
Appendix for the Report

**Dosimetric Assessment of the
Bang & Olufson BeoCom4 Handset
(FCC ID: BV5BEOCOM4HS)**

According to the FCC Requirements

SAR Distribution Plots

June 28, 2006
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The test results only relate to the items tested.
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1 SAR Distribution Plots, Head Measurements

Test Laboratory: Imst GmbH; File Name: [Comydlm_1.da4](#)

DUT: B&O Handset; Type: BeoCom 4;

Program Name: Cheek Left

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium parameters used (extrapolated): $f = 1924.99$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 41.1$; $\rho = 1000$ kg/m³

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 1340; Type: QD 000 P40 CB; Serial: TP-1340

- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Cheek Left/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.026 mW/g

Cheek Left/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.75 V/m; Power Drift = -0.191 dB

Peak SAR (extrapolated) = 0.054 W/kg

SAR(1 g) = 0.0279 mW/g; SAR(10 g) = 0.013 mW/g

Maximum value of SAR (measured) = 0.033 mW/g

Cheek Left/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.75 V/m; Power Drift = -0.191 dB

Peak SAR (extrapolated) = 0.026 W/kg

SAR(1 g) = 0.020 mW/g; SAR(10 g) = 0.013 mW/g

Maximum value of SAR (measured) = 0.022 mW/g

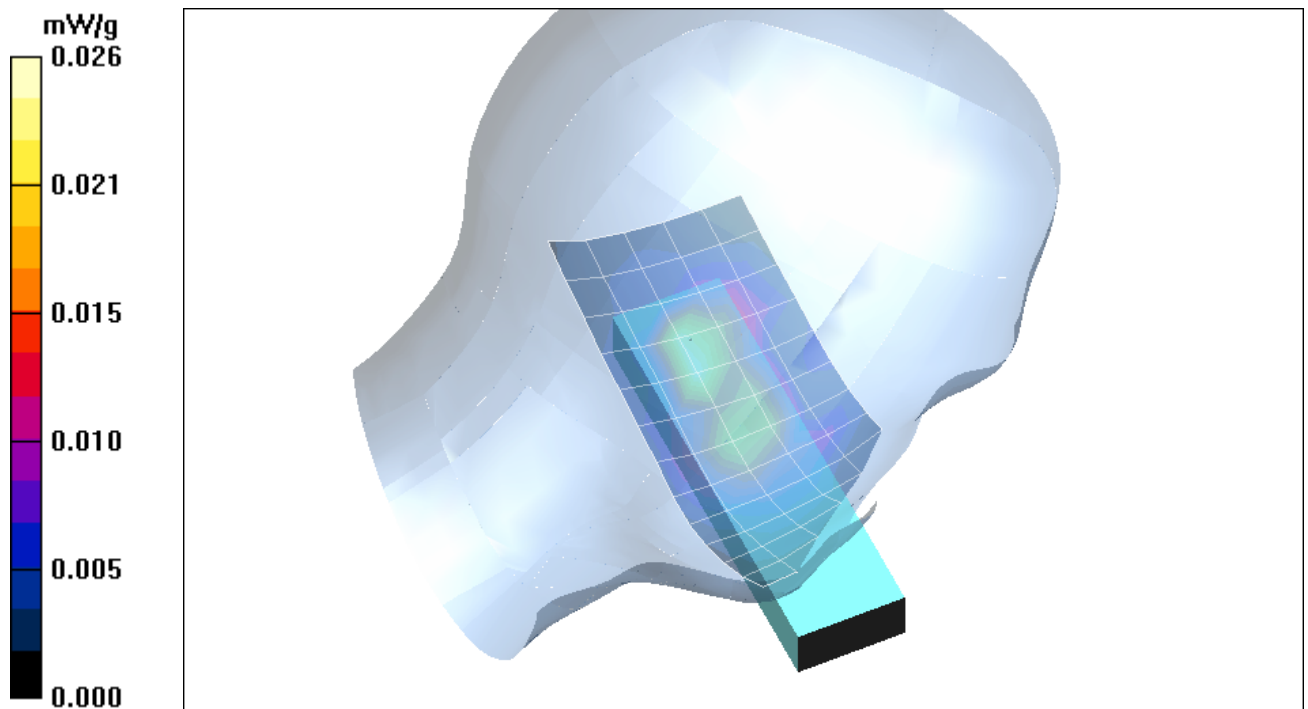


Fig. 1: SAR distribution for DECT US, channel 2, cheek position, left side of head (June 27, 2006; Ambient Temperature: 22.0°C; Liquid Temperature: 21.5°C).

Test Laboratory: Imst GmbH; File Name: [Comydlm_2.da4](#)

DUT: B&O Handset; Type: BeoCom 4;

Program Name: Tilted Left

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium parameters used (extrapolated): $f = 1924.99$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 41.1$; $\rho = 1000$ kg/m³

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 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Tilted Left/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.010 mW/g

Tilted Left/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.60 V/m; Power Drift = 0.044 dB

Peak SAR (extrapolated) = 0.016 W/kg

SAR(1 g) = 0.0097 mW/g; SAR(10 g) = 0.005 mW/g

Maximum value of SAR (measured) = 0.011 mW/g

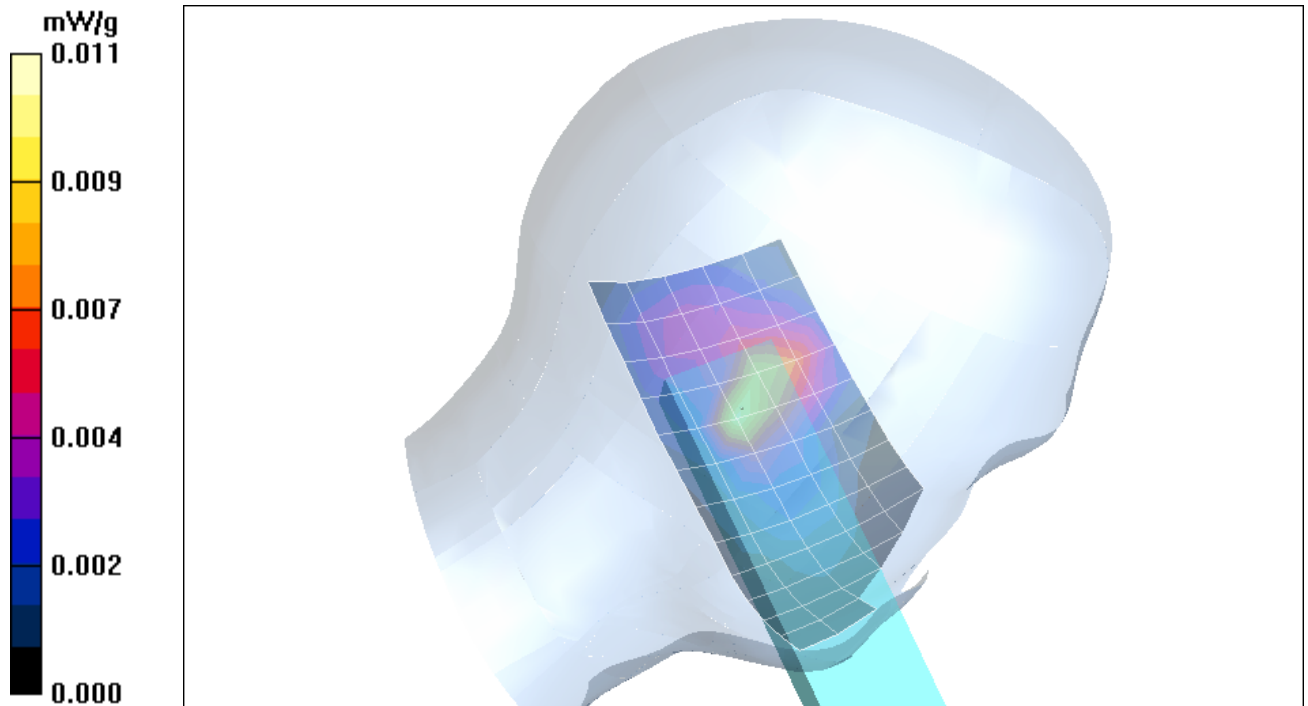


Fig. 2: SAR distribution for DECT US, channel 2, tilted position, left side of head (June 27, 2006; Ambient Temperature: 22.1°C; Liquid Temperature: 21.5°C).

Test Laboratory: Imst GmbH; File Name: [Comydrm_1.da4](#)

DUT: B&O Handset; Type: BeoCom 4;

Program Name: Cheek Right

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium parameters used (extrapolated): $f = 1924.99$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 41.1$; $\rho = 1000$ kg/m³

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 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Cheek Right/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.030 mW/g

Cheek Right/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.22 V/m; Power Drift = 0.077 dB

Peak SAR (extrapolated) = 0.071 W/kg

SAR(1 g) = 0.0376 mW/g; SAR(10 g) = 0.016 mW/g

Maximum value of SAR (measured) = 0.042 mW/g

Cheek Right/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.22 V/m; Power Drift = 0.077 dB

Peak SAR (extrapolated) = 0.023 W/kg

SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.011 mW/g

Maximum value of SAR (measured) = 0.019 mW/g

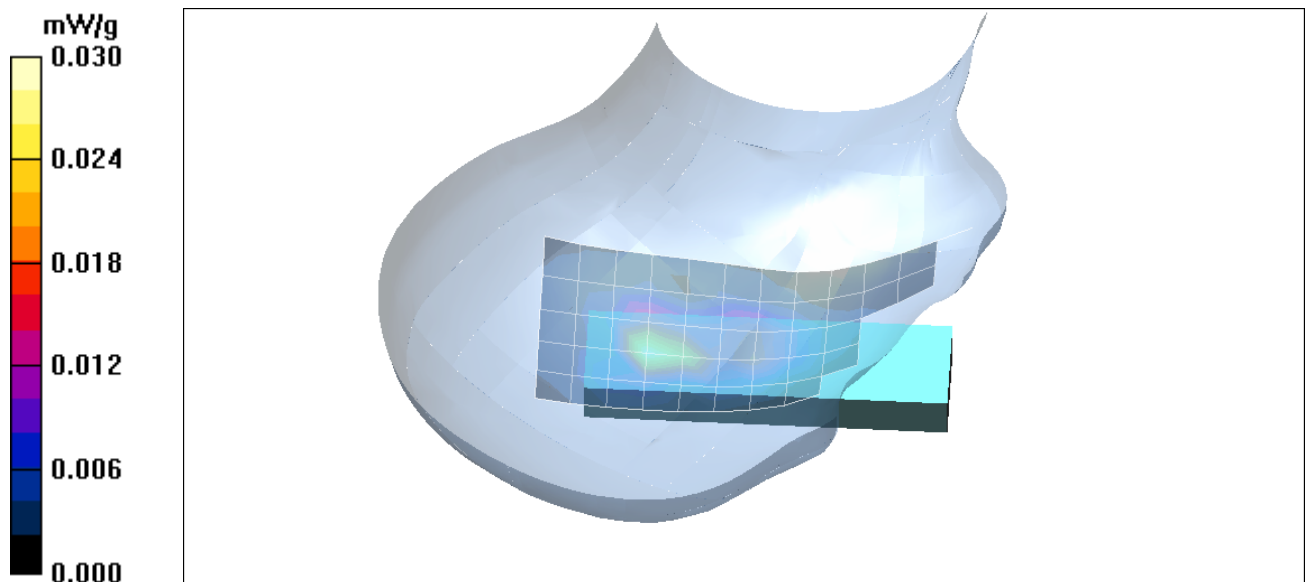


Fig. 3: SAR distribution for DECT US, channel 2, cheek position, right side of head (June 27, 2006; Ambient Temperature: 22.1° C; Liquid Temperature : 21.5° C).

Test Laboratory: Imst GmbH; File Name: [comydrm_2.da4](#)

DUT: B&O Handset; Type: BeoCom 4;

Program Name: Tilted Right

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium parameters used (extrapolated): $f = 1924.99$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 41.1$; $\rho = 1000$ kg/m³

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 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Tilted Right/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.011 mW/g

Tilted Right/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.75 V/m; Power Drift = 0.193 dB

Peak SAR (extrapolated) = 0.020 W/kg

SAR(1 g) = 0.0117 mW/g; SAR(10 g) = 0.00587 mW/g

Maximum value of SAR (measured) = 0.013 mW/g

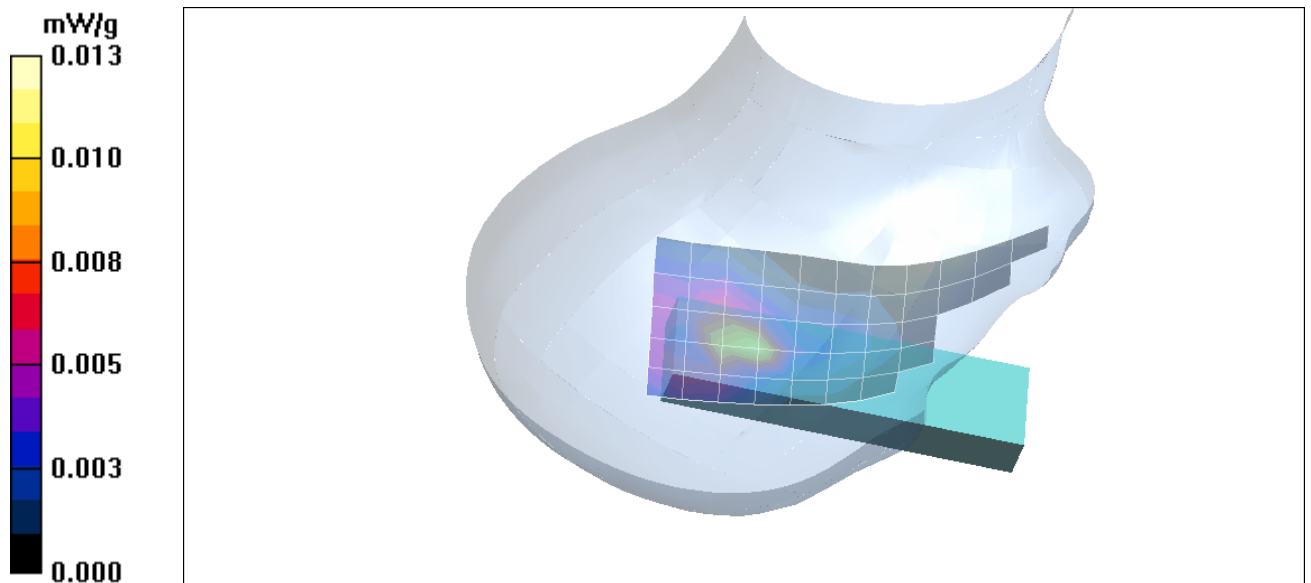


Fig. 4: SAR distribution for DECT US, channel 2, tilted position, right side of head (June 27, 2006; Ambient Temperature: 22.2 °C; Liquid Temperature : 21.5° C)

2 SAR Distribution Plots, Body worn

Test Laboratory: Imst GmbH; File Name: [Comydhm_2.da4](#)

DUT: B&O Handset; Type: BeoCom 4;

Program Name: Body Worn

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium parameters used (extrapolated): $f = 1924.99$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 51.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.67, 7.67, 7.67); Calibrated: 23.09.2005

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

- Electronics: DAE3 Sn335; Calibrated: 09.03.2006

- 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 (6x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.031 mW/g

Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.45 V/m; Power Drift = 0.131 dB

Peak SAR (extrapolated) = 0.050 W/kg

SAR(1 g) = 0.0295 mW/g; SAR(10 g) = 0.015 mW/g

Maximum value of SAR (measured) = 0.033 mW/g

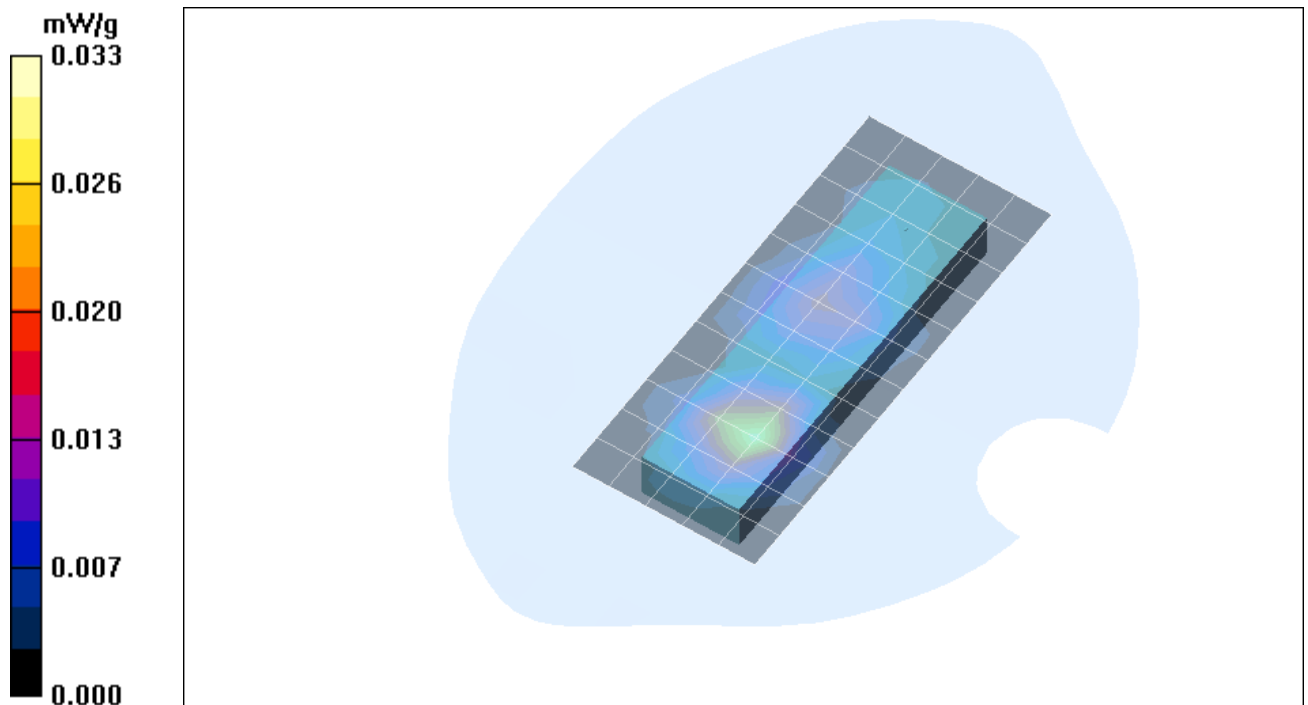


Fig. 5: SAR distribution for DECT US, channel 2, body worn configuration, display towards the ground, with headset and belt clip (June 26, 2006; Ambient Temperature: 22.1° C; Liquid Temperature: 21.2° C).

3 SAR z-axis scans (Validation)

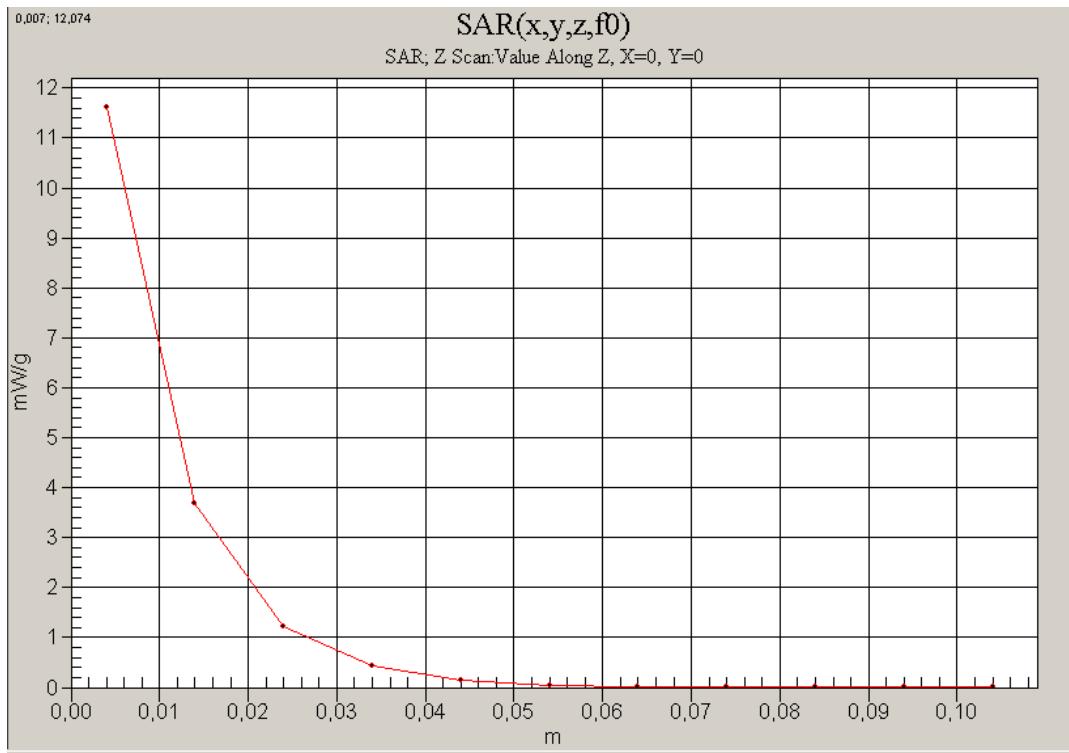


Fig. 6: SAR versus liquid depth, 1900 MHz, head (June 27, 2006; Ambient Temperature: 22.0° C; Liquid Temperature : 21.4° C).

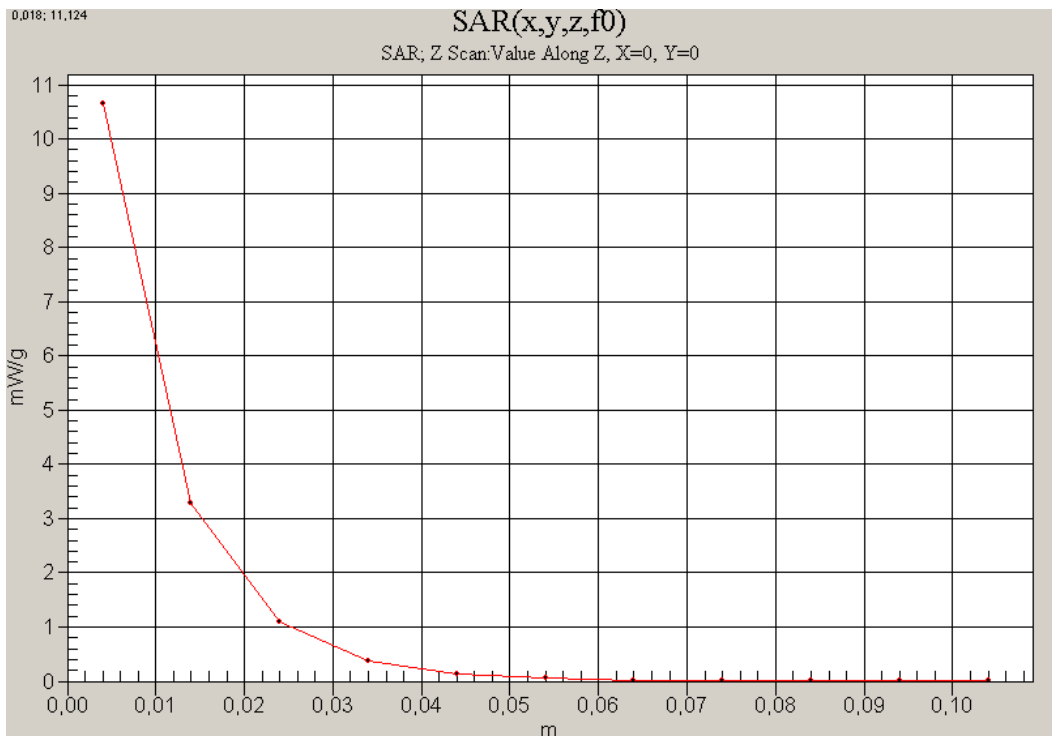


Fig. 7: SAR versus liquid depth, 1900 MHz, body (June 26, 2006; Ambient Temperature: 22.0° C; Liquid Temperature : 21.1° C).

4 SAR z-axis scans (Measurements)

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

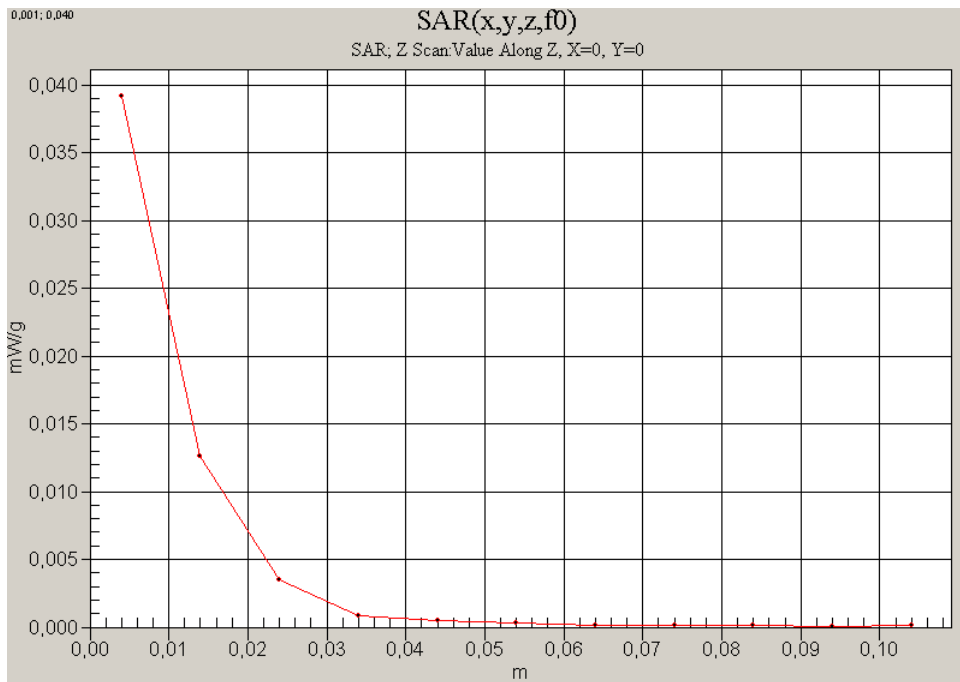


Fig. 8: SAR versus liquid depth, head: DECT US, channel 2, cheek position, right side of head (June 27, 2006; Ambient Temperature: 22.1° C; Liquid Temperature : 21.5° C).

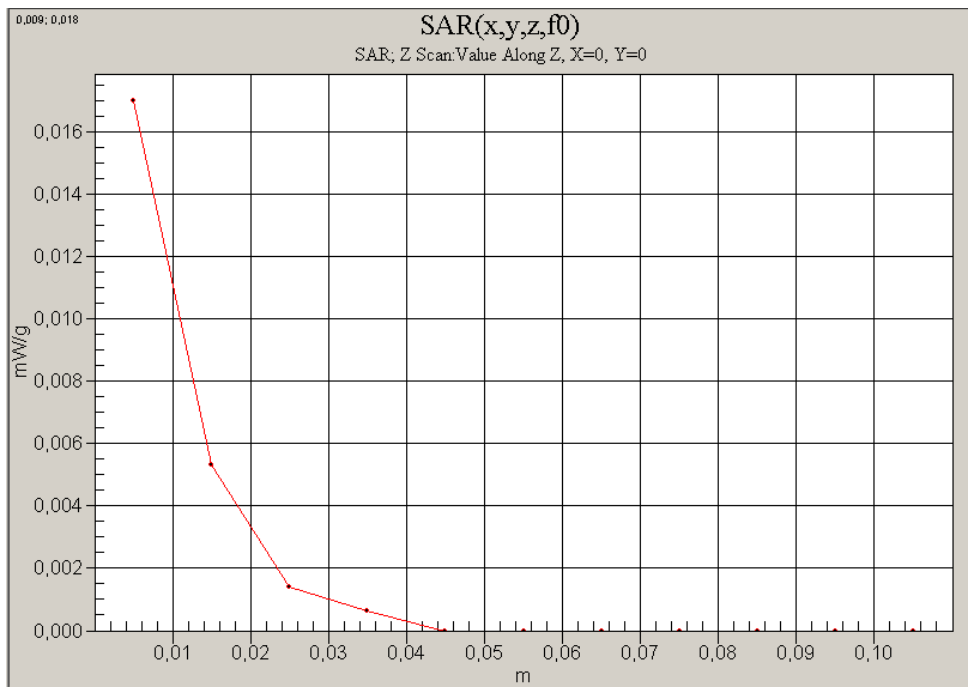


Fig. 9: SAR versus liquid depth, body: DECT US 1900, channel 2, headset and belt clip (June 26, 2006; Ambient Temperature: 22.1° C; Liquid Temperature: 21.2° C).