DAT-P-152/98-01

Appendix for the Report

Dosimetric Assessment of the Mitsubishi M430i (FCC ID: SIJVGH08) According to the FCC Requirements

SAR Distribution Plots

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IMST GmbH
Carl-Friedrich-Gauß-Str. 2
D-47475 Kamp-Lintfort

Customer
7layers AG
Borsigstrasse 11
D-40880 Ratingen

Table of Contents

1 SAR Distribution Plots, PCS 1900 Head

Test Laboratory: IMST GmbH; File Name: 262plm_1.da4

DUT: Mitsubishi; Type: M430i; Serial: 004400007813262
Program Name: Cheek Left

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1669; ConvF(5.19, 5.19, 5.19); Calibrated: 18.03.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Cheek Left/Area Scan (7x15x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 9.15 V/m; Power Drift = -0.068 dB
Maximum value of SAR (measured) = 0.458 mW/g
Cheek Left/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.15 V/m; Power Drift = -0.068 dB
Maximum value of SAR (measured) = 0.532 mW/g
Peak SAR (extrapolated) = 0.772 W/kg
SAR(1 g) = 0.462 mW/g; SAR(10 g) = 0.260 mW/g
Cheek Left/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.15 V/m; Power Drift = -0.068 dB
Maximum value of SAR (measured) = 0.481 mW/g
Peak SAR (extrapolated) = 0.747 W/kg
SAR(1 g) = 0.324 mW/g; SAR(10 g) = 0.183 mW/g

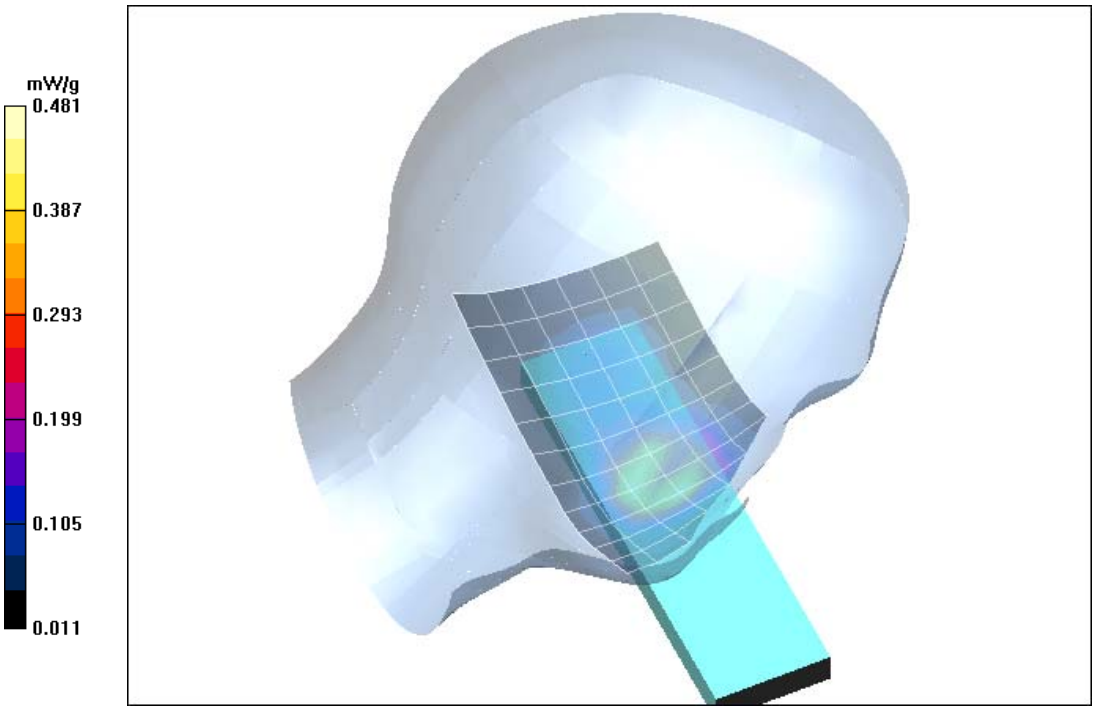

Fig. 1: SAR distribution for PCS 1900, channel 661, cheek position, left side of head. (03.09.2004; Ambient Temperature: 22.2° C; Liquid Temperature : 20.9° C).

Test Laboratory: IMST GmbH; File Name: 262plm_2.da4

DUT: Mitsubishi; Type: M430i; Serial: 004400007813262
Program Name: Tilted Left

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1669; ConvF(5.19, 5.19, 5.19); Calibrated: 18.03.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Tilted Left/Area Scan (6x15x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 9.74 V/m; Power Drift = -0.164 dB
Maximum value of SAR (measured) = 0.117 mW/g
Tilted Left/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.74 V/m; Power Drift = -0.164 dB
Maximum value of SAR (measured) = 0.131 mW/g
Peak SAR (extrapolated) = 4574.0 W/kg
SAR(1 g) = 0.090 mW/g; SAR(10 g) = 0.052 mW/g

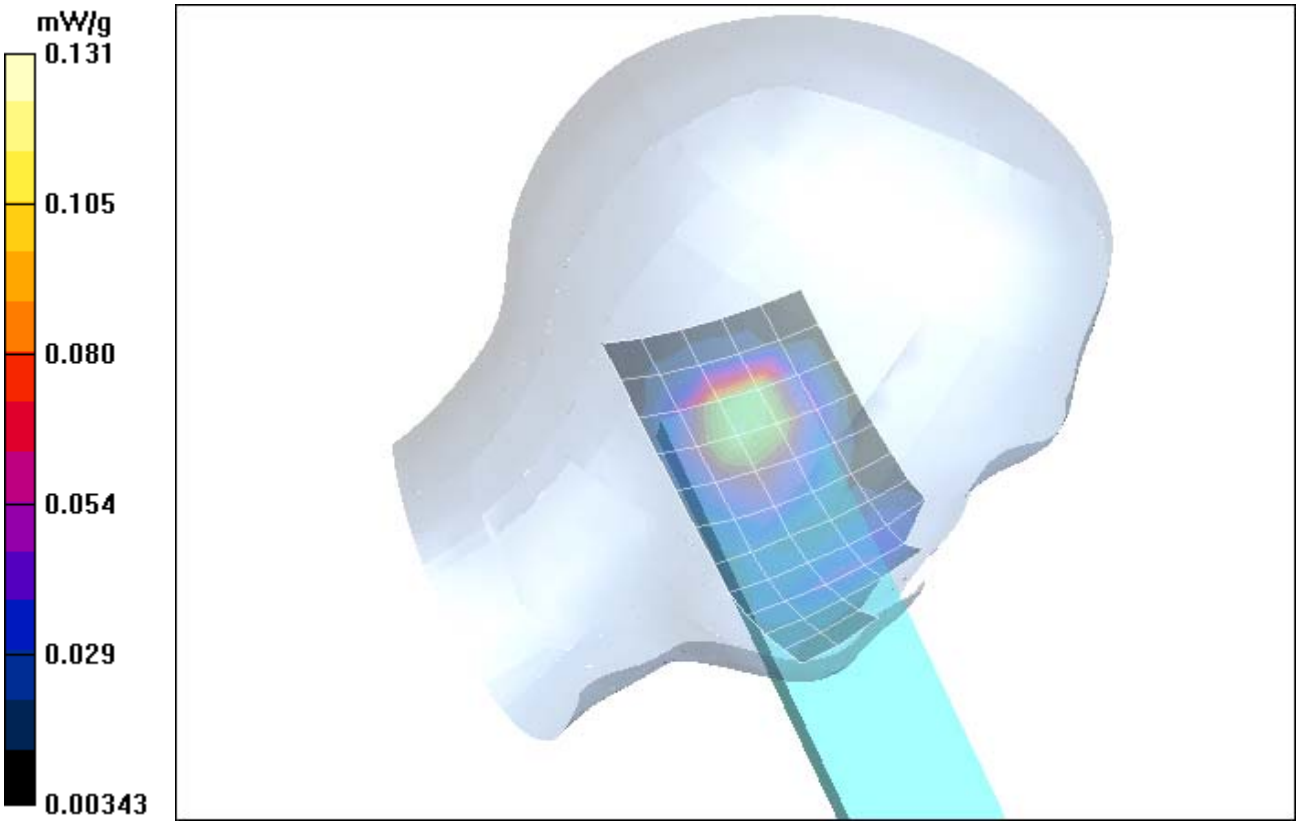

Fig. 2: SAR distribution for PCS 1900, channel 661, tilted position, left side of head. (03.09.2004; Ambient Temperature: 22.2° C; Liquid Temperature : 20.9° C).

Test Laboratory: IMST GmbH; File Name: 262prm_1.da4

DUT: Mitsubishi; Type: M430i; Serial: 004400007813262
Program Name: Cheek Right

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1669; ConvF(5.19, 5.19, 5.19); Calibrated: 18.03.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Cheek Right/Area Scan (7x15x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 8.33 V/m; Power Drift = -0.155 dB
Maximum value of SAR (measured) = 0.325 mW/g
Cheek Right/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.33 V/m; Power Drift = -0.155 dB
Maximum value of SAR (measured) = 0.377 mW/g
Peak SAR (extrapolated) = 0.530 W/kg
SAR(1 g) = 0.348 mW/g; SAR(10 g) = 0.204 mW/g
Cheek Right/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.33 V/m; Power Drift = -0.155 dB
Maximum value of SAR (measured) = 0.332 mW/g
Peak SAR (extrapolated) = 0.422 W/kg
SAR(1 g) = 0.275 mW/g; SAR(10 g) = 0.159 mW/g

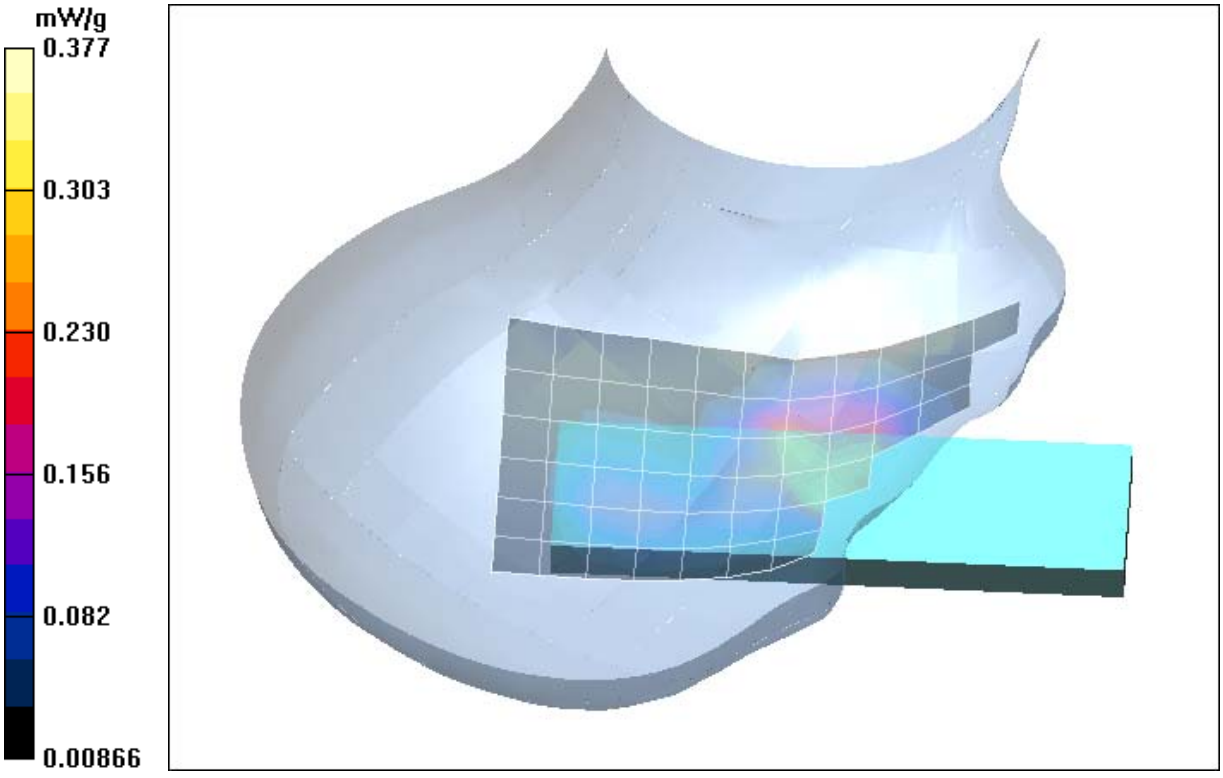

Fig. 3: SAR distribution for PCS 1900, channel 661, cheek position, right side of head. (03.09.2004; Ambient Temperature: 22.2° C; Liquid Temperature : 20.9° C).

Test Laboratory: IMST GmbH; File Name: 262prm_2.da4

DUT: Mitsubishi; Type: M430i; Serial: 004400007813262
Program Name: Tilted Right

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1669; ConvF(5.19, 5.19, 5.19); Calibrated: 18.03.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Tilted Right/Area Scan (6x15x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 9.16 V/m; Power Drift = -0.046 dB
Maximum value of SAR (measured) = 0.141 mW/g
Tilted Right/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.16 V/m; Power Drift = -0.046 dB
Maximum value of SAR (measured) = 0.164 mW/g
Peak SAR (extrapolated) = 0.521 W/kg
SAR(1 g) = 0.110 mW/g; SAR(10 g) = 0.065 mW/g

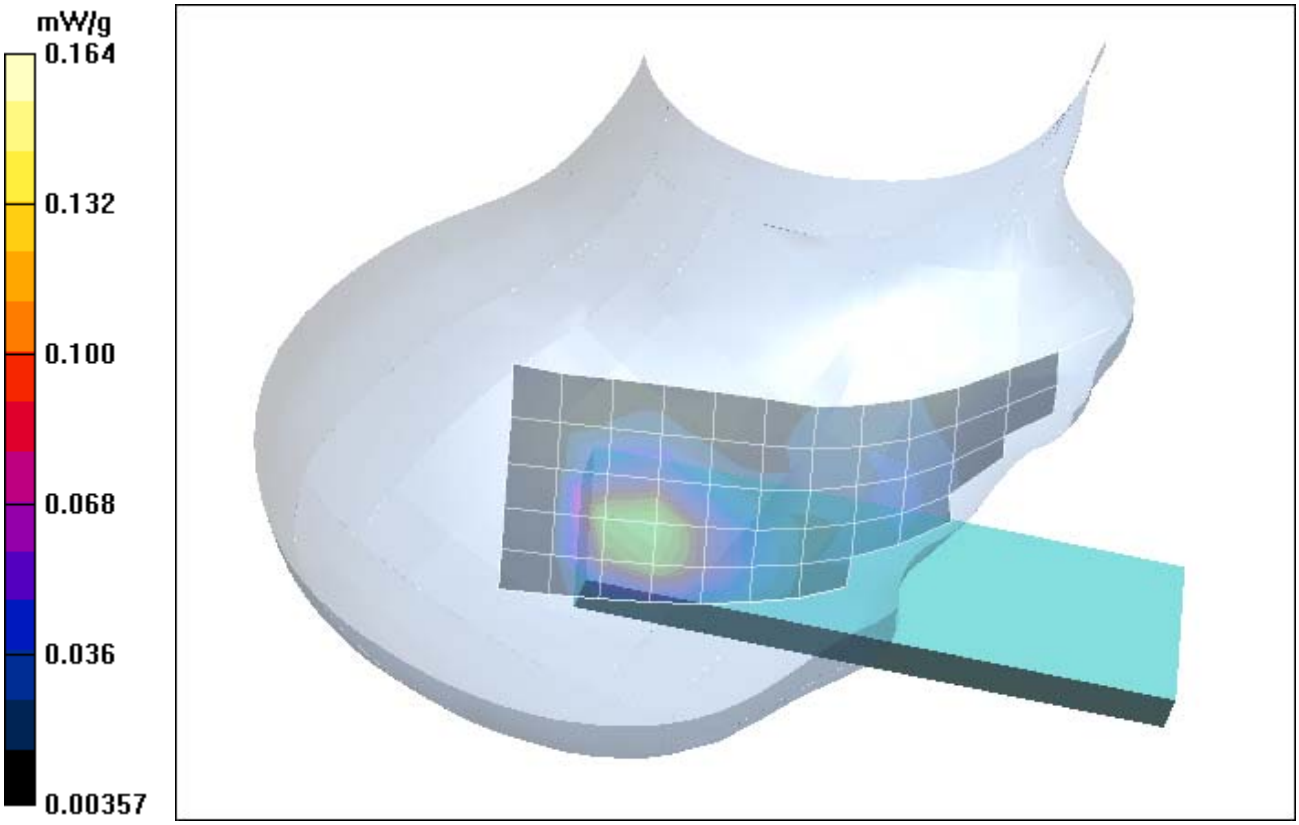

Fig. 4: SAR distribution for PCS 1900, channel 661, tilted position, right side of head. (03.09.2004; Ambient Temperature: 22.2° C; Liquid Temperature : 20.9° C).

2 SAR Distribution Plots, PCS 1900 Body with headset

Test Laboratory: IMST GmbH; File Name: 262phm_1.da4

DUT: Mitsubishi; Type: M430i; Serial: 004400007813262
Program Name: Body Worn

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: σ = 1.51; mho/m, ε_r = 52.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1669; ConvF(4.54, 4.54, 4.54); Calibrated: 18.03.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body Worn/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 8.43 V/m; Power Drift = -0.158 dB
Maximum value of SAR (measured) = 0.283 mW/g
Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.43 V/m; Power Drift = -0.158 dB
Maximum value of SAR (measured) = 0.303 mW/g
Peak SAR (extrapolated) = 0.458 W/kg
SAR(1 g) = 0.276 mW/g; SAR(10 g) = 0.156 mW/g

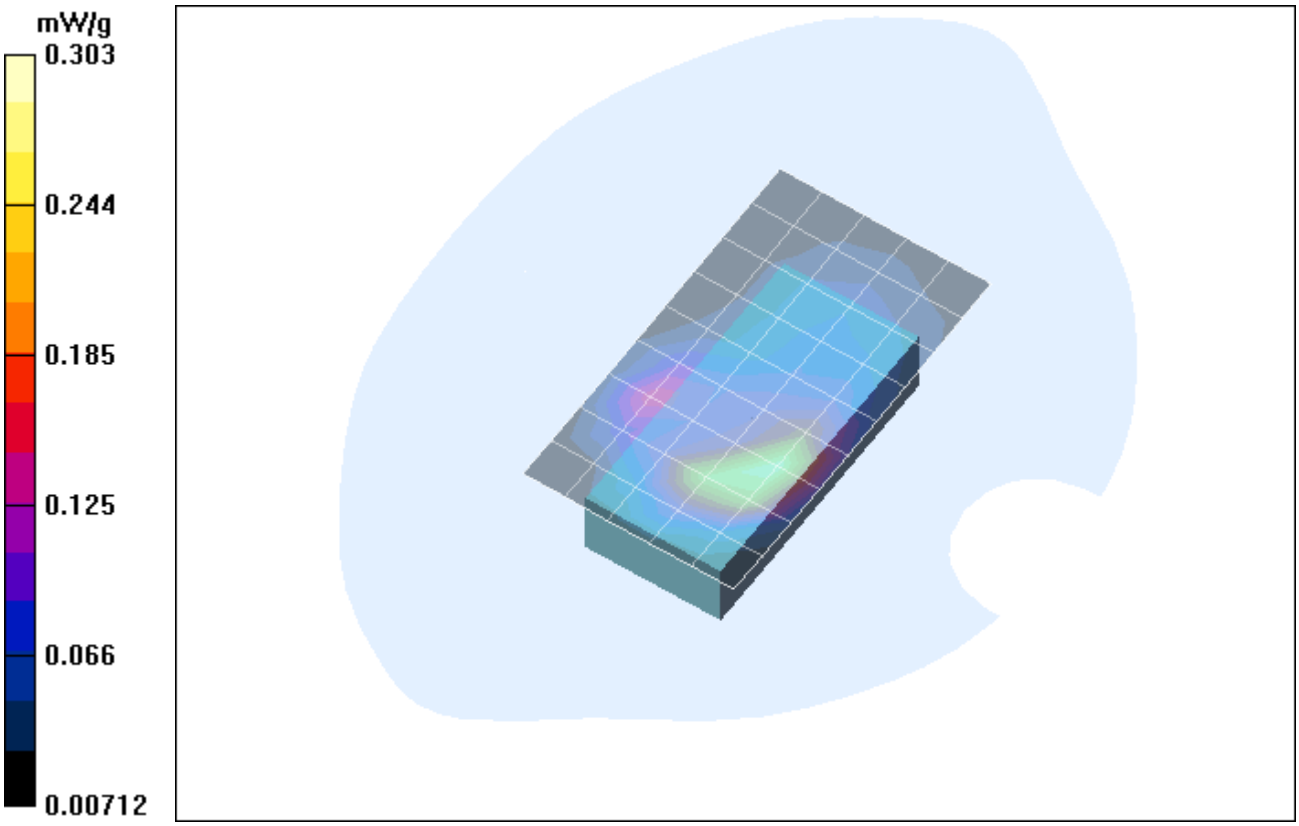

Fig. 5: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, with headset (07.09.2004; Ambient Temperature: 22.0° C; Liquid Temperature : 21.0° C)

3 SAR Distribution Plots, PCS 1900 Body GPRS

Test Laboratory: IMST GmbH; File Name: 262phm_2.da4

DUT: Mitsubishi; Type: M430i; Serial: 004400007813262
Program Name: Body Worn

Communication System: GPRS 1900; Frequency: 1880 MHz;Duty Cycle: 1:4
Medium parameters used: σ = 1.51; mho/m, ε_r = 52.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6 - SN1669; ConvF(4.54, 4.54, 4.54); Calibrated: 18.03.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 05.08.2004
- Phantom: SAM Glycol; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body Worn/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 12.2 V/m; Power Drift = -0.2 dB
Maximum value of SAR (measured) = 0.457 mW/g
Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.2 V/m; Power Drift = -0.2 dB
Maximum value of SAR (measured) = 0.495 mW/g
Peak SAR (extrapolated) = 0.715 W/kg
SAR(1 g) = 0.448 mW/g; SAR(10 g) = 0.261 mW/g
Body Worn/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.2 V/m; Power Drift = -0.2 dB
Maximum value of SAR (measured) = 0.373 mW/g
Peak SAR (extrapolated) = 0.556 W/kg
SAR(1 g) = 0.337 mW/g; SAR(10 g) = 0.191 mW/g

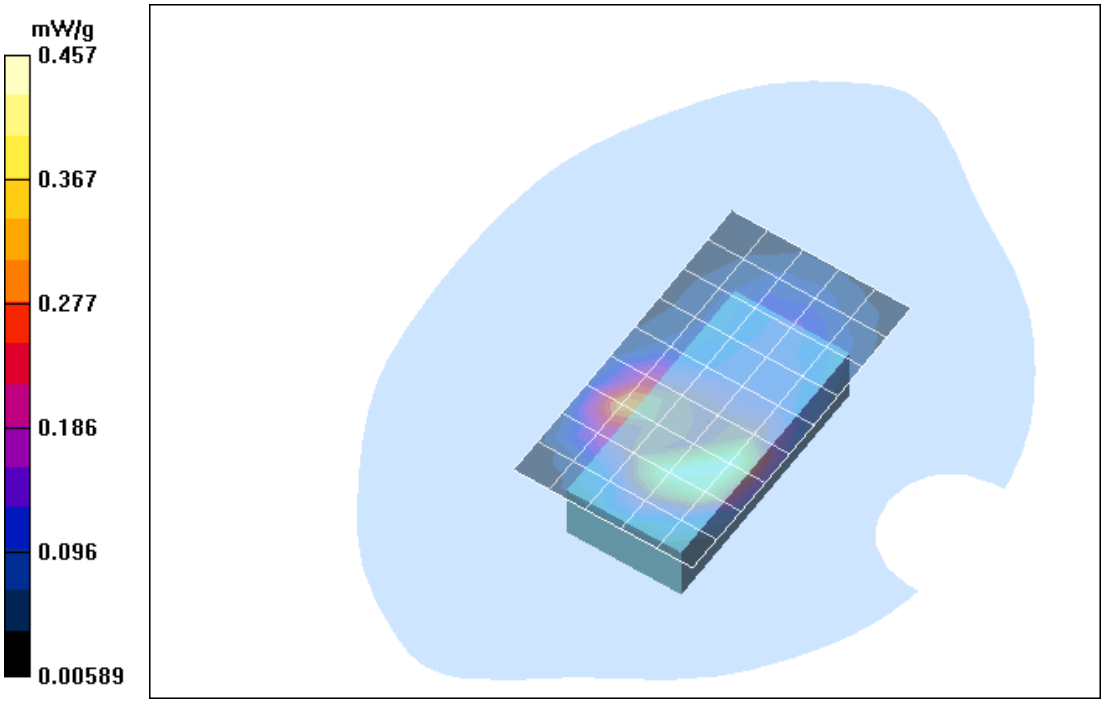

Fig. 6: SAR distribution for PCS 1900, channel 661, body worn configuration, antenna towards the phantom, 2TX, (07.09.2004; Ambient Temperature: 22.0° C; Liquid Temperature : 21.0° C).

4 SAR z-axis scans (Validation)

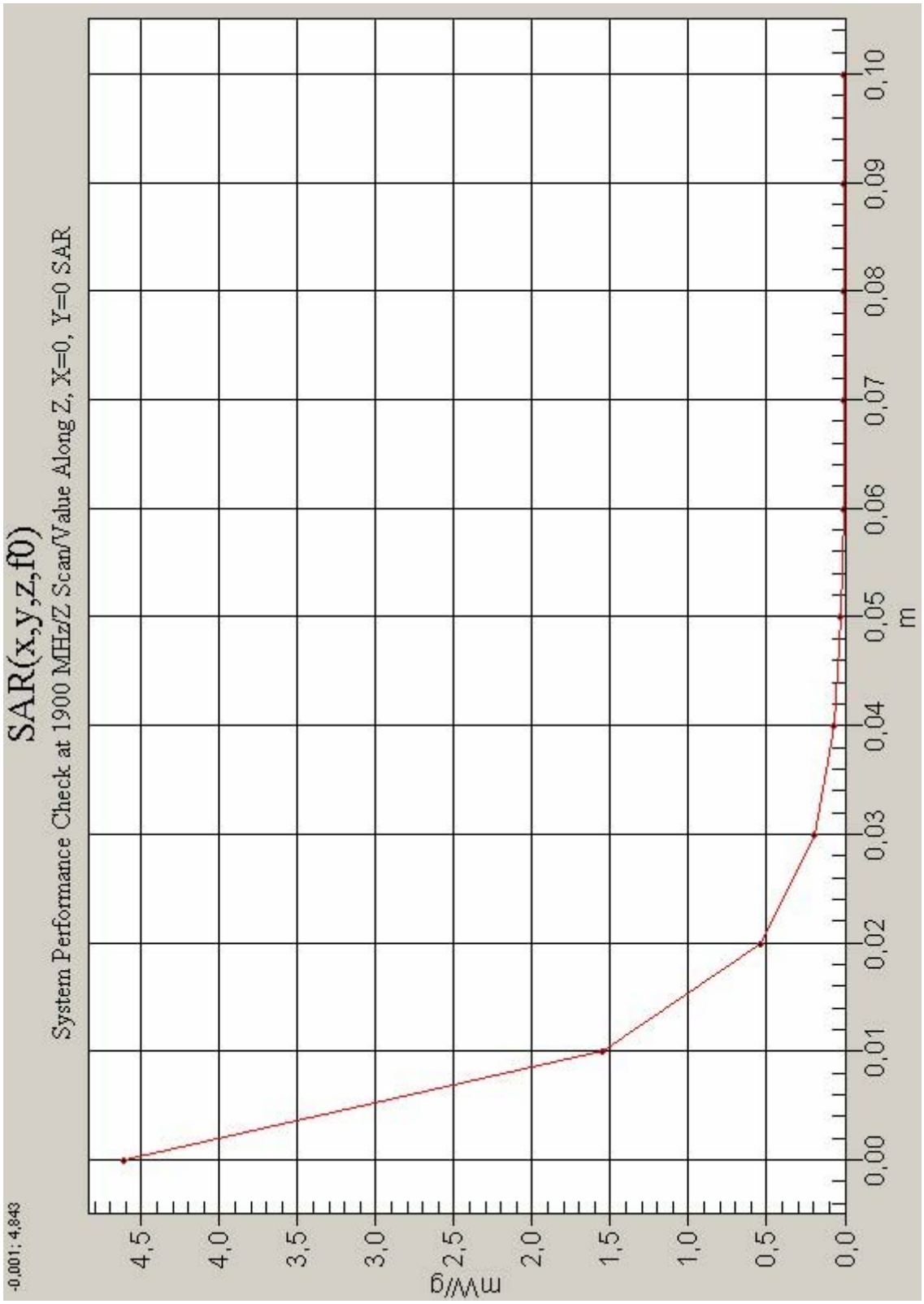

Fig. 7: SAR versus liquid depth, 1900 MHz, head (03.09.2004; Ambient Temperature: 21.3° C; Liquid Temperature : 20.7° C).

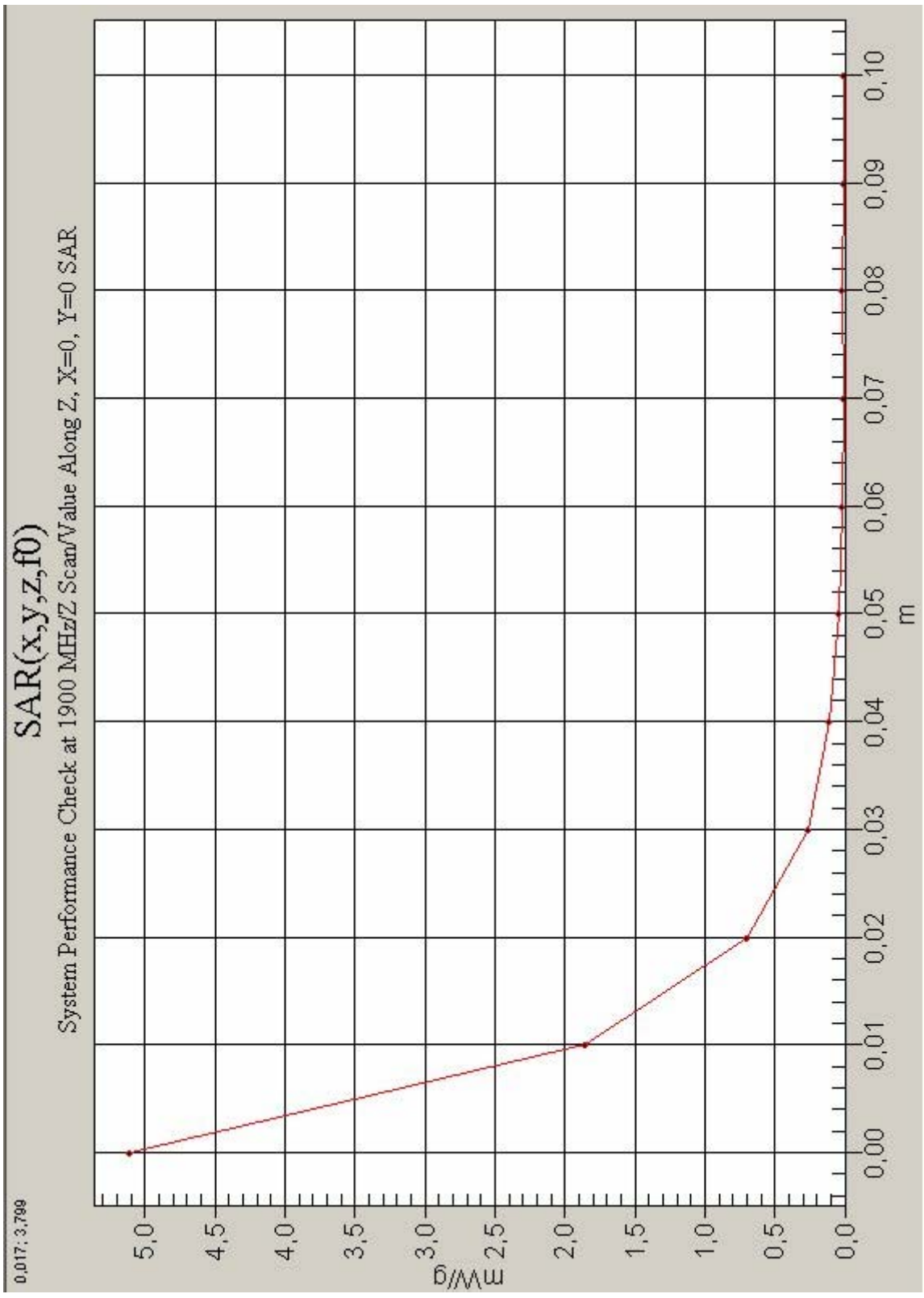

Fig. 8: SAR versus liquid depth, 1900 MHz, body (07.09.2004; Ambient Temperature: 22.6° C; Liquid Temperature : 21.5° C).

5 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 , PCS 1900, channel 661, cheek position, left side of head. (03.09.2004, Ambient Temperature: 22.2° C; Liquid Temperature : 20.9° C).

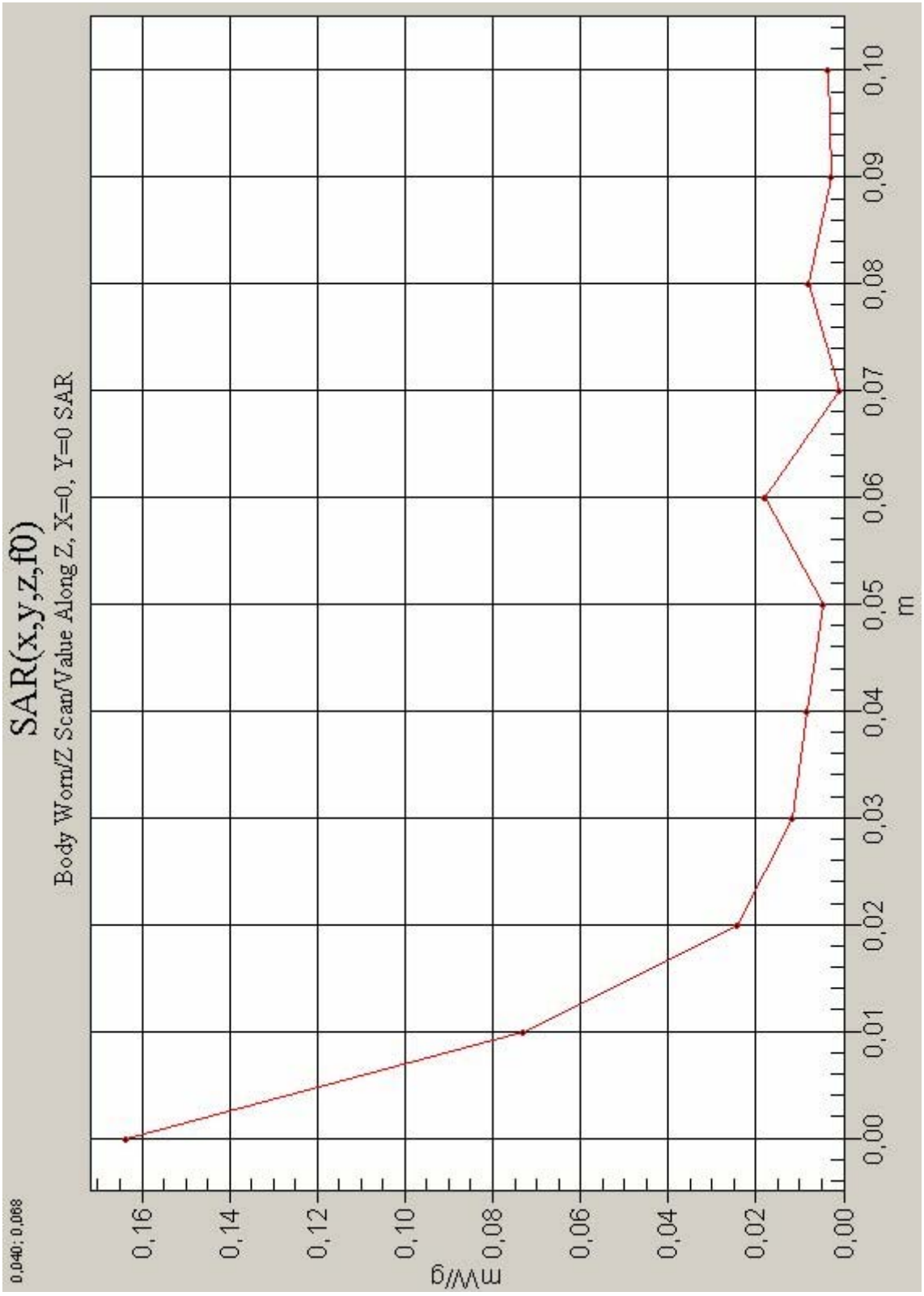

Fig. 10: SAR versus liquid depth: PCS 1900, channel 661, body worn configuration, antenna towards the phantom, 2TX (07.09.2004, Ambient Temperature: 22.0° C; Liquid Temperature : 21.0° C).