

SAR Compliance Test Report

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FCC ID:	PYARM-244	IC:	661V-RM244
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Testing has been carried out in accordance with:	47CFR §2.1093 Radiofrequency Radiation Exposure Evaluation: Portable Devices FCC OET Bulletin 65 (Edition 97-01), Supplement C (Edition 01-01) Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields RSS-102 Evaluation Procedure for Mobile and Portable Radio Transmitters with Respect to Health Canada's Safety Code 6 for Exposure of Humans to Radio Frequency Fields IEEE 1528 - 2003 IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Technique		
Documentation:	The documentation of the testing performed on the tested devices is archived for 15 years at TCC Nokia.		
Test results:	The tested device complies with the requirements in respect of all parameters subject to the test. The test results and statements relate only to the items tested. The test report shall not be reproduced except in full, without written approval of the laboratory.		

Date and signatures:

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1. SUMMARY OF SAR TEST REPORT

1.1 Test Details

Period of test	2007-07-11 to 2007-08-14
SN, HW and SW numbers of tested device	SN: 004401/01/280520/2, HW: 0501, SW: 007.22.01, DUT: 12110
Batteries used in testing	BP-6MT, DUT: 12056, 12057, 12058, 12059
Headsets used in testing	HS-47, DUT: 12046
Other accessories used in testing	-
State of sample	Prototype unit
Notes	-

1.2 Maximum Results

The maximum measured SAR values for Head configuration and Body Worn configuration are given in section 1.2.1 and 1.2.2 respectively. The device conforms to the requirements of the standard(s) when the maximum measured SAR value is less than or equal to the limit.

1.2.1 Head Configuration

Mode	Ch / f (MHz)	Radiated power	Position	Measured SAR value (1g avg)	Scaled* SAR value (1g avg)	SAR limit (1g avg)	Result
2-slot GPRS850	251 / 848.8	23.7 dBm ERP	Left, Cheek	0.861 W/kg	0.96 W/kg	1.6 W/kg	PASSED
WCDMA850	4175 / 835.0	17.2 dBm ERP	Left, Cheek	0.936 W/kg	1.05 W/kg	1.6 W/kg	PASSED
3-slot GPRS1900	661 / 1880.0	30.2 dBm EIRP	Right, Cheek	0.853 W/kg	0.96 W/kg	1.6 W/kg	PASSED
WLAN2450	1 / 2412.0	23.4dBm EIRP	Left, Tilt	0.289 W/kg	0.32 W/kg	1.6 W/kg	PASSED
WCDMA850 + WLAN2450	-	-	Left, Cheek	1.199 W/kg	1.34 W/kg	1.6 W/kg	PASSED
3-slot GPRS1900 + WLAN2450	-	-	Left, Tilt	1.067 W/kg	1.20 W/kg	1.6 W/kg	PASSED

1.2.2 Body Worn Configuration

Mode	Ch / f (MHz)	Radiated power	Separation distance	Measured SAR value (1g avg)	Scaled* SAR value (1g avg)	SAR limit (1g avg)	Result
2-slot GPRS850	251 / 848.8	23.7 dBm ERP	2.2cm	0.591W/kg	0.66 W/kg	1.6 W/kg	PASSED
WCDMA850	4175 / 835.0	17.2 dBm ERP	2.2cm	0.452 W/kg	0.51 W/kg	1.6 W/kg	PASSED
3-slot GPRS1900	661 / 1880.0	30.2 dBm EIRP	2.2cm	0.783 W/kg	0.88 W/kg	1.6 W/kg	PASSED
WLAN2450	7 / 2442.0	23.4 dBm EIRP	2.2cm	0.060 W/kg	0.07 W/kg	1.6 W/kg	PASSED
2-slot GPRS850 + WLAN2450	-	-	2.2cm	0.651 W/kg	0.73 W/kg	1.6 W/kg	PASSED
3-slot GPRS1900 + WLAN2450	-	-	2.2cm	0.843 W/kg	0.94 W/kg	1.6 W/kg	PASSED

*SAR values are scaled up by 12% to cover measurement drift.

1.2.3 Maximum Drift

Maximum drift covered by 12% scaling up of the SAR values	Maximum drift during measurements
0.5dB	0.40dB

1.2.4 Measurement Uncertainty

Expanded Uncertainty (k=2) 95%	± 25.8%
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2. DESCRIPTION OF THE DEVICE UNDER TEST

Device category	Portable
Exposure environment	General population / uncontrolled

Modes of Operation	Bands	Modulation Mode	Duty Cycle	Transmitter Frequency Range (MHz)
GSM	850 1900	GMSK	1/8	824 – 849 1850 – 1910
GPRS	850 1900	GMSK	1/8 to 3/8	824 – 849 1850 – 1910
EGPRS	850 1900	GMSK / 8PSK	1/8 to 3/8	824 – 849 1850 – 1910
WCDMA	850 (Band V)		1	826 – 847
BT	2450	GFSK	1	2402 – 2480
WLAN	2450	11Mbps QPSK	1	2412 – 2462

Outside of USA and Canada, the transmitter of the device is capable of operating also in GSM/GPRS/EGPRS900, GSM/GPRS/EGPRS1800 and WCDMA2100 bands which are not part of this filing.

This device has Voice-over-IP/Dual Transfer Mode capability for use at the ear. Therefore, SAR for multi slot GPRS mode was evaluated against the head profile of the phantom.

2.1 Description of the Antenna

The device has an internal antenna.

3. TEST CONDITIONS

3.1 Temperature and Humidity

Ambient temperature (°C):	20.0 to 22.5
Ambient humidity (RH %):	50 to 65

3.2 Test Signal, Frequencies and Output Power

The device was put into operation by using a call tester except for testing WLAN2450 where control software was used. Communication between the device and the call tester was established by air link.

The device output power was set to maximum power level for all tests; a fully charged battery was used for every test sequence.

In all operating bands the measurements were performed on lowest, middle and highest channels.

The radiated output power of the device was measured by a separate test laboratory on the same unit(s) as used for SAR testing.

The transmission mode of the device in all WCDMA tests was configured to 12.2kBps RMC with all TPC bits set as “1”.

4. DESCRIPTION OF THE TEST EQUIPMENT

4.1 Measurement System and Components

The measurements were performed using an automated near-field scanning system, DASY4, manufactured by Schmid & Partner Engineering AG (SPEAG) in Switzerland. The SAR extrapolation algorithm used in all measurements was the ‘advanced extrapolation’ algorithm.

The following table lists calibration dates of SPEAG components:

Test Equipment	Serial Number	Calibration interval	Calibration expiry
DAE 4	555	12 months	2008-03
DAE 4	728	12 months	2008-02
E-field Probe ET3DV6	1396	12 months	2008-02
E-field Probe ET3DV6	1766	12 months	2008-03
Dipole Validation Kit, D835V2	480	24 months	2009-05
Dipole Validation Kit, D1900V2	5d013	24 months	2008-07
Dipole Validation Kit, D2450V2	749	24 months	2008-04
DASY4 software	Version 4.7	-	-

Additional test equipment used in testing:

Test Equipment	Model	Serial Number	Calibration interval	Calibration expiry
Signal Generator	SML03	101265	12 months	2008-07
Amplifier	ZHL-42 (SMA)	N072095-5	12 months	2008-07
Power Meter	NRVS	849305/028	12 months	2008-07
Power Sensor	NRV-Z32	839176/020	12 months	2008-07
Call Tester	CMU 200	101111	-	-
Call Tester	CMU 200	103293	-	-
Call Tester	CMU 200	100084	-	-
Vector Network Analyzer	8753E	US38432928	12 months	2008-07
Dielectric Probe Kit	85070B	US33020420	-	-

4.1.1 Isotropic E-field Probe Type ET3DV6

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., butyl diglycol)
Calibration	Calibration certificate in Appendix C
Frequency	10 MHz to 3 GHz (dosimetry); Linearity: ± 0.2 dB (30 MHz to 3 GHz)
Optical Surface Detection	± 0.2 mm repeatability in air and clear liquids over diffuse reflecting surfaces
Directivity	± 0.2 dB in HSL (rotation around probe axis) ± 0.4 dB in HSL (rotation normal to probe axis)
Dynamic Range	5 μ W/g to > 100 mW/g; Linearity: ± 0.2 dB
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

4.2 Phantoms

The phantom used for all tests i.e. for both system checks and device testing, was the twin-headed "SAM Phantom", manufactured by SPEAG. The phantom conforms to the requirements of IEEE 1528 - 2003.

System checking was performed using the flat section, whilst Head SAR tests used the left and right head profile sections. Body SAR testing also used the flat section between the head profiles.

The SPEAG device holder (see Section 5.1) was used to position the device in all tests whilst a tripod was used to position the validation dipoles against the flat section of phantom.

4.3 Tissue Simulants

Recommended values for the dielectric parameters of the tissue simulants are given in IEEE 1528 - 2003 and FCC Supplement C to OET Bulletin 65. All tests were carried out using simulants whose dielectric parameters were within $\pm 5\%$ of the recommended values. All tests were carried out within 24 hours of measuring the dielectric parameters.

The depth of the tissue simulant was 15.0 ± 0.5 cm measured from the ear reference point during system checking and device measurements.

4.3.1 Tissue Simulant Recipes

The following recipe(s) were used for Head and Body tissue simulant(s):

800MHz band

Ingredient	Head (% by weight)	Body (% by weight)
Deionised Water	51.50	69.25
Tween 20	47.35	30.00
Salt	1.15	0.75

1900MHz band

Ingredient	Head (% by weight)	Body (% by weight)
Deionised Water	54.50	70.25
Tween 20	45.23	29.41
Salt	0.27	0.34

2450MHz band

Ingredient	Head (% by weight)	Body (% by weight)
Deionised Water	56.0	70.2
Tween 20	44.0	29.62
Salt	-	0.18

4.3.2 System Checking

The manufacturer calibrates the probes annually. Dielectric parameters of the tissue simulants were measured every day using the dielectric probe kit and the network analyser. A system check measurement was made following the determination of the dielectric parameters of the simulant, using the dipole validation kit. A power level of 250 mW was supplied to the dipole

antenna, which was placed under the flat section of the twin SAM phantom. The system checking results (dielectric parameters and SAR values) are given in the table below.

System checking, head tissue simulant

<i>f</i> [MHz]	Description	SAR [W/kg], 1g	Dielectric Parameters		Temp [°C]
			ϵ_r	σ [S/m]	
835	Reference result	2.29	41.6	0.90	
	± 10% window	2.06 – 2.52			
	2007-08-07	2.52	41.7	0.90	21.0
	2007-08-08	2.52	41.7	0.90	21.0
1900	Reference result	9.69	39.3	1.44	
	± 10% window	8.72 – 10.66			
	2007-08-06	9.95	39.4	1.42	21.0
	2007-08-07	9.59	39.9	1.39	21.0
	2007-08-14	9.70	39.7	1.41	21.0
2450	Reference result	13.5	38.8	1.76	
	± 10% window	12.1 – 14.9			
	2007-07-11	14.3	38.6	1.81	21.0

System checking, body tissue simulant

<i>f</i> [MHz]	Description	SAR [W/kg], 1g	Dielectric Parameters		Temp [°C]
			ϵ_r	σ [S/m]	
835	Reference result	2.48	53.0	0.98	
	± 10% window	2.23 – 2.73			
	2007-08-09	2.49	55.2	0.98	21.0
2450	Reference result	14.1	53.7	1.97	
	± 10% window	12.7 – 15.5			
	2007-07-12	14.2	52.7	1.92	21.0

Plots of the system checking scans are given in Appendix A.

4.3.3 Tissue Simulants used in the Measurements

Head tissue simulant measurements

f [MHz]	Description	Dielectric Parameters		Temp [°C]
		ϵ_r	σ [S/m]	
836	Recommended value	41.5	0.90	
	$\pm 5\%$ window	39.4 – 43.6	0.86 – 0.95	
	2007-08-07	41.7	0.91	21.0
	2007-08-08	41.7	0.90	21.0
1880	Recommended value	40.0	1.40	
	$\pm 5\%$ window	38.0 – 42.0	1.33 – 1.47	
	2007-08-06	39.5	1.41	21.0
	2007-08-14	39.8	1.39	21.0
2442	Recommended value	39.2	1.79	
	$\pm 5\%$ window	37.3 – 41.2	1.70 – 1.88	
	2007-07-11	38.7	1.81	21.0

Body tissue simulant measurements

f [MHz]	Description	Dielectric Parameters		Temp [°C]
		ϵ_r	σ [S/m]	
836	Recommended value	55.2	0.97	
	$\pm 5\%$ window	52.4 – 58.0	0.92 – 1.02	
	2007-08-08	55.1	0.97	21.0
	2007-08-09	55.2	0.98	21.0
1880	Recommended value	53.3	1.52	
	$\pm 5\%$ window	50.6 – 56.0	1.44 – 1.60	
	2007-08-06	52.7	1.53	21.0
	2007-08-07	52.8	1.50	21.0
2442	Recommended value	52.7	1.94	
	$\pm 5\%$ window	50.1 – 55.3	1.85 – 2.04	
	2007-07-12	52.7	1.91	21.0

5. DESCRIPTION OF THE TEST PROCEDURE

5.1 Device Holder

The device was placed in the device holder (illustrated below) that is supplied by SPEAG as an integral part of the Dasy system.



Device holder supplied by SPEAG

A Nokia designed spacer (illustrated below) was used to position the device within the SPEAG holder. The spacer positions the device so that the holder has minimal effect on the test results but still holds the device securely. The spacer was removed before the tests.



Nokia spacer

5.2 Test Positions

5.2.1 Against Phantom Head

Measurements were made in “cheek” and “tilt” positions on both the left hand and right hand sides of the phantom.

The positions used in the measurements were according to IEEE 1528 - 2003 "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques".

5.2.2 Body Worn Configuration

The device was placed in the SPEAG holder using the Nokia spacer and placed below the flat section of the phantom. The distance between the device and the phantom was kept at the separation distance indicated in Section 1.2.2 using a separate flat spacer that was removed before the start of the measurements. The device was oriented with its antenna facing the phantom since this orientation gives higher results.

5.3 Scan Procedures

First, area scans were used for determination of the field distribution. Next, a zoom scan, a minimum of 5x5x7 points covering a volume of at least 30x30x30mm, was performed around the highest E-field value to determine the averaged SAR value. Drift was determined by measuring the same point at the start of the area scan and again at the end of the zoom scan.

5.4 SAR Averaging Methods

The maximum SAR value was averaged over a cube of tissue using interpolation and extrapolation.

The interpolation, extrapolation and maximum search routines within Dasy4 are all based on the modified Quadratic Shepard's method (Robert J. Renka, "Multivariate Interpolation Of Large Sets Of Scattered Data", University of North Texas ACM Transactions on Mathematical Software, vol. 14, no. 2, June 1988, pp. 139-148).

The interpolation scheme combines a least-square fitted function method with a weighted average method. A trivariate 3-D / bivariate 2-D quadratic function is computed for each measurement point and fitted to neighbouring points by a least-square method. For the zoom scan, inverse distance weighting is incorporated to fit distant points more accurately. The interpolating function is finally calculated as a weighted average of the quadratics.

In the zoom scan, the interpolation function is used to extrapolate the Peak SAR from the deepest measurement points to the inner surface of the phantom.

6. MEASUREMENT UNCERTAINTY

Table 6.1 – Measurement uncertainty evaluation

Uncertainty Component	Section in IEEE 1528	Tol. (%)	Prob Dist	Div	C_i	$C_i \cdot u_i$ (%)	v_i
Measurement System							
Probe Calibration	E2.1	±5.9	N	1	1	±5.9	∞
Axial Isotropy	E2.2	±4.7	R	√3	$(1-c_p)^{1/2}$	±1.9	∞
Hemispherical Isotropy	E2.2	±9.6	R	√3	$(c_p)^{1/2}$	±3.9	∞
Boundary Effect	E2.3	±1.0	R	√3	1	±0.6	∞
Linearity	E2.4	±4.7	R	√3	1	±2.7	∞
System Detection Limits	E2.5	±1.0	R	√3	1	±0.6	∞
Readout Electronics	E2.6	±1.0	N	1	1	±1.0	∞
Response Time	E2.7	±0.8	R	√3	1	±0.5	∞
Integration Time	E2.8	±2.6	R	√3	1	±1.5	∞
RF Ambient Conditions - Noise	E6.1	±3.0	R	√3	1	±1.7	∞
RF Ambient Conditions - Reflections	E6.1	±3.0	R	√3	1	±1.7	∞
Probe Positioner Mechanical Tolerance	E6.2	±0.4	R	√3	1	±0.2	∞
Probe Positioning with respect to Phantom Shell	E6.3	±2.9	R	√3	1	±1.7	∞
Extrapolation, interpolation and Integration Algorithms for Max. SAR Evaluation	E5	±3.9	R	√3	1	±2.3	∞
Test sample Related							
Test Sample Positioning	E4.2	±6.0	N	1	1	±6.0	11
Device Holder Uncertainty	E4.1	±5.0	N	1	1	±5.0	7
Output Power Variation - SAR drift measurement	6.6.3	±0.0	R	√3	1	±0.0	∞
Phantom and Tissue Parameters							
Phantom Uncertainty (shape and thickness tolerances)	E3.1	±4.0	R	√3	1	±2.3	∞
Conductivity Target - tolerance	E3.2	±5.0	R	√3	0.64	±1.8	∞
Conductivity - measurement uncertainty	E3.3	±5.5	N	1	0.64	±3.5	5
Permittivity Target - tolerance	E3.2	±5.0	R	√3	0.6	±1.7	∞
Permittivity - measurement uncertainty	E3.3	±2.9	N	1	0.6	±1.7	5
Combined Standard Uncertainty			RSS			±12.9	116
Coverage Factor for 95%			k=2				
Expanded Uncertainty						±25.8	

7. RESULTS

The measured Head SAR values for the test device are tabulated below:

850MHz Head SAR results

Mode	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 128 824.2 MHz	Ch 190 836.6 MHz	Ch 251 848.8 MHz
GSM	Power		26.6 dBm	26.2 dBm	27.1 dBm
	Left	Cheek	-	0.622	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
2-slot GPRS	Power		23.3 dBm	22.9 dBm	23.7 dBm
	Left	Cheek	0.594	0.751	0.861
		Tilt	-	0.457	-
	Right	Cheek	-	0.689	-
		Tilt	-	0.491	-
3-slot GPRS	Power		23.4 dBm	23.0 dBm	24.0 dBm
	Left	Cheek	-	0.740	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
2-slot 8PSK EGPRS	Power		18.9 dBm	18.2 dBm	19.8 dBm
	Left	Cheek	-	-	0.229
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
Mode	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 4132 826.4 MHz	Ch 4175 835.0 MHz	Ch 4233 846.6 MHz
WCDMA	Power		16.4 dBm	17.2 dBm	17.8 dBm
	Left	Cheek	0.703	0.936	0.849
		Tilt	-	0.541	-
	Right	Cheek	0.647	0.851	0.751
		Tilt	-	0.596	-
WCDMA	Left Cheek, BT active		-	0.710	-

1900MHz Head SAR results

Mode	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 512 1850.2 MHz	Ch 661 1880.0 MHz	Ch 810 1909.8 MHz
GSM	Power		32.3 dBm	31.1 dBm	32.1 dBm
	Left	Cheek	-	0.364	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
2-slot GPRS	Power		31.3 dBm	30.0 dBm	32.0 dBm
	Left	Cheek	-	0.667	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
3-slot GPRS	Power		31.5 dBm	30.2 dBm	30.9 dBm
	Left	Cheek	-	0.773	-
		Tilt	-	0.778	-
	Right	Cheek	0.832	0.853	0.790
		Tilt	0.819	0.807	0.786
3-slot 8PSK EGPRS	Power		28.8 dBm	27.7 dBm	28.4 dBm
	Left	Cheek	-	-	-
		Tilt	-	-	-
	Right	Cheek	-	0.320	-
		Tilt	-	-	-
3-slot GPRS	Right Cheek, BT active		-	0.850	-

2450MHz Head SAR results

Mode	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 1 2412.0 MHz	Ch 7 2442.0 MHz	Ch 11 2462.0 MHz
WLAN	Power		23.4 dBm	23.4 dBm	22.5 dBm
	Left	Cheek	-	0.263	-
		Tilt	0.289	0.269	0.150
	Right	Cheek	-	0.170	-
		Tilt	-	0.244	-

The measured Body SAR values for the test device are tabulated below:

850MHz Body SAR results

Mode	Test configuration	SAR, averaged over 1g (W/kg)		
		Ch 128 824.2 MHz	Ch 190 836.6 MHz	Ch 251 848.8 MHz
2-slot GPRS	Power	23.3 dBm	22.9 dBm	23.7 dBm
	Without headset	0.366	0.457	0.570
	Headset HS-47	0.201	0.249	0.353
Mode	Test configuration	SAR, averaged over 1g (W/kg)		
		Ch 4132 826.4 MHz	Ch 4175 835.0 MHz	Ch 4233 846.6 MHz
WCDMA	Power	16.4 dBm	17.2 dBm	17.8 dBm
	Without headset	0.386	0.452	0.449
	Headset HS-47	0.258	0.278	0.300
2-slot GPRS	Without headset, BT active	-	-	0.591

1900MHz Body SAR results

Mode	Test configuration	SAR, averaged over 1g (W/kg)		
		Ch 512 1850.2 MHz	Ch 661 1880.0 MHz	Ch 810 1909.8 MHz
3-slot GPRS	Power	31.5 dBm	30.2 dBm	30.9 dBm
	Without headset	0.716	0.783	0.724
	Headset HS-47	0.653	0.670	0.578
3-slot GPRS	Without headset, BT active	-	0.760	-

2450MHz Body SAR results

Mode	Test configuration	SAR, averaged over 1g (W/kg)		
		Ch 1 2412.0 MHz	Ch 7 2442.0 MHz	Ch 11 2462.0 MHz
WLAN	Power	23.4 dBm	23.4 dBm	22.5 dBm
	Without headset	0.039	0.060	0.042
	Headset HS-47	0.040	0.059	0.042

Simultaneous transmissions: Combined SAR results

Test configuration	Max. 1g SAR results			Combined 1g SAR values	
	WLAN	850MHz band	1900MHz band	WLAN + 850MHz band	WLAN + 1900MHz band
Head: Left, Cheek	0.263	0.936	0.773	1.199	1.036
Head: Left, Tilt	0.289	0.541	0.778	0.830	1.067
Head: Right, Cheek	0.170	0.851	0.853	1.021	1.023
Head: Right, Tilt	0.244	0.596	0.807	0.840	1.051
Body: Without Headset	0.060	0.591	0.783	0.651	0.843
Body: With HS-47	0.059	0.353	0.670	0.412	0.729

Combining the maximum SAR values of WLAN2450 and the cellular bands tends to overestimate the SAR value since their maxima do not necessarily occur in the same location.

Plots of the Measurement scans are given in Appendix B.

APPENDIX A: SYSTEM CHECKING SCANS

Date/Time: 2007-08-07 12:21:13

Test Laboratory: TCC Nokia

Type: D835V2; Serial: D835V2 - SN:480

Communication System: CW835

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL835 (070807); Medium Notes: t=21.3C

Medium parameters used: $f = 835$ MHz; $\sigma = 0.904$ mho/m; $\epsilon_r = 41.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(5.88, 5.88, 5.88); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.70 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 56.6 V/m

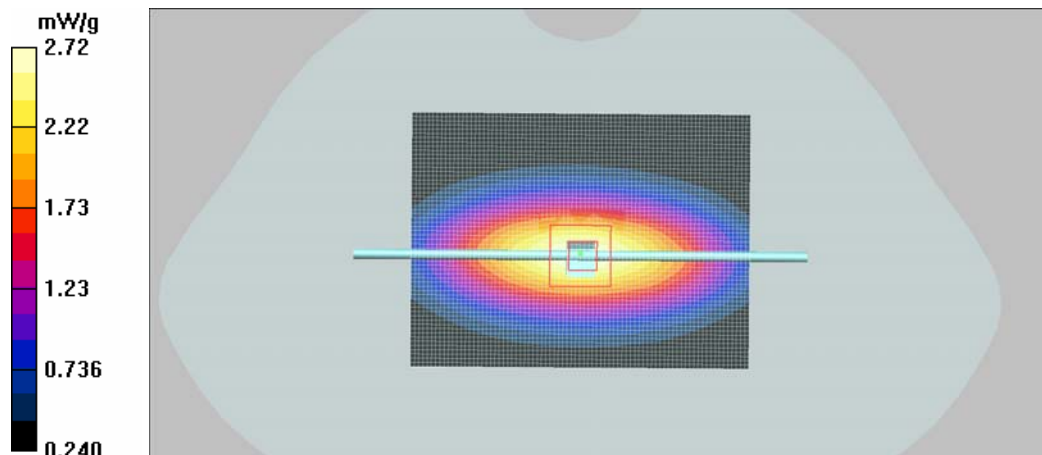
Peak SAR (extrapolated) = 3.79 W/kg

SAR(1 g) = 2.52 mW/g

SAR(10 g) = 1.64 mW/g

Power Drift = 0.027 dB

Maximum value of SAR (measured) = 2.72 mW/g



Date/Time: 2007-08-08 07:47:18

Test Laboratory: TCC Nokia

Type: D835V2; Serial: D835V2 - SN:480

Communication System: CW835

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL835 (070808); Medium Notes: t=21.0C

Medium parameters used: f = 835 MHz; $\sigma = 0.898$ mho/m; $\epsilon_r = 41.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(5.88, 5.88, 5.88); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.73 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 57.1 V/m

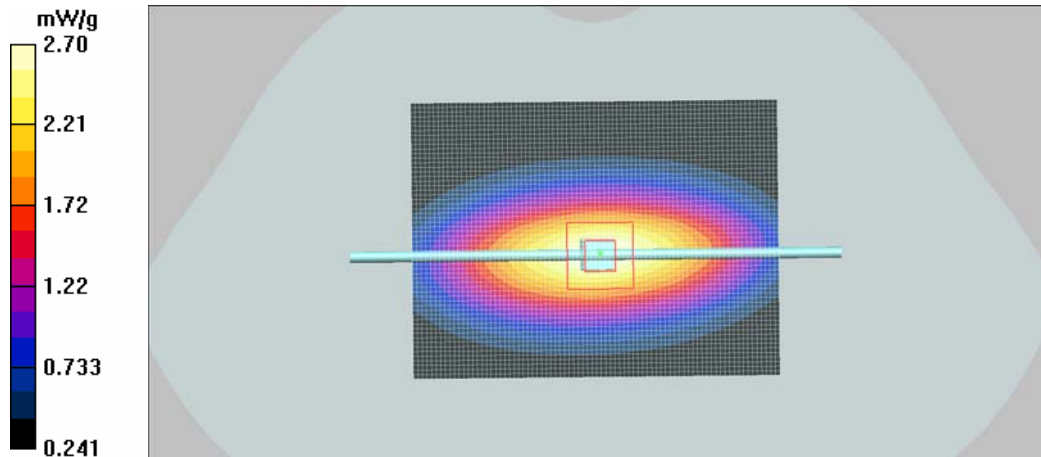
Peak SAR (extrapolated) = 3.79 W/kg

SAR(1 g) = 2.52 mW/g

SAR(10 g) = 1.63 mW/g

Power Drift = -0.001 dB

Maximum value of SAR (measured) = 2.70 mW/g



Date/Time: 2007-08-06 10:03:30

Test Laboratory: TCC Nokia

Type: D1900V2; Serial: D1900V2 - SN:5d013

Communication System: CW1900

Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium Notes: 20.5C

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 39.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1396; Probe Notes:
- ConvF(5.28, 5.28, 5.28); Calibrated: 2007-02-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn728; Calibrated: 2007-02-13
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

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

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 94.2 V/m

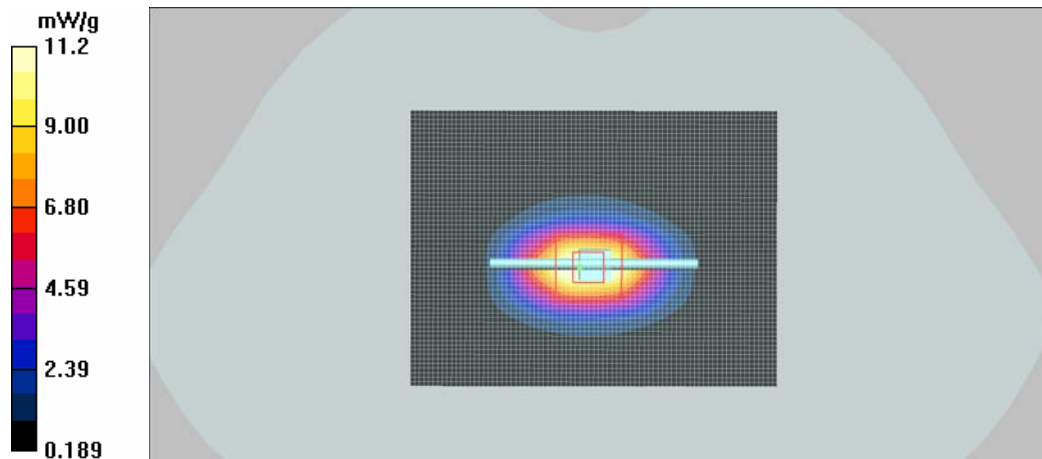
Peak SAR (extrapolated) = 17.2 W/kg

SAR(1 g) = 9.95 mW/g

SAR(10 g) = 5.25 mW/g

Power Drift = 0.003 dB

Maximum value of SAR (measured) = 11.2 mW/g



Date/Time: 2007-08-07 09:08:31

Test Laboratory: TCC Nokia

Type: D1900V2; Serial: D1900V2 - SN:5d013

Communication System: CW1900

Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium Notes: 21.4C

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 39.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1396; Probe Notes:
- ConvF(5.28, 5.28, 5.28); Calibrated: 2007-02-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn728; Calibrated: 2007-02-13
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

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

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 92.4 V/m

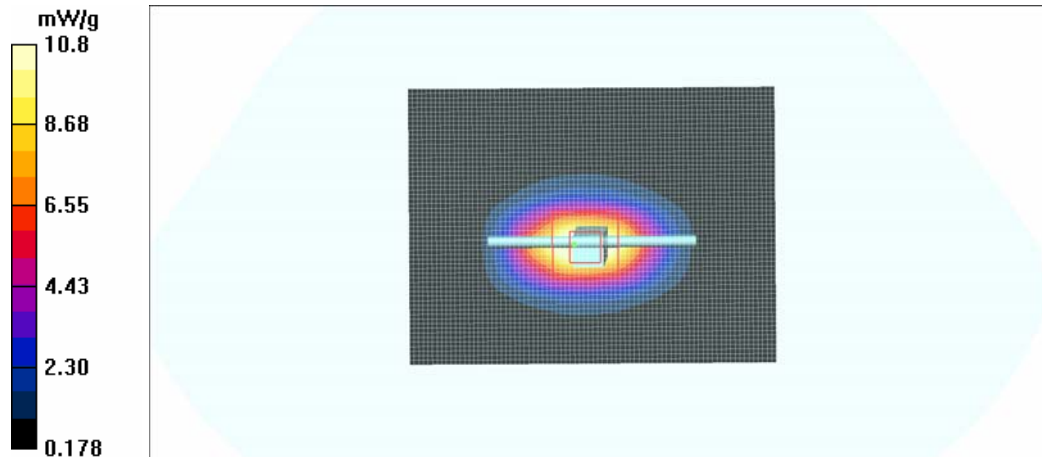
Peak SAR (extrapolated) = 16.5 W/kg

SAR(1 g) = 9.59 mW/g

SAR(10 g) = 5.08 mW/g

Power Drift = -0.008 dB

Maximum value of SAR (measured) = 10.8 mW/g



Date/Time: 2007-08-14 13:53:43

Test Laboratory: TCC Nokia

Type: D1900V2; Serial: D1900V2 - SN:5d013

Communication System: CW1900

Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium Notes: 20.3 C

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1396
- ConvF(5.28, 5.28, 5.28); Calibrated: 2007-02-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn728; Calibrated: 2007-02-13
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

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

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 92.1 V/m

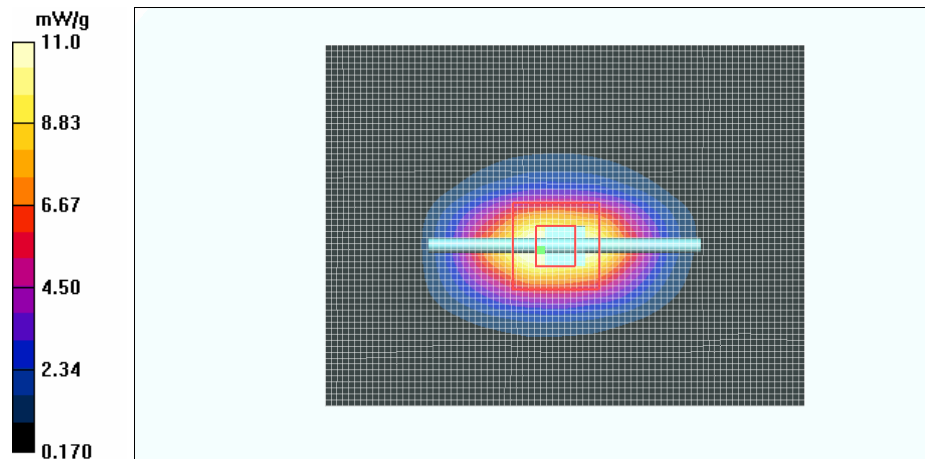
Peak SAR (extrapolated) = 16.9 W/kg

SAR(1 g) = 9.7 mW/g

SAR(10 g) = 5.11 mW/g

Power Drift = 0.004 dB

Maximum value of SAR (measured) = 11.0 mW/g



Date/Time: 2007-07-11 11:37:45

Test Laboratory: TCC Nokia

Type: D2450V2; Serial: D2450V2 - SN:749

Communication System: CW2450

Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: HSL2450 (070711); Medium Notes: T=20.8C

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.81$ mho/m; $\epsilon_r = 38.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(4.38, 4.38, 4.38); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 17.0 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 98.3 V/m

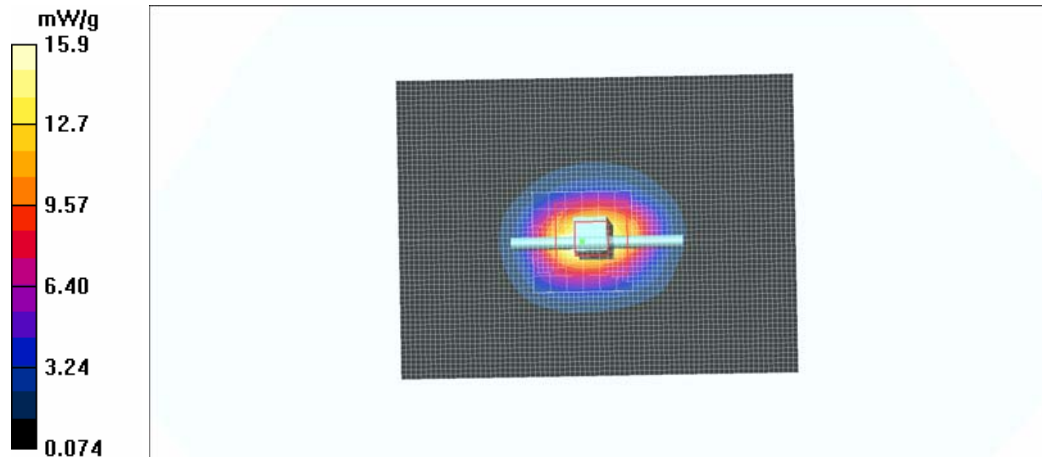
Peak SAR (extrapolated) = 30.8 W/kg

SAR(1 g) = 14.3 mW/g

SAR(10 g) = 6.63 mW/g

Power Drift = -0.018 dB

Maximum value of SAR (measured) = 15.9 mW/g



Date/Time: 2007-08-09 08:41:44

Test Laboratory: TCC Nokia

Type: D835V2; Serial: D835V2 - SN:480

Communication System: CW835

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: BSL835 (070809); Medium Notes: t=21.0C

Medium parameters used: f = 835 MHz; σ = 0.976 mho/m; ϵ_r = 55.2; ρ = 1000 kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 3; Type: SAM 4.0; Serial: 1272
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.69 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.7 V/m

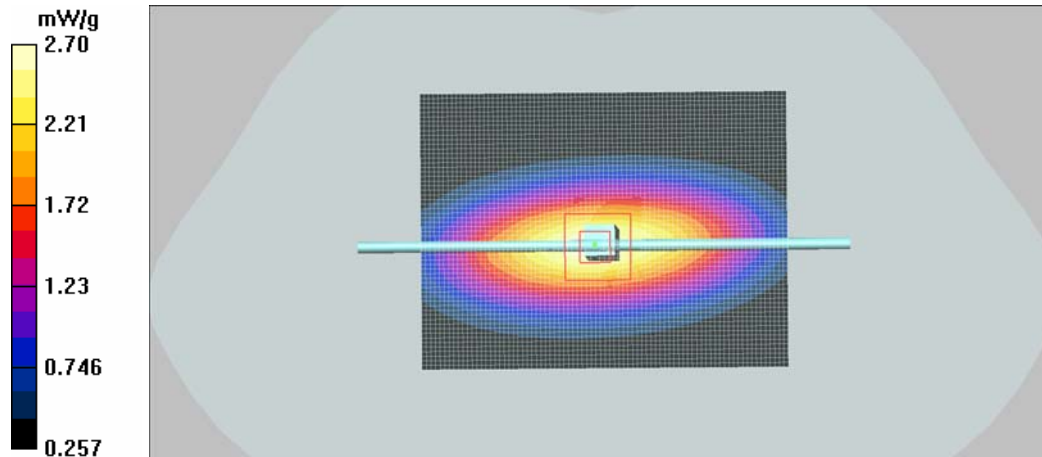
Peak SAR (extrapolated) = 3.62 W/kg

SAR(1 g) = 2.49 mW/g

SAR(10 g) = 1.64 mW/g

Power Drift = -0.002 dB

Maximum value of SAR (measured) = 2.70 mW/g



Date/Time: 2007-07-12 15:10:33

Test Laboratory: TCC Nokia

Type: D2450V2; Serial: D2450V2 - SN:749

Communication System: CW2450

Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: M2450; Medium Notes: 20.6C

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.92$ mho/m; $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1396; Probe Notes:
- ConvF(4, 4, 4); Calibrated: 2007-02-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn728; Calibrated: 2007-02-13
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 17.6 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 96.3 V/m

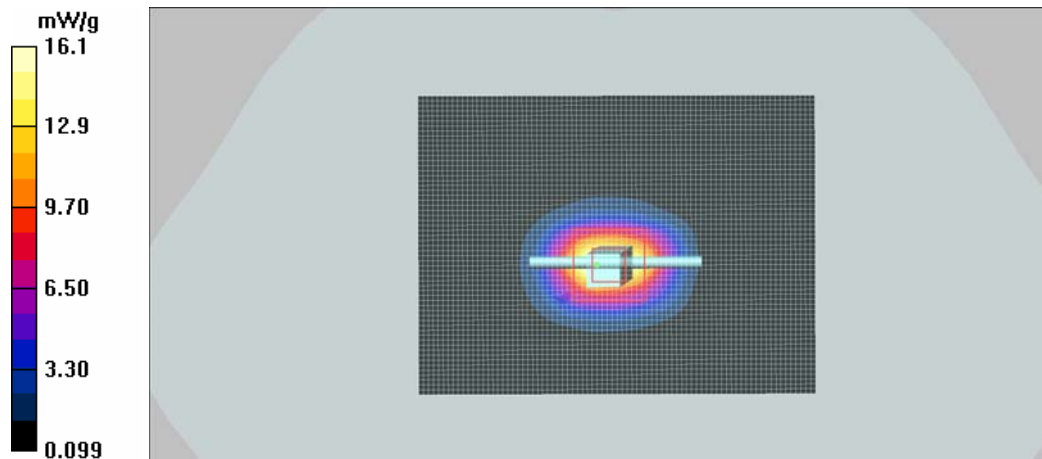
Peak SAR (extrapolated) = 30.5 W/kg

SAR(1 g) = 14.2 mW/g

SAR(10 g) = 6.65 mW/g

Power Drift = -0.007 dB

Maximum value of SAR (measured) = 16.1 mW/g



APPENDIX B: MEASUREMENT SCANS

Date/Time: 2007-08-07 13:46:28

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: GSM850

Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium: HSL835 (070807); Medium Notes: t=21.1C

Medium parameters used: $f = 837$ MHz; $\sigma = 0.906$ mho/m; $\epsilon_r = 41.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(5.88, 5.88, 5.88); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek position, Middle/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.660 mW/g

Cheek position, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 21.7 V/m

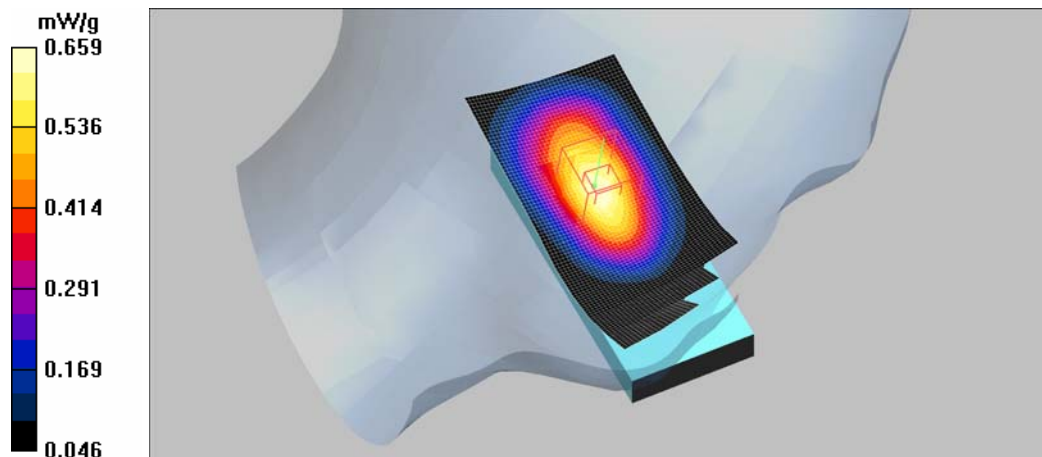
Peak SAR (extrapolated) = 0.835 W/kg

SAR(1 g) = 0.622 mW/g

SAR(10 g) = 0.420 mW/g

Power Drift = -0.307 dB

Maximum value of SAR (measured) = 0.659 mW/g



Date/Time: 2007-08-08 09:07:16

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: 2-slot GPRS850

Frequency: 848.8 MHz; Duty Cycle: 1:4.2

Medium: HSL835 (070808); Medium Notes: t=21.0C

Medium parameters used: f = 849 MHz; σ = 0.906 mho/m; ϵ_r = 41.6; ρ = 1000 kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(5.88, 5.88, 5.88); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek position, High/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

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

Cheek position, High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 25.2 V/m

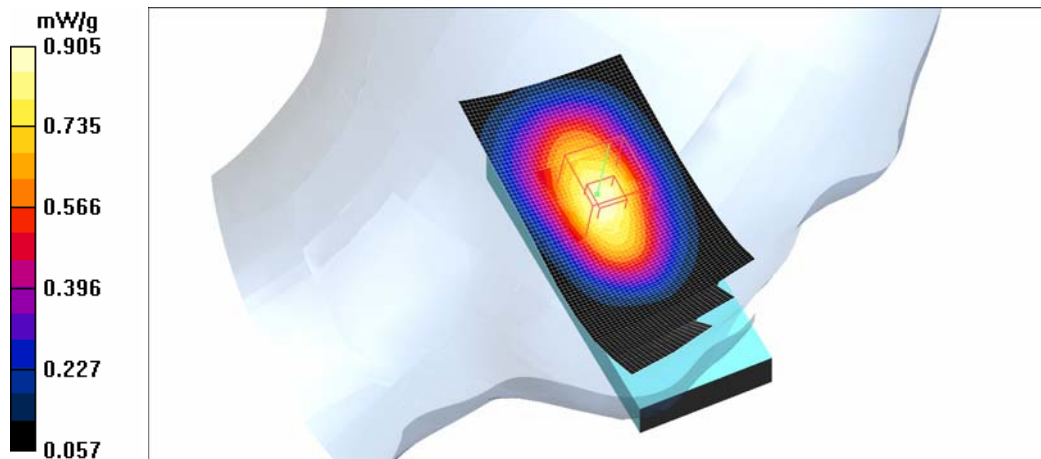
Peak SAR (extrapolated) = 1.16 W/kg

SAR(1 g) = 0.861 mW/g

SAR(10 g) = 0.587 mW/g

Power Drift = -0.204 dB

Maximum value of SAR (measured) = 0.905 mW/g



Date/Time: 2007-08-07 14:52:31

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: 2-slot GPRS850

Frequency: 836.6 MHz; Duty Cycle: 1:4.2

Medium: HSL835 (070807); Medium Notes: t=21.1C

Medium parameters used: $f = 837$ MHz; $\sigma = 0.906$ mho/m; $\epsilon_r = 41.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(5.88, 5.88, 5.88); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt position, Middle/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.489 mW/g

Tilt position, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 21.7 V/m

Peak SAR (extrapolated) = 0.630 W/kg

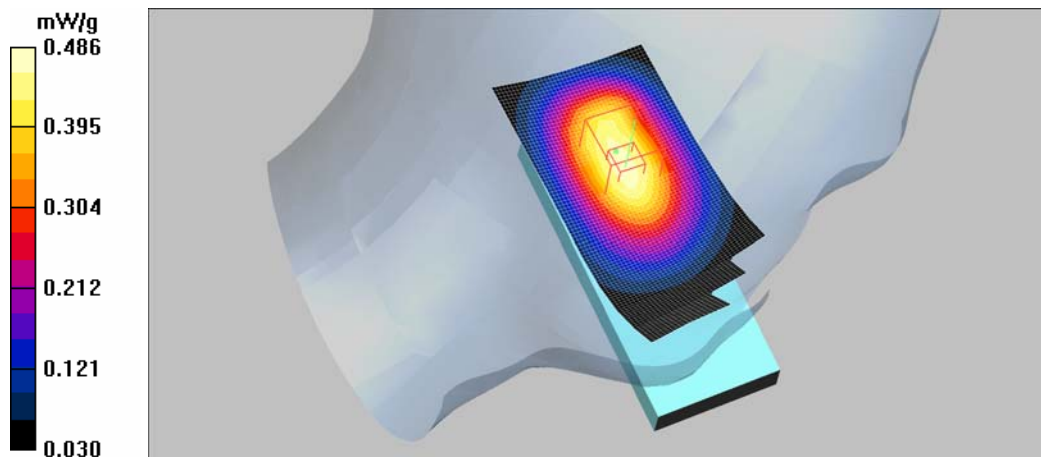
SAR(1 g) = 0.457 mW/g

SAR(10 g) = 0.322 mW/g

Power Drift = -0.006 dB

Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.

Maximum value of SAR (measured) = 0.486 mW/g



Date/Time: 2007-08-07 15:17:20

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: 2-slot GPRS850

Frequency: 836.6 MHz; Duty Cycle: 1:4.2

Medium: HSL835 (070807); Medium Notes: t=21.3C

Medium parameters used: f = 837 MHz; σ = 0.906 mho/m; ϵ_r = 41.7; ρ = 1000 kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(5.88, 5.88, 5.88); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek position, Middle/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.725 mW/g

Cheek position, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 21.5 V/m

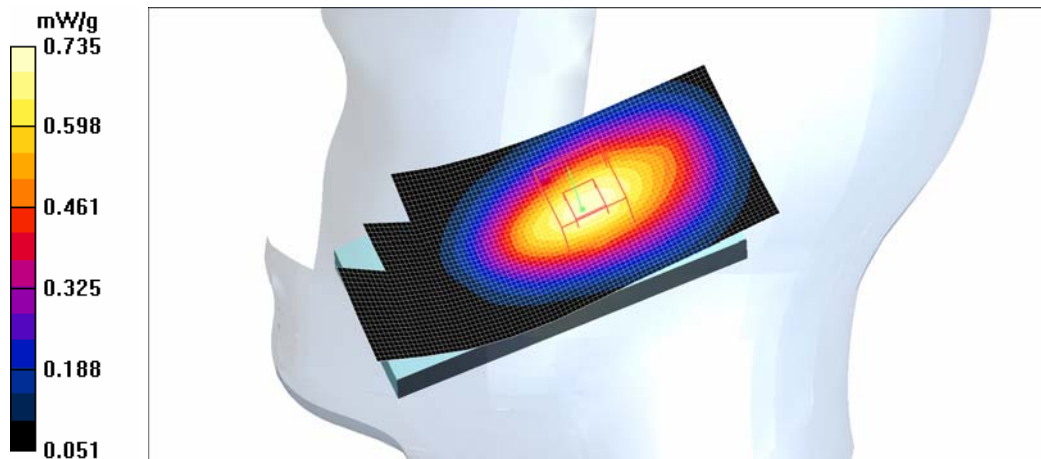
Peak SAR (extrapolated) = 0.923 W/kg

SAR(1 g) = 0.689 mW/g

SAR(10 g) = 0.471 mW/g

Power Drift = -0.208 dB

Maximum value of SAR (measured) = 0.735 mW/g



Date/Time: 2007-08-08 08:17:11

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: 2-slot GPRS850

Frequency: 836.6 MHz; Duty Cycle: 1:4.2

Medium: HSL835 (070808); Medium Notes: t=21.0C

Medium parameters used: f = 837 MHz; σ = 0.9 mho/m; ϵ_r = 41.7; ρ = 1000 kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(5.88, 5.88, 5.88); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt position, Middle/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

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

Tilt position, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 22.7 V/m

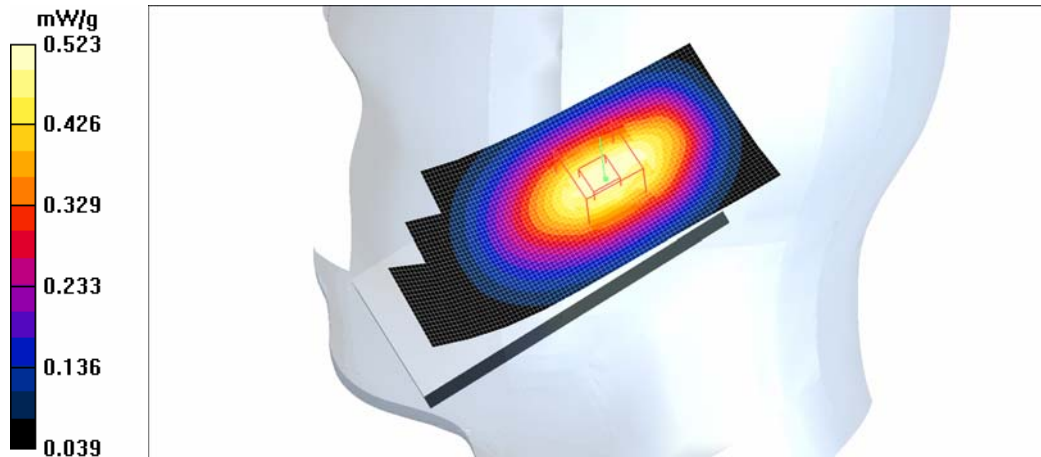
Peak SAR (extrapolated) = 0.638 W/kg

SAR(1 g) = 0.491 mW/g

SAR(10 g) = 0.345 mW/g

Power Drift = -0.377 dB

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



Date/Time: 2007-08-07 14:27:07

Test Laboratory: TCC Nokia
Type: RM-244; Serial: 004401/01/280520/2

Communication System: 3-slot GPRS850

Frequency: 836.6 MHz; Duty Cycle: 1:2.8

Medium: HSL835 (070807); Medium Notes: t=21.1C

Medium parameters used: $f = 837$ MHz; $\sigma = 0.906$ mho/m; $\epsilon_r = 41.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(5.88, 5.88, 5.88); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek position, Middle/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.785 mW/g

Cheek position, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 23.3 V/m

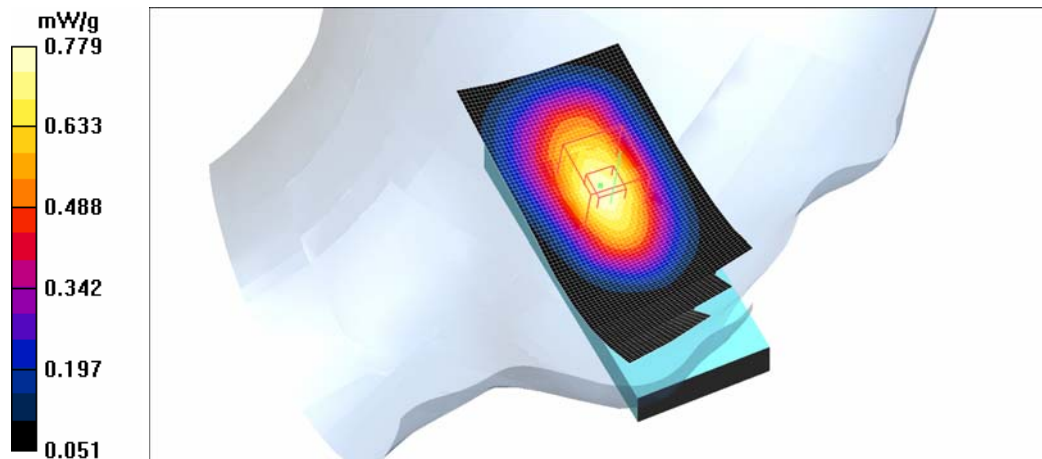
Peak SAR (extrapolated) = 0.981 W/kg

SAR(1 g) = 0.740 mW/g

SAR(10 g) = 0.504 mW/g

Power Drift = -0.176 dB

Maximum value of SAR (measured) = 0.779 mW/g



Date/Time: 2007-08-08 10:42:48

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: 2-slot 8PSK EGPRS850

Frequency: 849 MHz; Duty Cycle: 1:4.2

Medium: HSL835 (070808); Medium Notes: t=21.0C

Medium parameters used: f = 849 MHz; σ = 0.906 mho/m; ϵ_r = 41.6; ρ = 1000 kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(5.88, 5.88, 5.88); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek position, High/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.235 mW/g

Cheek position, High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 12.4 V/m

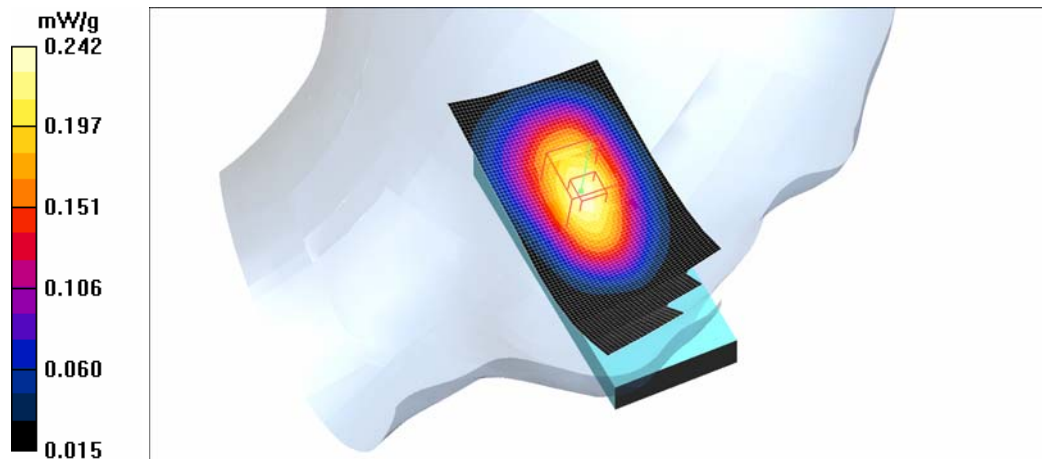
Peak SAR (extrapolated) = 0.306 W/kg

SAR(1 g) = 0.229 mW/g

SAR(10 g) = 0.156 mW/g

Power Drift = -0.007 dB

Maximum value of SAR (measured) = 0.242 mW/g



Date/Time: 2007-08-08 11:15:27

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: WCDMA850

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL835 (070808); Medium Notes: t=20.8C

Medium parameters used: f = 835 MHz; $\sigma = 0.898$ mho/m; $\epsilon_r = 41.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(5.88, 5.88, 5.88); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek position, Middle/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.990 mW/g

Cheek position, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 26.0 V/m

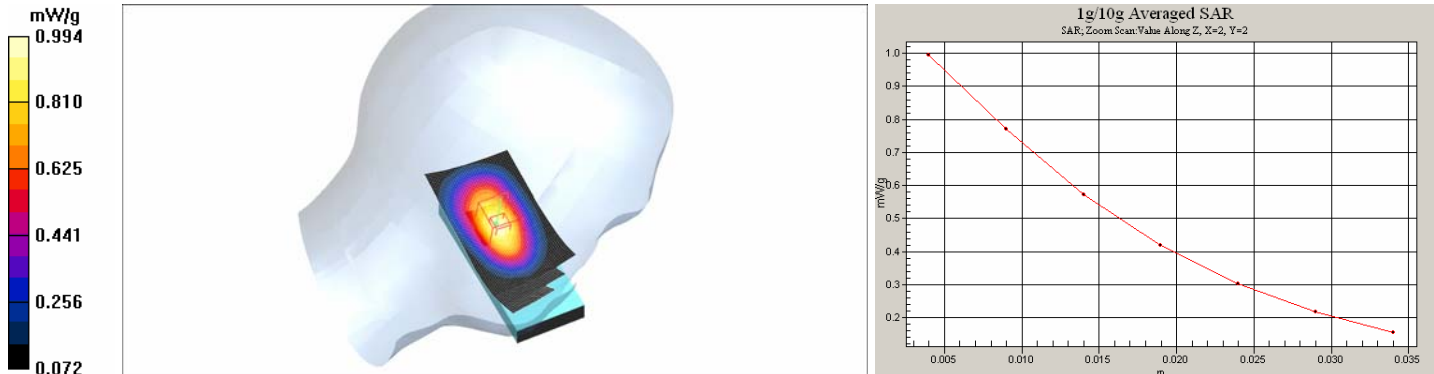
Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.936 mW/g

SAR(10 g) = 0.641 mW/g

Power Drift = -0.174 dB

Maximum value of SAR (measured) = 0.994 mW/g



Date/Time: 2007-08-08 11:33:00

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: WCDMA850

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL835 (070808); Medium Notes: t=20.8C

Medium parameters used: f = 835 MHz; σ = 0.898 mho/m; ϵ_r = 41.7; ρ = 1000 kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(5.88, 5.88, 5.88); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt position, Middle/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

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

Tilt position, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 24.0 V/m

Peak SAR (extrapolated) = 0.731 W/kg

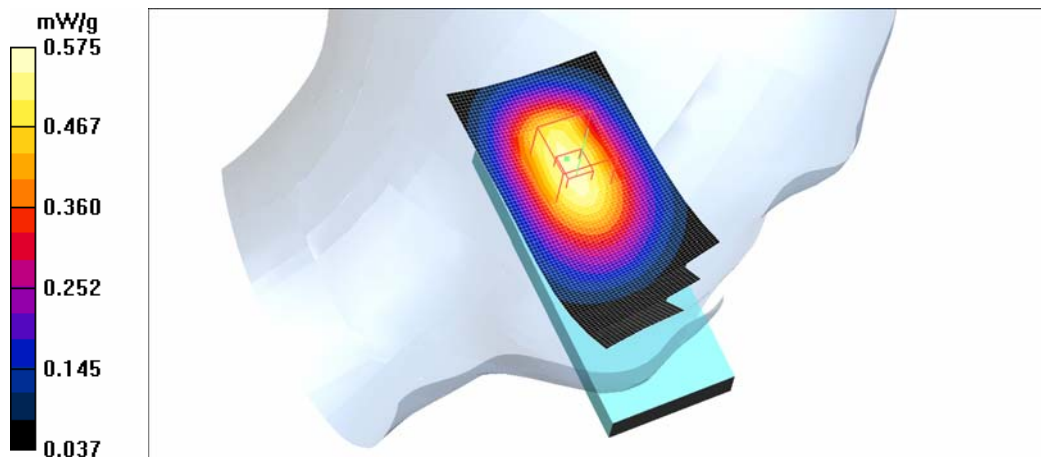
SAR(1 g) = 0.541 mW/g

SAR(10 g) = 0.383 mW/g

Power Drift = -0.146 dB

Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.

Maximum value of SAR (measured) = 0.575 mW/g



Date/Time: 2007-08-08 12:23:51

Test Laboratory: TCC Nokia
Type: RM-244; Serial: 004401/01/280520/2

Communication System: WCDMA850

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL835 (070808); Medium Notes: t=21.0C

Medium parameters used: f = 835 MHz; $\sigma = 0.898$ mho/m; $\epsilon_r = 41.7$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(5.88, 5.88, 5.88); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek position, Middle/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.915 mW/g

Cheek position, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 24.6 V/m

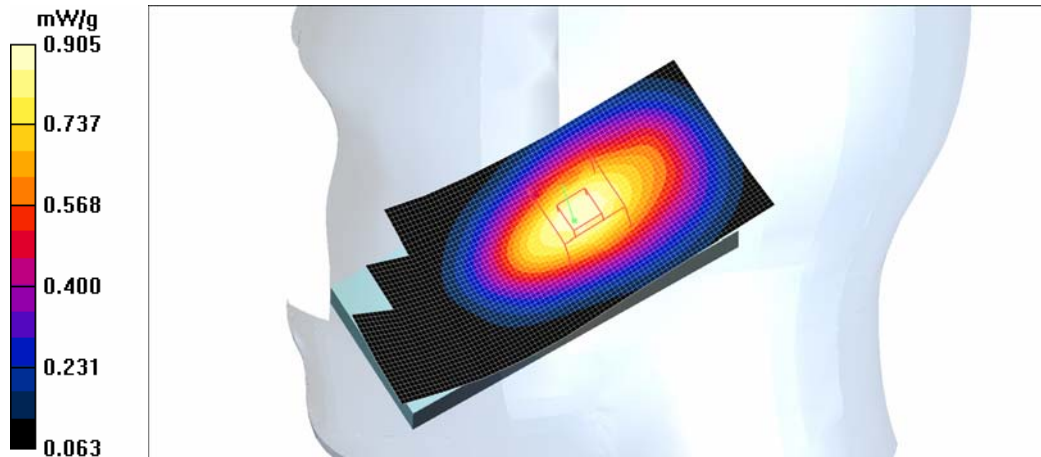
Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.851 mW/g

SAR(10 g) = 0.582 mW/g

Power Drift = -0.184 dB

Maximum value of SAR (measured) = 0.905 mW/g



Date/Time: 2007-08-08 12:39:44

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: WCDMA850

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL835 (070808); Medium Notes: t=20.4C

Medium parameters used: f = 835 MHz; σ = 0.898 mho/m; ϵ_r = 41.7; ρ = 1000 kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(5.88, 5.88, 5.88); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt position, Middle/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.635 mW/g

Tilt position, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 24.4 V/m

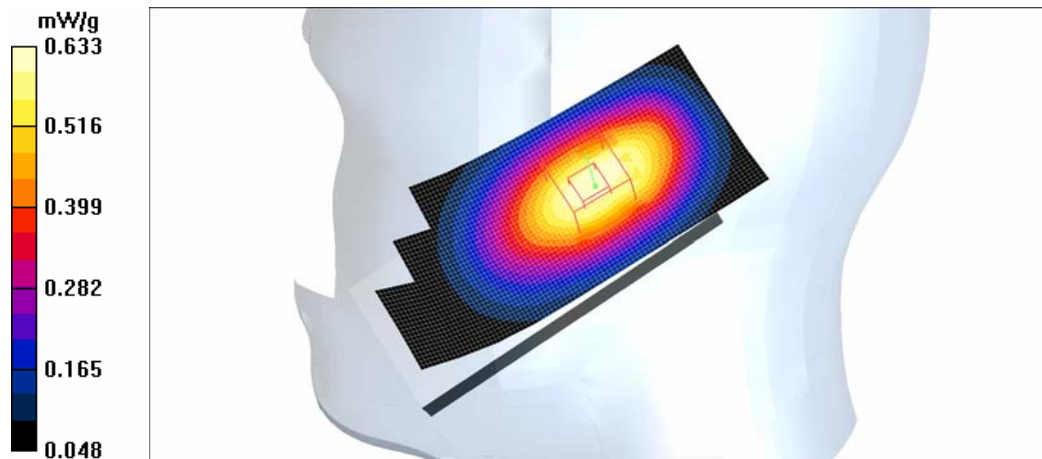
Peak SAR (extrapolated) = 0.772 W/kg

SAR(1 g) = 0.596 mW/g

SAR(10 g) = 0.421 mW/g

Power Drift = 0.050 dB

Maximum value of SAR (measured) = 0.633 mW/g



Date/Time: 2007-08-08 15:08:48

Test Laboratory: TCC Nokia
Type: RM-244; Serial: 004401/01/280520/2

Communication System: WCDMA850

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL835 (070808); Medium Notes: t=20.8C

Medium parameters used: f = 835 MHz; $\sigma = 0.898$ mho/m; $\epsilon_r = 41.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(5.88, 5.88, 5.88); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek position, Middle, BT/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.748 mW/g

Cheek position, Middle, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 22.6 V/m

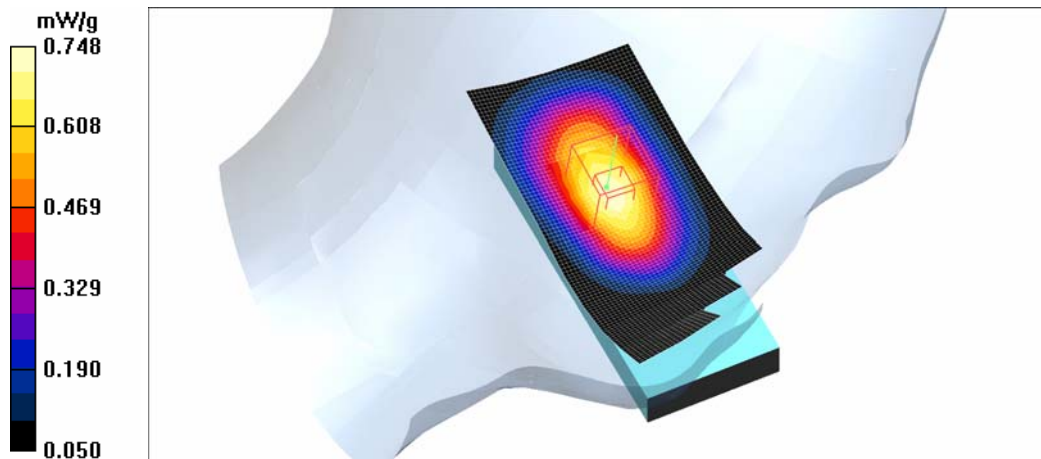
Peak SAR (extrapolated) = 0.928 W/kg

SAR(1 g) = 0.710 mW/g

SAR(10 g) = 0.484 mW/g

Power Drift = -0.042 dB

Maximum value of SAR (measured) = 0.748 mW/g



Date/Time: 2007-08-06 11:49:17

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: GSM1900

Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: HSL1900; Medium Notes: T=20.3C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 39.5$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1396; Probe Notes:
- ConvF(5.28, 5.28, 5.28); Calibrated: 2007-02-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn728; Calibrated: 2007-02-13
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek position, Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.480 mW/g

Cheek position, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 10.6 V/m

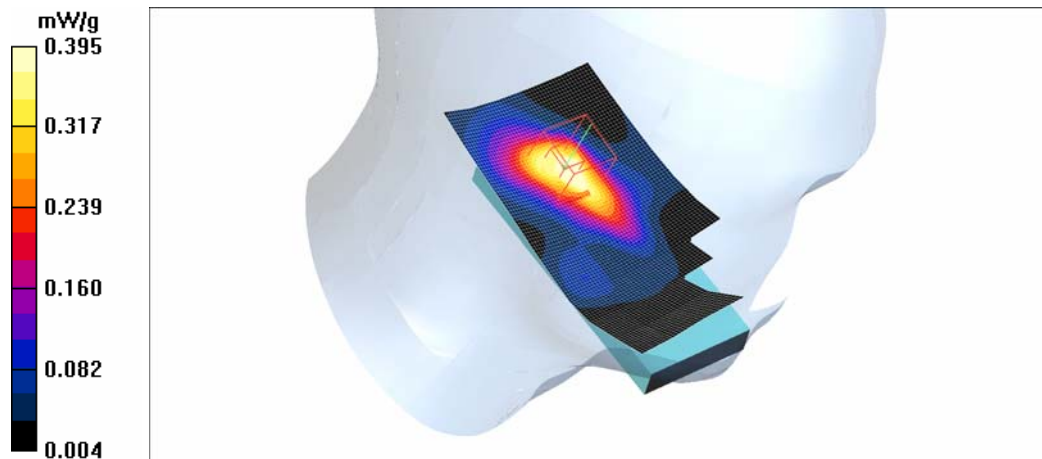
Peak SAR (extrapolated) = 0.534 W/kg

SAR(1 g) = 0.364 mW/g

SAR(10 g) = 0.218 mW/g

Power Drift = -0.064 dB

Maximum value of SAR (measured) = 0.395 mW/g



Date/Time: 2007-08-06 12:26:41

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: 2-slot GPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:4.2

Medium: HSL1900; Medium Notes: T=20.3C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 39.5$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1396; Probe Notes:
- ConvF(5.28, 5.28, 5.28); Calibrated: 2007-02-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn728; Calibrated: 2007-02-13
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek position, Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.880 mW/g

Cheek position, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 14.4 V/m

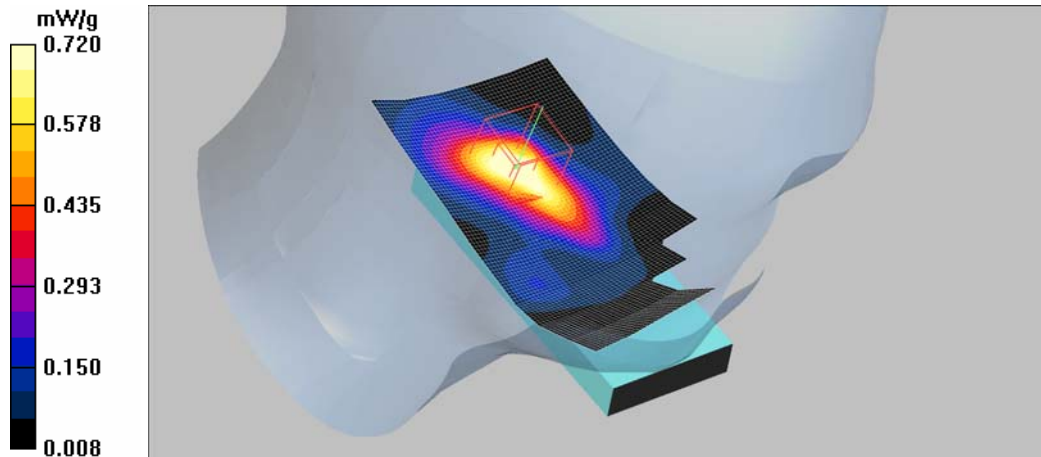
Peak SAR (extrapolated) = 0.979 W/kg

SAR(1 g) = 0.667 mW/g

SAR(10 g) = 0.400 mW/g

Power Drift = -0.061 dB

Maximum value of SAR (measured) = 0.720 mW/g



Date/Time: 2007-08-06 12:45:34

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: 3-slot GPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:2.8

Medium: HSL1900; Medium Notes: T=20.3C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 39.5$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1396; Probe Notes:
- ConvF(5.28, 5.28, 5.28); Calibrated: 2007-02-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn728; Calibrated: 2007-02-13
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek position, Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

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

Cheek position, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 15.4 V/m

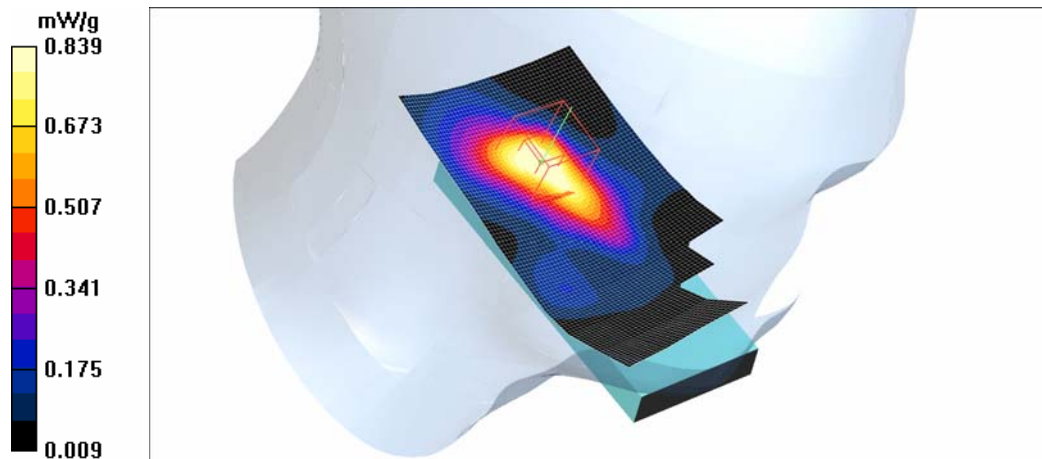
Peak SAR (extrapolated) = 1.13 W/kg

SAR(1 g) = 0.773 mW/g

SAR(10 g) = 0.463 mW/g

Power Drift = -0.062 dB

Maximum value of SAR (measured) = 0.839 mW/g



Date/Time: 2007-08-06 13:05:00

Test Laboratory: TCC Nokia
Type: RM-244; Serial: 004401/01/280520/2

Communication System: 3-slot GPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:2.8

Medium: HSL1900; Medium Notes: T=20.3C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 39.5$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1396; Probe Notes:
- ConvF(5.28, 5.28, 5.28); Calibrated: 2007-02-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn728; Calibrated: 2007-02-13
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt position, Middle/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.908 mW/g

Tilt position, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 20.0 V/m

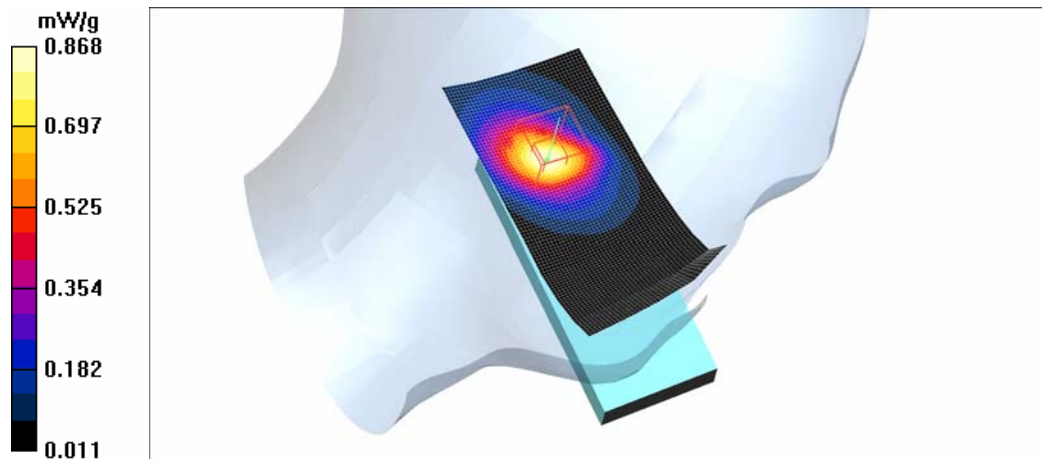
Peak SAR (extrapolated) = 1.17 W/kg

SAR(1 g) = 0.778 mW/g

SAR(10 g) = 0.442 mW/g

Power Drift = -0.097 dB

Maximum value of SAR (measured) = 0.868 mW/g



Date/Time: 2007-08-06 13:32:26

Test Laboratory: TCC Nokia
Type: RM-244; Serial: 004401/01/280520/2

Communication System: 3-slot GPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:2.8

Medium: HSL1900; Medium Notes: 20.2C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 39.5$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1396; Probe Notes:
- ConvF(5.28, 5.28, 5.28); Calibrated: 2007-02-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn728; Calibrated: 2007-02-13
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek position, Middle/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.943 mW/g

Cheek position, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 17.5 V/m

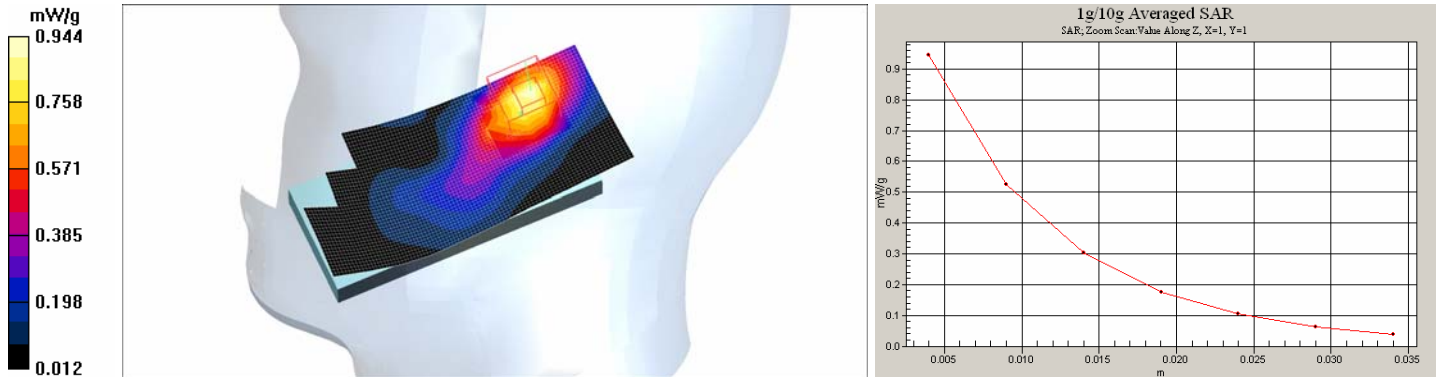
Peak SAR (extrapolated) = 1.49 W/kg

SAR(1 g) = 0.853 mW/g

SAR(10 g) = 0.479 mW/g

Power Drift = -0.041 dB

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



Date/Time: 2007-08-14 14:54:10

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: 3-slot GPRS1900

Frequency: 1850.2 MHz; Duty Cycle: 1:2.8

Medium: HSL1900; Medium Notes: 20.4 C

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 39.9$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1396
- ConvF(5.28, 5.28, 5.28); Calibrated: 2007-02-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn728; Calibrated: 2007-02-13
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt position, Low/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

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

Tilt position, Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 22.5 V/m

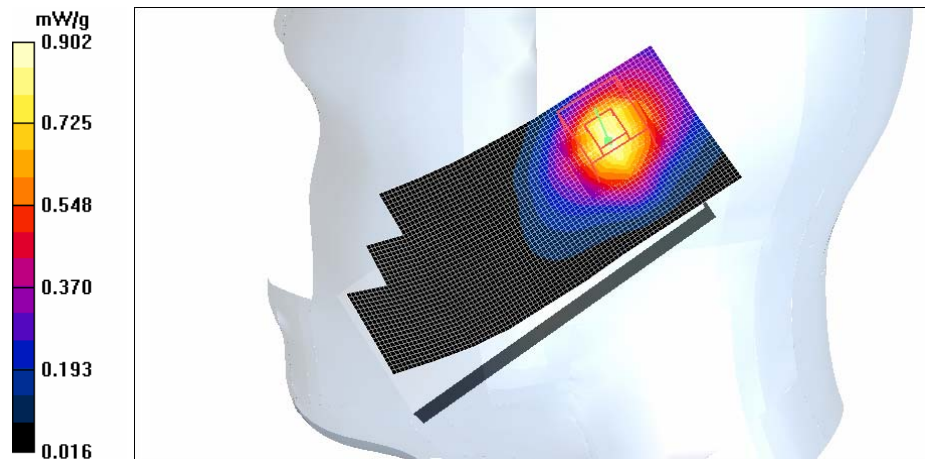
Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.819 mW/g

SAR(10 g) = 0.476 mW/g

Power Drift = -0.131 dB

Maximum value of SAR (measured) = 0.902 mW/g



Date/Time: 2007-08-06 15:21:52

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: 3-slot 8PSK EGPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:2.8

Medium: HSL1900; Medium Notes: 20.4C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 39.5$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1396; Probe Notes:
- ConvF(5.28, 5.28, 5.28); Calibrated: 2007-02-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn728; Calibrated: 2007-02-13
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek position, Middle/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.359 mW/g

Cheek position, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 11.9 V/m

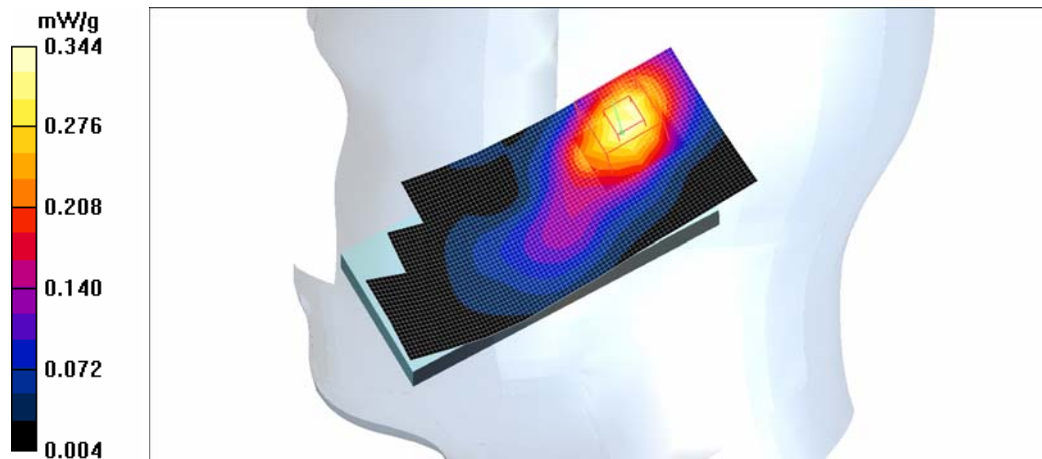
Peak SAR (extrapolated) = 0.546 W/kg

SAR(1 g) = 0.320 mW/g

SAR(10 g) = 0.181 mW/g

Power Drift = -0.086 dB

Maximum value of SAR (measured) = 0.344 mW/g



Date/Time: 2007-08-06 14:57:30

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: 3-slot GPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:2.8

Medium: HSL1900; Medium Notes: 20.4C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 39.5$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1396; Probe Notes:
- ConvF(5.28, 5.28, 5.28); Calibrated: 2007-02-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn728; Calibrated: 2007-02-13
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek position, Middle, BT/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.959 mW/g

Cheek position, Middle, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 18.9 V/m

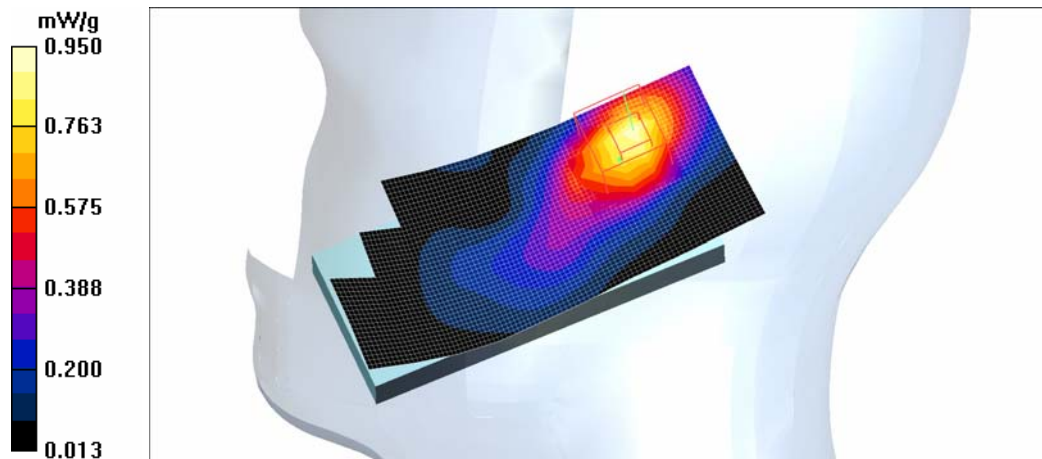
Peak SAR (extrapolated) = 1.45 W/kg

SAR(1 g) = 0.850 mW/g

SAR(10 g) = 0.477 mW/g

Power Drift = -0.175 dB

Maximum value of SAR (measured) = 0.950 mW/g



Date/Time: 2007-07-11 13:29:11

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: WLAN2450

Frequency: 2442 MHz; Duty Cycle: 1:1

Medium: HSL2450 (070711); Medium Notes: T=20.8C

Medium parameters used: $f = 2442$ MHz; $\sigma = 1.81$ mho/m; $\epsilon_r = 38.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(4.38, 4.38, 4.38); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek position, Middle/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.305 mW/g

Cheek position, Middle/Zoom Scan (5x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 11.8 V/m

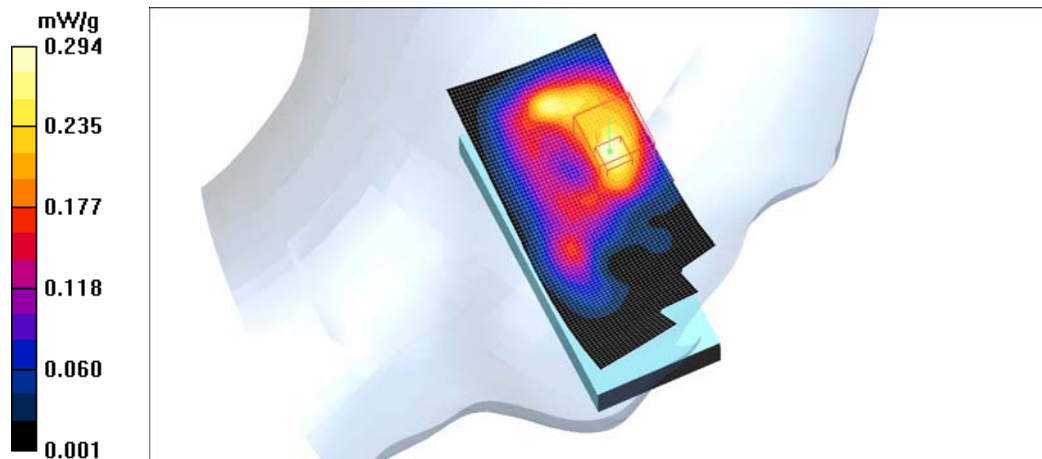
Peak SAR (extrapolated) = 0.563 W/kg

SAR(1 g) = 0.263 mW/g

SAR(10 g) = 0.129 mW/g

Power Drift = -0.053 dB

Maximum value of SAR (measured) = 0.294 mW/g



Date/Time: 2007-07-11 15:57:26

Test Laboratory: TCC Nokia
Type: RM-244; Serial: 004401/01/280520/2

Communication System: WLAN2450

Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: HSL2450 (070711); Medium Notes: T=19.9C

Medium parameters used: $f = 2412$ MHz; $\sigma = 1.76$ mho/m; $\epsilon_r = 38.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(4.38, 4.38, 4.38); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt position, Low/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

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

Tilt position, Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 14.8 V/m

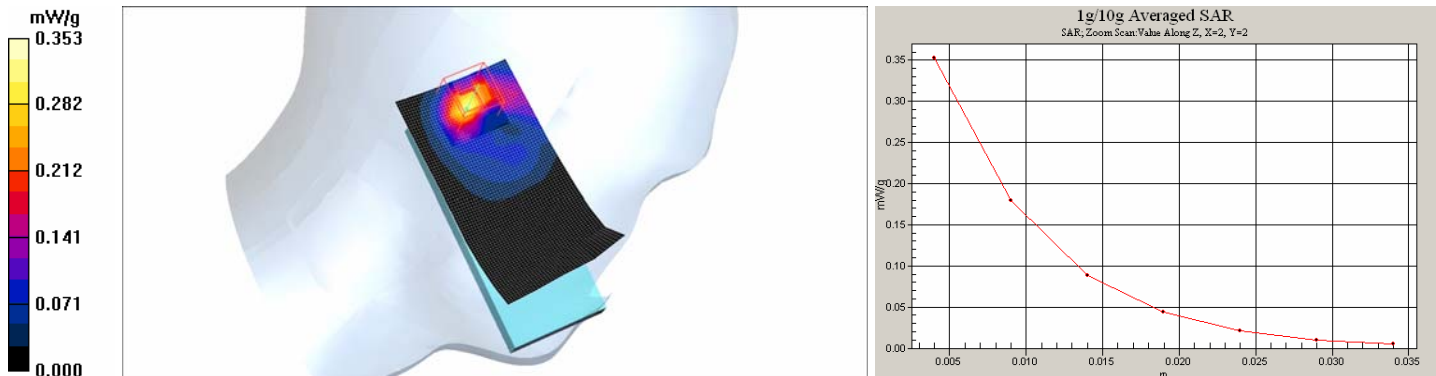
Peak SAR (extrapolated) = 0.627 W/kg

SAR(1 g) = 0.289 mW/g

SAR(10 g) = 0.121 mW/g

Power Drift = -0.041 dB

Maximum value of SAR (measured) = 0.353 mW/g



Date/Time: 2007-07-11 14:39:42

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: WLAN2450

Frequency: 2442 MHz; Duty Cycle: 1:1

Medium: HSL2450 (070711); Medium Notes: T=20.8C

Medium parameters used: $f = 2442$ MHz; $\sigma = 1.81$ mho/m; $\epsilon_r = 38.7$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(4.38, 4.38, 4.38); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek position, Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.185 mW/g

Cheek position, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 10.1 V/m

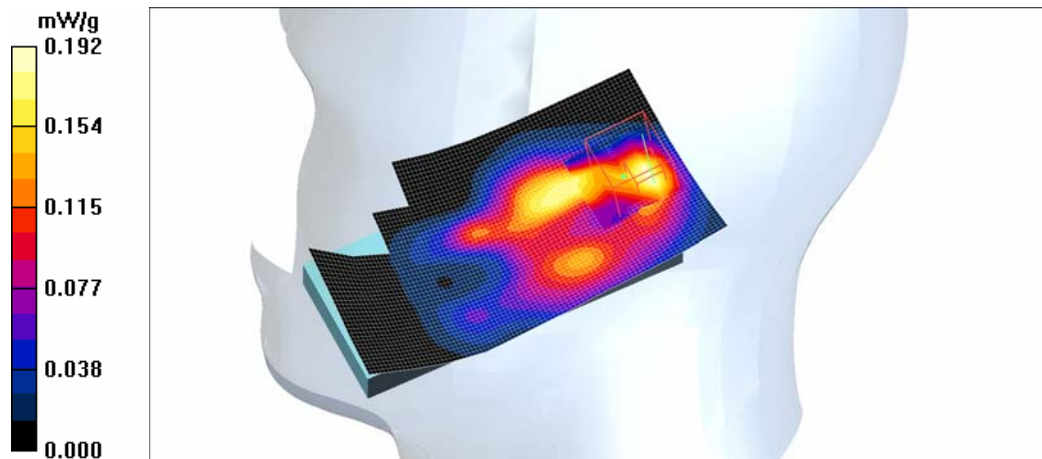
Peak SAR (extrapolated) = 0.405 W/kg

SAR(1 g) = 0.170 mW/g

SAR(10 g) = 0.077 mW/g

Power Drift = -0.142 dB

Maximum value of SAR (measured) = 0.192 mW/g



Date/Time: 2007-07-11 15:01:37

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: WLAN2450

Frequency: 2442 MHz; Duty Cycle: 1:1

Medium: HSL2450 (070711); Medium Notes: T=20.8C

Medium parameters used: $f = 2442$ MHz; $\sigma = 1.81$ mho/m; $\epsilon_r = 38.7$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(4.38, 4.38, 4.38); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

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

Maximum value of SAR (interpolated) = 0.246 mW/g

Tilt position, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 12.3 V/m

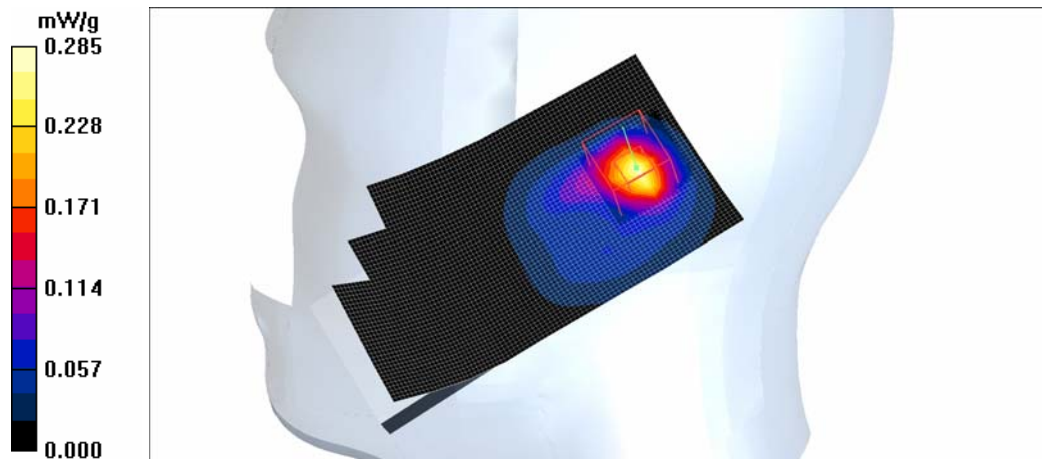
Peak SAR (extrapolated) = 0.515 W/kg

SAR(1 g) = 0.244 mW/g

SAR(10 g) = 0.104 mW/g

Power Drift = -0.105 dB

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



Date/Time: 2007-08-09 10:28:56

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: 2-slot GPRS850

Frequency: 848.8 MHz; Duty Cycle: 1:4.2

Medium: BSL835 (070809); Medium Notes: t=21.0C

Medium parameters used: f = 849 MHz; σ = 0.986 mho/m; ϵ_r = 55.1; ρ = 1000 kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 3; Type: SAM 4.0; Serial: 1272
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Body Measurement, High, No accessory/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.614 mW/g

Body Measurement, High, No accessory/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 15.2 V/m

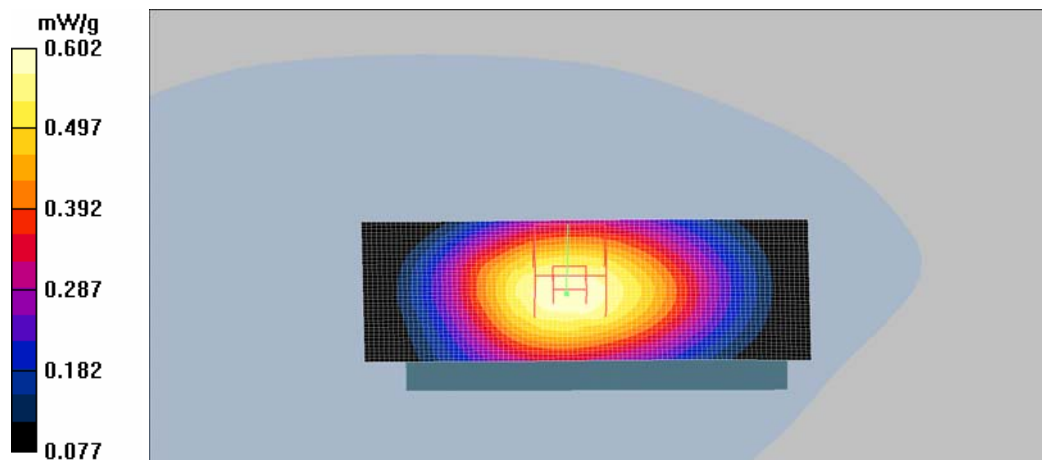
Peak SAR (extrapolated) = 0.726 W/kg

SAR(1 g) = 0.570 mW/g

SAR(10 g) = 0.419 mW/g

Power Drift = -0.047 dB

Maximum value of SAR (measured) = 0.602 mW/g



Date/Time: 2007-08-09 10:42:46

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: 2-slot GPRS850

Frequency: 848.8 MHz; Duty Cycle: 1:4.2

Medium: BSL835 (070809); Medium Notes: t=20.7C

Medium parameters used: f = 849 MHz; σ = 0.986 mho/m; ϵ_r = 55.1; ρ = 1000 kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 3; Type: SAM 4.0; Serial: 1272
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Body Measurement, High, HS-47/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.375 mW/g

Body Measurement, High, HS-47/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 12.3 V/m

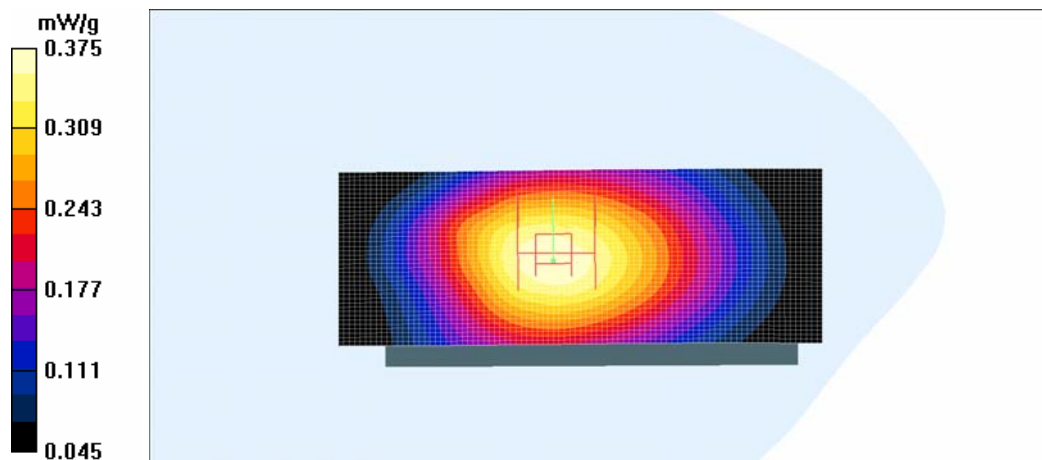
Peak SAR (extrapolated) = 0.456 W/kg

SAR(1 g) = 0.353 mW/g

SAR(10 g) = 0.257 mW/g

Power Drift = -0.006 dB

Maximum value of SAR (measured) = 0.375 mW/g



Date/Time: 2007-08-08 16:04:32

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: WCDMA850

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: BSL835 (070808); Medium Notes: t=21.0C

Medium parameters used: f = 835 MHz; $\sigma = 0.971$ mho/m; $\epsilon_r = 55.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 3; Type: SAM 4.0; Serial: 1272
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Body Measurement, Middle, No accessory/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.480 mW/g

Body Measurement, Middle, No accessory/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 13.3 V/m

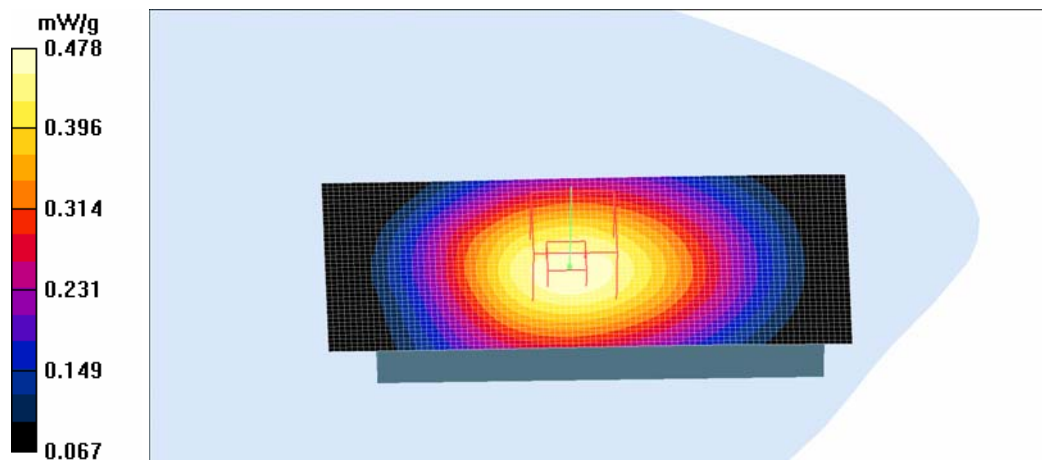
Peak SAR (extrapolated) = 0.580 W/kg

SAR(1 g) = 0.452 mW/g

SAR(10 g) = 0.332 mW/g

Power Drift = -0.070 dB

Maximum value of SAR (measured) = 0.478 mW/g



Date/Time: 2007-08-08 17:53:50

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: WCDMA850

Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium: BSL835 (070808); Medium Notes: t=20.8C

Medium parameters used: f = 847 MHz; σ = 0.98 mho/m; ϵ_r = 55; ρ = 1000 kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 3; Type: SAM 4.0; Serial: 1272
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Body Measurement, High, HS-47/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.318 mW/g

Body Measurement, High, HS-47/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 11.2 V/m

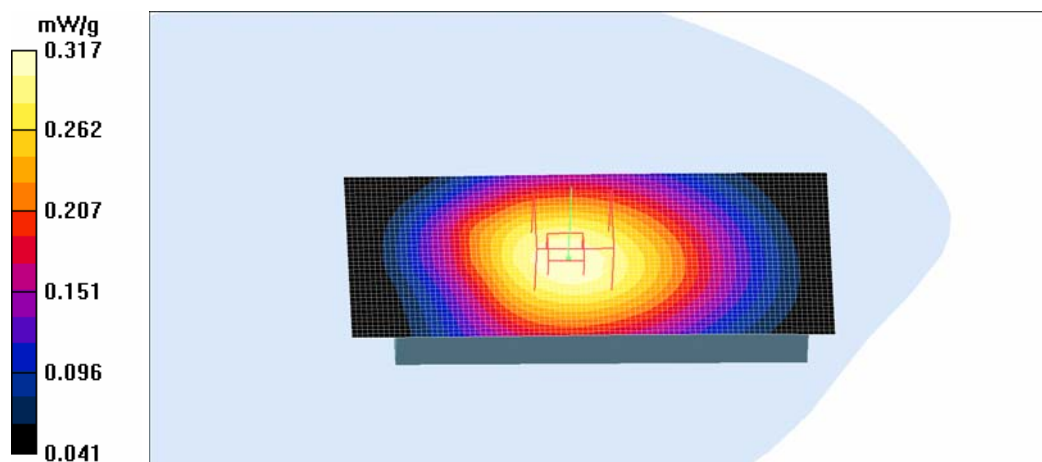
Peak SAR (extrapolated) = 0.385 W/kg

SAR(1 g) = 0.300 mW/g

SAR(10 g) = 0.220 mW/g

Power Drift = 0.000 dB

Maximum value of SAR (measured) = 0.317 mW/g



Date/Time: 2007-08-09 12:01:18

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: 2-slot GPRS850

Frequency: 848.8 MHz; Duty Cycle: 1:4.2

Medium: BSL835 (070809); Medium Notes: t=20.5C

Medium parameters used: f = 849 MHz; $\sigma = 0.986$ mho/m; $\epsilon_r = 55.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1766; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2007-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2007-03-15
- Phantom: SAM 3; Type: SAM 4.0; Serial: 1272
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Body Measurement, High, No accessory, BT/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.634 mW/g

Body Measurement, High, No accessory, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 15.5 V/m

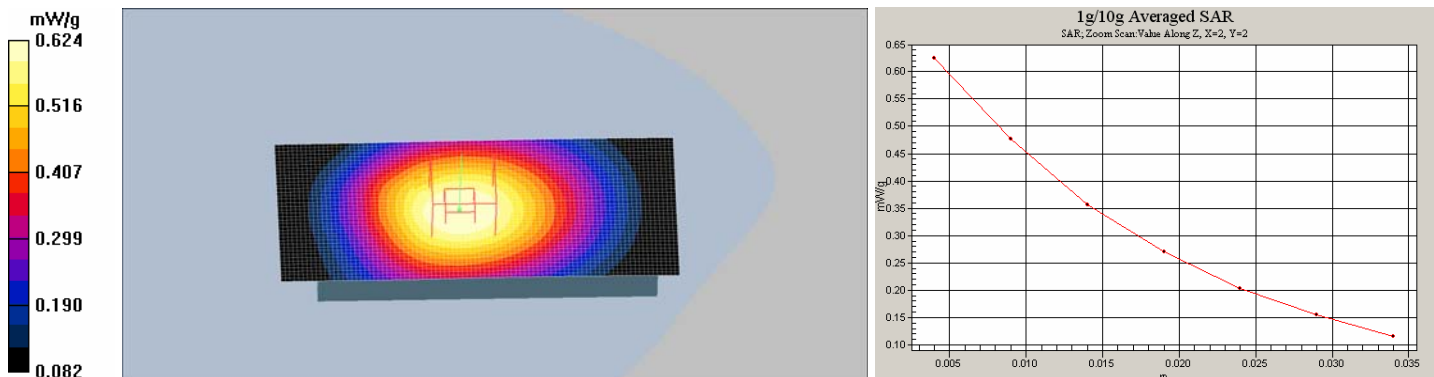
Peak SAR (extrapolated) = 0.761 W/kg

SAR(1 g) = 0.591 mW/g

SAR(10 g) = 0.433 mW/g

Power Drift = -0.127 dB

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



Date/Time: 2007-08-06 15:57:56

Test Laboratory: TCC Nokia
Type: RM-244; Serial: 004401/01/280520/2

Communication System: 3-slot GPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:2.8

Medium: M1900; Medium Notes: 21.1C

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.53 \text{ mho/m}$; $\epsilon_r = 52.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1396; Probe Notes:
- ConvF(4.7, 4.7, 4.7); Calibrated: 2007-02-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn728; Calibrated: 2007-02-13
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Body Measurement, Middle, No accessory/Area Scan (41x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.873 mW/g

Body Measurement, Middle, No accessory/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 23.8 V/m

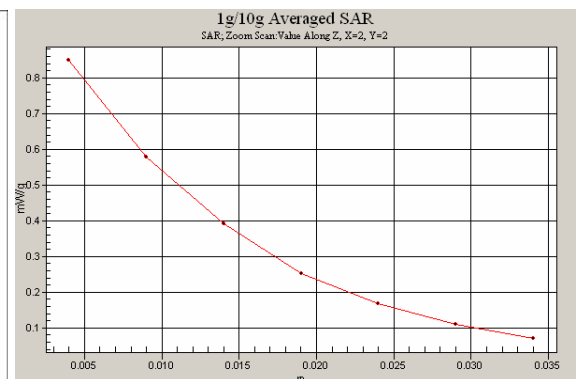
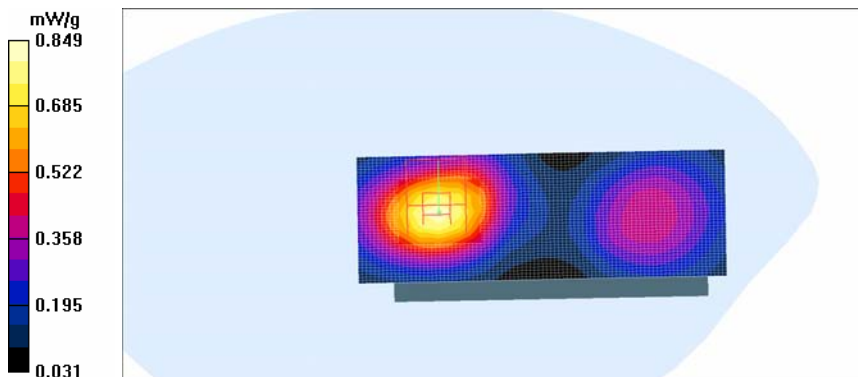
Peak SAR (extrapolated) = 1.15 W/kg

SAR(1 g) = 0.783 mW/g

SAR(10 g) = 0.493 mW/g

Power Drift = -0.116 dB

Maximum value of SAR (measured) = 0.849 mW/g



Date/Time: 2007-08-07 10:40:02

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: 3-slot GPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:2.8

Medium: BSL1900; Medium Notes: 21.5C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.5$ mho/m; $\epsilon_r = 52.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1396; Probe Notes:
- ConvF(4.7, 4.7, 4.7); Calibrated: 2007-02-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn728; Calibrated: 2007-02-13
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Body Measurement, Middle, HS-47/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.750 mW/g

Body Measurement, Middle, HS-47/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 22.3 V/m

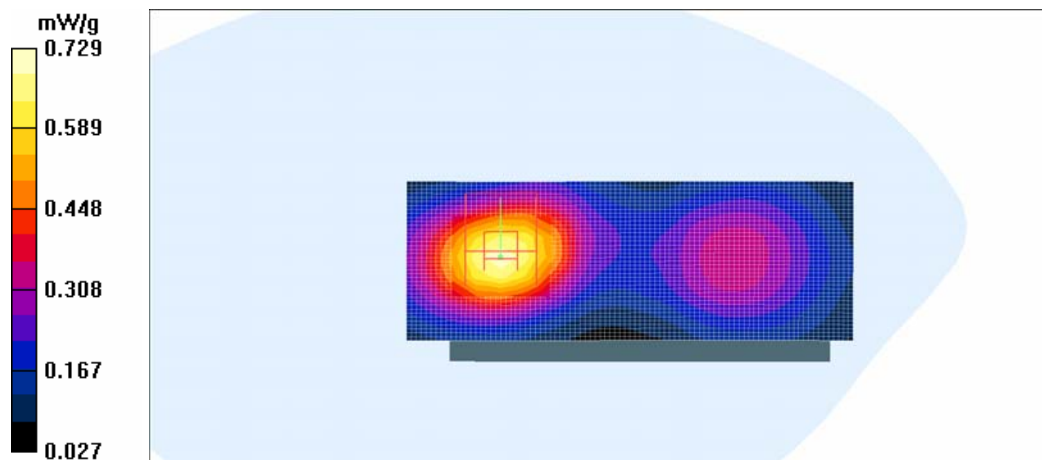
Peak SAR (extrapolated) = 1.00 W/kg

SAR(1 g) = 0.670 mW/g

SAR(10 g) = 0.420 mW/g

Power Drift = -0.034 dB

Maximum value of SAR (measured) = 0.729 mW/g



Date/Time: 2007-08-07 11:26:18

Test Laboratory: TCC Nokia
Type: RM-244; Serial: 004401/01/280520/2

Communication System: 3-slot GPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:2.8

Medium: BSL1900; Medium Notes: 21.7C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.5$ mho/m; $\epsilon_r = 52.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1396; Probe Notes:
- ConvF(4.7, 4.7, 4.7); Calibrated: 2007-02-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn728; Calibrated: 2007-02-13
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Body Measurement, Middle, No accessory, BT/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.865 mW/g

Body Measurement, Middle, No accessory, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 23.7 V/m

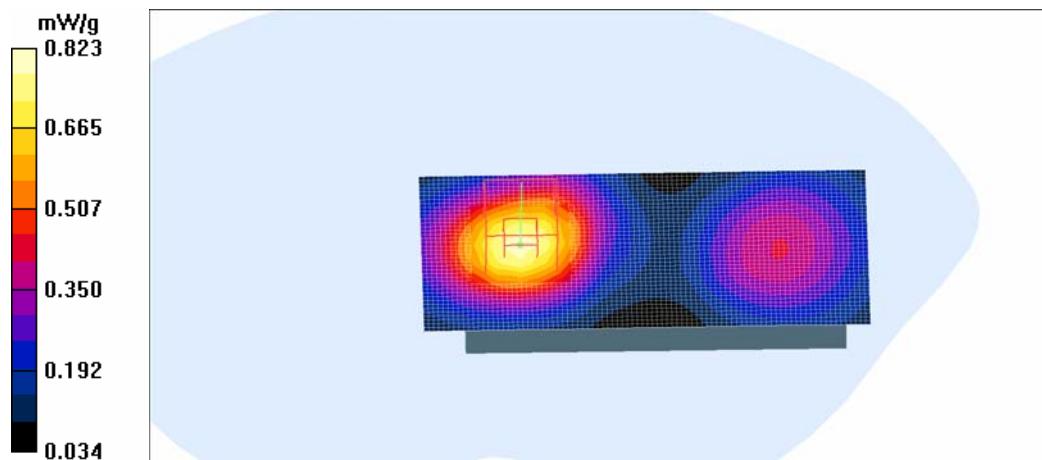
Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.760 mW/g

SAR(10 g) = 0.482 mW/g

Power Drift = -0.125 dB

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



Date/Time: 2007-07-12 13:18:21

Test Laboratory: TCC Nokia
Type: RM-244; Serial: 004401/01/280520/2

Communication System: WLAN2450

Frequency: 2442 MHz; Duty Cycle: 1:1

Medium: M2450; Medium Notes: 20.6C

Medium parameters used: $f = 2442$ MHz; $\sigma = 1.91$ mho/m; $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1396; Probe Notes:
- ConvF(4, 4, 4); Calibrated: 2007-02-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn728; Calibrated: 2007-02-13
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Body Measurement, Middle, No accessory/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.063 mW/g

Body Measurement, Middle, No accessory/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 5.60 V/m

Peak SAR (extrapolated) = 0.115 W/kg

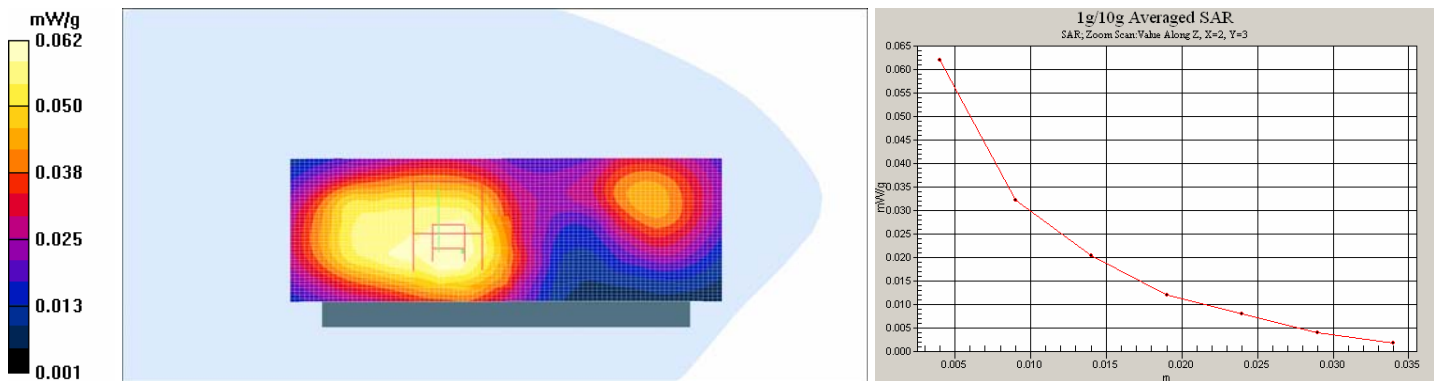
SAR(1 g) = 0.060 mW/g

SAR(10 g) = 0.036 mW/g

Power Drift = -0.041 dB

Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.

Maximum value of SAR (measured) = 0.062 mW/g



Date/Time: 2007-07-12 13:02:26

Test Laboratory: TCC Nokia

Type: RM-244; Serial: 004401/01/280520/2

Communication System: WLAN2450

Frequency: 2442 MHz; Duty Cycle: 1:1

Medium: M2450; Medium Notes: 20.6C

Medium parameters used: $f = 2442$ MHz; $\sigma = 1.91$ mho/m; $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1396; Probe Notes:
- ConvF(4, 4, 4); Calibrated: 2007-02-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn728; Calibrated: 2007-02-13
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Body Measurement, Middle, HS-47/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.062 mW/g

Body Measurement, Middle, HS-47/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 5.53 V/m

Peak SAR (extrapolated) = 0.106 W/kg

SAR(1 g) = 0.059 mW/g

SAR(10 g) = 0.036 mW/g

Power Drift = -0.165 dB

Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.

Maximum value of SAR (measured) = 0.062 mW/g

