

## **Appendix for the SAR Test Report**

### **Dosimetric Assessment of the Portable Device DH6 from Ascom (FCC ID: BXZDH6)**

### **According to the FCC Requirements SAR Distribution Plots**

April 18, 2016

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The test results only relate to the items tested.

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## SAR Distribution Plots for Head and Body Worn Configuration

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [DH6 7N8 b dect Im 1 clip ant1.da4](#)

DUT: Ascom; Type: DH6; Serial: T26105R7N8  
Program Name: DECT

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24  
Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5.3, 5.3, 5.3); Calibrated: 23.02.2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 16.09.2015
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Cheek Left/Area Scan (7x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.050 mW/g

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

Reference Value = 4.10 V/m; Power Drift = 0.193 dB

Peak SAR (extrapolated) = 0.071 W/kg

**SAR(1 g) = 0.043 mW/g; SAR(10 g) = 0.025 mW/g**

Maximum value of SAR (measured) = 0.047 mW/g

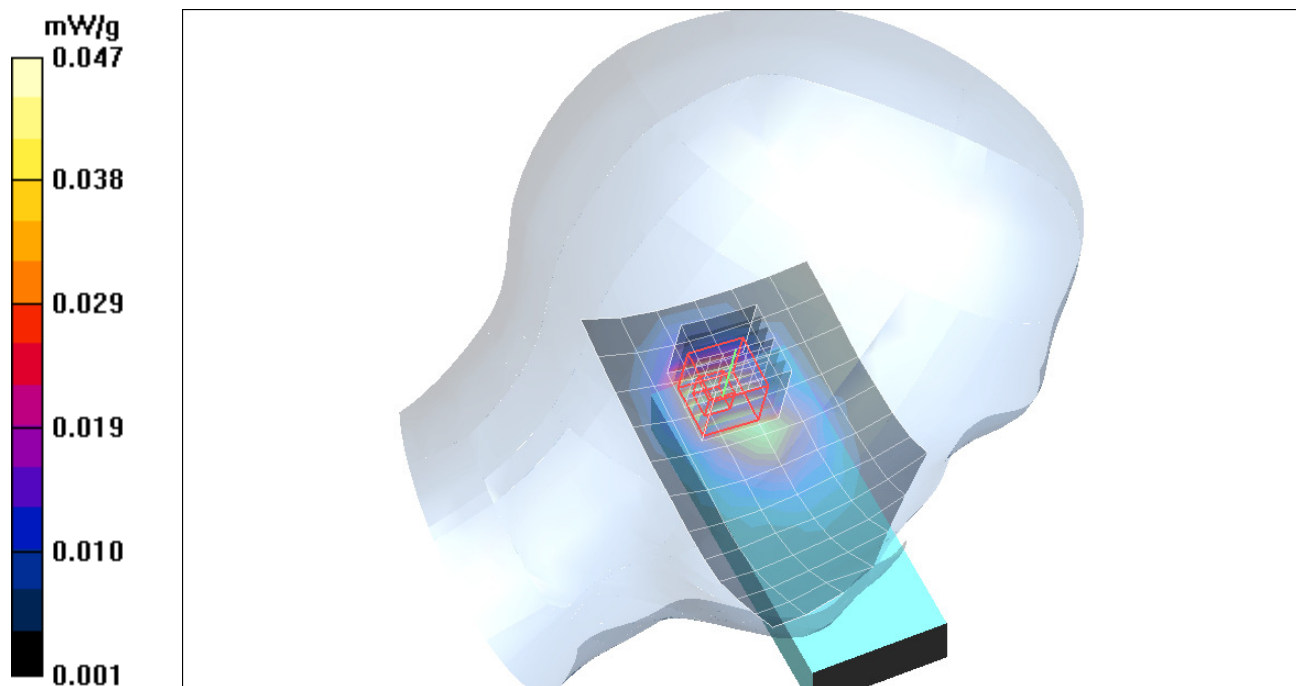


Fig. 1: SAR distribution for DECT US, channel 2, antenna 1, cheek position, left side of head

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [DH6 7N8 b dect lm 2 clip ant1.da4](#)

DUT: Ascom; Type: DH6; Serial: T26105R7N8  
Program Name: DECT

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24  
Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5.3, 5.3, 5.3); Calibrated: 23.02.2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 16.09.2015
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Tilted Left/Area Scan (7x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.038 mW/g

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

Reference Value = 2.19 V/m; Power Drift = 0.135 dB

Peak SAR (extrapolated) = 0.063 W/kg

**SAR(1 g) = 0.038 mW/g; SAR(10 g) = 0.021 mW/g**

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

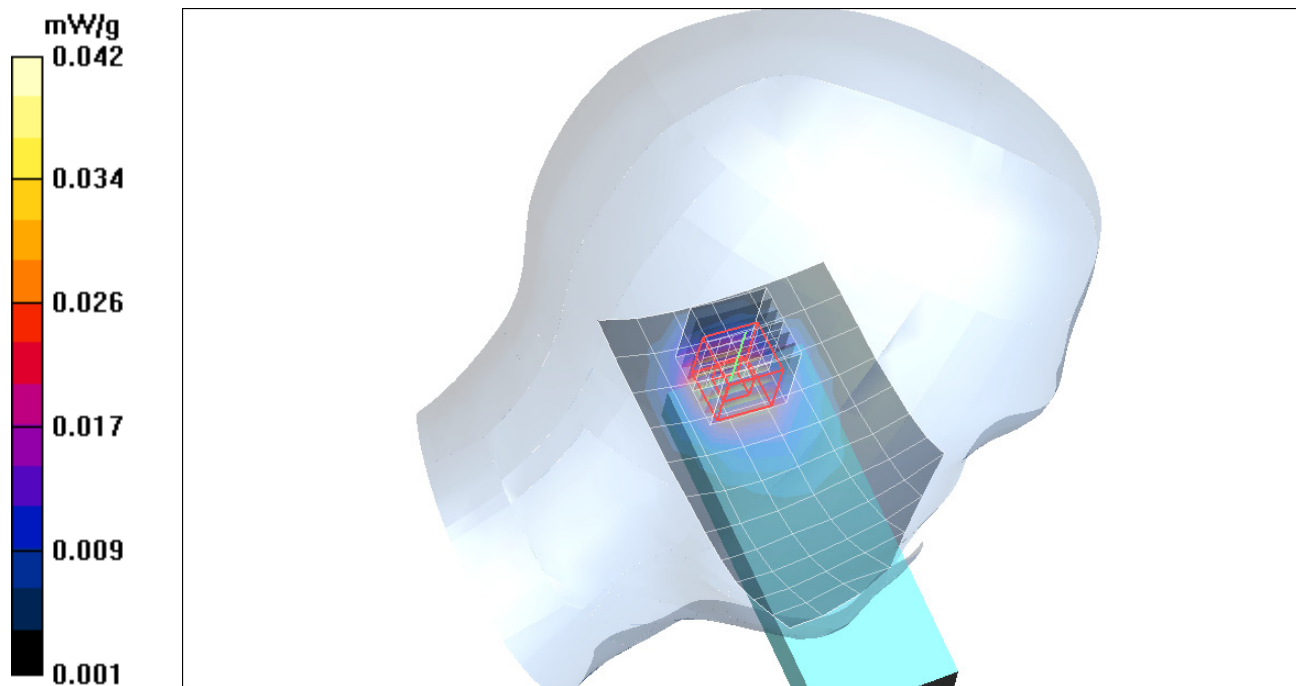


Fig. 2: SAR distribution for DECT US, channel 2, antenna 1, tilted position, left side of head

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [DH6 7N8 b dect rm 1 clip ant1.da4](#)

DUT: Ascom; Type: DH6; Serial: T26105R7N8  
Program Name: DECT

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24  
Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5.3, 5.3, 5.3); Calibrated: 23.02.2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 16.09.2015
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Cheek Right/Area Scan (7x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.054 mW/g

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

Reference Value = 5.87 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 0.092 W/kg

**SAR(1 g) = 0.053 mW/g; SAR(10 g) = 0.029 mW/g**

Maximum value of SAR (measured) = 0.059 mW/g

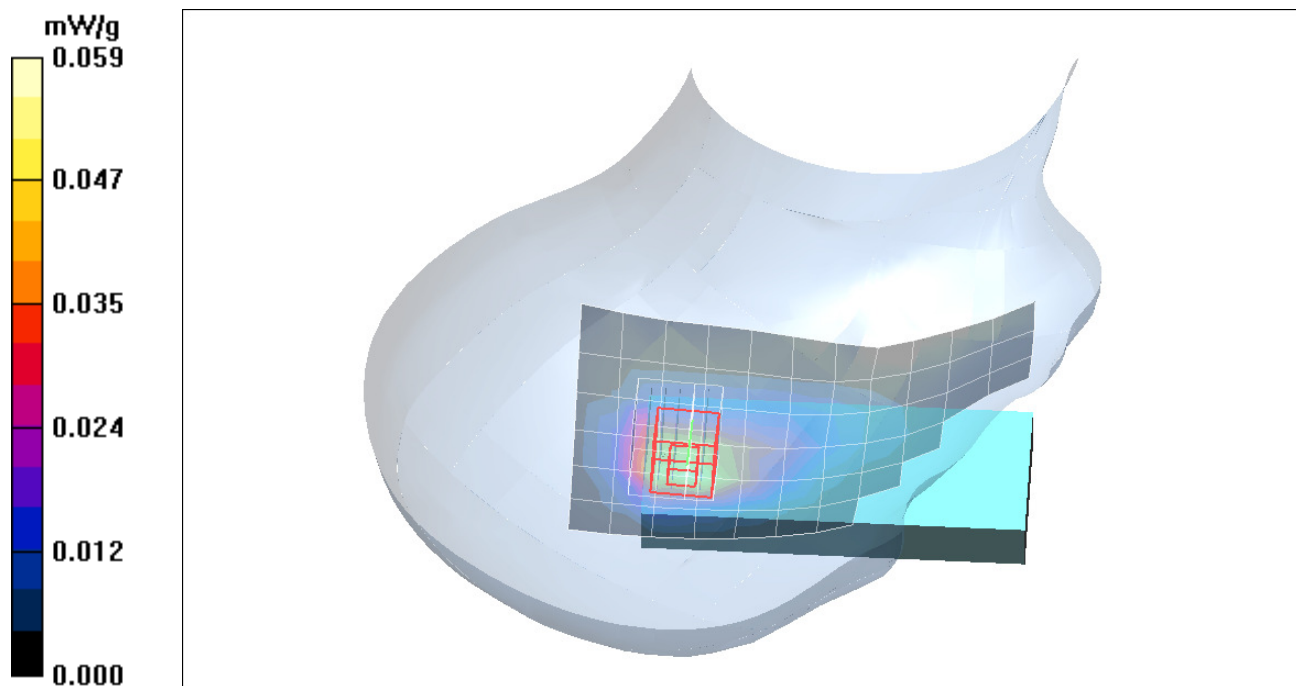


Fig. 3: SAR distribution for DECT US, channel 2, antenna 1, cheek position, right side of head

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [DH6 7N8 b dect rm 2 clip ant1.da4](#)

DUT: Ascom; Type: DH6; Serial: T26105R7N8  
Program Name: DECT

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24  
Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5.3, 5.3, 5.3); Calibrated: 23.02.2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 16.09.2015
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Tilted Right/Area Scan (7x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.044 mW/g

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

Reference Value = 5.95 V/m; Power Drift = 0.024 dB

Peak SAR (extrapolated) = 0.079 W/kg

**SAR(1 g) = 0.044 mW/g; SAR(10 g) = 0.024 mW/g**

Maximum value of SAR (measured) = 0.048 mW/g

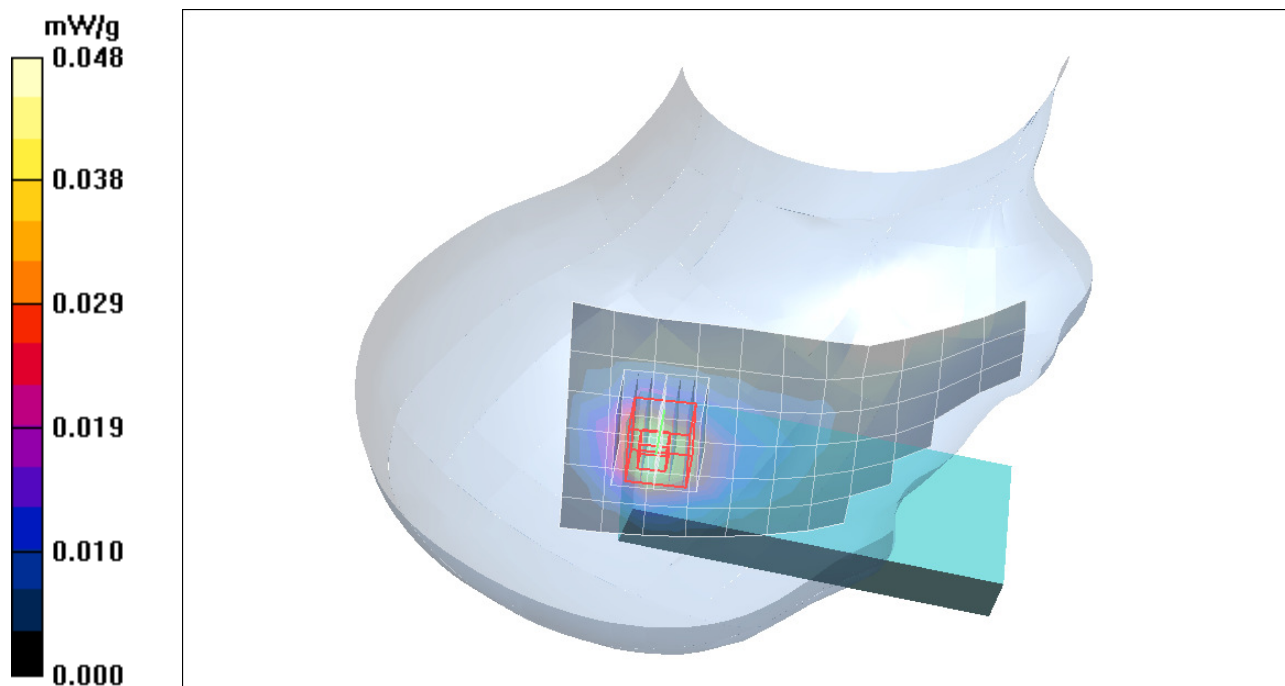


Fig. 4: SAR distribution for DECT US, channel 2, antenna 1, tilted position, right side of head

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [DH6 7N8 b dect Im 1 clip ant2.da4](#)

DUT: Ascom; Type: DH6; Serial: T26105R7N8  
Program Name: DECT

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24  
Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5.3, 5.3, 5.3); Calibrated: 23.02.2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 16.09.2015
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Cheek Left/Area Scan (7x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.020 mW/g

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

Reference Value = 2.98 V/m; Power Drift = 0.061 dB

Peak SAR (extrapolated) = 0.031 W/kg

**SAR(1 g) = 0.020 mW/g; SAR(10 g) = 0.012 mW/g**

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

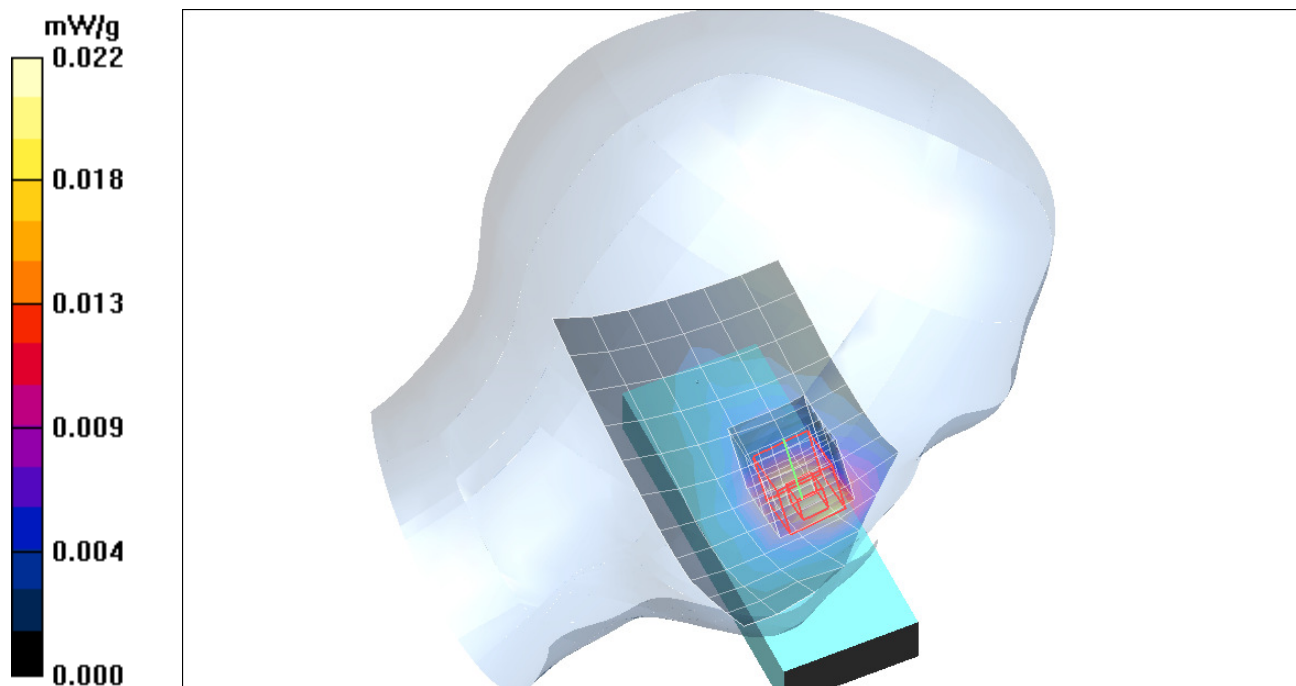


Fig. 5: SAR distribution for DECT US, channel 2, antenna 2, cheek position, left side of head

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [DH6 7N8 b dect Im 2 clip ant2.da4](#)

DUT: Ascom; Type: DH6; Serial: T26105R7N8  
Program Name: DECT

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24  
Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5.3, 5.3, 5.3); Calibrated: 23.02.2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 16.09.2015
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Tilted Left/Area Scan (7x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.005 mW/g

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

Reference Value = 1.80 V/m; Power Drift = 0.185 dB

Peak SAR (extrapolated) = 0.009 W/kg

**SAR(1 g) = 0.00569 mW/g; SAR(10 g) = 0.0036 mW/g**

Maximum value of SAR (measured) = 0.006 mW/g

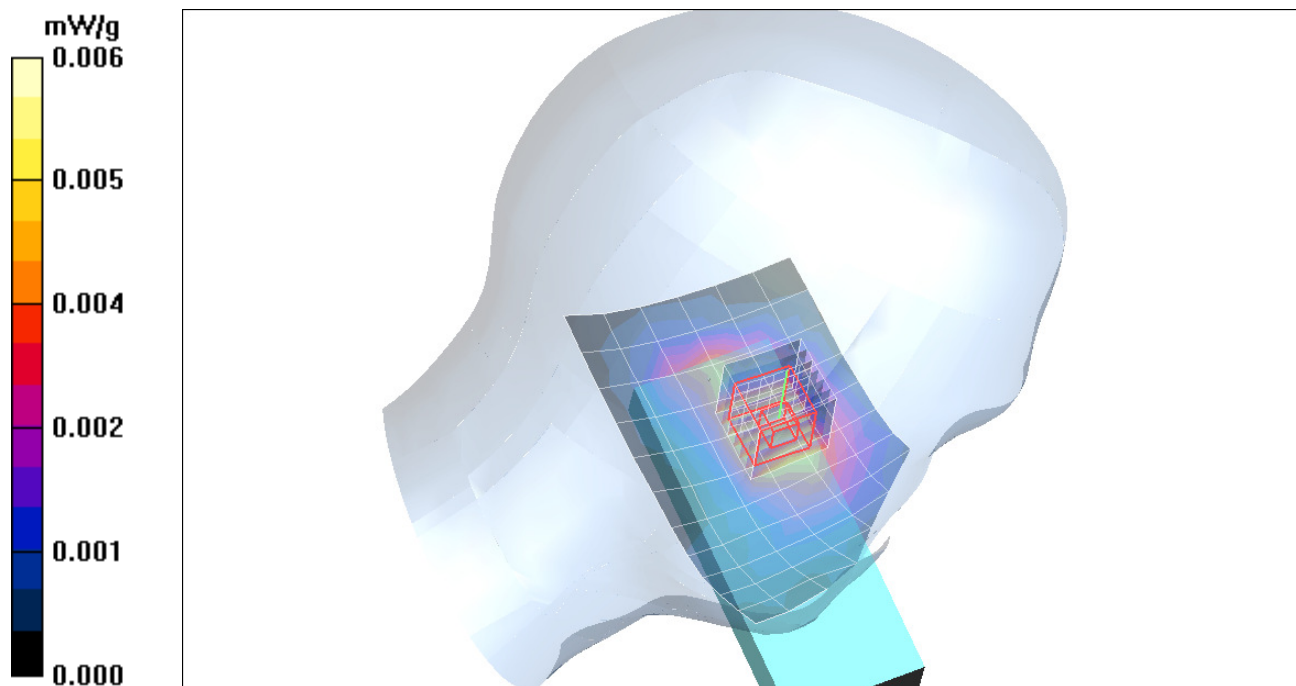


Fig. 6: SAR distribution for DECT US, channel 2, antenna 2, tilted position, left side of head



Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [DH6 7N8 b dect rm 1 clip ant2.da4](#)

DUT: Ascom; Type: DH6; Serial: T26105R7N8  
Program Name: DECT

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24  
Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5.3, 5.3, 5.3); Calibrated: 23.02.2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 16.09.2015
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Cheek Right/Area Scan (7x12x1):** Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 1.55 V/m; Power Drift = -0.161 dB

Peak SAR (extrapolated) = 0.041 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

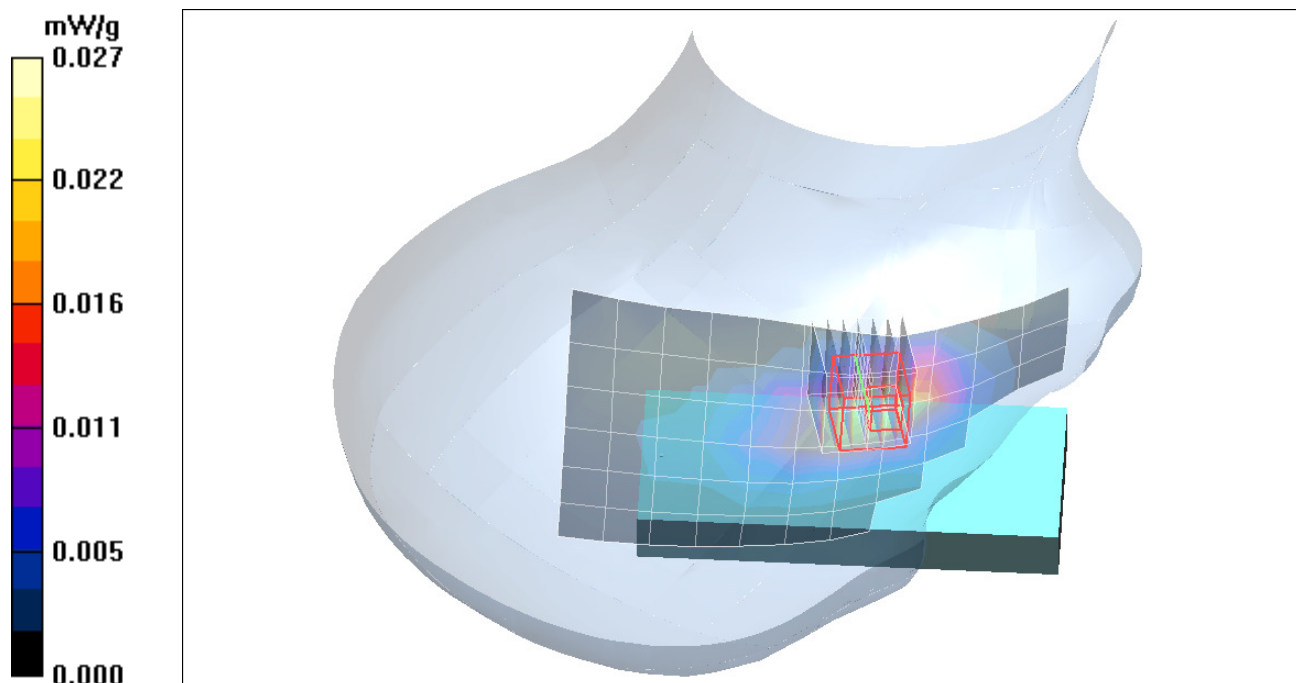


Fig. 7: SAR distribution for DECT US, channel 2, antenna 2, cheek position, right side of head



Test Laboratory: IMST GmbH, DASY Blue (I); File Name: [DH6 7N8 b dect rm 2 clip ant2.da4](#)

DUT: Ascom; Type: DH6; Serial: T26105R7N8  
Program Name: DECT

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24  
Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5.3, 5.3, 5.3); Calibrated: 23.02.2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 16.09.2015
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Tilted Right/Area Scan (7x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.005 mW/g

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

Reference Value = 2.00 V/m; Power Drift = 0.193 dB

Peak SAR (extrapolated) = 0.011 W/kg

**SAR(1 g) = 0.00537 mW/g; SAR(10 g) = 0.00278 mW/g**

Maximum value of SAR (measured) = 0.006 mW/g

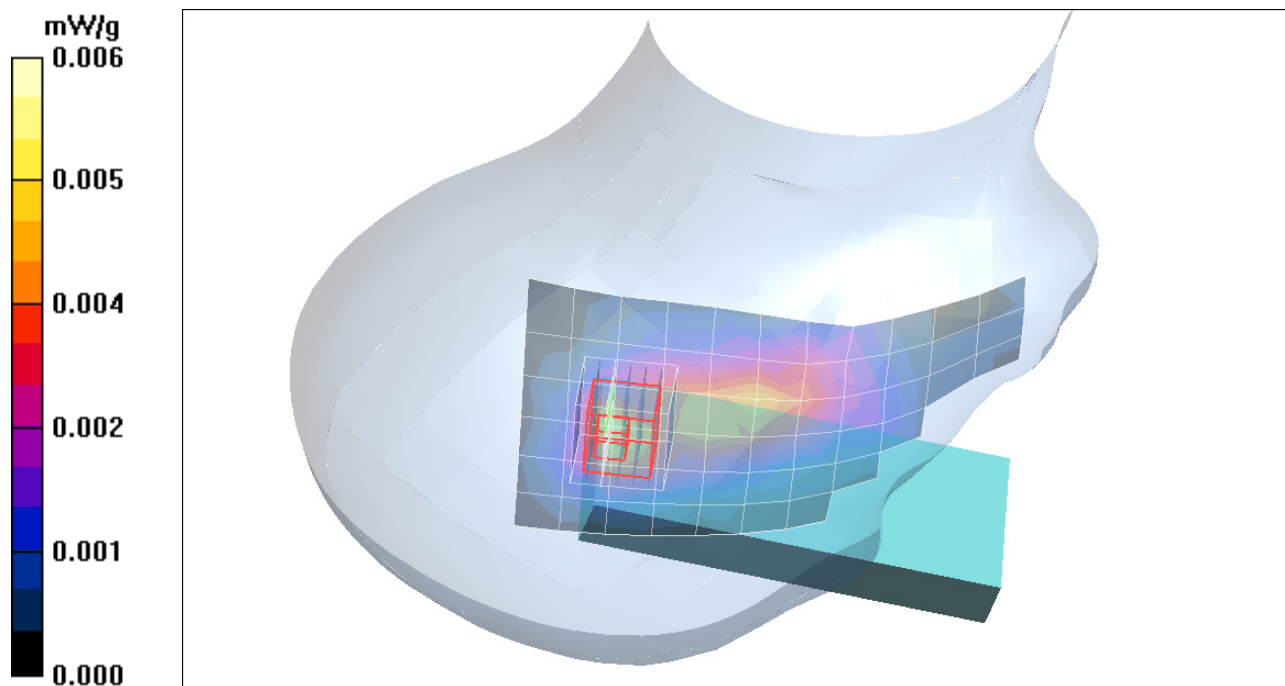


Fig. 8: SAR distribution for DECT US, channel 2, antenna 2, tilted position, right side of head

**Test Laboratory: IMST GmbH, DASY Yellow (II); File Name:**  
[DH6 7N8 y dect fm front clip hs ant1 0mm.da4](#)

**DUT: Ascorm; Type: DH6; Serial: T26105R7N8**  
**Program Name: US DECT**

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24  
 Medium parameters used:  $f = 1925$  MHz;  $\sigma = 1.59$  mho/m;  $\epsilon_r = 51.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(4.63, 4.63, 4.63); Calibrated: 2/23/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 9/16/2015
- Phantom: SAM 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 (7x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.054 mW/g

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

Reference Value = 6.57 V/m; Power Drift = 0.083 dB

Peak SAR (extrapolated) = 0.112 W/kg

**SAR(1 g) = 0.065 mW/g; SAR(10 g) = 0.036 mW/g**

Maximum value of SAR (measured) = 0.073 mW/g

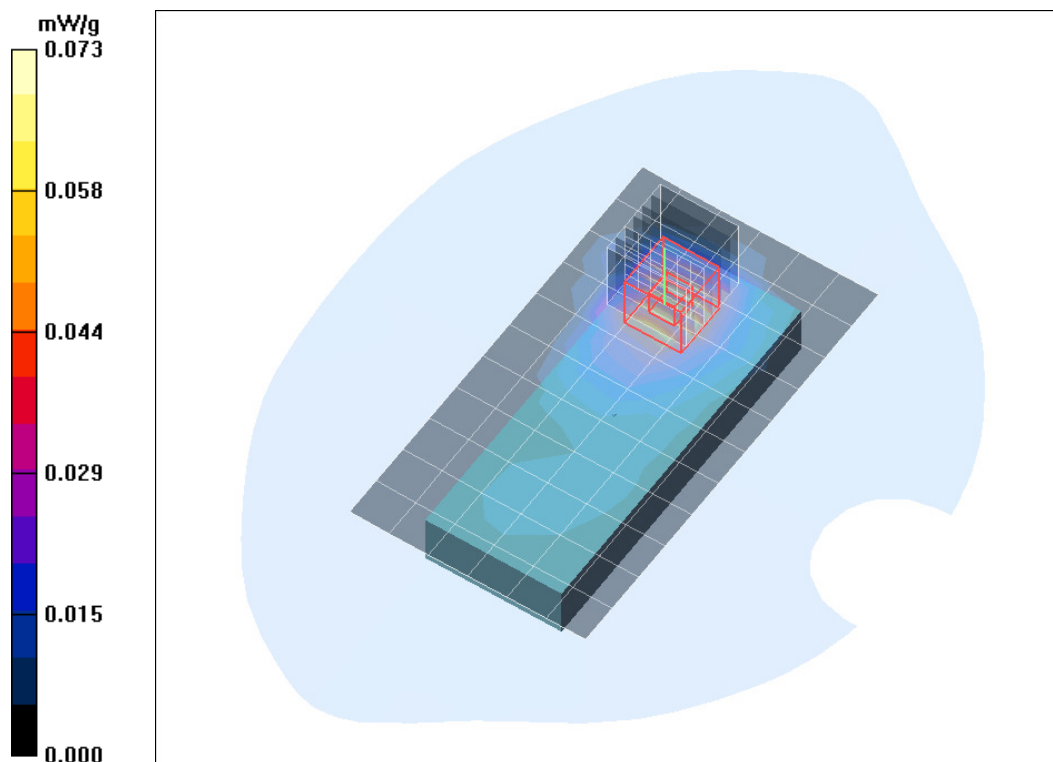


Fig. 9: SAR distribution for DECT US, channel 2, antenna 1, body worn configuration, front side of the device towards the phantom, HS and belt clip attached

Test Laboratory: IMST GmbH, DASY Yellow (II); File Name:  
[DH6 7N8 y dect fm back clip hs ant1 0mm.da4](#)

DUT: Ascsm; Type: DH6; Serial: T26105R7N8  
Program Name: US DECT

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24  
Medium parameters used:  $f = 1925$  MHz;  $\sigma = 1.59$  mho/m;  $\epsilon_r = 51.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(4.63, 4.63, 4.63); Calibrated: 2/23/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 9/16/2015
- Phantom: SAM 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 (7x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.016 mW/g

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

Reference Value = 1.98 V/m; Power Drift = 0.110 dB

Peak SAR (extrapolated) = 0.023 W/kg

**SAR(1 g) = 0.015 mW/g; SAR(10 g) = 0.0083 mW/g**

Maximum value of SAR (measured) = 0.017 mW/g

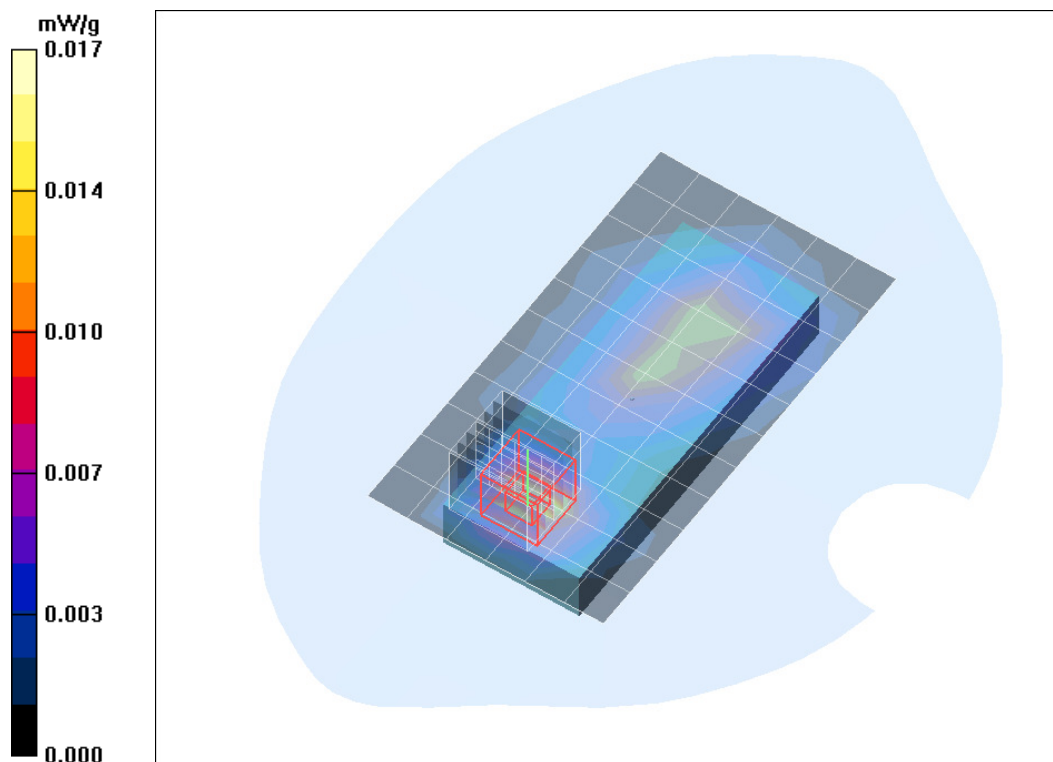


Fig. 10: SAR distribution for DECT US, channel 2, antenna 1, body worn configuration, back side of the device towards the phantom, HS and belt clip attached

**Test Laboratory: IMST GmbH, DASY Yellow (II); File Name:**  
[DH6 7N8 y dect fm front clip hs ant2 0mm.da4](#)

**DUT: Ascorm; Type: DH6; Serial: T26105R7N8**  
**Program Name: US DECT**

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24  
 Medium parameters used:  $f = 1925$  MHz;  $\sigma = 1.59$  mho/m;  $\epsilon_r = 51.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(4.63, 4.63, 4.63); Calibrated: 2/23/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 9/16/2015
- Phantom: SAM 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 (7x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.040 mW/g

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

Reference Value = 1.65 V/m; Power Drift = 0.086 dB

Peak SAR (extrapolated) = 0.083 W/kg

**SAR(1 g) = 0.044 mW/g; SAR(10 g) = 0.024 mW/g**

Maximum value of SAR (measured) = 0.051 mW/g

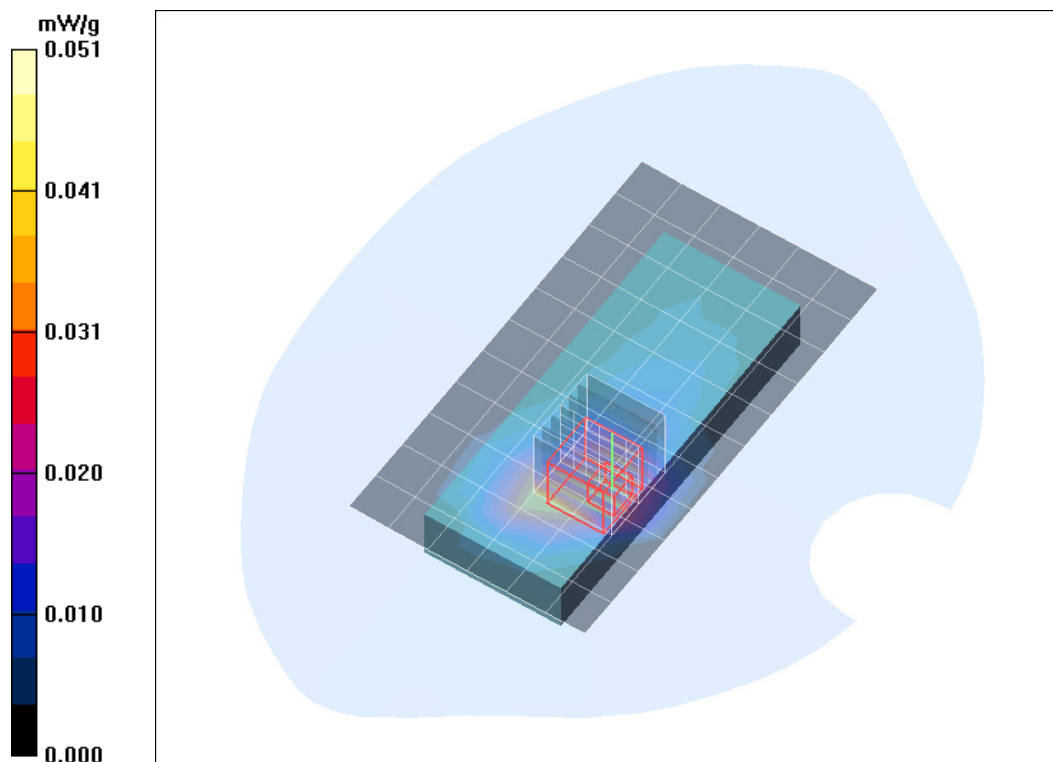


Fig. 11: SAR distribution for DECT US, channel 2, antenna 2, body worn configuration, front side of the device towards the phantom, HS and belt clip attached

**Test Laboratory: IMST GmbH, DASY Yellow (II); File Name:**  
[DH6 7N8 y dect fm back clip hs ant2 0mm.da4](#)

**DUT: Ascorm; Type: DH6; Serial: T26105R7N8**  
**Program Name: US DECT**

Communication System: DECT US; Frequency: 1924.99 MHz; Duty Cycle: 1:24  
 Medium parameters used:  $f = 1925$  MHz;  $\sigma = 1.59$  mho/m;  $\epsilon_r = 51.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(4.63, 4.63, 4.63); Calibrated: 2/23/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 9/16/2015
- Phantom: SAM 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 (7x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.020 mW/g

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

Reference Value = 0.878 V/m; Power Drift = -0.177 dB

Peak SAR (extrapolated) = 0.030 W/kg

**SAR(1 g) = 0.019 mW/g; SAR(10 g) = 0.011 mW/g**

Maximum value of SAR (measured) = 0.021 mW/g

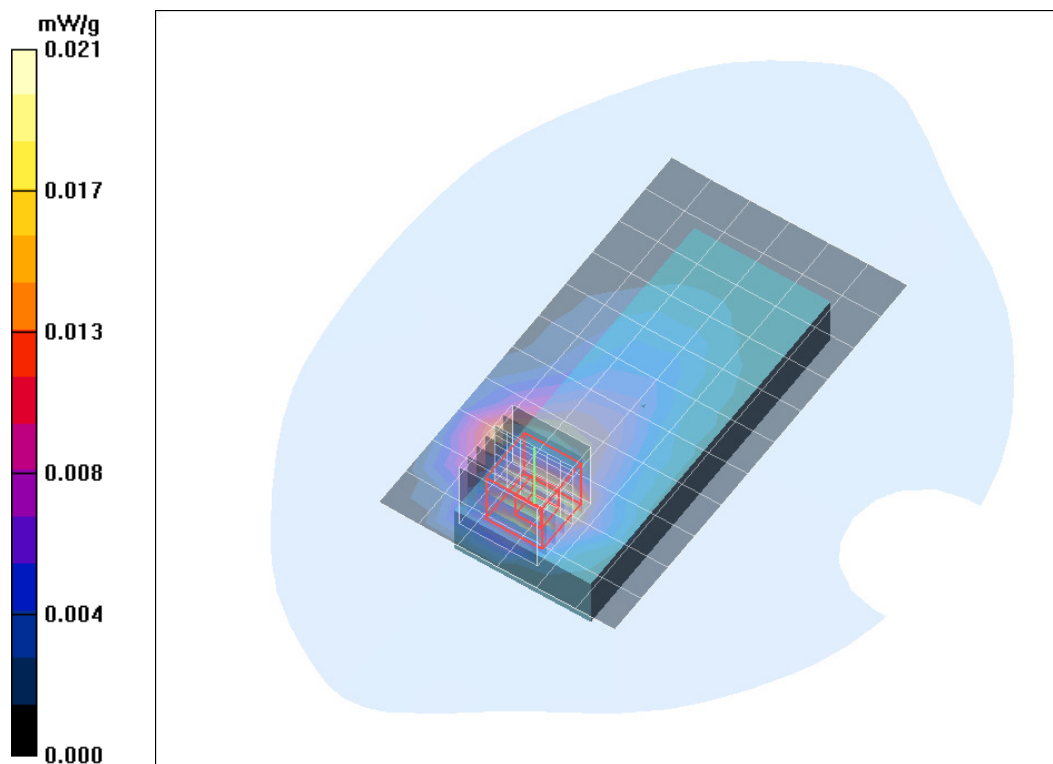


Fig. 12: SAR distribution for DECT US, channel 2, antenna 2, body worn configuration, back side of the device towards the phantom, HS and belt clip attached