

APPENDIX A: SYSTEM CHECKING SCANS

SystemPerformanceCheck-D835 for Head

Date: 2016.04.06.

DUT: Dipole 835 MHz D835V2; Type: D835V2 SN:4d141;

Communication System: CW; Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835$ MHz; $\sigma = 0.91$ mho/m; $\epsilon_r = 42.0$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3881; ConvF(9.66, 9.66, 9.66); Calibrated: 2015.07.24.;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn876; Calibrated: 2016.03.02.
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1504
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

Head/Dipole835/Area Scan (61x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 53.331 V/m; Power Drift = 0.03 dB

Fast SAR: SAR(1 g) = 2.36 mW/g; SAR(10 g) = 1.55 mW/g

Maximum value of SAR (interpolated) = 2.55 W/kg

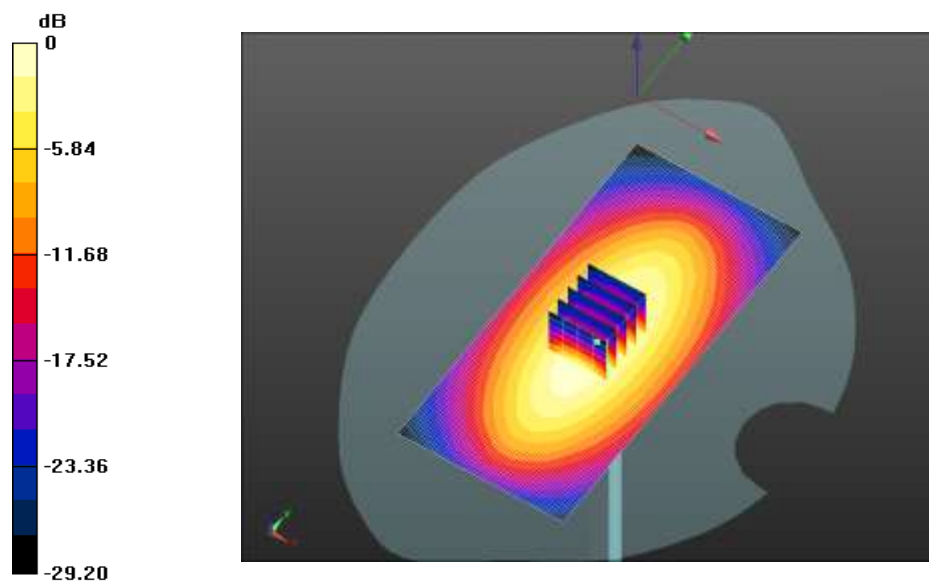
Head/Dipole835/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 53.331 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 3.606 mW/g

SAR(1 g) = 2.37 mW/g; SAR(10 g) = 1.54 mW/g

Maximum value of SAR (measured) = 2.56 W/kg



0 dB = 2.55 W/kg = 8.12 dB W/kg

SystemPerformanceCheck-D835 for Body

Date: 2016.04.06.

DUT: Dipole 835 MHz D835V2; Type: D835V2 SN:4d141;

Communication System: CW; Communication System Band: D835 (835.0 MHz); Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835$ MHz; $\sigma = 0.98$ mho/m; $\epsilon_r = 56.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3881; ConvF(9.45, 9.45, 9.45); Calibrated: 2015.07.24.;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn876; Calibrated: 2016.03.02.
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1504
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

Body/Dipole835/Area Scan (61x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 55.902 V/m; Power Drift = -0.52 dB

Fast SAR: SAR(1 g) = 2.55 mW/g; SAR(10 g) = 1.67 mW/g

Maximum value of SAR (interpolated) = 2.76 W/kg

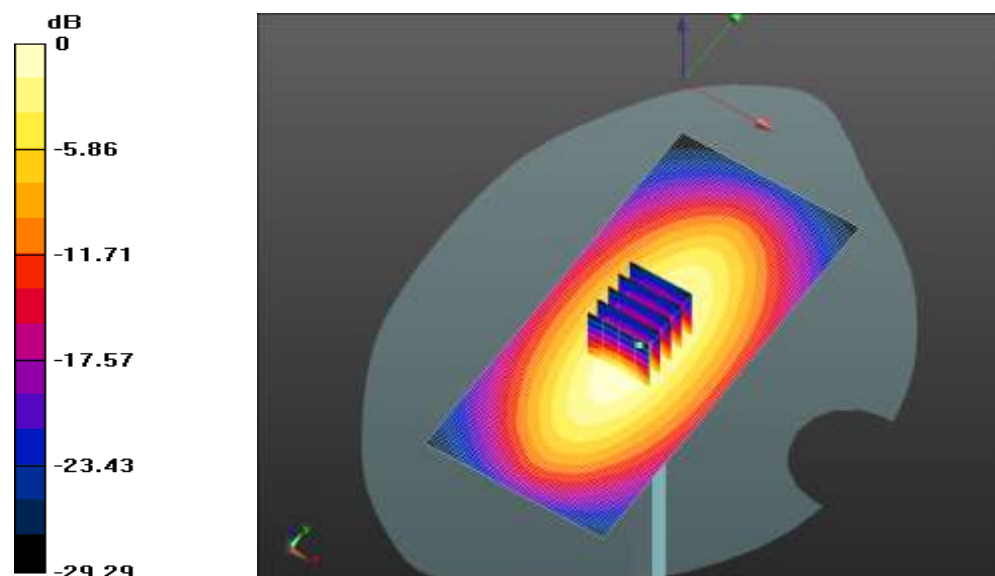
Body/Dipole835/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 55.902 V/m; Power Drift = -0.52 dB

Peak SAR (extrapolated) = 3.791 mW/g

SAR(1 g) = 2.48 mW/g; SAR(10 g) = 1.61 mW/g

Maximum value of SAR (measured) = 2.69 W/kg



0 dB = 2.76 W/kg = 8.82 dB W/kg

SystemPerformanceCheck-D1900 for Head

Date: 2016.04.07.

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2 SN: 5d162;

Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3881; ConvF(7.96, 7.96, 7.96); Calibrated: 2015.07.24.;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn876; Calibrated: 2016.03.02.
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1504
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

Head/Dipole1900/Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 86.202 V/m; Power Drift = 0.07 dB

Fast SAR: SAR(1 g) = 10 mW/g; SAR(10 g) = 4.88 mW/g

Maximum value of SAR (interpolated) = 11.8 W/kg

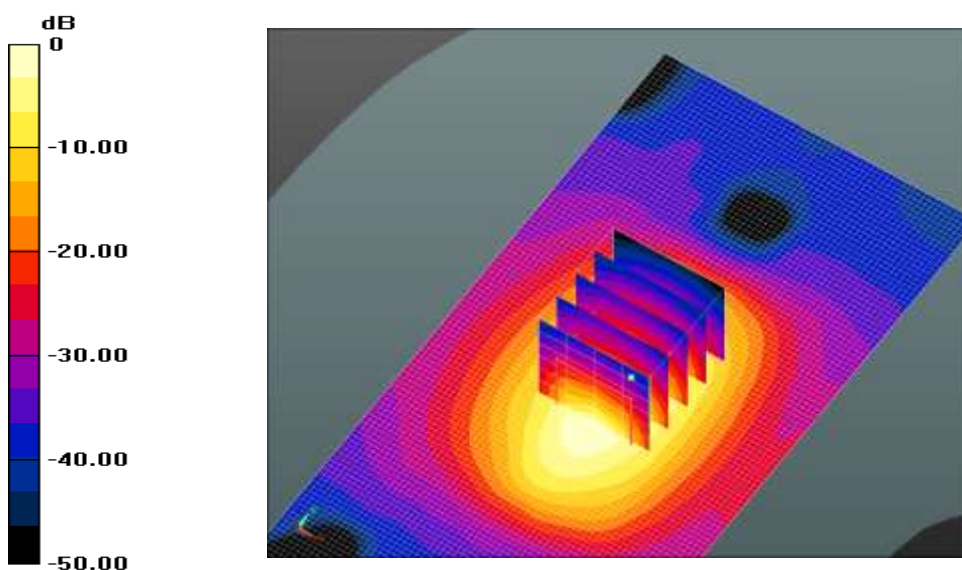
Head/Dipole1900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 86.202 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 19.737 mW/g

SAR(1 g) = 10.1 mW/g; SAR(10 g) = 5 mW/g

Maximum value of SAR (measured) = 11.5 W/kg



0 dB = 11.8 W/kg = 21.46 dB W/kg

SystemPerformanceCheck-D1900 for Body

Date: 2016.04.07.

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2 SN: 5d162;

Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.5$ mho/m; $\epsilon_r = 54.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3881; ConvF(7.6, 7.6, 7.6); Calibrated: 2015.07.24.;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn876; Calibrated: 2016.03.02.
- Phantom: SAM 1; Type: QD000P40CC; Serial: TP:1504
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

Body/Dipole1900/Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 86.711 V/m; Power Drift = 0.09 dB

Fast SAR: SAR(1 g) = 11 mW/g; SAR(10 g) = 5.34 mW/g

Maximum value of SAR (interpolated) = 13.0 W/kg

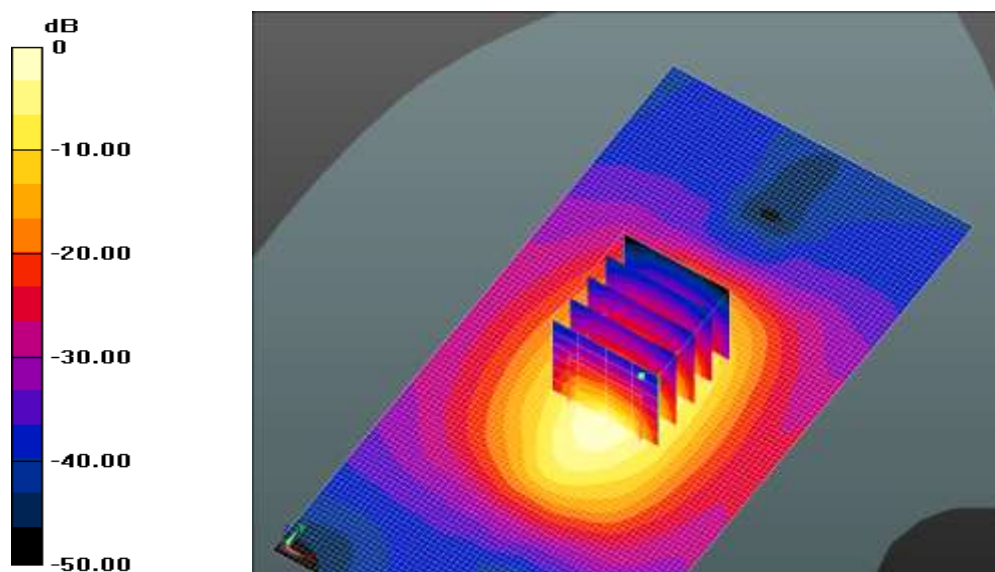
Body/Dipole1900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 86.711 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 21.345 mW/g

SAR(1 g) = 11.1 mW/g; SAR(10 g) = 5.49 mW/g

Maximum value of SAR (measured) = 12.6 W/kg



0 dB = 13.0 W/kg = 22.25 dB W/kg

SystemPerformanceCheck-D2450 for Head

Date: 2016.04.08.

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2 SN: 818;

Communication System: CW; Communication System Band: D2450 (2450.0 MHz); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.8$ mho/m; $\epsilon_r = 39.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3881; ConvF(7.38, 7.38, 7.38); Calibrated: 2015.11.26.;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn876; Calibrated: 2016.03.02.
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1504
- Measurement SW: DASYS2, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

Head/Dipole2450/Area Scan (91x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 94.894 V/m; Power Drift = -0.03 dB

Fast SAR: SAR(1 g) = 13.6 mW/g; SAR(10 g) = 5.85 mW/g

Maximum value of SAR (interpolated) = 17.3 W/kg

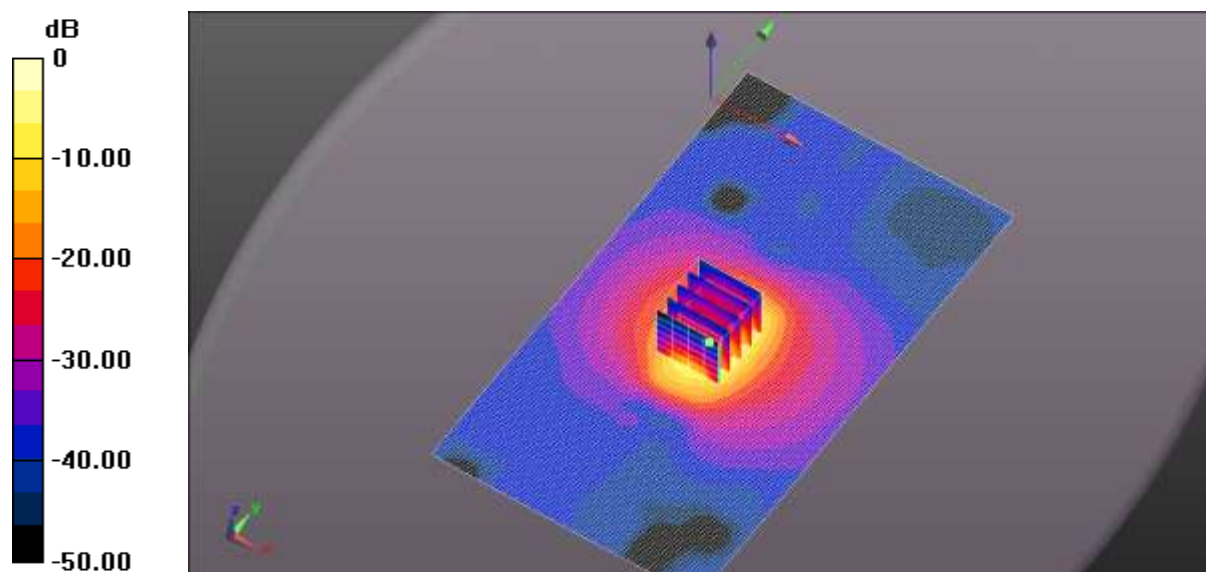
Head/Dipole2450/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 94.894 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 36.123 mW/g

SAR(1 g) = 13.8 mW/g; SAR(10 g) = 5.95 mW/g

Maximum value of SAR (measured) = 16.2 W/kg



0 dB = 17.3 W/kg = 24.74 dB W/kg

SystemPerformanceCheck-D2450 for Body

Date: 2016.04.08.

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2 SN: 818;

Communication System: CW; Communication System Band: D2450 (2450.0 MHz); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3881; ConvF(7.07, 7.07, 7.07); Calibrated: 2015.11.26.;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn876; Calibrated: 2016.03.02.
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1504
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

Body/Dipole2450/Area Scan (91x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Reference Value = 86.618 V/m; Power Drift = -0.02 dB

Fast SAR: SAR(1 g) = 12.7 mW/g; SAR(10 g) = 5.79 mW/g

Maximum value of SAR (interpolated) = 15.3 W/kg

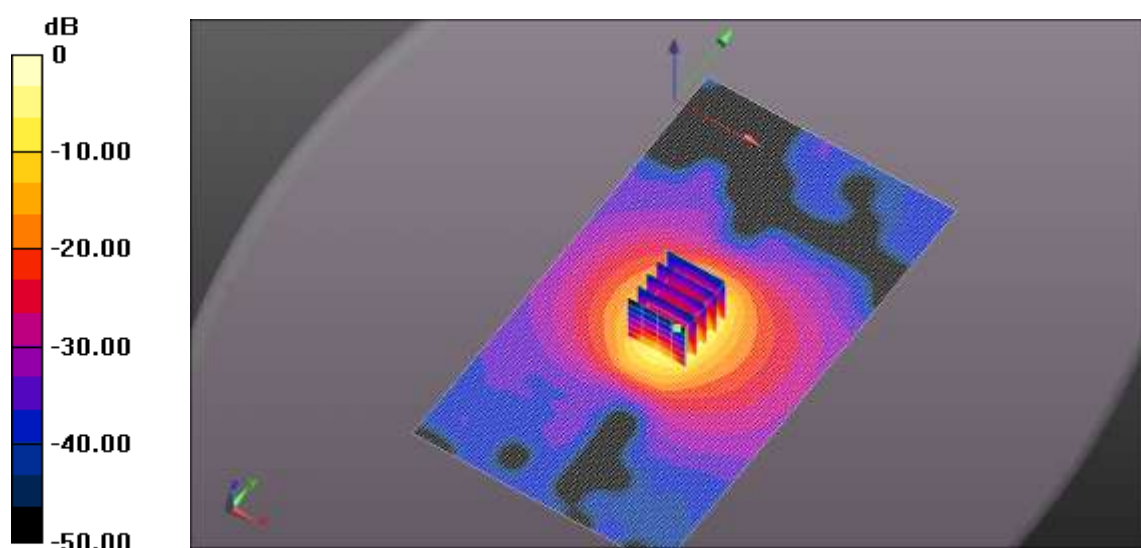
Body/Dipole2450/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 86.618 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 30.135 mW/g

SAR(1 g) = 13.3 mW/g; SAR(10 g) = 5.81 mW/g

Maximum value of SAR (measured) = 15.1 W/kg



0 dB = 15.3 W/kg = 23.69 dB W/kg

