

Appendix for the Report

Dosimetric Assessment of the Portable Device Datalogic Joya X1 Plus (FCC ID: U4G0156 / IC: 3862E-M0156)

According to the FCC Requirements SAR Distribution Plots

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1 SAR Distribution Plots

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: [Joya_X1+_ywhl_b_CH1_dspl_down.da4](#)

DUT: Datalogic; Type: Joya X1 Plus; Serial: E13D18174

Program Name: IEEE 802.11 b

Communication System: WLAN 2450; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.92 \text{ mho/m}$; $\epsilon_r = 51.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.55, 7.55, 7.55); Calibrated: 24.09.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 18.02.2013
- 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 Worn/Area Scan (11x17x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

Maximum value of SAR (measured) = 0.225 mW/g

Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.57 V/m ; Power Drift = -0.089 dB

Peak SAR (extrapolated) = 0.406 W/kg

SAR(1 g) = 0.205 mW/g ; SAR(10 g) = 0.107 mW/g

Maximum value of SAR (measured) = 0.226 mW/g

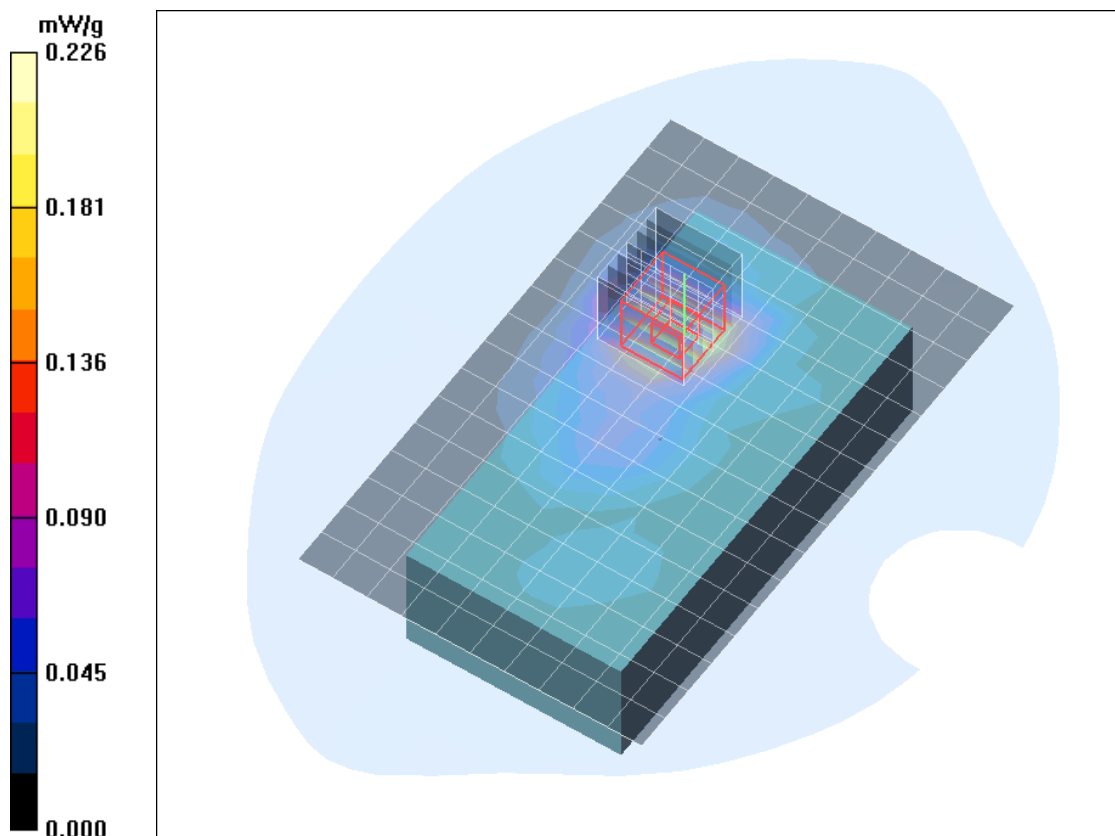


Fig. 1: SAR distribution for IEEE 802.11 b, channel 1, position 1 (September 12, 2013)

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:**

[Joya_X1+_ywhm_b_CH6_dspl_down.da4](#)

DUT: Datalogic; **Type:** Joya X1 Plus; **Serial:** E13D18174

Program Name: IEEE 802.11 b

Communication System: WLAN 2450; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 51.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.55, 7.55, 7.55); Calibrated: 24.09.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 18.02.2013
- 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 Worn/Area Scan (11x17x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.174 mW/g

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

Reference Value = 4.73 V/m; Power Drift = 0.012 dB

Peak SAR (extrapolated) = 0.330 W/kg

SAR(1 g) = 0.164 mW/g; SAR(10 g) = 0.085 mW/g

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

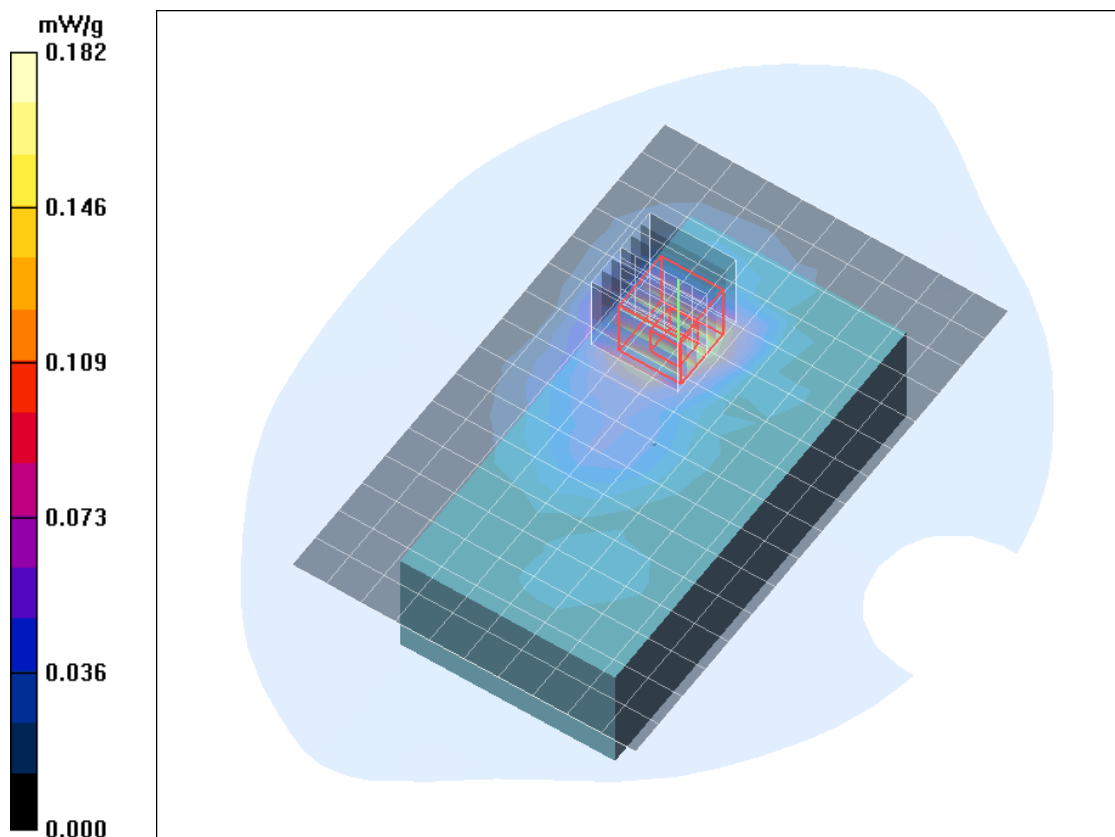


Fig. 2: SAR distribution for IEEE 802.11 b, channel 6, position 1 (September 12, 2013)

Test Laboratory: Imst GmbH, DASY Yellow (II); **File Name:**

[Joya_X1+_ywhh_b_CH11_dspl_down.da4](#)

DUT: Datalogic; **Type:** Joya X1 Plus; **Serial:** E13D18174

Program Name: IEEE 802.11 b

Communication System: WLAN 2450; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2462$ MHz; $\sigma = 2.02$ mho/m; $\epsilon_r = 51.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.55, 7.55, 7.55); Calibrated: 24.09.2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 18.02.2013
- 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 Worn/Area Scan (11x17x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.214 mW/g

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

Reference Value = 5.33 V/m; Power Drift = -0.101 dB

Peak SAR (extrapolated) = 0.421 W/kg

SAR(1 g) = 0.200 mW/g; SAR(10 g) = 0.102 mW/g

Maximum value of SAR (measured) = 0.219 mW/g

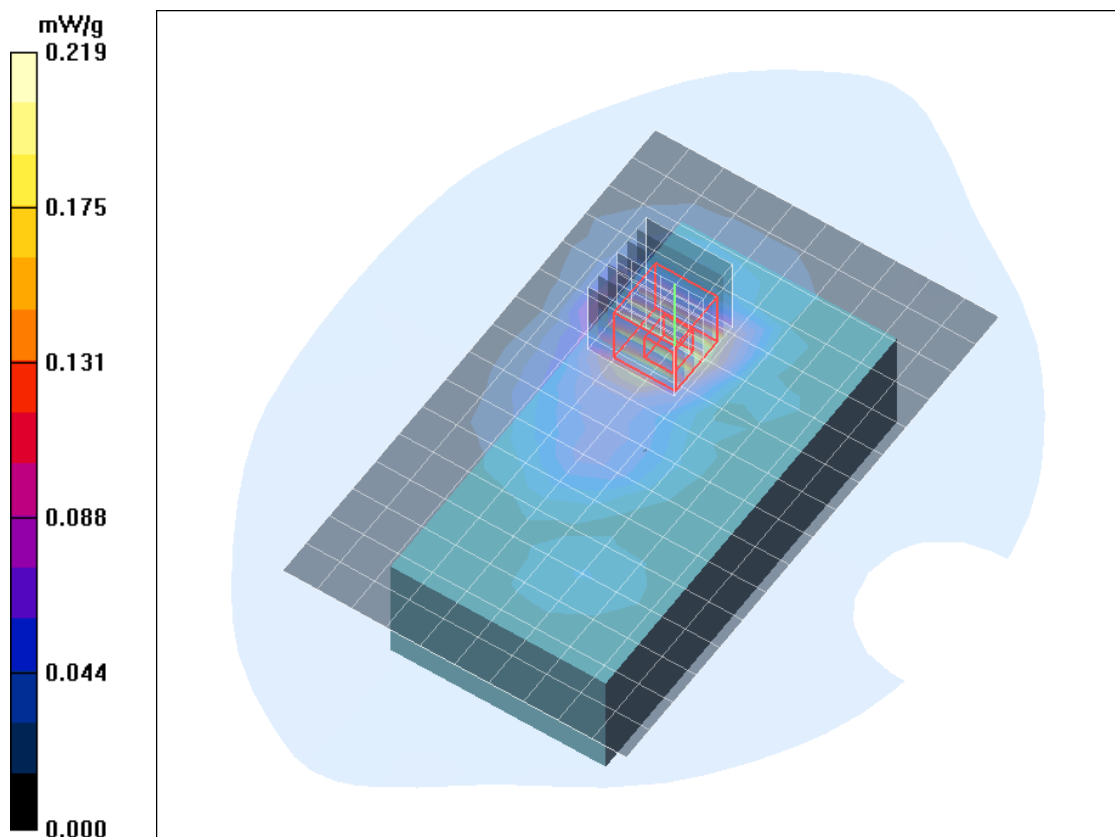


Fig. 3: SAR distribution for IEEE 802.11 b, channel 11, position 1 (September 12, 2013)