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T117 (EN ISO/IEC 17025)

SAR Compliance Test Report

Test report no.:	Salo_SAR_0910_04	**Date of report:**	2009-03-12
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Tested device:	RM-505		
FCC ID:	QVVRM-505	**IC:**	661AE-RM505
Supplement reports:	Salo_SAR_0910_05		

Testing has been carried out in accordance with:

47CFR §2.1093
Radiofrequency Radiation Exposure Evaluation: Portable Devices

FCC OET Bulletin 65 (Edition 97-01), Supplement C (Edition 01-01)
Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields

RSS-102
Evaluation Procedure for Mobile and Portable Radio Transmitters with Respect to Health Canada's Safety Code 6 for Exposure of Humans to Radio Frequency Fields

IEEE 1528 - 2003
IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Technique

Documentation: The documentation of the testing performed on the tested devices is archived for 15 years at TCC Nokia.

Test results: **The tested device complies with the requirements in respect of all parameters subject to the test.** The test results and statements relate only to the items tested. The test report shall not be reproduced except in full, without written approval of the laboratory.

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1. SUMMARY OF SAR TEST REPORT

1.1 Test Details

Period of test	2009-02-26 to 2009-03-06
SN, HW and SW numbers of tested device	SN: 04401/10/448325/6, HW: 2004, SW: v52.50.2009.05.1, DUT: 13508
Batteries used in testing	BP-4L, DUT: 13509, 13510, 13511, 13512, 13513, 13514
Headsets used in testing	HS-45, DUT: 13517 AD-54, DUT: 13518
Other accessories used in testing	-
State of sample	Prototype unit
Notes	-

1.2 Maximum Results

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

1.2.1 Head Configuration

Mode	Ch / *f* (MHz)	Radiated power	Position	Measured SAR value (1g avg)	Scaled* SAR value (1g avg)	SAR limit (1g avg)	Result
3-slot GPRS850	251 / 848.8	23.1 dBm ERP	Right, Cheek	0.468 W/kg	**0.52 W/kg**	1.6 W/kg	PASSED
2-slot GPRS1900	810 / 1909.8	24.2 dBm EIRP	Right, Cheek	0.409 W/kg	**0.46 W/kg**	1.6 W/kg	PASSED
WCDMA1900	9262 / 1852.4	15.7 dBm EIRP	Right, Cheek	0.525 W/kg	**0.59 W/kg**	1.6 W/kg	PASSED
WLAN2450	7 / 2442.0	18.6 dBm EIRP	Right, Cheek	0.139 W/kg	**0.16 W/kg**	1.6 W/kg	PASSED
3-slot GPRS850 + WLAN2450	-	-	Right, Cheek	0.607 W/kg	**0.68 W/kg**	1.6 W/kg	PASSED
2-slot GPRS1900 + WLAN2450	-	-	Right, Cheek	0.548 W/kg	**0.61 W/kg**	1.6 W/kg	PASSED
WCDMA1900 + WLAN2450	-	-	Right, Cheek	0.664 W/kg	**0.74 W/kg**	1.6 W/kg	PASSED

1.2.2 Body Worn Configuration

Mode	Ch / *f* (MHz)	Radiated power	Separation distance	Measured SAR value (1g avg)	Scaled* SAR value (1g avg)	SAR limit (1g avg)	Result
3-slot GPRS850	251 / 848.8	23.1 dBm ERP	1.5 cm	0.812 W/kg	**0.91 W/kg**	1.6 W/kg	PASSED
2-slot GPRS1900	661 / 1880	25.8 dBm EIRP	1.5 cm	0.356 W/kg	**0.40 W/kg**	1.6 W/kg	PASSED
WCDMA1900	9262 / 1852.4	15.7 dBm EIRP	1.5 cm	0.400 W/kg	**0.45 W/kg**	1.6 W/kg	PASSED
WLAN2450	7 / 2442.0	18.6 dBm EIRP	1.5 cm	0.094 W/kg	**0.11 W/kg**	1.6 W/kg	PASSED
3-slot GPRS850 + WLAN2450	-	-	1.5 cm	0.906 W/kg	**1.01 W/kg**	1.6 W/kg	PASSED
2-slot GPRS1900 + WLAN2450	-	-	1.5 cm	0.450 W/kg	**0.50 W/kg**	1.6 W/kg	PASSED
WCDMA1900 + WLAN2450	-	-	1.5 cm	0.494 W/kg	**0.55 W/kg**	1.6 W/kg	PASSED

*SAR values are scaled up by 12% to cover measurement drift. As a consequence of this conservative scaling of the SAR values, the contribution of measurement drift to the overall measurement uncertainty (Section 6) is reduced to zero.

1.2.3 Maximum Drift

Maximum drift covered by 12% scaling up of the SAR values	Maximum drift during measurements
0.5dB	0.49 dB

1.2.4 Measurement Uncertainty

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

2. DESCRIPTION OF THE DEVICE UNDER TEST

Device category	Portable
Exposure environment	General population / uncontrolled

Modes of Operation	Bands	Modulation Mode	Duty Cycle	Transmitter Frequency Range (MHz)
GSM	850 1900	GMSK	1/8	824 – 849 1850 – 1910
GPRS	850 1900	GMSK	1/8 to 3/8	824 – 849 1850 – 1910
EGPRS	850 1900	GMSK / 8PSK	1/8 to 3/8	824 – 849 1850 – 1910
WCDMA	1900 (Band II)		1	1852 – 1908
BT	2450	GFSK	1	2402 – 2480
WLAN	2450	11Mbps QPSK	1	2412 – 2462 2412 – 2472

Outside of USA and Canada, the transmitter of the device is capable of operating also in GSM/GPRS/EGPRS900, GSM/GPRS/EGPRS1800, WCDMA900 and WCDMA2100 bands which are not part of this filing.

This device has Voice-over-IP/Dual Transfer Mode capability for use at the ear. Therefore, SAR for multi slot GPRS mode was evaluated against the head profile of the phantom. Dual Transfer Mode is a feature that utilises the multi-slot GPRS capability in this device; it allows simultaneous transmission of voice and data during the same call, using the same transmitter and antenna.

2.1 Description of the Antenna

The device has an internal antenna. The main cellular antenna is located at the bottom of the device underneath the back surface.

3. TEST CONDITIONS

3.1 Temperature and Humidity

Ambient temperature (°C):	19.9 to 22.9
Ambient humidity (RH %):	28 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”.

When testing GSM/GPRS/EGPRS modes, comparative 1-slot, 2-slot and 3-slot SAR measurements are initially made for the same test configuration and the same frequency to determine which mode has the highest SAR value i.e. the highest average power. These tests are carried out with much reduced measurement uncertainty as they are relative tests in which the device does not change either its position or its operating frequency. Once the highest SAR mode has been determined, full SAR testing then takes place in the identified mode. It should be noted that the peak power levels given in the Results tables (Section 7) are poor indicators of the highest SAR modes as a) they are radiated tests and therefore subject to significant measurement uncertainty and b) take no account of the number of time slots. Head SAR checking in 8PSK EGPRS mode was subsequently performed in the maximum SAR test configuration for GSM/GPRS.

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

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

4. DESCRIPTION OF THE TEST EQUIPMENT

4.1 Measurement System and Components

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

The following table lists calibration dates of SPEAG components:

Test Equipment	Serial Number	Calibration interval	Calibration expiry
DAE 4	555	12 months	2009-11
DAE 4	793	12 months	2009-04
E-field Probe ES3DV6	3131	12 months	2010-02
E-field Probe ES3DV3	3165	12 months	2009-04
Dipole Validation Kit, D835V2	480	24 months	2009-05
Dipole Validation Kit, D1900V2	5d030	24 months	2010-01
Dipole Validation Kit, D2450V2	729	24 months	2010-01
DASY4 software	Version 4.7	-	-

Additional test equipment used in testing:

Test Equipment	Model	Serial Number	Calibration interval	Calibration expiry
Signal Generator	SML03	101265	12 months	2009-07
Amplifier	ZHL-42 (SMA)	N072095-5	12 months	2009-07
Power Meter	NRVS	849305/028	12 months	2009-07
Power Sensor	NRV-Z32	839176/020	12 months	2009-07
Call Tester	CMU 200	101111	-	-
Call Tester	CMU 200	103293	-	-
Vector Network Analyzer	8753E	US38432928	12 months	2009-07
Dielectric Probe Kit	85070B	US33020420	-	-

4.1.1 Isotropic E-field Probe Type ES3DV6

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 ES3DV3

Construction	Symmetrical design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., butyl diglycol)
Calibration	Calibration certificate in Appendix C
Frequency	10 MHz to 4 GHz (dosimetry); Linearity: ± 0.2 dB (30 MHz to 4 GHz)
Directivity	± 0.2 dB in HSL (rotation around probe axis) ± 0.3 dB in HSL (rotation normal to probe axis)
Dynamic Range	5 µW/g to > 100 mW/g; Linearity: ± 0.2 dB
Dimensions	Overall length: 330 mm Tip length: 20 mm Body diameter: 12 mm Tip diameter: 3.9 mm Distance from probe tip to dipole centers: 2.0 mm

Application	General dosimetry up to 4 GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms

4.2 Phantoms

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

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

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

4.3 Tissue Simulants

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

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

4.3.1 Tissue Simulant Recipes

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

800MHz band

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

1900MHz band

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

2450MHz band

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

4.3.2 System Checking

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

System checking, head tissue simulant

f [MHz]	Description	SAR [W/kg], 1g	Dielectric Parameters		Temp [°C]
			ε_r	σ [S/m]	
	Reference result	2.29	41.6	0.90	
	± 10% window	2.06 – 2.52			
835	2009-03-05	2.48	40.4	0.92	21.0
	Reference result	10.2	38.5	1.46	
	± 10% window	9.2 – 11.2			
1900	2009-02-26	10.4	38.0	1.47	21.0
	2009-03-04	10.7	38.5	1.46	21.0
	Reference result	14.3	37.8	1.82	
	± 10% window	12.9 – 15.7			
2450	2009-03-02	14.6	37.8	1.89	21.0
	2009-03-03	14.7	38.1	1.86	21.0

System checking, body tissue simulant

f [MHz]	Description	SAR [W/kg], 1g	Dielectric Parameters		Temp [°C]
			ε_r	σ [S/m]	
	Reference result	9.62	53.1	1.54	
	± 10% window	8.66 – 10.58			
1900	2009-03-06	9.93	51.7	1.55	21.0

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

4.3.3 Tissue Simulants used in the Measurements

Head tissue simulant measurements

f [MHz]	Description	Dielectric Parameters		Temp [°C]
		ε_r	σ [S/m]	
	Recommended value	41.5	0.90	
	± 5% window	39.4 – 43.6	0.86 – 0.95	
836	2009-03-05	40.4	0.92	21.0
	Recommended value	40.0	1.40	
	± 5% window	38.0 – 42.0	1.33 – 1.47	
1880	2009-02-26	38.1	1.45	21.0
	2009-03-04	38.6	1.44	21.0
	Recommended value	39.2	1.79	
	± 5% window	37.3 – 41.2	1.70 – 1.88	
2442	2009-03-02	37.8	1.87	21.0
	2009-03-03	38.1	1.84	21.0

Body tissue simulant measurements

f [MHz]	Description	Dielectric Parameters ε_r	Dielectric Parameters σ [S/m]	Temp [°C]
	Recommended value	55.2	0.97	
	± 5% window	52.4 – 58.0	0.92 – 1.02	
836	2009-03-05	52.6	1.00	21.0
	Recommended value	53.3	1.52	
	± 5% window	50.6 – 56.0	1.44 – 1.60	
1880	2009-03-06	51.8	1.54	21.0
	Recommended value	52.7	1.94	
	± 5% window	50.1 – 55.3	1.85 – 2.04	
2442	2009-03-03	51.0	2.01	21.0

DESCRIPTION OF THE TEST PROCEDURE

4.4 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

4.5 Test Positions

4.5.1 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".

4.5.2 Body Worn Configuration

The device was placed in the SPEAG holder using the Nokia spacer and placed below the flat section of the phantom. The distance between the device and the phantom was kept at the

separation distance indicated in Section 1.2.2 using a separate flat spacer that was removed before the start of the measurements. The device was oriented with its back facing the phantom since this orientation gives higher results.

4.6 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.

4.7 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.

5. 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**	

6. RESULTS

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

850MHz Head SAR results

Mode	Option used	Test configuration		SAR, averaged over 1g (W/kg)		
				Ch 128 824.2 MHz	Ch 190 836.6 MHz	Ch 251 848.8 MHz
GSM	Phone slide closed Camera slide closed	Power		23.1 dBm	23.9 dBm	24.8 dBm
		Left	Cheek	-	0.158	-
			Tilt	-	-	-
		Right	Cheek	-	-	-
			Tilt	-	-	-
2-slot GPRS	Phone slide closed Camera slide closed	Power		23.3 dBm	24.0 dBm	24.9 dBm
		Left	Cheek	-	0.305	-
			Tilt	-	-	-
		Right	Cheek	-	-	-
			Tilt	-	-	-
3-slot GPRS	Phone slide closed Camera slide closed	Power		21.5 dBm	22.4 dBm	23.1 dBm
		Left	Cheek	-	0.308	-
			Tilt	-	0.307	-
		Right	Cheek	0.410	0.419	**0.468**
			Tilt	-	0.297	-
3-slot 8PSK GPRS	Phone slide closed Camera slide closed	Power		12.8 dBm	13.5 dBm	15.1 dBm
		Left	Cheek	-	-	-
			Tilt	-	-	-
		Right	Cheek	-	-	0.071
			Tilt	-	-	-
3-slot GPRS	Phone slide closed Camera slide open	Right, Cheek		0.392	0.427	0.464

1900MHz Head SAR results

Mode	Option used	Test configuration		SAR, averaged over 1g (W/kg)		
				Ch 512 1850.2 MHz	Ch 661 1880.0 MHz	Ch 810 1909.8 MHz
GSM	Phone slide closed Camera slide closed	Power		23.1 dBm	25.8 dBm	24.0 dBm
		Left	Cheek	-	0.162	-
			Tilt	-	-	-
		Right	Cheek	-	-	-
			Tilt	-	-	-
2-slot GPRS	Phone slide closed Camera slide closed	Power		22.9 dBm	25.8 dBm	24.2 dBm
		Left	Cheek	-	0.298	-
			Tilt	-	0.229	-
		Right	Cheek	0.343	0.371	**0.395**
			Tilt	-	0.218	-
3-slot GPRS	Phone slide closed Camera slide closed	Power		21.0 dBm	24.0 dBm	22.3 dBm
		Left	Cheek	-	0.292	-
			Tilt	-	-	-
		Right	Cheek	-	-	-
			Tilt	-	-	-
2-slot 8PSK GPRS	Phone slide closed Camera slide closed	Power		18.9 dBm	21.3 dBm	18.4 dBm
		Left	Cheek	-	-	-
			Tilt	-	-	-
		Right	Cheek	-	-	0.093
			Tilt	-	-	-
2-slot GPRS	Phone slide closed Camera slide open	Right, Cheek		0.355	0.356	**0.409**
Mode	Option used	Test configuration		SAR, averaged over 1g (W/kg)		
				Ch 9262 1852.4 MHz	Ch 9400 1880.0 MHz	Ch 9538 1907.6 MHz
WCDMA	Phone slide closed Camera slide closed	Power		15.7 dBm	16.4 dBm	15.5 dBm
		Left	Cheek	-	0.290	-
			Tilt	-	0.240	-
		Right	Cheek	**0.525**	0.467	0.489
			Tilt	-	0.229	-
WCDMA	Phone slide closed Camera slide open	Right, Cheek		0.493	0.437	0.513

2450MHz Head SAR results

Mode	Option used	Test configuration		SAR, averaged over 1g (W/kg)		
				Ch 1 2412.0 MHz	Ch 7 2442.0 MHz	Ch 11 2462.0 MHz
WLAN	Phone slide closed Camera slide closed	Power		16.8 dBm	18.6 dBm	19.0 dBm
		Left	Cheek	-	0.133	-
			Tilt	-	0.117	-
		Right	Cheek	0.084	**0.139**	0.101
			Tilt	-	0.096	-
WLAN	Phone slide closed Camera slide open	Right, Cheek		0.110	0.110	0.102

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

850MHz Body SAR results

Mode	Option used	Device orientation	Test configuration	SAR, averaged over 1g (W/kg)		
				Ch 128 824.2 MHz	Ch 190 836.6 MHz	Ch 251 848.8 MHz
3-slot GPRS	Phone slide closed Camera slide closed		Power	21.5 dBm	22.4 dBm	23.1 dBm
		Display facing phantom	Without headset	-	-	-
			Headset HS-45 + AD-54	-	-	-
		Back facing phantom	Without headset	0.625	0.701	**0.812**
			Headset HS-45 + AD-54	-	0.466	-

1900MHz Body SAR results

Mode	Option used	Device orientation	Test configuration	SAR, averaged over 1g (W/kg)		
				Ch 512 1850.2 MHz	Ch 661 1880.0 MHz	Ch 810 1909.8 MHz
2-slot GPRS	Phone slide closed Camera slide closed		Power	22.9 dBm	25.8 dBm	24.2 dBm
		Display facing phantom	Without headset	-	-	-
			Headset HS-45 + AD-54	-	-	-
		Back facing phantom	Without headset	0.339	**0.356**	0.314
			Headset HS-45 + AD-54	-	0.333	-
	Option used	**Device orientation**	**Test configuration**	**SAR, averaged over 1g (W/kg)**		
				Ch 9262 1852.4 MHz	**Ch 9400 1880.0 MHz**	**Ch 9538 1907.6 MHz**
WCDMA	Phone slide closed Camera slide closed		Power	15.7 dBm	16.4 dBm	15.5 dBm
		Display facing phantom	Without headset	-	-	-
			Headset HS-45 + AD-54	-	-	-
		Back facing phantom	Without headset	**0.400**	0.368	0.358
			Headset HS-45 + AD-54		0.345	

2450MHz Body SAR results

Mode	Option used	Device orientation	Test configuration	SAR, averaged over 1g (W/kg)		
				Ch 1 2412.0 MHz	Ch 7 2442.0 MHz	Ch 11 2462.0 MHz
WLAN	Phone slide closed Camera slide closed		Power	16.8 dBm	18.6 dBm	19.0 dBm
		Display facing phantom	Without headset	-	-	-
			Headset HS-45 + AD-54	-	-	-
		Back facing phantom	Without headset	0.069	**0.094**	0.090
			Headset HS-45 + AD-54	-	0.090	-

Simultaneous transmissions: Combined SAR results

Test configuration	Max. 1g SAR results				Combined 1g SAR values		
	WLAN	3-slot GPRS850	2-slot GPRS1900	WCDMA 1900	WLAN + 3-slot GPRS850	WLAN + 2-slot GPRS1900	WLAN + WCDMA 1900
Head: Left, Cheek	0.133	0.308	0.298	0.290	0.441	0.431	0.423
Head: Left, Tilt	0.117	0.307	0.229	0.240	0.424	0.346	0.357
Head: Right, Cheek	0.139	0.468	0.409	0.525	**0.607**	**0.548**	**0.664**
Head: Right, Tilt	0.096	0.297	0.218	0.229	0.393	0.314	0.325
Body: Without Headset	0.094	0.812	0.356	0.400	**0.906**	**0.450**	**0.494**
Body: Headset HS-45 + AD-54	0.090	0.466	0.333	0.345	0.556	0.423	0.435

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: 2009-03-05 08:50:34

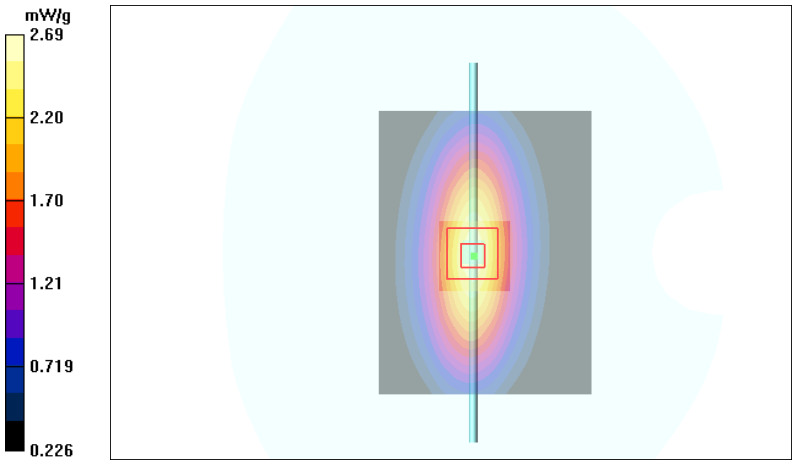
Test Laboratory: TCC Nokia
Type: D835V2; Serial: D835V2 - SN:480

Communication System: CW835
Frequency: 835 MHz; Duty Cycle: 1:1
Medium: HSL850; Medium Notes: t=20.6 C
Medium parameters used: f = 835 MHz; σ = 0.92 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3131
- ConvF(5.7, 5.7, 5.7); Calibrated: 2009-02-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2008-11-07
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 184

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.64 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.7 V/m
Peak SAR (extrapolated) = 3.77 W/kg
SAR(1 g) = 2.48 mW/g
SAR(10 g) = 1.6 mW/g
Power Drift = -0.025 dB
Maximum value of SAR (measured) = 2.69 mW/g



Date/Time: 2009-02-26 10:53:14

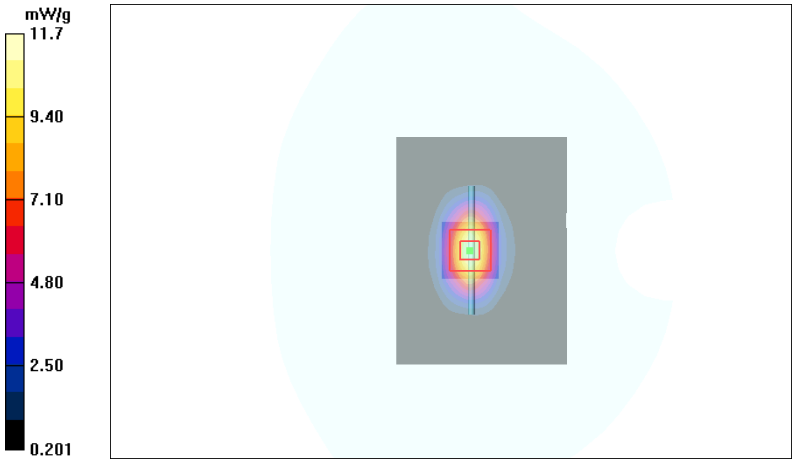
Test Laboratory: TCC Nokia
Type: D1900V2; Serial: D1900V2 - SN:5d030

Communication System: CW1900
Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: HSL1900; Medium Notes: t=20.9 C
Medium parameters used: f = 1900 MHz; σ = 1.47 mho/m; ε_r = 38; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(5.14, 5.14, 5.14); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 184

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 12.2 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 90.6 V/m
Peak SAR (extrapolated) = 19.7 W/kg
SAR(1 g) = 10.4 mW/g
SAR(10 g) = 5.33 mW/g
Power Drift = 0.027 dB
Maximum value of SAR (measured) = 11.7 mW/g



Date/Time: 2009-03-04 09:37:29

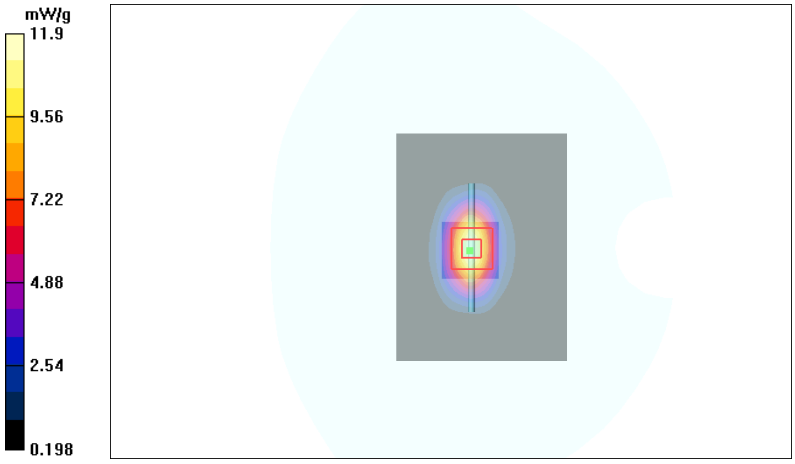
Test Laboratory: TCC Nokia
Type: D1900V2; Serial: D1900V2 - SN:5d030

Communication System: CW1900
Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: HSL1900; Medium Notes: t=21.1 C
Medium parameters used: f = 1900 MHz; σ = 1.46 mho/m; ε_r = 38.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(5.14, 5.14, 5.14); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 184

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 12.5 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 92.0 V/m
Peak SAR (extrapolated) = 20.3 W/kg
SAR(1 g) = 10.7 mW/g
SAR(10 g) = 5.47 mW/g
Power Drift = -0.017 dB
Maximum value of SAR (measured) = 11.9 mW/g



Date/Time: 2009-03-02 12:24:31

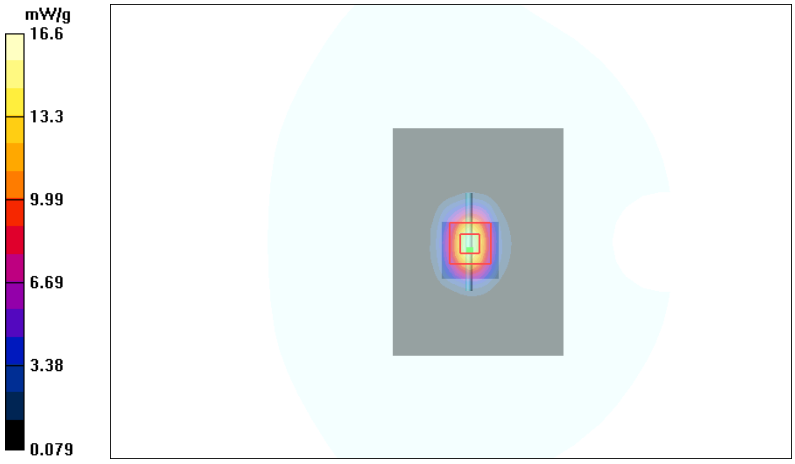
Test Laboratory: TCC Nokia
Type: D2450V2; Serial: D2450V2 - SN:729

Communication System: CW2450
Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: HSL2450; Medium Notes: t=20.7 C
Medium parameters used: f = 2450 MHz; σ = 1.89 mho/m; ε_r = 37.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(4.57, 4.57, 4.57); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 184

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 17.2 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 95.7 V/m
Peak SAR (extrapolated) = 31.2 W/kg
SAR(1 g) = 14.6 mW/g
SAR(10 g) = 6.69 mW/g
Power Drift = -0.011 dB
Maximum value of SAR (measured) = 16.6 mW/g



Date/Time: 2009-03-03 09:34:11

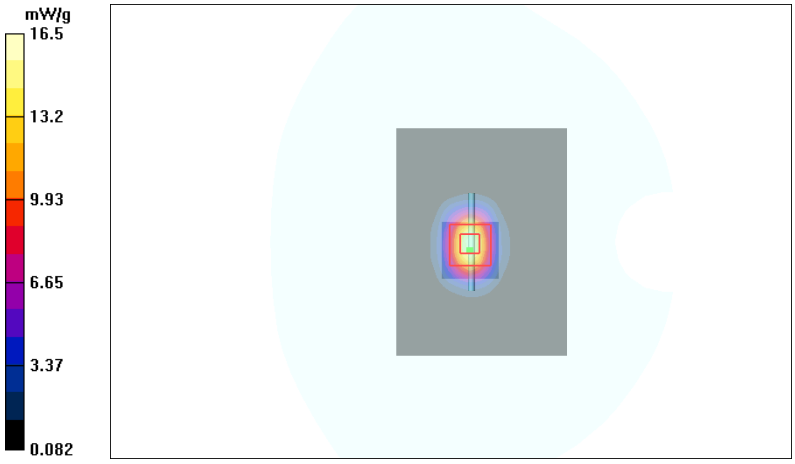
Test Laboratory: TCC Nokia
Type: D2450V2; Serial: D2450V2 - SN:729

Communication System: CW2450
Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: HSL2450; Medium Notes: t=20.3 C
Medium parameters used: f = 2450 MHz; σ = 1.86 mho/m; ε_r = 38.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(4.57, 4.57, 4.57); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 184

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 17.8 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 95.7 V/m
Peak SAR (extrapolated) = 31.3 W/kg
SAR(1 g) = 14.7 mW/g
SAR(10 g) = 6.71 mW/g
Power Drift = 0.004 dB
Maximum value of SAR (measured) = 16.5 mW/g



Date/Time: 2009-03-06 09:54:53

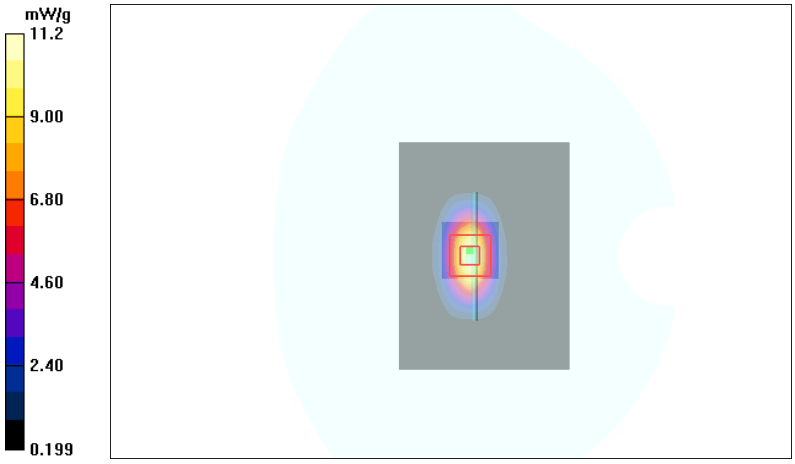
Test Laboratory: TCC Nokia
Type: D1900V2; Serial: D1900V2 - SN:5d030

Communication System: CW1900
Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: BSL1900; Medium Notes: t=20.2 C
Medium parameters used: f = 1900 MHz; σ = 1.55 mho/m; ε_r = 51.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(5.23, 5.23, 5.23); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 184

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 12.0 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 84.3 V/m
Peak SAR (extrapolated) = 18.6 W/kg
SAR(1 g) = 9.93 mW/g
SAR(10 g) = 5.11 mW/g
Power Drift = 0.028 dB
Maximum value of SAR (measured) = 11.2 mW/g



APPENDIX B: MEASUREMENT SCANS

Date/Time: 2009-03-05 09:22:24

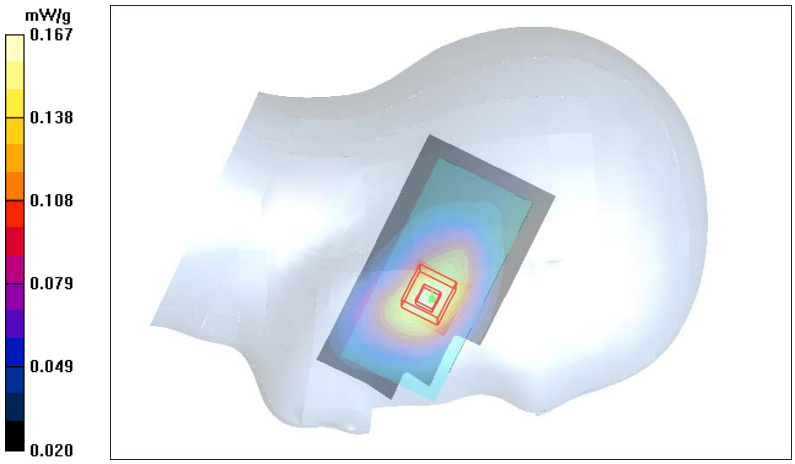
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: GSM850
Frequency: 836.6 MHz; Duty Cycle: 1:8.3
Medium: HSL850; Medium Notes: t=20.6 C
Medium parameters used: f = 837 MHz; σ = 0.922 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3131
- ConvF(5.7, 5.7, 5.7); Calibrated: 2009-02-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: : 2008-11-07
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle - Phone Slide Closed - Camera Slide Closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.166 mW/g

Cheek position - Middle - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 5.82 V/m
Peak SAR (extrapolated) = 0.193 W/kg
SAR(1 g) = 0.158 mW/g
SAR(10 g) = 0.117 mW/g
Power Drift = -0.282 dB
Maximum value of SAR (measured) = 0.167 mW/g



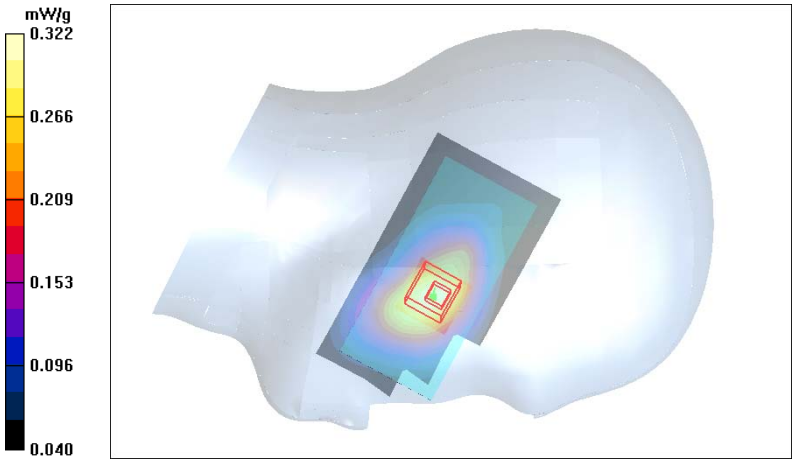
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: 2-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:4.2
Medium: HSL850; Medium Notes: t=20.6 C
Medium parameters used: f = 837 MHz; σ = 0.922 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3131
- ConvF(5.7, 5.7, 5.7); Calibrated: 2009-02-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: : 2008-11-07
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle - Phone Slide Closed - Camera Slide Closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.325 mW/g

Cheek position - Middle - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.87 V/m
Peak SAR (extrapolated) = 0.378 W/kg
SAR(1 g) = 0.305 mW/g
SAR(10 g) = 0.227 mW/g
Power Drift = 0.091 dB
Maximum value of SAR (measured) = 0.322 mW/g



Date/Time: 2009-03-05 09:51:41

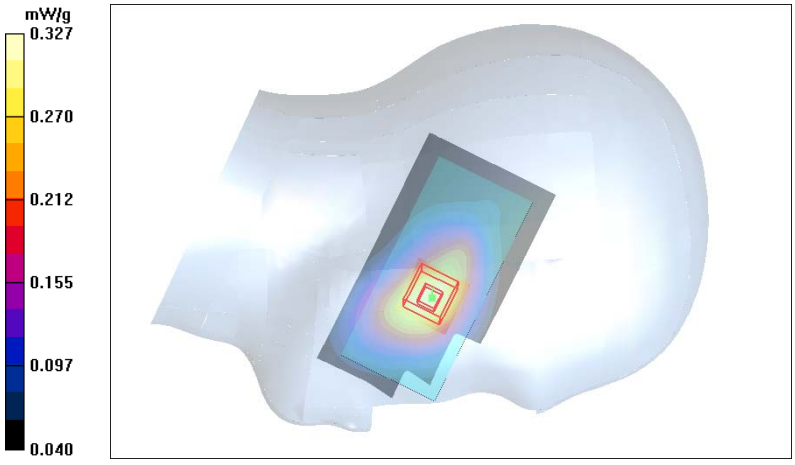
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: 3-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:2.8
Medium: HSL850; Medium Notes: t=20.6 C
Medium parameters used: f = 837 MHz; σ = 0.922 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3131
- ConvF(5.7, 5.7, 5.7); Calibrated: 2009-02-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: : 2008-11-07
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle - Phone Slide Closed - Camera Slide Closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.328 mW/g

Cheek position - Middle - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.94 V/m
Peak SAR (extrapolated) = 0.377 W/kg
SAR(1 g) = 0.308 mW/g
SAR(10 g) = 0.231 mW/g
Power Drift = 0.229 dB
Maximum value of SAR (measured) = 0.327 mW/g



Date/Time: 2009-03-05 10:08:43

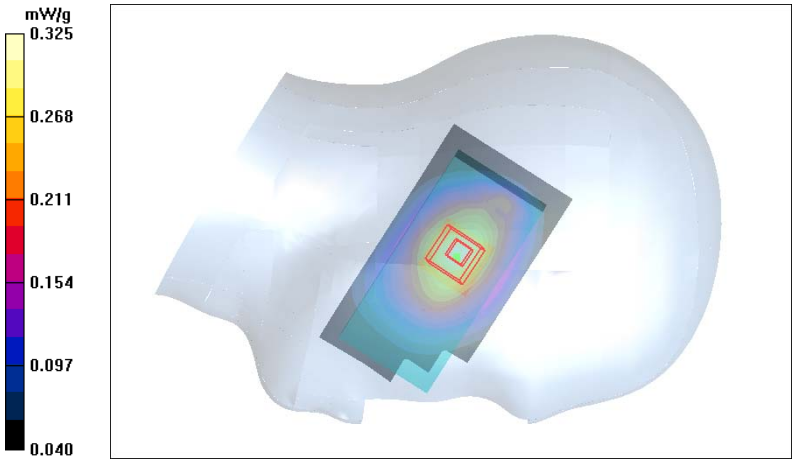
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: 3-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:2.8
Medium: HSL850; Medium Notes: t=20.6 C
Medium parameters used: f = 837 MHz; σ = 0.922 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3131
- ConvF(5.7, 5.7, 5.7); Calibrated: 2009-02-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: : 2008-11-07
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - Middle - Phone Slide Closed - Camera Slide Closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.316 mW/g

Tilt position - Middle - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 14.9 V/m
Peak SAR (extrapolated) = 0.405 W/kg
SAR(1 g) = 0.307 mW/g
SAR(10 g) = 0.222 mW/g
Power Drift = 0.096 dB
Maximum value of SAR (measured) = 0.325 mW/g



Date/Time: 2009-03-05 11:37:42

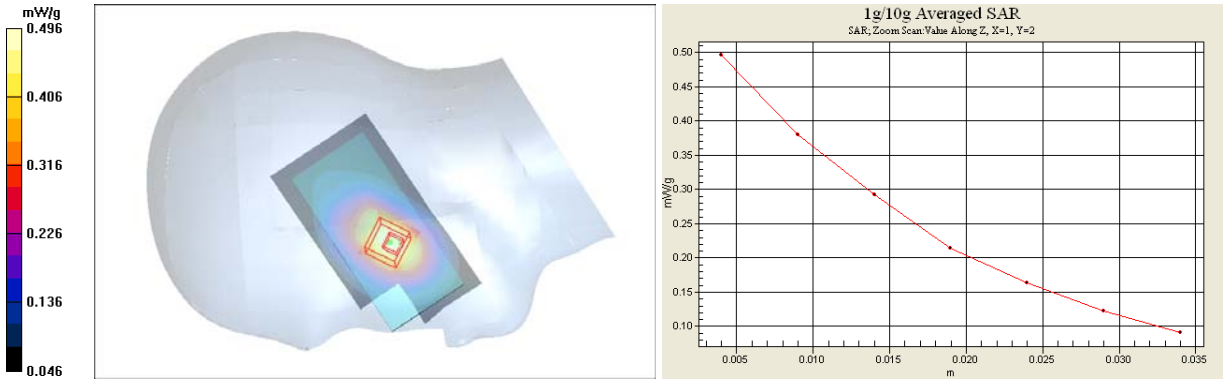
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: 3-slot GPRS850
Frequency: 848.8 MHz; Duty Cycle: 1:2.8
Medium: HSL850; Medium Notes: t=20.6 C
Medium parameters used: f = 849 MHz; σ = 0.93 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3131
- ConvF(5.7, 5.7, 5.7); Calibrated: 2009-02-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: : 2008-11-07
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - High - Phone Slide Closed - Camera Slide Closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.520 mW/g

Cheek position - High - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.98 V/m
Peak SAR (extrapolated) = 0.594 W/kg
SAR(1 g) = 0.468 mW/g
SAR(10 g) = 0.339 mW/g
Power Drift = 0.132 dB
Maximum value of SAR (measured) = 0.496 mW/g



Date/Time: 2009-03-05 10:27:53

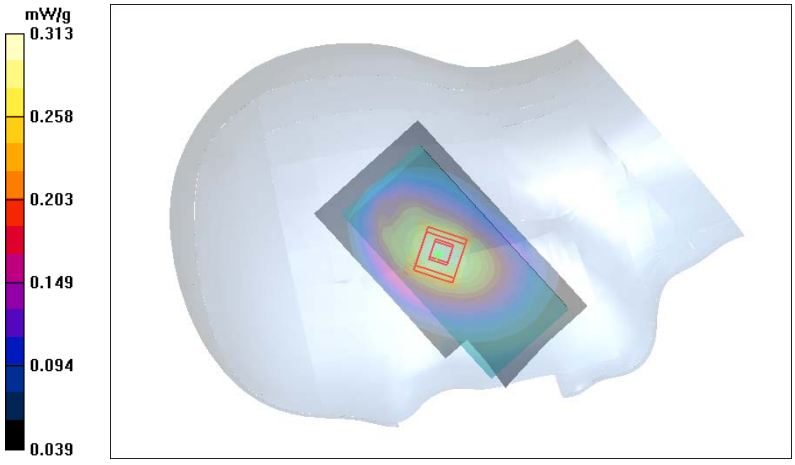
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: 3-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:2.8
Medium: HSL850; Medium Notes: t=20.6 C
Medium parameters used: f = 837 MHz; σ = 0.922 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3131
- ConvF(5.7, 5.7, 5.7); Calibrated: 2009-02-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: : 2008-11-07
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - Middle - Phone Slide Closed - Camera Slide Closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.316 mW/g

Tilt position - Middle - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 14.4 V/m
Peak SAR (extrapolated) = 0.380 W/kg
SAR(1 g) = 0.297 mW/g
SAR(10 g) = 0.217 mW/g
Power Drift = 0.058 dB
Maximum value of SAR (measured) = 0.313 mW/g



Date/Time: 2009-03-05 12:45:55

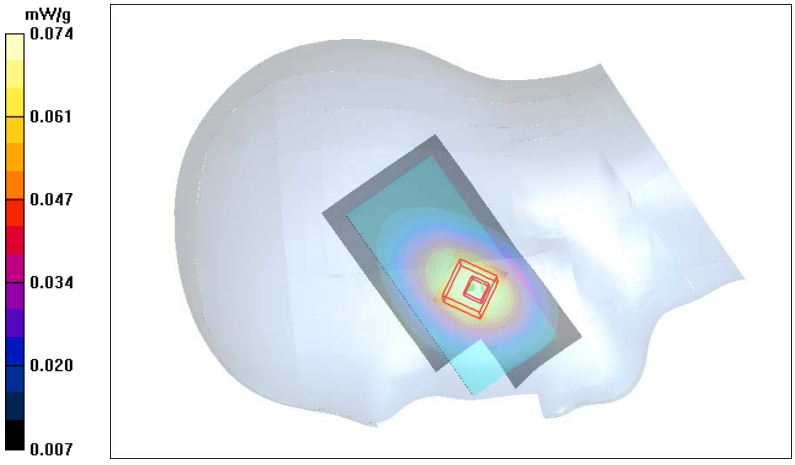
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: 3-slot 8PSK EGPRS850
Frequency: 849 MHz; Duty Cycle: 1:2.8
Medium: HSL850; Medium Notes: t=20.6 C
Medium parameters used: f = 849 MHz; σ = 0.93 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3131
- ConvF(5.7, 5.7, 5.7); Calibrated: 2009-02-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: : 2008-11-07
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - High - Phone Slide Closed - Camera Slide Closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.076 mW/g

Cheek position - High - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 3.30 V/m
Peak SAR (extrapolated) = 0.092 W/kg
SAR(1 g) = 0.071 mW/g
SAR(10 g) = 0.052 mW/g
Power Drift = 0.490 dB
Maximum value of SAR (measured) = 0.074 mW/g



Date/Time: 2009-03-05 11:53:08

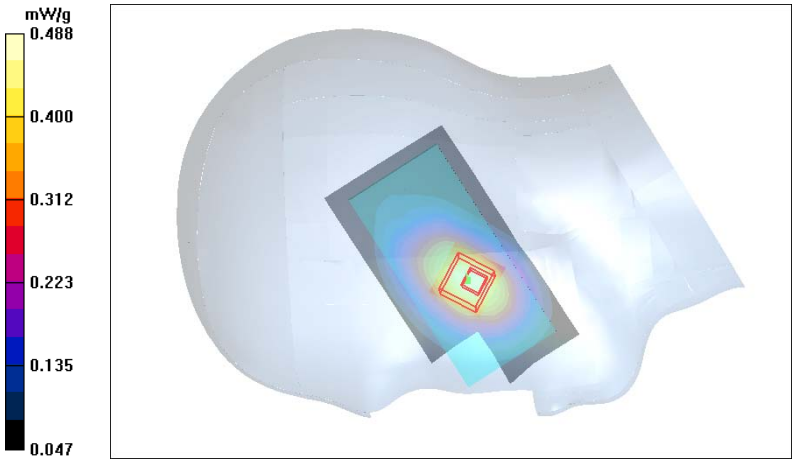
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: 3-slot GPRS850
Frequency: 848.8 MHz; Duty Cycle: 1:2.8
Medium: HSL850; Medium Notes: t=20.6 C
Medium parameters used: f = 849 MHz; σ = 0.93 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3131
- ConvF(5.7, 5.7, 5.7); Calibrated: 2009-02-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: : 2008-11-07
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - High - Phone Slide Closed - Camera Slide Open/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.504 mW/g

Cheek position - High - Phone Slide Closed - Camera Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 9.01 V/m
Peak SAR (extrapolated) = 0.614 W/kg
SAR(1 g) = 0.464 mW/g
SAR(10 g) = 0.340 mW/g
Power Drift = -0.110 dB
Maximum value of SAR (measured) = 0.488 mW/g



Date/Time: 2009-02-26 11:37:32

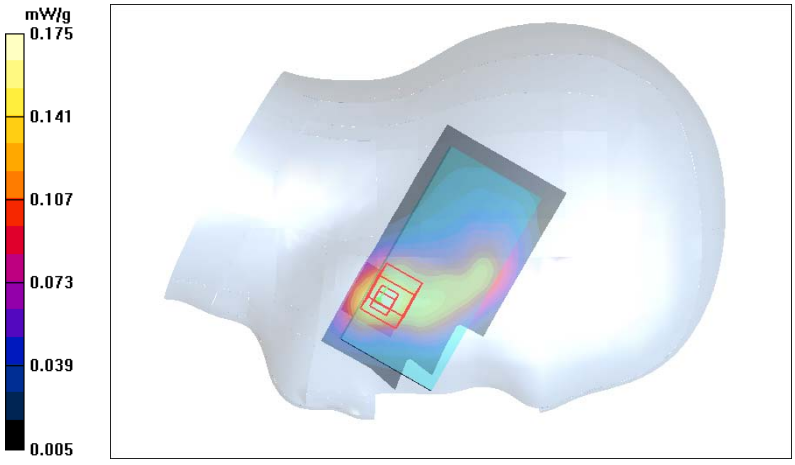
Test Laboratory: The name of your organization
Type: RM-505; Serial: 004401/10/448325/6

Communication System: GSM1900
Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium: HSL1900; Medium Notes: t=20.6C
Medium parameters used: f = 1880 MHz; σ = 1.45 mho/m; ε_r = 38.1; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(5.14, 5.14, 5.14); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle - Phone Slide Closed - Camera Slide Closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.181 mW/g

Cheek position - Middle - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 4.61 V/m
Peak SAR (extrapolated) = 0.271 W/kg
SAR(1 g) = 0.162 mW/g
SAR(10 g) = 0.096 mW/g
Power Drift = -0.159 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) = 0.175 mW/g



Date/Time: 2009-02-26 11:54:44

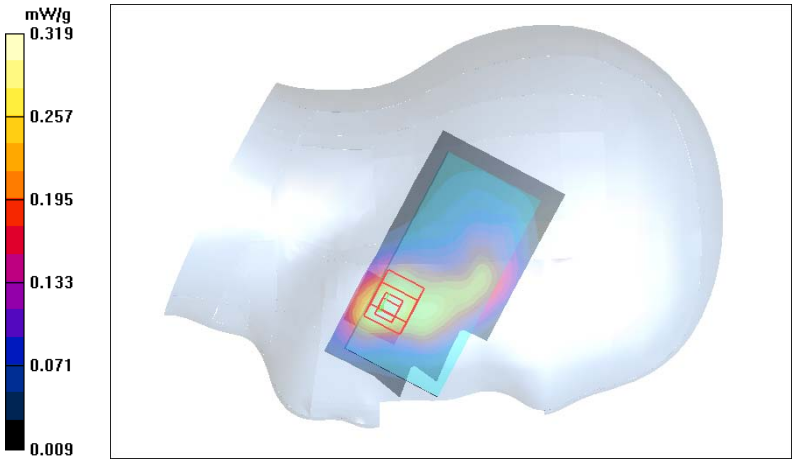
Test Laboratory: The name of your organization
Type: RM-505; Serial: 004401/10/448325/6

Communication System: 2-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:4.2
Medium: HSL1900; Medium Notes: t=20.6 C
Medium parameters used: f = 1880 MHz; σ = 1.45 mho/m; ε_r = 38.1; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(5.14, 5.14, 5.14); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle - Phone Slide Closed - Camera Slide Closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.329 mW/g

Cheek position - Middle - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 6.09 V/m
Peak SAR (extrapolated) = 0.488 W/kg
SAR(1 g) = 0.298 mW/g
SAR(10 g) = 0.177 mW/g
Power Drift = -0.107 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) = 0.319 mW/g



Date/Time: 2009-02-26 13:06:19

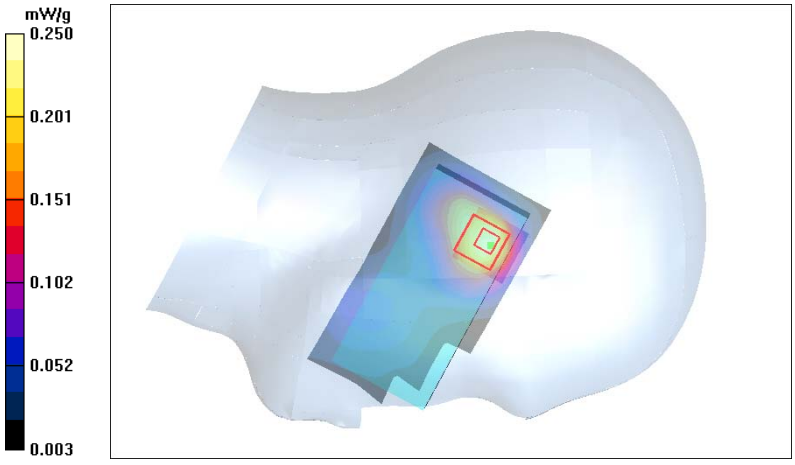
Test Laboratory: The name of your organization
Type: RM-505; Serial: 004401/10/448325/6

Communication System: 2-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:4.2
Medium: HSL1900; Medium Notes: t=20.6 C
Medium parameters used: f = 1880 MHz; σ = 1.45 mho/m; ε_r = 38.1; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(5.14, 5.14, 5.14); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - Middle - Phone Slide Closed - Camera Slide Closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.265 mW/g

Tilt position - Middle - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 11.1 V/m
Peak SAR (extrapolated) = 0.365 W/kg
SAR(1 g) = 0.229 mW/g
SAR(10 g) = 0.139 mW/g
Power Drift = 0.152 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) = 0.250 mW/g



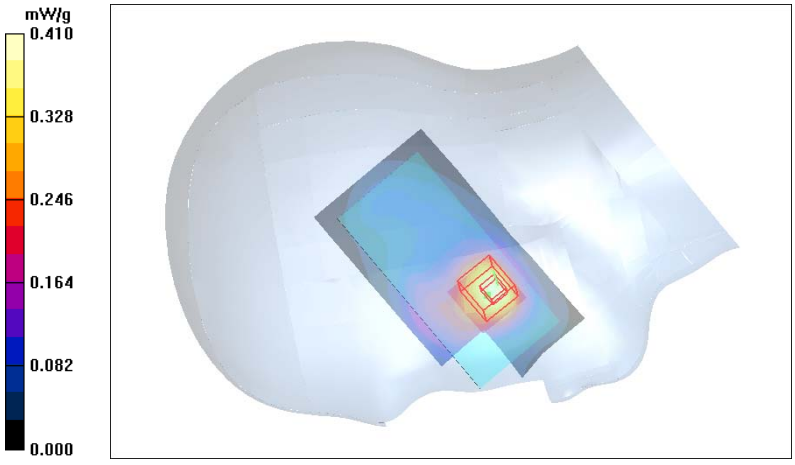
Test Laboratory: The name of your organization
Type: RM-505; Serial: 004401/10/448325/6

Communication System: 2-slot GPRS1900
Frequency: 1909.8 MHz; Duty Cycle: 1:4.2
Medium: HSL1900; Medium Notes: t=20.8 C
Medium parameters used: f = 1910 MHz; σ = 1.47 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(5.14, 5.14, 5.14); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - High - Phone Slide Closed - Camera Slide Closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.410 mW/g

Cheek position - High - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.16 V/m
Peak SAR (extrapolated) = 0.607 W/kg
SAR(1 g) = 0.395 mW/g
SAR(10 g) = 0.232 mW/g
Power Drift = 0.164 dB
Maximum value of SAR (measured) = 0.440 mW/g



Date/Time: 2009-02-26 13:55:56

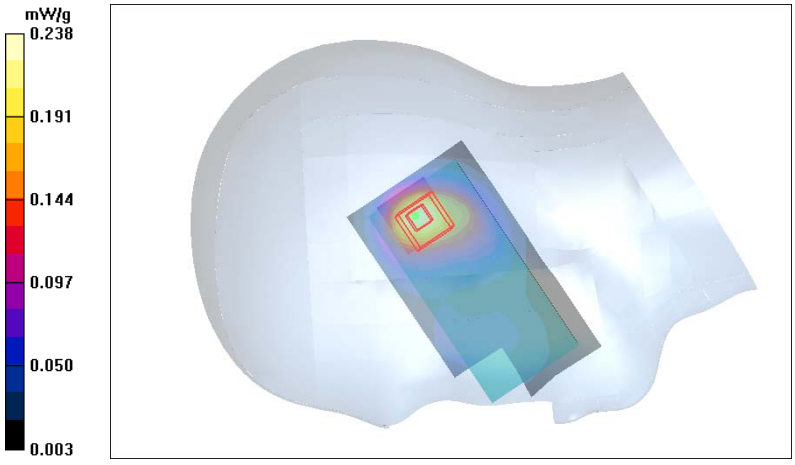
Test Laboratory: The name of your organization
Type: RM-505; Serial: 004401/10/448325/6

Communication System: 2-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:4.2
Medium: HSL1900; Medium Notes: t=20.9 C
Medium parameters used: f = 1880 MHz; σ = 1.45 mho/m; ε_r = 38.1; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(5.14, 5.14, 5.14); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - Middle - Phone Slide Closed - Camera Slide Closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.254 mW/g

Tilt position - Middle - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.7 V/m
Peak SAR (extrapolated) = 0.355 W/kg
SAR(1 g) = 0.218 mW/g
SAR(10 g) = 0.131 mW/g
Power Drift = 0.015 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) = 0.238 mW/g



Date/Time: 2009-02-26 12:09:51

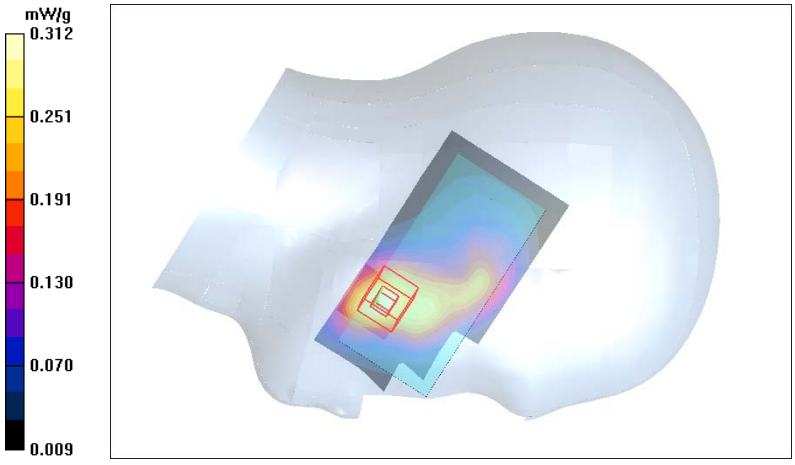
Test Laboratory: The name of your organization
Type: RM-505; Serial: 004401/10/448325/6

Communication System: 3-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:2.8
Medium: HSL1900; Medium Notes: t=20.6 C
Medium parameters used: f = 1880 MHz; σ = 1.45 mho/m; ε_r = 38.1; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(5.14, 5.14, 5.14); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle - Phone Slide Closed - Camera Slide Closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.337 mW/g

Cheek position - Middle - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 5.98 V/m
Peak SAR (extrapolated) = 0.478 W/kg
SAR(1 g) = 0.292 mW/g
SAR(10 g) = 0.173 mW/g
Power Drift = 0.004 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) = 0.312 mW/g



Date/Time: 2009-03-04 12:39:29

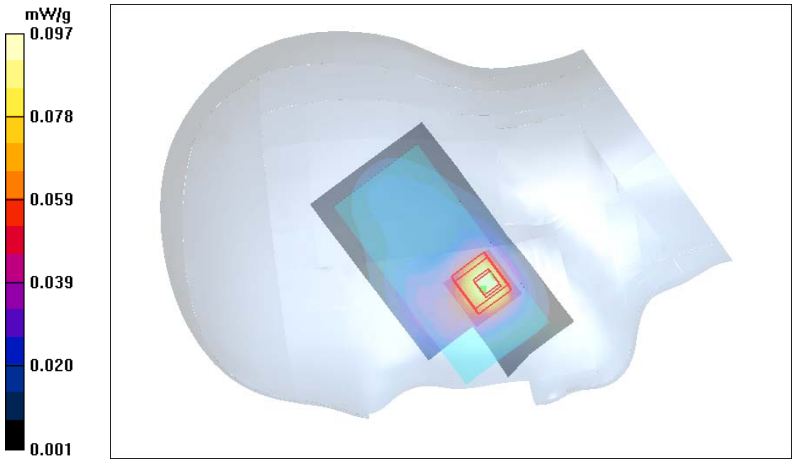
Test Laboratory: The name of your organization
Type: RM-505; Serial: 004401/10/448325/6

Communication System: 2-slot 8PSK EGPRS1900
Frequency: 1909.8 MHz; Duty Cycle: 1:4.2
Medium: HSL1900; Medium Notes: t=20.8 C
Medium parameters used: f = 1910 MHz; σ = 1.47 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(5.14, 5.14, 5.14); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - High - Phone Slide Closed - Camera Slide Closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.088 mW/g

Cheek position - High - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 3.69 V/m
Peak SAR (extrapolated) = 0.151 W/kg
SAR(1 g) = 0.093 mW/g
SAR(10 g) = 0.053 mW/g
Power Drift = 0.208 dB
Maximum value of SAR (measured) = 0.097 mW/g



Date/Time: 2009-03-04 11:57:28

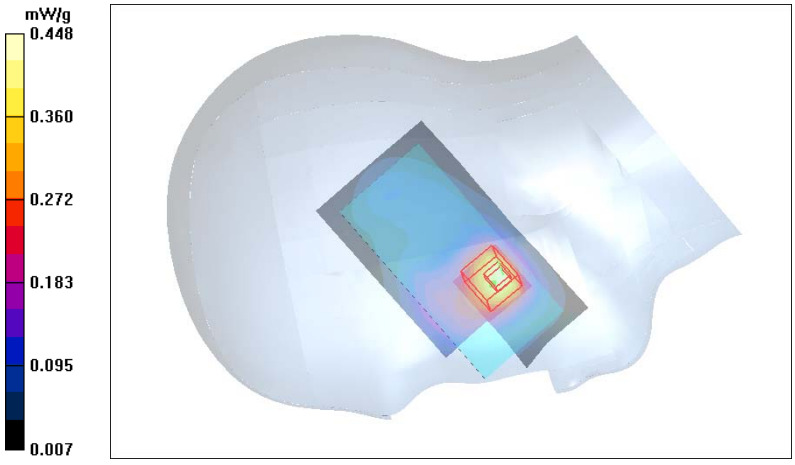
Test Laboratory: The name of your organization
Type: RM-505; Serial: 004401/10/448325/6

Communication System: 2-slot GPRS1900
Frequency: 1909.8 MHz; Duty Cycle: 1:4.2
Medium: HSL1900; Medium Notes: t=20.8 C
Medium parameters used: f = 1910 MHz; σ = 1.47 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(5.14, 5.14, 5.14); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - High - Phone Slide Closed - Camera Slide Open/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.412 mW/g

Cheek position - High - Phone Slide Closed - Camera Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.10 V/m
Peak SAR (extrapolated) = 0.632 W/kg
SAR(1 g) = 0.409 mW/g
SAR(10 g) = 0.236 mW/g
Power Drift = 0.164 dB
Maximum value of SAR (measured) = 0.448 mW/g



Date/Time: 2009-03-04 13:05:55

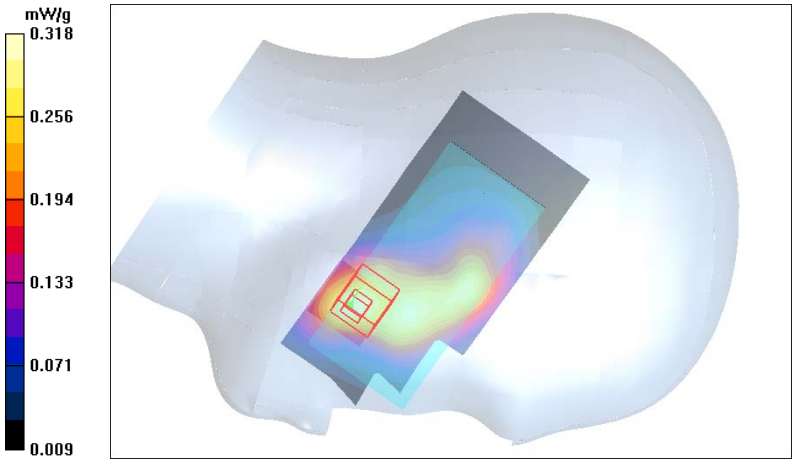
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: WCDMA1900
Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: HSL1900; Medium Notes: t=20.5 C
Medium parameters used: f = 1880 MHz; σ = 1.44 mho/m; ε_r = 38.6; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(5.14, 5.14, 5.14); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle - Phone Slide Closed - Camera Slide Closed/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.322 mW/g

Cheek position - Middle - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 6.48 V/m
Peak SAR (extrapolated) = 0.488 W/kg
SAR(1 g) = 0.290 mW/g
SAR(10 g) = 0.173 mW/g
Power Drift = -0.128 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) = 0.318 mW/g



Date/Time: 2009-03-04 13:25:45

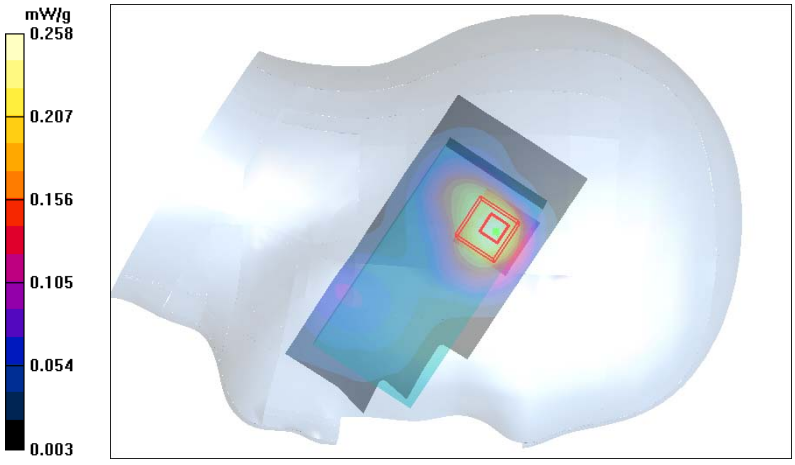
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: WCDMA1900
Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: HSL1900; Medium Notes: t=20.5 C
Medium parameters used: f = 1880 MHz; σ = 1.44 mho/m; ε_r = 38.6; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(5.14, 5.14, 5.14); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - Middle - Phone Slide Closed - Camera Slide Closed/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.277 mW/g

Tilt position - Middle - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 11.8 V/m
Peak SAR (extrapolated) = 0.376 W/kg
SAR(1 g) = 0.240 mW/g
SAR(10 g) = 0.147 mW/g
Power Drift = -0.032 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) = 0.258 mW/g



Date/Time: 2009-03-04 14:40:54

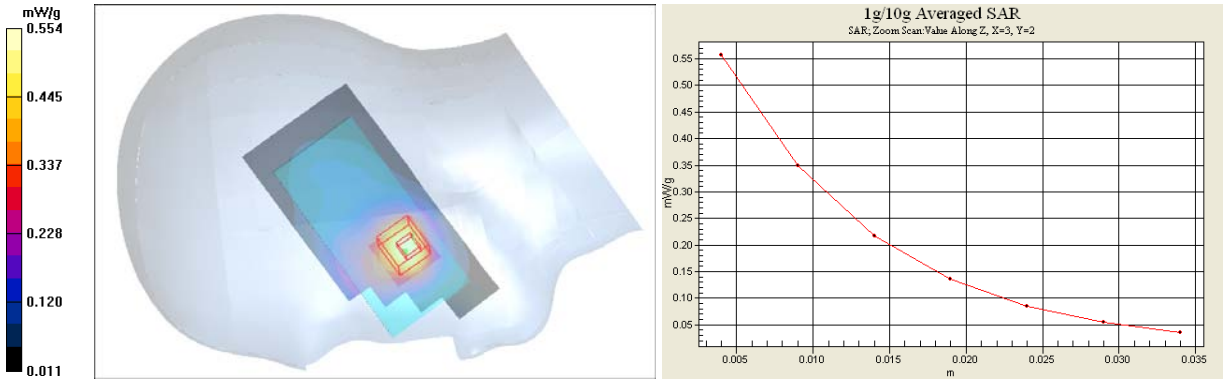
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: WCDMA1900
Frequency: 1852.4 MHz; Duty Cycle: 1:1
Medium: HSL1900; Medium Notes: t=20.5 C
Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.42 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(5.14, 5.14, 5.14); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Low - Phone Slide Closed - Camera Slide Closed/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.581 mW/g

Cheek position - Low - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.68 V/m
Peak SAR (extrapolated) = 0.817 W/kg
SAR(1 g) = 0.525 mW/g
SAR(10 g) = 0.313 mW/g
Power Drift = 0.087 dB
Maximum value of SAR (measured) = 0.554 mW/g



Date/Time: 2009-03-04 14:04:55

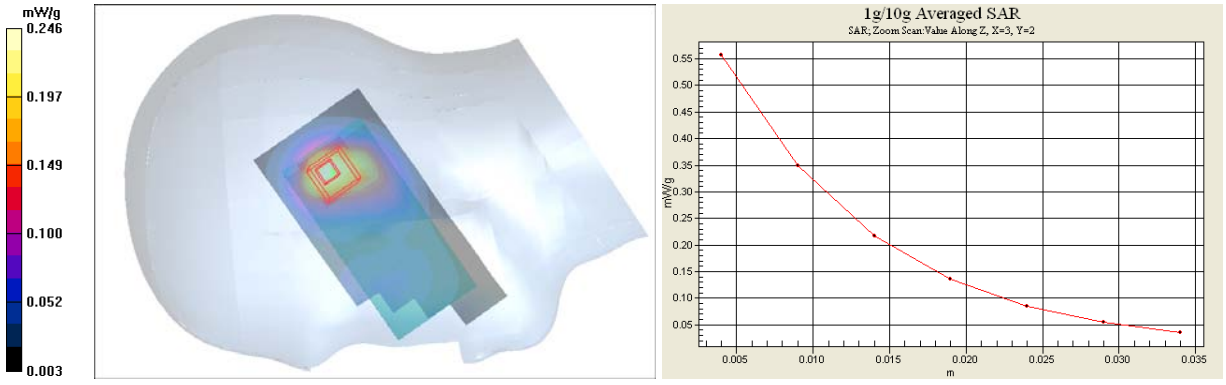
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: WCDMA1900
Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: HSL1900; Medium Notes: t=20.5 C
Medium parameters used: f = 1880 MHz; σ = 1.44 mho/m; ε_r = 38.6; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(5.14, 5.14, 5.14); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - Middle - Phone Slide Closed - Camera Slide Closed/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.264 mW/g

Tilt position - Middle - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 13.0 V/m
Peak SAR (extrapolated) = 0.366 W/kg
SAR(1 g) = 0.229 mW/g
SAR(10 g) = 0.135 mW/g
Power Drift = -0.069 dB
Maximum value of SAR (measured) = 0.246 mW/g



Date/Time: 2009-03-04 15:15:47

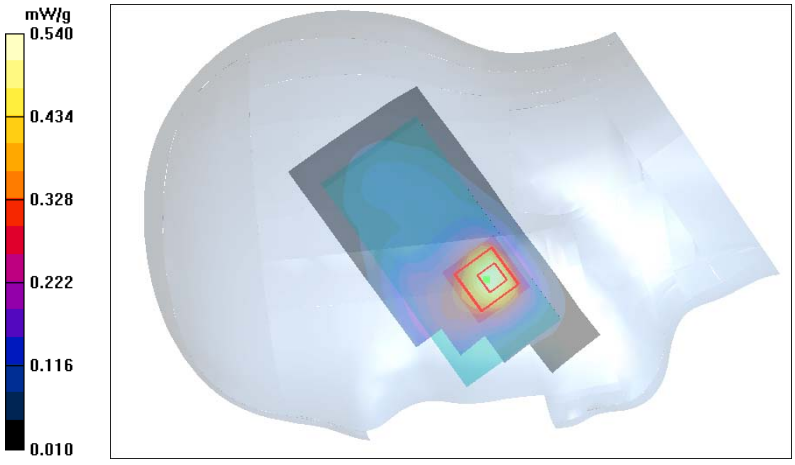
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: WCDMA1900
Frequency: 1907.6 MHz; Duty Cycle: 1:1
Medium: HSL1900; Medium Notes: t=20.5 C
Medium parameters used: f = 1908 MHz; σ = 1.47 mho/m; ε_r = 38.5; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(5.14, 5.14, 5.14); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1449
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - High - Phone Slide Closed - Camera Slide Open/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.537 mW/g

Cheek position - High - Phone Slide Closed - Camera Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.58 V/m
Peak SAR (extrapolated) = 0.819 W/kg
SAR(1 g) = 0.513 mW/g
SAR(10 g) = 0.295 mW/g
Power Drift = -0.023 dB
Maximum value of SAR (measured) = 0.540 mW/g



Date/Time: 2009-03-02 13:14:07

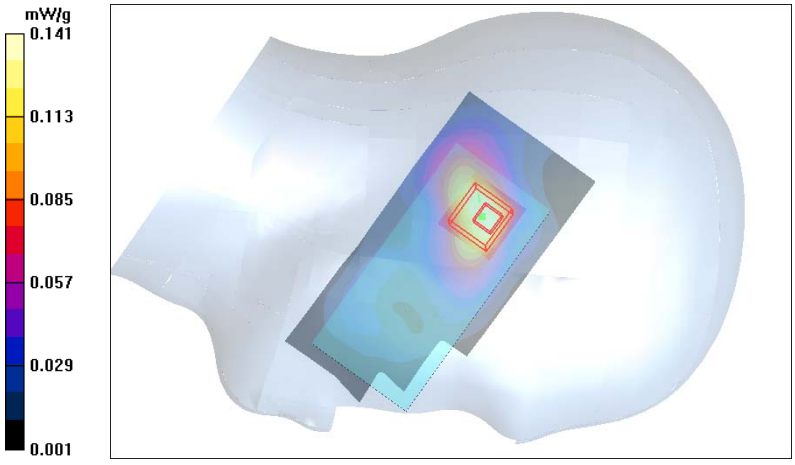
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: WLAN2450
Frequency: 2442 MHz; Duty Cycle: 1:1
Medium: HSL2450; Medium Notes: t=20.5 C
Medium parameters used: f = 2442 MHz; σ = 1.87 mho/m; ε_r = 37.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(4.57, 4.57, 4.57); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle - Phone Slide Closed - Camera Slide Closed/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.161 mW/g

Cheek position - Middle - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.53 V/m
Peak SAR (extrapolated) = 0.231 W/kg
SAR(1 g) = 0.133 mW/g
SAR(10 g) = 0.075 mW/g
Power Drift = -0.396 dB
Maximum value of SAR (measured) = 0.141 mW/g



Date/Time: 2009-03-02 13:31:10

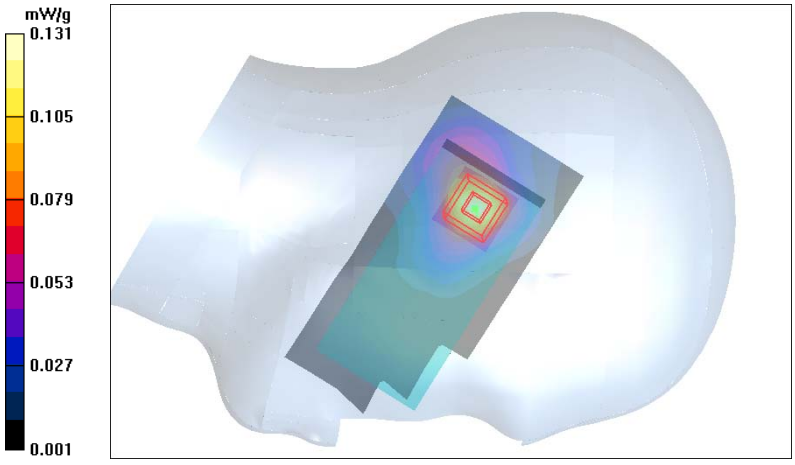
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: WLAN2450
Frequency: 2442 MHz; Duty Cycle: 1:1
Medium: HSL2450; Medium Notes: t=20.5 C
Medium parameters used: f = 2442 MHz; σ = 1.87 mho/m; ε_r = 37.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(4.57, 4.57, 4.57); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - Middle - Phone Slide Closed - Camera Slide Closed/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.128 mW/g

Tilt position - Middle - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.31 V/m
Peak SAR (extrapolated) = 0.208 W/kg
SAR(1 g) = 0.117 mW/g
SAR(10 g) = 0.063 mW/g
Power Drift = -0.173 dB
Maximum value of SAR (measured) = 0.131 mW/g



Date/Time: 2009-03-02 14:21:26

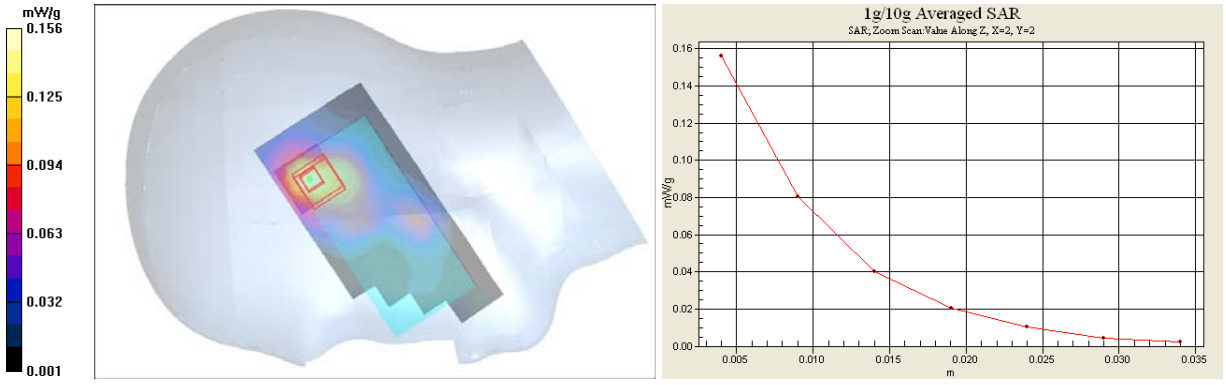
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: WLAN2450
Frequency: 2442 MHz; Duty Cycle: 1:1
Medium: HSL2450; Medium Notes: t=20.3 C
Medium parameters used: f = 2442 MHz; σ = 1.87 mho/m; ε_r = 37.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(4.57, 4.57, 4.57); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Middle - Phone Slide Closed - Camera Slide Closed/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.162 mW/g

Cheek position - Middle - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.04 V/m
Peak SAR (extrapolated) = 0.271 W/kg
SAR(1 g) = 0.139 mW/g
SAR(10 g) = 0.073 mW/g
Power Drift = 0.048 dB
Maximum value of SAR (measured) = 0.156 mW/g



Date/Time: 2009-03-02 14:34:40

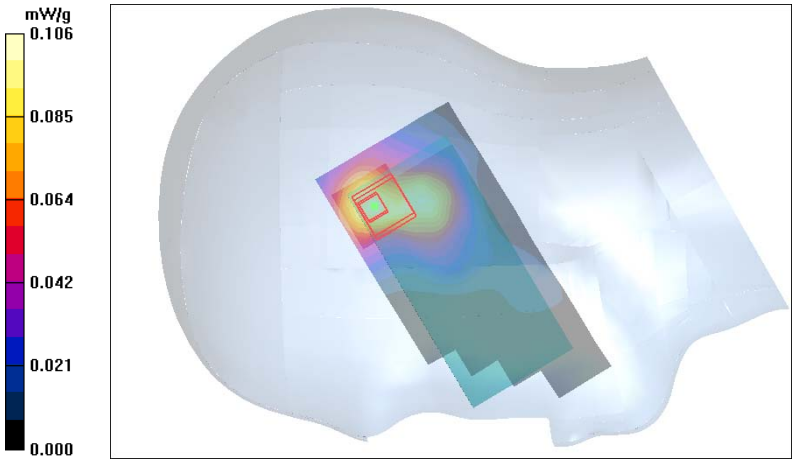
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: WLAN2450
Frequency: 2442 MHz; Duty Cycle: 1:1
Medium: HSL2450; Medium Notes: t=20.3 C
Medium parameters used: f = 2442 MHz; σ = 1.87 mho/m; ε_r = 37.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(4.57, 4.57, 4.57); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt position - Middle - Phone Slide Closed - Camera Slide Closed/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.110 mW/g

Tilt position - Middle - Phone Slide Closed - Camera Slide Closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.00 V/m
Peak SAR (extrapolated) = 0.201 W/kg
SAR(1 g) = 0.096 mW/g
SAR(10 g) = 0.051 mW/g
Power Drift = 0.108 dB
Maximum value of SAR (measured) = 0.106 mW/g



Date/Time: 2009-03-03 16:12:25

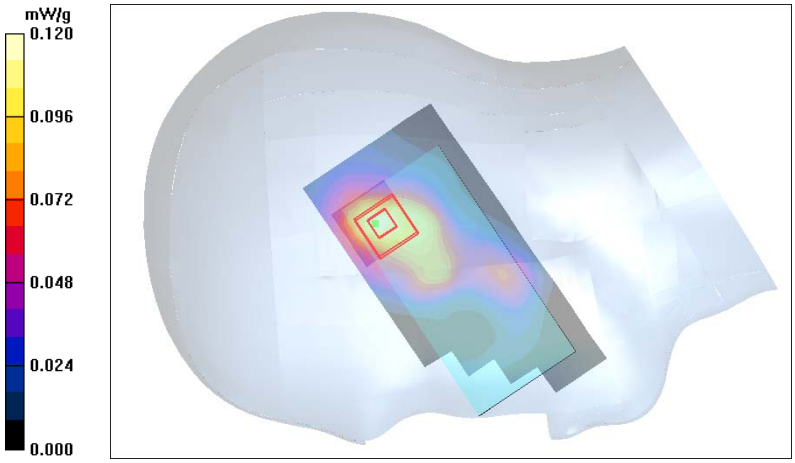
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: WLAN2450
Frequency: 2412 MHz; Duty Cycle: 1:1
Medium: HSL2450; Medium Notes: t=20.3 C
Medium parameters used: f = 2412 MHz; σ = 1.82 mho/m; ε_r = 38.2; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(4.57, 4.57, 4.57); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 4; Type: Twin SAM 040 CA; Serial: TP-1018
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek position - Low - Phone Slide Closed - Camera Slide Open/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.119 mW/g

Cheek position - Low - Phone Slide Closed - Camera Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 6.35 V/m
Peak SAR (extrapolated) = 0.207 W/kg
SAR(1 g) = 0.110 mW/g
SAR(10 g) = 0.059 mW/g
Power Drift = 0.045 dB
Maximum value of SAR (measured) = 0.120 mW/g



Date/Time: 2009-03-05 13:56:36

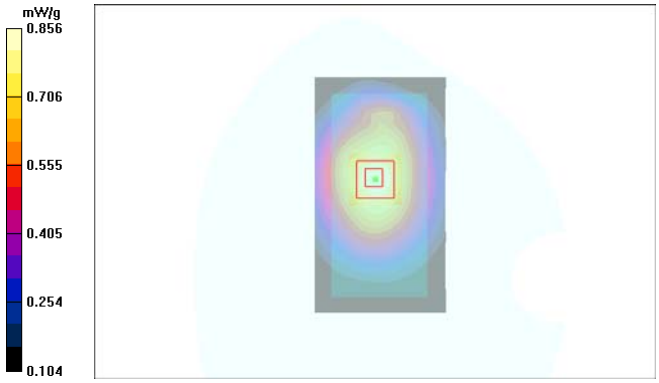
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

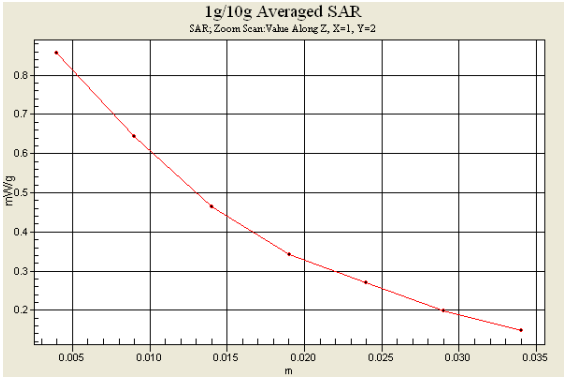
Communication System: 3-slot GPRS850
Frequency: 848.8 MHz; Duty Cycle: 1:2.8
Medium: BSL850; Medium Notes: t=20.8 C
Medium parameters used: f = 849 MHz; σ = 1.01 mho/m; ε_r = 52.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3131
- ConvF(5.64, 5.64, 5.64); Calibrated: 2009-02-12
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2008-11-07
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body Measurement - High - Phone Slide Closed - Camera Slide Closed - No Accessory - Back Facing
Phantom/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.852 mW/g

Body Measurement - High - Phone Slide Closed - Camera Slide Closed - No Accessory - Back Facing
Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 13.8 V/m
Peak SAR (extrapolated) = 1.10 W/kg
SAR(1 g) = 0.812 mW/g
SAR(10 g) = 0.590 mW/g
Power Drift = -0.015 dB
Maximum value of SAR (measured) = 0.856 mW/g





Date/Time: 2009-03-05 13:29:11

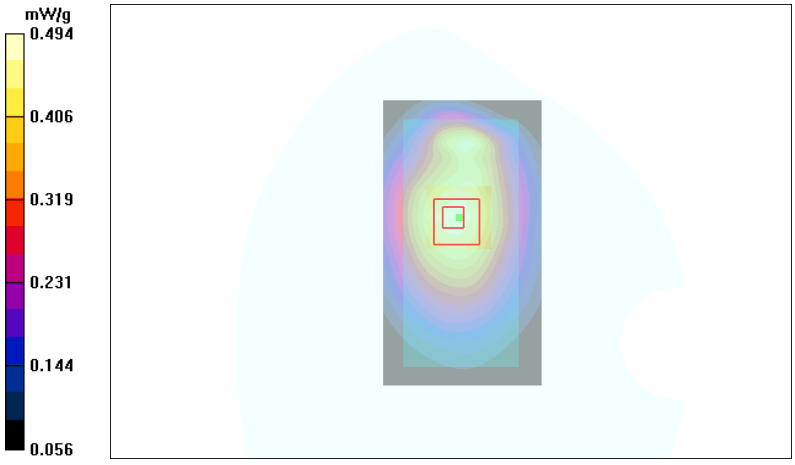
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: 3-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:2.8
Medium: BSL850; Medium Notes: t=20.8 C
Medium parameters used: f = 837 MHz; σ = 0.998 mho/m; ε_r = 52.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3131
- ConvF(5.64, 5.64, 5.64); Calibrated: 2009-02-12
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn555; Calibrated: 2008-11-07
- Phantom: SAM 1; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body Measurement - Middle - Phone Slide Closed - Camera Slide Closed - HS-45+AD-54 - Back Facing Phantom/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.476 mW/g

Body Measurement - Middle - Phone Slide Closed - Camera Slide Closed - HS-45+AD-54 - Back Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.1 V/m
Peak SAR (extrapolated) = 0.611 W/kg
SAR(1 g) = 0.466 mW/g
SAR(10 g) = 0.337 mW/g
Power Drift = 0.010 dB
Maximum value of SAR (measured) = 0.494 mW/g



Date/Time: 2009-03-06 12:40:24

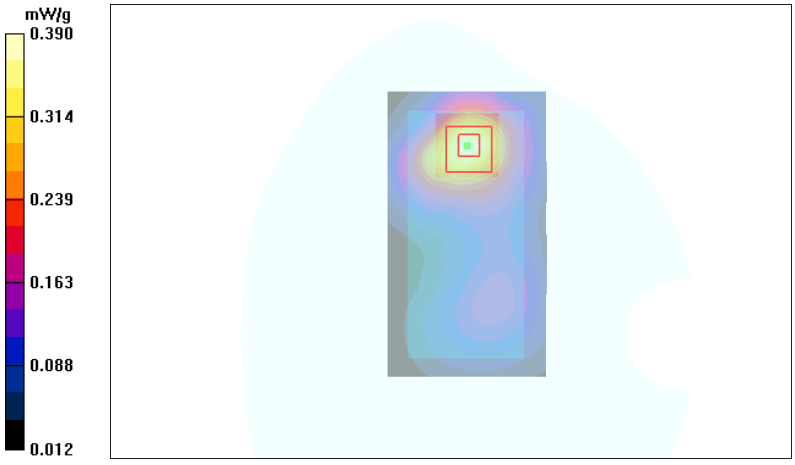
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: 2-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:4.2
Medium: BSL1900; Medium Notes: t=20.2 C
Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(5.23, 5.23, 5.23); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body Measurement - Middle - Phone Slide Closed - Camera Slide Closed - No Accessory - Back Facing
Phantom/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.381 mW/g

Body Measurement - Middle - Phone Slide Closed - Camera Slide Closed - No Accessory - Back Facing
Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.74 V/m
Peak SAR (extrapolated) = 0.593 W/kg
SAR(1 g) = 0.356 mW/g
SAR(10 g) = 0.215 mW/g
Power Drift = 0.227 dB
Maximum value of SAR (measured) = 0.390 mW/g



Date/Time: 2009-03-06 12:54:50

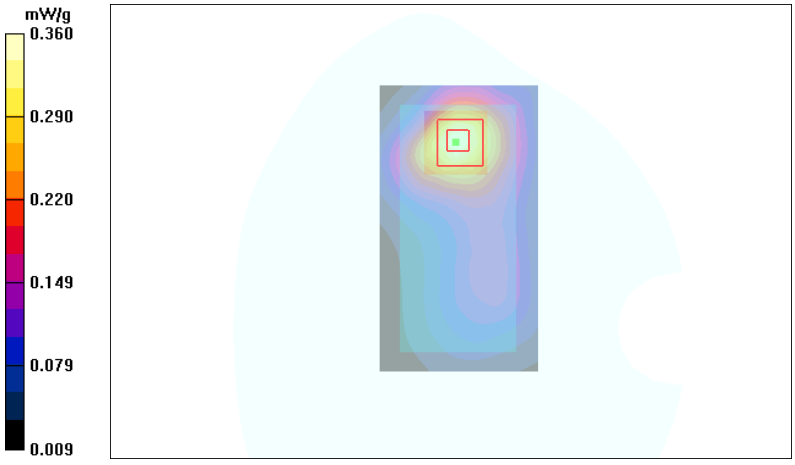
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: 2-slot GPRS1900
Frequency: 1880 MHz; Duty Cycle: 1:4.2
Medium: BSL1900; Medium Notes: t=20.2 C
Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(5.23, 5.23, 5.23); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body Measurement - Middle - Phone Slide Closed - Camera Slide Closed - HS-45 + AD-54 - Back Facing Phantom/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.368 mW/g

Body Measurement - Middle - Phone Slide Closed - Camera Slide Closed - HS-45 + AD-54 - Back Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.54 V/m
Peak SAR (extrapolated) = 0.542 W/kg
SAR(1 g) = 0.333 mW/g
SAR(10 g) = 0.204 mW/g
Power Drift = 0.135 dB
Maximum value of SAR (measured) = 0.360 mW/g



Date/Time: 2009-03-06 13:56:50

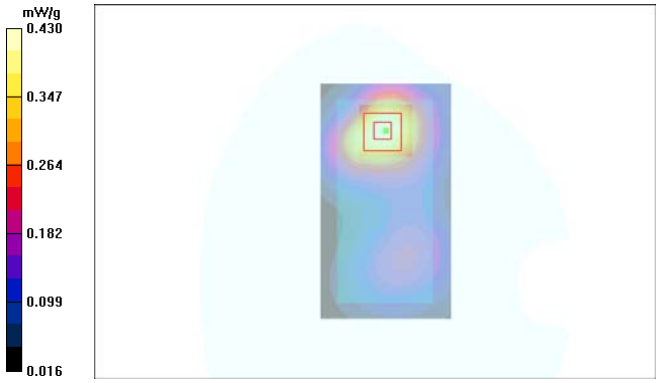
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

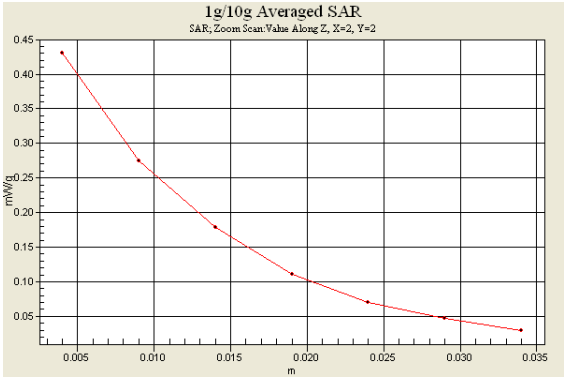
Communication System: WCDMA1900
Frequency: 1852.4 MHz; Duty Cycle: 1:1
Medium: BSL1900; Medium Notes: t=20.2 C
Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.52 mho/m; ε_r = 51.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(5.23, 5.23, 5.23); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body Measurement - Low - Phone Slide Closed - Camera Slide Closed - No Accessory - Back Facing
Phantom/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.459 mW/g

Body Measurement - Low - Phone Slide Closed - Camera Slide Closed - No Accessory - Back Facing
Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 9.92 V/m
Peak SAR (extrapolated) = 0.632 W/kg
SAR(1 g) = 0.400 mW/g
SAR(10 g) = 0.248 mW/g
Power Drift = -0.036 dB
Maximum value of SAR (measured) = 0.430 mW/g





Date/Time: 2009-03-06 13:45:29

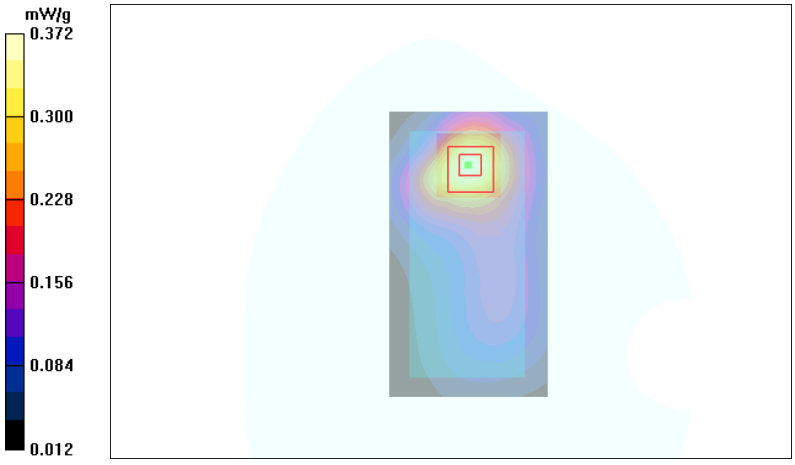
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: WCDMA1900
Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: BSL1900; Medium Notes: t=20.2 C
Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(5.23, 5.23, 5.23); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 3; Type: Twin SAM 040 CA; Serial: TP-1179
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body Measurement - Middle - Phone Slide Closed - Camera Slide Closed - HS-45 + AD-54 - Back Facing Phantom/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.383 mW/g

Body Measurement - Middle - Phone Slide Closed - Camera Slide Closed - HS-45 + AD-54 - Back Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.60 V/m
Peak SAR (extrapolated) = 0.552 W/kg
SAR(1 g) = 0.345 mW/g
SAR(10 g) = 0.211 mW/g
Power Drift = 0.095 dB
Maximum value of SAR (measured) = 0.372 mW/g



Date/Time: 2009-03-03 17:06:24

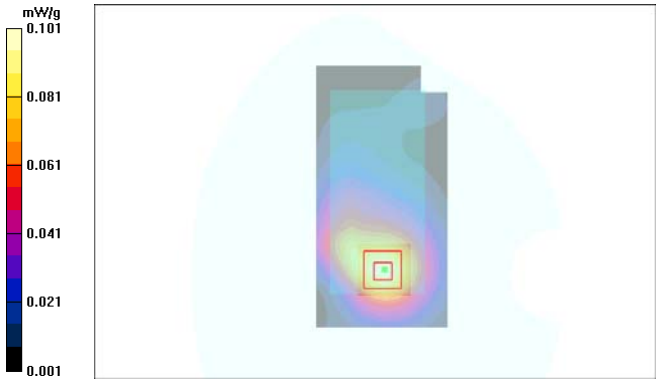
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

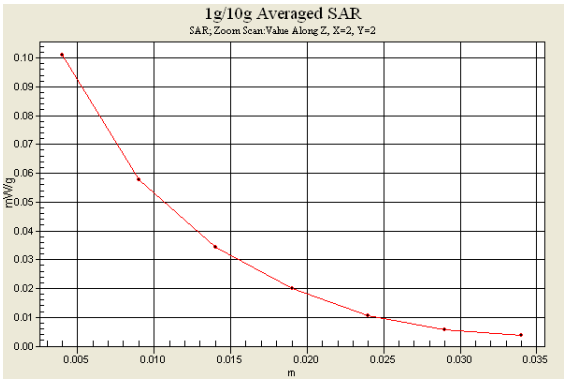
Communication System: WLAN2450
Frequency: 2442 MHz; Duty Cycle: 1:1
Medium: BSL2450; Medium Notes: t=20.2 C
Medium parameters used: f = 2442 MHz; σ = 2.01 mho/m; ε_r = 51; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(4.24, 4.24, 4.24); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body Measurement - Middle - Phone Slide Closed - Camera Slide Closed - No Accessory - Back Facing
Phantom/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.102 mW/g

Body Measurement - Middle - Phone Slide Closed - Camera Slide Closed - No Accessory - Back Facing
Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.25 V/m
Peak SAR (extrapolated) = 0.164 W/kg
SAR(1 g) = 0.094 mW/g
SAR(10 g) = 0.054 mW/g
Power Drift = -0.259 dB
Maximum value of SAR (measured) = 0.101 mW/g





Date/Time: 2009-03-03 17:21:12

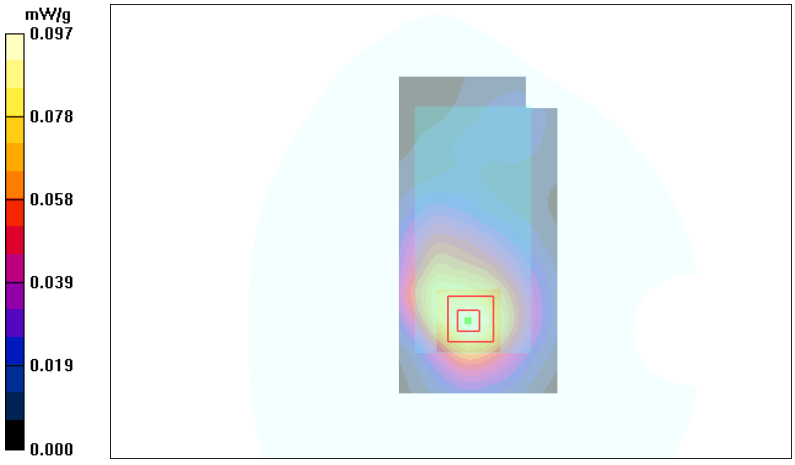
Test Laboratory: TCC Nokia
Type: RM-505; Serial: 004401/10/448325/6

Communication System: WLAN2450
Frequency: 2442 MHz; Duty Cycle: 1:1
Medium: BSL2450; Medium Notes: t=20.2 C
Medium parameters used: f = 2442 MHz; σ = 2.01 mho/m; ε_r = 51; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3165
- ConvF(4.24, 4.24, 4.24); Calibrated: 2008-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn793; Calibrated: 2008-04-30
- Phantom: SAM 2; Type: Twin SAM 040 CA; Serial: TP - 1177
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body Measurement - Middle - Phone Slide Closed - Camera Slide Closed - HS-45+AD-54 - Back Facing Phantom/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.099 mW/g

Body Measurement - Middle - Phone Slide Closed - Camera Slide Closed - HS-45+AD-54 - Back Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.12 V/m
Peak SAR (extrapolated) = 0.159 W/kg
SAR(1 g) = 0.090 mW/g
SAR(10 g) = 0.052 mW/g
Power Drift = -0.038 dB
Maximum value of SAR (measured) = 0.097 mW/g



APPENDIX C: RELEVANT PAGES FROM PROBE CALIBRATION REPORT(S)

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 108

Client **Nokia Salo TCC**

Certificate No: ES3-3131_Feb09

CALIBRATION CERTIFICATE

Object	ES3DV3 - SN:3131
Calibration procedure(s)	QA CAL-01.v6 and QA CAL-23.v3 Calibration procedure for dosimetric E-field probes
Calibration date:	February 12, 2009
Condition of the calibrated item	In Tolerance

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

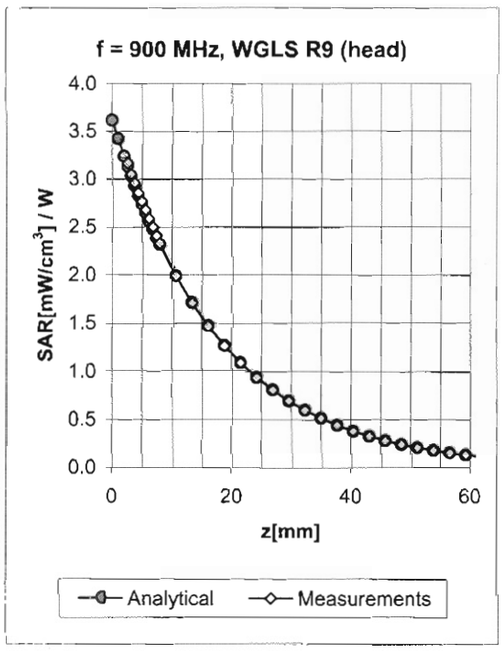
Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter E4419B	GB41293874	1-Apr-08 (No. 217-00788)	Apr-09
Power sensor E4412A	MY41495277	1-Apr-08 (No. 217-00788)	Apr-09
Power sensor E4412A	MY41498087	1-Apr-08 (No. 217-00788)	Apr-09
Reference 3 dB Attenuator	SN: S5054 (3c)	1-Jul-08 (No. 217-00865)	Jul-09
Reference 20 dB Attenuator	SN: S5086 (20b)	31-Mar-08 (No. 217-00787)	Apr-09
Reference 30 dB Attenuator	SN: S5129 (30b)	1-Jul-08 (No. 217-00866)	Jul-09
Reference Probe ES3DV2	SN: 3013	2-Jan-09 (No. ES3-3013_Jan09)	Jan-10
DAE4	SN: 660	9-Sep-08 (No. DAE4-660_Sep08)	Sep-09

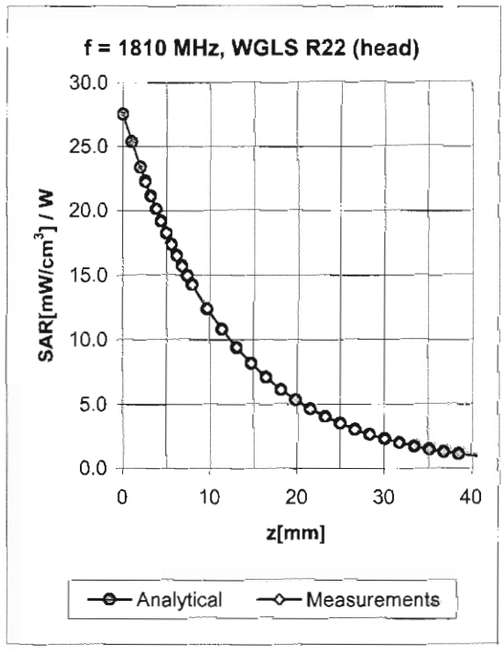
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator HP 8648C	US3642U01700	4-Aug-99 (in house check Oct-07)	In house check: Oct-09
Network Analyzer HP 8753E	US37390585	18-Oct-01 (in house check Oct-08)	In house check: Oct-09

	Name	Function	Signature
Calibrated by:	Katja Pokovic	Technical Manager	
Approved by:	Niels Kuster	Quality Manager	

Issued: February 12, 2009

Conversion Factor Assessment





f [MHz]	Validity [MHz][c]	TSL	Permittivity	Conductivity	Alpha	Depth	ConvF Uncertainty
900	± 50 / ± 100	Head	41.5 ± 5%	0.97 ± 5%	0.69	1.17	5.70 ± 11.0% (k=2)
1810	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.39	1.63	4.86 ± 11.0% (k=2)
1950	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.47	1.46	4.66 ± 11.0% (k=2)
2450	± 50 / ± 100	Head	39.2 ± 5%	1.80 ± 5%	0.42	1.74	4.33 ± 11.0% (k=2)
900	± 50 / ± 100	Body	55.0 ± 5%	1.05 ± 5%	0.69	1.26	5.64 ± 11.0% (k=2)
1810	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.49	1.37	4.65 ± 11.0% (k=2)
1950	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.45	1.46	4.61 ± 11.0% (k=2)
2450	± 50 / ± 100	Body	52.7 ± 5%	1.95 ± 5%	0.99	1.08	3.98 ± 11.0% (k=2)

[c] The validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2). The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 108

Client Nokia Salo TCC

Certificate No: ES3-3165_Apr08

CALIBRATION CERTIFICATE

Object	ES3DV3 - SN:3165
Calibration procedure(s)	QA CAL-01.v6 and QA CAL-23.v3 Calibration procedure for dosimetric E-field probes
Calibration date:	April 23, 2008
Condition of the calibrated item	In Tolerance

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

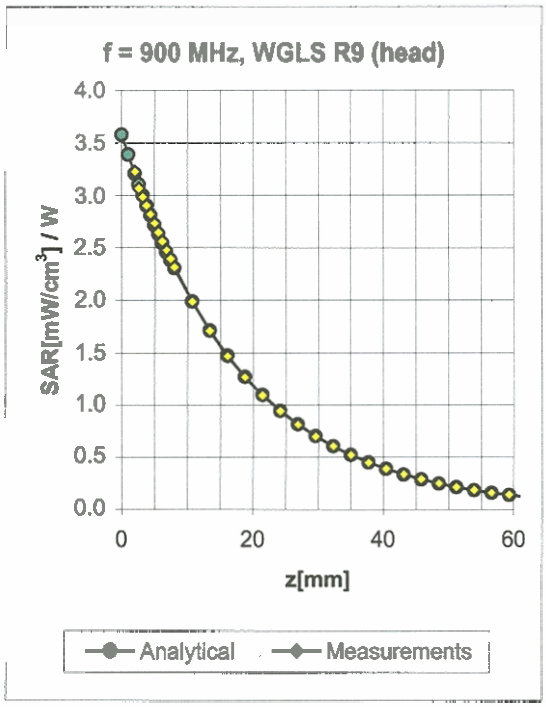
Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter E4419B	GB41293874	1-Apr-08 (No. 217-00788)	Apr-09
Power sensor E4412A	MY41495277	1-Apr-08 (No. 217-00788)	Apr-09
Power sensor E4412A	MY41498087	1-Apr-08 (No. 217-00788)	Apr-09
Reference 3 dB Attenuator	SN: S5054 (3c)	8-Aug-07 (No. 217-00719)	Aug-08
Reference 20 dB Attenuator	SN: S5086 (20b)	31-Mar-08 (No. 217-00787)	Apr-09
Reference 30 dB Attenuator	SN: S5129 (30b)	8-Aug-07 (No. 217-00720)	Aug-08
Reference Probe ES3DV2	SN: 3013	2-Jan-08 (No. ES3-3013_Jan08)	Jan-09
DAE4	SN: 660	3-Sep-07 (No. DAE4-660_Sep07)	Sep-08

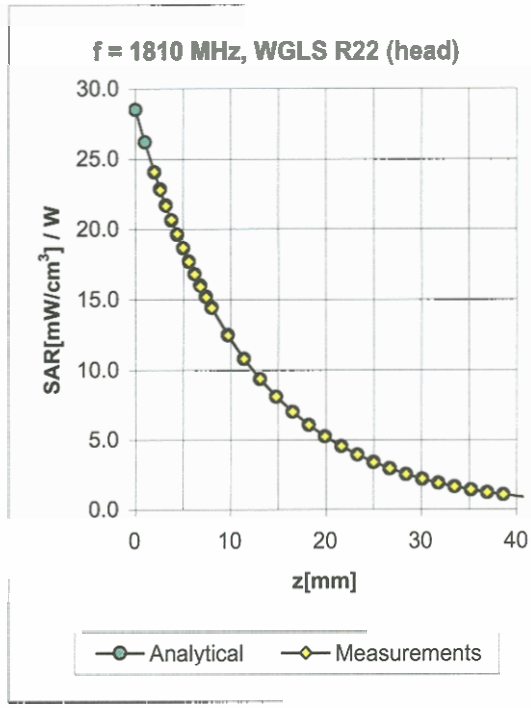
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator HP 8648C	US3642U01700	4-Aug-99 (in house check Oct-07)	In house check: Oct-09
Network Analyzer HP 8753E	US37390585	18-Oct-01 (in house check Oct-07)	In house check: Oct-08

	Name	Function	Signature
Calibrated by:	Katja Pokovic	Technical Manager	
Approved by:	Niels Kuster	Quality Manager	

Issued: April 23, 2008

Conversion Factor Assessment





f [MHz]	Validity [MHz][C]	TSL	Permittivity	Conductivity	Alpha	Depth	ConvF Uncertainty
900	± 50 / ± 100	Head	41.5 ± 5%	0.97 ± 5%	0.84	1.20	6.23 ± 11.0% (k=2)
1810	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.93	1.13	5.14 ± 11.0% (k=2)
1950	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.88	1.17	4.87 ± 11.0% (k=2)
2450	± 50 / ± 100	Head	39.2 ± 5%	1.80 ± 5%	0.79	1.24	4.57 ± 11.0% (k=2)
2600	± 50 / ± 100	Head	39.0 ± 5%	1.96 ± 5%	0.73	1.30	4.49 ± 11.0% (k=2)
900	± 50 / ± 100	Body	55.0 ± 5%	1.05 ± 5%	1.00	1.14	5.75 ± 11.0% (k=2)
1810	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.97	1.12	5.23 ± 11.0% (k=2)
1950	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.79	1.29	4.96 ± 11.0% (k=2)
2450	± 50 / ± 100	Body	52.7 ± 5%	1.95 ± 5%	0.63	1.50	4.24 ± 11.0% (k=2)
2600	± 50 / ± 100	Body	52.5 ± 5%	2.16 ± 5%	0.70	1.44	4.07 ± 11.0% (k=2)

[C] The validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2). The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.