Deutscher Akkreditierungs Rat

DAT-P-152/98-01

Appendix for the Report

Dosimetric Assessment of the Avaya-Tenovis BlueVoiceL (FCC ID: TYM-EXPLORER-BTHS)

According to the FCC Requirements

SAR Distribution Plots

February 15, 2006

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Table of Contents

1 SAR Distribution Plots, Bluetooth 2450, Head

Test Laboratory: Imst GmbH; File Name: BVL_yplm_1.da4

DUT: Tenovis ; Type: Blue Voice L;

Program Name: Cheek Left

Communication System: Bluetooth; Frequency: 2441 MHz;Duty Cycle: 1:1.2
Medium parameters used (interpolated): f = 2441 MHz; σ = 1.86 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(7.63, 7.63, 7.63); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 17.03.2005
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

Cheek Left/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.294 mW/g
Cheek Left/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.9 V/m; Power Drift = -0.053 dB
Peak SAR (extrapolated) = 0.580 W/kg
SAR(1 g) = 0.300 mW/g; SAR(10 g) = 0.157 mW/g
Maximum value of SAR (measured) = 0.330 mW/g
Cheek Left/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.9 V/m; Power Drift = -0.053 dB
Peak SAR (extrapolated) = 0.465 W/kg
SAR(1 g) = 0.261 mW/g; SAR(10 g) = 0.141 mW/g
Maximum value of SAR (measured) = 0.282 mW/g

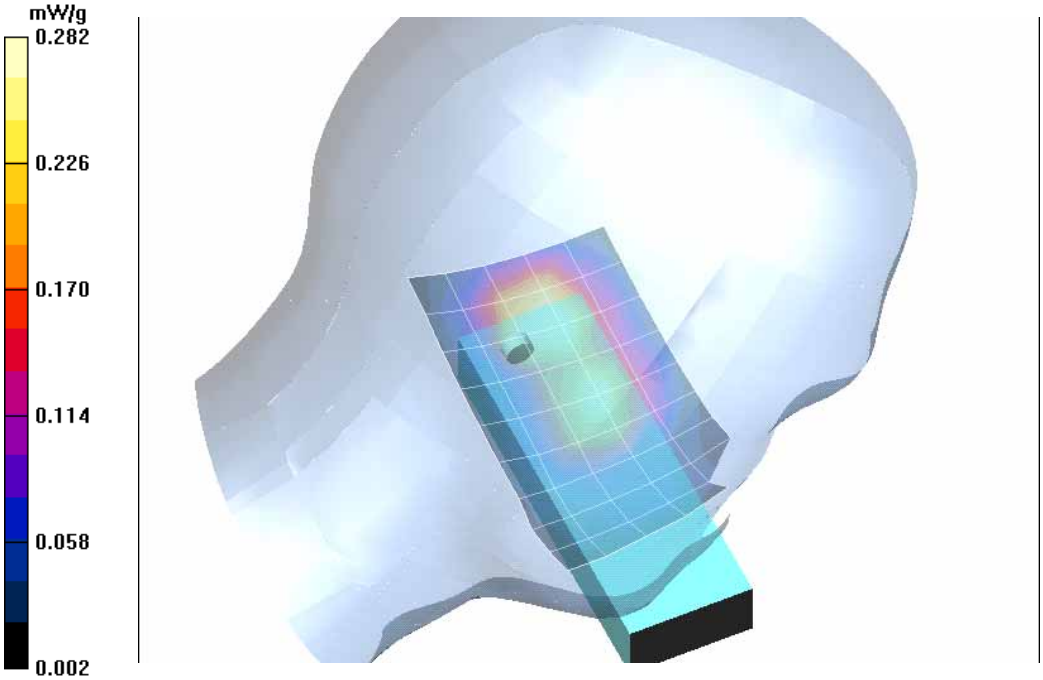

Fig. 1: SAR distribution for Bluetooth 2441 MHz, channel 039, cheek position, left side of head (February 13, 2006; Ambient Temperature: 22.3° C; Liquid Temperature: 21.5° C).

Test Laboratory: Imst GmbH; File Name: BVL_yplm_2.da4

DUT: Tenovis ; Type: Blue Voice L;
Program Name: Tilted Left

Communication System: Bluetooth; Frequency: 2441 MHz;Duty Cycle: 1:1.2
Medium parameters used (interpolated): f = 2441 MHz; σ = 1.86 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(7.63, 7.63, 7.63); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 17.03.2005
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

Tilted Left/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.301 mW/g
Tilted Left/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.8 V/m; Power Drift = -0.069 dB
Peak SAR (extrapolated) = 0.642 W/kg
SAR(1 g) = 0.322 mW/g; SAR(10 g) = 0.161 mW/g
Maximum value of SAR (measured) = 0.354 mW/g

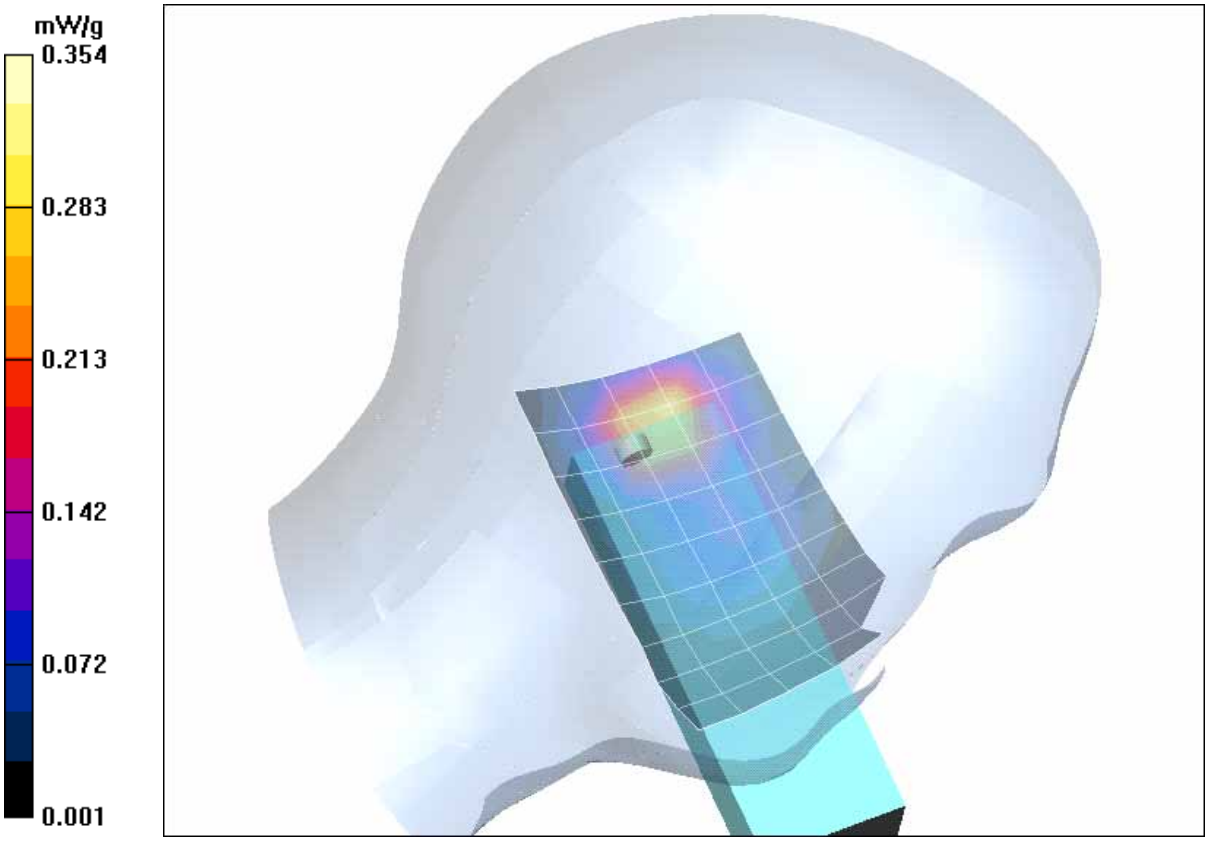

Fig. 2: SAR distribution for Bluetooth 2441, channel 039, tilted position, left side of head (February 13, 2006; Ambient Temperature: 22.2° C; Liquid Temperature: 21.4° C).

Test Laboratory: Imst GmbH; File Name: BVL_yprm_1.da4

DUT: Tenovis ; Type: Blue Voice L;
Program Name: Cheek Right

Communication System: Bluetooth; Frequency: 2441 MHz;Duty Cycle: 1:1.2
Medium parameters used (interpolated): f = 2441 MHz; σ = 1.86 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(7.63, 7.63, 7.63); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 17.03.2005
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

Cheek Right/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.348 mW/g
Cheek Right/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.8 V/m; Power Drift = -0.023 dB
Peak SAR (extrapolated) = 0.599 W/kg
SAR(1 g) = 0.314 mW/g; SAR(10 g) = 0.160 mW/g
Maximum value of SAR (measured) = 0.347 mW/g
Cheek Right/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.8 V/m; Power Drift = -0.023 dB
Peak SAR (extrapolated) = 0.425 W/kg
SAR(1 g) = 0.240 mW/g; SAR(10 g) = 0.131 mW/g
Maximum value of SAR (measured) = 0.264 mW/g

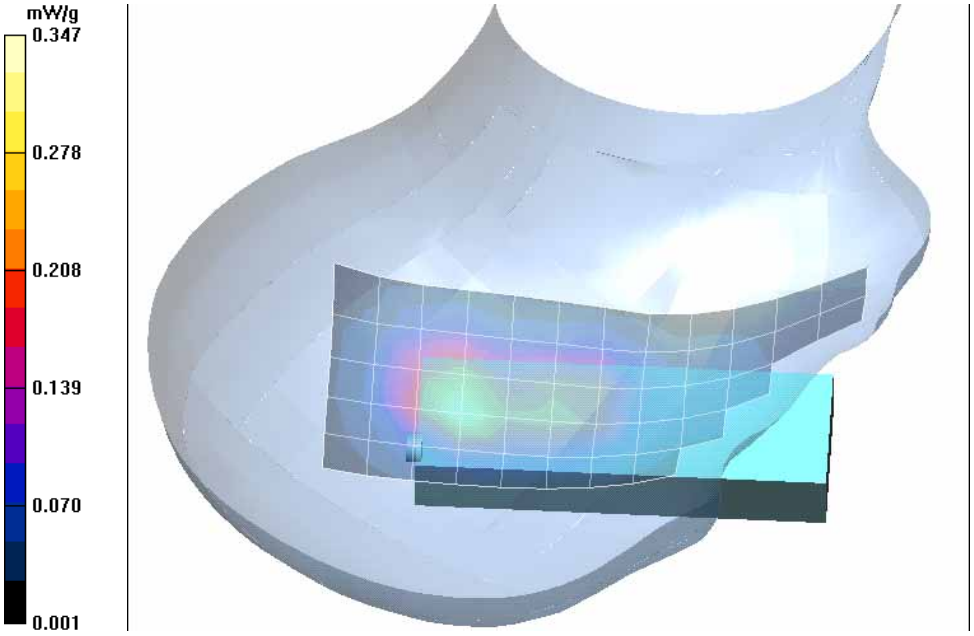

Fig. 3: SAR distribution for Bluetooth 2441, channel 039, cheek position, right side of head (February 13, 2006; Ambient Temperature: 22.4° C; Liquid: Temperature : 21.5° C).

Test Laboratory: Imst GmbH; File Name: BVL_yprm_2.da4

DUT: Tenovis ; Type: Blue Voice L;

Program Name: Tilted Right

Communication System: Bluetooth; Frequency: 2441 MHz;Duty Cycle: 1:1.2
Medium parameters used (interpolated): f = 2441 MHz; σ = 1.86 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(7.63, 7.63, 7.63); Calibrated: 23.09.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 17.03.2005
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

Tilted Right/Area Scan (6x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.307 mW/g
Tilted Right/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.7 V/m; Power Drift = -0.062 dB
Peak SAR (extrapolated) = 0.645 W/kg
SAR(1 g) = 0.319 mW/g; SAR(10 g) = 0.158 mW/g
Maximum value of SAR (measured) = 0.351 mW/g

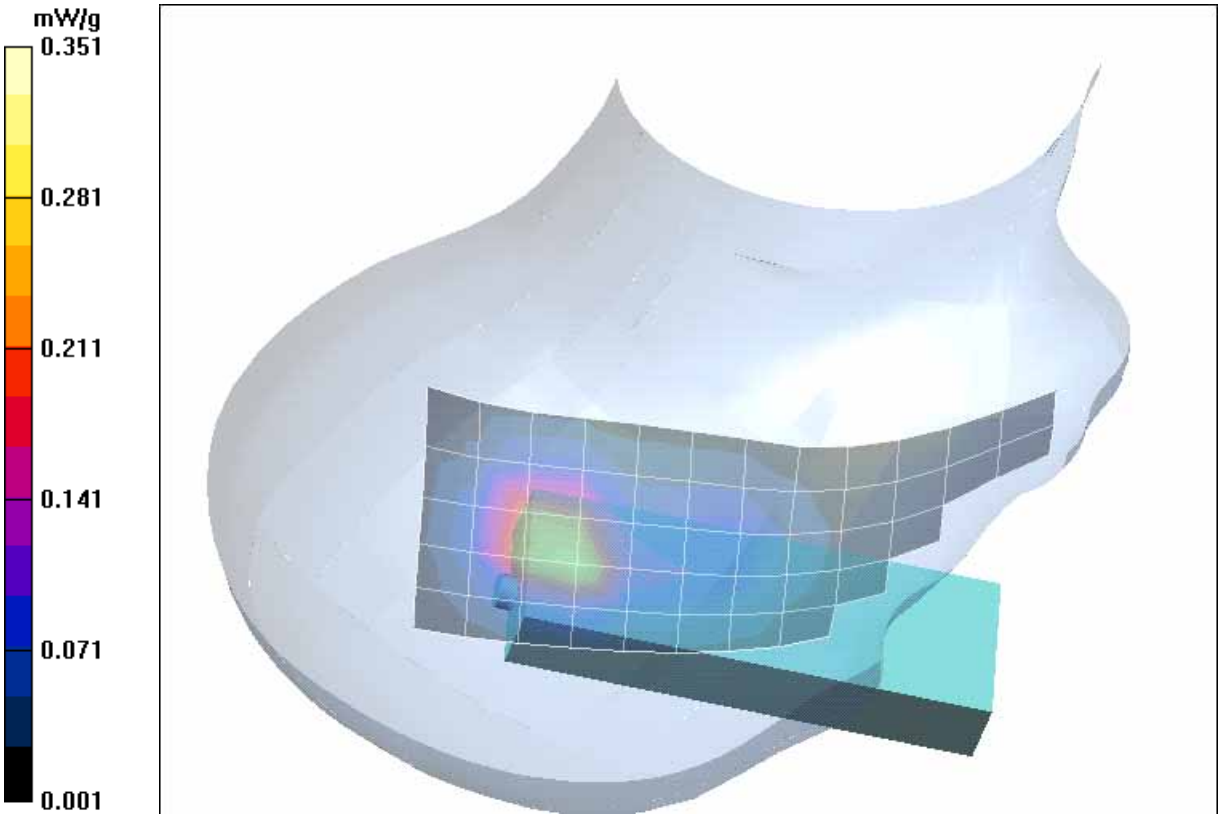

Fig. 4: SAR distribution for Bluetooth 2441, channel 039, tilted position, right side of head (February 13, 2006; Ambient Temperature: 22.3 °C; Liquid Temperature : 21.7° C)

2 SAR z-axis scans (Validation)

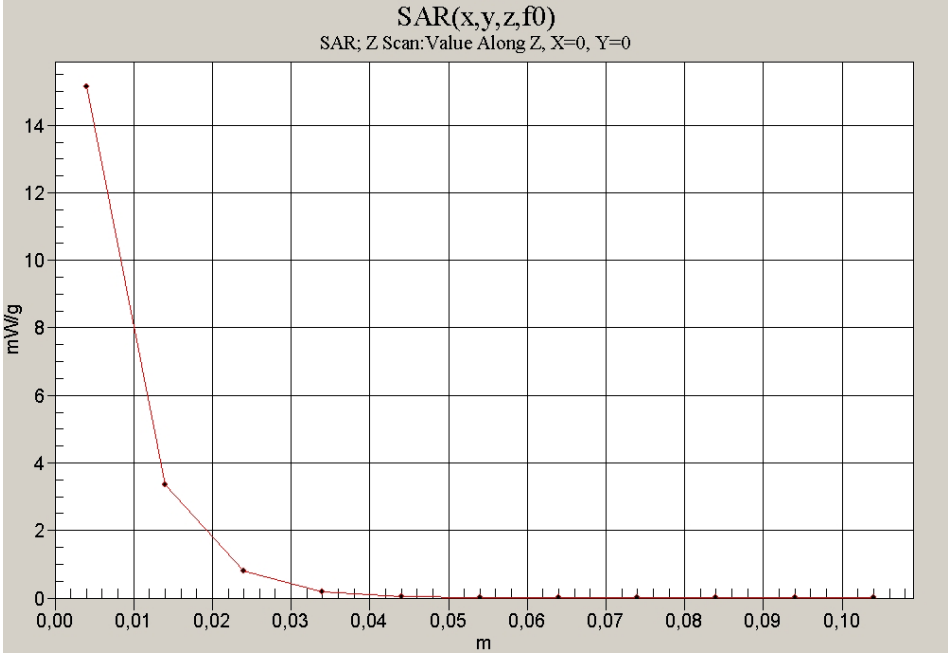

Fig. 5: SAR versus liquid depth, 2450 MHz, head (February 13, 2006; Ambient Temperature: 21.4° C; Liquid Temperature : 20.4° C).

3 SAR z-axis scans (Measurements)

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

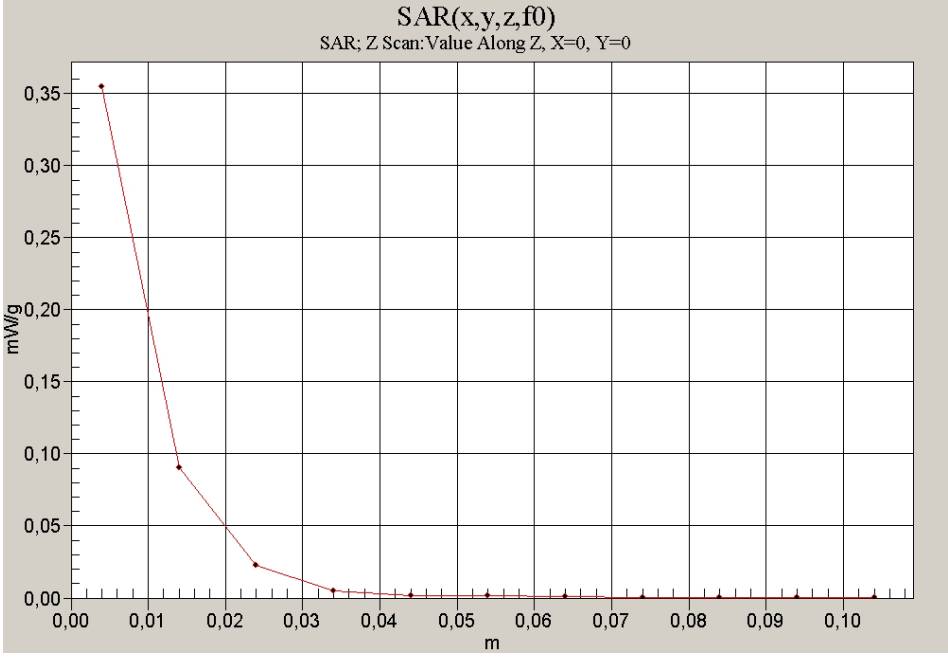

Fig. 6: SAR versus liquid depth, head: Bluetooth 2441, channel 039, tilted position, left side of head (February 13, 2006; Ambient Temperature: 22.4° C; Liquid Temperature : 21.5° C).