

# FCC SAR Test Report

# Appendix A. Plots of System Performance Check

The plots are shown as follows.

SPORTON INTERNATIONAL (KUNSHAN) INC.

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## System Check\_Head\_835MHz\_120229

#### **DUT: Dipole 835 MHz**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL\_850\_120229 Medium parameters used: f = 835 MHz;  $\sigma = 0.902$  mho/m;  $\epsilon_r = 40.749$ ;  $\rho$ 

Date: 29.02.2012

 $= 1000 \text{ kg/m}^3$ 

Ambient Temperature : 23.4 °C; Liquid Temperature : 21.6 °C

#### DASY5 Configuration:

- Probe: EX3DV4 SN3819; ConvF(9.4, 9.4, 9.4); Calibrated: 16.11.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

**Pin=250mW/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 2.650 mW/g

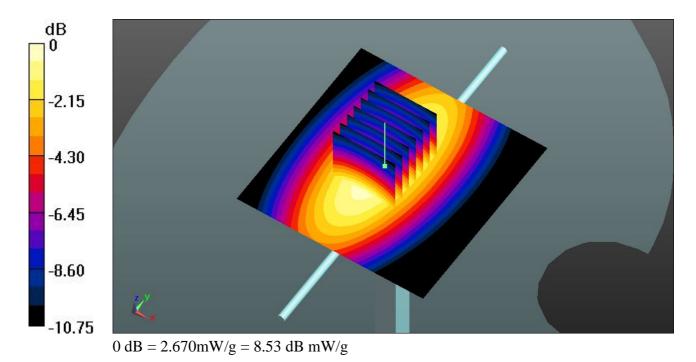
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 52.861 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 3.7780

SAR(1 g) = 2.47 mW/g; SAR(10 g) = 1.6 mW/g

Maximum value of SAR (measured) = 2.672 mW/g



#### System Check\_Body\_835MHz\_120229

#### **DUT: Dipole 835 MHz**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: MSL\_850\_120229 Medium parameters used: f = 835 MHz;  $\sigma = 0.976$  mho/m;  $\varepsilon_r = 54.369$ ;

Date: 29.02.2012

 $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature : 23.7 °C; Liquid Temperature : 21.5 °C

#### DASY5 Configuration:

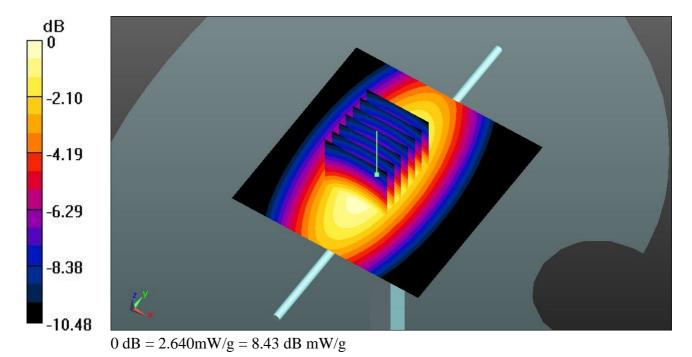
- Probe: EX3DV4 SN3819; ConvF(9.72, 9.72, 9.72); Calibrated: 16.11.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM1; Type: QD000P40CD; Serial: TP:1670
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

Pin=250mW/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 2.645 mW/g

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 51.634 V/m: Power Drift = 0.00026 dB

Peak SAR (extrapolated) = 3.7130

SAR(1 g) = 2.45 mW/g; SAR(10 g) = 1.59 mW/gMaximum value of SAR (measured) = 2.639 mW/g



## System Check\_Head\_1900MHz\_120301

#### **DUT: Dipole 1900 MHz**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL\_1900\_120301 Medium parameters used: f = 1900 MHz;  $\sigma = 1.412$  mho/m;  $\epsilon_{r} =$ 

Date: 01.03.2012

39.311;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 23.4 °C; Liquid Temperature: 21.7 °C

#### DASY5 Configuration:

- Probe: EX3DV4 SN3819; ConvF(8.36, 8.36, 8.36); Calibrated: 16.11.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

**Pin=250mW/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 11.726 mW/g

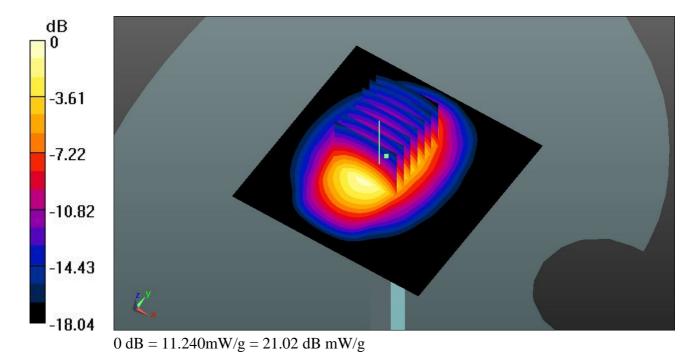
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 82.615 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 18.8200

SAR(1 g) = 10 mW/g; SAR(10 g) = 5.19 mW/g

Maximum value of SAR (measured) = 11.244 mW/g



#### System Check\_Body\_1900MHz\_120229

#### **DUT: Dipole 1900 MHz**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: MSL\_1900\_120229 Medium parameters used: f = 1900 MHz;  $\sigma = 1.501$  mho/m;  $\epsilon_{r} =$ 

Date: 29.02.2012

53.849;  $\rho = 1000 \text{ kg/m}^3$ 

Ambient Temperature: 23.5 °C; Liquid Temperature: 21.3 °C

#### DASY5 Configuration:

- Probe: EX3DV4 SN3819; ConvF(7.71, 7.71, 7.71); Calibrated: 16.11.2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1303; Calibrated: 10.11.2011
- Phantom: SAM3; Type: QDOVA002AA; Serial: TP:1149
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

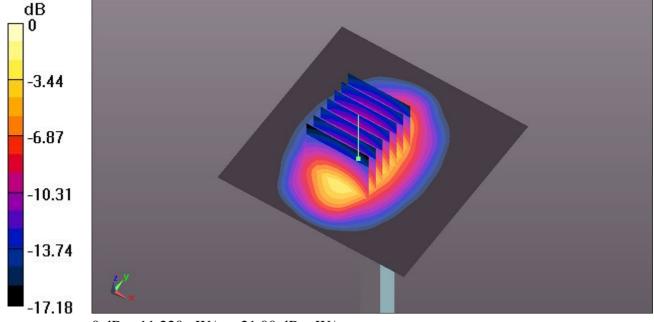
**Pin=250mW/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 11.700 mW/g

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 84.530 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 18.4650

SAR(1 g) = 10 mW/g; SAR(10 g) = 5.23 mW/g

Maximum value of SAR (measured) = 11.216 mW/g



0 dB = 11.220 mW/g = 21.00 dB mW/g