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# **Appendix for the Report**

# Dosimetric Assessment of the Portable Device Amyuni DBLDEV1 (FCC ID: ZTVDBLDEV1)

(IC: 9796A-DBLDEV1)

# According to the FCC and IC Requirements SAR Distribution Plots

October 17, 2011

# **IMST GmbH**

Carl-Friedrich-Gauß-Str. 2 D-47475 Kamp-Lintfort

#### Customer

Nemko Canada 303 River Road Ottawa, ON Canada K1V 1H2

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.

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#### 1 SAR Distribution Plots, IEEE 802.11 b/g Body

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

AMYUNI ywhm 1 CH6 b dspl down.da4

DUT: AMYUNI; Type: DBLDEV1; Serial: DBLDEV2010100000B8

Program Name: IEEE 802.11 b

Communication System: WLAN 2450; Frequency: 2437 MHz; Duty Cycle: 1:1 Medium parameters used: f = 2437 MHz;  $\sigma = 2.01$  mho/m;  $\epsilon_r = 52.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

#### **DASY4** Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.48, 7.48, 7.48); Calibrated: 16.09.2010

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

- Electronics: DAE4 Sn631; Calibrated: 17.09.2010

- 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 (8x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.287 mW/g

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

Reference Value = 12.1 V/m; Power Drift = 0.170 dB

Peak SAR (extrapolated) = 0.914 W/kg

SAR(1 g) = 0.305 mW/g; SAR(10 g) = 0.105 mW/g

Maximum value of SAR (measured) = 0.359 mW/g

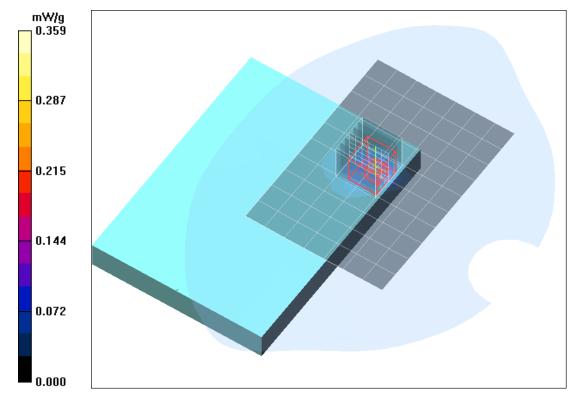


Fig. 1: SAR distribution for IEEE 802.11 b, channel 6, position 1, (May 20, 2011; Ambient Temperature: 21.9° C; Liquid Temperature: 21.6° C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: AMYUNI\_ywhm\_2\_CH6\_b\_dspl\_up.da4

DUT: AMYUNI; Type: DBLDEV1; Serial: DBLDEV2010100000B8

Program Name: IEEE 802.11 b

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

Medium parameters used: f = 2437 MHz;  $\sigma = 2.01$  mho/m;  $\varepsilon_r = 52.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

#### **DASY4** Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.48, 7.48, 7.48); Calibrated: 16.09.2010

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

- Electronics: DAE4 Sn631; Calibrated: 17.09.2010

- 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 (8x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.003 mW/g

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

Reference Value = 0.847 V/m; Power Drift = -0.110 dB

Peak SAR (extrapolated) = 0.013 W/kg

SAR(1 g) = 0.00218 mW/g; SAR(10 g) = 0.000943 mW/g

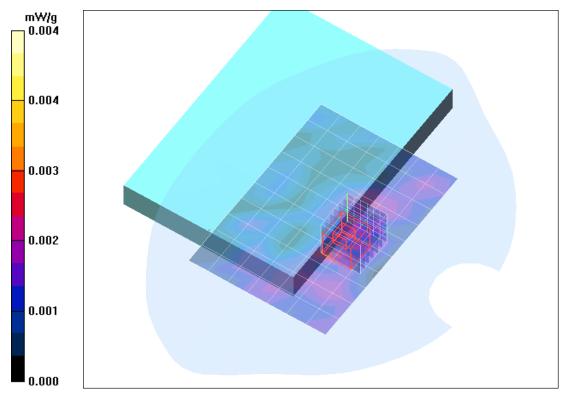


Fig. 2: SAR distribution for IEEE 802.11 b, channel 6, position 2, (May 20, 2011; Ambient Temperature: 21.9° C; Liquid Temperature: 21.6° C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: AMYUNI\_ywhm\_3\_CH6\_b\_side.da4

DUT: AMYUNI; Type: DBLDEV1; Serial: DBLDEV2010100000B8

Program Name: IEEE 802.11 b

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

Medium parameters used: f = 2437 MHz;  $\sigma = 2.01$  mho/m;  $\varepsilon_r = 52.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

#### **DASY4** Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.48, 7.48, 7.48); Calibrated: 16.09.2010

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

- Electronics: DAE4 Sn631; Calibrated: 17.09.2010

- 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 (7x12x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.010 mW/g

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

Reference Value = 2.30 V/m; Power Drift = -0.114 dB

Peak SAR (extrapolated) = 0.040 W/kg

SAR(1 g) = 0.013 mW/g; SAR(10 g) = 0.00498 mW/g

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

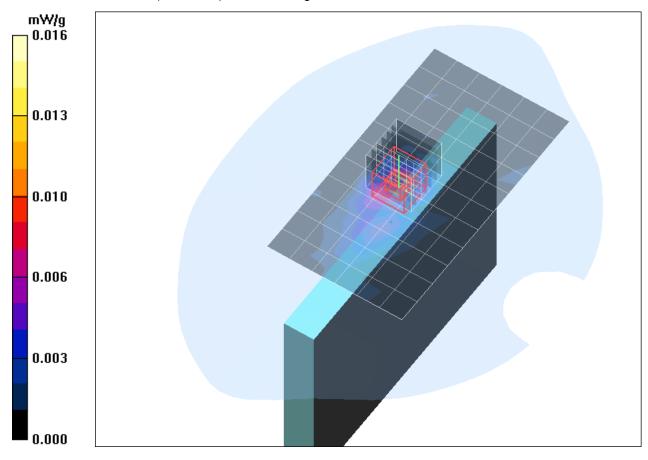


Fig. 3: SAR distribution for IEEE 802.11 b, channel 6, position 3, (May 20, 2011; Ambient Temperature: 21.9° C; Liquid Temperature: 21.6° C).

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

AMYUNI\_ywhm\_1\_CH6\_g\_dspl\_down.da4

DUT: AMYUNI; Type: DBLDEV1; Serial: DBLDEV2010100000B8

Program Name: IEEE 802.11 g

Communication System: WLAN 2450; Frequency: 2437 MHz; Duty Cycle: 1:1 Medium parameters used: f = 2437 MHz;  $\sigma = 2.01$  mho/m;  $\epsilon_r = 52.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

#### **DASY4** Configuration:

- Probe: EX3DV4 - SN3536; ConvF(7.48, 7.48, 7.48); Calibrated: 16.09.2010

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2010
- 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 (8x11x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 3.14 V/m; Power Drift = 0.136 dB

Peak SAR (extrapolated) = 0.170 W/kg

SAR(1 g) = 0.050 mW/g; SAR(10 g) = 0.017 mW/g Maximum value of SAR (measured) = 0.058 mW/g

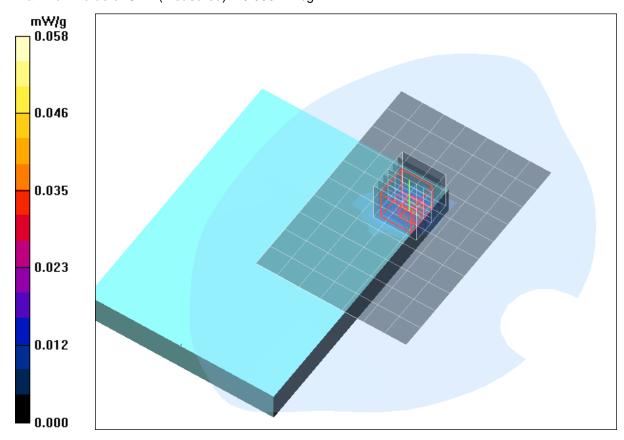


Fig. 4: SAR distribution for IEEE 802.11 g in worst case configuration, channel 6, position 1, (May 20, 2011; Ambient Temperature: 21.9° C; Liquid Temperature: 21.6° C).

## 2 SAR Z-axis Scans (Validation)

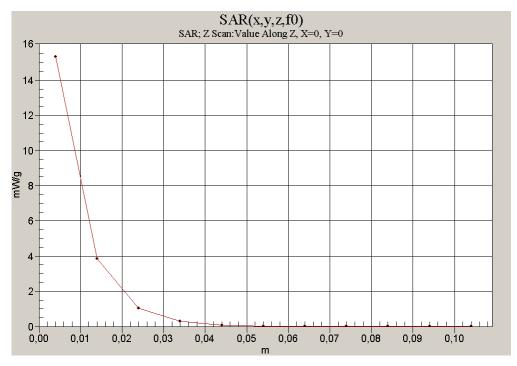


Fig. 5: SAR versus liquid depth, 2450 MHz, body (May 20, 2011; Ambient Temperature: 21.9° C; Liquid Temperature: 21.6° C).

# 3 SAR Z-axis Scans (Measurements)

The following pictures show the plots of SAR versus liquid depth for the worst case values.

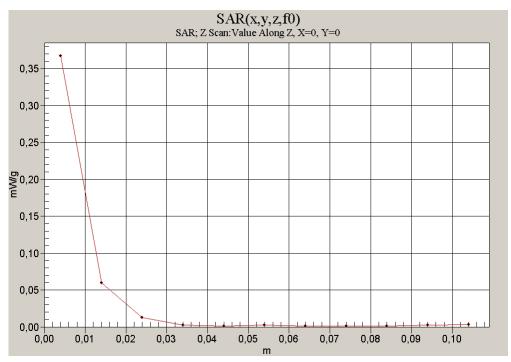


Fig. 6: SAR versus liquid depth, head: IEEE 802.11 b, channel 6, position 1, (May 20, 2011; Ambient Temperature: 22.1° C; Liquid Temperature: 21.8° C).