

SAR Compliance Test Report

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FCC ID:	PYARM-465	IC:	661V-RM465
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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.		
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1. SUMMARY OF SAR TEST REPORT

1.1 Test Details

Period of test	2009-02-04 to 2009-02-13
SN, HW and SW numbers of tested device	SN: 004401/10/469085/0, HW: 0201, SW: 008.44.0, DUT: 25518
Batteries used in testing	BL-4U, DUT: 25519, 25520, 25521
Headsets used in testing	AD-54 + HS-83, DUT: 25522, 25523
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 GPRS 850	190 / 836.6	29.6 dBm ERP	Left, Cheek	1.15 W/kg	1.29 W/kg	1.6 W/kg	PASSED
3-slot GPRS 1900	810 / 1909.8	27.1 dBm EIRP	Left, Cheek	0.928 W/kg	1.04 W/kg	1.6 W/kg	PASSED
WCDMA 1900	9538 / 1907.6	21.3 dBm EIRP	Left, Cheek	1.03 W/kg	1.15 W/kg	1.6 W/kg	PASSED
WLAN 2450	1 / 2412.0	19.5 dBm EIRP	Right, Cheek	0.148 W/kg	0.17 W/kg	1.6 W/kg	PASSED
2-slot GPRS 850 + WLAN 2450	-	-	Left, Cheek	1.237 W/kg	1.39 W/kg	1.6 W/kg	PASSED
3-slot GPRS 1900 + WLAN 2450	-	-	Left, Cheek	1.015 W/kg	1.14 W/kg	1.6 W/kg	PASSED
WCDMA 1900 + WLAN 2450	-	-	Left, Cheek	1.117 W/kg	1.25 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 GPRS 850	190 / 836.6	29.6 dBm ERP	2.2 cm	0.983 W/kg	1.10 W/kg	1.6 W/kg	PASSED
3-slot GPRS 1900	810 / 1909.8	27.1 dBm EIRP	2.2 cm	0.186 W/kg	0.21 W/kg	1.6 W/kg	PASSED
WCDMA 1900	9538 / 1907.6	21.3 dBm EIRP	2.2 cm	0.253 W/kg	0.28 W/kg	1.6 W/kg	PASSED
WLAN 2450	7 / 2442.0	20.4 dBm EIRP	2.2 cm	0.090 W/kg	0.10 W/kg	1.6 W/kg	PASSED
2-slot GPRS 850 + WLAN 2450	-	-	2.2 cm	1.057 W/kg	1.18 W/kg	1.6 W/kg	PASSED
3-slot GPRS 1900 + WLAN 2450	-	-	2.2 cm	0.260 W/kg	0.29 W/kg	1.6 W/kg	PASSED
WCDMA 1900 + WLAN 2450	-	-	2.2 cm	0.327 W/kg	0.37 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	0.49 dB

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	1900 (Band II)		1	1852 – 1908
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, WCDMA900 and WCDMA2100 bands which are not part of this filing.

This device has Dual Transfer Mode/Voice over IP 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):	20.5 to 22.5
Ambient humidity (RH %):	35 to 55

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.

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

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.

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
DAE3	501	12 months	2009-03
E-field Probe ES3DV3	3116	12 months	2009-07
Dipole Validation Kit, D835V2	4d042	24 months	2010-09
Dipole Validation Kit, D1900V2	5d026	24 months	2010-03
Dipole Validation Kit, D2450V2	750	24 months	2010-03
DASY4 software	Version 4.7	-	-

Additional test equipment used in testing:

Test Equipment	Model	Serial Number	Calibration interval	Calibration expiry
Signal Generator	SME06	829445/008	36 months	2009-03
Amplifier	2100-BBS3Q8CCJ	1003	-	-
Power Meter	NRP	100293	24 months	2009-07
Power Sensor	NRP-Z51	100830	24 months	2009-07
Call Tester	CMU200	105900	-	-
Call Tester	CMU200	110735	-	-
Vector Network Analyzer	AT8753ES	MY40001091	12 months	2009-08
Dielectric Probe Kit	HP85070B	US33020403	-	-

4.1.1 Isotropic E-field Probe Type ES3DV3

Construction	Symmetrical design with triangular core Interleaved sensors 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 4 GHz (dosimetry); Linearity: ± 0.2 dB (30 MHz to 4 GHz)
Directivity	± 0.2 dB in HSL (rotation around probe axis) ± 0.3 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: 20 mm Body diameter: 12 mm Tip diameter: 3.9 mm Distance from probe tip to dipole centers: 2.0 mm
Application	General dosimetry up to 4 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	39.74	55.97
HEC	0.25	1.21
Sugar	58.31	41.76
Preservative	0.15	0.27
Salt	1.55	0.79

1900MHz band

Ingredient	Head (% by weight)	Body (% by weight)
Deionised Water	54.88	69.02
Butyl Diglycol	44.91	30.76
Salt	0.21	0.22

2450MHz band

Ingredient	Head (% by weight)	Body (% by weight)
Deionised Water	56.0	70.20
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

f [MHz]	Description	SAR [W/kg], 1g	Dielectric Parameters		Temp [°C]
			ϵ_r	σ [S/m]	
835	Reference result	2.38	41.4	0.90	
	± 10% window	2.14 - 2.62			
	2009-02-04	2.38	39.9	0.88	21.1
1900	Reference result	10.3	40.2	1.47	
	± 10% window	9.3 - 11.3			
	2009-02-06	10.8	38.8	1.46	21.9
	2009-02-13	11.0	38.5	1.47	21.9
2450	Reference result	13.5	39.3	1.81	
	± 10% window	12.1 - 14.9			
	2009-02-07	14.2	38.1	1.87	21.2

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	
	2009-02-04	39.9	0.88	21.2
1880	Recommended value	40.0	1.40	
	$\pm 5\%$ window	38.0 – 42.0	1.33 – 1.47	
	2009-02-06	38.8	1.44	21.9
	2009-02-13	38.6	1.45	21.9
2442	Recommended value	39.2	1.79	
	$\pm 5\%$ window	37.3 – 41.2	1.70 – 1.88	
	2009-02-07	38.1	1.86	21.2

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	
	2009-02-04	53.6	0.95	21.1
1880	Recommended value	53.3	1.52	
	$\pm 5\%$ window	50.6 – 56.0	1.44 – 1.60	
	2009-02-06	53.2	1.48	21.9
	2009-02-13	53.4	1.50	21.9
2442	Recommended value	52.7	1.94	
	$\pm 5\%$ window	50.1 – 55.3	1.85 – 2.04	
	2009-02-07	50.8	1.98	21.2

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 both sides facing the phantom to find the highest 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:

850 MHz Head SAR results

Option used	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 128 824.2 MHz	Ch190 836.6 MHz	Ch 251 848.8 MHz
GSM	Power		31.0 dBm	31.1 dBm	31.3 dBm
	Left	Cheek	-	0.606	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
2-slot GPRS	Power		29.9 dBm	29.6 dBm	29.6 dBm
	Left	Cheek	0.906	1.15	1.15
		Tilt	0.576	0.822	0.829
	Right	Cheek	0.766	0.920	1.04
		Tilt	-	0.759	-
3-slot GPRS	Power		27.8 dBm	27.5 dBm	27.7 dBm
	Left	Cheek	-	1.12	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
2-slot 8PSK EGPRS	Power		21.9 dBm	21.2 dBm	21.4 dBm
	Left	Cheek	-	0.195	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-

1900 MHz Head SAR results

Option used	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		28.6 dBm	28.9 dBm	30.7 dBm
	Left	Cheek	-	0.691	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
2-slot GPRS	Power		26.5 dBm	26.8 dBm	28.6 dBm
	Left	Cheek	-	0.835	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
3-slot GPRS	Power		25.4 dBm	25.2 dBm	27.1 dBm
	Left	Cheek	0.846	0.921	0.928
		Tilt	-	0.319	-
	Right	Cheek	-	0.528	-
		Tilt	-	0.391	-
3-slot 8PSK EGPRS	Power		24.4 dBm	24.5 dBm	25.7 dBm
	Left	Cheek	-	-	0.350
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
Option used	Test configuration		Ch 9262 1852.4 MHz	Ch 9400 1880.0 MHz	Ch 9538 1907.6 MHz
WCDMA	Power		21.2 dBm	20.3 dBm	21.3 dBm
	Left	Cheek	0.987	0.930	1.03
		Tilt	-	0.292	-
	Right	Cheek	-	0.711	-
		Tilt	-	0.431	-

2450 MHz Head SAR results

Option used	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		19.5 dBm	20.4 dBm	19.4 dBm
	Left	Cheek	-	0.087	-
		Tilt	-	0.118	-
	Right	Cheek	0.148	0.145	0.143
		Tilt	-	0.135	-

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

850 MHz Body SAR results

Option used	Device orientation	Test configuration	SAR, averaged over 1g (W/kg)		
			Ch 128 824.2 MHz	Ch190 836.6 MHz	Ch 251 848.8 MHz
2-slot GPRS		Power	29.9 dBm	29.6 dBm	29.6 dBm
	Display facing phantom	Without headset	-	0.807	-
		Headset AD-54 + HS-83	-	0.532	-
	Back facing phantom	Without headset	0.889	0.983	0.964
		Headset AD-54 + HS-83	-	0.637	-

1900 MHz Body SAR results

Option used	Device orientation	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	25.4 dBm	25.2 dBm	27.1 dBm
	Display facing phantom	Without headset	-	0.156	-
		Headset AD-54 + HS-83	-	0.126	-
	Back facing phantom	Without headset	0.172	0.173	0.186
		Headset AD-54 + HS-83	-	0.151	-
Option used	Device orientation	Test configuration	Ch 9262 1852.4 MHz	Ch 9400 1880.0 MHz	Ch 9538 1907.6 MHz
WCDMA		Power	21.2 dBm	20.3 dBm	21.3 dBm
	Display facing phantom	Without headset	-	0.187	-
		Headset AD-54 + HS-83	-	0.162	-
	Back facing phantom	Without headset	0.227	0.198	0.253
		Headset AD-54 + HS-83	-	0.177	-

2450 MHz Body SAR results

Option used	Device orientation	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	19.5 dBm	20.4 dBm	19.4 dBm
	Display facing phantom	Without headset	-	0.016	-
		Headset AD-54 + HS-83	-	0.021	-
	Back facing phantom	Without headset	-	0.074	-
		Headset AD-54 + HS-83	0.085	0.090	0.080

Simultaneous transmissions: Combined SAR results

Test configuration	Max. 1g SAR results			
	WLAN	2-slot GPRS 850	3-slot GPRS 1900	WCDMA 1900
Head: Left, Cheek	0.087	1.15	0.928	1.03
Head: Left, Tilt	0.118	0.829	0.319	0.292
Head: Right, Cheek	0.148	1.04	0.528	0.711
Head: Right, Tilt	0.135	0.759	0.391	0.431
Body: Without Headset	0.074	0.983	0.186	0.253
Body: Headset AD-54 + HS-83	0.090	0.637	0.151	0.177

Test configuration	Combined 1g SAR values		
	WLAN + 2-slot GPRS 850	WLAN + 3-slot GPRS 1900	WLAN + WCDMA 1900
Head: Left, Cheek	1.237	1.015	1.117
Head: Left, Tilt	0.947	0.437	0.410
Head: Right, Cheek	1.188	0.676	0.859
Head: Right, Tilt	0.894	0.526	0.566
Body: Without Headset	1.057	0.260	0.327
Body: Headset AD-54 + HS-83	0.727	0.241	0.267

Note: Simultaneous Transmission Procedures as described in KDB648474 are not required for this product. The Combined SAR data given in the tables above has been voluntarily calculated.

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

See the following pages

Date/Time: 2009-02-04 15:41:09

Test Laboratory: TCC Nokia
Type: D835V2; Serial: 4d042

Communication System: CW835

Frequency: 835 MHz; Duty Cycle: 1:1

Medium: Head 850; Medium Notes: Medium Temperature: 21.2 C

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.879 \text{ mho/m}$; $\epsilon_r = 39.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

d=15mm, Pin=250mW/Area Scan (61x121x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 2.58 mW/g

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

Reference Value = 54.9 V/m

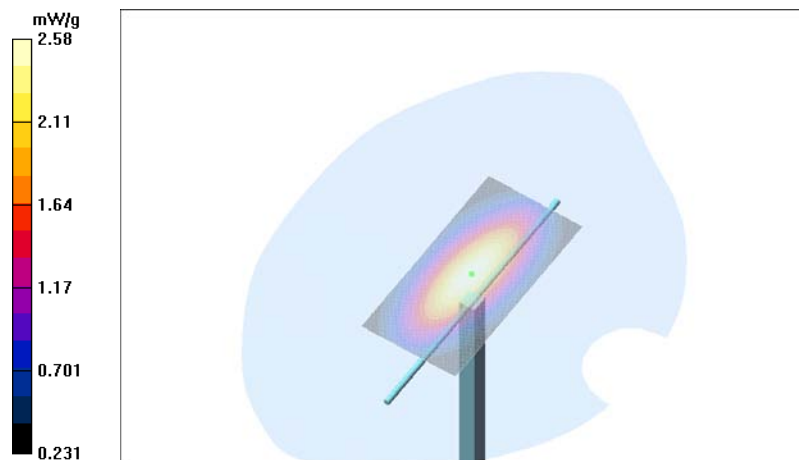
Peak SAR (extrapolated) = 3.54 W/kg

SAR(1 g) = 2.38 mW/g

SAR(10 g) = 1.55 mW/g

Power Drift = -0.013 dB

Maximum value of SAR (measured) = 2.58 mW/g



Date/Time: 2009-02-06 17:47:34

Test Laboratory: TCC Nokia
Type: D1900V2; Serial: 5d026

Communication System: CW1900

Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: Head 1900; Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.99, 4.99, 4.99); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

d=10mm, Pin=250mW/Area Scan (71x71x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 12.4 mW/g

d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 93.7 V/m

Peak SAR (extrapolated) = 20.1 W/kg

SAR(1 g) = 10.8 mW/g

SAR(10 g) = 5.57 mW/g

Power Drift = -0.006 dB

Maximum value of SAR (measured) = 12.2 mW/g



Date/Time: 2009-02-13 15:41:25

Test Laboratory: TCC Nokia
Type: D1900V2; Serial: 5d026

Communication System: CW1900

Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: Head 1900; Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.47$ mho/m; $\epsilon_r = 38.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.99, 4.99, 4.99); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

d=10mm, Pin=250mW/Area Scan (71x71x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 12.5 mW/g

d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 93.3 V/m

Peak SAR (extrapolated) = 20.7 W/kg

SAR(1 g) = 11 mW/g

SAR(10 g) = 5.67 mW/g

Power Drift = -0.042 dB

Maximum value of SAR (measured) = 12.5 mW/g



Date/Time: 2009-02-07 17:09:04

Test Laboratory: TCC Nokia

Type: D2450V2; Serial: 750

Communication System: CW2450

Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: Head 2450; Medium Notes: Medium Temperature: $t=21.2\text{ C}$

Medium parameters used: $f = 2450\text{ MHz}$; $\sigma = 1.87\text{ mho/m}$; $\epsilon_r = 38.1$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.43, 4.43, 4.43); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 8; Type: SAM Twin Phantom; Serial: TP-1408
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

d=10mm, Pin=250mW/Area Scan (71x71x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 87.0 V/m

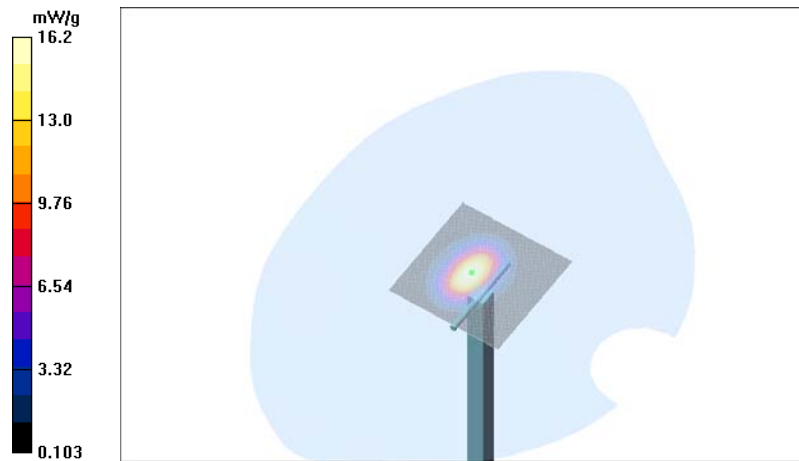
Peak SAR (extrapolated) = 29.3 W/kg

SAR(1 g) = 14.2 mW/g

SAR(10 g) = 6.53 mW/g

Power Drift = 0.012 dB

Maximum value of SAR (measured) = 16.2 mW/g



APPENDIX B: MEASUREMENT SCANS

See the following pages

Date/Time: 2009-02-04 16:58:43

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: GSM850

Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium: Head 850; Medium Notes: Medium Temperature: 21.2 C

Medium parameters used: $f = 837$ MHz; $\sigma = 0.882$ mho/m; $\epsilon_r = 39.9$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.649 mW/g

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

Reference Value = 9.10 V/m

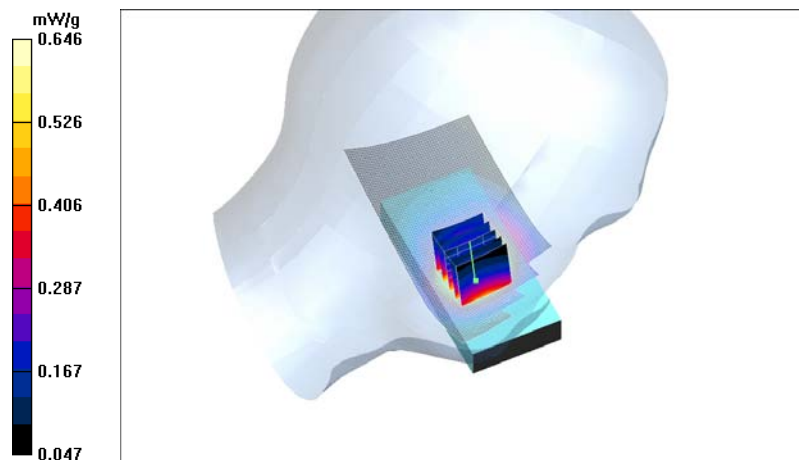
Peak SAR (extrapolated) = 0.745 W/kg

SAR(1 g) = 0.606 mW/g

SAR(10 g) = 0.449 mW/g

Power Drift = -0.097 dB

Maximum value of SAR (measured) = 0.646 mW/g



Date/Time: 2009-02-04 17:13:08

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: 2-slot GPRS850

Frequency: 836.6 MHz; Duty Cycle: 1:4.2

Medium: Head 850; Medium Notes: Medium Temperature: 21.2 C

Medium parameters used: $f = 837$ MHz; $\sigma = 0.882$ mho/m; $\epsilon_r = 39.9$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.19 mW/g

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

Reference Value = 12.4 V/m

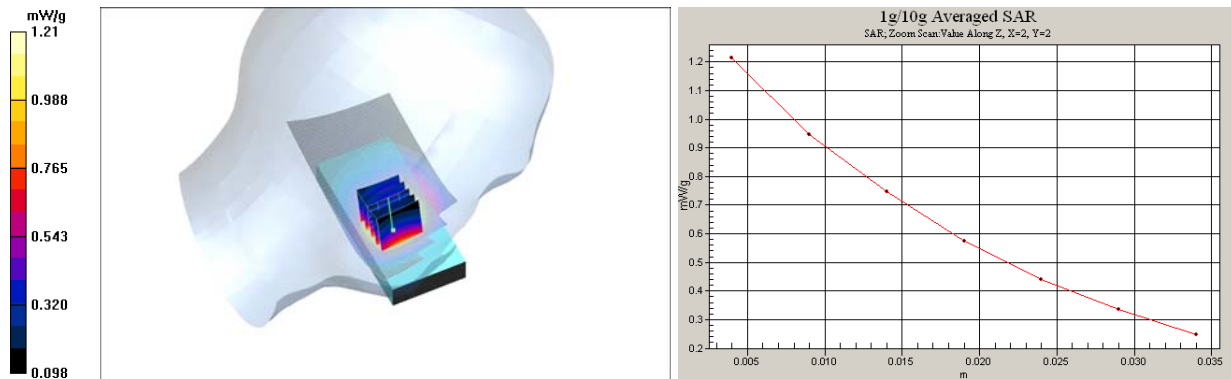
Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 1.15 mW/g

SAR(10 g) = 0.855 mW/g

Power Drift = -0.112 dB

Maximum value of SAR (measured) = 1.21 mW/g



Date/Time: 2009-02-04 18:27:10

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: 2-slot GPRS850

Frequency: 848.8 MHz; Duty Cycle: 1:4.2

Medium: Head 850; Medium Notes: Medium Temperature: 21.2 C

Medium parameters used: $f = 849$ MHz; $\sigma = 0.893$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - High/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.862 mW/g

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

Reference Value = 23.3 V/m

Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.829 mW/g

SAR(10 g) = 0.624 mW/g

Power Drift = -0.025 dB

Maximum value of SAR (measured) = 0.866 mW/g

Tilt position - High/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 23.3 V/m

Peak SAR (extrapolated) = 0.922 W/kg

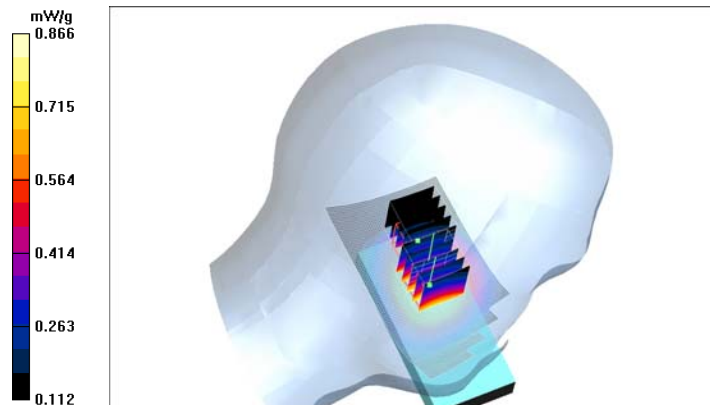
SAR(1 g) = 0.614 mW/g

SAR(10 g) = 0.424 mW/g

Power Drift = -0.025 dB

Warning: Maximum averaged SAR over 1 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 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) = 0.729 mW/g



Date/Time: 2009-02-04 20:15:09

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: 2-slot GPRS850

Frequency: 848.8 MHz; Duty Cycle: 1:4.2

Medium: Head 850; Medium Notes: Medium Temperature: 21.2 C

Medium parameters used: $f = 849$ MHz; $\sigma = 0.893$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - High/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 14.5 V/m

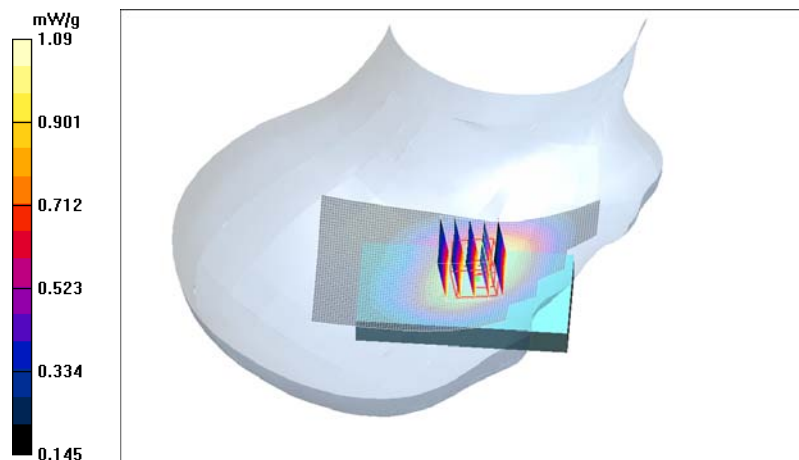
Peak SAR (extrapolated) = 1.27 W/kg

SAR(1 g) = 1.04 mW/g

SAR(10 g) = 0.795 mW/g

Power Drift = 0.083 dB

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



Date/Time: 2009-02-04 21:16:05

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: 2-slot GPRS850

Frequency: 836.6 MHz; Duty Cycle: 1:4.2

Medium: Head 850; Medium Notes: Medium Temperature: 21.2 C

Medium parameters used: $f = 837$ MHz; $\sigma = 0.882$ mho/m; $\epsilon_r = 39.9$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - Mid/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.820 mW/g

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

Reference Value = 24.8 V/m

Peak SAR (extrapolated) = 0.950 W/kg

SAR(1 g) = 0.759 mW/g

SAR(10 g) = 0.575 mW/g

Power Drift = -0.100 dB

Maximum value of SAR (measured) = 0.802 mW/g

Tilt position - Mid/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 24.8 V/m

Peak SAR (extrapolated) = 0.930 W/kg

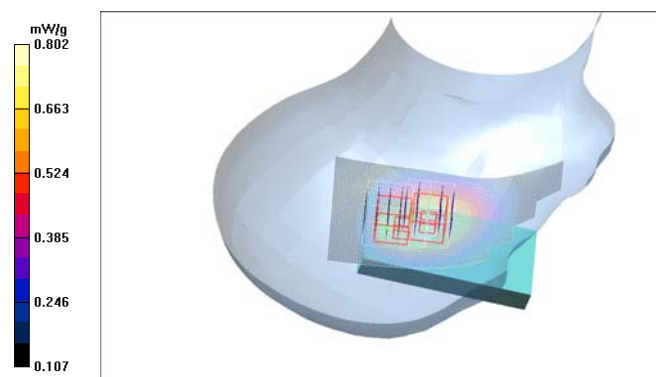
SAR(1 g) = 0.642 mW/g

SAR(10 g) = 0.436 mW/g

Power Drift = -0.100 dB

Warning: Maximum averaged SAR over 1 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) = 0.751 mW/g



Date/Time: 2009-02-04 17:27:48

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: 3-slot GPRS850

Frequency: 836.6 MHz; Duty Cycle: 1:2.8

Medium: Head 850; Medium Notes: Medium Temperature: 21.2 C

Medium parameters used: $f = 837$ MHz; $\sigma = 0.882$ mho/m; $\epsilon_r = 39.9$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 12.2 V/m

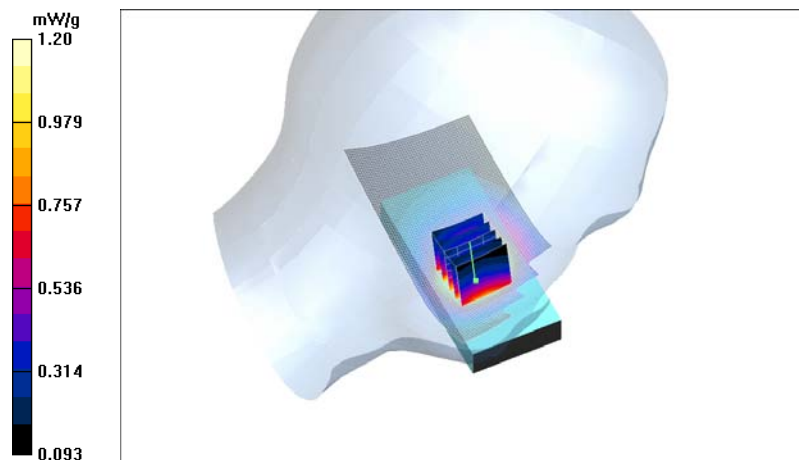
Peak SAR (extrapolated) = 1.43 W/kg

SAR(1 g) = 1.12 mW/g

SAR(10 g) = 0.841 mW/g

Power Drift = -0.063 dB

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



Date/Time: 2009-02-04 22:02:18

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: 2-slot 8PSK EGPRS850

Frequency: 836.6 MHz; Duty Cycle: 1:4.2

Medium: Head 850; Medium Notes: Medium Temperature: 21.2 C

Medium parameters used: $f = 837$ MHz; $\sigma = 0.882$ mho/m; $\epsilon_r = 39.9$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.225 mW/g

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

Reference Value = 5.06 V/m

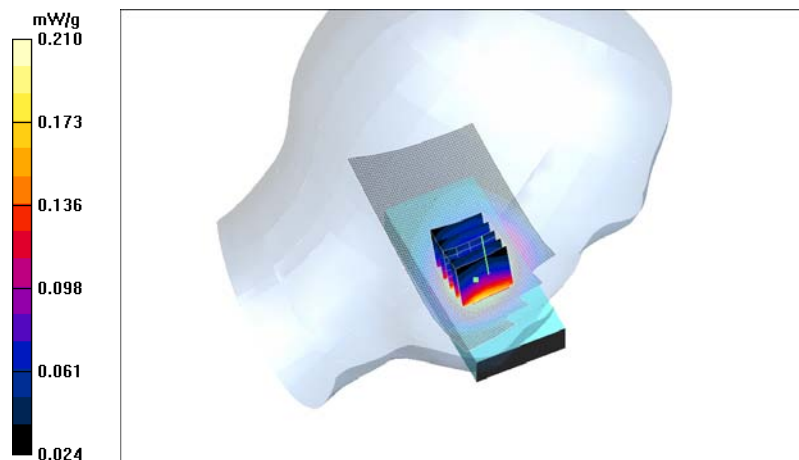
Peak SAR (extrapolated) = 0.245 W/kg

SAR(1 g) = 0.195 mW/g

SAR(10 g) = 0.146 mW/g

Power Drift = 0.092 dB

Maximum value of SAR (measured) = 0.210 mW/g



Date/Time: 2009-02-13 16:59:03

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: GSM 1900

Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: Head 1900; Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.45$ mho/m; $\epsilon_r = 38.6$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.99, 4.99, 4.99); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 8.17 V/m

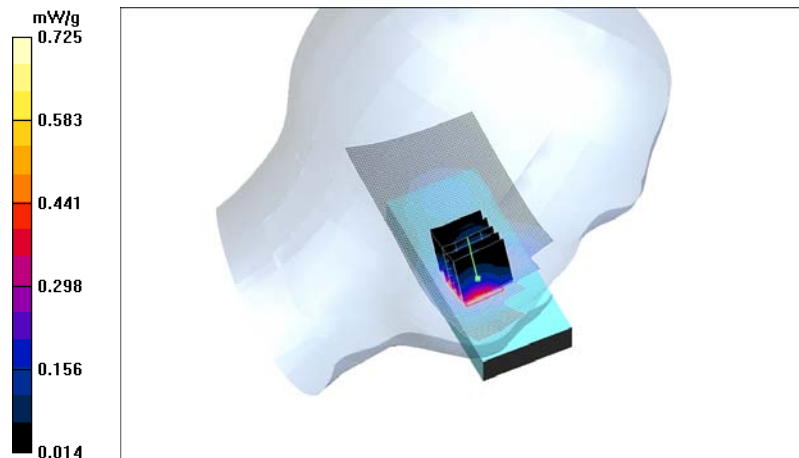
Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.691 mW/g

SAR(10 g) = 0.385 mW/g

Power Drift = -0.216 dB

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



Date/Time: 2009-02-13 17:14:56

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: 2-slot GPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:4.2

Medium: Head 1900; Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.45$ mho/m; $\epsilon_r = 38.6$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.99, 4.99, 4.99); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.904 mW/g

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

Reference Value = 8.91 V/m

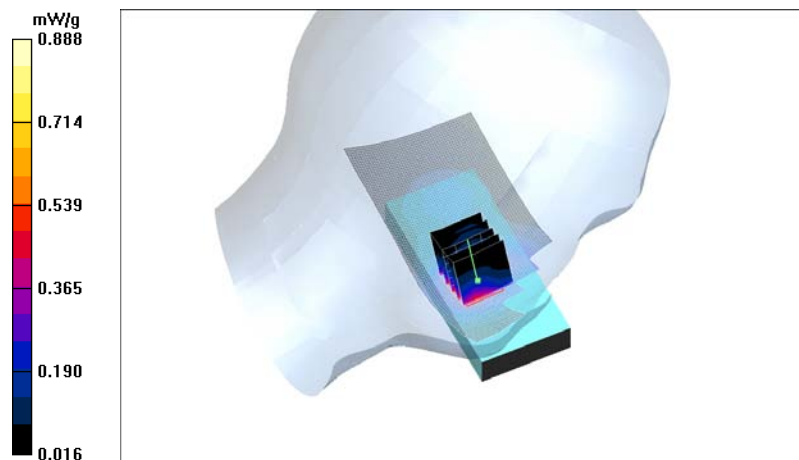
Peak SAR (extrapolated) = 1.36 W/kg

SAR(1 g) = 0.835 mW/g

SAR(10 g) = 0.467 mW/g

Power Drift = -0.078 dB

Maximum value of SAR (measured) = 0.888 mW/g



Date/Time: 2009-02-13 17:54:58

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: 3-slot GPRS1900

Frequency: 1909.8 MHz; Duty Cycle: 1:2.8

Medium: Head 1900; Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 38.4$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.99, 4.99, 4.99); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - High/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 8.91 V/m

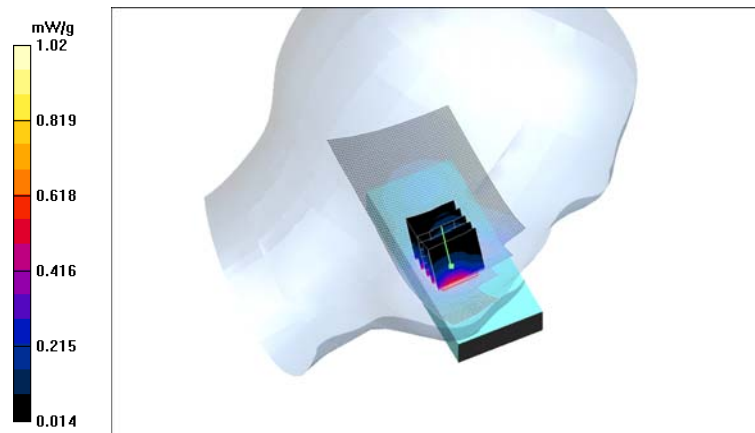
Peak SAR (extrapolated) = 1.46 W/kg

SAR(1 g) = 0.928 mW/g

SAR(10 g) = 0.513 mW/g

Power Drift = 0.331 dB

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



Date/Time: 2009-02-13 18:07:14

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: 3-slot GPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:2.8

Medium: Head 1900; Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.45$ mho/m; $\epsilon_r = 38.6$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.99, 4.99, 4.99); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.379 mW/g

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

Reference Value = 14.6 V/m

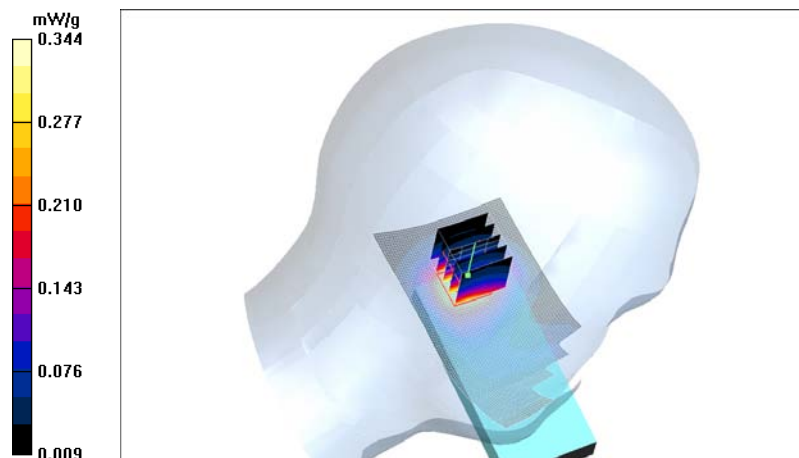
Peak SAR (extrapolated) = 0.482 W/kg

SAR(1 g) = 0.319 mW/g

SAR(10 g) = 0.198 mW/g

Power Drift = -0.063 dB

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



Date/Time: 2009-02-13 18:22:10

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: 3-slot GPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:2.8

Medium: Head 1900; Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.45$ mho/m; $\epsilon_r = 38.6$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.99, 4.99, 4.99); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 7.42 V/m

Peak SAR (extrapolated) = 0.745 W/kg

SAR(1 g) = 0.528 mW/g

SAR(10 g) = 0.347 mW/g

Power Drift = -0.146 dB

Maximum value of SAR (measured) = 0.577 mW/g

Cheek position - Middle/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 7.42 V/m

Peak SAR (extrapolated) = 0.789 W/kg

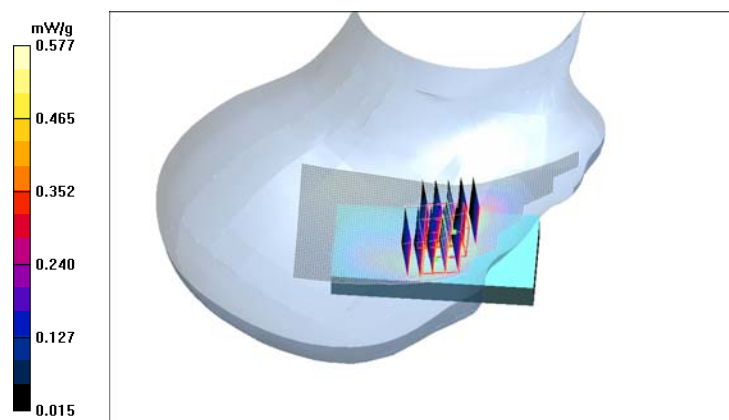
SAR(1 g) = 0.509 mW/g

SAR(10 g) = 0.338 mW/g

Power Drift = -0.146 dB

Warning: Maximum averaged SAR over 1 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) = 0.561 mW/g



Date/Time: 2009-02-13 18:41:52

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: 3-slot GPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:2.8

Medium: Head 1900; Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.45$ mho/m; $\epsilon_r = 38.6$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.99, 4.99, 4.99); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.487 mW/g

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

Reference Value = 12.2 V/m

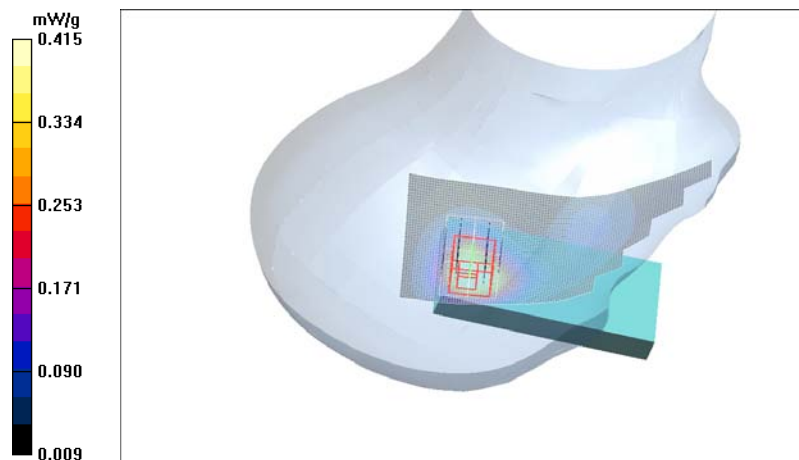
Peak SAR (extrapolated) = 0.597 W/kg

SAR(1 g) = 0.391 mW/g

SAR(10 g) = 0.236 mW/g

Power Drift = -0.113 dB

Maximum value of SAR (measured) = 0.415 mW/g



Date/Time: 2009-02-13 19:11:47

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: 3-slot 8PSK EGPRS1900

Frequency: 1909.8 MHz; Duty Cycle: 1:2.8

Medium: Head 1900; Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 38.4$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.99, 4.99, 4.99); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - High/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.386 mW/g

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

Reference Value = 5.68 V/m

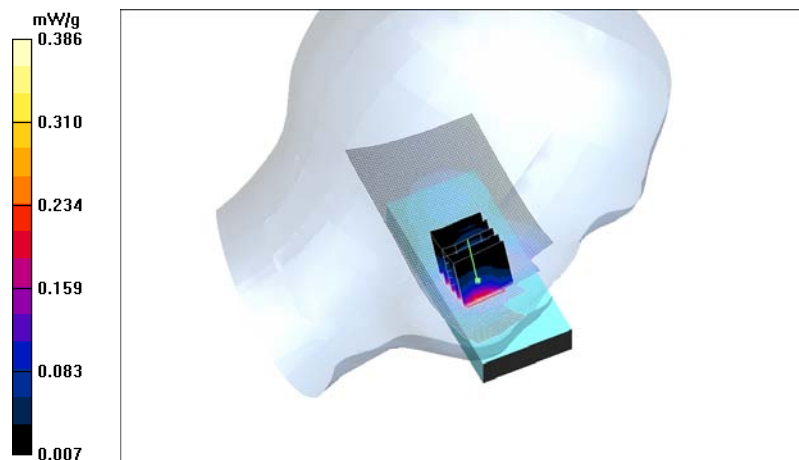
Peak SAR (extrapolated) = 0.570 W/kg

SAR(1 g) = 0.350 mW/g

SAR(10 g) = 0.197 mW/g

Power Drift = -0.129 dB

Maximum value of SAR (measured) = 0.386 mW/g



Date/Time: 2009-02-06 22:03:55

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: WCDMA1900

Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: Head 1900; Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: $f = 1908$ MHz; $\sigma = 1.47$ mho/m; $\epsilon_r = 38.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.99, 4.99, 4.99); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - High/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 9.48 V/m

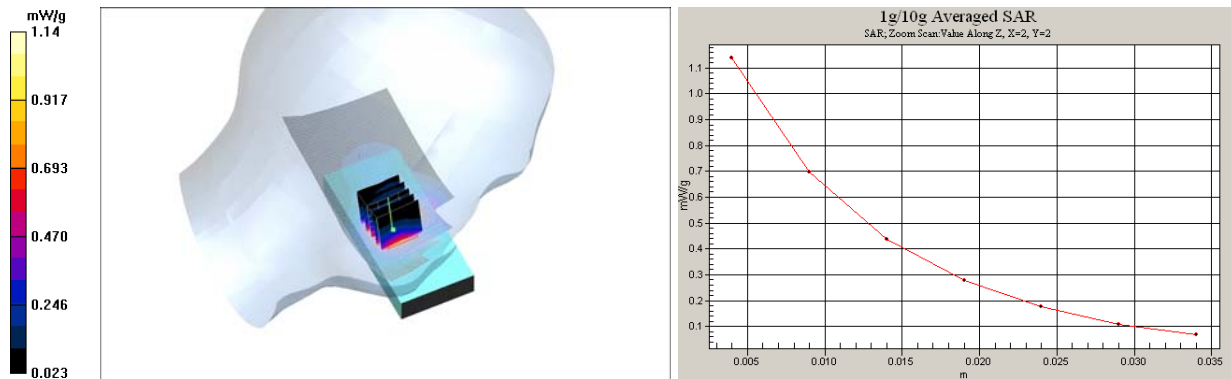
Peak SAR (extrapolated) = 1.67 W/kg

SAR(1 g) = 1.03 mW/g

SAR(10 g) = 0.607 mW/g

Power Drift = -0.313 dB

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



Date/Time: 2009-02-06 22:16:34

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: WCDMA1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: Head 1900; Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.44$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.99, 4.99, 4.99); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.322 mW/g

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

Reference Value = 14.3 V/m

Peak SAR (extrapolated) = 0.427 W/kg

SAR(1 g) = 0.292 mW/g

SAR(10 g) = 0.182 mW/g

Power Drift = -0.064 dB

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



Date/Time: 2009-02-06 22:35:52

Test Laboratory: TCC Nokia
Type: RM-465; Serial: 004401/10/469085/0

Communication System: WCDMA1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: Head 1900; Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.44$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.99, 4.99, 4.99); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.783 mW/g

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

Reference Value = 8.02 V/m

Peak SAR (extrapolated) = 1.08 W/kg

SAR(1 g) = 0.711 mW/g

SAR(10 g) = 0.435 mW/g

Power Drift = -0.267 dB

Maximum value of SAR (measured) = 0.771 mW/g

Cheek position - Middle/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 8.02 V/m

Peak SAR (extrapolated) = 1.17 W/kg

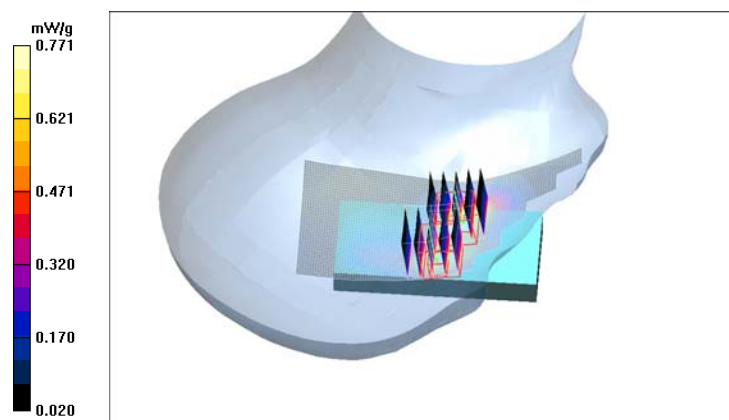
SAR(1 g) = 0.686 mW/g

SAR(10 g) = 0.402 mW/g

Power Drift = -0.267 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) = 0.735 mW/g



Date/Time: 2009-02-06 22:55:39

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: WCDMA1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: Head 1900; Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.44$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.99, 4.99, 4.99); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.526 mW/g

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

Reference Value = 13.0 V/m

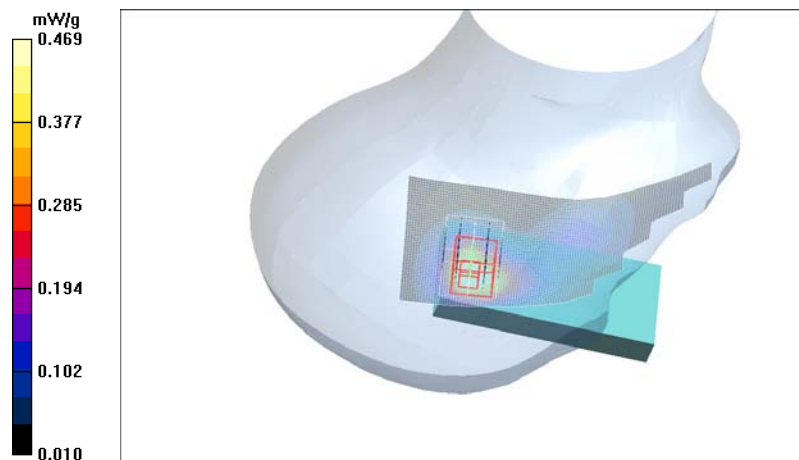
Peak SAR (extrapolated) = 0.643 W/kg

SAR(1 g) = 0.431 mW/g

SAR(10 g) = 0.261 mW/g

Power Drift = 0.021 dB

Maximum value of SAR (measured) = 0.469 mW/g



Date/Time: 2009-02-07 17:41:55

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: WLAN2450

Frequency: 2442 MHz; Duty Cycle: 1:1

Medium: Head 2450; Medium Notes: Medium Temperature: $t=21.2\text{ C}$

Medium parameters used: $f = 2442\text{ MHz}$; $\sigma = 1.86\text{ mho/m}$; $\epsilon_r = 38.1$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.43, 4.43, 4.43); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 8; Type: SAM Twin Phantom; Serial: TP-1408
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle/Area Scan (51x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.092 mW/g

Cheek position - Middle/Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 6.84 V/m

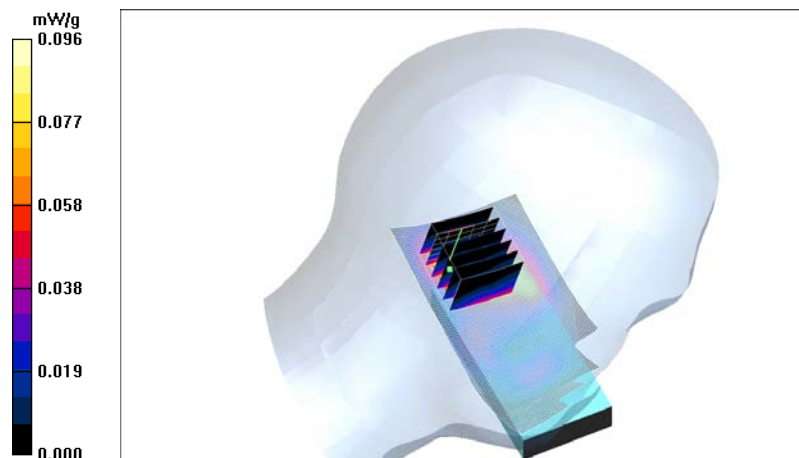
Peak SAR (extrapolated) = 0.169 W/kg

SAR(1 g) = 0.087 mW/g

SAR(10 g) = 0.046 mW/g

Power Drift = -0.274 dB

Maximum value of SAR (measured) = 0.096 mW/g



Date/Time: 2009-02-07 18:09:54

Test Laboratory: TCC Nokia
Type: RM-465; Serial: 004401/10/469085/0

Communication System: WLAN2450

Frequency: 2442 MHz; Duty Cycle: 1:1

Medium: Head 2450; Medium Notes: Medium Temperature: t=21.2 C

Medium parameters used: f = 2442 MHz; $\sigma = 1.86$ mho/m; $\epsilon_r = 38.1$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.43, 4.43, 4.43); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 8; Type: SAM Twin Phantom; Serial: TP-1408
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - Middle/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.143 mW/g

Tilt position - Middle/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 8.36 V/m

Peak SAR (extrapolated) = 0.232 W/kg

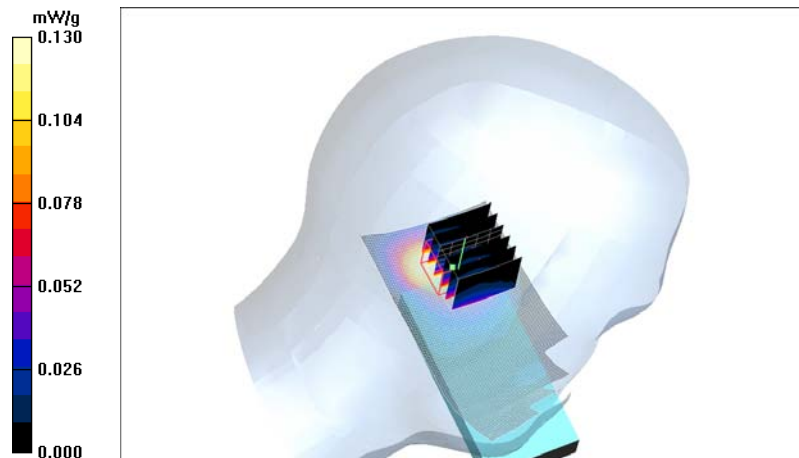
SAR(1 g) = 0.118 mW/g

SAR(10 g) = 0.063 mW/g

Power Drift = -0.012 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) = 0.130 mW/g



Date/Time: 2009-02-07 19:07:23

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: WLAN2450

Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: Head 2450; Medium Notes: Medium Temperature: $t=21.2\text{ C}$

Medium parameters used: $f = 2412\text{ MHz}$; $\sigma = 1.83\text{ mho/m}$; $\epsilon_r = 38.2$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.43, 4.43, 4.43); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 8; Type: SAM Twin Phantom; Serial: TP-1408
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Low/Area Scan (51x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.151 mW/g

Cheek position - Low/Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.71 V/m

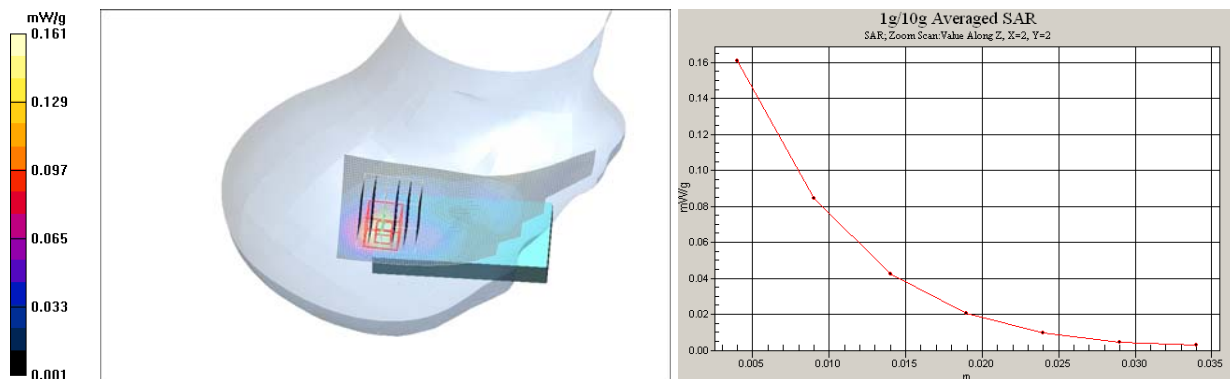
Peak SAR (extrapolated) = 0.301 W/kg

SAR(1 g) = 0.148 mW/g

SAR(10 g) = 0.070 mW/g

Power Drift = -0.119 dB

Maximum value of SAR (measured) = 0.161 mW/g



Date/Time: 2009-02-07 18:45:58

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: WLAN2450

Frequency: 2442 MHz; Duty Cycle: 1:1

Medium: Head 2450; Medium Notes: Medium Temperature: $t=21.2\text{ C}$

Medium parameters used: $f = 2442\text{ MHz}$; $\sigma = 1.86\text{ mho/m}$; $\epsilon_r = 38.1$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.43, 4.43, 4.43); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 8; Type: SAM Twin Phantom; Serial: TP-1408
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - Middle/Area Scan (51x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.150 mW/g

Tilt position - Middle/Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 8.05 V/m

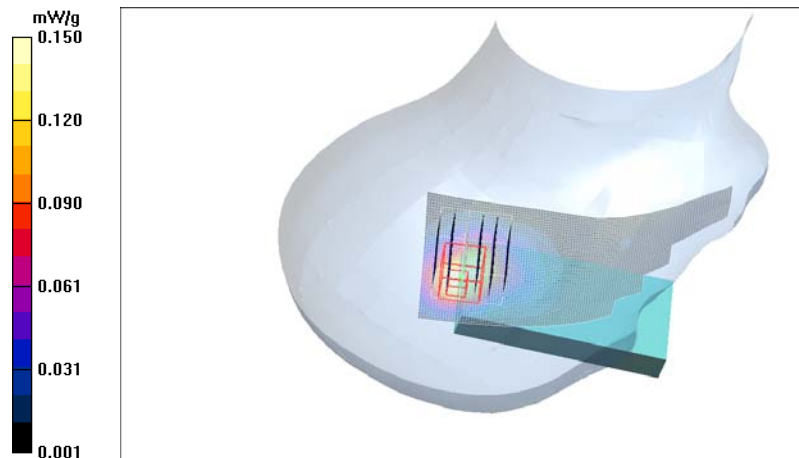
Peak SAR (extrapolated) = 0.285 W/kg

SAR(1 g) = 0.135 mW/g

SAR(10 g) = 0.068 mW/g

Power Drift = 0.072 dB

Maximum value of SAR (measured) = 0.150 mW/g



Date/Time: 2009-02-04 23:41:17

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: 2-slot GPRS850

Frequency: 836.6 MHz; Duty Cycle: 1:4.2

Medium: Body 850; Medium Notes: Medium Temperature: 21.1 C

Medium parameters used: $f = 837$ MHz; $\sigma = 0.958$ mho/m; $\epsilon_r = 53.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(5.76, 5.76, 5.76); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 5; Type: Twin Phantom; Serial: TP-1412
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - No Accessory - Display facing phantom/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.862 mW/g

Body - Middle - No Accessory - Display facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 14.3 V/m

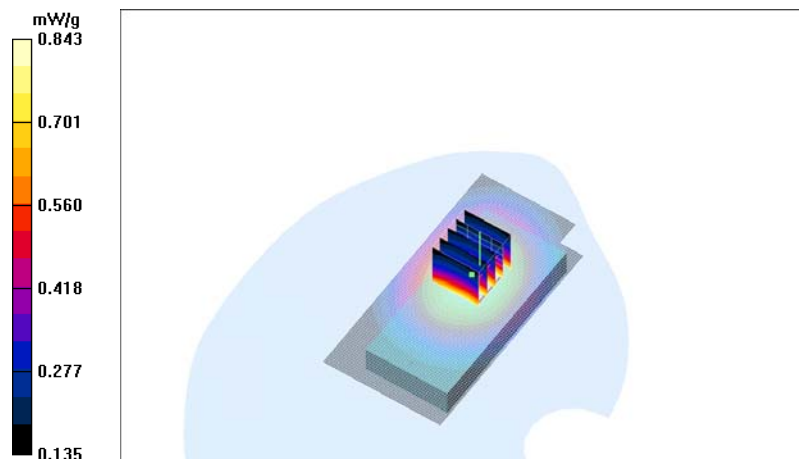
Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.807 mW/g

SAR(10 g) = 0.607 mW/g

Power Drift = 0.199 dB

Maximum value of SAR (measured) = 0.843 mW/g



Date/Time: 2009-02-04 23:54:50

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: 2-slot GPRS850

Frequency: 836.6 MHz; Duty Cycle: 1:4.2

Medium: Body 850; Medium Notes: Medium Temperature: 21.1 C

Medium parameters used: $f = 837$ MHz; $\sigma = 0.958$ mho/m; $\epsilon_r = 53.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(5.76, 5.76, 5.76); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 5; Type: Twin Phantom; Serial: TP-1412
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - AD-54 + HS-83 - Display facing phantom/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.556 mW/g

Body - Middle - AD-54 + HS-83 - Display facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 10.7 V/m

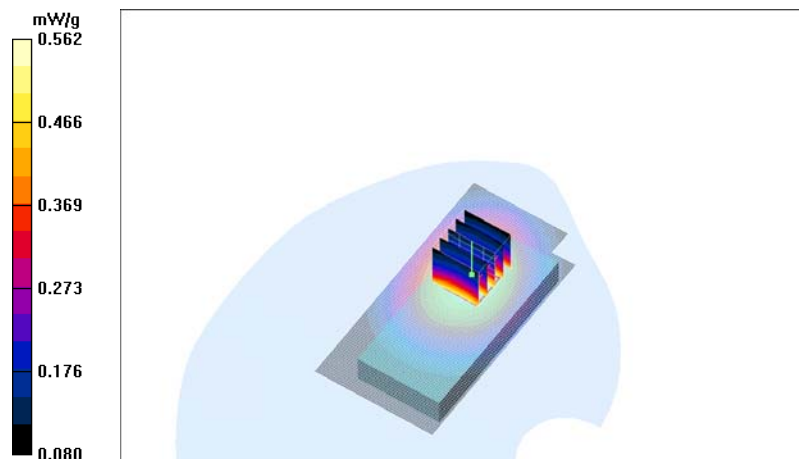
Peak SAR (extrapolated) = 0.682 W/kg

SAR(1 g) = 0.532 mW/g

SAR(10 g) = 0.396 mW/g

Power Drift = 0.062 dB

Maximum value of SAR (measured) = 0.562 mW/g



Date/Time: 2009-02-04 22:49:14

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: 2-slot GPRS850

Frequency: 836.6 MHz; Duty Cycle: 1:4.2

Medium: Body 850; Medium Notes: Medium Temperature: 21.1 C

Medium parameters used: $f = 837$ MHz; $\sigma = 0.958$ mho/m; $\epsilon_r = 53.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(5.76, 5.76, 5.76); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 5; Type: Twin Phantom; Serial: TP-1412
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - No Accessory - Back facing phantom/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

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

Body - Middle - No Accessory - Back facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 17.2 V/m

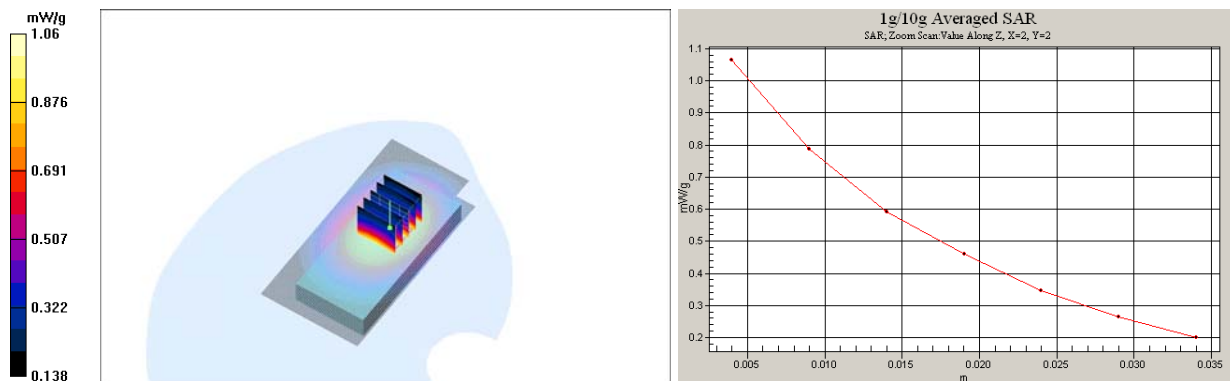
Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.983 mW/g

SAR(10 g) = 0.718 mW/g

Power Drift = -0.094 dB

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



Date/Time: 2009-02-04 23:26:36

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: 2-slot GPRS850

Frequency: 836.6 MHz; Duty Cycle: 1:4.2

Medium: Body 850; Medium Notes: Medium Temperature: 21.1 C

Medium parameters used: $f = 837$ MHz; $\sigma = 0.958$ mho/m; $\epsilon_r = 53.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(5.76, 5.76, 5.76); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 5; Type: Twin Phantom; Serial: TP-1412
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - AD-54 + HS-83 - Back facing phantom/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.663 mW/g

Body - Middle - AD-54 + HS-83 - Back facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 13.7 V/m

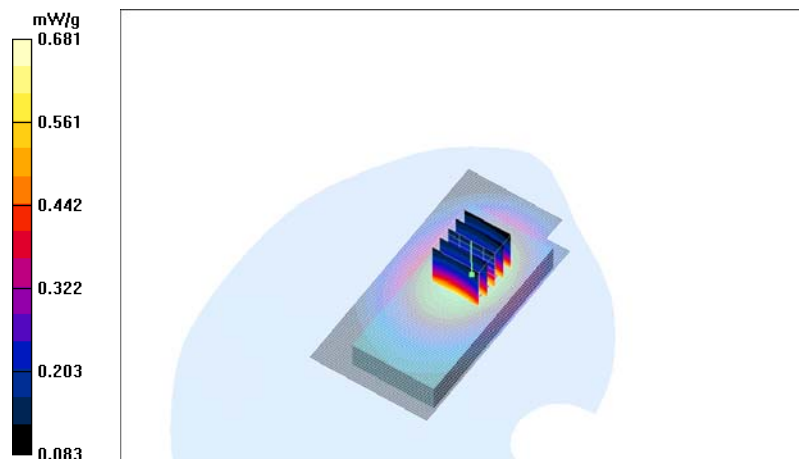
Peak SAR (extrapolated) = 0.831 W/kg

SAR(1 g) = 0.637 mW/g

SAR(10 g) = 0.466 mW/g

Power Drift = 0.214 dB

Maximum value of SAR (measured) = 0.681 mW/g



Date/Time: 2009-02-13 19:38:04

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: 3-slot GPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:2.8

Medium: Body 1900; Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.5$ mho/m; $\epsilon_r = 53.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.63, 4.63, 4.63); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 3; Type: Twin Phantom; Serial: TP-1302
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - No Accessory - Display facing phantom/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.171 mW/g

Body - Middle - No Accessory - Display facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 9.41 V/m

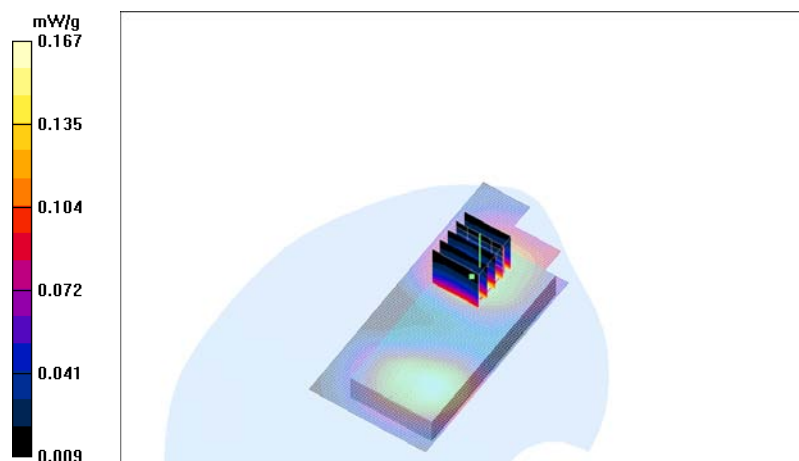
Peak SAR (extrapolated) = 0.249 W/kg

SAR(1 g) = 0.156 mW/g

SAR(10 g) = 0.101 mW/g

Power Drift = 0.277 dB

Maximum value of SAR (measured) = 0.167 mW/g



Date/Time: 2009-02-13 19:53:48

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: 3-slot GPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:2.8

Medium: Body 1900; Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.5$ mho/m; $\epsilon_r = 53.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.63, 4.63, 4.63); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 3; Type: Twin Phantom; Serial: TP-1302
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - AD-54 + HS-83 - Display facing phantom/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.142 mW/g

Body - Middle - AD-54 + HS-83 - Display facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 8.45 V/m

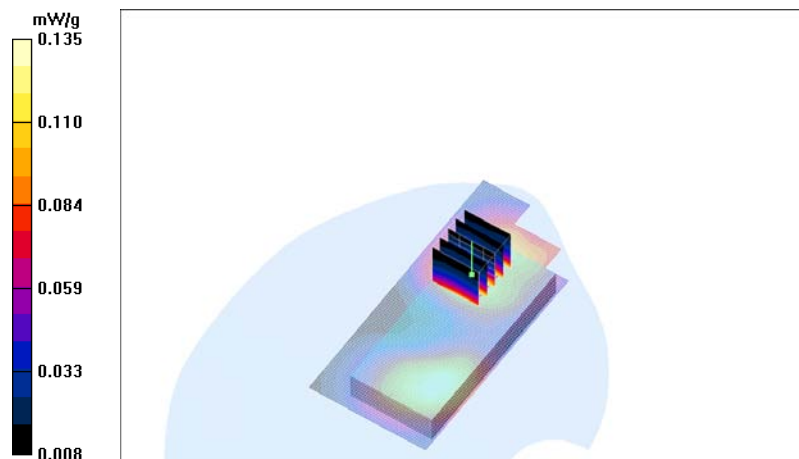
Peak SAR (extrapolated) = 0.194 W/kg

SAR(1 g) = 0.126 mW/g

SAR(10 g) = 0.082 mW/g

Power Drift = 0.041 dB

Maximum value of SAR (measured) = 0.135 mW/g



Date/Time: 2009-02-13 20:38:47

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: 3-slot GPRS1900

Frequency: 1909.8 MHz; Duty Cycle: 1:2.8

Medium: Body 1900; Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.53$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.63, 4.63, 4.63); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 3; Type: Twin Phantom; Serial: TP-1302
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - High - No Accessory - Back facing phantom/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

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

Body - High - No Accessory - Back facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 9.31 V/m

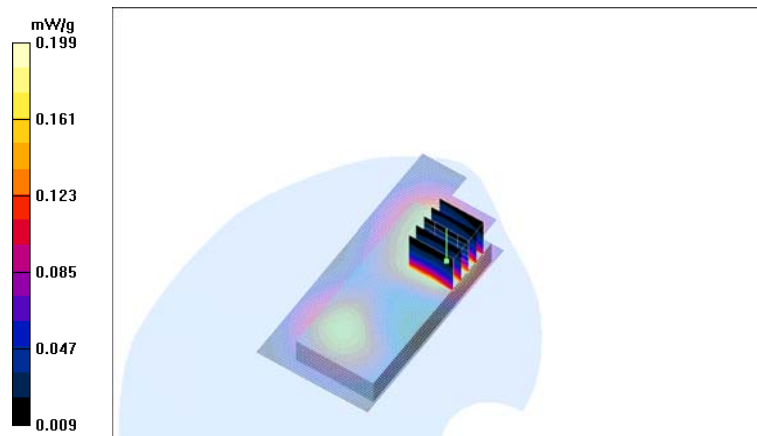
Peak SAR (extrapolated) = 0.301 W/kg

SAR(1 g) = 0.186 mW/g

SAR(10 g) = 0.119 mW/g

Power Drift = -0.084 dB

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



Date/Time: 2009-02-13 20:16:43

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: 3-slot GPRS1900

Frequency: 1880 MHz; Duty Cycle: 1:2.8

Medium: Body 1900; Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.5$ mho/m; $\epsilon_r = 53.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.63, 4.63, 4.63); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 3; Type: Twin Phantom; Serial: TP-1302
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - AD-54 + HS-83 - Back facing phantom/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.160 mW/g

Body - Middle - AD-54 + HS-83 - Back facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 8.17 V/m

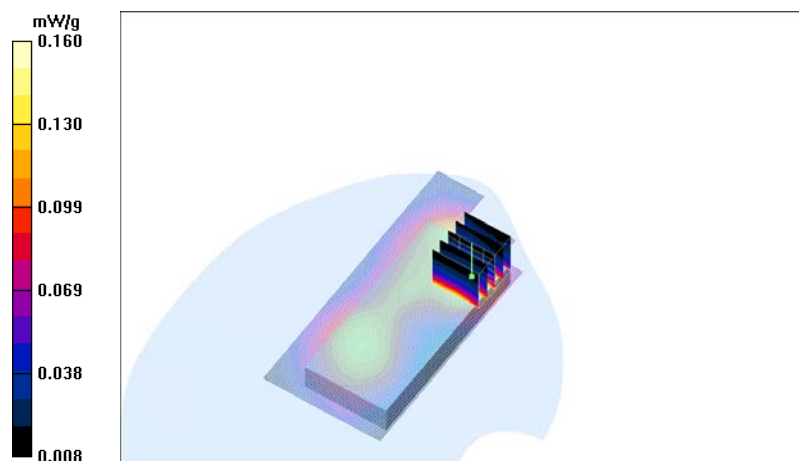
Peak SAR (extrapolated) = 0.231 W/kg

SAR(1 g) = 0.151 mW/g

SAR(10 g) = 0.097 mW/g

Power Drift = 0.037 dB

Maximum value of SAR (measured) = 0.160 mW/g



Date/Time: 2009-02-06 23:23:45

Test Laboratory: TCC Nokia
Type: RM-465; Serial: 004401/10/469085/0

Communication System: WCDMA1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: Body 1900; Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.63, 4.63, 4.63); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 3; Type: Twin Phantom; Serial: TP-1302
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - No Accessory - Display facing phantom/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.206 mW/g

Body - Middle - No Accessory - Display facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 9.23 V/m

Peak SAR (extrapolated) = 0.288 W/kg

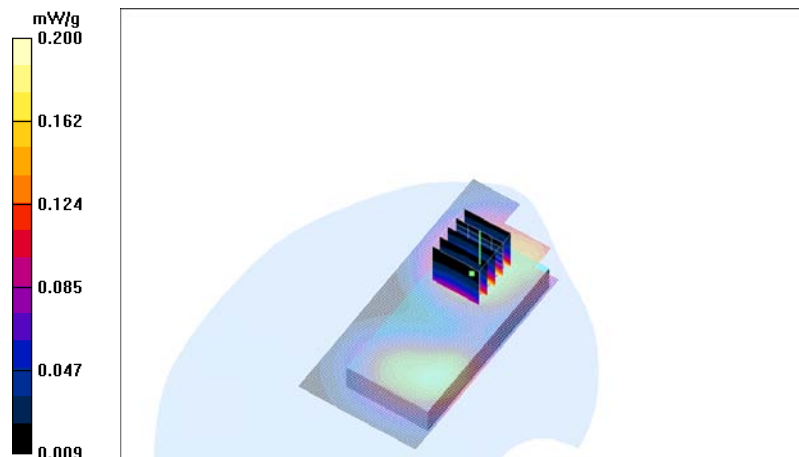
SAR(1 g) = 0.187 mW/g

SAR(10 g) = 0.118 mW/g

Power Drift = -0.475 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) = 0.200 mW/g



Date/Time: 2009-02-06 23:38:20

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: WCDMA1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: Body 1900; Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.63, 4.63, 4.63); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 3; Type: Twin Phantom; Serial: TP-1302
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - AD-54 + HS-83 - Display facing phantom/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.178 mW/g

Body - Middle - AD-54 + HS-83 - Display facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 8.10 V/m

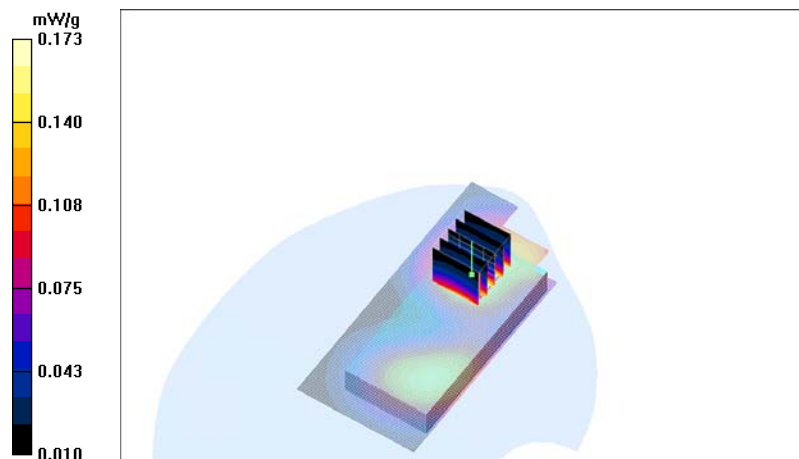
Peak SAR (extrapolated) = 0.247 W/kg

SAR(1 g) = 0.162 mW/g

SAR(10 g) = 0.105 mW/g

Power Drift = -0.032 dB

Maximum value of SAR (measured) = 0.173 mW/g



Date/Time: 2009-02-07 00:55:37

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: WCDMA1900

Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium: Body 1900; Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: $f = 1908$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.63, 4.63, 4.63); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 3; Type: Twin Phantom; Serial: TP-1302
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - High - No Accessory - Back facing phantom/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.288 mW/g

Body - High - No Accessory - Back facing phantom/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 9.39 V/m

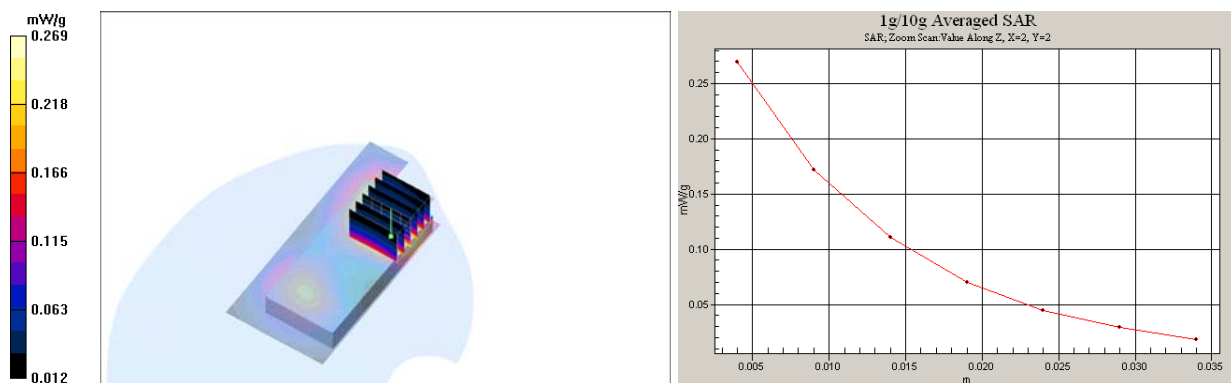
Peak SAR (extrapolated) = 0.395 W/kg

SAR(1 g) = 0.253 mW/g

SAR(10 g) = 0.163 mW/g

Power Drift = -0.289 dB

Maximum value of SAR (measured) = 0.269 mW/g



Date/Time: 2009-02-07 00:01:00

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: WCDMA1900

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: Body 1900; Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.63, 4.63, 4.63); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 3; Type: Twin Phantom; Serial: TP-1302
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - AD-54 + HS-83 - Back facing phantom/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

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

Body - Middle - AD-54 + HS-83 - Back facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 8.05 V/m

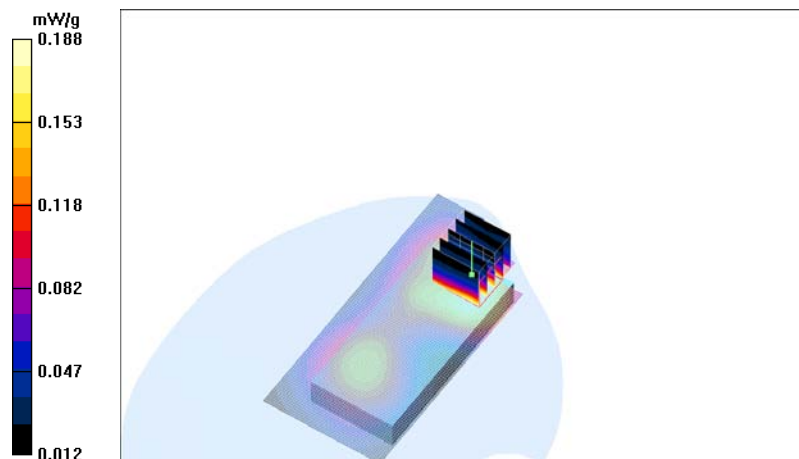
Peak SAR (extrapolated) = 0.271 W/kg

SAR(1 g) = 0.177 mW/g

SAR(10 g) = 0.115 mW/g

Power Drift = 0.031 dB

Maximum value of SAR (measured) = 0.188 mW/g



Date/Time: 2009-02-07 20:34:31

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: WLAN2450

Frequency: 2442 MHz; Duty Cycle: 1:1

Medium: Body 2450; Medium Notes: Medium Temperature: t=21.2 C

Medium parameters used: f = 2442 MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 50.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.03, 4.03, 4.03); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 8; Type: SAM Twin Phantom; Serial: TP-1408
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - No Accessory - Display facing phantom/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.018 mW/g

Body - Middle - No Accessory - Display facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 2.20 V/m

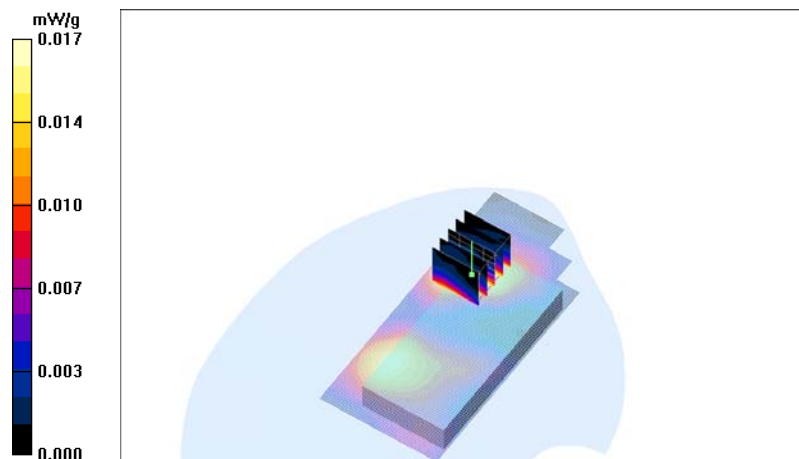
Peak SAR (extrapolated) = 0.025 W/kg

SAR(1 g) = 0.016 mW/g

SAR(10 g) = 0.00937 mW/g

Power Drift = 0.278 dB

Maximum value of SAR (measured) = 0.017 mW/g



Date/Time: 2009-02-07 20:49:51

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: WLAN2450

Frequency: 2442 MHz; Duty Cycle: 1:1

Medium: Body 2450; Medium Notes: Medium Temperature: $t=21.2\text{ C}$

Medium parameters used: $f = 2442\text{ MHz}$; $\sigma = 1.98\text{ mho/m}$; $\epsilon_r = 50.8$; $\rho = 1000\text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.03, 4.03, 4.03); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 8; Type: SAM Twin Phantom; Serial: TP-1408
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - AD-54 + HS-83 - Display facing phantom/Area Scan (51x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.025 mW/g

Body - Middle - AD-54 + HS-83 - Display facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 2.30 V/m

Peak SAR (extrapolated) = 0.034 W/kg

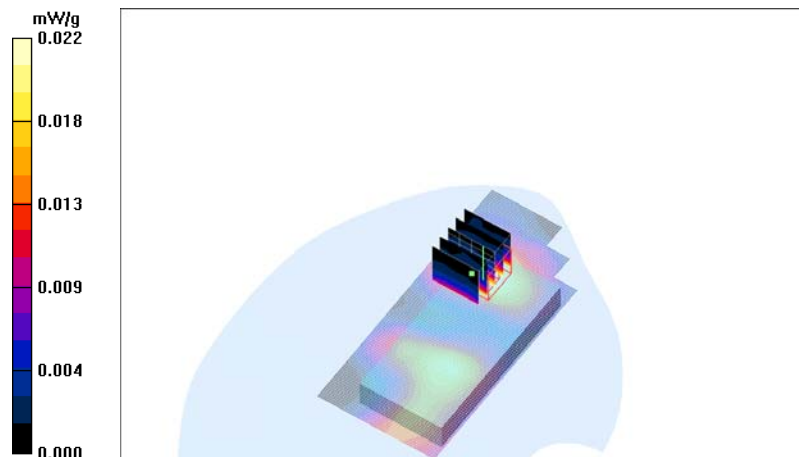
SAR(1 g) = 0.021 mW/g

SAR(10 g) = 0.012 mW/g

Power Drift = 0.488 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) = 0.022 mW/g



Date/Time: 2009-02-07 21:04:01

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: WLAN2450

Frequency: 2442 MHz; Duty Cycle: 1:1

Medium: Body 2450; Medium Notes: Medium Temperature: t=21.2 C

Medium parameters used: f = 2442 MHz; σ = 1.98 mho/m; ϵ_r = 50.8; ρ = 1000 kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.03, 4.03, 4.03); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 8; Type: SAM Twin Phantom; Serial: TP-1408
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - No Accessory - Back facing phantom/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.080 mW/g

Body - Middle - No Accessory - Back facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 5.44 V/m

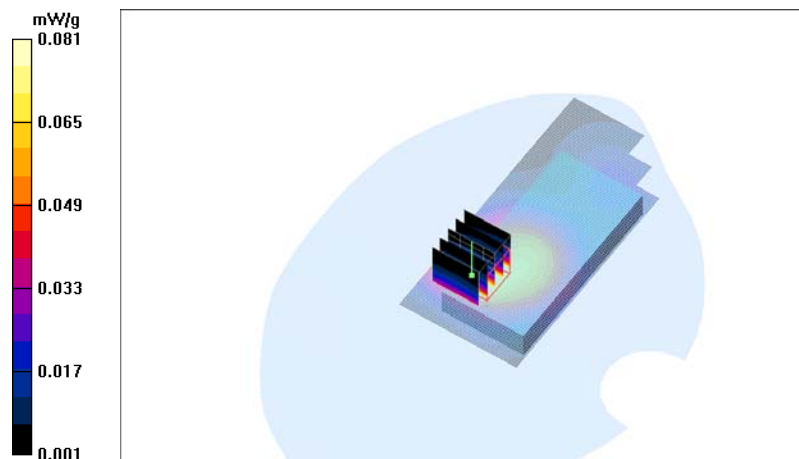
Peak SAR (extrapolated) = 0.130 W/kg

SAR(1 g) = 0.074 mW/g

SAR(10 g) = 0.043 mW/g

Power Drift = 0.032 dB

Maximum value of SAR (measured) = 0.081 mW/g



Date/Time: 2009-02-07 21:18:26

Test Laboratory: TCC Nokia

Type: RM-465; Serial: 004401/10/469085/0

Communication System: WLAN2450

Frequency: 2442 MHz; Duty Cycle: 1:1

Medium: Body 2450; Medium Notes: Medium Temperature: t=21.2 C

Medium parameters used: f = 2442 MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 50.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.03, 4.03, 4.03); Calibrated: 2008-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 2008-03-17
- Phantom: SAM 8; Type: SAM Twin Phantom; Serial: TP-1408
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - AD-54 + HS-83 - Back facing phantom/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.098 mW/g

Body - Middle - AD-54 + HS-83 - Back facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 5.30 V/m

Peak SAR (extrapolated) = 0.156 W/kg

SAR(1 g) = 0.090 mW/g

SAR(10 g) = 0.052 mW/g

Power Drift = 0.065 dB

Maximum value of SAR (measured) = 0.099 mW/g

