



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

The plots for system verification are shown as follows.

## System Check\_H835\_120107

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

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

Medium: H835\_0107 Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.92$  mho/m;  $\epsilon_r = 43.008$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 22.4 °C; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3800; ConvF(8.7, 8.7, 8.7); Calibrated: 2011/08/05
- 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 (0); SEMCAD X Version 14.6.4 (4989)

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

Maximum value of SAR (interpolated) = 2.710 mW/g

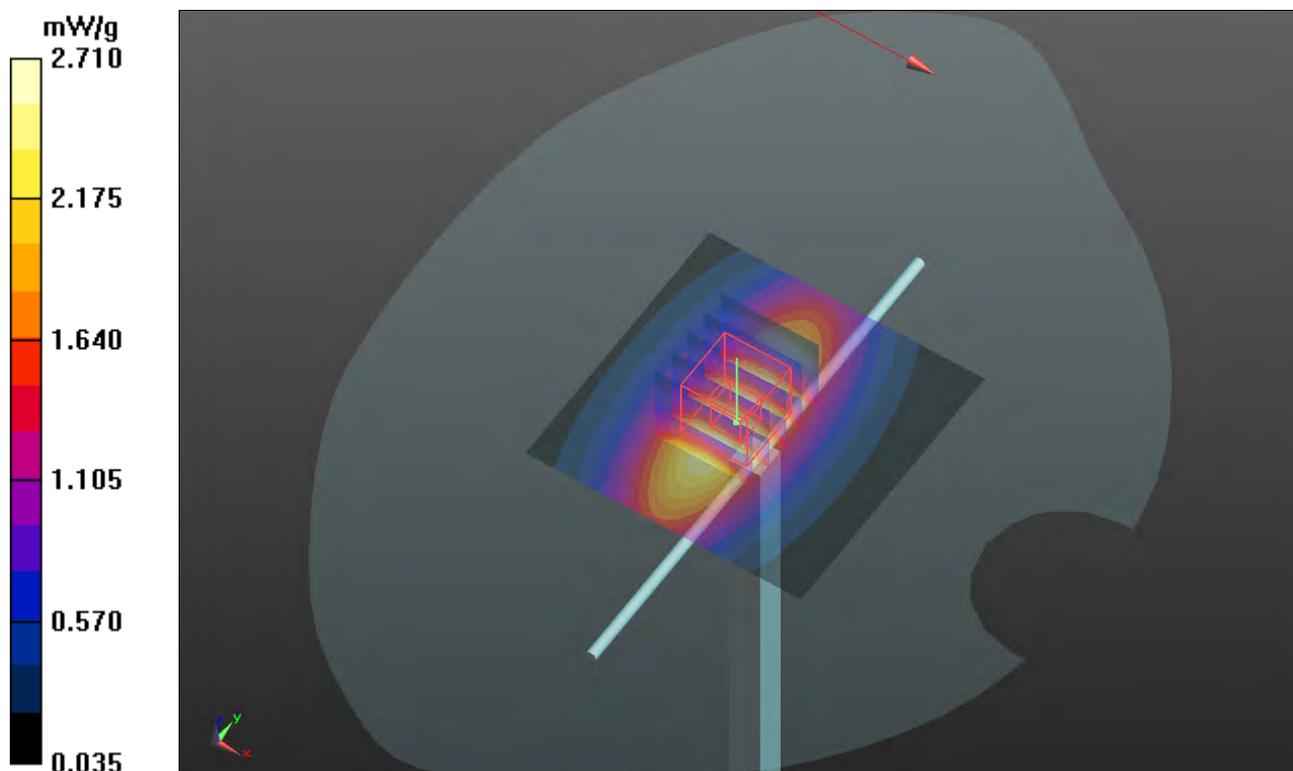
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 51.212 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 3.2410

**SAR(1 g) = 2.26 mW/g; SAR(10 g) = 1.42 mW/g**

Maximum value of SAR (measured) = 2.742 mW/g



## System Check\_H835\_120115

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

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

Medium: H835\_0115 Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.885 \text{ mho/m}$ ;  $\epsilon_r = 41.988$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature :  $21.8 \text{ }^\circ\text{C}$ ; Liquid Temperature :  $20.7 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(8.87, 8.87, 8.87); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Front; Type: SAM; Serial: TP-1485
- 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) =  $2.928 \text{ mW/g}$

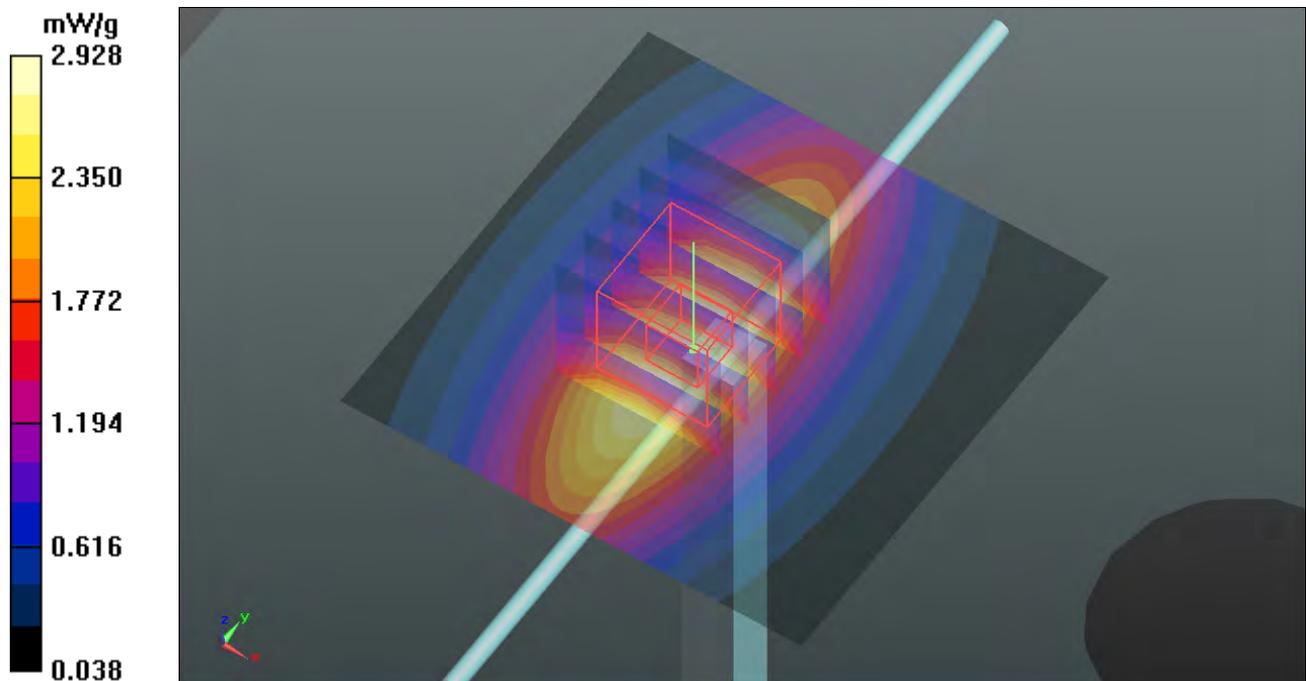
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $54.471 \text{ V/m}$ ; Power Drift =  $0.03 \text{ dB}$

Peak SAR (extrapolated) =  $3.4490$

**SAR(1 g) =  $2.33 \text{ mW/g}$ ; SAR(10 g) =  $1.54 \text{ mW/g}$**

Maximum value of SAR (measured) =  $2.938 \text{ mW/g}$



## System Check\_B835\_120105

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

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

Medium: B835\_0105 Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.988 \text{ mho/m}$ ;  $\epsilon_r = 54.796$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature :  $21.1 \text{ }^\circ\text{C}$ ; Liquid Temperature :  $20.4 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3800; ConvF(8.94, 8.94, 8.94); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- 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) =  $3.306 \text{ mW/g}$

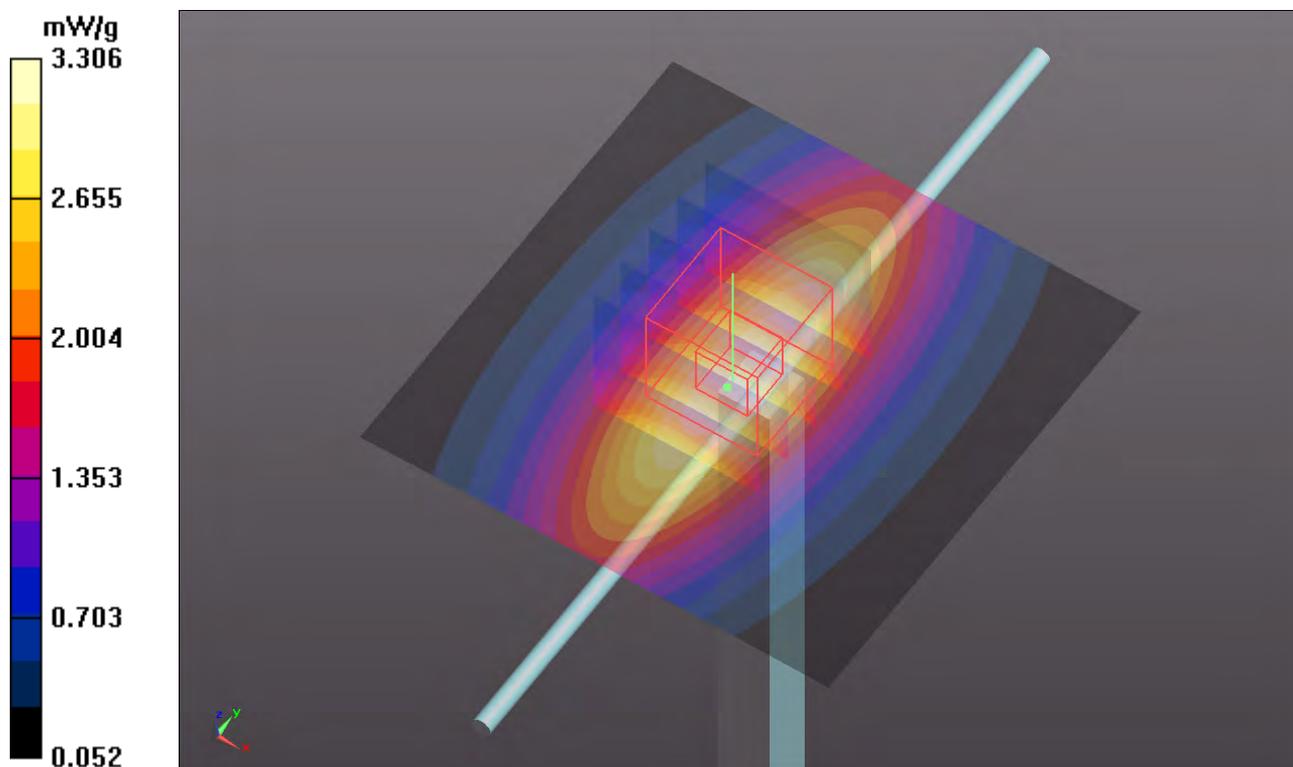
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $55.974 \text{ V/m}$ ; Power Drift =  $0.03 \text{ dB}$

Peak SAR (extrapolated) =  $3.8240$

**SAR(1 g) =  $2.62 \text{ mW/g}$ ; SAR(10 g) =  $1.74 \text{ mW/g}$**

Maximum value of SAR (measured) =  $3.298 \text{ mW/g}$



## System Check\_B835\_120116

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

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

Medium: B835\_0116 Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.994$  mho/m;  $\epsilon_r = 54.98$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 21.6 °C; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3590; ConvF(10.32, 10.32, 10.32); Calibrated: 2011/02/25
- 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 (0); SEMCAD X Version 14.6.4 (4989)

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

Maximum value of SAR (interpolated) = 3.366 mW/g

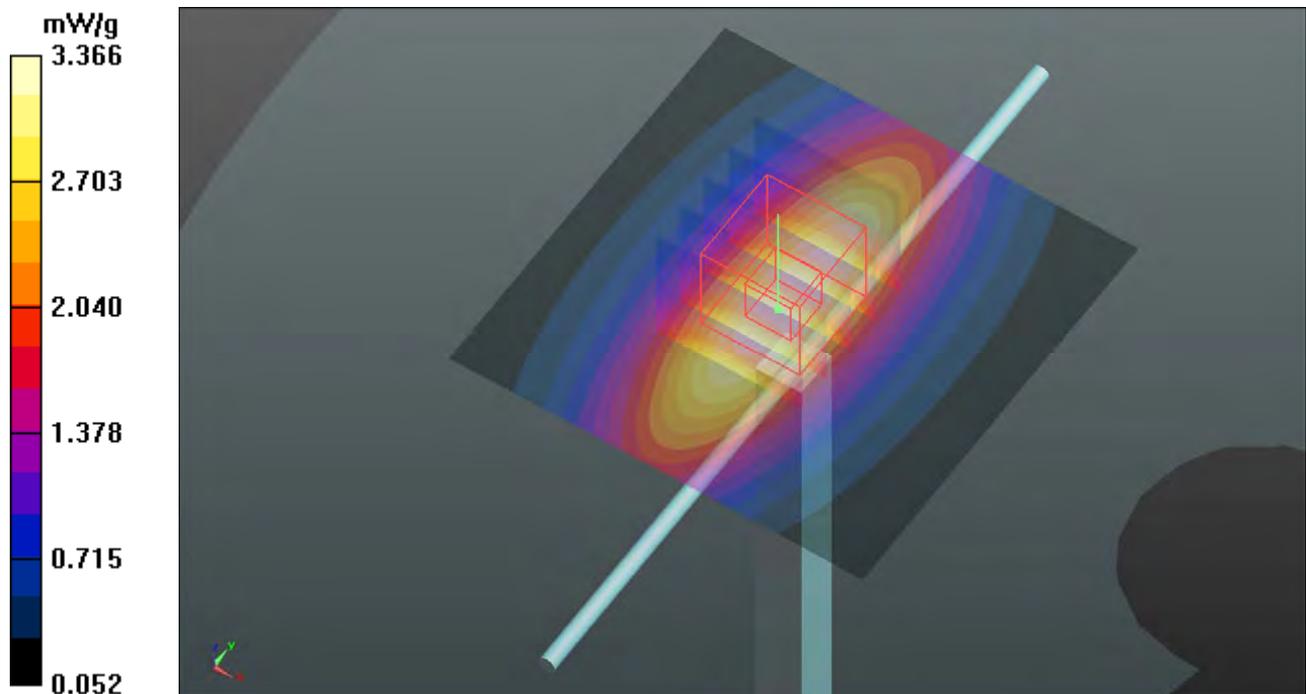
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 55.839 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 3.9550

**SAR(1 g) = 2.65 mW/g; SAR(10 g) = 1.75 mW/g**

Maximum value of SAR (measured) = 3.358 mW/g



## System Check\_H1900\_120107

**DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d022**

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

Medium: H1900\_0107 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.391$  mho/m;  $\epsilon_r = 40.582$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 22.4 °C ; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3800; ConvF(7.46, 7.46, 7.46); Calibrated: 2011/08/05
- 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 (0); SEMCAD X Version 14.6.4 (4989)

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

Maximum value of SAR (interpolated) = 14.914 mW/g

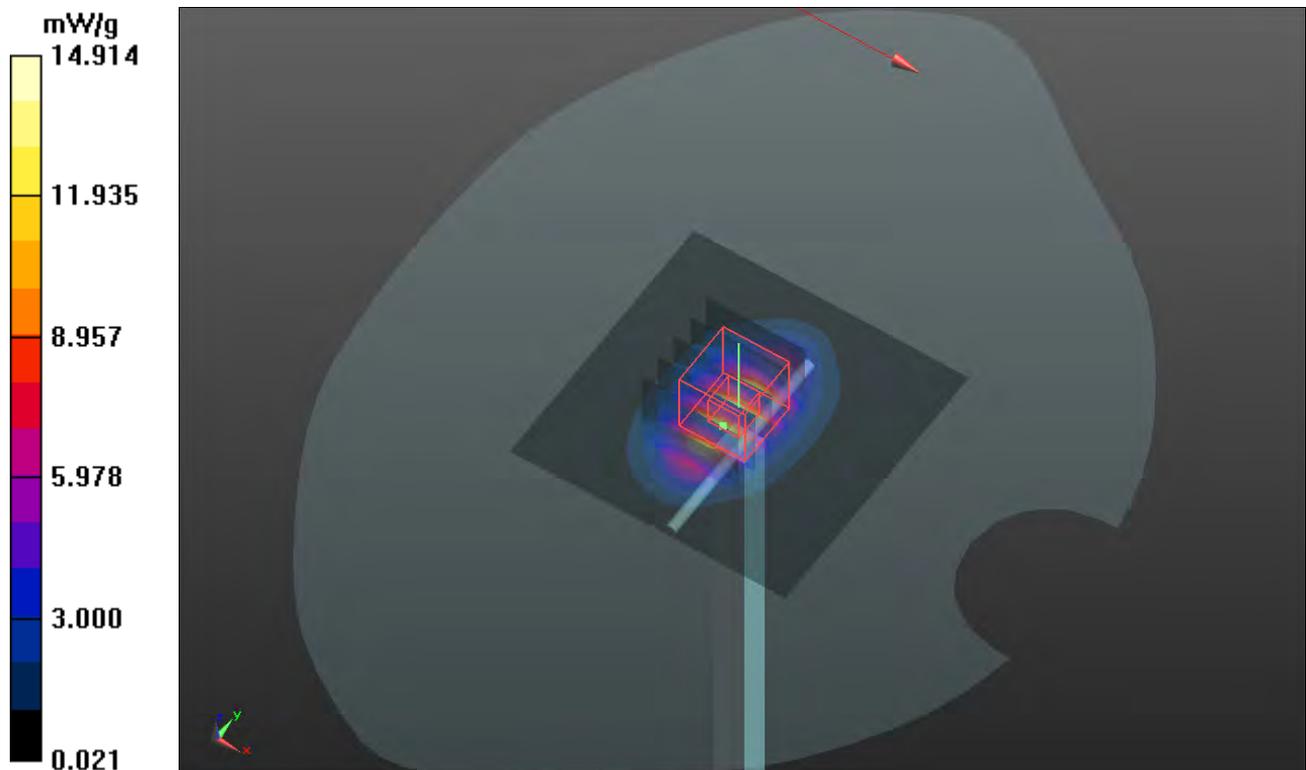
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 102.7 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 18.5810

**SAR(1 g) = 9.94 mW/g; SAR(10 g) = 5.14 mW/g**

Maximum value of SAR (measured) = 14.296 mW/g



## System Check\_H1900\_120115

**DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d022**

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

Medium: H1900\_0115 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.386$  mho/m;  $\epsilon_r = 40.493$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 21.8 °C ; Liquid Temperature : 20.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(7.4, 7.4, 7.4); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM; Serial: 1202
- 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) = 13.988 mW/g

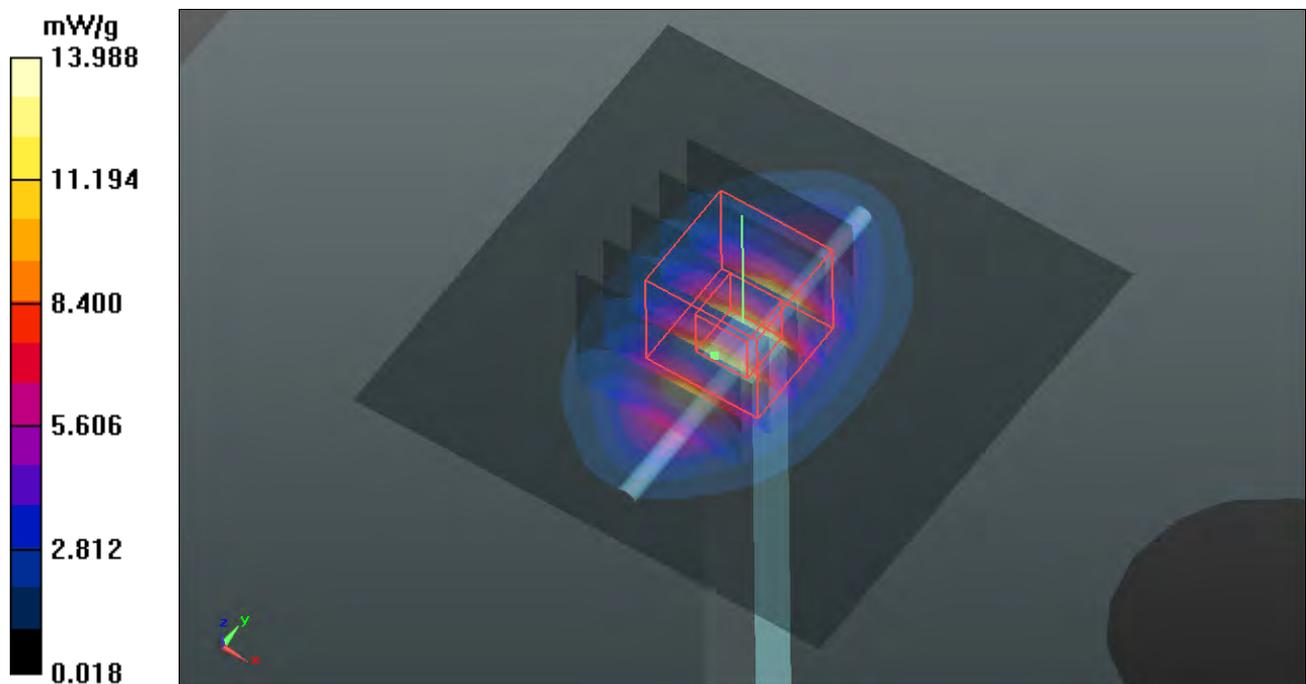
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 100.8 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 17.9830

**SAR(1 g) = 9.43 mW/g; SAR(10 g) = 4.85 mW/g**

Maximum value of SAR (measured) = 13.699 mW/g



## SystemCheck\_B1900\_120105

**DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d022**

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

Medium: B1900\_0105 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.546$  mho/m;  $\epsilon_r = 52.328$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 22.2 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3800; ConvF(6.97, 6.97, 6.97); Calibrated: 2011/08/05
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- 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) = 15.002 mW/g

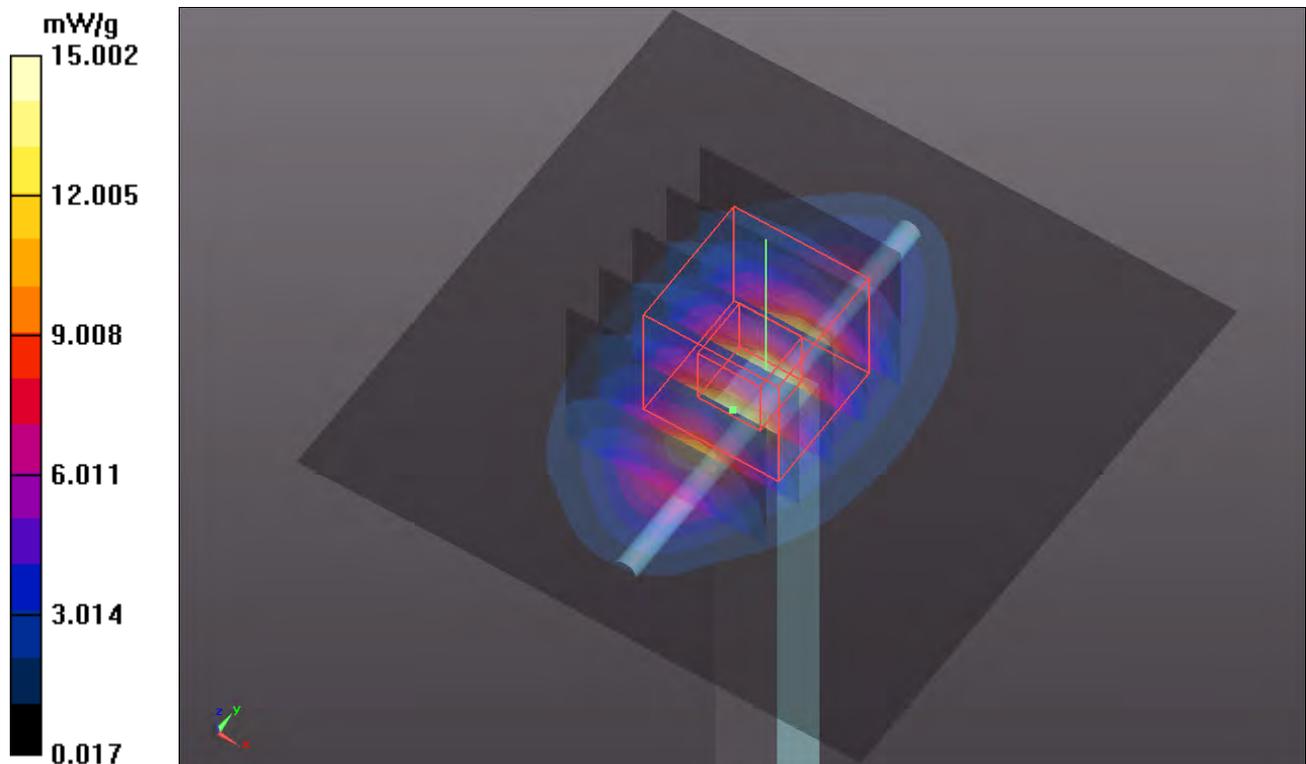
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 96.840 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 18.5130

**SAR(1 g) = 10.1 mW/g; SAR(10 g) = 5.2 mW/g**

Maximum value of SAR (measured) = 14.420 mW/g



## SystemCheck\_B1900\_120116

**DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d022**

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

Medium: B1900\_0116 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.529$  mho/m;  $\epsilon_r = 53.719$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 21.6 °C; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3590; ConvF(8.49, 8.49, 8.49); Calibrated: 2011/02/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1277; Calibrated: 2011/07/29
- Phantom: ELI v4.0; Type: QDOVA001BA; Serial: TP:1043
- 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) = 15.188 mW/g

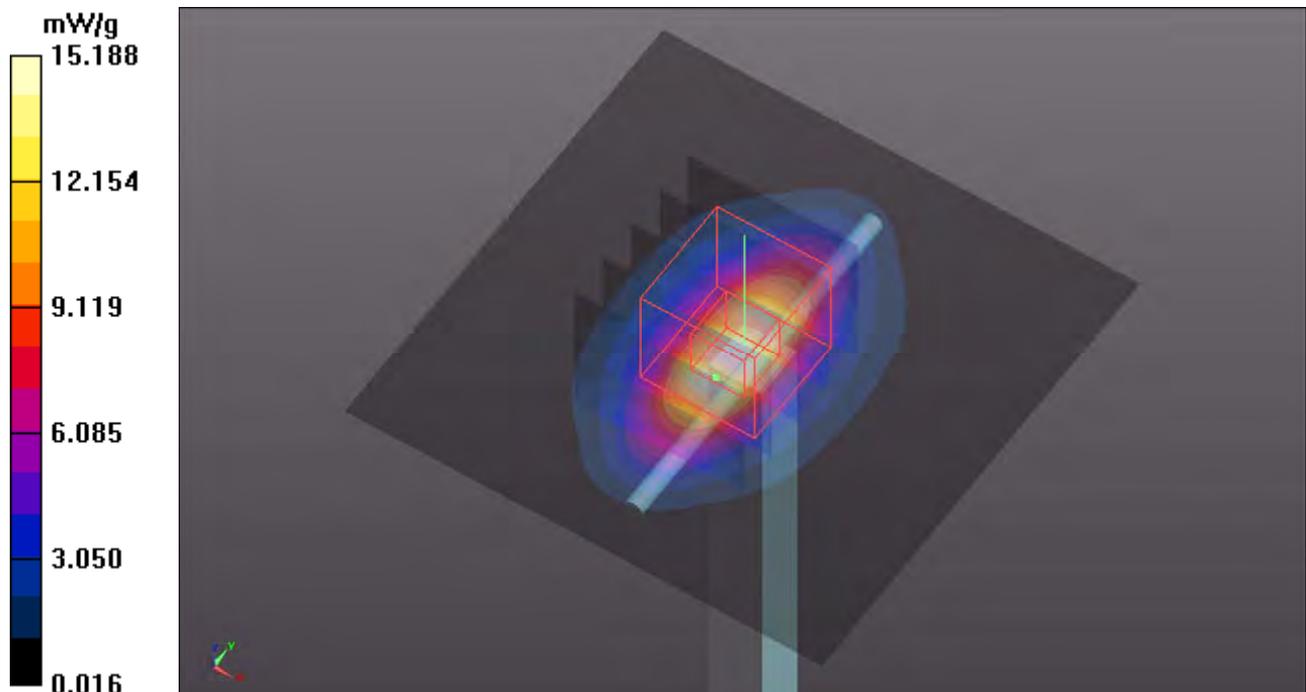
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 98.708 V/m; Power Drift = 0.00068 dB

Peak SAR (extrapolated) = 18.4130

**SAR(1 g) = 9.94 mW/g; SAR(10 g) = 5.08 mW/g**

Maximum value of SAR (measured) = 14.328 mW/g



## System Check\_H750\_120108

**DUT: Dipole 750 MHz; Type: D750V3; SN: 1013**

Communication System: CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: H750\_0108 Medium parameters used:  $f = 750$  MHz;  $\sigma = 0.908$  mho/m;  $\epsilon_r = 40.492$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 22.6 °C; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3800; ConvF(9.02, 9.02, 9.02); Calibrated: 2011/08/05
- 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 (0); SEMCAD X Version 14.6.4 (4989)

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

Maximum value of SAR (interpolated) = 2.785 mW/g

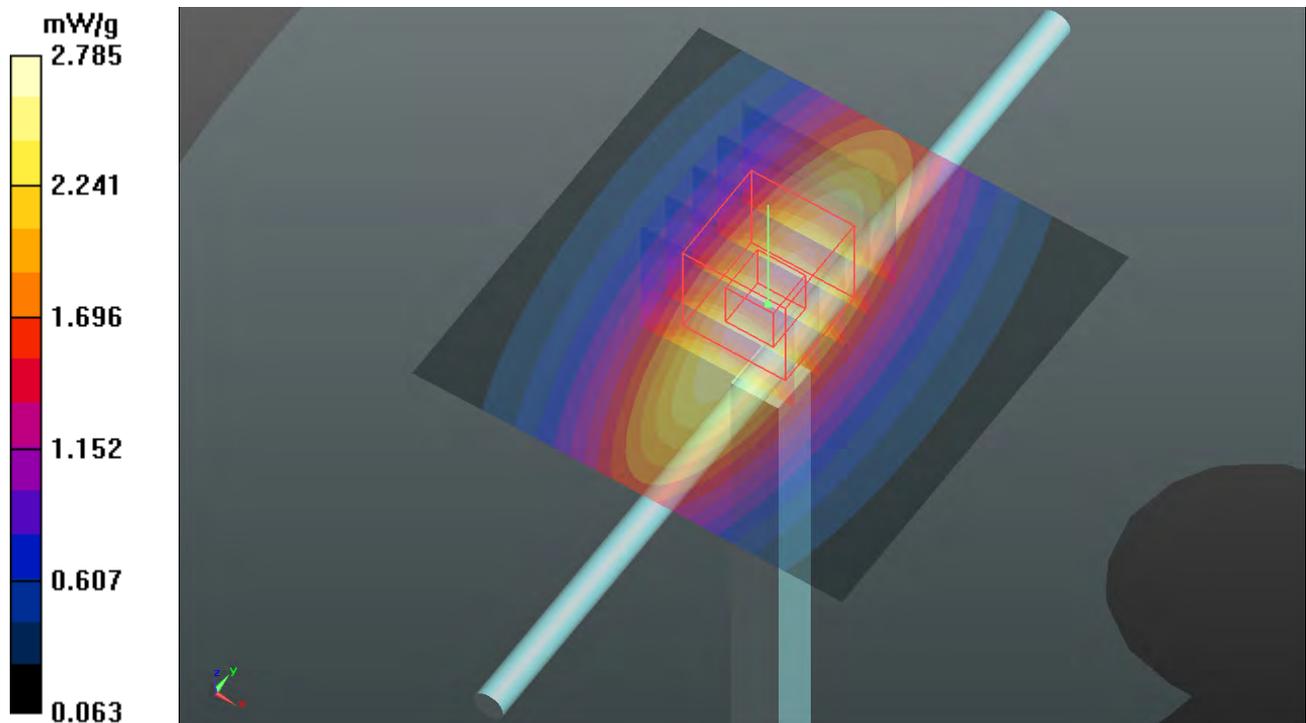
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 53.454 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 3.2990

**SAR(1 g) = 2.21 mW/g; SAR(10 g) = 1.47 mW/g**

Maximum value of SAR (measured) = 2.801 mW/g



## System Check\_H750\_120116

**DUT: Dipole 750 MHz; Type: D750V3; SN: 1013**

Communication System: CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: H750\_0116 Medium parameters used:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 41.109$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : 21.6 °C ; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3590; ConvF(10.21, 10.21, 10.21); Calibrated: 2011/02/25
- 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 (0); SEMCAD X Version 14.6.4 (4989)

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

Maximum value of SAR (interpolated) = 2.798 mW/g

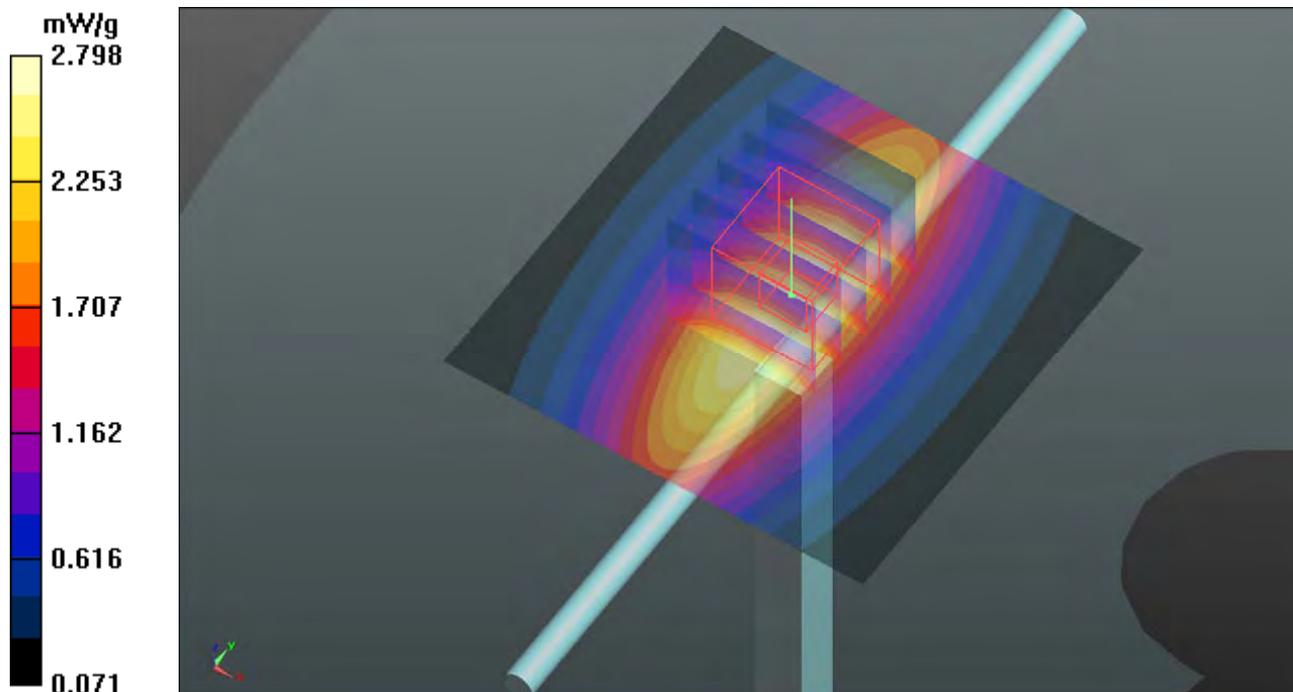
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 54.221 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 3.2870

**SAR(1 g) = 2.22 mW/g; SAR(10 g) = 1.48 mW/g**

Maximum value of SAR (measured) = 2.793 mW/g



## System Check\_H750\_120118

**DUT: Dipole 750 MHz; Type: D750V3; SN: 1013**

Communication System: CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: H750\_0118 Medium parameters used:  $f = 750$  MHz;  $\sigma = 0.912$  mho/m;  $\epsilon_r = 40.638$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 20.7 °C ; Liquid Temperature : 20.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(9.2, 9.2, 9.2); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM; Serial: 1202
- 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) = 2.798 mW/g

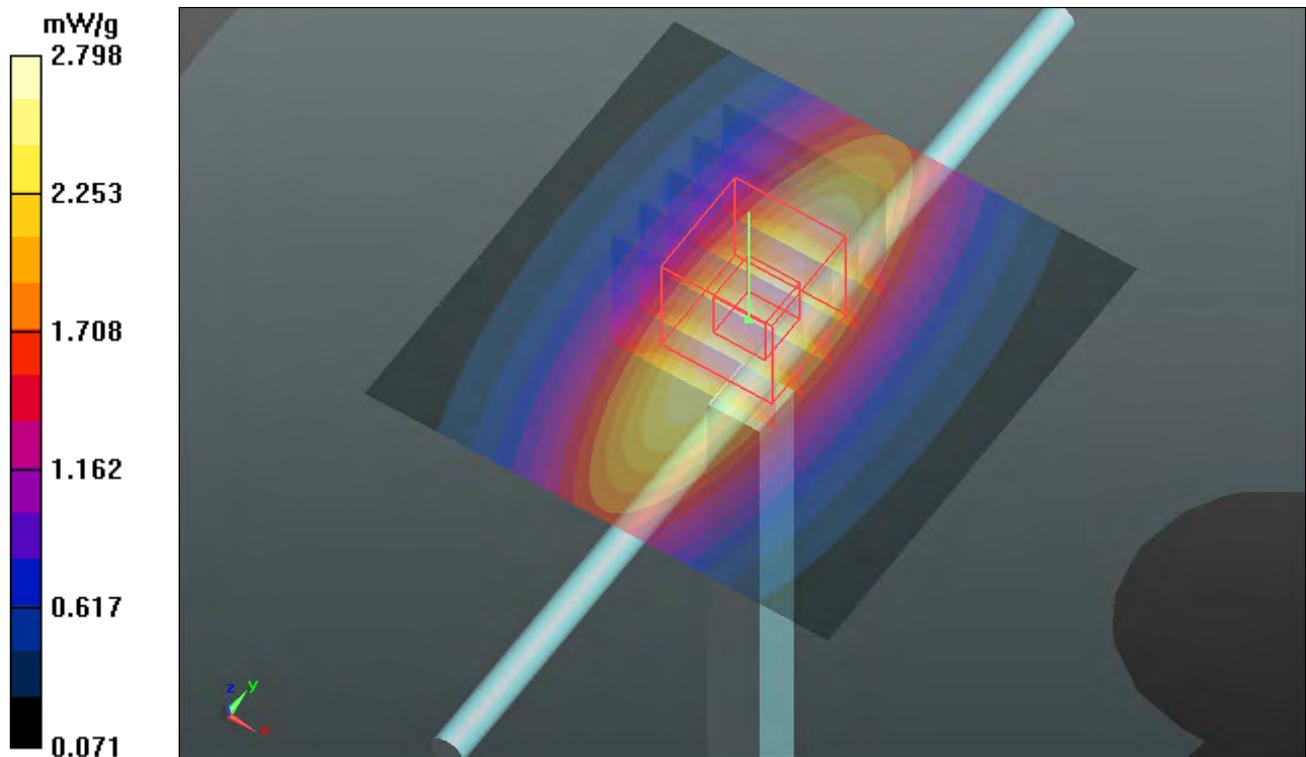
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 54.235 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 3.2920

**SAR(1 g) = 2.22 mW/g; SAR(10 g) = 1.48 mW/g**

Maximum value of SAR (measured) = 2.802 mW/g



## System Check\_B750\_120108

**DUT: Dipole 750 MHz; Type: D750V3; SN: 1013**

Communication System: CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: B750\_0108 Medium parameters used:  $f = 750$  MHz;  $\sigma = 0.968$  mho/m;  $\epsilon_r = 55.448$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 22.3 °C ; Liquid Temperature : 21.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- 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 (0); SEMCAD X Version 14.6.4 (4989)

**Pin=250mW/Area Scan (61x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.817 mW/g

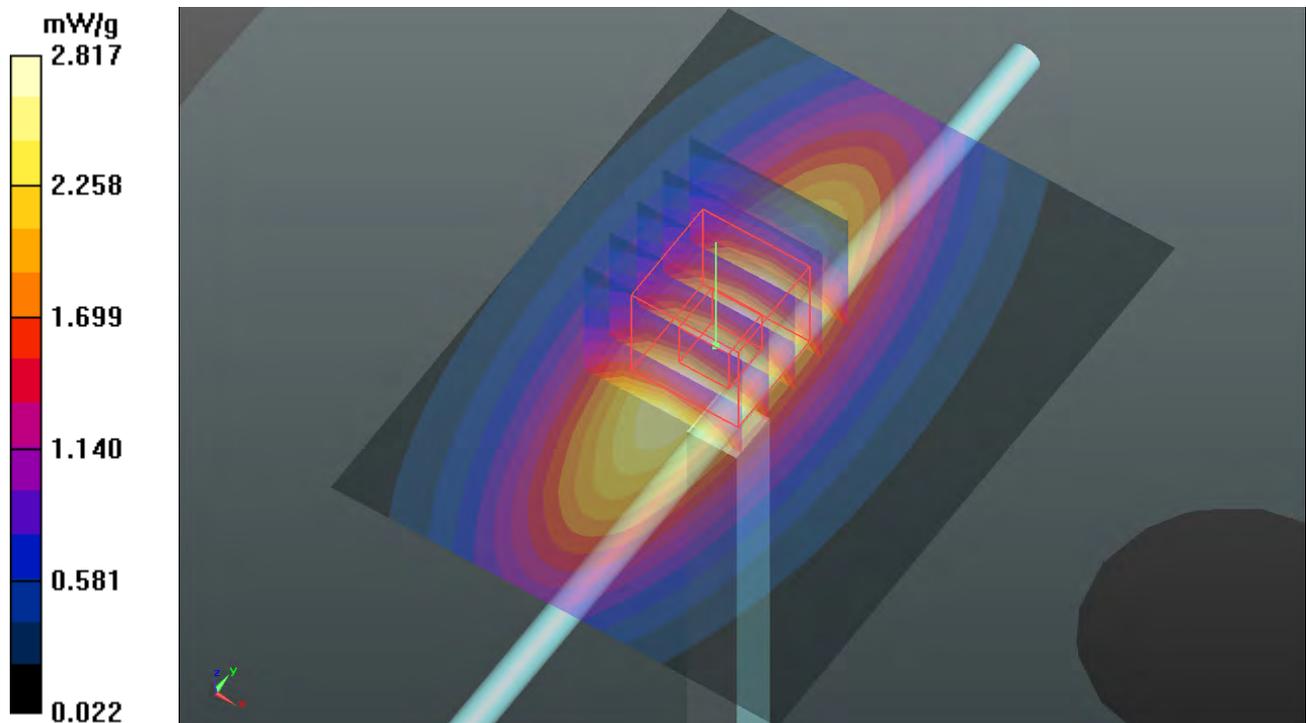
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 55.590 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.3080

**SAR(1 g) = 2.29 mW/g; SAR(10 g) = 1.54 mW/g**

Maximum value of SAR (measured) = 2.845 mW/g



## System Check\_B750\_120109

**DUT: Dipole 750 MHz; Type: D750V3; SN: 1013**

Communication System: CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: B750\_0109 Medium parameters used:  $f = 750$  MHz;  $\sigma = 0.971$  mho/m;  $\epsilon_r = 55.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 22.3 °C ; Liquid Temperature : 20.9 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3800; ConvF(9.34, 9.34, 9.34); Calibrated: 2011/08/05
- 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 (0); SEMCAD X Version 14.6.4 (4989)

**Pin=250mW/Area Scan (61x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.980 mW/g

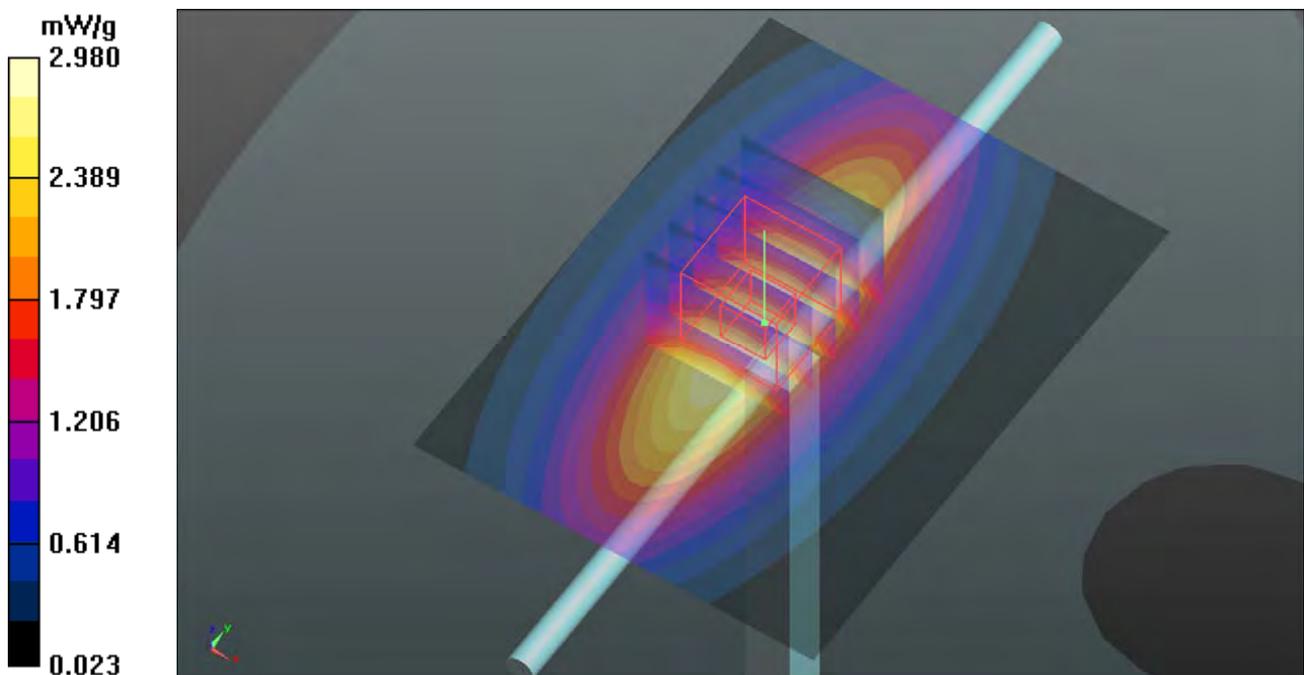
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 56.694 V/m; Power Drift = -0.0055 dB

Peak SAR (extrapolated) = 3.4830

**SAR(1 g) = 2.4 mW/g; SAR(10 g) = 1.62 mW/g**

Maximum value of SAR (measured) = 2.993 mW/g



## System Check\_B750\_120116

**DUT: Dipole 750 MHz; Type: D750V3; SN: 1013**

Communication System: CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: B750\_0116 Medium parameters used:  $f = 750$  MHz;  $\sigma = 0.974$  mho/m;  $\epsilon_r = 55.909$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 21.5 °C ; Liquid Temperature : 20.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3590; ConvF(10.32, 10.32, 10.32); Calibrated: 2011/02/25
- 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 (0); SEMCAD X Version 14.6.4 (4989)

**Pin=250mW/Area Scan (61x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.636 mW/g

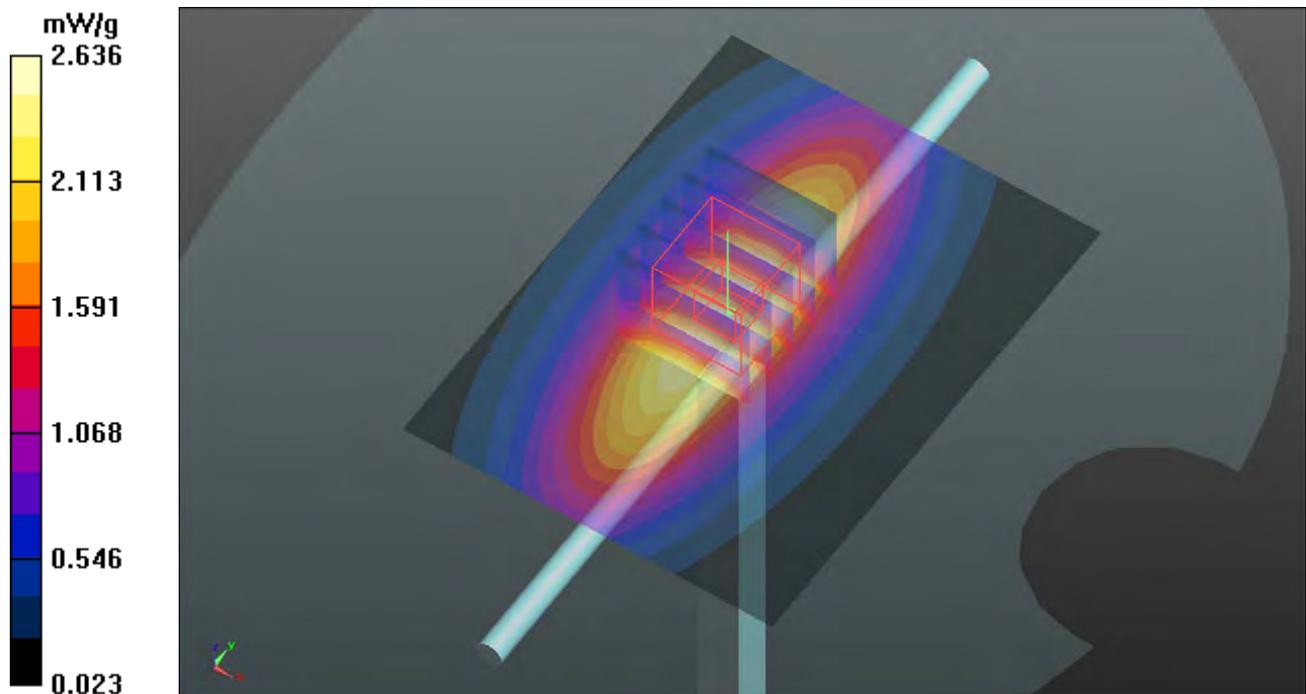
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 52.842 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.1310

**SAR(1 g) = 2.12 mW/g; SAR(10 g) = 1.42 mW/g**

Maximum value of SAR (measured) = 2.650 mW/g



## System Check\_B750\_120118

**DUT: Dipole 750 MHz; Type: D750V3; SN: 1013**

Communication System: CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: B750\_0118 Medium parameters used:  $f = 750$  MHz;  $\sigma = 0.966$  mho/m;  $\epsilon_r = 55.243$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 22.0 °C ; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Front; Type: SAM; Serial: TP-1485
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

**Pin=250mW/Area Scan (61x131x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.830 mW/g

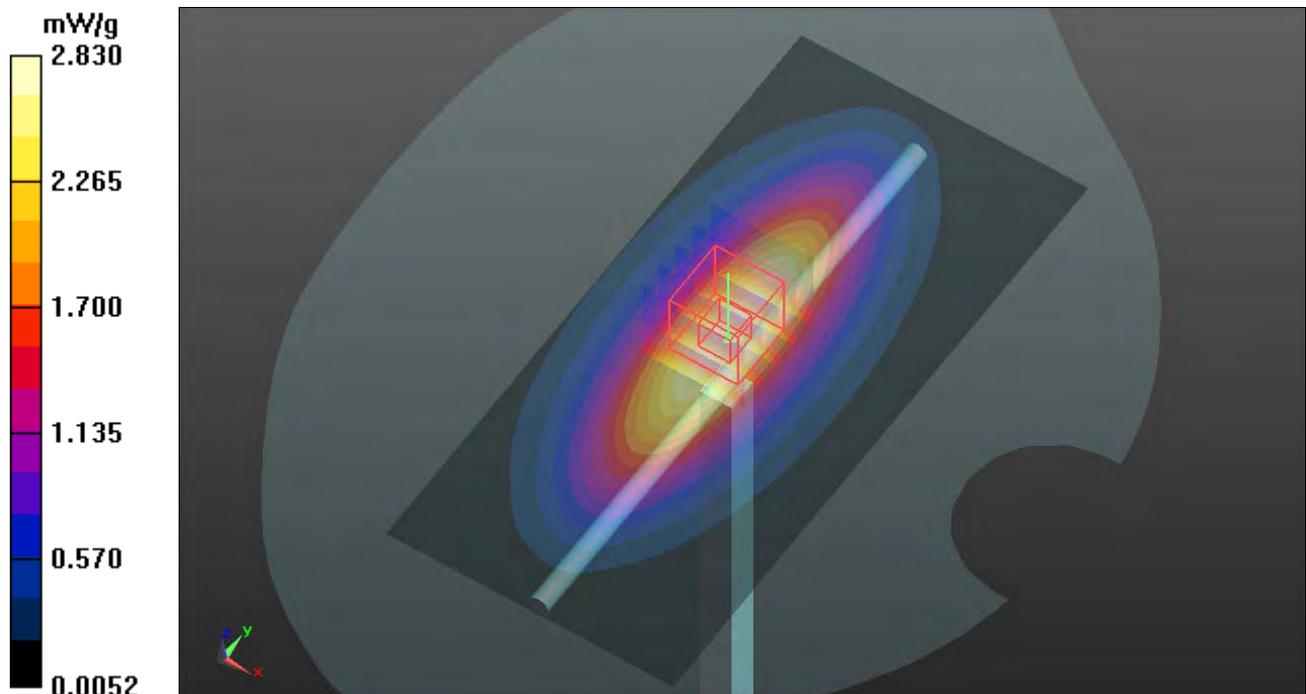
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 55.471 V/m; Power Drift = 0.0056 dB

Peak SAR (extrapolated) = 3.3450

**SAR(1 g) = 2.32 mW/g; SAR(10 g) = 1.56 mW/g**

Maximum value of SAR (measured) = 2.899 mW/g



## System Check\_H2450\_120117

**DUT: Dipole 2450 MHz; Type: D2450V2; SN: 716**

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

Medium: H2450\_0117 Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.843$  mho/m;  $\epsilon_r = 38.054$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 21.2 °C ; Liquid Temperature : 20.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(6.8, 6.8, 6.8); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Front; Type: SAM; Serial: TP-1485
- 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) = 22.602 mW/g

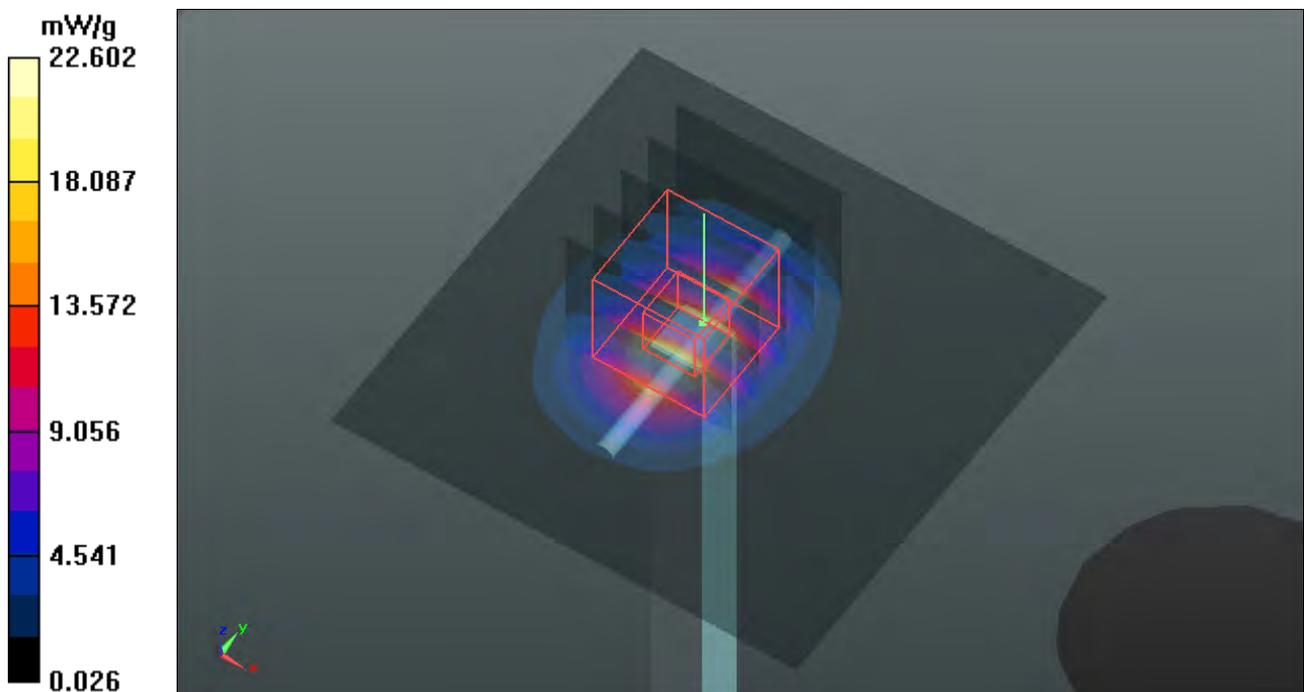
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 107.4 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 29.9480

**SAR(1 g) = 13.4 mW/g; SAR(10 g) = 6.1 mW/g**

Maximum value of SAR (measured) = 20.625 mW/g



## System Check\_B2450\_120108

**DUT: Dipole 2450 MHz; Type: D2450V2; SN: 716**

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

Medium: B2450\_0108 Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.98$  mho/m;  $\epsilon_r = 51.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 21.8 °C; Liquid Temperature : 20.7 °C

DASY4 Configuration:

- Probe: EX3DV4 - SN3590; ConvF(7.91, 7.91, 7.91); Calibrated: 2011/02/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2011/08/29
- Phantom: SAM Phantom\_Front; Type: SAM V4.0; Serial: TP 1654
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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

Maximum value of SAR (interpolated) = 21.6 mW/g

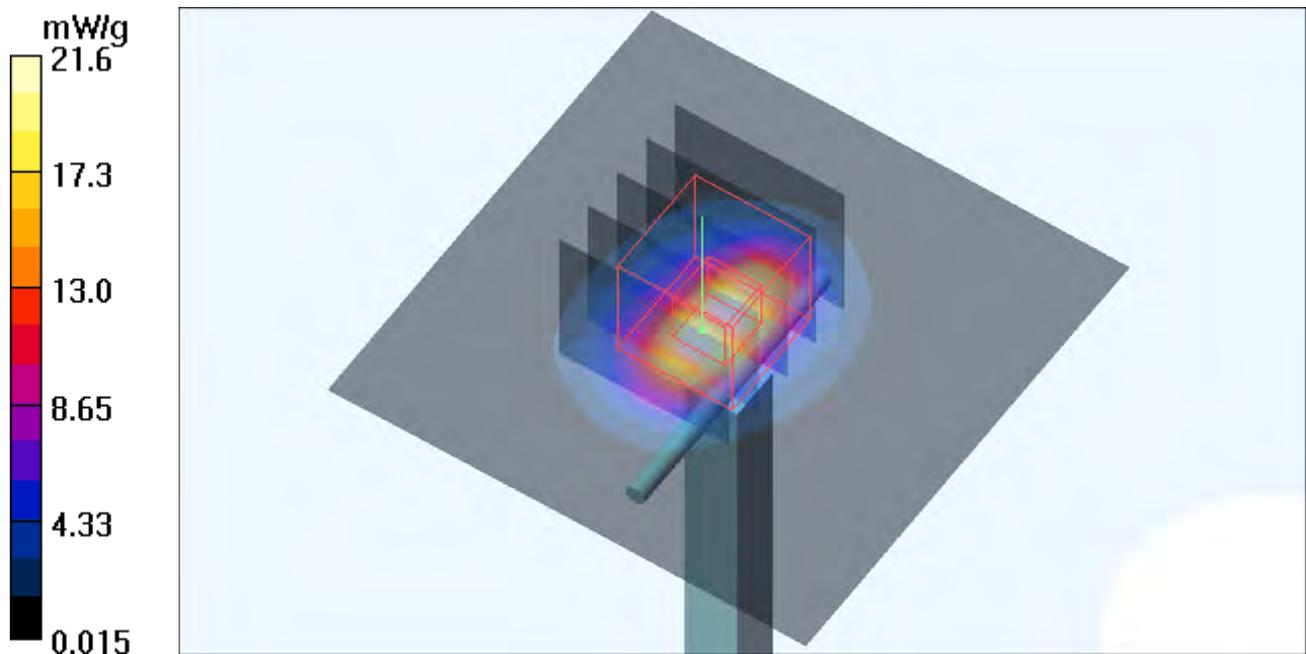
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 104.2 V/m; Power Drift = 0.044 dB

Peak SAR (extrapolated) = 28.4 W/kg

**SAR(1 g) = 13.9 mW/g; SAR(10 g) = 6.4 mW/g**

Maximum value of SAR (measured) = 20.9 mW/g



## System Check\_B2450\_120117

**DUT: Dipole 2450 MHz; Type: D2450V2; SN: 716**

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

Medium: B2450\_0117 Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.975$  mho/m;  $\epsilon_r = 50.958$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 21.2 °C ; Liquid Temperature : 20.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(6.89, 6.89, 6.89); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM; Serial: 1202
- 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) = 21.349 mW/g

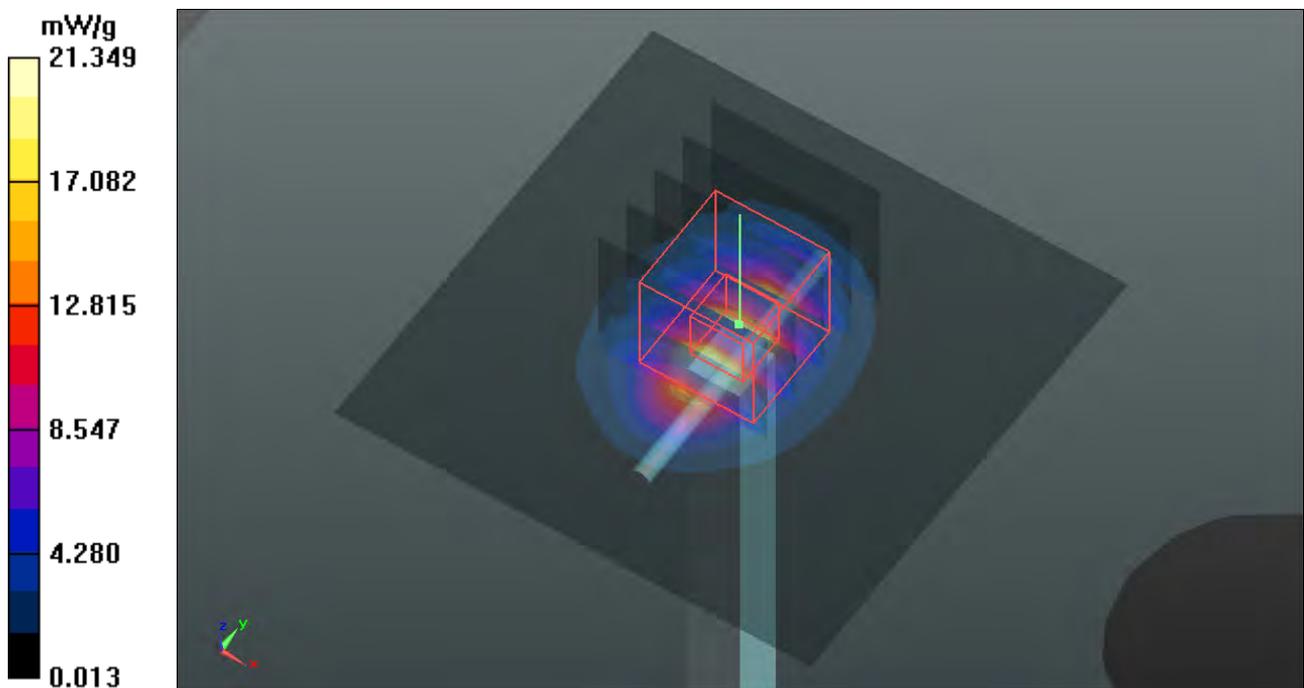
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 103.2 V/m; Power Drift = 0.0064 dB

Peak SAR (extrapolated) = 28.0900

**SAR(1 g) = 13.6 mW/g; SAR(10 g) = 6.29 mW/g**

Maximum value of SAR (measured) = 20.497 mW/g



## System Check\_H5200\_120109

**DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019**

Communication System: CW; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: H5G\_0109 Medium parameters used:  $f = 5200$  MHz;  $\sigma = 4.71$  mho/m;  $\epsilon_r = 35.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 21.4 °C ; Liquid Temperature : 20.8 °C

DASY4 Configuration:

- Probe: EX3DV4 - SN3590; ConvF(5.51, 5.51, 5.51); Calibrated: 2011/02/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2011/08/29
- Phantom: SAM Phantom\_Front; Type: SAM V4.0; Serial: TP 1654
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Pin=100mW/Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 16.2 mW/g

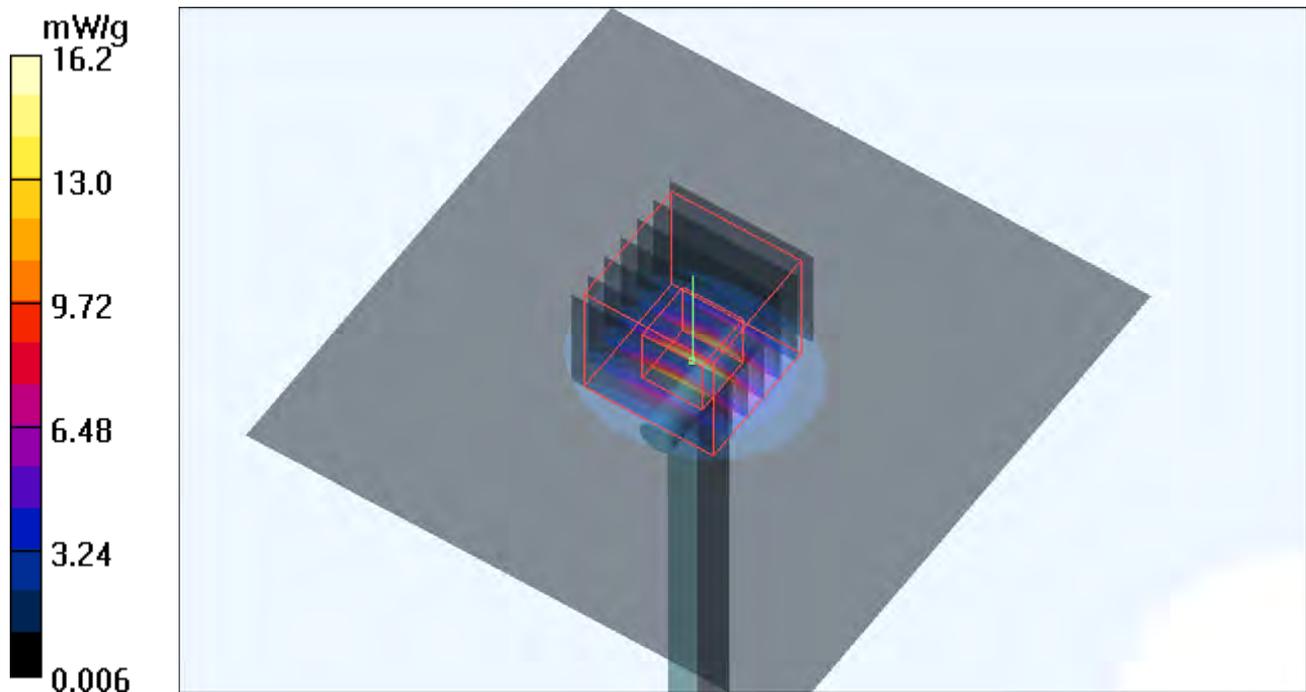
**Pin=100mW/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 60.8 V/m; Power Drift = 0.080 dB

Peak SAR (extrapolated) = 31.9 W/kg

**SAR(1 g) = 7.6 mW/g; SAR(10 g) = 2.15 mW/g**

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



## System Check\_H5200\_120117

**DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019**

Communication System: CW; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: H5G\_0117 Medium parameters used:  $f = 5200$  MHz;  $\sigma = 4.793$  mho/m;  $\epsilon_r = 36.787$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 20.8 °C ; Liquid Temperature : 20.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(5.05, 5.05, 5.05); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM; Serial: 1202
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

**Pin=100mW/Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 17.652 mW/g

**Pin=100mW/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm,

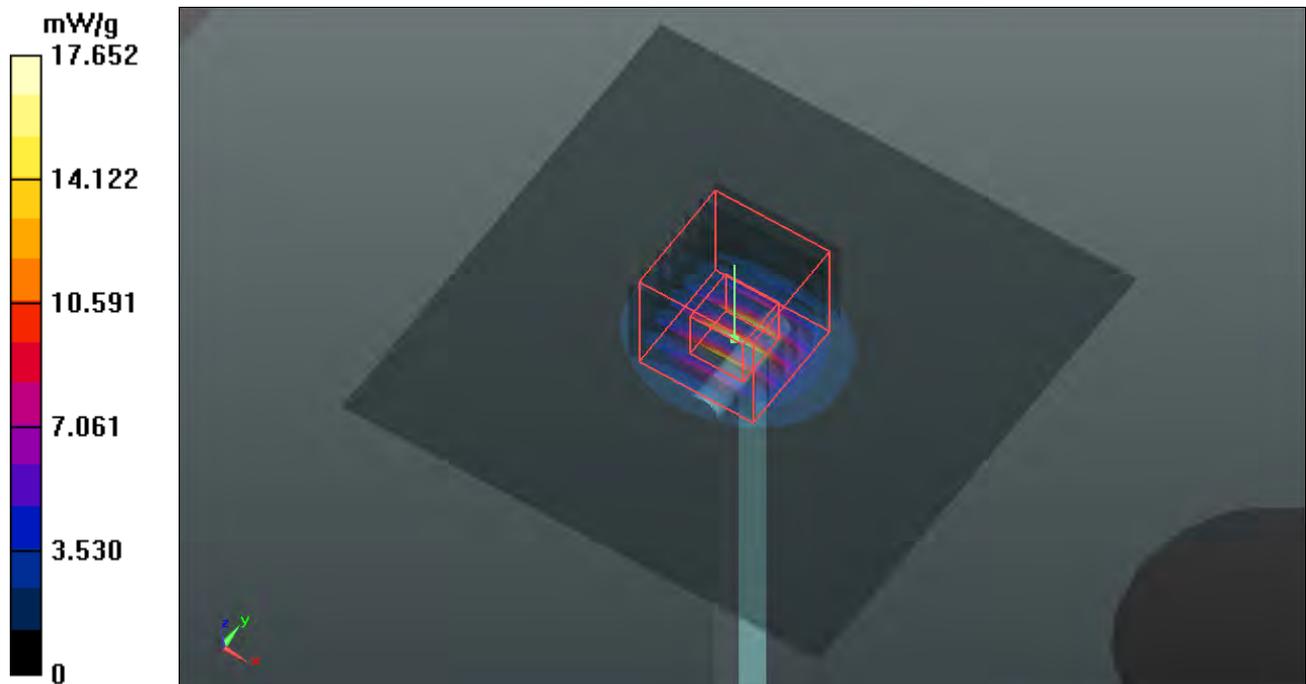
dy=4mm, dz=2.5mm

Reference Value = 65.704 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 34.7710

**SAR(1 g) = 8.48 mW/g; SAR(10 g) = 2.42 mW/g**

Maximum value of SAR (measured) = 18.099 mW/g



## System Check\_B5200\_120107

**DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019**

Communication System: CW; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: B5G\_0107 Medium parameters used:  $f = 5200$  MHz;  $\sigma = 5.23$  mho/m;  $\epsilon_r = 49.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 21.6 °C; Liquid Temperature : 21.3 °C

DASY4 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(4.28, 4.28, 4.28); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Pin=100mW/Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 16.1 mW/g

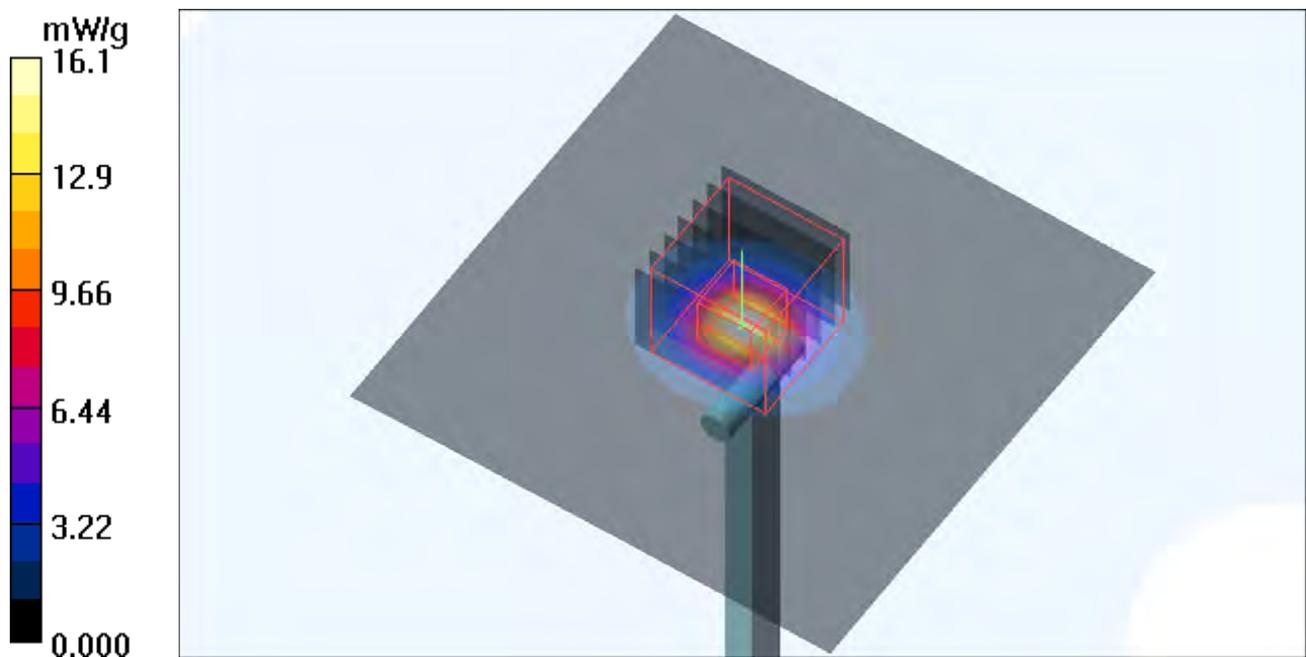
**Pin=100mW/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 59.9 V/m; Power Drift = 0.026 dB

Peak SAR (extrapolated) = 27.3 W/kg

**SAR(1 g) = 7.63 mW/g; SAR(10 g) = 2.25 mW/g**

Maximum value of SAR (measured) = 15.8 mW/g



## System Check\_B5200\_120117

**DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019**

Communication System: CW; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: B5G\_0117 Medium parameters used:  $f = 5200$  MHz;  $\sigma = 5.163$  mho/m;  $\epsilon_r = 47.875$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 20.9 °C ; Liquid Temperature : 20.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(4.28, 4.28, 4.28); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Front; Type: SAM; Serial: TP-1485
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

**Pin=100mW/Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 15.684 mW/g

**Pin=100mW/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm,

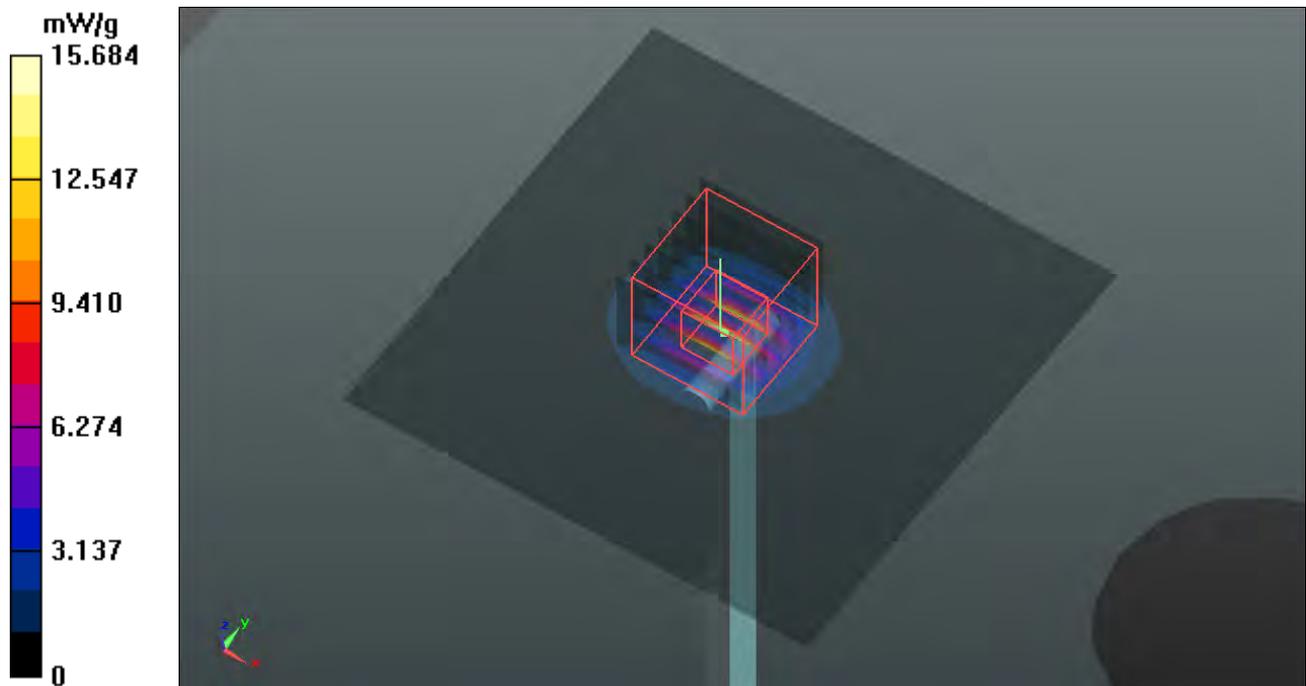
dy=4mm, dz=2.5mm

Reference Value = 59.517 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 26.6140

**SAR(1 g) = 7.48 mW/g; SAR(10 g) = 2.22 mW/g**

Maximum value of SAR (measured) = 15.495 mW/g



## System Check\_H5500\_120109

**DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019**

Communication System: CW; Frequency: 5500 MHz; Duty Cycle: 1:1

Medium: H5G\_0109 Medium parameters used:  $f = 5500$  MHz;  $\sigma = 4.86$  mho/m;  $\epsilon_r = 34.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 21.1 °C ; Liquid Temperature : 20.8 °C

DASY4 Configuration:

- Probe: EX3DV4 - SN3590; ConvF(5, 5, 5); Calibrated: 2011/02/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2011/08/29
- Phantom: SAM Phantom\_Front; Type: SAM V4.0; Serial: TP 1654
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Pin=100mW/Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 16.3 mW/g

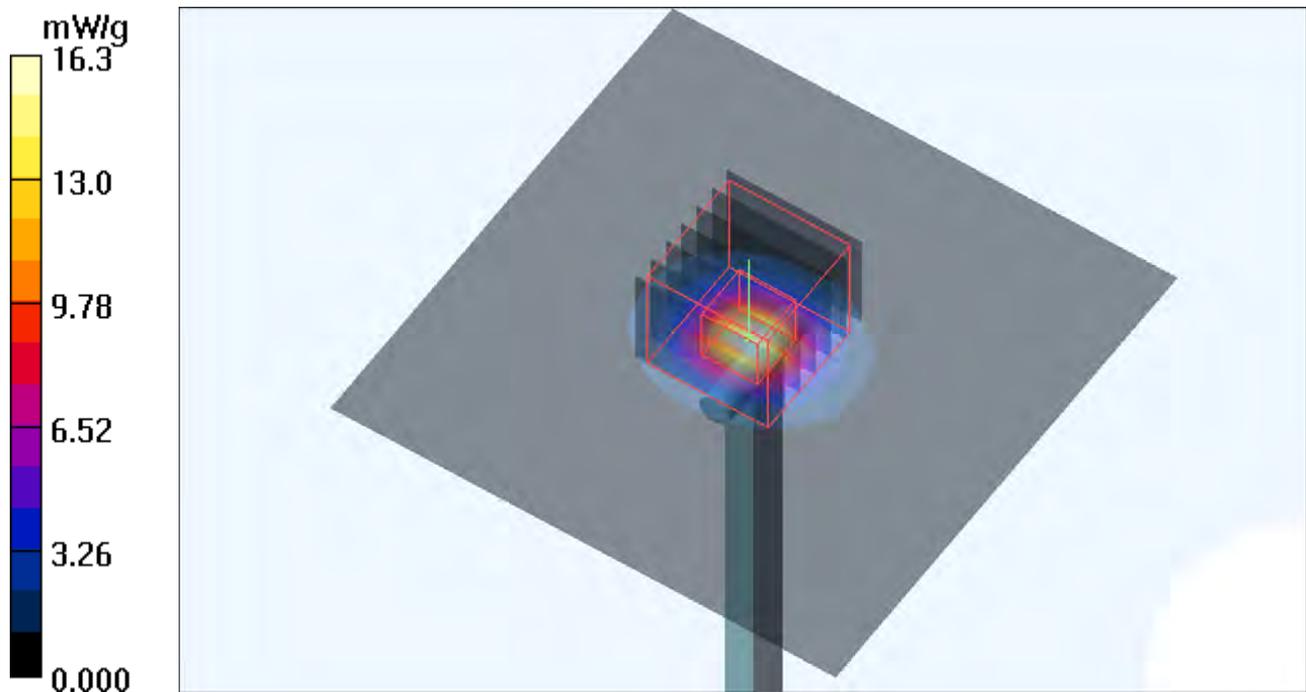
**Pin=100mW/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 61.1 V/m; Power Drift = 0.273 dB

Peak SAR (extrapolated) = 35.0 W/kg

**SAR(1 g) = 8.02 mW/g; SAR(10 g) = 2.23 mW/g**

Maximum value of SAR (measured) = 17.5 mW/g



### System Check\_H5500\_120117

**DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019**

Communication System: CW; Frequency: 5500 MHz; Duty Cycle: 1:1

Medium: H5G\_0117 Medium parameters used:  $f = 5500$  MHz;  $\sigma = 4.988$  mho/m;  $\epsilon_r = 36.385$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 20.9 °C ; Liquid Temperature : 20.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(4.56, 4.56, 4.56); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM; Serial: 1202
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

**Pin=100mW/Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 19.515 mW/g

**Pin=100mW/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm,

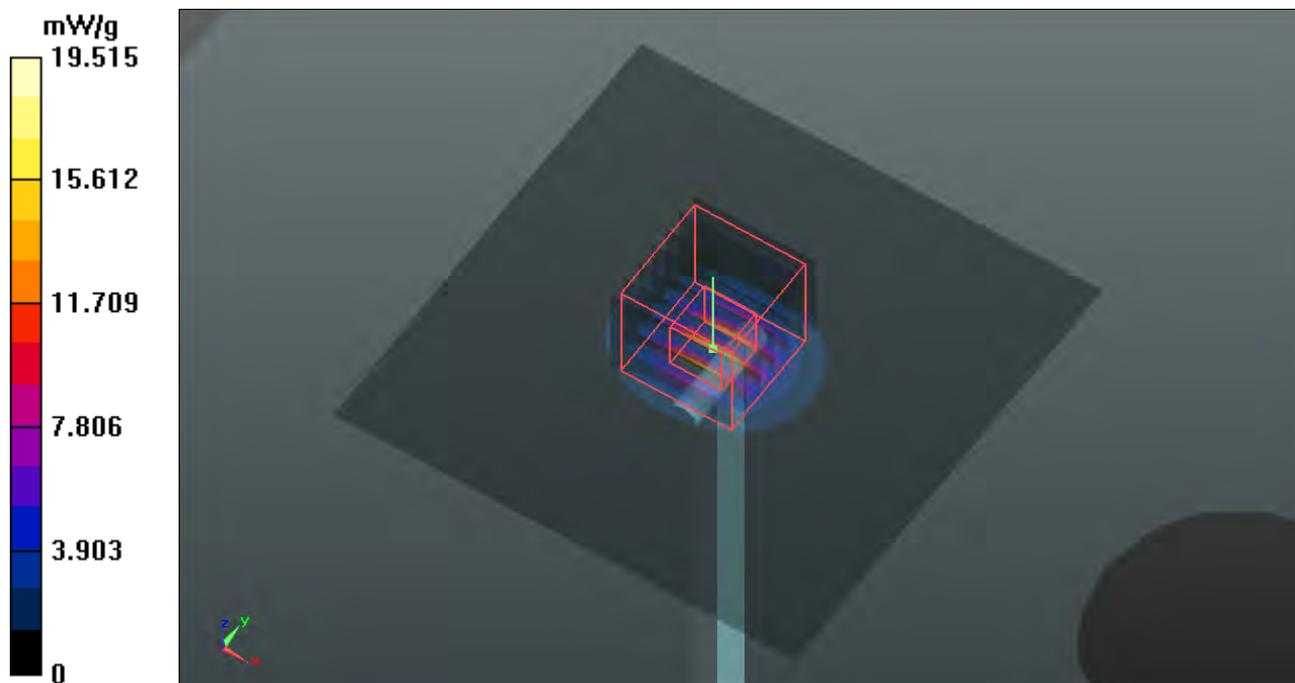
dy=4mm, dz=2.5mm

Reference Value = 67.400 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 35.2100

**SAR(1 g) = 8.67 mW/g; SAR(10 g) = 2.43 mW/g**

Maximum value of SAR (measured) = 18.441 mW/g



## System Check\_B5500\_120107

**DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019**

Communication System: CW; Frequency: 5500 MHz; Duty Cycle: 1:1

Medium: B5G\_0107 Medium parameters used:  $f = 5500$  MHz;  $\sigma = 5.71$  mho/m;  $\epsilon_r = 49$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 21.6 °C; Liquid Temperature : 21.3 °C

DASY4 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(3.73, 3.73, 3.73); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Pin=100mW/Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 18.3 mW/g

**Pin=100mW/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm,

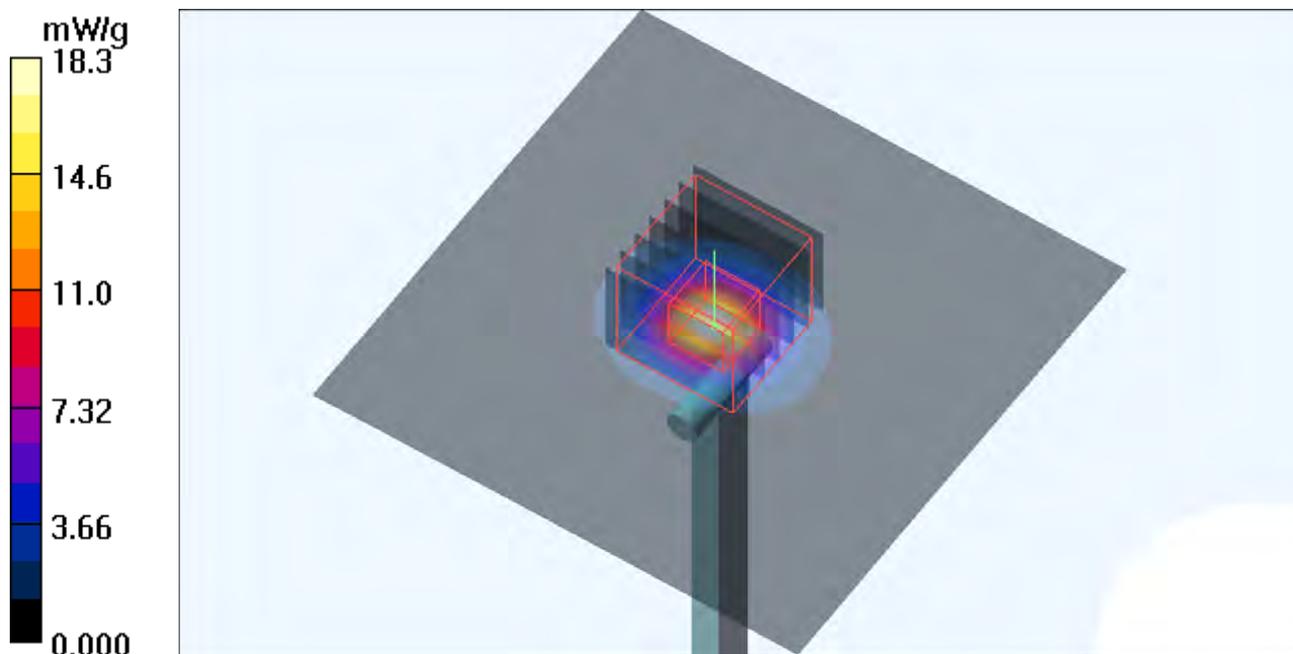
dy=4mm, dz=2.5mm

Reference Value = 61.9 V/m; Power Drift = 0.026 dB

Peak SAR (extrapolated) = 30.1 W/kg

**SAR(1 g) = 8.37 mW/g; SAR(10 g) = 2.43 mW/g**

Maximum value of SAR (measured) = 17.8 mW/g



## System Check\_B5500\_120117

**DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019**

Communication System: CW; Frequency: 5500 MHz; Duty Cycle: 1:1

Medium: B5G\_0117 Medium parameters used:  $f = 5500$  MHz;  $\sigma = 5.662$  mho/m;  $\epsilon_r = 47.761$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 20.9 °C ; Liquid Temperature : 20.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(3.73, 3.73, 3.73); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Front; Type: SAM; Serial: TP-1485
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

**Pin=100mW/Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 17.518 mW/g

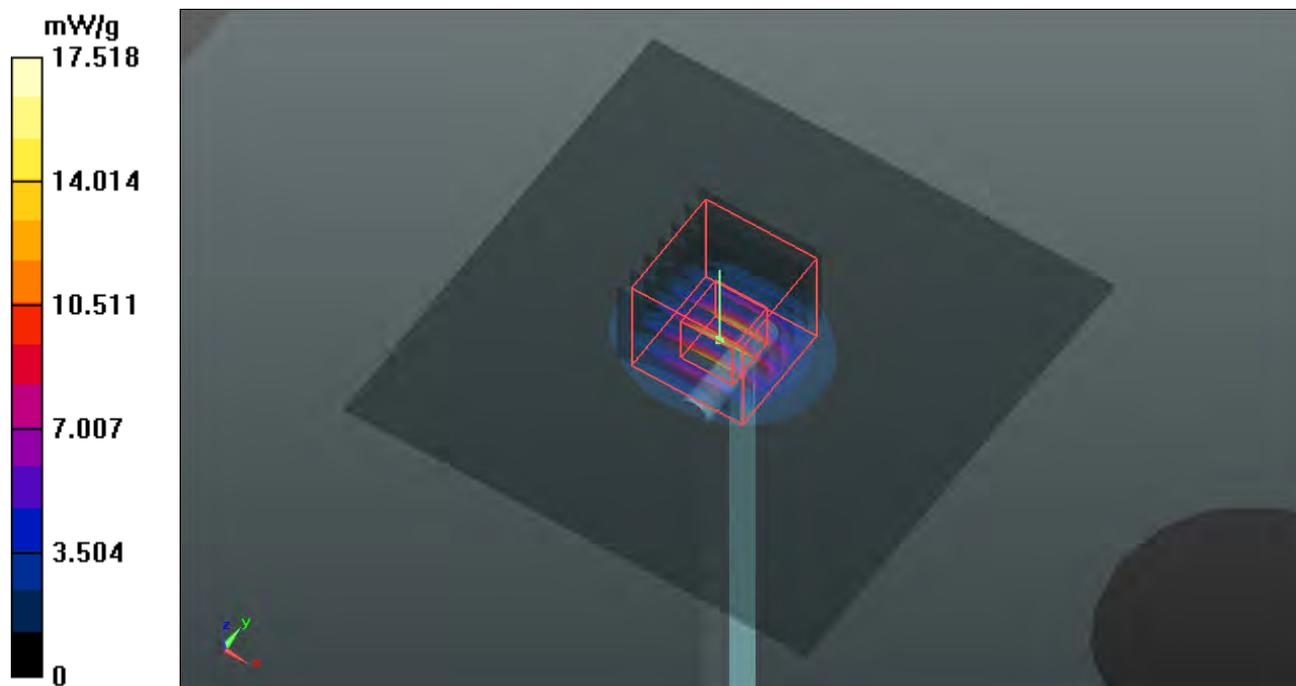
**Pin=100mW/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 60.673 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 28.5540

**SAR(1 g) = 8 mW/g; SAR(10 g) = 2.32 mW/g**

Maximum value of SAR (measured) = 16.725 mW/g



## System Check\_H5800\_120109

**DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019**

Communication System: CW; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: H5G\_0109 Medium parameters used:  $f = 5800$  MHz;  $\sigma = 5.07$  mho/m;  $\epsilon_r = 34.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 21.3 °C ; Liquid Temperature : 20.8 °C

DASY4 Configuration:

- Probe: EX3DV4 - SN3590; ConvF(4.53, 4.53, 4.53); Calibrated: 2011/02/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2011/08/29
- Phantom: SAM Phantom\_Front; Type: SAM V4.0; Serial: TP 1654
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Pin=100mW/Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 16.5 mW/g

**Pin=100mW/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm,

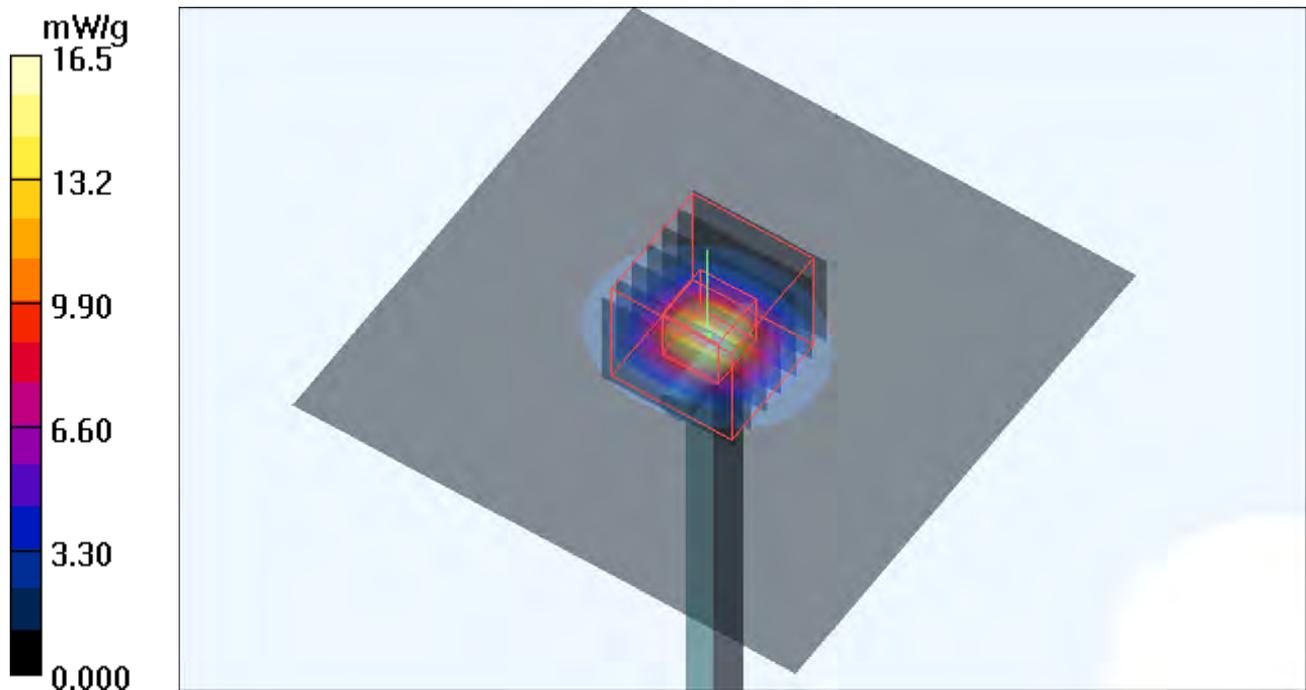
dy=4mm, dz=2.5mm

Reference Value = 63.7 V/m; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 34.2 W/kg

**SAR(1 g) = 7.8 mW/g; SAR(10 g) = 2.12 mW/g**

Maximum value of SAR (measured) = 16.4 mW/g



## System Check\_H5800\_120117

**DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019**

Communication System: CW; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: H5G\_0117 Medium parameters used:  $f = 5800$  MHz;  $\sigma = 5.202$  mho/m;  $\epsilon_r = 36.17$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 20.9 °C ; Liquid Temperature : 20.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(4.3, 4.3, 4.3); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM; Serial: 1202
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

**Pin=100mW/Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 17.101 mW/g

**Pin=100mW/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm,

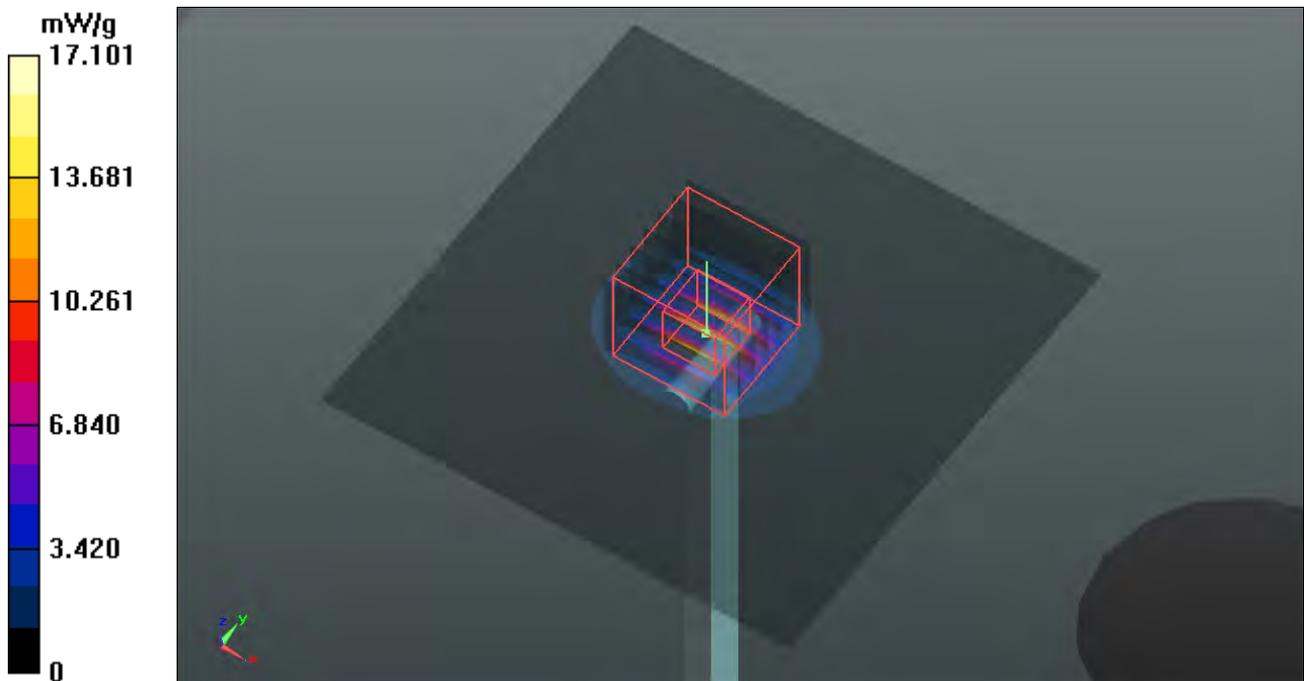
dy=4mm, dz=2.5mm

Reference Value = 62.525 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 32.7420

**SAR(1 g) = 7.86 mW/g; SAR(10 g) = 2.22 mW/g**

Maximum value of SAR (measured) = 17.039 mW/g



## System Check\_B5800\_120107

**DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019**

Communication System: CW; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: B5G\_0107 Medium parameters used:  $f = 5800$  MHz;  $\sigma = 6.21$  mho/m;  $\epsilon_r = 48.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 21.6 °C; Liquid Temperature : 21.3 °C

DASY4 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(3.81, 3.81, 3.81); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Pin=100mW/Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 15.8 mW/g

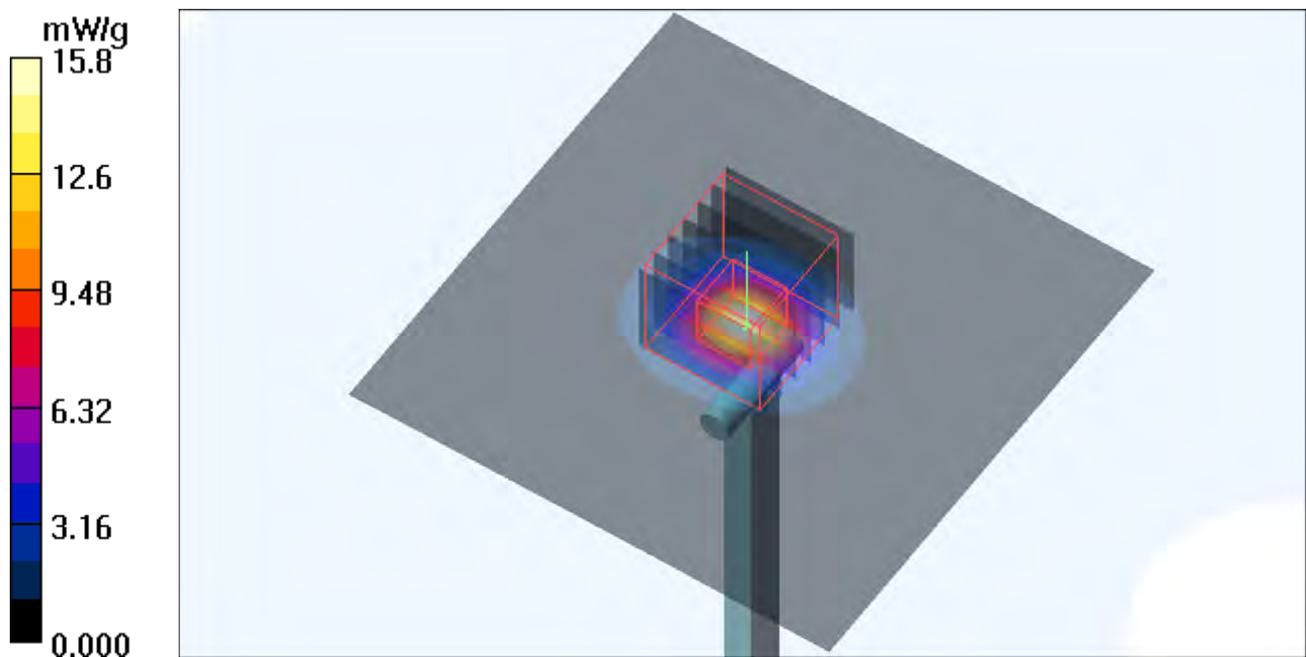
**Pin=100mW/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 55.9 V/m; Power Drift = 0.047 dB

Peak SAR (extrapolated) = 27.9 W/kg

**SAR(1 g) = 7.36 mW/g; SAR(10 g) = 2.14 mW/g**

Maximum value of SAR (measured) = 15.5 mW/g



## System Check\_B5800\_120117

**DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019**

Communication System: CW; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: B5G\_0117 Medium parameters used:  $f = 5800$  MHz;  $\sigma = 6.256$  mho/m;  $\epsilon_r = 47.082$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 20.9 °C ; Liquid Temperature : 20.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(3.81, 3.81, 3.81); Calibrated: 2011/10/26
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2011/09/23
- Phantom: SAM Phantom\_Front; Type: SAM; Serial: TP-1485
- Measurement SW: DASY52, Version 52.8 (0); SEMCAD X Version 14.6.4 (4989)

**Pin=100mW/Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 16.808 mW/g

**Pin=100mW/Zoom Scan (7x7x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 57.582 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 29.8760

**SAR(1 g) = 7.87 mW/g; SAR(10 g) = 2.28 mW/g**

Maximum value of SAR (measured) = 16.599 mW/g

