



Appendix A. SAR Plots of System Verification

The plots for system verification are shown as follows.

System Check_H835_120528

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

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

Medium: H835_0528 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.893 \text{ mho/m}$; $\epsilon_r = 41.64$; $\rho = 1000 \text{ kg/m}^3$

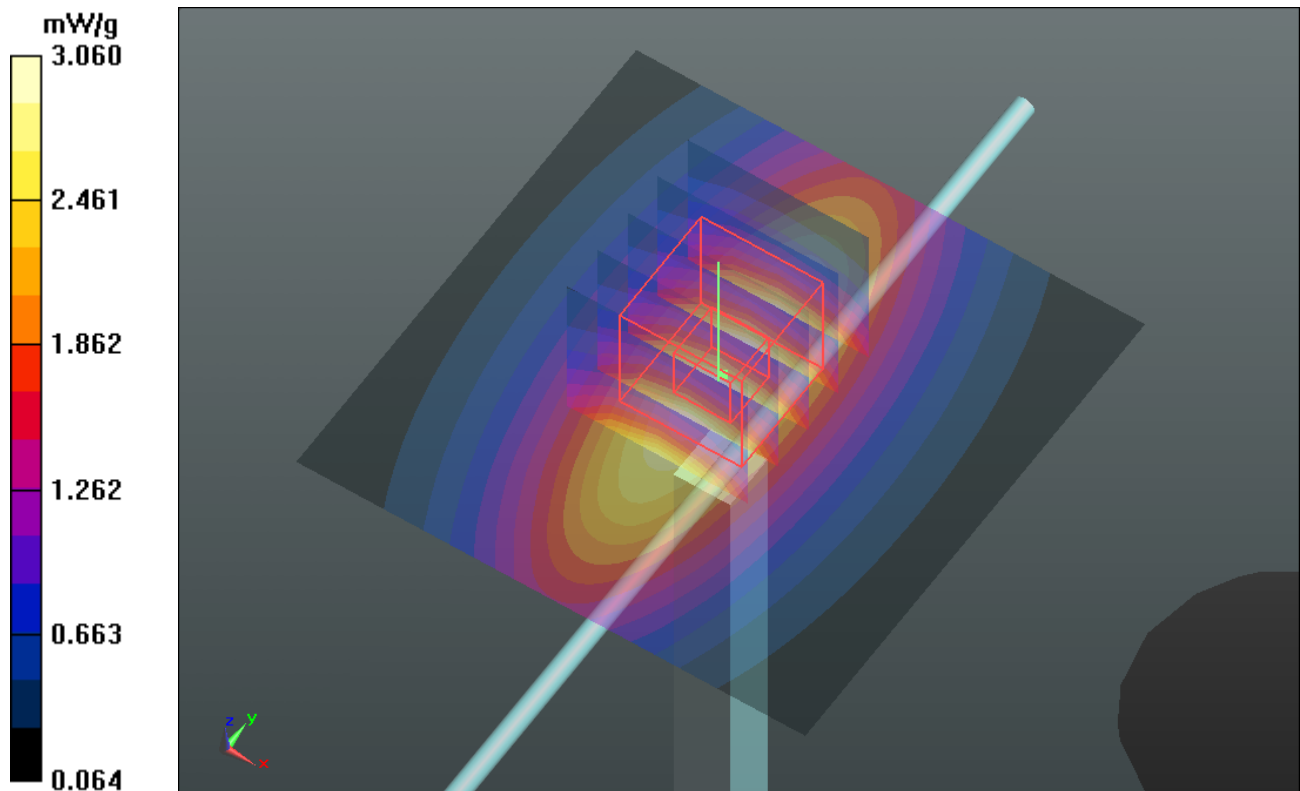
Ambient Temperature : $21.9 \text{ }^\circ\text{C}$; Liquid Temperature : $20.7 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(9, 9, 9); Calibrated: 2011/07/11;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2012/04/27
- Rj cpvqo <UCO 'Rj cpvqo aHtqpV{r g<UCO 'X6Q=Ugtkn<VR'3876
- Measurement SW: DASY52, Version 52.8 (1); SEMCAD X Version 14.6.5 (6469)

Pin=250mW/Area Scan (61x61x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 3.06 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 = 56.194 V/m ; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 3.612 mW/g
SAR(1 g) = 2.39 mW/g ; SAR(10 g) = 1.57 mW/g
Maximum value of SAR (measured) = 3.05 mW/g



System Check_B835_120529

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

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

Medium: B835_0529 Medium parameters used: $f = 835$ MHz; $\sigma = 0.992$ mho/m; $\epsilon_r = 55.575$; $\rho = 1000$ kg/m³

Ambient Temperature : 21.6 °C ; Liquid Temperature : 20.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/07/11;
- 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) = 3.09 mW/g

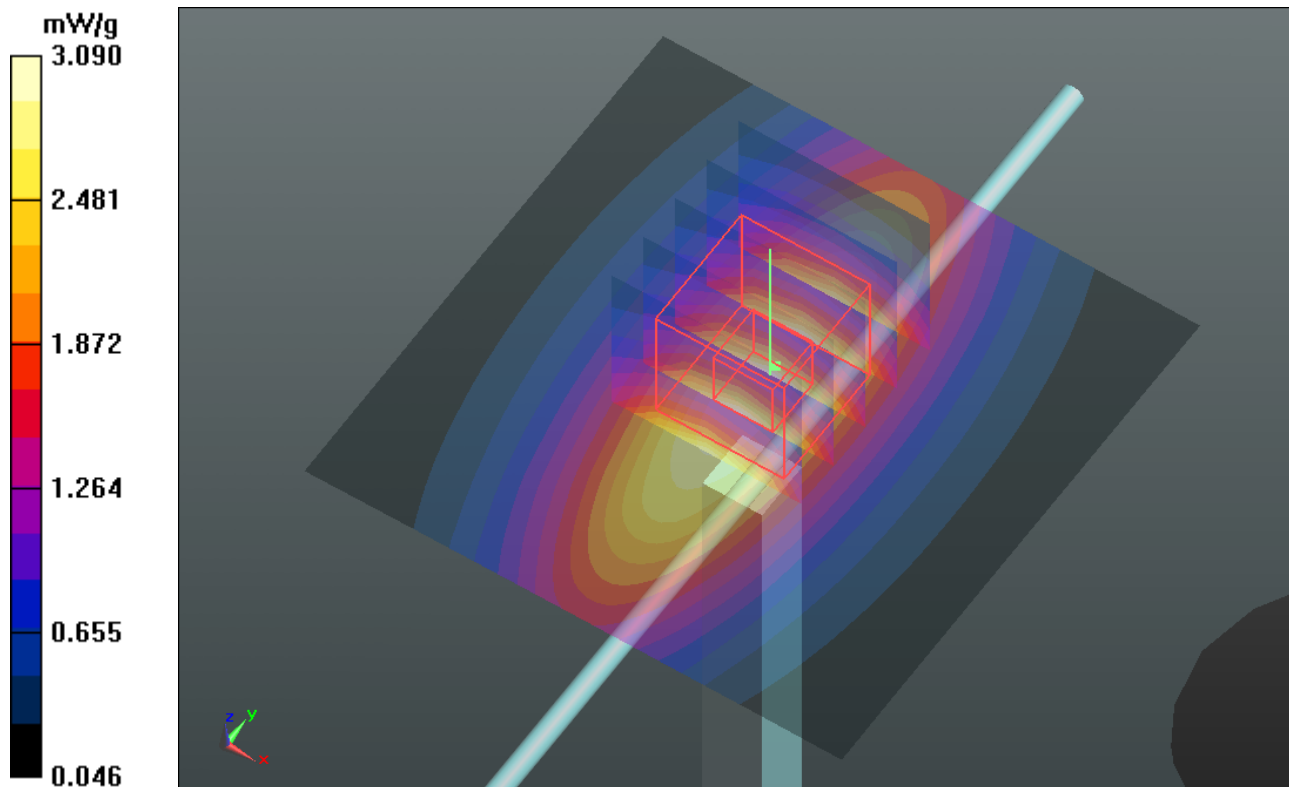
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 53.749 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.607 mW/g

SAR(1 g) = 2.43 mW/g; SAR(10 g) = 1.61 mW/g

Maximum value of SAR (measured) = 3.07 mW/g



System Check_B835_120601

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

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

Medium: B835_0601 Medium parameters used: $f = 835$ MHz; $\sigma = 0.994$ mho/m; $\epsilon_r = 55.999$; $\rho = 1000$ kg/m³

Ambient Temperature : 21.6 °C; Liquid Temperature : 20.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(9.21, 9.21, 9.21); Calibrated: 2011/07/11;
- 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) = 3.09 mW/g

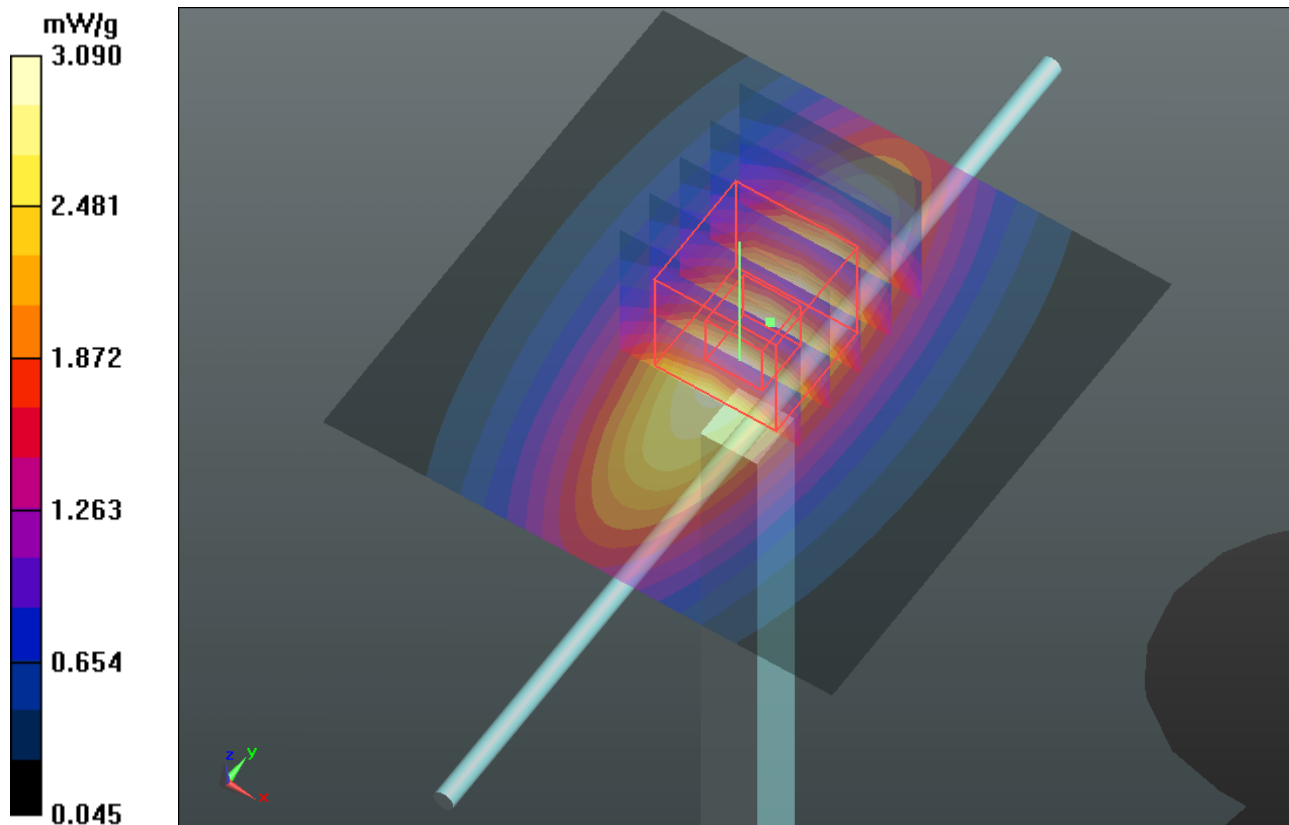
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 53.650 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.603 mW/g

SAR(1 g) = 2.43 mW/g; SAR(10 g) = 1.61 mW/g

Maximum value of SAR (measured) = 3.05 mW/g



System Check_H1750_120529

DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1055

Communication System: CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: H1750_0529 Medium parameters used: $f = 1750$ MHz; $\sigma = 1.357$ mho/m; $\epsilon_r = 40.639$; $\rho = 1000$ kg/m³

Ambient Temperature : 21.9 °C ; Liquid Temperature : 20.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(7.92, 7.92, 7.92); Calibrated: 2011/07/11;
- 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) = 12.8 mW/g

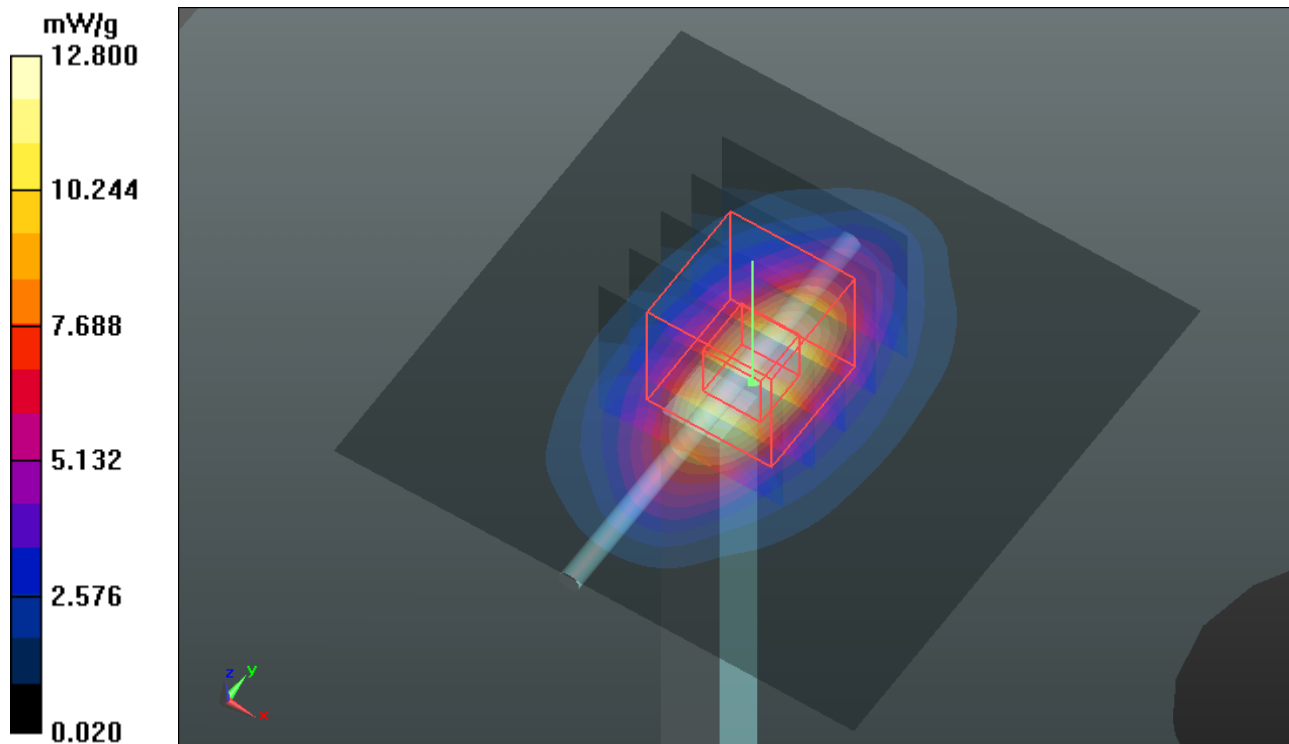
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 97.348 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 15.927 mW/g

SAR(1 g) = 9.05 mW/g; SAR(10 g) = 4.89 mW/g

Maximum value of SAR (measured) = 12.7 mW/g



System Check_B1750_120529

DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1055

Communication System: CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: B1750_0529 Medium parameters used: $f = 1750$ MHz; $\sigma = 1.531$ mho/m; $\epsilon_r = 52.593$; $\rho = 1000$ kg/m³

Ambient Temperature : 21.7 °C ; Liquid Temperature : 20.8 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(7.63, 7.63, 7.63); Calibrated: 2011/07/11;
- 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) = 13.3 mW/g

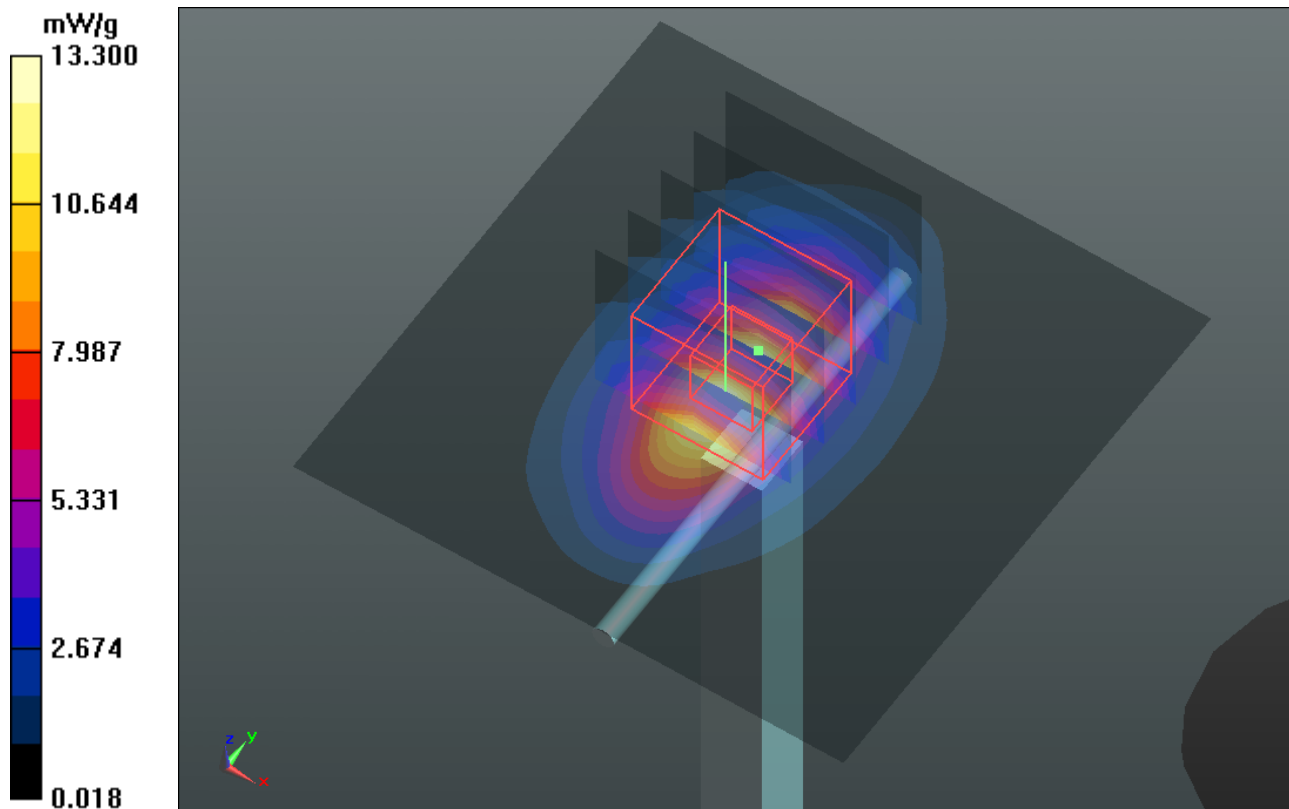
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 93.120 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 16.065 mW/g

SAR(1 g) = 9.29 mW/g; SAR(10 g) = 4.98 mW/g

Maximum value of SAR (measured) = 12.9 mW/g



System Check_B1750_120601

DUT: Dipole 1750 MHz; Type: D1750V2; SN: 1055

Communication System: CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: B1750_0601 Medium parameters used: $f = 1750$ MHz; $\sigma = 1.526$ mho/m; $\epsilon_r = 54.358$; $\rho = 1000$ kg/m³

Ambient Temperature : 21.4 °C ; Liquid Temperature : 20.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(7.63, 7.63, 7.63); Calibrated: 2011/07/11;
- 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) = 13.6 mW/g

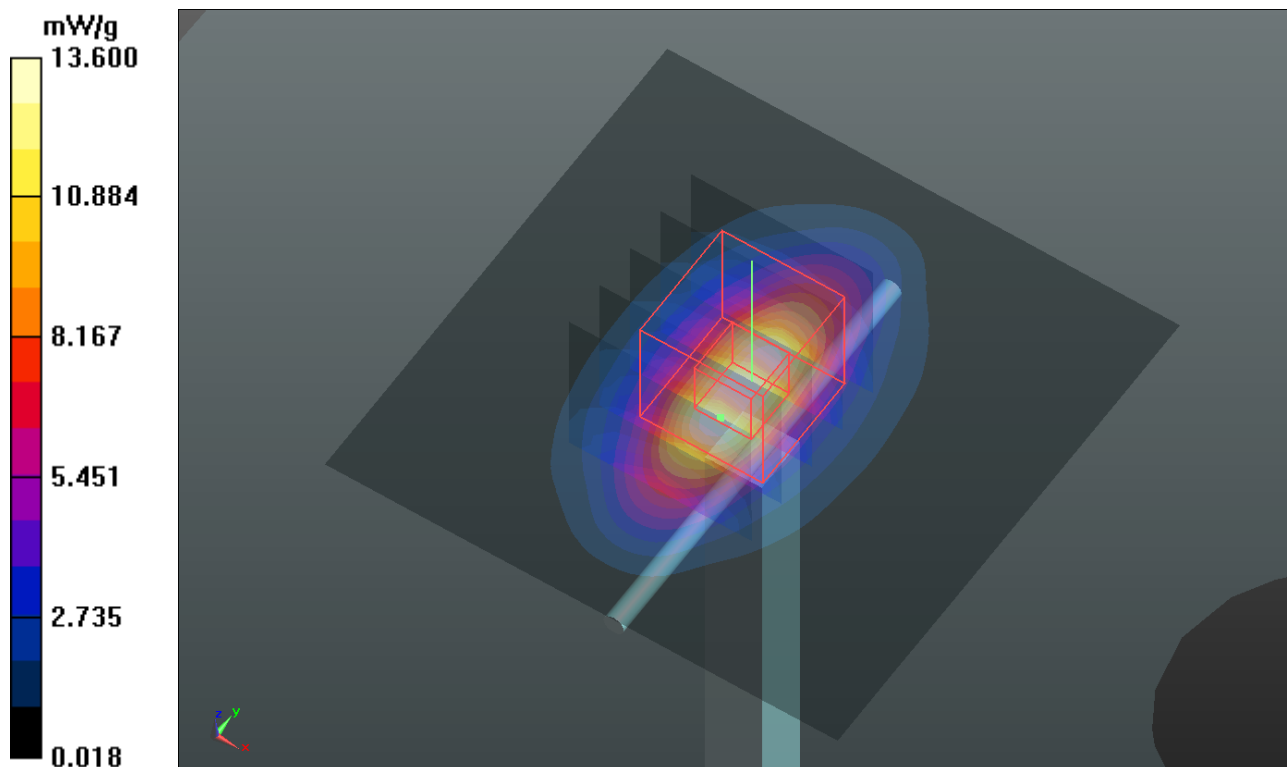
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 94.101 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 16.642 mW/g

SAR(1 g) = 9.42 mW/g; SAR(10 g) = 5 mW/g

Maximum value of SAR (measured) = 13.4 mW/g



System Check_H1900_120528

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

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

Medium: H1900_0528 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.409$ mho/m; $\epsilon_r = 40.842$; $\rho = 1000$ kg/m³

Ambient Temperature : 21.9 °C ; Liquid Temperature : 20.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(7.6, 7.6, 7.6); Calibrated: 2011/07/11;
- 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) = 13.7 mW/g

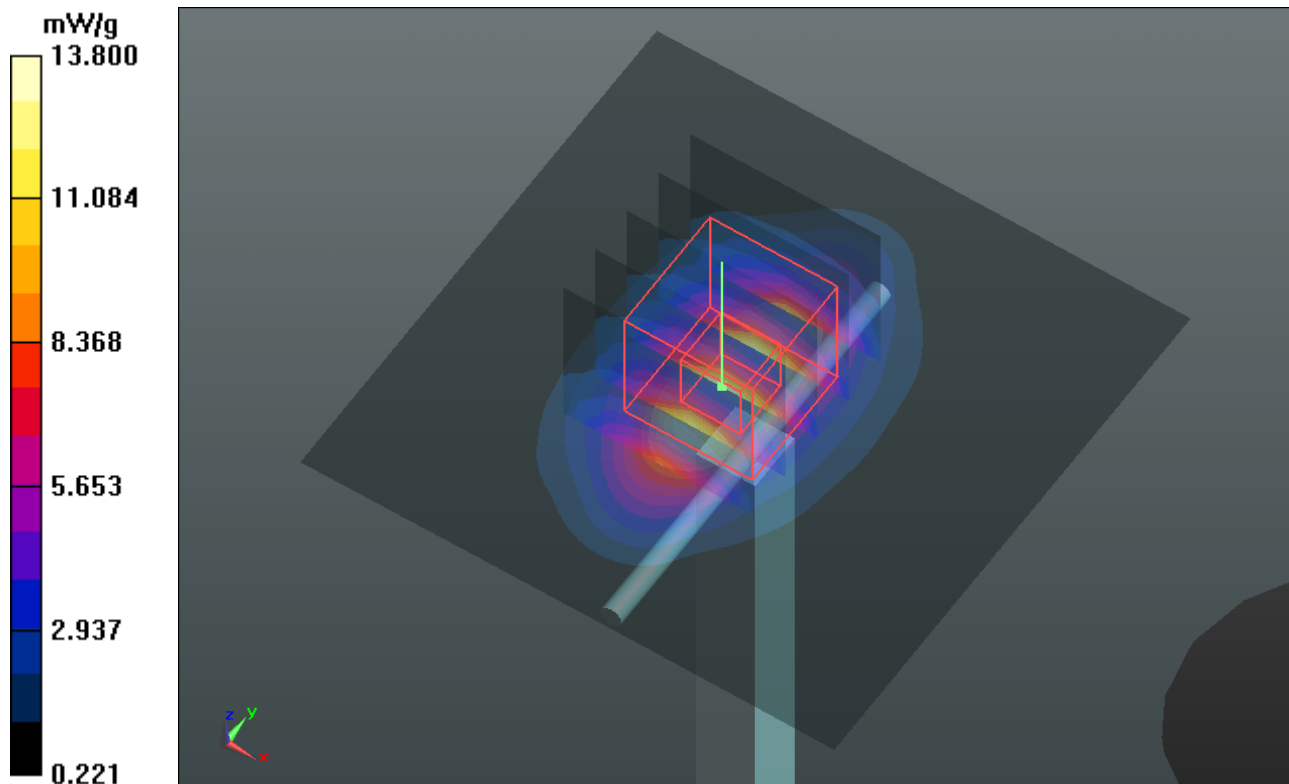
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 99.174 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 17.475 mW/g

SAR(1 g) = 9.6 mW/g; SAR(10 g) = 5 mW/g

Maximum value of SAR (measured) = 13.8 mW/g



System Check_B1900_120529

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

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

Medium: B1900_0529 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.564$ mho/m; $\epsilon_r = 54.848$; $\rho = 1000$ kg/m³

Ambient Temperature : 21.8 °C; Liquid Temperature : 20.8 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(7.14, 7.14, 7.14); Calibrated: 2011/07/11;
- 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) = 15.1 mW/g

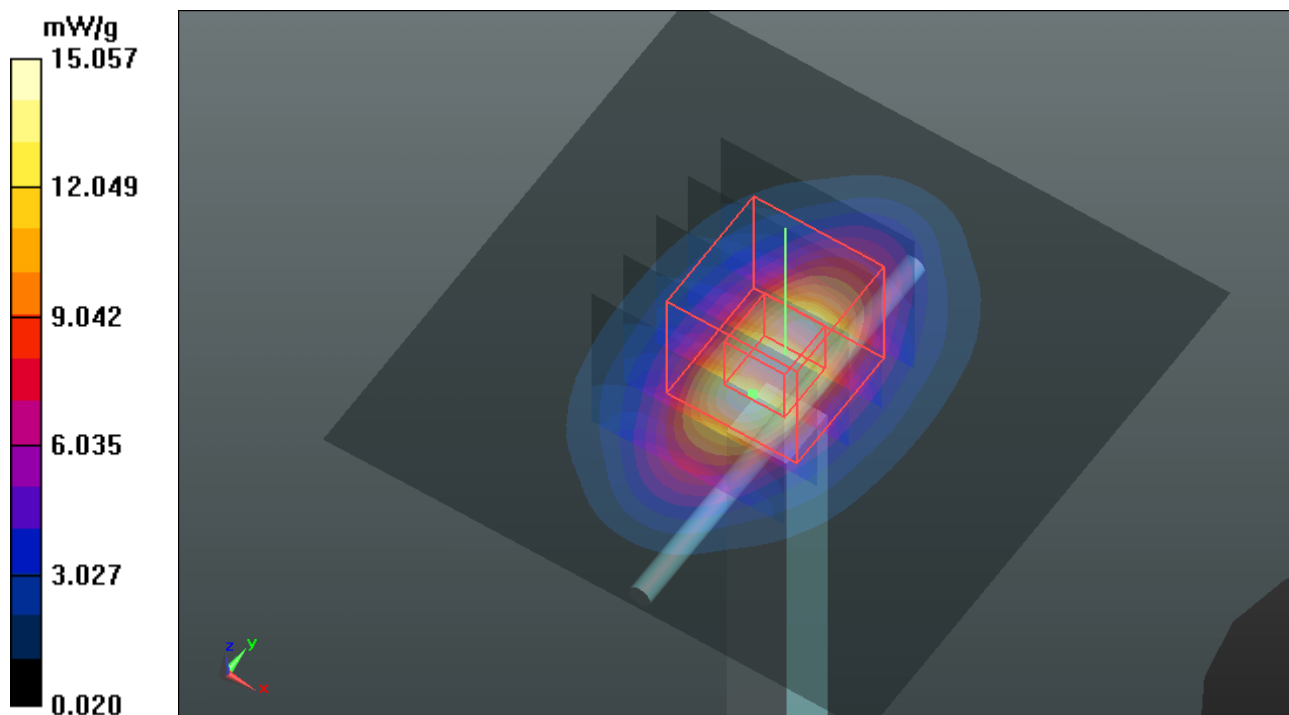
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 98.575 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 18.924 mW/g

SAR(1 g) = 9.94 mW/g; SAR(10 g) = 5.07 mW/g

Maximum value of SAR (measured) = 14.4 mW/g



System Check_B1900_120601

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

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

Medium: B1900_0601 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.554$ mho/m; $\epsilon_r = 54.282$; $\rho = 1000$ kg/m³

Ambient Temperature : 21.4 °C ; Liquid Temperature : 20.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(7.14, 7.14, 7.14); Calibrated: 2011/07/11;
- 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) = 15.2 mW/g

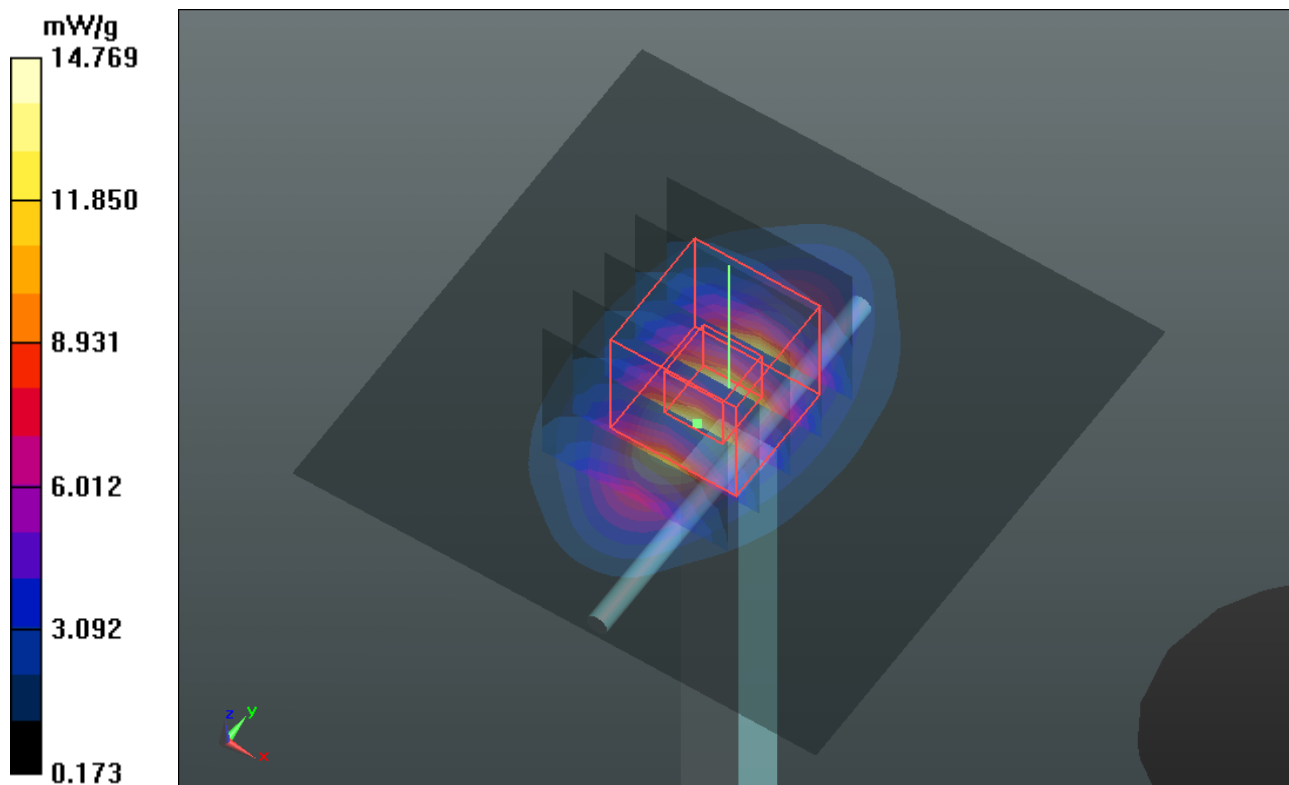
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 97.714 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 18.955 mW/g

SAR(1 g) = 10.3 mW/g; SAR(10 g) = 5.32 mW/g

Maximum value of SAR (measured) = 14.8 mW/g



System Check_H2450_120531

DUT: Dipole 2450 MHz; Type: D2450V2; SN: 737

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

Medium: H2450_0531 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.843$ mho/m; $\epsilon_r = 38.054$; $\rho = 1000$ kg/m³

Ambient Temperature : 21.7 °C ; Liquid Temperature : 20.8 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3650; ConvF(6.8, 6.8, 6.8); 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) = 22.9 mW/g

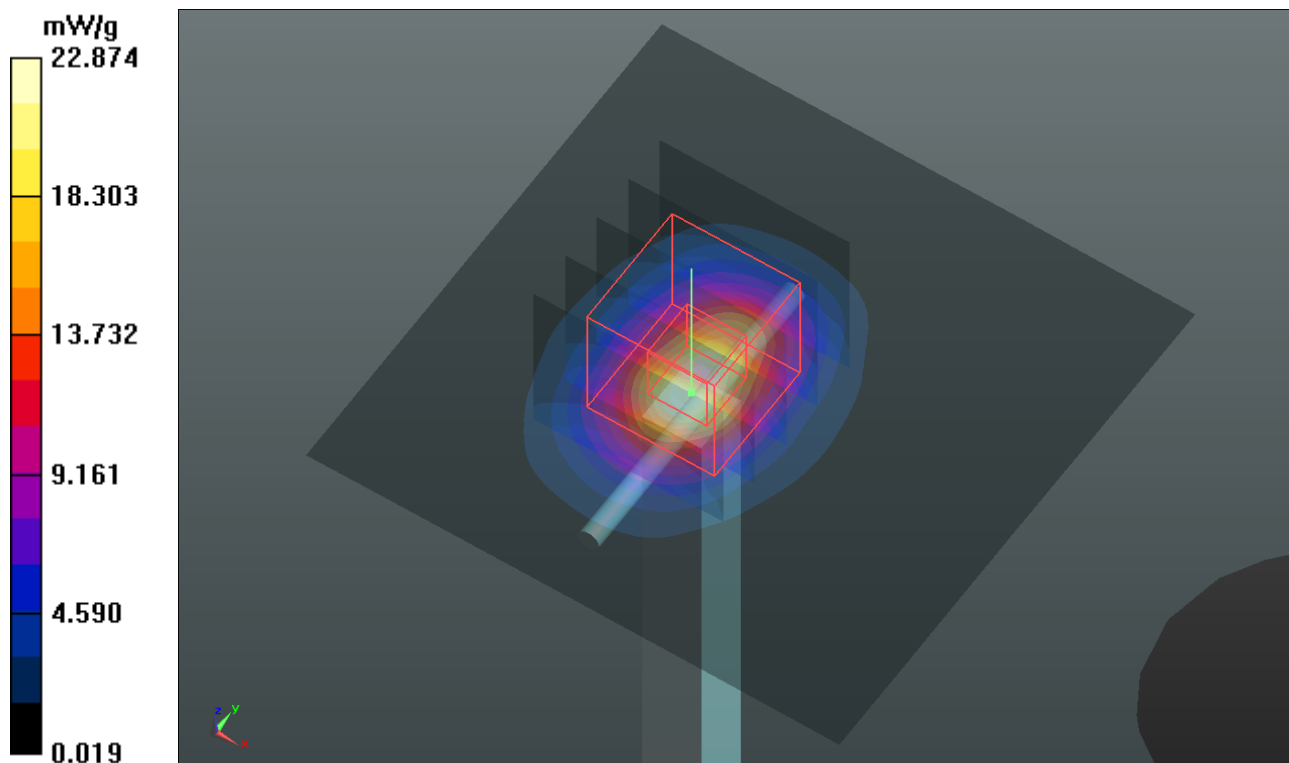
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 104.5 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 29.343 mW/g

SAR(1 g) = 13.4 mW/g; SAR(10 g) = 6.09 mW/g

Maximum value of SAR (measured) = 20.8 mW/g



System Check_B2450_120530

DUT: Dipole 2450 MHz; Type: D2450V2; SN: 737

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

Medium: B2450_0530 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.016$ mho/m; $\epsilon_r = 52.949$; $\rho = 1000$ kg/m³

Ambient Temperature : 21.7 °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: 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) = 19.9 mW/g

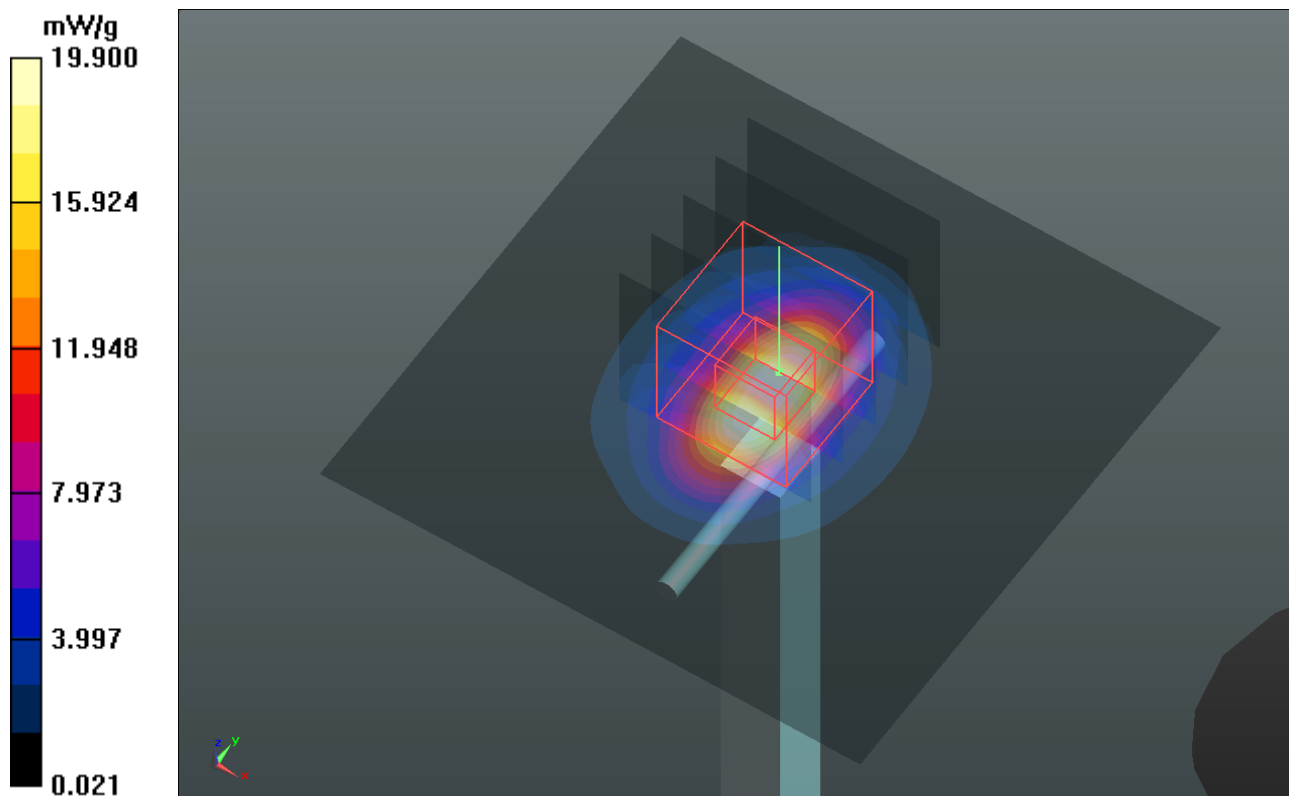
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 99.581 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 26.503 mW/g

SAR(1 g) = 12.8 mW/g; SAR(10 g) = 5.92 mW/g

Maximum value of SAR (measured) = 19.2 mW/g



System Check_B2450_120601

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

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

Medium: B2450_0601 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.026$ mho/m; $\epsilon_r = 52.8$; $\rho = 1000$ kg/m³

Ambient Temperature : 21.4 °C ; Liquid Temperature : 20.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3801; ConvF(6.79, 6.79, 6.79); Calibrated: 2011/07/11;
- 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) = 19.0 mW/g

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

Reference Value = 96.718 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 25.844 mW/g

SAR(1 g) = 12.6 mW/g; SAR(10 g) = 5.82 mW/g

Maximum value of SAR (measured) = 19.3 mW/g

