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SAR Compliance Test Report

Test report no.:	Cph_SAR_0840_03	**Date of report:**	2008-10-06
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Measurements made by:	Jesper Nielsen & Lars Ostermann		
Tested device:	RM-412		
FCC ID:	PYARM-412	**IC:**	661V-RM412
Supplement reports:	Salo_SAR_0838_15 for RM-413 / FCC ID: PYARM-413 / IC ID: 661V-RM413, Cph_SAR_0845_08		
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:

For the contents:

Jesper Nielsen
Test Engineer

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1. SUMMARY OF SAR TEST REPORT

1.1 Test Details

Period of test	2008-09-05 to 2008-10-01
SN, HW and SW numbers of tested device	SN: 004401/10/220412/6, HW: 0300, SW: 008.32.2, DUT: 25459 SN: 004401/10/016147/6, HW: 0321, SW: 008.32.2, DUT: 13189
Batteries used in testing	BL-4U, DUT: 25463, 25464, 13146, 13145, 13162, 13163
Headsets used in testing	HS-43, DUT: 29357, 13078
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
3-slot GPRS 850	251 / 848.8	27.3 dBm ERP	Left, Cheek	0.989 W/kg	**1.11 W/kg**	1.6 W/kg	PASSED
3-slot GPRS 1900	661 / 1880.0	28.0 dBm EIRP	Left, Cheek	1.09 W/kg	**1.22 W/kg**	1.6 W/kg	PASSED
WCDMA1900	9262 /1852.4	21.2 dBm EIRP	Left, Cheek	1.05 W/kg	**1.18 W/kg**	1.6 W/kg	PASSED
WLAN 2450**	11 / 2462.0	17.5 dBm EIRP	Right, Tilt	0.185 W/kg	**0.21 W/kg**	1.6 W/kg	PASSED
3-slot GPRS 850 + WLAN 2450	-	-	Left, Cheek	1.095 W/kg	**1.23 W/kg**	1.6 W/kg	PASSED
3-slot GPRS 1900 + WLAN 2450	-	-	Left, Cheek	1.186 W/kg	**1.33 W/kg**	1.6 W/kg	PASSED
WCDMA1900 + WLAN 2450	-	-	Left, Cheek	1.156 W/kg	**1.29 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
3-slot GPRS 850	251 / 848.8	27.3 dBm ERP	2.2 cm	0.829 W/kg	**0.93 W/kg**	1.6 W/kg	PASSED
3-slot GPRS 1900	810 / 1909.8	27.7 dBm EIRP	2.2 cm	0.304 W/kg	**0.34 W/kg**	1.6 W/kg	PASSED
WCDMA1900	9262 /1852.4	21.2 dBm EIRP	2.2 cm	0.223 W/kg	**0.25 W/kg**	1.6 W/kg	PASSED
WLAN 2450**	11 / 2462.0	17.5 dBm EIRP	2.2 cm	0.102 W/kg	**0.11 W/kg**	1.6 W/kg	PASSED
3-slot GPRS 850 + WLAN 2450	-	-	2.2 cm	0.895 W/kg	**1.00 W/kg**	1.6 W/kg	PASSED
3-slot GPRS 1900 + WLAN 2450	-	-	2.2 cm	0.380 W/kg	**0.43 W/kg**	1.6 W/kg	PASSED
WCDMA1900 + WLAN 2450	-	-	2.2 cm	0.319 W/kg	**0.36 W/kg**	1.6 W/kg	PASSED

*SAR values are scaled up by 12% to cover measurement drift.
**SAR values taken from Salo_SAR_0838_15 for RM-413 / FCC ID: PYARM-413 / IC ID: 661V-RM413.

1.2.3 Maximum Drift

Maximum drift covered by 12% scaling up of the SAR values	Maximum drift during measurements
0.5dB	0.47dB

1.2.4 Measurement Uncertainty

Expanded Uncertainty (k=2) 95%	± 25.8%

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 has Push to Talk/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 internal antennas.

3. TEST CONDITIONS

3.1 Temperature and Humidity

Ambient temperature (°C):	20.4 to 22.4
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.

Some of the SAR results, SAR plots and test details given in this report are duplicated from the earlier test report Salo_SAR_0835_15 for RM-413 / FCC ID: PYARM-413 / IC ID: 661V-RM413.

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
E-field Probe ES3DV3	3118	12 months	2008-10
Dipole Validation Kit, D835V2	476	24 months	2009-02
Dipole Validation Kit, D1900V2	5d026	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	-	-
BT Tester	CBT	100263	-	-
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 µW/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 ± 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]	
	Reference result	2.29	40.2	0.88	
	± 10% window	2.06 – 2.52			
835	2008-09-11	2.44	40.8	0.89	20.4
	Reference result	10.3	40.2	1.47	
	± 10% window	9.3 - 11.3			
1900	2008-09-05	10.2	40.8	1.48	22.3
	2008-09-22	10.6	38.5	1.40	20.6
	Reference result	14.3	37.8	1.82	
	± 10% window	12.9 – 15.7			
2450	2008-09-29	14.2	37.9	1.85	21.0

System checking, body tissue simulant

f [MHz]	Description	SAR [W/kg], 1g	Dielectric Parameters		Temp [°C]
			ε_r	σ [S/m]	
	Reference result	2.47	52.9	0.98	
	± 10% window	2.22 – 2.72			
835	2008-10-01	2.49	53.5	0.95	20.5
	Reference result	10.5	51.7	1.57	
	± 10% window	9.4 – 11.6			
1900	2008-09-10	10.6	53.0	1.52	21.5

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]	
	Recommended value	41.5	0.90	
	± 5% window	39.4 – 43.6	0.86 – 0.95	
836	2008-09-11	40.8	0.89	20.4
	Recommended value	40.0	1.40	
	± 5% window	38.0 – 42.0	1.33 – 1.47	
1880	2008-09-05	40.9	1.46	22.3
	2008-09-22	38.6	1.38	20.6
	Recommended value	39.2	1.79	
	± 5% window	37.3 – 41.2	1.70 – 1.88	
2442	2008-09-29	37.9	1.84	21.0

Body tissue simulant measurements

f [MHz]	Description	Dielectric Parameters		Temp [°C]
		ε_r	σ [S/m]	
	Recommended value	55.2	0.97	
	± 5% window	52.4 – 58.0	0.92 – 1.02	
836	2008-10-01	53.5	0.95	20.5
	Recommended value	53.3	1.52	
	± 5% window	50.6 – 56.0	1.44 – 1.60	
1880	2008-09-10	53.1	1.49	21.5
	Recommended value	52.7	1.94	
	± 5% window	50.1 – 55.3	1.85 – 2.04	
2442	2008-09-29	50.5	2.01	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 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	$c_i . u_i$ (%)	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**		**27.2 dBm**	**27.1 dBm**	**28.9 dBm**
Slide closed	Left	Cheek	-	0.497	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
2-slot GPRS	**Power**		**26.7 dBm**	**26.9 dBm**	**28.5 dBm**
Slide closed	Left	Cheek	-	0.848	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
3-slot GPRS	**Power**		**26.6 dBm**	**26.3 dBm**	**27.3 dBm**
Slide closed	Left	Cheek	0.890	0.950	**0.989**
		Tilt	-	0.717	-
	Right	Cheek	0.836	0.819	0.861
		Tilt	-	0.683	-
3-slot 8PSK EGPRS	**Power**		**19.9 dBm**	**19.4 dBm**	**19.7 dBm**
Slide closed	Left	Cheek	-	-	0.166
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt		-	
3-slot GPRS Slide closed	Left Cheek, BT active		-	-	0.973

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**		**29.3 dBm**	**29.8 dBm**	**29.3 dBm**
Slide closed	Left	Cheek	-	0.561	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
2-slot GPRS	**Power**		**29.2 dBm**	**29.7 dBm**	**28.8 dBm**
Slide closed	Left	Cheek	-	1.06	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
3-slot GPRS	**Power**		**27.4 dBm**	**28.0 dBm**	**27.7 dBm**
Slide closed	Left	Cheek	1.04	**1.08**	1.05
		Tilt	-	0.442	-
	Right	Cheek	-	0.565	-
		Tilt	-	0.541	-
3-slot 8PSK EGPRS	**Power**		**24.8 dBm**	**24.3 dBm**	**23.4 dBm**
Slide closed	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**	**23.2 dBm**	**22.1 dBm**
Slide closed	Left	Cheek	**1.05**	0.973	0.843
		Tilt		0.305	
	Right	Cheek		0.450	
		Tilt		0.359	
3-slot GPRS Slide closed	Left Cheek, BT Active		-	**1.09**	-

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**		**17.2 dBm**	**17.7 dBm**	**17.5 dBm**
Slide closed	Left	Cheek	-	0.106	-
		Tilt	-	0.155	**-**
	Right	Cheek	-	0.138	-
		Tilt	0.114	0.161	**0.185**

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
3-slot GPRS		**Power**	**26.6 dBm**	**26.3 dBm**	**27.3 dBm**
Slide closed	Display facing phantom	Without headset	-	0.619	-
		Headset HS-43	-	0.394	-
	Back facing phantom	Without headset	0.763	0.801	**0.819**
		Headset HS-43	0.483	0.516	0.586
3-slot GPRS Slide closed	Back facing phantom	Without headset BT active	-	-	**0.829**

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	27.4 dBm	28.0 dBm	27.7 dBm
Slide closed	Display facing phantom	Without headset	-	0.204	-
		Headset HS-43	-	0.190	-
	Back facing phantom	Without headset	0.262	0.267	**0.285**
		Headset HS-43	0.230	0.265	0.278
			Ch 9262 1852.4 MHz	Ch 9400 1880.0 MHz	Ch 9538 1907.6 MHz
WCDMA		Power	21.2 dBm	23.2 dBm	22.1 dBm
Slide closed	Display facing phantom	Without headset	-	0.157	-
		Headset HS-43	-	0.160	-
	Back facing phantom	Without headset	**0.223**	0.198	0.173
		Headset HS-43	0.217	0.195	0.195
3-slot GPRS Slide closed	Back facing phantom	Without headset BT active	-	-	**0.304**

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	17.2 dBm	17.7 dBm	17.5 dBm
Slide closed	Display facing phantom	Without headset	-	0.016	-
		Headset HS-43	-	0.018	-
	Back facing phantom	Without headset	-	0.076	-
		Headset HS-43	0.069	0.083	**0.102**

Simultaneous transmissions: Combined SAR results

Test configuration	Max. 1g SAR results				Combined 1g SAR values		
	WLAN**	GSM 850	GSM 1900	WCDMA1900	WLAN + GSM 850	WLAN + GSM 1900	WLAN + WCDMA1900
Head: Left, Cheek	0.106	0.989	1.08	1.05	**1.095**	**1.186**	**1.156**
Head: Left, Tilt	0.155	0.717	0.442	0.305	0.872	0.597	0.460
Head: Right, Cheek	0.138	0.861	0.565	0.450	0.999	0.703	0.588
Head: Right, Tilt	0.185	0.683	0.541	0.359	0.868	0.726	0.544
Body: Without Headset	0.076	0.819	0.285	0.223	**0.895**	0.361	0.299
Body: Headset HS-43	0.102	0.586	0.278	0.217	0.688	**0.380**	**0.319**

**SAR values taken from Salo_SAR_0838_15 for RM-413 / FCC ID: PYARM-413 / IC ID: 661V-RM413.

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: 2008-09-11 10:15:40 AM

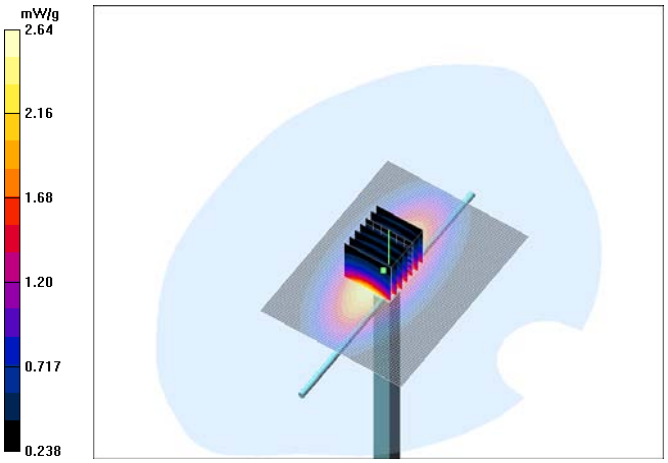
Test Laboratory: TCC Nokia
Type: D835V2; Serial: 476

Communication System: CW 835
Frequency: 835 MHz; Duty Cycle: 1:1
Medium: Head 850; Medium Notes: Medium Temperature: 20.4 C
Medium parameters used: f = 835 MHz; σ = 0.891 mho/m; ε_r = 40.8; ρ = 1000 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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.59 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.1 V/m
Peak SAR (extrapolated) = 3.61 W/kg
SAR(1 g) = 2.44 mW/g
SAR(10 g) = 1.59 mW/g
Power Drift = -0.031 dB
Maximum value of SAR (measured) = 2.64 mW/g



Date/Time: 2008-09-05 4:11:19 PM

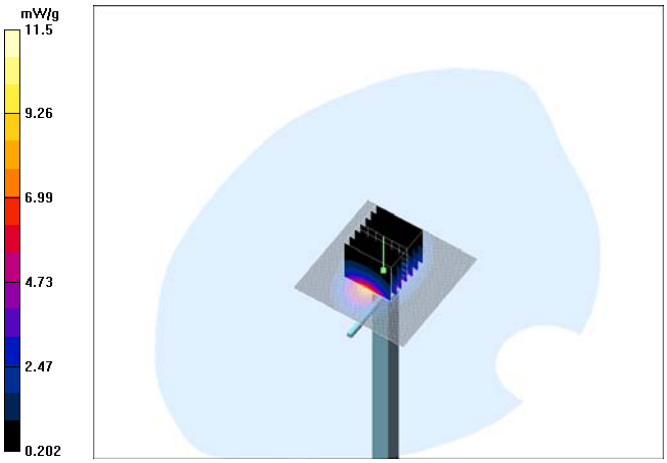
Test Laboratory: TCC Nokia
Type: D1900V2; Serial: 5d026

Communication System: CW1900
Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: Head 1900; Medium Notes: Medium Temperature: 22.3 C
Medium parameters used: f = 1900 MHz; σ = 1.48 mho/m; ε_r = 40.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.26, 5.26, 5.26); Calibrated: 2007-10-26
- 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 55; 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) = 11.7 mW/g

d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 88.0 V/m
Peak SAR (extrapolated) = 19.2 W/kg
SAR(1 g) = 10.2 mW/g
SAR(10 g) = 5.26 mW/g
Power Drift = 0.051 dB
Maximum value of SAR (measured) = 11.5 mW/g



Date/Time: 2008-09-22 11:06:17 AM

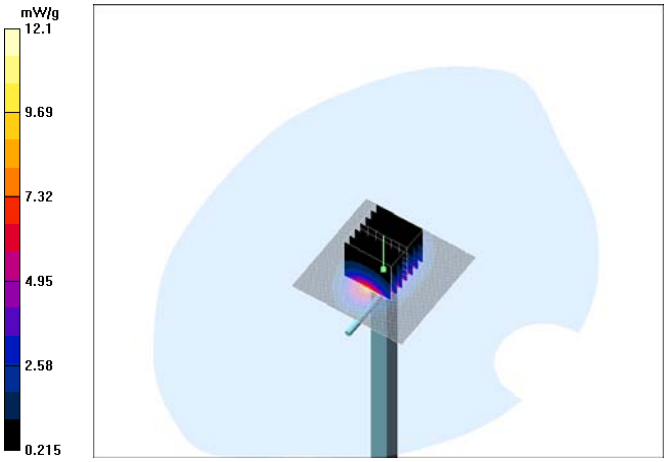
Test Laboratory: TCC Nokia
Type: D1900V2; Serial: 5d026

Communication System: CW 1900
Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: Head 1950; Medium Notes: Medium Temperature: 20.6 C
Medium parameters used: f = 1900 MHz; σ = 1.4 mho/m; ε_r = 38.5; ρ = 1000 kg/m^3
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 6; Type: SAM Twin Phantom; Serial: TP-1301
- Measurement SW: DASY4, V4.7 Build 55; 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) = 12.0 mW/g

d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 94.3 V/m
Peak SAR (extrapolated) = 19.8 W/kg
SAR(1 g) = 10.6 mW/g
SAR(10 g) = 5.46 mW/g
Power Drift = -0.021 dB
Maximum value of SAR (measured) = 12.1 mW/g



Date/Time: 2008-09-29 10:00:24

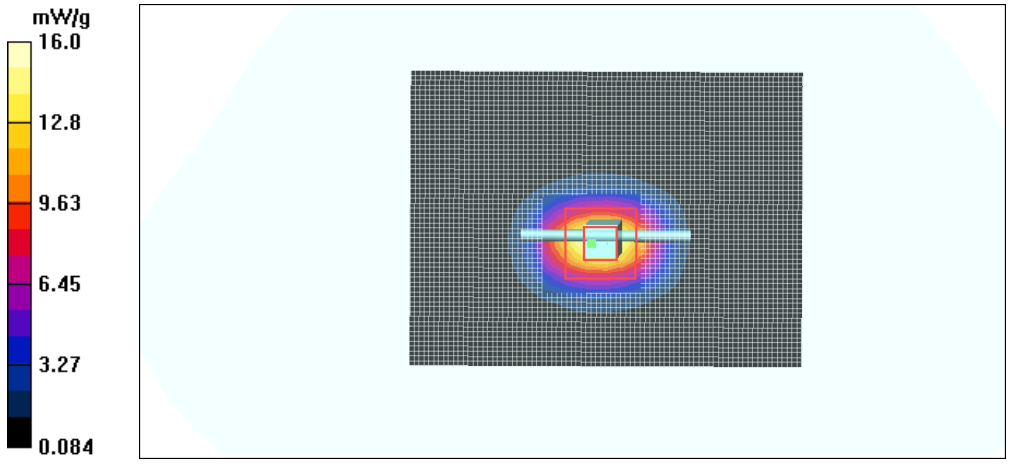
Test Laboratory: TCC Nokia
Type: D2450V2; Serial: D2450V2 - SN:729

Communication System: CW2450
Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: HSL2450; Medium Notes: 20.5C
Medium parameters used: f = 2450 MHz; σ = 1.85 mho/m; ε_r = 37.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(4.57, 4.57, 4.57); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 17.4 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 93.4 V/m
Peak SAR (extrapolated) = 30.3 W/kg
SAR(1 g) = 14.2 mW/g
SAR(10 g) = 6.54 mW/g
Power Drift = -0.030 dB
Maximum value of SAR (measured) = 16.0 mW/g



Date/Time: 2008-10-01 11:06:51 AM

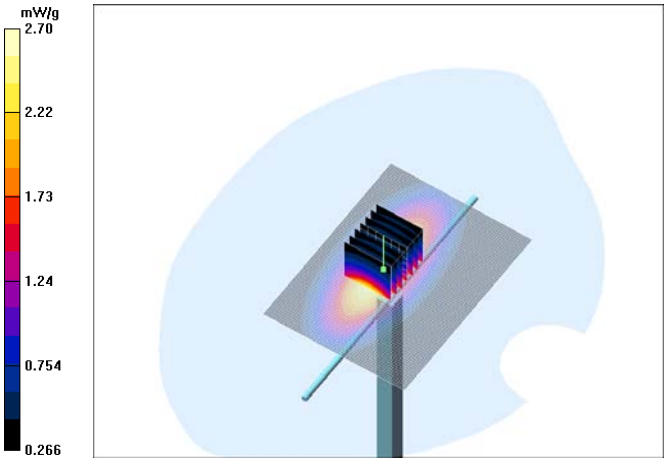
Test Laboratory: TCC Nokia
Type: D835V2; Serial: 476

Communication System: CW 835
Frequency: 835 MHz; Duty Cycle: 1:1
Medium: Body 850; Medium Notes: Medium Temperature: 20.5 C
Medium parameters used: f = 835 MHz; σ = 0.954 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.68 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 52.9 V/m
Peak SAR (extrapolated) = 3.63 W/kg
SAR(1 g) = 2.49 mW/g
SAR(10 g) = 1.64 mW/g
Power Drift = -0.045 dB
Maximum value of SAR (measured) = 2.70 mW/g



Date/Time: 2008-09-10 10:07:02 AM

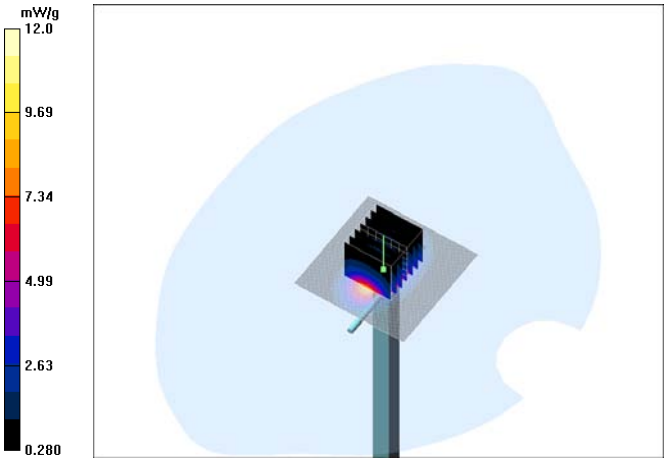
Test Laboratory: TCC Nokia
Type: D1900V2; Serial: 5d026

Communication System: CW 1900
Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: Body 1900; Medium Notes: Medium Temperature: 21.5 C
Medium parameters used: f = 1900 MHz; σ = 1.52 mho/m; ε_r = 53; ρ = 1000 kg/m^3
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 55; 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) = 12.1 mW/g

d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 90.3 V/m
Peak SAR (extrapolated) = 19.0 W/kg
SAR(1 g) = 10.6 mW/g
SAR(10 g) = 5.56 mW/g
Power Drift = -0.006 dB
Maximum value of SAR (measured) = 12.0 mW/g



APPENDIX B: MEASUREMENT SCANS

See the following pages

Date/Time: 2008-09-11 11:13:12 AM

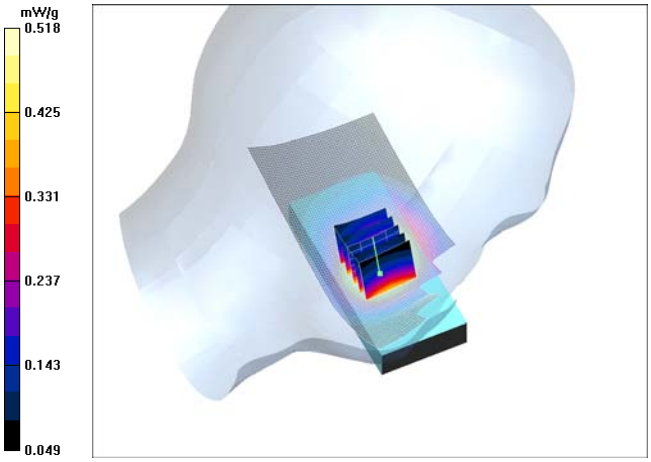
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: GSM850
Frequency: 836.6 MHz; Duty Cycle: 1:8.3
Medium: Head 850; Medium Notes: Medium Temperature: 20.4 C
Medium parameters used: f = 837 MHz; σ = 0.892 mho/m; ε_r = 40.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 7/21/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 3/17/2008
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position – Middle – Slide closed/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.525 mW/g

Cheek position - Middle – Slide closed /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 9.59 V/m
Peak SAR (extrapolated) = 0.655 W/kg
SAR(1 g) = 0.497 mW/g
SAR(10 g) = 0.375 mW/g
Power Drift = -0.127 dB
Maximum value of SAR (measured) = 0.518 mW/g



Date/Time: 2008-09-11 12:16:50 PM

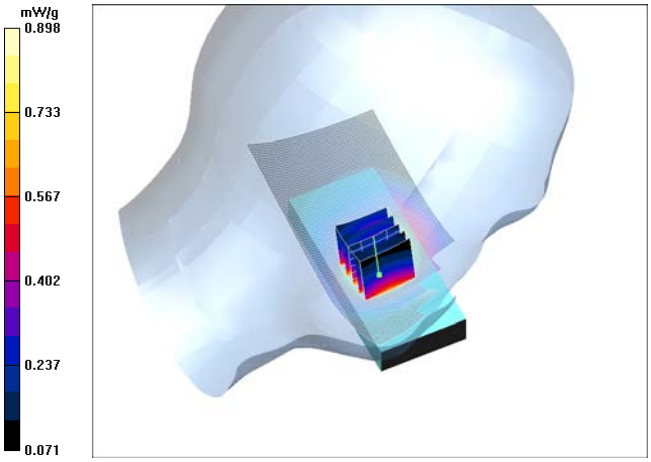
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: 2-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:4.2
Medium: Head 850; Medium Notes: Medium Temperature: 20.4 C
Medium parameters used: f = 837 MHz; σ = 0.892 mho/m; ε_r = 40.8; ρ = 1000 kg/m^3
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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle – Slide closed /Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.899 mW/g

Cheek position - Middle – Slide closed /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.2 V/m
Peak SAR (extrapolated) = 1.10 W/kg
SAR(1 g) = 0.848 mW/g
SAR(10 g) = 0.632 mW/g
Power Drift = -0.117 dB
Maximum value of SAR (measured) = 0.898 mW/g



Date/Time: 2008-09-11 3:22:29 PM

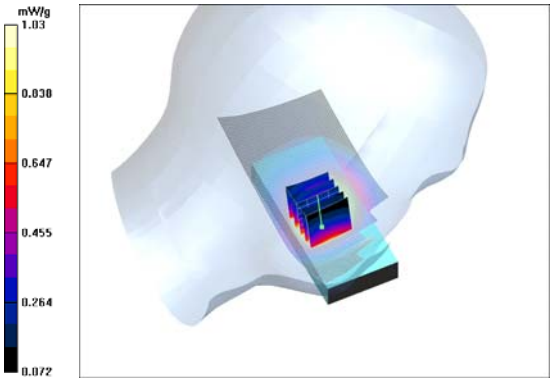
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

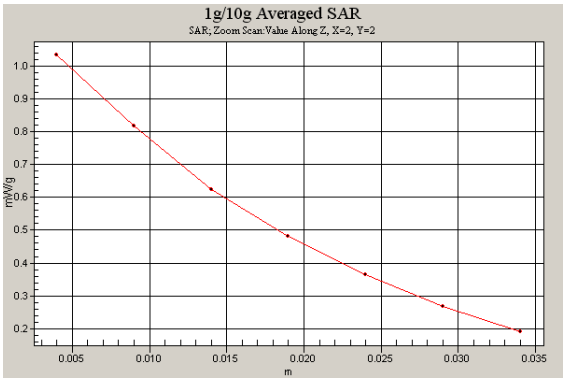
Communication System: 3-slot GPRS850
Frequency: 848.8 MHz; Duty Cycle: 1:2.8
Medium: Head 850; Medium Notes: Medium Temperature: 20.4 C
Medium parameters used: f = 849 MHz; σ = 0.906 mho/m; ε_r = 40.6; ρ = 1000 kg/m^3
Phantom section: Left Section

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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - High – Slide closed /Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.01 mW/g

Cheek position - High – Slide closed /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 14.1 V/m
Peak SAR (extrapolated) = 1.31 W/kg
SAR(1 g) = 0.989 mW/g
SAR(10 g) = 0.725 mW/g
Power Drift = -0.219 dB
Maximum value of SAR (measured) = 1.03 mW/g





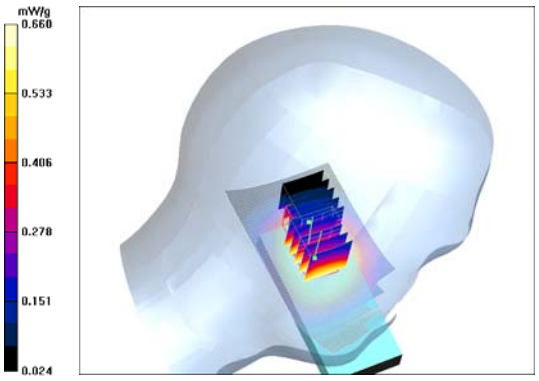
Date/Time: 2008-09-11 1:25:15 PM

Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: 3-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:2.8
Medium: Head 850; Medium Notes: Medium Temperature: 20.4 C
Medium parameters used: f = 837 MHz; σ = 0.892 mho/m; ε_r = 40.8; ρ = 1000 kg/m^3
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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - Middle – Slide closed /Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.763 mW/g
Tilt position - Middle – Slide closed /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 23.6 V/m
Peak SAR (extrapolated) = 0.868 W/kg
SAR(1 g) = 0.717 mW/g
SAR(10 g) = 0.541 mW/g
Power Drift = -0.157 dB
Maximum value of SAR (measured) = 0.759 mW/g
Tilt position - Middle – Slide closed /Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 23.6 V/m
Peak SAR (extrapolated) = 0.774 W/kg
SAR(1 g) = 0.583 mW/g
SAR(10 g) = 0.400 mW/g
Power Drift = -0.157 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) = 0.660 mW/g



Date/Time: 2008-09-11 2:58:51 PM

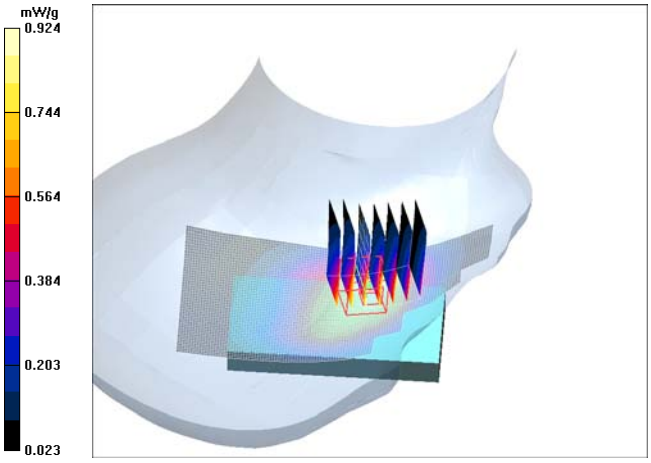
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: 3-slot GPRS850
Frequency: 848.8 MHz; Duty Cycle: 1:2.8
Medium: Head 850; Medium Notes: Medium Temperature: 20.4 C
Medium parameters used: f = 849 MHz; σ = 0.906 mho/m; ε_r = 40.6; ρ = 1000 kg/m^3
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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - High – Slide closed /Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.939 mW/g

Cheek position - High – Slide closed /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 11.7 V/m
Peak SAR (extrapolated) = 1.32 W/kg
SAR(1 g) = 0.861 mW/g
SAR(10 g) = 0.595 mW/g
Power Drift = -0.087 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) = 0.924 mW/g



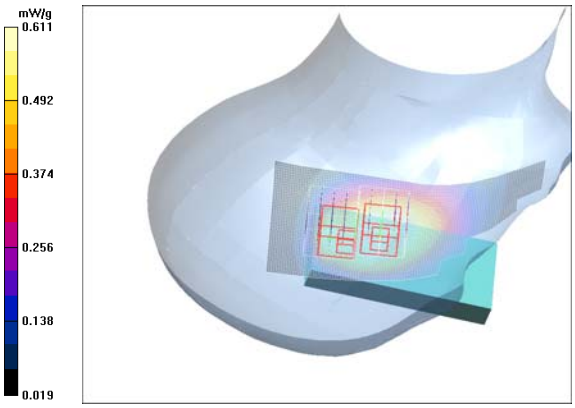
Date/Time: 2008-09-11 2:07:08 PM

Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: 3-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:2.8
Medium: Head 850; Medium Notes: Medium Temperature: 20.4 C
Medium parameters used: f = 837 MHz; σ = 0.892 mho/m; ε_r = 40.8; ρ = 1000 kg/m^3
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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - Middle – Slide closed /Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.698 mW/g
Tilt position - Middle – Slide closed /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 22.7 V/m
Peak SAR (extrapolated) = 0.839 W/kg
SAR(1 g) = 0.683 mW/g
SAR(10 g) = 0.516 mW/g
Power Drift = 0.059 dB
Maximum value of SAR (measured) = 0.716 mW/g
Tilt position - Middle – Slide closed /Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 22.7 V/m
Peak SAR (extrapolated) = 0.830 W/kg
SAR(1 g) = 0.528 mW/g
SAR(10 g) = 0.366 mW/g
Power Drift = 0.059 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) = 0.611 mW/g



Date/Time: 2008-09-11 7:11:09 PM

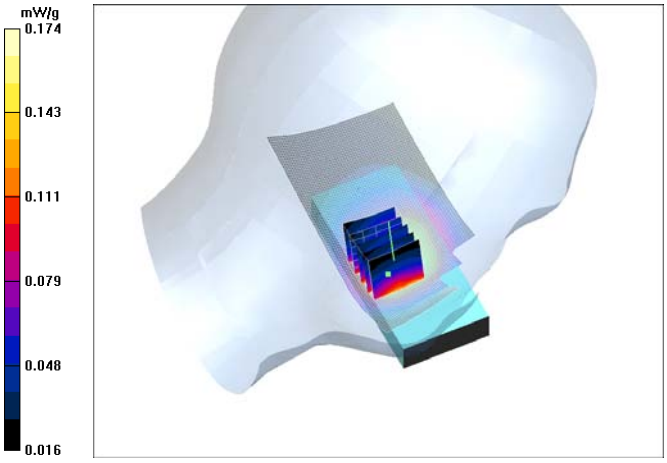
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: 3-slot 8PSK EGPRS850
Frequency: 848.8 MHz; Duty Cycle: 1:2.8
Medium: Head 850; Medium Notes: Medium Temperature: 20.4 C
Medium parameters used: f = 849 MHz; σ = 0.906 mho/m; ε_r = 40.6; ρ = 1000 kg/m^3
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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - High - Slide closed/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.179 mW/g

Cheek position - High - Slide closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 5.86 V/m
Peak SAR (extrapolated) = 0.232 W/kg
SAR(1 g) = 0.166 mW/g
SAR(10 g) = 0.124 mW/g
Power Drift = 0.048 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) = 0.174 mW/g



Date/Time: 2008-09-11 4:09:19 PM

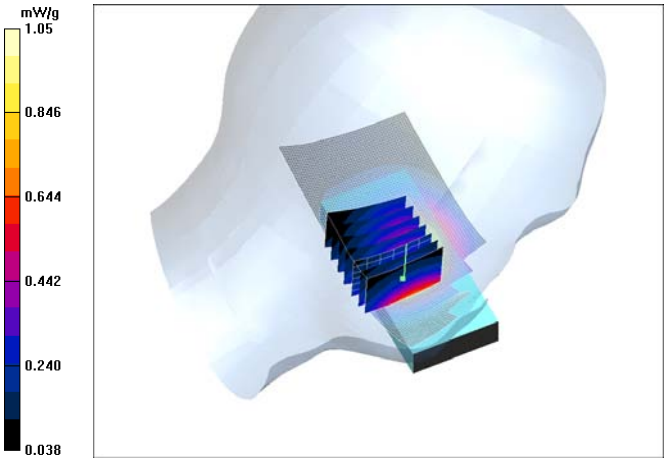
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: 3-slot GPRS850
Frequency: 848.8 MHz; Duty Cycle: 1:2.8
Medium: Head 850; Medium Notes: Medium Temperature: 20.4 C
Medium parameters used: f = 849 MHz; σ = 0.906 mho/m; ε_r = 40.6; ρ = 1000 kg/m^3
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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - High – Slide closed - BT Active/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.00 mW/g

Cheek position - High – Slide closed - BT Active/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 13.8 V/m
Peak SAR (extrapolated) = 1.23 W/kg
SAR(1 g) = 0.973 mW/g
SAR(10 g) = 0.723 mW/g
Power Drift = -0.031 dB
Maximum value of SAR (measured) = 1.05 mW/g



Date/Time: 2008-09-05 5:02:37 PM

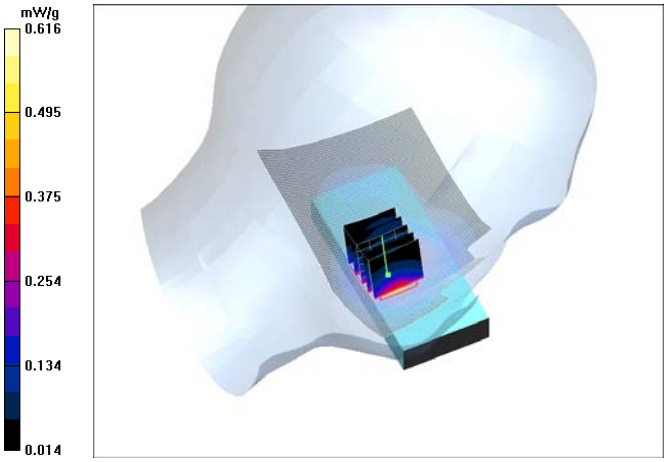
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: GSM 1900
Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium: Head 1900; Medium Notes: Medium Temperature: 22.3 C
Medium parameters used: f = 1880 MHz; σ = 1.46 mho/m; ε_r = 40.9; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.26, 5.26, 5.26); Calibrated: 2007-10-26
- 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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle - Slide closed/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.661 mW/g

Cheek position - Middle - Slide closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.38 V/m
Peak SAR (extrapolated) = 0.894 W/kg
SAR(1 g) = 0.561 mW/g
SAR(10 g) = 0.326 mW/g
Power Drift = 0.408 dB
Maximum value of SAR (measured) = 0.616 mW/g



Date/Time: 2008-09-05 5:21:20 PM

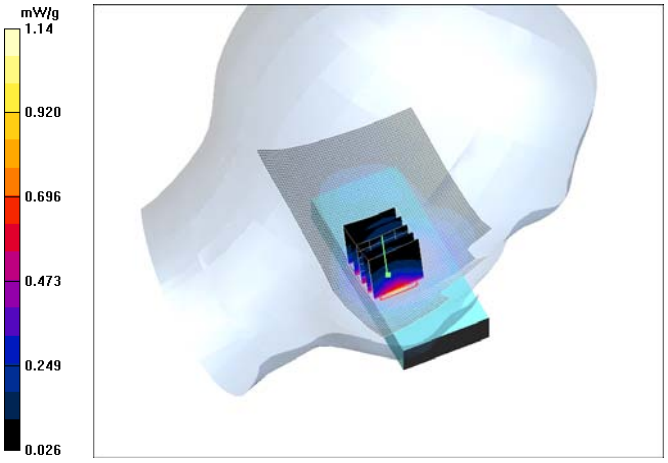
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: 2-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:4.2
Medium: Head 1900; Medium Notes: Medium Temperature: 22.3 C
Medium parameters used: f = 1880 MHz; σ = 1.46 mho/m; ε_r = 40.9; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.26, 5.26, 5.26); Calibrated: 2007-10-26
- 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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle - Slide closed/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.22 mW/g

Cheek position - Middle - Slide closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.1 V/m
Peak SAR (extrapolated) = 1.74 W/kg
SAR(1 g) = 1.06 mW/g
SAR(10 g) = 0.615 mW/g
Power Drift = -0.162 dB
Maximum value of SAR (measured) = 1.14 mW/g



Date/Time: 2008-09-05 5:37:05 PM

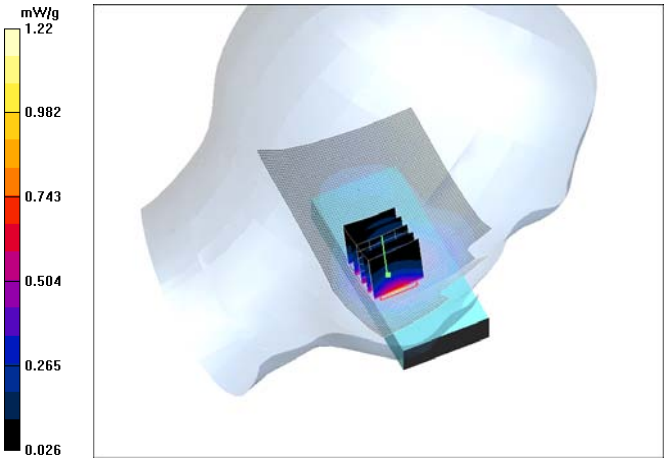
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: 3-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:2.8
Medium: Head 1900; Medium Notes: Medium Temperature: 22.3 C
Medium parameters used: f = 1880 MHz; σ = 1.46 mho/m; ε_r = 40.9; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.26, 5.26, 5.26); Calibrated: 2007-10-26
- 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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle - Slide closed/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.22 mW/g

Cheek position - Middle - Slide closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.0 V/m
Peak SAR (extrapolated) = 1.64 W/kg
SAR(1 g) = 1.08 mW/g
SAR(10 g) = 0.618 mW/g
Power Drift = 0.021 dB
Maximum value of SAR (measured) = 1.22 mW/g



Date/Time: 2008-09-05 6:33:56 PM

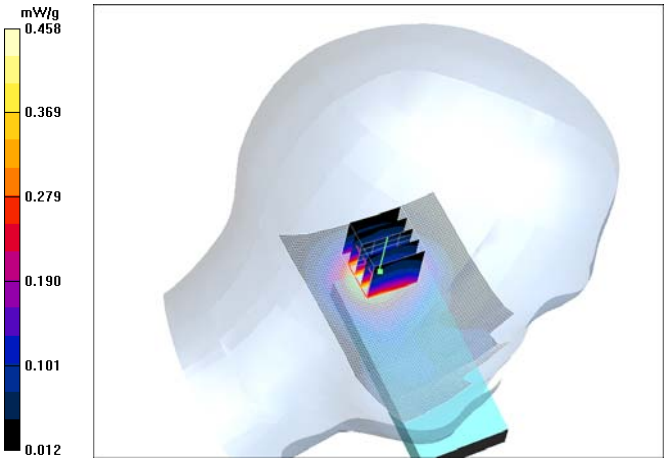
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: 3-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:2.8
Medium: Head 1900; Medium Notes: Medium Temperature: 22.3 C
Medium parameters used: f = 1880 MHz; σ = 1.46 mho/m; ε_r = 40.9; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.26, 5.26, 5.26); Calibrated: 2007-10-26
- 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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - Middle - Slide closed/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.516 mW/g

Tilt position - Middle - Slide closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 18.1 V/m
Peak SAR (extrapolated) = 0.672 W/kg
SAR(1 g) = 0.442 mW/g
SAR(10 g) = 0.274 mW/g
Power Drift = -0.104 dB
Maximum value of SAR (measured) = 0.458 mW/g



Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

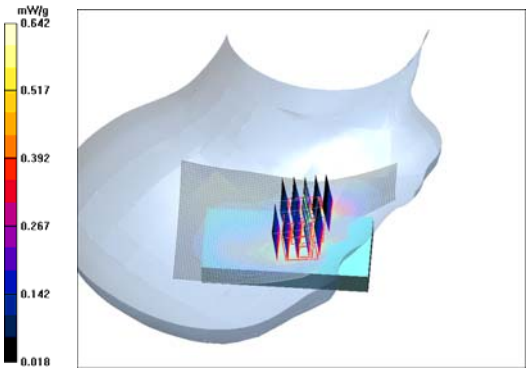
Communication System: 3-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:2.8
Medium: Head 1900; Medium Notes: Medium Temperature: 22.3 C
Medium parameters used: f = 1880 MHz; σ = 1.46 mho/m; ε_r = 40.9; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.26, 5.26, 5.26); Calibrated: 2007-10-26
- 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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle - Slide closed/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.670 mW/g

Cheek position - Middle - Slide closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.3 V/m
Peak SAR (extrapolated) = 0.845 W/kg
SAR(1 g) = 0.564 mW/g
SAR(10 g) = 0.370 mW/g
Power Drift = 0.176 dB
Maximum value of SAR (measured) = 0.600 mW/g

Cheek position - Middle - Slide closed/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.3 V/m
Peak SAR (extrapolated) = 0.895 W/kg
SAR(1 g) = 0.565 mW/g
SAR(10 g) = 0.352 mW/g
Power Drift = 0.176 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) = 0.642 mW/g



Date/Time: 2008-09-05 8:20:45 PM

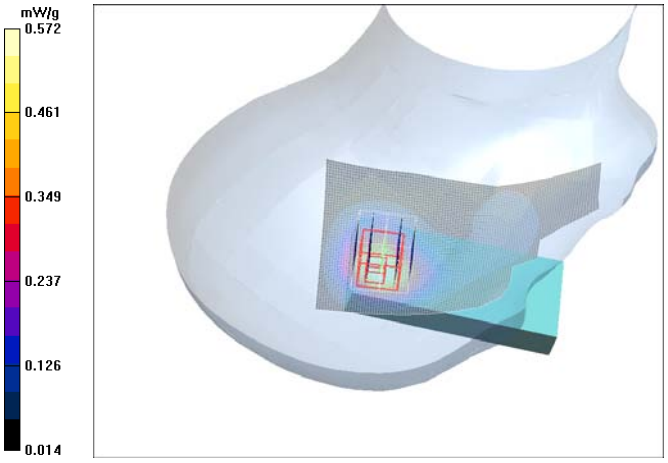
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: 3-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:2.8
Medium: Head 1900; Medium Notes: Medium Temperature: 22.3 C
Medium parameters used: f = 1880 MHz; σ = 1.46 mho/m; ε_r = 40.9; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.26, 5.26, 5.26); Calibrated: 2007-10-26
- 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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - Middle - Slide closed/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.615 mW/g

Tilt position - Middle - Slide closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 16.6 V/m
Peak SAR (extrapolated) = 0.898 W/kg
SAR(1 g) = 0.541 mW/g
SAR(10 g) = 0.319 mW/g
Power Drift = 0.123 dB
Maximum value of SAR (measured) = 0.572 mW/g



Date/Time: 2008-09-05 9:20:48 PM

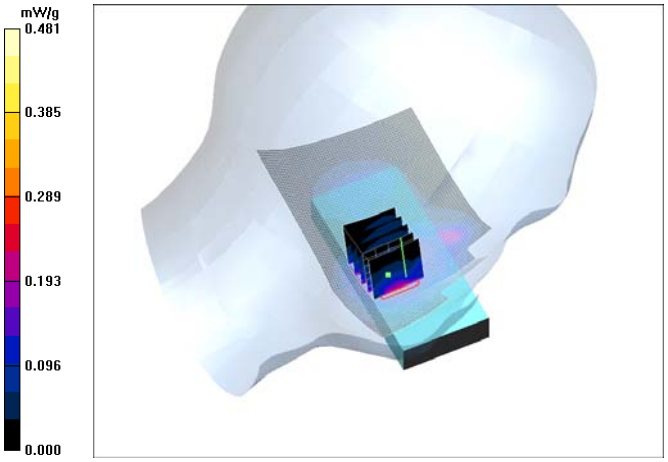
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: 3-slot 8PSK EGPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:2.8
Medium: Head 1900; Medium Notes: Medium Temperature: 22.3 C
Medium parameters used: f = 1880 MHz; σ = 1.46 mho/m; ε_r = 40.9; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.26, 5.26, 5.26); Calibrated: 2007-10-26
- 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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle - Slide closed/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.409 mW/g

Cheek position - Middle - Slide closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.84 V/m
Peak SAR (extrapolated) = 0.540 W/kg
SAR(1 g) = 0.350 mW/g
SAR(10 g) = 0.206 mW/g
Power Drift = -0.349 dB
Maximum value of SAR (measured) = 0.481 mW/g



Date/Time: 2008-09-22 6:57:49 PM

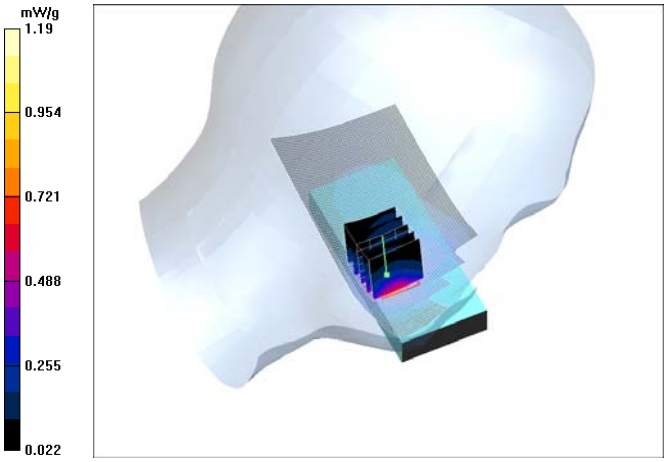
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: WCDMA1900
Frequency: 1852.4 MHz; Duty Cycle: 1:1
Medium: Head 1950; Medium Notes: Medium Temperature: 20.6 C
Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.35 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3
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 6; Type: SAM Twin Phantom; Serial: TP-1301
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Low – Slide closed /Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.08 mW/g

Cheek position - Low – Slide closed /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 9.60 V/m
Peak SAR (extrapolated) = 1.63 W/kg
SAR(1 g) = 1.05 mW/g
SAR(10 g) = 0.603 mW/g
Power Drift = -0.051 dB
Maximum value of SAR (measured) = 1.19 mW/g



Date/Time: 2008-09-22 6:07:26 PM

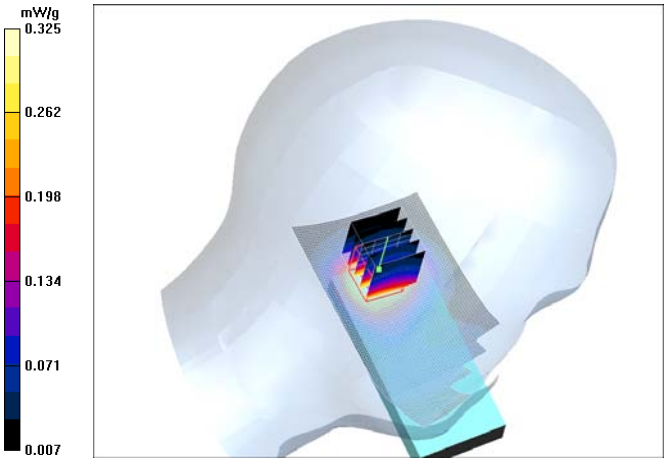
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: WCDMA1900
Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: Head 1950; Medium Notes: Medium Temperature: 20.6 C
Medium parameters used: f = 1880 MHz; σ = 1.38 mho/m; ε_r = 38.6; ρ = 1000 kg/m^3
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 6; Type: SAM Twin Phantom; Serial: TP-1301
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - Middle – Slide closed /Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.384 mW/g

Tilt position - Middle – Slide closed /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 14.6 V/m
Peak SAR (extrapolated) = 0.456 W/kg
SAR(1 g) = 0.305 mW/g
SAR(10 g) = 0.194 mW/g
Power Drift = -0.204 dB
Maximum value of SAR (measured) = 0.325 mW/g



Date/Time: 2008-09-22 6:25:14 PM

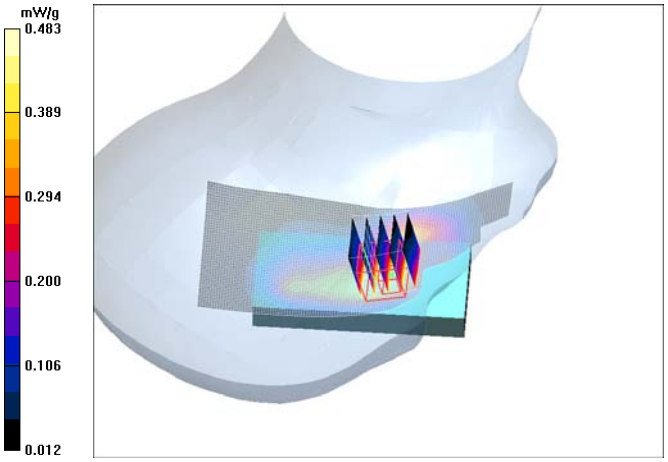
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: WCDMA1900
Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: Head 1950; Medium Notes: Medium Temperature: 20.6 C
Medium parameters used: f = 1880 MHz; σ = 1.38 mho/m; ε_r = 38.6; ρ = 1000 kg/m^3
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 6; Type: SAM Twin Phantom; Serial: TP-1301
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle – Slide closed /Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.475 mW/g

Cheek position - Middle – Slide closed /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 9.01 V/m
Peak SAR (extrapolated) = 0.667 W/kg
SAR(1 g) = 0.450 mW/g
SAR(10 g) = 0.291 mW/g
Power Drift = -0.312 dB
Maximum value of SAR (measured) = 0.483 mW/g



Date/Time: 2008-09-22 6:39:20 PM

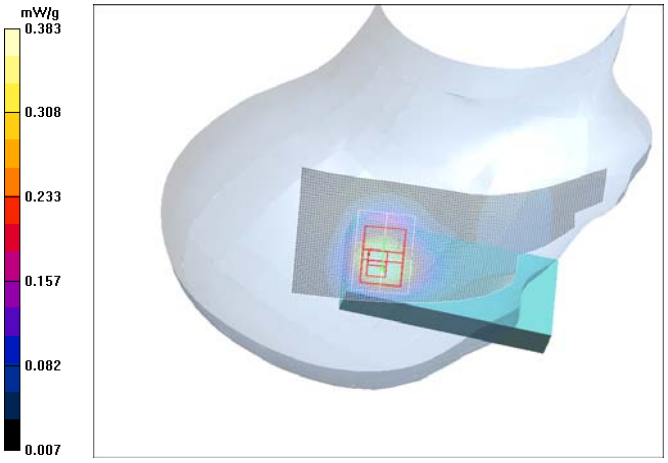
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: WCDMA1900
Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: Head 1950; Medium Notes: Medium Temperature: 20.6 C
Medium parameters used: f = 1880 MHz; σ = 1.38 mho/m; ε_r = 38.6; ρ = 1000 kg/m^3
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 6; Type: SAM Twin Phantom; Serial: TP-1301
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - Middle – Slide closed /Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.409 mW/g

Tilt position - Middle – Slide closed /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 13.7 V/m
Peak SAR (extrapolated) = 0.562 W/kg
SAR(1 g) = 0.359 mW/g
SAR(10 g) = 0.217 mW/g
Power Drift = -0.088 dB
Maximum value of SAR (measured) = 0.383 mW/g



Date/Time: 2008-09-05 20:47:12

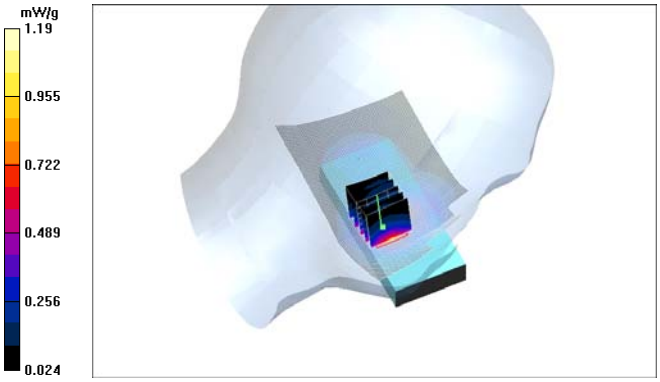
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

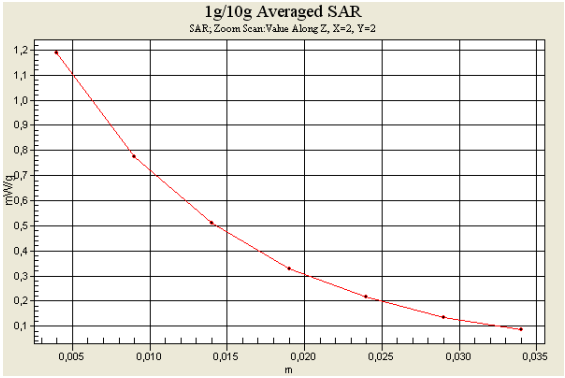
Communication System: 3-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:2.8
Medium: Head 1900; Medium Notes: Medium Temperature: 22.3 C
Medium parameters used: f = 1880 MHz; σ = 1.46 mho/m; ε_r = 40.9; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.26, 5.26, 5.26); Calibrated: 26-10-2007
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn501; Calibrated: 17-03-2008
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek position - Middle - Slide closed - BT Active/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.23 mW/g

Cheek position - Middle - Slide closed - BT Active/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 13.3 V/m
Peak SAR (extrapolated) = 1.81 W/kg
SAR(1 g) = 1.09 mW/g
SAR(10 g) = 0.627 mW/g
Power Drift = 0.107 dB
Maximum value of SAR (measured) = 1.19 mW/g





Date/Time: 2008-09-29 10:49:03

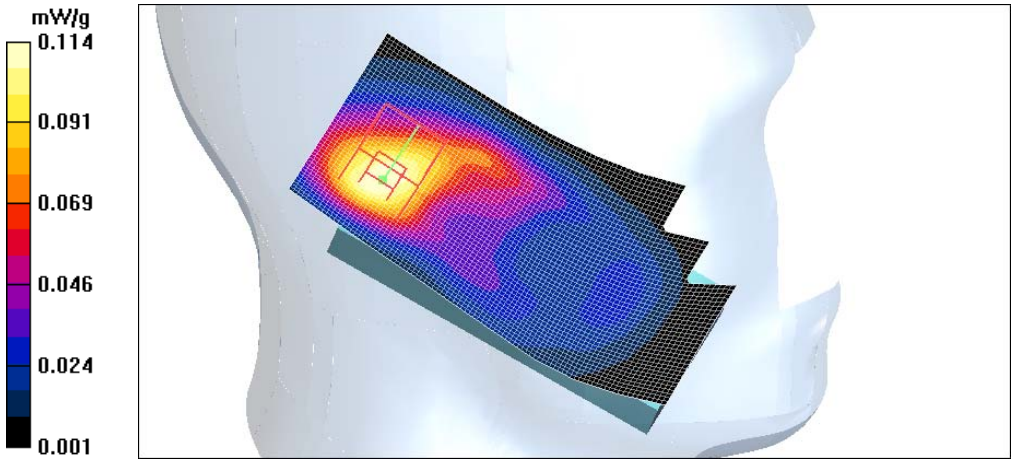
Test Laboratory: TCC Nokia
Type: RM-413; Serial: 004401/10/016147/6

Communication System: WLAN2450
Frequency: 2442 MHz; Duty Cycle: 1:1
Medium: HSL2450; Medium Notes: 20.5C
Medium parameters used: f = 2442 MHz; σ = 1.84 mho/m; ε_r = 37.9; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(4.57, 4.57, 4.57); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek – Middle - Slide closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.114 mW/g

Cheek – Middle - Slide closed /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.34 V/m
Peak SAR (extrapolated) = 0.206 W/kg
SAR(1 g) = 0.106 mW/g
SAR(10 g) = 0.057 mW/g
Power Drift = 0.019 dB
Maximum value of SAR (measured) = 0.114 mW/g



Date/Time: 2008-09-29 11:03:30

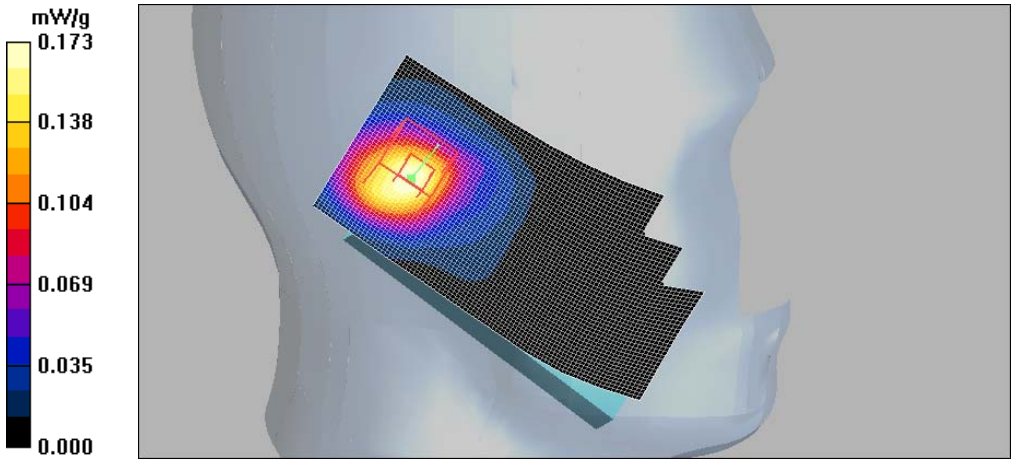
Test Laboratory: TCC Nokia
Type: RM-413; Serial: 004401/10/016147/6

Communication System: WLAN2450
Frequency: 2442 MHz; Duty Cycle: 1:1
Medium: HSL2450; Medium Notes: 20.5C
Medium parameters used: f = 2442 MHz; σ = 1.84 mho/m; ε_r = 37.9; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(4.57, 4.57, 4.57); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt – Middle - Slide closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.175 mW/g

Tilt – Middle - Slide closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 9.86 V/m
Peak SAR (extrapolated) = 0.308 W/kg
SAR(1 g) = 0.155 mW/g
SAR(10 g) = 0.081 mW/g
Power Drift = -0.013 dB
Maximum value of SAR (measured) = 0.173 mW/g



Date/Time: 2008-09-29 11:33:06

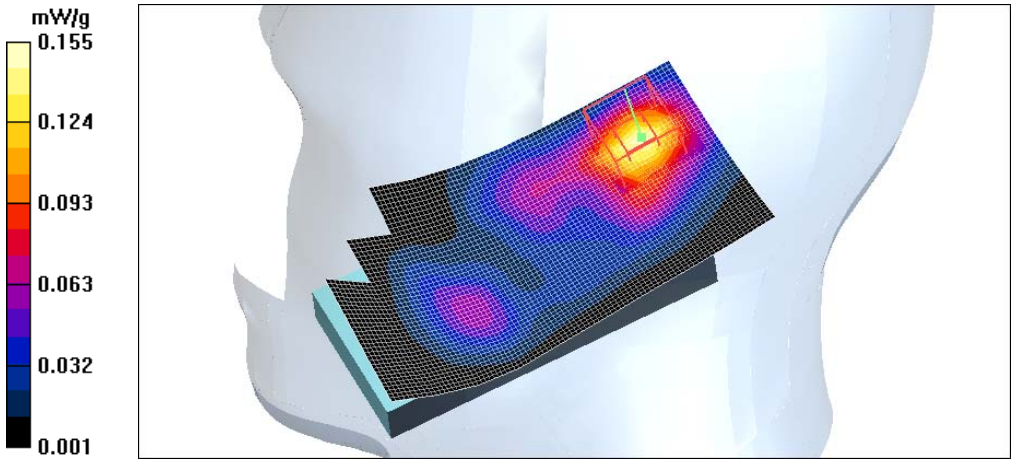
Test Laboratory: TCC Nokia
Type: RM-413; Serial: 004401/10/016147/6

Communication System: WLAN2450
Frequency: 2442 MHz; Duty Cycle: 1:1
Medium: HSL2450; Medium Notes: 20.5C
Medium parameters used: f = 2442 MHz; σ = 1.84 mho/m; ε_r = 37.9; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(4.57, 4.57, 4.57); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Cheek – Middle - Slide closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.143 mW/g

Cheek – Middle - Slide closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.32 V/m
Peak SAR (extrapolated) = 0.292 W/kg
SAR(1 g) = 0.138 mW/g
SAR(10 g) = 0.067 mW/g
Power Drift = -0.117 dB
Maximum value of SAR (measured) = 0.155 mW/g



Date/Time: 2008-09-29 12:23:56

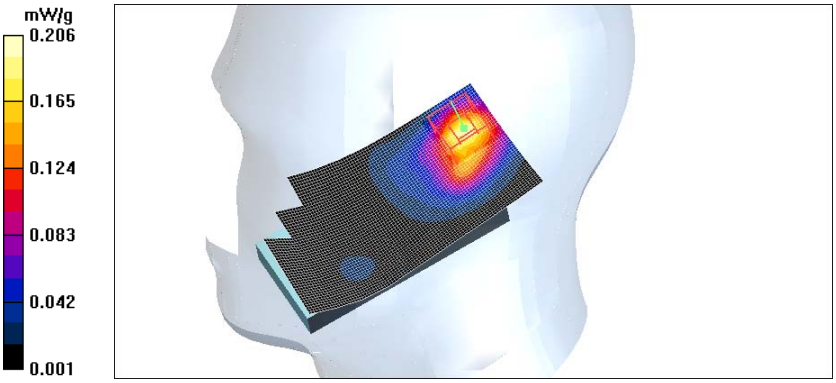
Test Laboratory: TCC Nokia
Type: RM-413; Serial: 004401/10/016147/6

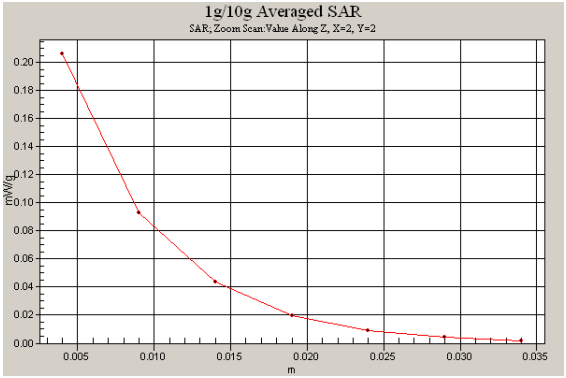
Communication System: WLAN2450
Frequency: 2462 MHz; Duty Cycle: 1:1
Medium: HSL2450; Medium Notes: 20.5C
Medium parameters used: f = 2462 MHz; σ = 1.86 mho/m; ε_r = 37.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(4.57, 4.57, 4.57); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Tilt – High - Slide closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.209 mW/g

Tilt – High - Slide closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 9.19 V/m
Peak SAR (extrapolated) = 0.409 W/kg
SAR(1 g) = 0.185 mW/g
SAR(10 g) = 0.089 mW/g
Power Drift = -0.098 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) = 0.206 mW/g





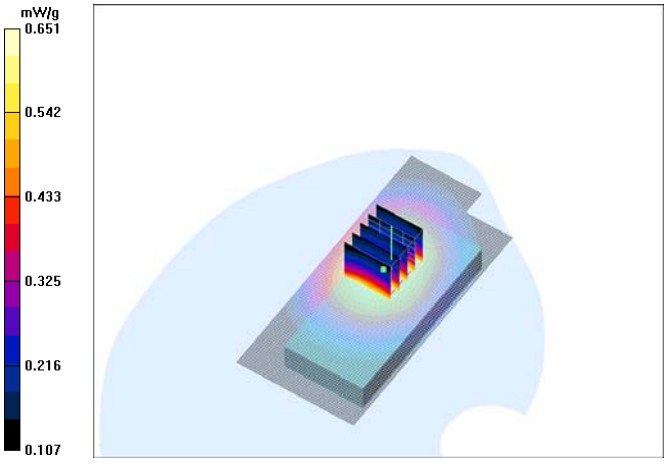
Date/Time: 2008-10-01 11:57:14 AM
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: 3-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:2.8
Medium: Body 850; Medium Notes: Medium Temperature: 20.5 C
Medium parameters used: f = 837 MHz; σ = 0.955 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - No Accessory – Slide closed - Display facing phantom/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.656 mW/g

Body - Middle - No Accessory – Slide closed - Display facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.2 V/m
Peak SAR (extrapolated) = 0.794 W/kg
SAR(1 g) = 0.619 mW/g
SAR(10 g) = 0.465 mW/g
Power Drift = -0.213 dB
Maximum value of SAR (measured) = 0.651 mW/g



Date/Time: 2008-10-01 12:23:10 PM

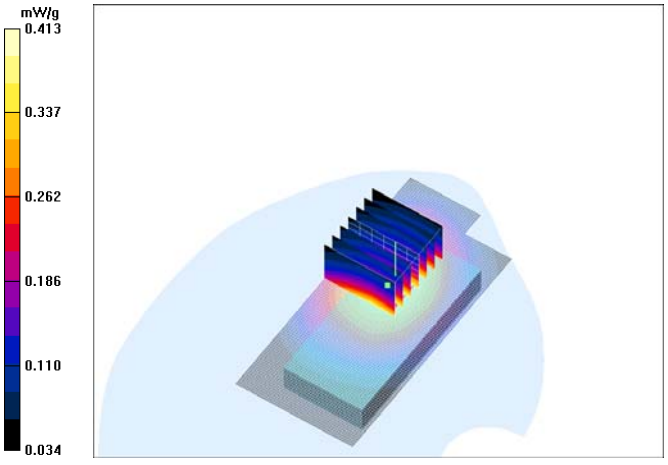
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: 3-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:2.8
Medium: Body 850; Medium Notes: Medium Temperature: 20.5 C
Medium parameters used: f = 837 MHz; σ = 0.955 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - HS-43 – Slide closed - Display facing phantom/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.393 mW/g

Body - Middle - HS-43 – Slide closed - Display facing phantom/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.56 V/m
Peak SAR (extrapolated) = 0.507 W/kg
SAR(1 g) = 0.394 mW/g
SAR(10 g) = 0.293 mW/g
Power Drift = 0.202 dB
Maximum value of SAR (measured) = 0.413 mW/g



Date/Time: 2008-10-01 1:56:22 PM

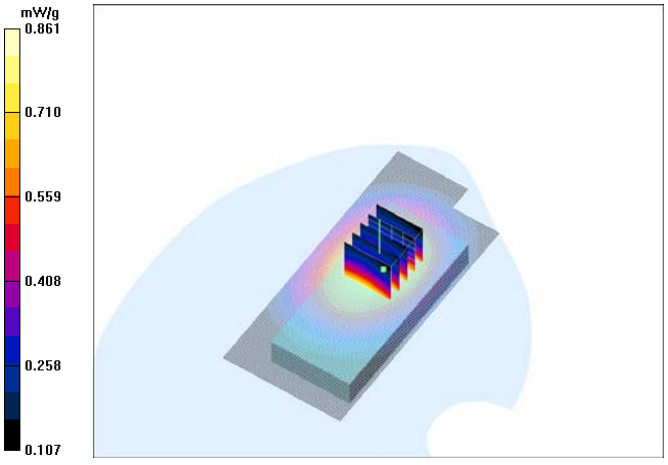
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: 3-slot GPRS850
Frequency: 848.8 MHz; Duty Cycle: 1:2.8
Medium: Body 850; Medium Notes: Medium Temperature: 20.5 C
Medium parameters used: f = 849 MHz; σ = 0.969 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - High - No Accessory – Slide closed - Back facing phantom/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.860 mW/g

Body - High - No Accessory – Slide closed - Back facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 14.1 V/m
Peak SAR (extrapolated) = 1.05 W/kg
SAR(1 g) = 0.819 mW/g
SAR(10 g) = 0.607 mW/g
Power Drift = -0.123 dB
Maximum value of SAR (measured) = 0.861 mW/g



Date/Time: 2008-10-01 2:12:13 PM

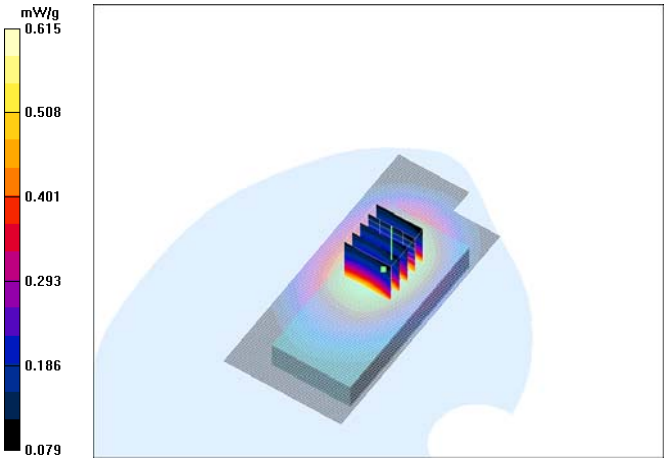
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: 3-slot GPRS850
Frequency: 848.8 MHz; Duty Cycle: 1:2.8
Medium: Body 850; Medium Notes: Medium Temperature: 20.5 C
Medium parameters used: f = 849 MHz; σ = 0.969 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - High - HS-43 – Slide closed - Back facing phantom/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.629 mW/g

Body - High - HS-43 – Slide closed – Back facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.0 V/m
Peak SAR (extrapolated) = 0.779 W/kg
SAR(1 g) = 0.586 mW/g
SAR(10 g) = 0.431 mW/g
Power Drift = 0.156 dB
Maximum value of SAR (measured) = 0.615 mW/g



Date/Time: 2008-10-01 2:24:46 PM

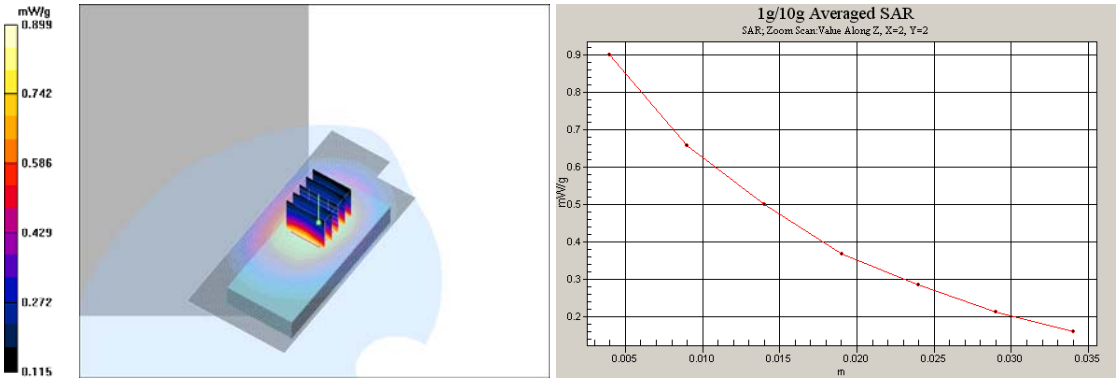
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: 3-slot GPRS850
Frequency: 848.8 MHz; Duty Cycle: 1:2.8
Medium: Body 850; Medium Notes: Medium Temperature: 20.5 C
Medium parameters used: f = 849 MHz; σ = 0.969 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - High - No Accessory – Slide closed - Back facing phantom - BT Active/Area Scan (51x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.862 mW/g

Body - High - No Accessory – Slide closed – Back facing phantom - BT Active/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 13.6 V/m
Peak SAR (extrapolated) = 1.11 W/kg
SAR(1 g) = 0.829 mW/g
SAR(10 g) = 0.606 mW/g
Power Drift = 0.088 dB
Maximum value of SAR (measured) = 0.899 mW/g



Date/Time: 2008-09-10 11:31:48 AM

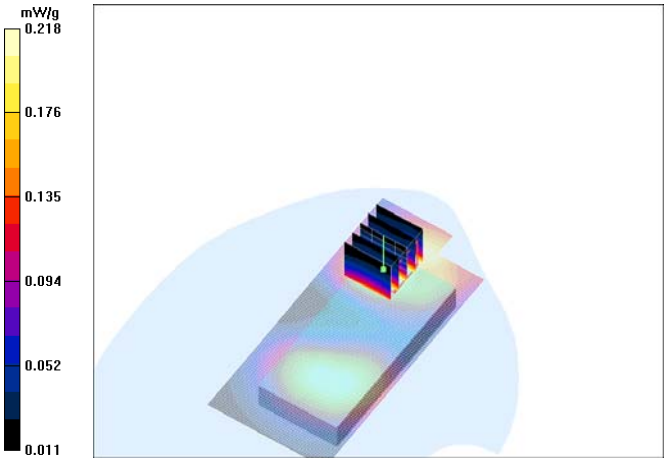
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: 3-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:2.8
Medium: Body 1900; Medium Notes: Medium Temperature: 21.5 C
Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.1; ρ = 1000 kg/m^3
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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - No Accessory – Slide closed - Display facing phantom/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.228 mW/g

Body - Middle - No Accessory – Slide closed - 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) = 0.313 W/kg
SAR(1 g) = 0.204 mW/g
SAR(10 g) = 0.133 mW/g
Power Drift = -0.097 dB
Maximum value of SAR (measured) = 0.218 mW/g



Date/Time: 2008-09-10 11:47:22 AM

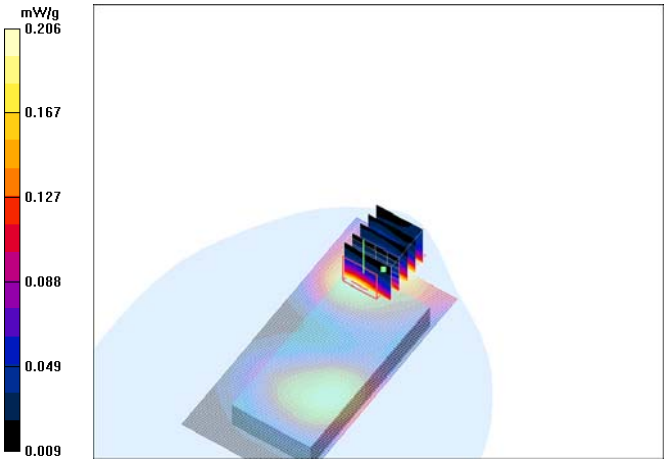
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: 3-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:2.8
Medium: Body 1900; Medium Notes: Medium Temperature: 21.5 C
Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.1; ρ = 1000 kg/m^3
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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - HS-43 – Slide closed - Display facing phantom/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.200 mW/g

Body - Middle - HS-43 – Slide closed - 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) = 0.290 W/kg
SAR(1 g) = 0.190 mW/g
SAR(10 g) = 0.121 mW/g
Power Drift = -0.056 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) = 0.206 mW/g



Date/Time: 2008-09-10 12:35:17 PM

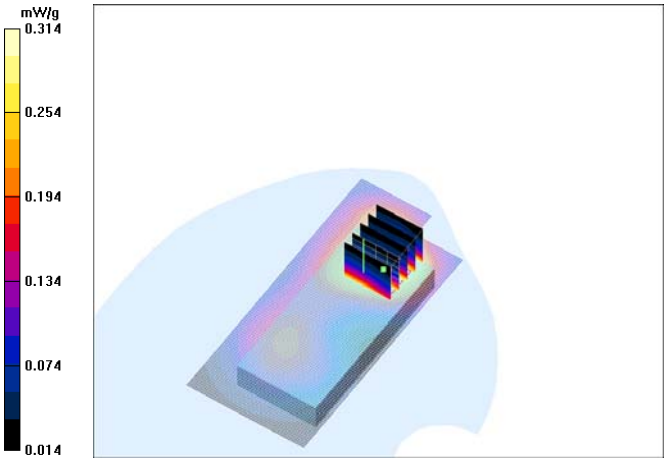
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: 3-slot GPRS1900
Frequency: 1909.8 MHz; Duty Cycle: 1:2.8
Medium: Body 1900; Medium Notes: Medium Temperature: 21.5 C
Medium parameters used: f = 1910 MHz; σ = 1.53 mho/m; ε_r = 53; ρ = 1000 kg/m^3
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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - High - No Accessory – Slide closed - Back facing phantom/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.310 mW/g

Body - High - No Accessory – Slide closed - Back facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 9.76 V/m
Peak SAR (extrapolated) = 0.472 W/kg
SAR(1 g) = 0.285 mW/g
SAR(10 g) = 0.182 mW/g
Power Drift = -0.148 dB
Maximum value of SAR (measured) = 0.314 mW/g



Date/Time: 2008-09-10 12:46:50 PM

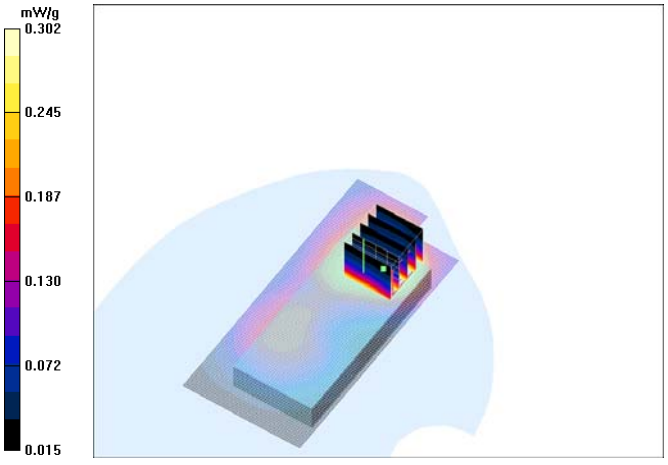
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: 3-slot GPRS1900
Frequency: 1909.8 MHz; Duty Cycle: 1:2.8
Medium: Body 1900; Medium Notes: Medium Temperature: 21.5 C
Medium parameters used: f = 1910 MHz; σ = 1.53 mho/m; ε_r = 53; ρ = 1000 kg/m^3
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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - High - HS-43 – Slide closed – Back facing phantom/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.324 mW/g

Body - High - HS-43 – Slide closed – Back facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.83 V/m
Peak SAR (extrapolated) = 0.458 W/kg
SAR(1 g) = 0.278 mW/g
SAR(10 g) = 0.182 mW/g
Power Drift = -0.125 dB
Maximum value of SAR (measured) = 0.302 mW/g



Date/Time: 2008-09-10 3:43:49 PM

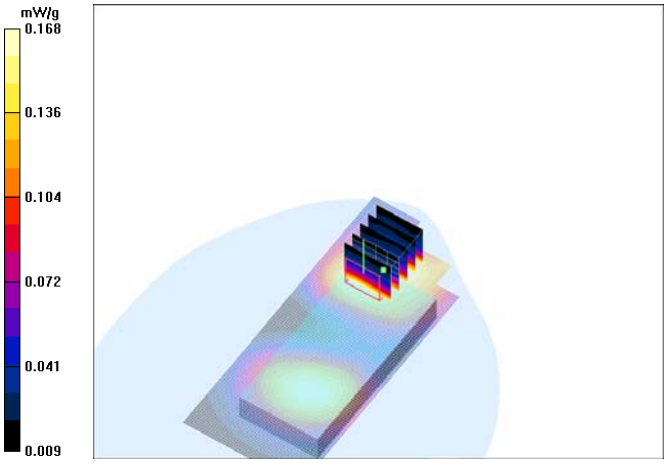
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: WCDMA1900
Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: Body 1900; Medium Notes: Medium Temperature: 21.5 C
Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.1; ρ = 1000 kg/m^3
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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - No Accessory – Slide closed - Display facing phantom/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.168 mW/g

Body - Middle - No Accessory – Slide closed - Display facing phantom/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 9.49 V/m
Peak SAR (extrapolated) = 0.240 W/kg
SAR(1 g) = 0.157 mW/g
SAR(10 g) = 0.102 mW/g
Power Drift = -0.161 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) = 0.168 mW/g



Date/Time: 2008-09-10 4:28:53 PM

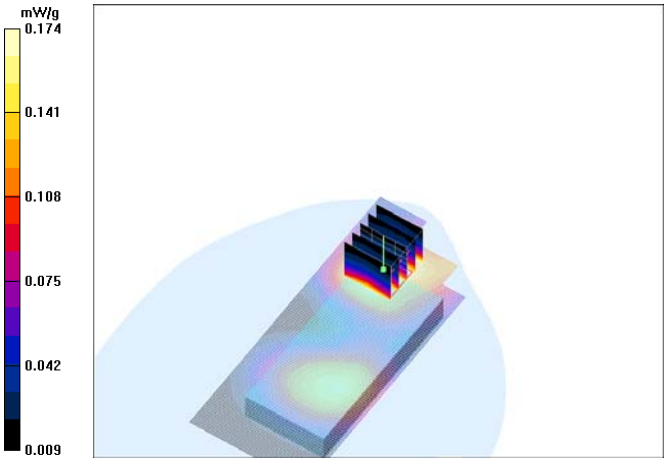
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: WCDMA1900
Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: Body 1900; Medium Notes: Medium Temperature: 21.5 C
Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.1; ρ = 1000 kg/m^3
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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - HS-43 – Slide closed - Display facing phantom/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.175 mW/g

Body - Middle - HS-43 – Slide closed - Display facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.14 V/m
Peak SAR (extrapolated) = 0.253 W/kg
SAR(1 g) = 0.160 mW/g
SAR(10 g) = 0.102 mW/g
Power Drift = -0.456 dB
Maximum value of SAR (measured) = 0.174 mW/g



Date/Time: 2008-09-10 5:06:20 PM

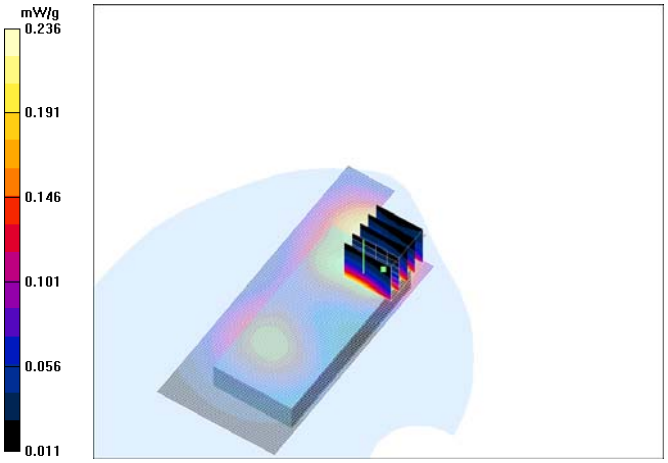
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: WCDMA1900
Frequency: 1852.4 MHz; Duty Cycle: 1:1
Medium: Body 1900; Medium Notes: Medium Temperature: 21.5 C
Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.46 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Low - No Accessory – Slide closed - Back facing phantom/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.240 mW/g

Body - Low - No Accessory – Slide closed - Back facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 9.03 V/m
Peak SAR (extrapolated) = 0.346 W/kg
SAR(1 g) = 0.223 mW/g
SAR(10 g) = 0.146 mW/g
Power Drift = -0.057 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) = 0.236 mW/g



Date/Time: 2008-09-10 9:46:53 PM

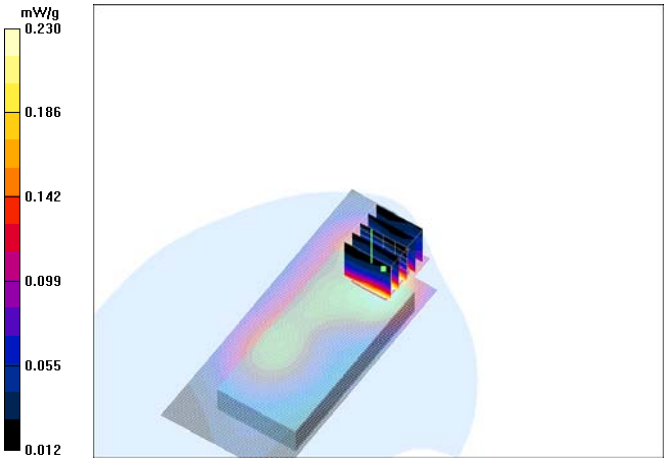
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: WCDMA1900
Frequency: 1852.4 MHz; Duty Cycle: 1:1
Medium: Body 1900; Medium Notes: Medium Temperature: 21.5 C
Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.46 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Low - HS-43 – Slide closed - Back facing phantom/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.246 mW/g

Body - Low - HS-43 – Slide closed - Back facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.68 V/m
Peak SAR (extrapolated) = 0.332 W/kg
SAR(1 g) = 0.217 mW/g
SAR(10 g) = 0.140 mW/g
Power Drift = -0.299 dB
Maximum value of SAR (measured) = 0.230 mW/g



Date/Time: 2008-09-10 1:34:16 PM

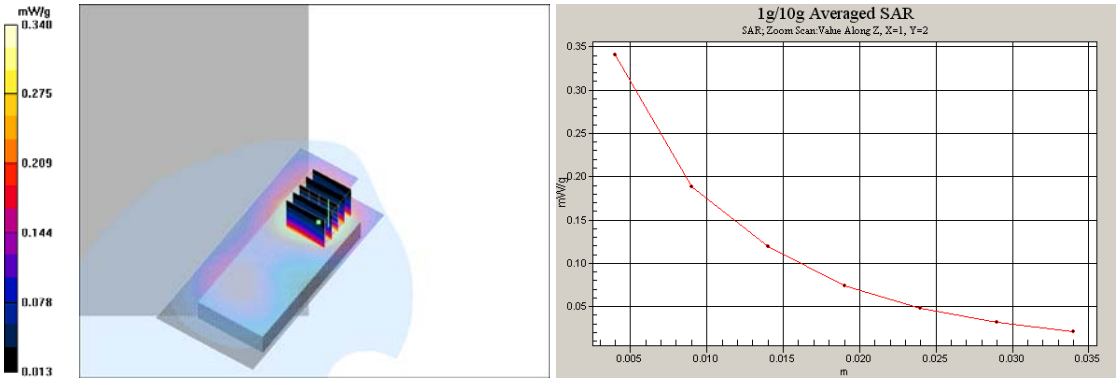
Test Laboratory: TCC Nokia
Type: RM-412; Serial: 004401/10/220412/6

Communication System: 3-slot GPRS1900
Frequency: 1909.8 MHz; Duty Cycle: 1:2.8
Medium: Body 1900; Medium Notes: Medium Temperature: 21.5 C
Medium parameters used: f = 1910 MHz; σ = 1.53 mho/m; ε_r = 53; ρ = 1000 kg/m^3
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 55; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - High - No Accessory – Slide closed – Back facing phantom - BT Active/Area Scan (51x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.323 mW/g

Body - High - No Accessory – Slide closed - Back facing phantom - BT Active/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 9.90 V/m
Peak SAR (extrapolated) = 0.516 W/kg
SAR(1 g) = 0.304 mW/g
SAR(10 g) = 0.187 mW/g
Power Drift = -0.162 dB
Maximum value of SAR (measured) = 0.340 mW/g



Date/Time: 2008-09-29 14:05:33

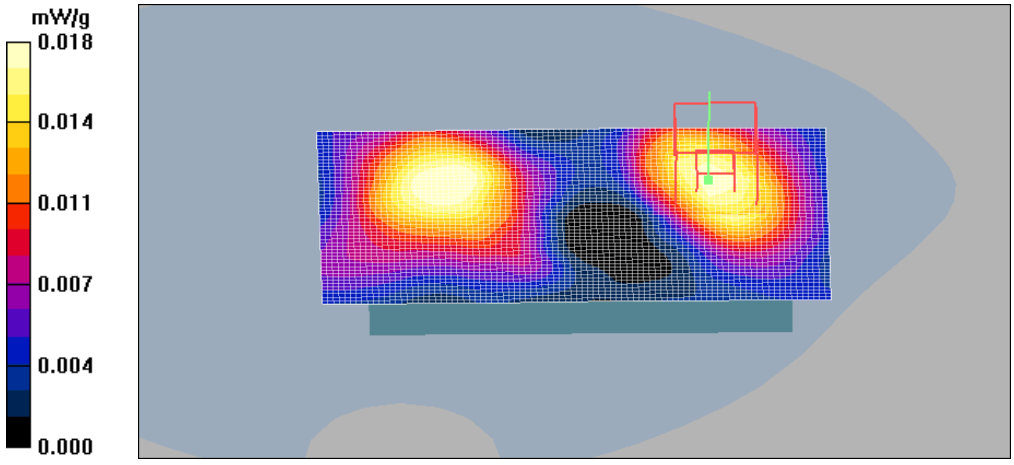
Test Laboratory: TCC Nokia
Type: RM-413; Serial: 004401/10/016147/6

Communication System: WLAN2450
Frequency: 2442 MHz; Duty Cycle: 1:1
Medium: BSL2450; Medium Notes: 21.5C
Medium parameters used: f = 2442 MHz; σ = 2.01 mho/m; ε_r = 50.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(4.24, 4.24, 4.24); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1018
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Body – Middle - Slide closed - Display facing phantom - No accessory/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.019 mW/g

Body – Middle - Slide closed - Display facing phantom - No accessory/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 2.55 V/m
Peak SAR (extrapolated) = 0.026 W/kg
SAR(1 g) = 0.016 mW/g
SAR(10 g) = 0.00952 mW/g
Power Drift = 0.309 dB
Maximum value of SAR (measured) = 0.018 mW/g



Date/Time: 2008-09-29 14:19:18

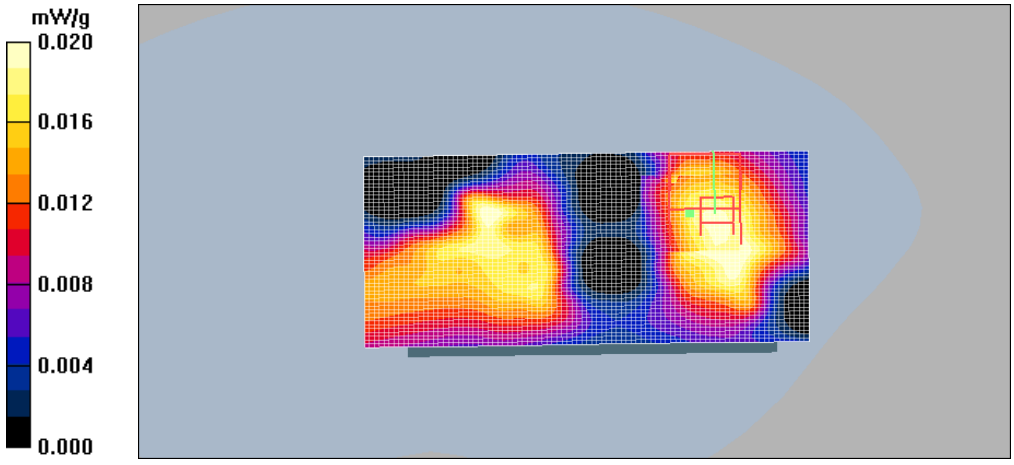
Test Laboratory: TCC Nokia
Type: RM-413; Serial: 004401/10/016147/6

Communication System: WLAN2450
Frequency: 2442 MHz; Duty Cycle: 1:1
Medium: BSL2450; Medium Notes: 21.5C
Medium parameters used: f = 2442 MHz; σ = 2.01 mho/m; ε_r = 50.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(4.24, 4.24, 4.24); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1018
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Body – Middle - Slide closed - Display facing phantom - HS-43/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.022 mW/g

Body – Middle - Slide closed - Display facing phantom - HS-43/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 2.41 V/m
Peak SAR (extrapolated) = 0.030 W/kg
SAR(1 g) = 0.018 mW/g
SAR(10 g) = 0.010 mW/g
Power Drift = 0.341 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) = 0.020 mW/g



Date/Time: 2008-09-29 14:35:07

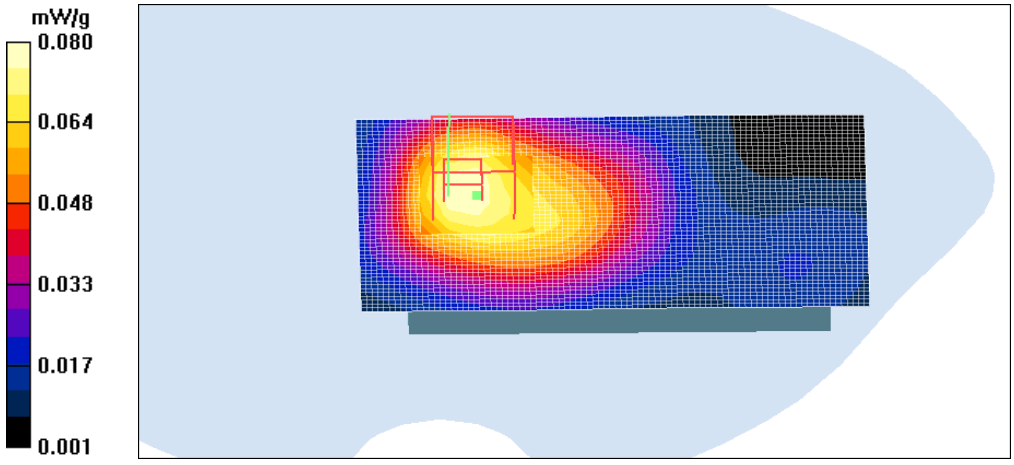
Test Laboratory: TCC Nokia
Type: RM-413; Serial: 004401/10/016147/6

Communication System: WLAN2450
Frequency: 2442 MHz; Duty Cycle: 1:1
Medium: BSL2450; Medium Notes: 21.5C
Medium parameters used: f = 2442 MHz; σ = 2.01 mho/m; ε_r = 50.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(4.24, 4.24, 4.24); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1018
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Body – Middle - Slide closed - Back facing phantom - No accessory/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.091 mW/g

Body – Middle - Slide closed - Back facing phantom - No accessory/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 5.97 V/m
Peak SAR (extrapolated) = 0.133 W/kg
SAR(1 g) = 0.076 mW/g
SAR(10 g) = 0.044 mW/g
Power Drift = -0.051 dB
Maximum value of SAR (measured) = 0.080 mW/g



Date/Time: 2008-09-29 15:30:07

Test Laboratory: TCC Nokia
Type: RM-413; Serial: 004401/10/016147/6

Communication System: WLAN2450
Frequency: 2462 MHz; Duty Cycle: 1:1
Medium: BSL2450; Medium Notes: 21.5C
Medium parameters used: f = 2462 MHz; σ = 2.04 mho/m; ε_r = 50.4; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(4.24, 4.24, 4.24); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1018
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Body – High - Slide closed - Back facing phantom - HS-43/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.109 mW/g

Body – High - Slide closed - Back facing phantom - HS-43/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 6.39 V/m
Peak SAR (extrapolated) = 0.177 W/kg
SAR(1 g) = 0.102 mW/g
SAR(10 g) = 0.058 mW/g
Power Drift = 0.001 dB
Maximum value of SAR (measured) = 0.110 mW/g