Test Laboratory: Sporton International Inc. SAR Testing Lab Date/Time: 02/28/05 13:37:27

Left Cheek_PCS Ch661_20050228

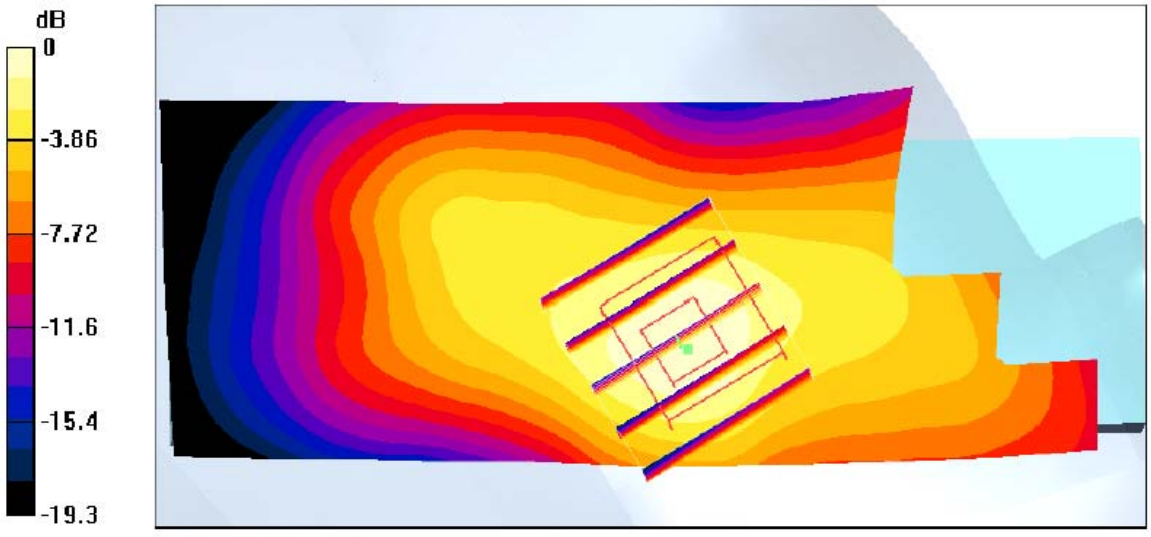
DUT: KMP6J1S1-6; Type: GSM Phone with GPRS; Serial: 350421030000600

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: HSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; ε_r = 38.8; ρ = 1000 kg/m^3
Ambient Temperature : 21.6 ℃; Liquid Temperature : 21.8 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(5.16, 5.16, 5.16); Calibrated: 9/30/2004
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 11/17/2004
- Phantom: SAM 12; Type: QD 000 P40 C; Serial: TP-1150
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Ch661/Area Scan (41x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.383 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.41 V/m; Power Drift = -0.0 dB
Peak SAR (extrapolated) = 0.579 W/kg
SAR(1 g) = 0.354 mW/g; SAR(10 g) = 0.198 mW/g
Maximum value of SAR (measured) = 0.391 mW/g



0 dB = 0.391mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab Date/Time: 02/28/05 13:52:22

Left Tilted_PCS Ch661_20050228

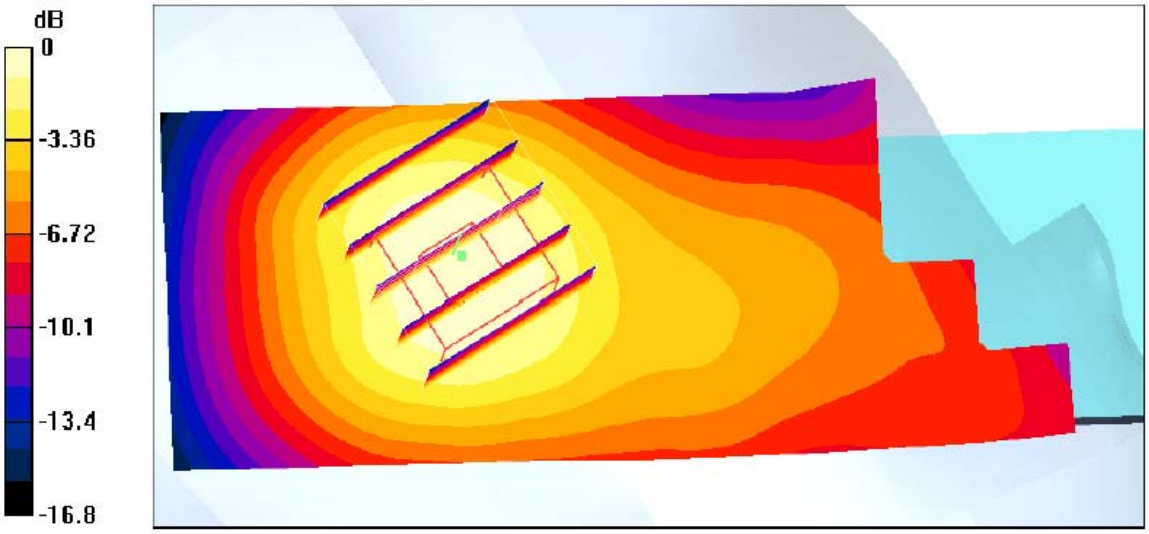
DUT: KMP6J1S1-6; Type: GSM Phone with GPRS; Serial: 350421030000600

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: HSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.39 mho/m; ε_r = 38.8; ρ = 1000 kg/m^3
Ambient Temperature : 21.8 ℃; Liquid Temperature : 22.2 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(5.16, 5.16, 5.16); Calibrated: 9/30/2004
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 11/17/2004
- Phantom: SAM 12; Type: QD 000 P40 C; Serial: TP-1150
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Ch661/Area Scan (41x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.129 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.76 V/m; Power Drift = 0.1 dB
Peak SAR (extrapolated) = 0.171 W/kg
SAR(1 g) = 0.121 mW/g; SAR(10 g) = 0.077 mW/g
Maximum value of SAR (measured) = 0.130 mW/g



0 dB = 0.130mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab Date/Time: 03/01/05 08:54:07

Body_GSM850 Ch189_Keypad Up With 1.5cm Gap_20050301

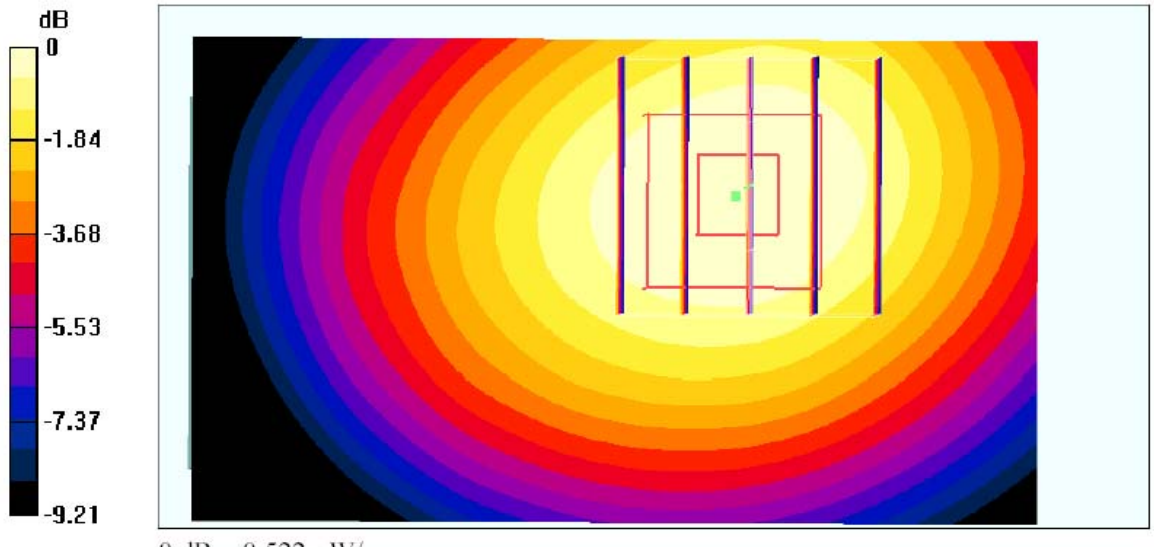
DUT: KMP6J1S1-6; Type: GSM Phone with GPRS; Serial: 350421030000600

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:4
Medium: MSL_850 Medium parameters used : f = 836.4 MHz; σ = 0.948 mho/m; ε_r = 57.1; ρ = 1000 kg/m^3
Ambient Temperature : 20.6 ℃; Liquid Temperature : 21.2 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.53, 6.53, 6.53); Calibrated: 9/30/2004
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 11/17/2004
- Phantom: SAM 12; Type: QD 000 P40 C; Serial: TP-1150
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Ch189/Area Scan (41x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.544 mW/g

Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.9 V/m; Power Drift = -0.2 dB
Peak SAR (extrapolated) = 0.617 W/kg
SAR(1 g) = 0.490 mW/g; SAR(10 g) = 0.354 mW/g
Maximum value of SAR (measured) = 0.522 mW/g



0 dB = 0.522mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab Date/Time: 03/01/05 09:33:45

Body_GSM850 Ch128_Keypad Down With 1.5cm Gap_20050301

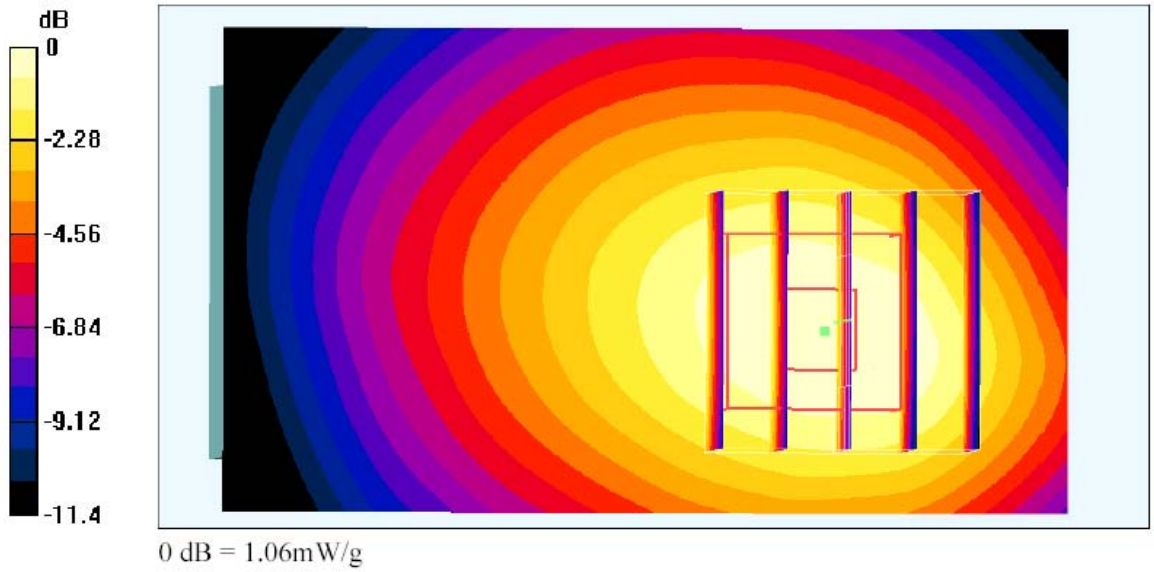
DUT: KMP6J1S1-6; Type: GSM Phone with GPRS; Serial: 350421030000600

Communication System: GSM850; Frequency: 824.2 MHz;Duty Cycle: 1:4
Medium: MSL_850 Medium parameters used : f = 824.2 MHz; σ = 0.936 mho/m; ε_r = 57.3; ρ = 1000 kg/m^3
Ambient Temperature : 21.0 ℃; Liquid Temperature : 21.3 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.53, 6.53, 6.53); Calibrated: 9/30/2004
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 11/17/2004
- Phantom: SAM 12; Type: QD 000 P40 C; Serial: TP-1150
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Ch128/Area Scan (41x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.08 mW/g

Ch128/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 31 V/m; Power Drift = -0.1 dB
Peak SAR (extrapolated) = 1.36 W/kg
SAR(1 g) = 0.992 mW/g; SAR(10 g) = 0.683 mW/g
Maximum value of SAR (measured) = 1.06 mW/g



0 dB = 1.06mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab Date/Time: 03/01/05 09:22:47

Body_GSM850 Ch189_Keypad Down With 1.5cm Gap_20050301

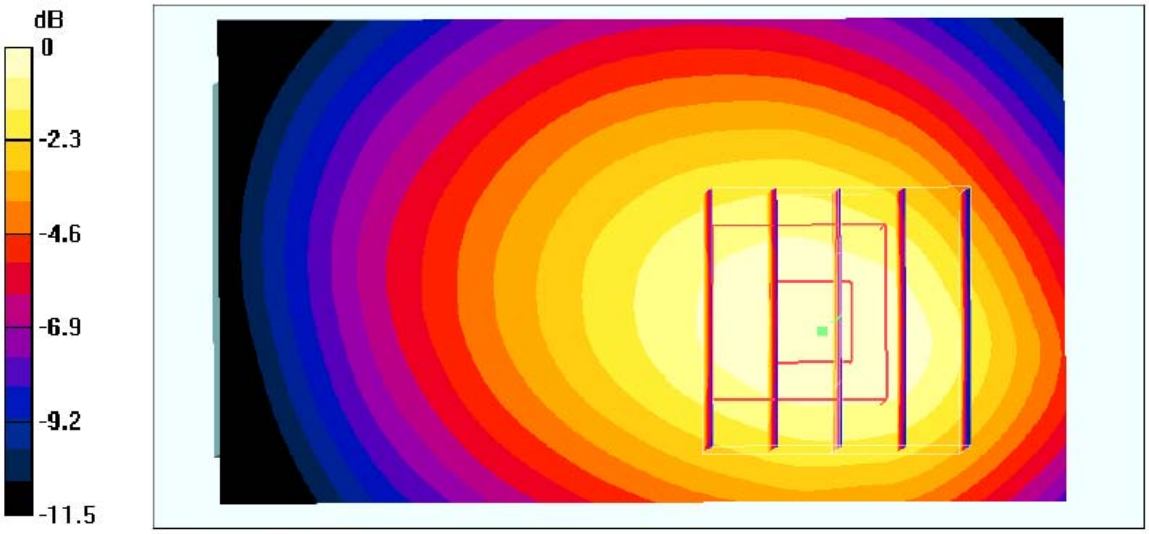
DUT: KMP6J1S1-6; Type: GSM Phone with GPRS; Serial: 350421030000600

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:4
Medium: MSL_850 Medium parameters used : f = 836.4 MHz; σ = 0.948 mho/m; ε_r = 57.1; ρ = 1000 kg/m^3
Ambient Temperature : 20.9 ℃; Liquid Temperature : 21.3 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.53, 6.53, 6.53); Calibrated: 9/30/2004
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 11/17/2004
- Phantom: SAM 12; Type: QD 000 P40 C; Serial: TP-1150
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Ch189/Area Scan (41x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.09 mW/g

Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 30.6 V/m; Power Drift = 0.1 dB
Peak SAR (extrapolated) = 1.33 W/kg
SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.705 mW/g
Maximum value of SAR (measured) = 1.08 mW/g



0 dB = 1.08mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab Date/Time: 03/01/05 09:44:20

Body_GSM850 Ch251_Keypad Down With 1.5cm Gap_20050301

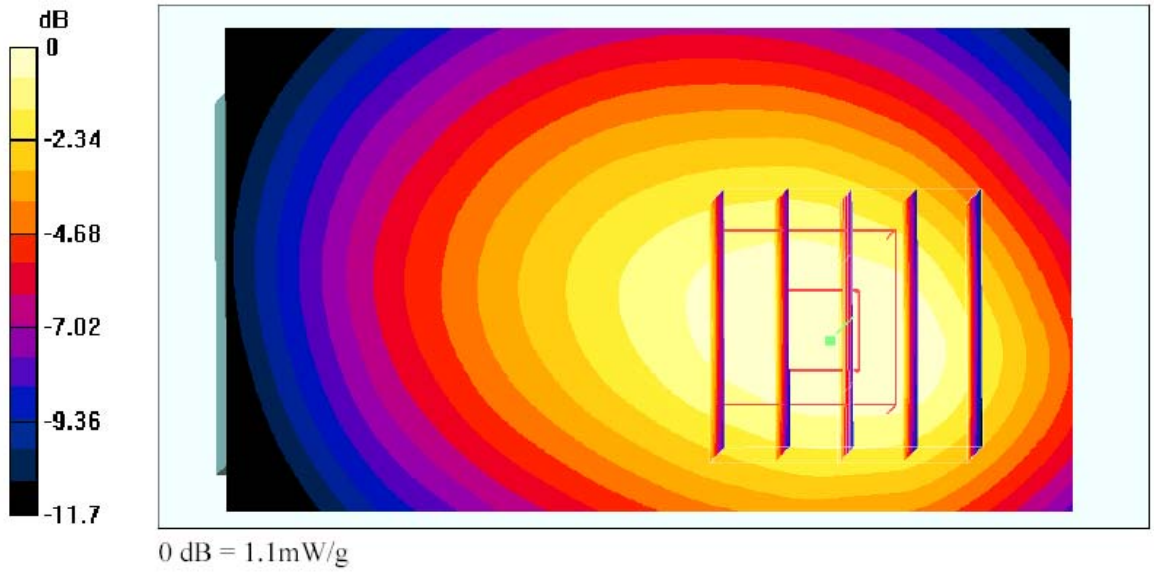
DUT: KMP6J1S1-6; Type: GSM Phone with GPRS; Serial: 350421030000600

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:4
Medium: MSL_850 Medium parameters used : f = 848.8 MHz; σ = 0.963 mho/m; ε_r = 57.1; ρ = 1000 kg/m^3
Ambient Temperature : 20.9 ℃; Liquid Temperature : 21.3 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.53, 6.53, 6.53); Calibrated: 9/30/2004
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 11/17/2004
- Phantom: SAM 12; Type: QD 000 P40 C; Serial: TP-1150
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Ch251/Area Scan (41x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.12 mW/g

Ch251/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 30.9 V/m; Power Drift = -0.009 dB
Peak SAR (extrapolated) = 1.4 W/kg
SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.712 mW/g
Maximum value of SAR (measured) = 1.1 mW/g



0 dB = 1.1mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab Date/Time: 02/28/05 15:11:16

Body_PCS Ch661_Keypad Up With 1.5cm Gap_20050228

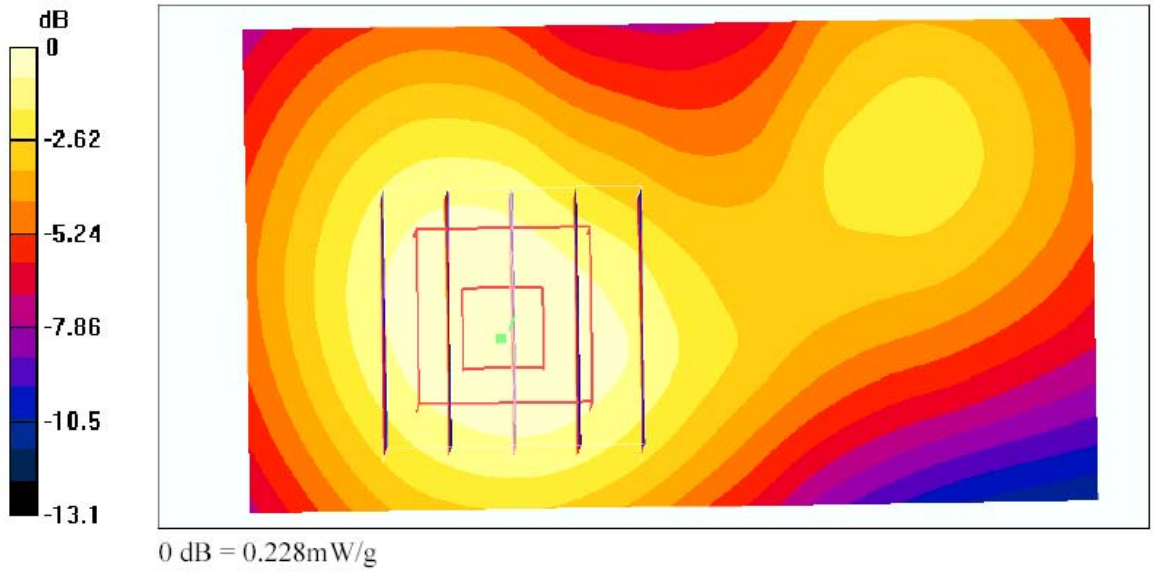
DUT: KMP6J1S1-6; Type: GSM Phone with GPRS; Serial: 350421030000600

Communication System: DCS 1900; Frequency: 1880 MHz;Duty Cycle: 1:4
Medium: MSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; ε_r = 52.4; ρ = 1000 kg/m^3
Ambient Temperature : 22.3 ℃; Liquid Temperature : 22.6 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.56, 4.56, 4.56); Calibrated: 9/30/2004
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 11/17/2004
- Phantom: SAM 12; Type: QD 000 P40 C; Serial: TP-1150
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Ch661/Area Scan (41x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.235 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.21 V/m; Power Drift = -0.0 dB
Peak SAR (extrapolated) = 0.313 W/kg
SAR(1 g) = 0.213 mW/g; SAR(10 g) = 0.139 mW/g
Maximum value of SAR (measured) = 0.228 mW/g



0 dB = 0.228mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab Date/Time: 02/28/05 17:14:31

Body_PCS Ch810_Keypad Down With 1.5cm Gap_20050228

DUT: KMP6J1S1-6; Type: GSM Phone with GPRS; Serial: 350421030000600

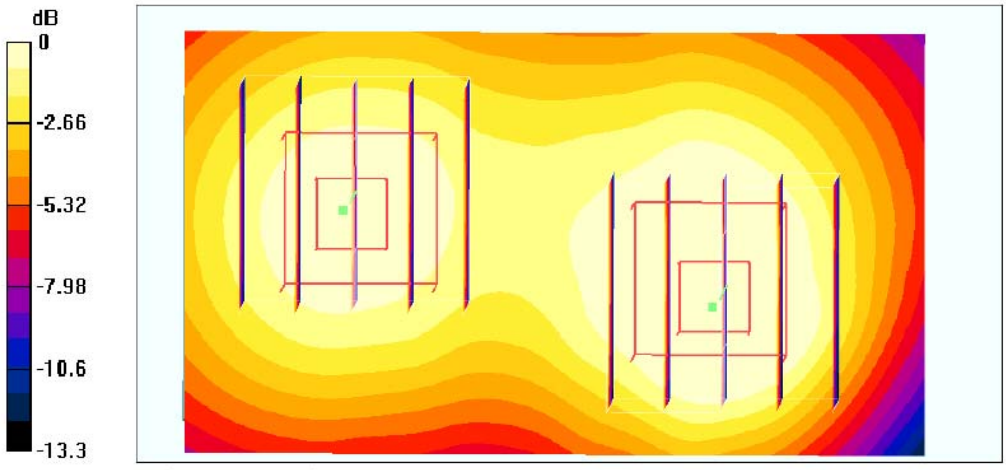
Communication System: DCS 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:4
Medium: MSL_1900 Medium parameters used : f = 1909.8 MHz; σ = 1.56 mho/m; ε_r = 52.2; ρ = 1000 kg/m^3
Ambient Temperature：22.1 ℃; Liquid Temperature：22.3 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.56, 4.56, 4.56); Calibrated: 9/30/2004
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 11/17/2004
- Phantom: SAM 12; Type: QD 000 P40 C; Serial: TP-1150
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Ch810/Area Scan (41x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.457 mW/g

Ch810/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.2 V/m; Power Drift = 0.002 dB
Peak SAR (extrapolated) = 0.662 W/kg
SAR(1 g) = 0.399 mW/g; SAR(10 g) = 0.236 mW/g
Maximum value of SAR (measured) = 0.436 mW/g

Ch810/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.2 V/m; Power Drift = 0.002 dB
Peak SAR (extrapolated) = 0.421 W/kg
SAR(1 g) = 0.292 mW/g; SAR(10 g) = 0.190 mW/g
Maximum value of SAR (measured) = 0.313 mW/g



0 dB = 0.313mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab Date/Time: 03/01/05 10:22:42

Right Cheek_GSM850 Ch189_20050301

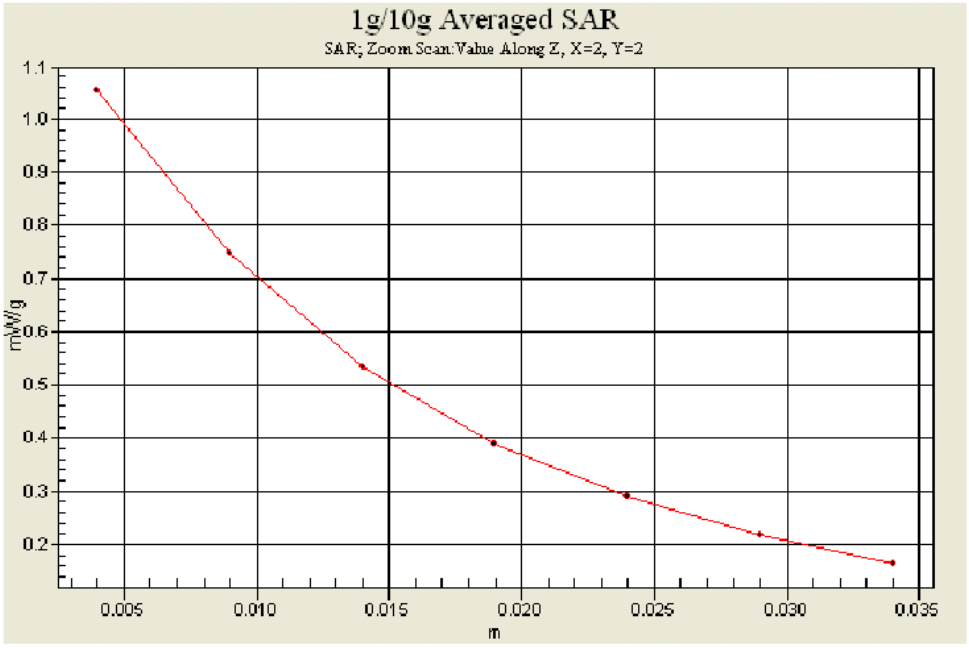
DUT: KMP6J1S1-6; Type: GSM Phone with GPRS; Serial: 350421030000600

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: HSL_850 Medium parameters used : f = 836.4 MHz; σ = 0.884 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3
Ambient Temperature：20.9 ℃; Liquid Temperature：21.2 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.74, 6.74, 6.74); Calibrated: 9/30/2004
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 11/17/2004
- Phantom: SAM 12; Type: QD 000 P40 C; Serial: TP-1150
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Ch189/Area Scan (41x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.08 mW/g

Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.03 V/m; Power Drift = -0.009 dB
Peak SAR (extrapolated) = 1.43 W/kg
SAR(1 g) = 0.987 mW/g; SAR(10 g) = 0.659 mW/g
Maximum value of SAR (measured) = 1.05 mW/g



Test Laboratory: Sporton International Inc. SAR Testing Lab Date/Time: 03/01/05 09:44:20

Body_GSM850 Ch251_Keypad Down With 1.5cm Gap_20050301

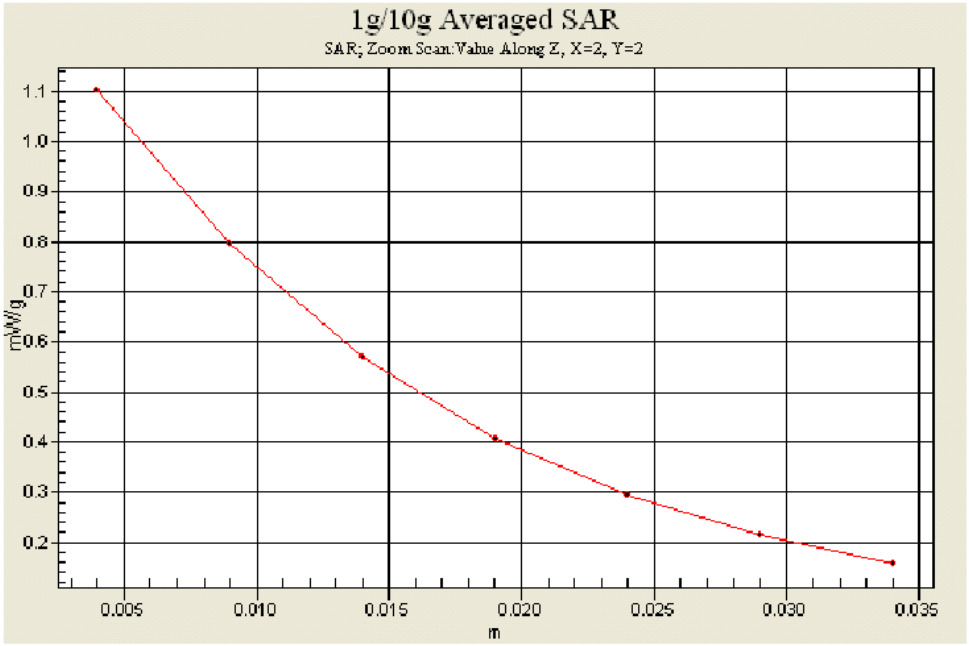
DUT: KMP6J1S1-6; Type: GSM Phone with GPRS; Serial: 350421030000600

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:4
Medium: MSL_850 Medium parameters used : f = 848.8 MHz; σ = 0.963 mho/m; ε_r = 57.1; ρ = 1000 kg/m^3
Ambient Temperature：20.9 ℃; Liquid Temperature：21.3 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.53, 6.53, 6.53); Calibrated: 9/30/2004
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 11/17/2004
- Phantom: SAM 12; Type: QD 000 P40 C; Serial: TP-1150
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Ch251/Area Scan (41x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.12 mW/g

Ch251/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 30.9 V/m; Power Drift = -0.009 dB
Peak SAR (extrapolated) = 1.4 W/kg
SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.712 mW/g
Maximum value of SAR (measured) = 1.1 mW/g



Test Laboratory: Sporton International Inc. SAR Testing Lab Date/Time: 02/28/05 14:21:19

Right Cheek_PCS Ch810_20050228

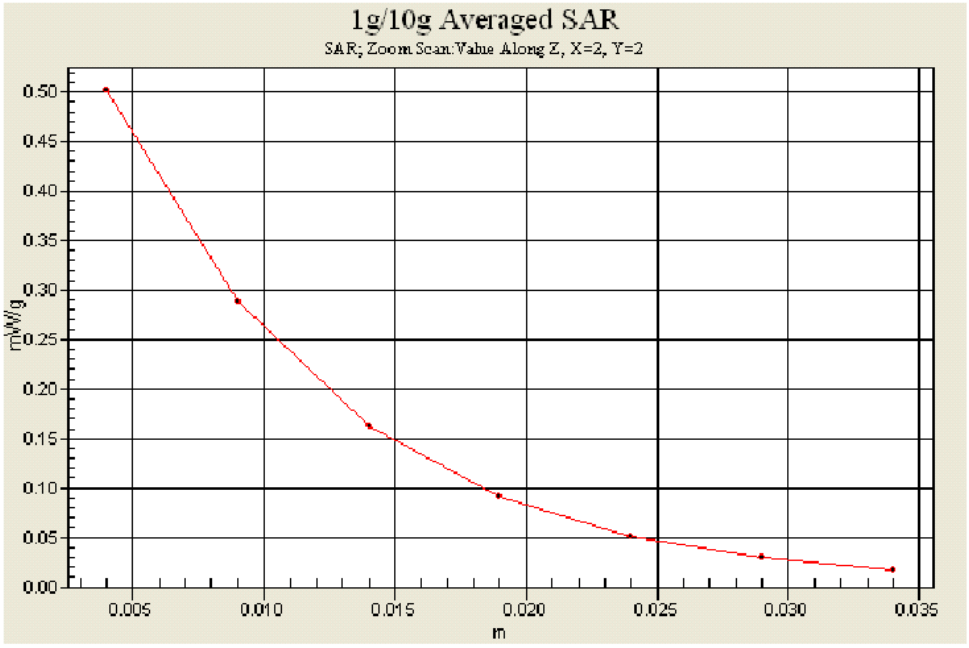
DUT: KMP6J1S1-6; Type: GSM Phone with GPRS; Serial: 350421030000600

Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: HSL_1900 Medium parameters used : f = 1909.8 MHz; σ = 1.45 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3
Ambient Temperature：22.1 ℃; Liquid Temperature：22.3 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(5.16, 5.16, 5.16); Calibrated: 9/30/2004
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 11/17/2004
- Phantom: SAM 12; Type: QD 000 P40 C; Serial: TP-1150
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Ch810/Area Scan (41x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.460 mW/g

Ch810/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.93 V/m; Power Drift = 0.2 dB
Peak SAR (extrapolated) = 0.785 W/kg
SAR(1 g) = 0.450 mW/g; SAR(10 g) = 0.248 mW/g
Maximum value of SAR (measured) = 0.501 mW/g



Test Laboratory: Sporton International Inc. SAR Testing Lab Date/Time: 02/28/05 17:14:31

Body_PCS Ch810_Keypad Down With 1.5cm Gap_20050228

DUT: KMP6J1S1-6; Type: GSM Phone with GPRS; Serial: 350421030000600

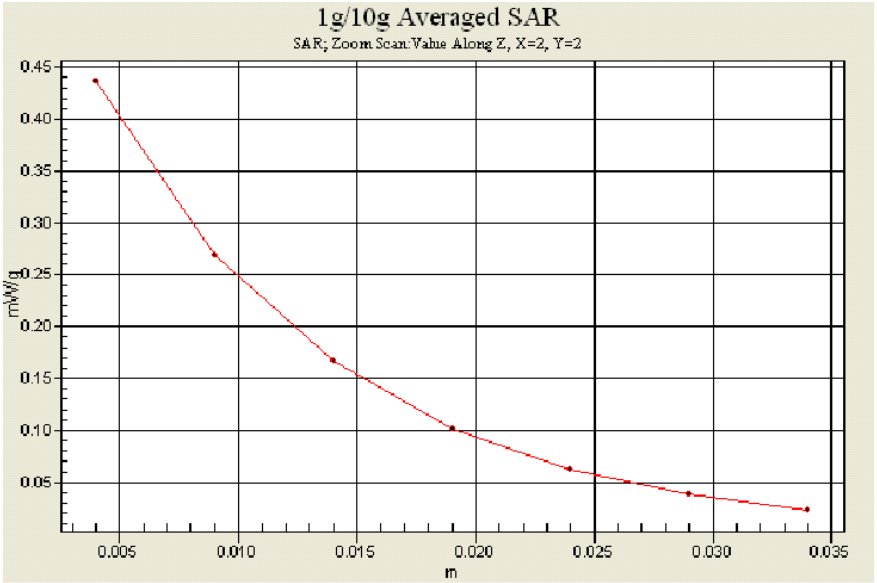
Communication System: DCS 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:4
Medium: MSL_1900 Medium parameters used : f = 1909.8 MHz; σ = 1.56 mho/m; ε_r = 52.2; ρ = 1000 kg/m^3
Ambient Temperature : 22.1 ℃; Liquid Temperature : 22.3 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.56, 4.56, 4.56); Calibrated: 9/30/2004
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 11/17/2004
- Phantom: SAM 12; Type: QD 000 P40 C; Serial: TP-1150
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Ch810/Area Scan (41x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.457 mW/g

Ch810/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.2 V/m; Power Drift = 0.002 dB
Peak SAR (extrapolated) = 0.662 W/kg
SAR(1 g) = 0.399 mW/g; SAR(10 g) = 0.236 mW/g
Maximum value of SAR (measured) = 0.436 mW/g

Ch810/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.2 V/m; Power Drift = 0.002 dB
Peak SAR (extrapolated) = 0.421 W/kg
SAR(1 g) = 0.292 mW/g; SAR(10 g) = 0.190 mW/g
Maximum value of SAR (measured) = 0.313 mW/g



Appendix C – Calibration Data

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

Client Sproton Int. (Auden)

CALIBRATION CERTIFICATE

Object(s)	D835V2 - SN:499
Calibration procedure(s)	QA CAL-05.v2 Calibration procedure for dipole validation kits
Calibration date:	February 12, 2004
Condition of the calibrated item	In Tolerance (according to the specific calibration document)

This calibration statement documents traceability of M&TE used in the calibration procedures and conformity of the procedures with the ISO/IEC 17025 international standard.

All calibrations have been conducted in the closed laboratory facility: environment temperature 22 +/- 2 degrees Celsius and humidity < 75%.

Calibration Equipment used (M&TE critical for calibration)

Model Type	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Power meter EPM E442	GB37480704	6-Nov-03 (METAS, No. 252-0254)	Nov-04
Power sensor HP 8481A	US37292783	6-Nov-03 (METAS, No. 252-0254)	Nov-04
Power sensor HP 8481A	MY41092317	18-Oct-02 (Agilent, No. 20021018)	Oct-04
RF generator R&S SML-03	100698	27-Mar-2002 (R&S, No. 20-92389)	In house check: Mar-05
Network Analyzer HP 8753E	US37390585	18-Oct-01 (SPEAG, in house check Nov-03)	In house check: Oct 05

	Name	Function	Signature
Calibrated by:	Judith Mueller	Technician	
Approved by:	Katja Pokovic	Laboratory Director	

Date issued: February 18, 2004

This calibration certificate is issued as an intermediate solution until the accreditation process (based on ISO/IEC 17025 international Standard) for Calibration Laboratory of Schmid & Partner Engineering AG is completed.

880-KP0301061-A Page 1 (1)

Schmid & Partner Engineering AG

s p e a g

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DASY

Dipole Validation Kit

Type: D835V2

Serial: 499

Manufactured: July 10, 2003
Calibrated: February 12, 2004

1. Measurement Conditions

The measurements were performed in the flat section of the SAM twin phantom filled with **head simulating solution** of the following electrical parameters at 835 MHz:

Relative Dielectricity	**42.1**	± 5%
Conductivity	**0.89 mho/m**	± 5%

The DASY4 System with a dosimetric E-field probe ET3DV6 (SN:1507, Conversion factor 6.3 at 835 MHz) was used for the measurements.

The dipole was mounted on the small tripod so that the dipole feedpoint was positioned below the center marking of the flat phantom section and the dipole was oriented parallel to the body axis (the long side of the phantom). The standard measuring distance was 15mm from dipole center to the solution surface. The included distance spacer was used during measurements for accurate distance positioning.

The coarse grid with a grid spacing of 15mm was aligned with the dipole. The 7x7x7 fine cube was chosen for cube integration.
The dipole input power (forward power) was 250 mW ± 3 %. The results are normalized to 1W input power.

2. SAR Measurement with DASY4 System

Standard SAR-measurements were performed according to the measurement conditions described in section 1. The results (see figure supplied) have been normalized to a dipole input power of 1W (forward power). The resulting averaged SAR-values measured with the dosimetric probe ET3DV6 SN:1507 and applying the advanced extrapolation are:

averaged over 1 cm^3 (1 g) of tissue:	**9.96 mW/g** ± 16.8 % (k=2)[1]
averaged over 10 cm^3 (10 g) of tissue:	**6.48 mW/g** ± 16.2 % (k=2)[1]

[1] validation uncertainty

3. Dipole Impedance and Return Loss

The impedance was measured at the SMA-connector with a network analyzer and numerically transformed to the dipole feedpoint. The transformation parameters from the SMA-connector to the dipole feedpoint are:

Electrical delay:	**1.382 ns**	(one direction)
Transmission factor:	**0.985**	(voltage transmission, one direction)

The dipole was positioned at the flat phantom sections according to section 1 and the distance holder was in place during impedance measurements.

Feedpoint impedance at 835 MHz:	Re{Z} = **51.2 Ω**
	Im {Z} = **-1.7 Ω**
Return Loss at 835 MHz	**-33.9 dB**

4. Measurement Conditions

The measurements were performed in the flat section of the SAM twin phantom filled with **body simulating solution** of the following electrical parameters at 835 MHz:

Relative Dielectricity	**55.5**	± 5%
Conductivity	**0.99 mho/m**	± 5%

The DASY4 System with a dosimetric E-field probe ET3DV6 (SN:1507, Conversion factor 6.13 at 835 MHz) was used for the measurements.

The dipole was mounted on the small tripod so that the dipole feedpoint was positioned below the center marking of the flat phantom section and the dipole was oriented parallel to the body axis (the long side of the phantom). The standard measuring distance was 15mm from dipole center to the solution surface. The included distance spacer was used during measurements for accurate distance positioning.

The coarse grid with a grid spacing of 15mm was aligned with the dipole. The 7x7x7 fine cube was chosen for cube integration.
The dipole input power (forward power) was 250 mW ± 3 %. The results are normalized to 1W input power.

5. SAR Measurement with DASY4 System

Standard SAR-measurements were performed according to the measurement conditions described in section 4. The results (see figure supplied) have been normalized to a dipole input power of 1W (forward power). The resulting averaged SAR-values measured with the dosimetric probe ET3DV6 SN:1507 and applying the advanced extrapolation are:

averaged over 1 cm^3 (1 g) of tissue:	**10.3 mW/g** ± 16.8 % (k=2)[2]
averaged over 10 cm^3 (10 g) of tissue:	**6.76 mW/g** ± 16.2 % (k=2)[2]

6. Dipole Impedance and Return Loss

The dipole was positioned at the flat phantom sections according to section 4 and the distance holder was in place during impedance measurements.

Feedpoint impedance at 835 MHz:	Re{Z} = **46.7 Ω**
	Im {Z} = **-4.5 Ω**
Return Loss at 835 MHz	**-24.7 dB**

7. Handling

Do not apply excessive force to the dipole arms, because they might bend. Bending of the dipole arms stresses the soldered connections near the feedpoint leading to a damage of the dipole.

8. Design

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals.

9. Power Test

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

[2] validation uncertainty

Date/Time: 02/12/04 12:33:41

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN499

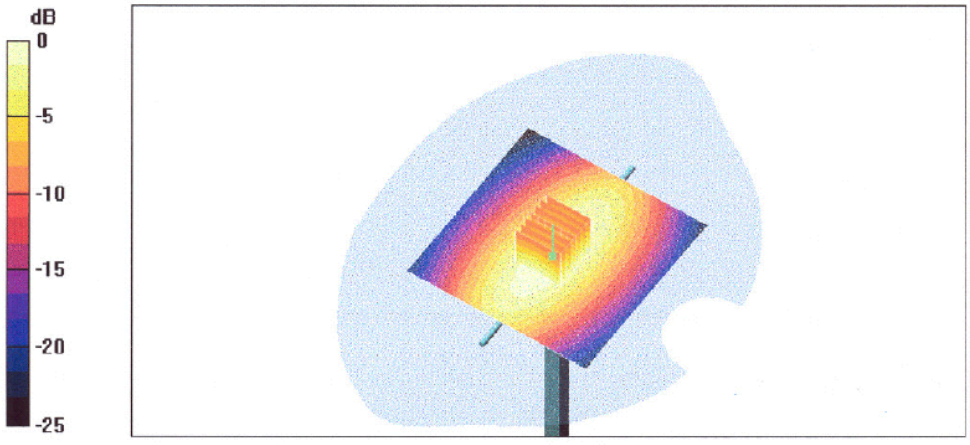
Communication System: CW-835; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: HSL 835 MHz
Medium parameters used: f = 835 MHz; σ = 0.89 mho/m; ε_r = 42.1; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1507; ConvF(6.3, 6.3, 6.3); Calibrated: 1/23/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn411; Calibrated: 11/6/2003
- Phantom: SAM with CRP - TP1006; Type: SAM 4.0; Serial: TP:1006
- Measurement SW: DASY4, V4.2 Build 25; Postprocessing SW: SEMCAD, V1.8 Build 98

Pin = 250 mW; d = 15 mm/Area Scan (81x81x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 56.5 V/m
Power Drift = -0.0 dB
Maximum value of SAR = 2.68 mW/g

Pin = 250 mW; d = 15 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 3.81 W/kg
SAR(1 g) = 2.49 mW/g; SAR(10 g) = 1.62 mW/g
Reference Value = 56.5 V/m
Power Drift = -0.0 dB
Maximum value of SAR = 2.68 mW/g



0 dB = 2.68mW/g