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

# Dosimetric Assessment of the ADTS TOUCH Hand Terminal from GE Druck

(FCC ID: 2AAVWADTSTOUCH-01) (IC: 12097A-ADTSTOUCH01)

# According to the FCC Requirements SAR Distribution Plots

November 21, 2014

### **IMST GmbH**

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### Customer

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The test results only relate to the items tested.

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#### 1 SAR Distribution Plots

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: ADTS\_899\_bhm\_front.da4

DUT: GE Druck; Type: ADTS Touch; Serial: 4294899

**Program Name: Bluetooth** 

Communication System: Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.3

Medium parameters used: f = 2441 MHz;  $\sigma$  = 1.94 mho/m;  $\varepsilon_r$  = 51.7;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Flat Section

#### DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.34, 7.34, 7.34); Calibrated: 24.07.2014

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn631; Calibrated: 23.07.2014

- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body/Area Scan (9x22x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.076 mW/g

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

Reference Value = 3.01 V/m; Power Drift = -0.195 dB

Peak SAR (extrapolated) = 0.162 W/kg

SAR(1 g) = 0.075 mW/g; SAR(10 g) = 0.042 mW/g Maximum value of SAR (measured) = 0.081 mW/g

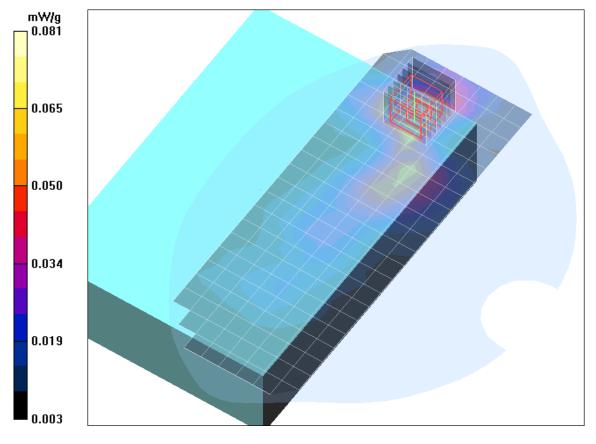


Fig. 1: SAR distribution for Bluetooth, channel 39, front side, gap = 0 mm (October 30, 2014)

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: ADTS 899 bhm back.da4

DUT: GE Druck; Type: ADTS Touch; Serial: 4294899

**Program Name: Bluetooth** 

Communication System: Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.3

Medium parameters used: f = 2441 MHz;  $\sigma$  = 1.94 mho/m;  $\epsilon_r$  = 51.7;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Flat Section

#### DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.34, 7.34, 7.34); Calibrated: 24.07.2014

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn631; Calibrated: 23.07.2014

- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body/Area Scan (9x12x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.136 mW/g

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

Reference Value = 4.59 V/m; Power Drift = 0.158 dB

Peak SAR (extrapolated) = 0.294 W/kg

SAR(1 g) = 0.139 mW/g; SAR(10 g) = 0.073 mW/g Maximum value of SAR (measured) = 0.153 mW/g

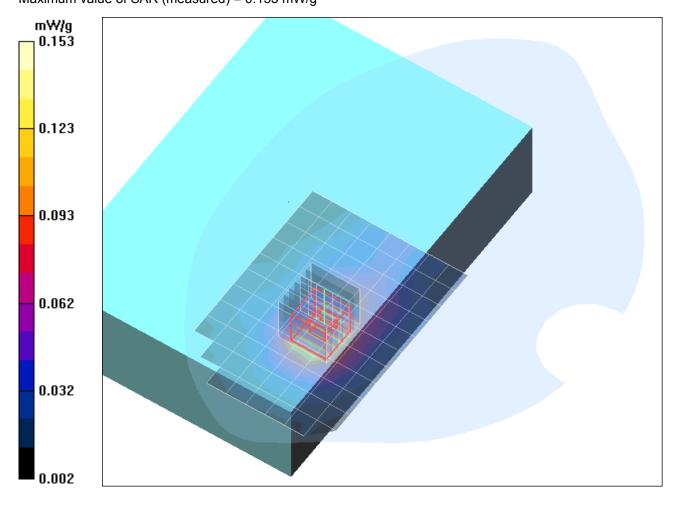


Fig. 2: SAR distribution for Bluetooth, channel 39, back side, gap = 0 mm (October 30, 2014)

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: ADTS 899 bhm top.da4

DUT: GE Druck; Type: ADTS Touch; Serial: 4294899

**Program Name: Bluetooth** 

Communication System: Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.3

Medium parameters used: f = 2441 MHz;  $\sigma$  = 1.94 mho/m;  $\epsilon_r$  = 51.7;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Flat Section

#### DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.34, 7.34, 7.34); Calibrated: 24.07.2014

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn631; Calibrated: 23.07.2014

- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body/Area Scan (8x11x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.197 mW/g

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

Reference Value = 6.04 V/m; Power Drift = -0.124 dB

Peak SAR (extrapolated) = 0.374 W/kg

SAR(1 g) = 0.181 mW/g; SAR(10 g) = 0.093 mW/g

Maximum value of SAR (measured) = 0.202 mW/g

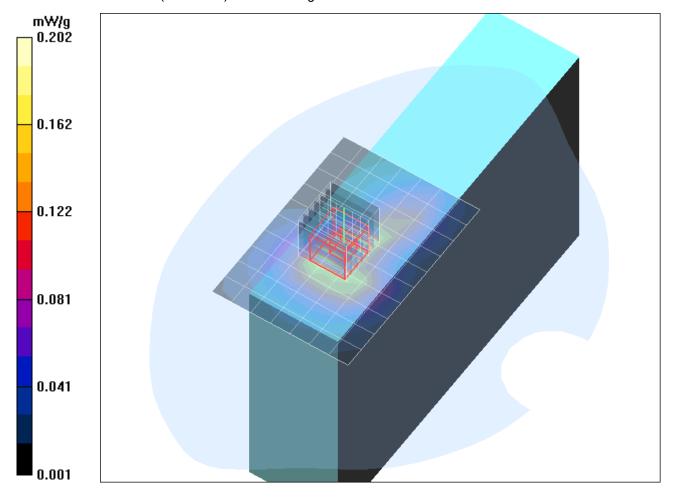


Fig. 3: SAR distribution for Bluetooth, channel 39, top side, gap = 0 mm (October 30, 2014)

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: ADTS 899 bhm left.da4

DUT: GE Druck; Type: ADTS Touch; Serial: 4294899

**Program Name: Bluetooth** 

Communication System: Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.3

Medium parameters used: f = 2441 MHz;  $\sigma$  = 1.94 mho/m;  $\varepsilon_r$  = 51.7;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Flat Section

#### DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.34, 7.34, 7.34); Calibrated: 24.07.2014

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn631; Calibrated: 23.07.2014

- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body/Area Scan (8x9x1): Measurement grid: dx=12mm, dy=12mm

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

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

Reference Value = 3.45 V/m; Power Drift = 0.096 dB

Peak SAR (extrapolated) = 0.097 W/kg

SAR(1 g) = 0.047 mW/g; SAR(10 g) = 0.026 mW/g Maximum value of SAR (measured) = 0.051 mW/g

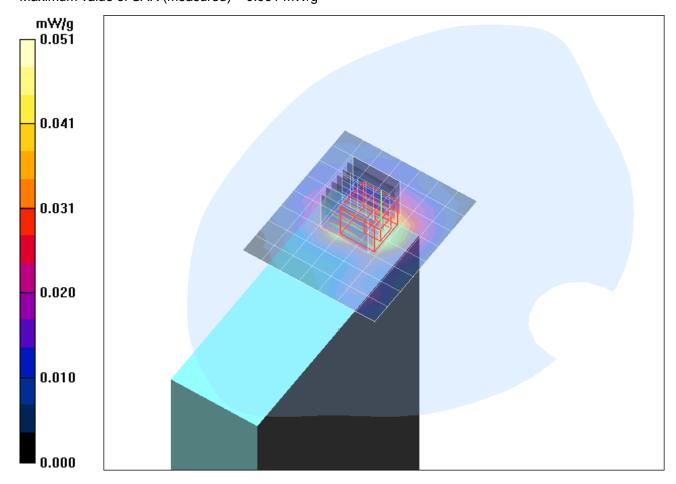


Fig. 4: SAR distribution for Bluetooth, channel 39, left side, gap = 0 mm (October 30, 2014)

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: ADTS 899 bhl top.da4

DUT: GE Druck; Type: ADTS Touch; Serial: 4294899

**Program Name: Bluetooth** 

Communication System: Bluetooth; Frequency: 2402 MHz; Duty Cycle: 1:1.3

Medium parameters used: f = 2402 MHz;  $\sigma$  = 1.88 mho/m;  $\epsilon_r$  = 51.9;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Flat Section

#### DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.34, 7.34, 7.34); Calibrated: 24.07.2014

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn631; Calibrated: 23.07.2014

- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body/Area Scan (8x11x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.125 mW/g

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

Reference Value = 5.07 V/m; Power Drift = 0.060 dB

Peak SAR (extrapolated) = 0.235 W/kg

SAR(1 g) = 0.117 mW/g; SAR(10 g) = 0.062 mW/gMaximum value of SAR (measured) = 0.129 mW/g

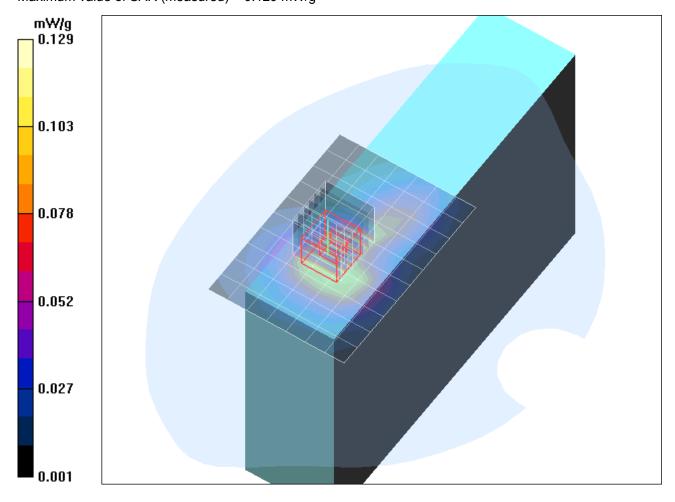


Fig. 5: SAR distribution for Bluetooth, channel 0, top side, gap = 0 mm (October 30, 2014)

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: ADTS 899 bhh top.da4

DUT: GE Druck; Type: ADTS Touch; Serial: 4294899

**Program Name: Bluetooth** 

Communication System: Bluetooth; Frequency: 2480 MHz; Duty Cycle: 1:1.3

Medium parameters used: f = 2480 MHz;  $\sigma$  = 2.01 mho/m;  $\varepsilon_r$  = 51.6;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Flat Section

#### DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.34, 7.34, 7.34); Calibrated: 24.07.2014

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn631; Calibrated: 23.07.2014

- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Body/Area Scan (8x11x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.182 mW/g

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

Reference Value = 5.55 V/m; Power Drift = -0.038 dB

Peak SAR (extrapolated) = 0.355 W/kg

SAR(1 g) = 0.171 mW/g; SAR(10 g) = 0.086 mW/g Maximum value of SAR (measured) = 0.189 mW/g

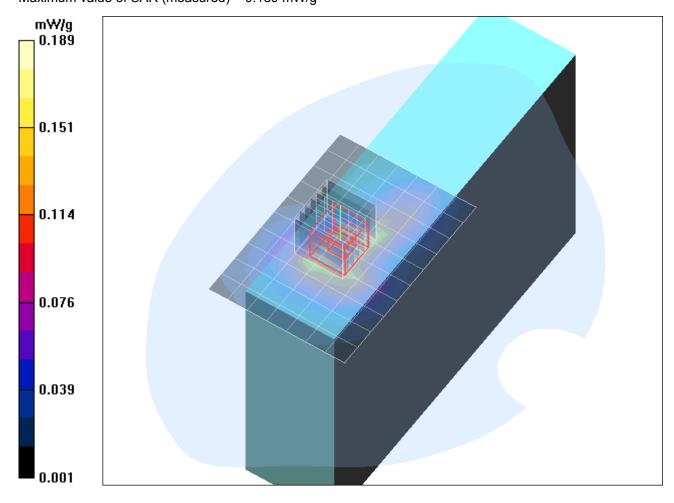


Fig. 6: SAR distribution for Bluetooth, channel 78, top side, gap = 0 mm (October 30, 2014)