



## ***Appendix A. Plots of System Performance Check***

The plots are shown as follows.

## **System Check\_Body\_2450MHz\_111102**

### **DUT: Dipole 2450 MHz**

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: MSL\_2450\_111101 Medium parameters used:  $f = 2450$  MHz;  $\sigma = 2.002$  mho/m;  $\epsilon_r =$

53.464;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.3 °C; Liquid Temperature : 21.4 °C

#### **DASY5 Configuration:**

- Probe: ET3DV6 - SN1787; ConvF(3.96, 3.96, 3.96); Calibrated: 2011-5-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2010-11-18
- Phantom: SAM3; Type: SAM; Serial: TP-1079
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

**Pin=250mW/Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 14.886 mW/g

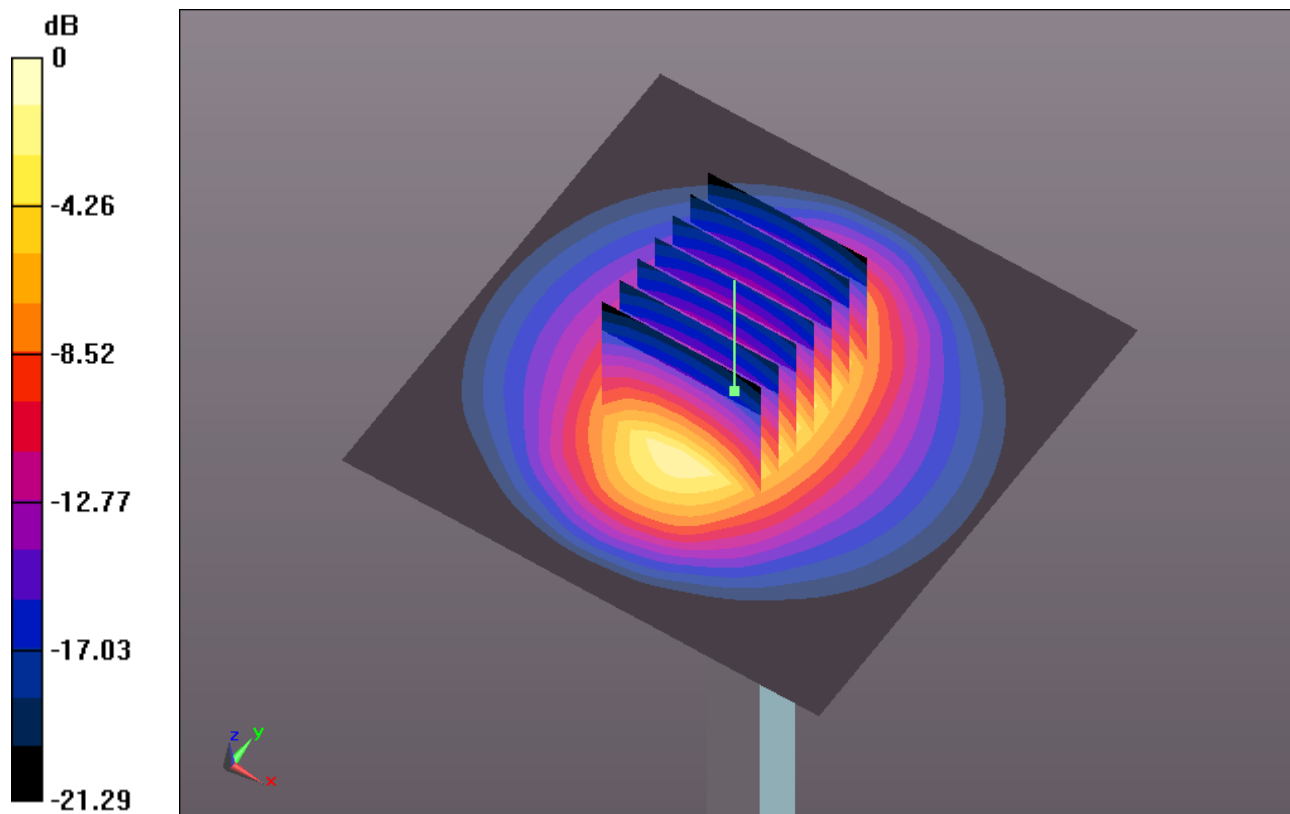
**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.225 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 31.854 W/kg

**SAR(1 g) = 13.1 mW/g; SAR(10 g) = 6.15 mW/g**

Maximum value of SAR (measured) = 14.165 mW/g



0 dB = 14.160mW/g

## **System Check\_Body\_2450MHz\_111215**

### **DUT: Dipole 2450 MHz**

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: MSL\_2450\_111215 Medium parameters used:  $f = 2450 \text{ MHz}$ ;  $\sigma = 1.96 \text{ mho/m}$ ;  $\epsilon_r = 51.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : 22.5 ; Liquid Temperature : 21.5

DASY5 Configuration:

- Probe: ET3DV6 - SN1787; ConvF(3.96, 3.96, 3.96); Calibrated: 2011/5/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2011/6/17
- Phantom: ELI 4.0\_Front; Type: QD 0VA 002 AA; Serial: TP-1131
- ; SEMCAD X Version 13.4 Build 125

**Pin=250mW/Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 15.9 mW/g

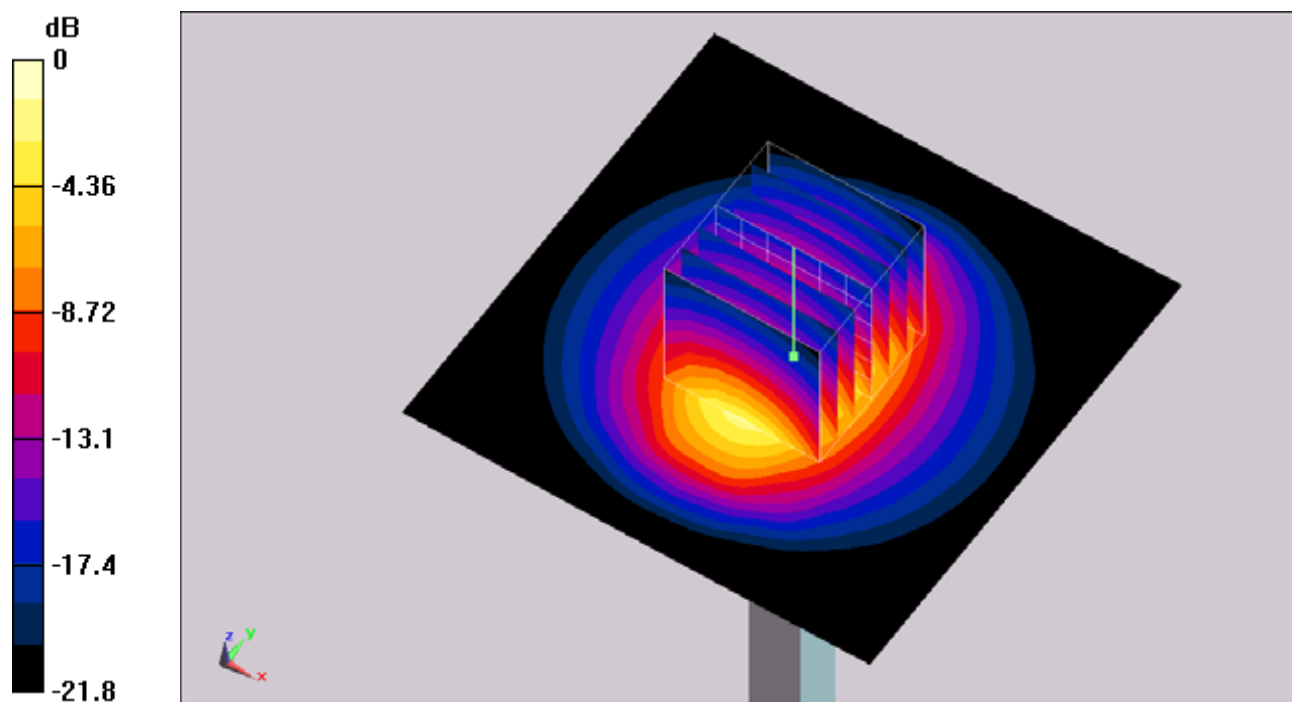
**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 89.5 V/m; Power Drift = -0.070 dB

Peak SAR (extrapolated) = 34.6 W/kg

**SAR(1 g) = 14 mW/g; SAR(10 g) = 6.34 mW/g**

Maximum value of SAR (measured) = 15.3 mW/g



0 dB = 15.3mW/g

**System Check\_Body\_900MHz\_111217****DUT: Dipole 900 MHz**

Communication System: CW; Frequency: 900 MHz; Duty Cycle: 1:1

Medium: MSL\_900\_111217 Medium parameters used:  $f = 900 \text{ MHz}$ ;  $\sigma = 1.06 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature :  $22.3^\circ\text{C}$ ; Liquid Temperature :  $21.3^\circ\text{C}$

DASY4 Configuration:

- Probe: EX3DV4 - SN3792; ConvF(8.91, 8.91, 8.91); Calibrated: 2011/6/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn778; Calibrated: 2011/11/22
- Phantom: ELI 4.0\_Front; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Pin=250mW/Area Scan (61x61x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $2.81 \text{ mW/g}$

**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $51.3 \text{ V/m}$ ; Power Drift =  $0.059 \text{ dB}$

Peak SAR (extrapolated) =  $3.98 \text{ W/kg}$

**SAR(1 g) =  $2.6 \text{ mW/g}$ ; SAR(10 g) =  $1.68 \text{ mW/g}$**

Maximum value of SAR (measured) =  $2.81 \text{ mW/g}$

