



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

The plots are shown as follows.

### System Check\_Head\_835MHz\_120310

#### DUT: Dipole 835 MHz

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

Medium: HSL\_835\_120310 Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.915 \text{ mho/m}$ ;  $\epsilon_r = 41.529$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : 23.6 °C; Liquid Temperature : 21.4 °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) = 2.561 mW/g

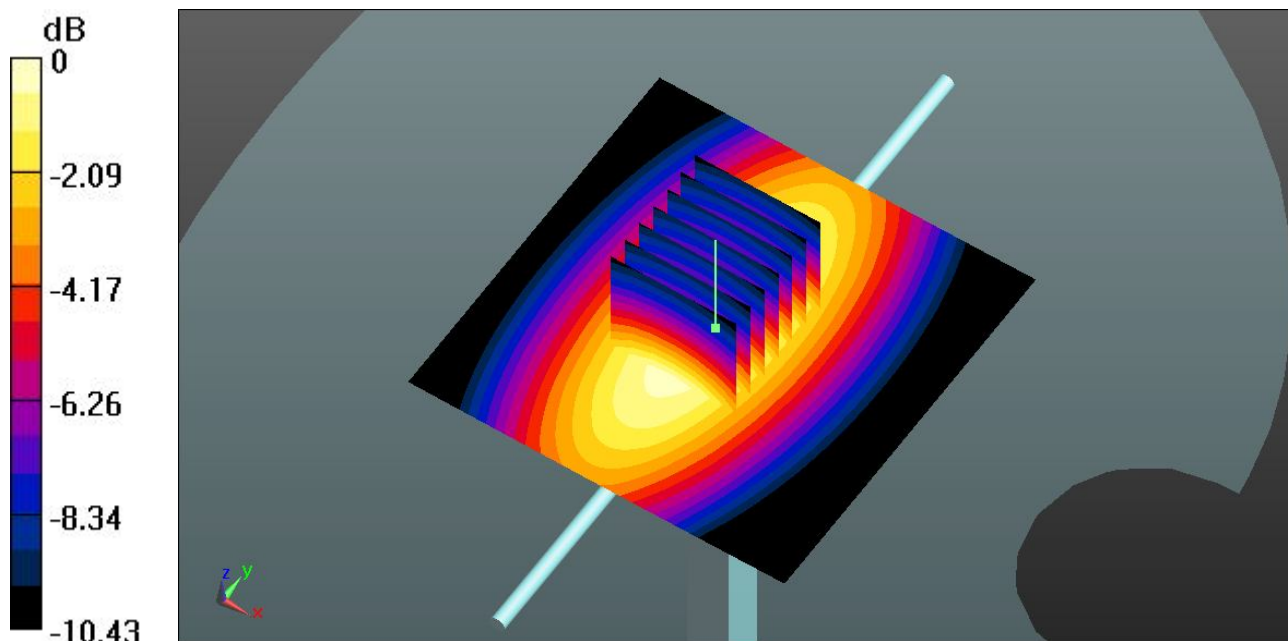
**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 52.714 V/m; Power Drift = -0.0068 dB

Peak SAR (extrapolated) = 3.5800

**SAR(1 g) = 2.37 mW/g; SAR(10 g) = 1.55 mW/g**

Maximum value of SAR (measured) = 2.557 mW/g



0 dB = 2.560mW/g = 8.16 dB mW/g

## System Check\_Body\_835MHz\_120309

### DUT: Dipole 835 MHz

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

Medium: MSL\_835\_120309 Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.976 \text{ mho/m}$ ;  $\epsilon_r = 54.369$ ;

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

Ambient Temperature :  $23.5 \text{ }^\circ\text{C}$ ; Liquid Temperature :  $21.3 \text{ }^\circ\text{C}$

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: 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:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $2.698 \text{ mW/g}$

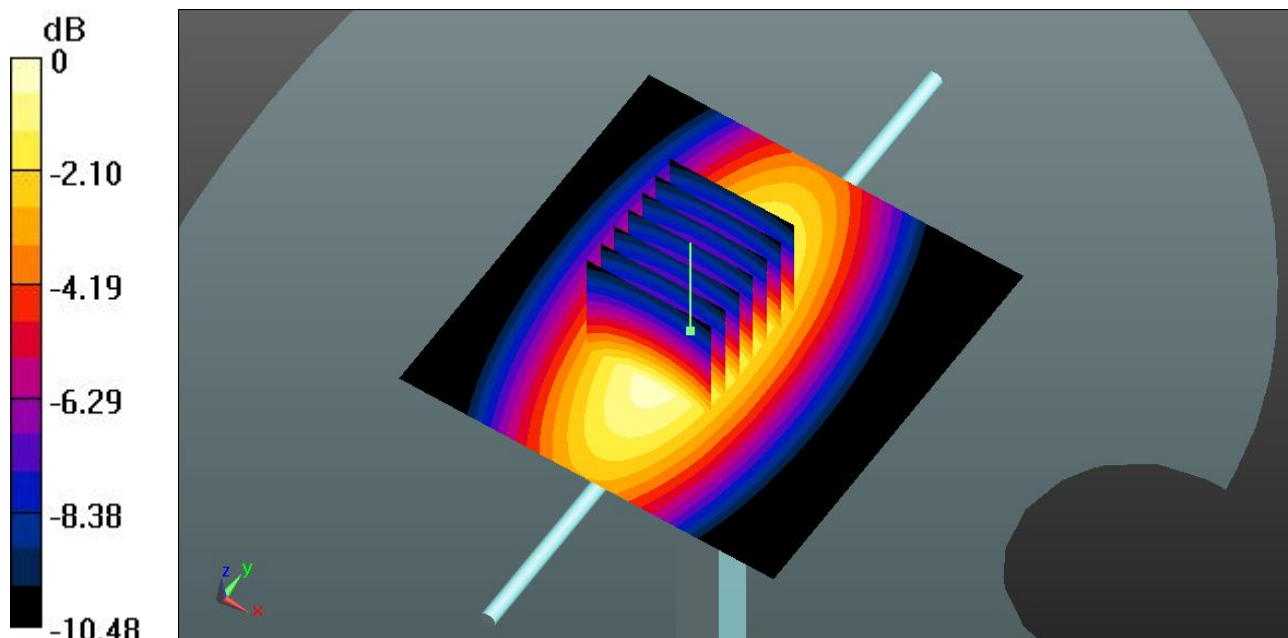
**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $52.188 \text{ V/m}$ ; Power Drift =  $0.02 \text{ dB}$

Peak SAR (extrapolated) =  $3.8130$

**SAR(1 g) =  $2.51 \text{ mW/g}$ ; SAR(10 g) =  $1.63 \text{ mW/g}$**

Maximum value of SAR (measured) =  $2.709 \text{ mW/g}$



$0 \text{ dB} = 2.710 \text{ mW/g} = 8.66 \text{ dB mW/g}$

### System Check\_Head\_1900MHz\_120309

#### DUT: Dipole 1900 MHz

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

Medium: HSL\_1900\_120309 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.419$  mho/m;  $\epsilon_r =$

$40.609$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.6 °C; Liquid Temperature : 21.6 °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: 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) = 11.822 mW/g

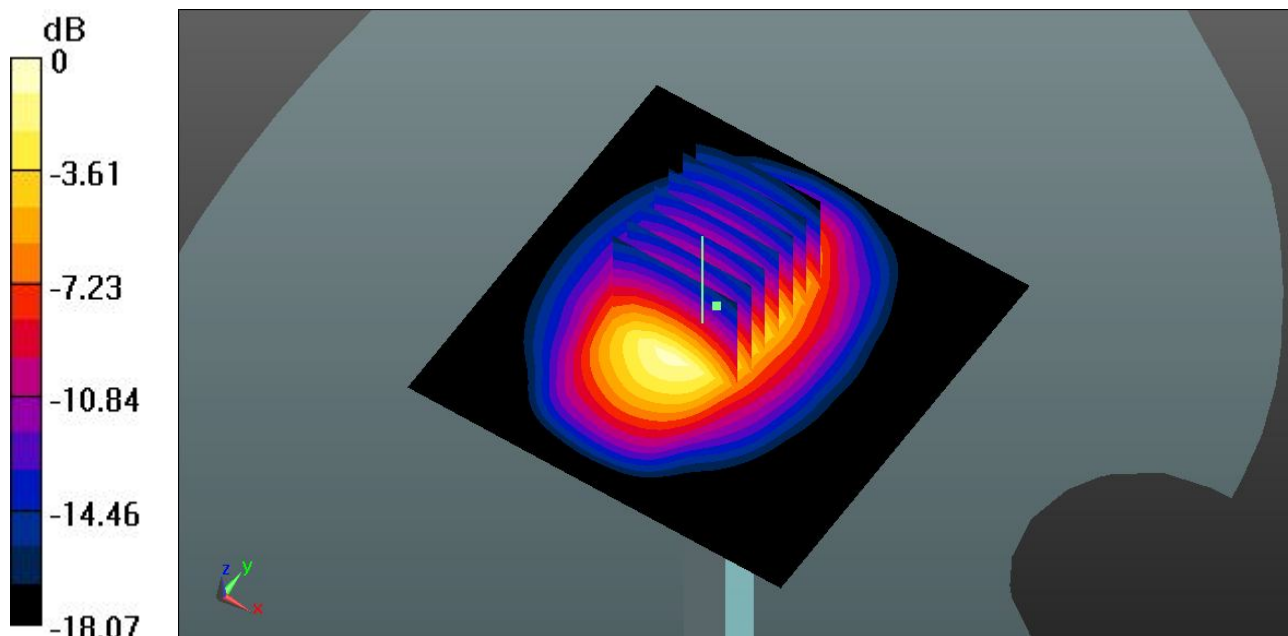
**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 82.918 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 18.9400

**SAR(1 g) = 10.1 mW/g; SAR(10 g) = 5.23 mW/g**

Maximum value of SAR (measured) = 11.325 mW/g



0 dB = 11.330mW/g = 21.08 dB mW/g

## System Check\_Body\_1900MHz\_120310

### DUT: Dipole 1900 MHz

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

Medium: MSL\_1900\_120310 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.528$  mho/m;  $\epsilon_r =$

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

Ambient Temperature : 23.5 °C; Liquid Temperature : 21.5 °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: 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) = 11.992 mW/g

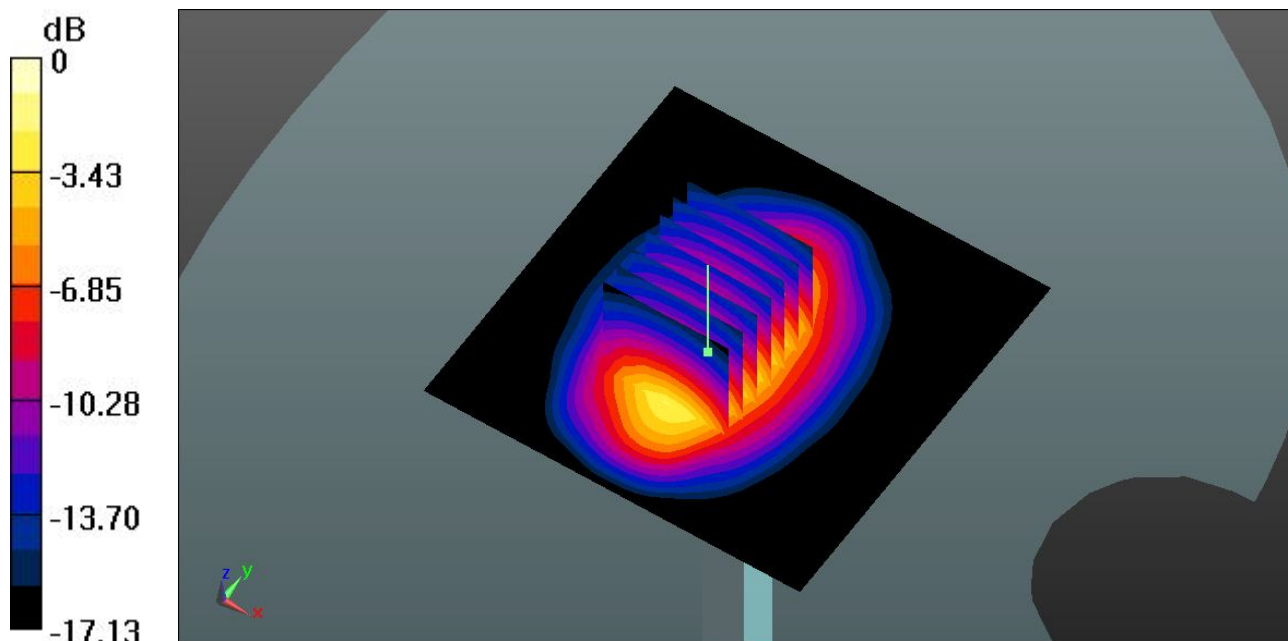
**Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 86.050 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 18.8770

**SAR(1 g) = 10.3 mW/g; SAR(10 g) = 5.4 mW/g**

Maximum value of SAR (measured) = 11.539 mW/g



0 dB = 11.540mW/g = 21.24 dB mW/g