TCC
Nokia

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

SAR Compliance Test Report

Test report no.:	SD_SAR_0837_01	**Date of report:**	2008-09-12
Template version:	9.0	**Number of pages:**	71
Testing laboratory:	TCC Nokia San Diego Laboratory 12278 Scripps Summit Drive SAN DIEGO CA. 92131 USA Tel. +1 858 831 5000 Fax. +1 858 831 6500	**Client:**	Nokia (China) Investment Co.,LTD. Nokia China CAMPUS Building 2, No.5 Donghuan Zhonglu Beijing, PRC China 100176 Tel. +86 10 8711 2186 Fax. +86 10 8711 4750
Responsible test engineer:	Jose Gomez	**Product contact person:**	Helen Xu
Measurements made by:	Jose Gomez		
Tested device:	RM-384		
FCC ID:	QMNRM-384	**IC:**	
Supplement reports:	SD_SAR_0837_02		

Testing has been carried out in accordance with:

47CFR §2.1093
Radiofrequency Radiation Exposure Evaluation: Portable Devices

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

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

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

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

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

Date and signatures:

For the contents: **Jose Gomez**, **Certification Test Engineer**, 2008-09-15

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1. SUMMARY OF SAR TEST REPORT

1.1 Test Details

Period of test	2008-09-03 to 2008-09-11
SN, HW and SW numbers of tested device	SN: A000000126D675, HW: 2500, SW: CB_1103T_FCC_151, DUT: 3087
Batteries used in testing	BL-4C, DUT 3088, 3089
Headsets used in testing	HS-48, DUT 3090
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 / (MHz)	Conducted power	Position	Measured SAR value (1g avg)	Scaled* SAR value (1g avg)	SAR limit (1g avg)	Result
CDMA800	777/ 848.31	24.76dBm	Left, Cheek	0.701W/kg	**0.79W/kg**	1.6 W/kg	PASSED
CDMA1900	1175/ 1908.75	23.85dBm	Right, Cheek	0.834W/kg	**0.93W/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
CDMA800	777/ 848.31	24.91dBm	2.2cm	0.594W/kg	**0.67W/kg**	1.6 W/kg	PASSED
CDMA1900	600/ 1880.00	24.17dBm	2.2cm	0.405W/kg	**0.45W/kg**	1.6 W/kg	PASSED

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

1.2.3 Maximum Drift

Maximum drift covered by 12% scaling up of the SAR values	Maximum drift during measurements
0.5dB	0.46dB

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)
CDMA	800 1900	QPSK	1	824 – 849 1850 – 1910
BT	2450	GFSK	1	2402 – 2480

This is a CDMA2000 1x RTT and 1x EV-DO RevA device.

2.1 Description of the Antenna

The device has internal antennas.

3. TEST CONDITIONS

3.1 Temperature and Humidity

Ambient temperature (°C):	20.3 to 21.9
Ambient humidity (RH %):	57 to 64

3.2 Test Signal, Frequencies and Output Power

The device was put into operation by using a call tester. 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.

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

4. DESCRIPTION OF THE TEST EQUIPMENT

4.1 Measurement System and Components

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

The following table lists calibration dates of SPEAG components:

Test Equipment	Serial Number	Calibration interval	Calibration expiry
DAE 4	860	12 months	2009-06
DAE 4	858	12 months	2009-06
E-field Probe ET3DV6	1792	12 months	2009-04
E-field Probe ET3DV6	1516	12 months	2008-11
Dipole Validation Kit, D835V2	486	24 months	2008-11
Dipole Validation Kit, D1900V2	509	24 months	2010-06
DASY Software	Version 4.7	-	-

Additional test equipment used in testing:

Test Equipment	Model	Serial Number	Calibration interval	Calibration expiry
Signal Generator	HP E4432B	US 40053677	24 months	2009-10
Signal Generator	HP E4432B	US 40052231	24 months	2010-06
Amplifier	Milmega AS0822-8L	1004832	-	-
Amplifier	Milmega AS0822-20L	1009777	-	-
Power Meter	Agilent E4419B	GB39290694	12 months	2008-11
Power Meter	Agilent E4417A	GB41290918	12 months	2009-01
Power Sensor	Agilent E9301A	US39211902	12 months	2009-07
Power Sensor	Agilent E9327A	US40440896	12 months	2009-04
Call Tester	CMU200	2838212008	-	-
Call Tester	CMU200	8377271008	-	-
Call Tester	Agilent 8960	GB44350217	-	-
Call Tester	Agilent 8960	GB45070553	-	-
Vector Network Analyzer	Agilent 8753ES	US39174327	12 months	2009-05
Dielectric Probe Kit	Agilent 85070D	US01440165	-	-

4.1.1 Isotropic E-field Probe Type ET3DV6

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

4.2 Phantoms

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

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

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

4.3 Tissue Simulants

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

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

4.3.1 Tissue Simulant Recipes

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

800MHz band

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

1900MHz band

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

4.3.2 System Checking

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

System checking, head tissue simulant

f [MHz]	Description	SAR [W/kg], 1g	Dielectric Parameters		Temp [°C]
			ε_r	σ [S/m]	
835	Reference result	2.29	42.3	0.90	
	± 10% window	2.06 – 2.52			
	2008-09-03	2.47	40.9	0.89	21.8
	2008-09-04	2.44	40.9	0.89	21.8
	2008-09-05	2.52	40.6	0.89	21.9
1900	Reference result	9.96	39.1	1.48	
	± 10% window	8.96 - 10.96			
	2008-09-09	9.44	38.4	1.45	20.4
	2008-09-10	9.40	38.3	1.43	20.3

System checking, body tissue simulant

f [MHz]	Description	SAR [W/kg], 1g	Dielectric Parameters		Temp [°C]
			ε_r	σ [S/m]	
835	Reference result	2.47	53.7	0.99	
	± 10% window	2.22 – 2.72			
	2008-09-08	2.59	53.4	0.97	21.6
1900	Reference result	9.77	52.4	1.58	
	± 10% window	8.79 – 10.75			
	2008-09-11	9.15	51.2	1.53	20.5

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	
	2008-09-03	40.9	0.89	21.8
	2008-09-04	40.9	0.89	21.8
	2008-09-05	40.7	0.89	21.9
1880	Recommended value	40.0	1.40	
	± 5% window	38.0 – 42.0	1.33 – 1.47	
	2008-09-09	38.5	1.43	20.4
	2008-09-10	38.4	1.41	20.3

Body tissue simulant measurements

f [MHz]	Description	Dielectric Parameters		Temp [°C]
		ε_r	σ [S/m]	
836	Recommended value	55.2	0.97	
	± 5% window	52.4 – 58.0	0.92 – 1.02	
	2008-09-05	53.3	0.98	21.6
	2008-09-08	53.4	0.97	21.6
1880	Recommended value	53.3	1.52	
	± 5% window	50.6 – 56.0	1.44 – 1.60	
	2008-09-11	51.3	1.52	20.5

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 its antenna facing the phantom since this orientation gives higher 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

CDMA800 Head SAR results

Option used	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 1013 824.70 MHz	Ch 384 836.52 MHz	Ch 777 848.31 MHz
RC3 / SO55		**Power**	**24.77dBm**	**24.73dBm**	**24.76dBm**
Slide open	Left	Cheek	0.541	0.625	**0.629**
		Tilt	-	0.310	-
	Right	Cheek	-	0.543	-
		Tilt	-	0.323	-
RC3 / SO55		**Power**	**25.26dBm**	**24.75dBm**	**24.80dBm**
Slide closed	Left	Cheek	-	0.349	-
		Tilt	-	0.281	-
	Right	Cheek	0.436	0.386	0.467
		Tilt	-	0.293	-
RC3 / SO55		**Power**	**24.77dBm**	**24.73dBm**	**24.76dBm**
MPS position	Left	Cheek	0.356	0.324	0.378
		Tilt	-	-	-
	Right	Cheek	-	-	-
		Tilt	-	-	-
RC3 / SO55 Slide open	Left Cheek, BT active		-	-	**0.701**

"Slide open" means the keypad slide
"MPS position" means the multimedia player slide

CDMA1900 Head SAR results

Option used	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch25 1851.25MHz	Ch600 1880.00MHz	Ch1175 1908.75MHz
RC3 / SO55		**Power**	**23.98dBm**	**24.01dBm**	**23.85dBm**
Slide open	Left	Cheek	-	0.656	-
		Tilt	-	0.408	-
	Right	Cheek	0.479	0.801	**0.834**
		Tilt	-	0.295	-
RC3 / SO55		**Power**	**23.98dBm**	**24.01dBm**	**23.85dBm**
Slide closed	Left	Cheek	-	0.758	-
		Tilt	-	0.327	-
	Right	Cheek	-	0.701	-
		Tilt	-	0.379	-
RC3 / SO55		**Power**	**23.98dBm**	**24.01dBm**	**23.85dBm**
MPS position	Left	Cheek	-	-	-
		Tilt	-	-	-
	Right	Cheek	0.532	0.693	0.700
		Tilt	-	-	-
RC3 / SO55 Slide open	Right Cheek, BT active		-	-	0.719

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

CDMA800 Body SAR results

Mode	Test configuration		SAR, averaged over 1g (W/kg)		
			Ch 1013 824.70 MHz	Ch 384 836.52 MHz	Ch 777 848.31 MHz
RC3/SO55		**Power**	**25.26dBm**	**24.75dBm**	**24.80dBm**
Slide closed	Without headset		0.566	-	-
	Headset HS-48		0.483	-	-
RTAP 153.6kbps		**Power**	**24.88dBm**	**24.92dBm**	**24.91dBm**
Slide closed	Without headset		0.535	0.526	**0.576**
	Headset HS-48		0.461	0.459	0.516
RTAP 153.6kbps		**Power**	**24.88dBm**	**24.92dBm**	**24.91dBm**
Slide closed	Without headset, BT active		-	-	**0.594**

CDMA1900 Body SAR results

Mode	Test configuration	SAR, averaged over 1g (W/kg)		
		Ch25 1851.25MHz	Ch600 1880.00MHz	Ch1175 1908.75MHz
RTAP 153.6kbps	**Power**	**24.10dBm**	**24.17dBm**	**24.07dBm**
Slide closed	Without headset	0.232	0.341	0.358
	Headset HS-48	0.255	**0.367**	0.352
RTAP 153.6kbps	**Power**	**24.10dBm**	**24.17dBm**	**24.07dBm**
Slide closed	Headset HS-48, BT active	-	**0.405**	-

Plots of the Measurement scans are given in Appendix B.

APPENDIX A: SYSTEM CHECKING SCANS

Date/Time: 2008-09-03 9:37:31

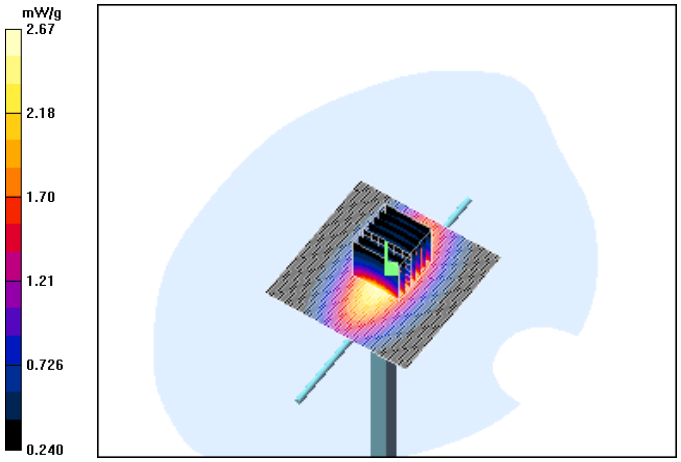
Test Laboratory: TCC Nokia
Type: D835V2; Serial: 486

Communication System: CW835
Frequency: 835 MHz; Duty Cycle: 1:1
Medium: HSL 835; Medium Notes: Liquid temperature= 21.8 C
Medium parameters used: f = 835 MHz; σ = 0.892 mho/m; ε_r = 40.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1792; Probe Notes:
- ConvF(6.55, 6.55, 6.55); Calibrated: 2008-04-14
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn860; Calibrated: 2008-06-12
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

System Check/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.72 mW/g

System Check/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 56.2 V/m
Peak SAR (extrapolated) = 3.60 W/kg
SAR(1 g) = 2.47 mW/g
SAR(10 g) = 1.62 mW/g
Power Drift = -0.007 dB
Maximum value of SAR (measured) = 2.67 mW/g



Date/Time: 2008-09-04 8:48:05

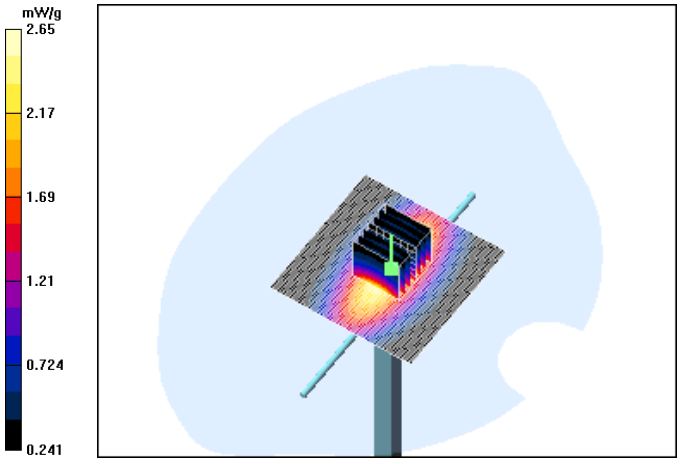
Test Laboratory: TCC Nokia
Type: D835V2; Serial: 486

Communication System: CW835
Frequency: 835 MHz; Duty Cycle: 1:1
Medium: HSL 835; Medium Notes: Liquid temperature= 21.8 C
Medium parameters used: f = 835 MHz; σ = 0.892 mho/m; ε_r = 40.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1792; Probe Notes:
- ConvF(6.55, 6.55, 6.55); Calibrated: 2008-04-14
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn860; Calibrated: 2008-06-12
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

System Check/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.62 mW/g

System Check/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 56.5 V/m
Peak SAR (extrapolated) = 3.58 W/kg
SAR(1 g) = 2.44 mW/g
SAR(10 g) = 1.59 mW/g
Power Drift = 0.019 dB
Maximum value of SAR (measured) = 2.65 mW/g



Date/Time: 2008-09-05 10:27:24

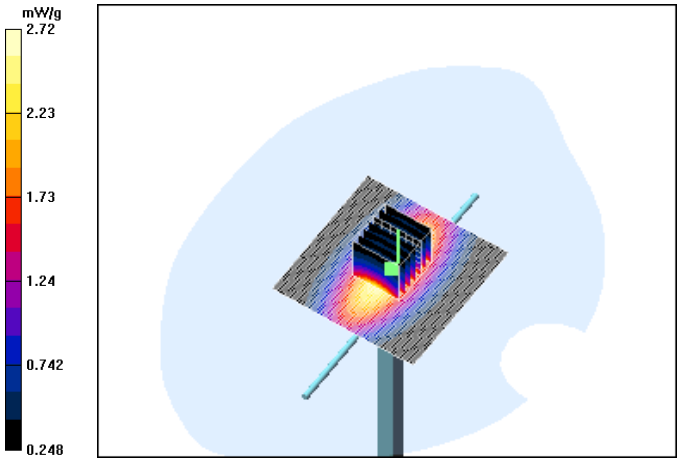
Test Laboratory: TCC Nokia
Type: D835V2; Serial: 486

Communication System: CW835
Frequency: 835 MHz; Duty Cycle: 1:1
Medium: HSL 835; Medium Notes: Liquid temperature= 21.9 C
Medium parameters used: f = 835 MHz; σ = 0.892 mho/m; ε_r = 40.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1792; Probe Notes:
- ConvF(6.55, 6.55, 6.55); Calibrated: 2008-04-14
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn860; Calibrated: 2008-06-12
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

System Check/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.75 mW/g

System Check/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 57.2 V/m
Peak SAR (extrapolated) = 3.72 W/kg
SAR(1 g) = 2.52 mW/g
SAR(10 g) = 1.64 mW/g
Power Drift = -0.004 dB
Maximum value of SAR (measured) = 2.72 mW/g



Date/Time: 2008-09-09 8:57:28

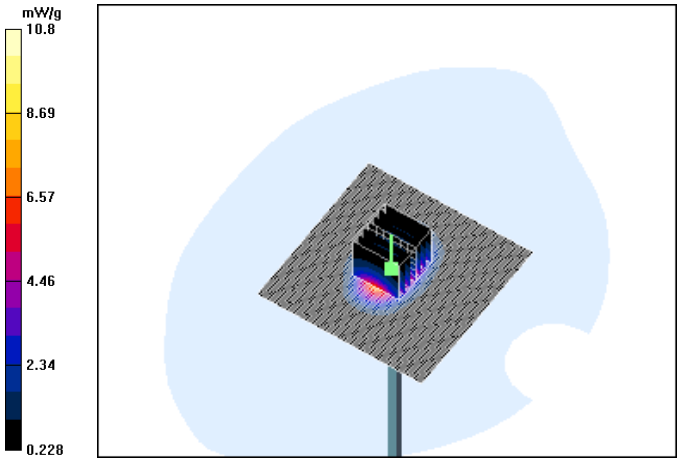
Test Laboratory: TCC Nokia
Type: D1900V2; Serial: 509

Communication System: CW1900
Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: HLS 1900; Medium Notes: T= 20.4C
Medium parameters used: f = 1900 MHz; σ = 1.45 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1516; Probe Notes:
- ConvF(5.24, 5.24, 5.24); Calibrated: 2007-11-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn858; Calibrated: 2008-06-12
- Phantom: SAM 1; Type: Twin Phantom; Serial: NMP3310
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 172

System Check/Area Scan (71x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 11.6 mW/g

System Check/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 88.6 V/m
Peak SAR (extrapolated) = 15.3 W/kg
SAR(1 g) = 9.44 mW/g
SAR(10 g) = 5.13 mW/g
Power Drift = -0.103 dB
Maximum value of SAR (measured) = 10.8 mW/g



Date/Time: 2008-09-10 8:53:46

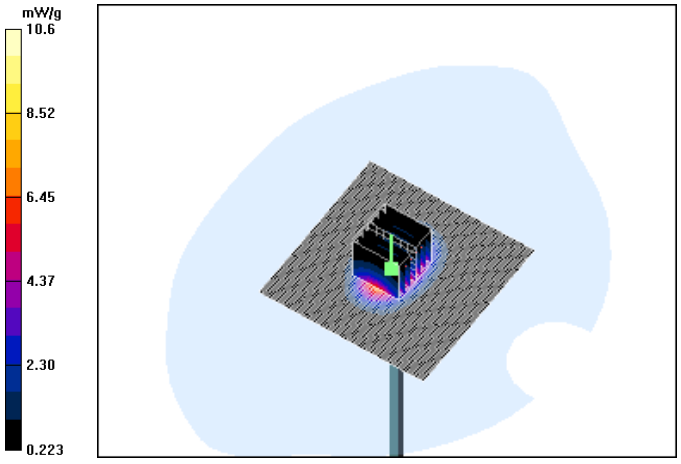
Test Laboratory: TCC Nokia
Type: D1900V2; Serial: 509

Communication System: CW1900
Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: HLS 1900; Medium Notes: T= 20.3C
Medium parameters used: f = 1900 MHz; σ = 1.43 mho/m; ε_r = 38.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1516; Probe Notes:
- ConvF(5.24, 5.24, 5.24); Calibrated: 2007-11-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn858; Calibrated: 2008-06-12
- Phantom: SAM 1; Type: Twin Phantom; Serial: NMP3310
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 172

System Check/Area Scan (71x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 11.5 mW/g

System Check/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 90.7 V/m
Peak SAR (extrapolated) = 15.2 W/kg
SAR(1 g) = 9.4 mW/g
SAR(10 g) = 5.11 mW/g
Power Drift = 0.009 dB
Maximum value of SAR (measured) = 10.6 mW/g



Date/Time: 2008-09-08 10:33:27

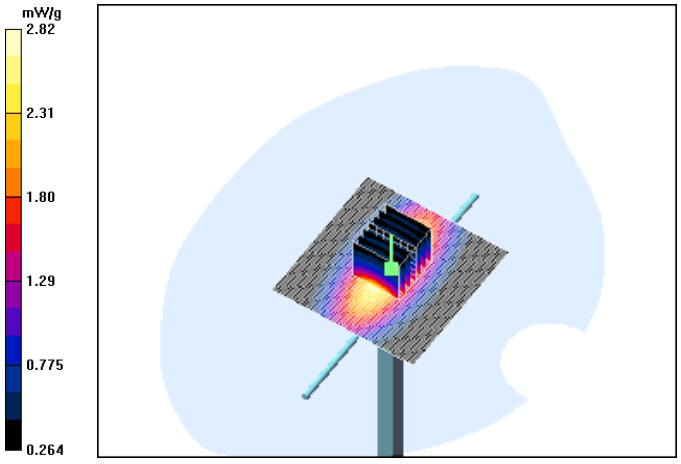
Test Laboratory: TCC Nokia
Type: D835V2; Serial: 486

Communication System: CW835
Frequency: 835 MHz; Duty Cycle: 1:1
Medium: MSL 835; Medium Notes: Liquid temperature= 21.6 C
Medium parameters used: f = 835 MHz; σ = 0.974 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1792; Probe Notes:
- ConvF(5.99, 5.99, 5.99); Calibrated: 2008-04-14
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn860; Calibrated: 2008-06-12
- Phantom: SAM2; Type: Twin Phantom; Serial: TP-1279
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

System Check/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.83 mW/g

System Check/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 56.2 V/m
Peak SAR (extrapolated) = 3.67 W/kg
SAR(1 g) = 2.59 mW/g
SAR(10 g) = 1.71 mW/g
Power Drift = -0.009 dB
Maximum value of SAR (measured) = 2.82 mW/g



Date/Time: 2008-09-11 8:50:14

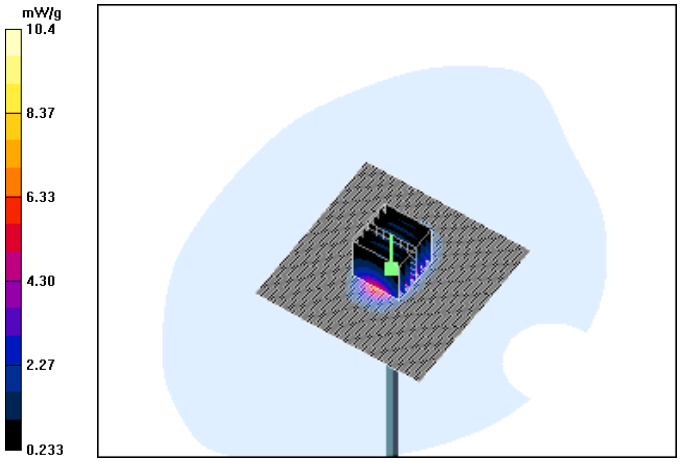
Test Laboratory: TCC Nokia
Type: D1900V2; Serial: 509

Communication System: CW1900
Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: MSL1900; Medium Notes: T=20.5C
Medium parameters used: f = 1900 MHz; σ = 1.53 mho/m; ε_r = 51.2; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1516; Probe Notes:
- ConvF(4.87, 4.87, 4.87); Calibrated: 2007-11-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn858; Calibrated: 2008-06-12
- Phantom: SAM 2 ; Type: Twin Phantom; Serial: NMP03309
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 172

System Check/Area Scan (71x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 11.4 mW/g

System Check/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 88.6 V/m
Peak SAR (extrapolated) = 14.2 W/kg
SAR(1 g) = 9.15 mW/g
SAR(10 g) = 5.03 mW/g
Power Drift = 0.039 dB
Maximum value of SAR (measured) = 10.4 mW/g



APPENDIX B: MEASUREMENT SCANS

Date/Time: 2008-09-04 10:42:01

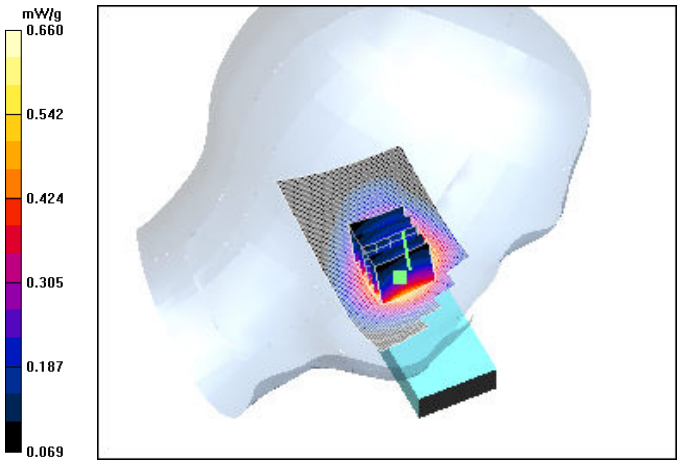
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA800
Frequency: 848.31 MHz; Duty Cycle: 1:1
Medium: HSL 835; Medium Notes: Liquid temperature= 21.8C
Medium parameters used (interpolated): f = 848.31 MHz; σ = 0.899 mho/m; ε_r = 40.7; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1792; Probe Notes:
- ConvF(6.55, 6.55, 6.55); Calibrated: 2008-04-14
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn860; Calibrated: 2008-06-12
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek, High, Slide open/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.683 mW/g

Cheek, High, Slide open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.7 V/m
Peak SAR (extrapolated) = 0.813 W/kg
SAR(1 g) = 0.629 mW/g
SAR(10 g) = 0.460 mW/g
Power Drift = 0.054 dB
Maximum value of SAR (measured) = 0.660 mW/g



Date/Time: 2008-09-03 13:50:15

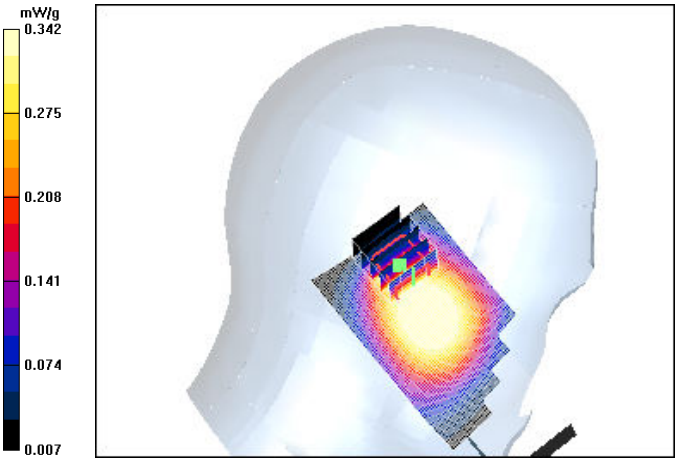
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA800
Frequency: 836.52 MHz; Duty Cycle: 1:1
Medium: HSL 835; Medium Notes: Liquid temperature= 21.8C
Medium parameters used: f = 837 MHz; σ = 0.892 mho/m; ε_r = 40.9; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1792; Probe Notes:
- ConvF(6.55, 6.55, 6.55); Calibrated: 2008-04-14
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn860; Calibrated: 2008-06-12
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt, Middle, Slide open/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.434 mW/g

Tilt, Middle, Slide open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.4 V/m
Peak SAR (extrapolated) = 0.605 W/kg
SAR(1 g) = 0.310 mW/g
SAR(10 g) = 0.210 mW/g
Power Drift = 0.012 dB
Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.
Maximum value of SAR (measured) = 0.342 mW/g



Date/Time: 2008-09-03 14:08:48

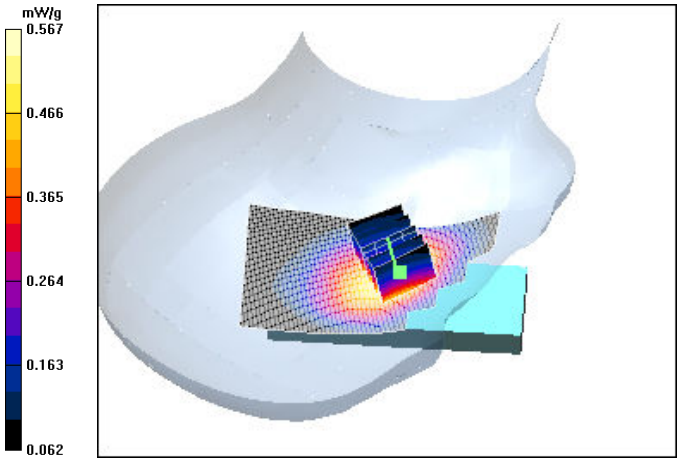
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA800
Frequency: 836.52 MHz; Duty Cycle: 1:1
Medium: HSL 835; Medium Notes: Liquid temperature= 21.8C
Medium parameters used: f = 837 MHz; σ = 0.892 mho/m; ε_r = 40.9; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1792; Probe Notes:
- ConvF(6.55, 6.55, 6.55); Calibrated: 2008-04-14
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn860; Calibrated: 2008-06-12
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek, Middle, Slide open/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.576 mW/g

Cheek, Middle, Slide open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.7 V/m
Peak SAR (extrapolated) = 0.719 W/kg
SAR(1 g) = 0.543 mW/g
SAR(10 g) = 0.397 mW/g
Power Drift = 0.039 dB
Maximum value of SAR (measured) = 0.567 mW/g



Date/Time: 2008-09-03 14:22:49

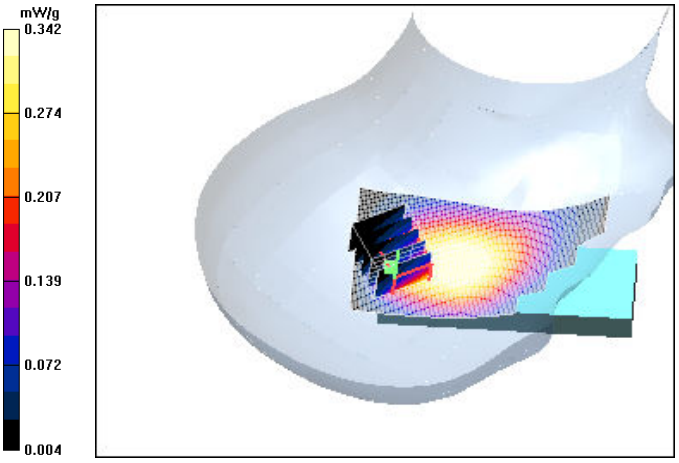
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA800
Frequency: 836.52 MHz; Duty Cycle: 1:1
Medium: HSL 835; Medium Notes: Liquid temperature= 21.8C
Medium parameters used: f = 837 MHz; σ = 0.892 mho/m; ε_r = 40.9; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1792; Probe Notes:
- ConvF(6.55, 6.55, 6.55); Calibrated: 2008-04-14
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn860; Calibrated: 2008-06-12
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt, Middle, Slide open/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.408 mW/g

Tilt, Middle, Slide open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.2 V/m
Peak SAR (extrapolated) = 0.730 W/kg
SAR(1 g) = 0.323 mW/g
SAR(10 g) = 0.201 mW/g
Power Drift = -0.047 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) = 0.342 mW/g



Date/Time: 2008-09-04 10:05:19

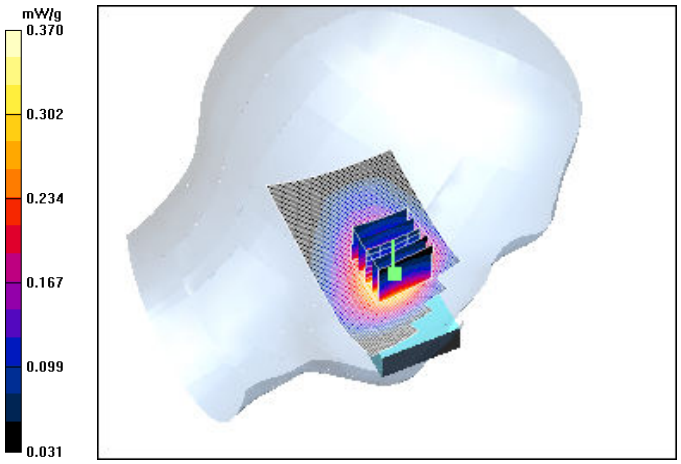
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA800
Frequency: 836.52 MHz; Duty Cycle: 1:1
Medium: HSL 835; Medium Notes: Liquid temperature= 21.8C
Medium parameters used: f = 837 MHz; σ = 0.892 mho/m; ε_r = 40.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1792; Probe Notes:
- ConvF(6.55, 6.55, 6.55); Calibrated: 2008-04-14
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn860; Calibrated: 2008-06-12
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek, Middle, Slide closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.371 mW/g

Cheek, Middle, Slice closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.9 V/m
Peak SAR (extrapolated) = 0.462 W/kg
SAR(1 g) = 0.349 mW/g
SAR(10 g) = 0.248 mW/g
Power Drift = 0.055 dB
Maximum value of SAR (measured) = 0.370 mW/g



Date/Time: 2008-09-04 9:36:42

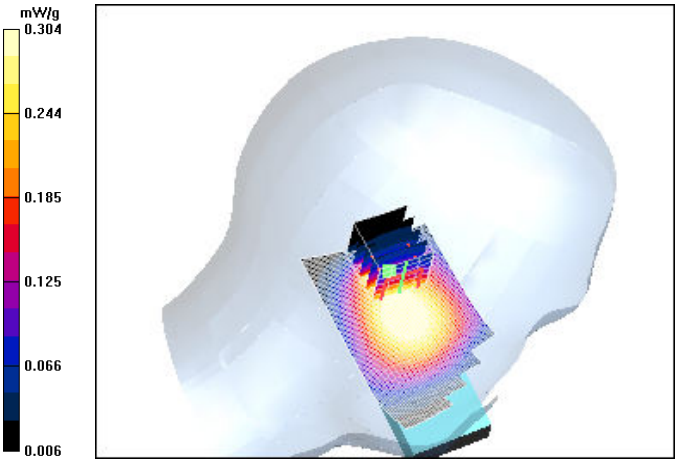
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA800
Frequency: 836.52 MHz; Duty Cycle: 1:1
Medium: HSL 835; Medium Notes: Liquid temperature= 21.8C
Medium parameters used: f = 837 MHz; σ = 0.892 mho/m; ε_r = 40.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1792; Probe Notes:
- ConvF(6.55, 6.55, 6.55); Calibrated: 2008-04-14
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn860; Calibrated: 2008-06-12
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt, Middle, Slide closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.376 mW/g

Tilt, Middle, Slide closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.3 V/m
Peak SAR (extrapolated) = 0.569 W/kg
SAR(1 g) = 0.281 mW/g
SAR(10 g) = 0.190 mW/g
Power Drift = -0.124 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) = 0.304 mW/g



Date/Time: 2008-09-04 11:20:06

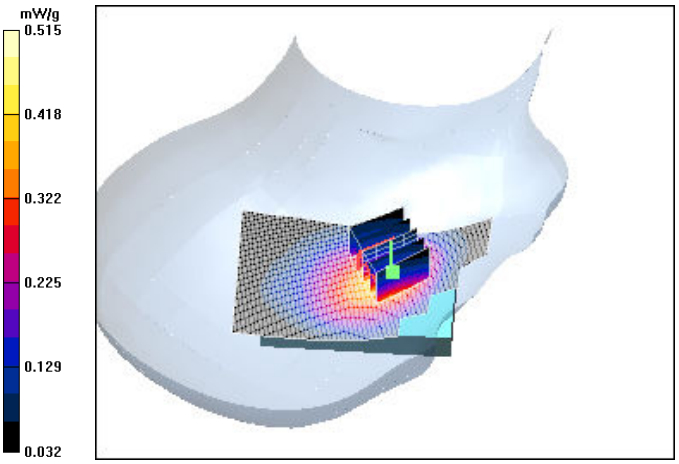
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA800
Frequency: 848.31 MHz; Duty Cycle: 1:1
Medium: HSL 835; Medium Notes: Liquid temperature= 21.8C
Medium parameters used (interpolated): f = 848.31 MHz; σ = 0.899 mho/m; ε_r = 40.7; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1792; Probe Notes:
- ConvF(6.55, 6.55, 6.55); Calibrated: 2008-04-14
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn860; Calibrated: 2008-06-12
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek, High, Slide closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.477 mW/g

Cheek, High, Slice closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.7 V/m
Peak SAR (extrapolated) = 0.663 W/kg
SAR(1 g) = 0.467 mW/g
SAR(10 g) = 0.315 mW/g
Power Drift = -0.168 dB
Maximum value of SAR (measured) = 0.515 mW/g



Date/Time: 2008-09-03 15:31:42

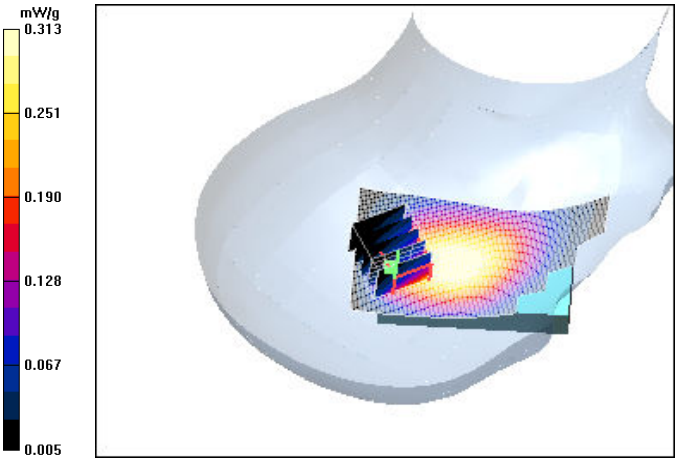
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA800
Frequency: 836.52 MHz; Duty Cycle: 1:1
Medium: HSL 835; Medium Notes: Liquid temperature= 21.8C
Medium parameters used: f = 837 MHz; σ = 0.892 mho/m; ε_r = 40.9; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1792; Probe Notes:
- ConvF(6.55, 6.55, 6.55); Calibrated: 2008-04-14
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn860; Calibrated: 2008-06-12
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt, Middle, Slide closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.357 mW/g

Tilt, Middle, Slide closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.2 V/m
Peak SAR (extrapolated) = 0.693 W/kg
SAR(1 g) = 0.293 mW/g
SAR(10 g) = 0.176 mW/g
Power Drift = 0.045 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) = 0.313 mW/g



Date/Time: 2008-09-05 11:34:22

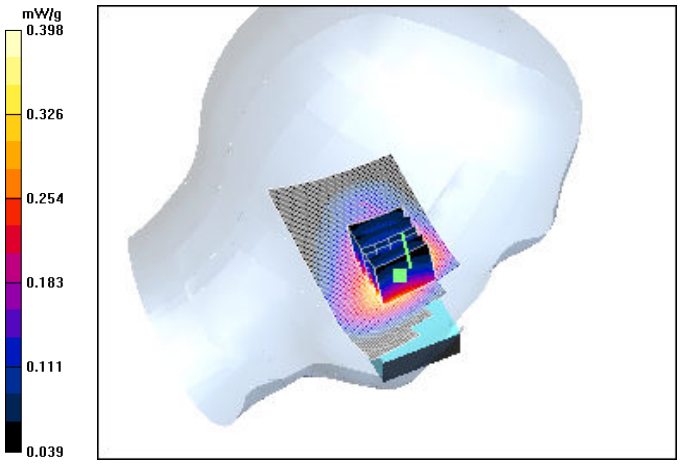
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA800
Frequency: 848.31 MHz; Duty Cycle: 1:1
Medium: HSL 835; Medium Notes: Liquid temperature= 21.9C
Medium parameters used (interpolated): f = 848.31 MHz; σ = 0.901 mho/m; ε_r = 40.6; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1792; Probe Notes:
- ConvF(6.55, 6.55, 6.55); Calibrated: 2008-04-14
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn860; Calibrated: 2008-06-12
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek, High, MPS/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.419 mW/g

Cheek, High, MPS/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.5 V/m
Peak SAR (extrapolated) = 0.520 W/kg
SAR(1 g) = 0.378 mW/g
SAR(10 g) = 0.262 mW/g
Power Drift = 0.006 dB
Maximum value of SAR (measured) = 0.398 mW/g



Date/Time: 2008-09-04 11:43:50

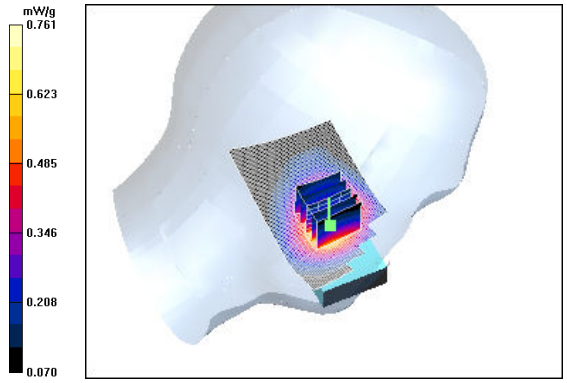
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

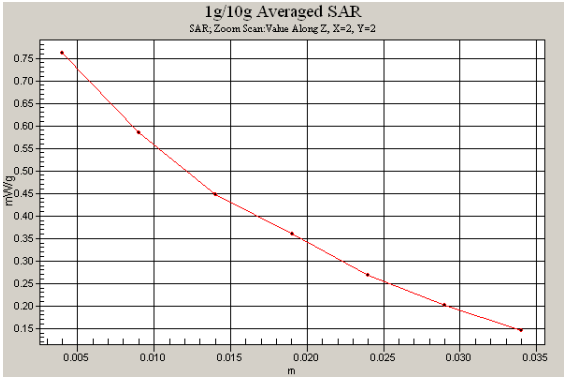
Communication System: CDMA800
Frequency: 848.31 MHz; Duty Cycle: 1:1
Medium: HSL 835; Medium Notes: Liquid temperature= 21.8C
Medium parameters used (interpolated): f = 848.31 MHz; σ = 0.899 mho/m; ε_r = 40.7; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1792; Probe Notes:
- ConvF(6.55, 6.55, 6.55); Calibrated: 2008-04-14
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn860; Calibrated: 2008-06-12
- Phantom: SAM1; Type: Twin Phantom; Serial: TP-1035
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek, High, Slide open, BT active/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.746 mW/g

Cheek, High, Slide open, BT active/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.8 V/m
Peak SAR (extrapolated) = 0.914 W/kg
SAR(1 g) = 0.701 mW/g
SAR(10 g) = 0.500 mW/g
Power Drift = 0.024 dB
Maximum value of SAR (measured) = 0.761 mW/g





Date/Time: 2008-09-09 14:46:20

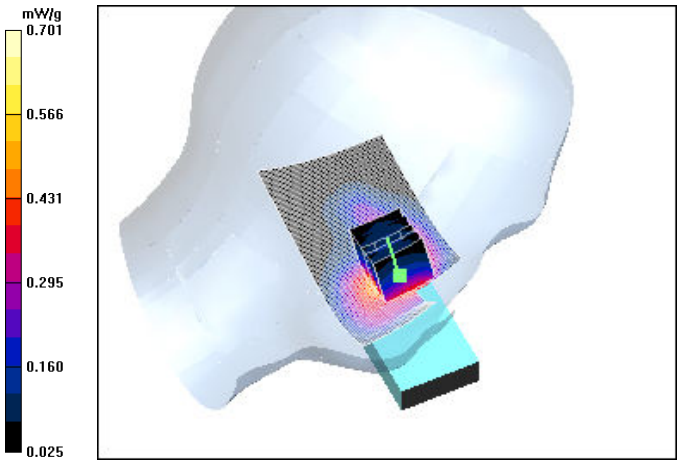
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA1900
Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: HLS 1900; Medium Notes: Temperature: 20.4C
Medium parameters used: f = 1880 MHz; σ = 1.43 mho/m; ε_r = 38.5; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1516; Probe Notes:
- ConvF(5.24, 5.24, 5.24); Calibrated: 2007-11-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn858; Calibrated: 2008-06-12
- Phantom: SAM 1; Type: Twin Phantom; Serial: NMP3310
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek, Middle, Slide open/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.694 mW/g

Cheek, Middle, Slide open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.93 V/m
Peak SAR (extrapolated) = 0.889 W/kg
SAR(1 g) = 0.656 mW/g
SAR(10 g) = 0.426 mW/g
Power Drift = 0.350 dB
Maximum value of SAR (measured) = 0.701 mW/g



Date/Time: 2008-09-09 15:00:32

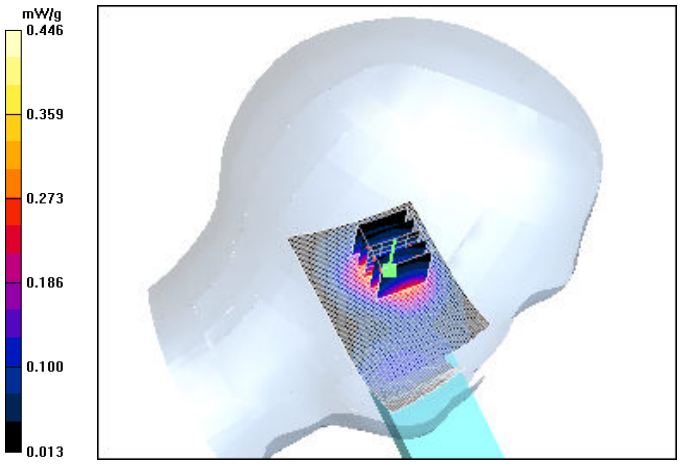
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA1900
Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: HLS 1900; Medium Notes: Temperature: 20.4C
Medium parameters used: f = 1880 MHz; σ = 1.43 mho/m; ε_r = 38.5; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1516; Probe Notes:
- ConvF(5.24, 5.24, 5.24); Calibrated: 2007-11-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn858; Calibrated: 2008-06-12
- Phantom: SAM 1; Type: Twin Phantom; Serial: NMP3310
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt, Middle, Slide open/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.476 mW/g

Tilt, Middle, Slide open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 14.5 V/m
Peak SAR (extrapolated) = 0.550 W/kg
SAR(1 g) = 0.408 mW/g
SAR(10 g) = 0.250 mW/g
Power Drift = -0.288 dB
Maximum value of SAR (measured) = 0.446 mW/g



Date/Time: 2008-09-09 15:35:41

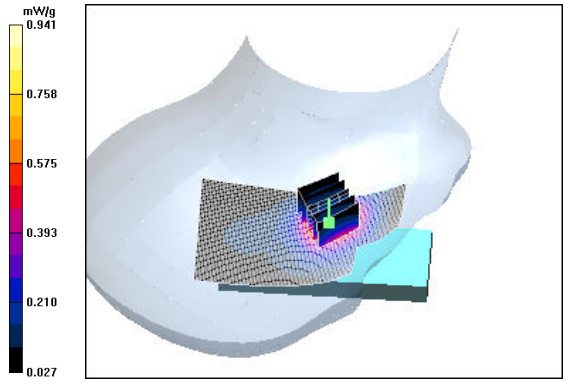
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

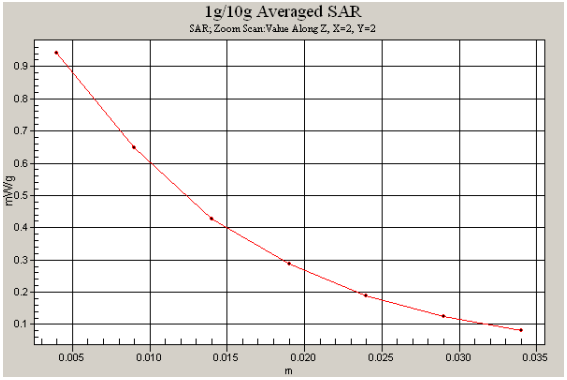
Communication System: CDMA1900
Frequency: 1908.75 MHz; Duty Cycle: 1:1
Medium: HLS 1900; Medium Notes: Temperature: 20.4C
Medium parameters used (interpolated): f = 1908.75 MHz; σ = 1.45 mho/m; ε_r = 38.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1516; Probe Notes:
- ConvF(5.24, 5.24, 5.24); Calibrated: 2007-11-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn858; Calibrated: 2008-06-12
- Phantom: SAM 1; Type: Twin Phantom; Serial: NMP3310
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek, High, Slide open/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.919 mW/g

Cheek, High, Slide open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 9.67 V/m
Peak SAR (extrapolated) = 1.24 W/kg
SAR(1 g) = 0.834 mW/g
SAR(10 g) = 0.491 mW/g
Power Drift = -0.154 dB
Maximum value of SAR (measured) = 0.941 mW/g





Date/Time: 2008-09-09 14:22:22

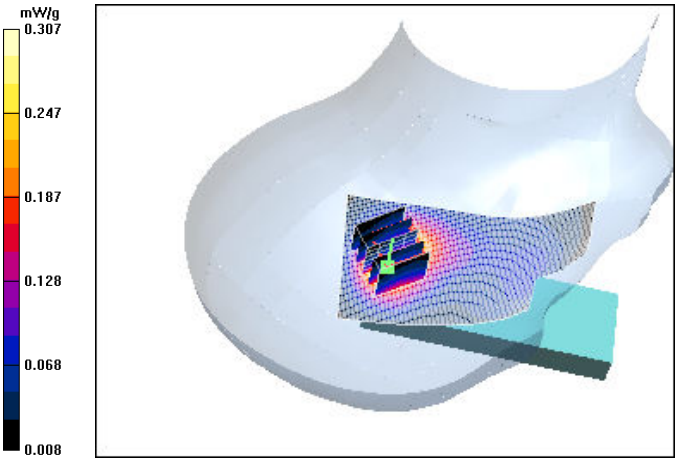
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA1900
Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: HLS 1900; Medium Notes: Temperature: 20.4C
Medium parameters used: f = 1880 MHz; σ = 1.43 mho/m; ε_r = 38.5; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1516; Probe Notes:
- ConvF(5.24, 5.24, 5.24); Calibrated: 2007-11-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn858; Calibrated: 2008-06-12
- Phantom: SAM 1; Type: Twin Phantom; Serial: NMP3310
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt, Middle, Slide open/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.322 mW/g

Tilt, Middle, Slide open/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 15.6 V/m
Peak SAR (extrapolated) = 0.399 W/kg
SAR(1 g) = 0.295 mW/g
SAR(10 g) = 0.188 mW/g
Power Drift = -0.149 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) = 0.307 mW/g



Date/Time: 2008-09-09 9:50:04

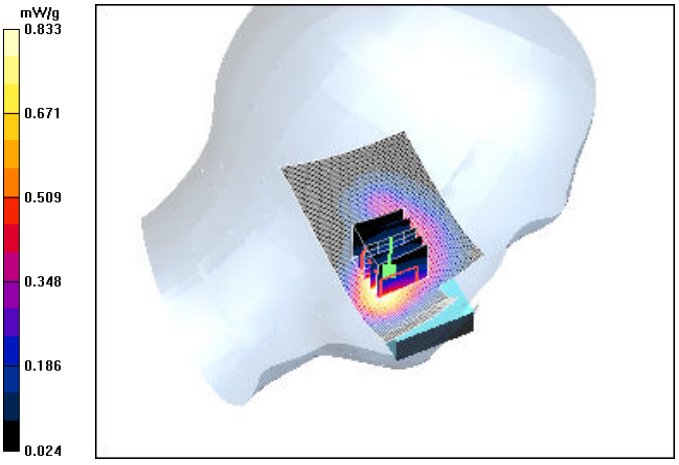
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA1900
Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: HLS 1900; Medium Notes: Temperature: 20.4C
Medium parameters used: f = 1880 MHz; σ = 1.43 mho/m; ε_r = 38.5; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1516; Probe Notes:
- ConvF(5.24, 5.24, 5.24); Calibrated: 2007-11-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn858; Calibrated: 2008-06-12
- Phantom: SAM 1; Type: Twin Phantom; Serial: NMP3310
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek, Middle, Slide closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.00 mW/g

Cheek, Middle, Slide closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.6 V/m
Peak SAR (extrapolated) = 1.09 W/kg
SAR(1 g) = 0.758 mW/g
SAR(10 g) = 0.446 mW/g
Power Drift = 0.000 dB
Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.
Maximum value of SAR (measured) = 0.833 mW/g



Date/Time: 2008-09-09 10:29:25

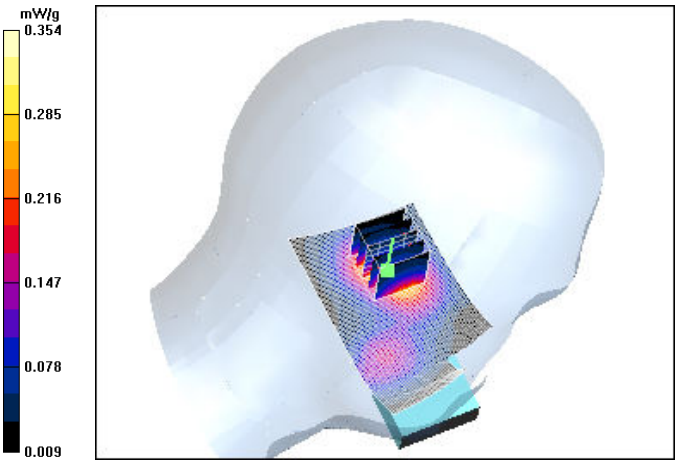
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA1900
Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: HLS 1900; Medium Notes: Temperature: 20.4C
Medium parameters used: f = 1880 MHz; σ = 1.43 mho/m; ε_r = 38.5; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1516; Probe Notes:
- ConvF(5.24, 5.24, 5.24); Calibrated: 2007-11-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn858; Calibrated: 2008-06-12
- Phantom: SAM 1; Type: Twin Phantom; Serial: NMP3310
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt, Middle, Slide closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.370 mW/g

Tilt, Middle, Slide closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 14.6 V/m
Peak SAR (extrapolated) = 0.434 W/kg
SAR(1 g) = 0.327 mW/g
SAR(10 g) = 0.205 mW/g
Power Drift = -0.185 dB
Maximum value of SAR (measured) = 0.354 mW/g



Date/Time: 2008-09-09 10:49:26

Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

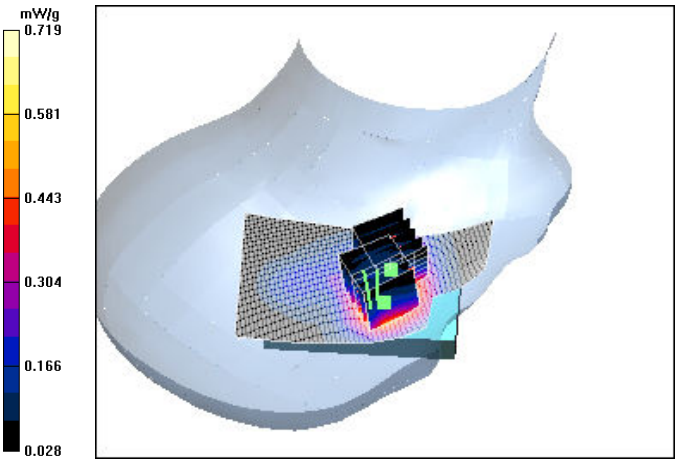
Communication System: CDMA1900
Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: HLS 1900; Medium Notes: Temperature: 20.4C
Medium parameters used: f = 1880 MHz; σ = 1.43 mho/m; ε_r = 38.5; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1516; Probe Notes:
- ConvF(5.24, 5.24, 5.24); Calibrated: 2007-11-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn858; Calibrated: 2008-06-12
- Phantom: SAM 1; Type: Twin Phantom; Serial: NMP3310
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek, Middle, Slide closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.751 mW/g

Cheek, Middle, Slide closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.3 V/m
Peak SAR (extrapolated) = 0.979 W/kg
SAR(1 g) = 0.701 mW/g
SAR(10 g) = 0.428 mW/g
Power Drift = -0.006 dB
Maximum value of SAR (measured) = 0.729 mW/g

Cheek, Middle, Slide closed/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.3 V/m
Peak SAR (extrapolated) = 0.825 W/kg
SAR(1 g) = 0.539 mW/g
SAR(10 g) = 0.346 mW/g
Power Drift = -0.006 dB
Maximum value of SAR (measured) = 0.719 mW/g



Date/Time: 2008-09-09 11:57:13

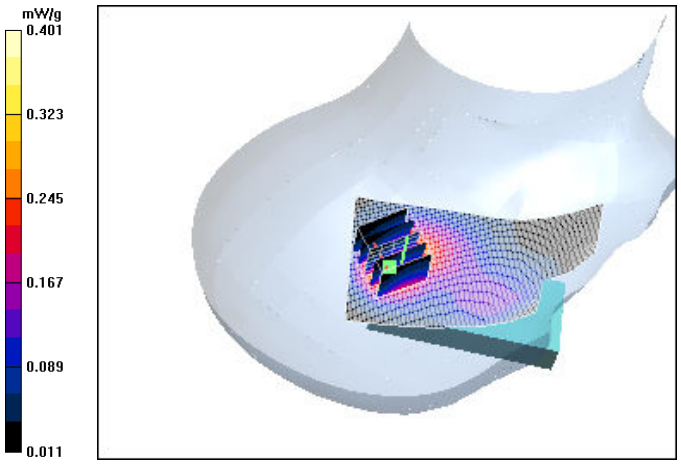
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA1900
Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: HLS 1900; Medium Notes: Temperature: 20.4C
Medium parameters used: f = 1880 MHz; σ = 1.43 mho/m; ε_r = 38.5; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1516; Probe Notes:
- ConvF(5.24, 5.24, 5.24); Calibrated: 2007-11-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn858; Calibrated: 2008-06-12
- Phantom: SAM 1; Type: Twin Phantom; Serial: NMP3310
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 172

Tilt, Middle, Slide closed/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.419 mW/g

Tilt, Middle, Slide closed/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 17.6 V/m
Peak SAR (extrapolated) = 0.505 W/kg
SAR(1 g) = 0.379 mW/g
SAR(10 g) = 0.236 mW/g
Power Drift = -0.404 dB
Maximum value of SAR (measured) = 0.401 mW/g



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

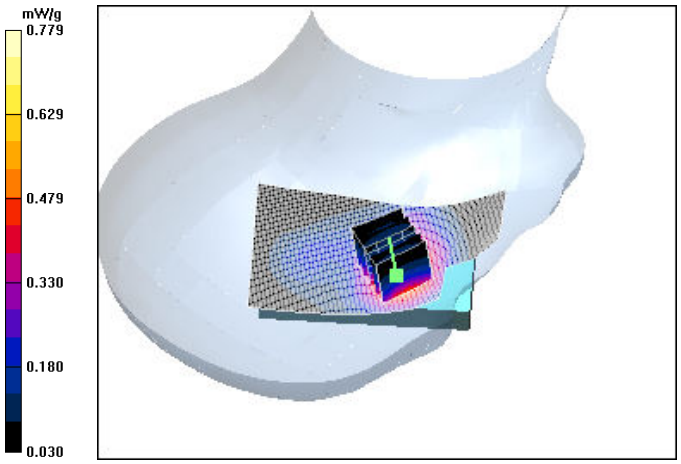
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA1900
Frequency: 1908.75 MHz; Duty Cycle: 1:1
Medium: HLS 1900; Medium Notes: Temperature: 20.3C
Medium parameters used (interpolated): f = 1908.75 MHz; σ = 1.44 mho/m; ε_r = 38.2; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1516; Probe Notes:
- ConvF(5.24, 5.24, 5.24); Calibrated: 2007-11-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn858; Calibrated: 2008-06-12
- Phantom: SAM 1; Type: Twin Phantom; Serial: NMP3310
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek, High, MPS/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.752 mW/g

Cheek, High, MPS/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.3 V/m
Peak SAR (extrapolated) = 0.971 W/kg
SAR(1 g) = 0.700 mW/g
SAR(10 g) = 0.424 mW/g
Power Drift = 0.257 dB
Maximum value of SAR (measured) = 0.779 mW/g



Date/Time: 2008-09-10 10:23:50

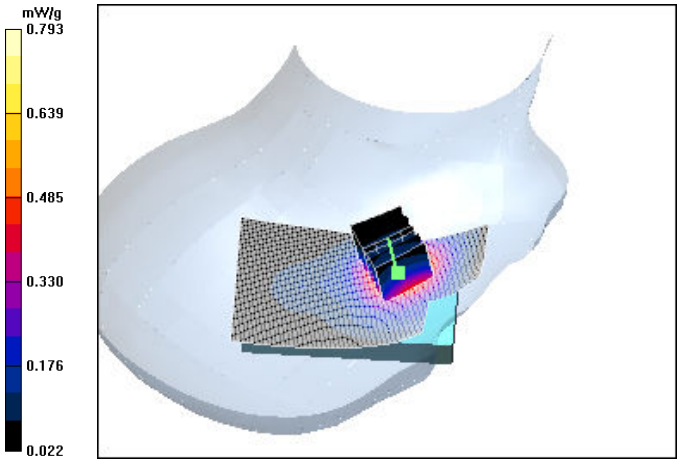
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA1900
Frequency: 1908.75 MHz; Duty Cycle: 1:1
Medium: HLS 1900; Medium Notes: Temperature: 20.3C
Medium parameters used (interpolated): f = 1908.75 MHz; σ = 1.44 mho/m; ε_r = 38.2; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1516; Probe Notes:
- ConvF(5.24, 5.24, 5.24); Calibrated: 2007-11-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn858; Calibrated: 2008-06-12
- Phantom: SAM 1; Type: Twin Phantom; Serial: NMP3310
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 172

Cheek, High, Slide open, BT active/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.827 mW/g

Cheek, High, Slide open, BT active/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 9.00 V/m
Peak SAR (extrapolated) = 1.07 W/kg
SAR(1 g) = 0.719 mW/g
SAR(10 g) = 0.429 mW/g
Power Drift = -0.352 dB
Maximum value of SAR (measured) = 0.793 mW/g



Date/Time: 2008-09-08 11:05:44

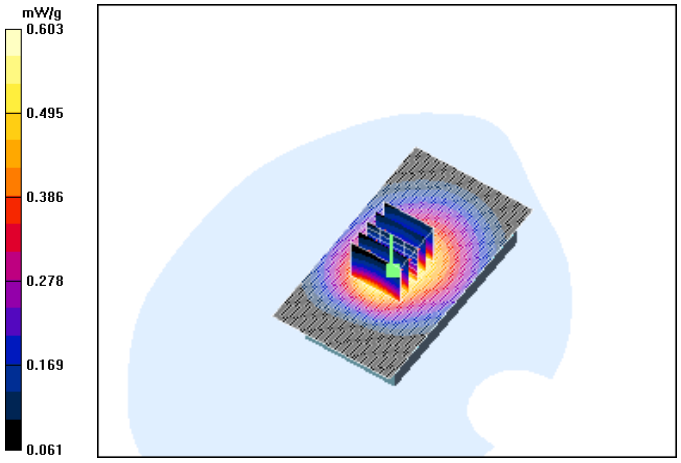
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA800 RC3/SO55
Frequency: 824.7 MHz; Duty Cycle: 1:1
Medium: MSL 835; Medium Notes: Liquid temperature= 21.6 C
Medium parameters used: f = 825 MHz; σ = 0.968 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1792; Probe Notes:
- ConvF(5.99, 5.99, 5.99); Calibrated: 2008-04-14
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn860; Calibrated: 2008-06-12
- Phantom: SAM2; Type: Twin Phantom; Serial: TP-1279
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body, Low, Slide closed, No accessory/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.598 mW/g

Body, Low, Slide closed, No accessory/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.7 V/m
Peak SAR (extrapolated) = 0.740 W/kg
SAR(1 g) = 0.566 mW/g
SAR(10 g) = 0.409 mW/g
Power Drift = -0.044 dB
Maximum value of SAR (measured) = 0.603 mW/g



Date/Time: 2008-09-08 11:19:55

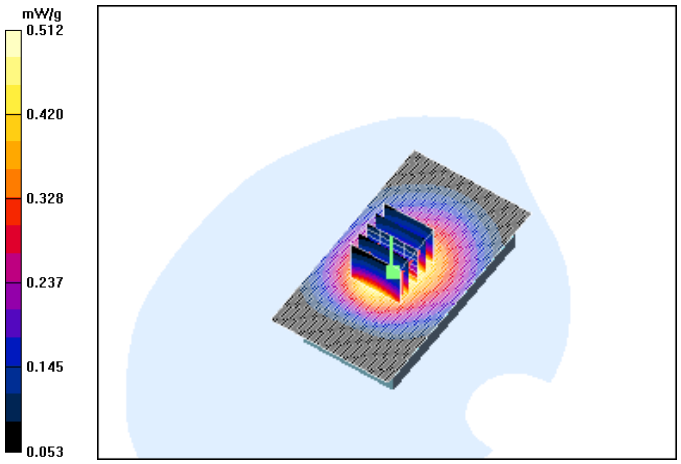
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA800 RC3/SO55
Frequency: 824.7 MHz; Duty Cycle: 1:1
Medium: MSL 835; Medium Notes: Liquid temperature= 21.6 C
Medium parameters used: f = 825 MHz; σ = 0.968 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1792; Probe Notes:
- ConvF(5.99, 5.99, 5.99); Calibrated: 2008-04-14
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn860; Calibrated: 2008-06-12
- Phantom: SAM2; Type: Twin Phantom; Serial: TP-1279
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body, Low, Slide closed, HS-48/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.509 mW/g

Body, Low, Slide closed, HS-48/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.9 V/m
Peak SAR (extrapolated) = 0.611 W/kg
SAR(1 g) = 0.483 mW/g
SAR(10 g) = 0.350 mW/g
Power Drift = -0.088 dB
Maximum value of SAR (measured) = 0.512 mW/g



Date/Time: 2008-09-05 15:54:51

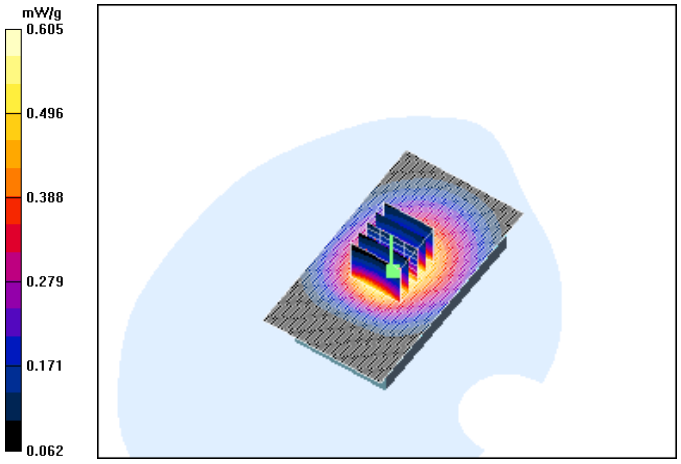
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA800 RTAP 153.6kbps
Frequency: 848.31 MHz; Duty Cycle: 1:1
Medium: MSL 835; Medium Notes: Liquid temperature= 21.6 C
Medium parameters used (interpolated): f = 848.31 MHz; σ = 0.987 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1792; Probe Notes:
- ConvF(5.99, 5.99, 5.99); Calibrated: 2008-04-14
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn860; Calibrated: 2008-06-12
- Phantom: SAM2; Type: Twin Phantom; Serial: TP-1279
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body, High, Slide closed, No accessory/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.613 mW/g

Body, High, Slide closed, No accessory/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.0 V/m
Peak SAR (extrapolated) = 0.750 W/kg
SAR(1 g) = 0.576 mW/g
SAR(10 g) = 0.417 mW/g
Power Drift = 0.198 dB
Maximum value of SAR (measured) = 0.605 mW/g



Date/Time: 2008-09-05 16:18:48

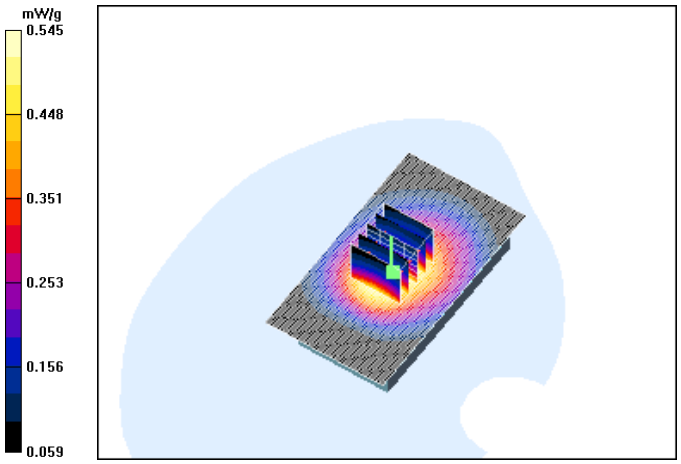
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA800 RTAP 153.6kbps
Frequency: 848.31 MHz; Duty Cycle: 1:1
Medium: MSL 835; Medium Notes: Liquid temperature= 21.6 C
Medium parameters used (interpolated): f = 848.31 MHz; σ = 0.987 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1792; Probe Notes:
- ConvF(5.99, 5.99, 5.99); Calibrated: 2008-04-14
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn860; Calibrated: 2008-06-12
- Phantom: SAM2; Type: Twin Phantom; Serial: TP-1279
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body, High, Slide closed, HS-48/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.540 mW/g

Body, High, Slide closed, HS-48/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.1 V/m
Peak SAR (extrapolated) = 0.676 W/kg
SAR(1 g) = 0.516 mW/g
SAR(10 g) = 0.372 mW/g
Power Drift = 0.056 dB
Maximum value of SAR (measured) = 0.545 mW/g



Date/Time: 2008-09-05 16:35:23

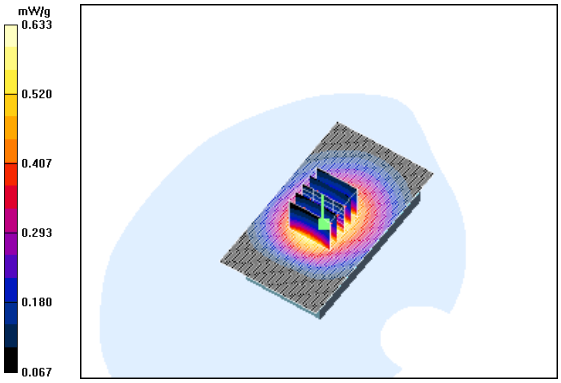
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

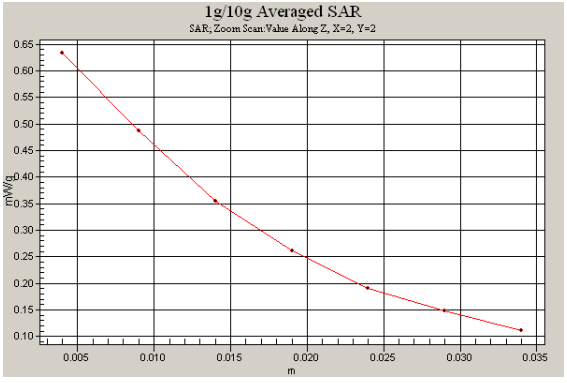
Communication System: CDMA800 RTAP 153.6kbps
Frequency: 848.31 MHz; Duty Cycle: 1:1
Medium: MSL 835; Medium Notes: Liquid temperature= 21.6 C
Medium parameters used (interpolated): f = 848.31 MHz; σ = 0.987 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1792; Probe Notes:
- ConvF(5.99, 5.99, 5.99); Calibrated: 2008-04-14
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn860; Calibrated: 2008-06-12
- Phantom: SAM2; Type: Twin Phantom; Serial: TP-1279
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 172

Body, High, No accessory, Slide closed, BT active/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.627 mW/g

Body, High, No accessory, Slide closed, BT active/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.3 V/m
Peak SAR (extrapolated) = 0.743 W/kg
SAR(1 g) = 0.594 mW/g
SAR(10 g) = 0.429 mW/g
Power Drift = -0.210 dB
Maximum value of SAR (measured) = 0.633 mW/g





Date/Time: 2008-09-11 10:49:15

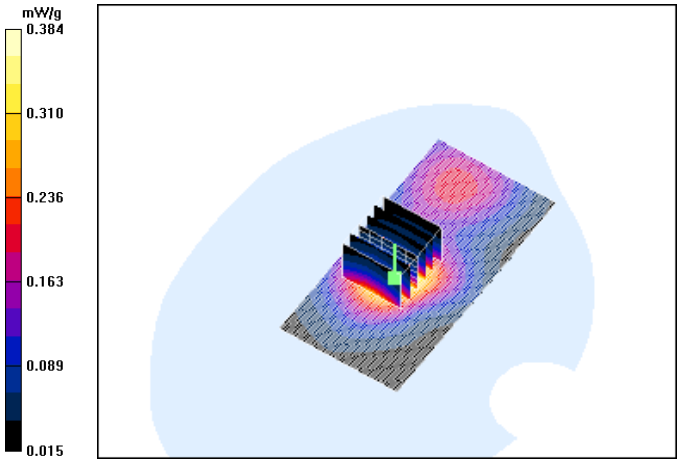
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA1900 RTAP 153.6kbps
Frequency: 1908.75 MHz; Duty Cycle: 1:1
Medium: 1900MHz Body; Medium Notes: T=20.5C
Medium parameters used (interpolated): f = 1908.75 MHz; σ = 1.54 mho/m; ε_r = 51.2; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1516; Probe Notes:
- ConvF(4.87, 4.87, 4.87); Calibrated: 2007-11-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn858; Calibrated: 2008-06-12
- Phantom: SAM 2 ; Type: Twin Phantom; Serial: NMP03309
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 172

Body, High, Slide closed, No accessory/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.380 mW/g

Body, High, Slide closed, No accessory/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.0 V/m
Peak SAR (extrapolated) = 0.531 W/kg
SAR(1 g) = 0.358 mW/g
SAR(10 g) = 0.231 mW/g
Power Drift = -0.032 dB
Maximum value of SAR (measured) = 0.384 mW/g



Date/Time: 2008-09-11 11:32:57

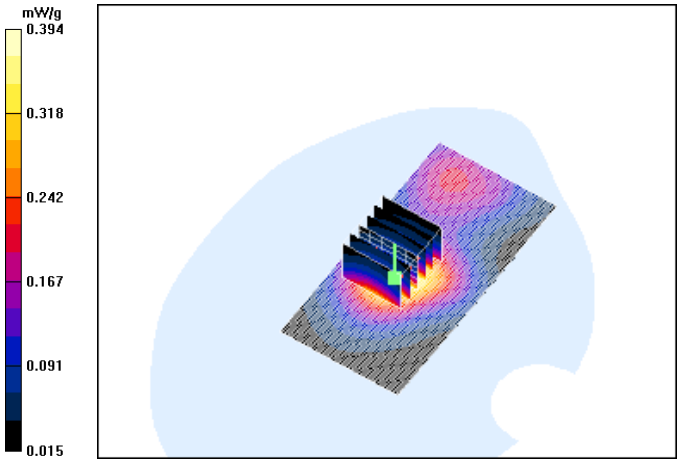
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

Communication System: CDMA1900 RTAP 153.6kbps
Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: 1900MHz Body; Medium Notes: T=20.5C
Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 51.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1516; Probe Notes:
- ConvF(4.87, 4.87, 4.87); Calibrated: 2007-11-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn858; Calibrated: 2008-06-12
- Phantom: SAM 2 ; Type: Twin Phantom; Serial: NMP03309
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 172

Body, Middle, Slide closed, HS-48/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.403 mW/g

Body, Middle, Slide closed, HS-48/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 11.8 V/m
Peak SAR (extrapolated) = 0.505 W/kg
SAR(1 g) = 0.367 mW/g
SAR(10 g) = 0.243 mW/g
Power Drift = -0.044 dB
Maximum value of SAR (measured) = 0.394 mW/g



Date/Time: 2008-09-11 12:23:22

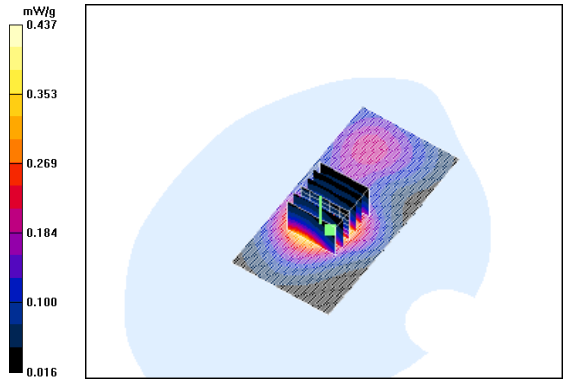
Test Laboratory: TCC Nokia
Type: RM-384; Serial: A000000126D675

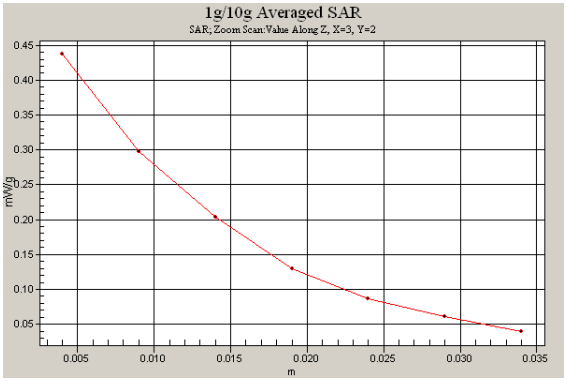
Communication System: CDMA1900 RTAP 153.6kbps
Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: 1900MHz Body; Medium Notes: T=20.5C
Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 51.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1516; Probe Notes:
- ConvF(4.87, 4.87, 4.87); Calibrated: 2007-11-12
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn858; Calibrated: 2008-06-12
- Phantom: SAM 2 ; Type: Twin Phantom; Serial: NMP03309
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 172

Body, Middle, Slide closed, HS-48, BT active/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.439 mW/g

Body, Middle, Slide closed, HS-48, BT active/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 14.8 V/m
Peak SAR (extrapolated) = 0.596 W/kg
SAR(1 g) = 0.405 mW/g
SAR(10 g) = 0.264 mW/g
Power Drift = -0.199 dB
Maximum value of SAR (measured) = 0.437 mW/g





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

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

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

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

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

Accreditation No.: SCS 108

Client: Nokia SD

Certificate No: ET3-1516_Nov07

CALIBRATION CERTIFICATE

Object: ET3DV6 - SN:1516

Calibration procedure(s): QA CAL-01.v6
Calibration procedure for dosimetric E-field probes

Calibration date: November 12, 2007

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)

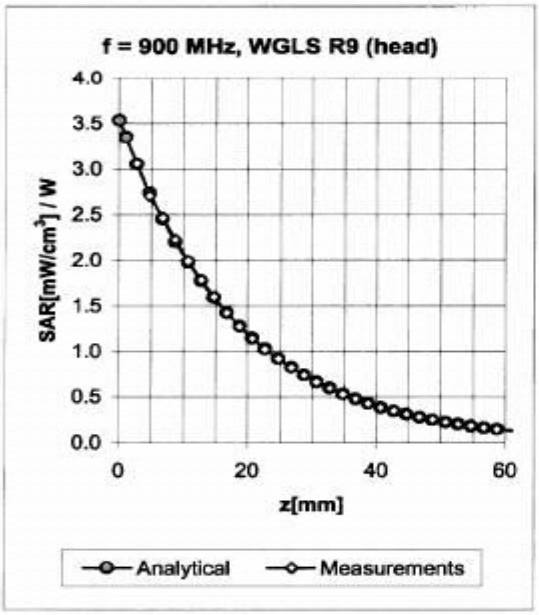
Primary Standards	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Power meter E4419B	GB41293874	29-Mar-07 (METAS, No. 217-00670)	Mar-08
Power sensor E4412A	MY41495277	29-Mar-07 (METAS, No. 217-00670)	Mar-08
Power sensor E4412A	MY41498087	29-Mar-07 (METAS, No. 217-00670)	Mar-08
Reference 3 dB Attenuator	SN: S5054 (3c)	8-Aug-07 (METAS, No. 217-00719)	Aug-08
Reference 20 dB Attenuator	SN: S5086 (20b)	29-Mar-07 (METAS, No. 217-00671)	Mar-08
Reference 30 dB Attenuator	SN: S5129 (30b)	8-Aug-07 (METAS, No. 217-00720)	Aug-08
Reference Probe ES3DV2	SN: 3013	4-Jan-07 (SPEAG, No. ES3-3013_Jan07)	Jan-08
DAE4	SN: 654	20-Apr-07 (SPEAG, No. DAE4-654_Apr07)	Apr-08

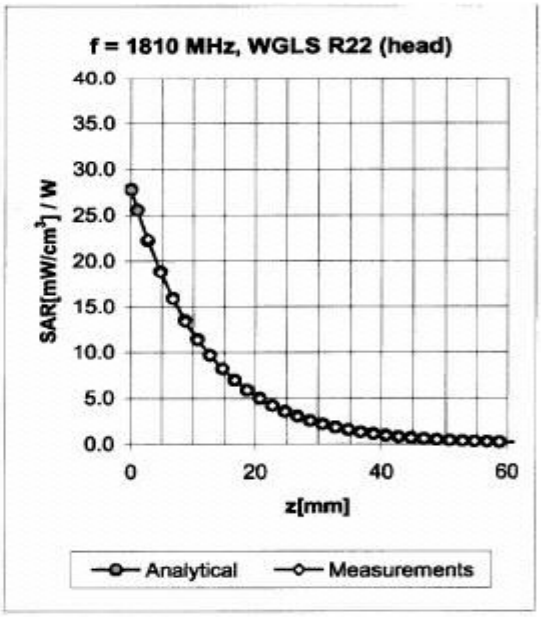
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator HP 8648C	US3642U01700	4-Aug-99 (SPEAG, in house check Oct-07)	In house check: Oct-09
Network Analyzer HP 8753E	US37390585	18-Oct-01 (SPEAG, in house check Oct-07)	In house check: Oct-08

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

Issued: November 12, 2007

Conversion Factor Assessment





f [MHz]	Validity [MHz][c]	TSL	Permittivity	Conductivity	Alpha	Depth	ConvF Uncertainty
900	± 50 / ± 100	Head	41.5 ± 5%	0.97 ± 5%	0.72	2.07	6.45 ± 11.0% (k=2)
1810	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.63	2.19	5.24 ± 11.0% (k=2)
1950	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.96	1.75	4.96 ± 11.0% (k=2)
2450	± 50 / ± 100	Head	39.2 ± 5%	1.80 ± 5%	0.92	1.71	4.47 ± 11.8% (k=2)
900	± 50 / ± 100	Body	55.0 ± 5%	1.05 ± 5%	0.79	1.94	6.01 ± 11.0% (k=2)
1810	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.73	2.35	4.87 ± 11.0% (k=2)
1950	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.64	2.49	4.56 ± 11.0% (k=2)
2450	± 50 / ± 100	Body	52.7 ± 5%	1.95 ± 5%	0.63	2.50	4.21 ± 11.8% (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.

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

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

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

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

Accreditation No.: SCS 108

Client: Nokia SD TCC

Certificate No: ET3-1792_Apr08

CALIBRATION CERTIFICATE

Object: ET3DV6 - SN:1792

Calibration procedure(s): QA CAL-01.v6 and QA CAL-23.v3
Calibration procedure for dosimetric E-field probes

Calibration date: April 14, 2008

Condition of the calibrated item: In Tolerance

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

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

Calibration Equipment used (M&TE critical for calibration)

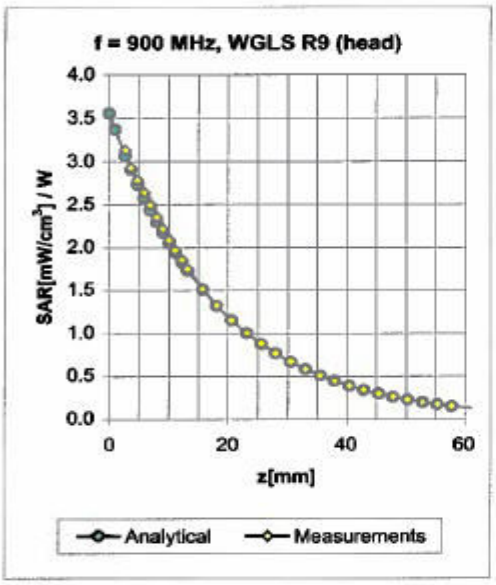
Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter E4419B	GB41293874	1-Apr-08 (No. 217-00788)	Apr-09
Power sensor E4412A	MY41495277	1-Apr-08 (No. 217-00788)	Apr-09
Power sensor E4412A	MY41496087	1-Apr-08 (No. 217-00788)	Apr-09
Reference 3 dB Attenuator	SN: S5054 (3c)	8-Aug-07 (No. 217-00719)	Aug-08
Reference 20 dB Attenuator	SN: S5086 (20b)	31-Mar-08 (No. 217-00787)	Apr-09
Reference 30 dB Attenuator	SN: S5129 (30b)	8-Aug-07 (No. 217-00720)	Aug-08
Reference Probe ES3DV2	SN: 3013	2-Jan-08 (No. ES3-3013_Jan08)	Jan-09
DAE4	SN: 654	20-Apr-07 (No. DAE4-654_Apr07)	Apr-08

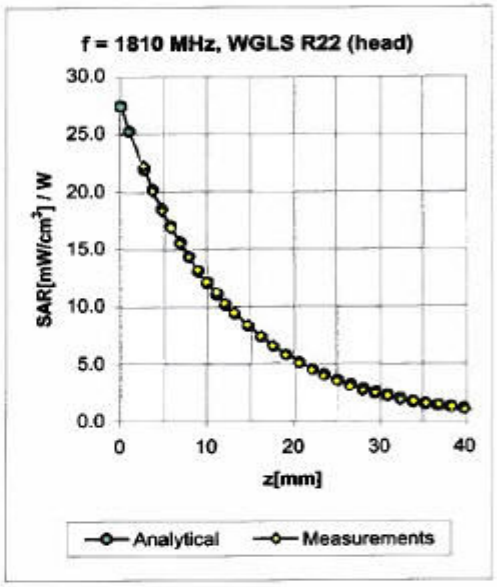
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator HP 8648C	US3642U01700	4-Aug-99 (in house check Oct-07)	In house check: Oct-09
Network Analyzer HP 8753E	US37390585	18-Oct-01 (in house check Oct-07)	In house check: Oct-08

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

Issued: April 16, 2008

Conversion Factor Assessment





f [MHz]	Validity [MHz][C]	TSL	Permittivity	Conductivity	Alpha	Depth	ConvF Uncertainty
900	± 50 / ± 100	Head	41.5 ± 5%	0.97 ± 5%	0.87	1.61	6.55 ± 11.0% (k=2)
1810	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.51	2.45	5.12 ± 11.0% (k=2)
1950	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.51	2.30	4.75 ± 11.0% (k=2)
2450	± 50 / ± 100	Head	39.2 ± 5%	1.80 ± 5%	0.72	1.84	4.24 ± 11.0% (k=2)
900	± 50 / ± 100	Body	55.0 ± 5%	1.05 ± 5%	0.76	1.81	5.99 ± 11.0% (k=2)
1810	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.51	2.45	5.10 ± 11.0% (k=2)
1950	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.55	2.17	4.90 ± 11.0% (k=2)
2450	± 50 / ± 100	Body	52.7 ± 5%	1.95 ± 5%	0.70	1.88	4.11 ± 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 D: RELEVANT PAGES FROM DIPOLE VALIDATION KIT REPORT(S)

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

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

Accredited by the Swiss Federal Office of Metrology and Accreditation
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 108

Client Nokia SD TCC

Certificate No: D835V2-486_Nov06

CALIBRATION CERTIFICATE

Object	D835V2 - SN: 486
Calibration procedure(s)	QA CAL-05.v6 Calibration procedure for dipole validation kits
Calibration date:	November 21, 2006
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 (Calibrated by, Certificate No.)	Scheduled Calibration
Power meter EPM-442A	GB37480704	03-Oct-06 (METAS, No. 217-00608)	Oct-07
Power sensor HP 8481A	US37292783	03-Oct-06 (METAS, No. 217-00608)	Oct-07
Reference 20 dB Attenuator	SN: 5086 (20g)	10-Aug-06 (METAS, No 217-00591)	Aug-07
Reference 10 dB Attenuator	SN: 5047.2 (10r)	10-Aug-06 (METAS, No 217-00591)	Aug-07
Reference Probe ET3DV6 (HF)	SN 1507	19-Oct-06 (SPEAG, No. ET3-1507_Oct06)	Oct-07
DAE4	SN 601	15-Dec-05 (SPEAG, No. DAE4-601_Dec05)	Dec-06

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power sensor HP 8481A	MY41092317	18-Oct-02 (SPEAG, in house check Oct-05)	In house check: Oct-07
RF generator Agilent E4421B	MY41000675	11-May-05 (SPEAG, in house check Nov-05)	In house check: Nov-07
Network Analyzer HP 8753E	US37390585 S4206	18-Oct-01 (SPEAG, in house check Oct-06)	In house check: Oct-07

	Name	Function	Signature
Calibrated by:	Mike Meili	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: November 23, 2006

DASY4 Validation Report for Head TSL

Date/Time: 21.11.2006 12:40:21

Test Laboratory: SPEAG, Zurich, Switzerland

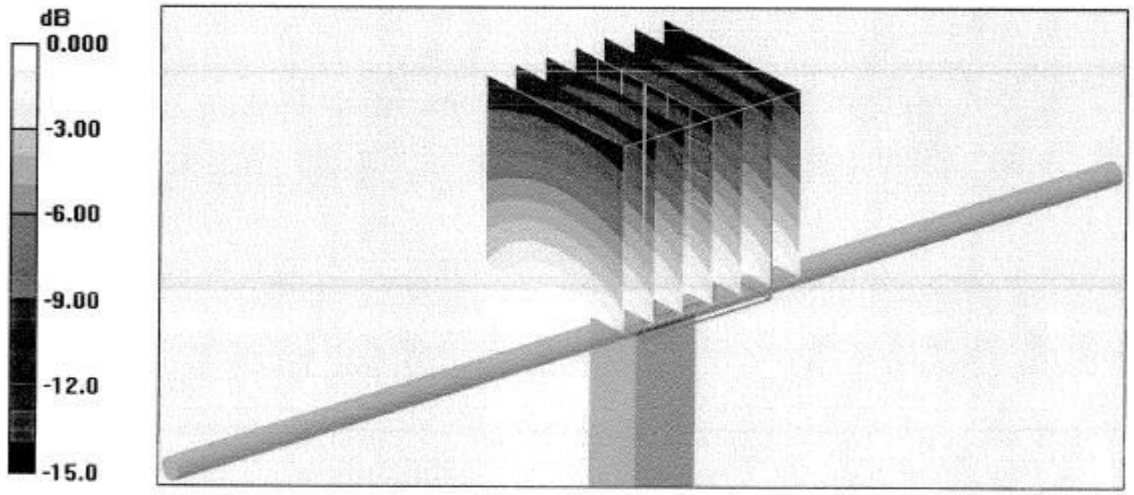
DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 486

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1
Medium: HSL 900 MHz;
Medium parameters used: f = 835 MHz; σ = 0.901 mho/m; ε_r = 42.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1507 (HF); ConvF(6.09, 6.09, 6.09); Calibrated: 19.10.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 15.12.2005
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Pin = 250 mW; d = 15 mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.8 V/m; Power Drift = 0.000 dB
Peak SAR (extrapolated) = 3.30 W/kg
SAR(1 g) = 2.29 mW/g; SAR(10 g) = 1.5 mW/g
Maximum value of SAR (measured) = 2.46 mW/g



0 dB = 2.46mW/g

DASY4 Validation Report for Body TSL

Date/Time: 14.11.2006 12:43:30

Test Laboratory: SPEAG, Zurich, Switzerland

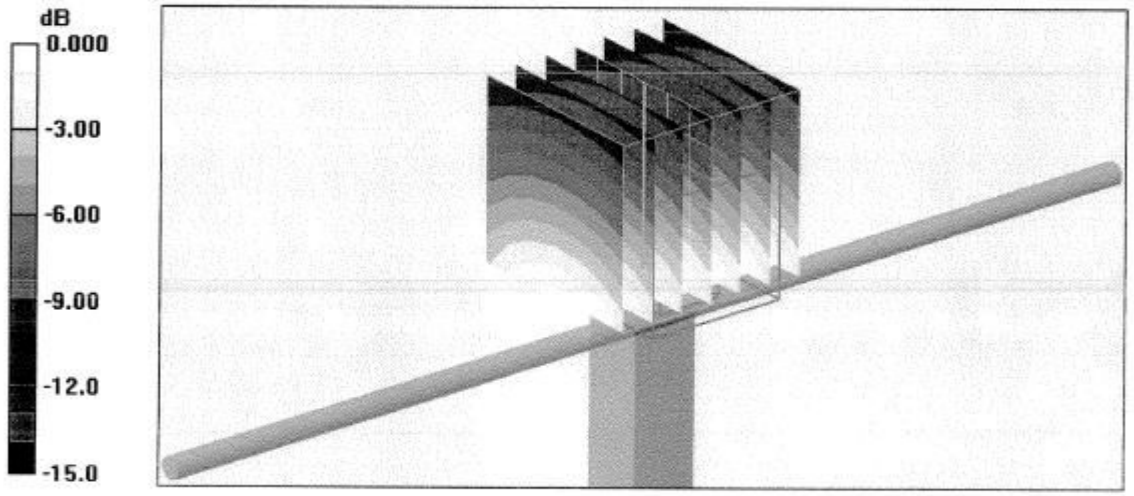
DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:486

Communication System: CW-835; Frequency: 835 MHz; Duty Cycle: 1:1
Medium: MSL900;
Medium parameters used: f = 835 MHz; σ = 0.99 mho/m; ε_r = 53.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1507 (HF); ConvF(5.75, 5.75, 5.75); Calibrated: 19.10.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 15.12.2005
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Pin = 250 mW; d = 15 mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.6 V/m; Power Drift = -0.023 dB
Peak SAR (extrapolated) = 3.46 W/kg
SAR(1 g) = 2.47 mW/g; SAR(10 g) = 1.63 mW/g
Maximum value of SAR (measured) = 2.67 mW/g



0 dB = 2.67mW/g

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Accreditation No.: SCS 108

Client: Nokia SD TCC

Certificate No: D1900V2-509_Jun08

CALIBRATION CERTIFICATE

Object	D1900V2 - SN: 509
Calibration procedure(s)	QA CAL-05.v7 Calibration procedure for dipole validation kits
Calibration date:	June 19, 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 (Calibrated by, 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)	07-Aug-07 (No. 217-00718)	Aug-08
Type-N mismatch combination	SN: 5047.2 / 06327	08-Aug-07 (No. 217-00721)	Aug-08
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-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:	Claudio Leubler	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: June 23, 2008

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

DASY4 Validation Report for Head TSL

Date/Time: 18.06.2008 14:57:06

Test Laboratory: SPEAG, Zurich, Switzerland

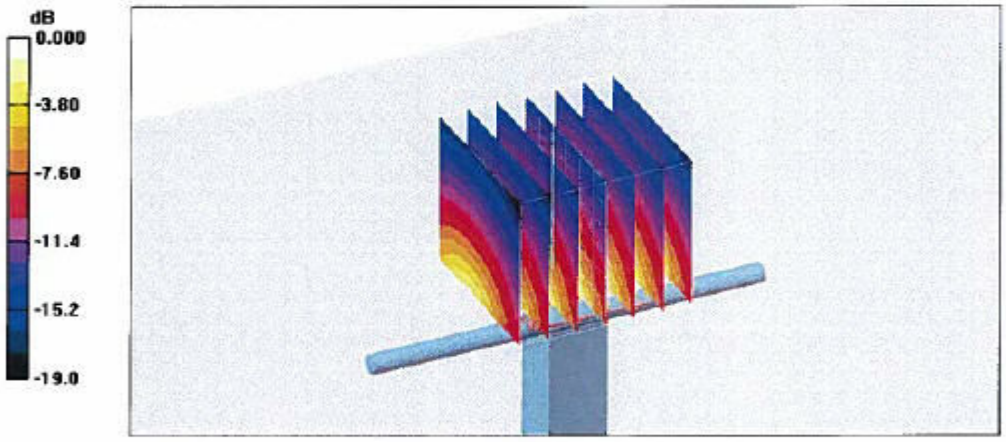
DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:509

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: HSL U10 BB;
Medium parameters used: f = 1900 MHz; σ = 1.48 mho/m; ε_r = 39.1; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3025; ConvF(4.9, 4.9, 4.9); 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; ;
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Pin = 250 mW; d = 10 mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 87.2 V/m; Power Drift = 0.060 dB
Peak SAR (extrapolated) = 18.5 W/kg
SAR(1 g) = 9.96 mW/g; SAR(10 g) = 5.12 mW/g
Maximum value of SAR (measured) = 12.0 mW/g



0 dB = 12.0mW/g

DASY4 Validation Report for Body TSL

Date/Time: 19.06.2008 15:04:52

Test Laboratory: SPEAG, Zurich, Switzerland

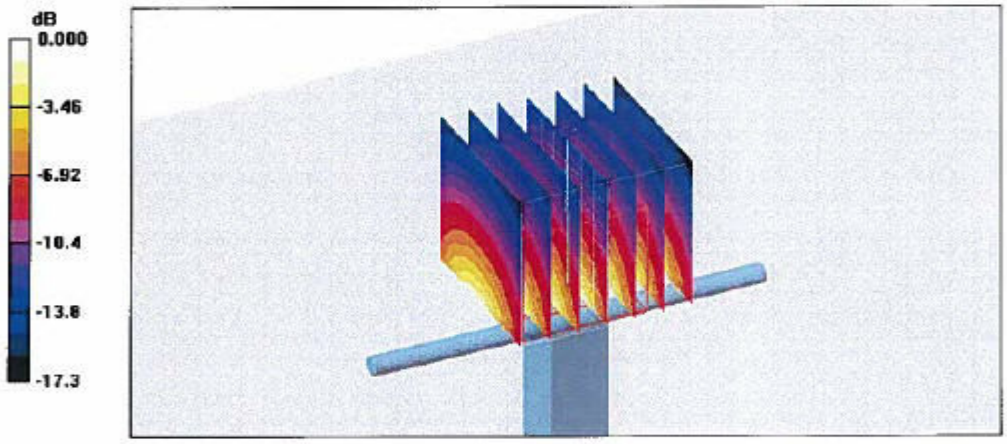
DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:509

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: MSL U10 BB;
Medium parameters used: f = 1900 MHz; σ = 1.58 mho/m; ε_r = 52.4; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3025; ConvF(4.5, 4.5, 4.5); 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; ;
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Pin = 250 mW; d = 10 mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 88.6 V/m; Power Drift = 0.001 dB
Peak SAR (extrapolated) = 17.3 W/kg
SAR(1 g) = 9.77 mW/g; SAR(10 g) = 5.11 mW/g
Maximum value of SAR (measured) = 11.6 mW/g



0 dB = 11.6mW/g

APPENDIX E: CONDUCTED POWER MEASUREMENTS FOR SUPPORTED TRANSMISSION MODES

Type: RM-384; Serial: A000000126D675

CDMA800 Slide Open and MPS

Radio Configuration	Service Options and Channel Configurations	Supported	Ch 1013 824.70 MHz	Ch 384 836.52 MHz	Ch 777 848.31 MHz
			Pavg (dBm)	Pavg (dBm)	Pavg (dBm)
RC1	SO1	no	-	-	-
RC1	SO2	yes	24.82	24.81	24.87
RC1	SO3	yes	24.95	24.82	24.99
RC1	SO55	yes	24.83	24.85	24.77
RC2	SO9	yes	24.89	24.84	24.92
RC2	SO17	yes	24.82	24.89	24.94
RC2	SO55	yes	24.82	24.89	24.87
RC3	SO1	no	-	-	-
RC3	SO2	yes	24.74	24.77	24.78
RC3	SO3	yes	24.74	24.72	24.74
RC3	SO32 (no SCH1)	no	-	-	-
RC3	SO32 (SCH1 9.6 kpbs)	yes	24.73	24.72	24.81
RC3	SO32 (SCH1 19.2 kpbs)	yes	24.72	24.71	24.78
RC3	SO32 (SCH1 38.4 kpbs)	yes	24.72	24.76	24.81
RC3	SO32 (SCH1 76.8 kpbs)	yes	24.70	24.69	24.73
RC3	SO32 (SCH1 153.6 kpbs)	yes	24.72	24.74	24.72
RC3	SO33 (SCH1 9.6 kpbs)	no	-	-	-
RC3	SO33 (SCH1 19.2 kpbs)	no	-	-	-
RC3	SO33 (SCH1 38.4 kpbs)	no	-	-	-
RC3	SO33 (SCH1 76.8 kpbs)	no	-	-	-
RC3	SO33 (SCH1 153.6 kpbs)	no	-	-	-
RC3	**SO55**	**yes**	**24.77**	**24.73**	**24.76**
RC4	SO1	no	-	-	-
RC4	SO2	yes	24.73	24.76	24.76
RC4	SO3	yes	24.74	24.71	24.77
RC4	SO32 (no SCH1)	no	-	-	-
RC4	SO32 (SCH1 9.6 kpbs)	yes	24.72	24.71	24.75
RC4	SO32 (SCH1 19.2 kpbs)	yes	24.73	24.72	24.69
RC4	SO32 (SCH1 38.4 kpbs)	yes	24.69	24.74	24.77
RC4	SO32 (SCH1 76.8 kpbs)	yes	24.74	24.72	24.79
RC4	SO32 (SCH1 153.6 kpbs)	yes	24.73	24.71	24.74
RC4	SO33 (SCH1 9.6 kpbs)	no	-	-	-
RC4	SO33 (SCH1 19.2 kpbs)	no	-	-	-
RC4	SO33 (SCH1 38.4 kpbs)	no	-	-	-
RC4	SO33 (SCH1 76.8 kpbs)	no	-	-	-

RC4	SO33 (SCH1 153.6 kpbs)	no	-	-	-
RC4	SO55	yes	24.72	24.75	24.79
RC5	SO9	yes	24.77	24.73	24.80
RC5	SO9	yes	24.70	24.74	24.77
RC5	SO33 (SCH1 9.6 kpbs)	no	-	-	-
RC5	SO33 (SCH1 19.2 kpbs)	no	-	-	-
RC5	SO33 (SCH1 38.4 kpbs)	no	-	-	-
RC5	SO33 (SCH1 76.8 kpbs)	no	-	-	-
RC5	SO33 (SCH1 153.6 kpbs)	no	-	-	-
RC5	SO55	yes	24.74	24.73	24.76

Application Configuration	Data Rate (kbps)	Supported	Ch 1013 824.70 MHz	Ch 384 836.52 MHz	Ch 777 848.31 MHz
			Pavg (dBm)	Pavg (dBm)	Pavg (dBm)
RTAP	9.6	yes	24.43	24.46	24.44
RTAP	19.2	yes	24.61	24.57	24.57
RTAP	38.4	yes	24.69	24.69	24.72
RTAP	76.8	yes	24.81	24.81	24.77
RTAP	153.6	yes	24.88	24.89	24.92

Note: FTAP set to 2 slots at 307.2kbps

Application Configuration	Payload size (bits)	Supported	Ch 1013 824.70 MHz	Ch 384 836.52 MHz	Ch 777 848.31 MHz
			Pavg (dBm)	Pavg (dBm)	Pavg (dBm)
RETAP	256	yes	24.64	24.65	24.70
RETAP	512	yes	24.65	24.71	24.64
RETAP	1024	yes	24.69	24.68	24.67
RETAP	2048	yes	24.64	24.67	24.67
RETAP	3072	yes	24.65	24.66	24.69
RETAP	6144	yes	24.68	24.68	24.70
RETAP	12288	yes	24.62	24.66	24.71

Note: FETAP set to 2 slots at 307.2kbps

CDMA800 Slide Closed

Radio Configuration	Service Options and Channel Configurations	Supported	Ch 1013 824.70 MHz	Ch 384 836.52 MHz	Ch 777 848.31 MHz
			Pavg (dBm)	Pavg (dBm)	Pavg (dBm)
RC1	SO1	no	-	-	-
RC1	SO2	yes	25.35	24.79	24.83
RC1	SO3	yes	25.37	24.82	24.88
RC1	SO55	yes	24.34	24.84	24.89
RC2	SO9	yes	24.29	24.88	24.86
RC2	SO17	yes	24.32	24.84	24.90
RC2	SO55	yes	24.31	24.88	24.81
RC3	SO1	no	-	-	-
RC3	SO2	yes	25.21	24.73	24.78
RC3	SO3	yes	25.25	24.80	24.74
RC3	SO32 (no SCH1)	no	-	-	-
RC3	SO32 (SCH1 9.6 kpbs)	yes	25.22	24.61	24.73
RC3	SO32 (SCH1 19.2 kpbs)	yes	25.13	24.63	24.75
RC3	SO32 (SCH1 38.4 kpbs)	yes	25.23	24.71	24.71
RC3	SO32 (SCH1 76.8 kpbs)	yes	25.24	24.76	24.75
RC3	SO32 (SCH1 153.6 kpbs)	yes	25.17	24.71	24.80
RC3	SO33 (SCH1 9.6 kpbs)	no	-	-	-
RC3	SO33 (SCH1 19.2 kpbs)	no	-	-	-
RC3	SO33 (SCH1 38.4 kpbs)	no	-	-	-
RC3	SO33 (SCH1 76.8 kpbs)	no	-	-	-
RC3	SO33 (SCH1 153.6 kpbs)	no	-	-	-
RC3	**SO55**	**yes**	**25.26**	**24.75**	**24.80**
RC4	SO1	no	-	-	-
RC4	SO2	yes	25.26	24.71	24.70
RC4	SO3	yes	25.23	24.72	24.76
RC4	SO32 (no SCH1)	no	-	-	-
RC4	SO32 (SCH1 9.6 kpbs)	yes	25.21	24.61	24.79
RC4	SO32 (SCH1 19.2 kpbs)	yes	25.21	24.73	24.75
RC4	SO32 (SCH1 38.4 kpbs)	yes	25.15	24.70	24.72
RC4	SO32 (SCH1 76.8 kpbs)	yes	25.18	24.74	24.77
RC4	SO32 (SCH1 153.6 kpbs)	yes	25.22	24.72	24.76
RC4	SO33 (SCH1 9.6 kpbs)	no	-	-	-
RC4	SO33 (SCH1 19.2 kpbs)	no	-	-	-
RC4	SO33 (SCH1 38.4 kpbs)	no	-	-	-
RC4	SO33 (SCH1 76.8 kpbs)	no	-	-	-
RC4	SO33 (SCH1 153.6 kpbs)	no	-	-	-
RC4	SO55	yes	25.18	24.72	24.81
RC5	SO9	yes	25.22	24.75	24.75
RC5	SO9	yes	25.20	24.76	24.79
RC5	SO33 (SCH1 9.6 kpbs)	no	-	-	-

RC5	SO33 (SCH1 19.2 kpbs)	no	-	-	-
RC5	SO33 (SCH1 38.4 kpbs)	no	-	-	-
RC5	SO33 (SCH1 76.8 kpbs)	no	-	-	-
RC5	SO33 (SCH1 153.6 kpbs)	no	-	-	-
RC5	SO55	yes	25.22	24.71	24.78

Application Configuration	Data Rate (kbps)	Supported	Ch 1013 824.70 MHz	Ch 384 836.52 MHz	Ch 777 848.31 MHz
			Pavg (dBm)	Pavg (dBm)	Pavg (dBm)
RTAP	9.6	yes	24.43	24.44	24.45
RTAP	19.2	yes	24.60	24.58	24.58
RTAP	38.4	yes	24.69	24.71	24.73
RTAP	76.8	yes	24.77	24.79	24.79
RTAP	**153.6**	**yes**	**24.88**	**24.92**	**24.91**

Note: FTAP set to 2 slots at 307.2kbps

Application Configuration	Payload size (bits)	Supported	Ch 1013 824.70 MHz	Ch 384 836.52 MHz	Ch 777 848.31 MHz
			Pavg (dBm)	Pavg (dBm)	Pavg (dBm)
RETAP	256	yes	24.60	24.62	24.67
RETAP	512	yes	24.66	24.64	24.68
RETAP	1024	yes	24.62	24.68	24.65
RETAP	2048	yes	24.62	24.62	24.62
RETAP	3072	yes	24.64	24.62	24.68
RETAP	6144	yes	24.58	24.63	24.68
RETAP	12288	yes	24.61	24.66	24.65

Note: FETAP set to 2 slots at 307.2kbps

CDMA1900 Slide Open, MPS and Closed

Radio Configuration	Service Options and Channel Configurations	Supported	Ch25 1851.25MHz	Ch600 1880.00MHz	Ch1175 1908.75MHz
			Pavg (dBm)	Pavg (dBm)	Pavg (dBm)
RC1	SO1	no	-	-	-
RC1	SO2	yes	24.08	24.12	23.95
RC1	SO3	yes	24.07	24.11	24.03
RC1	SO55	yes	24.01	24.05	23.93
RC2	SO9	yes	24.03	24.07	23.96
RC2	SO17	yes	24.06	24.13	24.08
RC2	SO55	yes	24.02	24.10	23.92
RC3	SO1	no	-	-	-
RC3	SO2	yes	24.95	24.00	23.90
RC3	SO3	yes	23.93	24.05	23.93
RC3	SO32 (no SCH1)	no	-	-	-
RC3	SO32 (SCH1 9.6 kpbs)	yes	23.95	23.97	23.95
RC3	SO32 (SCH1 19.2 kpbs)	yes	23.98	24.05	23.93
RC3	SO32 (SCH1 38.4 kpbs)	yes	23.94	24.05	23.89
RC3	SO32 (SCH1 76.8 kpbs)	yes	23.94	24.03	23.87
RC3	SO32 (SCH1 153.6 kpbs)	yes	23.92	24.01	23.87
RC3	SO33 (SCH1 9.6 kpbs)	no	-	-	-
RC3	SO33 (SCH1 19.2 kpbs)	no	-	-	-
RC3	SO33 (SCH1 38.4 kpbs)	no	-	-	-
RC3	SO33 (SCH1 76.8 kpbs)	no	-	-	-
RC3	SO33 (SCH1 153.6 kpbs)	no	-	-	-
RC3	**SO55**	**yes**	**23.98**	**24.01**	**23.85**
RC4	SO1	no	-	-	-
RC4	SO2	yes	23.95	24.08	23.91
RC4	SO3	yes	23.95	23.94	23.90
RC4	SO32 (no SCH1)	no	-	-	-
RC4	SO32 (SCH1 9.6 kpbs)	yes	23.92	24.00	23.83
RC4	SO32 (SCH1 19.2 kpbs)	yes	23.85	23.96	23.88
RC4	SO32 (SCH1 38.4 kpbs)	yes	23.85	23.95	23.83
RC4	SO32 (SCH1 76.8 kpbs)	yes	23.91	23.99	23.82
RC4	SO32 (SCH1 153.6 kpbs)	yes	23.88	23.93	23.81
RC4	SO33 (SCH1 9.6 kpbs)	no	-	-	-
RC4	SO33 (SCH1 19.2 kpbs)	no	-	-	-
RC4	SO33 (SCH1 38.4 kpbs)	no	-	-	-
RC4	SO33 (SCH1 76.8 kpbs)	no	-	-	-
RC4	SO33 (SCH1 153.6 kpbs)	no	-	-	-
RC4	SO55	yes	23.95	23.97	23.88
RC5	SO9	yes	23.98	24.01	23.90
RC5	SO9	yes	24.00	24.00	23.89
RC5	SO33 (SCH1 9.6 kpbs)	no	-	-	-

RC5	SO33 (SCH1 19.2 kpbs)	no	-	-	-
RC5	SO33 (SCH1 38.4 kpbs)	no	-	-	-
RC5	SO33 (SCH1 76.8 kpbs)	no	-	-	-
RC5	SO33 (SCH1 153.6 kpbs)	no	-	-	-
RC5	SO55	yes	23.93	24.02	23.82

Application Configuration	Data Rate (kbps)	Supported	Ch25 1851.25MHz	Ch600 1880.00MHz	Ch1175 1908.75MHz
			Pavg (dBm)	Pavg (dBm)	Pavg (dBm)
RTAP	9.6	yes	23.63	23.77	23.73
RTAP	19.2	yes	23.79	23.85	23.77
RTAP	38.4	yes	23.92	24.03	23.90
RTAP	76.8	yes	23.99	24.08	24.00
RTAP	**153.6**	**yes**	**24.10**	**24.17**	**24.07**

Note: FTAP set to 2 slots at 307.2kbps

Application Configuration	Payload size (bits)	Supported	Ch25 1851.25MHz	Ch600 1880.00MHz	Ch1175 1908.75MHz
			Pavg (dBm)	Pavg (dBm)	Pavg (dBm)
RETAP	256	yes	23.88	23.85	23.81
RETAP	512	yes	23.84	23.94	23.77
RETAP	1024	yes	23.85	23.91	23.82
RETAP	2048	yes	23.84	23.91	23.79
RETAP	3072	yes	23.83	23.89	23.81
RETAP	6144	yes	23.90	23.96	23.82
RETAP	12288	yes	23.81	23.89	23.75

Note: FETAP set to 2 slots at 307.2kbps