



## **Appendix A. SAR Plots of System Verification**

The plots for system verification are shown as follows.

## System Check\_H835\_120629

**DUT: Dipole 835 MHz; Type: D835V2; SN: 4d021**

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

Medium: H835\_0629 Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.897$  mho/m;  $\epsilon_r = 42.846$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 22.4 °C ; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(8.87, 8.87, 8.87); Calibrated: 2011/10/26;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: SAM with CRP v5.0 Front; Type: QD000P40CD; Serial: TP:1653
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

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

Maximum value of SAR (interpolated) = 3.03 mW/g

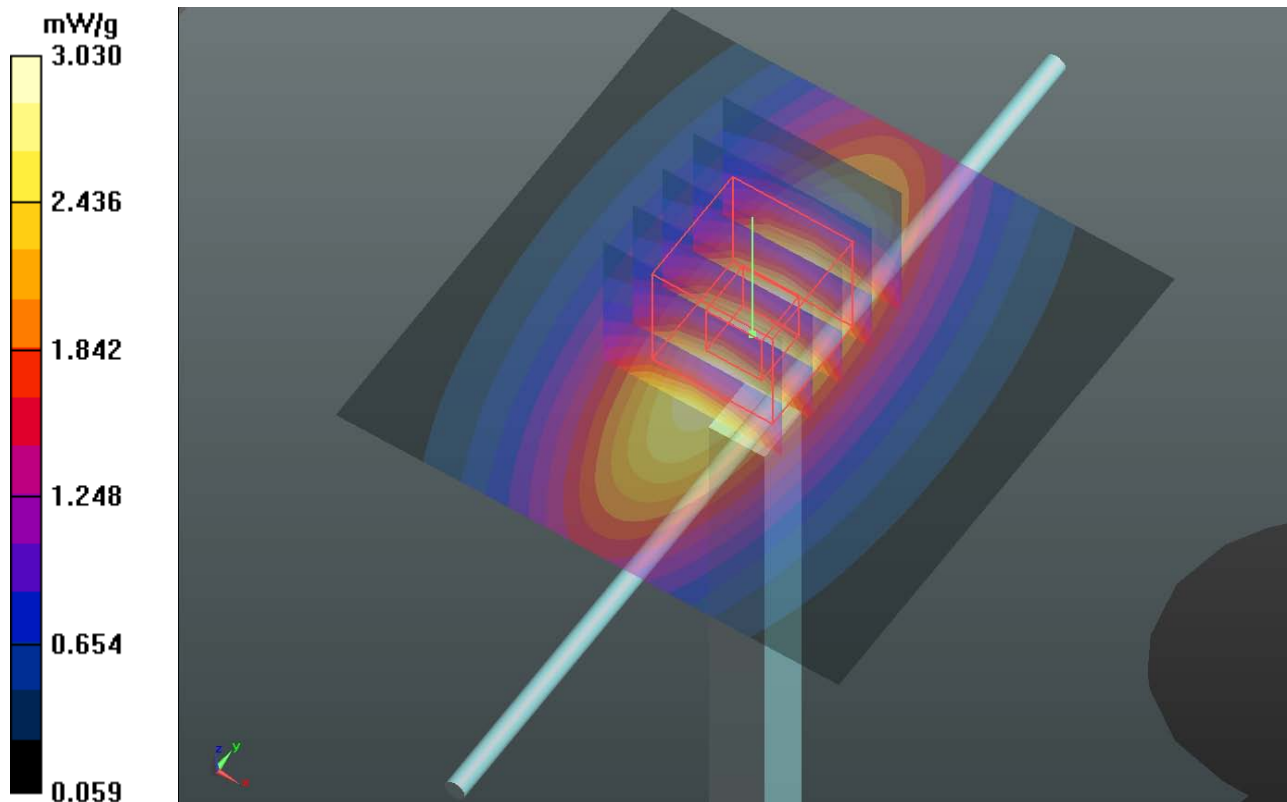
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 56.144 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 3.512 mW/g

**SAR(1 g) = 2.39 mW/g; SAR(10 g) = 1.58 mW/g**

Maximum value of SAR (measured) = 3.02 mW/g



## System Check\_B835\_120629

**DUT: Dipole 835 MHz; Type: D835V2; SN: 4d021**

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

Medium: B850\_0629 Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.992$  mho/m;  $\epsilon_r = 55.437$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 21.7 °C ; Liquid Temperature : 20.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3820; ConvF(9.24, 9.24, 9.24); Calibrated: 2011/12/16;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2012/04/27
- Phantom: SAM Phantom\_Front; Type: SAM V4.0; Serial: TP 1654
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

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

Maximum value of SAR (interpolated) = 3.04 mW/g

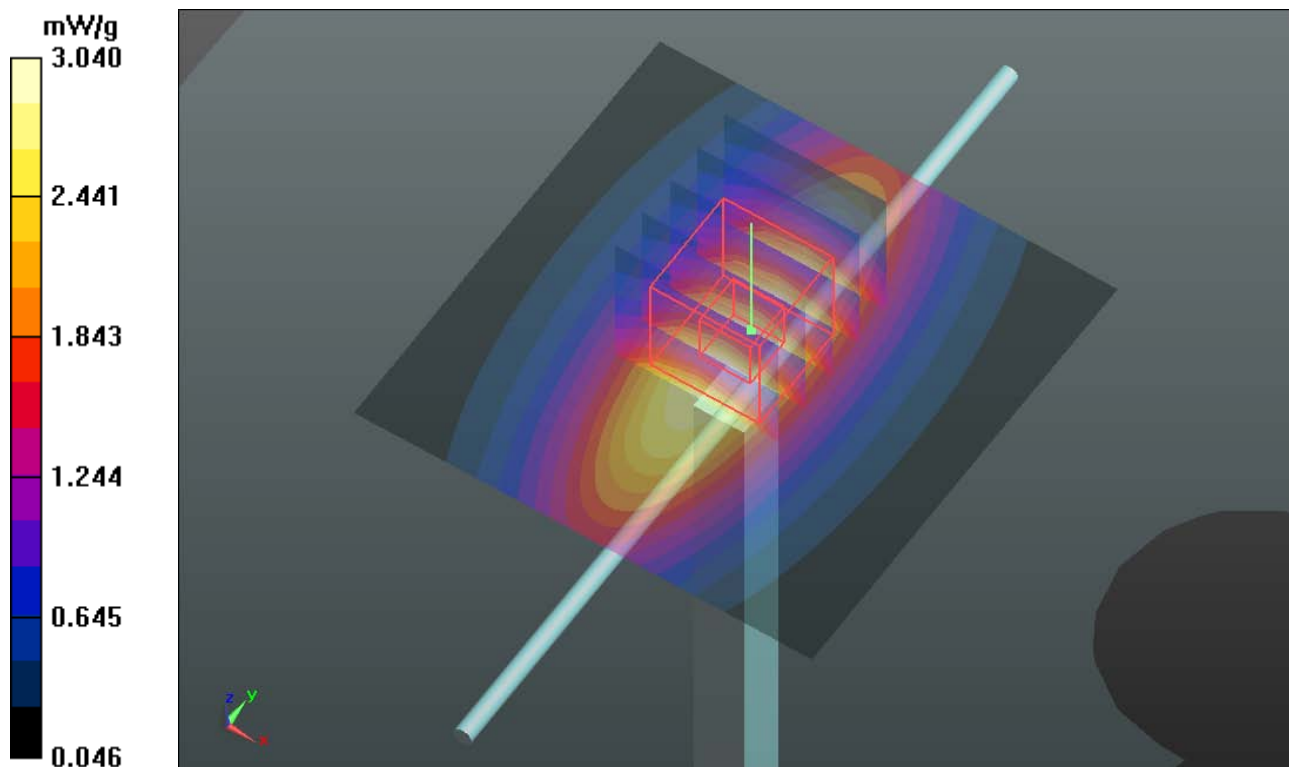
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 53.561 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 3.527 mW/g

**SAR(1 g) = 2.41 mW/g; SAR(10 g) = 1.59 mW/g**

Maximum value of SAR (measured) = 3.03 mW/g



### System Check\_H1900\_120629

**DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036**

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

Medium: H1900\_0629 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.409$  mho/m;  $\epsilon_r = 40.781$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 21.9 °C ; Liquid Temperature : 20.9 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(7.4, 7.4, 7.4); Calibrated: 2011/10/26;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: SAM with CRP v5.0 Front; Type: QD000P40CD; Serial: TP:1653
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

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

Maximum value of SAR (interpolated) = 14.2 mW/g

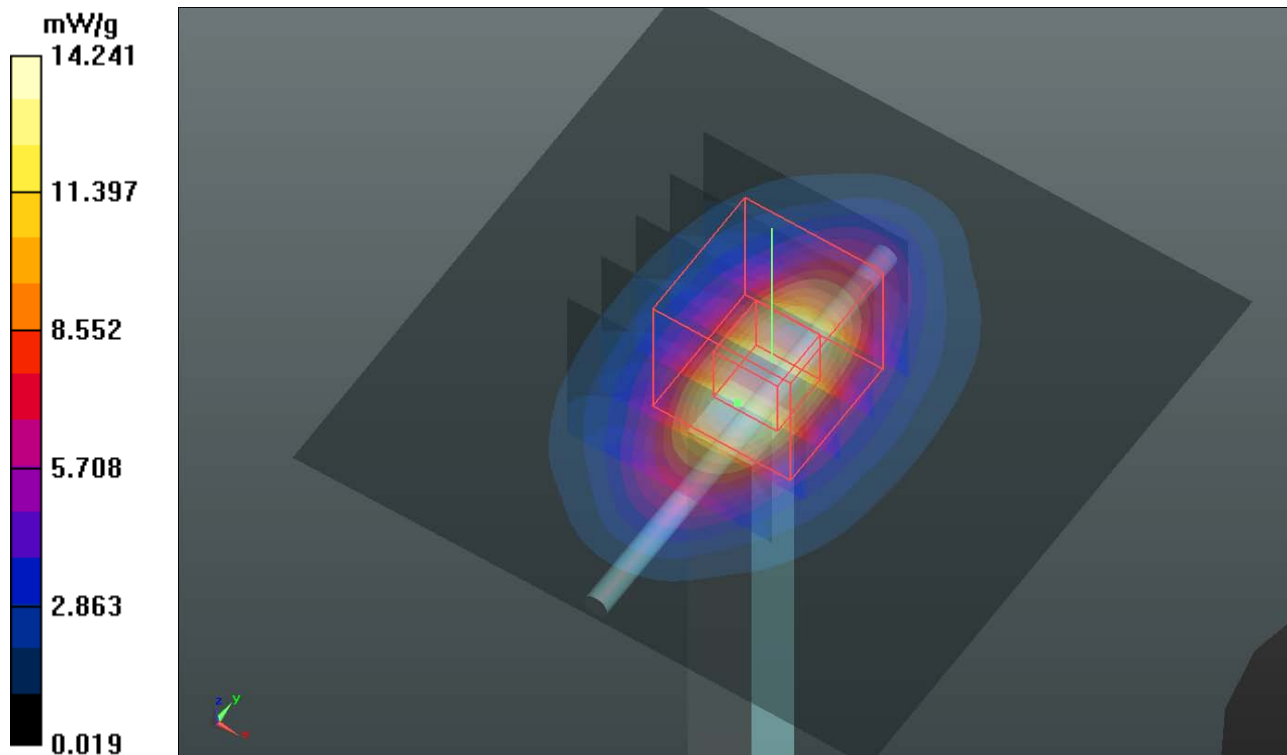
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 100.9 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 18.291 mW/g

**SAR(1 g) = 9.6 mW/g; SAR(10 g) = 4.93 mW/g**

Maximum value of SAR (measured) = 13.9 mW/g



## System Check\_B1900\_120629

**DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036**

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

Medium: B1900\_0629 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.554$  mho/m;  $\epsilon_r = 54.479$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 21.4 °C ; Liquid Temperature : 20.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3820; ConvF(8.04, 8.04, 8.04); Calibrated: 2011/12/16;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2012/04/27
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

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

Maximum value of SAR (interpolated) = 14.6 mW/g

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 97.823 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 17.799 mW/g

**SAR(1 g) = 9.98 mW/g; SAR(10 g) = 5.2 mW/g**

Maximum value of SAR (measured) = 14.1 mW/g

