TCC
Nokia

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Finnish Accreditation Service
T117 (EN ISO/IEC 17025)

SAR Compliance Test Report

Test report no.:	SD_SAR_0801_03	**Date of report:**	2008-01-31
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Measurements made by:	Jose Gomez, Julian Kim, Jesper Nielsen, Leif Klysner		
Tested device:	RM-407		
FCC ID:	PYARM-407	**IC:**	661V-RM407
Supplement reports:	SD_SAR_0801_04 and SD_SAR_0801_01 for RM-357 / FCC ID: PYARM-357 / IC: 661V-RM357		

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 San Diego.

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: **Jose Gomez**
Certification Test Engineer

2008-01-31

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1. SUMMARY OF SAR TEST REPORT

1.1 Test Details

Period of test	2008-01-07 to 2008-01-25
SN, HW and SW numbers of tested device	SN: 004401016086338, HW: 0513, SW: 007.45.3, DUT: 3060 SN: 004401016086361, HW: 0513, SW: 007.45.3, DUT: 3061
Batteries used in testing	BP-4L, DUT: 3062, 3063, 3064
Headsets used in testing	HS-47, DUT: 3065
Other accessories used in testing	-
State of sample	Prototype unit
Notes	-

1.2 Maximum Results

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

1.2.1 Head Configuration

Mode	Ch / *f* (MHz)	Radiated power	Position	Measured SAR value (1g avg)	Scaled* SAR value (1g avg)	SAR limit (1g avg)	Result
2-slot GPRS850	251 / 848.8	27.9dBm ERP	Right, Cheek	0.871 W/kg	**0.98W/kg**	1.6 W/kg	**PASSED**
WCDMA850	4233 / 846.6	19.5dBm ERP	Right, Cheek	0.717 W/kg	**0.80W/kg**	1.6 W/kg	**PASSED**
2-slot GPRS1900	810 / 1909.8	29.2dBm EIRP	Left, Cheek	1.05 W/kg	**1.18W/kg**	1.6 W/kg	**PASSED**
WLAN2450	7 / 2442.0	19.1dBm EIRP	Left, Tilt	0.281 W/kg	**0.31W/kg**	1.6 W/kg	**PASSED**
2-slot GPRS850 + WLAN2450	-	-	Right, Cheek	1.025 W/kg	**1.15W/kg**	1.6 W/kg	**PASSED**
WCDMA850 + WLAN2450	-	-	Right, Cheek	0.871 W/kg	**0.98W/kg**	1.6 W/kg	**PASSED**
2-slot GPRS1900 + WLAN2450	-	-	Left, Cheek	1.254 W/kg	**1.40W/kg**	1.6 W/kg	**PASSED**

1.2.2 Body Worn Configuration

Mode	Ch / *f* (MHz)	Radiated power	Separation distance	Measured SAR value (1g avg)	Scaled* SAR value (1g avg)	SAR limit (1g avg)	Result
2-slot GPRS850	251 / 848.8	27.9dBm ERP	2.2cm	0.623W/kg	**0.70W/kg**	1.6 W/kg	**PASSED**
WCDMA850	4233 / 846.6	19.5dBm ERP	2.2cm	0.578W/kg	**0.65W/kg**	1.6 W/kg	**PASSED**
2-slot GPRS1900	661 / 1880.0	29.0dBm EIRP	2.2cm	0.350W/kg	**0.39W/kg**	1.6 W/kg	**PASSED**
WLAN2450	7 / 2442.0	19.1dBm EIRP	2.2cm	0.058W/kg	**0.06W/kg**	1.6 W/kg	**PASSED**
2-slot GPRS850+ WLAN2450	-	-	2.2cm	0.681W/kg	**0.76W/kg**	1.6 W/kg	**PASSED**
WCDMA850+ WLAN2450	-	-	2.2cm	0.636W/kg	**0.71W/kg**	1.6 W/kg	**PASSED**
2-slot GPRS1900+ WLAN2450	-	-	2.2cm	0.362W/kg	**0.41W/kg**	1.6 W/kg	**PASSED**

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

1.2.3 Maximum Drift

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

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	850 (Band V)		1	826 – 847
BT	2450	GFSK	1	2402 – 2480
WLAN	2450	11Mbps QPSK	1	2412 – 2462

Outside of USA and Canada, the transmitter of the device is capable of operating also in GSM/GPRS/EGPRS900, WCDMA2, and GSM/GPRS/EGPRS1800 bands which are not part of this filing.

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

2.1 Description of the Antenna

The device has an internal antenna.

3. TEST CONDITIONS

3.1 Temperature and Humidity

Ambient temperature (°C):	18.6 to 21.6
Ambient humidity (RH %):	34 to 46

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 report SD_SAR_0801_01 for RM-357 / FCC ID: PYARM-357 / IC: 661V-RM357. The difference between RM-407 and RM-357 is that RM-407 has had WCDMA1900 components removed and WCDMA2100 components added.

4. DESCRIPTION OF THE TEST EQUIPMENT

4.1 Measurement System and Components

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

The following table lists calibration dates of SPEAG components:

Test Equipment	Serial Number	Calibration interval	Calibration expiry
DAE 3	389	12 months	2008-02
DAE 3	308	12 months	2008-02
DAE 4	710	12 months	2008-10
DAE 3	339	12 months	2008-06
E-field Probe ET3DV6	1504	12 months	2008-08
E-field Probe ET3DV6	1505	12 months	2008-08
E-field Probe ES3DV3	3119	12 months	2008-10
E-field Probe ES3DV3	3117	12 months	2008-08
Dipole Validation Kit, D835V2	487	24 months	2008-11
Dipole Validation Kit, D835V2	4d042	24 months	2008-09
Dipole Validation Kit, D1900V2	534	24 months	2008-09
Dipole Validation Kit, D1900V2	5d026	24 months	2008-02
Dipole Validation Kit, D2450V2	757	24 months	2008-09
Dipole Validation Kit, D2450V2	750	24 months	2008-02
DASY Software	Version 4.7	-	-

Additional test equipment used in testing:

Test Equipment	Model	Serial Number	Calibration interval	Calibration expiry
Signal Generator	HP E4432B	US 40052231	24 months	2008-05
Signal Generator	HP E4432B	US 39260114	24 months	2008-06
Signal Generator	SME06	848650/011	36 months	2008-07
Amplifier	Milmega AS0825-20L	1009777	-	-
Amplifier	Comtech PST AR8829-5	N2S7A00-1011	-	-
Amplifier	2100-BBS3Q8CCJ	1003	-	-
Power Meter	Agilent E4416A	GB41291842	12 months	2008-04
Power Meter	Agilent E4419B	GB40202155	12 months	2008-03
Power Meter	NRP	100808	24 months	2008-03
Power Sensor	Agilent E9327A	US40411295	12 months	2008-04
Power Sensor	Agilent E9301A	MY41495224	12 months	2008-04
Power Sensor	NRP-Z51	100412	24 months	2008-03
Call Tester	CMU 200	837727/071	-	-
Call Tester	CMU 200	837727/008	-	-
Call Tester	4400M	0411216	-	-
BT Tester	CBT	100263	-	-
Vector Network Analyzer	Agilent 8753ES	US39174327	12 months	2008-05
Vector Network Analyzer	AT8753ES	MY40001091	12 months	2008-08
Dielectric Probe Kit	HP85070B	US33020403	-	-
Dielectric Probe Kit	Agilent 85070D	US01440165	-	-

4.1.1 Isotropic E-field Probe Type ET3DV6

Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection system Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., butyl diglycol)
Calibration	Calibration certificate in Appendix C
Frequency	10 MHz to 3 GHz (dosimetry); Linearity: ± 0.2 dB (30 MHz to 3 GHz)
Optical Surface Detection	± 0.2 mm repeatability in air and clear liquids over diffuse reflecting surfaces
Directivity	± 0.2 dB in HSL (rotation around probe axis) ± 0.4 dB in HSL (rotation normal to probe axis)
Dynamic Range	5 µW/g to > 100 mW/g; Linearity: ± 0.2 dB
Dimensions	Overall length: 330 mm Tip length: 16 mm Body diameter: 12 mm Tip diameter: 6.8 mm Distance from probe tip to dipole centers: 2.7 mm
Application	General dosimetry up to 3 GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms

4.1.2 Isotropic E-field Probe Type ET3DV3

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	51.50	69.25
Tween 20	47.35	30.00
Salt	1.15	0.75

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	54.50	70.25
Tween 20	45.23	29.41
Salt	0.27	0.34

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

2450MHz band

Ingredient	Head (% by weight)	Body (% by weight)
Deionised Water	56.0	70.20
Tween 20	44.0	29.62
Salt	-	0.18

4.3.2 System Checking

The manufacturer calibrates the probes annually. Dielectric parameters of the tissue simulants were measured every day using the dielectric probe kit and the network analyser. A system check measurement was made following the determination of the dielectric parameters of the simulant, using the dipole validation kit. A power level of 250 mW was supplied to the dipole antenna, which was placed under the flat section of the twin SAM phantom. The system checking results (dielectric parameters and SAR values) are given in the table below.

System checking, head tissue simulant

f [MHz]	Description	SAR [W/kg], 1g	Dielectric Parameters		Temp [°C]
			ε_r	σ [S/m]	
835	Reference result	2.29	42.3	0.90	
	± 10% window	2.06 - 2.52			
	2008-01-07	2.39	41.4	0.92	21.5
	2008-01-08	2.35	41.1	0.92	21.0
1900	Reference result	9.38	38.6	1.41	
	± 10% window	8.44 – 10.32			
	2008-01-08	9.88	38.3	1.43	20.5
2450	Reference result	13.5	37.7	1.78	
	± 10% window	12.1 – 14.9			
	2008-01-10	13.5	39.0	1.80	18.6

System checking, body tissue simulant

f [MHz]	Description	SAR [W/kg], 1g	Dielectric Parameters		Temp [°C]
			ε_r	σ [S/m]	
835	Reference result	2.44	53.7	0.99	
	± 10% window	2.20 – 2.68			
	2008-01-10	2.47	55.1	0.99	21.6
	Reference result	2.45	53.8	0.98	
	± 10% window	2.20 - 2.70			
	2008-01-24	2.45	52.9	0.96	21.7
1900	Reference result	10.1	52.6	1.56	
	± 10% window	9.1 - 11.1			
	2008-01-11	9.67	53.5	1.53	19.5
	Reference result	10.0	54.8	1.54	
	± 10% window	9.0 – 11.0			
	2008-01-24	10.7	52.8	1.48	22.0
2450	Reference result	13.7	52.0	1.96	
	± 10% window	12.3 – 15.1			
	2008-01-07	14.6	52.5	2.00	20.8
	Reference result	13.5	53.8	1.97	
	± 10% window	12.1 - 14.9			
	2008-01-25	13.9	51.7	2.10	21.8

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

4.3.3 Tissue Simulants used in the Measurements

Head tissue simulant measurements

f [MHz]	Description	Dielectric Parameters		Temp [°C]
		ε_r	σ [S/m]	
836	Recommended value	41.5	0.90	
	± 5% window	39.4 – 43.6	0.86 – 0.95	
	2008-01-07	41.3	0.92	21.5
	2008-01-08	41.0	0.92	21.0
1880	Recommended value	40.0	1.40	
	± 5% window	38.0 – 42.0	1.33 – 1.47	
	2008-01-08	38.4	1.41	20.5
2442	Recommended value	39.2	1.79	
	± 5% window	37.3 – 41.2	1.70 – 1.88	
	2008-01-10	39.2	1.80	18.6

Body tissue simulant measurements

f [MHz]	Description	Dielectric Parameters		Temp [°C]
		ε_r	σ [S/m]	
836	Recommended value	55.2	0.97	
	± 5% window	52.4 – 58.0	0.92 – 1.02	
	2008-01-10	55.1	1.00	21.6
	2008-01-24	52.9	0.96	21.7
1880	Recommended value	53.3	1.52	
	± 5% window	50.6 – 56.0	1.44 – 1.60	
	2008-01-11	53.6	1.52	19.5
	2008-01-24	52.9	1.46	22.0
2442	Recommended value	52.7	1.94	
	± 5% window	50.1 – 55.3	1.85 – 2.04	
	2008-01-07	52.5	1.99	20.8
	2008-01-25	51.7	2.09	21.8

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:

850MHz Head SAR results

Mode	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 128 824.2 MHz	Ch 190 836.6 MHz	Ch 251 848.8 MHz
GSM	**Power**		**28.3dBm**	**29.7dBm**	**29.5dBm**
	Left	Cheek	-	0.546	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
2-slot GPRS	**Power**		**27.0dBm**	**28.3dBm**	**27.9dBm**
	Left	Cheek	-	0.678	-
		Tilt	-	0.527	-
	Right	Cheek	0.719	0.821	**0.851**
		Tilt	-	0.515	-
3-slot GPRS	**Power**		**25.5dBm**	**26.5dBm**	**25.7dBm**
	Left	Cheek	-	0.615	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
2-slot 8PSK EGPRS	**Power**		**22.3dBm**	**22.6dBm**	**21.5dBm**
	Left	Cheek	-	0.301	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
Mode	**Test configuration**		**SAR, averaged over 1g (W/kg)**		
			Ch 4132 826.4 MHz	**Ch 4175 835.0 MHz**	**Ch 4233 846.6 MHz**
WCDMA	**Power**		**18.8dBm**	**20.8dBm**	**19.5dBm**
	Left	Cheek	-	0.566	-
		Tilt	-	0.334	-
	Right	Cheek	0.526	0.700	**0.717**
		Tilt	-	0.415	-
2-slot GPRS	Right Cheek, BT active		-	-	**0.871**

1900MHz Head SAR results

Mode	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 512 1850.2 MHz	Ch 661 1880.0 MHz	Ch 810 1909.8 MHz
GSM	**Power**		**31.2dBm**	**30.9dBm**	**31.3dBm**
	Left	Cheek	-	0.500	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
2-slot GPRS	**Power**		**29.3dBm**	**29.0dBm**	**29.2dBm**
	Left	Cheek	0.860	1.02	**1.05**
		Tilt	-	0.294	-
	Right	Cheek	-	0.793	-
		Tilt	-	0.251	-
3-slot GPRS	**Power**		**27.1dBm**	**26.7dBm**	**26.9dBm**
	Left	Cheek	-	-	-
		Tilt	-	-	-
	Right	Cheek	-	0.717	-
		Tilt	-	-	-
2-slot 8PSK EGPRS	**Power**		**26.6dBm**	**26.3dBm**	**26.6dBm**
	Left	Cheek	-	-	0.456
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
2-slot GPRS	Left Cheek, BT active		-	-	0.994

2450MHz Head SAR results

Mode	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 1 2412.0 MHz	Ch 7 2442.0 MHz	Ch 11 2462.0 MHz
WLAN	**Power**		**16.7dBm**	**19.1dBm**	**18.4dBm**
	Left	Cheek	0.115	0.204	0.135
		Tilt	0.161	**0.281**	0.186
	Right	Cheek	0.092	0.154	0.093
		Tilt	0.157	0.264	0.168

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

850MHz Body SAR results

Mode	Test configuration	SAR, averaged over 1g (W/kg)		
		Ch 128 824.2 MHz	Ch 190 836.6 MHz	Ch 251 848.8 MHz
2-slot GPRS	**Power**	**27.0dBm**	**28.3dBm**	**27.9dBm**
Antenna facing Phantom	Without headset	0.554	0.614	**0.623**
	Headset HS-47	0.447	0.484	0.495
Display facing Phantom	Without headset		0.534	
	Headset HS-47		0.386	
Mode	**Test configuration**	**SAR, averaged over 1g (W/kg)**		
		Ch 4132 826.4 MHz	**Ch 4175 835.0 MHz**	**Ch 4233 846.6 MHz**
WCDMA	**Power**	**18.8dBm**	**20.8dBm**	**19.5dBm**
Antenna facing Phantom	Without headset	0.430	0.571	**0.578**
	Headset HS-47	0.328	0.459	0.463
Display facing Phantom	Without headset		0.478	
	Headset HS-47		0.359	
2-slot GPRS Antenna facing Phantom	Without headset, BT active	-	-	0.604

1900MHz Body SAR results

Mode	Test configuration	SAR, averaged over 1g (W/kg)		
		Ch 512 1850.2 MHz	Ch 661 1880.0 MHz	Ch 810 1909.8 MHz
2-slot GPRS	**Power**	**29.3dBm**	**29.0dBm**	**29.2dBm**
Antenna facing Phantom	Without headset	0.189	0.197	0.172
	Headset HS-47	0.182	0.187	0.165
Display facing Phantom	Without headset	0.339	**0.350**	0.309
	Headset HS-47	0.333	0.335	0.291
2-slot GPRS Display facing Phantom	Without headset, BT active	-	0.331	-

2450MHz Body SAR results

Mode	Test configuration	SAR, averaged over 1g (W/kg)		
		Ch 1 2412.0 MHz	Ch 7 2442.0 MHz	Ch 11 2462.0 MHz
WLAN	**Power**	**16.7dBm**	**19.1dBm**	**18.4dBm**
Antenna facing Phantom	Without headset	0.032	**0.058**	0.038
	Headset HS-47	0.029	0.051	0.034
Display facing Phantom	Without headset	-	0.012	-
	Headset HS-47	-	0.014	-

Simultaneous transmissions: Combined SAR results

Option used	Test configuration	Max. 1g SAR results				Combined 1g SAR values		
		WLAN	2-slot GPRS 850	WCDMA 850	2-slot GPRS 1900	WLAN + 2-slot GPRS 850	WLAN + WCDMA 850	WLAN + 2-slot GPRS 1900
	Head: Left, Cheek	0.204	0.678	0.566	1.05	0.882	0.770	**1.254**
	Head: Left, Tilt	0.281	0.527	0.334	0.294	0.808	0.615	0.575
	Head: Right, Cheek	0.154	0.871	0.717	0.793	**1.025**	**0.871**	0.947
	Head: Right, Tilt	0.264	0.515	0.415	0.251	0.779	0.679	0.515
Antenna facing Phantom	Body: Without headset	0.058	0.623	0.578	0.197	**0.681**	**0.636**	0.255
	Body: Headset HS-47	0.051	0.495	0.463	0.187	0.546	0.514	0.238
Display facing Phantom	Body: Without headset	0.012	0.534	0.478	0.350	0.546	0.490	**0.362**
	Body: Headset HS-47	0.014	0.386	0.359	0.335	0.400	0.373	0.349

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

Plots of the Measurement scans are given in Appendix B.

APPENDIX A: SYSTEM CHECKING SCANS

Date/Time: 2008-01-07 13:27:36

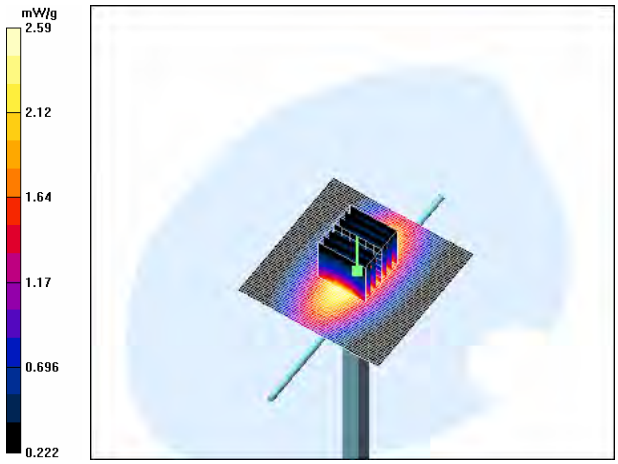
Test Laboratory: TCC Nokia
Type: D835V2; Serial: 487

Communication System: CW835
Frequency: 835 MHz; Duty Cycle: 1:1
Medium: 850MHz Head; Medium Notes: T=21.5 C
Medium parameters used: f = 835 MHz; σ = 0.918 mho/m; ε_r = 41.4; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1505; Probe Notes:
- ConvF(6.86, 6.86, 6.86); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn389; Calibrated: 2007-02-16
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

d=15mm, Pin=250mW/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.60 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.9 V/m
Peak SAR (extrapolated) = 3.56 W/kg
SAR(1 g) = 2.39 mW/g
SAR(10 g) = 1.56 mW/g
Power Drift = -0.022 dB
Maximum value of SAR (measured) = 2.59 mW/g



Date/Time: 2008-01-08 15:46:20

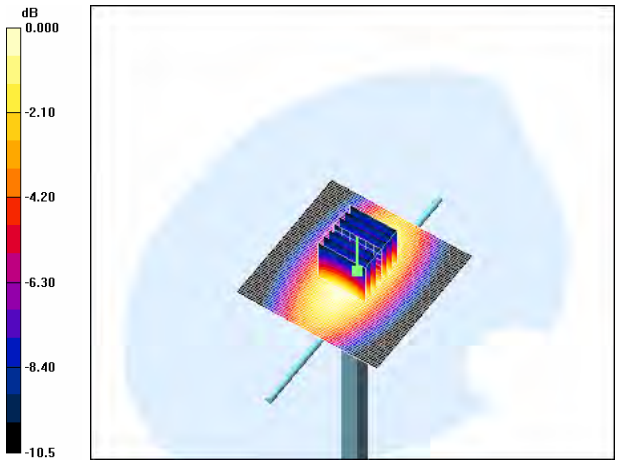
Test Laboratory: TCC Nokia
Type: D835V2; Serial: 487

Communication System: CW835
Frequency: 835 MHz; Duty Cycle: 1:1
Medium: 850MHz Head; Medium Notes: T=21.0 C
Medium parameters used: f = 835 MHz; σ = 0.915 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1505; Probe Notes:
- ConvF(6.86, 6.86, 6.86); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn389; Calibrated: 2007-02-16
- Phantom: SAM1; Type: Twin Phantom
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

d=15mm, Pin=250mW/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.59 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.1 V/m
Peak SAR (extrapolated) = 3.49 W/kg
SAR(1 g) = 2.35 mW/g
SAR(10 g) = 1.53 mW/g
Power Drift = -0.059 dB
Maximum value of SAR (measured) = 2.54 mW/g



Date/Time: 2008-01-08 6:19:35

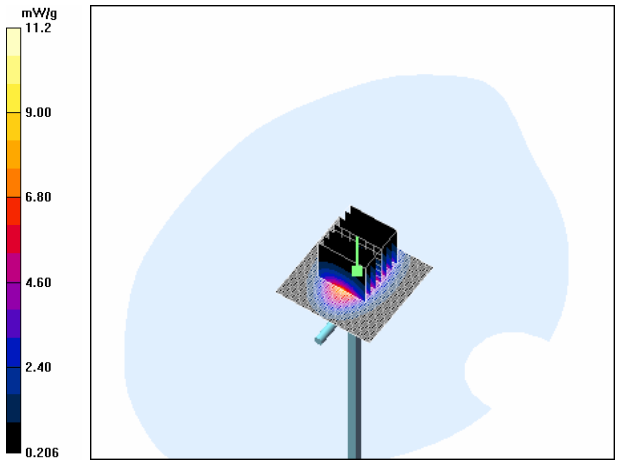
Test Laboratory: TCC Nokia
Type: D1900V2; Serial: 534

Communication System: CW1900
Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: 1900MHz Head; Medium Notes: T=20.5C
Medium parameters used: f = 1900 MHz; σ = 1.43 mho/m; ε_r = 38.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1504; Probe Notes:
- ConvF(5.09, 5.09, 5.09); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn308; Calibrated: 2007-02-16
- Phantom: SAM 2 ; Type: Twin Phantom; Serial: NMP03309
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

d=15mm, Pin=250mW/Area Scan (61x61x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 11.5 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 91.2 V/m
Peak SAR (extrapolated) = 16.9 W/kg
SAR(1 g) = 9.88 mW/g
SAR(10 g) = 5.22 mW/g
Power Drift = 0.010 dB
Maximum value of SAR (measured) = 11.2 mW/g



Date/Time: 2008-01-10 11:34:08

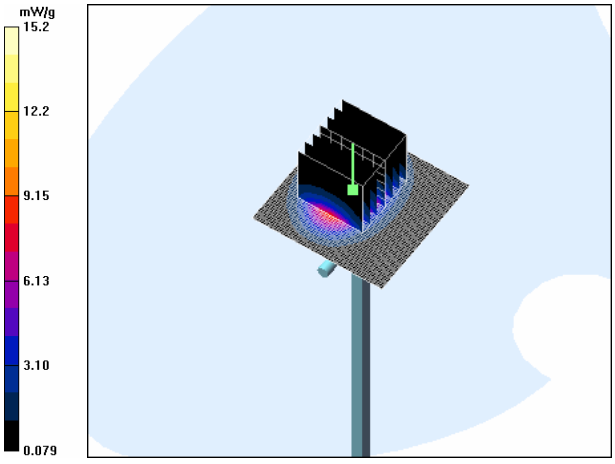
Test Laboratory: TCC Nokia
Type: D2450V2; Serial: 757

Communication System: CW2450
Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: 2450MHz Head; Medium Notes: T=18.6C
Medium parameters used: f = 2450 MHz; σ = 1.8 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1504; Probe Notes:
- ConvF(4.63, 4.63, 4.63); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn308; Calibrated: 2007-02-16
- Phantom: SAM 1; Type: Twin Phantom; Serial: NMP03309
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

d=15mm, Pin=250mW/Area Scan (61x61x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 15.8 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 80.6 V/m
Peak SAR (extrapolated) = 31.1 W/kg
SAR(1 g) = 13.5 mW/g
SAR(10 g) = 6.13 mW/g
Power Drift = -0.021 dB
Maximum value of SAR (measured) = 15.2 mW/g



Date/Time: 2008-01-10 16:38:03

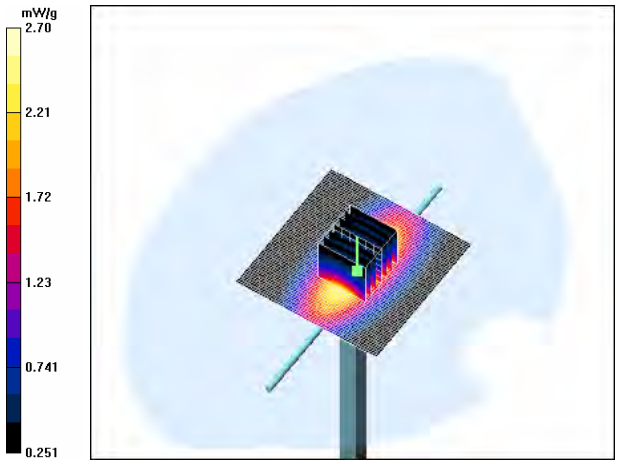
Test Laboratory: TCC Nokia
Type: D835V2; Serial:487

Communication System: CW835
Frequency: 835 MHz; Duty Cycle: 1:1
Medium: 850MHz Body; Medium Notes: T=21.6 C
Medium parameters used: f = 835 MHz; σ = 0.994 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1505; Probe Notes:
- ConvF(6.49, 6.49, 6.49); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn389; Calibrated: 2007-02-16
- Phantom: SAM2; Type: SAM; Serial: TP-1279
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

d=15mm, Pin=250mW/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.68 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 51.7 V/m
Peak SAR (extrapolated) = 3.61 W/kg
SAR(1 g) = 2.47 mW/g
SAR(10 g) = 1.62 mW/g
Power Drift = 0.055 dB
Maximum value of SAR (measured) = 2.70 mW/g



Date/Time: 2008-01-24 10:17:30

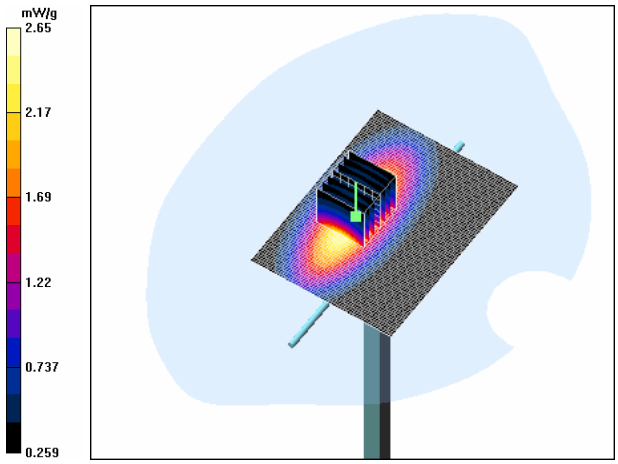
Test Laboratory: TCC Nokia
Type: D835V2; Serial: 4d042

Communication System: CW835
Frequency: 835 MHz; Duty Cycle: 1:1
Medium: Body 850; Medium Notes: Medium Temperature: 21.7 C
Medium parameters used: f = 835 MHz; σ = 0.958 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(5.74, 5.74, 5.74); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn339; Calibrated: 2007-06-12
- Phantom: SAM 5; Type: Twin Phantom; Serial: TP-1412
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.66 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 46.8 V/m
Peak SAR (extrapolated) = 3.56 W/kg
SAR(1 g) = 2.45 mW/g
SAR(10 g) = 1.62 mW/g
Power Drift = -0.167 dB
Maximum value of SAR (measured) = 2.65 mW/g



Date/Time: 2008-01-11 12:08:27

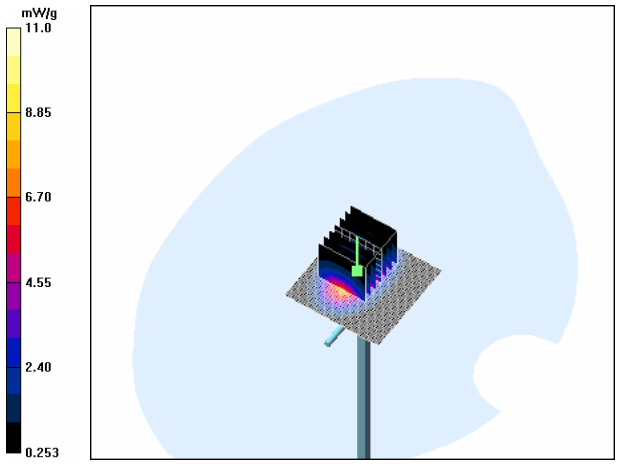
Test Laboratory: TCC Nokia
Type: D1900V2; Serial: 534

Communication System: CW1900
Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: 1900MHz Body; Medium Notes: T=19.5C
Medium parameters used: f = 1900 MHz; σ = 1.53 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1504; Probe Notes:
- ConvF(4.6, 4.6, 4.6); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn308; Calibrated: 2007-02-16
- Phantom: SAM 3; Type: Twin Phantom; Serial: NMP03311
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

d=15mm, Pin=250mW/Area Scan (61x61x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 11.1 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 78.8 V/m
Peak SAR (extrapolated) = 15.9 W/kg
SAR(1 g) = 9.67 mW/g
SAR(10 g) = 5.23 mW/g
Power Drift = -0.069 dB
Maximum value of SAR (measured) = 11.0 mW/g



Date/Time: 2008-01-24 18:28:49

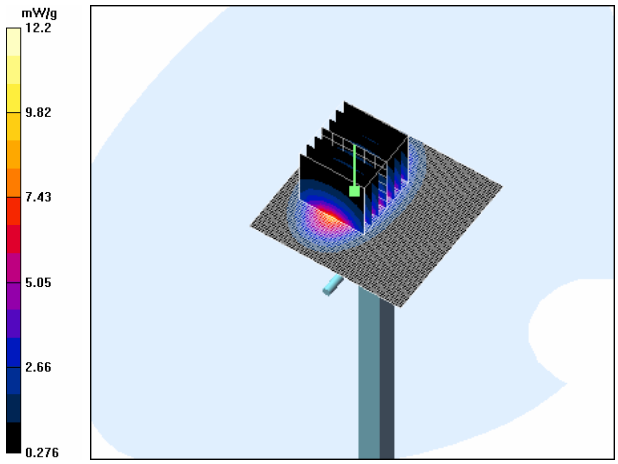
Test Laboratory: TCC Nokia
Type: D1900V2; Serial: 5d026

Communication System: CW1900
Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: Body 1900; Medium Notes: Medium Temperature: 22.0 C
Medium parameters used: f = 1900 MHz; σ = 1.48 mho/m; ε_r = 52.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3119; Probe Notes:
- ConvF(5.02, 5.02, 5.02); Calibrated: 2007-10-24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn710; Calibrated: 2007-10-16
- Phantom: SAM 8; Type: SAM Twin Phantom; Serial: TP-1408
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

d=10mm, Pin=250mW/Area Scan (71x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 12.3 mW/g

d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 61.4 V/m
Peak SAR (extrapolated) = 19.0 W/kg
SAR(1 g) = 10.7 mW/g
SAR(10 g) = 5.65 mW/g
Power Drift = 0.241 dB
Maximum value of SAR (measured) = 12.2 mW/g



Date/Time: 2008-01-07 13:38:36

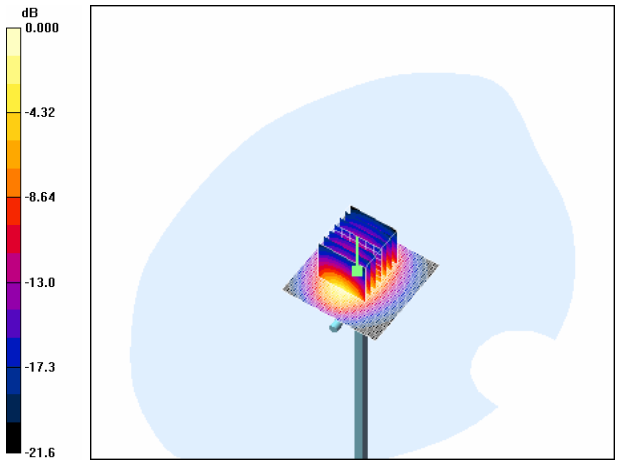
Test Laboratory: TCC Nokia
Type: D2450V2; Serial: 757

Communication System: CW2450
Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: 2450MHz Body; Medium Notes: T=20.8C
Medium parameters used: f = 2450 MHz; σ = 2 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1504; Probe Notes:
- ConvF(4.02, 4.02, 4.02); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn308; Calibrated: 2007-02-16
- Phantom: SAM 3; Type: Twin Phantom; Serial: NMP03311
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

d=15mm, Pin=250mW/Area Scan (61x61x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 17.5 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 90.7 V/m
Peak SAR (extrapolated) = 32.2 W/kg
SAR(1 g) = 14.6 mW/g
SAR(10 g) = 6.72 mW/g
Power Drift = -0.024 dB
Maximum value of SAR (measured) = 16.5 mW/g



Date/Time: 2008-01-25 17:52:00

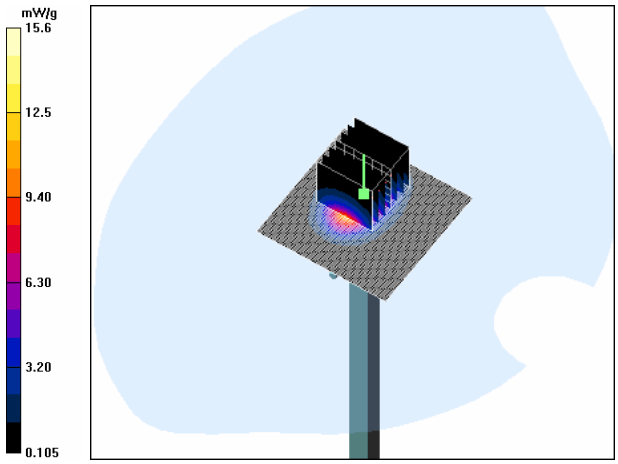
Test Laboratory: TCC Nokia
Type: D2450V2; Serial: 750

Communication System: CW2450
Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: Body 2450; Medium Notes: Medium Temperature: t=21.8 C
Medium parameters used: f = 2450 MHz; σ = 1.98 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(4.12, 4.12, 4.12); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn339; Calibrated: 2007-06-12
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

d=10mm, Pin=250mW/Area Scan (71x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 16.3 mW/g

d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 73.8 V/m
Peak SAR (extrapolated) = 28.8 W/kg
SAR(1 g) = 13.9 mW/g
SAR(10 g) = 6.44 mW/g
Power Drift = -0.011 dB
Maximum value of SAR (measured) = 15.6 mW/g



APPENDIX B: MEASUREMENT SCANS

Date/Time: 2008-01-07 14:32:22

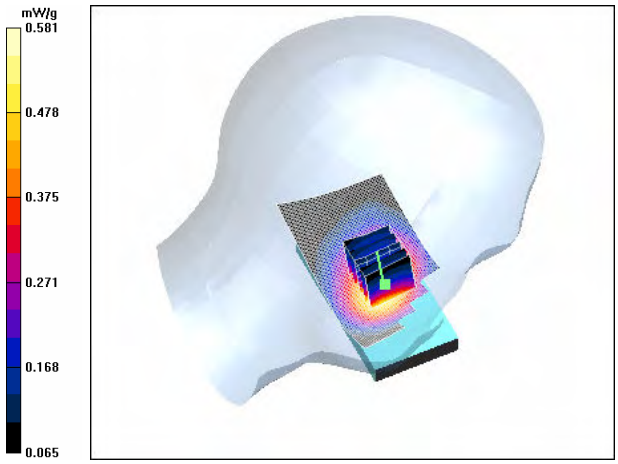
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086338

Communication System: GSM850
Frequency: 836.6 MHz; Duty Cycle: 1:8.3
Medium: HSL850; Medium Notes: T=21.5 C
Medium parameters used: f = 837 MHz; σ = 0.919 mho/m; ε_r = 41.4; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1505; Probe Notes:
- ConvF(6.86, 6.86, 6.86); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn389; Calibrated: 2007-02-16
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.573 mW/g

Cheek - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.9 V/m
Peak SAR (extrapolated) = 0.731 W/kg
SAR(1 g) = 0.546 mW/g
SAR(10 g) = 0.390 mW/g
Power Drift = -0.034 dB
Maximum value of SAR (measured) = 0.581 mW/g



Date/Time: 2008-01-07 14:55:51

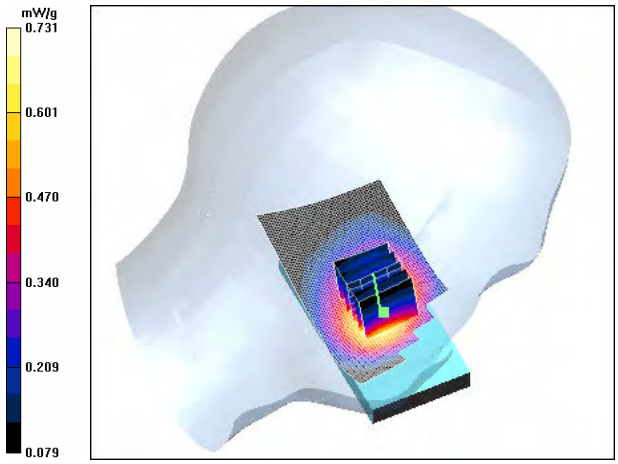
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086338

Communication System: 2-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:4.2
Medium: HSL850; Medium Notes: T=21.5 C
Medium parameters used: f = 837 MHz; σ = 0.919 mho/m; ε_r = 41.4; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1505; Probe Notes:
- ConvF(6.86, 6.86, 6.86); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn389; Calibrated: 2007-02-16
- Phantom: SAM1; Type: Twin Phantom Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.716 mW/g

Cheek - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.3 V/m
Peak SAR (extrapolated) = 0.889 W/kg
SAR(1 g) = 0.678 mW/g
SAR(10 g) = 0.485 mW/g
Power Drift = -0.297 dB
Maximum value of SAR (measured) = 0.731 mW/g



Date/Time: 2008-01-07 16:42:29

Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086338

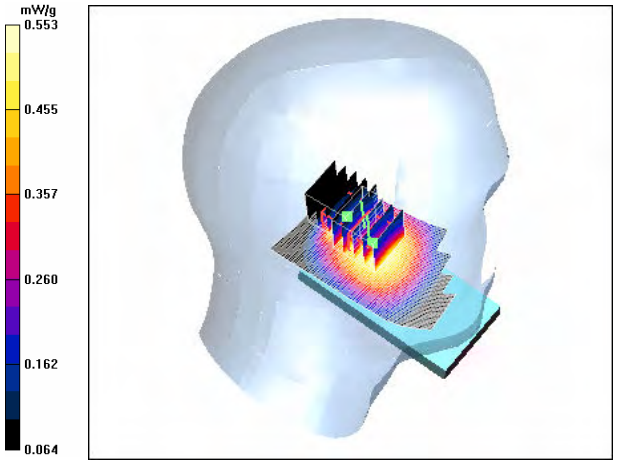
Communication System: 2-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:4.2
Medium: HSL850; Medium Notes: T=21.5 C
Medium parameters used: f = 837 MHz; σ = 0.919 mho/m; ε_r = 41.4; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1505; Probe Notes:
- ConvF(6.86, 6.86, 6.86); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn389; Calibrated: 2007-02-16
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.625 mW/g

Tilt - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.7 V/m
Peak SAR (extrapolated) = 1.03 W/kg
SAR(1 g) = 0.465 mW/g
SAR(10 g) = 0.317 mW/g
Power Drift = -0.064 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) = 0.498 mW/g

Tilt - Middle/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.7 V/m
Peak SAR (extrapolated) = 0.643 W/kg
SAR(1 g) = 0.527 mW/g
SAR(10 g) = 0.400 mW/g
Power Drift = -0.064 dB
Maximum value of SAR (measured) = 0.553 mW/g



Date/Time: 2008-01-08 10:47:52

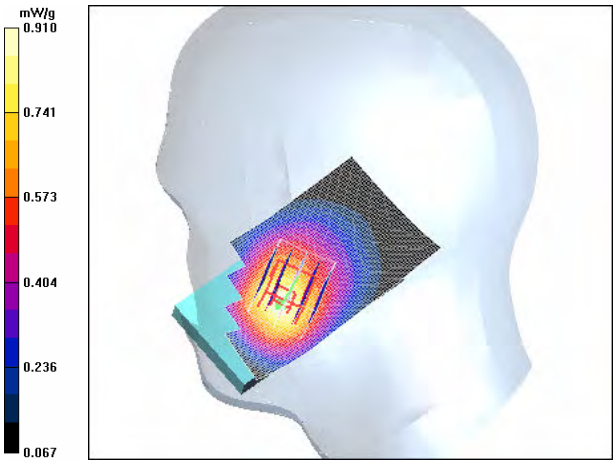
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086338

Communication System: 2-slot GPRS850
Frequency: 848.8 MHz; Duty Cycle: 1:4.2
Medium: HLS850; Medium Notes: T=21.5 C
Medium parameters used: f = 849 MHz; σ = 0.928 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1505; Probe Notes:
- ConvF(6.86, 6.86, 6.86); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn389; Calibrated: 2007-02-16
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek - High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.908 mW/g

Cheek - High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.6 V/m
Peak SAR (extrapolated) = 1.12 W/kg
SAR(1 g) = 0.851 mW/g
SAR(10 g) = 0.615 mW/g
Power Drift = -0.008 dB
Maximum value of SAR (measured) = 0.910 mW/g



Date/Time: 2008-01-08 11:05:12

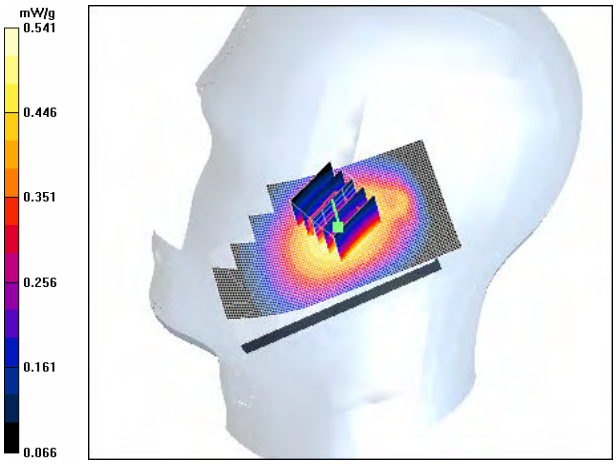
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086338

Communication System: 2-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:4.2
Medium: HLS850; Medium Notes: T=21.5 C
Medium parameters used: f = 837 MHz; σ = 0.919 mho/m; ε_r = 41.4; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1505; Probe Notes:
- ConvF(6.86, 6.86, 6.86); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn389; Calibrated: 2007-02-16
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.537 mW/g

Tilt - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.2 V/m
Peak SAR (extrapolated) = 0.642 W/kg
SAR(1 g) = 0.515 mW/g
SAR(10 g) = 0.389 mW/g
Power Drift = 0.151 dB
Maximum value of SAR (measured) = 0.541 mW/g



Date/Time: 2008-01-07 15:13:38

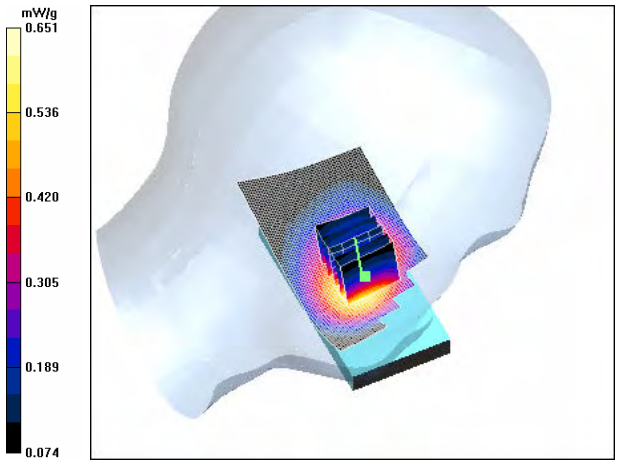
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086338

Communication System: 3-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:2.8
Medium: HSL850; Medium Notes: T=21.5 C
Medium parameters used: f = 837 MHz; σ = 0.919 mho/m; ε_r = 41.4; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1505; Probe Notes:
- ConvF(6.86, 6.86, 6.86); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn389; Calibrated: 2007-02-16
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.648 mW/g

Cheek - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.4 V/m
Peak SAR (extrapolated) = 0.810 W/kg
SAR(1 g) = 0.615 mW/g
SAR(10 g) = 0.439 mW/g
Power Drift = -0.094 dB
Maximum value of SAR (measured) = 0.651 mW/g



Date/Time: 2008-01-07 16:15:17

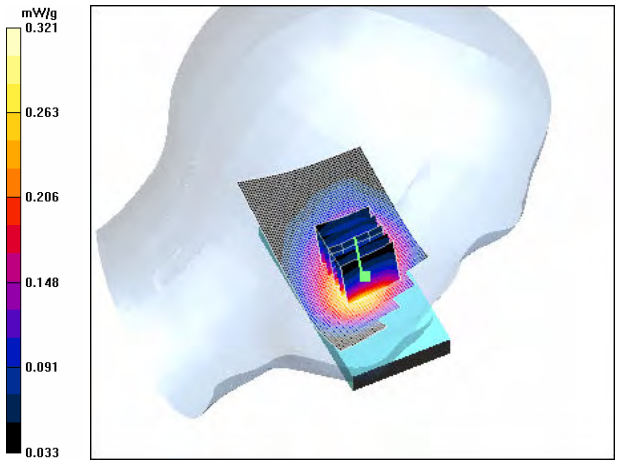
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086338

Communication System: 2-slot 8PSK EGPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:8.3
Medium: HSL850; Medium Notes: T=21.5 C
Medium parameters used: f = 837 MHz; σ = 0.919 mho/m; ε_r = 41.4; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1505; Probe Notes:
- ConvF(6.86, 6.86, 6.86); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn389; Calibrated: 2007-02-16
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.299 mW/g

Cheek - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.63 V/m
Peak SAR (extrapolated) = 0.418 W/kg
SAR(1 g) = 0.301 mW/g
SAR(10 g) = 0.209 mW/g
Power Drift = 0.111 dB
Maximum value of SAR (measured) = 0.321 mW/g



Date/Time: 2008-01-09 11:51:47

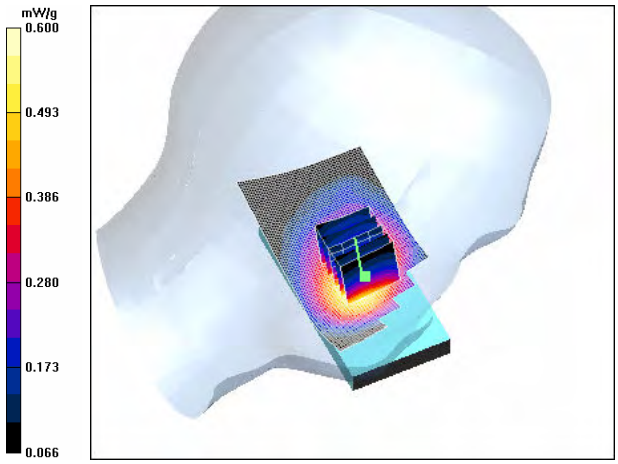
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086338

Communication System: WCDMA850
Frequency: 835 MHz; Duty Cycle: 1:1
Medium: HSL850; Medium Notes: T=21.0 C
Medium parameters used: f = 835 MHz; σ = 0.915 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1505; Probe Notes:
- ConvF(6.86, 6.86, 6.86); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn389; Calibrated: 2007-02-16
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.601 mW/g

Cheek - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.5 V/m
Peak SAR (extrapolated) = 0.752 W/kg
SAR(1 g) = 0.566 mW/g
SAR(10 g) = 0.405 mW/g
Power Drift = 0.016 dB
Maximum value of SAR (measured) = 0.600 mW/g



Date/Time: 2008-01-09 12:10:07

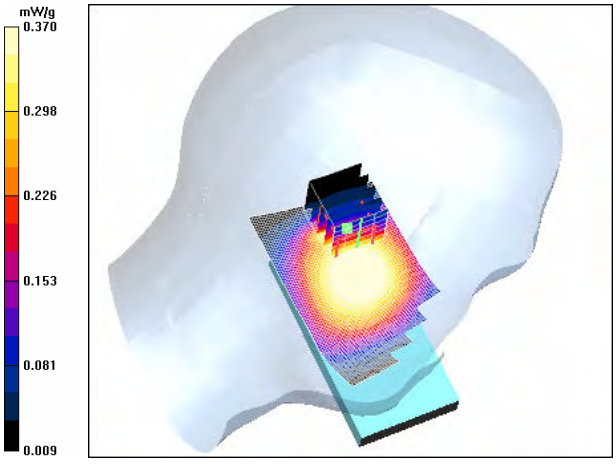
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086338

Communication System: WCDMA850
Frequency: 835 MHz; Duty Cycle: 1:1
Medium: HSL850; Medium Notes: T=21.0 C
Medium parameters used: f = 835 MHz; σ = 0.915 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1505; Probe Notes:
- ConvF(6.86, 6.86, 6.86); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn389; Calibrated: 2007-02-16
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.436 mW/g

Tilt - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.5 V/m
Peak SAR (extrapolated) = 0.676 W/kg
SAR(1 g) = 0.334 mW/g
SAR(10 g) = 0.232 mW/g
Power Drift = 0.000 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) = 0.370 mW/g



Date/Time: 2008-01-09 13:41:30

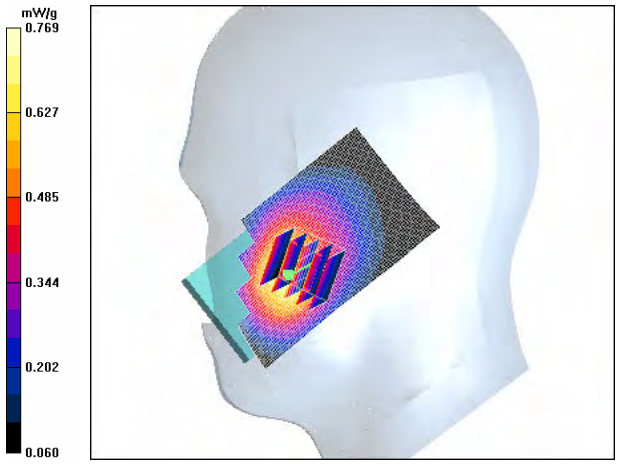
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086338

Communication System: WCDMA850
Frequency: 846.6 MHz; Duty Cycle: 1:1
Medium: HLS850; Medium Notes: T=21.0 C
Medium parameters used: f = 847 MHz; σ = 0.925 mho/m; ε_r = 41; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1505; Probe Notes:
- ConvF(6.86, 6.86, 6.86); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn389; Calibrated: 2007-02-16
- Phantom: SAM1; Type: Twin Phantom Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek - High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.744 mW/g

Cheek - High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.5 V/m
Peak SAR (extrapolated) = 0.945 W/kg
SAR(1 g) = 0.717 mW/g
SAR(10 g) = 0.513 mW/g
Power Drift = -0.098 dB
Maximum value of SAR (measured) = 0.769 mW/g



Date/Time: 2008-01-09 11:21:20

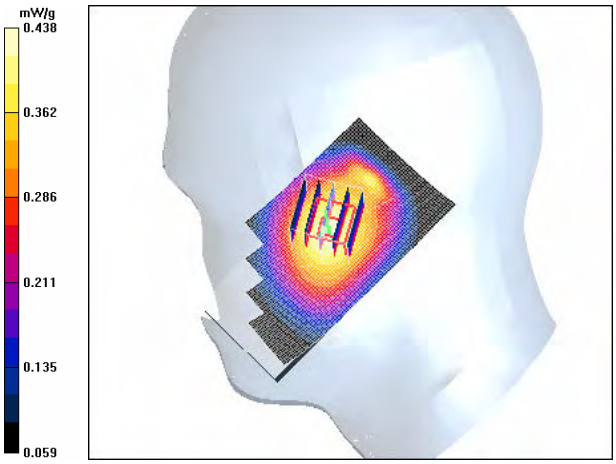
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086338

Communication System: WCDMA850
Frequency: 835 MHz; Duty Cycle: 1:1
Medium: HLS850; Medium Notes: T=21.0 C
Medium parameters used: f = 835 MHz; σ = 0.915 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1505; Probe Notes:
- ConvF(6.86, 6.86, 6.86); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn389; Calibrated: 2007-02-16
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.431 mW/g

Tilt - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.0 V/m
Peak SAR (extrapolated) = 0.520 W/kg
SAR(1 g) = 0.415 mW/g
SAR(10 g) = 0.314 mW/g
Power Drift = 0.028 dB
Maximum value of SAR (measured) = 0.438 mW/g



Date/Time: 2008-01-08 13:23:57

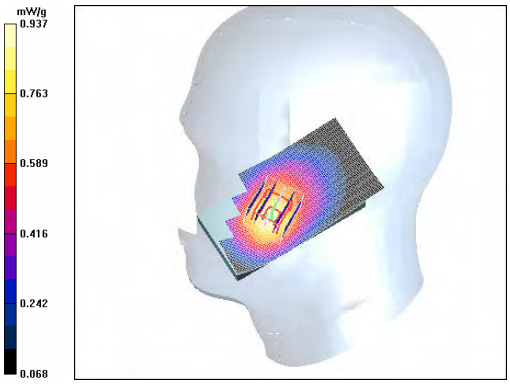
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086338

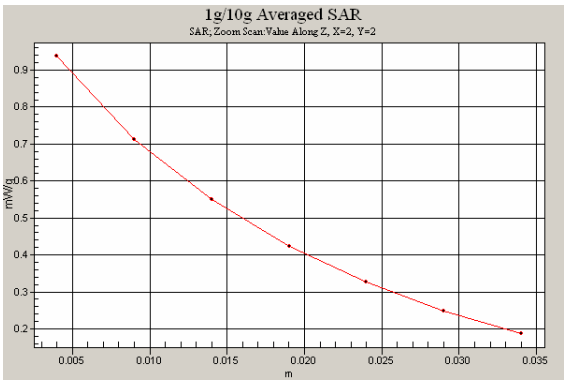
Communication System: 2-slot GPRS850
Frequency: 848.8 MHz; Duty Cycle: 1:4.2
Medium: HLS850; Medium Notes: T=21.5 C
Medium parameters used: f = 849 MHz; σ = 0.928 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1505; Probe Notes:
- ConvF(6.86, 6.86, 6.86); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn389; Calibrated: 2007-02-16
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek – High - BT active/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.921 mW/g

Cheek - High - BT active/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.9 V/m
Peak SAR (extrapolated) = 1.14 W/kg
SAR(1 g) = 0.871 mW/g
SAR(10 g) = 0.627 mW/g
Power Drift = -0.107 dB
Maximum value of SAR (measured) = 0.937 mW/g





Date/Time: 2008-01-08 7:00:05

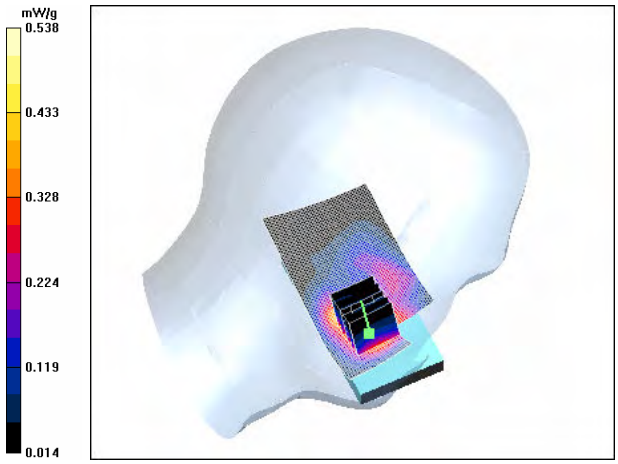
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: GSM1900
Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium: 1900MHz Head; Medium Notes: T=20.2C
Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1504; Probe Notes:
- ConvF(5.09, 5.09, 5.09); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn308; Calibrated: 2007-02-16
- Phantom: SAM 2 ; Type: Twin Phantom; Serial: NMP03309
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.528 mW/g

Cheek - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 5.86 V/m
Peak SAR (extrapolated) = 0.743 W/kg
SAR(1 g) = 0.500 mW/g
SAR(10 g) = 0.296 mW/g
Power Drift = 0.005 dB
Maximum value of SAR (measured) = 0.538 mW/g



Date/Time: 2008-01-08 10:30:49

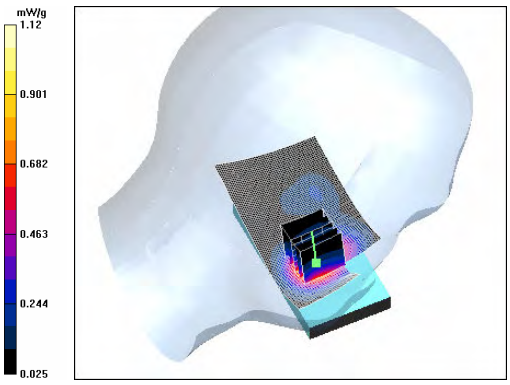
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

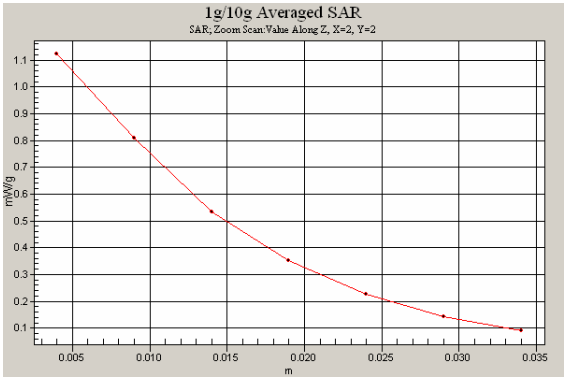
Communication System: 2-slot GPRS1900
Frequency: 1909.8 MHz; Duty Cycle: 1:4.2
Medium: 1900MHz Head; Medium Notes: T=20.2C
Medium parameters used: f = 1910 MHz; σ = 1.44 mho/m; ε_r = 38.3; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1504; Probe Notes:
- ConvF(5.09, 5.09, 5.09); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn308; Calibrated: 2007-02-16
- Phantom: SAM 2 ; Type: Twin Phantom; Serial: NMP03309
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek - High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.20 mW/g

Cheek - High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.14 V/m
Peak SAR (extrapolated) = 1.50 W/kg
SAR(1 g) = 1.05 mW/g
SAR(10 g) = 0.620 mW/g
Power Drift = 0.017 dB
Maximum value of SAR (measured) = 1.12 mW/g





Date/Time: 2008-01-08 9:52:17

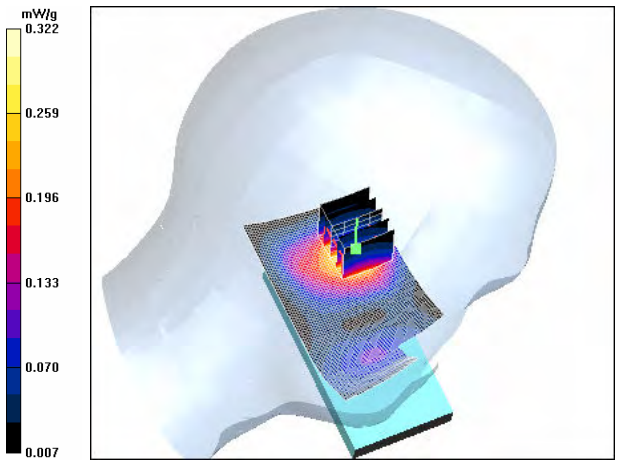
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: 2-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:4.2
Medium: 1900MHz Head; Medium Notes: T=20.2C
Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1504; Probe Notes:
- ConvF(5.09, 5.09, 5.09); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn308; Calibrated: 2007-02-16
- Phantom: SAM 2 ; Type: Twin Phantom; Serial: NMP03309
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.342 mW/g

Tilt - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.4 V/m
Peak SAR (extrapolated) = 0.406 W/kg
SAR(1 g) = 0.294 mW/g
SAR(10 g) = 0.184 mW/g
Power Drift = 0.033 dB
Maximum value of SAR (measured) = 0.322 mW/g



Date/Time: 2008-01-08 8:24:06

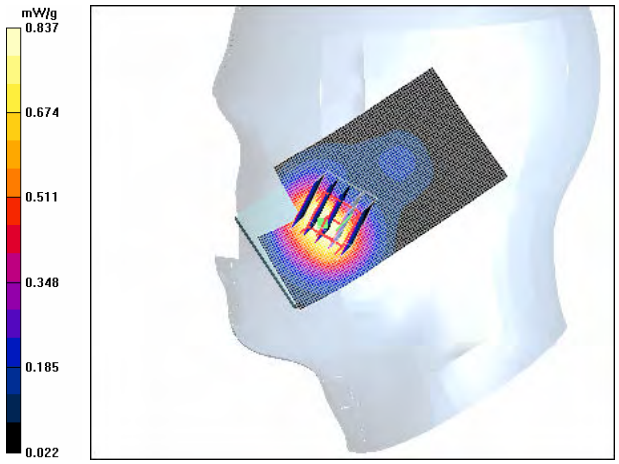
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: 2-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:4.2
Medium: 1900MHz Head; Medium Notes: T=20.2C
Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1504; Probe Notes:
- ConvF(5.09, 5.09, 5.09); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn308; Calibrated: 2007-02-16
- Phantom: SAM 2 ; Type: Twin Phantom; Serial: NMP03309
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.930 mW/g

Cheek - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 6.87 V/m
Peak SAR (extrapolated) = 1.03 W/kg
SAR(1 g) = 0.793 mW/g
SAR(10 g) = 0.514 mW/g
Power Drift = 0.019 dB
Maximum value of SAR (measured) = 0.837 mW/g



Date/Time: 2008-01-08 8:58:43

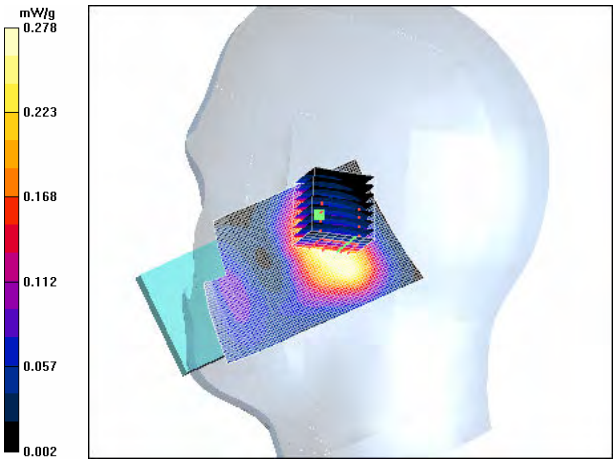
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: 2-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:4.2
Medium: 1900MHz Head; Medium Notes: T=20.2C
Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1504; Probe Notes:
- ConvF(5.09, 5.09, 5.09); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn308; Calibrated: 2007-02-16
- Phantom: SAM 2 ; Type: Twin Phantom; Serial: NMP03309
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.313 mW/g

Tilt - Middle/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.4 V/m
Peak SAR (extrapolated) = 0.362 W/kg
SAR(1 g) = 0.251 mW/g
SAR(10 g) = 0.167 mW/g
Power Drift = -0.002 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) = 0.278 mW/g



Date/Time: 2008-01-08 8:42:48

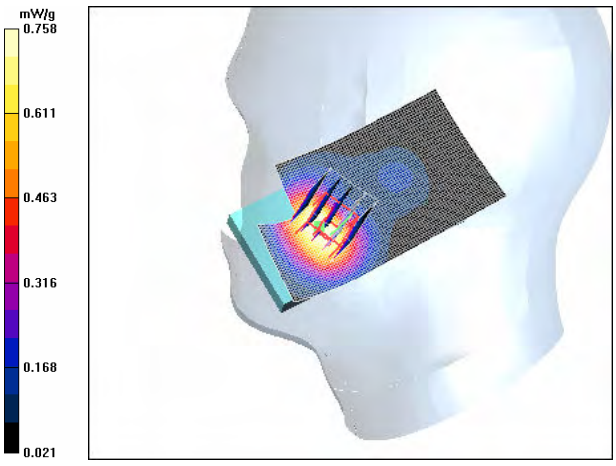
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: 3-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:2.8
Medium: 1900MHz Head; Medium Notes: T=20.2C
Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1504; Probe Notes:
- ConvF(5.09, 5.09, 5.09); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn308; Calibrated: 2007-02-16
- Phantom: SAM 2 ; Type: Twin Phantom; Serial: NMP03309
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.833 mW/g

Cheek - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 6.52 V/m
Peak SAR (extrapolated) = 0.938 W/kg
SAR(1 g) = 0.717 mW/g
SAR(10 g) = 0.465 mW/g
Power Drift = 0.034 dB
Maximum value of SAR (measured) = 0.758 mW/g



Date/Time: 2008-01-08 15:47:31

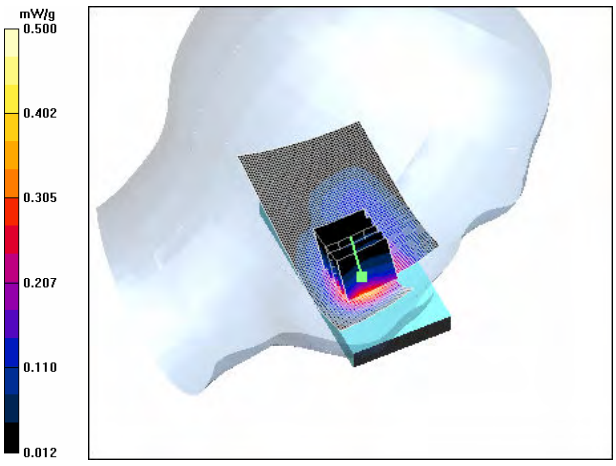
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: 2-slot 8PSK EGPRS1900
Frequency: 1909.8 MHz; Duty Cycle: 1:2.8
Medium: 1900MHz Head; Medium Notes: T=20.2C
Medium parameters used: f = 1910 MHz; σ = 1.44 mho/m; ε_r = 38.3; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1504; Probe Notes:
- ConvF(5.09, 5.09, 5.09); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn308; Calibrated: 2007-02-16
- Phantom: SAM 2 ; Type: Twin Phantom; Serial: NMP03309
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek - High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.530 mW/g

Cheek - High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 4.98 V/m
Peak SAR (extrapolated) = 0.687 W/kg
SAR(1 g) = 0.456 mW/g
SAR(10 g) = 0.264 mW/g
Power Drift = -0.144 dB
Maximum value of SAR (measured) = 0.500 mW/g



Date/Time: 2008-01-08 11:30:26

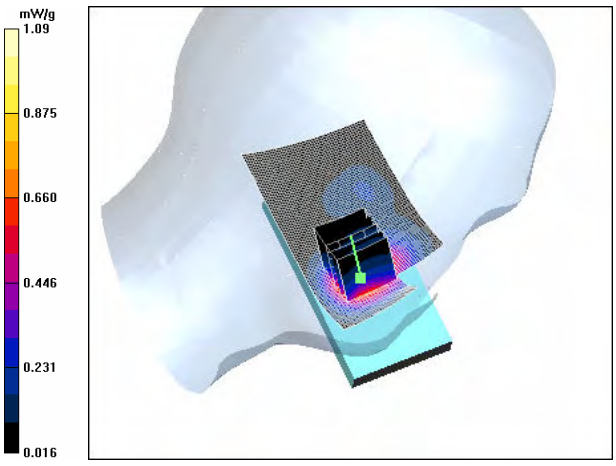
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: 2-slot GPRS1900
Frequency: 1909.8 MHz; Duty Cycle: 1:4.2
Medium: 1900MHz Head; Medium Notes: T=20.2C
Medium parameters used: f = 1910 MHz; σ = 1.44 mho/m; ε_r = 38.3; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1504; Probe Notes:
- ConvF(5.09, 5.09, 5.09); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn308; Calibrated: 2007-02-16
- Phantom: SAM 2 ; Type: Twin Phantom; Serial: NMP03309
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek - High - BT active/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.10 mW/g

Cheek - High - BT active/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 6.55 V/m
Peak SAR (extrapolated) = 1.42 W/kg
SAR(1 g) = 0.994 mW/g
SAR(10 g) = 0.588 mW/g
Power Drift = 0.013 dB
Maximum value of SAR (measured) = 1.09 mW/g



Date/Time: 2008-01-10 13:38:22

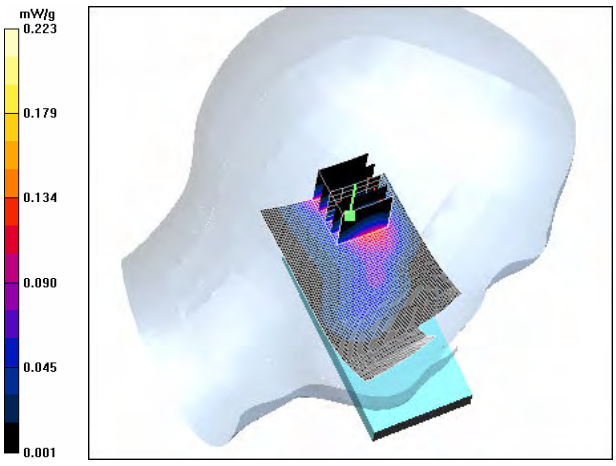
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: WLAN2450
Frequency: 2442 MHz; Duty Cycle: 1:1
Medium: 2400MHz Head; Medium Notes: T=20.5C
Medium parameters used: f = 2442 MHz; σ = 1.8 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1504; Probe Notes:
- ConvF(4.63, 4.63, 4.63); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn308; Calibrated: 2007-02-16
- Phantom: SAM 1; Type: Twin Phantom; Serial: NMP03309
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek, Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.198 mW/g

Cheek, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.36 V/m
Peak SAR (extrapolated) = 0.496 W/kg
SAR(1 g) = 0.204 mW/g
SAR(10 g) = 0.094 mW/g
Power Drift = -0.031 dB
Maximum value of SAR (measured) = 0.223 mW/g



Date/Time: 2008-01-10 14:23:15

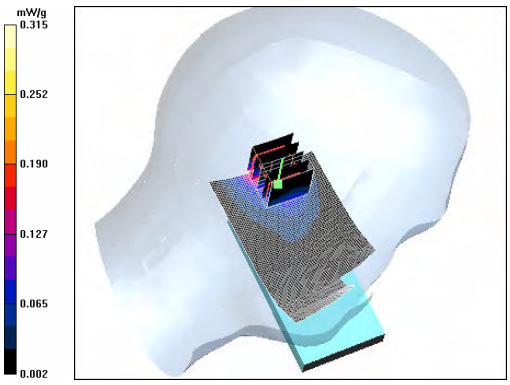
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

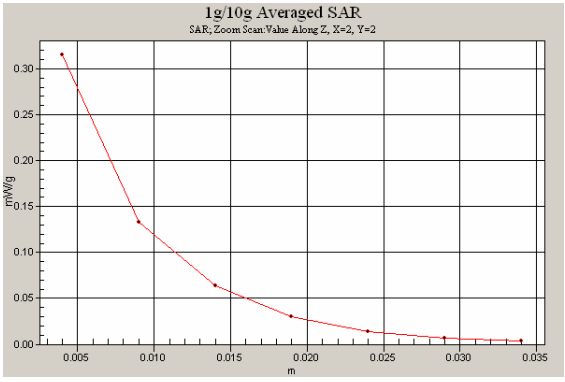
Communication System: WLAN2450
Frequency: 2442 MHz; Duty Cycle: 1:1
Medium: 2400MHz Head; Medium Notes: T=20.5C
Medium parameters used: f = 2442 MHz; σ = 1.8 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1504; Probe Notes:
- ConvF(4.63, 4.63, 4.63); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn308; Calibrated: 2007-02-16
- Phantom: SAM 1; Type: Twin Phantom; Serial: NMP03309
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.294 mW/g

Tilt - Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.84 V/m
Peak SAR (extrapolated) = 0.736 W/kg
SAR(1 g) = 0.281 mW/g
SAR(10 g) = 0.120 mW/g
Power Drift = -0.005 dB
Maximum value of SAR (measured) = 0.315 mW/g





Date/Time: 2008-01-11 11:30:01

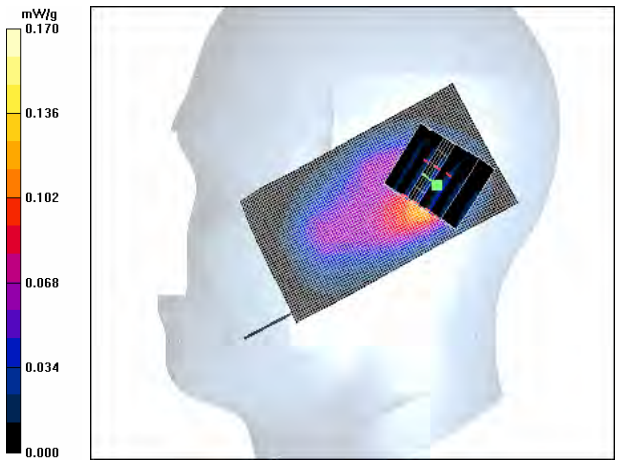
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: WLAN2450
Frequency: 2442 MHz; Duty Cycle: 1:1
Medium: 2400MHz Head; Medium Notes: T=20.5C
Medium parameters used: f = 2442 MHz; σ = 1.8 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1504; Probe Notes:
- ConvF(4.63, 4.63, 4.63); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn308; Calibrated: 2007-02-16
- Phantom: SAM 1; Type: Twin Phantom; Serial: NMP03309
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.170 mW/g

Cheek - Middle/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 6.77 V/m
Peak SAR (extrapolated) = 0.366 W/kg
SAR(1 g) = 0.154 mW/g
SAR(10 g) = 0.073 mW/g
Power Drift = -0.466 dB
Maximum value of SAR (measured) = 0.170 mW/g



Date/Time: 2008-01-11 10:34:25

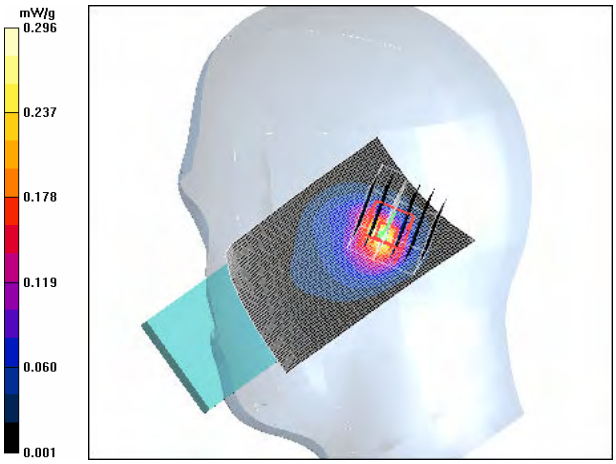
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: WLAN2450
Frequency: 2442 MHz; Duty Cycle: 1:1
Medium: 2400MHz Head; Medium Notes: T=20.5C
Medium parameters used: f = 2442 MHz; σ = 1.8 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1504; Probe Notes:
- ConvF(4.63, 4.63, 4.63); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn308; Calibrated: 2007-02-16
- Phantom: SAM 1; Type: Twin Phantom; Serial: NMP03309
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt - Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.297 mW/g

Tilt - Middle/Zoom Scan 2 (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 6.70 V/m
Peak SAR (extrapolated) = 0.665 W/kg
SAR(1 g) = 0.264 mW/g
SAR(10 g) = 0.116 mW/g
Power Drift = -0.075 dB
Maximum value of SAR (measured) = 0.296 mW/g



Date/Time: 2008-01-11 10:44:05

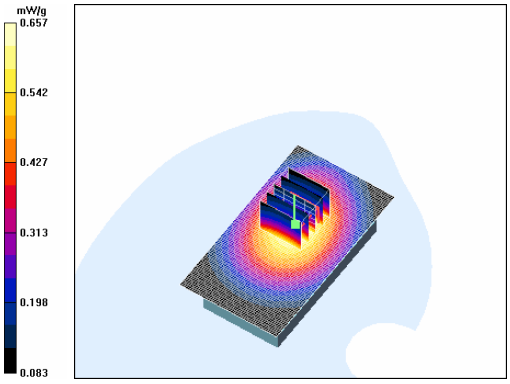
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086338

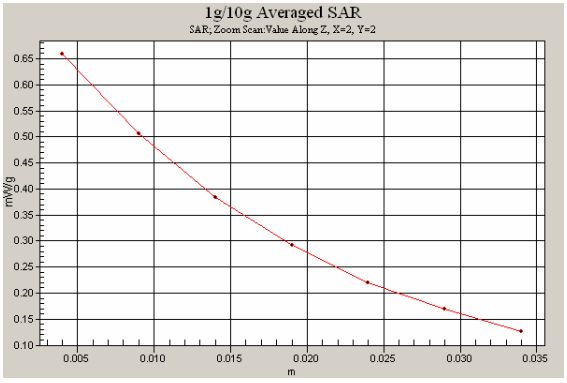
Communication System: 2-slot GPRS850
Frequency: 848.8 MHz; Duty Cycle: 1:4.2
Medium: BSL850; Medium Notes: T=21.6 C
Medium parameters used: f = 849 MHz; σ = 1 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1505; Probe Notes:
- ConvF(6.49, 6.49, 6.49); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn389; Calibrated: 2007-02-16
- Phantom: SAM2; Type: SAM; Serial: TP-1279
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body measurement – High - No accessory - Antenna facing phantom/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.654 mW/g

Body measurement - High - No accessory - Antenna facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.9 V/m
Peak SAR (extrapolated) = 0.790 W/kg
SAR(1 g) = 0.623 mW/g
SAR(10 g) = 0.462 mW/g
Power Drift = 0.037 dB
Maximum value of SAR (measured) = 0.657 mW/g





Date/Time: 2008-01-11 11:46:59

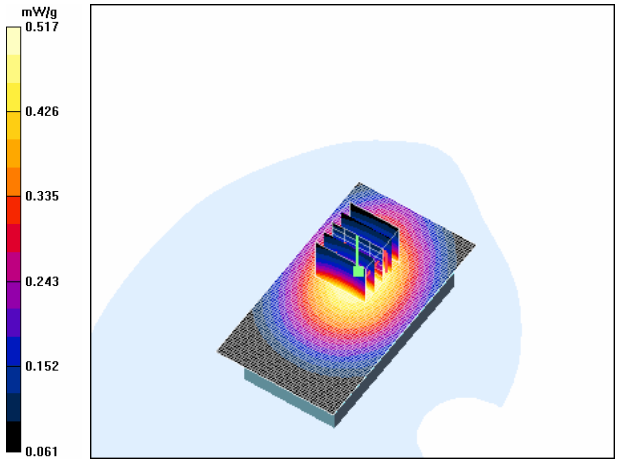
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086338

Communication System: 2-slot GPRS850
Frequency: 848.8 MHz; Duty Cycle: 1:4.2
Medium: BSL850; Medium Notes: T=21.6 C
Medium parameters used: f = 849 MHz; σ = 1 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1505; Probe Notes:
- ConvF(6.49, 6.49, 6.49); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn389; Calibrated: 2007-02-16
- Phantom: SAM2; Type: Twin Phantom; Serial: TP-1279
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body measurement - High - HS-47 - Antenna facing phantom/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.519 mW/g

Body measurement - High - HS-47 - Antenna facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.1 V/m
Peak SAR (extrapolated) = 0.627 W/kg
SAR(1 g) = 0.495 mW/g
SAR(10 g) = 0.366 mW/g
Power Drift = 0.048 dB
Maximum value of SAR (measured) = 0.517 mW/g



Date/Time: 2008-01-24 11:09:26

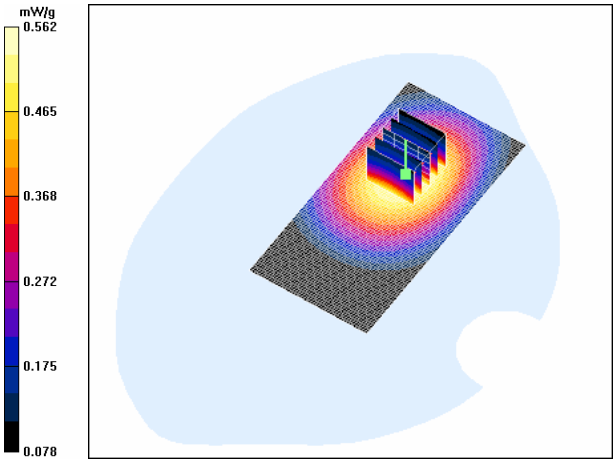
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: 2-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:4.2
Medium: Body 850; Medium Notes: Medium Temperature: 21.7 C
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.96 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(5.74, 5.74, 5.74); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn339; Calibrated: 2007-06-12
- Phantom: SAM 5; Type: Twin Phantom; Serial: TP-1412
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body - Middle - No Accessory - Display facing phantom/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.572 mW/g

Body - Middle - No Accessory - Display facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.3 V/m
Peak SAR (extrapolated) = 0.675 W/kg
SAR(1 g) = 0.534 mW/g
SAR(10 g) = 0.400 mW/g
Power Drift = -0.303 dB
Maximum value of SAR (measured) = 0.562 mW/g



Date/Time: 2008-01-24 11:22:43

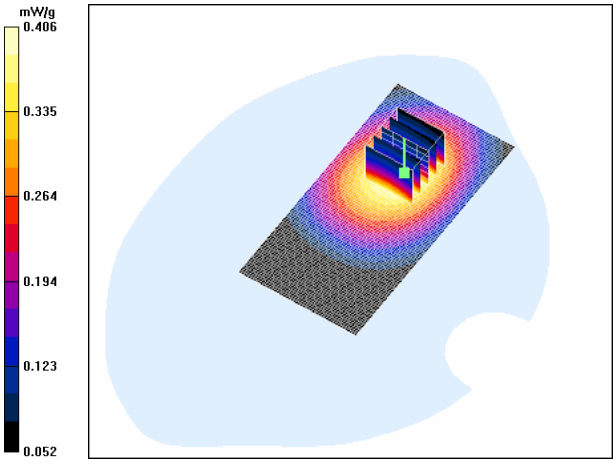
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: 2-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:4.2
Medium: Body 850; Medium Notes: Medium Temperature: 21.7 C
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.96 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(5.74, 5.74, 5.74); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn339; Calibrated: 2007-06-12
- Phantom: SAM 5; Type: Twin Phantom; Serial: TP-1412
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body - Middle - HS-47 - Display facing phantom/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.412 mW/g

Body - Middle - HS-47 - Display facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.98 V/m
Peak SAR (extrapolated) = 0.492 W/kg
SAR(1 g) = 0.386 mW/g
SAR(10 g) = 0.287 mW/g
Power Drift = 0.006 dB
Maximum value of SAR (measured) = 0.406 mW/g



Date/Time: 2008-01-11 12:31:56

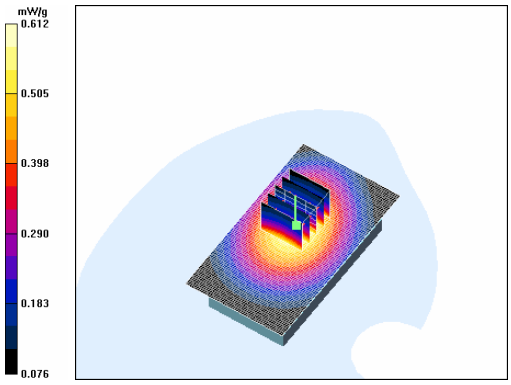
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086338

Communication System: WCDMA850
Frequency: 846.6 MHz; Duty Cycle: 1:1
Medium: BSL850; Medium Notes: T=21.6 C
Medium parameters used: f = 847 MHz; σ = 1 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1505; Probe Notes:
- ConvF(6.49, 6.49, 6.49); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn389; Calibrated: 2007-02-16
- Phantom: SAM2; Type: SAM; Serial: TP-1279
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body measurement – High - No accessory - Antenna facing phantom/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.604 mW/g

Body measurement - High - No accessory - Antenna facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.8 V/m
Peak SAR (extrapolated) = 0.738 W/kg
SAR(1 g) = 0.578 mW/g
SAR(10 g) = 0.426 mW/g
Power Drift = 0.055 dB
Maximum value of SAR (measured) = 0.612 mW/g



Date/Time: 2008-01-11 14:59:22

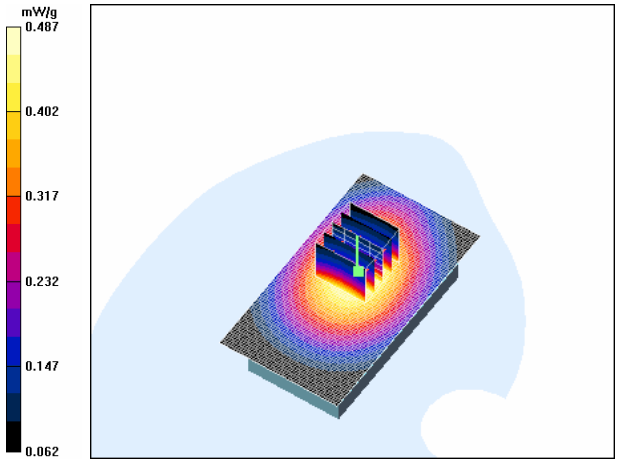
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086338

Communication System: WCDMA850
Frequency: 846.6 MHz; Duty Cycle: 1:1
Medium: BSL850; Medium Notes: T=21.6 C
Medium parameters used: f = 847 MHz; σ = 1 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1505; Probe Notes:
- ConvF(6.49, 6.49, 6.49); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn389; Calibrated: 2007-02-16
- Phantom: SAM2; Type: Twin Phantom; Serial: TP-1279
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body measurement – High - HS-47 - Antenna facing phantom/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.494 mW/g

Body measurement - High - HS-47 - Antenna facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.9 V/m
Peak SAR (extrapolated) = 0.590 W/kg
SAR(1 g) = 0.463 mW/g
SAR(10 g) = 0.343 mW/g
Power Drift = -0.013 dB
Maximum value of SAR (measured) = 0.487 mW/g



Date/Time: 2008-01-24 15:23:38

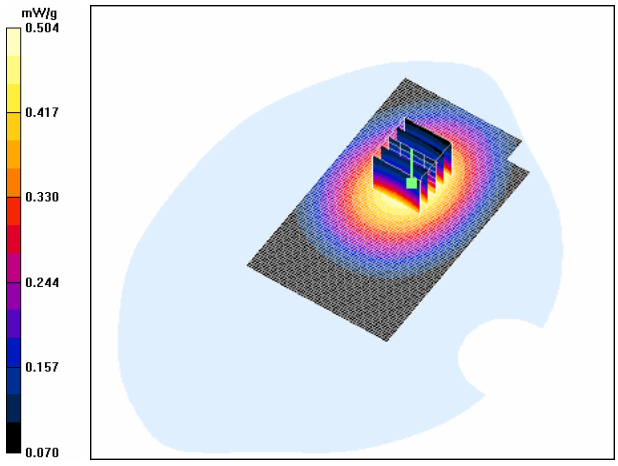
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: WCDMA850
Frequency: 835 MHz; Duty Cycle: 1:1
Medium: Body 850; Medium Notes: Medium Temperature: 21.7 C
Medium parameters used: f = 835 MHz; σ = 0.958 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(5.74, 5.74, 5.74); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn339; Calibrated: 2007-06-12
- Phantom: SAM 5; Type: Twin Phantom; Serial: TP-1412
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body - Middle - No Accessory - Display facing phantom/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.503 mW/g

Body - Middle - No Accessory - Display facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 11.5 V/m
Peak SAR (extrapolated) = 0.602 W/kg
SAR(1 g) = 0.478 mW/g
SAR(10 g) = 0.358 mW/g
Power Drift = -0.397 dB
Maximum value of SAR (measured) = 0.504 mW/g



Date/Time: 2008-01-24 15:37:39

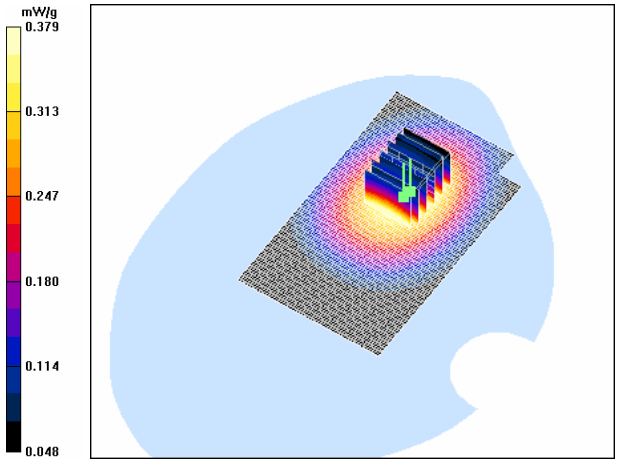
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: WCDMA850
Frequency: 835 MHz; Duty Cycle: 1:1
Medium: Body 850; Medium Notes: Medium Temperature: 21.7 C
Medium parameters used: f = 835 MHz; σ = 0.958 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(5.74, 5.74, 5.74); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))
- Electronics: DAE3 Sn339; Calibrated: 2007-06-12
- Phantom: SAM 5; Type: Twin Phantom; Serial: TP-1412
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body - Middle - HS-47 - Display facing phantom/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.384 mW/g

Body - Middle - HS-47 - Display facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.72 V/m
Peak SAR (extrapolated) = 0.456 W/kg
SAR(1 g) = 0.359 mW/g
SAR(10 g) = 0.268 mW/g
Power Drift = 0.058 dB
Maximum value of SAR (measured) = 0.379 mW/g



Date/Time: 2008-01-11 15:58:25

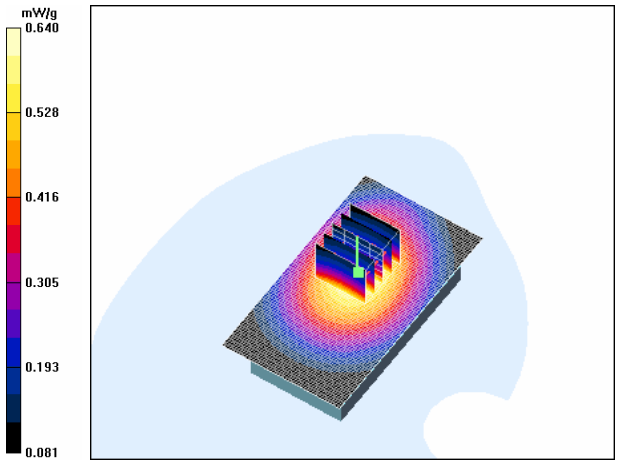
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086338

Communication System: 2-slot GPRS850
Frequency: 848.8 MHz; Duty Cycle: 1:4.2
Medium: BSL850; Medium Notes: T=21.6 C
Medium parameters used: f = 849 MHz; σ = 1 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1505; Probe Notes:
- ConvF(6.49, 6.49, 6.49); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn389; Calibrated: 2007-02-16
- Phantom: SAM2; Type: Twin Phantom; Serial: TP-1279
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body measurement – High - No accessory - Antenna facing phantom - BT active/Area Scan (51x91x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.639 mW/g

Body measurement - High - No accessory - Antenna facing phantom - BT active/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.6 V/m
Peak SAR (extrapolated) = 0.770 W/kg
SAR(1 g) = 0.604 mW/g
SAR(10 g) = 0.447 mW/g
Power Drift = 0.084 dB
Maximum value of SAR (measured) = 0.640 mW/g



Date/Time: 2008-01-11 13:32:48

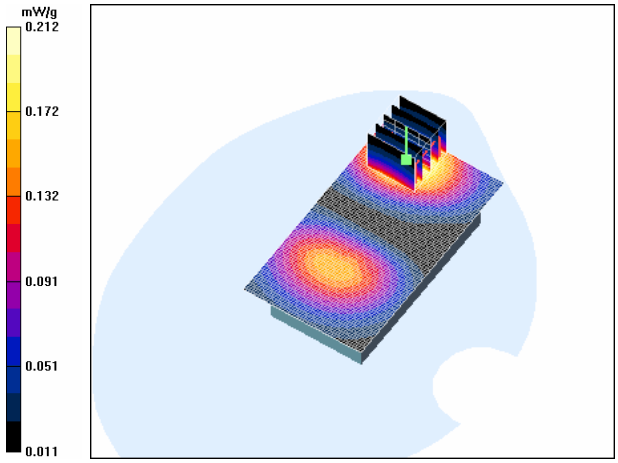
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: 2-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:4.2
Medium: 1900MHz Body; Medium Notes: Liquid temperature: 19.05C
Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 53.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1504; Probe Notes:
- ConvF(4.6, 4.6, 4.6); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn308; Calibrated: 2007-02-16
- Phantom: SAM 3; Type: Twin Phantom; Serial: NMP03311
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body measurement - Middle - No Accessory - Antenna facing phantom/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.213 mW/g

Body measurement - Middle - No Accessory - Antenna facing phantom/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.84 V/m
Peak SAR (extrapolated) = 0.285 W/kg
SAR(1 g) = 0.197 mW/g
SAR(10 g) = 0.128 mW/g
Power Drift = -0.026 dB
Maximum value of SAR (measured) = 0.212 mW/g



Date/Time: 2008-01-11 13:21:07

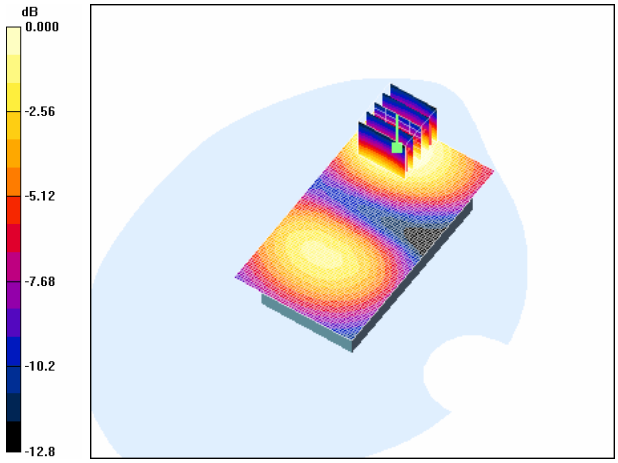
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: 2-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:4.2
Medium: 1900MHz Body; Medium Notes: Liquid temperature: 19.05C
Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 53.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1504; Probe Notes:
- ConvF(4.6, 4.6, 4.6); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn308; Calibrated: 2007-02-16
- Phantom: SAM 3; Type: Twin Phantom; Serial: NMP03311
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body measurement - Middle - HS-47 - Antenna facing phantom/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.204 mW/g

Body measurement - Middle - HS-47 - Antenna facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.47 V/m
Peak SAR (extrapolated) = 0.269 W/kg
SAR(1 g) = 0.187 mW/g
SAR(10 g) = 0.122 mW/g
Power Drift = 0.003 dB
Maximum value of SAR (measured) = 0.199 mW/g



Date/Time: 2008-01-24 20:26:45

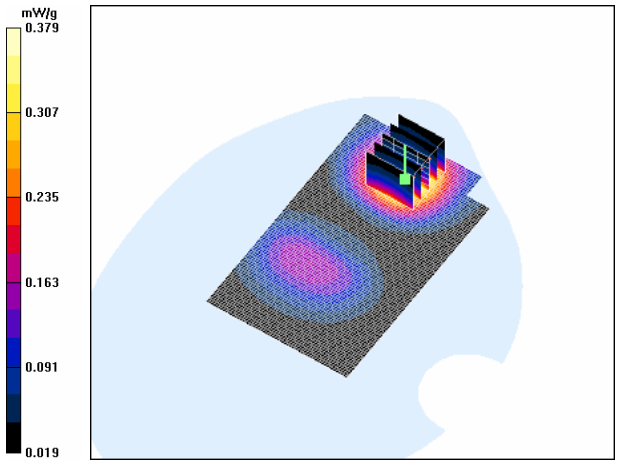
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: 2-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:4.2
Medium: Body 1900; Medium Notes: Medium Temperature: 22.0 C
Medium parameters used: f = 1880 MHz; σ = 1.46 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3119; Probe Notes:
- ConvF(5.02, 5.02, 5.02); Calibrated: 2007-10-24
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn710; Calibrated: 2007-10-16
- Phantom: SAM 8; Type: SAM Twin Phantom; Serial: TP-1408
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body - Middle - No Accessory - Display facing phantom/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.387 mW/g

Body - Middle - No Accessory - Display facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.99 V/m
Peak SAR (extrapolated) = 0.537 W/kg
SAR(1 g) = 0.350 mW/g
SAR(10 g) = 0.223 mW/g
Power Drift = -0.043 dB
Maximum value of SAR (measured) = 0.379 mW/g



Date/Time: 2008-01-24 20:15:22

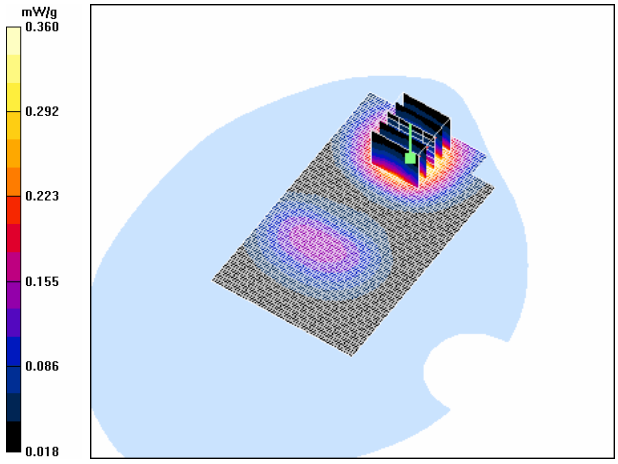
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: 2-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:4.2
Medium: Body 1900; Medium Notes: Medium Temperature: 22.0 C
Medium parameters used: f = 1880 MHz; σ = 1.46 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3119; Probe Notes:
- ConvF(5.02, 5.02, 5.02); Calibrated: 2007-10-24
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn710; Calibrated: 2007-10-16
- Phantom: SAM 8; Type: SAM Twin Phantom; Serial: TP-1408
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body - Middle - HS-47 - Display facing phantom/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.368 mW/g

Body - Middle - HS-47 - Display facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.56 V/m
Peak SAR (extrapolated) = 0.510 W/kg
SAR(1 g) = 0.335 mW/g
SAR(10 g) = 0.215 mW/g
Power Drift = -0.051 dB
Maximum value of SAR (measured) = 0.360 mW/g



Date/Time: 2008-01-24 21:31:42

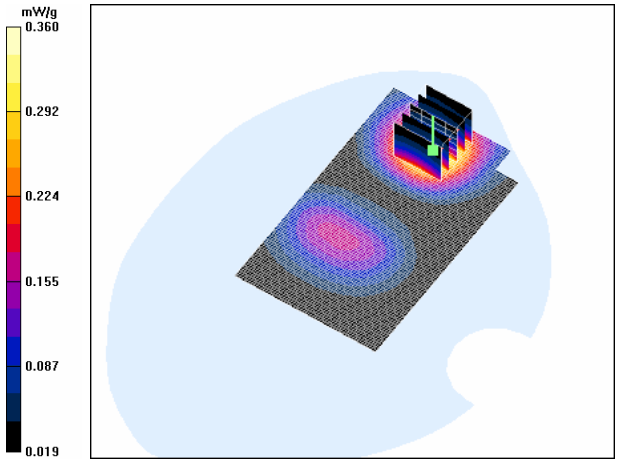
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: 2-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:4.2
Medium: Body 1900; Medium Notes: Medium Temperature: 22.0 C
Medium parameters used: f = 1880 MHz; σ = 1.46 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3119; Probe Notes:
- ConvF(5.02, 5.02, 5.02); Calibrated: 2007-10-24
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn710; Calibrated: 2007-10-16
- Phantom: SAM 8; Type: SAM Twin Phantom; Serial: TP-1408
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body – Middle - No Accessory - Display facing phantom - BT active/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.363 mW/g

Body - Middle - No Accessory - Display facing phantom - BT active/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.76 V/m
Peak SAR (extrapolated) = 0.498 W/kg
SAR(1 g) = 0.331 mW/g
SAR(10 g) = 0.212 mW/g
Power Drift = 0.012 dB
Maximum value of SAR (measured) = 0.360 mW/g



Date/Time: 2008-01-07 14:41:10

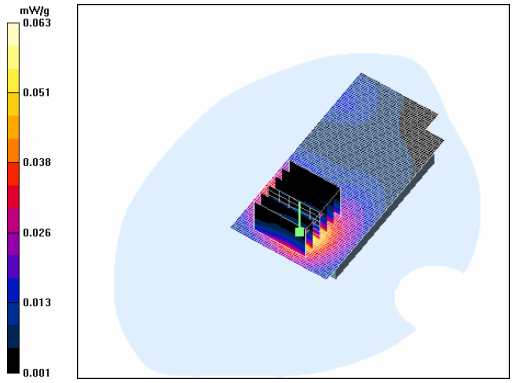
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

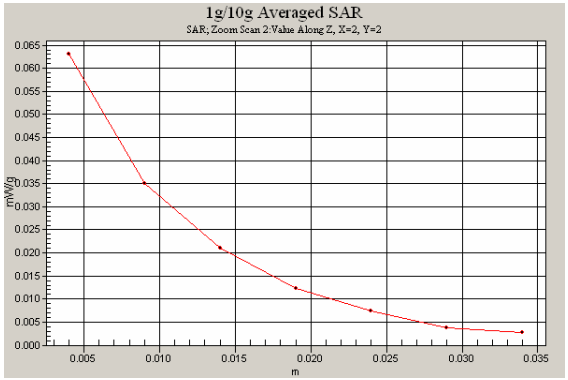
Communication System: WLAN2450
Frequency: 2442 MHz; Duty Cycle: 1:1
Medium: 2450MHz Body; Medium Notes: T=20.8C
Medium parameters used: f = 2442 MHz; σ = 1.99 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1504; Probe Notes:
- ConvF(4.02, 4.02, 4.02); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn308; Calibrated: 2007-02-16
- Phantom: SAM 3; Type: Twin Phantom; Serial: NMP03311
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body measurement - Middle - No accessory - Antenna facing phantom/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.061 mW/g

Body measurement - Middle - No accessory - Antenna facing phantom/Zoom Scan 2 (6x6x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.52 V/m
Peak SAR (extrapolated) = 0.110 W/kg
SAR(1 g) = 0.058 mW/g
SAR(10 g) = 0.033 mW/g
Power Drift = -0.019 dB
Maximum value of SAR (measured) = 0.063 mW/g





Date/Time: 2008-01-07 16:10:43

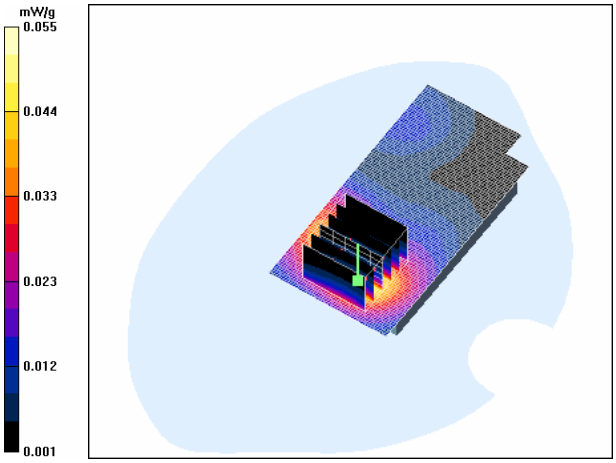
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: WLAN2450
Frequency: 2442 MHz; Duty Cycle: 1:1
Medium: 2450MHz Body; Medium Notes: T=20.8C
Medium parameters used: f = 2442 MHz; σ = 1.99 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1504; Probe Notes:
- ConvF(4.02, 4.02, 4.02); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn308; Calibrated: 2007-02-16
- Phantom: SAM 3; Type: Twin Phantom; Serial: NMP03311
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body measurement - High - HS-47 - Antenna facing phantom/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.053 mW/g

Body measurement - High - HS-47 - Antenna facing phantom/Zoom Scan 2 (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.11 V/m
Peak SAR (extrapolated) = 0.093 W/kg
SAR(1 g) = 0.051 mW/g
SAR(10 g) = 0.029 mW/g
Power Drift = -0.035 dB
Maximum value of SAR (measured) = 0.055 mW/g



Date/Time: 2008-01-25 18:21:49

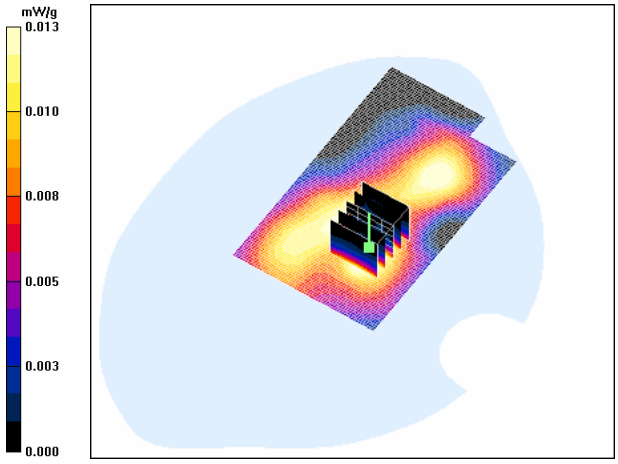
Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: WLAN2450
Frequency: 2442 MHz; Duty Cycle: 1:1
Medium: Body 2450; Medium Notes: Medium Temperature: t=21.8 C
Medium parameters used: f = 2442 MHz; σ = 1.97 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(4.12, 4.12, 4.12); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn339; Calibrated: 2007-06-12
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body - Middle - No Accessory - Display facing phantom/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.015 mW/g

Body - Middle - No Accessory - Display facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 2.13 V/m
Peak SAR (extrapolated) = 0.020 W/kg
SAR(1 g) = 0.012 mW/g
SAR(10 g) = 0.00714 mW/g
Power Drift = -0.125 dB
Maximum value of SAR (measured) = 0.013 mW/g



Date/Time: 2008-01-25 18:38:53

Test Laboratory: TCC Nokia
Type: RM-357; Serial: 004401016086361

Communication System: WLAN2450
Frequency: 2442 MHz; Duty Cycle: 1:1
Medium: Body 2450; Medium Notes: Medium Temperature: t=21.8 C
Medium parameters used: f = 2442 MHz; σ = 1.97 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(4.12, 4.12, 4.12); Calibrated: 2007-08-29
- Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))
- Electronics: DAE3 Sn339; Calibrated: 2007-06-12
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body - Middle - HS-47 - Display facing phantom/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.016 mW/g

Body - Middle - HS-47 - Display facing phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 2.20 V/m
Peak SAR (extrapolated) = 0.027 W/kg
SAR(1 g) = 0.014 mW/g
SAR(10 g) = 0.00776 mW/g
Power Drift = 0.277 dB
Maximum value of SAR (measured) = 0.015 mW/g