

Appendix A. SAR Plots of System Verification

The plots for system verification are shown as follows.

System Check_H1900_121011**DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036**

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

Medium: H1900_1011 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.427$ mho/m; $\epsilon_r = 40.357$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3590; ConvF(8.83, 8.83, 8.83); Calibrated: 2012/02/23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2012/08/23
- Phantom: SAM Phantom_Front; Type: SAM V4.0; Serial: TP 1127
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

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

Maximum value of SAR (interpolated) = 14.6 W/kg

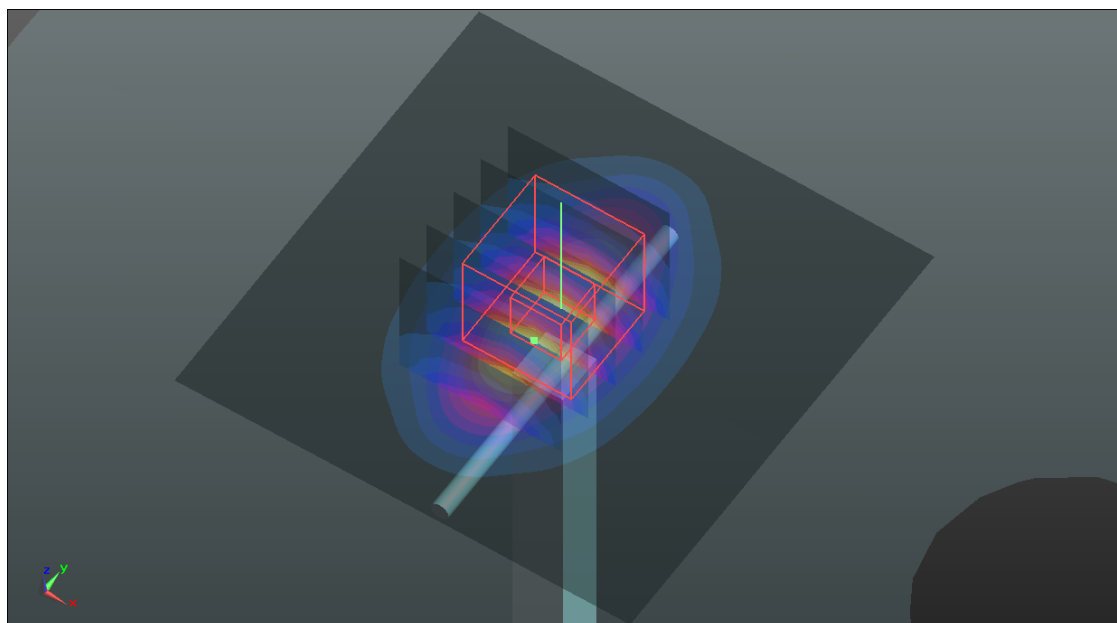
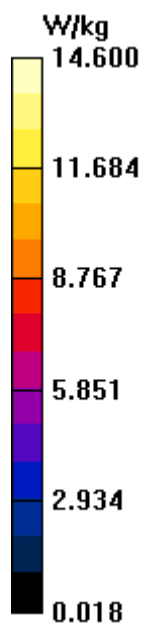
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 101.4 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 18.137 mW/g

SAR(1 g) = 9.72 mW/g; SAR(10 g) = 5.01 mW/g

Maximum value of SAR (measured) = 14.0 W/kg



System Check_H2450_121016**DUT: Dipole 2450 MHz; Type: D2450V2; SN: 737**

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

Medium: H2450_1016 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.841$ mho/m; $\epsilon_r = 37.845$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3820; ConvF(7.17, 7.17, 7.17); Calibrated: 2011/12/16;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn910; Calibrated: 2011/12/07
- Phantom: SAM Phantom_Front; Type: SAM V4.0; Serial: TP 1127
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

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

Maximum value of SAR (interpolated) = 22.0 W/kg

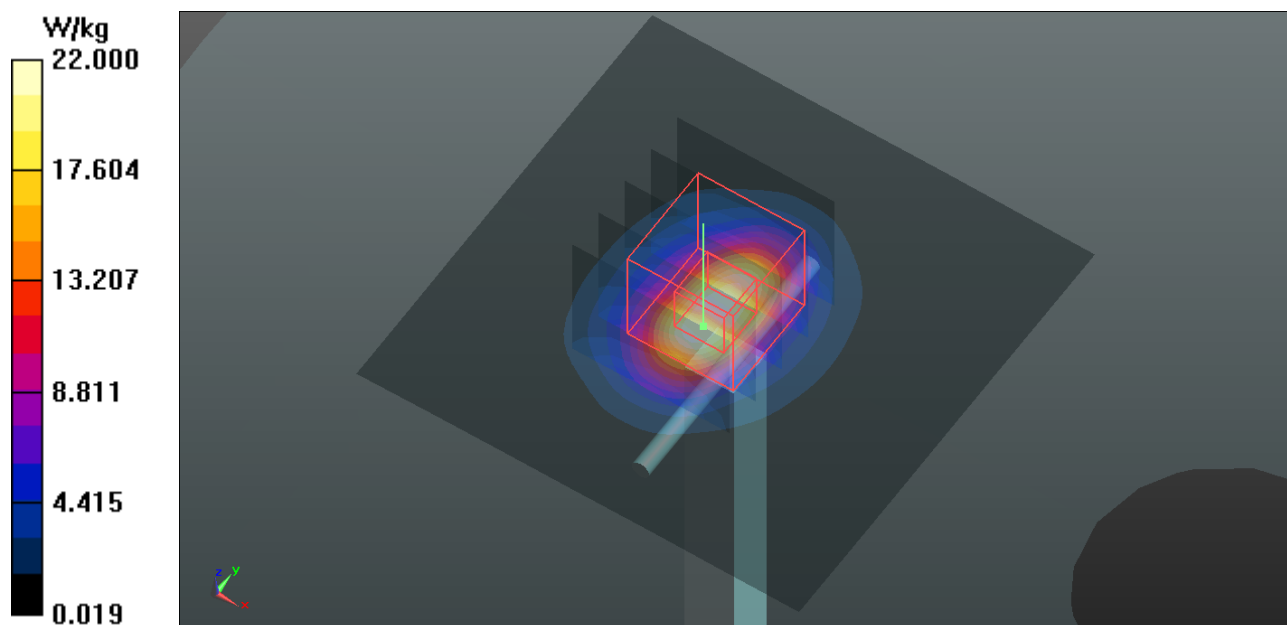
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 109.2 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 29.693 mW/g

SAR(1 g) = 13.9 mW/g; SAR(10 g) = 6.28 mW/g

Maximum value of SAR (measured) = 20.9 W/kg



System Check_H5200_121016**DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1018**

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

Medium: H5G_1016 Medium parameters used: $f = 5200$ MHz; $\sigma = 4.646$ mho/m; $\epsilon_r = 36.326$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3820; ConvF(5.15, 5.15, 5.15); Calibrated: 2011/12/16;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn910; Calibrated: 2011/12/07
- Phantom: SAM Phantom_right; Type: QD000P40CC; Serial: TP:1496
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

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

Maximum value of SAR (interpolated) = 16.4 W/kg

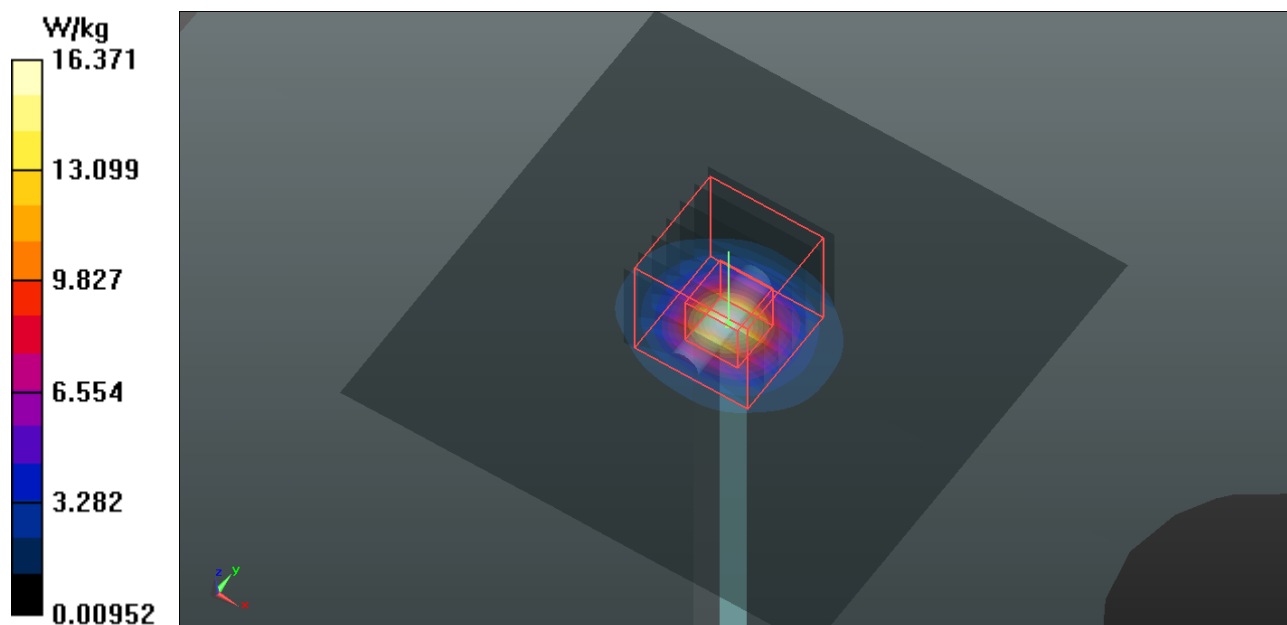
Pin=100mW/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 62.843 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 32.562 mW/g

SAR(1 g) = 7.74 mW/g; SAR(10 g) = 2.19 mW/g

Maximum value of SAR (measured) = 16.4 W/kg



System Check_H5500_121016**DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1018**

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

Medium: H5G_1016 Medium parameters used: $f = 5500$ MHz; $\sigma = 5.007$ mho/m; $\epsilon_r = 35.842$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3820; ConvF(4.59, 4.59, 4.59); Calibrated: 2011/12/16;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn910; Calibrated: 2011/12/07
- Phantom: SAM Phantom_right; Type: QD000P40CC; Serial: TP:1496
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

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

Maximum value of SAR (interpolated) = 19.0 W/kg

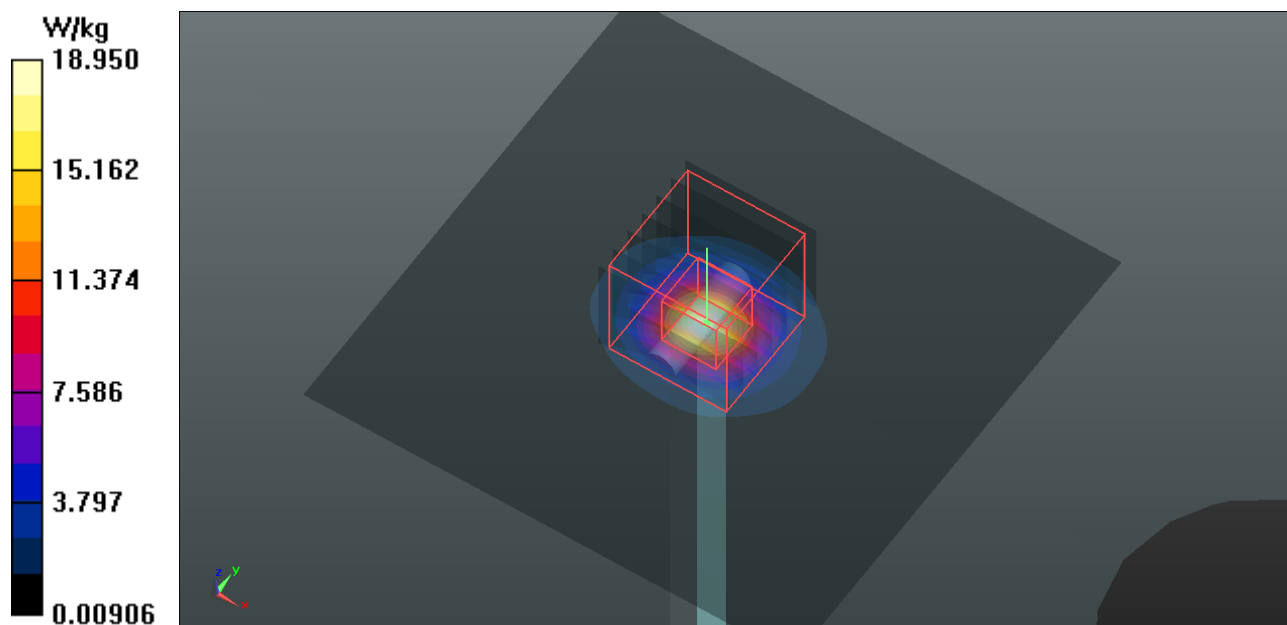
Pin=100mW/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 66.605 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 37.718 mW/g

SAR(1 g) = 8.81 mW/g; SAR(10 g) = 2.47 mW/g

Maximum value of SAR (measured) = 18.9 W/kg



System Check_H5800_121016**DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1018**

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

Medium: H5G_1016 Medium parameters used: $f = 5800$ MHz; $\sigma = 5.351$ mho/m; $\epsilon_r = 35.303$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3820; ConvF(4.44, 4.44, 4.44); Calibrated: 2011/12/16;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn910; Calibrated: 2011/12/07
- Phantom: SAM Phantom_right; Type: QD000P40CC; Serial: TP:1496
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

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

Maximum value of SAR (interpolated) = 18.1 W/kg

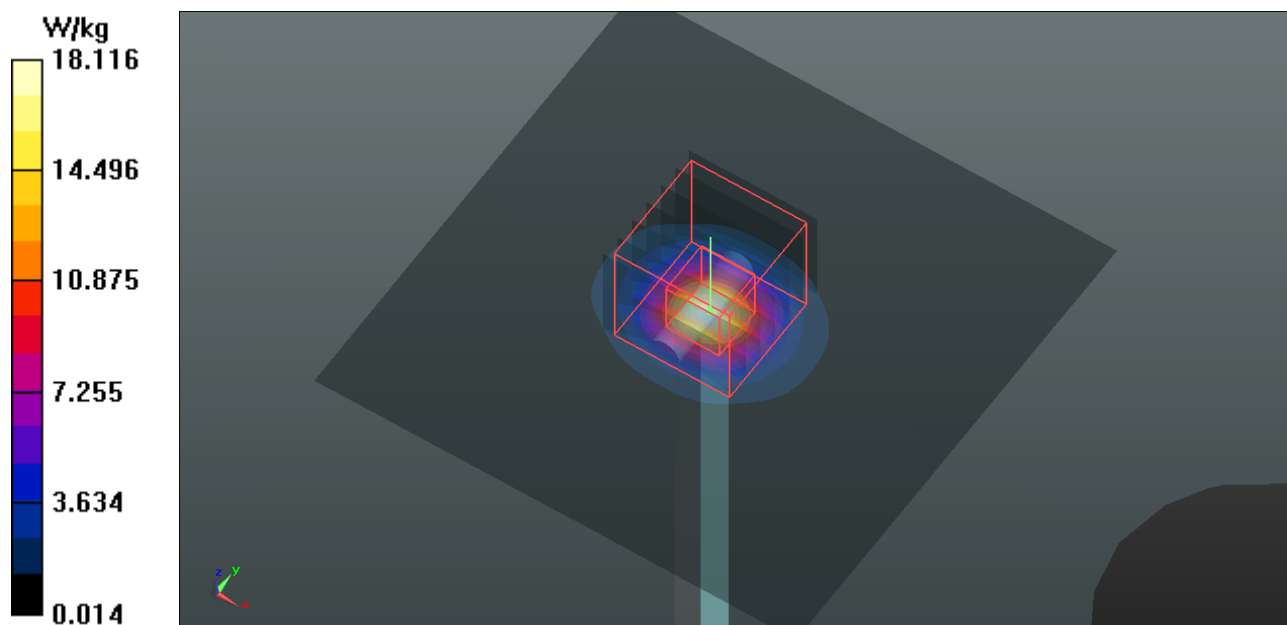
Pin=100mW/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 62.877 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 37.339 mW/g

SAR(1 g) = 8.43 mW/g; SAR(10 g) = 2.36 mW/g

Maximum value of SAR (measured) = 18.3 W/kg



System Check_B1900_121011**DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036**

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

Medium: B1900_1011 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.545$ mho/m; $\epsilon_r = 51.143$; $\rho = 1000$ kg/m³

Ambient Temperature : 21.7 °C; Liquid Temperature : 20.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3590; ConvF(8.07, 8.07, 8.07); Calibrated: 2012/02/23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2012/08/23
- Phantom: SAM Phantom_right; Type: QD000P40CC; Serial: TP:1496
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

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

Maximum value of SAR (interpolated) = 13.7 W/kg

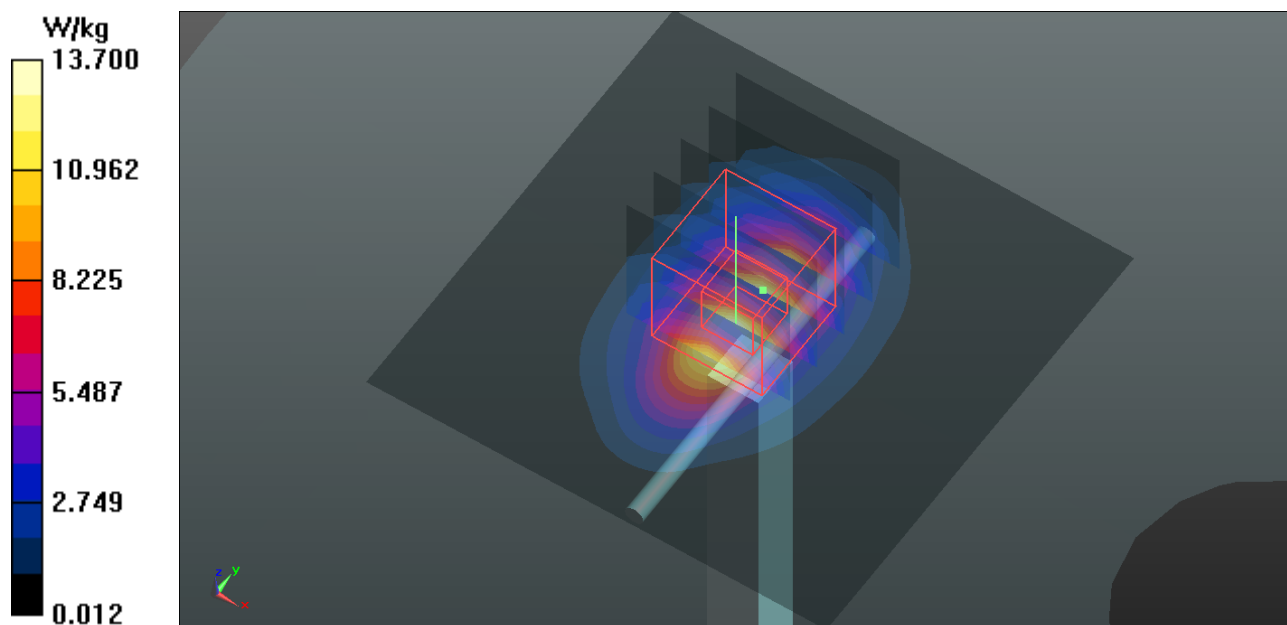
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 94.570 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 16.650 mW/g

SAR(1 g) = 9.44 mW/g; SAR(10 g) = 4.95 mW/g

Maximum value of SAR (measured) = 13.3 W/kg



System Check_B1900_121015**DUT: Dipole 1900 MHz; Type: D1900V2; SN: 5d036**

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

Medium: B1900_1015 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.545$ mho/m; $\epsilon_r = 51.163$; $\rho = 1000$ kg/m³

Ambient Temperature : 21.5 °C ; Liquid Temperature : 20.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3590; ConvF(8.07, 8.07, 8.07); Calibrated: 2012/02/23;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn861; Calibrated: 2012/08/23
- Phantom: SAM Phantom_Front; Type: SAM V4.0; Serial: TP 1485
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

Pin=250mW/Area Scan (61x61x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 13.9 W/kg

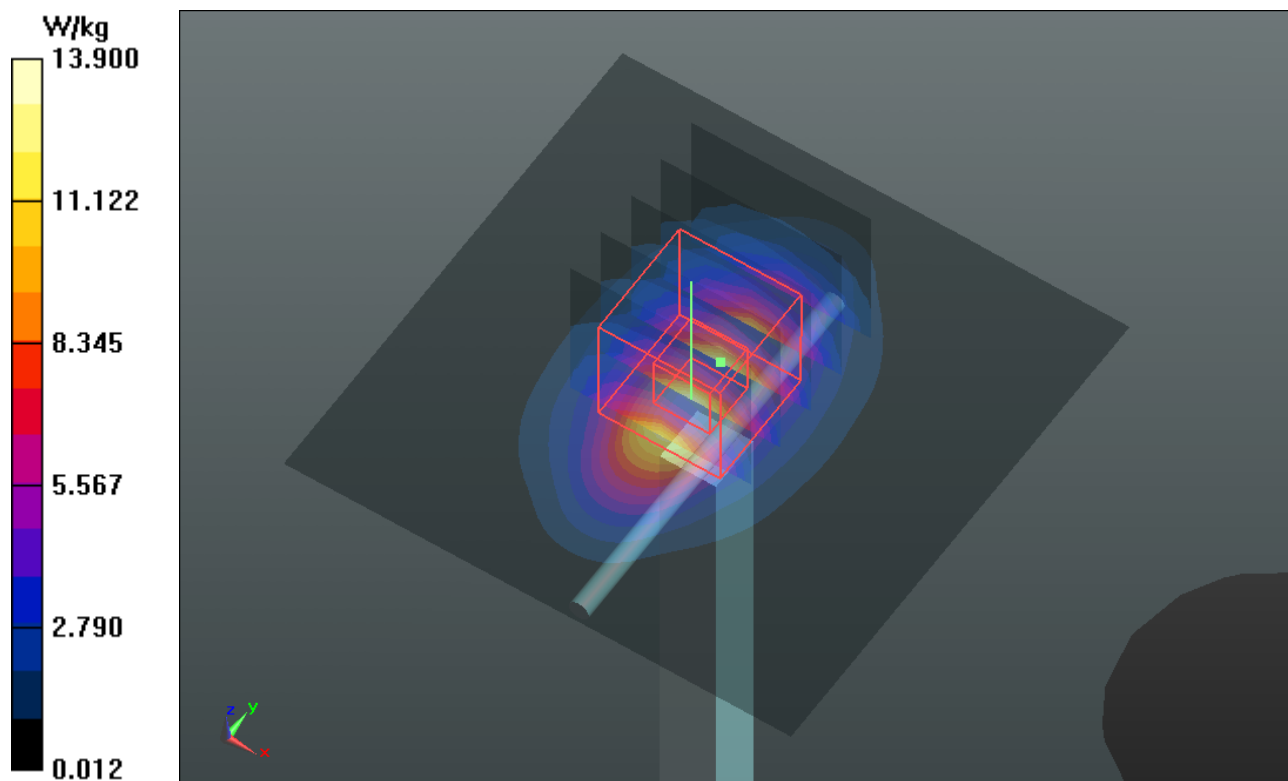
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 94.953 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 16.871 mW/g

SAR(1 g) = 9.54 mW/g; SAR(10 g) = 5 mW/g

Maximum value of SAR (measured) = 13.5 W/kg



System Check_B2450_121015**DUT: Dipole 2450 MHz; Type: D2450V2; SN: 737**

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

Medium: B2450_1015 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.945$ mho/m; $\epsilon_r = 50.906$; $\rho = 1000$ kg/m³

Ambient Temperature : 21.7 °C ; Liquid Temperature : 20.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3820; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/12/16;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn910; Calibrated: 2011/12/07
- Phantom: SAM Phantom_Left; Type: SAM V4.0; Serial: TP 1652
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

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

Maximum value of SAR (interpolated) = 20.3 W/kg

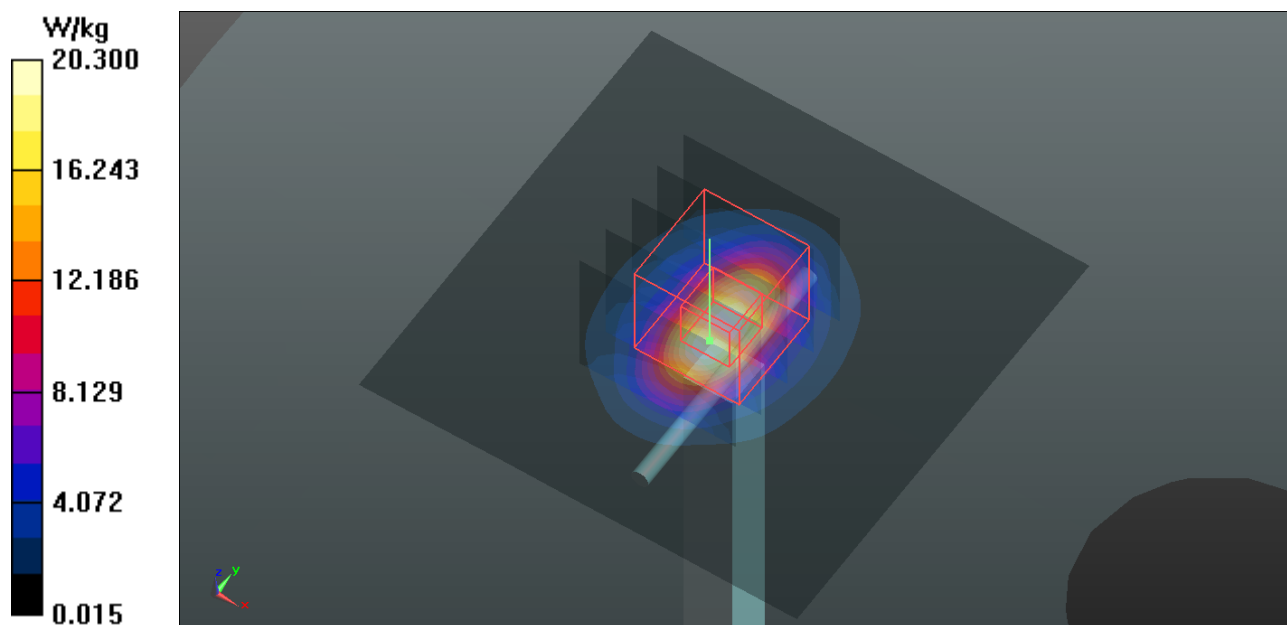
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 102.4 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 26.933 mW/g

SAR(1 g) = 12.9 mW/g; SAR(10 g) = 5.89 mW/g

Maximum value of SAR (measured) = 19.2 W/kg



System Check_B5200_121017**DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1018**

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

Medium: B5G_1017 Medium parameters used: $f = 5200$ MHz; $\sigma = 5.278$ mho/m; $\epsilon_r = 48.936$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3820; ConvF(4.19, 4.19, 4.19); Calibrated: 2011/12/16;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn910; Calibrated: 2011/12/07
- Phantom: SAM Phantom_Front; Type: SAM V4.0; Serial: TP 1127
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

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

Maximum value of SAR (interpolated) = 16.3 W/kg

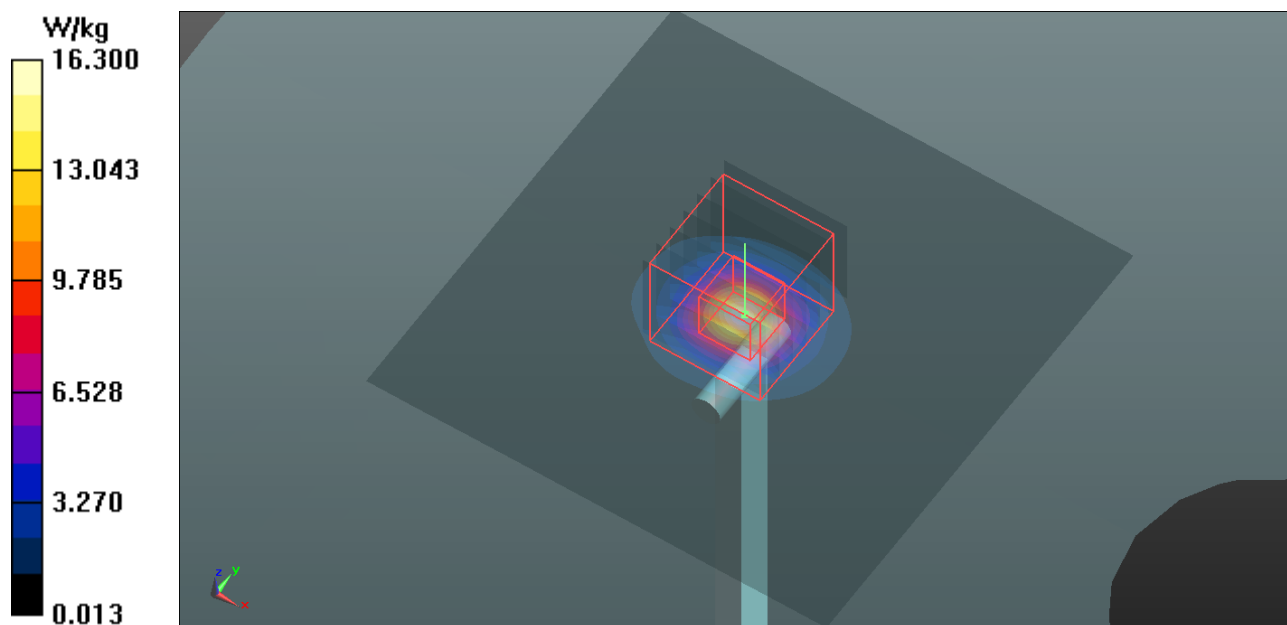
Pin=100mW/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 59.952 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 28.874 mW/g

SAR(1 g) = 7.57 mW/g; SAR(10 g) = 2.13 mW/g

Maximum value of SAR (measured) = 16.1 W/kg



System Check_B5500_121017**DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1018**

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

Medium: B5G_1017 Medium parameters used: $f = 5500$ MHz; $\sigma = 5.717$ mho/m; $\epsilon_r = 48.431$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3820; ConvF(3.7, 3.7, 3.7); Calibrated: 2011/12/16;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn910; Calibrated: 2011/12/07
- Phantom: SAM Phantom_Front; Type: SAM V4.0; Serial: TP 1127
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

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

Maximum value of SAR (interpolated) = 18.1 W/kg

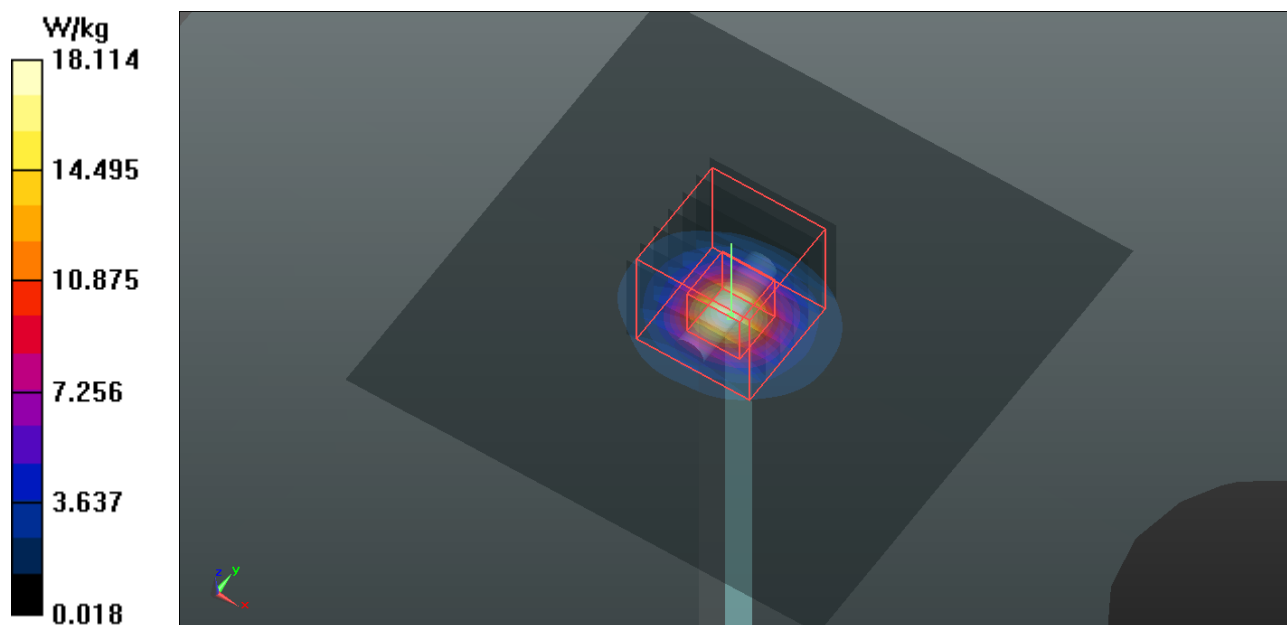
Pin=100mW/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 61.436 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 32.910 mW/g

SAR(1 g) = 8.29 mW/g; SAR(10 g) = 2.29 mW/g

Maximum value of SAR (measured) = 18.0 W/kg



System Check_B5800_121017**DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1018**

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

Medium: B5G_1017 Medium parameters used: $f = 5800$ MHz; $\sigma = 6.123$ mho/m; $\epsilon_r = 47.668$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3820; ConvF(3.82, 3.82, 3.82); Calibrated: 2011/12/16;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn910; Calibrated: 2011/12/07
- Phantom: SAM Phantom_Front; Type: SAM V4.0; Serial: TP 1127
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

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

Maximum value of SAR (interpolated) = 14.7 W/kg

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

Reference Value = 55.609 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 28.340 mW/g

SAR(1 g) = 7.05 mW/g; SAR(10 g) = 1.96 mW/g

Maximum value of SAR (measured) = 15.4 W/kg

