NOKIA

NOKIA MOBILE PHONES
6000 Connection Drive
Irving, TX 75039
972 894 5000
972 894 4988

30 September, 2003

Federal Communications Commission,
Authorization & Evaluation Division,
7435 Oakland Mills Road
Columbia, MD. 21046

Attention: Equipment Authorization Branch

We hereby certify that the transceiver FCC ID: GMLNPM-10X complies with ANSI/IEEE C95.1-1992 Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.

Compliance was determined by testing appropriate parameters according to standard.

NOKIA MOBILE PHONES

Leena Laitinen
Product Program Manager, Dallas

Nokia 3595 User Guide Update Draft

The following information replaces the Certification Information (SAR) section of the *Nokia 3595 User Guide*.

• CERTIFICATION INFORMATION (SAR)

THIS MODEL PHONE MEETS THE GOVERNMENT'S REQUIREMENTS FOR EXPOSURE TO RADIO WAVES.

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg.* Tests for SAR are conducted using standard operating positions accepted by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations (for example, at the ear and worn on the body) as required by the FCC for each model.

The highest SAR value for this model phone as reported to the FCC:

When tested for use at the ear -

FCCID # GMLNPM-10 is 1.08 W/kg

FCCID # GMLNPM-10X is 0.95 W/kg

When worn on the body, as described in this user guide:

FCCID # GMLNPM-10 is 0.73 W/kg

FCCID # GMLNPM-10X is 0.59 W/kg

(Body-worn measurements differ among phone models, depending upon available accessories and FCC requirements).

While there may be differences between the SAR levels of various phones and at various positions, they all meet the government requirement.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of **http://www.fcc.gov/oet/fccid** after searching on FCC ID GMLNPM-10 and GMLNPM-10X. For body worn operation, this phone has been tested and meets the FCC RF exposure guidelines for use with an accessory that contains no metal and that positions the handset a minimum of 5/8 inch (1.5 cm) from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines. If you do not use a body-worn accessory and are not holding the phone at the ear, position the handset a minimum of 5/8 inch (1.5 cm) from your body when the phone is switched on.

*In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kilogram (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements. SAR values may vary depending on national reporting requirements and the network band. For SAR information in other regions please look under product information at **www.nokia.com/us**.

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7725 Woodland Center Blvd., Ste. 150, Tampa, FL 33614
Telephone: 1-888-NOKIA-2U (1-888-665-4228)
Facsimile: 1-813-249-9619
TTY/TDD Users: 1-800-24-NOKIA (1-800-246-6542)
www.nokia.com/us
www.nokiahowto.com

TCC

Test & Certification Center (TCC) - Dallas

ACCREDITED

Accredited Laboratory
Certificate Number: 1819-01

SAR Compliance Test Report

Test report no.:	03-SA-0155/0204.001	**Date of report:**	22 October 2003
Template version:	-	**Number of pages:**	-
Testing laboratory:	Test & Certification Center (TCC) Dallas Nokia Mobile Phones 6021 Connection Drive Irving, TX 75039, USA Tel. +1 972 894 5000 Fax. +1 972 894 4988	**Client:**	Nokia Mobile Phones 6021 Connection Drive Irving, TX 75039, USA Tel. +1 972 894 5000 Fax. +1 972 894 4988
Responsible test engineer:	N. Walton	**Product contact person:**	N. Walton
Measurements made by:	J. Torres & E. Parish		
Tested devices:	NPM-10		
FCC ID (USA):	GMLNPM-10X	**Industry Canada ID:**	661N-NPM10X
Supplement reports:	-		

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 P1528/D1.2, April 21, 2003
Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques

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

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: **22 October 2003**

For the contents:

Alan Ewing
TCC Line Manager

Mark Severson
Test Engineer

CONTENTS

1. SUMMARY OF SAR TEST REPORT

1.1 Test Details

Period of test	29 July 2003 – 21 October 2003
SN, HW, SW and DUT numbers of tested device	IMEI: 010166/00/342893/2, HW: 5.4/1211F, SW: 8.06, Type: NPM-10 IMEI: 010185/00/724596/9, HW: 5.4/1251F, SW: 8.06, Type: NPM-10
Accessories used in testing	BLC-2 Battery, HDE-2 Headset, Original Cover, Spider Accessory Cover, Rita and EL Active Covers
Notes	-

1.2 Maximum Results

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

1.2.1 Head Configuration

Mode	Ch / *f* (MHz)	EDRP/EIRP	Position	SAR limit (1g avg)	Measured SAR value (1g avg)	Result
GSM 850	251 / 848.8	30.6 dBm	Left Cheek	1.6 W/kg	0.95 W/kg	**PASSED**
GSM 1900	661 / 1880.0	30.2 dBm	Right Tilt	1.6 W/kg	0.46 W/kg	**PASSED**

1.2.2 Body Worn Configuration

Mode	Ch / *f* (MHz)	EDRP/EIRP	Separation distance	SAR limit (1g avg)	Measured SAR value (1g avg)	Result
GSM 850	190 / 836.6	30.0 dBm	1.5 cm	1.6 W/kg	0.59 W/kg	**PASSED**
GSM 1900	661 / 1880.0	30.2 dBm	1.5 cm	1.6 W/kg	0.44 W/kg	**PASSED**

1.2.3 Maximum Drift

Maximum drift during measurements	0.45 dB

1.2.4 Measurement Uncertainty

Extended Uncertainty (k=2) 95%	±29.1%

2. DESCRIPTION OF THE DEVICE UNDER TEST (DUT)

Device category	Portable Device
Exposure environment	Uncontrolled Exposure
Unit type	Prototype Unit

Modes and Bands of Operation	GSM 850	GSM 1900
Modulation Mode	GMSK	GMSK
Duty Cycle	1/8	1/8
Transmitter Frequency Range (MHz)	824.2 – 848.8	1850.2 - 1909.8

2.1 Picture of Device




Original Cover Rita Cover EL Cover Spider Cover

2.2 Description of the Antenna

The device has an internal integrated antenna.

2.3 Batteries

The device was measured with a BLC-2, a rechargeable Li-ion battery.

2.4 Headsets

The device was measured with a HDE-2 headset.

3. TEST CONDITIONS

3.1 Temperature and Humidity

Period of measurement:	29 July 2003 – 21 October 2003
Ambient temperature (°C):	22±1
Ambient humidity (RH %):	41-57

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, DASY3, software version 3.1, manufactured by Schmid & Partner Engineering AG (SPEAG) in Switzerland. The SAR extrapolation algorithm used in all measurements on the test device was the 'worst-case extrapolation' algorithm.

The following table lists calibration dates of SPEAG components:

Test Equipment	Serial Number	Calibration Expiry
DASY3, DAE V1	377	11/2003
E-field Probe, ET3DV6	1505	11/2003
Dipole Validation Kit, D835V2	486	05/2005
Dipole Validation Kit, D835V2	487	05/2005
Dipole Validation Kit, D1900V2	504	07/2005
Dipole Validation Kit, D1900V2	5d0004	07/2004

Additional test equipment used in testing:

Test Equipment	Model	Serial Number	Calibration Expiry
Signal Generator	HP 8648C	3847U02985	11/2003
Amplifier	AR 5S1G4	25583	-
Coupler	AR DC7144	25304	-
Power Meter	Boonton 4232A	64701	07/2004
Power Sensor	Boonton 51015	32187	07/2004
Power Sensor	Boonton 51015	32188	07/2004
Thermometer	Omega CL27	T-228450	06/2004
Network Analyzer	Agilent 8753ES	US39174932	01/2004
Dielectric Probe Kit	Agilent 85070C	US99360172	-

4.1.1 Isotropic E-field probe (SN 1505)

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 A
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 validation testing and device testing, was the twin-headed "SAM Phantom", manufactured by SPEAG. The phantom conforms to the requirements of IEEE P1528/D1.2, April 21, 2003 (as established by sub committee SCC-34/SC-2).

Validation tests were 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 test device in all tests whilst a tripod was used to position the validation dipoles against the flat section of phantom.

4.3 Simulating Liquids

Recommended values for the dielectric parameters of the simulating liquids are given in IEEE P1528/D1.2, April 21, 2003 and FCC Supplement C to OET Bulletin 65. All tests were carried out using liquids 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 liquid was 15.0 ± 0.5 cm measured from the ear reference point during validation and device measurements.

4.3.1 Liquid recipes

The following recipes were used for Head and Body liquids:

835MHz Band

Ingredient	Head (% by weight)	Muscle (% by weight)
Deionised Water	51.07	65.45
HEC	0.23	-
Sugar	47.31	34.31
Preservative	0.24	0.10
Salt	1.15	0.62

1900MHz Band

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

4.3.2 Verification of the System

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

System Verification, Head Tissue Simulant

f [MHz]	Description	SAR [W/kg], 1g	Dielectric Parameters ε_r	Dielectric Parameters σ [S/m]	Temp [°C]
835	Reference result	9.80	42.8	0.89	N/A
	± 10% window	8.82 to 10.78			
	29-July-03	9.60	40.9	0.90	21.3
	30-July-03	9.80	40.9	0.90	21.2
	1-Aug-03	9.76	40.9	0.91	21.2
	4-Aug-03	9.72	41.3	0.92	21.5
	5-Aug-03	9.76	41.5	0.92	21.4
	4-Sept-03	9.76	40.9	0.91	21.2
	5-Sept-03	9.80	40.8	0.91	20.8
1900	Reference result	44.00	39.8	1.46	N/A
	± 10% window	39.60 to 48.40			
	30-July-03	40.80	39.3	1.48	21.5
	31-July-03	42.00	39.4	1.48	21.5
	Reference result	40.80	40.2	1.46	N/A
	± 10% window	36.72 to 44.88			
	16-Oct-03	37.28	38.2	1.46	20.0

System Verification, Body Tissue Simulant

f [MHz]	Description	SAR [W/kg], 1g	Dielectric Parameters ε_r	Dielectric Parameters σ [S/m]	Temp [°C]
835	Reference result	10.10	54.0	0.96	N/A
	± 10% window	9.09 to 11.11			
	21-Aug-03	10.16	54.4	0.96	21.6
	4-Sept-03	10.08	53.7	0.96	21.8
1900	Reference result	44.00	54.4	1.57	N/A
	± 10% window	39.60 to 48.40			
	4-Aug-03	42.00	53.8	1.50	21.5
	Reference result	42.00	50.9	1.60	N/A
	± 10% window	37.80 to 46.20			
	21-Oct-03	38.84	51.8	1.52	21.1

Plots of the Verification 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]	
836.5	Recommended value	41.5	0.90	N/A
	± 5% window	39.4 to 43.6	0.86 to 0.95	
	29-July-03	40.9	0.90	21.3
	30-Jul-03	40.9	0.90	21.2
	1-Aug-03	40.9	0.91	21.2
	4-Aug-03	41.3	0.92	21.5
	5-Aug-03	41.5	0.92	21.4
	4-Sept-03	40.8	0.91	21.2
	5-Sept-03	40.8	0.91	20.8
1880	Recommended value	40.0	1.40	N/A
	± 5% window	38.0 to 42.0	1.33 to 1.47	
	16-Oct-03	38.3	1.44	20.0

Body Tissue Simulant Measurements

f [MHz]	Description	Dielectric Parameters		Temp [°C]
		ε_r	σ [S/m]	
836.5	Recommended value	55.2	0.97	N/A
	± 5% window	52.44 to 57.96	0.92 to 1.02	
	21-Aug-03	54.4	0.96	21.6
	4-Sept-03	53.7	0.96	21.8
1880	Recommended value	53.3	1.52	N/A
	± 5% window	50.64 to 55.97	1.44 to 1.60	
	21-Oct-03	51.8	1.49	21.1

5. DESCRIPTION OF THE TEST PROCEDURE

5.1 Device Holder

The test 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

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 P1528/D1.2 April 21 2003 "Recommended Practice for Determining the Spatial-Peak Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques”.

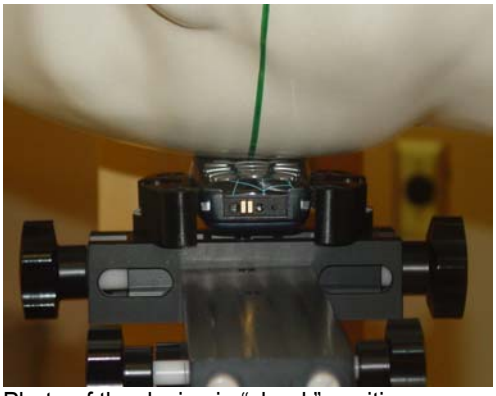

Photo of the device in “cheek” position

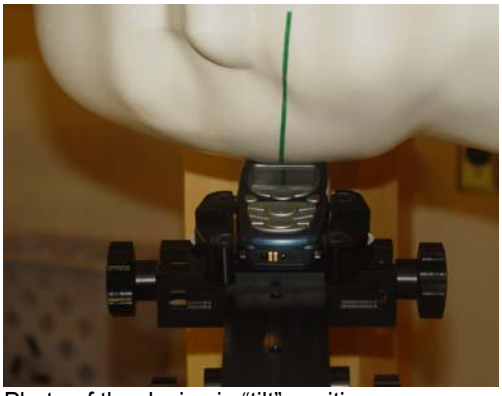

Photo of the device in “tilt” position

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 1.5cm 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 gave higher results.

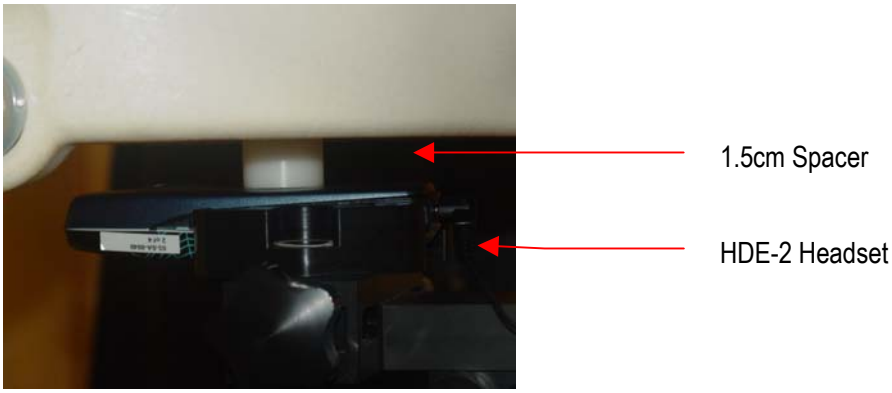

Photo of the device positioned for Body SAR measurement. The spacer was removed for the tests.

5.3 Scan Procedures

First coarse scans were used for determination of the field distribution. Next a cube scan, 5x5x7, 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 coarse scan and again at the end of the cube scan.

5.4 SAR Averaging Methods

The maximum SAR value was averaged over a cube of tissue using interpolation and extrapolation.

The interpolation of the points was done with a 3d-Spline. The 3d-Spline comprised three one-dimensional splines with the "Not a knot" -condition [W. Gander, Computermathematik, p. 141-150] (x, y and z -directions) [Numerical Recipes in C, Second Edition, p 123].

The extrapolation was based on least square algorithm [W. Gander, Computermathematik, p.168-180]. Through the points in the first 30 mm in all z-axis, a fourth order polynomial was calculated. This polynomial was then used to evaluate the points between the phantom surface and the probe tip. The points, calculated from the phantom surface, were at 1mm spacing.

6. MEASUREMENT UNCERTAINTY

Table 6.1 – Measurement uncertainty evaluation

Uncertainty Component	P1528 Sec	Tol. (%)	Prob Dist	Div	c_i	u_i (%)	v_i
Measurement System							
Probe Calibration	E2.1	±4.8	N	1	1	±4.8	∞
Axial Isotropy	E2.2	±4.7	R	√3	$(1\text{-}c_p)^{1/2}$	±1.9	∞
Hemispherical Isotropy	E2.2	±9.6	R	√3	$(c_p)^{1/2}$	±3.9	∞
Boundary Effect	E2.3	±8.3	R	√3	1	±4.8	∞
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	E5.2	±3.9	R	√3	1	±2.3	∞
Test sample Related							
Test Sample Positioning	E4.2.1	±6.0	N	1	1	±6.0	11
Device Holder Uncertainty	E4.1.1	±5.0	N	1	1	±5.0	7
Output Power Variation - SAR drift measurement	6.6.3	±10.0	R	√3	1	±5.8	∞
Phantom and Tissue Parameters							
Phantom Uncertainty (shape and thickness tolerances)	E3.1	±4.0	R	√3	1	±2.3	∞
Liquid Conductivity Target - tolerance	E3.2	±5.0	R	√3	0.64	±1.8	∞
Liquid Conductivity - measurement uncertainty	E3.3	±5.5	N	1	0.64	±3.5	5
Liquid Permittivity Target tolerance	E3.2	±5.0	R	√3	0.6	±1.7	∞
Liquid Permittivity - measurement uncertainty	E3.3	±2.9	N	1	0.6	±1.7	5
Combined Standard Uncertainty			RSS			**±14.5**	208
Coverage Factor for 95%			**k=2**				
Expanded Standard Uncertainty						**±29.1**	

7. RESULTS

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

GSM 850 Head SAR results

Mode and Band	Position		SAR, averaged over 1g (W/kg)		
			Ch 128 824.20 **MHz**	**Ch** 190 836.6 **MHz**	**Ch** 251 848.8 **MHz**
GSM850	**Power level (EDRP)**		29.8 **dBm**	30.0 **dBm**	30.6 **dBm**
	Left	Cheek	0.71	0.82	0.93
		Tilt	0.37	0.43	0.43
	Right	Cheek	0.69	0.79	0.87
		Tilt	0.41	0.43	0.42
GSM850	Left Cheek position with Spider A-Cover		0.71	0.82	**0.95**
	Left Tilt position with Spider A-Cover		-	0.43	**0.45**
	Right Cheek position with Spider A-Cover		0.71	0.79	**0.88**
	Right Tilt position with Spider A-Cover		-	**0.44**	0.43
GSM850	Left Cheek position with Rita A-Cover		0.73	0.82	0.91
	Left Tilt position with Rita A-Cover		-	0.39	0.44
	Right Cheek position with Rita A-Cover		0.72	0.77	0.83
	Right Tilt position with Rita A-Cover		-	0.44	0.41
GSM850	Left Cheek position with EL A-Cover		0.43	0.50	0.58
	Left Tilt position with EL A-Cover		-	0.29	0.36
	Right Cheek position with EL A-Cover		0.43	0.49	0.53
	Right Tilt position with EL A-Cover		-	0.35	0.39

GSM 1900 Head SAR results

Mode and Band	Position		SAR, averaged over 1g (W/kg)		
			Ch 512 1850.2 **MHz**	**Ch** 661 1880.0 **MHz**	**Ch** 810 1909.8 **MHz**
GSM1900	**Power level (EIRP)**		31.2 **dBm**	30.2 **dBm**	30.1 **dBm**
	Left	Cheek	-	**0.28**	-
		Tilt	-	0.38	-
	Right	Cheek	-	**0.38**	-
		Tilt	-	0.42	-
GSM1900	Left Cheek position with Spider A-Cover		-	0.25	-
	Left Tilt position with Spider A-Cover		-	**0.40**	-
	Right Cheek position with Spider A-Cover		-	0.34	-
	Right Tilt position with Spider A-Cover		-	**0.46**	-
GSM1900	Left Cheek position with Rita A-Cover		-	0.26	-
	Left Tilt position with Rita A-Cover		-	0.33	-
	Right Cheek position with Rita A-Cover		-	0.29	-
	Right Tilt position with Rita A-Cover		-	0.39	-
GSM1900	Left Cheek position with EL A-Cover		-	0.23	-
	Left Tilt position with EL A-Cover		-	0.32	-
	Right Cheek position with EL A-Cover		-	0.28	-
	Right Tilt position with EL A-Cover		-	0.39	-

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

GSM 850 Body SAR results

Mode and Band	Body-worn location setup	SAR, averaged over 1g (W/kg)		
		Ch 128 824.20 **MHz**	**Ch** 190 836.6 **MHz**	**Ch** 251 848.8 **MHz**
GSM 850	**Power level (EDRP)**	29.8 **dBm**	30.0 **dBm**	30.6 **dBm**
	Headset, HDE-2 / Original A-Cover	-	0.53	-
GSM 850	Headset, HDE-2 / Spider A-Cover	**-**	**0.59**	**-**
GSM 850	Headset, HDE-2 / Rita A-Cover	**-**	0.56	**-**
GSM 850	Headset, HDE-2 / EL A-Cover	**-**	0.52	**-**

GSM 1900 Body SAR results

Mode and Band	Body-worn location setup	SAR, averaged over 1g (W/kg)		
		Ch 512 1850.2 **MHz**	**Ch** 661 1880.0 **MHz**	**Ch** 810 1909.8 **MHz**
GSM 1900	**Power level (EIRP)**	31.2 **dBm**	30.2 **dBm**	30.1 **dBm**
	Headset, HDE-2 / Original A-Cover	-	0.44	-
GSM 1900	Headset, HDE-2 / Spider A-Cover	**-**	0.43	**-**
GSM 1900	Headset, HDE-2 / Rita A-Cover	**-**	**0.44**	**-**
GSM 1900	Headset, HDE-2 / EL A-Cover	**-**	0.42	**-**

Plots of the Measurement scans are given in Appendix B.