DAkkS
Deutsche
Akkreditierungsstelle
D-PL-12139-01-00

The Testcenter facility 'Dosimetric Test Lab' within IMST GmbH is accredited by the German National 'Deutsche Akkreditierungsstelle GmbH (DAkkS)' for testing according to the scope as listed in the accreditation certificate: D-PL-12139-01-00.

Appendix for the SAR Test Report

Dosimetric Assessment of the Portable Device KX-TGFA30 from Panasonic

(FCC ID: ACJ96NKX-TGFA30)
(IC: 216A-KXTGFA30)

According to the FCC Requirements SAR Distribution Plots

December 10, 2014

IMST GmbH
Carl-Friedrich-Gauß-Str. 2 - 4
47475 Kamp-Lintfort
Germany

Customer
Panasonic System Networks Co., Ltd.
1 - 62, 4 - chome Minoshima, Hakata,
Fukuoka 812-8531
Japan

The test results only relate to the items tested.
This report shall not be reproduced except in full without the written approval of the testing laboratory.

SAR Distribution Plots for Head and Body Worn Configuration

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: TGFA30_yplm_1.da4

DUT: Panasonic; Type: KX-TGFA30;
Program Name: US DECT

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.44 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1579; ConvF(5, 5, 5); Calibrated: 28.01.2014
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2014
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek Left/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.040 mW/g
Cheek Left/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.89 V/m; Power Drift = -0.082 dB
Peak SAR (extrapolated) = 0.073 W/kg
SAR(1 g) = 0.037 mW/g; SAR(10 g) = 0.021 mW/g
Maximum value of SAR (measured) = 0.042 mW/g

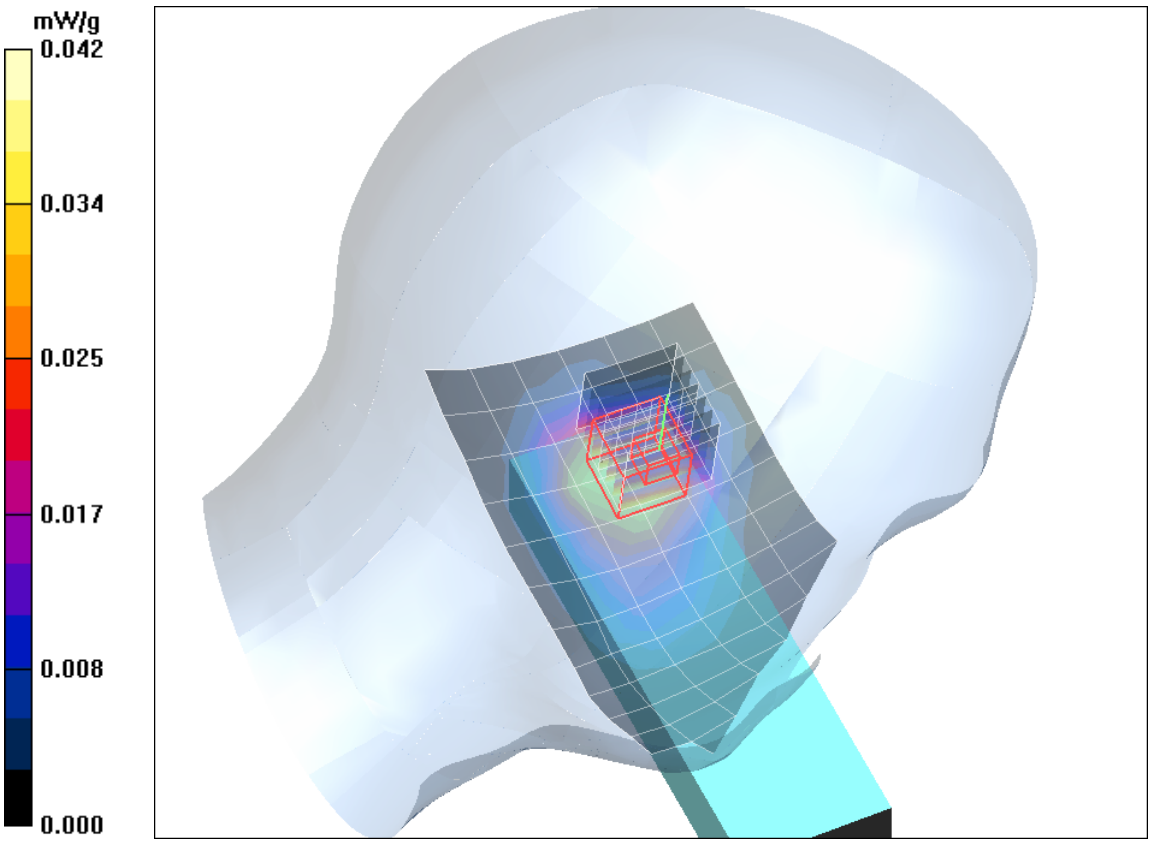

Fig. 1: SAR distribution for DECT US, channel 2, cheek position, left side of head (November 27, 2014)

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: TGFA30_yplm_2.da4

DUT: Panasonic; Type: KX-TGFA30;
Program Name: US DECT

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.44 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1579; ConvF(5, 5, 5); Calibrated: 28.01.2014
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2014
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilted Left/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.023 mW/g
Tilted Left/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.15 V/m; Power Drift = -0.035 dB
Peak SAR (extrapolated) = 0.036 W/kg
SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.013 mW/g
Maximum value of SAR (measured) = 0.024 mW/g

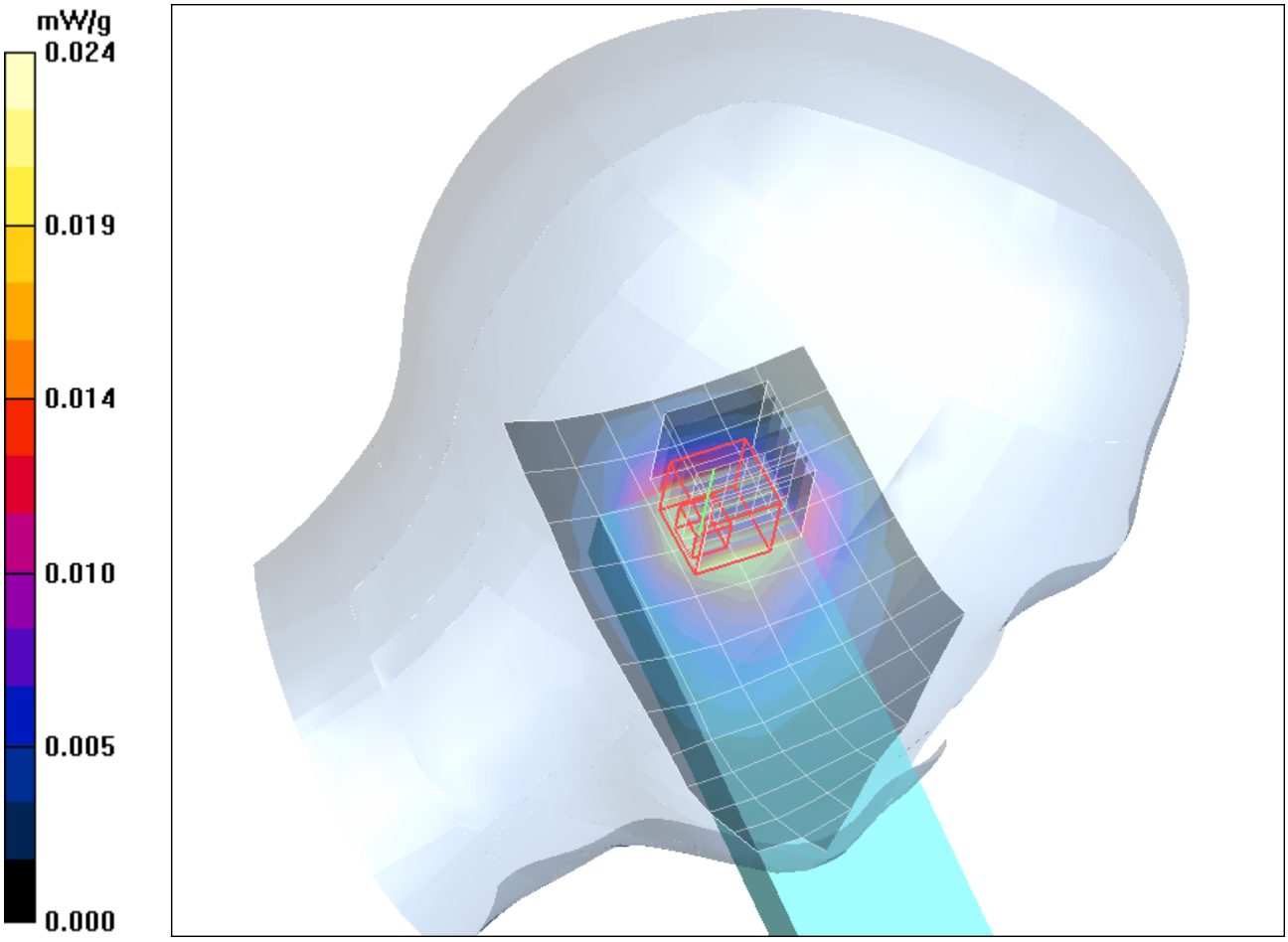

Fig. 2: SAR distribution for DECT US, channel 2, tilted position, left side of head (November 27, 2014)

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: TGFA30_yprm_1.da4

DUT: Panasonic; Type: KX-TGFA30;
Program Name: US DECT

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.44 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1579; ConvF(5, 5, 5); Calibrated: 28.01.2014
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2014
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek Right/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.039 mW/g
Cheek Right/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.05 V/m; Power Drift = -0.027 dB
Peak SAR (extrapolated) = 0.055 W/kg
SAR(1 g) = 0.036 mW/g; SAR(10 g) = 0.021 mW/g

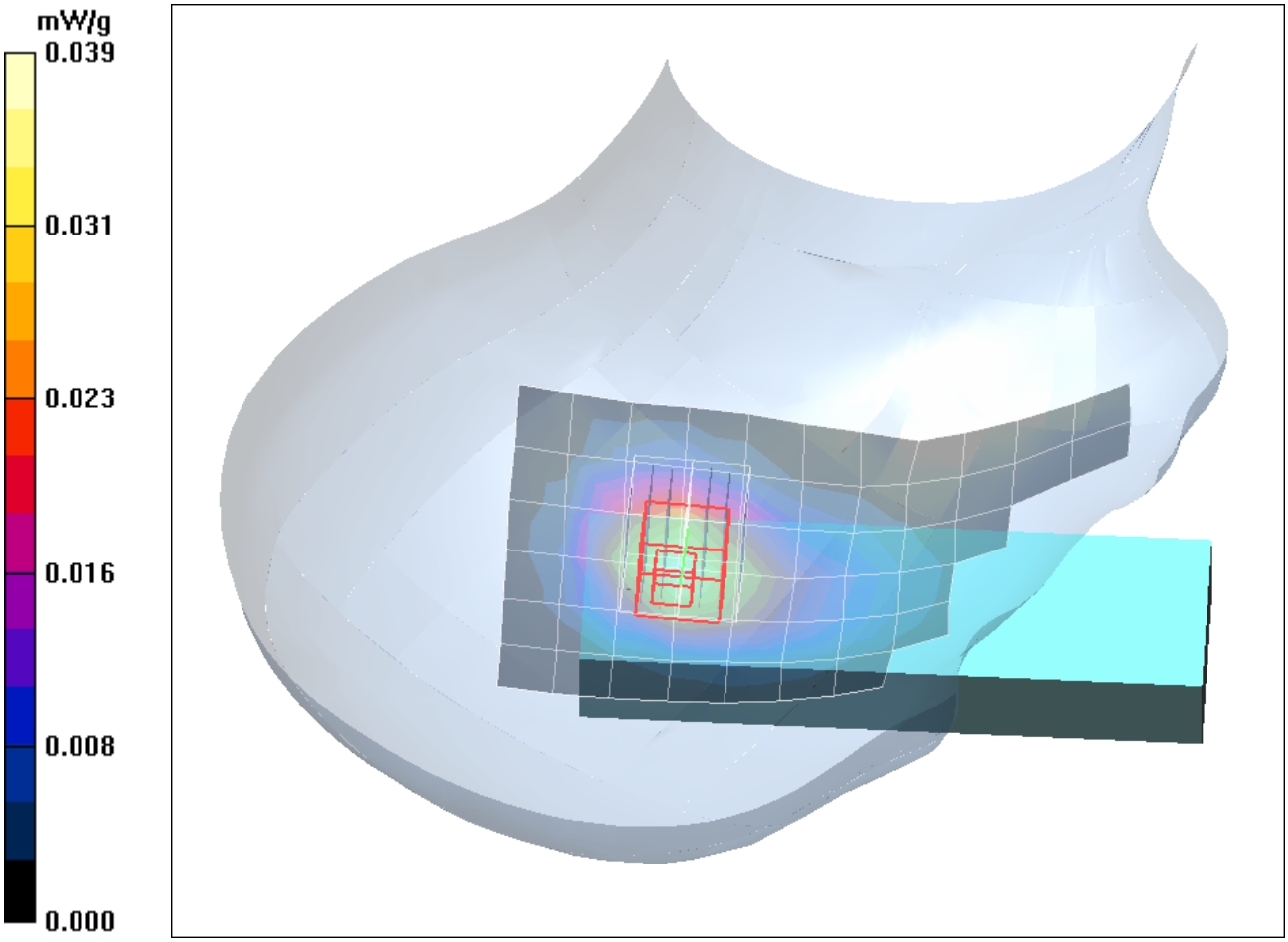

Fig. 3: SAR distribution for DECT US, channel 2, cheek position, right side of head (November 27, 2014)

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: TGFA30_yprm_2.da4

DUT: Panasonic; Type: KX-TGFA30;
Program Name: US DECT

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.44 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1579; ConvF(5, 5, 5); Calibrated: 28.01.2014
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2014
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilted Right/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.021 mW/g
Tilted Right/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.16 V/m; Power Drift = -0.011 dB
Peak SAR (extrapolated) = 0.033 W/kg
SAR(1 g) = 0.021 mW/g; SAR(10 g) = 0.012 mW/g
Maximum value of SAR (measured) = 0.023 mW/g

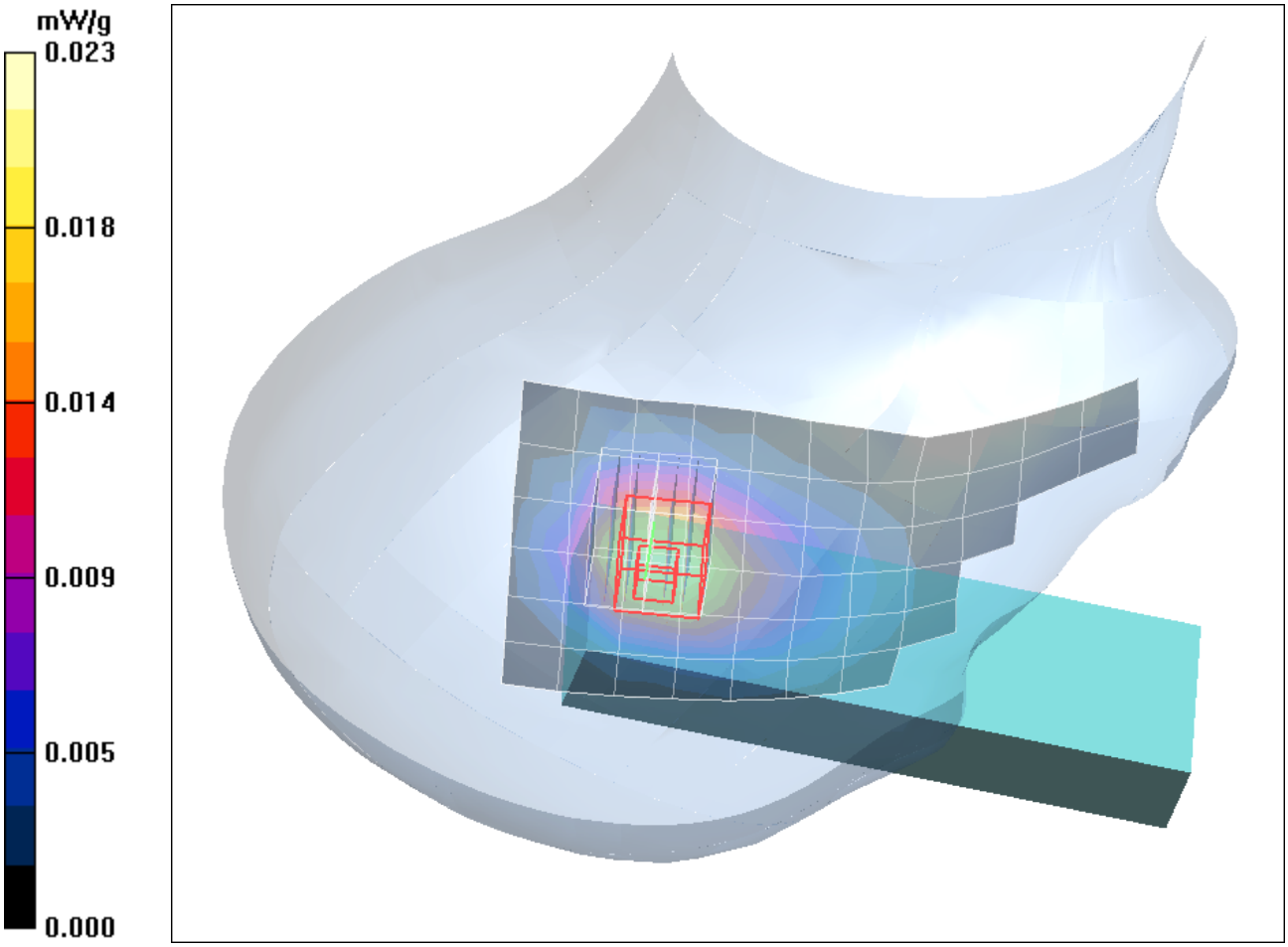

Fig. 4: SAR distribution for DECT US, channel 2, tilted position, right side of head (November 27, 2014)

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: TGFA30_yphm_1_front_hs_clip.da4

DUT: Panasonic; Type: KX-TGFA30;
Program Name: US DECT

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.59 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1579; ConvF(4.57, 4.57, 4.57); Calibrated: 28.01.2014
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2014
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.035 mW/g
Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.32 V/m; Power Drift = -0.168 dB
Peak SAR (extrapolated) = 0.062 W/kg
SAR(1 g) = 0.035 mW/g; SAR(10 g) = 0.020 mW/g
Maximum value of SAR (measured) = 0.038 mW/g

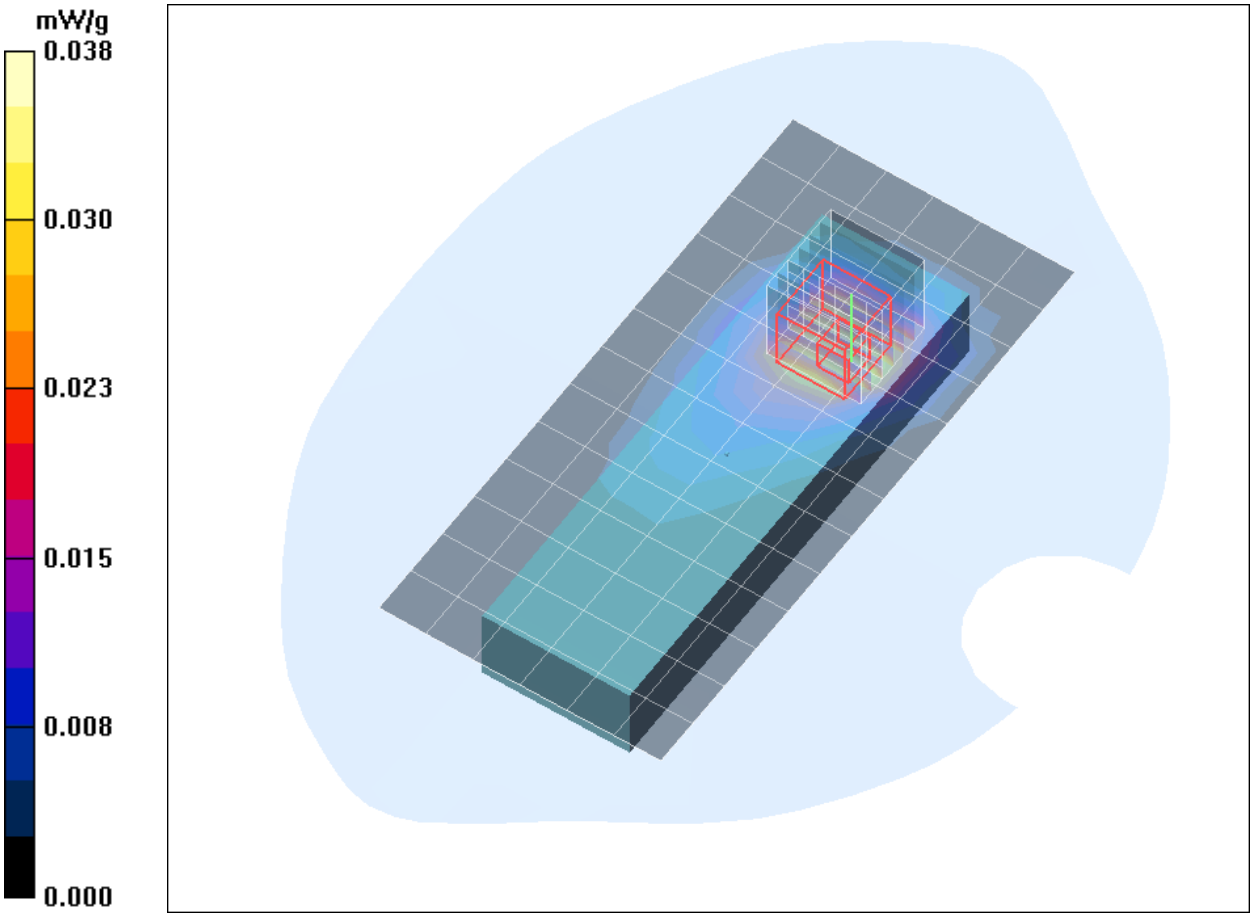

Fig. 5: SAR distribution for DECT US, channel 2, body worn configuration, front side of the device towards the phantom (December 02, 2014)

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: TGFA30_yphm_2_back_hs.da4

DUT: Panasonic; Type: KX-TGFA30;
Program Name: US DECT

Communication System: DECT US; Frequency: 1924.99 MHz;Duty Cycle: 1:24
Medium parameters used: f = 1924.99 MHz; σ = 1.59 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1579; ConvF(4.57, 4.57, 4.57); Calibrated: 28.01.2014
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 23.07.2014
- Phantom: SAM Glycol 1340; Type: QD 000 P40 CB; Serial: TP-1340
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.022 mW/g
Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.91 V/m; Power Drift = -0.033 dB
Peak SAR (extrapolated) = 0.034 W/kg
SAR(1 g) = 0.020 mW/g; SAR(10 g) = 0.011 mW/g

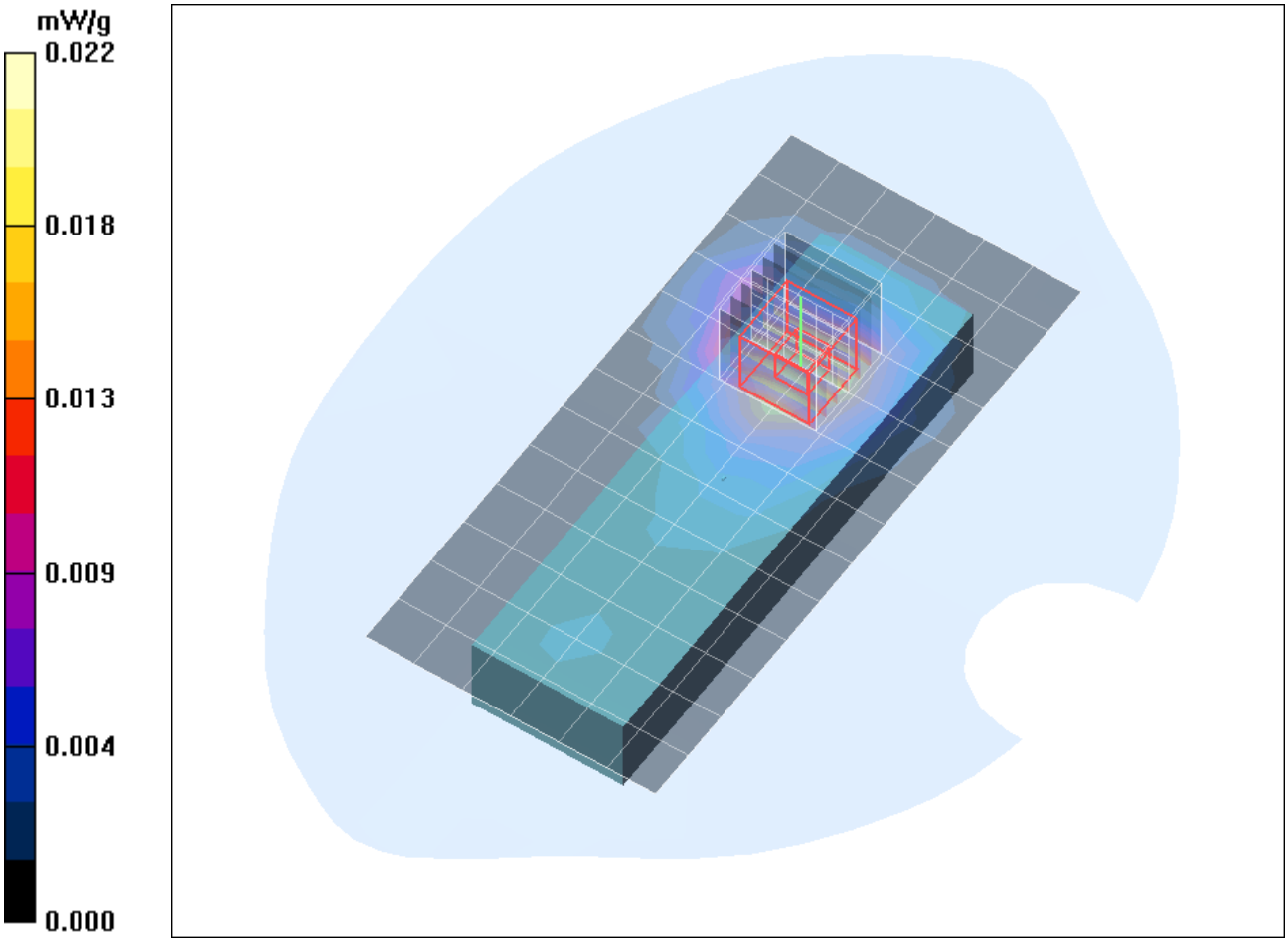

Fig. 6: SAR distribution for DECT US, channel 2, body worn configuration, back side of the device towards the phantom (December 02, 2014)