Sony Ericsson

Company Internal
REPORT

Prepared (also subject responsible if other)		No.		
LD/SEMC/BGGI/NM *Ramadan Plicanic*		*BGGIN05:005*		
Approved	Checked	Date	Rev	Reference
LD/SEMC/BGGI/NMC *Mats Hansson*	*050110*	*050107*	A	File

Report issued by Accredited SAR Laboratory

for

PY7A1031021

Date of test: *22,23,27,28,29 and 30 December, 2004*

Laboratory:
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Statement of Compliance

Sony Ericsson Mobile Communications AB declares under its sole responsibility that the product

Sony Ericsson Type AAB-1031021-BV; FCC ID: FY7A1031021

to which this declaration relates, is in conformity with the appropriate RF exposure standards recommendations and guidelines. It also declares that the product was tested in accordance with the appropriate measurement standards, guidelines and recommended practices. Any deviations from these standards, guidelines and recommended practices are noted below:

(None)

This laboratory is accredited to ISO/IEC 17025 (SWEDAC accreditation no. 1847).

SWEDAC ACKREDITERING 1847 ISO/IEC 17025

Laboratories are accredited by the Swedish Board for Accreditation and Conformity Assessment (SWEDAC) under the terms of Swedish legislation. The accredited laboratory activities meet the requirements in SS-EN ISO/IEC 17025 (2000). This report may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.
The results and statements contained herein relate only to the items tested. The names of individuals involved may be mentioned only in connection with the statements or results from this report.

Sony Ericsson encourages all feedback, both positive and negative, on this report.

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1 Table of contents

2 Introduction

In this test report, compliance of the Sony Ericsson PY7A1031021 portable telephone with RF safety guidelines is demonstrated. The applicable RF safety guidelines and the SAR measurement specifications used for the test are described in the *SAR Measurement Specifications of Wireless Handsets* [1].

3 Device Under Test

3.1 Antenna Description

Type	Built In	
Location	Up on the back	
Dimensions	Max length	32 mm
	Max width	20 mm
Configuration	PIFA	

3.2 Device description

Device model	PY7A1031021	
Serial number	TP810007VD	
Mode	GSM 835	GSM1900
Multiple Access Scheme	TDMA	TDMA
Maximum Output Power Setting (dBm)	33.0 (31.9*)	30.0
Factory Tolerance in Power Setting (dB)	0.5	0.5
Maximum Peak Output Power (dBm)	33.5 (32.4*)	30.5
Crest Factor	8	8
Transmitting Frequency Range(MHz)	824.2-848.8	1850.2 – 1909.8
Prototype or Production Unit	Preproduction	
Device Category	Portable	
RF exposure environment	General population / uncontrolled	

***** GSM835 on high frequency, maximum output power setting and maximum peak output power is separately.

4 Test equipment

4.1 Dosimetric system

SAR measurements were made using the DASY3 professional system (software version 3.1c) with SAM twin phantom, manufactured by Schmid & Partner Engineering AG (SPEAG). The list of calibrated equipment is given below.

Description	***Serial Number***	***Due Date***
DASY3 DAE V1	433	042005
E-field probe ETDV6	1569	032005
Dipole Validation Kit, D835V2	111	052005
Dipole Validation Kit, D1900V2	5d002	042005

4.2 Additional equipment

Description	***Inventory Number***	***Due Date***
Signal generator ESG-D4000A	INV 462935	092005
Directional coupler HP778D	INV 2903	012006
Power meter R&S NRVD	INV 483920	012006
Power sensor R&S NRV-Z5	INV 2333	012006
Power sensor R&S NRV-Z5	INV 2334	012006
Termination 65N50-0-11	INV 2903	072005
Network analyzer HP8753C	INV421671	092005
S-parameter test set HP85047A	INV 421670	082005
Dielectric probe kit HP8507D	INV 20000053	042005

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5 Electrical parameters on the tissue simulating liquid

Prior to conducting SAR measurements, the relative permittivity, ε_r, and the conductivity, σ, of the tissue simulating liquids were measured with the dielectric probe kit. These values are shown in the table below. The mass density, ρ, entered into the DASY3 software is also given. Recommended limits for permittivity ε_r, conductivity σ and mass density ρ are also shown.

f (MHz)	Tissue type	Limits / Measured	Dielectric Parameters		
			ε_r	σ (S/m)	ρ (g/cm³)
835	**Head**	**Measured, 22/12/2004**	43.1	0.9	1.00
		Recommended	41.5	0.9	1.00
835	**Head**	**Measured, 23/12/2004**	43.1	0.9	1.00
		Recommended	41.5	0.9	1.00
835	**Body**	**Measured, 29/12/2004**	53.9	1.01	1.00
		Recommended	55.2	0.97	1.00
1900	**Head**	**Measured, 28/12/2004**	39.0	1.46	1.00
		Recommended	40.0	1.4	1.00
1900	**Body**	**Measured, /month/year**	52.7	1.56	1.00
		Recommended	53.3	1.52	1.00

6 System accuracy verification

A system accuracy verification of the DASY3 was performed using the dipole validation kit listed in section 3.1. The system verification test was conducted on the same day as the measurement of the DUT. Measurement made in ambient temperature 22.0 °C and humanity 26-35%. The obtained results are displayed in the table below.

RF noise had been measured in liquid when all RF equipment in lab was set off. Measured value was 0.001 mW/g in 1g mass.

f (MHz)	Tissue type	Measured / Reference	SAR (W/kg) 1g/10g	Dielectric Parameters			Liquid t(°C)
				ε_r	σ (S/m)	ρ (g/cm³)	
835	**Head**	**Measured, 22/12/2004**	9.7/6.22	43.1	0.9	1.00	21
		Reference	9.64/6.28	42.8	0.89	1.00	-
835	**Head**	**Measured, 23/12/2004**	9.66/6.19	43.1	0.9	1.00	21
		Reference	9.64/6.28	42.8	0.89	1.00	-
835	**Body**	**Measured, 29/12/2004**	10.4/6.60	53.9	1.01	1.00	21
		Reference	10.0/6.60	54.0	0.96	1.00	-
1900	**Head**	**Measured, 28/12/2004**	40.8/20.5	39.0	1.46	1.00	21
		Reference	41.6/21.5	38.8	1.44	1.00	-
1900	**Body**	**Measured, 30/12/2004**	43.1/22.4	52.7	1.56	1.00	21
		Reference	43.2/22.4	51.2	1.59	1.00	-

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7 SAR measurement uncertainty

SAR measurement uncertainty evaluation for Sony Ericsson PY7A1031021 phone

Uncertainty Component	Uncer. (%)	Prob Dist.	Div.	C_i	GSM 835 Head	GSM 835 Body	GSM 1900 Head	GSM 1900 Body
Measurement System								
Probe Calibration	±4.4	N	1	1	±4.4	±4.4	±4.4	±4.4
Axial Isotropy	±4.7	R	√3	0.5	±1.4	±1.4	±1.4	±1.4
Spherical Isotropy	±9.6	R	√3	0.5	±2.8	±2.8	±2.8	±2.8
Spatial resolution	±0.0	R	√3	1	±0.0	±0.0	±0.0	±0.0
Boundary effect	±5.5	R	√3	1	±3.2	±3.2	±3.2	±3.2
Probe linearity	±4.7	R	√3	1	±2.7	±2.7	±2.7	±2.7
Detection limit	±1.0	R	√3	1	±0.6	±0.6	±0.6	±0.6
Readout electronics	±1.0	N	1	1	±1.0	±1.0	±1.0	±1.0
Response time	±0.8	R	√3	1	±0.5	±0.5	±0.5	±0.5
Integration time	±1.4	R	√3	1	±0.8	±0.8	±0.8	±0.8
RF Ambient Conditions	±3.0	R	√3	1	±1.7	±1.7	±1.7	±1.7
Mech. Constraints of robot	±0.4	R	√3	1	±0.2	±0.2	±0.2	±0.2
Probe positioning	±2.9	R	√3	1	±1.7	±1.7	±1.7	±1.7
Extrap, interpolation and integration	±3.9	R	√3	1	±2.3	±2.3	±2.3	±2.3
Measurement System Uncertainty					*±7.7*	*±7.7*	*±7.7*	*±7.7*
Test Sample Related								
Device positioning	±6.0	N	0.89	1	±6.7	±6.7	±6.7	±6.7
Device holder uncertainty	±5.0	N	0.84	1	±5.9	±5.9	±5.9	±5.9
Power drift	±1.6 (all)	R	√3	1	±0.9	±0.9	±0.9	±0.9
Test Sample Related Uncertainty					*±9.0*	*±9.0*	*±9.0*	*±9.0*
Phantom and Tissue Parameters								
Phantom uncertainty	±4.0	R	√3	1	±2.3	±2.3	±2.3	±2.3
Liquid conductivity (meas)	±5.0	R	√3	0.6	±1.7	±1.7	±1.7	±1.7
Liquid conductivity (target)	±(0/2.4/4.3/ 2.6)	R	√3	0.6	±0.0	±0.8	±1.5	±0.9
Liquid Permittivity (meas)	±5.0	R	√3	0.6	±1.7	±1.7	±1.7	±1.7
Liquid Permittivity (target)	±(3.8/4.1/ 2.5/1.1)	R	√3	0.6	±1.3	±1.4	±0.9	±0.4
Phantom and Tissue Parameters Uncertainty					*±3.6*	*±3.7*	*±3.8*	*±3.5*
Combined standard uncertainty					*±12.4*	*±12.4*	*±12.4*	*±12.3*
Extended standard uncertainty (k=2)					***±24.8***	***±24.8***	***±24.8***	***±24.6***

8 Test results

The measured 1-gram averaged SAR values of the device against the head are provided in Tables 1. The ambient humidity and temperature of test facility were 26% - 35% and 22.0 °C – 22.5 °C respectively. The depth of the head tissue simulating liquid was 15.6cm. A base station simulator was used to control the device during the SAR measurement. The phone was supplied with full-charged battery for each measurement.
For head measurement, the device was tested on the right-hand phantom (corresponding to the right side of the head) and the left-hand phantom in two phone position, cheek (touch) and tilt (cheek + 15deg). For all modes, the device was tested at the lowest, middle and highest frequencies in the transmit band.

Mode	Chanel	Peak Output Power(dBm)	Phone Position	Liquid temp(°C)	SAR (W/kg) 1g mass	
					Right-hand	Left-hand
835 GSM	128	33.3	Cheek	21/21.2	0.76	0.75
			Tilt	21/21.2	0.47	0.4
	190	33.4	Cheek	21/21.2	1.11	1.21
			Tilt	21/21.2	0.66	0.59
	251	32.2	Cheek	21/21.2	**1.2**	1.19
			Tilt	21/21.2	0.68	0.69
1900 GSM	512	30.4	Cheek	21/21.2	0.9	0.71
			Tilt	21.2/21.5	**1.03**	0.78
	661	30.4	Cheek	21/21.2	0.86	0.6
			Tilt	21.2/21.5	0.93	0.76
	810	30.3	Cheek	21/21.2	0.91	0.7
			Tilt	21.2/21.5	0.99	0.89

Table1: SAR measurement result for Sony Ericsson PY7A1031021 telephone at highest possible output power. Measured against the head.

For body measurement, the device was tested in three different cases under flat phantom on 15 distances between phone and phantom. In two cases phone was turn with back to the flat phantom and measured with and without portable hands free accessory HPE-14 which is part of the phones kit. In the third case phone was turned with front to the flat phantom.
For all cases and phone position, the device was tested at lowest, middle and highest frequencies in the transmit band. The depth of the head tissue simulating liquid was 15.1cm. Results are provided in Table 2.

Mode	Chanel	Peak Output Power(dBm)	Phone Position	Liquid temp(°C)	SAR (W/kg)
					1g mass
835 GSM	128	33.3	Back with HF	21	0.68
			Back witho. HF	21	**1.29**
			Front witho. HF	21.2	0.45
	190	33.4	Back with HF	21	0.68
			Back witho. HF	21	1.17
			Front witho. HF	21.2	0.61
	251	32.2	Back with HF	21	0.5
			Back witho. HF	21	0.71
			Front witho. HF	21.2	0.67
1900 GSM	512	30.4	Back with HF	21	**0.84**
			Back witho. HF	21	0.72
			Front witho. HF	21.2	0.26
	661	30.4	Back with HF	21	0.7
			Back witho. HF	21	0.63
			Front witho. HF	21.2	0.23
	810	30.3	Back with HF	21	0.69
			Back witho. HF	21	0.63
			Front witho. HF	21.2	0.26

Table2: SAR measurement result for Sony Ericsson PY7A1031021 telephone at highest possible output power. Measured against the body.

9 References

[1] R.Plicanic, “SAR Measurement Specification of Wireless Handsets”, Sony Ericsson SAR Test Laboratory internal document GUG/N 03:141

[2] Basic standard for the Measurement of Specific Absorption Rate related to human exposure to electromagnetic fields from mobile phones (300MHz-3GHz), European Standard EN 50361, July 2001

[3] FCC, “Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields: Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radio Frequency Emissions,” Supplement C (Edition 01-01) to OET Bulletin 65 (Edition 97-01).

[4] IEEE, “Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques,” Std 1528-2003, June, 2003.

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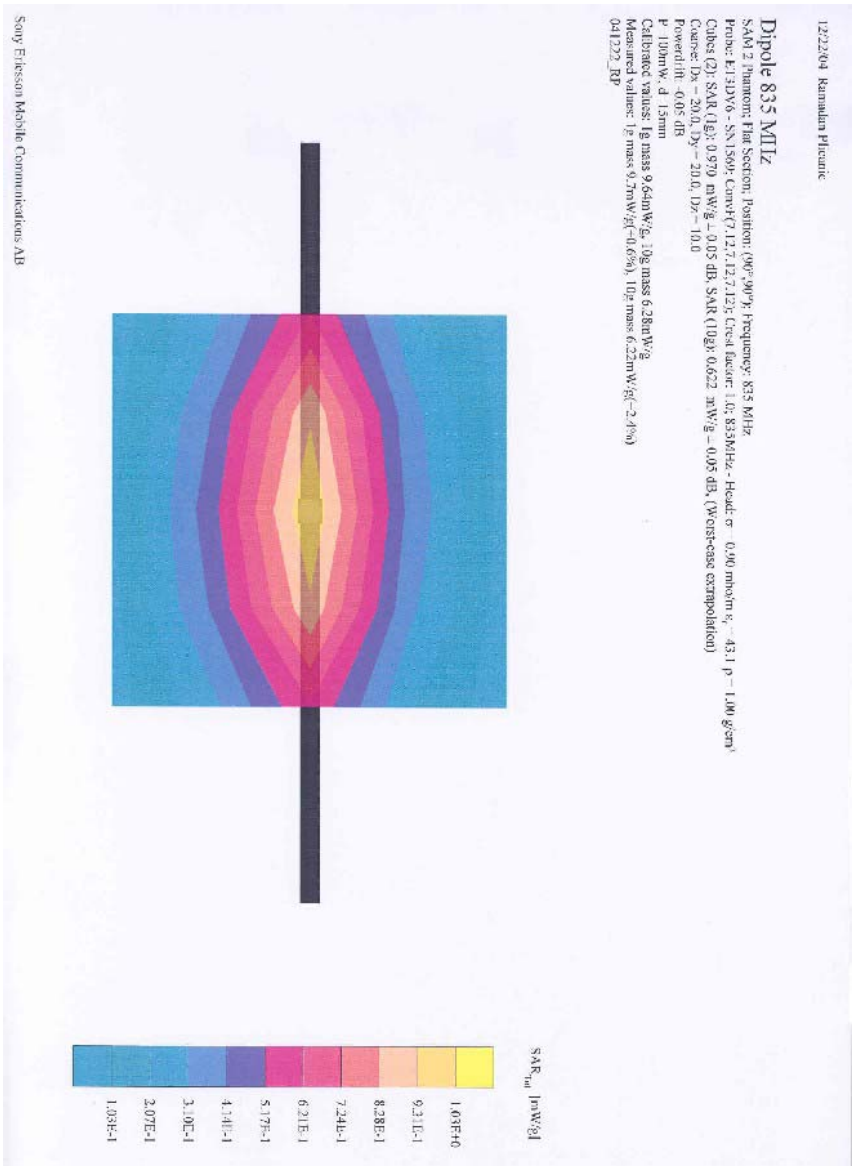
10 Appendix

10.1 SAR distribution comparison for system accuracy verification



Validation 835MHz Dipole , measured with head simulating tissue on *22/12/2004*

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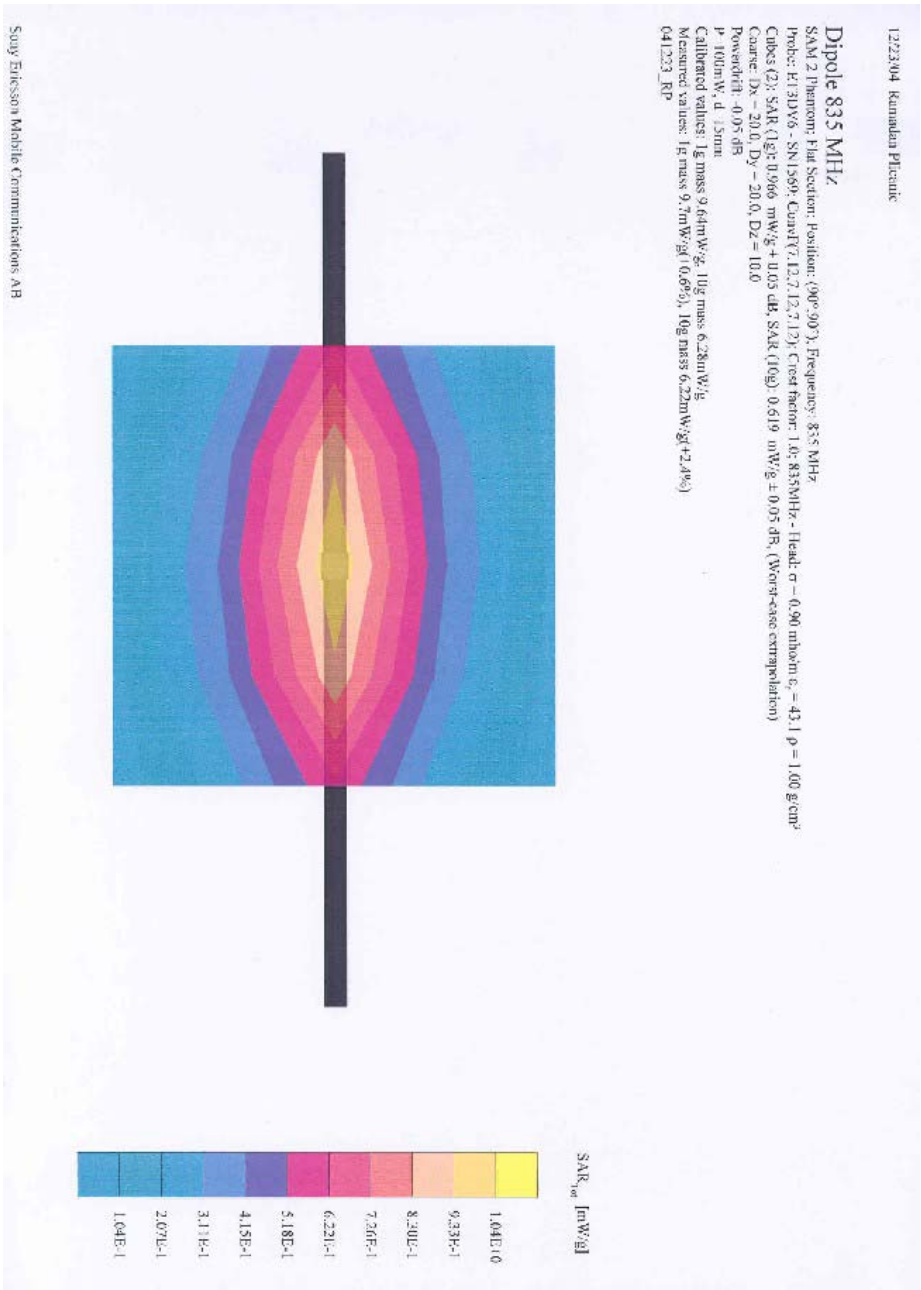

Validation 835MHz Dipole , measured with head simulating tissue on *23/12/2004*

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Approved	Checked	Date	Rev	Reference
LD/SEMC/BGGI/NMC *Mats Hansson*	*050110*	*050107*	A	File

Date/Time: 05/05/03 16:09:10

Test Laboratory: SPEAG, Zurich, Switzerland
File Name: SN484_SN1507_HSL835_050503.da4

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN484
Program: Dipole Calibration

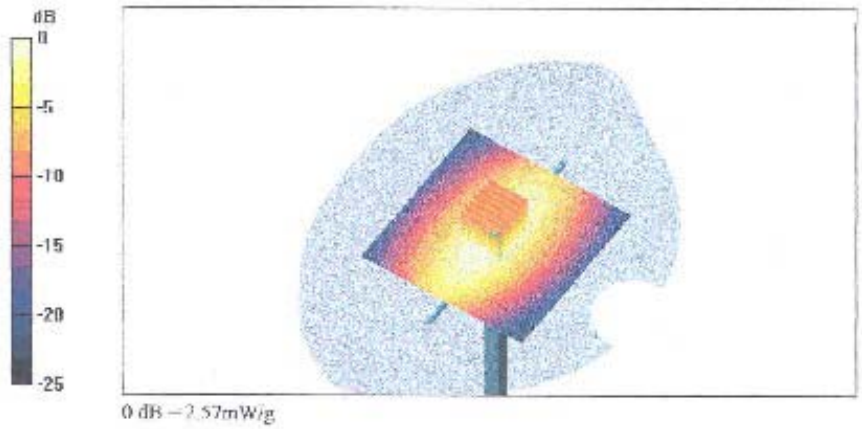
Communication System: CW-835; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: HSL 835 MHz (σ = 0.89 mho/m, ε_r = 42.8, ρ = 1000 kg/m^3)
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1507; ConvF(6.7, 6.7, 6.7); Calibrated: 1/18/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 - SN411; Calibrated: 1/16/2003
- Phantom: SAM with CRP - TP1006; Type: SAM 4.0; Serial: TP:1006
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Pin = 250 mW; d = 15 mm/Area Scan (81x81x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 56.1 V/m
Power Drift = -0.01 dB
Maximum value of SAR = 2.6 mW/g

Pin = 250 mW; d = 15 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 3.5 W/kg
SAR(1 g) = 2.41 mW/g; SAR(10 g) = 1.57 mW/g
Reference Value = 56.1 V/m
Power Drift = -0.01 dB
Maximum value of SAR = 2.57 mW/g



835MHz SAR distribution of validation dipole from reference measurement on head simulation liquid

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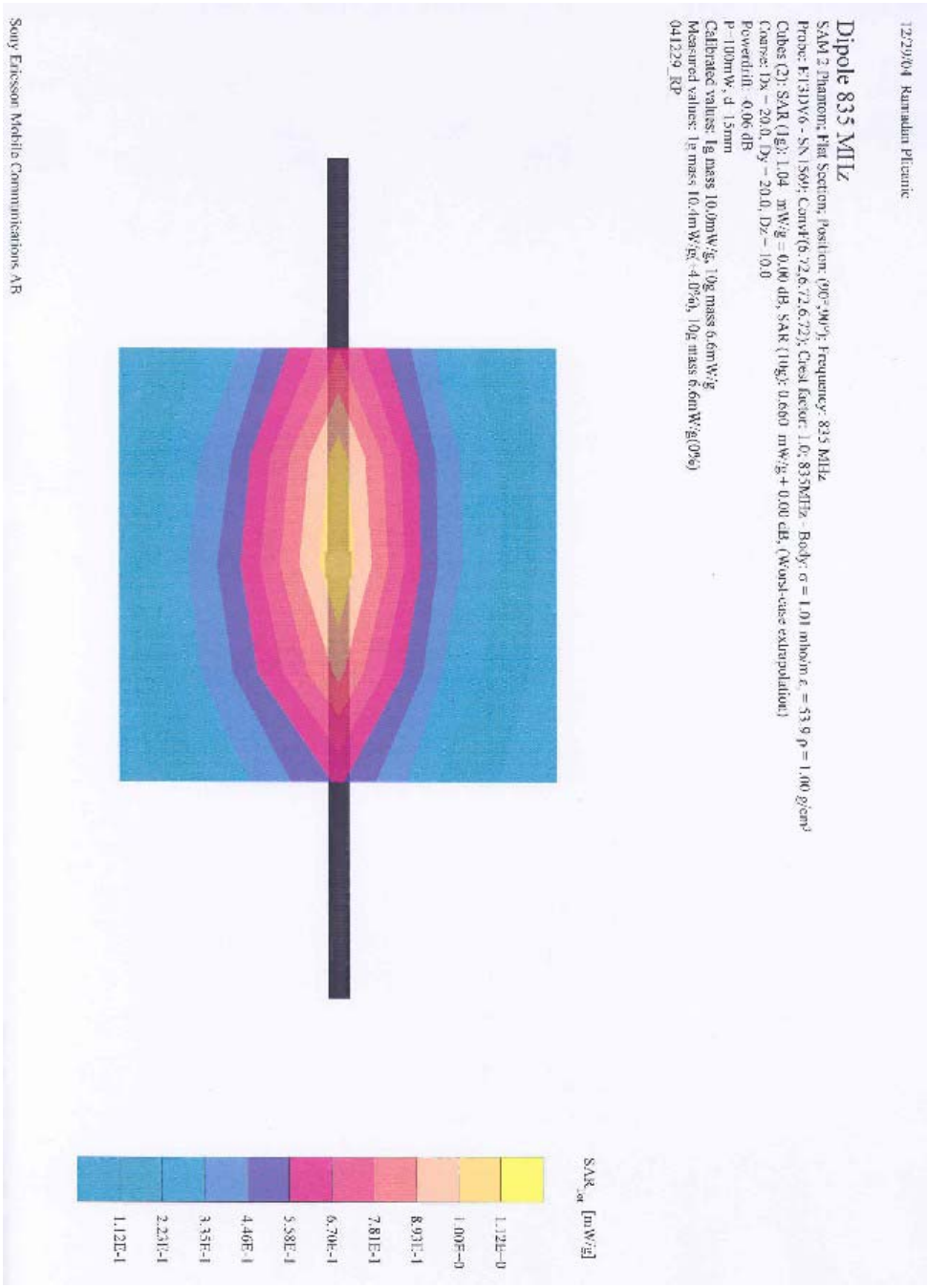

Validation 835MHz Dipole , measured with body simulating tissue on *29/12/2004*

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Date/Time: 05/13/03 12:47:00

Test Laboratory: SPEAG, Zurich, Switzerland
File Name: SN484_SN1507_M835_130503.da4

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN484
Program: Dipole Calibration

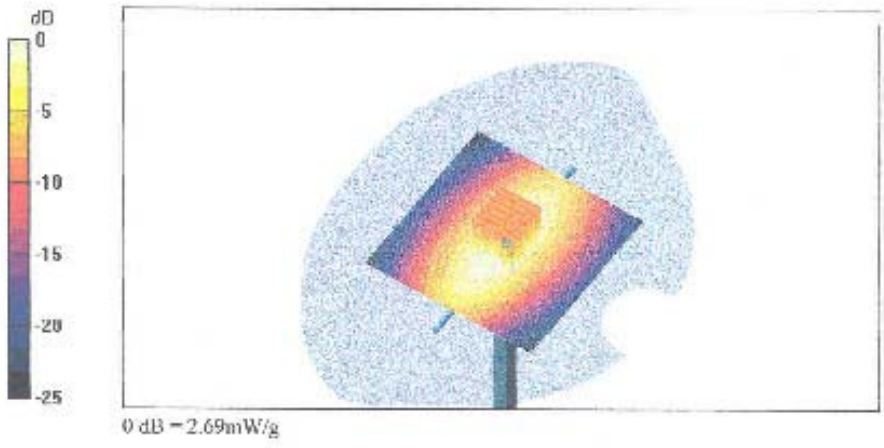
Communication System: CW-835; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: Muscle 835 MHz (σ = 0.96 mho/m, ε_r = 54.03, ρ = 1000 kg/m^3)
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1507; ConvF(6.3, 6.3, 6.3); Calibrated: 1/18/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 - SN411; Calibrated: 1/16/2003
- Phantom: SAM with CRP - TP1006; Type: SAM 4.0; Serial: TP:1006
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Pin = 250 mW; d = 15 mm/Area Scan (81x81x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 55.3 V/m
Power Drift = -0.009 dB
Maximum value of SAR = 2.72 mW/g

Pin = 250 mW; d = 15 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 3.54 W/kg
SAR(1 g) = 2.51 mW/g; SAR(10 g) = 1.65 mW/g
Reference Value = 55.3 V/m
Power Drift = -0.009 dB
Maximum value of SAR = 2.69 mW/g



835MHz SAR distribution of validation dipole from reference measurement on body simulation liquid

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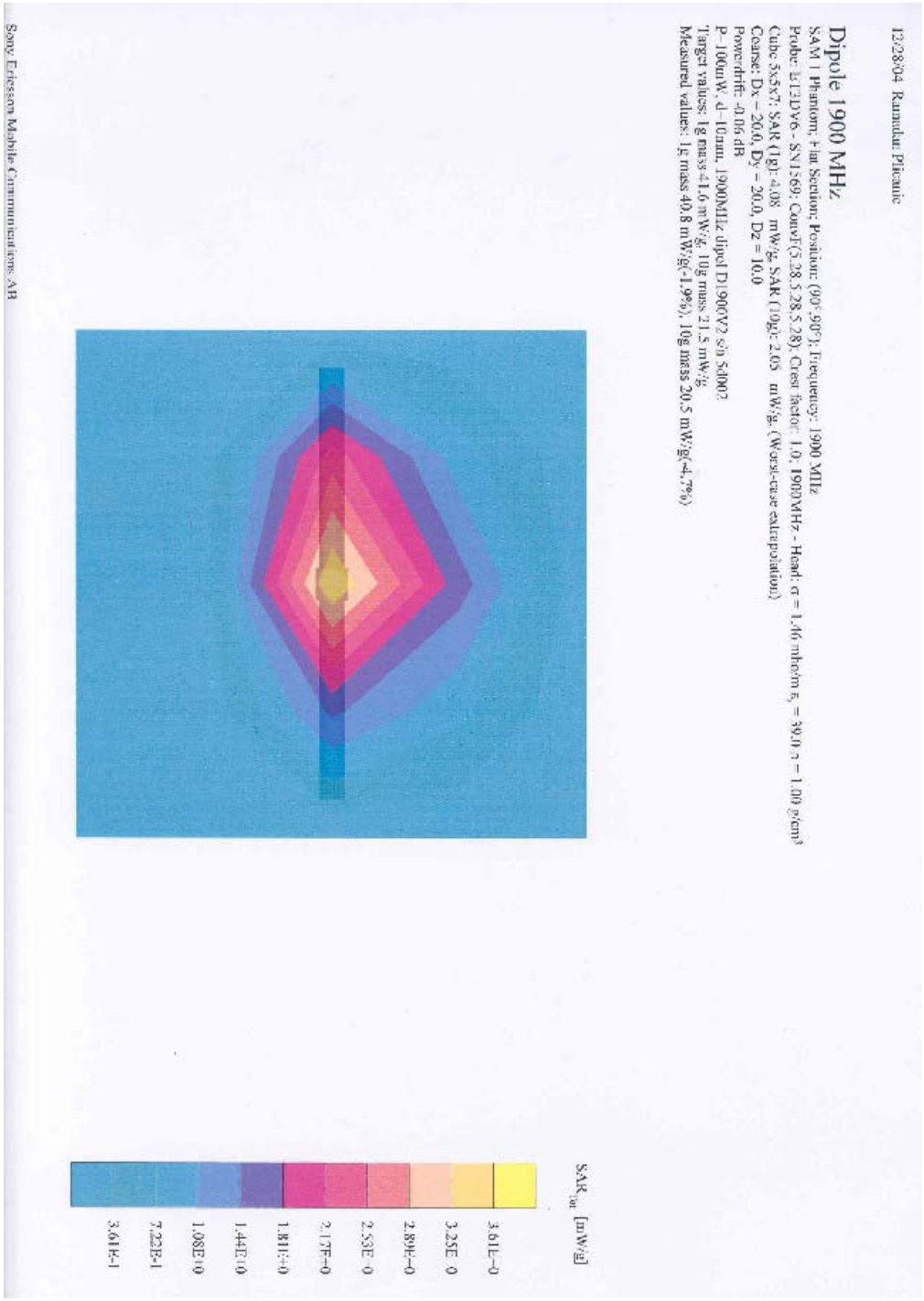

Validation 1900MHz Dipole , measured with head simulating tissue on *28/12/2004*

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Date/Time: 04/09/03 18:49:39

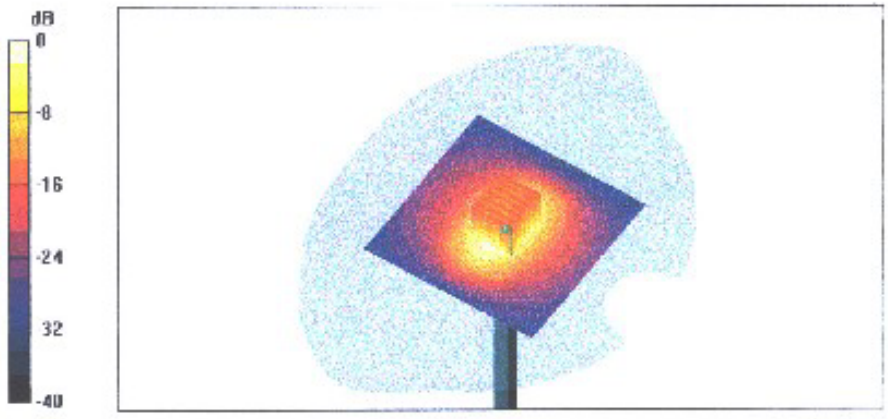
Test Laboratory: SPEAG, Zurich, Switzerland
File Name: SN5d002_SN1507_HSL1900_090403.da4

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN5d002
Program: Dipole Calibration

Communication System: CW-1900; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: HSL 1900 MHz (σ = 1.44 mho/m, ε_r = 38.78, ρ = 1000 kg/m^3)
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1507; ConvF(5.2, 5.2, 5.2); Calibrated: 1/18/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 - SN411; Calibrated: 1/16/2003
- Phantom: SAM with CRP - TP1006; Type: SAM 4.0; Serial: TP:1006
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

Pin = 250 mW; d = 10 mm/Area Scan (81x81x1): Measurement grid: dx=15mm, dy=15mm
Pin = 250 mW; d = 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 95.2 V/m
Peak SAR = 18.2 W/kg
SAR(1 g) = 10.4 mW/g; SAR(10 g) = 5.38 mW/g
Power Drift = 0.01 dB



1900MHz SAR distribution of validation dipole from reference measurement on head simulation liquid

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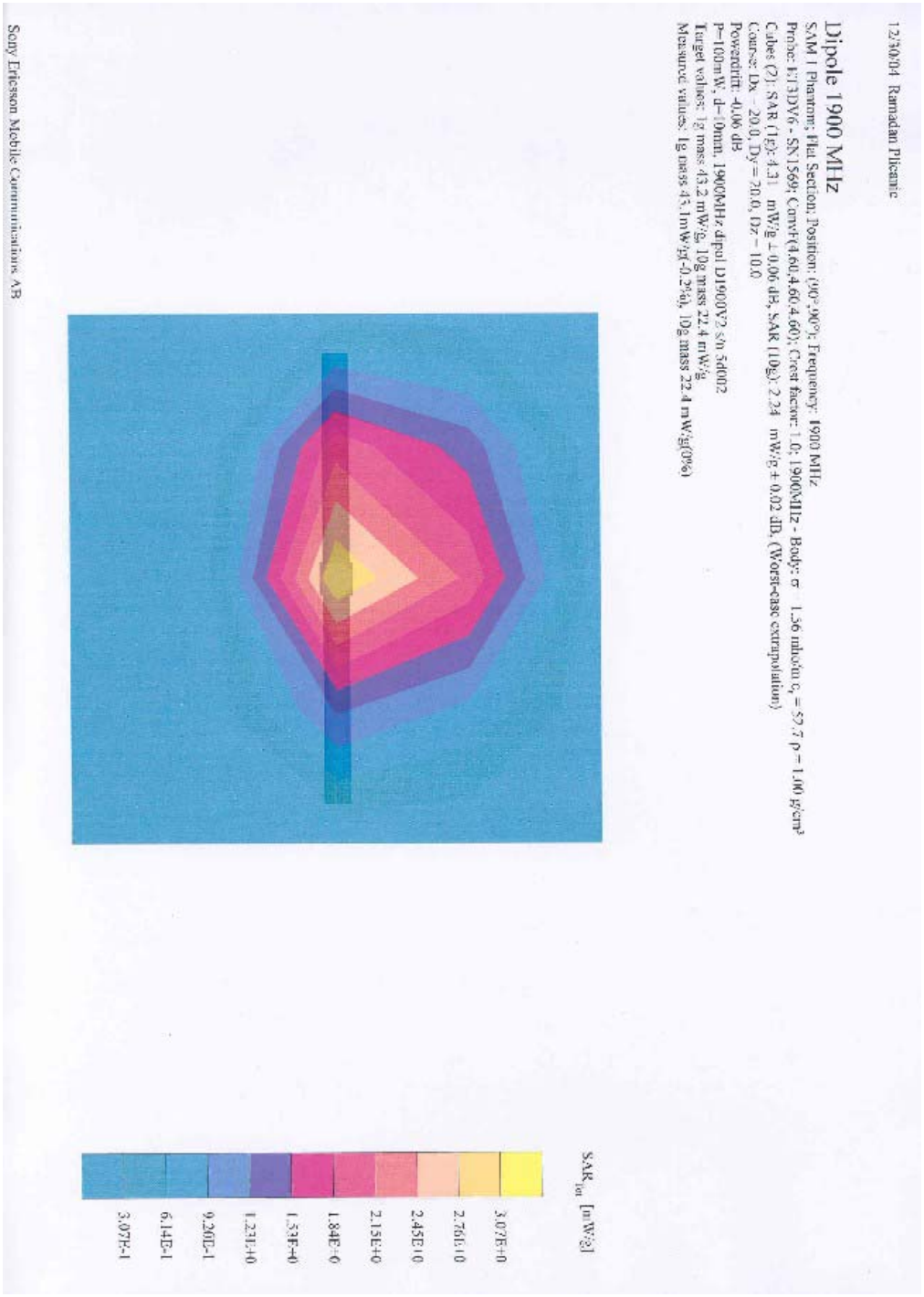
LD/SEMC/BGGI/NM *Ramadan Plicanic*			BGGIN05:005		
Approved		Checked	Date	Rev	Reference
LD/SEMC/BGGI/NMC *Mats Hansson*		*050110*	*050107*	A	File



Validation 1900MHz Dipole , measured with body simulating tissue on *30/12/2004*

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Date/Time: 04/08/03 12:31:50

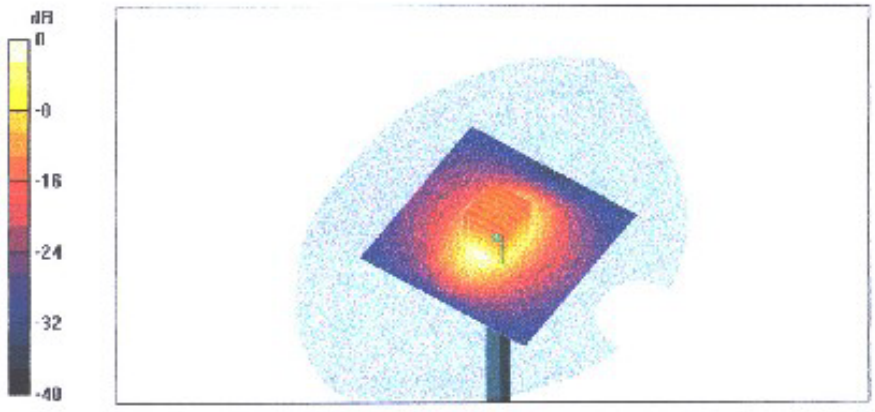
Test Laboratory: SPEAG, Zurich, Switzerland
File Name: SN5d002_SN1507_M1900_080403.da4

DUT: Dipole 1900 MHz; Serial: D1900V2 - SN5d002
Program: Dipole Calibration

Communication System: CW-1900; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: Muscle 1900 MHz (σ = 1.59 mho/m, ε_r = 51.2, ρ = 1000 kg/m^3)
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1507; ConvF(4.8, 4.8, 4.8); Calibrated: 1/18/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 - SN411; Calibrated: 1/16/2003
- Phantom: SAM with CRP - TP1006; Type: SAM 4.0; Serial: TP:1006
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

Pin = 250 mW; d = 10 mm/Area Scan (81x81x1): Measurement grid: dx=15mm, dy=15mm
Pin = 250 mW; d = 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 92.8 V/m
Peak SAR = 18.9 W/kg
SAR(1 g) = 10.8 mW/g; SAR(10 g) = 5.6 mW/g
Power Drift = 0.02 dB



1900MHz SAR distribution of validation dipole from reference measurement on body simulation liquid

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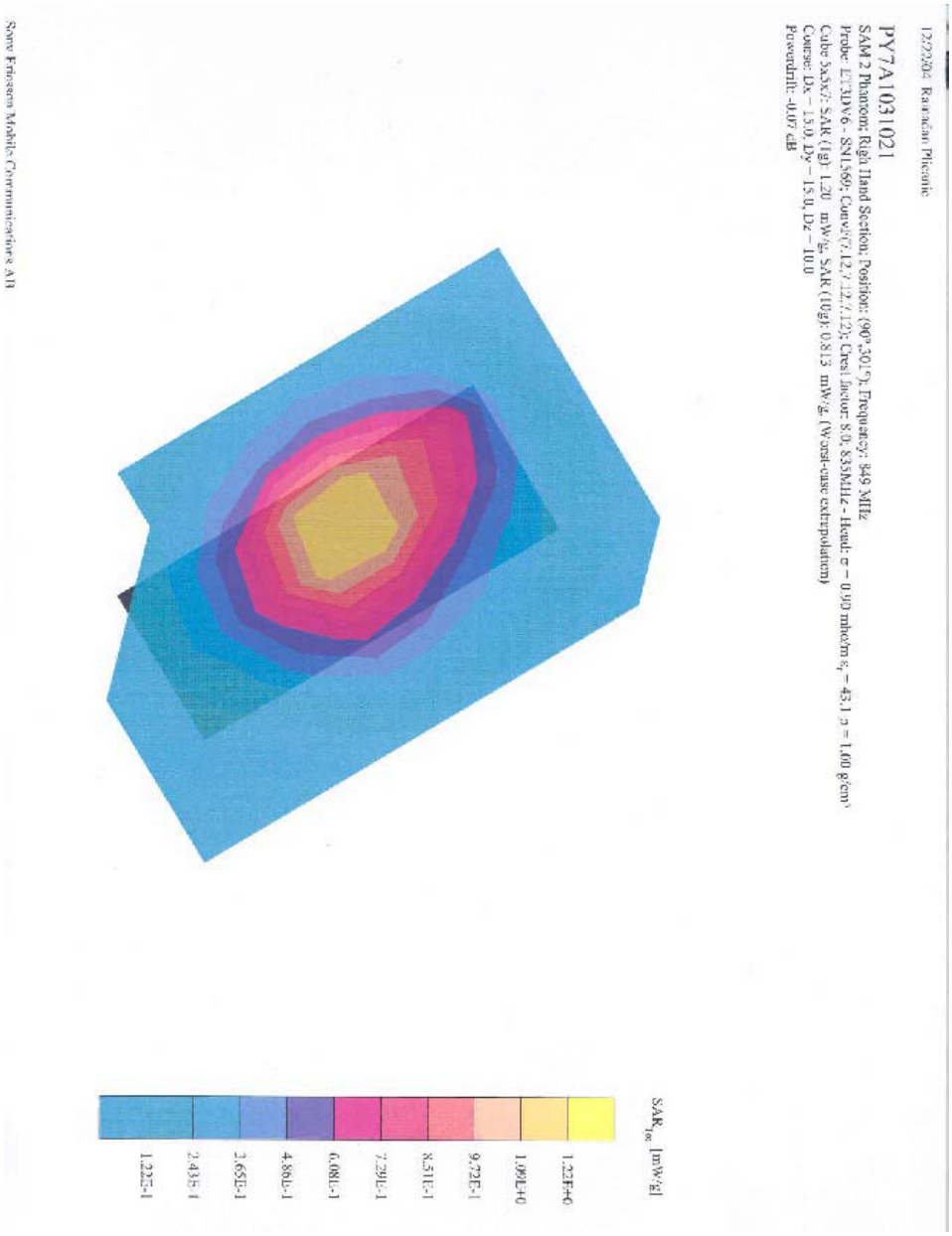
10.2 SAR distribution plot



Distribution of max SAR in GSM835 mode at 848.8MHz. Measured against the head for cheek phone position

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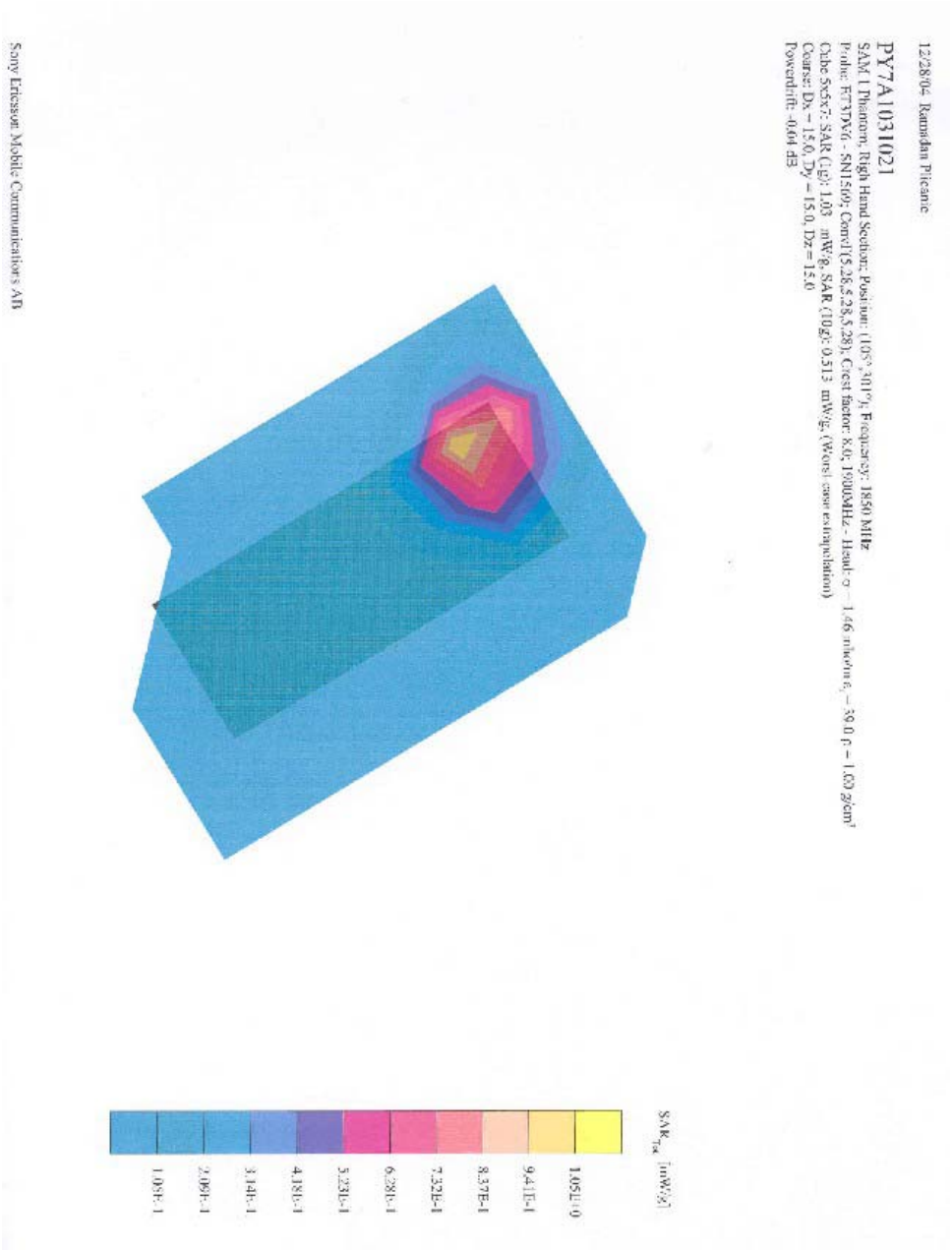
Approved		Checked	Date	Rev	Reference
LD/SEMC/BGGI/NMC *Mats Hansson*		*050110*	*050107*	A	File



Distribution of max SAR in GSM1900 mode at 1850.2MHz. Measured against the head for tilt phone position

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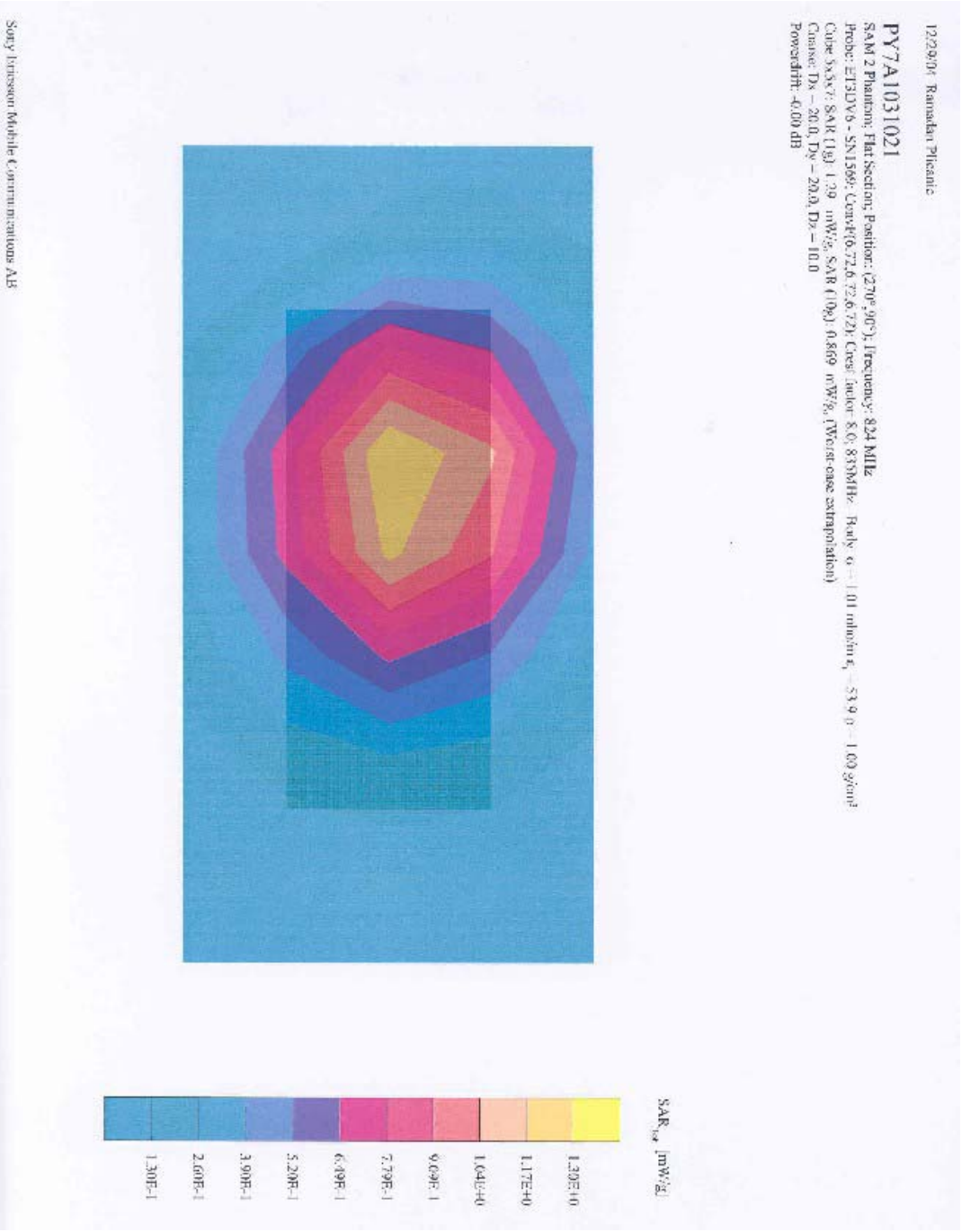
Approved	Checked	Date	Rev	Reference	
LD/SEMC/BGGI/NMC *Mats Hansson*	*050110*	*050107*	A	File	



Distribution of max SAR in GSM835 mode at 824.2MHz. Measured against the body

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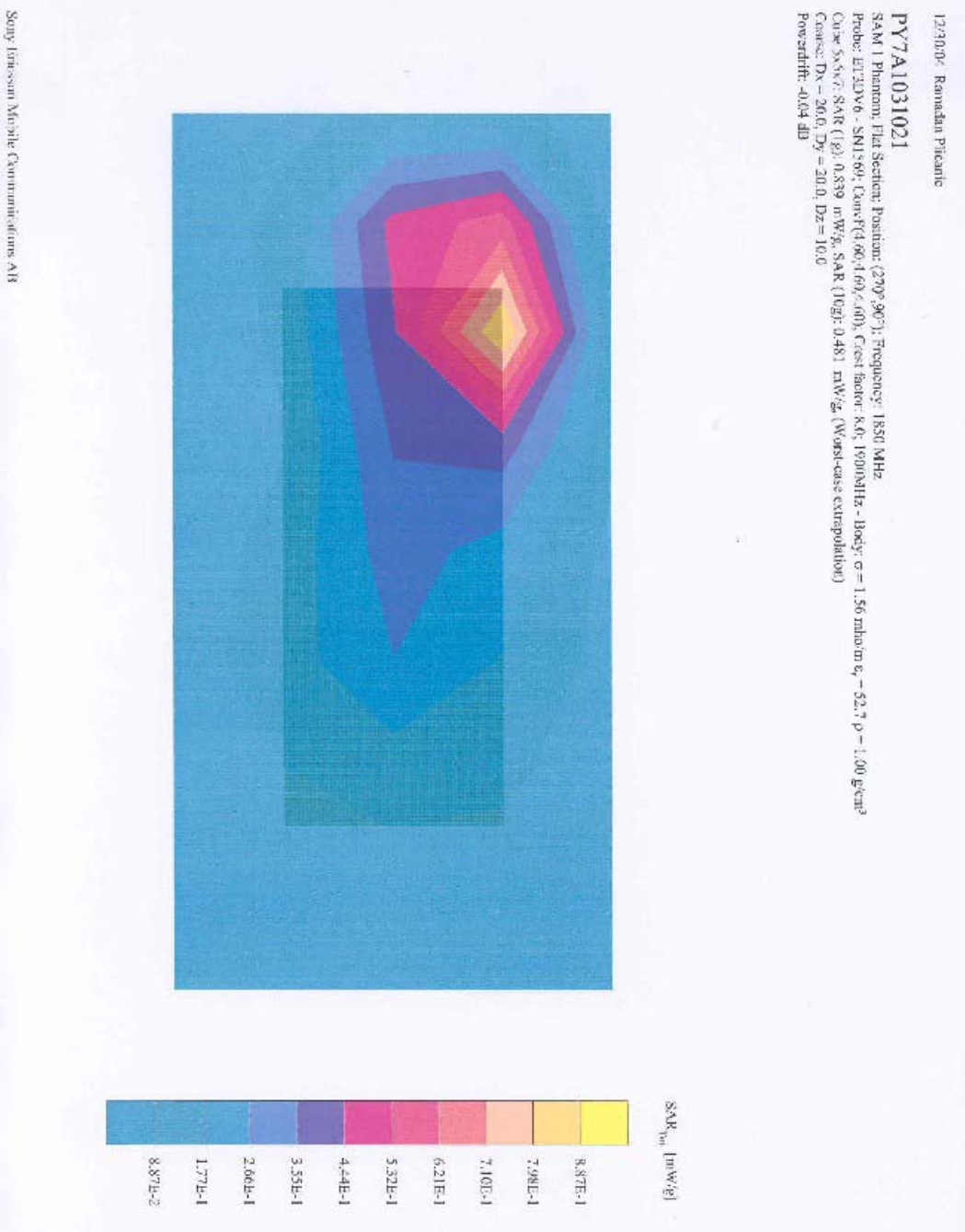
Approved	Checked	Date	Rev	Reference
LD/SEMC/BGGI/NMC *Mats Hansson*	*050110*	*050107*	A	File



Distribution of max SAR in GSM1900 mode at 1850.2MHz. Measured against the body

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Approved		Checked	Date	Rev	Reference
LD/SEMC/BGGI/NMC *Mats Hansson*		*050110*	*050107*	A	File

10.3 Photographs of the device under test

Front side

System Connector

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LD/SEMC/BGGI/NMC *Mats Hansson*	*050110*	*050107*	A	File

Back side with battery

Portable Hand Free HPE-14

10.4 Device position on SAM Twins Phantom

Device position against the head: Cheek (touch) phone position

Device position against the head: Tilt (cheek+15deg) phone position

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LD/SEMC/BGGI/NMC *Mats Hansson*	*050110*	*050107*	A	File

Device position against the body: Phone's back to the phantom without HF

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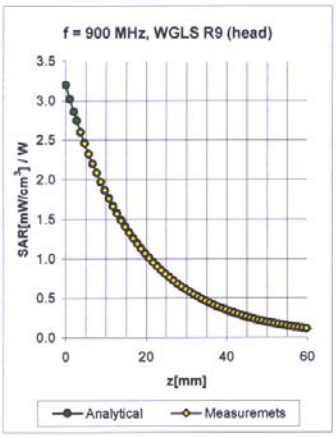
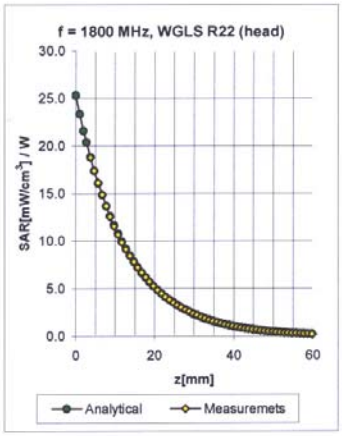
Approved	Checked	Date	Rev	Reference
LD/SEMC/BGGI/NMC *Mats Hansson*	*050110*	*050107*	A	File

10.5 Probe calibration parameters

ET3DV6 SN:1569 **March 18, 2004**

Conversion Factor Assessment





f [MHz]	Validity [MHz][B]	Tissue	Permittivity	Conductivity	Alpha	Depth	ConvF Uncertainty
835	785-885	Head	41.5 ± 5%	0.90 ± 5%	0.57	1.76	7.12 ± 9.7% (k=2)
900	850-950	Head	41.5 ± 5%	0.97 ± 5%	0.49	1.98	6.95 ± 9.7% (k=2)
1750	1700-1800	Head	40.0 ± 5%	1.40 ± 5%	0.43	2.75	5.56 ± 9.7% (k=2)
1900	1850-1950	Head	40.0 ± 5%	1.40 ± 5%	0.44	2.97	5.28 ± 9.7% (k=2)
2000	1950-2050	Head	40.0 ± 5%	1.40 ± 5%	0.47	2.73	5.05 ± 9.7% (k=2)
2450	2400-2500	Head	39.2 ± 5%	1.80 ± 5%	0.79	2.03	4.72 ± 9.7% (k=2)
835	785-885	Body	55.2 ± 5%	0.97 ± 5%	0.39	2.28	6.72 ± 9.7% (k=2)
900	850-950	Body	55.0 ± 5%	1.05 ± 5%	0.51	1.92	6.60 ± 9.7% (k=2)
1750	1700-1800	Body	53.3 ± 5%	1.52 ± 5%	0.51	2.83	4.79 ± 9.7% (k=2)
1900	1850-1950	Body	53.3 ± 5%	1.52 ± 5%	0.55	2.90	4.60 ± 9.7% (k=2)
2000	1950-2050	Body	53.3 ± 5%	1.52 ± 5%	0.63	2.51	4.44 ± 9.7% (k=2)
2450	2400-2500	Body	52.7 ± 5%	1.95 ± 5%	1.01	1.64	4.34 ± 9.7% (k=2)

[B] The total standard uncertainty is calculated as root-sum-square of standard uncertainty of the Conversion Factor at calibration frequency and the standard uncertainty for the indicated frequency band.