CETECOM ICT Services GmbH

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**Deutscher
Akkreditierungs
Rat**

Accredited testing laboratory

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

Test report no.   : 4-2428-01-02/07
Type identification   : PC300
Test specification   : IEEE P1528/D1.2
FCC-ID   : PY7F3231011
IC-ID   : 4170B-F3231011

Table of Contents

1 General Information

1.1 Notes

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

1.1.1 Statement of Compliance

The SAR values found for the PC300 **PCMCIA PC Card** are below the maximum recommended levels of 1.6 W/Kg as averaged over any 1 g tissue according to the FCC rule §2.1093, the ANSI/IEEE C 95.1:1999, the NCRP Report Number 86 for uncontrolled environment, according to the Health Canada's Safety Code 6 and the Industry Canada Radio Standards Specification RSS-102 for General Population/Uncontrolled exposure.

For body worn operation, this device has been tested and meets FCC RF exposure guidelines when used inside the PCMCIA slot a notebook that offers at least 10 mm distance to the underside of the notebook.

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

Test engineer:

2007-08-06	**Oleksandr Hnatovskiy**	
Date	Name	Signature
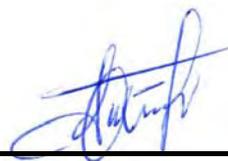
Technical responsibility for area of testing:

2007-08-06	**Thomas Vogler**	
Date	Name	Signature
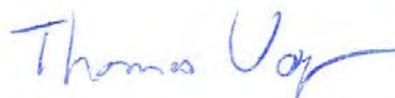
1.2 Testing laboratory

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66117 Saarbruecken
Germany
Telephone: + 49 681 598 - 0
Fax: + 49 681 598 - 8475

e-mail: info@ict.cetecom.de
Internet: http://www.cetecom-ict.de

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

Test location, if different from CETECOM ICT Services GmbH

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

1.3 Details of applicant

Name: Sony Ericsson Mobile Communications AB

Street: Nya Vattentornet
Town: 22188 Lund
Country: Sweden

Contact: Mr. Mats Hansson
Telephone: +46 46 19 3357

1.4 Application details

Date of receipt of application: 2007-06-21
Date of receipt of test item: 2007-07-09
Start/Date of test: 2007-07-10
End of test: 2007-07-18

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

1.5 Test item

Description of the test item:	PCMCIA PC Card
Type identification:	PC300
FCC-ID :	PY7F3231011
IC:	4170B-F3231011
Serial number:	BDX0001FEA
Manufacturer:	
Name:	Sony Ericsson Mobile Communications AB
Street:	Nya Vattentornet
Town:	22188 Lund
Country:	Sweden

additional information on the DUT:		
device type :	portable device	
IMEI No :	00460102385770-0	
exposure category:	uncontrolled environment / general population	
test device production information	identical prototype	
device operating configurations :		
operating mode(s)	GSM, DCS, PCS, UMTS (WCDMA/HSDPA)	
modulation	GMSK, 8-PSK; QPSK(dl), 2*BPSK/HPSK(ul)	
GPRS mobile station class :	B	
GPRS multislot class :	10	voice mode : ---
EGPRS multislot class	E2	voice mode : ---
maximum no. of timeslots in uplink:	2	
operating frequency range(s)	transmitter frequency range	receiver frequency range
PCS 1900 (tested):	1850.2 MHz ~ 1909.8 MHz	1930.2 MHz ~ 1989.8 MHz
PCS 850 (tested):	824.2 MHz ~ 848.8 MHz	869.2 MHz ~ 893.8 MHz
DCS 1800	1710 MHz ~ 1785 MHz	1805 MHz ~ 1880 MHz
GSM 900	880 MHz ~ 915 MHz	925 MHz ~ 960 MHz
UMTS 1950 (FDD I)	1922.4 MHz ~ 1977.6 MHz	2112.4 MHz ~ 2167.6 MHz
UMTS 1900 (FDD II) (tested):	1852.4 MHz ~ 1907.6 MHz	1932.4 MHz ~ 1987.6 MHz
UMTS 850 (FDD V) (tested):	826.4 MHz ~ 846.6 MHz	871.4 MHz ~ 891.6 MHz
Power class :	1, tested with power level 0 (1900 MHz band) 4, tested with power level 5 (850 MHz band) 3, tested with maximum output power (FDD II – FDD V)	
measured peak output power (conducted):	850 MHz band: 32.5 dBm (GSM); 30.2 dBm (Edge) 1900 MHz band: 29.4 dBm (GSM); 29.6 dBm (Edge) FDD band V: 26.8 dBm FDD band II: 26.0 dBm	
test channels (low – mid – high) :	128 – 190 – 251 (850 MHz) 512 – 661 – 810 (1900 MHz)	4182 (FDD V) 9262 – 9400 – 9538 (FDD II)
hardware version:	B	
software version:	R1A036	
antenna type:	One integrated and one external antenna	
accessories / body-worn configurations:	1st Laptop – Acer Aspire 3610 2nd Laptop – Compaq PP2130 3rd Laptop – Sony IRX 3190	

1.6   Test specification(s)

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

IEEE P1528/D1.2 (April 21, 2003)

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

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

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

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

1.6.1   RF exposure limits

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

Table 1: RF exposure limits

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

Notes:

*   The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time

**   The Spatial Average value of the SAR averaged over the whole body.

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

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

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

2 Technical test

2.1 Summary of test results

No deviations from the technical specification(s) were ascertained in the course of the tests performed.	☒
The deviations as specified in 2.5 were ascertained in the course of the tests performed.	☐

2.2 Test environment

General Environment conditions in the test area are as follows:

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

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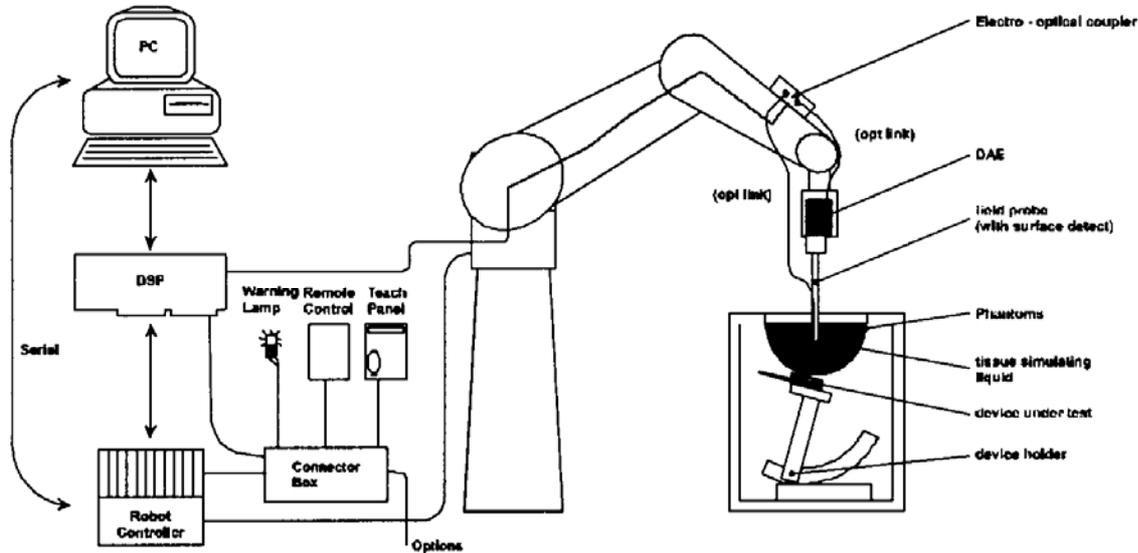
2.3 Measurement and test set-up

The measurement system is described in chapter 2.4.

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

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

2.4 Measurement system

2.4.1 System Description

The DASY4 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 DASY4 measurement server.
- The DASY4 measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation. A computer operating Windows 2000
- DASY4 software and SEMCAD data evaluation software.
- Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
- The generic twin phantom enabling the testing of left-hand and right-hand usage.
- The device holder for handheld mobile phones.
- Tissue simulating liquid mixed according to the given recipes.
- System validation dipoles allowing to validate the proper functioning of the system.

2.4.2 Test environment

The DASY4 measurement system is placed at the head end of a room with dimensions:
5 x 2.5 x 3 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.
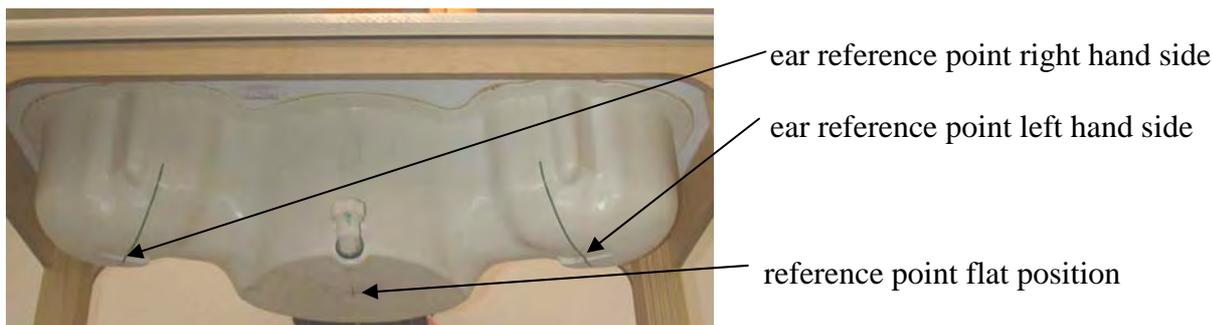
2.4.3 Probe description

Isotropic E-Field Probe ET3DV6 for Dosimetric Measurements

Technical data according to manufacturer information	
Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection system Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., glycolether)
Calibration	In air from 10 MHz to 2.5 GHz In head tissue simulating liquid (HSL) at 900 (800-1000) MHz and 1.8 GHz (1700-1910 MHz) (accuracy $\pm$ 9.5%; k=2) Calibration for other liquids and frequencies upon request
Frequency	10 MHz to 3 GHz (dosimetry); Linearity: $\pm$ 0.2 dB (30 MHz to 3 GHz)
Directivity	$\pm$ 0.2 dB in HSL (rotation around probe axis) $\pm$ 0.4 dB in HSL (rotation normal to probe axis)
Dynamic range	5 µW/g to > 100 mW/g; Linearity: $\pm$ 0.2 dB
Optical Surface Detection	$\pm$ 0.2 mm repeatability in air and clear liquids over diffuse reflecting surfaces (ET3DV6 only)
Dimensions	Overall length: 330 mm Tip length: 16 mm Body diameter: 12 mm Tip diameter: 6.8 mm Distance from probe tip to dipole centers: 2.7 mm
Application	General dosimetry up to 3 GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms (ET3DV6)

2.4.4 Phantom description

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

ear reference point right hand side

ear reference point left hand side

reference point flat position

2.4.5 Device holder description

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

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

2.4.6 Scanning procedure

The DASY4 installation includes predefined files with recommended procedures for measurements and validation. They are read-only document files and destined as fully defined but unmeasured masks. All test positions (head or body-worn) are tested with the same configuration of test steps differing only in the grid definition for the different test positions.

- The „reference" and „drift" measurements are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure. The indicated drift is mainly the variation of the DUT's output power and should vary max. +/- 5 %.

- The „surface check" measurement tests the optical surface detection system of the DASY4 system by repeatedly detecting the surface with the optical and mechanical surface detector and comparing the results. The output gives the detecting heights of both systems, the difference between the two systems and the standard deviation of the detection repeatability. Air bubbles or refraction in the liquid due to separation of the sugar-water mixture gives poor repeatability (above $\pm$ 0.1mm). 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 $\pm$ 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 head measurements is 15 mm in x- and y- dimension. If a finer resolution is needed, the grid spacing can be reduced. Grid spacing and orientation have no influence on the SAR result. For special applications where the standard scan method does not find the peak SAR within the grid, e.g. mobile phones with flip cover, the grid can be adapted in orientation.
Results of this coarse scan are shown in annex 2.

- A „7x7x7 zoom scan" measures the field in a volume around the 2D peak SAR value acquired in the previous „coarse" scan. This is a fine 7x7 grid where the robot additionally moves the probe in 7 steps along the z-axis away from the bottom of the Phantom. Grid spacing for the cube measurement is 5 mm in x and y-direction and 5 mm in z-direction. DASY4 is also able to perform repeated zoom scans if more than 1 peak is found during area scan. In this document, the evaluated peak 1g and 10g averaged SAR values are shown in the 2D-graphics in annex 2. Test results relevant for the specified standard (see chapter 1.6.) are shown in table form in chapter 2.5.

- A Z-axis scan measures the total SAR value at the x-and y-position of the maximum SAR value found during the cube 7x7x7 scan. The probe is moved away in z-direction from the bottom of the SAM phantom in 2mm steps. This measurement shows the continuity of the liquid and can - depending in the field strength – also show the liquid depth. A z-axis scan of the measurement with maximum SAR value is shown in annex 2.

2.4.7 Spatial Peak SAR Evaluation

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

- The data between the dipole center of the probe and the surface of the phantom are extrapolated. This data cannot be measured since the center of the dipole is 2.7 mm away from the tip of the probe and the distance between the surface and the lowest measuring point is about 1 mm (see probe calibration sheet). The extrapolated data from a cube measurement can be visualized by selecting 'Graph Evaluated'.

- The maximum interpolated value is searched with a straight-forward algorithm. Around this maximum the SAR - values averaged over the spatial volumes (1g or 10 g) are computed using the 3d-spline interpolation algorithm. If the volume cannot be evaluated (i.e., if a part of the grid was cut off by the boundary of the measurement area) the evaluation will be started on the corners of the bottom plane of the cube.

- All neighboring volumes are evaluated until no neighboring volume with a higher average value is found.

Extrapolation

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

Interpolation

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

Volume Averaging

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

Advanced Extrapolation

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

2.4.8 Data Storage and Evaluation

Data Storage

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

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

Data Evaluation by SEMCAD

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

Probe parameters:	- Sensitivity	$Norm_i$, a_{i0}, a_{i1}, a_{i2}
	- Conversion factor	$ConvF_i$
	- Diode compression point	$Dcpi$
Device parameters:	- Frequency	f
	- Crest factor	cf
Media parameters:	- Conductivity	σ
	- Density	ρ

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

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

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

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

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

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

E-field probes:

$$E_i = (V_i \,/\, Norm_i \cdot ConvF)^{1/2}$$

H-field probes:

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

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

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

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

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

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

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

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

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

2.4.9 Test equipment utilized

This table gives a complete overview of the SAR measurement equipment

Devices used during the test described in chapter 2.5. are marked ☒

	Manufacturer	Device	Type	Serial number	Date of last calibration)*
☒	Schmid & Partner Engineering AG	Dosimetric E-Field Probe	ET3DV6	1558	August 30, 2006
☐	Schmid & Partner Engineering AG	Dosimetric E-Field Probe	ET3DV6	1559	January 17, 2007
☒	Schmid & Partner Engineering AG	900 MHz System Validation Dipole	D900V2	102	August 18, 2006
☐	Schmid & Partner Engineering AG	1800 MHz System Validation Dipole	D1800V2	287	August 22, 2006
☒	Schmid & Partner Engineering AG	1900 MHz System Validation Dipole	D1900V2	5d009	August 16, 2006
☐	Schmid & Partner Engineering AG	2450 MHz System Validation Dipole	D2450V2	710	August 21, 2006
☒	Schmid & Partner Engineering AG	Data acquisition electronics	DAE3V1	413	January 18, 2007
☒	Schmid & Partner Engineering AG	Software	DASY 4 V4.5	---	N/A
☒	Schmid & Partner Engineering AG	Phantom	SAM	---	N/A
☒	Rohde & Schwarz	Universal Radio Communication Tester	CMU 200	832221/0055	January 12, 2006
☒	Rohde & Schwarz	Universal Radio Communication Tester	CMU 200	106826	March 14, 2007
☒	Hewlett Packard)*	Network Analyser 300 kHz to 6 GHz	8753C	2937U00269	March 13, 2007
☒	Hewlett Packard)*	Network Analyser 300 kHz to 6 GHz	85047A	2936A00872	March 13, 2007
☒	Hewlett Packard	Dielectric Probe Kit	85070C	US99360146	N/A
☒	Hewlett Packard	Signal Generator	8665A	2833A00112	February 9, 2007
☒	Amplifier Reasearch	Amplifier	25S1G4 (25 Watt)	20452	N/A
☒	Agilent	Power Meter	438A	2804U01006	February 2, 2007
☒	Agilent	Power Meter Sensor	8482A	2703A03025	February 2, 2007

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

2.4.10 Tissue simulating liquids: dielectric properties

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

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

Ingredients (% of weight)	Frequency (MHz)					
frequency band	☐ 450	☒ 835	☐ 900	☐ 1800	☒ 1900	☐ 2450
Tissue Type	Body	Body	Body	Body	Body	Body
Water	51.16	52.4	56.0	69.91	69.91	73.2
Salt (NaCl)	1.49	1.40	0.76	0.13	0.13	0.04
Sugar	46.78	45.0	41.76	0.0	0.0	0.0
HEC	0.52	1.0	1.21	0.0	0.0	0.0
Bactericide	0.05	0.1	0.27	0.0	0.0	0.0
Triton X-100	0.0	0.0	0.0	0.0	0.0	0.0
DGBE	0.0	0.0	0.0	29.96	29.96	26.7

Table 2: Body tissue dielectric properties

Salt: 99+% Pure Sodium Chloride   Sugar: 98+% Pure Sucrose
Water: De-ionized, 16MΩ+ resistivity   HEC: Hydroxyethyl Cellulose
DGBE: 99+% Di(ethylene glycol) butyl ether, [2-(2-butoxyethoxy)ethanol]
Triton X-100(ultra pure): Polyethylene glycol mono [4-(1,1,3,3-tetramethylbutyl)phenyl]ether

2.4.11 Tissue simulating liquids: parameters

Used Target Frequency	Target Body Tissue		Measured Body Tissue		Measured Date
[MHz]	Permittivity	Conductivity [S/m]	Permittivity	Conductivity [S/m]	
835	55.2	0.97	54.6	0.99	2007-07-10
900	55.0	1.05	54.1	1.05	2007-07-10
835	55.2	0.97	54.6	0.99	2007-07-11
900	55.0	1.05	54.1	1.05	2007-07-11
835	55.2	0.97	54.6	0.99	2007-07-17
900	55.0	1.05	54.1	1.05	2007-07-17
1900	53.3	1.52	52.5	1.52	2007-07-12
1900	53.3	1.52	52.5	1.52	2007-07-15

Table 3: Parameter of the body tissue simulating liquid

Note: The dielectric properties have been measured using the contact probe method at 22.5°C.

2.4.12 Measurement uncertainty evaluation for SAR test

The overall combined measurement uncertainty of the measurement system is ± 10,3% (K=1).
The expanded uncertainty (k=2) is assessed to be ± 20.6%
This measurement uncertainty budget is suggested by IEEE P1528 and determined by Schmid & Partner Engineering AG. The breakdown of the individual uncertainties is as follows:

Error Sources	Uncertainty Value	Probability Distribution	Divisor	c_i 1g	c_i 10g	Standard Uncertainty 1g	Standard Uncertainty 10g	v_i^2 or v_{eff}
Measurement System								
Probe calibration	± 4.8%	Normal	1	1	1	± 4.8%	± 4.8%	∞
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						± 10.3%	± 10.0%	330
Expanded Std. Uncertainty						**± 20.6%**	**± 20.1%**	

Table 4: Measurement uncertainties

2.4.13 Measurement uncertainty evaluation for system validation

The overall combined measurement uncertainty of the measurement system is ± 8.4% (K=1).
The expanded uncertainty (k=2) is assessed to be ± 16.8%
This measurement uncertainty budget is suggested by IEEE P1528 and determined by Schmid & Partner Engineering AG. The breakdown of the individual uncertainties is as follows:

Error Sources	Uncertainty Value	Probability Distribution	Divi-sor	c_i 1g	c_i 10g	Standard Uncertainty 1g	Standard Uncertainty 10g	v_i^2 or v_{eff}
Measurement System								
Probe calibration	± 4.8%	Normal	1	1	1	± 4.8%	± 4.8%	∞
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	± 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	± 0.0%	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								
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						**± 8.4%**	**± 8.1%**	
Expanded Std. Uncertainty						**± 16.8%**	**± 16.2%**	

Table 5: Measurement uncertainties

2.4.14 System validation

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

Validation Kit	Frequency	Target Peak SAR (1000 mW) (+/- 10%)	Target SAR_{1g} (1000 mW) (+/- 10%)	Measured Peak SAR	Measured SAR_{1g}	Measured date
D900V2 S/N: 102	900 MHz body	16.5 mW/g	10.9 mW/g	16.3 mW/g	11.1 mW/g	2007-07-10
D900V2 S/N: 102	900 MHz body	16.5 mW/g	10.9 mW/g	15.7 mW/g	10.7 mW/g	2007-07-11
D900V2 S/N: 102	900 MHz body	16.5 mW/g	10.9 mW/g	15.9 mW/g	10.8 mW/g	2007-07-17
D1900V2 S/N: 5d009	1900 MHz body	68.4 mW/g	38.9 mW/g	62.3 mW/g	37.5 mW/g	2007-07-12
D1900V2 S/N: 5d009	1900 MHz body	68.4 mW/g	38.9 mW/g	63.8 mW/g	39.1 mW/g	2007-07-15

Table 6: Results system validation

2.4.15 Validation procedure

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

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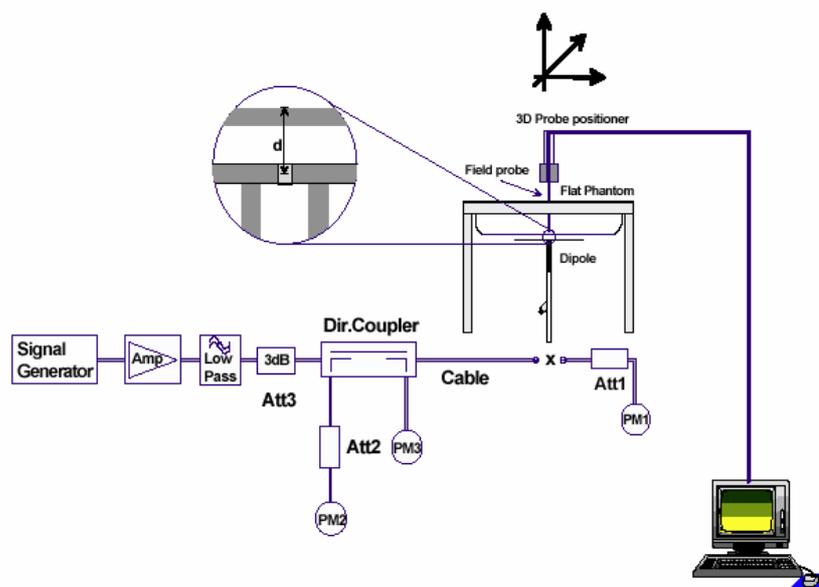
2.5 Test results (Body SAR)

2.5.1 GPRS / EDGE 850 MHz

The table contains the measured SAR values averaged over a mass of 1 g					
Channel / frequency	Position	Antenna	Body worn		Limit	Liquid temperature
Acer Aspire 3610					
190 / 836.6 MHz	underside	internal	0.856	W/kg	1.6 W/kg	22.8°C
128 / 824.2 MHz	underside	internal	0.838	W/kg	1.6 W/kg	22.7°C
251 / 848.8 MHz	underside	internal	0.657	W/kg	1.6 W/kg	22.6°C
190 / 836.6 MHz	underside	external	0.665	W/kg	1.6 W/kg	22.4°C
Compaq PP22130					
190 / 836.6 MHz	underside	internal	0.810	W/kg	1.6 W/kg	22.8°C
128 / 824.2 MHz	underside	internal	0.963	W/kg	1.6 W/kg	22.7°C
251 / 848.8 MHz	underside	internal	0.627	W/kg	1.6 W/kg	22.7°C
190 / 836.6 MHz	underside	external	0.887	W/kg	1.6 W/kg	22.8°C
128 / 824.2 MHz	underside	external	0.879	W/kg	1.6 W/kg	22.8°C
251 / 848.8 MHz	underside	external	0.923	W/kg	1.6 W/kg	22.7°C
Sony IRX 3190					
190 / 836.6 MHz	underside	internal	**1.180**	W/kg	1.6 W/kg	20.0°C
128 / 824.2 MHz	underside	internal	1.140	W/kg	1.6 W/kg	22.4°C
251 / 848.8 MHz	underside	internal	0.893	W/kg	1.6 W/kg	22.4°C
190 / 836.6 MHz	underside	external	0.908	W/kg	1.6 W/kg	22.0°C
128 / 824.2 MHz	underside	external	0.882	W/kg	1.6 W/kg	22.3°C
251 / 848.8 MHz	underside	external	0.914	W/kg	1.6 W/kg	22.4°C
worst case position of Sony IRX 3190 with EDGE (E-GPRS)					
190 / 836.6 MHz	underside	internal	0.347	W/kg	1.6 W/kg	22.4°C

Table 7: Test results (Body SAR 850 MHz GPRS)

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

2.5.2 GPRS / EDGE 1900 MHz

The table contains the measured SAR values averaged over a mass of 1 g					
Channel / frequency	Position	Antenna	Body worn	Limit	Liquid temperature
Acer Aspire 3610					
661 / 1880.0 MHz	underside	internal	1.160 W/kg	1.6 W/kg	23.6°C
512 / 1850.2 MHz	underside	internal	1.100 W/kg	1.6 W/kg	23.6°C
810 / 1909.8 MHz	underside	internal	1.060 W/kg	1.6 W/kg	23.6°C
661 / 1880.0 MHz	underside	external	0.225 W/kg	1.6 W/kg	23.5°C
Compaq PP22130					
661 / 1880.0 MHz	underside	internal	1.490 W/kg	1.6 W/kg	23.5°C
512 / 1850.2 MHz	underside	internal	1.540 W/kg	1.6 W/kg	23.6°C
810 / 1909.8 MHz	underside	internal	1.190 W/kg	1.6 W/kg	23.5°C
661 / 1880.0 MHz	underside	external	0.500 W/kg	1.6 W/kg	23.5°C
Sony IRX 3190					
661 / 1880.0 MHz	underside	internal	1.490 W/kg	1.6 W/kg	23.5°C
512 / 1850.2 MHz	underside	internal	**1.580** W/kg	1.6 W/kg	23.4°C
810 / 1909.8 MHz	underside	internal	1.210 W/kg	1.6 W/kg	23.5°C
661 / 1880.0 MHz	underside	external	0.392 W/kg	1.6 W/kg	23.5°C
worst case position of Sony IRX 3190 with EDGE (E-GPRS)					
512 / 1850.2 MHz	underside	internal	0.710 W/kg	1.6 W/kg	23.4°C

Table 8: Test results (Body SAR 1900 MHz GPRS)

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

2.5.3   WCDMA / HSDPA 850 MHz

The table contains the measured SAR values averaged over a mass of 1 g					
Channel / frequency	Position	Antenna	Body worn	Limit	Liquid temperature
Acer Aspire 3610					
4182 / 836.6 MHz	underside	internal	0.340 W/kg	1.6 W/kg	22.5°C
4182 / 836.6 MHz	underside	external	0.296 W/kg	1.6 W/kg	22.5°C
4182 / 836.6 MHz	underside	internal HSDPA	0.315 W/kg	1.6 W/kg	22.4°C
Compaq PP22130					
4182 / 836.6 MHz	underside	internal	0.406 W/kg	1.6 W/kg	22.4°C
4182 / 836.6 MHz	underside	external	0.423 W/kg	1.6 W/kg	22.2°C
4182 / 836.6 MHz	underside	internal HSDPA	0.377 W/kg	1.6 W/kg	22.3°C
Sony IRX 3190					
4182 / 836.6 MHz	underside	internal	**0.446** W/kg	1.6 W/kg	22.7°C
4182 / 836.6 MHz	underside	external	0.427 W/kg	1.6 W/kg	22.8°C
4182 / 836.6 MHz	underside	internal HSDPA	0.395 W/kg	1.6 W/kg	22.8°C

Table 9: Test results (Body SAR 850 MHz WCDMA)

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

2.5.4 WCDMA / HSDPA 1900 MHz

The table contains the measured SAR values averaged over a mass of 1 g					
Channel / frequency	Position	Antenna	Body worn	Limit	Liquid temperature
Acer Aspire 3610					
9400 / 1880.0 MHz	underside	internal	0.748 W/kg	1.6 W/kg	22.8°C
9400 / 1880.0 MHz	underside	external	0.263 W/kg	1.6 W/kg	22.8°C
9400 / 1880.0 MHz	underside	internal HSDPA	0.691 W/kg	1.6 W/kg	22.4°C
Compaq PP22130					
9400 / 1880.0 MHz	underside	internal	**0.944** W/kg	1.6 W/kg	22.6°C
9262 / 1852.4 MHz	underside	internal	0.927 W/kg	1.6 W/kg	22.7°C
9538 / 1907.6 MHz	underside	internal	0.925 W/kg	1.6 W/kg	22.7°C
9400 / 1880.0 MHz	underside	external	0.640 W/kg	1.6 W/kg	22.5°C
9400 / 1880.0 MHz	underside	internal HSDPA	0.764 W/kg	1.6 W/kg	22.4°C
Sony IRX 3190					
9400 / 1880.0 MHz	underside	internal	0.842 W/kg	1.6 W/kg	22.4°C
9262 / 1852.4 MHz	underside	internal	0.900 W/kg	1.6 W/kg	22.3°C
9538 / 1907.6 MHz	underside	internal	0.698 W/kg	1.6 W/kg	22.4°C
9400 / 1880.0 MHz	underside	external	0.429 W/kg	1.6 W/kg	22.4°C
9262 / 1852.4 MHz	underside	internal HSDPA	0.822 W/kg	1.6 W/kg	22.4°C

Table 10: Test results (Body SAR 1900 MHz WCDMA)

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

2.5.5 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 used notebooks offered the following distances between DUT and SAM phantom when positioned in direct contact to the flat part of the phantom :

Compaq PP22130 : 10 mm
Sony IRX 3190   : 12 mm
Acer Aspire 3610 : 16 mm

Tests in body position for GSM were performed with the maximum number of timeslots in uplink.
In WCDMA mode the device was tested with RMC at 12.2 kbit/s and transmit power control setting 'all bits up' to have the device transmit at maximum output power.
In HSDPA mode the test was performed with the following settings :

- Fixed reference channel (FRC) using QPSK
- H-set 5
- UE-category 6 (automatically detected)
- DPCCH/DPDCH gain factors :
  βc : 9
  βd : 15
- power offset parameters :
  ΔACK : 5
  ΔNACK : 5
  ΔCQI : 2

The device was tested in HSDPA mode in worst case configuration for each notebook.
The external antenna can be fixed properly only in vertical position allowing max. +/- 30° tilt.
Therefore it was tested in exact 90° angle to the phantom surface.

Conducted output power was measured using an integrated RF connector and attached RF cable.

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2.6 Test results (conducted power measurement)

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 measured before and after each SAR measurement. The resulting power
values were within a 0.2 dB tolerance of the values shown below.

GSM 850			
Channel / frequency	GSM/GPRS	EDGE avg.	EDGE peak
128 / 824.2 MHz	32.4 dBm	27.0 dBm	30.1 dBm
190 / 836.6 MHz	32.5 dBm	27.1 dBm	30.2 dBm
251 / 848.8 MHz	32.5 dBm	27.0 dBm	30.1 dBm
GSM 1900			
Channel / frequency	GSM/GPRS	EDGE avg.	EDGE peak
512 / 1850.2 MHz	29.1 dBm	26.0 dBm	29.1 dBm
661 / 1880.0 MHz	29.2 dBm	26.2 dBm	29.4 dBm
810 / 1909.8 MHz	29.4 dBm	26.4 dBm	29.6 dBm

Table 11: Test results conducted peak power measurement GSM

WCDMA 850		
Channel / frequency	Max. RMS	Peak
4182 / 836.6 MHz	23.5 dBm	26.8 dBm
WCDMA 1900		
Channel / frequency	Max. RMS	Peak
9400 / 1880.0 MHz	22.8 dBm	26.0 dBm
9262 / 1852.4 MHz	22.8 dBm	25.9 dBm
9538 / 1907.6 MHz	22.5 dBm	25.5 dBm

Table 12: Test results conducted peak power measurement WCDMA

WCDMA + HSDPA 850		
Channel / frequency	Max. RMS	Peak
4182 / 836.6 MHz	22.9 dBm	26.7 dBm
WCDMA + HSDPA1900		
Channel / frequency	Max. RMS	Peak
9400 / 1880.0 MHz	21.9 dBm	25.4 dBm
9262 / 1852.4 MHz	22.1 dBm	25.3 dBm
9538 / 1907.6 MHz	21.8 dBm	25.3 dBm

Table 13: Test results conducted peak power measurement WCDMA + HSDPA

Annex 1 System performance verification

Date/Time: 2007-07-10 08:32:37Date/Time: 2007-07-10 08:38:39

SystemPerformanceCheck-D900-850 body 2007-07-10

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

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

Medium: M850 Medium parameters used: f = 900 MHz; σ = 1.05 mho/m; ε_r = 54.1; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.94, 5.94, 5.94); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

d=15mm, Pin=1000mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 107.5 V/m; Power Drift = -0.011 dB

Peak SAR (extrapolated) = 16.3 W/kg

SAR(1 g) = 11.1 mW/g; SAR(10 g) = 7.17 mW/g

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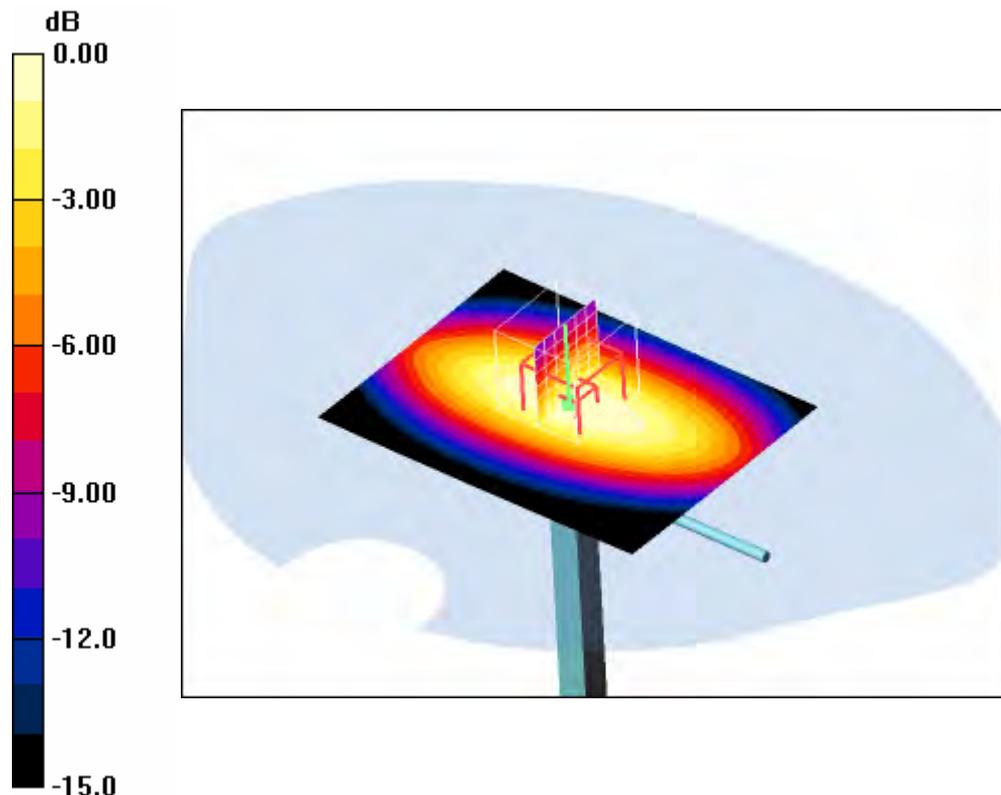
0 dB = 12.0mW/g

Additional information:

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

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

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SystemPerformanceCheck-D900-850 body 2007-07-11

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

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

Medium: M850 Medium parameters used: f = 900 MHz; σ = 1.05 mho/m; ε_r = 54.1; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(5.94, 5.94, 5.94); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

d=15mm, Pin=1000mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 105.3 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 15.7 W/kg

SAR(1 g) = 10.7 mW/g; SAR(10 g) = 6.93 mW/g

Maximum value of SAR (measured) = 11.5 mW/g
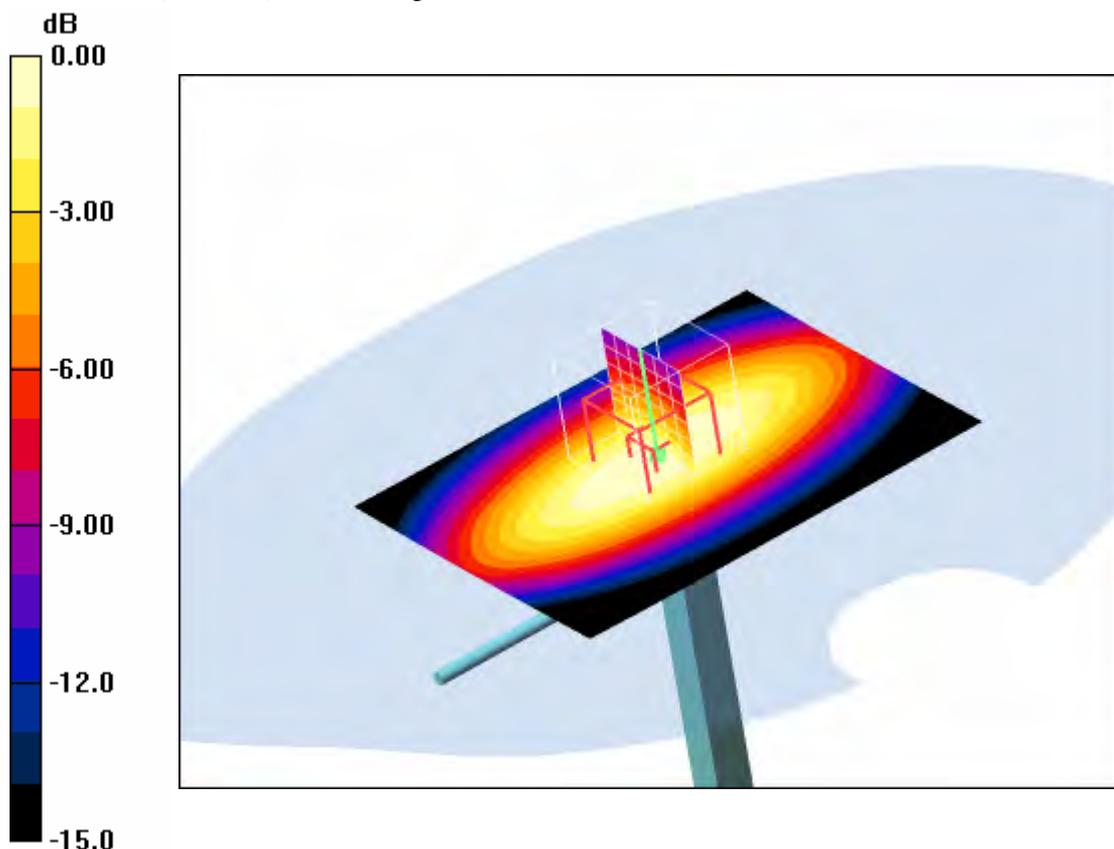
0 dB = 11.5mW/g

Additional information:

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

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

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SystemPerformanceCheck-D900-850-body 2007-07-17

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

Communication System: CW; Frequency: 900 MHz; Duty Cycle: 1:1
Medium: M850 Medium parameters used: $f = 900$ MHz; $\sigma = 1.05$ mho/m; $\varepsilon_r = 54.1$; $\rho = 1000$ kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(5.94, 5.94, 5.94); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

d=15mm, Pin=1000mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 11.8 mW/g

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

Reference Value = 107.1 V/m; Power Drift = 0.010 dB
Peak SAR (extrapolated) = 15.9 W/kg
SAR(1 g) = 10.8 mW/g; SAR(10 g) = 7.05 mW/g
Maximum value of SAR (measured) = 11.8 mW/g
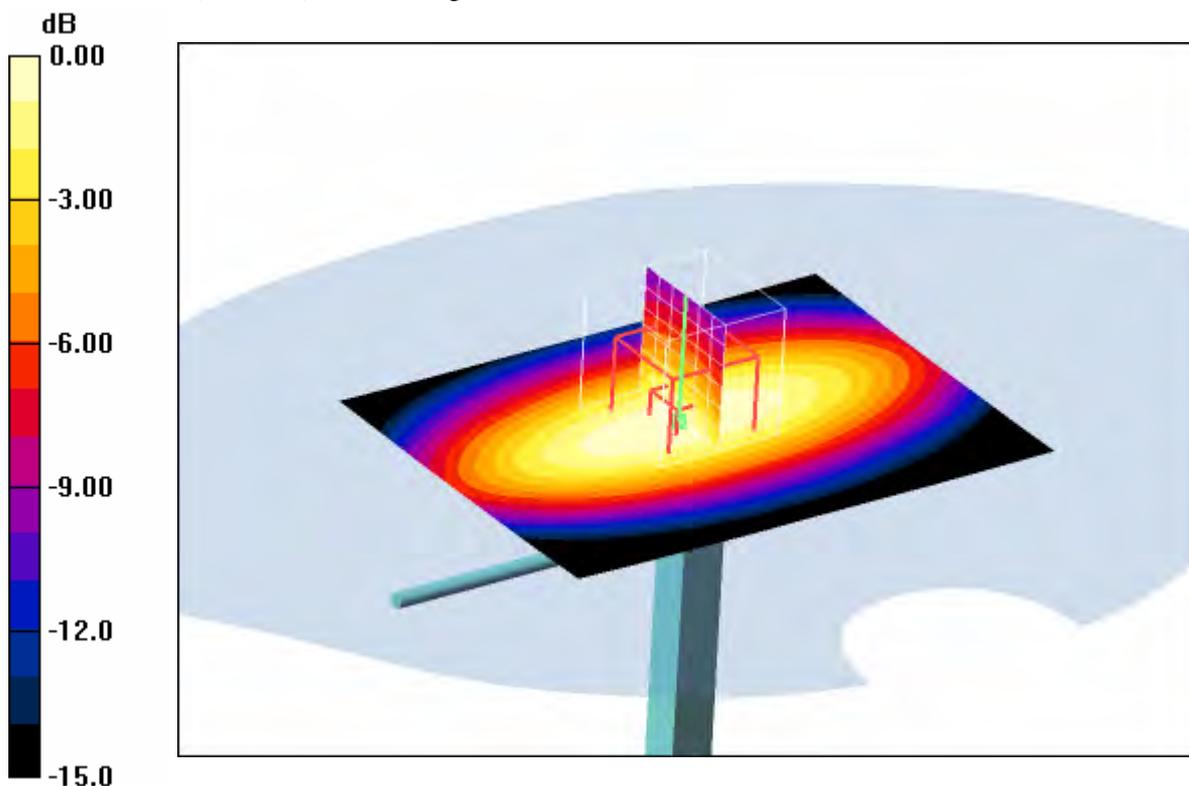
0 dB = 11.8mW/g

Additional information:
position or distance of DUT to SAM (if not standard head positions) :
ambient temperature: 23.3°C; liquid temperature: 22.5°C

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SystemPerformanceCheck-D1900 body 2007-07-12

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

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

Medium: M1900 Medium parameters used: f = 1900 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- 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 (51x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 44.7 mW/g

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

Reference Value = 163.0 V/m; Power Drift = 0.075 dB

Peak SAR (extrapolated) = 62.3 W/kg

SAR(1 g) = 37.5 mW/g; SAR(10 g) = 20.1 mW/g

Maximum value of SAR (measured) = 42.8 mW/g
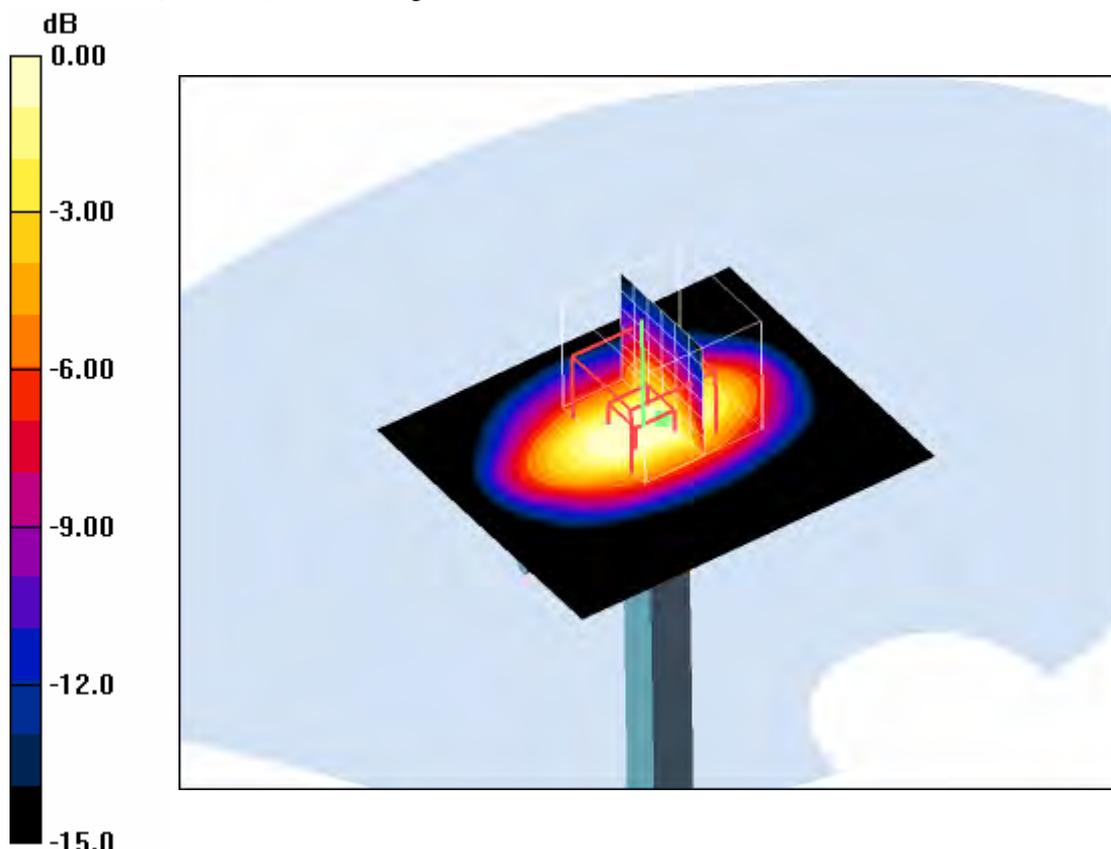
0 dB = 42.8mW/g

Additional information:

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

ambient temperature: 22.4°C; liquid temperature: 22.1°C

Date/Time: 2007-07-15 13:39:36Date/Time: 2007-07-15 13:44:04

SystemPerformanceCheck-D1900 body 2007-07-15

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d009
Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: M1900 Medium parameters used (interpolated): f = 1900 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- 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 (51x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 49.2 mW/g

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

Reference Value = 178.6 V/m; Power Drift = 0.059 dB
Peak SAR (extrapolated) = 63.8 W/kg
SAR(1 g) = 39.1 mW/g; SAR(10 g) = 21.2 mW/g
Maximum value of SAR (measured) = 44.3 mW/g
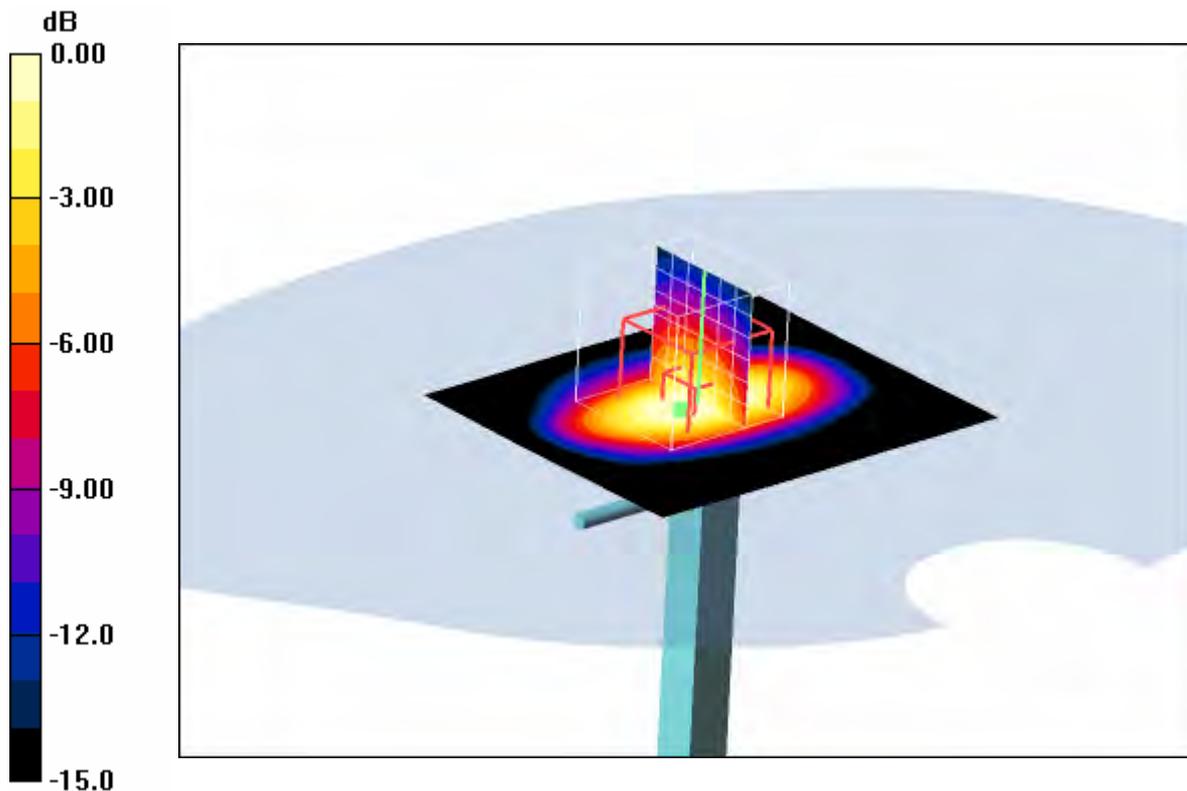
0 dB = 44.3mW/g

Additional information:
position or distance of DUT to SAM (if not standard head positions) :
ambient temperature: 23.5°C; liquid temperature: 23.6°C

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Annex 2 Measurement results (printout from DASY TM)

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

Annex 2.1   GPRS / EGPRS 850

Date/Time: 2007-07-10 20:58:09Date/Time: 2007-07-10 21:07:58

P1528_OET65-Body-GSM850 GPRS class 10 Acer Aspire 3610
DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna
Communication System: PCS 850 GPRS; Frequency: 836.6 MHz; Duty Cycle: 1:4
Medium: M850 Medium parameters used: f = 836.6 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.909 mW/g

## Underside position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm,
dy=5mm, dz=5mm
Reference Value = 22.2 V/m; Power Drift = 0.028 dB
Peak SAR (extrapolated) = 1.08 W/kg
SAR(1 g) = 0.856 mW/g; SAR(10 g) = 0.618 mW/g
Maximum value of SAR (measured) = 0.911 mW/g
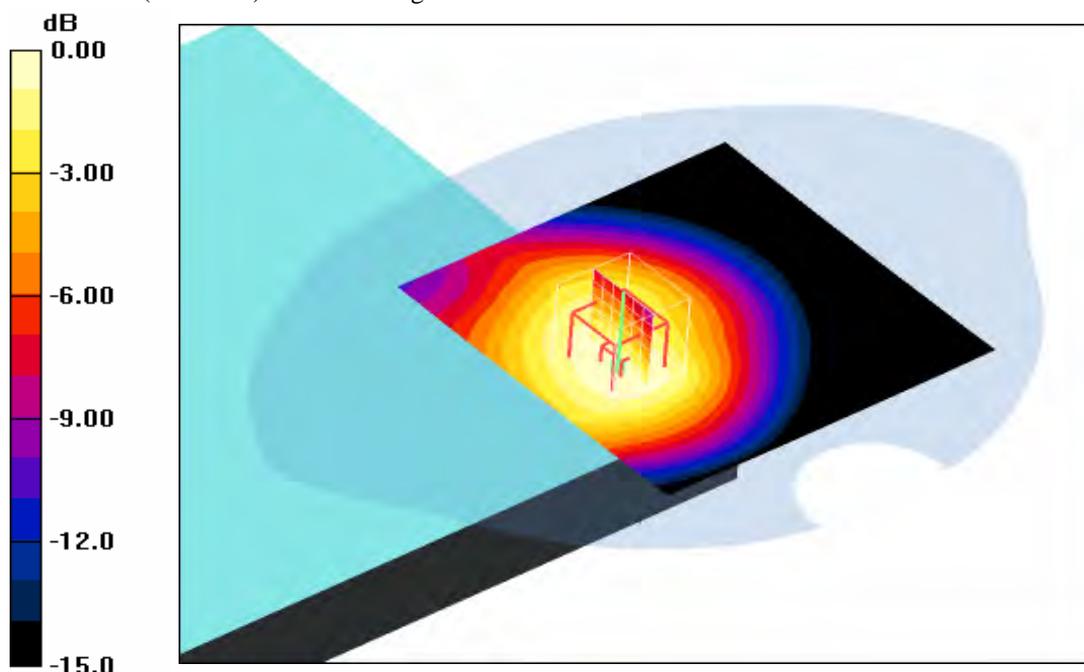
0 dB = 0.911mW/g

Additional information:
position or distance of DUT to SAM: 16 mm (without any distance of laptop to SAM)
ambient temperature: 22.8°C; liquid temperature: 22.8°C

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Date/Time: 2007-07-10 21:22:35Date/Time: 2007-07-10 21:32:39

P1528_OET65-Body-GSM850 GPRS class 10 Acer Aspire 3610

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna

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

Medium: M850 Medium parameters used: f = 824.2 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Low/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.909 mW/g

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

Reference Value = 22.2 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.06 W/kg

SAR(1 g) = 0.838 mW/g; SAR(10 g) = 0.607 mW/g

Maximum value of SAR (measured) = 0.894 mW/g
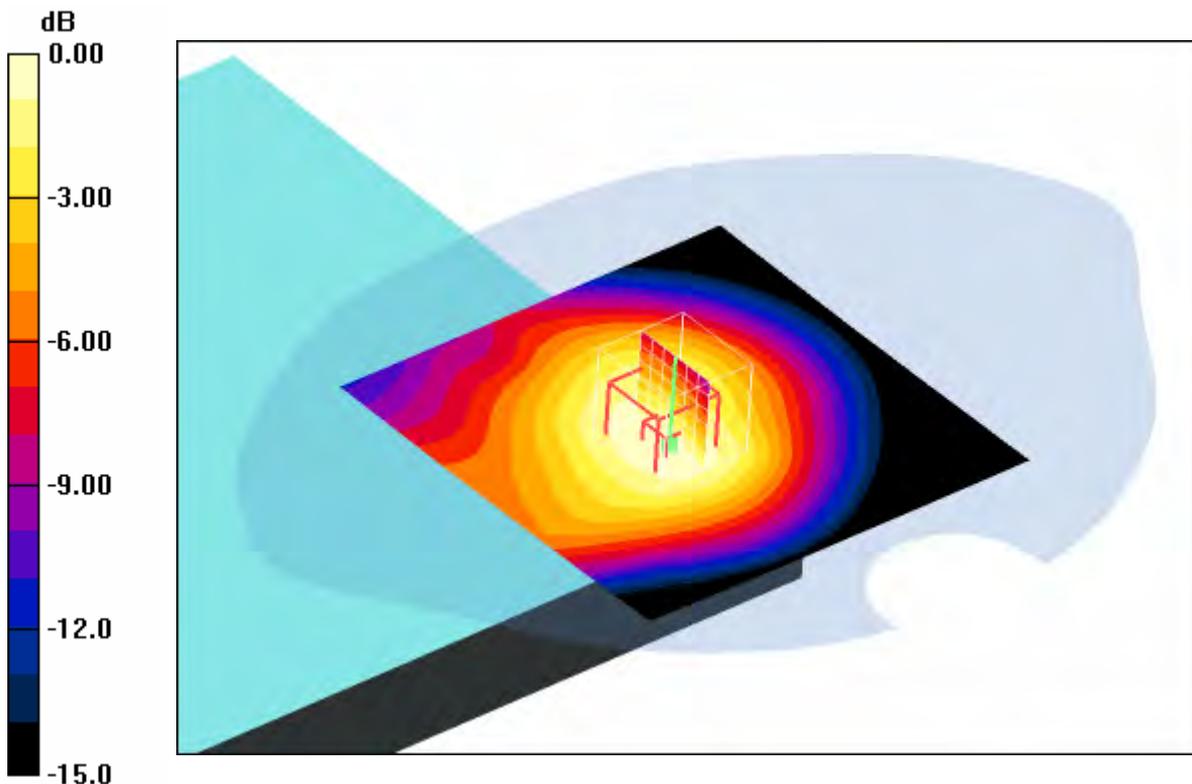
0 dB = 0.894mW/g

Additional information:

position or distance of DUT to SAM: 16 mm (without any distance of laptop to SAM)

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

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Date/Time: 2007-07-10 21:47:33Date/Time: 2007-07-10 21:57:28

P1528_OET65-Body-GSM850 GPRS class 10 Acer Aspire 3610

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna

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

Medium: M850 Medium parameters used: f = 848.8 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - High/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.709 mW/g

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

Reference Value = 18.9 V/m; Power Drift = 0.046 dB

Peak SAR (extrapolated) = 0.841 W/kg

SAR(1 g) = 0.657 mW/g; SAR(10 g) = 0.473 mW/g

Maximum value of SAR (measured) = 0.707 mW/g
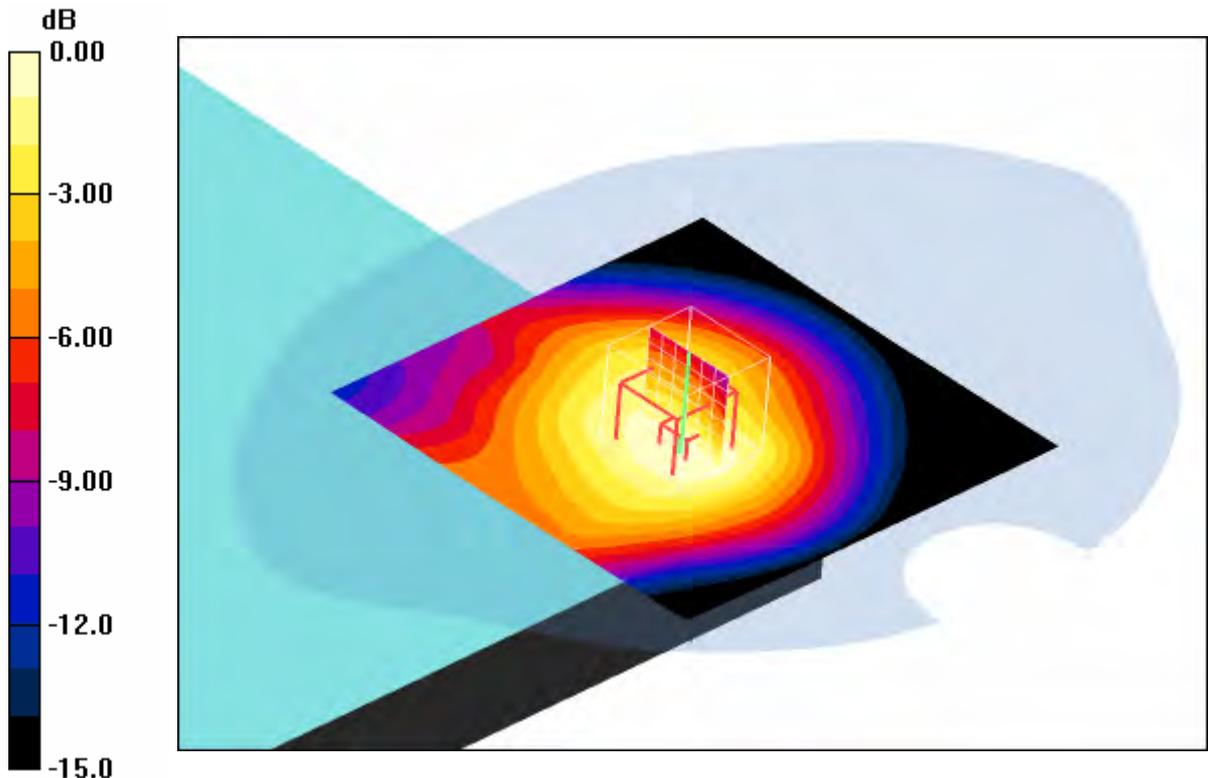
0 dB = 0.707mW/g

Additional information:

position or distance of DUT to SAM: 16 mm (without any distance of laptop to SAM)

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

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Date/Time: 2007-07-11 08:55:03Date/Time: 2007-07-11 09:05:09

P1528_OET65-Body-GSM850 GPRS class 10 Acer Aspire 3610

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; External antenna
Communication System: PCS 850 GPRS; Frequency: 836.6 MHz; Duty Cycle: 1:4
Medium: M850 Medium parameters used: f = 836.6 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m³
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.869 mW/g

Underside position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm,
dy=5mm, dz=5mm
Reference Value = 25.9 V/m; Power Drift = -0.049 dB
Peak SAR (extrapolated) = 0.836 W/kg
SAR(1 g) = 0.665 mW/g; SAR(10 g) = 0.486 mW/g
Maximum value of SAR (measured) = 0.704 mW/g
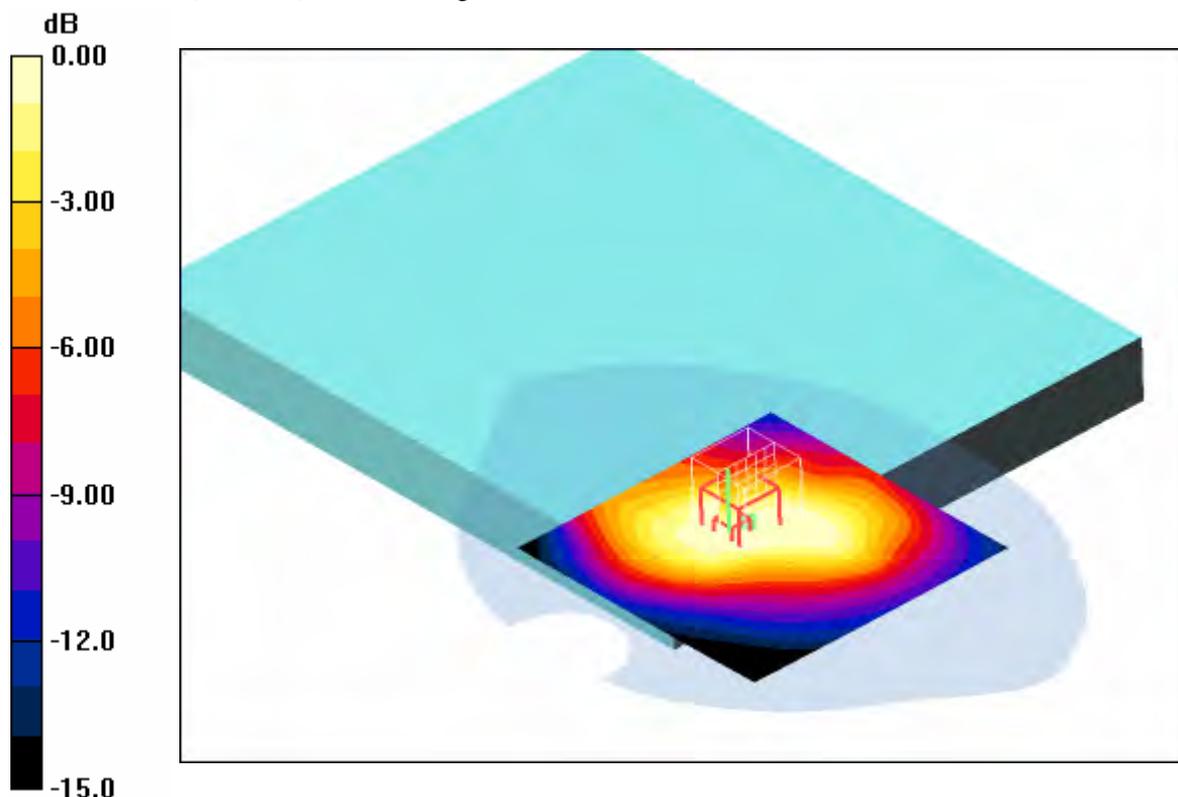
0 dB = 0.704mW/g

Additional information:
position or distance of DUT to SAM: 16 mm (without any distance of laptop to SAM)
ambient temperature: 21.9°C; liquid temperature: 22.4°C

Date/Time: 2007-07-10 17:27:09Date/Time: 2007-07-10 17:37:06

P1528_OET65-Body-GSM850 GPRS class 10 Compaq PP2130

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna
Communication System: PCS 850 GPRS; Frequency: 836.6 MHz; Duty Cycle: 1:4
Medium: M850 Medium parameters used: f = 836.6 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.933 mW/g

Underside position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm,
dy=5mm, dz=5mm
Reference Value = 21.8 V/m; Power Drift = -0.102 dB
Peak SAR (extrapolated) = 1.32 W/kg
SAR(1 g) = 0.810 mW/g; SAR(10 g) = 0.500 mW/g
Maximum value of SAR (measured) = 0.891 mW/g
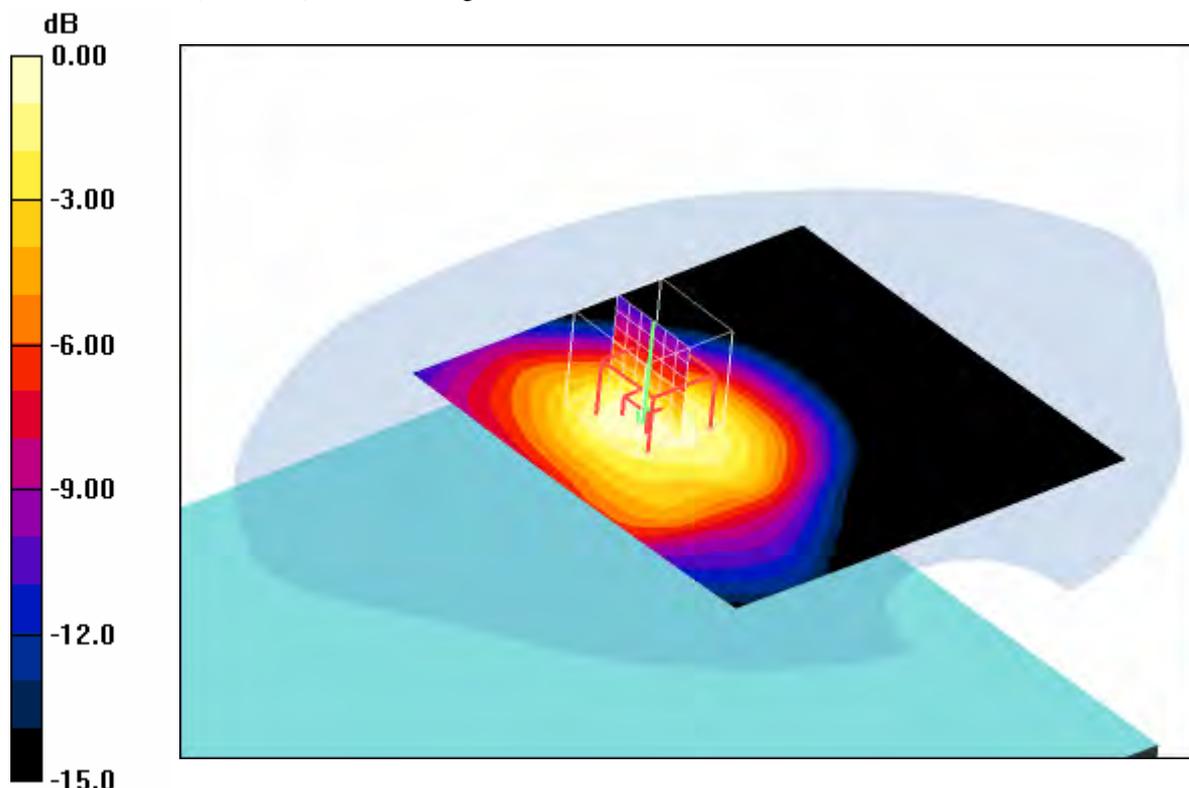
0 dB = 0.891mW/g

Additional information:
position or distance of DUT to SAM: 15 mm (without any distance of laptop to SAM)
ambient temperature: 22.7°C; liquid temperature: 22.8°C

Date/Time: 2007-07-10 17:52:52Date/Time: 2007-07-10 18:02:54

P1528_OET65-Body-GSM850 GPRS class 10 Compaq PP2130

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna

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

Medium: M850 Medium parameters used: $f = 824.2$ MHz; $\sigma = 0.99$ mho/m; $\varepsilon_r = 54.6$; $\rho = 1000$ kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Low/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.03 mW/g

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

Reference Value = 22.5 V/m; Power Drift = 0.017 dB

Peak SAR (extrapolated) = 1.59 W/kg

SAR(1 g) = 0.963 mW/g; SAR(10 g) = 0.591 mW/g

Maximum value of SAR (measured) = 1.06 mW/g
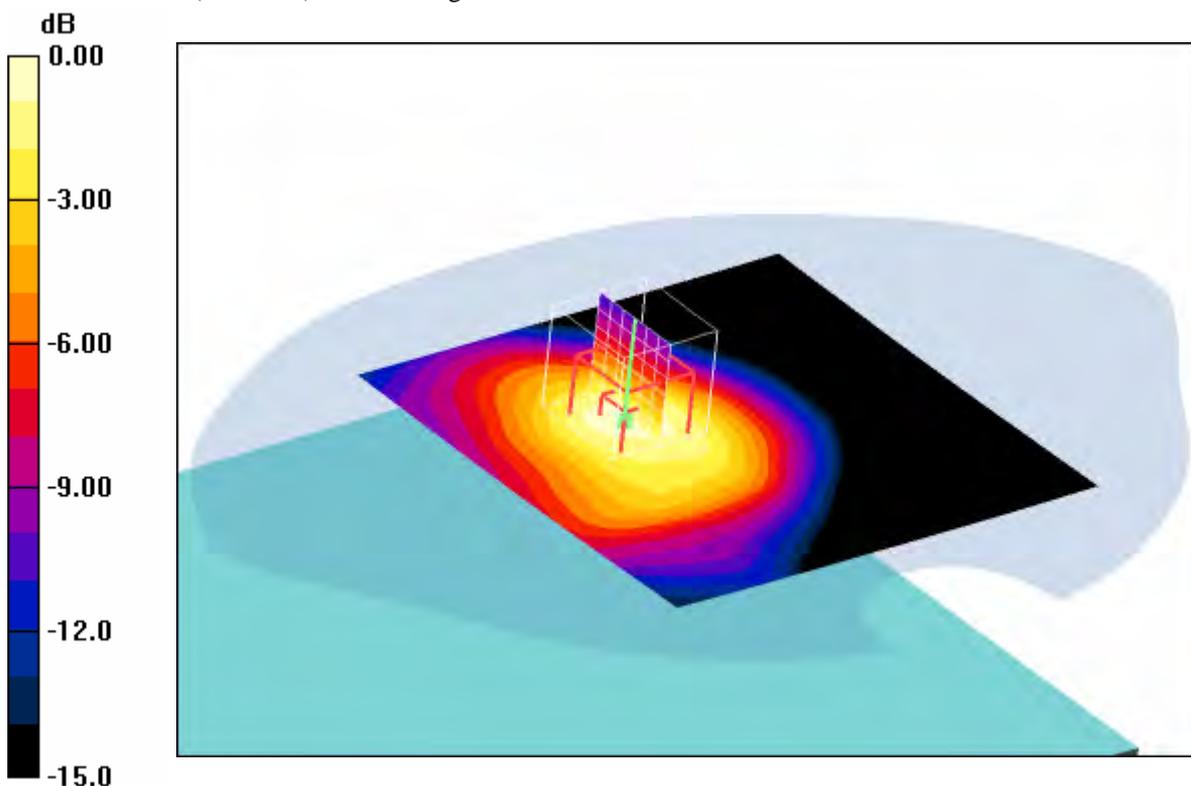
0 dB = 1.06mW/g

Additional information:

position or distance of DUT to SAM: 10 mm (without any distance of laptop to SAM)

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

Date/Time: 2007-07-10 18:21:58Date/Time: 2007-07-10 18:32:02

P1528_OET65-Body-GSM850 GPRS class 10 Compaq PP2130

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna
Communication System: PCS 850 GPRS; Frequency: 848.8 MHz; Duty Cycle: 1:4
Medium: M850 Medium parameters used: f = 848.8 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - High/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.699 mW/g

## Underside position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm,
dy=5mm, dz=5mm
Reference Value = 19.3 V/m; Power Drift = -0.083 dB
Peak SAR (extrapolated) = 1.02 W/kg
SAR(1 g) = 0.627 mW/g; SAR(10 g) = 0.387 mW/g
Maximum value of SAR (measured) = 0.673 mW/g
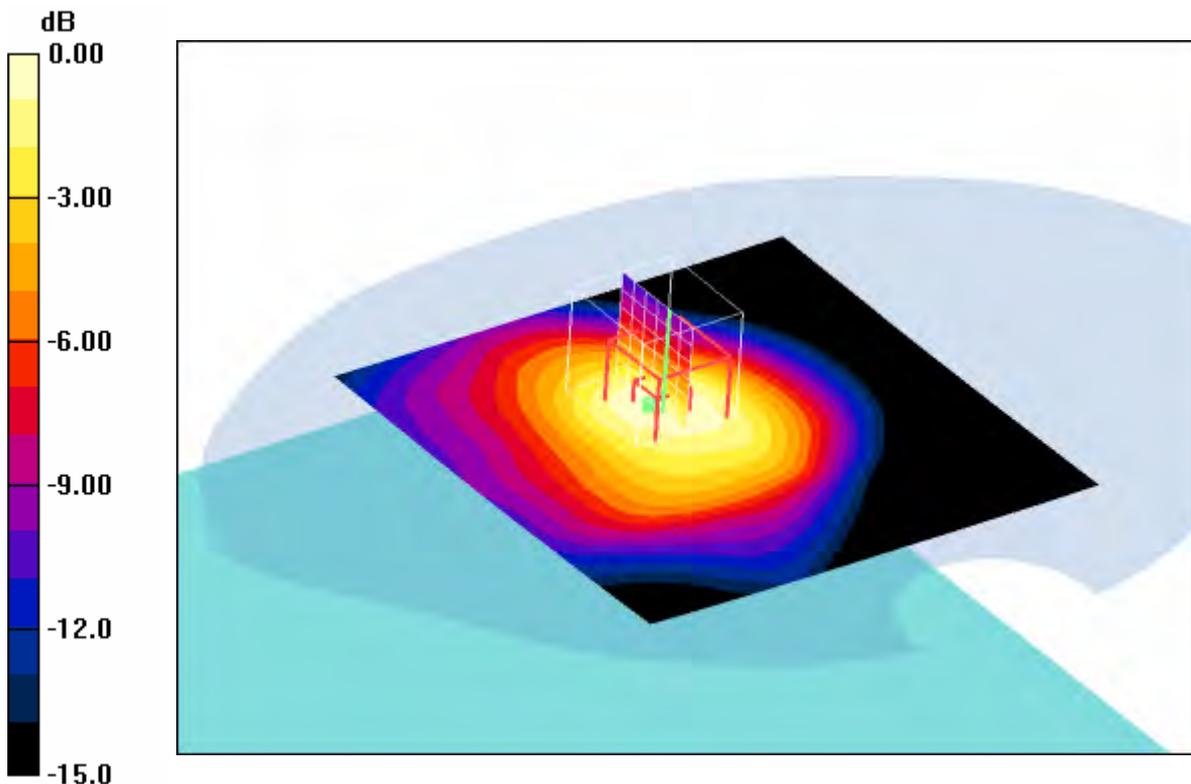
0 dB = 0.673mW/g

Additional information:
position or distance of DUT to SAM: 10 mm (without any distance of laptop to SAM)
ambient temperature: 22.8°C; liquid temperature: 22.7°C

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Date/Time: 2007-07-10 19:19:44Date/Time: 2007-07-10 19:29:37

P1528_OET65-Body-GSM850 GPRS class 10 Compaq PP2130

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; External antenna

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

Medium: M850 Medium parameters used: f = 824.2 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Low/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.926 mW/g

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

Reference Value = 26.3 V/m; Power Drift = 0.120 dB

Peak SAR (extrapolated) = 1.38 W/kg

SAR(1 g) = 0.879 mW/g; SAR(10 g) = 0.550 mW/g

Maximum value of SAR (measured) = 0.956 mW/g
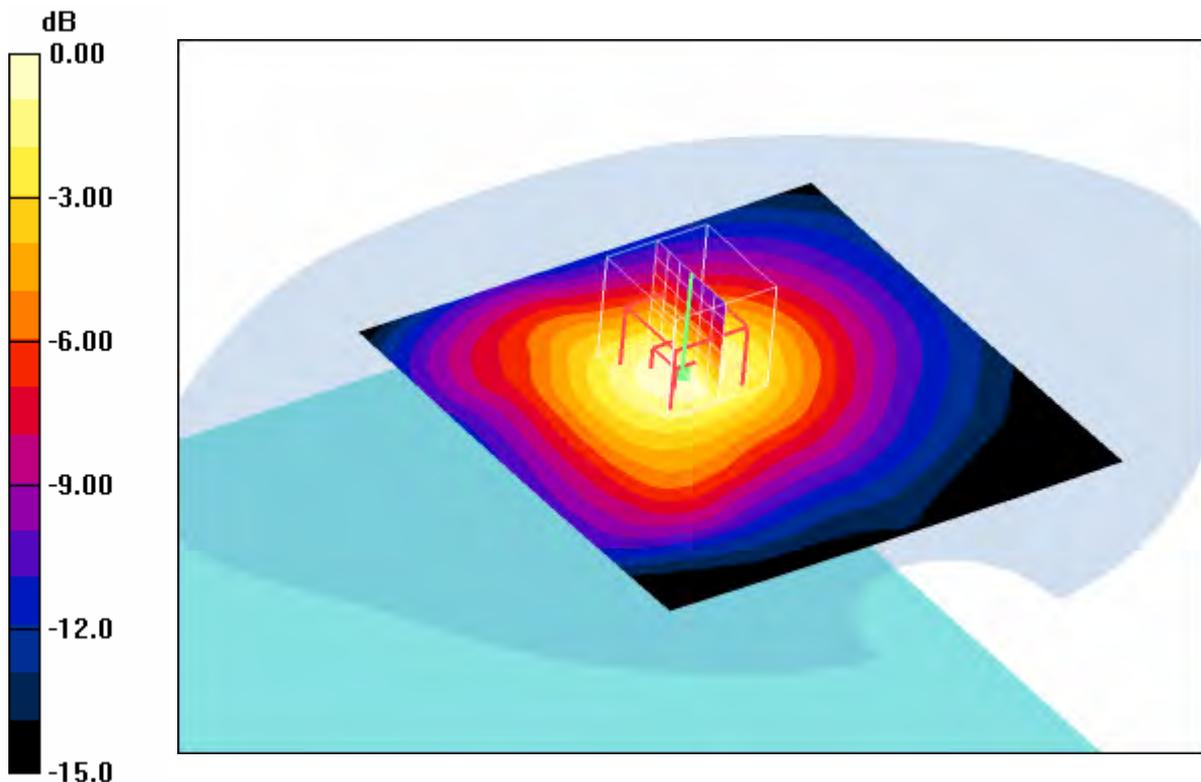
0 dB = 0.956mW/g

Additional information:

position or distance of DUT to SAM: 10 mm (without any distance of laptop to SAM)

ambient temperature: 22.9°C; liquid temperature: 22.8°C

Date/Time: 2007-07-10 19:44:26Date/Time: 2007-07-10 19:54:35

P1528_OET65-Body-GSM850 GPRS class 10 Compaq PP2130

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; External antenna

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

Medium: M850 Medium parameters used: f = 836.6 MHz; σ = 0.99 mho/m; ε$_r$ = 54.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.962 mW/g

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

Reference Value = 26.6 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.38 W/kg

SAR(1 g) = 0.887 mW/g; SAR(10 g) = 0.556 mW/g

Maximum value of SAR (measured) = 0.966 mW/g
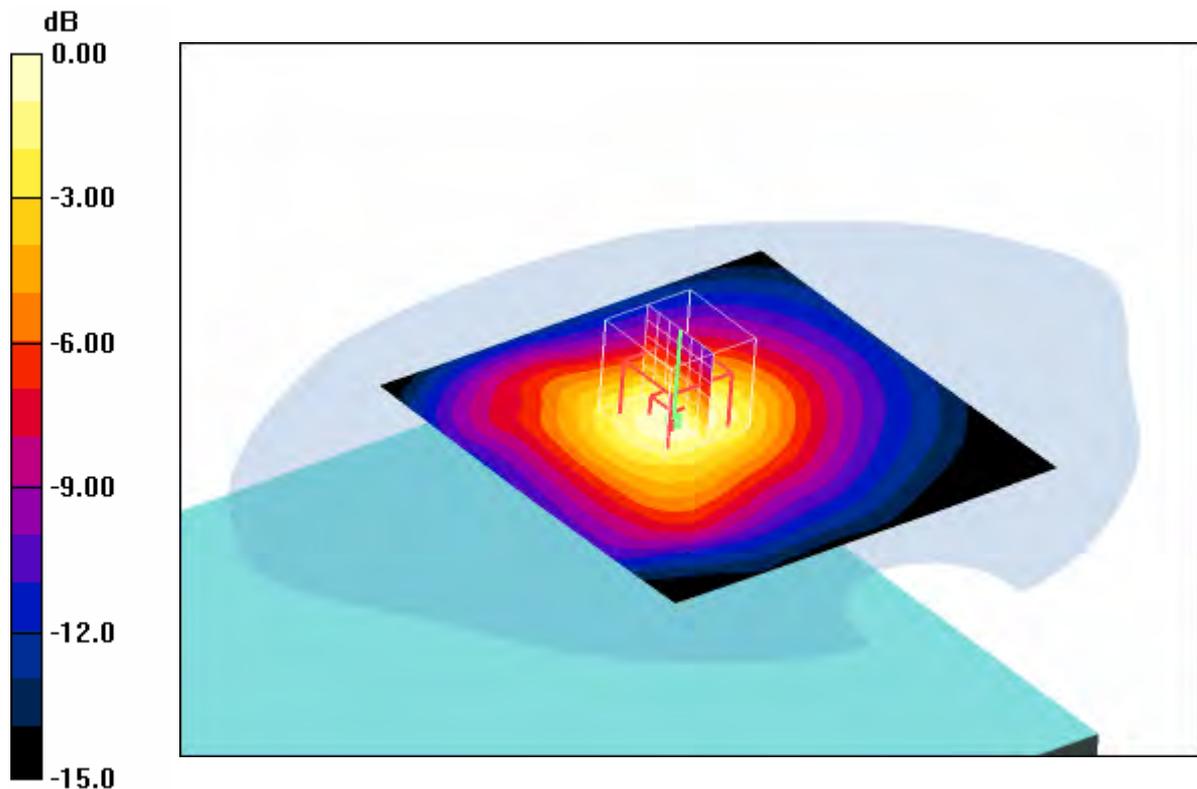
0 dB = 0.966mW/g

Additional information:

position or distance of DUT to SAM: 10 mm (without any distance of laptop to SAM)

ambient temperature: 22.9°C; liquid temperature: 22.8°C

Date/Time: 2007-07-10 20:09:49Date/Time: 2007-07-10 20:19:56

P1528_OET65-Body-GSM850 GPRS class 10 Compaq PP2130

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; External antenna

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

Medium: M850 Medium parameters used: f = 848.8 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - High/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.974 mW/g

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

dy=5mm, dz=5mm

Reference Value = 27.1 V/m; Power Drift = 0.031 dB

Peak SAR (extrapolated) = 1.45 W/kg

SAR(1 g) = 0.923 mW/g; SAR(10 g) = 0.576 mW/g

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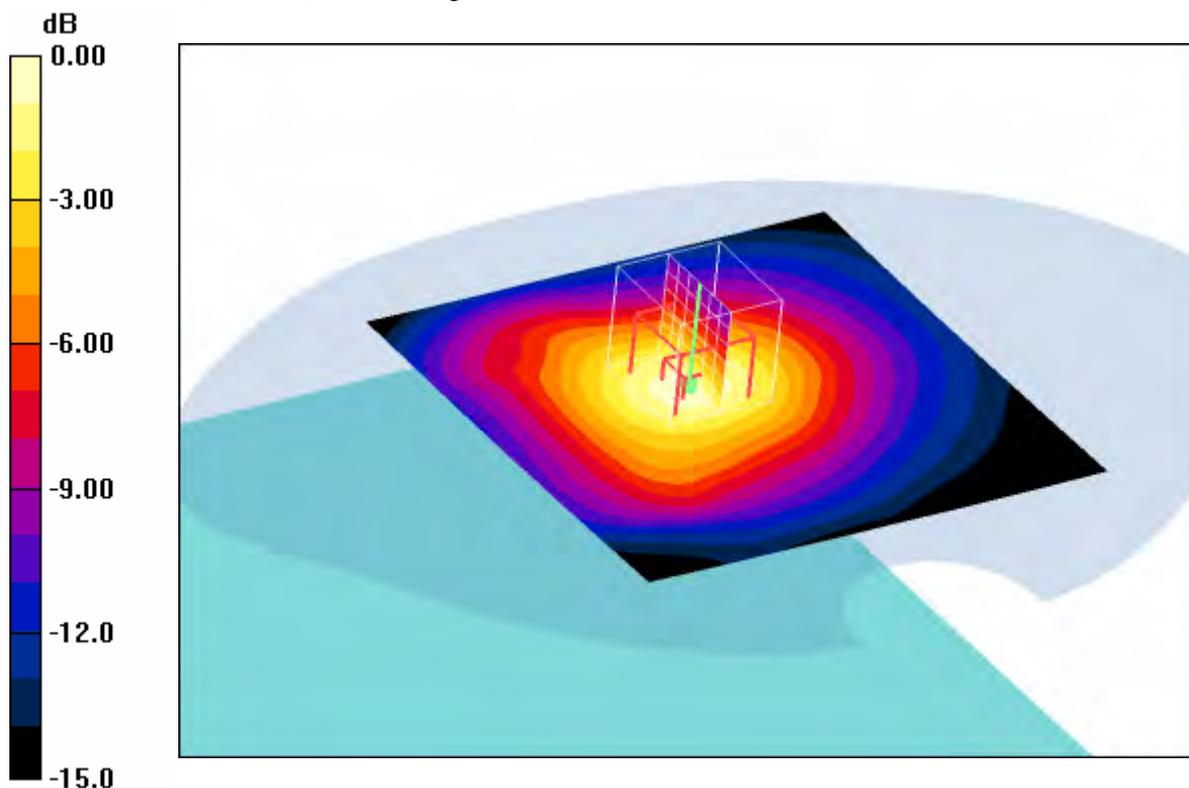
0 dB = 1.02mW/g

Additional information:

position or distance of DUT to SAM: 10 mm (without any distance of laptop to SAM)

ambient temperature: 22.9°C; liquid temperature: 22.7°C

Date/Time: 2007-07-10 13:38:04Date/Time: 2007-07-10 13:49:26

P1528_OET65-Body-GSM850 GPRS class 10 Sony IRX 3190

DUT: Sony Ericsson; Type: PC300; Serial: 00460102385770-0

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

Medium: M850 Medium parameters used: f = 836.6 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 36.1 V/m; Power Drift = 0.125 dB

Peak SAR (extrapolated) = 1.70 W/kg

SAR(1 g) = 1.18 mW/g; SAR(10 g) = 0.809 mW/g

Maximum value of SAR (measured) = 1.27 mW/g
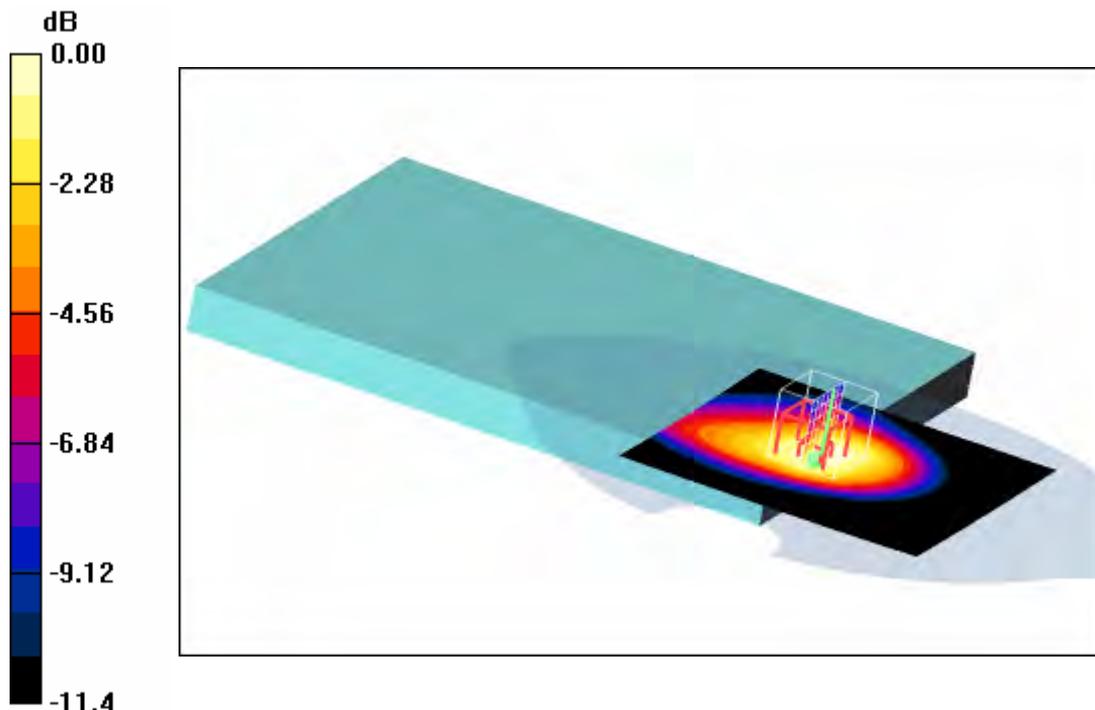
0 dB = 1.27mW/g

Additional information:

position or distance of DUT to SAM: 12 mm (without any distance of laptop to SAM)

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

Date/Time: 2007-07-10 14:11:09Date/Time: 2007-07-10 14:21:17

P1528_OET65-Body-GSM850 GPRS class 10 Sony IRX 3190

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; External antenna

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

Medium: M850 Medium parameters used: f = 836.6 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.967 mW/g

Underside position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
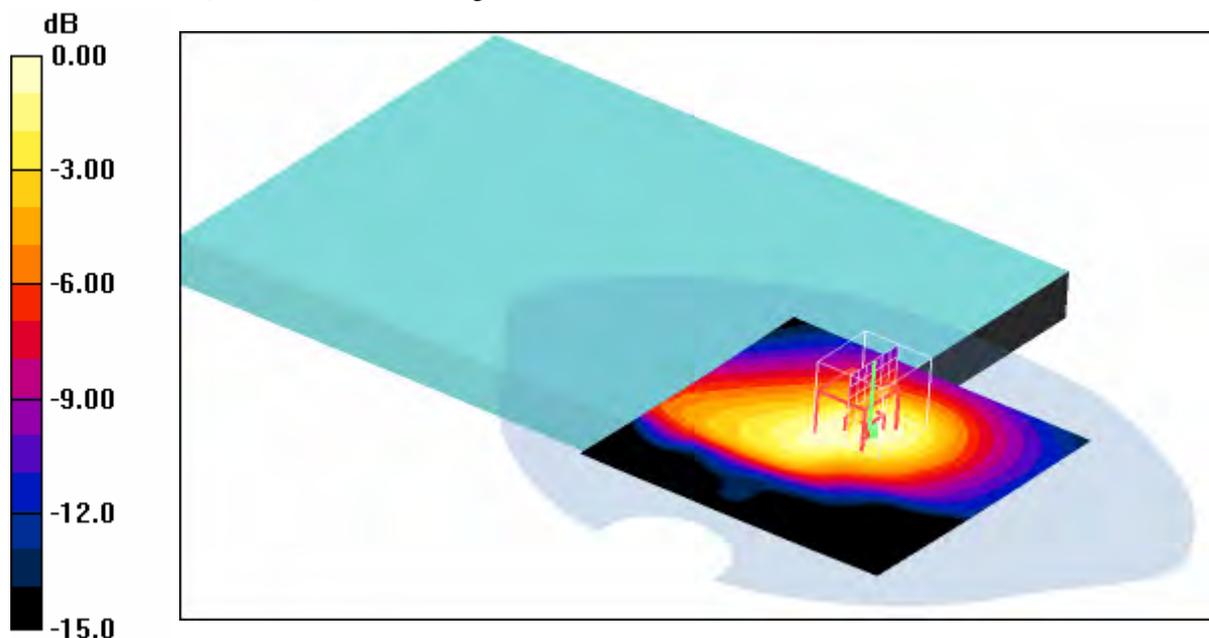
Reference Value = 30.1 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.38 W/kg

SAR(1 g) = 0.908 mW/g; SAR(10 g) = 0.593 mW/g

Maximum value of SAR (measured) = 0.980 mW/g
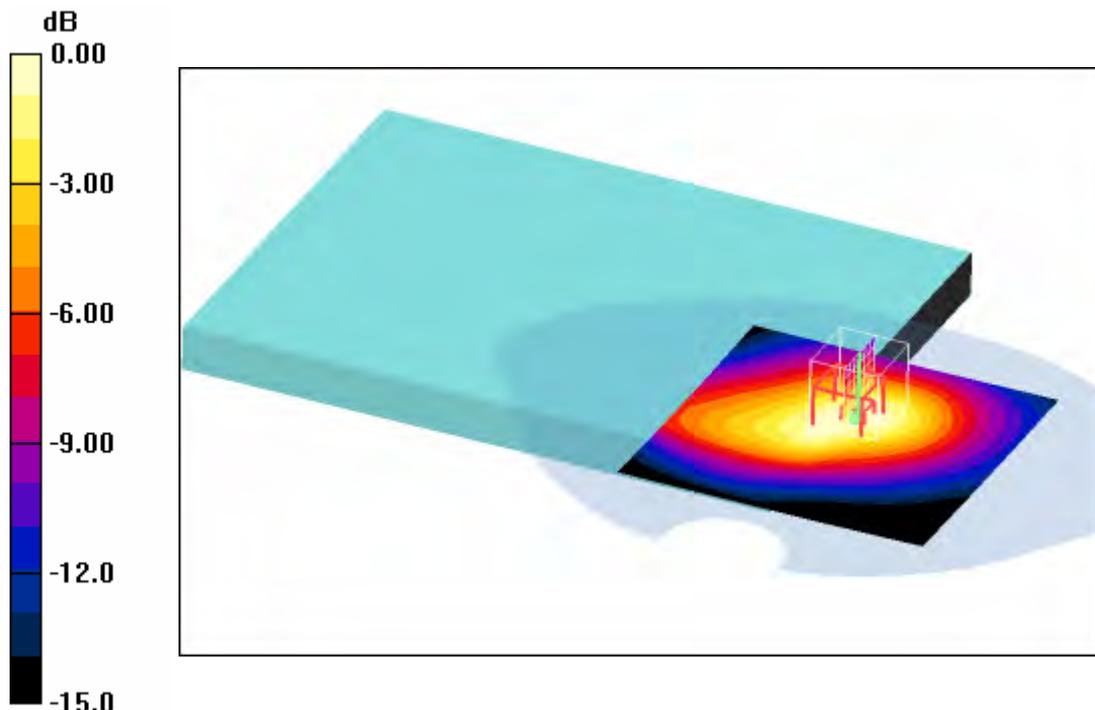
0 dB = 0.980mW/g

Additional information:

position or distance of DUT to SAM: 12 mm (without any distance of laptop to SAM)

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

Date/Time: 2007-07-10 14:36:42Date/Time: 2007-07-10 14:46:56Date/Time: 2007-07-10 14:58:17

P1528_OET65-Body-GSM850 GPRS class 10 Sony IRX 3190

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; External antenna

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

Medium: M850 Medium parameters used: f = 824.2 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Low/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.940 mW/g

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

dy=5mm, dz=5mm

Reference Value = 29.3 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.37 W/kg

SAR(1 g) = 0.882 mW/g; SAR(10 g) = 0.570 mW/g

Maximum value of SAR (measured) = 0.960 mW/g

Underside position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm,

dy=5mm, dz=5mm

Reference Value = 29.3 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.964 W/kg

SAR(1 g) = 0.667 mW/g; SAR(10 g) = 0.387 mW/g

Maximum value of SAR (measured) = 0.764 mW/g
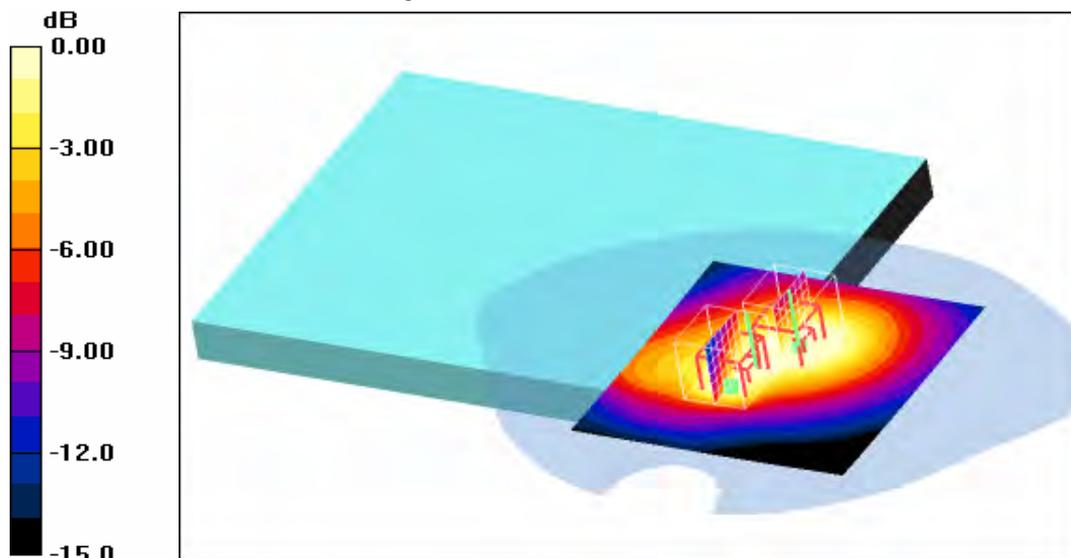
0 dB = 0.764mW/g

Additional information:

position or distance of DUT to SAM: 12 mm (without any distance of laptop to SAM)

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

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Date/Time: 2007-07-10 15:13:16Date/Time: 2007-07-10 15:26:34

P1528_OET65-Body-GSM850 GPRS class 10 Sony IRX 3190

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; External antenna
Communication System: PCS 850 GPRS; Frequency: 848.8 MHz; Duty Cycle: 1:4
Medium: M850 Medium parameters used: f = 848.8 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - High/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.992 mW/g

Underside position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm,
dy=5mm, dz=5mm
Reference Value = 30.6 V/m; Power Drift = 0.011 dB
Peak SAR (extrapolated) = 1.39 W/kg
SAR(1 g) = 0.914 mW/g; SAR(10 g) = 0.594 mW/g
Maximum value of SAR (measured) = 0.988 mW/g

0 dB = 0.988mW/g

Additional information:
position or distance of DUT to SAM: 12 mm (without any distance of laptop to SAM)
ambient temperature: 22.5°C; liquid temperature: 22.4°C

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P1528_OET65-Body-GSM850 GPRS class 10 Sony IRX 3190

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Integrated antenna

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

Medium: M850 Medium parameters used: f = 848.8 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - High/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.944 mW/g

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

Reference Value = 31.6 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.893 mW/g; SAR(10 g) = 0.613 mW/g

Maximum value of SAR (measured) = 0.960 mW/g
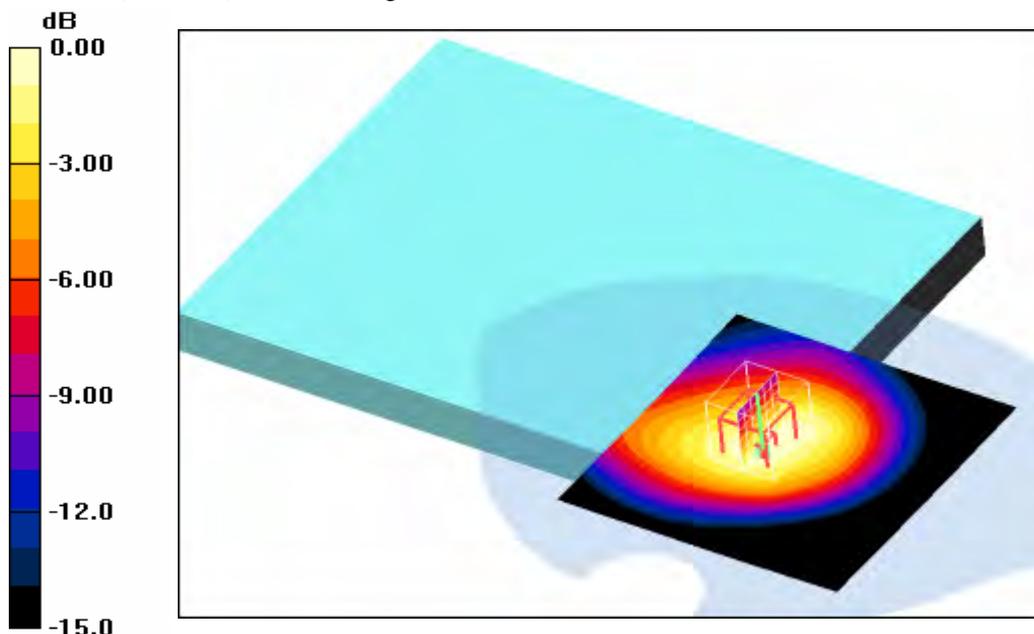
0 dB = 0.960mW/g

Additional information:

position or distance of DUT to SAM: 12 mm (without any distance of laptop to SAM)

ambient temperature: 22.5°C; liquid temperature: 22.4°C

CETECOM ICT Services GmbH

Date/Time: 2007-07-10 16:23:40Date/Time: 2007-07-10 16:33:48

P1528_OET65-Body-GSM850 GPRS class 10 Sony IRX 3190

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Integrated antenna
Communication System: PCS 850 GPRS; Frequency: 824.2 MHz; Duty Cycle: 1:4
Medium: M850 Medium parameters used: f = 824.2 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Low/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.22 mW/g

## Underside position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm,
dy=5mm, dz=5mm
Reference Value = 35.7 V/m; Power Drift = -0.030 dB
Peak SAR (extrapolated) = 1.65 W/kg
SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.786 mW/g
Maximum value of SAR (measured) = 1.23 mW/g
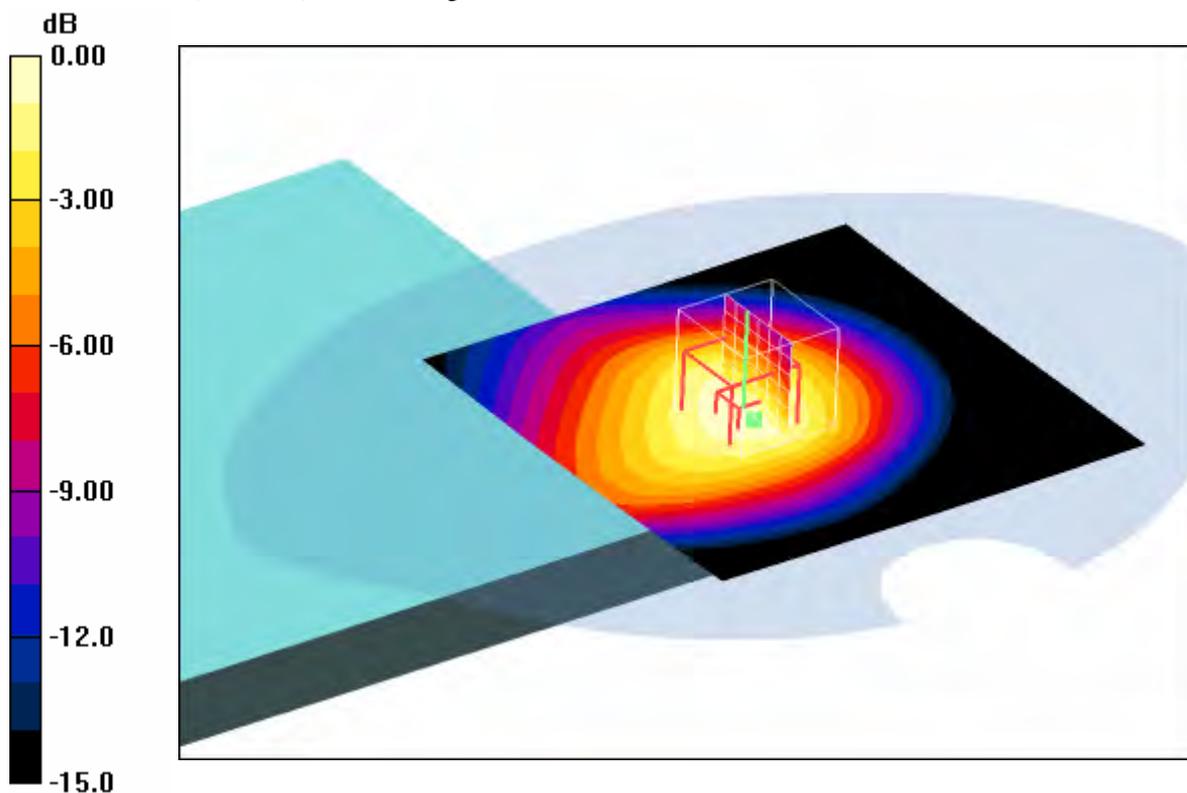
0 dB = 1.23mW/g

Additional information:
position or distance of DUT to SAM : 12 mm (without any distance of laptop to SAM)
ambient temperature: 22.5°C; liquid temperature: 22.4°C

CETECOM ICT Services GmbH

P1528_OET65-Body-GSM850 EGPRS Sony IRX 3190

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Integrated antenna

Communication System: PCS 850 EGPRS; Frequency: 836.6 MHz; Duty Cycle: 1:4

Medium: M850 Medium parameters used: f = 836.6 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.406 mW/g

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

Reference Value = 19.9 V/m; Power Drift = -0.094 dB

Peak SAR (extrapolated) = 0.526 W/kg

SAR(1 g) = 0.347 mW/g; SAR(10 g) = 0.235 mW/g

Maximum value of SAR (measured) = 0.372 mW/g
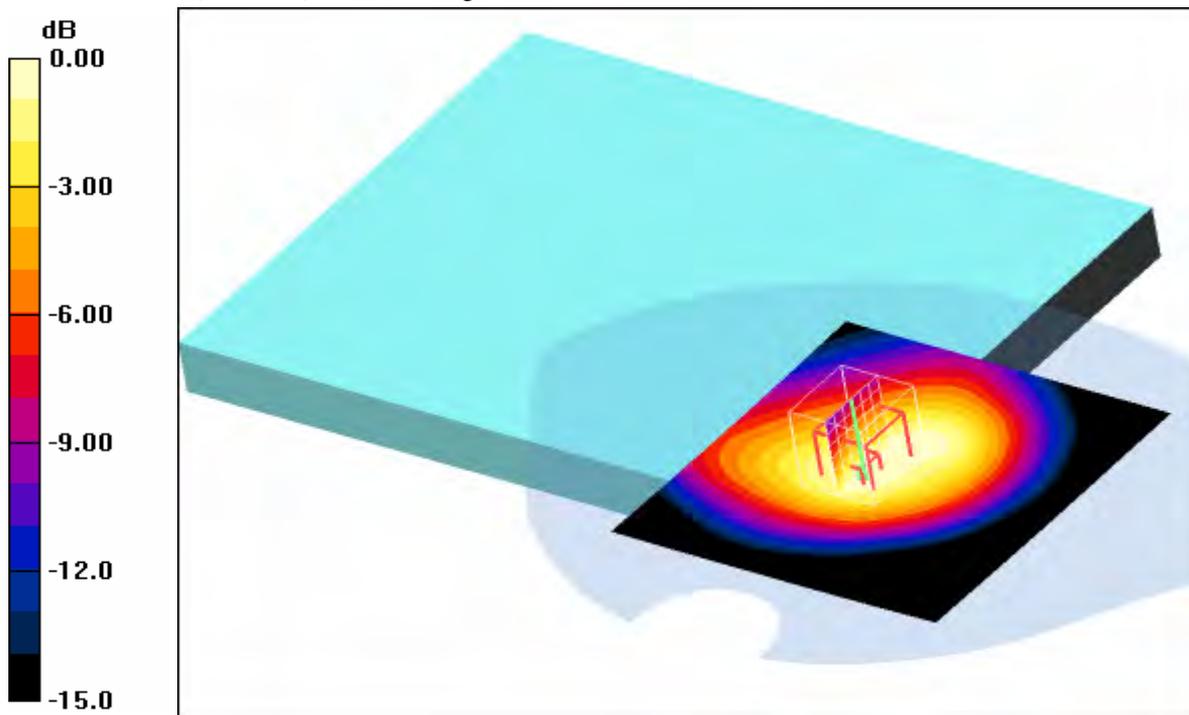
0 dB = 0.372mW/g

Additional information:

position or distance of DUT to SAM: 12 mm (without any distance of laptop to SAM)

ambient temperature: 22.1°C; liquid temperature: 22.4°C

Annex 2.2   GPRS / EGPRS 1900

Date/Time: 2007-07-15 15:01:23Date/Time: 2007-07-15 15:11:29Date/Time: 2007-07-15 15:24:30

P1528_OET65-Body1900 GPRS class 10 Acer Aspire 3610

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna

Communication System: PCS 1900 GPRS class 10; Frequency: 1880 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.36 mW/g

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

Reference Value = 17.3 V/m; Power Drift = -0.070 dB

Peak SAR (extrapolated) = 1.93 W/kg

SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.660 mW/g

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

**Underside position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.3 V/m; Power Drift = -0.070 dB

Peak SAR (extrapolated) = 1.14 W/kg

SAR(1 g) = 0.799 mW/g; SAR(10 g) = 0.537 mW/g

Maximum value of SAR (measured) = 0.854 mW/g
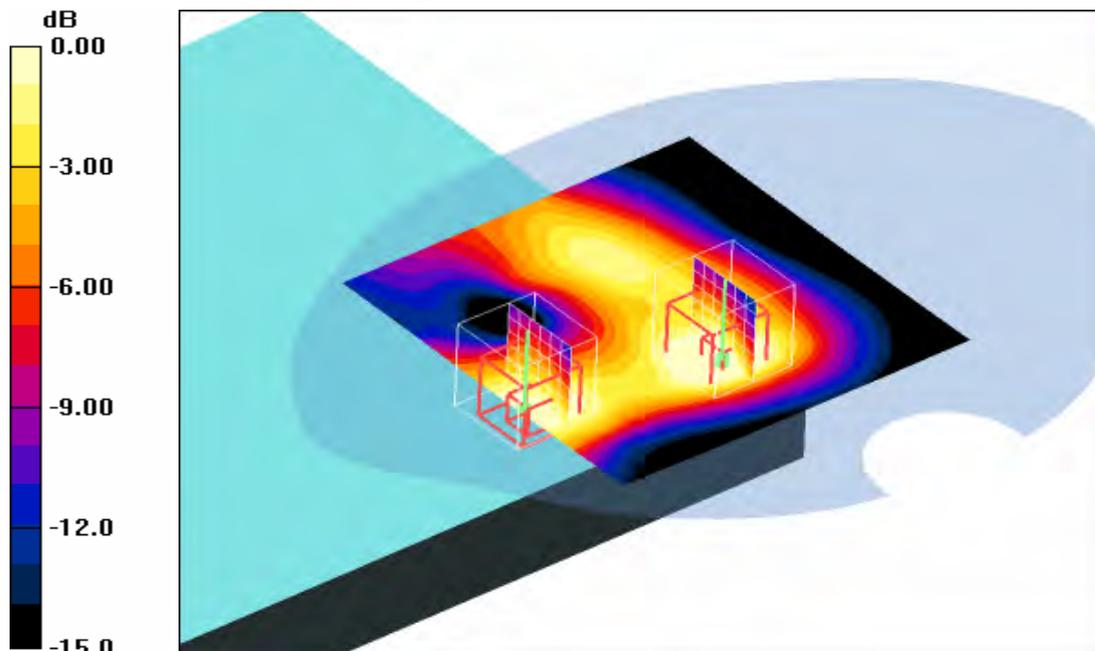
0 dB = 0.854mW/g

Additional information:

position or distance of DUT to SAM: 16 mm (without any distance of laptop to SAM)

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

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Date/Time: 2007-07-15 15:41:21Date/Time: 2007-07-15 15:51:48Date/Time: 2007-07-15 16:04:17

P1528_OET65-Body1900 GPRS class 10 Acer Aspire 3610

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna
Communication System: PCS 1900 GPRS class 10; Frequency: 1850.2 MHz; Duty Cycle: 1:4
Medium: M1900 Medium parameters used: f = 1850.2 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Low internal antenna/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.28 mW/g

Underside position - Low internal antenna/Zoom Scan (7x7x7) (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.0 V/m; Power Drift = 0.040 dB
Peak SAR (extrapolated) = 1.84 W/kg
SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.636 mW/g
Maximum value of SAR (measured) = 1.21 mW/g

Underside position - Low internal antenna/Zoom Scan (7x7x7) (7x7x7)/Cube 1:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.0 V/m; Power Drift = 0.040 dB
Peak SAR (extrapolated) = 1.05 W/kg
SAR(1 g) = 0.787 mW/g; SAR(10 g) = 0.534 mW/g
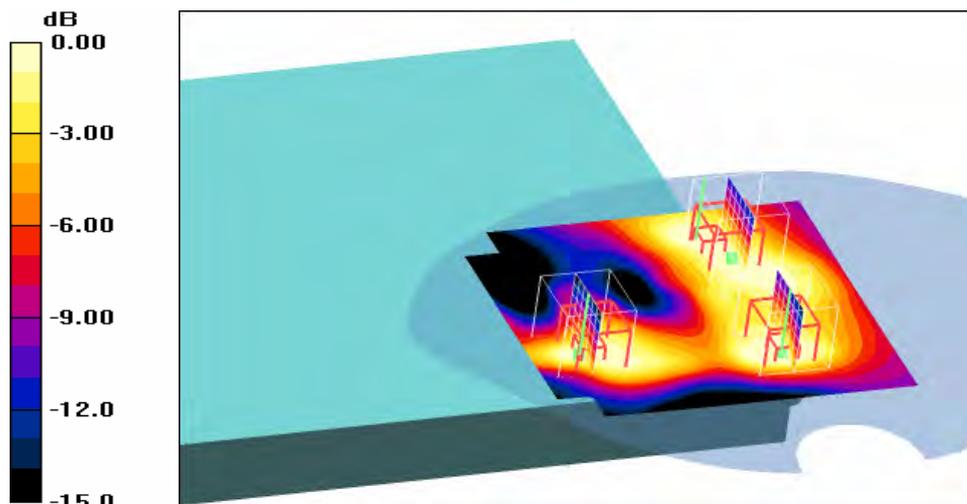Maximum value of SAR (measured) = 0.848 mW/g
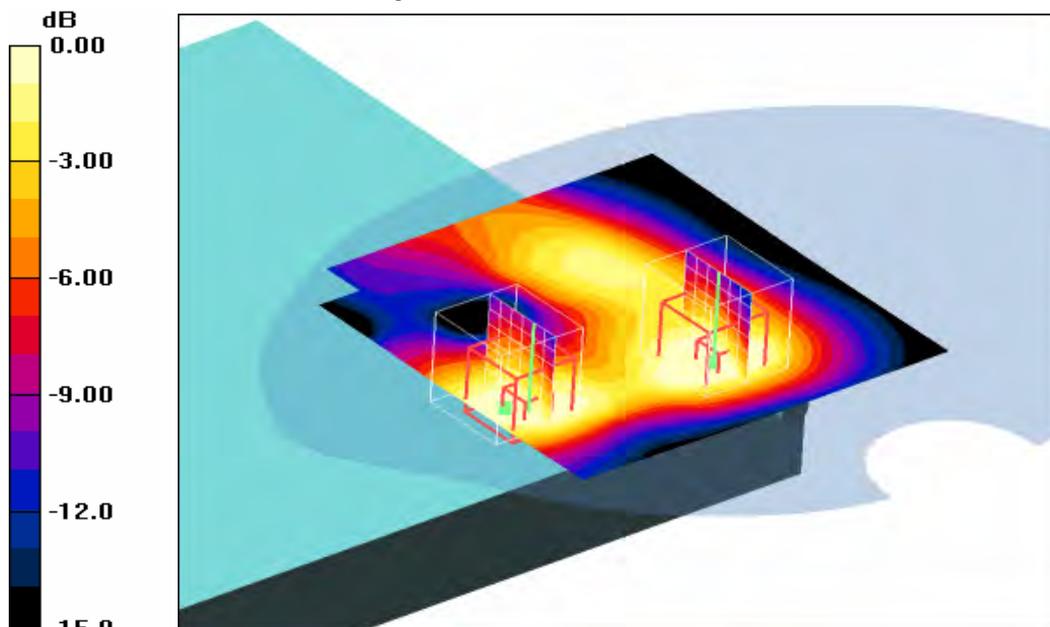
0 dB = 0.848mW/g

Additional information:
position or distance of DUT to SAM: 16 mm (without any distance of laptop to SAM)
ambient temperature: 23.7°C; liquid temperature: 23.6°C

CETECOM ICT Services GmbH

Date/Time: 2007-07-15 16:19:54Date/Time: 2007-07-15 16:30:03Date/Time: 2007-07-15 16:42:40

P1528_OET65-Body1900 GPRS class 10_Acer Aspire_3610

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna
Communication System: PCS 1900 GPRS class 10; Frequency: 1909.8 MHz; Duty Cycle: 1:4
Medium: M1900 Medium parameters used: f = 1909.8 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - High internal antenna/Area Scan (91x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.14 mW/g

Underside position - High internal antenna/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 29.0 V/m; Power Drift = -0.047 dB
Peak SAR (extrapolated) = 1.90 W/kg
SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.580 mW/g
Maximum value of SAR (measured) = 1.15 mW/g

## Underside position - High internal antenna/Zoom Scan (7x7x7) (7x7x7)/Cube 1:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 29.0 V/m; Power Drift = -0.047 dB
Peak SAR (extrapolated) = 0.955 W/kg
SAR(1 g) = 0.641 mW/g; SAR(10 g) = 0.410 mW/g
Maximum value of SAR (measured) = 0.700 mW/g
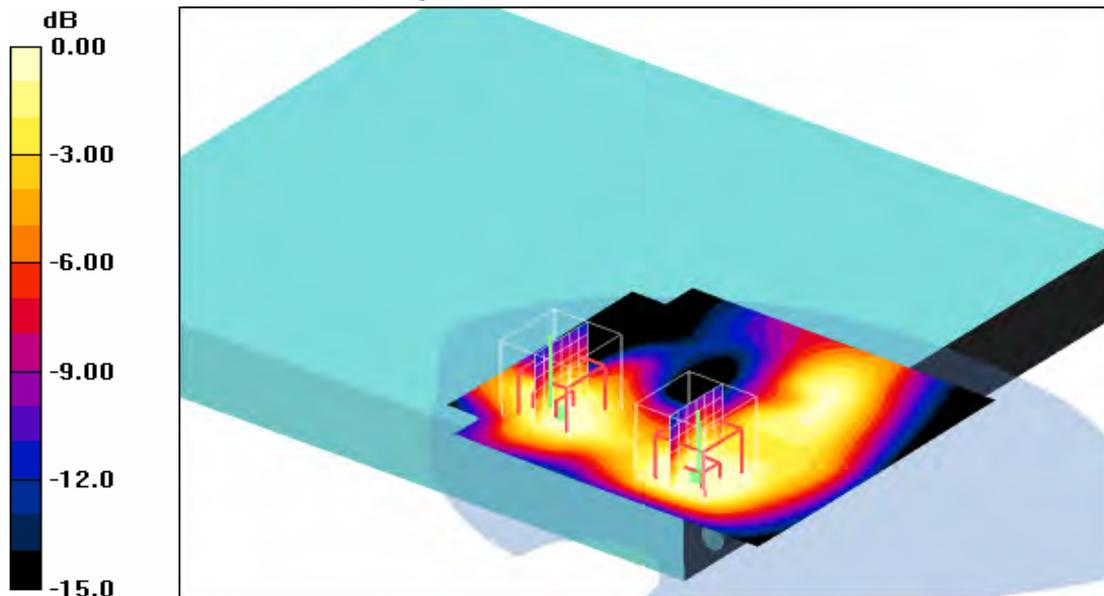
0 dB = 0.700mW/g

Additional information:
position or distance of DUT to SAM: 16 mm (without any distance of laptop to SAM)
ambient temperature: 23.7°C; liquid temperature: 23.6°C

CETECOM ICT Services GmbH

Date/Time: 2007-07-15 14:22:51Date/Time: 2007-07-15 14:32:40Date/Time: 2007-07-15 14:44:21
Date/Time: 2007-07-15 14:55:28

P1528_OET65-Body1900 GPRS class 10_Acer Aspire_3610

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; External antenna

Communication System: PCS 1900 GPRS class 10; Frequency: 1880 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle/Area Scan (91x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.283 mW/g

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

Reference Value = 13.9 V/m; Power Drift = -0.081 dB

Peak SAR (extrapolated) = 0.389 W/kg

SAR(1 g) = 0.225 mW/g; SAR(10 g) = 0.127 mW/g

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

Underside position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.9 V/m; Power Drift = -0.081 dB

Peak SAR (extrapolated) = 0.304 W/kg

SAR(1 g) = 0.196 mW/g; SAR(10 g) = 0.118 mW/g

Maximum value of SAR (measured) = 0.215 mW/g

Underside position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 2: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.9 V/m; Power Drift = -0.081 dB

Peak SAR (extrapolated) = 0.279 W/kg

SAR(1 g) = 0.180 mW/g; SAR(10 g) = 0.106 mW/g

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

0 dB = 0.199mW/g

Additional information:

position or distance of DUT to SAM: 16 mm (without any distance of laptop to SAM)
ambient temperature: 23.6°C; liquid temperature: 23.5°C

CETECOM ICT Services GmbH

Date/Time: 2007-07-15 17:53:40Date/Time: 2007-07-15 18:03:31

P1528_OET65-Body1900 GPRS class 10 Compaq PP2130

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna

Communication System: PCS 1900 GPRS class 10; Frequency: 1880 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.75 mW/g

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

Reference Value = 27.5 V/m; Power Drift = 0.013 dB

Peak SAR (extrapolated) = 2.48 W/kg

SAR(1 g) = 1.49 mW/g; SAR(10 g) = 0.851 mW/g

Maximum value of SAR (measured) = 1.63 mW/g
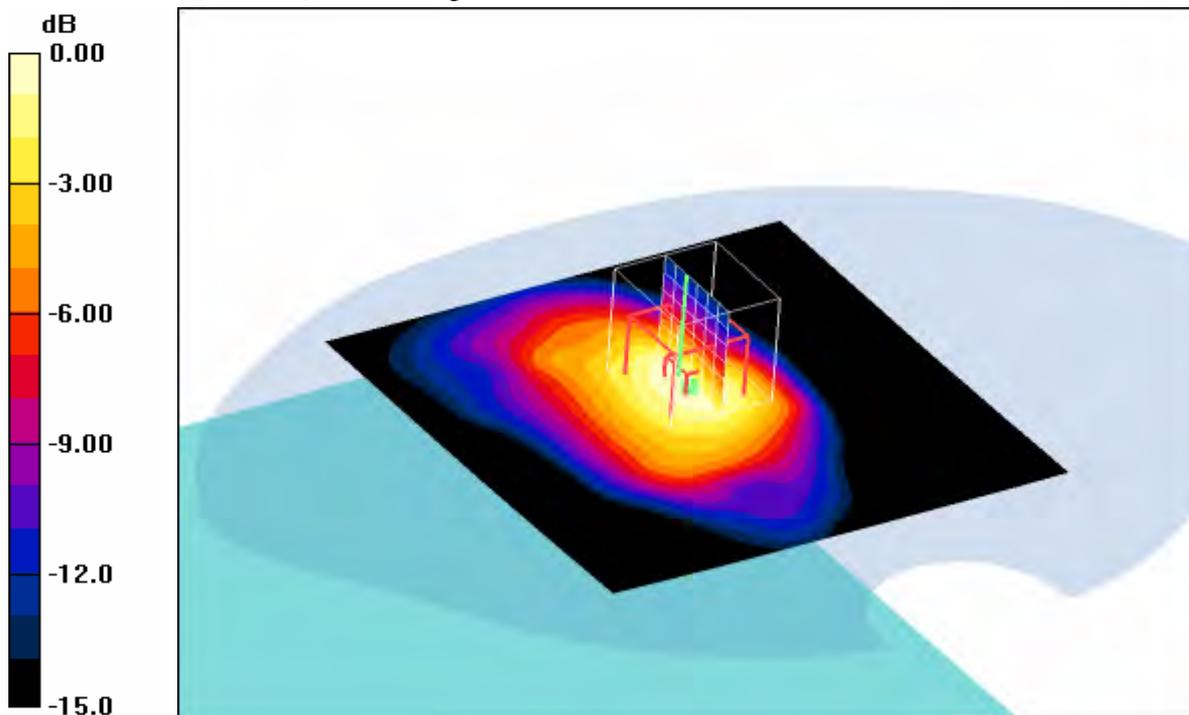
0 dB = 1.63mW/g

Additional information:

position or distance of DUT to SAM: 10 mm (without any distance of laptop to SAM)

ambient temperature: 23.7°C; liquid temperature: 23.5°C

CETECOM ICT Services GmbH

Date/Time: 2007-07-15 18:18:13Date/Time: 2007-07-15 18:28:20

P1528_OET65-Body1900 GPRS class 10 Compaq PP2130

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna
Communication System: PCS 1900 GPRS class 10; Frequency: 1850.2 MHz; Duty Cycle: 1:4
Medium: M1900 Medium parameters used: f = 1850.2 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Low internal antenna/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.82 mW/g

Underside position - Low internal antenna/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 27.0 V/m; Power Drift = 0.086 dB
Peak SAR (extrapolated) = 2.57 W/kg
SAR(1 g) = 1.54 mW/g; SAR(10 g) = 0.883 mW/g
Maximum value of SAR (measured) = 1.70 mW/g

0 dB = 1.70mW/g

Additional information:
position or distance of DUT to SAM: 10 mm (without any distance of laptop to SAM)
ambient temperature: 23.8°C; liquid temperature: 23.6°C

P1528_OET65-Body1900 GPRS class 10 Compaq PP2130

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna

Communication System: PCS 1900 GPRS class 10; Frequency: 1909.8 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used: f = 1909.8 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - High internal antenna/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.38 mW/g

Underside position - High internal antenna/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

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

Reference Value = 24.9 V/m; Power Drift = 0.103 dB

Peak SAR (extrapolated) = 2.04 W/kg

SAR(1 g) = 1.19 mW/g; SAR(10 g) = 0.672 mW/g

Maximum value of SAR (measured) = 1.32 mW/g
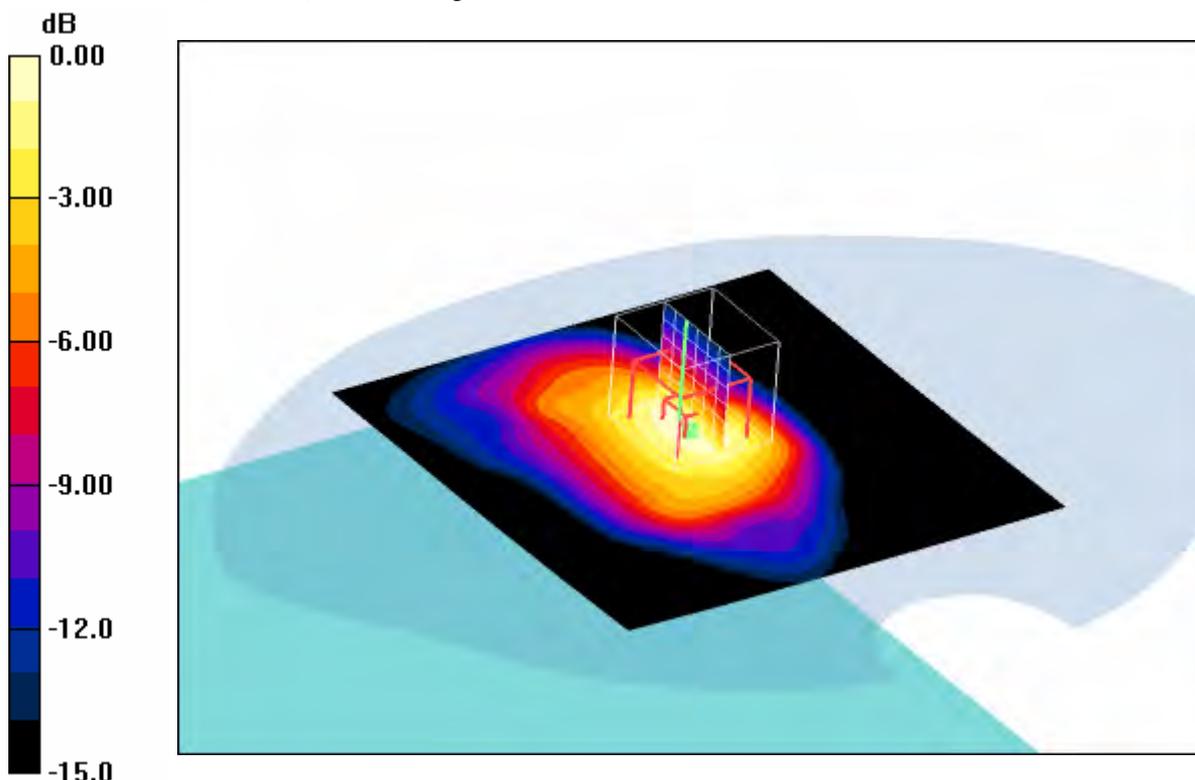
0 dB = 1.32mW/g

Additional information:

position or distance of DUT to SAM: 10 mm (without any distance of laptop to SAM)

ambient temperature: 23.7°C; liquid temperature: 23.5°C

Date/Time: 2007-07-15 16:57:45Date/Time: 2007-07-15 17:07:46

P1528_OET65-Body1900 GPRS class 10 Compaq PP2130

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; External antenna

Communication System: PCS 1900 GPRS class 10; Frequency: 1880 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.523 mW/g

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

Reference Value = 9.10 V/m; Power Drift = 0.070 dB

Peak SAR (extrapolated) = 0.856 W/kg

SAR(1 g) = 0.500 mW/g; SAR(10 g) = 0.278 mW/g

Maximum value of SAR (measured) = 0.561 mW/g
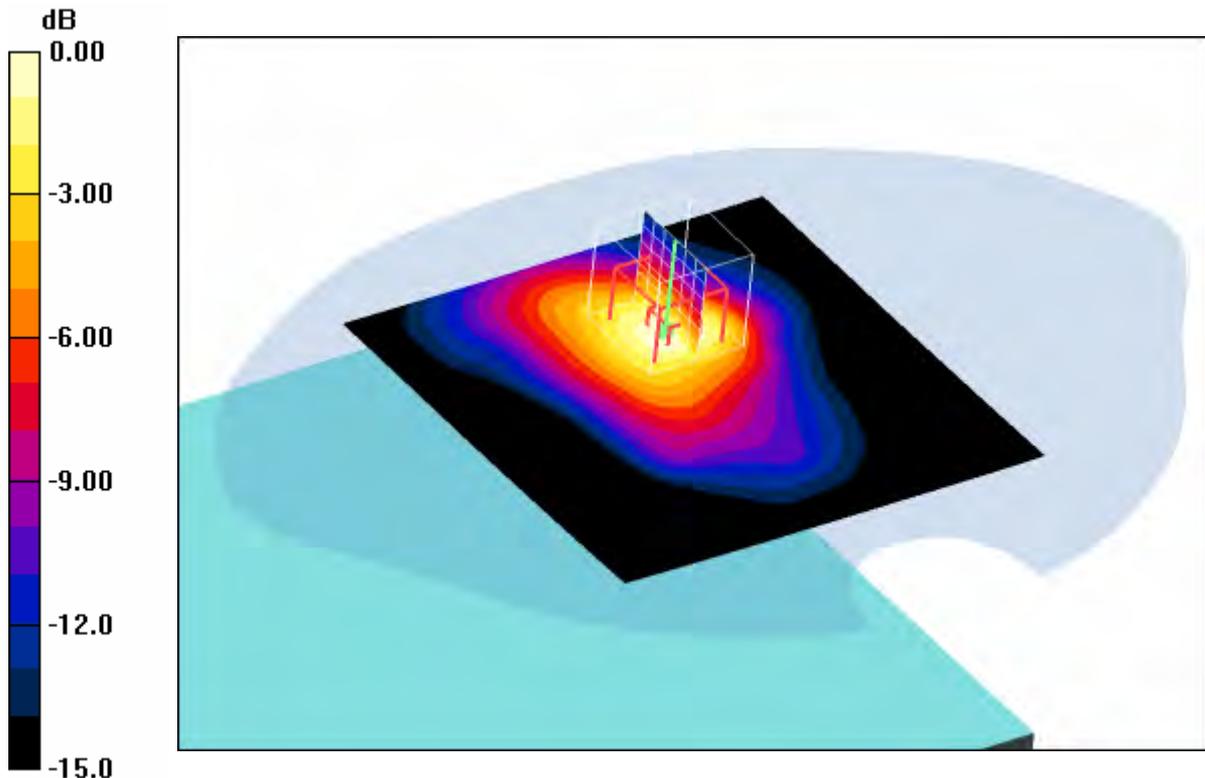
0 dB = 0.561mW/g

Additional information:

position or distance of DUT to SAM: 10 mm (without any distance of laptop to SAM)

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

Date/Time: 2007-07-15 22:21:02Date/Time: 2007-07-15 22:31:35

P1528_OET65-Body1900 GPRS class 10 Sony IRX 3190

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; External antenna

Communication System: PCS 1900 GPRS class 10; Frequency: 1880 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.450 mW/g

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

Reference Value = 11.2 V/m; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 0.644 W/kg

SAR(1 g) = 0.392 mW/g; SAR(10 g) = 0.229 mW/g

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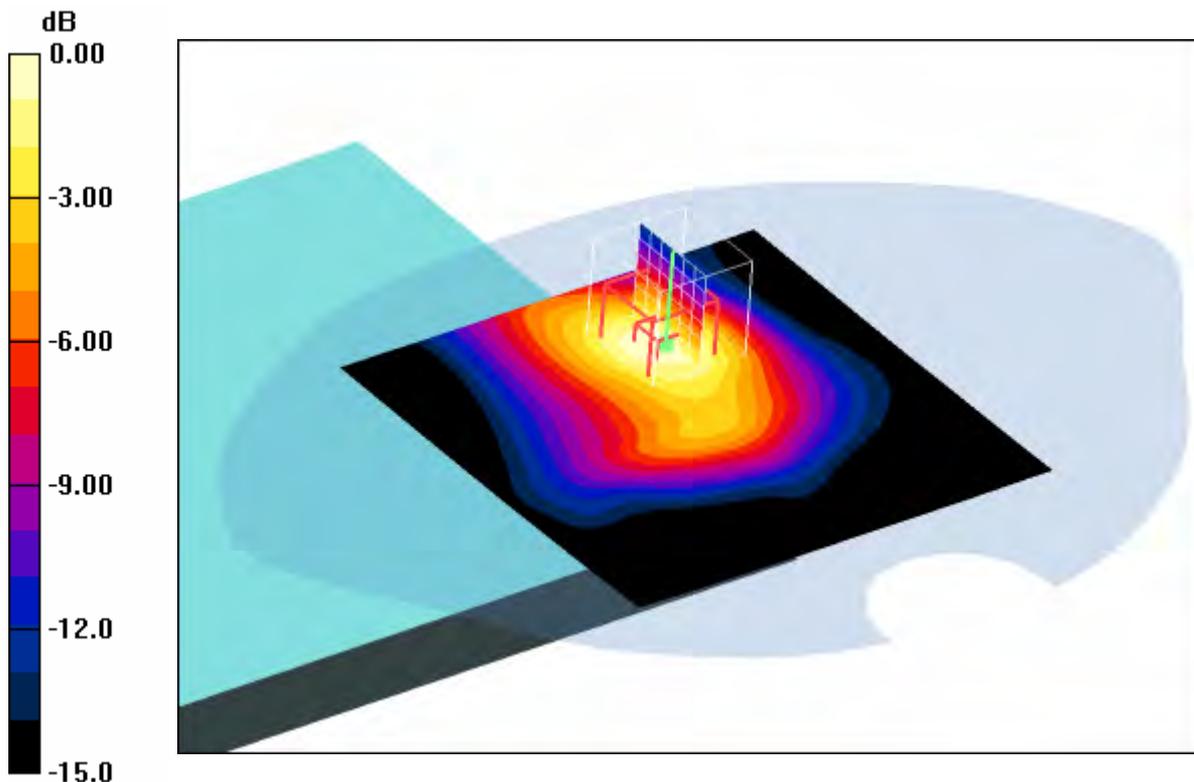
0 dB = 0.436mW/g

Additional information:

position or distance of DUT to SAM: 12 mm (without any distance of laptop to SAM)

ambient temperature: 23.9°C; liquid temperature: 23.5°C

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Date/Time: 2007-07-15 21:15:13Date/Time: 2007-07-15 21:25:36Date/Time: 2007-07-15 21:37:22

P1528_OET65-Body1900 GPRS class 10 Sony IRX 3190

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna

Communication System: PCS 1900 GPRS class 10; Frequency: 1850.2 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used: f = 1850.2 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Low internal antenna/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.72 mW/g

Underside position - Low internal antenna/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

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

Reference Value = 35.4 V/m; Power Drift = 0.024 dB

Peak SAR (extrapolated) = 2.51 W/kg

SAR(1 g) = 1.58 mW/g; SAR(10 g) = 0.918 mW/g

Maximum value of SAR (measured) = 1.75 mW/g

Underside position - Low internal antenna/Zoom Scan (7x7x7) (7x7x7)/Cube 1:

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

Reference Value = 35.4 V/m; Power Drift = 0.024 dB

Peak SAR (extrapolated) = 2.40 W/kg

SAR(1 g) = 1.27 mW/g; SAR(10 g) = 0.752 mW/g

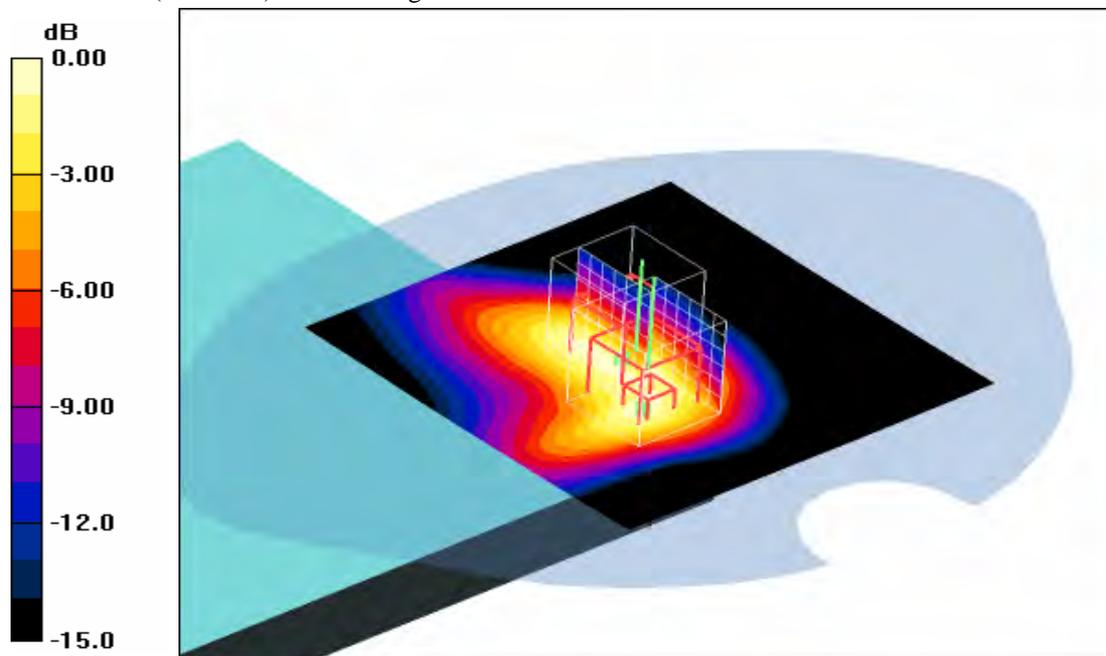Maximum value of SAR (measured) = 1.71 mW/g

0 dB = 1.71mW/g

Additional information:

position or distance of DUT to SAM: 12 mm (without any distance of laptop to SAM)

ambient temperature: 23.8°C; liquid temperature: 23.4°C

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P1528_OET65-Body1900 GPRS class 10 Sony IRX 3190

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna

Communication System: PCS 1900 GPRS class 10; Frequency: 1909.8 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used: f = 1909.8 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - High internal antenna/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.36 mW/g

Underside position - High internal antenna/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

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

Reference Value = 31.2 V/m; Power Drift = -0.035 dB

Peak SAR (extrapolated) = 1.96 W/kg

SAR(1 g) = 1.21 mW/g; SAR(10 g) = 0.698 mW/g

Maximum value of SAR (measured) = 1.32 mW/g
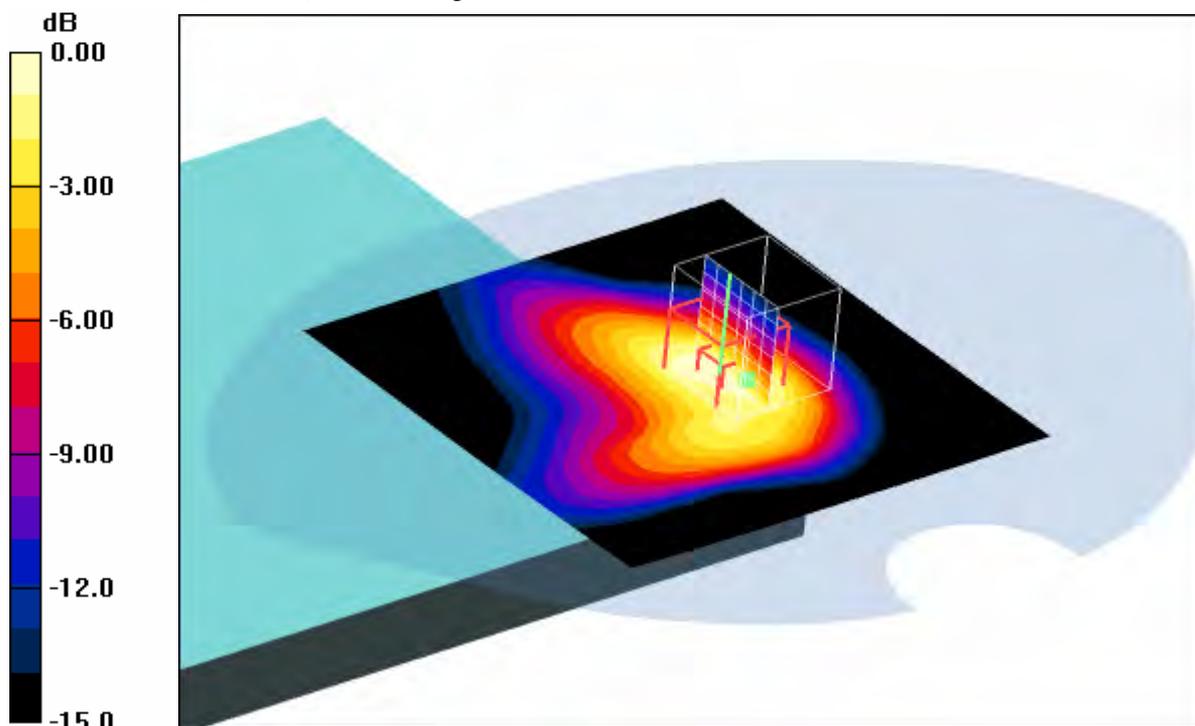
0 dB = 1.32mW/g

Additional information:

position or distance of DUT to SAM: 12 mm (without any distance of laptop to SAM)

ambient temperature: 23.9°C; liquid temperature: 23.5°C

Date/Time: 2007-07-15 20:37:34Date/Time: 2007-07-15 20:47:40Date/Time: 2007-07-15 20:59:25

P1528_OET65-Body1900 GPRS class 10 Sony IRX 3190

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna

Communication System: PCS 1900 GPRS class 10; Frequency: 1880 MHz;Duty Cycle: 1:4

Medium: M1900 Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.63 mW/g

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

Reference Value = 34.3 V/m; Power Drift = 0.081 dB

Peak SAR (extrapolated) = 2.36 W/kg

SAR(1 g) = 1.49 mW/g; SAR(10 g) = 0.864 mW/g

Maximum value of SAR (measured) = 1.63 mW/g

## Underside position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.3 V/m; Power Drift = 0.081 dB

Peak SAR (extrapolated) = 2.04 W/kg

SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.678 mW/g

Maximum value of SAR (measured) = 1.41 mW/g

0 dB = 1.41mW/g

Additional information:

position or distance of DUT to SAM: 12 mm (without any distance of laptop to SAM)

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

P1528_OET65-Body1900 GPRS class 10 Sony IRX 3190 EGPRS

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna

Communication System: PCS 1900 EGPRS class 8; Frequency: 1850.2 MHz; Duty Cycle: 1:4

Medium: M1900 Medium parameters used: f = 1850.2 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Low internal antenna/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.816 mW/g

Underside position - Low internal antenna/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

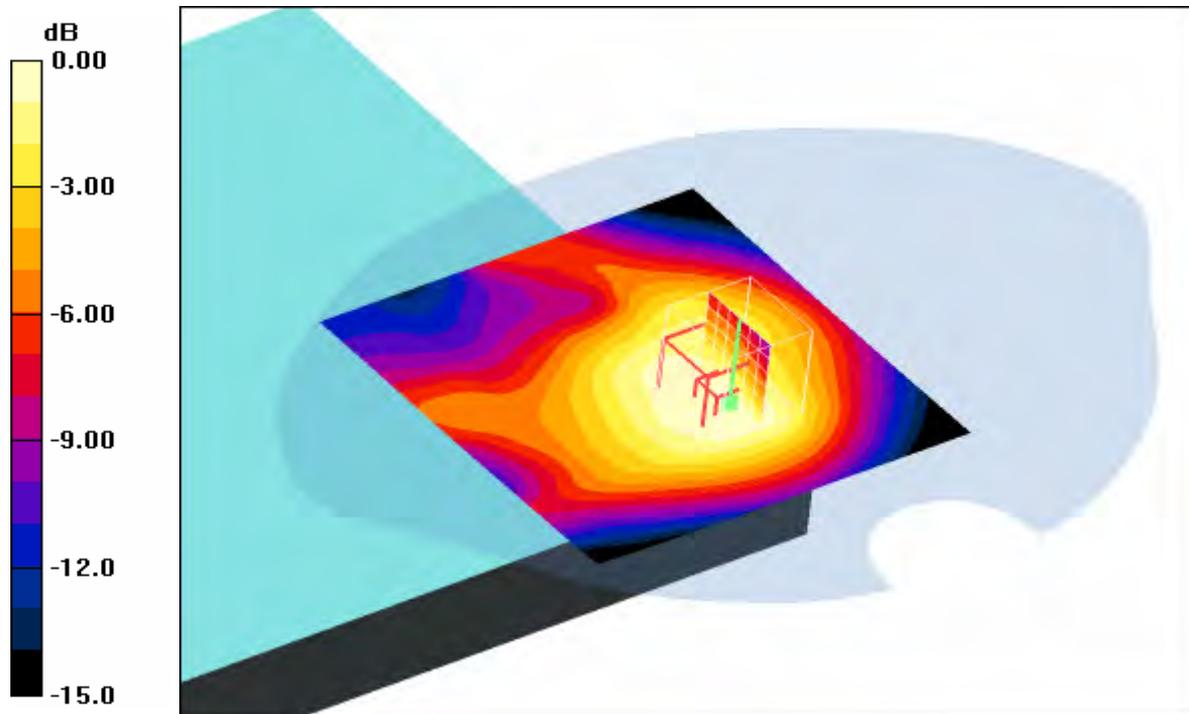Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.7 V/m; Power Drift = -0.012 dB

Peak SAR (extrapolated) = 1.15 W/kg

SAR(1 g) = 0.710 mW/g; SAR(10 g) = 0.408 mW/g

Maximum value of SAR (measured) = 0.789 mW/g

Underside position - Low internal antenna/Zoom Scan (7x7x7) (7x7x7)/Cube 1:

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

Reference Value = 18.7 V/m; Power Drift = -0.012 dB

Peak SAR (extrapolated) = 0.910 W/kg

SAR(1 g) = 0.562 mW/g; SAR(10 g) = 0.330 mW/g
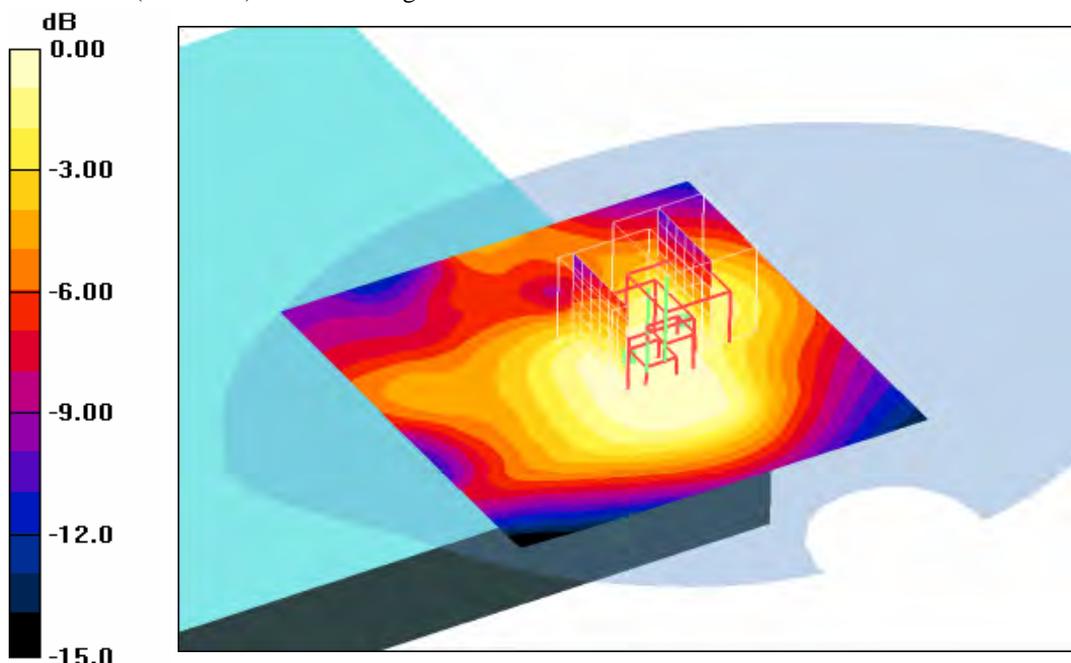
Maximum value of SAR (measured) = 0.631 mW/g
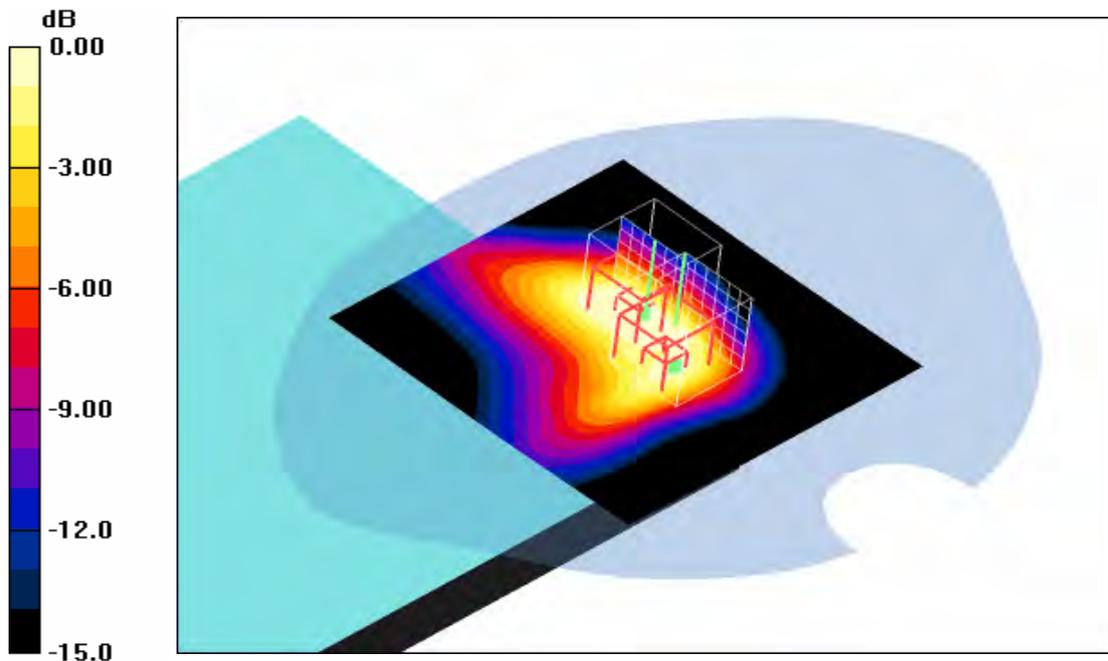
0 dB = 0.631mW/g

Additional information:

position or distance of DUT to SAM: 12 mm (without any distance of laptop to SAM)

ambient temperature: 23.8°C; liquid temperature: 23.4°C

Annex 2.3   WCDMA / HSDPA 850

Date/Time: 2007-07-17 20:02:12Date/Time: 2007-07-17 20:12:06

P1528_OET65-Body-WCDMA850 Acer Aspire 3610

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna

Communication System: UMTS band V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle internal antenna/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.354 mW/g

Underside position - Middle internal antenna/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

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

Reference Value = 15.4 V/m; Power Drift = -0.066 dB

Peak SAR (extrapolated) = 0.445 W/kg

SAR(1 g) = 0.340 mW/g; SAR(10 g) = 0.250 mW/g

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

0 dB = 0.358mW/g

Additional information:

position or distance of DUT to SAM: 16 mm (without any distance of laptop to SAM)

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

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P1528_OET65-Body-WCDMA850 Acer Aspire 3610

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; External antenna

Communication System: UMTS band V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 14.8 V/m; Power Drift = 0.163 dB

Peak SAR (extrapolated) = 0.364 W/kg

SAR(1 g) = 0.296 mW/g; SAR(10 g) = 0.213 mW/g

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

Underside position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.8 V/m; Power Drift = 0.163 dB

Peak SAR (extrapolated) = 0.358 W/kg

SAR(1 g) = 0.257 mW/g; SAR(10 g) = 0.178 mW/g

Maximum value of SAR (measured) = 0.298 mW/g

0 dB = 0.298mW/g

Additional information:

position or distance of DUT to SAM: 16 mm (without any distance of laptop to SAM)

ambient temperature: 23.2°C; liquid temperature: 22.5°C

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Date/Time: 2007-07-17 20:27:45Date/Time: 2007-07-17 20:38:02

P1528_OET65-Body-WCDMA850 Acer Aspire 3610

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna HSDPA

Communication System: UMTS band V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle internal antenna HSDPA/Area Scan (91x91x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.327 mW/g

## Underside position - Middle internal antenna HSDPA/Zoom Scan (7x7x7) (7x7x7)/Cube

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

Reference Value = 14.6 V/m; Power Drift = 0.184 dB

Peak SAR (extrapolated) = 0.421 W/kg

SAR(1 g) = 0.315 mW/g; SAR(10 g) = 0.231 mW/g

Maximum value of SAR (measured) = 0.333 mW/g
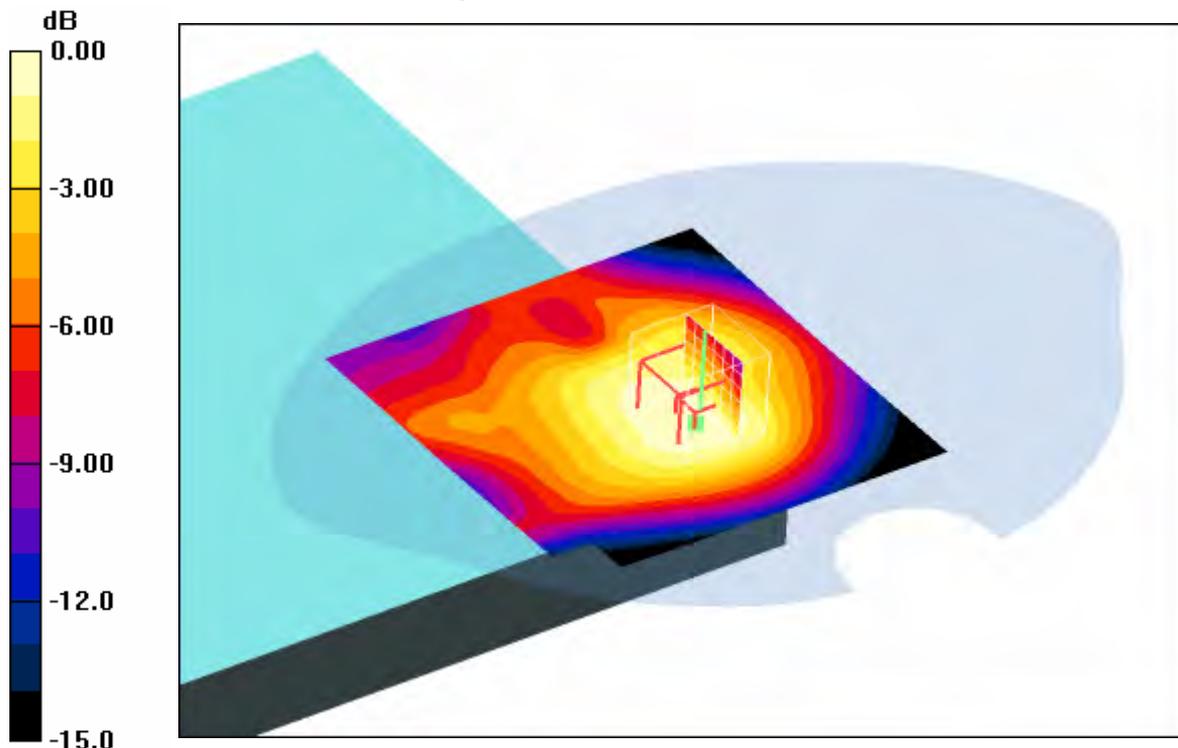
0 dB = 0.333mW/g

Additional information:

position or distance of DUT to SAM: 16 mm (without any distance of laptop to SAM)

ambient temperature: 23.2°C; liquid temperature: 22.4°C

Date/Time: 2007-07-17 21:32:20Date/Time: 2007-07-17 21:42:13

P1528_OET65-Body-WCDMA850 Compaq PP2130

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna

Communication System: UMTS band V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle internal antenna/Area Scan (91x91x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.414 mW/g

Underside position - Middle internal antenna/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

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

Reference Value = 18.6 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.673 W/kg

SAR(1 g) = 0.406 mW/g; SAR(10 g) = 0.247 mW/g

Maximum value of SAR (measured) = 0.440 mW/g
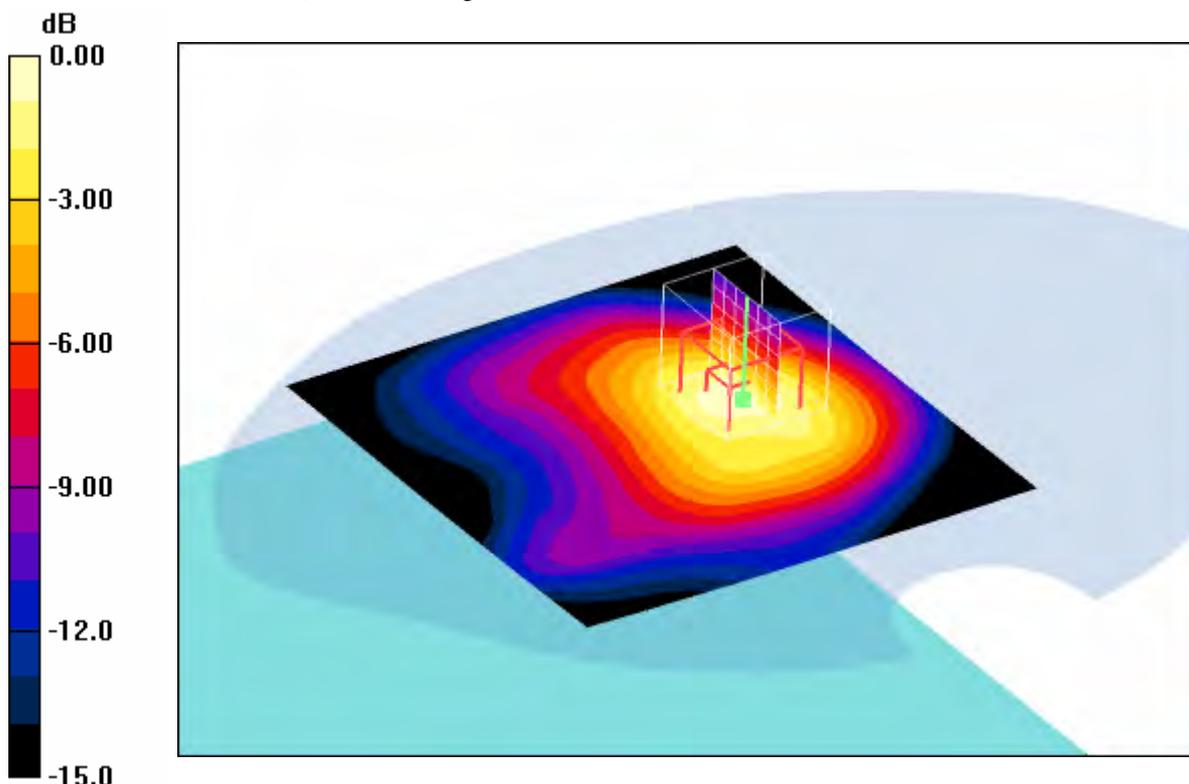
0 dB = 0.440mW/g

Additional information:

position or distance of DUT to SAM: 10 mm (without any distance of laptop to SAM)

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

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Date/Time: 2007-07-17 21:04:39Date/Time: 2007-07-17 21:14:35

P1528_OET65-Body-WCDMA850 Compaq PP2130

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; External antenna

Communication System: UMTS band V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 15.7 V/m; Power Drift = 0.120 dB

Peak SAR (extrapolated) = 0.666 W/kg

SAR(1 g) = 0.423 mW/g; SAR(10 g) = 0.261 mW/g

Maximum value of SAR (measured) = 0.460 mW/g
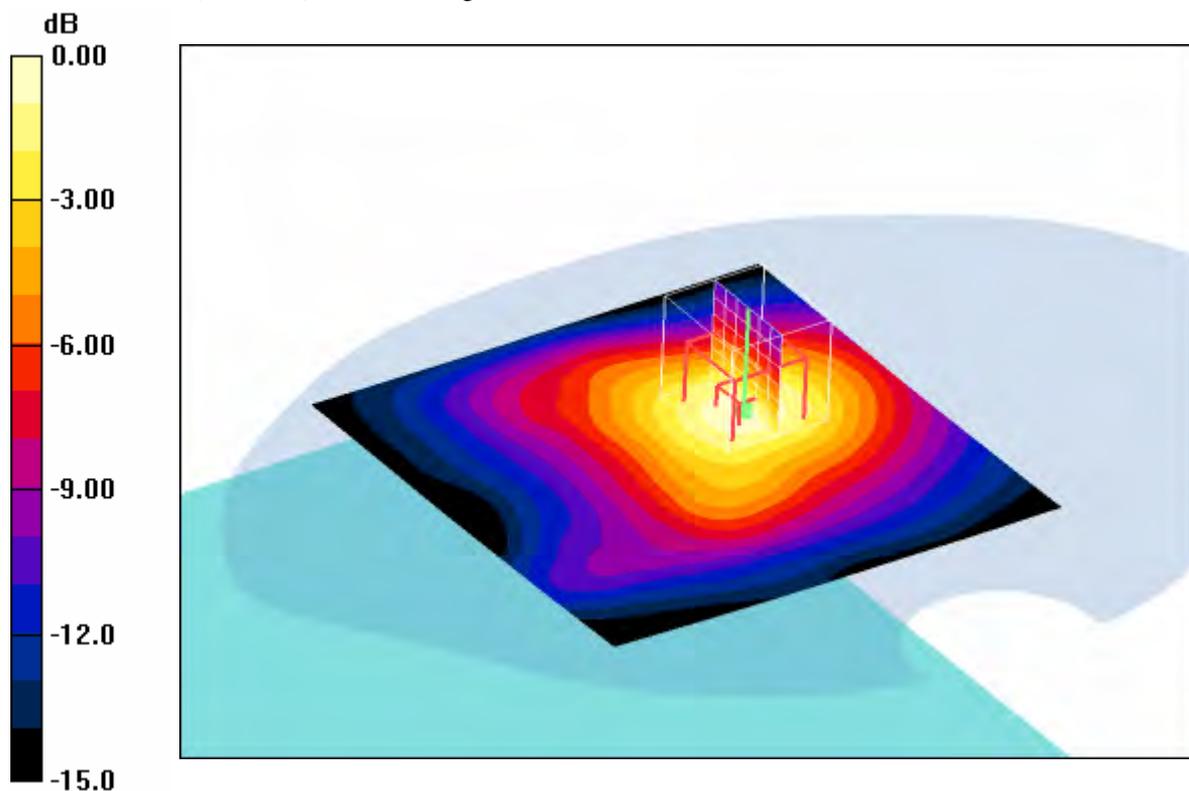
0 dB = 0.460mW/g

Additional information:

position or distance of DUT to SAM: 10 mm (without any distance of laptop to SAM)

ambient temperature: 23.0°C; liquid temperature: 22.3°C

Date/Time: 2007-07-17 21:57:28Date/Time: 2007-07-17 22:07:27

P1528_OET65-Body-WCDMA850 Compaq PP2130

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna HSDPA

Communication System: UMTS band V; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle internal antenna HSDPA/Area Scan (91x91x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.396 mW/g

Underside position - Middle internal antenna HSDPA/Zoom Scan (7x7x7) (7x7x7)/Cube

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

Reference Value = 17.9 V/m; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 0.623 W/kg

SAR(1 g) = 0.377 mW/g; SAR(10 g) = 0.231 mW/g

Maximum value of SAR (measured) = 0.408 mW/g
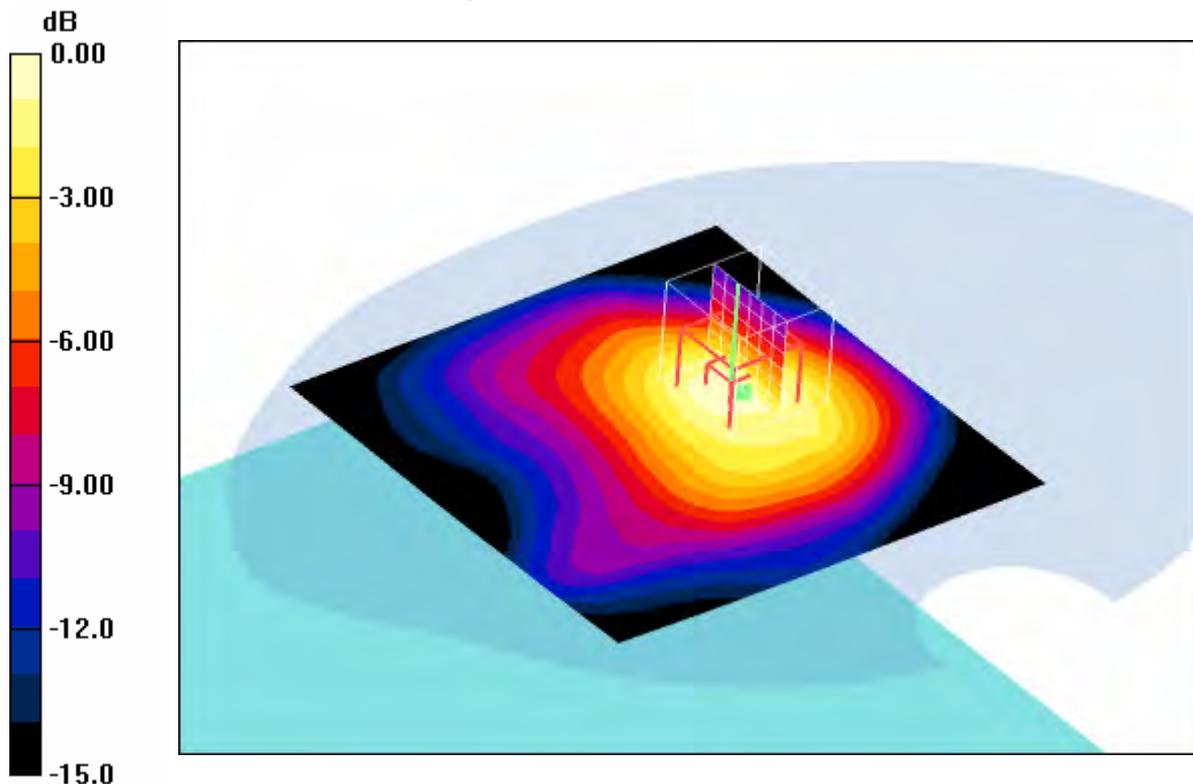
0 dB = 0.408mW/g

Additional information:

position or distance of DUT to SAM: 10 mm (without any distance of laptop to SAM)

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

Date/Time: 2007-07-17 22:22:11Date/Time: 2007-07-17 22:31:11Date/Time: 2007-07-17 22:42:44

P1528_OET65-Body-WCDMA850 Sony IRX 3190

DUT: Sony Ericsson; Type: PC300; Serial: 00460102385770-0; Internal antenna
Communication System: UMTS band V; Frequency: 836.4 MHz; Duty Cycle: 1:1
Medium: M850 Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle internal antenna/Area Scan (91x91x1): Measurement grid:

dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.485 mW/g

Underside position - Middle internal antenna/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.6 V/m; Power Drift = 0.079 dB
Peak SAR (extrapolated) = 0.692 W/kg
SAR(1 g) = 0.446 mW/g; SAR(10 g) = 0.301 mW/g
Maximum value of SAR (measured) = 0.487 mW/g

Underside position - Middle internal antenna/Zoom Scan (7x7x7) (7x7x7)/Cube 1:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.6 V/m; Power Drift = 0.079 dB
Peak SAR (extrapolated) = 0.631 W/kg
SAR(1 g) = 0.429 mW/g; SAR(10 g) = 0.285 mW/g
Maximum value of SAR (measured) = 0.466 mW/g
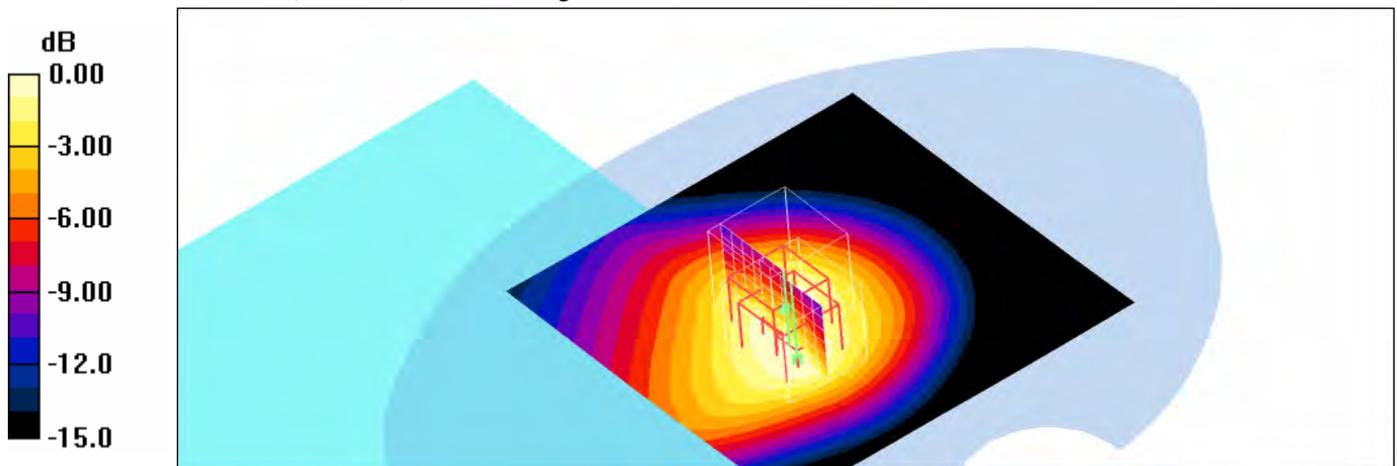
0 dB = 0.466mW/g

Additional information:
position or distance of DUT to SAM: 12 mm distance (without any distance of laptop to SAM)
ambient temperature: 22.8°C; liquid temperature: 22.7°C

Date/Time: 2007-07-17 23:04:57Date/Time: 2007-07-17 23:14:56Date/Time: 2007-07-17 23:26:29

P1528_OET65-Body-WCDMA850 Sony IRX 3190

DUT: Sony Ericsson; Type: PC300; Serial: 00460102385770-0; External antenna

Communication System: UMTS band V; Frequency: 836.4 MHz;Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.454 mW/g

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

Reference Value = 17.2 V/m; Power Drift = 0.050 dB

Peak SAR (extrapolated) = 0.657 W/kg

SAR(1 g) = 0.427 mW/g; SAR(10 g) = 0.277 mW/g

Maximum value of SAR (measured) = 0.459 mW/g

Underside position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.2 V/m; Power Drift = 0.050 dB

Peak SAR (extrapolated) = 0.540 W/kg

SAR(1 g) = 0.372 mW/g; SAR(10 g) = 0.250 mW/g

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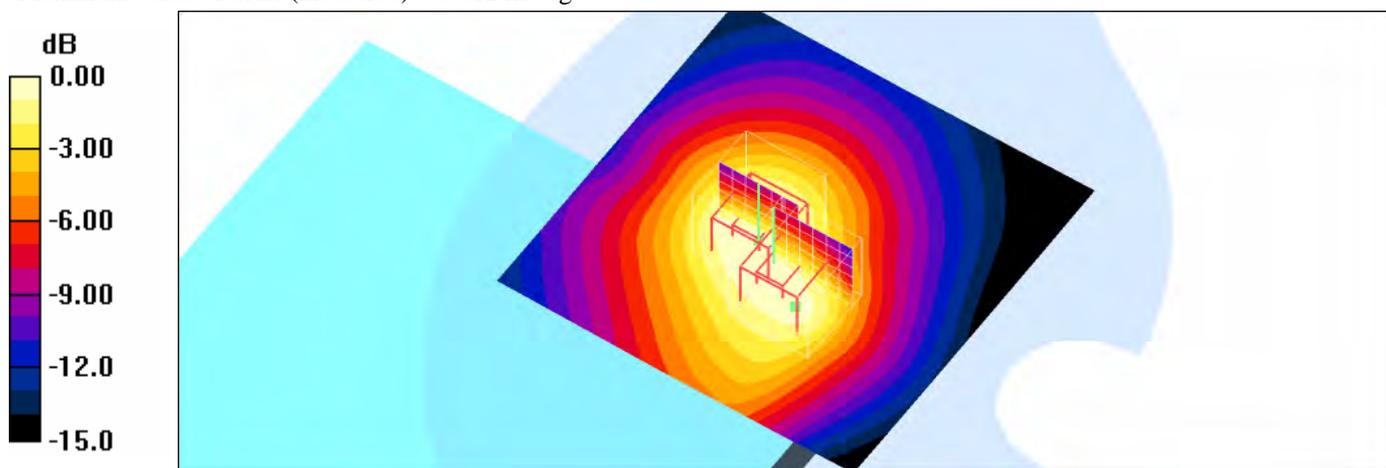
0 dB = 0.412mW/g

Additional information:

position or distance of DUT to SAM (if not standard head positions) : 12 mm distance (without any distance of laptop to SAM)

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

Date/Time: 2007-07-17 23:49:46Date/Time: 2007-07-17 23:59:54Date/Time: 2007-07-18 00:11:28

P1528_OET65-Body-WCDMA850 Sony IRX 3190

DUT: Sony Ericsson; Type: PC300; Serial: 00460102385770-0; Internal antenna HSDPA

Communication System: UMTS band V; Frequency: 836.4 MHz;Duty Cycle: 1:1

Medium: M850 Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.99 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(6.07, 6.07, 6.07); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle internal antenna HSDPA/Area Scan (91x91x1): Measurement

grid: dx=15mm, dy=15mm

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

Underside position - Middle internal antenna HSDPA/Zoom Scan (7x7x7) (7x7x7)/Cube

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

Reference Value = 17.6 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 0.589 W/kg

SAR(1 g) = 0.395 mW/g; SAR(10 g) = 0.269 mW/g

Maximum value of SAR (measured) = 0.428 mW/g

Underside position - Middle internal antenna HSDPA/Zoom Scan (7x7x7) (7x7x7)/Cube

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

Reference Value = 17.6 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 0.550 W/kg

SAR(1 g) = 0.383 mW/g; SAR(10 g) = 0.254 mW/g

Maximum value of SAR (measured) = 0.418 mW/g
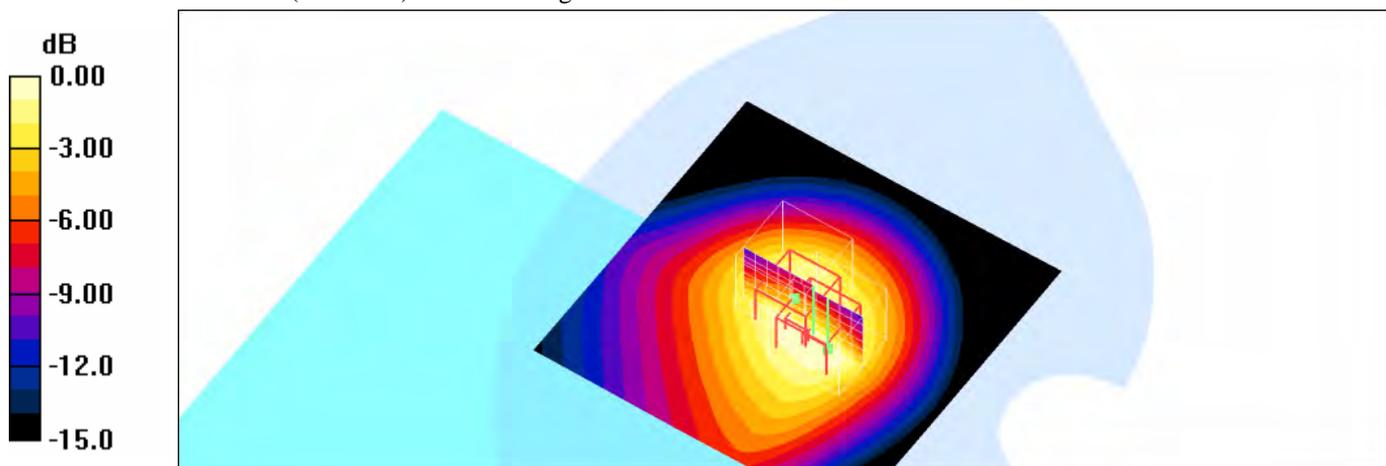
0 dB = 0.418mW/g

Additional information:

position or distance of DUT to SAM (if not standard head positions) : 12 mm distance (without any distance of laptop to SAM)

ambient temperature: 23.1°C; liquid temperature: 22.8°C

Annex 2.4 WCDMA / HSDPA 1900

Date/Time: 2007-07-12 19:03:49Date/Time: 2007-07-12 19:14:10Date/Time: 2007-07-12 19:26:44

P1528_OET65-Body-WCDMA1900 Acer Aspire_3610

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna

Communication System: WCDMA US; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 14.1 V/m; Power Drift = 0.027 dB

Peak SAR (extrapolated) = 1.27 W/kg

SAR(1 g) = 0.748 mW/g; SAR(10 g) = 0.420 mW/g

Maximum value of SAR (measured) = 0.832 mW/g

### Underside position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.1 V/m; Power Drift = 0.027 dB

Peak SAR (extrapolated) = 0.735 W/kg

SAR(1 g) = 0.528 mW/g; SAR(10 g) = 0.352 mW/g

Maximum value of SAR (measured) = 0.566 mW/g
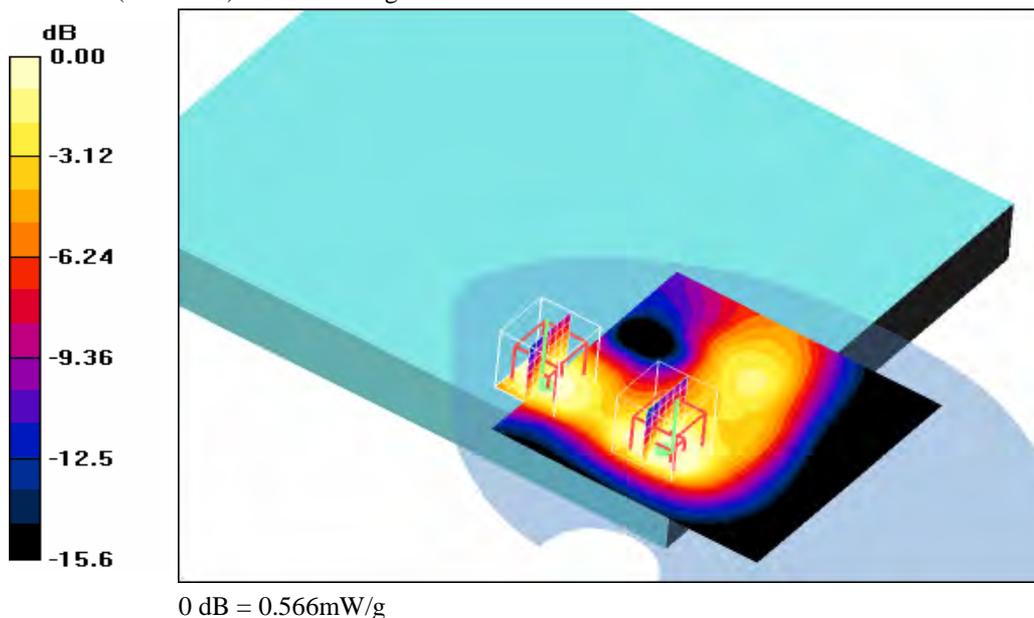
0 dB = 0.566mW/g

Additional information:

position or distance of DUT to SAM: 16 mm (without any distance of laptop to SAM)

ambient temperature: 23.4°C; liquid temperature: 22.8°C

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Date/Time: 2007-07-12 17:49:22Date/Time: 2007-07-12 17:59:08Date/Time: 2007-07-12 18:12:31

P1528_OET65-Body-WCDMA1900 Acer Aspire_3610

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; External antenna
Communication System: WCDMA US; Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: M1900 Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle/Area Scan (91x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.310 mW/g

Underside position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm,
dy=5mm, dz=5mm
Reference Value = 14.6 V/m; Power Drift = -0.032 dB
Peak SAR (extrapolated) = 0.428 W/kg
SAR(1 g) = 0.251 mW/g; SAR(10 g) = 0.146 mW/g
Maximum value of SAR (measured) = 0.279 mW/g

## Underside position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm,
dy=5mm, dz=5mm
Reference Value = 14.6 V/m; Power Drift = -0.032 dB
Peak SAR (extrapolated) = 0.406 W/kg
SAR(1 g) = 0.263 mW/g; SAR(10 g) = 0.157 mW/g
Maximum value of SAR (measured) = 0.291 mW/g
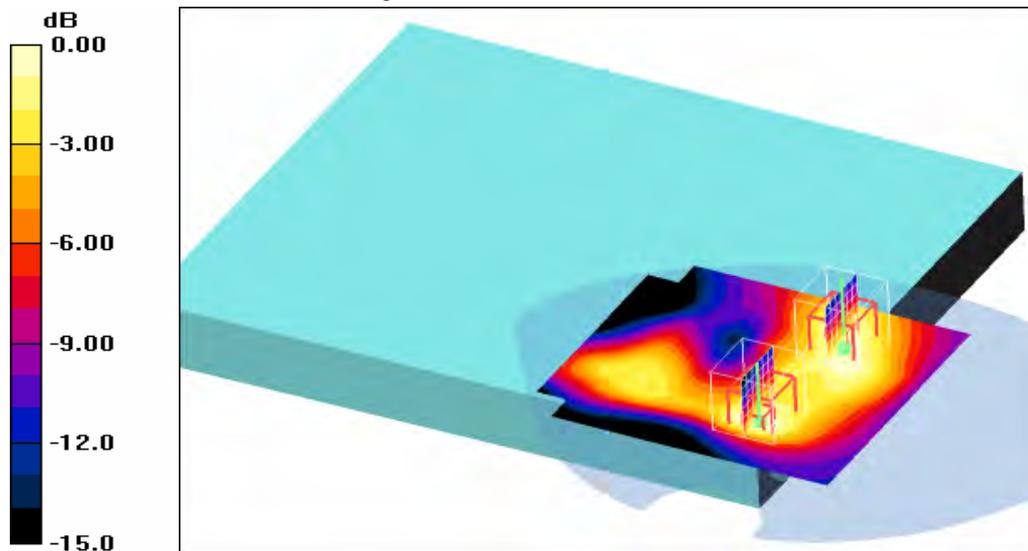
0 dB = 0.291mW/g

Additional information:
position or distance of DUT to SAM: 16 mm (without any distance of laptop to SAM)
ambient temperature: 23.4°C; liquid temperature: 22.8°C

Date/Time: 2007-07-12 19:34:52Date/Time: 2007-07-12 19:45:27Date/Time: 2007-07-12 19:57:05

P1528_OET65-Body-WCDMA1900 Acer Aspire 3610

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna HSDPA
Communication System: WCDMA US; Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: M1900 Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle internal antenna HSDPA/Area Scan (91x91x1): Measurement

grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.786 mW/g

Underside position - Middle internal antenna HSDPA/Zoom Scan (7x7x7) (7x7x7)/Cube

0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.0 V/m; Power Drift = 0.044 dB
Peak SAR (extrapolated) = 1.15 W/kg
SAR(1 g) = 0.691 mW/g; SAR(10 g) = 0.396 mW/g
Maximum value of SAR (measured) = 0.767 mW/g

Underside position - Middle internal antenna HSDPA/Zoom Scan (7x7x7) (7x7x7)/Cube

1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.0 V/m; Power Drift = 0.044 dB
Peak SAR (extrapolated) = 0.709 W/kg
SAR(1 g) = 0.530 mW/g; SAR(10 g) = 0.355 mW/g
Maximum value of SAR (measured) = 0.582 mW/g
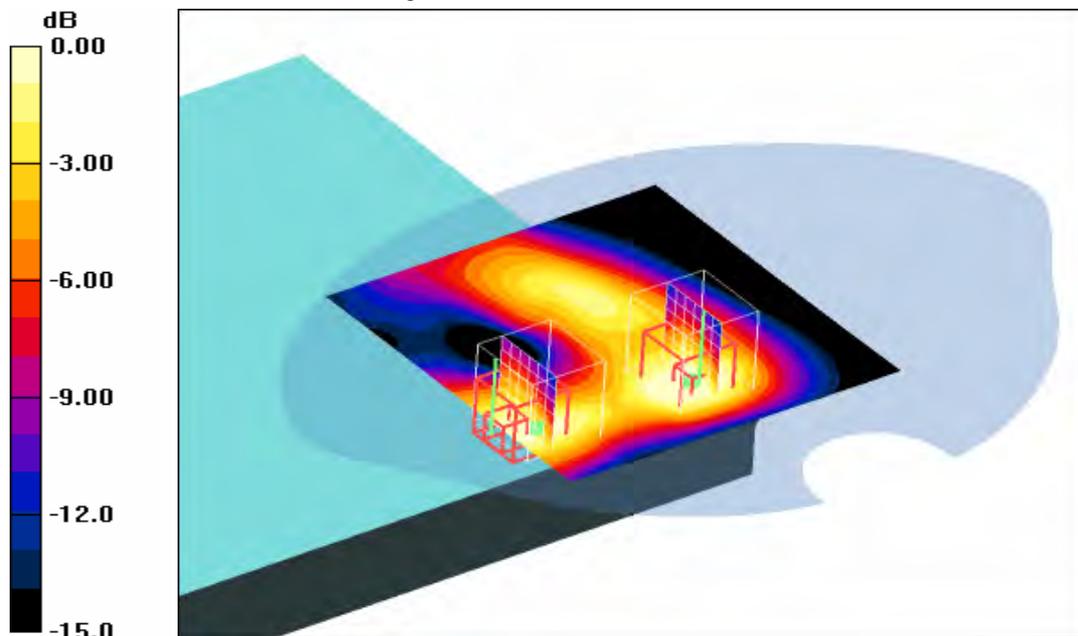
0 dB = 0.582mW/g

Additional information:
position or distance of DUT to SAM: 16 mm (without any distance of laptop to SAM)
ambient temperature: 23.2°C; liquid temperature: 22.4°C

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P1528_OET65-Body-WCDMA1900 Compaq PP2130

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna

Communication System: WCDMA US; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.13 mW/g

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

dy=5mm, dz=5mm

Reference Value = 22.2 V/m; Power Drift = -0.070 dB

Peak SAR (extrapolated) = 1.63 W/kg

SAR(1 g) = 0.944 mW/g; SAR(10 g) = 0.544 mW/g

Maximum value of SAR (measured) = 1.07 mW/g
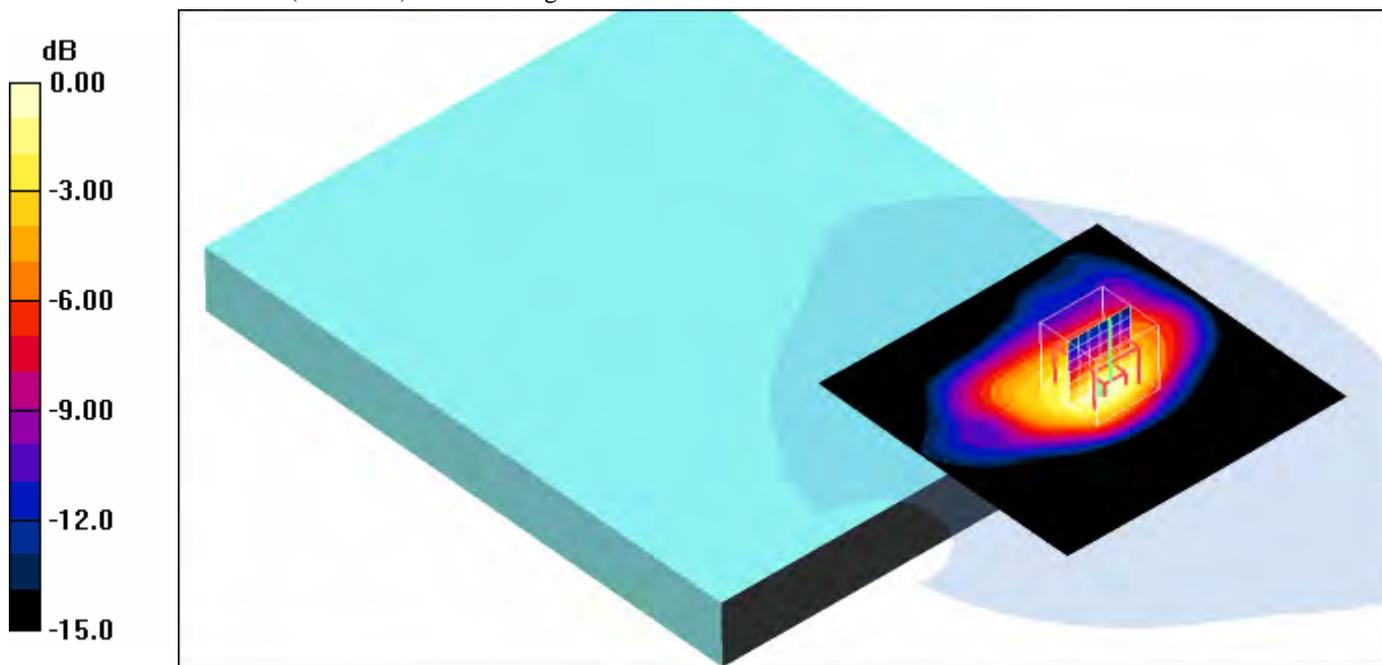
0 dB = 1.07mW/g

Additional information:

position or distance of DUT to SAM: 10 mm (without any distance of laptop to SAM)

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

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Date/Time: 2007-07-12 16:32:16Date/Time: 2007-07-12 16:42:19

P1528_OET65-Body-WCDMA1900 Compaq PP2130

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna

Communication System: WCDMA US; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated): f = 1852.5 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Low internal antenna/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

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

## Underside position - Low internal antenna/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

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

Reference Value = 21.4 V/m; Power Drift = 0.073 dB

Peak SAR (extrapolated) = 1.56 W/kg

SAR(1 g) = 0.927 mW/g; SAR(10 g) = 0.540 mW/g

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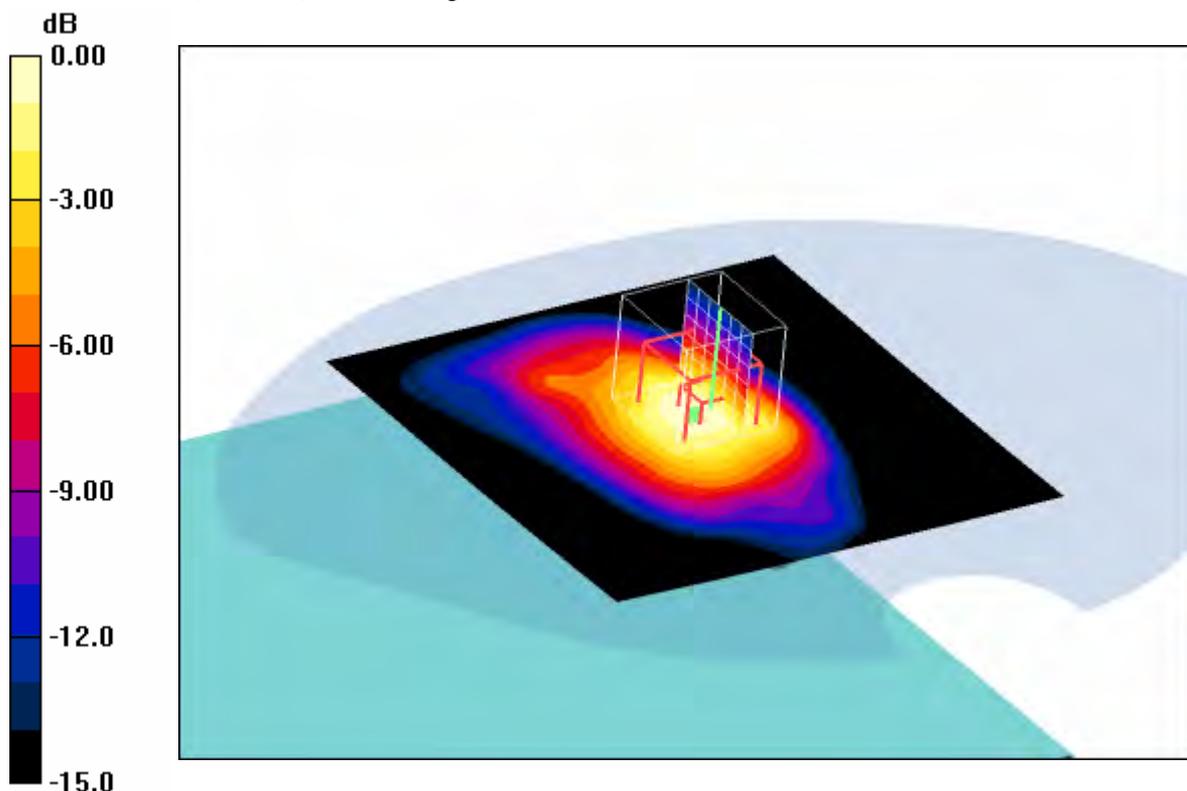
0 dB = 1.05mW/g

Additional information:

position or distance of DUT to SAM: 10 mm (without any distance of laptop to SAM)

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

CETECOM ICT Services GmbH

Date/Time: 2007-07-12 16:58:43Date/Time: 2007-07-12 17:22:45

P1528_OET65-Body-WCDMA1900 Compaq PP2130

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna
Communication System: WCDMA US; Frequency: 1907.6 MHz; Duty Cycle: 1:1
Medium: M1900 Medium parameters used (interpolated): f = 1907.6 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - High internal antenna/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.968 mW/g

Underside position - High internal antenna/Zoom Scan (7x7x7) (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
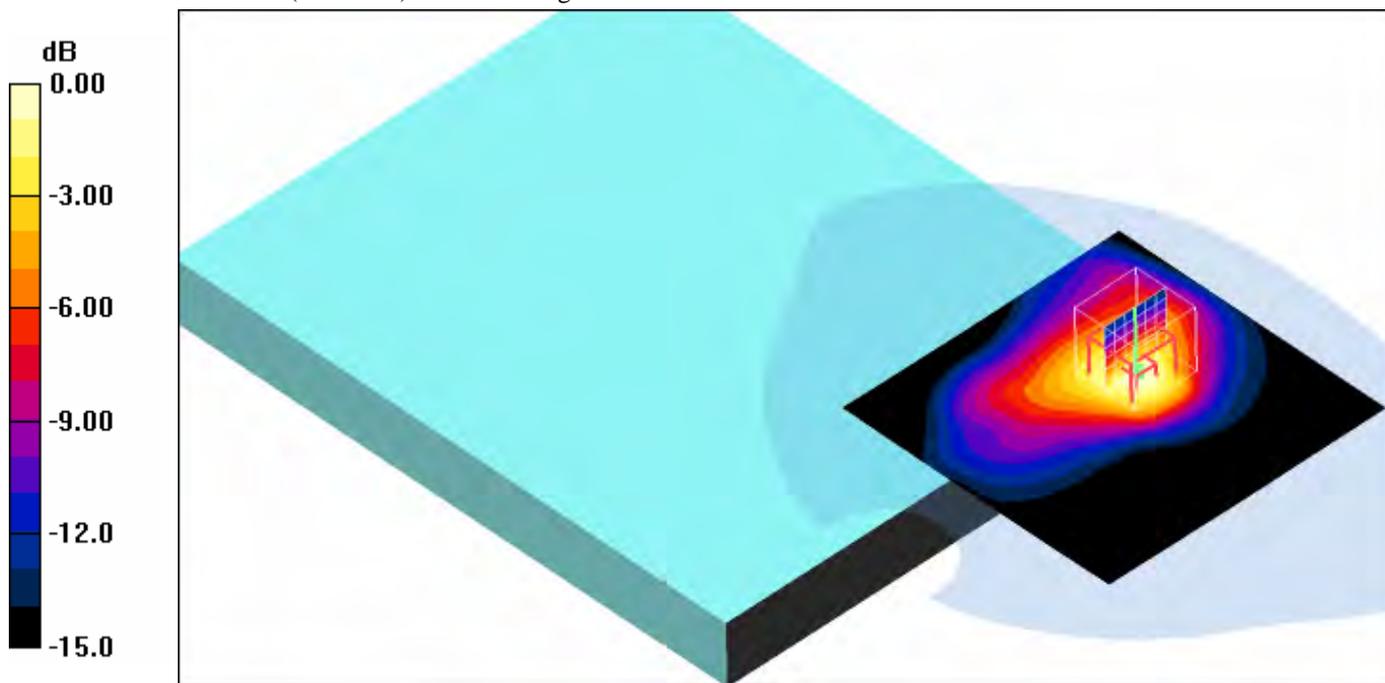Reference Value = 22.6 V/m; Power Drift = -0.174 dB
Peak SAR (extrapolated) = 1.61 W/kg
SAR(1 g) = 0.925 mW/g; SAR(10 g) = 0.525 mW/g
Maximum value of SAR (measured) = 1.05 mW/g
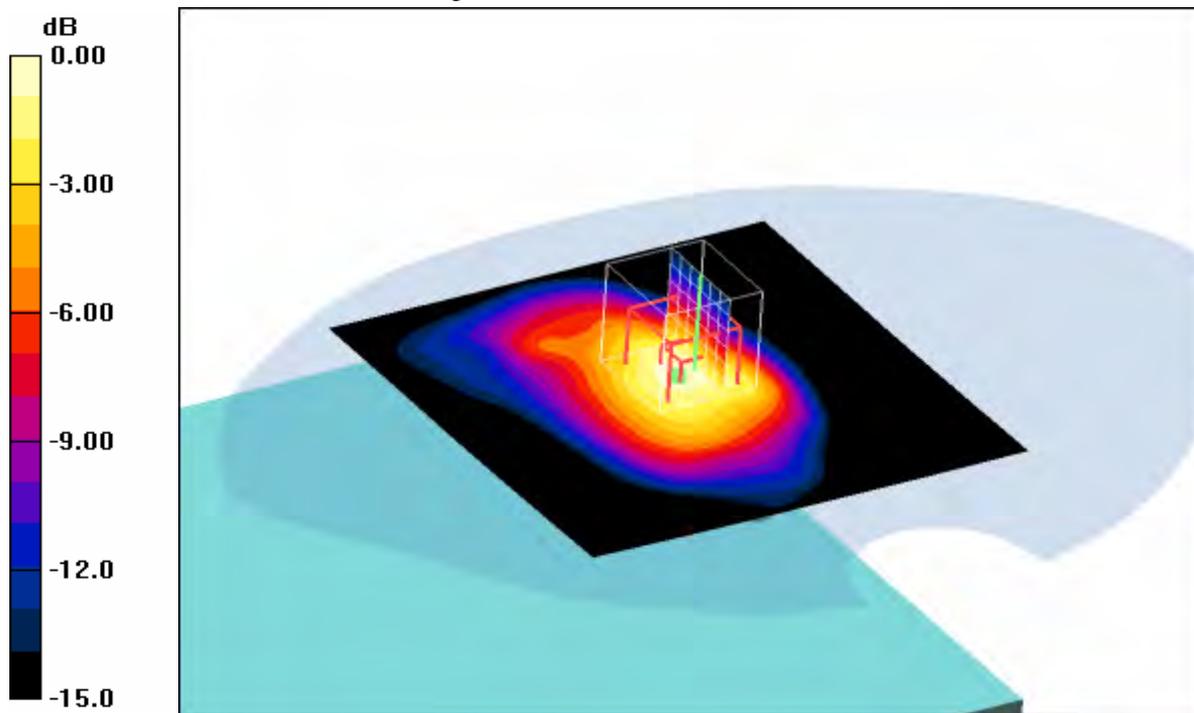
0 dB = 1.05mW/g

Additional information:
position or distance of DUT to SAM: 10 mm (without any distance of laptop to SAM)
ambient temperature: 23.3°C; liquid temperature: 22.7°C

CETECOM ICT Services GmbH

Date/Time: 2007-07-12 15:41:22Date/Time: 2007-07-12 15:51:16

P1528_OET65-Body-WCDMA1900 Compaq PP2130

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; External antenna

Communication System: WCDMA US; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.52$ mho/m; $\varepsilon_r = 52.5$; $\rho = 1000$ kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.705 mW/g

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

Reference Value = 11.1 V/m; Power Drift = 0.088 dB

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.640 mW/g; SAR(10 g) = 0.358 mW/g

Maximum value of SAR (measured) = 0.702 mW/g

0 dB = 0.702mW/g

Additional information:

position or distance of DUT to SAM: 10 mm (without any distance of laptop to SAM)

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

CETECOM ICT Services GmbH

P1528_OET65-Body-WCDMA1900 Compaq PP2130

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna HSDPA

Communication System: WCDMA US; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.52$ mho/m; $\varepsilon_r = 52.5$; $\rho = 1000$ kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle internal antenna HSDPA/Area Scan (91x91x1): Measurement

grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.874 mW/g

Underside position - Middle internal antenna HSDPA/Zoom Scan (7x7x7) (7x7x7)/Cube

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

Reference Value = 18.9 V/m; Power Drift = 0.027 dB

Peak SAR (extrapolated) = 1.27 W/kg

SAR(1 g) = 0.764 mW/g; SAR(10 g) = 0.444 mW/g

Maximum value of SAR (measured) = 0.837 mW/g
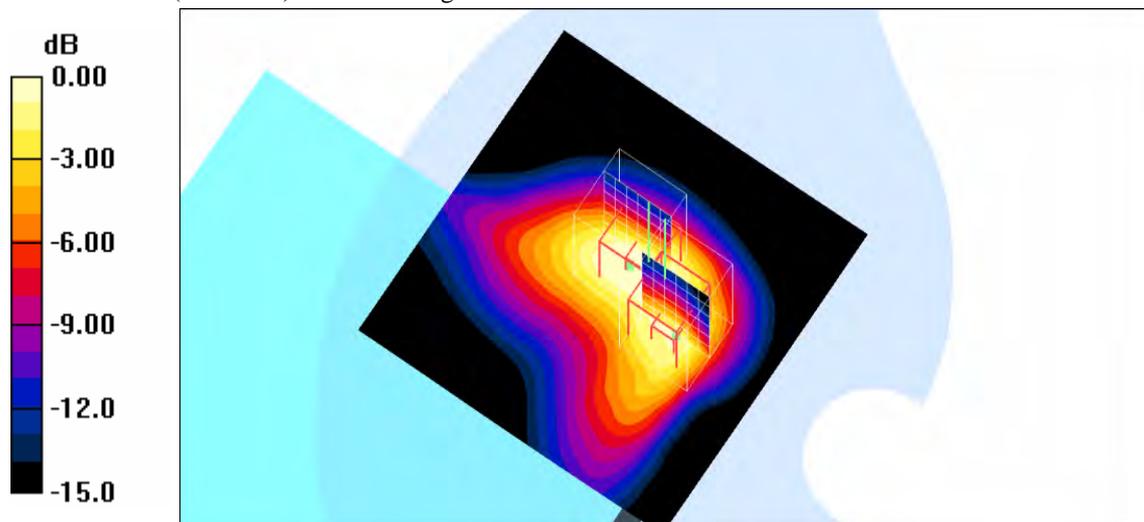
0 dB = 0.837mW/g

Additional information:

position or distance of DUT to SAM: 10 mm (without any distance of laptop to SAM)

ambient temperature: 23.3°C; liquid temperature: 22.4°C

Date/Time: 2007-07-12 13:06:55Date/Time: 2007-07-12 13:16:39

P1528_OET65-Body-WCDMA1900 Sony IRX 3190

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna
Communication System: WCDMA US; Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: M1900 Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.02 mW/g

Underside position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm,
dy=5mm, dz=5mm
Reference Value = 22.5 V/m; Power Drift = -0.197 dB
Peak SAR (extrapolated) = 1.40 W/kg
SAR(1 g) = 0.842 mW/g; SAR(10 g) = 0.476 mW/g
Maximum value of SAR (measured) = 0.936 mW/g
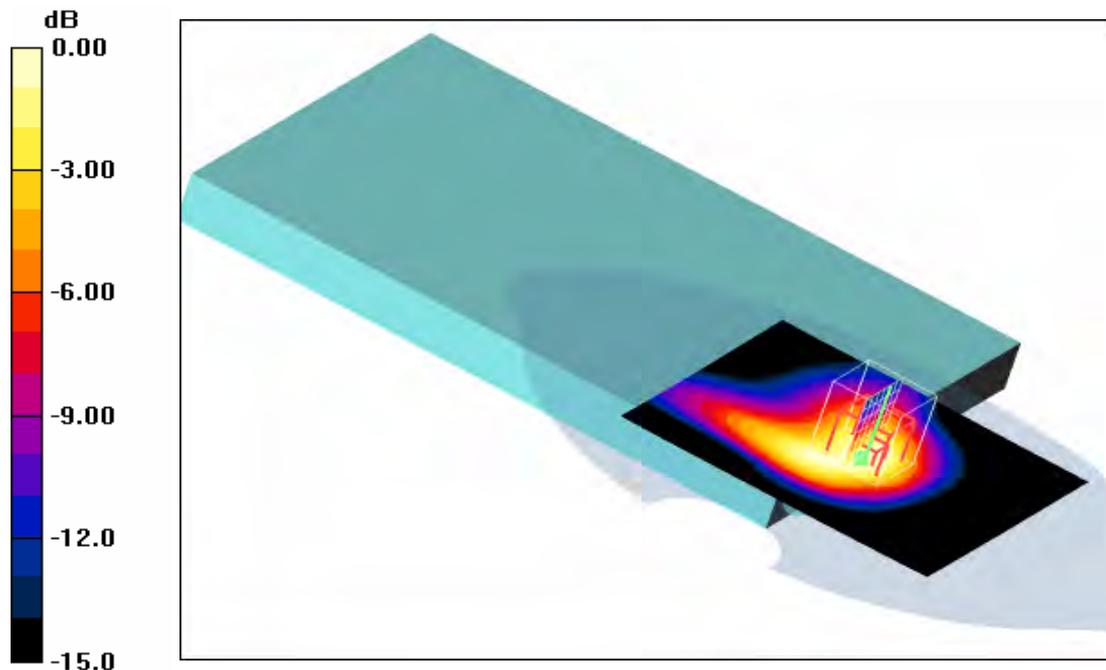
0 dB = 0.936mW/g

Additional information:
position or distance of DUT to SAM: 12 mm (without any distance of laptop to SAM)
ambient temperature: 22.6°C; liquid temperature: 22.4°C

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Date/Time: 2007-07-12 14:03:53Date/Time: 2007-07-12 14:13:46Date/Time: 2007-07-12 14:25:15

P1528_OET65-Body-WCDMA1900 Sony IRX 3190

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna
Communication System: WCDMA US; Frequency: 1852.5 MHz; Duty Cycle: 1:1
Medium: M1900 Medium parameters used (interpolated): f = 1852.5 MHz; σ = 1.52 mho/m; $ε_r$ = 52.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Low internal antenna/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.982 mW/g

Underside position - Low internal antenna/Zoom Scan (7x7x7) (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.0 V/m; Power Drift = -0.190 dB
Peak SAR (extrapolated) = 1.47 W/kg
SAR(1 g) = 0.900 mW/g; SAR(10 g) = 0.512 mW/g
Maximum value of SAR (measured) = 0.990 mW/g

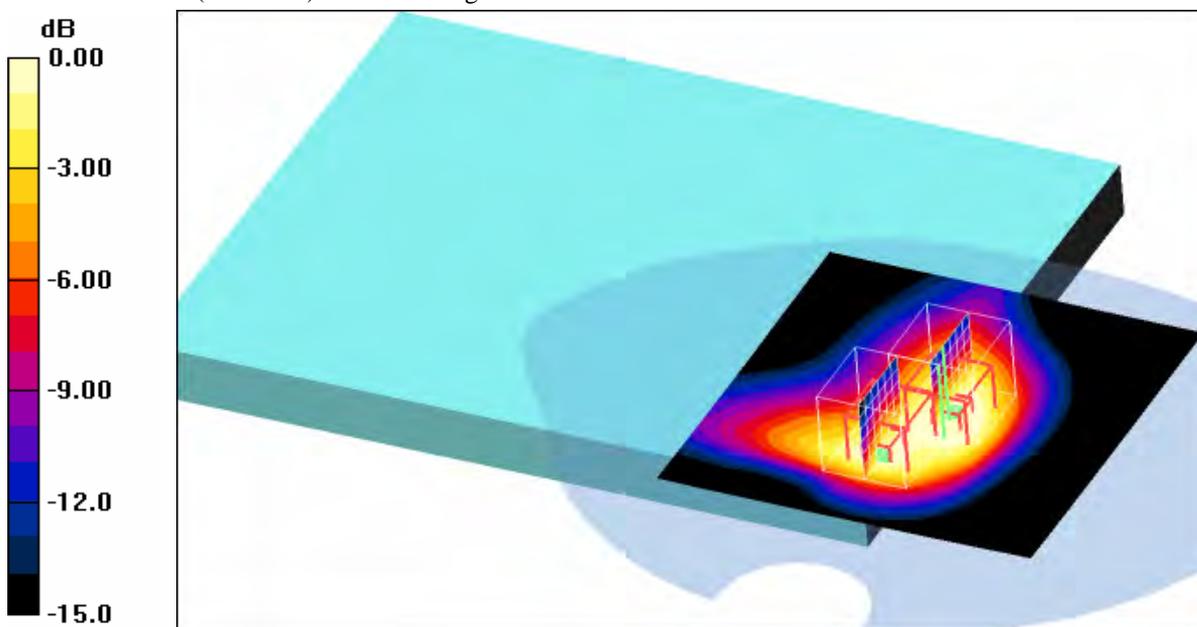## Underside position - Low internal antenna/Zoom Scan (7x7x7) (7x7x7)/Cube 1:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.0 V/m; Power Drift = -0.190 dB
Peak SAR (extrapolated) = 1.17 W/kg
SAR(1 g) = 0.700 mW/g; SAR(10 g) = 0.409 mW/g
Maximum value of SAR (measured) = 0.826 mW/g

0 dB = 0.826mW/g

Additional information:
position or distance of DUT to SAM: 12 mm (without any distance of laptop to SAM)
ambient temperature: 22.7°C; liquid temperature: 22.3°C

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P1528_OET65-Body-WCDMA1900 Sony IRX 3190

DUT: Sony Ericsson; Type: PC300; Serial: 00460102385770-0; Internal antenna
Communication System: WCDMA US; Frequency: 1907.6 MHz; Duty Cycle: 1:1
Medium: M1900 Medium parameters used (interpolated): f = 1907.6 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - High internal antenna/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.727 mW/g

Underside position - High internal antenna/Zoom Scan (7x7x7) (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.0 V/m; Power Drift = -0.026 dB
Peak SAR (extrapolated) = 1.16 W/kg
SAR(1 g) = 0.698 mW/g; SAR(10 g) = 0.392 mW/g
Maximum value of SAR (measured) = 0.763 mW/g

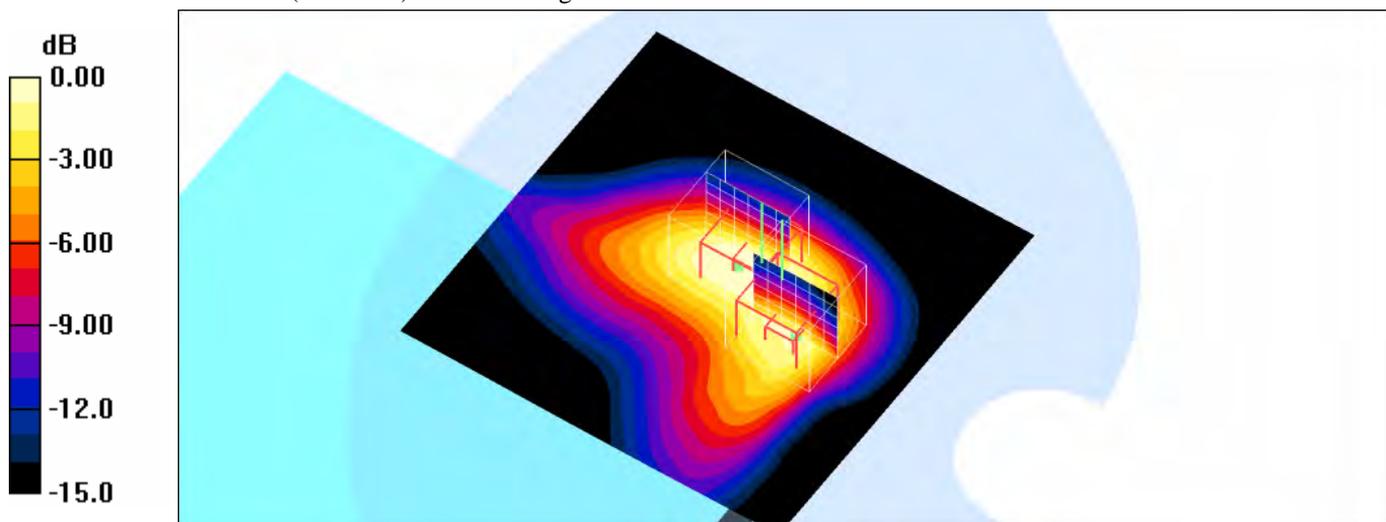## Underside position - High internal antenna/Zoom Scan (7x7x7) (7x7x7)/Cube 1:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.0 V/m; Power Drift = -0.026 dB
Peak SAR (extrapolated) = 0.988 W/kg
SAR(1 g) = 0.530 mW/g; SAR(10 g) = 0.307 mW/g
Maximum value of SAR (measured) = 0.684 mW/g

0 dB = 0.684mW/g

Additional information:
position or distance of DUT to SAM (if not standard head positions) : 12 mm distance
ambient temperature: 22.8°C; liquid temperature: 22.4°C

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Date/Time: 2007-07-12 13:30:59Date/Time: 2007-07-12 13:40:42

P1528_OET65-Body-WCDMA1900 Sony IRX 3190

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; External antenna

Communication System: WCDMA US; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Middle 2/Area Scan (91x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.472 mW/g

Underside position - Middle 2/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.4 V/m; Power Drift = 0.045 dB

Peak SAR (extrapolated) = 0.701 W/kg

SAR(1 g) = 0.429 mW/g; SAR(10 g) = 0.248 mW/g

Maximum value of SAR (measured) = 0.471 mW/g
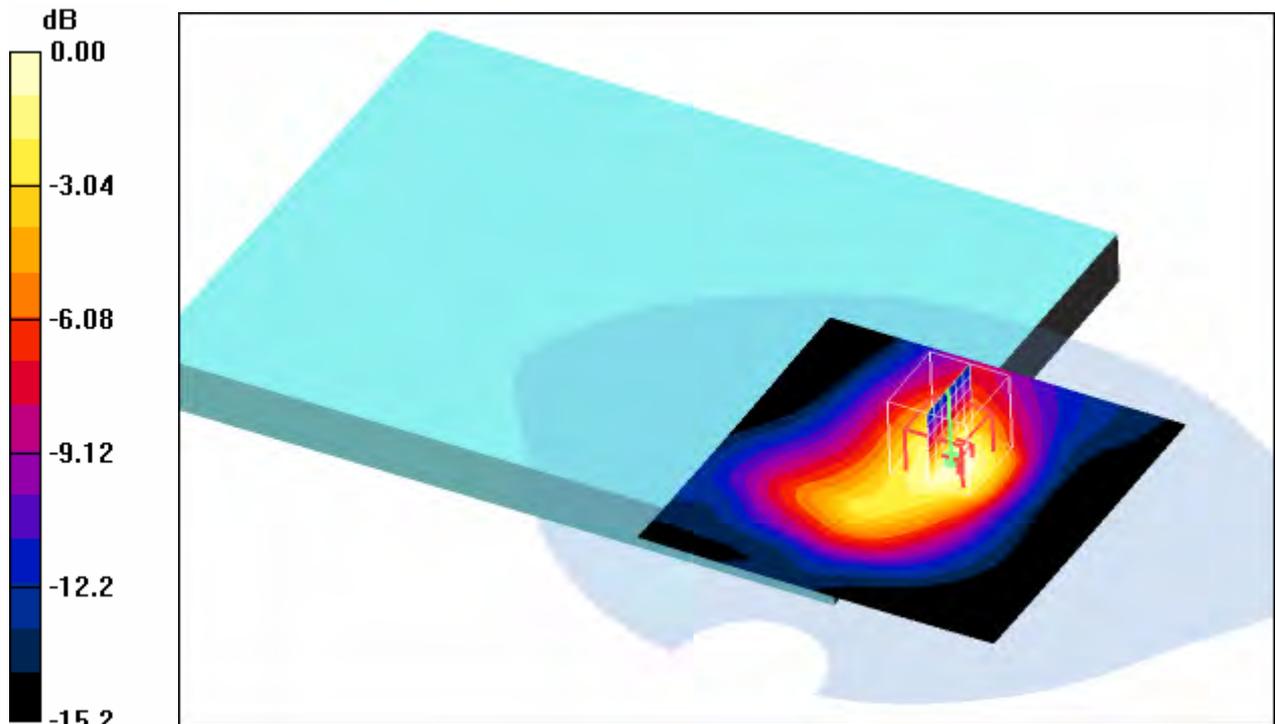
0 dB = 0.471mW/g

Additional information:

position or distance of DUT to SAM: 12 mm (without any distance of laptop to SAM)

ambient temperature: 22.6°C; liquid temperature: 22.4°C

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P1528_OET65-Body-WCDMA1900 Sony IRX 3190

DUT: Sony Ericsson; Type: PC300; IMEI: 00460102385770-0; Internal antenna HSDPA

Communication System: WCDMA US; Frequency: 1852.5 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used (interpolated): f = 1852.5 MHz; σ = 1.52 mho/m; ε_r = 52.5; ρ = 1000 kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1558; ConvF(4.44, 4.44, 4.44); Calibrated: 2006-08-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn413; Calibrated: 2007-01-18
- Phantom: SAM 12; Type: SAM; Serial: 1043
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Underside position - Low internal antenna HSDPA/Area Scan (91x91x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.926 mW/g

Underside position - Low internal antenna HSDPA/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

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

Reference Value = 24.5 V/m; Power Drift = 0.033 dB

Peak SAR (extrapolated) = 1.32 W/kg

SAR(1 g) = 0.822 mW/g; SAR(10 g) = 0.476 mW/g

Maximum value of SAR (measured) = 0.899 mW/g

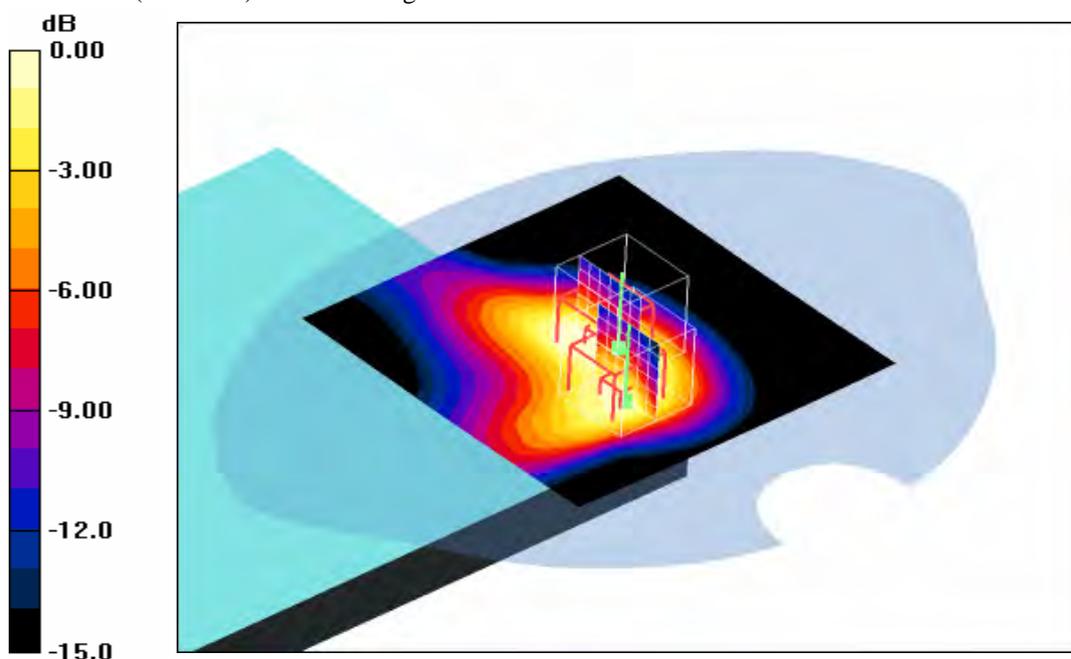## Underside position - Low internal antenna HSDPA/Zoom Scan (7x7x7) (7x7x7)/Cube 1:

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

Reference Value = 24.5 V/m; Power Drift = 0.033 dB

Peak SAR (extrapolated) = 1.08 W/kg

SAR(1 g) = 0.686 mW/g; SAR(10 g) = 0.412 mW/g
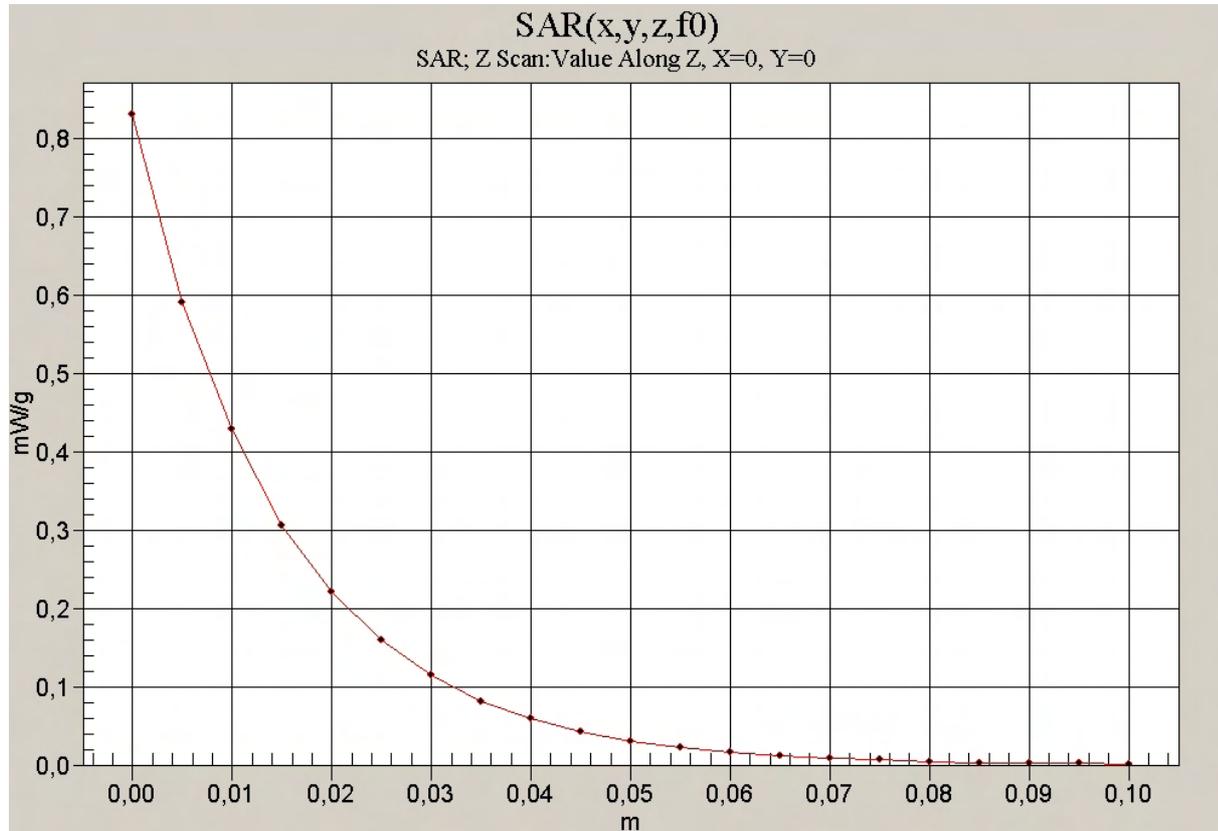
Maximum value of SAR (measured) = 0.756 mW/g

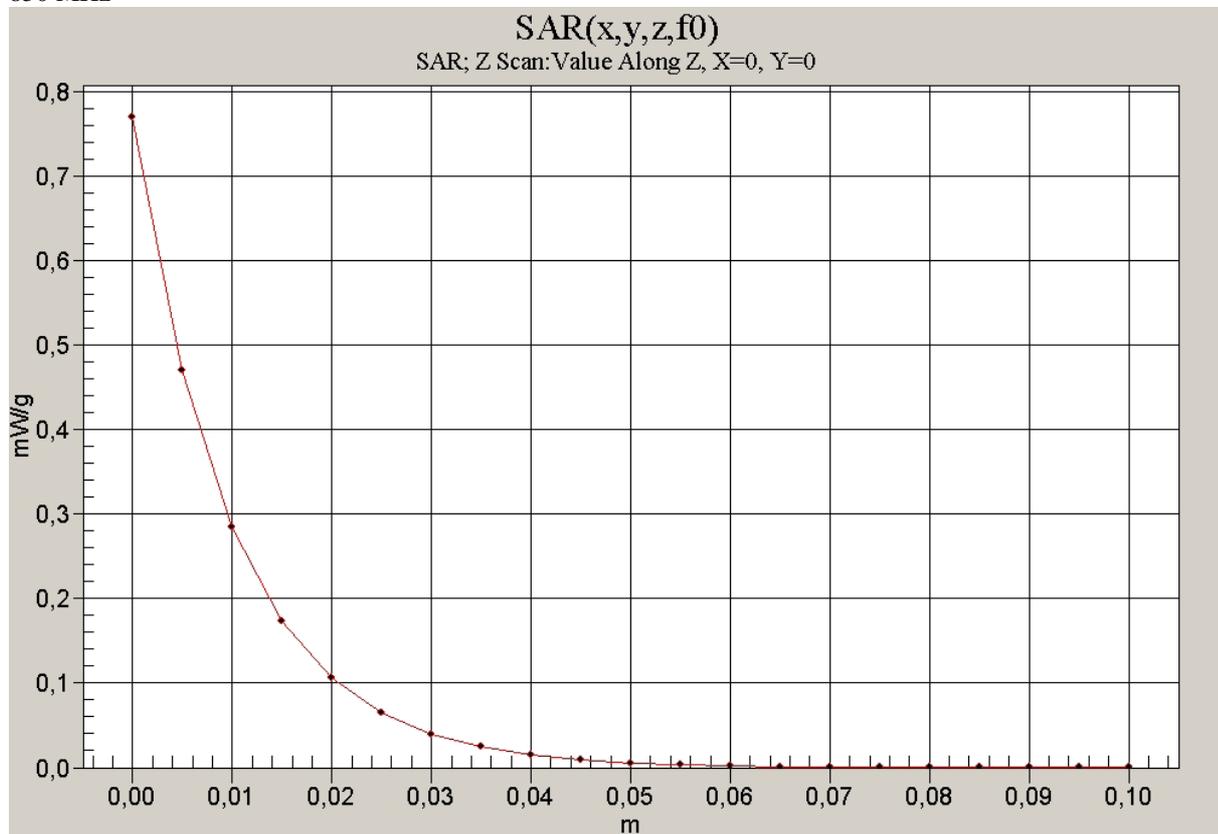0 dB = 0.756mW/g

Additional information:

position or distance of DUT to SAM: 12 mm (without any distance of laptop to SAM)
ambient temperature: 23.4°C; liquid temperature: 22.4°C

Annex 2.5   Z-axis scans

850 MHz

1900 MHz

Annex 3 Photo documentation

Photo 1: Measurement System DASY 4

Photo 2: DUT with external antenna - top view

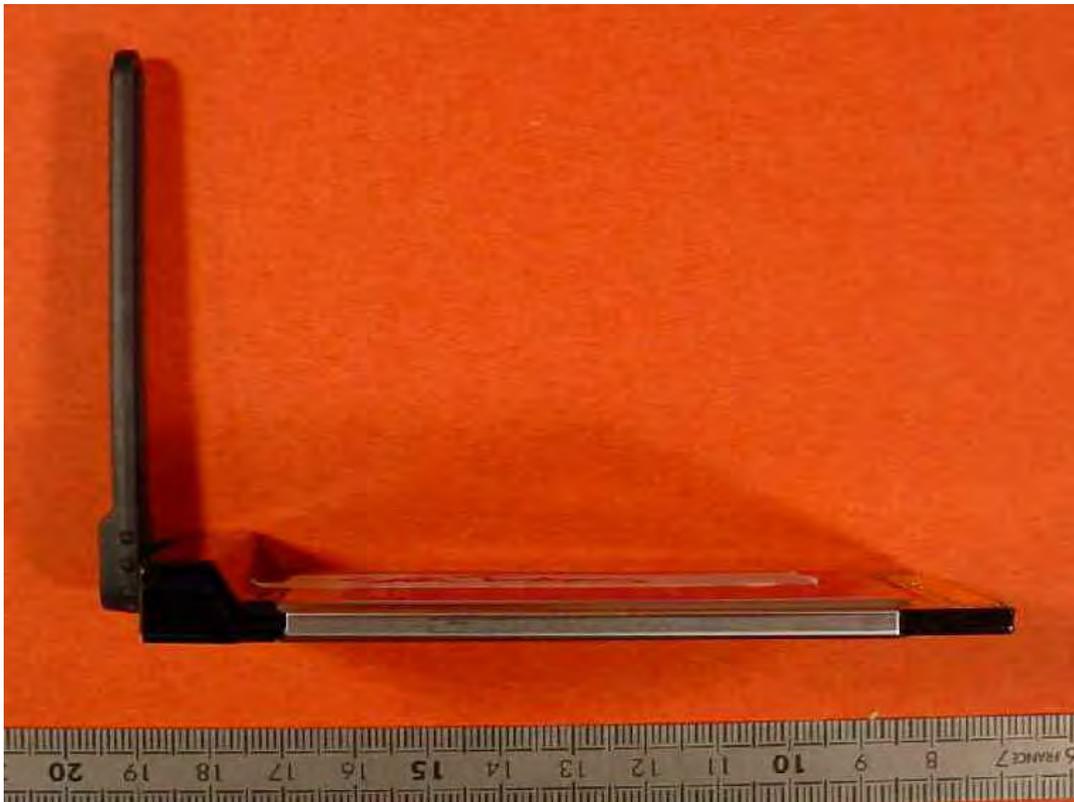Photo 3: DUT with external antenna - side view

Photo 4: DUT and antenna - front view

Photo 5: DUT - underside view with label

Photo 6: DUT in Acer notebook - top view

Photo 7: DUT in Acer notebook - front view

Photo 8: DUT in Acer notebook - side view

Photo 9: DUT in Acer notebook - close view (16 mm distance from DUT to unterside of Notebook)

Photo 10: Acer notebook - underside view

Photo 11: Acer notebook - label

Photo 12: DUT in Compaq notebook - top view

Photo 13: DUT in Compaq notebook - front view

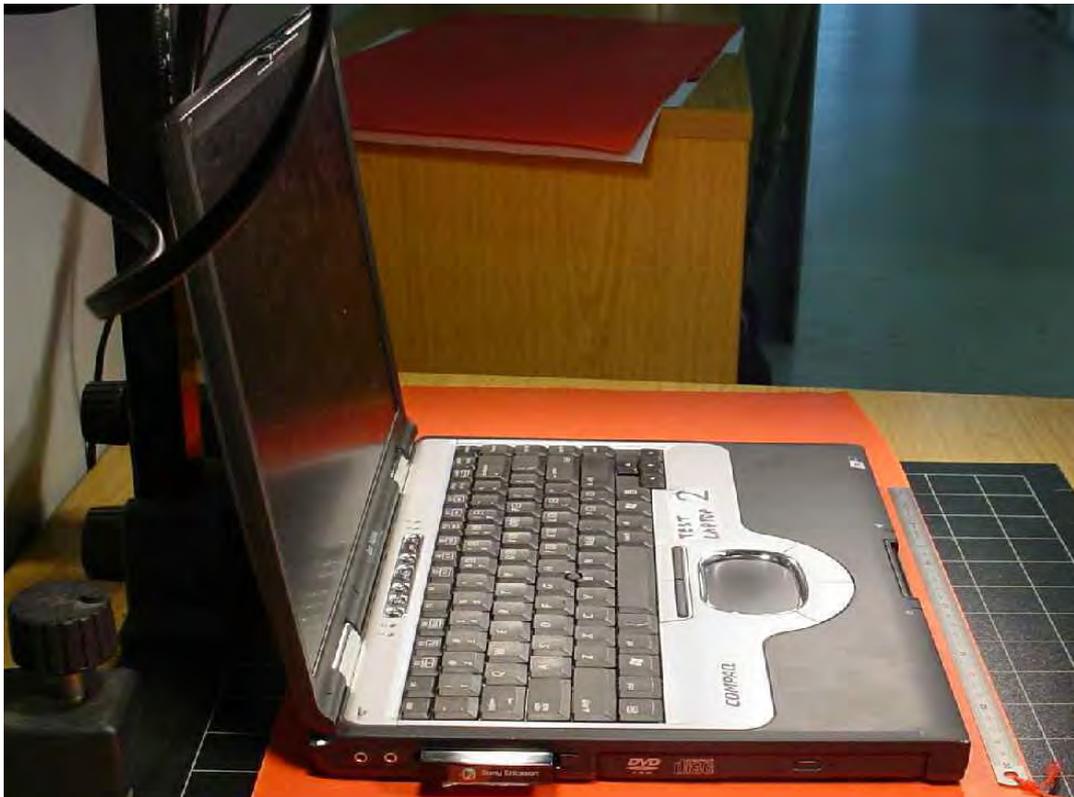Photo 14: DUT in Compaq notebook - side view (10 mm distance from DUT to unterside of notebook)

Photo 15: Compaq notebook - underside view

Photo 16: Compaq notebook - label

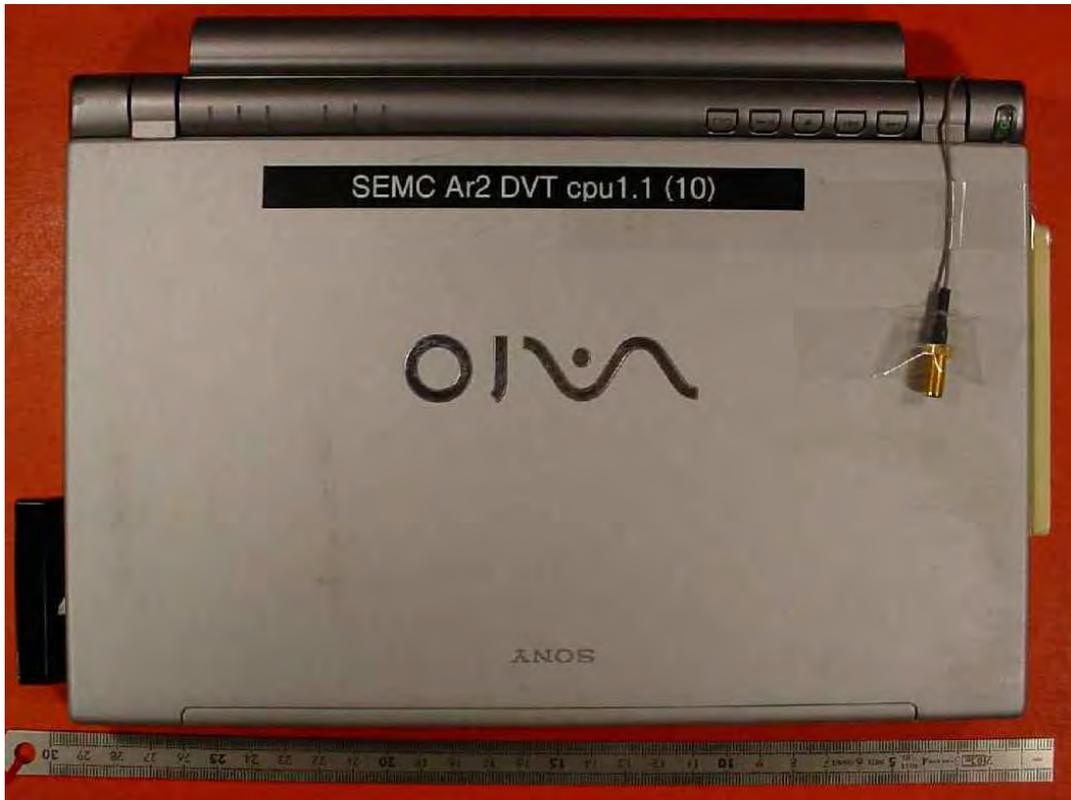Photo 17: DUT in Sony notebook - top view

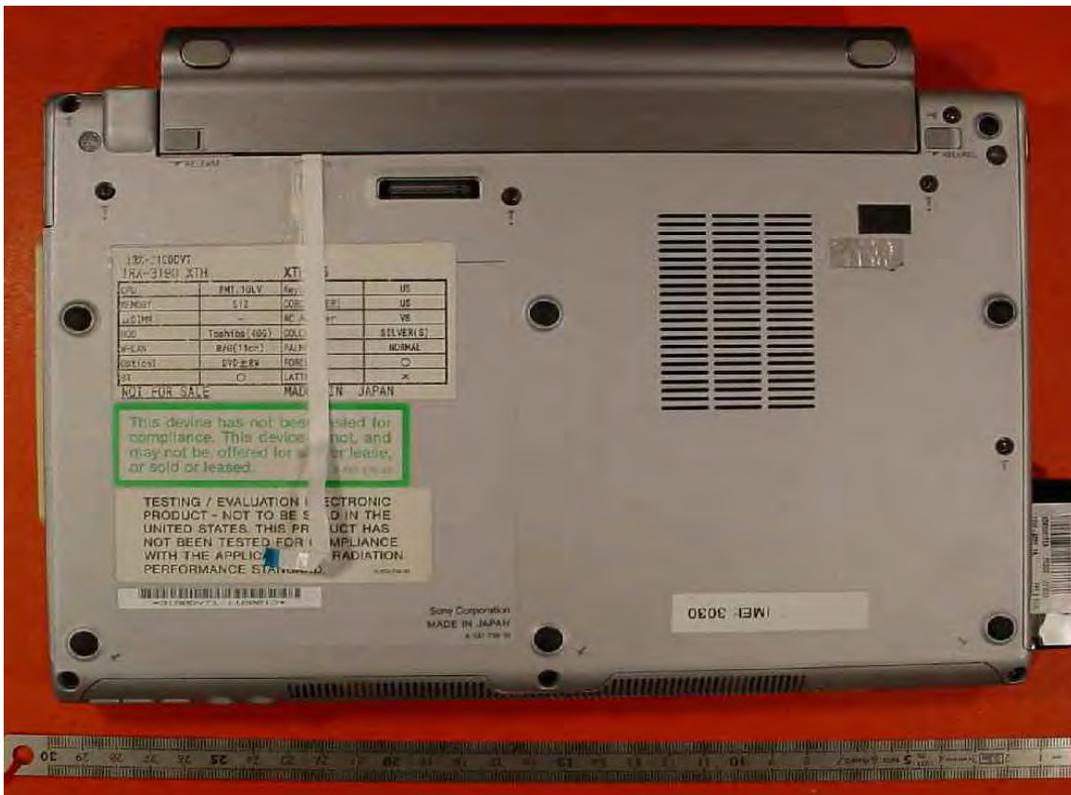Photo 18: DUT in Sony notebook - underside view

Photo 19: DUT in Sony notebook - side view (12 mm distance from DUT to underside of notebook)

Photo 20: DUT in Sony notebook (including external antenna) - front view

Photo 21: DUT in Sony notebook(including external antenna) - side view

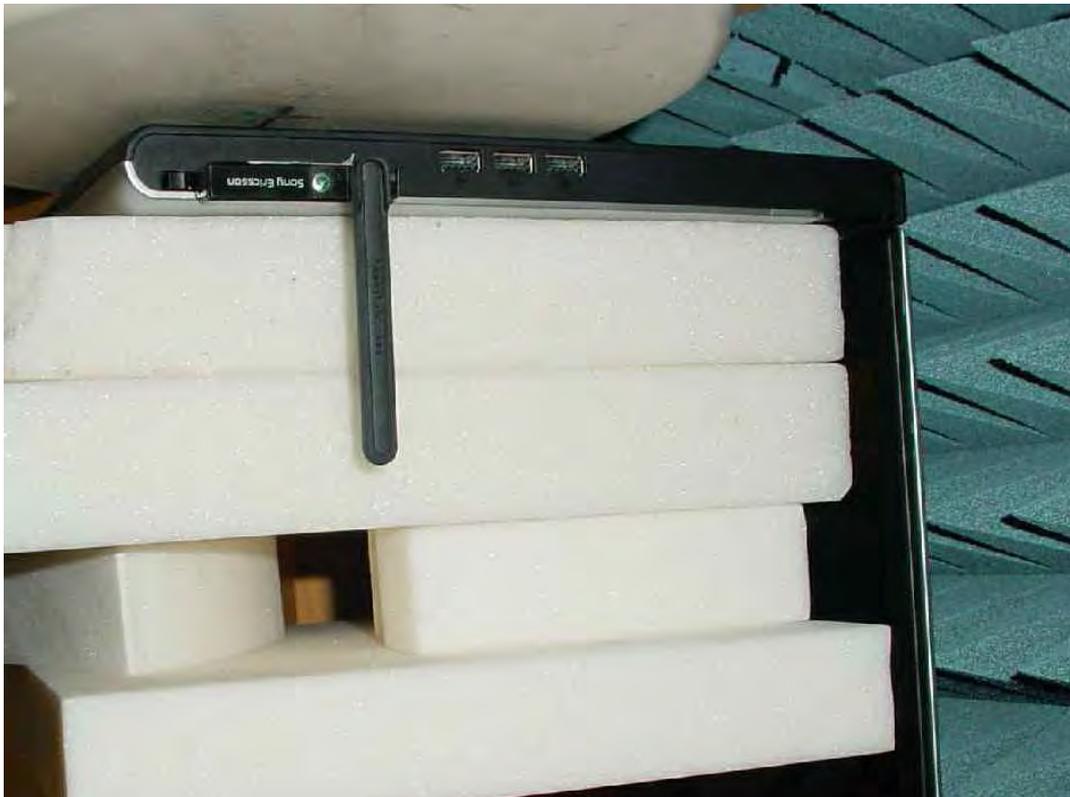Photo 22: test position underside with Acer notebook and external antenna attached

Photo 23: test position underside with Acer notebook (16 mm distance to SAM)

Photo 24: test position underside with Compaq notebook (10 mm distance to SAM)

Photo 25: test position underside with Compaq notebook and external antenna attached

Photo 26: test position underside with Sony notebook (12 mm distance to SAM)

Photo 27: test position underside with Sony notebook and external antenna attached

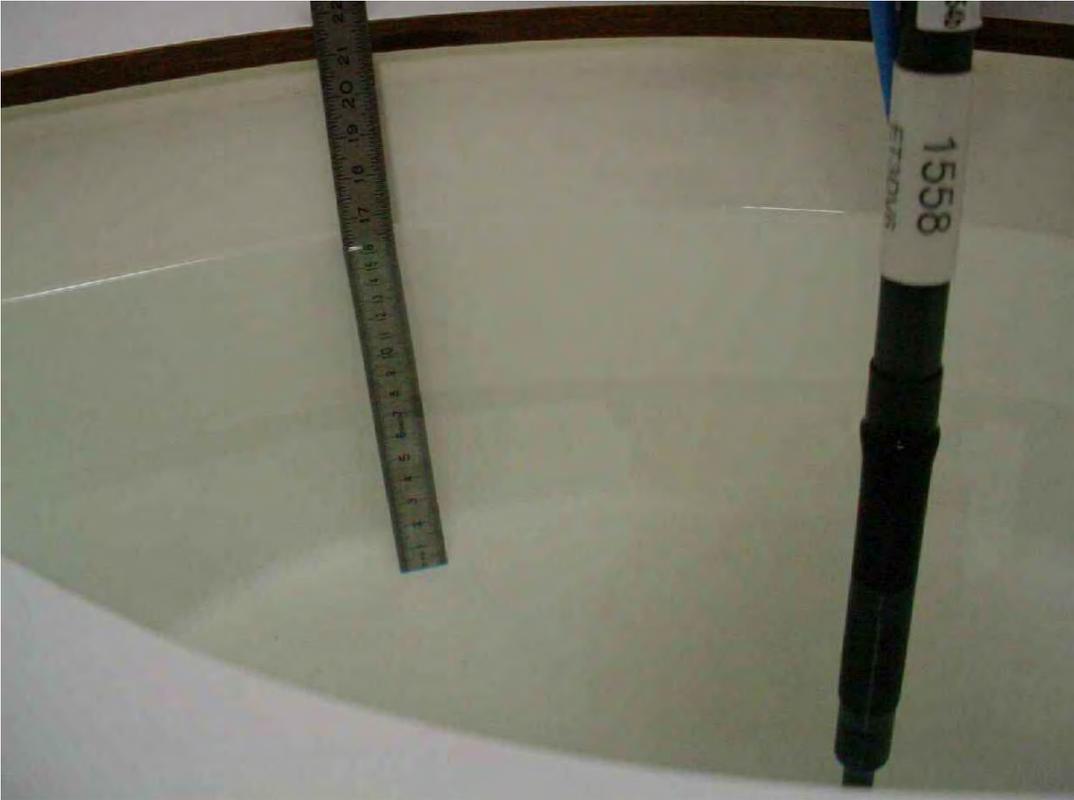Photo 28: liquid depth 1900 MHz body tissue simulating liquid

Photo 29: liquid depth 850 MHz body tissue simulating liquid

Annex 4   RF Technical Brief Cover Sheet acc. to RSS-102

1. COMPANY NUMBER: 4170B

2. MODEL NUMBER: F3231011

3. MANUFACTURER: Sony Ericsson Mobile Communications AB

4. TYPE OF EVALUATION:

SAR Evaluation: Body-worn Device

- **Multiple transmitters: Yes ☐ No ⊠**

- **Evaluated against exposure limits: General Public Use ⊠ Controlled Use ☐**
- **Duty cycle used in evaluation: 100% (UMTS); 25% (GPRS)**
- **Standard used for evaluation: RSS-102 Issue 2 (2005-11)**

- **SAR value: 1.58 W/kg at 10 mm distance   Measured ⊠ Computed ☐ Calculated ☐**

Annex 4.1   Declaration of RF Exposure Compliance

ATTESTATION: I attest that the information provided in Annex 4 is correct; that a Technical Brief was prepared and the information it contains is correct; that the device evaluation was performed or supervised by me; that applicable measurement methods and evaluation methodologies have been followed and that the device meets the SAR and/or RF exposure limits of RSS-102.

Signature: _Thomas Vog_   **Date: 2007-08-06**

NAME : Thomas Vogler

TITLE : Dipl.-Ing. (FH)

COMPANY : CETECOM ICT Services GmbH

CETECOM ICT Services GmbH

Annex 5 Calibration parameters

Calibration parameters are described in the additional document :

Appendix to test report no. 4-2428-01-02/07'
Calibration data, Phantom certificate
and detail information of the DASY4 System