Deutscher Akkreditierungs Rat

DAT-P-152/98-01

Appendix for the Report

Dosimetric Assessment of the Ascom DH3 (FCC ID: BXZDH3)

According to the FCC Requirements

SAR Distribution Plots

May 19, 2008

IMST GmbH

Carl-Friedrich-Gauß-Str. 2

D-47475 Kamp-Lintfort

Customer

Ascom Sweden AB

Wireless Solution P.O. Box 8783

SE-40276 Gøteborg

Table of Contents

1 SAR Distribution Plots, Head Measurements, Antenna 1

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: DT390_us_bplm_1_ant1.da4

DUT: ascom; Type: DT390; Serial: T26103JJBT
Program Name: Cheek Left

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.45 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(7.85, 7.85, 7.85); Calibrated: 18.09.2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2007
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek Left/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.024 mW/g
Cheek Left/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.94 V/m; Power Drift = -0.193 dB
Peak SAR (extrapolated) = 0.047 W/kg
SAR(1 g) = 0.028 mW/g; SAR(10 g) = 0.014 mW/g
Maximum value of SAR (measured) = 0.031 mW/g
Cheek Left/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.94 V/m; Power Drift = -0.193 dB
Peak SAR (extrapolated) = 0.033 W/kg
SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.0087 mW/g
Maximum value of SAR (measured) = 0.020 mW/g

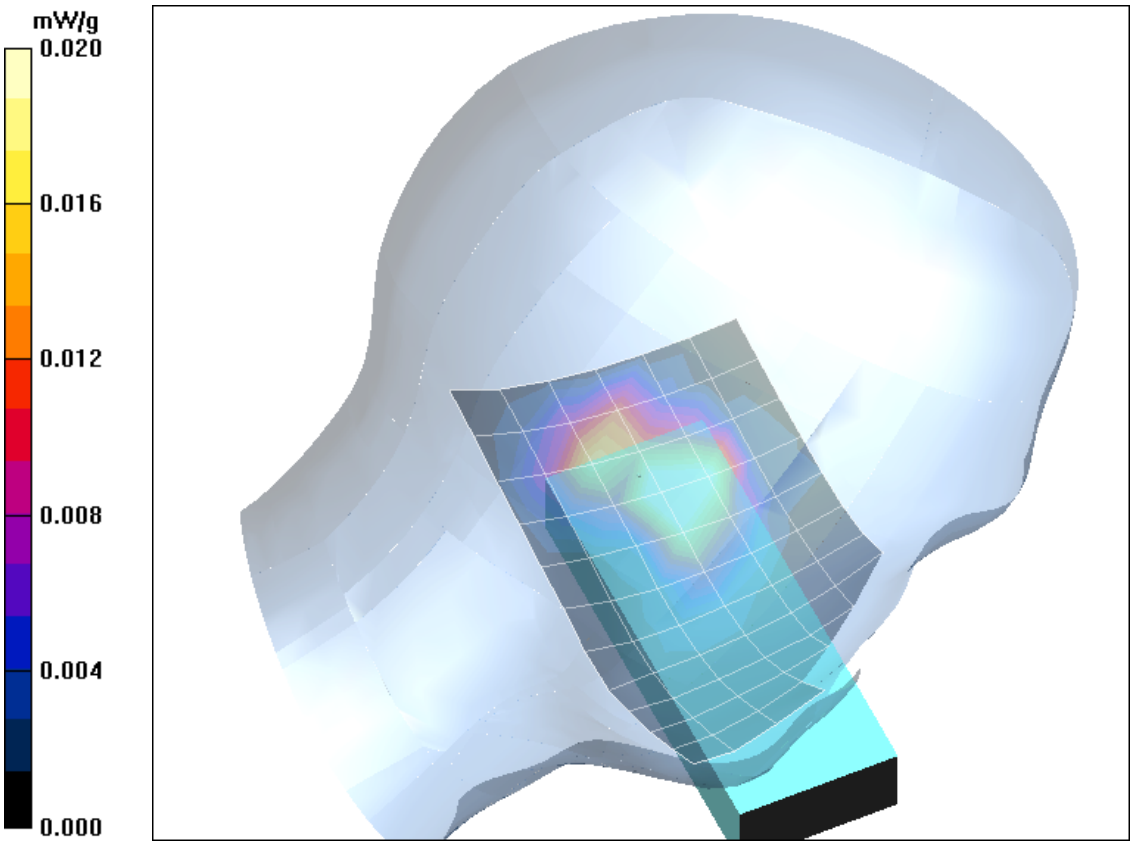

Fig. 1: SAR distribution for DECT US, channel 2, cheek position, left side of head (May 15, 2008; Ambient Temperature: 23.2°C; Liquid Temperature: 22.0°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: DT390_us_bplm_2_ant1.da4

DUT: ascom; Type: DT390; Serial: T26103JJBT
Program Name: Tilted Left

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.45 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(7.85, 7.85, 7.85); Calibrated: 18.09.2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2007
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilted Left/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.015 mW/g
Tilted Left/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.75 V/m; Power Drift = 0.185 dB
Peak SAR (extrapolated) = 0.067 W/kg
SAR(1 g) = 0.015 mW/g; SAR(10 g) = 0.0069 mW/g
Tilted Left/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.75 V/m; Power Drift = 0.185 dB
Peak SAR (extrapolated) = 0.024 W/kg
SAR(1 g) = 0.014 mW/g; SAR(10 g) = 0.0078 mW/g
Maximum value of SAR (measured) = 0.016 mW/g

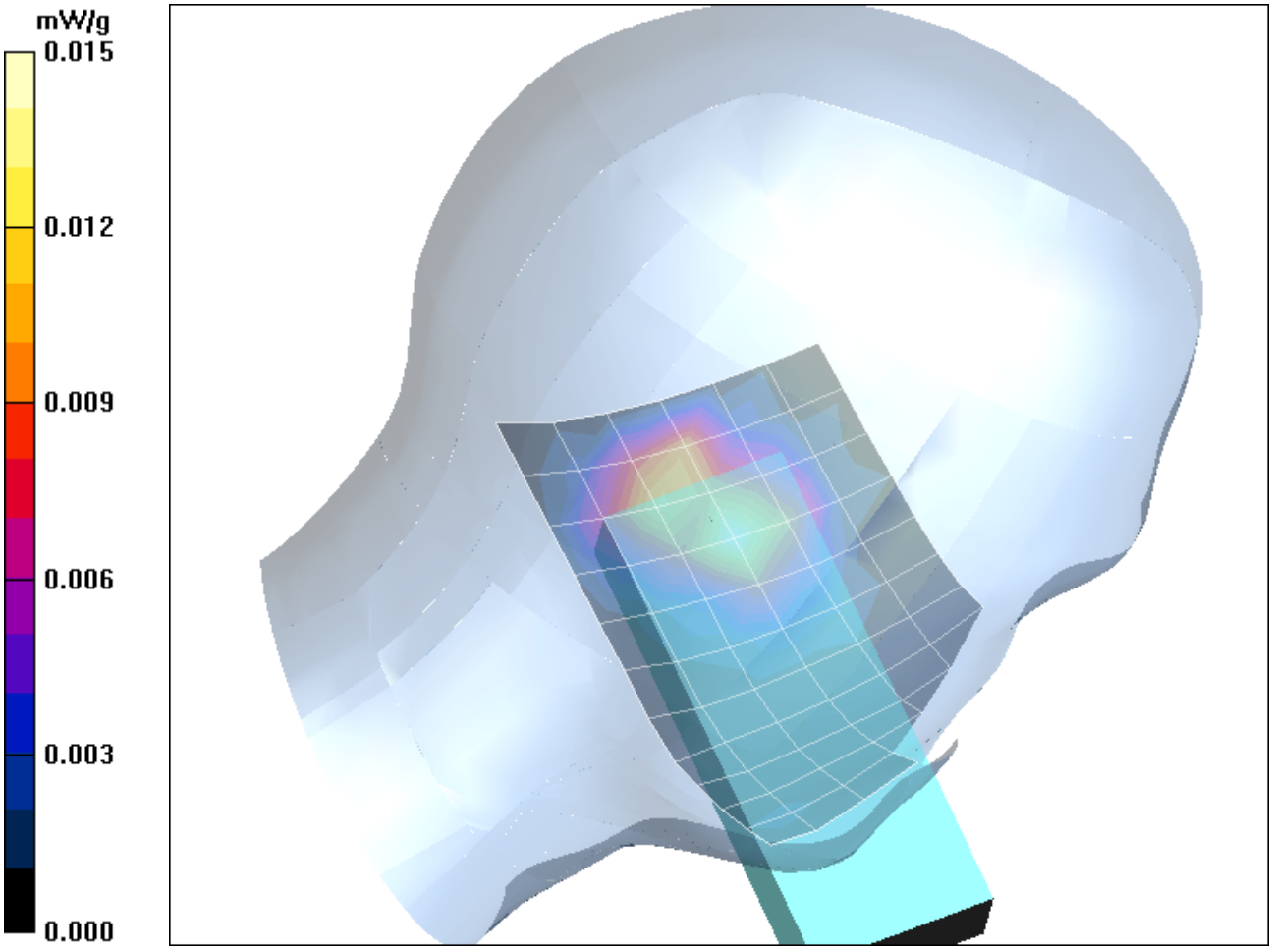

Fig. 2: SAR distribution for DECT US, channel 2, tilted position, left side of head (May 15, 2008; Ambient Temperature: 23.2°C; Liquid Temperature: 22.0°C C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: DT390_us_bprm_1_ant1.da4

DUT: ascom; Type: DT390; Serial: T26103JJBT
Program Name: Cheek Right

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.45 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(7.85, 7.85, 7.85); Calibrated: 18.09.2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2007
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek Right/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.025 mW/g
Cheek Right/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.00 V/m; Power Drift = -0.148 dB
Peak SAR (extrapolated) = 0.048 W/kg
SAR(1 g) = 0.023 mW/g; SAR(10 g) = 0.011 mW/g
Maximum value of SAR (measured) = 0.026 mW/g
Cheek Right/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.00 V/m; Power Drift = -0.148 dB
Peak SAR (extrapolated) = 0.037 W/kg
SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.011 mW/g

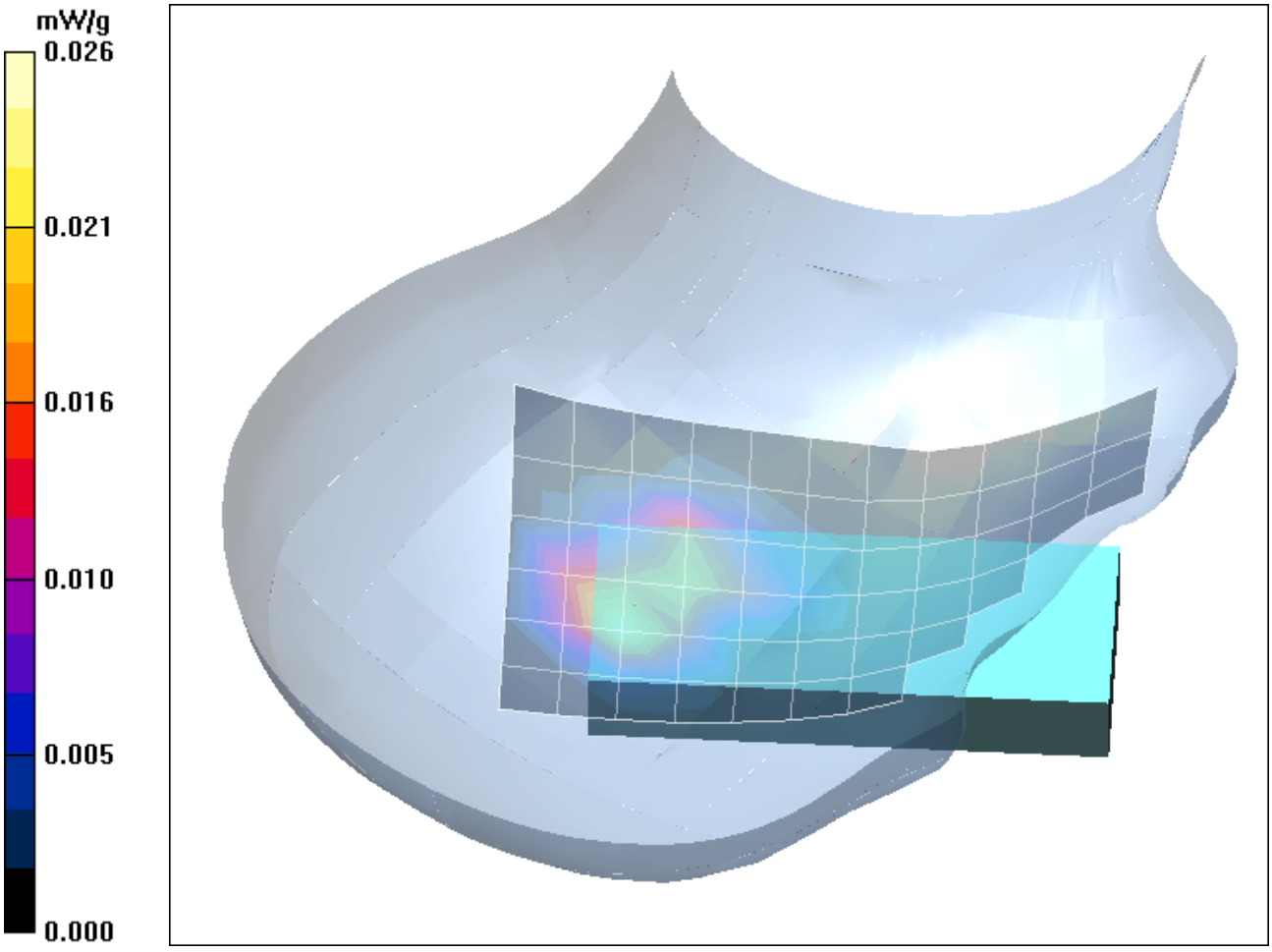

Fig. 3: SAR distribution for DECT US, channel 2, cheek position, right side of head (May 15, 2008; Ambient Temperature: 23.2°C; Liquid Temperature: 22.0°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: DT390_us_bprm_2_ant1.da4

DUT: ascom; Type: DT390; Serial: T26103JJBT
Program Name: Tilted Right

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.45 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(7.85, 7.85, 7.85); Calibrated: 18.09.2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2007
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilted Right/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.019 mW/g
Tilted Right/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.74 V/m; Power Drift = 0.117 dB
Peak SAR (extrapolated) = 0.041 W/kg
SAR(1 g) = 0.020 mW/g; SAR(10 g) = 0.0093 mW/g
Maximum value of SAR (measured) = 0.023 mW/g
Tilted Right/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.74 V/m; Power Drift = 0.117 dB
Peak SAR (extrapolated) = 0.024 W/kg
SAR(1 g) = 0.014 mW/g; SAR(10 g) = 0.0072 mW/g
Maximum value of SAR (measured) = 0.016 mW/g

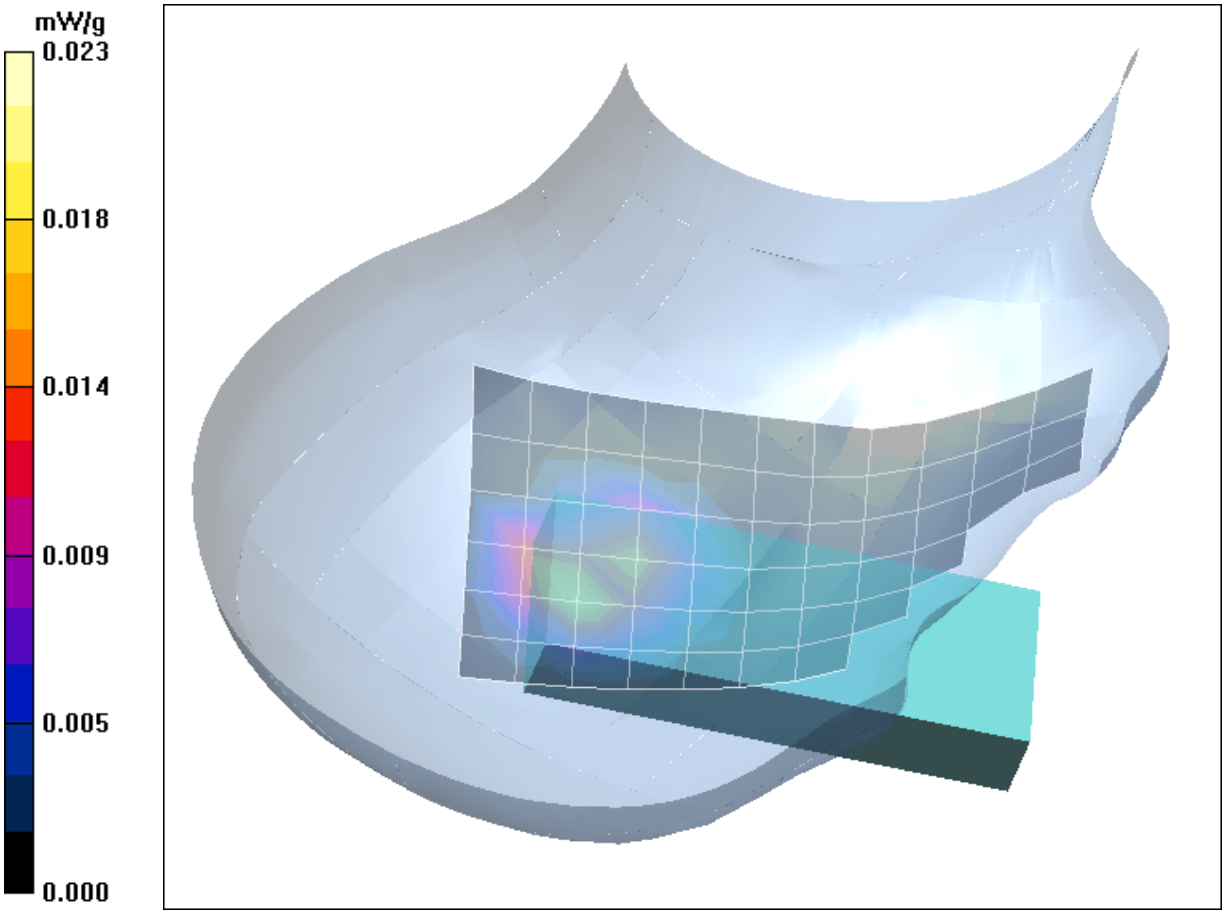

Fig. 4: SAR distribution for DECT US, channel 2, tilted position, right side of head (May 15, 2008; Ambient Temperature: 23.2°C; Liquid Temperature: 22.0°C)

2 SAR Distribution Plots, Head Measurements, Antenna 2

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: DT390_us_bplm_1_ant2.da4

DUT: ascom; Type: DT390; Serial: T26103JJBT
Program Name: Cheek Left

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.45 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(7.85, 7.85, 7.85); Calibrated: 18.09.2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2007
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek Left/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.028 mW/g
Cheek Left/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.30 V/m; Power Drift = 0.113 dB
Peak SAR (extrapolated) = 0.049 W/kg
SAR(1 g) = 0.028 mW/g; SAR(10 g) = 0.016 mW/g
Maximum value of SAR (measured) = 0.031 mW/g
Cheek Left/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.30 V/m; Power Drift = 0.113 dB
Peak SAR (extrapolated) = 0.038 W/kg
SAR(1 g) = 0.024 mW/g; SAR(10 g) = 0.014 mW/g
Maximum value of SAR (measured) = 0.027 mW/g

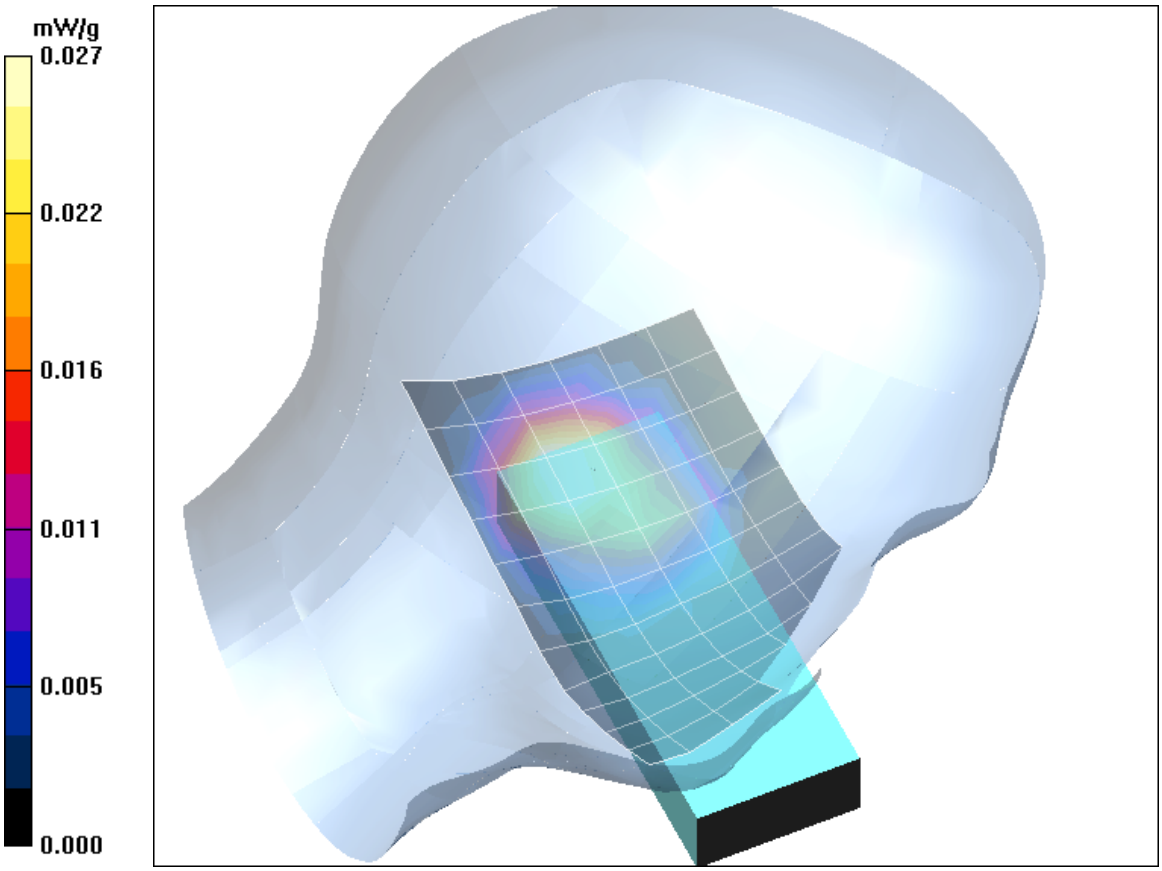

Fig. 5: SAR distribution for DECT US, channel 2, cheek position, left side of head (May 15, 2008; Ambient Temperature: 23.2°C; Liquid Temperature: 22.0°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: DT390_us_bplm_2_ant2.da4

DUT: ascom; Type: DT390; Serial: T26103JJBT
Program Name: Tilted Left

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.45 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(7.85, 7.85, 7.85); Calibrated: 18.09.2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2007
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilted Left/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.025 mW/g
Tilted Left/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.74 V/m; Power Drift = -0.058 dB
Peak SAR (extrapolated) = 0.038 W/kg
SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.012 mW/g
Maximum value of SAR (measured) = 0.024 mW/g

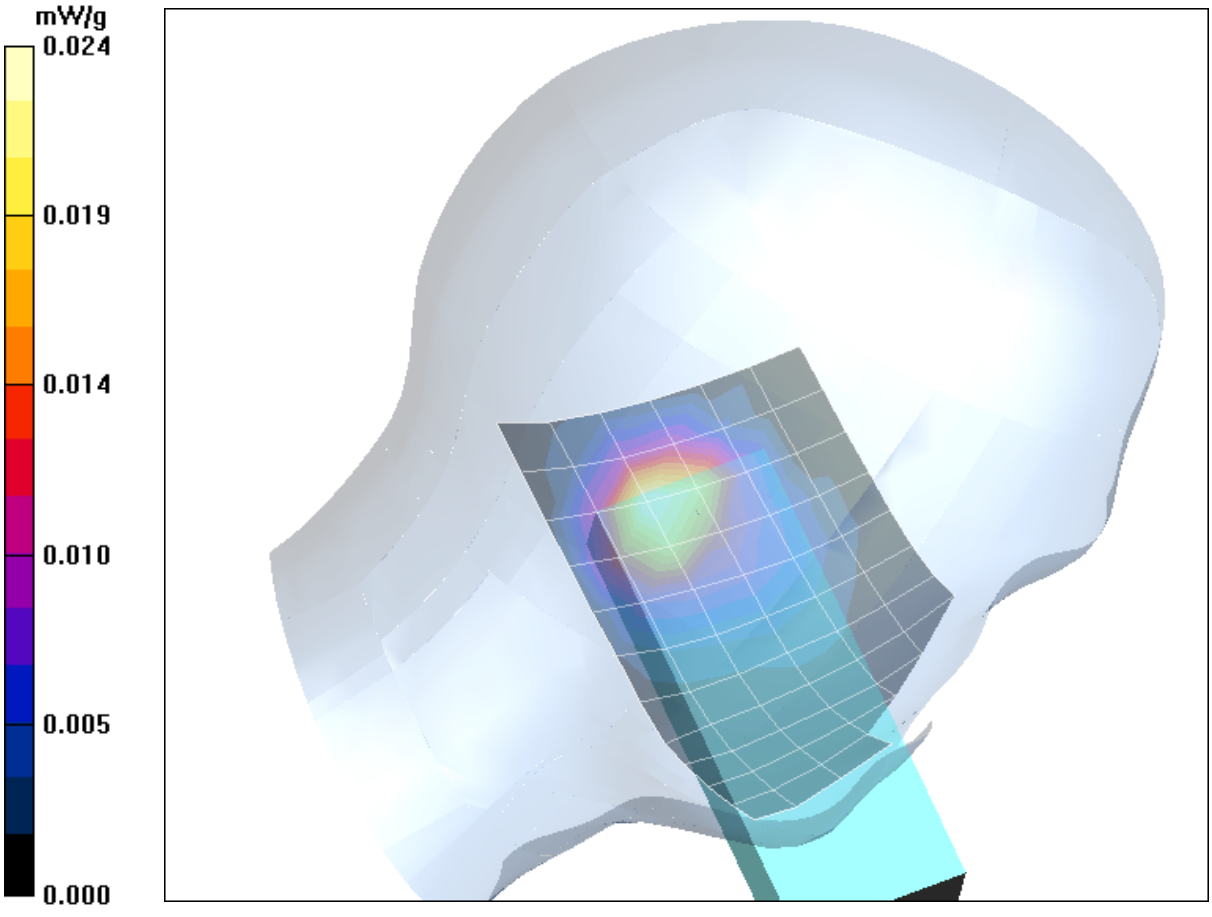

Fig. 6: SAR distribution for DECT US, channel 2, tilted position, left side of head (May 15, 2008; Ambient Temperature: 23.2°C; Liquid Temperature: 22.0°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: DT390_us_bprm_1_ant2.da4

DUT: ascom; Type: DT390; Serial: T26103JJBT
Program Name: Cheek Right

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.45 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(7.85, 7.85, 7.85); Calibrated: 18.09.2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2007
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek Right/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.044 mW/g
Cheek Right/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.58 V/m; Power Drift = 0.033 dB
Peak SAR (extrapolated) = 0.081 W/kg
SAR(1 g) = 0.043 mW/g; SAR(10 g) = 0.023 mW/g
Maximum value of SAR (measured) = 0.048 mW/g
Cheek Right/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.58 V/m; Power Drift = 0.033 dB
Peak SAR (extrapolated) = 0.061 W/kg
SAR(1 g) = 0.027 mW/g; SAR(10 g) = 0.016 mW/g
Maximum value of SAR (measured) = 0.040 mW/g

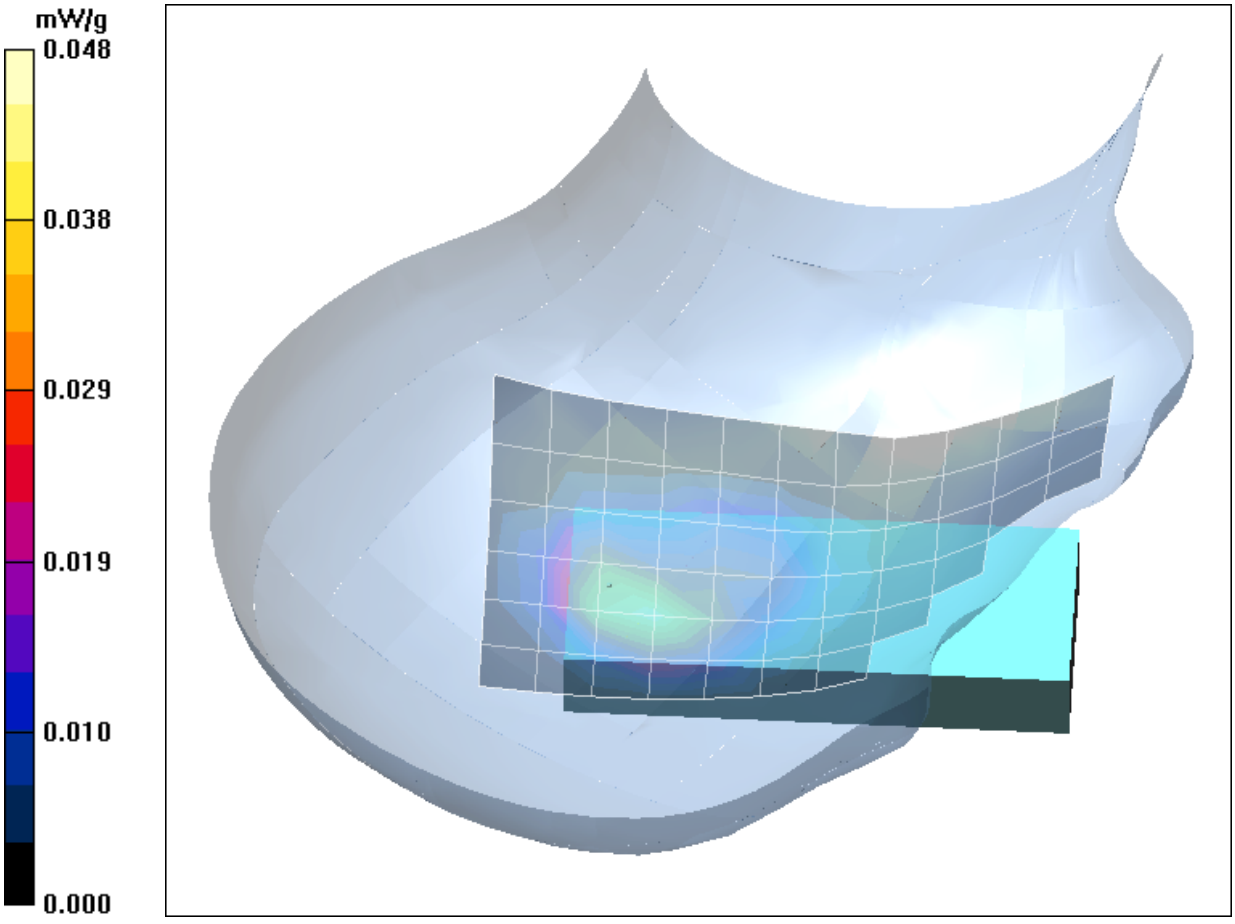

Fig. 7: SAR distribution for DECT US, channel 2, cheek position, right side of head (May 15, 2008; Ambient Temperature: 23.2°C; Liquid Temperature: 22.0°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: DT390_us_bprm_2_ant2.da4

DUT: ascom; Type: DT390; Serial: T26103JJBT
Program Name: Tilted Right

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.45 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(7.85, 7.85, 7.85); Calibrated: 18.09.2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2007
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilted Right/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.032 mW/g
Tilted Right/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.15 V/m; Power Drift = 0.152 dB
Peak SAR (extrapolated) = 0.055 W/kg
SAR(1 g) = 0.031 mW/g; SAR(10 g) = 0.017 mW/g
Maximum value of SAR (measured) = 0.034 mW/g

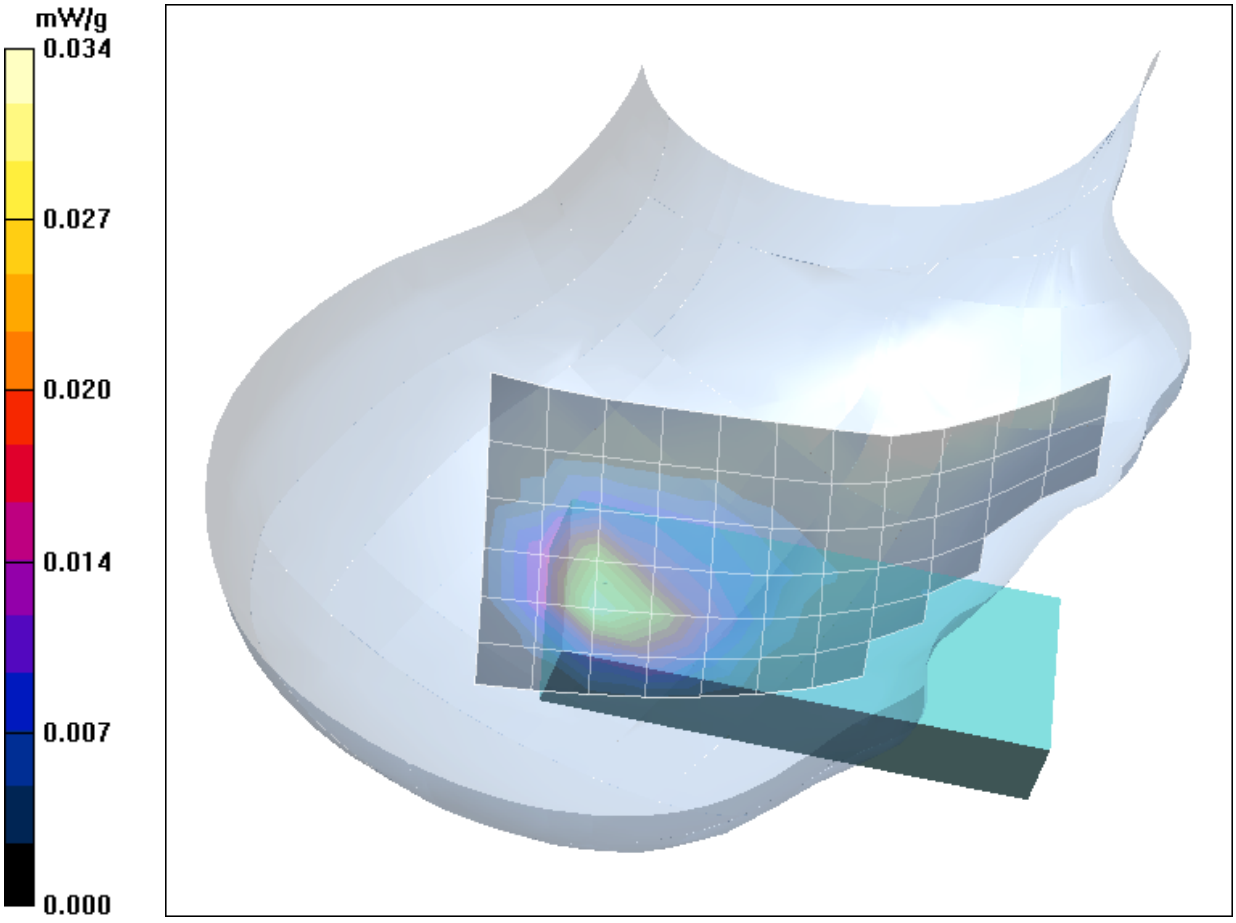

Fig. 8: SAR distribution for DECT US, channel 2, tilted position, right side of head (May 15, 2008; Ambient Temperature: 23.2°C; Liquid Temperature: 22.0°C)

3 SAR Distribution Plots, Body Measurements, Antenna 1

Test Laboratory: IMST GmbH, DASY Blue (I); File Name:
DT390_bphm_1_ant1_clip_headset_dspl_up.da4

DUT: ascom; Type: DT390; Serial: T26103JJBT
Program Name: Body Worn

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.58 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(7.67, 7.67, 7.67); Calibrated: 18.09.2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2007
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body Worn/Area Scan (7x13x1): 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 = 0.596 V/m; Power Drift = -0.122 dB
Peak SAR (extrapolated) = 0.063 W/kg
SAR(1 g) = 0.033 mW/g; SAR(10 g) = 0.016 mW/g
Maximum value of SAR (measured) = 0.038 mW/g

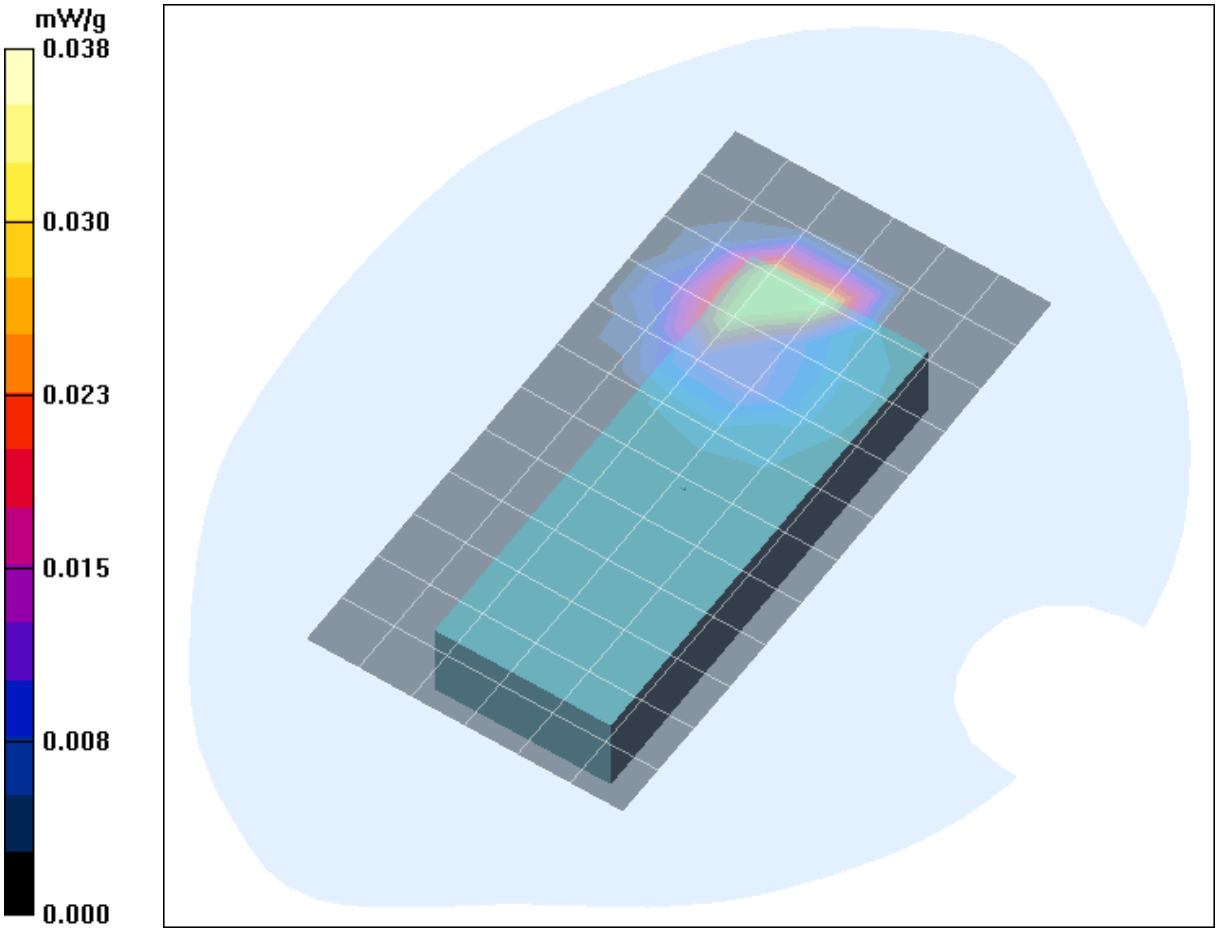

Fig. 9: SAR distribution for DECT US, channel 2, body worn configuration, display towards the phantom, with headset and 0 mm distance (May 19, 2008; Ambient Temperature: 22.7° C; Liquid Temperature: 21.8° C).

4 SAR Distribution Plots, Body Measurements, Antenna 2

Test Laboratory: IMST GmbH, DASY Blue (I); File Name:
DT390_bphm_2_ant2_clip_headset_dspl_up.da4

DUT: ascom; Type: DT390; Serial: T26103JJBT
Program Name: Body Worn

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.58 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(7.67, 7.67, 7.67); Calibrated: 18.09.2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2007
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body Worn/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.040 mW/g
Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.17 V/m; Power Drift = 0.094 dB
Peak SAR (extrapolated) = 0.072 W/kg
SAR(1 g) = 0.037 mW/g; SAR(10 g) = 0.022 mW/g
Maximum value of SAR (measured) = 0.041 mW/g

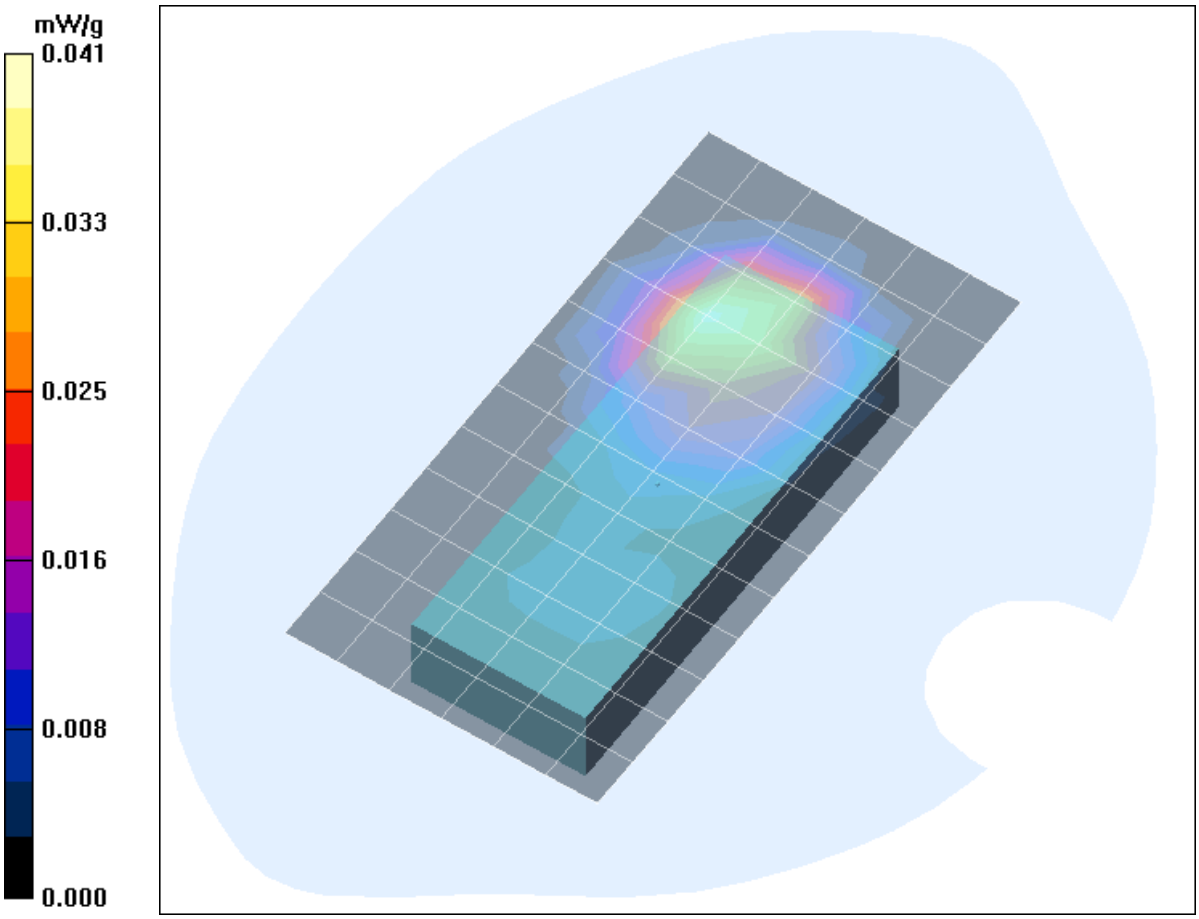

Fig. 10: SAR distribution for DECT US, channel 2, body worn configuration, display towards the phantom, with headset and 0 mm distance (May 19, 2008; Ambient Temperature: 22.7° C; Liquid Temperature: 21.8° C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name:
DT390_bphm_3_ant2_clip_headset_dspl_DOWN.da4

DUT: ascom; Type: DT390; Serial: T26103JJBT
Program Name: Body Worn

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.58 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(7.67, 7.67, 7.67); Calibrated: 18.09.2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2007
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Body Worn/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.018 mW/g
Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.35 V/m; Power Drift = 0.134 dB
Peak SAR (extrapolated) = 0.027 W/kg
SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.00975 mW/g
Maximum value of SAR (measured) = 0.019 mW/g

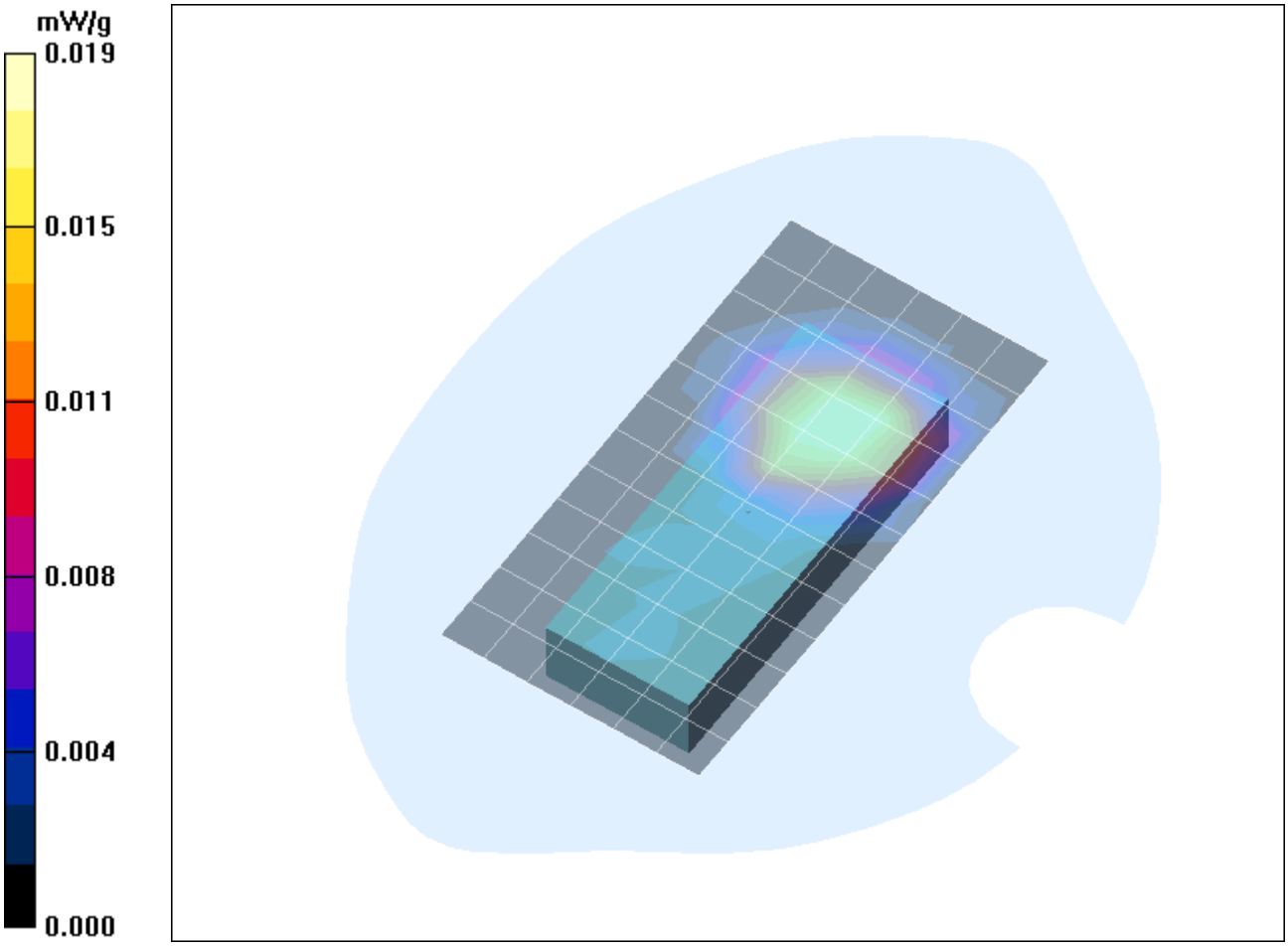

Fig. 11: SAR distribution for DECT US, channel 2, body worn configuration, display towards the ground, with headset and 0 mm distance (May 19, 2008; Ambient Temperature: 22.7° C; Liquid Temperature: 21.8° C).

5 SAR z-axis scans (Validation)

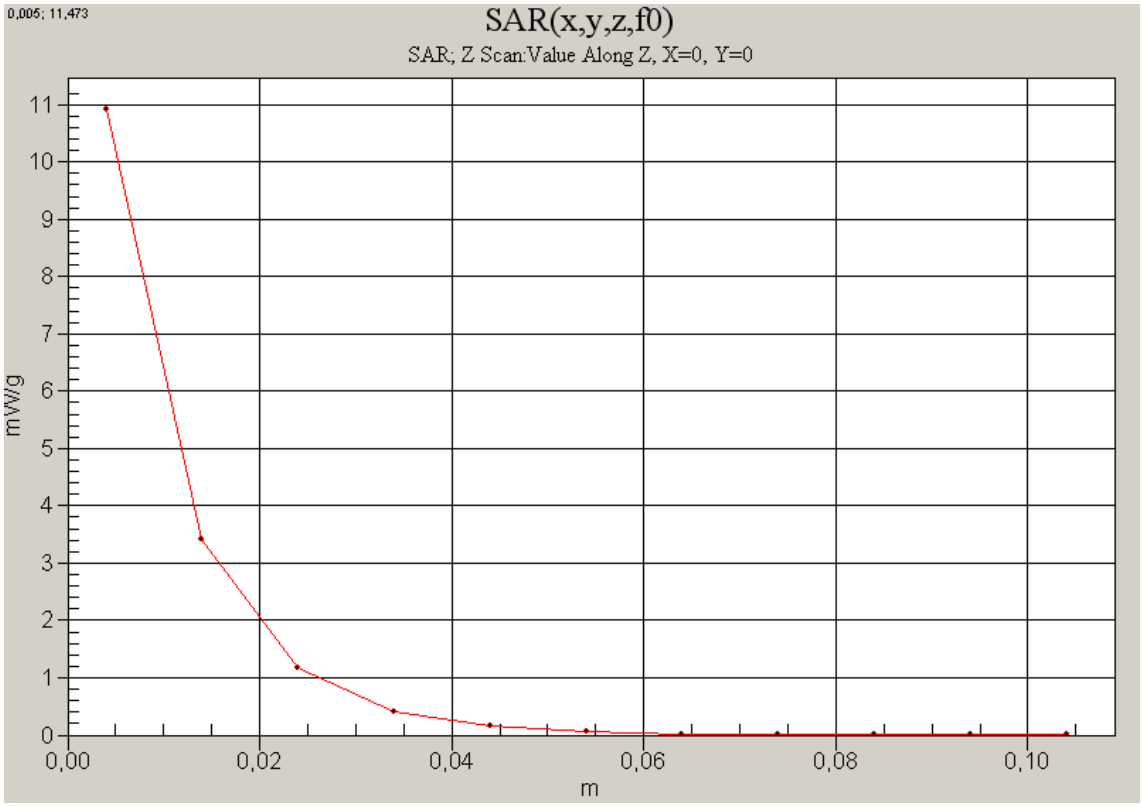

Fig. 12: SAR versus liquid depth, 1900 MHz, head (May 15, 2008; Ambient Temperature: 23.0° C; Liquid Temperature : 21.9° C).

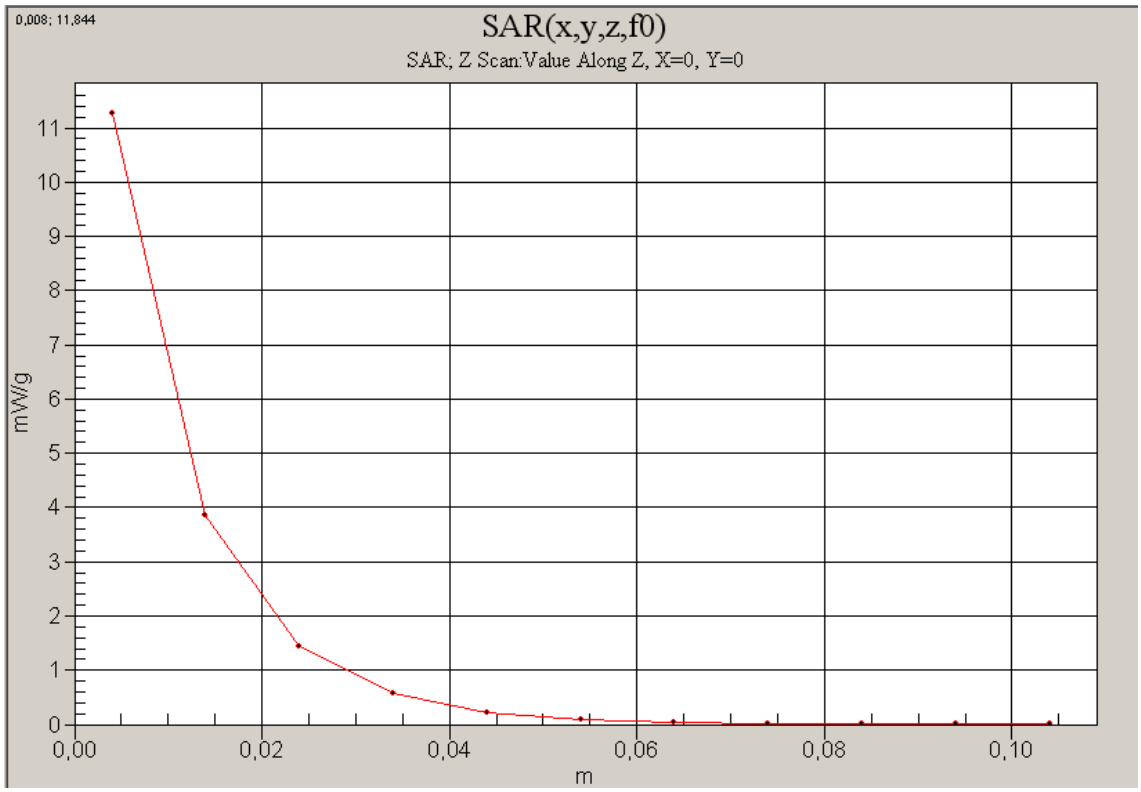

Fig. 13: SAR versus liquid depth, 1900 MHz, body (May 19, 2008; Ambient Temperature: 22.7° C; Liquid Temperature : 21.8° C).

6 SAR z-axis scans (Measurements)

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

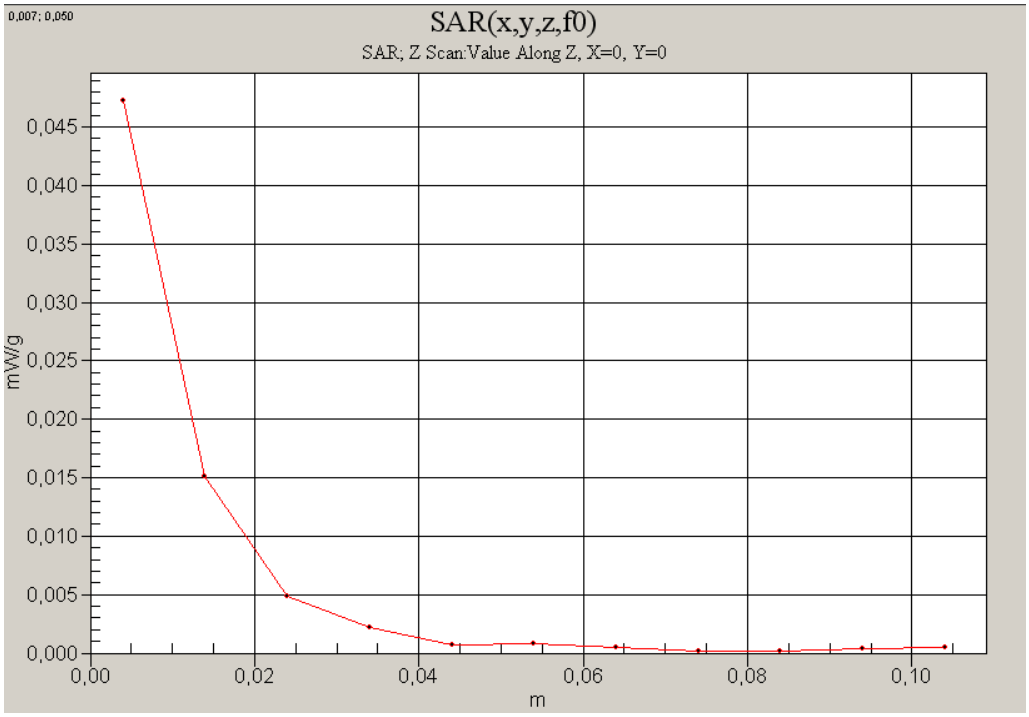

Fig. 14: SAR versus liquid depth, head: DECT US, channel 2, cheek position, right side of head, antenna 2 (May 15, 2008; Ambient Temperature: 23.2° C; Liquid Temperature : 22.0° C).

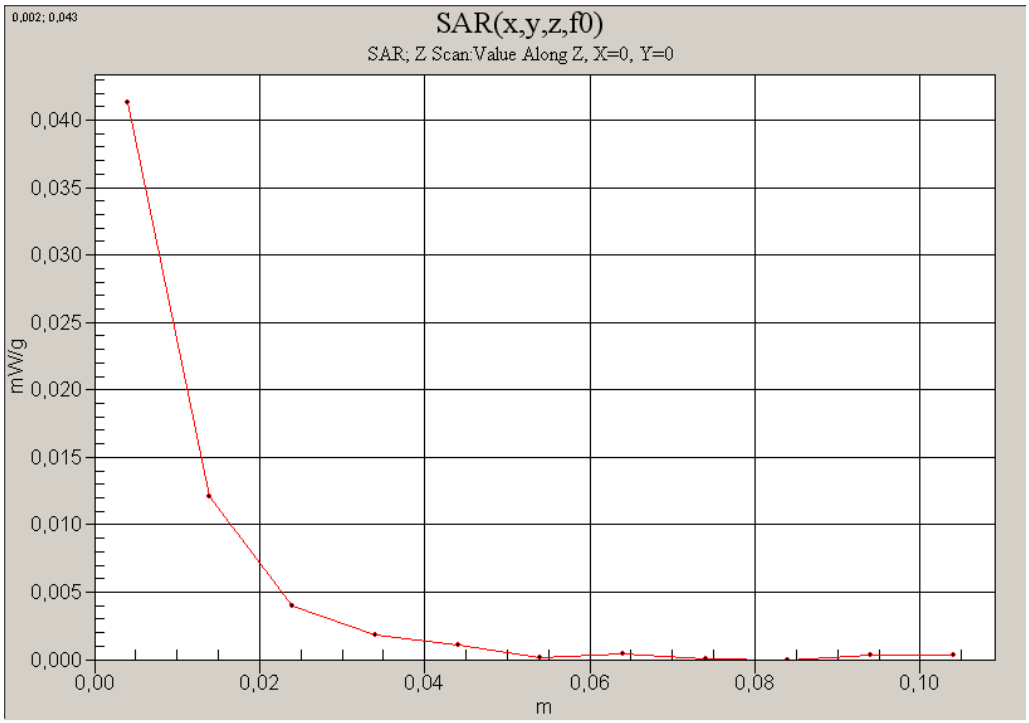

Fig. 15: SAR versus liquid depth, body: DECT US, display towards the phantom, channel 2, headset and 0 mm distance, antenna 2 (May 19, 2008; Ambient Temperature: 22.7° C; Liquid Temperature: 21.8° C).