



Company Internal REPORT

Prepared (also subject responsible if other)

LD/SEMC/CCDALE Ramadan Plicanic

No.

CCDA09:408

Approved

Checked

Date

Rev

Reference

LD/SEMC/CCDA Mats Hansson

090707

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Report issued by Accredited SAR Laboratory

for

FCC ID: PY7A3880020 (Satio U1)

Date of test: 2009-06-11 – 2009-06-23

Laboratory: Sony Ericsson SAR Test Laboratory
Sony Ericsson Mobile Communications AB
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Testing Approval: Mats Hansson
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Statement of Compliance

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

Sony Ericsson Type: AAD-3880020-BV
FCC ID: PY7A3880020
IC: 4170B-A3880020

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).



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 (2005). 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 Introduction

In this test report, compliance of the Sony Ericsson PY7A3880020 (Satio U1) 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].

2 Customer details

Company Name:	Sony Ericsson Mobile Communications AB
Address:	Sony Ericsson Mobile Tokyo, Japan
Contact Name:	Takashi Izumi

3 Device Under Test

3.1 Antenna Description

Type	Internal antenna	
Location	Bottom of phone	
Main and BT antennas distance	87,5 mm	
Dimensions	Max length	49 mm
	Max width	11 mm
Configuration	Monopole	



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3.2 Device Description

Device model	AAD-3880020-BV					
Market name	Satio U1					
Serial number (EUT #)	CB5A13VH48 (#15593); CB5AVH5C(#15596)					
Mode	GSM 850			GSM 1900		
Crest factor	8.3			8.3		
Multiple access scheme	TDMA			TDMA		
Channel No.	128	190	251	512	661	885
Measured Power Level [dBm] ¹	32.7	32.7	32.7	30.0	30.0	30.0
Product Maximum power Level [dBm] ¹(1524 spec)	33.2	33.2	33.2	30.5	30.5	30.5
Data mode	GPRS			GPRS		
Crest factor	4.15			4.15		
Measured Power Level [dBm] ¹	30.2	30.2	30.2	27.7	27.7	27.7
Product Maximum power Level [dBm] ¹(1524 spec)	30.7	30.7	30.7	28.2	28.2	28.2
Data mode	EDGE			EDGE		
Crest factor	4.15			4.15		
Measured Power Level [dBm] ¹	27.5	27.5	27.5	26.5	26.5	26.5
Product Maximum power Level [dBm] ¹(1524 spec)	28.0	28.0	28.0	27.0	27.0	27.0
Transmitting frequency range [MHz]	824.0 - 849.0			1850.0 - 1910.0		

GPRS Multislot class	10
EDGE class	10
GPRS Capability class	B
BT class and conducted power	Class 1, 10 mW
Prototype or production unit	Preproduction
Hardware Version	AP1.2
Software version	R1BA005 and ITP_ATP39
Device category	Portable
RF exposure environment	General population / uncontrolled



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WLAN Output Power					
Mode	Max Output Power ¹ (dBm)	Factory Tolerance ¹ (dB)	EUT (#15596) power (dBm) ¹		
			Ch 1	Ch6	Ch 11
802.11b 1Mbit/sec	19.0	1	18.8	19	19.2
802.11b 2Mbit/sec			18.7	19.2	19.2
802.11b 5.5Mbit/sec			18.7	19.0	19.0
802.11b 11Mbit/sec			18.7	18.9	19.1
802.11g 6Mbit/sec	15.0	1	14.9	14.9	14.9
802.11g 9Mbit/sec			14.9	14.9	14.9
802.11g 12Mbit/sec	15.0	1	14.9	14.9	15.0
802.11g 18Mbit/sec			14.9	14.8	14.9
802.11g 24Mbit/sec	15.0	1	15.0	14.9	14.9
802.11g 36Mbit/sec			14.9	14.9	15.0
802.11g 48Mbit/sec	15.0	1	15.0	14.9	15.0
802.11g 54Mbit/sec			14.8	14.8	15.0

¹ Measured output values were provided by the customer.

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4 Test equipment

4.1 Dosimetric system

SAR measurements were made using the DASY4 professional system (software version 4.7, Build 55) with SAM twin phantom, manufactured by Schmid & Partner Engineering AG (SPEAG). The list of calibrated equipment is given below.

Description	Serial Number	Due Date
DASY4 DAE	428	01 2010
E-field probe ET3DV6	1569	01 2010
Dipole Validation Kit, D835V2	4d039	01 2010
Dipole Validation Kit, D1900V2	5d002	01 2010
Dipole Validation Kit, D2450V2	745	03 2011

4.2 Additional equipment

Description	Inventory Number	Due Date
Signal generator hp D4000A	483972	03 2010
Directional coupler HP778D	39656	032010
Power meter R&S NRVD	20007668	032010
Power sensor R&S NRV-Z5	20007671	032010
Power sensor R&S NRV-Z5	20007670	032010
Network analyzer hp 8753	421671	032010
Dielectric probe kit HP85070D	20000053	Self. cal
R&S CMU200	20002149	032010

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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 DASY4 software is also given. Recommended limits for permittivity ϵ_r , conductivity σ and mass density ρ are also shown.

f [MHz]	Tissue type	Measured / Recommended	Dielectric Parameters		Density
			ϵ_r	σ [S/m]	ρ [g/cm ³]
835	Head	Measured, 2009-06-11	42.8	0.89	1.00
		Recommended	41.5	0.90	1.00
835	Body	Measured, 2009-06-16	53.7	0.96	1.00
		Recommended	55.2	0.97	1.00
1900	Head	Measured, 2009-06-22	38.5	1.44	1.00
		Recommended	40.0	1.40	1.00
1900	Body	Measured, 2009-06-22	53.7	1.56	1.00
		Recommended	53.3	1.52	1.00
2450	Head	Measured, 2009-06-23	38.8	1.89	1.00
		Recommended	39.2	1.80	1.00
2450	Body	Measured, 2009-06-26	50.6	1.92	1.00
		Recommended	52.7	1.95	1.00

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6 System accuracy verification

A system accuracy verification of the DASY4 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. The ambient humidity and temperature of test facility were kept between the range 30-70% and 20.0-25.0 °C respectively. RF noise had been measured in liquid when all RF equipment in lab was switched off. Measured value was 0.00015 mW/g in 1g mass.

f [MHz]	Tissue type	Measured / Reference	SAR [W/kg] 1g	Dielectric Parameters		Density	Liquid T [°C]
				ϵ_r	σ [S/m]	ρ [g/cm ³]	
835	Head	Measured, 2009-06-11	9.86	42.8	0.89	1.00	22.5
		Reference	9.68	41.5	0.90	1.00	22.0
835	Body	Measured, 2009-06-16	9.97	53.7	0.96	1.00	22.8
		Reference	9.41	55.2	0.97	1.00	22.0
1900	Head	Measured, 2009-06-22	40.0	38.5	1.44	1.00	22.7
		Reference	39.9	40.0	1.40	1.00	22.0
1900	Body	Measured, 2009-06-22	37.9	53.7	1.56	1.00	23.0
		Reference	41.5	53.3	1.52	1.00	22.0
2450	Head	Measured, 2009-06-23	55.2	38.8	1.89	1.00	22.5
		Reference	52.9	39.2	1.80	1.00	22.0
2450	Body	Measured, 2009-06-26	56.3	50.6	1.92	1.00	22.6
		Reference	53.4	52.7	1.95	1.00	22.0

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7 SAR measurement uncertainty

SAR measurement uncertainty evaluation for Sony Ericsson PY7A3880020 (Satio U1) phone According to IEEE 1528

Uncertainty Component	Uncer. (%)	Prob Dist.	Div.	C _i	1g mass
Measurement System					
Probe Calibration	±5.9	N	1	1	±5.9
Axial Isotropy	±4.7	R	√3	0.7	±1.9
Spherical Isotropy	±9.6	R	√3	0.7	±3.9
Boundary effect	±1.0	R	√3	1	±0.6
Probe linearity	±4.7	R	√3	1	±2.7
Detection limit	±1.0	R	√3	1	±0.6
Readout electronics	±0.3	N	1	1	±0.3
Response time	±0.8	R	√3	1	±0.5
Integration time	±2.6	R	√3	1	±1.5
RF Ambient Conditions	±3.0	R	√3	1	±1.7
Mech. Constraints of robot	±0.4	R	√3	1	±0.2
Probe positioning	±2.9	R	√3	1	±1.7
Extrap, interpolation and integration	±1.0	R	√3	1	±0.6
Measurement System Uncertainty					±8.4
Test Sample Related					
Device positioning	±3.5	N	1	1	±3.5
Device holder uncertainty	±3.5	N	1	1	±3.5
Power drift	±5.0	R	√3	1	±2.9
Test Sample Related Uncertainty					±5.5
Phantom and Tissue Parameters					
Phantom uncertainty	±4.0	R	√3	1	±2.3
Liquid conductivity (measured)	±2.5	R	1	0.64	±1.6
Liquid conductivity (target)	±5.0	R	√3	0.64	±1.8
Liquid Permittivity (measured)	±2.5	R	1	0.6	±1.5
Liquid Permittivity (target)	±5.0	R	√3	0.6	±1.7
Phantom and Tissue Parameters Uncertainty					±4.1
Combined standard uncertainty					±10.8
Extended standard uncertainty (k=2)					±21.6

8 Test results

The ambient humidity and temperature of test facility were kept between the range 30-70% and 20.0-25.0 °C respectively. A base station simulator was used to control the device during the SAR measurement. The DUT was supplied with a fully charged battery for each measurement.

For head measurement, the DUT was tested on the right-hand side and the left-hand side of the phantom in two phone positions, cheek (touch) and tilt (cheek + 15°). The DUT was tested at the lowest, middle and highest frequencies in the transmission band. The measured 1-gram averaged SAR values of the DUT towards the head are provided in Table 1.

For body measurement the DUT was tested with the back (antenna) and front(display) towards the phantom flat section with 15 mm distance in both speech and data mode. For all modes, the device was tested at the lowest, middle and highest frequencies in the transmission band. For portable hands free (PHF) usage the Sony Ericsson head set HPB-60 was connected to the DUT. The measured 1-gram averaged SAR values of the DUT towards the body are provided in Table 2.

Band	Channel	Measured output power ¹ [dBm]	Position	Liquid T [°C]	Measured SAR [W/kg]	
					Left-hand 1g mass	Right-hand 1g mass
GSM 850	128	33.1	Cheek	22.5	0.52	0.58
			Tilt	22.5	-	-
	190	33.2	Cheek	22.5	0.74	0.76
			Tilt	22.5	0.40	0.44
	251	33.1	Cheek	22.5	0.96	1.08
			Tilt	22.5	-	0.78
GSM 1900	512	30.3	Cheek	22.7	0.98	1.04
			Tilt	22.7	-	-
	661	30.5	Cheek	22.7	0.94	0.89
			Tilt	22.7	0.29	0.33
	810	30.4	Cheek	22.7	0.84	0.79
			Tilt	22.7	-	-
Wlan	1	18.8	Cheek	22.5	0.26	0.34
			Tilt	22.5	-	-
	6	19.0	Cheek	22.5	0.29	0.38
			Tilt	22.5	0.23	0.19
	11	19.2	Cheek	22.5	0.40	0.51
			Tilt	22.5	-	-

Table 1: SAR measurement result for Sony Ericsson PY7A3880020 telephone at highest possible output power. Measured towards the head.

¹ Measured output values were provided by the customer.

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Band	Channel	Measured output power ¹ [dBm]	Position / Mode	Liquid T [°C]	Measured SAR [W/kg] 1g mass
GSM 850	128	30.6	Back / GPRS	22.8	0.58
		33.1	Back / Wireless	22.8	0.49
	190	30.7	Back /GPRS	22.8	0.8
		33.2	Back /Wireless	22.8	0.71
	251	30.6	Back / GPRS	22.8	1.03
		33.1	Front /GPRS	22.8	0.95
		28.0	Back/EDGE	22.8	0.54
		33.1	Back/Wire	22.8	0.92
GSM 1900	512	28.2	Back / GPRS	23.0	0.76
		28.2	Front / GPRS	23.0	0.55
		27.0	Back / EDGE	23.0	0.55
		30.3	Back/wire	23.0	0.40
	661	30.3	Back/wireless	23.0	0.66
		28.1	Back /GPRS	23.0	0.63
	810	30.5	Back /Wireless	23.0	0.59
		28.0	Back / GPRS	23.0	0.53
Wlan	1	18.8	Back/wire	22.6	0.13
			Back/wireless	22.6	0.13
	6	19.0	Back/wire	22.6	0.17
	11	19.2	Back/wire	22.6	0.17

Table 2: SAR measurement result for Sony Ericsson PY7A3880020 telephone at highest possible output power. Measured towards the body.

¹ Measured output values were provided by the customer.



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- [1] R.Plicanic. "SAR Measurement Specification of Wireless Handsets". Sony Ericsson SAR Test Laboratory internal document GUG/N 03:141
- [2] 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).
- [3] 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.
- [4] IEC 62209-1. "Procedure to measure the Specific Absorption Rate (SAR) for hand-held mobile wireless devices in the frequency range of 300 MHz to 3 GHz". February 2005.
- [5] FCC KDB648474. "SAR Evaluation Consideration for HANDSETS with Multiple Transmitters and Antenna", April 2008.
- [6] 3GPP TS 34.121 Universal Mobile Telecommunications System (UMTS); Terminal Conformance Specification, Radio Transmission and Reception (FDD).

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Appendix

9.1 Photographs of the device under test



Front



Sides



Back side with battery



Back

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9.2 Device position at SAM Twin Phantom



DUT position towards the head: Cheek (touch) position



DUT position towards the head: Tilt (touch + 15°) position

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DUT in body position with 15 mm distance

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9.3 Attachments

- System validation
- Measurement plots for head and body position
- Probe calibration
- Dipole calibration

Date/Time: 2009-06-26 15:51:06

Test Laboratory: Sony Ericsson Mobile Communications
 File Name: [Body Wlan_090626_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15596
Program Name: SAR Measurement on the Body

Communication System: WLAN; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2462$ MHz; $\sigma = 1.94$ mho/m; $\epsilon_r = 50.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(3.86, 3.86, 3.86); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 6; Type: SAM; Serial: 1351
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

High FCC, PHF/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.186 mW/g

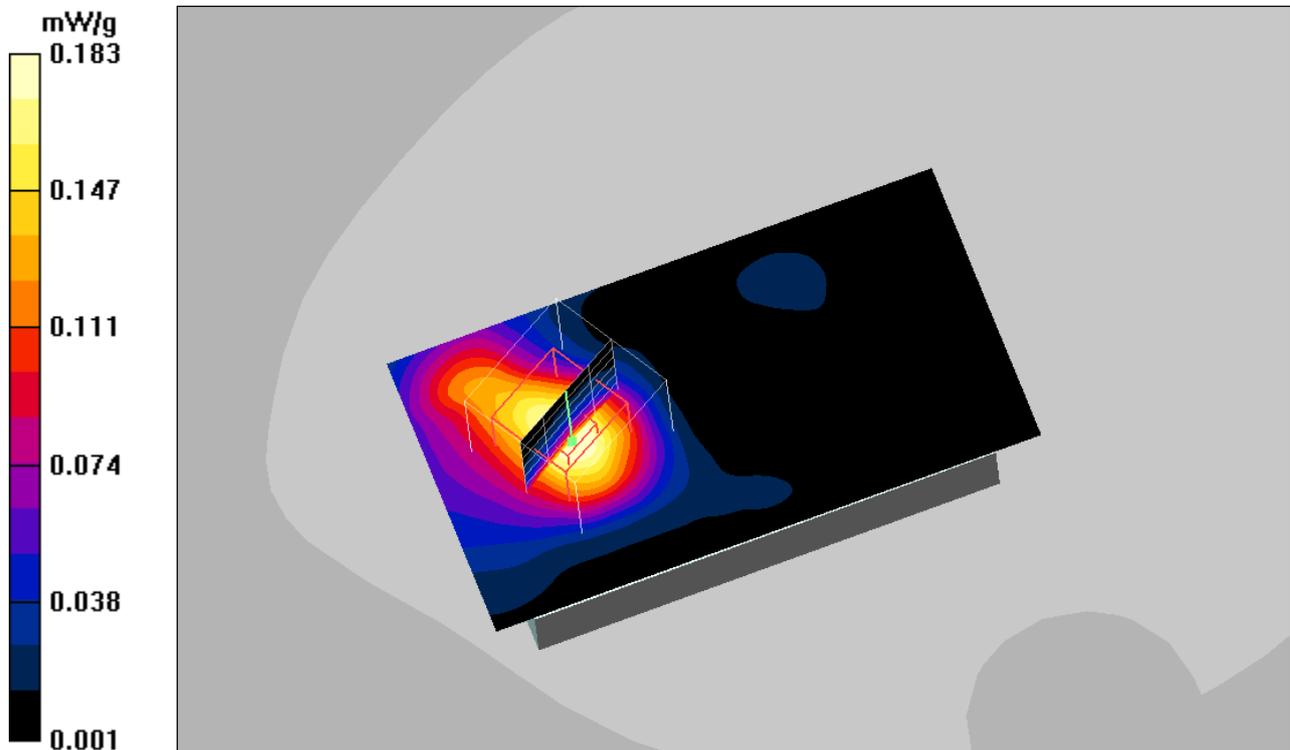
High FCC, PHF/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.34 V/m; Power Drift = -0.184 dB

Peak SAR (extrapolated) = 0.367 W/kg

SAR(1 g) = 0.173 mW/g; SAR(10 g) = 0.092 mW/g

Maximum value of SAR (measured) = 0.183 mW/g



Date/Time: 2009-06-26 13:50:35

Test Laboratory: Sony Ericsson Mobile Communications

File Name: [Verification Measurement_2450MHz_Body_090626.da4](#)

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:xxx
Program Name: Verification Measurement on 1900MHz with HSL

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.92$ mho/m; $\epsilon_r = 50.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(3.86, 3.86, 3.86); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 6; Type: SAM; Serial: 1351
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

P=100mW, 10mm distance/Area Scan (61x101x1): Measurement grid: dx=10mm,
dy=10mm

Maximum value of SAR (interpolated) = 6.43 mW/g

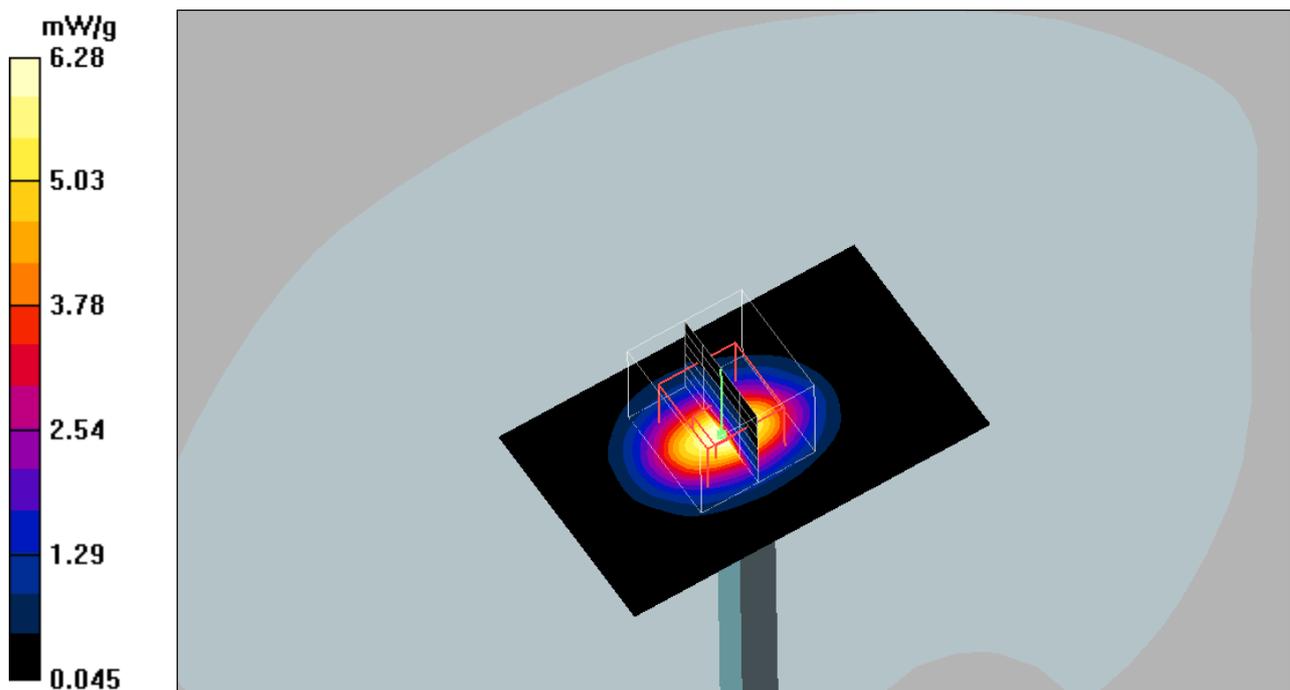
P=100mW, 10mm distance/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm,
dy=8mm, dz=5mm

Reference Value = 57.5 V/m; Power Drift = -0.013 dB

Peak SAR (extrapolated) = 12.7 W/kg

SAR(1 g) = 5.63 mW/g; SAR(10 g) = 2.6 mW/g

Maximum value of SAR (measured) = 6.28 mW/g



Date/Time: 2009-06-22 08:13:03

Test Laboratory: Sony Ericsson Mobile Communications

File Name: [Verification Measurement_1900MHz_Head_090622.da4](#)**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d002****Program Name: Verification Measurement on 1900MHz with HSL**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.44$ mho/m; $\epsilon_r = 38.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(4.99, 4.99, 4.99); Calibrated: 2009-01-12

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn428; Calibrated: 2009-01-09

- Phantom: SAM 6; Type: SAM; Serial: 1351

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

P=100mW, 10mm distance/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 4.44 mW/g

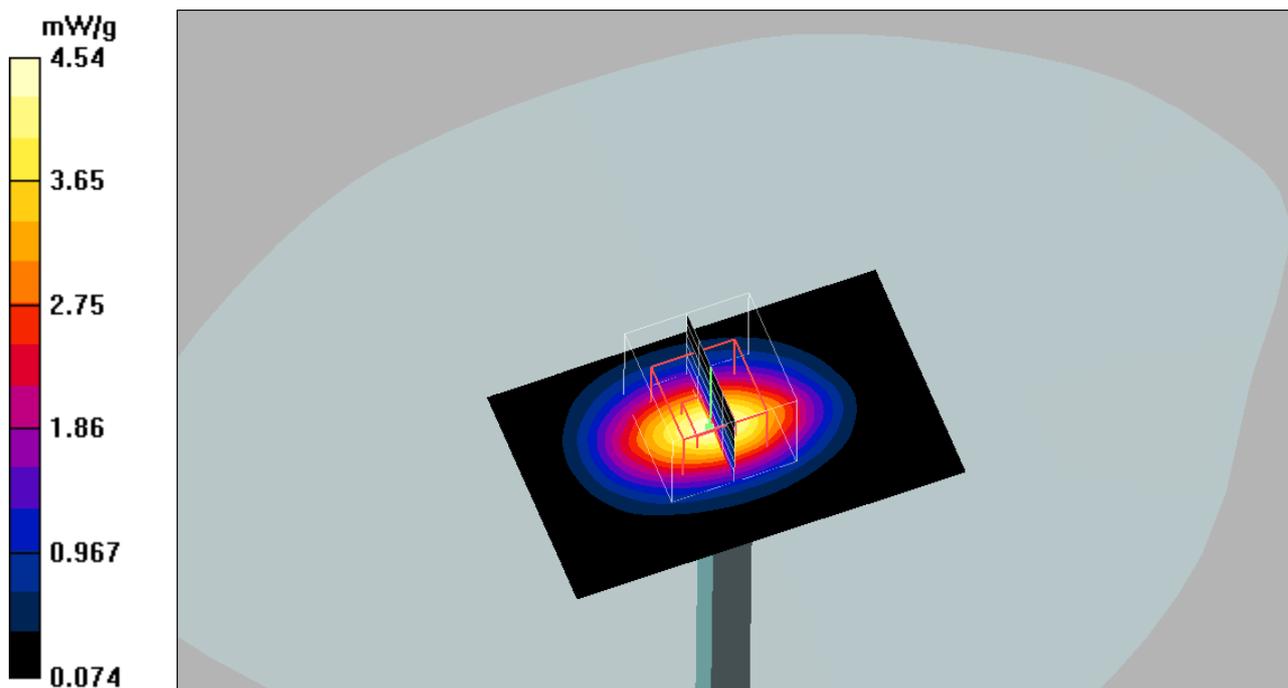
P=100mW, 10mm distance/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 57.2 V/m; Power Drift = -0.001 dB

Peak SAR (extrapolated) = 6.76 W/kg

SAR(1 g) = 4 mW/g; SAR(10 g) = 2.1 mW/g

Maximum value of SAR (measured) = 4.54 mW/g



Date/Time: 2009-06-22 16:42:09

Test Laboratory: Sony Ericsson Mobile Communications

File Name: [Verification Measurement_1900MHz_Body_090622.da4](#)**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d002****Program Name: Verification Measurement on 1900MHz with MSL**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 53.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(4.42, 4.42, 4.42); Calibrated: 2009-01-12

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn428; Calibrated: 2009-01-09

- Phantom: SAM 6; Type: SAM; Serial: 1351

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

P=100mW, 10mm distance/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 4.23 mW/g

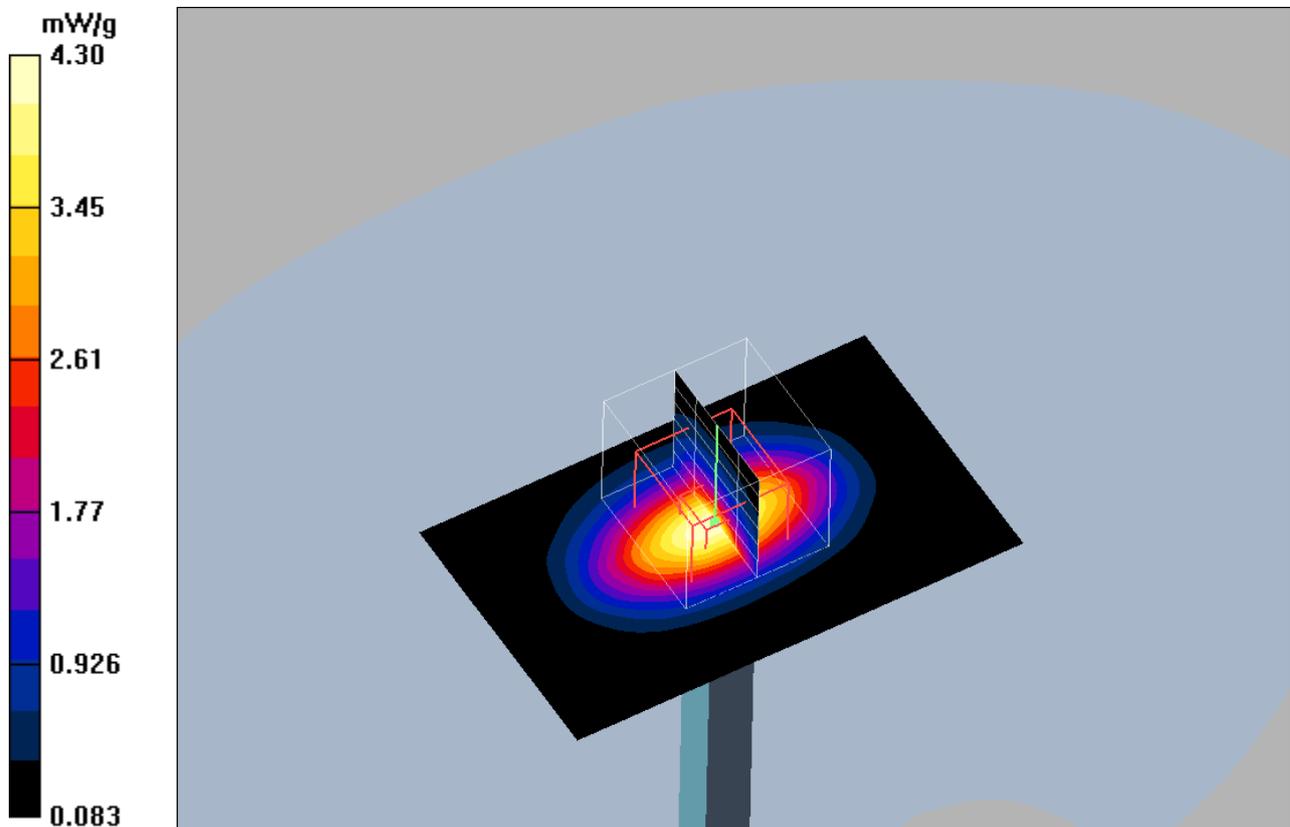
P=100mW, 10mm distance/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 53.1 V/m; Power Drift = 0.048 dB

Peak SAR (extrapolated) = 6.31 W/kg

SAR(1 g) = 3.79 mW/g; SAR(10 g) = 2.02 mW/g

Maximum value of SAR (measured) = 4.30 mW/g



Date/Time: 2009-06-11 09:06:51

Test Laboratory: Sony Ericsson Mobile Communications

File Name: [Verification Measurement 835MHz Head_090611.da4](#)**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d039****Program Name: Verification Measurement on 835MHz with HSL**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.894 \text{ mho/m}$; $\epsilon_r = 42.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(6.36, 6.36, 6.36); Calibrated: 2009-01-12

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn428; Calibrated: 2009-01-09

- Phantom: SAM 5; Type: SAM; Serial: 1352

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

P=100mW, 15mm distance/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.08 mW/g

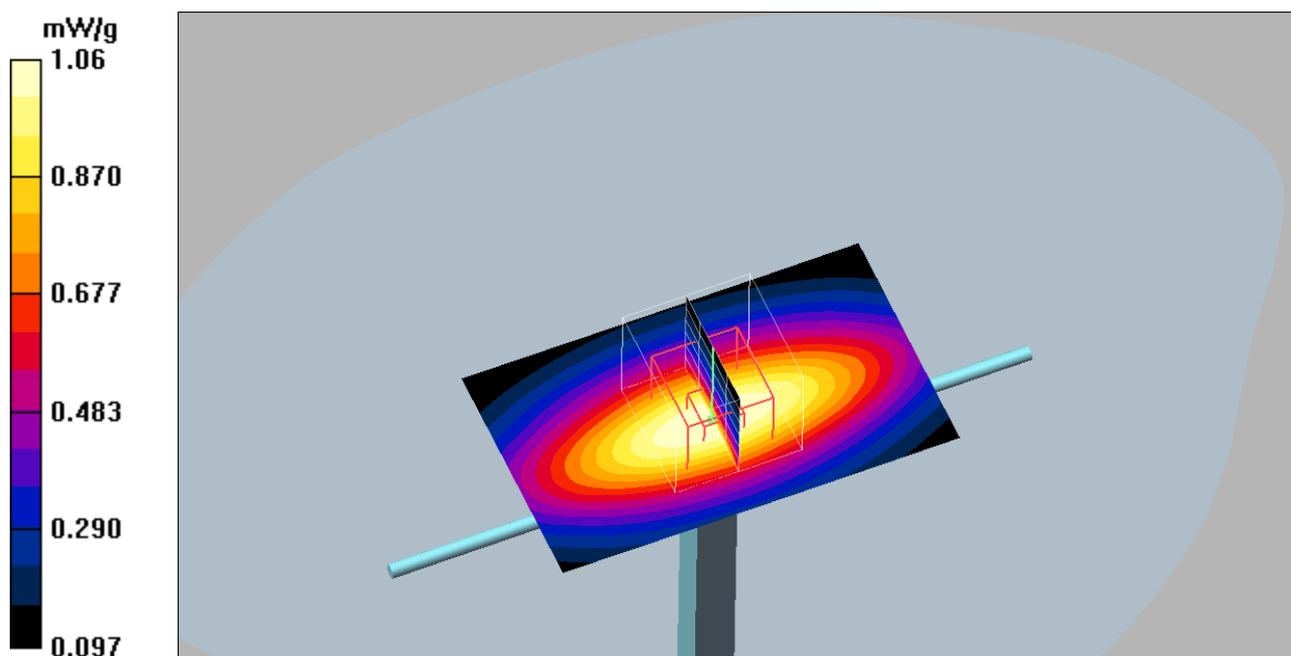
P=100mW, 15mm distance/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 35.4 V/m; Power Drift = -0.042 dB

Peak SAR (extrapolated) = 1.43 W/kg

SAR(1 g) = 0.986 mW/g; SAR(10 g) = 0.649 mW/g

Maximum value of SAR (measured) = 1.06 mW/g



Date/Time: 2009-06-16 11:07:59

Test Laboratory: Sony Ericsson Mobile Communications

File Name: [Verification Measurement_835MHz_Body_090616.da4](#)**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d039****Program Name: Verification Measurement on 835MHz with BSL**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835$ MHz; $\sigma = 0.966$ mho/m; $\epsilon_r = 53.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(6.22, 6.22, 6.22); Calibrated: 2009-01-12

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn428; Calibrated: 2009-01-09

- Phantom: SAM 6; Type: SAM; Serial: 1351

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

P=100mW, 15mm distance/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.07 mW/g

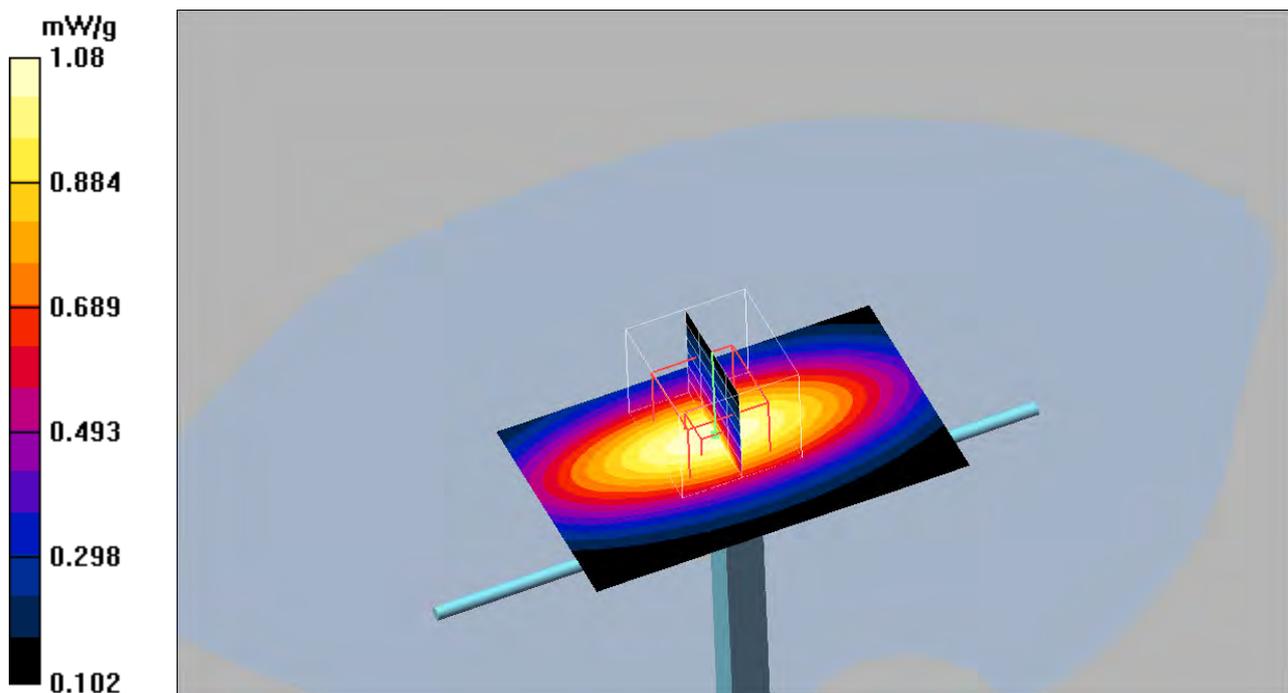
P=100mW, 15mm distance/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 33.0 V/m; Power Drift = 0.003 dB

Peak SAR (extrapolated) = 1.40 W/kg

SAR(1 g) = 0.997 mW/g; SAR(10 g) = 0.662 mW/g

Maximum value of SAR (measured) = 1.08 mW/g



Date/Time: 2009-06-22 19:48:23

Test Laboratory: Sony Ericsson Mobile Communications
 File Name: [Speech_GSM1900_090622_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15593
Program Name: SAR Measurement on the Body

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 53.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(4.42, 4.42, 4.42); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 6; Type: SAM; Serial: 1351
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

FB+15mm, BT, Low/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.724 mW/g

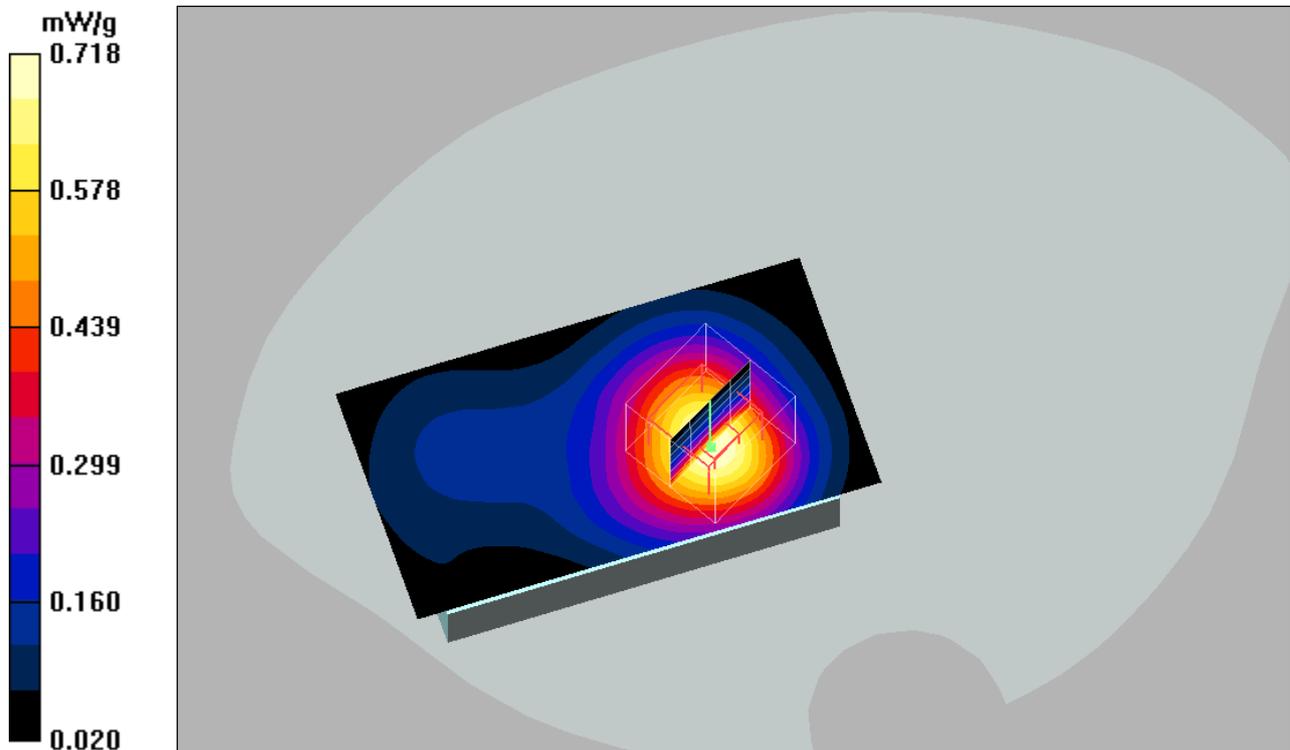
FB+15mm, BT, Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.5 V/m; Power Drift = -0.016 dB

Peak SAR (extrapolated) = 0.985 W/kg

SAR(1 g) = 0.662 mW/g; SAR(10 g) = 0.417 mW/g

Maximum value of SAR (measured) = 0.718 mW/g



Date/Time: 2009-06-16 13:35:44

Test Laboratory: Sony Ericsson Mobile Communications
 File Name: [Speech_GSM835_090616_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15593
Program Name: SAR Measurement on the Body

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 849$ MHz; $\sigma = 0.979$ mho/m; $\epsilon_r = 53.4$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(6.22, 6.22, 6.22); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 6; Type: SAM; Serial: 1351
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

15mm High BT/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 1.00 mW/g

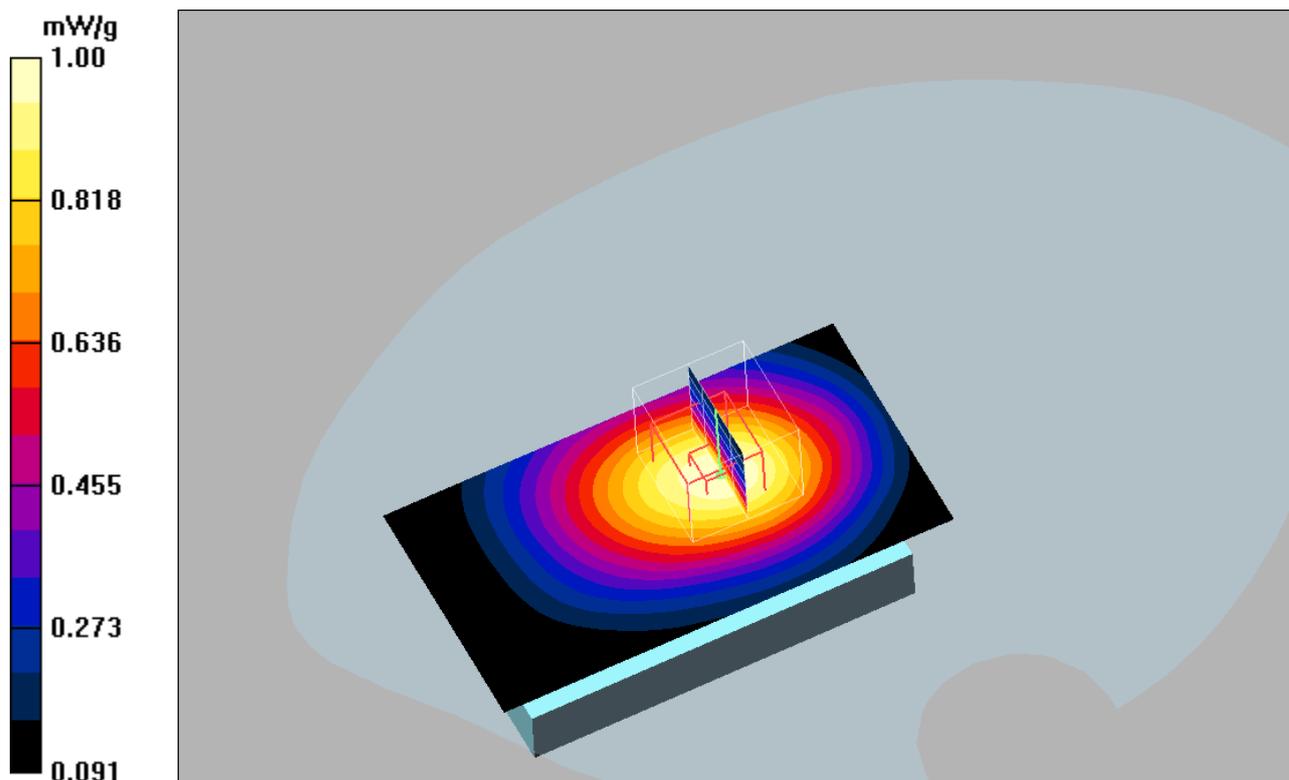
15mm High BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.6 V/m; Power Drift = 0.020 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.941 mW/g; SAR(10 g) = 0.681 mW/g

Maximum value of SAR (measured) = 1.00 mW/g



Date/Time: 2009-06-22 19:28:56

Test Laboratory: Sony Ericsson Mobile Communications
File Name: [Speech_GSM1900_090622_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15593
Program Name: SAR Measurement on the Body

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 53.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(4.42, 4.42, 4.42); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 6; Type: SAM; Serial: 1351
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

FB+15mm, PHF, Low/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.443 mW/g

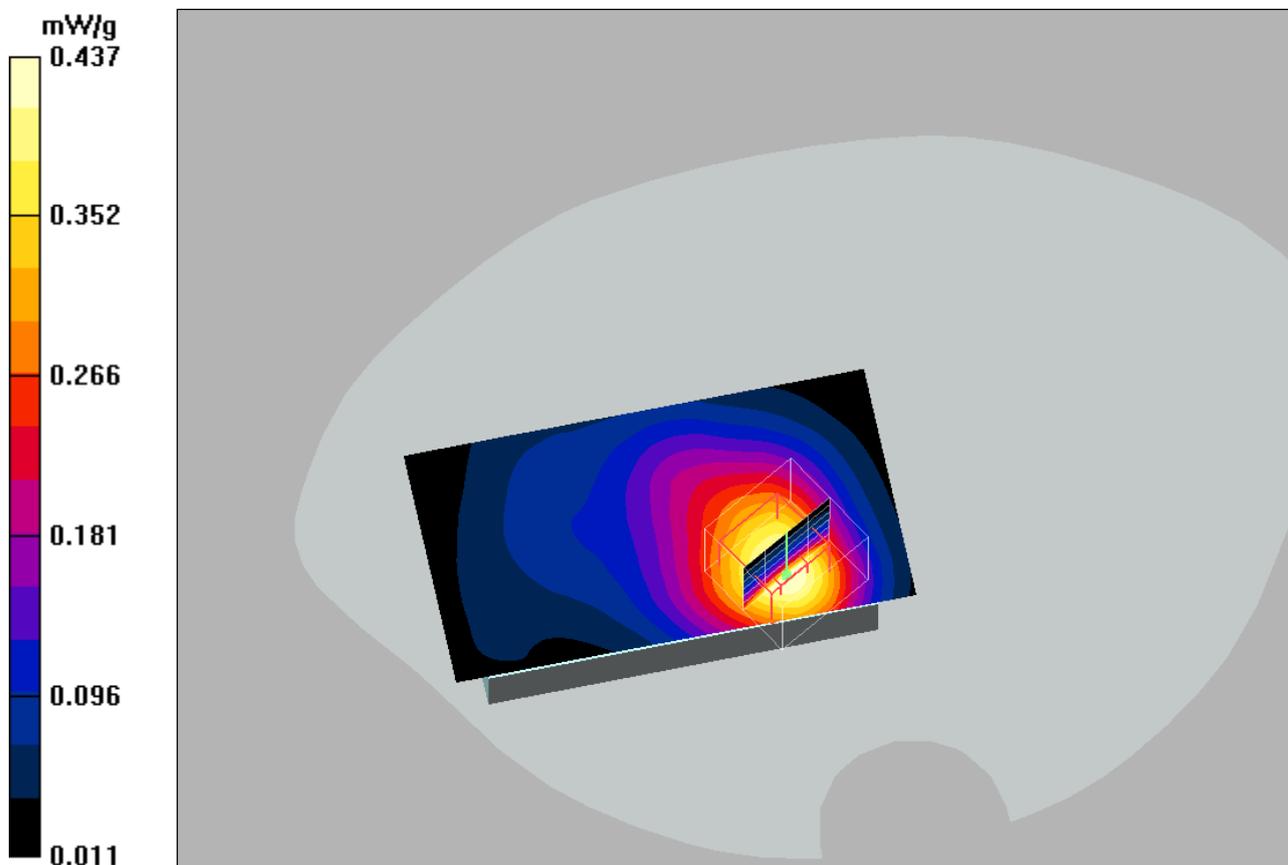
FB+15mm, PHF, Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.72 V/m; Power Drift = -0.059 dB

Peak SAR (extrapolated) = 0.619 W/kg

SAR(1 g) = 0.403 mW/g; SAR(10 g) = 0.250 mW/g

Maximum value of SAR (measured) = 0.437 mW/g



Date/Time: 2009-06-16 13:15:37

Test Laboratory: Sony Ericsson Mobile Communications
 File Name: [Speech_GSM835_090616_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15593
Program Name: SAR Measurement on the Body

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 849$ MHz; $\sigma = 0.979$ mho/m; $\epsilon_r = 53.4$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(6.22, 6.22, 6.22); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 6; Type: SAM; Serial: 1351
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

15mm High PHF/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.986 mW/g

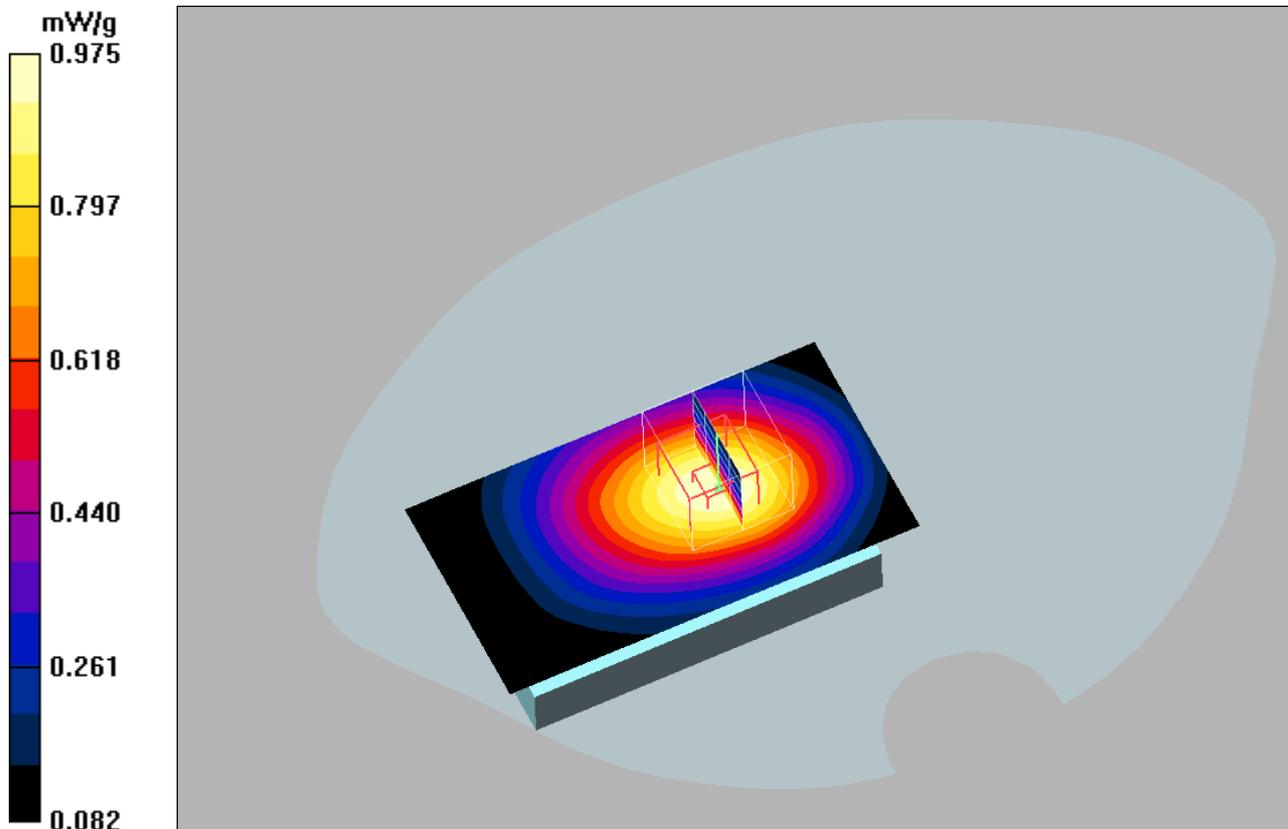
15mm High PHF/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm,
 dz=5mm

Reference Value = 23.5 V/m; Power Drift = -0.045 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.917 mW/g; SAR(10 g) = 0.661 mW/g

Maximum value of SAR (measured) = 0.975 mW/g



Date/Time: 2009-06-23 14:51:49

Test Laboratory: Sony Ericsson Mobile Communications
 File Name: [Right Wlan_090623_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15596
Program Name: SAR Measurement on the Head

Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.88$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(4.32, 4.32, 4.32); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 6; Type: SAM; Serial: 1351
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Tilt Middle/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.216 mW/g

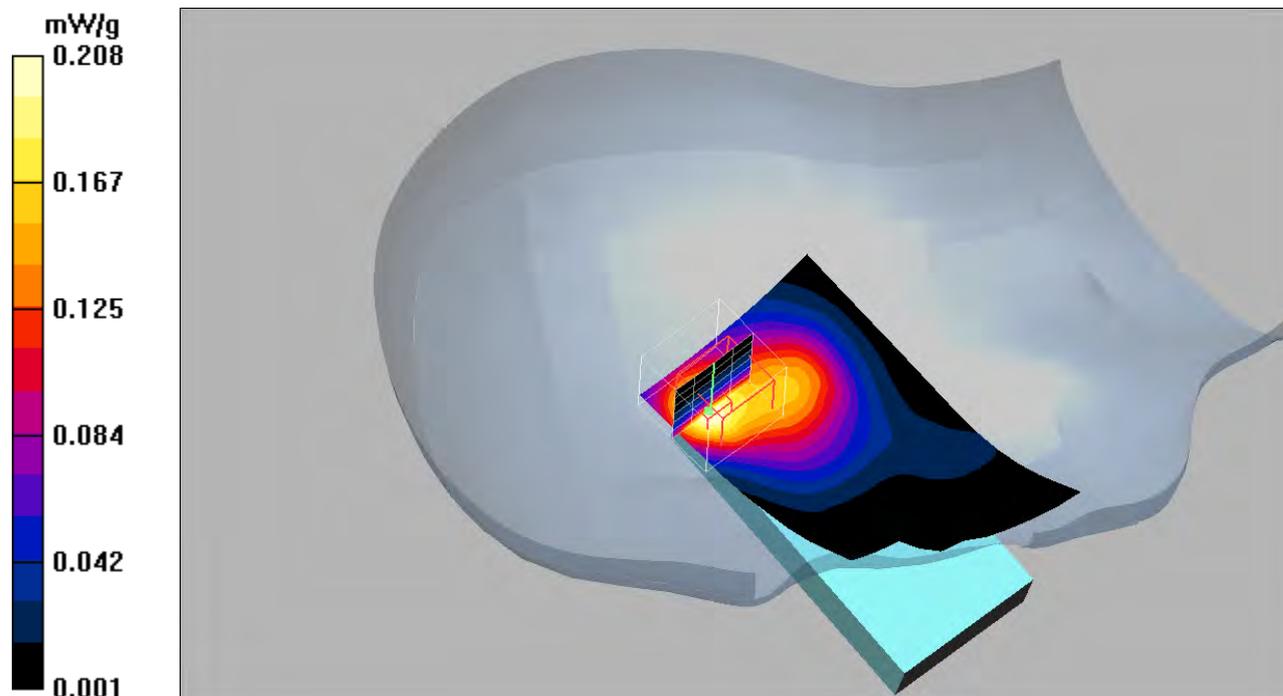
Right Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

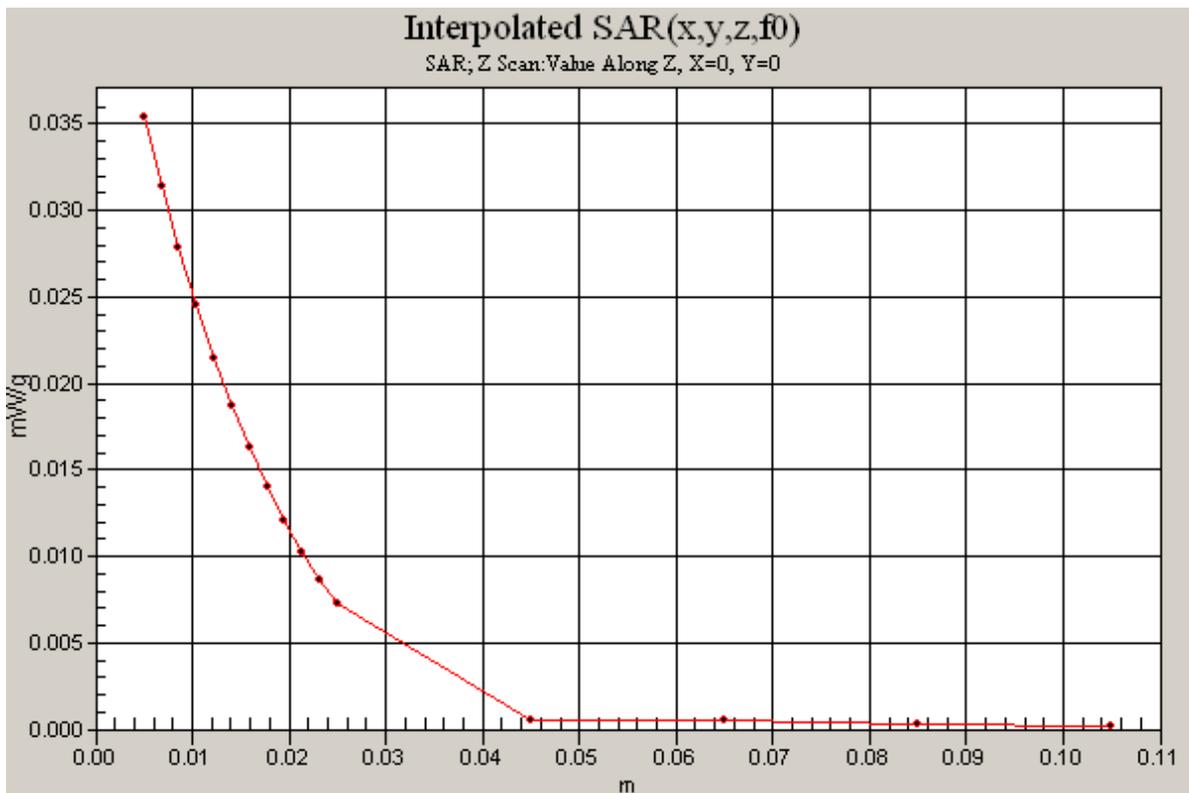
Reference Value = 8.89 V/m; Power Drift = -0.023 dB

Peak SAR (extrapolated) = 0.398 W/kg

SAR(1 g) = 0.191 mW/g; SAR(10 g) = 0.099 mW/g

Maximum value of SAR (measured) = 0.208 mW/g





Date/Time: 2009-06-22 11:09:55

Test Laboratory: Sony Ericsson Mobile Communications
 File Name: [Right_GSM1900_090622_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15593
Program Name: SAR Measurement on the Head

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.45$ mho/m; $\epsilon_r = 38.5$; $\rho = 1000$ kg/m³
 Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(4.99, 4.99, 4.99); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 6; Type: SAM; Serial: 1351
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Tilt Middle/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.370 mW/g

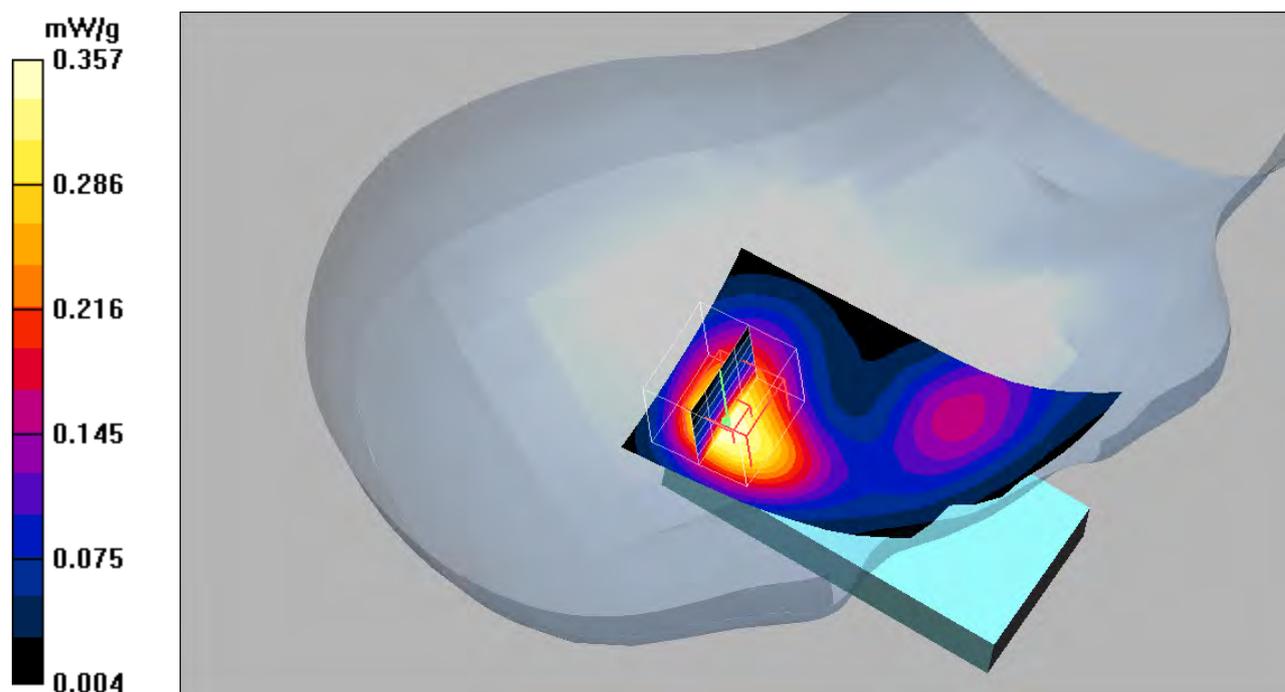
Right Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

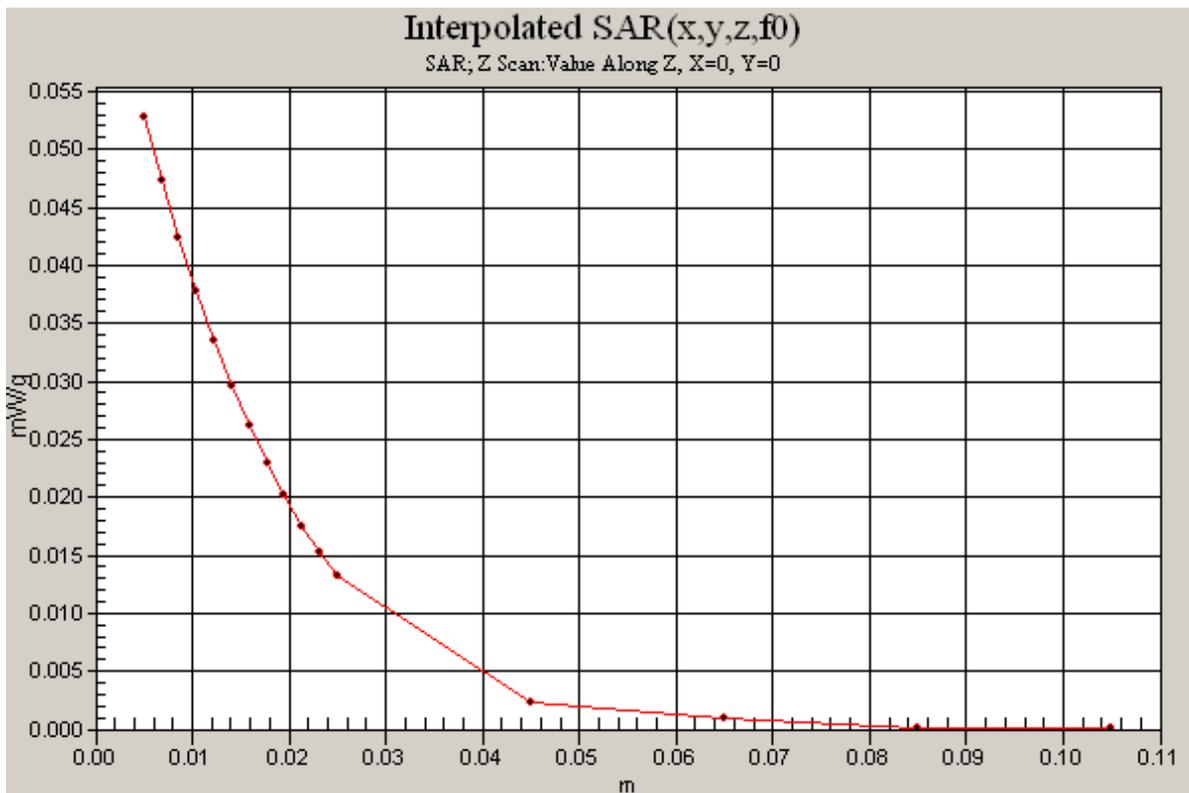
Reference Value = 14.9 V/m; Power Drift = -0.010 dB

Peak SAR (extrapolated) = 0.504 W/kg

SAR(1 g) = 0.331 mW/g; SAR(10 g) = 0.204 mW/g

Maximum value of SAR (measured) = 0.357 mW/g





Date/Time: 2009-06-11 10:21:17

Test Laboratory: Sony Ericsson Mobile Communications
 File Name: [Right_GSM850_090611_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15593
Program Name: SAR Measurement on the Head

Communication System: GSM835MHz; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.896$ mho/m; $\epsilon_r = 42.8$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(6.36, 6.36, 6.36); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 5; Type: SAM; Serial: 1352
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Tilt Middle/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.462 mW/g

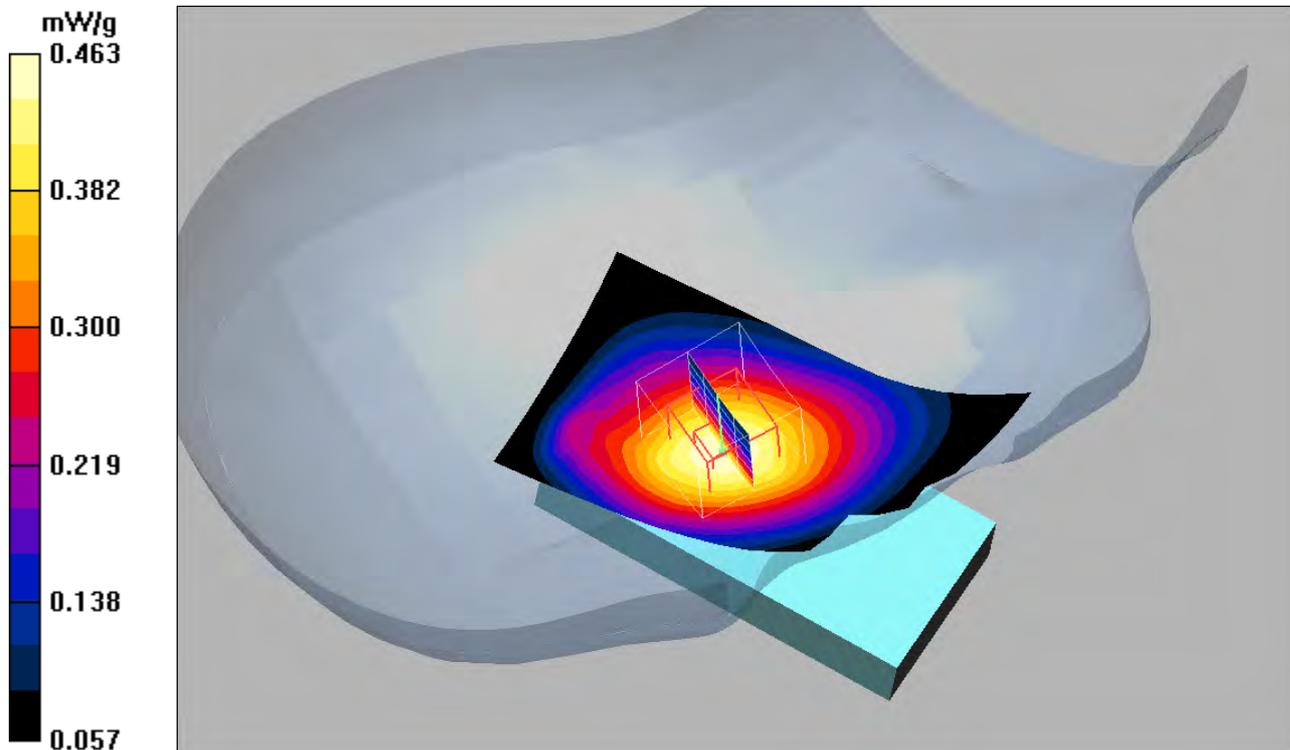
Right Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.3 V/m; Power Drift = 0.089 dB

Peak SAR (extrapolated) = 0.543 W/kg

SAR(1 g) = 0.436 mW/g; SAR(10 g) = 0.324 mW/g

Maximum value of SAR (measured) = 0.463 mW/g



Date/Time: 2009-06-23 15:29:41

Test Laboratory: Sony Ericsson Mobile Communications
 File Name: [Right Wlan_090623_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15596
Program Name: SAR Measurement on the Head

Communication System: WLAN; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2462$ MHz; $\sigma = 1.89$ mho/m; $\epsilon_r = 38.7$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(4.32, 4.32, 4.32); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 6; Type: SAM; Serial: 1351
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Cheek High FCC/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.572 mW/g

Right Cheek High FCC/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.6 V/m; Power Drift = -0.002 dB

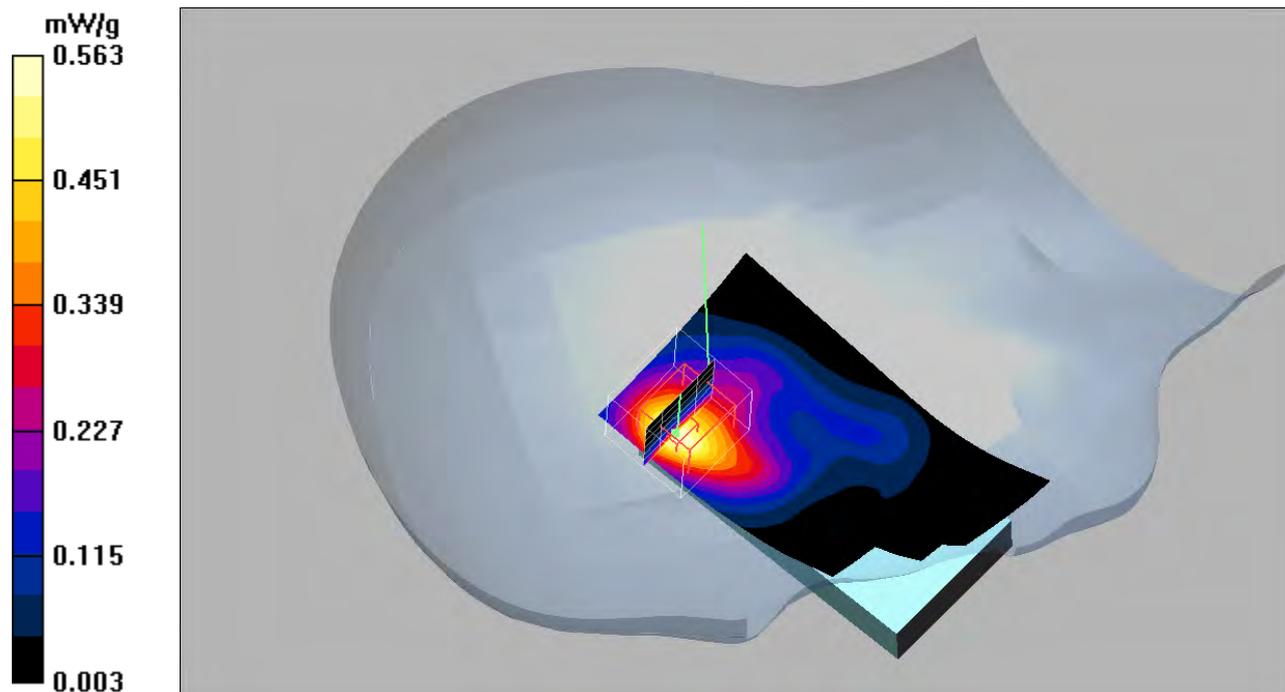
Peak SAR (extrapolated) = 1.11 W/kg

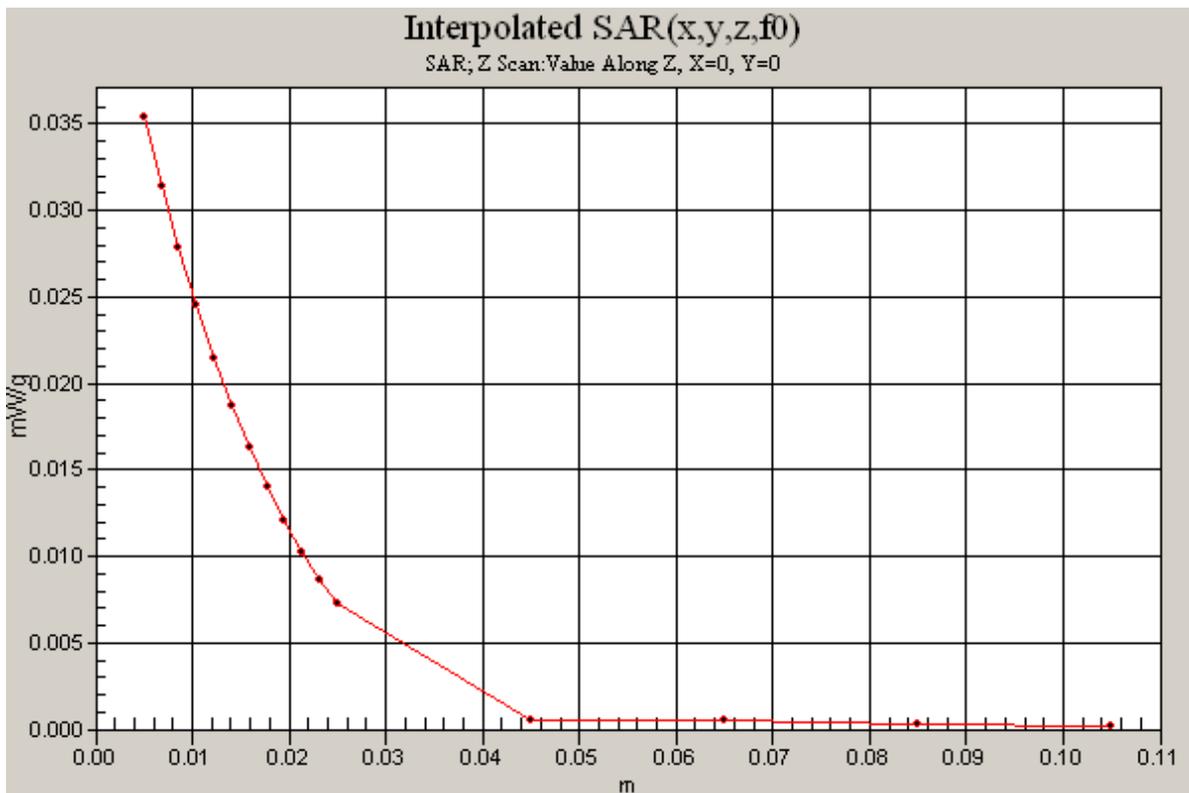
SAR(1 g) = 0.510 mW/g; SAR(10 g) = 0.257 mW/g

Maximum value of SAR (measured) = 0.563 mW/g

Right Cheek High FCC/Z Scan (1x1x16): Measurement grid: dx=20mm, dy=20mm, dz=20mm

Maximum value of SAR (interpolated) = 0.035 mW/g





Date/Time: 2009-06-22 11:27:04

Test Laboratory: Sony Ericsson Mobile Communications
 File Name: [Right_GSM1900_090622_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15593
Program Name: SAR Measurement on the Head

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 38.6$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(4.99, 4.99, 4.99); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 6; Type: SAM; Serial: 1351
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Cheek Low/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.16 mW/g

Right Cheek Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.6 V/m; Power Drift = -0.004 dB

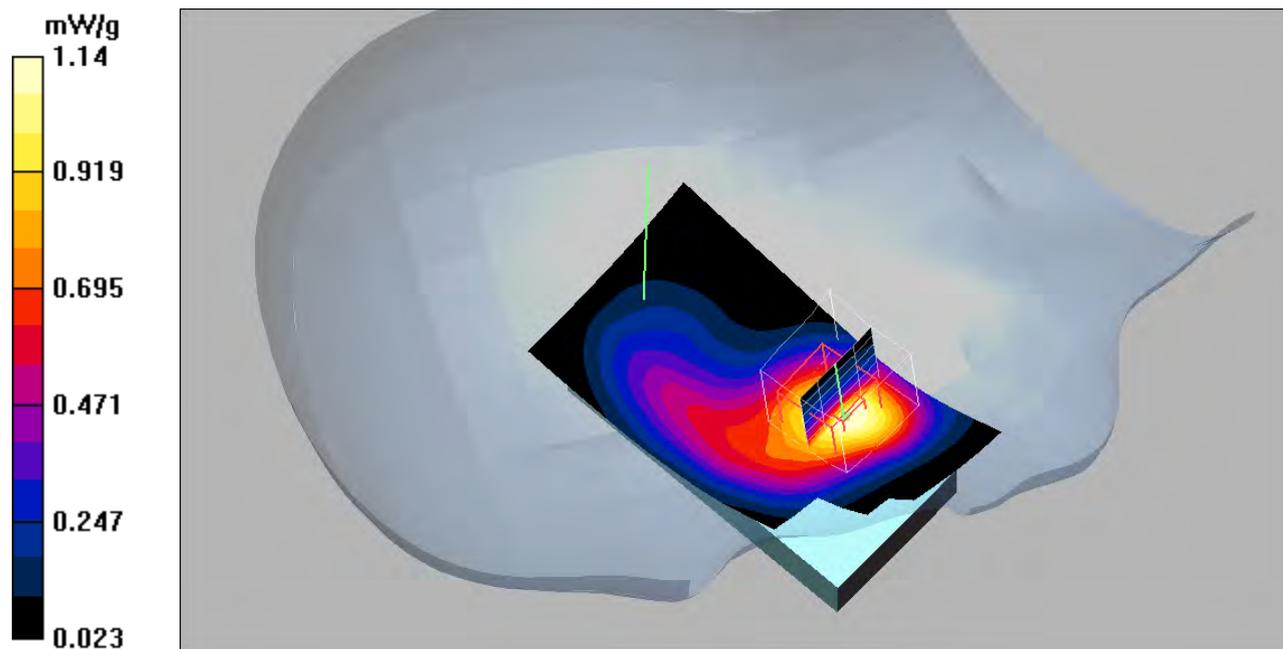
Peak SAR (extrapolated) = 1.53 W/kg

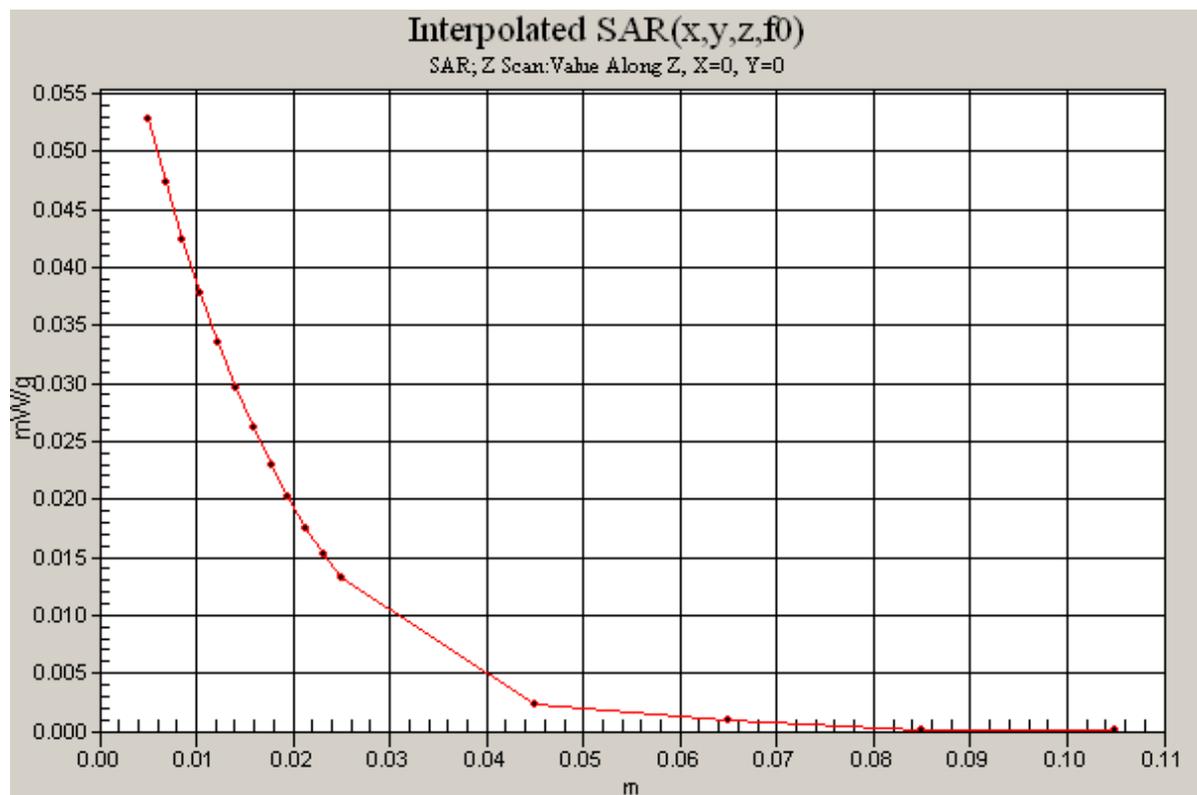
SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.643 mW/g

Maximum value of SAR (measured) = 1.14 mW/g

Right Cheek Low/Z Scan (1x1x16): Measurement grid: dx=20mm, dy=20mm, dz=20mm

Maximum value of SAR (interpolated) = 0.053 mW/g





Date/Time: 2009-06-11 10:46:09

Test Laboratory: Sony Ericsson Mobile Communications
 File Name: [Right_GSM850_090611_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15593
Program Name: SAR Measurement on the Head

Communication System: GSM835MHz; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated): $f = 848.8$ MHz; $\sigma = 0.912$ mho/m; $\epsilon_r = 42.4$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(6.36, 6.36, 6.36); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 5; Type: SAM; Serial: 1352
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

Right Cheek High/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.16 mW/g

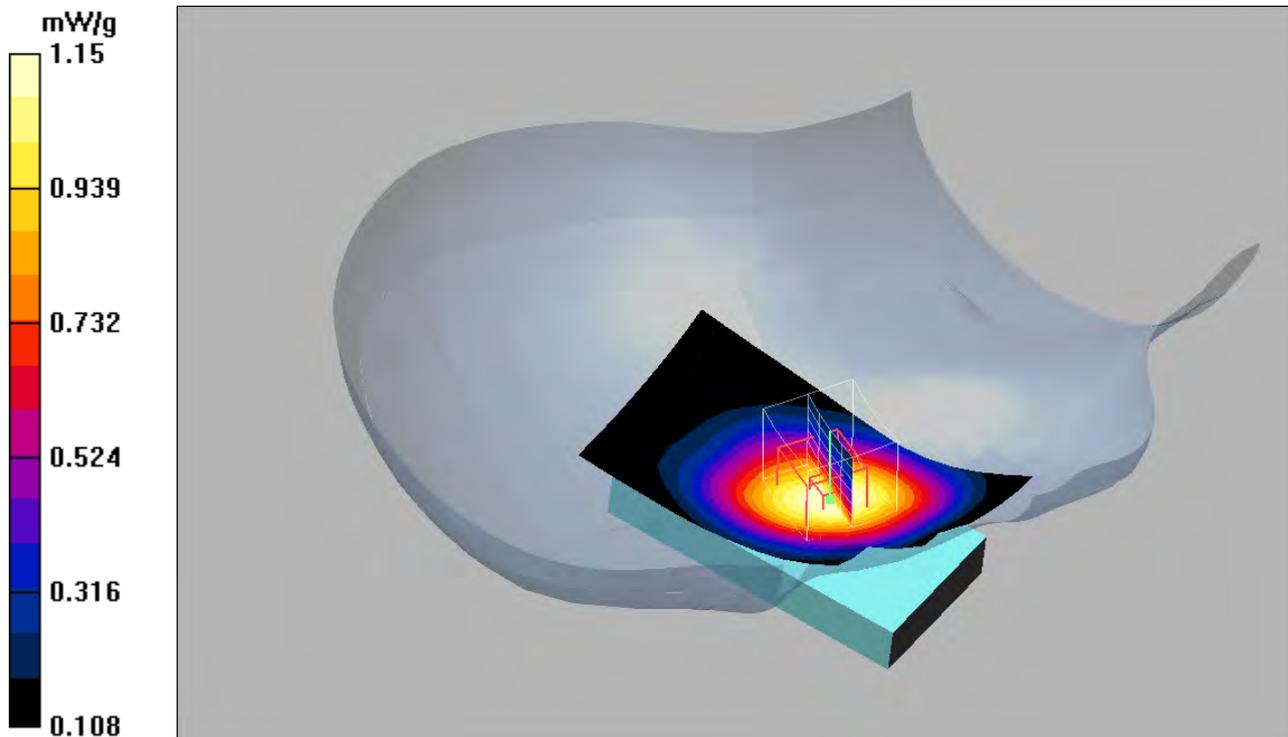
Right Cheek High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.3 V/m; Power Drift = -0.019 dB

Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.784 mW/g

Maximum value of SAR (measured) = 1.15 mW/g



Date/Time: 2009-06-23 16:42:16

Test Laboratory: Sony Ericsson Mobile Communications
 File Name: [Left Wlan_090623_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15596
Program Name: SAR Measurement on the Head

Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.88$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(4.32, 4.32, 4.32); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 6; Type: SAM; Serial: 1351
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

Left Tilt Middle/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.260 mW/g

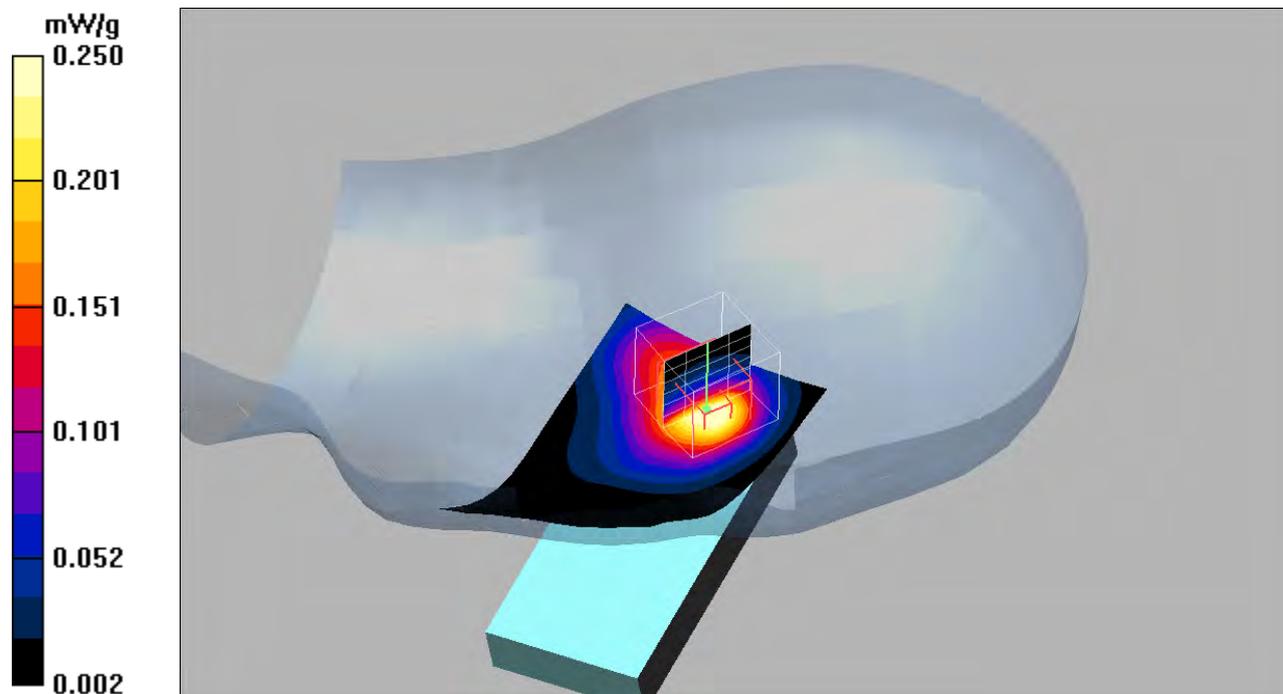
Left Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

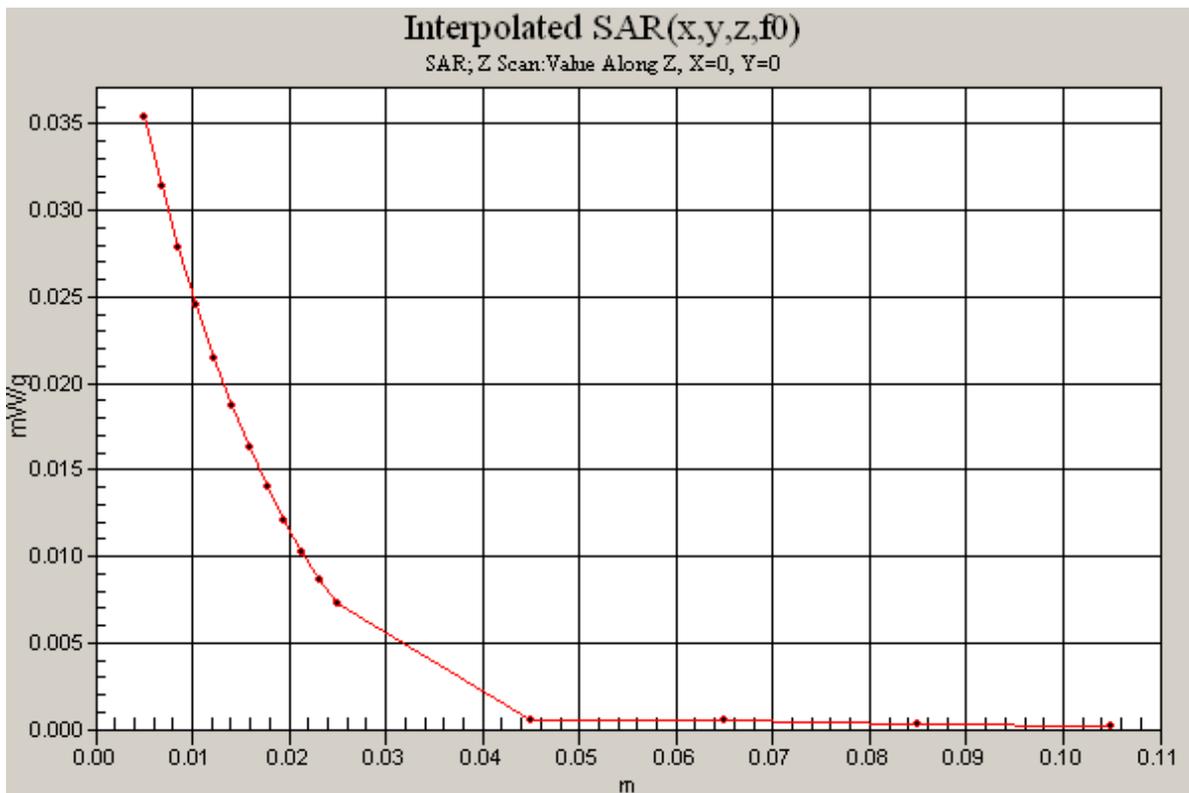
Reference Value = 10.9 V/m; Power Drift = -0.009 dB

Peak SAR (extrapolated) = 0.431 W/kg

SAR(1 g) = 0.234 mW/g; SAR(10 g) = 0.126 mW/g

Maximum value of SAR (measured) = 0.250 mW/g





Date/Time: 2009-06-22 13:10:21

Test Laboratory: Sony Ericsson Mobile Communications
 File Name: [Left GSM1900_090622_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15593
Program Name: SAR Measurement on the Head

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.45$ mho/m; $\epsilon_r = 38.5$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(4.99, 4.99, 4.99); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 6; Type: SAM; Serial: 1351
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

Left Tilt Middle/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.311 mW/g

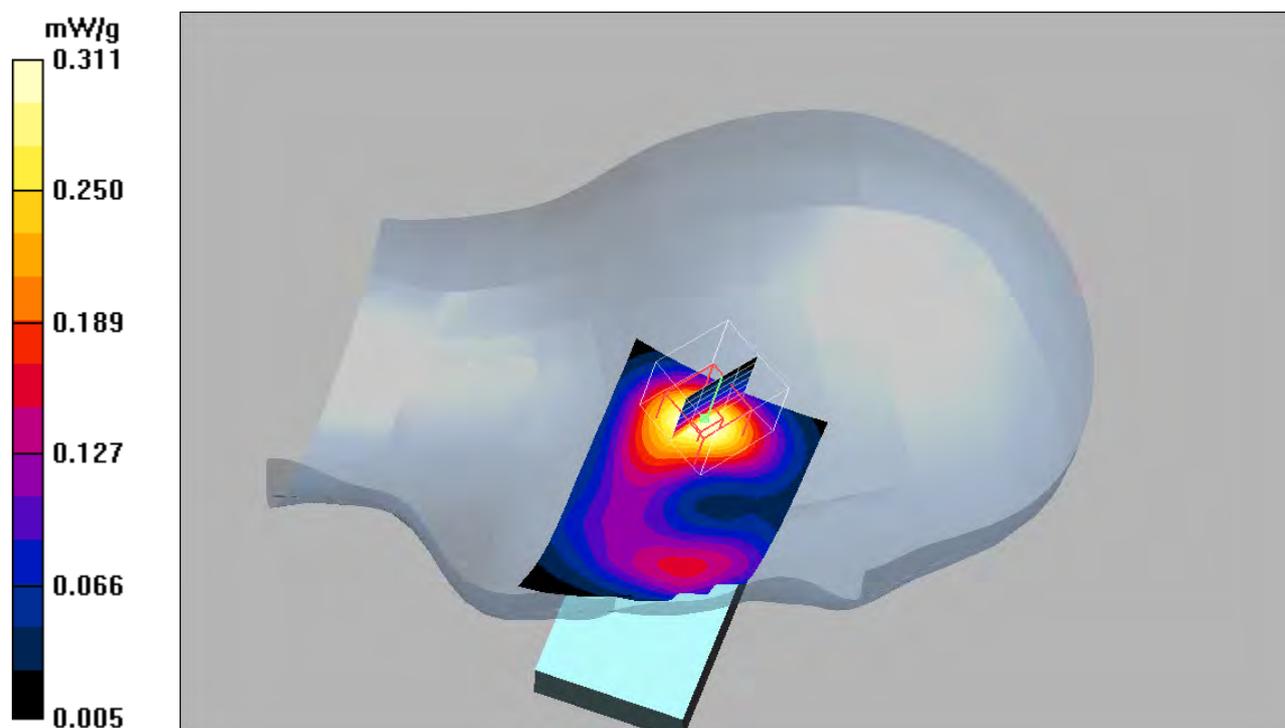
Left Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

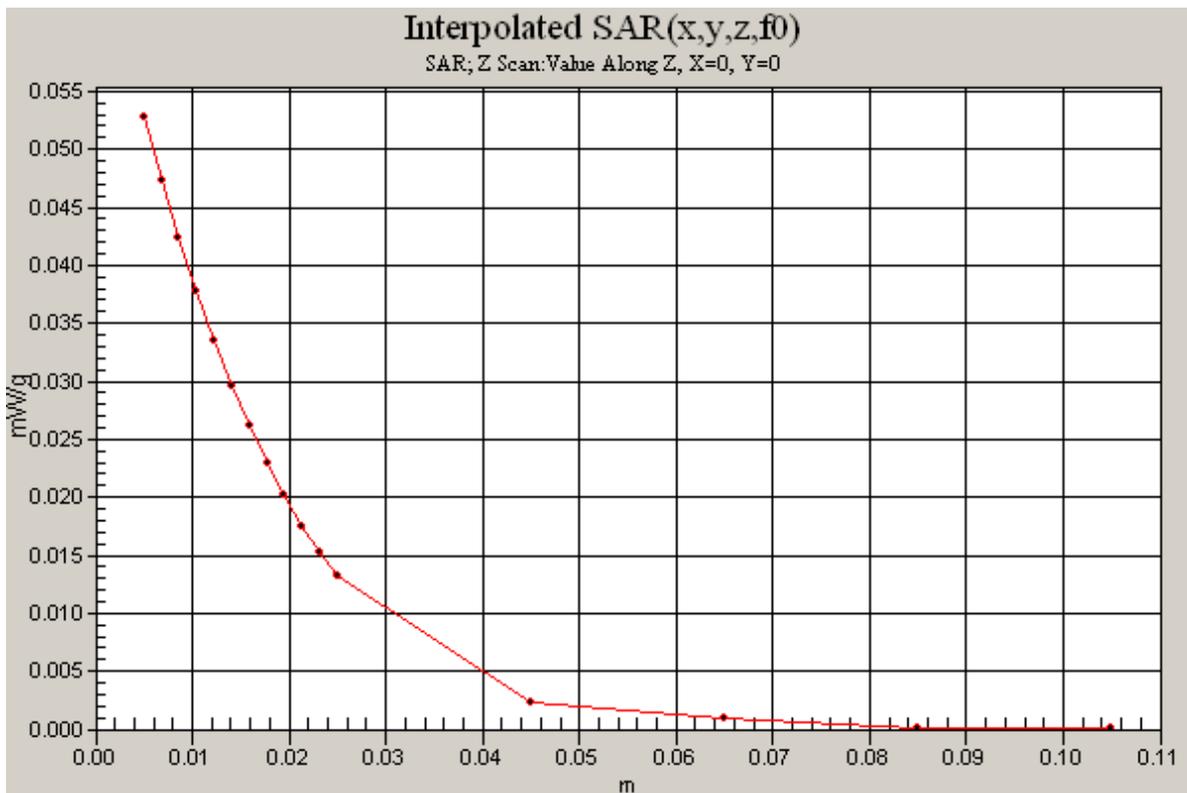
Reference Value = 15.3 V/m; Power Drift = 0.001 dB

Peak SAR (extrapolated) = 0.414 W/kg

SAR(1 g) = 0.285 mW/g; SAR(10 g) = 0.173 mW/g

Maximum value of SAR (measured) = 0.311 mW/g





Date/Time: 2009-06-11 11:41:06

Test Laboratory: Sony Ericsson Mobile Communications
 File Name: [Left GSM850_090611_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15593
Program Name: SAR Measurement on the Head

Communication System: GSM835MHz; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.896$ mho/m; $\epsilon_r = 42.8$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(6.36, 6.36, 6.36); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 5; Type: SAM; Serial: 1352
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

Left Tilt Middle/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.421 mW/g

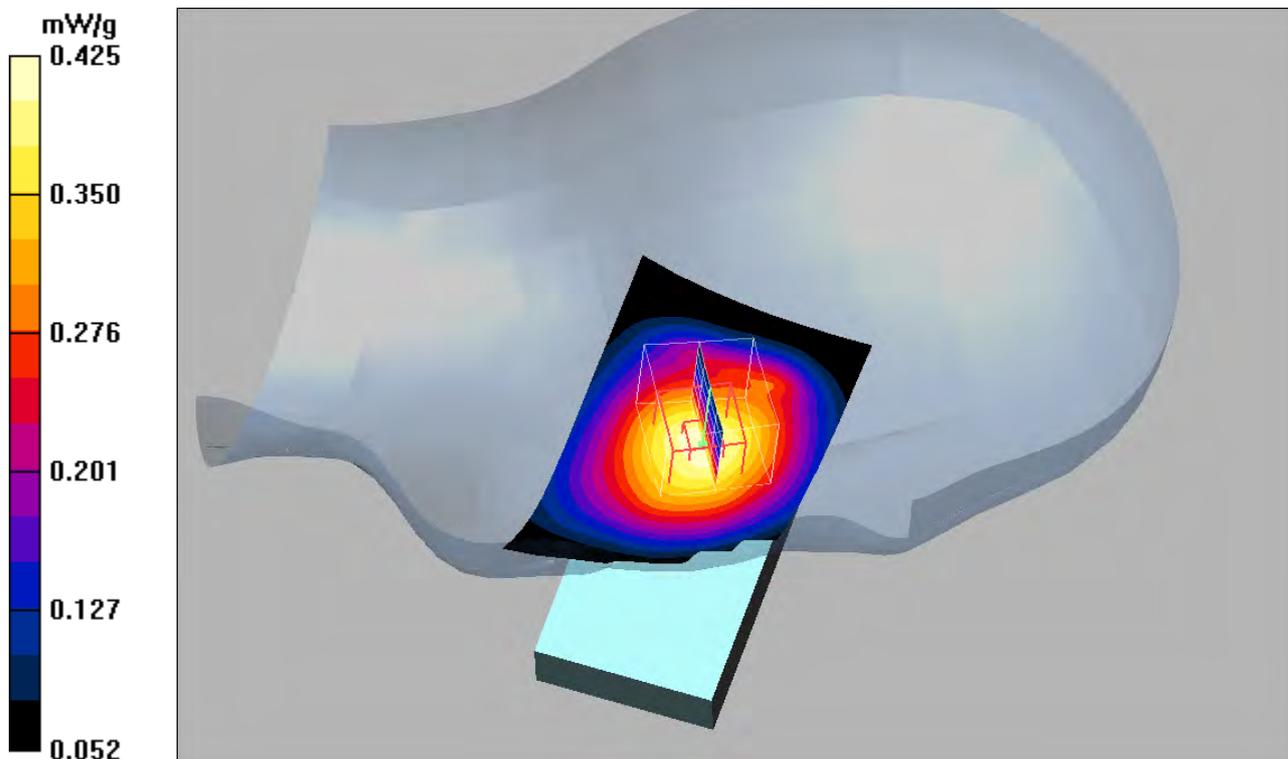
Left Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.8 V/m; Power Drift = 0.069 dB

Peak SAR (extrapolated) = 0.500 W/kg

SAR(1 g) = 0.398 mW/g; SAR(10 g) = 0.296 mW/g

Maximum value of SAR (measured) = 0.425 mW/g



Date/Time: 2009-06-23 16:22:54

Test Laboratory: Sony Ericsson Mobile Communications
 File Name: [Left Wlan_090623_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15596
Program Name: SAR Measurement on the Head

Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.88$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(4.32, 4.32, 4.32); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 6; Type: SAM; Serial: 1351
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

Left Cheek Middle/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.348 mW/g

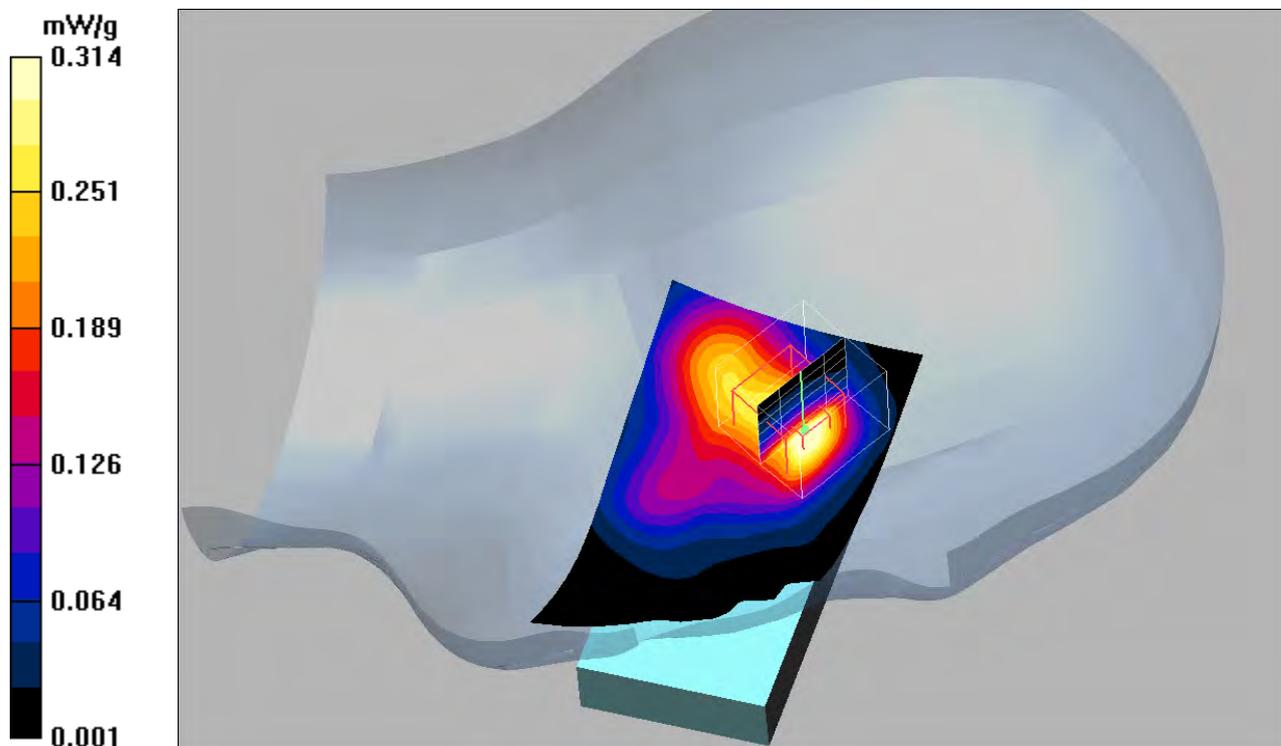
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

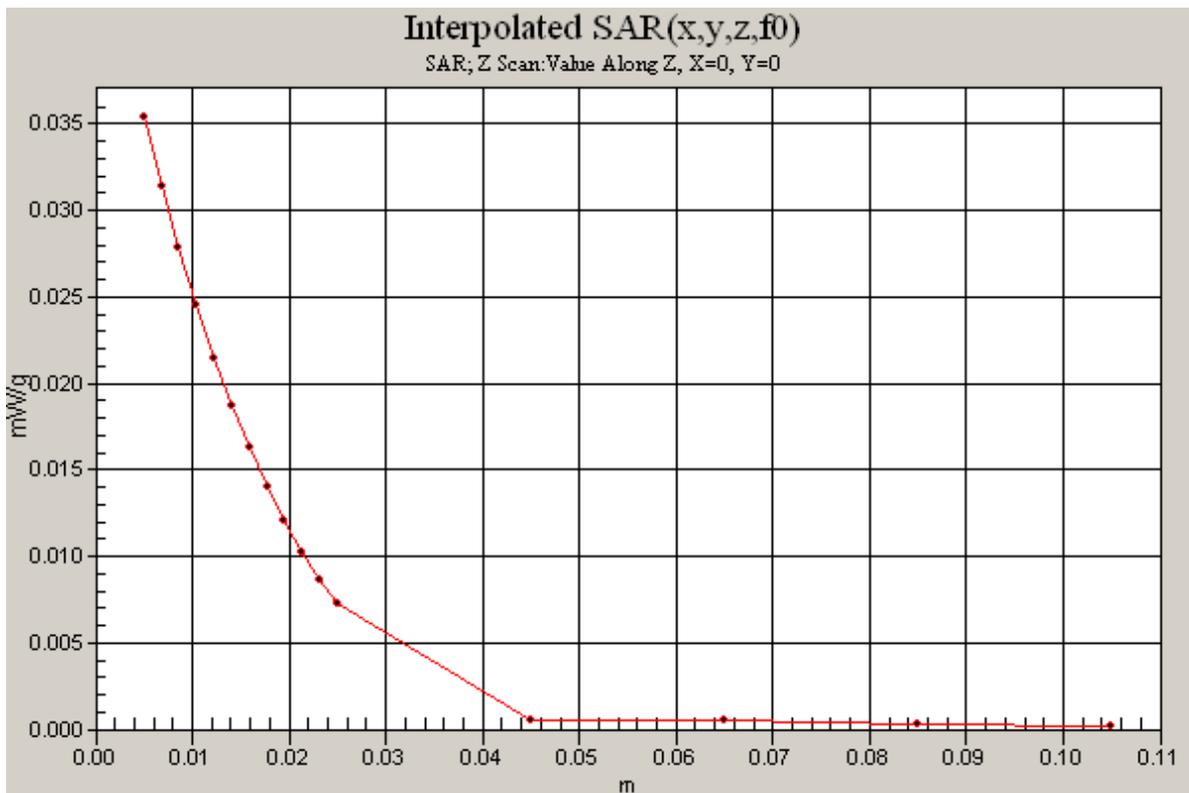
Reference Value = 10.5 V/m; Power Drift = -0.028 dB

Peak SAR (extrapolated) = 0.554 W/kg

SAR(1 g) = 0.292 mW/g; SAR(10 g) = 0.159 mW/g

Maximum value of SAR (measured) = 0.314 mW/g





Date/Time: 2009-06-22 12:20:39

Test Laboratory: Sony Ericsson Mobile Communications
 File Name: [Left GSM1900_090622_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15593
Program Name: SAR Measurement on the Head

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.45$ mho/m; $\epsilon_r = 38.5$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(4.99, 4.99, 4.99); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 6; Type: SAM; Serial: 1351
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

Left Cheek Middle/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 1.06 mW/g

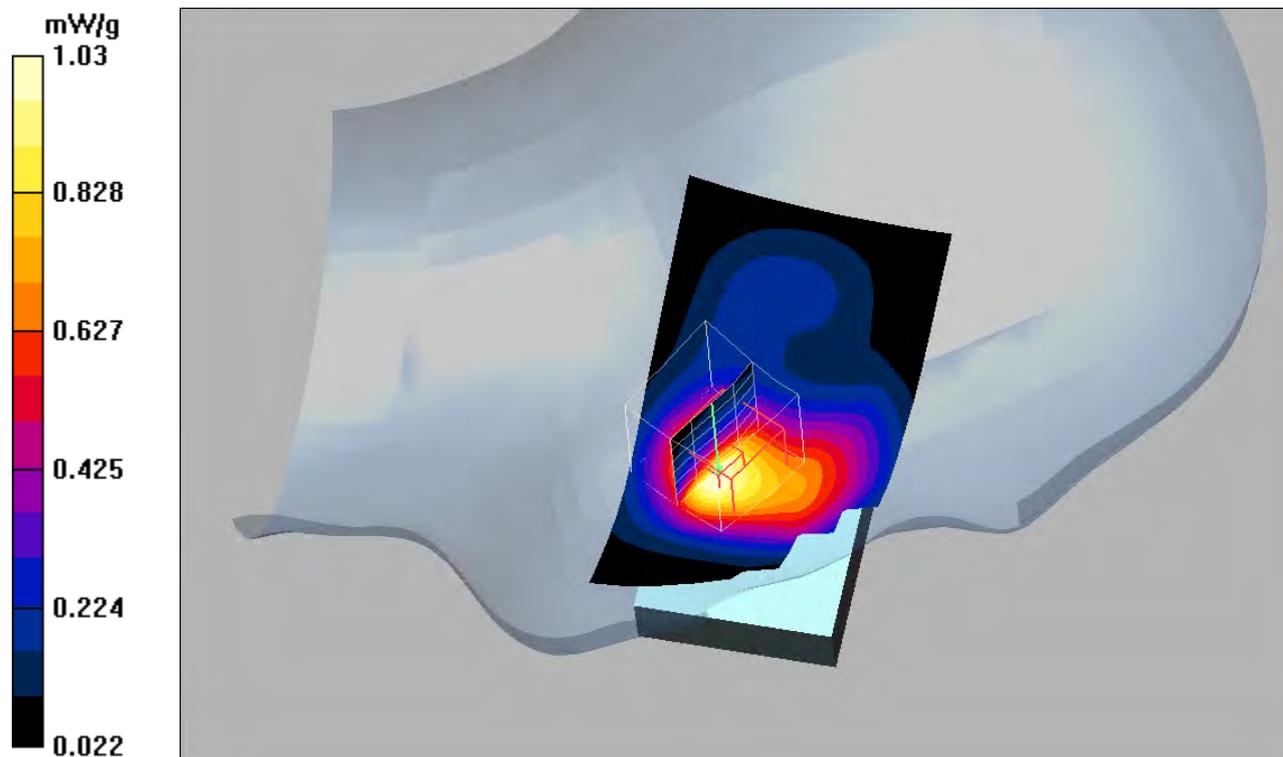
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm,
 dz=5mm

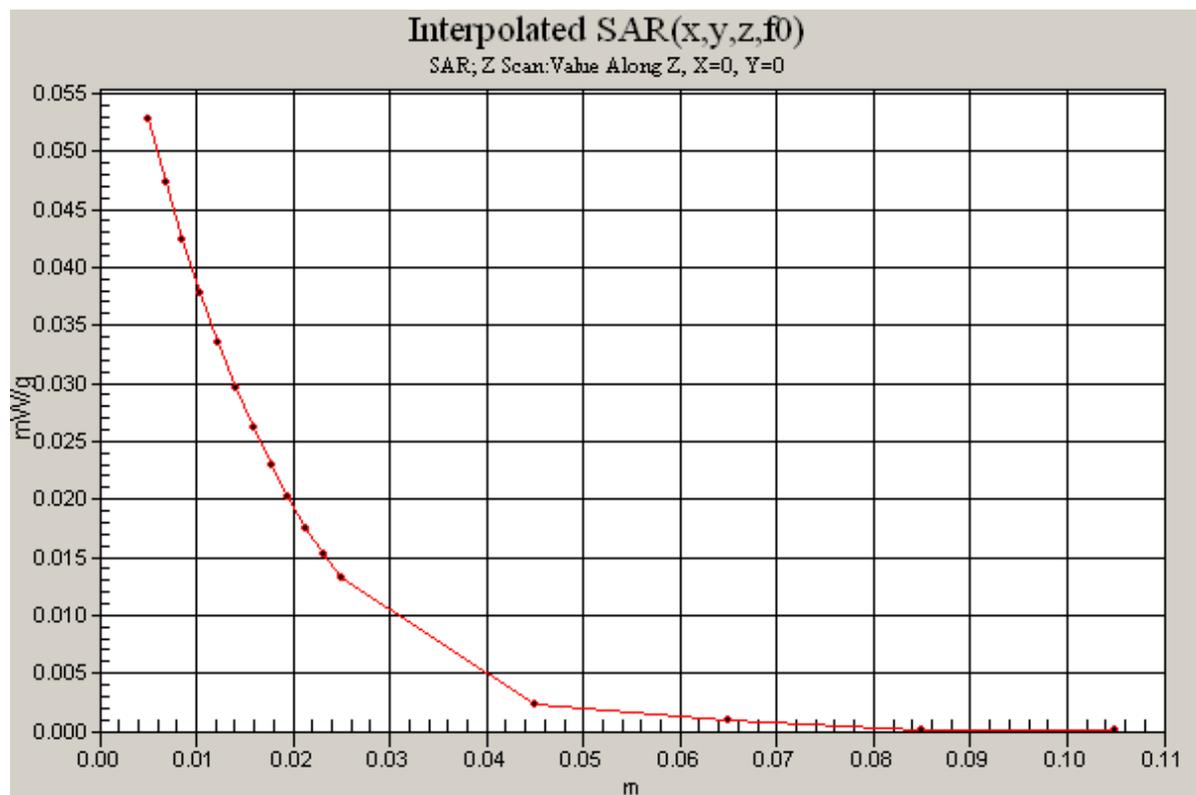
Reference Value = 11.0 V/m; Power Drift = -0.030 dB

Peak SAR (extrapolated) = 1.39 W/kg

SAR(1 g) = 0.941 mW/g; SAR(10 g) = 0.587 mW/g

Maximum value of SAR (measured) = 1.03 mW/g





Date/Time: 2009-06-11 11:21:44

Test Laboratory: Sony Ericsson Mobile Communications
 File Name: [Left GSM850_090611_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15593
Program Name: SAR Measurement on the Head

Communication System: GSM835MHz; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
 Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.896$ mho/m; $\epsilon_r = 42.8$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(6.36, 6.36, 6.36); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 5; Type: SAM; Serial: 1352
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

Left Cheek Middle/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.808 mW/g

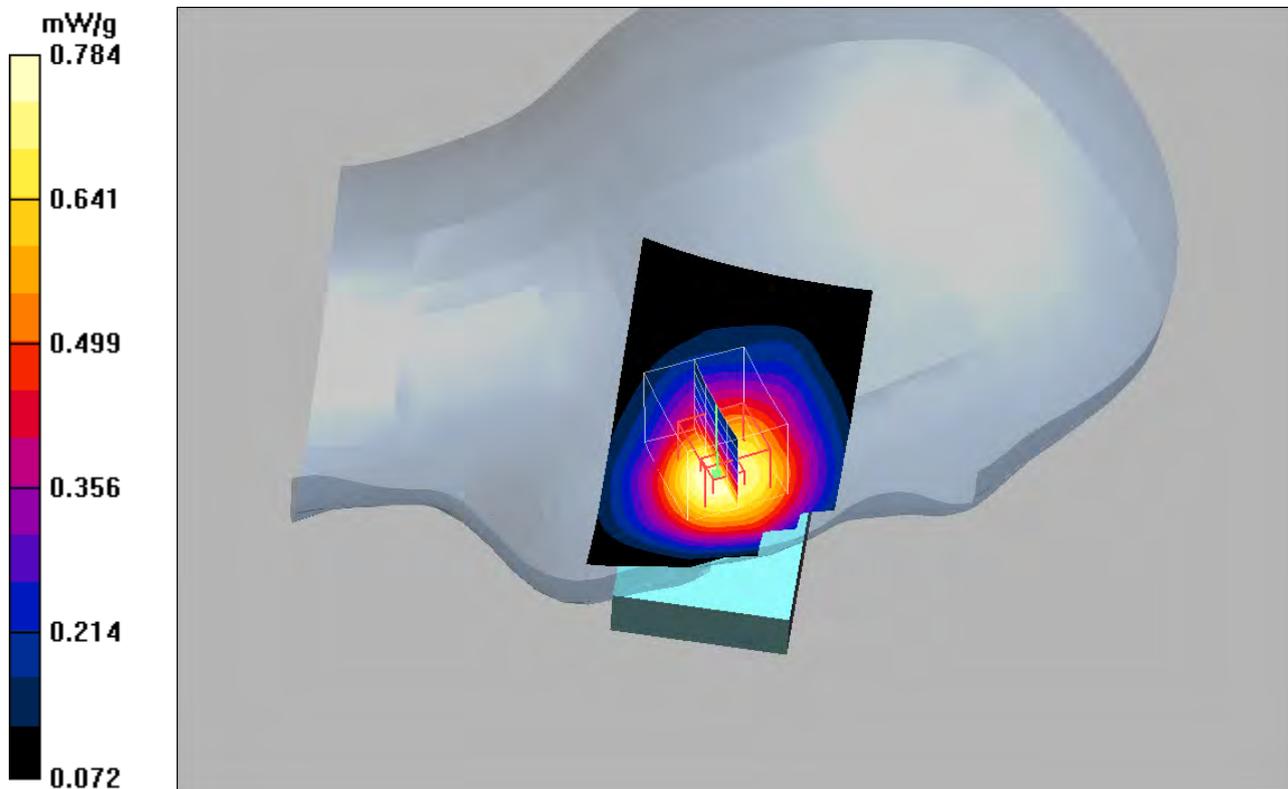
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.4 V/m; Power Drift = -0.008 dB

Peak SAR (extrapolated) = 0.948 W/kg

SAR(1 g) = 0.744 mW/g; SAR(10 g) = 0.542 mW/g

Maximum value of SAR (measured) = 0.784 mW/g



Date/Time: 2009-06-16 12:42:13

Test Laboratory: Sony Ericsson Mobile Communications
 File Name: [Data_GSM835_090616_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15593
Program Name: SAR Measurement on the Body

Communication System: GSM850 GPRS2TX; Frequency: 848.8 MHz; Duty Cycle: 1:4.15
 Medium parameters used: $f = 849$ MHz; $\sigma = 0.979$ mho/m; $\epsilon_r = 53.4$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(6.22, 6.22, 6.22); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 6; Type: SAM; Serial: 1351
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

15mm High Front/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.00 mW/g

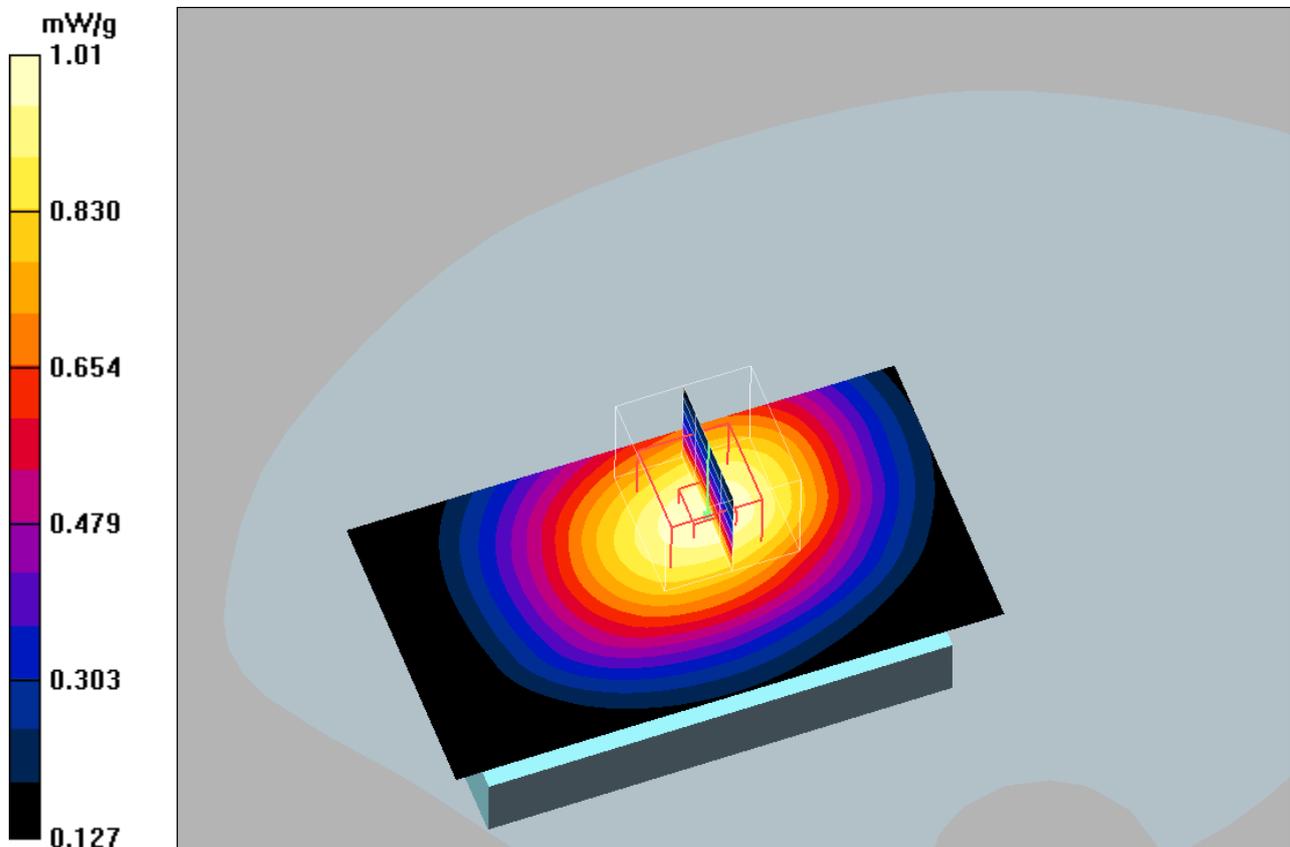
15mm High Front/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.6 V/m; Power Drift = 0.114 dB

Peak SAR (extrapolated) = 1.16 W/kg

SAR(1 g) = 0.945 mW/g; SAR(10 g) = 0.703 mW/g

Maximum value of SAR (measured) = 1.01 mW/g



Date/Time: 2009-06-16 12:14:45

Test Laboratory: Sony Ericsson Mobile Communications
 File Name: [Data_GSM835_090616_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15593
Program Name: SAR Measurement on the Body

Communication System: GSM850 GPRS2TX; Frequency: 848.8 MHz; Duty Cycle: 1:4.15
 Medium parameters used: $f = 849$ MHz; $\sigma = 0.979$ mho/m; $\epsilon_r = 53.4$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

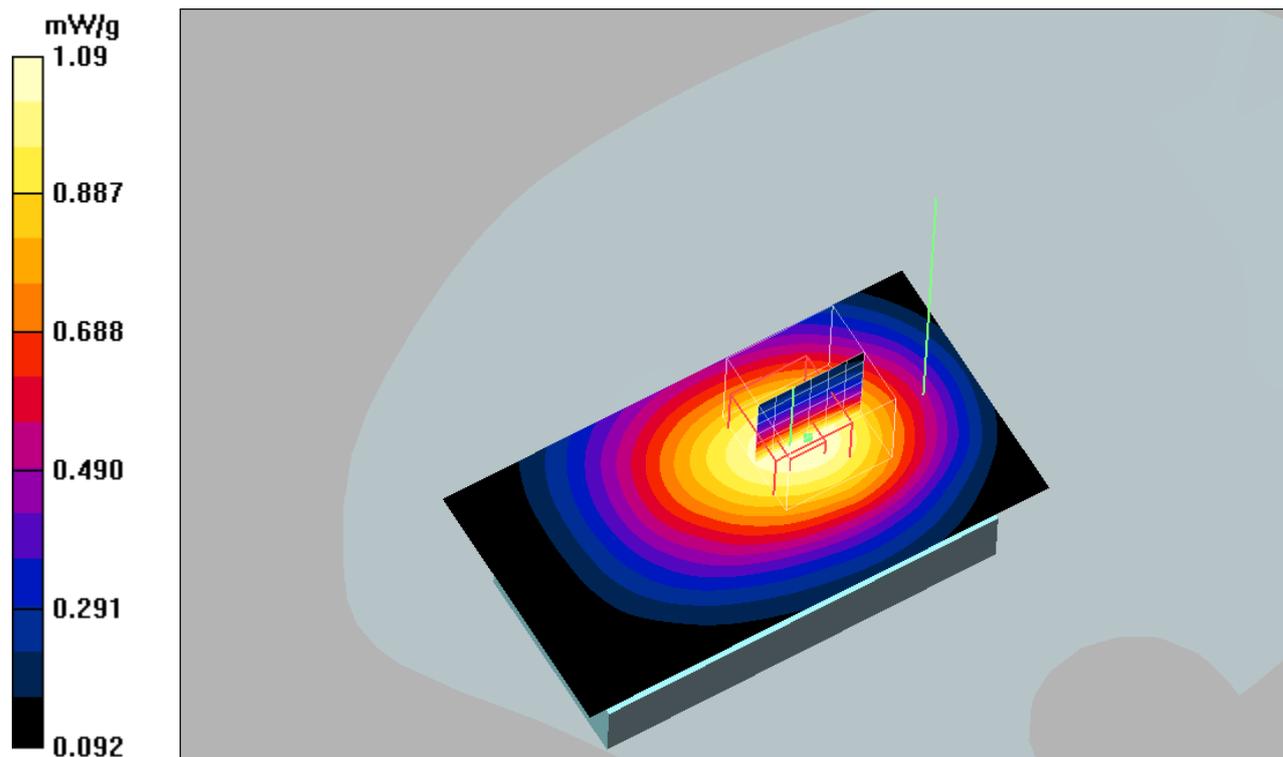
DASY4 Configuration:

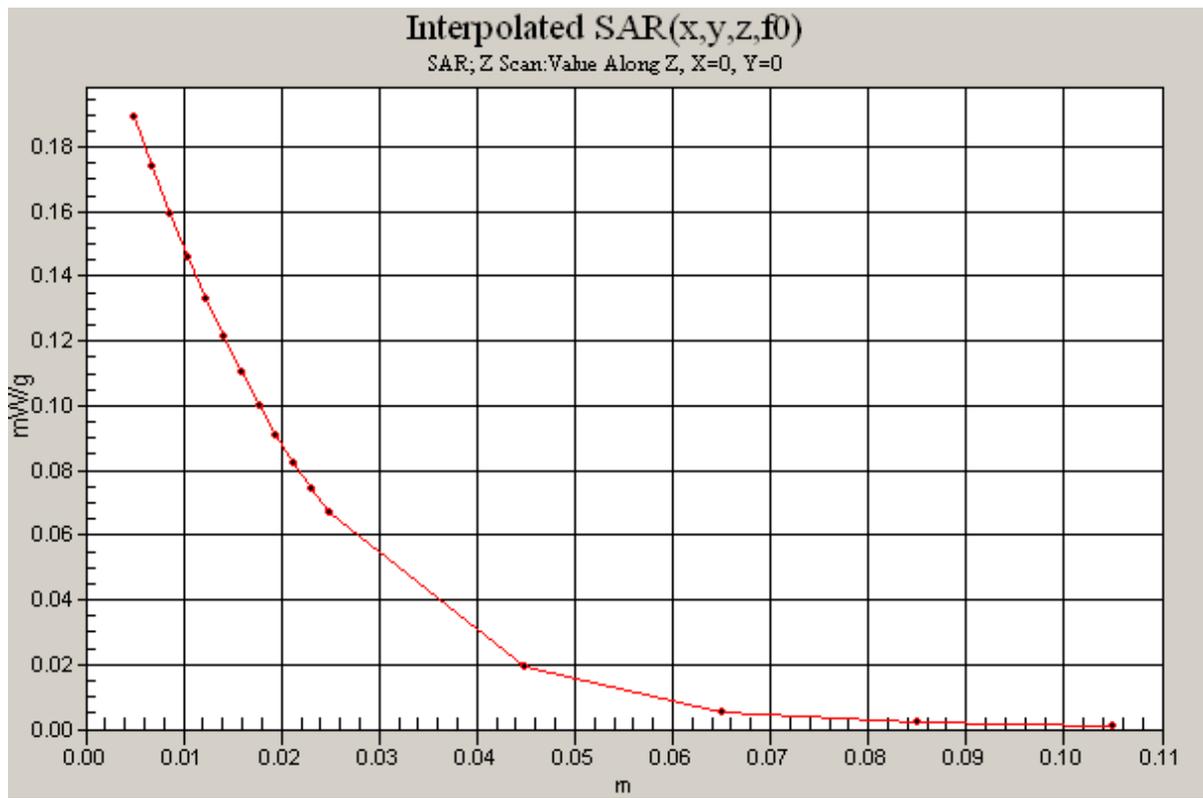
- Probe: ET3DV6 - SN1569; ConvF(6.22, 6.22, 6.22); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 6; Type: SAM; Serial: 1351
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

15mm High/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 1.09 mW/g

15mm High/Zoom Scan 2 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 24.7 V/m; Power Drift = 0.035 dB
 Peak SAR (extrapolated) = 1.31 W/kg
SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.739 mW/g
 Maximum value of SAR (measured) = 1.09 mW/g

15mm High/Z Scan (1x1x16): Measurement grid: dx=20mm, dy=20mm, dz=20mm
 Maximum value of SAR (interpolated) = 0.189 mW/g





Date/Time: 2009-06-22 19:02:21

Test Laboratory: Sony Ericsson Mobile Communications
 File Name: [Data_2TS_GSM1900_090622_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15593
Program Name: SAR Measurement on the Body

Communication System: GSM1900 GPRS2TX; Frequency: 1850.2 MHz; Duty Cycle: 1:4.15
 Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 53.8$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(4.42, 4.42, 4.42); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 6; Type: SAM; Serial: 1351
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

FF+15mm, GPRS 2TS, Low/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.589 mW/g

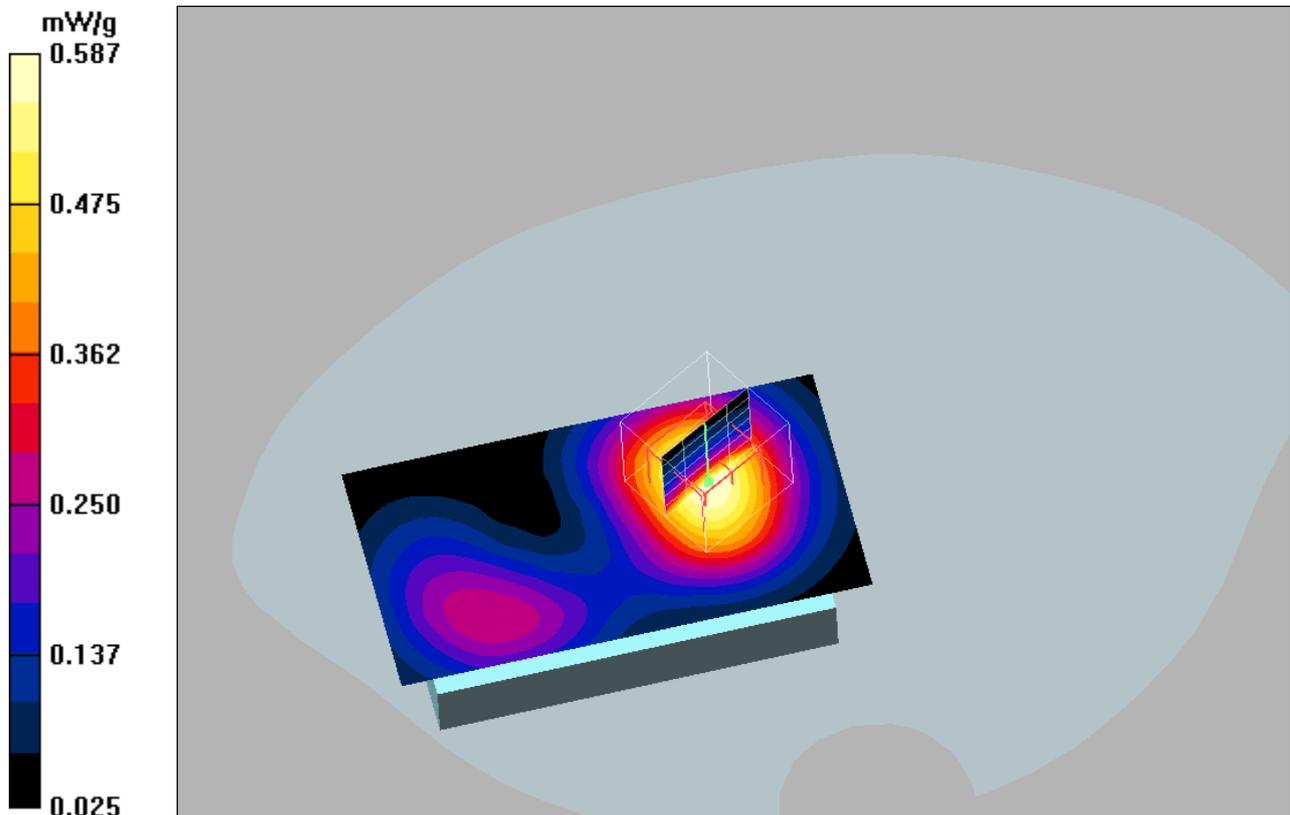
FF+15mm, GPRS 2TS, Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.3 V/m; Power Drift = 0.029 dB

Peak SAR (extrapolated) = 0.809 W/kg

SAR(1 g) = 0.545 mW/g; SAR(10 g) = 0.350 mW/g

Maximum value of SAR (measured) = 0.587 mW/g



Date/Time: 2009-06-22 17:34:47

Test Laboratory: Sony Ericsson Mobile Communications
 File Name: [Data_2TS_GSM1900_090622_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15593
Program Name: SAR Measurement on the Body

Communication System: GSM1900 GPRS2TX; Frequency: 1850.2 MHz; Duty Cycle: 1:4.15
 Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 53.8$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(4.42, 4.42, 4.42); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 6; Type: SAM; Serial: 1351
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

FB+15mm, GPRS 2TS, Low/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.836 mW/g

FB+15mm, GPRS 2TS, Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.2 V/m; Power Drift = -0.053 dB

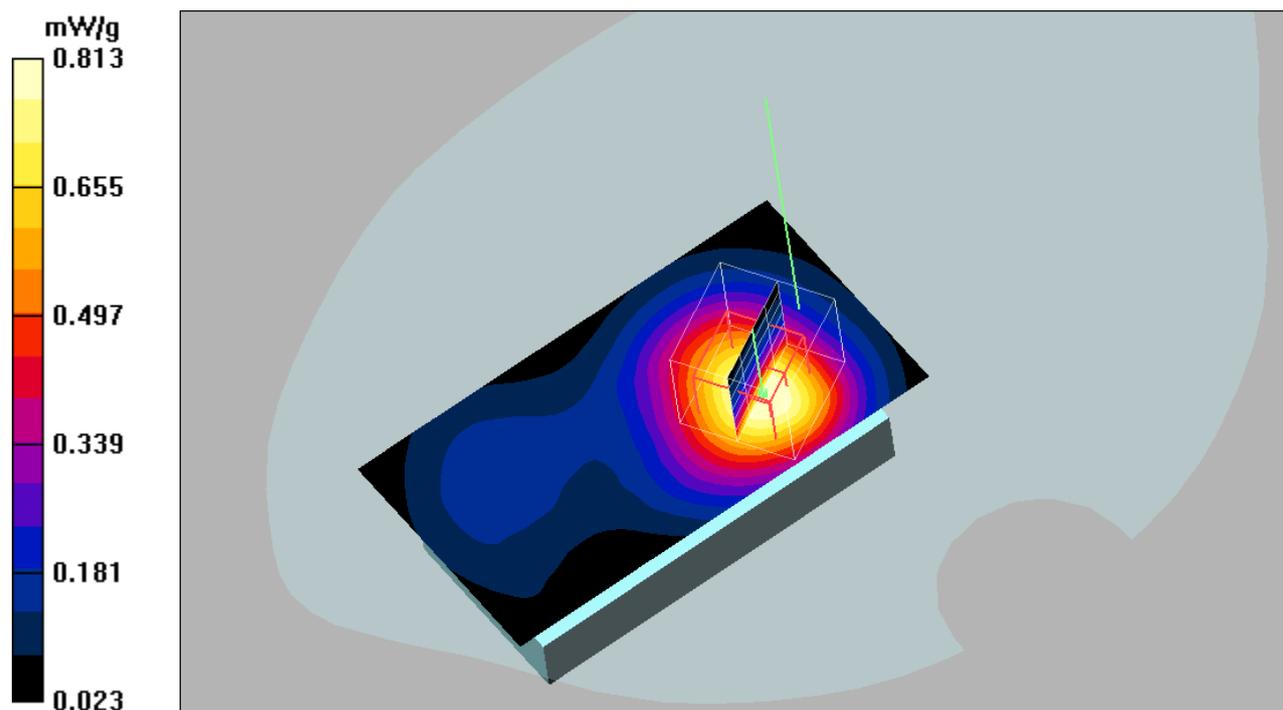
Peak SAR (extrapolated) = 1.12 W/kg

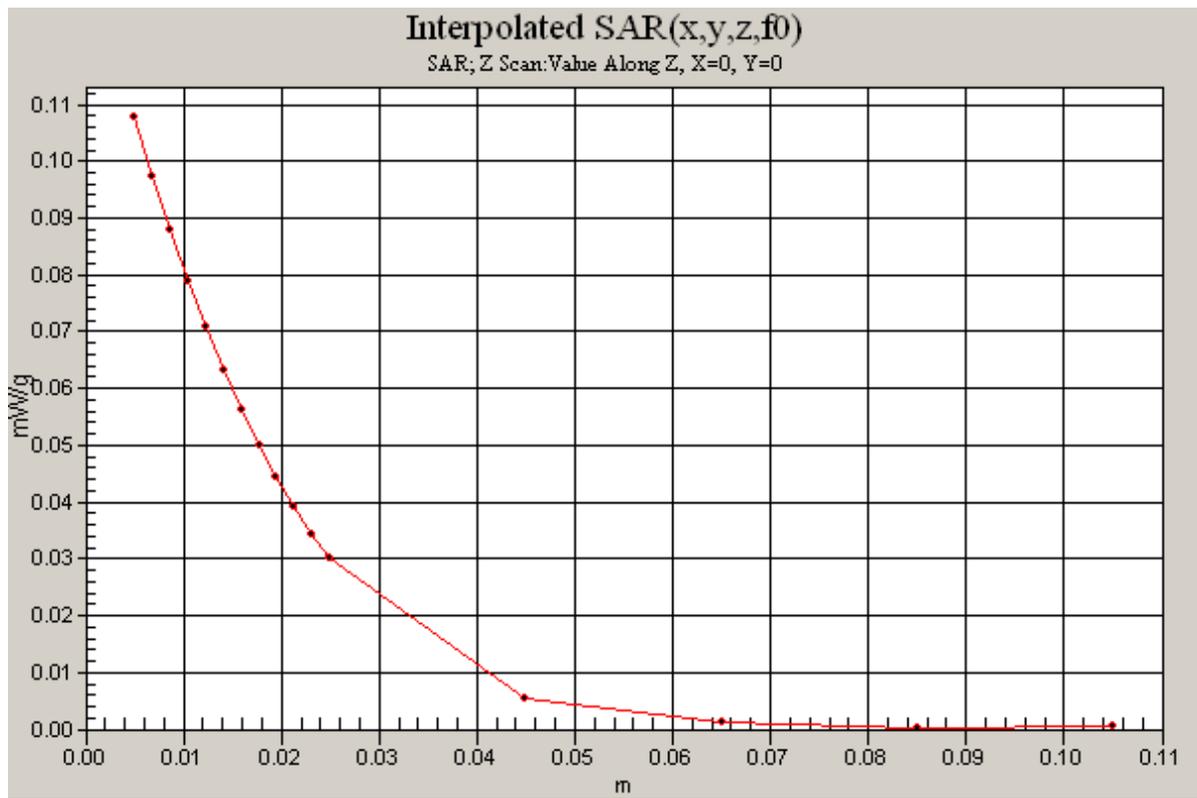
SAR(1 g) = 0.755 mW/g; SAR(10 g) = 0.479 mW/g

Maximum value of SAR (measured) = 0.813 mW/g

FB+15mm, GPRS 2TS, Low/Z Scan (1x1x16): Measurement grid: dx=20mm, dy=20mm, dz=20mm

Maximum value of SAR (interpolated) = 0.108 mW/g





Date/Time: 2009-06-26 15:04:52

Test Laboratory: Sony Ericsson Mobile Communications
 File Name: [Body_Wlan_090626_RP.da4](#)

DUT: PY7A3880020 (Satio U1) ; Type: GSM+UMTS+Wlan; Serial: #15596
Program Name: SAR Measurement on the Body

Communication System: WLAN; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.87$ mho/m; $\epsilon_r = 50.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(3.86, 3.86, 3.86); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used)) Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 6; Type: SAM; Serial: 1351
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

Low, BT/Area Scan (71x131x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.141 mW/g

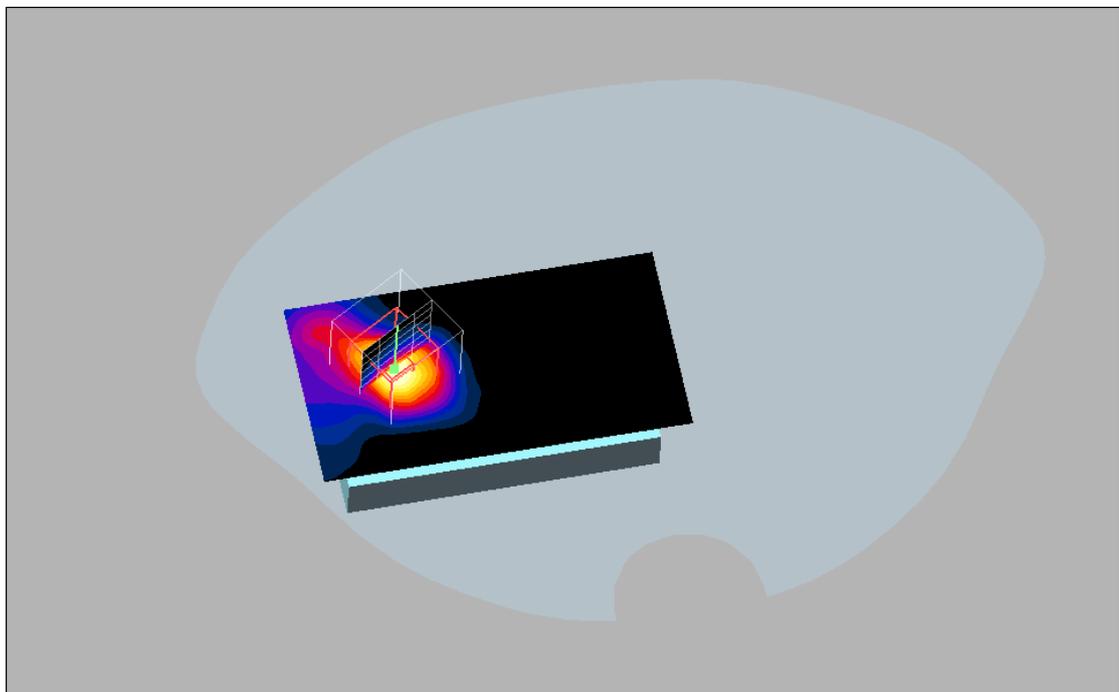
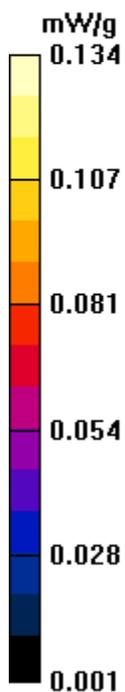
Low, BT/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.23 V/m; Power Drift = 0.092 dB

Peak SAR (extrapolated) = 0.258 W/kg

SAR(1 g) = 0.126 mW/g; SAR(10 g) = 0.065 mW/g

Maximum value of SAR (measured) = 0.134 mW/g



Date/Time: 2009-06-23 13:51:32

Test Laboratory: Sony Ericsson Mobile Communications

File Name: [Verification Measurement_2450MHz_Head_090623.da4](#)**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:745****Program Name: Verification Measurement on 1900MHz with HSL**

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.89$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1569; ConvF(4.32, 4.32, 4.32); Calibrated: 2009-01-12
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn428; Calibrated: 2009-01-09
- Phantom: SAM 6; Type: SAM; Serial: 1351
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 171

P=100mW, 10mm distance/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 6.11 mW/g

P=100mW, 10mm distance/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 58.9 V/m; Power Drift = -0.014 dB

Peak SAR (extrapolated) = 12.2 W/kg

SAR(1 g) = 5.52 mW/g; SAR(10 g) = 2.52 mW/g

Maximum value of SAR (measured) = 6.18 mW/g

