TCC
Nokia

FINAS
Finnish Accreditation Service
T117 (EN ISO/IEC 17025)

SAR Compliance Test Report

Test report no.:	FCC_RM-648_07	**Date of report:**	2010-07-11
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Tested device:	RM-648		
FCC ID:	QTKRM-648	**IC:**	661AD-RM648
Supplement reports:	SAR_Photo_RM-648_08, FCC_RM-627_06 for RM-627 / FCC ID: QTKRM-627		

Testing has been carried out in accordance with:

47CFR §2.1093
Radiofrequency Radiation Exposure Evaluation: Portable Devices

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

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

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

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

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

Date and signatures:

For the contents:

Jesper Nielsen
Test Engineer

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1. SUMMARY OF SAR TEST REPORT

1.1 Test Details

Period of test	2010-06-22 to 2010-07-02
SN, HW and SW numbers of tested device	SN: 352718/04/000253/8, HW: 0305, SW: 041.017, DUT: 24230 SN: 352713/04/000957/5, HW: 0300, SW: 041.017, DUT: 24226
Batteries used in testing	BL-5F, DUT: 24401, 24406, 24407, 24409, 24410
Headsets used in testing	WH-102, DUT: 24400
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)	Conducted power	Position	Measured SAR value (1g avg)	Scaled* SAR value (1g avg)	SAR limit (1g avg)	Result
2-slot GPRS 850**	128 / 824.4	29.5 dBm	Right, Cheek	0.838 W/kg	**0.94 W/kg**	1.6 W/kg	PASSED
WCDMA 850	4233 / 846.6	23.0 dBm	Right, Cheek	0.633 W/kg	**0.71 W/kg**	1.6 W/kg	PASSED
GSM 1900**	661 / 1880.0	30.0 dBm	Left, Cheek	0.605 W/kg	**0.68 W/kg**	1.6 W/kg	PASSED
WCDMA 1900**	9538 / 1907.6	22.0 dBm	Left, Cheek	0.720 W/kg	**0.81 W/kg**	1.6 W/kg	PASSED
WLAN 2450**	7 / 2442.0	16.0 dBm	Left, Cheek	0.274 W/kg	**0.31 W/kg**	1.6 W/kg	PASSED
2-slot GPRS850** + WLAN2450	-	-	Left, Cheek	1.01 W/kg	**1.13 W/kg**	1.6 W/kg	PASSED
WCDMA 850 + WLAN2450	-	-	Left, Cheek	0.811 W/kg	**0.91 W/kg**	1.6 W/kg	PASSED
GSM 1900** + WLAN2450	-	-	Left, Cheek	0.605 W/kg	**0.68 W/kg**	1.6 W/kg	PASSED
WCDMA 1900** + WLAN2450	-	-	Left, Cheek	0.767 W/kg	**0.86 W/kg**	1.6 W/kg	PASSED

1.2.2 Body Worn Configuration

Mode	Ch / *f* (MHz)	Conducted power	Separation distance	Measured SAR value (1g avg)	Scaled* SAR value (1g avg)	SAR limit (1g avg)	Result
2-slot GPRS 850**	251 / 848.8	29.5 dBm	1.5 cm	0.602 W/kg	**0.67 W/kg**	1.6 W/kg	PASSED
WCDMA 850	4233 / 846.6	23.0 dBm	1.5 cm	0.446 W/kg	**0.50 W/kg**	1.6 W/kg	PASSED
GSM 1900**	512 / 1850.2	30.0 dBm	1.5 cm	0.706 W/kg	**0.79 W/kg**	1.6 W/kg	PASSED
WCDMA 1900**	9262 / 1852.4	22.0 dBm	1.5 cm	0.782 W/kg	**0.88 W/kg**	1.6 W/kg	PASSED
WLAN 2450**	1 / 2412.0	16.0 dBm	1.5 cm	0.067 W/kg	**0.08 W/kg**	1.6 W/kg	PASSED
2-slot GPRS850** + WLAN2450	-	-	1.5 cm	0.631 W/kg	**0.71 W/kg**	1.6 W/kg	PASSED
WCDMA 850 + WLAN2450	-	-	1.5 cm	0.474 W/kg	**0.53 W/kg**	1.6 W/kg	PASSED
GSM 1900** + WLAN2450	-	-	1.5 cm	0.706 W/kg	**0.79 W/kg**	1.6 W/kg	PASSED
WCDMA 1900** + WLAN2450	-	-	1.5 cm	0.782 W/kg	**0.88 W/kg**	1.6 W/kg	PASSED

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

* * SAR values copied from FCC_RM-627_06 for RM-627 / FCC ID: QTKRM-627.

1.2.3 Maximum Drift

Maximum drift covered by 12% scaling up of the SAR values	Maximum drift during measurements
0.5dB	0.48 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	850 (Band V) 1900 (Band II)		1	826 – 847 1852 – 1908
HSUPA	850 (Band V) 1900 (Band II)		1	826 – 847 1852 – 1908
BT	2450	GFSK	1	2402 – 2480
WLAN	2450	11Mbps QPSK	1	2412 – 2462

Outside of USA and Canada, the transmitter of the device is capable of operating also in GSM/GPRS/EGPRS900, GSM/GPRS/EGPRS1800 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.

This is a WCDMA HSUPA device, but SAR tests for HSUPA mode have not been performed as no HSUPA Sub-test mode has an average power > 0.25dB above the basic WCDMA 12.2kbps RMC mode. Appendix C of this report gives a summary of the measured WCDMA and HSUPA average powers; a detailed report of these WCDMA and HSUPA conducted power tests is submitted separately.

This device mutes the internal earpiece when the slide is closed. Head SAR testing has therefore been limited to slide-open configuration only as Voice calls cannot be made with the slide closed.

2.1 Description of the Antenna

The device has internal antennas for both cellular and WLAN use. The cellular antenna is located at the bottom in the back section of the keypad slide. The WLAN antenna is located at the top in the back section of the keypad slide.

3. TEST CONDITIONS

3.1 Temperature and Humidity

Ambient temperature (°C):	20.5 to 22.5
Ambient humidity (RH %):	35 to 55

3.2 Test Signal, Frequencies and Output Power

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

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

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

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

The radiated output power of the device was measured by a separate test laboratory on the same unit(s) as used for SAR testing. The results are given in the EMC report supporting this application.

The transmission mode of the device in all WLAN tests was DSSS QPSK 11Mbps. This mode has the highest (or equal highest) time-averaged output power of all the WLAN modulation modes in Nokia devices.

Some of the SAR values given in this report have been taken from the earlier report FCC_RM-627_06 for RM-627 / FCC ID: QTKRM-627. The only difference between RM-627 and RM-648 is that RM-648 has had its WCDMA900 components removed and WCDMA850 components added.

3.3 Test Cases and Test Minimisation

The tested device examined in this report may not incorporate all of the features described in the text that follows, but its SAR evaluation will have been subjected to the same considerations and test logic described below.

Whilst it's possible to identify the maximum SAR test cases from inspection of the conducted power levels given in the Results tables (Section 7), different modes in the same band and multi-slot transmit GSM/GPRS modes can create some difficulties. Therefore the sequence of the SAR tests made in evaluating this device has used test logic that is based on measured SAR values. Comparison of measured SAR values in this way, can also allow some test minimization (i.e. test elimination) to be made.

For example, when SAR testing multi-slot GSM/GPRS/EGPRS modes, it is an inefficient use of test resources to fully SAR test every test configuration in each of the different modes as these modes have a fixed power relationship between them that is the same, irrespective of the test configuration. In the case of multi-slot GSM/GPRS modes, a single comparative SAR test - using the same test channel and test configuration – is made in each of the n-slot modes; the mode with the highest measured SAR value is then subjected to full SAR testing in all test configurations. These comparative SAR tests (same frequency, same test configuration) are regarded as extremely accurate as they are relative tests in which the tested device changes neither its frequency nor its position between tests. For different modes that operate in the same band and use the same antenna e.g. GSM/GPRS850 and WCDMA850, full SAR testing is carried out in the GSM/GPRS850 mode but WCDMA850 testing is limited to 3 channel testing in the maximum SAR test configuration for GSM/GPRS850.

Multi-slot SAR testing against the Head is always performed whenever such a device offers Push to Talk over cellular with the internal earpiece active, Dual Transfer Mode (i.e. the ability to transmit voice and data simultaneously using the same transmitter) or has WLAN (which enables a Voice over IP call to take place whilst the device can simultaneously transmit data on a cellular band). Whenever a device has an intended multi-slot use against the head, it is also Head SAR tested in EGPRS mode. It should be noted that EGPRS transmit modes can have either GMSK or 8PSK modulation but, when tested, only 8PSK EGPRS will appear explicitly in the results tables, as GMSK EGPRS mode has identical time-averaged power to the reported GPRS mode.

Devices that have flips or slides are fully SAR tested in all device configurations consistent with their intended usage. For example, flip phones that can receive a call in closed mode are SAR tested against the head in both open and closed configurations. Similarly, slide phones are fully SAR tested in all slide configurations in which calls are intended to be made or received.

In the results tables in Section 7, the maximum SAR value for the 'basic' tests (i.e. left cheek, left tilt, right cheek and right tilt in Head SAR testing; with and without headset with the back &/or display side facing the flat phantom in Body SAR testing) is bolded for each band. In some cases, after full testing of the basic SAR test configurations has been completed, additional checking SAR tests are made. These checking tests are always based on the bolded result from the 'basic' testing. When the SAR value of a checking test exceeds the maximum value from the basic tests, it is also bolded and used as the basis for any further checking tests that might be needed.

Checking tests are largely voluntary and can cover optional batteries, different camera slide positions, optional covers, etc. In the case of optional batteries, if the construction of the optional battery is significantly different to the battery used in the full testing e.g. if the outer can is floating electrically rather than grounded, then the maximum SAR test configuration in each band is tested with the optional battery in 3 channels. For camera slides, if the slide material is metal, then checking tests in 3 channels are again run for the maximum SAR test configuration in each band. For plastic camera slides, SAR checking is only carried out in the channel that provided the maximum SAR value for the original. Optional front and back covers are tested if their shape differs significantly from the original or if their metallic content varies by more than 15% from the original; in the former case, the testing depends on the extent of the physical differences, whereas in the latter case, 3 channel SAR testing is performed in every band in the max SAR test configuration.

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
DAE4	682	12 months	2010-07
DAE4	710	12 months	2010-09
DAE3	573	12 months	2010-07
E-field Probe ES3DV3	3116	12 months	2011-02
E-field Probe ES3DV3	3117	12 months	2010-07
E-field Probe ES3DV3	3118	12 months	2010-09
Dipole Validation Kit, D835V2	4d042	24 months	2010-09
Dipole Validation Kit, D1900V2	5d063	24 months	2012-02
Dipole Validation Kit, D2450V2	790	24 months	2010-09
DASY4 software	Version 4.7	-	-

Additional test equipment used in testing:

Test Equipment	Model	Serial Number	Calibration interval	Calibration expiry
Signal Generator	SME06	829445/008	36 months	2012-02
Signal Generator	SME06	848650/011	36 months	2012-08
Amplifier	ZHL-42W	E012903	-	-
Amplifier	2100-BBS3Q8CCJ	1003	-	-
Power Meter	NRP	100808	24 months	2012-04
Power Meter	NRP	101293	24 months	2011-08
Power Sensor	NRP-Z51	100410	24 months	2012-04
Power Sensor	NRP-Z51	100830	24 months	2011-08
Call Tester	CMU200	110735	-	-
Call Tester	CMU200	105900	-	-
Vector Network Analyzer	AT8753ES	MY40001091	12 months	
Dielectric Probe Kit	HP85070B	US33020403	-	-

4.1.1 Isotropic E-field Probe Type ES3DV3

Construction	Symmetrical design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., butyl diglycol)
Calibration	Calibration certificate in Appendix D
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 at least 15.0 cm measured from the ear reference point during system checking and device measurements.

4.3.1 Tissue Simulant Recipes

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

800MHz band

Ingredient	Head (% by weight)	Body (% by weight)
Deionised Water	39.74	55.97
HEC	0.25	1.21
Sugar	58.31	41.76
Preservative	0.15	0.27
Salt	1.55	0.79

1900MHz band

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

2450MHz band

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

4.3.2 System Checking

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

System checking, head tissue simulant

f [MHz]	Description	SAR [W/kg], 1g	Dielectric Parameters		Temp [°C]
			ε_r	σ [S/m]	
835	Reference result	2.38	41.4	0.90	
	± 10% window	2.14 - 2.62			
	2010-06-22	2.37	40.2	0.89	22.4
	2010-06-29	2.51	42.3	0.93	21.9
1900	Reference result	9.98	39.2	1.42	
	± 10% window	8.98 - 10.98			
	2010-06-23	10.9	38.5	1.48	22.5
	2010-06-24	10.8	38.6	1.49	20.8
2450	Reference result	13.2	39.8	1.80	
	± 10% window	11.9 – 14.5			
	2010-06-30	13.6	39.0	1.88	22.4
	2010-07-01	14.3	38.8	1.89	22.5

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

4.3.3 Tissue Simulants used in the Measurements

Head tissue simulant measurements

f [MHz]	Description	Dielectric Parameters		Temp [°C]
		ε_r	σ [S/m]	
836	Recommended value	41.5	0.90	
	± 5% window	39.4 – 43.6	0.86 – 0.95	
	2010-06-22	40.2	0.89	22.4
	2010-06-29	42.3	0.93	21.9
1880	Recommended value	40.0	1.40	
	± 5% window	38.0 – 42.0	1.33 – 1.47	
	2010-06-23	38.5	1.46	22.5
	2010-06-24	38.7	1.47	20.8
2442	Recommended value	39.2	1.79	
	± 5% window	37.3 – 41.2	1.70 – 1.88	
	2010-06-30	39.0	1.88	22.4

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	
	2010-06-22	54.0	0.97	22.4
	2010-06-29	53.5	0.98	22.3
1880	Recommended value	53.3	1.52	
	± 5% window	50.6 – 56.0	1.44 – 1.60	
	2010-06-24	52.3	1.57	22.8
2442	Recommended value	52.7	1.94	
	± 5% window	50.1 – 55.3	1.85 – 2.04	
	2010-07-01	51.8	1.92	22.8

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**

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	Conducted Power		-	32.5 dBm	-
Slide open	Left	Cheek	-	0.735	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
2-slot GPRS	Conducted Power		29.5 dBm	29.5 dBm	29.5 dBm
Slide open	Left	Cheek	0.830	0.805	0.798
		Tilt	-	0.376	-
	Right	Cheek	**0.838**	0.835	0.838
		Tilt	-	0.356	-
3-slot GPRS	Conducted Power		-	27.7 dBm	-
Slide open	Left	Cheek	-	0.805	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
2-slot 8PSK EGPRS	Conducted Power		23.5 dBm	-	-
Slide open	Left	Cheek	-	-	-
		Tilt	-	-	-
	Right	Cheek	0.104	-	-
		Tilt	-	-	-

850MHz Head SAR results

Option used	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 4132 826.4 MHz	Ch 4175 835.0 MHz	Ch 4233 846.6 MHz
WCDMA	Conducted Power		23.0 dBm	23.0 dBm	23.0 dBm
Slide open	Left	Cheek	-	0.569	-
		Tilt	-	0.310	-
	Right	Cheek	0.617	0.591	**0.633**
		Tilt	-	0.284	-

1900MHz Head SAR results**

Option used	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 512 1850.2 MHz	Ch 661 1880.0 MHz	Ch 810 1909.8 MHz
GSM	Conducted Power		30.0 dBm	30.0 dBm	30.0 dBm
Slide open	Left	Cheek	0.592	**0.605**	0.542
		Tilt	-	0.092	-
	Right	Cheek	-	0.471	-
		Tilt	-	0.135	-
2-slot GPRS	Conducted Power		-	27.0 dBm	-
Slide open	Left	Cheek	-	0.599	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
3-slot GPRS	Conducted Power		-	25.2 dBm	-
Slide open	Left	Cheek	-	0.587	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
1-slot 8PSK EGPRS	Conducted Power		-	25.5 dBm	-
Slide open	Left	Cheek	-	0.124	-
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
Option used	Test configuration		Ch 9262 1852.4 MHz	Ch 9400 1880.0 MHz	Ch 9538 1907.6 MHz
WCDMA	Conducted Power		22.0 dBm	22.0 dBm	22.0 dBm
Slide open	Left	Cheek	0.711	0.672	**0.720**
		Tilt	-	0.109	-
	Right	Cheek	-	0.669	-
		Tilt	-	0.102	-

2450MHz Head SAR results**

Option used	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 1 2412.0 MHz	Ch 7 2442.0 MHz	Ch 11 2462.0 MHz
WLAN	Conducted Power		16.0 dBm	16.0 dBm	16.0 dBm
Slide open	Left	Cheek	0.231	**0.274**	0.247
		Tilt	-	0.134	-
	Right	Cheek	-	0.158	-
		Tilt	-	0.135	-

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

850MHz Body SAR results**

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
2-slot GPRS		Conducted Power	29.5 dBm	29.5 dBm	29.5 dBm
Slide closed	Display facing phantom	Without headset	-	0.382	-
		Headset WH-102	-	0.273	-
	Back facing phantom	Without headset	0.382	0.553	**0.602**
		Headset WH-102	-	0.397	-

850MHz Body SAR results

Option used	Device orientation	Test configuration	SAR, averaged over 1g (W/kg)		
			Ch 4132 826.4 MHz	Ch 4175 835.0 MHz	Ch 4233 846.6 MHz
WCDMA		Conducted Power	23.0 dBm	23.0 dBm	23.0 dBm
Slide closed	Display facing phantom	Without headset	-	0.282	-
		Headset WH-102	-	0.200	-
	Back facing phantom	Without headset	0.381	0.431	**0.446**
		Headset WH-102	-	0.343	-

1900MHz Body SAR results**

Option used	Device orientation	Test configuration	SAR, averaged over 1g (W/kg)		
			Ch 512 1850.2 MHz	Ch 661 1880.0 MHz	Ch 810 1909.8 MHz
GSM		Conducted Power	30.0 dBm	30.0 dBm	30.0 dBm
Slide closed	Display facing phantom	Without headset	-	0.229	-
		Headset WH-102	-	0.236	-
	Back facing phantom	Without headset	**0.706**	0.665	0.589
		Headset WH-102	-	0.661	-
Option used	**Device orientation**	**Test configuration**	**Ch 9262 1852.4 MHz**	**Ch 9400 1880.0 MHz**	**Ch 9538 1907.6 MHz**
WCDMA		Conducted Power	22.0 dBm	22.0 dBm	22.0 dBm
Slide closed	Display facing phantom	Without headset	-	0.293	-
		Headset WH-102	-	0.297	-
	Back facing phantom	Without headset	**0.782**	0.768	0.607
		Headset WH-102	-	0.729	-

2450MHz Body SAR results**

Option used	Device orientation	Test configuration	SAR, averaged over 1g (W/kg)		
			Ch 1 2412.0 MHz	Ch 7 2442.0 MHz	Ch 11 2462.0 MHz
WLAN		Conducted Power	16.0 dBm	16.0 dBm	16.0 dBm
Slide closed	Display facing phantom	Without headset	**0.067**	0.060	0.054
		Headset WH-102	-	0.055	-
	Back facing phantom	Without headset	-	0.059	-
		Headset WH-102	-	0.052	-

** SAR values copied from FCC_RM-627_06 for RM-627 / FCC ID: QTKRM-627.

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

Simultaneous transmissions: Combined SAR results – Individual band Max results

Test configuration	Max. 1g SAR results				
	WLAN**	2-slot GPRS 850**	WCDMA 850	GSM 1900**	WCDMA 1900**
Head: Left, Cheek	0.274	0.830	0.569	0.605	0.720
Head: Left, Tilt	0.134	0.376	0.310	0.092	0.109
Head: Right, Cheek	0.158	0.838	0.633	0.471	0.669
Head: Right, Tilt	0.135	0.356	0.284	0.135	0.102
Body: Without Headset	0.067	0.602	0.446	0.706	0.782
Body: Headset WH-102	0.055	0.397	0.343	0.661	0.729

Simultaneous transmissions: Combined SAR results – Max + Max combined results

Test configuration	Combined 1g SAR values			
	WLAN + 2-slot GPRS 850**	WLAN + WCDMA 850	WLAN + GSM 1900**	WLAN + WCDMA 1900**
Head: Left, Cheek	**1.104**	**0.843**	**0.879**	**0.994**
Head: Left, Tilt	0.510	0.444	0.226	0.243
Head: Right, Cheek	0.996	0.791	0.629	0.827
Head: Right, Tilt	0.491	0.419	0.270	0.237
Body: Without Headset	**0.669**	**0.513**	**0.773**	**0.849**
Body: Headset WH-102	0.452	0.398	0.716	0.784

The following table gives a more accurate assessment of the SAR values for simultaneous transmission. These values have been calculated using the SPEAG Combined Multiband algorithm, which is based on area scans. It a) converts the 2D area scans into 3D volume scans by assuming frequency-dependent decay characteristics for the E-field, b) sums the SAR values for WLAN2450 and the cellular bands point-by-point and c) calculates the combined average SAR values.

**Simultaneous transmissions: Combined SAR results –
SPEAG Combined Multiband algorithm results**

Test configuration	Combined 1g SAR values			
	WLAN + 2-slot GPRS 850**	WLAN + WCDMA 850	WLAN + GSM 1900**	WLAN + WCDMA 1900**
Head: Left, Cheek	**1.01**	**0.811**	**0.564**	**0.767**
Head: Left, Tilt	-	-	-	-
Head: Right, Cheek	-	-	-	-
Head: Right, Tilt	-	-	-	-
Body: Without Headset	**0.631**	**0.474**	**0.673**	**0.734**
Body: Headset WH-102	-	-	-	-

Some of the Combined SAR values in the above table are less than the maximum SAR values for the contributing cellular band. This is due to a) minimal overlap of the SAR distributions of the cellular band with WLAN2450 and b) uncertainties associated with the different methods of calculation. In these cases, the maximum SAR values given for the combined Modes in the Summary table in Section 1.2 are those for the individual cellular band

Plots of the Measurement scans are given in Appendix B.

APPENDIX A: SYSTEM CHECKING SCANS

See the following pages

Date/Time: 2010-06-22 15:57:35

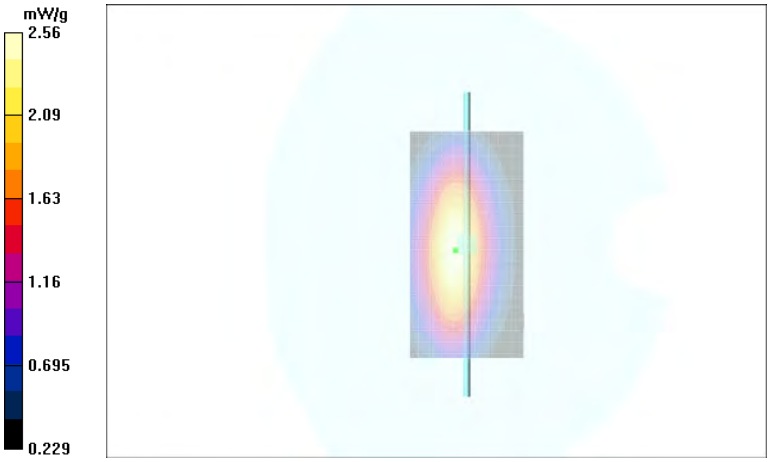
Test Laboratory: TCC Nokia
Type: D835V2; Serial: 4d042

Communication System: CW835
Frequency: 835 MHz; Duty Cycle: 1:1
Medium: Head 835; Medium Notes: Medium Temperature: 22.4 C
Medium parameters used: f = 835 MHz; σ = 0.888 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

d=15mm, Pin=250mW/Area Scan (61x121x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 2.57 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 51.7 V/m
Peak SAR (extrapolated) = 3.59 W/kg
SAR(1 g) = 2.37 mW/g
SAR(10 g) = 1.54 mW/g
Power Drift = 0.000 dB
Maximum value of SAR (measured) = 2.56 mW/g



Date/Time: 2010-06-29 10:10:13

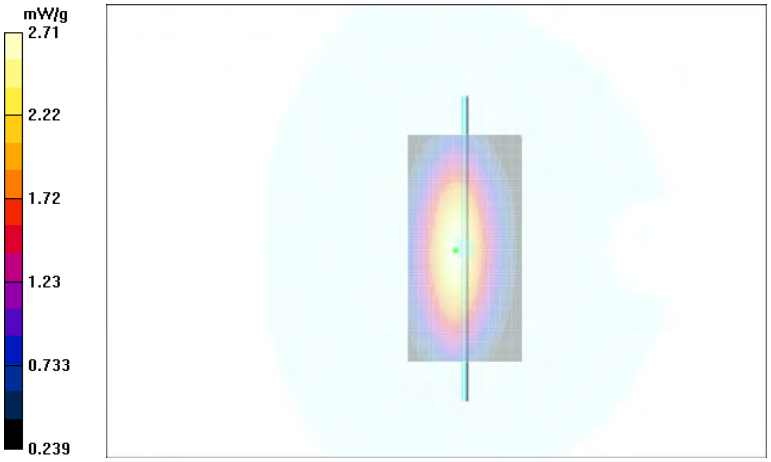
Test Laboratory: TCC Nokia
Type: D835V2; Serial: 4d042

Communication System: CW835
Frequency: 835 MHz; Duty Cycle: 1:1
Medium: Head 835; Medium Notes: Medium Temperature: 21.9 C
Medium parameters used: f = 835 MHz; σ = 0.929 mho/m; ε_r = 42.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

d=15mm, Pin=250mW/Area Scan (61x121x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 2.69 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.2 V/m
Peak SAR (extrapolated) = 3.82 W/kg
SAR(1 g) = 2.51 mW/g
SAR(10 g) = 1.63 mW/g
Power Drift = -0.008 dB
Maximum value of SAR (measured) = 2.71 mW/g



Date/Time: 2010-06-23 13:17:00

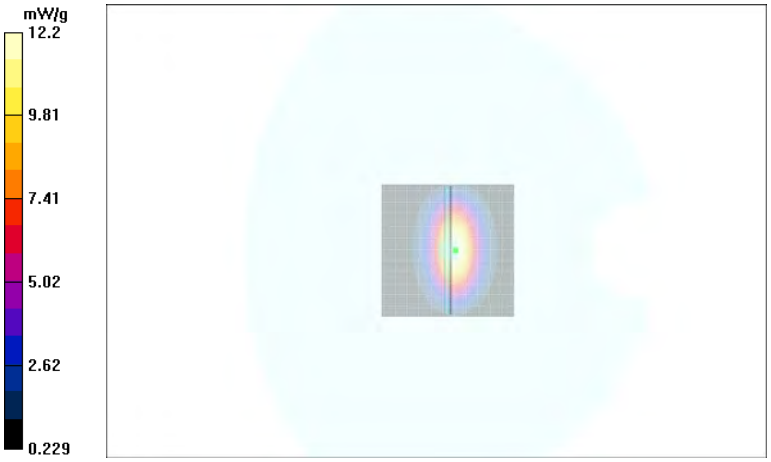
Test Laboratory: TCC Nokia
Type: D1900V2; Serial: 5d063

Communication System: CW1900
Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: Head 1900; Medium Notes: Medium Temperature: 22.5 C
Medium parameters used: f = 1900 MHz; σ = 1.48 mho/m; ε_r = 38.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(4.74, 4.74, 4.74); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 3; Type: Twin Phantom; Serial: TP-1302
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

d=10mm, Pin=250mW/Area Scan (71x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 12.5 mW/g

d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 88.9 V/m
Peak SAR (extrapolated) = 20.2 W/kg
SAR(1 g) = 10.9 mW/g
SAR(10 g) = 5.62 mW/g
Power Drift = -0.019 dB
Maximum value of SAR (measured) = 12.2 mW/g



Date/Time: 2010-06-24 11:40:49

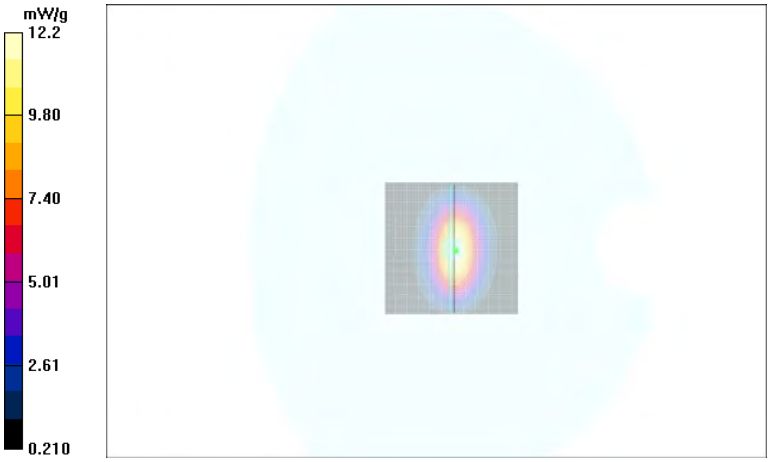
Test Laboratory: TCC Nokia
Type: D1900V2; Serial: 5d063

Communication System: CW1900
Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: Head 1900; Medium Notes: Medium Temperature: 20.8 C
Medium parameters used: f = 1900 MHz; σ = 1.49 mho/m; ε_r = 38.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(4.9, 4.9, 4.9); Calibrated: 2009-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn682; Calibrated: 2009-07-21
- Phantom: SAM 4.5; Type: Twin Phantom; Serial: TP-1215
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

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

d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 89.8 V/m
Peak SAR (extrapolated) = 20.2 W/kg
SAR(1 g) = 10.8 mW/g
SAR(10 g) = 5.54 mW/g
Power Drift = 0.052 dB
Maximum value of SAR (measured) = 12.2 mW/g



Date/Time: 2010-06-30 10:58:18

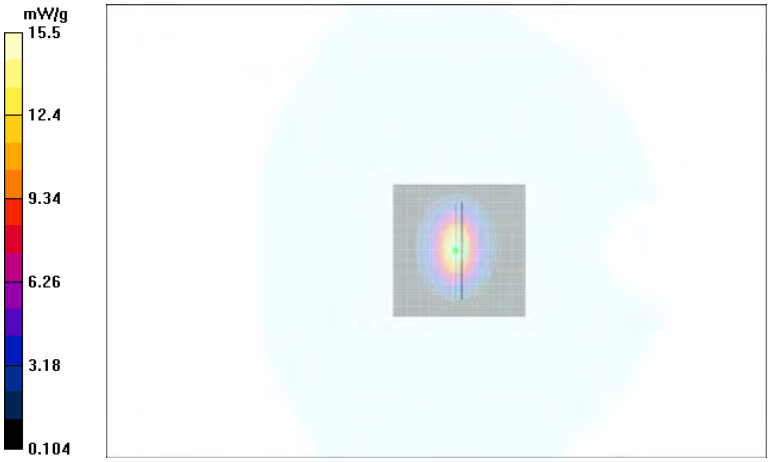
Test Laboratory: TCC Nokia
Type: D2450V2; Serial: 790

Communication System: CW790
Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: Head 2450; Medium Notes: Medium Temperature: 22.4 C
Medium parameters used: f = 2450 MHz; σ = 1.88 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(4.21, 4.21, 4.21); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 8; Type: SAM Twin Phantom; Serial: TP-1408
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

d=10mm, Pin=250mW/Area Scan (71x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 14.0 mW/g

d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 91.4 V/m
Peak SAR (extrapolated) = 27.9 W/kg
SAR(1 g) = 13.6 mW/g
SAR(10 g) = 6.32 mW/g
Power Drift = 0.008 dB
Maximum value of SAR (measured) = 15.5 mW/g



Date/Time: 2010-07-01 13:39:03

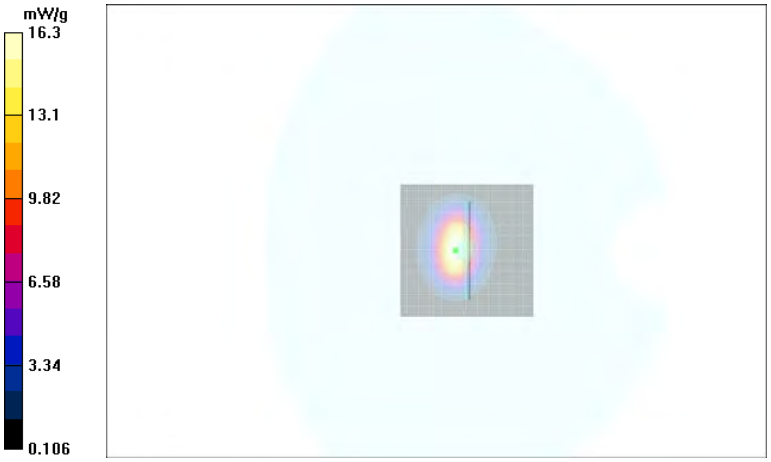
Test Laboratory: TCC Nokia
Type: D2450V2; Serial: 790

Communication System: CW790
Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: Head 2450; Medium Notes: Medium Temperature: 22.5 C
Medium parameters used: f = 2450 MHz; σ = 1.89 mho/m; ε_r = 38.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.36, 4.36, 4.36); Calibrated: 2010-02-24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn710; Calibrated: 2009-09-18
- Phantom: SAM 8; Type: SAM Twin Phantom; Serial: TP-1408
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

d=10mm, Pin=250mW/Area Scan (71x71x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 17.0 mW/g

d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 85.7 V/m
Peak SAR (extrapolated) = 29.2 W/kg
SAR(1 g) = 14.3 mW/g
SAR(10 g) = 6.64 mW/g
Power Drift = -0.151 dB
Maximum value of SAR (measured) = 16.3 mW/g



APPENDIX B: MEASUREMENT SCANS

See the following pages

Date/Time: 2010-06-22 17:31:28

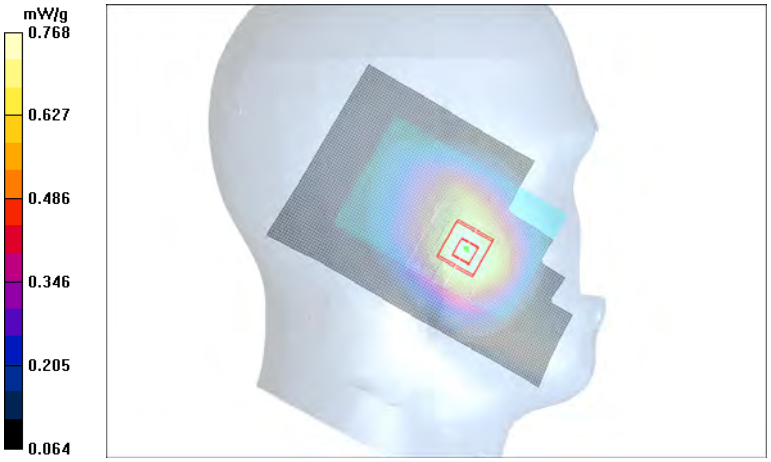
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: GSM850
Frequency: 836.6 MHz; Duty Cycle: 1:8.3
Medium: Head 835; Medium Notes: Medium Temperature: 22.4 C
Medium parameters used: f = 837 MHz; σ = 0.891 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek - Middle – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.806 mW/g

Cheek - Middle – Slide Open/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.5 V/m
Peak SAR (extrapolated) = 0.981 W/kg
SAR(1 g) = 0.735 mW/g
SAR(10 g) = 0.522 mW/g
Power Drift = -0.226 dB
Maximum value of SAR (measured) = 0.768 mW/g



Date/Time: 2010-06-22 19:14:30

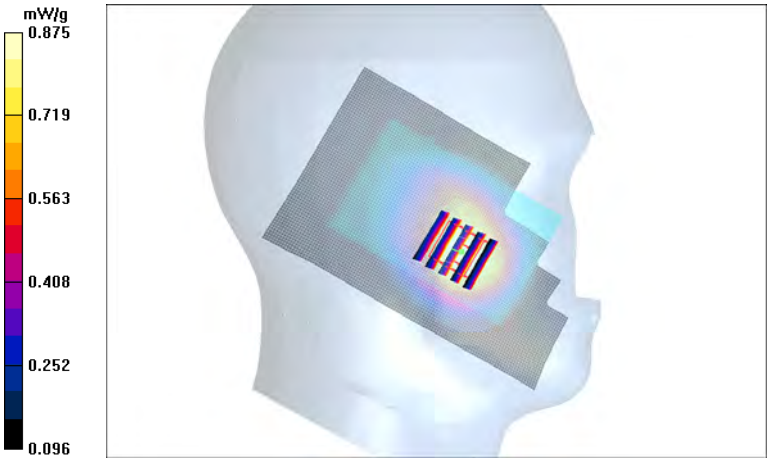
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: 2-slot GPRS850
Frequency: 824.2 MHz; Duty Cycle: 1:4.2
Medium: Head 835; Medium Notes: Medium Temperature: 22.4 C
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.879 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek - Low – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.899 mW/g

Cheek - Low – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 13.0 V/m
Peak SAR (extrapolated) = 1.12 W/kg
SAR(1 g) = 0.830 mW/g
SAR(10 g) = 0.592 mW/g
Power Drift = -0.141 dB
Maximum value of SAR (measured) = 0.875 mW/g



Date/Time: 2010-06-22 19:33:50

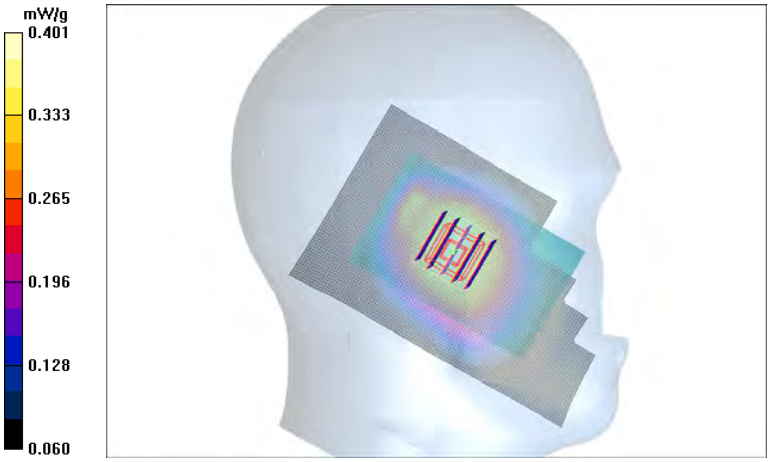
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: 2-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:4.2
Medium: Head 835; Medium Notes: Medium Temperature: 22.4 C
Medium parameters used: f = 837 MHz; σ = 0.891 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt - Middle – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.392 mW/g

Tilt - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 16.4 V/m
Peak SAR (extrapolated) = 0.475 W/kg
SAR(1 g) = 0.376 mW/g
SAR(10 g) = 0.285 mW/g
Power Drift = -0.118 dB
Maximum value of SAR (measured) = 0.401 mW/g



Date/Time: 2010-06-22 20:10:55

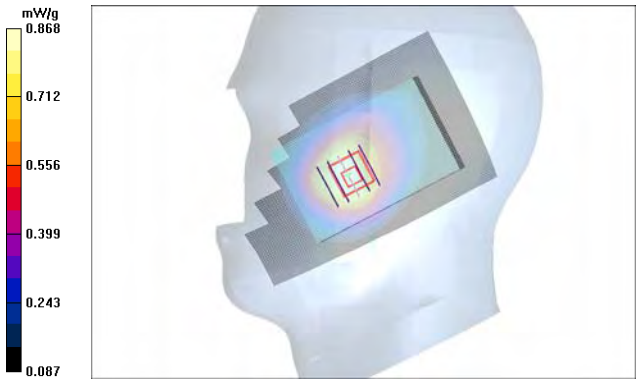
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

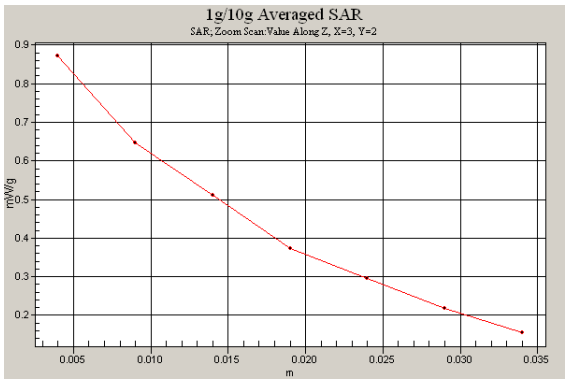
Communication System: 2-slot GPRS850
Frequency: 824.2 MHz; Duty Cycle: 1:4.2
Medium: Head 835; Medium Notes: Medium Temperature: 22.4 C
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.879 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek - Low – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.951 mW/g

Cheek - Low – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 13.4 V/m
Peak SAR (extrapolated) = 1.15 W/kg
SAR(1 g) = 0.838 mW/g
SAR(10 g) = 0.605 mW/g
Power Drift = -0.051 dB
Maximum value of SAR (measured) = 0.868 mW/g





Date/Time: 2010-06-22 20:38:50

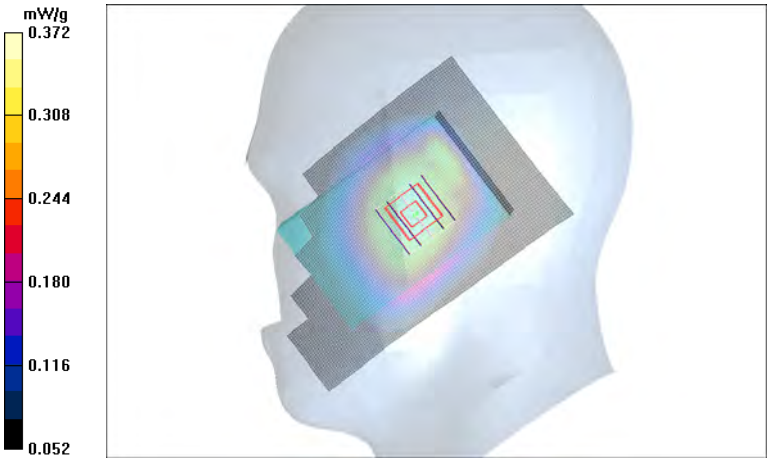
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: 2-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:4.2
Medium: Head 835; Medium Notes: Medium Temperature: 22.4 C
Medium parameters used: f = 837 MHz; σ = 0.891 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt - Middle – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.382 mW/g

Tilt - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 15.8 V/m
Peak SAR (extrapolated) = 0.443 W/kg
SAR(1 g) = 0.356 mW/g
SAR(10 g) = 0.273 mW/g
Power Drift = -0.057 dB
Maximum value of SAR (measured) = 0.372 mW/g



Date/Time: 2010-06-22 18:18:54

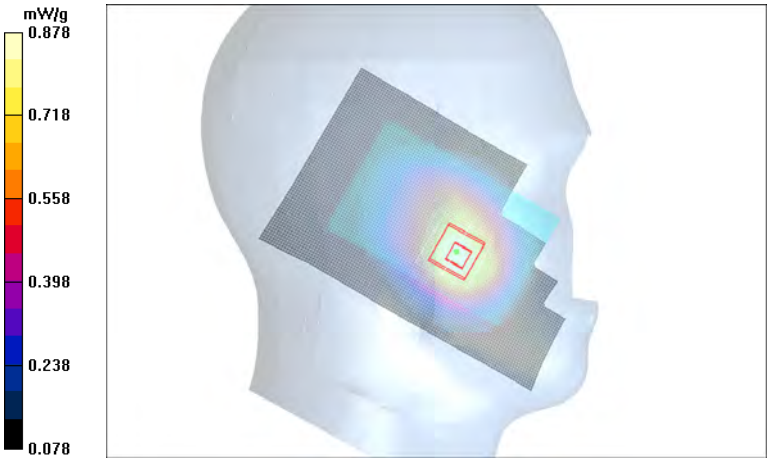
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: 3-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:2.8
Medium: Head 835; Medium Notes: Medium Temperature: 22.4 C
Medium parameters used: f = 837 MHz; σ = 0.891 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek - Middle – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.885 mW/g

Cheek - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.4 V/m
Peak SAR (extrapolated) = 1.06 W/kg
SAR(1 g) = 0.805 mW/g
SAR(10 g) = 0.569 mW/g
Power Drift = 0.384 dB
Maximum value of SAR (measured) = 0.878 mW/g



Date/Time: 2010-06-22 20:53:44

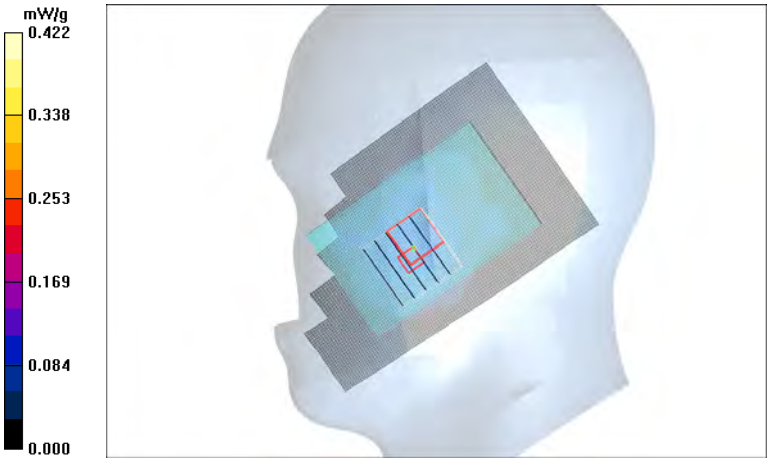
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: 2-slot 8PSK EGPRS850
Frequency: 824.2 MHz; Duty Cycle: 1:4.2
Medium: Head 835; Medium Notes: Medium Temperature: 22.4 C
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.879 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek - Low – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.117 mW/g

Cheek - Low – Slide Open/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 4.88 V/m
Peak SAR (extrapolated) = 0.422 W/kg
SAR(1 g) = 0.104 mW/g
SAR(10 g) = 0.072 mW/g
Power Drift = 0.053 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) = 0.422 mW/g



Date/Time: 2010-06-29 11:49:00

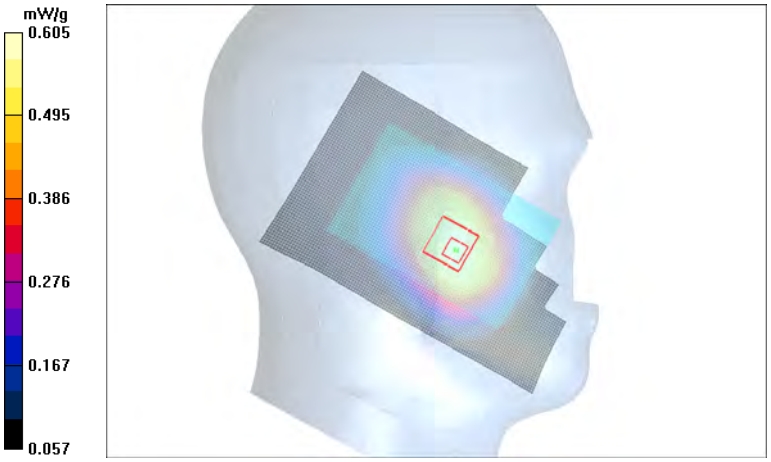
Test Laboratory: TCC Nokia
Type: RM-648; Serial: 352718/04/000253/8

Communication System: WCDMA850
Frequency: 835.0 MHz; Duty Cycle: 1:1
Medium: Head 835; Medium Notes: Medium Temperature: 21.9 C
Medium parameters used: f = 835 MHz; σ = 0.929 mho/m; ε_r = 42.3; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek - Middle – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.595 mW/g

Cheek - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 11.1 V/m
Peak SAR (extrapolated) = 0.740 W/kg
SAR(1 g) = 0.569 mW/g
SAR(10 g) = 0.423 mW/g
Power Drift = -0.072 dB
Maximum value of SAR (measured) = 0.605 mW/g



Date/Time: 2010-06-29 12:02:09

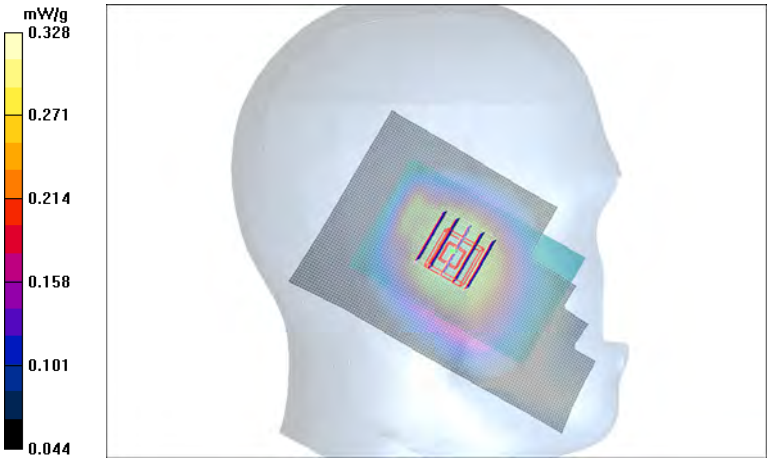
Test Laboratory: TCC Nokia
Type: RM-648; Serial: 352718/04/000253/8

Communication System: WCDMA850
Frequency: 835.0 MHz; Duty Cycle: 1:1
Medium: Head 835; Medium Notes: Medium Temperature: 21.9 C
Medium parameters used: f = 835 MHz; σ = 0.929 mho/m; ε_r = 42.3; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt - Middle – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.325 mW/g

Tilt - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 14.4 V/m
Peak SAR (extrapolated) = 0.390 W/kg
SAR(1 g) = 0.310 mW/g
SAR(10 g) = 0.235 mW/g
Power Drift = -0.057 dB
Maximum value of SAR (measured) = 0.328 mW/g



Date/Time: 2010-06-29 13:09:40

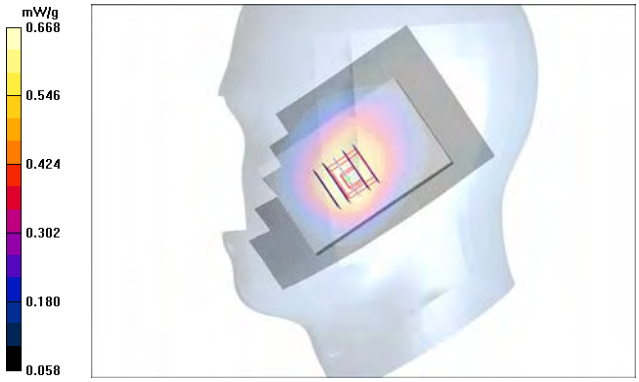
Test Laboratory: TCC Nokia
Type: RM-648; Serial: 352718/04/000253/8

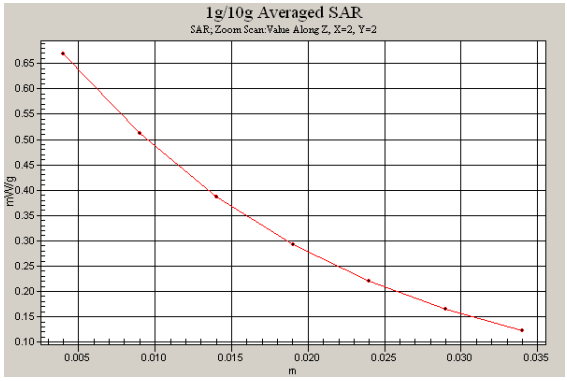
Communication System: WCDMA850
Frequency: 846.6 MHz; Duty Cycle: 1:1
Medium: Head 835; Medium Notes: Medium Temperature: 21.9 C
Medium parameters used: f = 847 MHz; σ = 0.943 mho/m; ε_r = 42.1; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek - High – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.673 mW/g

Cheek - High – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 13.5 V/m
Peak SAR (extrapolated) = 0.820 W/kg
SAR(1 g) = 0.633 mW/g
SAR(10 g) = 0.465 mW/g
Power Drift = -0.146 dB
Maximum value of SAR (measured) = 0.668 mW/g





Date/Time: 2010-06-29 12:33:06

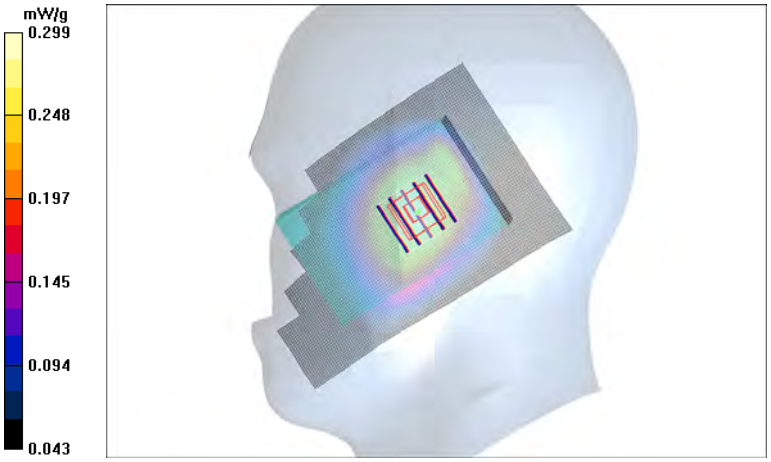
Test Laboratory: TCC Nokia
Type: RM-648; Serial: 352718/04/000253/8

Communication System: WCDMA850
Frequency: 835.0 MHz; Duty Cycle: 1:1
Medium: Head 835; Medium Notes: Medium Temperature: 21.9 C
Medium parameters used: f = 835 MHz; σ = 0.929 mho/m; ε_r = 42.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.85, 5.85, 5.85); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 4; Type: Twin Phantom; Serial: TP-1410
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt - Middle – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.299 mW/g

Tilt - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 14.0 V/m
Peak SAR (extrapolated) = 0.353 W/kg
SAR(1 g) = 0.284 mW/g
SAR(10 g) = 0.215 mW/g
Power Drift = 0.070 dB
Maximum value of SAR (measured) = 0.299 mW/g



Date/Time: 2010-06-24 16:20:35

Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

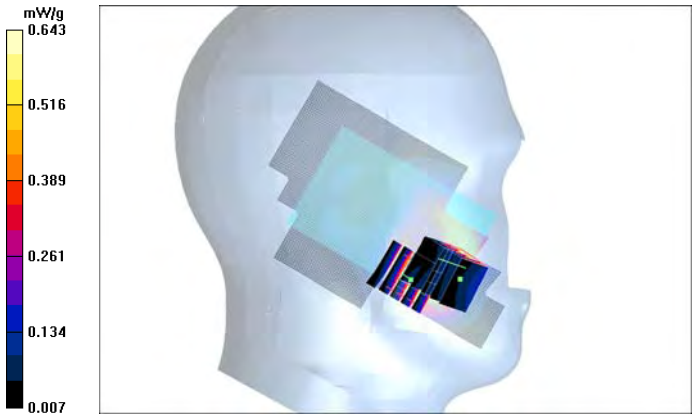
Communication System: GSM 1900
Frequency: 1880.0 MHz; Duty Cycle: 1:8.3
Medium: Head 1900; Medium Notes: Medium Temperature: 20.8 C
Medium parameters used: f = 1880 MHz; σ = 1.47 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(4.9, 4.9, 4.9); Calibrated: 2009-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn682; Calibrated: 2009-07-21
- Phantom: SAM 4.5; Type: Twin Phantom; Serial: TP-1215
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek - Middle – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.606 mW/g

Cheek - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 5.89 V/m
Peak SAR (extrapolated) = 0.892 W/kg
SAR(1 g) = 0.528 mW/g
SAR(10 g) = 0.295 mW/g
Power Drift = -0.094 dB
Maximum value of SAR (measured) = 0.583 mW/g

Cheek - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 5.89 V/m
Peak SAR (extrapolated) = 1.07 W/kg
SAR(1 g) = 0.605 mW/g
SAR(10 g) = 0.332 mW/g
Power Drift = -0.094 dB
Maximum value of SAR (measured) = 0.643 mW/g



Date/Time: 2010-06-24 17:37:19

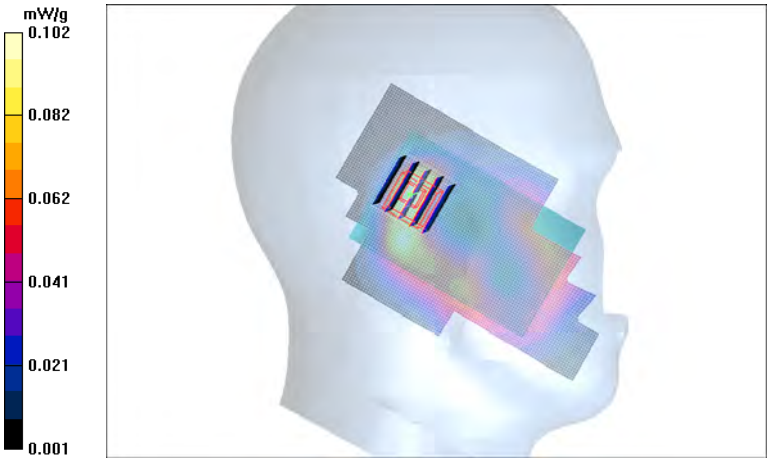
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: GSM 1900
Frequency: 1880.0 MHz; Duty Cycle: 1:8.3
Medium: Head 1900; Medium Notes: Medium Temperature: 20.8 C
Medium parameters used: f = 1880 MHz; σ = 1.47 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(4.9, 4.9, 4.9); Calibrated: 2009-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn682; Calibrated: 2009-07-21
- Phantom: SAM 4.5; Type: Twin Phantom; Serial: TP-1215
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt - Middle – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.107 mW/g

Tilt - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.00 V/m
Peak SAR (extrapolated) = 0.151 W/kg
SAR(1 g) = 0.092 mW/g
SAR(10 g) = 0.052 mW/g
Power Drift = -0.033 dB
Maximum value of SAR (measured) = 0.102 mW/g



Date/Time: 2010-06-24 18:19:31

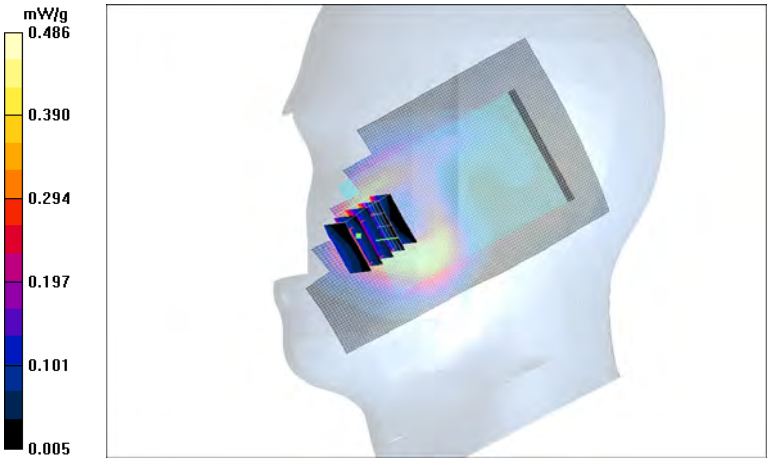
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: GSM 1900
Frequency: 1880.0 MHz; Duty Cycle: 1:8.3
Medium: Head 1900; Medium Notes: Medium Temperature: 20.8 C
Medium parameters used: f = 1880 MHz; σ = 1.47 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(4.9, 4.9, 4.9); Calibrated: 2009-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn682; Calibrated: 2009-07-21
- Phantom: SAM 4.5; Type: Twin Phantom; Serial: TP-1215
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek - Middle – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.418 mW/g

Cheek - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 6.45 V/m
Peak SAR (extrapolated) = 0.792 W/kg
SAR(1 g) = 0.471 mW/g
SAR(10 g) = 0.267 mW/g
Power Drift = -0.318 dB
Maximum value of SAR (measured) = 0.486 mW/g



Date/Time: 2010-06-24 18:37:11

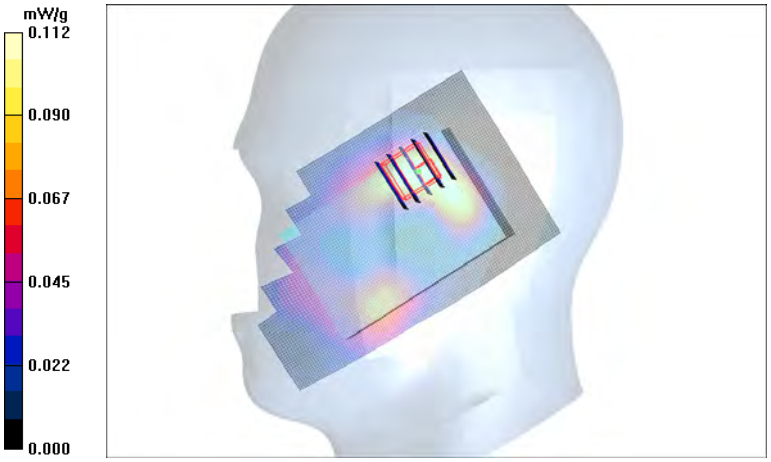
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: GSM 1900
Frequency: 1880.0 MHz; Duty Cycle: 1:8.3
Medium: Head 1900; Medium Notes: Medium Temperature: 20.8 C
Medium parameters used: f = 1880 MHz; σ = 1.47 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(4.9, 4.9, 4.9); Calibrated: 2009-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn682; Calibrated: 2009-07-21
- Phantom: SAM 4.5; Type: Twin Phantom; Serial: TP-1215
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt - Middle – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.128 mW/g

Tilt - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.53 V/m
Peak SAR (extrapolated) = 0.296 W/kg
SAR(1 g) = 0.135 mW/g
SAR(10 g) = 0.068 mW/g
Power Drift = -0.098 dB
Maximum value of SAR (measured) = 0.112 mW/g



Date/Time: 2010-06-24 16:51:26

Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

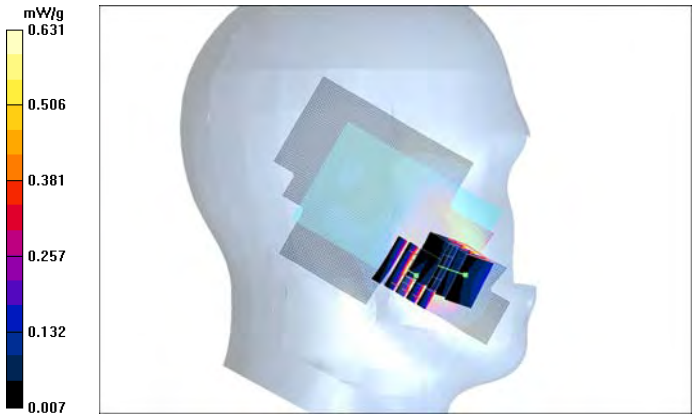
Communication System: 2-slot GPRS1900
Frequency: 1880.0 MHz; Duty Cycle: 1:4.2
Medium: Head 1900; Medium Notes: Medium Temperature: 20.8 C
Medium parameters used: f = 1880 MHz; σ = 1.47 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(4.9, 4.9, 4.9); Calibrated: 2009-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn682; Calibrated: 2009-07-21
- Phantom: SAM 4.5; Type: Twin Phantom; Serial: TP-1215
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek - Middle – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.606 mW/g

Cheek - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 5.77 V/m
Peak SAR (extrapolated) = 0.834 W/kg
SAR(1 g) = 0.527 mW/g
SAR(10 g) = 0.295 mW/g
Power Drift = 0.005 dB
Maximum value of SAR (measured) = 0.573 mW/g

Cheek - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 5.77 V/m
Peak SAR (extrapolated) = 1.05 W/kg
SAR(1 g) = 0.599 mW/g
SAR(10 g) = 0.331 mW/g
Power Drift = 0.005 dB
Maximum value of SAR (measured) = 0.631 mW/g



Date/Time: 2010-06-24 17:13:51

Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

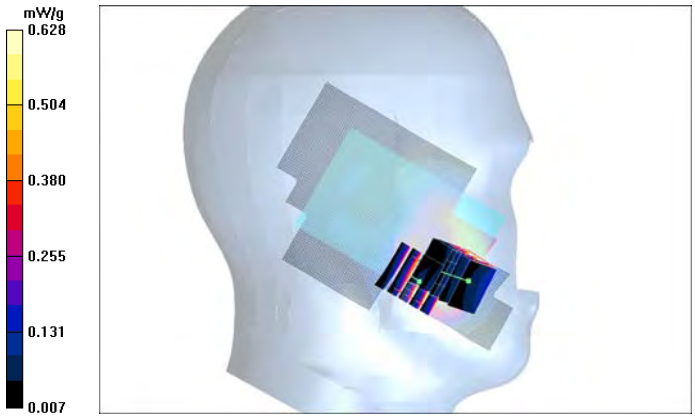
Communication System: 3-slot GPRS1900
Frequency: 1880.0 MHz; Duty Cycle: 1:2.8
Medium: Head 1900; Medium Notes: Medium Temperature: 20.8 C
Medium parameters used: f = 1880 MHz; σ = 1.47 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(4.9, 4.9, 4.9); Calibrated: 2009-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn682; Calibrated: 2009-07-21
- Phantom: SAM 4.5; Type: Twin Phantom; Serial: TP-1215
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek - Middle – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.604 mW/g

Cheek - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 5.88 V/m
Peak SAR (extrapolated) = 0.879 W/kg
SAR(1 g) = 0.536 mW/g
SAR(10 g) = 0.300 mW/g
Power Drift = -0.213 dB
Maximum value of SAR (measured) = 0.581 mW/g

Cheek - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 5.88 V/m
Peak SAR (extrapolated) = 0.997 W/kg
SAR(1 g) = 0.587 mW/g
SAR(10 g) = 0.326 mW/g
Power Drift = -0.213 dB
Maximum value of SAR (measured) = 0.628 mW/g



Date/Time: 2010-06-24 20:18:51

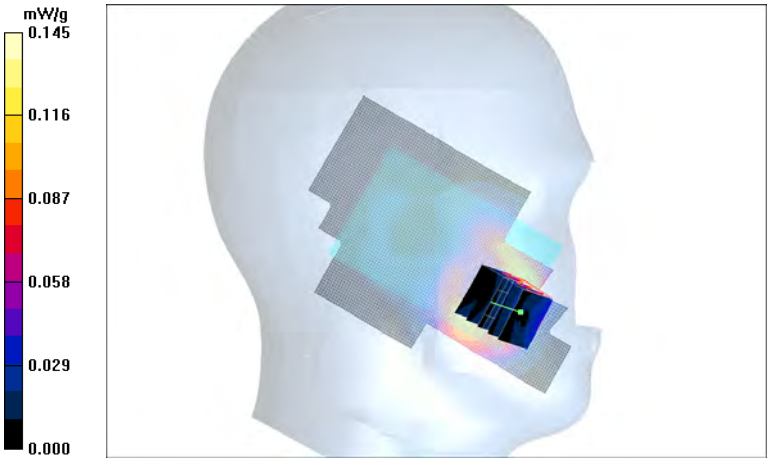
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: 1-slot 8PSK EGPRS 1900
Frequency: 1880.0 MHz; Duty Cycle: 1:8.3
Medium: Head 1900; Medium Notes: Medium Temperature: 20.8 C
Medium parameters used: f = 1880 MHz; σ = 1.47 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(4.9, 4.9, 4.9); Calibrated: 2009-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn682; Calibrated: 2009-07-21
- Phantom: SAM 4.5; Type: Twin Phantom; Serial: TP-1215
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek - Middle – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.116 mW/g

Cheek - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 2.79 V/m
Peak SAR (extrapolated) = 0.222 W/kg
SAR(1 g) = 0.124 mW/g
SAR(10 g) = 0.067 mW/g
Power Drift = -0.263 dB
Maximum value of SAR (measured) = 0.145 mW/g



Date/Time: 2010-06-23 23:21:25

Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: WCDMA1900
Frequency: 1907.6 MHz; Duty Cycle: 1:1
Medium: Head 1900; Medium Notes: Medium Temperature: 22.5 C
Medium parameters used: f = 1908 MHz; σ = 1.48 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Phantom section: Left Section

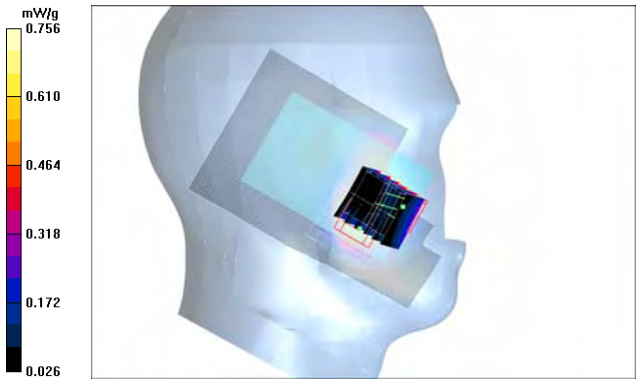
DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(4.74, 4.74, 4.74); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 3; Type: Twin Phantom; Serial: TP-1302
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

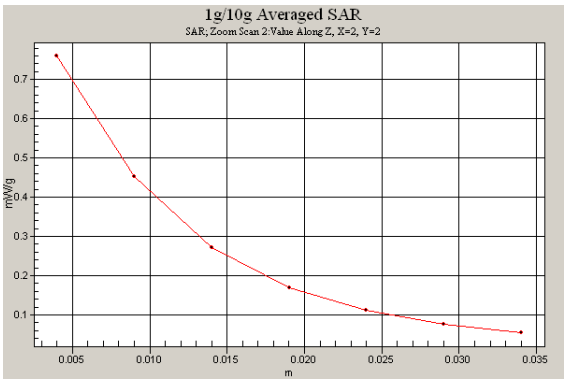
Cheek - High – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.660 mW/g

Cheek - High – Slide Open/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.58 V/m
Peak SAR (extrapolated) = 1.13 W/kg
SAR(1 g) = 0.608 mW/g
SAR(10 g) = 0.366 mW/g
Power Drift = -0.477 dB
Maximum value of SAR (measured) = 0.762 mW/g

Cheek - High – 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) = 1.25 W/kg
SAR(1 g) = 0.720 mW/g
SAR(10 g) = 0.388 mW/g
Power Drift = -0.477 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) = 0.756 mW/g

Cheek - High – Slide Open/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.58 V/m
Peak SAR (extrapolated) = 1.13 W/kg
SAR(1 g) = 0.683 mW/g
SAR(10 g) = 0.381 mW/g
Power Drift = -0.477 dB
Maximum value of SAR (measured) = 0.730 mW/g





Date/Time: 2010-06-23 17:46:28

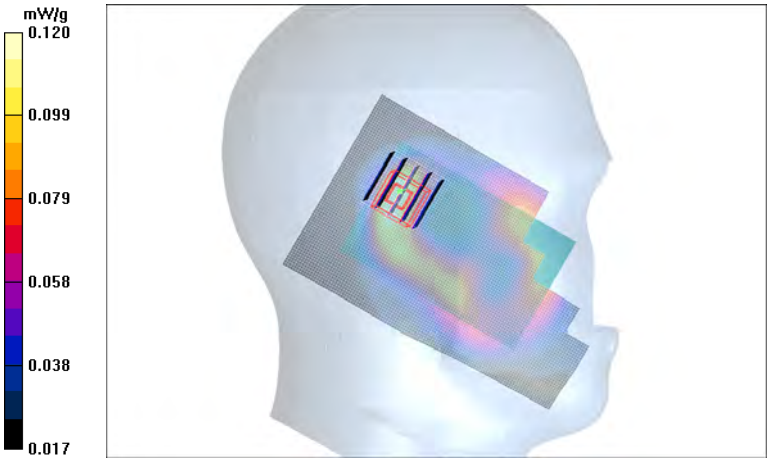
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: WCDMA1900
Frequency: 1880.0 MHz; Duty Cycle: 1:1
Medium: Head 1900; Medium Notes: Medium Temperature: 22.5 C
Medium parameters used: f = 1880 MHz; σ = 1.46 mho/m; ε_r = 38.5; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(4.74, 4.74, 4.74); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 3; Type: Twin Phantom; Serial: TP-1302
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt - Middle – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.131 mW/g

Tilt - Middle – 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) = 0.173 W/kg
SAR(1 g) = 0.109 mW/g
SAR(10 g) = 0.067 mW/g
Power Drift = -0.023 dB
Maximum value of SAR (measured) = 0.120 mW/g



Date/Time: 2010-06-23 18:38:26

Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

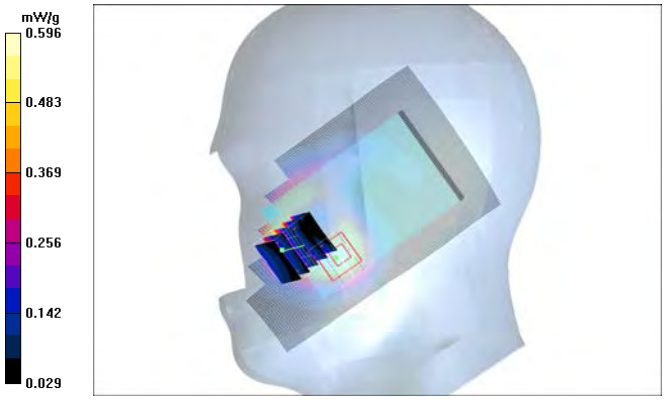
Communication System: WCDMA1900
Frequency: 1880.0 MHz; Duty Cycle: 1:1
Medium: Head 1900; Medium Notes: Medium Temperature: 22.5 C
Medium parameters used: f = 1880 MHz; σ = 1.46 mho/m; ε_r = 38.5; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(4.74, 4.74, 4.74); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 3; Type: Twin Phantom; Serial: TP-1302
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek - Middle – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.637 mW/g

Cheek - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.73 V/m
Peak SAR (extrapolated) = 1.16 W/kg
SAR(1 g) = 0.669 mW/g
SAR(10 g) = 0.369 mW/g
Power Drift = 0.234 dB
Maximum value of SAR (measured) = 0.696 mW/g

Cheek - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.73 V/m
Peak SAR (extrapolated) = 0.873 W/kg
SAR(1 g) = 0.549 mW/g
SAR(10 g) = 0.342 mW/g
Power Drift = 0.234 dB
Maximum value of SAR (measured) = 0.596 mW/g



Date/Time: 2010-06-23 19:04:10

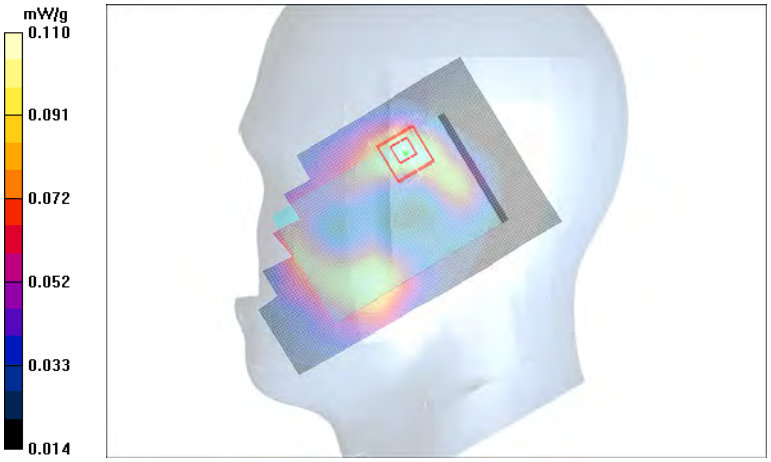
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: WCDMA1900
Frequency: 1880.0 MHz; Duty Cycle: 1:1
Medium: Head 1900; Medium Notes: Medium Temperature: 22.5 C
Medium parameters used: f = 1880 MHz; σ = 1.46 mho/m; ε_r = 38.5; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(4.74, 4.74, 4.74); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 3; Type: Twin Phantom; Serial: TP-1302
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt - Middle – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.119 mW/g

Tilt - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.94 V/m
Peak SAR (extrapolated) = 0.153 W/kg
SAR(1 g) = 0.102 mW/g
SAR(10 g) = 0.066 mW/g
Power Drift = -0.014 dB
Maximum value of SAR (measured) = 0.110 mW/g



Date/Time: 2010-06-30 13:17:07

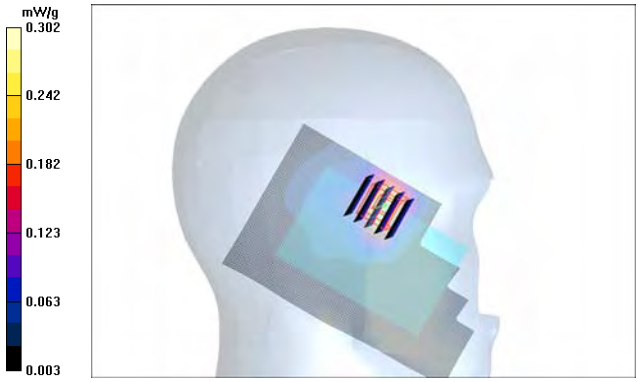
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

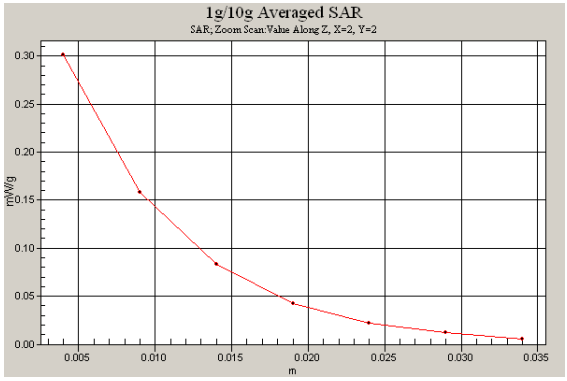
Communication System: WLAN2450
Frequency: 2442.0 MHz; Duty Cycle: 1:1
Medium: Head 2450; Medium Notes: Medium Temperature: 22.4 C
Medium parameters used: f = 2442 MHz; σ = 1.88 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(4.21, 4.21, 4.21); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 8; Type: SAM Twin Phantom; Serial: TP-1408
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek - Middle – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.291 mW/g

Cheek - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 5.04 V/m
Peak SAR (extrapolated) = 0.528 W/kg
SAR(1 g) = 0.274 mW/g
SAR(10 g) = 0.139 mW/g
Power Drift = -0.150 dB
Maximum value of SAR (measured) = 0.302 mW/g





Date/Time: 2010-06-30 13:43:24

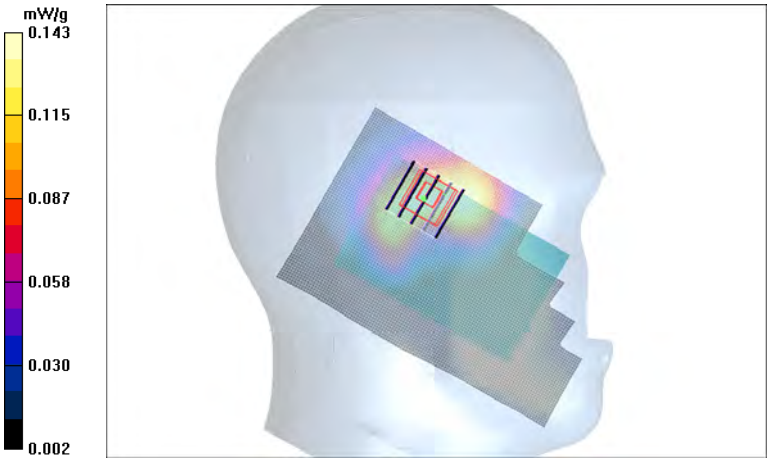
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: WLAN2450
Frequency: 2442.0 MHz; Duty Cycle: 1:1
Medium: Head 2450; Medium Notes: Medium Temperature: 22.4 C
Medium parameters used: f = 2442 MHz; σ = 1.88 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(4.21, 4.21, 4.21); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 8; Type: SAM Twin Phantom; Serial: TP-1408
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt - Middle – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.145 mW/g

Tilt - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.23 V/m
Peak SAR (extrapolated) = 0.234 W/kg
SAR(1 g) = 0.134 mW/g
SAR(10 g) = 0.076 mW/g
Power Drift = -0.136 dB
Maximum value of SAR (measured) = 0.143 mW/g



Date/Time: 2010-06-30 14:05:38

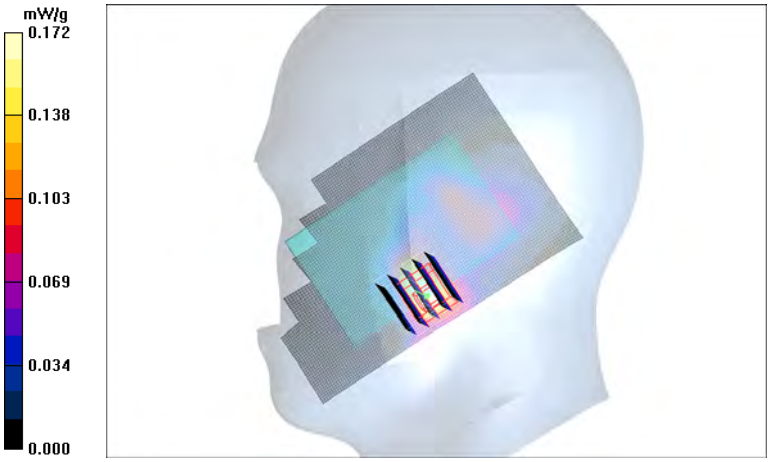
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: WLAN2450
Frequency: 2442.0 MHz; Duty Cycle: 1:1
Medium: Head 2450; Medium Notes: Medium Temperature: 22.4 C
Medium parameters used: f = 2442 MHz; σ = 1.88 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(4.21, 4.21, 4.21); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 8; Type: SAM Twin Phantom; Serial: TP-1408
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek - Middle – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.198 mW/g

Cheek - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 5.86 V/m
Peak SAR (extrapolated) = 0.286 W/kg
SAR(1 g) = 0.158 mW/g
SAR(10 g) = 0.082 mW/g
Power Drift = 0.029 dB
Maximum value of SAR (measured) = 0.172 mW/g



Date/Time: 2010-06-30 14:25:17

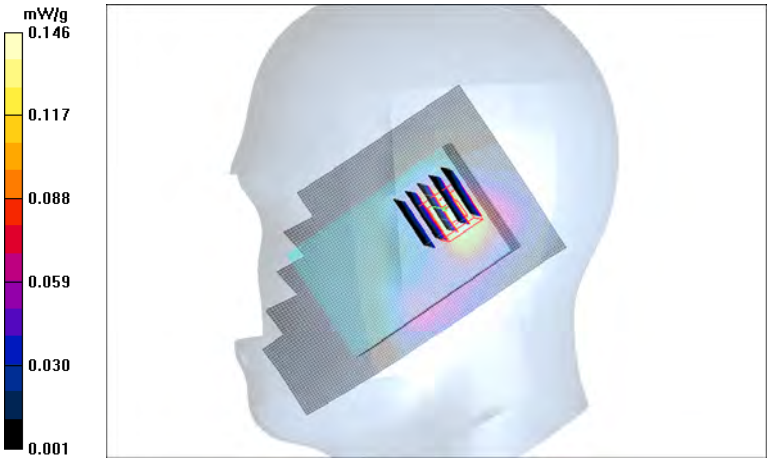
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: WLAN2450
Frequency: 2442.0 MHz; Duty Cycle: 1:1
Medium: Head 2450; Medium Notes: Medium Temperature: 22.4 C
Medium parameters used: f = 2442 MHz; σ = 1.88 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(4.21, 4.21, 4.21); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 8; Type: SAM Twin Phantom; Serial: TP-1408
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt - Middle – Slide Open/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.157 mW/g

Tilt - Middle – Slide Open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.67 V/m
Peak SAR (extrapolated) = 0.245 W/kg
SAR(1 g) = 0.135 mW/g
SAR(10 g) = 0.072 mW/g
Power Drift = -0.200 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) = 0.146 mW/g



Date/Time: 2010-06-22 21:33:50

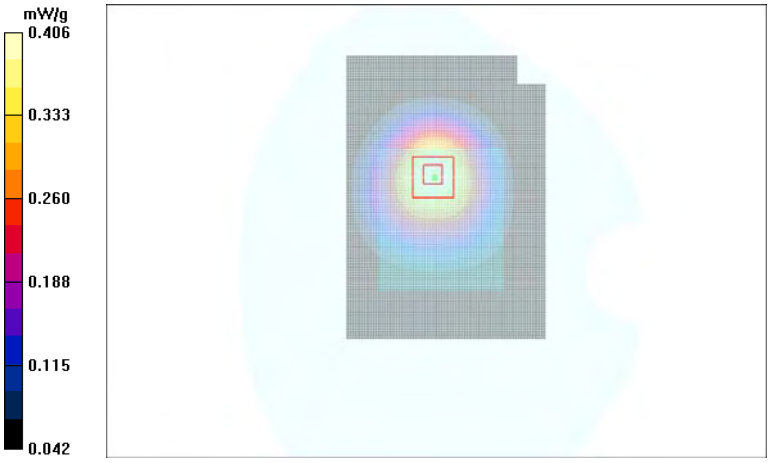
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: 2-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:4.2
Medium: Body 835; Medium Notes: Medium Temperature: 22.4 C
Medium parameters used: f = 837 MHz; σ = 0.974 mho/m; ε_r = 54; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.65, 5.65, 5.65); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 5; Type: Twin Phantom; Serial: TP-1302
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - No Accessory - Slide Closed - Display Facing Phantom/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.411 mW/g

Body - Middle - No Accessory - Slide Closed - Display Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.48 V/m
Peak SAR (extrapolated) = 0.548 W/kg
SAR(1 g) = 0.382 mW/g
SAR(10 g) = 0.262 mW/g
Power Drift = -0.292 dB
Maximum value of SAR (measured) = 0.406 mW/g



Date/Time: 2010-06-22 21:49:51

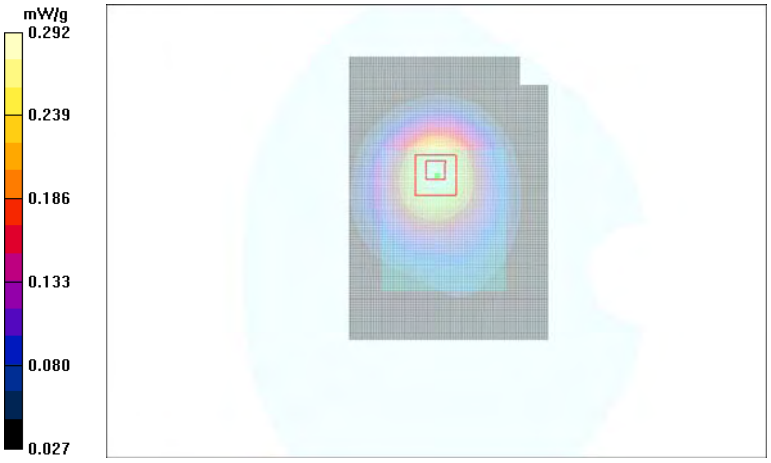
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: 2-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:4.2
Medium: Body 835; Medium Notes: Medium Temperature: 22.4 C
Medium parameters used: f = 837 MHz; σ = 0.974 mho/m; ε_r = 54; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.65, 5.65, 5.65); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 5; Type: Twin Phantom; Serial: TP-1302
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - WH-102 - Slide Closed - Display Facing Phantom/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.292 mW/g

Body - Middle - WH-102 - Slide Closed - Display Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.26 V/m
Peak SAR (extrapolated) = 0.408 W/kg
SAR(1 g) = 0.273 mW/g
SAR(10 g) = 0.185 mW/g
Power Drift = 0.054 dB
Maximum value of SAR (measured) = 0.292 mW/g



Date/Time: 2010-06-22 22:27:14

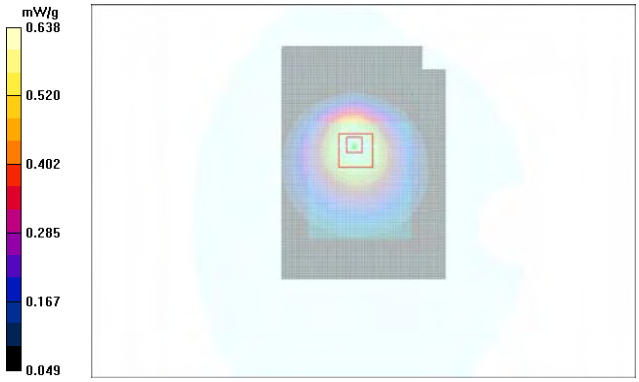
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

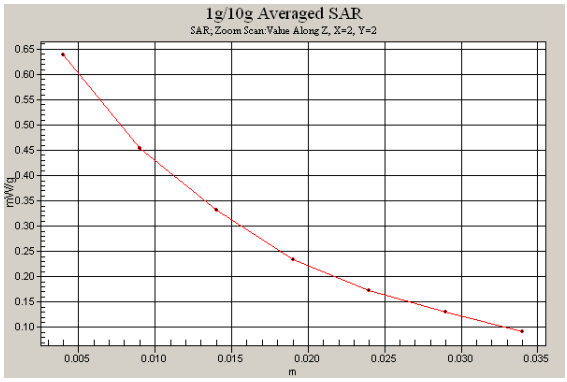
Communication System: 2-slot GPRS850
Frequency: 848.8 MHz; Duty Cycle: 1:4.2
Medium: Body 835; Medium Notes: Medium Temperature: 22.4 C
Medium parameters used: f = 849 MHz; σ = 0.985 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.65, 5.65, 5.65); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 5; Type: Twin Phantom; Serial: TP-1302
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - High - No Accessory - Slide Closed - Back Facing Phantom/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.668 mW/g

Body - High - No Accessory - Slide Closed - Back Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.1 V/m
Peak SAR (extrapolated) = 0.885 W/kg
SAR(1 g) = 0.602 mW/g
SAR(10 g) = 0.415 mW/g
Power Drift = 0.028 dB
Maximum value of SAR (measured) = 0.638 mW/g





Date/Time: 2010-06-22 22:52:14

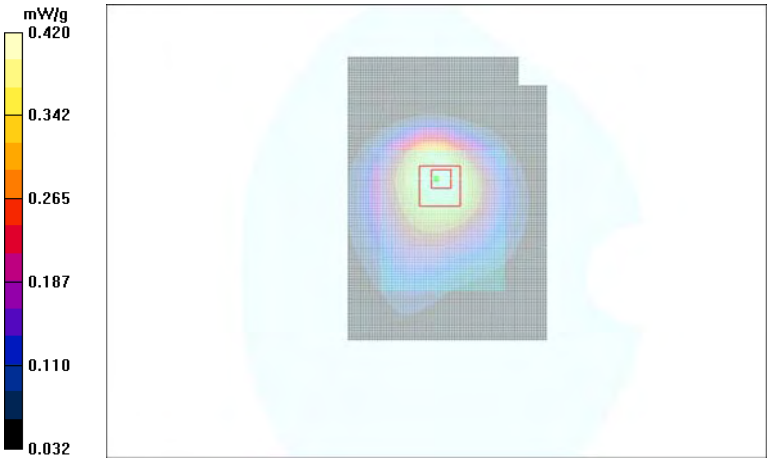
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: 2-slot GPRS850
Frequency: 836.6 MHz; Duty Cycle: 1:4.2
Medium: Body 835; Medium Notes: Medium Temperature: 22.4 C
Medium parameters used: f = 837 MHz; σ = 0.974 mho/m; ε_r = 54; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.65, 5.65, 5.65); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 5; Type: Twin Phantom; Serial: TP-1302
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - WH-102 - Slide Closed - Back Facing Phantom/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.437 mW/g

Body - Middle - WH-102 - Slide Closed - Back Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.8 V/m
Peak SAR (extrapolated) = 0.563 W/kg
SAR(1 g) = 0.397 mW/g
SAR(10 g) = 0.277 mW/g
Power Drift = -0.071 dB
Maximum value of SAR (measured) = 0.420 mW/g



Date/Time: 2010-06-29 13:50:34

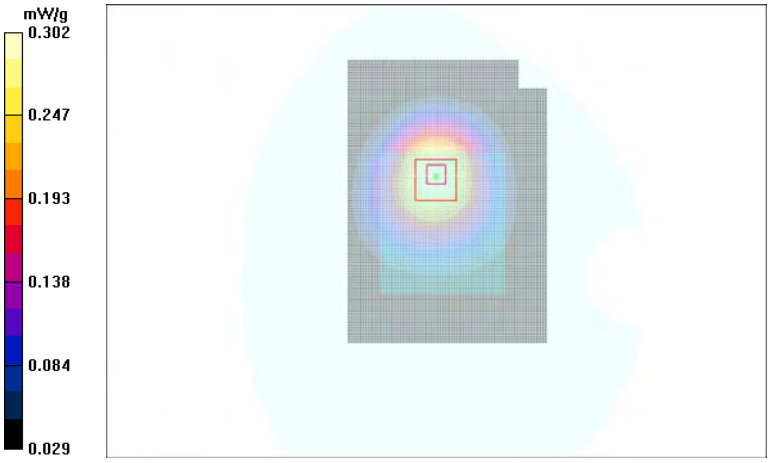
Test Laboratory: TCC Nokia
Type: RM-648; Serial: 352718/04/000253/8

Communication System: WCDMA850
Frequency: 835.0 MHz; Duty Cycle: 1:1
Medium: Body 835; Medium Notes: Medium Temperature: 22.3 C
Medium parameters used: f = 835 MHz; σ = 0.982 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.65, 5.65, 5.65); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 5; Type: Twin Phantom; Serial: TP-1302
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - No Accessory - Slide Closed - Display Facing Phantom/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.307 mW/g

Body - Middle - No Accessory - Slide Closed - Display Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 6.99 V/m
Peak SAR (extrapolated) = 0.395 W/kg
SAR(1 g) = 0.282 mW/g
SAR(10 g) = 0.194 mW/g
Power Drift = -0.272 dB
Maximum value of SAR (measured) = 0.302 mW/g



Date/Time: 2010-06-29 14:06:58

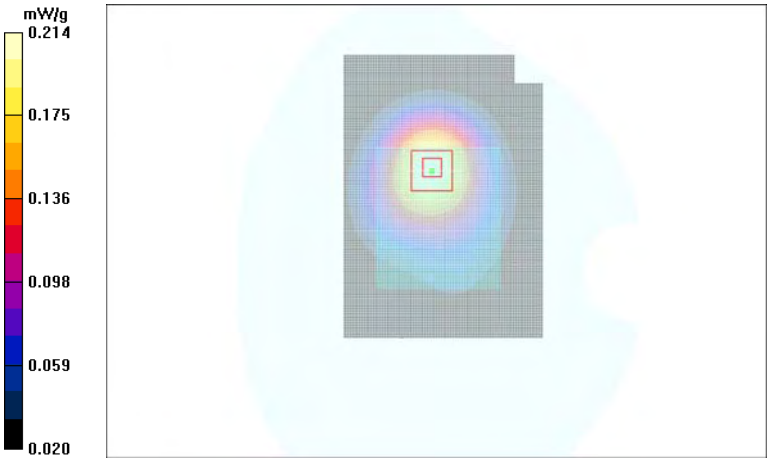
Test Laboratory: TCC Nokia
Type: RM-648; Serial: 352718/04/000253/8

Communication System: WCDMA850
Frequency: 835.0 MHz; Duty Cycle: 1:1
Medium: Body 835; Medium Notes: Medium Temperature: 22.3 C
Medium parameters used: f = 835 MHz; σ = 0.982 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.65, 5.65, 5.65); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 5; Type: Twin Phantom; Serial: TP-1302
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - Headset WH-102 - Slide Closed - Display Facing Phantom/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.221 mW/g

Body - Middle - Headset WH-102 - Slide Closed - Display Facing Phantom/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 6.96 V/m
Peak SAR (extrapolated) = 0.287 W/kg
SAR(1 g) = 0.200 mW/g
SAR(10 g) = 0.136 mW/g
Power Drift = -0.052 dB
Maximum value of SAR (measured) = 0.214 mW/g



Date/Time: 2010-06-29 15:06:09

Test Laboratory: TCC Nokia
Type: RM-648; Serial: 352718/04/000253/8

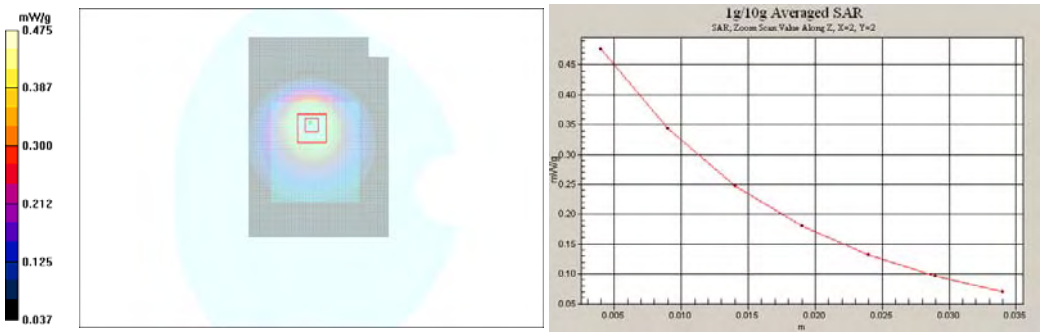
Communication System: WCDMA850
Frequency: 846.6 MHz; Duty Cycle: 1:1
Medium: Body 835; Medium Notes: Medium Temperature: 22.3 C
Medium parameters used: f = 847 MHz; σ = 0.995 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.65, 5.65, 5.65); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 5; Type: Twin Phantom; Serial: TP-1302
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - High - No Accessory - Slide Closed - Back Facing Phantom/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.496 mW/g

Body - High - No Accessory - Slide Closed - Back Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.9 V/m
Peak SAR (extrapolated) = 0.616 W/kg
SAR(1 g) = 0.446 mW/g
SAR(10 g) = 0.312 mW/g
Power Drift = -0.123 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) = 0.475 mW/g

Body - High - No Accessory - Slide Closed - Back Facing Phantom/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.9 V/m
Peak SAR (extrapolated) = 0.608 W/kg
SAR(1 g) = 0.440 mW/g
SAR(10 g) = 0.309 mW/g
Power Drift = -0.123 dB
Maximum value of SAR (measured) = 0.470 mW/g



Date/Time: 2010-06-29 14:31:36

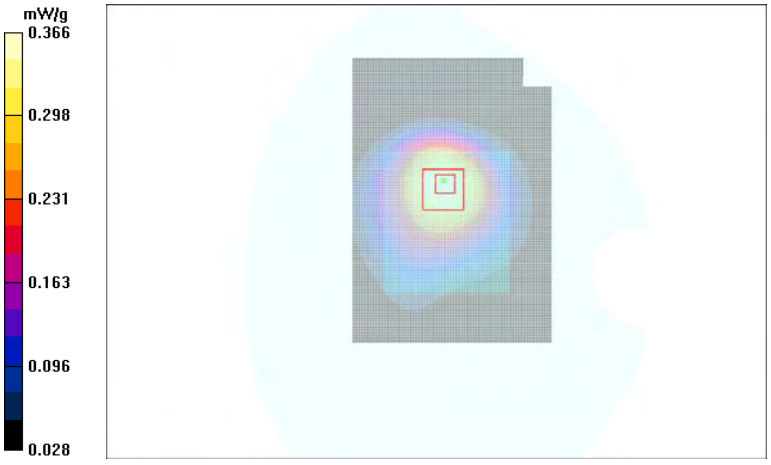
Test Laboratory: TCC Nokia
Type: RM-648; Serial: 352718/04/000253/8

Communication System: WCDMA850
Frequency: 835.0 MHz; Duty Cycle: 1:1
Medium: Body 835; Medium Notes: Medium Temperature: 22.3 C
Medium parameters used: f = 835 MHz; σ = 0.982 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(5.65, 5.65, 5.65); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 5; Type: Twin Phantom; Serial: TP-1302
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - Headset WH-102 - Slide Closed - Back Facing Phantom/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.369 mW/g

Body - Middle - Headset WH-102 - Slide Closed - Back Facing Phantom/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 9.60 V/m
Peak SAR (extrapolated) = 0.473 W/kg
SAR(1 g) = 0.343 mW/g
SAR(10 g) = 0.239 mW/g
Power Drift = 0.019 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) = 0.366 mW/g



Date/Time: 2010-06-24 21:28:23

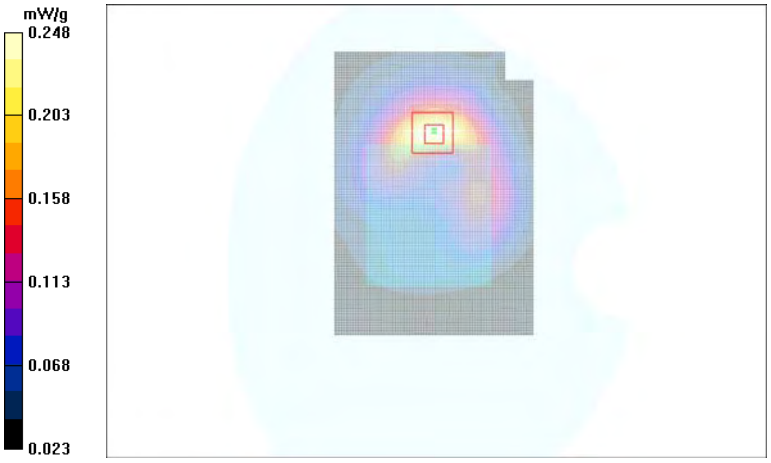
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: GSM 1900
Frequency: 1880.0 MHz; Duty Cycle: 1:8.3
Medium: Body 1900; Medium Notes: Medium Temperature: 22.8 C
Medium parameters used: f = 1880 MHz; σ = 1.57 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(4.41, 4.41, 4.41); Calibrated: 2009-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn682; Calibrated: 2009-07-21
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - No Accessory - Slide Closed - Display Facing Phantom/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.251 mW/g

Body - Middle - No Accessory - Slide Closed - Display Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 6.76 V/m
Peak SAR (extrapolated) = 0.323 W/kg
SAR(1 g) = 0.229 mW/g
SAR(10 g) = 0.147 mW/g
Power Drift = -0.079 dB
Maximum value of SAR (measured) = 0.248 mW/g



Date/Time: 2010-06-24 21:44:43

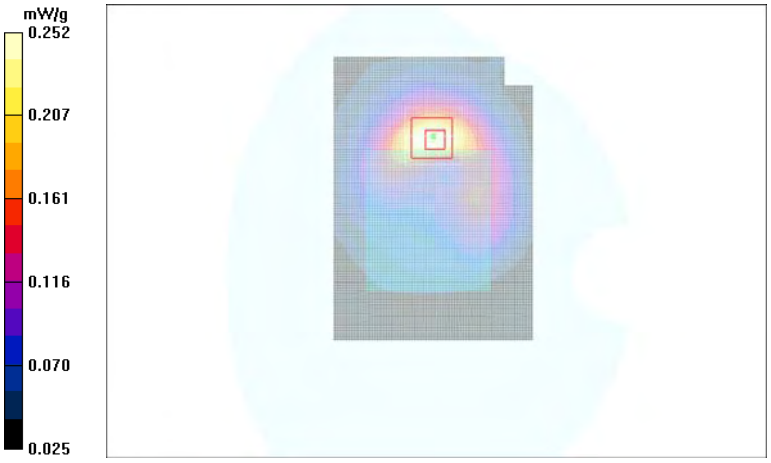
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: GSM 1900
Frequency: 1880.0 MHz; Duty Cycle: 1:8.3
Medium: Body 1900; Medium Notes: Medium Temperature: 22.8 C
Medium parameters used: f = 1880 MHz; σ = 1.57 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(4.41, 4.41, 4.41); Calibrated: 2009-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn682; Calibrated: 2009-07-21
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - WH-102 - Slide Closed - Display Facing Phantom/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.265 mW/g

Body - Middle - WH-102 - Slide Closed - Display Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 6.24 V/m
Peak SAR (extrapolated) = 0.328 W/kg
SAR(1 g) = 0.236 mW/g
SAR(10 g) = 0.153 mW/g
Power Drift = 0.009 dB
Maximum value of SAR (measured) = 0.252 mW/g



Date/Time: 2010-06-24 22:22:39

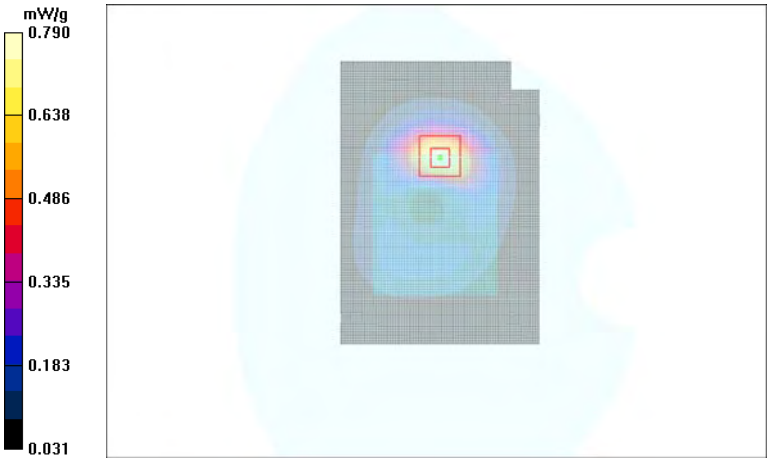
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: GSM 1900
Frequency: 1850.2 MHz; Duty Cycle: 1:8.3
Medium: Body 1900; Medium Notes: Medium Temperature: 22.8 C
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.54 mho/m; ε_r = 52.4; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(4.41, 4.41, 4.41); Calibrated: 2009-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn682; Calibrated: 2009-07-21
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Low - No Accessory - Slide Closed - Back Facing Phantom/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.804 mW/g

Body - Low - No Accessory - Slide Closed - Back Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 9.74 V/m
Peak SAR (extrapolated) = 1.08 W/kg
SAR(1 g) = 0.706 mW/g
SAR(10 g) = 0.405 mW/g
Power Drift = -0.074 dB
Maximum value of SAR (measured) = 0.790 mW/g



Date/Time: 2010-06-24 22:08:27

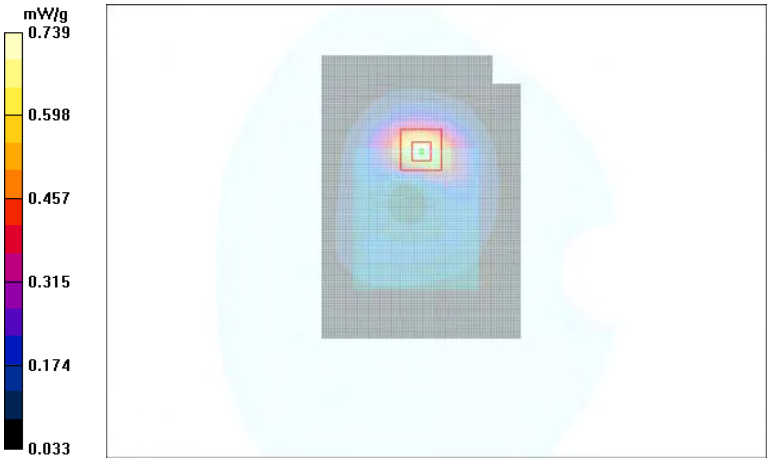
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: GSM 1900
Frequency: 1880.0 MHz; Duty Cycle: 1:8.3
Medium: Body 1900; Medium Notes: Medium Temperature: 22.8 C
Medium parameters used: f = 1880 MHz; σ = 1.57 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(4.41, 4.41, 4.41); Calibrated: 2009-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn682; Calibrated: 2009-07-21
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - WH-102 - Slide Closed - Back Facing Phantom/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.742 mW/g

Body - Middle - WH-102 - Slide Closed - Back Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.64 V/m
Peak SAR (extrapolated) = 1.01 W/kg
SAR(1 g) = 0.661 mW/g
SAR(10 g) = 0.379 mW/g
Power Drift = -0.042 dB
Maximum value of SAR (measured) = 0.739 mW/g



Date/Time: 2010-06-24 22:51:12

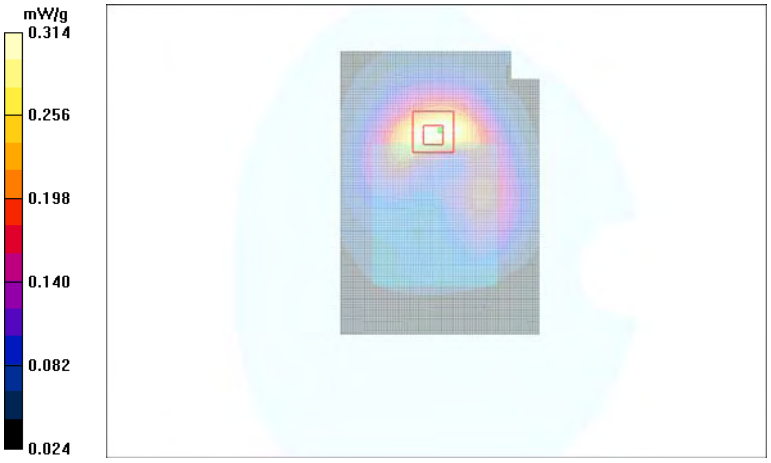
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: WCDMA1900
Frequency: 1880.0 MHz; Duty Cycle: 1:1
Medium: Body 1900; Medium Notes: Medium Temperature: 22.8 C
Medium parameters used: f = 1880 MHz; σ = 1.57 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(4.41, 4.41, 4.41); Calibrated: 2009-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn682; Calibrated: 2009-07-21
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - No Accessory - Slide Closed - Display Facing Phantom/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.333 mW/g

Body - Middle - No Accessory - Slide Closed - Display Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.40 V/m
Peak SAR (extrapolated) = 0.420 W/kg
SAR(1 g) = 0.293 mW/g
SAR(10 g) = 0.186 mW/g
Power Drift = -0.109 dB
Maximum value of SAR (measured) = 0.314 mW/g



Date/Time: 2010-06-24 23:06:15

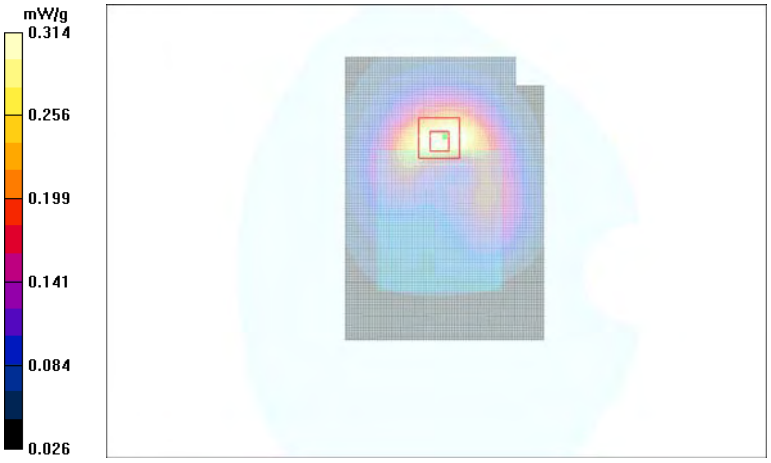
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: WCDMA1900
Frequency: 1880.0 MHz; Duty Cycle: 1:1
Medium: Body 1900; Medium Notes: Medium Temperature: 22.8 C
Medium parameters used: f = 1880 MHz; σ = 1.57 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(4.41, 4.41, 4.41); Calibrated: 2009-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn682; Calibrated: 2009-07-21
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - WH-102 - Slide Closed - Display Facing Phantom/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.340 mW/g

Body - Middle - WH-102 - Slide Closed - Display Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 6.82 V/m
Peak SAR (extrapolated) = 0.424 W/kg
SAR(1 g) = 0.297 mW/g
SAR(10 g) = 0.188 mW/g
Power Drift = -0.412 dB
Maximum value of SAR (measured) = 0.314 mW/g



Date/Time: 2010-06-24 23:44:46

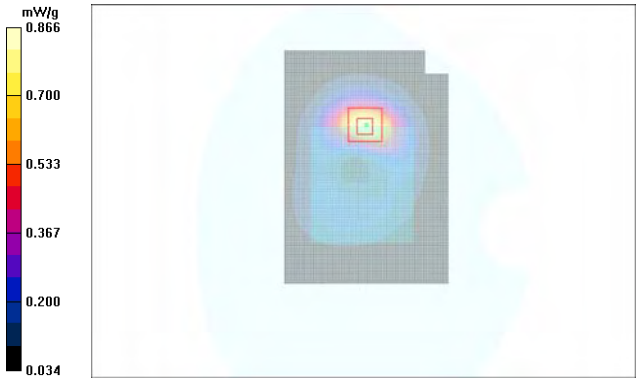
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

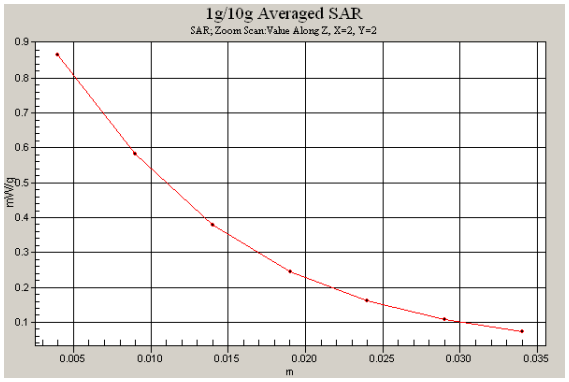
Communication System: WCDMA1900
Frequency: 1852.4 MHz; Duty Cycle: 1:1
Medium: Body 1900; Medium Notes: Medium Temperature: 22.8 C
Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.54 mho/m; ε_r = 52.4; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(4.41, 4.41, 4.41); Calibrated: 2009-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn682; Calibrated: 2009-07-21
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Low - No Accessory - Slide Closed - Back Facing Phantom/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.848 mW/g

Body - Low - No Accessory - Slide Closed - Back Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.2 V/m
Peak SAR (extrapolated) = 1.18 W/kg
SAR(1 g) = 0.782 mW/g
SAR(10 g) = 0.453 mW/g
Power Drift = 0.101 dB
Maximum value of SAR (measured) = 0.866 mW/g





Date/Time: 2010-06-24 23:30:56

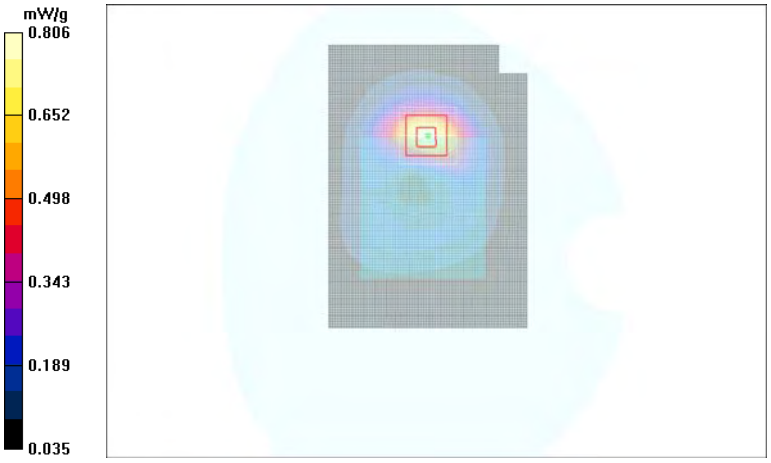
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: WCDMA1900
Frequency: 1880.0 MHz; Duty Cycle: 1:1
Medium: Body 1900; Medium Notes: Medium Temperature: 22.8 C
Medium parameters used: f = 1880 MHz; σ = 1.57 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(4.41, 4.41, 4.41); Calibrated: 2009-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn682; Calibrated: 2009-07-21
- Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1037
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - WH-102 - Slide Closed - Back Facing Phantom/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.784 mW/g

Body - Middle - WH-102 - Slide Closed - Back Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 8.88 V/m
Peak SAR (extrapolated) = 1.11 W/kg
SAR(1 g) = 0.729 mW/g
SAR(10 g) = 0.422 mW/g
Power Drift = 0.004 dB
Maximum value of SAR (measured) = 0.806 mW/g



Date/Time: 2010-07-02 00:36:57

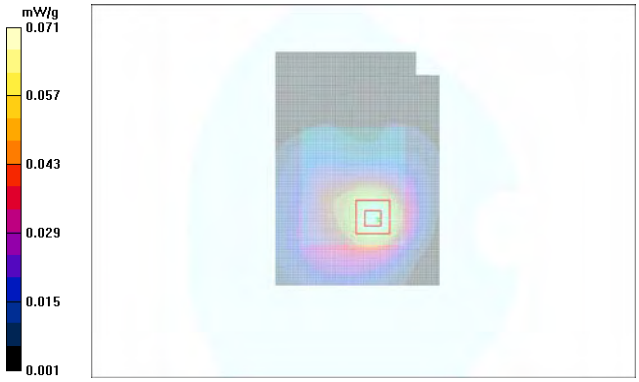
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

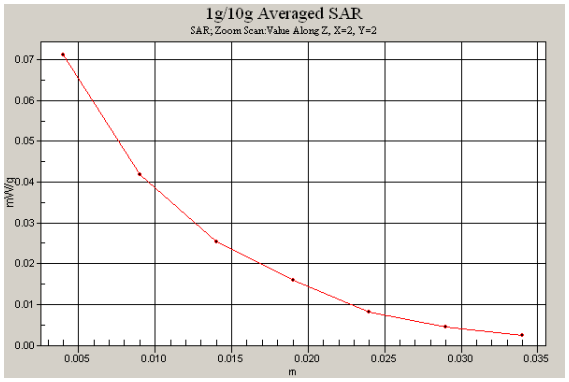
Communication System: WLAN2450
Frequency: 2412.0 MHz; Duty Cycle: 1:1
Medium: Body 2450; Medium Notes: Medium Temperature: 22.8 C
Medium parameters used: f = 2412 MHz; σ = 1.88 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.12, 4.12, 4.12); Calibrated: 2010-02-24
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn710; Calibrated: 2009-09-18
- Phantom: SAM 4.5; Type: Twin Phantom; Serial: TP-1215
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Low - No Accessory - Slide Closed - Display Facing Phantom/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.072 mW/g

Body - Low - No Accessory - Slide Closed - Display Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 5.33 V/m
Peak SAR (extrapolated) = 0.117 W/kg
SAR(1 g) = 0.067 mW/g
SAR(10 g) = 0.040 mW/g
Power Drift = 0.057 dB
Maximum value of SAR (measured) = 0.071 mW/g





Date/Time: 2010-07-01 23:04:37

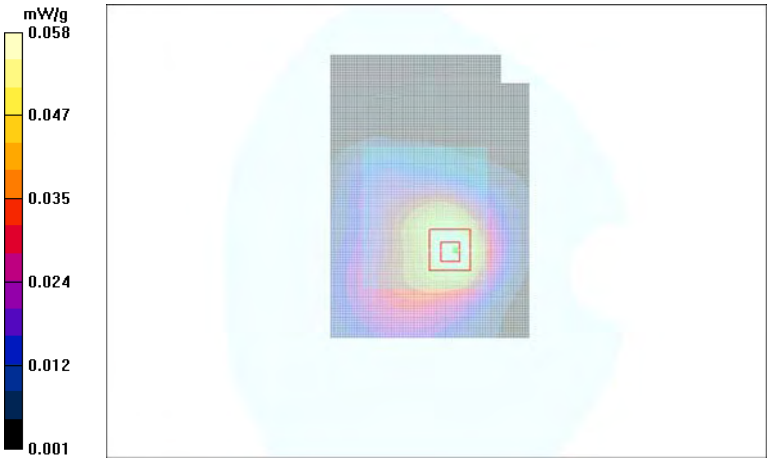
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: WLAN2450
Frequency: 2442.0 MHz; Duty Cycle: 1:1
Medium: Body 2450; Medium Notes: Medium Temperature: 22.8 C
Medium parameters used: f = 2442 MHz; σ = 1.92 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.12, 4.12, 4.12); Calibrated: 2010-02-24
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn710; Calibrated: 2009-09-18
- Phantom: SAM 4.5; Type: Twin Phantom; Serial: TP-1215
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - WH-102 - Slide Closed - Display Facing Phantom/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.059 mW/g

Body - Middle - WH-102 - Slide Closed - Display Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 4.81 V/m
Peak SAR (extrapolated) = 0.094 W/kg
SAR(1 g) = 0.055 mW/g
SAR(10 g) = 0.033 mW/g
Power Drift = 0.031 dB
Maximum value of SAR (measured) = 0.058 mW/g



Date/Time: 2010-07-01 23:22:29

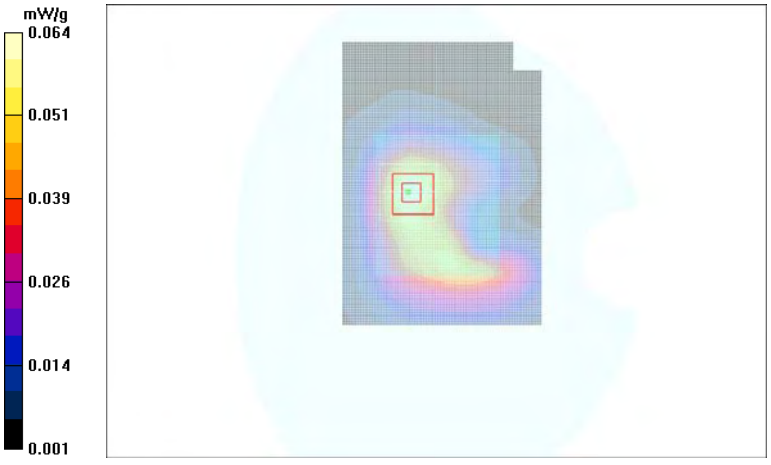
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: WLAN2450
Frequency: 2442.0 MHz; Duty Cycle: 1:1
Medium: Body 2450; Medium Notes: Medium Temperature: 22.8 C
Medium parameters used: f = 2442 MHz; σ = 1.92 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.12, 4.12, 4.12); Calibrated: 2010-02-24
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn710; Calibrated: 2009-09-18
- Phantom: SAM 4.5; Type: Twin Phantom; Serial: TP-1215
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - No Accessory - Slide Closed - Back Facing Phantom/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.063 mW/g

Body - Middle - No Accessory - Slide Closed - Back Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 5.31 V/m
Peak SAR (extrapolated) = 0.103 W/kg
SAR(1 g) = 0.059 mW/g
SAR(10 g) = 0.035 mW/g
Power Drift = -0.011 dB
Maximum value of SAR (measured) = 0.064 mW/g



Date/Time: 2010-07-01 23:37:57

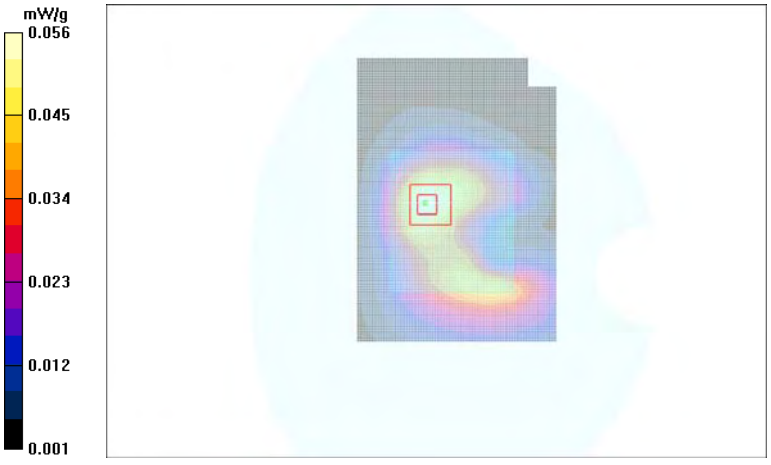
Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: WLAN2450
Frequency: 2442.0 MHz; Duty Cycle: 1:1
Medium: Body 2450; Medium Notes: Medium Temperature: 22.8 C
Medium parameters used: f = 2442 MHz; σ = 1.92 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ES3DV3 - SN3116; Probe Notes:
- ConvF(4.12, 4.12, 4.12); Calibrated: 2010-02-24
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn710; Calibrated: 2009-09-18
- Phantom: SAM 4.5; Type: Twin Phantom; Serial: TP-1215
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body - Middle - WH-102 - Slide Closed - Back Facing Phantom/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.058 mW/g

Body - Middle - WH-102 - Slide Closed - Back Facing Phantom/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 4.64 V/m
Peak SAR (extrapolated) = 0.090 W/kg
SAR(1 g) = 0.052 mW/g
SAR(10 g) = 0.031 mW/g
Power Drift = 0.039 dB
Maximum value of SAR (measured) = 0.056 mW/g



Date/Time: 2010-06-30 13:17:07, Date/Time: 2010-06-22 17:47:52

Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: WLAN2450, Communication System: 2-slot GPRS850
Frequency: 2442.0 MHz, Frequency: 836.6 MHz; Duty Cycle: 1:1, Duty Cycle: 1:4.2
Medium: Head 2450, Medium: Head 835; Medium Notes: Medium Temperature: 22.4 C
Medium parameters used: f = 2442 MHz; σ = 1.88 mho/m; ε_r = 39; ρ = 1000 kg/m^3 , Medium parameters used: f = 837 MHz; σ = 0.891 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3
Phantom section: Left Section

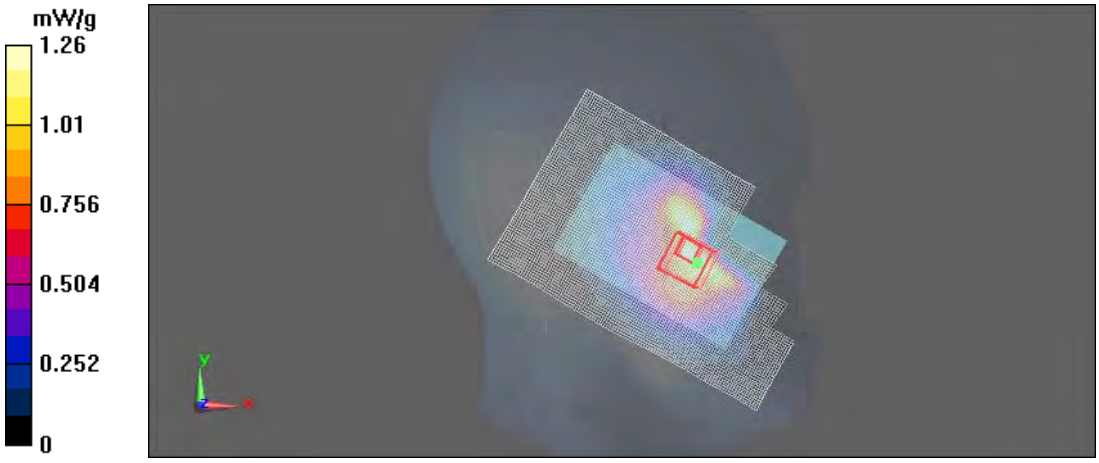
DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(4.21, 4.21, 4.21), ConvF(5.85, 5.85, 5.85); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 8, Phantom: SAM 4; Type: SAM Twin Phantom, Type: Twin Phantom; Serial: TP-1408, Serial: TP-1410
- ; SEMCAD X Version 14.0 Build 61

Configuration/Cheek - Middle – Slide Open/Area Scan (8x12x1): Measurement grid: dx=15mm, dy=15mm

Configuration/Cheek - Middle – Slide Open /Area Scan (8x12x1): Measurement grid: dx=15mm, dy=15mm

Motorola Fast SAR of Combined Scans: SAR(1 g) = 1.01 mW/g
SAR(10 g) = 0.654 mW/g

Maximum value of SAR (measured) = 1.26 mW/g



Date/Time: 2010-06-30 13:17:07, Date/Time: 2010-06-29 11:49:00

Test Laboratory: TCC Nokia

Type: RM-627, Type: RM-648; Serial: 352713/04/000957/5, Serial: 352718/04/000253/8

Communication System: WLAN2450, Communication System: WCDMA850

Frequency: 2442 MHz, Frequency: 835 MHz; Duty Cycle: 1:1

Medium: Head 2450, Medium: Head 835; Medium Notes: Medium Temperature: 22.4 C, Medium Notes: Medium Temperature: 21.9 C

Medium parameters used: f = 2442 MHz; σ = 1.88 mho/m; ε_r = 39; ρ = 1000 kg/m^3 , Medium parameters used: f = 835 MHz; σ = 0.929 mho/m; ε_r = 42.3; ρ = 1000 kg/m^3

Phantom section: Left Section

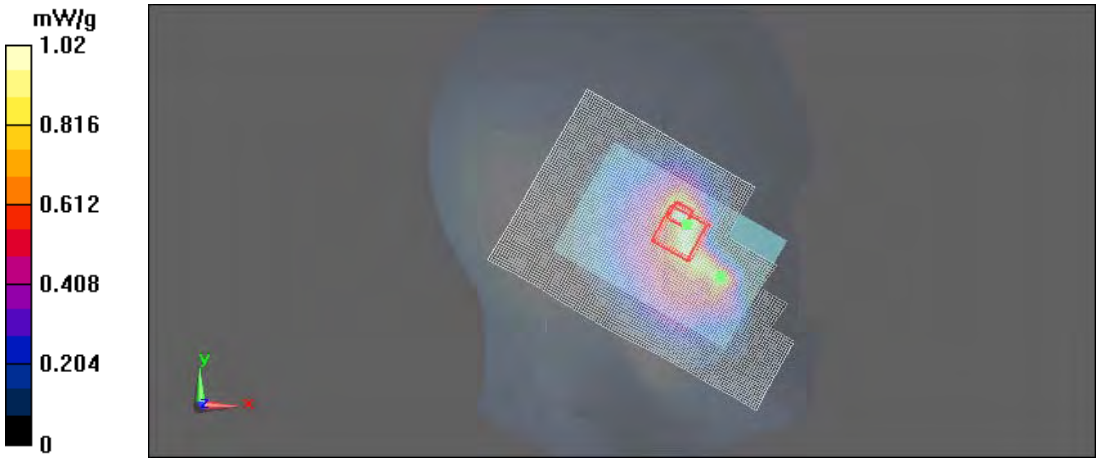
DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(4.21, 4.21, 4.21), ConvF(5.85, 5.85, 5.85); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 8, Phantom: SAM 4; Type: SAM Twin Phantom, Type: Twin Phantom; Serial: TP-1408, Serial: TP-1410
- ; SEMCAD X Version 14.0 Build 61

Configuration/Cheek - Middle – Slide Open/Area Scan (8x12x1): Measurement grid: dx=15mm, dy=15mm

Configuration/Cheek - Middle – Slide Open/Area Scan (8x12x1): Measurement grid: dx=15mm, dy=15mm

Motorola Fast SAR of Combined Scans: SAR(1 g) = 0.811 mW/g
SAR(10 g) = 0.513 mW/g

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



Date/Time: 2010-06-24 16:20:35, Date/Time: 2010-06-30 13:17:07

Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: GSM 1900, Communication System: WLAN2450
Frequency: 1880.0 MHz, Frequency: 2442.0 MHz; Duty Cycle: 1:8.3, Duty Cycle: 1:1
Medium: Head 1900, Medium: Head 2450; Medium Notes: Medium Temperature: 20.8 C, Medium Notes: Medium Temperature: 22.4 C
Medium parameters used: f = 1880 MHz; σ = 1.47 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3 , Medium parameters used: f = 2442 MHz; σ = 1.88 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Left Section

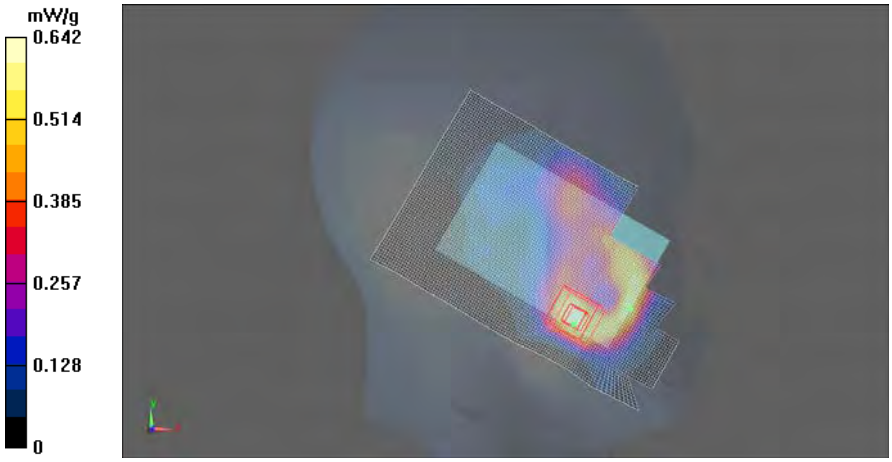
DASY4 Configuration:
- Probe: ES3DV3 - SN3117, Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(4.9, 4.9, 4.9), ConvF(4.21, 4.21, 4.21); Calibrated: 2009-07-21, Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn682, Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 4.5, Phantom: SAM 8; Type: Twin Phantom, Type: SAM Twin Phantom; Serial: TP-1215, Serial: TP-1408
- ; SEMCAD X Version 14.0 Build 61

Configuration/Cheek - Middle – Slide Open/Area Scan (8x12x1): Measurement grid: dx=15mm, dy=15mm

Configuration/Cheek - Middle – Slide Open/Area Scan (8x12x1): Measurement grid: dx=15mm, dy=15mm

Motorola Fast SAR of Combined Scans: SAR(1 g) = 0.564 mW/g
SAR(10 g) = 0.310 mW/g

Maximum value of SAR (measured) = 0.642 mW/g



Date/Time: 2010-06-30 13:17:07, Date/Time: 2010-06-23 23:21:25

Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: WLAN2450, Communication System: WCDMA1900
Frequency: 2442.0 MHz, Frequency: 1907.6 MHz; Duty Cycle: 1:1
Medium: Head 2450, Medium: Head 1900; Medium Notes: Medium Temperature: 22.4 C, Medium Notes: Medium Temperature: 22.5 C
Medium parameters used: f = 2442 MHz; σ = 1.88 mho/m; ε_r = 39; ρ = 1000 kg/m^3 , Medium parameters used: f = 1908 MHz; σ = 1.48 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Phantom section: Left Section

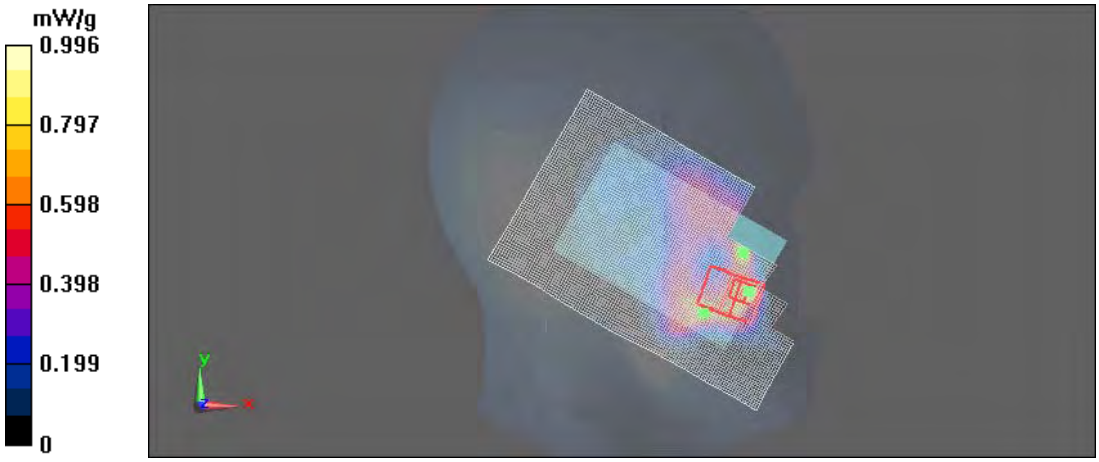
DASY4 Configuration:
- Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(4.21, 4.21, 4.21), ConvF(4.74, 4.74, 4.74); Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))
- Electronics: DAE3 Sn573; Calibrated: 2009-07-21
- Phantom: SAM 8, Phantom: SAM 3; Type: SAM Twin Phantom, Type: Twin Phantom; Serial: TP-1408, Serial: TP-1302
- ; SEMCAD X Version 14.0 Build 61

Configuration/Cheek - Middle – Slide Open/Area Scan (8x12x1): Measurement grid: dx=15mm, dy=15mm

Configuration/Cheek - High – Slide Open/Area Scan (8x12x1): Measurement grid: dx=15mm, dy=15mm

Motorola Fast SAR of Combined Scans: SAR(1 g) = 0.767 mW/g
SAR(10 g) = 0.398 mW/g

Maximum value of SAR (measured) = 0.996 mW/g



Date/Time: 2010-07-02 00:36:57, Date/Time: 2010-06-22 22:27:14

Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: WLAN2450, Communication System: 2-slot GPRS850
Frequency: 2412.0 MHz, Frequency: 848.8 MHz; Duty Cycle: 1:1, Duty Cycle: 1:4.2
Medium: Body 2450, Medium: Body 835; Medium Notes: Medium Temperature: 22.8 C, Medium Notes: Medium Temperature: 22.4 C
Medium parameters used: f = 2412 MHz; σ = 1.88 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3 , Medium parameters used: f = 849 MHz; σ = 0.985 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

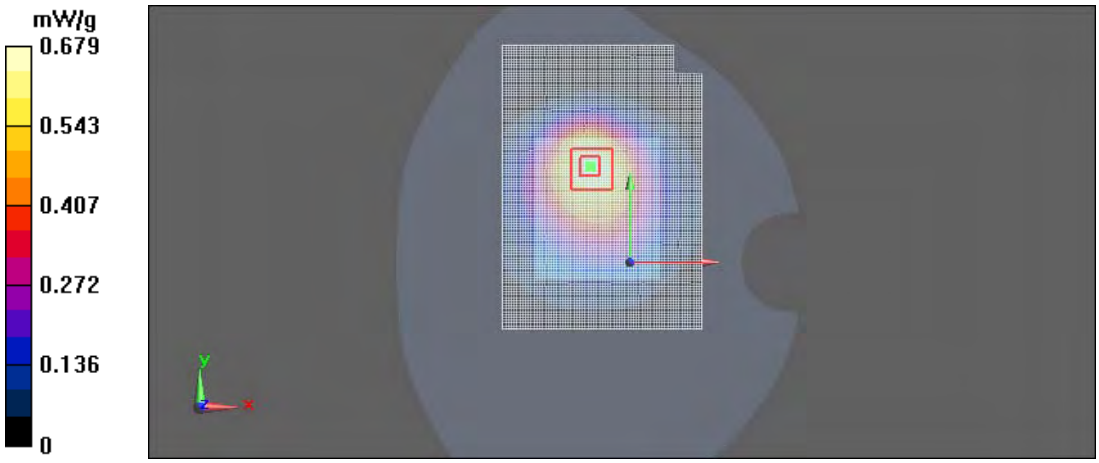
DASY4 Configuration:
- Probe: ES3DV3 - SN3116, Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(4.12, 4.12, 4.12), ConvF(5.65, 5.65, 5.65); Calibrated: 2010-02-24, Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))
- Electronics: DAE4 Sn710, Electronics: DAE3 Sn573; Calibrated: 2009-09-18, Calibrated: 2009-07-21
- Phantom: SAM 4.5, Phantom: SAM 5; Type: Twin Phantom; Serial: TP-1215, Serial: TP-1302
- ; SEMCAD X Version 14.0 Build 61

Configuration/Body - Low - No Accessory - Slide Closed - Display Facing Phantom/Area Scan (8x11x1):
Measurement grid: dx=15mm, dy=15mm

Configuration/Body - High - No Accessory - Slide Closed - Back Facing Phantom/Area Scan (8x11x1):
Measurement grid: dx=15mm, dy=15mm

Motorola Fast SAR of Combined Scans: SAR(1 g) = 0.631 mW/g
SAR(10 g) = 0.429 mW/g

Maximum value of SAR (measured) = 0.679 mW/g



Date/Time: 2010-07-02 00:36:57, Date/Time: 2010-06-29 15:06:09

Test Laboratory: TCC Nokia
Type: RM-627, Type: RM-648; Serial: 352713/04/000957/5, Serial: 352718/04/000253/8

Communication System: WLAN2450, Communication System: WCDMA850
Frequency: 2412 MHz, Frequency: 846.6 MHz; Duty Cycle: 1:1
Medium: Body 2450, Medium: Body 835; Medium Notes: Medium Temperature: 22.8 C, Medium Notes: Medium Temperature: 22.3 C
Medium parameters used: f = 2412 MHz; σ = 1.88 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3 , Medium parameters used: f = 847 MHz; σ = 0.995 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

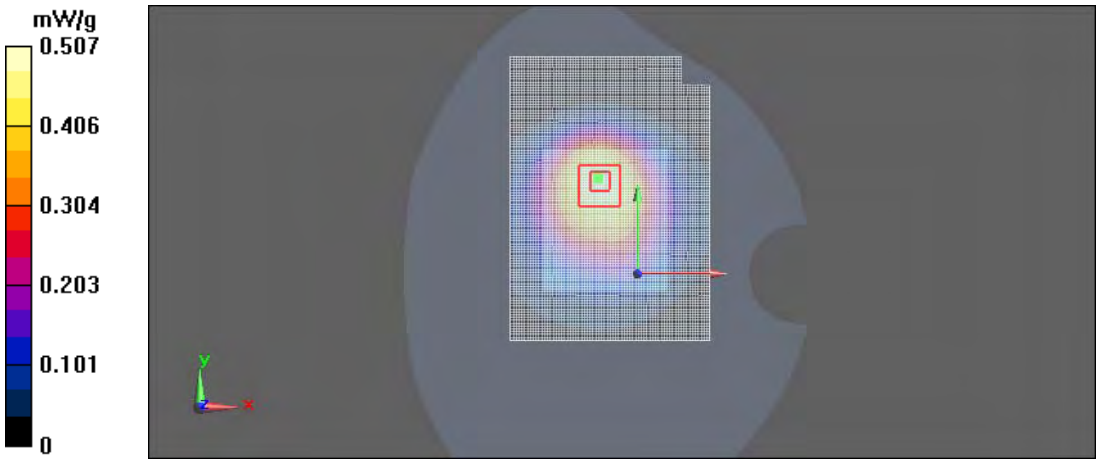
DASY4 Configuration:
- Probe: ES3DV3 - SN3116, Probe: ES3DV3 - SN3118; Probe Notes:
- ConvF(4.12, 4.12, 4.12), ConvF(5.65, 5.65, 5.65); Calibrated: 2010-02-24, Calibrated: 2009-09-22
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))
- Electronics: DAE4 Sn710, Electronics: DAE3 Sn573; Calibrated: 2009-09-18, Calibrated: 2009-07-21
- Phantom: SAM 4.5, Phantom: SAM 5; Type: Twin Phantom; Serial: TP-1215, Serial: TP-1302
- ; SEMCAD X Version 14.0 Build 61

Configuration/Body - Low - No Accessory - Slide Closed - Display Facing Phantom/Area Scan (8x11x1):
Measurement grid: dx=15mm, dy=15mm

Configuration/Body - High - No Accessory - Slide Closed - Back Facing Phantom/Area Scan (8x11x1):
Measurement grid: dx=15mm, dy=15mm

Motorola Fast SAR of Combined Scans: SAR(1 g) = 0.474 mW/g
SAR(10 g) = 0.326 mW/g

Maximum value of SAR (measured) = 0.507 mW/g



Date/Time: 2010-07-02 00:36:57, Date/Time: 2010-06-24 22:22:39

Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: WLAN2450, Communication System: GSM 1900
Frequency: 2412.0 MHz, Frequency: 1850.2 MHz; Duty Cycle: 1:1, Duty Cycle: 1:8.3
Medium: Body 2450, Medium: Body 1900; Medium Notes: Medium Temperature: 22.8 C
Medium parameters used: f = 2412 MHz; σ = 1.88 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3 , Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.54 mho/m; ε_r = 52.4; ρ = 1000 kg/m^3
Phantom section: Flat Section

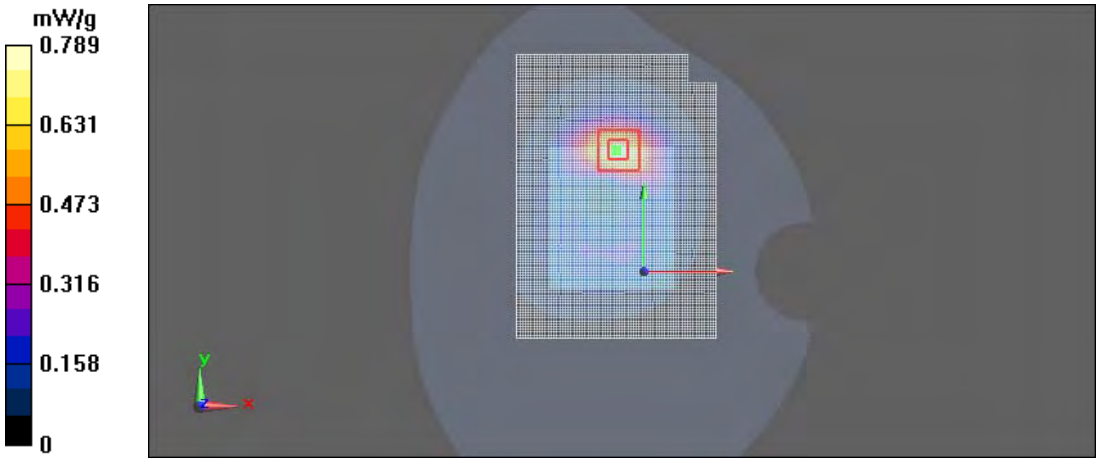
DASY4 Configuration:
- Probe: ES3DV3 - SN3116, Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(4.12, 4.12, 4.12), ConvF(4.41, 4.41, 4.41); Calibrated: 2010-02-24, Calibrated: 2009-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))
- Electronics: DAE4 Sn710, Electronics: DAE4 Sn682; Calibrated: 2009-09-18, Calibrated: 2009-07-21
- Phantom: SAM 4.5, Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1215, Serial: TP-1037
- ; SEMCAD X Version 14.0 Build 61

Configuration/Body - Low - No Accessory - Slide Closed - Display Facing Phantom/Area Scan (8x11x1):
Measurement grid: dx=15mm, dy=15mm

Configuration/Body - Low - No Accessory - Slide Closed - Back Facing Phantom/Area Scan (8x11x1):
Measurement grid: dx=15mm, dy=15mm

Motorola Fast SAR of Combined Scans: SAR(1 g) = 0.673 mW/g
SAR(10 g) = 0.372 mW/g

Maximum value of SAR (measured) = 0.789 mW/g



Date/Time: 2010-07-02 00:36:57, Date/Time: 2010-06-24 23:44:46

Test Laboratory: TCC Nokia
Type: RM-627; Serial: 352713/04/000957/5

Communication System: WLAN2450, Communication System: WCDMA1900
Frequency: 2412.0 MHz, Frequency: 1852.4 MHz; Duty Cycle: 1:1
Medium: Body 2450, Medium: Body 1900; Medium Notes: Medium Temperature: 22.8 C
Medium parameters used: f = 2412 MHz; σ = 1.88 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3 , Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.54 mho/m; ε_r = 52.4; ρ = 1000 kg/m^3
Phantom section: Flat Section

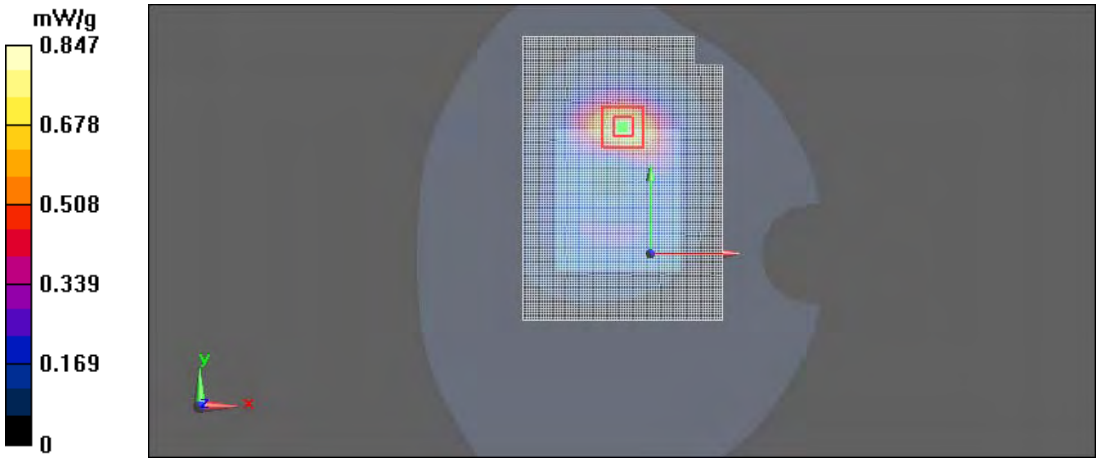
DASY4 Configuration:
- Probe: ES3DV3 - SN3116, Probe: ES3DV3 - SN3117; Probe Notes:
- ConvF(4.12, 4.12, 4.12), ConvF(4.41, 4.41, 4.41); Calibrated: 2010-02-24, Calibrated: 2009-07-21
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))
- Electronics: DAE4 Sn710, Electronics: DAE4 Sn682; Calibrated: 2009-09-18, Calibrated: 2009-07-21
- Phantom: SAM 4.5, Phantom: SAM 2; Type: Twin Phantom; Serial: TP-1215, Serial: TP-1037
- ; SEMCAD X Version 14.0 Build 61

Configuration/Body - Low - No Accessory - Slide Closed - Display Facing Phantom/Area Scan (8x11x1):
Measurement grid: dx=15mm, dy=15mm

Configuration/Body - Low - No Accessory - Slide Closed - Back Facing Phantom/Area Scan (8x11x1):
Measurement grid: dx=15mm, dy=15mm

Motorola Fast SAR of Combined Scans: SAR(1 g) = 0.734 mW/g
SAR(10 g) = 0.405 mW/g

Maximum value of SAR (measured) = 0.847 mW/g



APPENDIX C: CONDUCTED AVERAGE POWER MEASUREMENTS FOR WCDMA AND HSUPA

Test Laboratory: TCC Nokia
Type: RM-648; Serial: 004402/13/031087/7, HW: 0204, SW: 041.005

C.1. WCDMA850 Test results

Average power

Ch / *f* (MHz)	P [dBm]
4133 / 826.6	22.61
4175 / 835.0	22.60
4232 / 846.4	22.79

C.2. HSUPA850 Test results

Average power

Ch / *f* (MHz)	P [dBm]				
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
4133 / 826.6	19.50	18.59	20.53	18.77	19.40
4175 / 835.0	19.65	18.60	20.47	19.52	19.75
4232 / 846.4	19.51	18.59	19.93	19.49	19.62

Note: In HSUPA operation, the output power is reduced relative to the tuning target power for WCDMA. This device runs two separate HSUPA power control routines: MPR and E-TFC MPR. In each Subtest mode, the routine with the higher power reduction dominates. In addition, to ensure linearity of the PA output, a further 1dB power reduction for all Subtest modes is implemented. As a result, the MPR for each of the Subtest modes is as follows:

Maximum Power Reduction (MPR)				
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
2.5dB	3.0dB	2.0dB	3.0dB	2.5dB

Test Laboratory: TCC Nokia
Type: RM-627; Serial: 766988/72/344762/2, HW: 0200, SW: 041.005

C.3. WCDMA1900 Test results

Average power

Ch / *f* (MHz)	P [dBm]
9263 / 1852.6	21.56
9400 / 1880.0	21.62
9537 / 1907.4	21.60

C.4. HSUPA1900 Test results

Average power

Ch / *f* (MHz)	P [dBm]				
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
9263 / 1852.6	18.98	19.52	20.20	18.48	19.09
9400 / 1880.0	19.72	18.54	20.52	19.58	19.62
9537 / 1907.4	19.80	18.84	20.57	18.82	19.69

Note: In HSUPA operation, the output power is reduced relative to the tuning target power for WCDMA. This device runs two separate HSUPA power control routines: MPR and E-TFC MPR. In each Subtest mode, the routine with the higher power reduction dominates. As a result, the MPR for each of the Subtest modes is as follows:

Maximum Power Reduction (MPR)				
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
1.5dB	2.0dB	1.0dB	2.0dB	1.5dB

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

See the following pages

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

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Accreditation No.: **SCS 108**

Client **Nokia Denmark A/S**

Certificate No: **ES3-3116_Feb10**

CALIBRATION CERTIFICATE

Object	ES3DV3 - SN:3116
Calibration procedure(s)	QA CAL-01.v6, QA CAL-23.v3 and QA CAL-25.v2 Calibration procedure for dosimetric E-field probes
Calibration date	February 24, 2010

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-09 (No. 217-01030)	Apr-10
Power sensor E4412A	MY41495277	1-Apr-09 (No. 217-01030)	Apr-10
Power sensor E4412A	MY41498087	1-Apr-09 (No. 217-01030)	Apr-10
Reference 3 dB Attenuator	SN S5054 (3c)	31-Mar-09 (No. 217-01026)	Mar-10
Reference 20 dB Attenuator	SN S5086 (20b)	31-Mar-09 (No. 217-01028)	Mar-10
Reference 30 dB Attenuator	SN: S5129 (30b)	31-Mar-09 (No 217-01027)	Mar-10
Reference Probe ES3DV2	SN: 3013	30-Dec-09 (No. ES3-3013_Dec09)	Dec-10
DAE4	SN: 660	29-Sep-09 (No. DAE4-660_Sep09)	Sep-10

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator HP 8648C	US3642U01700	4-Aug-99 (in house check Oct-09)	In house check. Oct-11
Network Analyzer HP 8753E	US37390585	18-Oct-01 (in house check Oct-09)	In house check Oct10

	Name	Function	Signature
Calibrated by	Jeton Kastrati	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: February 24, 2010

DASY - Parameters of Probe: ES3DV3 SN:3116

Calibration Parameter Determined in Head Tissue Simulating Media

f [MHz]	Validity [MHz][C]	Permittivity	Conductivity	ConvF X	ConvF Y	ConvF Z	Alpha	Depth Unc (k=2)
835	± 50 / ± 100	41.5 ± 5%	0.90 ± 5%	5.94	5.94	5.94	0.83	1.07 ± 11.0%
1750	± 50 / ± 100	40.1 ± 5%	1.37 ± 5%	5.05	5.05	5.05	0.45	1.55 ± 11.0%
1900	± 50 / ± 100	40.0 ± 5%	1.40 ± 5%	4.90	4.90	4.90	0.33	1.91 ± 11.0%
2450	± 50 / ± 100	39.2 ± 5%	1.80 ± 5%	4.36	4.36	4.36	0.41	1.86 ± 11.0%

[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.

DASY - Parameters of Probe: ES3DV3 SN:3116

Calibration Parameter Determined in Body Tissue Simulating Media

f [MHz]	Validity [MHz][C]	Permittivity	Conductivity	ConvF X	ConvF Y	ConvF Z	Alpha	Depth	Unc (k=2)
835	± 50 / ± 100	55.2 ± 5%	0.97 ± 5%	5.84	5.84	5.84	0.72	1.23	± 11.0%
1750	± 50 / ± 100	53.4 ± 5%	1.49 ± 5%	4.82	4.82	4.82	0.45	1.75	± 11.0%
1900	± 50 / ± 100	53.3 ± 5%	1.52 ± 5%	4.58	4.58	4.58	0.33	2.40	± 11.0%
2450	± 50 / ± 100	52.7 ± 5%	1.95 ± 5%	4.12	4.12	4.12	0.82	1.17	± 11.0%

[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.

20177

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Accreditation No.: **SCS 108**

Client: **Nokia Denmark A/S**

Certificate No: **ES3-3117_Jul09**

CALIBRATION CERTIFICATE

Object	ES3DV3x - SN:3117
Calibration procedure(s)	QA CAL-01.v6, QA CAL-23.v3 and QA CAL-25.v2 Calibration procedure for dosimetric E-field probes
Calibration date	July 21, 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)

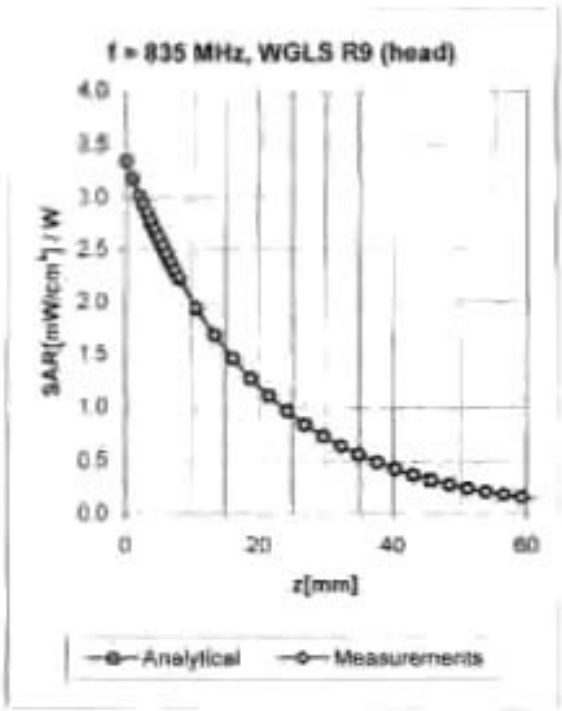
Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter E4419B	GB41293874	1-Apr-09 (No. 217-01030)	Apr-10
Power sensor E4412A	MY41495277	1-Apr-09 (No. 217-01030)	Apr-10
Power sensor E4412A	MY41498087	1-Apr-09 (No. 217-01030)	Apr-10
Reference 3 dB Attenuator	SN: S5054 (3c)	31-Mar-09 (No. 217-01026)	Mar-10
Reference 20 dB Attenuator	SN: S5086 (20b)	31-Mar-09 (No. 217-01028)	Mar-10
Reference 30 dB Attenuator	SN: S5129 (30b)	31-Mar-09 (No. 217-01027)	Mar-10
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

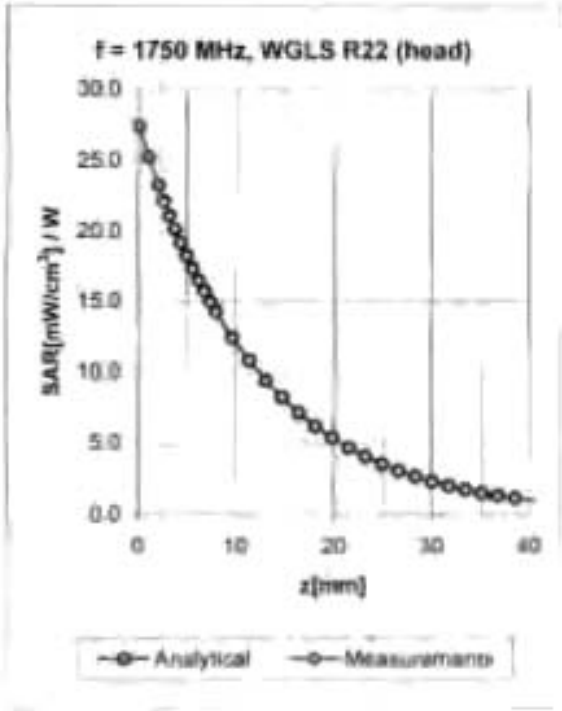
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator HP 8648C	US3642U01700	4-Aug-99 (in house check Oct-07)	In house check: Oct-09
Network Analyzer HP 8753E	US37390585	18-Oct-01 (in house check Oct-08)	In house check: Oct-09

	Name	Function	Signature
Calibrated by	Claudio Leubler	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: July 21, 2009

Conversion Factor Assessment





f [MHz]	Validity [MHz][c]	TSL	Permittivity	Conductivity	Alpha	Depth	ConvF Uncertainty
835	± 50 / ± 100	Head	41.5 ± 5%	0.90 ± 5%	0.88	1.11	5.85 ± 11.0% (k=2)
1750	± 50 / ± 100	Head	40.1 ± 5%	1.37 ± 5%	0.53	1.48	5.04 ± 11.0% (k=2)
1900	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.50	1.50	4.90 ± 11.0% (k=2)
2450	± 50 / ± 100	Head	39.2 ± 5%	1.80 ± 5%	0.41	1.79	4.36 ± 11.0% (k=2)
835	± 50 / ± 100	Body	55.2 ± 5%	0.97 ± 5%	0.90	1.11	5.76 ± 11.0% (k=2)
1750	± 50 / ± 100	Body	53.4 ± 5%	1.49 ± 5%	0.37	2.02	4.83 ± 11.0% (k=2)
1900	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.31	2.84	4.41 ± 11.0% (k=2)
2450	± 50 / ± 100	Body	52.7 ± 5%	1.95 ± 5%	0.81	1.21	4.12 ± 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.

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Accreditation No.: SCS 108

Client **Nokia Denmark A/S**

Certificate No: **ES3-3118_Sep09**

CALIBRATION CERTIFICATE

Object	ES3DV3 - SN:3118
Calibration procedure(s)	QA CAL-01.v6, QA CAL-23.v3 and QA CAL-25.v2 Calibration procedure for dosimetric E-field probes
Calibration date:	September 22, 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)

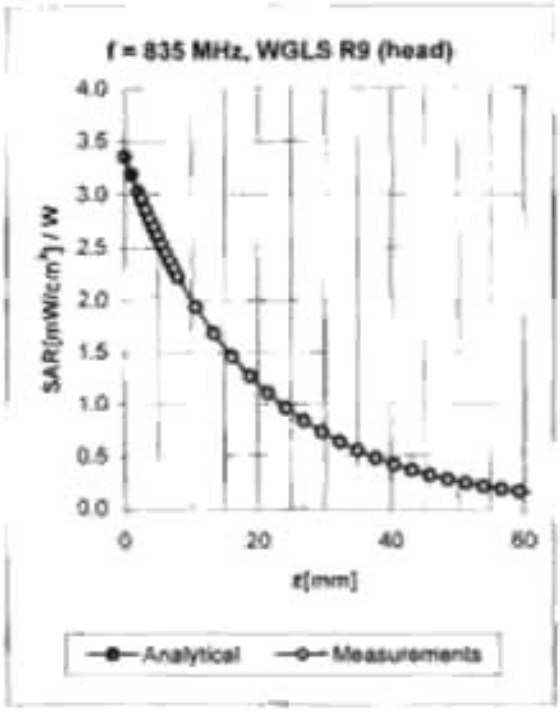
Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter E4419B	GB41293874	1-Apr-09 (No. 217-01030)	Apr-10
Power sensor E4412A	MY41495277	1-Apr-09 (No. 217-01030)	Apr-10
Power sensor E4412A	MY41498087	1-Apr-09 (No. 217-01030)	Apr-10
Reference 3 dB Attenuator	SN: S5054 (3c)	31-Mar-09 (No. 217-01026)	Mar-10
Reference 20 dB Attenuator	SN: S5086 (20b)	31-Mar-09 (No. 217-01028)	Mar-10
Reference 30 dB Attenuator	SN: S5129 (30b)	31-Mar-09 (No. 217-01027)	Mar-10
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

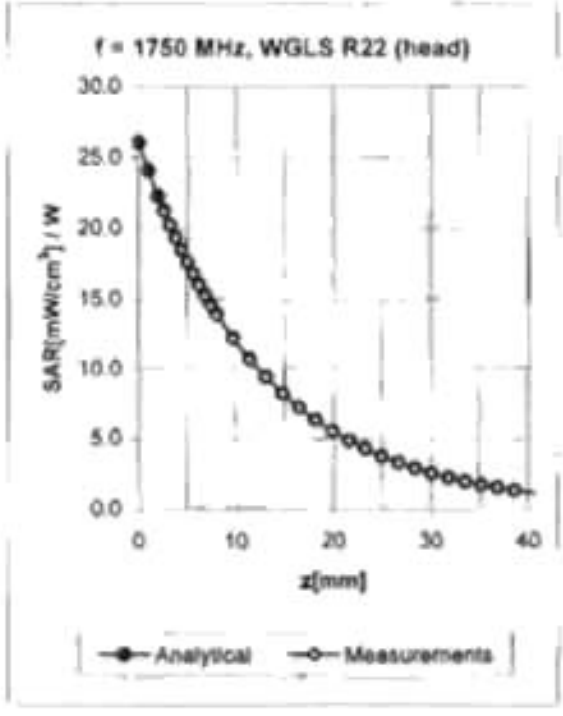
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator HP 8648C	US3642U01700	4-Aug-99 (in house check Oct-07)	In house check: Oct-09
Network Analyzer HP 8753E	US37390585	18-Oct-01 (in house check Oct-08)	In house check: Oct-09

	Name	Function	Signature
Calibrated by:	Marcel Fehr	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: September 22, 2009

Conversion Factor Assessment





f [MHz]	Validity [MHz][C]	TSL	Permittivity	Conductivity	Alpha	Depth	ConvF Uncertainty
835	± 50 / ± 100	Head	41.5 ± 5%	0.90 ± 5%	0.97	1.07	5.85 ± 11.0% (k=2)
1750	± 50 / ± 100	Head	40.1 ± 5%	1.37 ± 5%	0.61	1.40	4.97 ± 11.0% (k=2)
1900	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.50	1.53	4.74 ± 11.0% (k=2)
2450	± 50 / ± 100	Head	39.2 ± 5%	1.80 ± 5%	0.46	1.69	4.21 ± 11.0% (k=2)
835	± 50 / ± 100	Body	55.2 ± 5%	0.97 ± 5%	0.95	1.13	5.65 ± 11.0% (k=2)
1750	± 50 / ± 100	Body	53.4 ± 5%	1.49 ± 5%	0.41	1.92	4.60 ± 11.0% (k=2)
1900	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.41	2.14	4.37 ± 11.0% (k=2)
2450	± 50 / ± 100	Body	52.7 ± 5%	1.95 ± 5%	0.99	1.05	4.05 ± 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.

APPENDIX E: RELEVANT PAGES FROM DIPOLE VALIDATION KIT REPORT(S)

See the following pages

Calibration Laboratory of
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Accreditation No.: SCS 108

Client: Nokia Denmark A/S

Certificate No: D835V2-4d042_Sep08

CALIBRATION CERTIFICATE

Object: D835V2 - SN: 4d042

Calibration procedure(s): QA CAL-05.v7
Calibration procedure for dipole validation kits

Calibration date: September 22, 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 EPM-442A	GB37480704	04-Oct-07 (No. 217-00736)	Oct-08
Power sensor HP 8481A	US37292783	04-Oct-07 (No. 217-00736)	Oct-08
Reference 20 dB Attenuator	SN: 5086 (20g)	01-Jul-08 (No. 217-00864)	Jul-09
Type-N mismatch combination	SN: 5047.2 / 06327	01-Jul-08 (No. 217-00867)	Jul-09
Reference Probe ES3DV2	SN: 3025	28-Apr-08 (No. ES3-3025_Apr08)	Apr-09
DAE4	SN: 601	14-Mar-08 (No. DAE4-601_Mar08)	Mar-09

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power sensor HP 8481A	MY41092317	18-Oct-02 (in house check Oct-07)	In house check: Oct-08
RF generator R&S SMT-06	100005	4-Aug-99 (in house check Oct-07)	In house check: Oct-08
Network Analyzer HP 8753E	US37390585 S4206	18-Oct-01 (in house check Oct-07)	In house check: Oct-08

	Name	Function	Signature
Calibrated by:	Jeton Kastrati	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: September 22, 2008

DASY5 Validation Report for Head TSL

Date/Time: 22.09.2008 10:40:16

Test Laboratory: SPEAG, Zurich, Switzerland

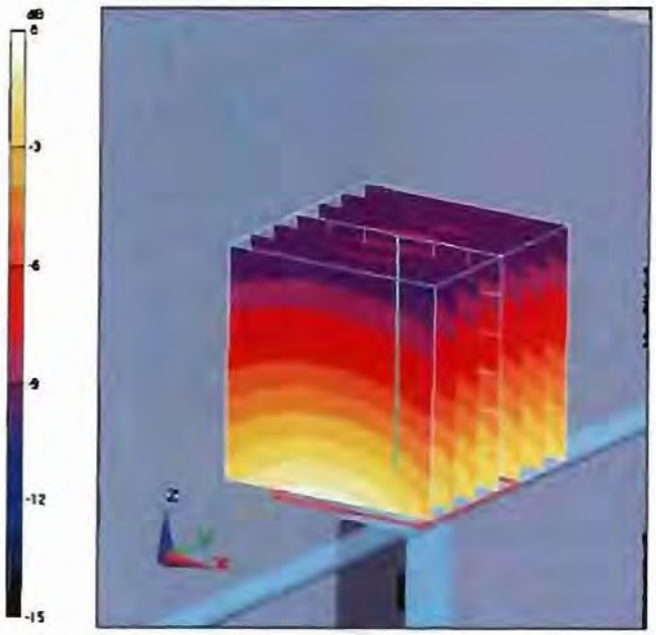
DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d042

Communication System: CW-835; Frequency: 835 MHz; Duty Cycle: 1:1
Medium: HSL 900 MHz
Medium parameters used: f = 835 MHz; σ = 0.901 mho/m; ε_r = 41.4; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY5 Configuration:

- Probe: ES3DV2 - SN3025; ConvF(5.97, 5.97, 5.97); Calibrated: 28.04.2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 14.03.2008
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

Pin=250mW; dip=15mm; dist=3.4mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.9 V/m; Power Drift = 0.013 dB
Peak SAR (extrapolated) = 3.48 W/kg
SAR(1 g) = 2.38 mW/g; SAR(10 g) = 1.57 mW/g
Maximum value of SAR (measured) = 2.69 mW/g



0 dB = 2.69mW/g

DASY5 Validation Report for Body TSL

Date/Time: 16.09.2008 10:46:36

Test Laboratory: SPEAG, Zurich, Switzerland

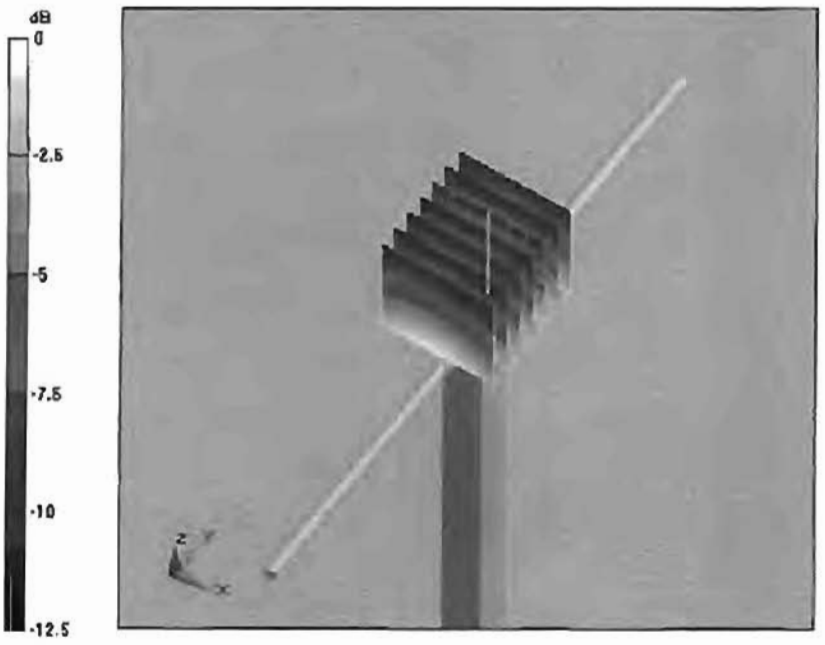
DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d042

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1
Medium: MSL900
Medium parameters used: f = 835 MHz; σ = 1.01 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY5 Configuration:

- Probe: ES3DV2 - SN3025; ConvF(5.9, 5.9, 5.9); Calibrated: 28.04.2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 14.03.2008
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

Pin = 250mW, d = 15mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54 V/m; Power Drift = 0.024 dB
Peak SAR (extrapolated) = 3.63 W/kg
SAR(1 g) = 2.51 mW/g; SAR(10 g) = 1.65 mW/g
Maximum value of SAR (measured) = 2.81 mW/g



0 dB = 2.81mW/g

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

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C Service suisse d'étalonnage
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Accreditation No.: **SCS 108**

Client **Nokia Denmark A/S**

Certificate No: **D1900V2-5d063_Feb10**

CALIBRATION CERTIFICATE

Object	D1900V2 - SN: 5d063
Calibration procedure(s)	QA CAL-05.v7 Calibration procedure for dipole validation kits
Calibration date:	February 23, 2010

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 EPM-442A	GB37480704	06-Oct-09 (No. 217-01086)	Oct-10
Power sensor HP 8481A	US37292783	06-Oct-09 (No. 217-01086)	Oct-10
Reference 20 dB Attenuator	SN: 5086 (20g)	31-Mar-09 (No. 217-01025)	Mar-10
Type-N mismatch combination	SN: 5047.2 / 06327	31-Mar-09 (No. 217-01029)	Mar-10
Reference Probe ES3DV3	SN: 3205	26-Jun-09 (No. ES3-3205_Jun09)	Jun-10
DAE4	SN: 601	07-Mar-09 (No. DAE4-601_Mar09)	Mar-10

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power sensor HP 8481A	MY41092317	18-Oct-02 (in house check Oct-09)	In house check: Oct-11
RF generator R&S SMT-06	100005	4-Aug-99 (in house check Oct-09)	In house check: Oct-11
Network Analyzer HP 8753E	US37390585 S4206	18-Oct-01 (in house check Oct-09)	In house check: Oct-10

	Name	Function	Signature
Calibrated by:	Jeton Kastrati	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: February 25, 2010

DASY5 Validation Report for Head TSL

Date/Time: 23.02.2010 13:21:31

Test Laboratory: SPEAG, Zurich, Switzerland

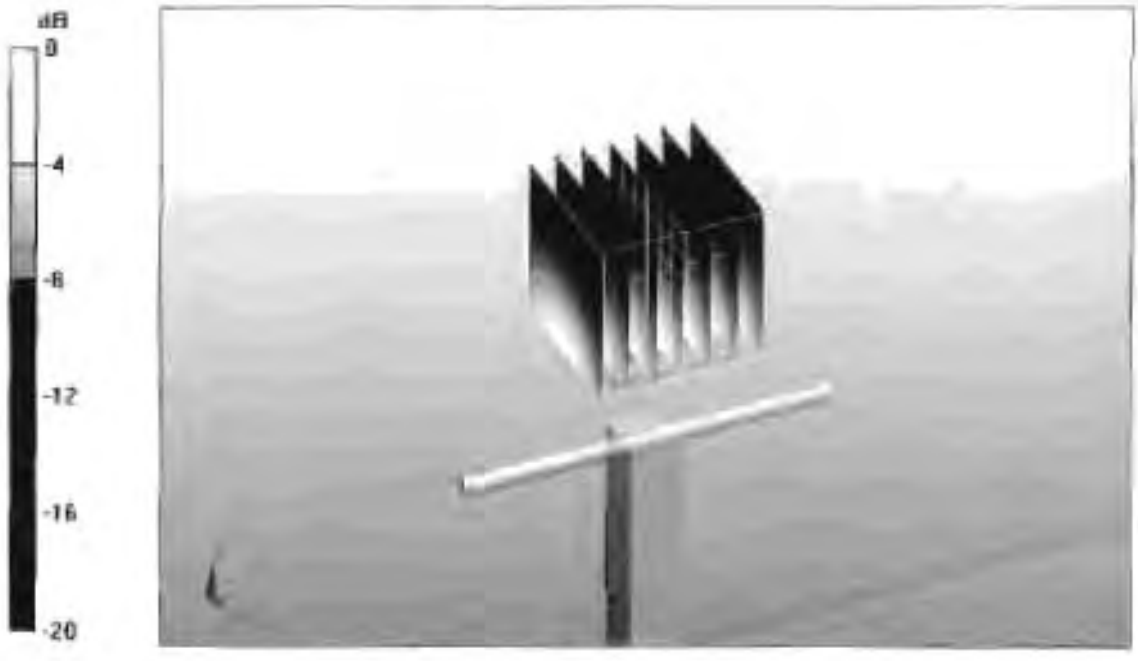
DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d063

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: HSL U11 BB
Medium parameters used: f = 1900 MHz; σ = 1.42 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(5.09, 5.09, 5.09); Calibrated: 26.06.2009
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 07.03.2009
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001
- Measurement SW: DASY5, V5.2 Build 157; SEMCAD X Version 14.0 Build 57

Pin=250 mW /d=10mm, dist=3.0mm (ES-Probe)/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 97.1 V/m; Power Drift = 0.041 dB
Peak SAR (extrapolated) = 18.3 W/kg
SAR(1 g) = 9.98 mW/g; SAR(10 g) = 5.2 mW/g
Maximum value of SAR (measured) = 12.4 mW/g



0 dB = 12.4mW/g

DASY5 Validation Report for Body

Date/Time: 16.02.2010 13:00:42

Test Laboratory: SPEAG, Zurich, Switzerland

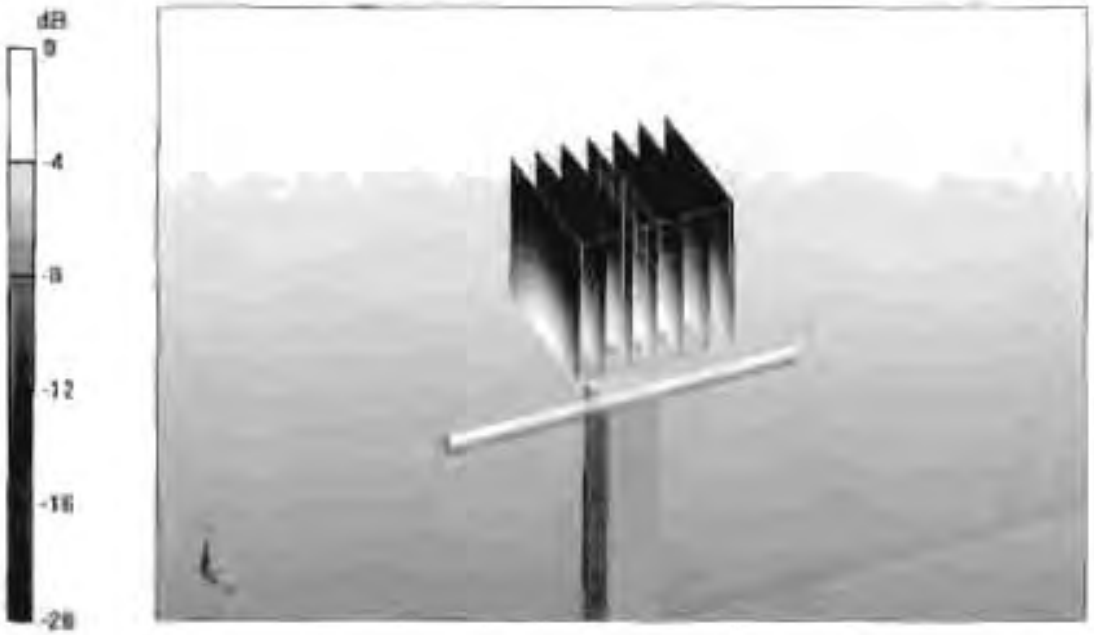
DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d063

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: MSL U10 BB
Medium parameters used: f = 1900 MHz; σ = 1.56 mho/m; ε_r = 52.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(4.59, 4.59, 4.59); Calibrated: 26.06.2009
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 07.03.2009
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002
- Measurement SW: DASY5, V5.2 Build 157; SEMCAD X Version 14.0 Build 57

Pin250 mW /d=10mm, dist=3.0mm (ES-Probe)/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 96.1 V/m; Power Drift = 0.078 dB
Peak SAR (extrapolated) = 16.7 W/kg
SAR(1 g) = 10.1 mW/g; SAR(10 g) = 5.31 mW/g
Maximum value of SAR (measured) = 12.8 mW/g



0 dB = 12.8mW/g

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Accreditation No.: SCS 108

Client **Nokia Denmark A/S**

Certificate No: **D2450V2-790_Sep08**

CALIBRATION CERTIFICATE

Object	D2450V2 - SN: 790
Calibration procedure(s)	QA CAL-05.v7 Calibration procedure for dipole validation kits
Calibration date:	September 24, 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 EPM-442A	GB37480704	04-Oct-07 (No. 217-00736)	Oct-08
Power sensor HP 8481A	US37292783	04-Oct-07 (No. 217-00736)	Oct-08
Reference 20 dB Attenuator	SN: S5086 (20g)	01-Jul-08 (No. 217-00864)	Jul-09
Type-N mismatch combination	SN: 5047.2 / 06327	01-Jul-08 (No. 217-00867)	Jul-09
Reference Probe ES3DV2	SN: 3025	28-Apr-08 (No. ES3-3025_Apr08)	Apr-09
DAE4	SN: 601	14-Mar-08 (No. DAE4-601_Mar08)	Mar-09

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power sensor HP 8481A	MY41092317	18-Oct-02 (in house check Oct-07)	In house check: Oct-09
RF generator R&S SMT-06	100005	4-Aug-99 (in house check Oct-07)	In house check: Oct-09
Network Analyzer HP 8753E	US37390585 S4206	18-Oct-01 (in house check Oct-07)	In house check: Oct-08

	Name	Function	Signature
Calibrated by:	Jeton Kastrati	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: September 25, 2008

Date/Time: 24.09.2008 12:50:11

Test Laboratory: SPEAG, Zurich, Switzerland

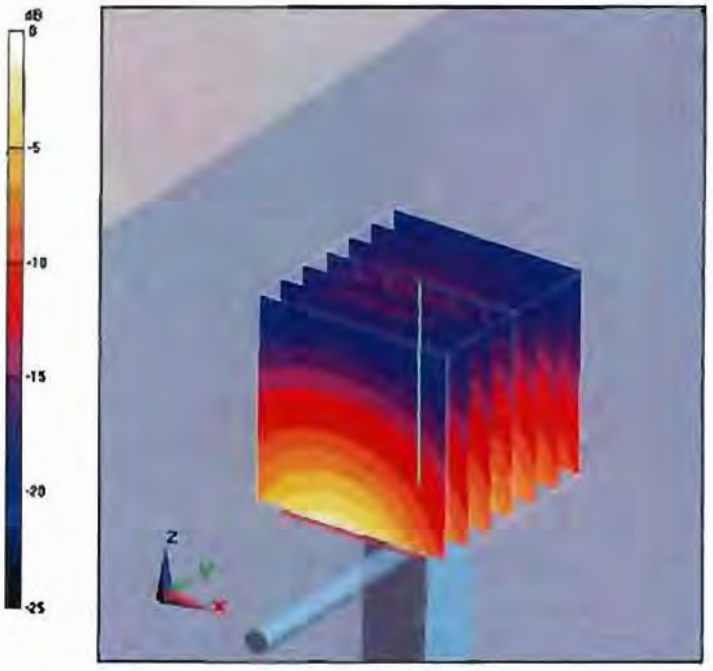
DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN790

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: HSL U10 BB
Medium parameters used: f = 2450 MHz; σ = 1.8 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY5 Configuration:

- Probe: ES3DV2 - SN3025; ConvF(4.4, 4.4, 4.4); Calibrated: 28.04.2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 14.03.2008
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

Pin = 250 mW; d = 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 95.9 V/m; Power Drift = 0.028 dB
Peak SAR (extrapolated) = 27.6 W/kg
SAR(1 g) = 13.2 mW/g; SAR(10 g) = 6.15 mW/g
Maximum value of SAR (measured) = 15.8 mW/g



0 dB = 15.8mW/g

DASY5 Validation Report for Body TSL

Date/Time: 18.09.2008 13:52:58

Test Laboratory: SPEAG, Zurich, Switzerland

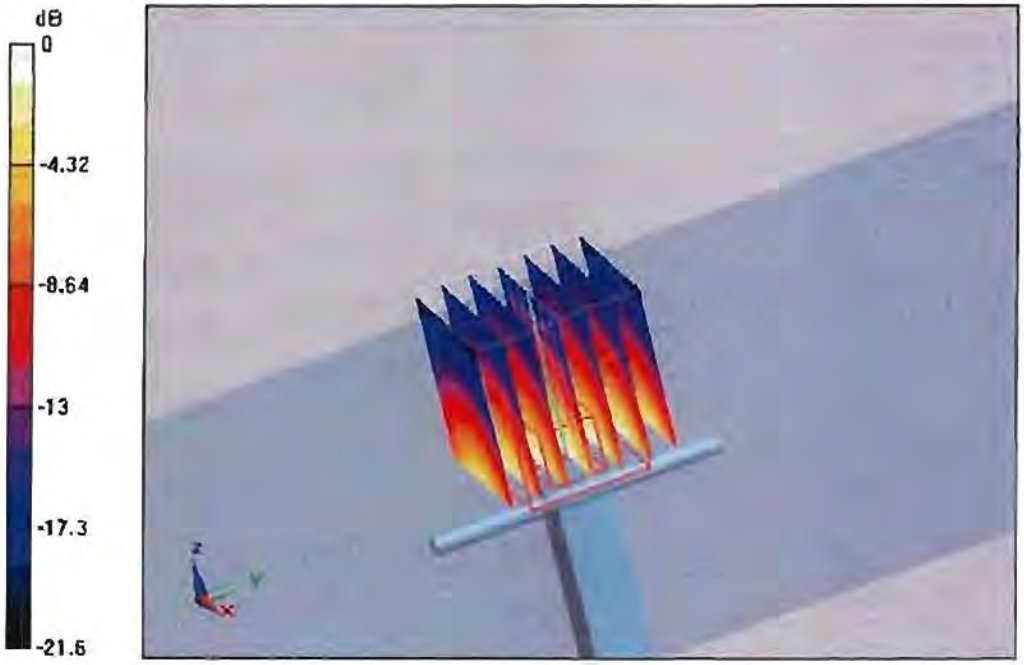
DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:790

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: MSL U10 BB
Medium parameters used: f = 2450 MHz; σ = 1.97 mho/m; ε_r = 50.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC)

DASY5 Configuration:

- Probe: ES3DV2 - SN3025; ConvF(4.07, 4.07, 4.07); Calibrated: 28.04.2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 14.03.2008
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.2 Build 87

Pin = 250 mW; d = 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 91.9 V/m; Power Drift = 0.030 dB
Peak SAR (extrapolated) = 26 W/kg
SAR(1 g) = 12.6 mW/g; SAR(10 g) = 5.81 mW/g
Maximum value of SAR (measured) = 15.7 mW/g



0 dB = 15.7mW/g