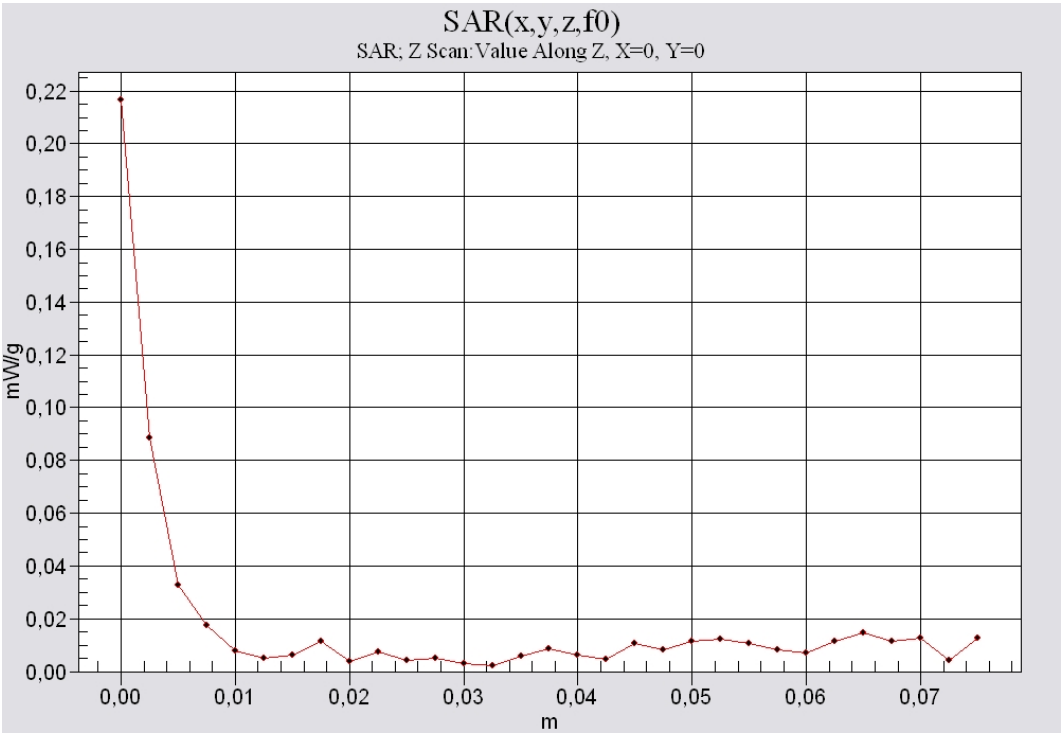
1900 body



2450 head



2450 body


SAR(x,y,z,f0)
SAR; Z Scan: Value Along Z, X=0, Y=0
mW/g
0,22
0,20
0,18
0,16
0,14
0,12
0,10
0,08
0,06
0,04
0,02
0,00
0,00
0,01
0,02
0,03
0,04
0,05
0,06
0,07
m

5GHz head

Annex B.7: Liquid depth

Photo 1: Liquid depth 850 MHz head simulating liquid

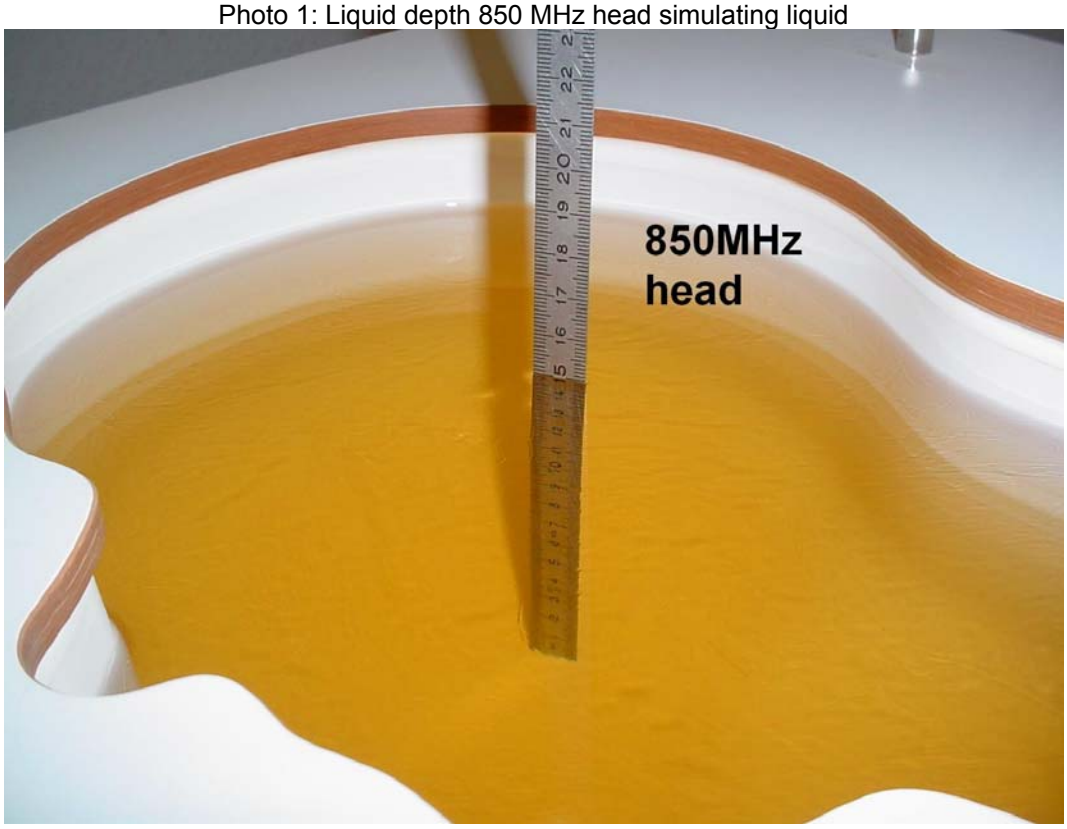


Photo 2: Liquid depth 850 MHz body simulating liquid

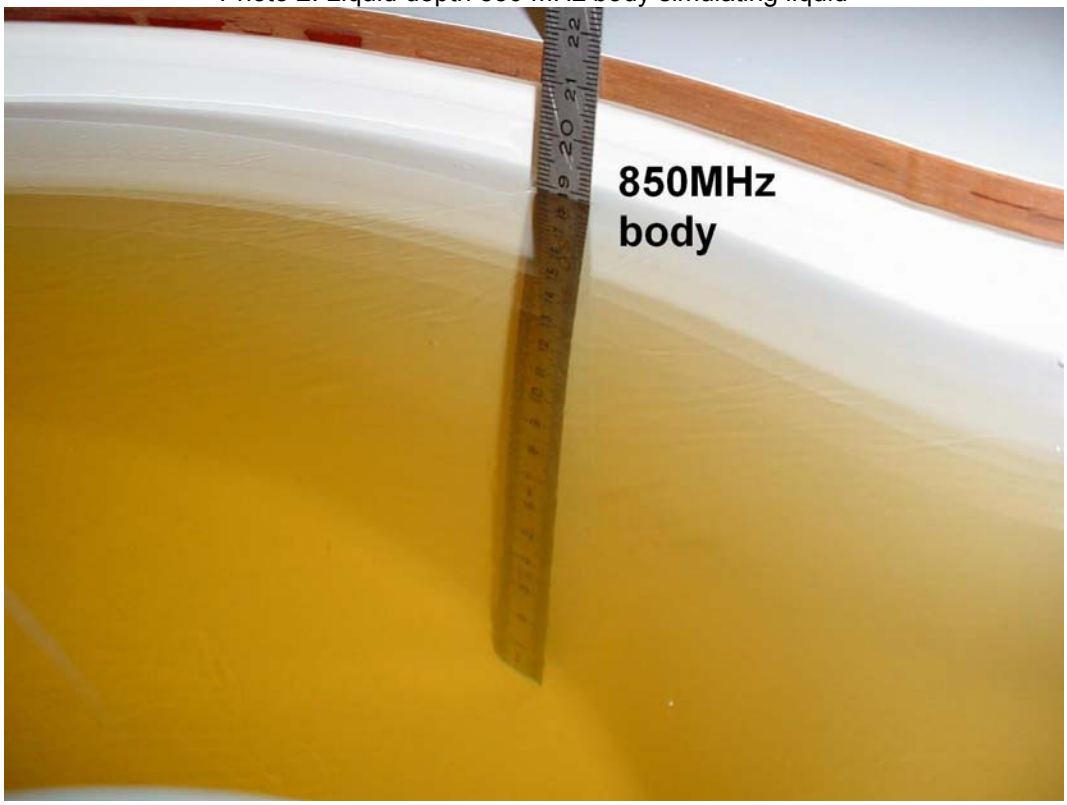


Photo 3: Liquid depth 1900MHz head simulating liquid

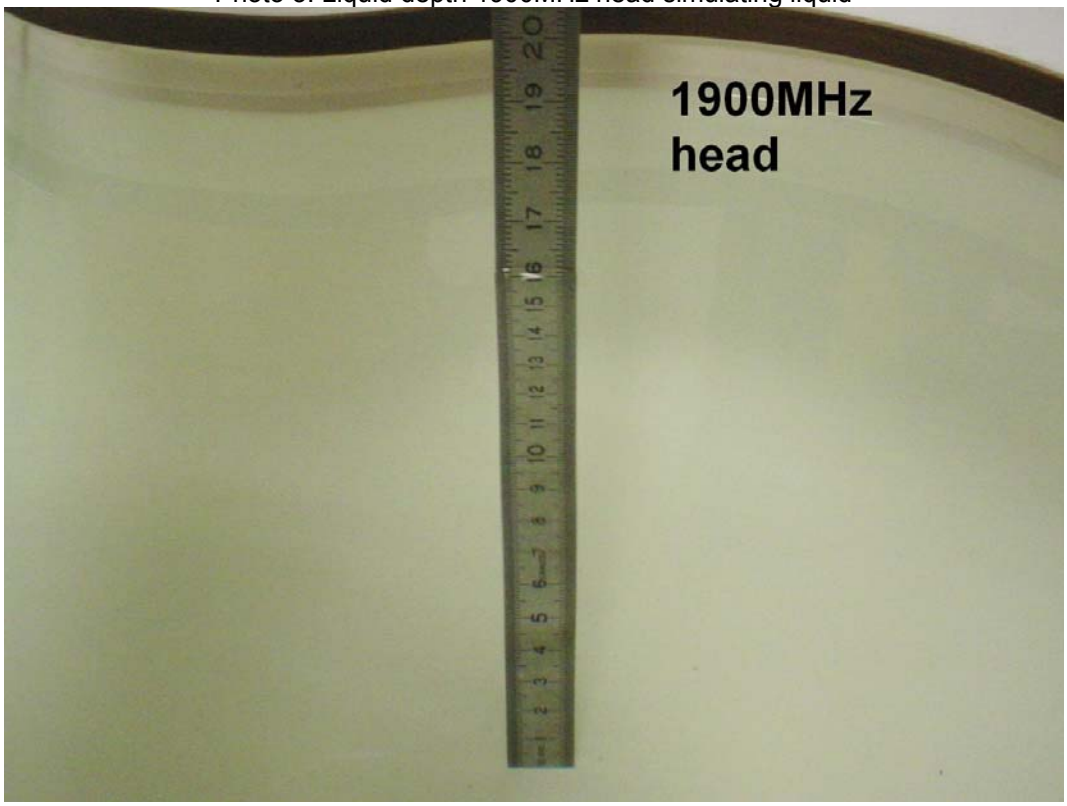


Photo 4: Liquid depth 1900 MHz body simulating liquid

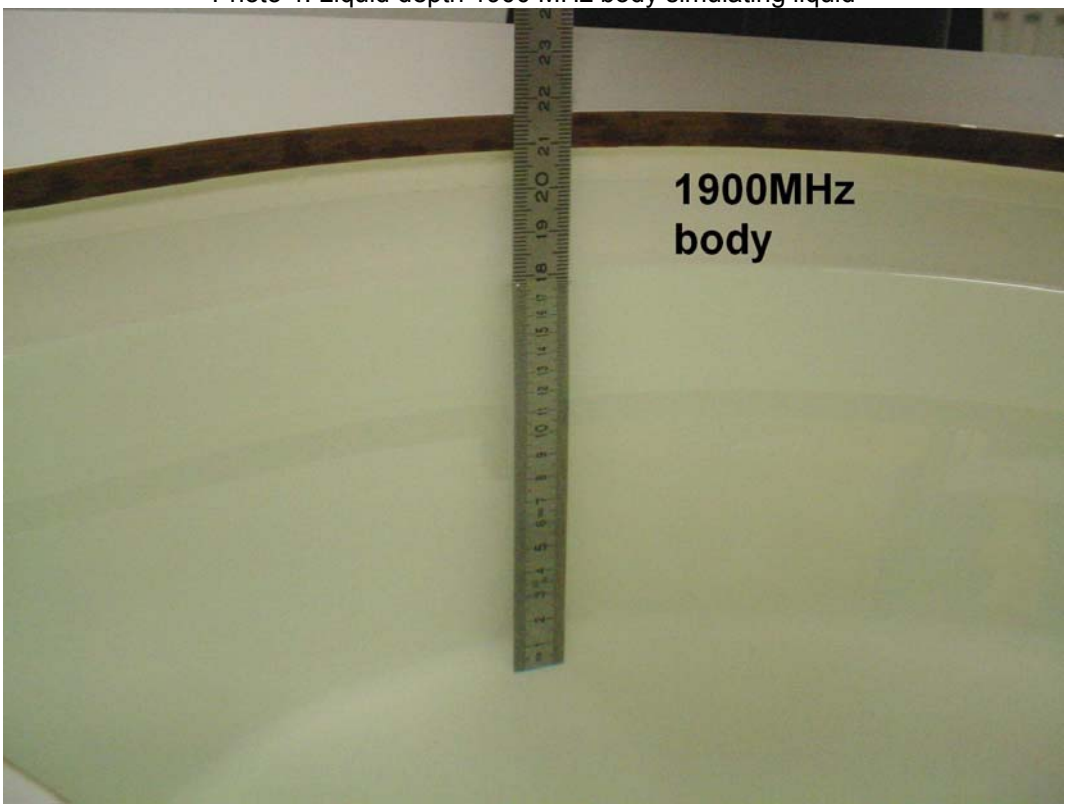


Photo 5: Liquid depth 2450MHz head simulating liquid

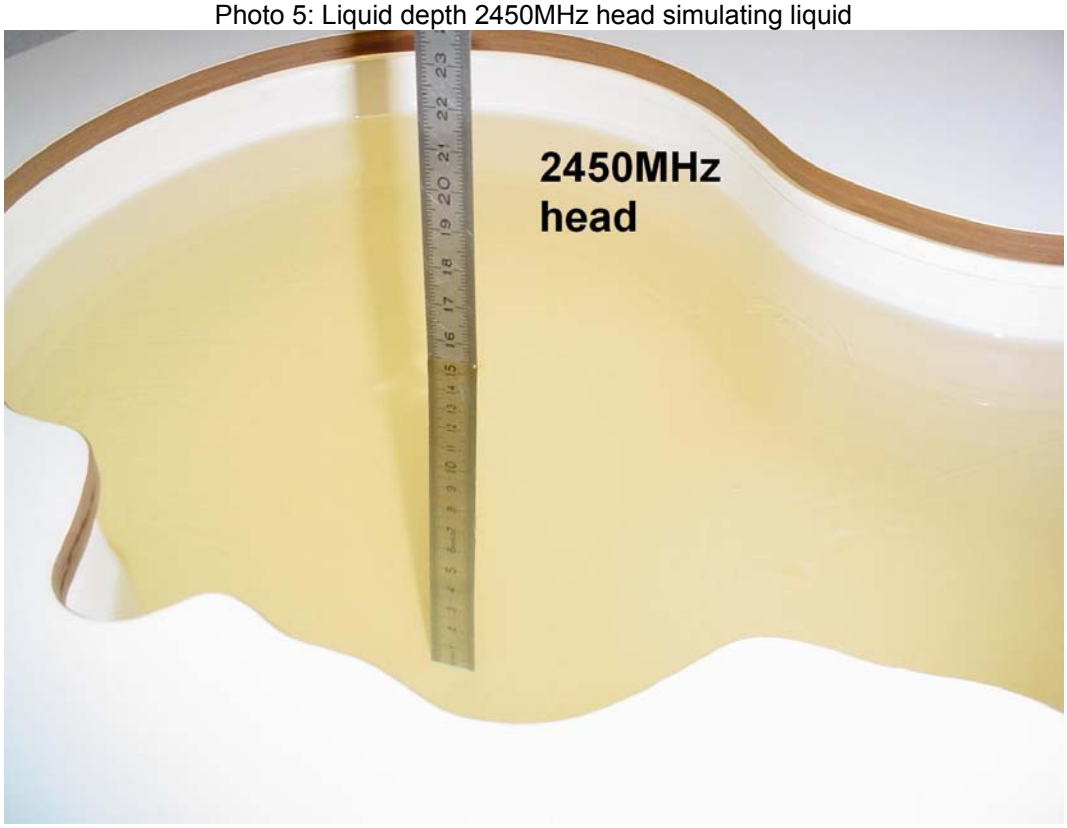


Photo 6: Liquid depth 2450 MHz body simulating liquid

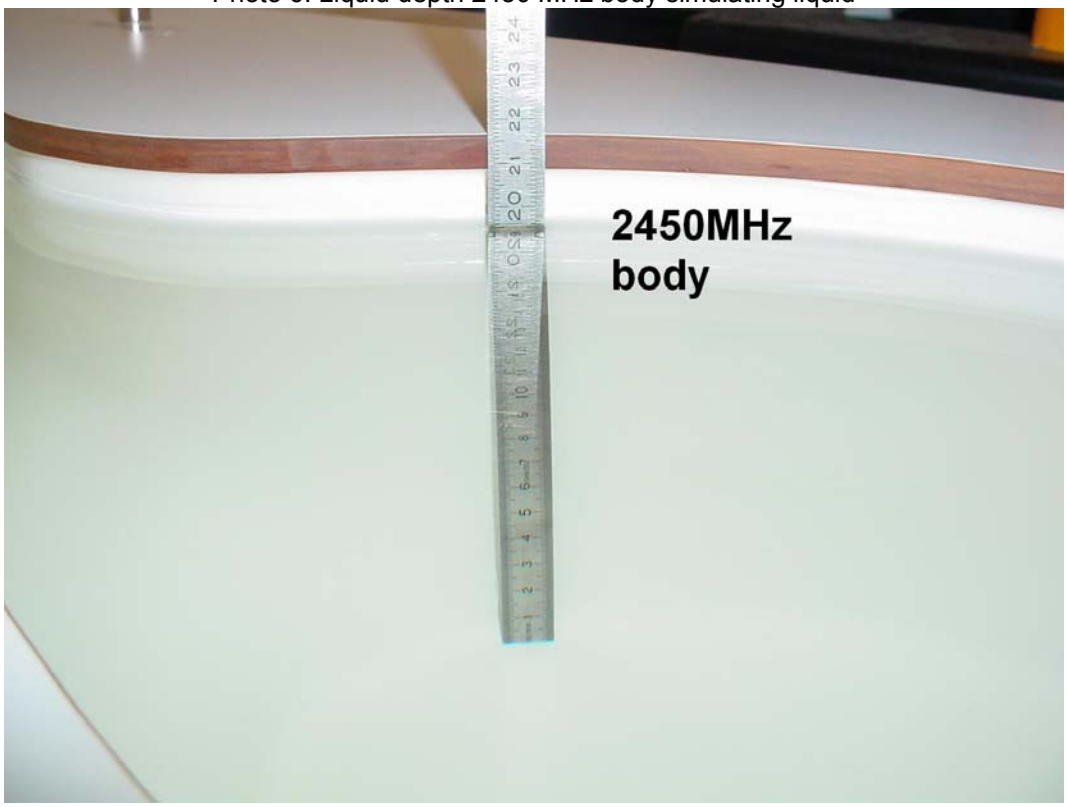


Photo 7: Liquid depth 5 GHz head simulating liquid

Annex C: Photo documentation

Photo documentation is described in the additional document:

Appendix to test report no. 1-4254/12-49-02-A Photo documentation

Annex D: Calibration parameters

Calibration parameters are described in the additional document:

Appendix to test report no. 1-4254/12-49-02-A
Calibration data, Phantom certificate
and detail information of the DASY System

Annex E: Document History

Version	Applied Changes	Date of Release
	Initial Release	2012-11-27
-A	Frequencies and max. tune-up info corrected in table 30 Additional measurements at 15 mm distance added	2012-12-11

Annex F: Further Information

Glossary

BW	-	Bandwidth
DTS	-	Distributed Transmission System
DUT	-	Device under Test
EUT	-	Equipment under Test
FCC	-	Federal Communication Commission
FCC ID	-	Company Identifier at FCC
HW	-	Hardware
IC	-	Industry Canada
Inv. No.	-	Inventory number
LTE	-	Long Term Evolution
N/A	-	not applicable
PCE	-	Personal Consumption Expenditure
OET	-	Office of Engineering and Technology
RB	-	resource block(s)
SAR	-	Specific Absorption Rate
S/N	-	Serial Number
SW	-	Software
UNII	-	Unlicensed National Information Infrastructure