

# **Appendix for the SAR Test Report**

## **Dosimetric Assessment of the Emergency Locator Buddi Click System - Clip from buddi Limited (FCC ID: ZDL353A)**

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

November 26, 2014

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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: [Buddi\\_020\\_bahl\\_pos1\\_voice\\_5mm.da4](#)

DUT: Care Innovations; Type: Buddi; Serial: C00020

Program Name: GSM850

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium parameters used:  $f = 824.2$  MHz;  $\sigma = 0.88$  mho/m;  $\epsilon_r = 41.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(6.42, 6.42, 6.42); Calibrated: 28.01.2014
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 23.01.2014
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Voice/Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.600 mW/g

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

Reference Value = 24.7 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 1.54 W/kg

**SAR(1 g) = 0.621 mW/g; SAR(10 g) = 0.339 mW/g**

Maximum value of SAR (measured) = 0.681 mW/g

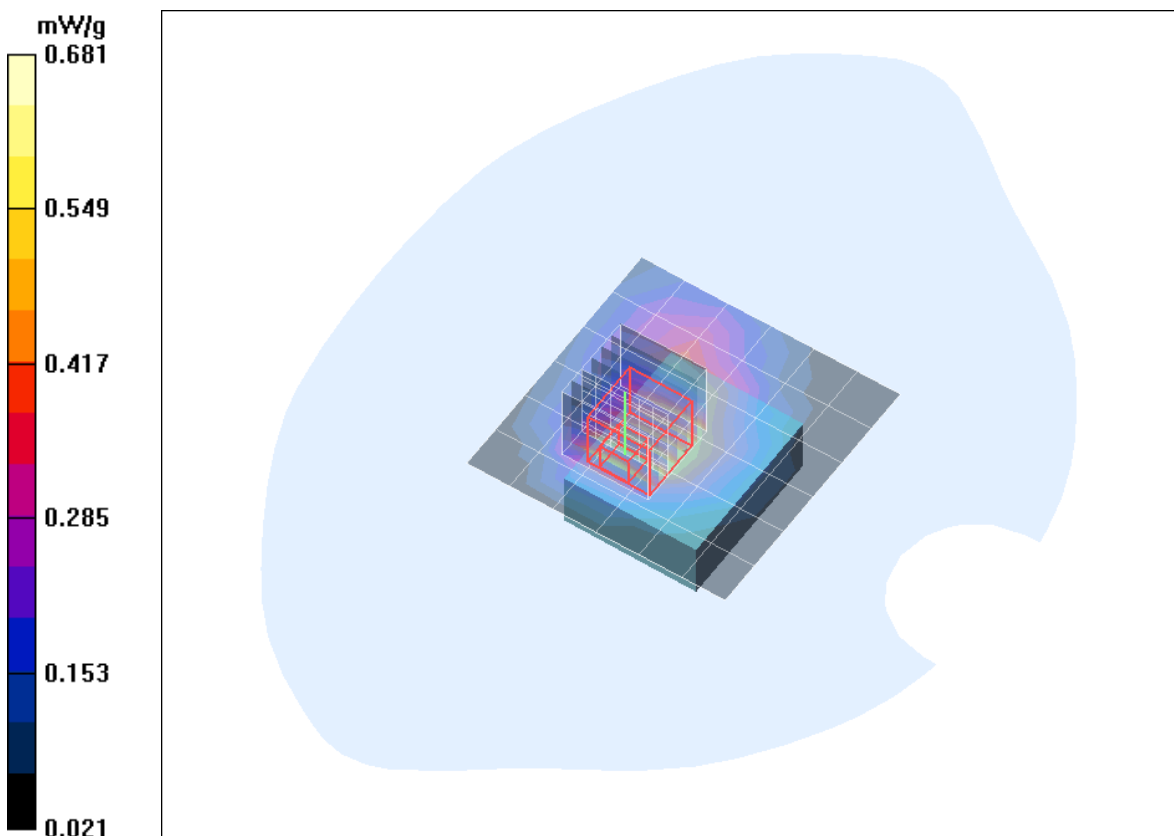


Fig. 1: SAR distribution for GSM 850, channel 128, top side, gap = 5 mm (September 30, 2014)

**Test Laboratory:** Imst GmbH, DASY Yellow (II); **File Name:** [Buddi\\_020\\_yphl\\_pos1\\_voice\\_7mm.da4](#)

**DUT:** Care Innovations; **Type:** Buddi; **Serial:** C00020

**Program Name:** PCS 1900

Communication System: PCS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.38$  mho/m;  $\epsilon_r = 39.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(5.19, 5.19, 5.19); 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

**Voice/Area Scan (8x8x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.31 mW/g

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

Reference Value = 32.3 V/m; Power Drift = -0.106 dB

Peak SAR (extrapolated) = 1.97 W/kg

**SAR(1 g) = 1.2 mW/g; SAR(10 g) = 0.639 mW/g**

Maximum value of SAR (measured) = 1.36 mW/g

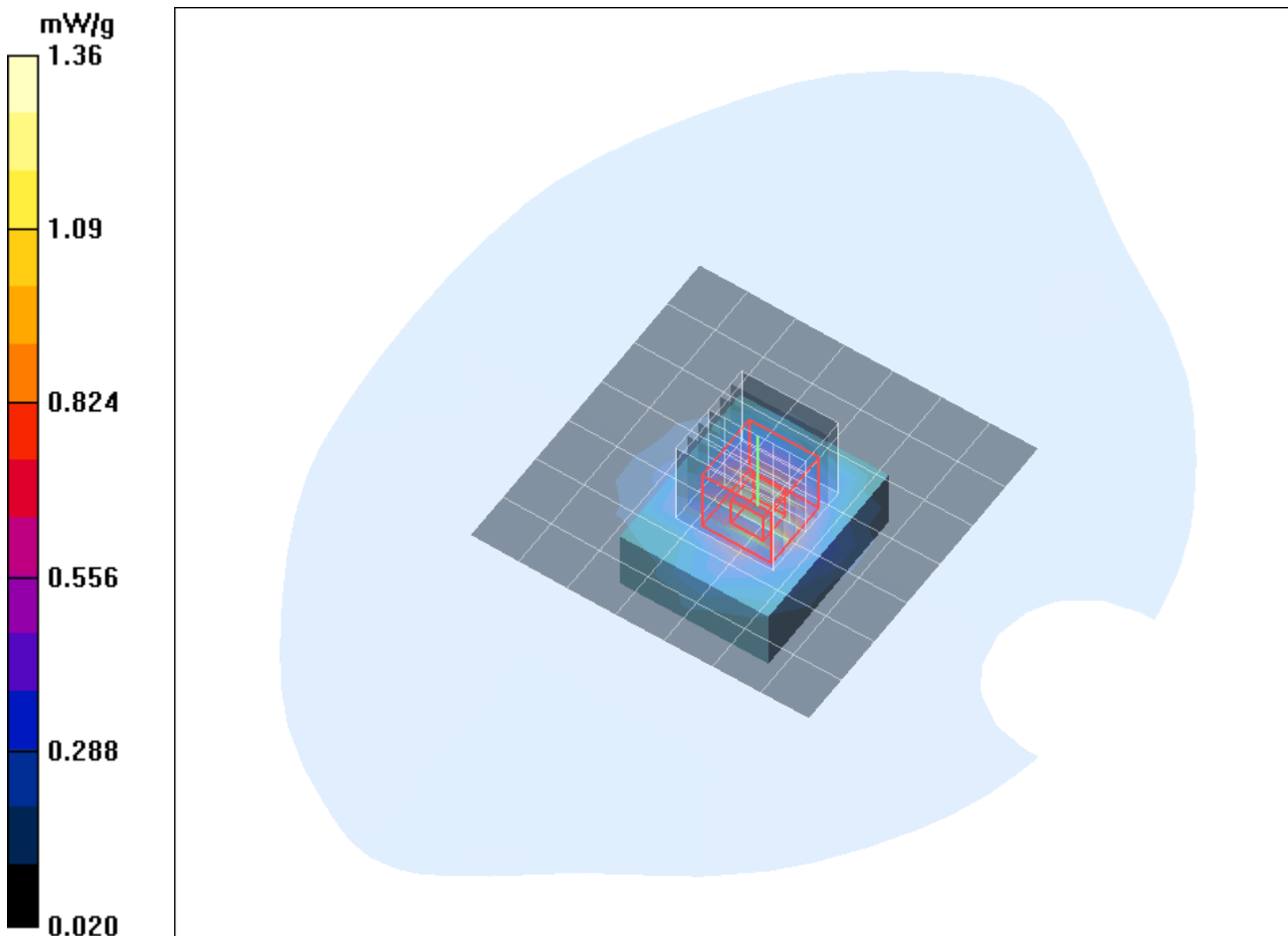


Fig. 2: SAR distribution for PCS 1900, channel 512, top side, gap = 7 mm (November 10, 2014)

**Test Laboratory:** IMST GmbH, DASY Blue (I); **File Name:** [Buddi\\_020\\_bahl\\_pos1\\_2TX\\_0mm.da4](#)

**DUT:** Care Innovations; **Type:** Buddi; **Serial:** C00020

**Program Name:** GPRS850 (Class 10)

Communication System: GPRS 850; Frequency: 824.2 MHz; Duty Cycle: 1:4

Medium parameters used:  $f = 824.2$  MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 55.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(6.25, 6.25, 6.25); Calibrated: 28.01.2014

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

- Electronics: DAE3 Sn335; Calibrated: 23.01.2014

- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059

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

**Voice/Area Scan (7x8x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.57 mW/g

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

Reference Value = 35.9 V/m; Power Drift = 0.084 dB

Peak SAR (extrapolated) = 6.86 W/kg

**SAR(1 g) = 2.1 mW/g; SAR(10 g) = 0.956 mW/g**

Maximum value of SAR (measured) = 2.39 mW/g

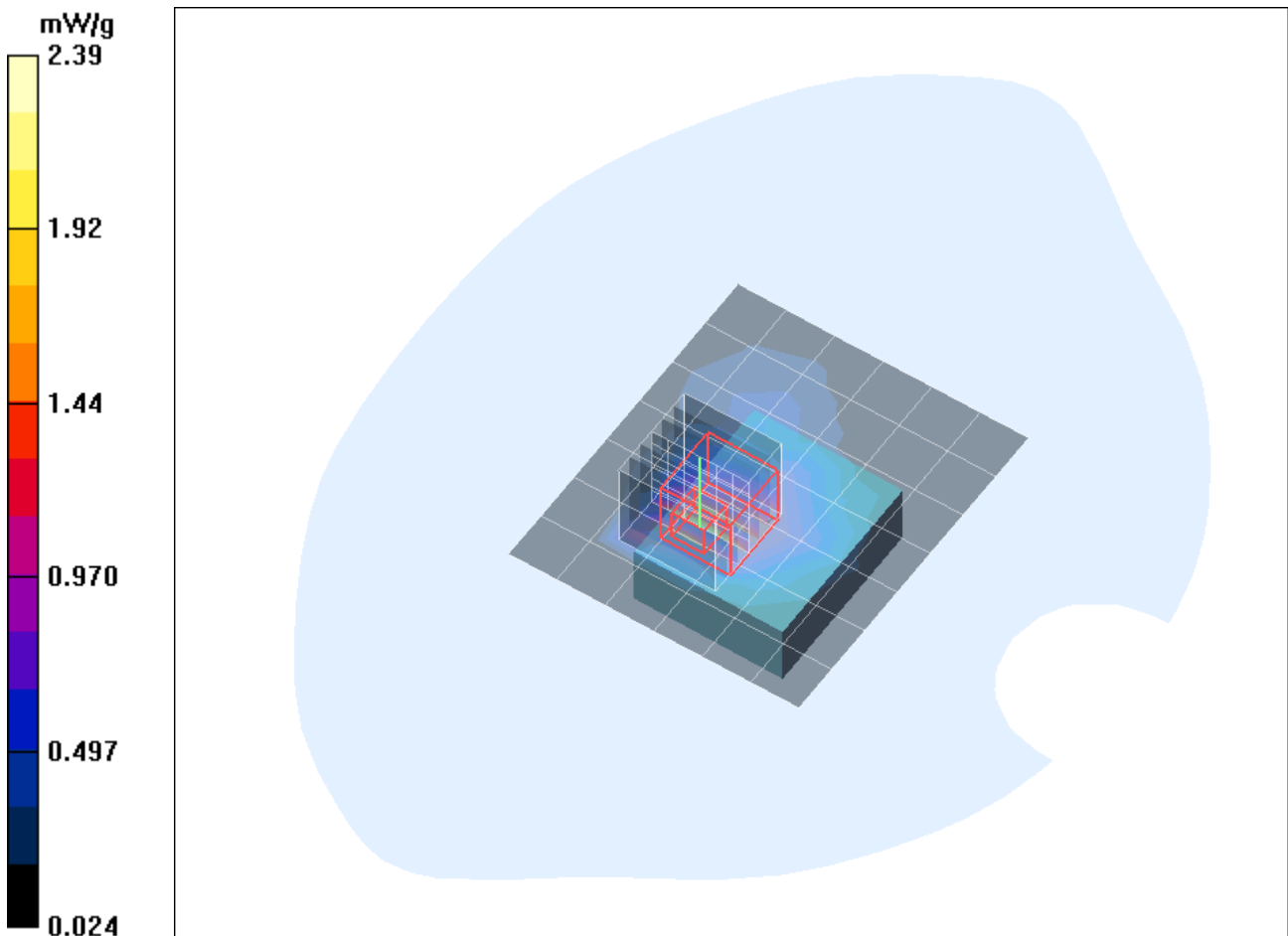


Fig. 3: SAR distribution for GPRS 850, channel 128, top side, gap = 0 mm (November 14, 2014)

**Test Laboratory:** Imst GmbH, DASY Yellow (II); **File Name:** [Buddi\\_020\\_yphm\\_pos1\\_2TX\\_0mm.da4](#)

**DUT:** Care Innovations; **Type:** Buddi; **Serial:** C00020

**Program Name:** GPRS 1900 (Class 10)

Communication System: GPRS 1900; Frequency: 1880 MHz; Duty Cycle: 1:4

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.5$  mho/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(4.49, 4.49, 4.49); 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 (8x8x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 6.45 mW/g

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

Reference Value = 67.6 V/m; Power Drift = -0.198 dB

Peak SAR (extrapolated) = 9.79 W/kg

**SAR(1 g) = 5.67 mW/g; SAR(10 g) = 2.78 mW/g**

Maximum value of SAR (measured) = 6.52 mW/g

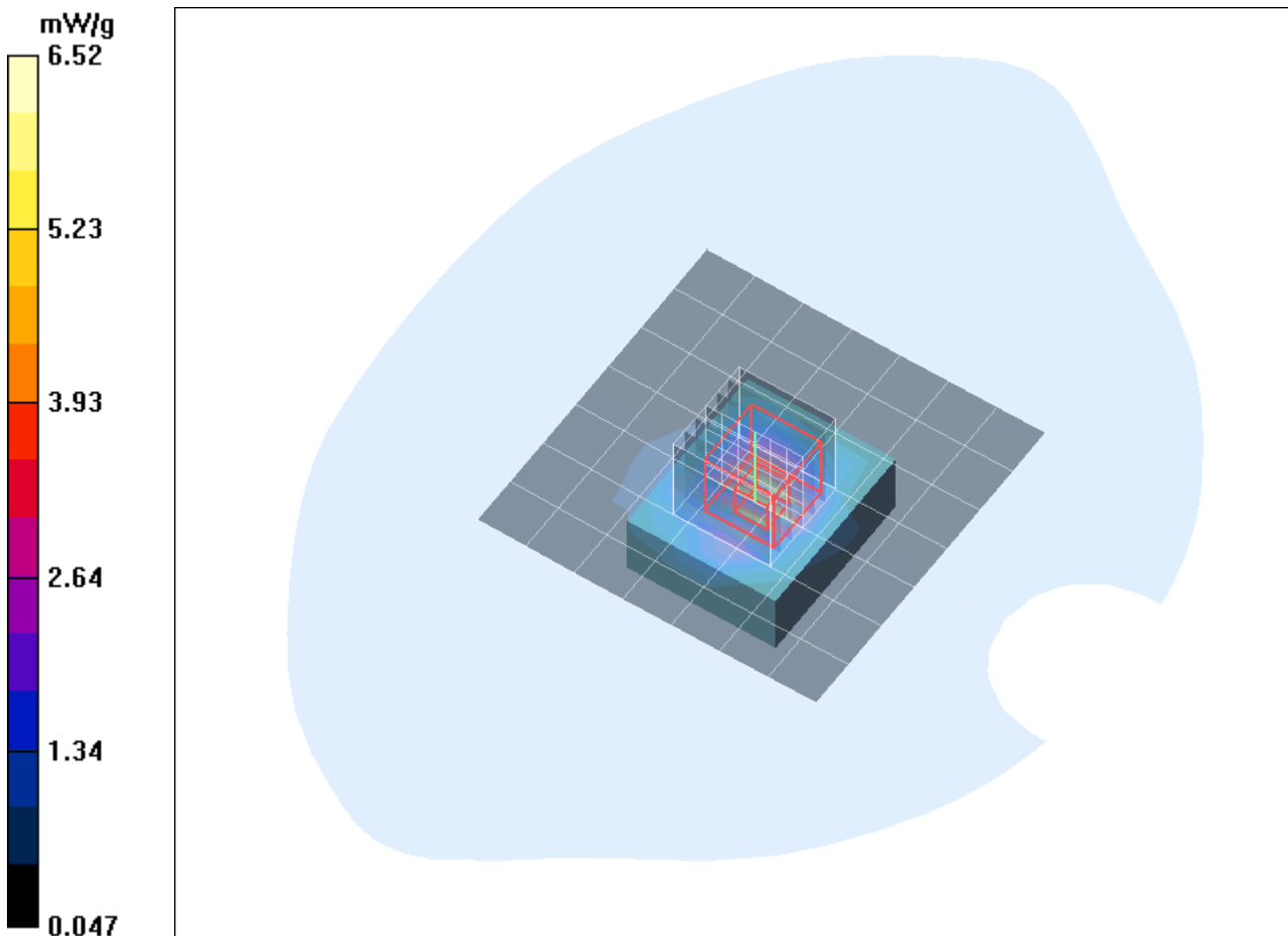


Fig. 4: SAR distribution for GPRS 1900, channel 661, top side, gap = 0 mm (October 22, 2014)

**Test Laboratory:** Imst GmbH, DASY Yellow (II); **File Name:** [Buddi\\_020\\_yphl\\_pos1\\_2TX\\_0mm.da4](#)

**DUT:** Care Innovations; **Type:** Buddi; **Serial:** C00020

**Program Name:** GPRS 1900 (Class 10)

Communication System: GPRS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:4

Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6R - SN1579; ConvF(4.49, 4.49, 4.49); 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 (8x8x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 6.72 mW/g

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

Reference Value = 69.2 V/m; Power Drift = -0.086 dB

Peak SAR (extrapolated) = 10.4 W/kg

**SAR(1 g) = 6.04 mW/g; SAR(10 g) = 2.98 mW/g**

Maximum value of SAR (measured) = 6.92 mW/g

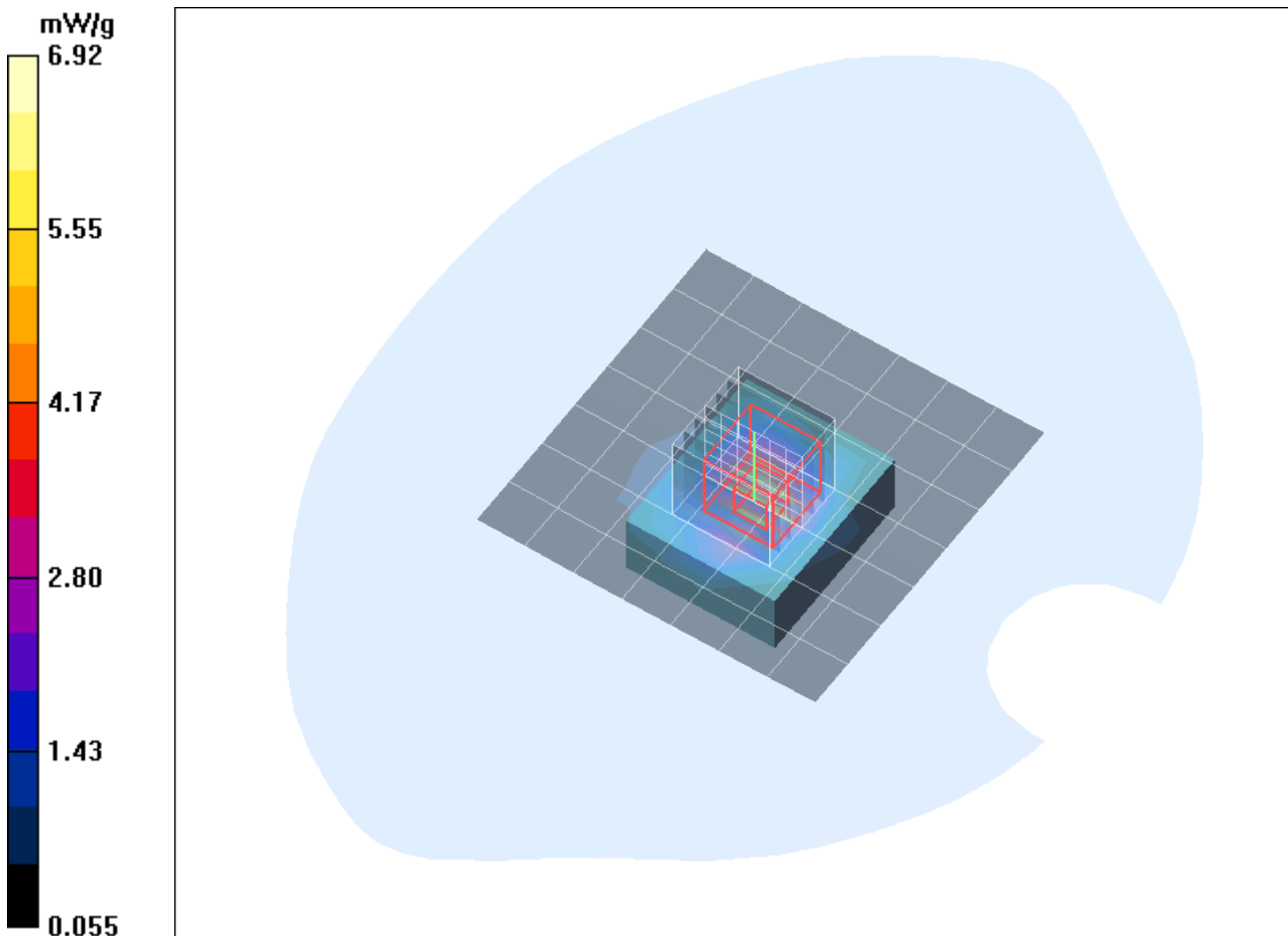


Fig. 5: SAR distribution for GPRS 1900, channel 512, top side, gap = 0 mm (October 22, 2014)