Deutscher Akkreditierungs Rat

DAT-P-152/98-01

Appendix for the Report

Dosimetric Assessment of the Webstar CT7141H-US (FCC ID: T7HCT7141H-US)

According to the FCC Requirements

SAR Distribution Plots

July 07, 2006

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1 SAR Distribution Plots, Head Measurements

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: Sally_bplm_1.da4

DUT: Webstar; Type: Sally;
Program Name: Cheek Left

Communication System: DECT Handset; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used (extrapolated): f = 1924.99 MHz; σ = 1.46 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669; ConvF(4.87, 4.87, 4.87); Calibrated: 15.02.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 07.07.2005
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 161

Cheek Left/Area Scan (6x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.048 mW/g
Cheek Left/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.83 V/m; Power Drift = 0.119 dB
Peak SAR (extrapolated) = 0.073 W/kg
SAR(1 g) = 0.047 mW/g; SAR(10 g) = 0.031 mW/g
Maximum value of SAR (measured) = 0.051 mW/g

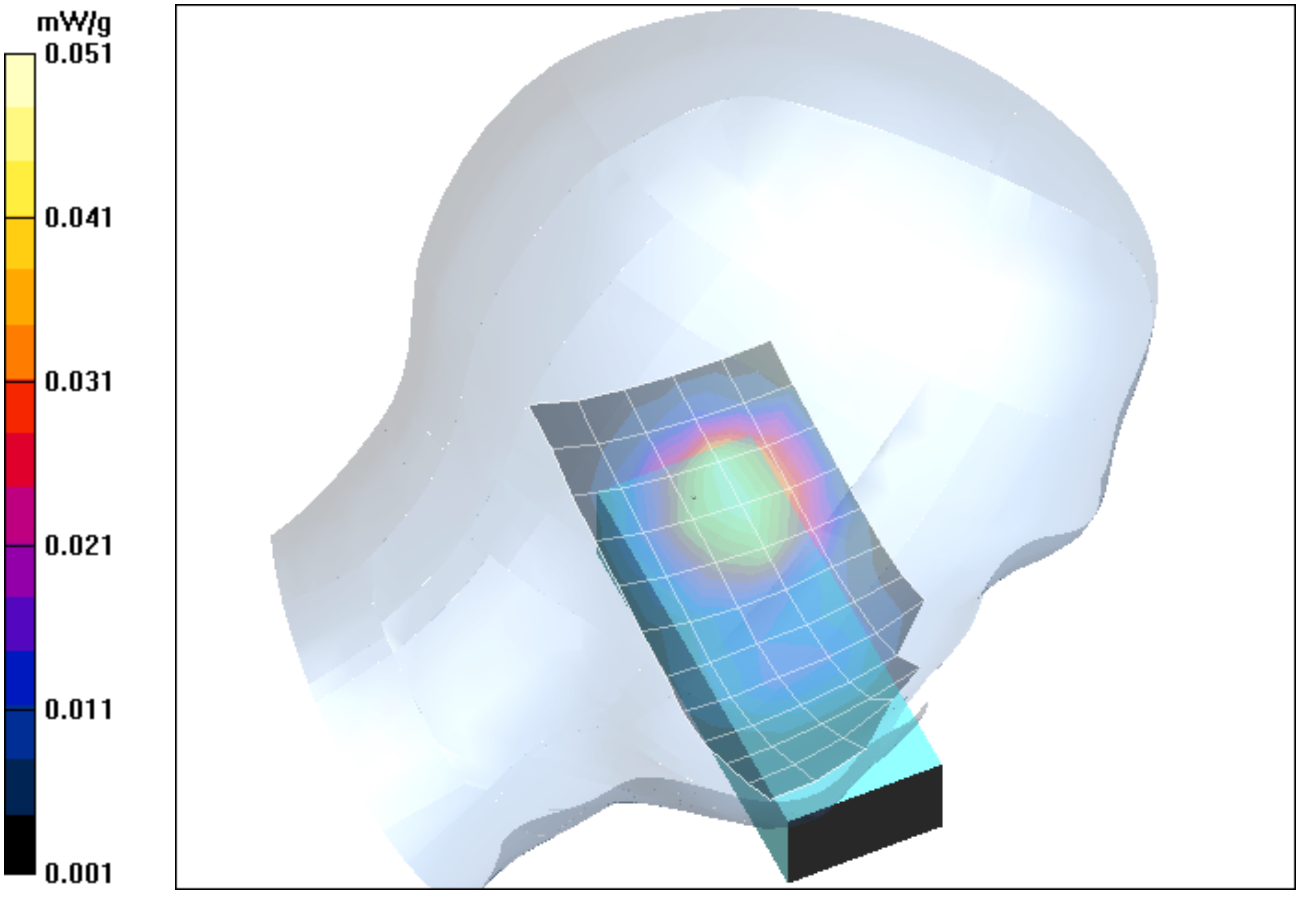

Fig. 1: SAR distribution for DECT US, channel 2, cheek position, left side of head (May 10, 2006; Ambient Temperature: 22.0°C; Liquid Temperature: 20.8°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: Sally_bplm_2.da4

DUT: Webstar; Type: Sally;
Program Name: Tilted Left

Communication System: DECT Handset; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used (extrapolated): f = 1924.99 MHz; σ = 1.46 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669; ConvF(4.87, 4.87, 4.87); Calibrated: 15.02.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 07.07.2005
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 161

Tilted Left/Area Scan (6x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.042 mW/g
Tilted Left/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.90 V/m; Power Drift = -0.038 dB
Peak SAR (extrapolated) = 0.071 W/kg
SAR(1 g) = 0.045 mW/g; SAR(10 g) = 0.026 mW/g
Maximum value of SAR (measured) = 0.049 mW/g

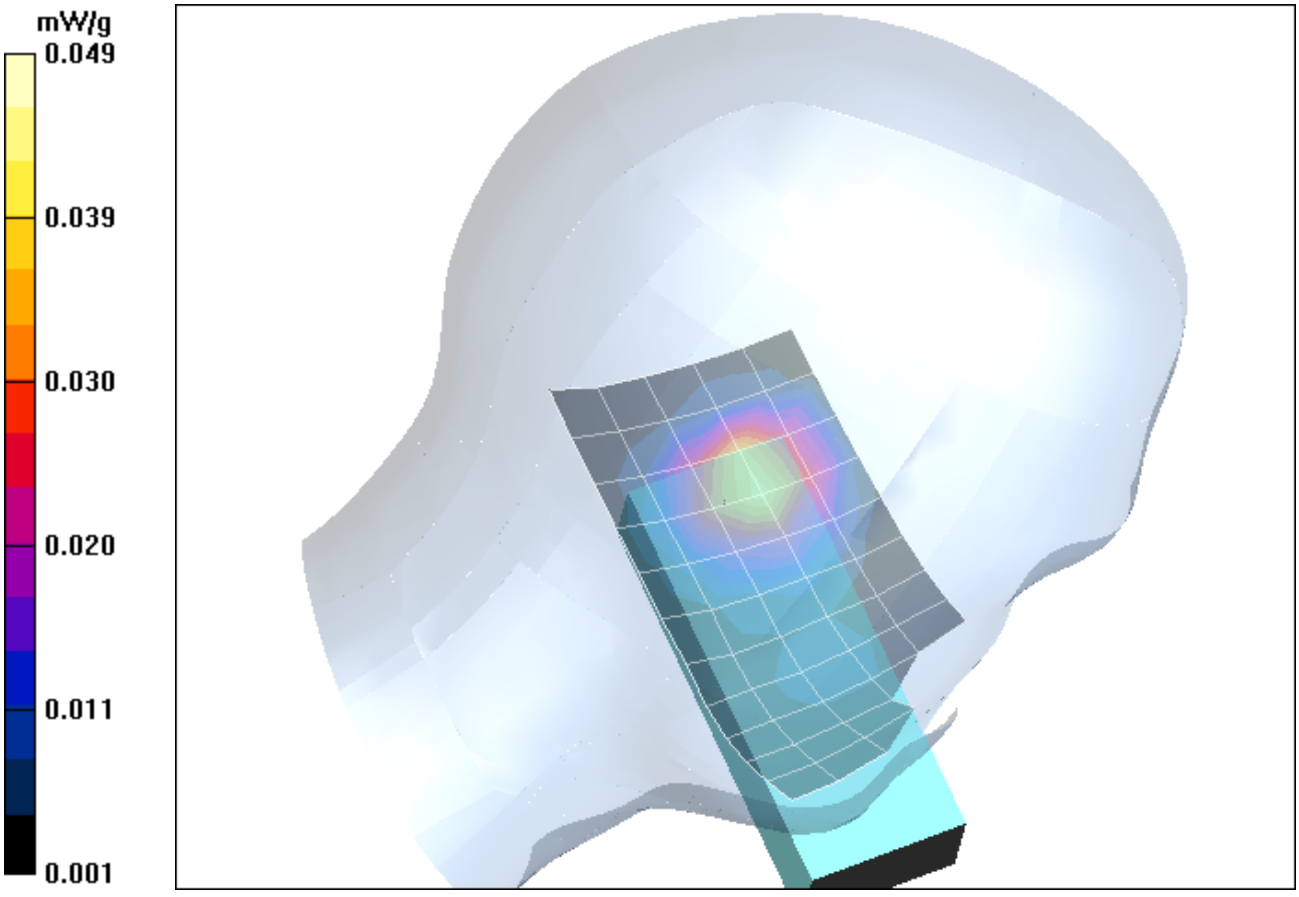

Fig. 2: SAR distribution for DECT US, channel 2, tilted position, left side of head (May 10, 2006; Ambient Temperature: 22.1°C; Liquid Temperature: 20.9°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: Sally_bprm_1.da4

DUT: Webstar; Type: Sally;
Program Name: Cheek Right

Communication System: DECT Handset; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used (extrapolated): f = 1924.99 MHz; σ = 1.46 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669; ConvF(4.87, 4.87, 4.87); Calibrated: 15.02.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 07.07.2005
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 161

Cheek Right/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.059 mW/g
Cheek Right/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.90 V/m; Power Drift = -0.045 dB
Peak SAR (extrapolated) = 0.081 W/kg
SAR(1 g) = 0.056 mW/g; SAR(10 g) = 0.035 mW/g
Maximum value of SAR (measured) = 0.060 mW/g

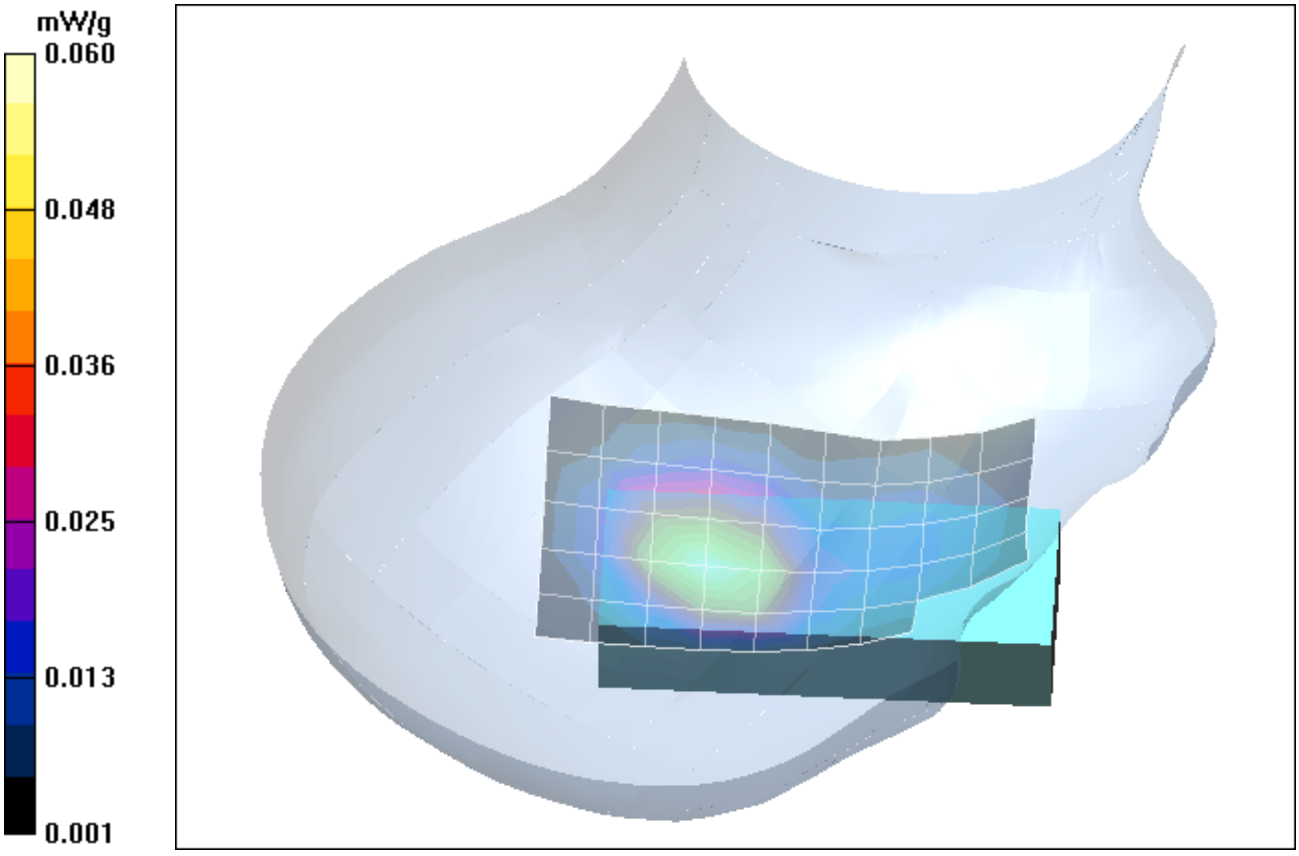

Fig. 3: SAR distribution for DECT US, channel 2, cheek position, right side of head (May 10, 2006; Ambient Temperature: 22.1° C; Liquid Temperature : 20.9° C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: Sally_bprm_2.da4

DUT: Webstar; Type: Sally;
Program Name: Tilted Right

Communication System: DECT Handset; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used (extrapolated): f = 1924.99 MHz; σ = 1.46 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669; ConvF(4.87, 4.87, 4.87); Calibrated: 15.02.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 07.07.2005
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 161

Tilted Right/Area Scan (6x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.040 mW/g
Tilted Right/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.12 V/m; Power Drift = -0.029 dB
Peak SAR (extrapolated) = 0.067 W/kg
SAR(1 g) = 0.044 mW/g; SAR(10 g) = 0.026 mW/g
Maximum value of SAR (measured) = 0.049 mW/g

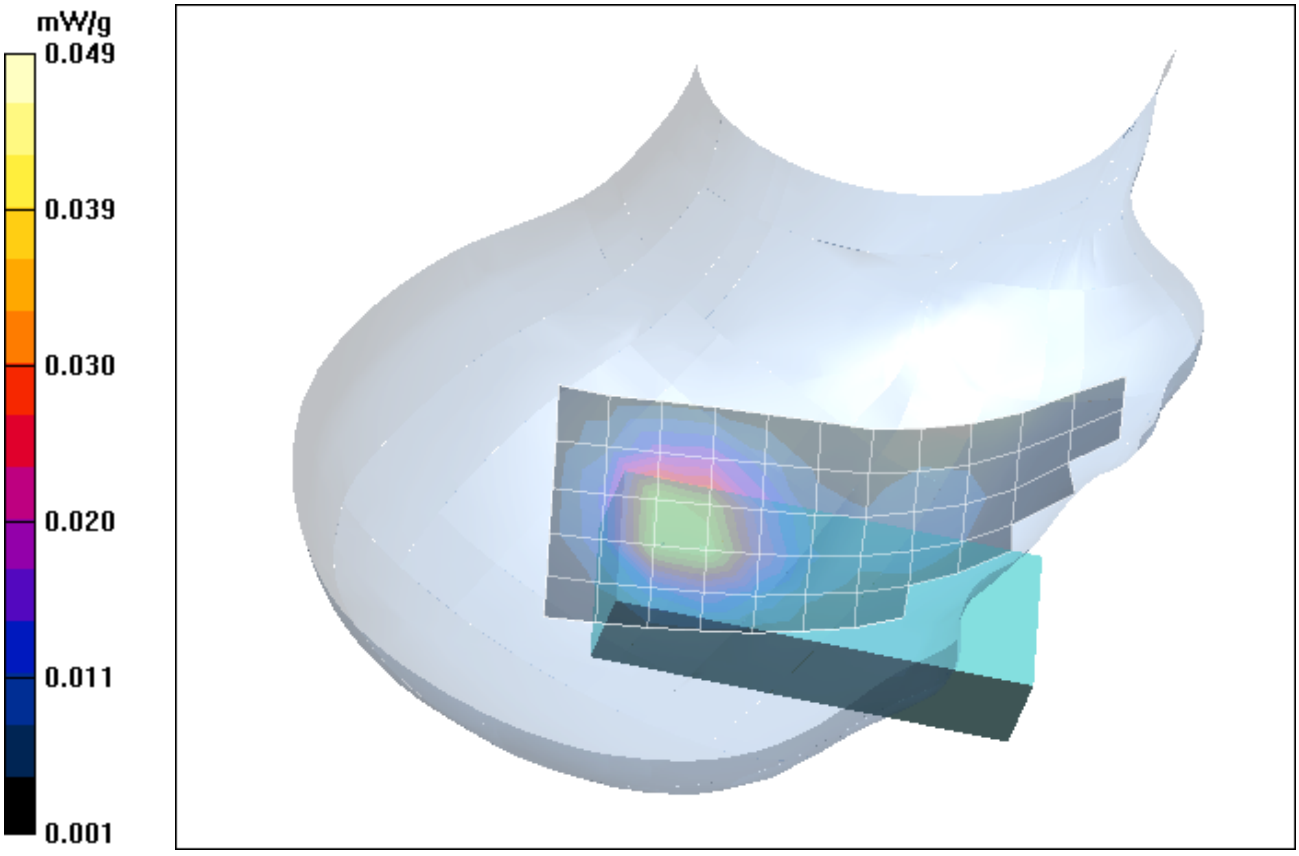

Fig. 4: SAR distribution for DECT US, channel 2, tilted position, right side of head (May 10, 2006; Ambient Temperature: 22.1 °C; Liquid Temperature : 20.8° C)

2 SAR Distribution Plots, Body Measurements

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: Sally_yphm_1_headset_2006.da4

DUT: Webstar; Type: Sally;
Program Name: Body Worn

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1909.8 MHz; σ = 1.58 mho/m; ε_r = 51.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669; ConvF(4.45, 4.45, 4.45); Calibrated: 15.02.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 07.07.2005
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body Worn/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.012 mW/g

Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.20 V/m; Power Drift = 0.053 dB
Peak SAR (extrapolated) = 0.019 W/kg
SAR(1 g) = 0.012 mW/g; SAR(10 g) = 0.00714 mW/g

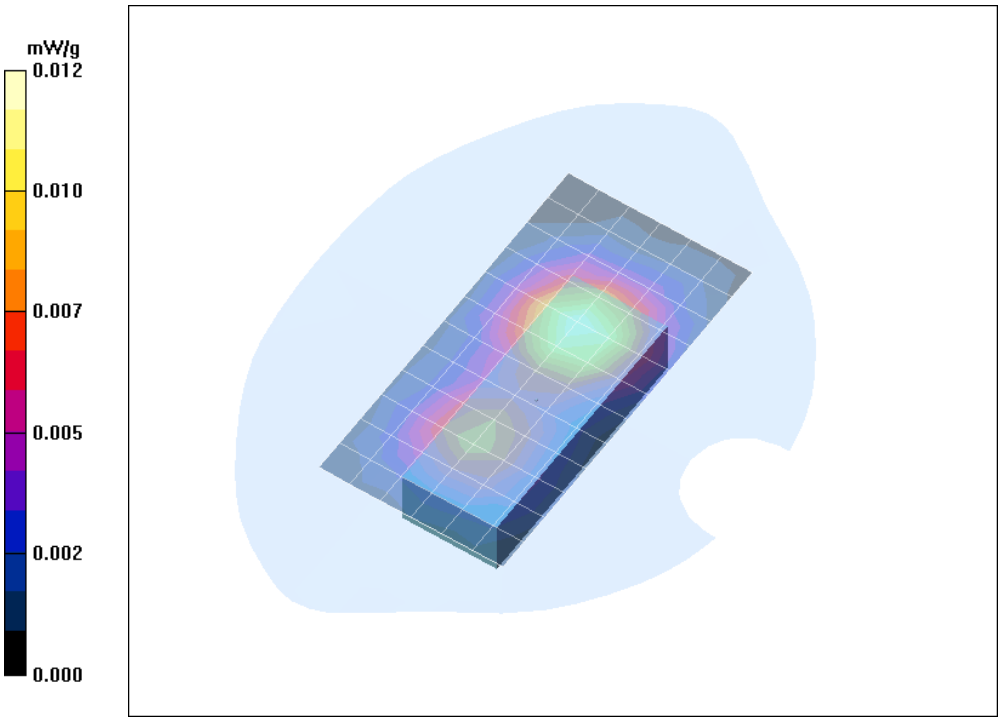

Fig. 5: SAR distribution for DECT US, channel 2, body worn configuration, display towards the ground, with headset and 15 mm distance (May 11, 2006; Ambient Temperature: 22.0° C; Liquid Temperature: 21.1° C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: Sally_yphm_2_headset_2006.da4

DUT: Webstar; Type: Sally;
Program Name: Body Worn

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1909.8 MHz; σ = 1.58 mho/m; ε_r = 51.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669; ConvF(4.45, 4.45, 4.45); Calibrated: 15.02.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 07.07.2005
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body Worn/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.017 mW/g
Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.61 V/m; Power Drift = 0.110 dB
Peak SAR (extrapolated) = 0.026 W/kg
SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.010 mW/g
Maximum value of SAR (measured) = 0.018 mW/g
Body Worn/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.61 V/m; Power Drift = 0.110 dB
Peak SAR (extrapolated) = 0.024 W/kg
SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.00967 mW/g

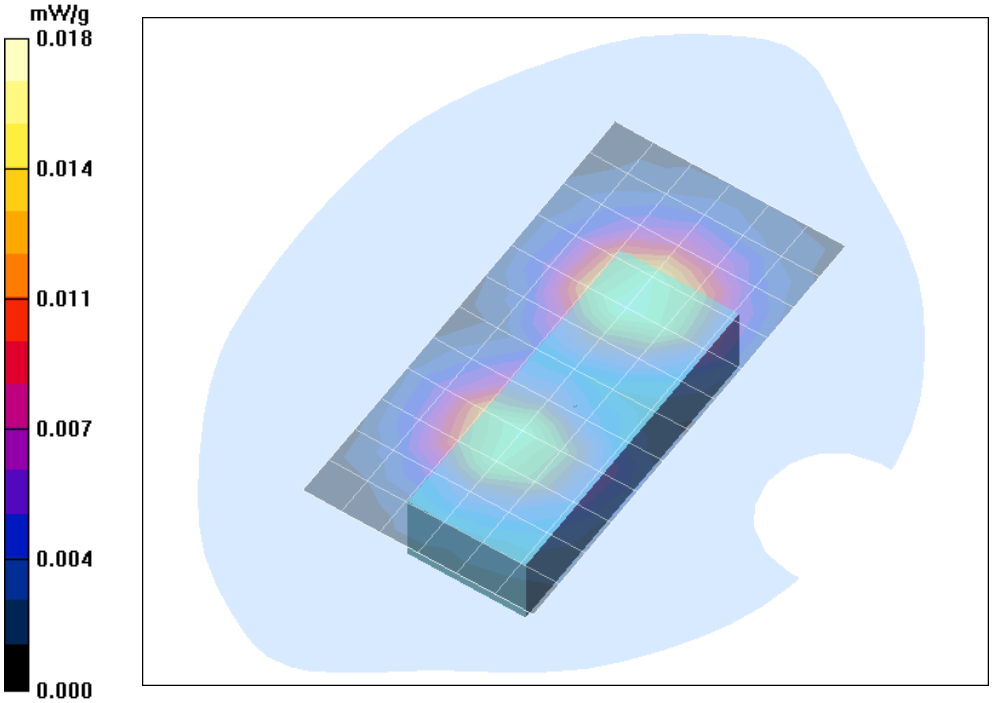

Fig. 6: SAR distribution for DECT US, channel 2, body worn configuration, display towards the phnatom, with headset and 15 mm distance (May 11, 2006; Ambient Temperature: 22.0° C; Liquid Temperature: 21.1° C).

3 SAR z-axis scans (Validation)

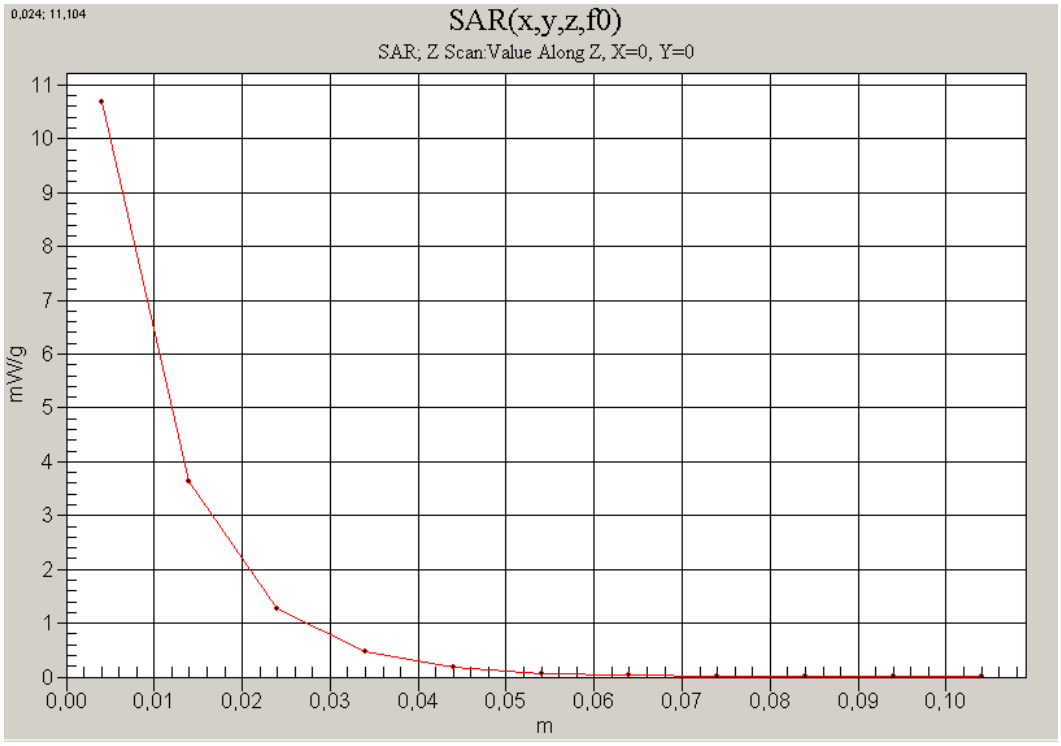

Fig. 7: SAR versus liquid depth, 1900 MHz, head (May 10, 2006; Ambient Temperature: 21.8° C; Liquid Temperature : 20.7° C).

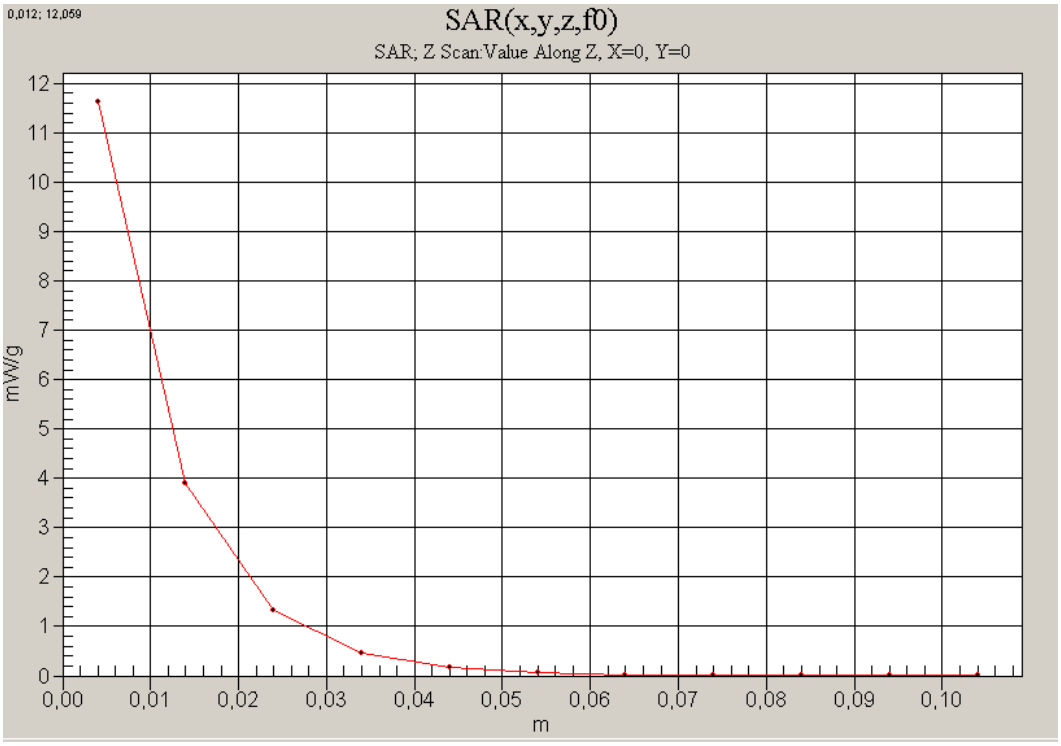

Fig. 8: SAR versus liquid depth, 1900 MHz, body (May 11, 2006; Ambient Temperature: 22.1° C; Liquid Temperature : 21.0° C).

4 SAR z-axis scans (Measurements)

The following pictures show the plots of SAR versus liquid depth for the worst case values.

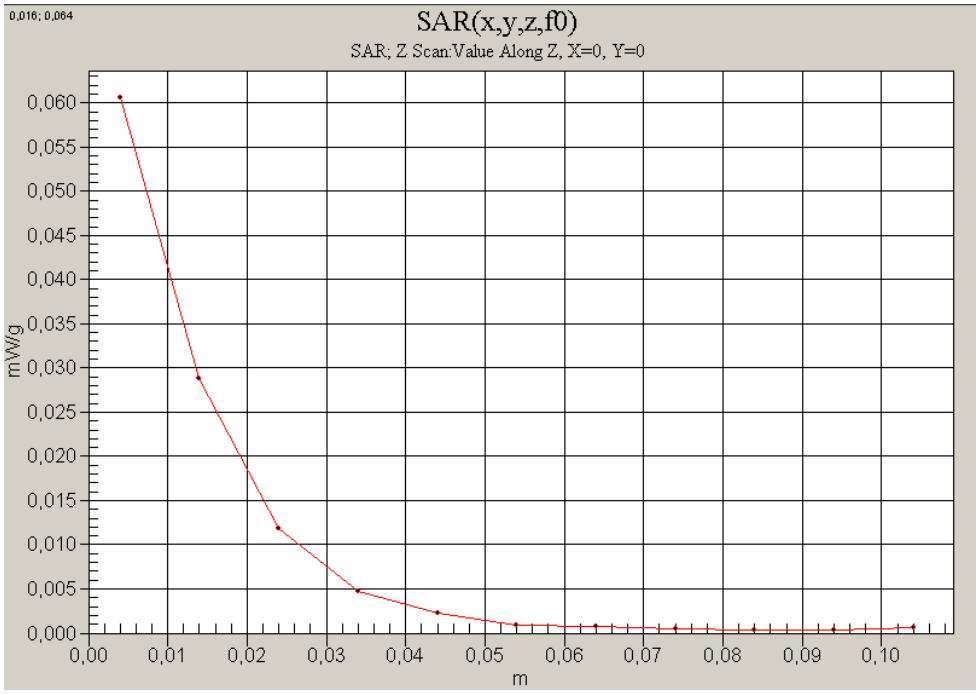

Fig. 9: SAR versus liquid depth, head: DECT US, channel 2, cheek position, right side of head (May 10, 2006; Ambient Temperature: 22.1° C; Liquid Temperature : 20.9° C).

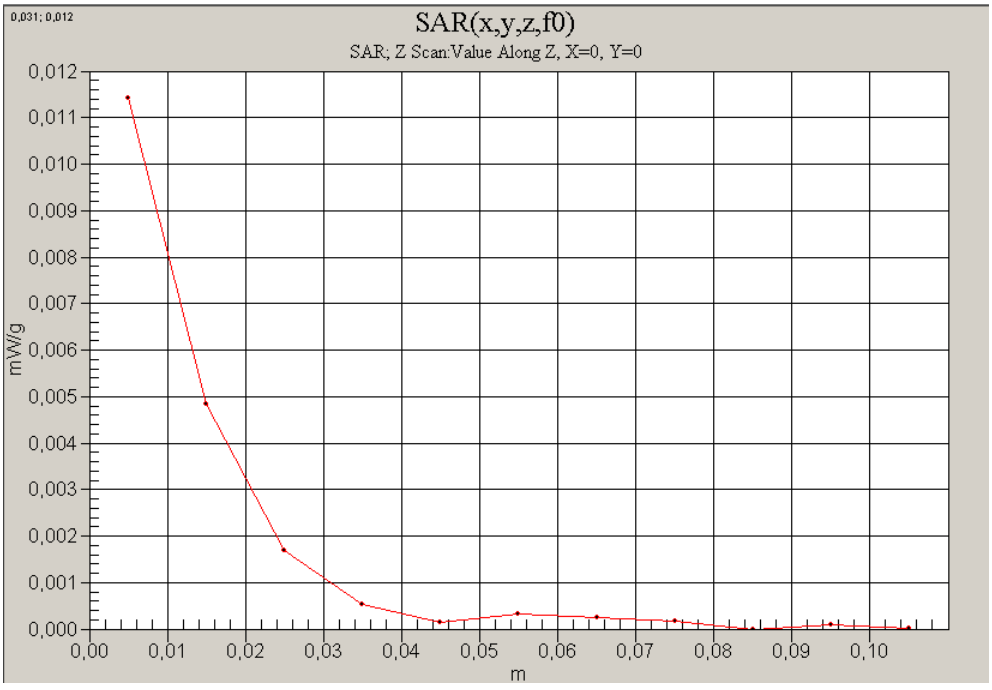

Fig. 10: SAR versus liquid depth, body: DECT US 1900, channel 2,display towards the phantom, headset and 15 mm distance (May 11, 2006; Ambient Temperature: 22.1° C; Liquid Temperature: 21.1° C).